2003-07 RESTRAINTS

SRS (Supplemental Restraint System) - Accord

COMPONENT LOCATION INDEX

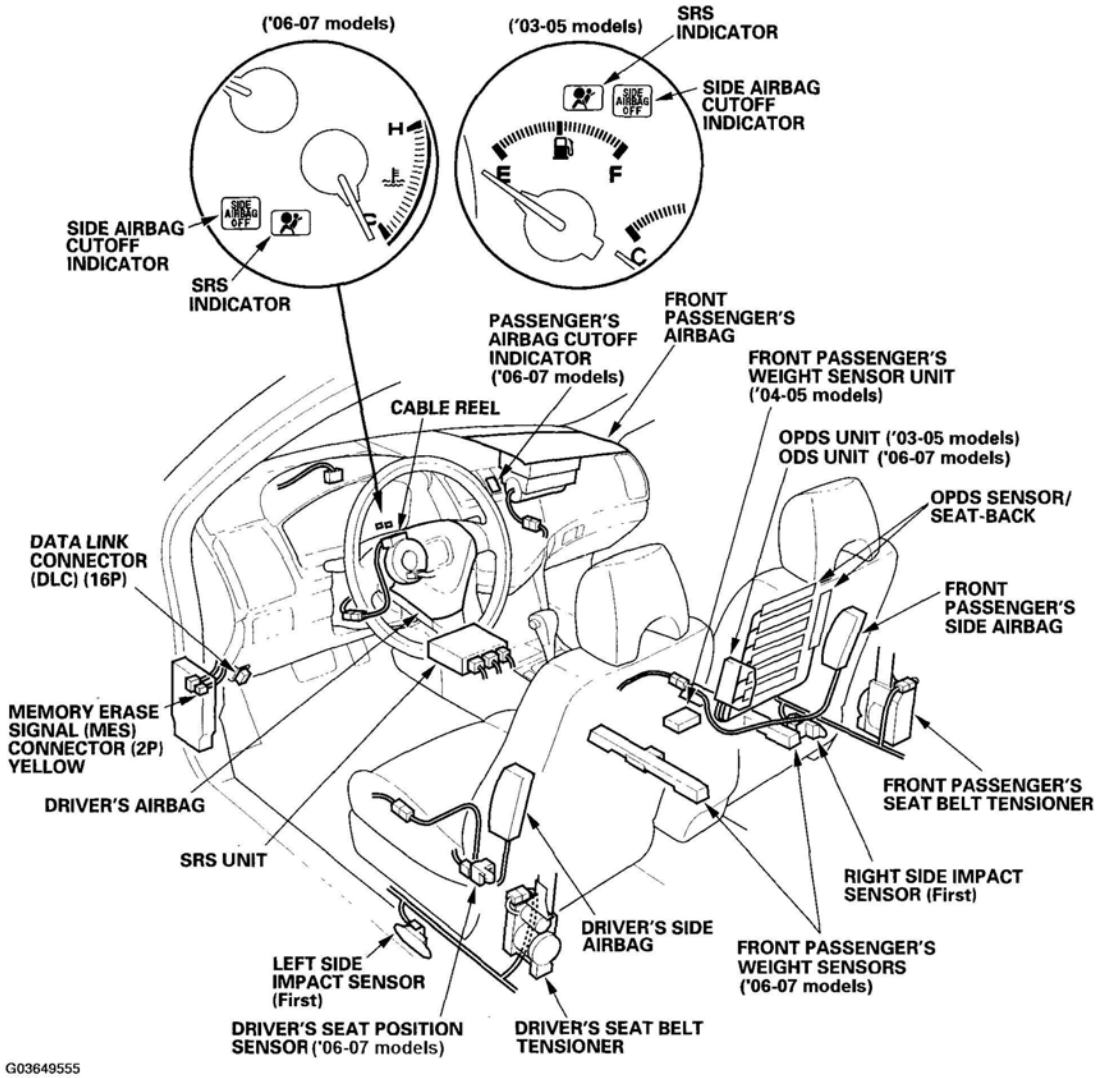


Fig. 1: Locating SRS Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

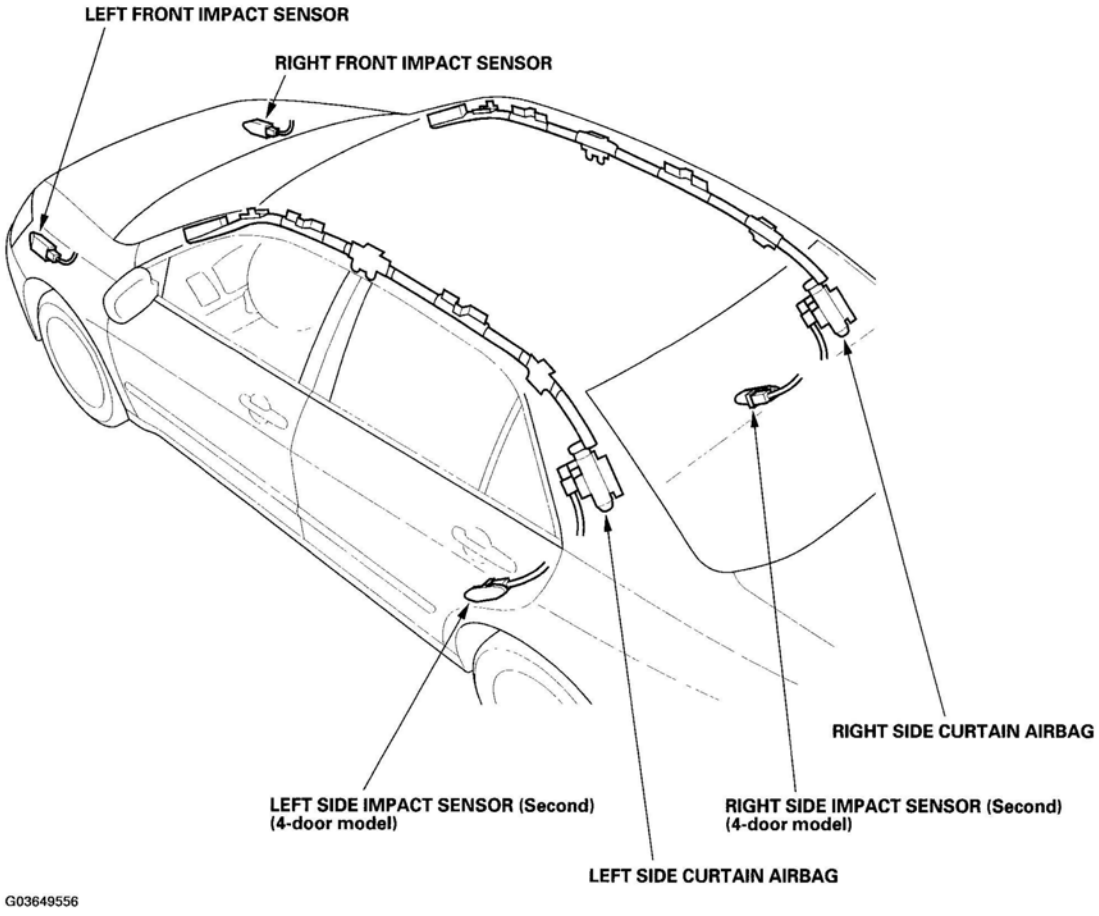


Fig. 2: Locating SRS Components (4-Door Shown; 2-Door Similar)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PRECAUTIONS AND PROCEDURES

GENERAL PRECAUTIONS

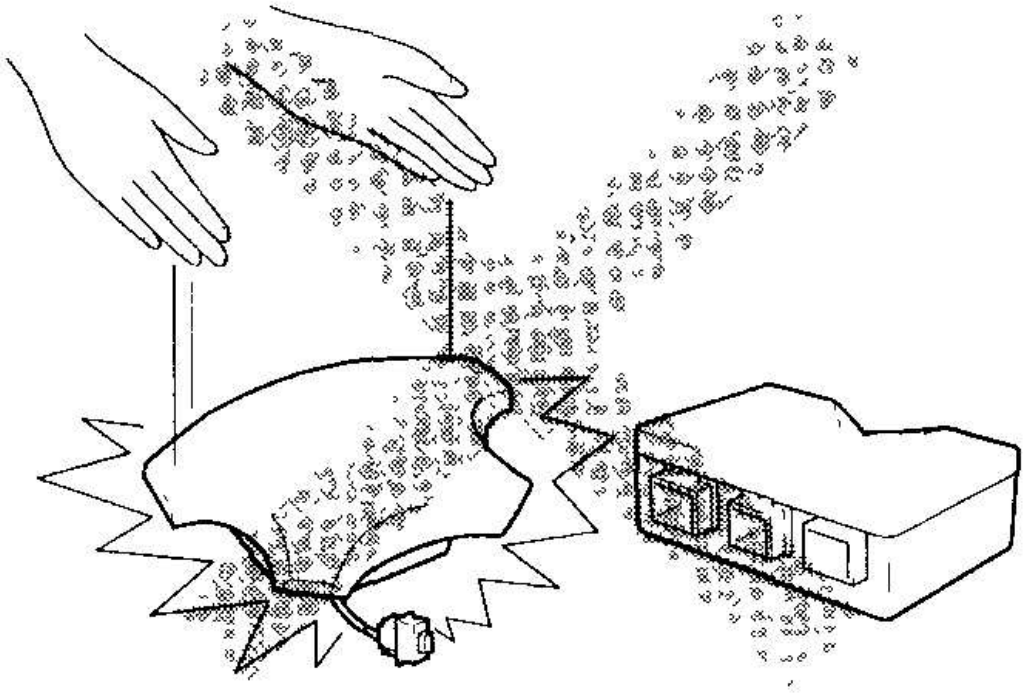
Please read the following precautions carefully before performing the airbag system service. Observe the instructions described in this information, or the airbags could accidentally deploy and cause damage or injuries.

- Except when performing electrical inspections, always turn the ignition switch OFF, disconnect the negative cable from the battery, and wait at least 3 minutes before beginning work.

NOTE: The SRS memory is not erased even if the ignition

switch is turned OFF or the battery cables are disconnected from the battery.

- Use replacement parts which are manufactured to the same standards and quality as the original parts. Do not install used SRS parts. Use only new parts when making SRS repairs.
- Carefully inspect any SRS part before you install it. Do not install any part that shows signs of being dropped or improperly handled, such as dents, cracks or deformation.



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Fig. 3: Inspecting SRS Parts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- Before removing any of the SRS parts (including the disconnection of the connectors), always disconnect the SRS connector.

- Use only a digital multimeter to check the system. If it is not a Honda multimeter, make sure its output is 10 mA (0.01 A) or less when switched to the lowest value in the ohmmeter range. A tester with a higher output could cause accidental deployment and possible injury.
- Do not put objects on the front passenger's airbag.
- The original radio and navigation system have a coded theft protection circuit. Be sure to get the customer's anti-theft codes and write down the frequencies for the radio's preset stations before disconnecting the battery negative cable.
- Before returning the vehicle to the customer, enter the radio code, the navigation code, then enter the customer's audio presets, and set the clock.

STEERING-RELATED PRECAUTIONS

Cable Reel Alignment

- Misalignment of the cable reel could cause an open in the wiring, make the SRS system remote steering wheel controls and the horn inoperative. Center the cable reel whenever the following is performed (see step 6 in **Installation**).
  - Installation of the steering wheel
  - Installation of the cable reel
  - Installation of the steering column
  - Other steering-related adjustment or installation
- Do not disassemble the cable reel.
- Do not apply grease to the cable reel.
- If the cable, reel shows any signs of damage, replace it with a new one. For example, if it does not rotate smoothly, replace the cable reel.

AIRBAG HANDLING AND STORAGE

Do not disassemble an airbag. It has no serviceable parts. Once an airbag has been deployed, it cannot be repaired or reused.

For temporary storage of an airbag during service, observe the following precautions.

- Store the removed airbag with the pad surface up. Never put anything on the airbag.

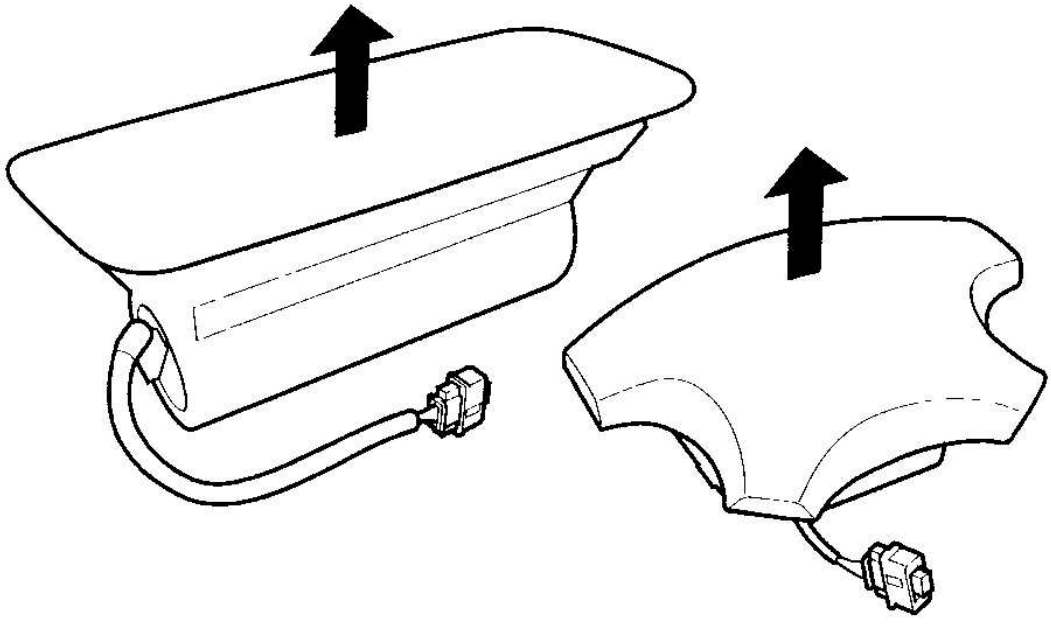


Fig. 4: Storing Removed Airbag With Pad Surface Up
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- To prevent damage to the airbag, keep it away from any oil, grease, detergent, or water.

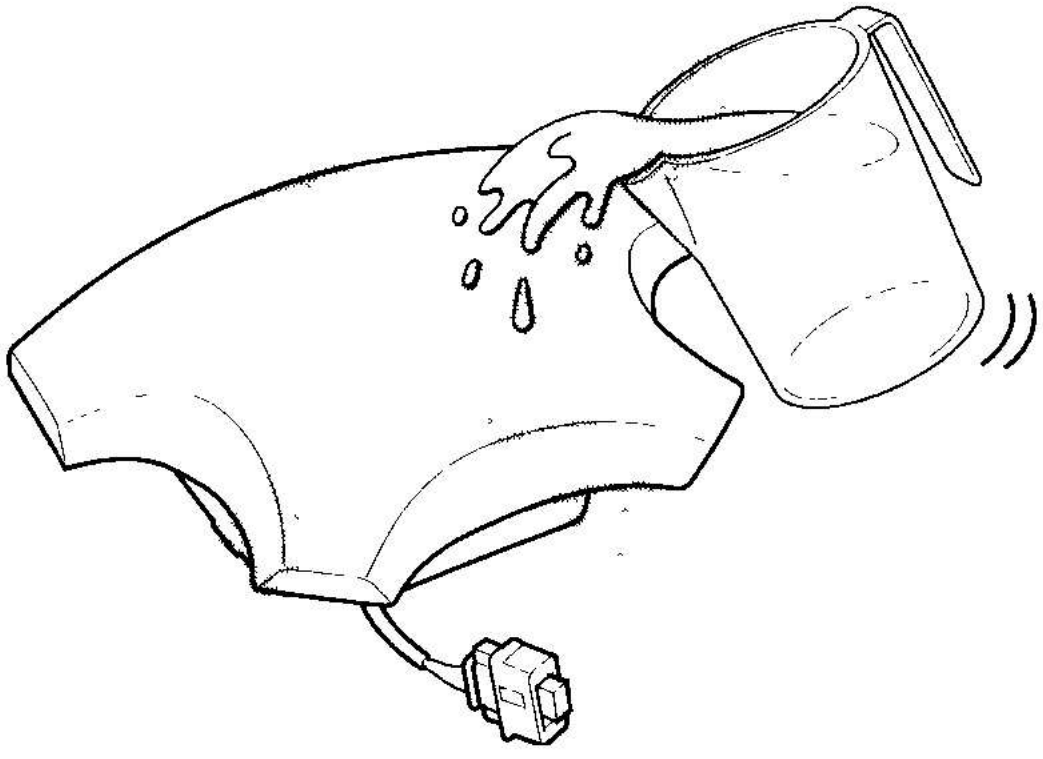


Fig. 5: Keeping Airbag Away From Oil, Grease, Detergent Or Water
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- Store the removed airbag on a secure, flat surface away from any high heat source (exceeding 200°F/93°C).



Fig. 6: Removing Airbag Keeping Flat Surface Away From Any Heat Source
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- Never perform electrical inspections to the airbags, such as measuring resistance.
- Do not position yourself in front of the airbag during removal, inspection, or replacement.

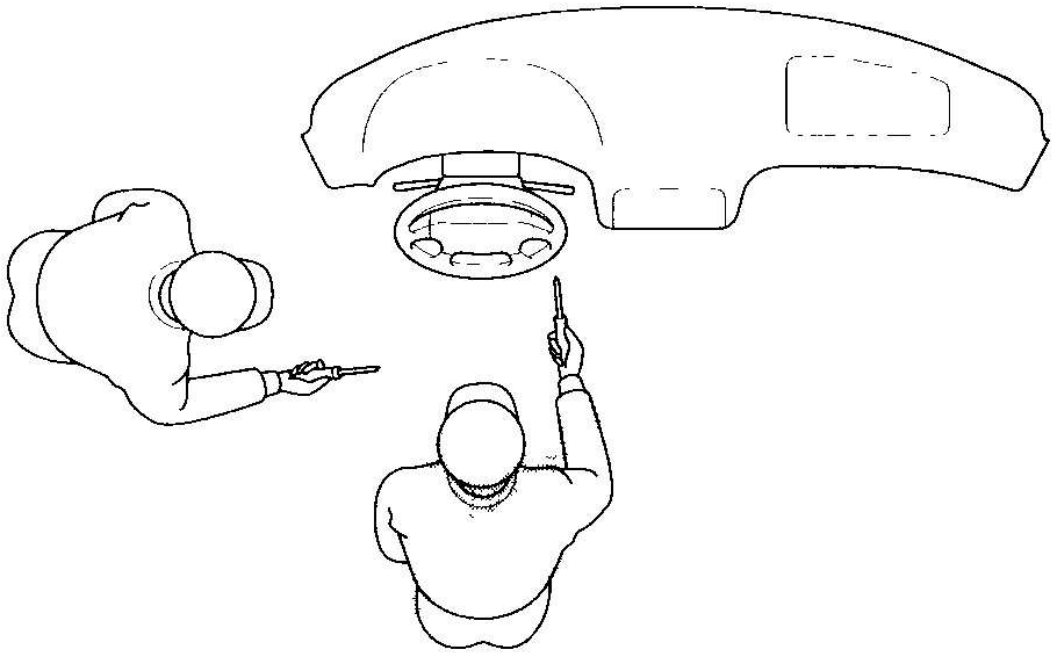


Fig. 7: Precaution For Airbag Removal, Inspection, Or Replacement
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- Refer to the scrapping procedures for disposal of a damaged airbag.
- The side curtain airbag inflator assembly is a long, jointed part containing an inflator (A), a flexible bag (B), an adapter pipe (C), and a center bracket (D).

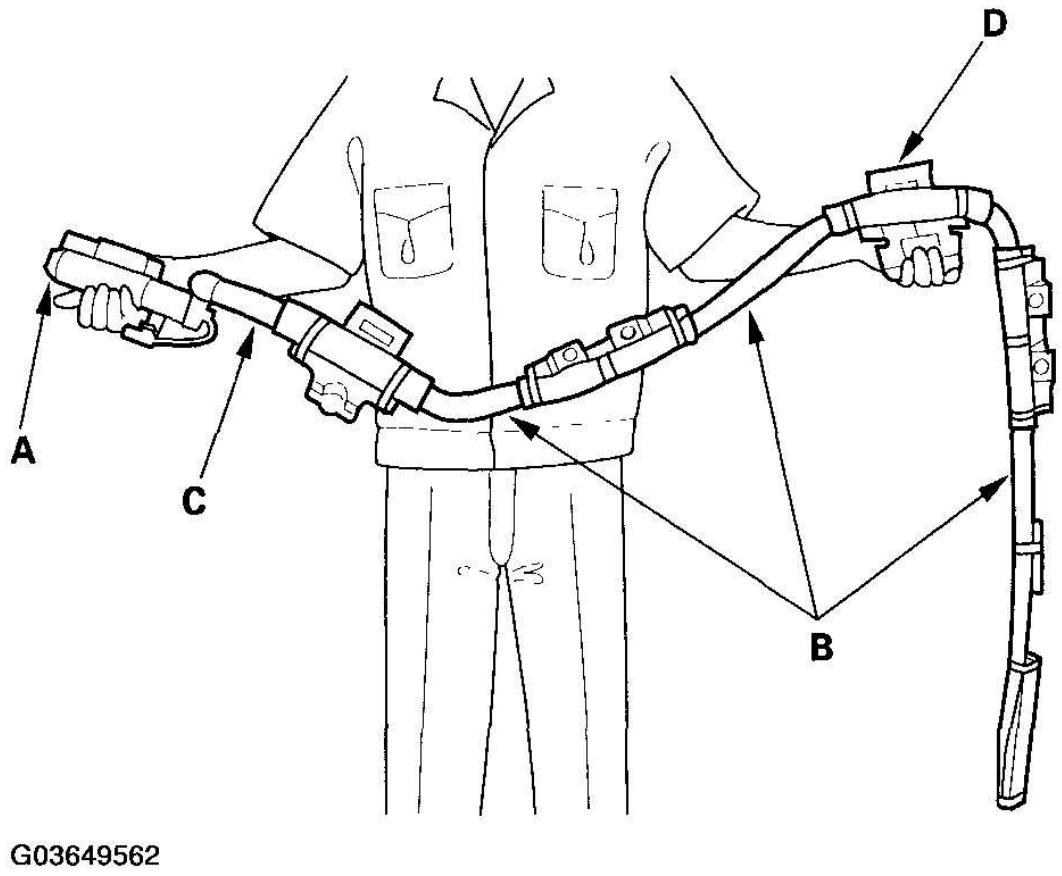


Fig. 8: Identifying Side Curtain Airbag Inflator Assembly Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- When removing or installing the side curtain airbag inflator assembly, never handle the flexible bag (B) or the adapter pipe (C).

SRS UNIT, FRONT IMPACT SENSORS, SIDE IMPACT SENSORS, FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS), AND FRONT PASSENGER'S WEIGHT SENSORS ('04-07 MODELS)

- Be careful not to bump or impact the SRS unit, front impact sensors, or side impact sensors when the ignition switch is ON (II), or for at least 3 minutes after the ignition switch is turned OFF.
- During installation or replacement, be careful not to bump (by impact wrench, hammer, etc.) the area around the SRS unit, front impact sensors, or side

impact sensors. The airbags could accidentally deploy and cause damage or injury.

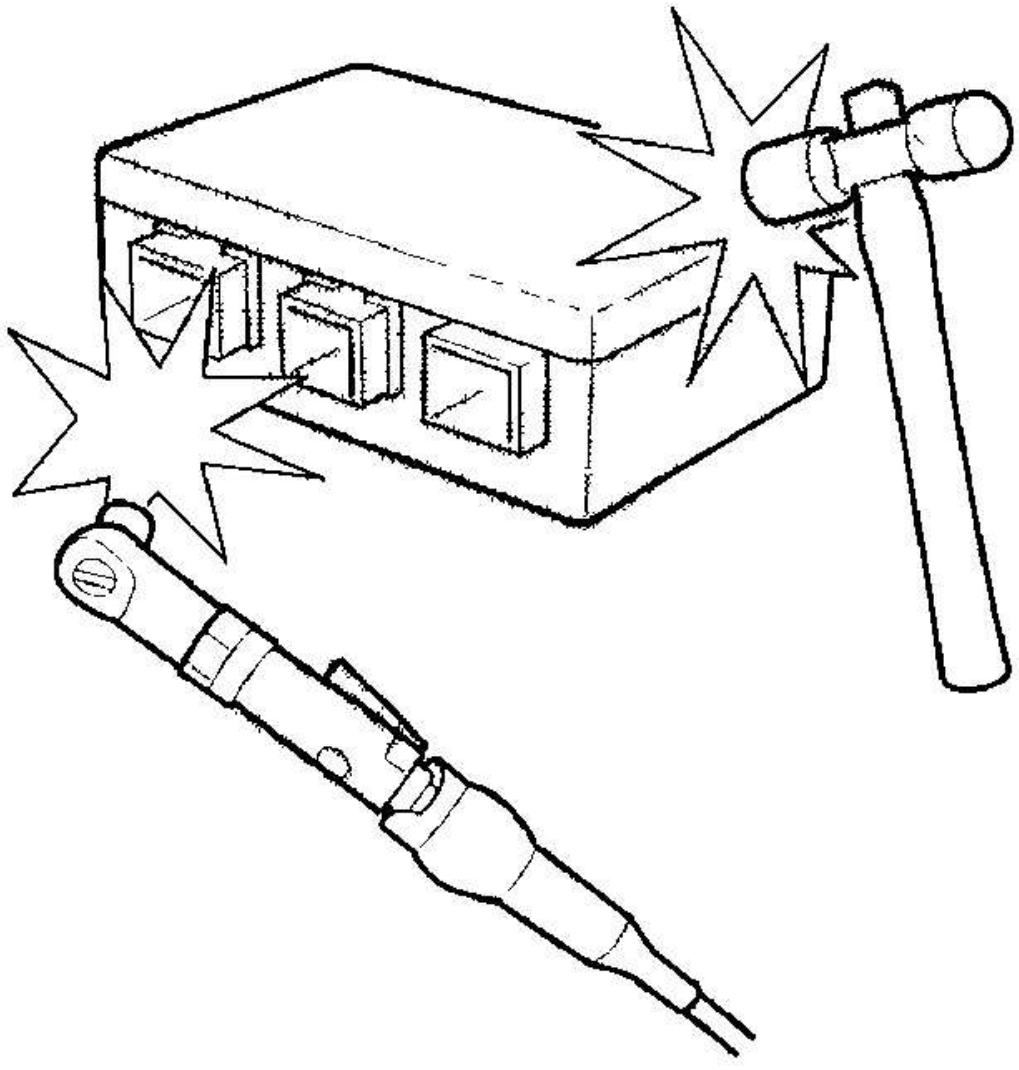


Fig. 9: Precaution For Bump Area Around SRS Unit, Front Impact Sensors, Or Side Impact Sensors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- After a collision in which the front airbags or seat belt tensioners were deployed, replace the SRS unit, front sensors, and other related components (see **COMPONENT REPLACEMENT/INSPECTION AFTER DEPLOYMENT**). After a collision in which a side airbag was deployed, replace the side impact sensor on the deployed side, and the SRS unit. After a collision in which the airbags or the side airbags did not deploy, inspect for any damage or any deformation on the SRS unit, front impact sensors, and side impact sensors. Replace all damaged parts.

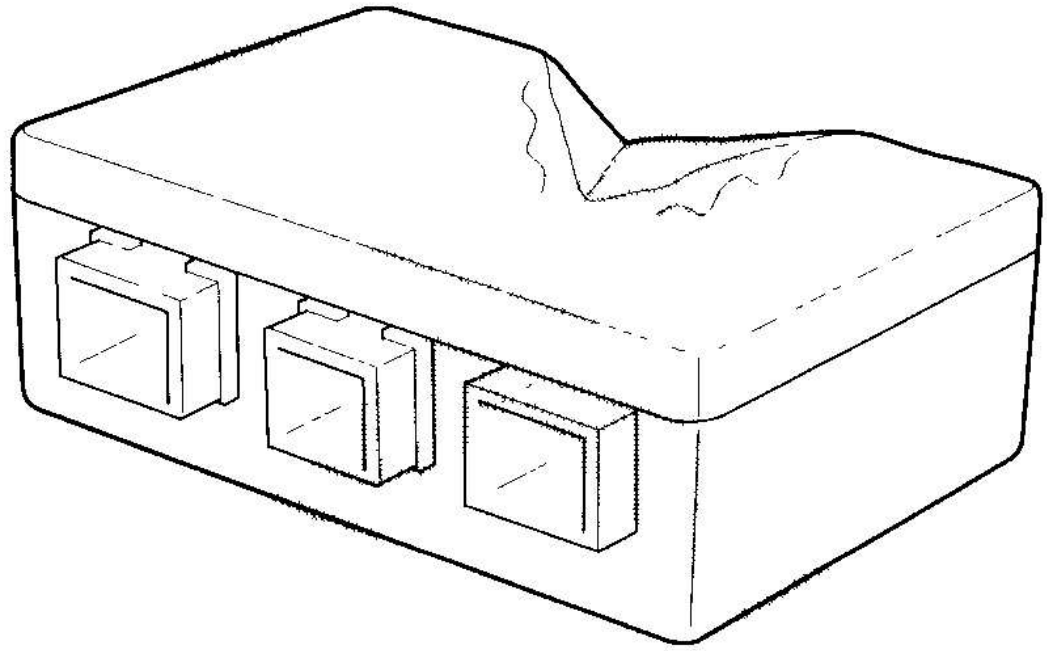


Fig. 10: Precaution For Deformation On SRS Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- Do not disassemble the SRS unit, front impact sensors, side impact sensors, driver's seat position sensor, front passenger's weight sensor unit ('03-05 models), and front passenger's weight sensors.
- Turn the ignition switch OFF, disconnect the battery negative cable, and wait at least 3 minutes before beginning installation or replacement of the SRS unit

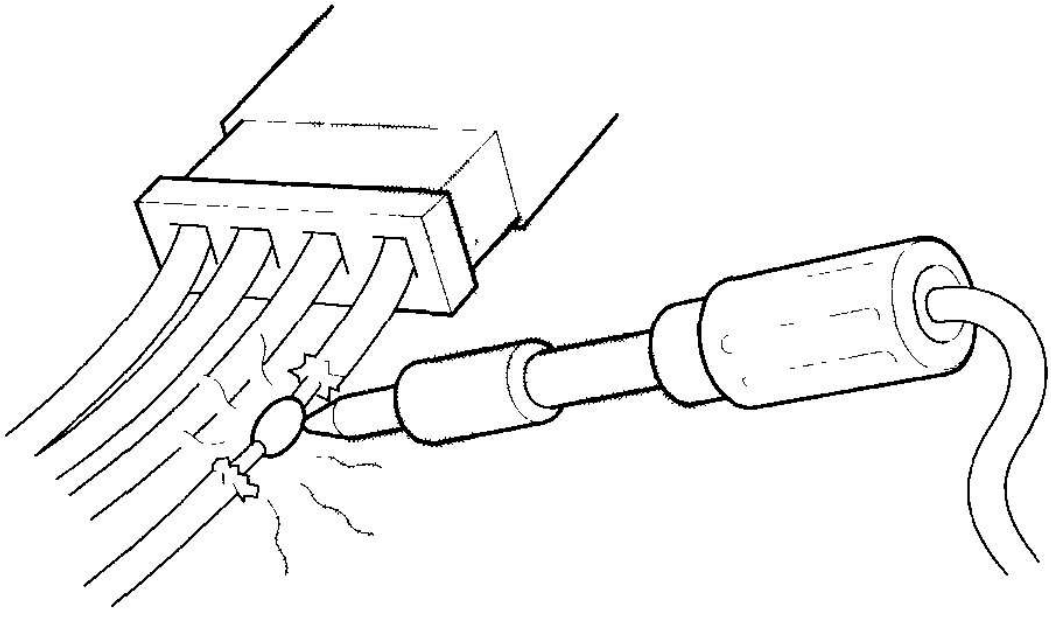
or disconnecting the connectors from the SRS unit.

- Be sure the SRS unit, front impact sensors, and side impact sensors are installed securely with the mounting bolts torqued to 9.8 N.m (1.0 kgf.m, 7.2 lbf.ft)
- Do not spill water or oil on the SRS unit or the side impact sensors, and keep them away from dust.
- Store the SRS unit, front impact sensors, and side impact sensors in a cool (less than 104 °F/40 °C) and dry (less than 80 % relative humidity, no moisture) area.

WIRING PRECAUTIONS

Some of the SRS wiring can be identified by special yellow outer covering, and the SRS connectors can be identified by their yellow color. Observe the instructions.

- Never attempt to modify, splice, or repair SRS wiring. If there is an open or damage in SRS wiring or terminals, replace the harness.



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Fig. 11: Never Attempt To Modify, Splice Or Repair SRS Wiring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- Be sure to install the harness wires so they do not get pinched or interfere with other parts.

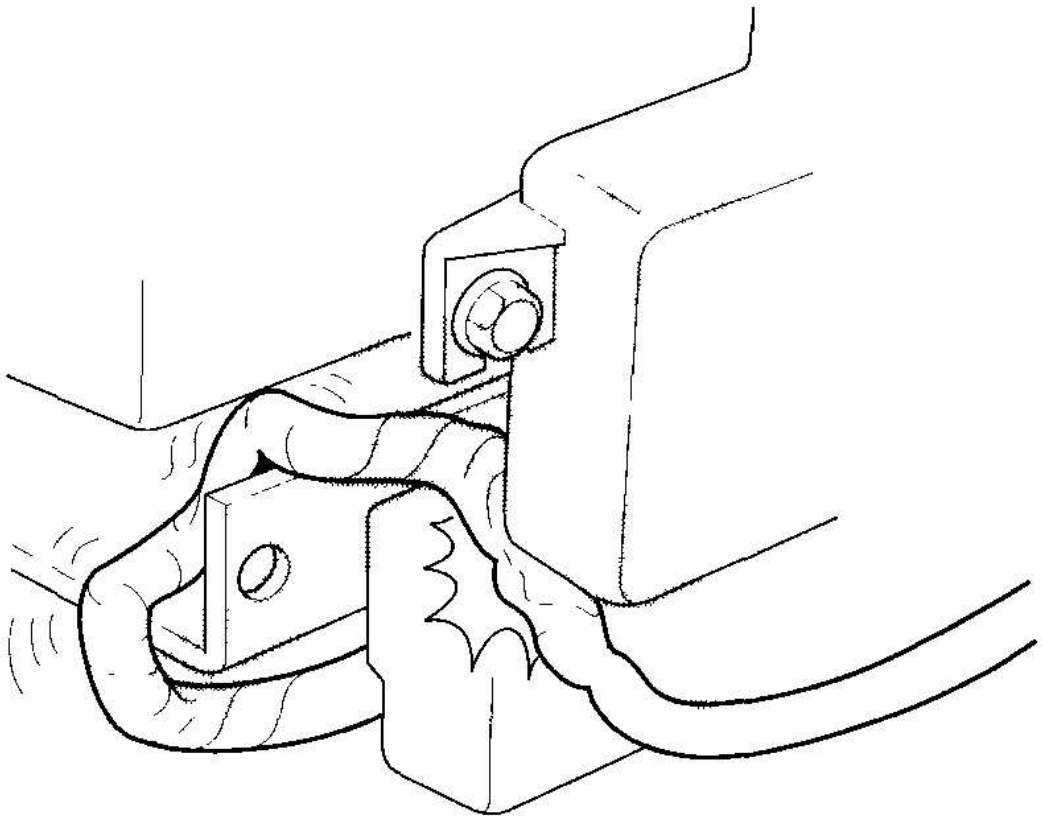


Fig. 12: Do Not Pinch Or Interfere With Other Parts When Installing Harness Wires
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- Make sure all SRS ground locations are clean and securely fastened for optimum metal-to-metal contact. Poor grounding can cause intermittent problems that are difficult to diagnose.

PRECAUTIONS FOR ELECTRICAL INSPECTIONS

- When using electrical test equipment, insert the probe of the tester into the wire side of the connector. Do not insert the probe of the tester into the terminal side of the connector, and do not tamper with the connector.

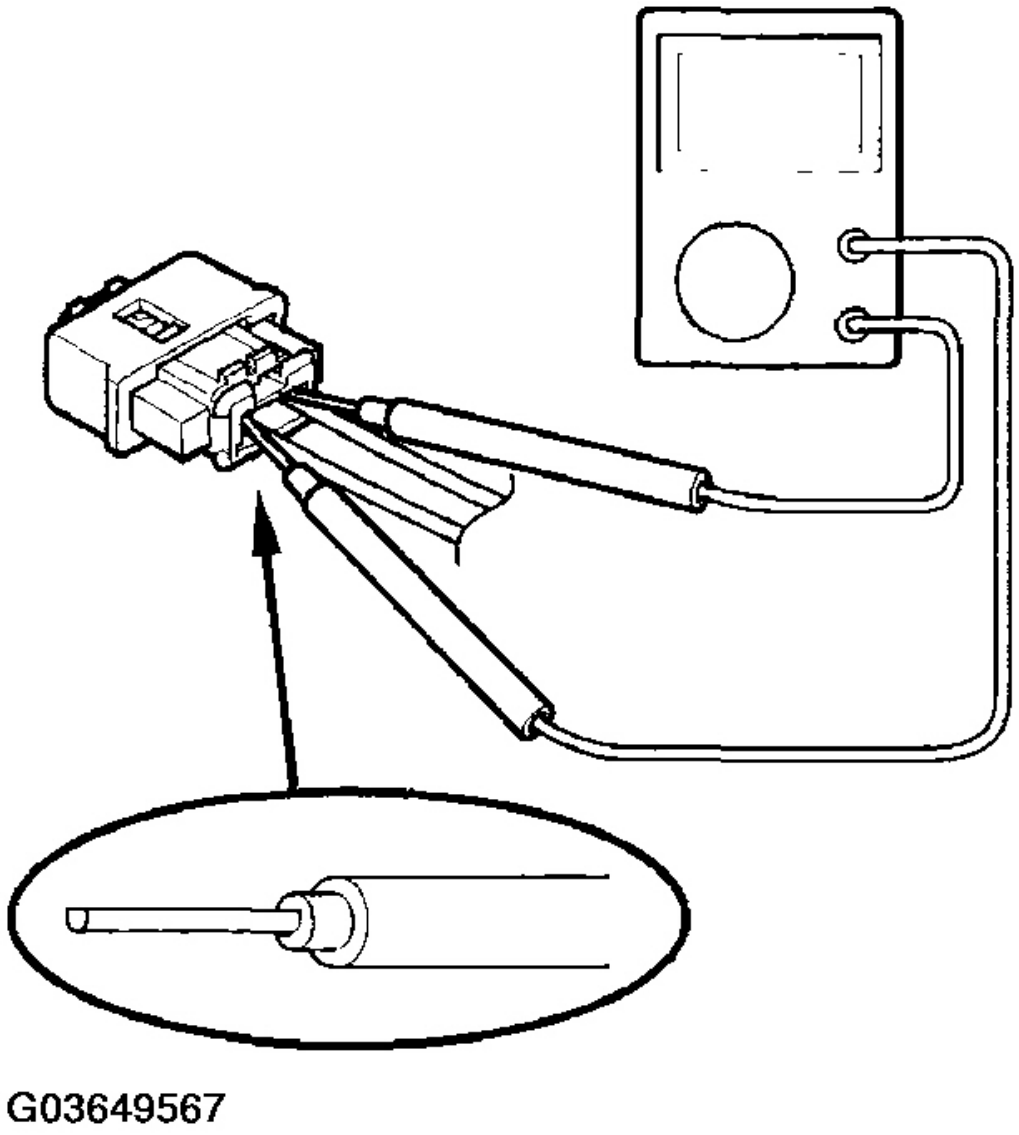


Fig. 13: Do Not Insert Probe Of Tester Into Terminal Side Of Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

- Use a U-shaped probe. Do not insert the probe forcibly.

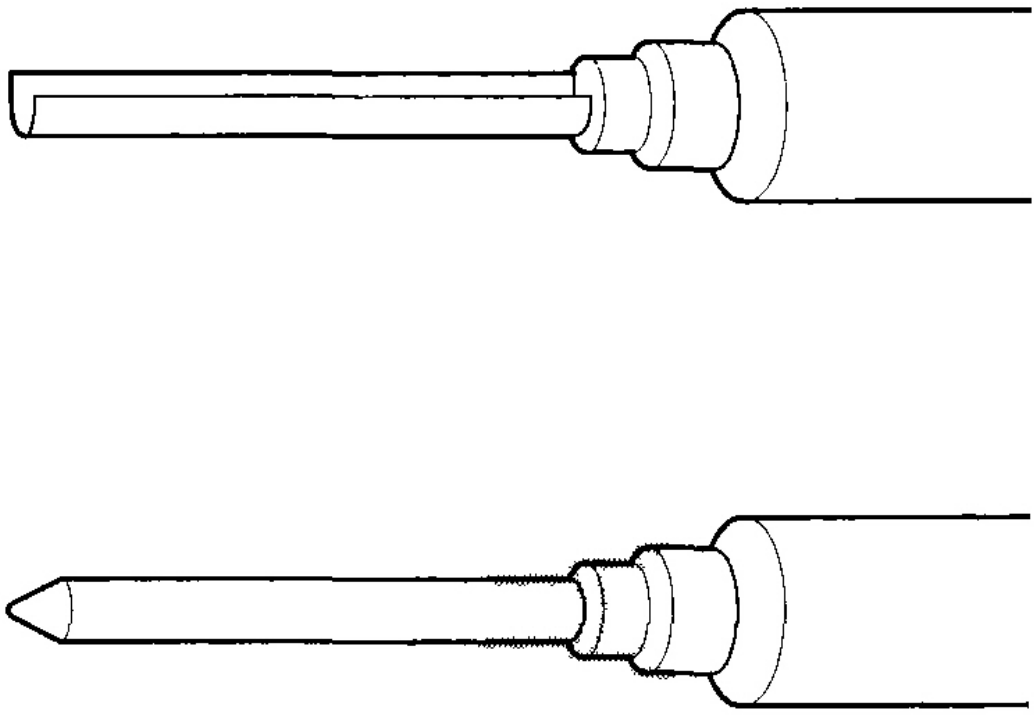


Fig. 14: Using U-Shaped Probe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- Use specified service connectors in troubleshooting. Using improper tools could cause an error in inspection due to poor metal-to-metal contact.

SPRING-LOADED LOCK CONNECTOR

Some SRS system connectors have a spring-loaded lock.

Front Airbag Connectors

Disconnecting

To release the lock, pull the spring-loaded sleeve (A) toward the stop (B) while holding the opposite half of the connector. Then pull the connector halves apart. Be sure to pull on the sleeve and not on the connector.

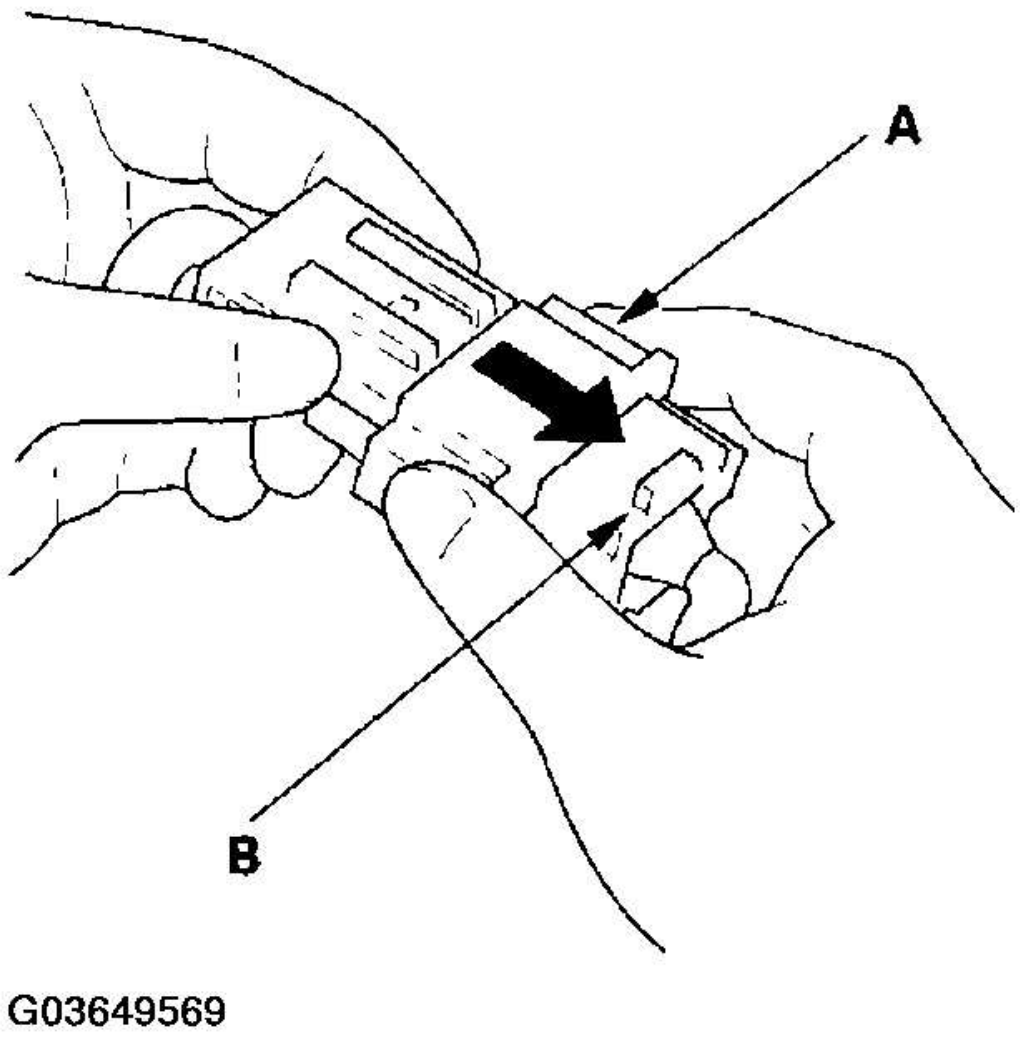


Fig. 15: Disconnecting Front Airbag Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Connecting

1. To reconnect, hold the pawl-side connector, and press on the back of the

sleeve-side connector in the direction shown in **Fig. 17**. As the two connector halves are pressed together, the sleeve (A) is pushed back by the pawl (C). Do not touch the sleeve.

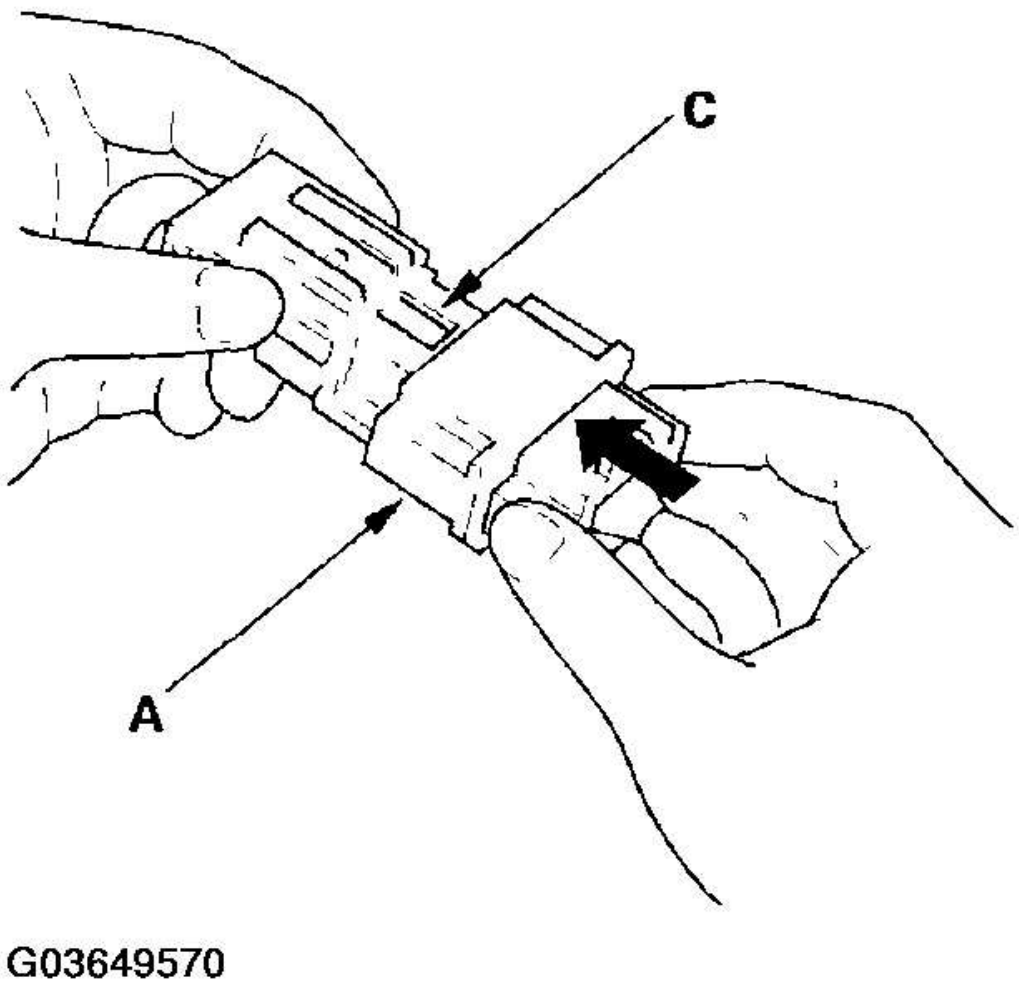
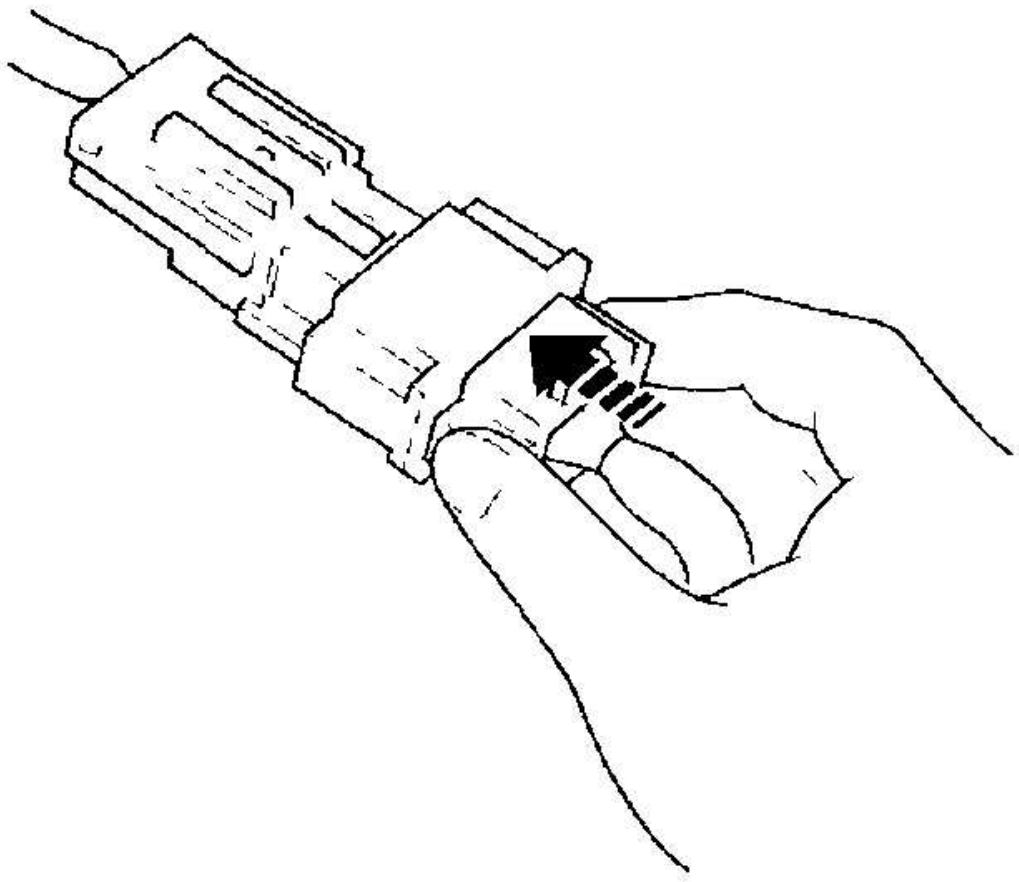


Fig. 16: Holding Pawl-Side Connector And Pressing On Back Of Sleeve-Side Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. When the connector halves are completely connected, the pawl is released, and the spring-loaded sleeve locks the connector.



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Fig. 17: When Connector Is Connected Pawl Is Released And Spring-Loaded Sleeve Locks Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Side Airbag Connector

Disconnecting

To release the lock, pull the spring-loaded sleeve (A) and the slider (B) while holding the opposite half of the connector. Then pull the connector halves apart. Be sure to pull on the sleeve and not on the connector half.

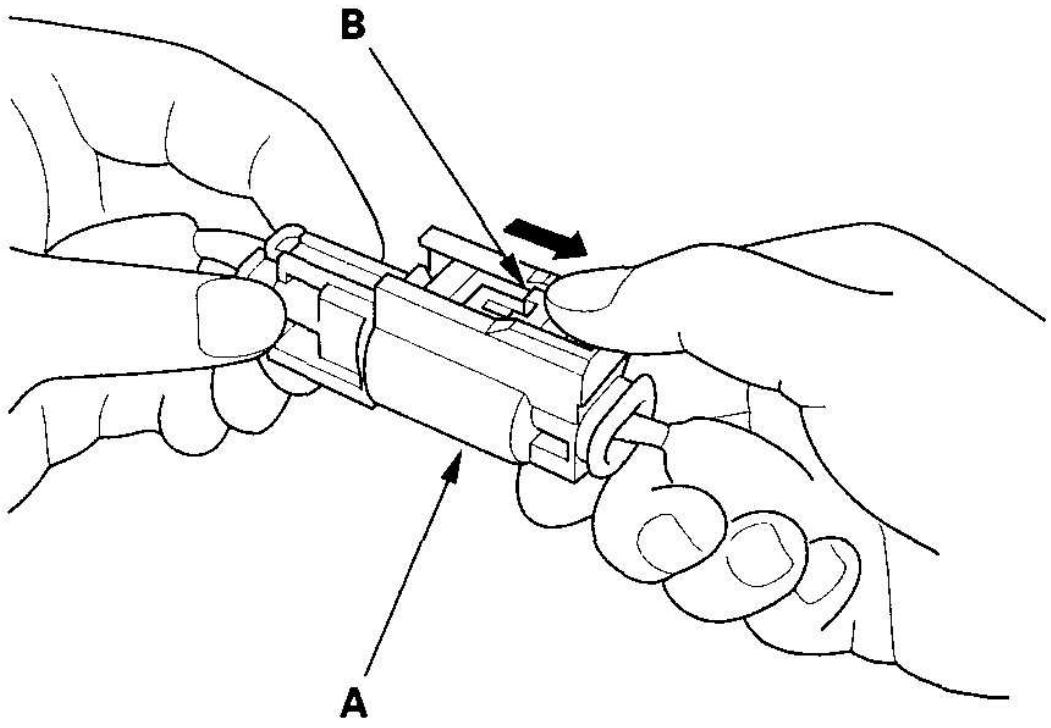


Fig. 18: Disconnecting Side Airbag Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Connecting

Hold both connector halves, and press them firmly together until the projection (C) of the sleeve-side connector clicks.

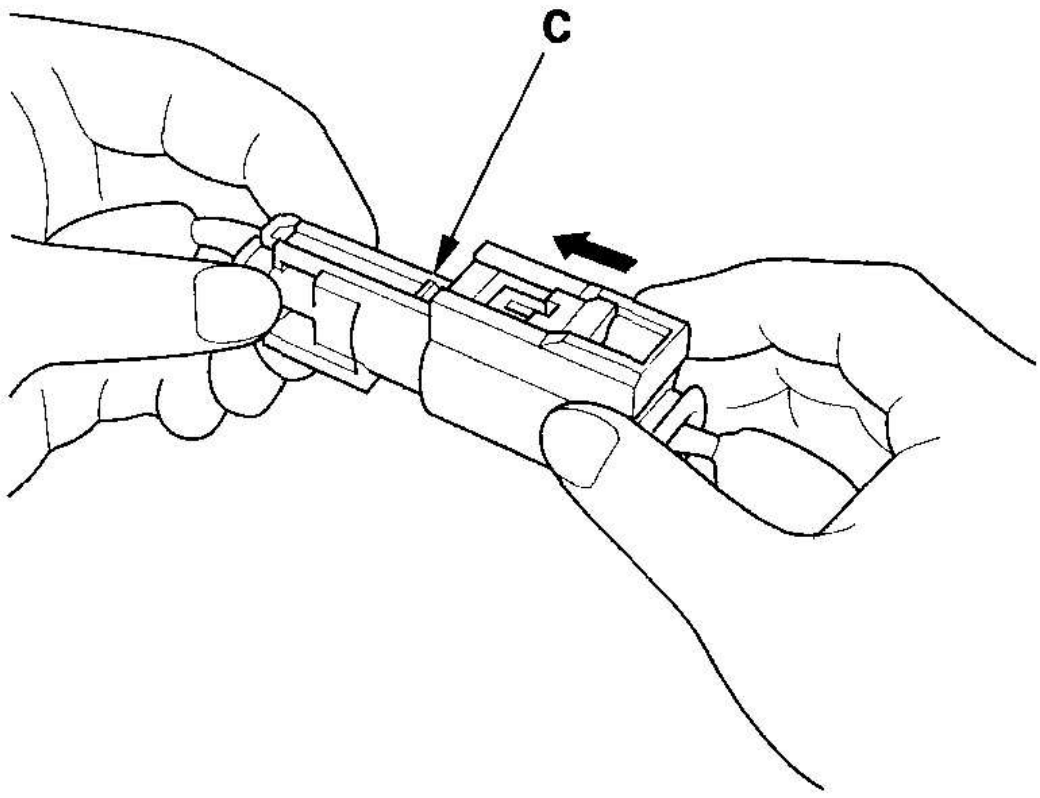


Fig. 19: Connecting Side Airbag Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REOPENING THE SRS UNIT CIRCUIT FOR DIAGNOSIS

NOTE:

- **To prevent damage of the connector cavity, insert the SRS short canceller straight into the cavity from the terminal side.**
- **Do not use the special tool if it is damaged.**
- **Make sure to remove the special tool before reconnecting.**

When SRS unit connectors A, B, or C are disconnected, a short circuit is created in

the connector by its own function to prevent airbag deployment. The circuit may need to be opened when diagnosis is performed on the circuit.

Insert the SRS short canceller (No. 070AZ-SAA0100, short canceller) in the specified cavities when it is necessary to keep the circuit open for diagnosis.

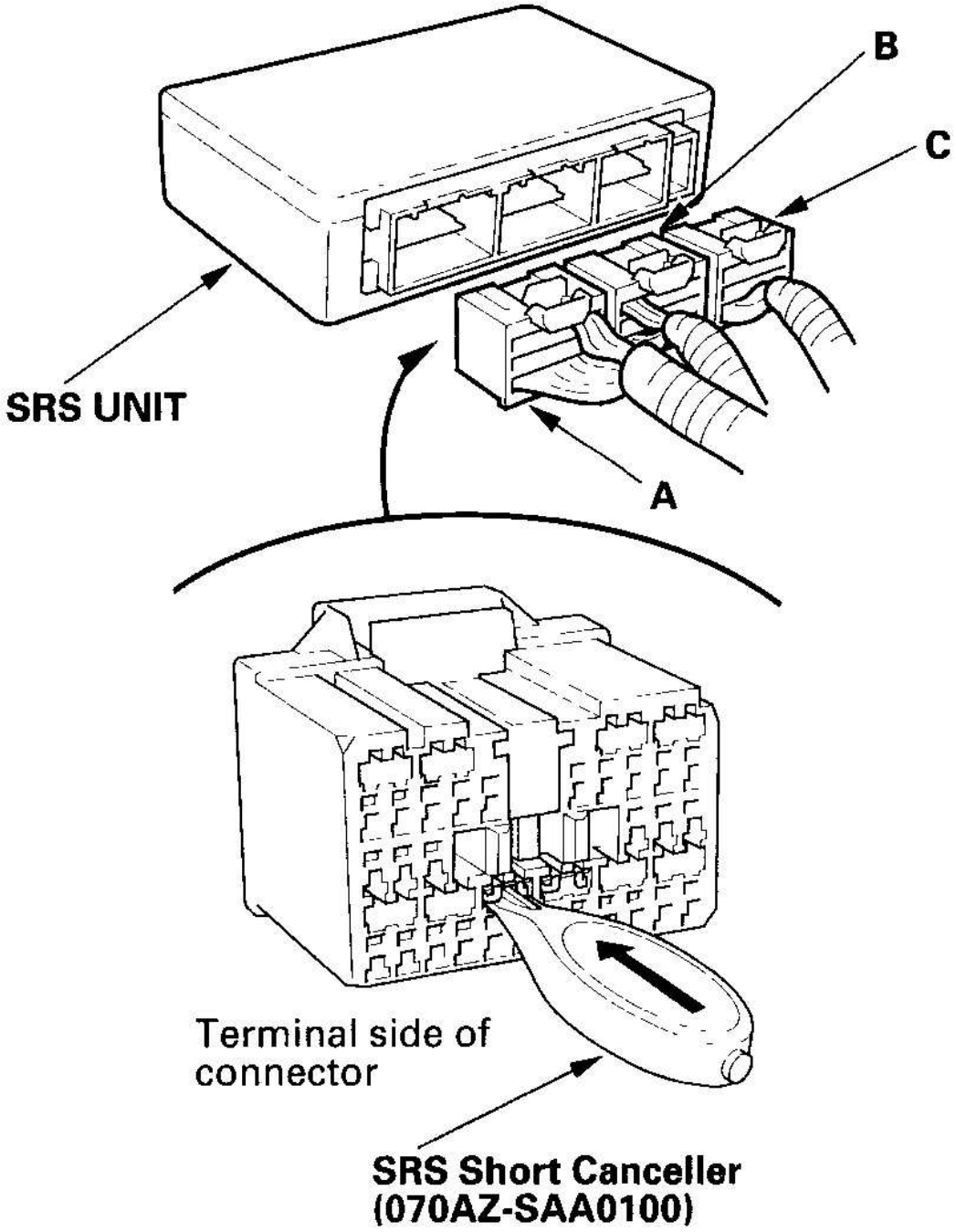


Fig. 20: Inserting SRS Short Canceller In Specified Cavities
Courtesy of AMERICAN HONDA MOTOR CO., INC.

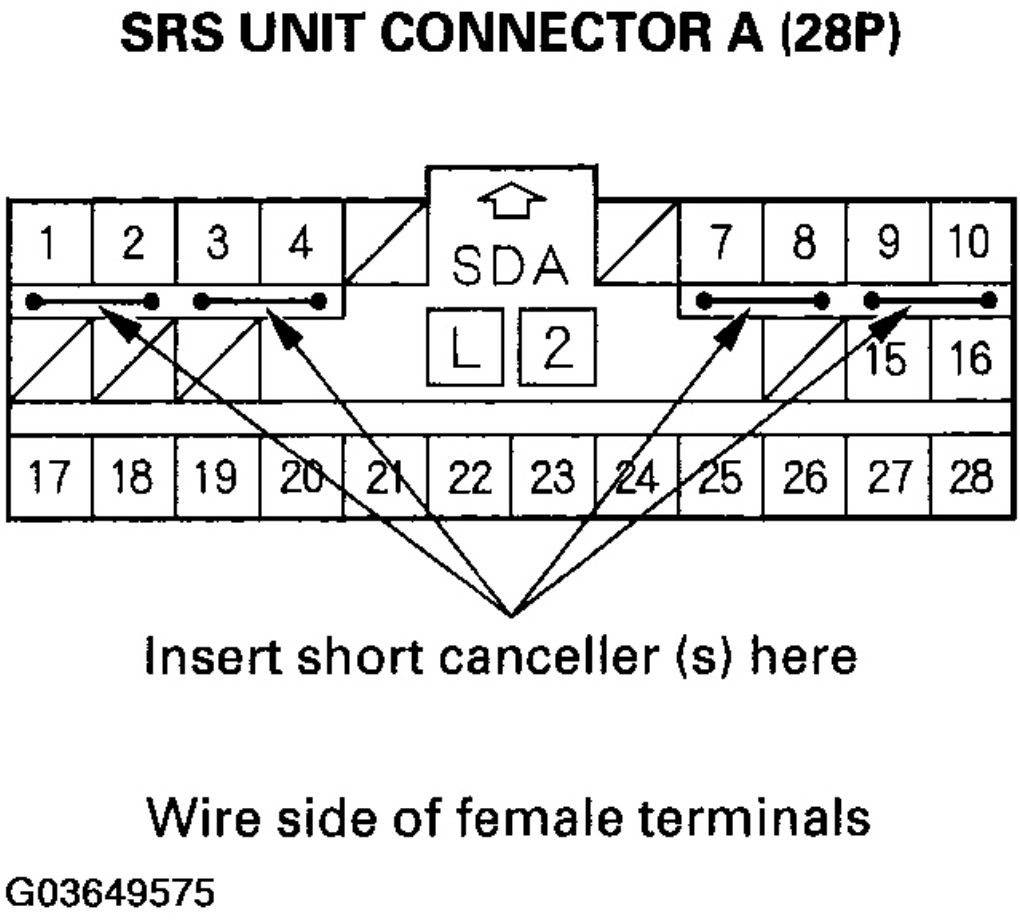


Fig. 21: Identifying SRS Unit Connector A 28P
Courtesy of AMERICAN HONDA MOTOR CO., INC.

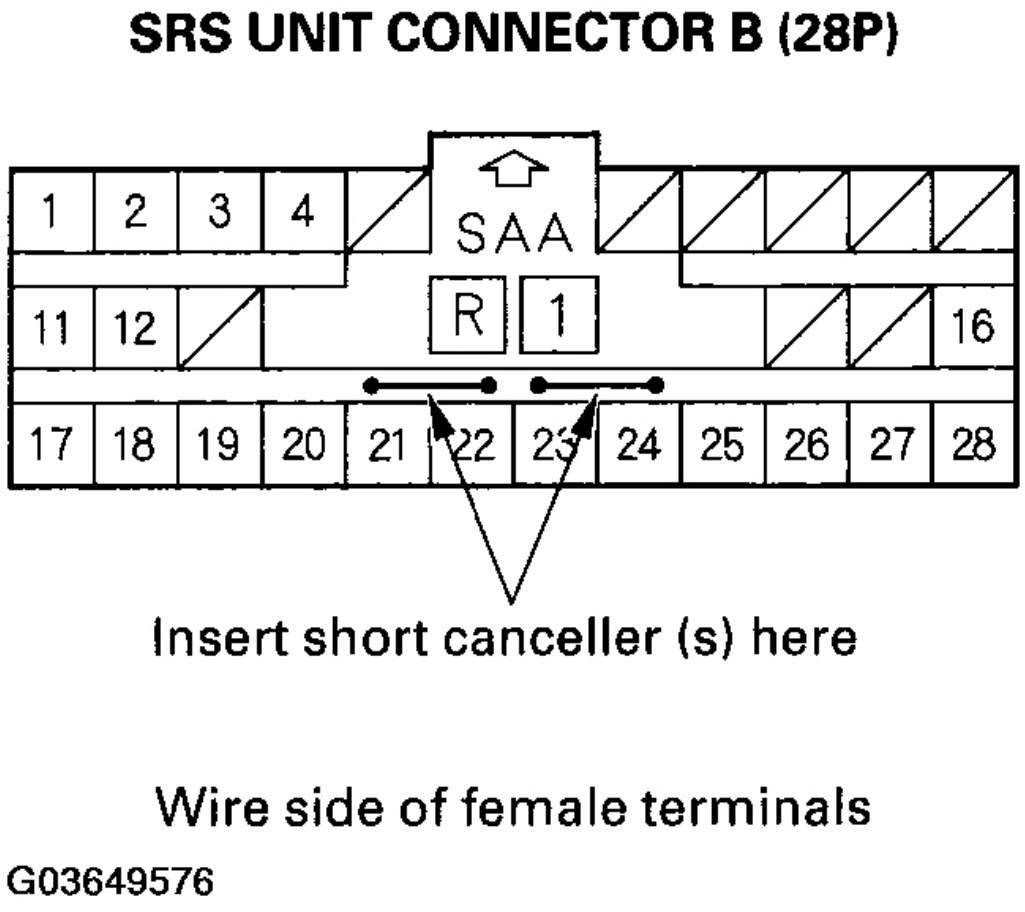


Fig. 22: Identifying SRS Unit Connector B 28P
Courtesy of AMERICAN HONDA MOTOR CO., INC.

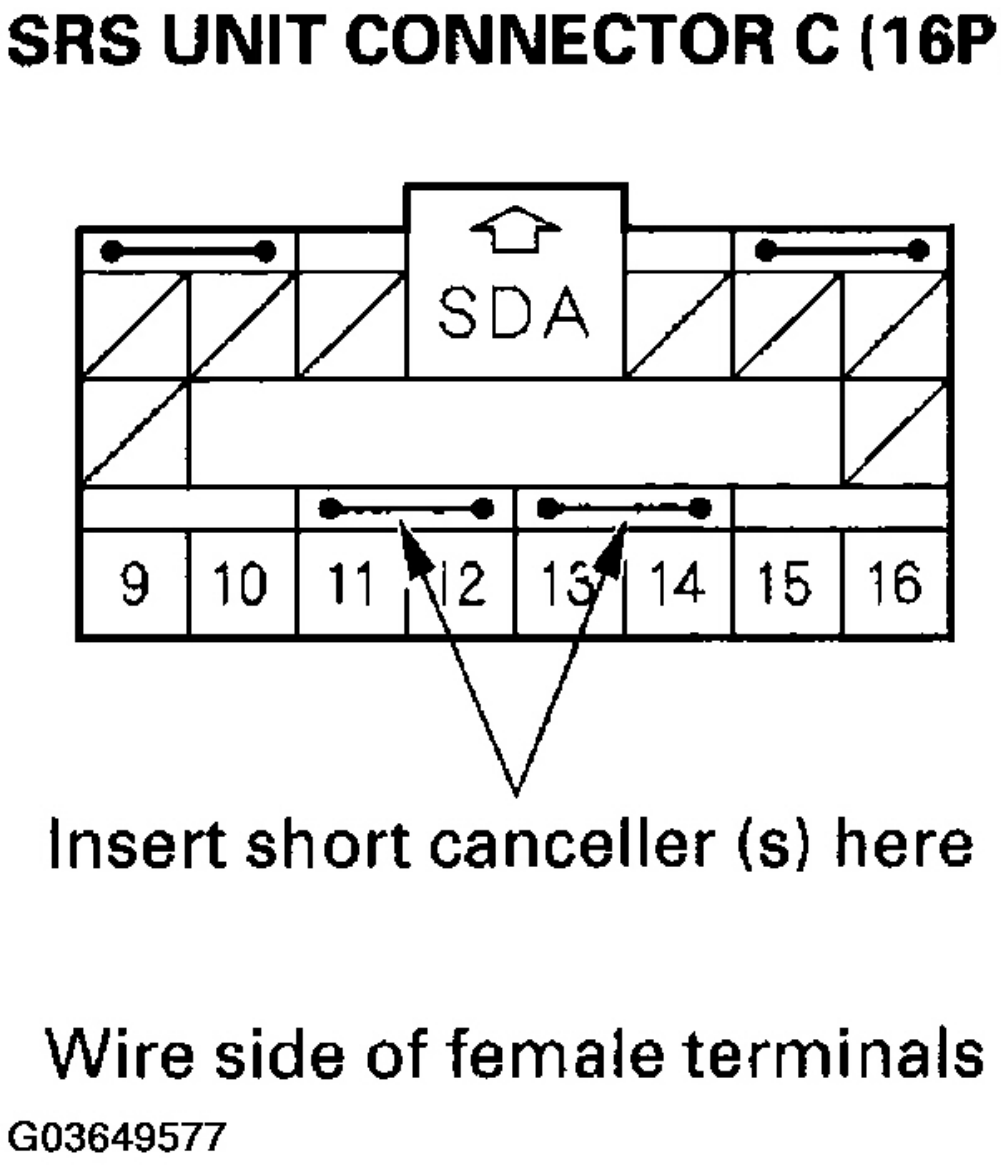


Fig. 23: Identifying SRS Unit Connector C 16P
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BACKPROBING SPRING-LOADED LOCK CONNECTORS

When checking voltage or resistance on this type of connector the first time, you must remove the retainer to insert the tester probe from the wire side.

NOTE: It is not necessary to reinstall the removed retainer; the terminals will stay locked in the connector housing.

To remove the retainer (A), insert a flat-tip screwdriver (B) between the connector body and the retainer, then carefully pry out the retainer. Take care not to break the connector.

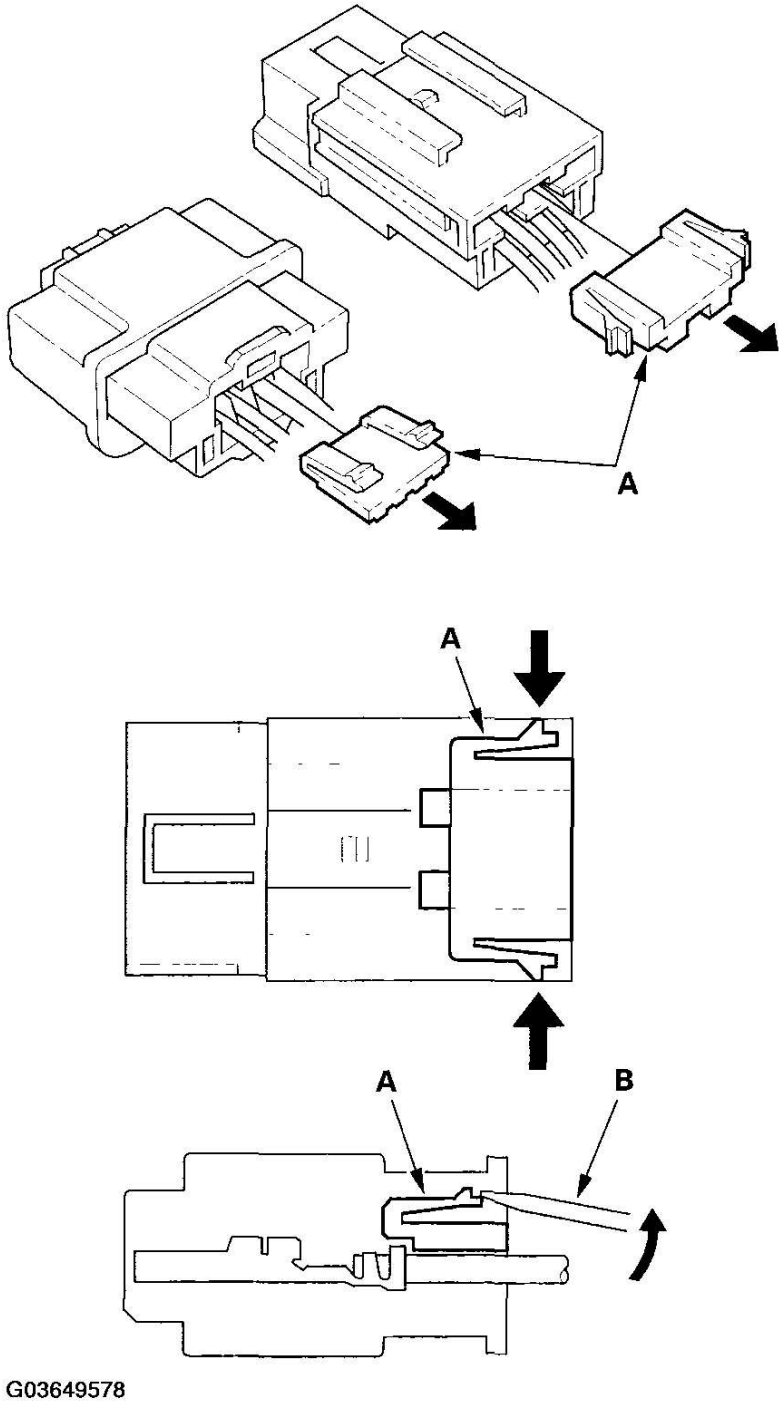


Fig. 24: Removing Retainer Inserting Screwdriver Between Connector Body And Retainer

Courtesy of AMERICAN HONDA MOTOR CO., INC.

SEATS WITH SIDE AIRBAGS

Seats with side airbags have a "SIDE AIRBAG" label on the seat-back. Because the component parts (seat-back cover, cushion, etc.) of seats with and without airbags are different, make sure you install only the correct replacement parts.



Fig. 25: Identifying Side Airbag Label
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- When cleaning, do not saturate the seat with liquid, and do not spray steam on

the seat.

- Do not repair a torn or frayed seat-back cover. Replace the seat-back cover.
- After a collision in which the side airbag was deployed, replace the side airbag with new parts. If the seat-back cushion is split, it must be replaced. If the seat-back frame is deformed, it must be replaced.
- Never put aftermarket accessories on the seat (covers, pads, seat heaters, lights, etc.).

DISCONNECTING SYSTEM CONNECTORS

Turn the ignition switch OFF and disconnect the negative cable from the battery, and wait at least 3 minutes before beginning the following procedures.

- Before disconnecting SRS unit connector B (3) from SRS unit, disconnect both seat belt tensioner 4P connectors (4, 5).
- Before disconnecting the cable reel 4P connector (1), disconnect the driver's airbag 4P connector (2).

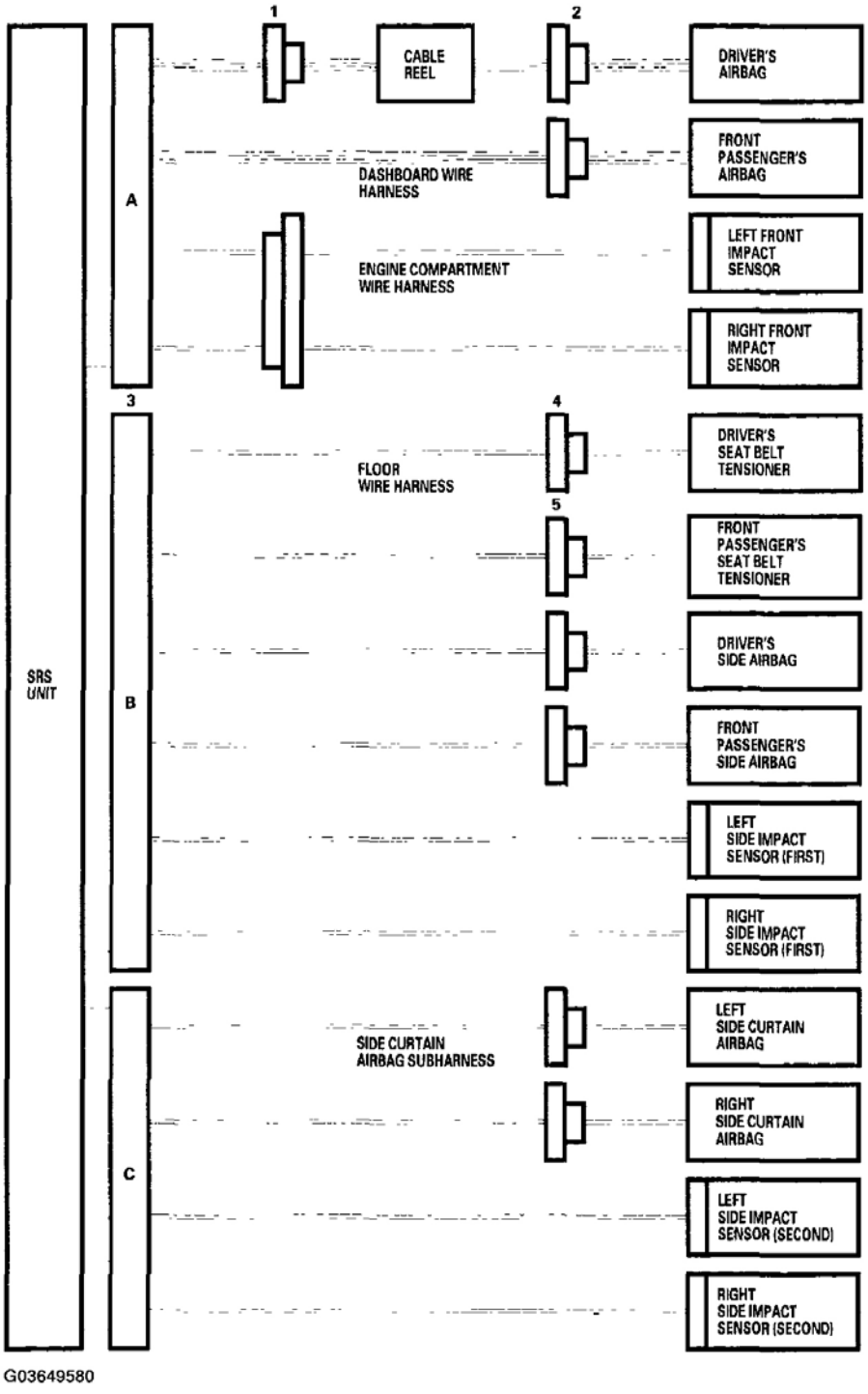


Fig. 26: Disconnecting Negative Cable From Battery
Courtesy of AMERICAN HONDA MOTOR CO., INC.

1. Disconnect the battery negative cable, and wait at least 3 minutes.

Driver's Airbag

2. Remove the access panel (A) from the steering wheel, then disconnect the driver's airbag 4P connector (B) from the cable reel.

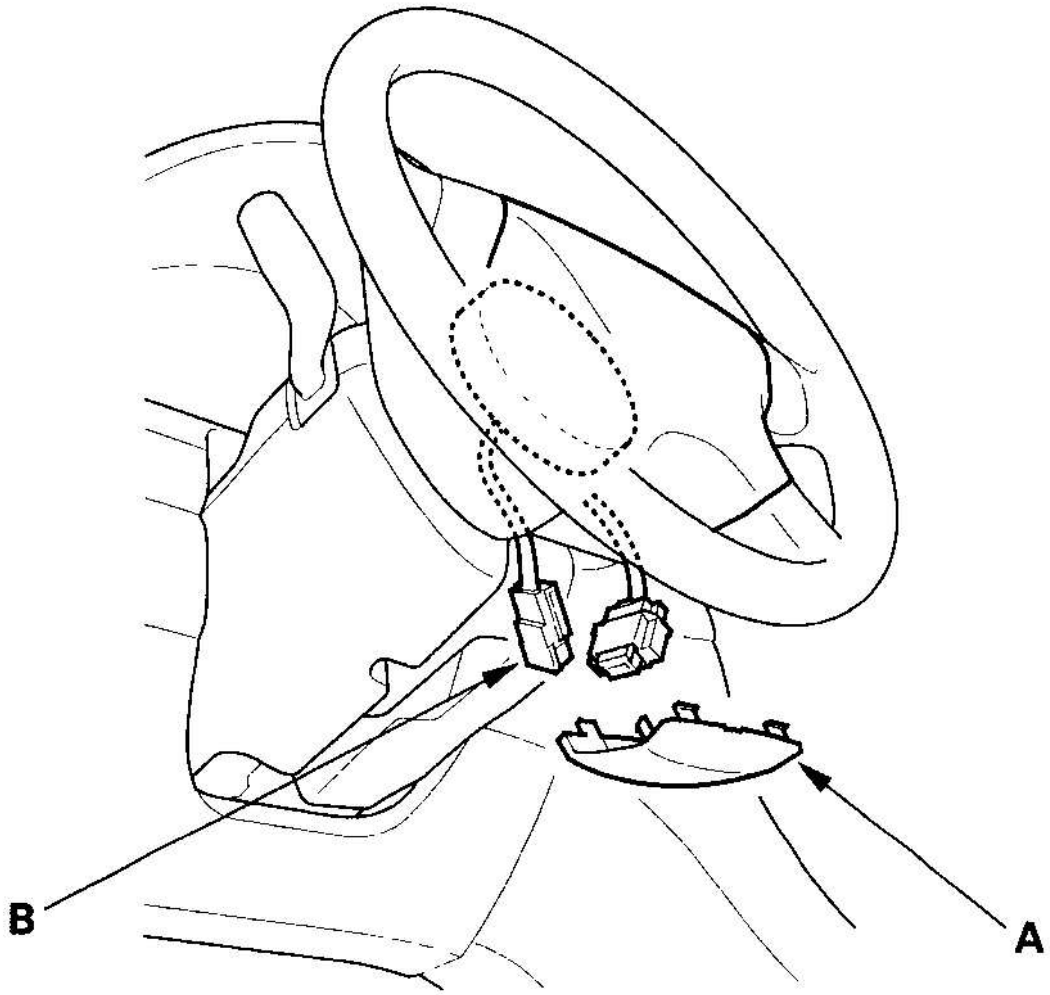


Fig. 27: Removing Access Panel From Steering Wheel (Driver's Airbag)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Front Passenger's Airbag

3. Remove the glove box, then disconnect the front passenger's airbag 4P connector (A) from the dashboard wire harness.

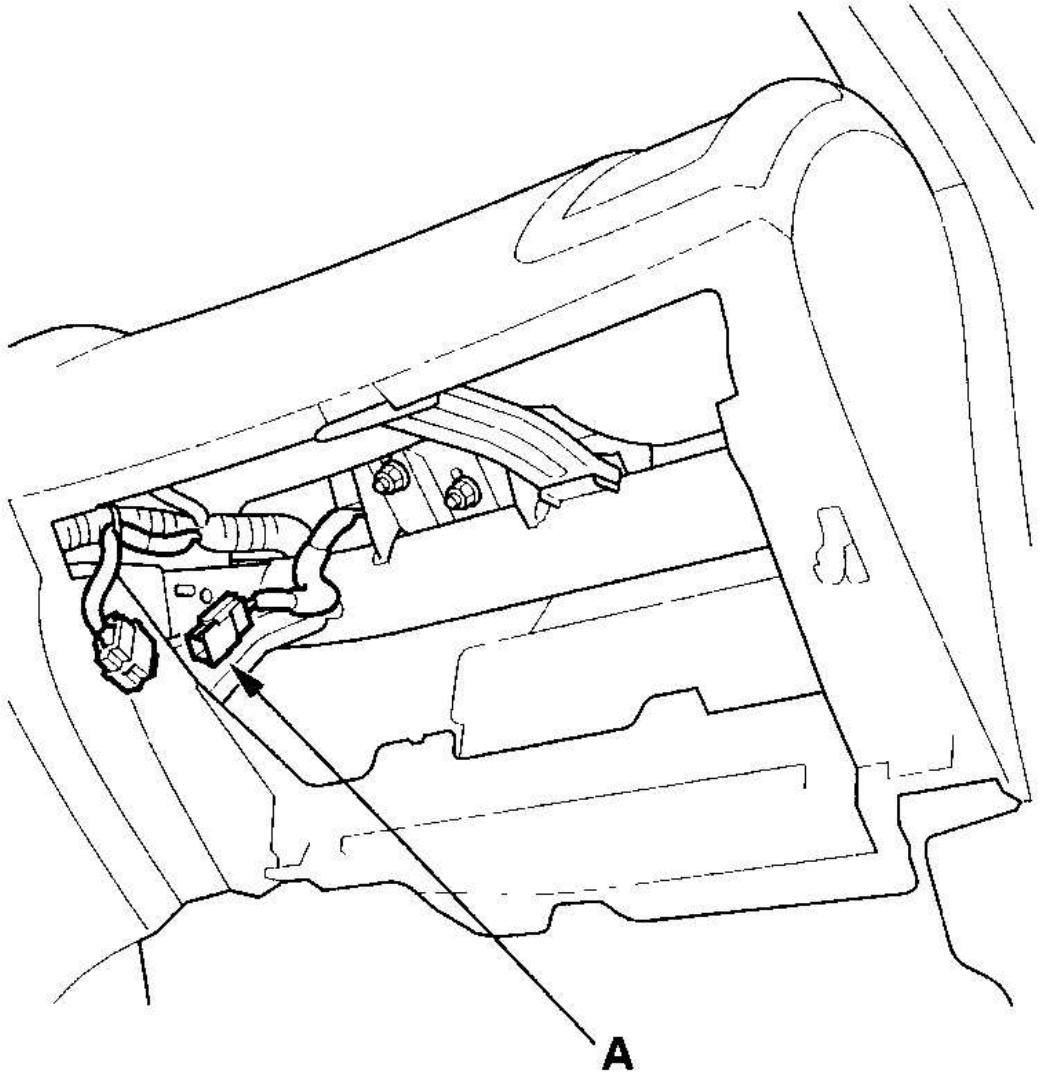
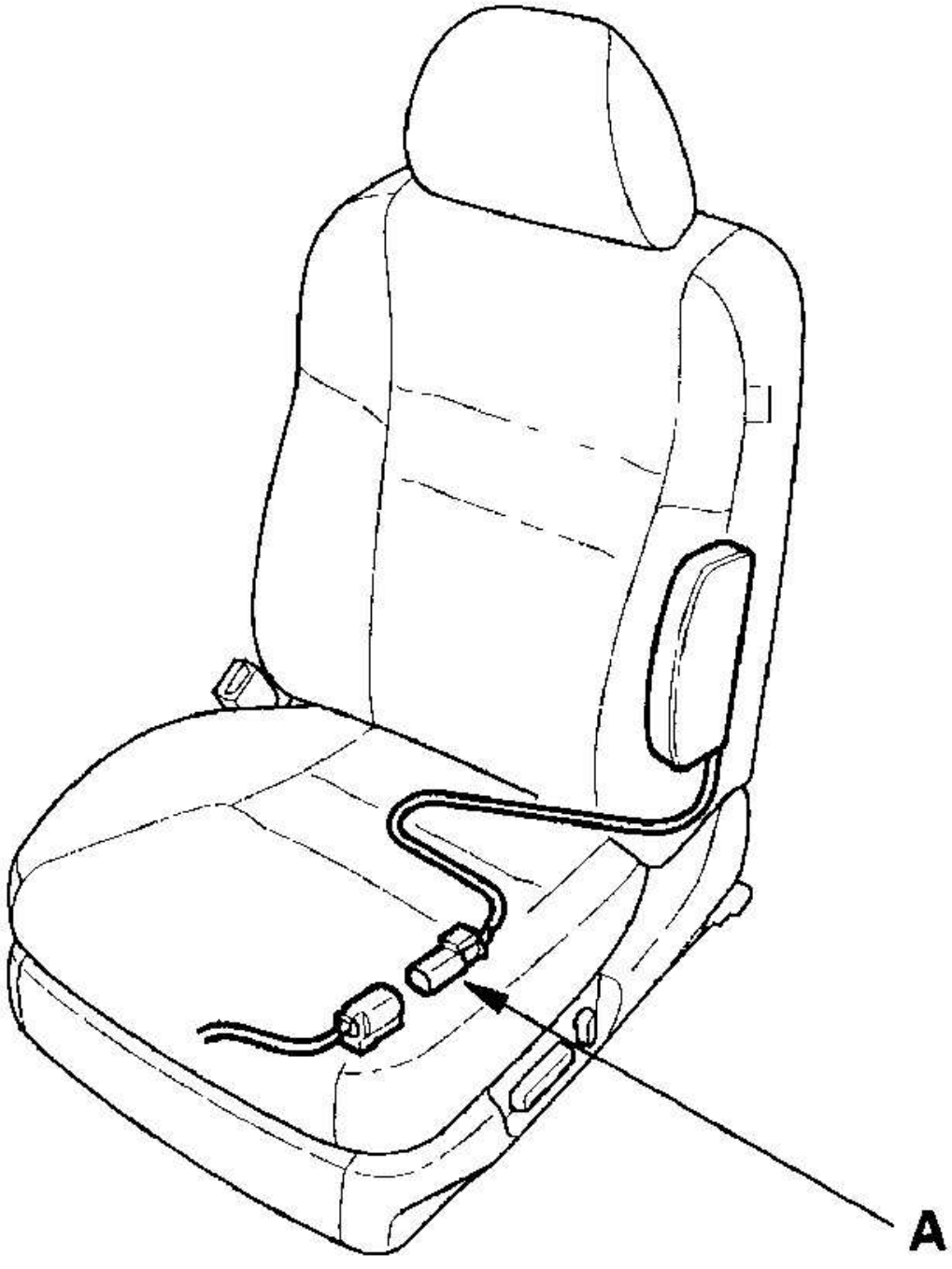


Fig. 28: Disconnecting Front Passenger's Airbag 4P Connector From Dashboard Wire Harness (Front Passenger's Airbag)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Side Airbag

4. Disconnect both side airbag 2P connectors (A) from the floor wire harness.



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Fig. 29: Disconnecting Side Airbag 2P Connectors From Floor Wire Harness (Side Airbag)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Side Curtain Airbag

5. Remove the headliner (see **HEADLINER REMOVAL/INSTALLATION**).
6. Remove the antenna coil (see **WINDOW ANTENNA COIL REPLACEMENT**).
7. Disconnect both side curtain airbag subharness 2P connectors from the side curtain airbags.

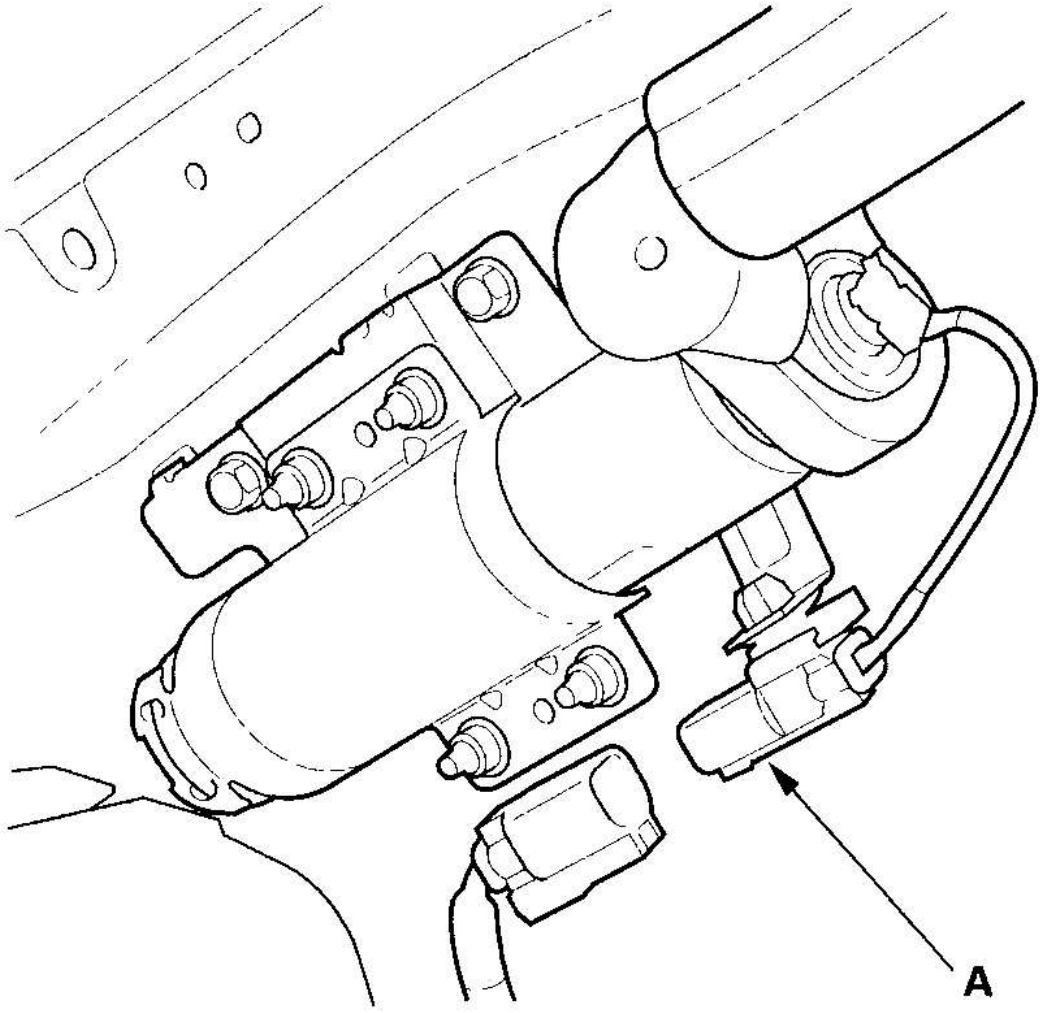


Fig. 30: Disconnecting Side Curtain Airbag Subharness 2P Connectors From Side Curtain Airbags (Side Curtain Airbag)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Seat Belt Tensioner

8. Remove the side trim panel.
9. Remove the middle cross-member gusset.
10. Disconnect both floor wire harness 4P connectors (A) from the seat belt

tensioners.

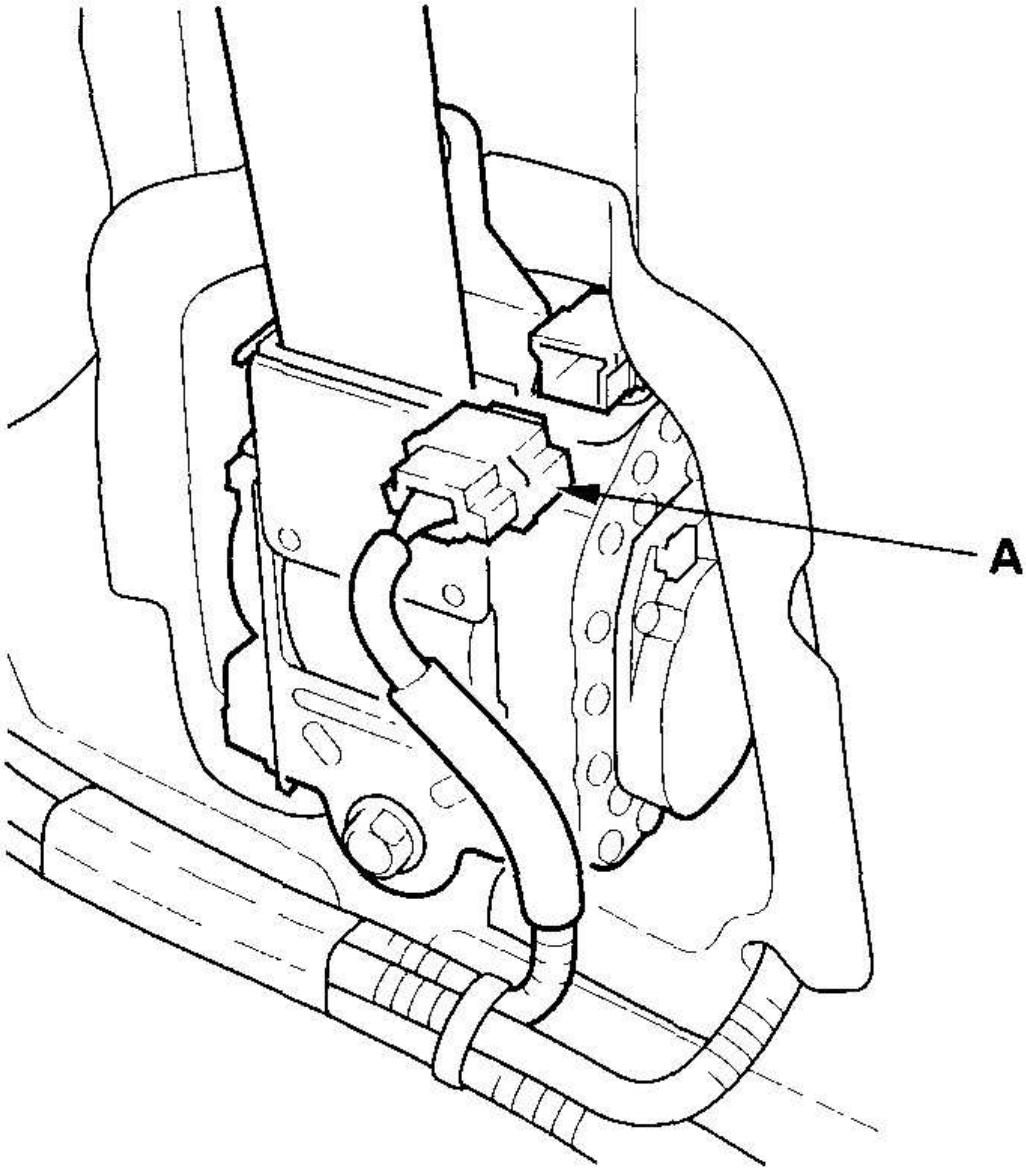


Fig. 31: Disconnecting Floor Wire Harness 4P Connectors From Seat Belt Tensioners (Seat Belt Tensioner)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SRS Unit

11. Remove the center console and front panel.
12. Remove the center console and front panel (see **CENTER CONSOLE REMOVAL/INSTALLATION**).
13. Remove the center pocket (see **CENTER POCKET REMOVAL/INSTALLATION**).
14. Remove the center holder (see **CENTER CONSOLE REMOVAL/INSTALLATION**).
15. Remove the driver's and passenger's center lower cover (see **DASHBOARD/STEERING HANGER BEAM REMOVAL/INSTALLATION**).
16. Disconnect SRS unit connector A, and/or SRS unit connector B, and/or SRS unit connector C from the SRS unit.

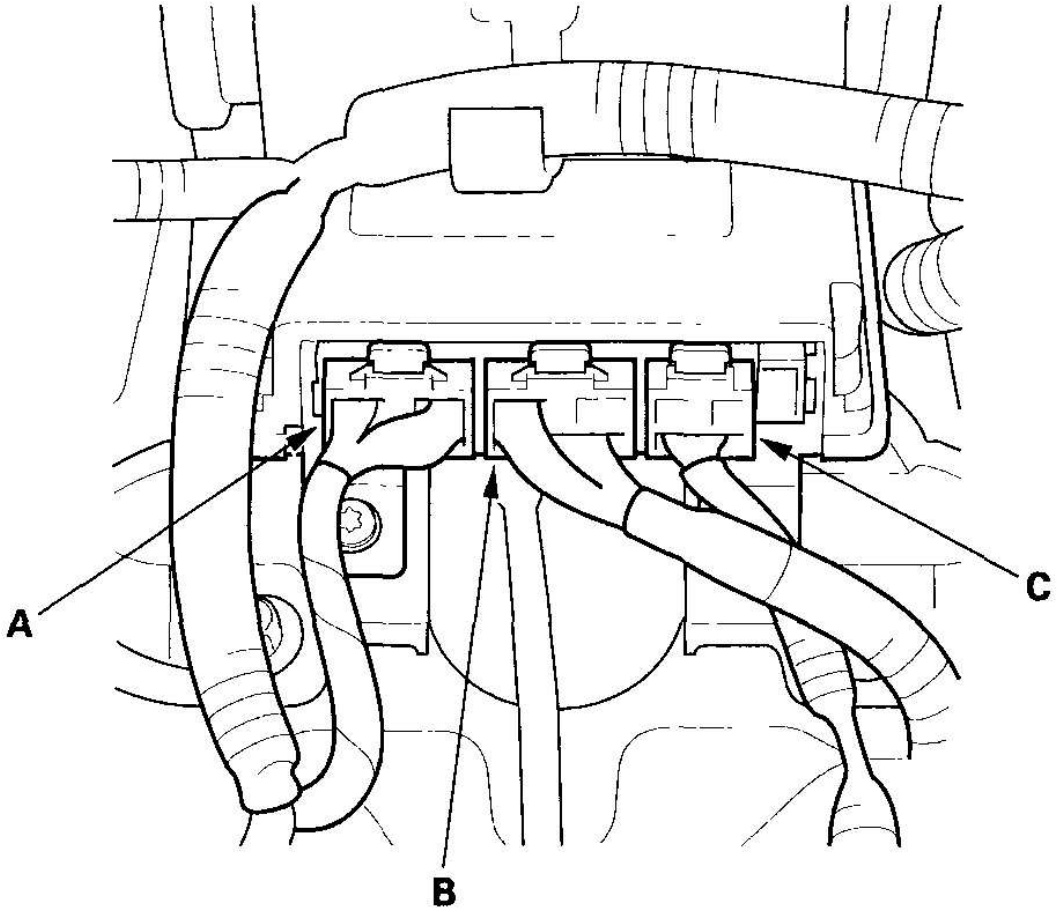


Fig. 32: Disconnecting SRS Unit Connector A, B And C From SRS Unit From SRS Unit (SRS Unit)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

DTC (DIAGNOSTIC TROUBLE CODES)

The self-diagnostic function of the SRS system allows it to locate the causes of system problems and then store this information in memory. For easier troubleshooting, this data can be retrieved via a data link circuit.

- When you turn the ignition switch ON (II), the SRS indicator comes on. If it

goes off after 6 seconds, the system is normal, and is not currently detecting any abnormality.

- If there is an abnormality, the system locates and defines the problem, stores this information in memory, and turns the SRS indicator on. The data will remain in the memory even when the ignition switch is turned off or if the battery is disconnected.
- The data is stored in memory as a diagnostic trouble code (DTC).
- DTCs are either latching or resetting depending on the malfunction. With resetting DTCs, the SRS indicator will go off the next time the ignition switch is turned ON and the system is normal, but the DTC is still stored. With latching DTCs the SRS indicator will not turn OFF until the malfunction is repaired and the DTC is cleared.
- When you connect the HDS to the 16P data link connector (DLC), you can retrieve a more detailed DTC in the Honda Systems "SRS" menu.
- After reading and recording the DTC, proceed with the troubleshooting procedure for that code.

Precautions

- Use only a digital multimeter to check the system. If it's not a Honda multimeter, make sure its output is 10 mA (0.01 A) or less when switched to the smallest value in the ohmmeter range. A tester with a higher output could damage the airbag circuit or cause accidental airbag deployment and possible injury.
- Whenever the ignition switch is ON (II), or has been turned OFF for less than 3 minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.
- Before you remove the SRS harness, disconnect the driver's airbag connector, the front passenger's airbag connector, both side airbag connectors, both side curtain airbag connectors, and both seat belt tensioner connectors.
- Make sure the battery is sufficiently charged. If the battery is dead or low, measuring values won't be correct.
- Do not touch a tester probe to the terminals in the SRS unit or harness connectors, and do not connect the terminals with a jumper wire. Use only the

backprobe set and the HDS. Backprobe spring-loaded lock type connectors correctly.

READING THE DTC

HDS

1. Make sure the ignition switch is OFF.
2. Connect the HDS to the DLC (A).

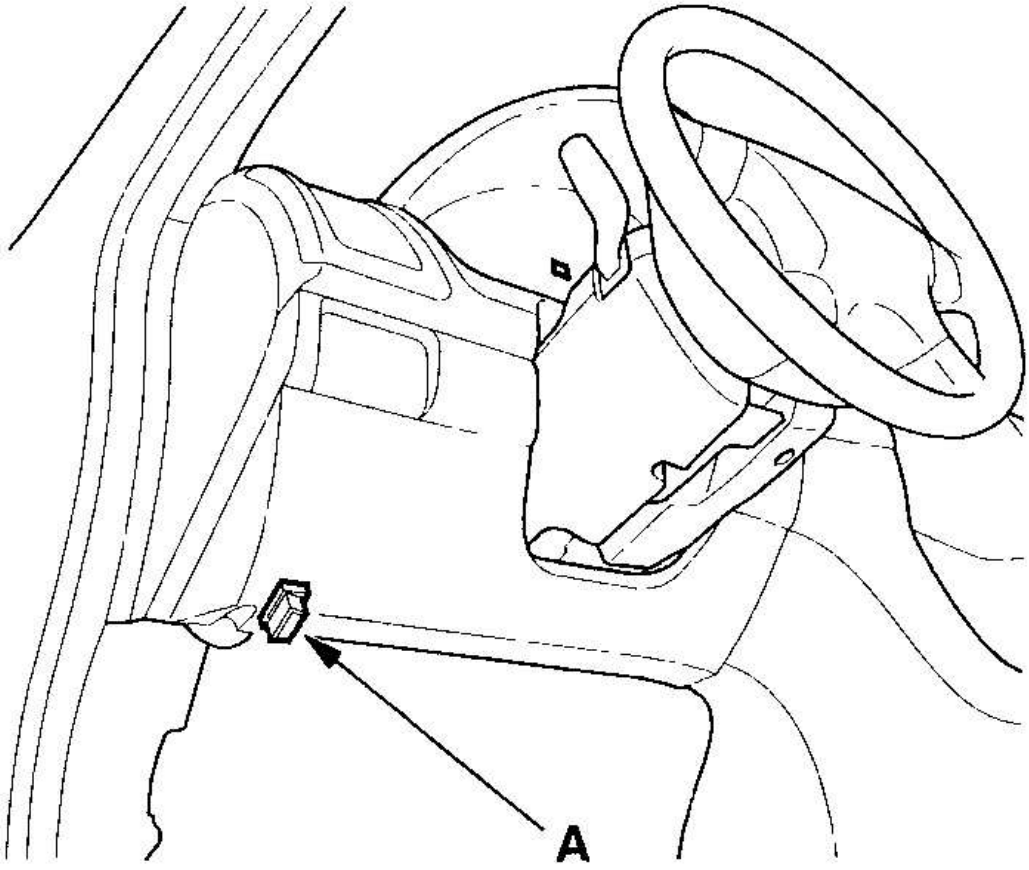


Fig. 33: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch ON (II).
4. Use the HDS to check for DTCs.
5. Read and record the DTC.
6. Turn the ignition switch OFF, and wait for 10 seconds.
7. Disconnect the HDS from the DLC.
8. Do the troubleshooting procedure for the DTC.

ERASING THE DTC MEMORY WITH HDS

1. Make sure the ignition switch is OFF.
2. Connect the HDS to the DLC (A).

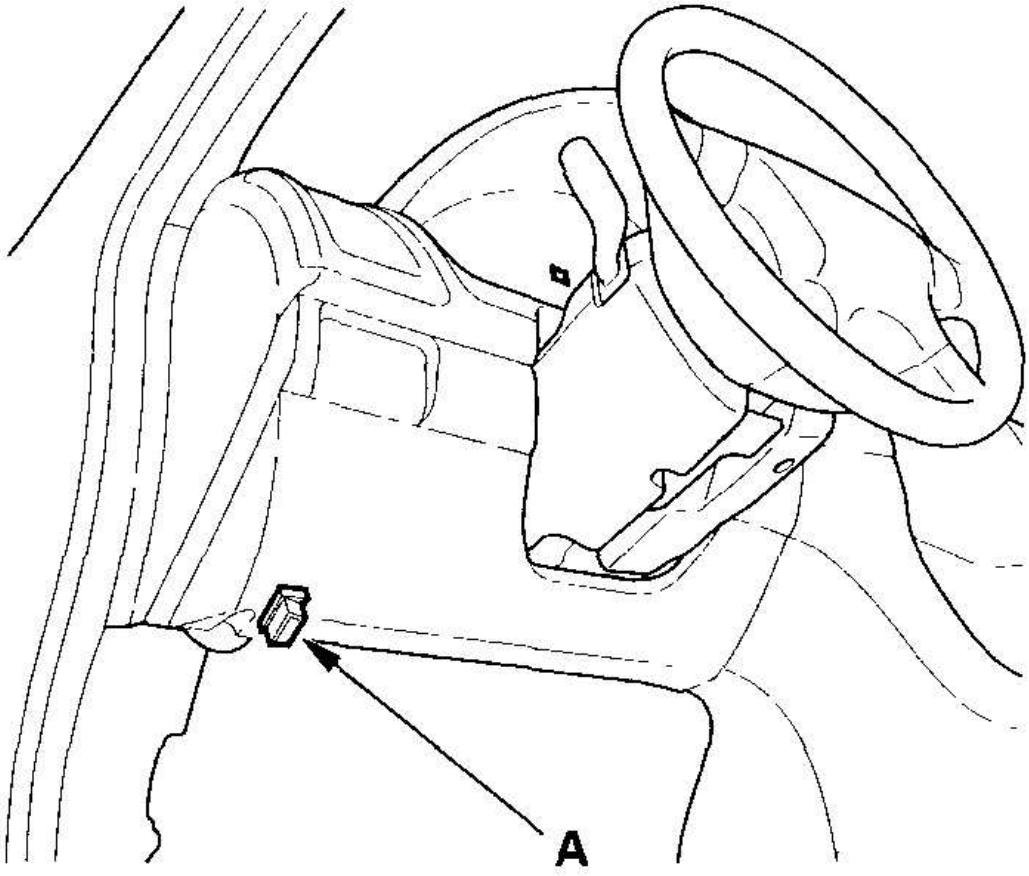


Fig. 34: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch ON (II).
4. In the TEST MODE MENU of the HDS, select DTC CLEAR. This erases the DTC(s).
5. Turn the ignition switch OFF, and wait for 10 seconds.
6. Disconnect the HDS from the DLC.

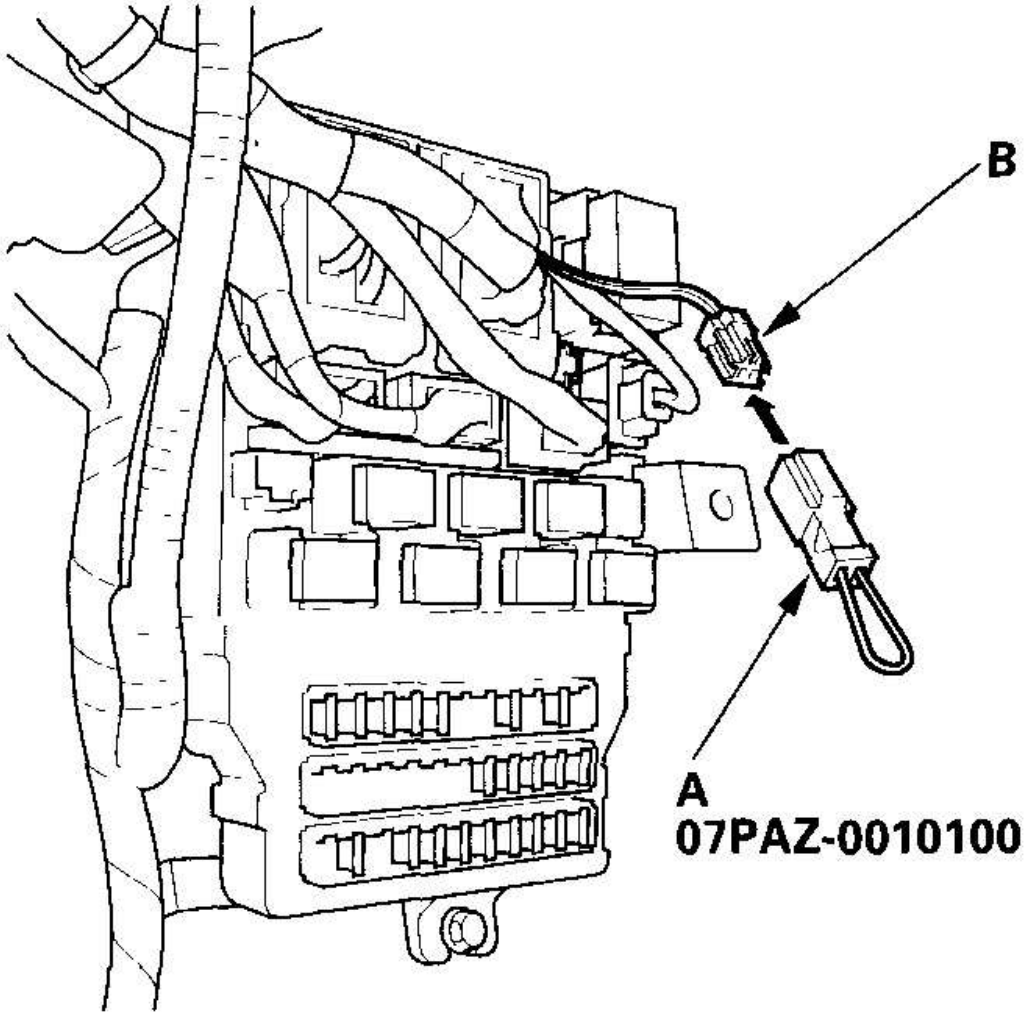
ERASING THE DTC MEMORY WITH MANUAL MODE

Special Tools Required

SCS Service Connector 07PAZ-0010100

To erase the DTC(s) from the SRS unit, use the HDS, or the following procedure.

1. Make sure the ignition switch is OFF.
2. Connect the SCS service connector (A) to the yellow MES 2P connector (B). Do not use a jumper wire.



G03649589

Fig. 35: Connecting SCS Service Connector To Yellow MES 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch ON (II).
4. The SRS indicator comes on for about 6 seconds, and then goes off. Remove the SCS service connector from the MES connector (2P) within 4 seconds after the indicator goes off.
5. The SRS indicator comes on again. Reconnect the SCS service connector to the MES connector (2P) within 4 seconds after the indicator comes on.
6. When the SRS indicator goes off, remove the SCS service connector from the MES connector (2P) within 4 seconds.
7. The SRS indicator blinks two times indicating that the memory has been erased.
8. Turn the ignition switch OFF, and wait for 10 seconds.
9. Turn the ignition switch ON (II) again. If the SRS indicator comes on for 6 seconds, and then goes off, the system is OK.

INITIALIZING THE OPDS/ODS UNIT

When a seat-back cover, seat-back cushion, and/or OPDS/ODS unit is replaced, initialize the OPDS/ODS by following the procedure.

NOTE: A new (uninitialized) OPDS/ODS unit installed with a faulty OPDS sensor can cause DTC 85-71.

1. Erase the DTC memory (see "**ERASING THE DTC MEMORY WITH HDS**").
2. Make sure the front passenger's seat is dry. Set the seat-back in a normal position, and make sure there is nothing on the seat.
3. Make sure the ignition switch is OFF and the MES connector is not shorted.
4. Connect the HDS to the DLC (A).

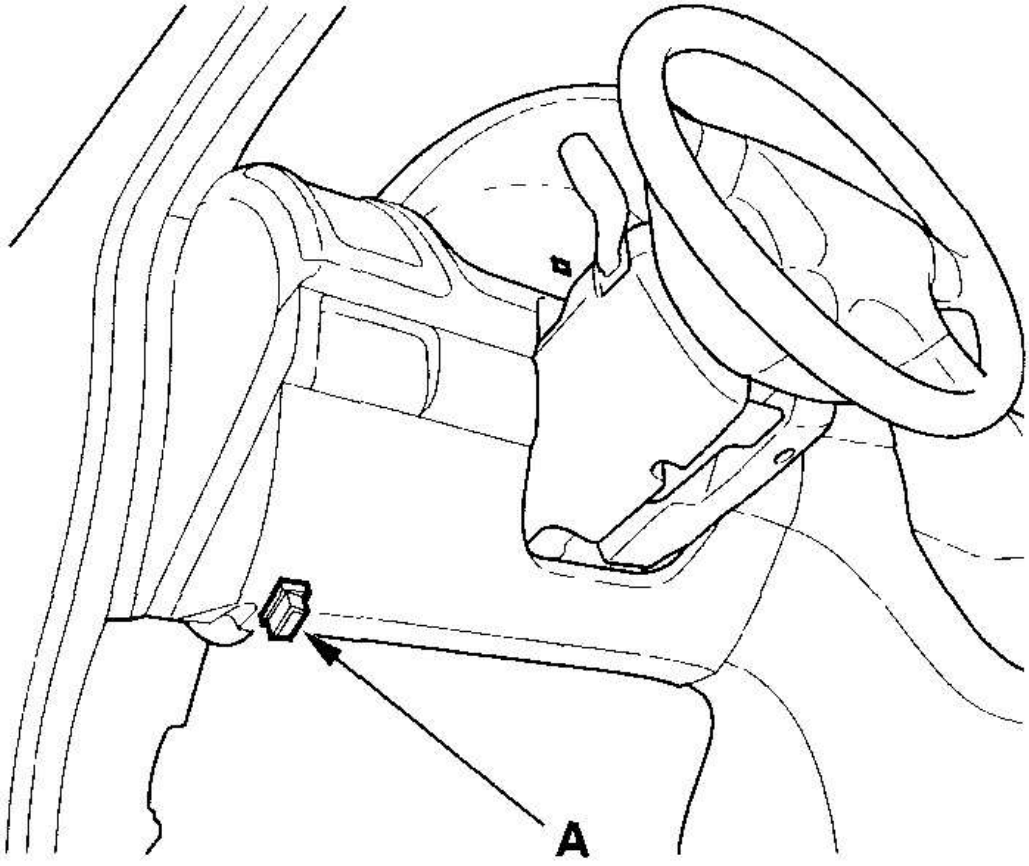


Fig. 36: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Turn the ignition switch ON (II).
6. From the HDS Main Menu, select SRS, then Misc Test, then Adjustments. In the Adjustment Menu, select OPDS/ODS INIT. Follow the screen prompts to initialize the OPDS/ODS.
7. Turn the ignition switch OFF.
8. Disconnect the HDS from the DLC.

NOTE: If the OPDS/ODS system fails to initialize after several

attempts, replace the OPDS sensor and retry. If the OPDS/ODS system continues to fail to initialize, replace the OPDS/ODS unit.

TROUBLESHOOTING INTERMITTENT FAILURES

If there was a malfunction, but it doesn't recur, it will be stored in the memory as an intermittent failure, and the SRS indicator may come on depending on the malfunction detected.

After checking the DTC, troubleshoot as follows:

1. Read the DTC (see "**Reading the DTC**").
2. Erase the DTC memory (see "**ERASING THE DTC MEMORY WITH HDS**").
3. Set the parking brake, then start the engine, and let it idle.
4. The SRS indicator comes on for about 6 seconds and then go off.
5. Shake the wire harness and the connectors, take a test drive (quick acceleration, quick braking, cornering), turn the steering wheel fully left and right, and hold it there for 5 to 10 seconds. If the problem recurs, the SRS indicator will come on.
6. If you can't duplicate the intermittent failure, the system is OK at this time.

CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06-07 MODEL)

When the front passenger's weight sensors and/or weight sensor unit ('04-05 models) or calibrate the ODS unit ('06-07 model) is replaced, calibrate the weight sensor unit ('04-05 models) or calibrate the ODS unit ('06-07 model) by following the procedure.

While calibrating the front passenger's weight sensor unit ('04-05 models) or calibrate the ODS unit ('06-07 model), observe these precautions:

- Make sure all components of the front passenger's seat are correctly installed.
- Make sure all optional parts such as seat covers are removed.

- Make sure nothing is on or under the front passenger's seat.
- Make sure there is nothing in the front passenger's seat-back pocket.
- Keep the windows closed.
- Perform all calibration procedures except test driving in the service bay.
- Make sure the vehicle is on level ground.
- Keep the A/C and the heater off.
- Do not touch the front passenger's seat until you drive the vehicle.
- Do not expose the front passenger's seat to sudden temperature changes.

1. Position the front passenger's seat to the rear most position, and adjust the recliner to the most forward position. Do not move from these positions.
2. Connect the HDS to the data link connector (DLC) (A).

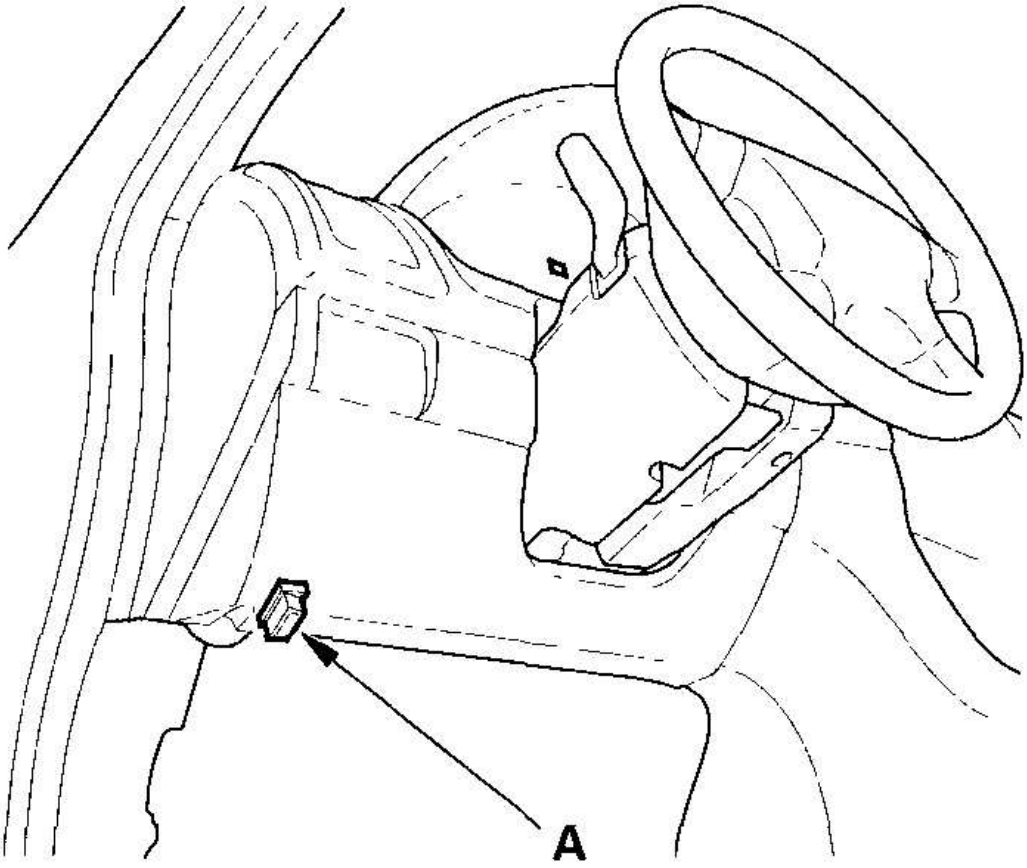


Fig. 37: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Drive the vehicle, and accelerate to 20 mph (36 km/h), then stop on level ground.
4. From the Main Menu, select SRS, then Seat Weight Sensor, then Misc Test, then Adjustments. Select "SWS INIT" in the Adjustment Menu and follow the prompts until the initialization operation has been completed.

OPERATION CHECK OF THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR OPERATE THE ODS UNIT ('06-07 MODEL)

The operation of the front passenger's weight sensor unit ('04-05 models) or operate the ODS unit ('06-07 model) must be checked after any of these actions.

- Replacement of front passenger's seat component(s) (except weight sensor unit and/or weight sensors)
- After a vehicle collision

Pre-Operation Check Set-up

- Make sure all the components of the front passenger's seat are correctly installed.
- Position the front passenger's seat to the rear most position.
- Adjust the seat recline to the forward most position.
- Do not move the seat from this position.
- Make sure nothing is on or under the front passenger's seat.
- Make sure there is nothing in the front passenger's seat-back pocket.
- Keep the windows closed.
- Perform all calibration procedures except test-driving in the service bay.
- Make sure the vehicle is on level ground.
- Turn the heater and the A/C off.
- Do not touch the passenger's seat during the calibration.
- Do not expose the front passenger's seat to sudden temperature changes.

After Replacing Front Passenger's Seat Component(s)

1. Connect the HDS to the data link connector (DLC) (A).

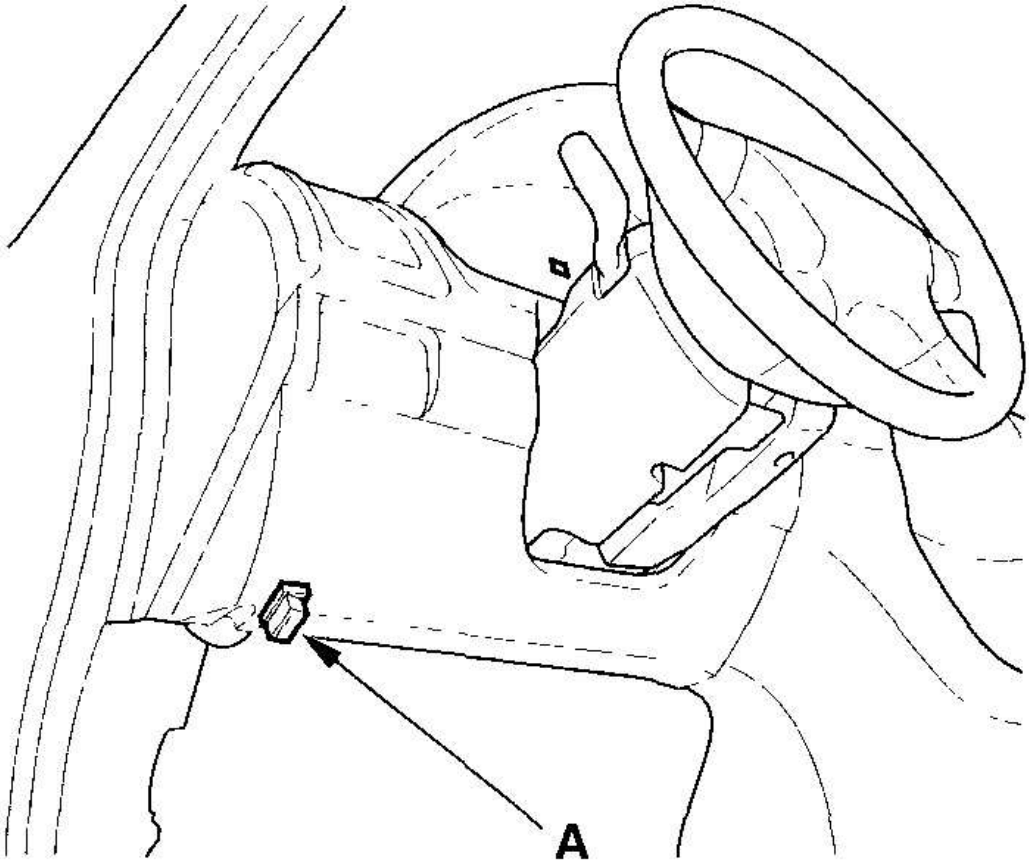


Fig. 38: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Drive the vehicle, accelerate to 20 mph (36 km/h), then stop on level ground.
3. From the HDS Main Menu, select SRS, then Seat Weight Sensor, then Misc Test, then Inspection. Select "SEAT OUTPUT CHK." in the HDS Inspection Menu. The weight (T0) of the front passenger's seat is recorded by the HDS.

OPERATION CHECK OF THE DRIVER'S SEAT POSITION SENSOR

The driver's seat position sensor must be checked after any of these actions.

- Driver's seat position sensor replacement
- Cover plate (front side of driver's seat slide rail) replacement

1. Make sure the driver's seat is at its full forward position.
2. Make sure the ignition switch is OFF (0).
3. Connect the HDS to the DLC (A).

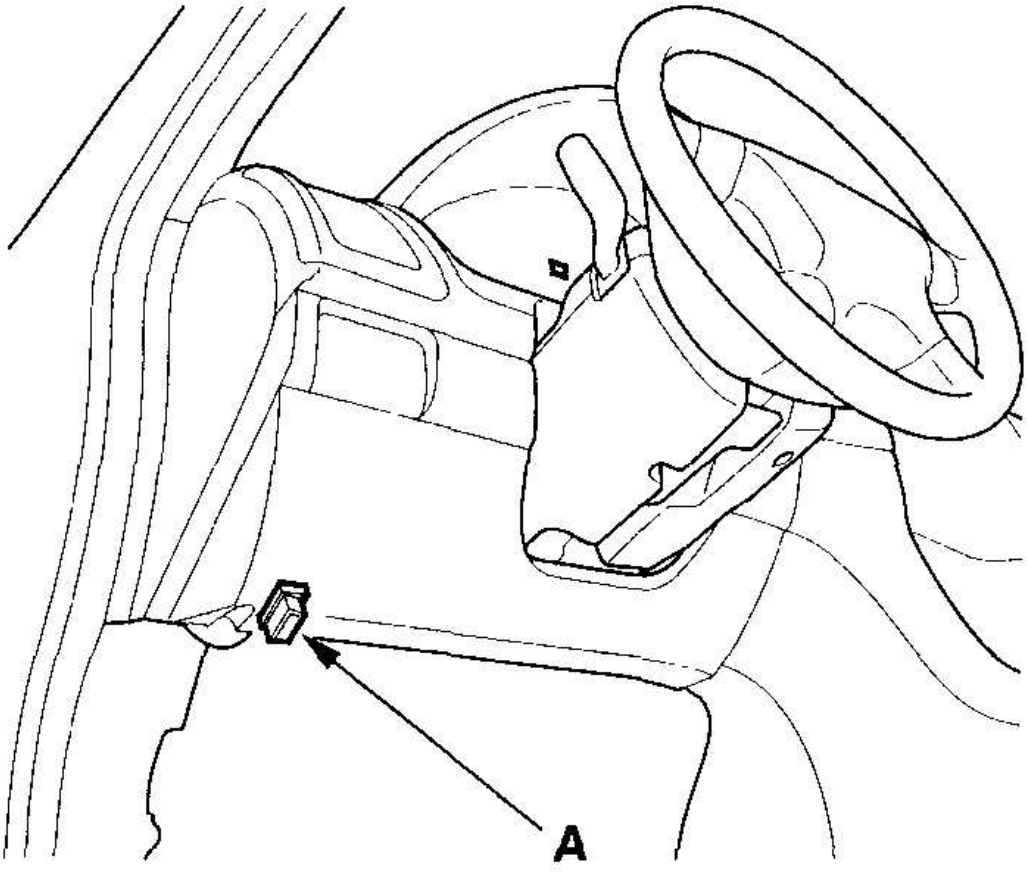


Fig. 39: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Turn the ignition switch ON (II).

5. From the HDS Main Menu, select SRS, then Data List, then All Data List, then SPS.
6. Move the seat all the way forward. Using a piece of tape, mark a line on the seat's outer cover where the front riser cover meets the seat riser. The SPS should read "NEAR."

NOTE: It takes a few seconds for the HDS to display changes, so wait about 5 seconds between each move.

Move the seat back in small increments (about 5 mm) until the SPS reads "NOT NEAR." The seat should be approximately 25 mm from the front.

If the SPS data does not work as described above, check the driver's seat position sensor or the cover plate for damage, and replace parts as needed.

7. Turn the ignition switch OFF, and disconnect the HDS from the DLC.

DTC TROUBLESHOOTING INDEX

NOTE: Before looking up DTC's in the DTC troubleshooting index, verify the manufacturer of the SRS unit. The DTC's are different from manufacturer to manufacturer.

DTC TROUBLESHOOTING INDEX - TRW SRS UNIT ('03-05 MODELS)

DTC	Latch(1)	Reset(2)	Detection Item	Notes
11-1x		X	Open or increased resistance in driver's airbag first inflator	(see **DTC 11-1X (11-10 TO 11-19,11-1A TO 11-1F): OPEN IN DRIVER'S AIRBAG FIRST INFLATOR**)
11-3x		X	Short to another wire or decreased resistance in driver's airbag first	(see **DTC 11-3X (11-30 TO 11-39,11-3A TO 11-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN**

			inflator	**DRIVER'S AIRBAG FIRST INFLATOR**)
11-4x		X	Open or increased resistance in driver's airbag second inflator	(see **DTC 11-4X (11-40 TO 11-49,11-4A TO 11-4F): OPEN IN DRIVER'S AIRBAG SECOND INFLATOR**)
11-6x		X	Short to another wire or decreased resistance in driver's airbag second inflator	(see **DTC 11-6X (11-60 TO 11-69,11-6A TO 11-6F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN DRIVER'S AIRBAG SECOND INFLATOR**)
11-8x	X		Short to power in driver's airbag first inflator	(see **DTC 11-8X (11-80 TO 11-89, 11-8A TO 11-8F): SHORT TO POWER IN DRIVER'S AIRBAG FIRST INFLATOR**)
11-9x	X		Short to ground in driver's airbag first inflator	(see **DTC 11-9X (11-90 TO 11-99, 11-9A TO 11-9F): SHORT TO GROUND IN DRIVER'S AIRBAG FIRST INFLATOR**)
11-Ax	X		Short to power in driver's airbag second inflator	(see **DTC 11-AX (11-A0 TO 11-A9, 11-AA TO 11-AF): SHORT TO POWER IN DRIVER'S AIRBAG SECOND INFLATOR**)
11-Bx	X		Short to ground in driver's airbag second inflator	(see **DTC 11-BX (11-B0 TO 11-B9, 11-BA TO 11-BF): SHORT TO GROUND IN DRIVER'S AIRBAG SECOND INFLATOR**)

12-1x		X	Open or increased resistance in front passenger's airbag first inflator	(see **DTC 12-1X (12-10 TO 12-19, 12-1A TO 12-1F): OPEN IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR**)
12-3x		X	Short to another wire or decreased resistance in front passenger's airbag first inflator	(see **DTC 12-3X (12-30 TO 12-39, 12-3A TO 12-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR**)
12-4x		X	Open or increased resistance in front passenger's airbag second inflator	(see **DTC 12-4X (12-40 TO 12-49, 12-4A TO 12-4F): OPEN IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR**)
12-6x		X	Short to another wire or decreased resistance in front passenger's airbag second inflator	(see **DTC 12-6X (12-60 TO 12-69, 12-6A TO 12-6F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR**)
12-8x	X		Short to power in front passenger's airbag first inflator	(see **DTC 12-8X (12-80 TO 12-89, 12-8A TO 12-8F): SHORT TO POWER IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR**)
12-9x	X		Short to ground in front passenger's airbag first inflator	(see **DTC 12-9X (12-90 TO 12-99, 12-9A TO 12-9F): SHORT TO GROUND IN FRONT PASSENGER'S AIRBAG FIRST**

				INFLATOR)
12-Ax	X		Short to power in front passenger's airbag second inflator	(see **DTC 12-AX (12-A0 TO 12-A9, 12-AA TO 12-AF): SHORT TO POWER IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR**)
12-Bx	X		Short to ground in front passenger's airbag second inflator	(see **DTC 12-BX (12-B0 TO 12-B9, 12-BA TO 12-BF): SHORT TO GROUND IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR**)
21-1x		X	Open or increased resistance in driver's seat belt tensioner	(see **DTC 21-1X (21-10 TO 21-19, 21-1A TO 21-1F): OPEN IN DRIVER'S SEAT BELT TENSIONER**)
21-3x		X	Short to another wire or decreased resistance in driver's seat belt tensioner	(see **DTC 21-3X (21-30 TO 21-39, 21-3A TO 21-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN DRIVER'S SEAT BELT TENSIONER**)
21-8x	X		Short to power in driver's seat belt tensioner	(see **DTC 21-8X (21-80 TO 21-89, 21-8A TO 21-8F): SHORT TO POWER IN DRIVER'S SEAT BELT TENSIONER**)
21-9x	X		Short to ground in driver's seat belt tensioner	(see **DTC 21-9X (21-90 TO 21-99, 21-9A TO 21-9F): SHORT TO GROUND IN DRIVER'S SEAT BELT TENSIONER**)

22-1x		X	Open or increased resistance in front passenger's seat belt tensioner	(see **DTC 22-1X (22-10 TO 22-19, 22-1A TO 22-1F): OPEN IN FRONT PASSENGER'S SEAT BELT TENSIONER**)
22-3x		X	Short to another wire or decreased resistance in front passenger's seat belt tensioner	(see **DTC 22-3X (22-30 TO 22-39, 22-3A TO 22-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S SEAT BELT TENSIONER**)
22-8x	X		Short to power in front passenger's seat belt tensioner	(see **DTC 22-8X (22-80 TO 22-89, 22-8A TO 22-8F): SHORT TO POWER IN FRONT PASSENGER'S SEAT BELT TENSIONER**)
22-9x	X		Short to ground in front passenger's seat belt tensioner	(see **DTC 22-9X (22-90 TO 22-99, 22-9A TO 22-9F): SHORT TO GROUND IN FRONT PASSENGER'S SEAT BELT TENSIONER**)
31-1x		X	Open or increased resistance in driver's side airbag inflator	(see **DTC 31-1X (31-10 TO 31-19, 31-1A TO 31-1F): OPEN IN DRIVER'S SIDE AIRBAG INFLATOR**)
31-3x		X	Short to another wire or decreased resistance in driver's side airbag inflator	(see **DTC 31-3X (31-30 TO 31-39, 31-3A TO 31-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN DRIVER'S SIDE AIRBAG INFLATOR**)

31-8x	X		Short to power in driver's side airbag inflator	(see **DTC 31-8X (31-80 TO 31-89, 31-8A TO 31-8F): SHORT TO POWER IN DRIVER'S SIDE AIRBAG INFLATOR**)
31-9x	X		Short to ground in driver's side airbag inflator	(see **DTC 31-9X (31-90 TO 31-99, 31-9A TO 31-9F): SHORT TO GROUND IN DRIVER'S SIDE AIRBAG INFLATOR**)
32-1x		X	Open or increased resistance in front passenger's side airbag inflator	(see **DTC 32-1X (32-10 TO 32-19, 32-1A TO 32-1F): OPEN IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR**)
32-3x		X	Short to another wire or decreased resistance in front passenger's side airbag inflator	(see **DTC 32-3X (32-30 TO 32-39, 32-3A TO 32-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR**)
32-8x	X		Short to power in front passenger's side airbag inflator	(see **DTC 32-8X (32-80 TO 32-89, 32-8A TO 32-8F): SHORT TO POWER IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR**)
32-9x	X		Short to ground in front passenger's side airbag inflator	(see **DTC 32-9X (32-90 TO 32-99, 32-9A TO 32-9F): SHORT TO GROUND IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR**)
				(see **DTC 33-1X (33-10 TO**

33-1x		X	Open or increased resistance in left side curtain airbag inflator	**33-19, 33-1A TO 33-1F): OPEN OR INCREASED RESISTANCE IN LEFT SIDE CURTAIN AIRBAG INFLATOR**)
33-3x		X	Short to another wire or decreased resistance in left side curtain airbag inflator	(see **DTC 33-3X (33-30 TO 33-39, 33-3A TO 33-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN LEFT SIDE CURTAIN AIRBAG INFLATOR**)
33-8x	X		Short to power in left side curtain airbag inflator	(see **DTC 33-8X (33-80 TO 33-89, 33-8A TO 33-8F): SHORT TO POWER IN LEFT SIDE CURTAIN AIRBAG INFLATOR**)
33-9x	X		Short to ground in left side curtain airbag inflator	(see **DTC 33-9X (33-90 TO 33-99, 33-9A TO 33-9F): SHORT TO GROUND IN LEFT SIDE CURTAIN AIRBAG INFLATOR**)
34-1x		X	Open or increased resistance in right side curtain airbag inflator	(see **DTC 34-1X (34-10 TO 34-19, 34-1A TO 34-1F): OPEN OR INCREASED RESISTANCE IN RIGHT SIDE CURTAIN AIRBAG INFLATOR**)
34-3x		X	Short to another wire or decreased resistance in right side curtain airbag inflator	(see **DTC 34-3X (34-30 TO 34-39, 34-3A TO 34-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN RIGHT SIDE CURTAIN AIRBAG INFLATOR**)

34-8x	X		Short to power in right side curtain airbag inflator	(see **DTC 34-8X (34-80 TO 34-89, 34-8A TO 34-8F): SHORT TO POWER IN RIGHT SIDE CURTAIN AIRBAG INFLATOR**)
34-9x	X		Short to ground in right side curtain airbag inflator	(see **DTC 34-9X (34-90 TO 34-99, 34-9A TO 34-9F): SHORT TO GROUND IN RIGHT SIDE CURTAIN AIRBAG INFLATOR**)

(1) The SRS indicator turns on and stays on whenever the ignition switch is in the ON (II) position, or until the code is cleared.

(2) The SRS indicator turns on when the DTC is set. The SRS indicator will not turn on after the ignition switch is cycled from ON (II) to OFF (0), but the DTC will be stored in the SRS unit.

NOTE: The "x" at the end of each DTC denotes a numeric character (0 thru 9) or an alpha character (A thru F) that you will see on the HDS display. The character is unrelated to your troubleshooting; it designates the SRS unit manufacturer and other detail used for product analysis.

NOTE: Before looking up DTCs in the DTC troubleshooting index, verify the manufacturer of the SRS unit. The DTCs are different from manufacturer to manufacturer.

DTC TROUBLESHOOTING INDEX - TRW SRS UNIT ('03-05 MODELS) (CONT.)

DTC	Latch(1)	Reset(2)	Detection Item	Notes
41-1x		X	No signal from the left front impact sensor	(see **DTC 41-1x (41-10 to 41-19, 41-1A to 41-1F): No signal from the Left Front Impact Sensor**)
				(see **DTC 41-2x (41-20 to**

41-2x		X	Internal failure of the left front impact sensor	**41-29, 41-2A to 41-2F), 41-3x (41-30 to 41-39, 41-3A to 41-3F): Internal Failure of the Left Front Impact Sensor**)
41-3x				
41-Bx	X			
42-1x		X	No signal from the right front impact sensor	(see **DTC 42-1x (42-10 to 42-19, 42-1A to 42-1F): No Signal from the Right Front Impact Sensor**)
42-2x		X	Internal failure of the right front impact sensor	(see **DTC 42-2x (42-20 to 42-29, 42-2A to 42-2F), 42-3x (42-30 to 42-39, 42-3A to 42-3F): Internal Failure of the Right Front Impact Sensor**)
42-3x				
42-Bx	X			
43-1X		X	No signal from the left side impact sensor (first)	(see **DTC 43-1x (43-10 to 43-19, 43-1A to 43-1F): No Signal from the Left Side Impact Sensor (first)**)
43-2x		X	Internal failure of the left side impact sensor (first)	(see **DTC 43-2x (43-20 to 43-29, 43-2A to 43-2F), 43-3x (43-30 to 43-39, 43-3A to 43-3F), 43-Bx (43-B0 to 43-B9, 43-BA to 43-BF): Internal Failure of the Left Side Impact Sensor (first)**)
43-3x				
43-Bx	X			
44-1 x		X	No signal from the right side impact sensor (first)	(see **DTC 44-1x (44-10 to 44-19, 44-1A to 44-1F): No Signal from the Right Side Impact Sensor (first)**)
44-2x				(see **DTC 43-2x (43-20 to 43-29, 43-2A to 43-2F),**

44-3X		X	Internal failure of the right side impact sensor (first)	**43-3x (43-30 to 43-39, 43-3A to 43-3F), 43-Bx (43-B0 to 43-B9, 43-BA to 43-BF): Internal Failure of the Left Side Impact Sensor (first)**)
44-Bx	X			
45-1x		X	No signal from left side impact sensor (second)	(see **DTC 45-1x (45-10 to 45-19, 45-1A to 45-1F): No Signal from the Left Side Impact Sensor (second)**)
45-2x		X	Internal failure of left side impact sensor (second)	(see **DTC 45-2x (45-20 to 45-29, 45-2A to 45-2F), 45-3x (45-30 to 45-39, 45-3A to 45-3F), 45-Bx (45-B0 to 45-B9, 45-BA to 45-BF): Internal Failure of the Left Side Impact Sensor (second)**)
45-3x				
45-Bx	X			
46-1x		X	No signal from right side impact sensor (second)	(see **DTC 46-1x (46-10 to 46-19, 46-1A to 46-1F): No Signal from the Right Side Impact Sensor (second)**)
46-2x		X	Internal failure of right side impact sensor (second)	(see **DTC 45-2x (45-20 to 45-29, 45-2A to 45-2F), 45-3x (45-30 to 45-39, 45-3A to 45-3F), 45-Bx (45-B0 to 45-B9, 45-BA to 45-BF): Internal Failure of the Left Side Impact Sensor (second)**)
46-3x				
46-Bx	X			
51-2x		X		(see **DTC 51-2x (51-20 to 51-29, 51-2A to 51-2F), 51-4x (51-40 to 51-49, 51-**
51-4x				

52-8x 52-9x 52-Ax	X		Internal failure of SRS unit	**4A to 51-4F), 51-7x (51-70 to 51-79, 51-7A to 51-7F): Internal Failure of the SRS Unit**)
52-Bx 52-Cx 52-Dx 52-Ex 52-Fx	X		Internal failure of SRS unit	(see **DTC 52-Bx (52-B0 to 52-B9, 52-BA to 52-BF), 52-Cx (52-C0 to 52-C9, 52-CA to 52-CF), 52-Dx (52-D0 to 52-D9, 52-DA to 52-DF): Internal Failure of the SRS Unit**)
53-1 x		X		
53-2x 53-3x 53-4x 54-1x 54-2x 54-3x		X	Internal failure of SRS unit	(see **DTC 53-2x (53-20 to 53-29, 53-2A to 53-2F), 53-3x (53-30 to 53-39, 53-3A to 53-3F), 53-4x (53-40 to 53-49, 53-4A to 53-4F): Internal Failure of the SRS Unit**)
54-4x 54-5x 54-6x 54-7x 55-1x 55-2x		X	Internal failure of SRS unit	(see **DTC 54-4x (54-40 to 54-49, 54-4A to 54-4F), 54-5x (54-50 to 54-59, 54-5A to 54-5F), 54-6x (54-60 to 54-69,54-6A to 54-6F): Internal Failure of the SRS Unit**)
55-3x 55-4x		X	Internal failure of SRS unit	(see **DTC 55-3x (55-30 to 55-39, 55-3A to 55-3F), 55-4x (55-40 to 55-49, 55-4A to 55-4F), 55-7x (55-70 to 55-79, 55-7A to 55-7F): Internal Failure of the SRS Unit**)

(1) The SRS indicator turns on and stays on whenever the ignition switch is in the ON (II) position, or until the code is cleared.

(2) The SRS indicator turns on when the DTC is set. The SRS indicator will not turn on after the ignition switch is cycled from ON (II) to OFF (0), but the DTC will be stored in the SRS unit.

NOTE: The "x" at the end of each DTC denotes a numeric character (0 thru 9) or an alpha character (A thru F) that you will see on the HDS display. The character is unrelated to your troubleshooting; it designates the SRS unit manufacturer and other detail used for product analysis.

NOTE: Before looking up DTCs in the DTC troubleshooting index, verify the manufacturer of the SRS unit. The DTCs are different from manufacturer to manufacturer.

DTC TROUBLESHOOTING INDEX - TRW SRS UNIT ('03-05 MODELS) (CONT.)

DTC	Latch(1)	Reset(2)	Detection Item	Notes
61-1x			Open in driver's seat belt buckle switch (with power seat)	(see **DTC 61-1x (61-10 to 61-19,61-1A to 61-1F): Open in Driver's Seat Belt Buckle Switch (with power seat)**)
			Open in driver's seat belt buckle switch (without power seat)	(see **DTC 61-1x (61-10 to 61-19,61-1A to 61-1F): Open in Driver's Seat Belt Buckle Switch (without power seat)**)
61-2x			Short in driver's seat belt buckle switch (with power seat)	(see **DTC 61-2x (61-20 to 61-29,61-2A to 61-2F): Short in Driver's Seat Belt Buckle Switch (with power seat)**)
			Short in driver's seat	(see **DTC 61-2x (61-20 to 61-29, 61-2A to 61-2F):**

			belt buckle switch (without power seat)	**Short in Driver's Seat Belt Buckle Switch (without power seat)**)
62-1x			Open in front passenger's seat belt buckle switch (with power seat)	(see **DTC 62-1x (62-10 to 62-19, 62-1A to 62-1F): Open in Front Passenger's Seat Belt Buckle Switch (with power seat)**)
		X	Open in front passenger's seat belt buckle switch (without power seat)	(see **DTC 62-1x (62-10 to 62-19,62-1A to 62-1F): Open in Front Passenger's Seat Belt Buckle Switch (without power seat)**)
62-2x			Short in front passenger's seat belt buckle switch (with power seat)	(see **DTC 62-2x (62-20 to 62-29,62-2A to 62-2F): Short in Front Passenger's Seat Belt Buckle Switch (with power seat)**)
			Short in front passenger's seat belt buckle switch (without power seat)	(see **DTC 62-2x (62-20 to 62-29, 62-2A to 62-2F): Short in Front Passenger's Seat Belt Buckle Switch (without power seat)**)
71-1x			Open in driver's seat position sensor	(see **DTC 71-1x171-10 to 71-19, 71-1A to 71-1F): Open in Driver's Seat Position Sensor**)
71-2x			Short in driver's seat position sensor	(see **DTC 71-2x (71-20 to 71-29, 71-2A to 71-2F): Short in Driver's Seat Position Sensor**)

81-4x			Faulty front passenger's weight sensor unit	(see **DTC 81-4x (81-40 to 81-49, 81-4A to 81-4F), 81-5x (81-50 to 81-59, 81-5A to 81-5F), 81-63, 81-64: Internal Failure of the Front Passenger's Weight Sensor Unit ('04-05 models)**)
81-5x				
81-61			No signal from the front passenger's weight sensor unit (with side airbag)	(see **DTC 81-61: No Signal from Front Passenger's Weight Sensor Unit (with side airbag) ('04-05 models); DTC 81-62: Non-stipulated Response Data (with side airbag) ('04-05 models)**)
			No signal from the front passenger's weight sensor unit (without side airbag)	(see **DTC 81-61: No Signal from Front Passenger's Weight Sensor Unit (without side airbag) ('04-05 models); DTC 81-62: Non-stipulated Response Data (without side airbag) ('04-05 models)**)
			Non-stipulated response data (with side airbag)	(see **DTC 81-61: No Signal from Front Passenger's Weight Sensor Unit (with side airbag) ('04-05 models); DTC 81-62: Non-stipulated Response Data (with side airbag) ('04-05 models)**)

81-62			Non-stipulated response data (without side airbag)	(see **DTC 81-61: No Signal from Front Passenger's Weight Sensor Unit (without side airbag) ('04-05 models); DTC 81-62: Non-stipulated Response Data (without side airbag) ('04-05 models)**)
81-63			Model ID code or variation code inconsistent	(see **DTC 81-4x (81-40 to 81-49, 81-4A to 81-4F), 81-5x (81-50 to 81-59, 81-5A to 81-5F), 81-63, 81-64: Internal Failure of the Front Passenger's Weight Sensor Unit ('04-05 models)**)
81-64			ECU serial ID code inconsistent	
81-71			Front passenger's weight sensor unit does not calibrate	(see **DTC 81-71, 81-78: Front passenger's weight sensor unit does not calibrate ('04-05 models)**)
81-78				
81-79			Front passenger's weight sensors drift check failure	(see **DTC 81-4x (81-40 to 81-49, 81-4A to 81-4F), 81-5x (81-50 to 81-59, 81-5A to 81-5F), 81-63, 81-64: Internal Failure of the Front Passenger's Weight Sensor Unit ('04-05 models)**)
82-1x			No signal from the inner side front passenger's weight sensor	(see **DTC 82-1x (82-10 to 82-19, 82-1A to 82-1F): No Signal from the Inner Side Front Passenger's Weight Sensor ('04-06**

		models))
82-2x	No signal from the outer side front passenger's weight sensor	(see **DTC 82-1x (82-10 to 82-19, 82-1A to 82-1F): No Signal from the Inner Side Front Passenger's Weight Sensor ('04-06 models)**)
85-4x 85-5x	Faulty OPDS unit	(see **DTC 85-4x (85-40 to 85-49, 85-4A to 85-4F), 85-5x (85-50 to 85-59, 85-5A to 85-5F), 85-63, 85-64: Internal Failure of the OPDS/ODS Unit**)
85-61	No signal from the OPDS unit	(see **DTC 85-61: No Signal from the OPDS Unit ('04-05 models): DTC 85-62: Non-stipulated Response Data ('04-05 models)**)
85-62	Non-stipulated response data	
85-63	Model ID code or variation code inconsistent	(see **DTC 85-4x (85-40 to 85-49, 85-4A to 85-4F), 85-5x (85-50 to 85-59, 85-5A to 85-5F), 85-63, 85-64: INTERNAL FAILURE OF THE OPDS/ODS UNIT**)
85-64	ECU serial ID code inconsistent	
85-71 85-78	OPDS unit not initialized	(see **DTC 85-71, 85-78: OPDS/ODS unit not initialized**)
86-79	OPDS drift check failure	(see **DTC 85-4x (85-40 to 85-49, 85-4A to 85-4F), 85-5x (85-50 to 85-59, 85-5A to 85-5F), 85-63, 85-64: Internal Failure of the OPDS/ODS Unit**)

86-1x			Faulty seat-back OPDS sensor	(see **DTC 85-71, 85-78: OPDS/ODS unit not initialized**)
86-2x			Faulty seat support OPDS sensor	
87-31			Internal failure of the OPDS unit	(see **DTC 87-31: Internal Failure of the OPDS/ODS Unit**)
87-32			The side airbag cutoff indicator stays on	(see **DTC 87-31: Internal Failure of the OPDS/ODS Unit**)
91-1x			Internal failure of the SRS unit	(see **DTC 91-1x (91-10 to 91-19, 91-1A to 91-1F): Internal Failure of the SRS Unit**)
91-2x			Short in SRS indicator circuit	(see **DTC 91-1x (91-10 to 91-19, 91-1A to 91-1F): Internal Failure of the SRS Unit**)

	X			
92-1x		X	Open in passenger's airbag cutoff indicator	(see **DTC 92-1x (92-10 to 92-19, 92-1A to 92-1F): Passenger's Airbag Cutoff Indicator Malfunction ('04-06 models)**)
92-2x			Short to ground in passenger's airbag cutoff indicator	(see **DTC 92-1x (92-10 to 92-19, 92-1A to 92-1F): Passenger's Airbag Cutoff Indicator Malfunction ('04-06 models)**)
A1-1x	X		Faulty power supply (VA line)	(see **DTC A1-1x (A1-10 to A1-19, A1-1A to A1-1F): Faulty Power Supply (VA Line)**)
A2-1x			Faulty power supply (VB line)	(see **DTC A2-1x (A2-10 to A2-19, A2-1A to A2-1F): Faulty Power Supply (VB Line)**)
D1-11			Driver's airbag and/or driver's seat belt tensioner deployed	(see **DTC 55-3x (55-30 to 55-39, 55-3A to 55-3F), 55-4x (55-40 to 55-49, 55-**
D2-11			Front passenger's airbag and/or front passenger's seat belt tensioner deployed	
D3-11			Driver's side airbag deployed	
D4-11			Front passenger's side airbag deployed	
D7-11			Rear-end collisioned	
E2-11			Front passenger's	

			airbag deployed	**4A to 55-4F), 55-7x (55-70 to 55-79, 55-7A to 55-7F): Internal Failure of the SRS Unit**)
E4-11			Front passenger's side airbag deployed	
F1-11			Driver's airbag and/or driver's seat belt tensioner deployed	
F2-11			Front passenger's airbag and/or front passenger's seat belt tensioner deployed	
F3-11			Driver's side airbag deployed	
F4-11			Front passenger's side airbag deployed	

(1) The SRS indicator turns on and stays on whenever the ignition switch is in the ON (II) position, or until the code is cleared.

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NOTE: The "x" at the end of each DTC denotes a numeric character (0 thru 9) or an alpha character (A thru F) that you will see on the HDS display. The character is unrelated to your troubleshooting; it designates the SRS unit manufacturer and other detail used for product analysis.

NOTE: Before looking up DTCs in the DTC troubleshooting index, verify the manufacturer of the SRS unit. The DTCs are different from manufacturer to manufacturer.

DTC TROUBLESHOOTING INDEX - DENSO SRS UNIT ('03-05 MODELS)

DTC	Latch(1)	Reset(2)	Detection Item	Notes
				(see **DTC 11-1X (11-10 TO**

11-1x		X	Open in driver's airbag first inflator	**11-19,11-1A TO 11-1F): OPEN IN DRIVER'S AIRBAG FIRST INFLATOR**)
11-2x		X	Increased resistance in driver's airbag first inflator	(see **DTC 11-2X (11-20 TO 11-29,11-2A TO 11-2F): INCREASED RESISTANCE IN DRIVER'S FIRST AIRBAG INFLATOR**)
11-3x		X	Short to another wire or decreased resistance in driver's airbag first inflator	(see **DTC 11-3X (11-30 TO 11-39,11-3A TO 11-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN DRIVER'S AIRBAG FIRST INFLATOR**)
11-4x		X	Open in driver's airbag second inflator	(see **DTC 11-4X (11-40 TO 11-49,11-4A TO 11-4F): OPEN IN DRIVER'S AIRBAG SECOND INFLATOR**)
11-5x		X	Increased resistance in driver's airbag second inflator	(see **DTC 11-5X (11-50 TO 11-59,11-5A TO 11-5F): INCREASED RESISTANCE IN DRIVER'S AIRBAG SECOND INFLATOR**)
11-6x		X	Short to another wire or decreased resistance in driver's airbag second inflator	(see **DTC 11-6X (11-60 TO 11-69,11-6A TO 11-6F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN DRIVER'S AIRBAG SECOND INFLATOR**)

11-8x	X		Short to power in driver's airbag first inflator	(see **DTC 11-8X (11-80 TO 11-89, 11-8A TO 11-8F): SHORT TO POWER IN DRIVER'S AIRBAG FIRST INFLATOR**)
11-9x	X		Short to ground in driver's airbag first inflator	(see **DTC 11-9X (11-90 TO 11-99, 11-9A TO 11-9F): SHORT TO GROUND IN DRIVER'S AIRBAG FIRST INFLATOR**)
11-Ax	X		Short to power in driver's airbag second inflator	(see **DTC 11-AX (11-A0 TO 11-A9, 11-AA TO 11-AF): SHORT TO POWER IN DRIVER'S AIRBAG SECOND INFLATOR**)
11-Bx	X		Short to ground in driver's airbag second inflator	(see **DTC 11-BX (11-B0 TO 11-B9, 11-BA TO 11-BF): SHORT TO GROUND IN DRIVER'S AIRBAG SECOND INFLATOR**)
12-1x		X	Open in front passenger's airbag first inflator	(see **DTC 12-1X (12-10 TO 12-19, 12-1A TO 12-1F): OPEN IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR**)
12-2x		X	Increased resistance in front passenger's airbag first inflator	(see **DTC 12-2X (12-20 TO 12-29, 12-2A TO 12-2F): INCREASED RESISTANCE IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR**)
			Short to another wire or decreased	(see **DTC 12-3X (12-30 TO 12-39, 12-3A TO 12-3F): SHORT TO ANOTHER**

12-3x		X	resistance in front passenger's airbag first inflator	**WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR**)
12-4x		X	Open in front passenger's airbag second inflator	(see **DTC 12-4X (12-40 TO 12-49, 12-4A TO 12-4F): OPEN IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR**)
12-5X		X	Increased resistance in front passenger's airbag second inflator	(see **DTC 12-5X (12-50 TO 12-59, 12-5A TO 12-5F): INCREASED RESISTANCE IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR**)
12-6x		X	Short to another wire or decreased resistance in front passenger's airbag second inflator	(see **DTC 12-6X (12-60 TO 12-69, 12-6A TO 12-6F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR**)
12-8x	X		Short to power in front passenger's airbag first inflator	(see **DTC 12-8X (12-80 TO 12-89, 12-8A TO 12-8F): SHORT TO POWER IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR**)
12-9x	X		Short to ground in front passenger's airbag first inflator	(see **DTC 12-9X (12-90 TO 12-99, 12-9A TO 12-9F): SHORT TO GROUND IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR**)
				(see **DTC 12-AX (12-A0**

12-Ax	X		Short to power in front passenger's airbag second inflator	**TO 12-A9, 12-AA TO 12-AF): SHORT TO POWER IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR**)
12-Bx	X		Short to ground in front passenger's airbag second inflator	(see **DTC 12-BX (12-B0 TO 12-B9, 12-BA TO 12-BF): SHORT TO GROUND IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR**)
21-1x		X	Open in driver's seat belt tensioner	(see **DTC 21-1X (21-10 TO 21-19, 21-1A TO 21-1F): OPEN IN DRIVER'S SEAT BELT TENSIONER**)
21-2x		X	Increased resistance in driver's seat belt tensioner	(see **DTC 21-2X (21-20 TO 21-29, 21-2A TO 21-2F): INCREASED RESISTANCE IN DRIVER'S SEAT BELT TENSIONER**)
21-3x		X	Short to another wire or decreased resistance in driver's seat belt tensioner	(see **DTC 21-3X (21-30 TO 21-39, 21-3A TO 21-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN DRIVER'S SEAT BELT TENSIONER**)
21-8x	X		Short to power in driver's seat belt tensioner	(see **DTC 21-8X (21-80 TO 21-89, 21-8A TO 21-8F): SHORT TO POWER IN DRIVER'S SEAT BELT TENSIONER**)
				(see **DTC 21-9X (21-90 TO**

21-9x	X		Short to ground in driver's seat belt tensioner	**21-99, 21-9A TO 21-9F): SHORT TO GROUND IN DRIVER'S SEAT BELT TENSIONER**)
22-1x		X	Open in front passenger's seat belt tensioner	(see **DTC 22-1X (22-10 TO 22-19, 22-1A TO 22-1F): OPEN IN FRONT PASSENGER'S SEAT BELT TENSIONER**)
22-2x		X	Increased resistance in front passenger's seat belt tensioner	(see **DTC 22-2X (22-20 TO 22-29, 22-2A TO 22-2F): INCREASED RESISTANCE IN FRONT PASSENGER'S SEAT BELT TENSIONER**)
22-3x		X	Short to another wire or decreased resistance in front passenger's seat belt tensioner	(see **DTC 22-3X (22-30 TO 22-39, 22-3A TO 22-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S SEAT BELT TENSIONER**)
22-8x	X		Short to power in front passenger's seat belt tensioner	(see **DTC 22-8X (22-80 TO 22-89, 22-8A TO 22-8F): SHORT TO POWER IN FRONT PASSENGER'S SEAT BELT TENSIONER**)
22-9x	X		Short to ground in front passenger's seat belt tensioner	(see **DTC 22-9X (22-90 TO 22-99, 22-9A TO 22-9F): SHORT TO GROUND IN FRONT PASSENGER'S SEAT BELT TENSIONER**)
				(see **DTC 31-1X (31-10 TO**

31-1x		X	Open in driver's side airbag inflator	**31-19, 31-1A TO 31-1F): OPEN IN DRIVER'S SIDE AIRBAG INFLATOR**)
31-2x		X	Increased resistance in driver's side airbag inflator	(see **DTC 31-2X (31-20 TO 31-29, 31-2A TO 31-2F): INCREASED RESISTANCE IN DRIVER'S SIDE AIRBAG INFLATOR**)
31-3x		X	Short to another wire or decreased resistance in driver's side airbag inflator	(see **DTC 31-3X (31-30 TO 31-39, 31-3A TO 31-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN DRIVER'S SIDE AIRBAG INFLATOR**)
31-8x	X		Short to power in driver's side airbag inflator	(see **DTC 31-8X (31-80 TO 31-89, 31-8A TO 31-8F): SHORT TO POWER IN DRIVER'S SIDE AIRBAG INFLATOR**)
31-9x	X		Short to ground in driver's side airbag inflator	(see **DTC 31-9X (31-90 TO 31-99, 31-9A TO 31-9F): SHORT TO GROUND IN DRIVER'S SIDE AIRBAG INFLATOR**)
32-1x		X	Open in front passenger's side airbag inflator	(see **DTC 32-1X (32-10 TO 32-19, 32-1A TO 32-1F): OPEN IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR**)
			Increased resistance	(see **DTC 32-2X (32-20 TO 32-29, 32-2A TO 32-2F): INCREASED**

32-2x		X	in front passenger's side airbag inflator	**RESISTANCE IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR**)
32-3x		X	Short to another wire or decreased resistance in front passenger's side airbag inflator	(see **DTC 32-3X (32-30 TO 32-39, 32-3A TO 32-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR**)
32-8x	X		Short to power in front passenger's side airbag inflator	(see **DTC 32-8X (32-80 TO 32-89, 32-8A TO 32-8F): SHORT TO POWER IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR**)
32-9x	X		Short to ground in front passenger's side airbag inflator	(see **DTC 32-9X (32-90 TO 32-99, 32-9A TO 32-9F): SHORT TO GROUND IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR**)

(1) The SRS indicator turns on and stays on whenever the ignition switch is in the ON (II) position, or until the code is cleared.

(2) The SRS indicator turns on when the DTC is set. The SRS indicator will not turn on after the ignition switch is cycled from ON (II) to OFF (0), but the DTC will be stored in the SRS unit.

NOTE: The "x" at the end of each DTC denotes a numeric character (0 thru 9) or an alpha character (A thru F) that you will see on the HDS display. The character is unrelated to your troubleshooting; it designates the SRS unit manufacturer and other detail used for product analysis.

NOTE: Before looking up DTCs in the DTC troubleshooting index, verify the manufacturer of the SRS unit. The DTCs are different from manufacturer to manufacturer.

DTC TROUBLESHOOTING INDEX - DENSO SRS UNIT ('03-05 MODELS) (CONT.)

DTC	Latch(1)	Reset(2)	Detection Item	Notes
41-1x		X	No signal from the left front impact sensor	(see **DTC 41-1X (41-10 TO 41-19, 41-1A TO 41-1F): NO SIGNAL FROM THE LEFT FRONT IMPACT SENSOR**)
41-2x			Internal failure of the left front impact sensor	(see **DTC 41-2X (41-20 TO 41-29, 41-2A TO 41-2F), 41-3X (41-30 TO 41-39, 41-3A TO 41-3F): INTERNAL FAILURE OF THE LEFT FRONT IMPACT SENSOR**)
41-9x	X			
41-Bx				
41-Cx	X		Faulty power supply to the left front impact sensor	(see **DTC 41-CX (41-C0 TO 41-C9, 41-CA TO 41-CF): FAULTY POWER SUPPLY TO THE LEFT FRONT IMPACT SENSOR**)
42-1x		X	No signal from the right front impact sensor	(see **DTC 42-1X (42-10 TO 42-19, 42-1A TO 42-1F): NO SIGNAL FROM THE RIGHT FRONT IMPACT SENSOR**)
42-2x			Internal failure of the right front impact sensor	(see **DTC 42-2X (42-20 TO 42-29, 42-2A TO 42-2F), 42-3X (42-30 TO 42-39, 42-3A TO 42-3F):**
42-9x	X			

42-Bx				**INTERNAL FAILURE OF THE RIGHT FRONT IMPACT SENSOR**)
42-Cx			Faulty power supply to the right front impact sensor	(see **DTC 42-CX (42-CO TO 42-C9, 42-CA TO 42-CF): FAULTY POWER SUPPLY TO THE RIGHT FRONT IMPACT SENSOR**)
43-1x		X	No signal from the left side impact sensor (First)	(see **DTC 43-1X (43-10 TO 43-19, 43-1A TO 43-1F): NO SIGNAL FROM THE LEFT SIDE IMPACT SENSOR (FIRST)**)
43-2x			Internal failure of the left side impact sensor (First)	(see **DTC 43-2X (43-20 TO 43-29, 43-2A TO 43-2F), 43-3X (43-30 TO 43-39, 43-3A TO 43-3F), 43-BX (43-B0 TO 43-B9, 43-BA TO 43-BF): INTERNAL FAILURE OF THE LEFT SIDE IMPACT SENSOR (FIRST)**)
43-Bx	X			
43-Cx			Faulty power supply to the left side impact sensor (First)	(see **DTC 43-CX (43-C0 TO 43-C9, 43-CA TO 43-CF): FAULTY POWER SUPPLY TO THE LEFT SIDE IMPACT SENSOR (FIRST)**)
44-1x		X	No signal from the right side impact sensor (First)	(see **DTC 44-1X (44-10 TO 44-19, 44-1A TO 44-1F): NO SIGNAL FROM THE RIGHT SIDE IMPACT SENSOR (FIRST)**)
44-2x			Internal failure of the	(see **DTC 44-2X (44-20 TO**

44-Bx	X		right side impact sensor (First)	**44-29, 44-2A TO 44-2F), 44-3X (44-30 TO 44-39, 44-3A TO 44-3F), 44-BX (44-B0 TO 44-B9, 44-BA TO 44- BF): INTERNAL FAILURE OF THE RIGHT SIDE IMPACT SENSOR (FIRST)**)
44-Cx			Faulty power supply to the right side impact sensor (First)	(see **DTC 44-CX (44-C0 TO 44-C9, 44-CA TO 44-CF): FAULTY POWER SUPPLY TO THE RIGHT SIDE IMPACT SENSOR (FIRST)**)
51-2x		X	Internal failure of SRS unit	(see **DTC 51-2X (51-20 TO 51-29, 51-2A TO 51-2F), 51-4X (51-40 TO 51-49, 51-4A TO 51-4F), 51-7X (51-70 TO 51-79, 51-7A TO 51-7F): INTERNAL FAILURE OF THE SRS UNIT**)
51-4x				
51-7x				
52-8x	X			
52-9x				
52-Ax				
52-Bx			Internal failure of SRS unit	(see **DTC 52-BX (52-B0 TO 52-B9, 52-BA TO 52-BF), 52-CX (52-C0 TO 52-C9, 52-CA TO 52-CF), 52-DX (52-D0 TO 52-D9, 52-DA TO 52-DF): INTERNAL FAILURE OF THE SRS UNIT**)
52-Cx				
52-Dx				
52-Ex				
52-Fx				
53-3x		X	Internal failure of SRS unit	(see **DTC 53-2x (53-20 TO 53-29, 53-2A TO 53-2F), 53-3x (53-30 to 53-39, 53-3A TO 53-3F), 53-4x (53-40 TO 53-49, 53-4A TO**
53-4x				
54-1x				

54-2x 54-3x				**53-4F): INTERNAL FAILURE OF THE SRS UNIT**)
54-4x 54-7x 55-1x 55-2x			Internal failure of SRS unit	(see **DTC 54-4X (54-40 TO 54-49, 54-4A TO 54-4F), 54-5X (54-50 TO 54-59, 54-5A TO 54-5F), 54-6X (54-60 TO 54-69,54-6A TO 54-6F): INTERNAL FAILURE OF THE SRS UNIT**)
55-7x			Internal failure of SRS unit	(see **DTC 55-3x (55-30 TO 55-39, 55-3A TO 55-3F), 55-4x (55-40 TO 55-49, 55-4A TO 55-4F), 55-7x (55-70 TO 55-79, 55-7A TO 55-7F): INTERNAL FAILURE OF THE SRS UNIT**)

(1) The SRS indicator turns on and stays on whenever the ignition switch is in the ON (II) position, or until the code is cleared.

(2) The SRS indicator turns on when the DTC is set. The SRS indicator will not turn on after the ignition switch is cycled from ON (II) to OFF (0), but the DTC will be stored in the SRS unit.

NOTE: The "x" at the end of each DTC denotes a numeric character (0 thru 9) or an alpha character (A thru F) that you will see on the HDS display. The character is unrelated to your troubleshooting; it designates the SRS unit manufacturer and other detail used for product analysis.

NOTE: Before looking up DTCs in the DTC troubleshooting index, verify the manufacturer of the SRS unit. The DTCs are different from manufacturer to manufacturer.

DTC TROUBLESHOOTING INDEX - DENSO SRS UNIT ('03-05 MODELS) (CONT.)

DTC	Latch(1)	Reset (2)	Detection Item	Notes
61-1x			Open in driver's seat belt buckle switch (with power seat)	(see **DTC 61-1X (61-10 TO 61-19,61-1A TO 61-1F): OPEN IN DRIVER'S SEAT BELT BUCKLE SWITCH (WITH POWER SEAT)**)
			Open in driver's seat belt buckle switch (without power seat)	(see **DTC 61-1X (61-10 TO 61-19,61-1A TO 61-1F): OPEN IN DRIVER'S SEAT BELT BUCKLE SWITCH (WITHOUT POWER SEAT)**)
61-2x		X	Short in driver's seat belt buckle switch (with power seat)	(see **DTC 61-2X (61-20 TO 61-29,61-2A TO 61-2F): SHORT IN DRIVER'S SEAT BELT BUCKLE SWITCH (WITH POWER SEAT)**)
			Short in driver's seat belt buckle switch (without power seat)	(see **DTC 61-2X (61-20 TO 61-29, 61-2A TO 61-2F): SHORT IN DRIVER'S SEAT BELT BUCKLE SWITCH (WITHOUT POWER SEAT)**)
			Open in front passenger's seat belt buckle switch (with power seat)	(see **DTC 62-1X (62-10 TO 62-19, 62-1A TO 62-1F): OPEN IN FRONT PASSENGER'S SEAT BELT BUCKLE SWITCH (WITH POWER SEAT)**)

62-1x			Open in front passenger's seat belt buckle switch (without power seat)	(see **DTC 62-1X (62-10 TO 62-19,62-1A TO 62-1F): OPEN IN FRONT PASSENGER'S SEAT BELT BUCKLE SWITCH (WITHOUT POWER SEAT)**)
62-2x			Short in front passenger's seat belt buckle switch (with power seat)	(see **DTC 62-2X (62-20 TO 62-29,62-2A TO 62-2F): SHORT IN FRONT PASSENGER'S SEAT BELT BUCKLE SWITCH (WITH POWER SEAT)**)
			Short in front passenger's seat belt buckle switch (without power seat)	(see **DTC 62-2X (62-20 TO 62-29, 62-2A TO 62-2F): SHORT IN FRONT PASSENGER'S SEAT BELT BUCKLE SWITCH (WITHOUT POWER SEAT)**)
71-1x			Open in driver's seat position sensor	(see **DTC 71-1x171-10 to 71-19, 71-1A to 71-1F): Open in Driver's Seat Position Sensor**)
71-2x			Short in driver's seat position sensor	(see **DTC 71-2X (71-20 TO 71-29, 71-2A TO 71-2F): SHORT IN DRIVER'S SEAT POSITION SENSOR**)
71-22			Short to power in driver's seat position sensor	(see **DTC 71-22: SHORT TO POWER IN DRIVER'S SEAT POSITION SENSOR**)
				(see **DTC 81-4X (81-40 TO 81-49, 81-4A TO 81-4F),**

81-4x	Faulty front passenger's weight sensor unit	**81-5X (81-50 TO 81-59, 81-5A TO 81-5F), 81-63, 81-64: INTERNAL FAILURE OF THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS)**)
81-5x		
81-61	No signal from the front passenger's weight sensor unit (with side airbag)	(see **DTC 81-61: NO SIGNAL FROM FRONT PASSENGER'S WEIGHT SENSOR UNIT (WITH SIDE AIRBAG) ('04-05 MODELS)**)
81-62	No signal from the front passenger's weight sensor unit (without side airbag)	(see **DTC 81-62: NON-STIPULATED RESPONSE DATA (WITH SIDE AIRBAG) ('04-05 MODELS)**)
81-63	Model ID code or variation code inconsistent	(see **DTC 81-4X (81-40 TO 81-49, 81-4A TO 81-4F), 81-5X (81-50 TO 81-59, 81-5A TO 81-5F), 81-63, 81-64: INTERNAL FAILURE OF THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS)**)
81-64	ECU serial ID code inconsistent	
81-71	Front passenger's weight sensor unit does not calibrate	(see **DTC 81-71, 81-78: FRONT PASSENGER'S WEIGHT SENSOR UNIT DOES NOT CALIBRATE ('04-05 MODELS)**)
81-78		
81-79	Front passenger's weight sensors drift	(see **DTC 81-79: FRONT PASSENGER'S WEIGHT SENSORS DRIFT**

			check failure	**CHECK FAILURE ('04-05 MODELS)**)
82-1x			No signal from the inner side front passenger's weight sensor	(see **DTC 82-1X (82-10 TO 82-19, 82-1A TO 82-1F): NO SIGNAL FROM THE INNER SIDE FRONT PASSENGER'S WEIGHT SENSOR ('04-06 MODELS)**)
83-2x			No signal from the outer side front passenger's weight sensor	(see **DTC 83-2X (83-20 TO 83-29, 83-2A TO 83-2F): NO SIGNAL FROM THE OUTER SIDE FRONT PASSENGER'S WEIGHT SENSOR ('04-06 MODELS)**)
85-4x			Faulty OPDS unit	(see **DTC 85-4X (85-40 TO 85-49, 85-4A TO 85-4F), 85-5X (85-50 TO 85-59, 85-5A TO 85-5F), 85-63, 85-64: INTERNAL FAILURE OF THE OPDS/ODS UNIT**)
85-5X				
85-61			No signal from the OPDS unit	(see **DTC 85-61: NO SIGNAL FROM THE OPDS UNIT ('04-05 MODELS)**)
85-62			Non-stipulated response data	
85-63			Model ID code or variation code inconsistent	(see **DTC 85-4x (85-40 to 85-49, 85-4A to 85-4F), 85-5x (85-50 to 85-59, 85-5A to 85-5F), 85-63, 85-64: INTERNAL FAILURE OF THE OPDS/ODS UNIT**)
85-64			ECU serial ID code inconsistent	
85-71			OPDS unit not	(see **DTC 85-71, 85-78:**

85-78			initialized	**OPDS/ODS UNIT NOT INITIALIZED**)
85-79			OPDS drift check failure	(see **DTC 85-79: OPDS SENSOR DRIFT CHECK FAILURE**)

	X			
86-1x		X	Faulty seat-back OPDS sensor	(see **DTC 86-1X (86-10 TO 86-19, 86-1A TO 86-1F): FAULTY OPDS SEAT-BACK SENSOR**)
86-2x			Faulty seat support OPDS sensor	
87-31			Internal failure of the OPDS unit	(see **DTC 87-31: INTERNAL FAILURE OF THE OPDS/ODS UNIT**)
87-32			The side airbag cutoff indicator stays on	(see **DTC 87-32: SIDE AIRBAG CUTOFF INDICATOR STAYS ON ('03-05 MODELS)**)
91-1x			Internal failure of the SRS unit	(see **DTC 91-1X (91-10 TO 91-19, 91-1A TO 91-1F): INTERNAL FAILURE OF THE SRS UNIT**)
91-2x			Short in SRS indicator circuit	(see **DTC 91-2X (91-20 TO 91-29, 91-2A TO 91-2F): SHORT IN SRS INDICATOR**)
92-1x			Short to power in passenger's airbag cutoff indicator	(see **DTC 92-1X (92-10 TO 92-19, 92-1A TO 92-1F): PASSENGER'S AIRBAG CUTOFF INDICATOR MALFUNCTION ('04-06 MODELS)**)
92-2x			Open in passenger's airbag cutoff indicator	(see **DTC 92-2X (92-20 TO 92-29, 92-2A TO 92-2F): OPEN OR SHORT TO GROUND IN PASSENGER'S AIRBAG CUTOFF INDICATOR ('04-06 MODELS)**)
				(see **DTC 92-2X (92-20 TO**

			Short to ground in passenger's airbag cutoff indicator	**92-29, 92-2A TO 92-2F): OPEN OR SHORT TO GROUND IN PASSENGER'S AIRBAG CUTOFF INDICATOR ('04-06 MODELS)**)
A1-1x			Faulty power supply (VA line)	(see **DTC A1-1X (A1-10 TO A1-19, A1-1A TO A1-1F): FAULTY POWER SUPPLY (VA LINE)**)
A2-1x			Faulty power supply (VB line)	(see **DTC A2-1X (A2-10 TO A2-19, A2-1A TO A2-1F): FAULTY POWER SUPPLY (VB LINE)**)
D1-11	X		Driver's airbag and/or driver's seat belt tensioner deployed	(see **DTC D1-11, D2-11, D3-11, D4-11, D7-11, E2-11, E4-11, F1-11, F2-11, F3-11, F4-11: AIRBAGS, SIDE AIRBAGS, AND/OR SEAT BELT TENSIONERS DEPLOYED**)
D2-11			Front passenger's airbag and/or front passenger's seat belt tensioner deployed	
D3-11			Driver's side airbag deployed	
D4-11			Front passenger's side airbag deployed	
D7-11			Rear-end collisioned	
E2-11			Front passenger's airbag deployed	
E4-11			Front passenger's side airbag deployed	
F1-11			Driver's airbag and/or driver's seat belt tensioner deployed	
			Front passenger's	

F2-11			airbag and/or front passenger's seat belt tensioner deployed	
F3-11			Driver's side airbag deployed	
F4-11			Front passenger's side airbag deployed	

(1) The SRS indicator turns on and stays on whenever the ignition switch is in the ON (II) position, or until the code is cleared.

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NOTE: The "x" at the end of each DTC denotes a numeric character (0 thru 9) or an alpha character (A thru F) that you will see on the HDS display. The character is unrelated to your troubleshooting; it designates the SRS unit manufacturer and other detail used for product analysis.

NOTE: Before looking up DTCs in the DTC troubleshooting index, verify the manufacturer of the SRS unit. The DTCs a re different from manufacturer to manufacturer.

DTC TROUBLESHOOTING INDEX - TRW SRS UNIT ('06-07 MODELS)

DTC	Latch(1)	Reset(2)	Detection Item	Notes
11-1x		X	Open or increased resistance in driver's airbag first inflator	(see **DTC 11-1X (11-10 TO 11-19,11-1A TO 11-1F): OPEN IN DRIVER'S AIRBAG FIRST INFLATOR**)
11-3x		X	Short to another wire or decreased resistance in driver's airbag first inflator	(see **DTC 11-3X (11-30 TO 11-39,11-3A TO 11-3F): SHORT TO ANOTHER WIRE OR DECREASED**

				RESISTANCE IN DRIVER'S AIRBAG FIRST INFLATOR)
11-4x		X	Open or increased resistance in driver's airbag second inflator	(see **DTC 11-4X (11-40 TO 11-49,11-4A TO 11-4F): OPEN IN DRIVER'S AIRBAG SECOND INFLATOR**)
11-6x		X	Short to another wire or decreased resistance in driver's airbag second inflator	(see **DTC 11-6X (11-60 TO 11-69,11-6A TO 11-6F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN DRIVER'S AIRBAG SECOND INFLATOR**)
11-8x	X		Short to power in driver's airbag first inflator	(see **DTC 11-8X (11-80 TO 11-89, 11-8A TO 11-8F): SHORT TO POWER IN DRIVER'S AIRBAG FIRST INFLATOR**)
11-9x	X		Short to ground in driver's airbag first inflator	(see **DTC 11-9X (11-90 TO 11-99, 11-9A TO 11-9F): SHORT TO GROUND IN DRIVER'S AIRBAG FIRST INFLATOR**)
11-Ax	X		Short to power in driver's airbag second inflator	(see **DTC 11-AX (11-A0 TO 11-A9, 11-AA TO 11-AF): SHORT TO POWER IN DRIVER'S AIRBAG SECOND INFLATOR**)
11-Bx	X		Short to ground in driver's airbag second inflator	(see **DTC 11-BX (11-B0 TO 11-B9, 11-BA TO 11-BF): SHORT TO GROUND IN DRIVER'S AIRBAG SECOND INFLATOR**)

12-1x		X	Open or increased resistance in front passenger's airbag first inflator	(see **DTC 12-1X (12-10 TO 12-19, 12-1A TO 12-1F): OPEN IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR**)
12-3x		X	Short to another wire or decreased resistance in front passenger's airbag first inflator	(see **DTC 12-3X (12-30 TO 12-39, 12-3A TO 12-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR**)
12-4x		X	Open or increased resistance in front passenger's airbag second inflator	(see **DTC 12-4X (12-40 TO 12-49, 12-4A TO 12-4F): OPEN IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR**)
12-6x		X	Short to another wire or decreased resistance in front passenger's airbag second inflator	(see **DTC 12-6X (12-60 TO 12-69, 12-6A TO 12-6F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR**)
12-8x	X		Short to power in front passenger's airbag first inflator	(see **DTC 12-8X (12-80 TO 12-89, 12-8A TO 12-8F): SHORT TO POWER IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR**)
12-9x	X		Short to ground in front passenger's airbag first inflator	(see **DTC 12-9X (12-90 TO 12-99, 12-9A TO 12-9F): SHORT TO GROUND IN FRONT PASSENGER'S AIRBAG FIRST**

				INFLATOR)
12-Ax	X		Short to power in front passenger's airbag second inflator	(see **DTC 12-AX (12-A0 TO 12-A9, 12-AA TO 12-AF): SHORT TO POWER IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR**)
12-Bx	X		Short to ground in front passenger's airbag second inflator	(see **DTC 12-BX (12-B0 TO 12-B9, 12-BA TO 12-BF): SHORT TO GROUND IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR**)
21-1x		X	Open or increased resistance in driver's seat belt tensioner	(see **DTC 21-1X (21-10 TO 21-19, 21-1A TO 21-1F): OPEN IN DRIVER'S SEAT BELT TENSIONER**)
21-3x		X	Short to another wire or decreased resistance in driver's seat belt tensioner	(see **DTC 21-3X (21-30 TO 21-39, 21-3A TO 21-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN DRIVER'S SEAT BELT TENSIONER**)
21-8x	X		Short to power in driver's seat belt tensioner	(see **DTC 21-8X (21-80 TO 21-89, 21-8A TO 21-8F): SHORT TO POWER IN DRIVER'S SEAT BELT TENSIONER**)
21-9x	X		Short to ground in driver's seat belt tensioner	(see **DTC 21-9X (21-90 TO 21-99, 21-9A TO 21-9F): SHORT TO GROUND IN DRIVER'S SEAT BELT TENSIONER**)

22-1x		X	Open or increased resistance in front passenger's seat belt tensioner	(see **DTC 22-1X (22-10 TO 22-19, 22-1A TO 22-1F): OPEN IN FRONT PASSENGER'S SEAT BELT TENSIONER**)
22-3x		X	Short to another wire or decreased resistance in front passenger's seat belt tensioner	(see **DTC 22-3X (22-30 TO 22-39, 22-3A TO 22-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S SEAT BELT TENSIONER**)
22-8x	X		Short to power in front passenger's seat belt tensioner	(see **DTC 22-8X (22-80 TO 22-89, 22-8A TO 22-8F): SHORT TO POWER IN FRONT PASSENGER'S SEAT BELT TENSIONER**)
22-9x	X		Short to ground in front passenger's seat belt tensioner	(see **DTC 22-9X (22-90 TO 22-99, 22-9A TO 22-9F): SHORT TO GROUND IN FRONT PASSENGER'S SEAT BELT TENSIONER**)
31-1x		X	Open or increased resistance in driver's side airbag inflator	(see **DTC 31-1X (31-10 TO 31-19, 31-1A TO 31-1F): OPEN IN DRIVER'S SIDE AIRBAG INFLATOR**)
31-3x		X	Short to another wire or decreased resistance in driver's side airbag inflator	(see **DTC 31-3X (31-30 TO 31-39, 31-3A TO 31-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN DRIVER'S SIDE AIRBAG INFLATOR**)

31-8x	X		Short to power in driver's side airbag inflator	(see **DTC 31-8X (31-80 TO 31-89, 31-8A TO 31-8F): SHORT TO POWER IN DRIVER'S SIDE AIRBAG INFLATOR**)
31-9x	X		Short to ground in driver's side airbag inflator	(see **DTC 31-9X (31-90 TO 31-99, 31-9A TO 31-9F): SHORT TO GROUND IN DRIVER'S SIDE AIRBAG INFLATOR**)
32-1x		X	Open or increased resistance in front passenger's side airbag inflator	(see **DTC 32-1X (32-10 TO 32-19, 32-1A TO 32-1F): OPEN IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR**)
32-3x		X	Short to another wire or decreased resistance in front passenger's side airbag inflator	(see **DTC 32-3X (32-30 TO 32-39, 32-3A TO 32-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR**)
32-8x	X		Short to power in front passenger's side airbag inflator	(see **DTC 32-8X (32-80 TO 32-89, 32-8A TO 32-8F): SHORT TO POWER IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR**)
32-9x	X		Short to ground in front passenger's side airbag inflator	(see **DTC 32-9X (32-90 TO 32-99, 32-9A TO 32-9F): SHORT TO GROUND IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR**)
33-1x		X	Open or increased	(see **DTC 33-1X (33-10 TO**

			resistance in left side curtain airbag inflator	**33-19, 33-1A TO 33-1F): OPEN OR INCREASED RESISTANCE IN LEFT SIDE CURTAIN AIRBAG INFLATOR**)
33-3x		X	Short to another wire or decreased resistance in left side curtain airbag inflator	(see **DTC 33-3X (33-30 TO 33-39, 33-3A TO 33-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN LEFT SIDE CURTAIN AIRBAG INFLATOR**)
33-8x	X		Short to power in left side curtain airbag inflator	(see **DTC 33-8X (33-80 TO 33-89, 33-8A TO 33-8F): SHORT TO POWER IN LEFT SIDE CURTAIN AIRBAG INFLATOR**)
33-9x	X		Short to ground in left side curtain airbag inflator	(see **DTC 33-9X (33-90 TO 33-99, 33-9A TO 33-9F): SHORT TO GROUND IN LEFT SIDE CURTAIN AIRBAG INFLATOR**)
34-1x		X	Open or increased resistance in right side curtain airbag inflator	(see **DTC 34-1X (34-10 TO 34-19, 34-1A TO 34-1F): OPEN OR INCREASED RESISTANCE IN RIGHT SIDE CURTAIN AIRBAG INFLATOR**)
34-3x		X	Short to another wire or decreased resistance in right side curtain airbag inflator	(see **DTC 34-3X (34-30 TO 34-39, 34-3A TO 34-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN RIGHT SIDE CURTAIN AIRBAG INFLATOR**)

34-8x	X		Short to power in right side curtain airbag inflator	(see **DTC 34-8X (34-80 TO 34-89, 34-8A TO 34-8F): SHORT TO POWER IN RIGHT SIDE CURTAIN AIRBAG INFLATOR**)
34-9x	X		Short to ground in right side curtain airbag inflator	(see **DTC 34-9X (34-90 TO 34-99, 34-9A TO 34-9F): SHORT TO GROUND IN RIGHT SIDE CURTAIN AIRBAG INFLATOR**)

(1) The SRS indicator turns on and stays on whenever the ignition switch is in the ON (II) position, or until the code is cleared.

(2) The SRS indicator turns on when the DTC is set. The SRS indicator will not turn on after the ignition switch is cycled from ON (II) to OFF (0), but the DTC will be stored in the SRS unit.

NOTE: The "x" at the end of each DTC denotes a numeric character (0 thru 9) or an alpha character (A thru F) that you will see on the HDS display. The character is unrelated to your troubleshooting; it designates the SRS unit manufacturer and other detail used for product analysis.

NOTE: Before looking up DTCs in the DTC troubleshooting index, verify the manufacturer of the SRS unit. The DTCs are different from manufacturer to manufacturer.

DTC TROUBLESHOOTING INDEX - TRW SRS UNIT ('06-07 MODELS) (CONT.)

DTC	Latch(1)	Reset(2)	Detection Item	Notes
41-1x		X	No signal from the left front impact sensor	(see **DTC 41-1X (41-10 TO 41-19, 41-1A TO 41-1F): NO SIGNAL FROM THE LEFT FRONT IMPACT SENSOR**)

41-2x		X	Internal failure of the left front impact sensor	(see **DTC 41-2X (41-20 TO 41-29, 41-2A TO 41-2F), 41-3X (41-30 TO 41-39, 41-3A TO 41-3F): INTERNAL FAILURE OF THE LEFT FRONT IMPACT SENSOR**)
41-3x				
41-Bx	X			
42-1x		X	No signal from the right front impact sensor	(see **DTC 42-1X (42-10 TO 42-19, 42-1A TO 42-1F): NO SIGNAL FROM THE RIGHT FRONT IMPACT SENSOR**)
42-2x		X	Internal failure of the right front impact sensor	(see **DTC 42-2X (42-20 TO 42-29, 42-2A TO 42-2F), 42-3X (42-30 TO 42-39, 42-3A TO 42-3F): INTERNAL FAILURE OF THE RIGHT FRONT IMPACT SENSOR**)
42-3x				
42-Bx	X			
43-1x		X	No signal from the left side impact sensor (first)	(see **DTC 43-1X (43-10 TO 43-19, 43-1A TO 43-1F): NO SIGNAL FROM THE LEFT SIDE IMPACT SENSOR (FIRST)**)
43-2x		X	Internal failure of the left side impact sensor (first)	(see **DTC 43-2X (43-20 TO 43-29, 43-2A TO 43-2F), 43-3X (43-30 TO 43-39, 43-3A TO 43-3F), 43-BX (43-B0 TO 43-B9, 43-BA TO 43-BF): INTERNAL FAILURE OF THE LEFT SIDE IMPACT SENSOR (FIRST)**)
43-3x				
43-Bx	X			
			No signal from the	(see **DTC 44-1X (44-10 TO 44-19, 44-1A TO 44-1F):**

44-1x		X	right side impact sensor (first)	**NO SIGNAL FROM THE RIGHT SIDE IMPACT SENSOR (FIRST)**)
44-2x		X	Internal failure of the right side impact sensor (first)	(see **DTC 44-2X (44-20 TO 44-29, 44-2A TO 44-2F), 44-3X (44-30 TO 44-39, 44-3A TO 44-3F), 44-BX (44-B0 TO 44-B9, 44-BA TO 44- BF): INTERNAL FAILURE OF THE RIGHT SIDE IMPACT SENSOR (FIRST)**)
44-3x				
44-Bx	X			
45-1x		X	No signal from left side impact sensor (second)	(see **DTC 45-1X (45-10 TO 45-19, 45-1A TO 45-1F): NO SIGNAL FROM THE LEFT SIDE IMPACT SENSOR (SECOND)**)
45-2x		X	Internal failure of left side impact sensor (second)	(see **DTC 45-2X (45-20 TO 45-29, 45-2A TO 45-2F), 45-3X (45-30 TO 45-39, 45-3A TO 45-3F), 45-BX (45-B0 TO 45-B9, 45-BA TO 45-BF): INTERNAL FAILURE OF THE LEFT SIDE IMPACT SENSOR (SECOND)**)
45-3x				
45-Bx	X			
46-1x		X	No signal from right side impact sensor (second)	(see **DTC 46-1X (46-10 TO 46-19, 46-1A TO 46-1F): NO SIGNAL FROM THE RIGHT SIDE IMPACT SENSOR (SECOND)**)
46-2x		X	Internal failure of	(see **DTC 46-2X (46-20 TO 46-29, 46-2A TO 46-2F), 46-3X (46-30 TO 46-39, 46-3A TO 46-3F), 46-BX (46-**

46-3x			right side impact sensor (second)	**B0 TO 46-B9, 46-BA TO 46-BF): INTERNAL FAILURE OF THE RIGHT SIDE IMPACT SENSOR (SECOND)**)
46-Bx	X			
51-2x		X	Internal failure of SRS unit	(see **DTC 51-2X (51-20 TO 51-29, 51-2A TO 51-2F), 51-4X (51-40 TO 51-49, 51-4A TO 51-4F), 51-7X (51-70 TO 51-79, 51-7A TO 51-7F): INTERNAL FAILURE OF THE SRS UNIT**)
51-4x				
52-8x	X			
52-9x				
52-Ax				
52-Bx	X		Internal failure of SRS unit	(see **DTC 52-BX (52-B0 TO 52-B9, 52-BA TO 52-BF), 52-CX (52-C0 TO 52-C9, 52-CA TO 52-CF), 52-DX (52-D0 TO 52-D9, 52-DA TO 52-DF): INTERNAL FAILURE OF THE SRS UNIT**)
52-Cx				
52-Dx				
52-Ex				
52-Fx				
53-1x		X		
53-2x		X	Internal failure of SRS unit	(see **DTC 53-2X (53-20 TO 53-29, 53-2A TO 53-2F), 53-3X (53-30 TO 53-39, 53-3A TO 53-3F), 53-4X (53-40 TO 53-49, 53-4A TO 53-4F): INTERNAL FAILURE OF THE SRS UNIT**)
53-3x				
53-4x				
54-1x				
54-2x				
54-3x				
54-4x		X	Internal failure of SRS unit	(see **DTC 54-4X (54-40 TO 54-49, 54-4A TO 54-4F), 54-5X (54-50 TO 54-59, 54-5A TO 54-5F), 54-6X (54-60 TO 54-69,54-6A TO 54-6F): INTERNAL**
54-5x				
54-6x				
54-7x				

55-1x 55-2x				**FAILURE OF THE SRS UNIT**)
55-3x 55-4X		X	Internal failure of SRS unit	(see **DTC 55-3X (55-30 TO 55-39, 55-3A TO 55-3F), 55-4X (55-40 TO 55-49, 55-4A TO 55-4F), 55-7X (55-70 TO 55-79, 55-7A TO 55-7F): INTERNAL FAILURE OF THE SRS UNIT**)
(1) The SRS indicator turns on and stays on whenever the ignition switch is in the ON (II) position, or until the code is cleared. (2) The SRS indicator turns on when the DTC is set. The SRS indicator will not turn on after the ignition switch is cycled from ON (II) to OFF (0), but the DTC will be stored in the SRS unit.				

NOTE: The "x" at the end of each DTC denotes a numeric character (0 thru 9) or an alpha character (A thru F) that you will see on the HDS display. The character is unrelated to your troubleshooting; it designates the SRS unit manufacturer and other detail used for product analysis.

NOTE: Before looking up DTCs in the DTC troubleshooting index, verify the manufacturer of the SRS unit. The DTCs are different from manufacturer to manufacturer.

DTC TROUBLESHOOTING INDEX - TRW SRS UNIT ('06-07 MODELS) (CONT.)

DTC	Latch(1)	Reset(2)	Detection Item	Notes
			Open in driver's seat belt buckle switch (with power seat)	(see **DTC 61-1X (61-10 TO 61-19,61-1A TO 61-1F): OPEN IN DRIVER'S SEAT BELT BUCKLE SWITCH**

				(WITH POWER SEAT))
61-1x			Open in driver's seat belt buckle switch (without power seat)	(see **DTC 61-1X (61-10 TO 61-19,61-1A TO 61-1F): OPEN IN DRIVER'S SEAT BELT BUCKLE SWITCH (WITHOUT POWER SEAT)**)
61-2x			Short in driver's seat belt buckle switch (with power seat)	(see **DTC 61-2X (61-20 TO 61-29,61-2A TO 61-2F): SHORT IN DRIVER'S SEAT BELT BUCKLE SWITCH (WITH POWER SEAT)**)
		X	Short in driver's seat belt buckle switch (without power seat)	(see **DTC 61-2X (61-20 TO 61-29, 61-2A TO 61-2F): SHORT IN DRIVER'S SEAT BELT BUCKLE SWITCH (WITHOUT POWER SEAT)**)
62-1x			Open in front passenger's seat belt buckle switch (with power seat)	(see **DTC 62-1X (62-10 TO 62-19, 62-1A TO 62-1F): OPEN IN FRONT PASSENGER'S SEAT BELT BUCKLE SWITCH (WITH POWER SEAT)**)
			Open in front passenger's seat belt buckle switch (without power seat)	(see **DTC 62-1X (62-10 TO 62-19,62-1A TO 62-1F): OPEN IN FRONT PASSENGER'S SEAT BELT BUCKLE SWITCH (WITHOUT POWER SEAT)**)
			Short in front passenger's seat belt	(see **DTC 62-2X (62-20 TO 62-29,62-2A TO 62-2F): SHORT IN FRONT**

62-2x			buckle switch (with power seat)	(see **PASSENGER'S SEAT BELT BUCKLE SWITCH (WITH POWER SEAT)**)
			Short in front passenger's seat belt buckle switch (without power seat)	(see **DTC 62-2X (62-20 TO 62-29, 62-2A TO 62-2F): SHORT IN FRONT PASSENGER'S SEAT BELT BUCKLE SWITCH (WITHOUT POWER SEAT)**)
71-1x			Open in driver's seat position sensor	(see **DTC 71-1X171-10 TO 71-19, 71-1A TO 71-1F): OPEN IN DRIVER'S SEAT POSITION SENSOR**)
71-2x			Short in driver's seat position sensor	(see **DTC 71-2X (71-20 TO 71-29, 71-2A TO 71-2F): SHORT IN DRIVER'S SEAT POSITION SENSOR**)
81-4x			Faulty ODS unit	(see **DTC 81-4X (81-40 TO 81-49, 81-4A TO 81-4F), 81-5X (81-50 TO 81-59, 81-5A TO 81-5F), 81-63, 81-64: INTERNAL FAILURE OF THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS)**)
81-5x				
81-61			No signal from the ODS unit	(see **DTC 81-61: NO SIGNAL FROM FRONT PASSENGER'S WEIGHT SENSOR UNIT (WITH SIDE AIRBAG) ('04-05 MODELS)**)
				(see **DTC 81-62: NON-**

81-62	Non-stipulated response data	**STIPULATED RESPONSE DATA (WITH SIDE AIRBAG) ('04-05 MODELS)**)
81-63	Model ID code or variation code inconsistent	(see **DTC 81-4X (81-40 TO 81-49, 81-4A TO 81-4F), 81-5X (81-50 TO 81-59, 81-5A TO 81-5F), 81-63, 81-64: INTERNAL FAILURE OF THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS)**)
81-64	ECU serial ID code inconsistent	
81-71 81-78	ODS unit does not calibrate	(see **DTC 81-71, 81-78: FRONT PASSENGER'S WEIGHT SENSOR UNIT DOES NOT CALIBRATE ('04-05 MODELS)**)
81-79	Front passenger's weight sensors drift check failure	(see **DTC 81-79: FRONT PASSENGER'S WEIGHT SENSORS DRIFT CHECK FAILURE ('04-05 MODELS)**)
82-1x	No signal from the inner side front passenger's weight sensor	(see **DTC 82-1X (82-10 TO 82-19, 82-1A TO 82-1F): NO SIGNAL FROM THE INNER SIDE FRONT PASSENGER'S WEIGHT SENSOR ('04-06 MODELS)**)
83-2x	No signal from the outer side front passenger's weight	(see **DTC 83-2X (83-20 TO 83-29, 83-2A TO 83-2F): NO SIGNAL FROM THE OUTER SIDE FRONT PASSENGER'S WEIGHT**

	sensor	**SENSOR ('04-06 MODELS)**)
85-4x 85-5x	Faulty ODS unit	(see **DTC 85-4X (85-40 TO 85-49, 85-4A TO 85-4F), 85-5X (85-50 TO 85-59, 85-5A TO 85-5F), 85-63, 85-64: INTERNAL FAILURE OF THE OPDS/ODS UNIT**)
85-61	No signal from the ODS unit	(see **DTC 85-61: NO SIGNAL FROM THE OPDS UNIT ('04-05 MODELS)**)
85-62	Non-stipulated response data	
85-63	Model ID code or variation code inconsistent	(see **DTC 85-4x (85-40 to 85-49, 85-4A to 85-4F), 85-5x (85-50 to 85-59, 85-5A to 85-5F), 85-63, 85-64: INTERNAL FAILURE OF THE OPDS/ODS UNIT**)
85-64	ECU serial ID code inconsistent	
85-71 85-78	ODS unit not initialized	(see **DTC 85-71, 85-78: OPDS/ODS UNIT NOT INITIALIZED**)
85-79	ODS drift check failure	(see **DTC 85-79: OPDS SENSOR DRIFT CHECK FAILURE**)
86-1x	Faulty seat-back OPDS sensor	(see **DTC 86-1X (86-10 TO 86-19, 86-1A TO 86-1F): FAULTY OPDS SEAT-BACK SENSOR**)
86-2x	Faulty seat support OPDS sensor	
87-31	Internal failure of the ODS unit	(see **DTC 87-31: INTERNAL FAILURE OF THE OPDS/ODS UNIT**)
87-32	The side airbag cutoff indicator stays on	(see **DTC 87-32: SIDE AIRBAG CUTOFF INDICATOR STAYS ON**

				('03-05 MODELS))
91-1x			Internal failure of the SRS unit	(see **DTC 91-1X (91-10 TO 91-19, 91-1A TO 91-1F): INTERNAL FAILURE OF THE SRS UNIT**)
91-2x			Short in SRS indicator circuit	(see **DTC 91-2X (91-20 TO 91-29, 91-2A TO 91-2F): SHORT IN SRS INDICATOR**)

	X			
92-1x		X	Open in passenger's airbag cutoff indicator	(see **DTC 92-1X (92-10 TO 92-19, 92-1A TO 92-1F): PASSENGER'S AIRBAG CUTOFF INDICATOR MALFUNCTION ('04-06 MODELS)**)
92-2x			Short to ground in passenger's airbag cutoff indicator	(see **DTC 92-2X (92-20 TO 92-29, 92-2A TO 92-2F): OPEN OR SHORT TO GROUND IN PASSENGER'S AIRBAG CUTOFF INDICATOR ('04-06 MODELS)**)
A1-1x			Faulty power supply (VA line)	(see **DTC A1-1X (A1-10 TO A1-19, A1-1A TO A1-1F): FAULTY POWER SUPPLY (VA LINE)**)
A2-1x			Faulty power supply (VB line)	(see **DTC A2-1X (A2-10 TO A2-19, A2-1A TO A2-1F): FAULTY POWER SUPPLY (VB LINE)**)
D1-11	X		Driver's airbag and driver's seat belt tensioner deployed	(see **DTC D1-11, D2-11, D3-11, D4-11, D7-11, E2-11,**
D2-11			Front passenger's airbag and front passenger's seat belt tensioner deployed	
D3-11			Driver's side airbag deployed	
D4-11			Front passenger's side airbag deployed	
D7-11			Rear-end collisioned	

E2-11			Front passenger's airbag deployed	**E4-11, F1-11, F2-11, F3-11, F4-11: Airbags, Side Airbags, and/or Seat Belt Tensioners Deployed**)
E4-11			Front passenger's side airbag deployed	
F1-11			Driver's airbag and driver's seat belt tensioner deployed	
F2-11			Front passenger's airbag and front passenger's seat belt tensioner deployed	
F3-11			Driver's side airbag deployed	
F4-11			Front passenger's side airbag deployed	

(1) The SRS indicator turns on and stays on whenever the ignition switch is in the ON (II) position, or until the code is cleared.

(2) The SRS indicator turns on when the DTC is set. The SRS indicator will not turn on after the ignition switch is cycled from ON (II) to OFF (0), but the DTC will be stored in the SRS unit.

NOTE: The "x" at the end of each DTC denotes a numeric character (0 thru 9) or an alpha character (A thru F) that you will see on the HDS display. The character is unrelated to your troubleshooting; it designates the SRS unit manufacturer and other detail used for product analysis.

When an OPDS sensor or seat weight sensor failure occurs, the DTC is stored by the STS unit and the ODS unit. The ODS unit DTC is a subcode of the STS unit DTC.

ODS Unit DTC Index ('06-07 models)

SRS Unit DTC	ODS Unit DTC	Detection Item	Notes
81-41	41-01	Internal failure of the ODS unit	
	41-02		
	41-03		
	41-04		
	41-05		
	41-06		
	41-07		
	41-08		
	41-11		
82-11	11-11	Short to power in the inner side front passenger's weight sensor power circuit	
	11-12	Short to ground in the inner side front passenger's weight sensor power circuit	
82-12	12-21	Open in the inner side front passenger's weight sensor signal line	
82-13	13-31	No signal from the inner side front passenger's weight sensor	
	13-32		
	13-33		
	13-34		
	13-35		
83-21	21-11	Short to power in the outer side front passenger's weight sensor power circuit	
	21-12	Short to ground in the outer side front passenger's weight sensor power circuit	
83-22	22-21	Open in the outer side front passenger's weight sensor signal line	
83-23	23-31	No signal from the outer side front passenger's weight sensor	
	23-32		
	23-33		
	23-34		
	23-35		
85-42	42-11	Internal failure of the ODS unit	
	42-12		
	42-13		
	42-14		
	42-15		
	42-16		
	42-17		
	42-18		
	42-21		
	42-23		
	42-25		
85-43	43-31		
	43-32		
	43-33		
	43-34		
	43-36		
	43-41		
85-71	71-41	ODS unit does not calibrate	Calibrate the front passenger's weight sensor
	71-42	Inner side front passenger's weight sensor serial ID code inconsistent	
	71-43	Outer side front passenger's weight sensor serial ID code inconsistent	
	71-51	Faulty power supply of ODS unit	Failure of battery voltage
	71-53	Communication error between ODS unit and front passenger's weight sensor	Calibrate the front passenger's weight sensor
	71-55	Unsuccessful calibration	
	71-56		
	71-57		
	71-58		

NOTE:
* 1: The SRS indicator turns on and stays on whenever the ignition switch is in the ON (II) position, or until the code is cleared.
* 2: The SRS indicator turns on when the DTC is set. The SRS indicator will not turn on after the ignition switch is cycled from ON (II) to OFF (0), but the DTC is stored in the SRS unit.

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Fig. 40: ODS Unit DTC Index ('06-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for
SRS indicator does	Symptom Troubleshooting (see **SYMPTOM**	

not come on	**TROUBLESHOOTING**)	
SRS indicator stays on, but no DTCs are stored	Symptom Troubleshooting (see step 1 in **SRS indicator stays on, but no DTCs are stored ('03-05 models)**)	
Side airbag cutoff indicator stays on after bulb check, and no DTCs are stored, or side airbag cutoff indicator is flashing	• Make sure nothing is on the front passenger's seat. • If the side airbag cutoff indicator stays on after the ignition switch is turned ON (II), initialize the OPDS/ODS unit (see **INITIALIZING THE OPDS/ODS UNIT**). ○ If the side airbag cutoff indicator operates normally, the system is OK. ○ If the side airbag cutoff indicator stays on, or flashes replace the OPDS sensor/ seat-back (see **FRONT SEAT COVER REPLACEMENT**). The sensor is part of the seat-back pad.	DTC 87-32 troubleshooting

SYSTEM DESCRIPTION

SRS COMPONENTS

Airbags

The SRS is a safety device which, when used with the seat belt, is designed to help

protect the driver and front passenger in a frontal impact exceeding a certain set limit. The system consists of the SRS unit, including safing sensor and impact sensor (A), the cable reel (B), the driver's airbag (C), the front passenger's airbag (D), side airbags (E), side curtain airbags (L), seat belt tensioners (I), front impact sensors (J), side impact sensors (first) (F) and side impact sensors (second) (K).

Since the driver's and front passenger's airbags use the same sensors, both normally inflate at the same time. However, it is possible for only one airbag to inflate. This can occur when the severity of a collision is at the margin, or threshold, that the SRS unit determines whether or not the airbags will deploy. In such cases, the seat belt will provide sufficient protection, and the supplemental protection offered by the airbag would be minimal.

Front Passenger's Weight Sensors ('04-07 models)

The front passenger's weight sensor unit ('04-05 models) (M) is under the front passenger's seat along with the weight sensors (N). The weight sensors detect the weight on the seat, and send the information to the front passenger's weight sensor unit ('04-05 models) or the ODS unit ('06-07 model). If the total weight is about 65 lbs (30 kg) or less, the front passenger's weight sensor unit or OPDS/ODS unit sends a signal to the SRS unit to prevent the passenger's airbag from deploying. When the passenger's airbag is disabled, the passenger airbag cutoff indicator on the center panel comes on to alert the driver that the front passenger's airbag will not deploy in a front-end collision.

Driver's Seat Position Sensor ('04-07 models)

The driver's seat position sensor (O) is under the driver's seat on the left side. When the driver's seat is moved to its full forward position, the deployment of the driver's airbag is moderated to decrease its force of impact during a front-end collision.

OPDS/ODS

The side airbag system also includes an occupant position detection system (OPDS). This system consists of sensors (G) and a OPDS/ODS unit (H) in the front passenger's seat-back. The OPDS/ODS unit sends occupant height and position data to the SRS unit. If the OPDS/ODS unit determines that the front passenger is of small stature (for example, a child) or the front passenger is leaning into the side

airbag deployment path, the SRS unit will automatically disable the passenger's side airbag. The SRS unit will also disable the airbag when the OPDS detects certain objects on the seat. When the side airbag is disabled, the side airbag cutoff indicator on the instrument panel alerts the driver that the passenger's side airbag will not deploy in a side impact. When the object is removed, or the passenger sits upright, the side airbag cutoff indicator will go off after a few seconds, alerting the driver that the passenger's side airbag will deploy in a side impact.

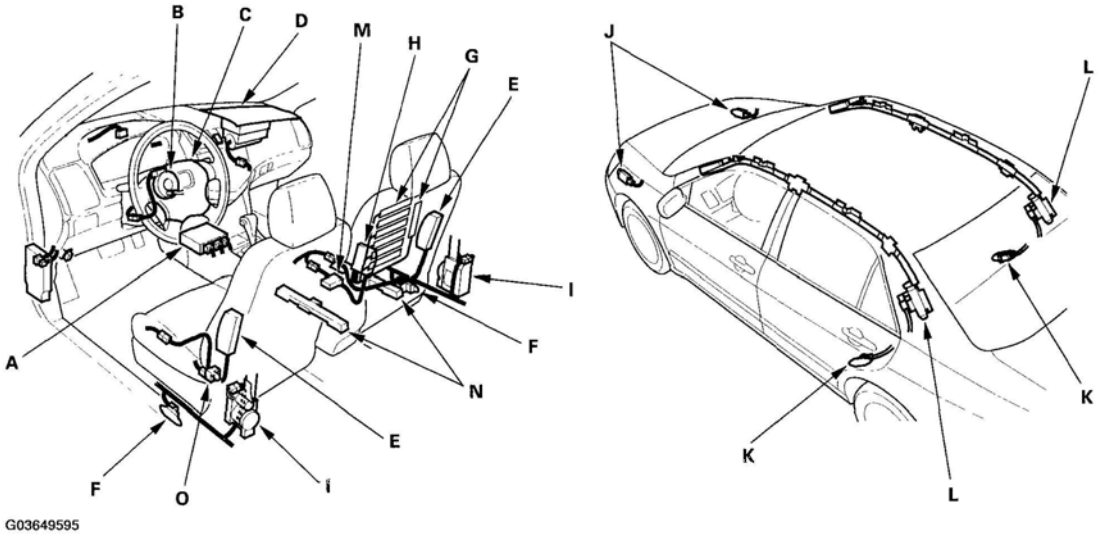


Fig. 41: Identifying SRS Components ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

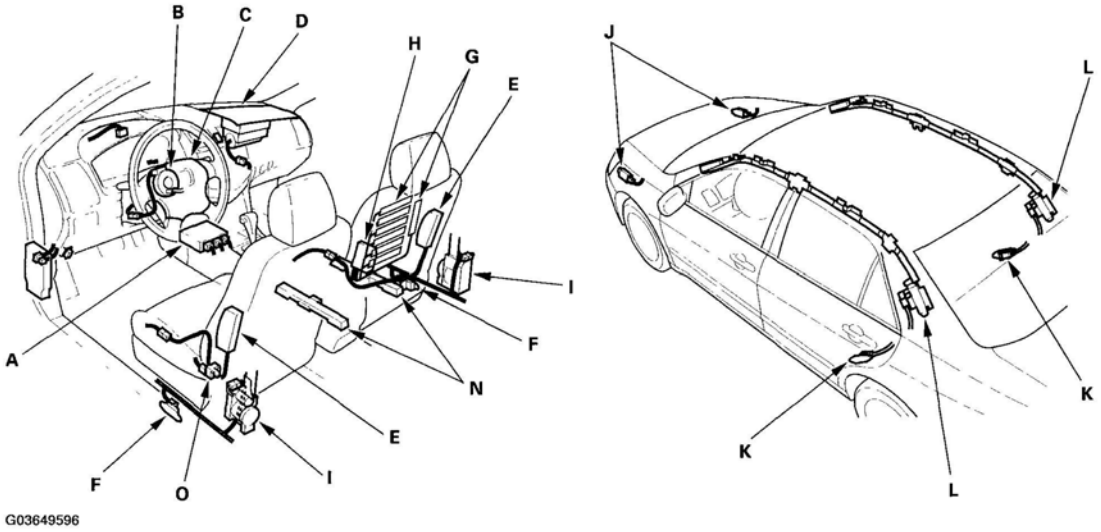


Fig. 42: Identifying SRS Components ('06-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SIDE AIRBAG CUTOFF INDICATOR/OPDS/ODS OPERATION

The indicator comes on if the front passenger's seat is occupied by a small adult or child who is leaning into the deployment path, or an object (grocery bag, briefcase, purse, etc.) is in the seat. This indicates the passenger's side airbag is off and will not deploy; there is no problem with the side airbag. If the passenger sits upright or moves to another seat, or you remove the object from the seat, the light should go off. There will be some delay between the occupant's repositioning, and when the indicator will turn on or off.

PASSENGER AIRBAG CUTOFF INDICATOR

The indicator comes on if the weight of the front passenger is 65 lbs (30 kg) or less. This indicates the passenger's front airbag is off and will not deploy. The front airbag is shut off to reduce the chance of airbag-caused injuries.

SRS OPERATION

The main circuit in the SRS unit senses and judges the force of impact and, if necessary, ignites the inflator charges. If battery voltage is too low or power is disconnected due to the impact, the voltage regulator and the back-up power circuit, respectively, will keep voltage at a constant level.

For the SRS to operate

Seat Belt Tensioners

1. A front impact sensor must activate and send electric signals to the microprocessor.
2. The microprocessor must compute the signals and send them to the tensioners.
3. The charges must ignite and deploy the tensioners.

Driver's and Front Passenger's Airbag(s)

1. A front impact sensor must activate, and send electric signals to the microprocessor.
2. The microprocessor must compute the signals, and send them to the airbag inflator(s).
3. The inflators that received signals must ignite and deploy the airbags.

Side Airbag(s)

1. Aside impact sensor must activate, and send electric signals to the microprocessor.
2. The microprocessor must compute the signals and send them to the side airbag inflator(s). However, the microprocessor cuts off the signals to the front passenger's side airbag if the SRS unit determines that the front passenger's head is in the deployment path of the side airbag.
3. The inflator that received the signal must ignite and deploy the side airbag.

Side Curtain Airbag(s)

1. Side impact sensors must activate, and send electrical signals to the microprocessor.
2. The microprocessor must compute the signals and send them to the side curtain airbag and side airbag inflator(s).
3. The inflator that received the signals must ignite and deploy the side curtain airbag and side airbag at the same time.

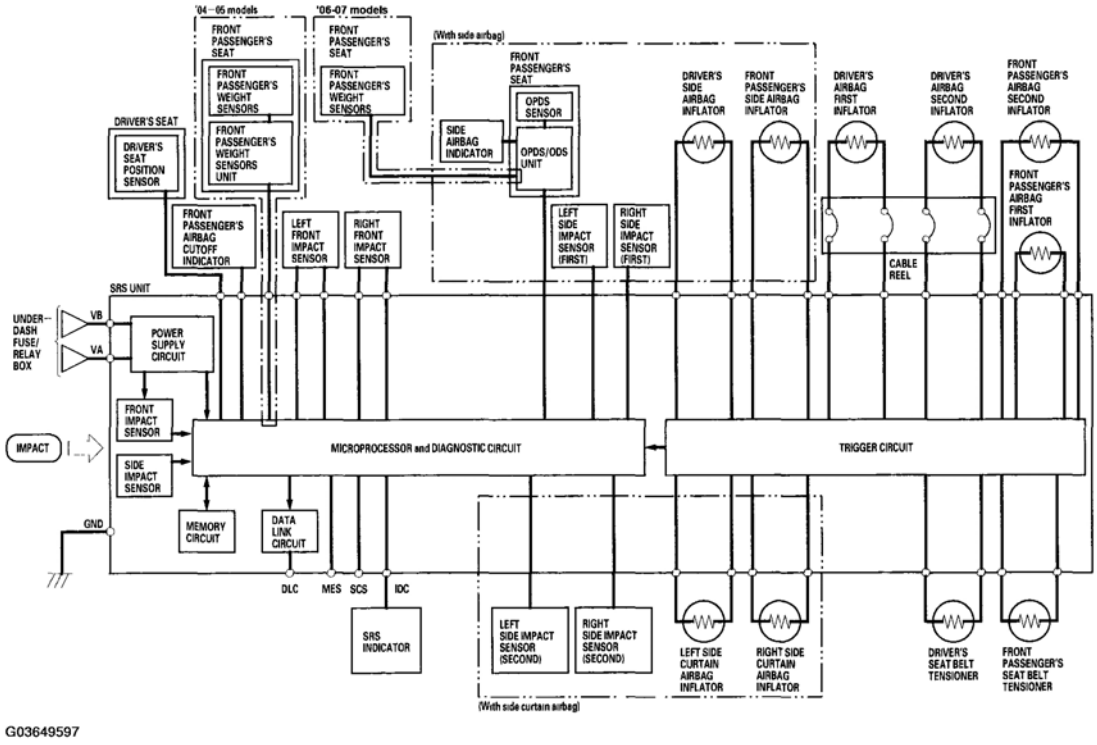


Fig. 43: SRS System Electrical Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Self-diagnosis System

A self-diagnosis circuit is built into the SRS unit; when the ignition switch is turned ON (II), the SRS indicator comes on and goes off after about 6 seconds if the system is operating normally.

If the indicator does not come on, or does not go off after 6 seconds, or if it comes on while driving, it indicates an abnormality in the system. The system must be inspected and repaired as soon as possible.

For better serviceability, the SRS unit memory stores a DTC that relates to the cause of the malfunction, and the unit is connected to the data link connector (DLC). This information can be read with the HDS when it is connected to the DLC (16P) (see **GENERAL TROUBLESHOOTING INFORMATION**).

NOTE: Before you disconnect the battery negative cable for

troubleshooting, make sure you have the anti-theft code for the audio and the navigation system. Write down the audio presets.

CIRCUIT DIAGRAM

WITHOUT SIDE CURTAIN AIRBAGS ('03-05 MODELS)

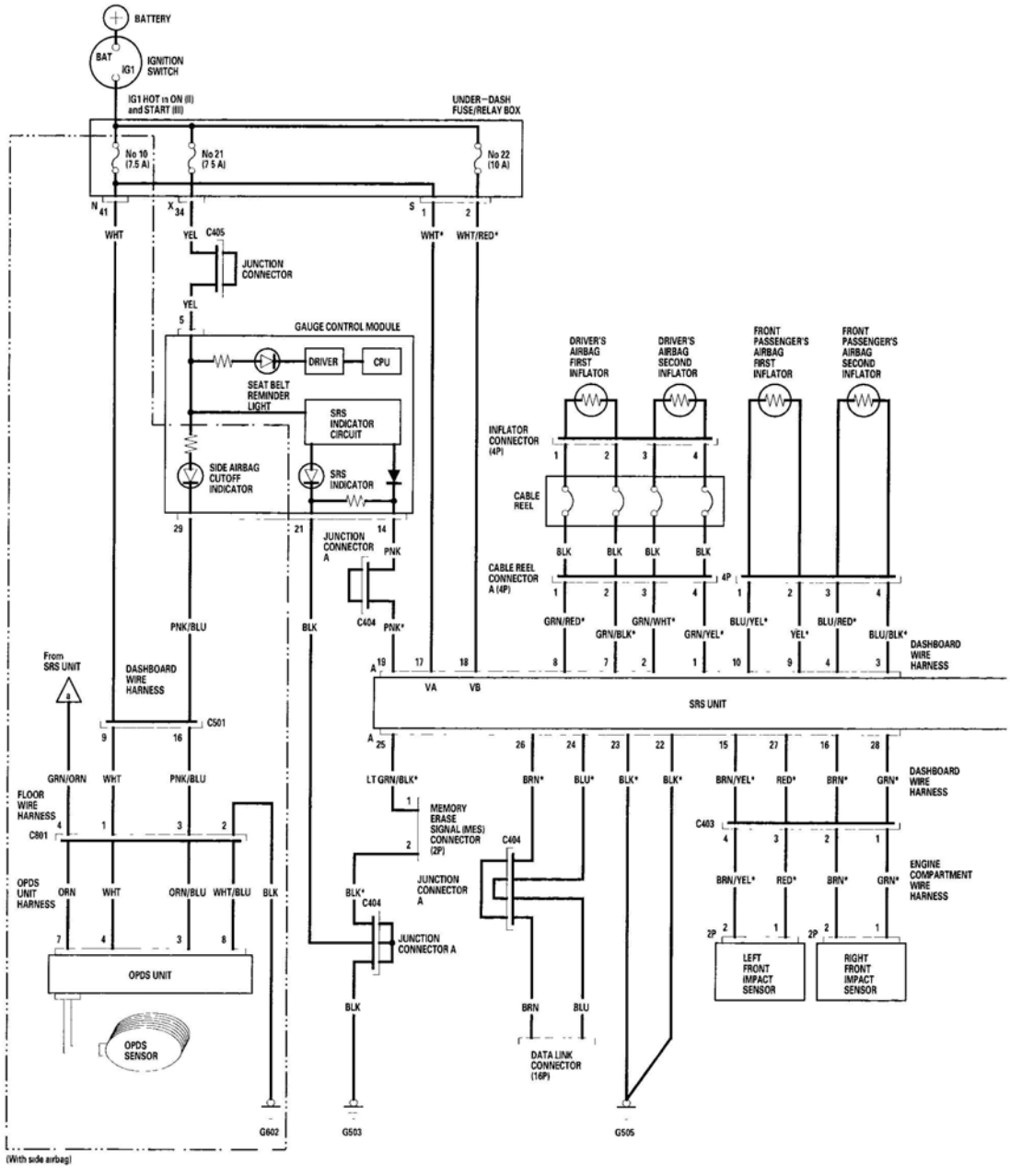


Fig. 44: SRS System Circuit Diagram (Without Side Curtain Airbags - '03-05 Models - 1 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

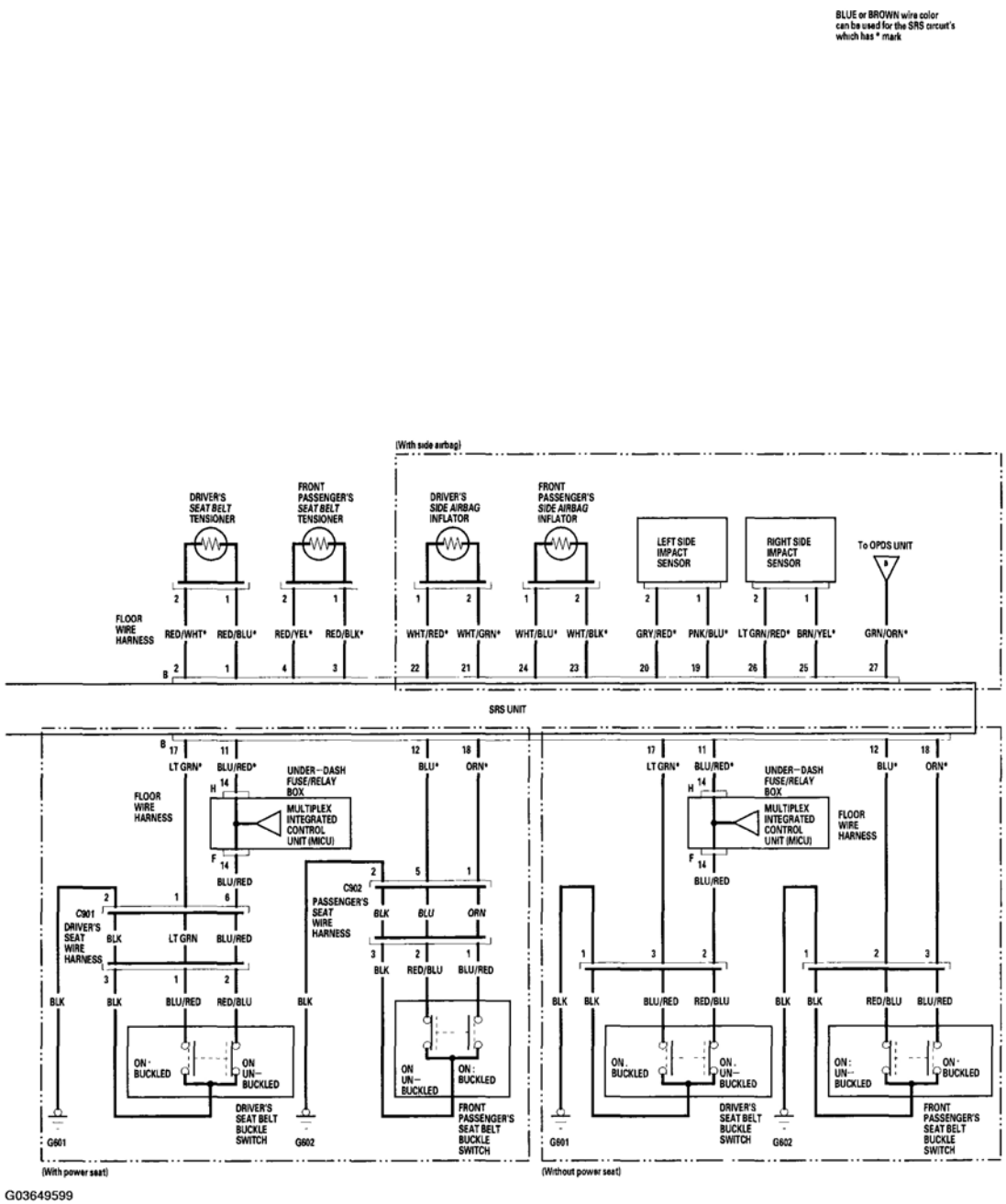


Fig. 45: SRS System Circuit Diagram (Without Side Curtain Airbags - '03-05 Models - 2 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

WITH SIDE CURTAIN AIRBAGS ('03-05 MODELS)

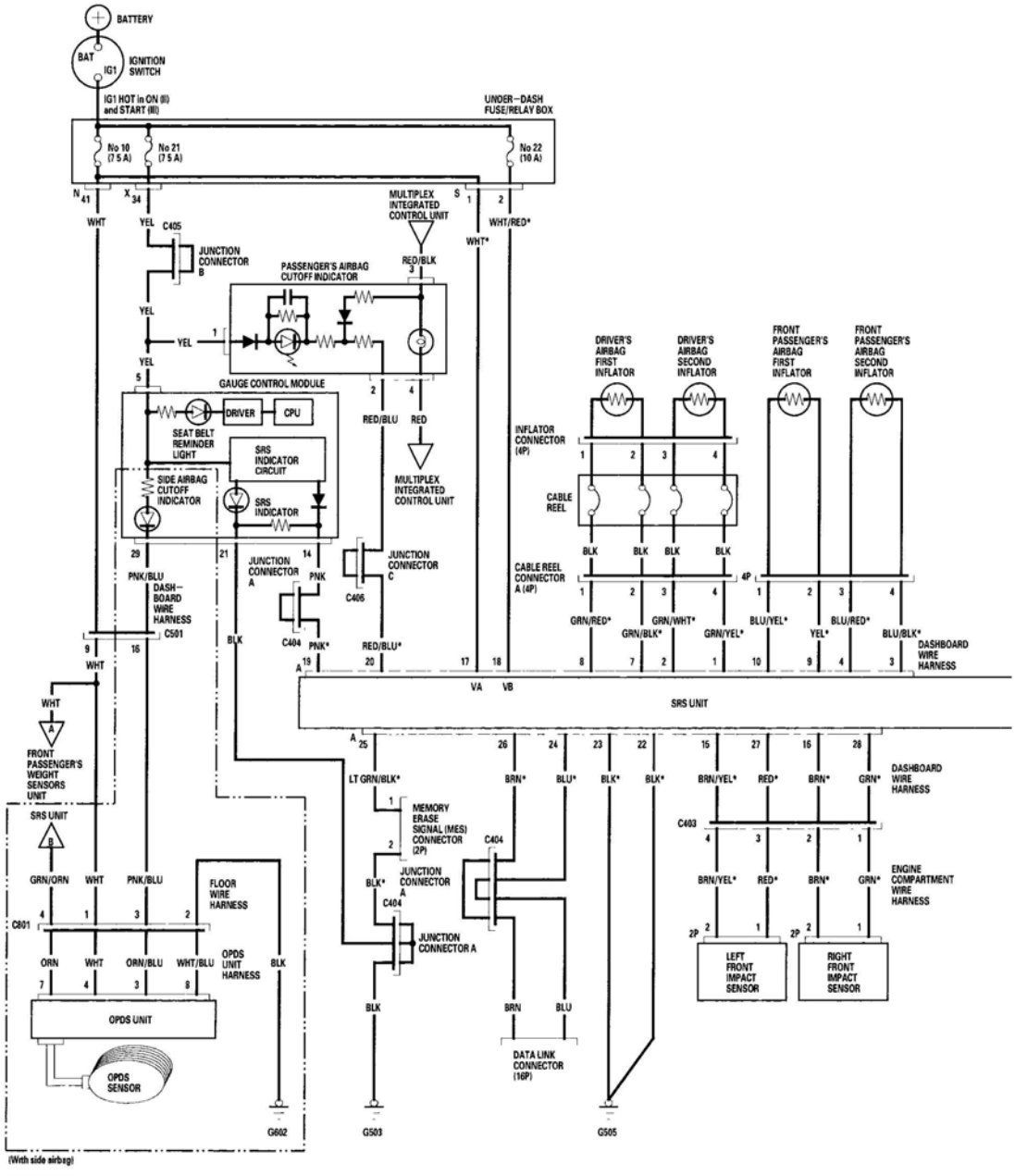


Fig. 46: SRS System Circuit Diagram (With Side Curtain Airbags - '03-05 Models - 1 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

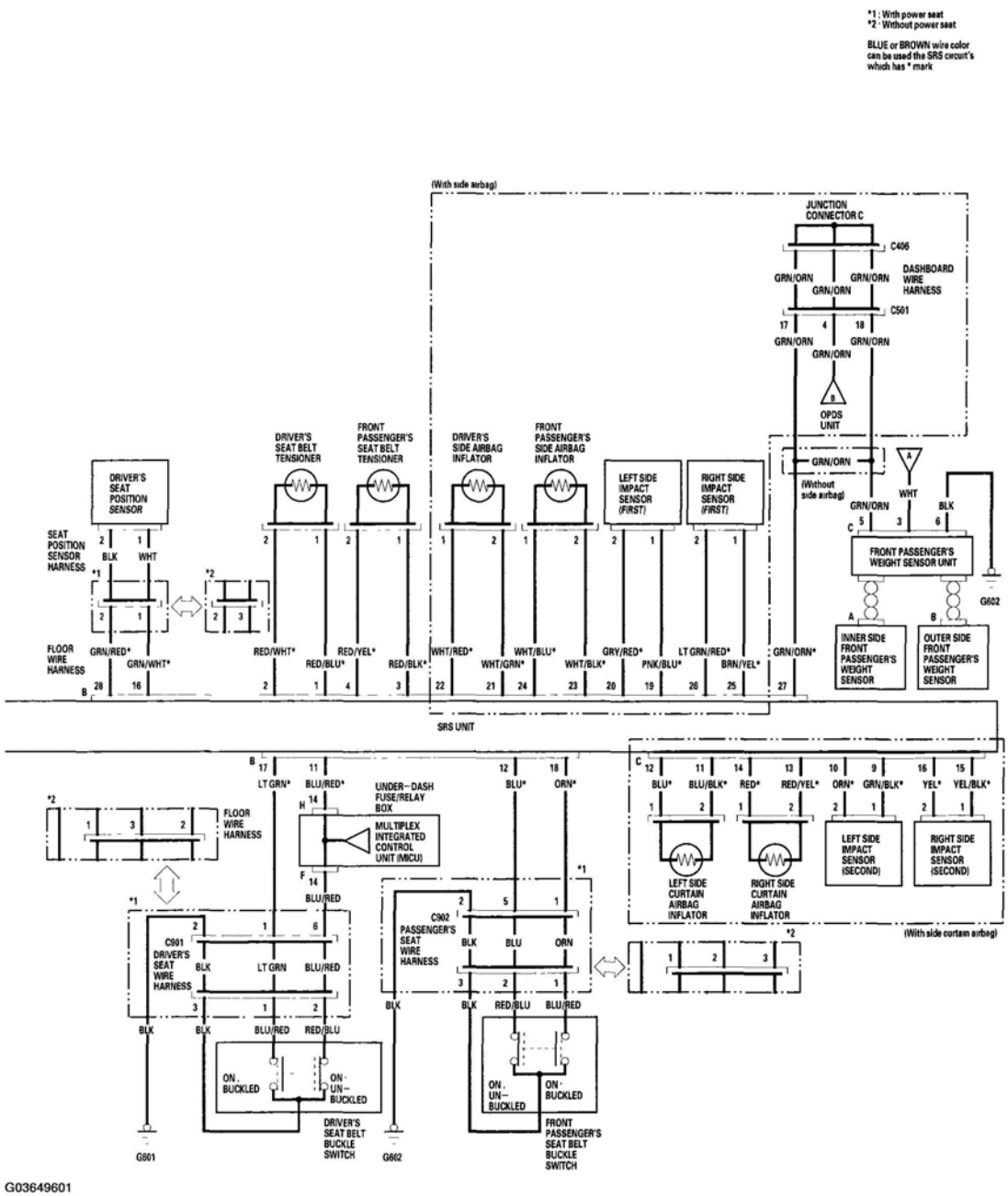


Fig. 47: SRS System Circuit Diagram (With Side Curtain Airbags - '03-05 Models - 2 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

('06-07 MODEL)

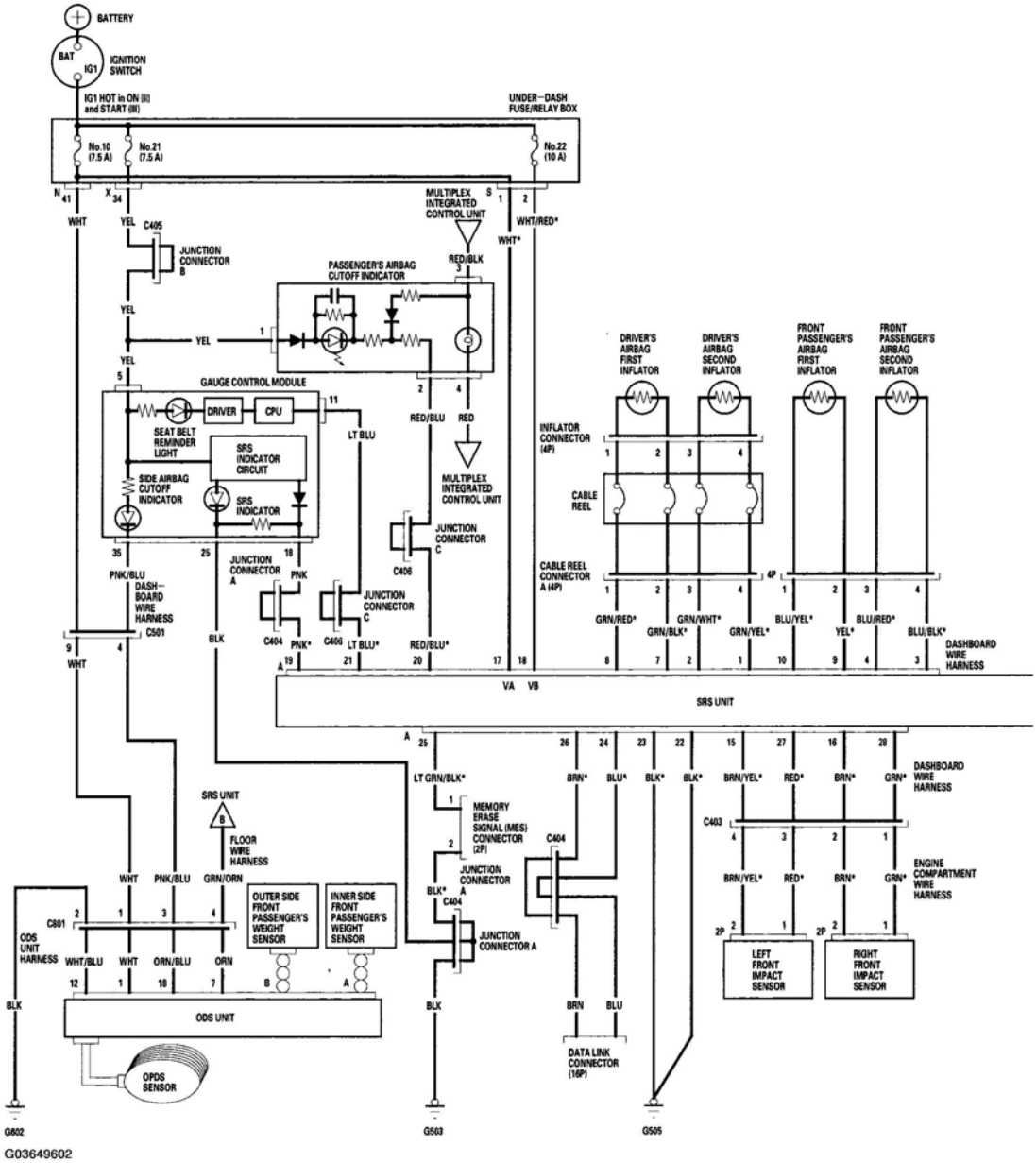


Fig. 48: SRS System Circuit Diagram ('06-07 Models - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

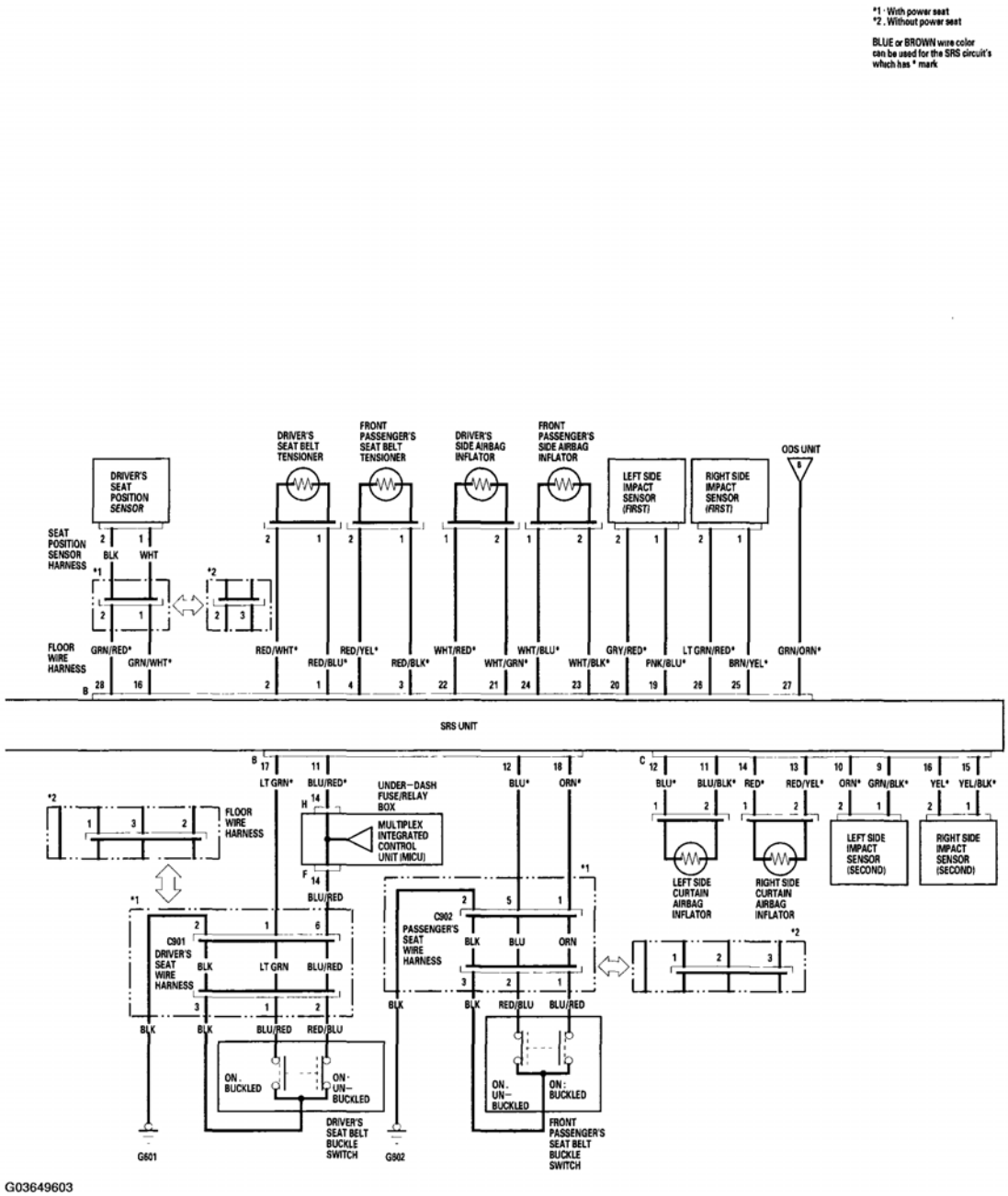
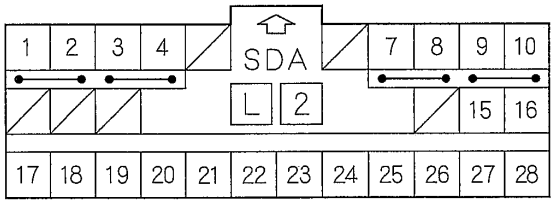


Fig. 49: SRS System Circuit Diagram ('06-07 Models - 2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SRS UNIT INPUTS & OUTPUTS

CONNECTOR "A"



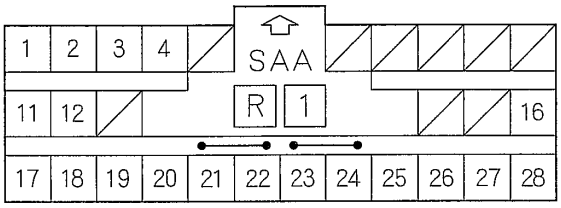
Wire side of female terminals

Terminal Number	Wire Color	Terminal Name	Description
1	GRN/YEL	LA2+	Power source for driver's airbag second inflator
2	GRN/WHT	LA2−	Ground for driver's airbag second inflator
3	BLU/BLK	RA2+	Power source for front passenger's airbag second inflator
4	BLU/RED	RA2−	Ground for front passenger's airbag second inflator
5	———	Not used	———
6	———	Not used	———
7	GRN/BLK	LA1+	Power source for driver's airbag first inflator
8	GRN/RED	LA1−	Ground for driver's airbag first inflator
9	YEL	RA1+	Power source for front passenger's airbag first inflator
10	BLU/YEL	RA1−	Ground for front passenger's airbag first inflator
11	———	Not used	———
12	———	Not used	———
13	———	Not used	———
14	———	Not used	———
15	BRN/YEL	LFS−	Ground for left front impact sensor
16	BRN	RFS−	Ground for right front impact sensor
17	WHT	VA	SRS system subpower (common with OPDS/ODS)
18	WHT/RED	VB	SRS dedicated power (dedicated booster circuit)
19	PNK	IDC	SRS warning indicator output line
20	RED/BLU	PTT	Passenger's airbag cutoff indicator output line
21	LT BLU	CDS	Front passenger's occupant detection signal output line
22	BLK	SRS GND (1)	Ground circuit for the SRS
23	BLK	SRS GND (2)	Ground circuit for the SRS
24	BLU	K-LINE	Sends and receives scan tool signal
25	LT GRN/ BLK	MES	Memory delete signal input
26	BRN	SCS	Service check signal input
27	RED	LFS+	Power source for left front impact sensor
28	GRN	RFS+	Power source for right front impact sensor

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Fig. 50: Identifying Connector "A" Inputs & Outputs
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CONNECTOR "B"



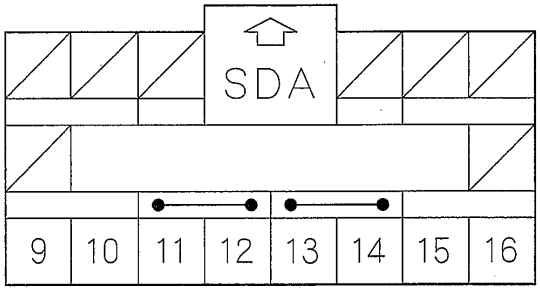
Wire side of female terminals

Terminal Number	Wire Color	Terminal Name	Description
1	RED/BLU	LRP+	Power source for driver's seat belt tensioner
2	RED/WHT	LRP−	Ground for driver's seat belt tensioner
3	RED/BLK	RRP+	Power source for front passenger's seat belt tensioner
4	RED/YEL	RRP−	Ground for front passenger's seat belt tensioner
5	———	Not used	———
6	———	Not used	———
7	———	Not used	———
8	———	Not used	———
9	———	Not used	———
10	———	Not used	———
11	BLU/RED	LBSC	Driver's seat belt buckle switch un-buckled signal
12	BLU	RBSC	Front passenger's seat belt buckle switch un-buckled signal
13	———	Not used	———
14	———	Not used	———
15	———	Not used	———
16	GRN/WHT	SS+	Power source for driver's seat position sensor
17	LT GRN	LBSO	Driver's seat belt buckle switch buckled signal
18	ORN	RBSO	Front passenger's seat belt buckle switch buckled signal
19	PNK/BLU	LBSI+	Power source for left side impact sensor (first)
20	GRY/RED	LBSI−	Ground for left side impact sensor (first)
21	WHT/GRN	LSA+	Power source for driver's side airbag inflator
22	WHT/RED	LSA−	Ground driver's side airbag inflator
23	WHT/BLK	RSA+	Power source for front passenger's side airbag inflator
24	WHT/BLU	RSA−	Ground for front passenger's side airbag inflator
25	BRN/YEL	RBSI+	Power source for right side impact sensor (first)
26	LT GRN/ RED	RBSI−	Ground for right side impact sensor (first)
27	GRN/ORN	OPDS/ODS	Sends and receives communication signal
28	GRN/RED	SS−	Ground for driver's seat position sensor

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Fig. 51: Identifying Connector "B" Inputs & Outputs
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CONNECTOR "C"



Wire side of female terminals

Terminal Number	Wire Color	Terminal Name	Description
1	———	Not used	———
2	———	Not used	———
3	———	Not used	———
4	———	Not used	———
5	———	Not used	———
6	———	Not used	———
7	———	Not used	———
8	———	Not used	———
9	GRN/BLK	LCSI+	Power source for left side impact sensor (second)
10	ORN	LCSI−	Ground for left side impact sensor (second)
11	BLU/BLK	LCA+	Power source for left side curtain airbag inflator
12	BLU	LCA−	Ground for left side curtain airbag inflator
13	RED/YEL	RCA+	Power source for right side curtain airbag inflator
14	RED	RCA−	Ground for right side curtain airbag inflator
15	YEL/BLK	RCSI+	Power source for right side impact sensor (second)
16	YEL	RCSI−	Ground for right side impact sensor (second)

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Fig. 52: Indentifying Connector "C" Inputs & Outputs
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC CODES

DTC CODES INDEX

DTC	Description
DTC 11	1x (11-10 to 11-19,11-1A to 11-1F): Open in Driver's Airbag First Inflator
DTC 11	2x (11-20 to 11-29,11-2A to 11-2F): Increased Resistance in Driver's First Airbag Inflator
DTC 11	4x (11-40 to 11-49,11-4A to 11-4F): Open in Driver's Airbag Second Inflator
DTC 11	5x (11-50 to 11-59,11-5A to 11-5F):

	Increased Resistance in Driver's Airbag Second Inflator
DTC 11	3x (11-30 to 11-39,11-3A to 11-3F): Short to Another Wire or Decreased Resistance in Driver's Airbag First Inflator
DTC 11	6x (11-60 to 11-69,11-6A to 11-6F): Short to Another Wire or Decreased Resistance in Driver's Airbag Second Inflator
DTC 11	8x (11-80 to 11-89, 11-8A to 11-8F): Short to Power in Driver's Airbag First Inflator
DTC 11	Ax (11-A0 to 11-A9, 11-AA to 11-AF): Short to Power in Driver's Airbag Second Inflator
DTC 11	9x (11-90 to 11-99, 11-9A to 11-9F): Short to Ground in Driver's Airbag First Inflator
DTC 11	Bx (11-B0 to 11-B9, 11-BA to 11-BF): Short to Ground in Driver's Airbag Second Inflator
DTC 12	1x (12-10 to 12-19, 12-1A to 12-1F): Open in Front Passenger's Airbag First Inflator
DTC 12	2x (12-20 to 12-29, 12-2A to 12-2F): Increased Resistance in Front Passenger's Airbag First Inflator
DTC 12	4x (12-40 to 12-49, 12-4A to 12-4F): Open in Front Passenger's Airbag Second Inflator
DTC 12	5x (12-50 to 12-59, 12-5A to 12-5F): Increased Resistance in Front Passenger's Airbag Second Inflator

DTC 12	3x (12-30 to 12-39, 12-3A to 12-3F): Short to Another Wire or Decreased Resistance in Front Passenger's Airbag First Inflator
DTC 12	6x (12-60 to 12-69, 12-6A to 12-6F): Short to Another Wire or Decreased Resistance in Front Passenger's Airbag Second Inflator
DTC 12	8x (12-80 to 12-89, 12-8A to 12-8F): Short to Power in Front Passenger's Airbag First Inflator
DTC 12	Ax (12-A0 to 12-A9, 12-AA to 12-AF): Short to Power in Front Passenger's Airbag Second Inflator
DTC 12	9x (12-90 to 12-99, 12-9A to 12-9F): Short to Ground in Front Passenger's Airbag First Inflator
DTC 12	Bx (12-B0 to 12-B9, 12-BA to 12-BF): Short to Ground in Front Passenger's Airbag Second Inflator
DTC 21	1x (21-10 to 21-19, 21-1A to 21-1F): Open in Driver's Seat Belt Tensioner
DTC 21	2x (21-20 to 21-29, 21-2A to 21-2F): Increased Resistance in Driver's Seat Belt Tensioner
DTC 21	3x (21-30 to 21-39, 21-3A to 21-3F): Short to Another Wire or Decreased Resistance in Driver's Seat Belt Tensioner
DTC 21	8x (21-80 to 21-89, 21-8A to 21-8F): Short to Power in Driver's Seat Belt Tensioner
DTC 21	9x (21-90 to 21-99, 21-9A to 21-9F): Short to Ground in Driver's Seat Belt

	Tensioner
DTC 22	1x (22-10 to 22-19, 22-1A to 22-1F): Open in Front Passenger's Seat Belt Tensioner
DTC 22	2x (22-20 to 22-29, 22-2A to 22-2F): Increased Resistance in Front Passenger's Seat Belt Tensioner
DTC 22	3x (22-30 to 22-39, 22-3A to 22-3F): Short to Another Wire or Decreased Resistance in Front Passenger's Seat Belt Tensioner
DTC 22	8x (22-80 to 22-89, 22-8A to 22-8F): Short to Power in Front Passenger's Seat Belt Tensioner
DTC 22	9x (22-90 to 22-99, 22-9A to 22-9F): Short to Ground in Front Passenger's Seat Belt Tensioner
DTC 31	1x (31-10 to 31-19, 31-1A to 31-1F): Open in Driver's Side Airbag Inflator
DTC 31	2x (31-20 to 31-29, 31-2A to 31-2F): Increased Resistance in Driver's Side Airbag Inflator
DTC 31	3x (31-30 to 31-39, 31-3A to 31-3F): Short to Another Wire or Decreased Resistance in Driver's Side Airbag Inflator
DTC 31	8x (31-80 to 31-89, 31-8A to 31-8F): Short to Power in Driver's Side Airbag Inflator
DTC 31	9x (31-90 to 31-99, 31-9A to 31-9F): Short to Ground in Driver's Side Airbag Inflator
DTC 32	1x (32-10 to 32-19, 32-1A to 32-1F): Open in Front Passenger's Side Airbag

	Inflator
DTC 32	2x (32-20 to 32-29, 32-2A to 32-2F): Increased Resistance in Front Passenger's Side Airbag Inflator
DTC 32	3x (32-30 to 32-39, 32-3A to 32-3F): Short to Another Wire or Decreased Resistance in Front Passenger's Side Airbag Inflator
DTC 32	8x (32-80 to 32-89, 32-8A to 32-8F): Short to Power in Front Passenger's Side Airbag Inflator
DTC 32	9x (32-90 to 32-99, 32-9A to 32-9F): Short to Ground in Front Passenger's Side Airbag Inflator
DTC 33	1x (33-10 to 33-19, 33-1A to 33-1F): Open or Increased Resistance in Left Side Curtain Airbag Inflator
DTC 33	3x (33-30 to 33-39, 33-3A to 33-3F): Short to Another Wire or Decreased Resistance in Left Side Curtain Airbag Inflator
DTC 33	8x (33-80 to 33-89, 33-8A to 33-8F): Short to Power in Left Side Curtain Airbag Inflator
DTC 33	9x (33-90 to 33-99, 33-9A to 33-9F): Short to Ground in Left Side Curtain Airbag Inflator
DTC 34	1x (34-10 to 34-19, 34-1A to 34-1F): Open or Increased Resistance in Right Side Curtain Airbag Inflator
DTC 34	3x (34-30 to 34-39, 34-3A to 34-3F): Short to Another Wire or Decreased Resistance in Right Side Curtain Airbag Inflator

DTC 34	8x (34-80 to 34-89, 34-8A to 34-8F): Short to Power in Right Side Curtain Airbag Inflator
DTC 34	9x (34-90 to 34-99, 34-9A to 34-9F): Short to Ground in Right Side Curtain Airbag Inflator
DTC 41	1x (41-10 to 41-19, 41-1A to 41-1F): No signal from the Left Front Impact Sensor
DTC 41	Cx (41-C0 to 41-C9, 41-CA to 41-CF): Faulty Power Supply to the Left Front Impact Sensor
DTC 42	1x (42-10 to 42-19, 42-1A to 42-1F): No Signal from the Right Front Impact Sensor
DTC 42	Cx (42-CO to 42-C9, 42-CA to 42-CF): Faulty Power Supply to the Right Front Impact Sensor
DTC 41	2x (41-20 to 41-29, 41-2A to 41-2F), 41-3x (41-30 to 41-39, 41-3A to 41-3F): Internal Failure of the Left Front Impact Sensor
DTC 41	9x (41-90 to 41-99, 41-9A to 41-9F), 41-Bx (41-B0 to 41-B9, 41-BA to 41-BF): Internal Failure of the Left Front Impact Sensor
DTC 42	2x (42-20 to 42-29, 42-2A to 42-2F), 42-3x (42-30 to 42-39, 42-3A to 42-3F): Internal Failure of the Right Front Impact Sensor
DTC 42	9x (42-90 to 42-99, 42-9A to 42-9F), 42-Bx (42-B0 to 42-B9, 42-BA to 42-BF): Internal Failure of the Right Front Impact Sensor

DTC 43	1x (43-10 to 43-19, 43-1A to 43-1F): No Signal from the Left Side Impact Sensor (first)
DTC 43	Cx (43-C0 to 43-C9, 43-CA to 43-CF): Faulty Power Supply to the Left Side Impact Sensor (first)
DTC 44	1x (44-10 to 44-19, 44-1A to 44-1F): No Signal from the Right Side Impact Sensor (first)
DTC 44	Cx (44-C0 to 44-C9, 44-CA to 44-CF): Faulty Power Supply to the Right Side Impact Sensor (first)
DTC 43	2x (43-20 to 43-29, 43-2A to 43-2F), 43-3x (43-30 to 43-39, 43-3A to 43-3F), 43-Bx (43-B0 to 43-B9, 43-BA to 43-BF): Internal Failure of the Left Side Impact Sensor (first)
DTC 44	2x (44-20 to 44-29, 44-2A to 44-2F), 44-3x (44-30 to 44-39, 44-3A to 44-3F), 44-Bx (44-B0 to 44-B9, 44-BA to 44-BF): Internal Failure of the Right Side Impact Sensor (first)
DTC 45	1x (45-10 to 45-19, 45-1A to 45-1F): No Signal from the Left Side Impact Sensor (second)
DTC 46	1x (46-10 to 46-19, 46-1A to 46-1F): No Signal from the Right Side Impact Sensor (second)
DTC 45	2x (45-20 to 45-29, 45-2A to 45-2F), 45-3x (45-30 to 45-39, 45-3A to 45-3F), 45-Bx (45-B0 to 45-B9, 45-BA to 45-BF): Internal Failure of the Left Side Impact Sensor (second)
DTC 46	2x (46-20 to 46-29, 46-2A to 46-2F),

	46-3x (46-30 to 46-39, 46-3A to 46-3F), 46-Bx (46-B0 to 46-B9, 46-BA to 46-BF): Internal Failure of the Right Side Impact Sensor (second)
DTC 51	2x (51-20 to 51-29, 51-2A to 51-2F), 51-4x (51-40 to 51-49, 51-4A to 51-4F), 51-7x (51-70 to 51-79, 51-7A to 51-7F): Internal Failure of the SRS Unit
DTC 52	8x (52-80 to 52-89, 52-8A to 52-8F), 52-9x (52-90 to 52-99, 52-9A to 52-9F), 52-Ax (52-A0 to 52-A9, 52-AA to 52-AF): Internal Failure of the SRS Unit
DTC 52	Bx (52-B0 to 52-B9, 52-BA to 52-BF), 52-Cx (52-C0 to 52-C9, 52-CA to 52-CF), 52-Dx (52-D0 to 52-D9, 52-DA to 52-DF): Internal Failure of the SRS Unit
DTC 52	Ex (52-E0 to 52-E9, 52-EA to 52-EF), 52-Fx (52-F0 to 52-F9, 52-FA to 52-FF), 53-1x (53-10 to 53-19, 53-1A to 53-1F): Internal Failure of the SRS Unit
DTC 53	2x (53-20 to 53-29, 53-2A to 53-2F), 53-3x (53-30 to 53-39, 53-3A to 53-3F), 53-4x (53-40 to 53-49, 53-4A to 53-4F): Internal Failure of the SRS Unit
DTC 54	1x (54-10 to 54-19, 54-1A to 54-1F), 54-2x (54-20 to 54-29, 54-2A to 54-2F), 54-3x (54-30 to 54-39, 54-3A to 54-3F): Internal Failure of the SRS Unit
DTC 54	4x (54-40 to 54-49, 54-4A to 54-4F), 54-5x (54-50 to 54-59, 54-5A to 54-5F), 54-6x (54-60 to 54-69,54-6A to 54-6F): Internal Failure of the SRS Unit
DTC 54	7x (54-70 to 54-79,54-7A to 54-7F), 55-

	1x (55-10 to 55-19,55-1A to 55-1F), 55-2X (55-20 to 55-29,55-2A to 55-2F): Internal Failure of the SRS Unit
DTC 55	3x (55-30 to 55-39, 55-3A to 55-3F), 55-4x (55-40 to 55-49, 55-4A to 55-4F), 55-7x (55-70 to 55-79, 55-7A to 55-7F): Internal Failure of the SRS Unit
DTC D1	11, D2-11, D3-11, D4-11, D7-11, E2-11, E4-11, F1-11, F2-11, F3-11, F4-11: Airbags, Side Airbags, and/or Seat Belt Tensioners Deployed
DTC 61	1x (61-10 to 61-19,61-1A to 61-1F): Open in Driver's Seat Belt Buckle Switch (with power seat)
DTC 61	1x (61-10 to 61-19,61-1A to 61-1F): Open in Driver's Seat Belt Buckle Switch (without power seat)
DTC 61	2x (61-20 to 61-29,61-2A to 61-2F): Short in Driver's Seat Belt Buckle Switch (with power seat)
DTC 61	2x (61-20 to 61-29, 61-2A to 61-2F): Short in Driver's Seat Belt Buckle Switch (without power seat)
DTC 62	1x (62-10 to 62-19, 62-1A to 62-1F): Open in Front Passenger's Seat Belt Buckle Switch (with power seat)
DTC 62	1x (62-10 to 62-19,62-1A to 62-1F): Open in Front Passenger's Seat Belt Buckle Switch (without power seat)
DTC 62	2x (62-20 to 62-29,62-2A to 62-2F): Short in Front Passenger's Seat Belt Buckle Switch (with power seat)
DTC 62	2x (62-20 to 62-29, 62-2A to 62-2F): Short in Front Passenger's Seat Belt

	Buckle Switch (without power seat)
DTC 71	1x171-10 to 71-19, 71-1A to 71-1F): Open in Driver's Seat Position Sensor
DTC 71	2x (71-20 to 71-29, 71-2A to 71-2F): Short in Driver's Seat Position Sensor
DTC 71	22: Short to Power in Driver's Seat Position Sensor
DTC 81	61: No Signal from Front Passenger's Weight Sensor Unit (with side airbag) ('04-05 models)
DTC 81	62: Non-stipulated Response Data (with side airbag) ('04-05 models)
DTC 81	61: No Signal from Front Passenger's Weight Sensor Unit (without side airbag) ('04-05 models)
DTC 81	62: Non-stipulated Response Data (without side airbag) ('04-05 models)
DTC 81	4x (81-40 to 81-49, 81-4A to 81-4F), 81-5x (81-50 to 81-59, 81-5A to 81-5F), 81-63, 81-64: Internal Failure of the Front Passenger's Weight Sensor Unit ('04-05 models)
DTC 81	79: Front Passenger's Weight Sensors Drift Check Failure ('04-05 models)
DTC 81	71, 81-78: Front passenger's weight sensor unit does not calibrate ('04-05 models)
DTC 81	71, 81-78: ODS unit does not calibrate ('06 model)
DTC 82	1x (82-10 to 82-19, 82-1A to 82-1F): No Signal from the Inner Side Front Passenger's Weight Sensor ('04-06 models)
DTC 83	2x (83-20 to 83-29, 83-2A to 83-2F):

	No Signal from the Outer Side Front Passenger's Weight Sensor ('04-06 models)
DTC 85	4x (85-40 to 85-49, 85-4A to 85-4F), 85-5x (85-50 to 85-59, 85-5A to 85-5F), 85-63, 85-64: Internal Failure of the OPDS/ODS Unit
DTC 85	79: OPDS Sensor Drift Check Failure
DTC 85	61: No Signal from the OPDS Unit ('04-05 models)
DTC 85	62: Non-stipulated Response Data ('04-05 models)
DTC 81	61, 85-61: No Signal from the ODS Unit ('06 model)
DTC 81	62, 85-62: Non-stipulated Response Data ('06 model)
DTC 85	71, 85-78: OPDS/ODS unit not initialized
DTC 86	1x (86-10 to 86-19, 86-1A to 86-1F): Faulty OPDS Seat-back Sensor
DTC 86	2x (86-20 to 86-29, 86-2A to 86-2F): Faulty OPDS Seat Support Sensor
DTC 87	31: Internal Failure of the OPDS/ODS Unit
DTC 87	32: Side Airbag Cutoff Indicator Stays ON ('03-05 models)
DTC 87	32: Side Airbag Cutoff Indicator Stays ON ('06 model)
DTC 91	1x (91-10 to 91-19, 91-1A to 91-1F): Internal Failure of the SRS Unit
DTC 91	2x (91-20 to 91-29, 91-2A to 91-2F): Short in SRS Indicator
DTC 92	1x (92-10 to 92-19, 92-1A to 92-1F):

	Passenger's Airbag Cutoff Indicator Malfunction ('04-06 models)
DTC 92	2x (92-20 to 92-29, 92-2A to 92-2F): Open or Short to Ground in Passenger's Airbag Cutoff Indicator ('04-06 models)
DTC A1	1x (A1-10 to A1-19, A1-1A to A1-1F): Faulty Power Supply (VA Line)
DTC A2	1x (A2-10 to A2-19, A2-1A to A2-1F): Faulty Power Supply (VB Line)

DTC 11-1X (11-10 TO 11-19,11-1A TO 11-1F): OPEN IN DRIVER'S AIRBAG FIRST INFLATOR

DTC 11-2X (11-20 TO 11-29,11-2A TO 11-2F): INCREASED RESISTANCE IN DRIVER'S FIRST AIRBAG INFLATOR

DTC 11-4X (11-40 TO 11-49,11-4A TO 11-4F): OPEN IN DRIVER'S AIRBAG SECOND INFLATOR

DTC 11-5X (11-50 TO 11-59,11-5A TO 11-5F): INCREASED RESISTANCE IN DRIVER'S AIRBAG SECOND INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 11-1x, 11-2x, 11-4x, or 11-5x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the driver's airbag 4P connector (A) from the cable reel.

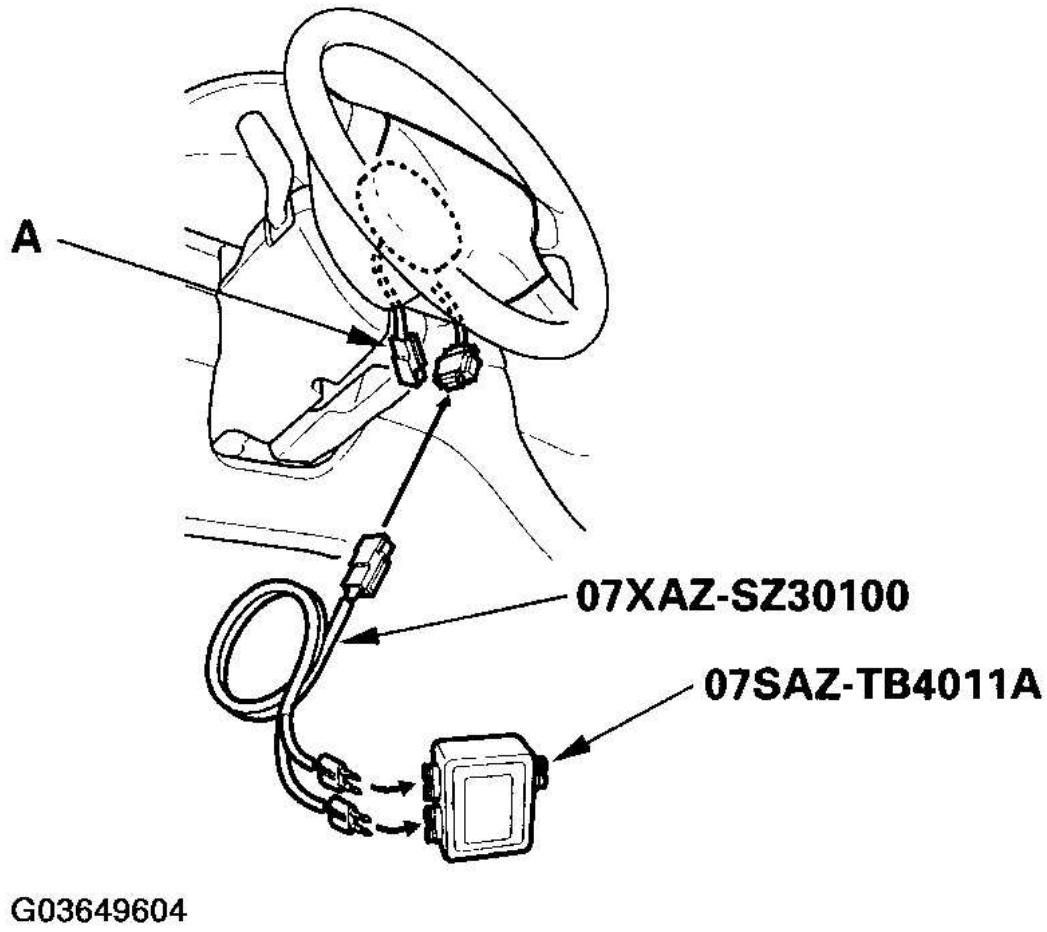


Fig. 53: Disconnecting Driver's Airbag 4P Connector From Cable Reel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the cable reel.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.

8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

   Is DTC 11-1x, 11-2x, 11-4x, or 11-5x indicated?

   YES - Go to step 9.

   NO - Open or increased resistance in the driver's airbag first or second inflator; replace the driver's airbag (see **DRIVER'S AIRBAG REPLACEMENT**).
9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect the dashboard wire harness 4P connector (A) from the cable reel.

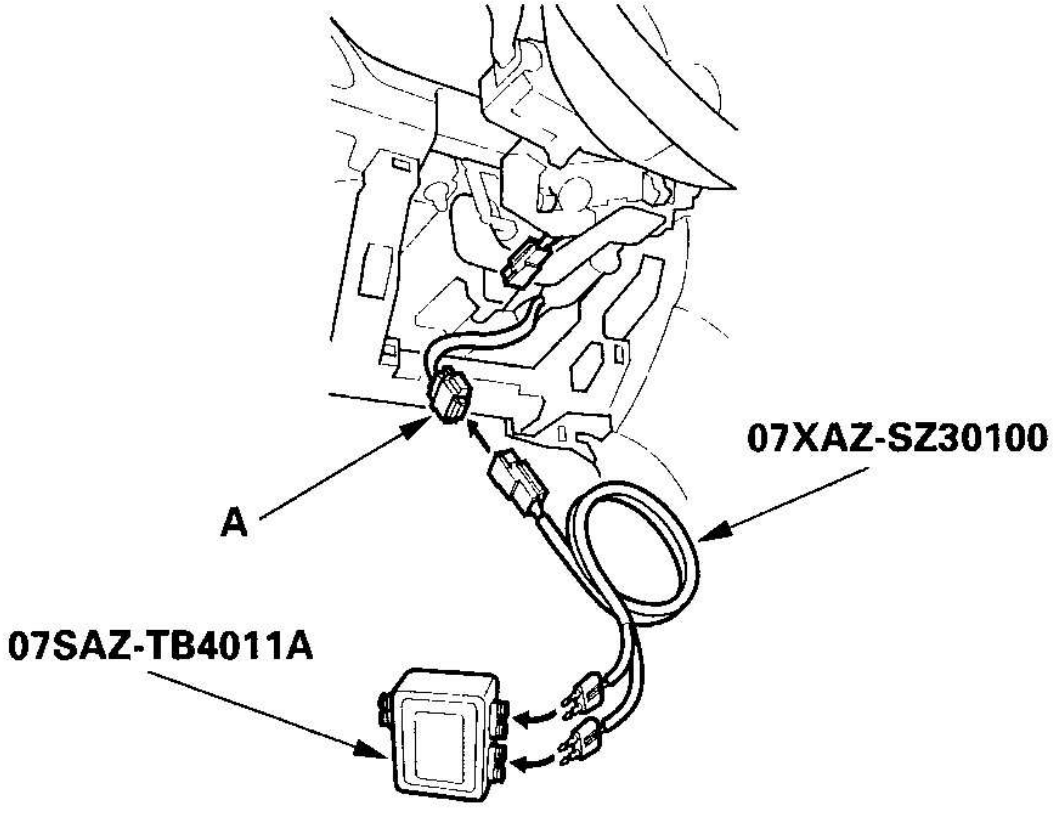


Fig. 54: Disconnecting Dashboard Wire Harness 4P Connector From Cable Reel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Connect the SRS inflator simulator (2 ohms connectors) and the simulator lead to the dashboard wire harness.
12. Reconnect the battery negative cable.
13. Erase the DTC memory.
14. Read the DTC.

Is DTC 11-1x, 11-2x, 11-4x, or 11-5x indicated?

YES - Go to step 15.

NO - Open or increased resistance in the cable reel; replace the cable reel (see **CABLE REEL REPLACEMENT**).

15. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
16. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**). Do not disconnect the simulator lead from dashboard wire harness 4P connector.
17. Disconnect the SRS inflator simulator from SRS simulator lead F.
18. Check the resistance between the terminals of both SRS simulator leads. There should be 1 ohms or less.

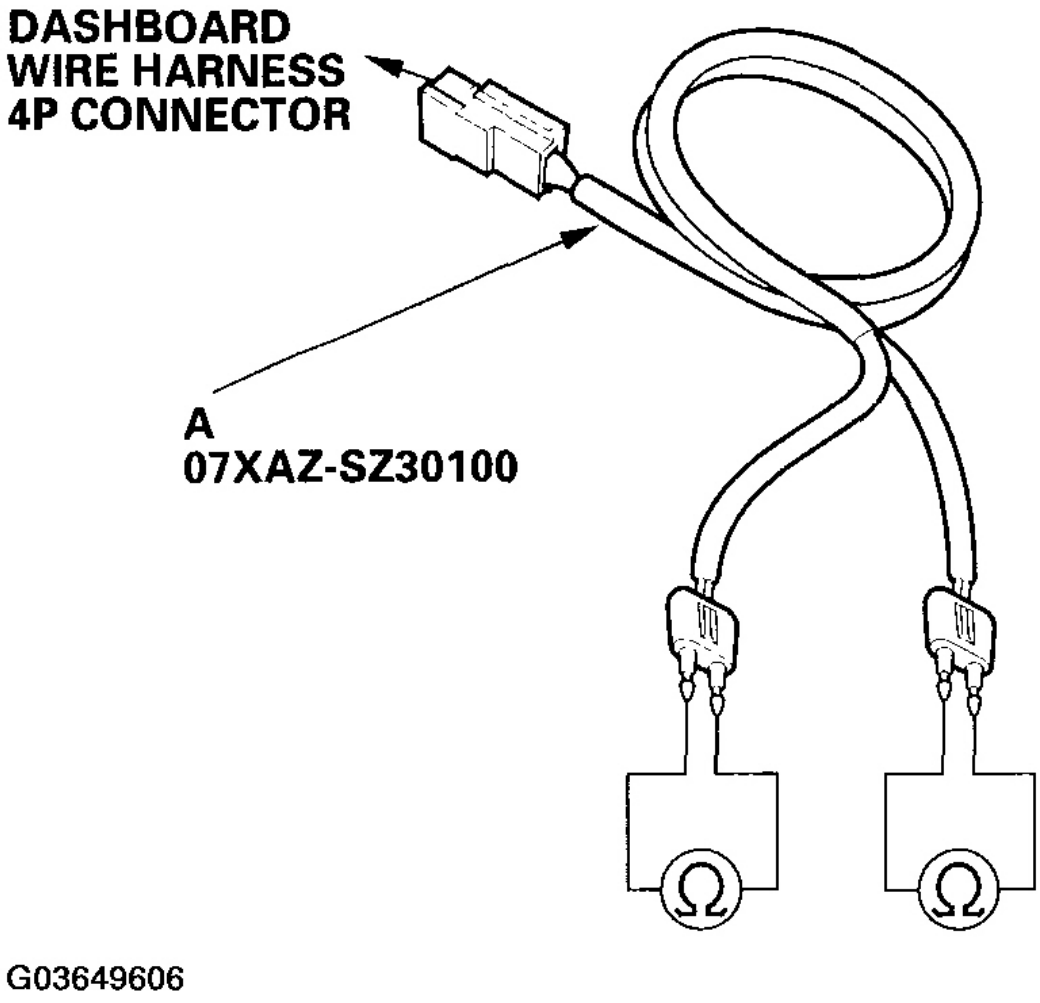


Fig. 55: Checking Resistance Between Terminals Of SRS Simulator Leads
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector A (28P) and the SRS unit. Check the connection between the connector and the SRS unit. If the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open or increased resistance in the dashboard wire harness; replace the dashboard wire harness.

DTC 11-3X (11-30 TO 11-39,11-3A TO 11-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN DRIVER'S AIRBAG FIRST INFLATOR

DTC 11-6X (11-60 TO 11-69,11-6A TO 11-6F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN DRIVER'S AIRBAG SECOND INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100
- SRS short canceller 070AZ-SAA0100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 11-3x or 11-6x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the driver's airbag 4P connector (A) from the cable reel.

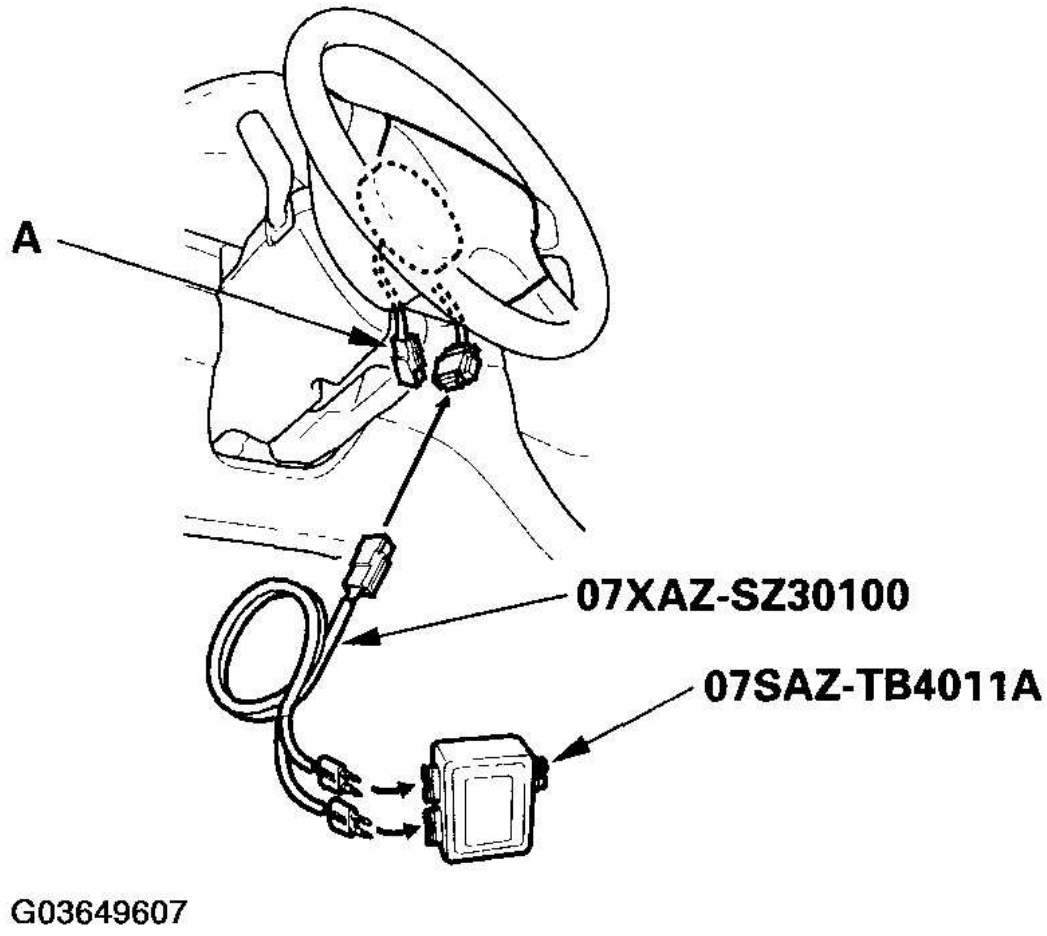


Fig. 56: Disconnecting Driver's Airbag 4P Connector From Cable Reel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the cable reel.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 11-3x or 11-6x indicated?

YES - Go to step 9.

NO - Short in the driver's airbag first or second inflator; replace the driver's airbag (see **DRIVER'S AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect the dashboard wire harness 4P connector (A) from the cable reel.

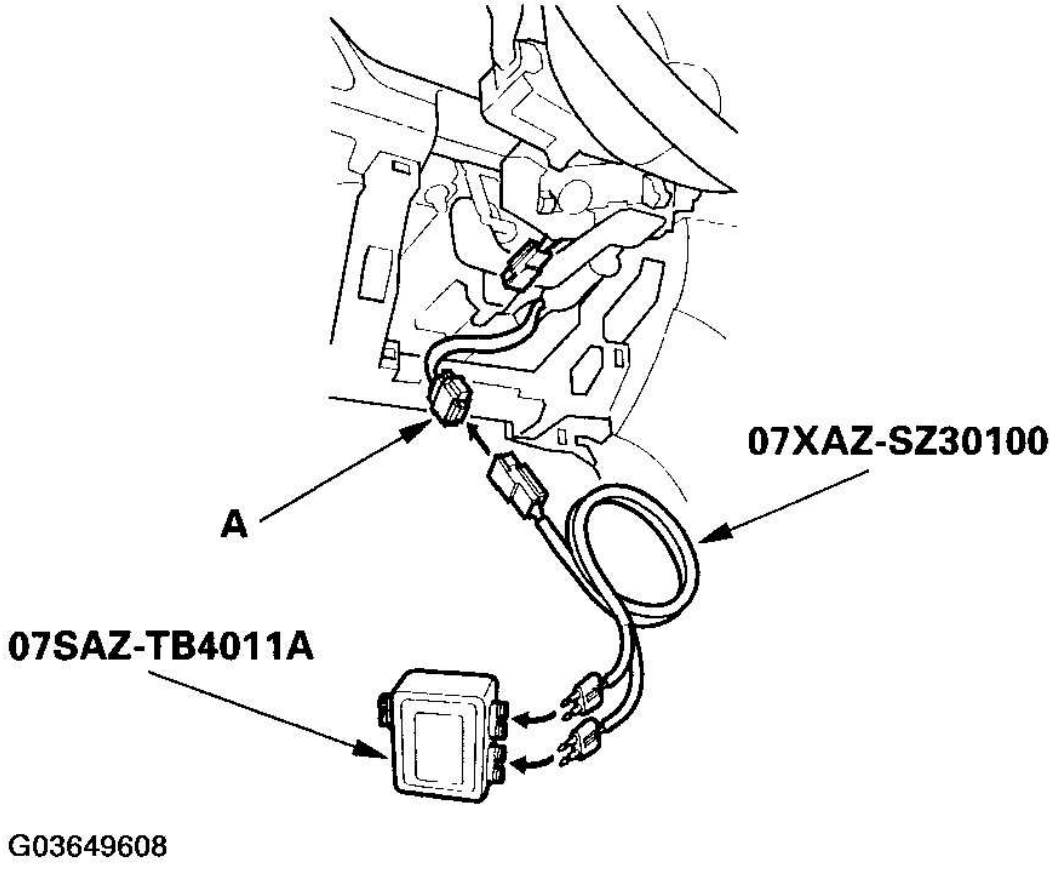


Fig. 57: Disconnecting Dashboard Wire Harness 4P Connector From Cable Reel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Connect the SRS inflator simulator (2 ohms connectors) and the simulator lead to the dashboard wire harness.

12. Reconnect the battery negative cable.
13. Erase the DTC memory.
14. Read the DTC.

Is DTC 11-3x or 11-6x indicated?

YES - Go to step 15.

NO - Short in the cable reel; replace the cable reel (see **CABLE REEL REPLACEMENT**).

15. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
16. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**). Do not disconnect the simulator lead from dashboard wire harness 4P connector.
17. Disconnect the SRS inflator simulator from the SRS simulator lead. Do not disconnect the simulator lead from dashboard wire harness 4P connector.
18. Connect SRS short cancellers (070AZ-SAA0100) to the No. 7 and No. 8 terminals and No. 1 and No.2 terminals of the SRS unit connector A (28P) (see **REOPENING THE SRS UNIT CIRCUIT FOR DIAGNOSIS**).
19. Check resistance between the terminals of both SRS simulator leads. There should be an open circuit or at least 1 M ohms.

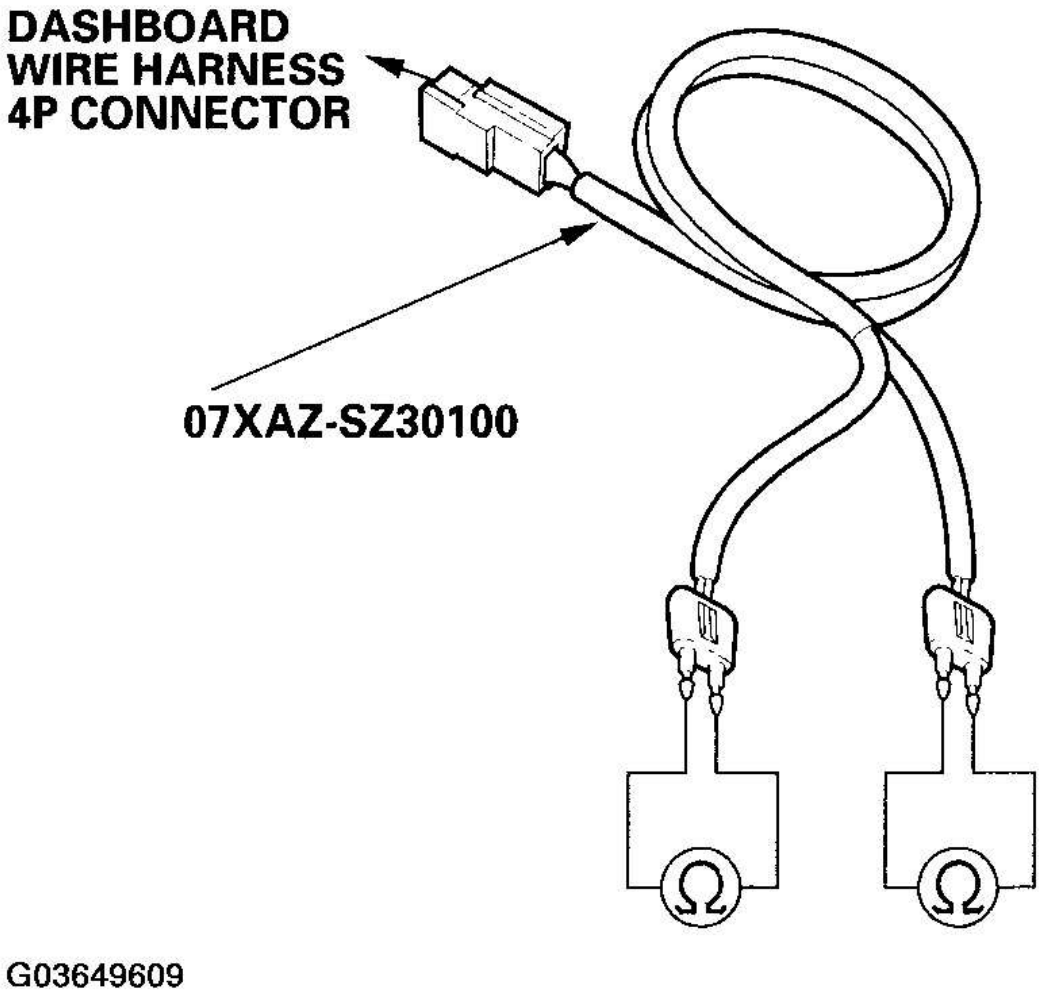


Fig. 58: Checking Resistance Between Terminals Of SRS Simulator Leads
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector A (28P) and the SRS unit. Check the connection between the connector and the SRS unit. If the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short in the dashboard wire harness; replace the dashboard wire harness.

DTC 11-8X (11-80 TO 11-89, 11-8A TO 11-8F): SHORT TO POWER IN DRIVER'S AIRBAG FIRST INFLATOR

DTC 11-AX (11-A0 TO 11-A9, 11-AA TO 11-AF): SHORT TO POWER IN DRIVER'S AIRBAG SECOND INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 11-8x or 11-Ax indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the driver's airbag 4P connector (A) from the cable reel.

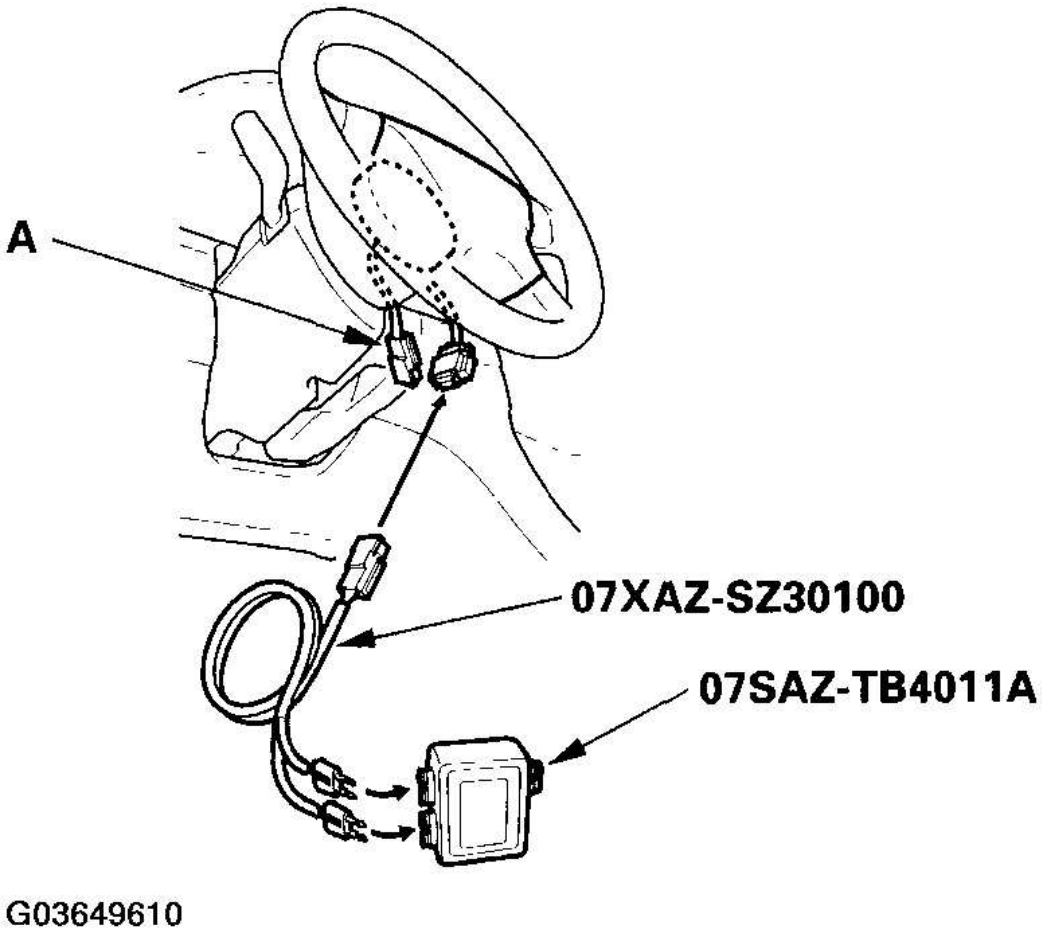


Fig. 59: Disconnecting Driver's Airbag 4P Connector From Cable Reel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the cable reel.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 11-8x or 11-Ax indicated?

YES - Go to step 9.

NO - Short to power in the driver's airbag first or second inflator; replace the driver's airbag (see **DRIVER'S AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect the dashboard wire harness 4P connector (A) from the cable reel.

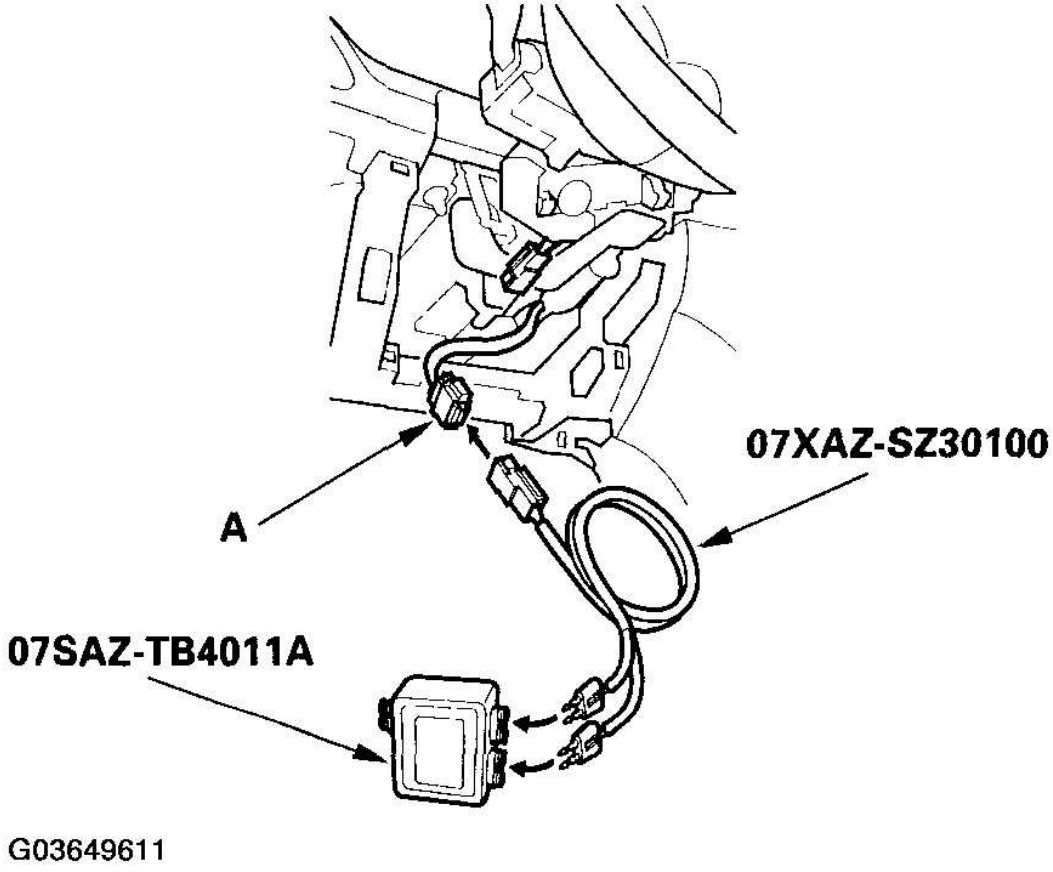


Fig. 60: Disconnecting Dashboard Wire Harness 4P Connector From Cable Reel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Connect the SRS inflator simulator (2 ohms connectors) and the simulator lead to the dashboard wire harness.

12. Reconnect the battery negative cable.
13. Erase the DTC memory.
14. Read the DTC.

Is DTC 11-8x or 11-Ax indicated?

YES - Go to step 15.

NO - Short to power in the cable reel; replace the cable reel (see **CABLE REEL REPLACEMENT**).

15. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
16. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
17. Disconnect the SRS inflator simulator from the SRS simulator lead.
18. Reconnect the battery negative cable.
19. Turn the ignition switch ON (II).
20. Check for voltage between each terminal of both SRS simulator leads and body ground. There should be 0.5 V or less.

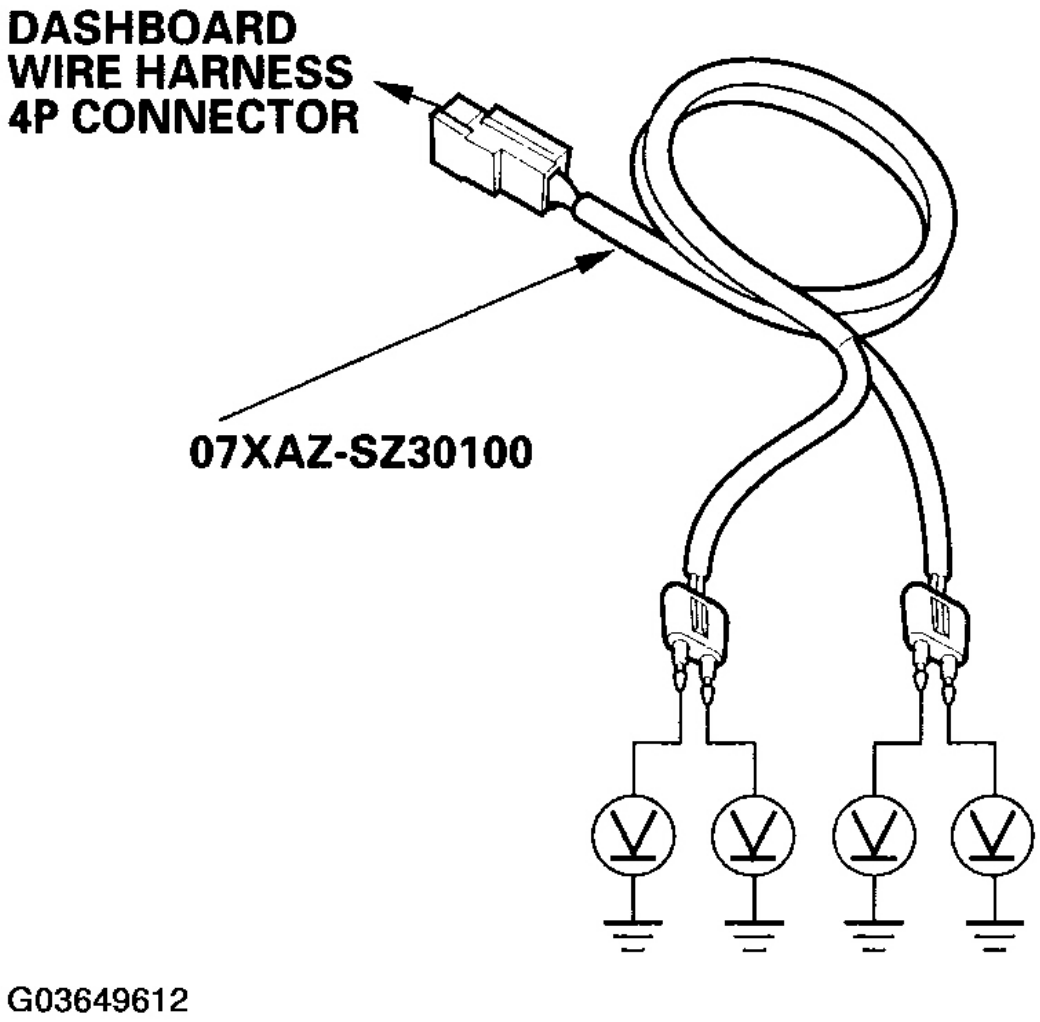


Fig. 61: Checking Voltage Between Terminal Of SRS Simulator Leads And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector A (28P) and the SRS unit. Check the connection between the connector and the SRS unit. If the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to power in the dashboard wire harness; replace the dashboard wire harness.

DTC 11-9X (11-90 TO 11-99, 11-9A TO 11-9F): SHORT TO GROUND IN DRIVER'S AIRBAG FIRST INFLATOR

DTC 11-BX (11-B0 TO 11-B9, 11-BA TO 11-BF): SHORT TO GROUND IN DRIVER'S AIRBAG SECOND INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 11-9x or 11-Bx indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the driver's airbag 4P connector (A) from the cable reel.

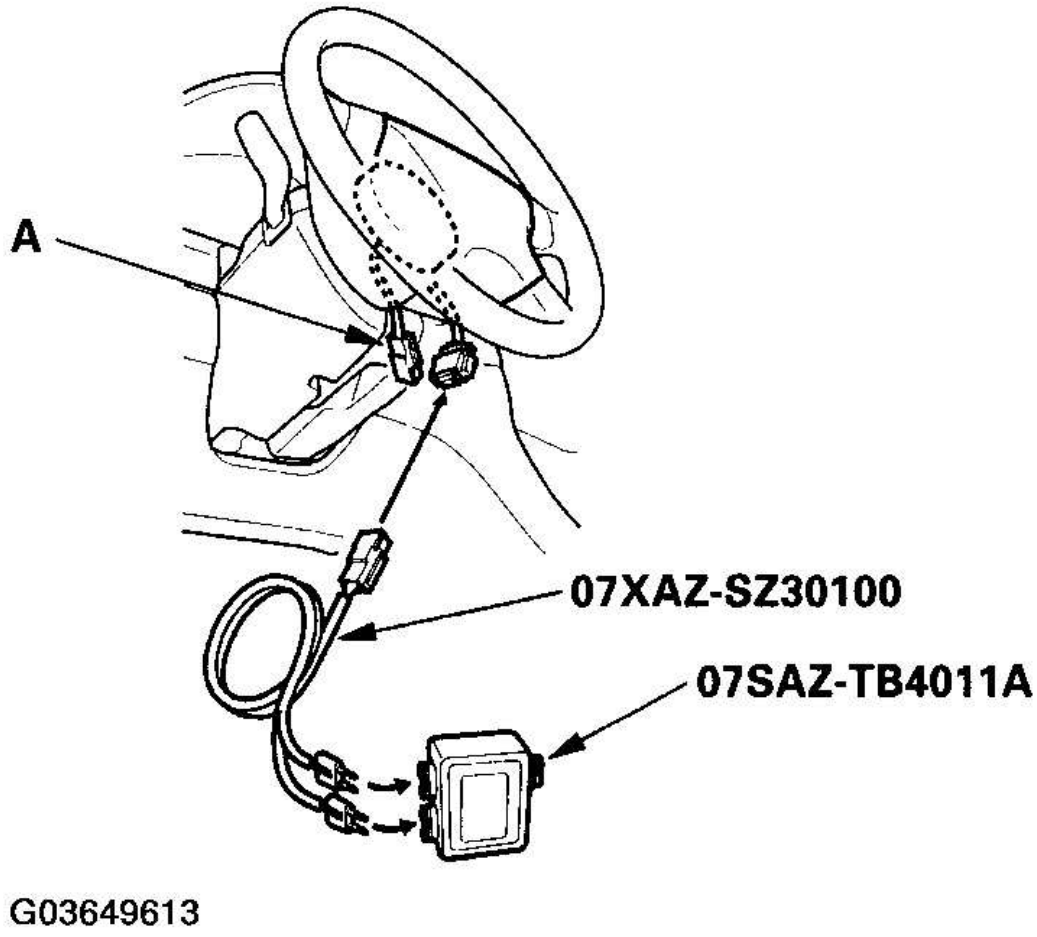


Fig. 62: Disconnecting Driver's Airbag 4P Connector From Cable Reel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the cable reel.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 11-9x or 11-Bx indicated?

YES - Go to step 9.

NO - Short to ground in the driver's airbag first or second inflator; replace the driver's airbag (see **DRIVER'S AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect the dashboard wire harness 4P connector (A) from the cable reel.

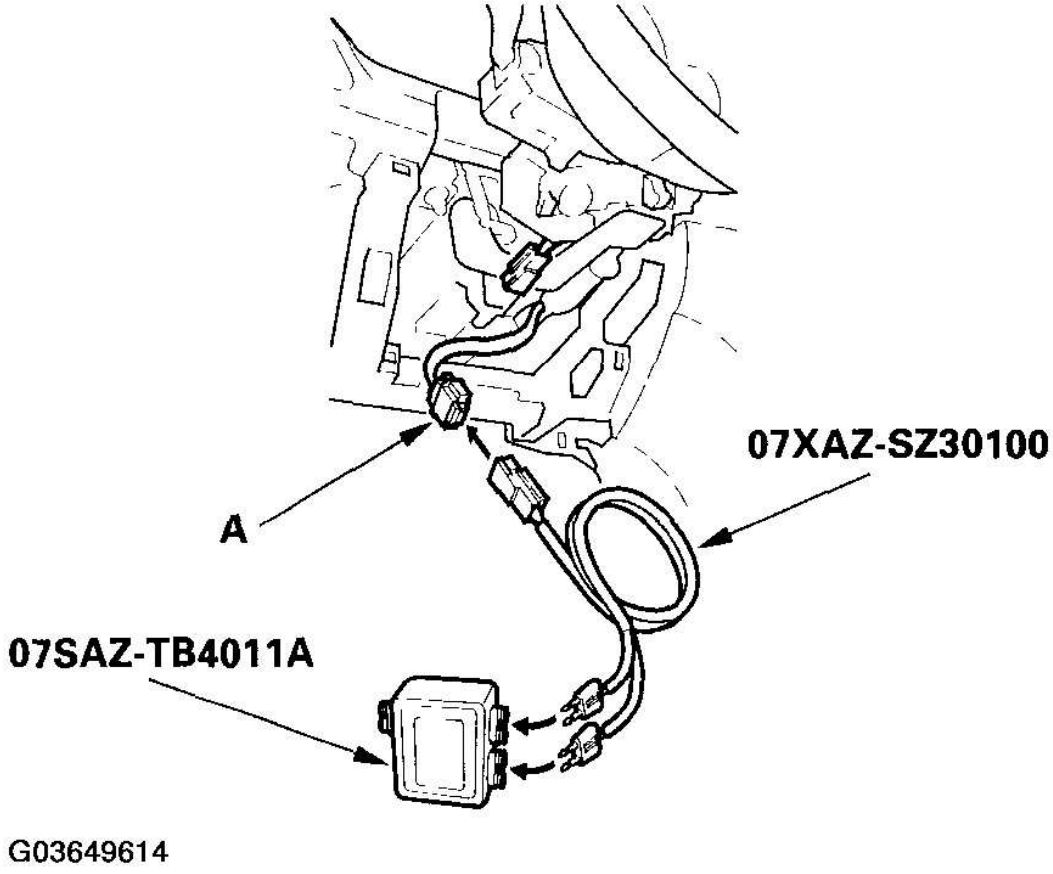


Fig. 63: Disconnecting Dashboard Wire Harness 4P Connector From Cable Reel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Connect the SRS inflator simulator (2 ohms connectors) and the simulator lead to the dashboard wire harness.

12. Reconnect the battery negative cable.
13. Erase the DTC memory.
14. Read the DTC.

Is DTC 11-9x or 11-Bx indicated?

YES - Go to step 15.

NO - Short to ground in the cable reel; replace the cable reel (see **CABLE REEL REPLACEMENT**).

15. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
16. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
17. Disconnect the SRS inflator simulator from the SRS simulator lead.
18. Check resistance between each terminal of both SRS simulator leads and body ground. There should be an open circuit or at least 1 M ohms.

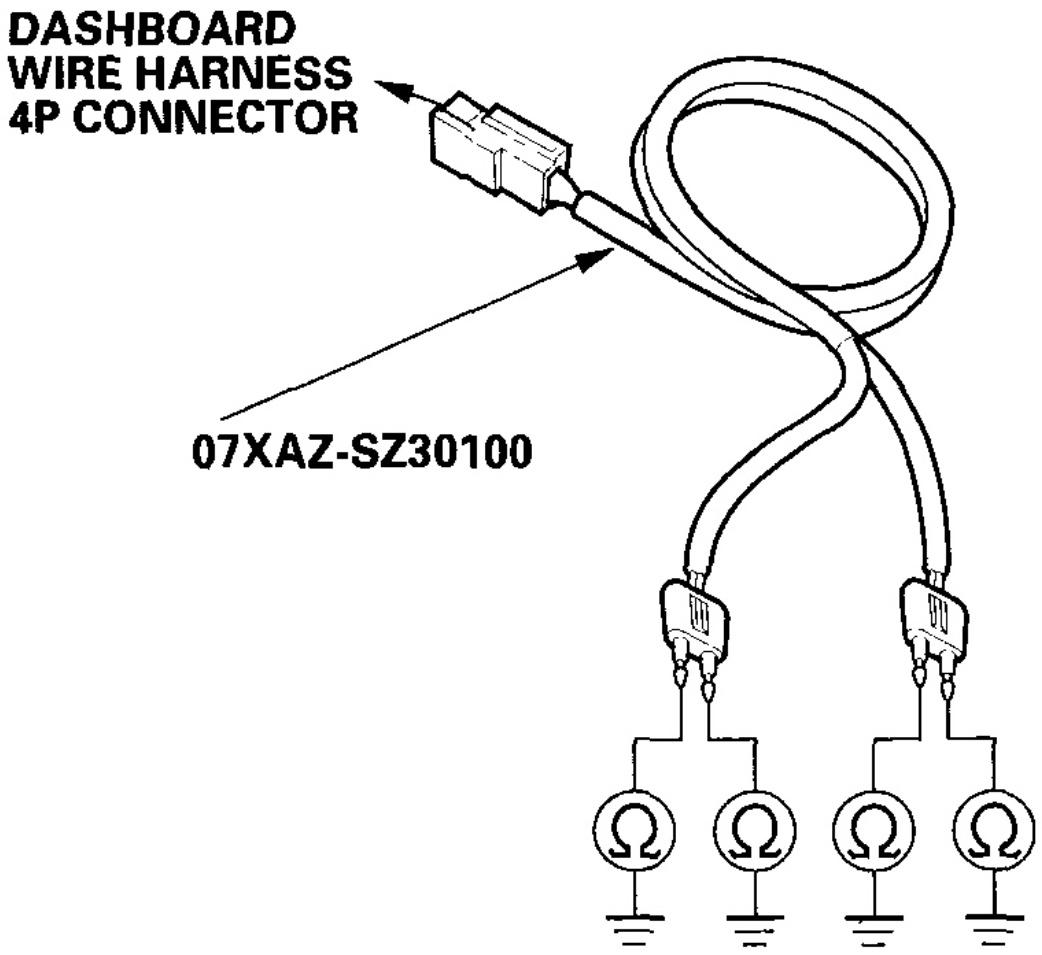


Fig. 64: Checking Resistance Between Terminal Of SRS Simulator Leads And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector A (28P) and the SRS unit. Check the connection between the connector and the SRS unit. If the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to ground in the dashboard wire harness; replace the dashboard wire harness.

DTC 12-1X (12-10 TO 12-19, 12-1A TO 12-1F): OPEN IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR

DTC 12-2X (12-20 TO 12-29, 12-2A TO 12-2F): INCREASED RESISTANCE IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR

DTC 12-4X (12-40 TO 12-49, 12-4A TO 12-4F): OPEN IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR

DTC 12-5X (12-50 TO 12-59, 12-5A TO 12-5F): INCREASED RESISTANCE IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 12-1x, 12-2x, 12-4x, or 12-5x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the front passenger's airbag 4P connector (A) from the dashboard wire harness.

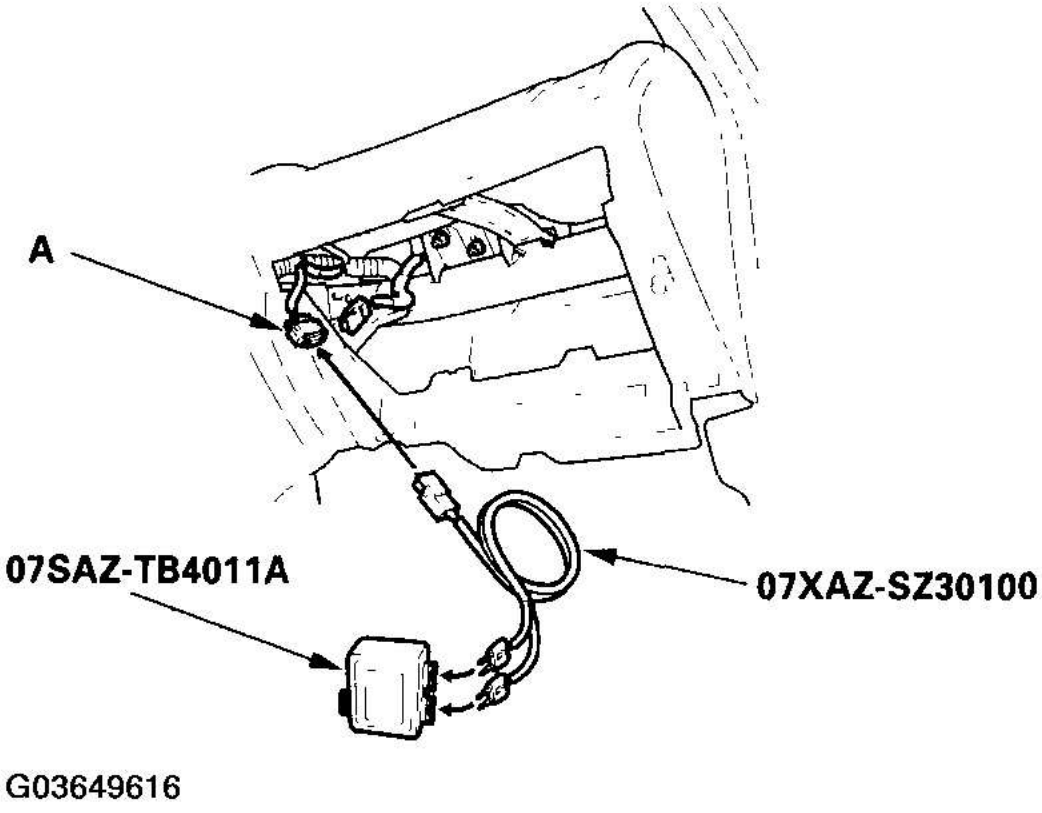


Fig. 65: Disconnecting Front Passenger's Airbag 4P Connector From Dashboard Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the dashboard wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 12-1x, 12-2x, 12-4x, or 12-5x indicated?

YES - Go to step 9.

NO - Open or increased resistance in the front passenger's airbag first or second inflator; replace the front passenger's airbag (see **FRONT PASSENGER'S AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**). Do not disconnect the simulator lead from the dashboard wire harness 4P connector.
11. Disconnect the SRS inflator simulator from the SRS simulator lead.
12. Check resistance between the terminals of both SRS simulator leads. There should be 1 ohms or less.

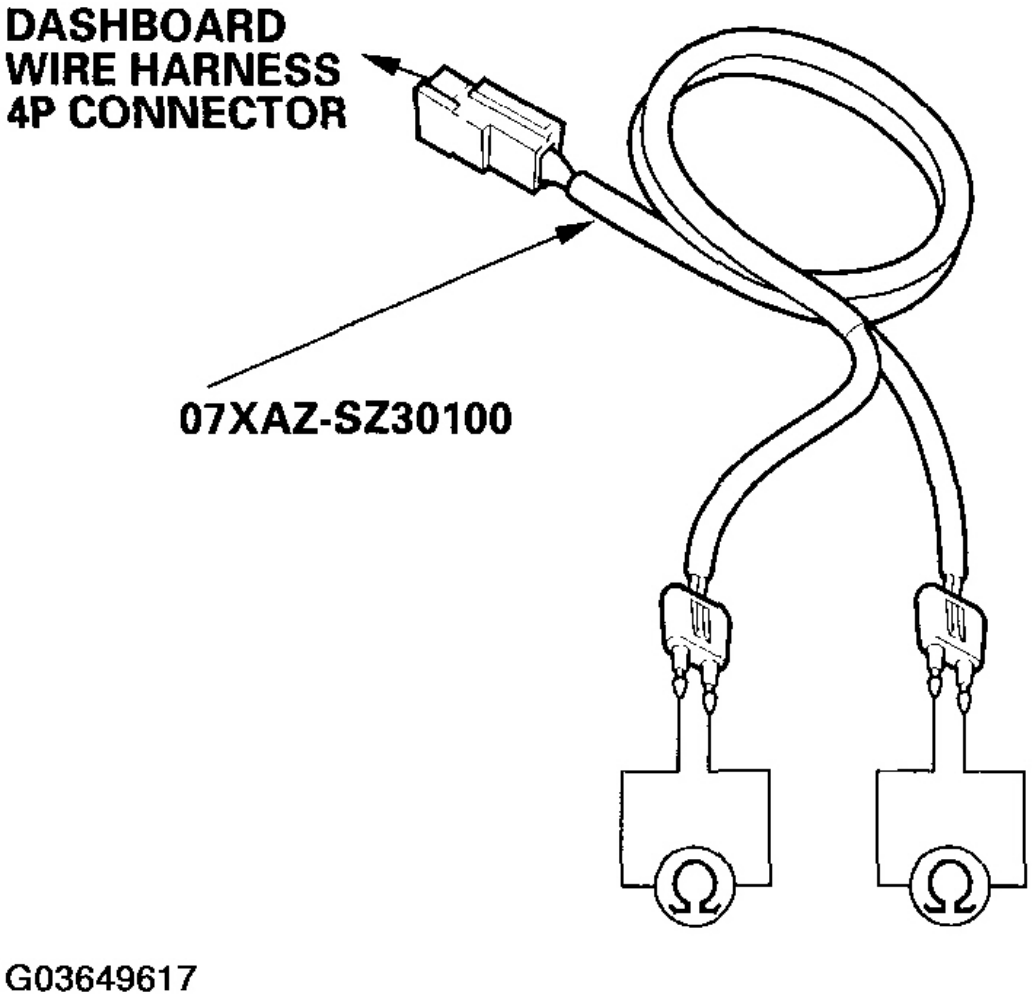


Fig. 66: Checking Resistance Between Terminals Of SRS Simulator Leads
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector A (28P). Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open or increased resistance in the dashboard wire harness; replace the dashboard wire harness.

DTC 12-3X (12-30 TO 12-39, 12-3A TO 12-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR

DTC 12-6X (12-60 TO 12-69, 12-6A TO 12-6F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100
- SRS short canceller 070AZ-SAA0100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 12-3x or 12-6x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the front passenger's airbag 4P connector (A) from the dashboard wire harness.

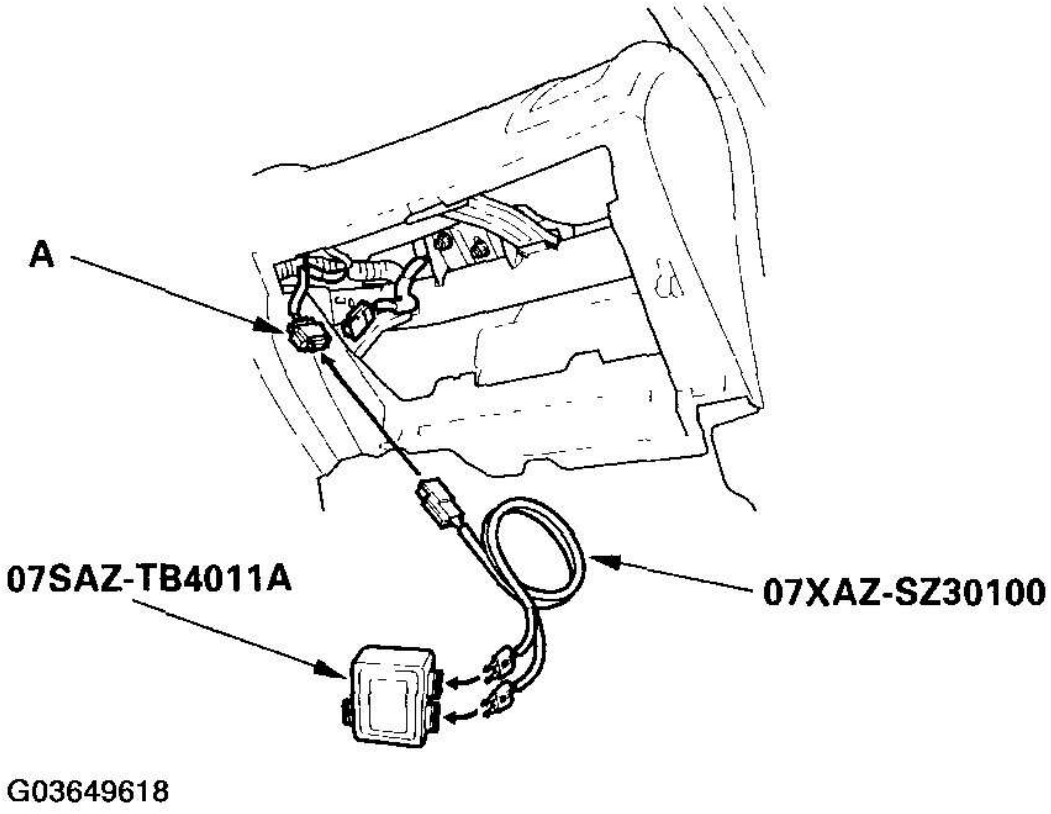


Fig. 67: Disconnecting Front Passenger's Airbag 4P Connector From Dashboard Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the dashboard wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 12-3x or 12-6x indicated?

YES - Go to step 9.

NO - Short in the front passenger's airbag first or second inflator; replace the front passenger's airbag (see **FRONT PASSENGER'S AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect the SRS inflator simulator from the SRS simulator lead.
12. Connect SRS short cancellers (070AZ-SAA0100) to the No. 9 and No. 10 terminals and the No. 3 and No. 4 terminal of the SRS unit connector A (28P) (see **REOPENING THE SRS UNIT CIRCUIT FOR DIAGNOSIS**).
13. Check resistance between the terminals of both SRS simulator leads. There should be an open circuit or at least 1 M ohms.

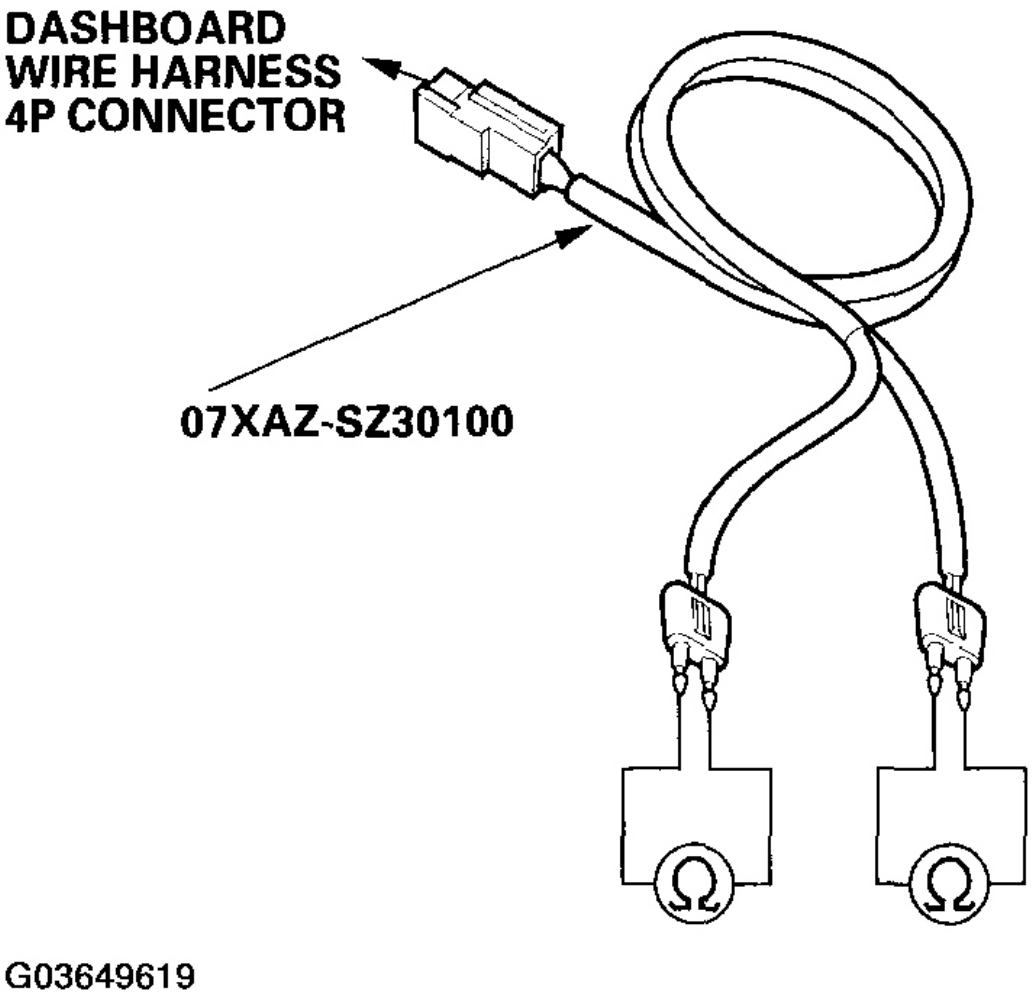


Fig. 68: Checking Resistance Between Terminals Of SRS Simulator Leads
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector A (28P) and the SRS unit. Check the connection between the connector and the SRS unit. If the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short in the dashboard wire harness; replace the dashboard wire

harness.

DTC 12-8X (12-80 TO 12-89, 12-8A TO 12-8F): SHORT TO POWER IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR

DTC 12-AX (12-A0 TO 12-A9, 12-AA TO 12-AF): SHORT TO POWER IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 12-8x or 12-Ax indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the front passenger's airbag 4P connector (A) from the dashboard wire harness.

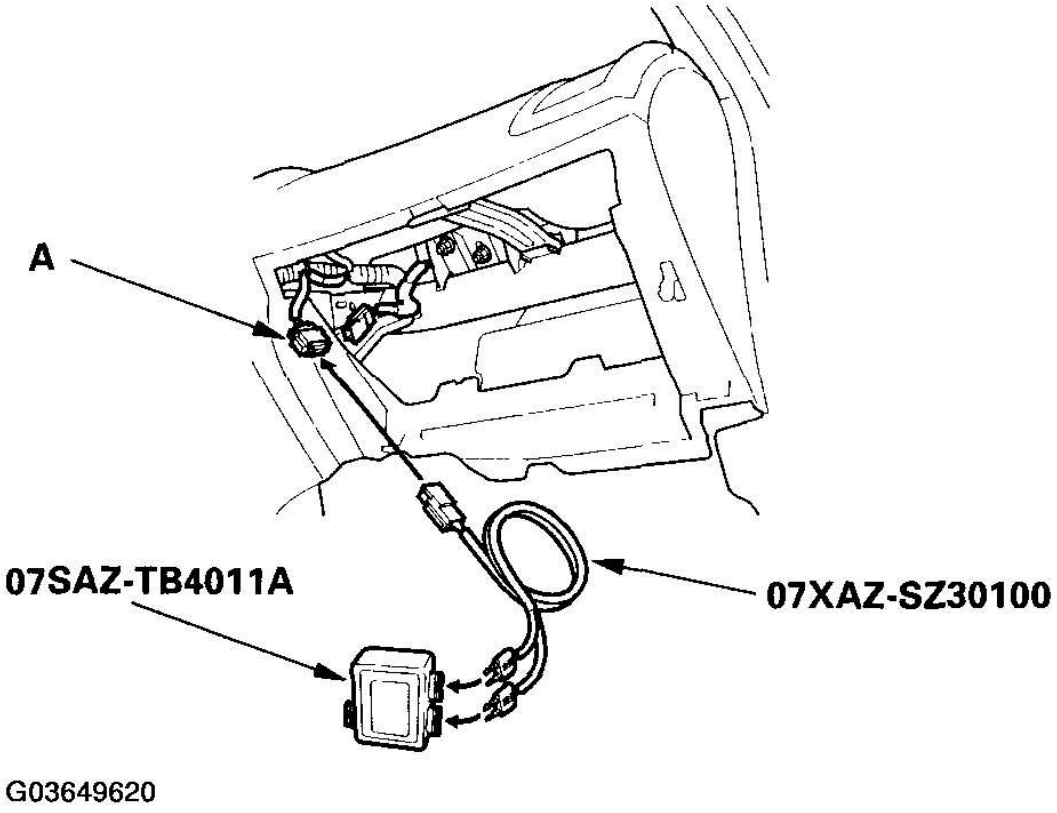


Fig. 69: Disconnecting Front Passenger's Airbag 4P Connector From Dashboard Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the dashboard wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 12-8x or 12-Ax indicated?

YES - Go to step 9.

NO - Short to power in the front passenger's airbag first or second inflator;

replace the front passenger's airbag (see **FRONT PASSENGER'S AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect the SRS inflator simulator from the SRS simulator lead. Do not disconnect the simulator lead from the dashboard wire harness 4P connector.
12. Reconnect the battery negative cable.
13. Turn the ignition switch ON (II).
14. Check for voltage between each terminal of both SRS simulator leads and body ground. There should be 0.5 V or less.

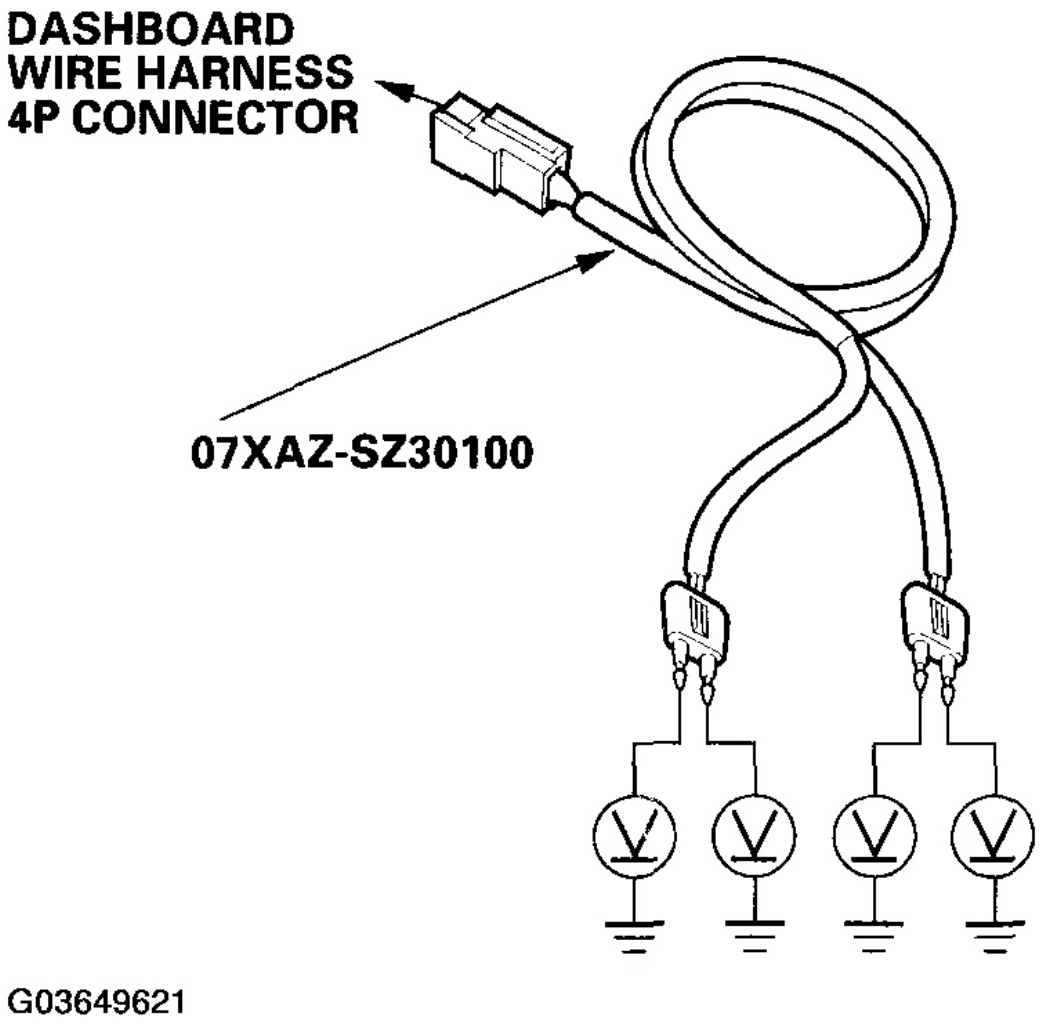


Fig. 70: Checking Voltage Between Terminal Of SRS Simulator Leads And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector A (28P) and the SRS unit. Check the connection between the connector and the SRS unit. If the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to power in the dashboard wire harness; replace the dashboard wire harness.

DTC 12-9X (12-90 TO 12-99, 12-9A TO 12-9F): SHORT TO GROUND IN FRONT PASSENGER'S AIRBAG FIRST INFLATOR

DTC 12-BX (12-B0 TO 12-B9, 12-BA TO 12-BF): SHORT TO GROUND IN FRONT PASSENGER'S AIRBAG SECOND INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 12-9x or 12-Bx indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the front passenger's airbag 4P connector (A) from the dashboard wire harness.

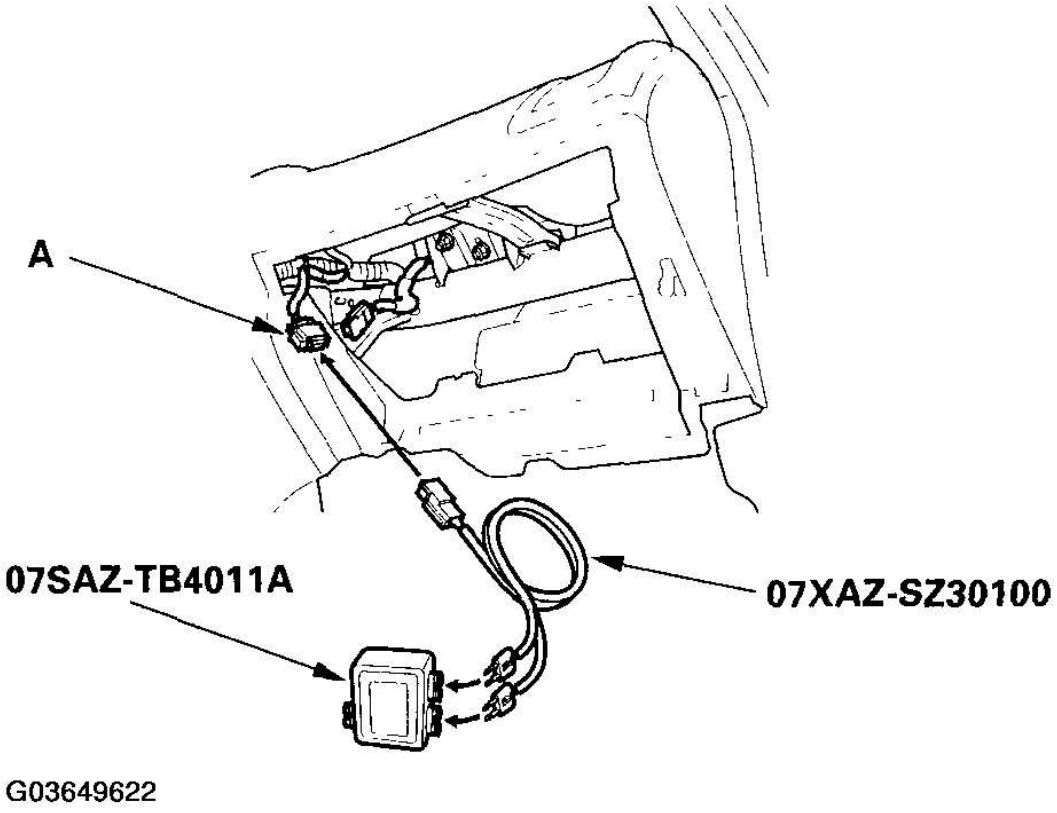


Fig. 71: Disconnecting Front Passenger's Airbag 4P Connector From Dashboard Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the dashboard wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

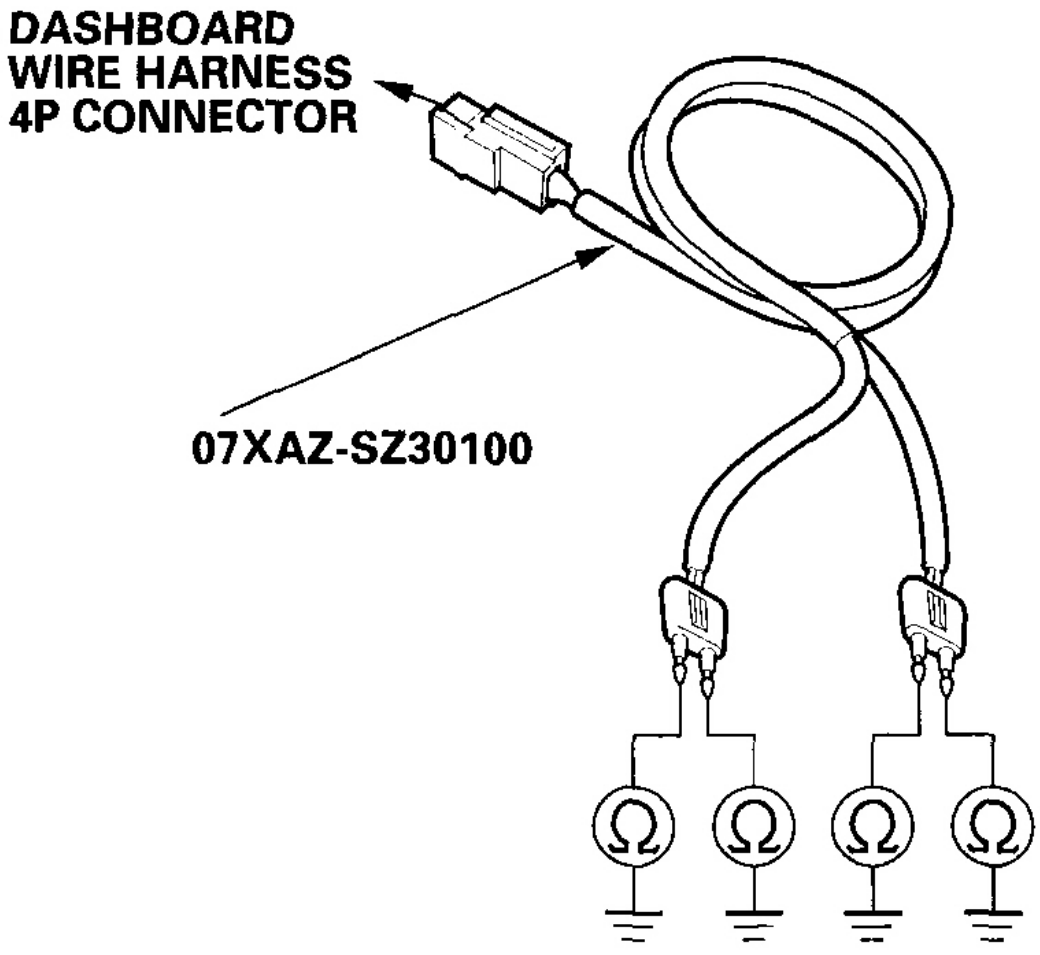
Is DTC 12-9x or 12-Bx indicated?

YES - Go to step 9.

NO - Short to ground in the front passenger's airbag first or second

inflator; replace the front passenger's airbag (see **FRONT PASSENGER'S AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect the SRS inflator simulator from the SRS simulator lead.
12. Check resistance between each terminal of both SRS simulator leads and body ground. There should be an open circuit or at least 1 M ohms.



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Fig. 72: Checking Resistance Between Terminal Of SRS Simulator Leads And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector A (28P) and the SRS unit. Check the connection between the connector and the SRS unit. If the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to ground in the dashboard wire harness; replace the dashboard wire harness.

DTC 21-1X (21-10 TO 21-19, 21-1A TO 21-1F): OPEN IN DRIVER'S SEAT BELT TENSIONER

DTC 21-2X (21-20 TO 21-29, 21-2A TO 21-2F): INCREASED RESISTANCE IN DRIVER'S SEAT BELT TENSIONER

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 21-1x or 21-2x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.

4. Disconnect the driver's seat belt tensioner 4P connector (A) from the floor wire harness.

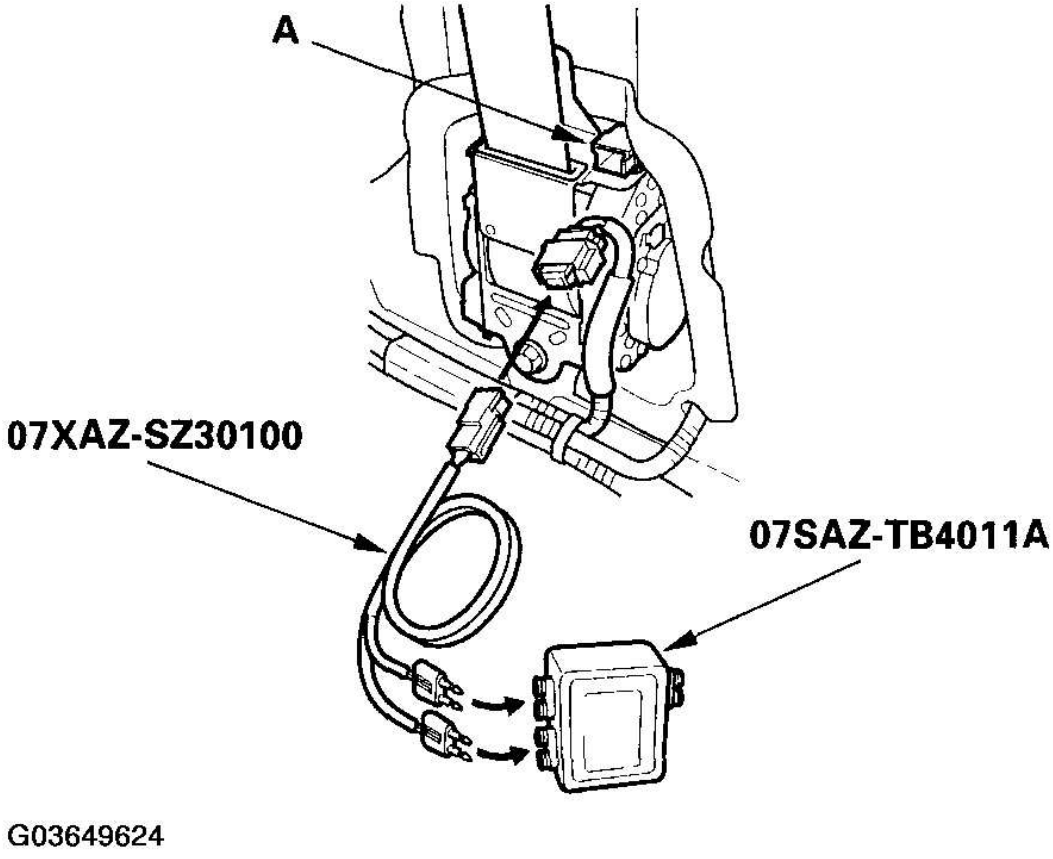


Fig. 73: Disconnecting Driver's Seat Belt Tensioner 4P Connector From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 21-1x or 21-2x indicated?

YES - Go to step 9.

NO - Open or increased resistance in the driver's seat belt tensioner; replace the driver's seat belt (see **FRONT SEAT BELT REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect the front passenger's seat belt tensioner connector (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Check resistance between the No. 1 and the No. 2 terminals of SRS unit connector B (28P). There should be 2.0-3.0 ohms.

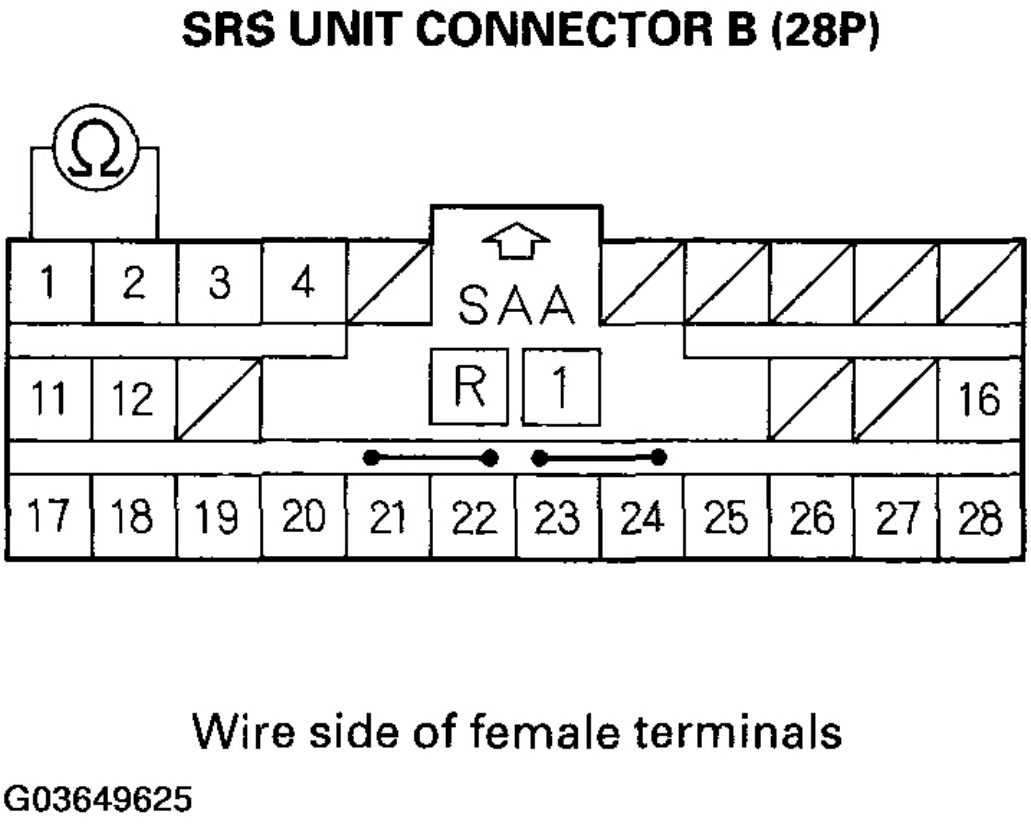


Fig. 74: Checking Resistance Between 1 And 2 Terminals Of SRS Unit Connector B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open or increased resistance in the floor wire harness; replace the floor wire harness.

DTC 21-3X (21-30 TO 21-39, 21-3A TO 21-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN DRIVER'S SEAT BELT TENSIONER

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 21-3x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the driver's seat belt tensioner 4P connector (A) from the floor wire harness.

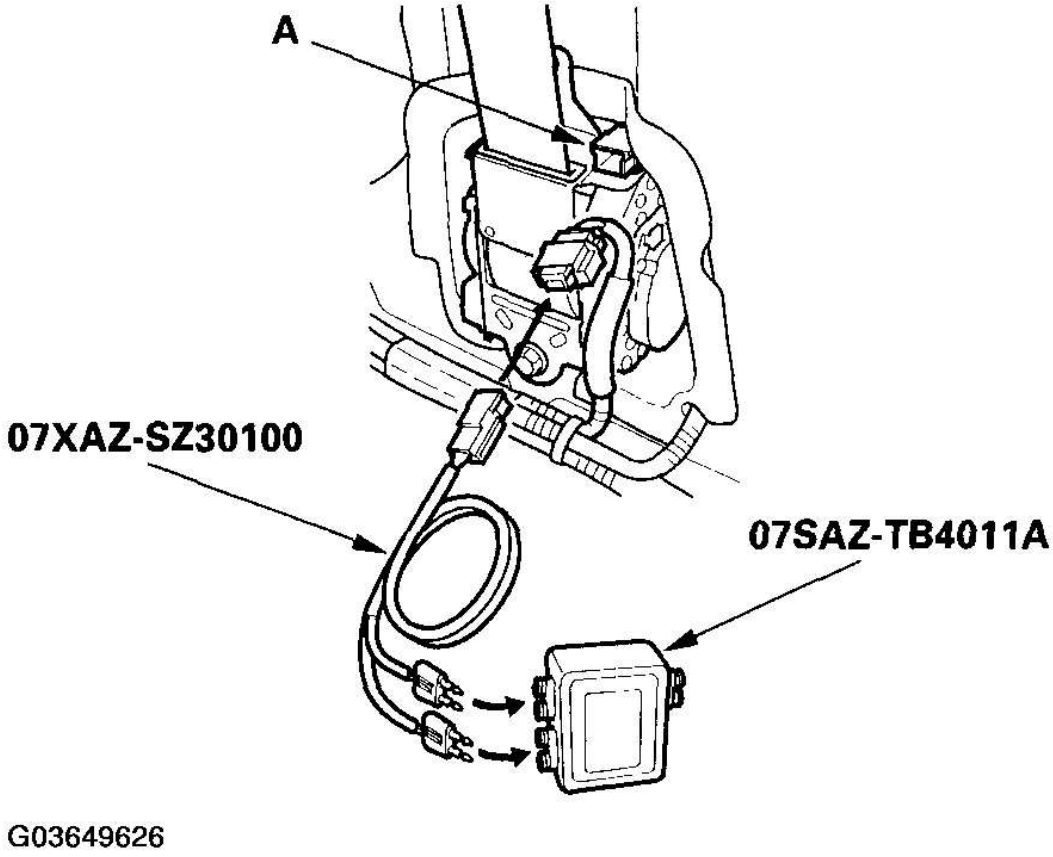


Fig. 75: Disconnecting Driver's Seat Belt Tensioner 4P Connector From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 21-3x indicated?

YES - Go to step 9.

NO - Short in the driver's seat belt tensioner; replace the driver's seat belt (see **FRONT SEAT BELT REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect the front passenger's seat belt tensioner connector (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Disconnect the simulator lead from the floor wire harness.
13. Check resistance between the No. 1 and the No. 2 terminals of SRS unit connector B (28P). There should be an open circuit or at least 1 M ohms.

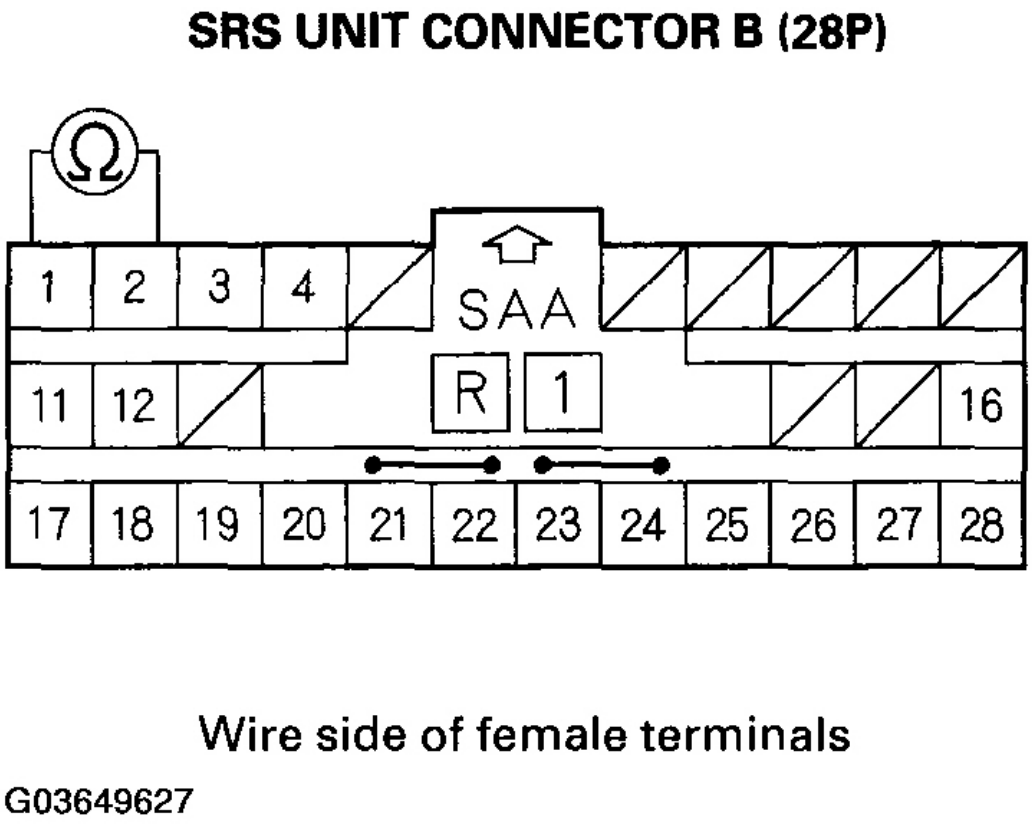


Fig. 76: Checking Resistance Between No. 1 And 2 Terminals Of SRS Unit

Connector B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short in the floor wire harness; replace the floor wire harness.

DTC 21-8X (21-80 TO 21-89, 21-8A TO 21-8F): SHORT TO POWER IN DRIVER'S SEAT BELT TENSIONER

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 21-8x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the driver's seat belt tensioner 4P connector (A) from the floor wire harness.

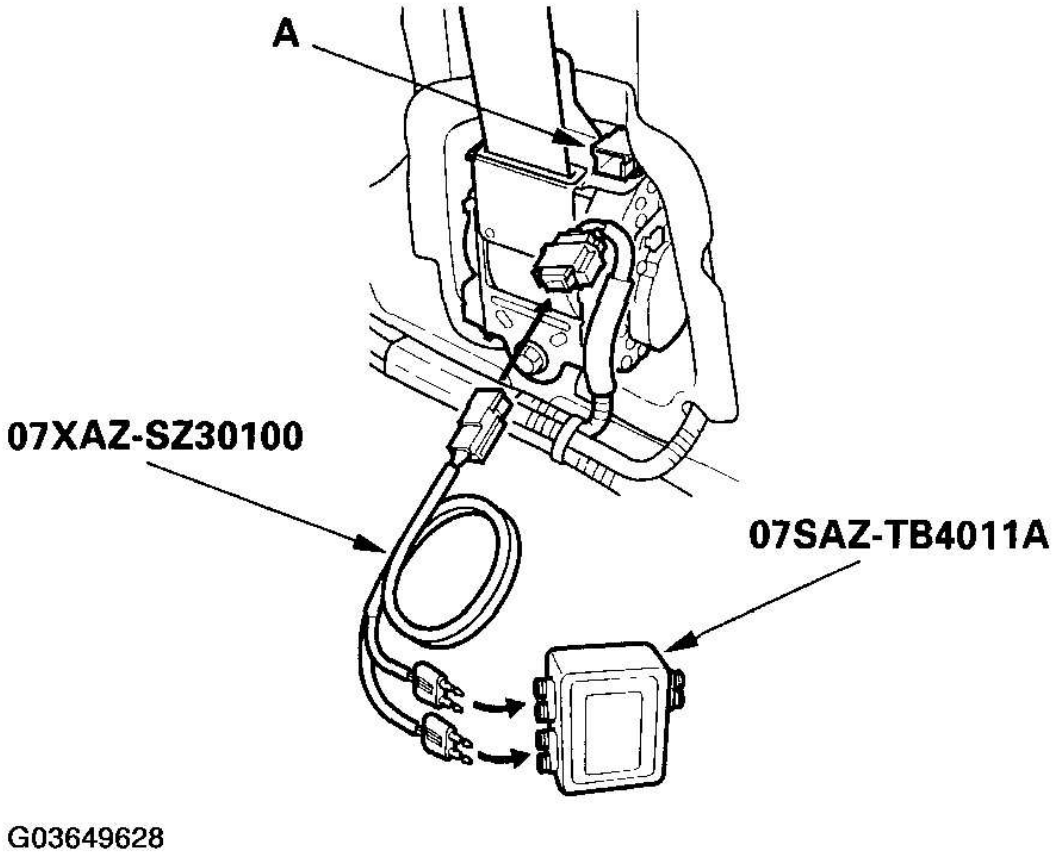


Fig. 77: Disconnecting Driver's Seat Belt Tensioner 4P Connector From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 21-8x indicated?

YES - Go to step 9.

NO - Short to power in the driver's seat belt tensioner; replace the driver's seat belt (see **FRONT SEAT BELT REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect the front passenger's seat belt tensioner connector (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Disconnect the simulator lead from the floor wire harness.
13. Reconnect the battery negative cable.
14. Turn the ignition switch ON (II).
15. Check for voltage between the No. 1 terminal of SRS unit connector B (28P) and body ground, and between the No. 2 terminal and body ground. There should be 0.5 V or less.

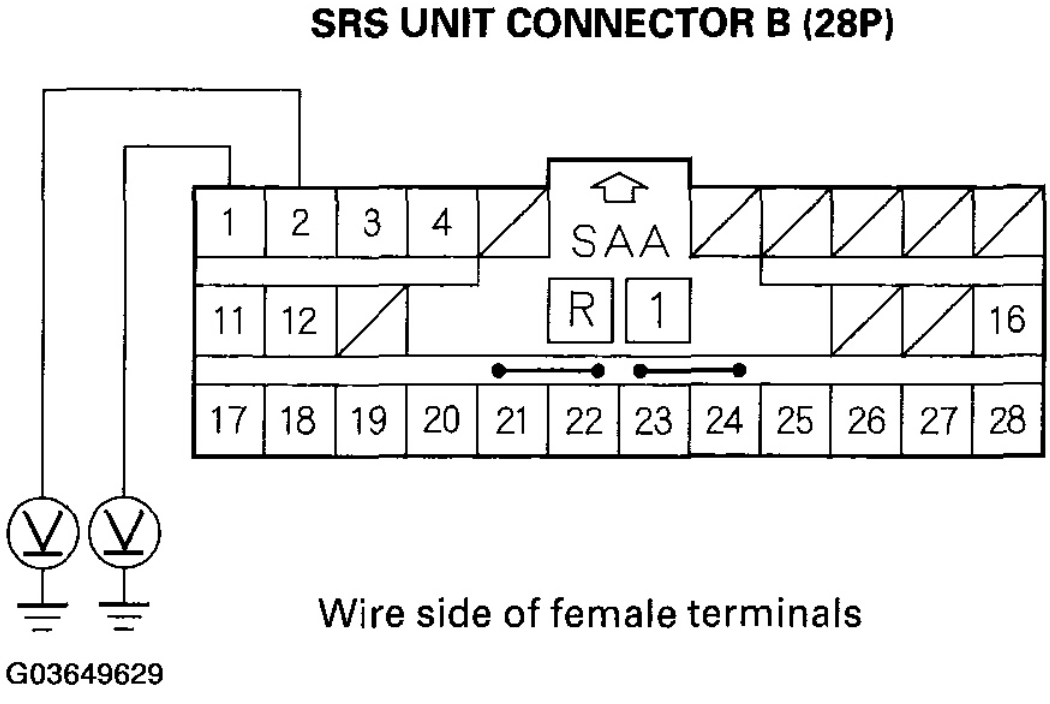


Fig. 78: Checking Voltage Between No. 1 Terminal Of SRS Unit

Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to power in the floor wire harness; replace the floor wire harness.

DTC 21-9X (21-90 TO 21-99, 21-9A TO 21-9F): SHORT TO GROUND IN DRIVER'S SEAT BELT TENSIONER

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 21-9x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the driver's seat belt tensioner 4P connector (A) from the floor wire harness.

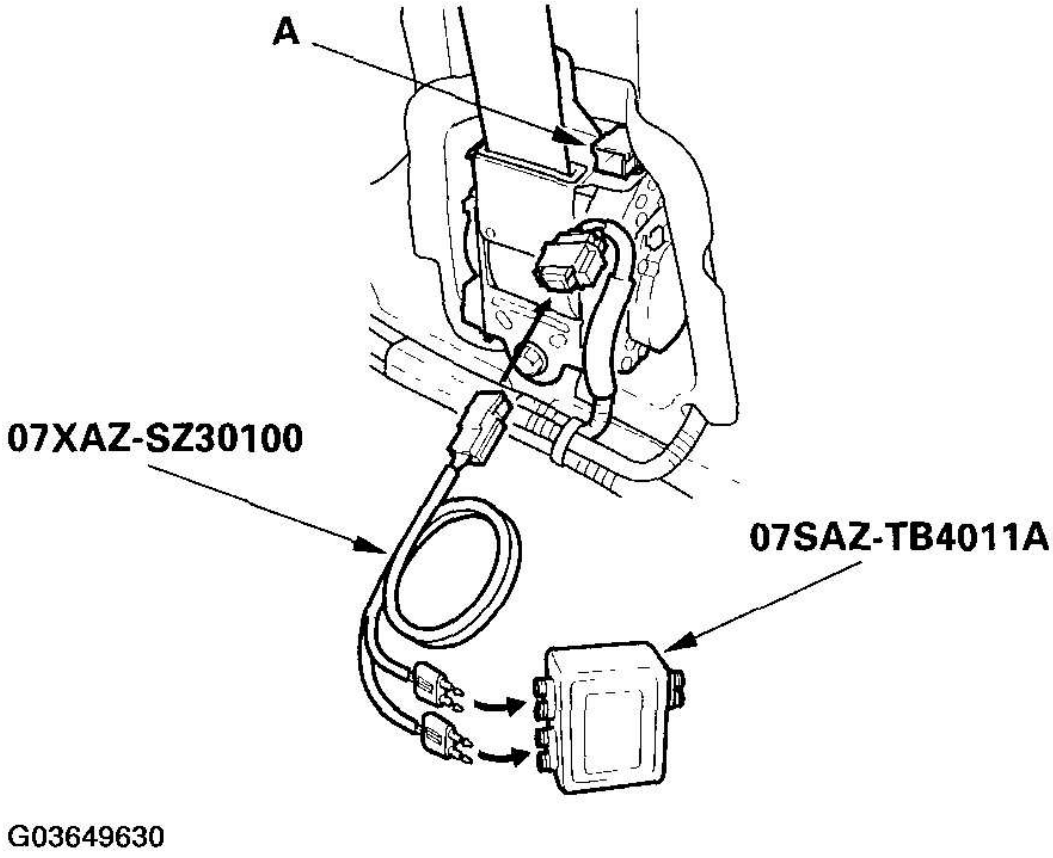


Fig. 79: Disconnecting Driver's Seat Belt Tensioner 4P Connector From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 21-9x indicated?

YES - Go to step 9.

NO - Short to ground in the driver's seat belt tensioner; replace the driver's seat belt (see **FRONT SEAT BELT REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect the front passenger's seat belt tensioner connector (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Disconnect the simulator lead from the floor wire harness.
13. Check resistance between the No. 1 terminals of SRS unit connector B (28P) and body ground, and between the No. 2 terminal and body ground. There should be an open circuit or at least 1 M ohms.

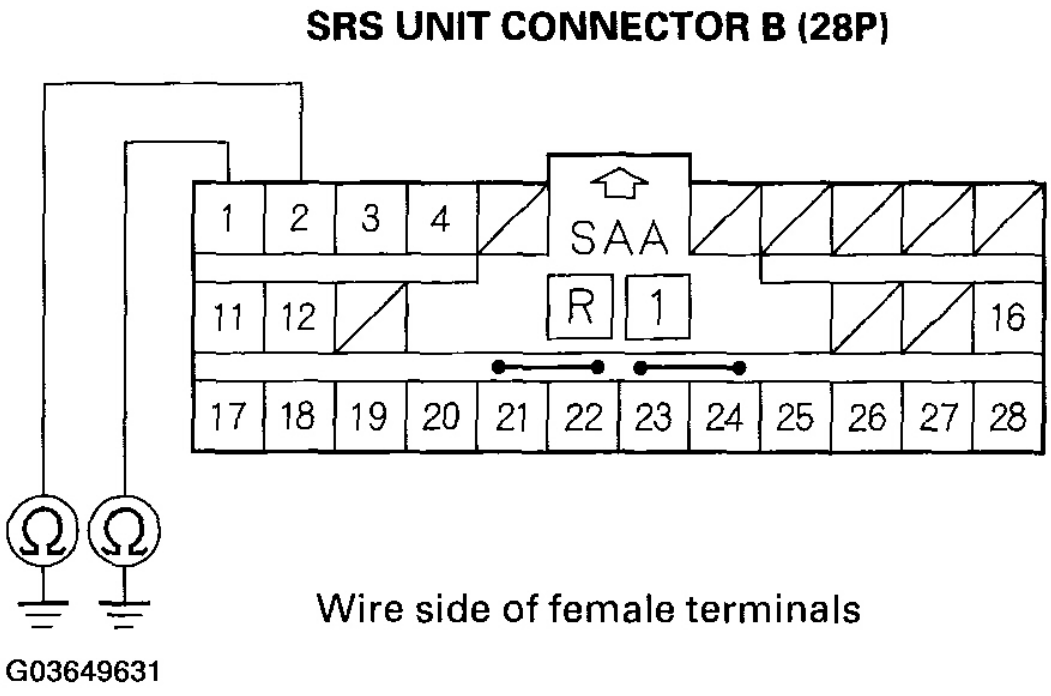


Fig. 80: Checking Resistance Between No. 1 Terminals Of SRS Unit Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to ground in the floor wire harness; replace the floor wire harness.

DTC 22-1X (22-10 TO 22-19, 22-1A TO 22-1F): OPEN IN FRONT PASSENGER'S SEAT BELT TENSIONER

DTC 22-2X (22-20 TO 22-29, 22-2A TO 22-2F): INCREASED RESISTANCE IN FRONT PASSENGER'S SEAT BELT TENSIONER

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 22-1x or 22-2x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the front passenger's seat belt tensioner 4P connector (A) from the floor wire harness.

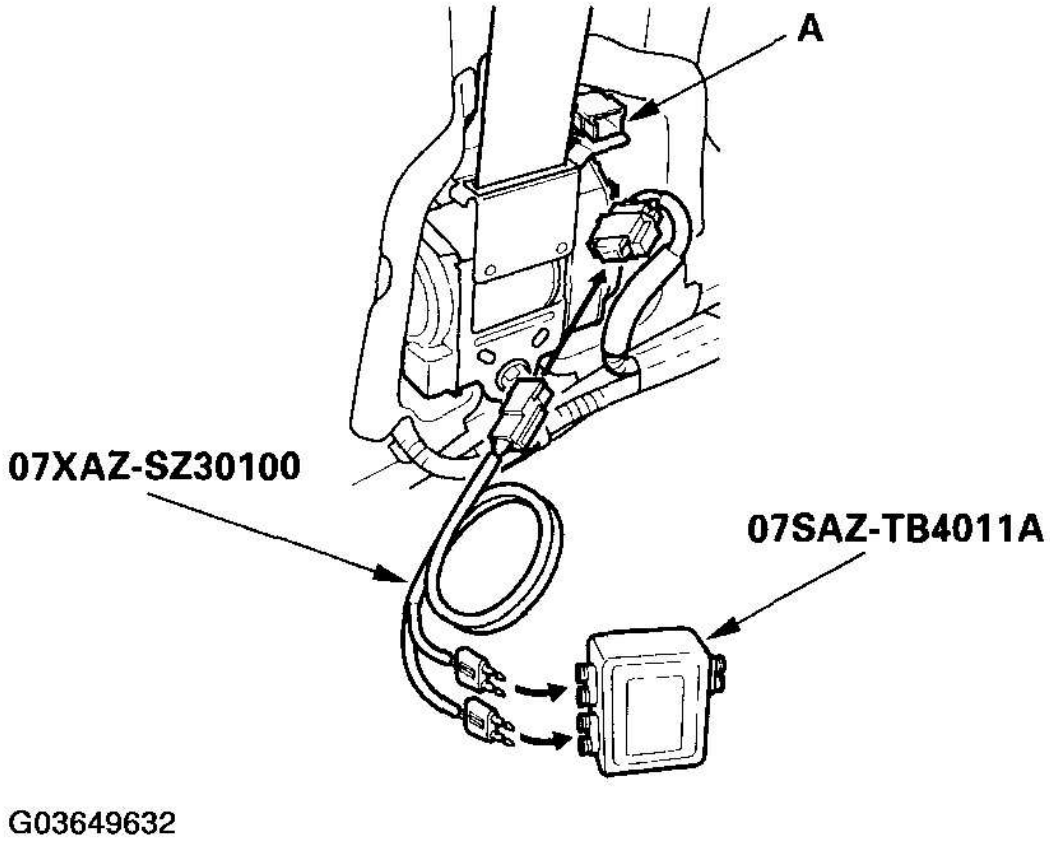


Fig. 81: Disconnecting Front Passenger's Seat Belt Tensioner 4P Connector From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 22-1x or 22-2x indicated?

YES - Go to step 9.

NO - Open or increased resistance in the front passenger's seat belt tensioner; replace the front passenger's seat belt (see **FRONT SEAT BELT REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect the driver's seat belt tensioner connector (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Check resistance between the No. 3 and the No. 4 terminal of SRS unit connector B (28P). There should be 2.0-3.0 ohms.

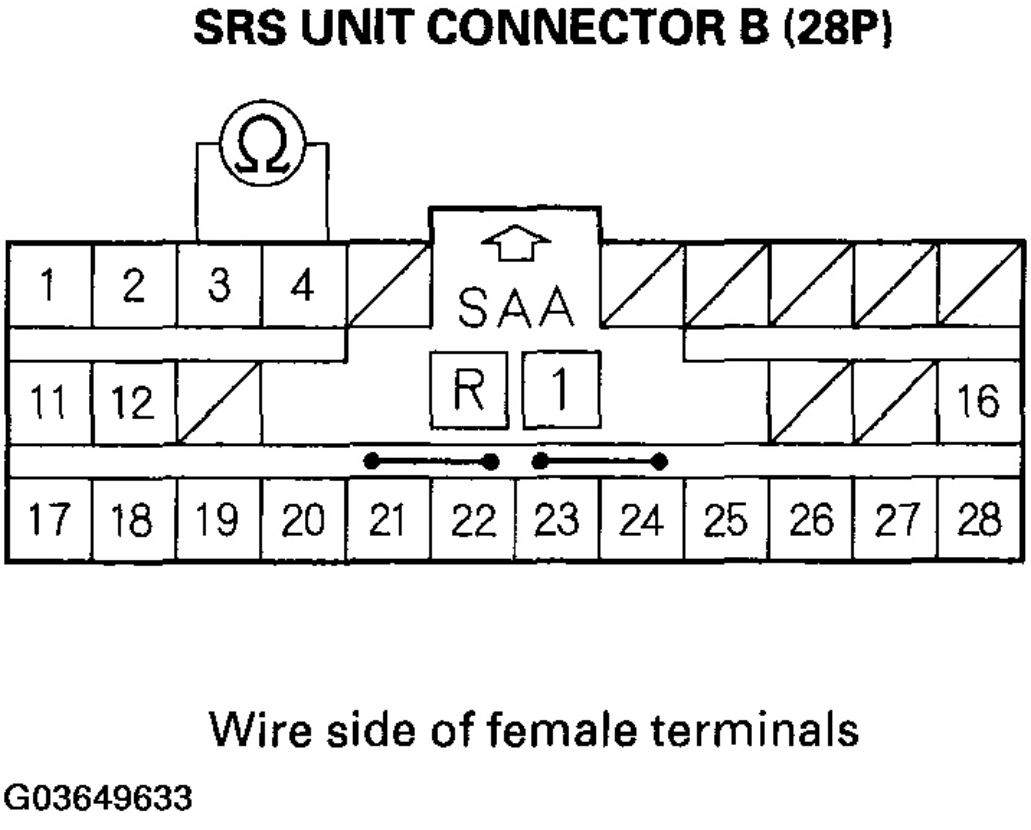


Fig. 82: Checking Resistance Between No. 3 And 4 Terminal Of SRS Unit

Connector B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open or increased resistance in the floor wire harness; replace the floor wire harness.

DTC 22-3X (22-30 TO 22-39, 22-3A TO 22-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S SEAT BELT TENSIONER

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 22-3x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the front passenger's seat belt tensioner 4P connector (A) from the floor wire harness.

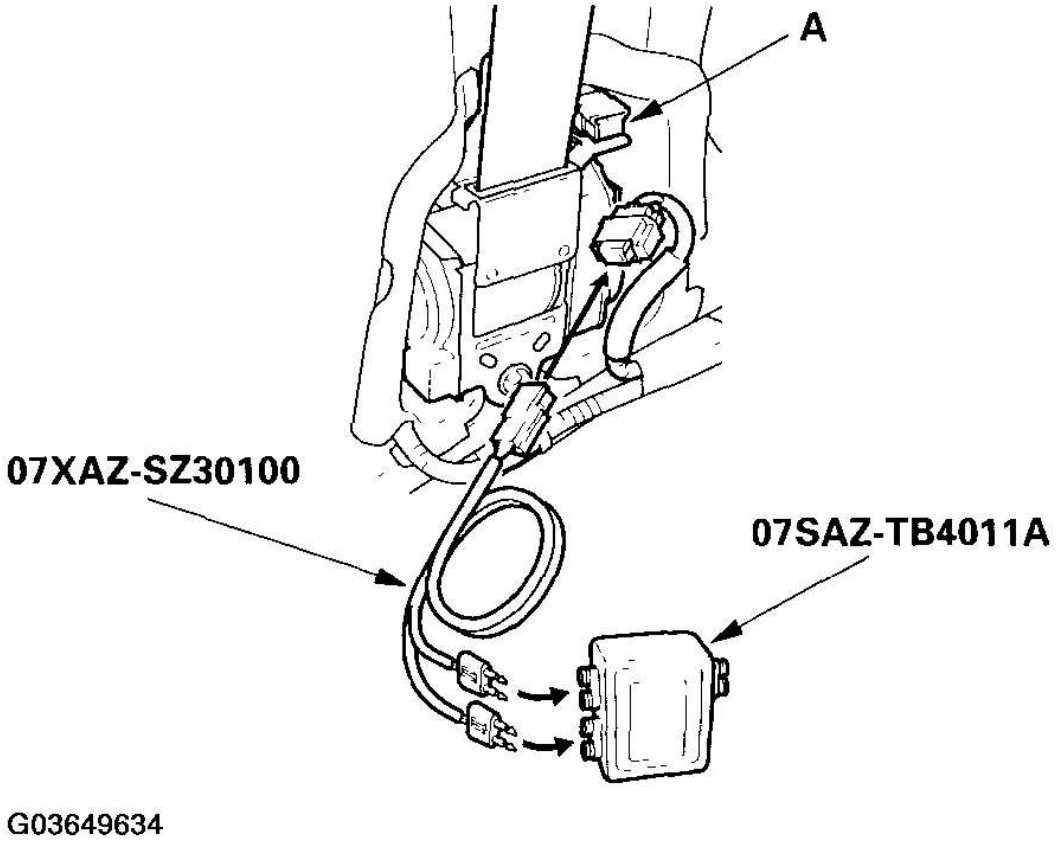


Fig. 83: Disconnecting Front Passenger's Seat Belt Tensioner 4P Connector From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 22-3x indicated?

YES - Go to step 9.

NO - Short in the front passenger's seat belt tensioner; replace the front passenger's seat belt (see **FRONT SEAT BELT REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect the driver's seat belt tensioner connector (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Disconnect the simulator lead from the floor wire harness.
13. Check resistance between the No. 3 and the No. 4 terminals of SRS unit connector B (28P). There should be an open circuit or at least 1 M ohms.

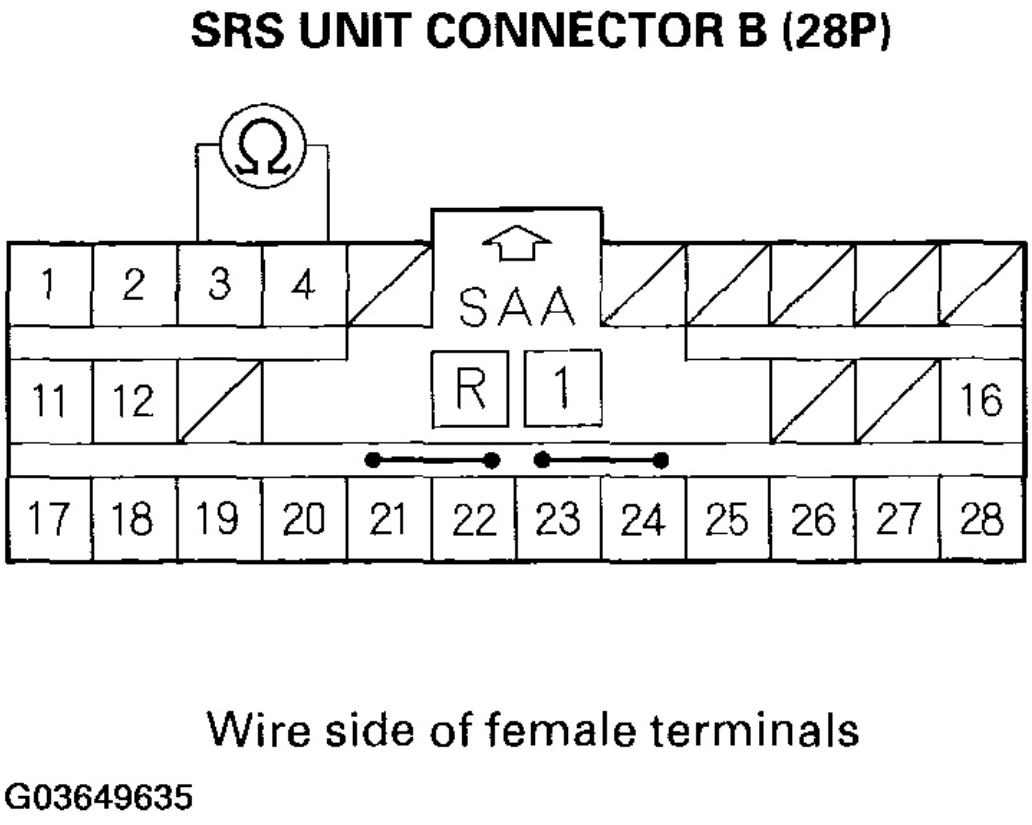


Fig. 84: Checking Resistance Between No. 3 And 4 Terminals Of SRS Unit

Connector B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short in the floor wire harness; replace the floor wire harness.

DTC 22-8X (22-80 TO 22-89, 22-8A TO 22-8F): SHORT TO POWER IN FRONT PASSENGER'S SEAT BELT TENSIONER

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead F 07XAZ-SZ30100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 22-8x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the front passenger's seat belt tensioner 4P connector (A) from the floor wire harness.

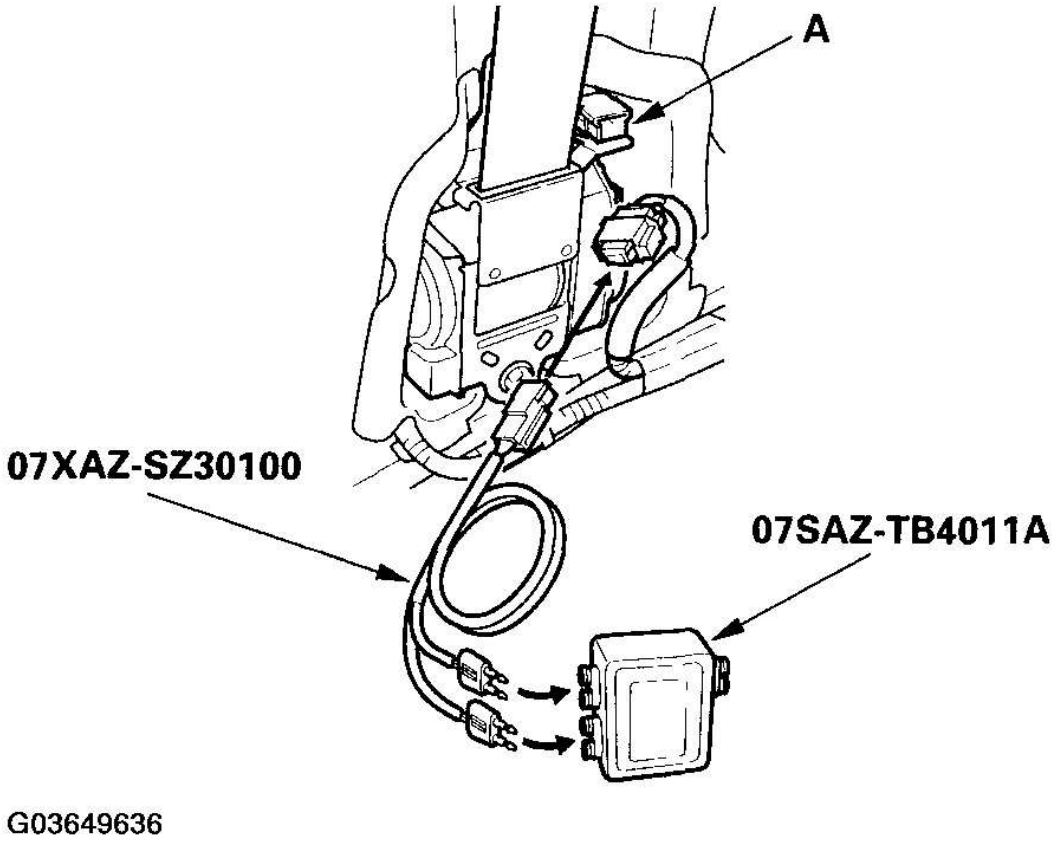


Fig. 85: Disconnecting Front Passenger's Seat Belt Tensioner 4P Connector From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 22-8x indicated?

YES - Go to step 9.

NO - Short to power in the front passenger's seat belt tensioner; replace the front passenger's seat belt (see **FRONT SEAT BELT REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect the driver's seat belt tensioner connector (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Disconnect the simulator lead from the floor wire harness.
13. Reconnect the battery negative cable.
14. Turn the ignition switch ON (II).
15. Check for voltage between the No. 3 terminal of SRS unit connector B (28P) and body ground, and between the No. 4 terminal and body ground. There should be 0.5 V or less.

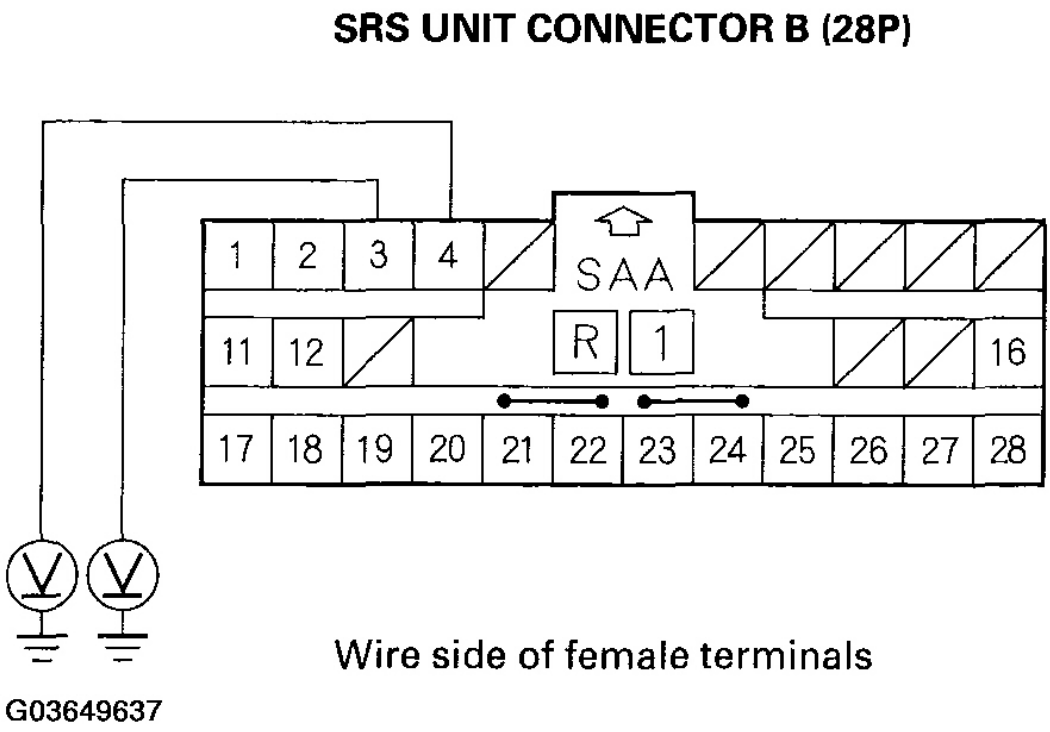


Fig. 86: Checking Voltage Between No. 3 Terminal Of SRS Unit Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to power in the floor wire harness; replace the floor wire harness.

DTC 22-9X (22-90 TO 22-99, 22-9A TO 22-9F): SHORT TO GROUND IN FRONT PASSENGER'S SEAT BELT TENSIONER

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A

- SRS simulator lead F 07XAZ-SZ30100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 22-9x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the front passenger's seat belt tensioner 4P connector (A) from the floor wire harness.

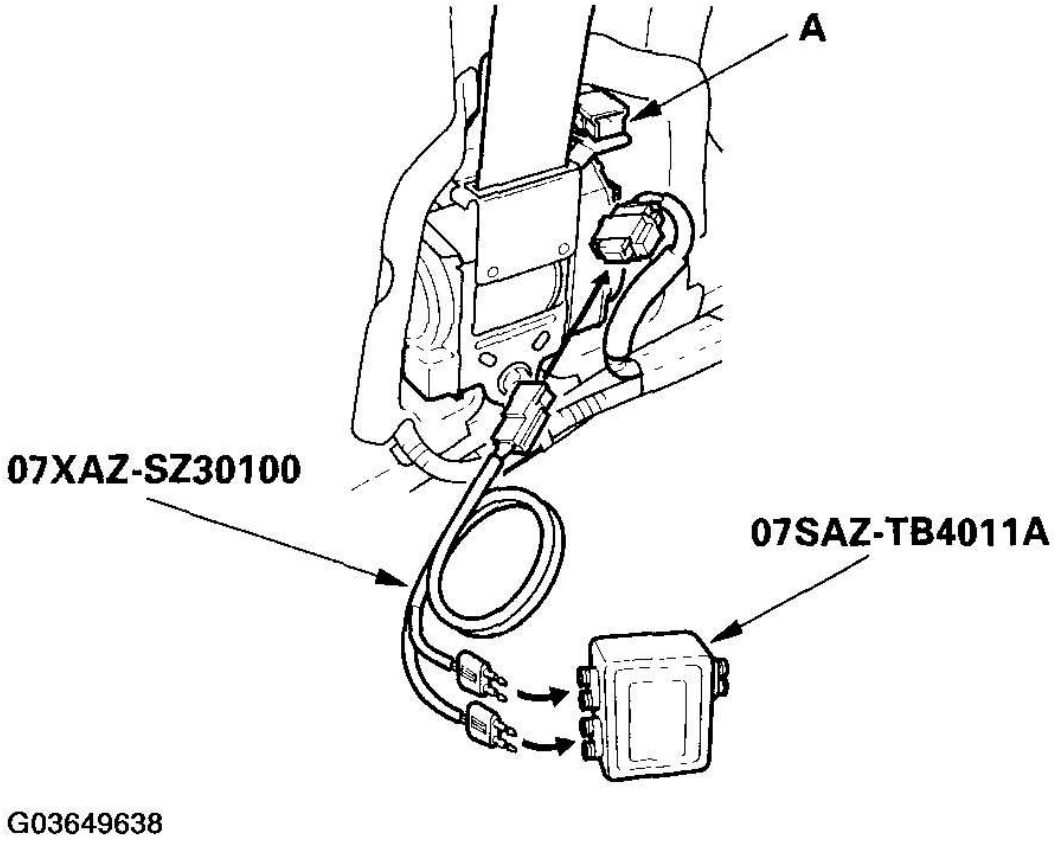


Fig. 87: Disconnecting Front Passenger's Seat Belt Tensioner 4P Connector From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connectors) and simulator lead F to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 22-9x indicated?

YES - Go to step 9.

NO - Short to ground in the front passenger's seat belt tensioner; replace the front passenger's seat belt (see **FRONT SEAT BELT REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect the driver's seat belt tensioner connector (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **Disconnecting System Connectors**).
12. Disconnect the simulator lead from the floor wire harness.
13. Check resistance between the No. 3 terminal of SRS unit connector B (28P) and body ground, and between the No. 4 terminal and body ground. There should be an open circuit or at least 1 M ohms.

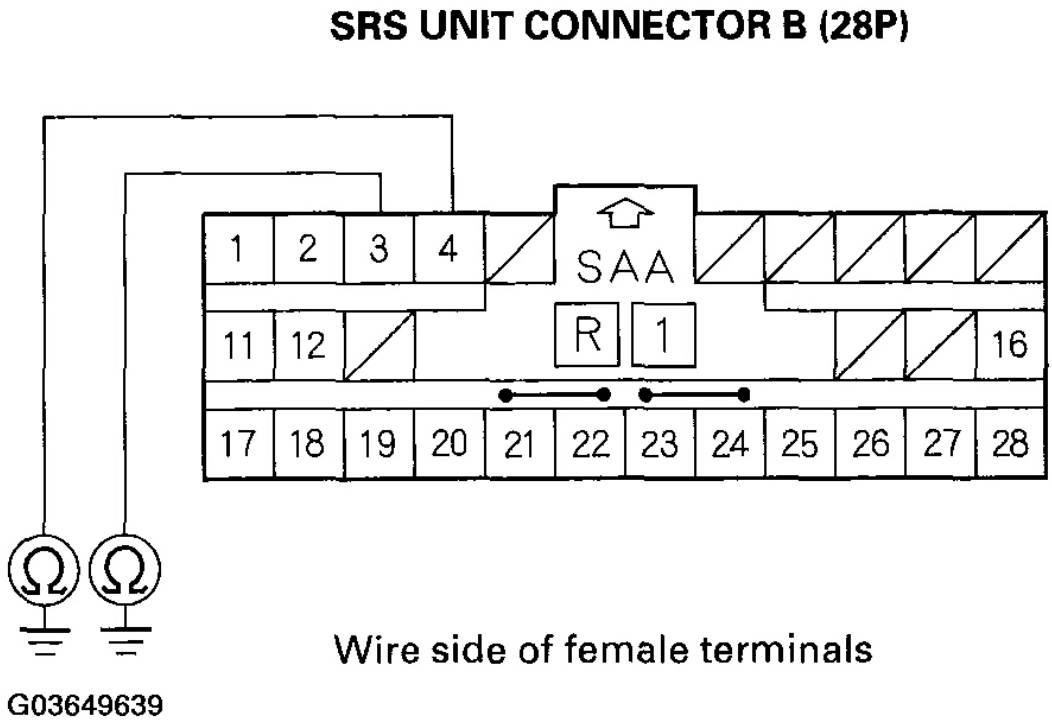


Fig. 88: Checking Resistance Between No. 3 Terminal Of SRS Unit Connector B And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to ground in the floor wire harness; replace the floor wire harness.

DTC 31-1X (31-10 TO 31-19, 31-1A TO 31-1F): OPEN IN DRIVER'S SIDE AIRBAG INFLATOR

DTC 31-2X (31-20 TO 31-29, 31-2A TO 31-2F): INCREASED RESISTANCE IN DRIVER'S SIDE AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 31-1x or 31-2x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the floor wire harness 2P connector (A) from the driver's side airbag.

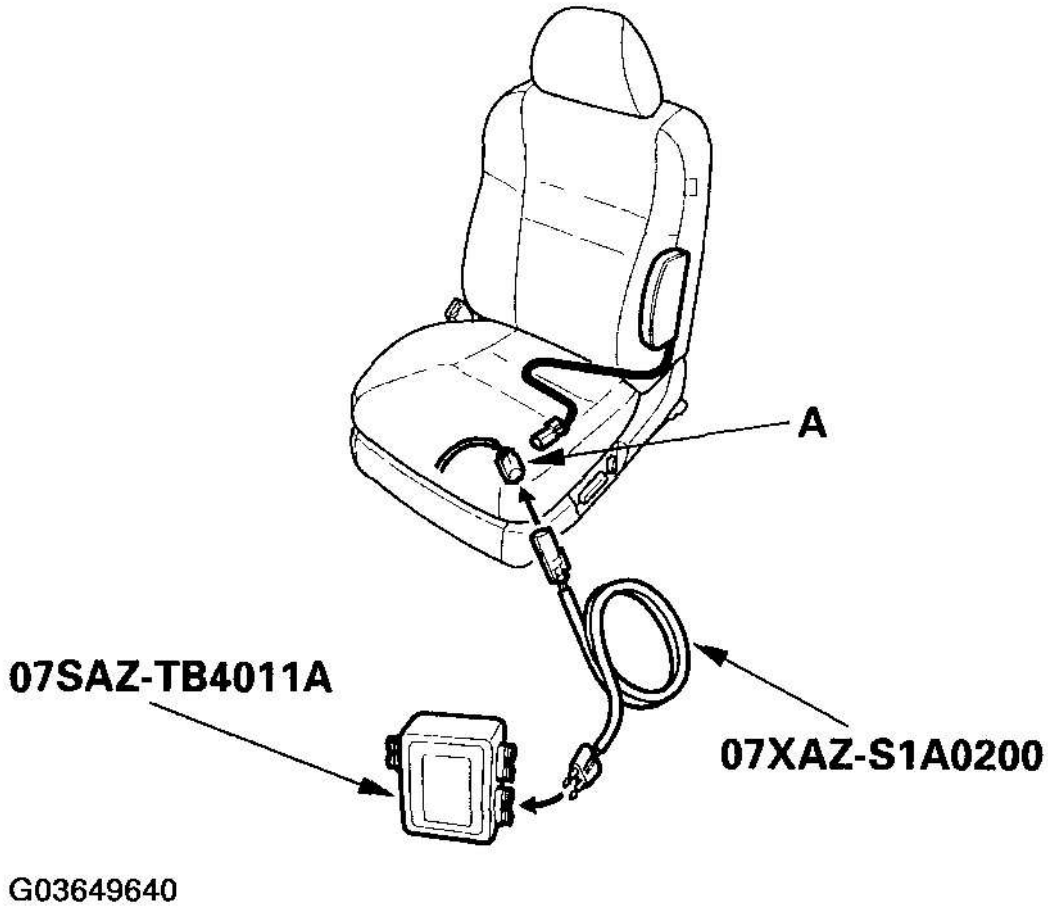


Fig. 89: Disconnecting Floor Wire Harness 2P Connector From Driver's Side Airbag
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 31-1x or 31-2x indicated?

YES - Go to step 9.

NO - Open or increased resistance in the driver's side airbag inflator; replace the driver's side airbag (see **SIDE AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect both seat belt tensioner 4P connectors (see step 6 in **Disconnecting System Connectors**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Disconnect the SRS inflator simulator from the SRS simulator lead.
13. Check resistance between the terminals of the SRS simulator lead. There should be 1.0 ohms or less.

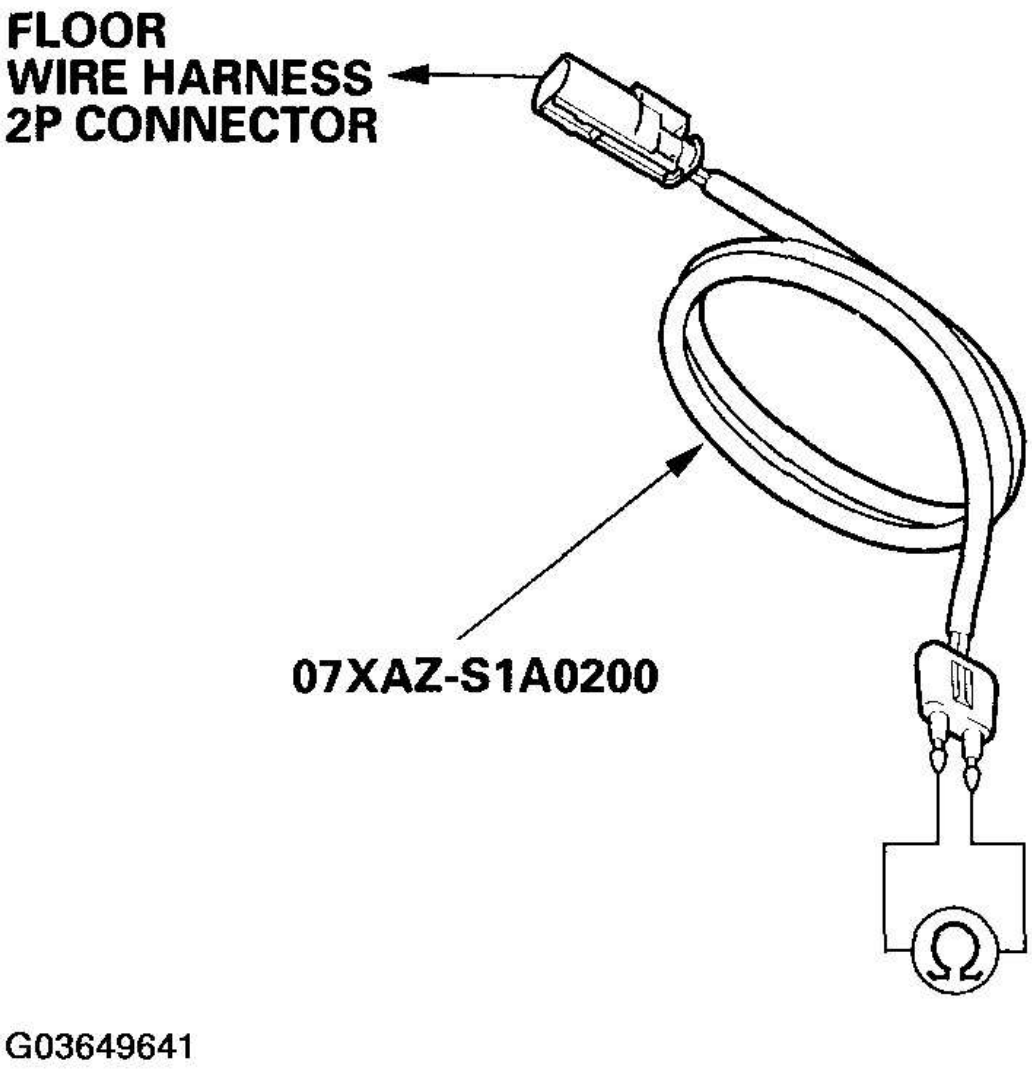


Fig. 90: Checking Resistance Between Terminals Of SRS Simulator Lead
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open or increased resistance in the floor wire harness; replace the

floor wire harness.

DTC 31-3X (31-30 TO 31-39, 31-3A TO 31-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN DRIVER'S SIDE AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200
- SRS short canceller 070AZ-SAA0100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 31-3x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the floor wire harness 2P connector (A) from the driver's side airbag.

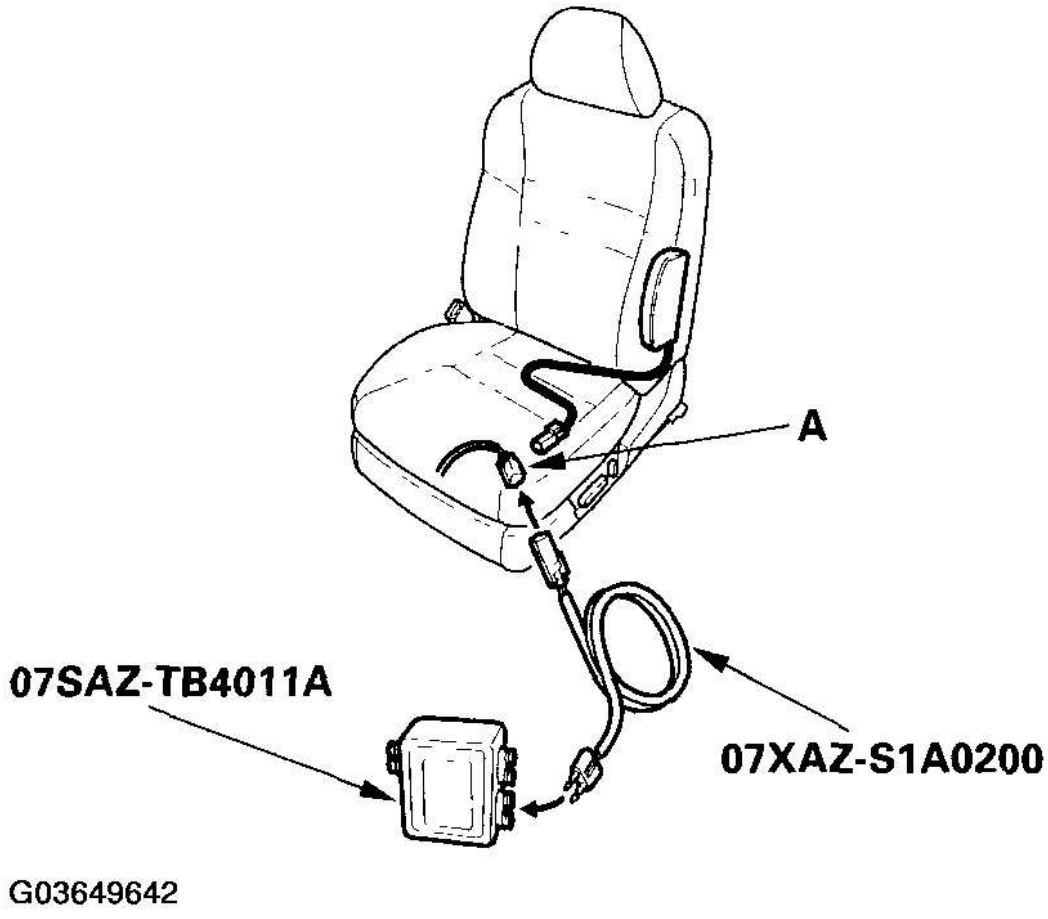


Fig. 91: Disconnecting Floor Wire Harness 2P Connector From Driver's Side Airbag
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 31-3x indicated?

YES - Go to step 9.

NO - Short to another wire in the driver's side airbag inflator; replace the driver's side airbag (see **SIDE AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Disconnect the SRS inflator simulator from the SRS simulator lead.
13. Connect the SRS short canceller (070AZ-SAA0100) to the No. 21 and No. 22 terminals of SRS unit connector B (28P) (see **REOPENING THE SRS UNIT CIRCUIT FOR DIAGNOSIS**).
14. Check resistance between the terminals of SRS simulator lead E. There should be an open circuit or at least 1 M ohms.

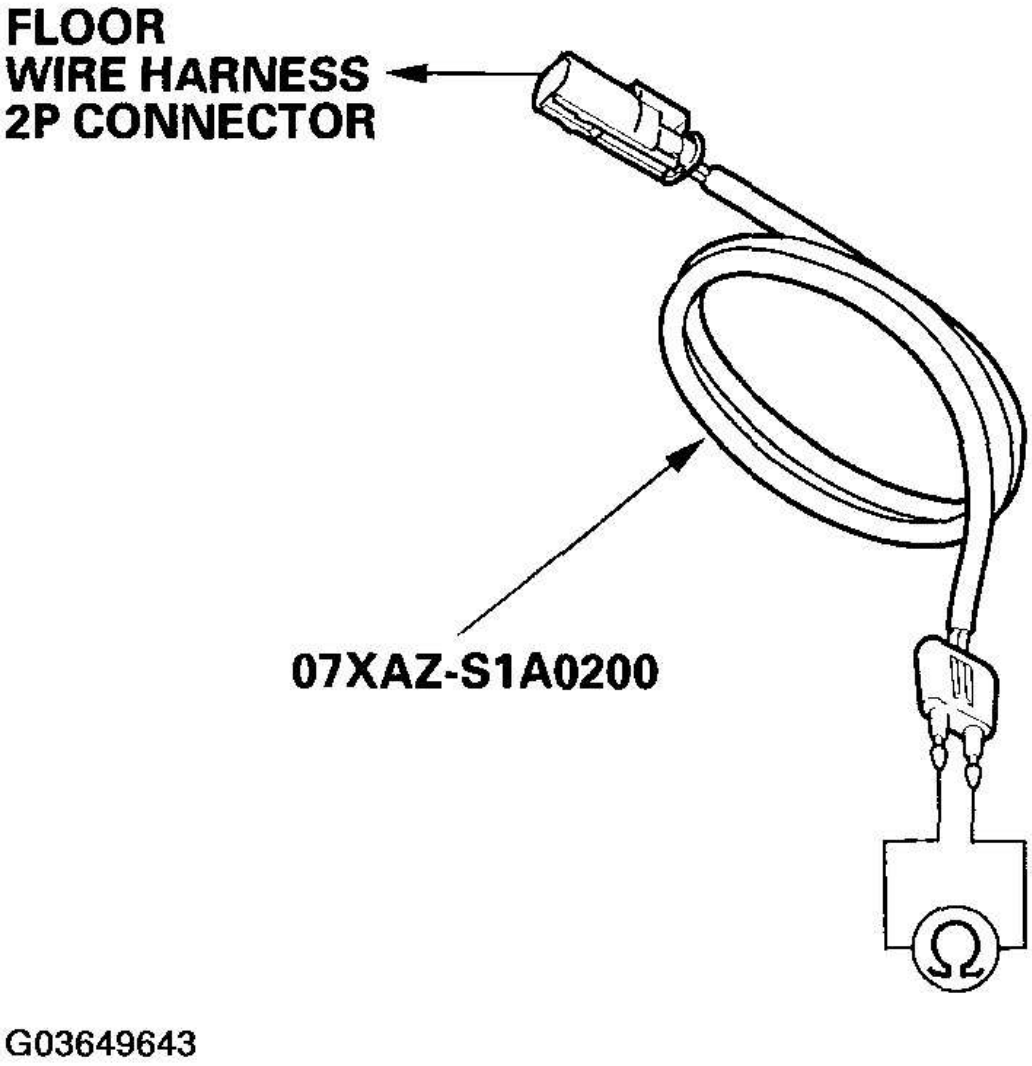


Fig. 92: Checking Resistance Between Terminals Of SRS Simulator Lead E
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short in the floor wire harness; replace the floor wire harness.

DTC 31-8X (31-80 TO 31-89, 31-8A TO 31-8F): SHORT TO POWER IN DRIVER'S SIDE AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 31-8x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the floor wire harness 2P connector (A) from the driver's side airbag.

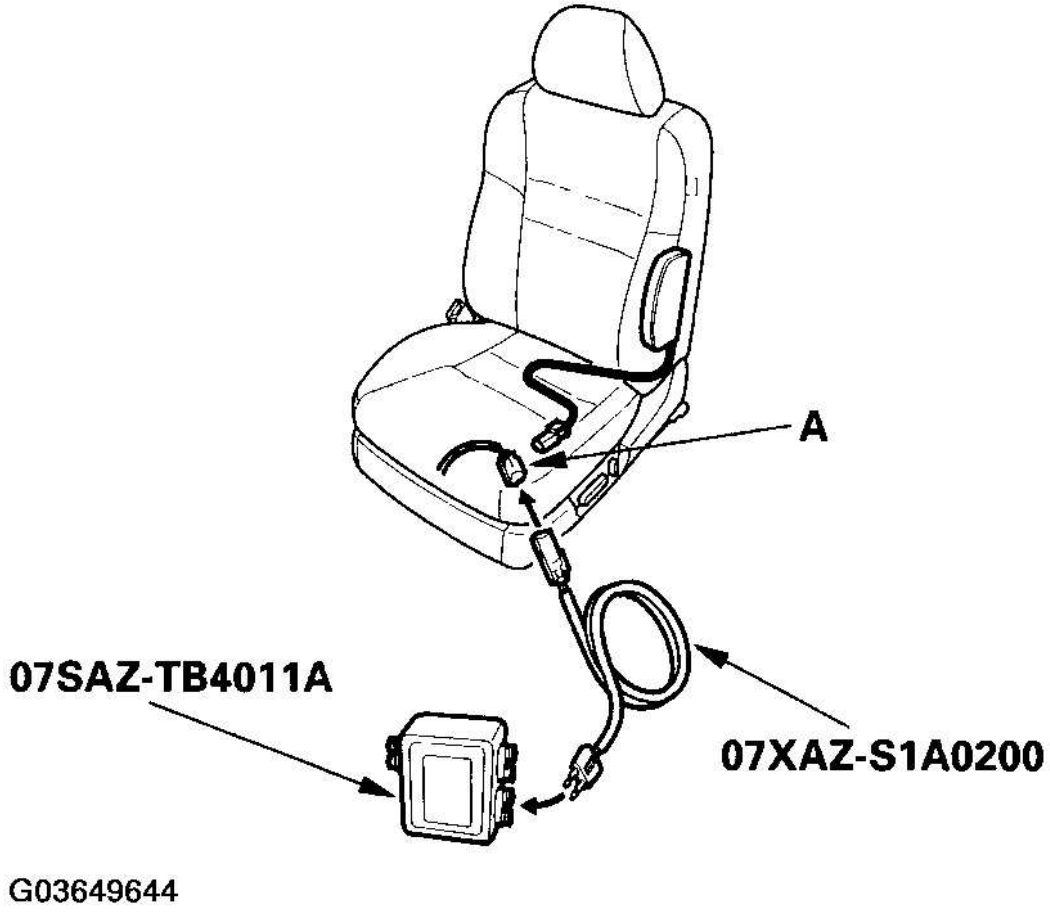


Fig. 93: Disconnecting Floor Wire Harness 2P Connector From Driver's Side Airbag
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 31-8x indicated?

YES - Go to step 9.

NO - Short to power in the driver's side airbag inflator; replace the driver's side airbag (see **SIDE AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Disconnect the SRS inflator simulator from the SRS simulator lead.
13. Reconnect the battery negative cable.
14. Turn the ignition switch ON (II).
15. Check for voltage between each terminal of SRS simulator lead E and body ground. There should be 0.5 V or less.

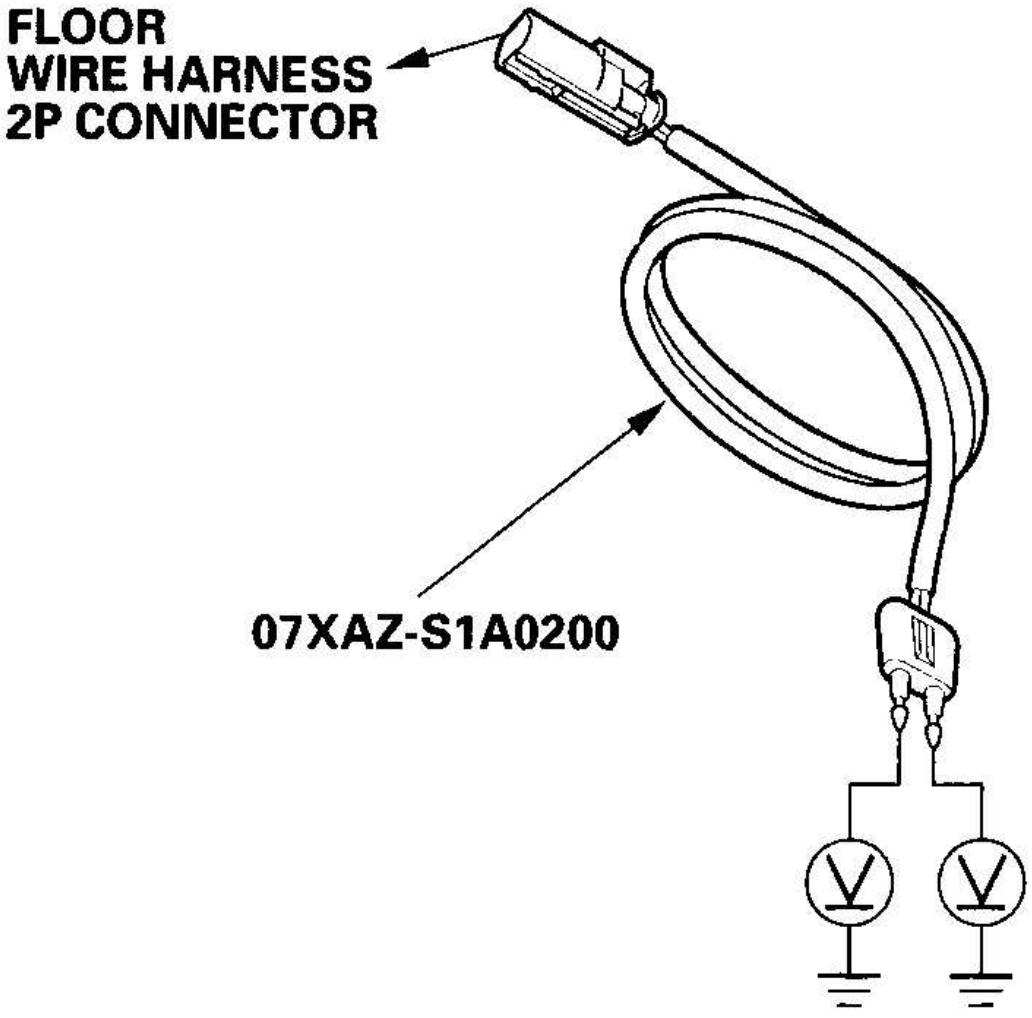


Fig. 94: Checking Voltage Between Terminal Of SRS Simulator Lead E And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to power in the floor wire harness; replace the floor wire harness.

DTC 31-9X (31-90 TO 31-99, 31-9A TO 31-9F): SHORT TO GROUND IN DRIVER'S SIDE AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 31-9x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the floor wire harness 2P connector (A) from the driver's side airbag.

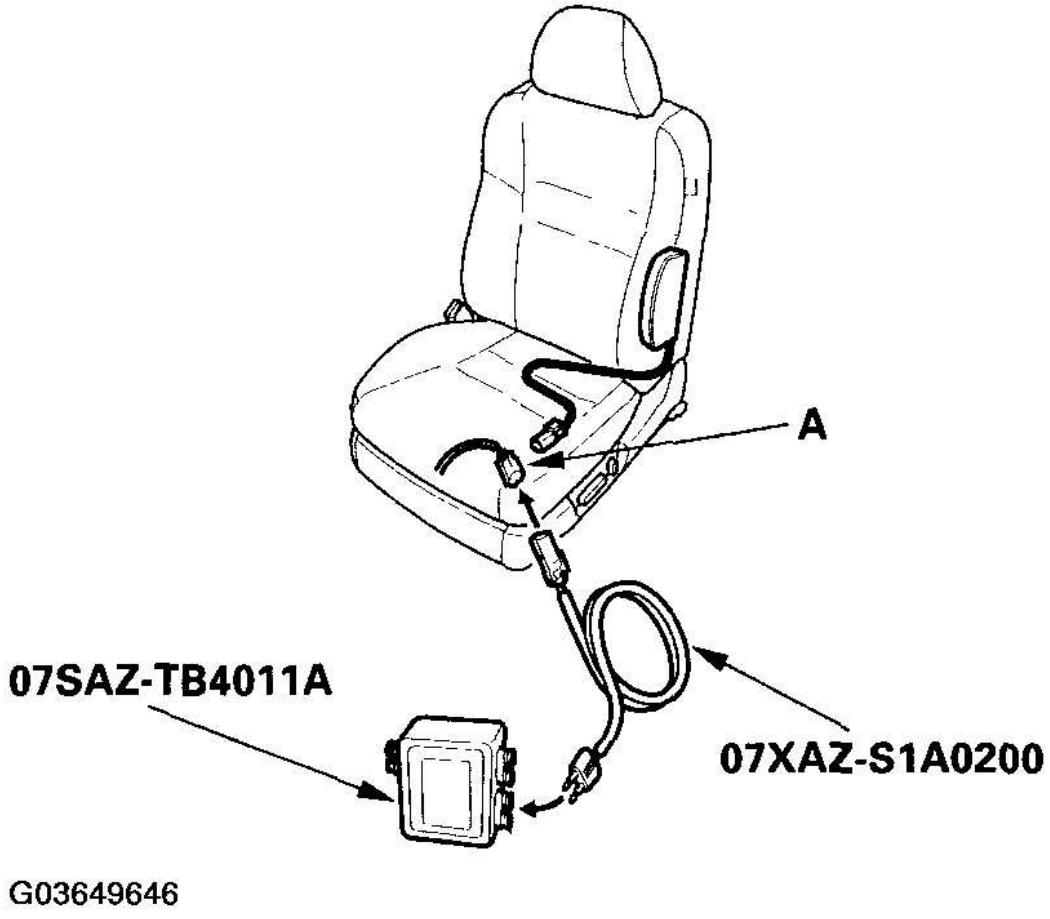


Fig. 95: Disconnecting Floor Wire Harness 2P Connector From Driver's Side Airbag
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 31-9x indicated?

YES - Go to step 9.

NO - Short to ground in the driver's side airbag inflator; replace the driver's side airbag (see **SIDE AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Disconnect the SRS inflator simulator from the SRS simulator lead.
13. Check resistance between each terminal of SRS simulator lead E and body ground. There should be an open circuit or at least 1 M ohms.

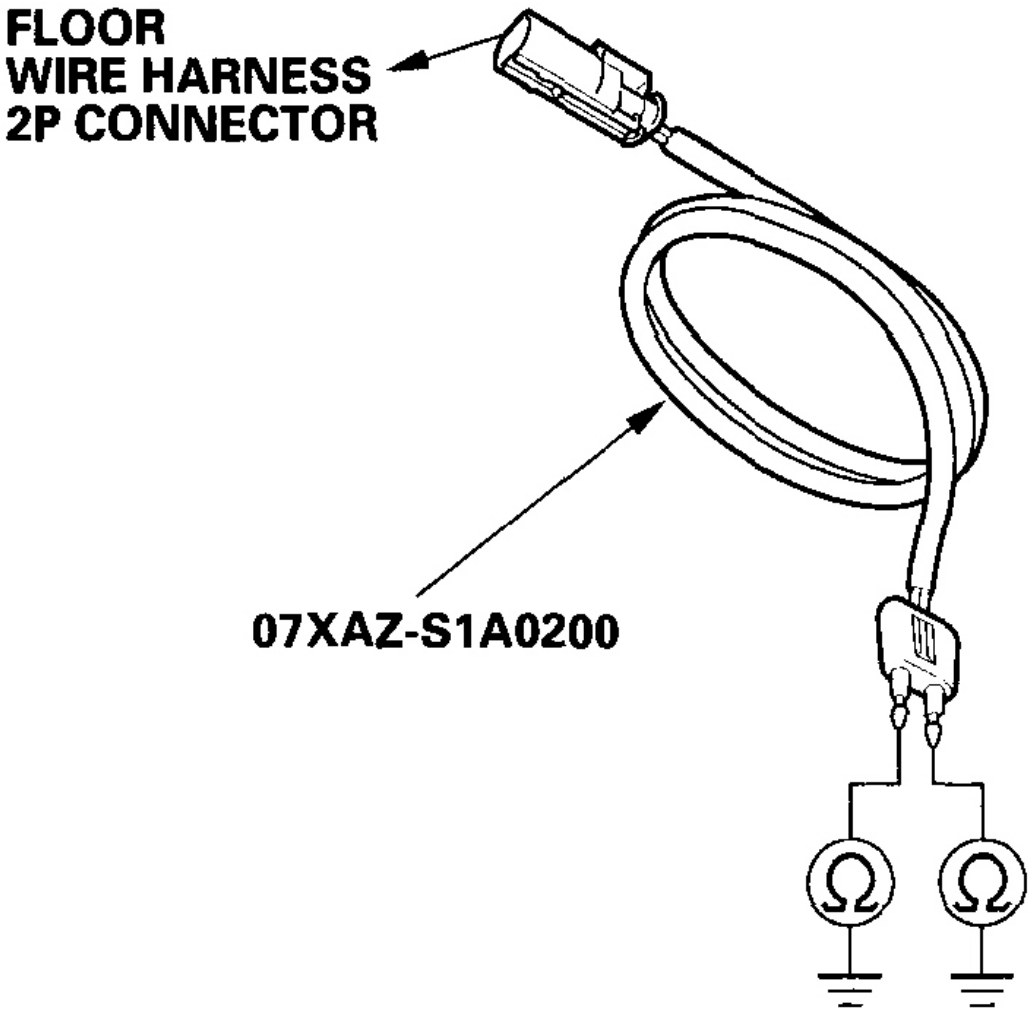


Fig. 96: Checking Resistance Between Terminal Of SRS Simulator Lead E And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to ground in the floor wire harness; replace the floor wire harness.

DTC 32-1X (32-10 TO 32-19, 32-1A TO 32-1F): OPEN IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR

DTC 32-2X (32-20 TO 32-29, 32-2A TO 32-2F): INCREASED RESISTANCE IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 32-1x or 32-x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the floor wire harness 2P connector (A) from the front passenger's side airbag.

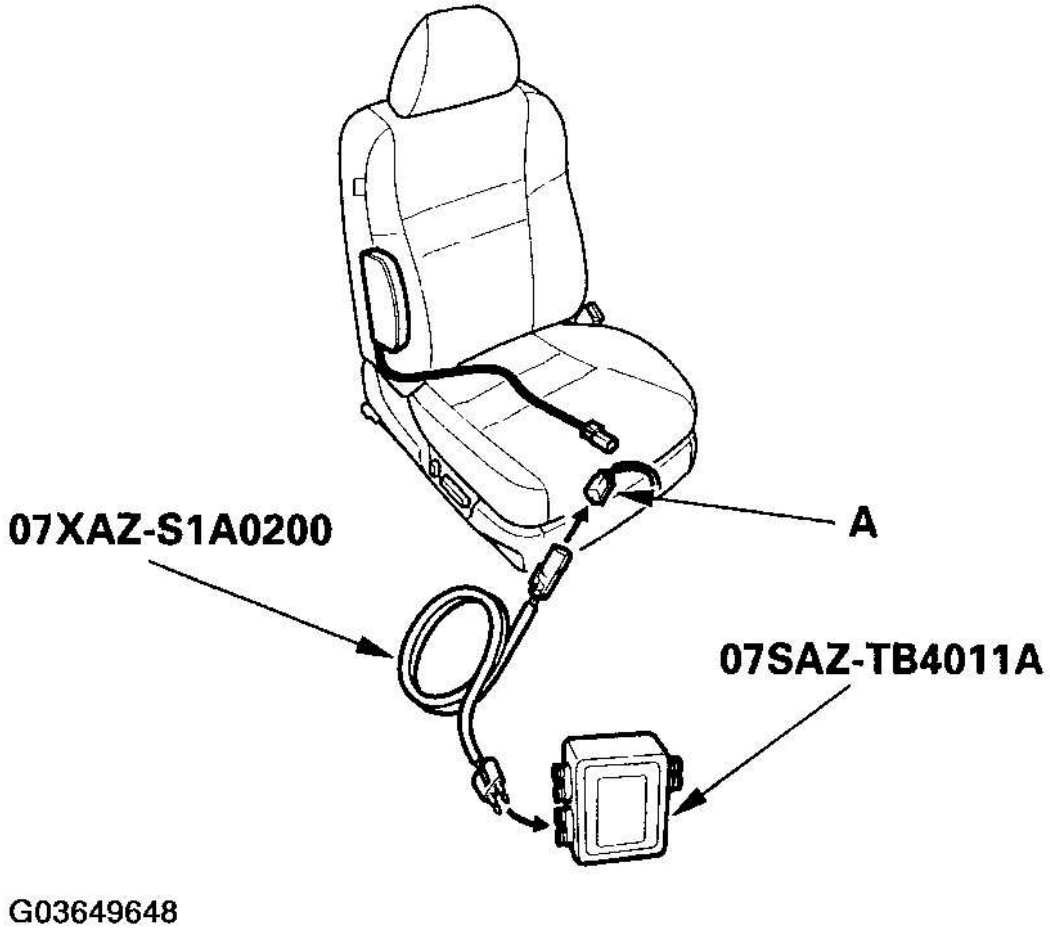


Fig. 97: Disconnecting Floor Wire Harness 2P Connector From Front Passenger's Side Airbag
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 32-1x or 32-2x indicated?

YES - Go to step 9.

NO - Open or increased resistance in the front passenger's side airbag inflator; replace the front passenger's side airbag (see **SIDE AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Disconnect the SRS inflator simulator from the SRS simulator lead.
13. Check resistance between the terminals of the SRS simulator lead. There should be 1.0 ohms or less.

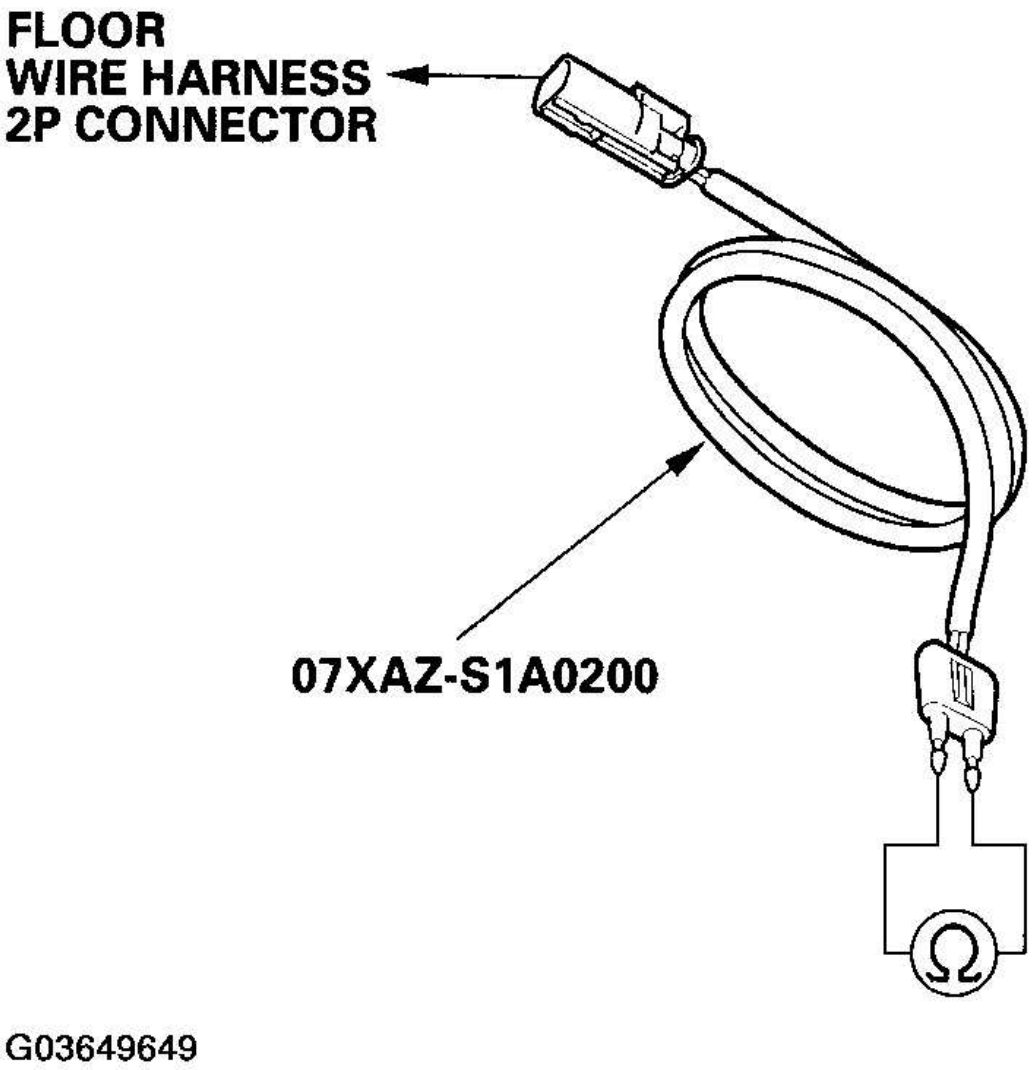


Fig. 98: Checking Resistance Between Terminals Of SRS Simulator Lead
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open or increased resistance in the floor wire harness; replace the

floor wire harness.

DTC 32-3X (32-30 TO 32-39, 32-3A TO 32-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200
- SRS short canceller 070AZ-SAA0100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 32-3x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the floor wire harness 2P connector (A) from the front passenger's side airbag.

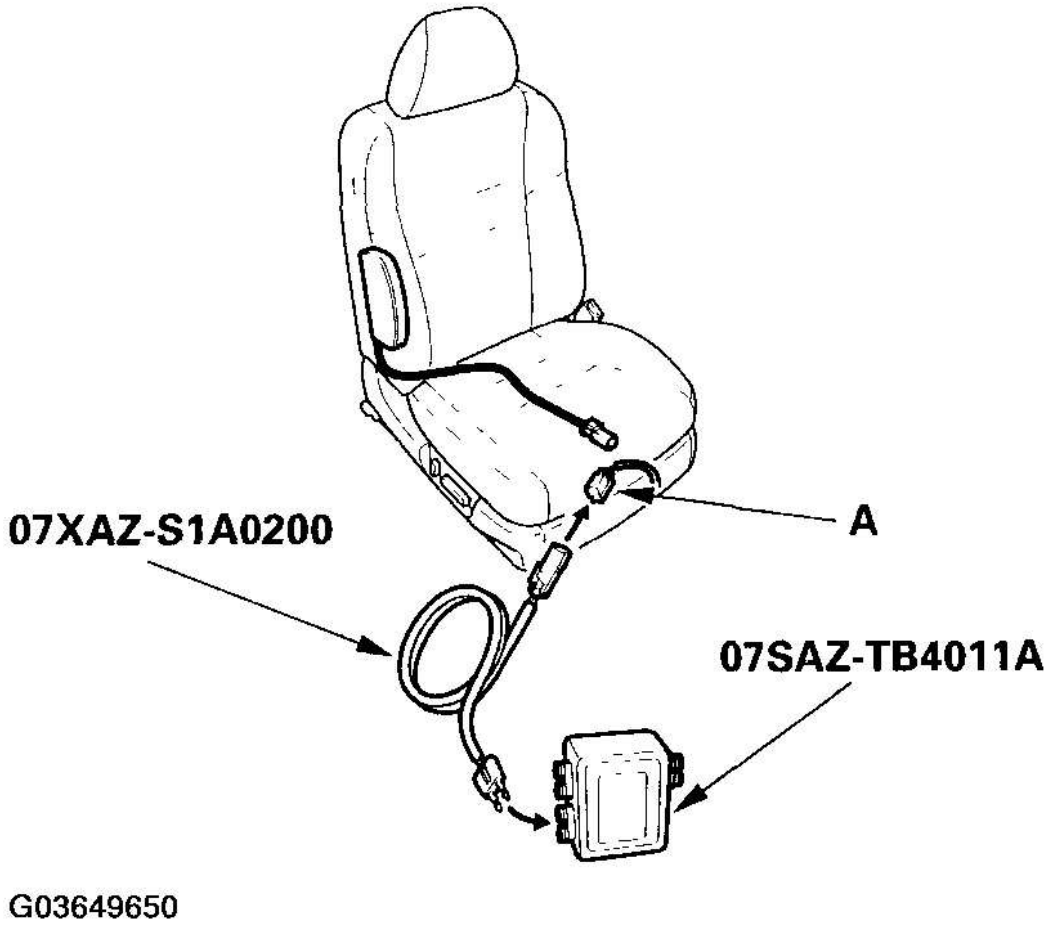


Fig. 99: Disconnecting Floor Wire Harness 2P Connector From Front Passenger's Side Airbag
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms, connector) and simulator lead E to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 32-3x indicated?

YES - Go to step 9.

NO - Short to another wire in the front passenger's side airbag inflator; replace the front passenger's side airbag (see **SIDE AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Disconnect the SRS inflator simulator from the SRS simulator lead.
13. Connect the SRS short canceller (070AZ-SAA0100) to the No. 23 and No. 24 terminals of SRS unit connector B (28P) (see **REOPENING THE SRS UNIT CIRCUIT FOR DIAGNOSIS**).
14. Check resistance between the terminals of the SRS simulator lead. There should be an open circuit or at least 1 Mohms.

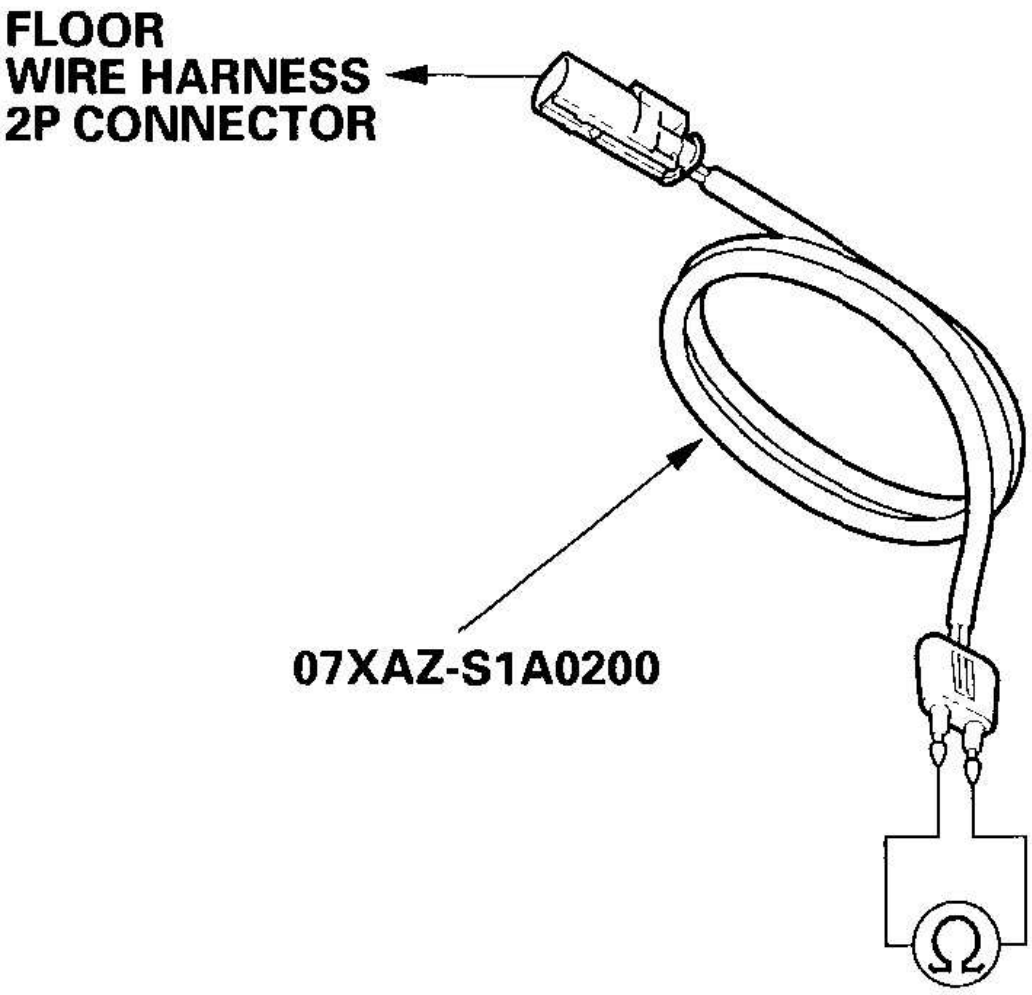


Fig. 100: Checking Resistance Between Terminals Of SRS Simulator Lead
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short in the floor wire harness; replace the floor wire harness.

DTC 32-8X (32-80 TO 32-89, 32-8A TO 32-8F): SHORT TO POWER IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 32-8x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the floor wire harness 2P connector (A) from the front passenger's side airbag.

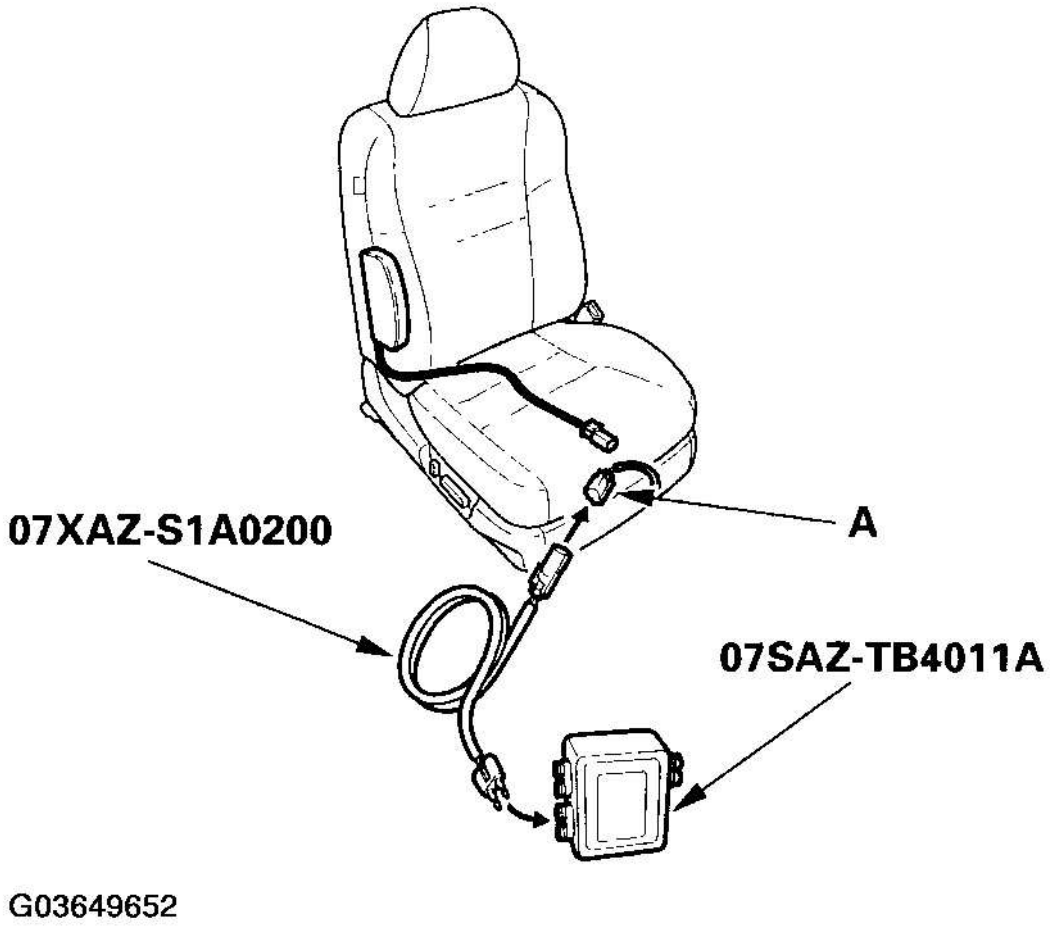


Fig. 101: Disconnecting Floor Wire Harness 2P Connector From Front Passenger's Side Airbag
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 32-8x indicated?

YES - Go to step 9.

NO - Short to power in the front passenger's side airbag inflator; replace the front passenger's side airbag (see **SIDE AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in**DISCONNECTING SYSTEM CONNECTORS**).
12. Disconnect the SRS inflator simulator from the SRS simulator lead. Do not disconnect the simulator lead from the floor wire harness 2P connector.
13. Reconnect the battery negative cable.
14. Turn the ignition switch ON (II).
15. Check for voltage between each terminal of the SRS simulator lead and body ground. There should be 0.5 V or less.

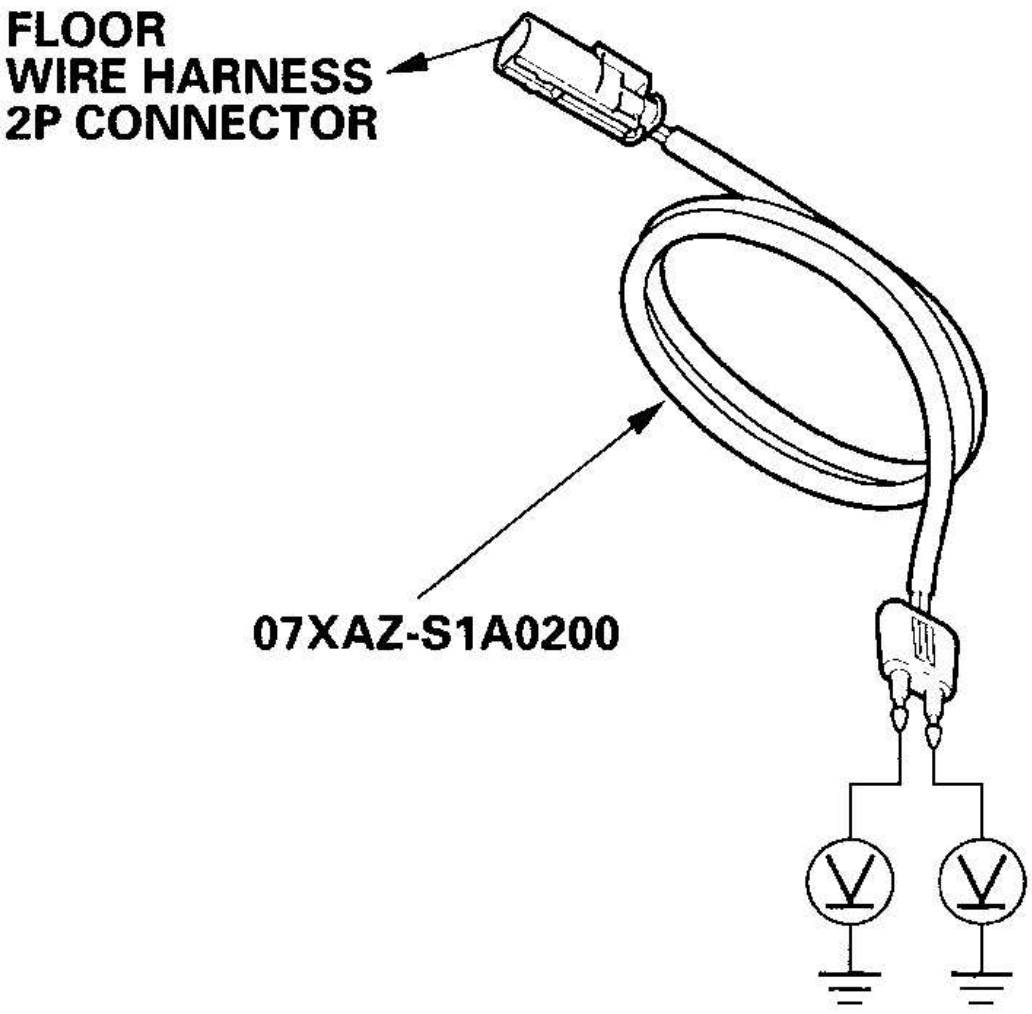


Fig. 102: Checking Voltage Between Terminal Of SRS Simulator Lead And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to power in the floor wire harness; replace the floor wire harness.

DTC 32-9X (32-90 TO 32-99, 32-9A TO 32-9F): SHORT TO GROUND IN FRONT PASSENGER'S SIDE AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 32-9x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the floor wire harness 2P connector (A) from the front passenger's side airbag.

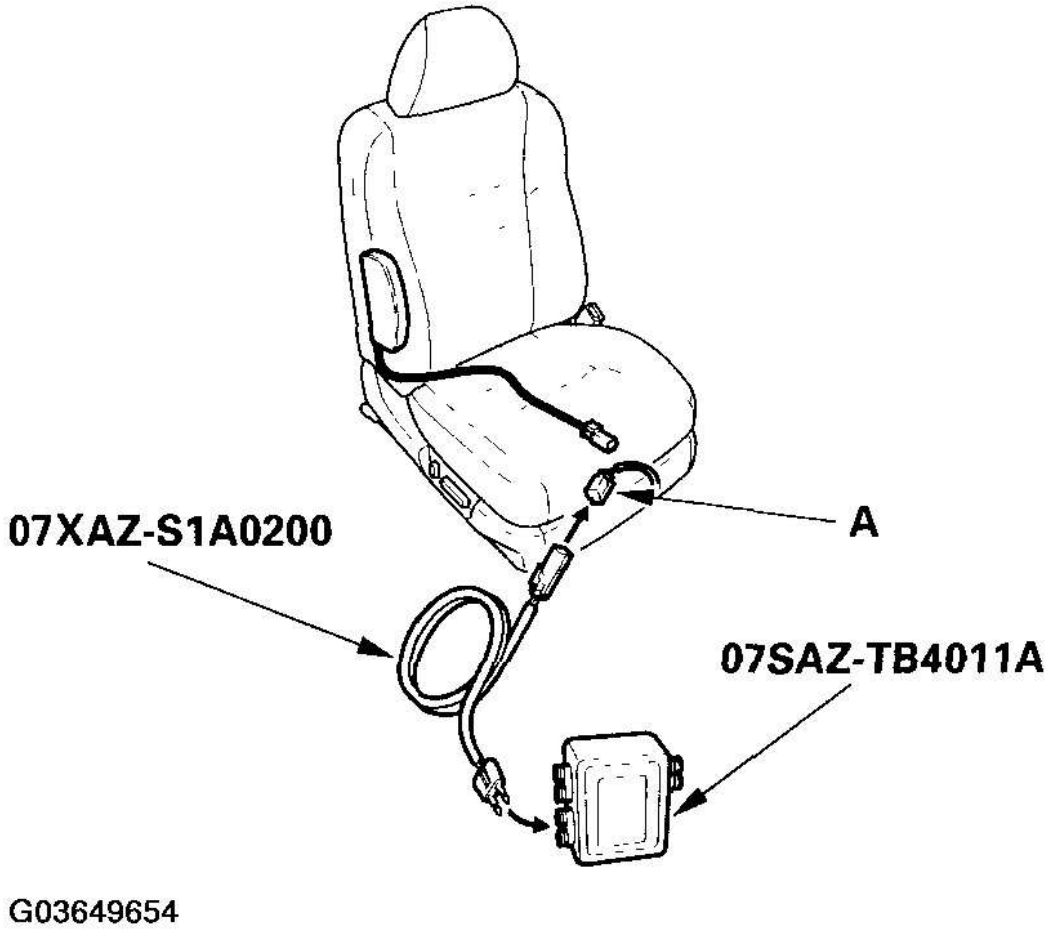


Fig. 103: Disconnecting Floor Wire Harness 2P Connector From Front Passenger's Side Airbag
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to the floor wire harness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 32-9x indicated?

YES - Go to step 9.

NO - Short to ground in the front passenger's side airbag inflator; replace the front passenger's side airbag (see **SIDE AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Disconnect the SRS inflator simulator from the SRS simulator lead. Do not disconnect the simulator lead from the floor wire harness 2P connector.
13. Check resistance between each terminal of the SRS simulator lead and body ground. There should be an open circuit or at least 1 Mohms.

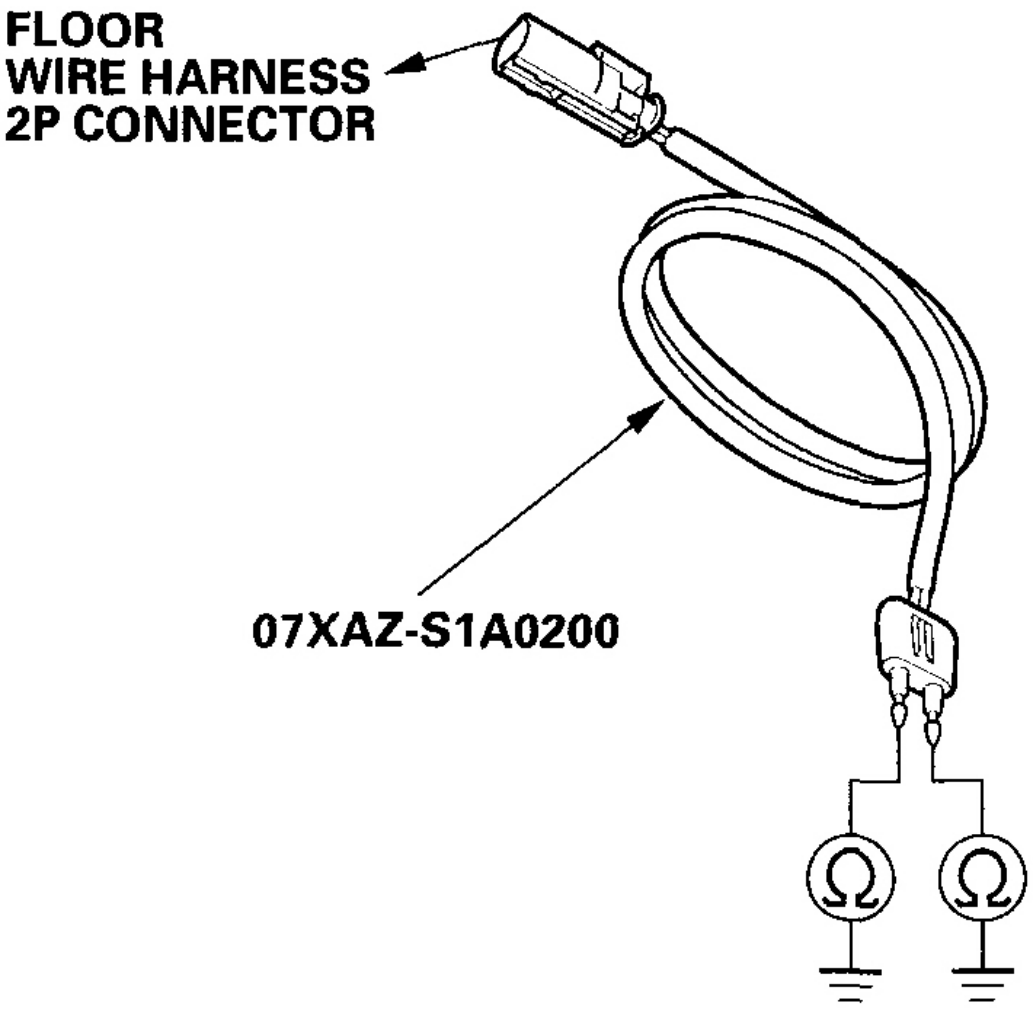


Fig. 104: Checking Resistance Between Terminal Of SRS Simulator Lead And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector B (28P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to ground in the floor wire harness; replace the floor wire harness.

DTC 33-1X (33-10 TO 33-19, 33-1A TO 33-1F): OPEN OR INCREASED RESISTANCE IN LEFT SIDE CURTAIN AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 33-1x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the left side curtain airbag 2P connector from the side curtain airbag subharness (A).

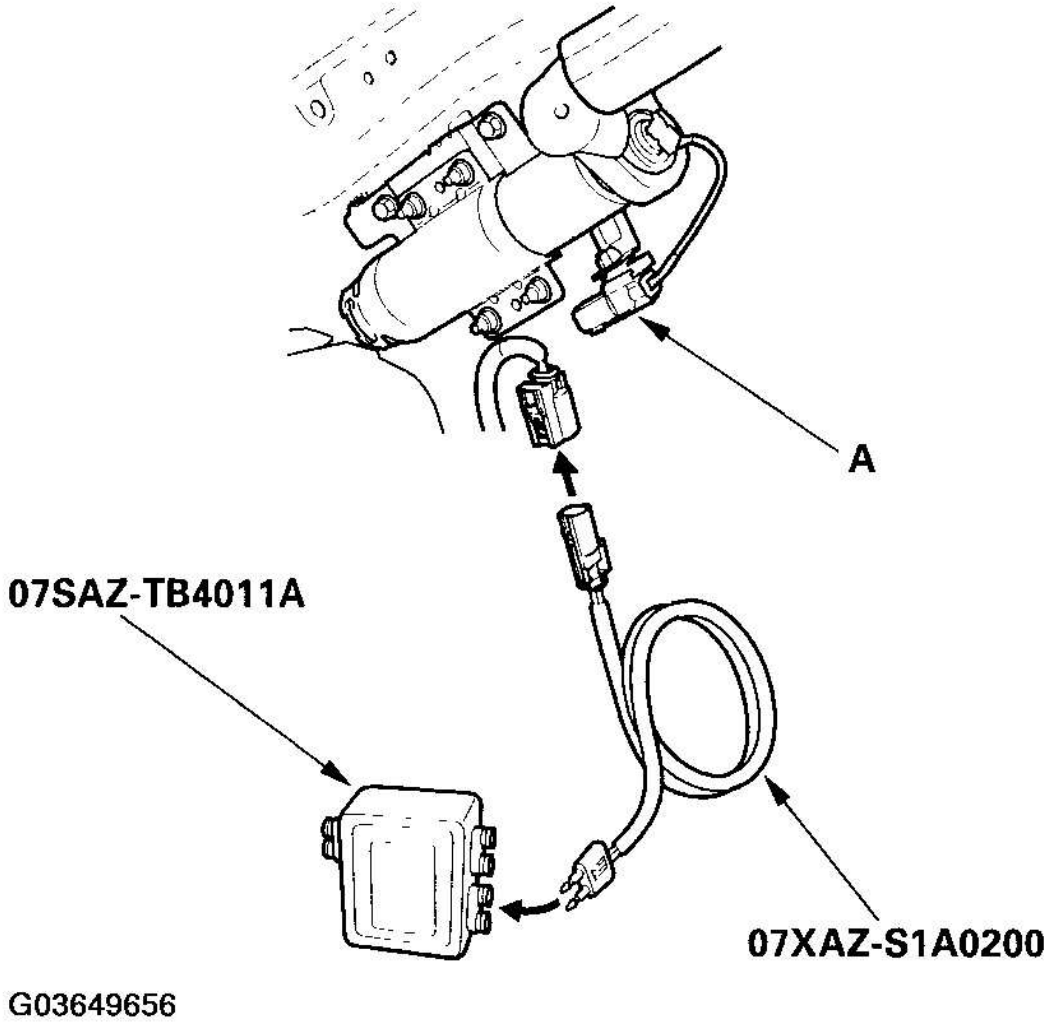


Fig. 105: Disconnecting Left Side Curtain Airbag 2P Connector From Side Curtain Airbag Subharness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to the side curtain airbag subharness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 33-1x indicated?

YES - Go to step 9.

NO - Open or increased resistance in the left side curtain airbag; replace the left side curtain airbag (see **SIDE CURTAIN AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect SRS unit connector C (16P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**). Do not disconnect the simulator lead from the side curtain airbag subharness.
11. Disconnect the SRS inflator simulator from the SRS simulator lead. Do not disconnect the simulator lead from the side curtain airbag subharness.
12. Check resistance between the terminals of the SRS simulator lead. There should be 1.0 ohms or less.

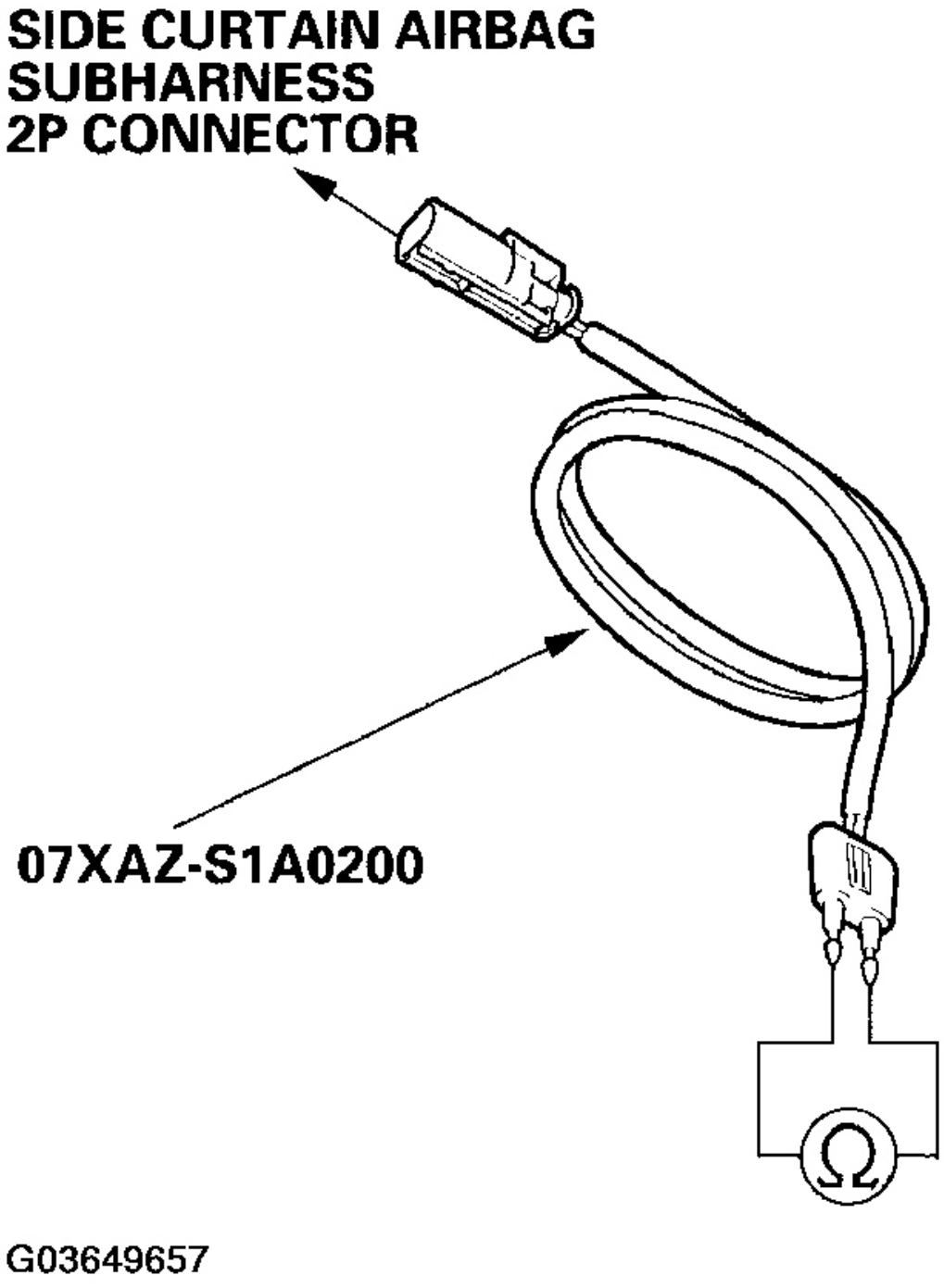


Fig. 106: Checking Resistance Between Terminals Of SRS Simulator Lead

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at the SRS unit connector C (16P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open or increased resistance in the side curtain airbag subharness; replace the side curtain airbag subharness.

DTC 33-3X (33-30 TO 33-39, 33-3A TO 33-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN LEFT SIDE CURTAIN AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200
- SRS short canceller 070AZ-SAA0100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 33-3x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the left side curtain airbag 2P connector from the side curtain airbag subharness (A).

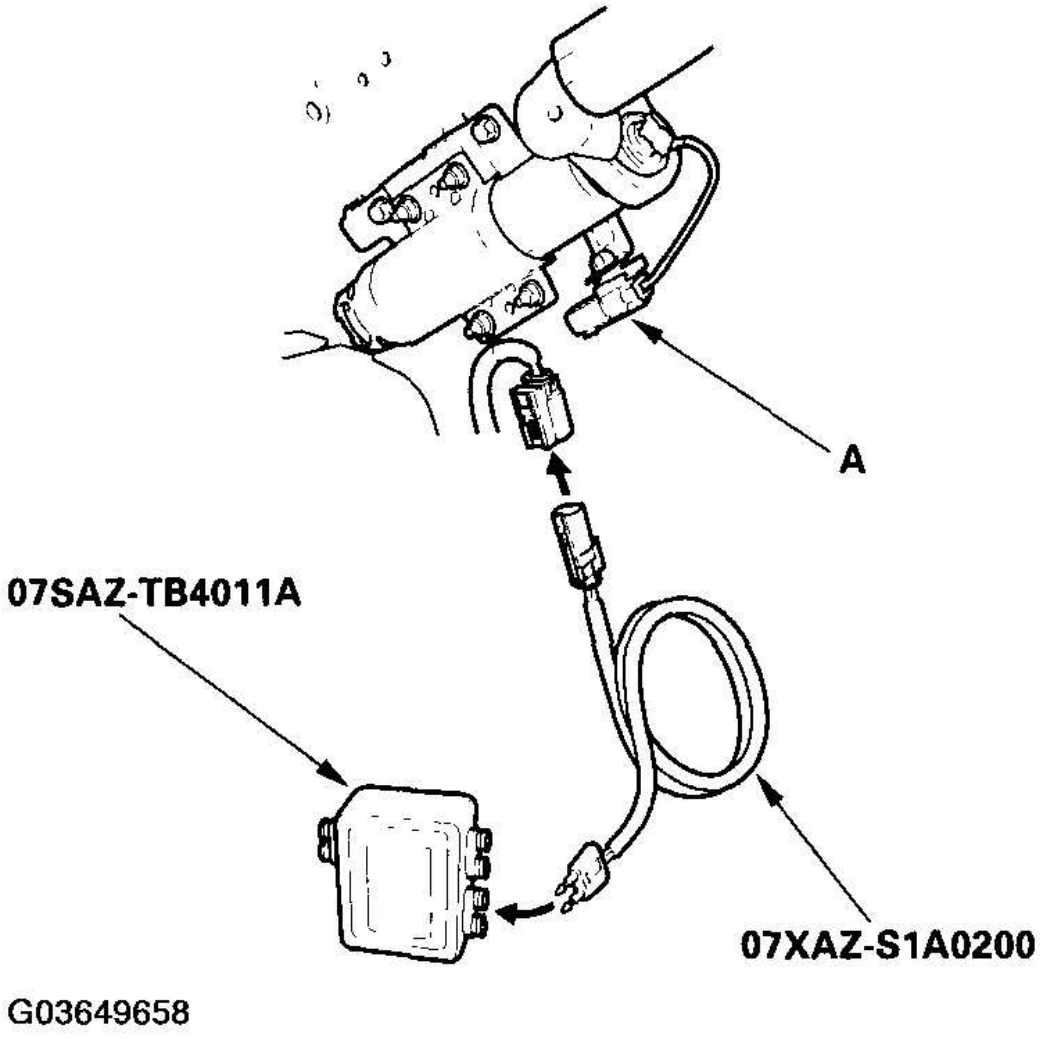


Fig. 107: Disconnecting Left Side Curtain Airbag 2P Connector From Side Curtain Airbag Subharness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to the side curtain airbag subharness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING**

INFORMATION).

Is DTC 33-3x indicated?

YES - Go to step 9.

NO - Short to another wire in the left side curtain airbag inflator; replace the left side curtain airbag (see **SIDE CURTAIN AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect SRS unit connector C (16P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect the SRS inflator simulator from the SRS simulator lead. Do not disconnect the simulator lead from the side curtain airbag subharness.
12. Connect the SRS short canceller (070AZ-SAA0100) to the No. 11 and No. 12 terminals of SRS unit connector C (16P) (see **REOPENING THE SRS UNIT CIRCUIT FOR DIAGNOSIS**).
13. Check resistance between the terminals of the SRS simulator lead. There should be an open circuit or at least 1 Mohms.

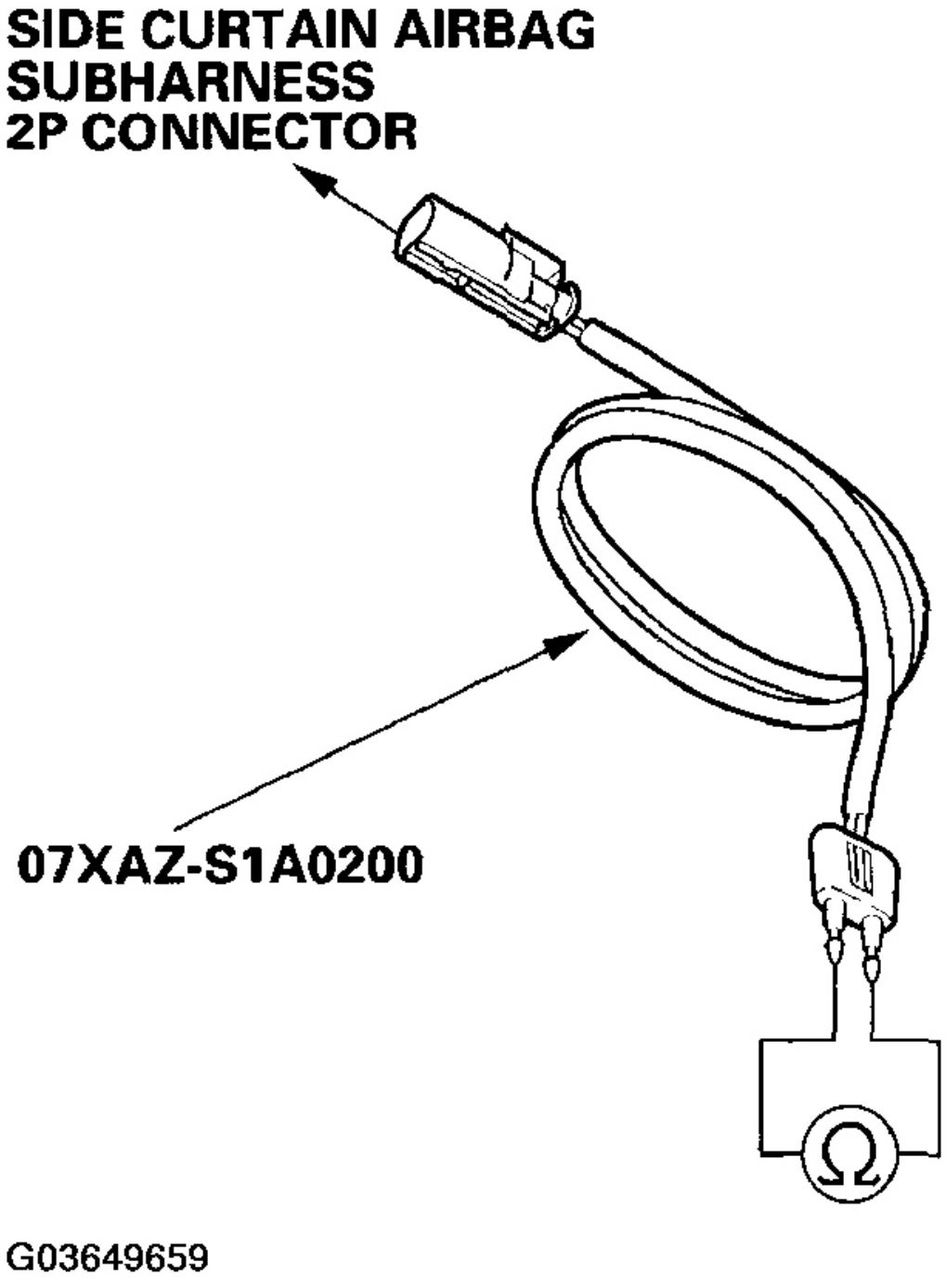


Fig. 108: Checking Resistance Between Terminals Of SRS Simulator Lead

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector C (16P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to another wire in the side curtain airbag subharness; replace the side curtain airbag subharness.

DTC 33-8X (33-80 TO 33-89, 33-8A TO 33-8F): SHORT TO POWER IN LEFT SIDE CURTAIN AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 33-8x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the left side curtain airbag 2P connector from the side curtain airbag subharness (A).

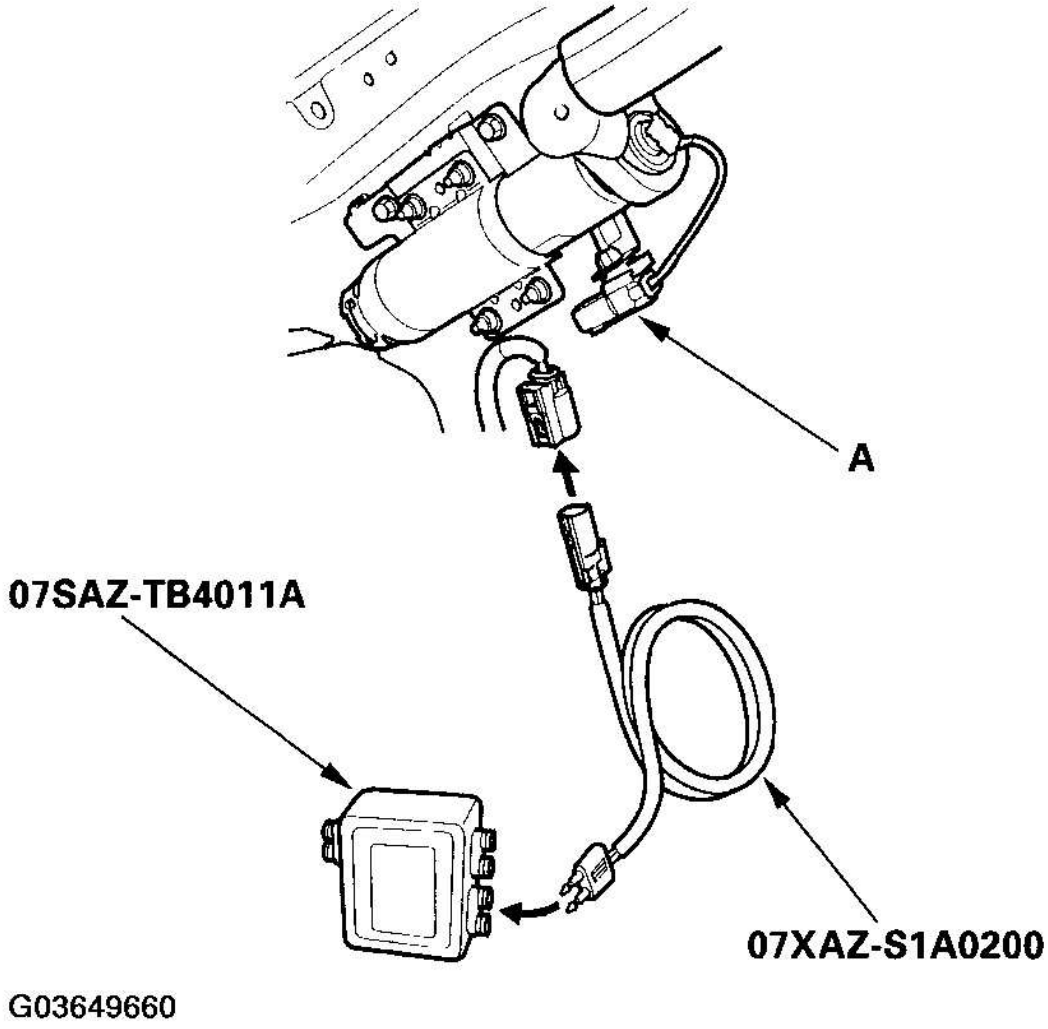


Fig. 109: Disconnecting Left Side Curtain Airbag 2P Connector From Side Curtain Airbag Subharness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to side curtain airbag subharness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 33-8x indicated?

YES - Go to step 9.

NO - Short to power in the left side curtain airbag inflator; replace the left side curtain airbag (see **SIDE CURTAIN AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect the SRS unit connector C (16P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect the SRS inflator simulator from the SRS simulator lead. Do not disconnect the simulator lead from the side curtain airbag subharness.
12. Reconnect the battery negative cable.
13. Turn the ignition switch ON (II).
14. Check for voltage between each terminal of the SRS simulator lead and body ground. There should be 0.5 V or less.

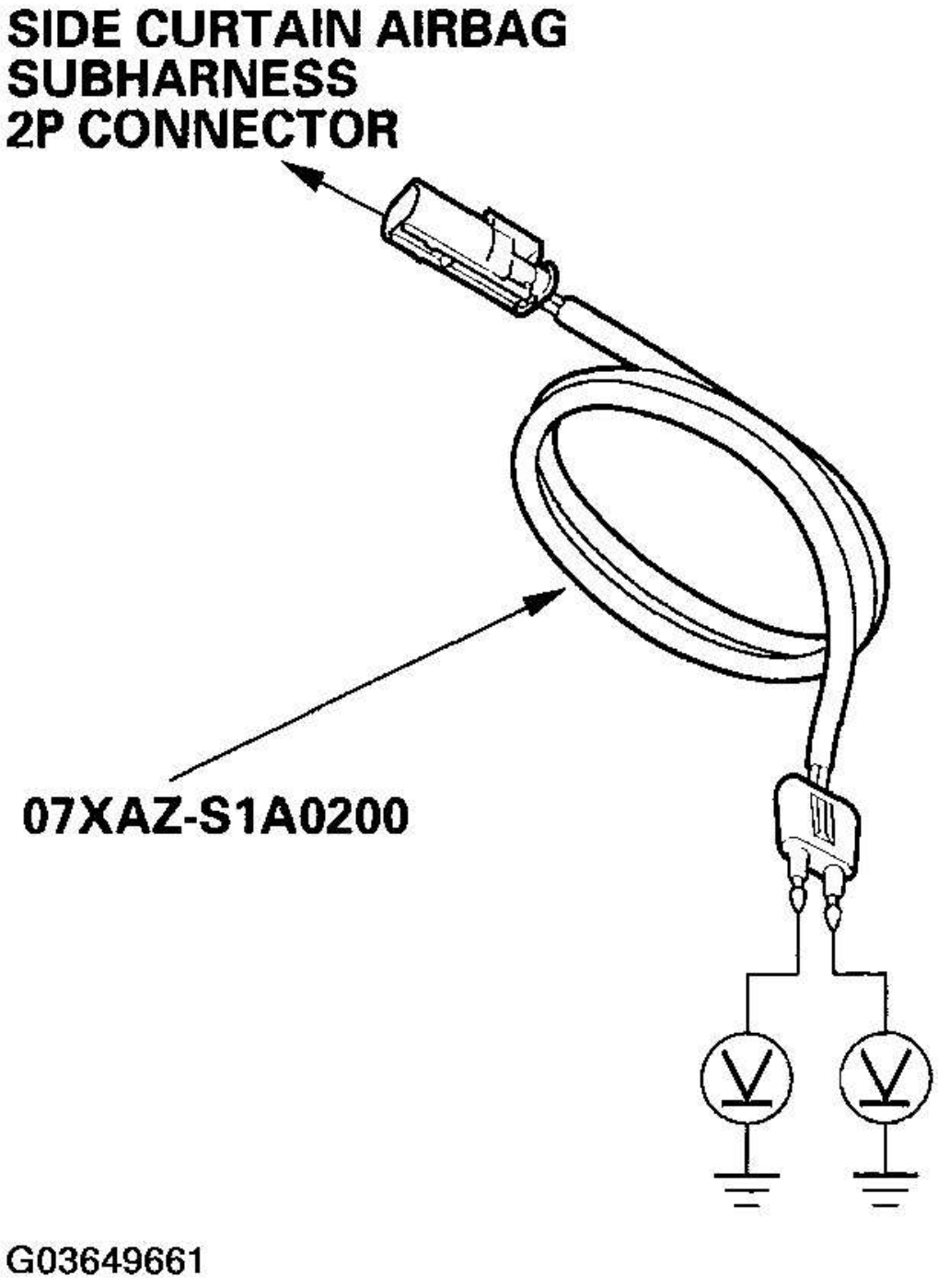


Fig. 110: Checking Voltage Between Terminal Of SRS Simulator Lead

And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector C (16P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to power in the side curtain airbag subharness; replace the side curtain airbag subharness.

DTC 33-9X (33-90 TO 33-99, 33-9A TO 33-9F): SHORT TO GROUND IN LEFT SIDE CURTAIN AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 33-9x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the left side curtain airbag 2P connector from the side curtain airbag subharness (A).

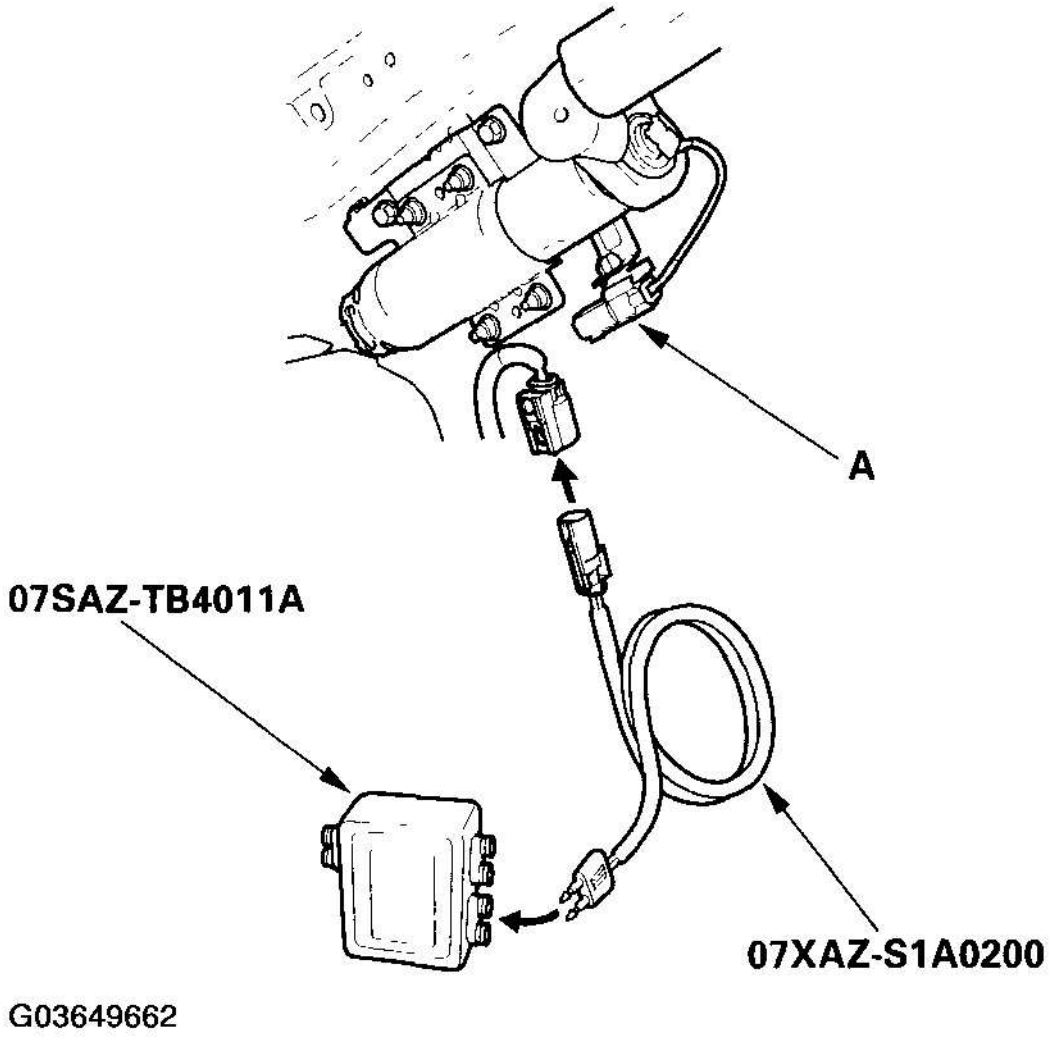


Fig. 111: Disconnecting Left Side Curtain Airbag 2P Connector From Side Curtain Airbag Subharness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to the side curtain airbag subharness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING**

INFORMATION).

Is DTC 33-9x indicated?

YES - Go to step 9.

NO - Short to ground in the left side curtain airbag inflator; replace the left side curtain airbag (see **SIDE CURTAIN AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect SRS unit connector C (16P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect the SRS inflator simulator from the SRS simulator lead. Do not disconnect the simulator lead from the side curtain airbag subharness.
12. Check resistance between each terminal of the SRS simulator lead and body ground. There should be an open circuit or at least 1 Mohms.

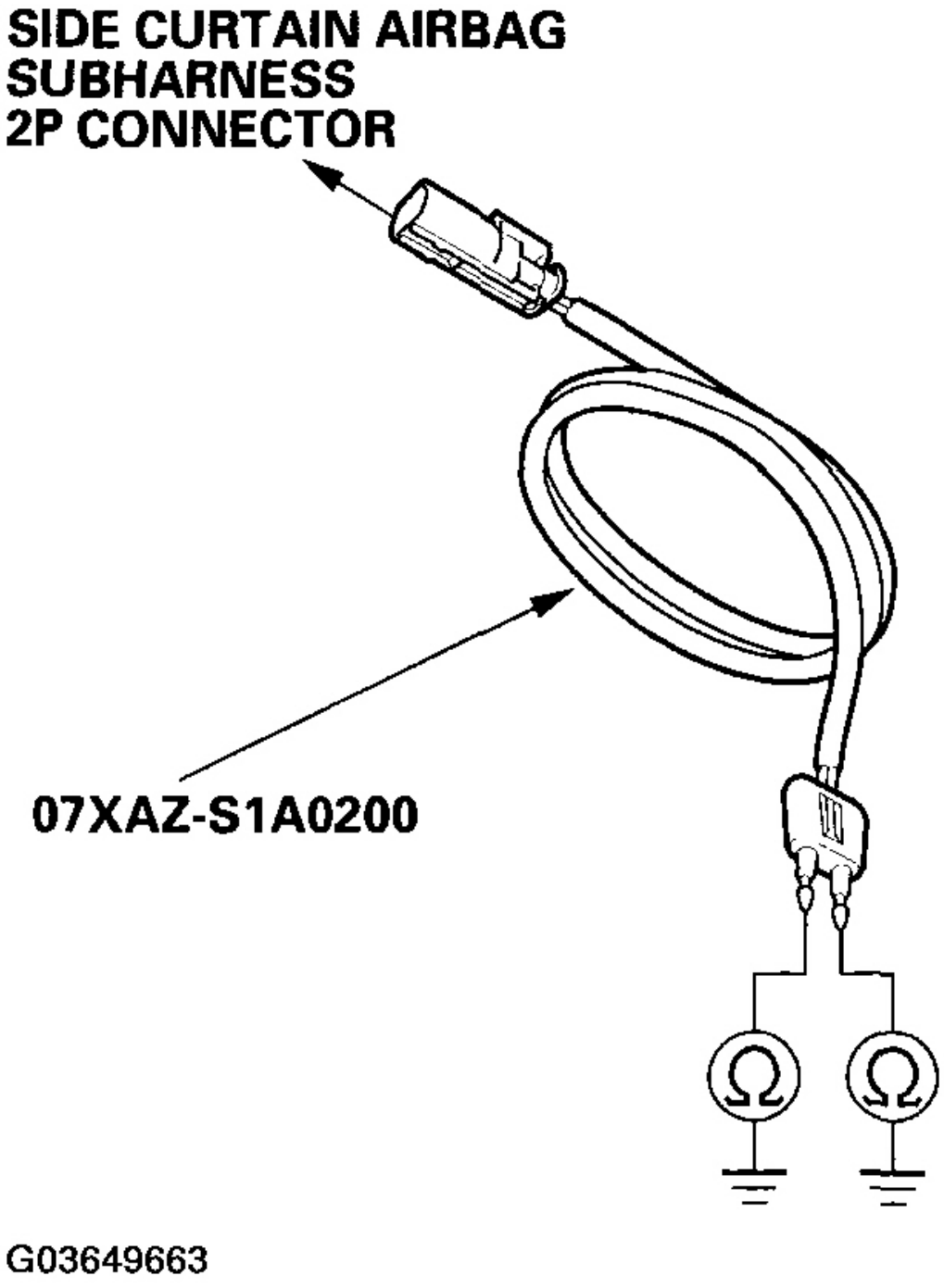


Fig. 112: Checking Resistance Between Terminal Of SRS Simulator Lead

And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector C (16P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to ground in the side curtain airbag subharness; replace the side curtain airbag subharness.

DTC 34-1X (34-10 TO 34-19, 34-1A TO 34-1F): OPEN OR INCREASED RESISTANCE IN RIGHT SIDE CURTAIN AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS Indicator stay on, and is DTC 34-1x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the right side curtain airbag 2P connector from the side curtain airbag subharness (A).

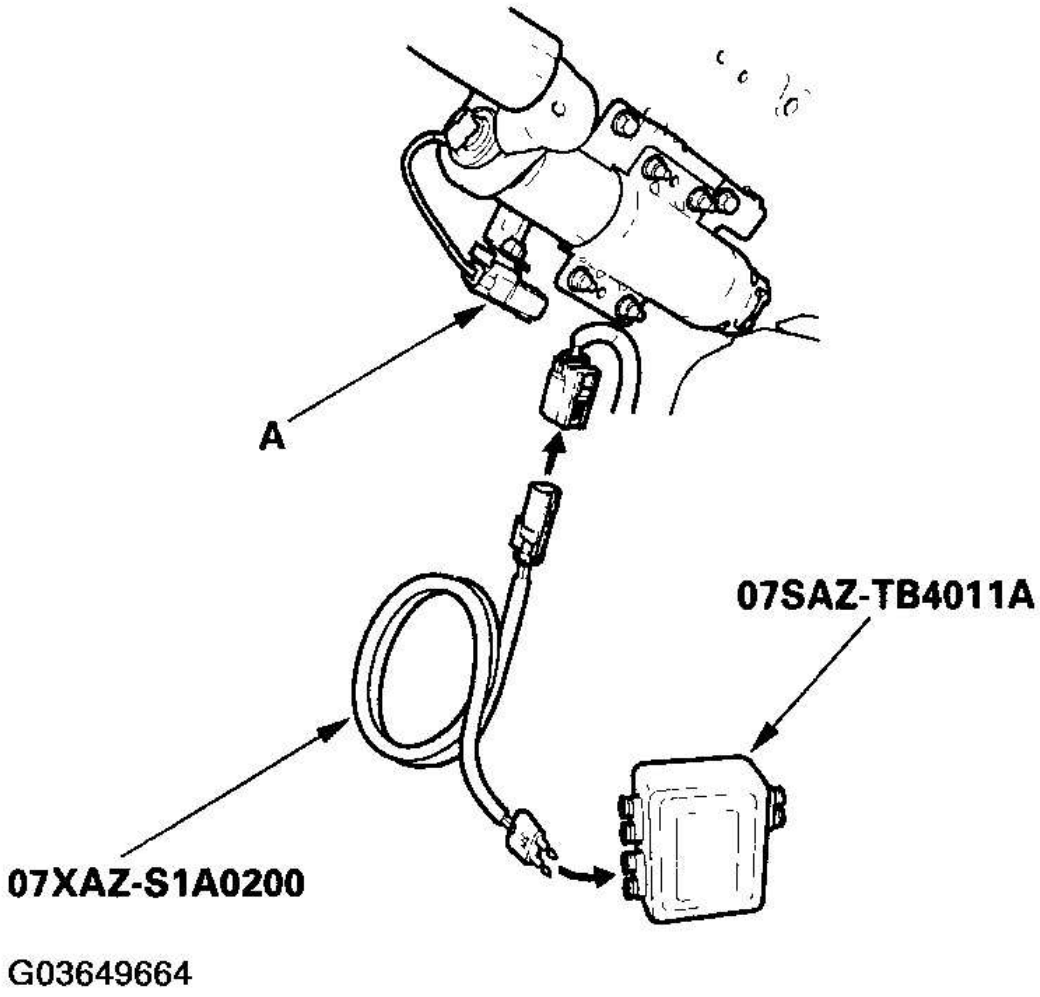


Fig. 113: Disconnecting Right Side Curtain Airbag 2P Connector From Side Curtain Airbag Subharness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to the side curtain airbag subharness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 34-1x indicated?

YES - Go to step 9.

NO - Open or increased resistance in the right side curtain airbag inflator, replace the right side curtain airbag (see **SIDE CURTAIN AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect SRS unit connector C (16P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect the SRS inflator simulator from the SRS simulator lead. Do not disconnect the simulator lead from the side curtain airbag subharness.
12. Check resistance between the terminals of the SRS simulator lead. There should be 1.0 ohms or less.

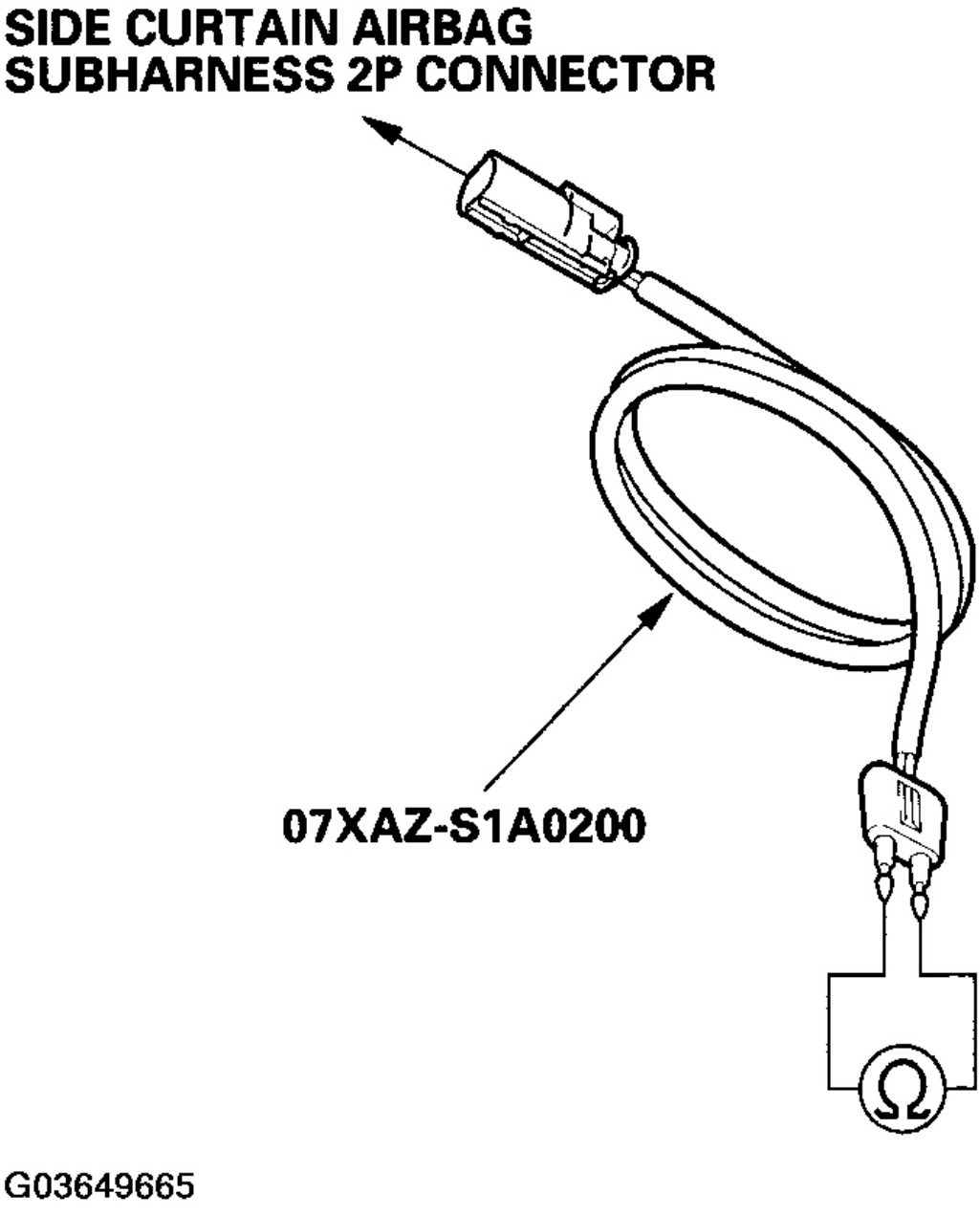


Fig. 114: Checking Resistance Between Terminals Of SRS Simulator Lead
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector C (16P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open or increased resistance in the side curtain airbag subharness; replace the side curtain airbag subharness.

DTC 34-3X (34-30 TO 34-39, 34-3A TO 34-3F): SHORT TO ANOTHER WIRE OR DECREASED RESISTANCE IN RIGHT SIDE CURTAIN AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200
- SRS short canceller 070AZ-SAA0100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 34-3x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the right side curtain airbag 2P connector from the side curtain airbag subharness (A).

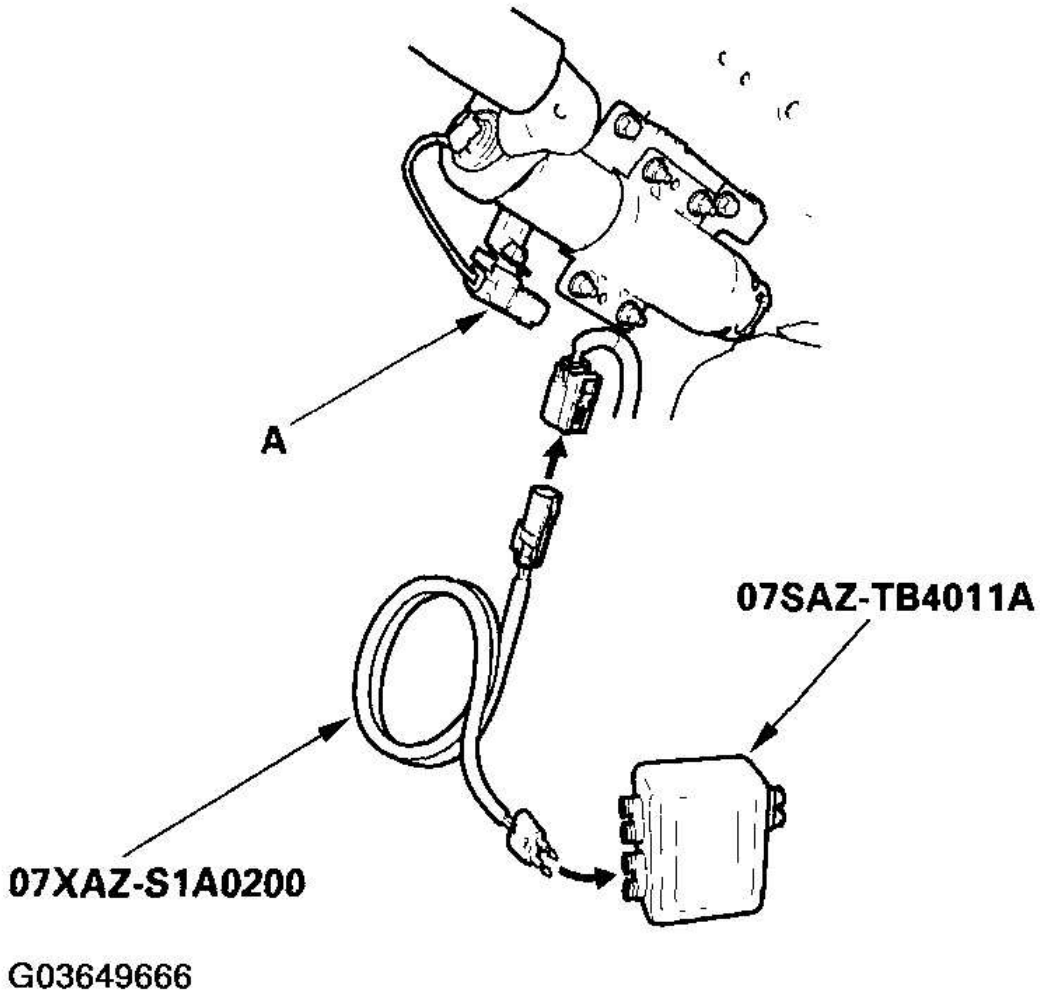


Fig. 115: Disconnecting Right Side Curtain Airbag 2P Connector From Side Curtain Airbag Subharness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to the side curtain airbag subharness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 34-3x indicated?

YES - Go to step 9.

NO - Short to another wire in the right side curtain airbag inflator; replace the right side curtain airbag (see **SIDE CURTAIN AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect SRS unit connector C (16P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect the SRS inflator simulator from the SRS simulator lead. Do not disconnect the simulator lead from the side curtain airbag subharness.
12. Connect the SRS short canceller (070AZ-SAA0100) to the No. 13 and No. 14 terminals of SRS unit connector C (16P) (see **REOPENING THE SRS UNIT CIRCUIT FOR DIAGNOSIS**).
13. Check resistance between the terminals of the SRS simulator lead. There should be an open circuit or at least 1 Mohms.

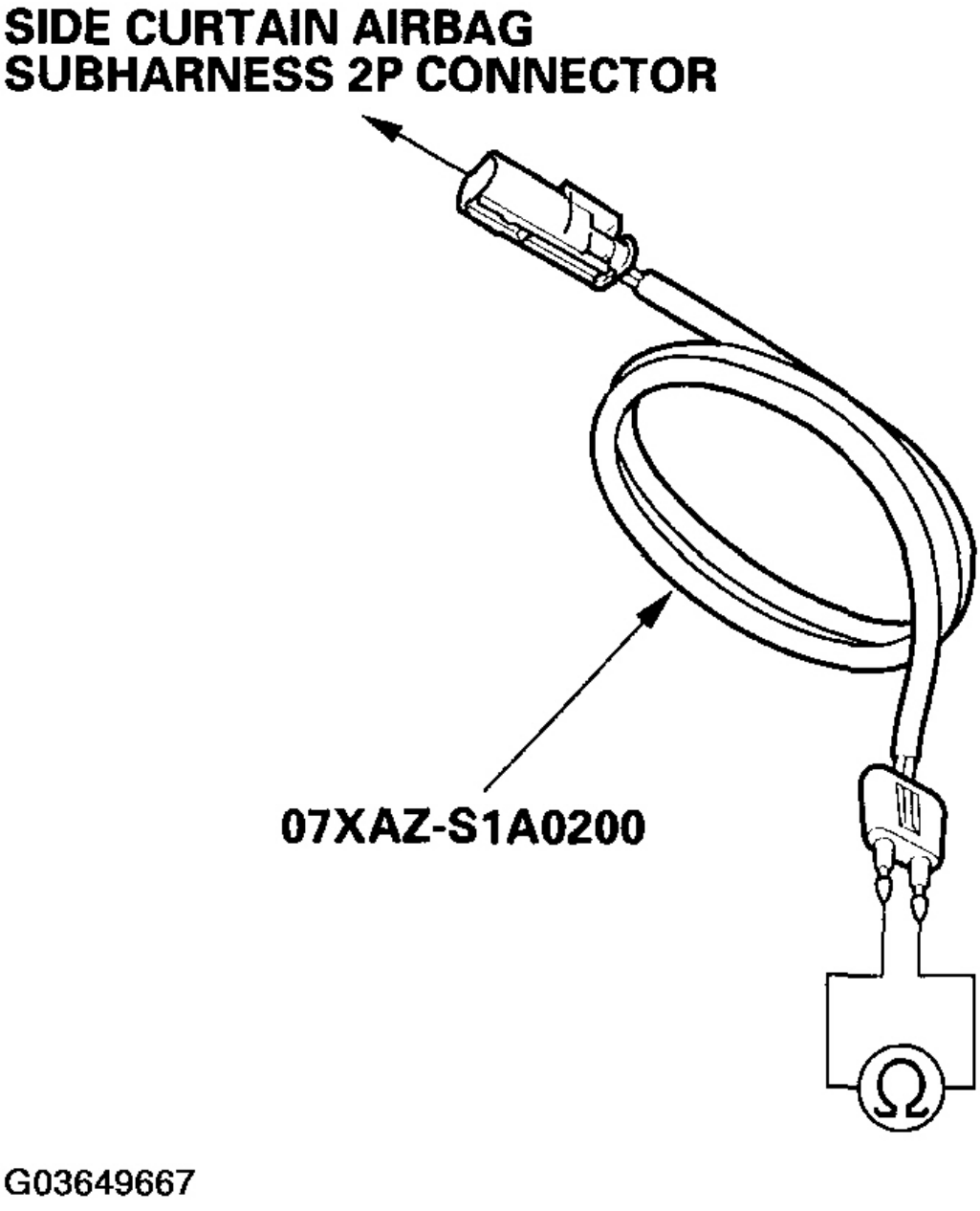


Fig. 116: Checking Resistance Between Terminals Of SRS Simulator Lead
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector C(16P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short in the side curtain airbag subharness; replace the side curtain airbag subharness.

DTC 34-8X (34-80 TO 34-89, 34-8A TO 34-8F): SHORT TO POWER IN RIGHT SIDE CURTAIN AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 34-8x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the right side curtain airbag 2P connector from the side curtain airbag subharness (A).

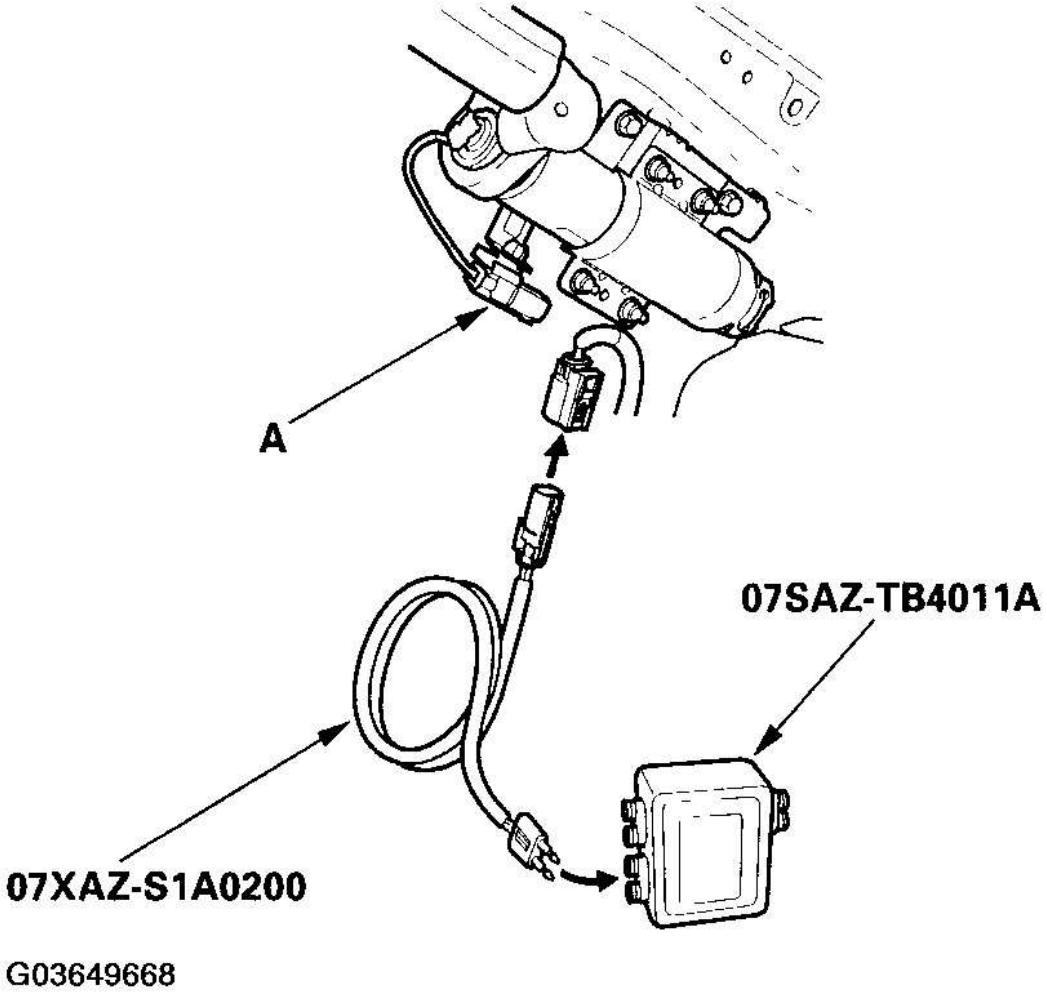


Fig. 117: Disconnecting Right Side Curtain Airbag 2P Connector From Side Curtain Airbag Subharness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to the side curtain airbag subharness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 34-8x indicated?

YES - Go to step 9.

NO - Short to power in the right side curtain airbag inflator; replace the right side curtain airbag (see **SIDE CURTAIN AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect SRS unit connector C (16P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect the SRS inflator simulator from the SRS simulator lead. Do not disconnect the simulator lead from the side curtain airbag subharness.
12. Reconnect the battery negative cable.
13. Turn the ignition switch ON (II).
14. Check for voltage between each terminal of the SRS simulator lead and body ground. There should be 0.5 V or less.

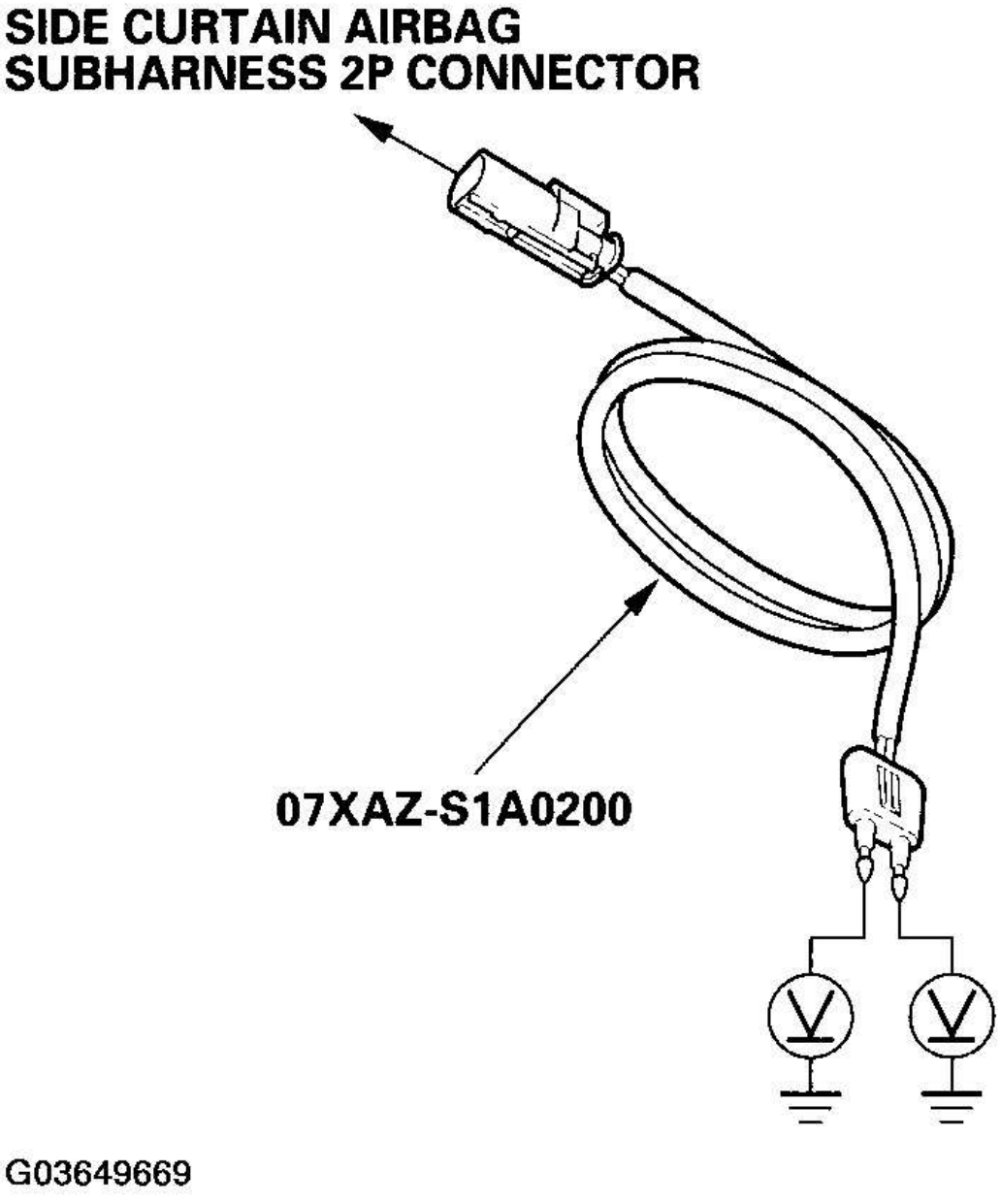


Fig. 118: Checking Voltage Between Terminal Of SRS Simulator Lead And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector C (16P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to power in the side curtain airbag subharness; replace the side curtain airbag subharness.

DTC 34-9X (34-90 TO 34-99, 34-9A TO 34-9F): SHORT TO GROUND IN RIGHT SIDE CURTAIN AIRBAG INFLATOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead E 07XAZ-S1A0200

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 34-9x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the right side curtain airbag 2P connector from the side curtain airbag subharness (A).

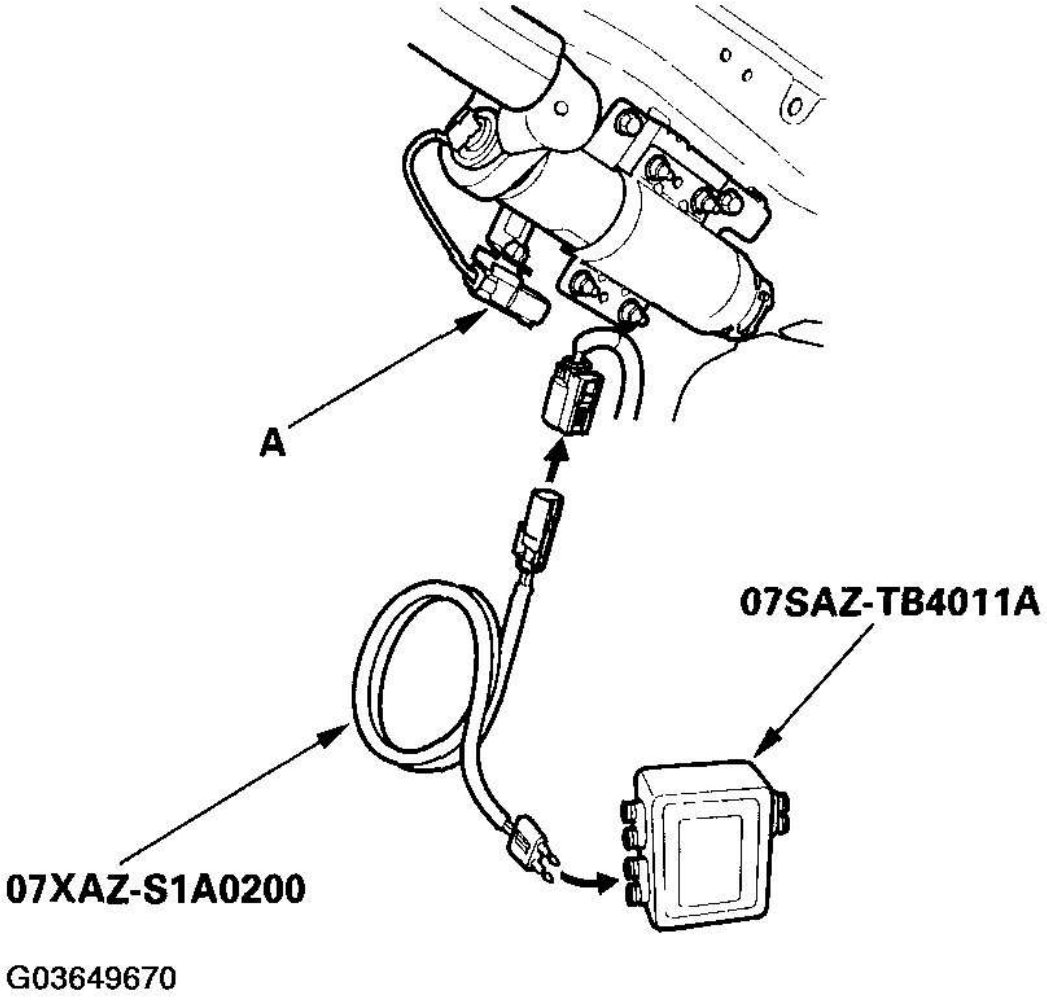


Fig. 119: Disconnecting Right Side Curtain Airbag 2P Connector From Side Curtain Airbag Subharness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the SRS inflator simulator (2 ohms connector) and simulator lead E to the side curtain airbag subharness.
6. Reconnect the battery negative cable.
7. Erase the DTC memory.
8. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 34-9x indicated?

YES - Go to step 9.

NO - Short to ground in the right side curtain airbag inflator; replace the right side curtain airbag (see **SIDE CURTAIN AIRBAG REPLACEMENT**).

9. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
10. Disconnect SRS unit connector C (16P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect the SRS inflator simulator from the SRS simulator lead.
12. Check resistance between each terminal of the SRS simulator lead and body ground. There should be an open circuit or at least 1 Mohms.

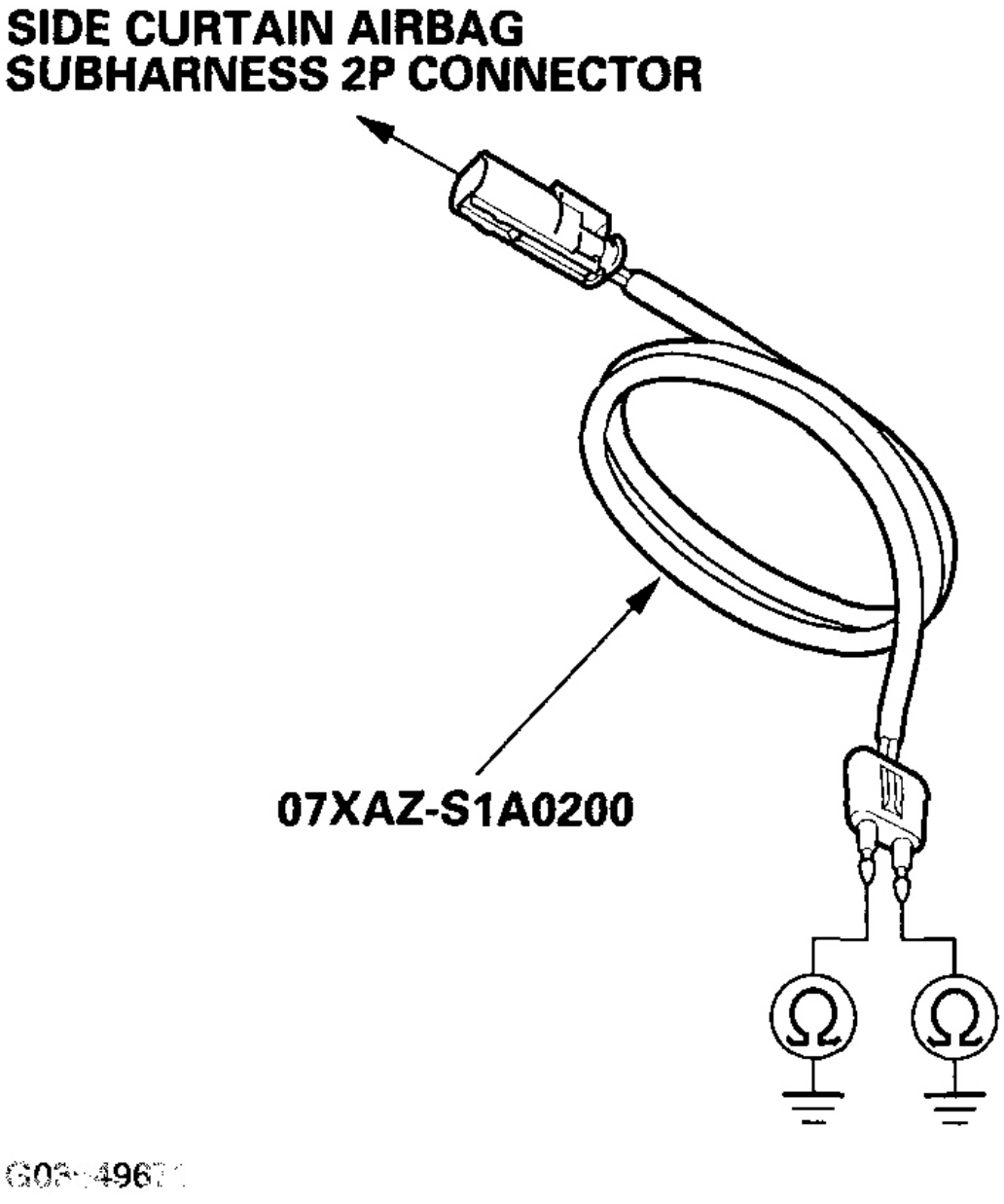


Fig. 120: Checking Resistance Between Terminal Of SRS Simulator Lead And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty SRS unit or poor contact at SRS unit connector C (16P) and the SRS unit. Check the connection; if the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to ground in the side curtain airbag subharness; replace the side curtain airbag subharness.

DTC 41-1X (41-10 TO 41-19, 41-1A TO 41-1F): NO SIGNAL FROM THE LEFT FRONT IMPACT SENSOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead H 07YAZ-S3AA100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 41-1x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Check the connections between SRS unit connector A (28P) and the SRS unit, between the engine compartment wire harness 2P connector and the left front impact sensor (see **FRONT IMPACT SENSOR REPLACEMENT**), and at connector C403 (see **ENGINE COMPARTMENT WIRE HARNESS (LEFT BRANCH)**).

   Are the connections OK?

   YES - Go to step 4.

   NO - Repair the poor connections and retest. If DTC 41-1x is still present,

go to step 4.

4. Disconnect the battery negative cable, and wait for 3 minutes.

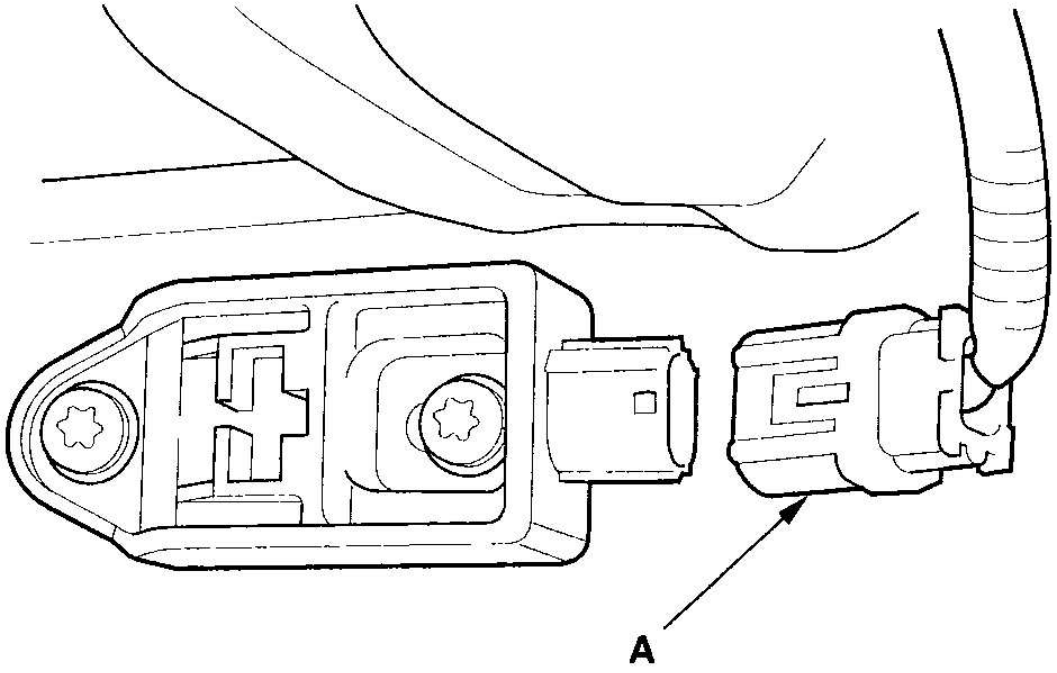


Fig. 121: Disconnecting Engine Compartment Wire Harness 2P Connector From Left Front Impact Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the engine compartment wire harness 2P connector (A) from the left front impact sensor.
6. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
7. Check resistance between the No. 15 and No. 27 terminals of SRS unit connector A (28P). There should be an open circuit or at least 1 Mohms.

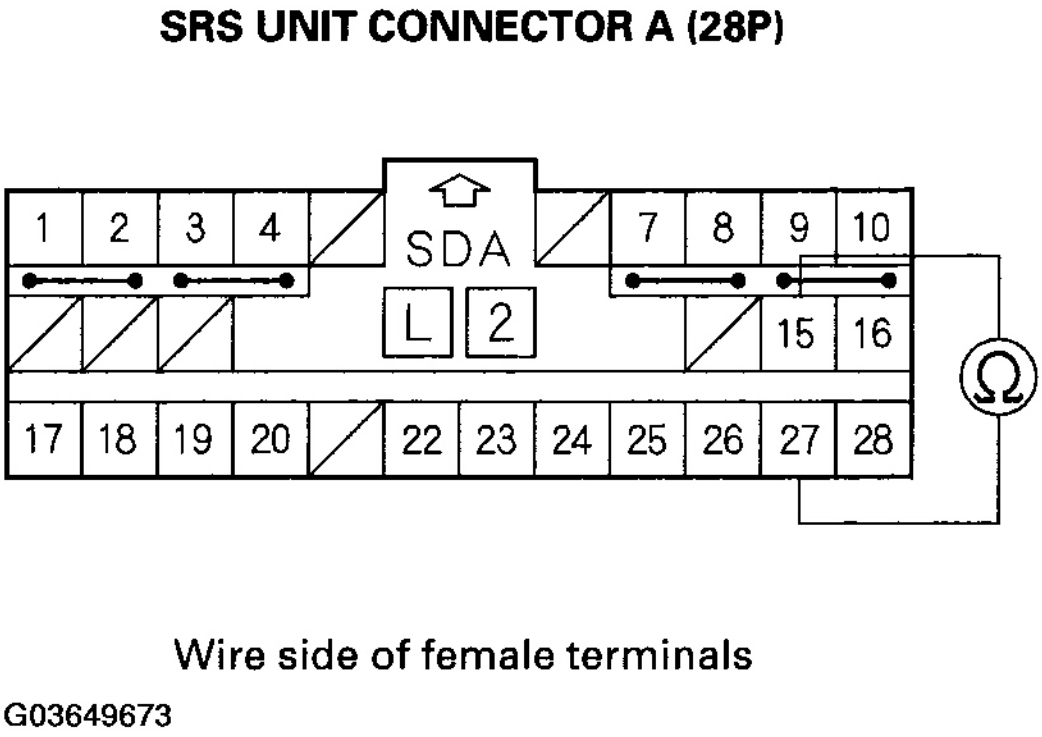


Fig. 122: Checking Resistance Between No. 15 And 27 Terminals Of SRS Unit Connector A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 8.

NO - Short in the engine compartment wire harness or dashboard wire harness; replace the faulty harness.

8. Check resistance between the No. 15 terminal of SRS unit connector A (28P) and body ground, and between the No. 27 terminal and body ground. There should be an open circuit or at lest 1 Mohms.

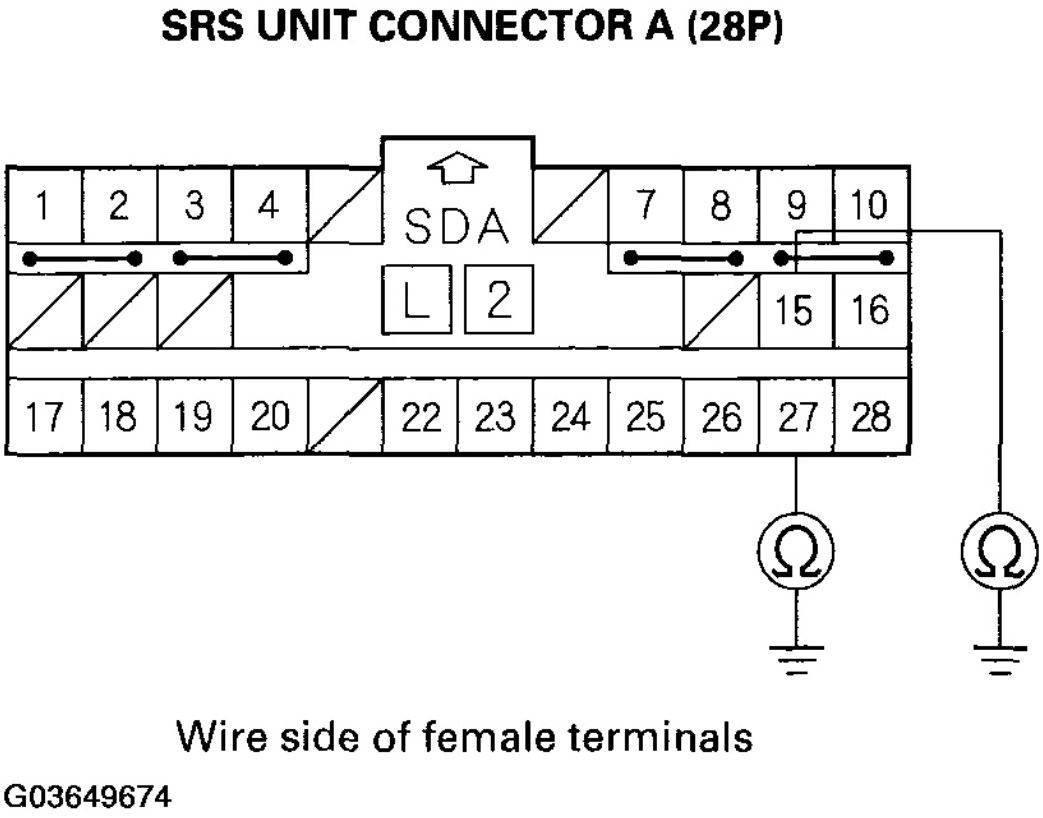


Fig. 123: Checking Resistance Between No. 15 Terminal Of SRS Unit Connector A (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 9.

NO - Short to ground in the dashboard wire harness or engine compartment wire harness; replace the faulty harness.

9. Reconnect the battery negative cable.
10. Turn the ignition switch ON (II).
11. Check for voltage between the No. 15 terminal of SRS unit connector A (28P) and body ground, and between the No. 27 terminal and body ground. There should be 1 V or less.

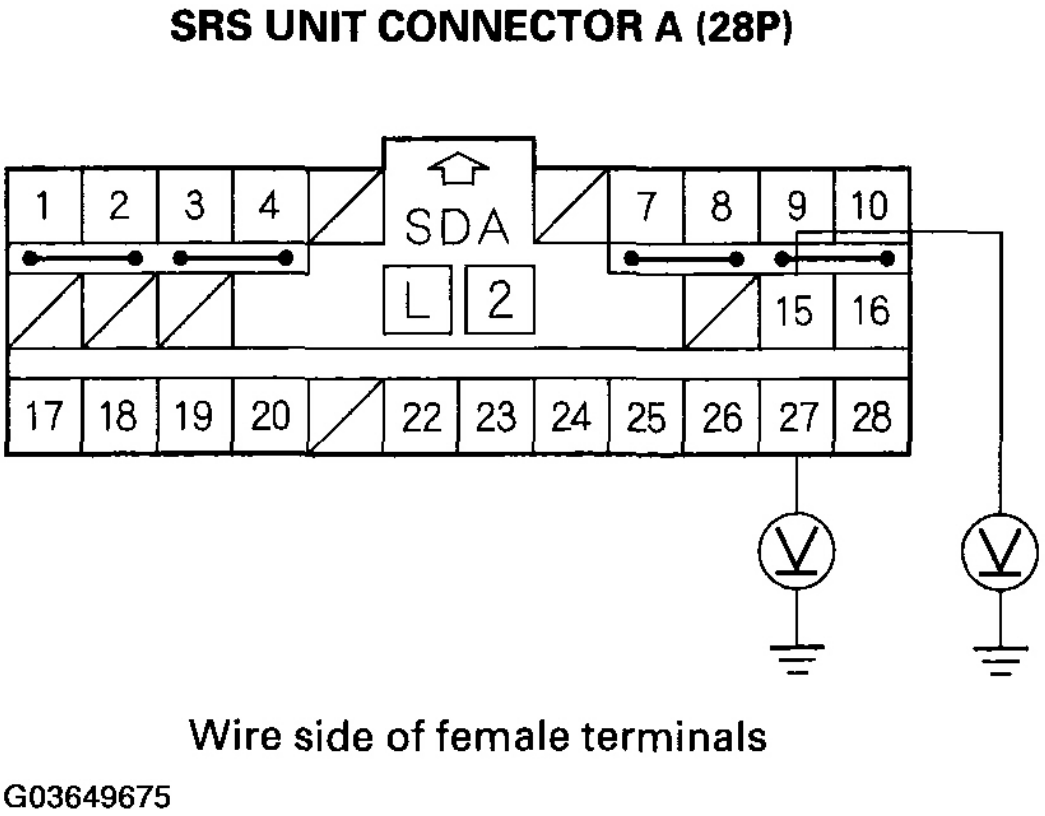


Fig. 124: Checking Voltage Between No. 15 Terminal Of SRS Unit Connector A (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Go to step 12.

NO - Short to power in the engine compartment wire harness or the dashboard wire harness; replace the faulty harness.

12. Turn the ignition switch OFF.
13. Connect the SRS inflator simulator (jumper connector) and simulator lead H to the engine compartment wire harness 2P connector (A).

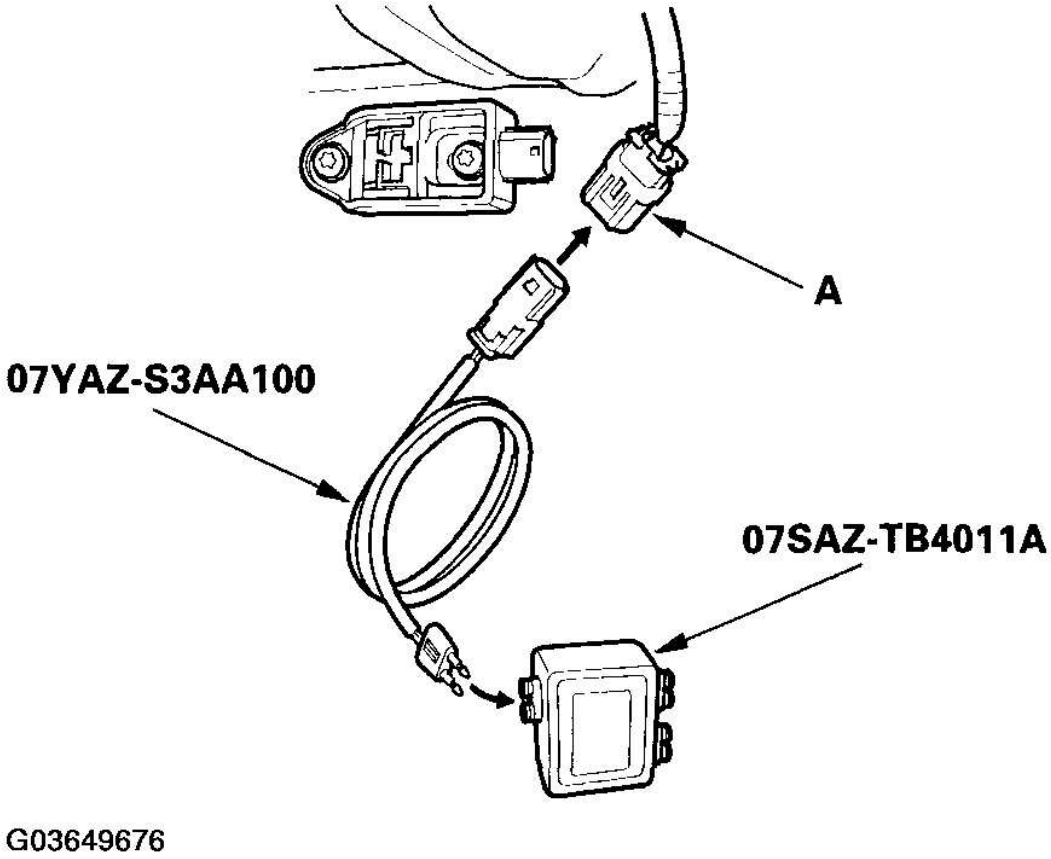


Fig. 125: Connecting SRS Inflator Simulator And Simulator Lead H To Engine Compartment Wire Harness 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Check resistance between the No. 15 and No. 27 terminals of SRS unit connector A (28P). There should be 0-1.0 ohms.

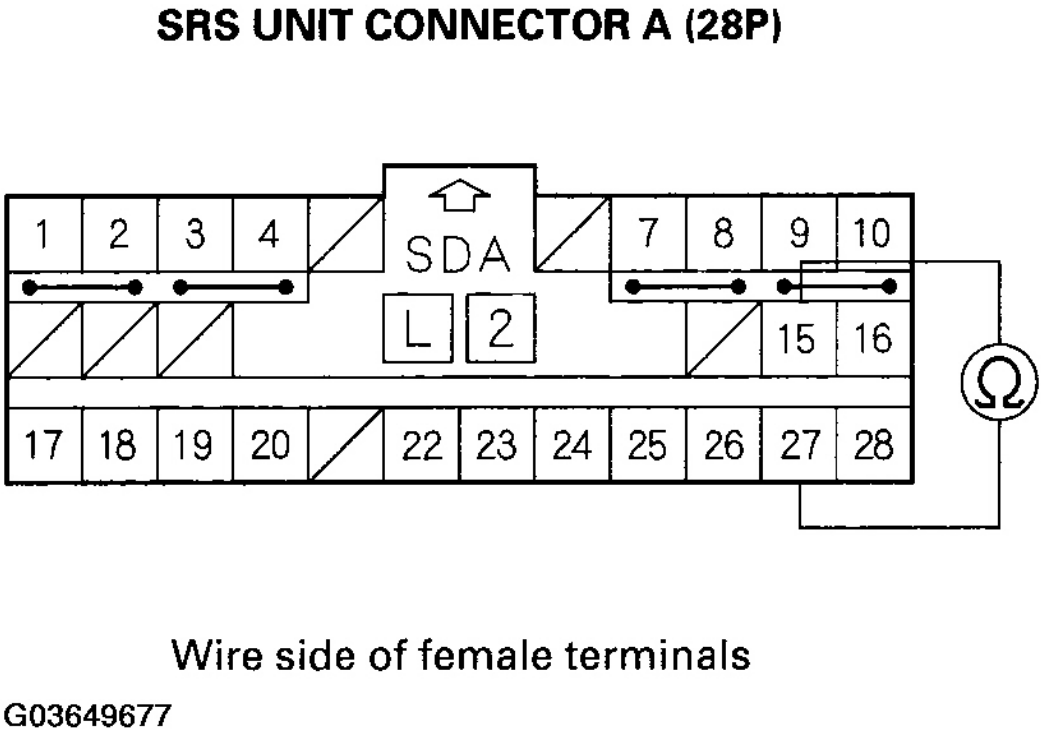


Fig. 126: Checking Resistance Between No. 15 And 27 Terminals Of SRS Unit Connector A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty left front impact sensor or SRS unit-replace the left front impact sensor (see **FRONT IMPACT SENSOR REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Poor connection at C403, faulty engine compartment wire harness, or faulty dashboard wire harness. Inspect C403. If it is OK, replace the faulty harness.

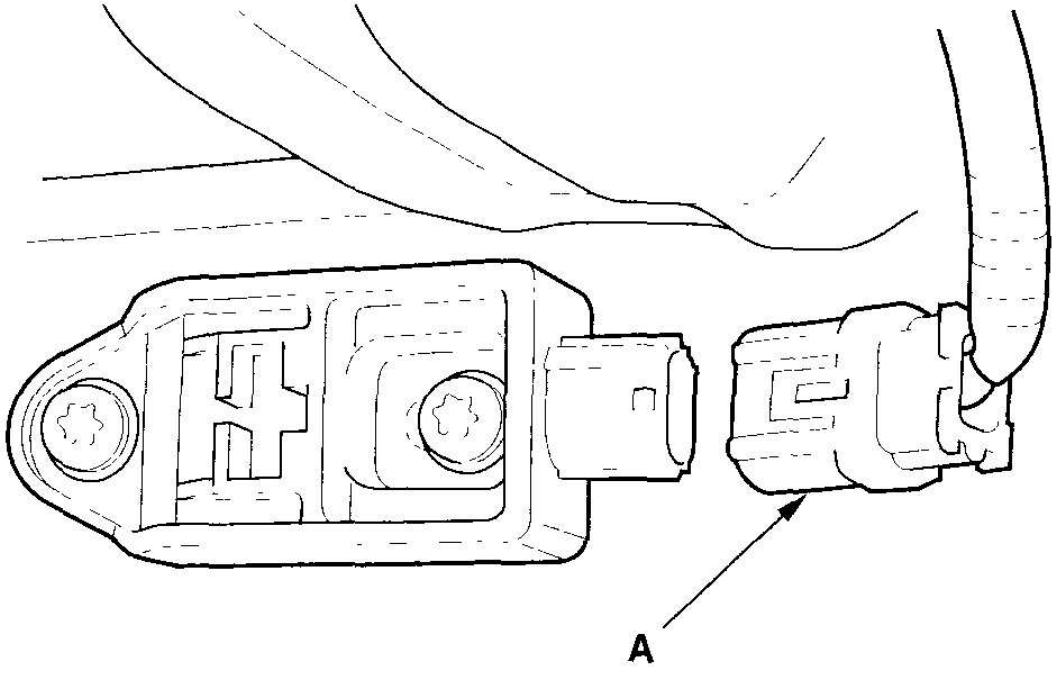
DTC 41-CX (41-C0 TO 41-C9, 41-CA TO 41-CF): FAULTY POWER SUPPLY TO THE LEFT FRONT IMPACT SENSOR

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 41-Cx indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the engine compartment wire harness 2P connector (A) from the left front impact sensor.



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Fig. 127: Disconnecting Engine Compartment Wire Harness 2P Connector From Left Front Impact Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
6. Check resistance between the No. 27 terminal of SRS unit connector A (28P) and body ground. There should be an open circuit or at least 1 Mohms.

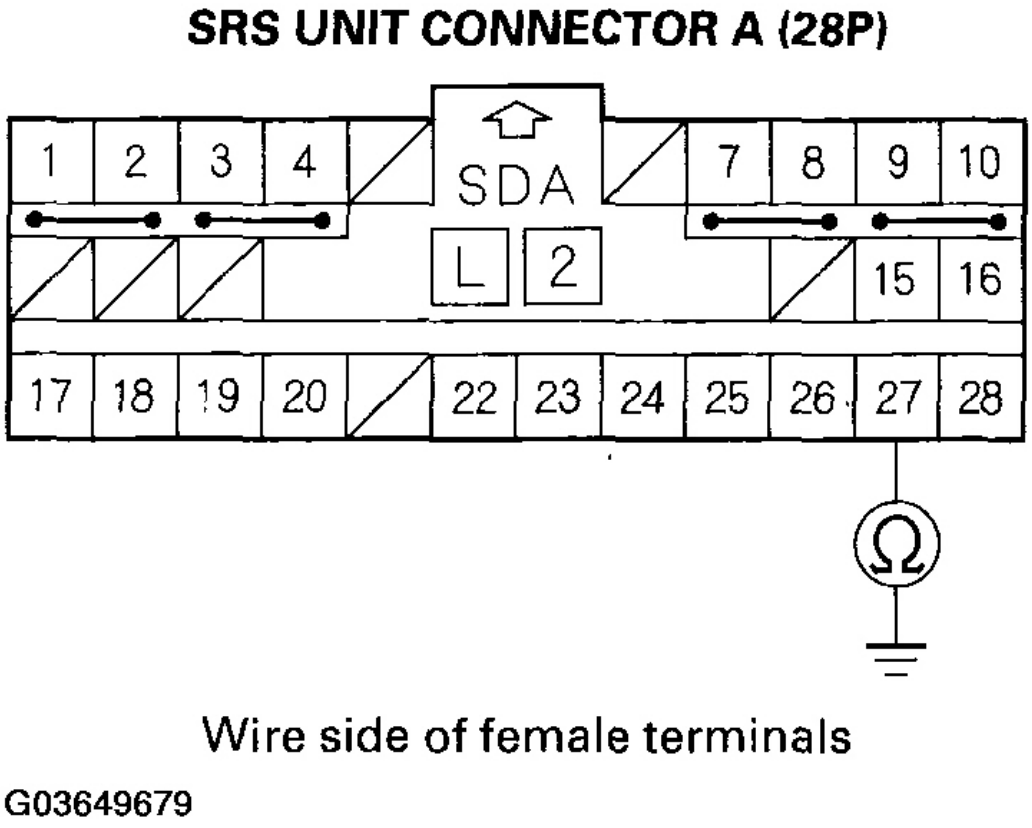


Fig. 128: Checking Resistance Between No. 27 Terminal Of SRS Unit Connector A (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 7.

NO - Short to ground in the dashboard wire harness or engine compartment wire harness; replace the faulty harness.

7. Check resistance between the No. 15 and No. 27 terminals of SRS unit connector A (28P). There should be an open circuit or at least 1 Mohms.

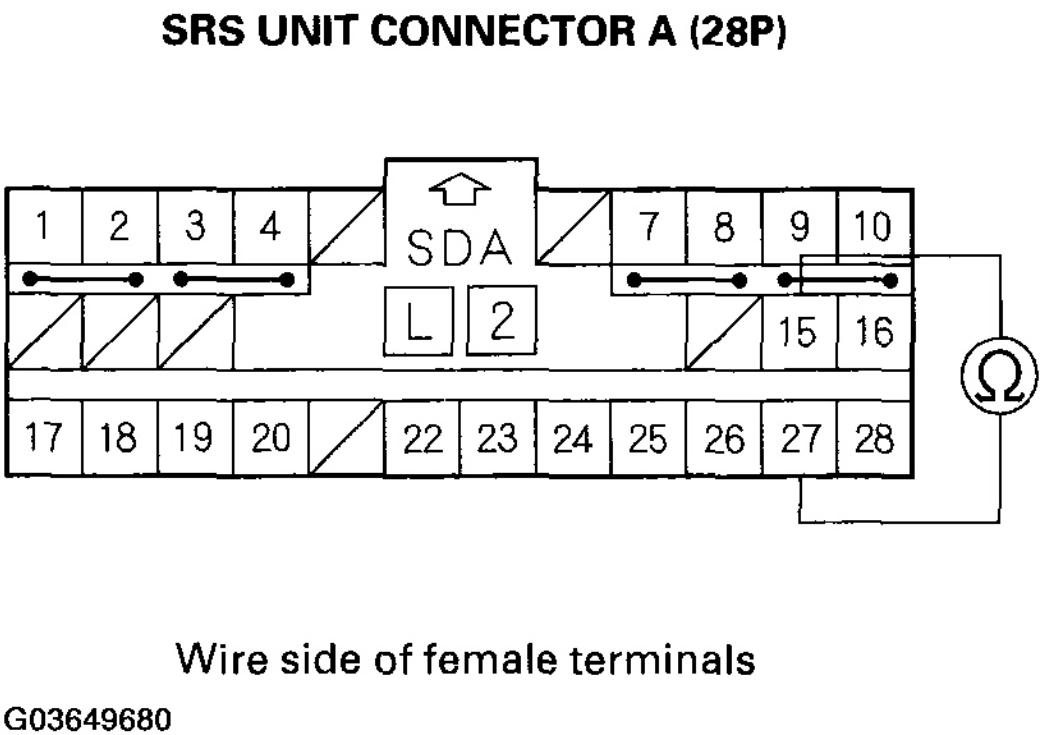


Fig. 129: Checking Resistance Between No. 15 And 27 Terminals Of SRS Unit Connector A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty left front impact sensor or SRS unit; replace the left front impact sensor (see **FRONT IMPACT SENSOR REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short in the dashboard wire harness or engine compartment wire harness; replace the faulty harness.

DTC 42-1X (42-10 TO 42-19, 42-1A TO 42-1F): NO SIGNAL FROM THE RIGHT FRONT IMPACT SENSOR

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead H 07YAZ-S3AA100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 42-1x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Check the connections between SRS unit connector A (28P) and the SRS unit, between the engine compartment wire harness 2P connector and the right front impact sensor (see **FRONT IMPACT SENSOR REPLACEMENT**), and at connector C403 (see **ENGINE COMPARTMENT WIRE HARNESS (LEFT BRANCH)**).

   Are the connections OK?

   YES - Go to step 4.

   NO - Repair the poor connections and retest. If DTC 42-1x is still present, go to step 4.
4. Disconnect the battery negative cable, and wait for 3 minutes.
5. Disconnect the engine compartment wire harness 2P connector (A) from the

right front impact sensor.

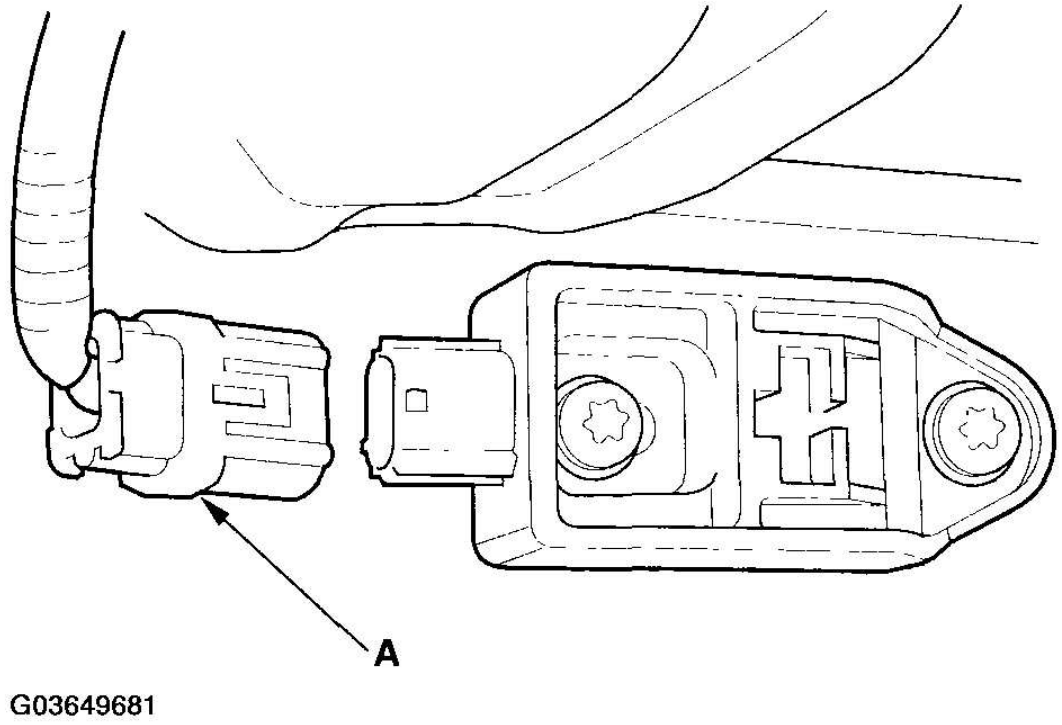


Fig. 130: Disconnecting Engine Compartment Wire Harness 2P Connector From Right Front Impact Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
7. Check resistance between the No. 16 and No. 28 terminals of SRS unit connector A (28P). There should be an open circuit or at least 1 Mohms.

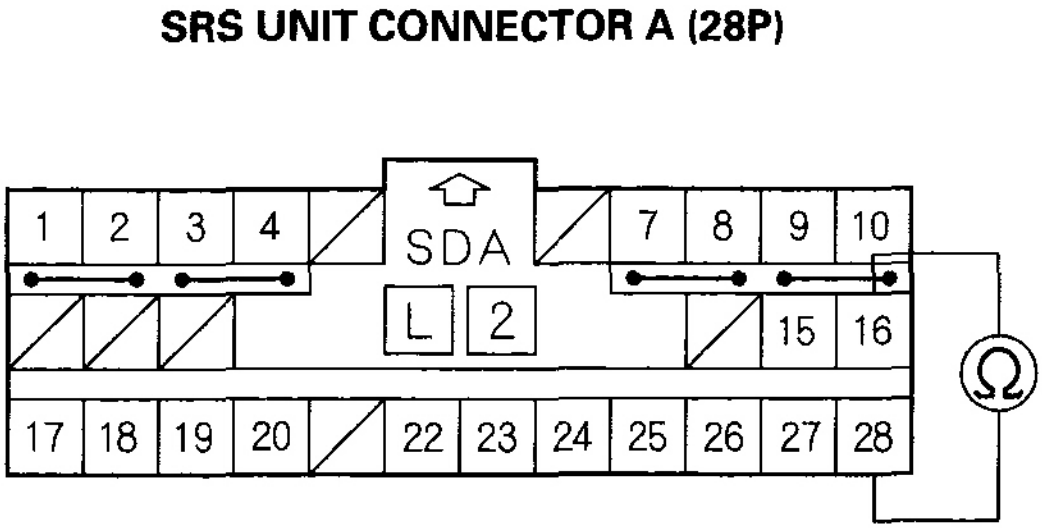


Fig. 131: Checking Resistance Between No. 16 And 28 Terminals Of SRS Unit Connector A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 8.

NO - Short in the engine compartment wire harness or dashboard wire harness; replace the faulty harness.

8. Check resistance between the No. 16 terminal of SRS unit connector A (28P) and body ground, and between the No. 28 terminal and body ground. There should be an open circuit or at least 1 Mohms.

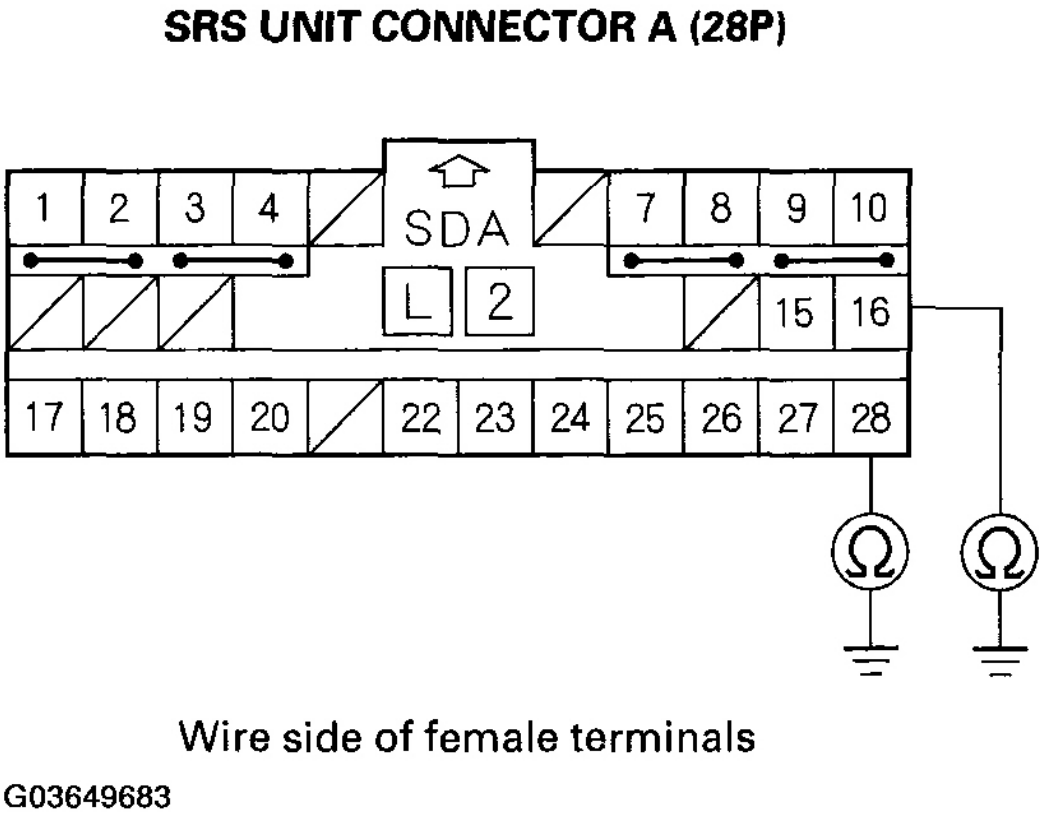


Fig. 132: Checking Resistance Between No. 16 Terminal Of SRS Unit Connector A (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 9.

NO - Short to ground in the dashboard wire harness or engine compartment wire harness; replace the faulty harness.

9. Reconnect the battery negative cable.
10. Turn the ignition switch ON (II).
11. Check for voltage between the No. 16 terminal of SRS unit connector A (28P) and body ground, and between the No. 28 terminal and body ground. There should be 1 V or less.

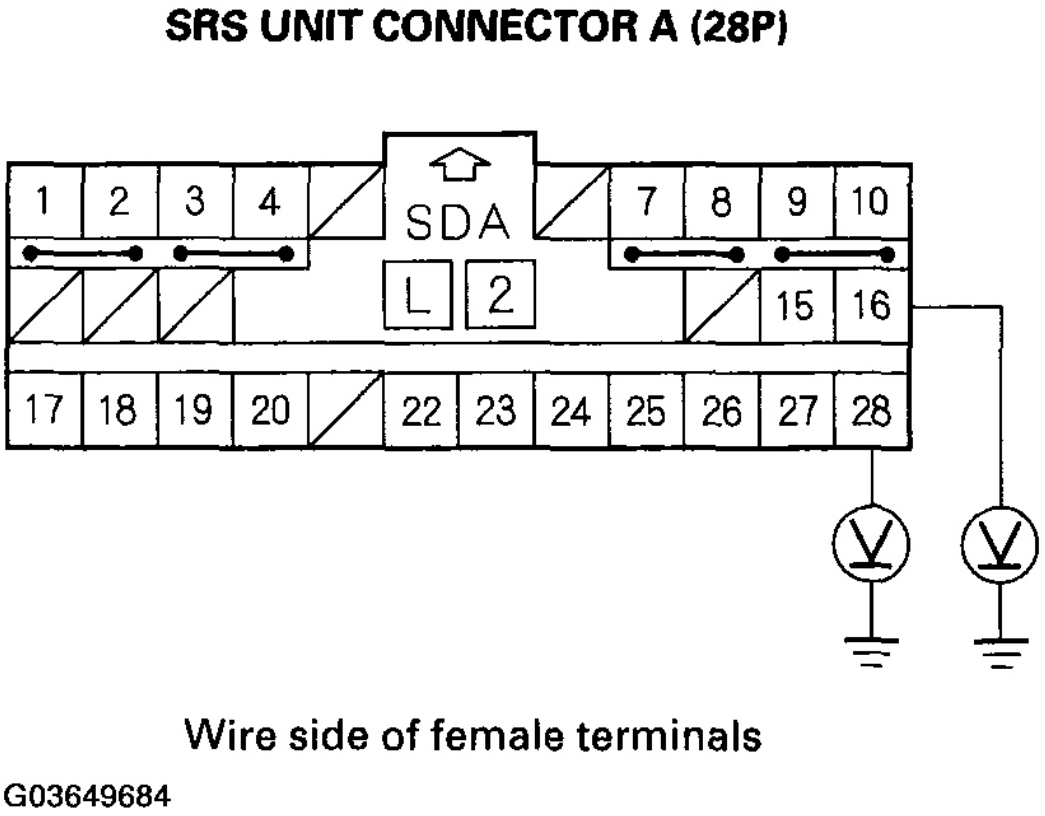


Fig. 133: Checking Voltage Between No. 16 Terminal Of SRS Unit Connector A (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Go to step 12.

NO - Short to power in the engine compartment wire harness or dashboard wire harness; replace the faulty harness.

12. Turn the ignition switch OFF.
13. Connect the SRS inflator simulator (jumper connector) and the simulator lead to the engine compartment wire harness 2P connector (A).

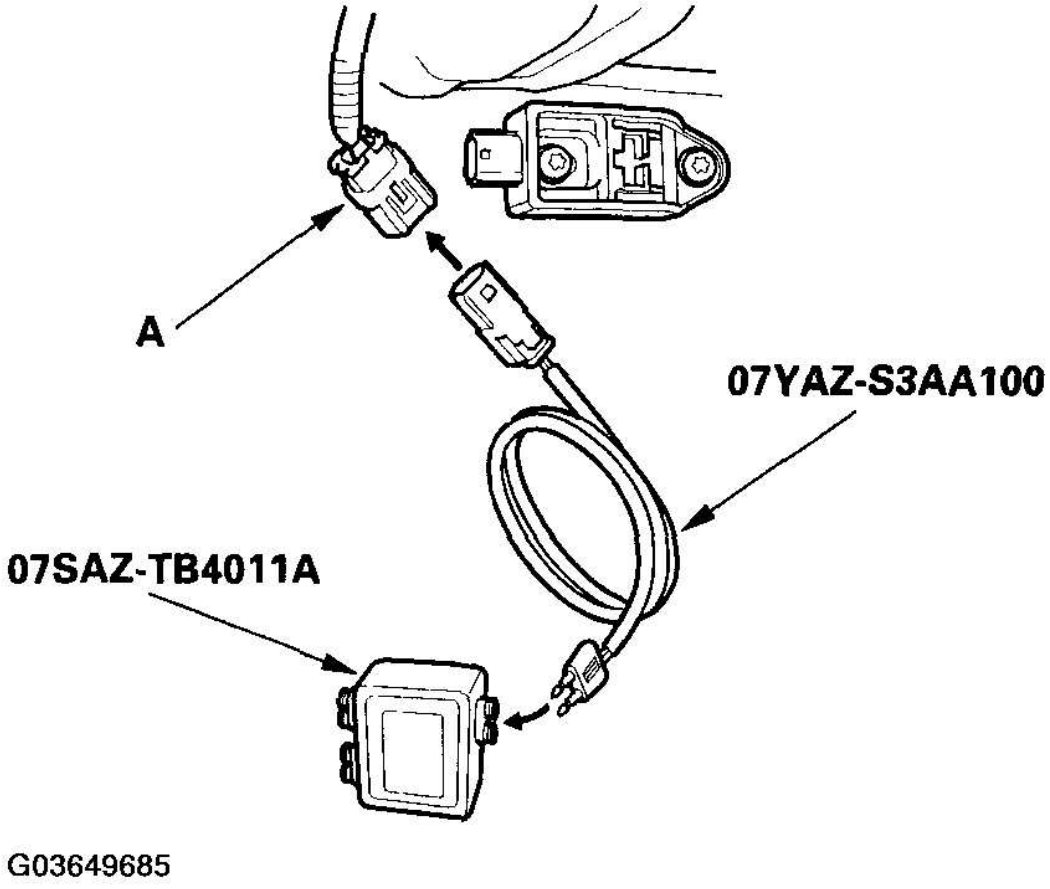


Fig. 134: Connecting SRS Inflator Simulator And Simulator Lead To Engine Compartment Wire Harness 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Check resistance between the No. 16 and No. 28 terminals of SRS unit connector A (28P). There should be 0-1.0 ohms.

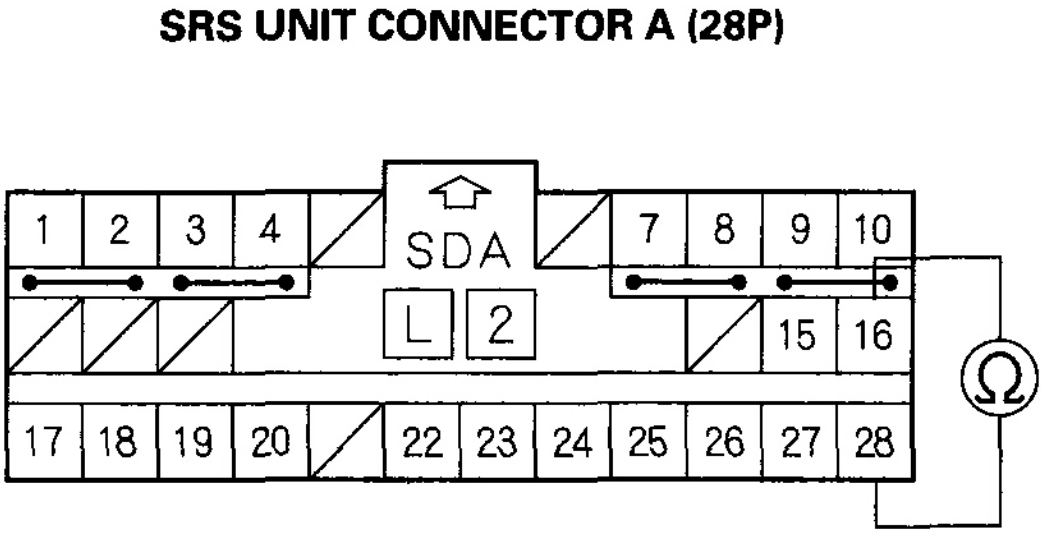


Fig. 135: Checking Resistance Between No. 16 And 28 Terminals Of SRS Unit Connector A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty right front impact sensor or SRS unit; replace the right front impact sensor (see **FRONT IMPACT SENSOR REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Poor connection at C403, faulty engine compartment wire harness, or faulty dashboard wire harness. Inspect C403. If it is OK, replace the faulty harness.

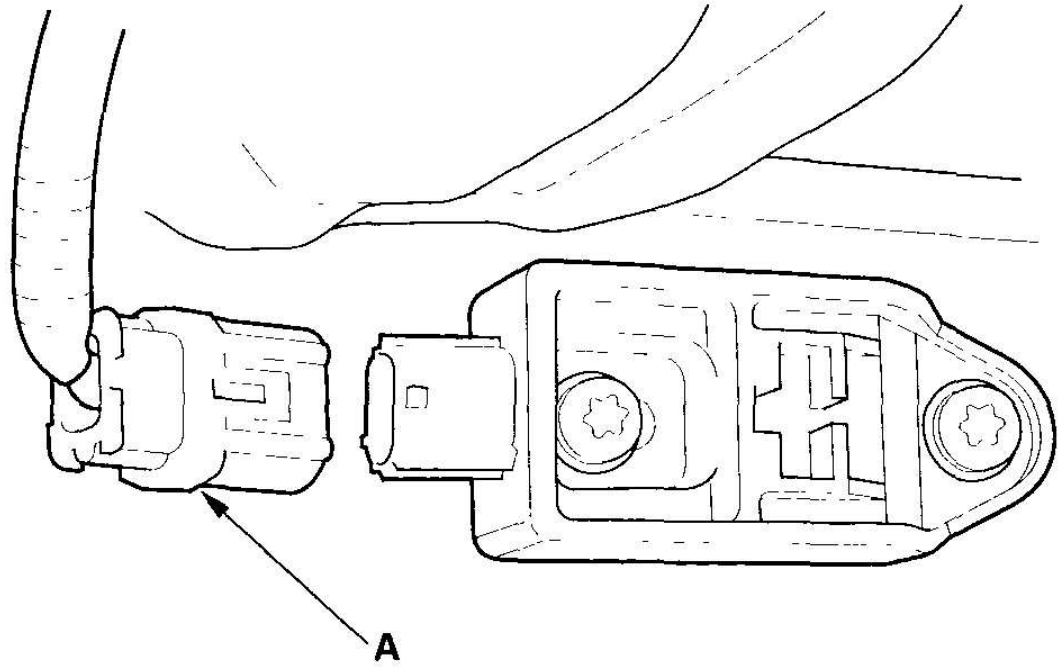
DTC 42-CX (42-CO TO 42-C9, 42-CA TO 42-CF): FAULTY POWER SUPPLY TO THE RIGHT FRONT IMPACT SENSOR

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS Indicator stay on, and is DTC 42-Cx indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the engine compartment wire harness 2P connector (A) from the right front impact sensor.



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Fig. 136: Disconnecting Engine Compartment Wire Harness 2P Connector From Right Front Impact Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
6. Check resistance between the No. 28 terminal of SRS unit connector A (28P) and body ground. There should be an open circuit or at least 1 Mohms.

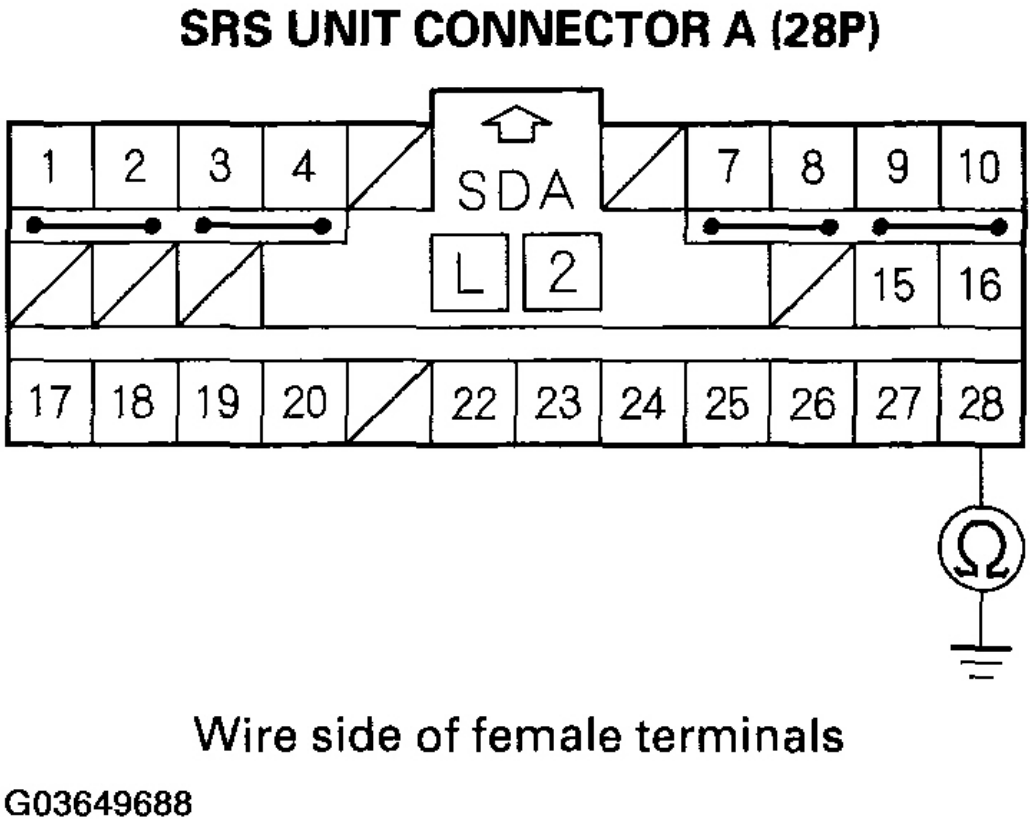


Fig. 137: Checking Resistance Between No. 28 Terminal Of SRS Unit Connector A (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 7.

NO - Short to ground in the dashboard wire harness or engine compartment wire harness; replace the faulty harness.

7. Check resistance between the No. 16 and No. 28 terminals of SRS unit connector A (28P). There should be an open circuit or at least 1 Mohms.

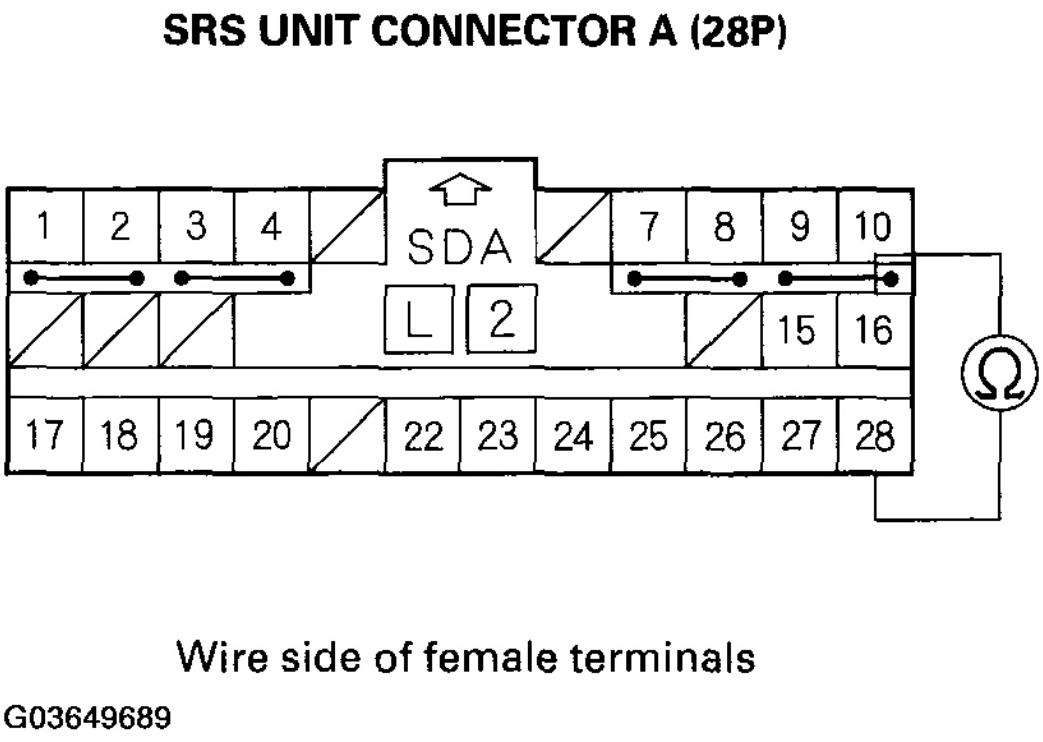


Fig. 138: Checking Resistance Between No. 16 And 28 Terminals Of SRS Unit Connector A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty right front impact sensor or SRS unit; replace the right front impact sensor (see **FRONT IMPACT SENSOR REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short in the dashboard wire harness or engine compartment wire harness; replace the faulty harness.

DTC 41-2X (41-20 TO 41-29, 41-2A TO 41-2F), 41-3X (41-30 TO 41-39, 41-3A TO 41-3F): INTERNAL FAILURE OF THE LEFT FRONT IMPACT SENSOR

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 41-2x or 41-3x indicated?

YES - Replace the left front impact sensor (see **FRONT IMPACT SENSOR REPLACEMENT**). If DTC returns, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 41-9X (41-90 TO 41-99, 41-9A TO 41-9F), 41-BX (41-B0 TO 41-B9, 41-BA TO 41-BF): INTERNAL FAILURE OF THE LEFT FRONT IMPACT SENSOR

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 41-9x or 41-Bx indicated?

YES - Replace the left front impact sensor (see **FRONT IMPACT SENSOR REPLACEMENT**). If the DTC returns, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the

DTC TROUBLESHOOTING INDEX.

DTC 42-2X (42-20 TO 42-29, 42-2A TO 42-2F), 42-3X (42-30 TO 42-39, 42-3A TO 42-3F): INTERNAL FAILURE OF THE RIGHT FRONT IMPACT SENSOR

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 42-2x or 42-3x indicated?

YES - Replace the right front impact sensor (see **FRONT IMPACT SENSOR REPLACEMENT**). If DTC returns, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 42-9X (42-90 TO 42-99, 42-9A TO 42-9F), 42-BX (42-B0 TO 42-B9, 42-BA TO 42-BF): INTERNAL FAILURE OF THE RIGHT FRONT IMPACT SENSOR

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 42-9x or 42-Bx indicated?

YES - Replace the right front impact sensor (see **FRONT IMPACT SENSOR REPLACEMENT**). If the DTC returns, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 43-1X (43-10 TO 43-19, 43-1A TO 43-1F): NO SIGNAL FROM THE LEFT SIDE IMPACT SENSOR (FIRST)

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead H 07YAZ-S3AA100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 43-1x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Check the connection between the floor wire harness 2P connector and the left side impact sensor (first).

   Is the connection OK?

   YES - Go to step 5.

   NO - Repair the poor connections and retest. If the DTC 43-1x is still present, go to step 5.
5. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
6. Disconnect the floor wire harness 2P connector (A) from the left side impact sensor (first).

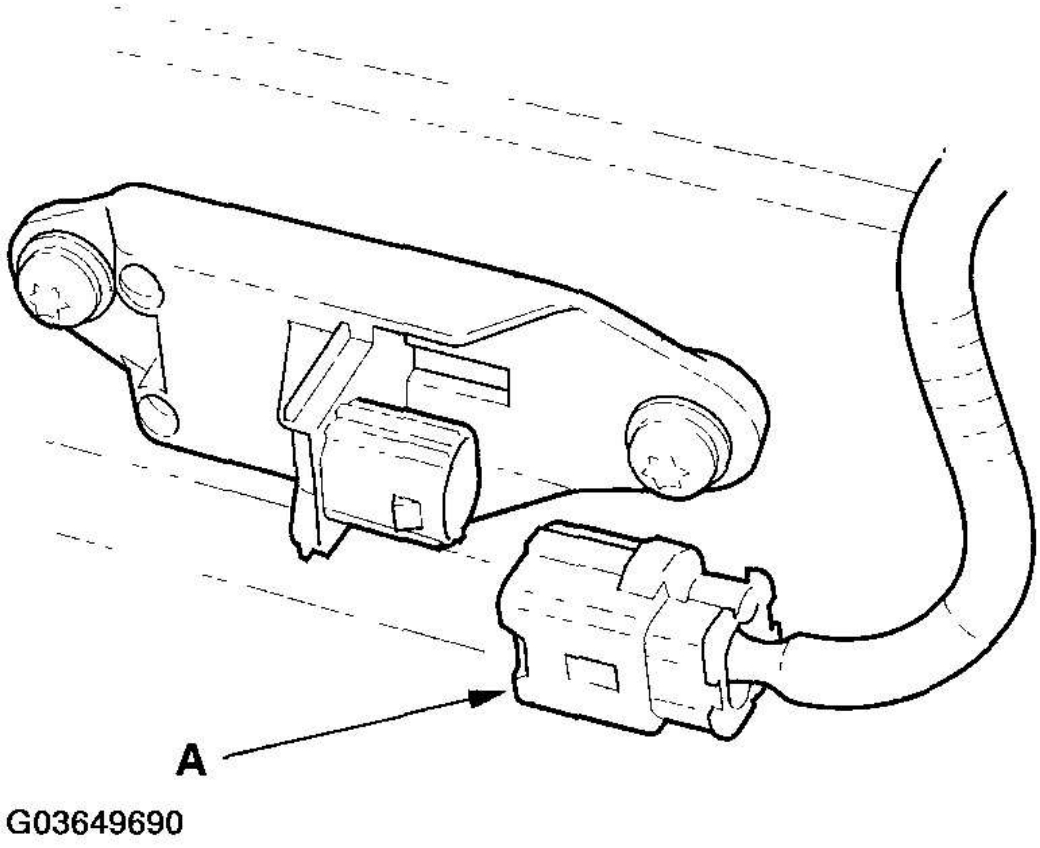


Fig. 139: Disconnecting Floor Wire Harness 2P Connector From Left Side Impact Sensor (First)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
8. Check resistance between the No. 19 and No. 20 terminals of SRS unit connector B (28P). There should be an open circuit or at least 1 Mohms.

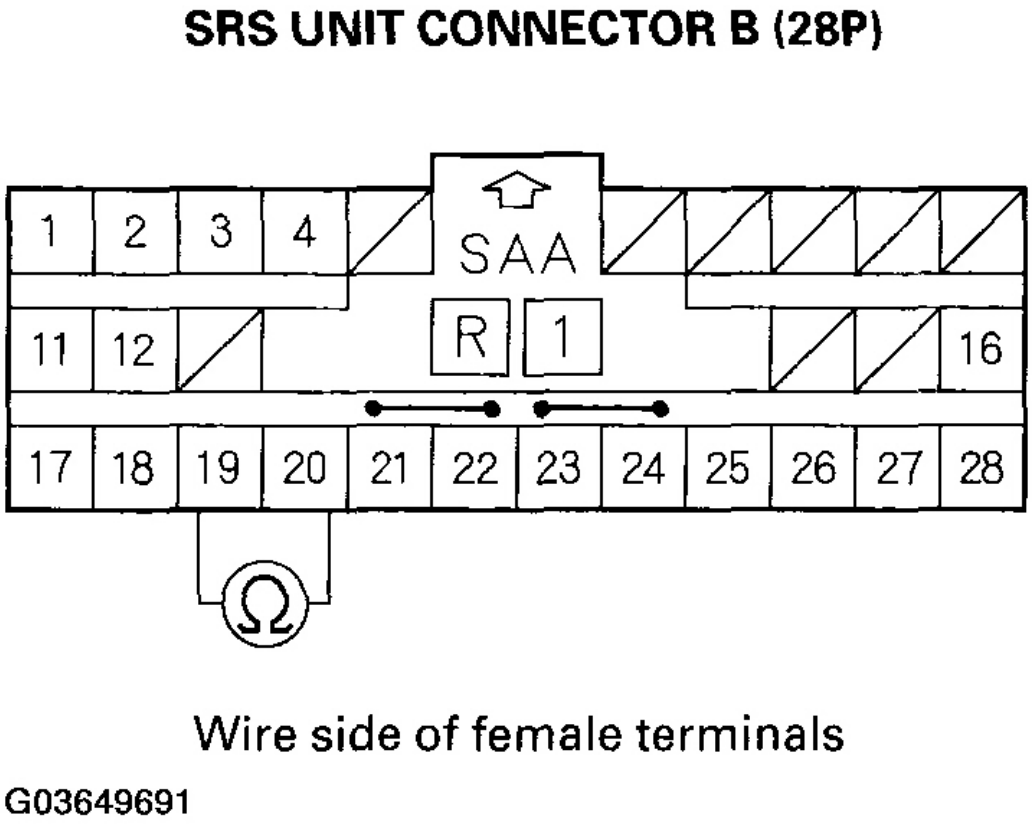


Fig. 140: Checking Resistance Between No. 19 And 20 Terminals Of SRS Unit Connector B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 9.

NO - Short in the floor wire harness; replace the floor wire harness.

9. Check resistance between the No. 19 terminal of SRS unit connector B (28P) and body ground, and between the No. 20 terminal and body ground. There should be an open circuit or at least 1 Mohms.

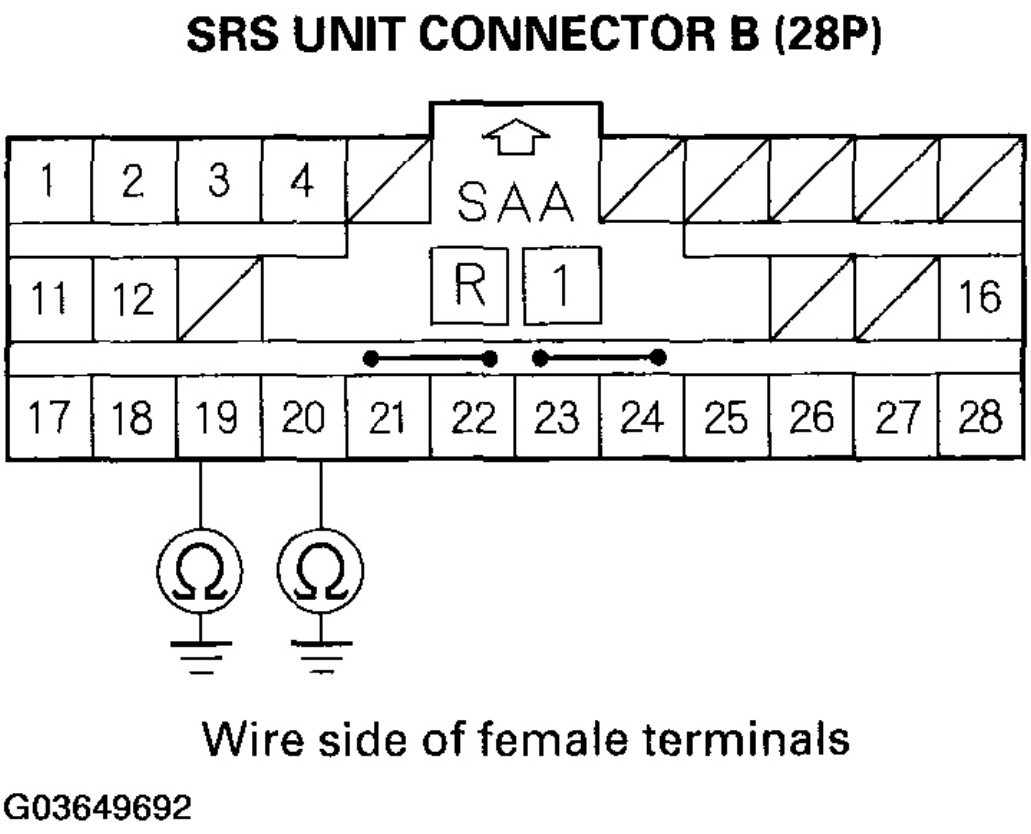


Fig. 141: Checking Resistance Between No. 19 Terminal Of SRS Unit Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 10.

NO - Short to ground in the floor wire harness; replace the floor wire harness.

10. Reconnect the battery negative cable.
11. Turn the ignition switch ON (II).
12. Check for voltage between the No. 19 terminal of SRS unit connector B (28P) and body ground, and between the No. 20 terminal and body ground. There

should be 1 V or less.

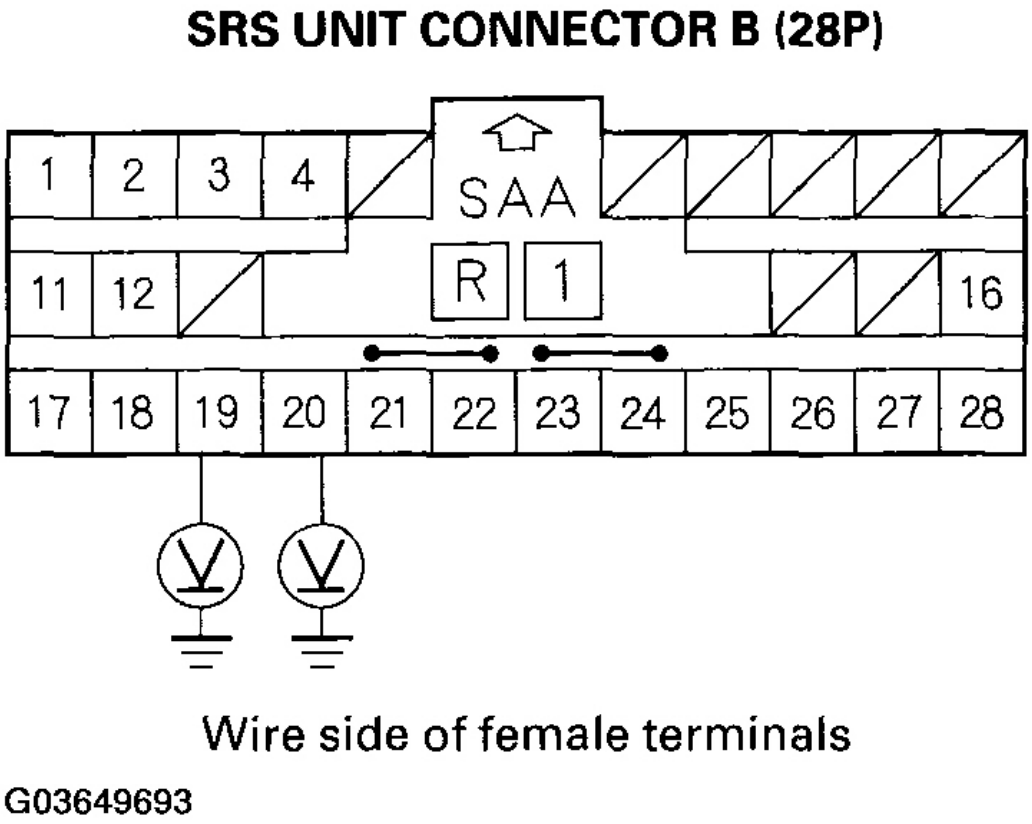


Fig. 142: Checking Voltage Between No. 19 Terminal Of SRS Unit Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Go to step 13.

NO - Short to power in the floor wire harness; replace the floor wire harness.

13. Turn the ignition switch OFF.
14. Connect the SRS inflator simulator (jumper connector) and simulator lead H to the floor wire harness 2P connector (A).

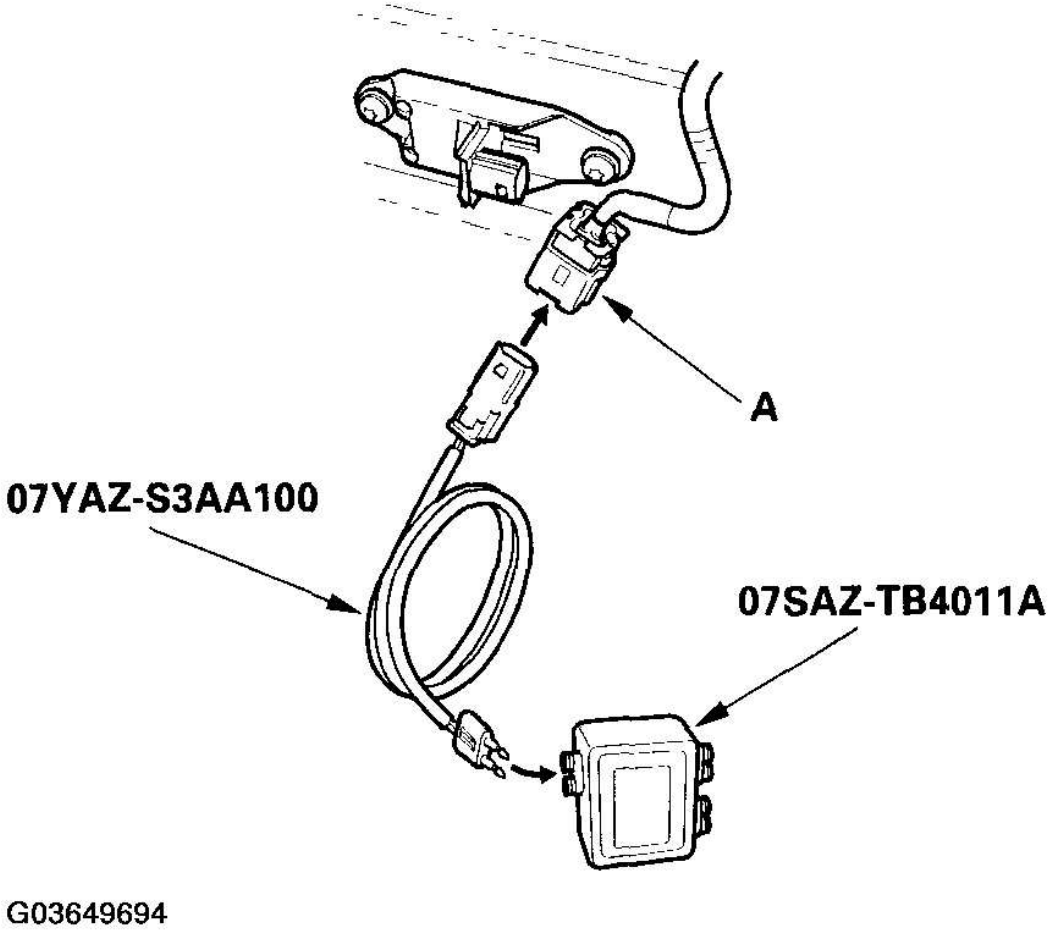


Fig. 143: Connecting SRS Inflator Simulator And Simulator Lead H To Floor Wire Harness 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Check resistance between the No. 19 and No. 20 terminals of SRS unit connector B (28P). There should be 1.0 ohms or less.

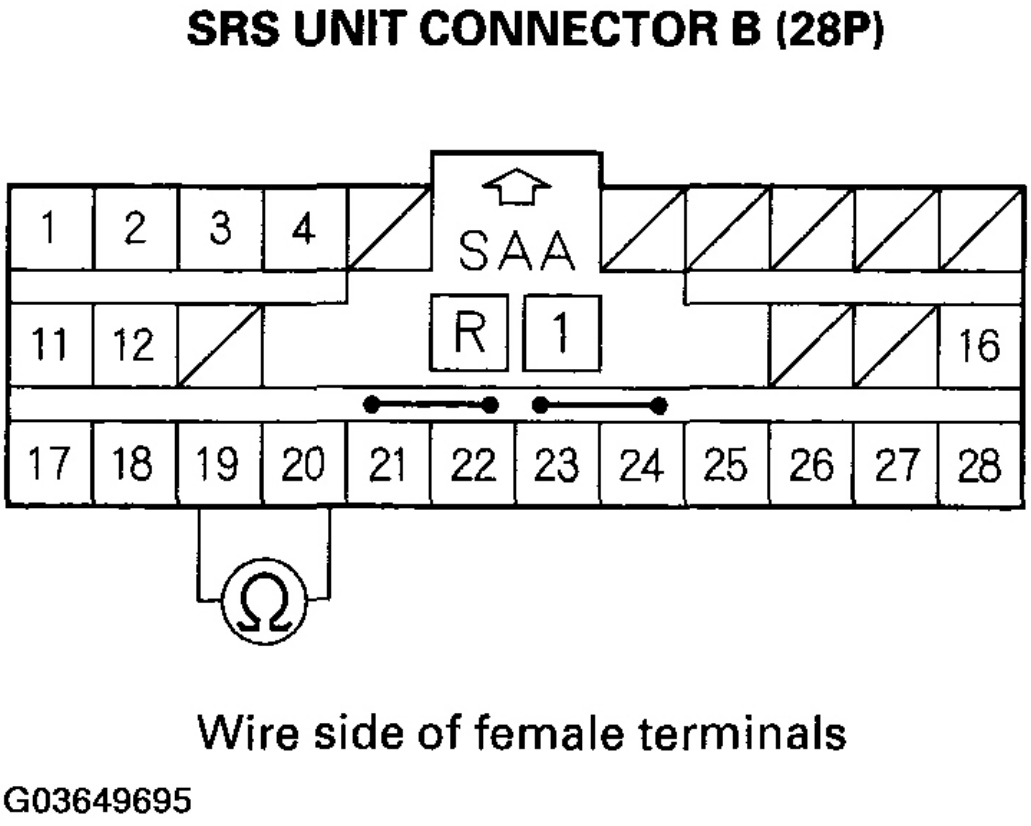


Fig. 144: Checking Resistance Between No. 19 And 20 Terminals Of SRS Unit Connector B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty left side impact sensor (first) or SRS unit; replace the left side impact sensor (first) (see **SIDE IMPACT SENSOR (FIRST) REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open in the floor wire harness; replace the floor wire harness.

DTC 43-CX (43-C0 TO 43-C9, 43-CA TO 43-CF): FAULTY POWER SUPPLY TO THE LEFT SIDE IMPACT SENSOR (FIRST)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 43-Cx indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
5. Disconnect the floor wire harness 2P connector (A) from the driver's side impact sensor (first).

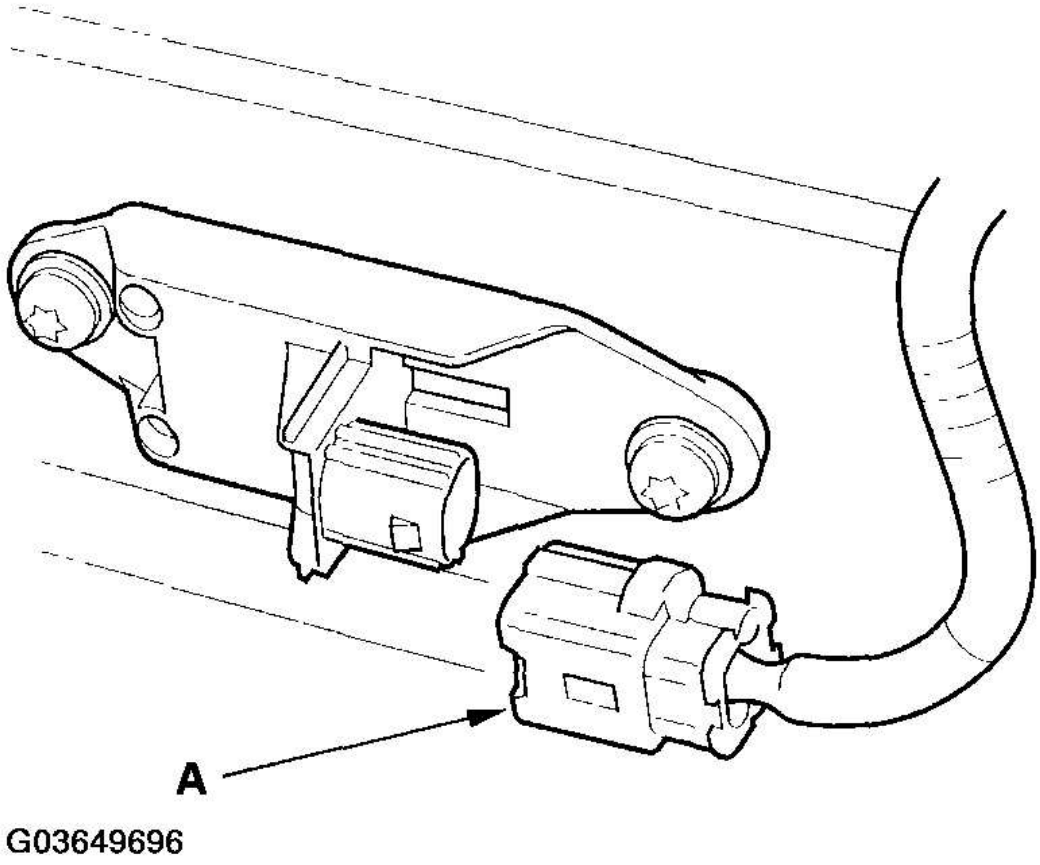


Fig. 145: Disconnecting Floor Wire Harness 2P Connector From Driver's Side Impact Sensor (First)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
7. Check resistance between the No. 19 terminal of SRS unit connector B (28P) and body ground. There should be an open circuit or at least 1 Mohms.

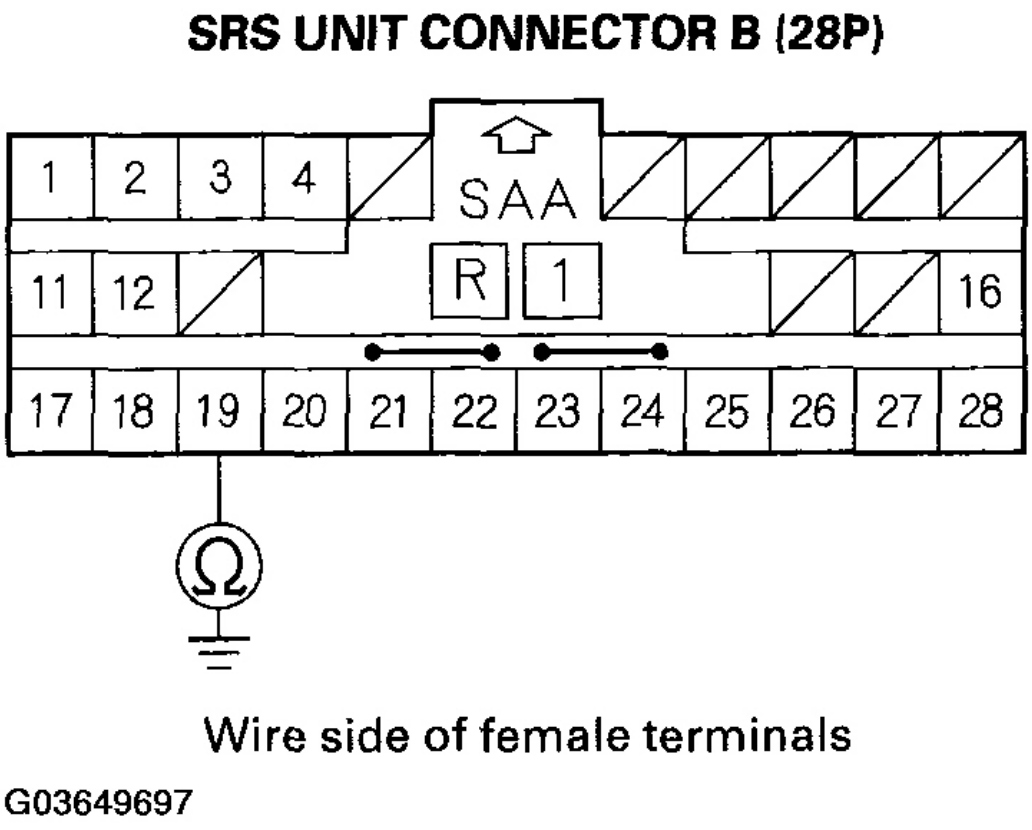


Fig. 146: Checking Resistance Between No. 19 Terminal Of SRS Unit Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 8.

NO - Short to ground in the floor wire harness, replace the floor wire harness.

8. Check resistance between the No. 19 and No. 20 terminals of SRS unit connector B (28P). There should be an open circuit or at least 1 Mohms.

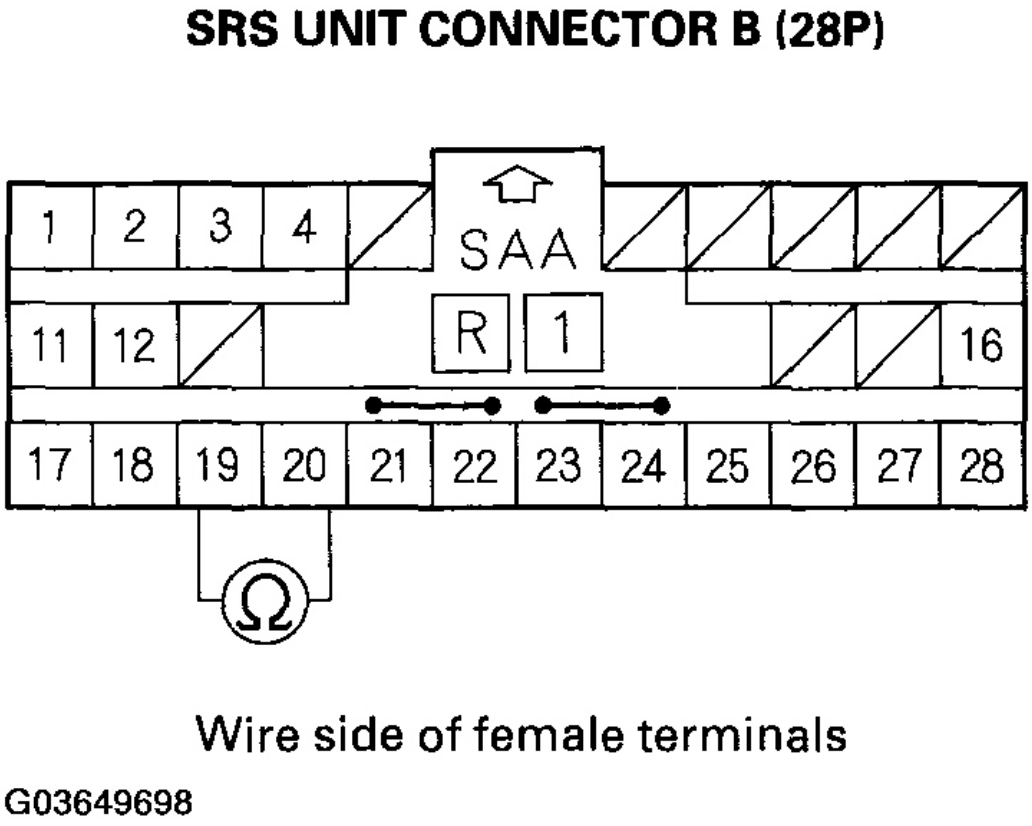


Fig. 147: Checking Resistance Between No. 19 And 20 Terminals Of SRS Unit Connector B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty driver's side impact sensor (first) or SRS unit; replace the sensor (first) (see **SIDE IMPACT SENSOR (FIRST) REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short in the floor wire harness; replace the floor wire harness.

DTC 44-1X (44-10 TO 44-19, 44-1A TO 44-1F): NO SIGNAL FROM THE RIGHT SIDE IMPACT SENSOR (FIRST)

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead H 07YAZ-S3AA100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 44-1x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Check the connection between the floor wire harness 2P connector and the right side impact sensor (first).

   Is the connection OK?

   YES - Go to step 5.

   NO - Repair the poor connections and retest. If the DTC 44-1x is still present, go to step 5.
5. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
6. Disconnect the floor wire harness 2P connector (A) from the right side impact sensor (first).

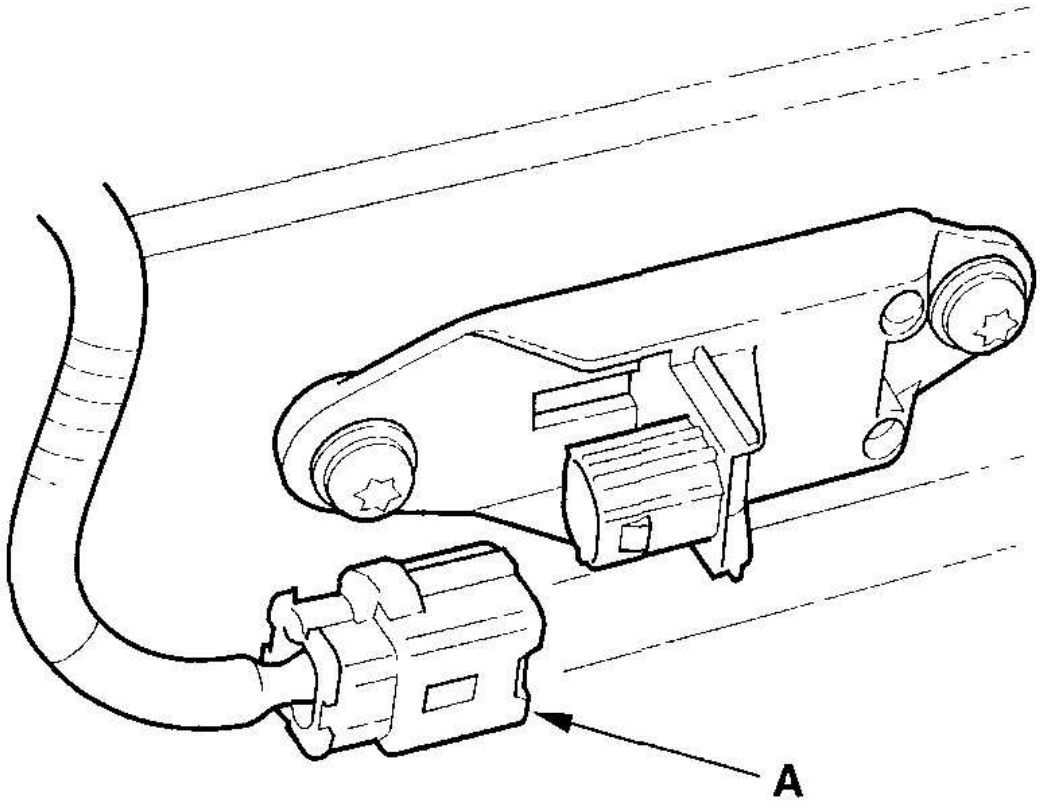


Fig. 148: Disconnecting Floor Wire Harness 2P Connector From Right Side Impact Sensor (First)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
8. Check resistance between the No. 25 and No. 26 terminals of SRS unit connector B (28P). There should be an open circuit or at least 1 Mohms.

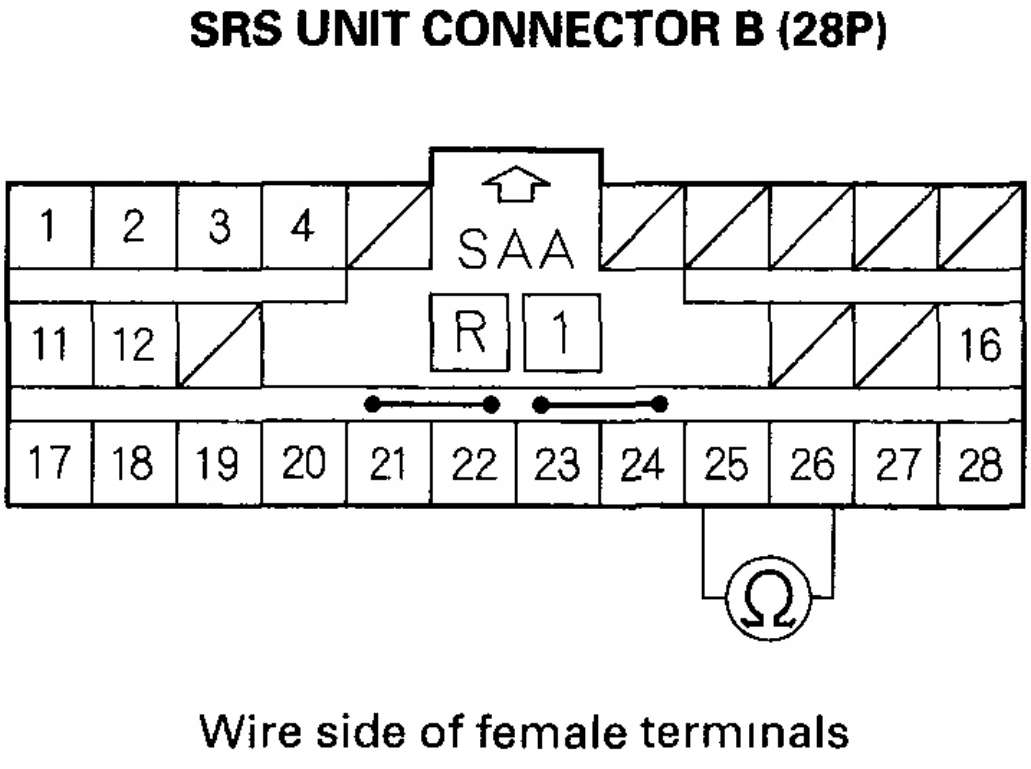


Fig. 149: Checking Resistance Between No. 25 And 26 Terminals Of SRS Unit Connector B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 9.

NO - Short in the floor wire harness; replace the floor wire harness.

9. Check resistance between the No. 25 terminal of SRS unit connector B (28P) and body ground, and between the No. 26 terminal and body ground. There should be an open circuit or at least 1 Mohms.

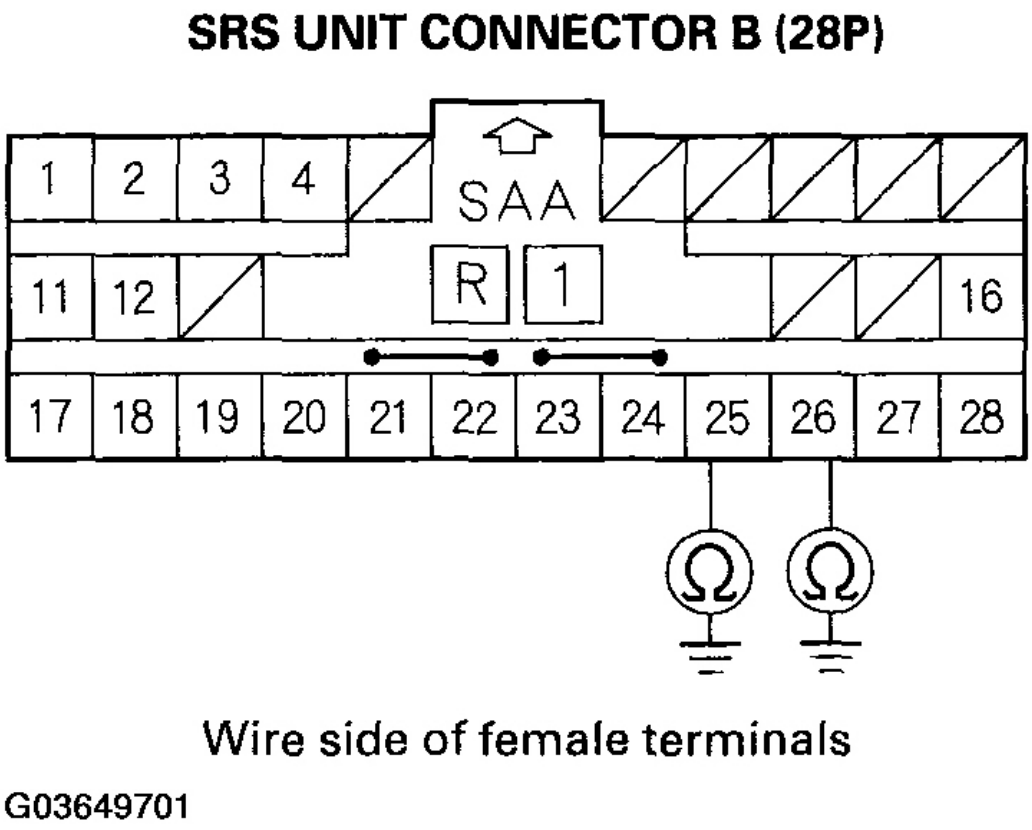


Fig. 150: Checking Resistance Between No. 25 Terminal Of SRS Unit Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 10.

NO - Short to ground in the floor wire harness; replace the floor wire harness.

10. Reconnect the battery negative cable.
11. Turn the ignition switch ON (II).
12. Check for voltage between the No. 25 terminal of SRS unit connector B (28P) and body ground, and between the No. 26 terminal and body ground. There

should be 1 V or less.

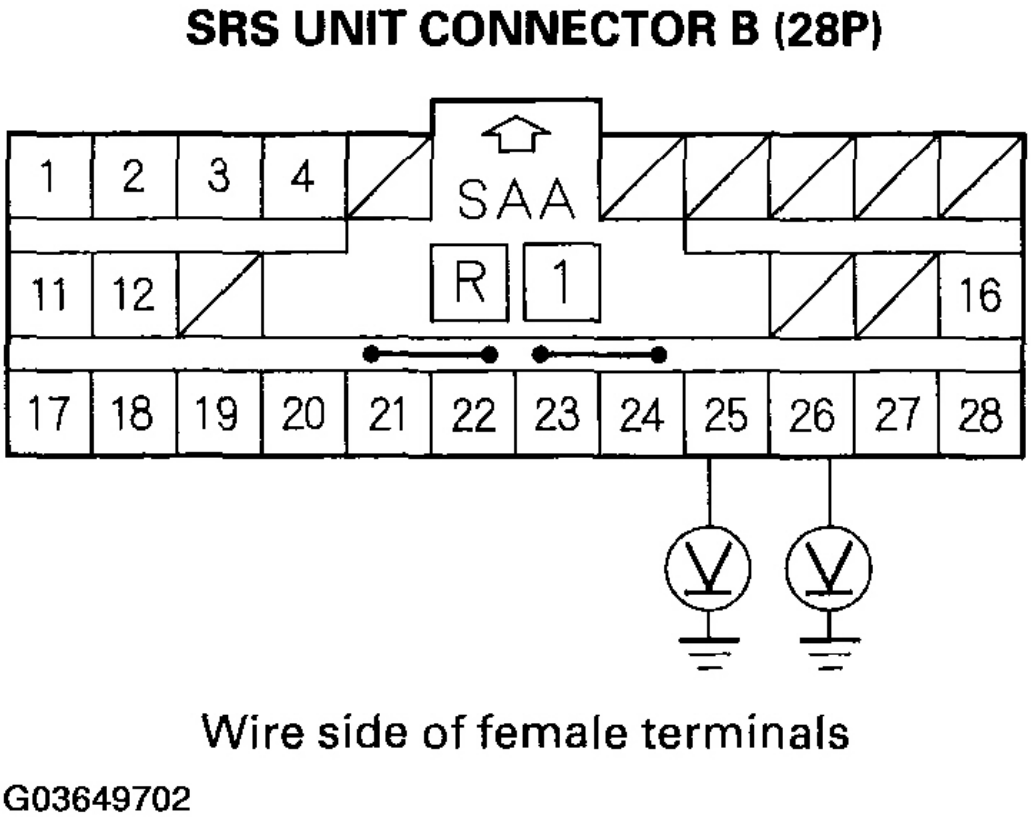


Fig. 151: Checking Voltage Between No. 25 Terminal Of SRS Unit Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Go to step 13.

NO - Short to power in the floor wire harness; replace the floor wire harness.

13. Turn the ignition switch OFF.
14. Connect the SRS inflator simulator (jumper connector) and simulator lead H to the floor wire harness 2P connector (A).

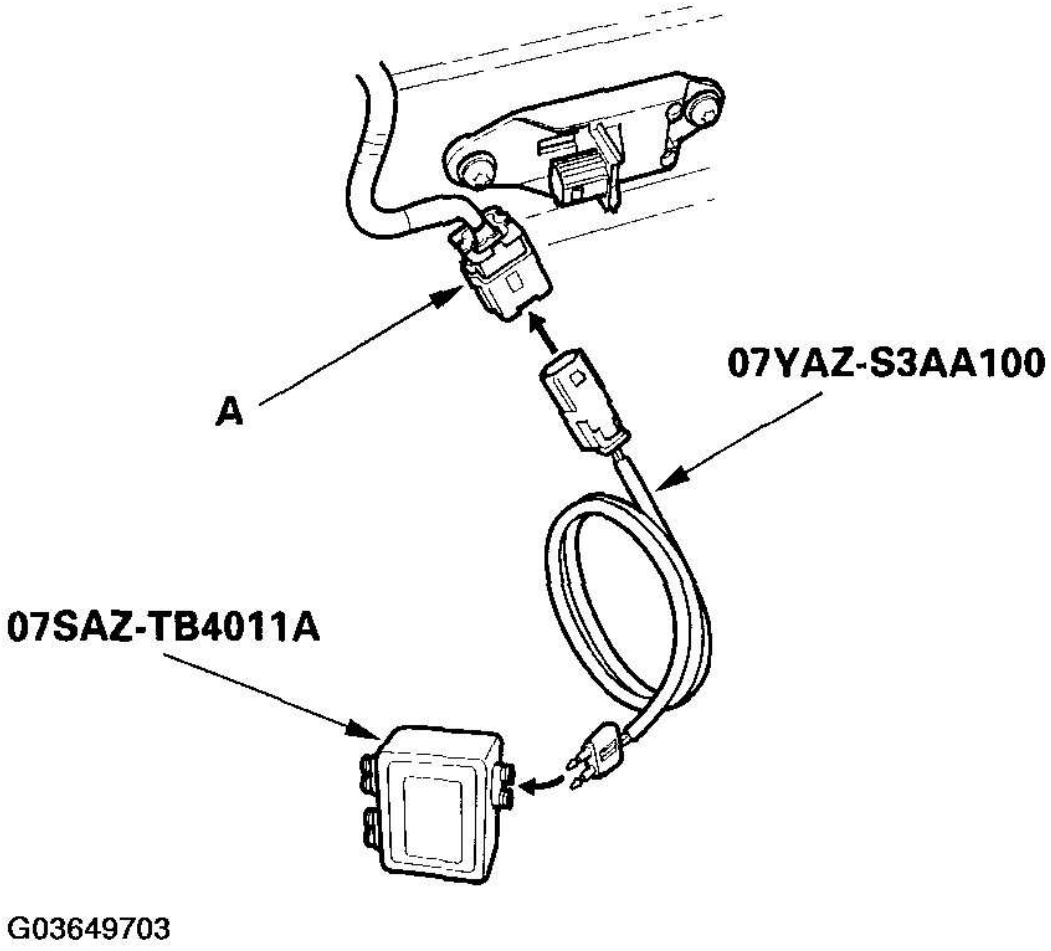


Fig. 152: Connecting SRS Inflator Simulator And Simulator Lead H To Floor Wire Harness 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Check resistance between the No. 25 and No. 26 terminals of SRS unit connector B (28P). There should be 1.0 ohms or less.

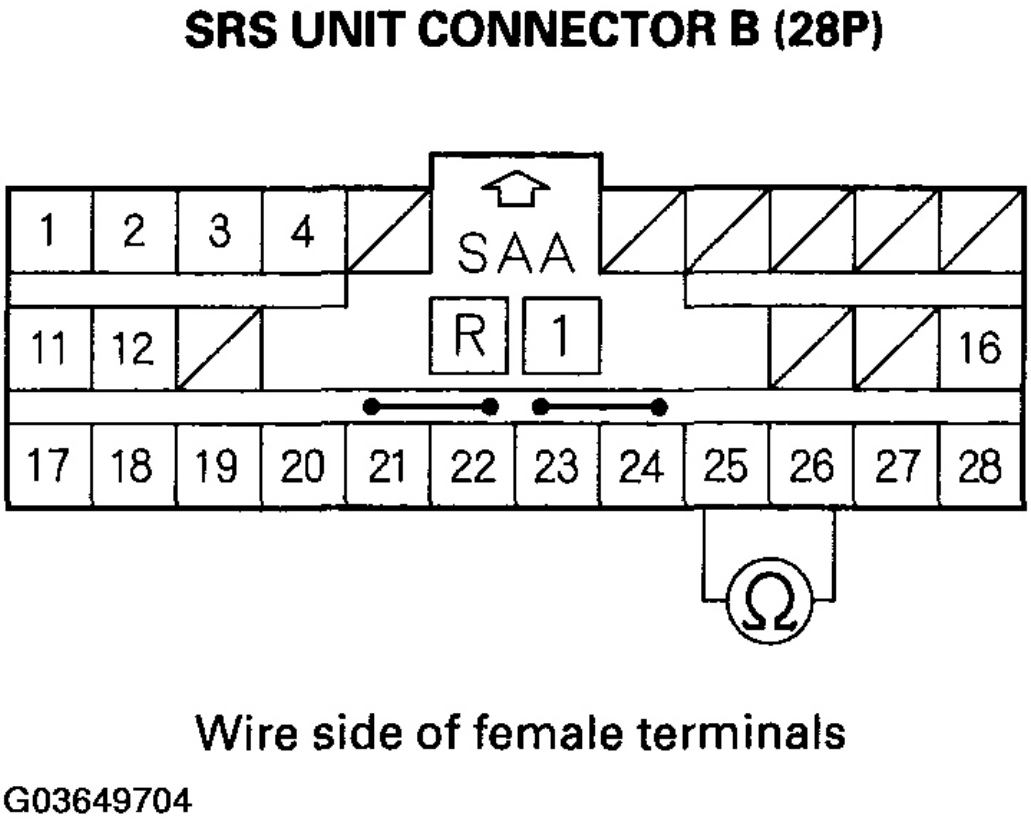


Fig. 153: Checking Resistance Between No. 25 And 26 Terminals Of SRS Unit Connector B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty right side impact sensor (first) or SRS unit; replace the right side impact sensor (first) (see **SIDE IMPACT SENSOR (FIRST) REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open in the floor wire harness; replace the floor wire harness.

DTC 44-CX (44-C0 TO 44-C9, 44-CA TO 44-CF): FAULTY POWER SUPPLY TO THE RIGHT SIDE IMPACT SENSOR (FIRST)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 44-Cx indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
5. Disconnect the floor wire harness 2P connector (A) from the right side impact sensor (first).

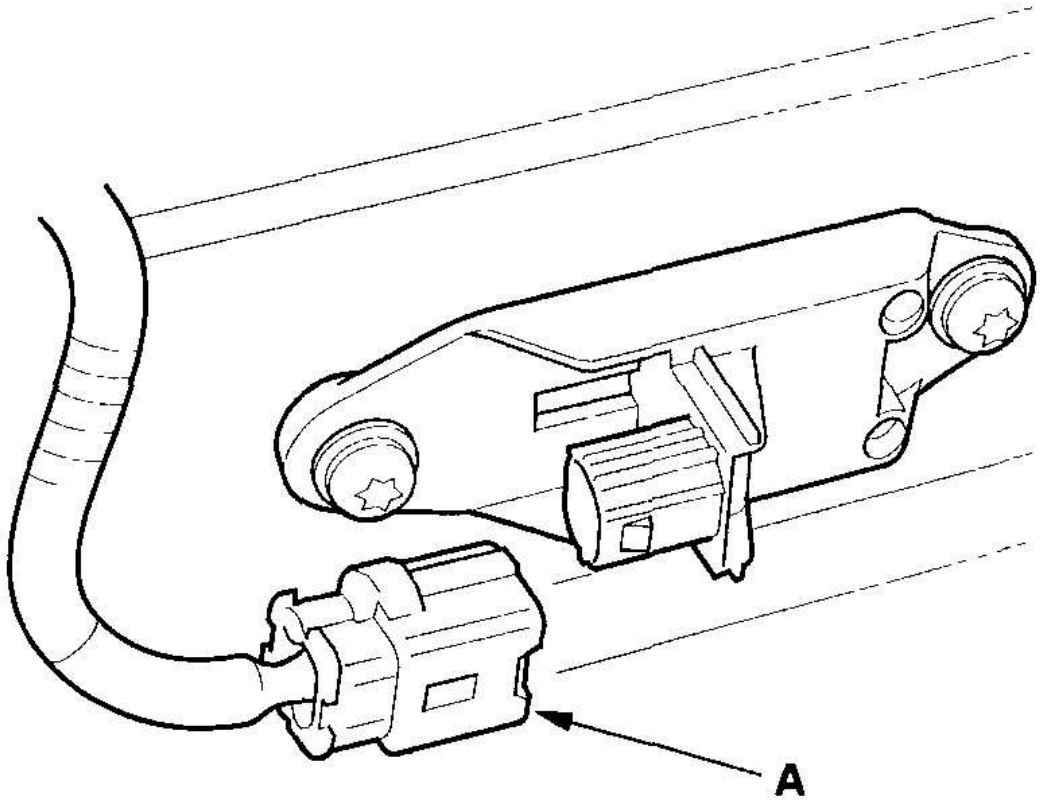


Fig. 154: Disconnecting Floor Wire Harness 2P Connector From Right Side Impact Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
7. Check resistance between the No. 25 terminal of SRS unit connector B (28P) and body ground. There should be an open circuit or at least 1 Mohms.

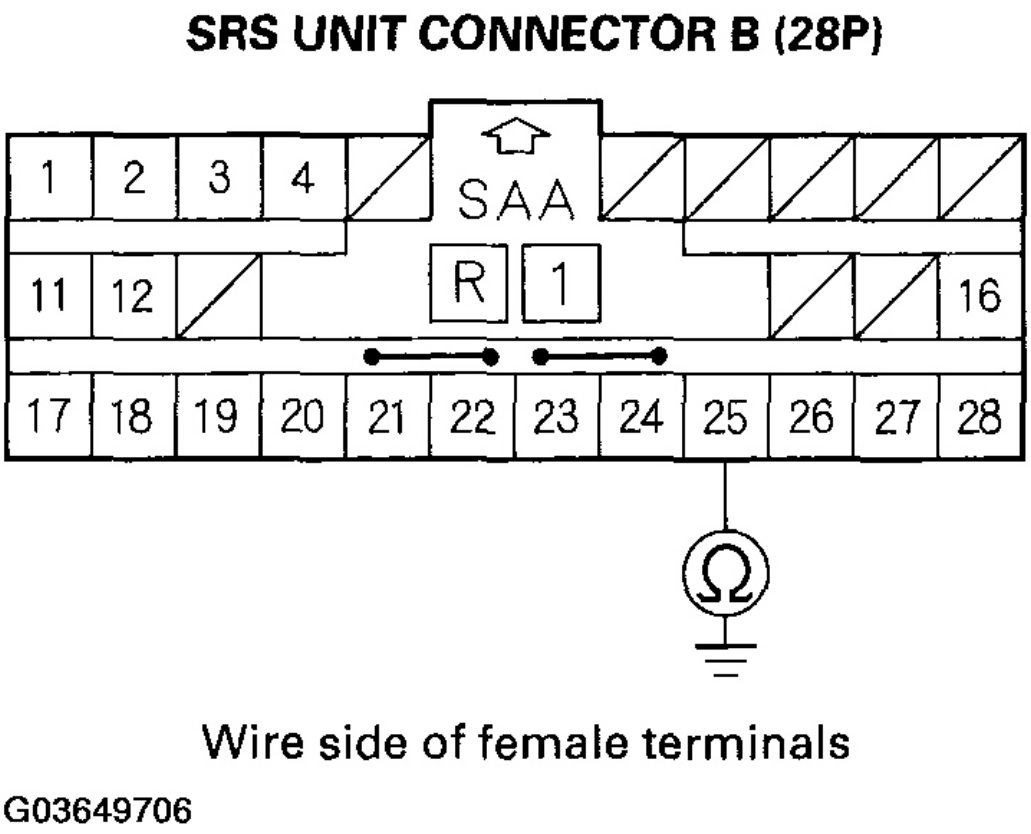


Fig. 155: Checking Resistance Between 25 Terminal Of SRS Unit Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 8.

NO - Short to ground in the floor wire harness; replace the floor wire harness.

8. Check resistance between the No. 25 and No. 26 terminals of SRS unit connector B (28P). There should be an open circuit, or at least 1 Mohms.

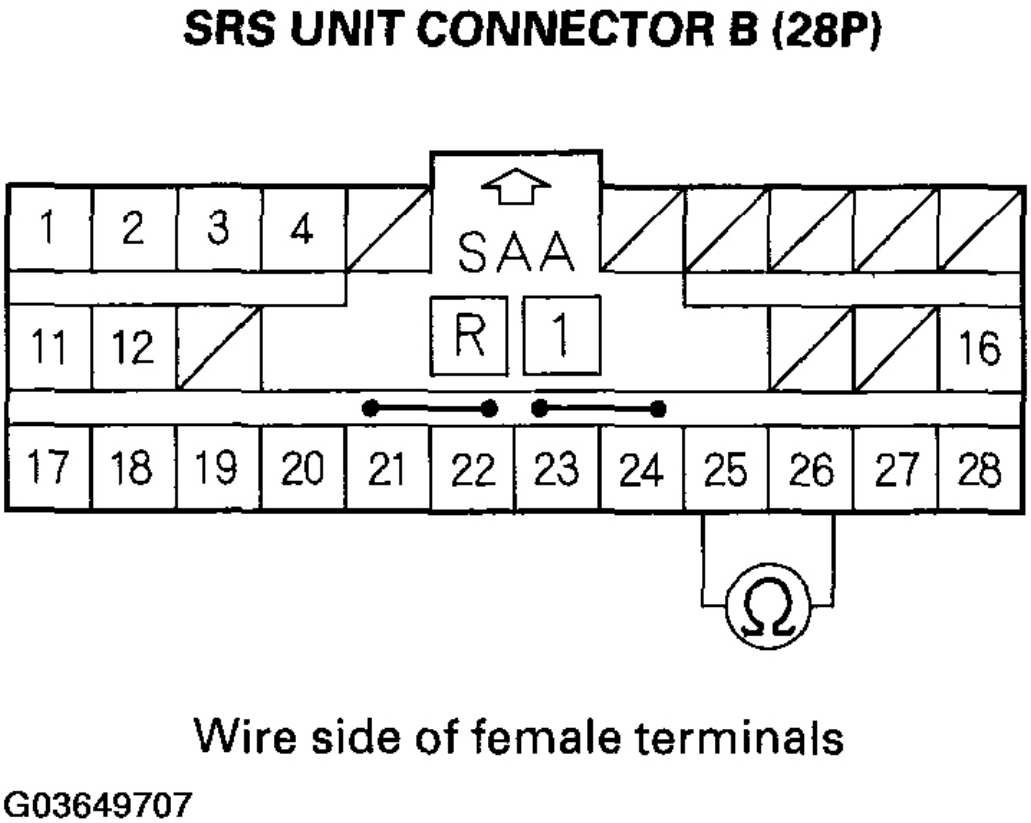


Fig. 156: Checking Resistance Between No. 25 And 26 Terminals Of SRS Unit Connector B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty right side impact sensor (first) or SRS unit; replace the sensor (see **SIDE IMPACT SENSOR (FIRST) REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short in the floor wire harness; replace the floor wire harness.

DTC 43-2X (43-20 TO 43-29, 43-2A TO 43-2F), 43-3X (43-30 TO 43-39, 43-3A TO 43-3F), 43-BX (43-B0 TO 43-B9, 43-BA TO 43-BF): INTERNAL FAILURE OF THE LEFT SIDE IMPACT SENSOR (FIRST)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 43-2x, 43-3x, or 43-Bx indicated?

   YES - Replace the left side impact sensor (first) (see **SIDE IMPACT SENSOR (FIRST) REPLACEMENT**). If the DTC returns, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 44-2X (44-20 TO 44-29, 44-2A TO 44-2F), 44-3X (44-30 TO 44-39, 44-3A TO 44-3F), 44-BX (44-B0 TO 44-B9, 44-BA TO 44- BF): INTERNAL FAILURE OF THE RIGHT SIDE IMPACT SENSOR (FIRST)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC42-2x, 44-3x, or 44-Bx indicated?

   YES - Replace the right side impact sensor (first) (see **SIDE IMPACT SENSOR (FIRST) REPLACEMENT**). If the DTC returns, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 45-1X (45-10 TO 45-19, 45-1A TO 45-1F): NO SIGNAL FROM THE LEFT SIDE IMPACT

SENSOR (SECOND)

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead H 07YAZ-S3AA100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 45-1x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Check the connection between the side curtain airbag subharness 2P connector and the left side impact sensor (second).

   Is the connection OK?

   YES - Go to step 5.

   NO - Repair the poor connections and retest. If the DTC 45-1x is still present, go to step 5.
5. Disconnect the left side curtain airbag 2P connector and side curtain airbag subharness (see step 5 in **DISCONNECTING SYSTEM CONNECTORS**).
6. Disconnect the side curtain airbag subharness 2P connector (A) from the left side impact sensor (second).

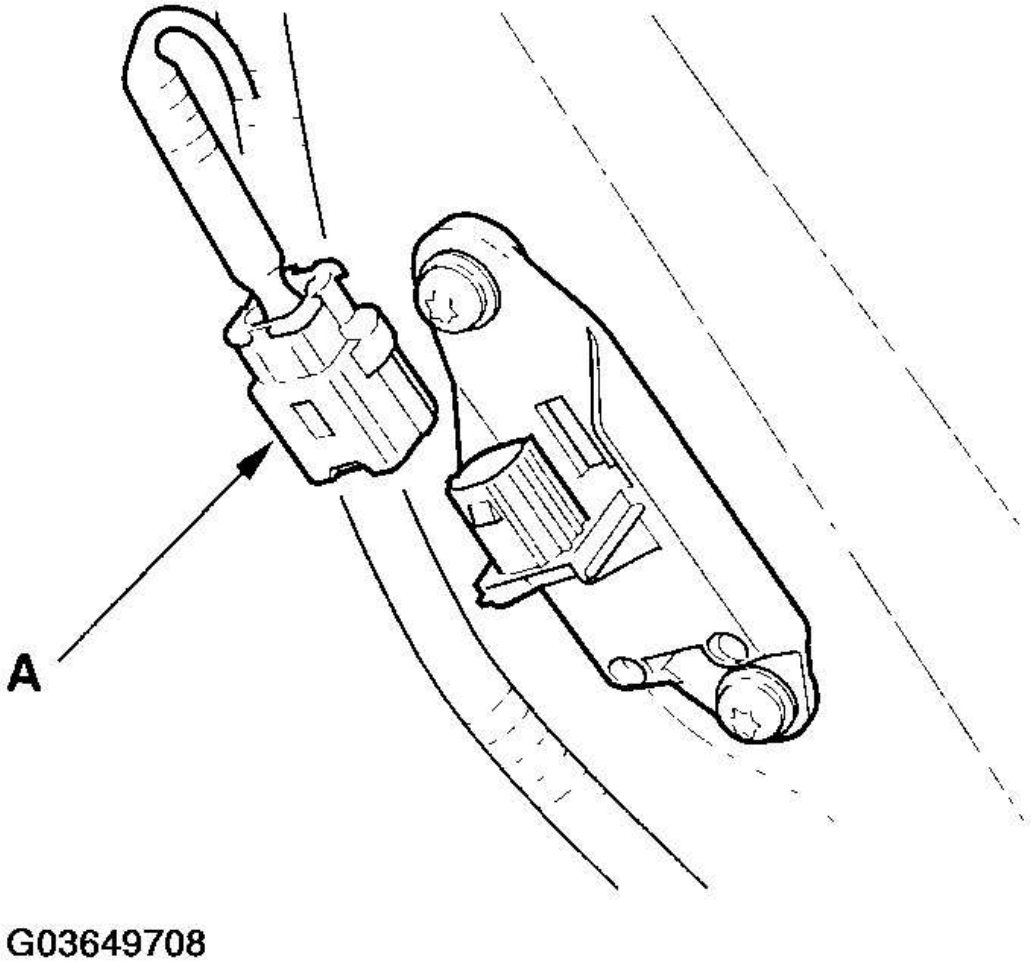


Fig. 157: Disconnecting Side Curtain Airbag Subharness 2P Connector From Left Side Impact Sensor (Second)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Disconnect SRS unit connector C (16P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
8. Check resistance between the No. 9 and No. 10 terminals of SRS unit connector C (16P). There should be an open circuit or at least 1 Mohms.

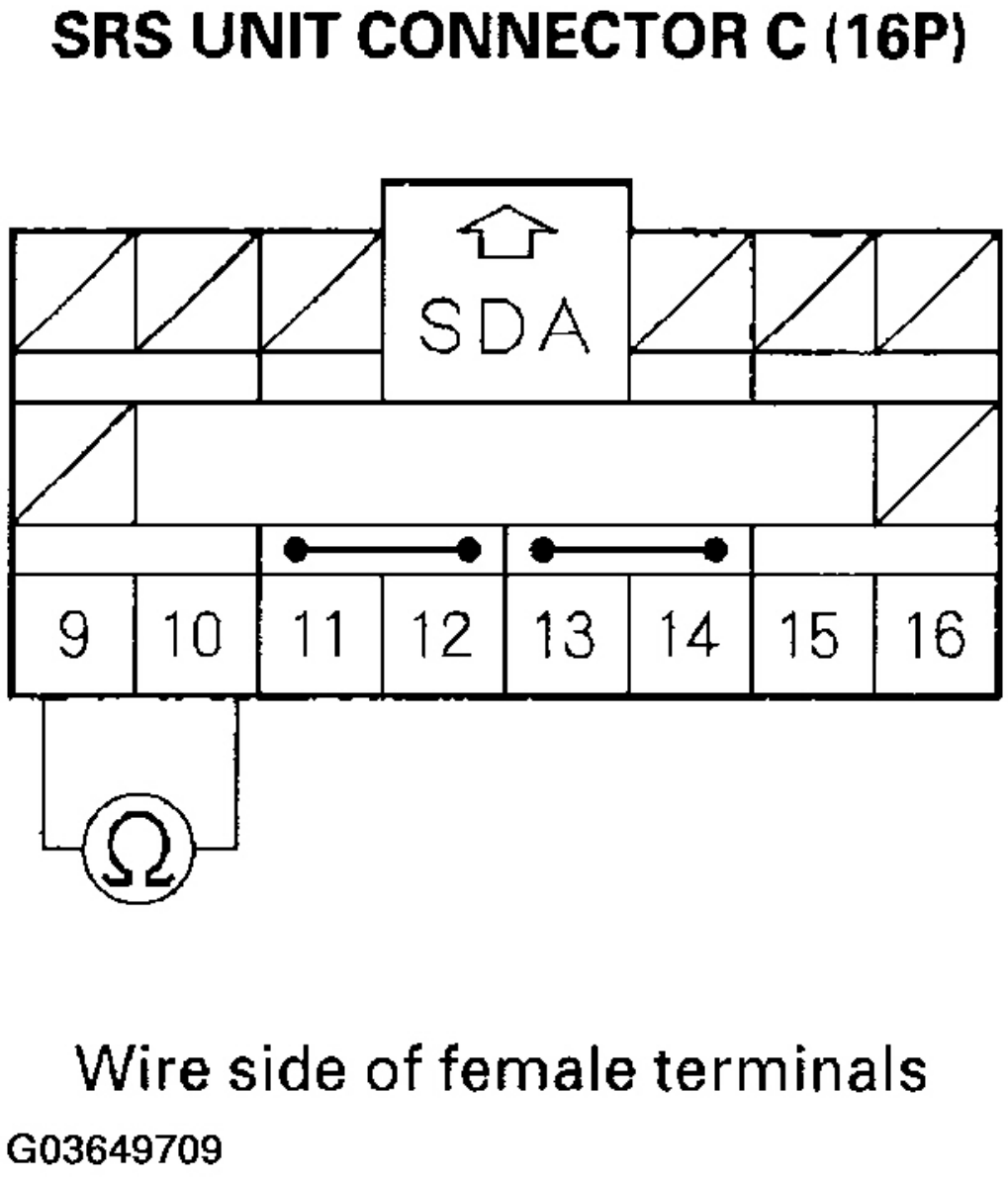


Fig. 158: Checking Resistance Between No. 9 And 10 Terminals Of SRS Unit Connector C
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 9.

NO - Short in the side curtain airbag subharness; replace the side curtain airbag subharness.

9. Check resistance between the No. 9 terminal of SRS unit connector C (16P) and body ground, and between the No. 10 terminal and body ground. There should be an open circuit or at least 1 Mohms.

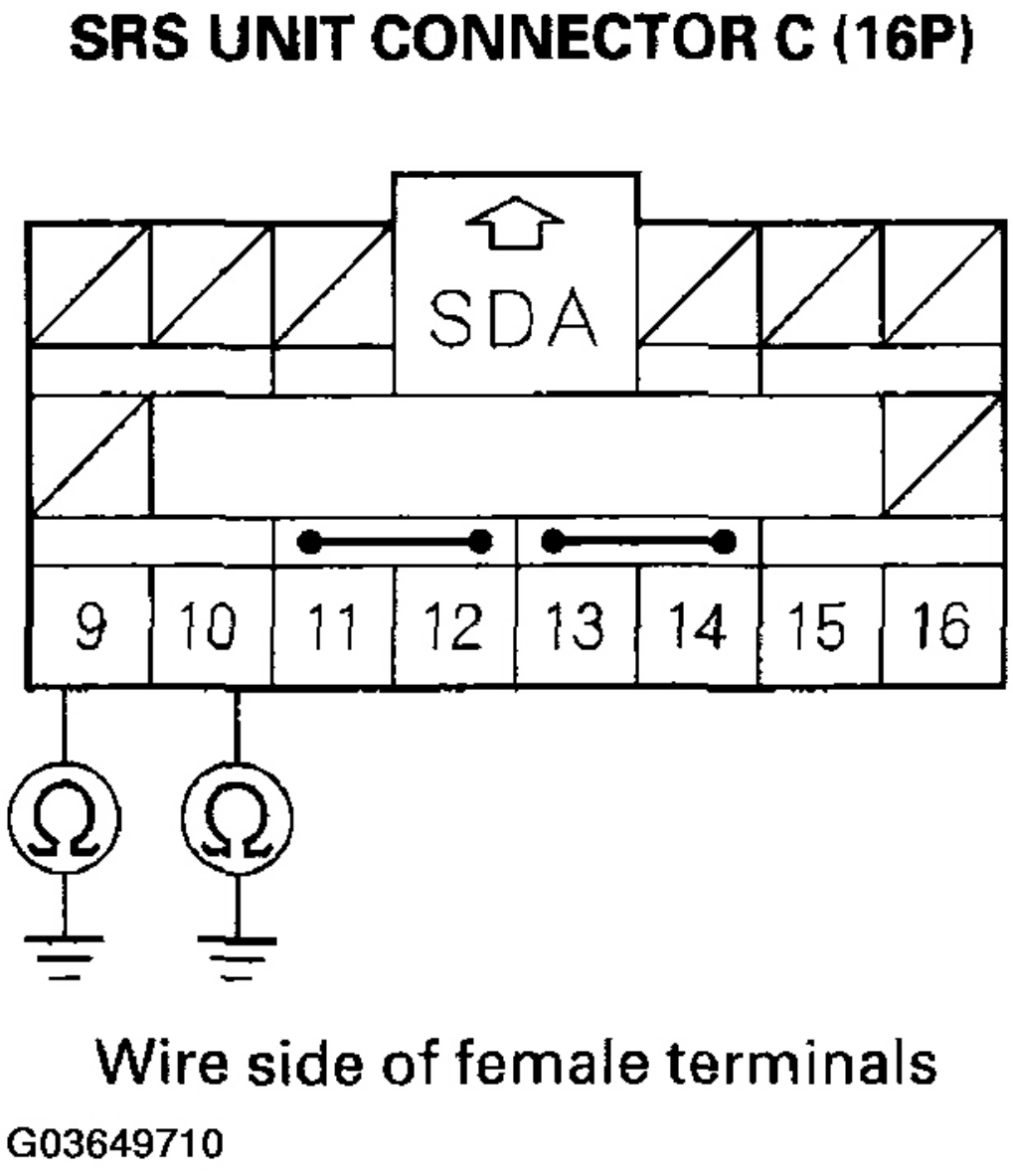


Fig. 159: Checking Resistance Between No. 9 Terminal Of SRS Unit Connector C (16P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 10.

NO - Short to ground in the side curtain airbag subharness; replace the side curtain airbag subharness.

10. Reconnect the battery negative cable.
11. Turn the ignition switch ON (II).
12. Check for voltage between the No. 9 terminal of SRS unit connector C (16P) and body ground, and between the No. 10 terminal and body ground. There should be 1 V or less.

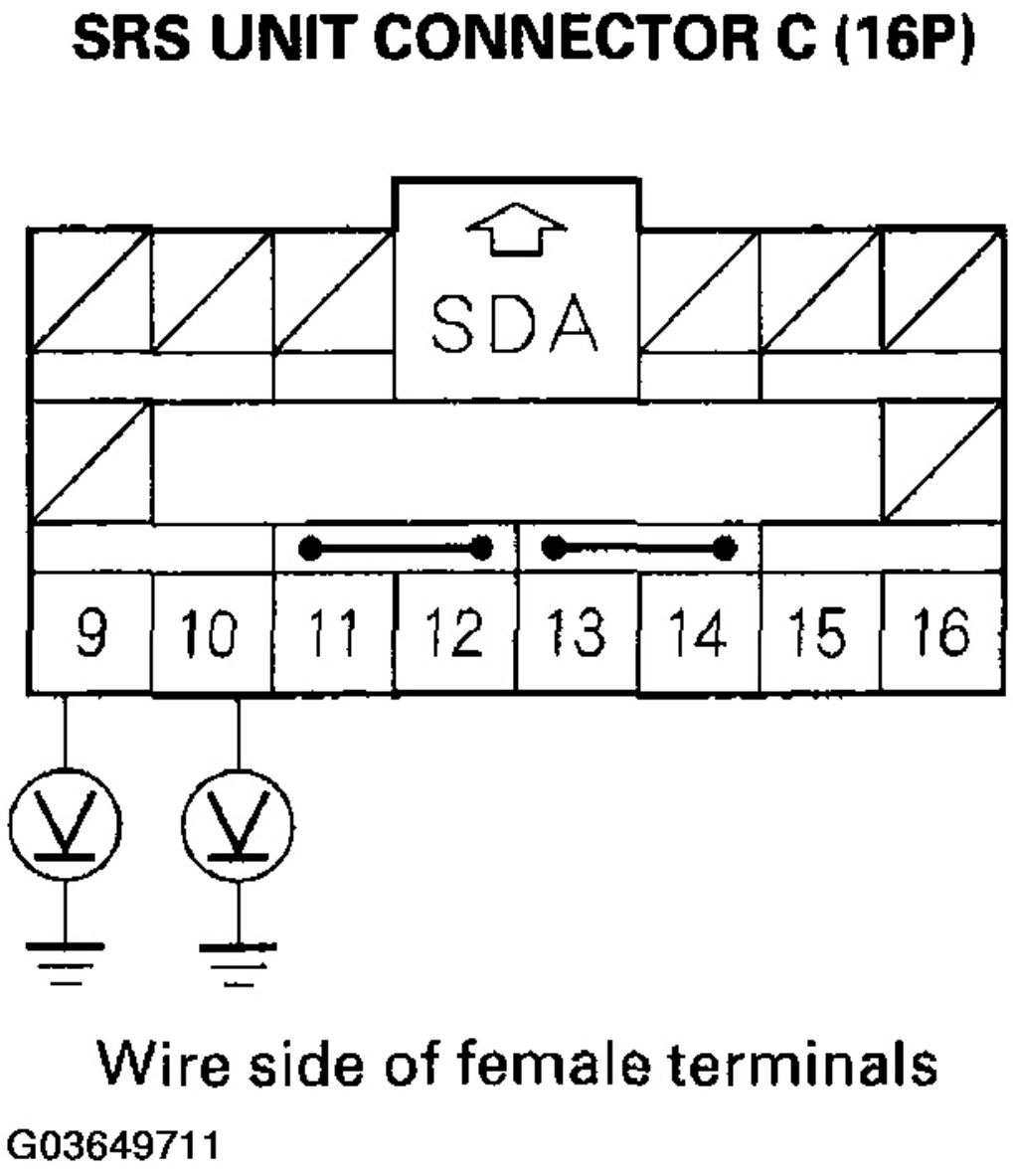


Fig. 160: Checking Voltage Between No. 9 Terminal Of SRS Unit Connector C (16P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Go to step 13.

NO - Short to power in the side curtain airbag subharness; replace the side curtain airbag subharness.

13. Turn the ignition switch OFF.
14. Connect the SRS inflator simulator (jumper connector) and simulator lead H to the side curtain airbag subharness 2P connector (A).

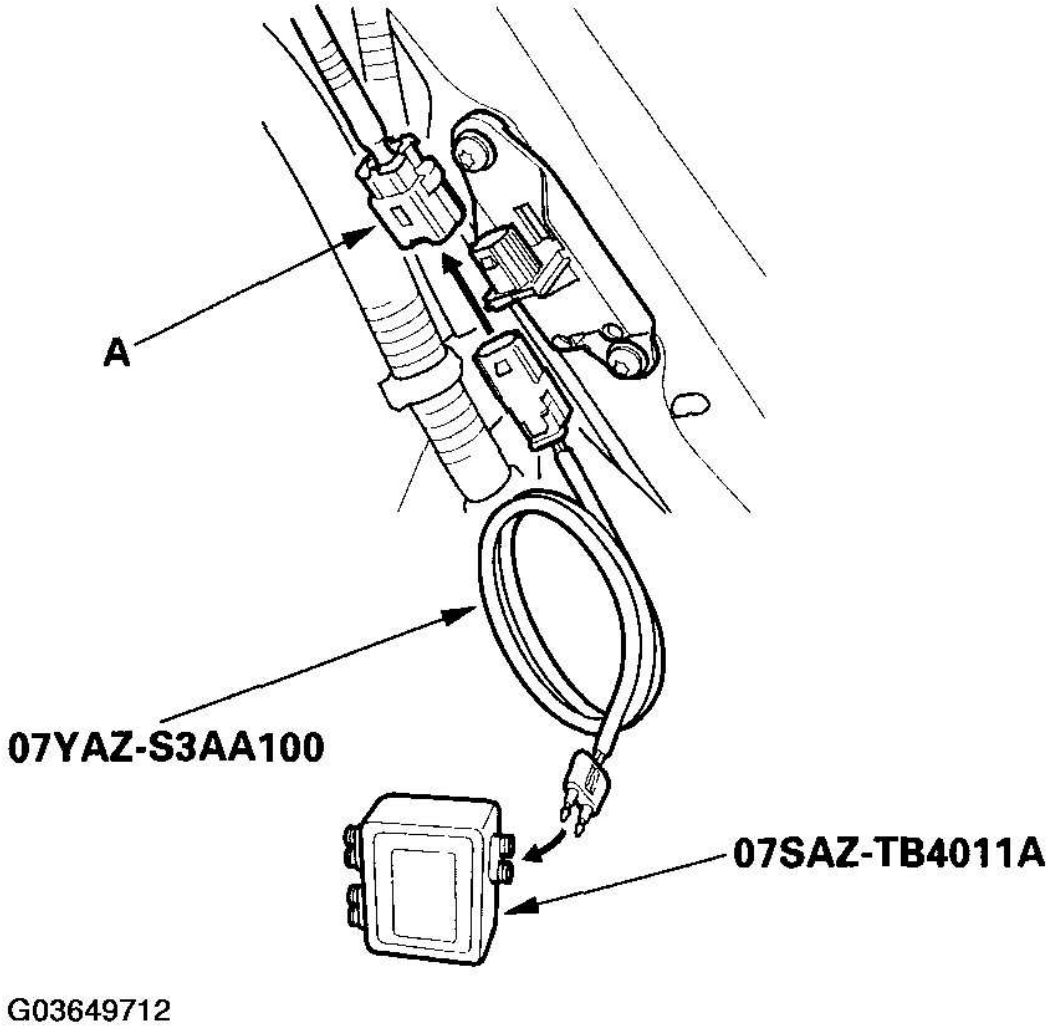


Fig. 161: Connecting SRS Inflator Simulator And Simulator Lead H To Side Curtain Airbag Subharness 2P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Check resistance between the No. 9 and No. 10 terminals of SRS unit connector C (16P). There should be 1.0 ohms or less.

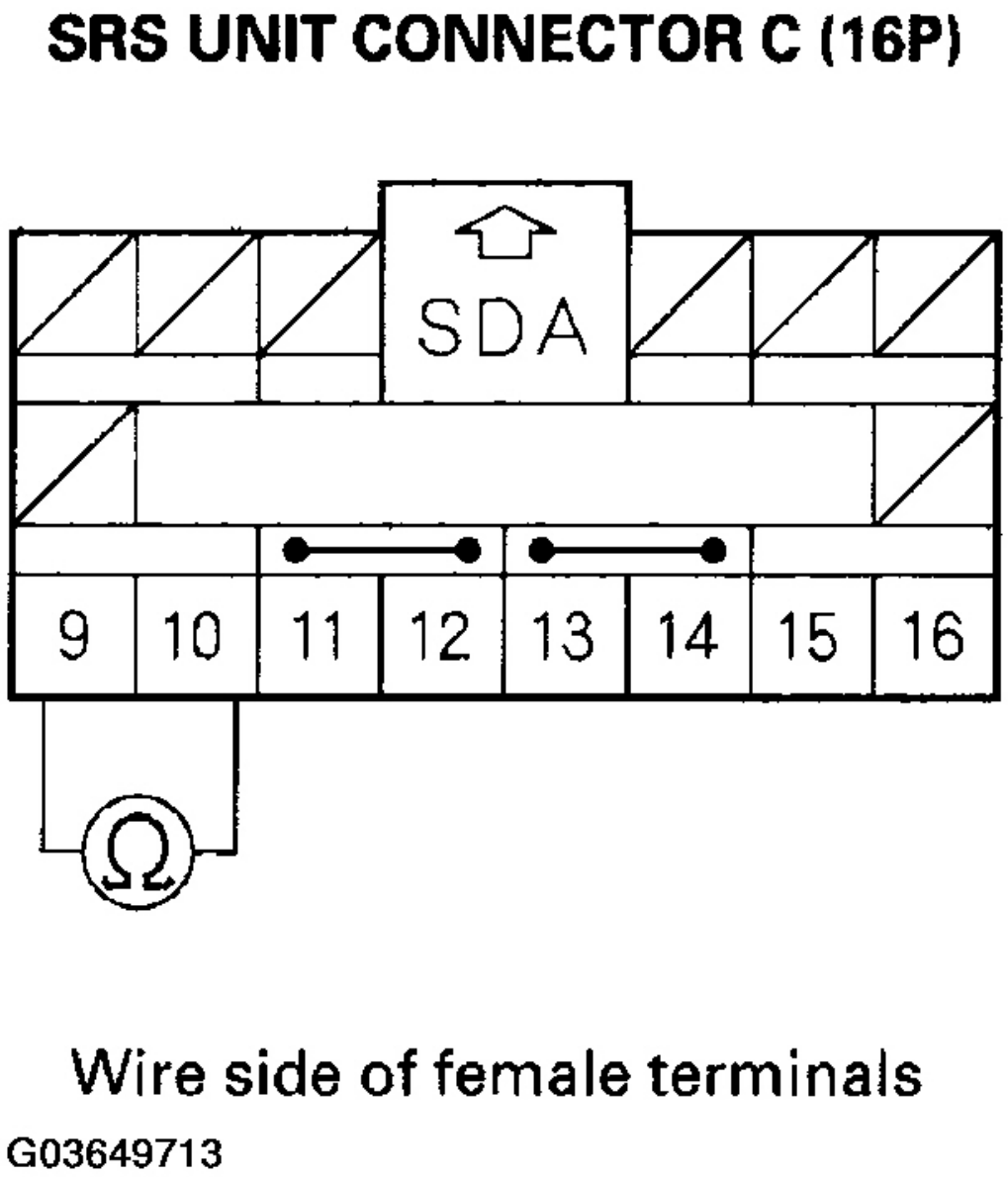


Fig. 162: Checking Resistance Between No. 9 And 10 Terminals Of SRS

Unit Connector C
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty left side impact sensor (second) or SRS unit; replace the left side impact sensor (second) (see **SIDE IMPACT SENSOR (SECOND) REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open in the side curtain airbag subharness; replace the side curtain airbag subharness.

DTC 46-1X (46-10 TO 46-19, 46-1A TO 46-1F): NO SIGNAL FROM THE RIGHT SIDE IMPACT SENSOR (SECOND)

Special Tools Required

- SRS inflator simulator 07SAZ-TB4011A
- SRS simulator lead H 07YAZ-S3AA100

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 46-1x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Check the connection between the side curtain airbag subharness 2P connector and the right side impact sensor (second).

Is the connection OK?

YES - Go to step 5.

NO - Repair the poor connections and retest. If the DTC 46-1x is still present, go to step 5.

5. Disconnect the right side curtain airbag 2P connector and side curtain airbag subharness (see step 5 in **DISCONNECTING SYSTEM CONNECTORS**).
6. Disconnect the side curtain airbag subharness 2P connector (A) from the right side impact sensor (second).

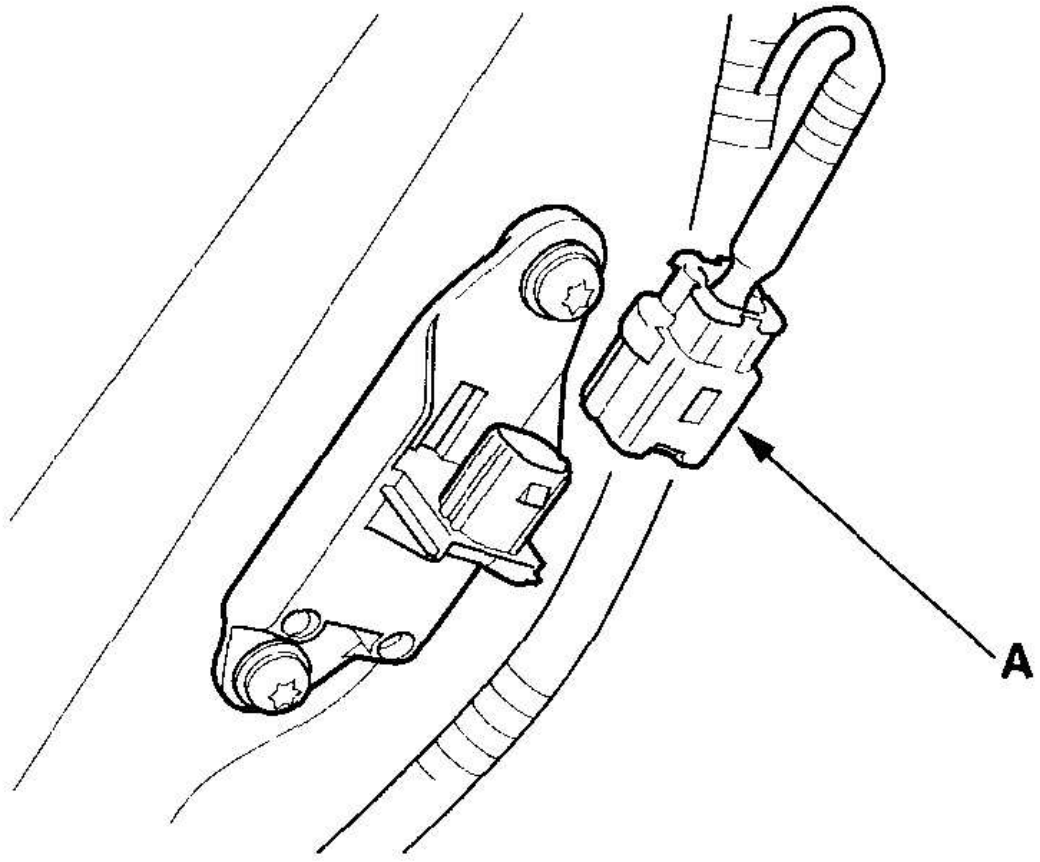


Fig. 163: Disconnecting Side Curtain Airbag Subharness 2P Connector

From Right Side Impact Sensor (Second)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Disconnect SRS unit connector C (16P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
8. Check resistance between the No. 15 and No. 16 terminals of SRS unit connector C (16P). There should be an open circuit or at least 1 Mohms.

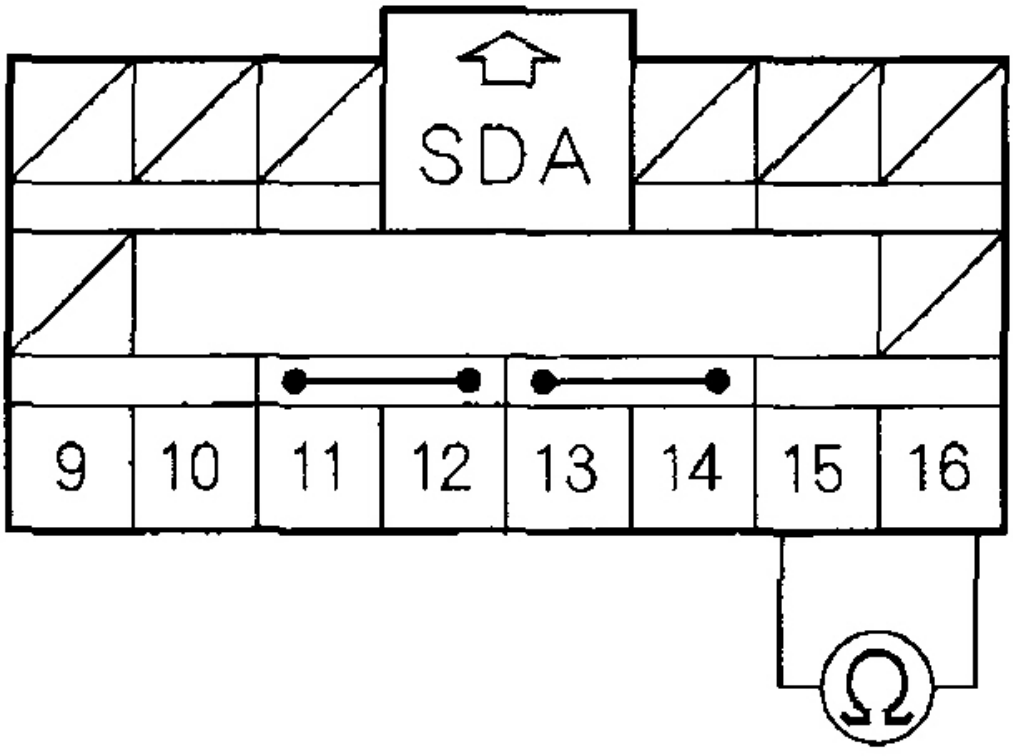


Fig. 164: Checking Resistance Between No. 15 And 16 Terminals Of SRS Unit Connector C
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 9.

NO - Short in the side curtain airbag subharness; replace the side curtain airbag subharness.

9. Check resistance between the No. 15 terminal of SRS unit connector C (16P) and body ground, and between the No. 16 terminal and body ground. There should be an open circuit or at least 1 Mohms.

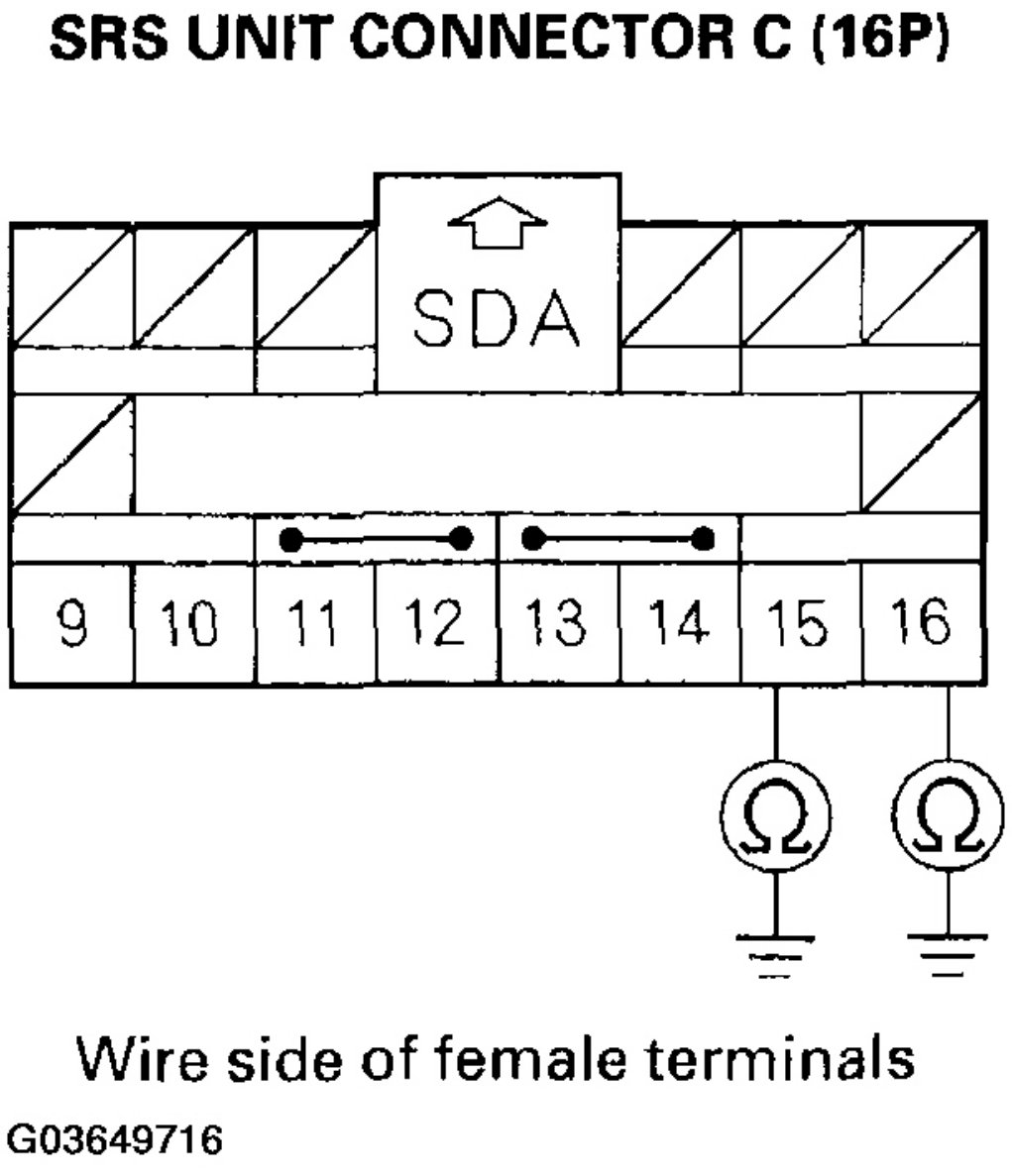


Fig. 165: Checking Resistance Between No. 15 Terminal Of SRS Unit Connector C (16P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 10.

NO - Short to ground in the side curtain airbag subharness; replace the side curtain airbag subharness.

10. Reconnect the battery negative cable.
11. Turn the ignition switch ON (II).
12. Check for voltage between the No. 15 terminal of SRS unit connector C (16P) and body ground, and between the No. 16 terminal and body ground. There should be 1 V or less.

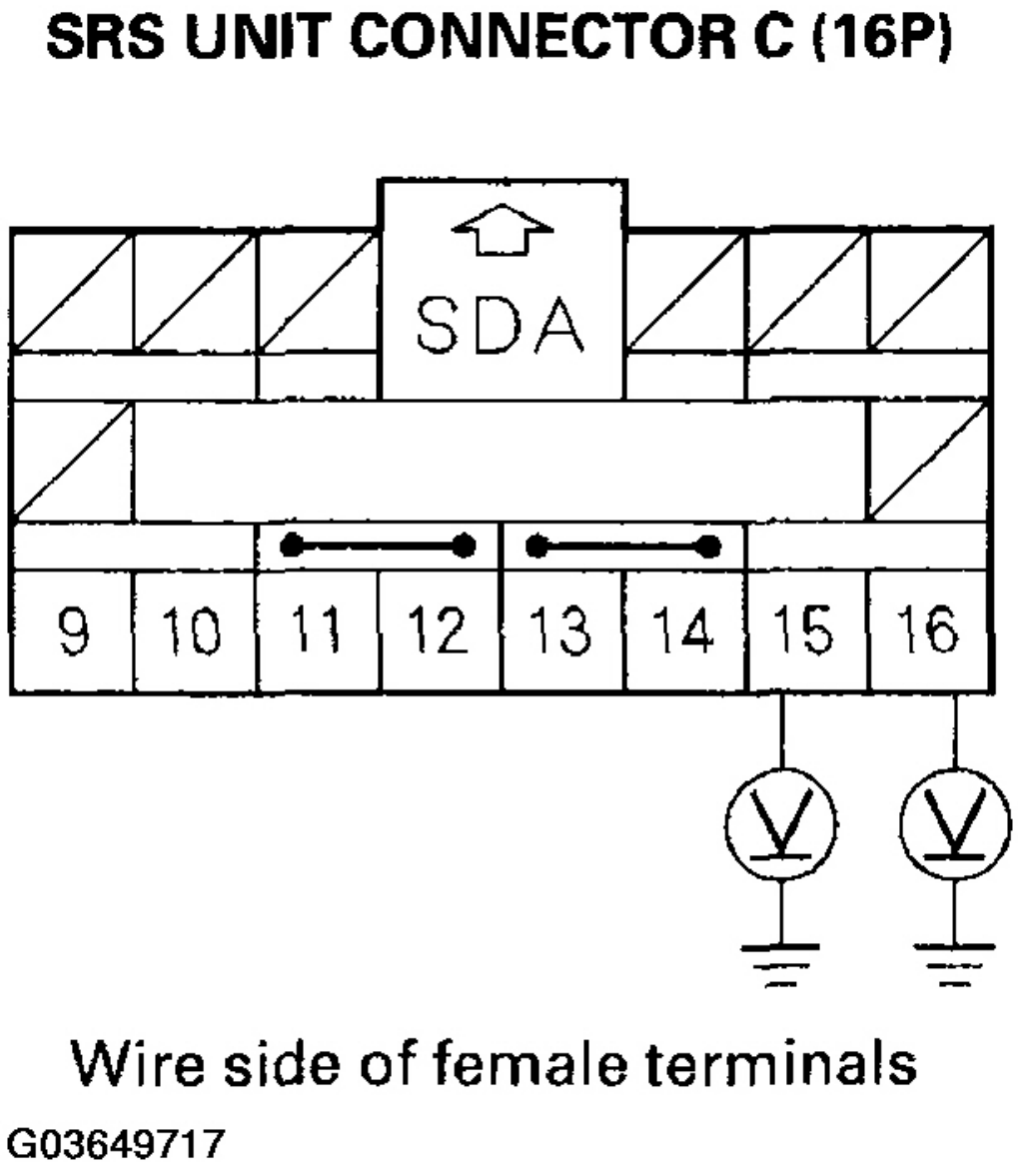


Fig. 166: Checking Voltage Between No. 15 Terminal Of SRS Unit Connector C (16P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Go to step 13.

NO - Short to power in the side curtain airbag subharness; replace the side curtain airbag subharness.

13. Turn the ignition switch OFF.
14. Connect the SRS inflator simulator (jumper connector) and simulator lead H to the side curtain airbag subharness 2P connector (A).

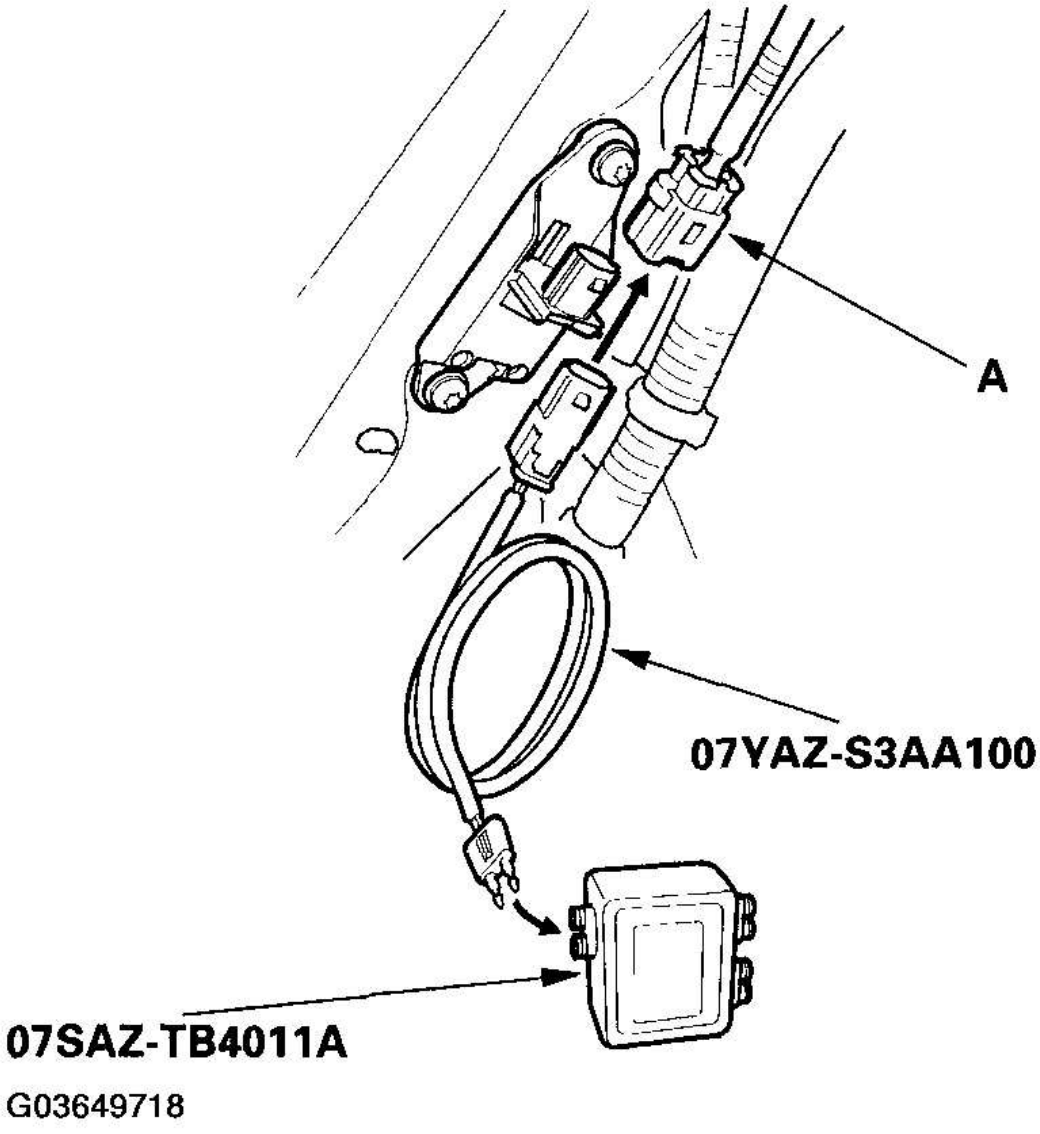


Fig. 167: Connecting SRS Inflator Simulator And Simulator Lead H To Side Curtain Airbag Subharness 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Check resistance between the No. 15 and No. 16 terminals of SRS unit connector C (16P). There should be 1.0 ohms or less.

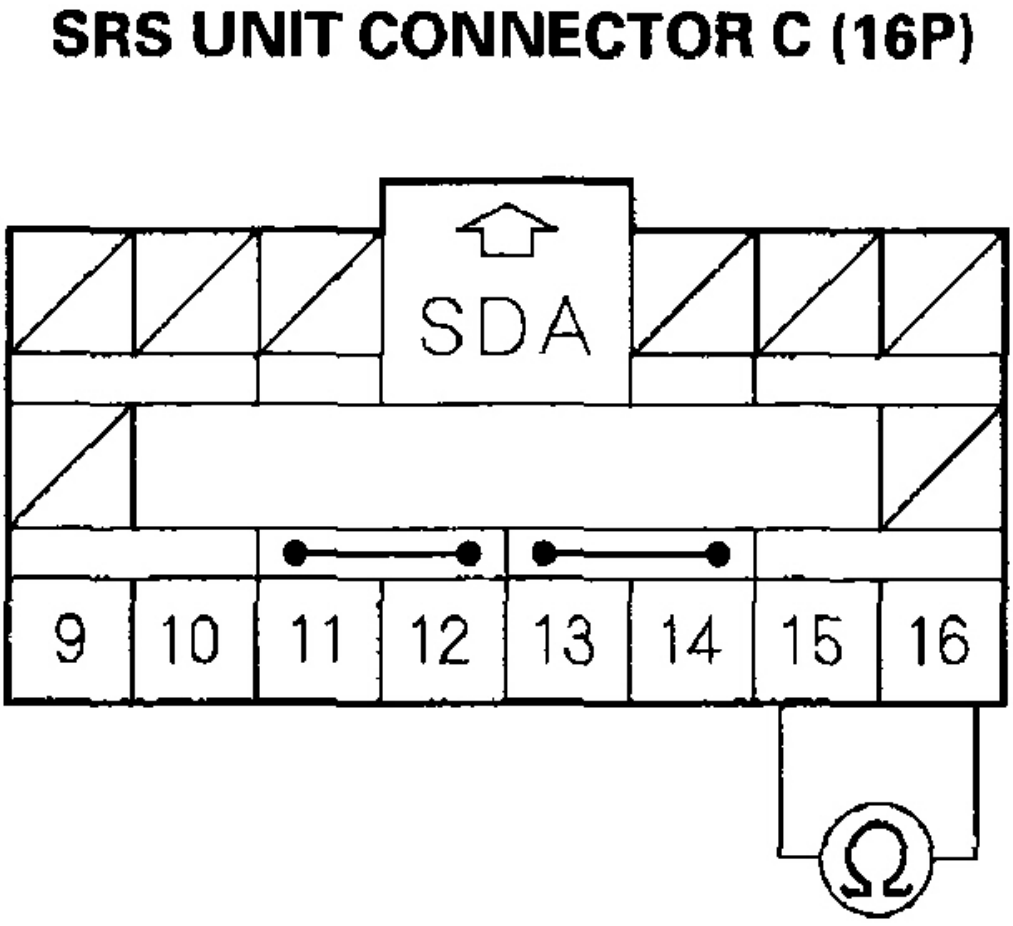


Fig. 168: Checking Resistance Between No. 15 And 16 Terminals Of SRS Unit Connector C
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty right side impact sensor (second) or SRS unit; replace the right side impact sensor (second) (see **SIDE IMPACT SENSOR (SECOND) REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open in the side curtain airbag subharness; replace the side curtain airbag subharness.

DTC 45-2X (45-20 TO 45-29, 45-2A TO 45-2F), 45-3X (45-30 TO 45-39, 45-3A TO 45-3F), 45-BX (45-B0 TO 45-B9, 45-BA TO 45-BF): INTERNAL FAILURE OF THE LEFT SIDE IMPACT SENSOR (SECOND)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 45-2x, 45-3x, or 45-Bx indicated?

YES - Replace the left side impact sensor (second) (see **SIDE IMPACT SENSOR (SECOND) REPLACEMENT**). If the DTC returns, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 46-2X (46-20 TO 46-29, 46-2A TO 46-2F), 46-3X (46-30 TO 46-39, 46-3A TO 46-3F), 46-BX (46-B0 TO 46-B9, 46-BA TO 46-BF): INTERNAL FAILURE OF THE RIGHT SIDE IMPACT SENSOR (SECOND)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 46-2x, 46-3x, or 46-Bx

indicated?

YES - Replace the right side impact sensor (second) (see **SIDE IMPACT SENSOR (SECOND) REPLACEMENT**). If the DTC returns, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 51-2X (51-20 TO 51-29, 51-2A TO 51-2F), 51-4X (51-40 TO 51-49, 51-4A TO 51-4F), 51-7X (51-70 TO 51-79, 51-7A TO 51-7F): INTERNAL FAILURE OF THE SRS UNIT

NOTE: Before troubleshooting any of these DTCs, check the battery/system voltage. If the voltage is low, repair the charging system or replace the battery before troubleshooting the SRS. If the battery/system voltage is now OK, ask the customer if the battery ever went dead. A dead battery may trigger one of these DTCs.

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 51-2x, 51-4x, or 51-7x indicated?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 52-8X (52-80 TO 52-89, 52-8A TO 52-8F), 52-9X (52-90 TO 52-99, 52-9A TO 52-9F), 52-AX (52-A0 TO 52-A9, 52-AA TO 52-AF): INTERNAL FAILURE OF THE SRS UNIT

NOTE: Before troubleshooting any of these DTCs, check the battery/system voltage. If the voltage is low, repair the charging system or replace the battery before troubleshooting the SRS. If the battery/system voltage is now OK, ask the customer if the battery ever went dead. A dead battery may trigger one of these DTCs.

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 52-8x, 52-9x, or 52-Ax indicated?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 52-BX (52-B0 TO 52-B9, 52-BA TO 52-BF), 52-CX (52-C0 TO 52-C9, 52-CA TO 52-CF), 52-DX (52-D0 TO 52-D9, 52-DA TO 52-DF): INTERNAL FAILURE OF THE SRS UNIT

NOTE: Before troubleshooting any of these DTCs, check the battery/system voltage. If the voltage is low, repair the charging system or replace the battery before troubleshooting the SRS. If the battery/system voltage is now OK, ask the customer if the battery ever went dead. A dead battery may trigger one of these DTCs.

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 52-Bx, 52-Cx, or 52-Dx indicated?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 52-EX (52-E0 TO 52-E9, 52-EA TO 52-EF), 52-FX (52-F0 TO 52-F9, 52-FA TO 52-FF), 53-1X (53-10 TO 53-19, 53-1A TO 53-1F): INTERNAL FAILURE OF THE SRS UNIT

NOTE: Before troubleshooting any of these DTCs, check the battery/system voltage. If the voltage is low, repair the charging system or replace the battery before troubleshooting the SRS. If the battery/system voltage is now OK, ask the customer if the battery ever went dead. A dead battery may trigger one of these DTCs.

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 52-Ex, 52-Fx, or 53-1x indicated?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 53-2X (53-20 TO 53-29, 53-2A TO 53-2F), 53-3X (53-30 TO 53-39, 53-3A TO 53-3F), 53-4X (53-40 TO 53-49, 53-4A TO 53-4F): INTERNAL FAILURE OF THE SRS UNIT

NOTE: Before troubleshooting any of these DTCs, check the

battery/system voltage. If the voltage is low, repair the charging system or replace the battery before troubleshooting the SRS. If the battery/system voltage is now OK, ask the customer if the battery ever went dead. A dead battery may trigger one of these DTCs.

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 53-2x, 53-3x, or 53-4x indicated?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 54-1X (54-10 TO 54-19, 54-1A TO 54-1F), 54-2X (54-20 TO 54-29, 54-2A TO 54-2F), 54-3X (54-30 TO 54-39, 54-3A TO 54-3F): INTERNAL FAILURE OF THE SRS UNIT

NOTE: Before troubleshooting any of these DTCs, check the battery/system voltage. If the voltage is low, repair the charging system or replace the battery before troubleshooting the SRS. If the battery/system voltage is now OK, ask the customer if the battery ever went dead. A dead battery may trigger one of these DTCs.

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 54-1x, 54-2x, or 54-3x

indicated?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 54-4X (54-40 TO 54-49, 54-4A TO 54-4F), 54-5X (54-50 TO 54-59, 54-5A TO 54-5F), 54-6X (54-60 TO 54-69,54-6A TO 54-6F): INTERNAL FAILURE OF THE SRS UNIT

NOTE: Before troubleshooting any of these DTCs, check the battery/system voltage. If the voltage is low, repair the charging system or replace the battery before troubleshooting the SRS. If the battery/system voltage is now OK, ask the customer if the battery ever went dead. A dead battery may trigger one of these DTCs.

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 54-4x, 54-5x, or 54-6x indicated?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 54-7X (54-70 TO 54-79,54-7A TO 54-7F), 55-1X (55-10 TO 55-19,55-1A TO 55-1F), 55-2X (55-20 TO 55-29,55-2A TO 55-2F): INTERNAL FAILURE OF THE SRS UNIT

NOTE: Before troubleshooting any of these DTCs, check the battery/system voltage. If the voltage is low, repair the

charging system or replace the battery before troubleshooting the SRS. If the battery/system voltage is now OK, ask the customer if the battery ever went dead. A dead battery may trigger one of these DTCs.

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 54-7x, 55-1 x, or 55-2x indicated?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 55-3X (55-30 TO 55-39, 55-3A TO 55-3F), 55-4X (55-40 TO 55-49, 55-4A TO 55-4F), 55-7X (55-70 TO 55-79, 55-7A TO 55-7F): INTERNAL FAILURE OF THE SRS UNIT

NOTE: Before troubleshooting any of these DTCs, check the battery/system voltage. If the voltage is low, repair the charging system or replace the battery before troubleshooting the SRS. If the battery/system voltage is now OK, ask the customer if the battery ever went dead. A dead battery may trigger one of these DTCs.

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 55-3x, 55-4x, or 55-7x indicated?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC D1-11, D2-11, D3-11, D4-11, D7-11, E2-11, E4-11, F1-11, F2-11, F3-11, F4-11: AIRBAGS, SIDE AIRBAGS, AND/OR SEAT BELT TENSIONERS DEPLOYED

The SRS unit must be replaced after any airbags and/or tensioners have deployed (see **COMPONENT REPLACEMENT/INSPECTION AFTER DEPLOYMENT**).

DTC 61-1X (61-10 TO 61-19,61-1A TO 61-1F): OPEN IN DRIVER'S SEAT BELT BUCKLE SWITCH (WITH POWER SEAT)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), then buckle and unbuckle the driver's seat belt several times.
3. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

   Is DTC 61-1x indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**).
4. Turn the ignition switch OFF.
5. Disconnect the driver's seat wire harness 3P connector from the driver's seat belt buckle switch 3P connector (A).

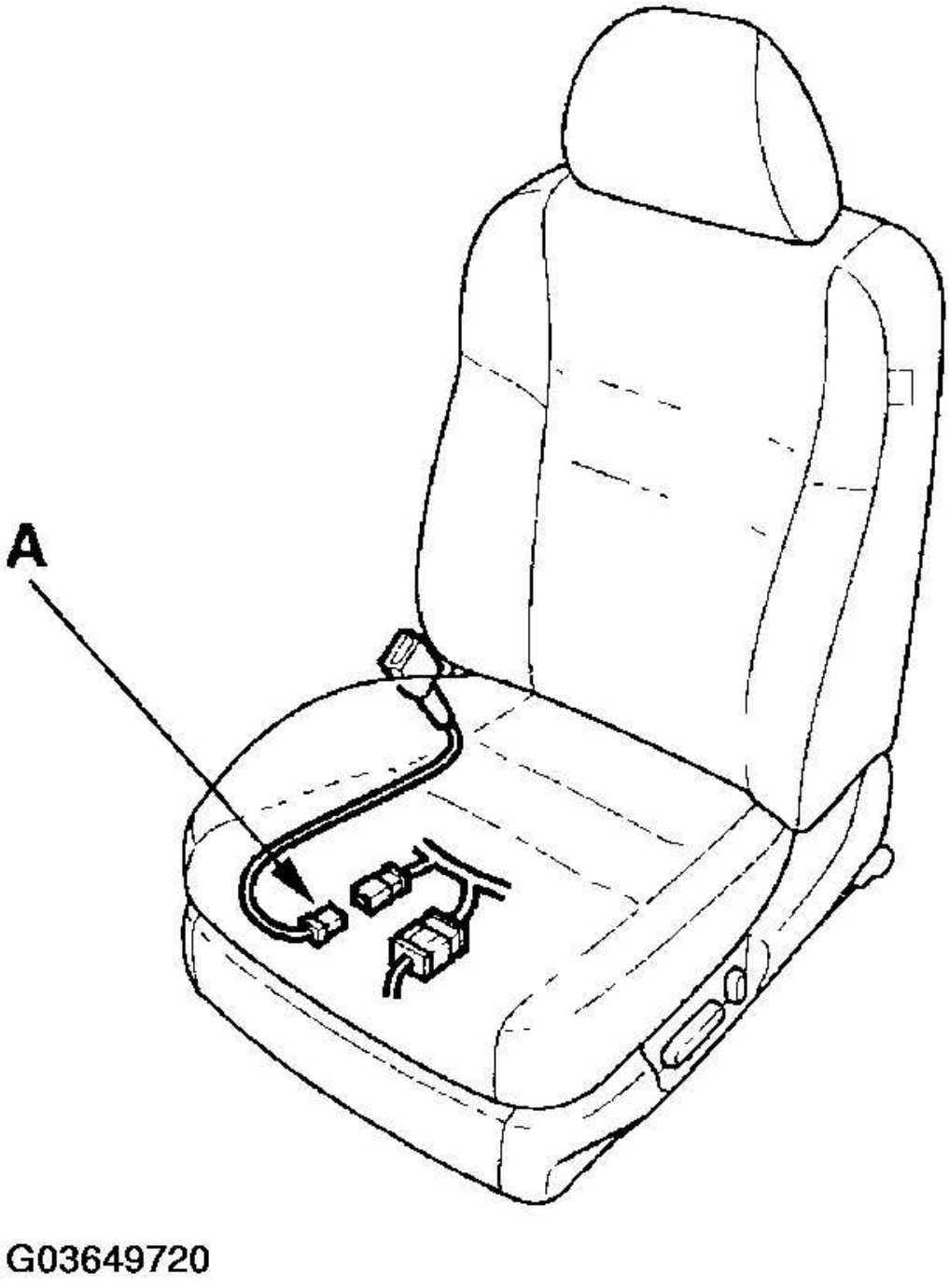


Fig. 169: Disconnecting Driver's Seat Wire Harness 3P Connector From

Driver's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Buckle the driver's seat belt.

   Check resistance between the No. 1 and No. 3 terminals of the driver's seat belt buckle switch 3P connector. There should be 0-1 ohms.

   Check resistance between the No. 2 and No. 3 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

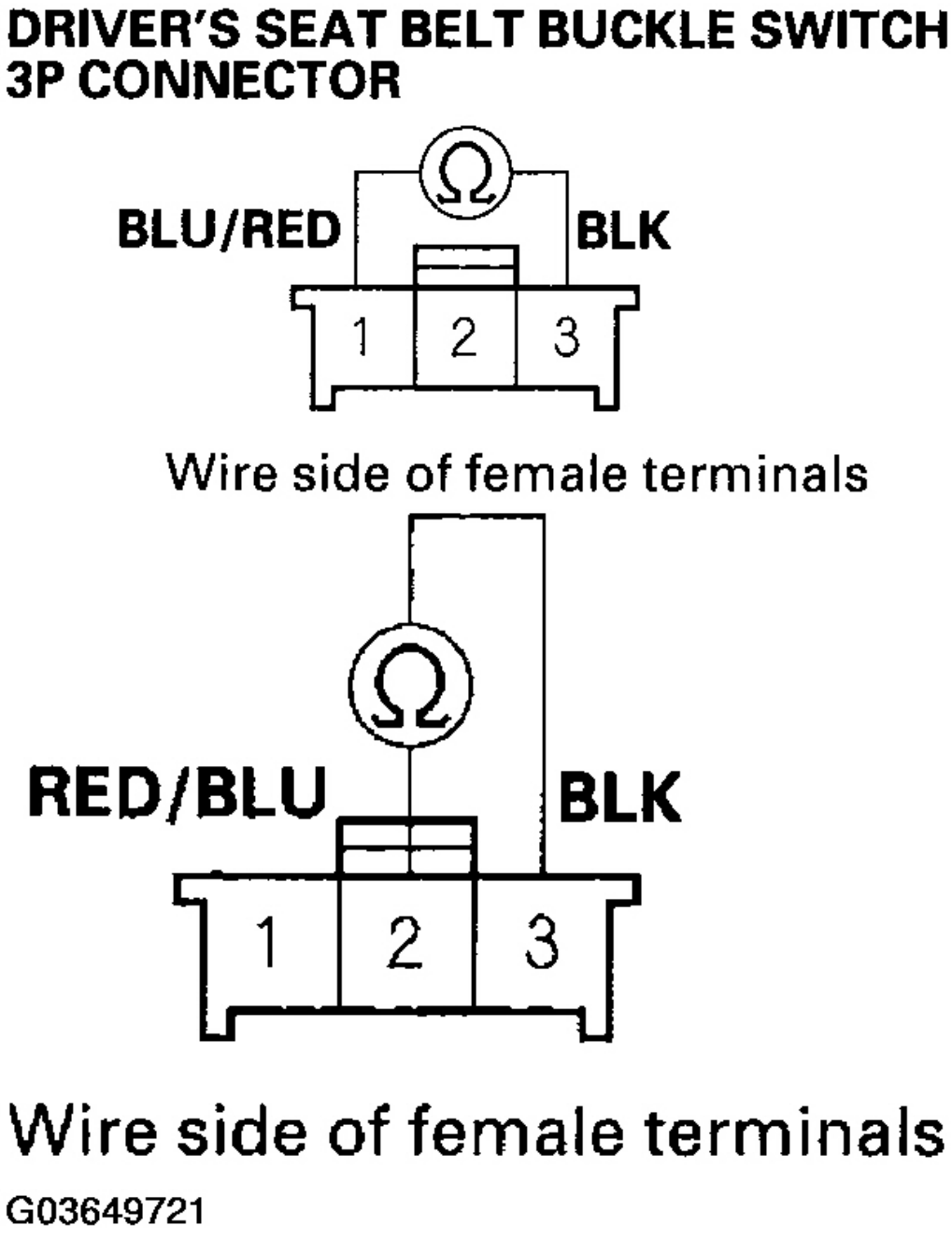


Fig. 170: Checking Resistance Between No. 1 And 3 Terminals Of Driver's Seat Belt Buckle Switch 3P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 7.

NO - Replace the driver's seat belt buckle assembly (see **FRONT SEAT BELT REPLACEMENT**), then clear the DTC.

7. Unbuckle the driver's seat belt.

   Check resistance between the No. 2 and No. 3 terminals of the driver's seat belt buckle switch 3P connector. There should be 0-1 ohms.

   Check resistance between the No. 1 and No. 3 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

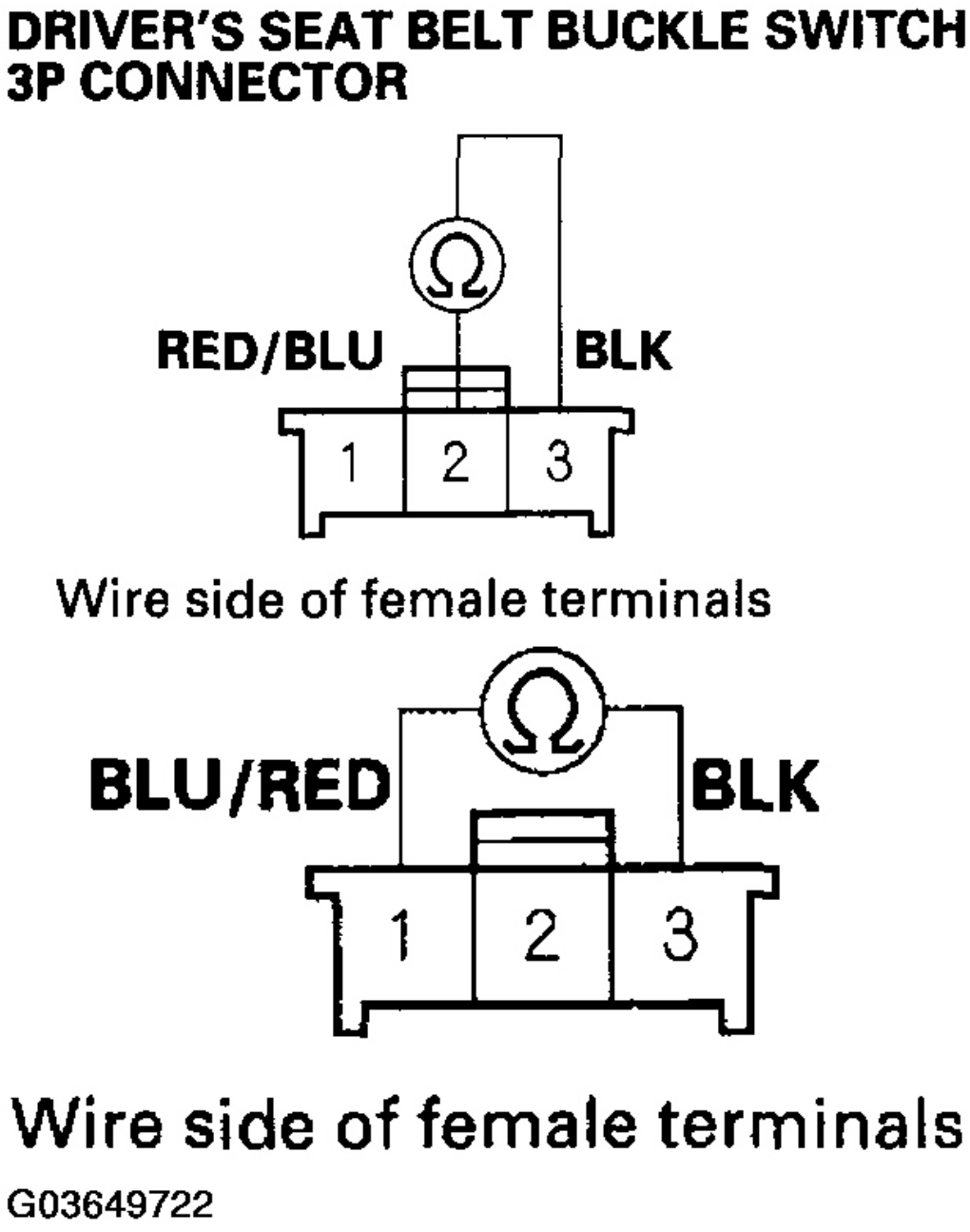


Fig. 171: Checking Resistance Between No. 2 And 3 Terminals Of Driver's Seat Belt Buckle Switch 3P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 8.

NO - Replace the driver's seat belt buckle assembly, then clear the DTC.

8. Check resistance between the No. 3 terminal of the driver's seat wire harness 3P connector and body ground. There should be 0-1 ohms.

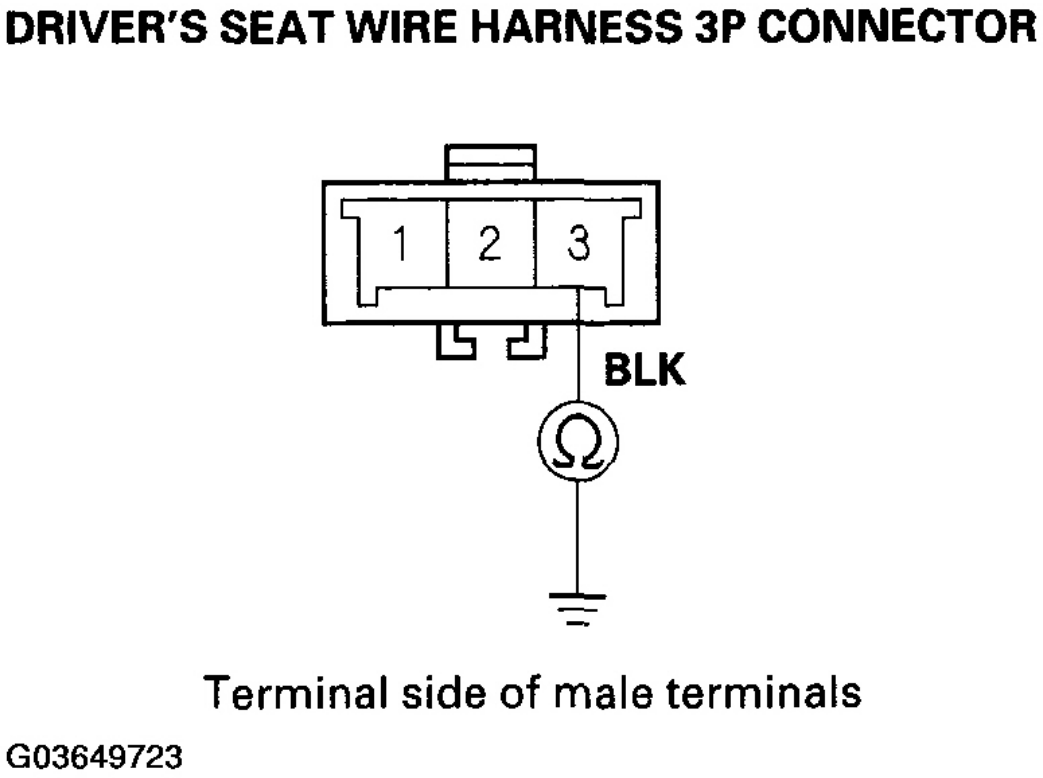


Fig. 172: Checking Resistance Between No. 3 Terminal Of Driver's Seat Wire Harness 3P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 9.

NO - Open in the driver's seat wire harness or floor wire harness, or poor

ground connection at G601 (see **FLOOR WIRE HARNESS (LEFT BRANCH) (4-DOOR)**). If G601 is OK, replace the faulty harness.

9. Disconnect the negative cable from the battery.
10. Disconnect both seat belt tensioner 4P connectors from the floor wire harness (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Check resistance between the No. 17 terminal of SRS unit connector B (28P) and the No. 1 terminal of the driver's seat wire harness 3P connector. There should be 0-1 ohms.

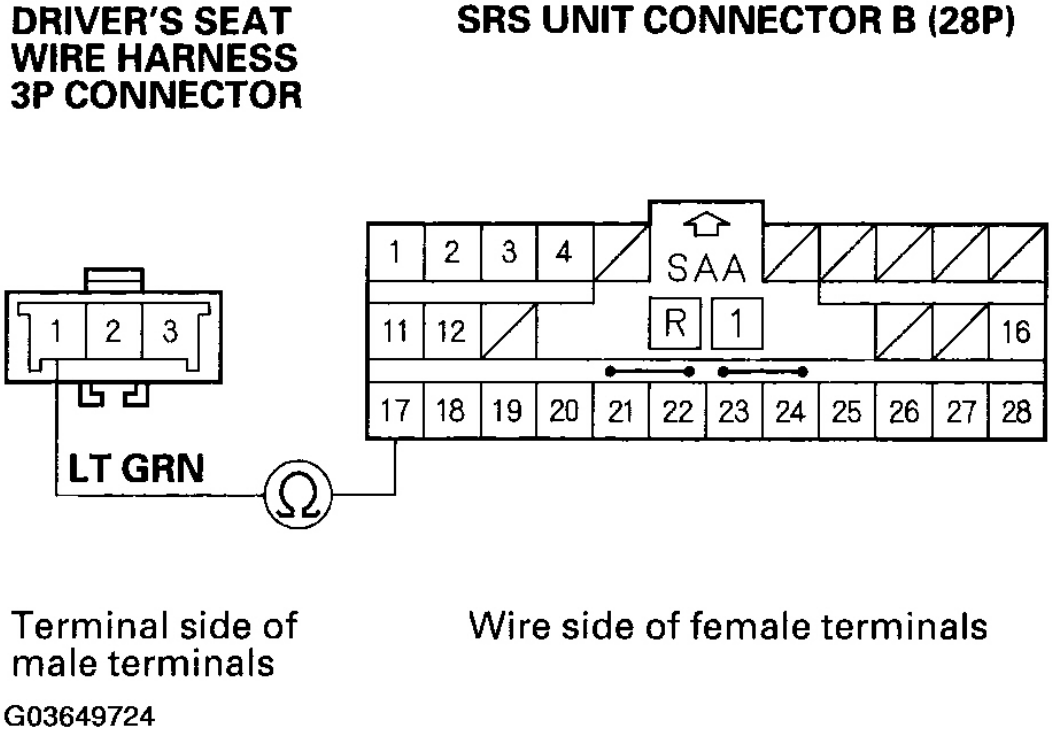


Fig. 173: Checking Resistance Between No. 17 Terminal Of SRS Unit Connector B (28P) And No. 1 Terminal Of Driver's Seat Wire Harness 3P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 13.

NO - Open in the driver's seat wire harness or floor wire harness; replace the faulty harness.

13. Check resistance between the No. 11 terminal of SRS unit connector B (28P) and the No. 2 terminal of the driver's seat wire harness 3P connector. There should be 0-1 ohms.

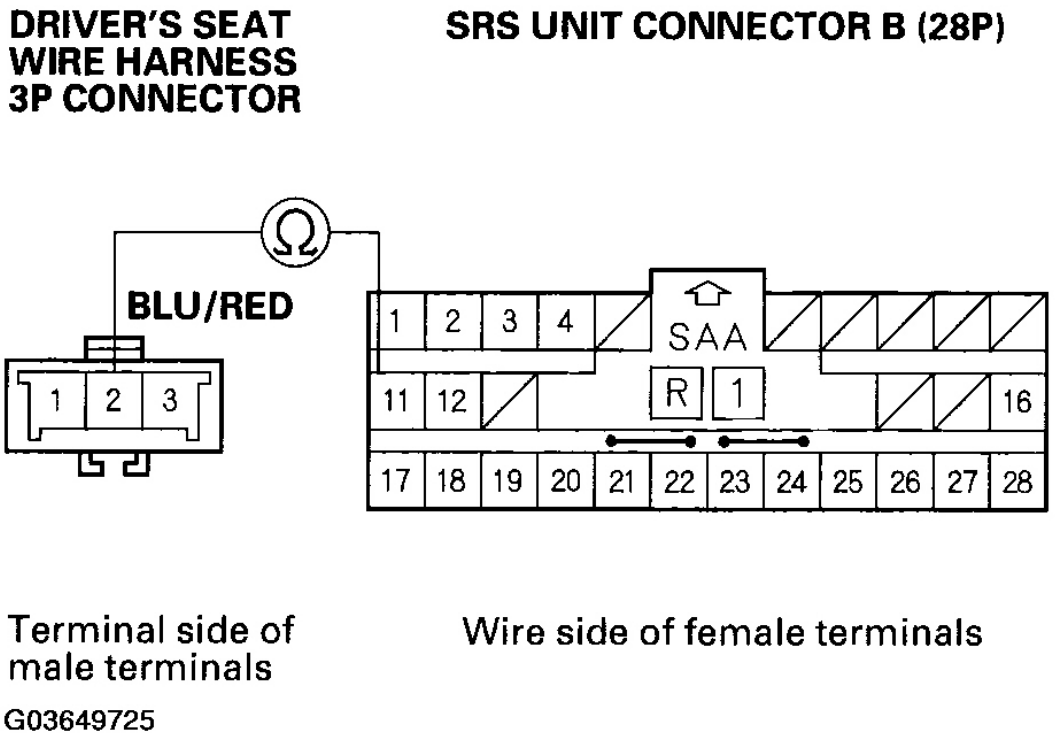


Fig. 174: Checking Resistance Between No. 11 Terminal Of SRS Unit Connector B (28P) And No. 2 Terminal Of Driver's Seat Wire Harness 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open in the driver's seat wire harness or floor wire harness, or poor connection at the floor wire harness. Check the connections at the floor wire harness, connector F (14P), and connector H (14P) at the under-dash fuse/relay box. If the connections are OK, replace the faulty harness or part.

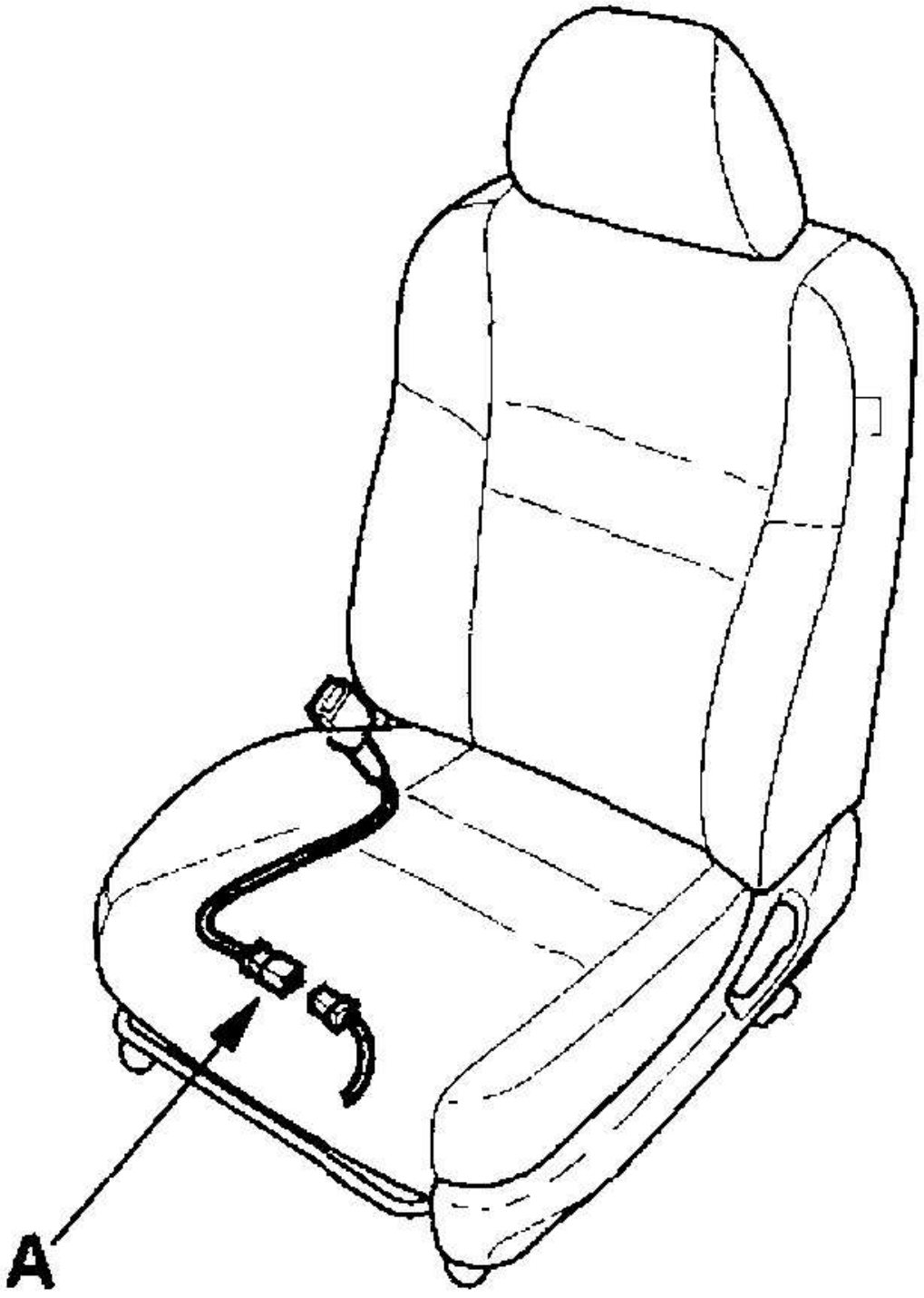
DTC 61-1X (61-10 TO 61-19,61-1A TO 61-1F): OPEN IN DRIVER'S SEAT BELT BUCKLE SWITCH (WITHOUT POWER SEAT)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), then buckle and unbuckle the driver's seat belt several times.
3. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

   Is DTC 61-1x indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**).
4. Turn the ignition switch OFF.
5. Disconnect the floor wire harness 3P connector from the driver's seat belt buckle switch 3P connector (A).



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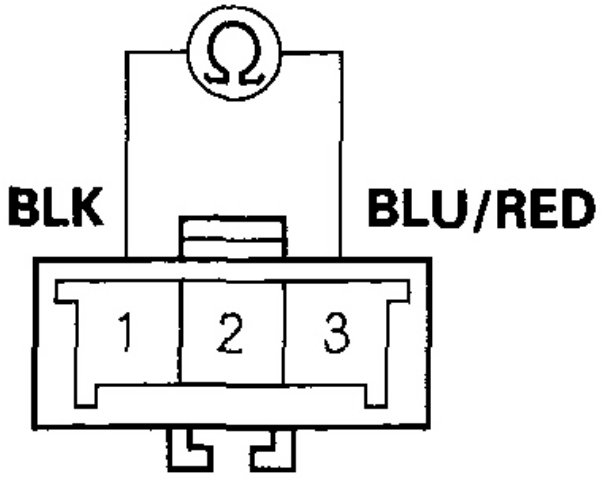
Fig. 175: Disconnecting Floor Wire Harness 3P Connector From Driver's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Buckle the driver's seat belt.

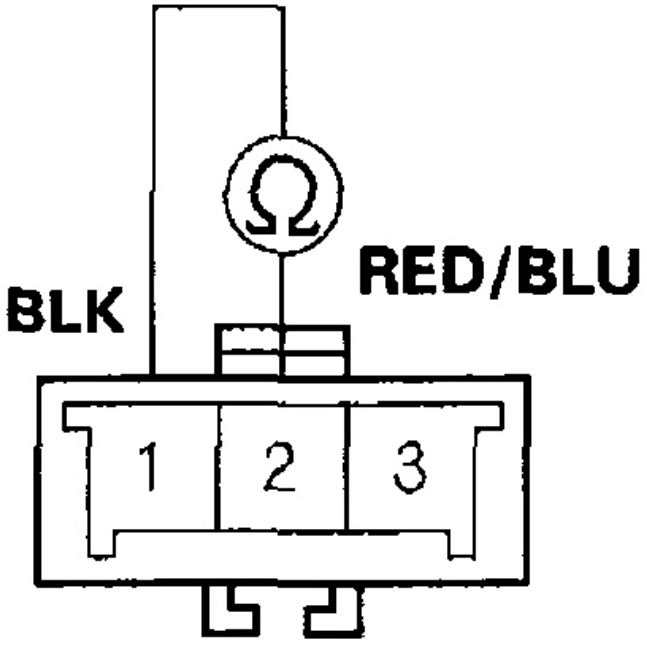
   Check resistance between the No. 1 and No. 3 terminals of the driver's seat belt buckle switch 3P connector. There should be 0-1 ohms.

   Check resistance between the No. 1 and No. 2 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

DRIVER'S SEAT BELT BUCKLE SWITCH 3P CONNECTOR



Terminal side of male terminals



Terminal side of male terminals

G03649727

Fig. 176: Checking Resistance Between No. 1 And 3 Terminals Of Driver's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 7.

NO - Replace the driver's seat belt buckle assembly (see **SEAT BELT BUCKLE**), then clear the DTC.

7. Unbuckle the driver's seat belt.

Check resistance between the No. 1 and No. 2 terminals of the driver's seat belt buckle switch 3P connector. There should be 0-1 ohms.

Check resistance between the No. 1 and No. 3 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

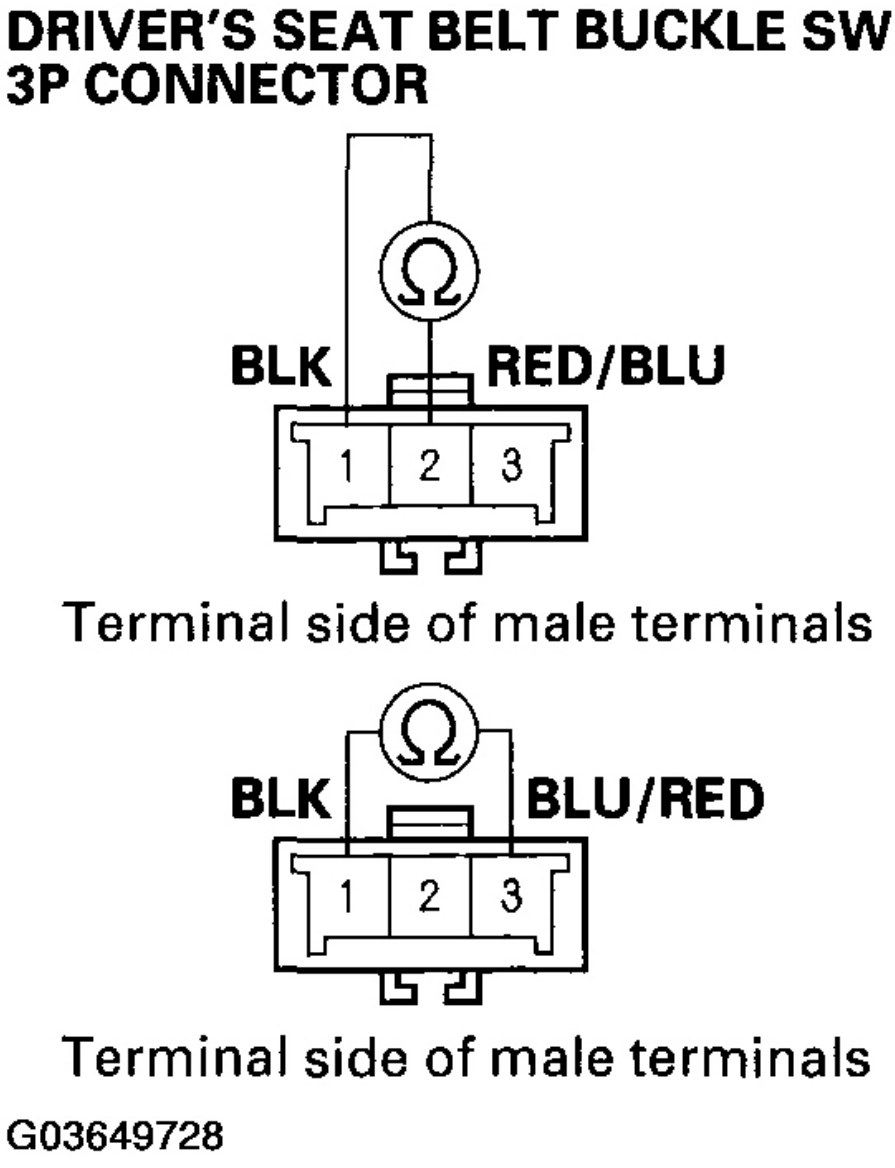


Fig. 177: Checking Resistance Between No. 1 And 2 Terminals Of Driver's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 8.

NO - Replace the driver's seat belt buckle assembly (see **SEAT BELT BUCKLE**), then clear the DTC.

8. Check resistance between the No. 1 terminal of the floor wire harness 3P connector and body ground. There should be 0-1 ohms.

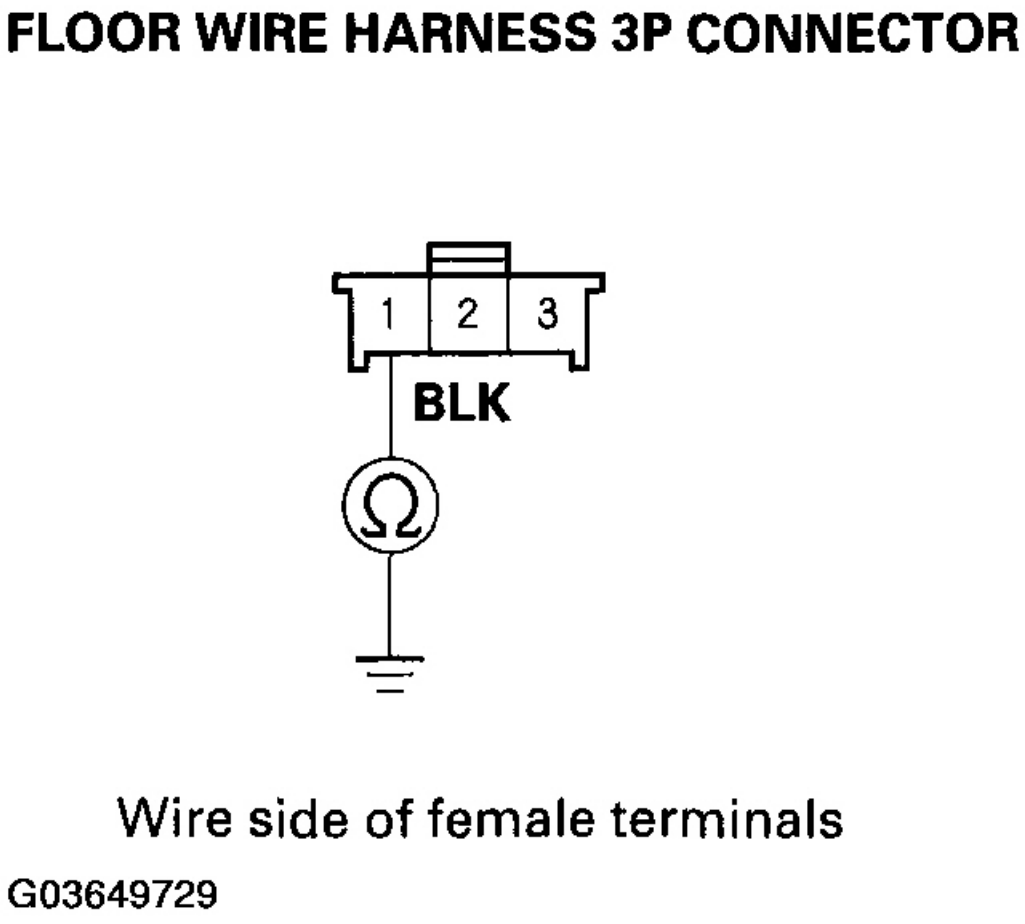


Fig. 178: Checking Resistance Between No. 1 Terminal Of Floor Wire Harness 3P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 9.

NO - Open in the floor wire harness or poor ground connection at G601 (see **FLOOR WIRE HARNESS (LEFT BRANCH) (4-DOOR)**). If G601 is OK, replace the floor wire harness.

9. Disconnect the negative cable from the battery.
10. Disconnect both floor wire harness 4P connector from the seat belt tensioner (see step 6 on **FRONT SEAT BELT - 2-DOOR**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Check resistance between the No. 17 terminal of SRS unit connector B (28P) and the No. 3 terminal of the floor wire harness 3P connector. There should be 0-1 ohms.

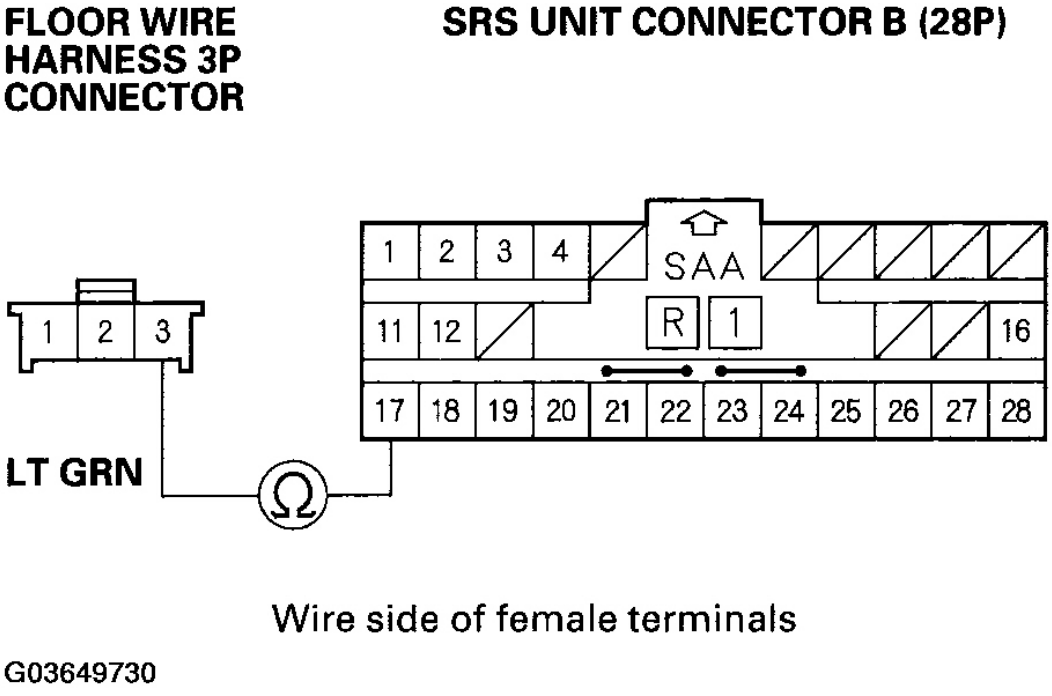


Fig. 179: Checking Resistance Between No. 17 Terminal Of SRS Unit Connector B And No. 3 Terminal Of Floor Wire Harness 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 13.

NO - Open in the floor wire harness; replace the floor wire harness.

13. Check resistance between the No. 11 terminal of SRS unit connector B (28P) and the No. 2 terminal of the floor wire harness 3P connector. There should be 0---1 ohms.

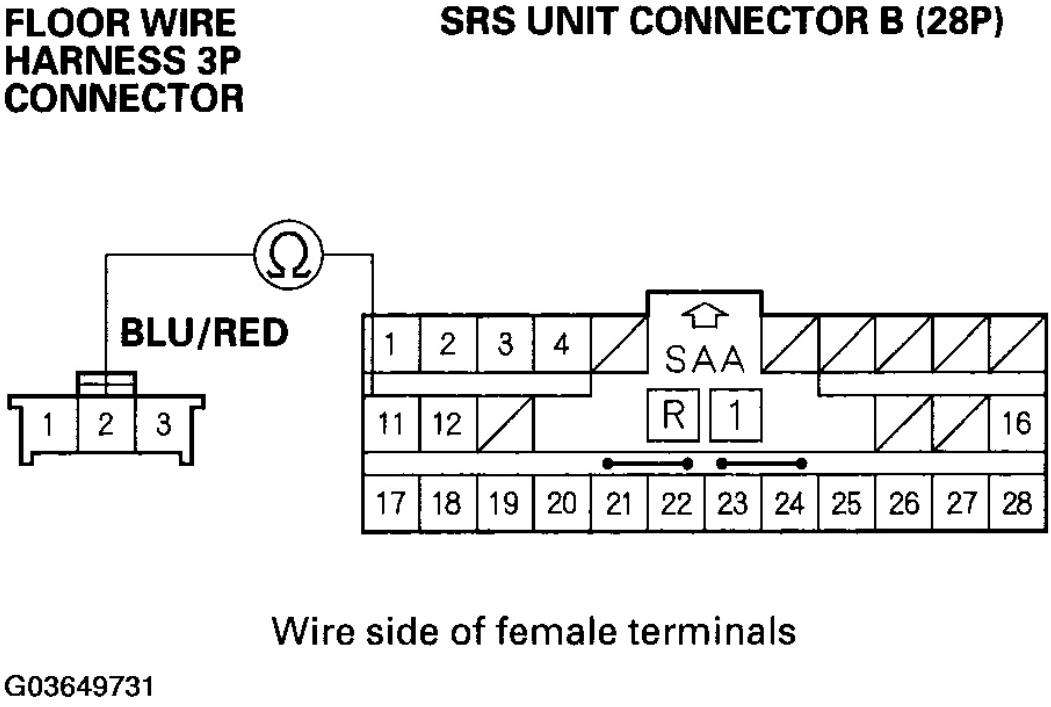


Fig. 180: Checking Resistance Between No. 11 Terminal Of SRS Unit Connector B And 2 Terminal Of Floor Wire Harness 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open in the floor wire harness, or poor connection at the floor wire harness. Check the connections at the floor wire harness, connector F

(14P), and connector H (14P) at the under-dash fuse/relay box. If the connections are OK, replace the faulty harness or part.

DTC 61-2X (61-20 TO 61-29,61-2A TO 61-2F): SHORT IN DRIVER'S SEAT BELT BUCKLE SWITCH (WITH POWER SEAT)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), then buckle and unbuckle the driver's seat belt several times.
3. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

   Is DTC 61-2x indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**).
4. Turn the ignition switch OFF.
5. Disconnect the driver's seat harness 3P connector from the driver's seat belt buckle switch 3P connector (A).

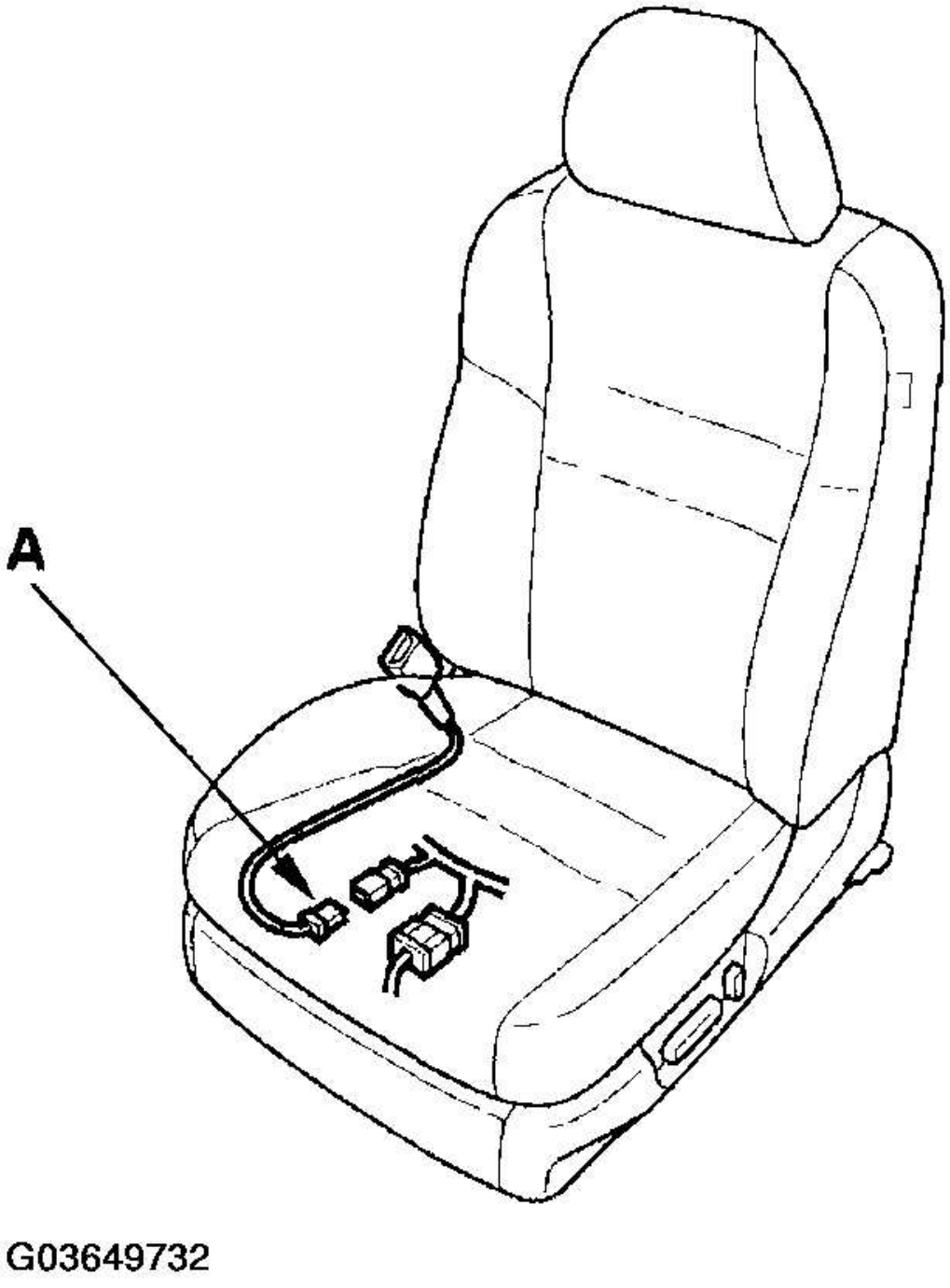


Fig. 181: Disconnecting Driver's Seat Harness 3P Connector From

Driver's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Buckle the driver's seat belt.

   Check resistance between the No. 1 and No. 3 terminals of the driver's seat belt buckle switch 3P connector. There should be 0-1 ohms.

   Check resistance between the No. 2 and No. 3 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

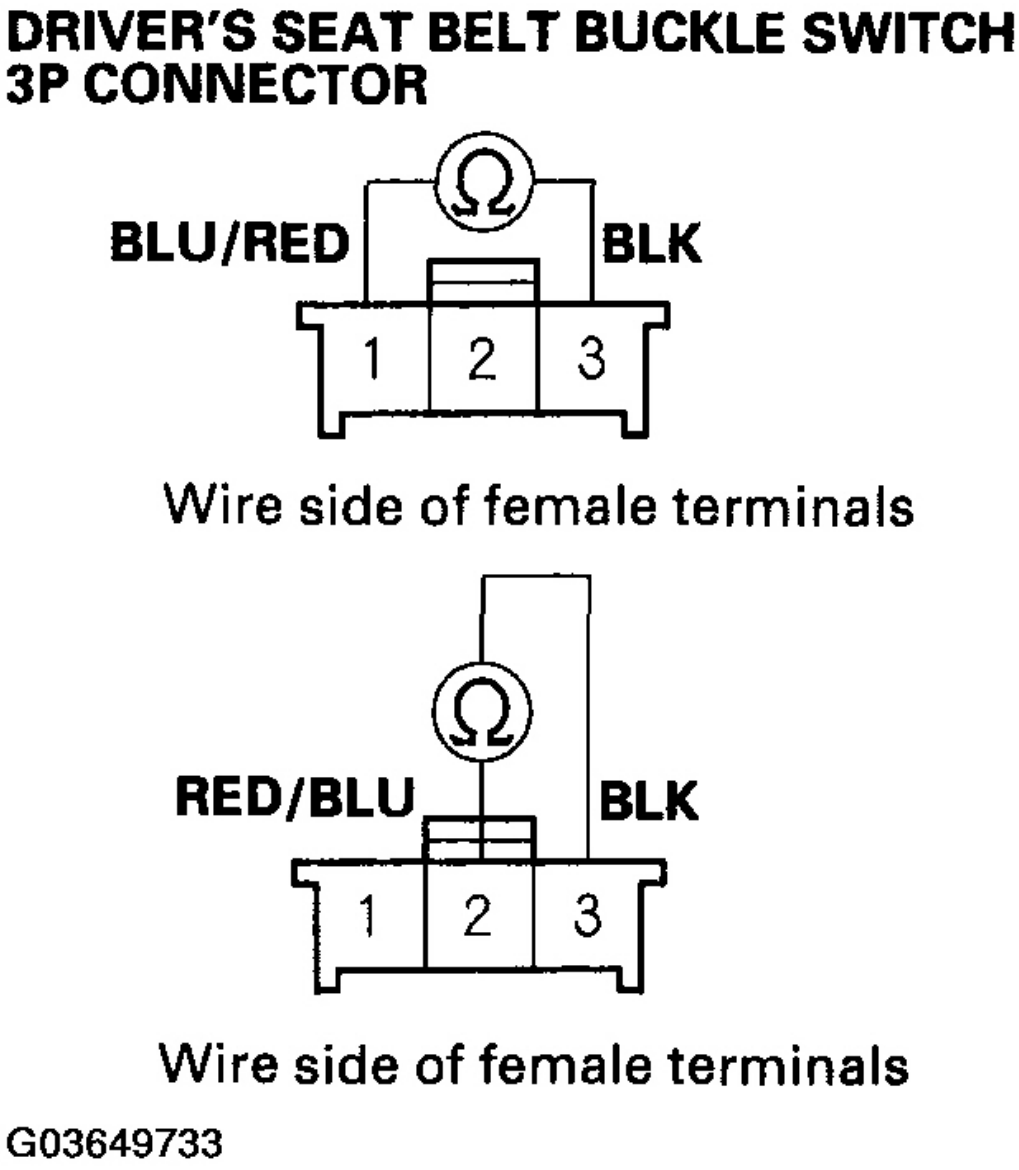


Fig. 182: Checking Resistance Between No. 1 And 3 Terminals Of Driver's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 7.

NO - Replace the driver's seat belt buckle assembly, then clear the DTC.

7. Unbuckle the driver's seat belt.

   Check resistance between the No. 2 and No. 3 terminals of the driver's seat belt buckle switch 3P connector. There should be 0-1 ohms.

   Check resistance between the No. 1 and No. 3 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

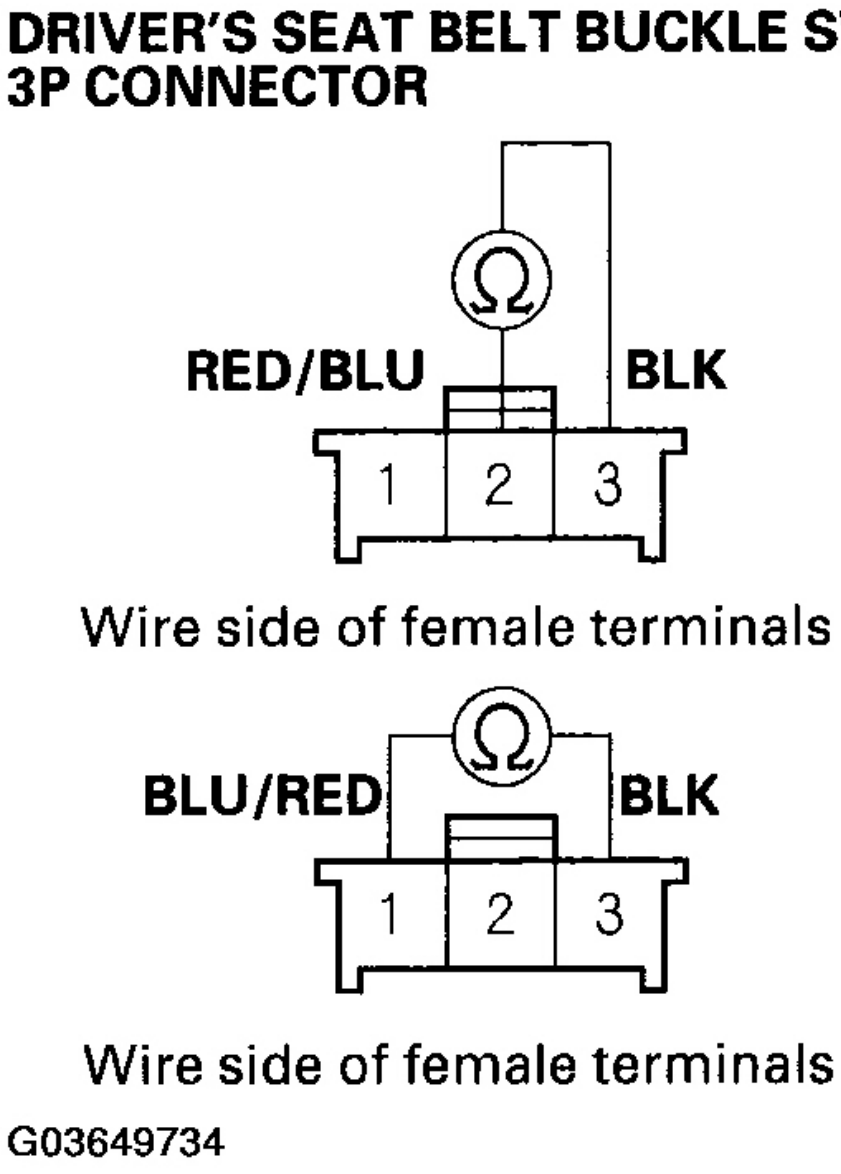


Fig. 183: Checking Resistance Between No. 2 And 3 Terminals Of Driver's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 8.

NO - Replace the driver's seat belt buckle assembly, then clear the DTC.

8. Check resistance between body ground and driver's seat belt buckle switch 3P connector terminals No. 1 and No. 2. There should be an open circuit or at least 1 Mohms.

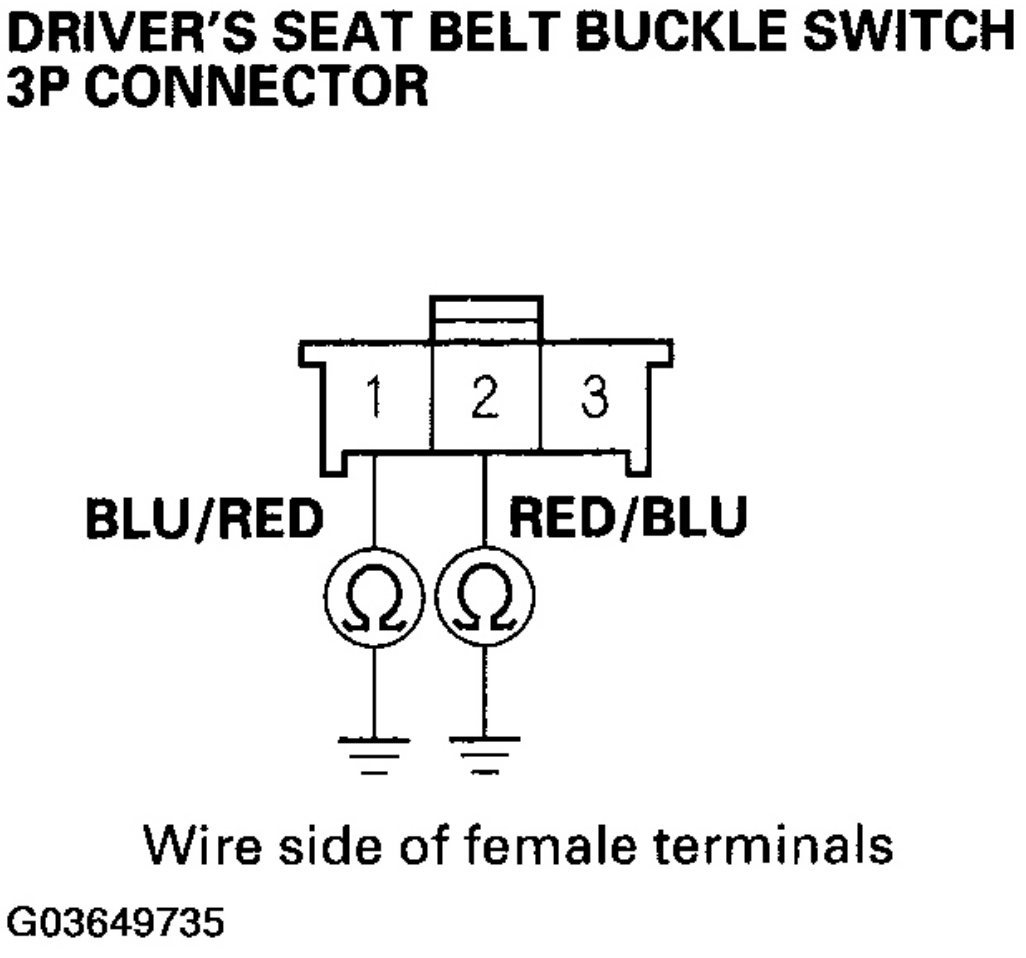


Fig. 184: Checking Resistance Between Body Ground And Driver's Seat Belt Buckle Switch 3P Connector Terminals No. 1 And 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 9.

NO - Replace the driver's seat belt buckle assembly.

9. Disconnect the negative cable from the battery.
10. Disconnect both seat belt tensioner 4P connectors from the floor wire harness (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Check resistance between the No. 2 terminal of the driver's seat wire harness 3P connector and body ground. There should be an open circuit or at least 1 Mohms.

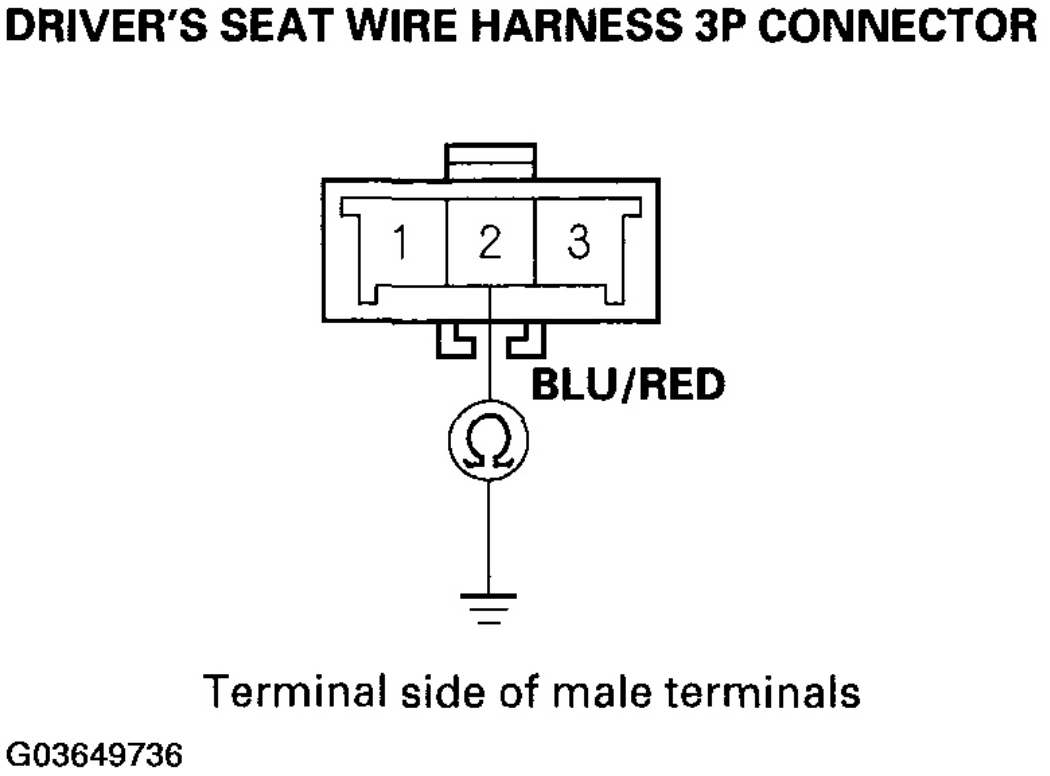


Fig. 185: Checking Resistance Between No. 2 Terminal Of Driver's Seat

Wire Harness 3P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Check the connections at the floor wire harness connector F <14P), and connector H (14P) at the under-dash fuse/relay box. If the connections are OK, go to step 13.

NO - Short to ground in the driver's seat wire harness, floor wire harness, or multiplex control unit. Replace the faulty harness or part.

13. Check resistance between the No. 1 terminal of the driver's seat wire harness 3P connector and body ground. There should be an open circuit or at least 1 Mohms

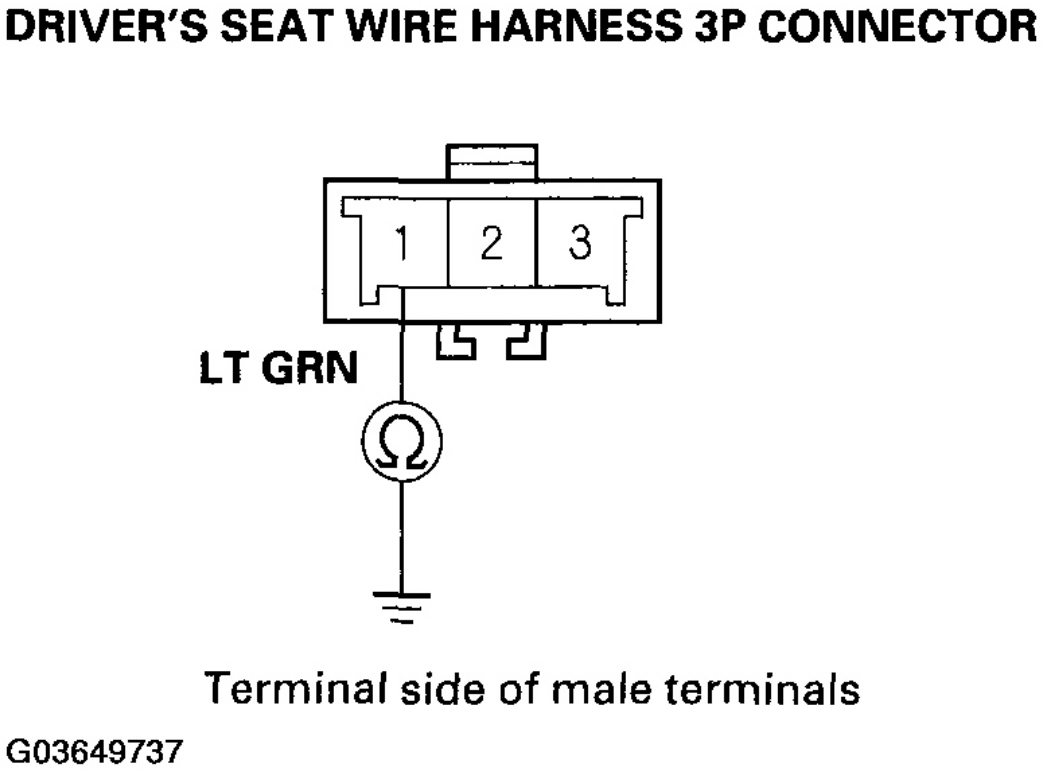


Fig. 186: Checking Resistance Between No. 1 Terminal Of Driver's Seat

Wire Harness 3P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to ground in the driver's seat wire harness or floor wire harness; replace the faulty harness.

DTC 61-2X (61-20 TO 61-29, 61-2A TO 61-2F): SHORT IN DRIVER'S SEAT BELT BUCKLE SWITCH (WITHOUT POWER SEAT)

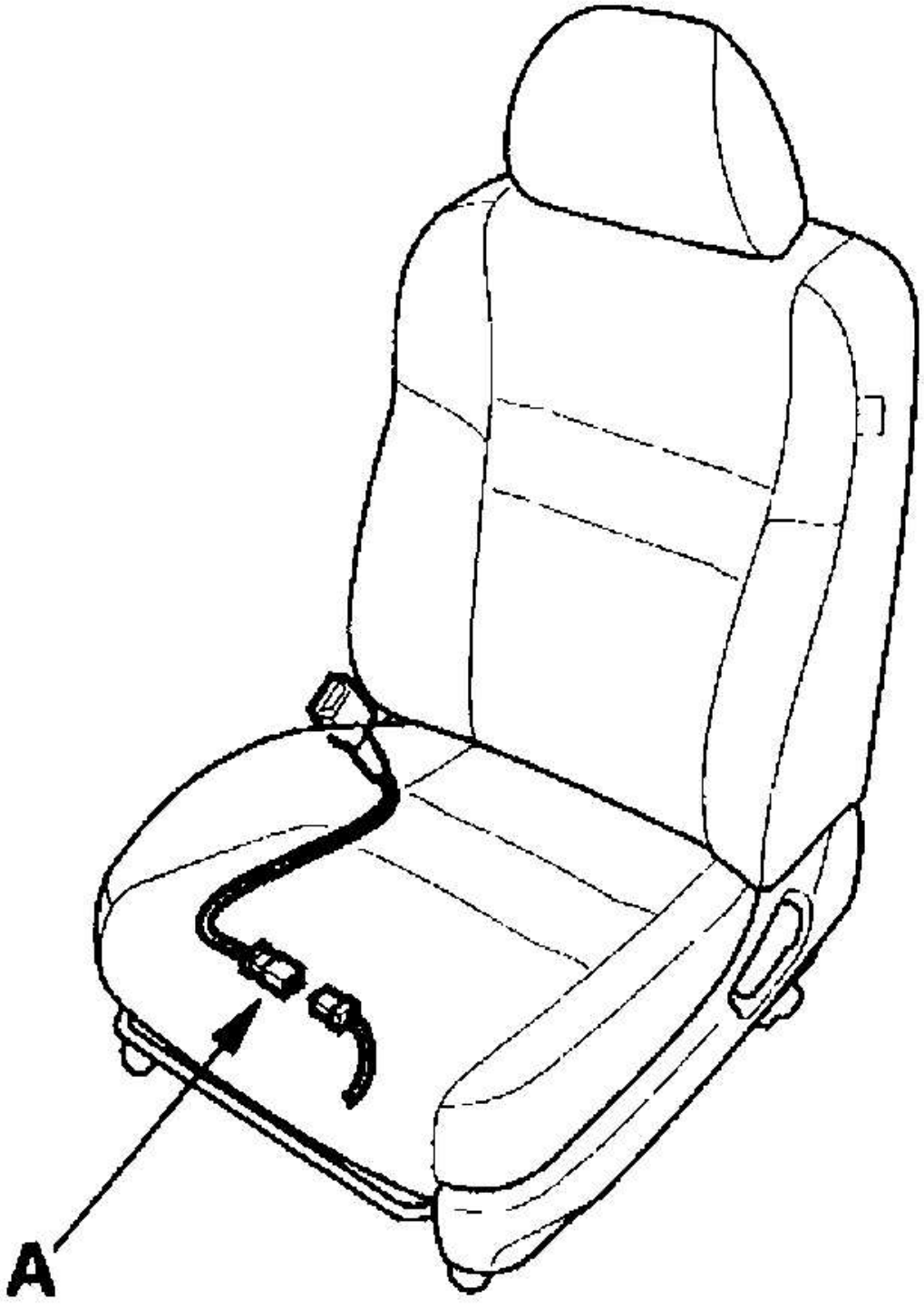
1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), then buckle and unbuckle the driver's seat belt several times.
3. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 61-2x indicated?

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**).

4. Turn the ignition switch OFF.
5. Disconnect the floor wire harness 3P connector from the driver's seat belt buckle switch 3P connector (A).



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Fig. 187: Disconnecting Floor Wire Harness 3P Connector From Driver's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Buckle the driver's seat belt.

   Check resistance between the No. 1 and No. 3 terminals of the driver's seat belt buckle switch 3P connector. There should be 0-1 ohms.

   Check resistance between the No. 2 and No. 3 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

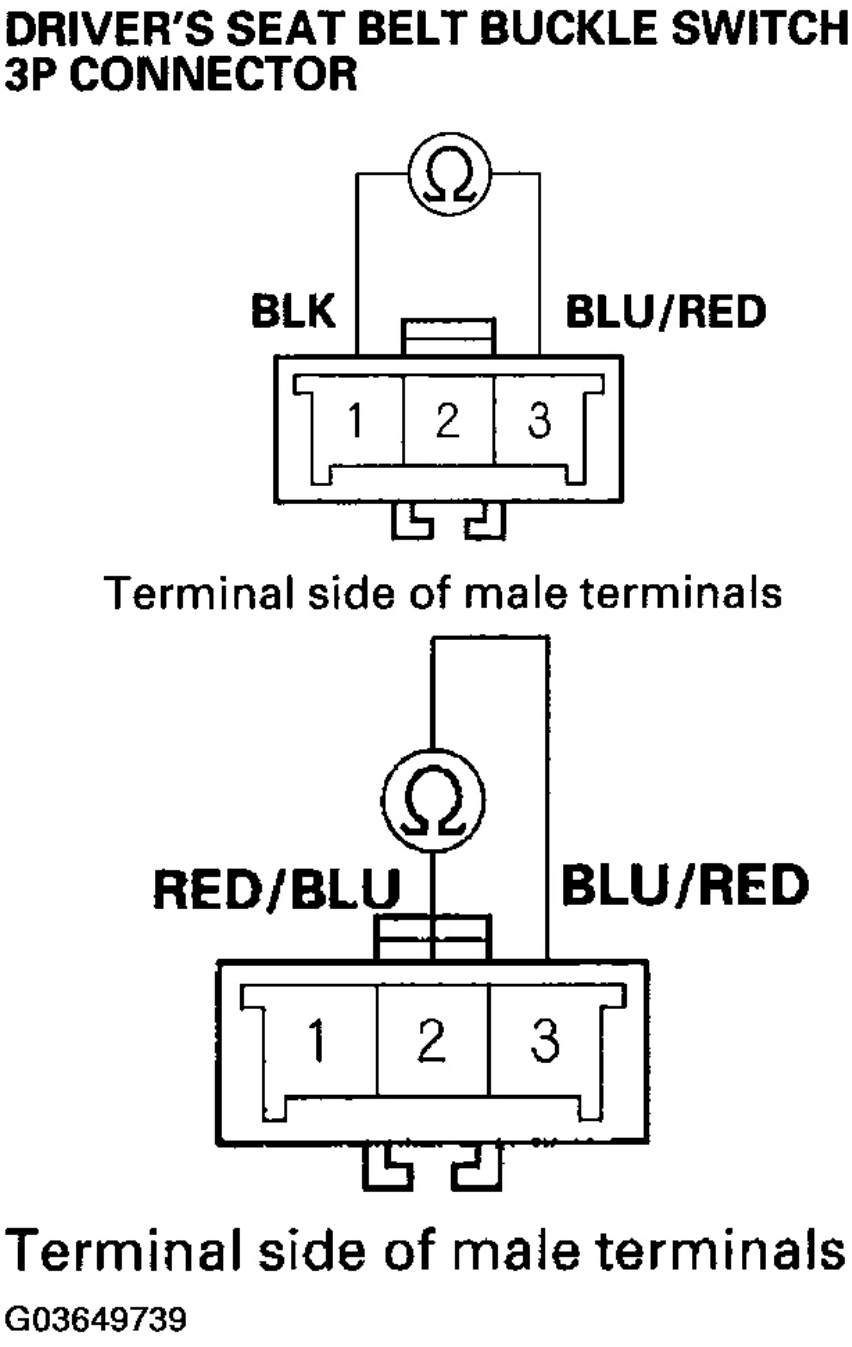


Fig. 188: Checking Resistance Between No. 1 And 3 Terminals Of Driver's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 7.

NO - Replace the driver's seat belt buckle assembly, then clear the DTC.

7. Unbuckle the driver's seat belt.

Check resistance between the No. 1 and No. 2 terminals of the driver's seat belt buckle switch 3P connector. There should be 0-1 ohms.

Check resistance between the No. 1 and No. 3 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

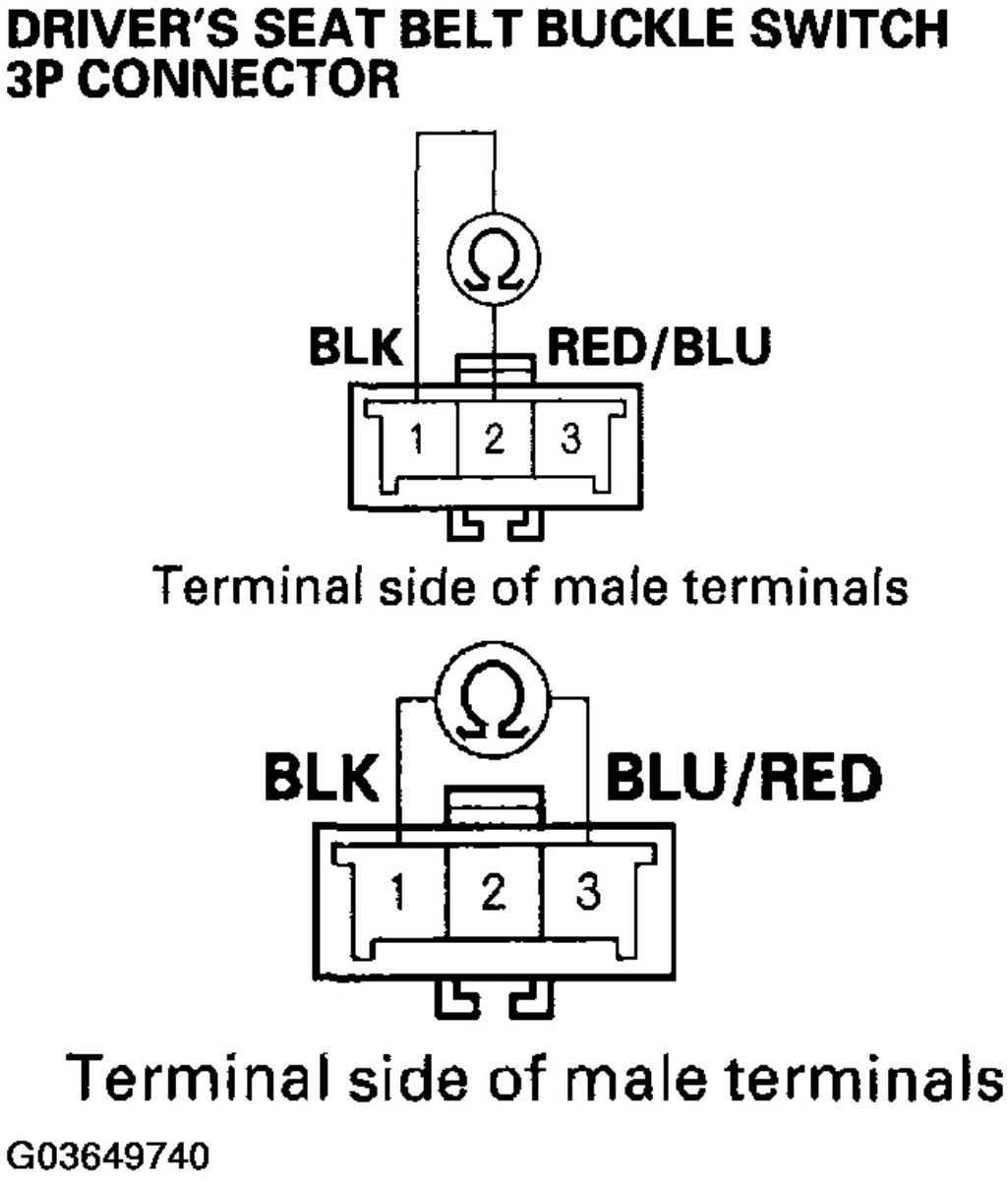


Fig. 189: Checking Resistance Between No. 1 And 2 Terminals Of Driver's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 8.

NO - Replace the driver's seat belt buckle assembly, then clear the DTC.

8. Check resistance between body ground and driver's seat belt buckle switch 3P connector terminals No. 2 and No. 3. There should an open circuit or at least 1 Mohms.

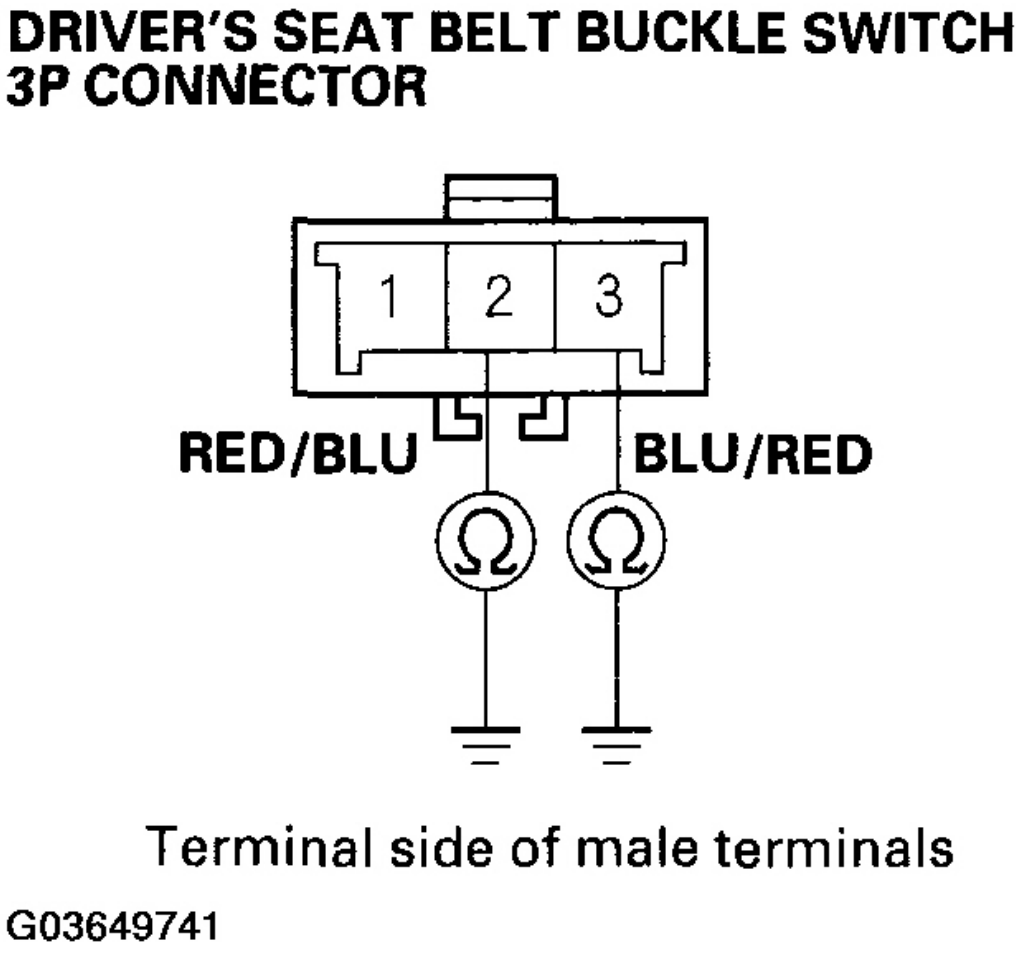


Fig. 190: Checking Resistance Between Body Ground And Driver's Seat Belt Buckle Switch 3P Connector Terminals No. 2 And 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 9.

NO - Replace the driver's seat belt buckle assembly.

9. Disconnect the negative cable from the battery.
10. Disconnect both seat belt tensioner 4P connectors from the floor wire harness (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Check resistance between the No. 2 terminal of the floor wire harness 3P connector and body ground. There should be an open circuit or at least 1 Mohms.

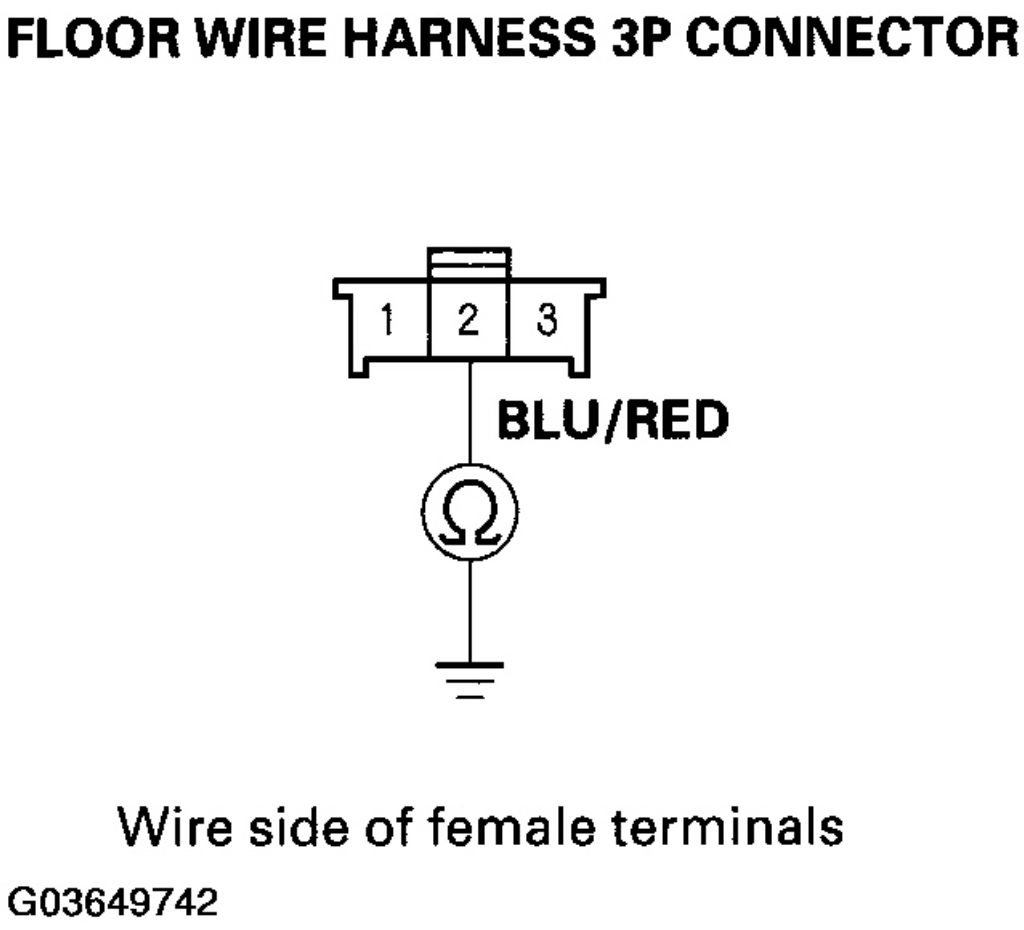


Fig. 191: Checking Resistance Between No. 2 Terminal Of Floor Wire Harness 3P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Check the connections at the floor wire harness, connector F (14P), and connector H (14P) at the under-dash fuse/relay box. If the connections are OK, go to step 13.

NO - Short to ground in the floor wire harness or the multiplex control unit. Replace the faulty harness or part.

13. Check resistance between the No. 3 terminal of the floor wire harness 3P connector and body ground. There should be an open circuit or at least 1 Mohms.

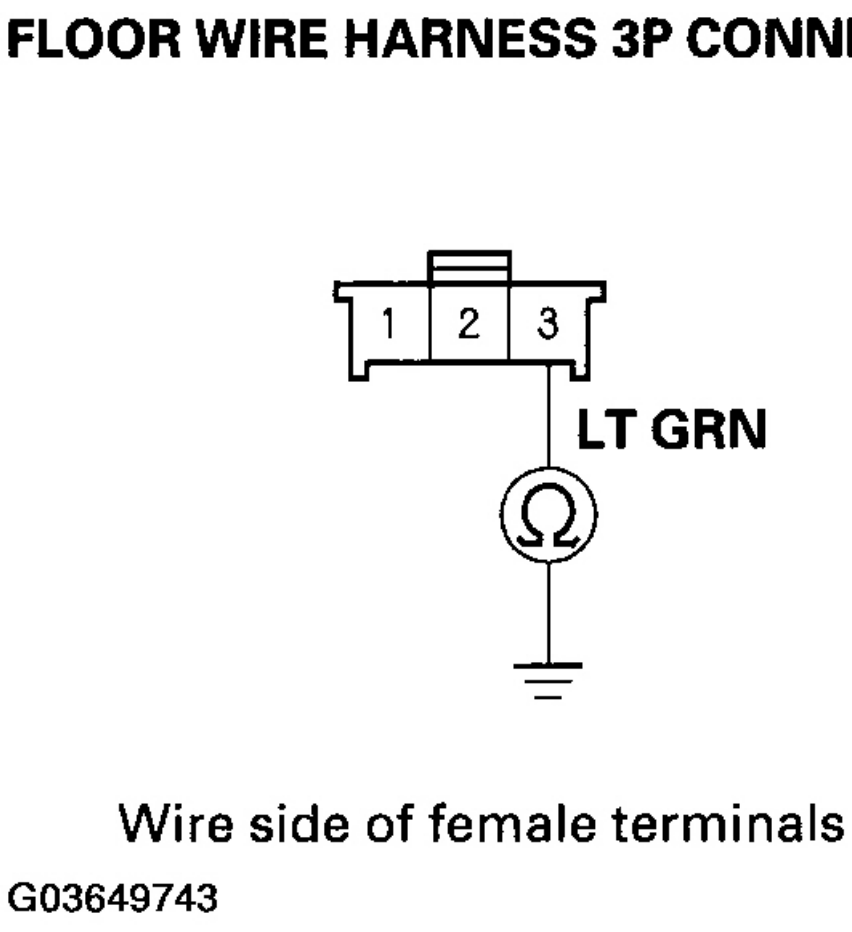


Fig. 192: Checking Resistance Between No. 3 Terminal Of Floor Wire Harness 3P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to ground in the floor wire harness; replace the floor wire

harness.

DTC 62-1X (62-10 TO 62-19, 62-1A TO 62-1F): OPEN IN FRONT PASSENGER'S SEAT BELT BUCKLE SWITCH (WITH POWER SEAT)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), then buckle and unbuckle the front passenger's seat belt several times.
3. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

   Is DTC 62-1x indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**).
4. Turn the ignition switch OFF.
5. Disconnect the front passenger's seat belt buckle switch 3P connector (A) from the passenger's seat wire harness.

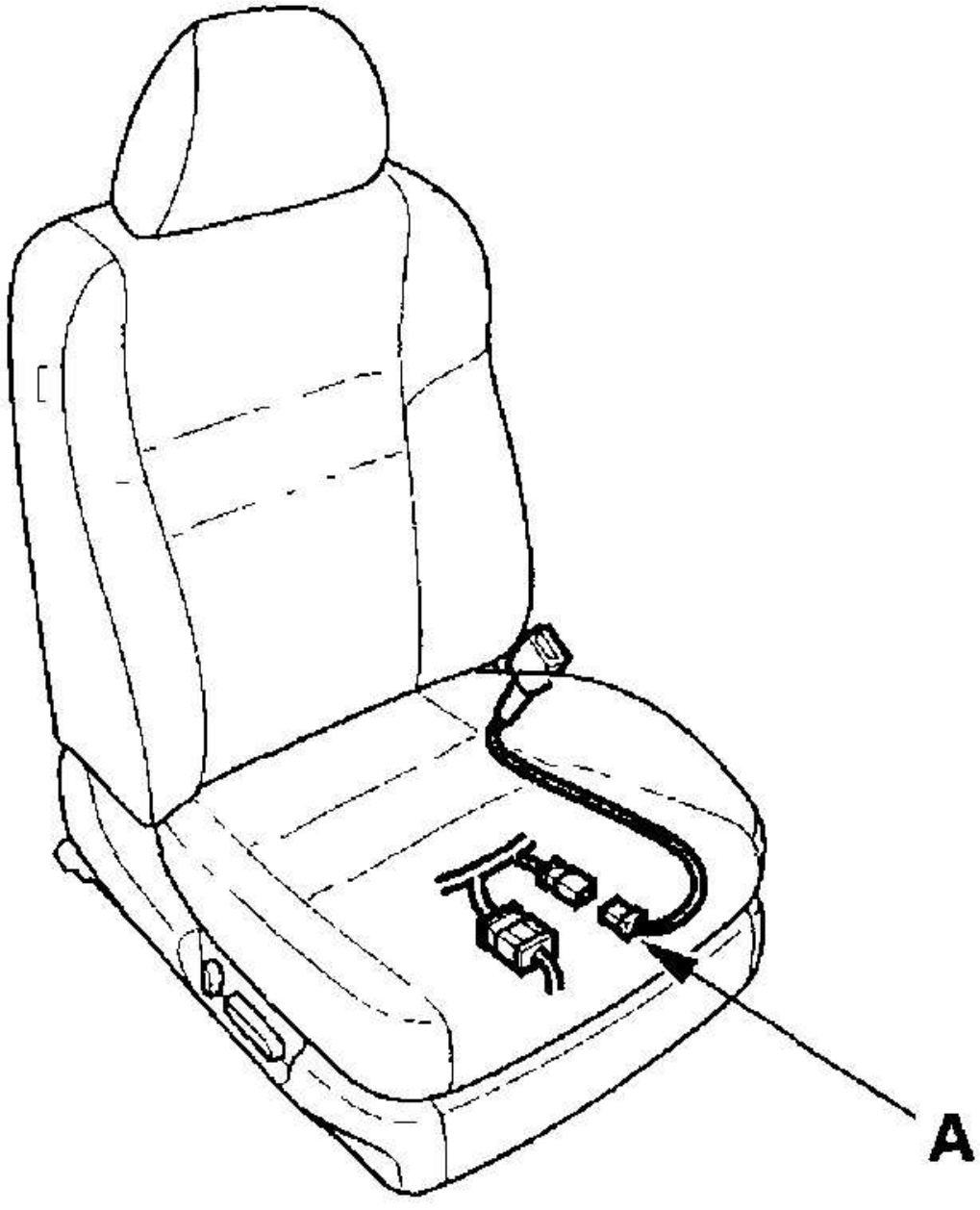


Fig. 193: Disconnecting Front Passenger's Seat Belt Buckle Switch 3P Connector From Passenger's Seat Wire Harness

Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Buckle the front passenger's seat belt.

   Check resistance between the No. 1 and No. 3 terminals of the front passenger's seat belt buckle switch 3P connector. There should be 0-1 ohms.

   Check resistance between the No. 2 and No. 3 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

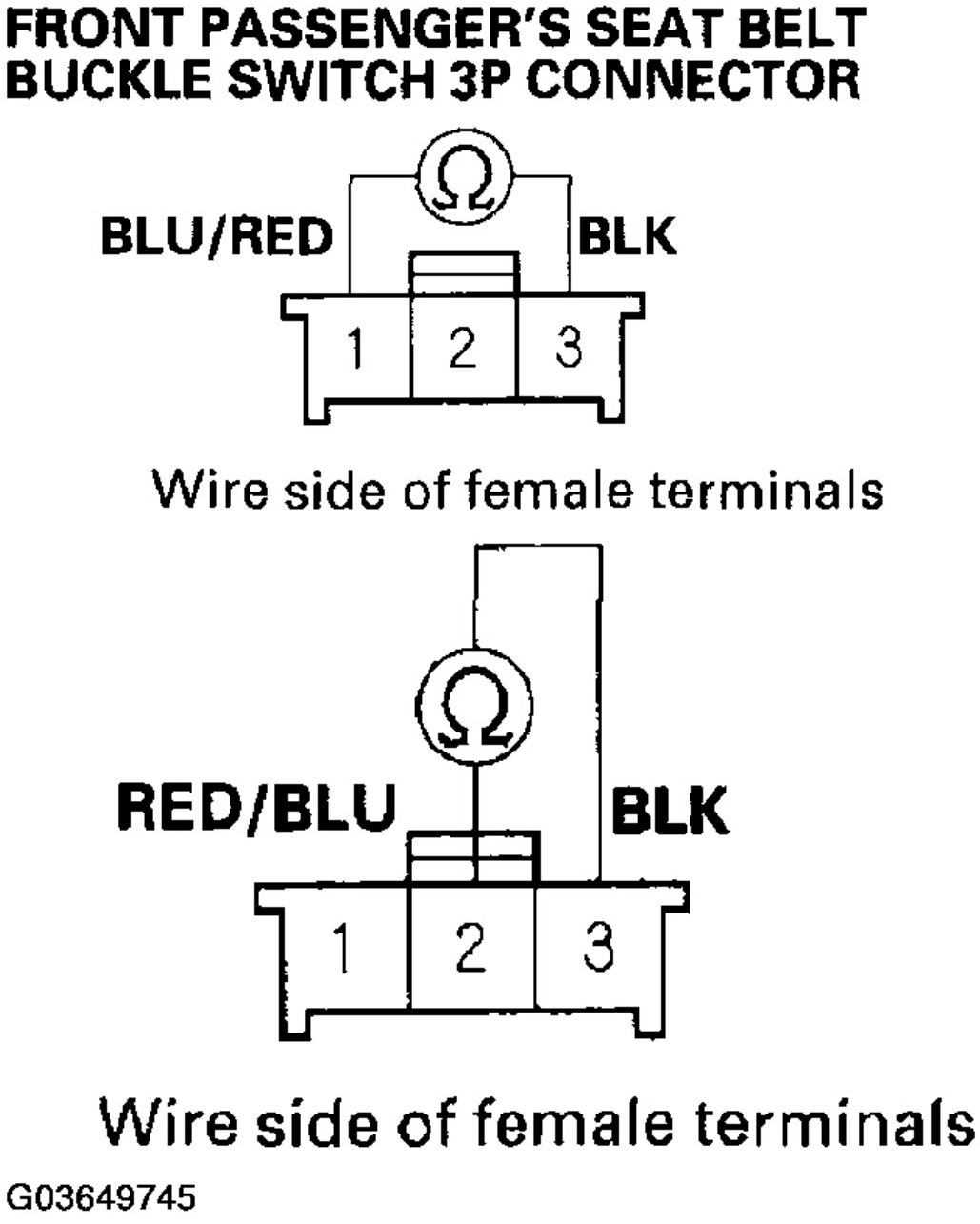


Fig. 194: Checking Resistance Between No. 1 And 3 Terminals Of Front Passenger's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 7.

NO - Replace the front passenger's seat belt buckle assembly, then clear the DTC.

7. Unbuckle the front passenger's seat belt.

Check resistance between the No. 2 and No. 3 terminals of the front passenger's seat belt buckle switch 3P connector. There should be 0-1 ohms.

Check resistance between the No. 1 and No. 3 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

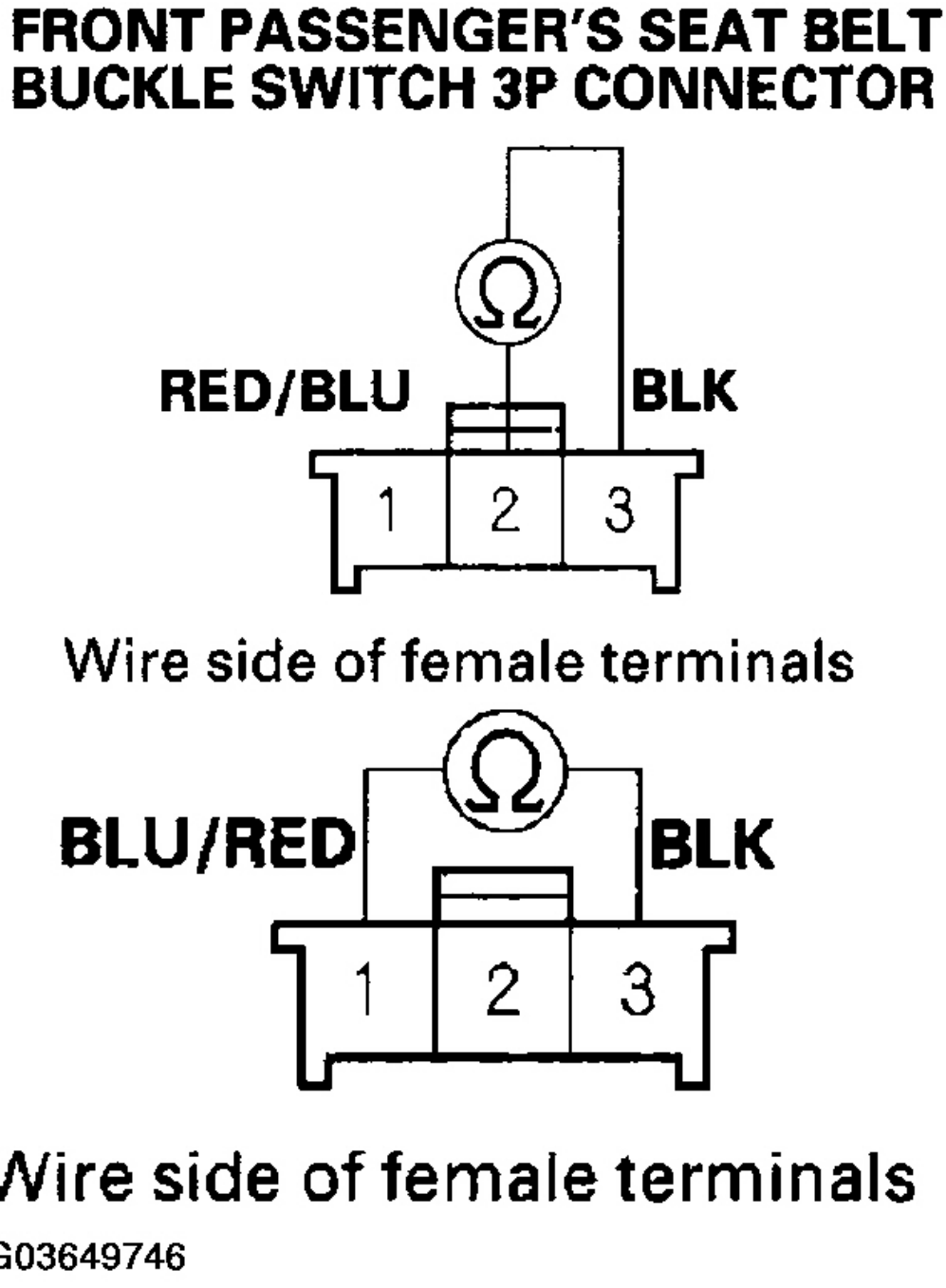


Fig. 195: Checking Resistance Between No. 2 And 3 Terminals Of Front Passenger's Seat Belt Buckle Switch 3P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 8.

NO - Replace the front passenger's seat belt buckle assembly, then clear the DTC.

8. Check resistance between the No. 3 terminal of the passenger's seat wire harness 3P connector and body ground. There should be 0-1 ohms.

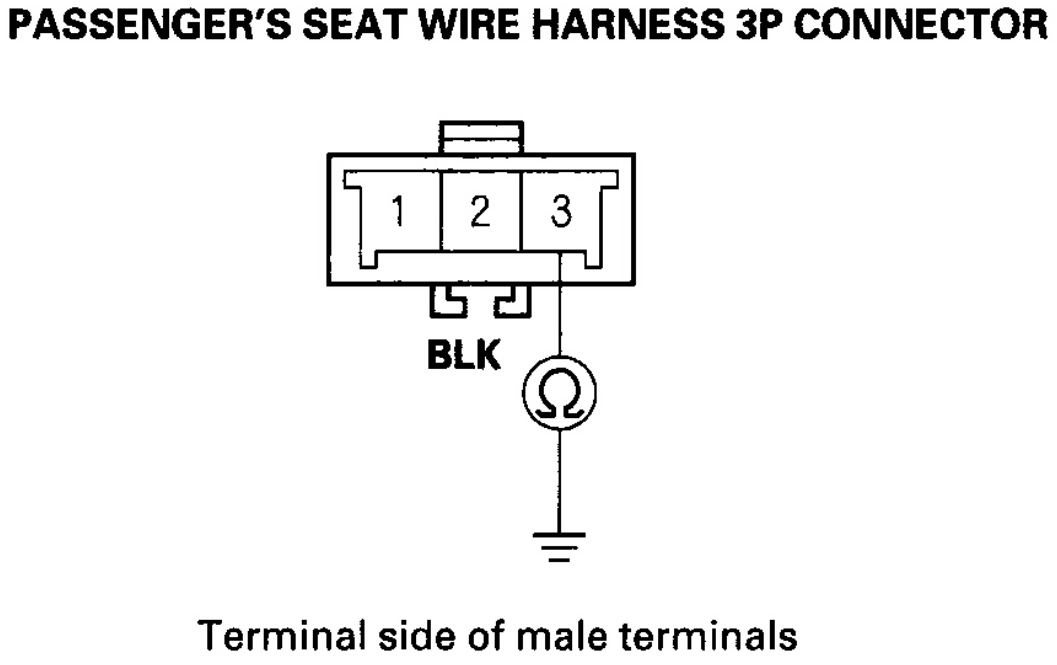


Fig. 196: Checking Resistance Between No. 3 Terminal Of Passenger's Seat Wire Harness 3P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 9.

NO - Open in the passenger's seat wire harness or floor wire harness, or poor ground connection at G602 (see **FLOOR WIRE HARNESS (LEFT BRANCH) (4-DOOR)**). If G602 is OK, replace the faulty harness.

9. Disconnect the negative cable from the battery.
10. Disconnect both seat belt tensioner 4P connectors from the floor wire harness (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Check resistance between the No. 18 terminal of SRS unit connector B (28P) and the No. 1 terminal of the passenger's seat wire harness 3P connector. There should be 0-1 ohms.

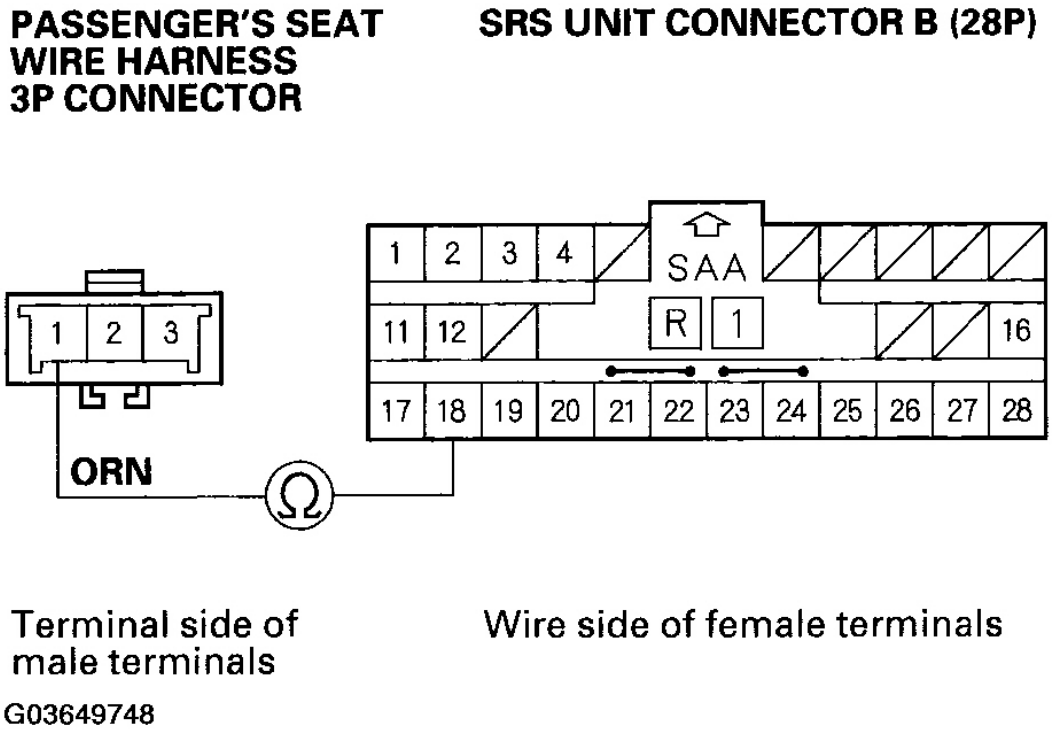


Fig. 197: Checking Resistance Between No. 18 Terminal Of SRS Unit Connector B And No. 1 Terminal Of Passenger's Seat Wire Harness 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 13.

NO - Open in the passenger's seat wire harness or floor wire harness; replace the faulty harness.

13. Check resistance between the No. 12 terminal of SRS unit connector B (28P) and the No. 2 terminal of the passenger's seat wire harness 3P connector. There should be 0-1 ohms.

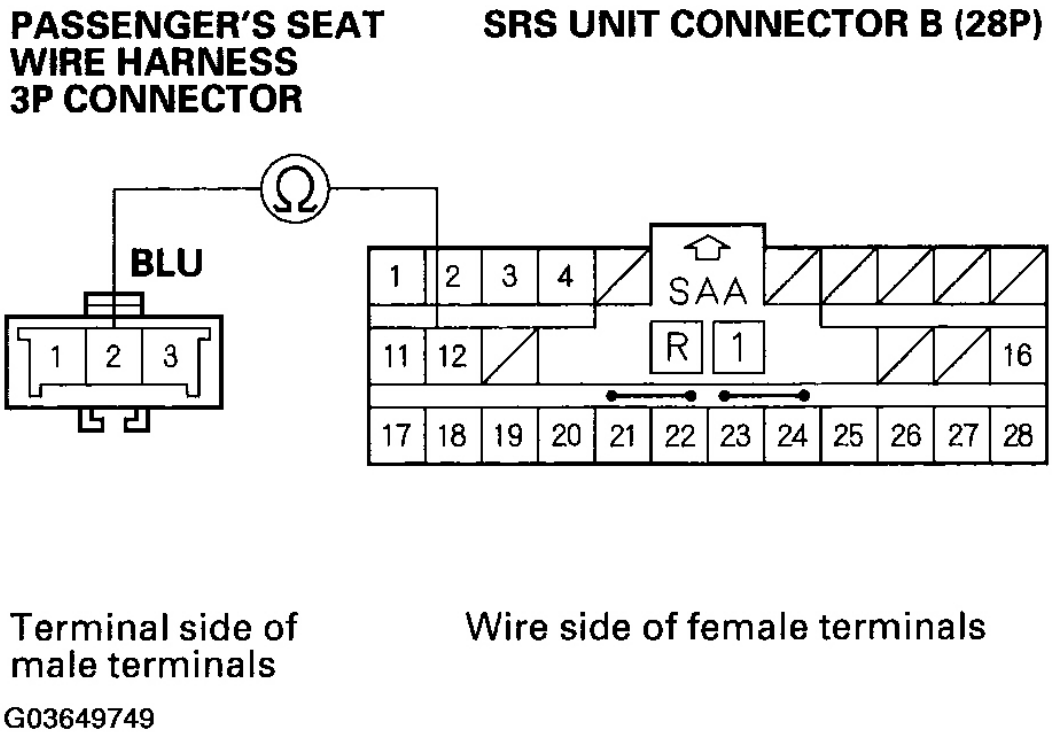


Fig. 198: Checking Resistance Between No. 12 Terminal Of SRS Unit Connector B And No. 2 Terminal Of Passenger's Seat Wire Harness 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open in the passenger's seat wire harness or floor wire harness; replace the faulty harness.

DTC 62-1X (62-10 TO 62-19,62-1A TO 62-1F): OPEN IN FRONT PASSENGER'S SEAT BELT BUCKLE SWITCH (WITHOUT POWER SEAT)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), then buckle and unbuckle the front passenger's seat belt several times.
3. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

   Is DTC 62-1x indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**).
4. Turn the ignition switch OFF.
5. Disconnect the front passenger's seat belt buckle switch 3P connector (A) from the floor wire harness.

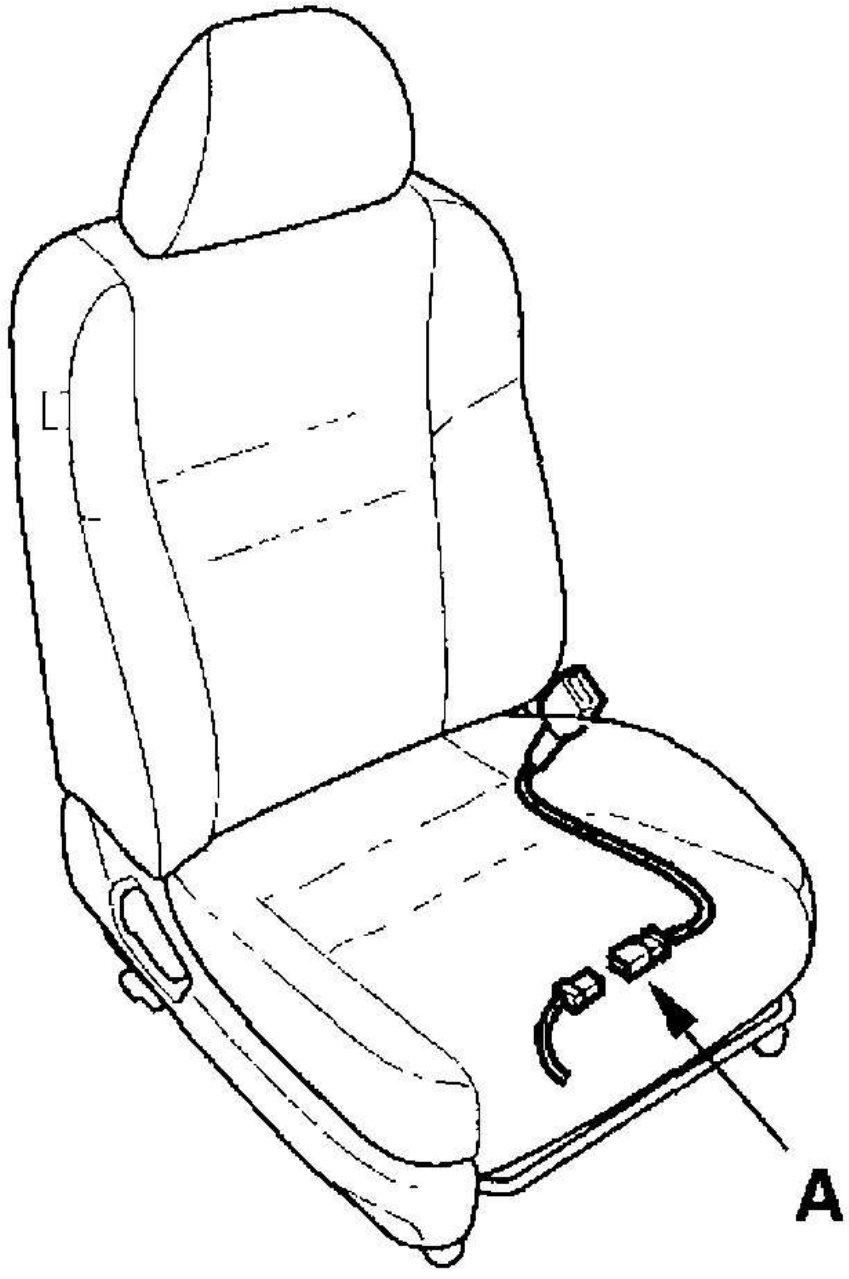


Fig. 199: Disconnecting Front Passenger's Seat Belt Buckle Switch 3P Connector From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Buckle the front passenger's seat belt.

   Check resistance between the No. 1 and No. 3 terminals of the front passenger's seat belt buckle switch 3P connector. There should be 0-1 ohms.

   Check resistance between the No. 1 and No. 2 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

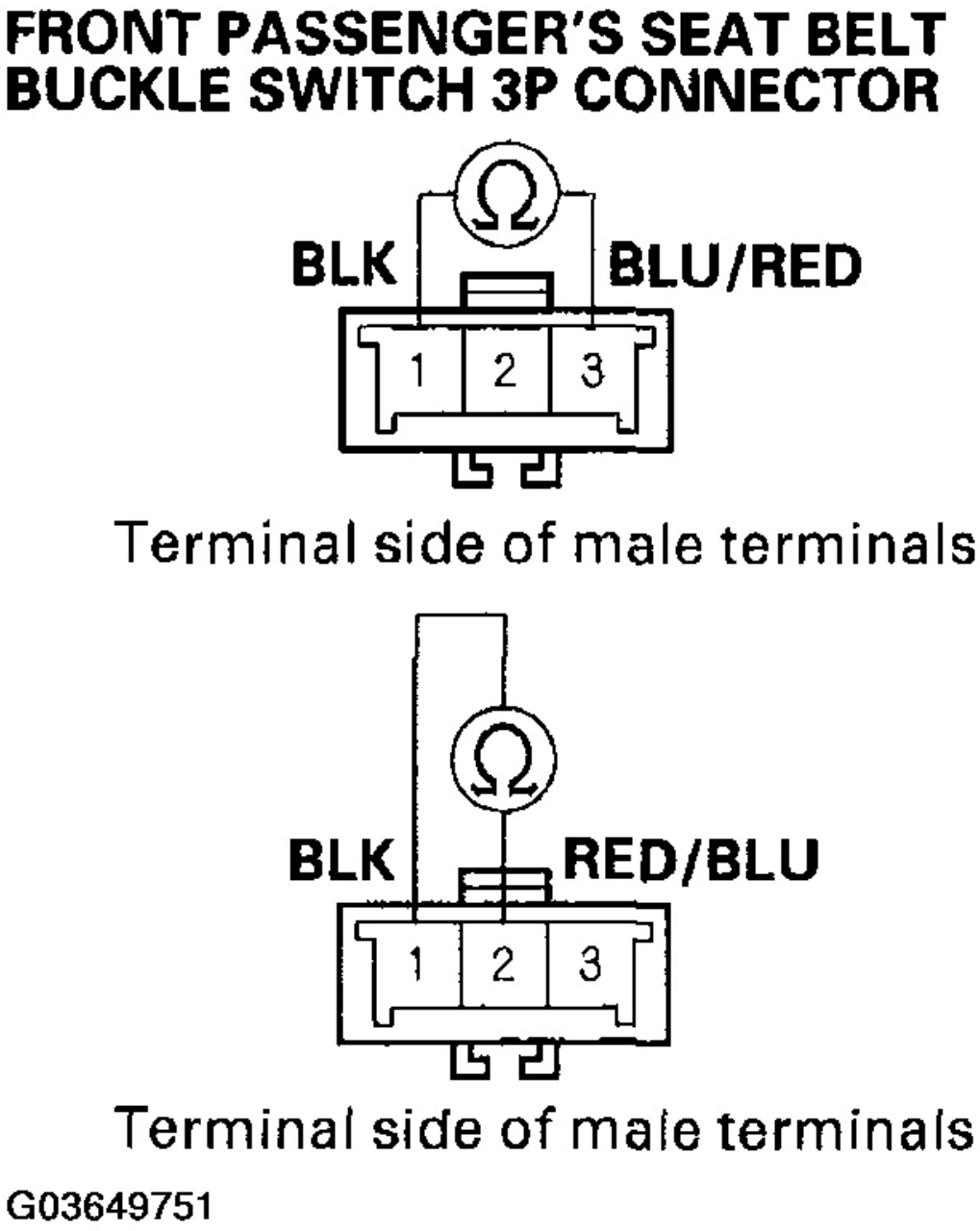


Fig. 200: Checking Resistance Between No. 1 And 3 Terminals Of Front Passenger's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 7.

NO - Replace the front passenger's seat belt buckle assembly, then clear the DTC.

7. Unbuckle the front passenger's seat belt.

Check resistance between the No. 1 and No. 2 terminals of the front passenger's seat belt buckle switch 3P connector. There should be 0-1 ohms.

Check resistance between the No. 1 and No. 3 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

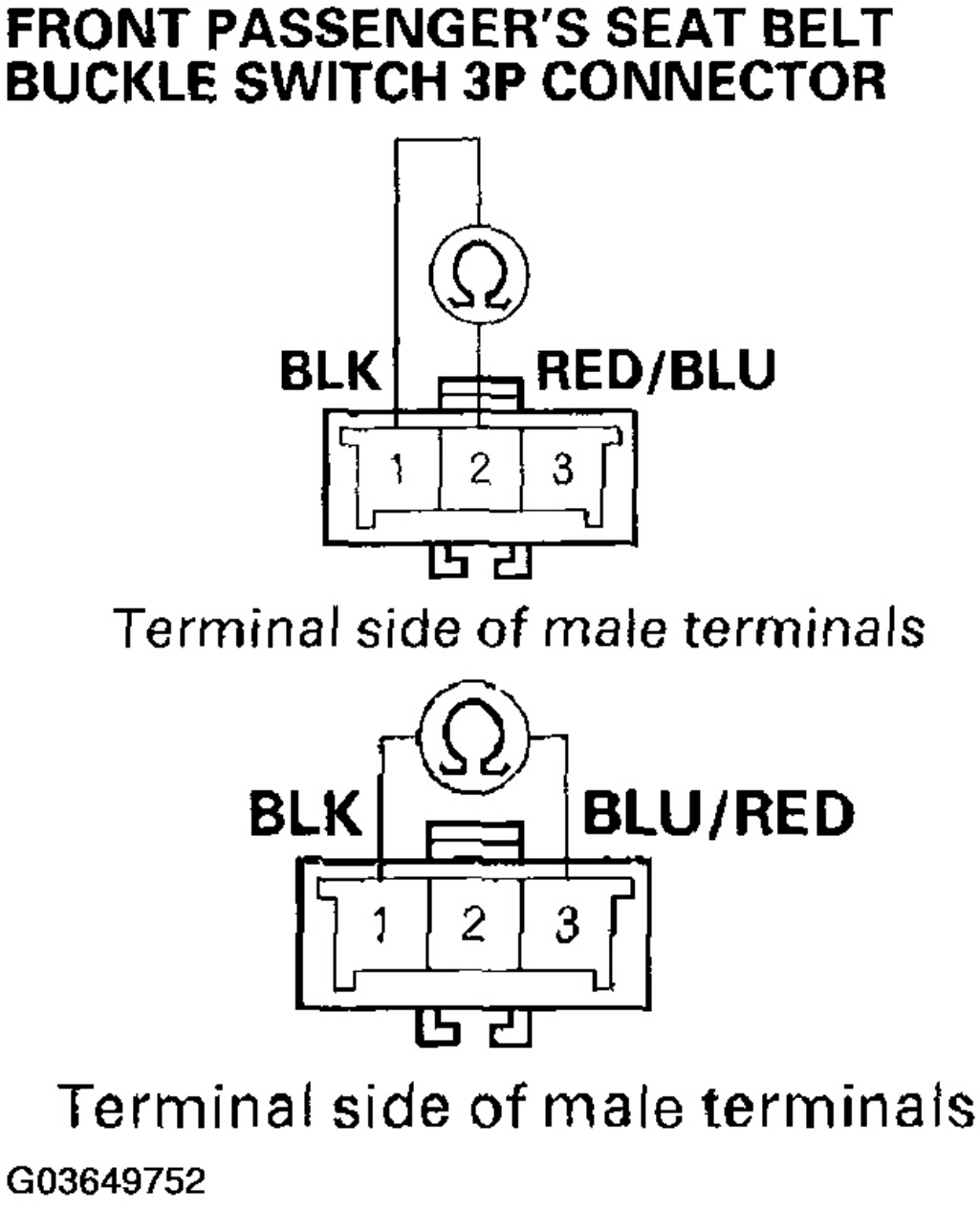


Fig. 201: Checking Resistance Between No. 1 And 2 Terminals Of Front Passenger's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 8.

NO - Replace the front passenger's seat belt buckle assembly, then clear the DTC.

8. Check resistance between the No. 1 terminal of the floor wire harness 3P connector and body ground. There should be 0-1 ohms.

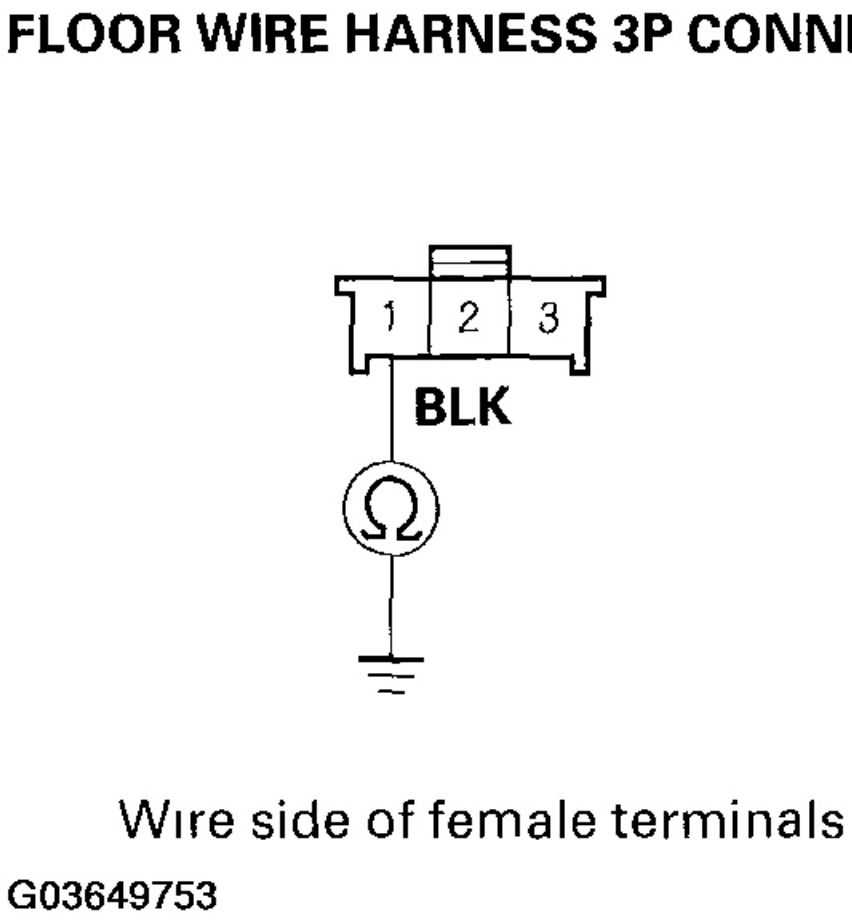


Fig. 202: Checking Resistance Between No. 1 Terminal Of Floor Wire Harness 3P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 9.

NO - Open in the floor wire harness or poor ground connection at G602 (see **FLOOR WIRE HARNESS (LEFT BRANCH) (4-DOOR)**). If G602 is OK, replace the floor wire harness.

9. Disconnect the negative cable from the battery.
10. Disconnect both seat belt tensioner 4P connectors from the floor wire harness (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Check resistance between the No. 18 terminal of SRS unit connector B (28P) and the No. 3 terminal of the floor wire harness 3P connector. There should be 0-1 ohms.

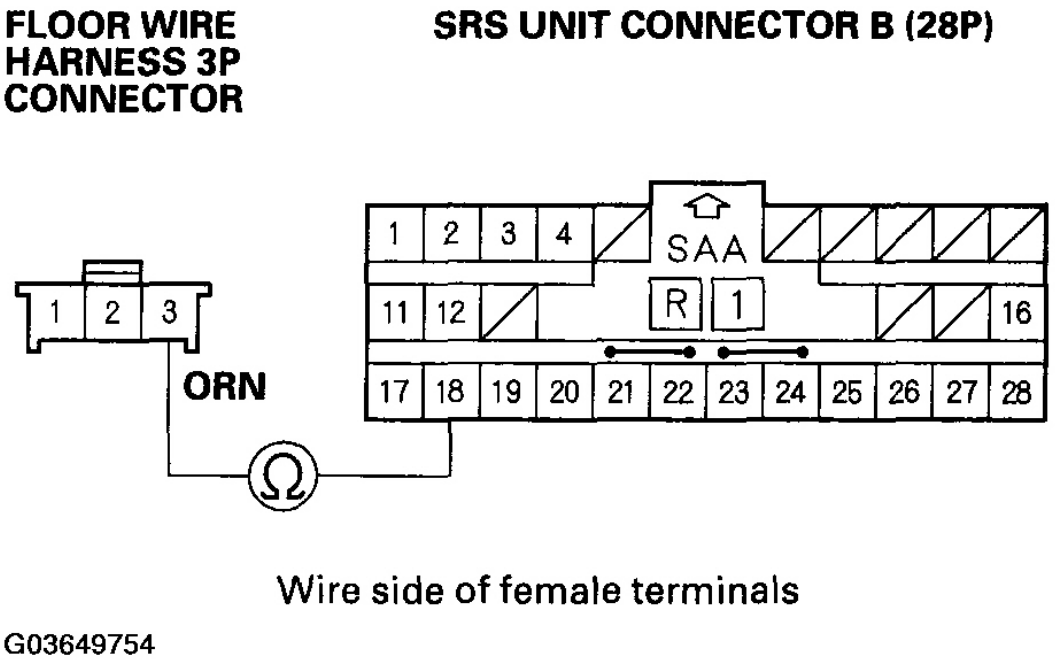


Fig. 203: Checking Resistance Between No. 18 Terminal Of SRS Unit Connector B And No. 3 Terminal Of Floor Wire Harness 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 13.

NO - Open in the floor wire harness; replace the floor wire harness.

13. Check resistance between the No. 12 terminal of SRS unit connector B (28P) and the No. 2 terminal of the floor wire harness 3P connector. There should be 0---1 ohms.

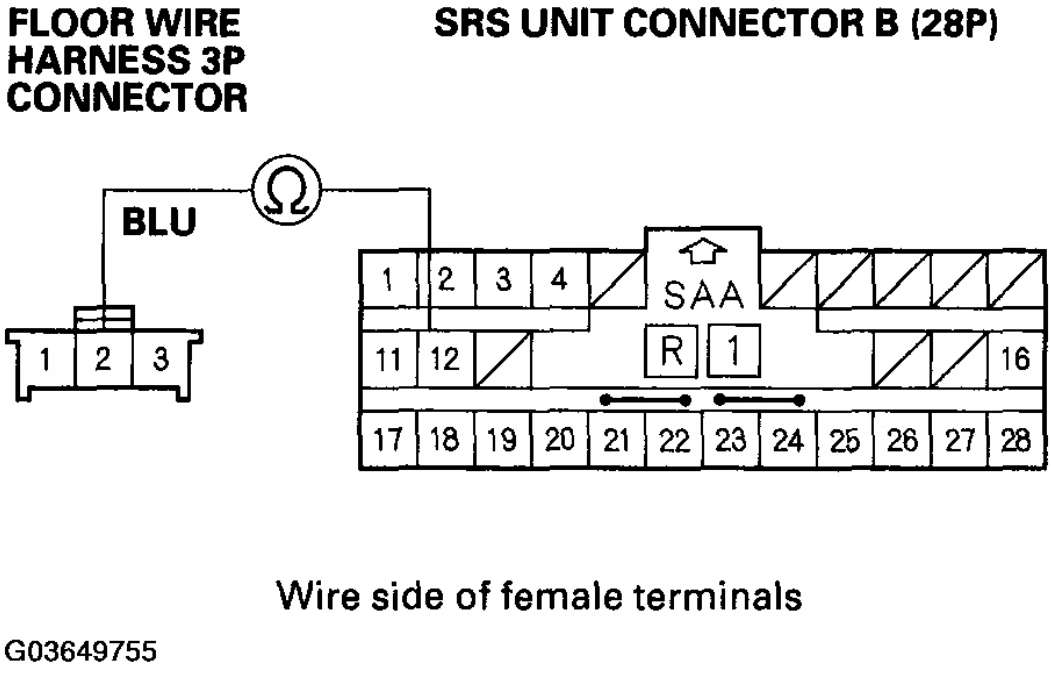


Fig. 204: Checking Resistance Between No. 12 Terminal Of SRS Unit Connector B And No. 2 Terminal Of Floor Wire Harness 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open in the floor wire harness; replace the floor wire harness.

DTC 62-2X (62-20 TO 62-29,62-2A TO 62-2F): SHORT IN FRONT PASSENGER'S SEAT BELT BUCKLE SWITCH (WITH POWER SEAT)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), then buckle and unbuckle the front passenger's seat belt several times.
3. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

   Is DTC 62-2x indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**).
4. Turn the ignition switch OFF.
5. Disconnect the front passenger's seat belt buckle switch 3P connector (A) from the passenger's seat wire harness.

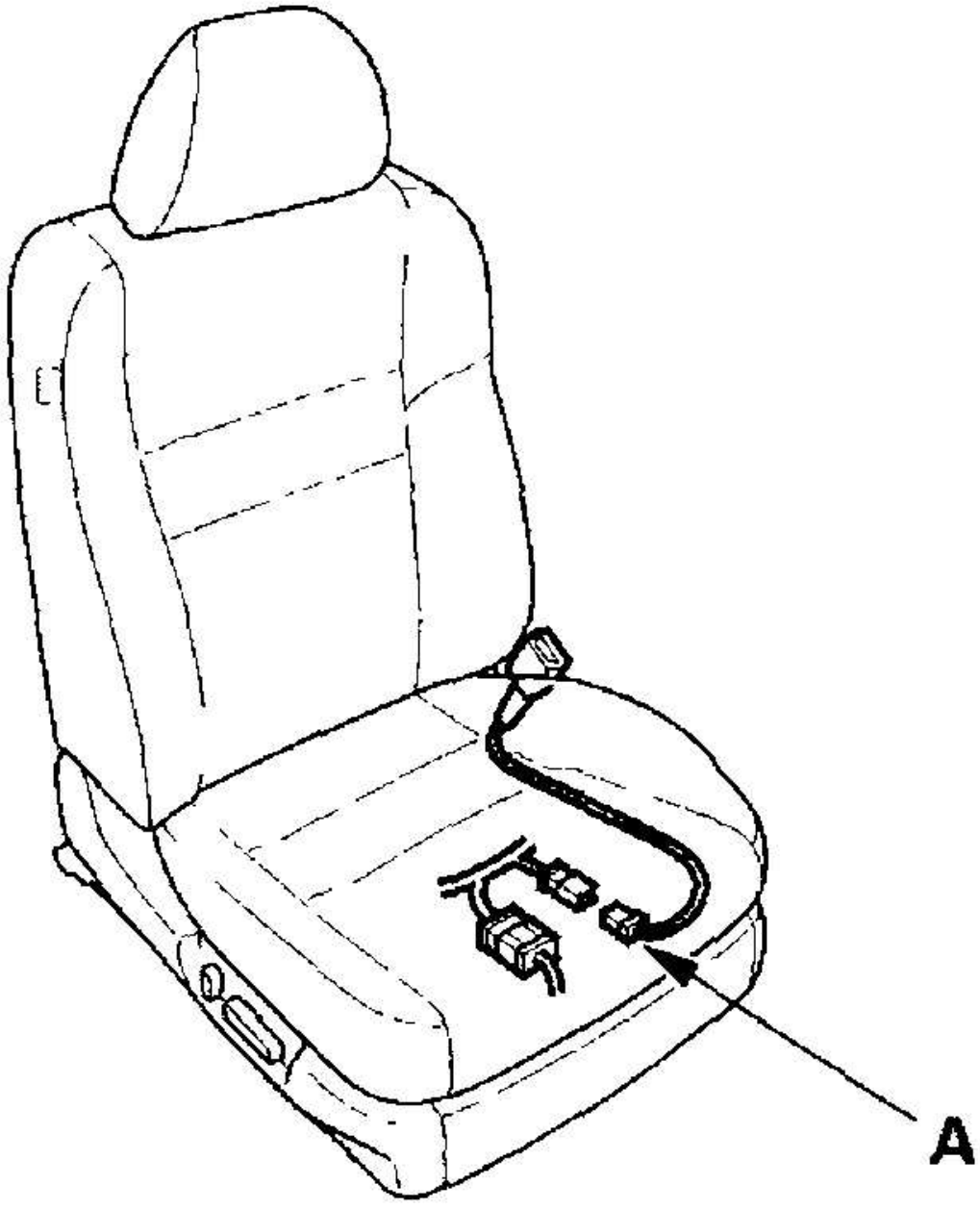


Fig. 205: Disconnecting Front Passenger's Seat Belt Buckle Switch 3P Connector From Passenger's Seat Wire Harness

Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Buckle the front passenger's seat belt.

   Check resistance between the No. 1 and No. 3 terminals of the front passenger's seat belt buckle switch 3P connector. There should be 0-1 ohms.

   Check resistance between the No. 2 and No. 3 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

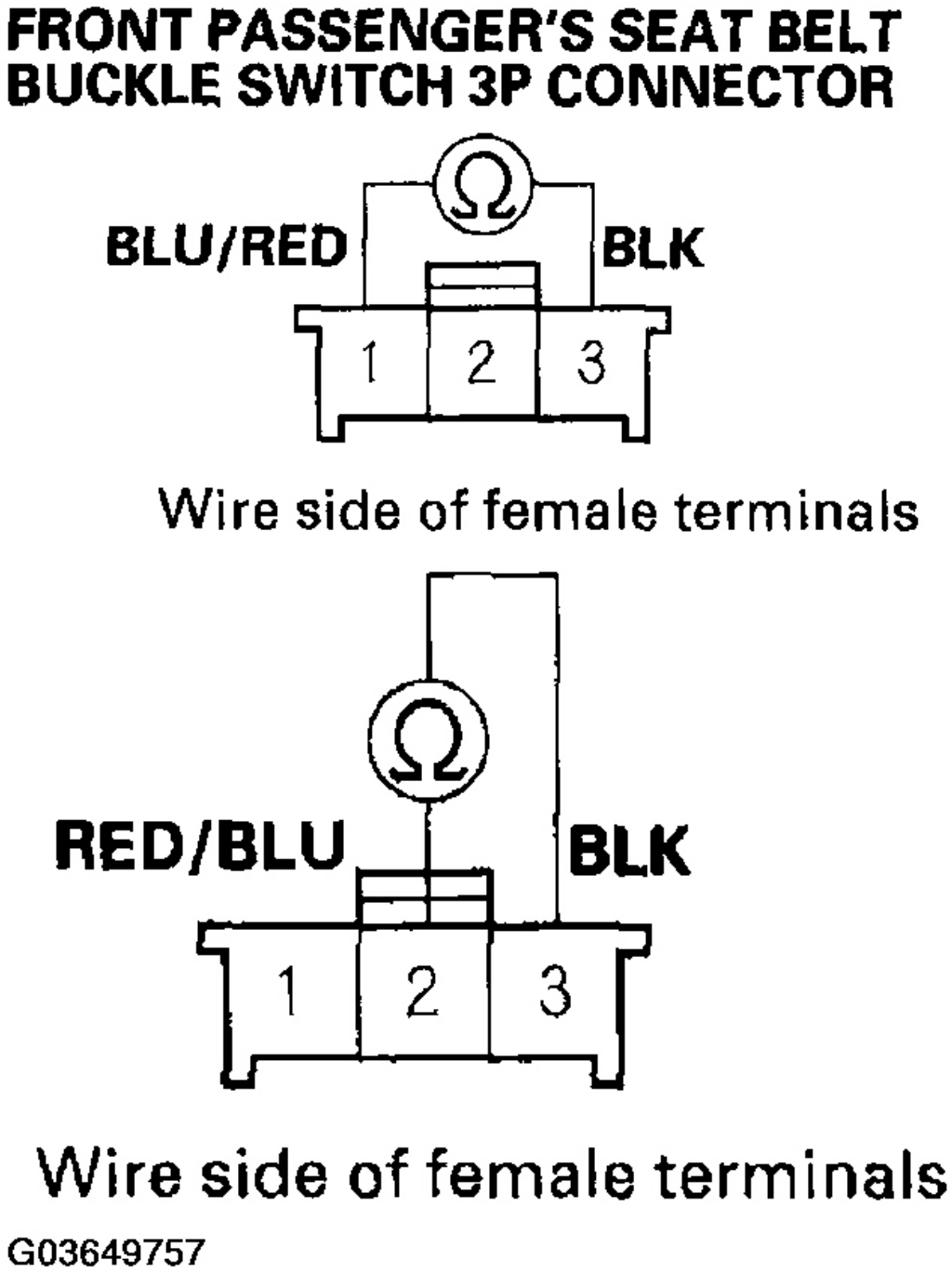


Fig. 206: Checking Resistance Between No. 1 And 3 Terminals Of Front Passenger's Seat Belt Buckle Switch 3P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 7.

NO - Replace the front passenger's seat belt buckle assembly, then clear the DTC.

7. Unbuckle the front passenger's seat belt.

Check resistance between the No. 2 and No. 3 terminals of the front passenger's seat belt buckle switch 3P connector. There should be 0-1 ohms.

Check resistance between the No. 1 and No. 3 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

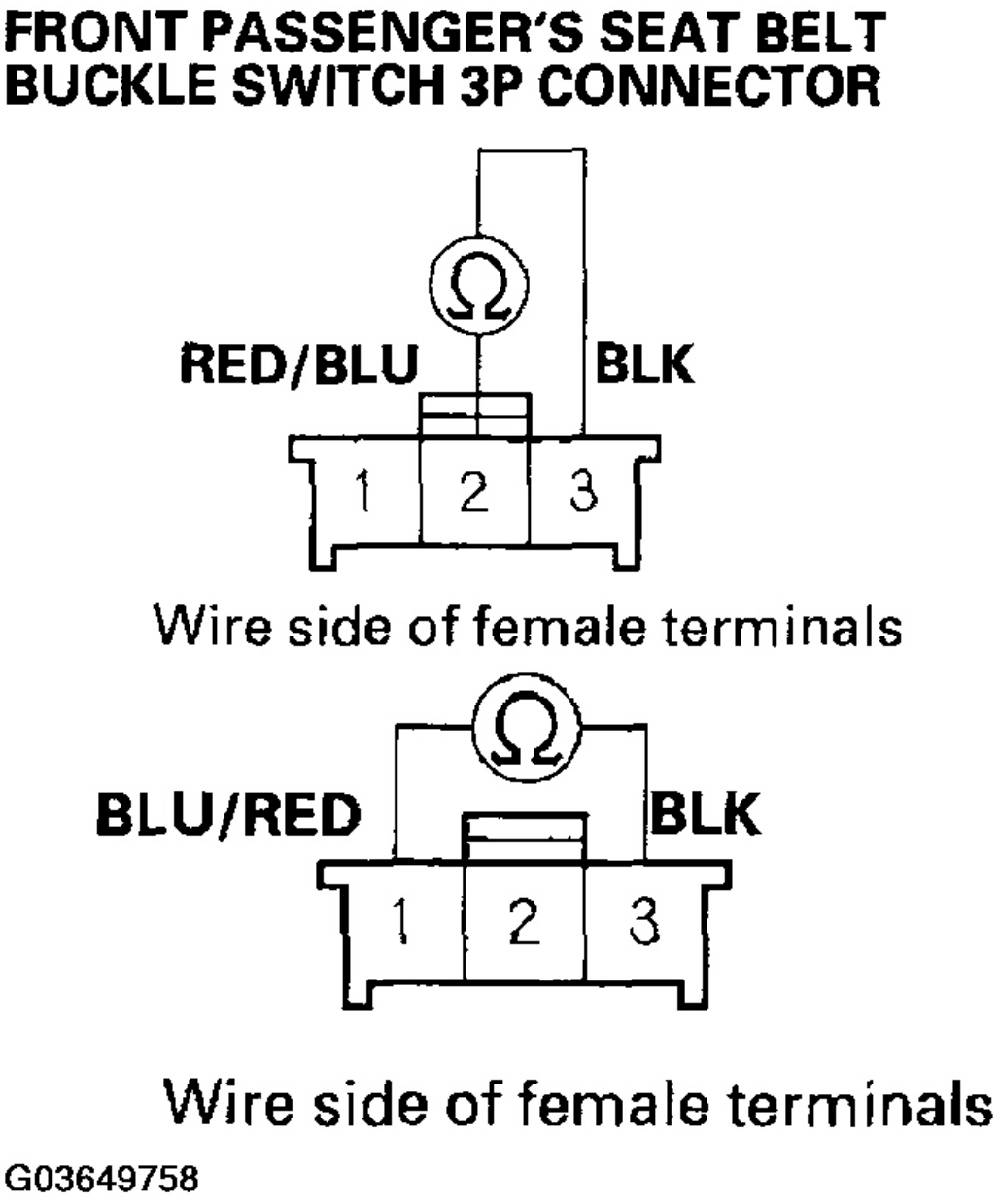


Fig. 207: Checking Resistance Between No. 2 And 3 Terminals Of Front Passenger's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 8.

NO - Replace the front passenger's seat belt buckle assembly, then clear the DTC.

8. Check continuity between body ground and front passenger's seat belt buckle switch 3P connector terminals No. 1 and No. 2.

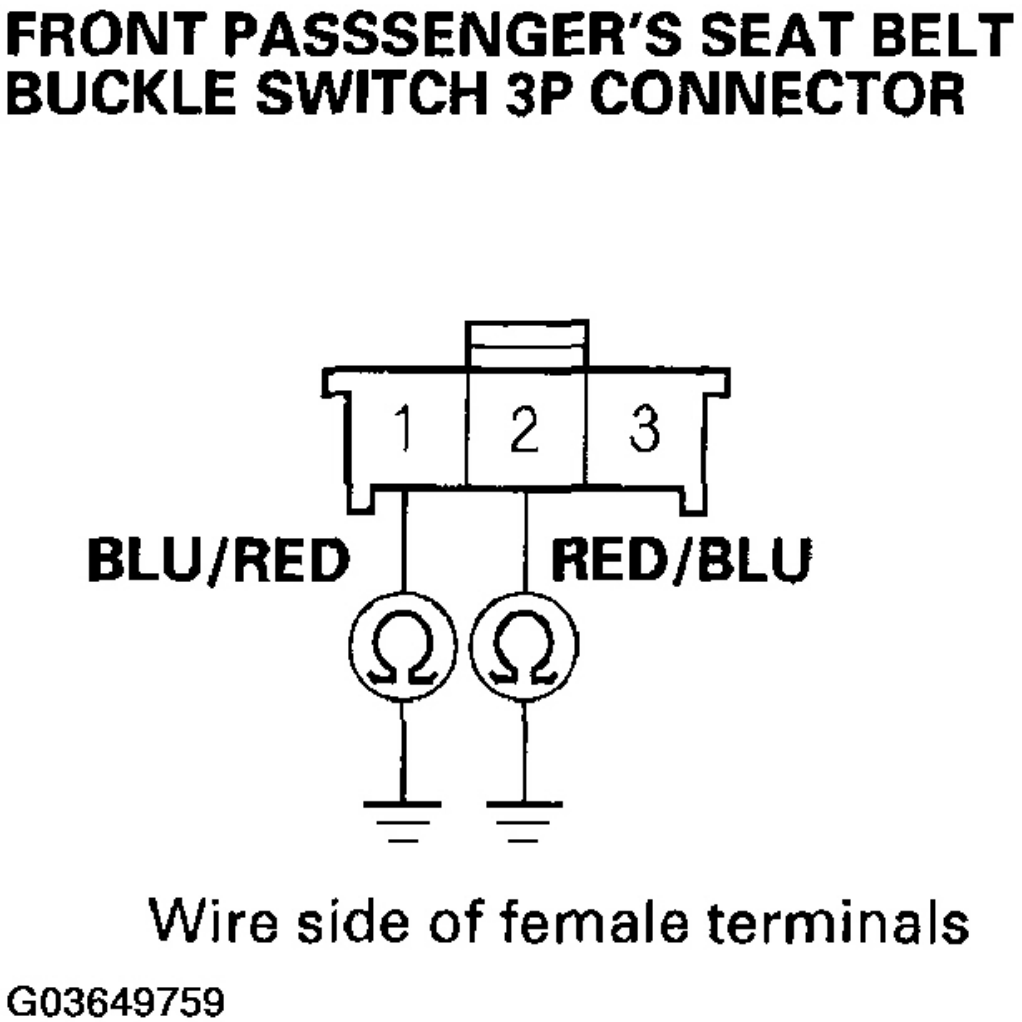


Fig. 208: Checking Continuity Between Body Ground And Front Passenger's Seat Belt Buckle Switch 3P Connector Terminals No. 1 And 2

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the front passenger's seat belt buckle assembly.

NO - Go to step 9.

9. Disconnect the negative cable from the battery.
10. Disconnect both seat belt tensioner 4P connectors from the floor wire harness (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Check resistance between the No. 2 terminal of the passenger's seat wire harness 3P connector and body ground. There should be an open circuit or at least 1 Mohms.

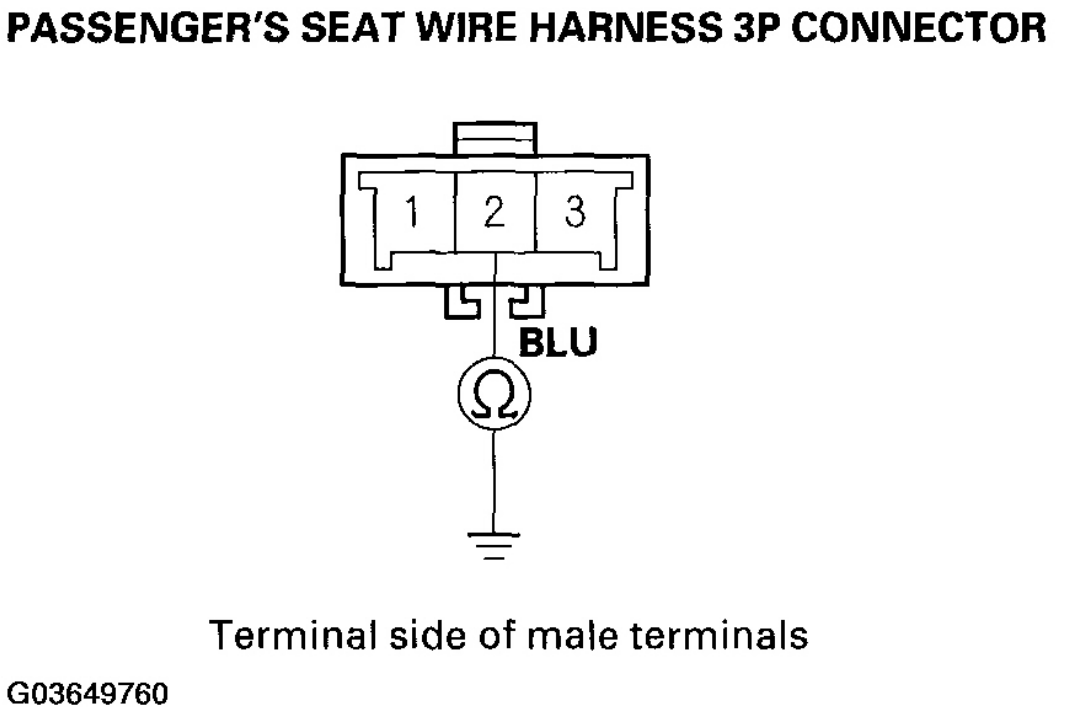


Fig. 209: Checking Resistance Between No. 2 Terminal Of Passenger's

Seat Wire Harness 3P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 13.

NO - Short to ground in the passenger's seat wire harness or floor wire harness; replace the faulty harness.

13. Check resistance between the No. 1 terminal of the passenger's seat wire harness 3P connector and body ground. There should be an open circuit or at least 1 Mohms.

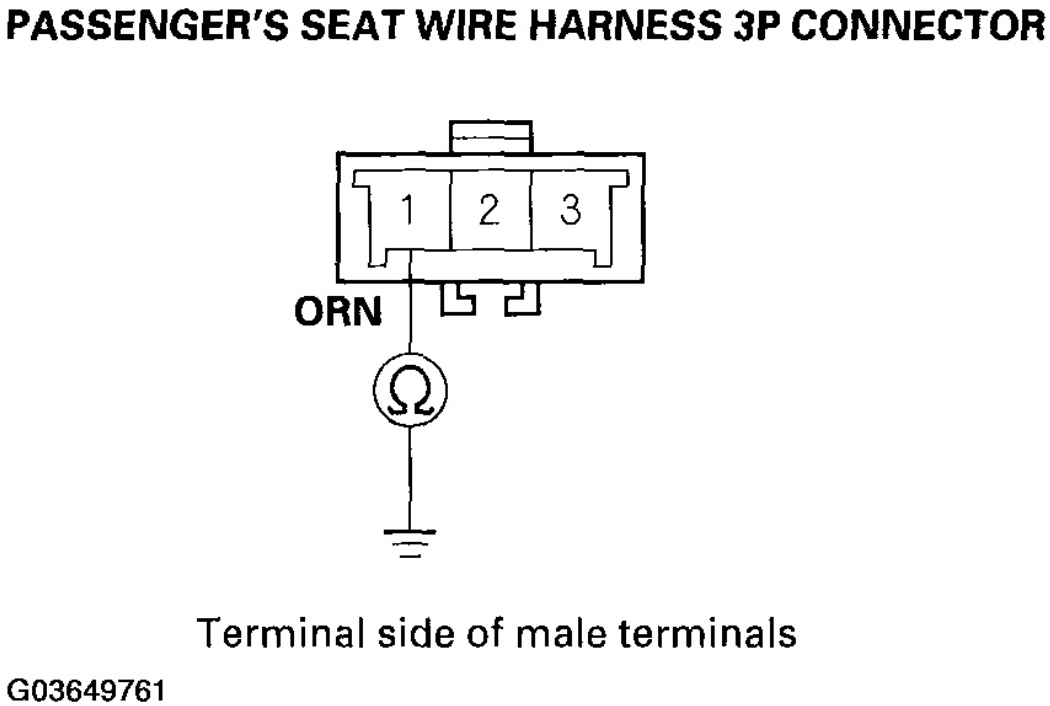


Fig. 210: Checking Resistance Between No. 1 Terminal Of Passenger's Seat Wire Harness 3P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to ground in the passenger's seat wire harness or floor wire harness; replace the faulty harness.

DTC 62-2X (62-20 TO 62-29, 62-2A TO 62-2F): SHORT IN FRONT PASSENGER'S SEAT BELT BUCKLE SWITCH (WITHOUT POWER SEAT)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), then buckle and unbuckle the front passenger's seat belt several times.
3. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

   Is DTC 62-2x indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**).
4. Turn the ignition switch OFF.
5. Disconnect the front passenger's seat belt buckle switch 3P connector (A) from the floor wire harness.

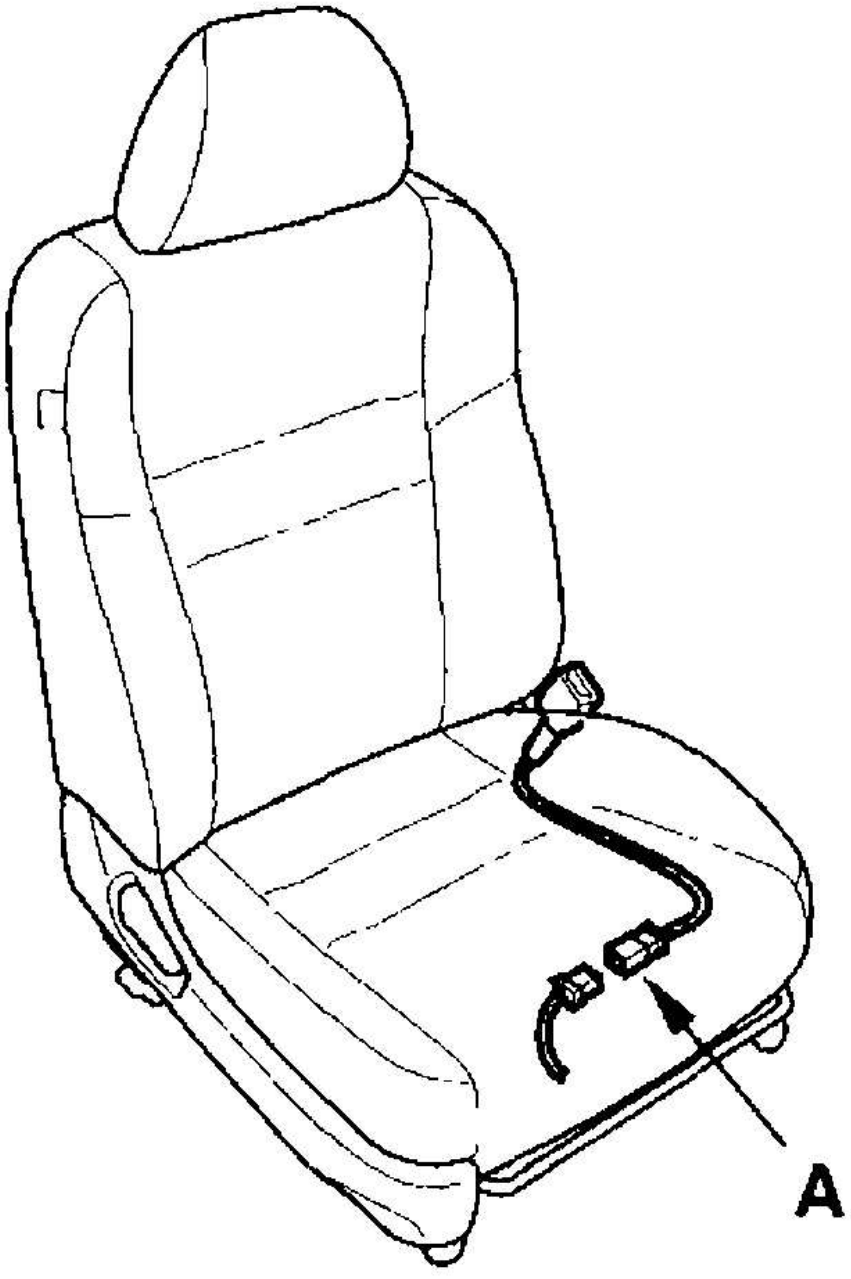


Fig. 211: Disconnecting Front Passenger's Seat Belt Buckle Switch 3P Connector From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Buckle the front passenger's seat belt.

   Check resistance between the No. 1 and No. 3 terminals of the front passenger's seat belt buckle switch 3P connector. There should be 0-1 ohms.

   Check resistance between the No. 1 and No. 2 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

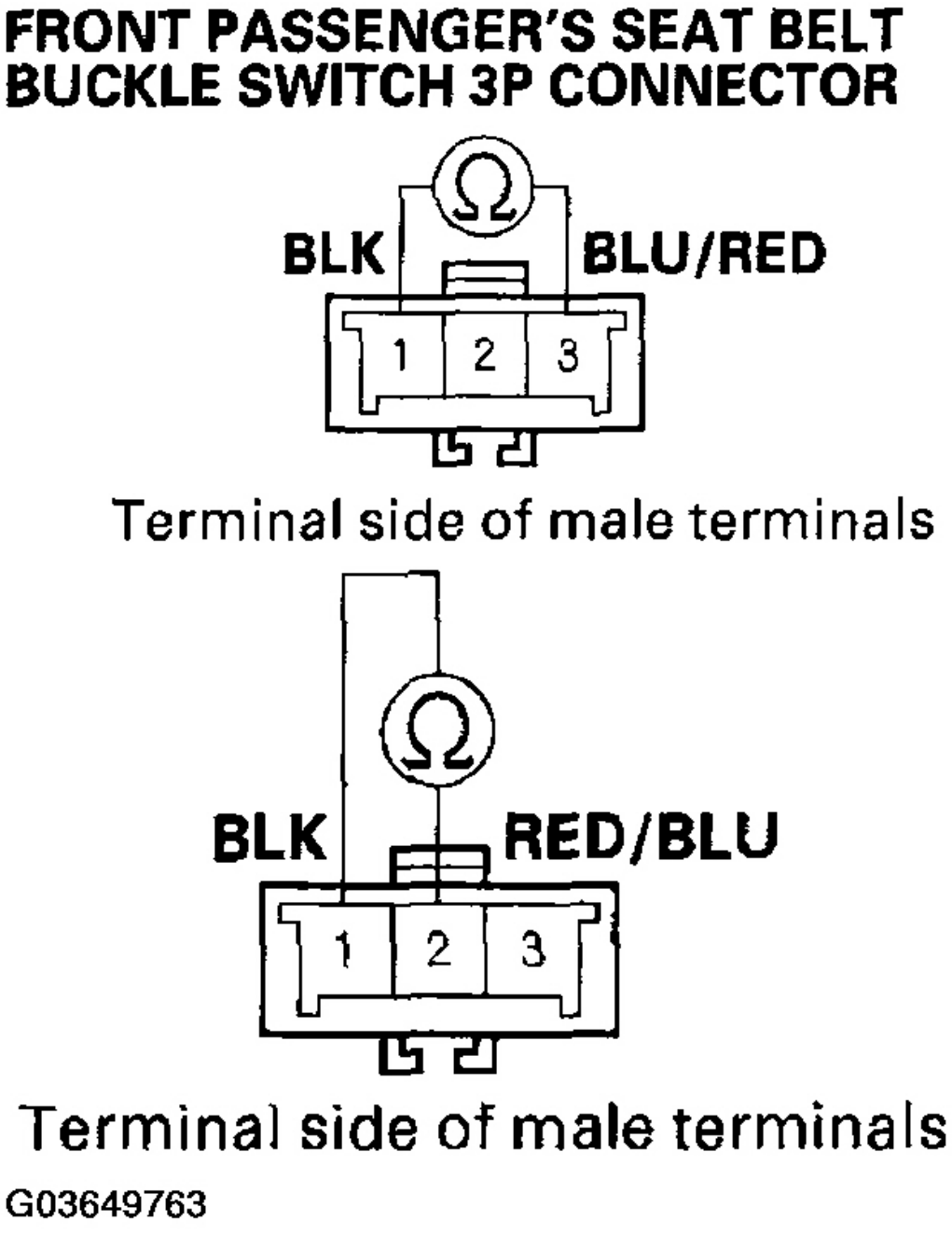


Fig. 212: Checking Resistance Between No. 1 And 3 Terminals Of Front Passenger's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 7.

NO - Replace the front passenger's seat belt buckle assembly, then clear the DTC.

7. Unbuckle the front passenger's seat belt.

Check resistance between the No. 1 and No. 2 terminals of the front passenger's seat belt buckle switch 3P connector. There should be 0-1 ohms.

Check resistance between the No. 1 and No. 3 terminals of the same connector. There should be an open circuit or at least 1 Mohms.

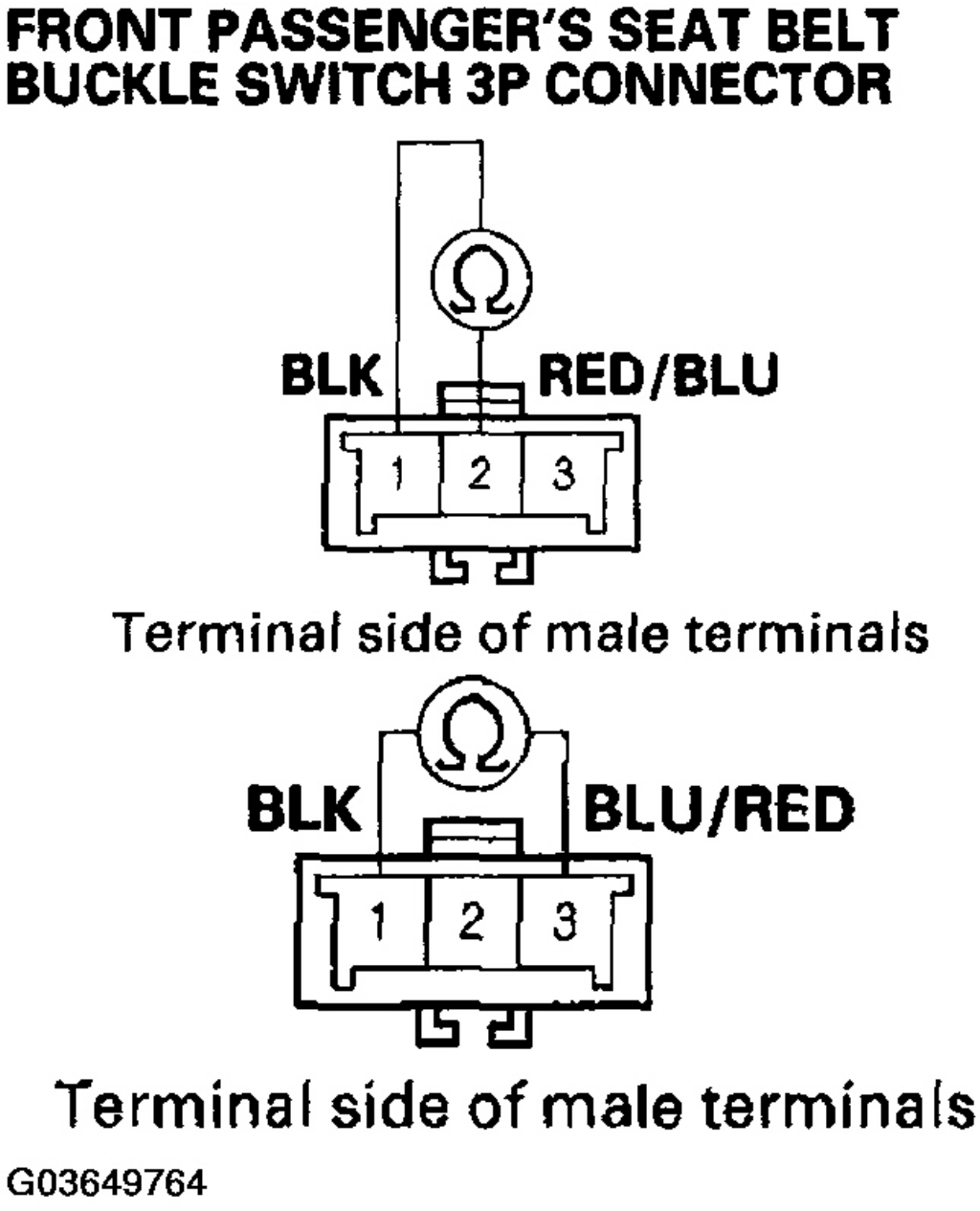


Fig. 213: Checking Resistance Between No. 1 And 2 Terminals Of Front Passenger's Seat Belt Buckle Switch 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are the resistance as specified?

YES - Go to step 8.

NO - Replace the front passenger's seat belt buckle assembly, then clear the DTC.

8. Check continuity between body ground and front passenger's seat belt buckle switch 3P connector terminals No. 2 and No. 3.

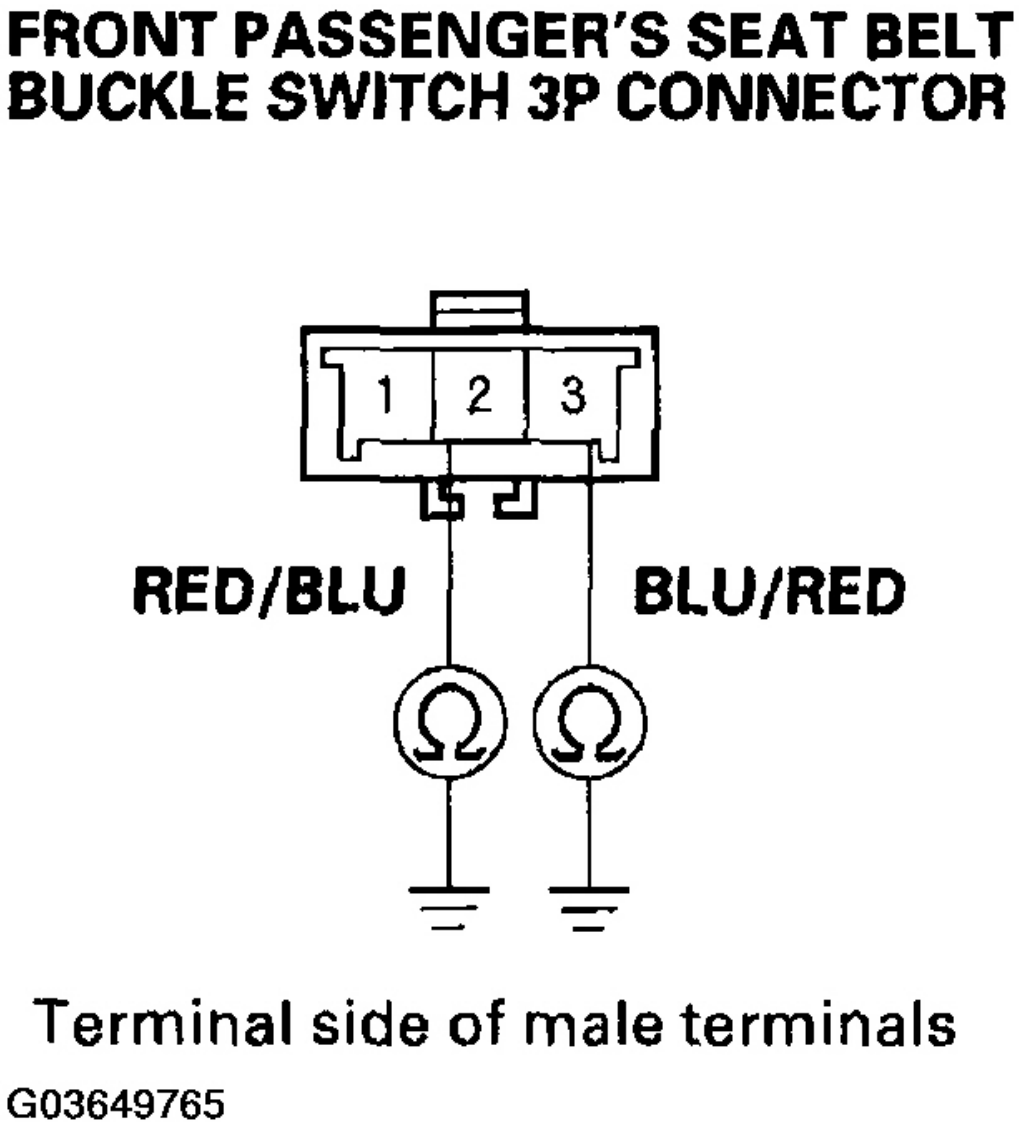


Fig. 214: Checking Continuity Between Body Ground And Front Passenger's Seat Belt Buckle Switch 3P Connector Terminals No. 2 And 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

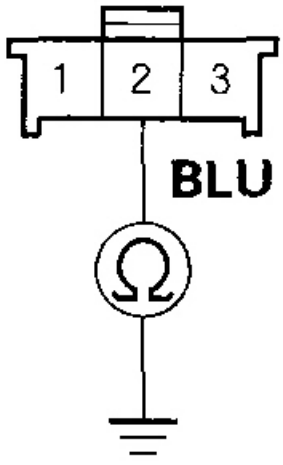
Is there continuity?

YES - Replace the front passenger's seat belt buckle assembly.

NO - Go to step 9.

9. Disconnect the negative cable from the battery.
10. Disconnect both seat belt tensioner 4P connectors from the floor wire harness (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
12. Check resistance between the No. 2 terminal of the floor wire harness 3P connector and body ground. There should be an open circuit or at least 1 Mohms.

FLOOR WIRE HARNESS 3P CONNECTOR



Wire side of female terminals

G03649766

Fig. 215: Checking Resistance Between No. 2 Terminal Of Floor Wire Harness 3P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 13.

NO - Short to ground in the floor wire harness; replace the floor wire harness.

13. Check resistance between the No. 3 terminal of the floor wire harness 3P connector and body ground. There should be an open circuit or at least 1 Mohms.

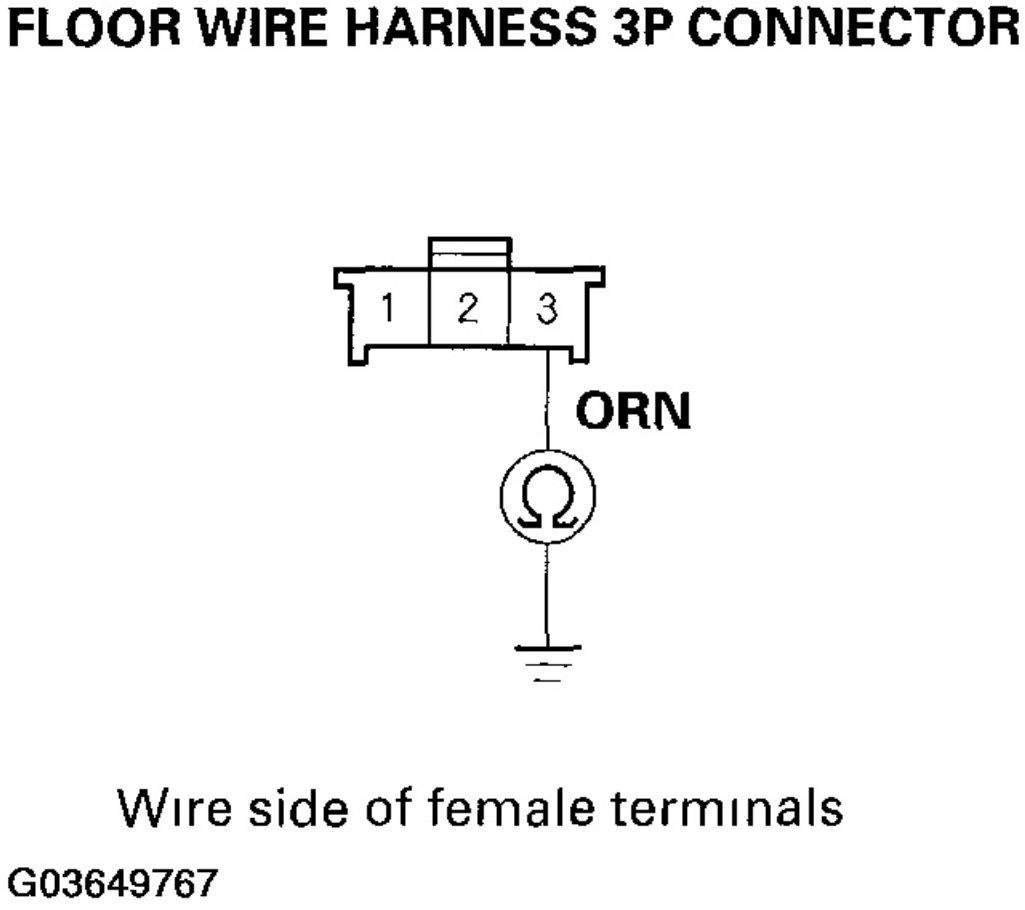


Fig. 216: Checking Resistance Between No. 3 Terminal Of Floor Wire Harness 3P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to ground in the floor wire harness; replace the floor wire harness.

DTC 71-1X171-10 TO 71-19, 71-1A TO 71-1F): OPEN IN DRIVER'S SEAT POSITION SENSOR

Special Tools Required

SRS inflator simulator 07SAZ-TB4011A

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 71-1x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Check the connection between the seat position sensor harness 2P connector and the driver's seat position sensor.
4. Erase the DTC memory.
5. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

   Is DTC 71-1x indicated?

   YES - Go to step 6.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
6. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
7. Disconnect the driver's seat wire harness 2P connector from the driver's seat position sensor (A).

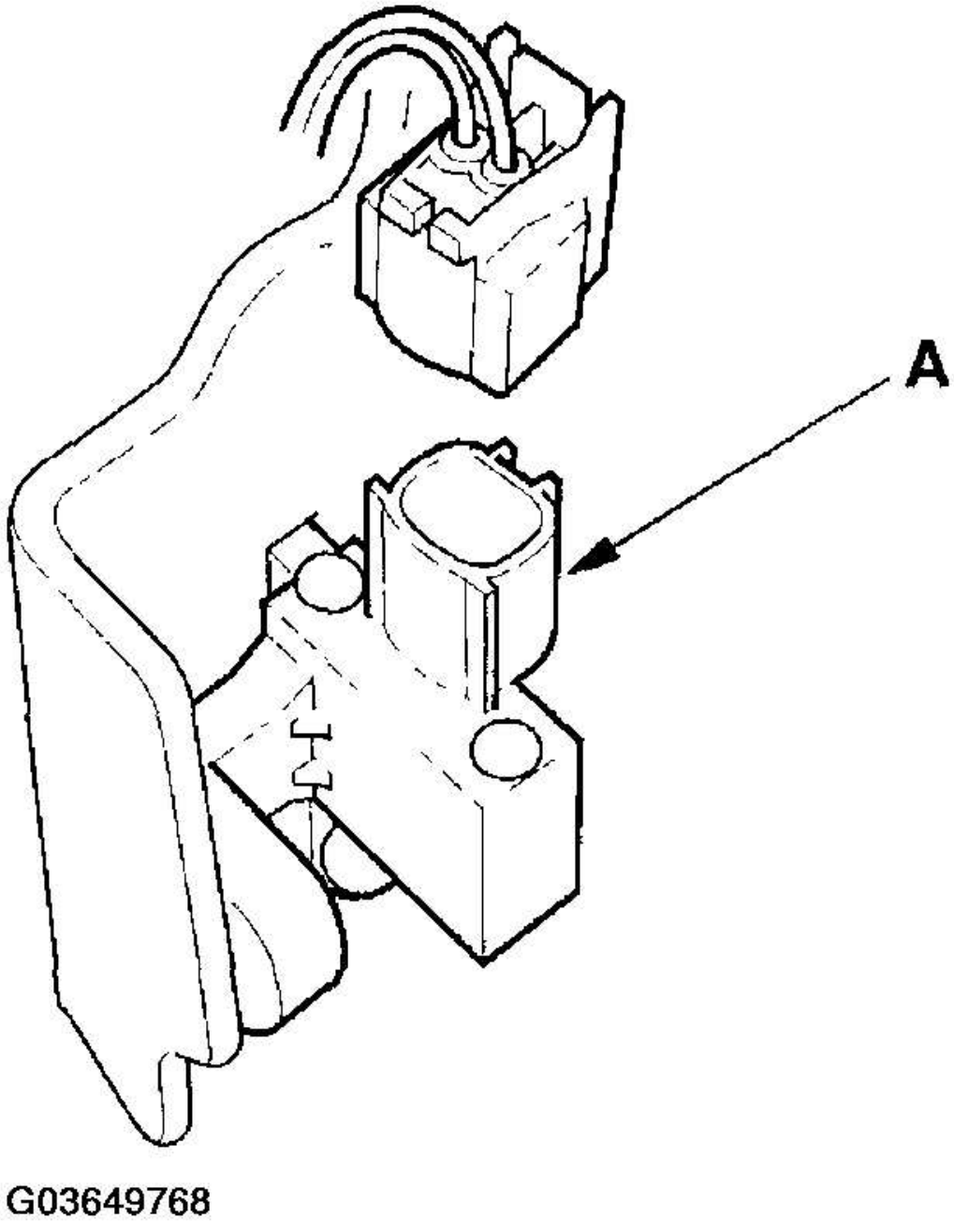


Fig. 217: Disconnecting Driver's Seat Wire Harness 2P Connector From Driver's Seat Position Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Connect the No. 1 and No. 2 terminals of the driver's seat wire harness 2P connector with a jumper wire.
9. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
10. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Check resistance between the No. 16 and No. 28 terminals of SRS unit connector B (28P). There should be 0-1.0 ohms.

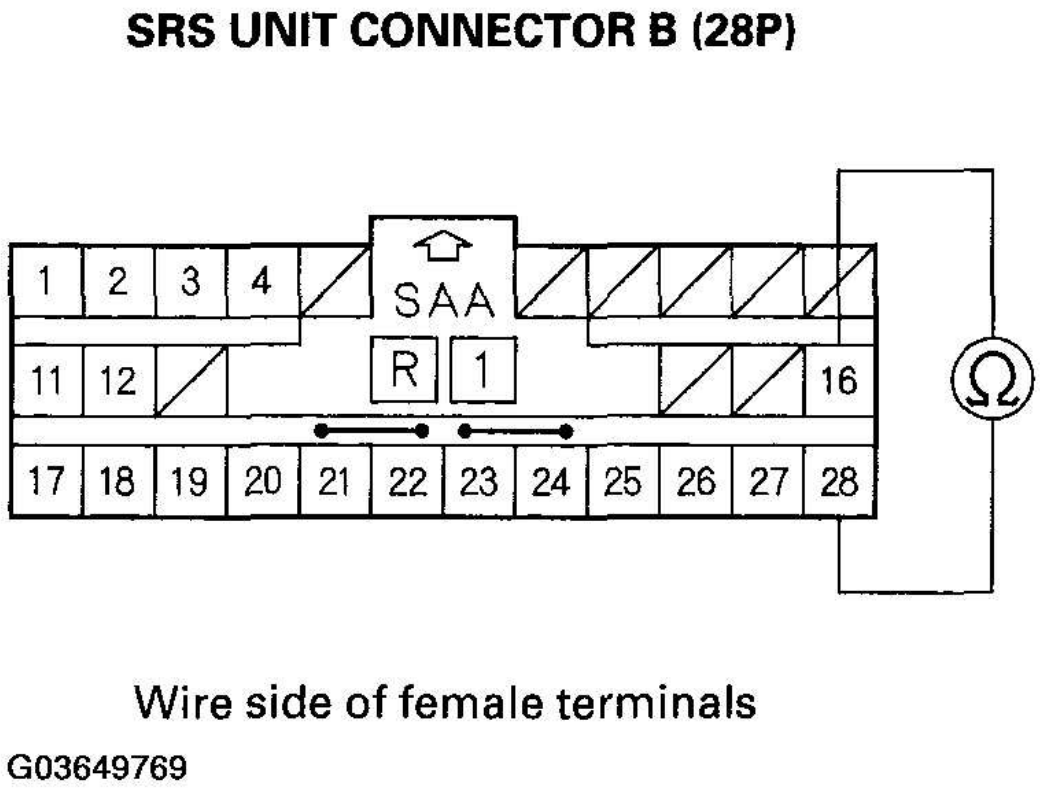


Fig. 218: Checking Resistance Between No. 16 And 28 Terminals Of SRS Unit Connector B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty driver's seat position sensor or SRS unit; replace the driver's seat position sensor (see **DRIVER'S SEAT POSITION SENSOR REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open in the floor wire harness or seat position sensor harness; replace the faulty harness.

DTC 71-2X (71-20 TO 71-29, 71-2A TO 71-2F): SHORT IN DRIVER'S SEAT POSITION SENSOR

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 71-2x indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the driver's seat wire harness 2P connector from the driver's seat position sensor (A).

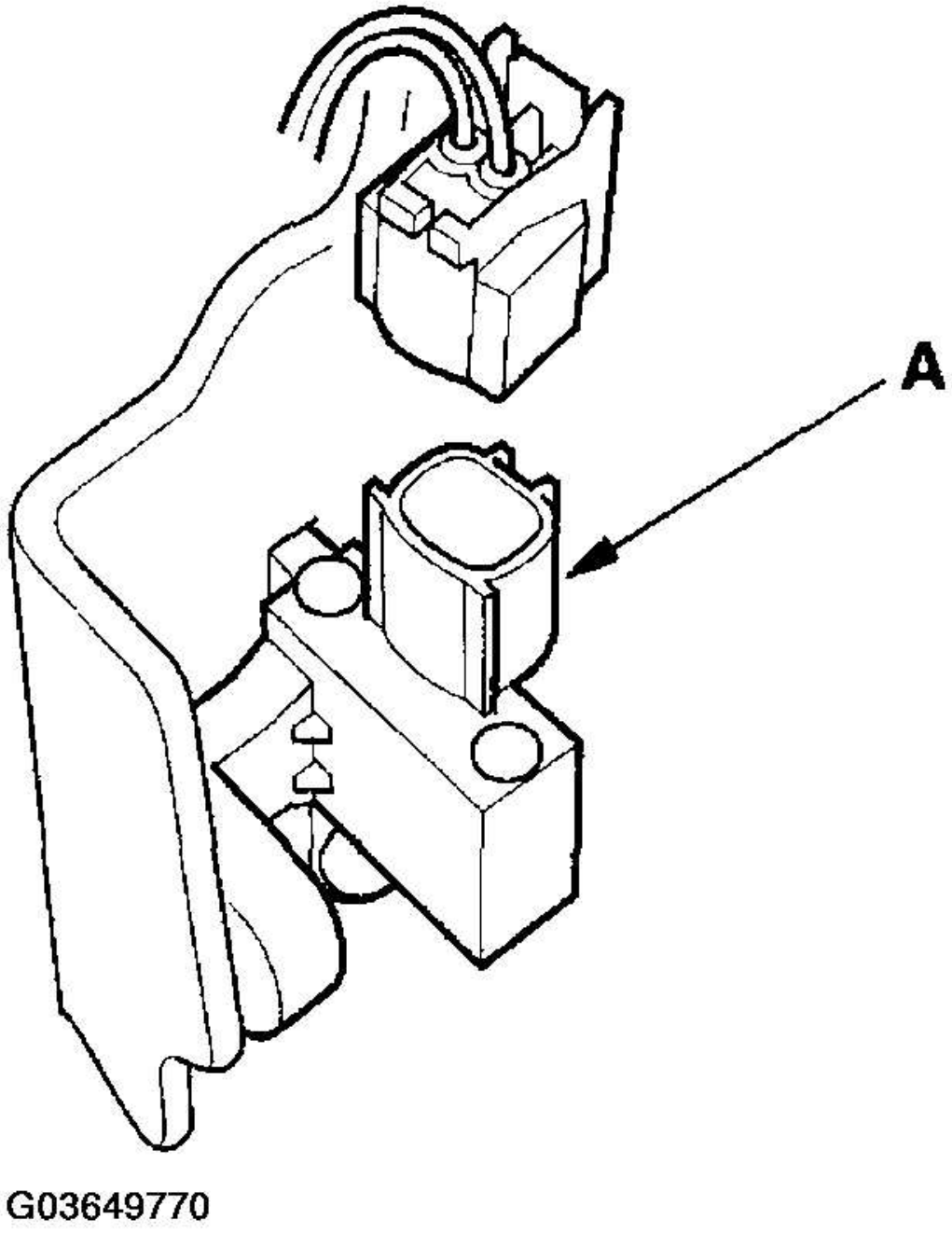


Fig. 219: Disconnecting Driver's Seat Wire Harness 2P Connector From Driver's Seat Position Sensor

Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Reconnect the battery negative cable.
6. Erase the DTC memory.
7. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

   Is DTC 71-2x indicated?

   YES - Go to step 8.

   NO - Faulty driver's seat position sensor; replace the driver's seat position sensor.
8. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
9. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
10. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
11. Check resistance between the No. 16 and No. 28 terminals of SRS unit connector B (28P). There should be an open circuit or at least 1 Mohms.

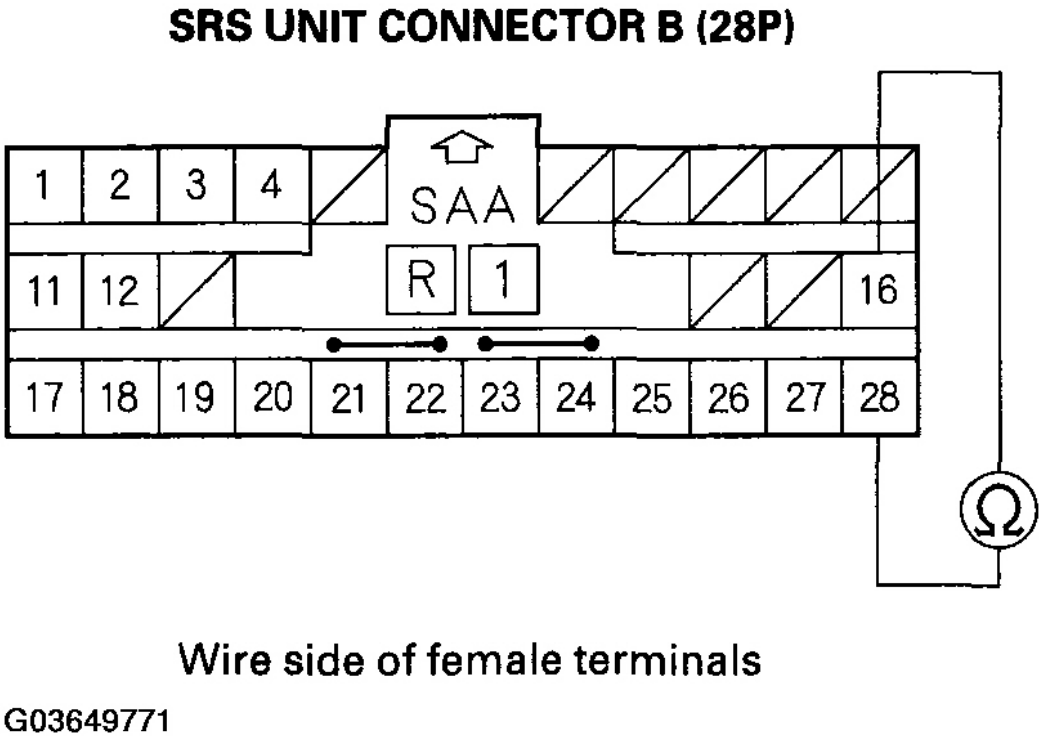


Fig. 220: Checking Resistance Between No. 16 And 28 Terminals Of SRS Unit Connector B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 12.

NO - Short in the floor wire harness or seat position sensor harness; replace the faulty harness.

12. Check resistance between the No. 16 terminal of SRS unit connector B (28P) and body ground, and between the No. 28 terminal and body ground. There should be an open circuit or at least 1 Mohms.

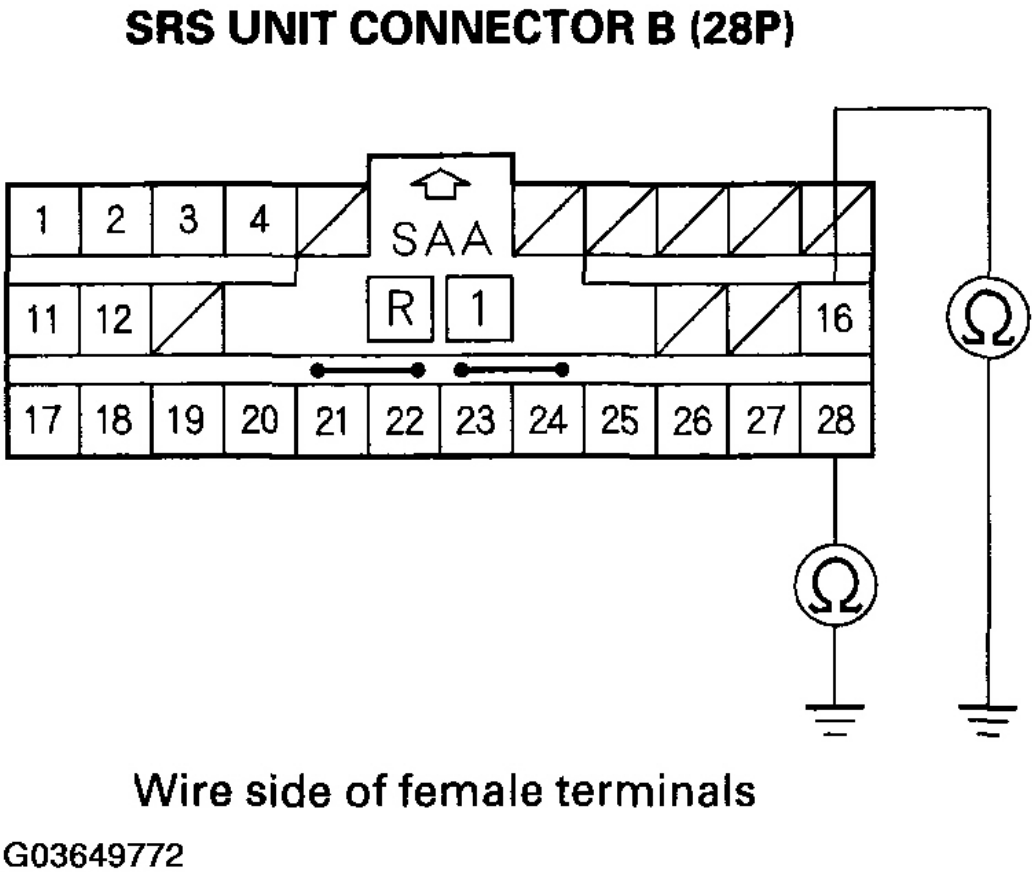


Fig. 221: Checking Resistance Between No. 16 Terminal Of SRS Unit Connector B And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty driver's seat position sensor or SRS unit; replace the driver's seat position sensor (see **DRIVER'S SEAT POSITION SENSOR REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short in the floor wire harness or seat position sensor harness; replace the faulty harness.

DTC 71-22: SHORT TO POWER IN DRIVER'S SEAT POSITION SENSOR

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 71-22 indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect the floor wire harness 2P connector from the driver's seat position sensor (A).

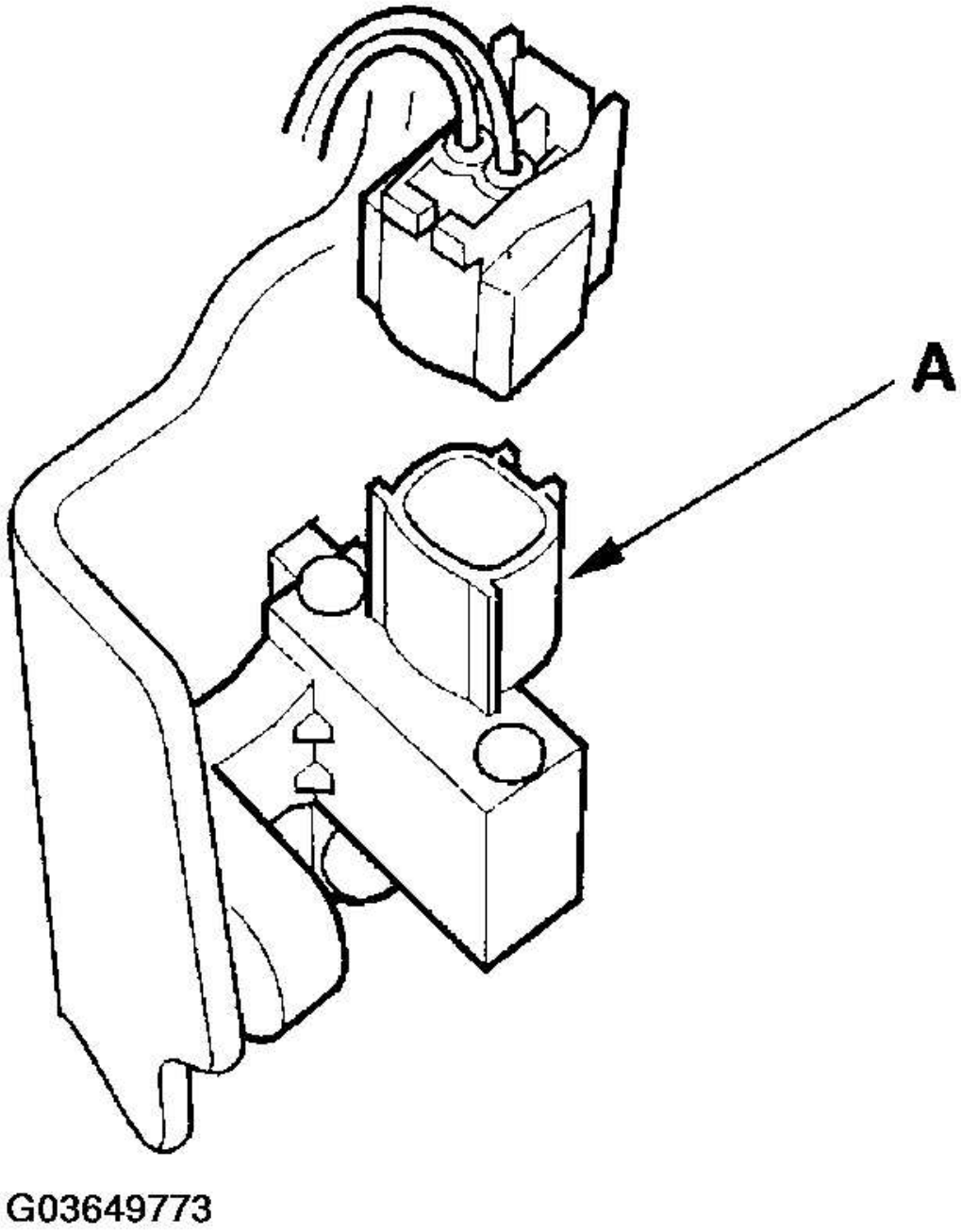


Fig. 222: Disconnecting Floor Wire Harness 2P Connector From Driver's Seat Position Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
6. Disconnect SRS unit connector B from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
7. Check the voltage between the No. 16 terminal of SRS unit connector B (28P) and body ground, and between the No. 28 terminal and body ground. There should be 1 V or less.

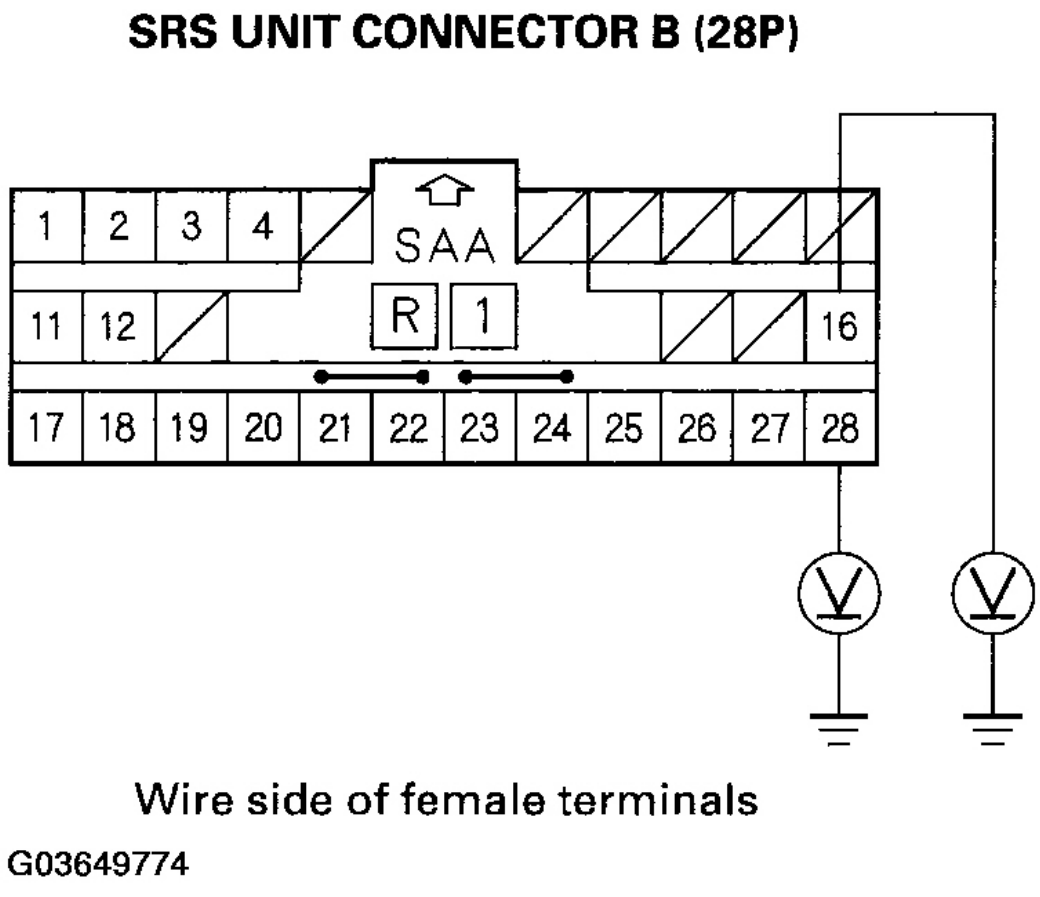


Fig. 223: Checking Voltage Between No. 16 Terminal Of SRS Unit Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Faulty driver's seat position sensor or SRS unit; replace the driver's seat position sensor (see **DRIVER'S SEAT POSITION SENSOR REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to power in the floor wire harness or seat position sensor harness; replace the faulty harness.

DTC 81-61: NO SIGNAL FROM FRONT PASSENGER'S WEIGHT SENSOR UNIT (WITH SIDE AIRBAG) ('04-05 MODELS)

DTC 81-62: NON-STIPULATED RESPONSE DATA (WITH SIDE AIRBAG) ('04-05 MODELS)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

   Is DTC 81-61 or 81-62 indicated?

   YES - Go to step 5.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Check the connection between the floor wire harness 6P connector and the front passenger's weight sensor unit.

   Is the connection OK?

   YES - Go to step 4.

   NO - Repair the poor connection and retest. If DTC 81-61 or 81-62 or still present, go to step 6.
4. Turn the ignition switch OFF.
5. Check the No. 10 (7.5A) fuse in the under-dash fuse/relay box.

   Is the fuse OK?

YES - Go to step 6.

NO - Replace the fuse, then turn the ignition switch ON (II). If the fuse blows again, check for a short in the No. 10 (7.5 A) fuse circuit (dashboard wire harness or floor wire harness).

6. Disconnect the floor wire harness 6P connector C from the front passenger's weight sensor unit.

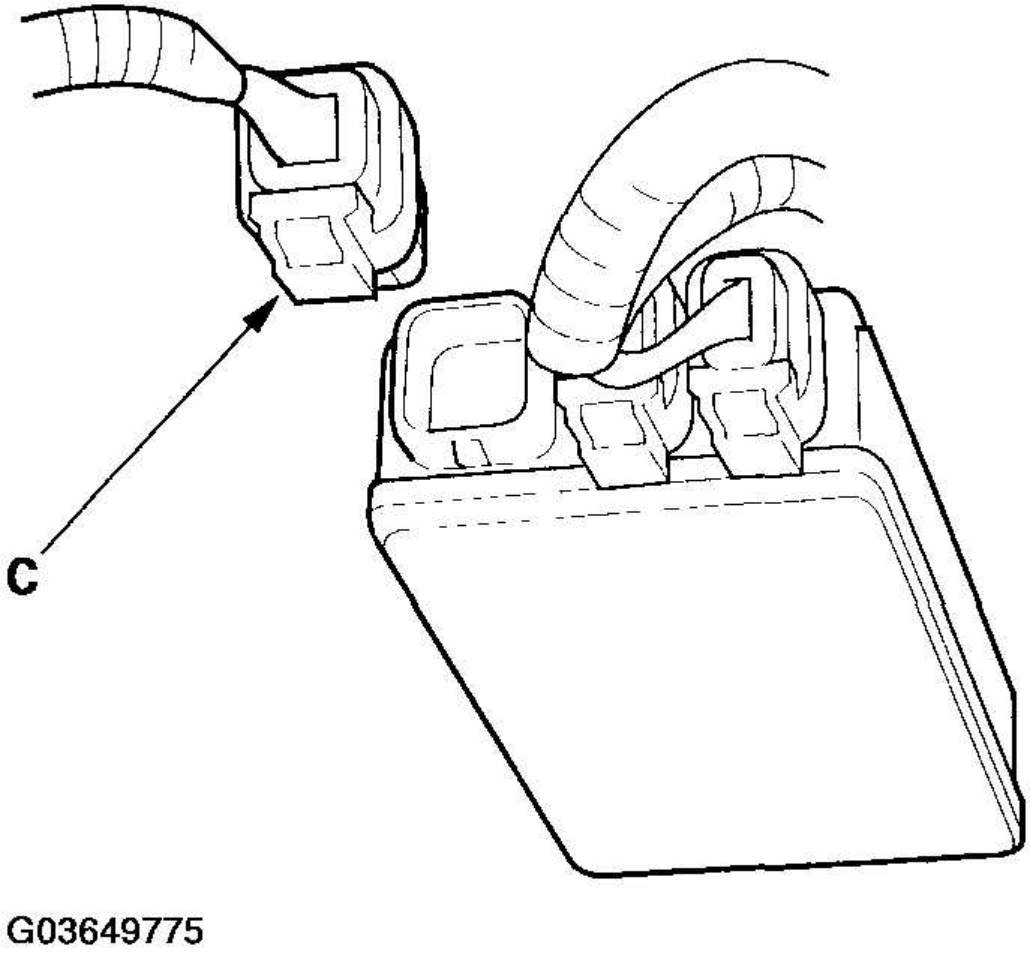


Fig. 224: Disconnecting Floor Wire Harness 6P Connector C From Front Passenger's Weight Sensor Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Turn the ignition switch ON (II).
8. Check for voltage between the No. 3 terminal of the front passenger's weight sensor unit 6P connector C and body ground. There should be battery voltage.

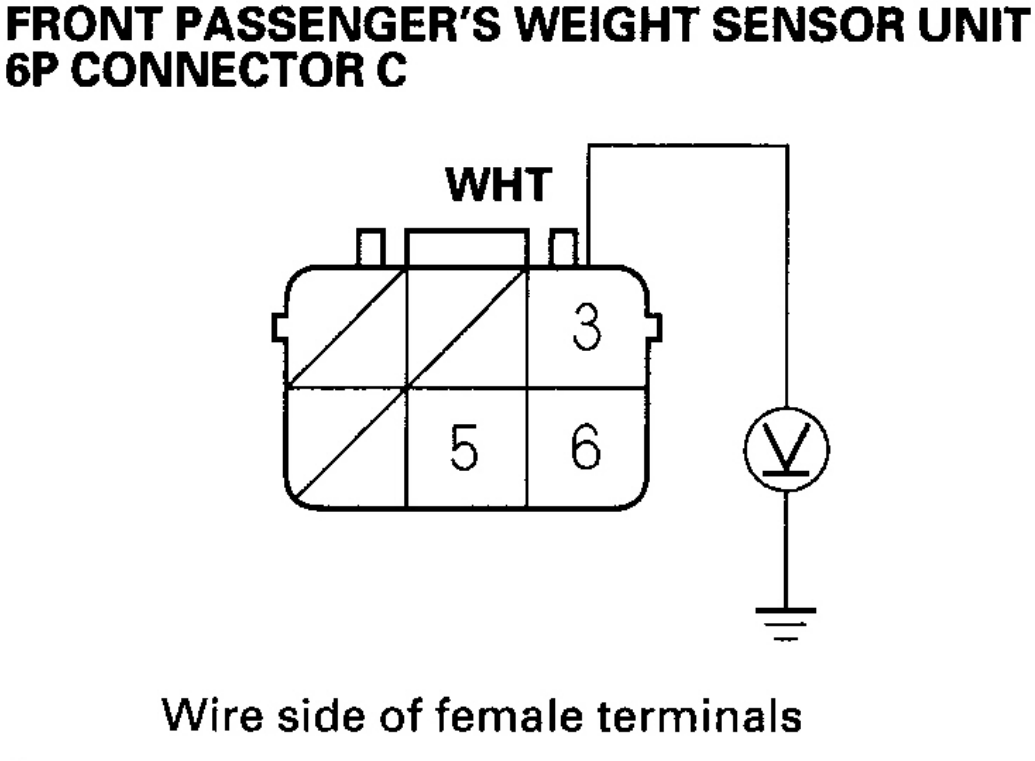


Fig. 225: Checking Voltage Between No. 3 Terminal Of Front Passenger's Weight Sensor Unit 6P Connector C And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 13.

NO - Go to step 9.

9. Turn the ignition switch OFF.
10. Disconnect dashboard wire harness 24P connector C501A from the floor wire

harness (C501B).

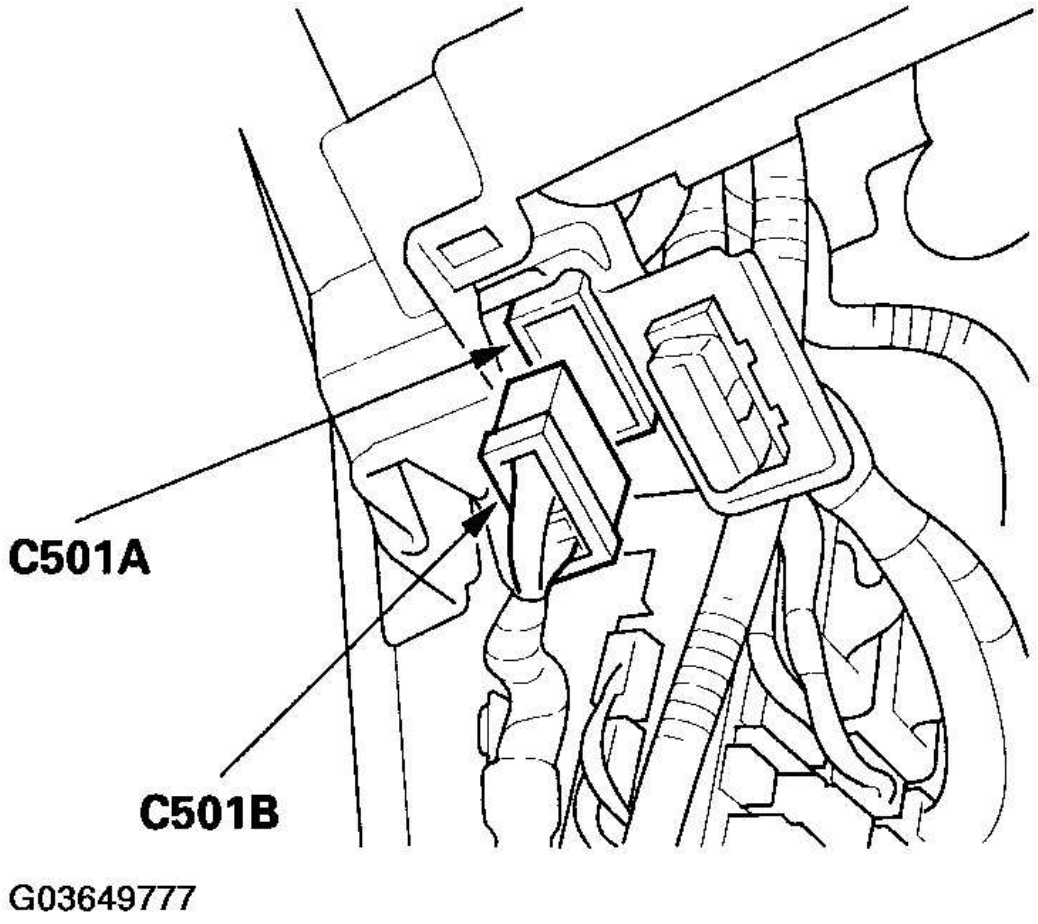


Fig. 226: Disconnecting Dashboard Wire Harness 24P Connector C501A From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Turn the ignition switch ON (II).
12. Check for voltage between the No. 9 terminal of dashboard wire harness 24P connector and body ground. There should be battery voltage.

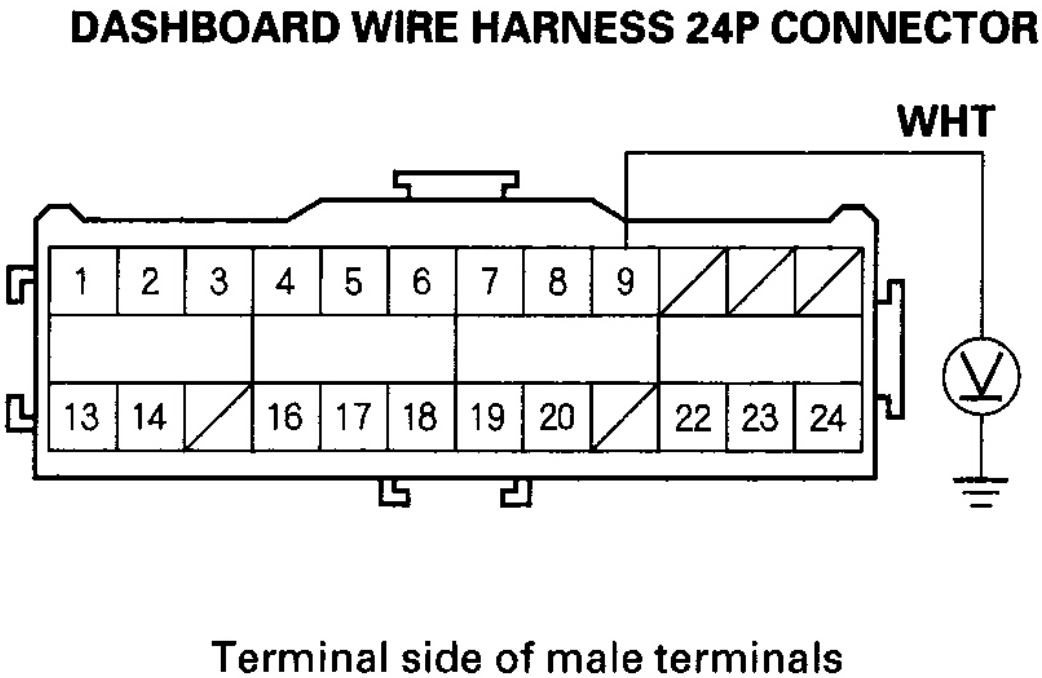


Fig. 227: Checking Voltage Between No. 9 Terminal Of Dashboard Wire Harness 24P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Open in the WHT wire of the floor wire harness; replace the floor wire harness.

NO - Open in the WHT wire of the dashboard wire harness; replace dashboard wire harness.

13. Turn the ignition switch OFF.
14. Check resistance between the No. 6 terminal of the front passenger's weight sensor unit 6P connector C and body ground. There should be 0---1.0 ohms.

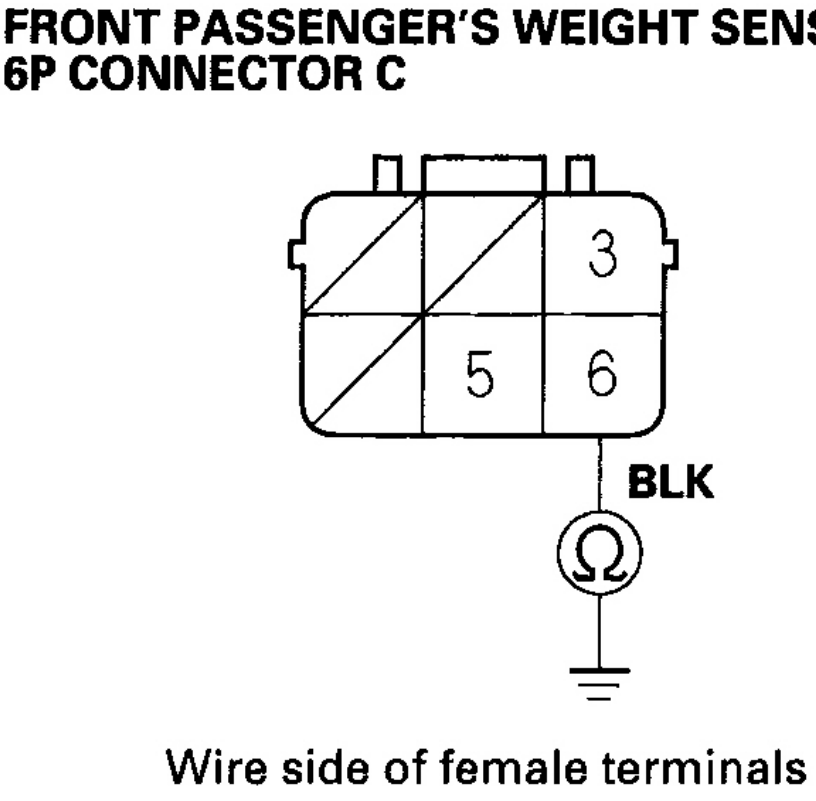


Fig. 228: Checking Resistance Between No. 6 Terminal Of Front Passenger's Weight Sensor Unit 6P Connector C And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 15.

NO - Open in the BLK wire of the floor wire harness; check for poor ground connection at G602 (see **FLOOR WIRE HARNESS (LEFT BRANCH) (4-DOOR)**). If the connection is OK, replace the floor wire harness.

15. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.

16. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
17. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**). Disconnect OPDS unit 8P connector D from the OPDS unit.
18. Check resistance between the No. 27 terminal of SRS unit connector B (28P) and body ground. There should be an open circuit or at least 1 Mohms.

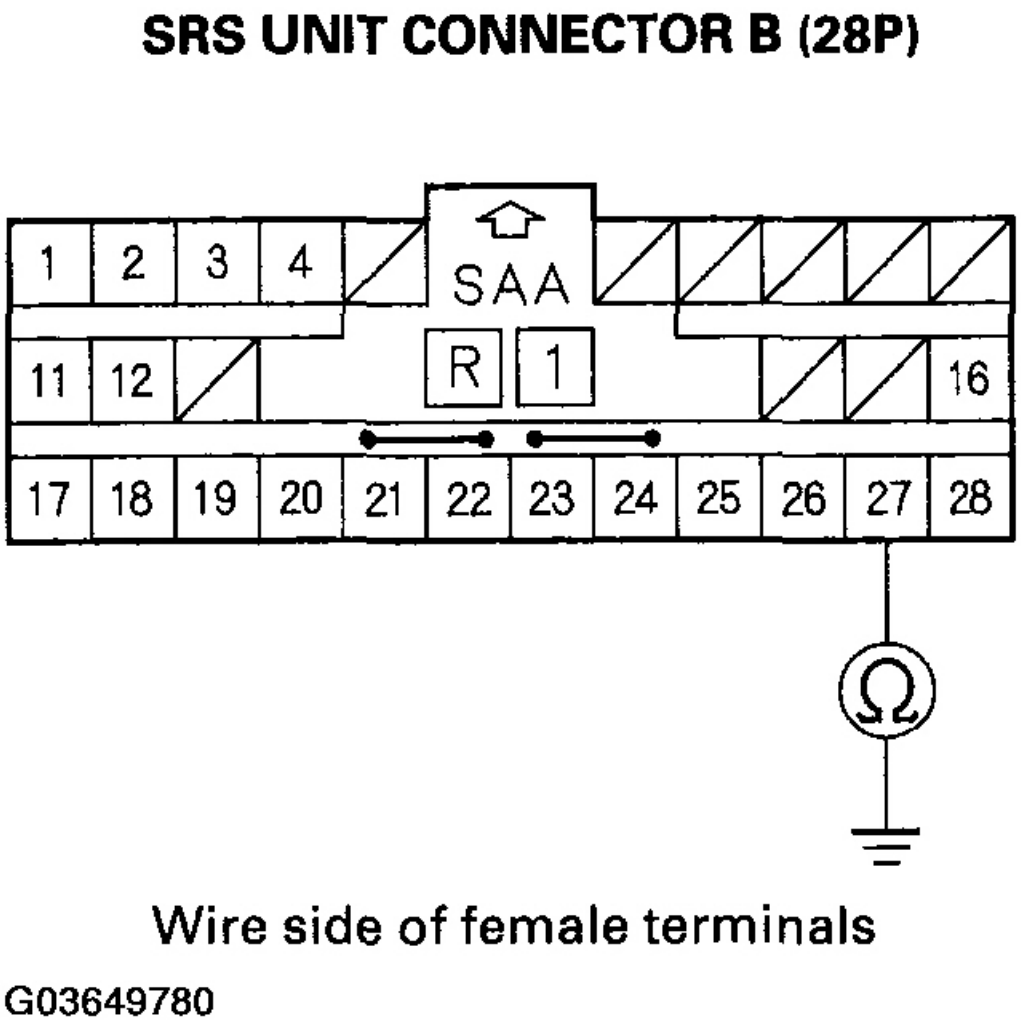


Fig. 229: Checking Resistance Between No. 27 Terminal Of SRS Unit

Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 19.

NO - Go to step 22.

19. Check resistance between the No. 27 terminal of SRS unit connector B (28P) and the No. 5 terminal of the front passenger's weight sensor unit 6P connector C. There should be 0-1.0 ohms.

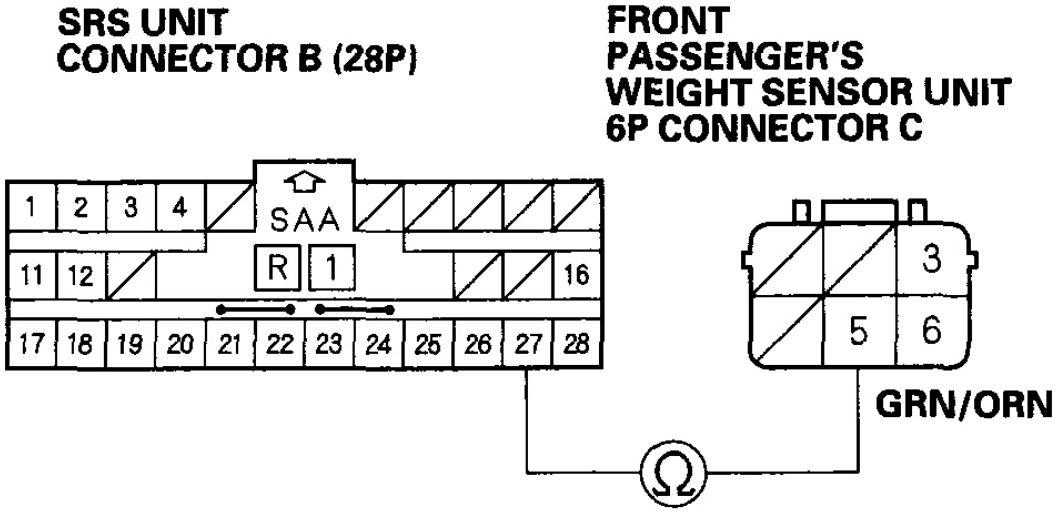


Fig. 230: Checking Resistance Between No. 27 Terminal Of SRS Unit Connector B (28P) And No. 5 Terminal Of Front Passenger's Weight Sensor Unit 6P Connector C
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty front passenger's weight sensor unit or SRS unit; replace the

front passenger's weight sensor unit (see **FRONT PASSENGER'S WEIGHT SENSOR UNIT REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Go to step 20.

20. Disconnect dashboard wire harness 24P connector C501A from the floor wire harness (C501B).

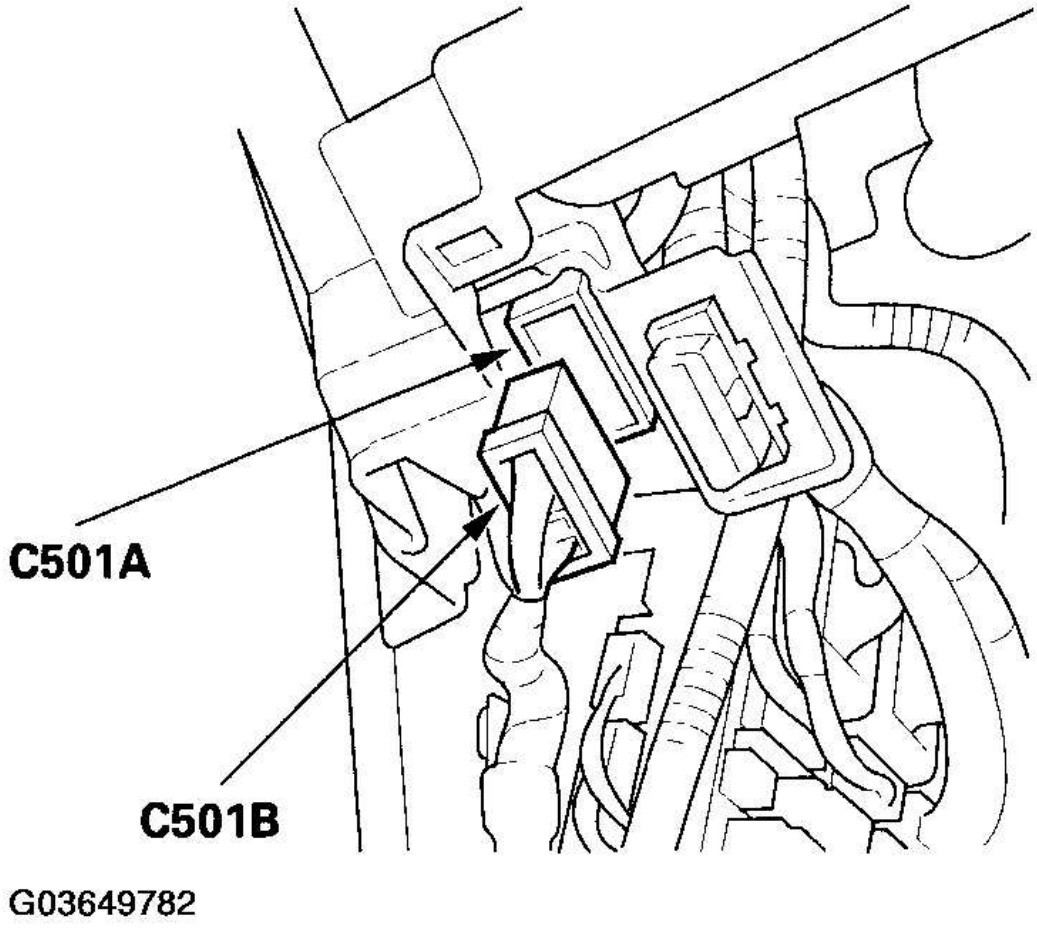


Fig. 231: Disconnecting Dashboard Wire Harness 24P Connector C501A From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Check resistance between the No. 27 terminal of SRS unit connector B (28P)

and the No. 17 terminal of floor wire harness 24P connector. There should be 0-1.0 ohms.

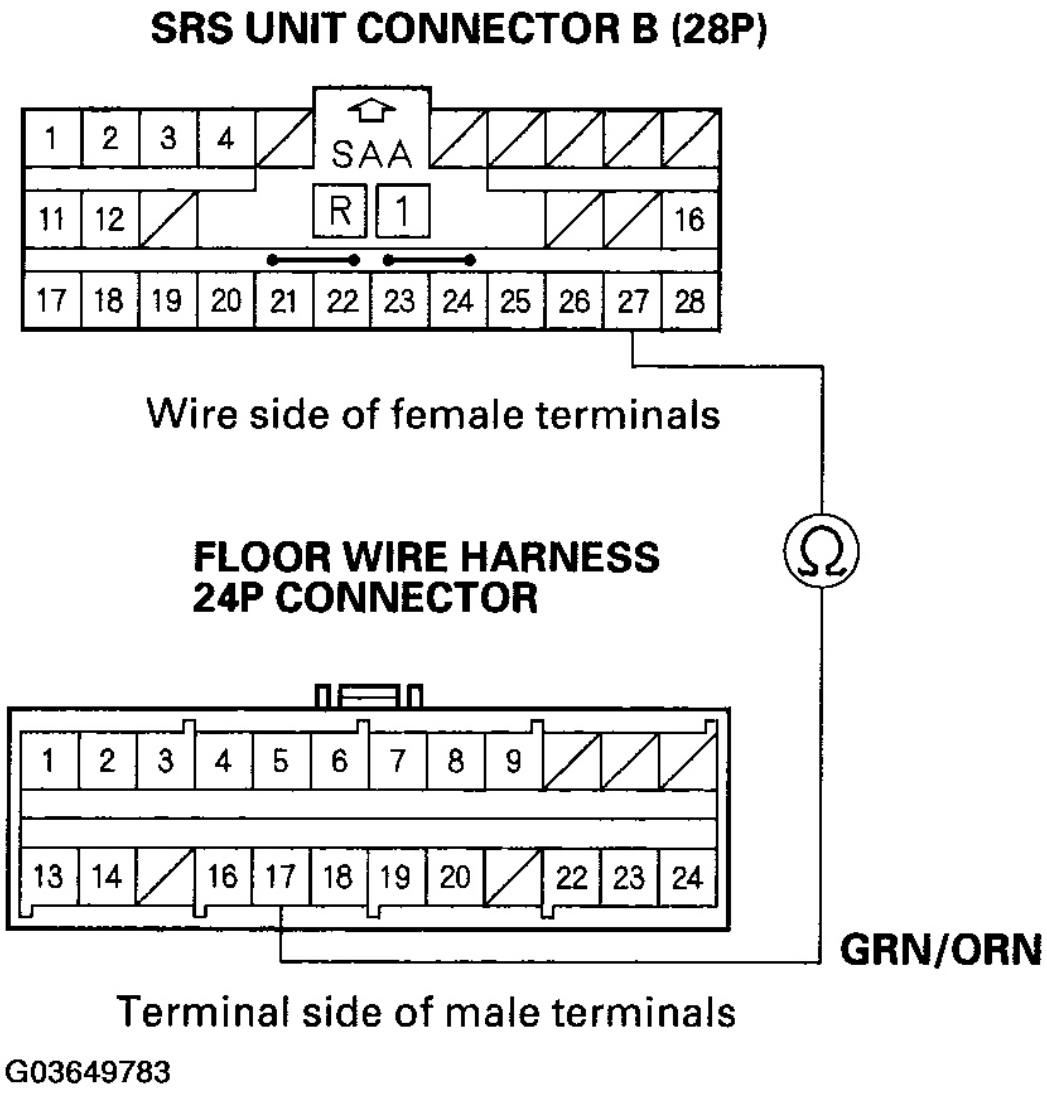


Fig. 232: Checking Resistance Between No. 27 Terminal Of SRS Unit Connector B (28P) And No. 17 Terminal Of Floor Wire Harness 24P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Open in the GRN/ORN wire of the dashboard wire harness; replace the dashboard wire harness.

NO - Open in the floor wire harness; replace the floor wire harness.

22. Disconnect dashboard wire harness 24P connector C501A from floor wire harness (C501B).

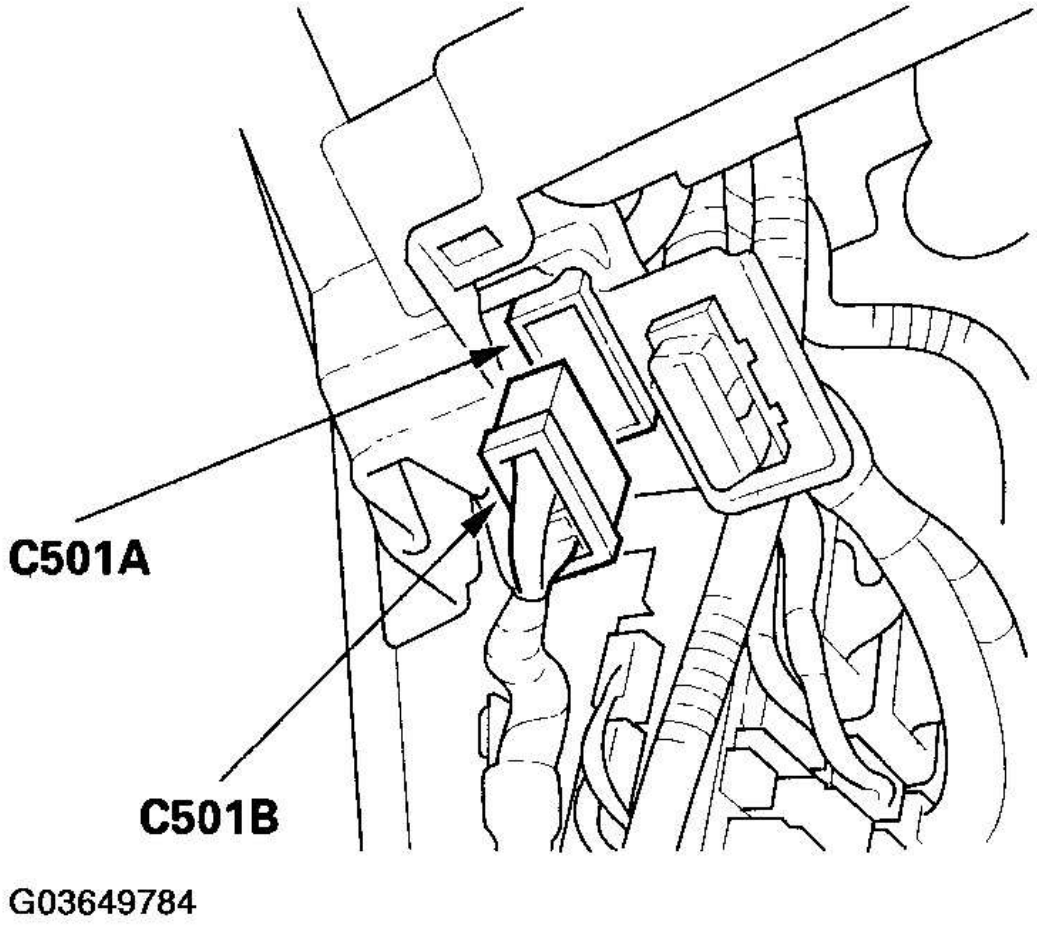


Fig. 233: Disconnecting Dashboard Wire Harness 24P Connector C501A From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Check resistance between the No. 27 terminal of SRS unit connector B (28P)

and body ground. There should be an open circuit or at least 1 Mohms.

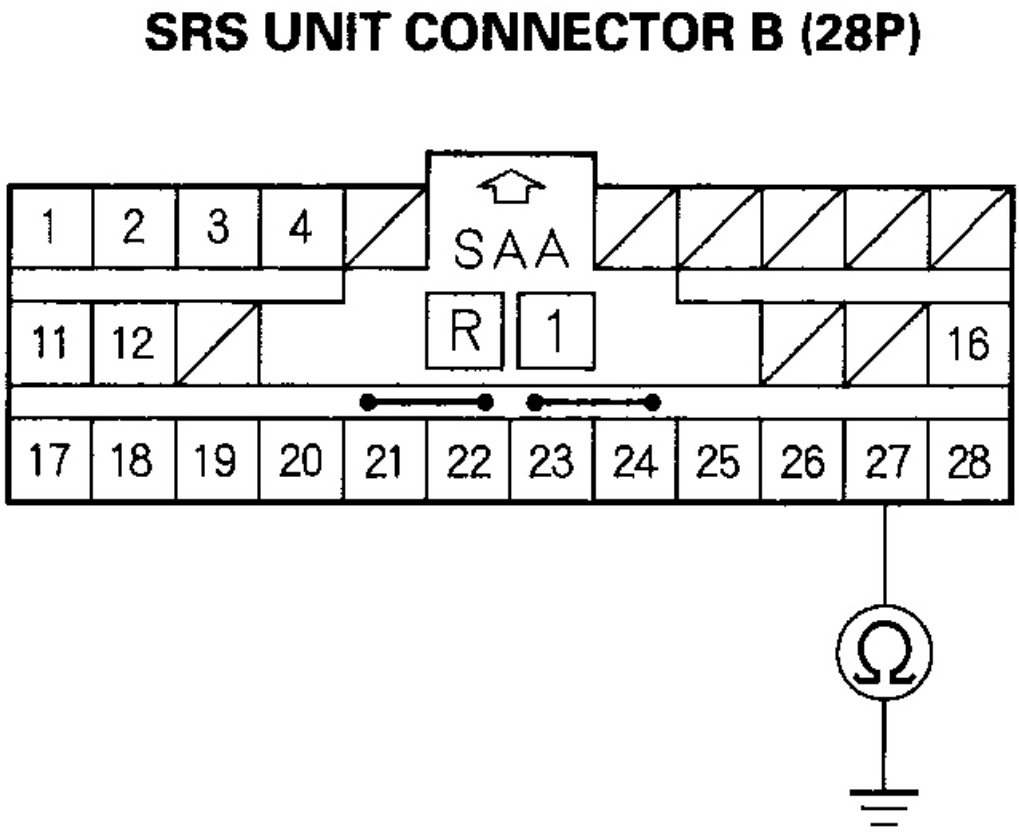


Fig. 234: Checking Resistance Between 27 Terminal Of SRS Unit Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Short to ground in the dashboard wire harness; replace the dashboard wire harness.

NO - Short to ground in the floor wire harness; replace the floor wire harness.

DTC 81-61: NO SIGNAL FROM FRONT PASSENGER'S WEIGHT SENSOR UNIT (WITHOUT SIDE AIRBAG) ('04-05 MODELS)

DTC 81-62: NON-STIPULATED RESPONSE DATA (WITHOUT SIDE AIRBAG) ('04-05 MODELS)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 81-61 or 81-62 indicated?

YES - Go to step 3.

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

3. Check the connection between the floor wire 6P connector and the front passenger's weight sensor unit.

Is the connection OK?

YES - Go to step 4.

NO - Repair the poor connection and retest. If DTC 81-61 or 81-62 is still present, go to step 6.

4. Turn the ignition switch OFF.
5. Check the No. 10 (7.5 A) fuse in the driver's under-dash fuse/relay box.

Is the fuse OK?

YES - Go to step 6.

NO - Replace the fuse, then turn the ignition switch ON (II). If the fuse blows again, check for a short in the No. 10 (7.5 A) fuse circuit

(dashboard wire harness or floor wire harness).

6. Disconnect the floor wire harness 6P connector C from the front passenger's weight sensor unit.

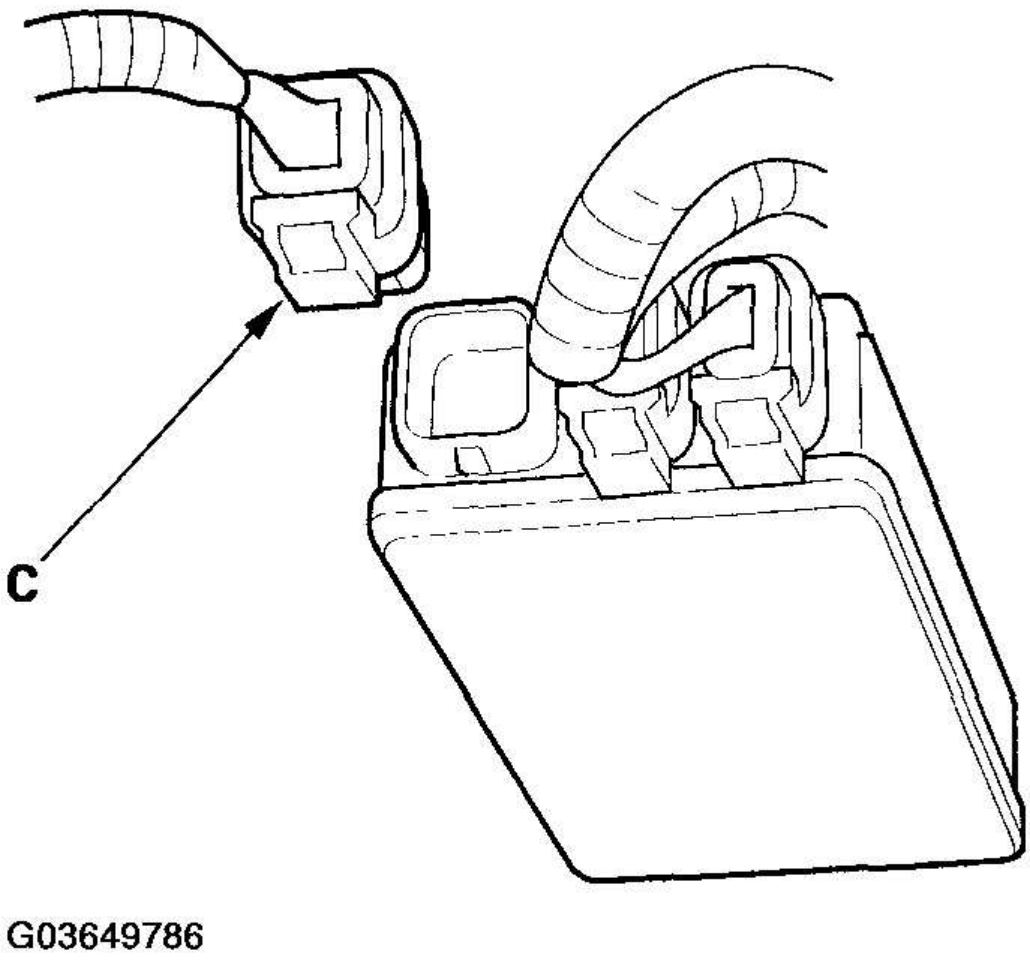


Fig. 235: Disconnecting Floor Wire Harness 6P Connector C From Front Passenger's Weight Sensor Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Turn the ignition switch ON (II).
8. Check for voltage between the No. 3 terminal of the front passenger's weight sensor unit 6P connector C and body ground. There should be battery voltage.

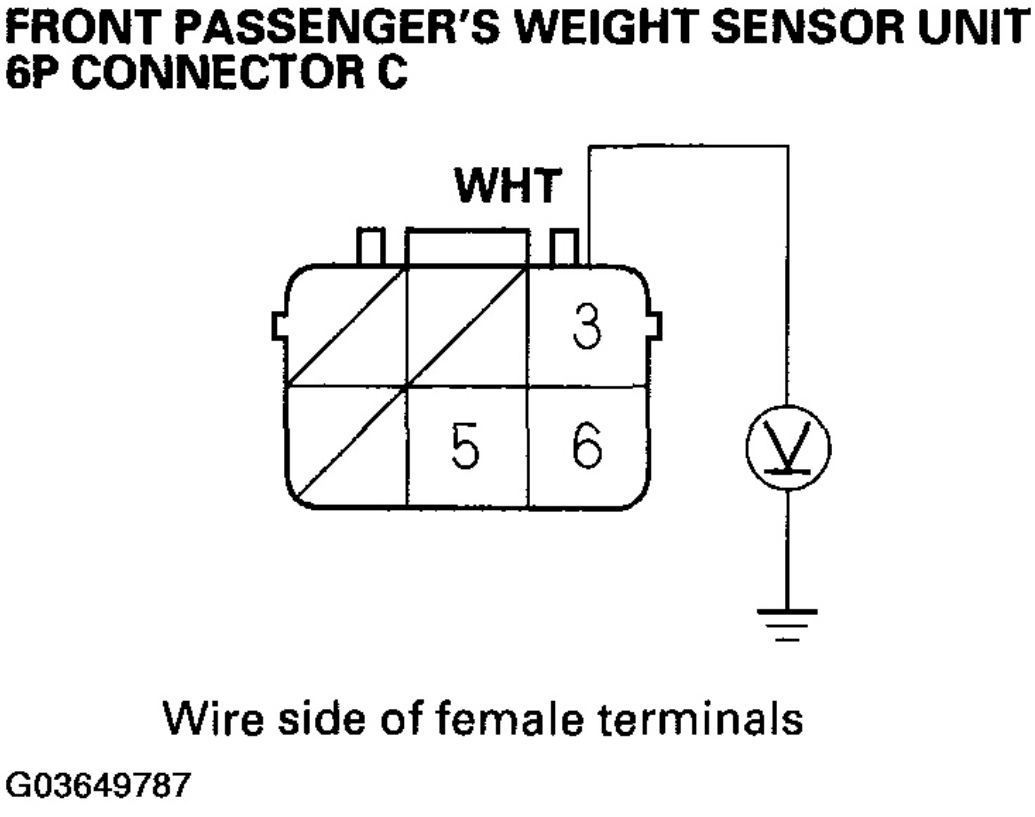


Fig. 236: Checking Voltage Between No. 3 Terminal Of Front Passenger'S Weight Sensor Unit 6P Connector C And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 13.

NO - Go to step 9.

9. Turn the ignition switch OFF.
10. Disconnect dashboard wire harness 24P connector C501A from the floor wire harness (C501B).

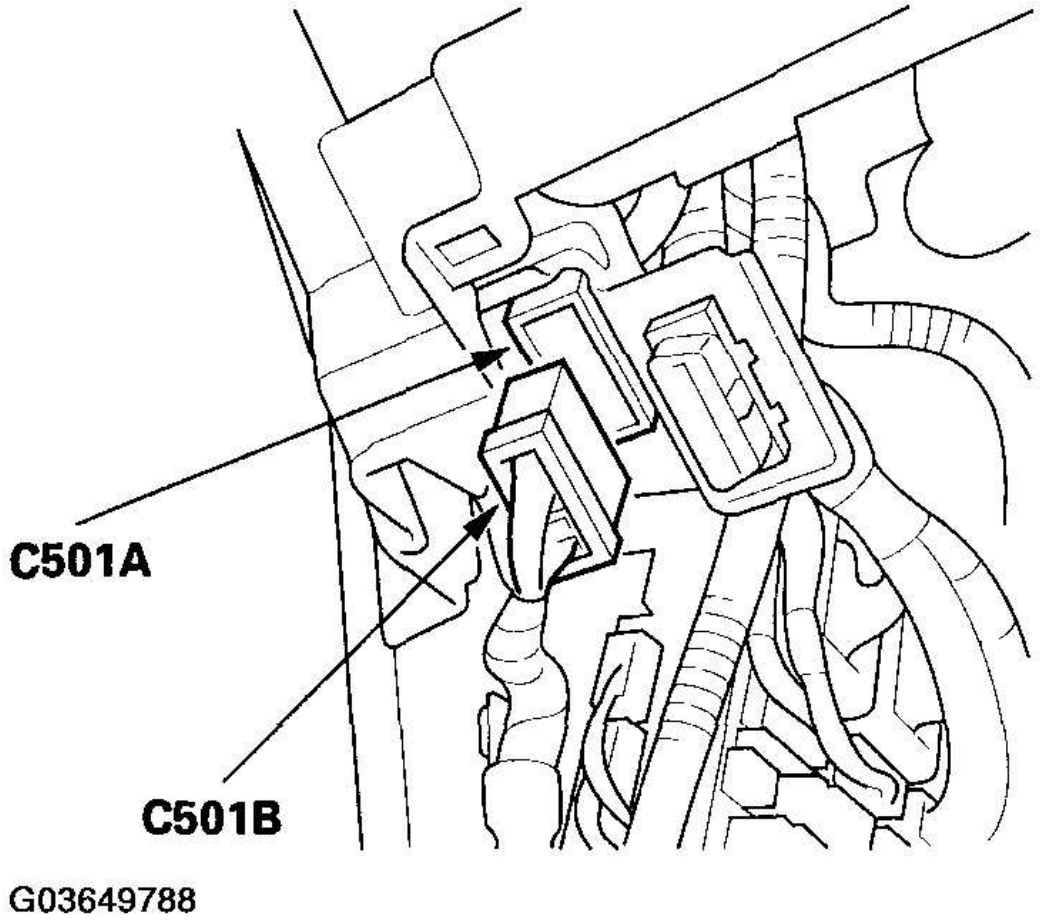


Fig. 237: Disconnecting Dashboard Wire Harness 24P Connector C501A From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Turn the ignition switch ON (II).
12. Check for voltage between the No. 9 terminal of dashboard wire harness 24P connector and body ground. There should be battery voltage.

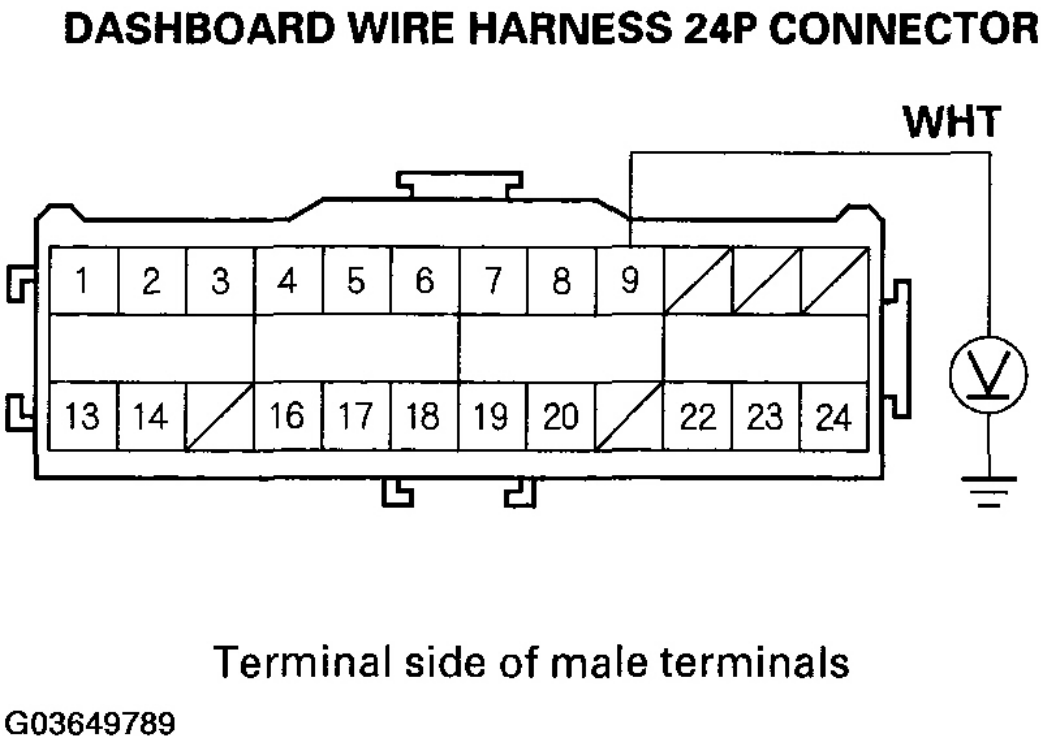


Fig. 238: Checking Voltage Between No. 9 Terminal Of Dashboard Wire Harness 24P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Open in the WHT wire of the floor wire harness; replace the floor wire harness.

NO - Open in the WHT wire of the dashboard wire harness; replace dashboard wire harness.

13. Turn the ignition switch OFF.
14. Check resistance between the No. 6 terminal of the front passenger's weight sensor unit 6P connector C and body ground. There should be 0-1.0 ohms.

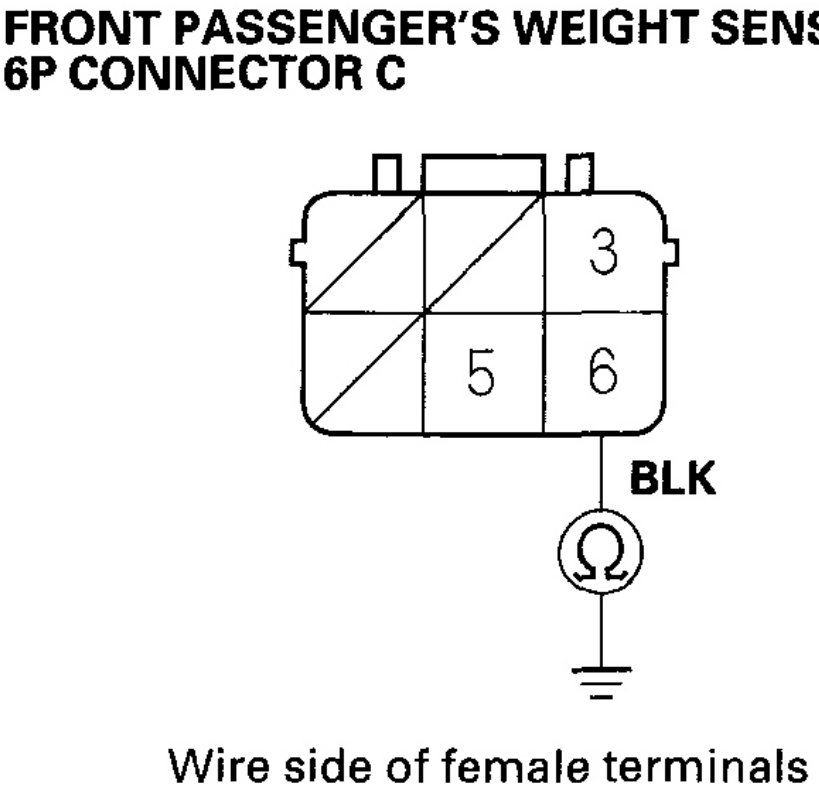


Fig. 239: Checking Resistance Between No. 6 Terminal Of Front Passenger's Weight Sensor Unit 6P Connector C And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 15.

NO - Open in the BLK wire of the floor wire harness or left floor wire harness; check for poor ground connection at G601 (see **FLOOR WIRE HARNESS (LEFT BRANCH) (4-DOOR)**). If the connection is OK, replace the floor wire harness.

15. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.

16. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
17. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
18. Check resistance between the No. 27 terminal of SRS unit connector B (28P) and body ground. There should be an open circuit or at least 1 Mohms.

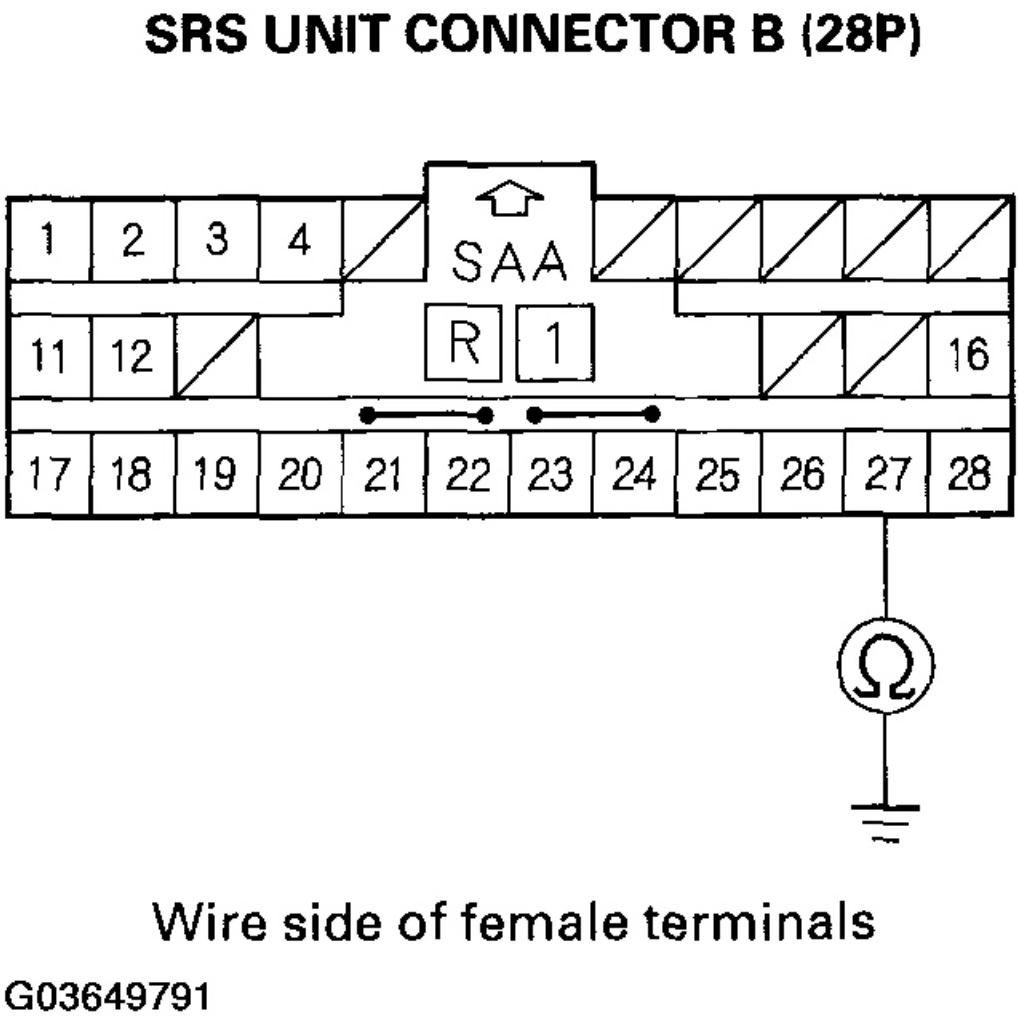


Fig. 240: Checking Resistance Between No. 27 Terminal Of SRS Unit Connector B (28P) And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 19.

NO - Short to ground in the floor wire harness; replace the floor wire harness.

19. Check resistance between the No. 27 terminal of SRS unit connector B (28P) and the No. 5 terminal of the front passenger's weight sensor unit 6P connector C. There should be 0-1.0 ohms.

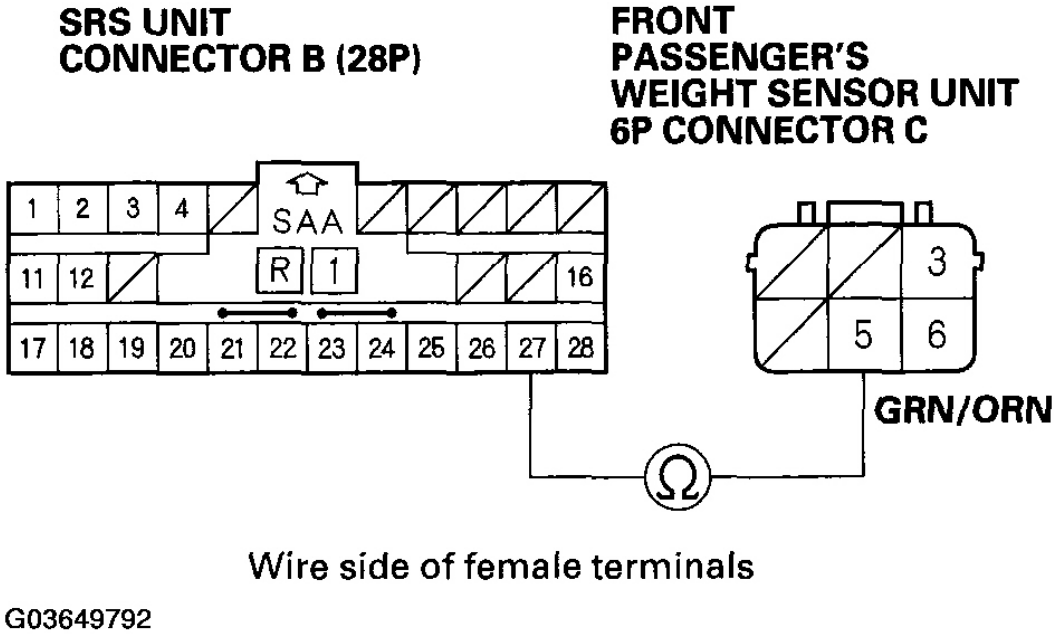


Fig. 241: Checking Resistance Between No. 27 Terminal Of SRS Unit Connector B And No. 5 Terminal Of Front Passenger's Weight Sensor Unit 6P Connector C
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty front passenger's weight sensor unit or SRS unit; replace the

front passenger's weight sensor unit (see **FRONT PASSENGER'S WEIGHT SENSOR UNIT REPLACEMENT**). If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Open in the GRN/ORN wire of the floor wire harness; replace the floor wire harness.

DTC 81-4X (81-40 TO 81-49, 81-4A TO 81-4F), 81-5X (81-50 TO 81-59, 81-5A TO 81-5F), 81-63, 81-64: INTERNAL FAILURE OF THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 81-4x, 81-5x, 81-63, or 81-64 indicated?

YES - Replace the front passenger's weight sensor unit (see **FRONT PASSENGER'S WEIGHT SENSOR UNIT REPLACEMENT**). If the DTC returns, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 81-79: FRONT PASSENGER'S WEIGHT SENSORS DRIFT CHECK FAILURE ('04-05 MODELS)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 81-79 indicated?

YES - Go to step 3.

NO - Intermittent failure, system is OK at this time. Go to

Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

3. Turn the ignition switch OFF.
4. Make sure nothing is on the front passenger's seat.
5. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator go off?

YES - The system is OK.

NO - Remove the seat assembly (see **FRONT SEAT REMOVAL/INSTALLATION**) and front passenger's weight sensors, then reinstall them. Calibrate the front passenger's weight sensor unit (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06-07 MODEL)**). Retry the troubleshooting. If DTC 81-79 is indicated repeatedly, replace the front passenger's weight sensors.

DTC 81-71, 81-78: FRONT PASSENGER'S WEIGHT SENSOR UNIT DOES NOT CALIBRATE ('04-05 MODELS)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 81-71, or 81-78 indicated?

YES - Calibrate the front passenger's weight sensor unit. If the DTC returns, replace the front passenger's weight sensor unit (see **FRONT PASSENGER'S WEIGHT SENSOR UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 81-71, 81-78: ODS UNIT DOES NOT CALIBRATE ('06-07 MODEL)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 81-71, or 81-78 indicated?

YES - Calibrate the ODS unit. If the DTC returns, replace the ODS unit (see **OPDS/ODS Unit Replacement**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 82-1X (82-10 TO 82-19, 82-1A TO 82-1F): NO SIGNAL FROM THE INNER SIDE FRONT PASSENGER'S WEIGHT SENSOR ('04-07 MODELS)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 82-1x indicated?

YES - Replace the inner side front passenger's weight sensor (see **FRONT PASSENGER'S WEIGHT SENSOR REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 83-2X (83-20 TO 83-29, 83-2A TO 83-2F): NO SIGNAL FROM THE OUTER SIDE FRONT PASSENGER'S WEIGHT SENSOR ('04-07 MODELS)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).

2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 83-2x indicated?

   YES - Replace the outer side front passenger's weight sensor (see **FRONT PASSENGER'S WEIGHT SENSOR REPLACEMENT**).

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 85-4X (85-40 TO 85-49, 85-4A TO 85-4F), 85-5X (85-50 TO 85-59, 85-5A TO 85-5F), 85-63, 85-64: INTERNAL FAILURE OF THE OPDS/ODS UNIT

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC85-4x, 85-5x, 85-63, or 85-64 indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Initialize the OPDS/ODS unit (see **INITIALIZING THE OPDS/ODS UNIT**).
4. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator go off?

   YES - The system is OK.

NO - Replace the OPDS/ODS unit (see **OPDS/ODS UNIT REPLACEMENT**), and retest. If the problem is still present, replace the OPDS sensor/seat-back (see **FRONT SEAT COVER REPLACEMENT**).

DTC 85-79: OPDS SENSOR DRIFT CHECK FAILURE

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on, and is DTC 85-79 indicated?

   YES - Turn the ignition switch OFF, and go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
3. Make sure nothing is on the front passenger's seat.
4. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator go off?

   YES - The system is OK.

   NO - Go to step 5.
5. Initialize the OPDS/ODS unit (see **INITIALIZING THE OPDS/ODS UNIT**).
6. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator go off?

   YES - The system is OK.

   NO - Replace the OPDS/ODS unit (see **OPDS/ODS Unit Replacement**),

and retest. If the problem is still present, replace the OPDS sensor/seat-back (see **FRONT SEAT COVER REPLACEMENT**).

DTC 85-61: NO SIGNAL FROM THE OPDS UNIT ('04-05 MODELS)

DTC 85-62: NON-STIPULATED RESPONSE DATA ('04-05 MODELS)

NOTE:

- **An incorrect OPDS unit can cause DTC 85-63.**
- **A new (uninitialized) OPDS unit installed with a faulty sensor can also cause DTC 85-71.**

1. Make sure nothing is on the front passenger's seat.
2. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
3. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

   Is DTC 85-61 or 85-62 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
4. Check the connection between the OPDS unit harness 8P connector D and the OPDS unit.

   Is the connection OK?

   YES - Go to step 5.

   NO - Repair the poor connection and retest. If DTC 85-61 or 85-62 is still present, go to step 5.
5. Turn the ignition switch OFF.
6. Check the No. 10 (7.5 A) fuse in the under-dash fuse/relay box.

   Is the fuse OK?

YES - Go to step 7.

NO - Replace the fuse, then turn the ignition switch ON (II). If the fuse blows again, check for a short in the No. 10 (7.5 A) fuse circuit (dashboard wire harness, floor wire harness, or OPDS unit harness).

7. Disconnect the OPDS unit 8P connector D from the OPDS unit.

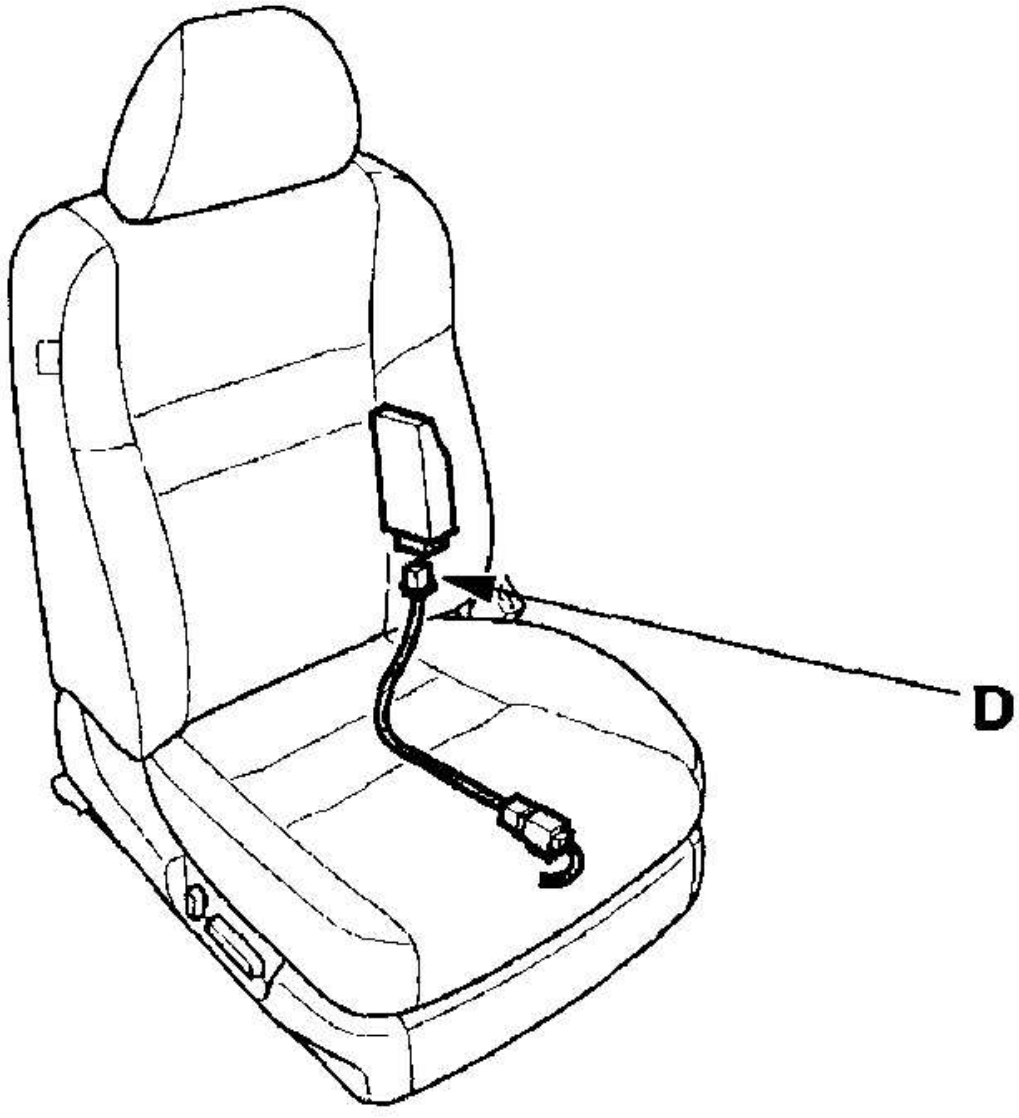


Fig. 242: Disconnecting OPDS Unit 8P Connector D From OPDS Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Turn the ignition switch ON (II).
9. Check for voltage between the No. 4 terminal of the OPDS unit 8P connector

D and body ground. There should battery voltage.

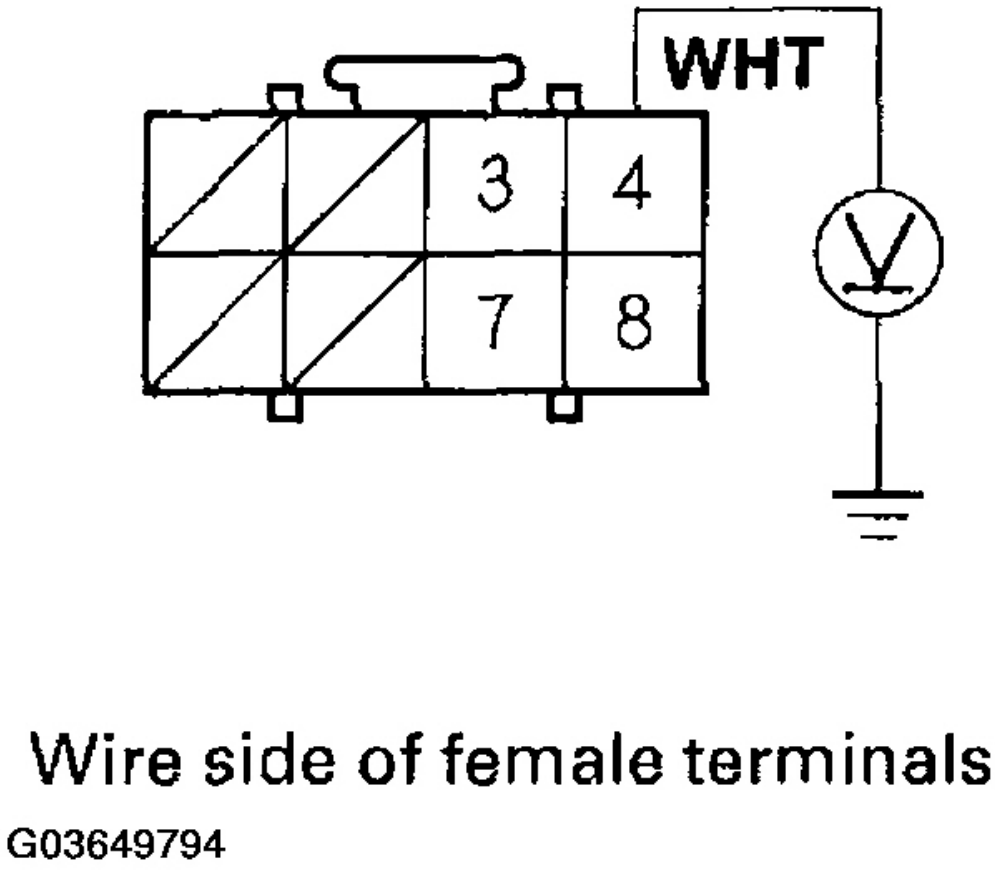


Fig. 243: Checking Voltage Between No. 4 Terminal Of OPDS Unit 8P Connector D And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 14.

NO - Go to step 10.

10. Turn the ignition switch OFF.
11. Disconnect dashboard wire harness 24P connector C501A from the floor wire harness (C501B).

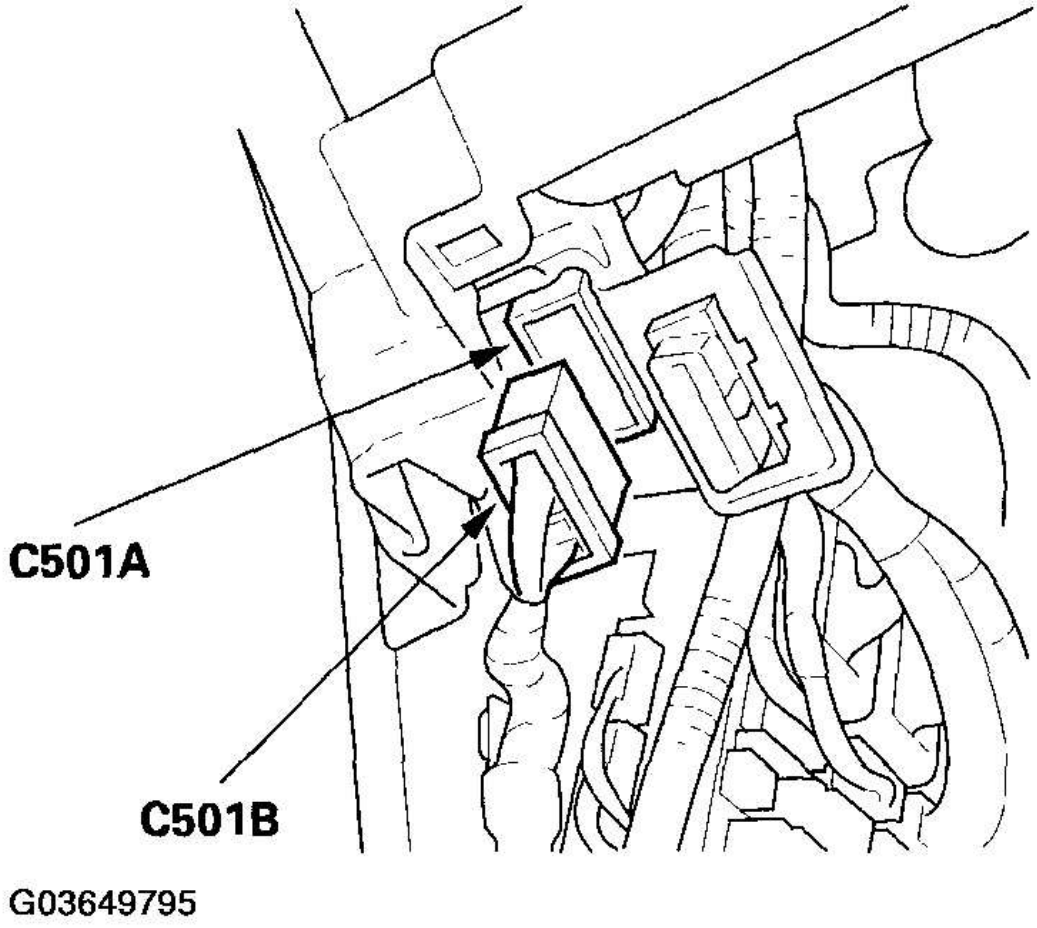


Fig. 244: Disconnecting Dashboard Wire Harness 24P Connector C501A From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Turn the ignition switch ON (II).
13. Check for voltage between the No. 9 terminal of dashboard wire harness 24P connector and body ground. There should be battery voltage.

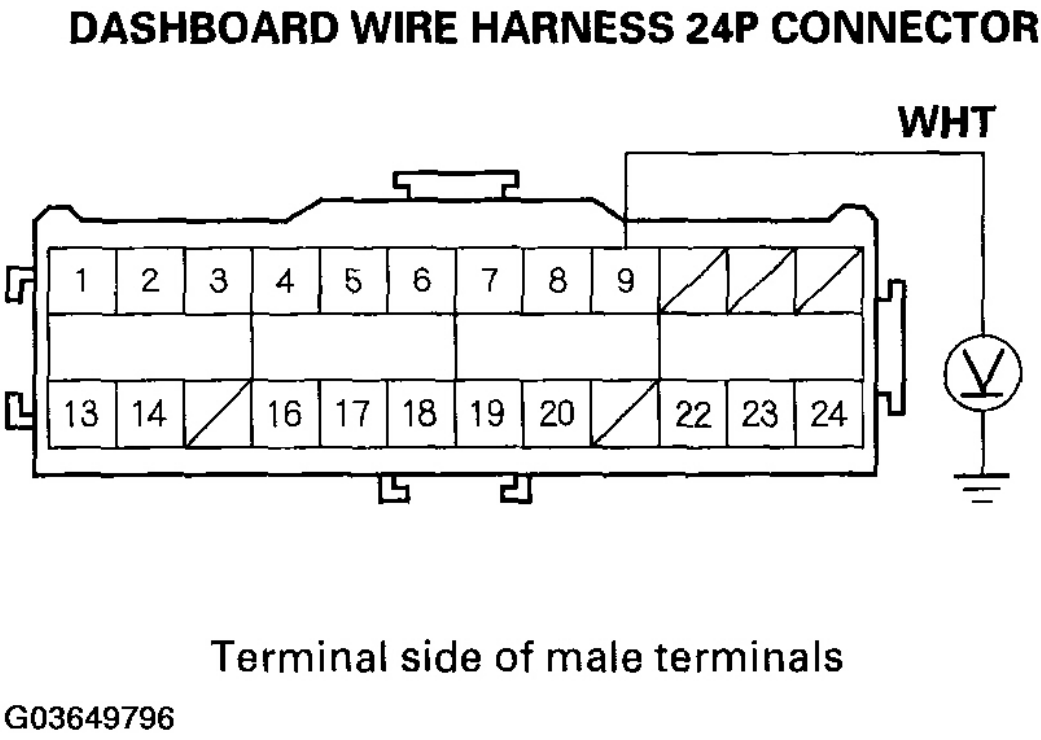


Fig. 245: Checking Voltage Between No. 9 Terminal Of Dashboard Wire Harness 24P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Open in the WHT wire of the floor wire harness or OPDS unit harness; replace the faulty harness.

NO - Open in the WHT wire of the dashboard wire harness; replace the dashboard wire harness.

14. Turn the ignition switch OFF.
15. Check resistance between the No. 8 terminal of the OPDS unit 8P connector D

and body ground. There should be 0-1.0 ohms.

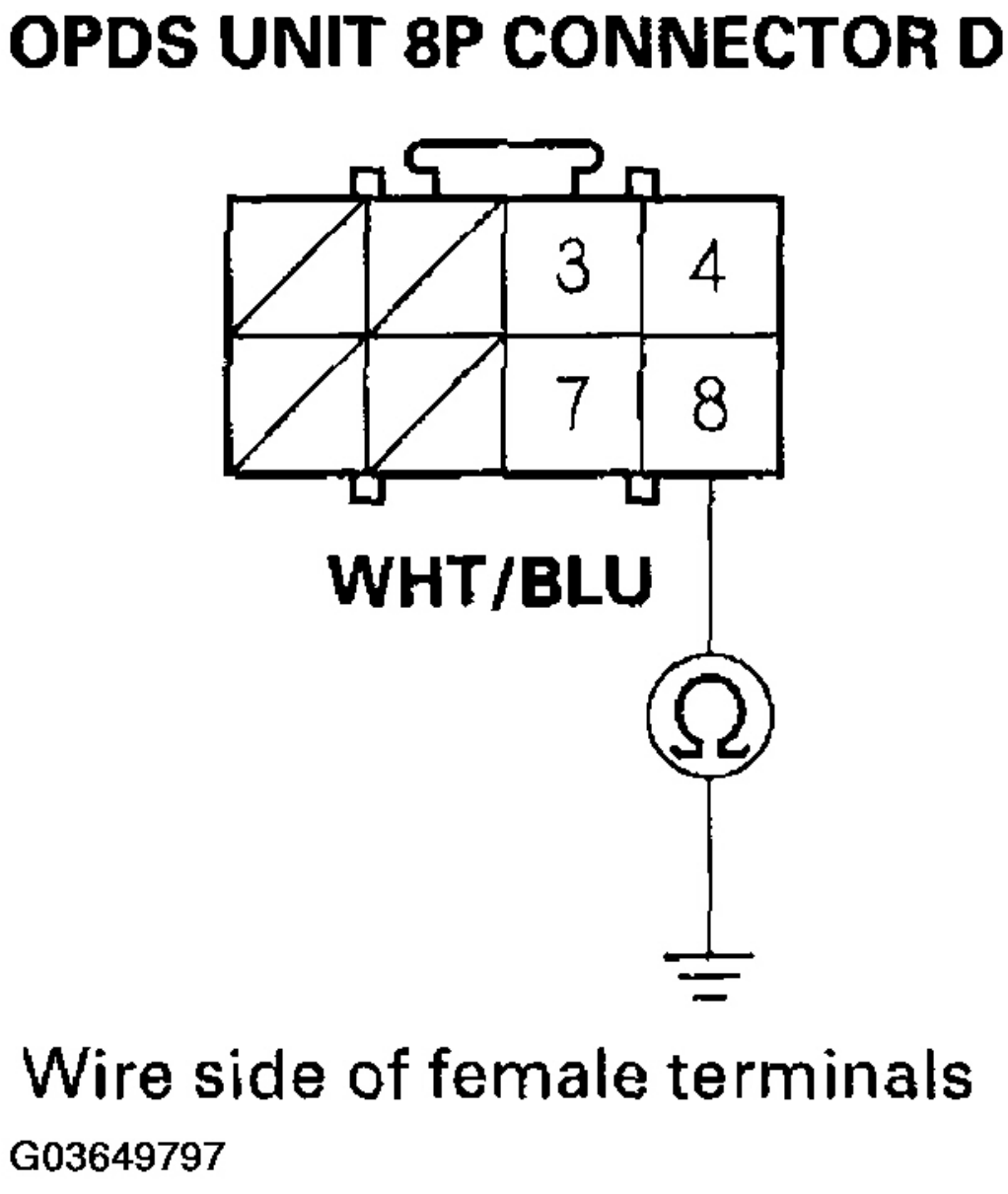


Fig. 246: Checking Resistance Between No. 8 Terminal Of OPDS Unit 8P Connector D And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 16.

NO - Open in the OPDS unit harness or floor wire harness; check the connection at G602 (see **FLOOR WIRE HARNESS (LEFT BRANCH) (4-DOOR)**). If the connection is OK, replace the faulty harness.

16. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
17. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
18. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
19. Check resistance between the No. 27 terminal of SRS unit connector B (28P) and body ground. There should be an open circuit or at least 1 Mohms.

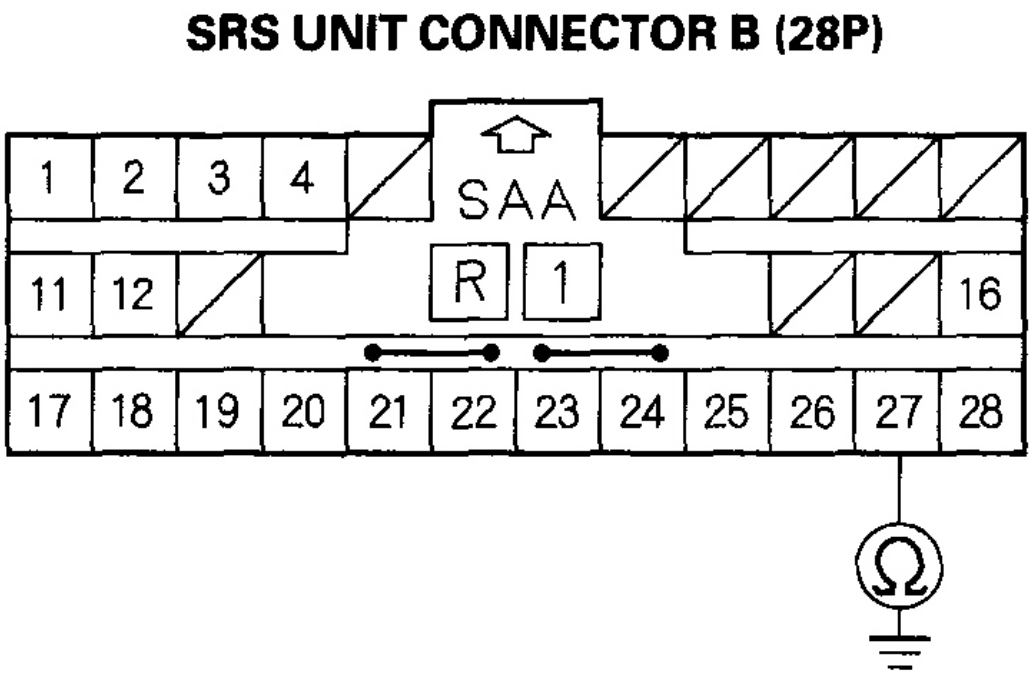


Fig. 247: Checking Resistance Between No. 27 Terminal Of SRS Unit Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 20.

NO - Go to step 23.

20. Check resistance between the No. 27 terminal of SRS unit connector B (28P) and the No. 7 terminal of the OPDS unit 8P connector D. There should be 0-1.0 ohms.

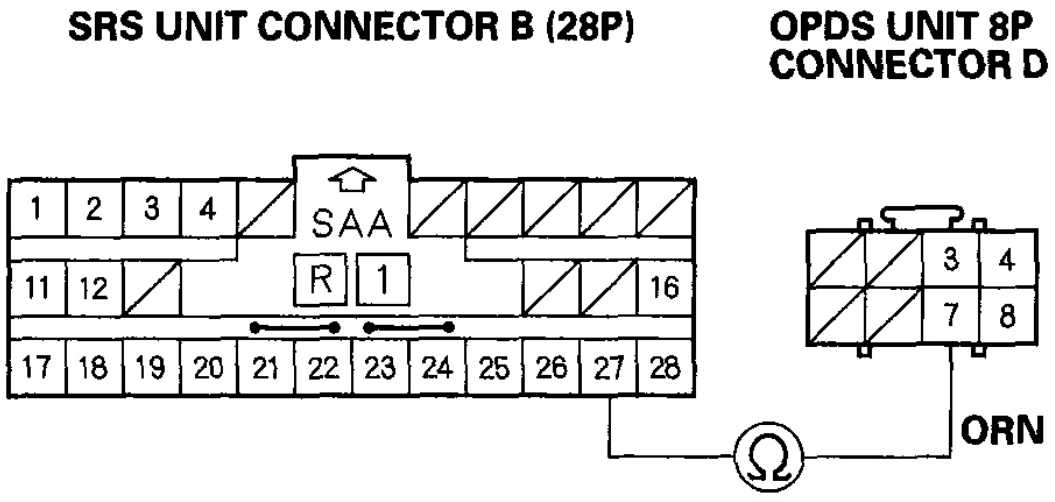


Fig. 248: Checking Resistance Between No. 27 Terminal Of SRS Unit Connector B And No. 7 Terminal Of OPDS Unit 8P Connector D
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty OPDS unit or SRS unit; replace the OPDS unit (see **OPDS/ODS Unit Replacement**). If the problem is still present, replace the OPDS sensor/seat-back (see **FRONT SEAT COVER REPLACEMENT**). If problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Go to step 21.

21. Disconnect the floor wire harness 4P connector C801 from the OPDS unit harness.

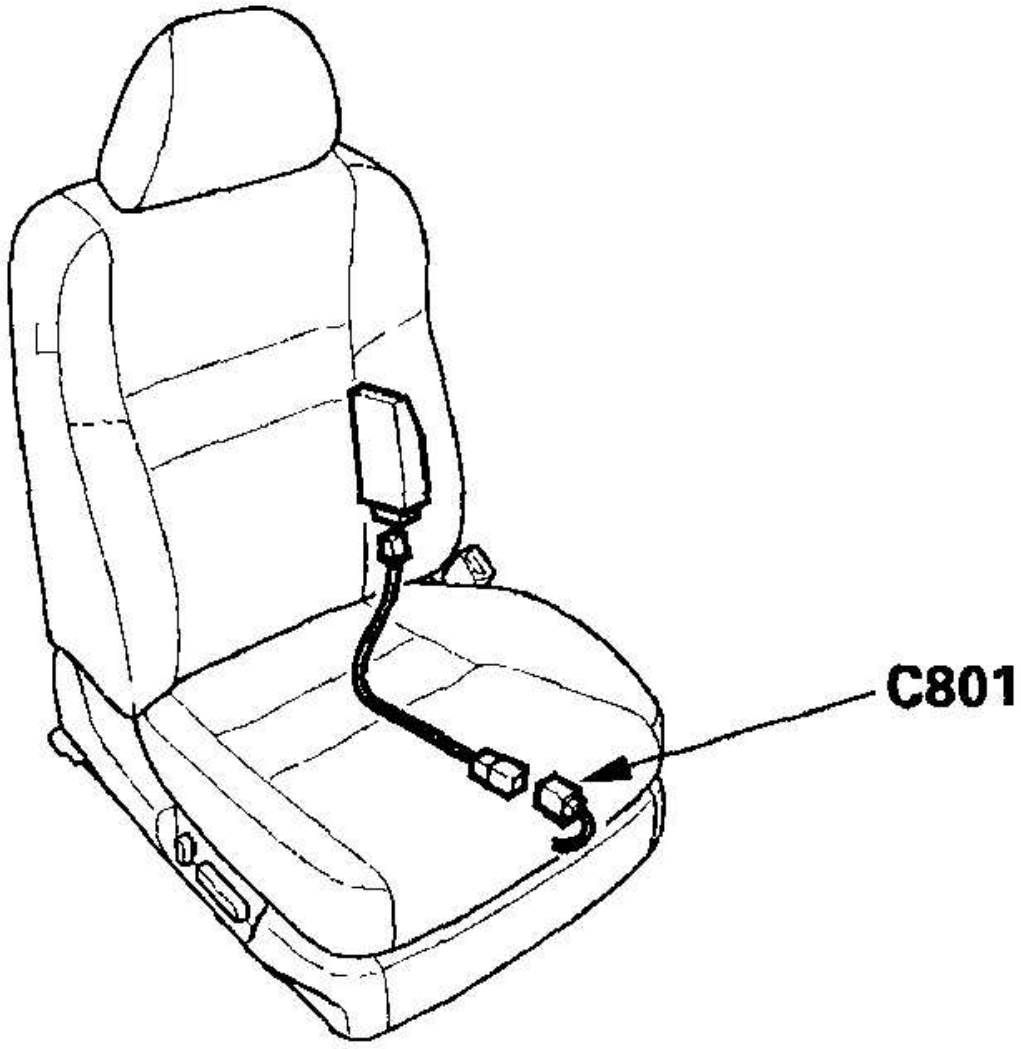


Fig. 249: Disconnecting Floor Wire Harness 4P Connector C801 From OPDS Unit Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Check resistance between the No. 27 terminal of SRS unit connector B (28P) and the No. 4 terminal of floor wire harness 4P connector C801. There should be 0-1.0 ohms.

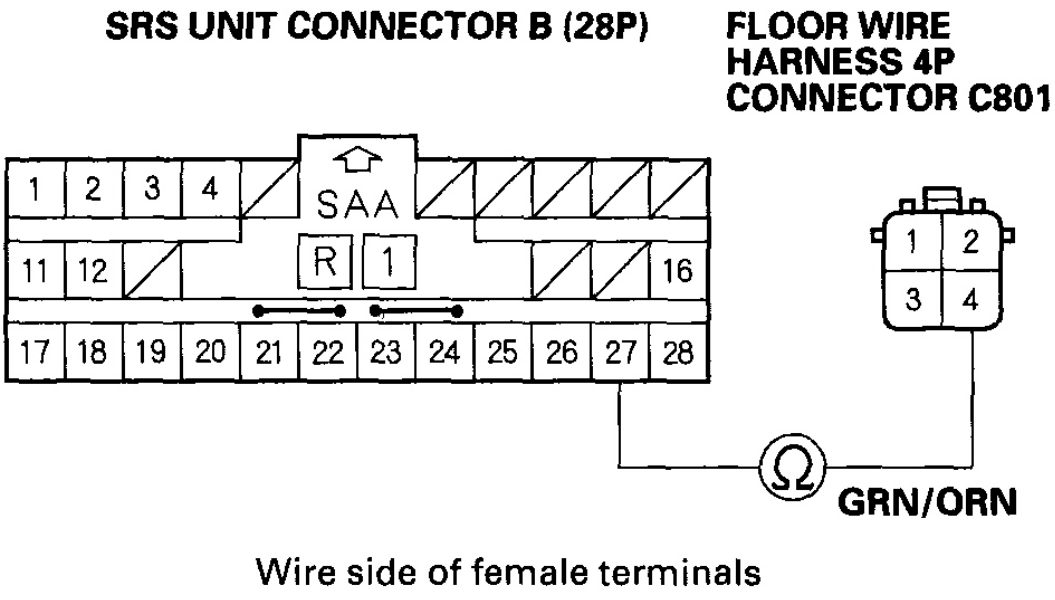


Fig. 250: Checking Resistance Between No. 27 Terminal Of SRS Unit Connector B And No. 4 Terminal Of Floor Wire Harness 4P Connector C801
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Open in the OPDS unit harness; replace the OPDS unit harness.

NO - Open in the GRN/ORN wire of the dashboard wire harness or floor wire harness; replace the faulty harness.

23. Disconnect floor wire harness 4P connector C801 from the OPDS unit harness.

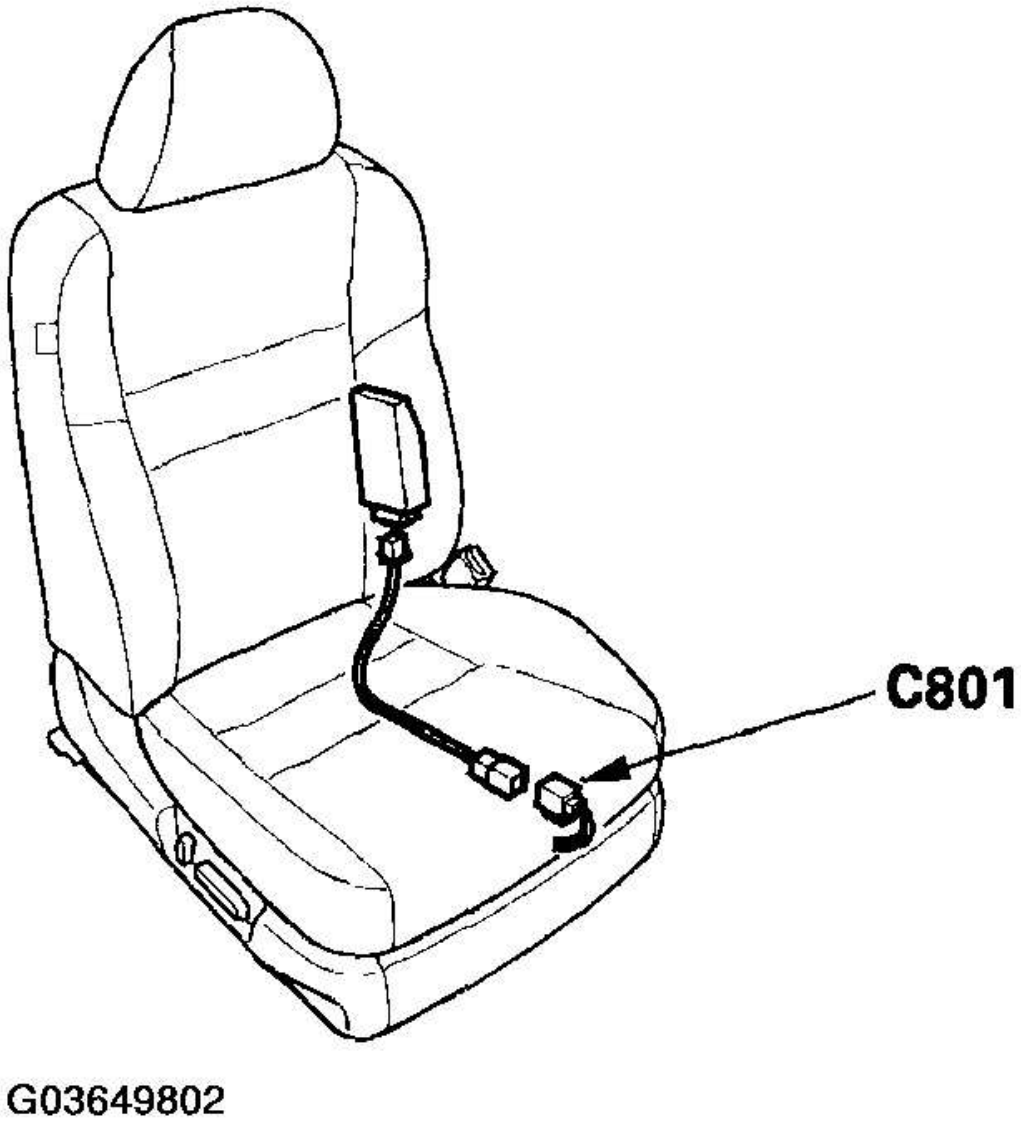


Fig. 251: Disconnecting Floor Wire Harness 4P Connector C801 From OPDS Unit Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Check resistance between the No. 27 terminal of SRS unit connector B (28P) and body ground. There should be an open circuit or at least 1 Mohms.

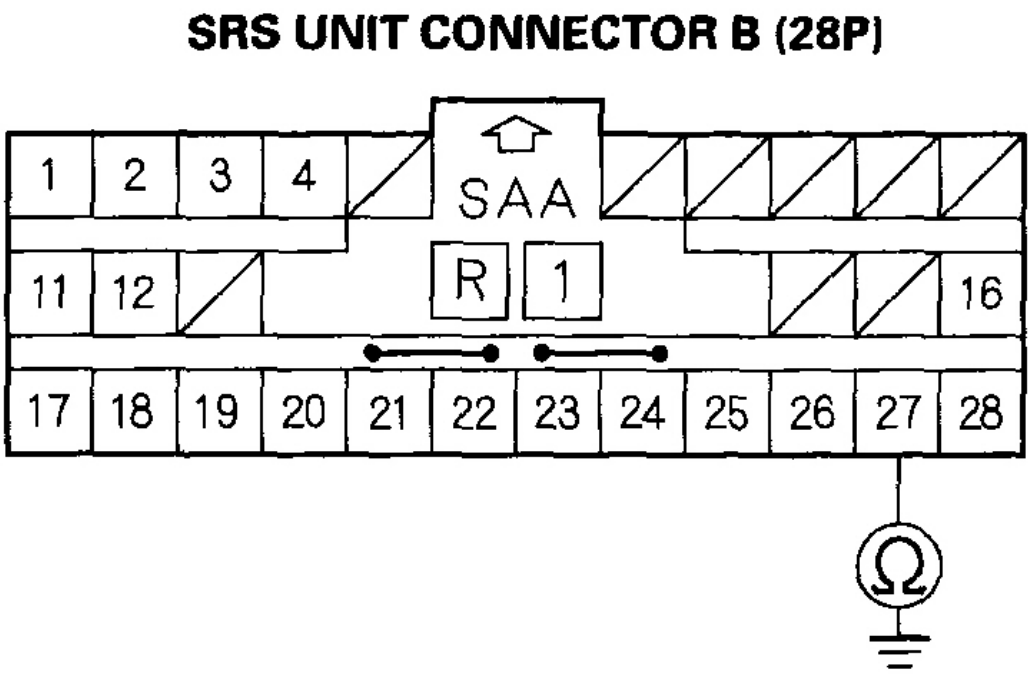


Fig. 252: Checking Resistance Between No. 27 Terminal Of SRS Unit Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Short to ground in the OPDS unit harness; replace the OPDS unit harness.

NO - Short to ground in the dashboard wire harness or floor wire harness; replace the faulty harness.

DTC 81-61, 85-61: NO SIGNAL FROM THE ODS UNIT ('06-07 MODEL); DTC 81-62, 85-62: NON-STIPULATED RESPONSE DATA ('06-07 MODEL)

NOTE:

- **An incorrect ODS unit can cause DTC 85-63.**

- **A new (uninitialized) ODS unit installed with a faulty sensor can also cause DTC 85-71.**

1. Make sure nothing is on the front passenger's seat.
2. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
3. Read the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**).

   Is DTC 81-61, 85-61, 81-62, or 85-62 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.
4. Check the connection between the ODS unit harness 18P connector D and the ODS unit.

   Is the connection OK?

   YES - Go to step 5.

   NO - Repair the poor connection and retest. If DTC 81-61, 85-61, 81-61, or 85-62 is still present, go to step 5.
5. Turn the ignition switch OFF.
6. Check the No. 10 (7.5 A) fuse in the under-dash fuse/relay box.

   Is the fuse OK?

   YES - Go to step 7.

   NO - Replace the fuse, then turn the ignition switch ON (II). If the fuse blows again, check for a short in the No. 10 (7.5 A) fuse circuit (dashboard wire harness, floor wire harness, or ODS unit harness).
7. Disconnect the ODS unit 18P connector D from the ODS unit.

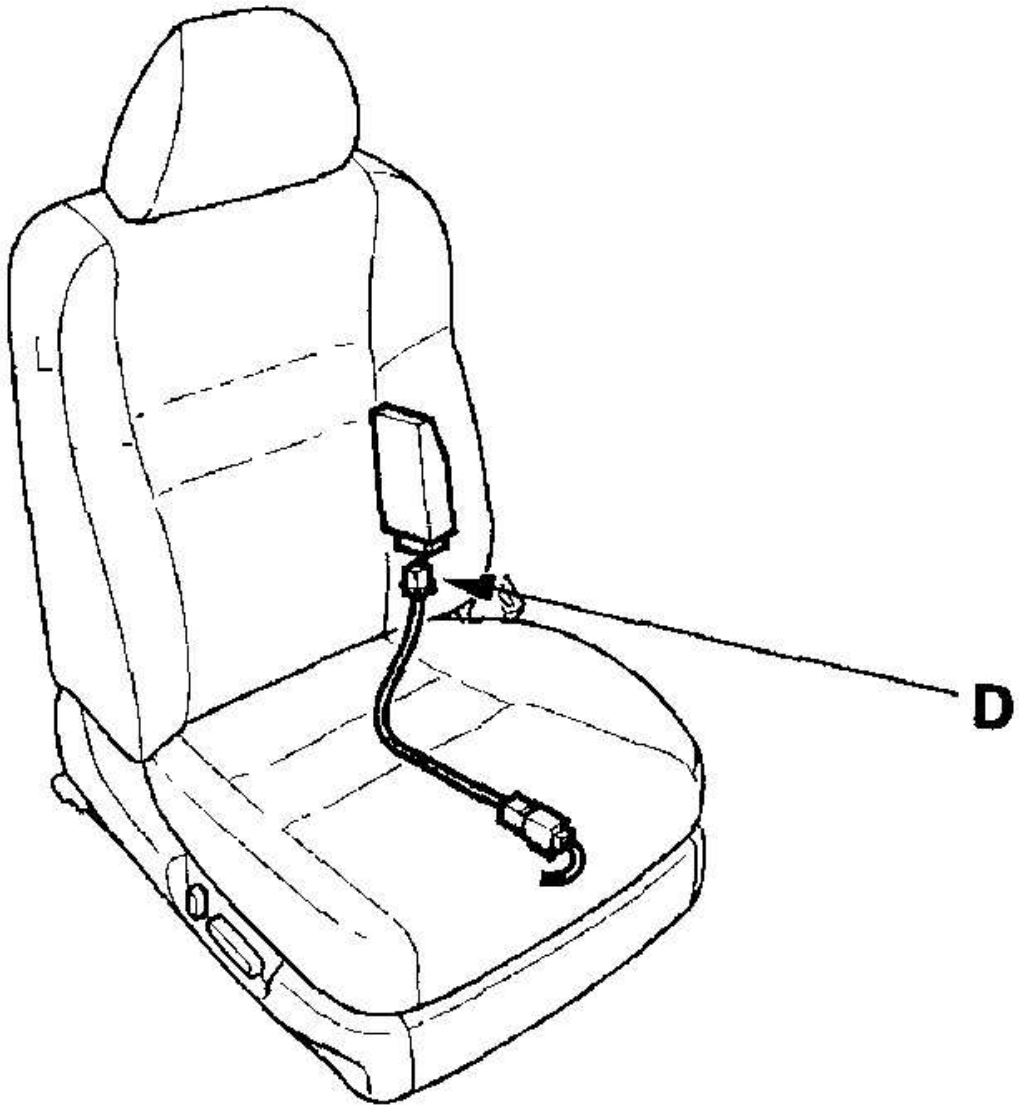


Fig. 253: Disconnecting ODS Unit 18P Connector D From ODS Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Turn the ignition switch ON (II).
9. Check for voltage between the No. 1 terminal of the ODS unit 18P connector D

and body ground. There should battery voltage.

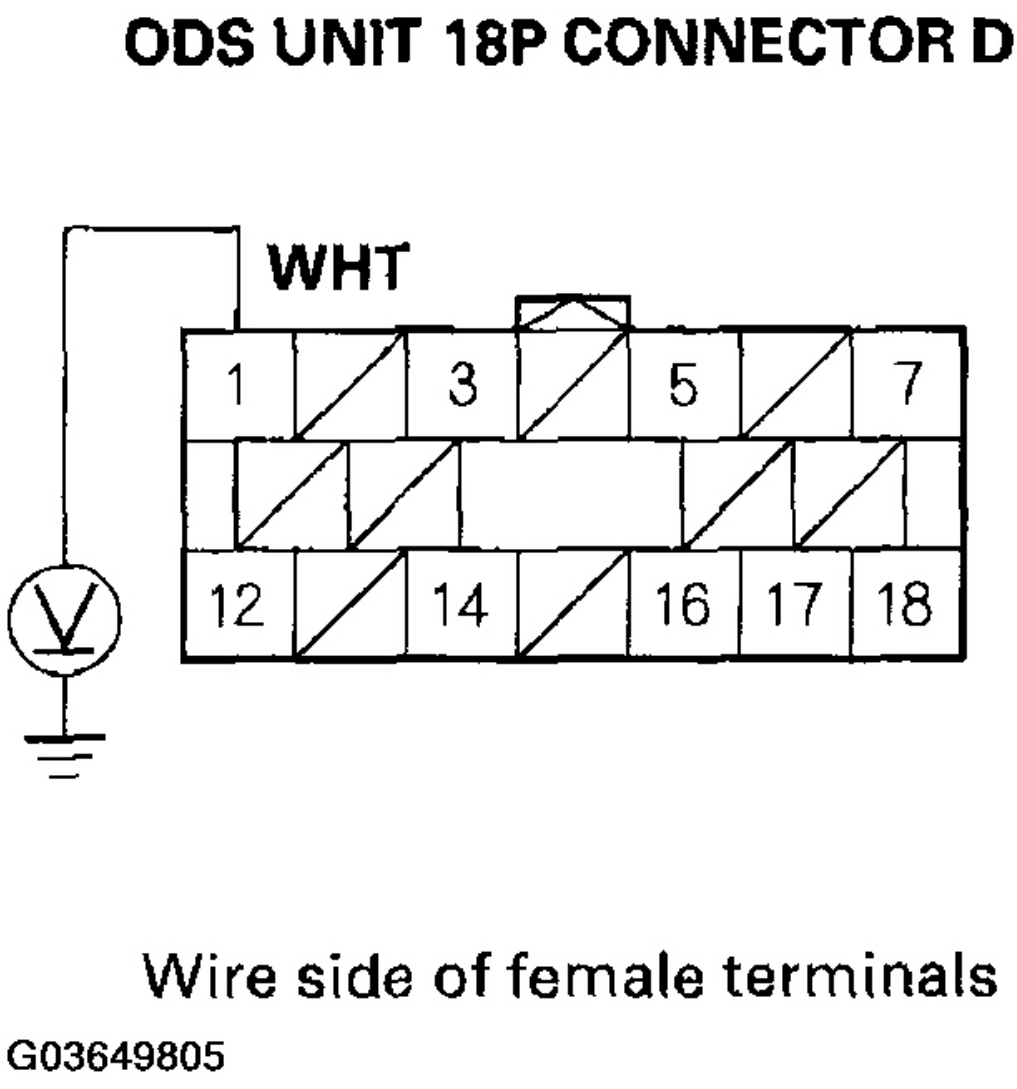


Fig. 254: Checking Voltage Between No. 1 Terminal Of ODS Unit 18P Connector D And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 14.

NO - Go to step 10.

10. Turn the ignition switch OFF.
11. Disconnect dashboard wire harness 24P connector C501 from the floor wire harness (A).

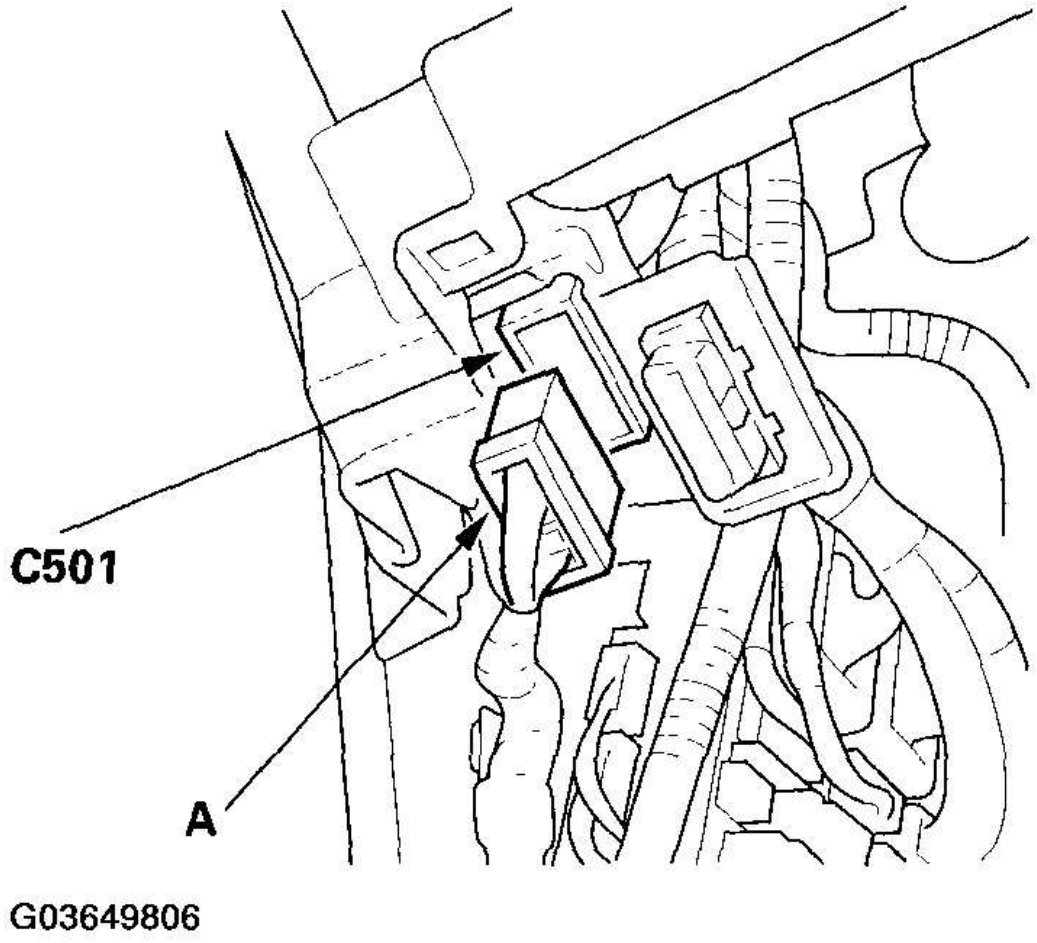


Fig. 255: Disconnecting Dashboard Wire Harness 24P Connector C501 From Floor Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Turn the ignition switch ON (II).

13. Check for voltage between the No. 9 terminal of dashboard wire harness 24P connector and body ground. There should be battery voltage.

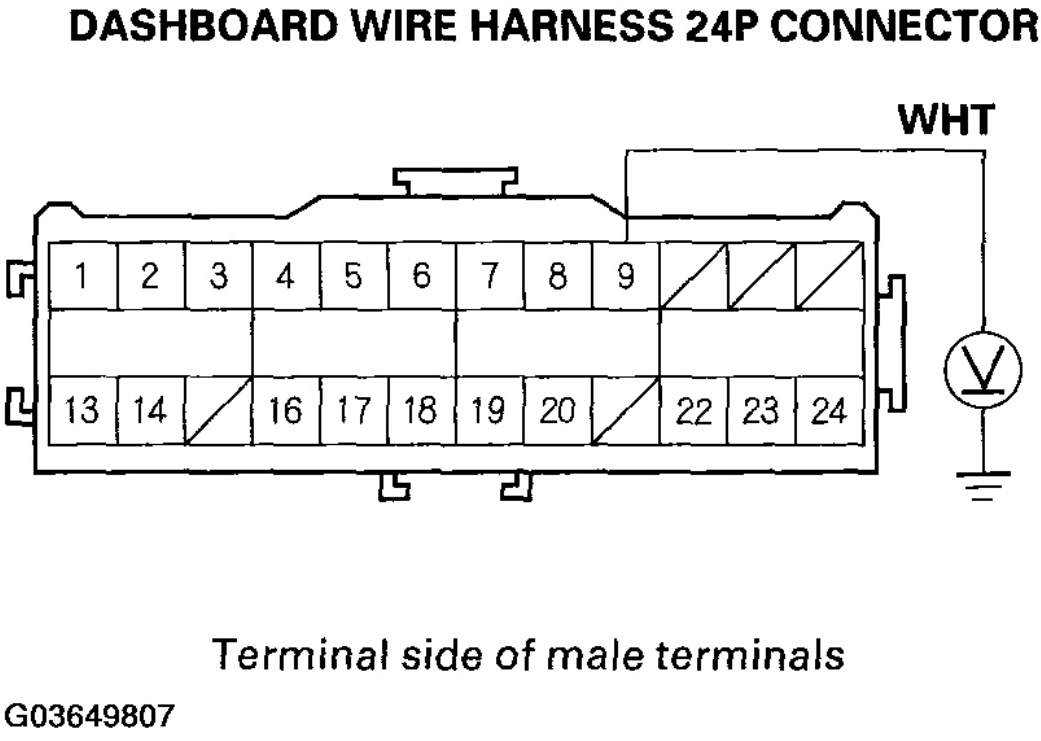


Fig. 256: Checking Voltage Between No. 9 Terminal Of Dashboard Wire Harness 24P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Open in the WHT wire of the floor wire harness or ODS unit harness; replace the faulty harness.

NO - Open in the WHT wire of the dashboard wire harness; replace the dashboard wire harness.

14. Turn the ignition switch OFF.
15. Check resistance between the No. 12 terminal of the ODS unit 18P connector D and body ground. There should be 0-1.0 ohms.

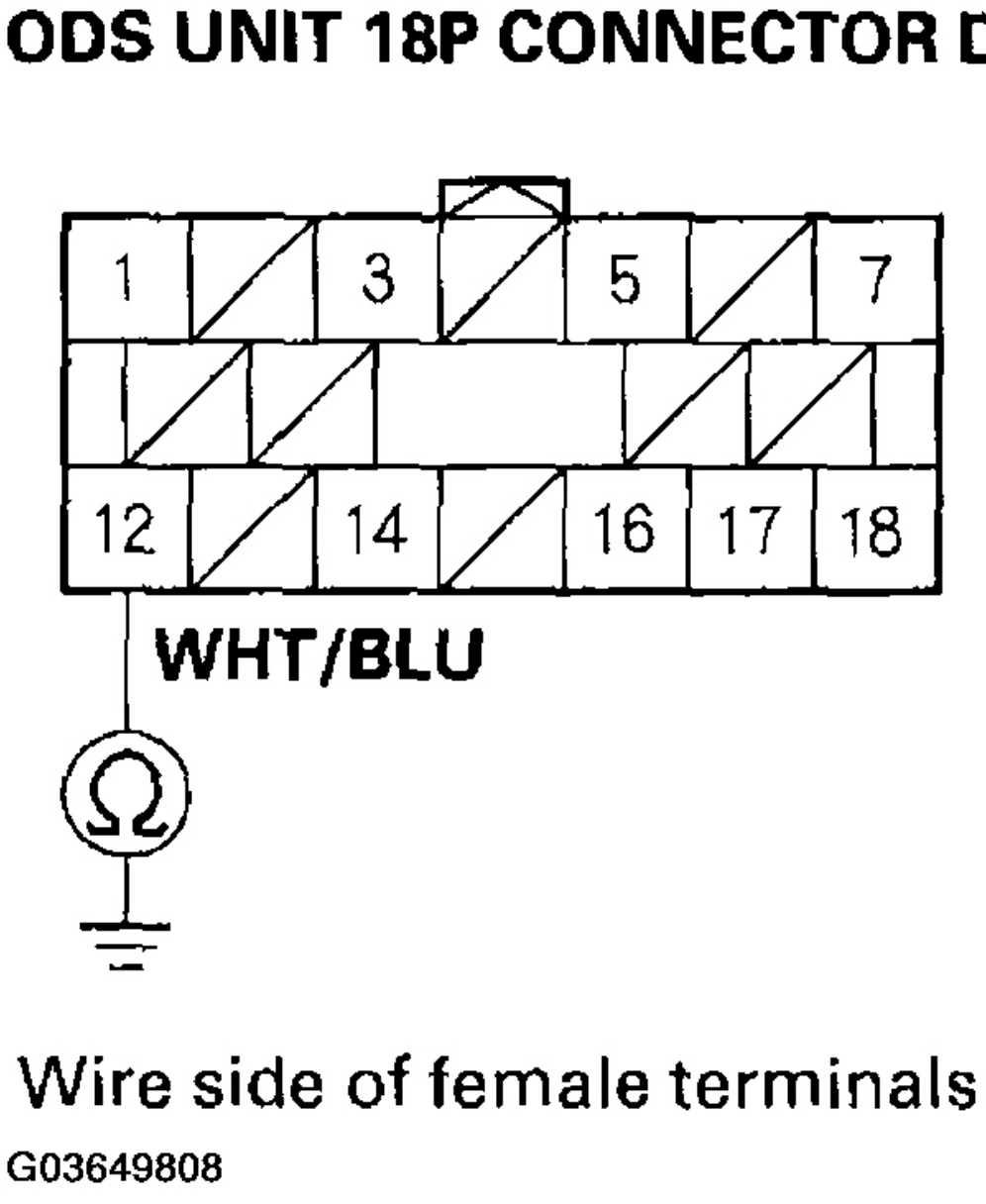


Fig. 257: Checking Resistance Between No. 12 Terminal Of ODS Unit 18P Connector D And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

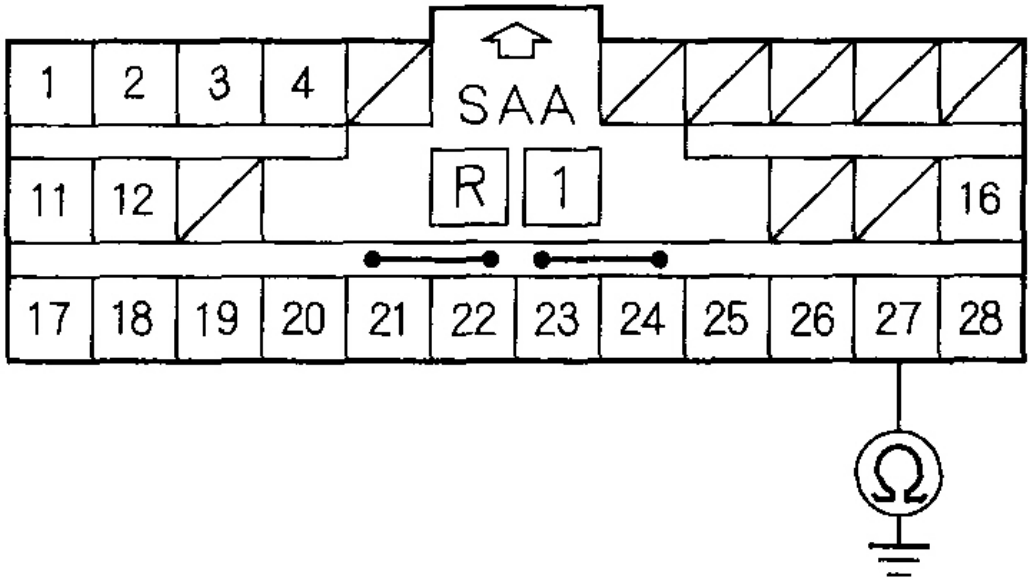
Is the resistance as specified?

YES - Go to step 16.

NO - Open in the ODS unit harness or floor wire harness; check the connection at G602 (see **FLOOR WIRE HARNESS (LEFT BRANCH) (4-DOOR)**). If the connection is OK, replace the faulty harness.

16. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
17. Disconnect both seat belt tensioner 4P connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
18. Disconnect SRS unit connector B (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
19. Check resistance between the No. 27 terminal of SRS unit connector B (28P) and body ground. There should be an open circuit or at least 1 Mohms.

SRS UNIT CONNECTOR B (28P)



Wire side of female terminals

G03649809

Fig. 258: Checking Resistance Between No. 27 Terminal Of SRS Unit Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 20.

NO - Go to step 23.

20. Check resistance between the No. 27 terminal of SRS unit connector B (28P) and the No. 7 terminal of the ODS unit 18P connector D. There should be 0-1.0 ohms.

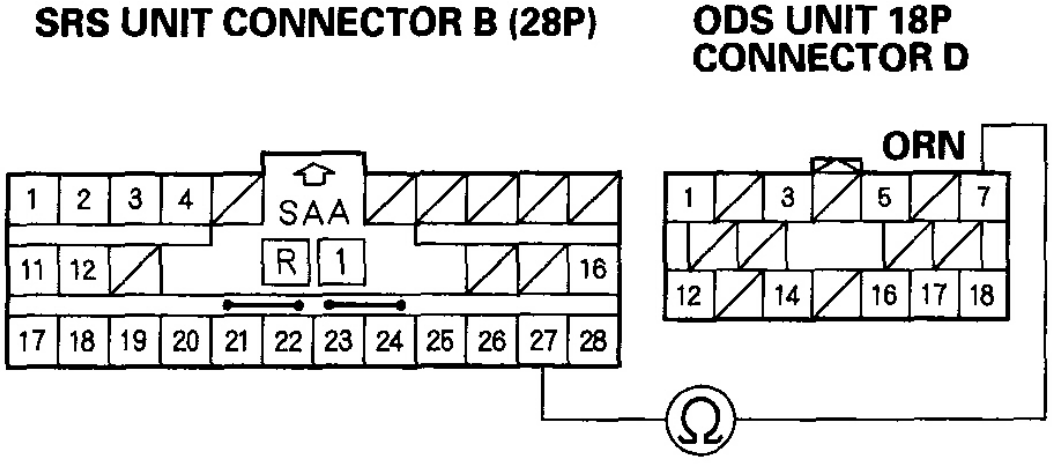


Fig. 259: Checking Resistance Between No. 27 Terminal Of SRS Unit Connector B (28P) And No. 7 Terminal Of ODS Unit 18P Connector D
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Faulty ODS unit or SRS unit; replace the ODS unit (see

OPDS/ODS Unit Replacement). If the problem is still present, replace the OPDS sensor/seat-back (see **FRONT SEAT COVER REPLACEMENT**). If problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Go to step 21.

21. Disconnect the floor wire harness 4P connector C801 from the ODS unit harness.

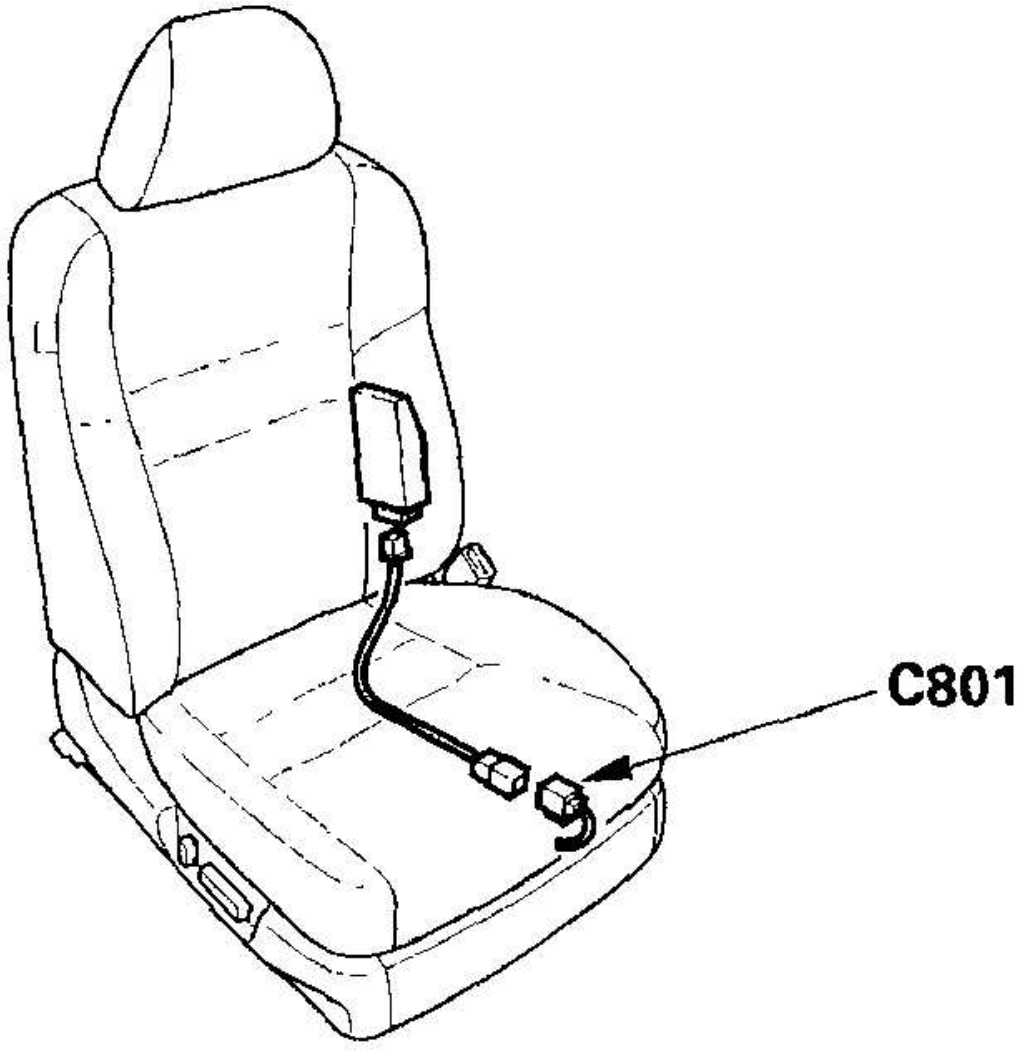


Fig. 260: Disconnecting Floor Wire Harness 4P Connector C801 From ODS Unit Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Check resistance between the No. 27 terminal of SRS unit connector B (28P) and the No. 4 terminal of floor wire harness 4P connector C801. There should be 0-1.0 ohms.

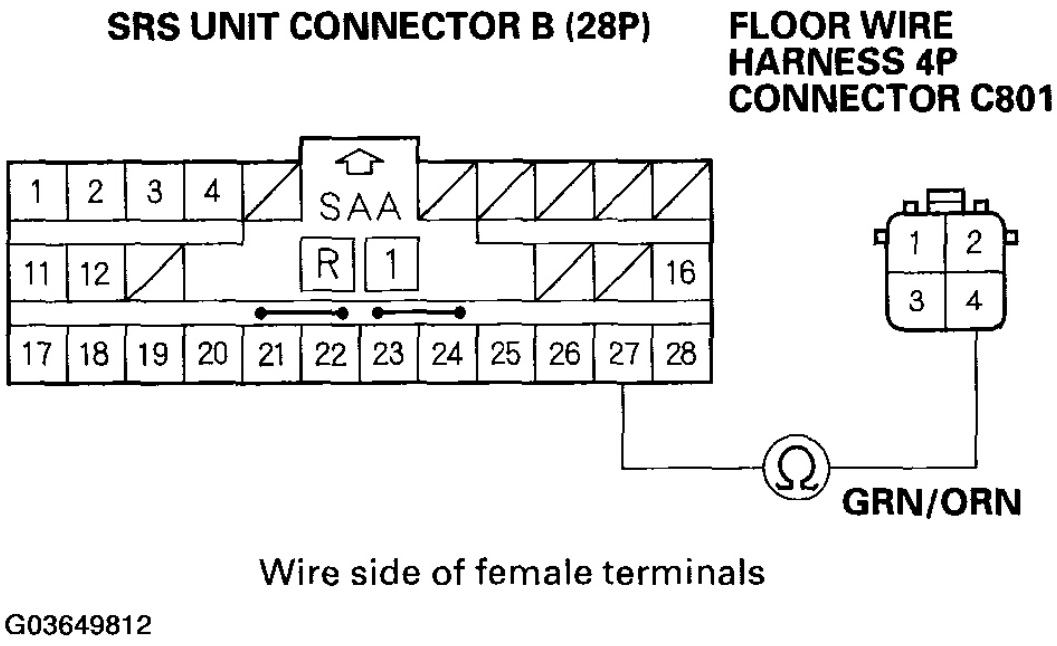


Fig. 261: Checking Resistance Between No. 27 Terminal Of SRS Unit Connector B (28P) And 4 Terminal Of Floor Wire Harness 4P Connector C801
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Open in the ODS unit harness; replace the ODS unit harness.

NO - Open in the GRN/ORN wire of the floor wire harness; replace the faulty harness.

23. Disconnect floor wire harness 4P connector C801 from the ODS unit harness.

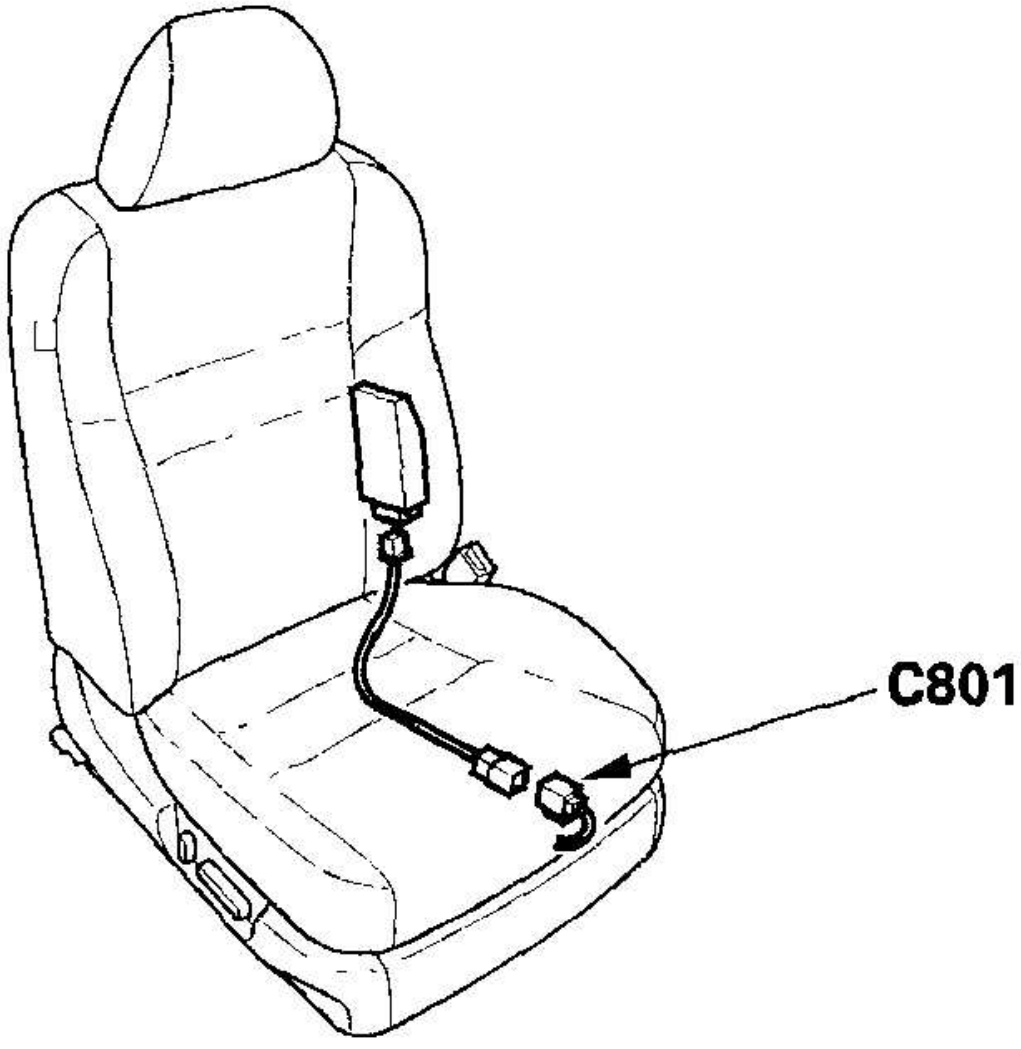


Fig. 262: Disconnecting Floor Wire Harness 4P Connector C801 From ODS Unit Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Check resistance between the No. 27 terminal of SRS unit connector B (28P) and body ground. There should be an open circuit or at least 1 Mohms.

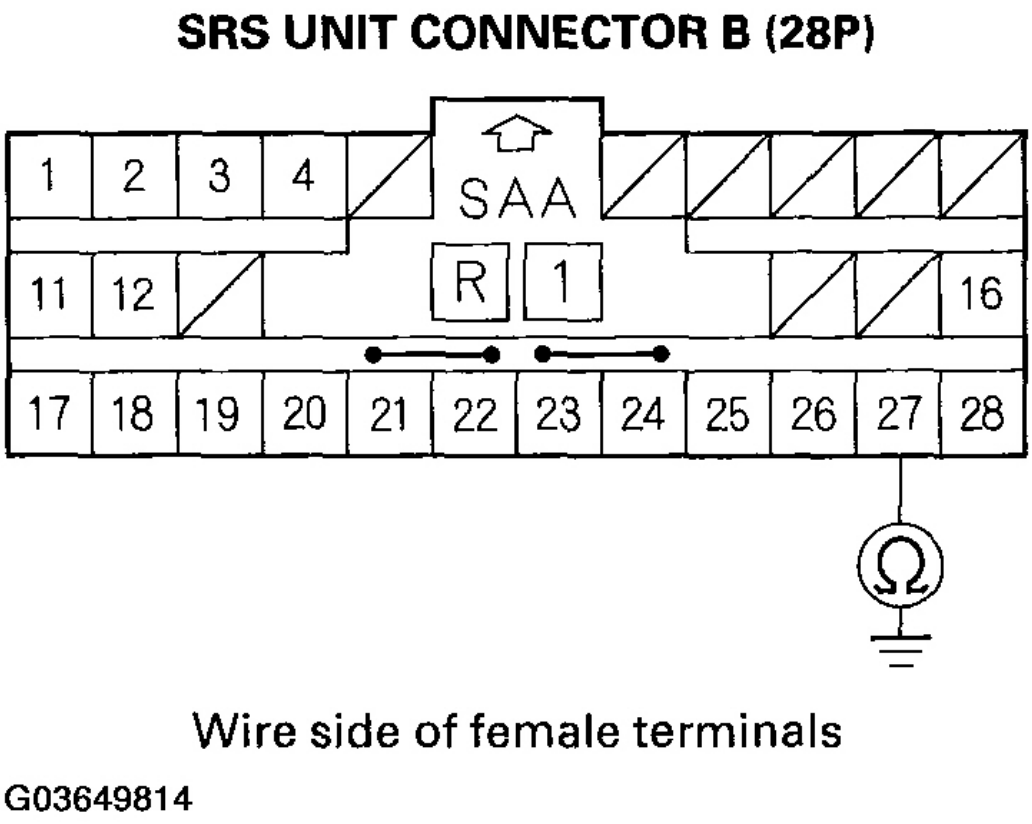


Fig. 263: Checking Resistance Between No. 27 Terminal Of SRS Unit Connector B (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Short to ground in the ODS unit harness; replace the ODS unit harness.

NO - Short to ground in the floor wire harness; replace the faulty harness.

DTC 85-71, 85-78: OPDS/ODS UNIT NOT INITIALIZED

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on

for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 85-71, or 85-78 indicated?

YES - Initialized OPDS/ODS unit (see **INITIALIZING THE OPDS/ODS UNIT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 86-1X (86-10 TO 86-19, 86-1A TO 86-1F): FAULTY OPDS SEAT-BACK SENSOR

DTC 86-2X (86-20 TO 86-29, 86-2A TO 86-2F): FAULTY OPDS SEAT SUPPORT SENSOR

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**).

   NOTE: Aftermarket devices (fluorescent lights, laptop computers, etc.) used near the front passenger's seat-back can interfere with the seat-back sensors and cause a false DTC 86-1x or 86-2x. If one of these devices was used, erase the DTC, operate the device near the seat-back, and recheck for DTCs. If DTC 86-1x or 86-2x is reset, erase it, and do not use the device near the seat-back.

3. Check the connection at the OPDS sensor harness connector and the

OPDS/ODS unit connector.

Are the connections OK?

YES - Go to step 4.

NO - Reconnect the OPDS sensor harness connector, and clear the DTC.

4. Replace the OPDS sensor/seat-back foam (see **FRONT SEAT RECLINE MOTOR REPLACEMENT**), and initialize the OPDS/ODS unit (see **INITIALIZING THE OPDS/ODS UNIT**).
5. Erase the DTC memory, then check for DTC 86-1x or 86-2x.

Is DTC 86-1x or 86-2x indicated?

YES - Replace the OPDS/ODS unit (see **OPDS/ODS UNIT REPLACEMENT**).

NO - The system is OK.

DTC 87-31: INTERNAL FAILURE OF THE OPDS/ODS UNIT

NOTE: Make sure the battery is sufficiently charged and in good condition.

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 87-31 indicated?

YES - Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**. for troubleshooting details.

DTC 87-32: SIDE AIRBAG CUTOFF INDICATOR STAYS ON ('04-05 MODELS)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

   Does the SRS indicator stay on?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failure (see **TROUBLESHOOTING INTERMITTENT FAILURES**).
3. Turn the ignition switch OFF. Make sure nothing is on the front passenger's seat.
4. Disconnect the OPDS unit 8P connector D from the OPDS unit.

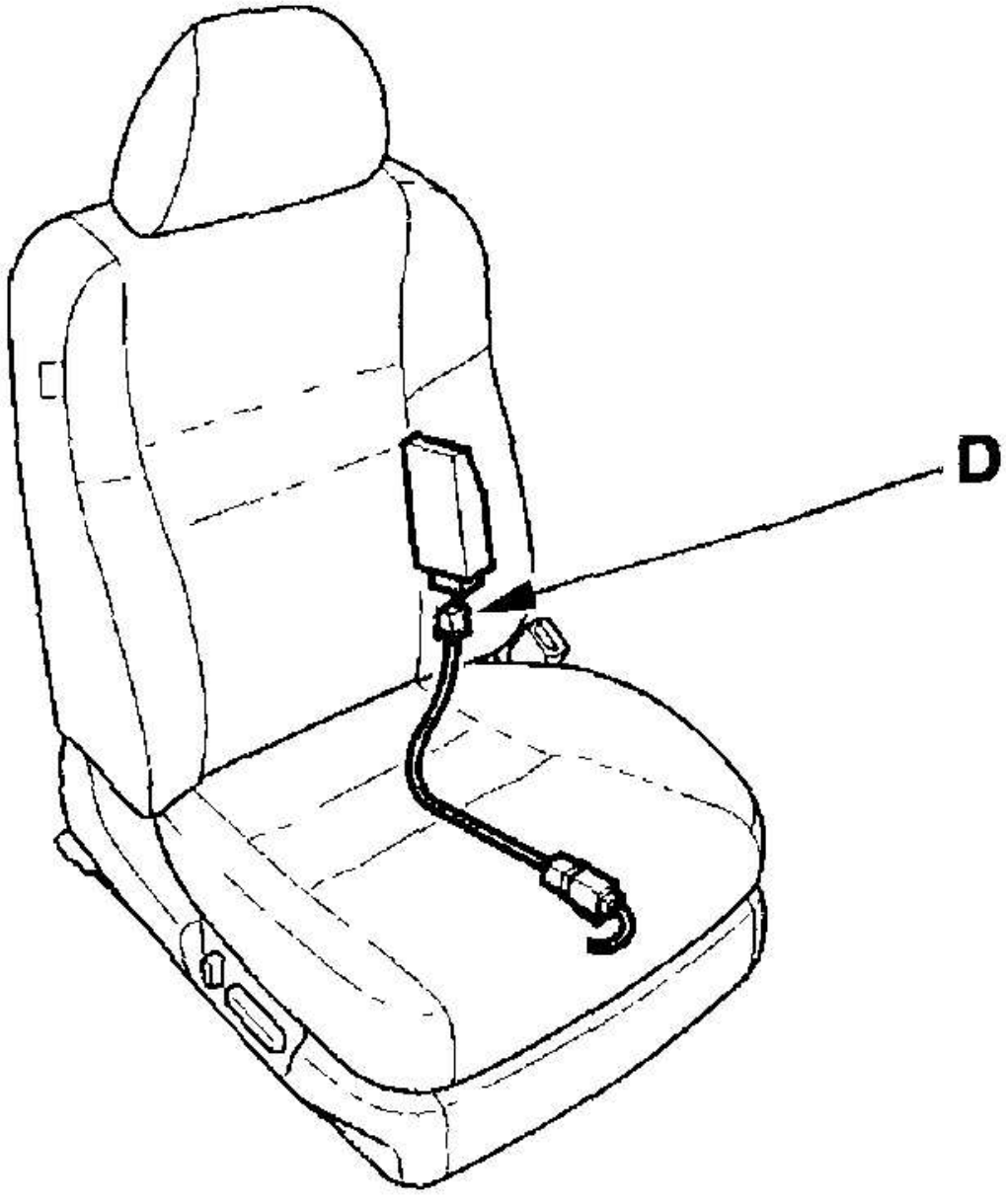


Fig. 264: Disconnecting OPDS Unit 8P Connector D From OPDS Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Turn the ignition switch ON (II).
6. Check for voltage between the No. 3 terminal of the OPDS unit harness 8P connector D and body ground. There should be battery voltage.

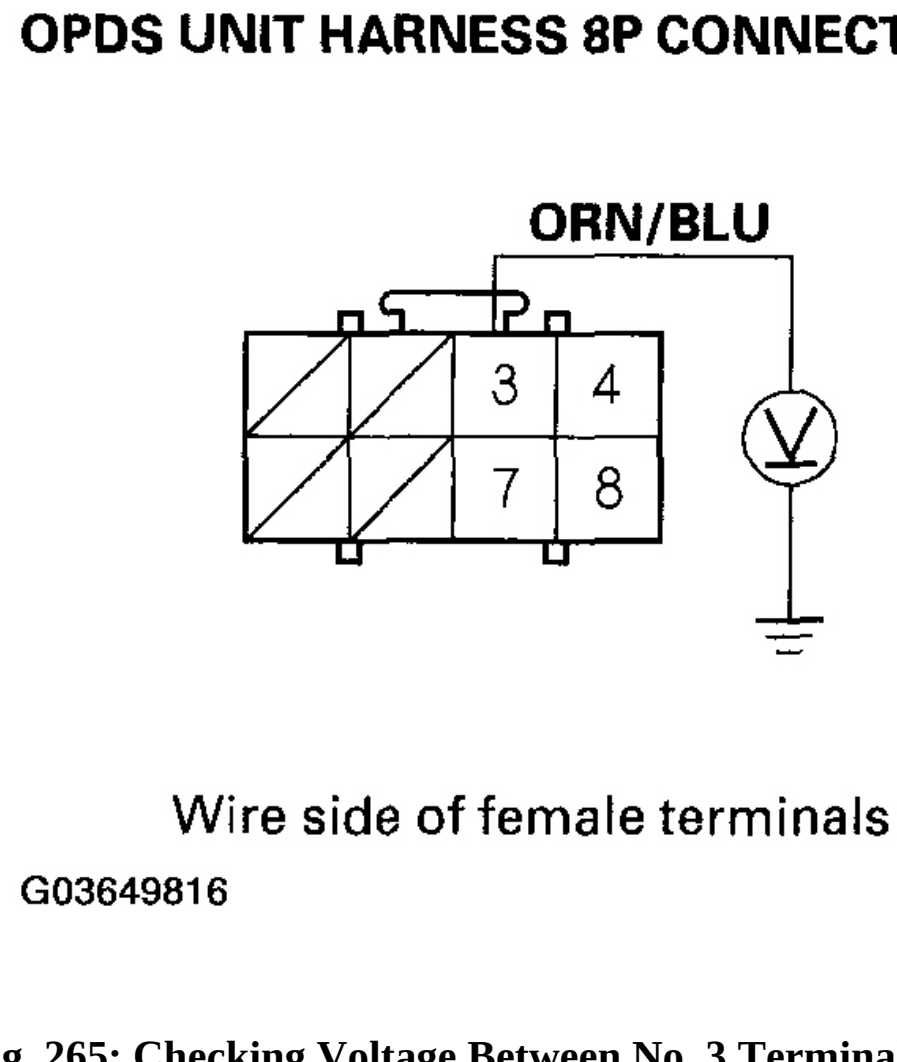


Fig. 265: Checking Voltage Between No. 3 Terminal Of OPDS Unit Harness 8P Connector D And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Faulty OPDS unit; replace the OPDS unit (see **OPDS/ODS Unit Replacement**).

NO - Go to step 7.

7. Turn the ignition switch OFF.
8. Remove the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**). Disconnect gauge control module connector (30P) (A) from the gauge control module.

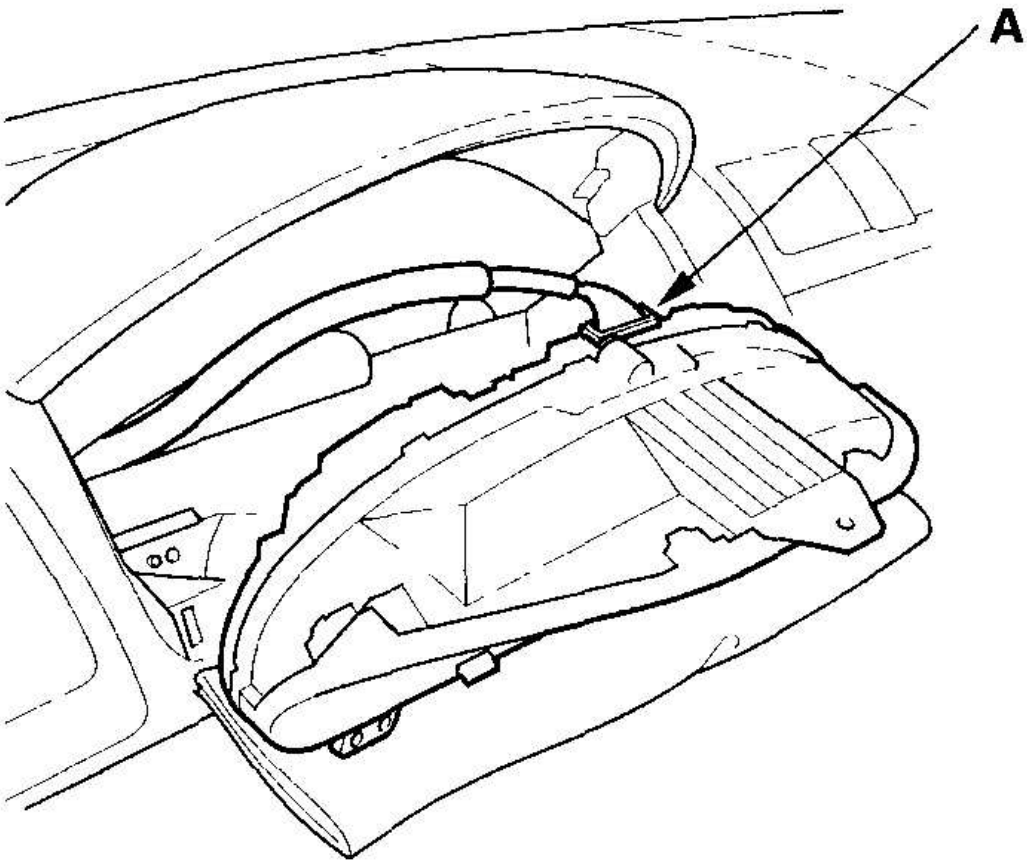


Fig. 266: Disconnecting Gauge Control Module Connector (30P) From Gauge Control Module
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Check resistance between the No. 3 terminal of the OPDS unit 8P connector D

and body ground. There should be an open circuit or at least 1 Mohms.

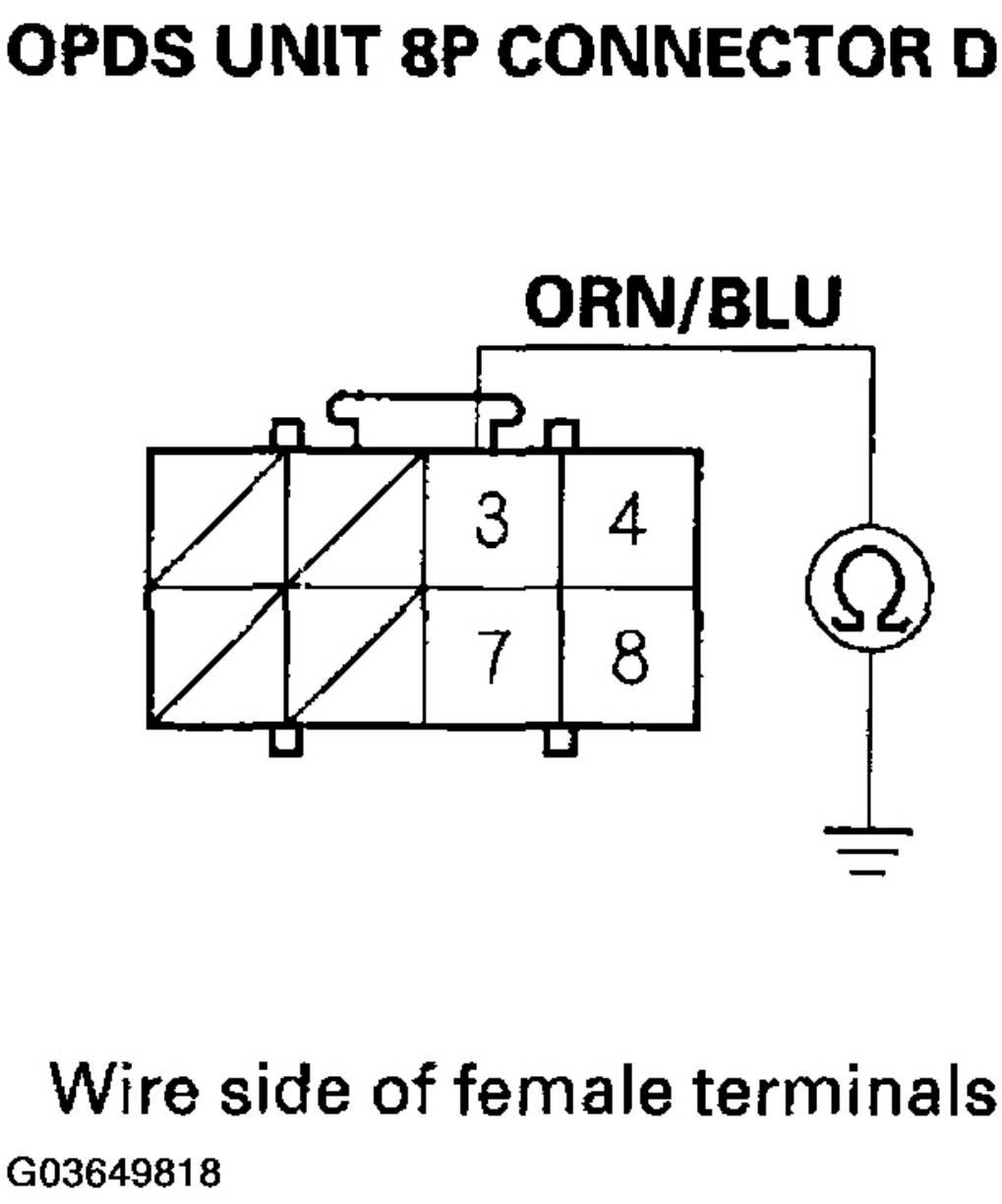


Fig. 267: Checking Resistance Between No. 3 Terminal Of OPDS Unit 8P Connector D And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Replace the gauge control module.

NO - Short to ground in the OPDS unit harness floor wire harness or dashboard wire harness; replace the faulty harness.

DTC 87-32: SIDE AIRBAG CUTOFF INDICATOR STAYS ON ('06-07 MODEL)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on?

YES - Go to step 3.

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failure (see **TROUBLESHOOTING INTERMITTENT FAILURES**).

3. Turn the ignition switch OFF. Make sure nothing is on the front passenger's seat.
4. Disconnect the ODS unit 18P connector D from the ODS unit.

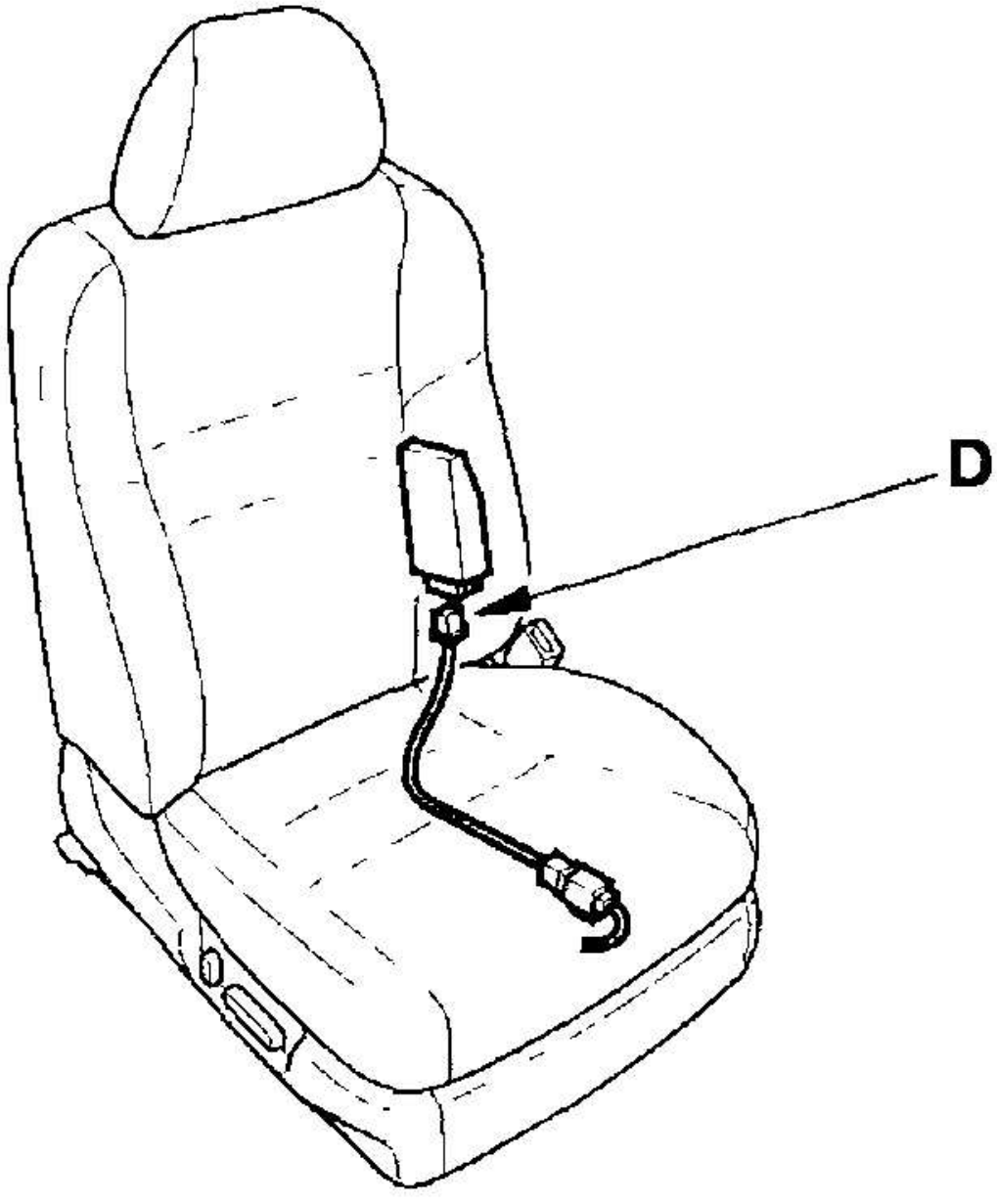


Fig. 268: Disconnecting ODS Unit 18P Connector D From ODS Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Turn the ignition switch ON (II).
6. Check for voltage between the No. 18 terminal of the ODS unit harness 18P connector D and body ground. There should be battery voltage.

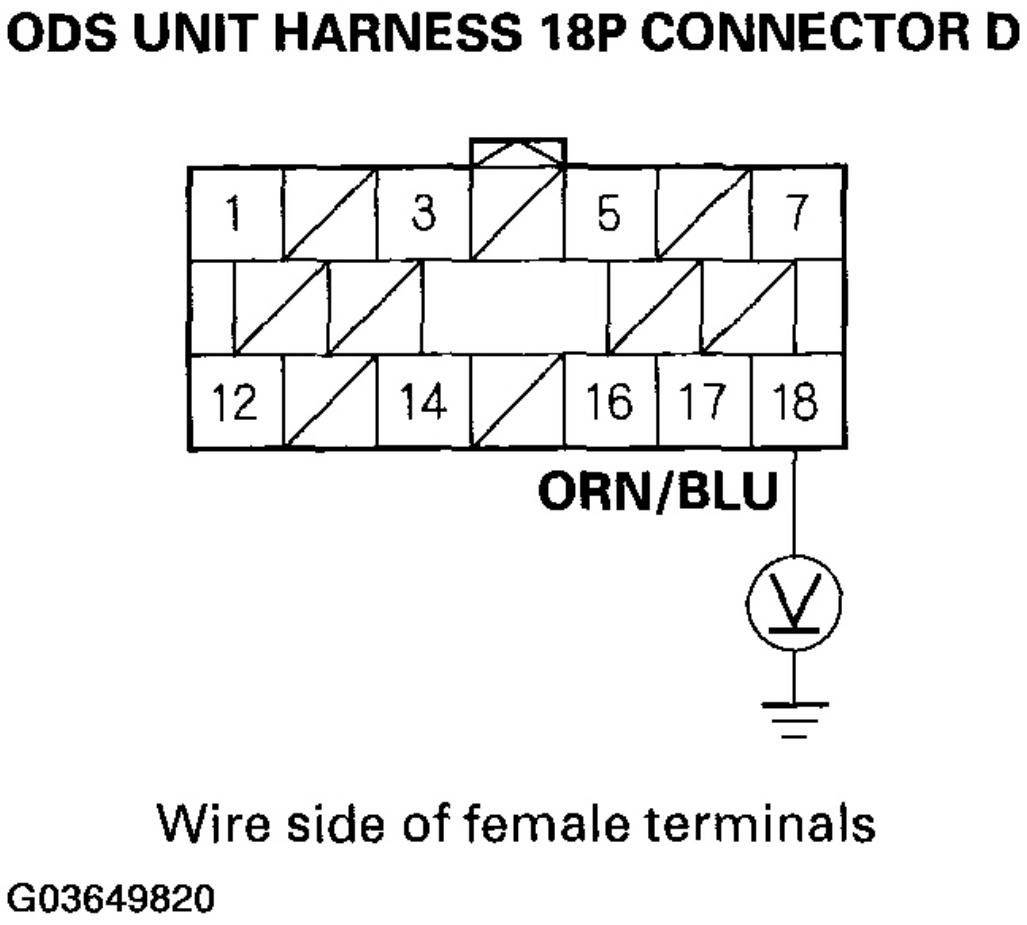


Fig. 269: Checking Voltage Between No. 18 Terminal Of ODS Unit Harness 18P Connector D And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Faulty ODS unit; replace the ODS unit (see **OPDS/ODS Unit Replacement**).

NO - Go to step 7.

7. Turn the ignition switch OFF.
8. Remove the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**). Disconnect gauge control module connector (36P) (A) from the gauge control module.

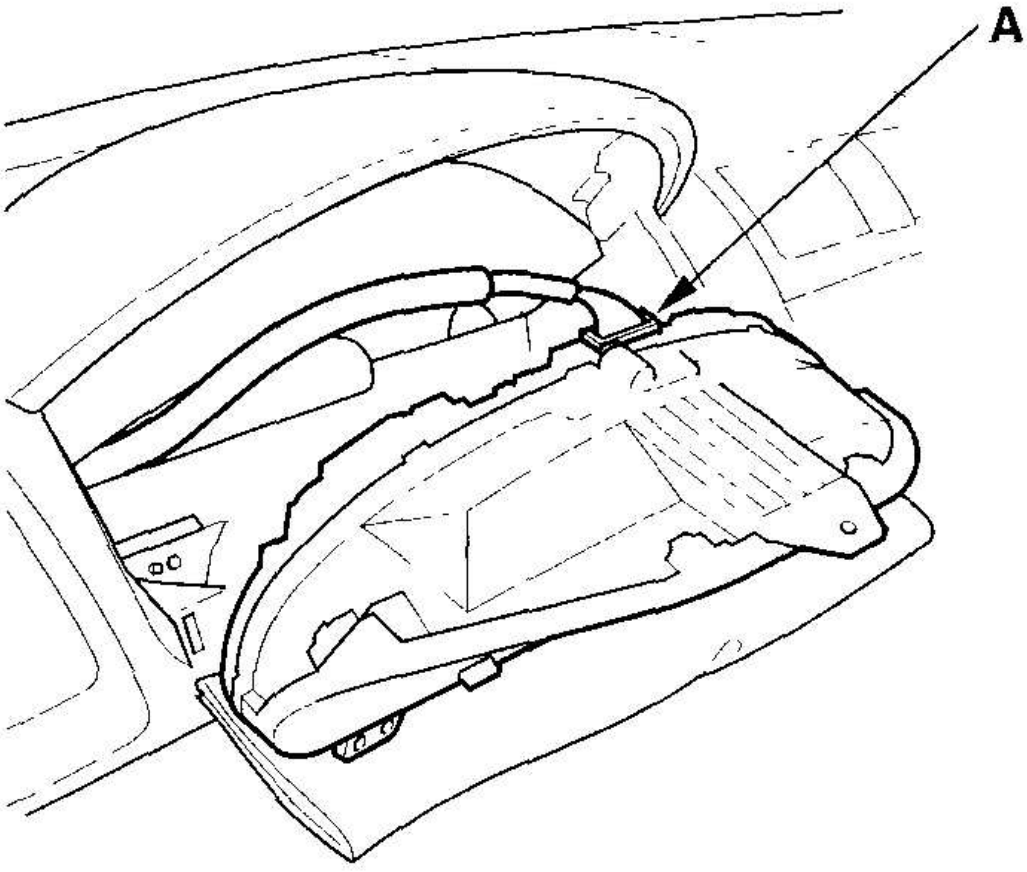


Fig. 270: Disconnecting Gauge Control Module Connector (36P) From Gauge Control Module
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Check resistance between the No. 18 terminal of the ODS unit 18P connector

D and body ground. There should be an open circuit or at least 1 Mohms.

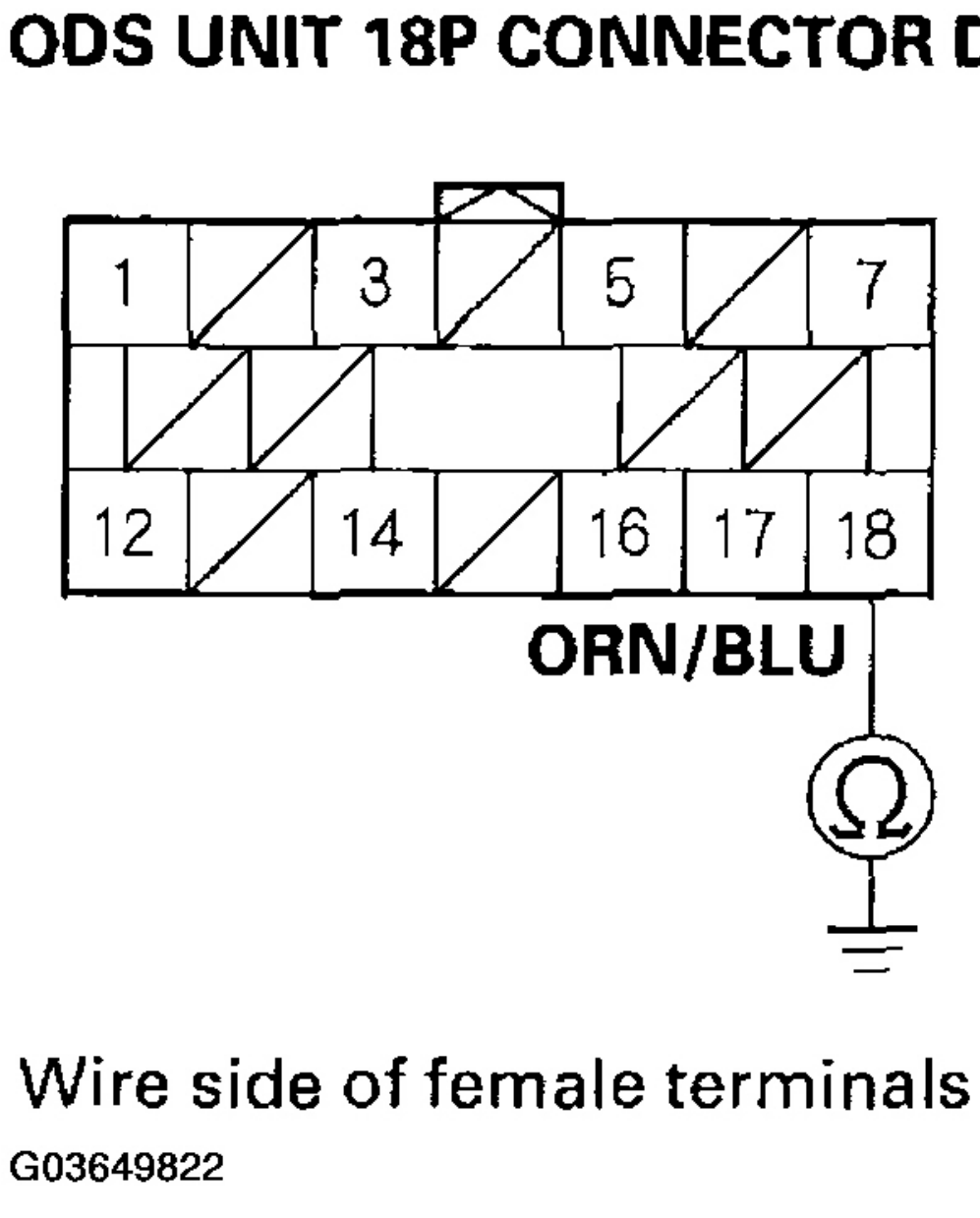


Fig. 271: Checking Resistance Between No. 18 Terminal Of ODS Unit 18P Connector D And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Replace the gauge control module.

NO - Short to ground in the ODS unit harness floor wire harness or dashboard wire harness; replace the faulty harness.

DTC 91-1X (91-10 TO 91-19, 91-1A TO 91-1F): INTERNAL FAILURE OF THE SRS UNIT

NOTE: Before troubleshooting any of these DTCs, check the battery/system voltage. If the voltage is low, repair the charging system or replace the battery before troubleshooting the SRS. If the battery/system voltage is now OK, ask the customer if the battery ever went dead. A dead battery may trigger a DTC.

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 91-1x indicated?

YES - Replace the SRS Unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 91-2X (91-20 TO 91-29, 91-2A TO 91-2F): SHORT IN SRS INDICATOR

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 91-2x indicated?

YES - Go to step 3.

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

3. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
4. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
5. Remove the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**). Disconnect the gauge control module connector 30P ('03-05 models) or 36P ('06-07 model) (A) from the gauge control module.

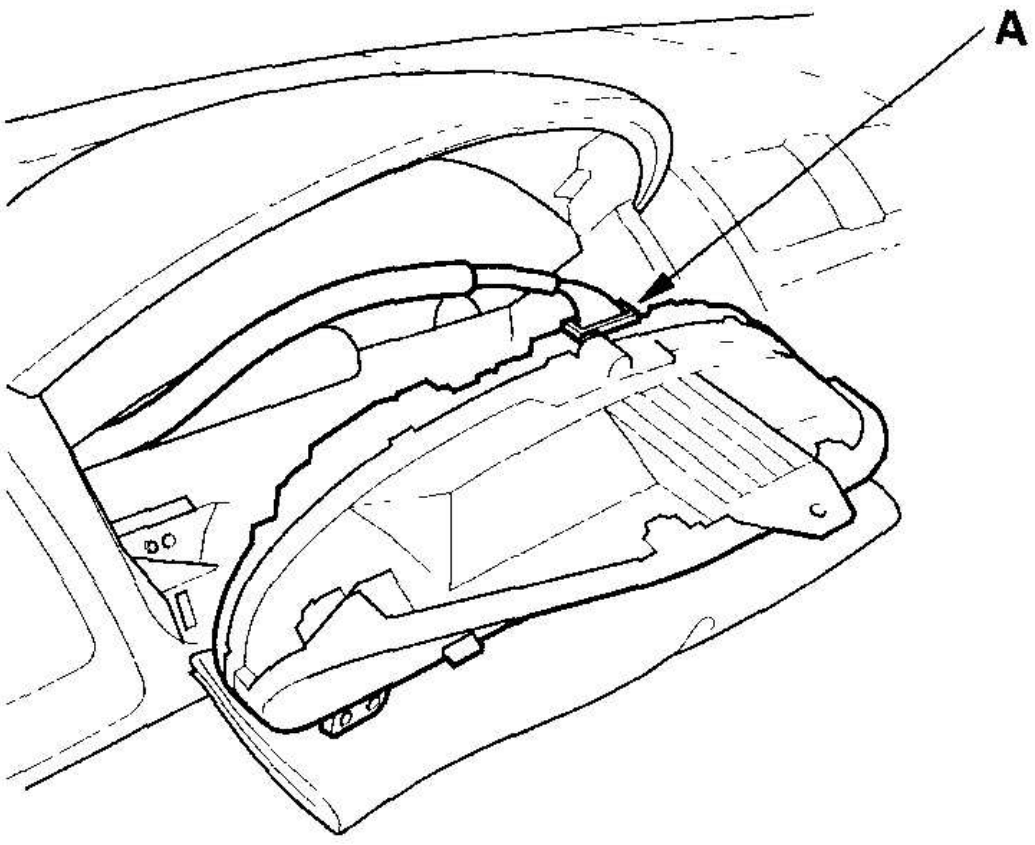


Fig. 272: Disconnecting Gauge Control Module Connector 30P ('03-05 Models) Or 36P ('06-07 Model) From Gauge Control Module
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Check resistance between the No. 19 terminal of SRS unit connector A (28P) and body ground. There should be an open circuit or at least 1 Mohms.

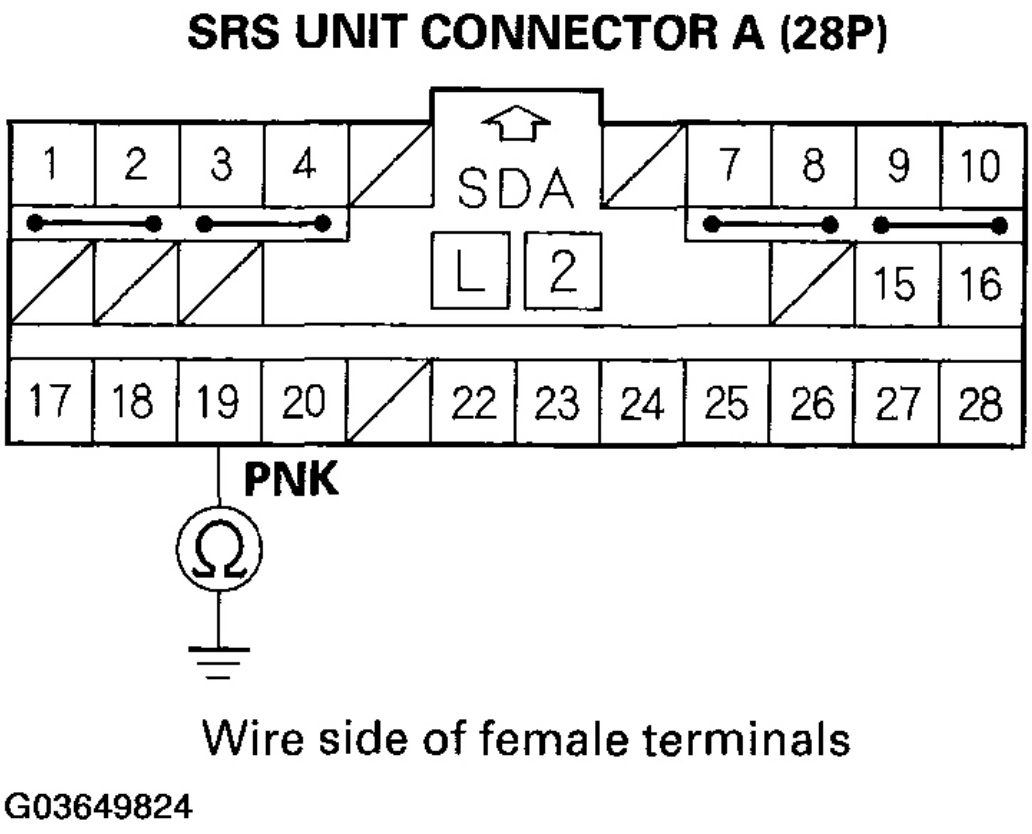


Fig. 273: Checking Resistance Between No. 19 Terminal Of SRS Unit Connector A (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 7.

NO - Short to ground in the dashboard wire harness; replace the dashboard wire harness.

7. Reconnect the gauge control module connector (A).

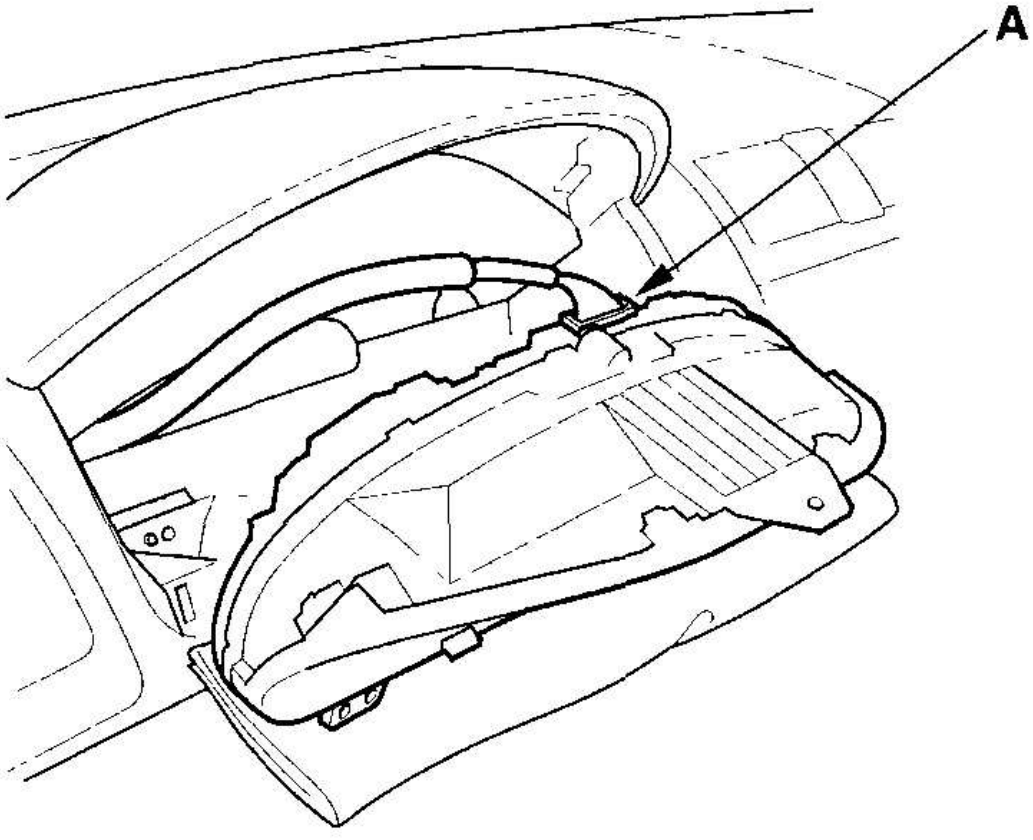


Fig. 274: Reconnecting Gauge Control Module Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Turn the ignition switch ON (II).
9. Install a jumper wire between the No. 5 terminal and the No. 14 ('03-05 models), or the No. 18 ('06-07 model) terminal of the gauge control module connector 30P ('03-05 models), 36P ('06-07 model). The SRS indicator should go off.

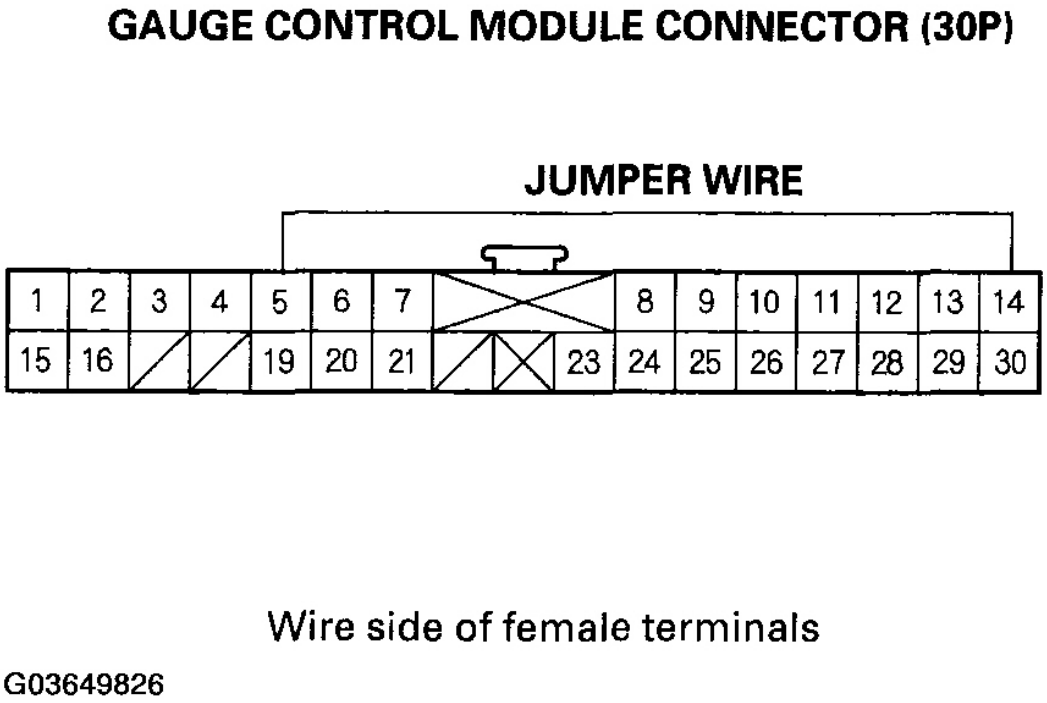


Fig. 275: Installing Jumper Wire Between No. 5 And 14 Terminals ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

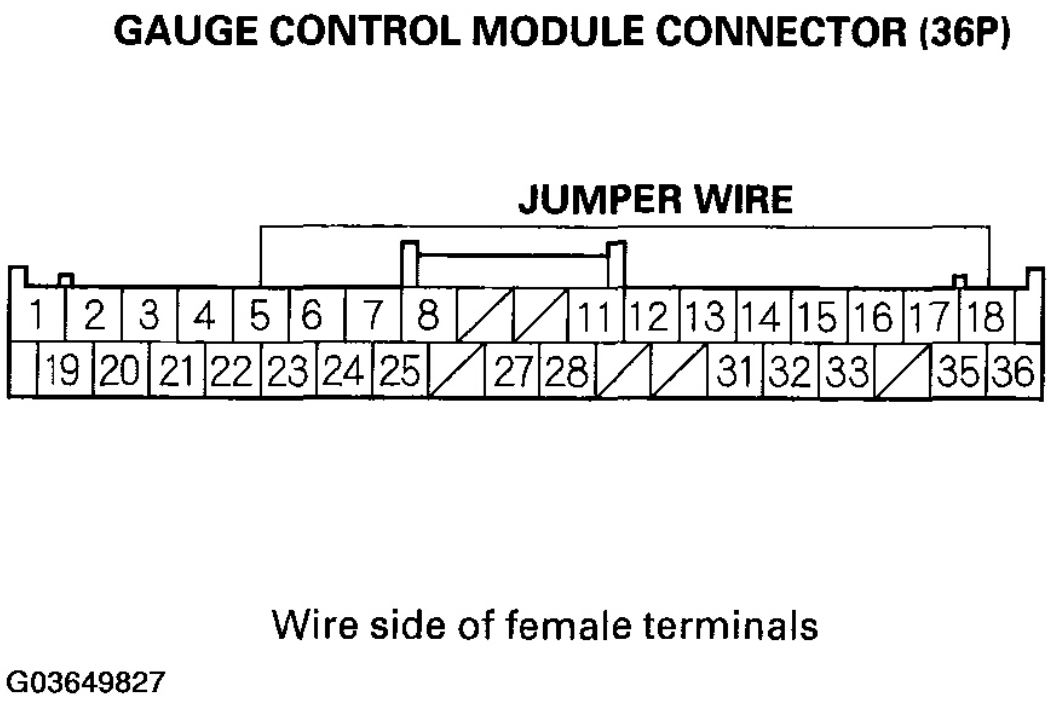


Fig. 276: Installing Jumper Wire Between No. 5 And 18 Terminals ('06-07 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the SRS indicator go off?

YES - Faulty SRS unit or poor contact at SRS unit connector A (28P) and the SRS unit; check the connection. If the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Faulty SRS indicator circuit in the gauge control module or poor contact at gauge control module connector 30P ('03-05 models), 36P ('06-07 model); check the connection. If the connection is OK, replace the gauge control module.

DTC 92-1X (92-10 TO 92-19, 92-1A TO 92-1F): PASSENGER'S AIRBAG CUTOFF INDICATOR MALFUNCTION ('04-06 MODELS)

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH**

HDS).

2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 92-1x indicated?

YES - Internal failure of SRS unit. Replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

DTC 92-2X (92-20 TO 92-29, 92-2A TO 92-2F): OPEN OR SHORT TO GROUND IN PASSENGER'S AIRBAG CUTOFF INDICATOR ('04-07 MODELS)

NOTE: This DTC can be set if the key is turned on when the passenger's airbag cutoff indicator is unplugged.

1. Erase the DTC memory (see **ERASING THE DTC MEMORY WITH HDS**).
2. Turn the ignition switch ON (II), and check that the SRS indicator comes on for about 6 seconds and then goes off.

Does the SRS indicator stay on, and is DTC 92-2x indicated?

YES - Go to step 3.

NO - Intermittent failure, system is OK at this time. Go to Troubleshooting Intermittent Failures (see **TROUBLESHOOTING INTERMITTENT FAILURES**). If another DTC is indicated, go to the **DTC TROUBLESHOOTING INDEX**.

3. Check the connection between the dashboard wire harness 6P connector and the passenger's airbag cutoff indicator.
4. Erase the DTC memory.
5. Check for a DTC.

Is DTC 92-2x indicated?

YES - Go to step 6.

NO - Repair the poor connections and retest. If DTC 92-2x is still present, go to step 6.

6. Check the No. 21 (7.5 A) fuse in the driver's under-dash fuse/relay box.

Is the fuse OK?

YES - Go to step 7.

NO - Replace the fuse, then turn the ignition switch ON (II). If the fuse blows again, check for a short in the No. 21 (7.5 A) fuse circuit (dashboard wire harness A).

7. Disconnect the passenger's airbag cutoff indicator 6P connector.

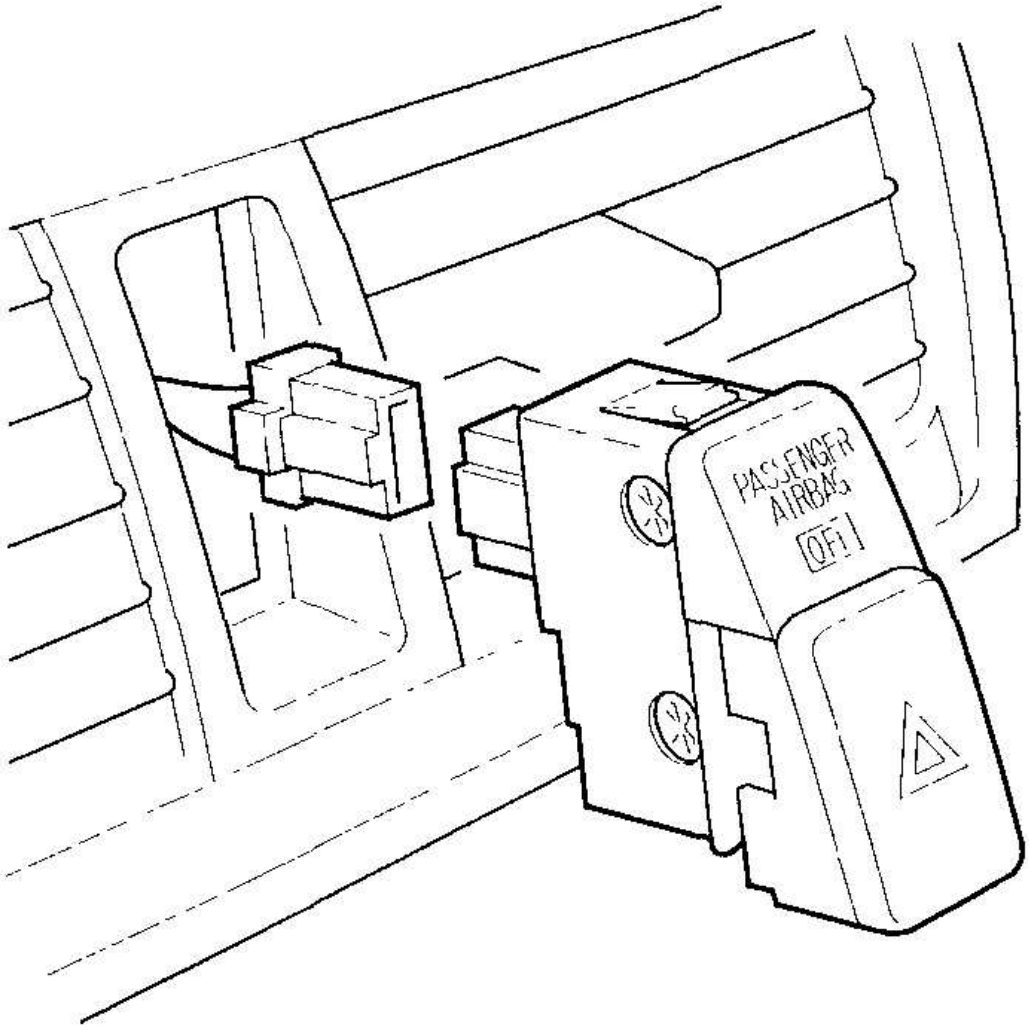


Fig. 277: Disconnecting Passenger's Airbag Cutoff Indicator 6P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Turn the ignition switch ON (II).
9. Check for voltage between the No. 1 terminal of the passenger's airbag cutoff indicator 6P connector and body ground. There should be battery voltage.

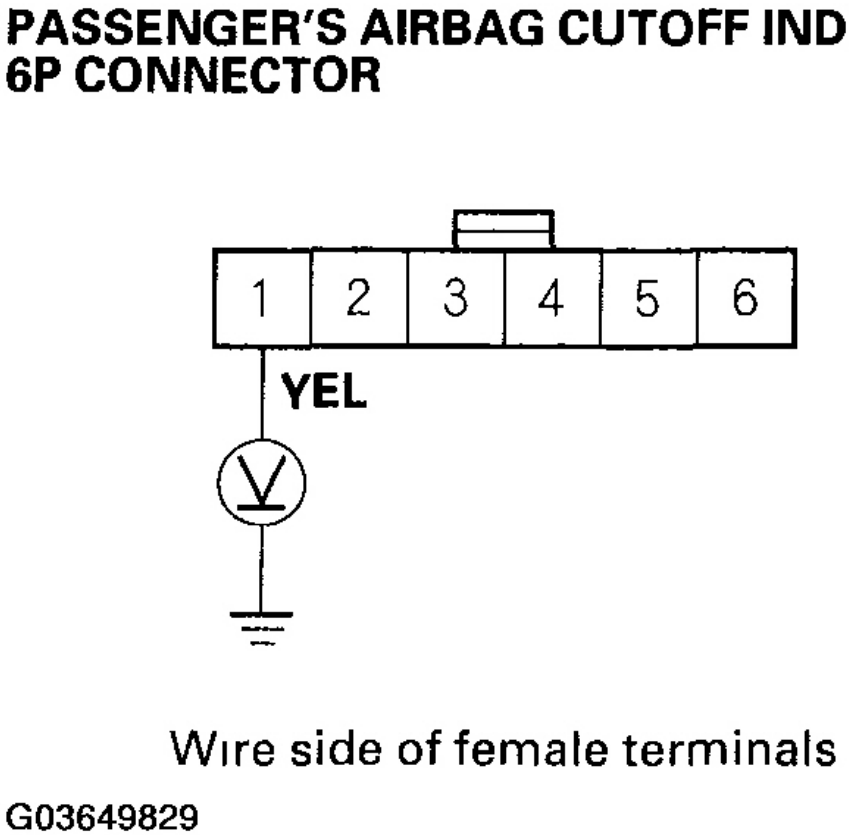


Fig. 278: Checking Voltage Between No. 1 Terminal Of Passenger's Airbag Cutoff Indicator 6P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 10.

NO - Open in the dashboard wire harness; replace the dashboard wire harness.

10. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
11. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).

12. Check resistance between the No. 2 terminal of the passenger's airbag cutoff indicator 6P connector and the No. 20 terminal of dashboard wire harness 28P connector C801. There should be 0-1.0 ohms.

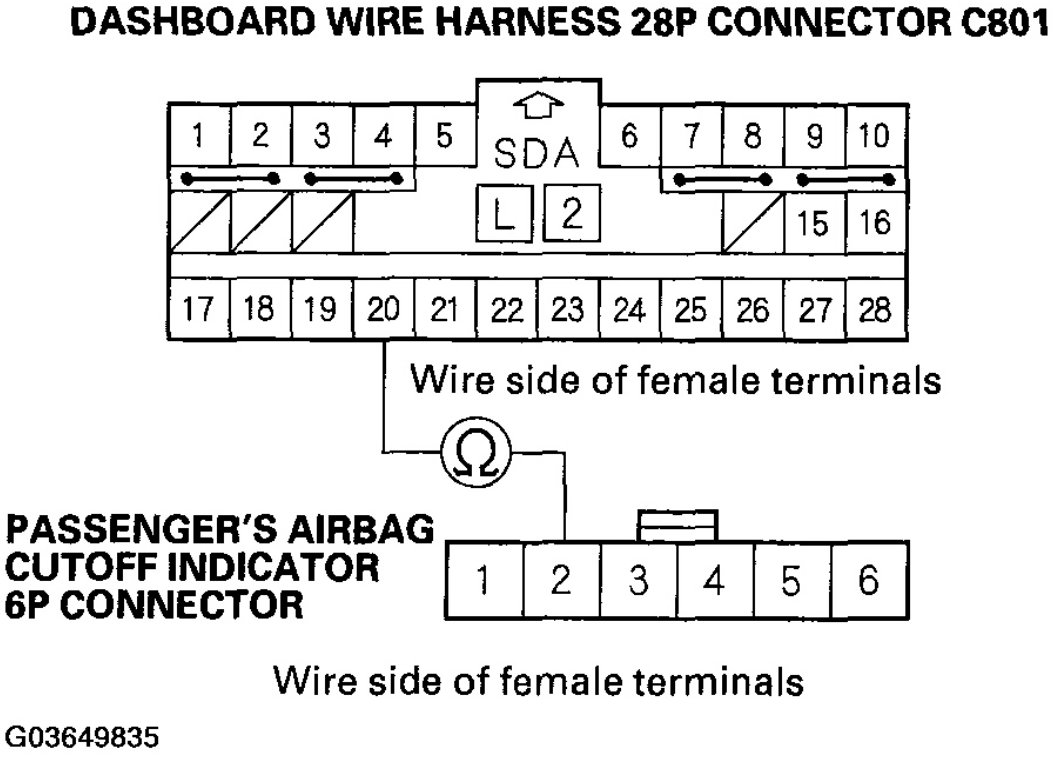


Fig. 279: Checking Resistance Between No. 2 Terminal Of Passenger's Airbag Cutoff Indicator 6P Connector And No. 20 Terminal Of Dashboard Wire Harness 28P Connector C801
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 13.

NO - Open in the dashboard wire harness; replace the dashboard wire harness.

13. Check resistance between the No. 20 terminal of SRS unit connector A (28P) and body ground. There should be an open circuit or at least 1 Mohms.

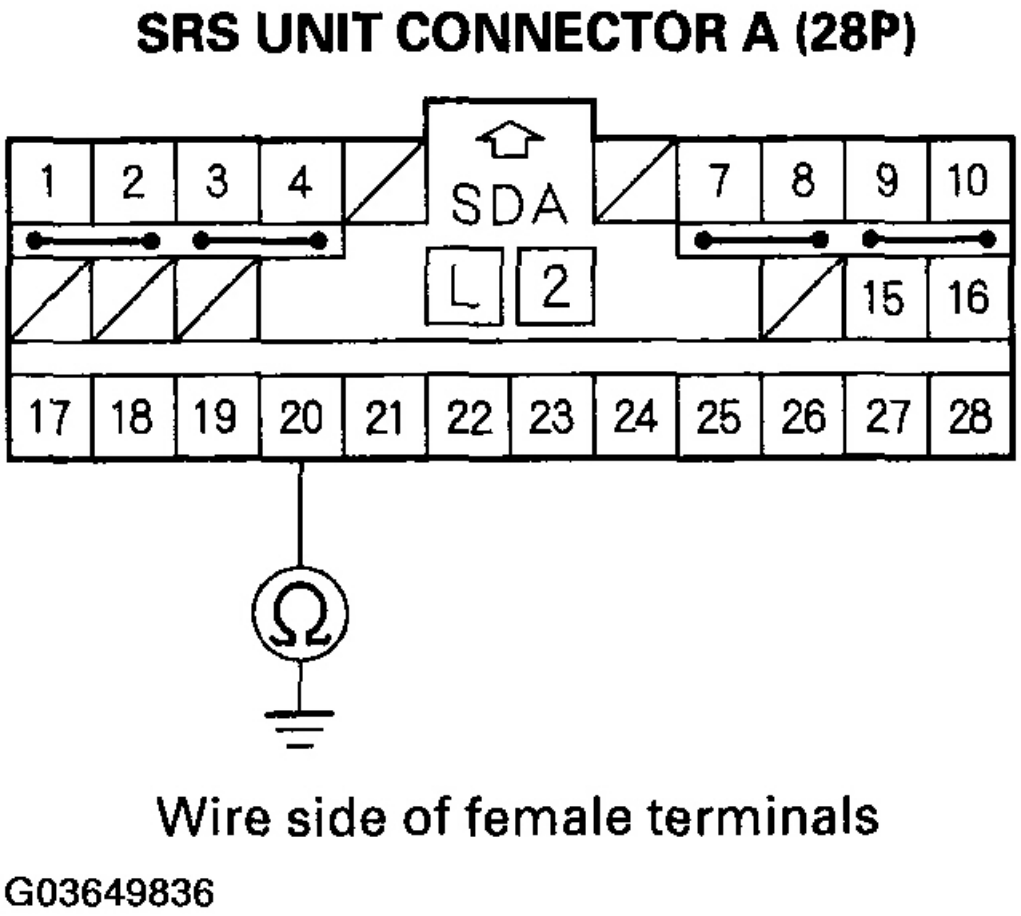


Fig. 280: Checking Resistance Between No. 20 Terminal Of SRS Unit Connector A (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Check for faulty SRS unit or passenger's airbag cutoff indicator; replace the passenger's airbag cutoff indicator. If the problem is still present, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to ground in dashboard wire harness; replace dashboard wire harness.

DTC A1-1X (A1-10 TO A1-19, A1-1A TO A1-1F): FAULTY POWER SUPPLY (VA LINE)

1. Check the No. 10 (7.5 A) fuse in the under-dash fuse/relay box.

   Is the fuse OK?

   YES - Go to step 2.

   NO - Replace the fuse, then turn the ignition switch ON (II). If the fuse blows again, check for a short in the No. 10 (7.5 A) fuse circuit (dashboard wire harness, floor wire harness, or OPDS/ODS unit harness).
2. Disconnect the battery negative cable, and wait for 3 minutes.
3. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
4. Reconnect the battery negative cable.
5. Connect a voltmeter between the No. 17 terminal of SRS unit connector A (28P) and body ground. Turn the ignition switch ON (II), and measure voltage. There should be battery voltage.

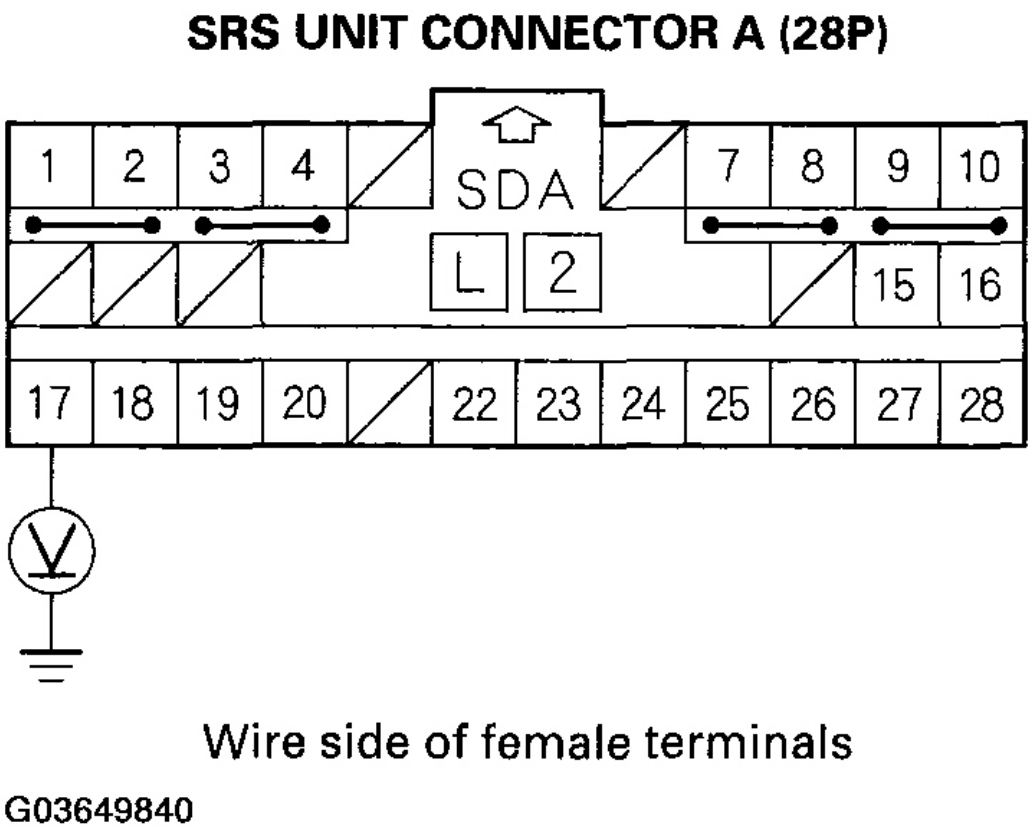


Fig. 281: Measuring Voltage Between No. 17 Terminal Of SRS Unit Connector A (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Faulty SRS unit or poor contact at SRS unit connector A (28P) and the SRS unit; check the connection. If the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Go to step 6.

6. Turn the ignition switch OFF.
7. Disconnect under-dash fuse/relay box connector S (2P).

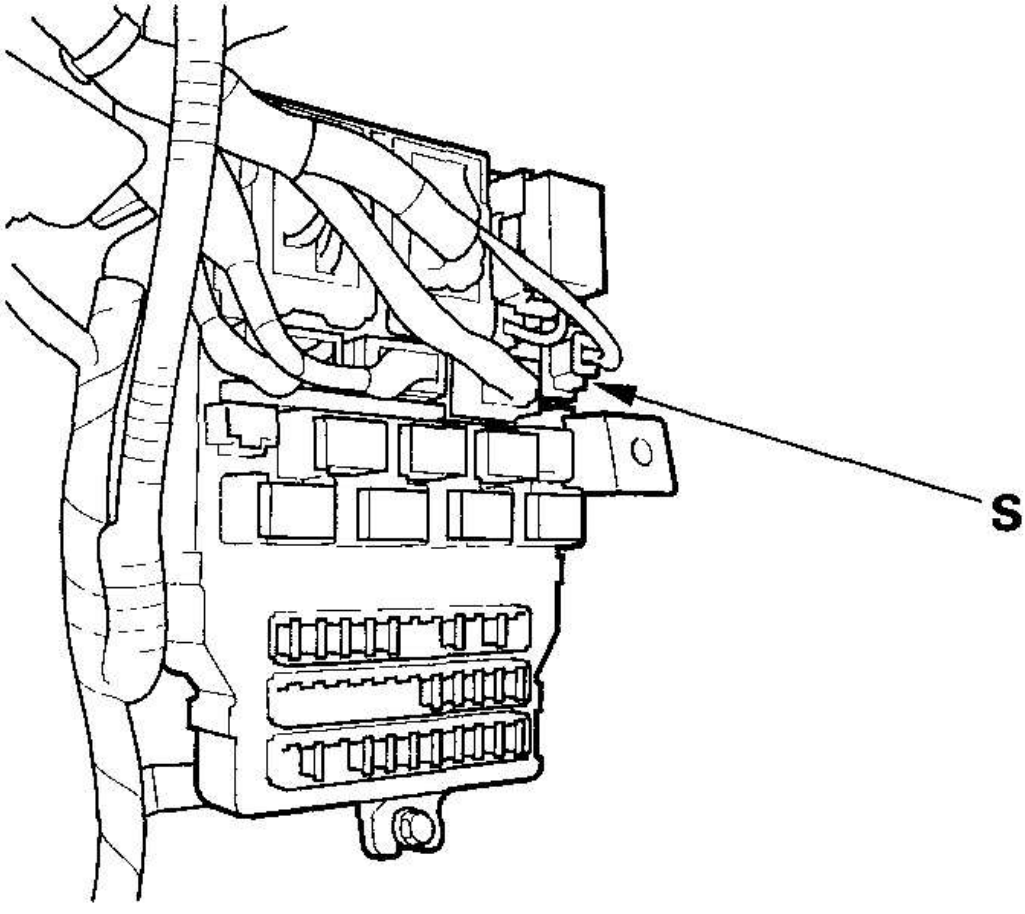


Fig. 282: Disconnecting Under-Dash Fuse/Relay Box Connector S (2P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Check resistance between the No. 1 terminal of under-dash fuse/relay box connector S (2P) and the No. 17 terminal of SRS unit connector A (28P). There should be 0-1.0 ohms.

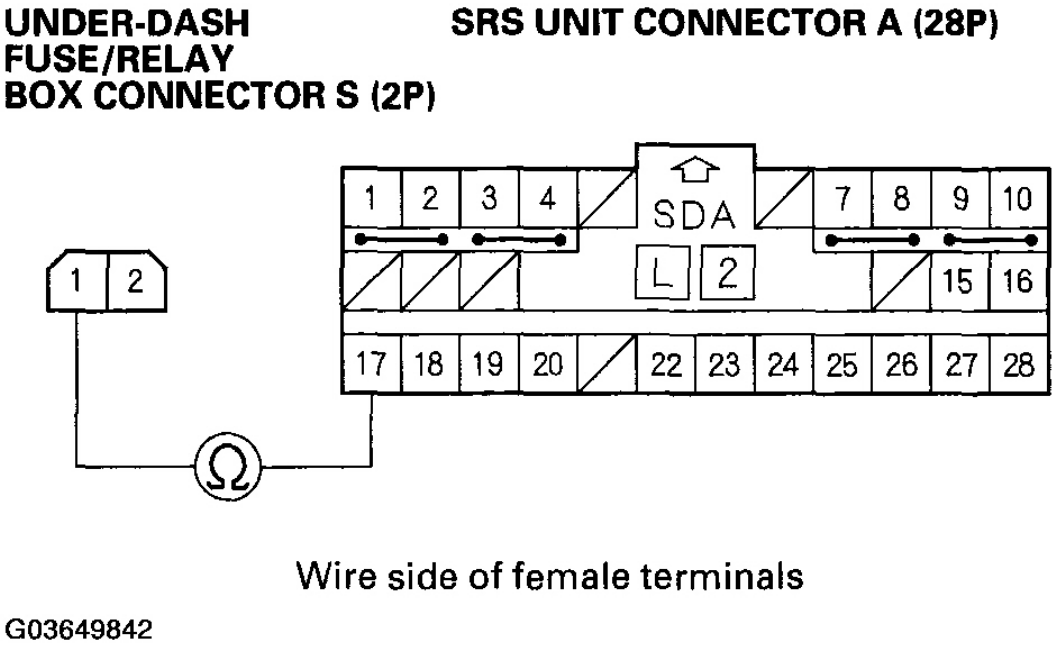


Fig. 283: Checking Resistance Between No. 1 Terminal Of Under-Dash Fuse/Relay Box Connector S (2P) And No. 17 Terminal Of SRS Unit Connector A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Open in the under-dash fuse/relay box or poor contact between connector S (2P) and the under-dash fuse/relay box; check the connection. If the connection is OK, replace the under-dash fuse/relay box (see **UNDER-DASH FUSE/RELAY BOX (EXCEPT HYBRID & V6)**).

NO - Open in the dashboard wire harness; replace the dashboard wire harness.

DTC A2-1X (A2-10 TO A2-19, A2-1A TO A2-1F): FAULTY POWER SUPPLY (VB LINE)

1. Check the No. 22 (10 A) fuse.

Is the fuse OK?

YES - Go to step 2.

NO - Replace the fuse, then turn the ignition switch ON (II). If the fuse blows again, check for a short to ground in the dashboard wire harness or in the under-dash fuse/relay box No. 22 (10 A) fuse line; replace the dashboard wire harness. If the problem is still there, replace the under-dash fuse/relay box.

2. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
3. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
4. Reconnect the battery negative cable.
5. Connect a voltmeter between the No. 18 terminal of SRS unit connector A (28P) and body ground. Turn the ignition switch ON (II), and measure voltage. There should be battery voltage.

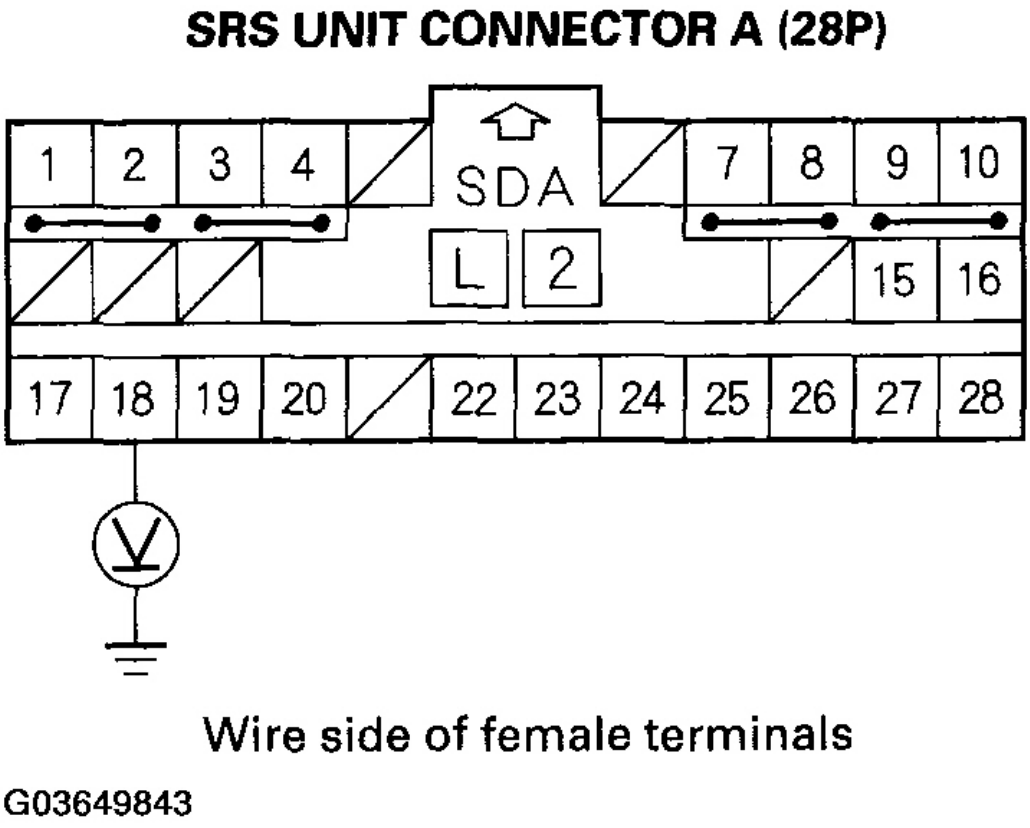


Fig. 284: Measuring Voltage Between No. 18 Terminal Of SRS Unit Connector A (28P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Faulty SRS unit or poor contact at SRS unit connector A (28P) and the SRS unit; check the connection. If the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Go to step 6.

6. Turn the ignition switch OFF.
7. Disconnect under-dash fuse/relay box connector S (2P).

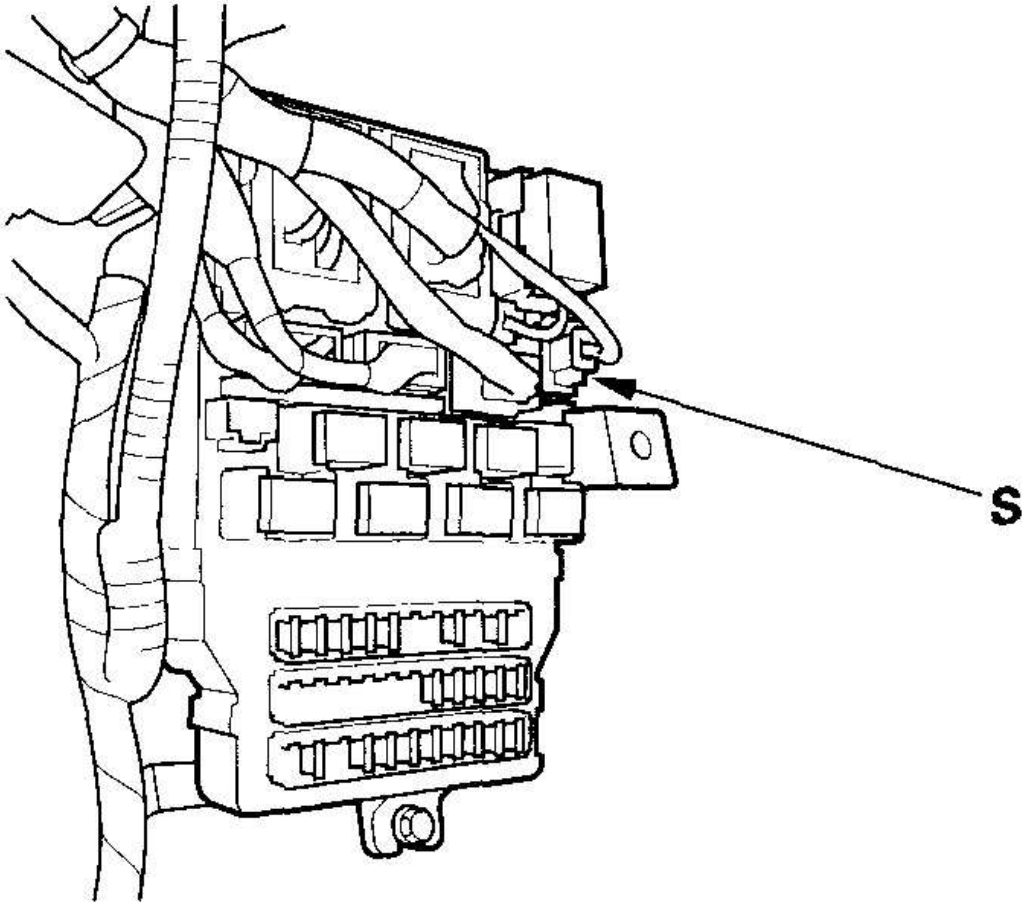


Fig. 285: Disconnecting Under-Dash Fuse/Relay Box Connector S (2P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Check resistance between the No. 2 terminal of the under-dash fuse/relay box connector S (2P) and the No. 18 terminal of SRS unit connector A (28P). There should be 0-1.0 ohms.

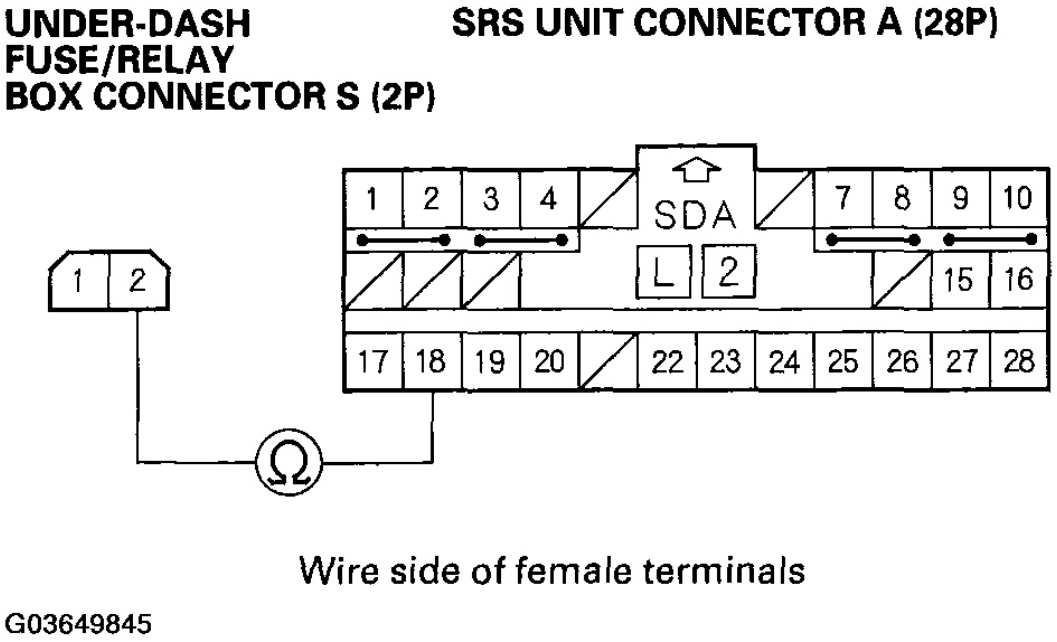


Fig. 286: Checking Resistance Between No. 2 Terminal Of Under-Dash Fuse/Relay Box Connector S (2P) And No. 18 Terminal Of SRS Unit Connector A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Open in the under-dash fuse/relay box or poor contact between connector S (2P) and the under-dash fuse/relay box; check the connection. If the connection is OK, replace the under-dash fuse/relay box (see **UNDER-DASH FUSE/RELAY BOX (EXCEPT HYBRID & V6)**).

NO - Open in the dashboard wire harness; replace the dashboard wire harness.

SYMPTOM TROUBLESHOOTING

SRS INDICATOR DOES NOT COME ON ('03-05 MODELS)

1. Turn the ignition switch ON (II), and see if the other indicators come on (brake system, etc).

Do the other indicators come on?

YES - Go to step 2.

NO - Go to step 8.

2. Turn the ignition switch OFF, then remove the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**).

   Disconnect the gauge control module connector (30P) (A) from the gauge control module.

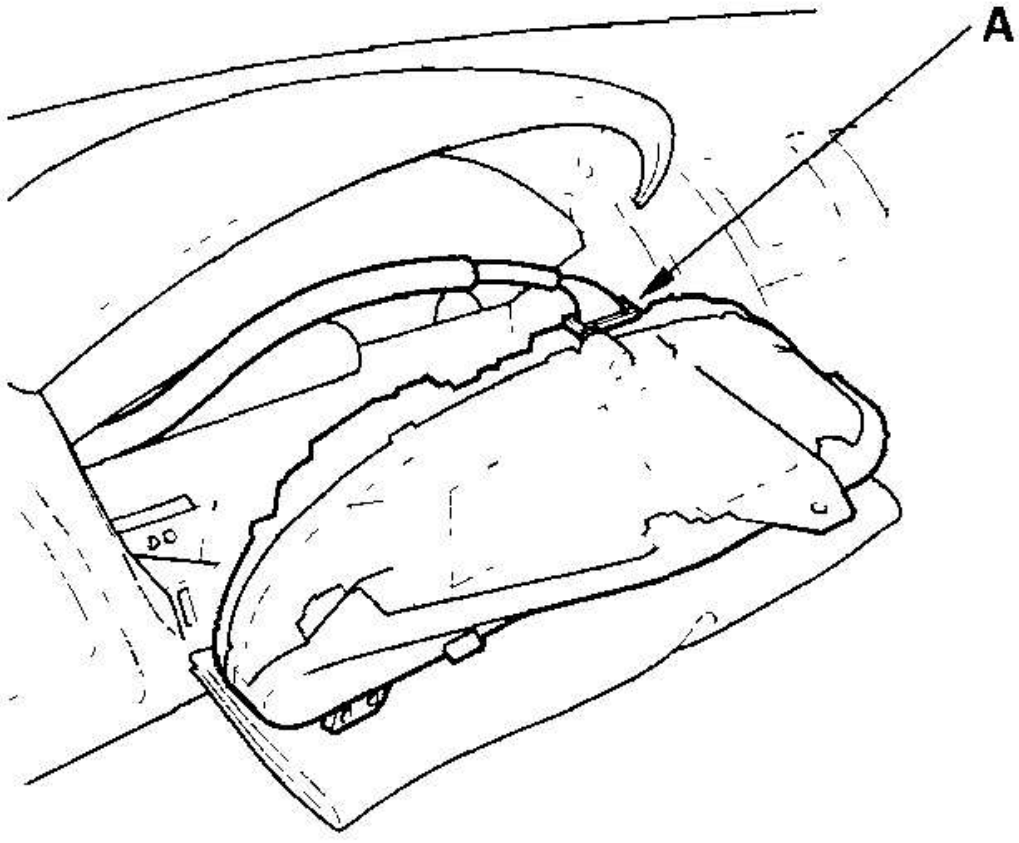


Fig. 287: Disconnecting Gauge Control Module Connector (30P) From

Gauge Control Module
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check resistance between the No. 21 terminal of gauge control module connector (30P) and body ground. There should be 0-1.0 ohms.

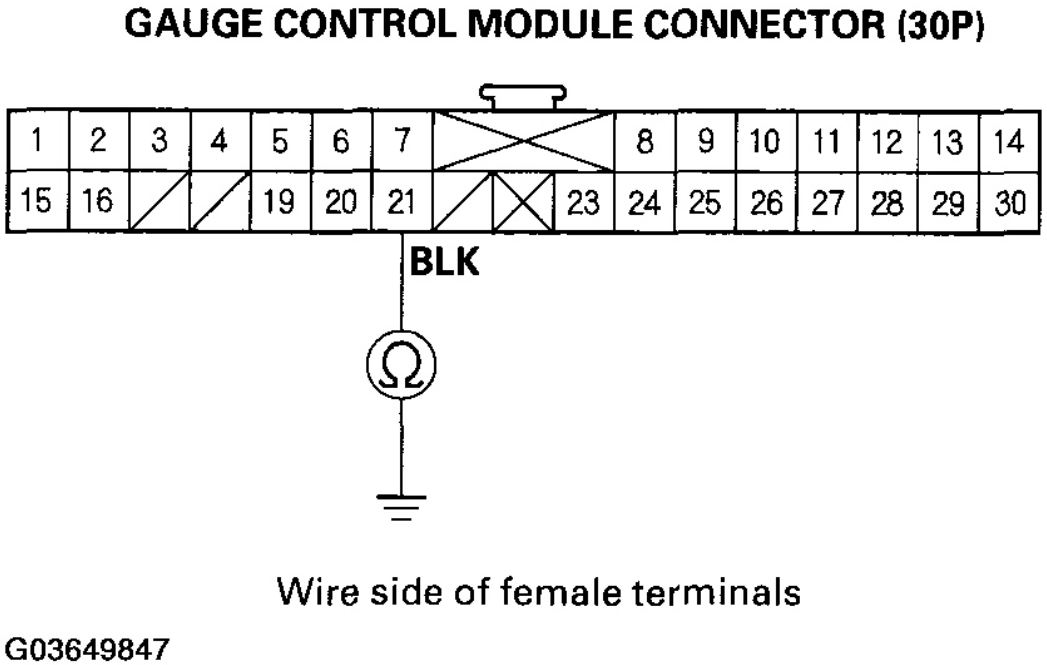


Fig. 288: Checking Resistance Between No. 21 Terminal Of Gauge Control Module Connector (30P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 4.

NO - Open in the BLK wire of the dashboard wire harness, junction connector or faulty body ground terminal (G503) (see). If the body ground terminal is OK, replace the dashboard wire harness.

4. Check for voltage between the No. 14 terminal of the gauge control module connector (30P) and body ground within the first 6 seconds after turning the

ignition switch ON (II). There should be about 1.0 V for 6 seconds and then about 11V.

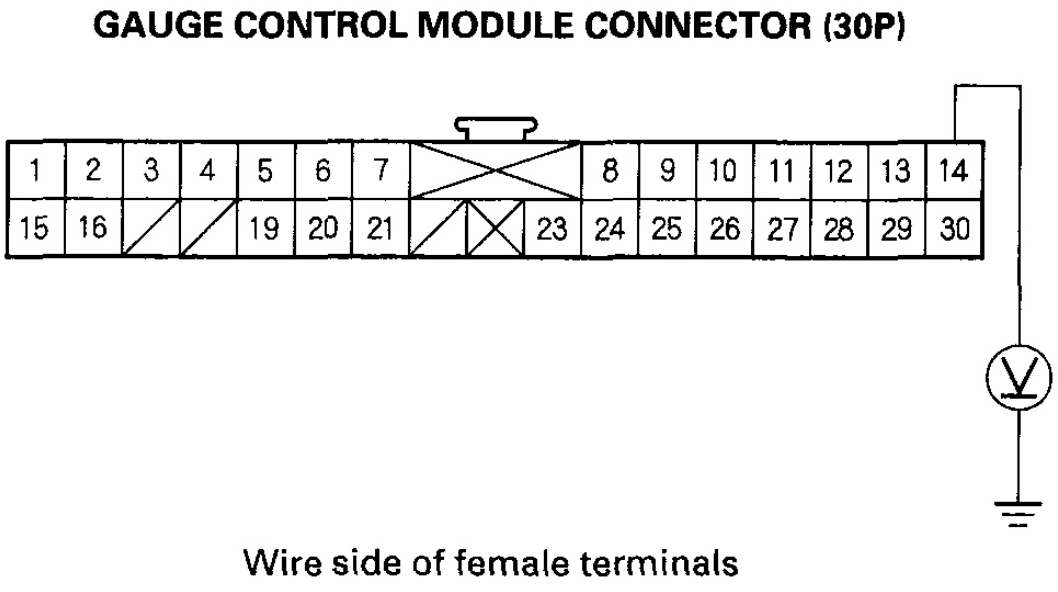


Fig. 289: Checking Voltage Between No. 14 Terminal Of Gauge Control Module Connector (30P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Faulty SRS indicator circuit in the gauge control module; replace the gauge control module.

NO - Go to step 5.

5. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
6. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
7. Reconnect the battery negative cable.
8. Connect a voltmeter between the No. 14 terminal of gauge control module connector (30P) and body ground. Turn the ignition switch ON (II), and

measure voltage. There should be 0.5 V or less.

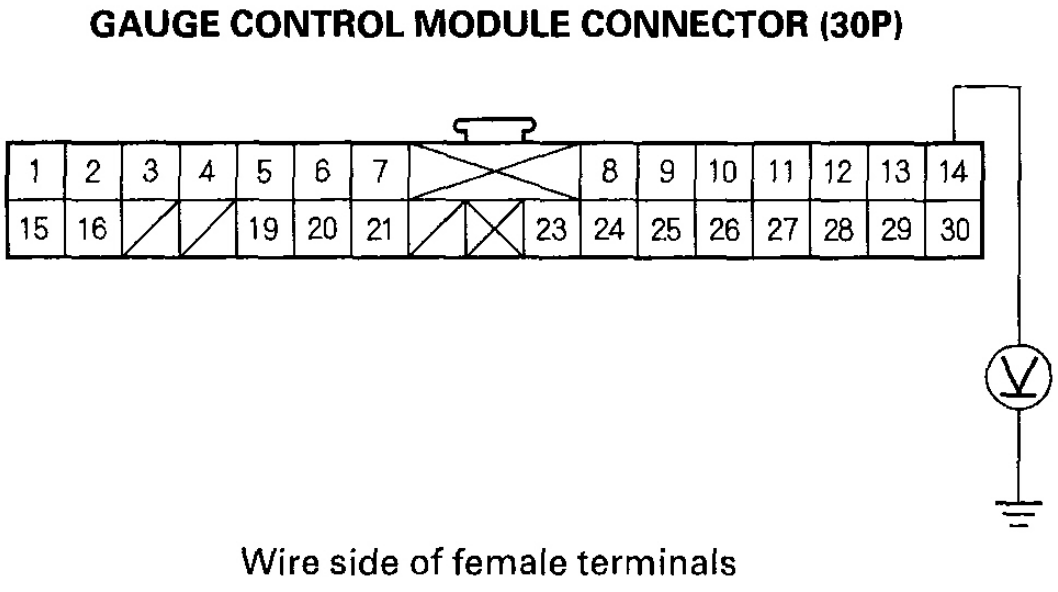


Fig. 290: Measuring Voltage Between No. 14 Terminal Of Gauge Control Module Connector (30P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Faulty SRS unit; replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to power in the PNK wire of the dashboard wire harness or junction connector; replace the dashboard wire harness.

9. Turn the ignition switch OFF. Check the No. 21 (7.5 A) fuse in the under-dash fuse/relay box.

Is the fuse blown?

YES - Go to step 11.

NO - Go to step 10.

10. Connect a voltmeter between the No. 5 terminal of the gauge control module connector (30P) and body ground. Turn the ignition switch ON (II), and measure the voltage. There should be battery voltage.

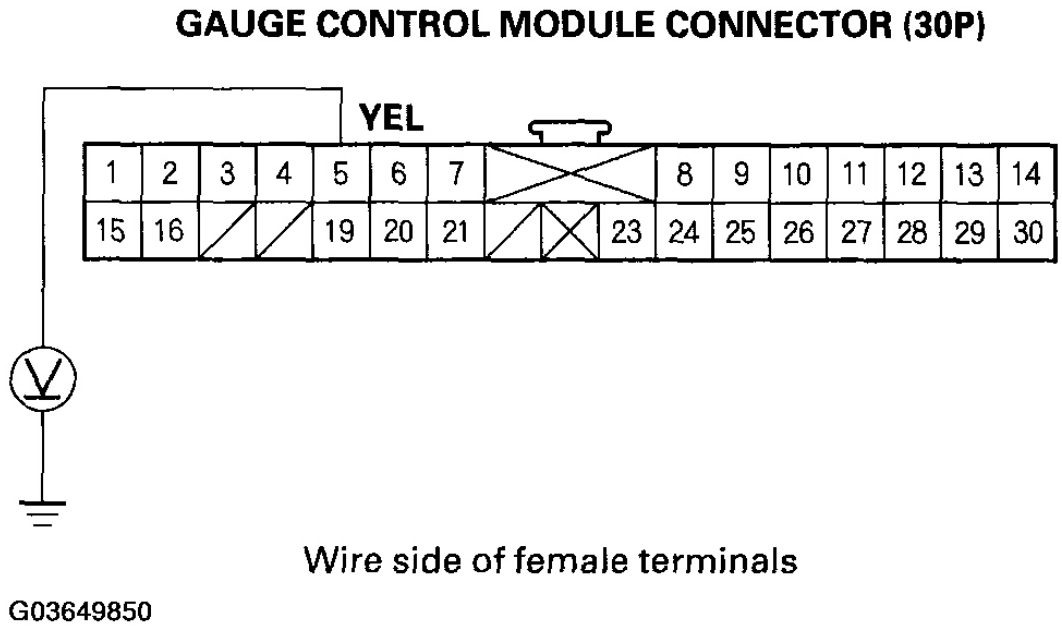


Fig. 291: Measuring Voltage Between No. 5 Terminal Of Gauge Control Module Connector (30P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Faulty SRS indicator circuit in the gauge control module or poor contact at the gauge control module connector (30P) and the gauge control module; if the connection is OK, replace the gauge control module.

NO - Open in the under-dash fuse/relay box No. 21 (7.5 A) fuse circuit, or open in the YEL wire of the dashboard wire harness A or junction connector. If the under-dash fuse/relay box is OK, replace the dashboard wire harness.

11. Replace the No. 21 (7.5 A) fuse, then check to see if the indicators comes on.

Do the indicators come on?

YES - The system is OK at this time.

NO - Repair the short to ground in the under-dash fuse/relay box No. 21 (7.5 A) fuse circuit.

SRS INDICATOR DOES NOT COME ON ('06-07 MODEL)

1. Turn the ignition switch ON (II), and see if the other indicators come on (brake system, etc).

   Do the other indicators come on?

   YES - Go to step 2.

   NO - Go to step 9.
2. Turn the ignition switch OFF, then remove the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**).

   Disconnect the gauge control module connector (36P) (A) from the gauge control module.

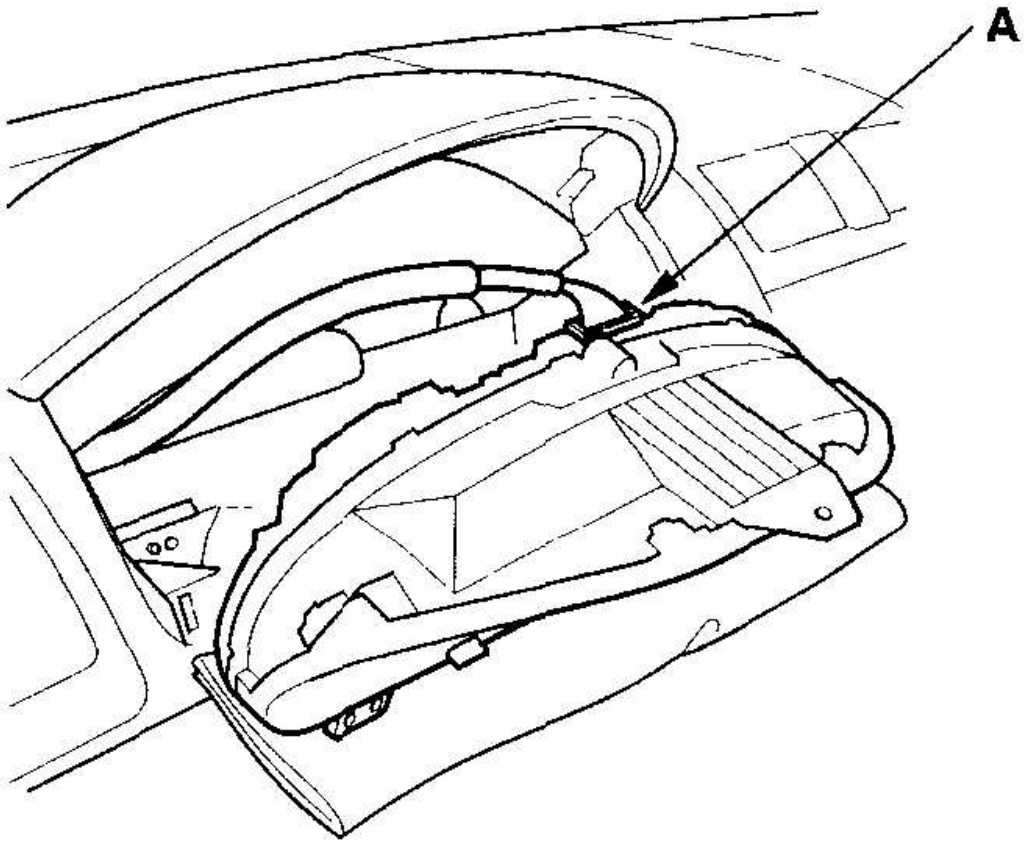


Fig. 292: Disconnecting Gauge Control Module Connector (36P) From Gauge Control Module
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check resistance between the No. 25 terminal of gauge control module connector (36P) and body ground. There should be 0-1.0 ohms.

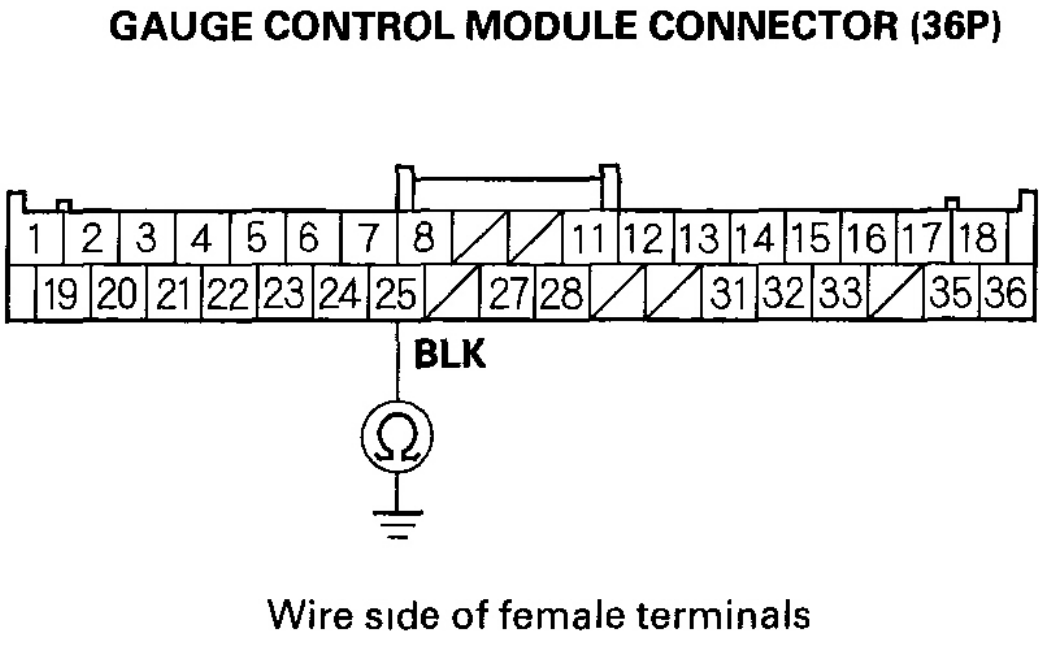


Fig. 293: Checking Resistance Between No. 25 Terminal Of Gauge Control Module Connector (36P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 4.

NO - Open in the BLK wire of the dashboard wire harness, junction connector or faulty body ground terminal (G503) (see). If the body ground terminal is OK, replace the dashboard wire harness.

4. Check for voltage between the No. 18 terminal of the gauge control module connector (36P) and body ground within the first 6 seconds after turning the ignition switch ON (II). There should be about 1.0 V for 6 seconds and then about 11 V.

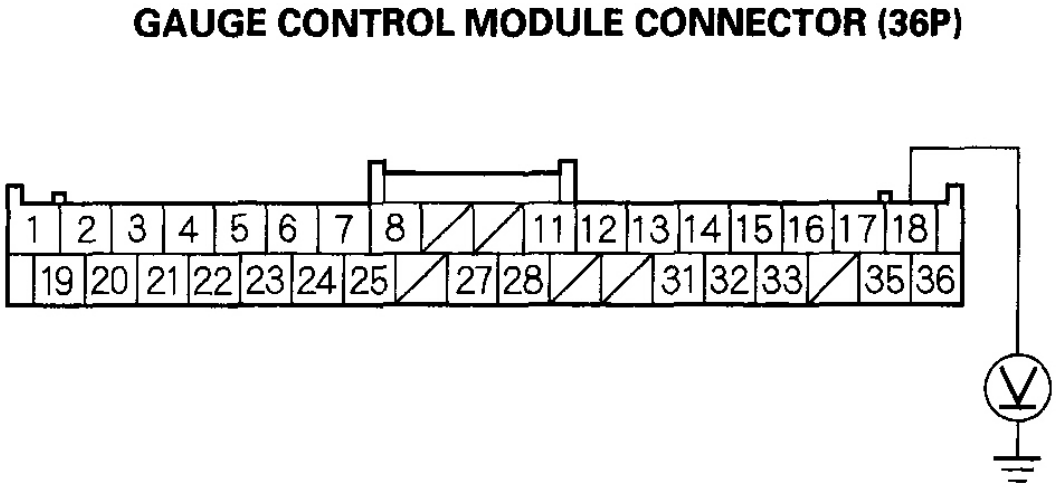


Fig. 294: Checking Voltage Between No. 18 Terminal Of Gauge Control Module Connector (36P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Faulty SRS indicator circuit in the gauge control module; replace the gauge control module.

NO - Go to step 5.

5. Turn the ignition switch OFF. Disconnect the battery negative cable, and wait for 3 minutes.
6. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
7. Reconnect the battery negative cable.
8. Connect a voltmeter between the No. 18 terminal of gauge control module connector (36P) and body ground. Turn the ignition switch ON (II), and measure voltage. There should be 0.5 V or less.

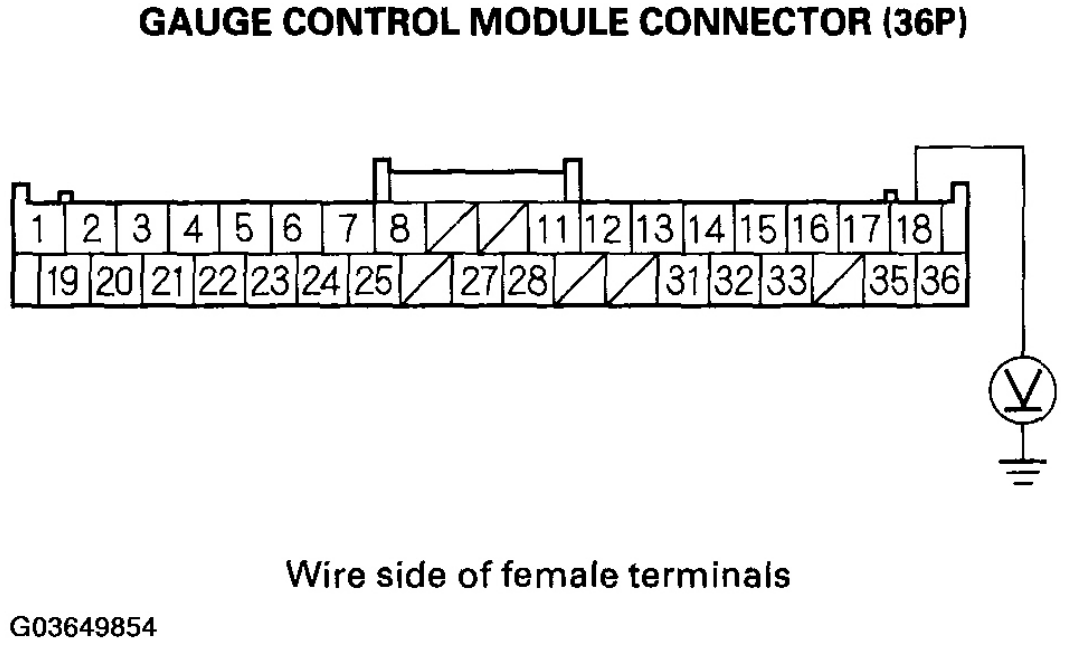


Fig. 295: Measuring Voltage Between No. 18 Terminal Of Gauge Control Module Connector (36P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage as specified?

YES - Faulty SRS unit; replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Short to power in the PNK wire of the dashboard wire harness or junction connector; replace the dashboard wire harness.

9. Turn the ignition switch OFF. Check the No. 21 (7.5 A) fuse in the under-dash fuse/relay box.

Is the fuse blown?

YES - Go to step 11.

NO - Go to step 10.

10. Connect a voltmeter between the No. 5 terminal of the gauge control module connector (36P) and body ground. Turn the ignition switch ON (II), and

measure the voltage. There should be battery voltage.

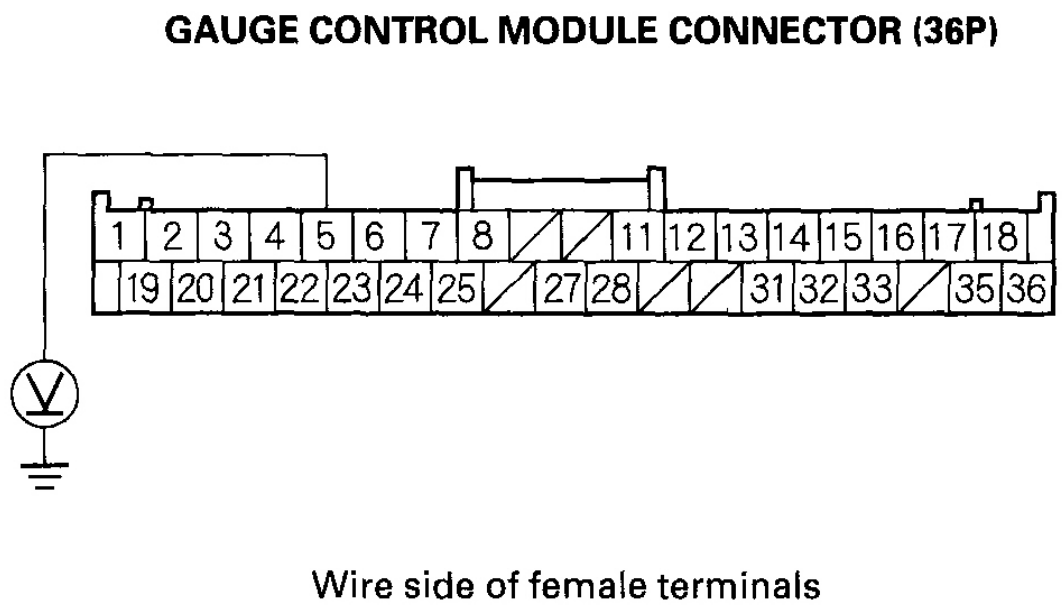


Fig. 296: Measuring Voltage Between No. 5 Terminal Of Gauge Control Module Connector (36P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Faulty SRS indicator circuit in the gauge control module or poor contact at the gauge control module connector (36P) and the gauge control module; if the connection is OK, replace the gauge control module.

NO - Open in the under-dash fuse/relay box No. 21 (7.5 A) fuse circuit, or open in the YEL wire of the dashboard wire harness A or junction connector. If the under-dash fuse/relay box is OK, replace the dashboard wire harness.

11. Replace the No. 21 (7.5 A) fuse, then check to see if the indicators comes on.

Do the indicators come on?

YES - The system is OK at this time.

NO - Repair the short to ground in the under-dash fuse/relay box No. 21 (7.5 A) fuse circuit.

SRS INDICATOR STAYS ON, BUT NO DTCS ARE STORED ('03-05 MODELS)

NOTE:

- **If you cannot retrieve DTCs with the HDS using the SRS menu method, retrieve flash codes with the HDS in SCS mode.**
- **A new SRS unit must sense the entire system is OK before completing its initial self-test. The most common cause of an incomplete self-test is the failure to replace all deployed parts after a collision, in particular seat belt tensioners (see COMPONENT REPLACEMENT/INSPECTION AFTER DEPLOYMENT).**
- **A battery/system voltage above 15.2 V can cause the SRS indicator to come on without storing any DTCs.**

1. Disconnect the battery negative cable, and wait for 3 minutes.
2. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
3. Remove the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**). Disconnect gauge control module connector (30P) (A) from the gauge control module.

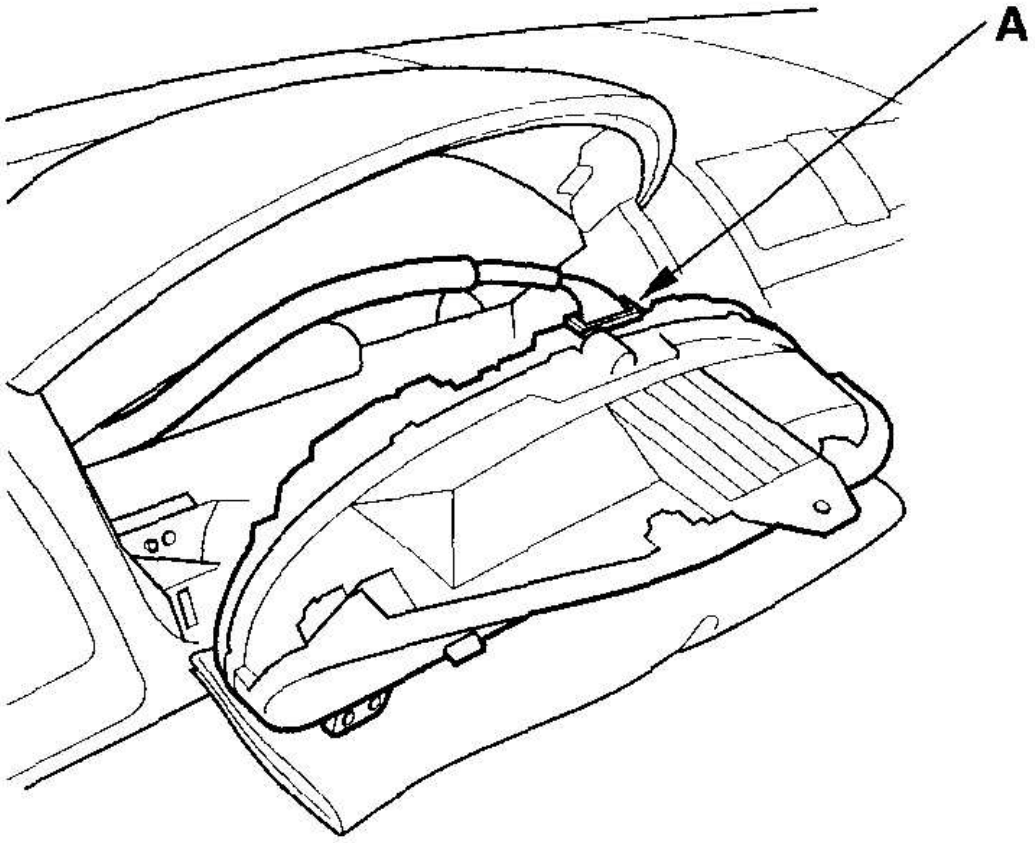


Fig. 297: Disconnecting Gauge Control Module Connector (30P) From Gauge Control Module
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check resistance between the No. 14 terminal of gauge control module connector (30P) and the No. 19 terminal of SRS unit connector A (28P). There should be 1 ohms or less.

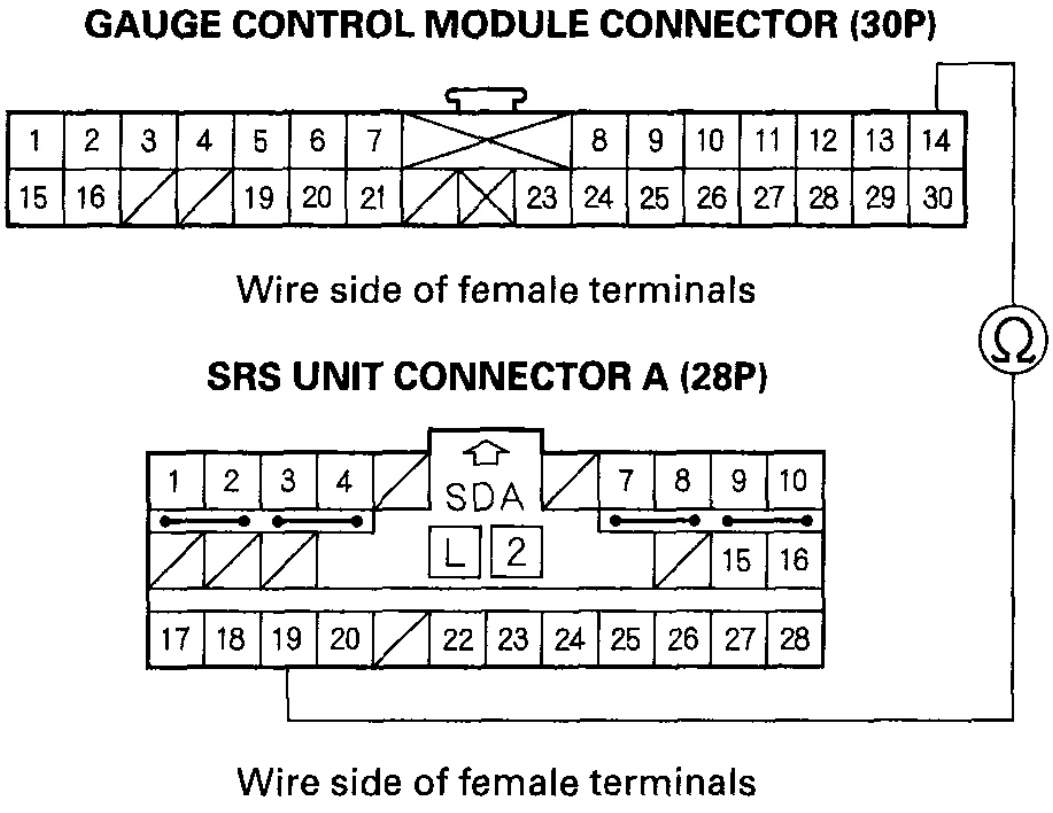


Fig. 298: Checking Resistance Between No. 14 Terminal Of Gauge Control Module Connector (30P) And No. 19 Terminal Of SRS Unit Connector A (28P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 5.

NO - Open in the dashboard wire harness; replace the dashboard wire harness.

5. Reconnect the battery negative cable.
6. Reconnect gauge control module connector (30P) to the gauge control module.
7. Turn the ignition switch ON (II).

8. Install a jumper wire between the No. 5 terminal and the No. 14 terminal of the gauge control module connector (30P). The SRS indicator should go off.

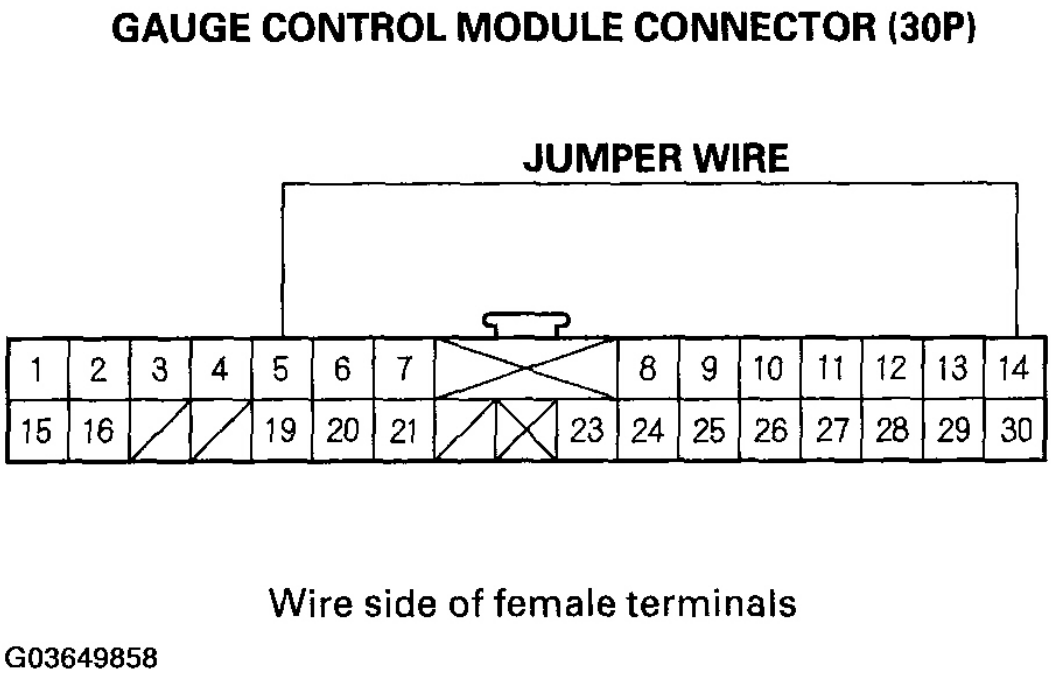


Fig. 299: Installing Jumper Wire Between No. 5 And 14 Terminals Of Gauge Control Module Connector (30P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the SRS indicator go off?

YES - Faulty SRS unit or poor contact at SRS unit connector A (28P) and the SRS unit; check the connection. If the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

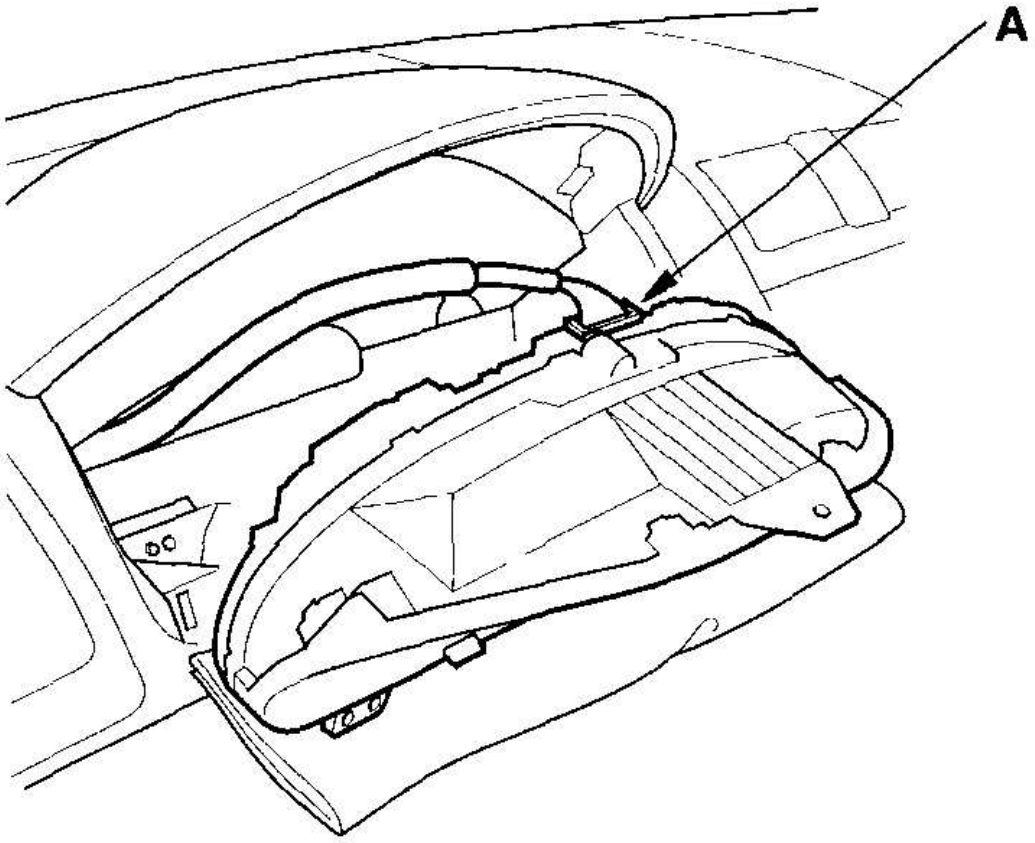
NO - Faulty SRS indicator circuit in the gauge control module or poor contact at gauge control module connector (30P); check the connection. If the connection is OK, replace the gauge control module.

SRS INDICATOR STAYS ON, BUT NO DTCS ARE STORED ('06-07 MODEL)

NOTE:

- **If you cannot retrieve DTCs with the HDS using the SRS menu method, retrieve flash codes with the HDS in SCS mode.**
- **A new SRS unit must sense the entire system is OK before completing its initial self-test. The most common cause of an incomplete self-test is the failure to replace all deployed parts after a collision, in particular seat belt tensioners (see COMPONENT REPLACEMENT/INSPECTION AFTER DEPLOYMENT).**
- **A battery/system voltage above 15.2 V can cause the SRS indicator to come on without storing any DTCs.**

1. Disconnect the battery negative cable, and wait for 3 minutes.
2. Disconnect SRS unit connector A (28P) from the SRS unit (see step 16 in **DISCONNECTING SYSTEM CONNECTORS**).
3. Remove the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**). Disconnect gauge control module connector (36P) (A) from the gauge control module.



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Fig. 300: Disconnecting Gauge Control Module Connector (36P) From Gauge Control Module
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check resistance between the No. 18 terminal of gauge control module connector (36P) and the No. 19 terminal of SRS unit connector A (28P). There should be 1 ohms or less.

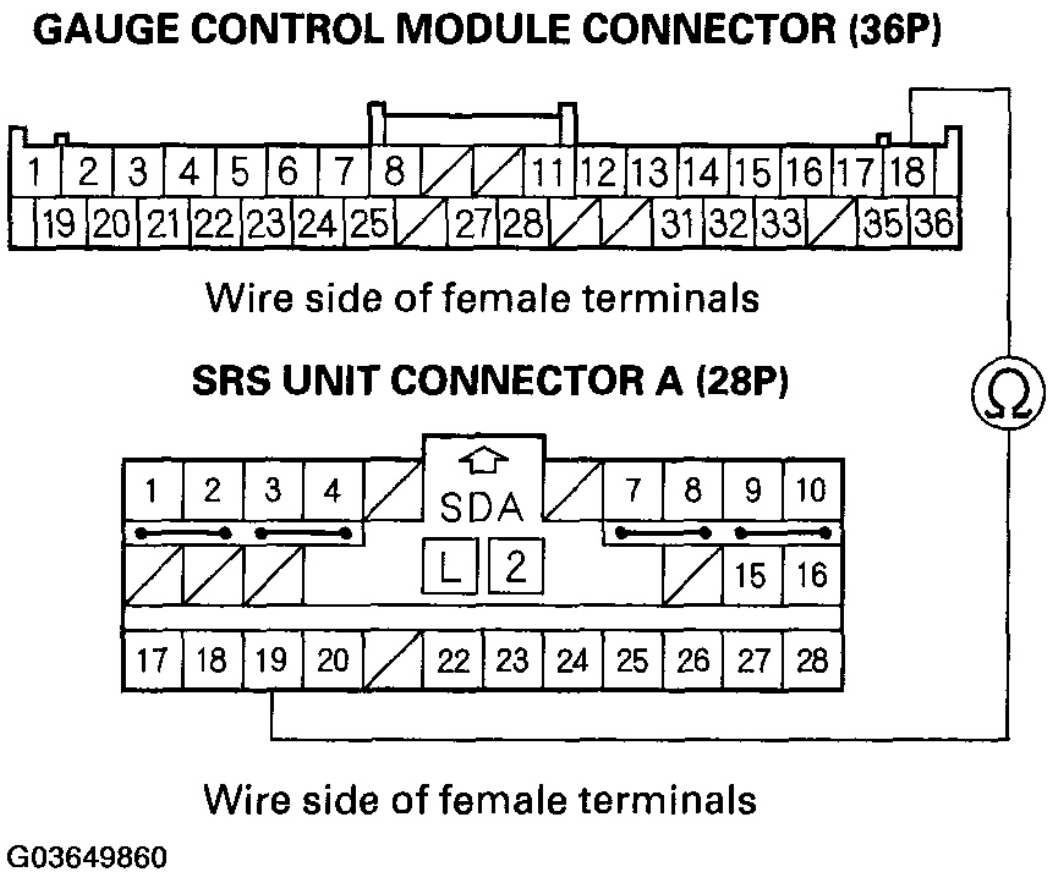


Fig. 301: Checking Resistance Between No. 18 Terminal Of Gauge Control Module Connector (36P) And No. 19 Terminal Of SRS Unit Connector A (28P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance as specified?

YES - Go to step 5.

NO - Open in the dashboard wire harness; replace the dashboard wire harness.

5. Reconnect the battery negative cable.
6. Reconnect gauge control module connector (36P) to the gauge control module.
7. Turn the ignition switch ON (II).

8. Install a jumper wire between the No. 5 terminal and the No. 18 terminal of the gauge control module connector (36P). The SRS indicator should go off.

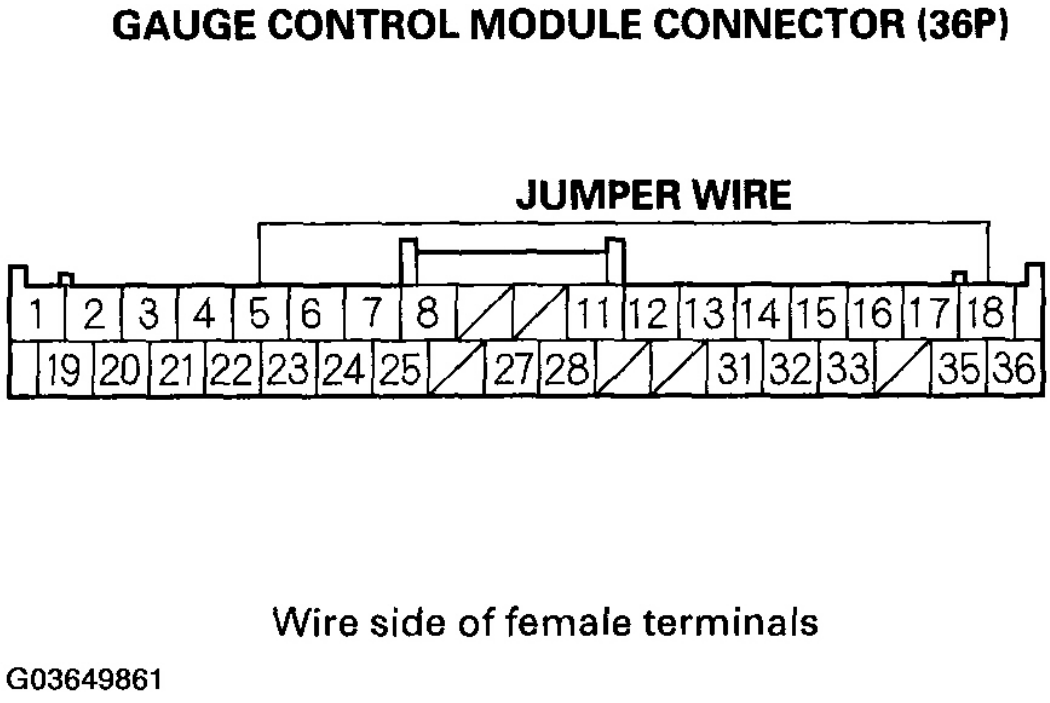


Fig. 302: Installing Jumper Wire Between No. 5 And 18 Terminals Of Gauge Control Module Connector (36P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the SRS indicator go off?

YES - Faulty SRS unit or poor contact at SRS unit connector A (28P) and the SRS unit; check the connection. If the connection is OK, replace the SRS unit (see **SRS UNIT REPLACEMENT**).

NO - Faulty SRS indicator circuit in the gauge control module or poor contact at gauge control module connector (36P); check the connection. If the connection is OK, replace the gauge control module.

COMPONENT REPLACEMENT/INSPECTION AFTER DEPLOYMENT

NOTE:

- **Before doing any SRS repairs, use the HDS SRS menu method to check for DTCs; read the DTC for the less obvious deployed parts (seat belt tensioners, front impact sensors, side airbag sensors, etc.)**
- **Do not mix TRW and Denso impact sensors. Impact sensors and the SRS unit must be of the same manufacturer.**

After a collision where the seat belt tensioners deployed, replace these items:

- SRS unit
- Seat belt tensioners
- Front impact sensors

After a collision where the front airbag(s) deployed, replace these items:

- SRS unit
- Deployed airbag(s)
- Seat belt tensioners
- Front impact sensors

After a collision where the side airbag(s) deployed, replace these items:

- SRS unit
- Deployed side airbag(s)
- Seat belt tensioner(s) for the side(s) that deployed.
- Side impact sensor(s) (first) for the side(s) that deployed
- Side impact sensor(s) (second) for the side(s) that deployed (4-door)

After a collision where the side curtain airbag(s) deployed, replace these items:

- SRS unit
- Deployed side curtain airbag(s)
- Seat belt tensioner(s) for the side(s) that deployed

- Side impact sensor(s) (first) for the side(s) that deployed
- Side impact sensor(s) (second) for the side(s) that deployed (4-door)
- Roof trim
- A-pillar trim
- B-pillar trim
- C-pillar trim
- Front grab handle
- Sunvisor
- All related trim clips

After a moderate to severe side or rear collision, inspect for damage on the side curtain airbag or other related components. According to the degree of damage, replace components as needed.

After a collision, where a side curtain airbag has deployed, replace all trim clips on that side, even if they appear to be undamaged. Replace the clips on these parts:

- A-pillar trim
- B-pillar trim
- C-pillar trim
- Front grab handle
- Sunvisor

A-PILLAR

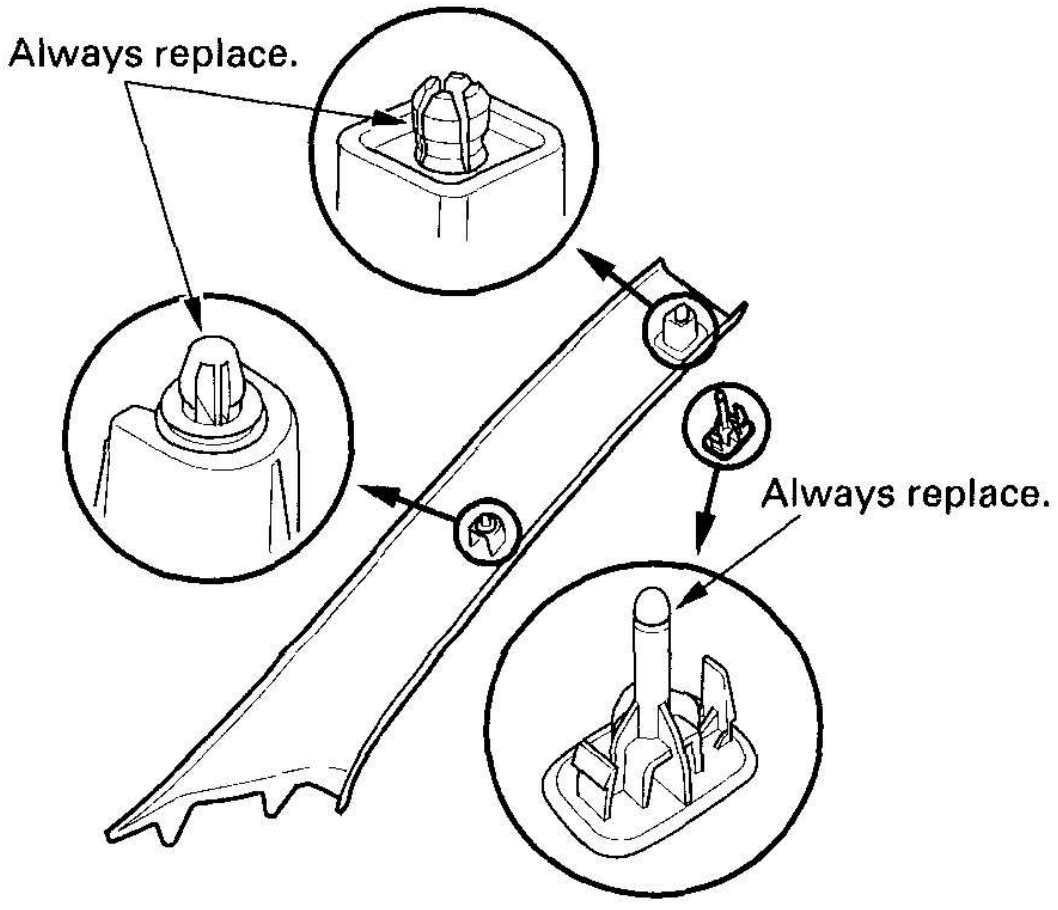


Fig. 303: Identifying A-Pillar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

B-PILLAR (4-DOOR)

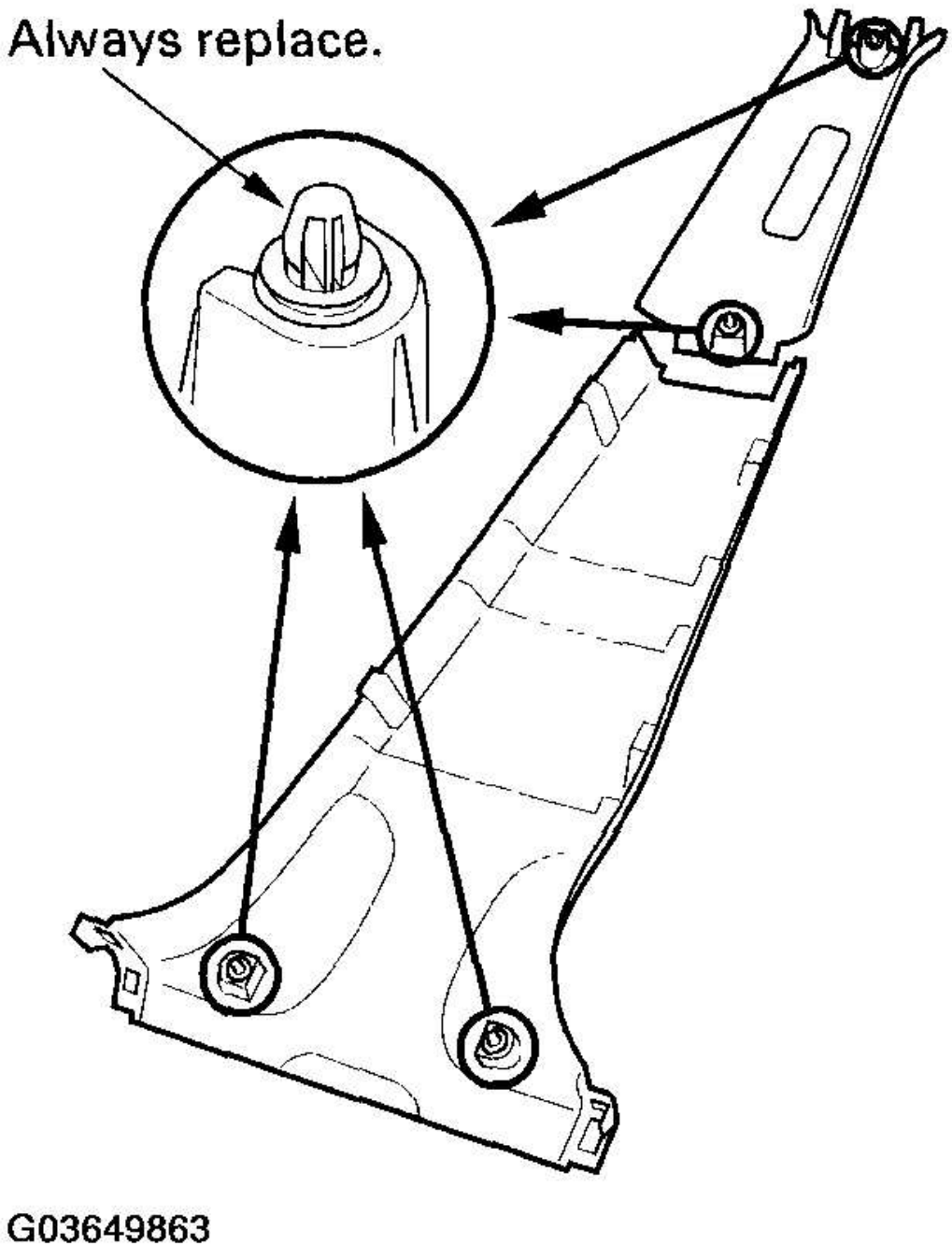


Fig. 304: Identifying B-Pillar (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

C-PILLAR (4-DOOR)

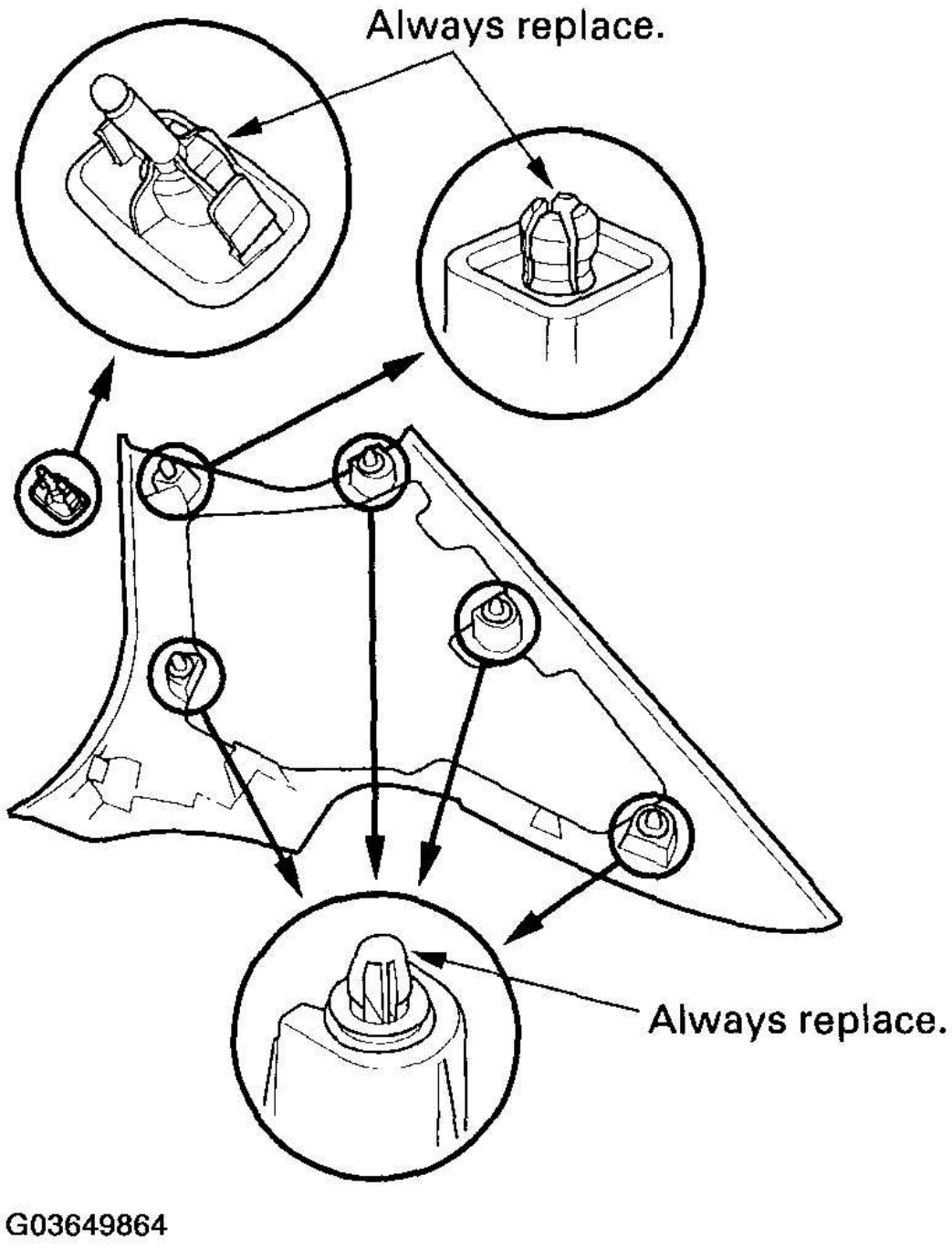
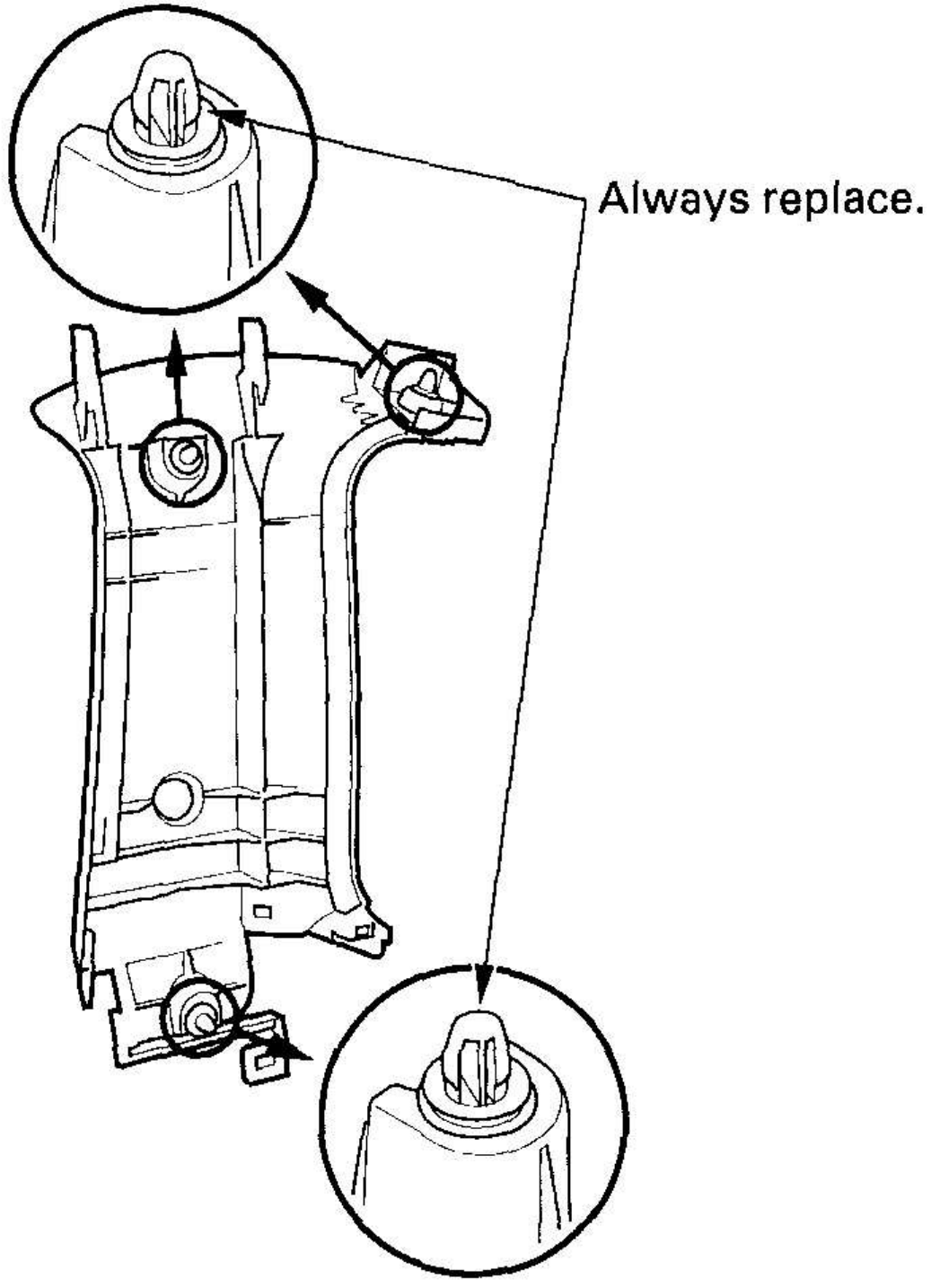


Fig. 305: Identifying C-Pillar (4-Door)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

B-PILLAR (2-DOOR)



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Fig. 306: Identifying B-Pillar (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

C-PILLAR (2-DOOR)

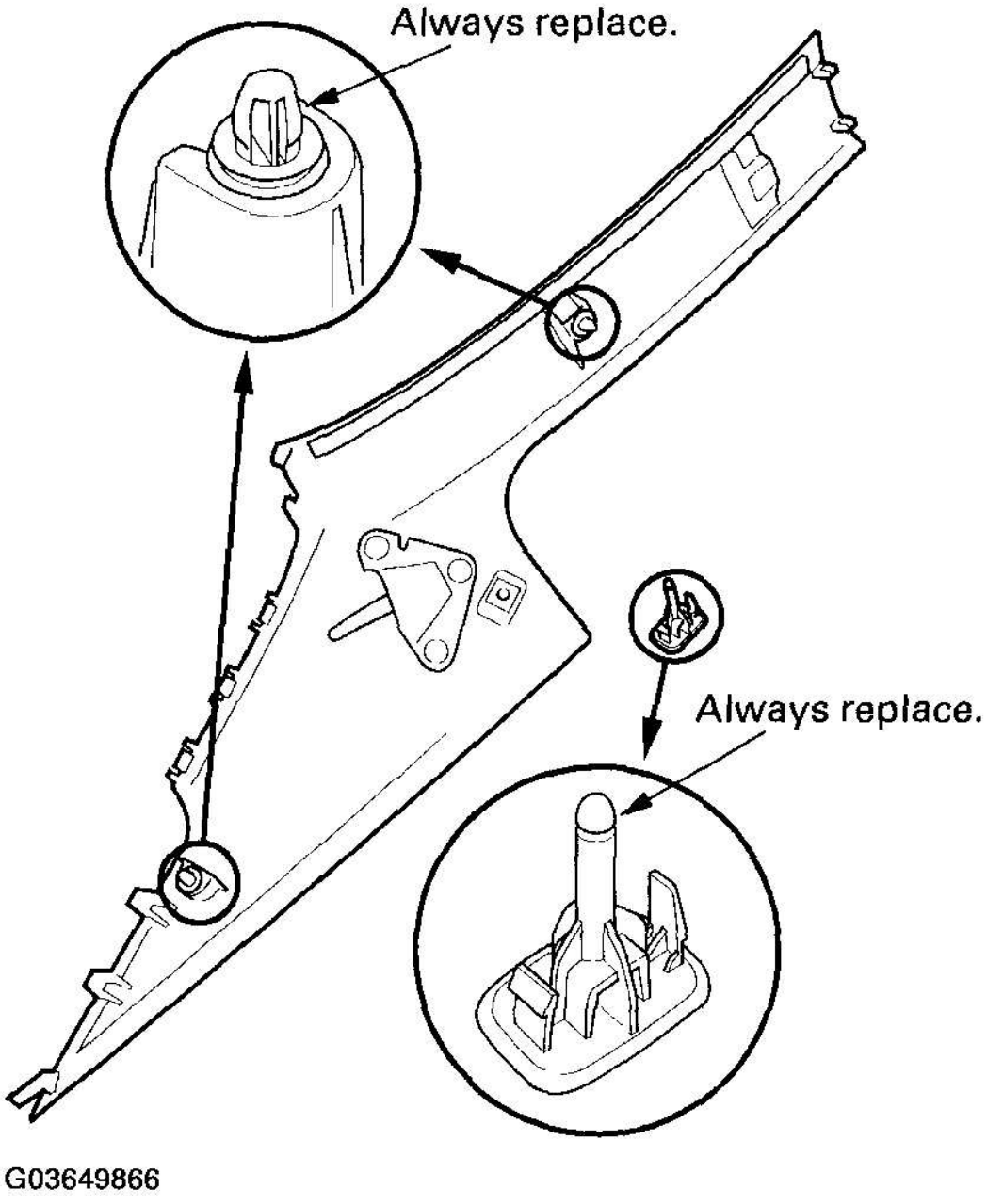


Fig. 307: Identifying C-Pillar (2-Door)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

During the repair process, inspect these areas:

- Inspect all the SRS wire harnesses. Replace, don't repair, any damaged harnesses.
- Inspect the cable reel for heat damage. If there is any damage, replace the cable reel.

After the vehicle is completely repaired, turn the ignition switch ON (II). If the SRS indicator comes on for about 6 seconds and then goes off, the SRS is OK. If the indicator does not function properly, use the HDS SRS Menu Method to read the DTC. If you cannot retrieve a code, go to **SYMPTOM TROUBLESHOOTING** .

CHECKING AND ADJUSTING THE HEADLINER/PILLAR TRIM OVERLAP

To prevent the side curtain airbag from accidentally deploying and damaged the pillar trim, the overlap between the headliner and pillar trim must be less then 15 mm. To check the overlap, do this:

1. Install the headliner (A) and the pillar trim (B).

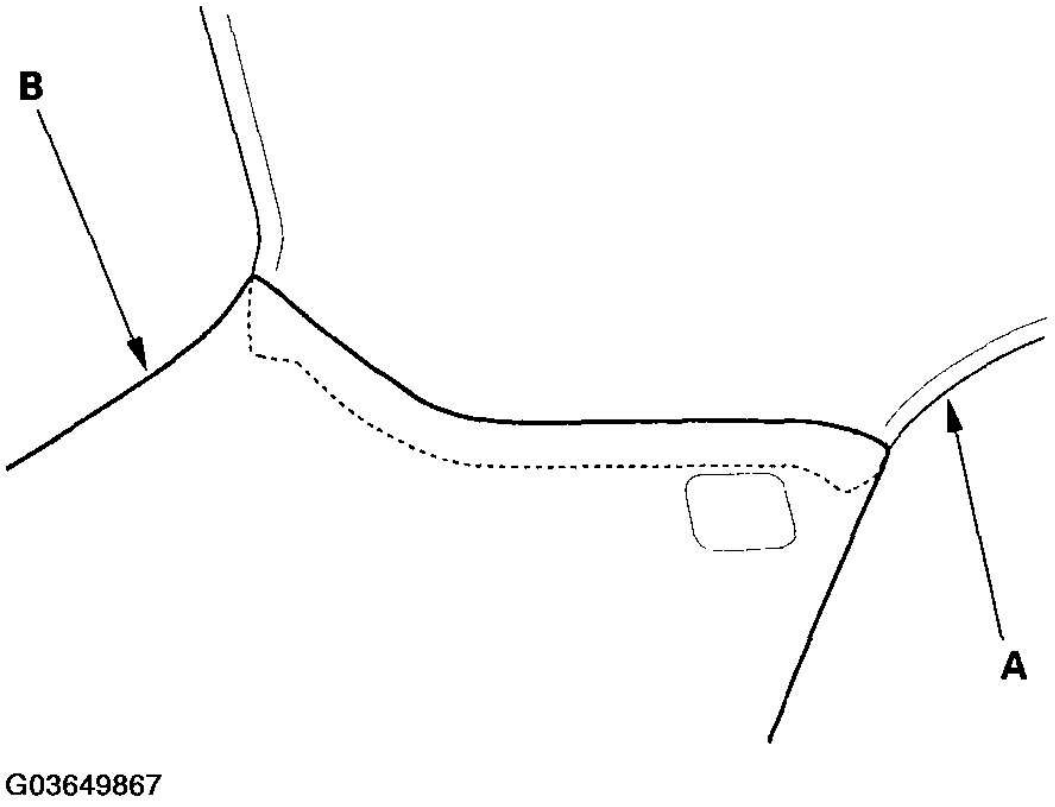
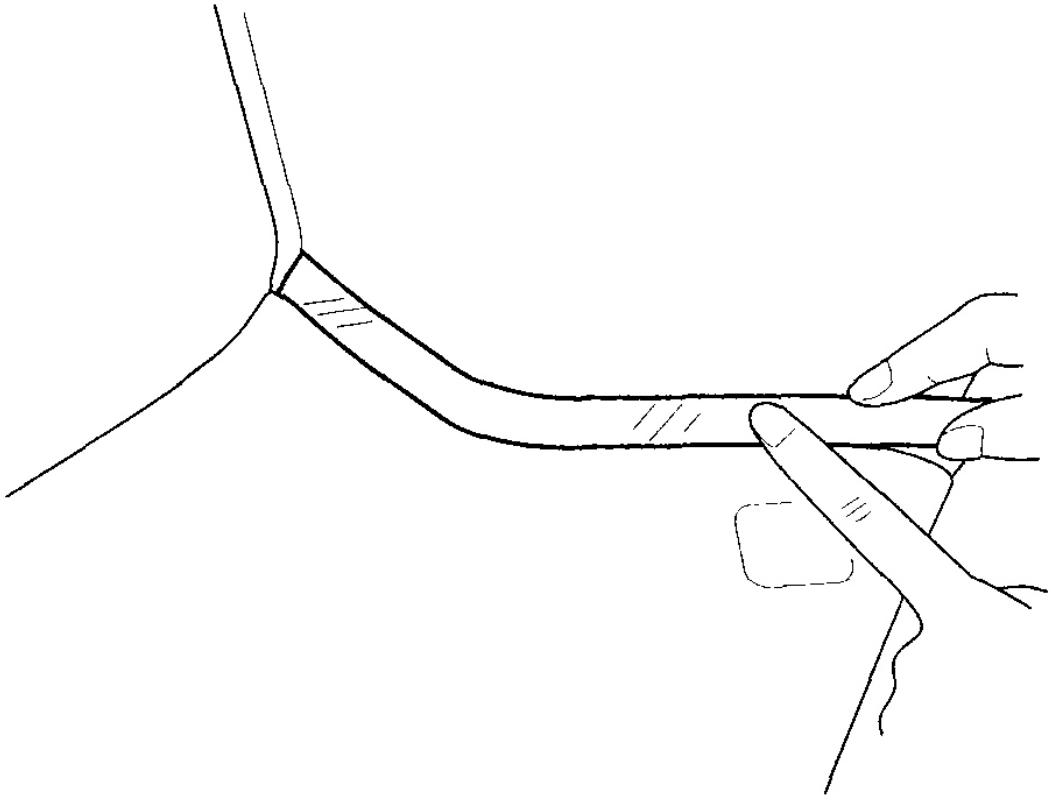


Fig. 308: Installing Headliner And Pillar Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Using masking tape on the headliner, mark the upper edge of each pillar trim.



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Fig. 309: Marking Upper Edge Of Pillar Trim Using Masking Tape On Headliner
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the pillar trims, and measure the headliner overlap.
   - '04-07 2-Door Models: If the overlap is less than 12 mm, remove the tape, and install the pillar trims.
   - '04-07 2-Door Models: If the overlap is more than 12 mm, go to step 4.
   - If the overlap is less than 15 mm, remove the tape, and install the pillar trims.
   - If the overlap is more than 15 mm, go to step 4.

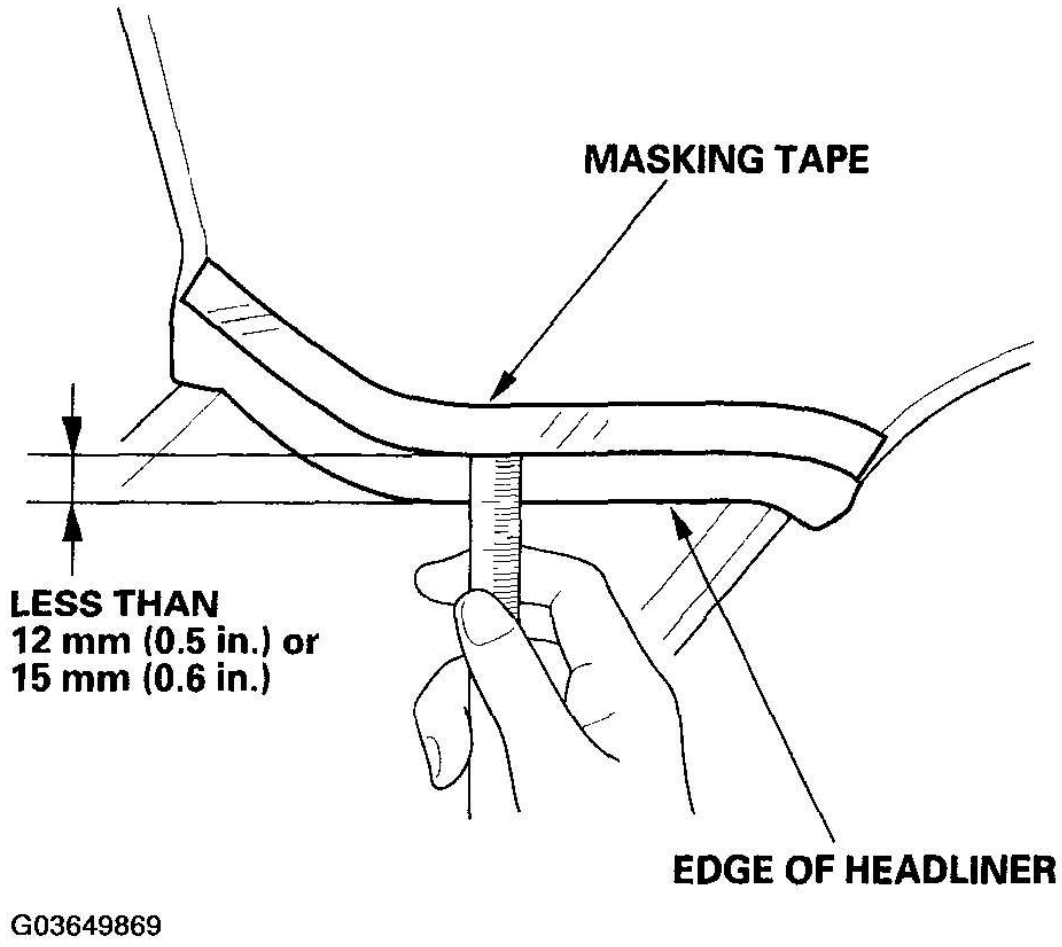


Fig. 310: Measuring Headliner Overlap
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Carefully trim the headliner with a utility knife, reducing the overlap to less than 12 mm ('04-07 Models, 2-door) or 15 mm.

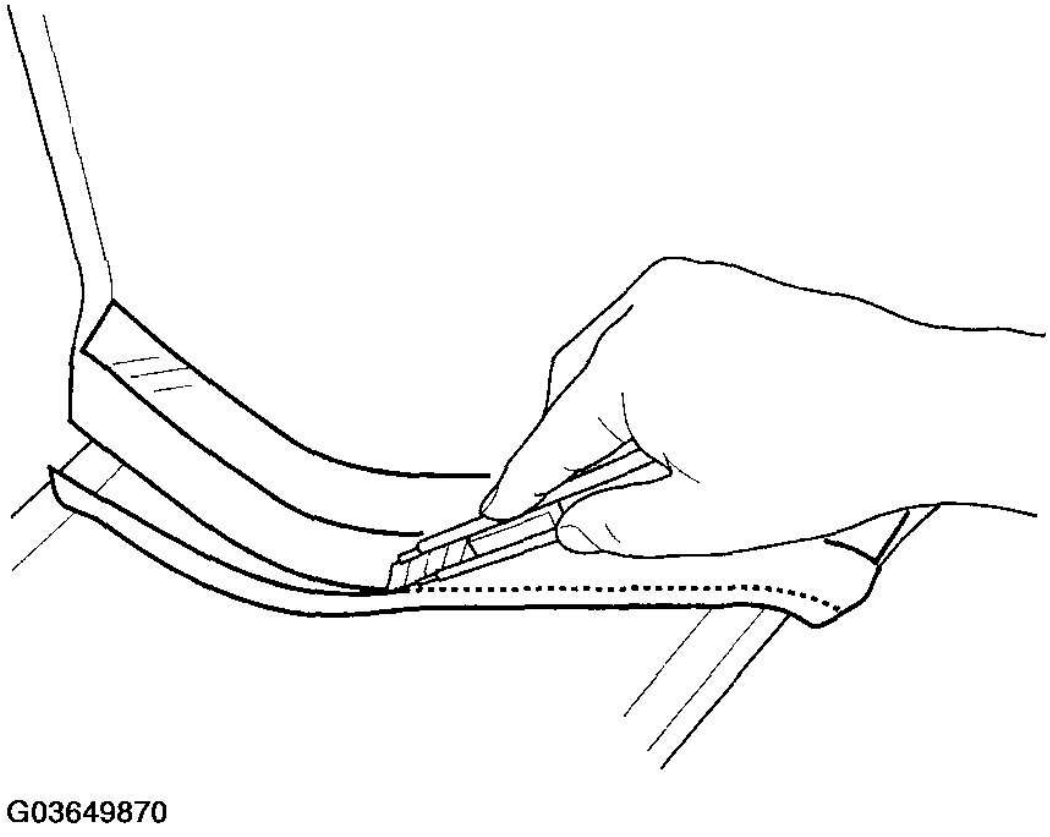


Fig. 311: Trimming Headliner With Utility Knife
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the tape, and install the pillar trim.

DRIVER'S AIRBAG REPLACEMENT

REMOVAL

1. Disconnect the battery negative cable, and wait at least 3 minutes before beginning work.
2. Remove the access panel (A) from the steering wheel, then disconnect the driver's airbag 4P connector (B) from the cable reel.

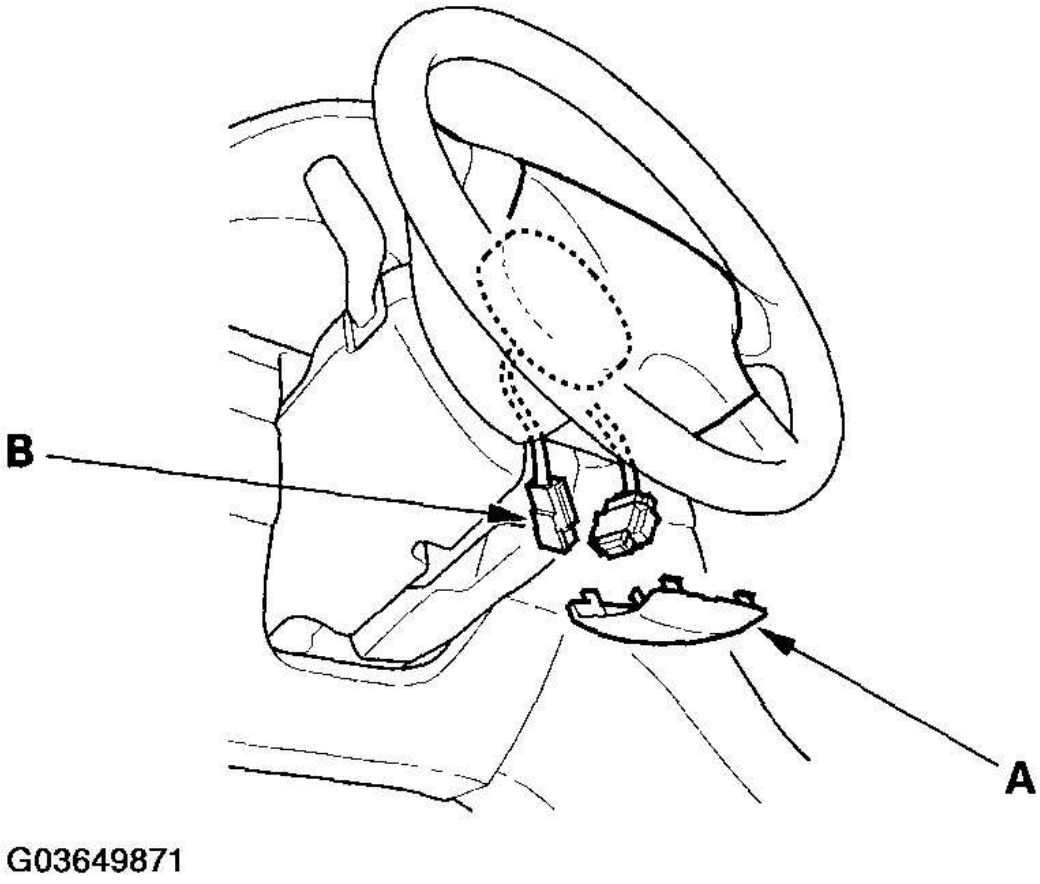


Fig. 312: Disconnecting Driver's Airbag 4P Connector From Cable Reel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the two Torx bolts (A) using a Torx T30 bit.

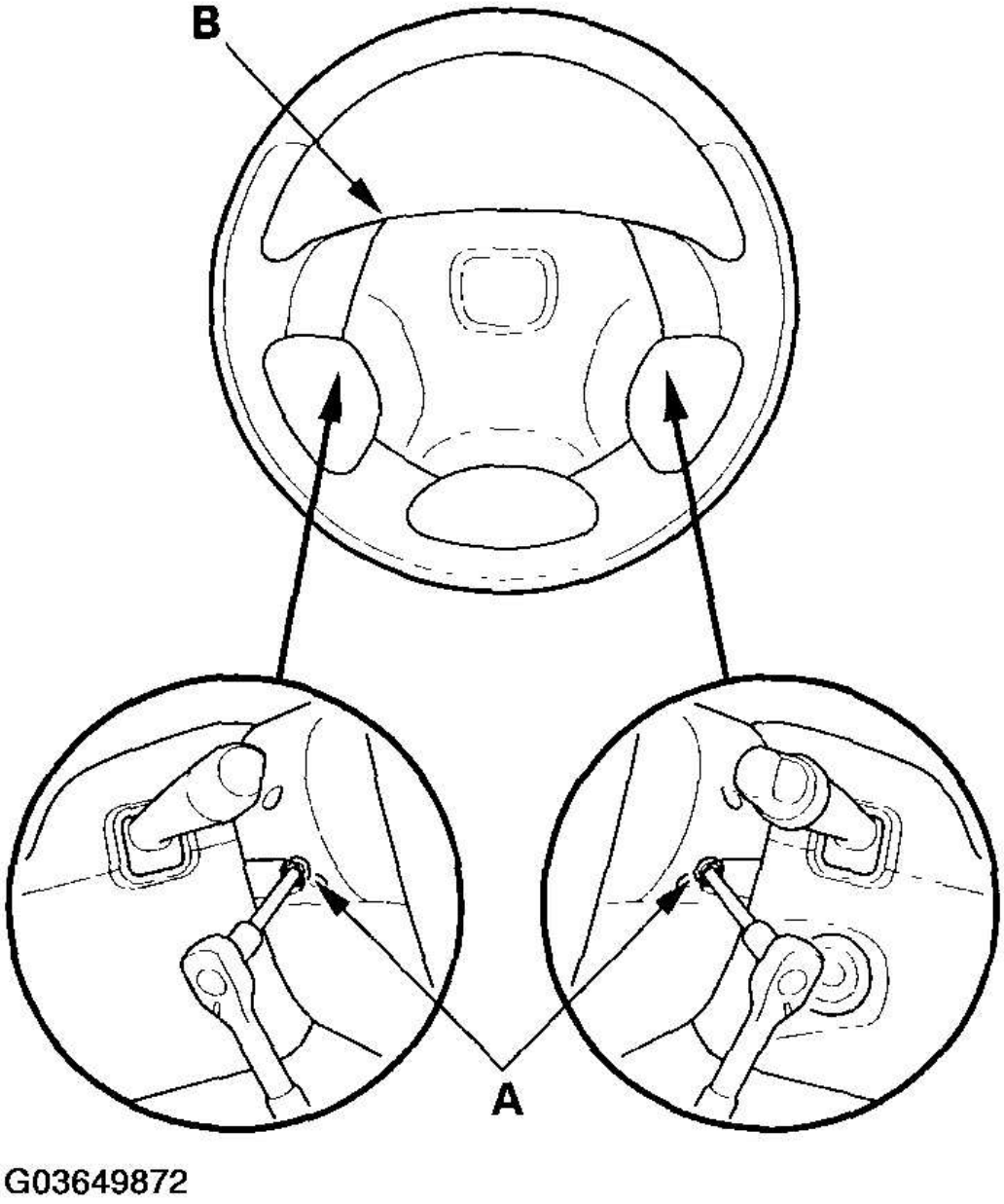


Fig. 313: Removing Torx Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Disconnect the horn switch connector (1P), then remove the driver's airbag (B).

INSTALLATION

1. Connect the horn switch connector (1P) (A) to the driver's airbag.

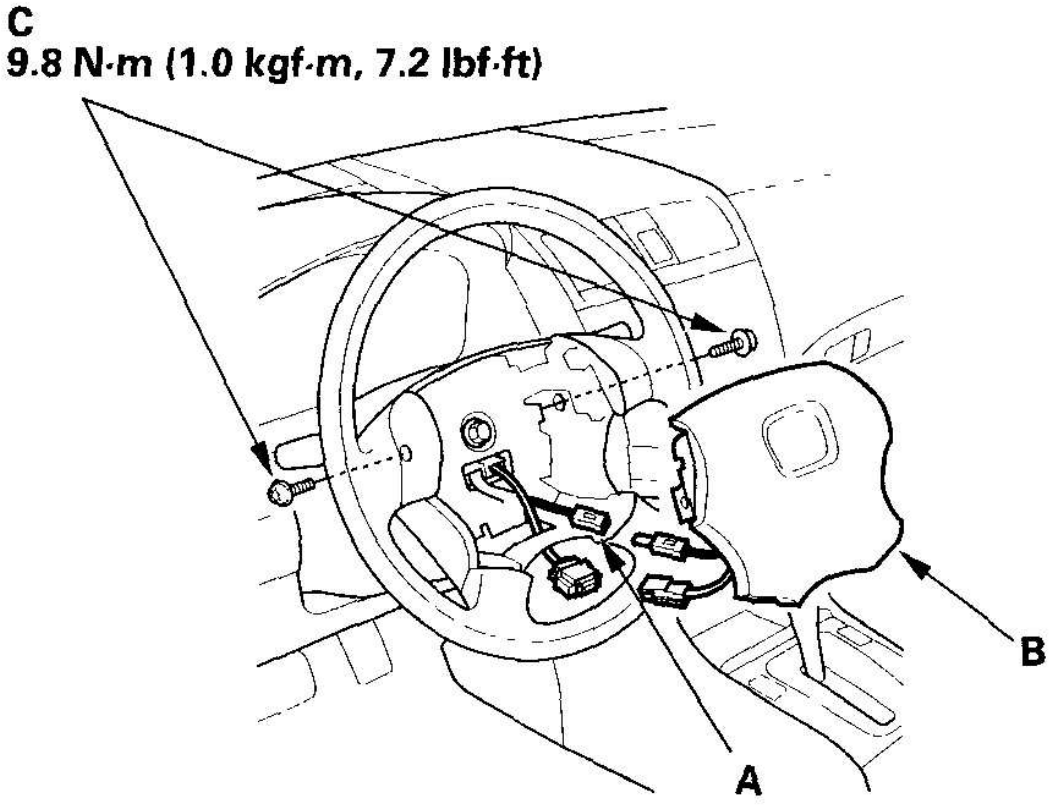


Fig. 314: Connecting Horn Switch Connector (1P) To Driver's Airbag
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Place the new driver's airbag (B) in the steering wheel, and secure it with new Torx bolts (C).
3. Connect the cable reel to the driver's airbag 4P connector (A), then install the access panel (B) on the steering wheel.

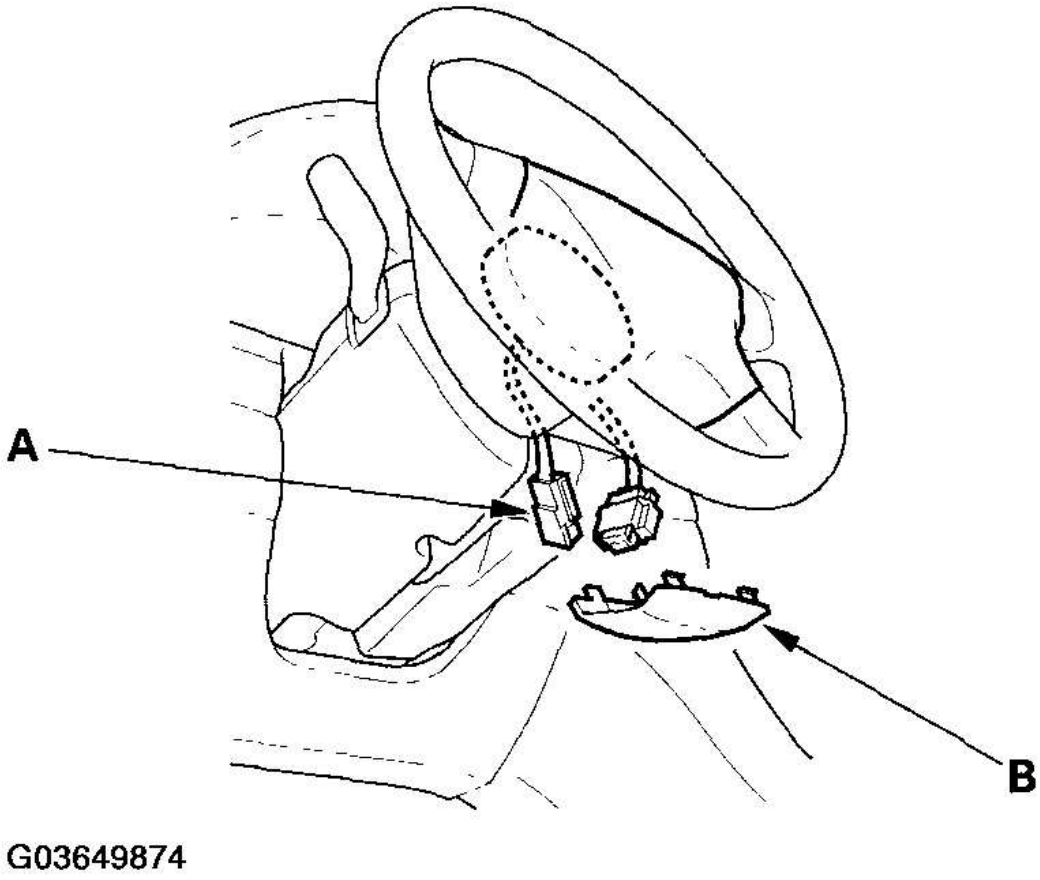


Fig. 315: Connecting Cable Reel To Driver's Airbag 4P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Connect the battery negative cable.
5. After installing the airbag, confirm proper system operation:
   - Turn the ignition switch ON (II); the SRS indicator should come on for about 6 seconds and then go off.
   - Make sure the horn button works.

FRONT PASSENGER'S AIRBAG REPLACEMENT

REMOVAL

1. Disconnect the battery negative cable, and wait at least 3 minutes before beginning work.
2. Remove the glove box (see **GLOVE BOX REMOVAL/INSTALLATION**).
3. Disconnect the front passenger's airbag 4P connector (A) from dashboard wire harness.

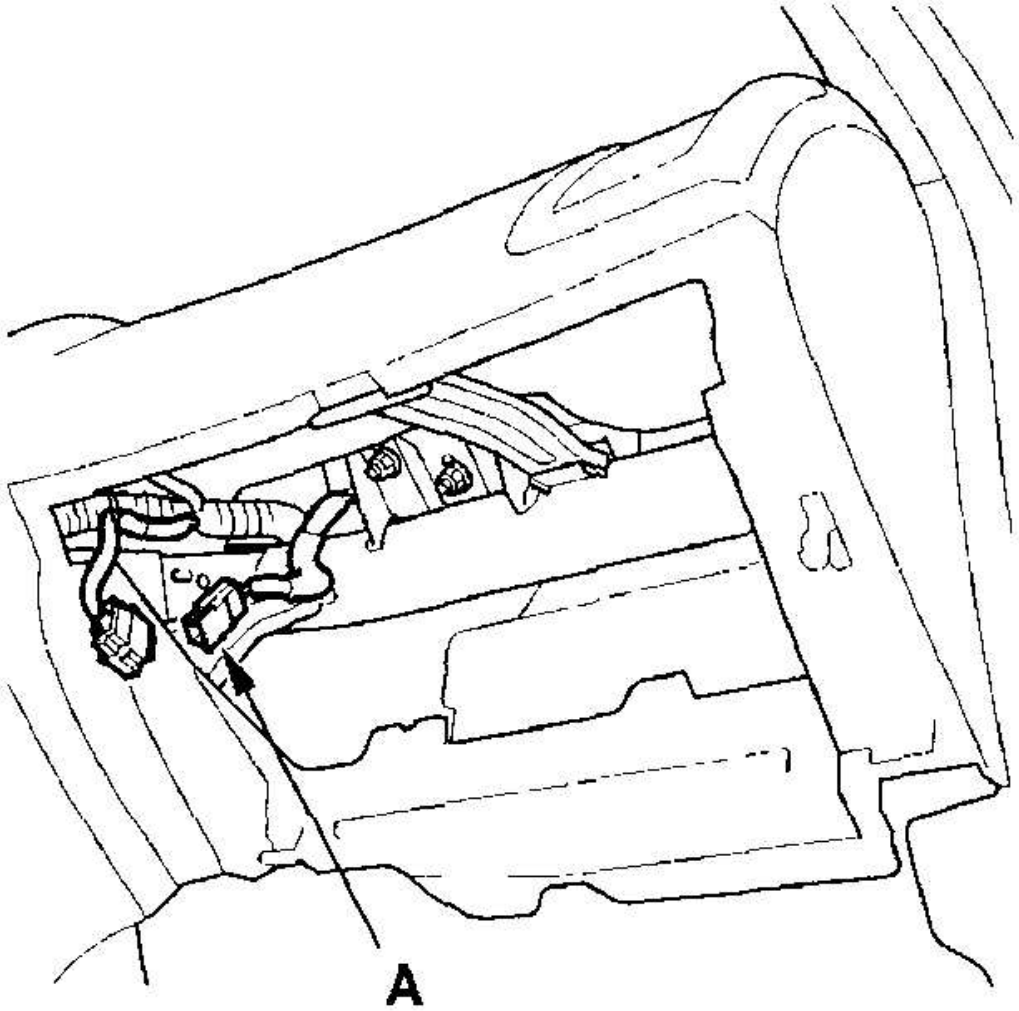
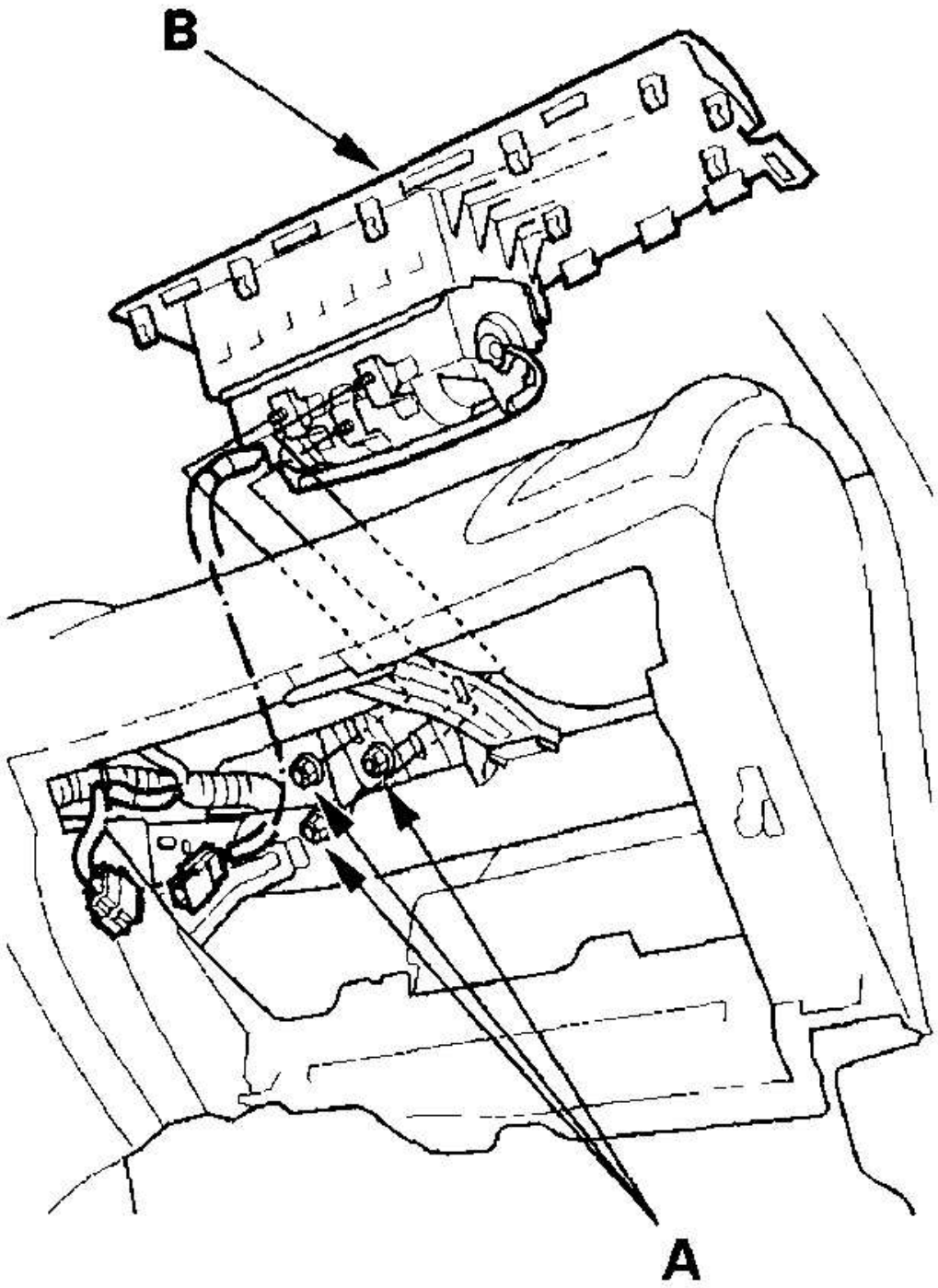


Fig. 316: Disconnecting Front Passenger's Airbag 4P Connector (A) From

Dashboard Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Disconnect the passenger's A-pillar trim.
   - Without side curtain airbag (see **A-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**).
   - With side curtain airbag (see **A-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)**).
5. Remove the three mounting nuts (A) from the bracket. Cover the lid and dashboard with a cloth, and pry carefully with a flat-tip screwdriver to lift the front passenger's airbag (B) out of the dashboard.

NOTE: The airbag lid has pawls on each side which attach it to the dashboard.



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Fig. 317: Removing Mounting Nuts From Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INSTALLATION

1. Place the new front passenger's airbag (A) into the dashboard. Tighten the front passenger's airbag mounting nuts (B).

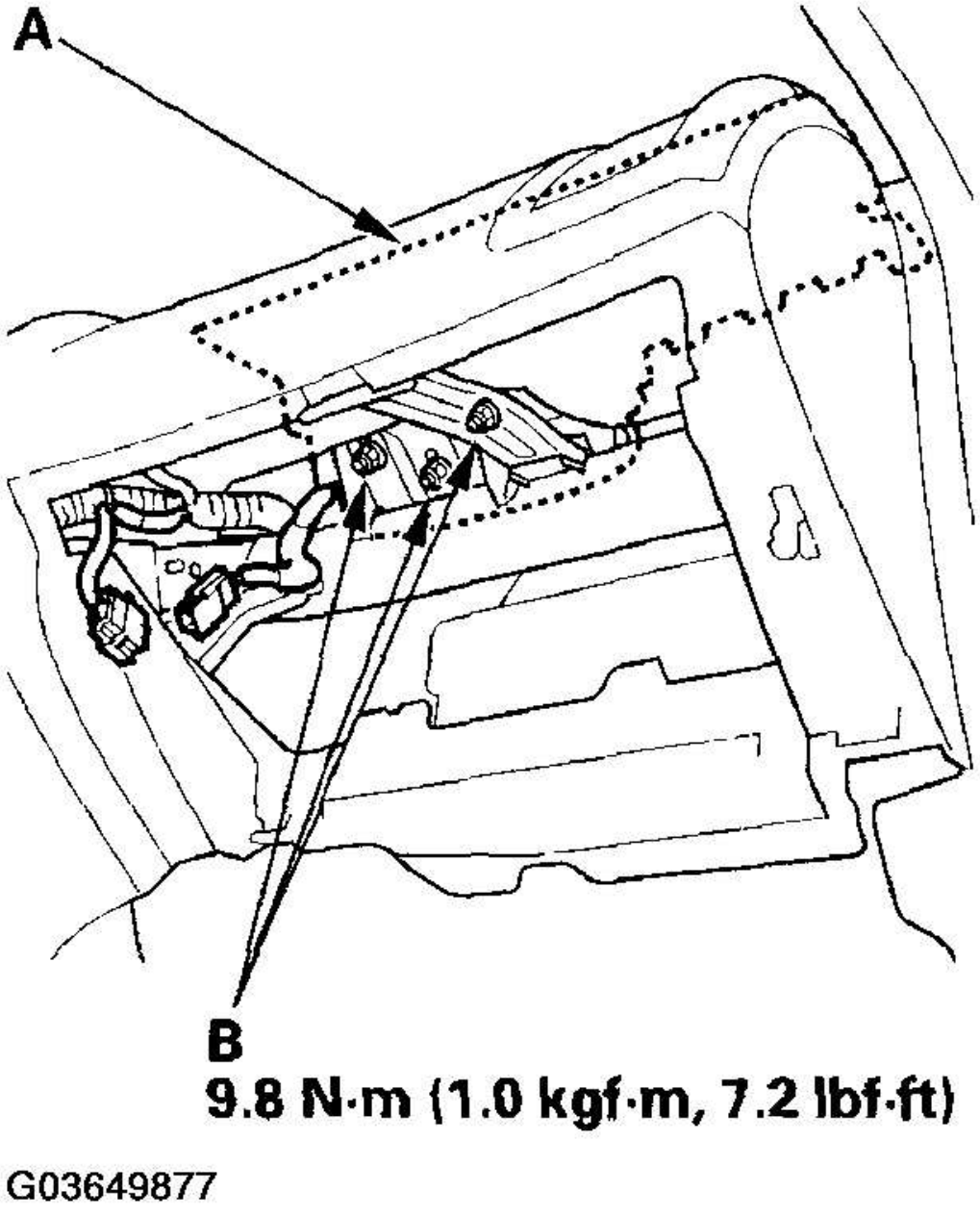


Fig. 318: Tightening Front Passenger's Airbag Mounting Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Connect the front passenger's airbag 4P connector (A) to dashboard wire

harness, then reinstall the glove box and passenger's front pillar trim.

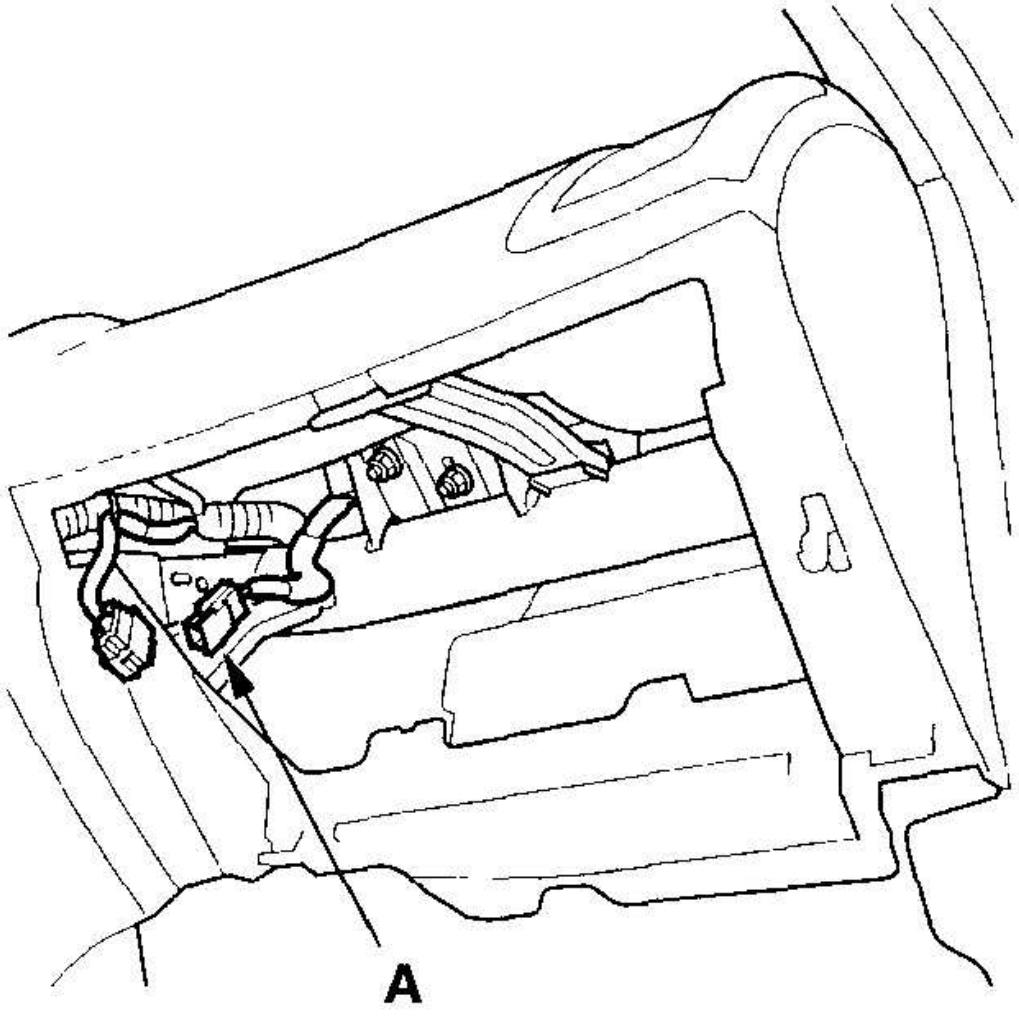


Fig. 319: Connecting Front Passenger's Airbag 4P Connector To Dashboard Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Reconnect the battery negative cable.
4. After installing the airbag, confirm proper system operation: Turn the ignition

switch ON (II); the SRS indicator should come on for about 6 seconds and then go off.

SIDE AIRBAG REPLACEMENT

NOTE: Review the seat replacement procedure before performing repairs or service.

REMOVAL

1. Disconnect the battery negative cable, and wait at least 3 minutes before beginning work.
2. Disconnect the side airbag harness 2P connectors (A).

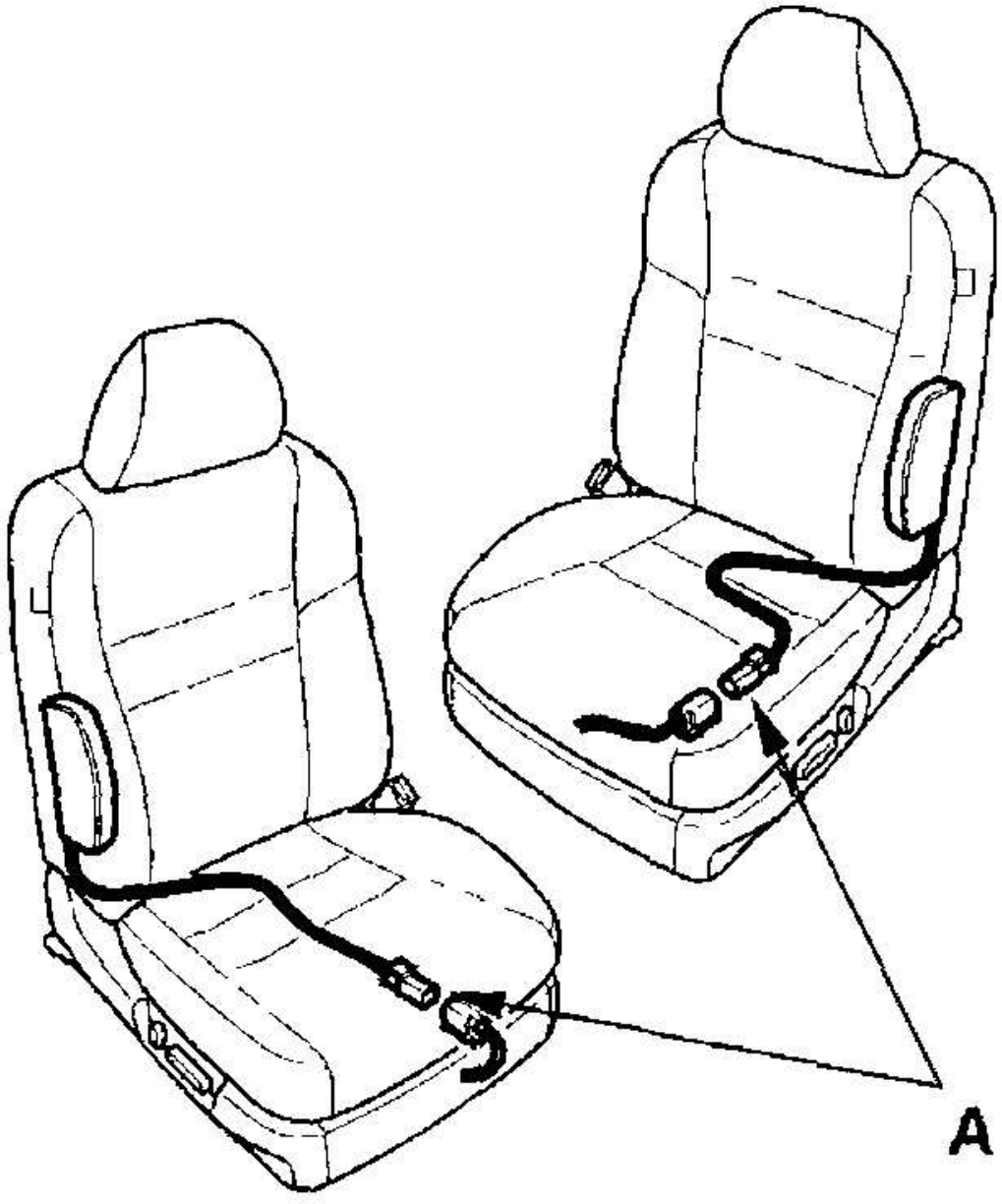


Fig. 320: Disconnecting Side Airbag Harness 2P Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the seat assembly (see **FRONT SEAT REMOVAL/INSTALLATION**) and seat-back cover (see **FRONT SEAT COVER REPLACEMENT**).
4. Remove the mounting nut (A) and the side airbag (B).

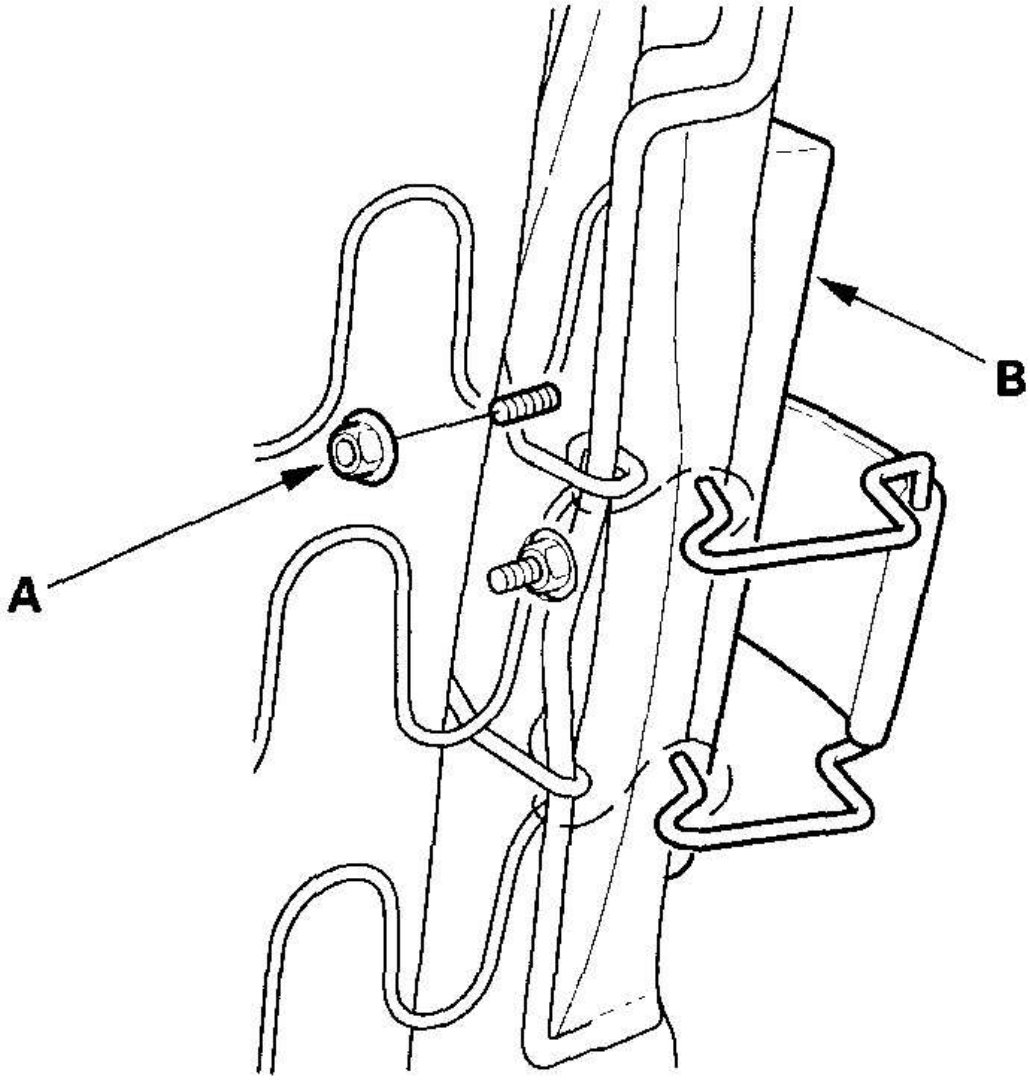


Fig. 321: Removing Mounting Nut And Side Airbag

Courtesy of AMERICAN HONDA MOTOR CO., INC.

INSTALLATION

NOTE:

- **If the side airbag lid is secured by a tape, remove the tape.**
- **Do not open the lid of the side airbag cover.**
- **Use new mounting nuts tightened to the specified torque.**
- **Make sure that the seat-back cover is installed properly. Improper installation may prevent proper deployment.**
- **Be sure to install the harness wires so that they are not pinched or interfering with other parts.**

1. Place the new side airbag on the seat-back frame (A). Tighten the side airbag mounting nuts (B).

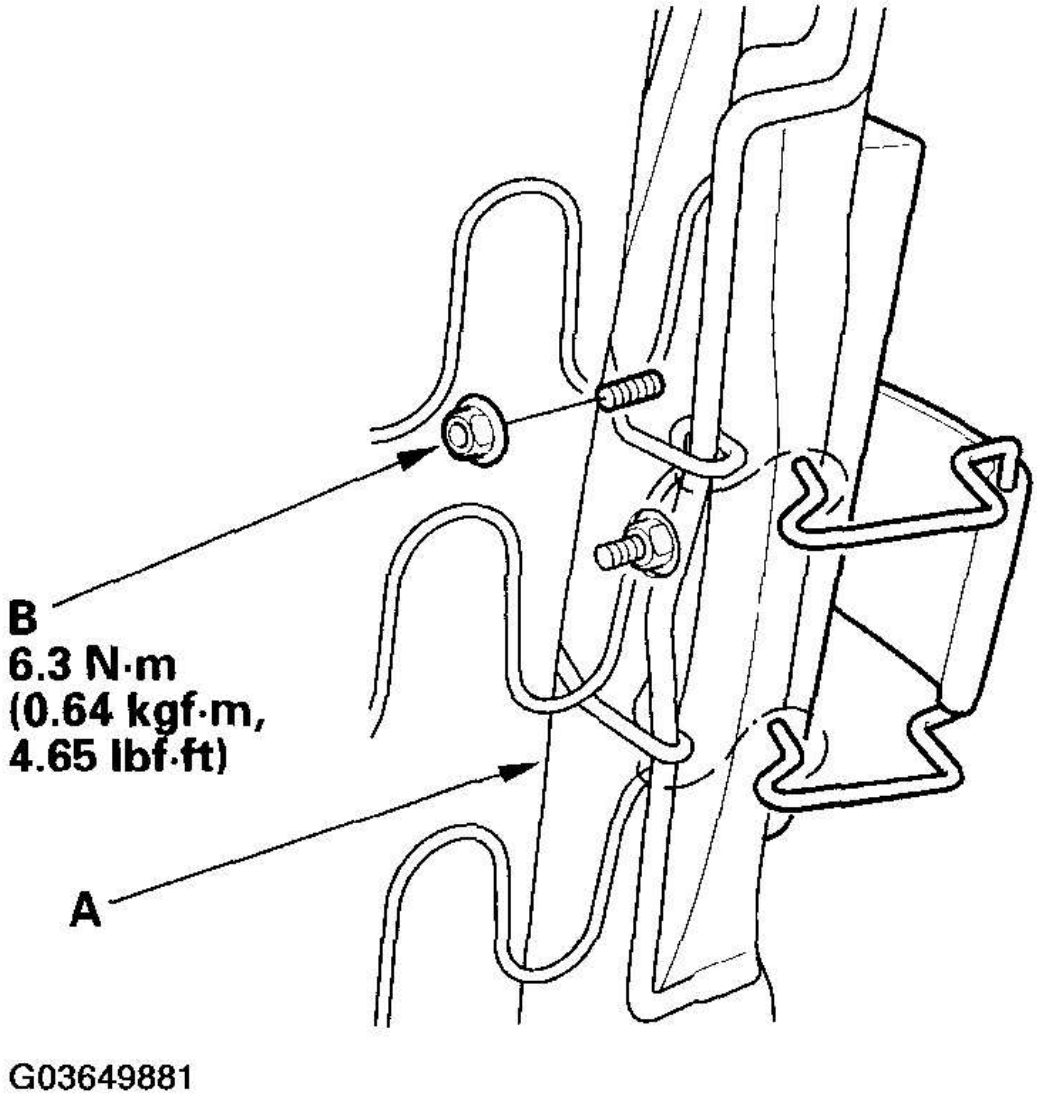


Fig. 322: Tightening Side Airbag Mounting Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the seat-back cover in the reverse order of removal (see **FRONT SEAT COVER REPLACEMENT**).
3. Install the seat assembly (see **FRONT SEAT REMOVAL/INSTALLATION**), then connect the side airbag harness 2P connector.

4. Move the front seat and the seat-back through their full ranges of movement, making sure the harness wires are not pinched or interfering with other parts.
5. Reconnect the battery negative cable.
6. Connect the HDS and clear the DTCs (see **ERASING THE DTC MEMORY WITH HDS**).
7. After installing the side airbag, confirm proper system operation: Turn the ignition switch ON (II); the SRS indicator should come on for about 6 seconds and then go off.

SIDE CURTAIN AIRBAG REPLACEMENT

REMOVAL

NOTE:

- **Review the interior trim replacement procedure before performing repair or service.**
- **Removal of the side curtain airbag must be performed according to the precautions/procedures described at the beginning of the SRS.**
- **The side curtain airbag system consists of the side curtain airbag module, including the roof trim and front grab handle. When the side curtain airbag has been deployed, these parts should be replaced.**

1. Disconnect the battery negative cable, and wait at least 3 minutes before beginning work.
2. Remove the headliner (see **HEADLINER REMOVAL/INSTALLATION**).
3. Remove the antenna coil (see **WINDOW ANTENNA COIL REPLACEMENT**).
4. Disconnect the side curtain airbag subharness from the side curtain airbag 2P connector (A).

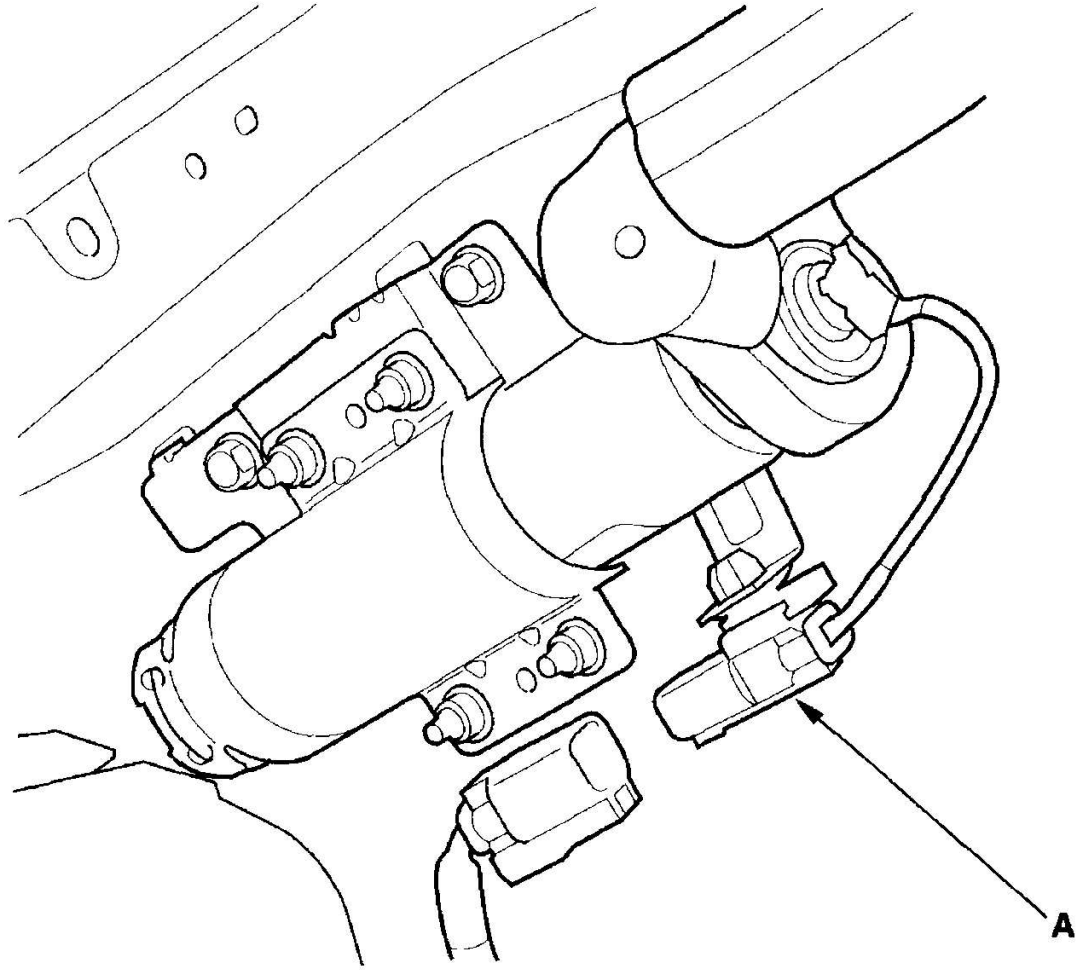


Fig. 323: Disconnecting Side Curtain Airbag Subharness From Side Curtain Airbag 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the mounting bolts (A) from the bracket.

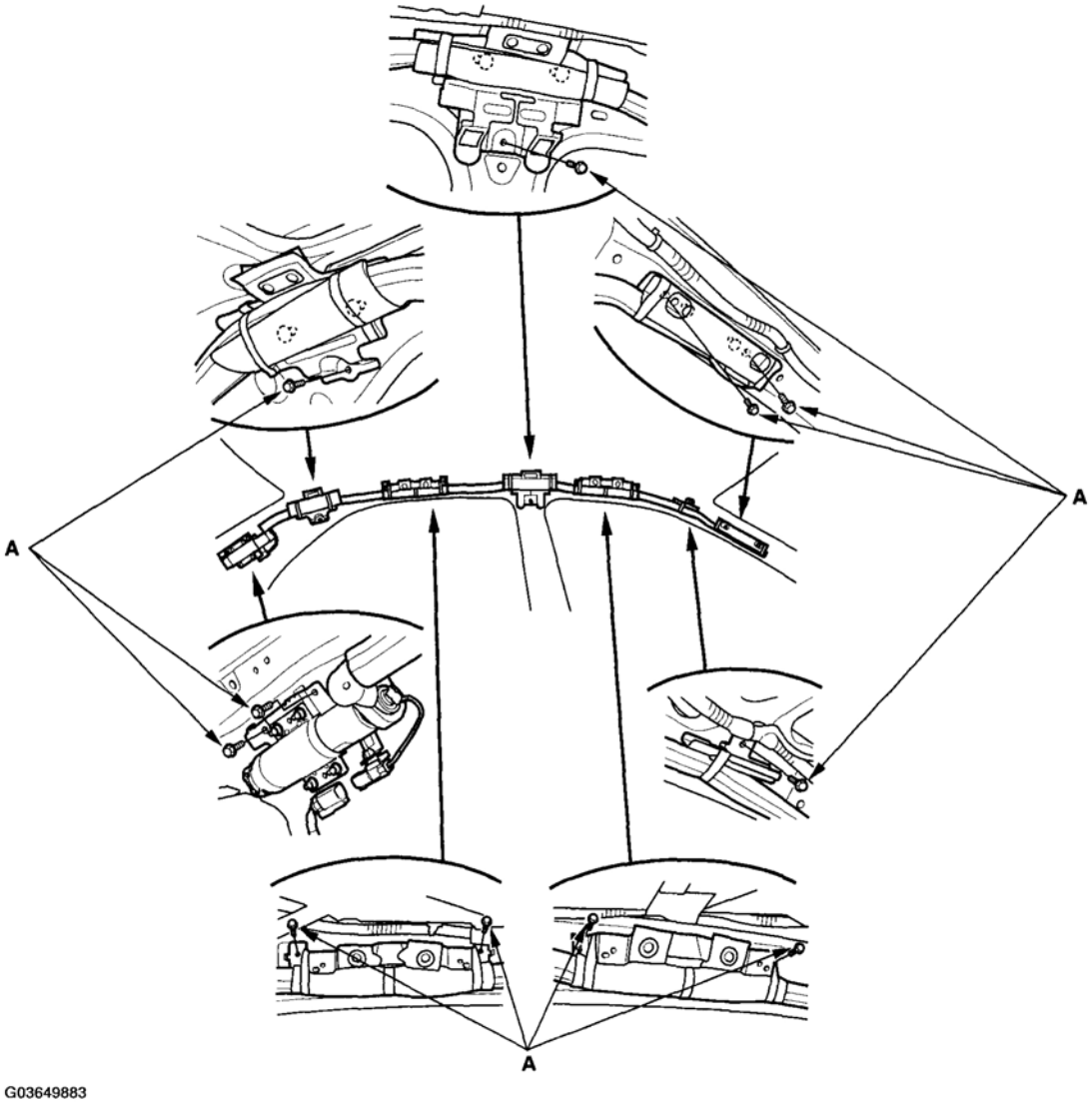


Fig. 324: Removing Mounting Bolts From Bracket (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

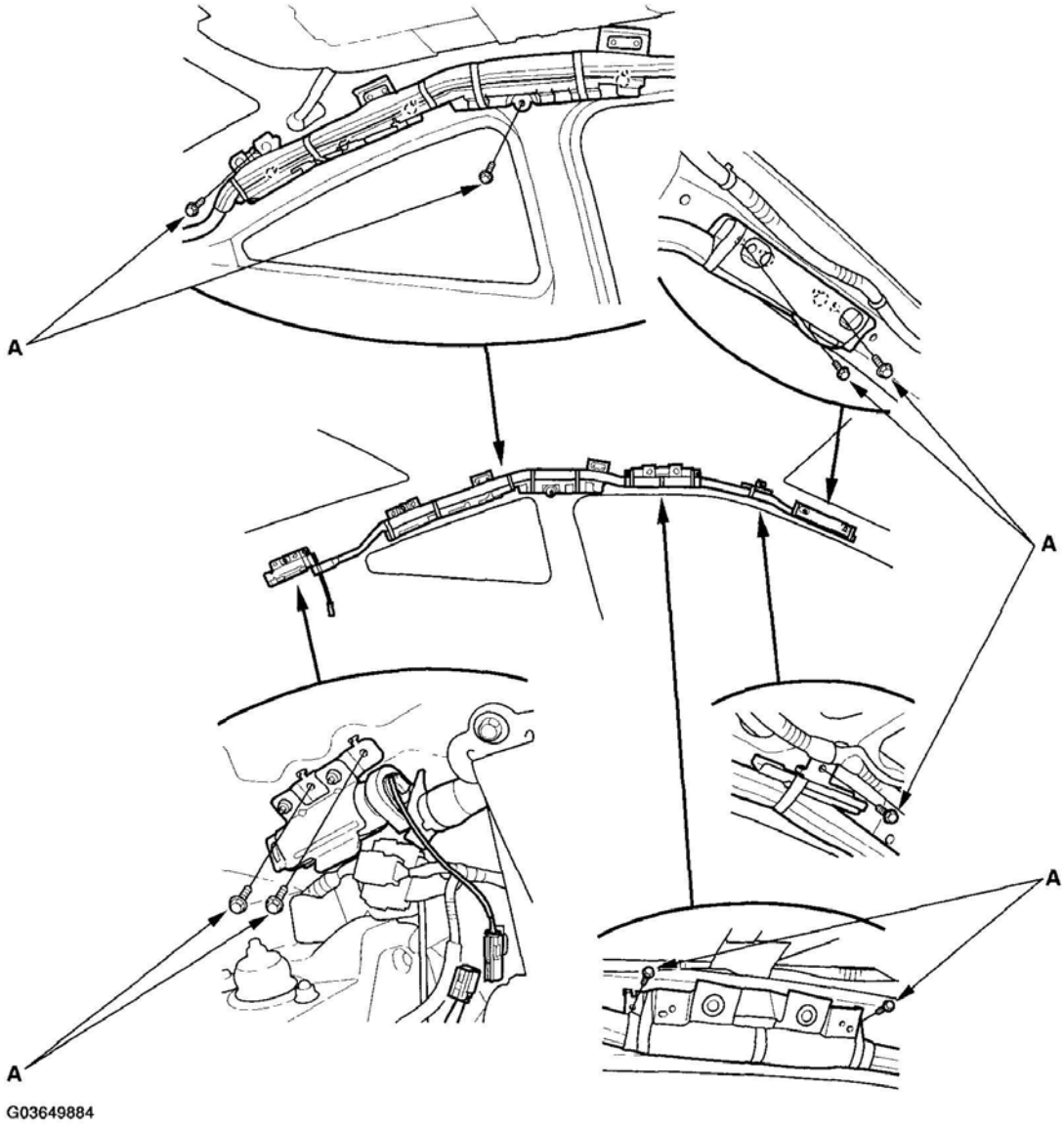


Fig. 325: Removing Mounting Bolts From Bracket (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the side curtain airbag assembly.

INSTALLATION

NOTE:

- **Installation of the side curtain airbag must be performed according to the precautions/procedures described at the beginning of the SRS.**

- **If the airbag is frayed, or has only other visible damage, replace it. Do not attempt to repair an airbag.**
- **When you install the airbag, make sure it is not twisted, and not caught between the inflator brackets by the bracket bolts.**
- **Make sure that the side curtain airbag inflator retainer is installed properly, otherwise the airbag could accidentally deploy and cause damage or injuries.**

1. Place the new side curtain airbag assembly on the side of the roof. Tighten the side curtain airbag mounting bolts (A).

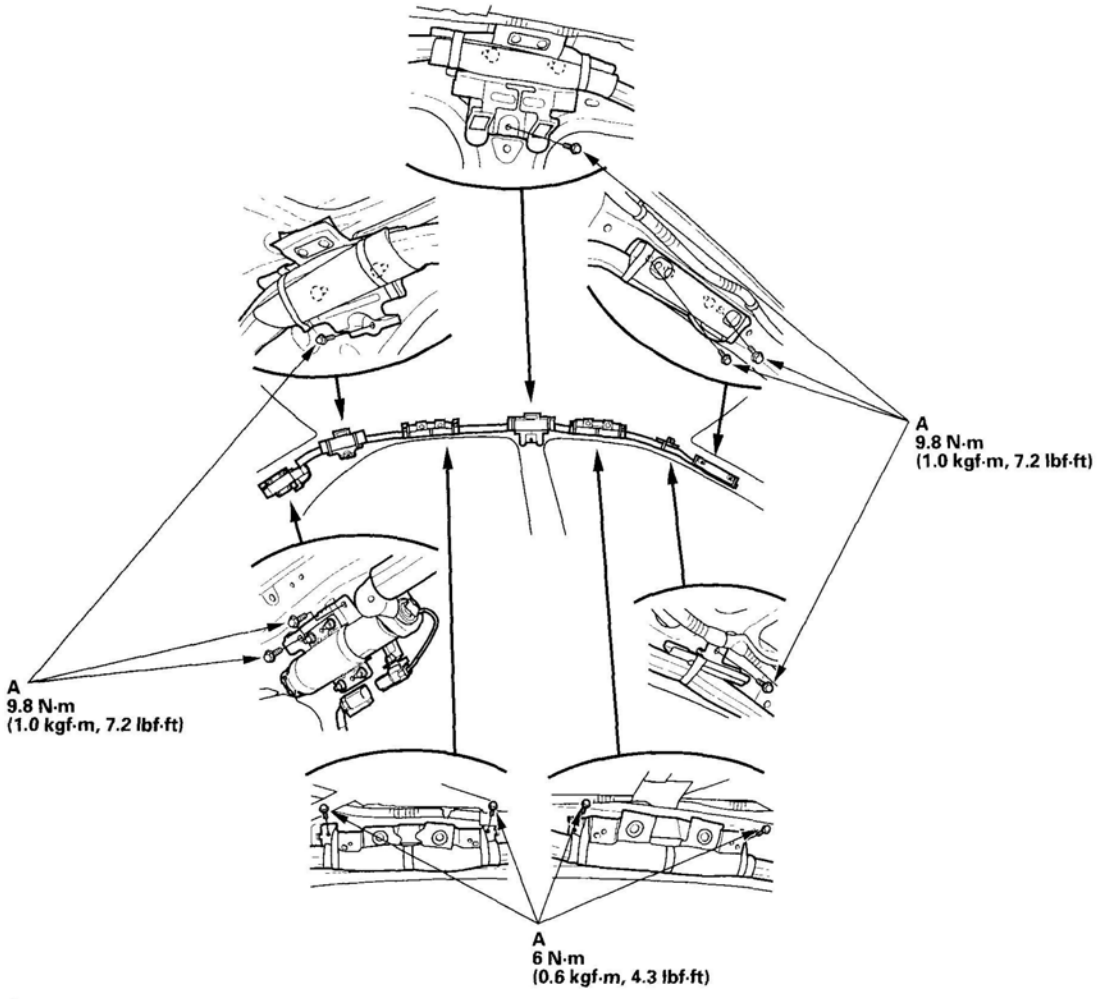


Fig. 326: Tightening Side Curtain Airbag Mounting Bolts (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

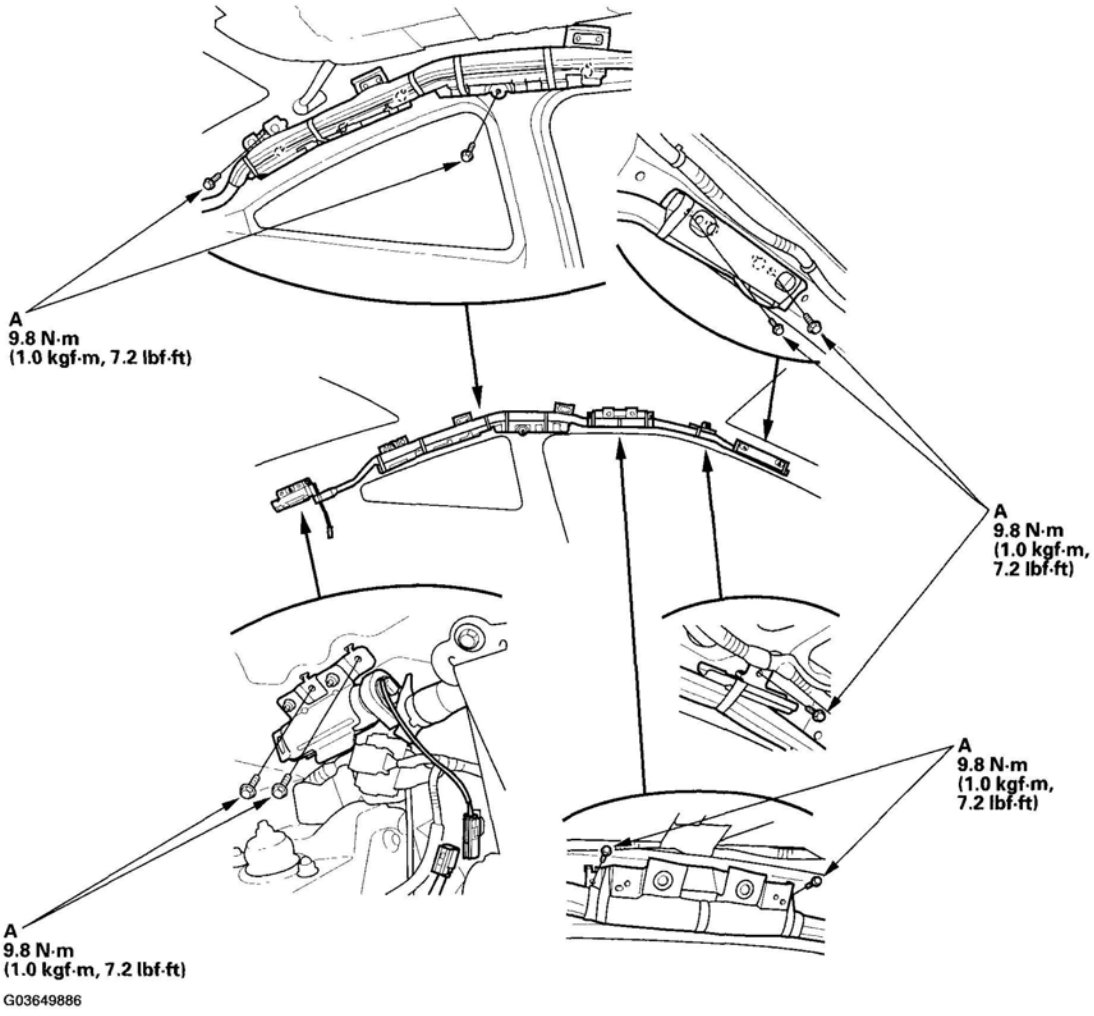


Fig. 327: Tightening Side Curtain Airbag Mounting Bolts (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Connect the side curtain airbag subharness to the side curtain airbag 2P connector (A).

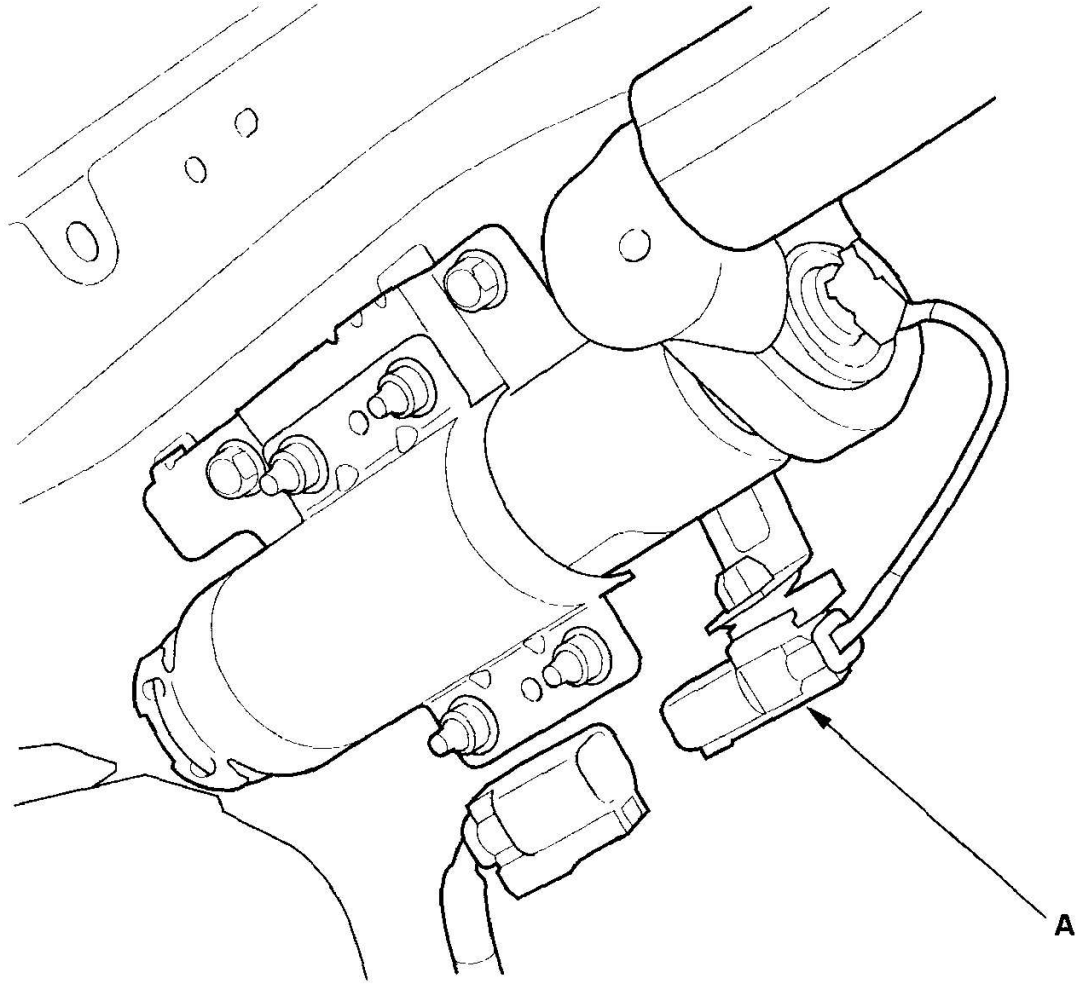


Fig. 328: Connecting Side Curtain Airbag Subharness To Side Curtain Airbag 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Reconnect the battery negative cable.
4. Connect the HDS and clear the DTCs (see **ERASING THE DTC MEMORY WITH HDS**).
5. After installing the side curtain airbag, confirm proper system operation: Turn the ignition switch ON (II); the SRS indicator should come on for about 6 seconds and then go off.
6. Install all removed parts.

7. Confirm proper headliner/pillar trim overlap (see **COMPONENT REPLACEMENT/INSPECTION AFTER DEPLOYMENT**).

AIRBAG DISPOSAL

Special Tools Required

Deployment tool 07HAZ-SG00500

Before scrapping any airbags, side airbags, side curtain airbags, or seat belt tensioners (including those in a whole vehicle to be scrapped), the part(s) must be deployed. If the vehicle is still within the warranty period, the Honda District Manager must give approval and/or special instruction before deploying the part(s). Only after the part(s) have been deployed (as the result of vehicle collision, for example), can they be scrapped. If the parts appear intact (not deployed), treat them with extreme caution. Follow this procedure.

DEPLOYING AIRBAGS IN THE VEHICLE

If an SRS equipped vehicle is to be entirely scrapped, its airbags, side airbags, side curtain airbags, and seat belt tensioners should be deployed while still in the vehicle. These parts should not be considered as salvageable parts and should never be installed in another vehicle.

1. Turn the ignition switch OFF, then disconnect the battery negative cable, and wait at least 3 minutes.
2. Confirm that each airbag, side airbag, side curtain airbag, or seat belt tensioner is securely mounted.
3. Confirm that the deployment tool is functioning properly by following the check procedure on the tool label.

Driver's Airbag

4. Remove the access panel (A) from the steering wheel, then disconnect the driver's airbag 4P connector (B) from the cable reel.

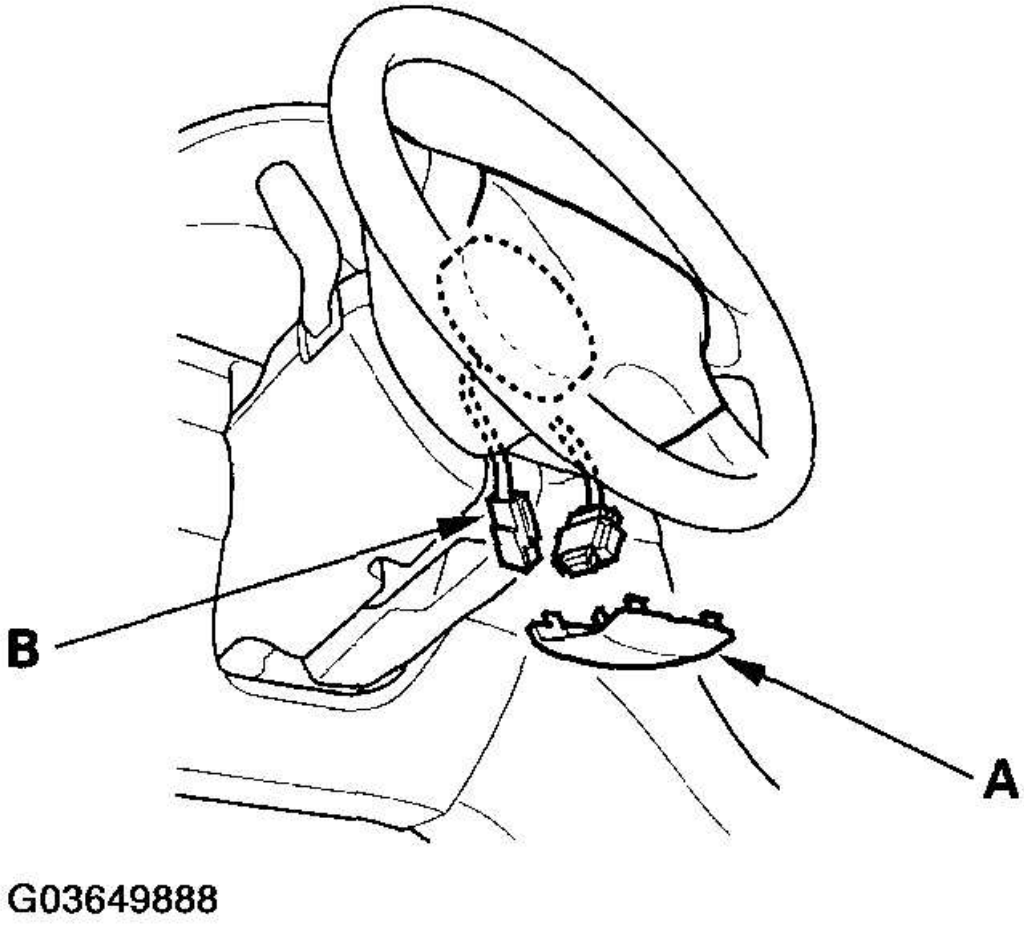


Fig. 329: Disconnecting Driver's Airbag 4P Connector From Cable Reel (Driver's Airbag)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Front Passenger's Airbag

5. Remove the glove box, then disconnect the front passenger's airbag 4P connector (A) from dashboard wire harness.

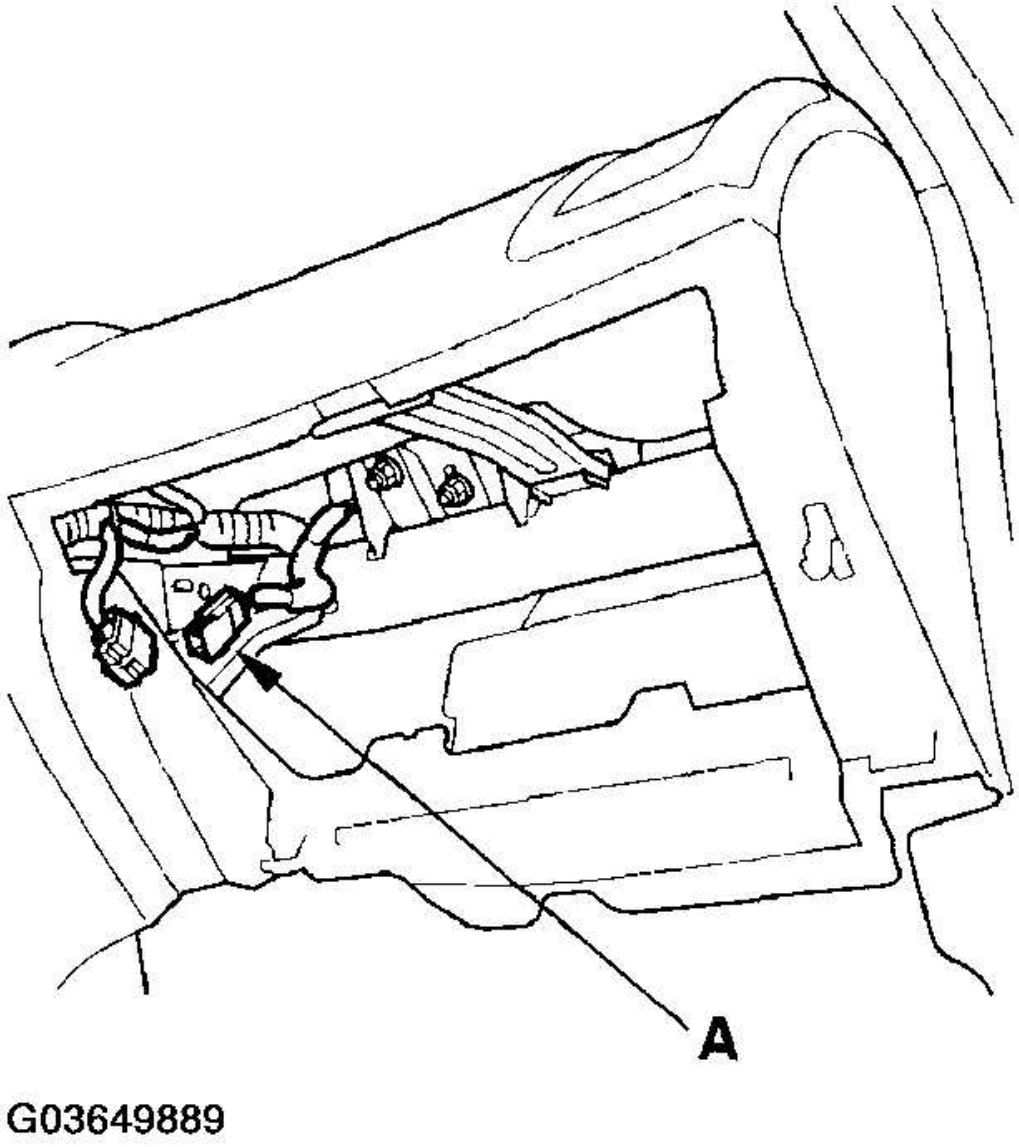
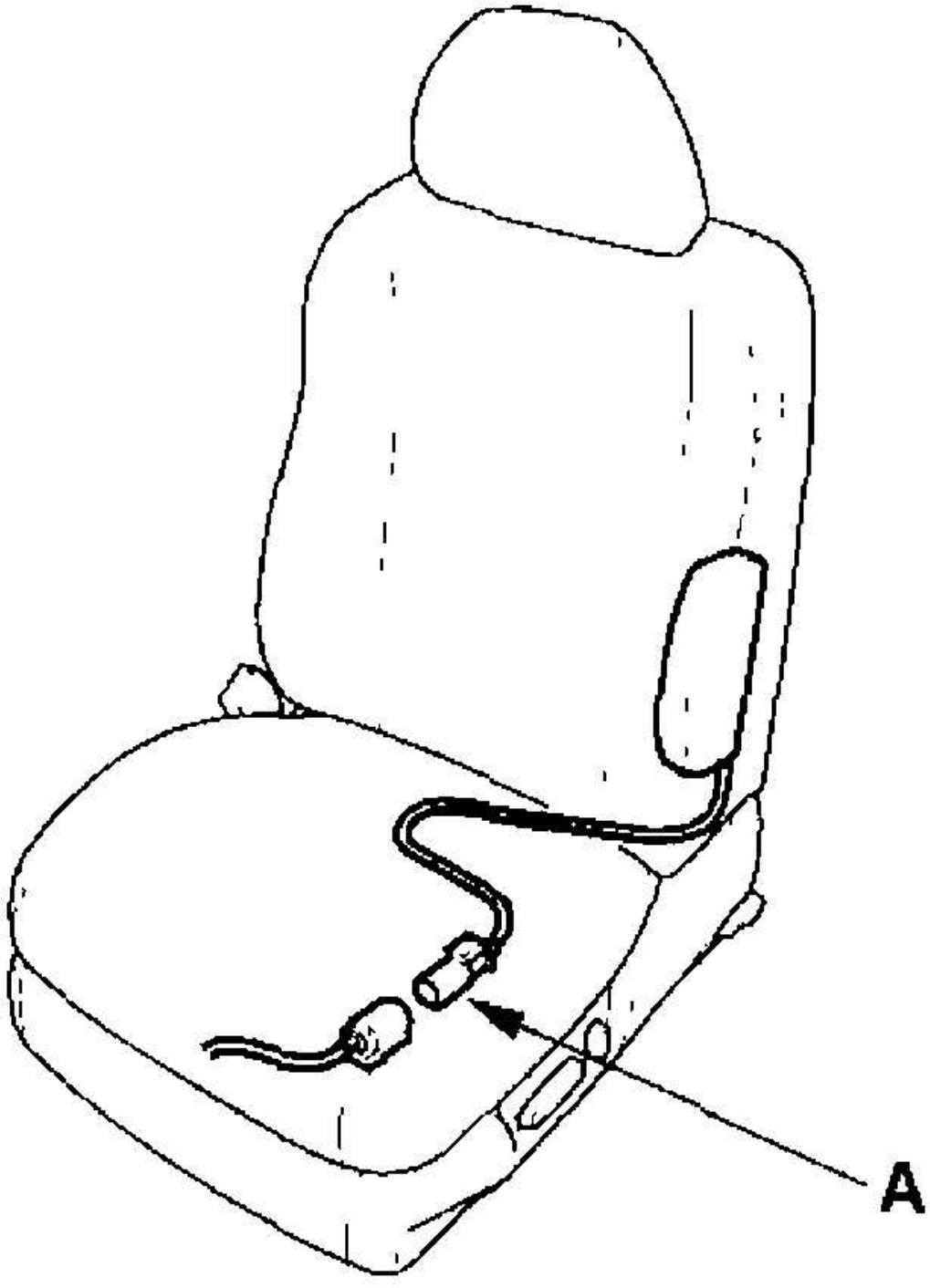


Fig. 330: Disconnecting Front Passenger's Airbag 4P Connector From Dashboard Wire Harness (Front Passenger's Airbag)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Side Airbag

6. Disconnect the side airbag 2P connector (A) from the floor wire harness.

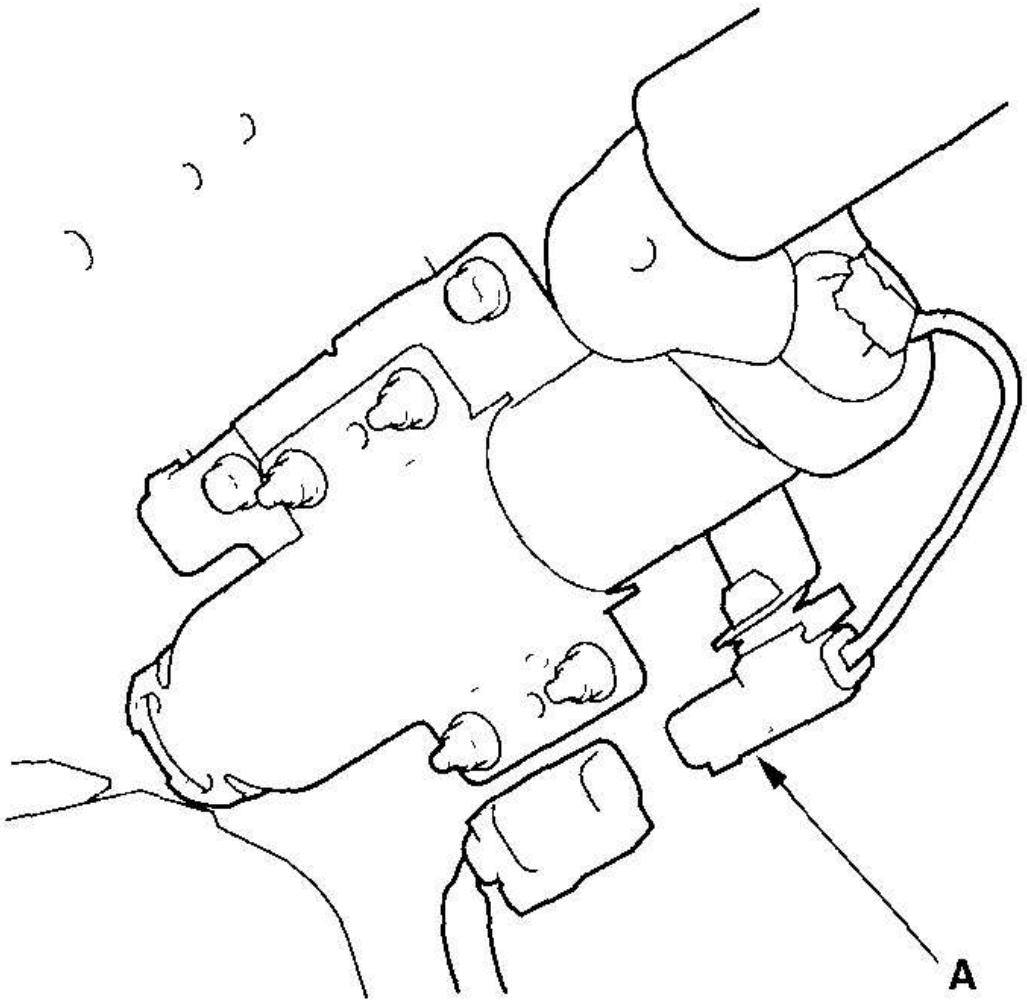


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Fig. 331: Disconnecting Side Airbag 2P Connector From Floor Wire Harness (Side Airbag)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Side curtain airbag

7. Disconnect the side curtain airbag 2P connector (A) from the side curtain airbag subharness.



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Fig. 332: Disconnecting Side Curtain Airbag 2P Connector From Side Curtain Airbag Subharness (Side Curtain Airbag)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Seat belt tensioner

8. Disconnect the seat belt tensioner 4P connector (A) from the floor wire harness. Pull the seat belt out all the way and cut it.

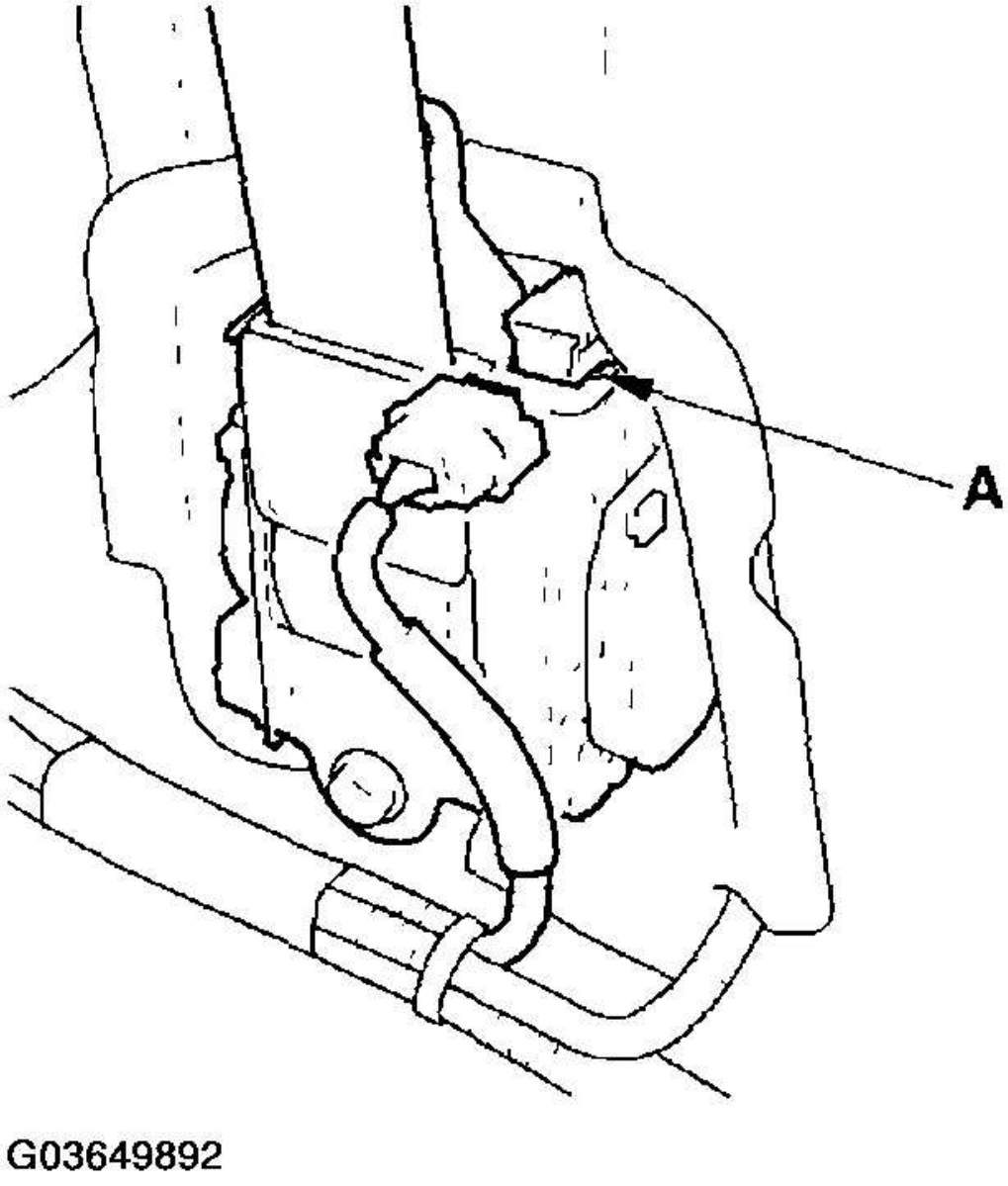


Fig. 333: Disconnecting Seat Belt Tensioner 4P Connector From Floor Wire Harness (Seat Belt Tensioner)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Cut off each connector, strip the ends of the wires, and connect the deployment

tool alligator clips (A) to the wires. Place the deployment tool at least 30 feet (10 meters) away from the vehicle.

NOTE: The driver's and front passenger's airbags have dual inflators. The like color wires go to the individual inflators.

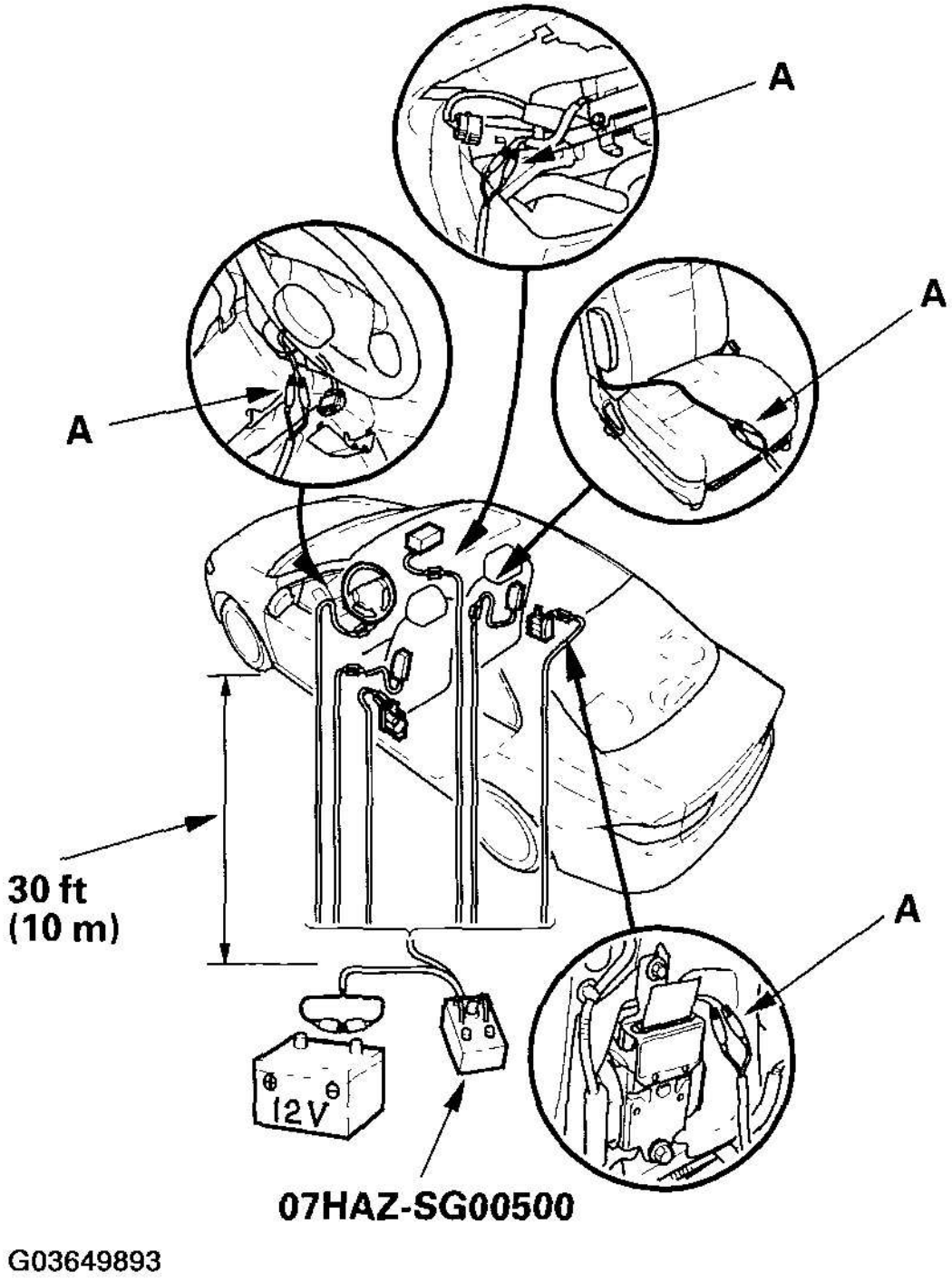


Fig. 334: Connecting Deployment Tool Alligator Clips To Wires (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

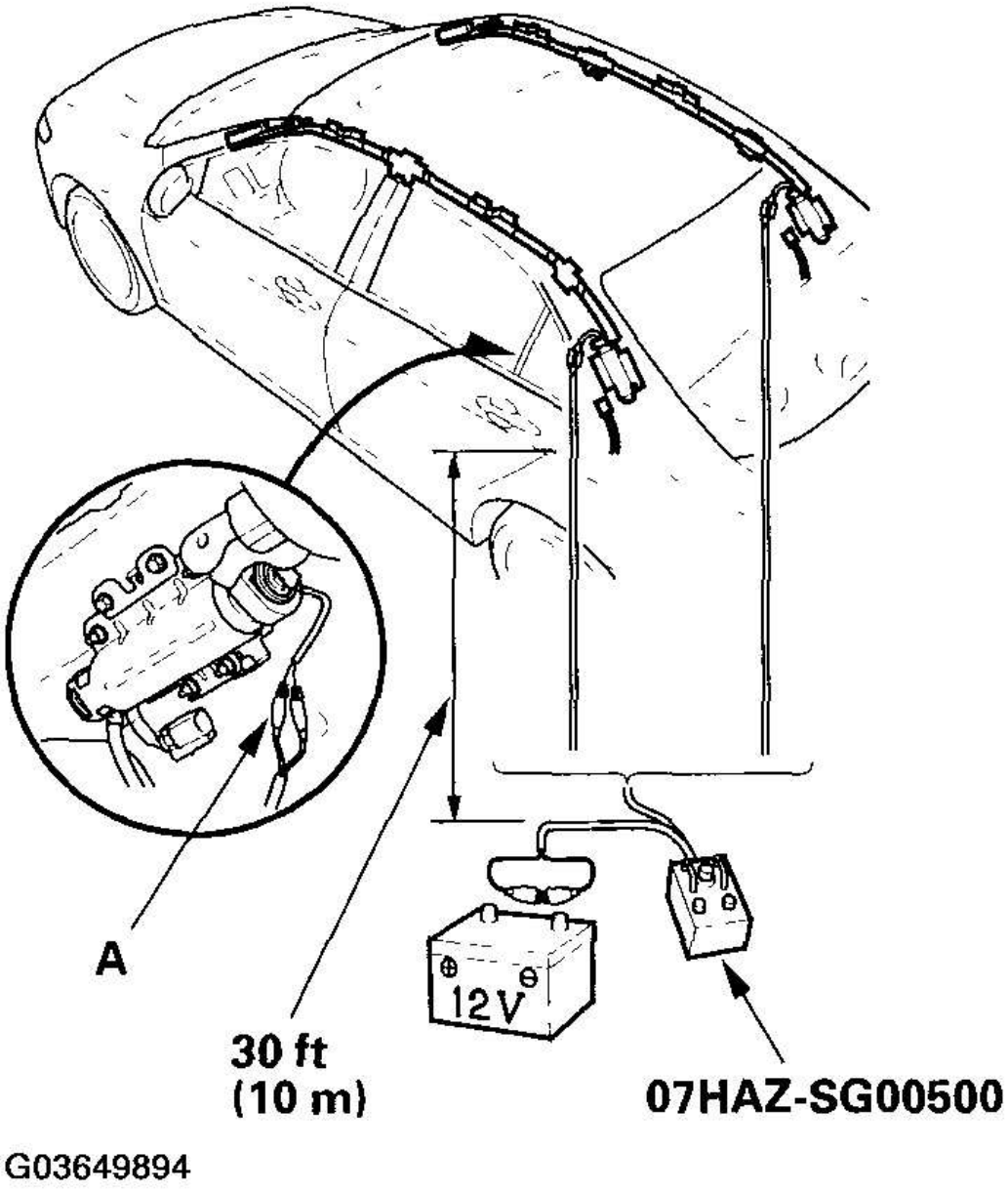


Fig. 335: Connecting Deployment Tool Alligator Clips To Wires (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Connect a 12 volt battery to the tool.
    - If the green light on the tool comes on, the igniter circuit is defective and

cannot deploy the component. Go to **DISPOSAL OF DAMAGED COMPONENTS** .

- If the red light on the tool comes on, the component is ready to be deployed.

11. Push the tool's deployment switch. The airbags and tensioners should deploy (deployment is both highly audible and visible: a loud noise and rapid inflation of the bag, followed by slow deflation).
    - If the components deploy and the green light on the tool comes on, continue with this procedure.
    - If a component does not deploy, yet the green light comes ON, its igniter is defective. Go to **DISPOSAL OF DAMAGED COMPONENTS** .
    - During deployment, the airbags can become hot enough to burn you. Wait 30 minutes after deployment before touching the airbags.
12. Dispose of the complete airbag. No part of it can be reused. Place it in a sturdy plastic bag (A), and seal it securely. Dispose of the deployed airbag according to your local regulations.

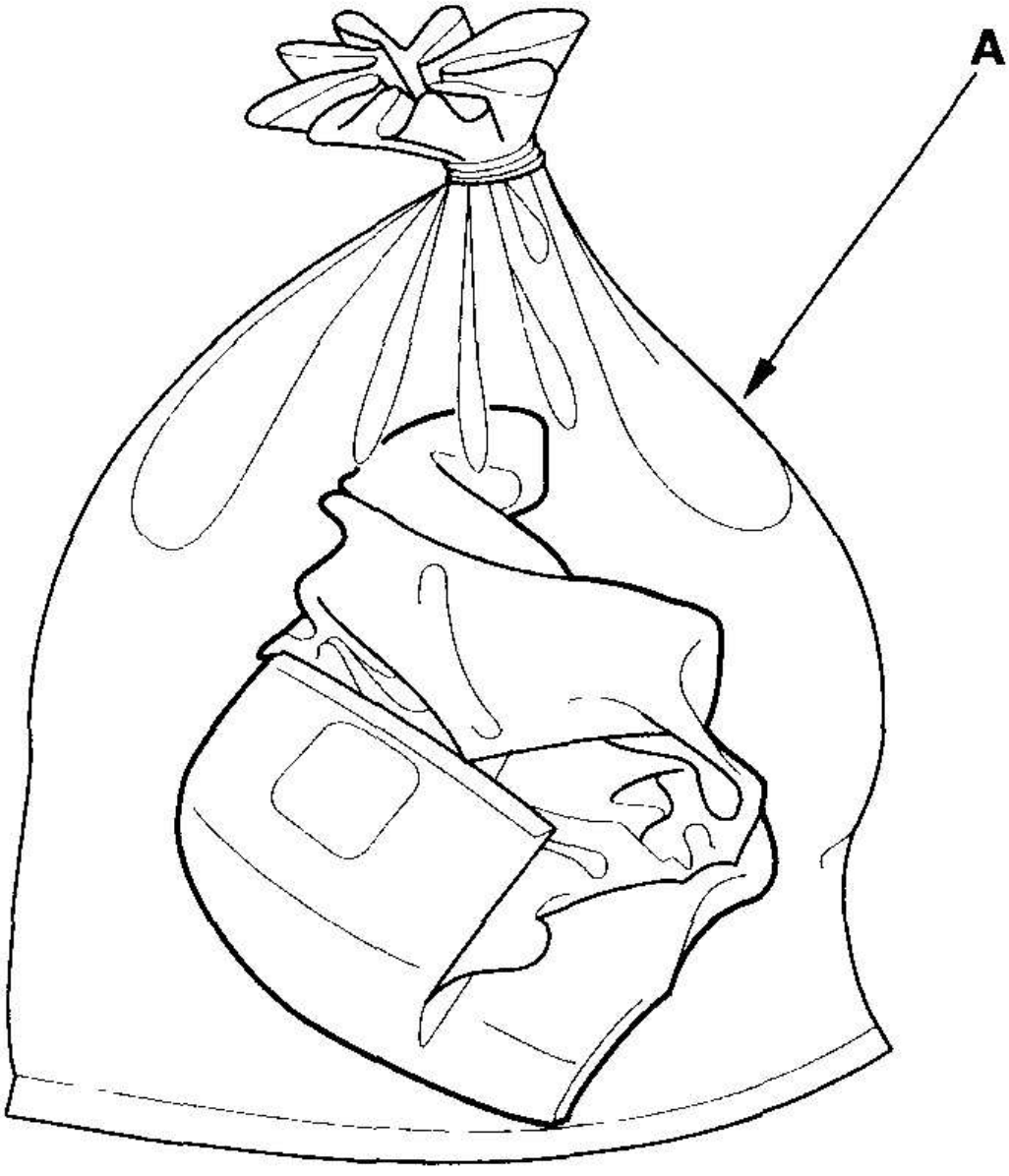
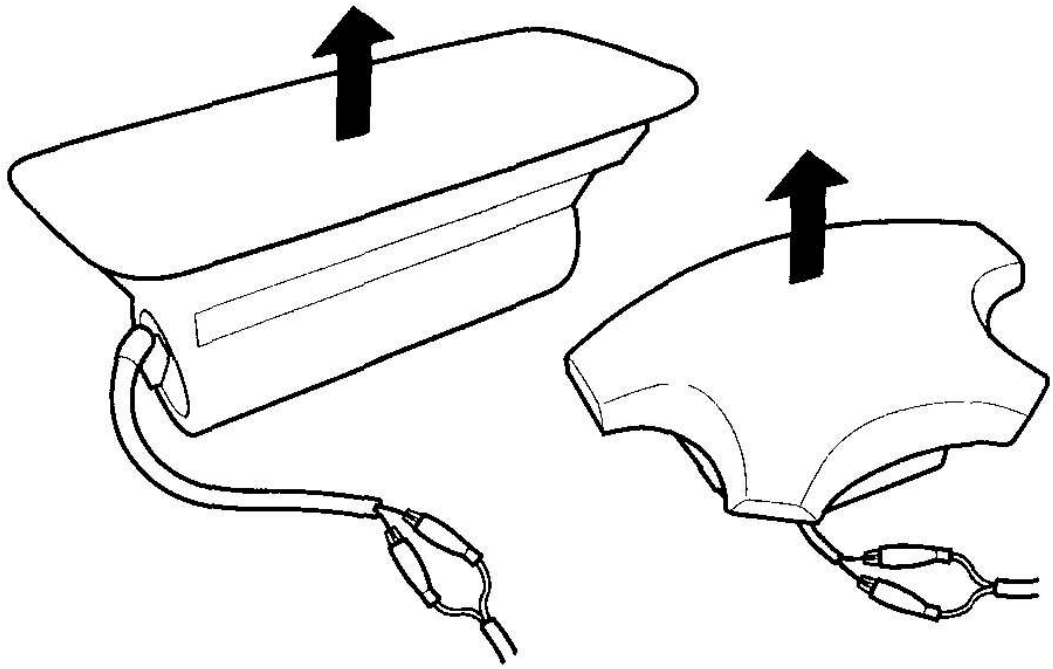


Fig. 336: Placing Airbag In Sturdy Plastic Bag And Seal Securely
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DEPLOYING COMPONENTS OUT OF THE VEHICLE

If an intact airbag or tensioner has been removed from a scrapped vehicle, or has been found defective or damaged during transit, storage, or service, it should be deployed as follows:



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Fig. 337: Deploying Components Of Airbag Out Of Vehicle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

1. Confirm that the deployment tool is functioning properly by following the check procedure on the tool label.
2. Position the airbag face up, outdoors, on flat ground, at least 30 feet (10 meters) from any obstacles or people.
3. Follow steps 9 through 12 in **DEPLOYING AIRBAGS IN THE VEHICLE** .

NOTE: The driver's and front passenger's airbags have dual inflators. The like color wires go to the individual inflators.

DISPOSAL OF DAMAGED COMPONENTS

1. If installed in a vehicle, follow the removal procedure for the driver's airbag (see **DRIVER'S AIRBAG REPLACEMENT**), front passenger's airbag (see **FRONT PASSENGER'S AIRBAG REPLACEMENT**), side airbag (see **SIDE AIRBAG REPLACEMENT**), side curtain airbag (see **SIDE CURTAIN AIRBAG REPLACEMENT**), and seat belt tensioner (see **FRONT SEAT BELT REPLACEMENT**).
2. In all cases, make a short circuit by cutting, stripping, and twisting together the two inflator wires.

NOTE: The driver's and front passenger's airbags have dual inflators. The like color wires go to the individual inflators.

3. Package the component in exactly the same packaging that the new replacement part came in.
4. Mark the outside of the box "DAMAGED AIRBAG NOT DEPLOYED", "DAMAGED SIDE AIRBAG NOT DEPLOYED", "DAMAGED SIDE CURTAIN AIRBAG NOT DEPLOYED", "DAMAGED SEAT BELT TENSIONER NOT DEPLOYED" so it does not get confused with your parts stock.
5. Contact your Honda District Parts & Service Manager for how and where to return it for disposal.

DEPLOYMENT TOOL CHECK

1. Connect the yellow clips to both switch protector handles on the tool; connect the tool to a battery.
2. Push the operation switch: green means the tool is OK; red means the tool is faulty.
3. Disconnect the yellow clips from the battery.

CABLE REEL REPLACEMENT

REMOVAL

1. Make sure the wheels are aligned straight ahead.
2. Disconnect the battery negative cable, and wait at least 3 minutes.
3. Remove the driver's airbag (see **DRIVER'S AIRBAG REPLACEMENT**).
4. Disconnect the connector (A) from the cable reel, then remove the steering wheel bolt (B).

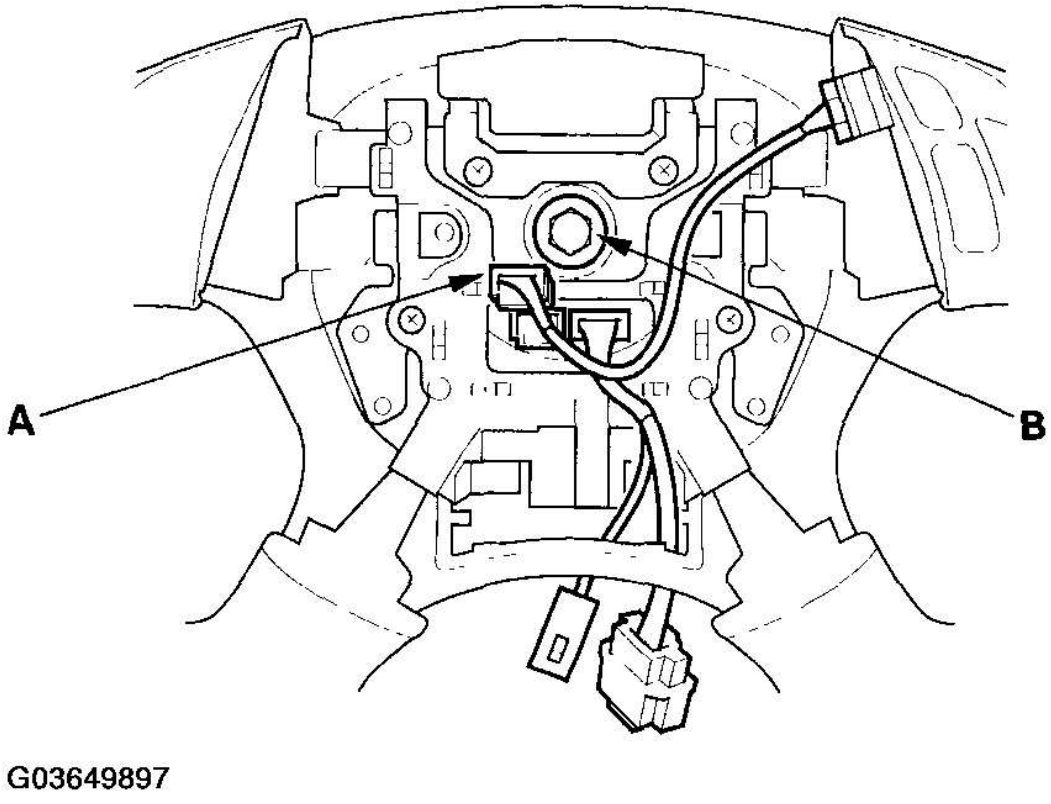


Fig. 338: Removing Steering Wheel Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Align the front wheels straight ahead, then remove the steering wheel with a steering wheel puller (see step 5 on **STEERING WHEEL REMOVAL**). Do not tap on the steering wheel or steering column shaft when removing the steering wheel.
6. Remove the dashboard lower cover (A).

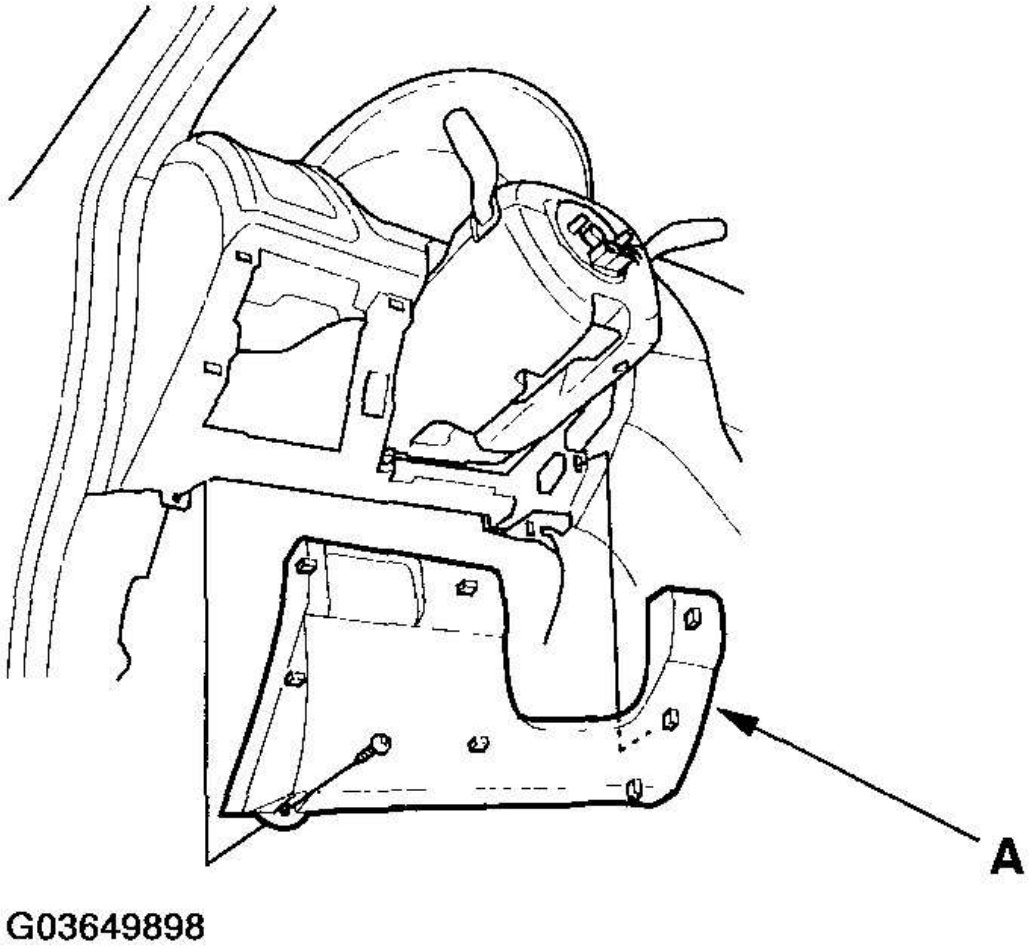
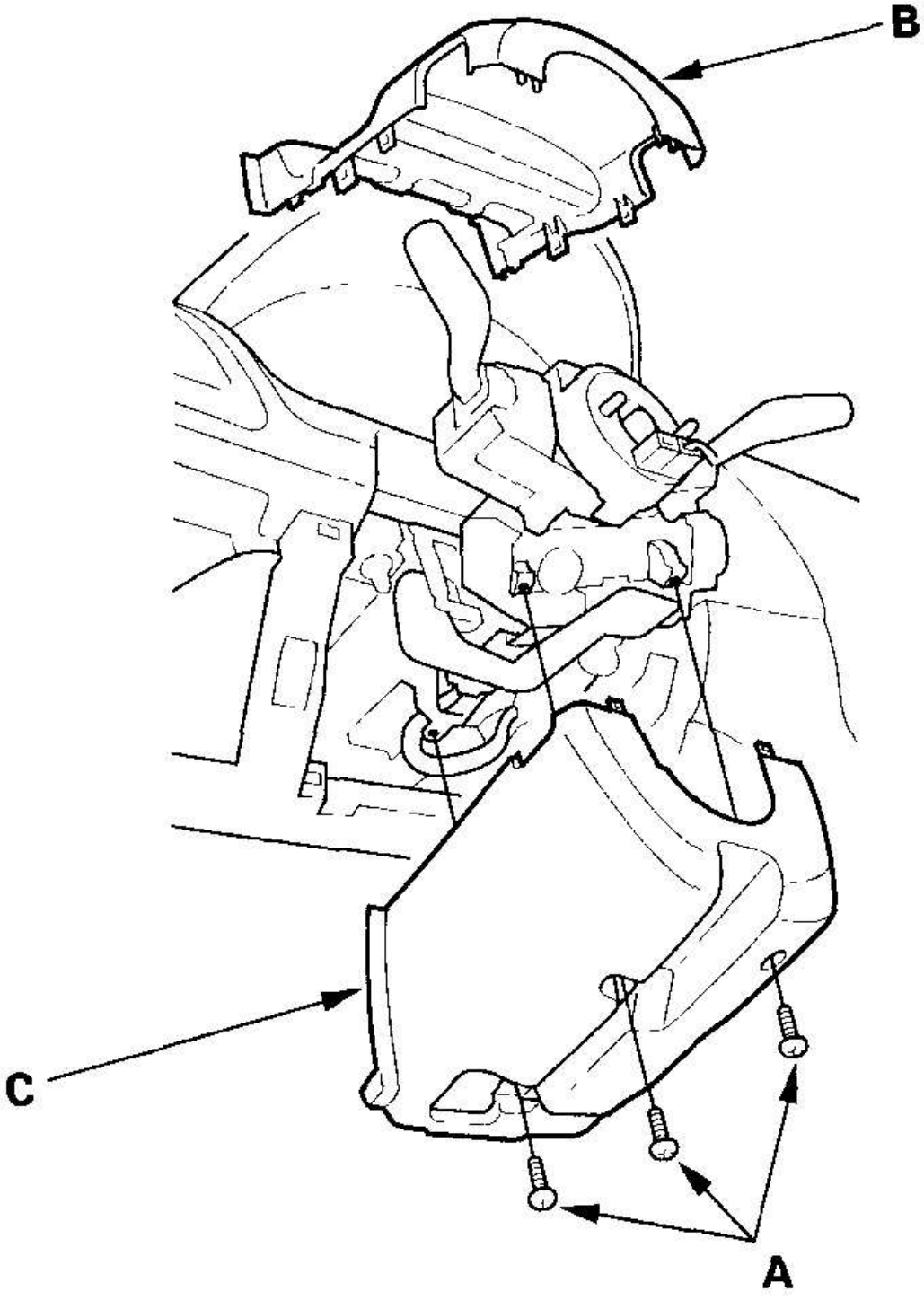


Fig. 339: Removing Dashboard Lower Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the column cover screws (A), then remove the column covers (B, C).



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Fig. 340: Removing Column Covers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Disconnect the dashboard wire harness 4P connector (A) from the cable reel 4P connector (B), then disconnect the dashboard wire harness 5P or 13P connector (C) from the cable reel (D).

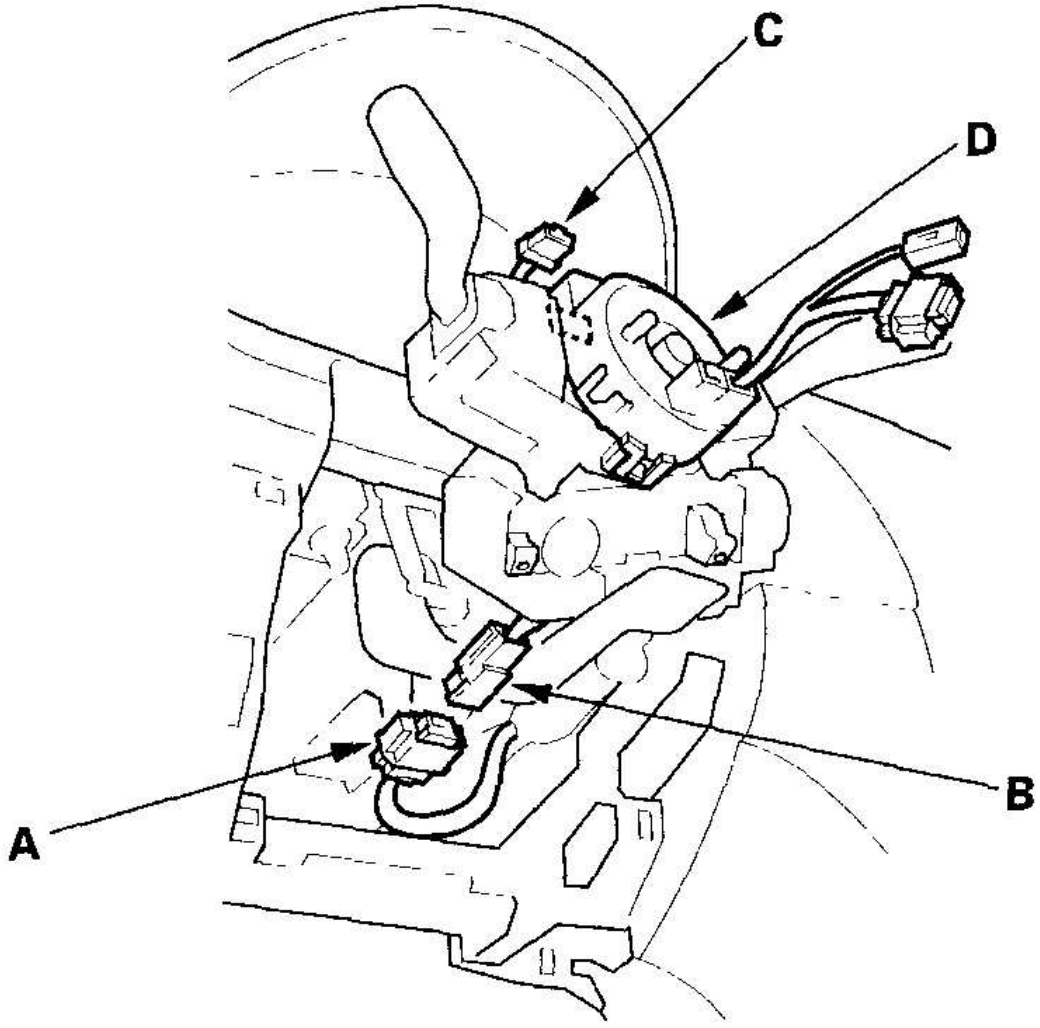
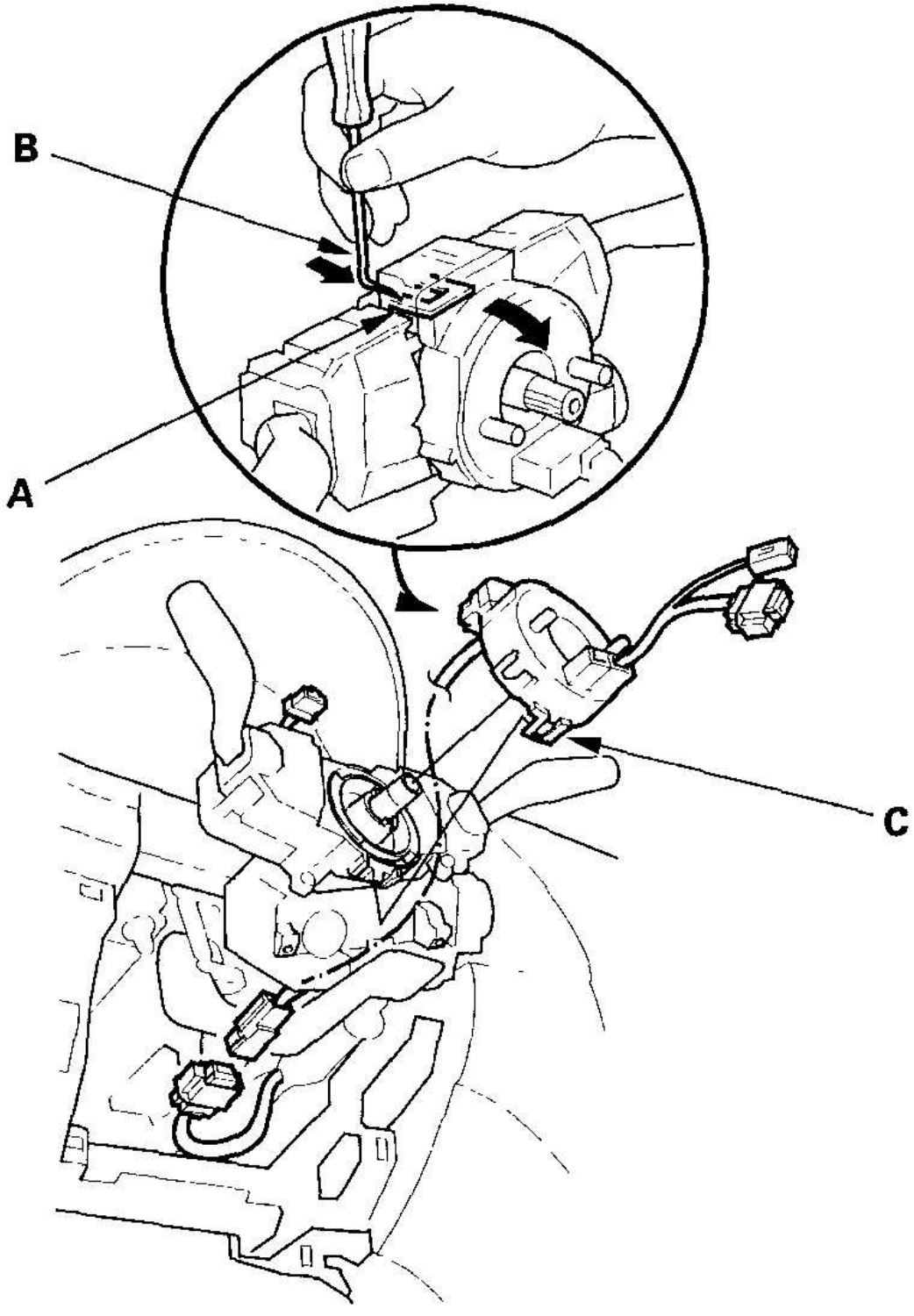


Fig. 341: Disconnecting Dashboard Wire Harness 4P Connector From Cable Reel 4P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Release the lock tab (A) under the cable reel connector with a 90° hook shaped tool (B). Slide the tool below the cable reel connector just above the lock tab. Release the lower lock tab (C), and slide the cable reel off the column.



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Fig. 342: Releasing Lock Tab Under Cable Reel Connector With Hook Shaped Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INSTALLATION

1. Before installing the steering wheel, align the front wheels straight ahead.
2. Disconnect the battery negative cable, and wait at least 3 minutes.
3. Set the turn signal cancelling sleeve (A) so that the projections (B) are aligned vertically.

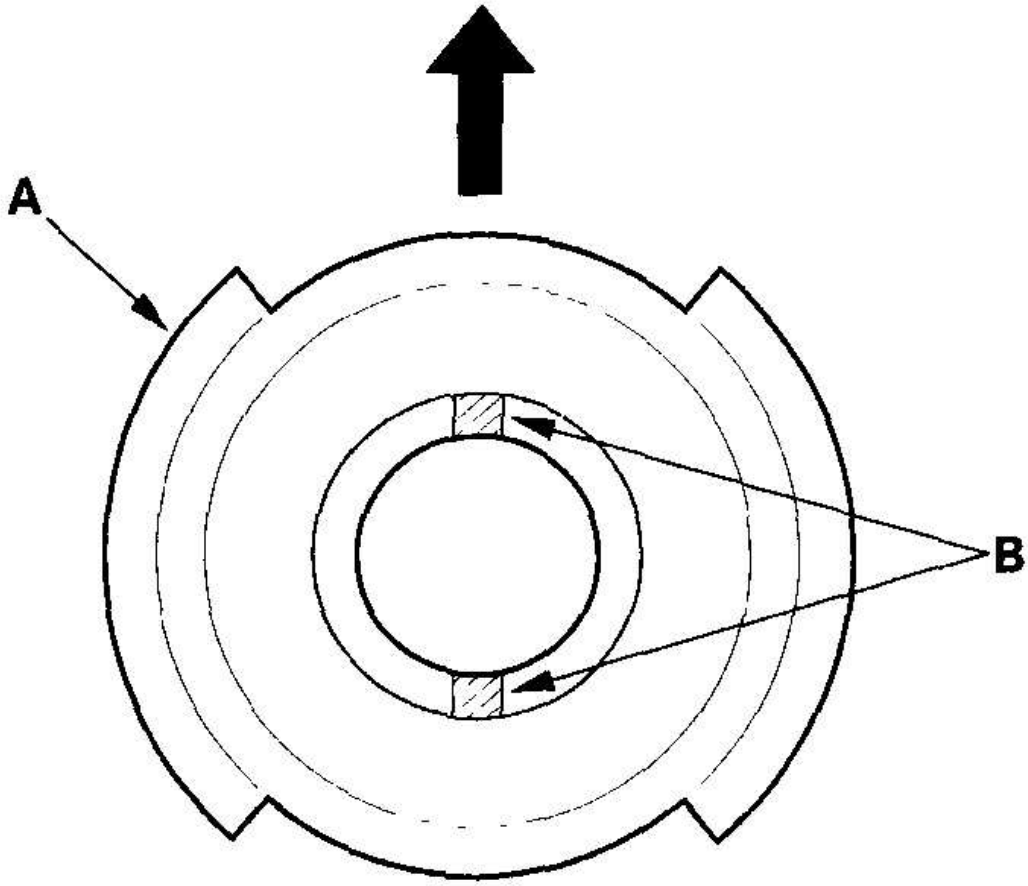


Fig. 343: Setting Turn Signal Cancelling Sleeve Aligning Projections Vertically
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Carefully install the cable reel (A) on the steering column shaft. Then connect the 5P or 13P connector (B) to the cable reel, and connect the 4P connector (C) to the dashboard wire harness 4P connector (D).

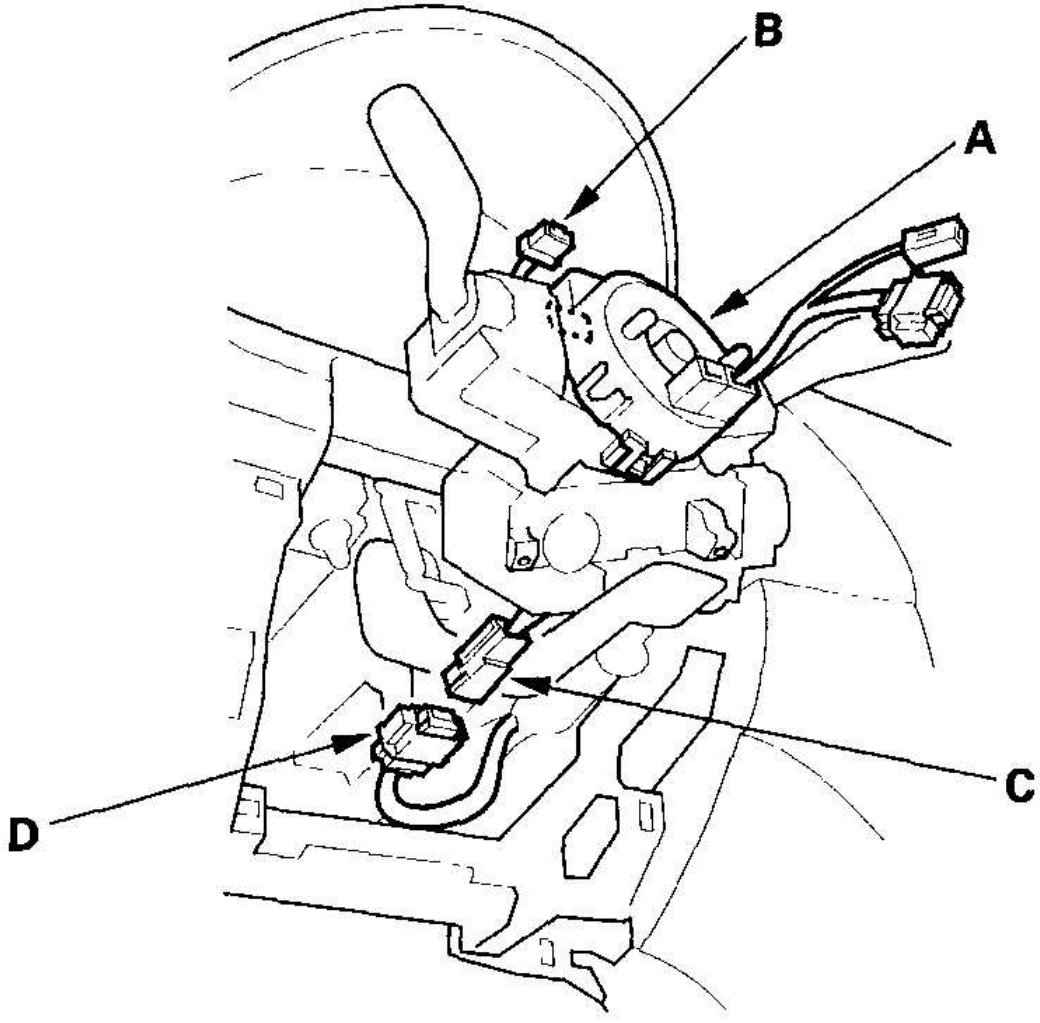
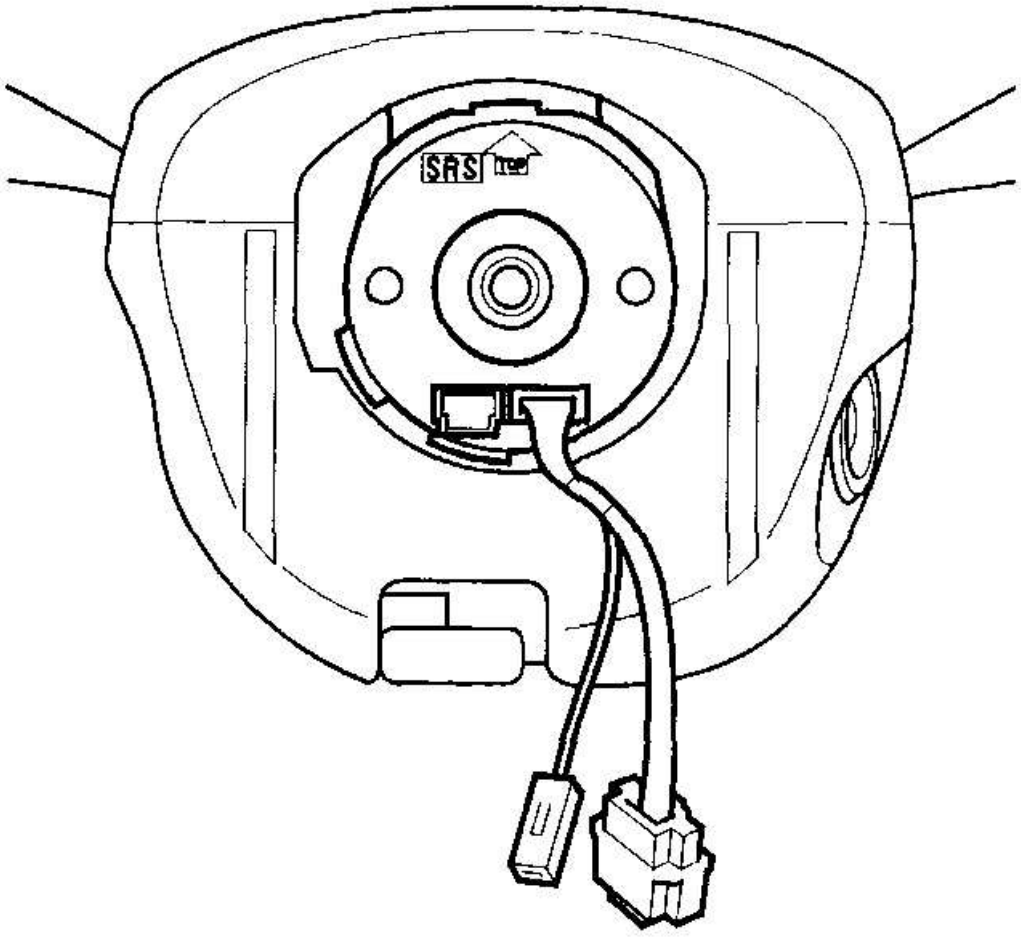


Fig. 344: Installing Cable Reel On Steering Column Shaft

Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the steering column covers.
6. If necessary, center the cable reel. (New replacement cable reels come centered.) Do this by first rotating the cable reel clockwise until it stops. Then rotate it counterclockwise (about 3 turns) until the arrow mark on the cable reel label points straight up.



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Fig. 345: Aligning Arrow Mark On Cable Reel Label Points Straight Up
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Align the projections on the cable reel with the holes on the steering wheel (see step 2 on **STEERING WHEEL INSTALLATION**). Install the steering wheel with a new steering wheel bolt (A), then reconnect the connector (B).

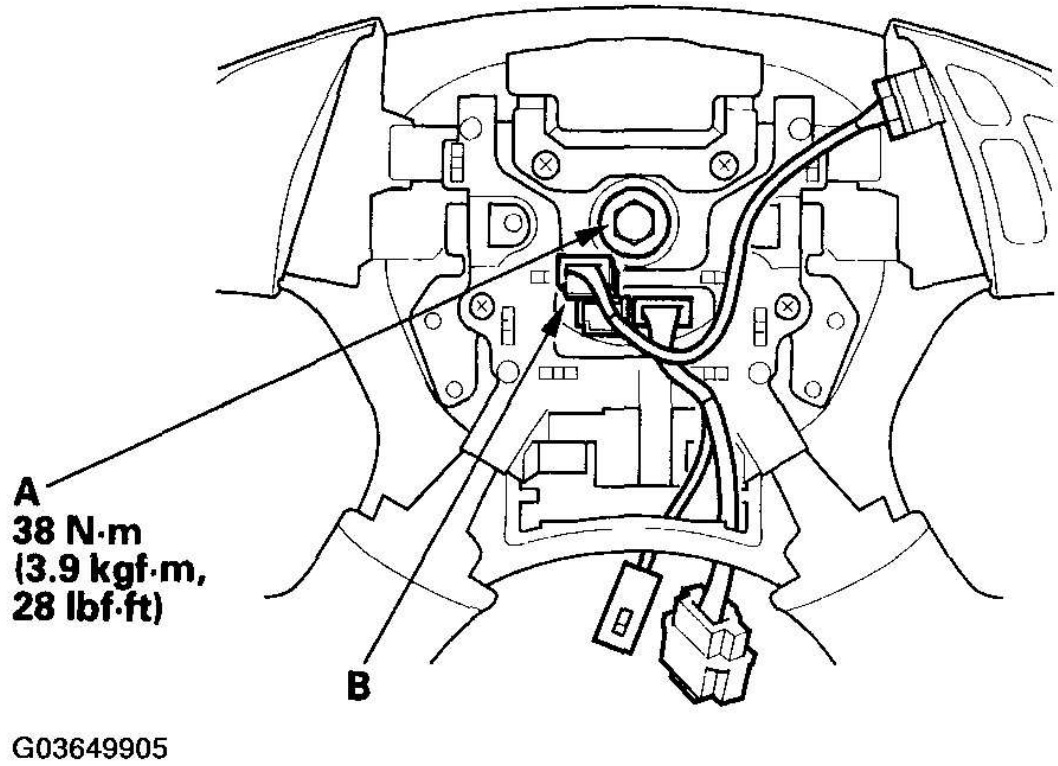


Fig. 346: Aligning Projections On Cable Reel With Holes On Steering Wheel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the driver's airbag (see **DRIVER'S AIRBAG REPLACEMENT**).
9. Reconnect the battery negative cable.
10. After installing the cable reel, confirm proper system operation:
    - Turn the ignition switch ON (II); the SRS indicator should come on for about 6 seconds and then go off.
    - After the SRS indicator has turned off, turn the steering wheel fully left and right to confirm the indicator does not come on.

- Make sure the horn works.

SRS UNIT REPLACEMENT

NOTE: Make sure the SRS unit and the impact sensors are of the same manufacturer.

REMOVAL

1. Disconnect the battery negative cable, and wait at least 3 minutes before beginning work.
2. Disconnect both seat belt tensioner connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
3. Remove the center console and front panel (see **CENTER CONSOLE REMOVAL/INSTALLATION**).
4. Remove the center pocket (see **CENTER POCKET REMOVAL/INSTALLATION**).
5. Remove the center holder (see **CENTER CONSOLE REMOVAL/INSTALLATION**).
6. Remove the driver's and passenger's center lower cover (see **DASHBOARD/STEERING HANGER BEAM REMOVAL/INSTALLATION**).
7. Remove the heater vent ducts (see **DASHBOARD/STEERING HANGER BEAM REMOVAL/INSTALLATION**).
8. Disconnect the connectors and remove the Torx bolts (A), then pull out the SRS unit.

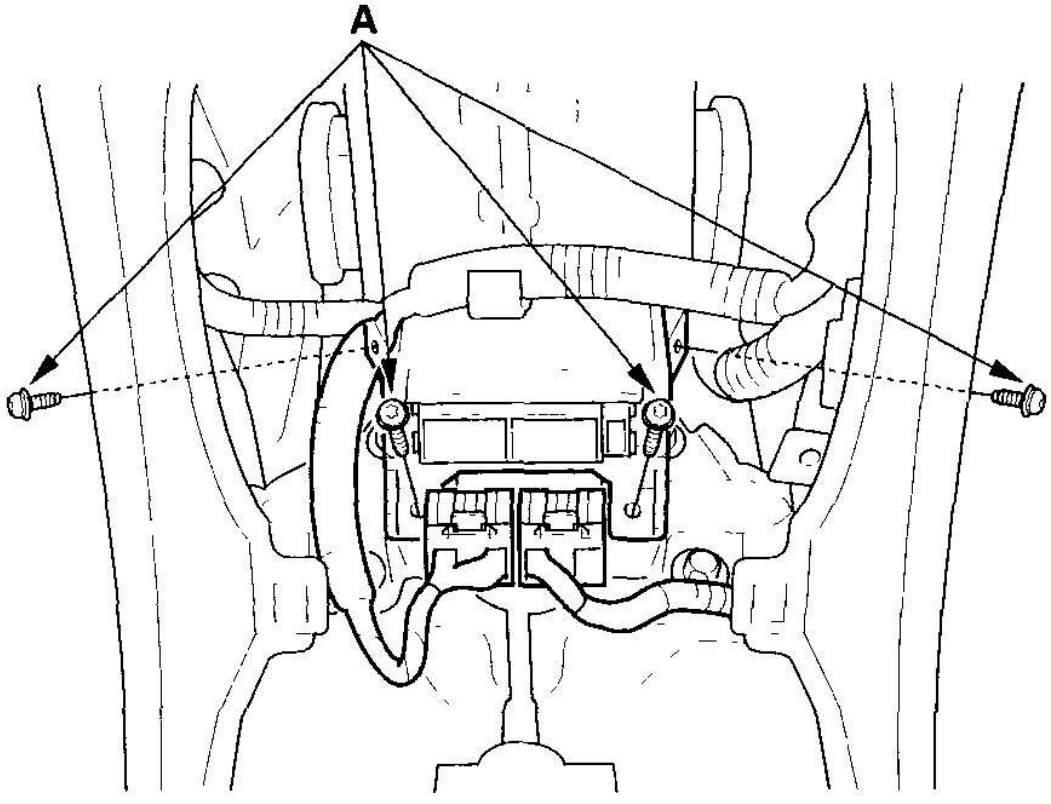


Fig. 347: Removing Torx Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INSTALLATION

1. Install the new SRS unit (A) with Torx bolts (B), then connect the connectors (C) to the SRS unit; push them into position until they click.

NOTE: Be sure the SRS unit is sitting squarely against its bracket before torquing the Torx bolts.

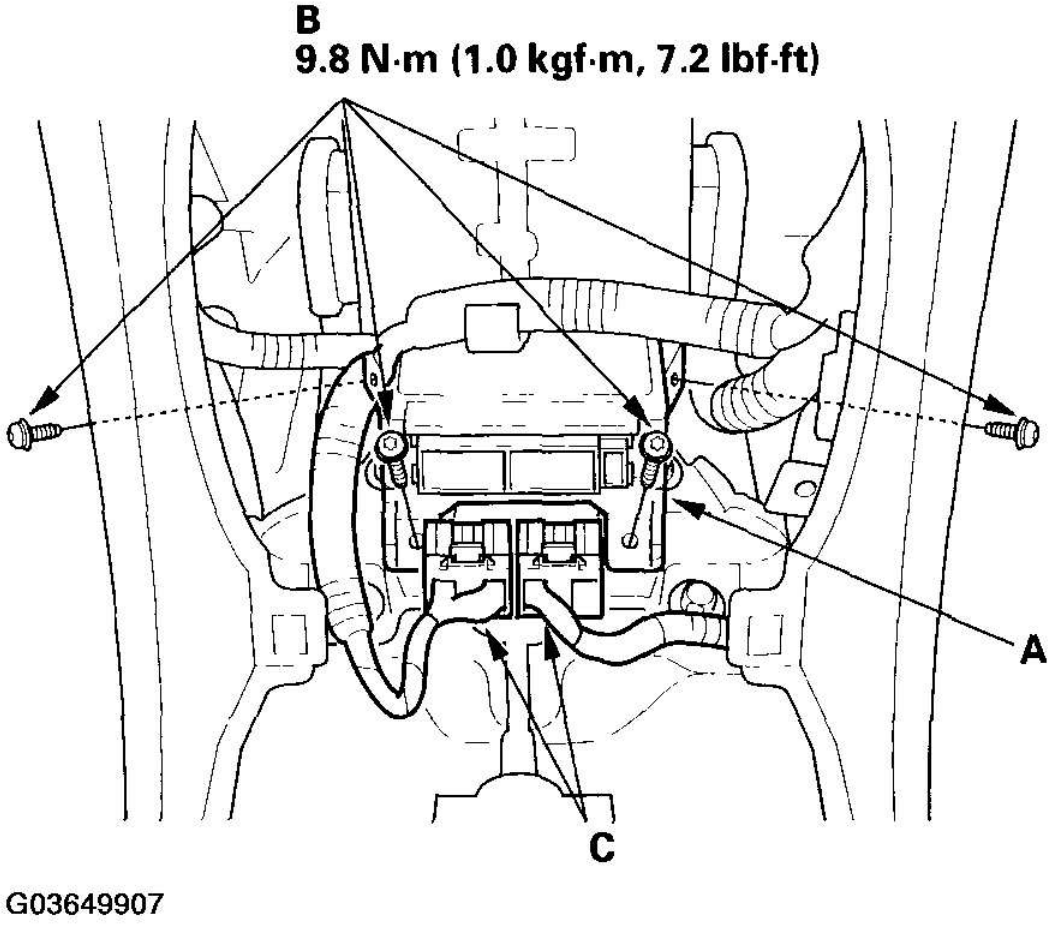


Fig. 348: Installing SRS Unit With Torx Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Reconnect both seat belt tensioner connectors (see step 6 in **DISCONNECTING SYSTEM CONNECTORS**).
3. Reconnect the battery negative cable.
4. After installing the SRS unit, confirm proper system operation: Turn the ignition switch ON (II); the SRS indicator should come on for about 6 seconds and then go off.
5. Install all removed parts.

SIDE IMPACT SENSOR (FIRST) REPLACEMENT

NOTE:

- **Review the seat replacement procedure before doing repairs or service.**
- **Make sure the SRS unit and the impact sensors are of the same manufacturer.**

REMOVAL

1. Disconnect the battery negative cable, and wait at least 3 minutes before beginning work.
2. Disconnect the appropriate side airbag 2P connector (see step 4 in **DISCONNECTING SYSTEM CONNECTORS**).
3. Remove the seat assembly (see **FRONT SEAT REMOVAL/INSTALLATION**).
4. Remove the front door sill trim and the center pillar lower trim panel.
   - 2-door (see **2-DOOR - DOOR SILL AREA**)
   - 4-door (see **4-DOOR - FRONT DOOR SILL AREA**)
5. Disconnect the floor wire harness 2P connector from the side impact sensor (first).
6. Remove the Torx bolts (A) using a Torx T30 bit, then remove the side impact sensor (first) (B).

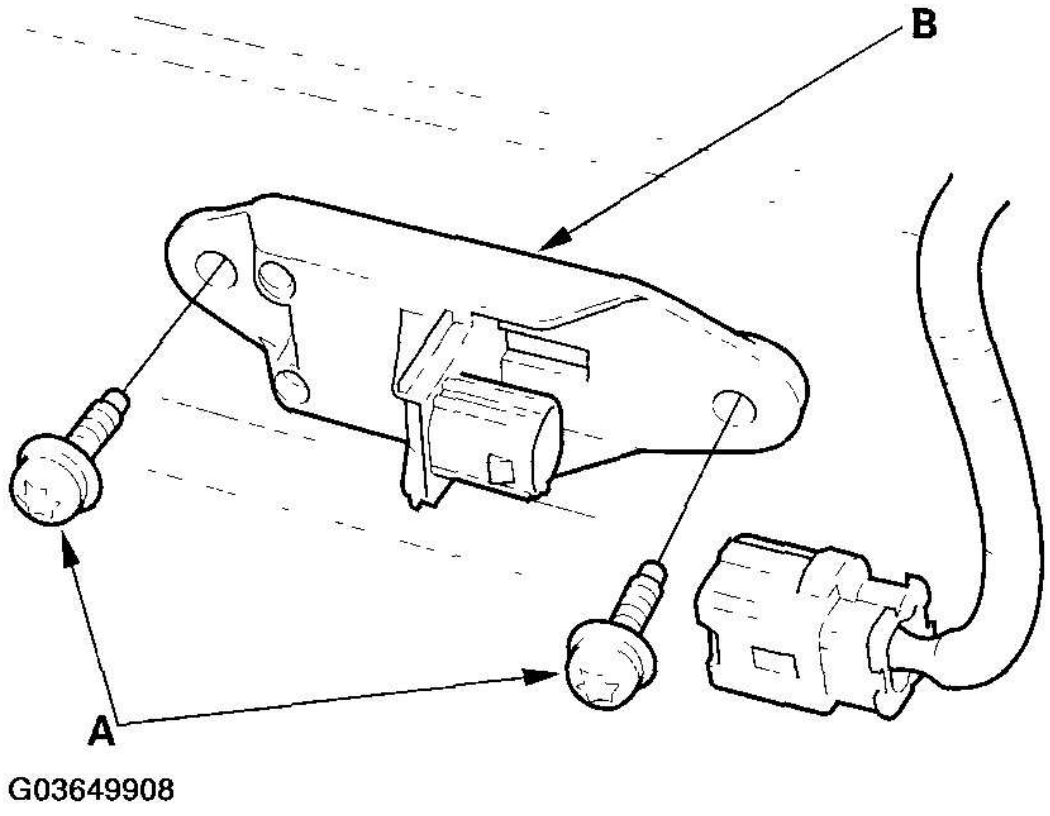


Fig. 349: Removing Side Impact Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INSTALLATION

1. Install the new side impact sensor (first) (A) with the Torx bolts (B), then connect the floor wire harness 2P connector (C) to the side impact sensor.

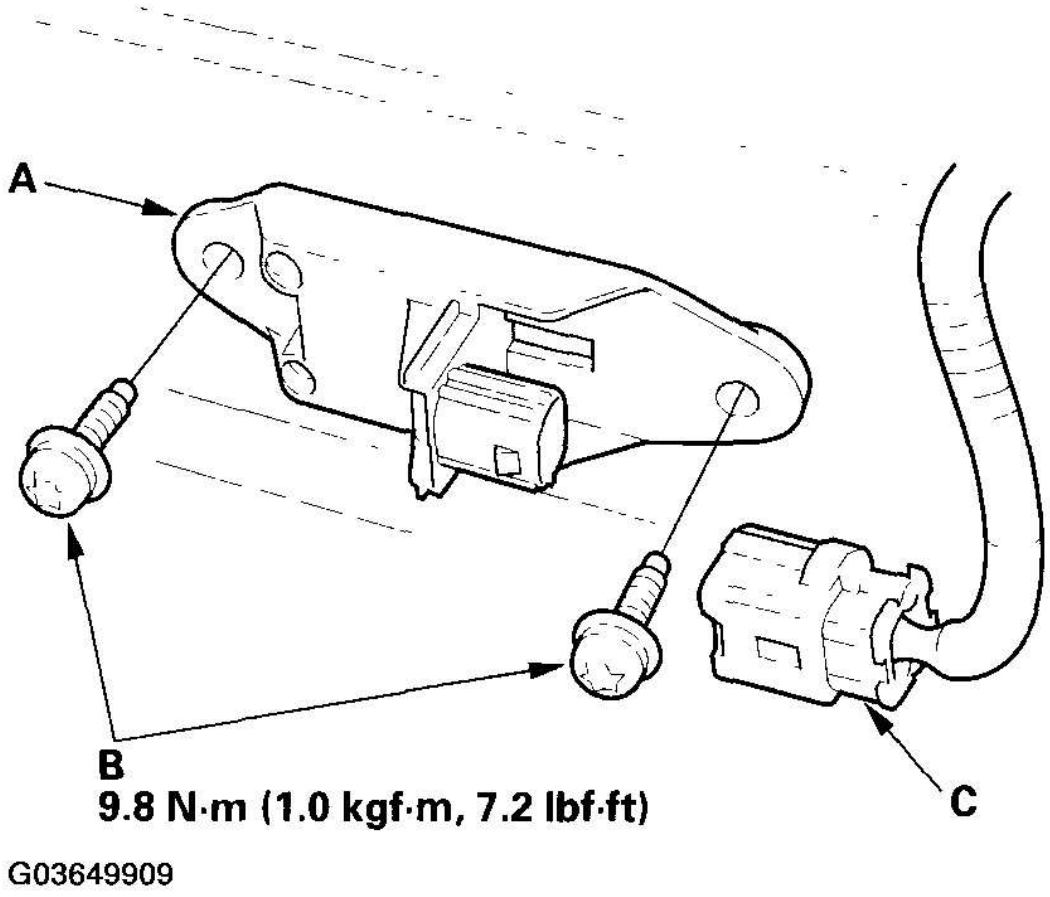


Fig. 350: Installing Side Impact Sensor (First) With Torx Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Reconnect the battery negative cable.
3. Install all removed parts.
4. After installing the side impact sensor (first), confirm proper system operation: Turn the ignition switch ON (II); the SRS indicator should come on for about 6 seconds and then go off.

SIDE IMPACT SENSOR (SECOND) REPLACEMENT

NOTE: Make sure the SRS unit and the impact sensors are of the same manufacturer.

REMOVAL

1. Disconnect the battery negative cable, and wait at least 3 minutes before beginning work.
2. Disconnect the appropriate side curtain airbag 2P connector (see step 5 in **DISCONNECTING SYSTEM CONNECTORS**).
3. Disconnect the side impact sensor (second) 2P connector (A) from the side curtain airbag subharness.

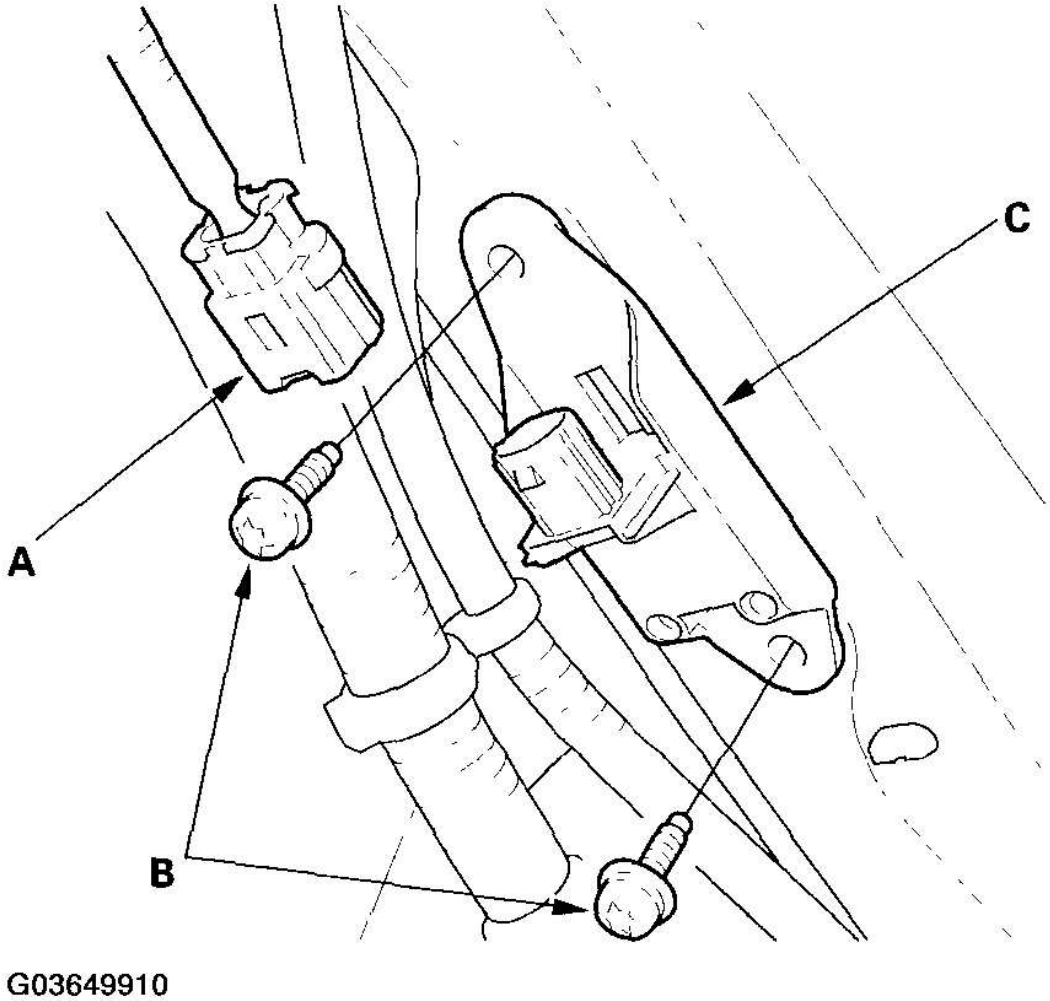


Fig. 351: Disconnecting Side Impact Sensor (Second) 2P Connector From Side Curtain Airbag Subharness

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the Torx bolts (B) using a Torx T30 bit, then remove the side impact sensor (second) (C).

INSTALLATION

1. Install the new side impact sensor (second) (A) with the Torx bolts (B), then connect the side curtain airbag subharness 2P connector (C) to the side impact sensor (second).

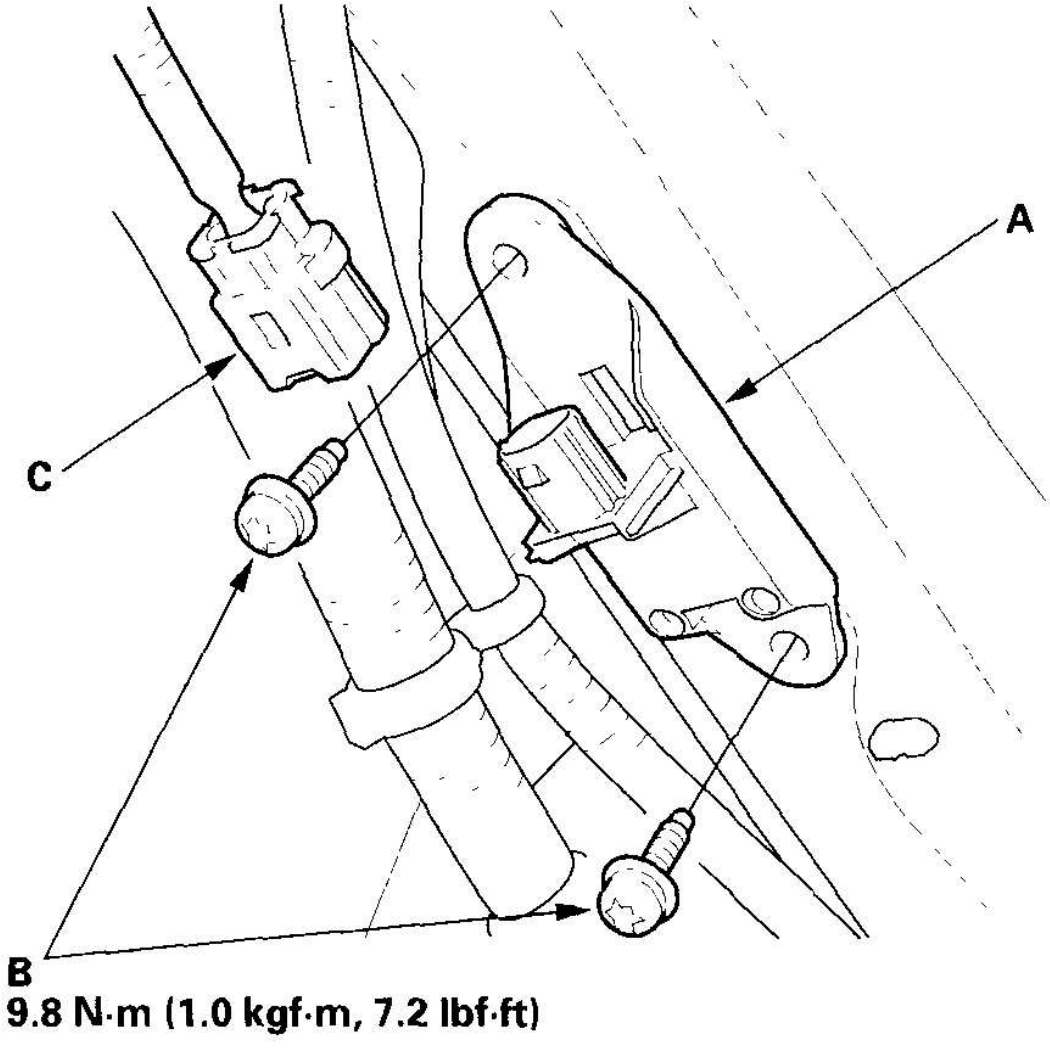


Fig. 352: Installing Side Impact Sensor (Second) With Torx Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Reconnect the battery negative cable.
3. Install all removed parts.
4. After installing the side impact sensor (second), confirm proper system operation: Turn the ignition switch ON (II); the SRS indicator should come on for about 6 seconds and then go off.

OPDS/ODS UNIT REPLACEMENT

NOTE: Review the seat replacement procedure (see FRONT SEAT REMOVAL/INSTALLATION) before doing repairs or service.

REMOVAL

1. Disconnect the battery negative cable, and wait at least 3 minutes before beginning work.
2. Disconnect the front passenger's side airbag harness 2P connector (see step 4 in **DISCONNECTING SYSTEM CONNECTORS**).
3. Remove the front passenger's seat assembly (see **FRONT SEAT REMOVAL/INSTALLATION**) and seat-back cover (see **FRONT SEAT COVER REPLACEMENT**).
4. Remove the cover (A), then disconnect the OPDS unit 8P/ODS unit 18P connector D and sensor connectors (B) from the OPDS/ODS unit (C).

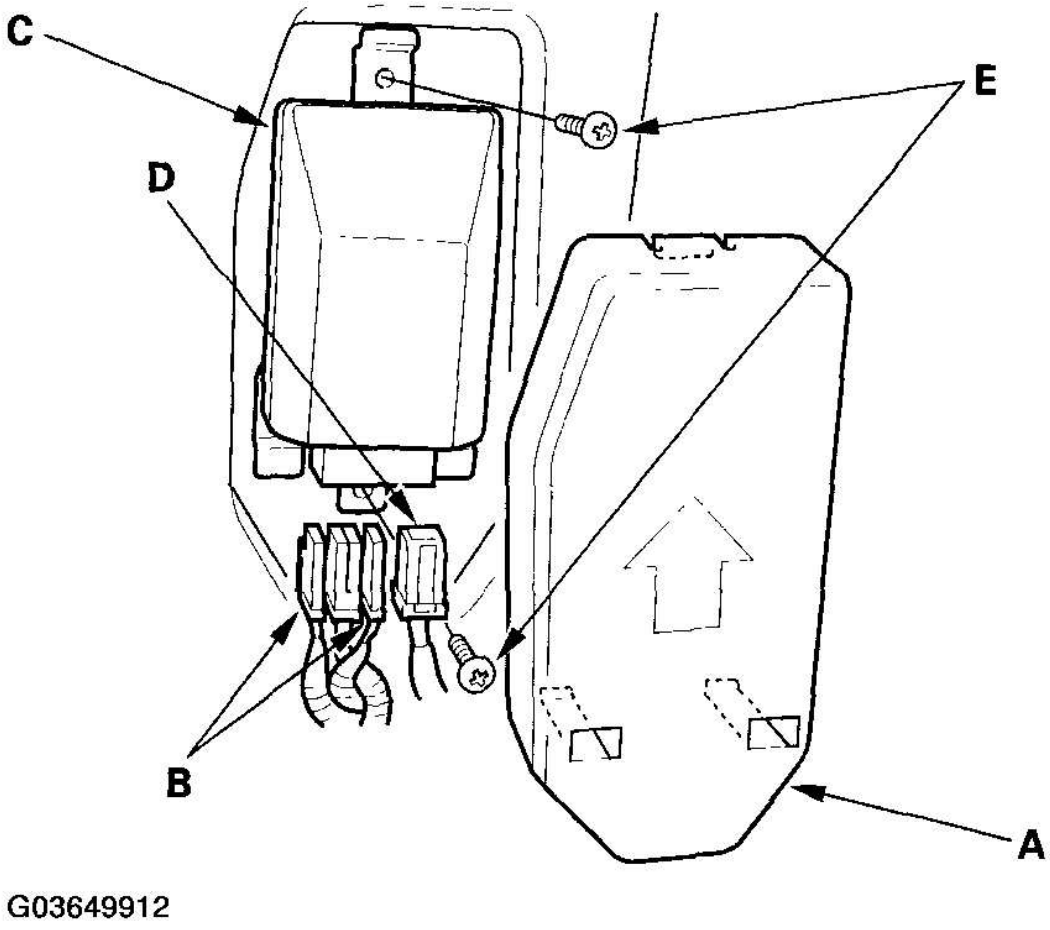


Fig. 353: Disconnecting OPDS Unit 8P/ODS Unit 18P Connector D And Sensor Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the two screws (E) and the OPDS/ODS unit.

INSTALLATION

1. Place the new OPDS/ODS unit (A) on the seat-back frame. Tighten the two screws (B), and connect the OPDS unit harness 8P/ODS unit harness 18P connector D and sensor connectors (C) to the OPDS/ODS unit. Reinstall the cover (E).

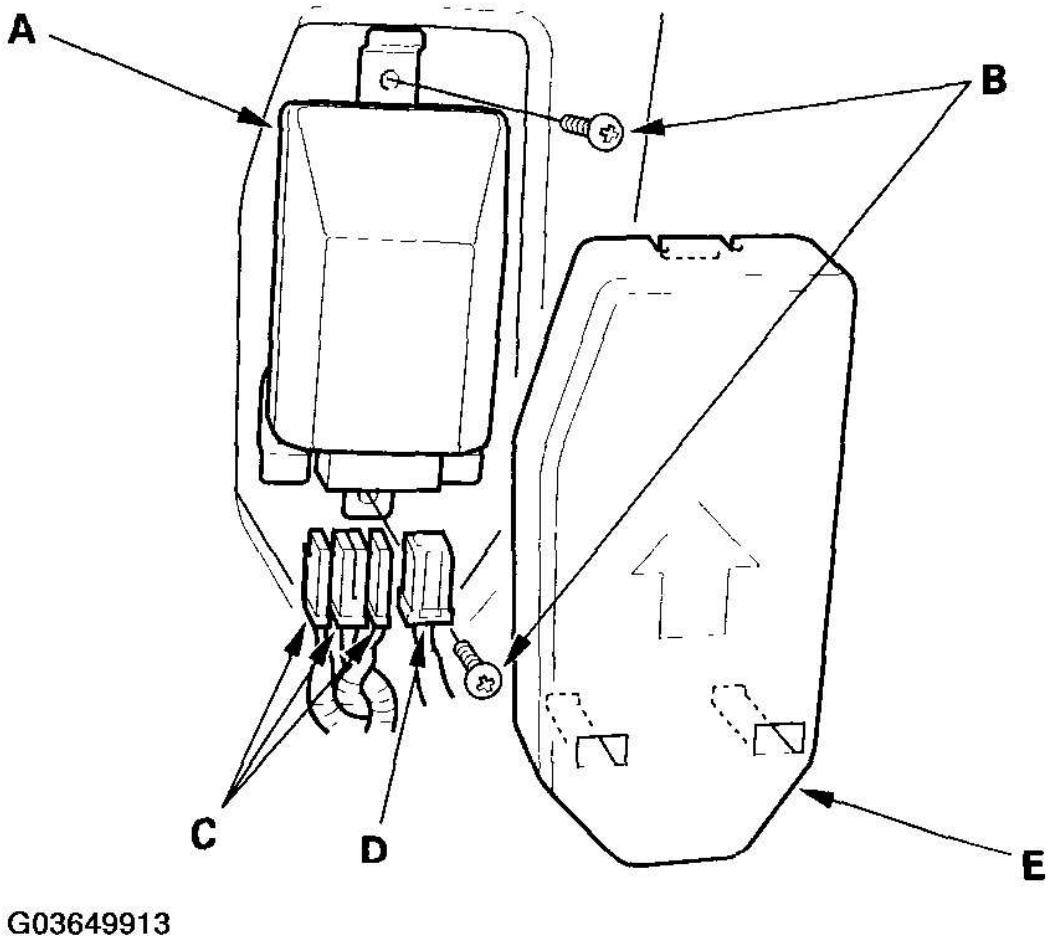


Fig. 354: Placing OPDS/ODS Unit On Seat-Back Frame
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the seat-back cover in the reverse order of removal.
3. Install the front passenger's seat assembly (see **FRONT SEAT REMOVAL/INSTALLATION**), then connect the side airbag harness 2P connector.
4. Reconnect the battery negative cable.
5. Set the seat-back in the normal position, and make sure there is nothing on the front passenger's seat.
6. Initialize the OPDS/ODS unit (see **INITIALIZING THE OPDS/ODS**

UNIT).

7. Calibrate the OPDS/ODS unit ('06-07 model) (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06-07 MODEL)**).
8. After installing the OPDS/ODS unit, confirm proper system operation: Turn the ignition switch ON (II); the SRS indicator should come on for about 6 seconds and then go off.

FRONT IMPACT SENSOR REPLACEMENT

NOTE: Make sure the SRS unit and the impact sensors are of the same manufacturer.

REMOVAL

1. Disconnect the battery negative cable, and wait at least 3 minutes before beginning work.
2. Disconnect the driver's airbag 4P connector (see step 2 in **DISCONNECTING SYSTEM CONNECTORS**), the front passenger's airbag 4P connector (see step 3 in **DISCONNECTING SYSTEM CONNECTORS**), and both seat belt tensioner 2P connectors (see step 6 **DISCONNECTING SYSTEM CONNECTORS**).
3. Remove the front bumper.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
4. Remove the washer reservoir for the right side sensor or the intake air resonator for the left side sensor (see **WASHER RESERVOIR REPLACEMENT**).
5. Disconnect the engine compartment wire harness 2P connector (A), and remove the two Torx bolts (B) using a Torx T30 bit, then remove the front impact sensor (C).

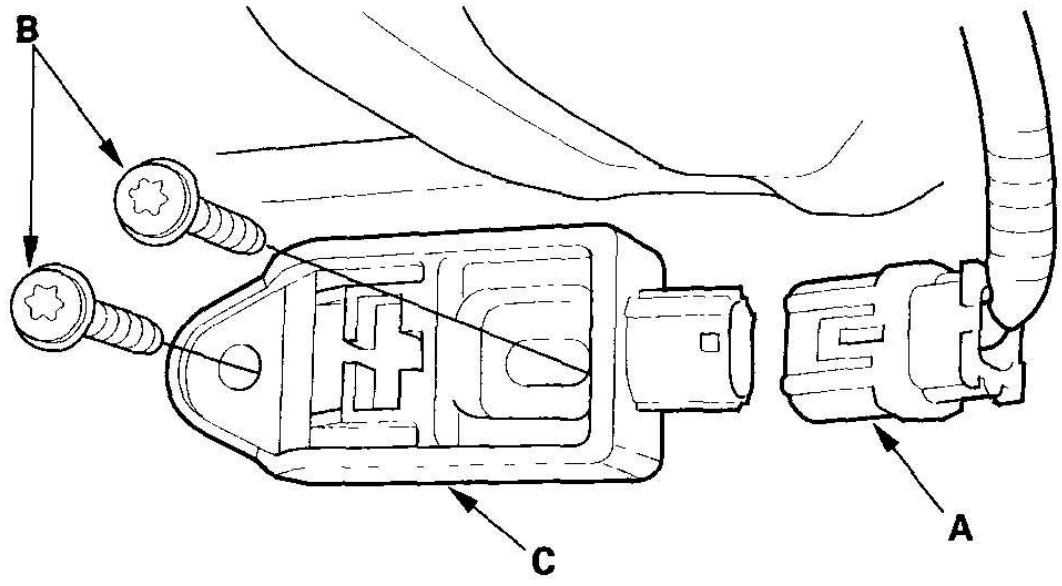


Fig. 355: Disconnecting Engine Compartment Wire Harness 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INSTALLATION

1. Install the new front impact sensor with new Torx bolts (A), then connect the engine compartment wire harness 2P connector (B) to the front impact sensor (C).

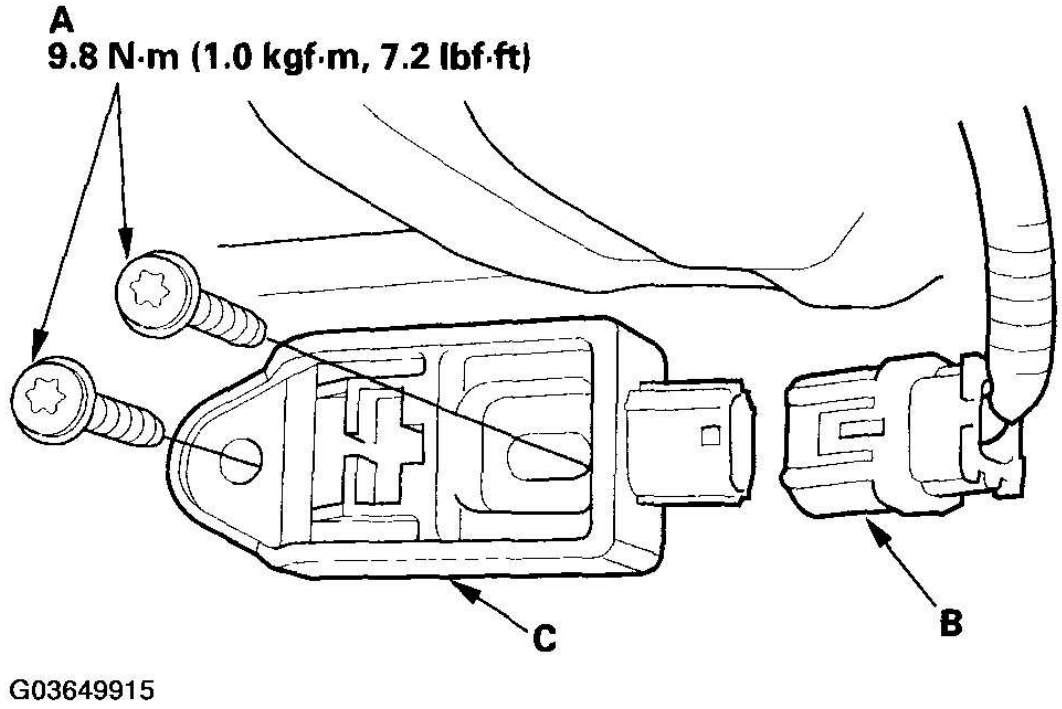


Fig. 356: Installing Front Impact Sensor With Torx Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Reconnect the driver's airbag 4P connector (see **DISCONNECTING SYSTEM CONNECTORS**), the front passenger's airbag 4P connector (see **DISCONNECTING SYSTEM CONNECTORS**), and both seat belt tensioner 4P connectors (see **DISCONNECTING SYSTEM CONNECTORS**).
3. Reconnect the battery negative cable.
4. After installing the front impact sensor, confirm proper system operation: Turn the ignition switch ON (II); the SRS indicator should come on for about 6 seconds and then go off.
5. Install all removed parts.

FRONT PASSENGER'S WEIGHT SENSOR REPLACEMENT

REMOVAL ('04-07 MODELS)

NOTE: Removal of the front passenger's weight sensors must be performed according to the precautions/procedures described at the beginning of SRS (see PRECAUTIONS AND PROCEDURES).

1. Remove the front passenger's seat assembly (see **FRONT SEAT REMOVAL/INSTALLATION**).
2. Remove the tamper-resistant Torx bolts attaching the seat to the weight sensors.
   - 2-door (see **'04-07 MODELS 2-DOOR**)
   - 4-door (see **'04-07 MODELS 4-DOOR**)
3. Remove the front passenger's weight sensors from the seat riser.
   - 2-door (see **'04-07 MODELS 2-DOOR**)
   - 4-door (see **'04-07 MODELS 4-DOOR**)

INSTALLATION ('04-07 MODELS)

NOTE: Be sure to install the harness wires so they are not pinched or interfering with other parts.

1. Place the new front passenger's weight sensors on the front passenger's seat riser.
   - 2-door (see **'04-07 MODELS 2-DOOR**)
   - 4-door (see **'04-07 MODELS 4-DOOR**)
2. Install the seat onto the weight sensors.
3. Reinstall the front passenger's seat assembly (see **FRONT SEAT REMOVAL/INSTALLATION**).
4. Reconnect the battery negative cable.
5. Calibrate the front passenger's weight sensor unit (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06-07 MODEL)**) ('03-05 models) ODS unit ('06 model) (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06-07 MODEL)**).

6. After installing the front passenger's weight sensors, confirm proper system operation: Turn the ignition switch ON (II); the SRS indicator should come on for about 6 seconds and then go off.

FRONT PASSENGER'S WEIGHT SENSOR UNIT REPLACEMENT

NOTE: Review the seat replacement procedure (see FRONT SEAT REMOVAL/INSTALLATION) before performing repair or service.

REMOVAL ('04-05 MODELS)

1. Make sure you have the anti-theft codes for the audio and the navigation system, then write down the audio presets.
2. Slide the seat all the way to the rear.
3. Disconnect the battery negative cable, and wait at least 3 minutes before beginning work.
4. Disconnect the front passenger's airbag 4P connector (see step 3 in **DISCONNECTING SYSTEM CONNECTORS**).
5. Disconnect the connectors. Remove the mounting nuts (A) and the front passenger's weight sensor unit (B) from the seat riser.

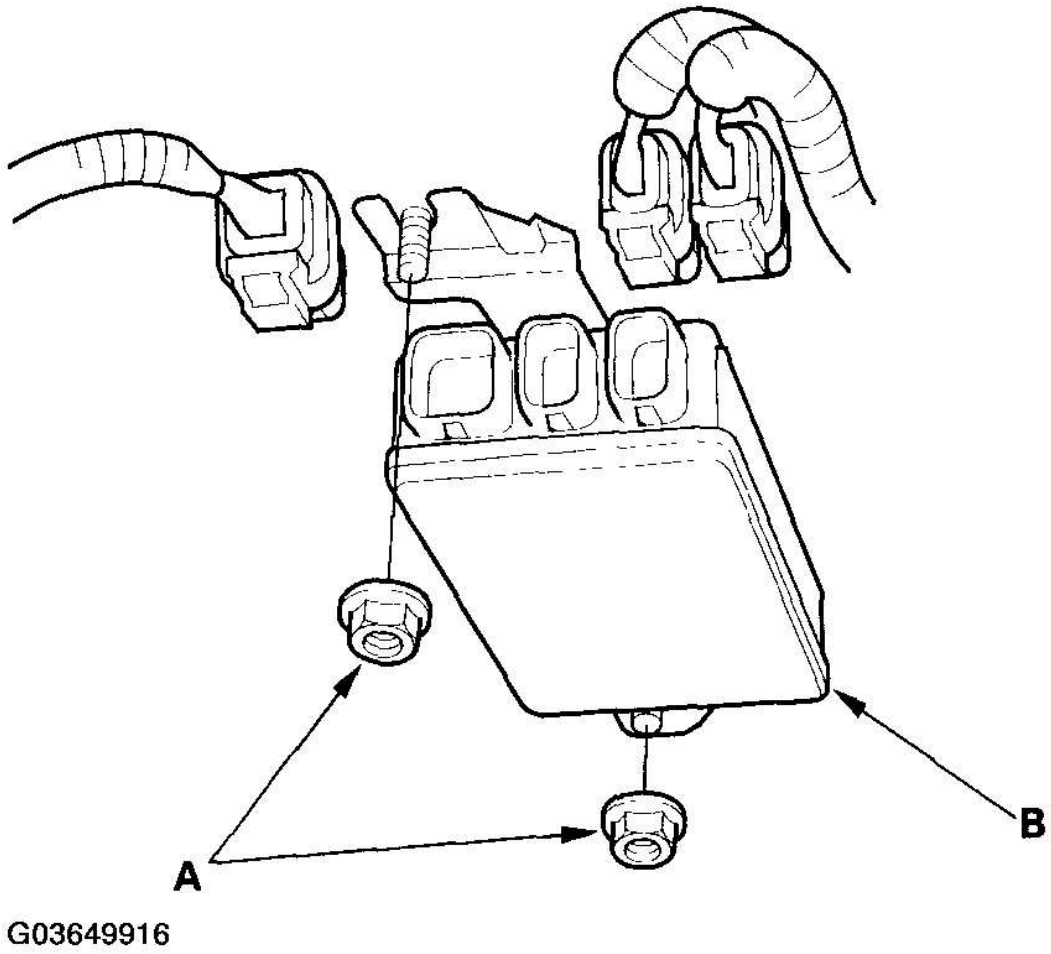


Fig. 357: Removing Mounting Nuts And Front Passenger's Weight Sensor Unit From Seat Riser
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INSTALLATION ('04-05 MODELS)

NOTE: Be sure to install the harness wires so they are not pinched or interfering with other parts.

1. Place the new front passenger's weight sensor unit on the seat riser. Tighten the two mounting nuts (A) and connect the connectors.

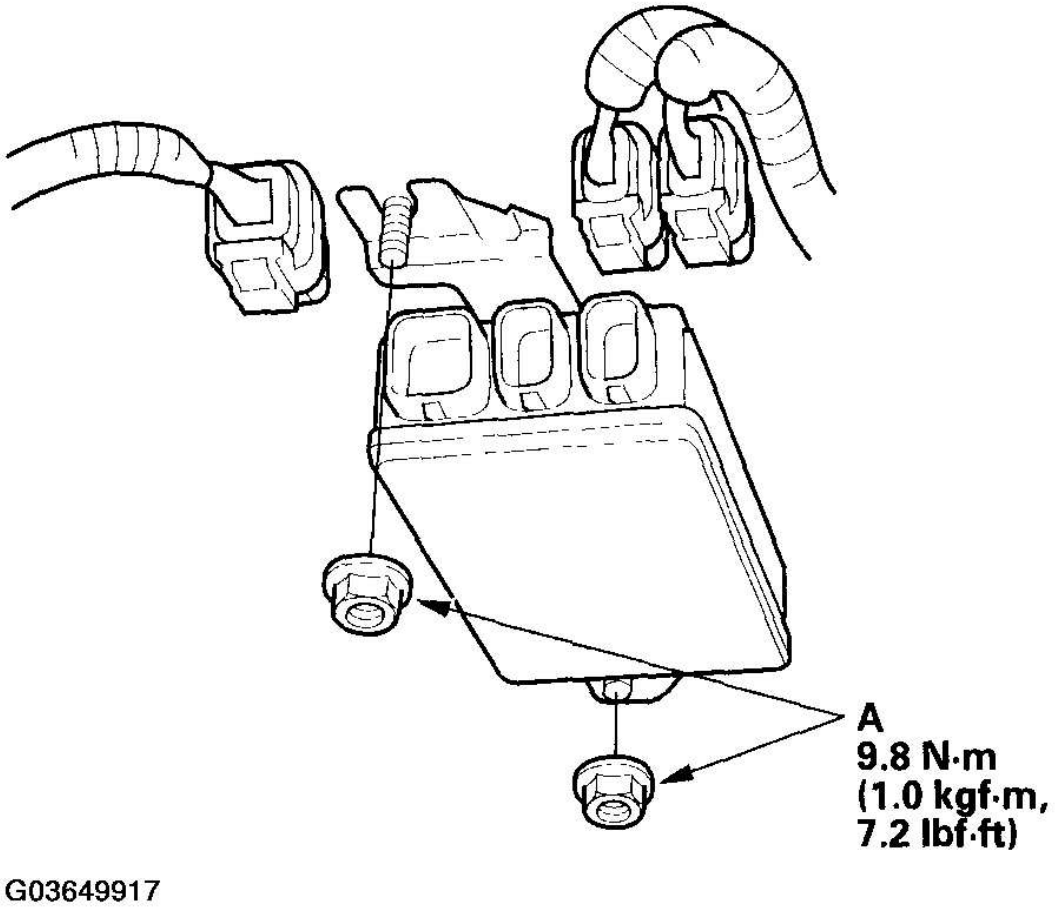


Fig. 358: Tightening Mounting Nuts And Connecting Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Reconnect the front passenger's airbag 4P connector (see **GENERAL TROUBLESHOOTING INFORMATION**).
3. Reconnect the battery negative cable.
4. Calibrate the front passenger's weight sensor unit (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06-07 MODEL)**).
5. After installing the front passenger's weight sensor unit, confirm proper system operation: Turn the ignition switch ON (II); the SRS indicator should come on for about 6 seconds and then go off.

6. Enter the anti-theft codes for the audio and the navigation system, then enter the customer's audio presets, and set the clock.

DRIVER'S SEAT POSITION SENSOR REPLACEMENT

REMOVAL ('04-07 MODELS)

NOTE:

- **Removal of the driver's seat position sensor must be performed according to the precautions/procedures described at the beginning of SRS (see PRECAUTIONS AND PROCEDURES).**
- **Before disconnecting the driver's seat position sensor 2P connector, disconnect the driver's airbag 4P connector.**
- **Do not turn the ignition switch ON (II), and do not connect the battery negative cable while removing the driver's seat position sensor.**

1. Make sure you have the anti-theft codes for the audio and the navigation system, then write down the audio presets.
2. Disconnect the battery negative cable, and wait at least 3 minutes before beginning work.
3. Remove the driver's seat assembly (see **FRONT SEAT REMOVAL/INSTALLATION**).
4. Disconnect the floor wire harness or seat position sensor harness 2P connector (A) from the driver's seat position sensor.

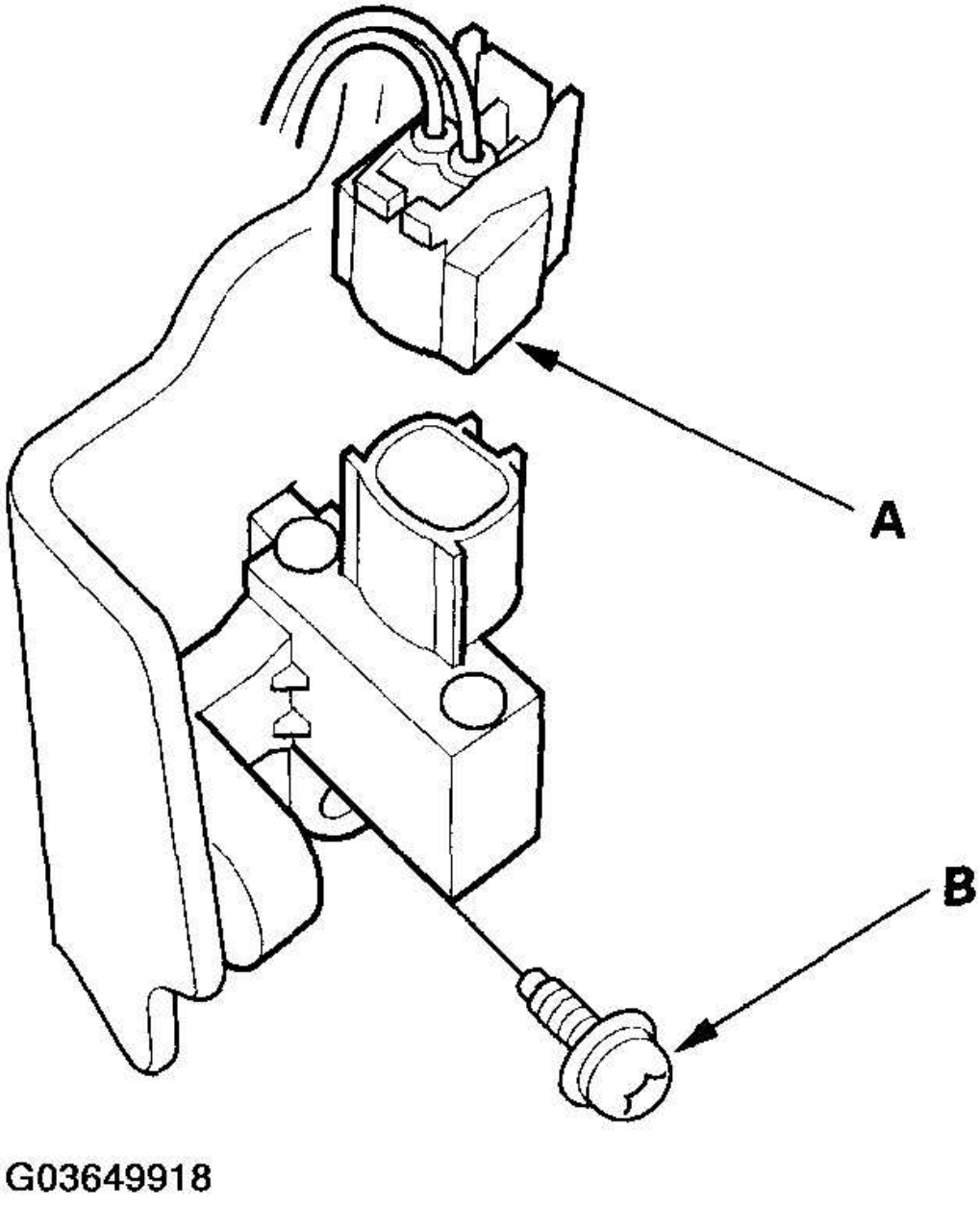


Fig. 359: Disconnecting Floor Wire Harness Or Seat Position Sensor Harness 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Using a Torx T30 bit, remove the Torx bolt (B), then remove the driver's seat position sensor.

INSTALLATION ('04-07 MODELS)

NOTE:

- **Be sure to install the harness wires so they are not pinched or interfering with other parts.**
- **Do not turn the ignition switch ON (II), and do not connect the battery negative cable while installing the driver's seat position sensor.**
- **After installing the driver's seat position sensor, make sure it is clean. Keep it away from dust.**

1. Install the new driver's seat position sensor with a Torx bolt (A), then connect the floor wire harness or seat position sensor harness 2P connector to the driver's seat position sensor (B).

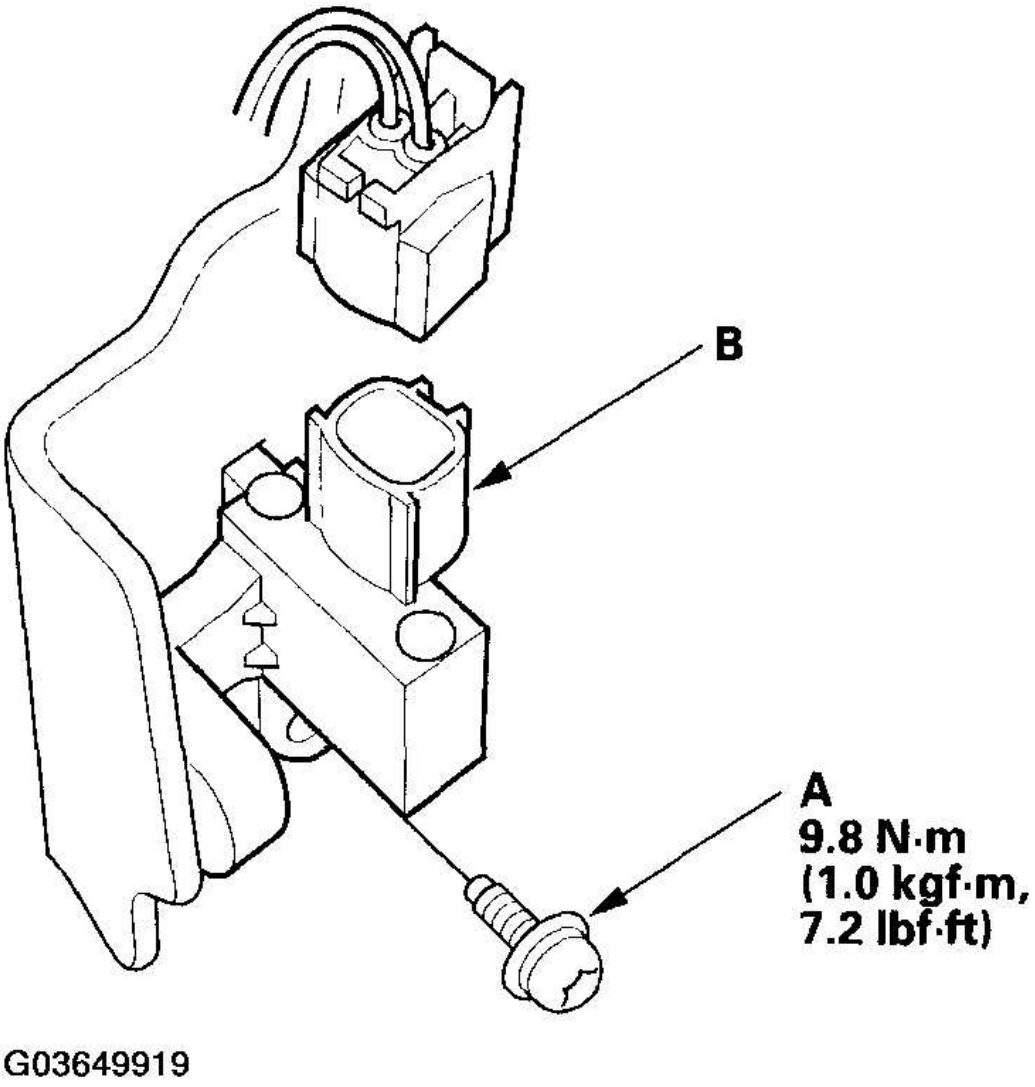


Fig. 360: Installing Driver's Seat Position Sensor With Torx Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the driver's seat assembly (see **FRONT SEAT REMOVAL/INSTALLATION**).
3. Reconnect the battery negative cable.
4. Check the operation of the driver's seat position sensor with the HDS (see **OPERATION CHECK OF THE DRIVER'S SEAT POSITION**

SENSOR).

5. Enter the anti-theft codes for the audio and navigation system, then enter the customer's audio presets, and set the clock.

PASSENGER'S AIRBAG CUTOFF INDICATOR ILLUMINATION BULB TEST

'04-07 MODELS

1. Remove the upper panel (see **UPPER PANEL REMOVAL/INSTALLATION**).
2. Push out the passenger's airbag cutoff indicator (A) from behind the upper panel.

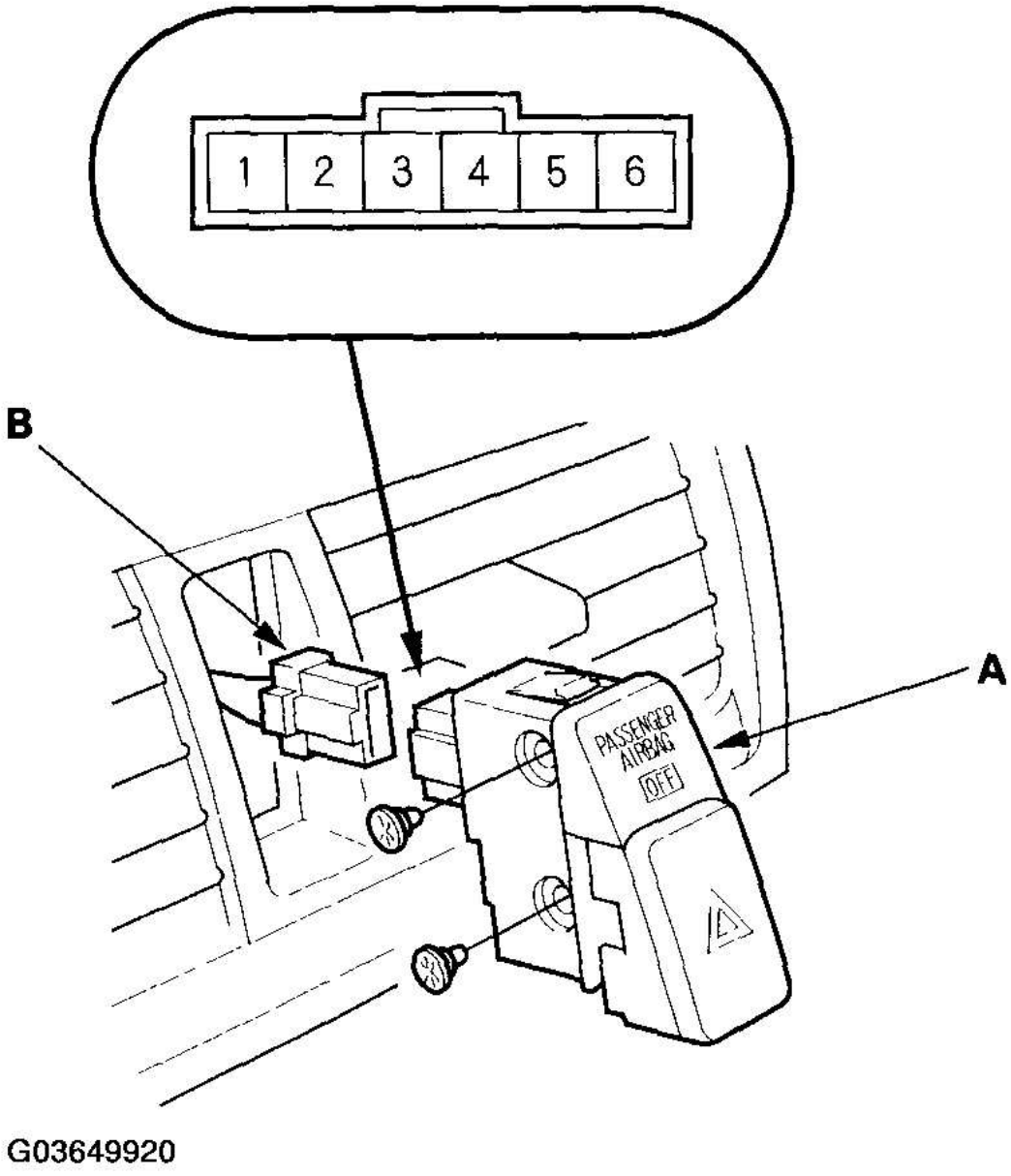


Fig. 361: Removing Passenger's Airbag Cutoff Indicator (A) From Behind Upper Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the 6P connector (B) from the passenger's airbag cutoff indicator.
4. Check for continuity between the No. 3 and No. 4 terminals of the indicator. If

there is no continuity, replace the bulb.

5. Install the parts in the reverse order of removal.

2003-07 BRAKES

ABS (Anti-Lock Brake System) - Accord

COMPONENT LOCATION INDEX

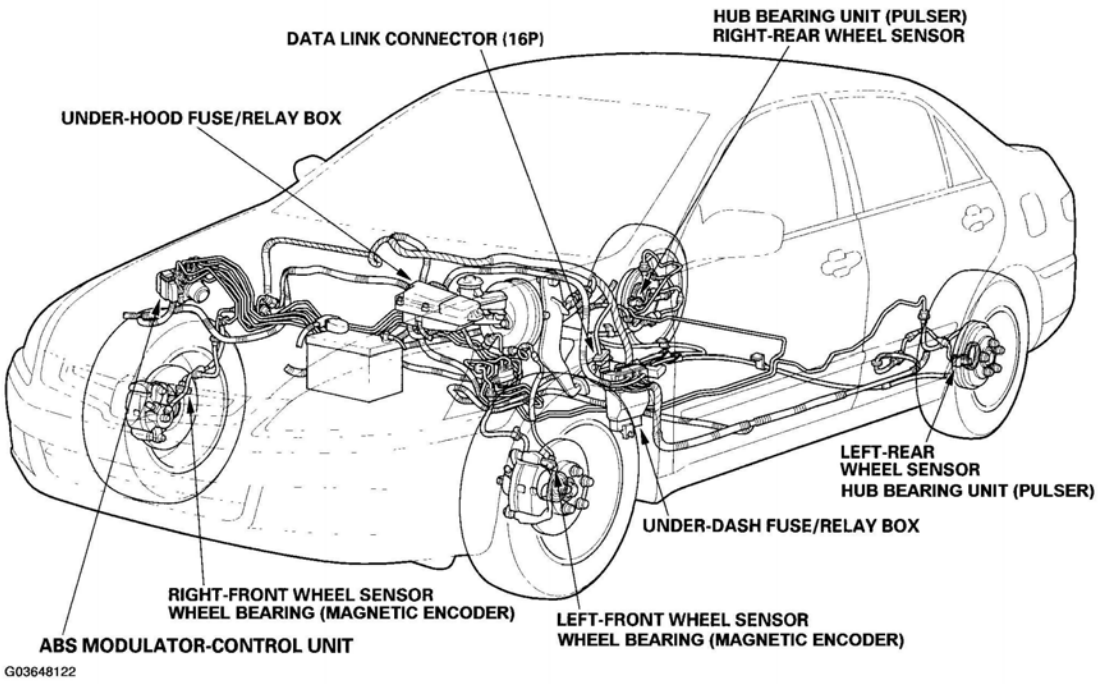


Fig. 1: Identifying ABS (Anti - Lock Brakes) System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

ABS INDICATOR

- If the system is OK, the ABS indicator goes off 2 seconds after turning the ignition switch ON (II).
- The ABS indicator comes on when the ABS modulator-control unit detects a problem in the system. However, even though the system is operating properly, the indicator will come on under these conditions:
  - Only the drive wheels rotate
  - One drive wheel is stuck
  - The vehicle goes into a spin

- The ABS continues to operate for a long time
- The vehicle is subjected to an electrical signal disturbance

To determine the actual cause of the problem, question the customer about the problem, taking the conditions into consideration.

- When a problem is detected and the ABS indicator comes on, there are cases when the indicator stays on until the ignition switch is turned OFF, and cases when the indicator goes off automatically when the system returns to normal.
  - DTC 61 or 62: The ABS indicator goes off automatically when the system returns to normal.
  - DTC 11, 13, 15, 17, 31, 32, 33, 34, 35, 36, 37, 38, 54, 71, or 81: The ABS indicator stays on until the ignition switch is turned OFF whether or not the system returns to normal.
  - DTC 12, 14, 16, 18, 21, 22, 23, 24, 41, 42, 43, 44, 51, 52, or 53: The ABS indicator goes off after the ignition switch is turned OFF and then back ON (II), the vehicle is driven, and the system is OK.

BRAKE SYSTEM INDICATOR

The brake system indicator in the gauge control module will come on under these conditions:

- Parking brake lever pulled up
- Low brake fluid in the brake master cylinder reservoir
- ABS modulator-control unit detects a problem that affects the EBD

DIAGNOSTIC TROUBLE CODE (DTC)

- The memory can hold any number of DTCs. However, when the same DTC is detected more than once, the more recent DTC is written over the earlier one. Therefore, when the same problem is detected repeatedly, it is memorized as a single DTC.
- The DTCs are indicated in the order they occurred, beginning with the most recent.
- The DTCs are memorized in the EEPROM (nonvolatile memory). Therefore,

the memorized DTCs are not cleared when the battery is disconnected, the ignition switch is turned off, or the system returns to normal. Do the specified procedures to clear the DTCs.

SELF-DIAGNOSIS

- Self-diagnosis can be classified into two categories:

  - Initial diagnosis:

    Done right after the ignition switch is turned ON (II) and until the ABS indicator goes off

  - Regular diagnosis:

    Done right after the initial diagnosis until the ignition switch is turned OFF

- When a problem is detected by self-diagnosis, the system does the following:
  - Turns the ABS indicator and possibly the brake system indicator on
  - Memorizes the DTC
  - Stops ABS operation

KICKBACK

The pump motor operates when the ABS modulator-control unit is functioning, and the fluid in the reservoir is forced back to the master cylinder, causing kickback at the brake pedal.

PUMP MOTOR

- The pump motor operates when the ABS modulator-control unit is functioning.
- The ABS modulator-control unit checks the pump motor operation when the vehicle is driven the first time after the ignition switch is turned ON (II). You may hear the motor operate at this time, but it is normal.

HOW TO TROUBLESHOOT DTCS

The troubleshooting flowchart procedures assume that the cause of the problem is

still present, and the ABS indicator and possibly the brake system indicator are still on. Following the flowchart when the ABS indicator does not come on can result in incorrect diagnosis. The connector illustrations show the female terminal connectors with a single outline and the male terminal connectors with a double outline.

1. Question the customer about the conditions when the problem occurred, and try to reproduce the same conditions for troubleshooting. Find out when the ABS indicator and possibly the brake system indicator came on, such as during ABS control, after ABS control, when the vehicle was at a certain speed, etc.
2. Clear the code and, test-drive the vehicle. If the code resets immediately, refer to **DTC TROUBLESHOOTING INDEX** .
3. When the ABS indicator and possibly the brake system indicator does not come on during the test-drive, but troubleshooting is done based on the DTC, check for loose connectors, poor terminal contact, etc., before you start troubleshooting.
4. After troubleshooting, clear the DTC, and test-drive the vehicle. Make sure the ABS indicator and possibly the brake system indicator does not come on.

HOW TO RETRIEVE DTCS

1. With the ignition switch OFF, connect the Honda Diagnostic System (HDS) to the 16P data link connector (DLC) (A) under the left side of the dashboard.

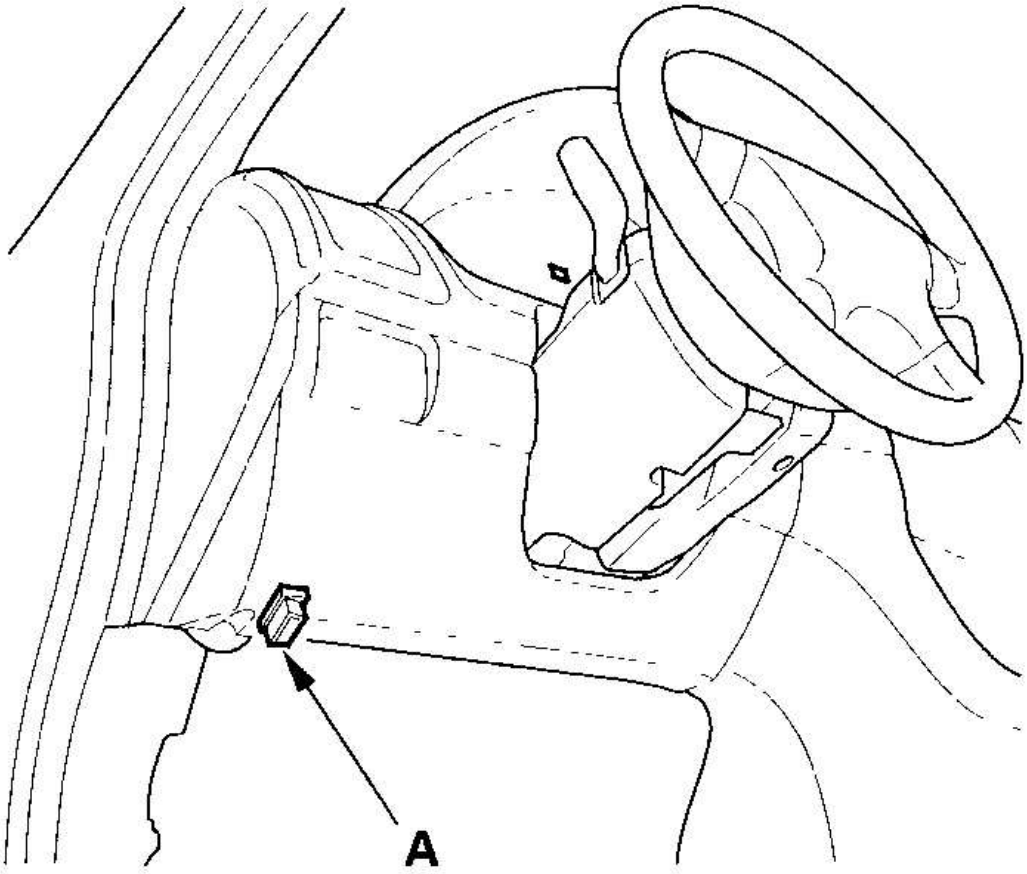


Fig. 2: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Turn the ignition switch ON (II), and follow the prompts on the HDS to display the ABS DTC(s) on the screen. After determining the DTC, refer to **DTC TROUBLESHOOTING INDEX** .

NOTE: See the HDS Help menu for specific instructions.

HOW TO CLEAR DTCS

1. With the ignition switch OFF, connect the HDS to the 16P data link connector

(DLC) (A) under the left side of the dashboard.

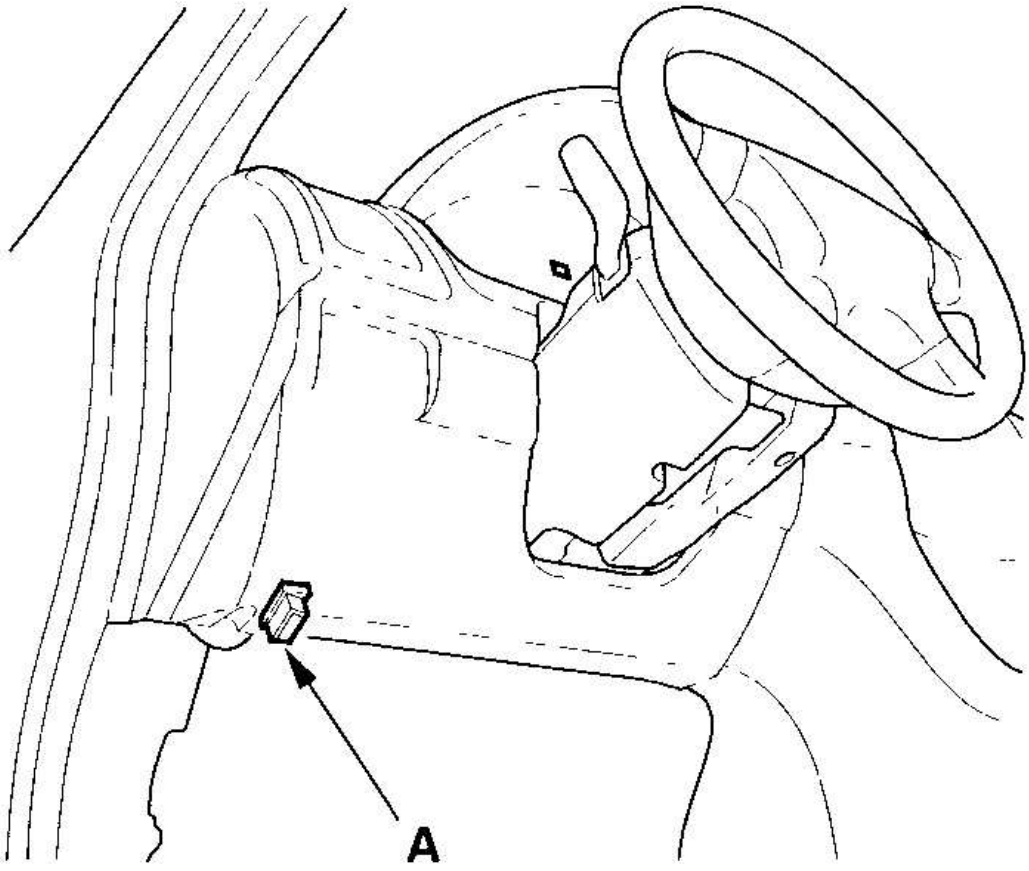


Fig. 3: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Turn the ignition switch ON (II), and clear the DTC(s) by following the screen prompts on the HDS.

NOTE: See the HDS Help menu for specific instructions.

DTC TROUBLESHOOTING INDEX

DTC TROUBLESHOOTING INDEX

DTC	ABS indicator	Brake system indicator	Detection Item	Troubleshooting
11	ON	ON or OFF (1), (2)	Right-front wheel sensor (open/short to body ground/short to power)	(see **DTC 11, 13, 15, 17: WHEEL SENSOR (OPEN/SHORT TO BODY GROUND/SHORT TO POWER)**)
12	ON	ON or OFF (1), (2)	Right-front wheel sensor (electrical noise/intermittent interruption)	(see **DTC 12, 14, 16, 18: WHEEL SENSOR (ELECTRICAL NOISE/INTERMITTENT INTERRUPTION)**)
13	ON	ON or OFF (1), (2)	Left-front wheel sensor (open/short to body ground/short to power)	(see **DTC 11, 13, 15, 17: WHEEL SENSOR (OPEN/SHORT TO BODY GROUND/SHORT TO POWER)**)
14	ON	ON or OFF (1), (2)	Left-front wheel sensor (electrical noise/intermittent interruption)	(see **DTC 12, 14, 16, 18: WHEEL SENSOR (ELECTRICAL NOISE/INTERMITTENT INTERRUPTION)**)
15	ON	ON or OFF (1), (2)	Right-rear wheel sensor (open/short to body ground/short to power)	(see **DTC 11, 13, 15, 17: WHEEL SENSOR (OPEN/SHORT TO BODY GROUND/SHORT TO POWER)**)
16	ON	ON or OFF	Right-rear wheel sensor (electrical	(see **DTC 12, 14, 16, 18: WHEEL SENSOR (ELECTRICAL**

		(1), (2)	noise/intermittent interruption)	**NOISE/INTERMITTENT INTERRUPTION)**)
17	ON	ON or OFF (1), (2)	Left-rear wheel sensor (open/short to body ground/short to power)	(see **DTC 11, 13, 15, 17: WHEEL SENSOR (OPEN/SHORT TO BODY GROUND/SHORT TO POWER)**)
18	ON	ON or OFF (1), (2)	Left-rear wheel sensor (electrical noise/intermittent interruption)	(see **DTC 12, 14, 16, 18: WHEEL SENSOR (ELECTRICAL NOISE/INTERMITTENT INTERRUPTION)**)
21	ON	ON or OFF (1), (2)	Right-front magnetic encoder	(see **DTC 21, 22: MAGNETIC ENCODER (FRONT)**)
22	ON	ON or OFF (1), (2)	Left-front magnetic encoder	(see **DTC 21, 22: MAGNETIC ENCODER (FRONT)**)
23	ON	ON or OFF (1), (2)	Right-rear pulser	(see **DTC 23, 24: PULSER (REAR)**)
24	ON	ON or OFF (1), (2)	Left-rear pulser	(see **DTC 23, 24: PULSER (REAR)**)
31	ON	ON	Solenoid	(see **DTC 31, 32, 33, 34, 35, 36, 37, 38: SOLENOID**)
32	ON	ON	Solenoid	(see **DTC 31, 32, 33, 34, 35, 36, 37, 38: SOLENOID**)
33	ON	ON	Solenoid	(see **DTC 31, 32, 33, 34, 35, 36, 37, 38: SOLENOID**)
				(see **DTC 31, 32, 33, 34,**

34	ON	ON	Solenoid	**35, 36, 37, 38: SOLENOID**)
35	ON	ON	Solenoid	(see **DTC 31, 32, 33, 34, 35, 36, 37, 38: SOLENOID**)
36	ON	ON	Solenoid	(see **DTC 31, 32, 33, 34, 35, 36, 37, 38: SOLENOID**)
37	ON	ON	Solenoid	(see **DTC 31, 32, 33, 34, 35, 36, 37, 38: SOLENOID**)
38	ON	ON	Solenoid	(see **DTC 31, 32, 33, 34, 35, 36, 37, 38: SOLENOID**)
41	ON	ON or OFF (1), (2)	Right-front wheel lock	(see **DTC 41, 42, 43, 44: WHEEL LOCK**)
42	ON	ON or OFF (1), (2)	Left-front wheel lock	(see **DTC 41, 42, 43, 44: WHEEL LOCK**)
43	ON	ON or OFF (1), (2)	Right-rear wheel lock	(see **DTC 41, 42, 43, 44: WHEEL LOCK**)
44	ON	ON or OFF (1), (2)	Left-rear wheel lock	(see **DTC 41, 42, 43, 44: WHEEL LOCK**)
51	ON	ON	Motor lock	(see **DTC 51: MOTOR LOCK**)
52	ON	ON	Motor stuck OFF	(see **DTC 52: MOTOR STUCK OFF**)
53	ON	ON	Motor stuck ON	(see **DTC 53: MOTOR STUCK ON**)
54	ON	ON	ABS fail-safe relay	(see **DTC 54: ABS FAIL-SAFE RELAY; DTC 61: LOW +B-FSR VOLTAGE**)

61	ON	ON or OFF	Low +B-FSR voltage	(see **DTC 61: LOW +B-FSR VOLTAGE**)
62	ON	ON	High +B-FSR voltage	(see **DTC 62: HIGH +B-FSR VOLTAGE**)
71	ON	ON	Different diameter tire	(see **DTC 71: DIFFERENT DIAMETER TIRE**)
81	ON	ON	Central processing unit (CPU) diagnosis, and ROM/RAM diagnosis	(see **DTC 81: CENTRAL PROCESSING UNIT (CPU) DIAGNOSIS, AND ROM/RAM DIAGNOSIS**)

(1) With EBD type.

(2) Braike system indicator turns ON when 2 or more wheel fail.

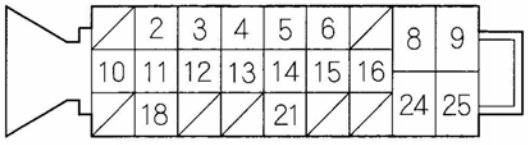
SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure
ABS indicator does not come on	ABS Indicator Circuit Troubleshooting (see **SYMPTOM TROUBLESHOOTING**)
ABS indicator does not go off, and no DTCs are stored	ABS Indicator Circuit Troubleshooting (see **ABS indicator does not go off, and no DTCs are stored**)
Brake system indicator does not come on	Brake System Indicator Circuit Troubleshooting (see **BRAKE SYSTEM INDICATOR DOES NOT COME ON**)
Brake system indicator does not go off, and no DTCs are stored	Brake System Indicator Circuit Troubleshooting (see **BRAKE SYSTEM INDICATOR DOES NOT GO OFF, AND NO DTCS ARE STORED**)

SYSTEM DESCRIPTION

ABS MODULATOR-CONTROL UNIT INPUTS AND OUTPUTS FOR 25P CONNECTOR

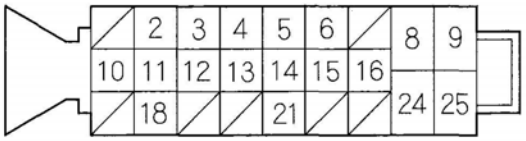


Wire side of female terminals

Terminal number	Wire color	Terminal sign	Description	Measurement (Disconnect the ABS modulator-control unit 25P connector)			
				Terminals	Conditions		Voltage
2	GRN/BLK	FR +B	Detects right-front wheel sensor signal	———	———		———
3	BRN/WHT	FL-GND	Detects left-front wheel sensor signal	———	———		———
4	WHT/BLK	STOP	Detects brake switch signal	4—GND	Brake pedal	Pressed	Battery Voltage
						Released	Below 0.3 V
5	RED	RL-GND	Detects left-rear wheel sensor signal	———	———		———
6	GRN/YEL	RR +B	Detects right-rear wheel sensor signal	———	———		———
8	WHT	+B-FSR	Power source for the fail-safe relay	8—GND	At all times		Battery Voltage
9	WHT/RED	+B-MR	Power source for the motor relay	9—GND	At all times		Battery Voltage

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Fig. 4: Identifying ABS Modulator-Control Unit Inputs And Outputs For 25P Connector (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



Wire side of female terminals

Terminal number	Wire color	Terminal sign	Description	Measurement (Disconnect the ABS modulator-control unit 25P connector)			
				Terminals	Conditions		Voltage
10	BLU	K-LINE	Communications with HDS	—	—		—
11	BLK/RED BLK/YEL *	EBD	Drives brake system indicator	11—GND	Brake system indicator	OFF	Battery Voltage
						ON	Battery Voltage (via brake fluid level switch or parking brake switch)
						ON	Below 0.3 V (via ABS modulator-control unit)
12	BLU/WHT	FL +B	Detects left-front wheel sensor signal	—	—		—
13	BRN	SCS	DTC indication	—	—		—
14	YEL/RED	RL +B	Detects left-rear wheel sensor signal	—	—		—
15	BLU/YEL	RR-GND	Detects right-rear wheel sensor signal	—	—		—
16	BLK/RED	IG1	Power source for activating the system	16—GND	Ignition switch ON (II)		Battery Voltage
18	PNK	FR-GND	Detects right-front wheel sensor signal	—	—		—
21	BLU/RED	ABS	Drives ABS indicator	21—GND	ABS indicator (Ignition switch ON (II))	ON	About 6 V
						OFF	Below 0.3 V
24	BLK	GND	Ground for the ABS modulator-control unit	24—GND	At all times		0 V
25	BLK	MR-GND	Ground for the pump motor	25—GND	At all times		0 V

* : '06-07 models

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Fig. 5: Identifying ABS Modulator-Control Unit Inputs And Outputs For 25P Connector (2 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

FEATURES

When the brake pedal is pressed during driving, the wheels can lock before the vehicle comes to a stop. In such an event, the maneuverability of the vehicle is reduced if the front wheels are locked, and the stability of the vehicle is reduced if

the rear wheels are locked, creating an extremely unstable condition. The ABS precisely controls the slip rate of the wheels to ensure maximum grip force from the tires, thereby ensuring the maneuverability and stability of the vehicle.

The ABS calculates the slip rate of the wheels based on the vehicle speed and the wheel speed, then it controls the brake fluid pressure to reach the target slip rate.

Grip Force of Tire and Road Surface

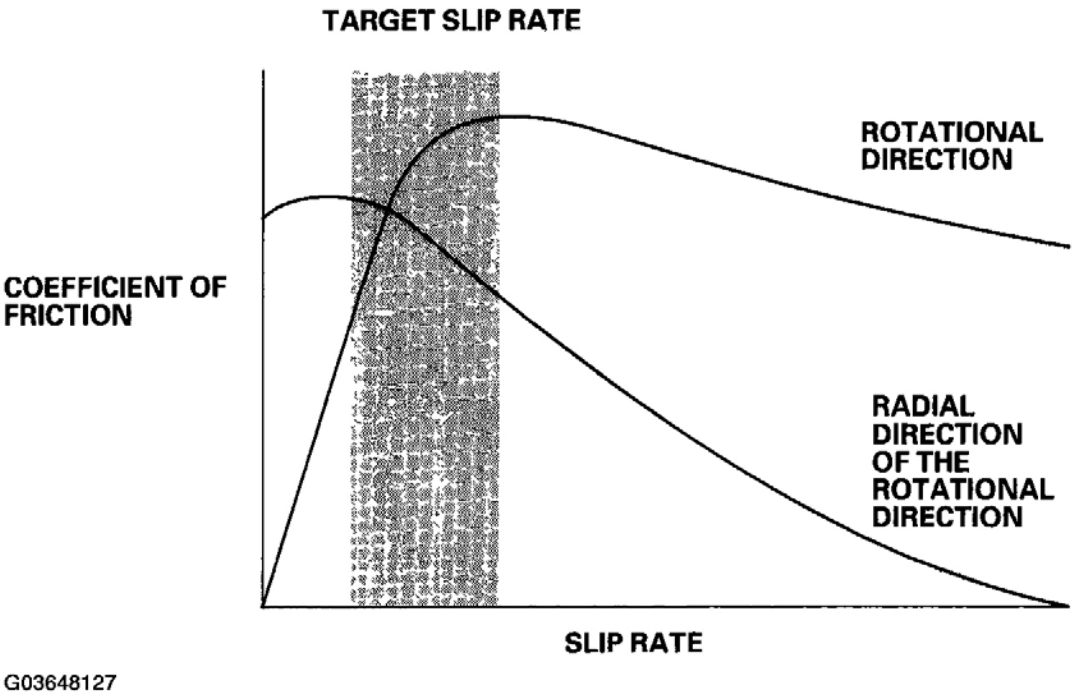
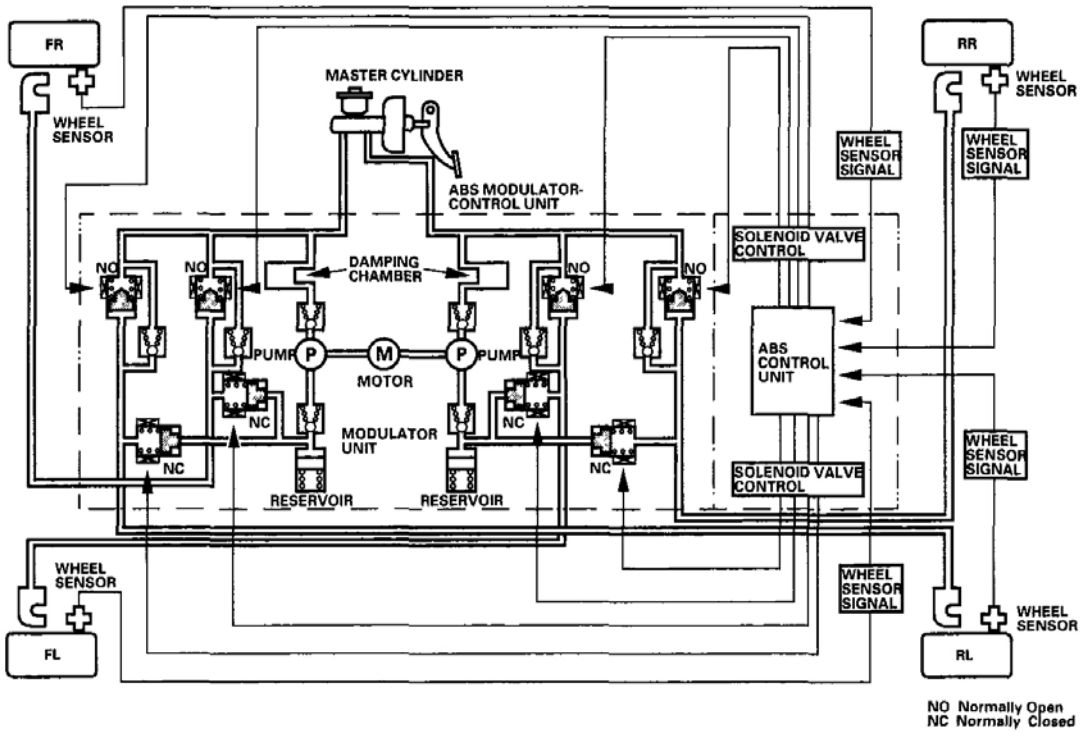


Fig. 6: Grip Force Of Tire And Road Surface Graph
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT DESCRIPTION CHART

COMPONENTS	MAIN FUNCTION
Wheel sensor	The wheel sensor outputs the speed signal to the ABS control unit according to the pulser's rotation speed.

ABS modulator-control unit	ABS control unit	The ABS control unit processes the signal from the wheel sensors, then outputs the ABS control signal to the modulator unit.
	Modulator unit	The modulator unit receives the control signal, then controls brake fluid pressure for each wheel.
Motor relay (inside of the ABS control unit)		The motor relay drives the ABS pump motor.
ABS fail-safe relay (inside of the ABS control unit)		The ABS fail-safe relay cuts the power to the solenoid valves when a problem is detected.



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Fig. 7: ABS System Description Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ABS CONTROL UNIT

Main Control

The ABS control unit detects the wheel speed based on the wheel sensor signal it received, then it calculates the vehicle speed based on the detected wheel speed. The control unit detects the vehicle speed during deceleration based on the rate of deceleration.

The ABS control unit calculates the slip rate of each wheel, and transmits the control signal to the modulator unit solenoid valve when the slip rate is high.

The hydraulic control has three modes: Pressure reducing, pressure retaining, and pressure intensifying.

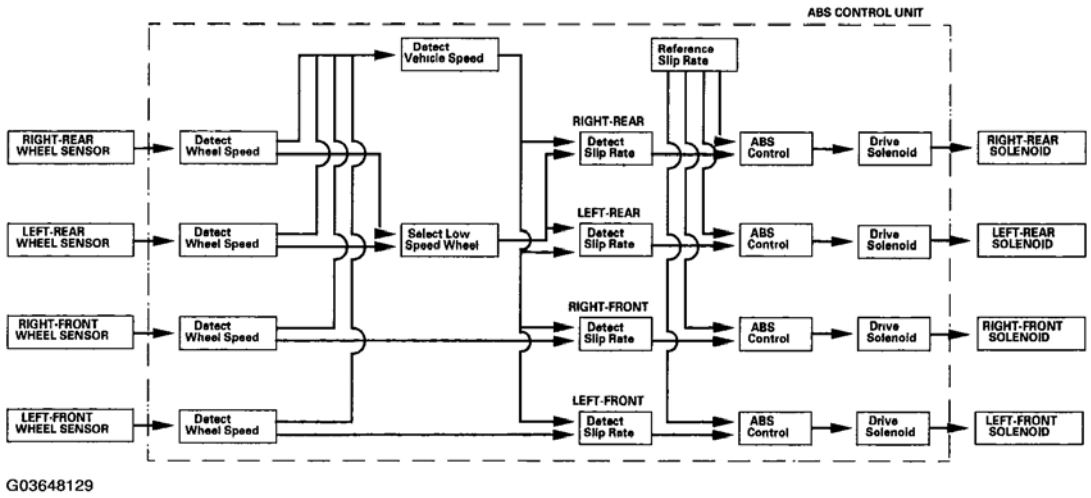


Fig. 8: Identifying Hydraulic Control Modes
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Electronic Brake Distribution (EBD) Control

The electronic brake distribution (EBD) function helps control vehicle braking by adjusting the rear brake force before the ABS operates. Based on wheel sensor signals, the ABS control unit uses the modulator to control the rear brakes

individually. When the rear wheel speed is less than the front wheel speed, the ABS control unit retains the current rear brake fluid pressure by closing the inlet valve in the modulator. As the rear wheel speed increases and approaches the front wheel speed, the control unit increases the rear brake fluid pressure by momentarily opening the inlet valve. This whole process is repeated very rapidly. While this is happening, there is kickback at the brake pedal.

During self-diagnosis, if the ABS control unit detects a problem that affects the EBD, it turns on the brake system indicator and the ABS indicator.

Self-diagnosis Function

1. The ABS control unit is equipped with a CPU and a monitor IC. They check each other for problems.
2. The CPU check the system circuits.
3. The ABS control unit turns on the ABS and possibly the brake system indicator when the unit detects a problem, and the unit stops ABS operation.
4. The self-diagnosis can be classified into these two categories:
    - Initial diagnosis
    - Regular diagnosis

On-board Diagnosis Function

The ABS can be diagnosed with the HDS.

The ALB Checker cannot be used with this system. For air bleeding, and checking wheel sensor signals, use the HDS.

See the HDS Help menu for specific operating instructions.

ABS MODULATOR

The ABS modulator consists of the inlet solenoid valve, outlet solenoid valve, reservoir, pump, and the pump motor. The modulator reduces the caliper fluid pressure directly. It is a circulating-type modulator because the brake fluid circulates through the caliper, reservoir, and the master cylinder. The hydraulic control has three modes; normal braking, pressure retaining, and pressure reducing.

The hydraulic circuit is an independent four channel type, one channel for each wheel.

Shown in normal braking mode

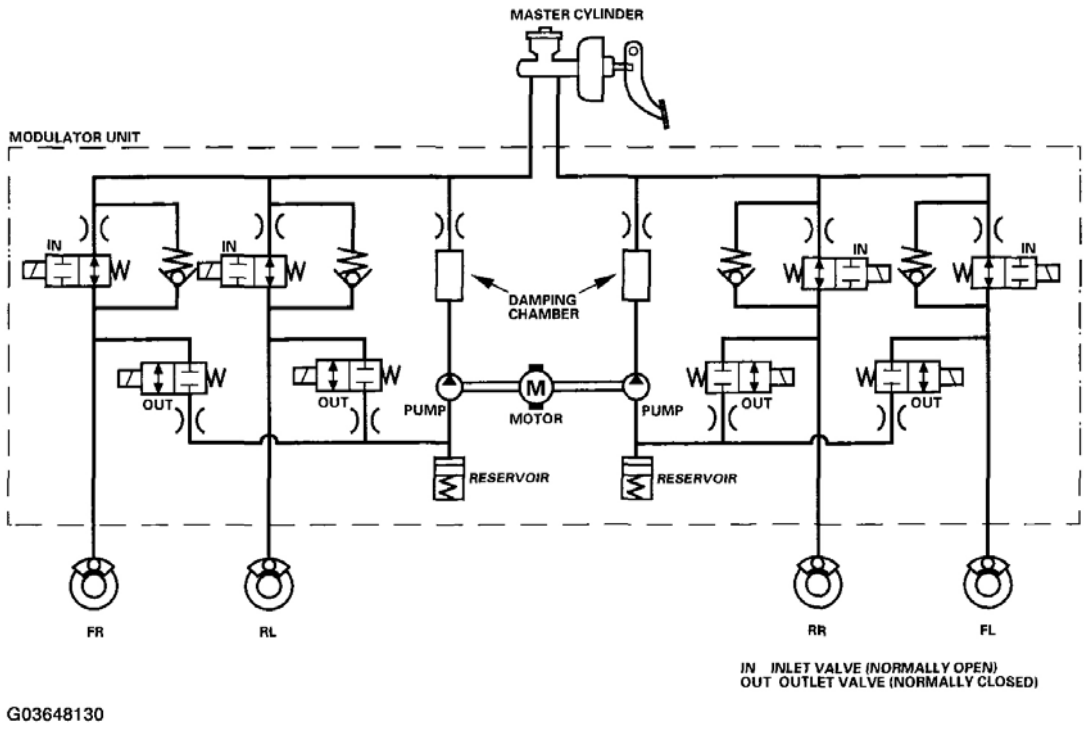


Fig. 9: Identifying Modulator Unit Wiring Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ABS MODULATOR

Normal braking mode:	Inlet valve open, outlet valve closed: Master cylinder fluid is pumped out to the caliper.
Pressure retaining mode:	Inlet valve closed, outlet valve closed: Caliper fluid is retained by the inlet valve and outlet valve.
	Inlet valve closed, outlet valve open: Caliper fluid flows through the outlet valve to the reservoir. When in pressure reducing mode, the

Pressure reducing mode:	pump motor is ON. The reservoir fluid is pumped out by the pump, through the damping chamber, to the master cylinder. When stopping ABS operation, the pump motor is OFF.

WHEEL SENSORS

The wheel sensors are the magnetic contactless type. The wheel sensors detect changing of magnetic polarity on the magnetic encoder contained inside the front wheel bearings. The ABS modulator-control unit calculates the wheel speed based on signals sent from the wheel sensor.

NOTE: The front wheel bearings are directional.

Wheel Speed and Modulator Control

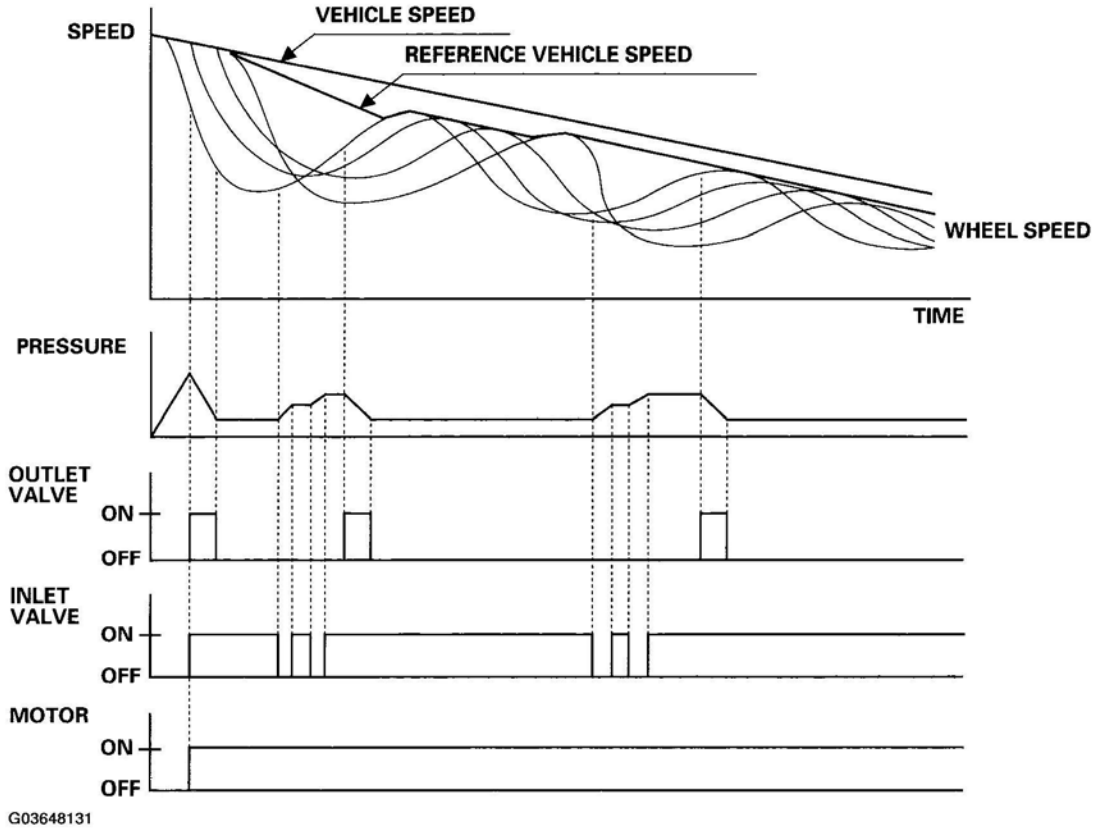


Fig. 10: Identifying Wheel Speed And Modulator Control
Courtesy of AMERICAN HONDA MOTOR CO., INC.

When the wheel speed drops sharply below the vehicle speed, the outlet valve opens momentarily to reduce the caliper fluid pressure. The pump motor starts at this time. As the wheel speed is restored, the inlet valve opens momentarily to increase the caliper fluid pressure.

CIRCUIT DIAGRAM

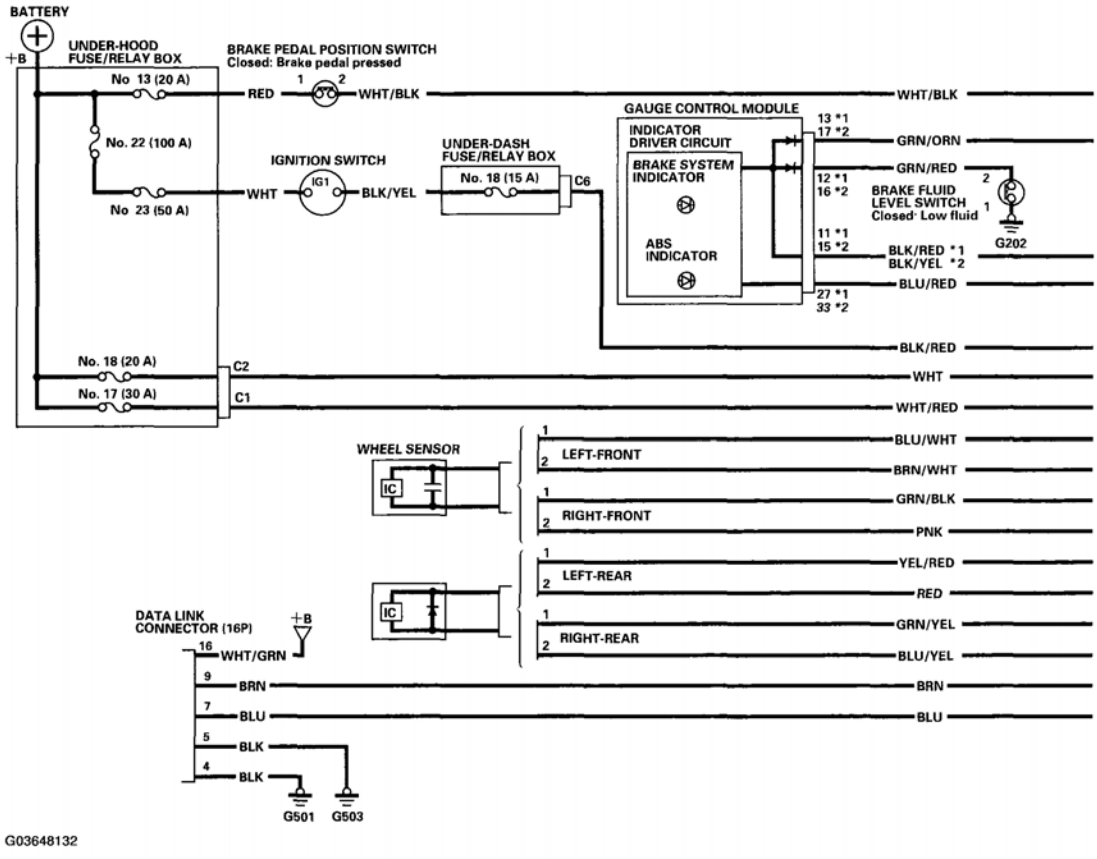
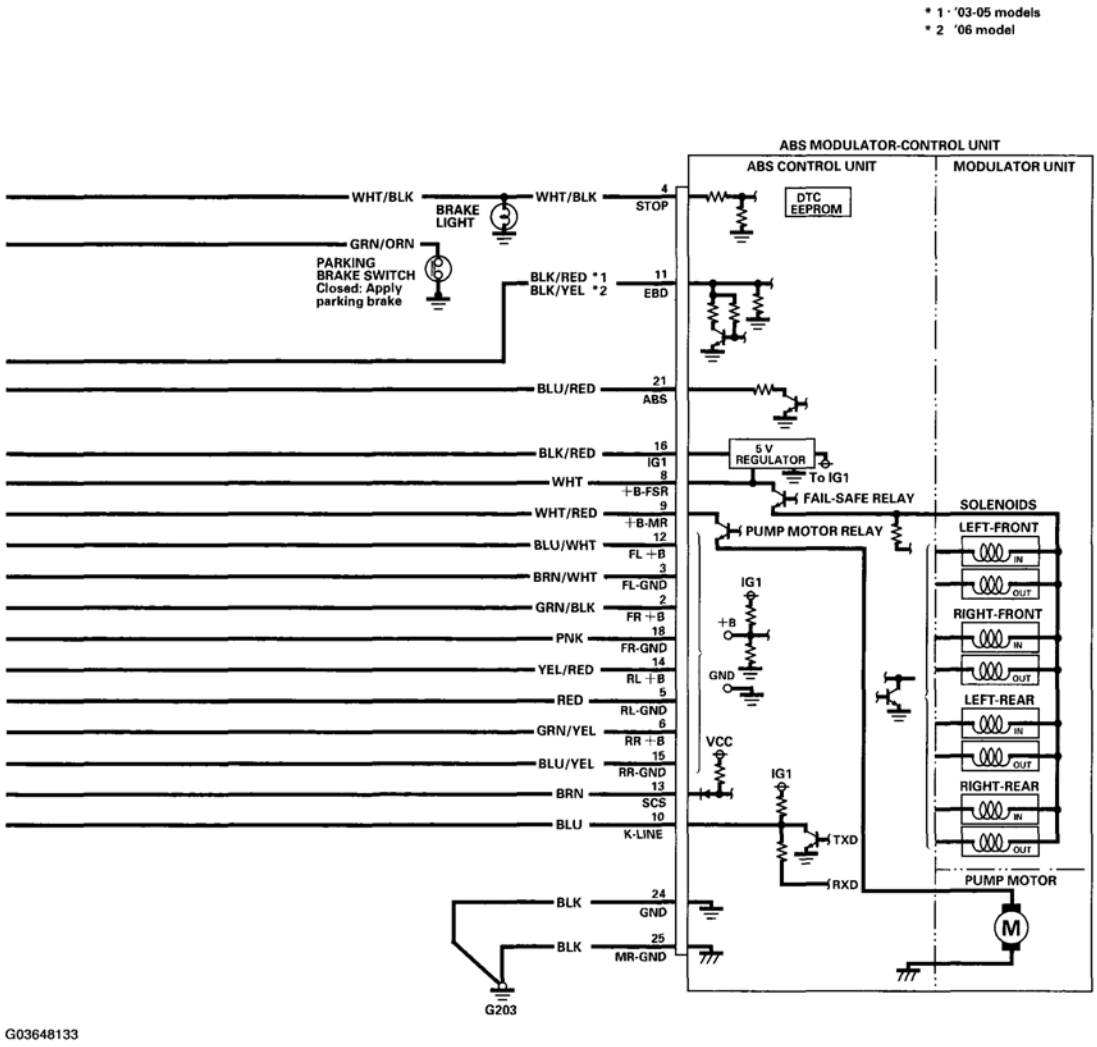


Fig. 11: Identifying ABS Circuit Diagram (1 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 12: Identifying ABS Circuit Diagram (2 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

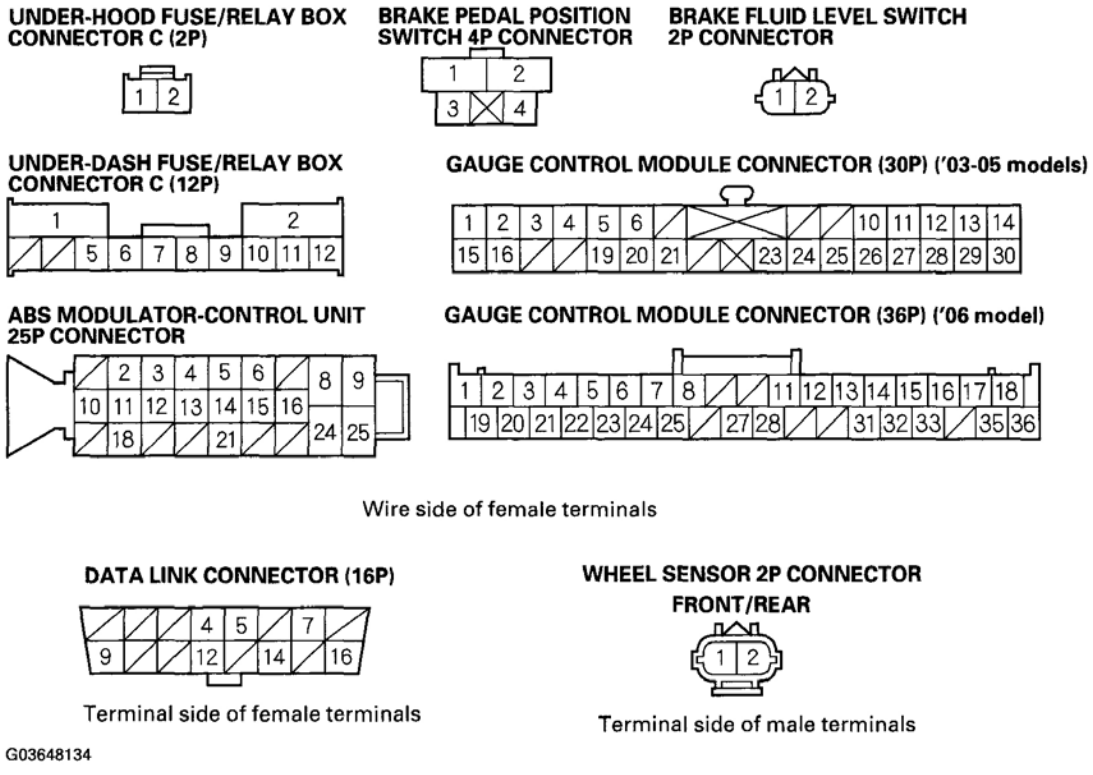


Fig. 13: Identifying ABS Circuit Diagram (3 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC CODES

DTC CHART

DTC	Description
DTC 11, 13, 15, 17	Wheel Sensor (Open/Short to Body Ground/Short to Power)
DTC 12, 14, 16, 18	Wheel Sensor (Electrical Noise/Intermittent Interruption)
DTC 21, 22	Magnetic Encoder (Front)
DTC 23, 24	Pulser (Rear)
DTC 31, 32, 33, 34, 35, 36, 37, 38	Solenoid
DTC 41, 42, 43, 44	Wheel Lock
DTC 51	Motor Lock
DTC 52	Motor Stuck OFF

DTC 53	Motor Stuck ON
DTC 54	ABS Fail-safe Relay
DTC 61	Low +B-FSR Voltage
DTC 62	High +B-FSR Voltage
DTC 71	Different Diameter Tire
DTC 81	Central Processing Unit (CPU) Diagnosis, and ROM/RAM Diagnosis

DTC TROUBLESHOOTING

DTC 11, 13, 15, 17: WHEEL SENSOR (OPEN/SHORT TO BODY GROUND/SHORT TO POWER)

1. Disconnect the ABS modulator-control unit 25P connector.
2. Start the engine.
3. Measure the voltage between body ground and the appropriate wheel sensor +B and GND terminals of the ABS modulator-control unit 25P connector individually (see **WHEEL SENSOR +B AND GND TERMINALS**).

WHEEL SENSOR +B AND GND TERMINALS

DTC	Appropriate Terminal	
	+B	GND
11 (Right-front)	FR +B: No. 2	FR-GND: No. 18
13 (Left-front)	FL +B: No. 12	FL-GND: No. 3
15 (Right-rear)	RR +B: No. 6	RR-GND: No. 15
17 (Left-rear)	RL +B: No. 14	RL-GND: No. 5

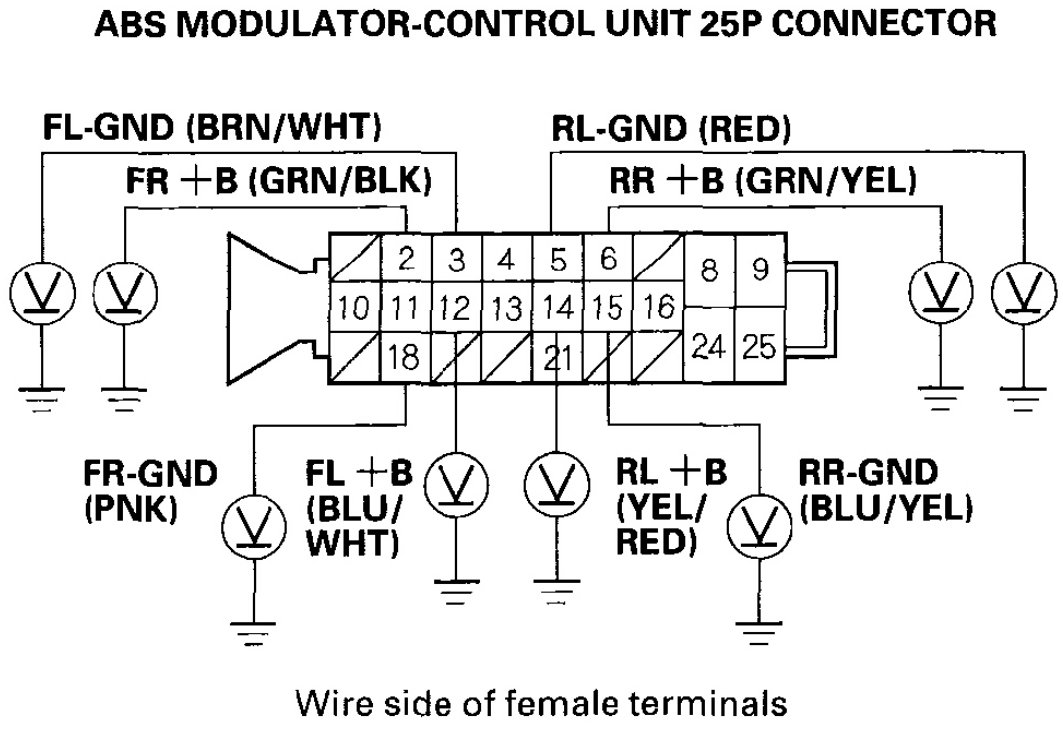


Fig. 14: Measuring Voltage Between Body Ground And Appropriate Wheel Sensor +B And GND Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Repair short to power in the wire between the ABS modulator-control unit and the appropriate wheel sensor.

NO - Go to step 4.

4. Turn the ignition switch OFF.
5. Check for continuity between body ground and the appropriate wheel sensor +B and GND terminals of the ABS modulator-control unit 25P connector individually (see **WHEEL SENSOR +B AND GND TERMINALS**).

WHEEL SENSOR +B AND GND TERMINALS

	Appropriate Terminal

DTC	+B	GND
11 (Right-front)	FR +B: No. 2	FR-GND: No. 18
13 (Left-front)	FL +B: No. 12	FL-GND: No. 3
15 (Right-rear)	RR +B: No. 6	RR-GND: No. 15
17 (Left-rear)	RL +B: No. 14	RL-GND: No. 5

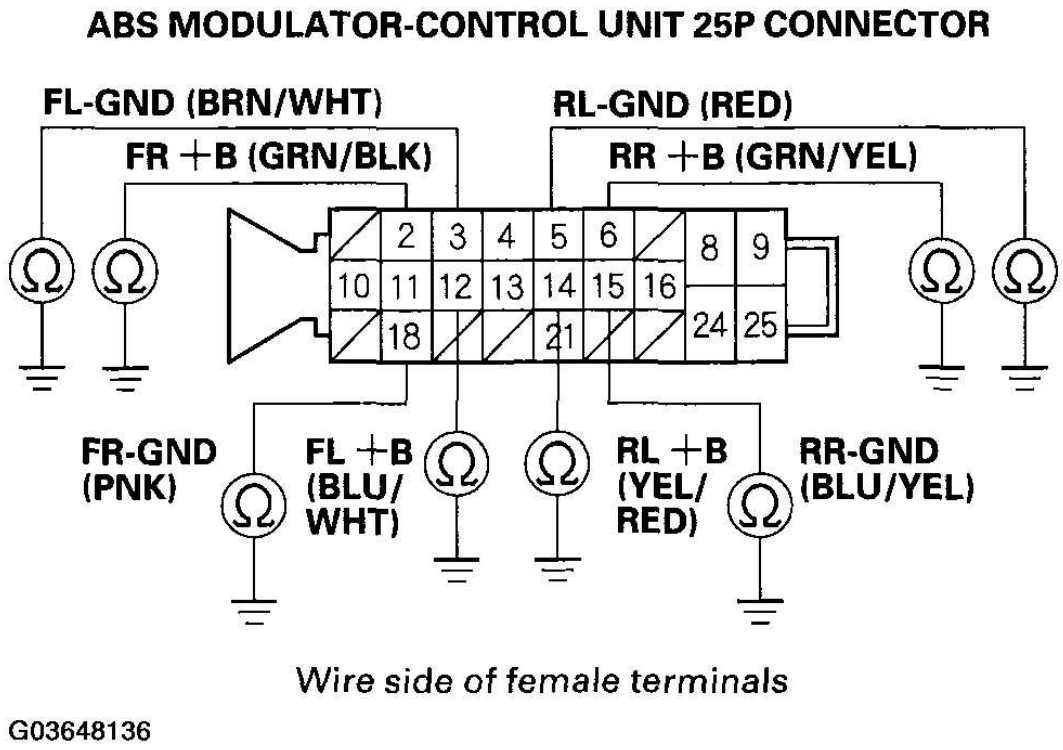


Fig. 15: Checking Continuity Between Body Ground And Appropriate Wheel Sensor +B And GND Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 6.
NO - Go to step 8.

6. Disconnect the appropriate wheel sensor 2P connector.
7. Check for continuity between body ground and the appropriate wheel sensor

+B and GND terminals of the ABS modulator-control unit 25P connector individually (see **WHEEL SENSOR +B AND GND TERMINALS**).

WHEEL SENSOR +B AND GND TERMINALS

DTC	Appropriate Terminal	
	+B	GND
11 (Right-front)	FR +B: No. 2	FR-GND: No. 18
13 (Left-front)	FL +B: No. 12	FL-GND: No. 3
15 (Right-rear)	RR +B: No. 6	RR-GND: No. 15
17 (Left-rear)	RL +B: No. 14	RL-GND: No. 5

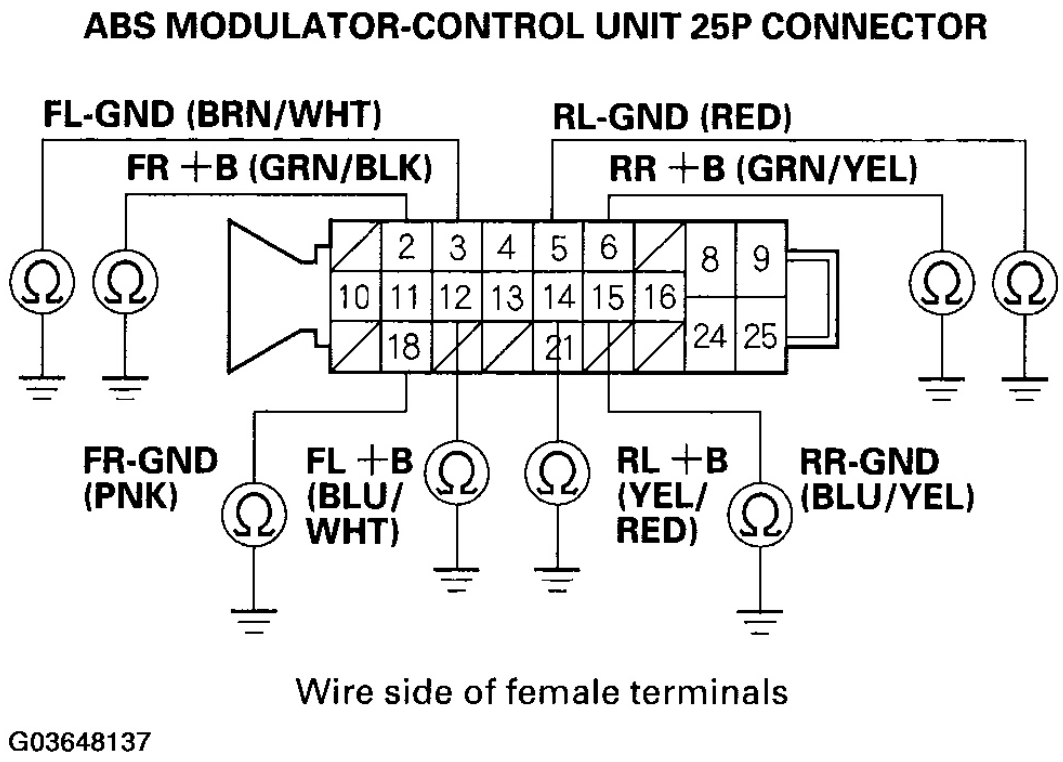


Fig. 16: Checking Continuity Between Body Ground And Appropriate Wheel Sensor +B And GND Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the ABS modulator-control unit and the wheel sensor.

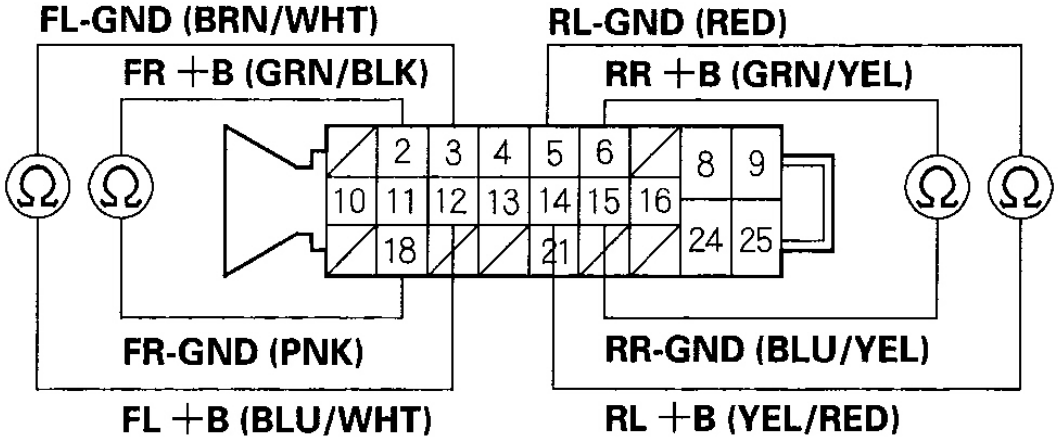
NO - Replace the wheel sensor (see **WHEEL SENSOR REPLACEMENT**).

8. Measure the resistance between the appropriate wheel sensor +B and GND terminals of the ABS modulator-control unit 25P connector (see **WHEEL SENSOR +B AND GND TERMINALS**). Then measure the resistance between the same terminals and reverse the positive and negative tester probes.

WHEEL SENSOR +B AND GND TERMINALS

DTC	Appropriate Terminal	
	+B	GND
11 (Right-front)	FR +B: No. 2	FR-GND: No. 18
13 (Left-front)	FL +B: No. 12	FL-GND: No. 3
15 (Right-rear)	RR +B: No. 6	RR-GND: No. 15
17 (Left-rear)	RL +B: No. 14	RL-GND: No. 5

ABS MODULATOR-CONTROL UNIT 25P CONNECTOR



Wire side of female terminals

G03648138

Fig. 17: Measuring Resistance Between Appropriate Wheel Sensor +B And GND Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance infinity (open circuit) in both directions?

YES - Go to step 9.

NO - Go to step 11.

9. Disconnect the appropriate wheel sensor 2P connector.
10. Measure the resistance between the appropriate wheel sensor 2P connector terminals, then measure the resistance between the same terminals and reverse the positive and negative tester probes.

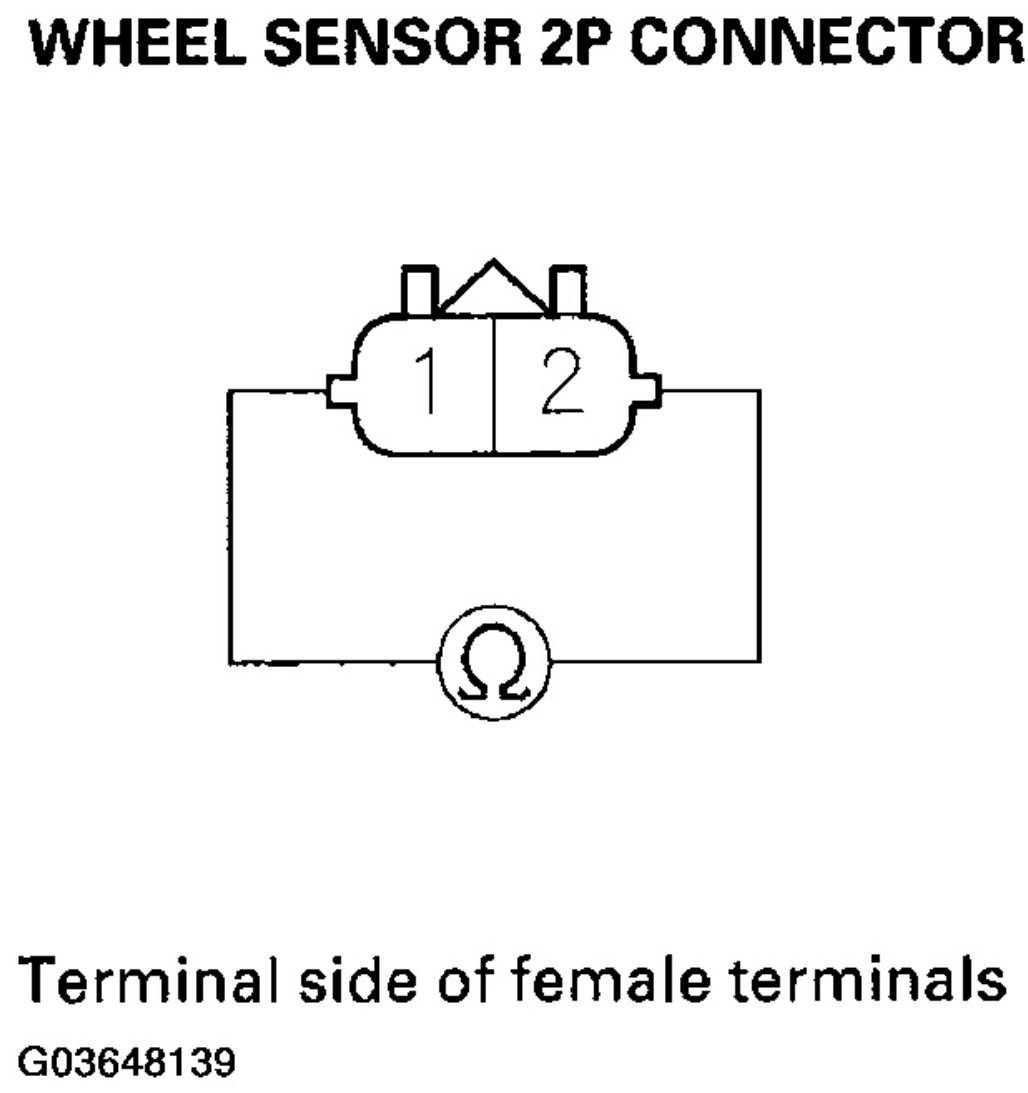


Fig. 18: Measuring Resistance Between Appropriate Wheel Sensor 2P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance infinity (open circuit) in both directions?

YES - Replace the wheel sensor (see **WHEEL SENSOR REPLACEMENT**).

NO - Repair open in the wire between the ABS modulator-control unit and the wheel sensor.

11. Disconnect the appropriate wheel sensor 2P connector.
12. Check for continuity between the appropriate wheel sensor +B and GND terminals of the ABS modulator-control unit 25P connector (see **WHEEL SENSOR +B AND GND TERMINALS**). Then check for continuity between the same terminals and reverse the positive and negative tester probes.

WHEEL SENSOR +B AND GND TERMINALS

DTC	Appropriate Terminal	
	+B	GND
11 (Right-front)	FR +B: No. 2	FR-GND: No. 18
13 (Left-front)	FL +B: No. 12	FL-GND: No. 3
15 (Right-rear)	RR +B: No. 6	RR-GND: No. 15
17 (Left-rear)	RL +B: No. 14	RL-GND: No. 5

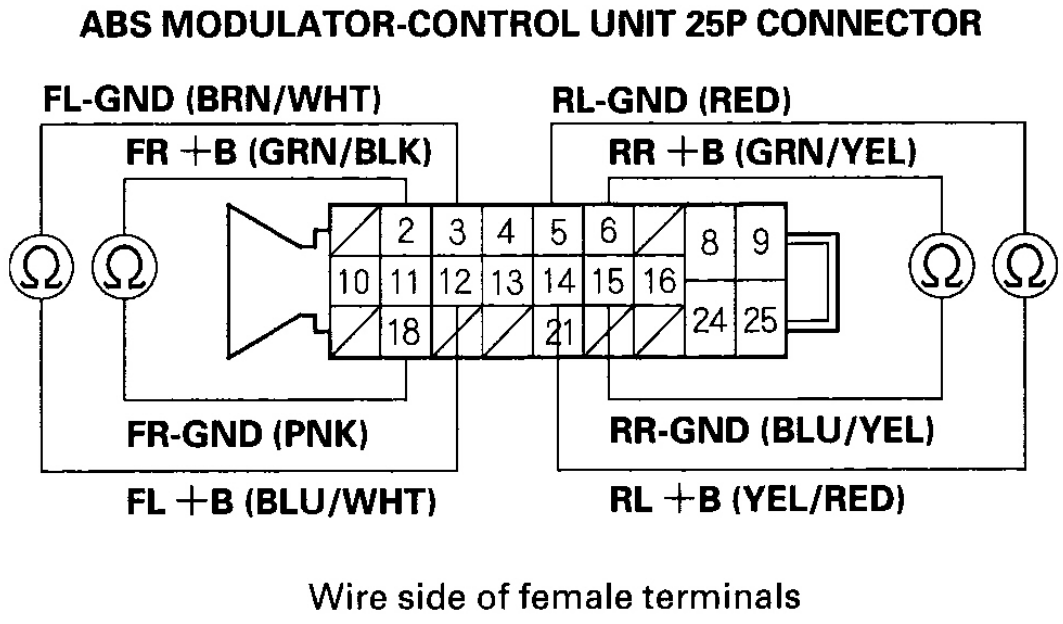


Fig. 19: Identifying ABS Modulator-Control Unit 25P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity in both directions?

YES - Repair the wires between the ABS modulator-control unit and the wheel sensor that are shorted to each other.

NO - Check for loose or poor connections at the ABS modulator-control unit 25P connector and the appropriate wheel sensor 2P connector. If the connections are good, replace the appropriate wheel sensor and recheck for DTCs. If the DTC returns, replace the ABS modular-control unit (see **ABS MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

DTC 12, 14, 16, 18: WHEEL SENSOR (ELECTRICAL NOISE/INTERMITTENT INTERRUPTION)

NOTE: If the ABS indicator comes on because of electrical noise, the indicator will go off when you drive the vehicle over 19 mph (30 km/h) and the noise is gone.

1. Inspect the appropriate wheel sensor and magnetic encoder (front) and pulser (rear) (see **WHEEL SENSOR INSPECTION**).

APPROPRIATE WHEEL SENSOR

DTC	Appropriate Wheel Sensor
12	Right-front
14	Left-front
16	Right-rear
18	Left-rear

Are they OK?

YES - Go to step 2.

NO - Reinstall or replace the appropriate wheel sensor or magnetic encoder (front) and pulser (rear) (see **WHEEL SENSOR REPLACEMENT**).

2. Disconnect the ABS modulator-control unit 25P connector.

3. Check for continuity between the appropriate wheel sensor GND terminal and other wheel sensor GND terminals (see **WHEEL SENSOR GND TERMINAL AND OTHER WHEEL SENSOR GND TERMINALS**).

WHEEL SENSOR GND TERMINAL AND OTHER WHEEL SENSOR GND TERMINALS

DTC	Appropriate Terminal	Other Terminals		
12	FR-GND: No. 18	No. 3	No. 15	No. 5
14	FL-GND: No. 3	No. 18	No. 15	No. 5
16	RR-GND: No. 15	No. 18	No. 3	No. 5
18	RL-GND: No. 5	No. 18	No. 3	No. 15

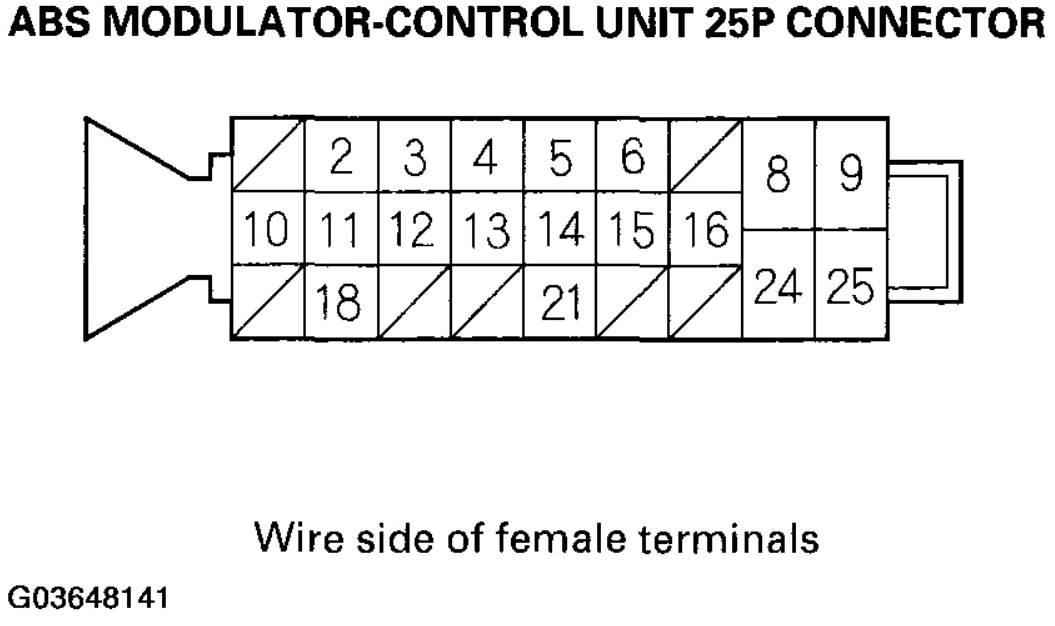


Fig. 20: Identifying ABS Modulator-Control Unit 25P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wires between the appropriate wheel sensor and the other wheel sensor.

NO - Clear the DTC, and test-drive the vehicle. If the ABS indicator comes on and the same DTC is indicated, replace the ABS modulator-control unit (see **ABS MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

DTC 21, 22: MAGNETIC ENCODER (FRONT); DTC 23, 24: PULSER (REAR)

1. Clear the DTC (see **HOW TO TROUBLESHOOT DTCS**).
2. Test-drive the vehicle at 19 mph (30 km/h) or more.

   Does the ABS indicator come on, and are DTCs21, 22, 23, 24 indicated?

   YES - Go to step 3.

   NO - The system is OK at this time.
3. Inspect the appropriate encoder or pulser (see **APPROPRIATE ENCODER OR PULSER** and). **WHEEL SENSOR INSPECTION**

   APPROPRIATE ENCODER OR PULSER

DTC	Appropriate Encoder or Pulser
21	Right-front
22	Left-front
23	Right-rear
24	Left-rear

   Is the sensor OK?

   YES - Go to step 4.

   NO - Replace the magnetic encoder or pulser.
4. Check that the front encoder is installed correctly (see step 7 in **KNUCKLE/HUB REPLACEMENT**), or rear pulser for damage.

   Are they installed correctly?

   YES - Check for loose terminals in the ABS modulator-control unit 25P connector. If necessary, substitute a known-good ABS modulator-control unit, and recheck.

NO - Reinstall or replace the appropriate encoder or pulser.

DTC 31, 32, 33, 34, 35, 36, 37, 38: SOLENOID

1. Clear the DTC (see **HOW TO TROUBLESHOOT DTCS**).
2. Turn the ignition switch ON (II).
3. Verify the DTC.

Does the ABS indicator come on, and are DTCs 31, 32, 33, 34, 35, 36, 37, 38 indicated?

YES - Check for loose terminals in the ABS modulator-control unit 25P connector. If necessary, substitute a known-good ABS modulator-control unit.

NO - The system is OK at this time.

DTC 41, 42, 43, 44: WHEEL LOCK

1. Check for brake drag when the brakes are hot.

Do the brakes drag?

YES - Repair the brake drag.

NO - Go to step 2.

2. Check the installation of the appropriate wheel sensor (see **APPROPRIATE WHEEL SENSOR**).

APPROPRIATE WHEEL SENSOR

DTC	Appropriate Wheel Sensor
41	Right-front
42	Left-front
43	Right-rear
44	Left-rear

Is it correct?

YES - The probable cause was the vehicle spun during cornering. If the code reoccurs during normal driving, replace the ABS modulator-control unit (see **ABS MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Reinstall the wheel sensor correctly.

DTC 51: MOTOR LOCK; DTC 52: MOTOR STUCK OFF

1. Check the No. 17 (30 A) fuse in the under-hood fuse/relay box.

   Is the fuse OK?

   YES - Reinstall the fuse, and go to step 2.

   NO - Replace the fuse, and recheck. If the fuse is blown, check for a short to body ground in this fuse circuit. If the circuit is OK, replace the ABS modulator-control unit (see **ABS MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).
2. Disconnect the ABS modulator-control unit 25P connector.
3. Measure the voltage between the ABS modulator-control unit 25P connector terminal No. 9 and body ground.

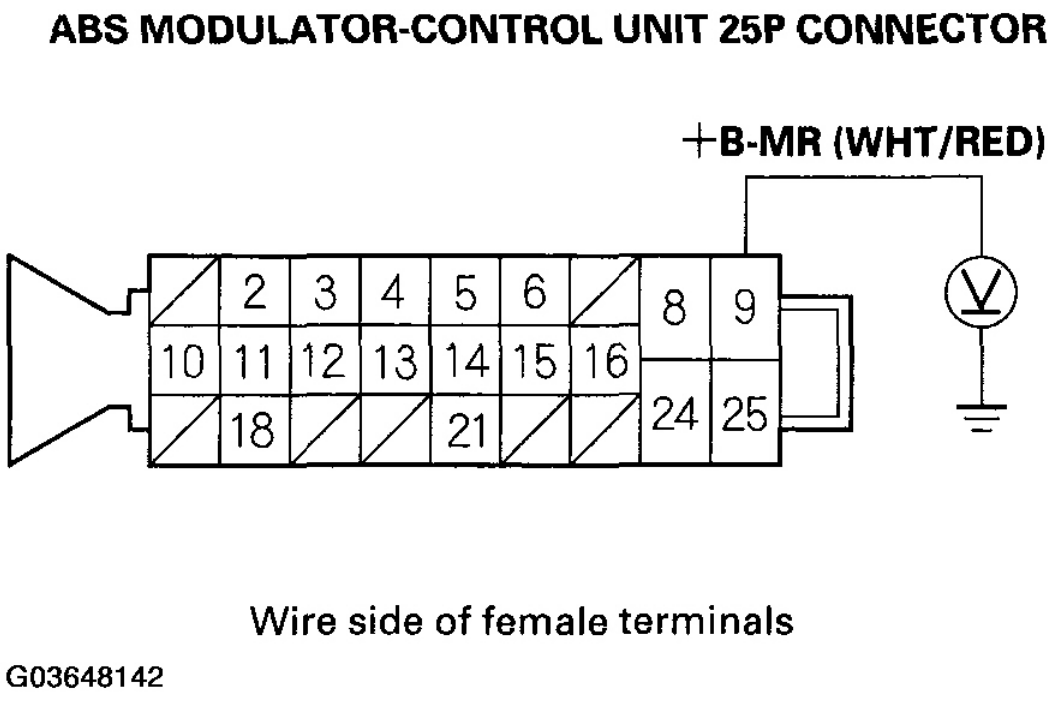


Fig. 21: Measuring Voltage Between ABS Modulator-Control Unit 25P Connector Terminal 9 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Reconnect the ABS modulator-control unit 25P connector, then go to step 4.

NO - Repair open in the wire between the No. 17 (30 A) fuse and the ABS modulator-control unit.

4. Measure the voltage between the ABS modulator-control unit 25P connector terminal No. 25 and body ground.

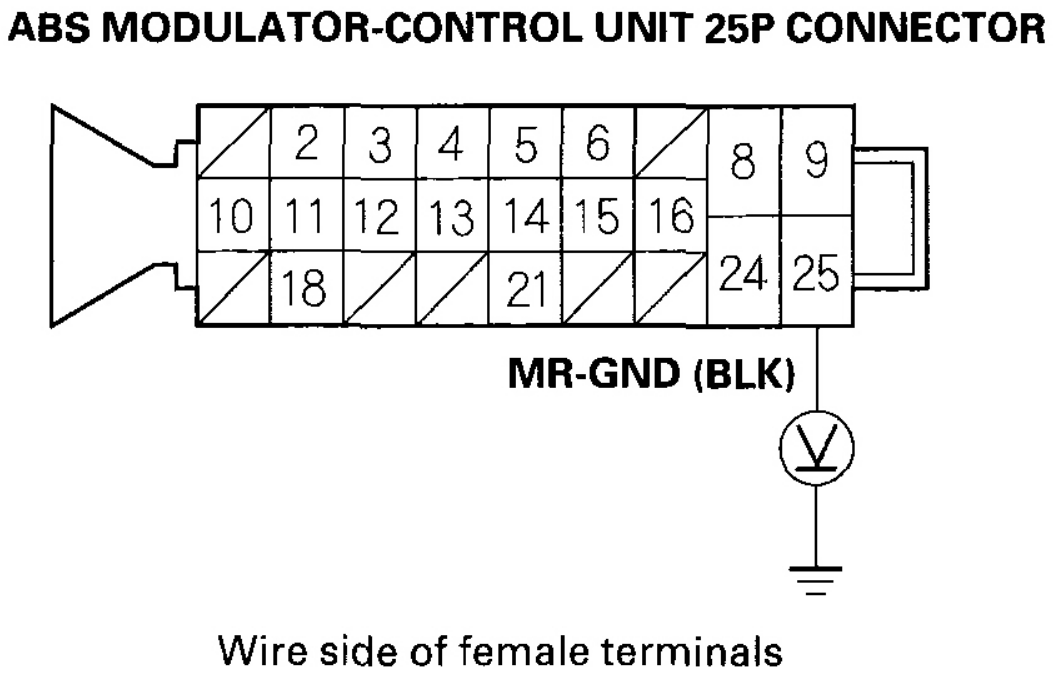


Fig. 22: Measuring Voltage Between ABS Modulator-Control Unit 25P Connector Terminal 25 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there less than 0.1 voltage?

YES - Go to step 5.

NO - Repair open in the wire between the ABS control unit and body ground (G203).

5. Clear the DTC (see **HOW TO TROUBLESHOOT DTCS**).
6. Test-drive the vehicle at 6 mph (10 km/h) or more.

Does the ABS indicator come on, and are DTC 51 or DTC 52 indicated?

YES - Check for loose terminals in the ABS modulator-control unit 25P connector. If connections are OK, replace the ABS modulator-control unit (see **ABS MODULATOR-CONTROL UNIT REMOVAL AND**

INSTALLATION).

NO - The system is OK at this time.

DTC 53: MOTOR STUCK ON

1. Clear the DTC (see **HOW TO TROUBLESHOOT DTCS**).
2. Test-drive the vehicle.

Does the ABS indicator come on, and is DTC 53 indicated?

YES - Replace the ABS modulator-control unit (see **ABS MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - The system is OK at this time.

DTC 54: ABS FAIL-SAFE RELAY; DTC 61: LOW +B-FSR VOLTAGE

1. Check the No. 18 (20 A) fuse in the under-hood fuse/relay box.

Is the fuse OK?

YES - Reinstall the fuse, and go to step 2.

NO - Replace the fuse, and recheck.

2. Clear the DTC (see **HOW TO TROUBLESHOOT DTCS**).
3. Test-drive the vehicle.

Does the ABS indicator come on, and are DTC 54 or DTC 61 indicated?

YES - Go to step 4.

NO - Intermittent failure; the vehicle is OK at this time.

4. Disconnect the ABS modulator-control unit 25P connector.
5. Measure the voltage between the ABS modulator-control unit 25P connector terminal No. 8 and body ground.

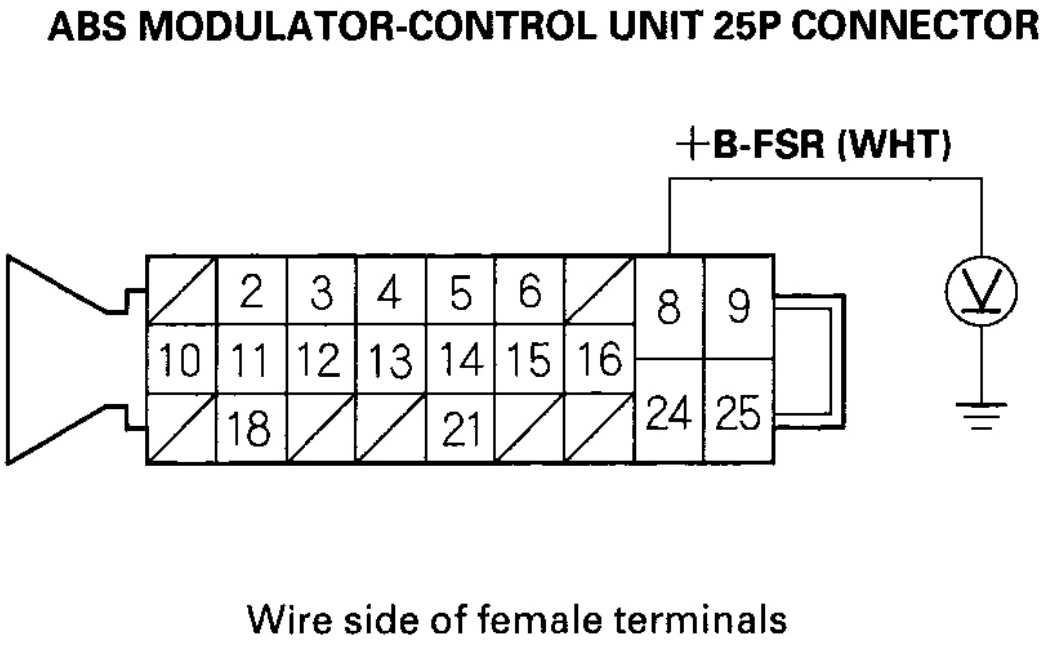


Fig. 23: Measuring Voltage Between ABS Modulator-Control Unit 25P Connector Terminal 8 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Check for loose terminals in the ABS modulator-control unit 25P connector. If connections are OK, replace the ABS modulator-control unit (see **ABS MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Repair open in the wire between the No. 18 (20 A) fuse in the under-hood fuse/relay box and the ABS modulator-control unit.

DTC 62: HIGH +B-FSR VOLTAGE

1. Clear the DTC (see **HOW TO TROUBLESHOOT DTCS**).
2. Test-drive the vehicle at 6 mph (10 km/h) or more.

Does the ABS indicator come on?

YES - Go to step 3.

NO - The system is OK at this time.

3. Verify the DTC.

Is DTC 62 indicated?

YES - Go to step 4.

NO - Do the appropriate troubleshooting for the DTC.

4. Check the charging system.

Is the charging system OK?

YES - Replace the ABS modulator-control unit (see **ABS MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Repair the charging system, and retest.

DTC 71: DIFFERENT DIAMETER TIRE

1. Clear the DTC (see **HOW TO TROUBLESHOOT DTCS**).
2. Test-drive the vehicle.

Does the ABS indicator come on, and is DTC 71 indicated?

YES - Go to step 3.

NO - Intermittent failure; confirm that tire inflation is set to spec. The vehicle is OK at this time.

3. Check that all four tires are the specified size and are inflated to the proper specification.

Are all four tires the correct size and properly inflated?

YES - Go to step 4.

NO - Install the correct tires or set the tires to the correct inflation, and

retest.

4. With the vehicle on level ground, mark each tire with a small spot of grease. Roll the vehicle until each of the tires makes two grease spots on the floor.
5. Measure and record the distance between the two grease spots.

Is the difference between the shortest and the longest measurement more than 10%?

YES - Replace the tire/tires that is smaller or larger than the others.

NO - Replace the ABS modulator-control unit (see **ABS MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

DTC 81: CENTRAL PROCESSING UNIT (CPU) DIAGNOSIS, AND ROM/RAM DIAGNOSIS

1. Check for other DTCs.

Is another DTC present?

YES - Do the appropriate troubleshooting for the other DTC.

NO - Go to step 2.

2. Clear the DTC (see **HOW TO TROUBLESHOOT DTCS**).
3. Test-drive the vehicle.

Does the ABS indicator come on, and is DTC 81 indicated?

YES - Replace the ABS modulator-control unit (see **ABS MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Intermittent failure; the vehicle is OK at this time.

SYMPTOM TROUBLESHOOTING

ABS INDICATOR DOES NOT COME ON

1. Turn the ignition switch ON (II), and watch the ABS indicator.

Does the ABS indicator come on?

YES - The system is OK at this time.

NO - Go to step 2.

2. Apply the parking brake.

Does the brake system indicator come on?

YES - Go to step 3.

NO - Repair open in the indicator power source circuit. If necessary, substitute a known-good gauge control module, and recheck.

3. Turn the ignition switch OFF.
4. Disconnect the ABS modulator-control unit 25P connector.
5. Turn the ignition switch ON (II).

Does ABS indicator come on?

YES - Check for loose terminals in the ABS modulator-control unit 25P connector. If necessary, substitute a known-good ABS modulator-control unit, and recheck.

NO - Go to step 6.

6. Turn the ignition switch OFF.
7. Remove the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**).
8. Disconnect the gauge control module connector (30P) ('03-05 models), (36P) ('06-07 models).
9. Check for continuity between the gauge control module connector and body ground.
   - '03-05 models: Check between the gauge control module connector (30P) terminal No. 27 and body ground.
   - '06-07 models: Check between the gauge control module connector (36P) terminal No. 33 and body ground.

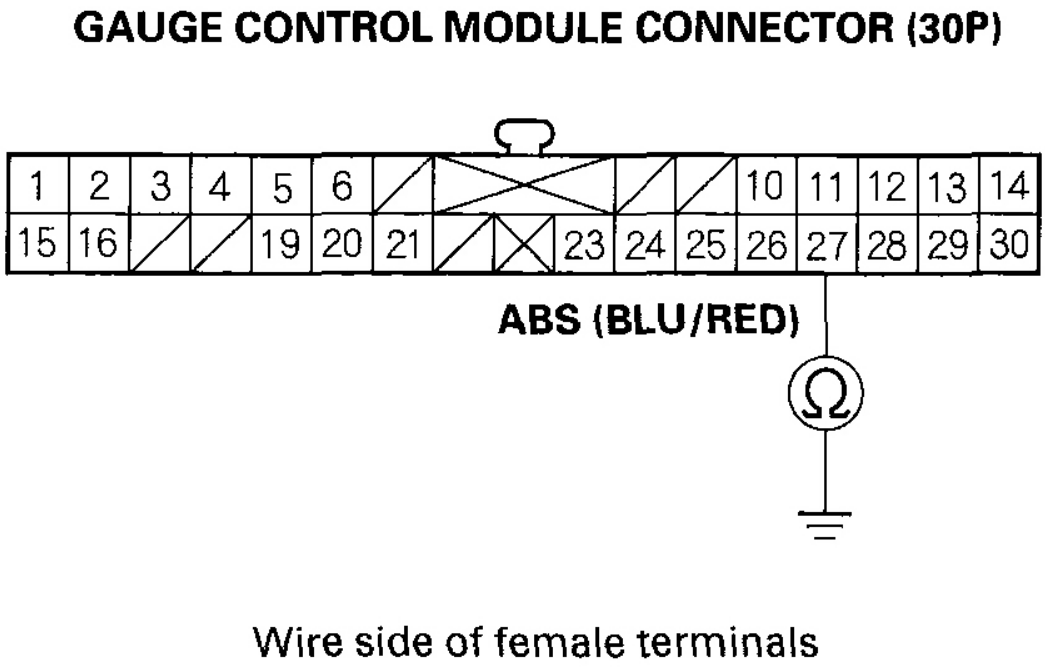


Fig. 24: Checking Between Gauge Control Module Connector (30P) Terminal No. 27 And Body Ground ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

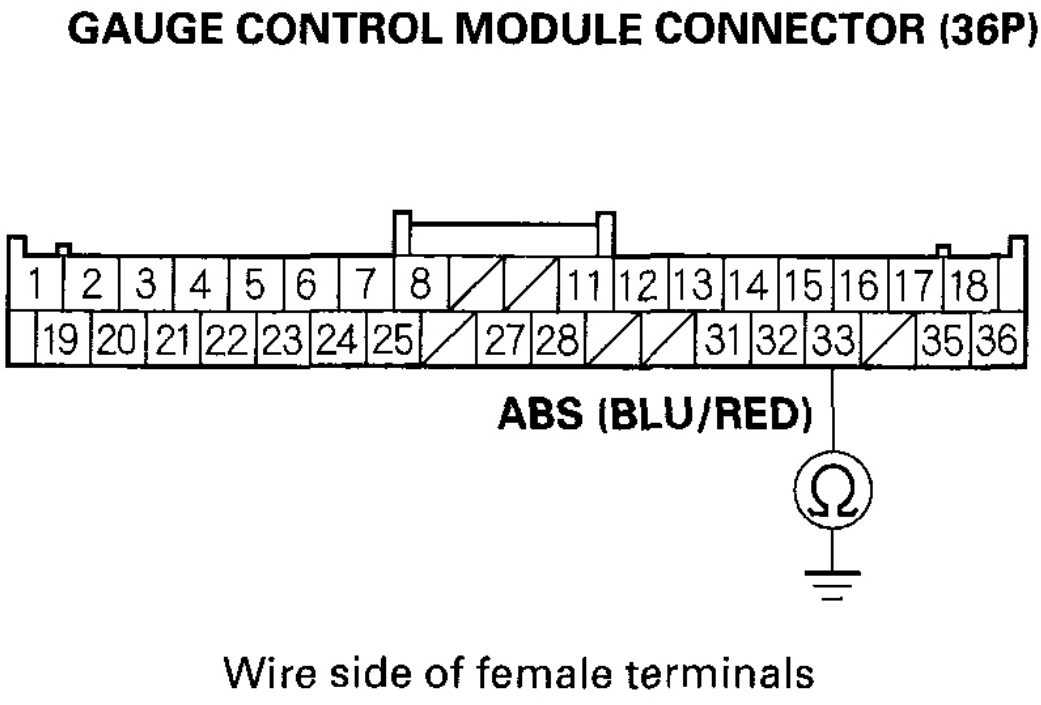


Fig. 25: Checking Between Gauge Control Module Connector (36P) Terminal No. 33 And Body Ground ('06-07 models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the gauge control module and the ABS modulator-control unit.

NO - Check for loose terminals in the gauge control module connector. If connector is OK, replace the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**).

ABS INDICATOR DOES NOT GO OFF, AND NO DTCS ARE STORED

1. Disconnect the ABS modulator-control unit 25P connector.
2. Turn the ignition switch ON (II).

3. Measure the voltage between the ABS modulator-control unit 25P connector terminal No. 16 and body ground.

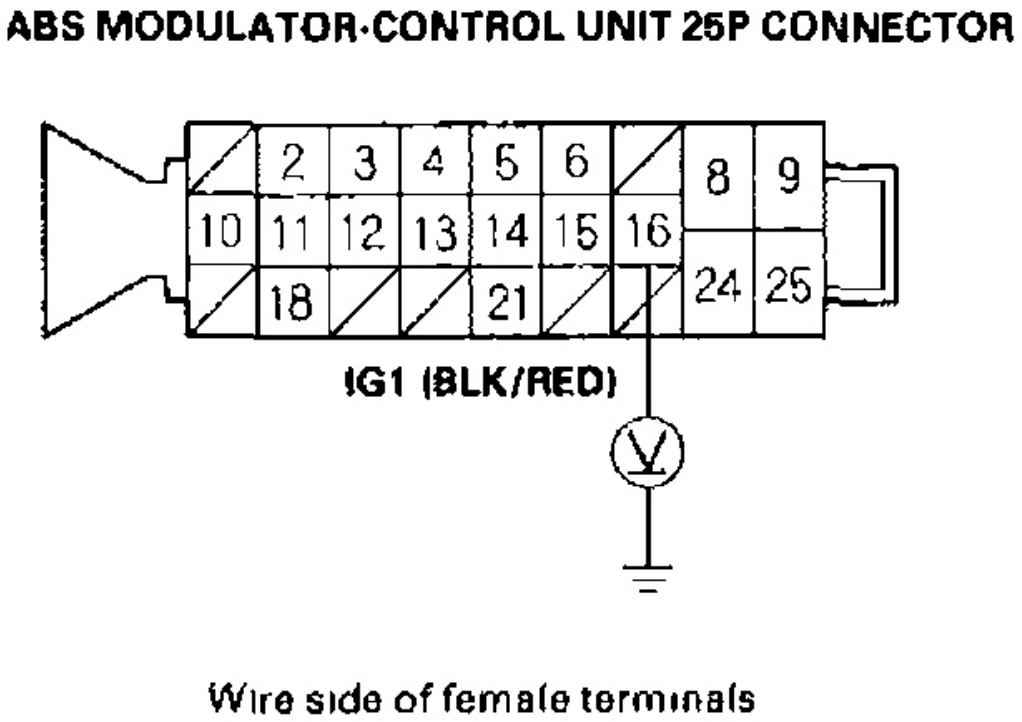


Fig. 26: Measuring Voltage Between ABS Modulator-Control Unit 25P Connector Terminal 16 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 4.

NO - Check fuse No. 18 (15 A) in the under-dash fuse/relay box. If the fuse is good, repair open in the wire between the No. 18 (15 A) fuse and the ABS modulator-control unit.

4. Turn the ignition switch OFF.

5. Check for continuity between the ABS modulator-control unit 25P connector terminal No. 24 and body ground.

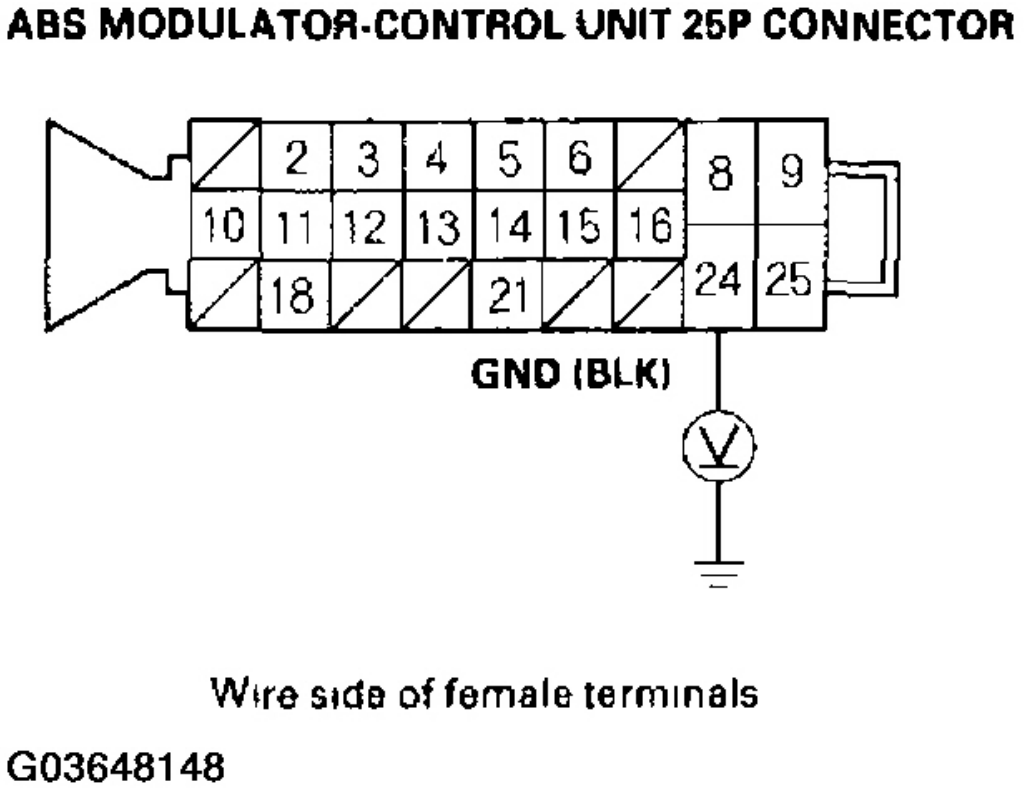


Fig. 27: Checking Continuity Between ABS Modulator-Control Unit 25P Connector Terminal 24 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 6.

NO - Repair open in the wire between the ABS modulator-control unit and body ground (G203).

6. Turn the ignition switch ON.
7. Connect the ABS modulator-control unit 25P connector terminal No. 21 and

body ground with a jumper wire.

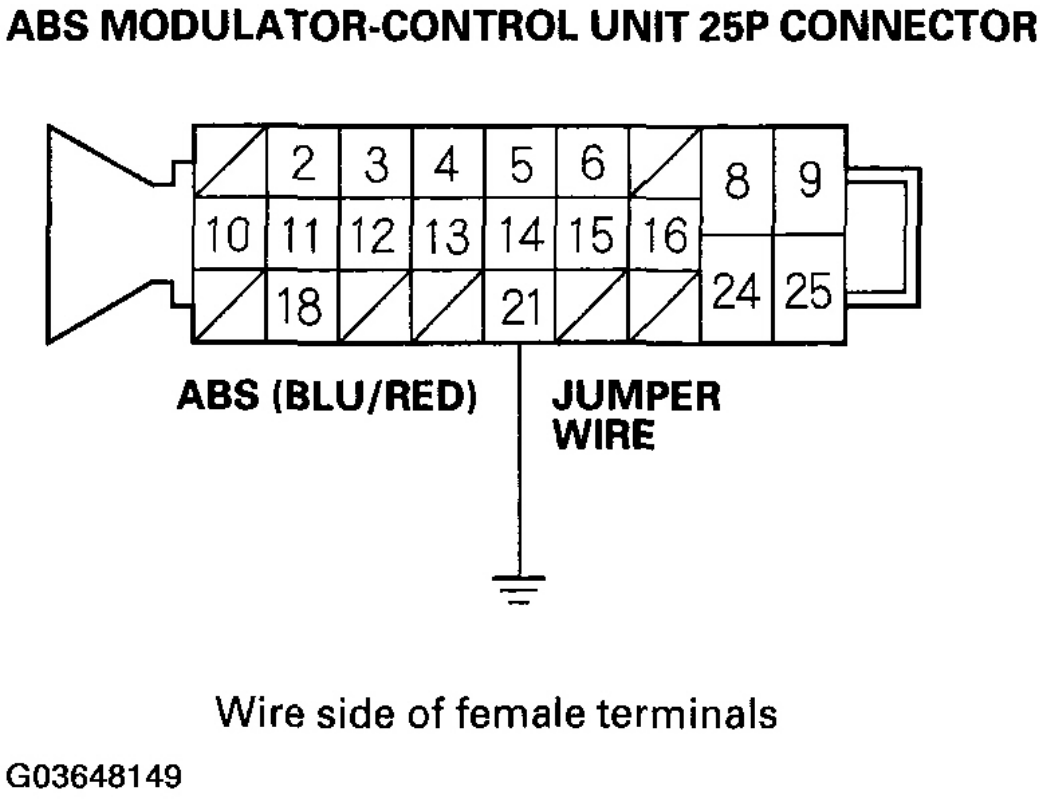


Fig. 28: Connecting ABS Modulator-Control Unit 25P Connector Terminal No. 21 And Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the ABS indicator go off?

YES - Check for loose terminals in the ABS modulator-control unit 25P connector. If necessary, substitute a known-good ABS modulator-control unit, and recheck.

NO - Go to step 8.

8. Turn the ignition switch OFF.
9. Remove the gauge control module, and leave the connector connected.

10. Connect the gauge control module connector to body ground with a jumper wire. Turn the ignition switch ON (II).
    - '03-05 models: Connect a jumper wire between the gauge control module connector (30P) terminal No. 27 and body ground.
    - '06-07 models: Connect a jumper wire between the gauge control module connector (36P) terminal No. 33 and body ground.

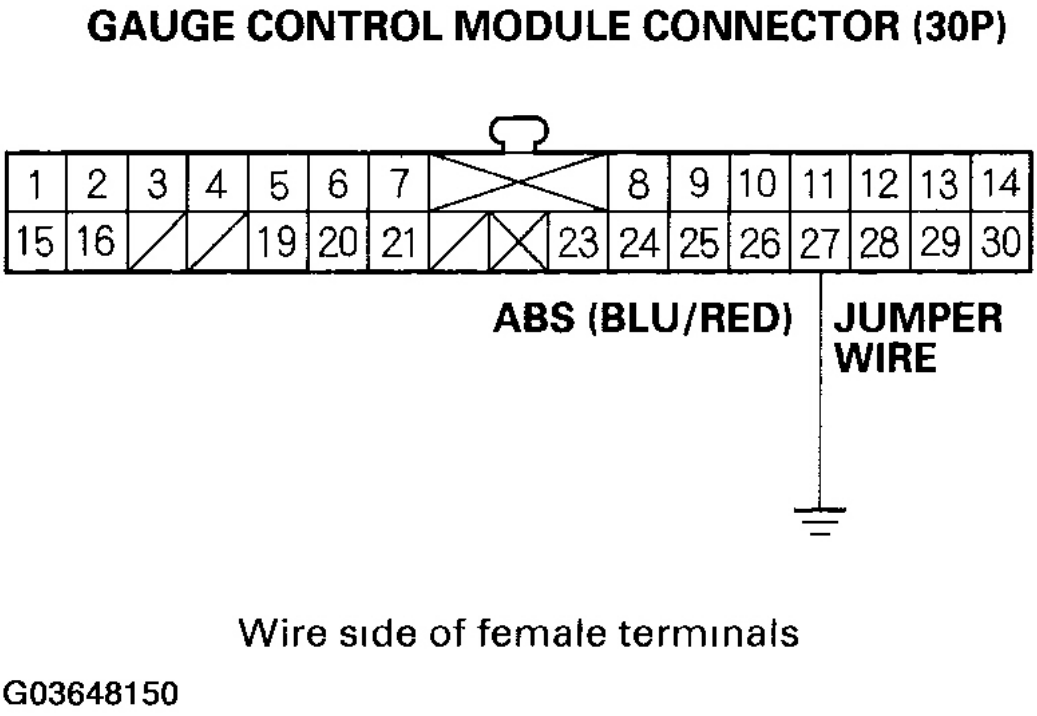


Fig. 29: Identifying Wire Side Of Female Terminals 03-05 Model (30P Connector - '03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

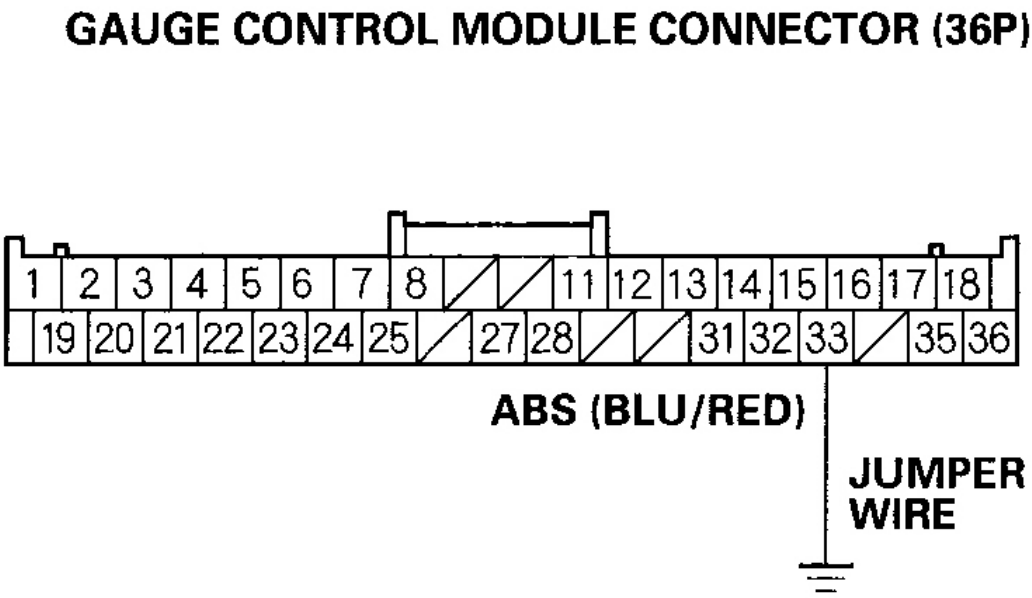


Fig. 30: Identifying Wire Side Of Female Terminals 06-07 models (36P Connector - '06-07 models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Turn the ignition switch ON (II).

    Does the ABS indicator go off?

    YES - Repair open in the wire between the gauge control module and the ABS modulator-control unit.

    NO - Check for loose terminal in the gauge control module connectors. If connections are OK, replace the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**).

BRAKE SYSTEM INDICATOR DOES NOT COME ON

1. With the parking brake applied, turn the ignition switch ON (II), and watch the

brake system indicator.

Does the brake system indicator come on?

YES - The system is OK at this time

NO - Go to step 2.

2. Turn the ignition switch OFF.
3. Remove the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**).
4. Connect the gauge control module connector to body ground with a jumper wire.
   - '03-05 models: Connect a jumper wire between the gauge control module connector (30P) terminal No. 11 and body ground.
   - '06-07 models: Connect a jumper wire between the gauge control module connector (36P) terminal No. 15 and body ground.

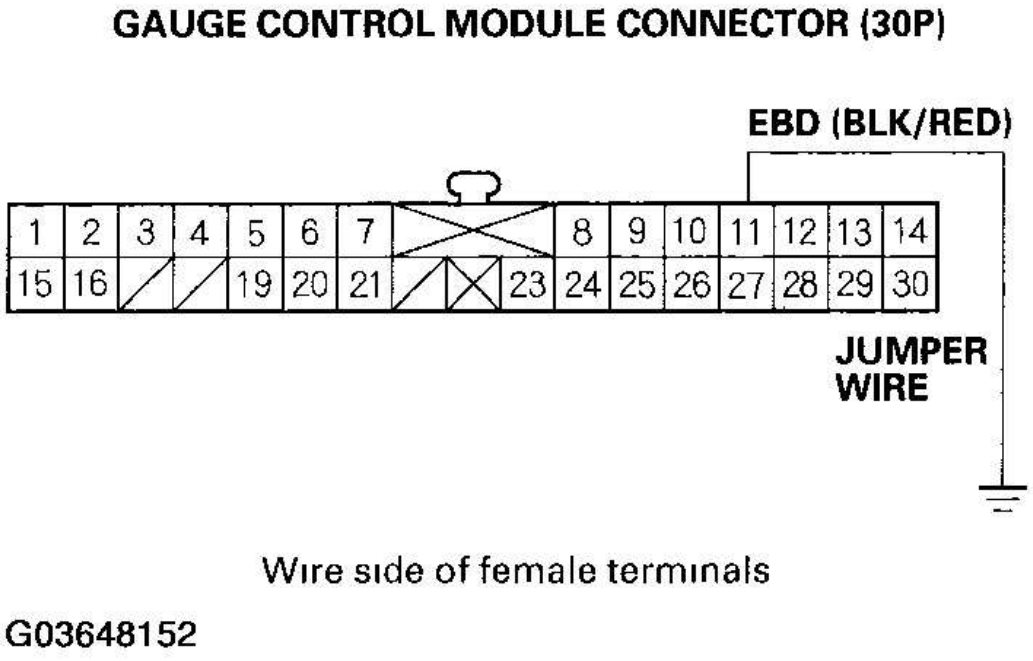


Fig. 31: Connecting Jumper Wire Between Gauge Control Module

Connector (30P) Terminal No. 11 And Body Ground ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

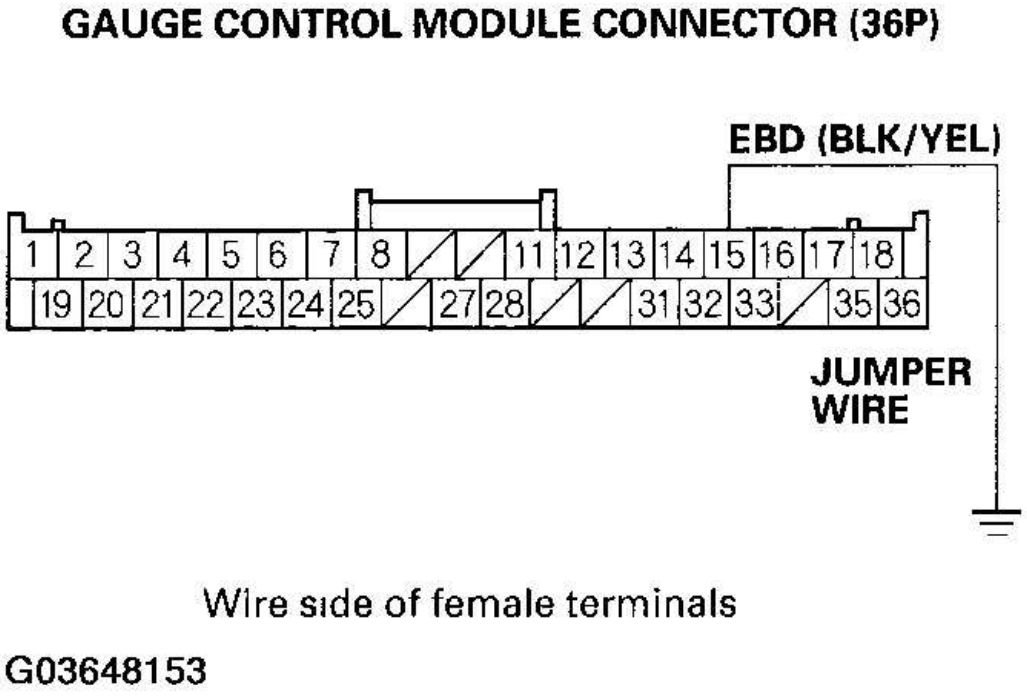


Fig. 32: Connecting Jumper Wire Between Gauge Control Module Connector (36P) Terminal No. 15 And Body Ground ('06-07 models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Turn the ignition switch ON (II).

   Does the brake system indicator come on and stay on?

   YES - Replace the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**).

   NO - Go to step 6.
6. Turn the ignition switch OFF.
7. Disconnect the ABS modulator-control unit 25P connector.

8. Connect the ABS modulator-control unit 25P connector terminal No. 11 and body ground with a jumper wire.

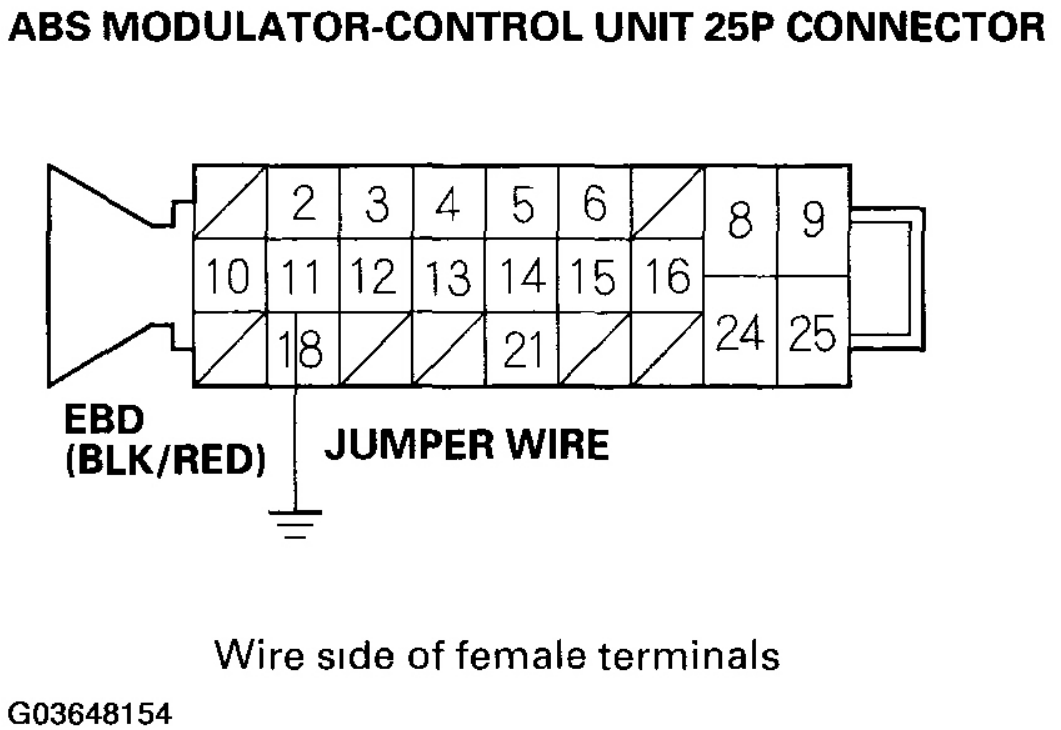


Fig. 33: Connecting ABS Modulator-Control Unit 25P Connector Terminal No. 11 And Body Ground With Jumper Wire ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

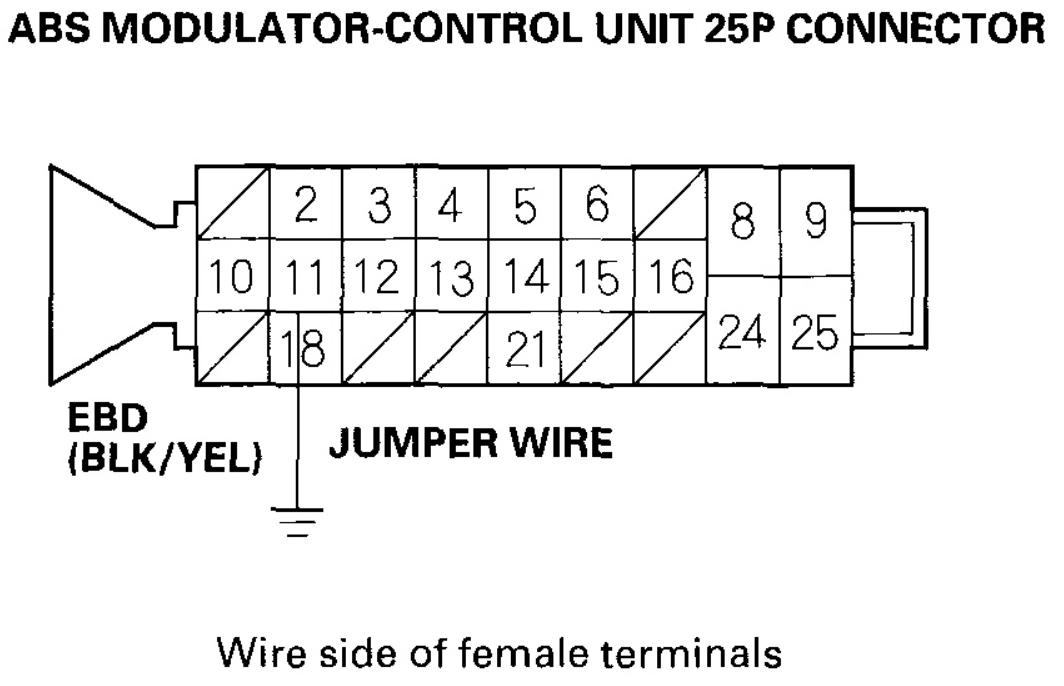


Fig. 34: Connecting ABS Modulator-Control Unit 25P Connector Terminal No. 11 And Body Ground With Jumper Wire ('06-07 models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Turn the ignition switch ON (II).

Does the brake system indicator come on?

YES - Check for loose terminals in the ABS modulator-control unit 25P connector. If connections are OK, replace the ABS modulator-control unit (see **ABS MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Repair open in the wire between the ABS modulator-control unit and the gauge control module.

BRAKE SYSTEM INDICATOR DOES NOT GO OFF, AND NO DTCS ARE STORED

1. Turn the ignition switch ON (II).
2. Release the parking brake.

   Does the brake system indicator go off after several seconds?

   YES - The system is OK at this time.

   NO - Go to step 3.
3. Check the brake fluid level.

   Is the level OK?

   YES - Go to step 4.

   NO - Inspect the brake system for fluid leaks.
4. Check the ABS indicator.

   Does the ABS indicator stay on?

   YES - Read the ABS DTC (see **HOW TO TROUBLESHOOT DTCS**), and do the applicable troubleshooting for the DTC.

   NO - Go to step 5.
5. Turn the ignition switch OFF.
6. Disconnect the ABS modulator-control unit 25P connector.
7. Turn the ignition switch ON (II), and check the brake system indicator.

   Does the brake system indicator go off?

   YES - Replace the ABS modulator-control unit (see **ABS MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

   NO - Go to step 8.
8. Turn the ignition switch OFF.
9. Remove the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**).
10. Disconnect the gauge control module connector (30P) ('03-05 models), (36P)

('06-07 models).

11. Check for continuity between the ABS modulator-control unit 25P connector terminal No. 21 and body ground.

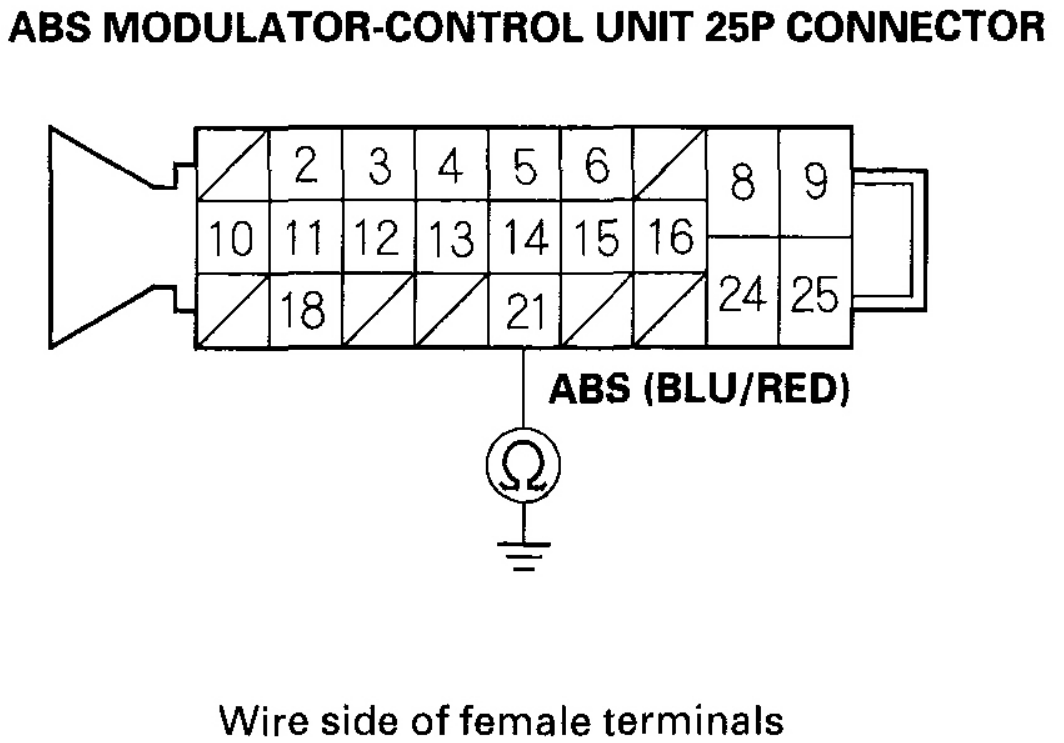


Fig. 35: Checking Continuity Between ABS Modulator-Control Unit 25P Connector Terminal 21 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the gauge control module and the ABS modulator-control unit.

NO - Check for a short to body ground in the brake system indicator circuit (see **BRAKE SYSTEM INDICATOR CIRCUIT DIAGRAM**).

ABS MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION

NOTE:

- **Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid gets on the paint, wash it off immediately with water.**
- **Be careful not to damage or deform the brake lines during removal and installation.**
- **To prevent the brake fluid from flowing, plug and cover the hose ends and joints with a shop towel or equivalent material.**

REMOVAL

1. Pull up the lock (A) of the ABS modulator-control unit 25P connector (B), and the connector disconnects itself.

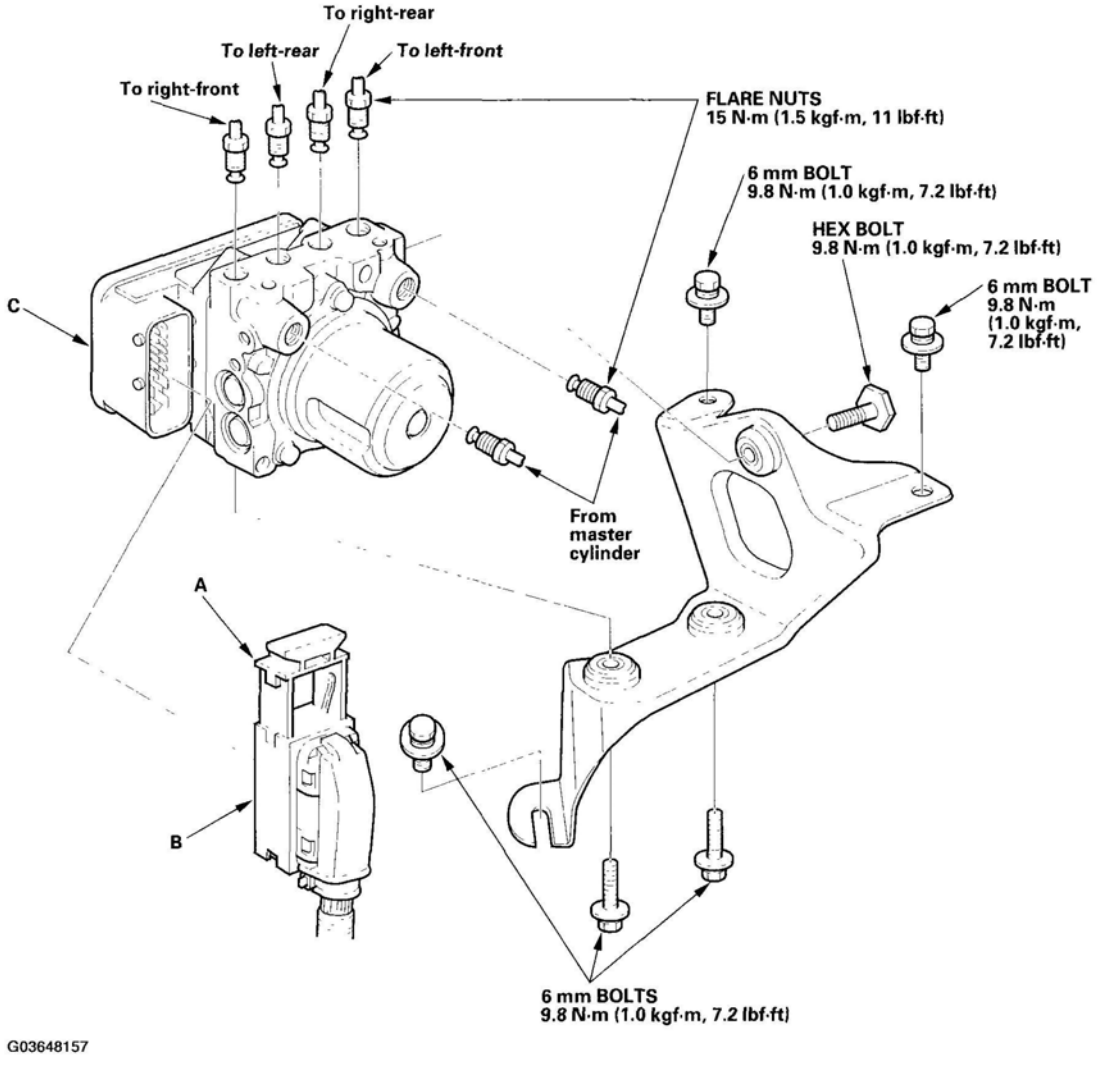


Fig. 36: Pulling Up Lock Of ABS Modulator-Control Unit 25 Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Disconnect the six brake lines from the ABS modulator-control unit (C).
3. Remove the five 6 mm bolts and the one hex bolt.
4. Remove the ABS modulator-control unit.

INSTALLATION

1. Install the ABS modulator-control unit, then tighten the five 6 mm bolts and the one hex bolt.
2. Reconnect the six brake lines, then tighten the flare nuts to the specified torque.

3. Align the connecting surface of the ABS modulator-control unit 25P connector to the ABS modulator-control unit.
4. Push in the lock (A) of the ABS modulator-control unit 25P connector (B) until you hear it click into place.

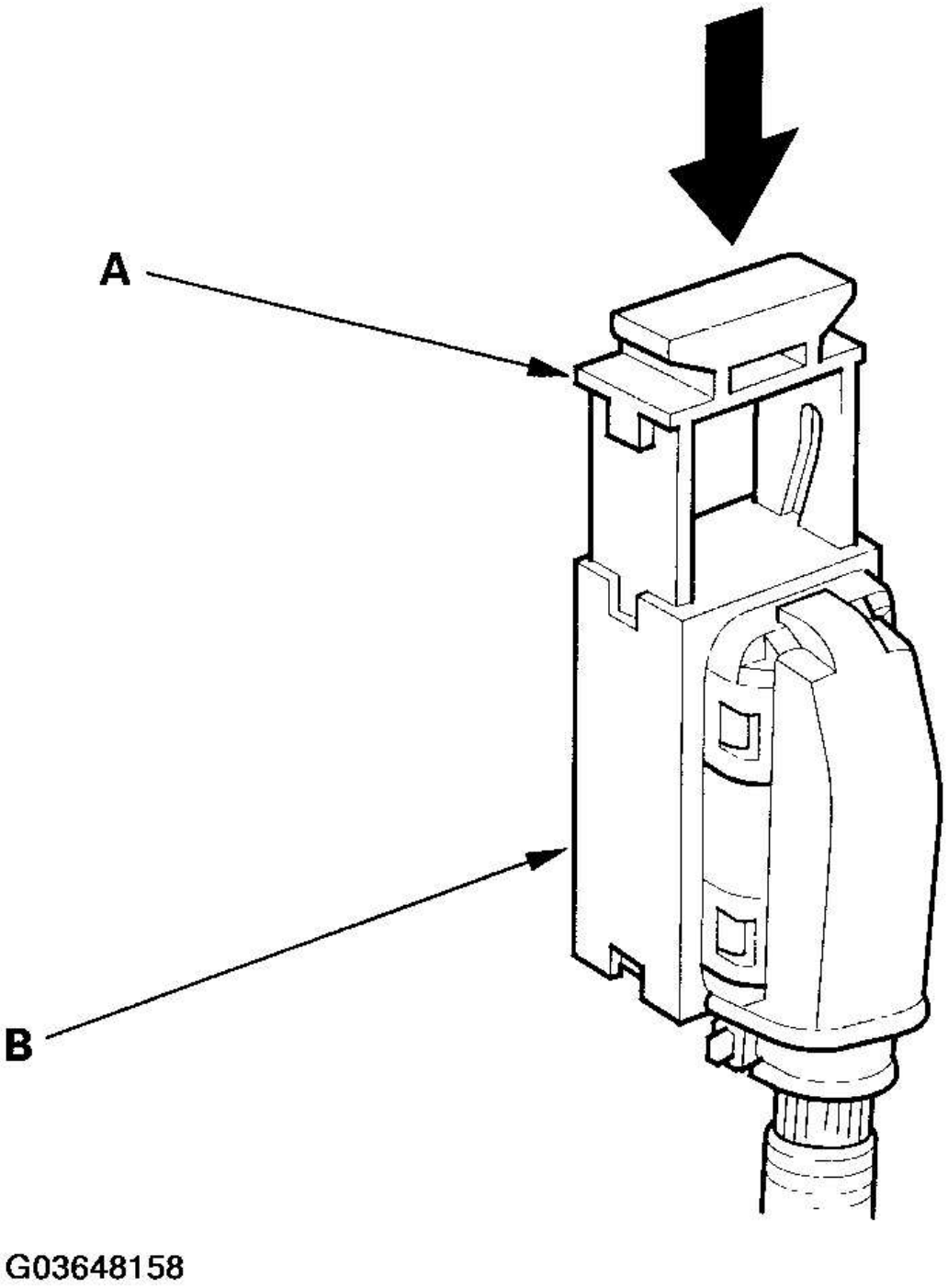


Fig. 37: Pushing Lock Of ABS Modulator-Control Unit 25P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Bleed the brake system, starting with the front wheels (see **BRAKE SYSTEM BLEEDING**).
6. Start the engine, and check that the ABS indicator goes off.
7. Test-drive the vehicle, check the ABS operation, and check that the ABS indicator does not come on.
8. If the brake pedal is now spongy, there may be air trapped in the modulator and then induced into the normal brake system during modulation. Exercise the ABS then bleed the brake system again, starting with the front wheels (see **BRAKE SYSTEM BLEEDING**).

WHEEL SENSOR INSPECTION

1. Check the magnetic encoder (A) and pulser (B) after cleaning. If necessary, replace the encoder or pulser.

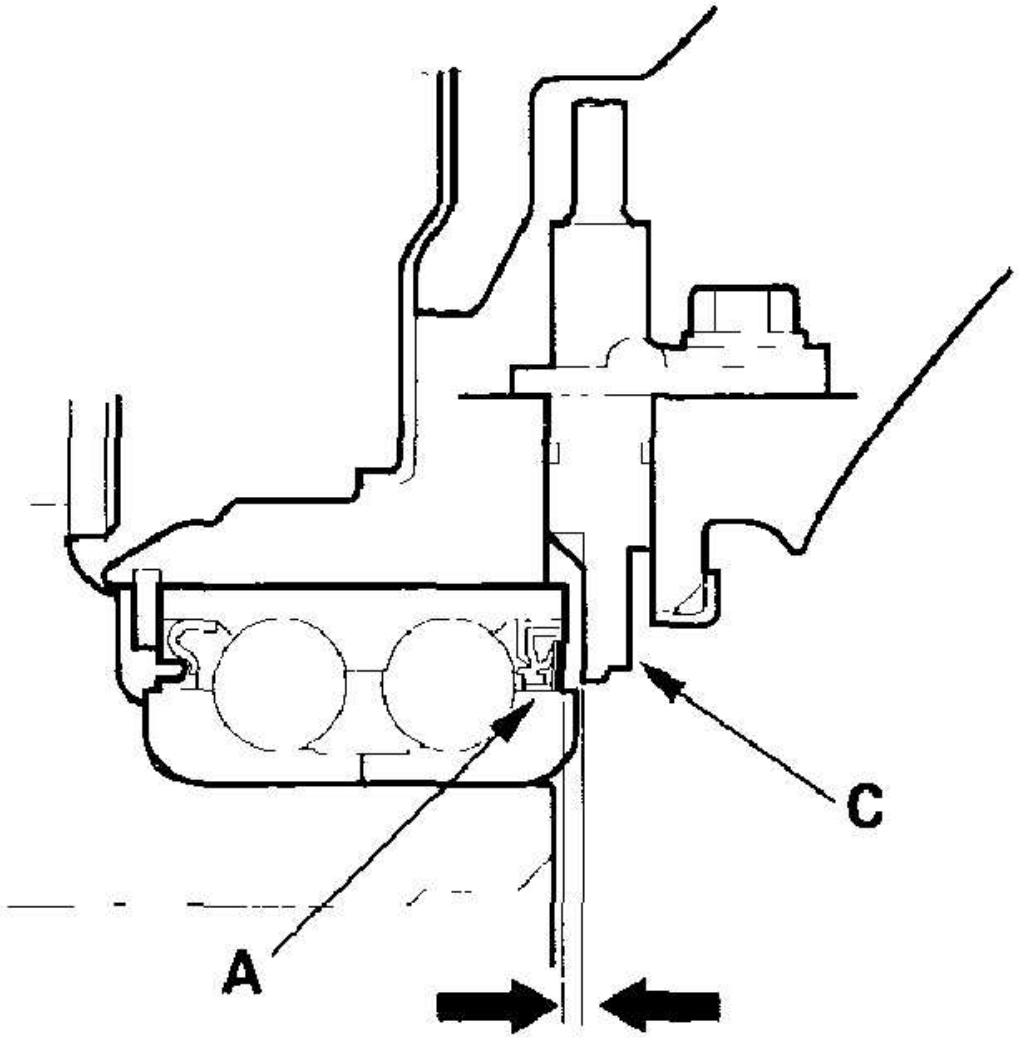


Fig. 38: Checking Front Magnetic Encoder And Pulser After Cleaning (Front)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

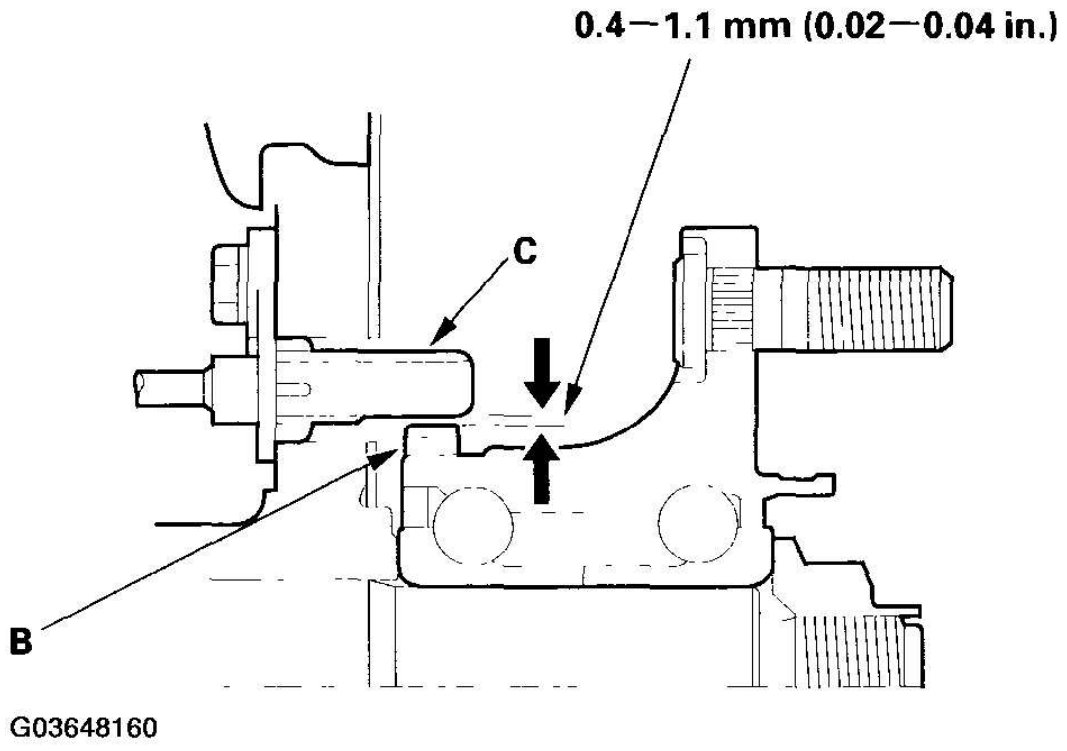


Fig. 39: Checking Rear Magnetic Encoder And Pulser After Cleaning (Rear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the air gap between the wheel sensor (C) and the magnetic encoder or pulser all the way around while rotating the encoder or pulser.

   Standard:

   Front: 0.5-1.2 mm (0.02-0.05 in.)
   Rear: 0.4-1.1 mm (0.02-0.04 in.)

WHEEL SENSOR REPLACEMENT

NOTE: Install the sensor carefully to avoid twisting the wires.

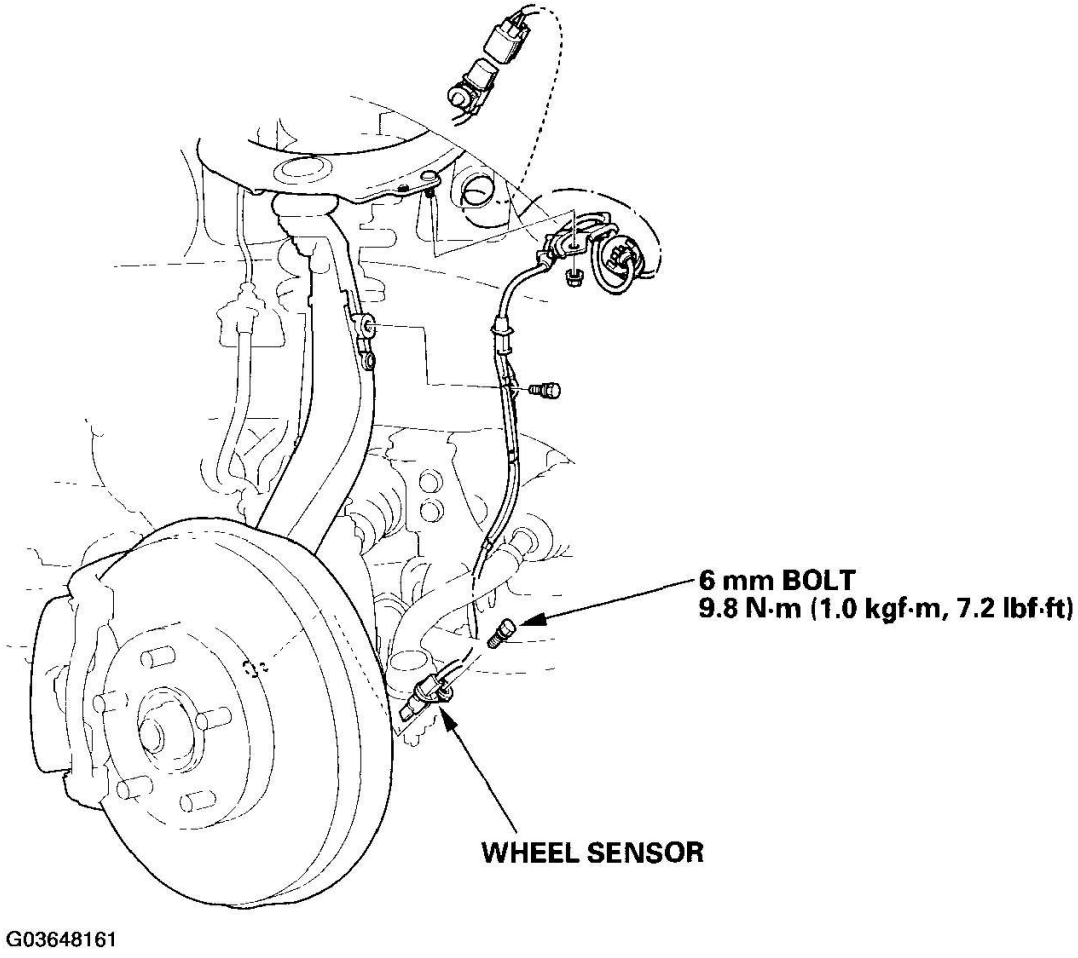


Fig. 40: Installing Front Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

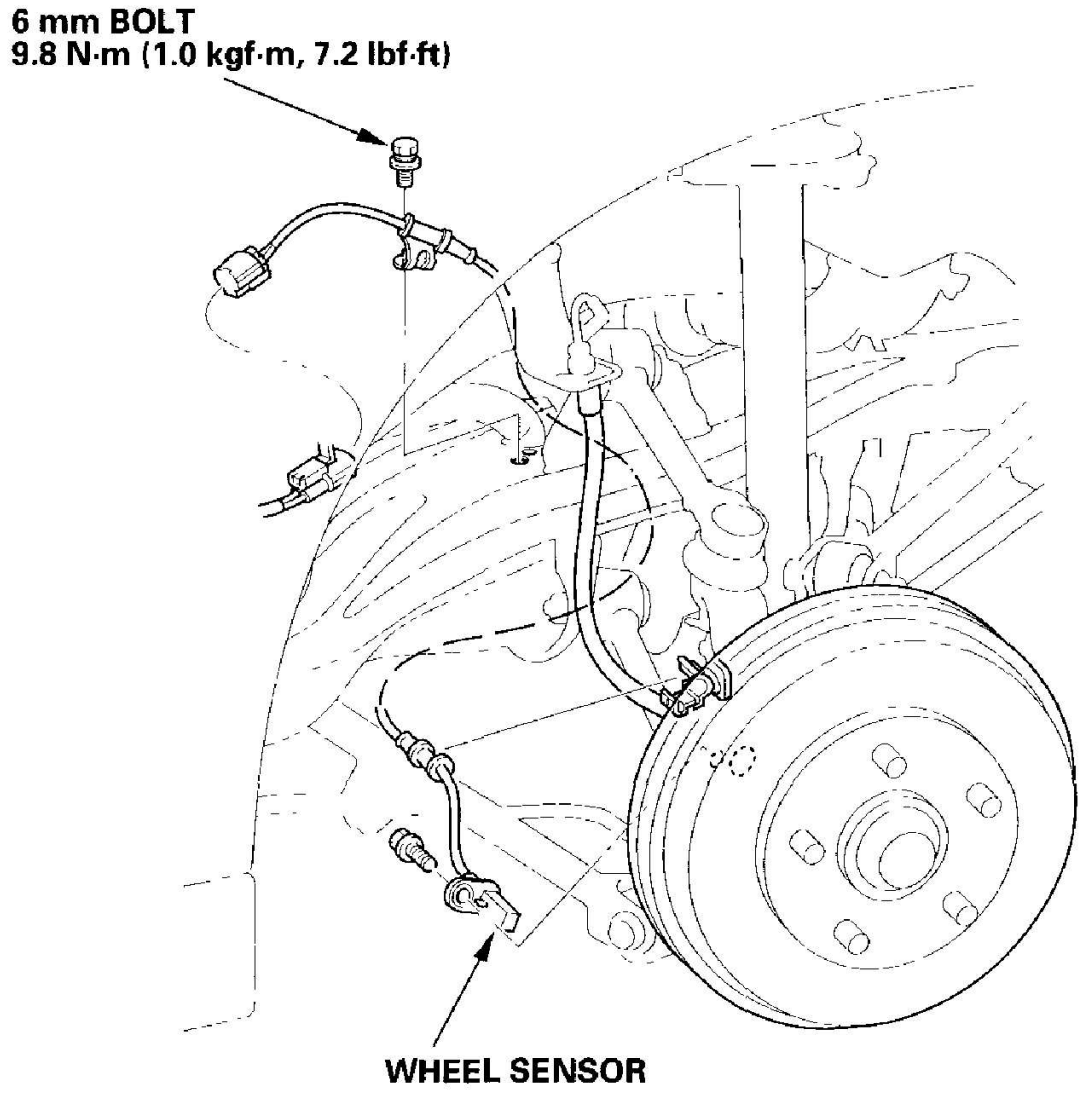


Fig. 41: Installing Rear Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 TRANSMISSION

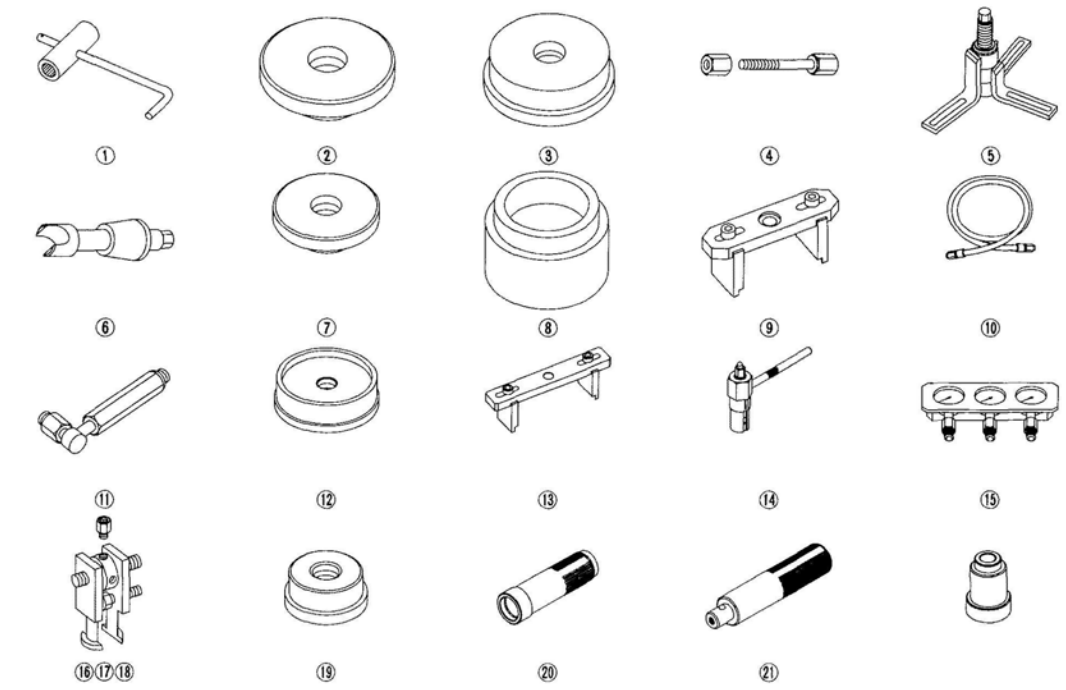
Automatic Transmission - Accord (V6)

AUTOMATIC TRANSMISSION

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07GAB-PF50101 or 07GAB-PF50100	Mainshaft Holder	1
②	07GAD-PG40101 or 07GAD-PG40100	Seal Driver Attachment	1
③	07GAD-SD40101	Attachment, 78 x 90 mm	1
④	07GAE-PG40200 or 07GAE-PG4020A	Clutch Spring Compressor Bolt Assembly	1
⑤	07HAC-PK40102	Housing Puller	1
⑥	07HAJ-PK40201	Preload Inspection Tool	1
⑦	07JAD-PH80101	Oil Seal Driver Attachment	1
⑧	07LAD-PW50601	Attachment, 40 x 50 mm	1
⑨	07LAE-PX40100	Clutch Spring Compressor Attachment	2
⑩	07MAJ-PY4011A	A/T Pressure Hose, 2,210 mm	3
⑪	07MAJ-PY40120	A/T Pressure Hose Adapter	3
⑫	07NAD-PX40100	Attachment, 78 x 80 mm	1
⑬	07ZAE-PRP0100	Clutch Compressor Attachment	1
⑭	070AJ-0020101	Preload Inspection Tool	1
⑮	07406-0020400 or 07406-0020401	A/T Oil Pressure Gauge Set w/Panel	1
⑯	07736-A01000B or 07736-A01000A	Adjustable Bearing Puller, 25—40 mm	1
⑰	07746-0010500	Attachment, 62 x 68 mm	1
⑱	07746-0010600	Attachment, 72 x 75 mm	1
⑲	07746-0010800	Attachment, 22 x 24 mm	1
⑳	07746-0030100	Driver, 40 mm I.D.	1
㉑	07749-0010000	Driver	1
㉒	07947-6340500	Driver Attachment	1

⑤: If the top arm is too short, replace it with 07SAC-P0Z01001.
⑨: 07HAE-PL50101 may be used to substitute one of these tools.
⑯: Must be used with commercially available 3/8 ″-16 slide hammer.



G03672355

Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC CODES

DTC CHART

DTC	Description
DTC P0705	Short in Transmission Range Switch Circuit (Multiple Shift-position Input)
DTC P0706	Open in Transmission Range Switch Circuit
DTC P0711	Problem in ATF Temperature Sensor Circuit
DTC P0712	Short in ATF Temperature Sensor Circuit
DTC P0713	Open in ATF Temperature Sensor Circuit
DTC P0716	Problem in Input Shaft (Mainshaft) Speed Sensor Circuit
DTC P0717	Problem in Input Shaft (Mainshaft) Speed Sensor Circuit (No Signal Input)
DTC P0718	Input Shaft (Mainshaft) Speed Sensor Intermittent Failure
DTC P0721	Problem in Output Shaft (Countershaft) Speed Sensor Circuit
DTC P0722	Problem in Output Shaft (Countershaft) Speed Sensor Circuit (No Signal Input)
DTC P0723	Output Shaft (Countershaft) Speed Sensor Intermittent Failure
DTC P0731	Problem in 1st Clutch and 1st Clutch Hydraulic Circuit
DTC P0732	Problem in 2nd Clutch and 2nd Clutch Hydraulic Circuit
DTC P0733	Problem in 3rd Clutch and 3rd Clutch Hydraulic Circuit
DTC P0734	Problem in 4th Clutch and 4th Clutch Hydraulic Circuit
DTC P0735	Problem in 5th Clutch and 5th Clutch

	Hydraulic Circuit
DTC P0741	Torque Converter Clutch Circuit Stuck OFF
DTC P0746	A/T Clutch Pressure Control Solenoid Valve A Stuck OFF
DTC P0747	A/T Clutch Pressure Control Solenoid Valve A Stuck ON
DTC P0751	Shift Solenoid Valve A Stuck OFF
DTC P0752	Shift Solenoid Valve A Stuck ON
DTC P0756	Shift Solenoid Valve B Stuck OFF
DTC P0757	Shift Solenoid Valve B Stuck ON
DTC P0761	Shift Solenoid Valve C Stuck OFF
DTC P0762	Shift Solenoid Valve C Stuck ON
DTC P0776	A/T Clutch Pressure Control Solenoid Valve B Stuck OFF
DTC P0777	A/T Clutch Pressure Control Solenoid Valve B Stuck ON
DTC P0780	Problem in Shift Control System
DTC P0847	Short in 3rd Clutch Transmission Fluid Pressure Switch Circuit, or 3rd Clutch Transmission Fluid Pressure Switch Stuck ON
DTC P0848	Open in 3rd Clutch Transmission Fluid Pressure Switch Circuit, or 3rd Clutch Transmission Fluid Pressure Switch Stuck OFF
DTC P0872	Short in 4th Clutch Transmission Fluid Pressure Switch Circuit, or 4th Clutch Transmission Fluid Pressure Switch Stuck ON
DTC P0873	Open in 4th Clutch Transmission Fluid Pressure Switch Circuit, or 4th Clutch Transmission Fluid Pressure Switch

	Stuck OFF
DTC P0962	Problem in A/T Clutch Pressure Control Solenoid Valve A Circuit
DTC P0963	Problem in A/T Clutch Pressure Control Solenoid Valve A
DTC P0966	Problem in A/T Clutch Pressure Control Solenoid Valve B Circuit
DTC P0967	Problem in A/T Clutch Pressure Control Solenoid Valve B
DTC P0970	Problem in A/T Clutch Pressure Control Solenoid Valve C Circuit
DTC P0971	Problem in A/T Clutch Pressure Control Solenoid Valve C
DTC P0973	Short in Shift Solenoid Valve A Circuit
DTC P0974	Open in Shift Solenoid Valve A Circuit
DTC P0976	Short in Shift Solenoid Valve B Circuit
DTC P0977	Open in Shift Solenoid Valve B Circuit
DTC P0979	Short in Shift Solenoid Valve C Circuit
DTC P0980	Open in Shift Solenoid Valve C Circuit
DTC P2769	Short in Torque Converter Clutch Solenoid Valve Circuit
DTC P2770	Open in Torque Converter Clutch Solenoid Valve Circuit

DTC TROUBLESHOOTING INDEX

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

DTC TROUBLESHOOTING INDEX (1 OF 2)

DTC (1)	D Indicator	MIL	Detection Item	Action
P0705(5-	Blinks	ON	Transmission range	(see **DTC P0705:**

2)[2]			switch (multiple shift-position input)	**SHORT IN TRANSMISSION RANGE SWITCH CIRCUIT (MULTIPLE SHIFT-POSITION INPUT)**)
P0706(6-2)[2]	OFF	ON	Transmission range switch (open)	(see **DTC P0706: OPEN IN TRANSMISSION RANGE SWITCH CIRCUIT**)
P0711 (28-5)[2]	Blinks	OFF	ATF temperature sensor (range/performance)	(see **DTC P0711: PROBLEM IN ATF TEMPERATURE SENSOR CIRCUIT**)
P0712 (28-3)[2]	Blinks	OFF	ATF temperature sensor (short)	(see **DTC P0712: SHORT IN ATF TEMPERATURE SENSOR CIRCUIT**)
P0713 (28-4)[2]	Blinks	OFF	ATF temperature sensor (open)	(see **DTC P0713: OPEN IN ATF TEMPERATURE SENSOR CIRCUIT**)
P0716 (15-5)[2]	Blinks	ON	Input shaft (mainshaft) speed sensor (range/performance)	(see **DTC P0716: PROBLEM IN INPUT SHAFT (MAINSHAFT) SPEED SENSOR CIRCUIT**)
P0717 (15-	Blinks	ON	Input shaft (mainshaft) speed	(see **DTC P0717: PROBLEM IN**

3)(2)			sensor (no signal input)	**INPUT SHAFT (MAINSHAFT) SPEED SENSOR CIRCUIT (NO SIGNAL INPUT)**)
P0718 (15-6)(2)	Blinks	ON	Input shaft (mainshaft) speed sensor (intermittent failure)	(see **DTC P0718: INPUT SHAFT (MAINSHAFT) SPEED SENSOR INTERMITTENT FAILURE**)
P0721 (9-5)(2)	Blinks	ON	Output shaft (countershaft) speed sensor (range/performance)	(see **DTC P0721: PROBLEM IN OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR CIRCUIT**)
P0722 (9-3)(2)	Blinks	ON	Output shaft (countershaft) speed sensor (no signal input)	(see **DTC P0722: PROBLEM IN OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR CIRCUIT (NO SIGNAL INPUT)**)
P0723 (9-6)(2)	Blinks	ON	Output shaft (countershaft) speed sensor (intermittent failure)	(see **DTC P0723: OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR INTERMITTENT FAILURE**)
P0731 (64-1)	Blinks	OFF	1st gear incorrect ratio	(see **DTC P0731: PROBLEM IN 1ST CLUTCH AND 1ST CLUTCH HYDRAULIC**

				CIRCUIT)
P0732 (64-2)	Blinks	OFF	2nd gear incorrect ratio	(see **DTC P0732: PROBLEM IN 2ND CLUTCH AND 2ND CLUTCH HYDRAULIC CIRCUIT**)
P0733 (64-3)	Blinks	OFF	3rd gear incorrect ratio	(see **DTC P0733: PROBLEM IN 3RD CLUTCH AND 3RD CLUTCH HYDRAULIC CIRCUIT**)
P0734 (64-4)	Blinks	OFF	4th gear incorrect ratio	(see **DTC P0734: PROBLEM IN 4TH CLUTCH AND 4TH CLUTCH HYDRAULIC CIRCUIT**)
P0735 (64-5)	Blinks	OFF	5th gear incorrect ratio	(see **DTC P0735: PROBLEM IN 5TH CLUTCH AND 5TH CLUTCH HYDRAULIC CIRCUIT**)
P0741 (40-3)	OFF	ON	Torque converter clutch circuit performance or stuck OFF	(see **DTC P0741: TORQUE CONVERTER CLUTCH CIRCUIT STUCK OFF**)
P0746 (76-3)	Blinks	ON	A/T clutch pressure control solenoid valve A stuck OFF	(see **DTC P0746: A/T CLUTCH PRESSURE CONTROL SOLENOID**

				VALVE A STUCK OFF)
P0747 (76-4)	Blinks	ON	A/T clutch pressure control solenoid valve A stuck ON	(see DTC P0747: A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A STUCK ON)
P0751 (70-3)	Blinks	ON	Shift solenoid valve A stuck OFF	(see DTC P0751: SHIFT SOLENOID VALVE A STUCK OFF)
P0752 (70-4)	Blinks	ON	Shift solenoid valve A stuck ON	(see DTC P0752: SHIFT SOLENOID VALVE A STUCK ON)
P0756 (71-3)	Blinks	ON	Shift solenoid valve B stuck OFF	(see DTC P0756: SHIFT SOLENOID VALVE B STUCK OFF)

(1) The DTC in parentheses is the Honda code that you will see when you use the HDS. The first number(s) before the - (hyphen) is the flash code the D indicator indicates when the data link connector (DLC) is connected to the HDS, and the HDS in SCS mode.

(2) This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.

DTC TROUBLESHOOTING INDEX (2 OF 2)

DTC(1)	D Indicator	MIL	Detection Item	Action
P0757 (71-4)	Blinks	ON	Shift solenoid valve B stuck ON	(see DTC P0757: SHIFT SOLENOID VALVE B

				STUCK ON)
P0761 (72-3)	Blinks	ON	Shift solenoid valve C stuck OFF	(see **DTC P0761: SHIFT SOLENOID VALVE C STUCK OFF**)
P0762 (72-4)	Blinks	ON	Shift solenoid valve C stuck ON	(see **DTC P0762: SHIFT SOLENOID VALVE C STUCK ON**)
P0776 (77-3)	Blinks	ON	A/T clutch pressure control solenoid valve B stuck OFF	(see **DTC P0776: A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE B STUCK OFF**)
P0777 (77-4)	Blinks	ON	A/T clutch pressure control solenoid valve B stuck ON	(see **DTC P0777: A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE B STUCK ON**)
P0780 (45-1)	Blinks	ON	Shift control system	(see **DTC P0780: PROBLEM IN SHIFT CONTROL SYSTEM**)
P0847 (26-3) (2)	Blinks	OFF	3rd clutch transmission fluid pressure switch (short or stuck ON)	(see **DTC P0847: SHORT IN 3RD CLUTCH TRANSMISSION FLUID**

				PRESSURE SWITCH CIRCUIT, OR 3RD CLUTCH TRANSMISSION FLUID PRESSURE SWITCH STUCK ON)
P0848 (26-4) (2)	Blinks	OFF	3rd clutch transmission fluid pressure switch (open or stuck OFF)	(see **DTC P0848: OPEN IN 3RD CLUTCH TRANSMISSION FLUID PRESSURE SWITCH CIRCUIT, OR 3RD CLUTCH TRANSMISSION FLUID PRESSURE SWITCH STUCK OFF**)
P0872 (27-3) (2)	Blinks	OFF	4th clutch transmission fluid pressure switch (short or stuck ON)	(see **DTC P0872: SHORT IN 4TH CLUTCH TRANSMISSION FLUID PRESSURE SWITCH CIRCUIT, OR 4TH CLUTCH TRANSMISSION FLUID PRESSURE**

				SWITCH STUCK ON)
P0873 (27-4) (2)	Blinks	OFF	4th clutch transmission fluid pressure switch (open or stuck OFF)	(see **DTC P0873: OPEN IN 4TH CLUTCH TRANSMISSION FLUID PRESSURE SWITCH CIRCUIT, OR 4TH CLUTCH TRANSMISSION FLUID PRESSURE SWITCH STUCK OFF**)
P0962 (16-3) (2)	Blinks	ON	A/T clutch pressure control solenoid valve A (open/short)	(see **DTC P0962: PROBLEM IN A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A CIRCUIT**)
P0963 (16-4) (2)	Blinks	ON	A/T clutch pressure control solenoid valve A	(see **DTC P0963: PROBLEM IN A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A**)
P0966 (23-3) (2)	Blinks	ON	A/T clutch pressure control solenoid valve B (open/short)	(see **DTC P0966: PROBLEM IN A/T CLUTCH PRESSURE**

				CONTROL SOLENOID VALVE B CIRCUIT)
P0967 (23-4) (2)	Blinks	ON	A/T clutch pressure control solenoid valve B	(see **DTC P0967: PROBLEM IN A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE B**)
P0970 (29-3) (2)	Blinks	ON	A/T clutch pressure control solenoid valve C (open/short)	(see **DTC P0970: PROBLEM IN A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE C CIRCUIT**)
P0971 (29-4) (2)	Blinks	ON	A/T clutch pressure control solenoid valve C	(see **DTC P0971: PROBLEM IN A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE C**)
P0973 (7-3) (2)	Blinks	ON	Shift solenoid valve A (short)	(see **DTC P0973: SHORT IN SHIFT SOLENOID VALVE A CIRCUIT**)
P0974 (7-4) (2)	Blinks	ON	Shift solenoid valve A (open)	(see **DTC P0974: OPEN IN SHIFT SOLENOID**

				VALVE A CIRCUIT)
P0976 (8-3) (2)	Blinks	ON	Shift solenoid valve B (short)	(see **DTC P0976: SHORT IN SHIFT SOLENOID VALVE B CIRCUIT**)
P0977 (8-4) (2)	Blinks	ON	Shift solenoid valve B (open)	(see **DTC P0977: OPEN IN SHIFT SOLENOID VALVE B CIRCUIT**)
P0979 (22-3) (2)	Blinks	ON	Shift solenoid valve C (short)	(see **DTC P0979: SHORT IN SHIFT SOLENOID VALVE C CIRCUIT**)
P0980 (22-4) (2)	Blinks	ON	Shift solenoid valve C (open)	(see **DTC P0980: OPEN IN SHIFT SOLENOID VALVE C CIRCUIT**)
P2769 (1-3) (2)	Blinks	ON	Torque converter clutch solenoid valve circuit (short)	(see **DTC P2769: SHORT IN TORQUE CONVERTER CLUTCH SOLENOID VALVE CIRCUIT**)
P2770 (1-4) (2)	Blinks	ON	Torque converter clutch solenoid valve	(see **DTC P2770: OPEN IN TORQUE**

			circuit (open)	**CONVERTER CLUTCH SOLENOID VALVE CIRCUIT**)

(1) The DTC in parentheses is the Honda code that you will see when you use the HDS. The first number(s) before the - (hyphen) is the flash code the D indicator indicates when the data link connector (DLC) is connected to the HDS, and the HDS in SCS mode.

(2) This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING

Symptom	Probable cause(s)	Notes
When you turn the ignition switch ON (II), the D indicator comes on and stays on in all shift lever positions, or it never comes on at all	• F-CAN communication line error • Gauge control module defective • PCM defective	• Check the F-CAN communication line for a DTC, see **DTC B1178: F-CAN COMMUNICATION LINE ERROR; DTC B1168: GAUGE CONTROL MODULE LOST COMMUNICATION WITH ECM/PCM (ENGINE MESSAGES); DTC B1169: GAUGE CONTROL MODULE LOST COMMUNICATION WITH THE PCM (A/T MESSAGES)** . • Check indicator drive

		circuit in the gauge control module by gauge control module self-diagnostic function (see **SELF-DIAGNOSTIC FUNCTION**).
A/T gear position indicator does not come on while the shift lever is in that position	• F-CAN communication line error • Gauge control module defective • PCM defective • Transmission range switch defective	• Check the F-CAN communication line for a DTC, see **DTC B1178: F-CAN COMMUNICATION LINE ERROR; DTC B1168: GAUGE CONTROL MODULE LOST COMMUNICATION WITH ECM/PCM (ENGINE MESSAGES); DTC B1169: GAUGE CONTROL MODULE LOST COMMUNICATION WITH THE PCM (A/T MESSAGES)** . • Check indicator drive circuit in the gauge control module by gauge control module self-diagnostic function (see **SELF-DIAGNOSTIC FUNCTION**). • Inspect the transmission

		range switch (see **TRANSMISSION RANGE SWITCH TEST**).
Shift lever cannot be moved from P while you are pressing on the brake pedal	• Accelerator pedal position sensor circuit • Accelerator pedal position sensor defective • Brake pedal position switch circuit • Brake pedal position switch defective • Shift lock solenoid defective • Shift lock solenoid control circuit • Shift lock mechanism defective • Throttle body defective • Transmission range switch ATP P switch stuck OFF • Transmission range switch ATP P switch line opened	• Inspect the APP sensor signal (see **APP SENSOR INSPECTION**). • Check the interlock system - shift lock system circuit, refer to **SHIFT LOCK SYSTEM CIRCUIT TROUBLESHOOTING** . • Test the shift lock solenoid (see **SHIFT LOCK SOLENOID TEST**). • Inspect the transmission range switch (see **TRANSMISSION RANGE SWITCH TEST**).
Ignition switch cannot be moved		Check the interlock system - key interlock system circuit,

from ACC (I) to LOCK (0) (key is pushed in, shift lever in P)	A problem in the key interlock system of the interlock system	refer to **KEY INTERLOCK SYSTEM CIRCUIT TROUBLESHOOTING** . Inspect the transmission range switch (see **TRANSMISSION RANGE SWITCH TEST**).
Engine runs, but vehicle does not	1. Low ATF level 2. Shift cable broken or out of adjustment 3. Shift cable worn 4. ATF pump worn or binding 5. Regulator valve stuck or spring worn 6. ATF strainer clogged	• Check the ATF level, and check the ATF cooler lines for leakage and loose connections. • Check for a loose shift cable at the shift lever and the transmission control lever. • Improper alignment of ATF pump and torque converter housing may cause ATF pump seizure. The symptoms are mostly an rpm-related ticking noise or a high pitched squeak. • Check the line pressure. • Check the ATF strainer for debris. If the ATF strainer is clogged with particles of steel or aluminum, inspect the ATF pump. If the ATF pump is OK, find the damaged components that caused the debris. If no cause for contamination is found, replace the torque converter.

move in any gear	7. Mainshaft worn or damaged 8. Final gears worn or damaged 9. Transmission-to-engine assembly error 10. Axle disengaged	• Inspect the differential pinion gears for wear. If the differential pinion gears are worn, replace the differential assembly, replace the ATF strainer, and thoroughly clean the transmission. • Be careful not to damage the torque converter housing when replacing the main ball bearing. You may also damage the ATF pump when you torque down the main valve body. This will result in ATF pump seizure if not detected. Use the proper tools. • Install the main seal flush with the torque converter housing. If you push it into the torque converter housing until it bottoms out, it will block the fluid return passage and result in damage.
		• Check the 1st clutch pressure. • Inspect the secondary shaft and 1st/1st-hold/2nd clutch assembly for wear and damage. • Inspect the clutch piston,

Vehicle moves in R, but not in D, D3, or 1	1. 1st accumulator defective 2. 1st clutch defective	clutch piston check valve, and O-rings. Check the spring retainer for wear and damage. Inspect the clutch end-plate-to-top disc clearance. If the clearance is out of tolerance, inspect the clutch discs and plates for wear and damage. If the discs and plates are worn and damaged, replace them as a set. If they are OK, adjust the clutch end plate clearance.
Vehicle moves in 2 and R, but not in D, D3, or 1	1. 1st gear one-way clutch defective 2. 1st gears worn or damaged 3. 1st clutch defective	• Check the 1st clutch pressure. • Inspect the secondary shaft and 1st/1st-hold/2nd clutch assembly for wear and damage. • Inspect the clutch piston, clutch piston check valve, and O-rings. Check the spring retainer for wear and damage. Inspect the clutch end-plate-to-top-disc clearance. If the clearance is out of tolerance, inspect the clutch discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK,

		adjust the clutch end plate clearance.
Vehicle moves in D, D3, 2, and R, but not in 1	1. 1st-hold accumulator defective 2. 1st-hold clutch defective	• Check the 1st-hold clutch pressure. • Inspect the secondary shaft and 1st/1st-hold/2nd clutch assembly for wear and damage. • Inspect the clutch piston, clutch piston check valve, and O-rings. Check the spring retainer for wear and damage. Inspect the clutch end-plate-to-top-disc clearance. If the clearance is out of tolerance, inspect the clutch discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clutch end plate clearance.
Vehicle moves in D,	1. 2nd accumulator defective	• Check the 2nd clutch pressure. • Inspect the secondary shaft and 1st/1st-hold/2nd clutch assembly for wear and damage. • Inspect the clutch piston, clutch piston check valve, and O-rings. Check the spring retainer for wear

D3,1,and R, but not in 2	2. 2nd gears worn or damaged 3. 2nd clutch defective	and damage. Inspect the clutch end-plate-to-top-disc clearance. If the clearance is out of tolerance, inspect the clutch discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clutch end plate clearance.
Vehicle moves in D, D3, 2, and 1,but not in R (or moves forward in R)		• Check the line pressure and 5th clutch pressure. • Check for a missing shift fork bolt on the shift fork shaft. • Check the ATF strainer for debris. If the ATF strainer is clogged with particles of steel or aluminum, inspect the ATF pump. If the ATF pump is OK, find the damaged components that caused the debris. If no cause for the contamination is found, replace the torque converter. • Inspect the reverse selector gear teeth chamfers, and inspect engagement teeth chamfers of the countershaft 5th gear and

		reverse gear. Replace the reverse gears and the reverse selector if they are worn or damaged. If the transmission makes clicking, grinding, or whirring noises, also replace the mainshaft 5th gear, reverse idler gear, and countershaft 5th gear.
	1. Shift fork shaft stuck 2. Modulator valve defective 3. Reverse CPC valve defective 4. 5th accumulator defective 5. 5th clutch defective 6. Reverse gears worn or damaged	• If the 5th clutch feed pipe guide in the end cover is scored by the mainshaft, inspect the ball bearing for excessive movement in the transmission housing. If the ball bearing is OK, replace the end cover as it is dented. The O-ring under the guide is probably worn. • Replace the mainshaft if the bushing for the 4th and 5th clutch feed pipes are loose or damaged. If the 5th clutch feed pipe is damaged or out of round, replace the end cover. • Inspect the clutch piston, clutch piston check valve, and O-rings. Check the spring retainer for wear and damage. Inspect the clutch end-plate-to-top-disc clearance. If the

		clearance is out of tolerance, inspect the clutch discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clearance with the clutch end plate.
Poor acceleration; flares when starting off in D and D3; stall speed high in D, D3, 2, and 1	1. Low ATF level 2. Shift cable broken or out of adjustment 3. ATF pump worn or binding 4. Regulator valve stuck or spring worn 5. ATF strainer clogged 6. Torque converter check valve defective	• Check the ATF level, and check the ATF cooler lines for leakage and loose connections. • Check for a loose shift cable at the shift lever and the transmission control lever. • Check the line pressure. • Improper alignment of ATF pump and torque converter housing may cause ATF pump seizure. The symptom is mostly an rpm-ticking noise or a high pitched squeak. • Be careful not to damage the torque converter housing when replacing the main ball bearing. You may also damage the ATF pump when you torque down the main valve body. This will result in ATF pump seizure if not

		detected. Use the proper tools.
Poor acceleration; flares when starting off in D and D3; stall speed high in 2	2nd clutch defective	• Check the 2nd clutch pressure. • Inspect the clutch piston, clutch piston check valve, and O-rings. Check the spring retainer for wear and damage. Inspect the clutch end-plate-to-top-disc clearance. If the clearance is out of tolerance, inspect the clutch discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clutch end plate clearance.
Poor acceleration; flares when starting off in R; stall speed high in R	1. Shift cable broken or out of adjustment 2. 5th clutch defective	• Check for a loose shift cable at the shift lever and the transmission control shaft. • Check the 5th clutch pressure. • Inspect the clutch piston, clutch piston check valve, and O-rings. Check the spring retainer for wear and damage. Inspect the clutch end-plate-to-top-disc clearance. If the clearance is out of

		tolerance, inspect the clutch discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clutch end plate clearance.
Poor acceleration; stall speed low	1. Torque converter clutch solenoid valve defective 2. Engine output low 3. Lock-up clutch piston defective 4. Lock-up shift valve defective	Check for a stuck lock-up valve in the valve body.
Engine idle vibration	1. Low ATF level 2. Torque converter clutch solenoid valve defective 3. Drive plate defective or transmission misassembled 4. Engine output low 5. Lock-up clutch piston defective 6. ATF pump worn or binding 7. Lock-up shift valve defective	• Set idle rpm in gear to the specified idle speed. If it is still no good, adjust the engine and transmission mounts. • Check the ATF level, and check the ATF cooler lines for leakage and loose connections.
	1. Excessive ATF	

Vehicle moves in N	2. Foreign material in separator plate orifice 3. Relief valve defective 4. 1st-hold clutch defective 5. 1st clutch defective 6. 2nd clutch defective 7. 3rd clutch defective 8. 4th clutch defective 9. 5th clutch defective 10. Clutch clearance incorrect 11. Needle bearing seized up, worn, or damaged 12. Thrust washer seized up, worn, or damaged	• Check the ATF level, and drain the ATF if it is over filled. • Inspect the clutch piston, clutch piston check valve, and O-rings. Check the spring retainer for wear and damage. Inspect the clutch end-plate-to-top-disc clearance. If the clearance is out of tolerance, inspect the clutch discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clutch end plate clearance. • Check all clutch pressures.
	1. Shift solenoid valve C defective 2. A/T clutch pressure control solenoid valve A defective 3. A/T clutch pressure control solenoid valve B defective 4. A/T clutch pressure	• Check the D indicator, and check for loose connectors. • Inspect the O-ring, and check the shift solenoid valve for seizure. • Inspect the A/T clutch pressure control solenoid valve body gasket and ATF feed pipes for wear and damage. If the A/T clutch pressure control

Late shift after shifting from N to D, or excessive shock when shifted into D	control solenoid valve C defective 5. Shift cable broken or out of adjustment 6. Connection between the shift cable and transmission or body is worn 7. Input shaft (mainshaft) speed sensor defective 8. Output shaft (countershaft) speed sensor defective 9. ATF temperature sensor defective 10. CPC valve C stuck 11. Foreign material in separator plate orifice 12. Shift valve C defective 13. Shift valve E defective 14. Servo control valve defective 15. 1st accumulator defective 16. 1st check ball stuck 17. 1st clutch defective	solenoid valve is stuck, inspect the CPC valves. • Check for a loose shift cable at the shift lever and the transmission control lever. • If the ATF strainer is clogged with particles of steel or aluminum, inspect the ATF pump. If the ATF pump is OK, find the damaged components that caused the debris. If no cause for the contamination is found, replace the torque converter. • Check the 1st clutch pressure. • Inspect the clutch piston, clutch piston check valve, and O-rings, Check the spring retainer for wear and damage. Inspect the clutch end-plate-to-top-disc clearance. If the clearance is out of tolerance, inspect the clutch discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clutch end plate clearance.

Late shift after shifting from N to R	1. Shift solenoid valve C defective 2. A/T clutch pressure control solenoid valve A defective 3. A/T clutch pressure control solenoid valve B defective 4. A/T clutch pressure control solenoid valve C defective 5. Shift cable broken or out of adjustment 6. Connection between the shift cable and transmission or body is worn 7. Input shaft (mainshaft) speed sensor defective 8. Output shaft (countershaft) speed sensor defective 9. ATF temperature sensor defective 10. Shift fork shaft stuck 11. CPC valve C stuck 12. Reverse CPC valve	• Check the D indicator, and check for loose connectors. • Inspect the O-ring, and check the shift solenoid valve for seizure. • Inspect the A/T clutch pressure control solenoid valve body gasket and ATF feed pipes for wear and damage. If the A/T clutch pressure control solenoid valve is stuck, inspect the CPC valves. • Check for a loose shift cable at the shift lever and the transmission control lever. • Check the ATF strainer for debris. If the ATF strainer is clogged with particles of steel or aluminum, inspect the ATF pump. If the ATF pump is OK, find the damaged components that caused the debris. If no cause for the contamination is found, replace the torque converter. • Check the 5th clutch pressure. • Inspect the clutch piston, clutch piston check valve,

	defective 13. Foreign material in separator plate orifice 14. Shift valve E defective 15. 5th accumulator defective 16. 5th clutch defective	and O-rings. Check the spring retainer for wear and damage. Inspect the clutch end-plate-to-top-disc clearance. If the clearance is out of tolerance, inspect the clutch discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clutch end plate clearance.
The A/T does not shift	1. Input shaft (mainshaft) speed sensor defective 2. Output shaft (countershaft) speed sensor defective 3. Modulator valve defective	• Check the D indicator, and check for loose connectors. • Check the line pressure. • Check the input shaft (mainshaft) and output shaft (countershaft) speed sensor installation.
Erratic shifting: fails to shift in D and D3; starts off in 5th	1. Shift solenoid valve B defective 2. Shift valve B defective	• Check the D indicator, and check for loose connectors. • Inspect the O-ring, and check the shift solenoid valve for seizure.
Erratic shifting: fails to shift in 2; starts off in 4th	1. Shift solenoid valve B defective 2. Shift valve B defective	• Check the D indicator, and check for loose connectors. • Inspect the O-ring, and check the shift solenoid valve for seizure.

Erratic shifting: fails to shift in D, D 3, and 1; starts off in 3rd	1. Shift solenoid valve A defective 2. Shift valve A defective	• Check the D indicator, and check for loose connectors. • Inspect the O-ring, and check the shift solenoid valve for seizure.
Excessive shock or flares on all upshifts and downshifts	1. A/T clutch pressure control solenoid valve A defective 2. A/T clutch pressure control solenoid valve B defective 3. Input shaft (mainshaft) speed sensor defective 4. Output shaft (countershaft) speed sensor defective 5. ATF temperature sensor defective 6. CPC valve A defective 7. Foreign material in separator plate orifice	• Check the D indicator, and check for loose connectors. • Inspect the A/T clutch pressure control solenoid valve body gasket and ATF feed pipes for wear and damage. If the A/T clutch pressure control solenoid valve is stuck, inspect the CPC valves. • Inspect the sensor O-rings.
Excessive shock or	1. Foreign material in separator plate orifice	• Check the 1st and 2nd clutch pressures. • Inspect the clutch piston, clutch piston check valve, and O-rings. Check the spring retainer for wear and damage. Inspect the clutch end-plate-to-top-

flares on 1-2 upshift or 2-1 downshift	2. 2nd accumulator defective 3. 2nd check ball stuck 4. 2nd clutch defective	disc clearance. If the clearance is out of tolerance, inspect the clutch discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clutch end plate clearance.
Excessive shock or flares on 2-3 upshift or 3-2 downshift	1. Shift solenoid valve C defective 2. A/T clutch pressure control solenoid valve A defective 3. A/T clutch pressure control solenoid valve B defective 4. 3rd clutch transmission fluid pressure switch defective 5. CPC valve B defective 6. Foreign material in separator plate orifice 7. Shift valve C defective 8. 2nd accumulator defective 9. 3rd accumulator	• Check the D indicator, and check for loose connectors. • Inspect the O-rings, and check the shift solenoid valve for seizure. • Check for clogged orifice in the transmission fluid pressure switch connector. If the orifice is clogged, remove it and clean the connector. • Check the 2nd and 3rd clutch pressures. • Inspect the clutch piston, clutch piston check valve, and O-rings. Check the spring retainer for wear and damage. Inspect the clutch end-plate-to-top-disc clearance. If the clearance is out of tolerance, inspect the clutch discs and plates for

	defective 10. 2nd check ball stuck 11. 2nd clutch defective 12. 3rd clutch defective	wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clutch end plate clearance.
Excessive shock or flares on 3-4 upshift or 4-3 downshift	1. Shift solenoid valve C defective 2. A/T clutch pressure control solenoid valve A defective 3. A/T clutch pressure control solenoid valve B defective 4. 4th clutch transmission fluid pressure switch defective 5. CPC valve B defective 6. Foreign material in separator plate orifice 7. Shift valve C defective 8. 3rd accumulator defective 9. 4th accumulator defective 10. 3rd clutch defective 11. 4th clutch defective	• Check the D indicator, and check for loose connectors. • Inspect the O-rings, and check the shift solenoid valve for seizure. • Check for clogged orifice in the transmission fluid pressure switch connector. If the orifice is clogged, remove it and clean the connector. • Check the 3rd and 4th clutch pressures. • Inspect the clutch piston, clutch piston check valve, and O-rings. Check the spring retainer for wear and damage. Inspect the clutch end-plate-to-top-disc clearance. If the clearance is out of tolerance, inspect the clutch discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK,

		adjust the clutch end plate clearance.
Excessive shock or flares on 4-5 upshift or 5-4 downshift	1. Shift solenoid valve C defective 2. A/T clutch pressure control solenoid valve A defective 3. A/T clutch pressure control solenoid valve B defective 4. A/T clutch pressure control solenoid valve C defective 5. CPC valve B defective 6. CPC valve C defective 7. Foreign material in separator plate orifice 8. Shift valve C defective 9. Shift valve E defective 10. Kick-down valve or kick-down short valve defective 11. 4th accumulator defective 12. 5th accumulator defective 13. 4th clutch defective	• Check the D indicator, and check for loose connectors. • Inspect the O-rings, and check the shift solenoid valve for seizure. • Check the 4th and 5th clutch pressures. • Inspect the clutch piston, clutch piston check valve, and O-rings. Check the spring retainer for wear and damage. Inspect the clutch end-plate-to-top-disc clearance. If the clearance is out of tolerance, inspect the clutch discs and plates for wear and damage. If the discs and plates are worn or damaged, replace them as a set. If they are OK, adjust the clutch end plate clearance.

	14. 5th clutch defective	
Noise from transmission in all shift lever positions	1. ATF pump worn or binding 2. Torque converter housing or transmission housing bearing worn or damaged	• Improper alignment of ATF pump and torque converter housing may cause ATF pump seizure. The symptoms are mostly an rpm-related ticking noise or a high pitched squeak. • Inspect the contact of the countershaft and secondary shaft with the bearings. • Check the ATF guide plates for damage and wear. • Inspect the 1st clutch feed pipe for damage and out of round. If the 1st clutch feed pipe is damaged or out of round, replace it. Replace the secondary shaft if the bushing for the 1st clutch feed pipe is damaged or out of round.
Vehicle does not accelerate above 31 mph (50 km/h)	Torque converter one-way clutch defective	Replace the torque converter.
Vibration in all shift lever positions	Drive plate defective or transmission misassembled	• Check for a misinstalled/damaged drive plate. • Set idle rpm in gear to the specified idle speed. If still no good, adjust the engine

		mounts. • Check the stall speed.
Shift lever does not operate smoothly	1. Transmission range switch defective or out of adjustment 2. Shift cable broken or out of adjustment 3. Joint in shift cable and transmission or body worn	• Check the D indicator, and check for loose connectors. • Inspect the transmission range switch. If the transmission range switch is faulty, replace it. If the transmission range switch is out of adjustment, adjust it and the shift cable. • Check for a loose shift cable at the shift lever and the transmission control lever.
Transmission does not shift into P	1. Shift cable broken or out of adjustment 2. Connection between the shift cable and transmission or body is worn 3. Park mechanism defective	• Check for a loose shift cable at the shift lever and the transmission control lever. • Check the park pawl spring installation and the park lever spring installation. If installation is incorrect, install the spring correctly. Make sure that the park lever stop is not installed upside down. Check the distance between the park pawl shaft and the park lever roller pin. If the distance is out of tolerance, adjust the distance with the park

		lever stop.
Torque converter clutch does not disengage	1. Torque converter clutch solenoid valve defective 2. A/T clutch pressure control solenoid valve C defective 3. Torque converter clutch piston defective 4. Lock-up shift valve defective 5. Lock-up control valve defective 6. Lock-up timing valve defective	• Check the D indicator, and check for loose connectors. • Inspect the A/T clutch pressure control solenoid valve body gasket for wear and damage. If the A/T clutch pressure control solenoid valve is stuck, inspect the CPC valves.
Torque converter clutch does not operate smoothly	1. Torque converter clutch solenoid valve defective 2. A/T clutch pressure control solenoid valve C defective 3. Torque converter clutch piston defective 4. Torque converter check valve defective 5. Lock-up shift valve defective 6. Lock-up control valve defective	• Check the D indicator, and check for loose connectors. • Inspect the A/T clutch pressure control solenoid valve body gasket for wear and damage. If the A/T clutch pressure control solenoid valve is stuck, inspect the CPC valves. • Center all engine mounts.

	7. Lock-up timing valve defective	
Torque converter clutch does not engage	1. Torque converter clutch solenoid valve defective 2. A/T clutch pressure control solenoid valve C defective 3. Input shaft (mainshaft) speed sensor defective 4. Output shaft (countershaft) speed sensor defective 5. Torque converter clutch piston defective. 6. Torque converter check valve defective 7. Lock-up shift valve defective 8. Lock-up control valve defective	• Check the D indicator, and check for loose connectors. • Inspect the A/T clutch pressure control solenoid valve body gasket for wear and damage. If the A/T clutch pressure control solenoid valve is stuck, inspect the CPC valves.
A/T gear position indicator does not indicate shift lever positions	1. Transmission range switch defective or out of adjustment 2. Shift cable broken or out of adjustment 3. Connection between	• Check the D indicator, and check for loose connectors. • Inspect the transmission range switch. If the transmission range switch is faulty, replace it. If the transmission range switch is out of adjustment, adjust

	the shift cable and transmission or body is worn	it and the shift cable. • Check for a loose shift cable at the shift lever and the transmission control shaft.
Speedometer and odometer do not work	Output shaft (countershaft) speed sensor defective	Check the D indicator, and check for loose connectors.
The engine does not rev to high rpm, and the transmission upshifts at low rpm (engine at normal operating temperature)	VTEC rocker arms defective	Check the engine rocker arms.

SYSTEM DESCRIPTION

General Operation

The automatic transmission is a combination of a 3-element torque converter and triple-shaft electronically controlled unit which provides 5 speeds forward and 1 reverse. The entire unit is positioned in line with the engine.

Torque Converter, Gears, and Clutches

The torque converter consists of a pump, turbine, and stator assembly in a single unit. The converter housing (pump) is connected to the engine crankshaft and turns as the engine turns. Around the outside of the torque converter is a ring gear which meshes with the starter pinion when the engine is being started. The entire torque converter assembly serves as a flywheel, transmitting power to the transmission mainshaft. The transmission has three parallel shafts: the mainshaft, the countershaft, and the secondary shaft. The mainshaft is in line with the engine crankshaft. The mainshaft includes the 4th and 5th clutches, and gears for 3rd, 4th, 5th, and reverse (reverse gear is integral with the 5th gear). The countershaft includes the 3rd clutch, and gears for the final drive, 1st, 4th, 5th, reverse, 2nd, park, and 3rd (the final drive gear is integral with the countershaft). The secondary

shaft includes the 1st, 1st-hold and 2nd clutches, and gears for 1st, 2nd, and idler. The countershaft 5th gear and the countershaft reverse gear can be locked to the countershaft at its center, providing 5th gear or reverse, depending with which way the selector is moved. The gears on the mainshaft and the secondary shaft are in constant mesh with those on the countershaft. When certain combinations of gears in the transmission are engaged by the clutches, power is transmitted through the mainshaft, then to the secondary shaft to the countershaft provide drive.

Electronic Control

The electronic control system consists of the powertrain control module (PCM), sensors, and seven solenoid valves. Shifting and lock-up are electronically controlled for comfortable driving under all conditions. The PCM is located below the dashboard, under the front lower panel behind the center console.

Hydraulic Control

The valve bodies include the main valve body, the regulator valve body, the servo body, and the accumulator body. They are bolted to the torque converter housing. The main valve body contains the manual valve, the modulator valve, the shift valve C, the shift valve D, the kick-down valve, the servo control valve, the torque converter check valve, the reverse CPC valve, the lock-up shift valve, the relief valve, the cooler check valve, and the ATF pump gears. The regulator valve body contains the regulator valve, the lock-up timing valve, and the lock-up control valve. The servo body contains the servo valve, the shift valve A, the shift valve B, the CPC valves A and B. The top accumulator body contains shift valve E, CPC valve C, 1st-hold accumulator piston, 4th accumulator piston, and 5th accumulator piston. The accumulator body contains the 1st and 2nd accumulators and lubrication check valve. Fluid from the regulator passes through the manual valve to the various control valves. The 1st, 3rd, 4th, and 5th clutches receive fluid from their respective feed pipes, and the 1st-hold and 2nd clutches receive fluid from the internal hydraulic circuit.

Shift Control Mechanism

To shift gears, the PCM controls shift solenoid valves A, B, and C, and automatic transaxle (A/T) clutch pressure control solenoid valves A and B, while receiving input signals from various sensors and switches located throughout the vehicle. The

shift solenoid valves shift the positions of the shift valves to switch the port leading hydraulic pressure to the clutch. The A/T clutch pressure control solenoid valves A and B control the CPC valves A and B to shift smoothly between lower gear and higher gear. This pressurizes a line to one of the clutches, engaging the clutch and its corresponding gear.

Lock-up Mechanism

The lock-up mechanism operates in the D position (2nd, 3rd, 4th, and 5th), and D3 position (2nd and 3rd). The pressurized fluid is drained from the back of the torque converter through a fluid passage, causing the torque converter clutch piston to be held against the torque converter cover. As this takes place, the mainshaft rotates at the same speed as the engine crankshaft. Together with hydraulic control, the PCM optimizes the timing of the lock-up mechanism. When the torque converter clutch solenoid valve activates, modulator pressure changes to switch lock-up on and off. The lock-up control valve and the lock-up timing valve control the volume of lock-up according to A/T clutch pressure control solenoid valve C. The torque converter clutch solenoid valve is mounted on the torque converter housing, and A/T clutch pressure control solenoid valve C is mounted on the transmission housing. They are all controlled by the PCM.

Gear Selection

The shift lever has seven positions; P: PARK, R: REVERSE, N: NEUTRAL, D: 1st through 5th gear ranges, D3: 1st through 3rd gear ranges, 2: 2nd gear, and 1: 1st gear.

GEAR SELECTION POSITION

Position	Description
P: PARK	Front wheels locked; park pawl engaged with park gear on countershaft. All clutches are released.
R: REVERSE	Reverse; reverse selector engaged with countershaft reverse gear and 5th clutch engaged.
N: NEUTRAL	All clutches are released.
D: DRIVE (1st	General driving; starts off in 1st, shifts automatically to 2nd, 3rd, 4th, then 5th, depending on vehicle speed and throttle position. Downshifts through 4th, 3rd, 2nd, and 1st on

through 5th)	deceleration to stop. The lock-up mechanism operates in 2nd, 3rd, 4th, and 5th gear.
D3: DRIVE (1st through 3rd)	Used for rapid acceleration at highway speeds and general driving; up-hill and down-hill driving; starts off in 1st, shifts automatically to 2nd, then 3rd, depending on vehicle speed and throttle position. Downshifts through 2nd to 1st on deceleration to stop. The lock-up mechanism operates in 2nd and 3rd gear.
2: SECOND	Used for engine braking or better traction starting off on loose or slippery surfaces; stays in 2nd gear; does not shift up or down.
1: FIRST	Used for engine braking; stays in 1st gear; does not shift up.

Starting is possible only in the P and N positions because of a slide-type neutral-safety switch.

Automatic Transmission (A/T) Gear Position Indicator

The A/T gear position indicator in the instrument panel shows which shift lever position has been selected without having to look down at the shift lever.

Clutches

The five-speed automatic transmission uses hydraulically-actuated clutches to engage or disengage the transmission gears. When hydraulic pressure is introduced into the clutch drum, the clutch piston moves. This presses the friction discs and steel plates together, locking them so they don't slip. Power is then transmitted through the engaged clutch pack to its hub-mounted gear. Likewise, when the hydraulic pressure is bled from the clutch pack, the piston releases the friction discs and steel plates, and they are free to slide past each other. This allows the gear to spin independently on its shaft, transmitting no power.

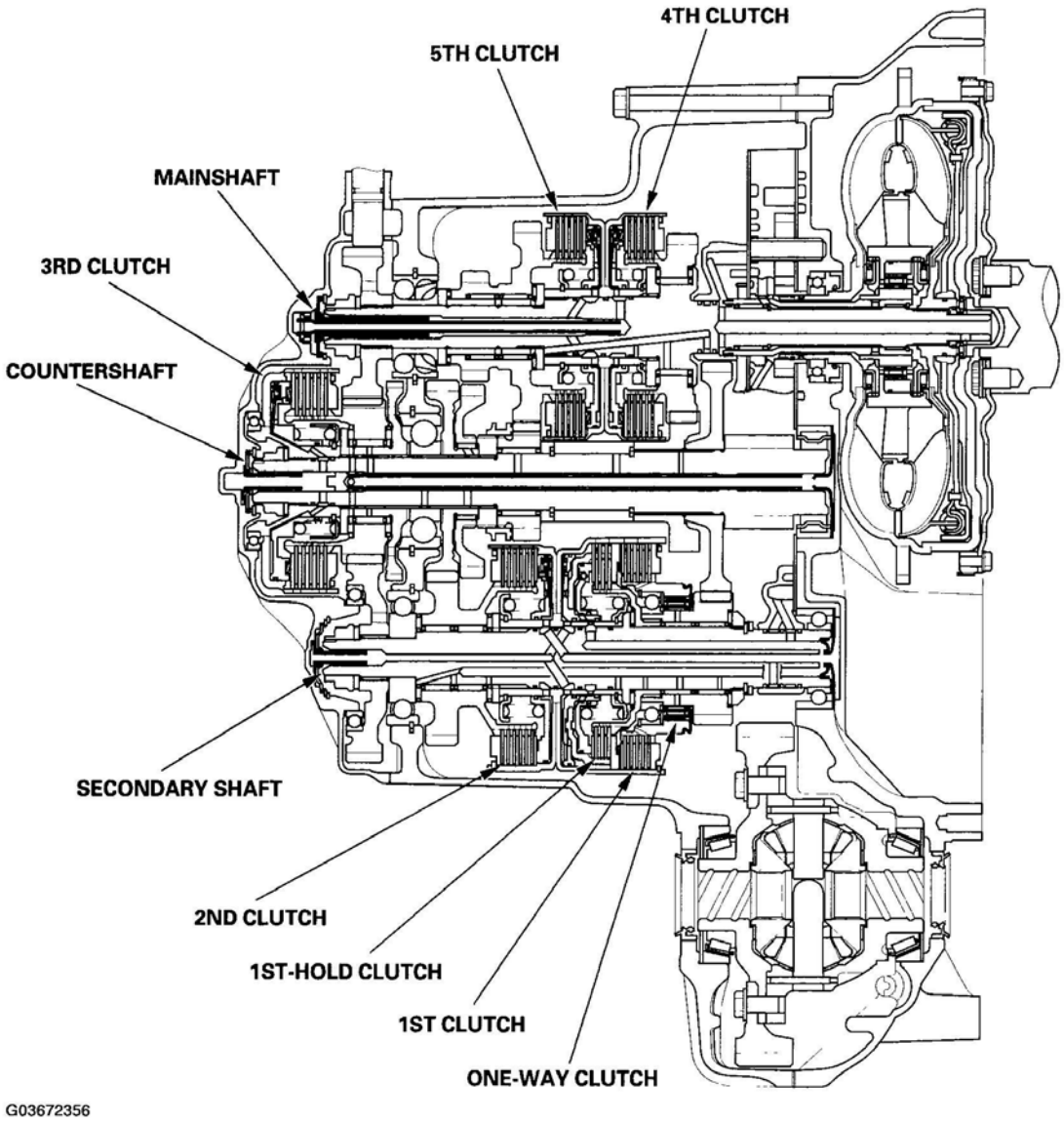


Fig. 2: Transmission Cutaway View
Courtesy of AMERICAN HONDA MOTOR CO., INC.

1st Clutch

The 1st clutch engages/disengages 1st gear, and is located at the middle of the secondary shaft. The 1st clutch is joined back-to-back to the 2nd clutch. The 1st clutch is supplied hydraulic pressure by its ATF feed pipe within the secondary shaft.

1st-hold Clutch

The 1st-hold clutch engages/disengages 1st-hold in 1 position, and is located in the 1st clutch drum. The 1st-hold clutch is supplied hydraulic pressure through the orifice inside the secondary shaft by a circuit connected to the internal hydraulic circuit.

2nd Clutch

The 2nd clutch engages/disengages 2nd gear, and is located at the middle of the secondary shaft. The 2nd clutch is joined back-to-back to the 1st clutch. The 2nd clutch is supplied hydraulic pressure through the orifice inside the secondary shaft by a circuit connected to the internal hydraulic circuit.

3rd Clutch

The 3rd clutch engages/disengages 3rd gear, and is located at the end of the countershaft, just behind the end cover. The 3rd clutch is supplied hydraulic pressure by its ATF feed pipe in the countershaft.

4th Clutch

The 4th clutch engages/disengages 4th gear, and is located at the middle of the mainshaft. The 4th clutch is joined back-to-back to the 5th clutch. The 4th clutch is supplied hydraulic pressure by its ATF feed pipe within the mainshaft.

5th Clutch

The 5th clutch engages/disengages 5th gear, as well as reverse gear, and is located at the middle of the mainshaft. The 5th clutch is joined back-to-back to the 4th clutch. The 5th clutch is supplied hydraulic pressure by its ATF feed pipe within the mainshaft.

One-way Clutch

The one-way clutch is positioned between the 1st clutch hub and the secondary shaft 1st gear. The secondary shaft 1st gear is splined to the 1st-hold clutch hub, with the 1st-hold clutch hub splined to the secondary shaft. The secondary shaft 1st gear provides the outer race surface, and the 1st clutch hub provides the inner race surface. The one-way clutch locks when power is transmitted from the secondary shaft 1st gear to the countershaft 1st gear. The 1st clutch and gears remain engaged in the 1st, 2nd, 3rd, 4th, and 5th gear ranges in the D, D3, or 2 position. However,

the one-way clutch disengages when the 2nd, 3rd, 4th, or 5th clutches and gears are applied in the D, D3, or 2 position. This is because the increased rotational speed of the gears on the secondary shaft causes the one-way clutch to free-wheels with the 1st clutch still engaged.

Power Flow

Gear Operation

Gears on the mainshaft:

- 4th gear is engaged/disengaged with the mainshaft by the 4th clutch.
- 5th gear is engaged/disengaged with the mainshaft by the 5th clutch.
- Reverse gear is engaged/disengaged with the mainshaft by the 5th clutch.
- 3rd gear is splined with the mainshaft and rotates with the mainshaft.

Gears on the countershaft:

- Final gear is integral with the countershaft.
- 1st gear, 4th gear, 2nd gear, and park gear are splined with the countershaft, and rotate with the countershaft.
- 5th gear and reverse gear rotate freely from the countershaft. The reverse selector engages 5th gear and reverse gear with the reverse selector hub. The reverse selector hub is splined to the countershaft so 5th gear and reverse gear engage with the countershaft.
- 3rd gear is engaged/disengaged with the countershaft by the 3rd clutch.

Gears on the secondary shaft:

- 1st gear is engaged/disengaged with the secondary shaft by the 1st clutch. 1st gear is engaged with the secondary shaft by the one-way clutch and the 1st-hold clutch when decelerating for engine braking.
- 2nd gear is engaged/disengaged with the secondary shaft by the 2nd clutch.
- Idler gear is splined with the secondary shaft, and rotates with the secondary shaft.

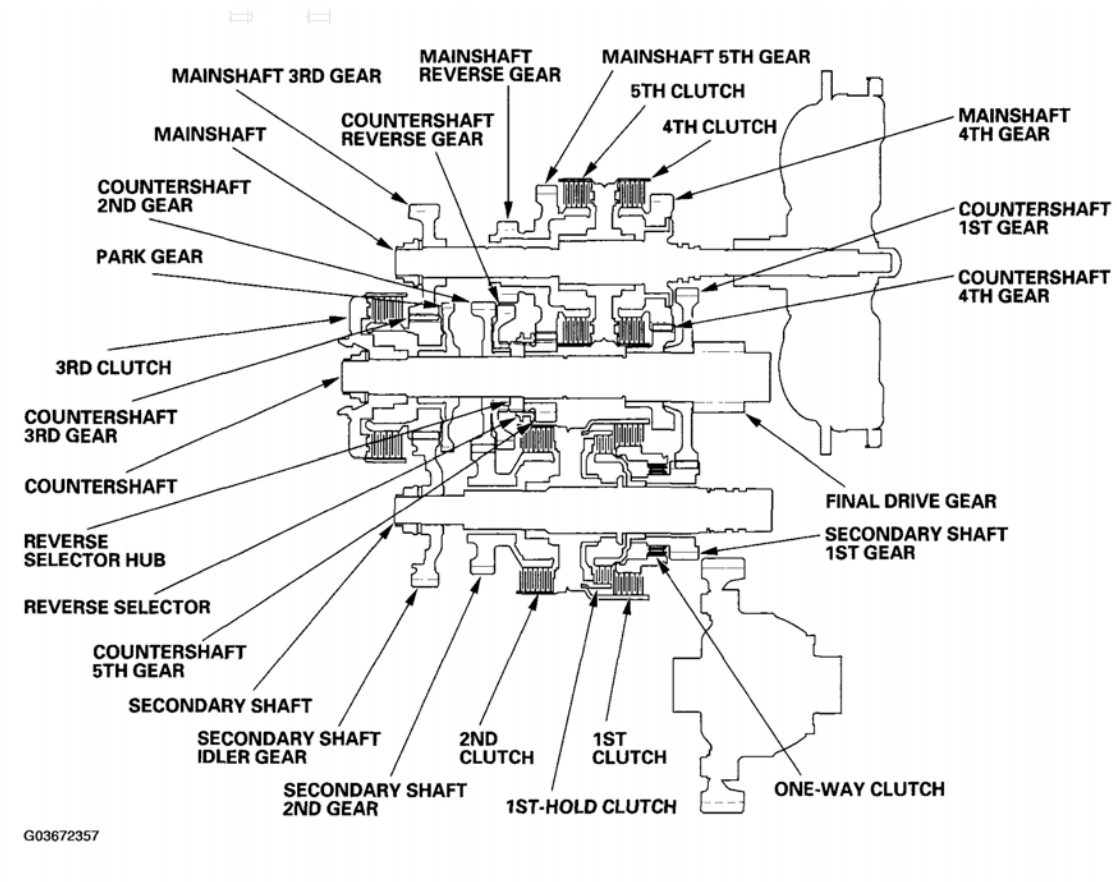


Fig. 3: Automatic Transmission Power Flow (Gear Operation)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

P Position

Hydraulic pressure is not applied to the clutches. Power is not transmitted to the countershaft. The countershaft is locked by the park pawl interlocking the park gear.

N Position

Engine power transmitted from the countershaft drives the mainshaft 3rd gear, the countershaft 3rd gear, and the secondary shaft idler gear, but hydraulic pressure is not applied to the clutches. Power is not transmitted to the countershaft. In this position, the position of the reverse selector differs according to whether the shift lever shifted from the D or P position:

- When shifted from the D position, the reverse selector engages with the countershaft 5th gear and the reverse selector hub, and the 5th gear engages

with the countershaft.

- When shifted from the R position, the reverse selector engages with the countershaft reverse gear and the reverse selector hub, and the reverse gear engages with the countershaft.

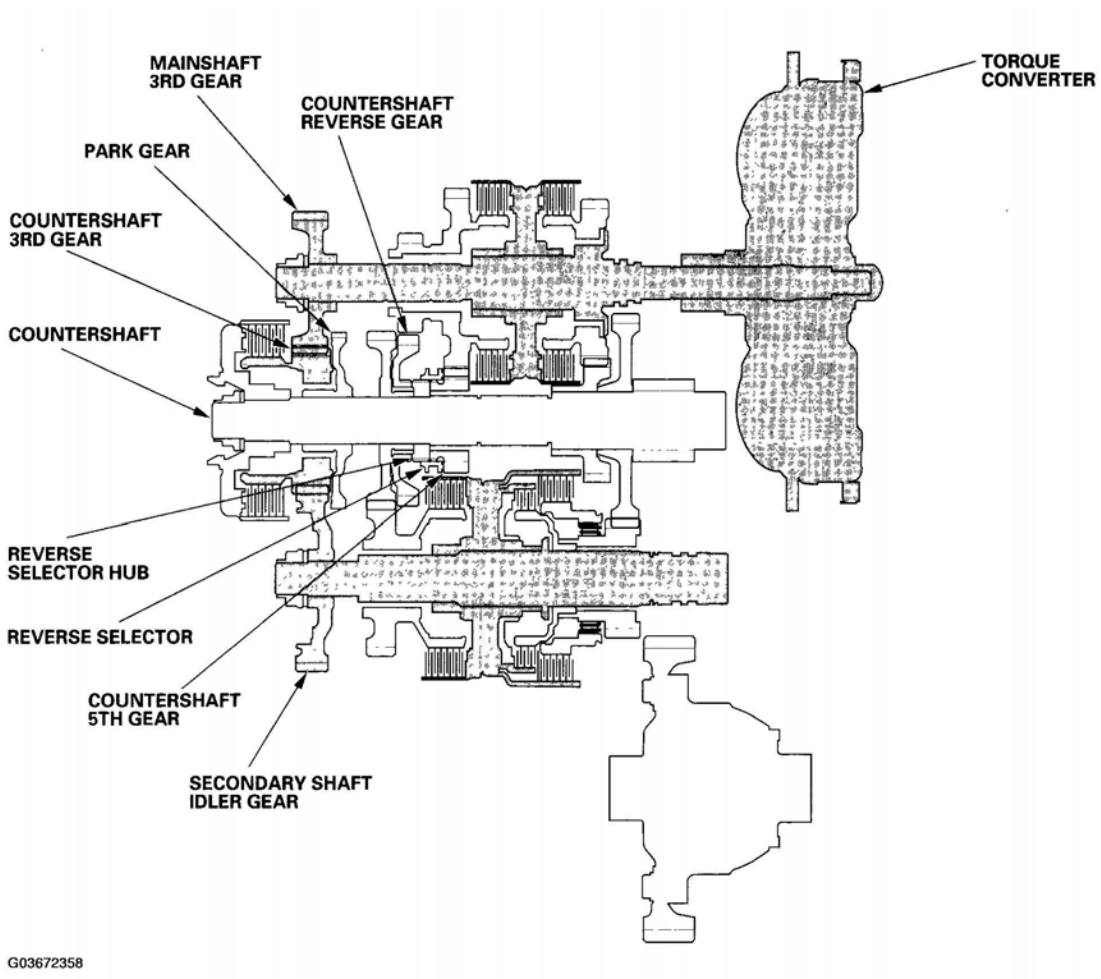


Fig. 4: Automatic Transmission Power Flow (N Position)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

1 Position

In the 1 position, hydraulic pressure is applied to the 1st clutch and the 1st-hold clutch. The power flow when accelerating is as follows:

- Hydraulic pressure is applied to the 1st clutch, then the 1st clutch engages the secondary shaft 1st gear with the secondary shaft by the one-way clutch.

- Hydraulic pressure is also applied to the 1st-hold clutch, and the 1st-hold clutch engages the secondary shaft 1st gear with the secondary shaft.
- The mainshaft 3rd gear drives the secondary shaft via the countershaft 3rd gear and the secondary shaft idler gear.
- The secondary shaft 1st gear drives the countershaft 1st gear and the countershaft.
- Power is transmitted to the final drive gear, which in turn drives the final driven gear.

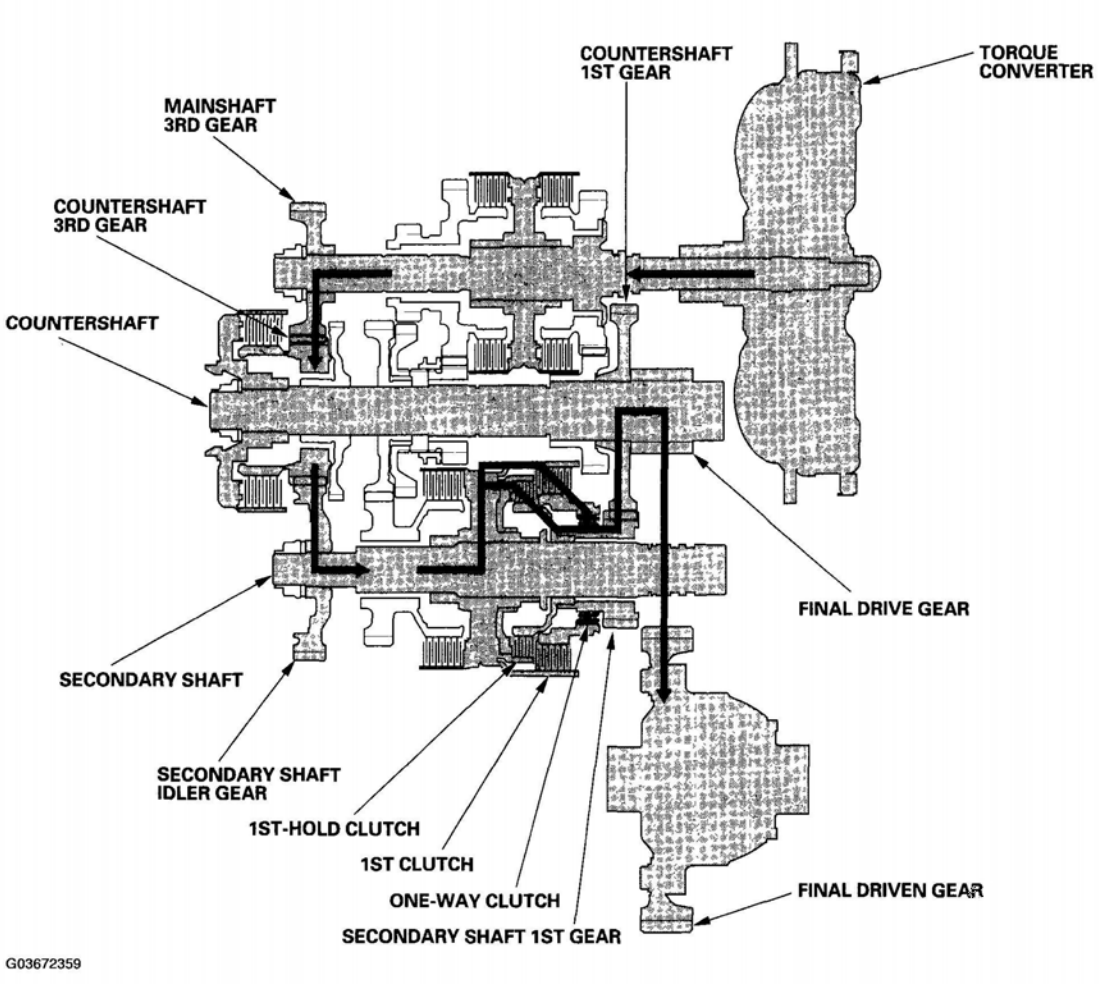


Fig. 5: Automatic Transmission Power Flow (1st Position - Accelerating))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

1 Position

The power flow when decelerating as follows:

- Hydraulic pressure is applied to the 1st clutch and the 1st-hold clutch. Rolling resistance from the road surface goes through the front wheels to the final drive gear, then to the secondary shaft idler gear.
- The one-way clutch disengages because the application of torque is reversed.
- The counterforce conveyed to the secondary shaft idler gear turns the mainshaft 3rd gear via the countershaft 3rd gear. As a result, engine braking can be obtained with 1st gear.

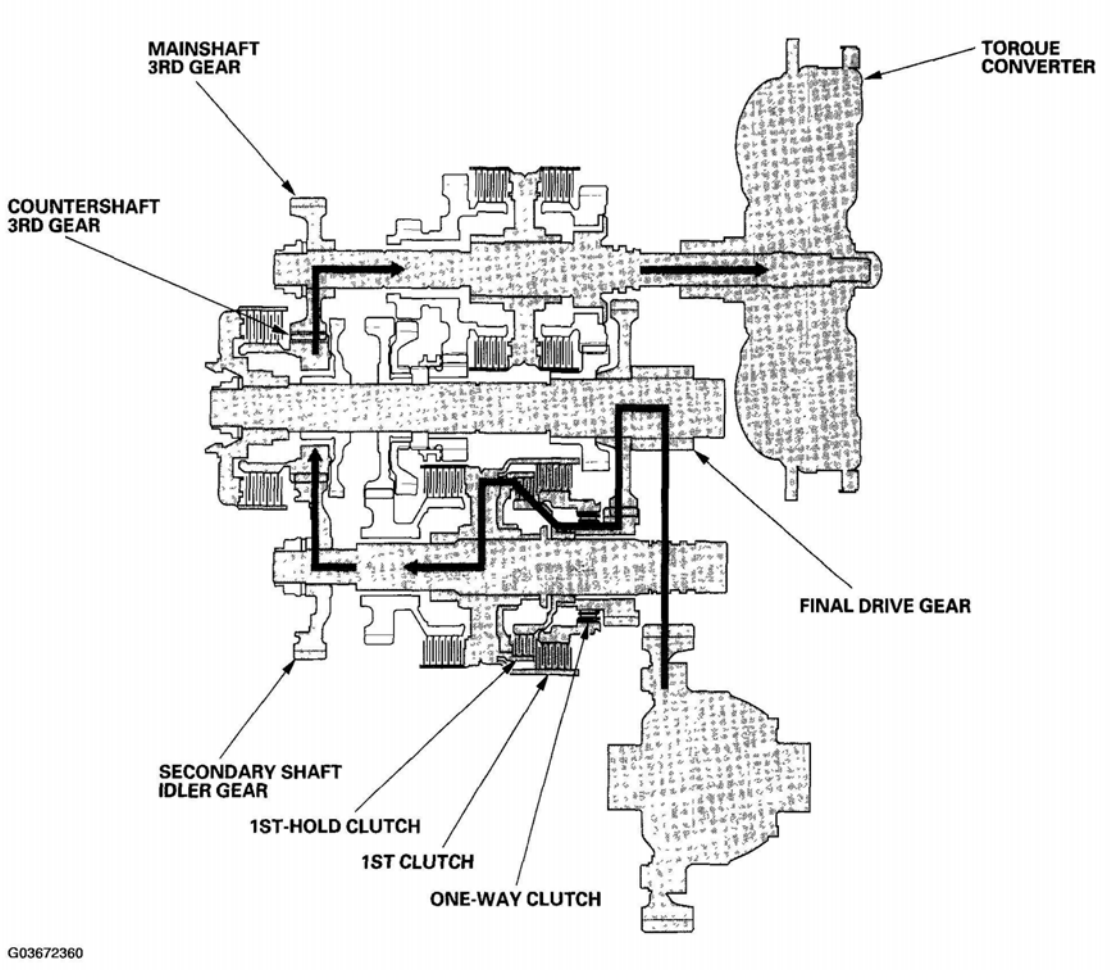


Fig. 6: Automatic Transmission Power Flow (1 Position - Decelerating) Courtesy of AMERICAN HONDA MOTOR CO., INC.

In the D or D3 position, the optimum gear is automatically selected from the 1st,

2nd, 3rd, 4th, and 5th gears according to conditions such as the balance between the throttle opening (engine loading) and vehicle speed.

D or D3 Position in 1st gear

- Hydraulic pressure is applied to the 1st clutch, then the 1st clutch engages the secondary shaft 1st gear with the secondary shaft by the one-way clutch.
- The mainshaft 3rd gear drives the secondary shaft via the countershaft 3rd gear and secondary shaft idler gear.
- The secondary shaft 1st gear drives the countershaft 1st gear and the countershaft.
- Power is transmitted to the final drive gear, which in turn drives the final driven gear.

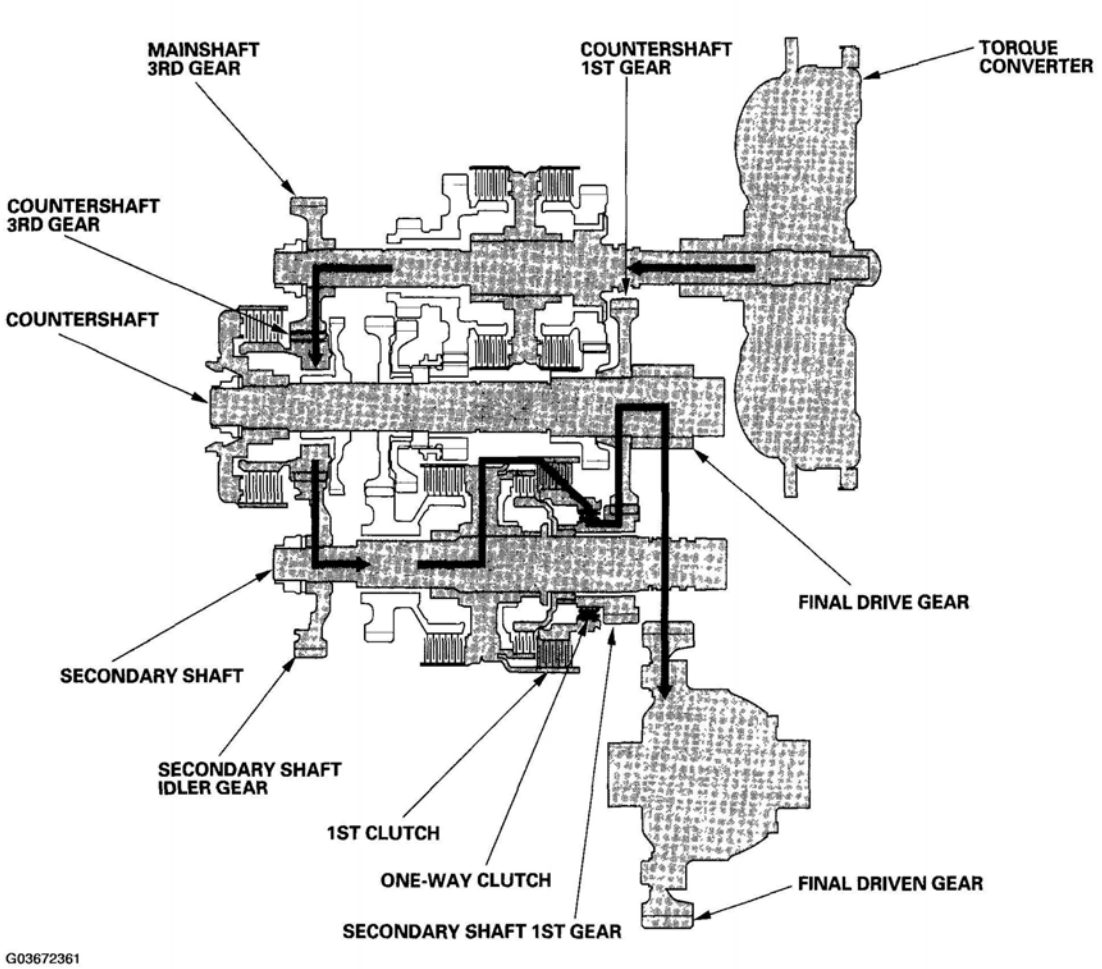


Fig. 7: Automatic Transmission Power Flow (D or D3 Position In 1st Gear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

D or D3 Position in 2nd gear and 2 Position

- Hydraulic pressure is applied to the 2nd clutch, then the 2nd clutch engages the secondary shaft 2nd gear with the secondary shaft.
- The mainshaft 3rd gear drives the secondary shaft via the countershaft 3rd gear and secondary shaft idler gear.
- The secondary shaft 2nd gear drives the countershaft 2nd gear and the countershaft.
- Power is transmitted to the final drive gear, which in turn drives the final driven gear.
- Hydraulic pressure is also applied to the 1st clutch, but since the rotation speed of 2nd gear exceeds that of 1st gear, power from 1st gear is cut off at the one-way clutch.

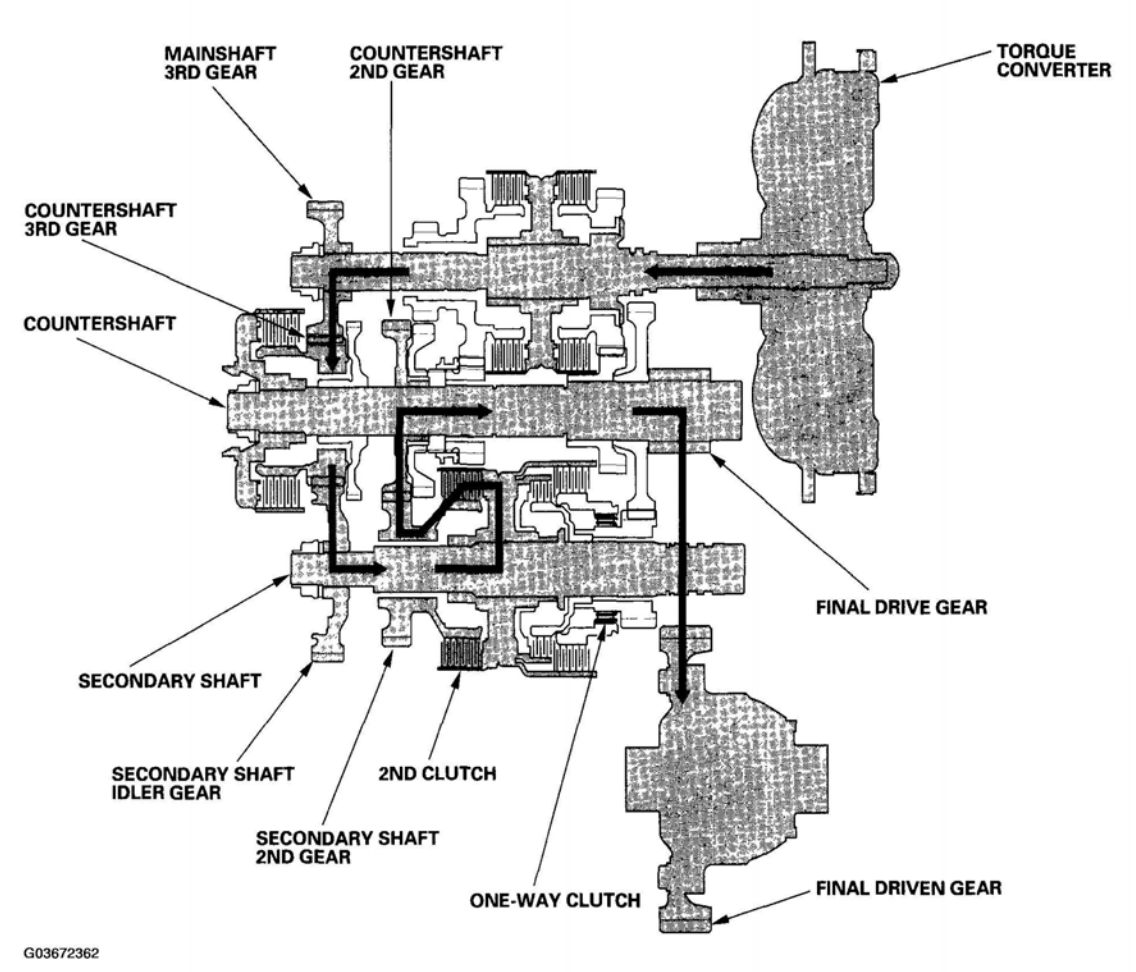


Fig. 8: Automatic Transmission Power Flow (D or D3 Position In 2nd Gear And 2 Position)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

D or D3 Position in 3rd gear

- Hydraulic pressure is applied to the 3rd clutch, then 3rd clutch engages the countershaft 3rd gear with the countershaft.
- The mainshaft 3rd gear drives the countershaft 3rd gear and countershaft.
- Power is transmitted to the final drive gear, which in turn drives the final driven gear.
- Hydraulic pressure is also applied to the 1st clutch, but since the rotation speed of 3rd gear exceeds that of 1st gear, power from 1st gear is cut off at the one-way clutch.

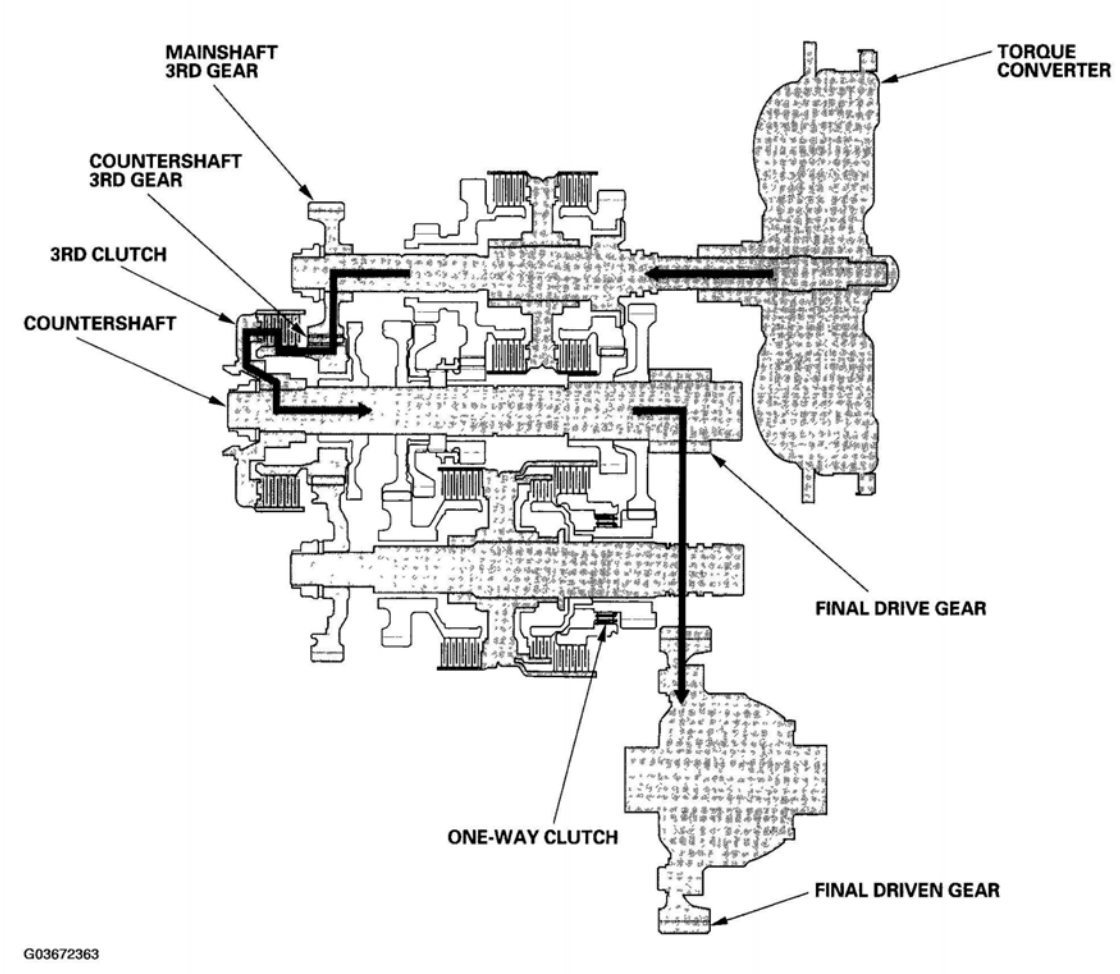


Fig. 9: Automatic Transmission Power Flow (D or D3 Position In 3rd gear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

D Position in 4th gear

- Hydraulic pressure is applied to the 4th clutch, then the 4th clutch engages the mainshaft 4th gear with the mainshaft.
- The mainshaft 4th gear drives the countershaft 4th gear and the countershaft.
- Power is transmitted to the final drive gear, which in turn drives the final driven gear.
- Hydraulic pressure is also applied to the 1st clutch, but since the rotation speed of 4th gear exceeds that of 1st gear, power from 1st gear is cut off at the one-way clutch.

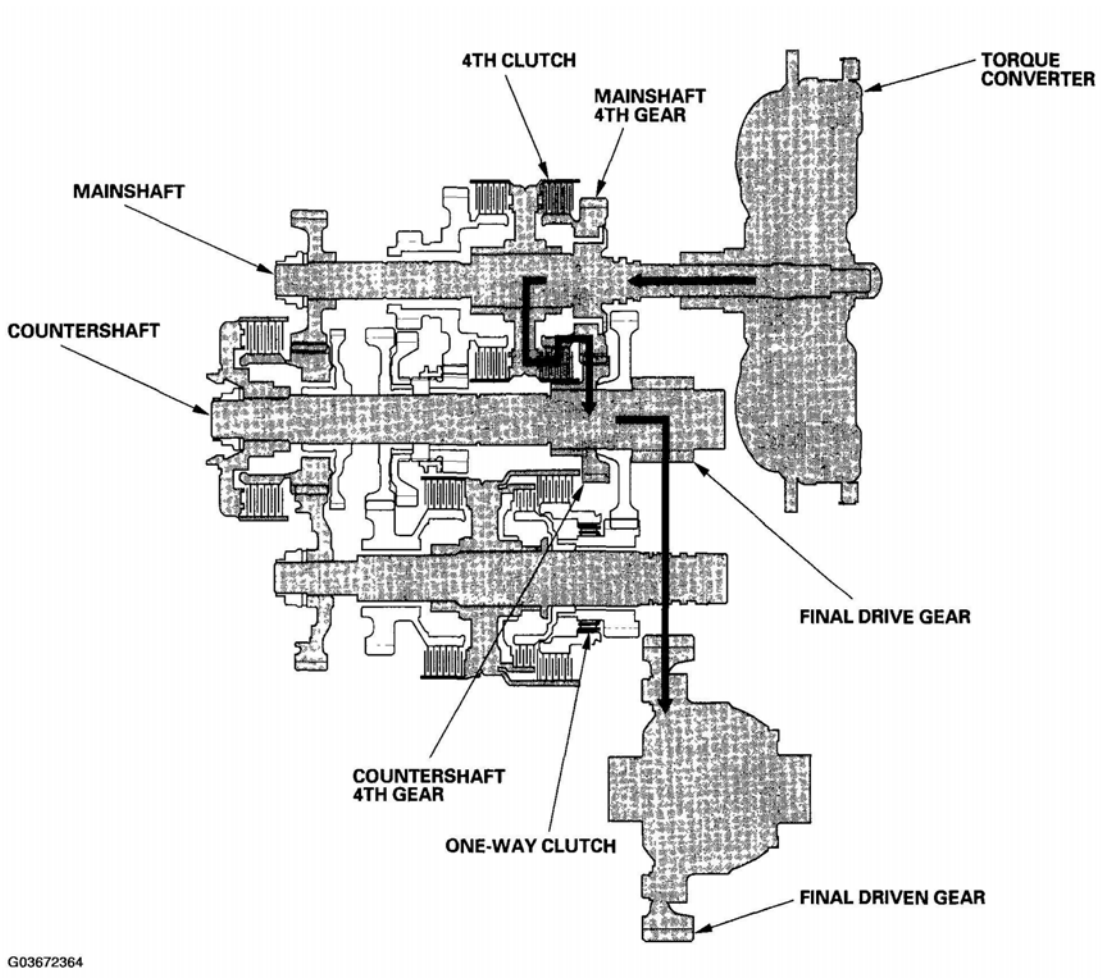


Fig. 10: Automatic Transmission Power Flow (D or D3 Position In 4th gear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

D Position in 5th gear

- Hydraulic pressure is applied to the servo valve to engage the reverse selector with the countershaft 5th gear while the shift lever in the forward range (D, D3, 2, and 1 positions).
- Hydraulic pressure is also applied to the 5th clutch, then the 5th clutch engages the mainshaft 5th gear with the mainshaft.
- The mainshaft 5th gear drives the countershaft 5th gear, which drives the reverse selector hub and the countershaft.
- Power is transmitted to the final drive gear, which in turn drives the final

driven gear.

- Hydraulic pressure is also applied to the 1st clutch, but since the rotation speed of 5th gear exceeds that of 1st gear, power from 1st gear is cut off at the one-way clutch.

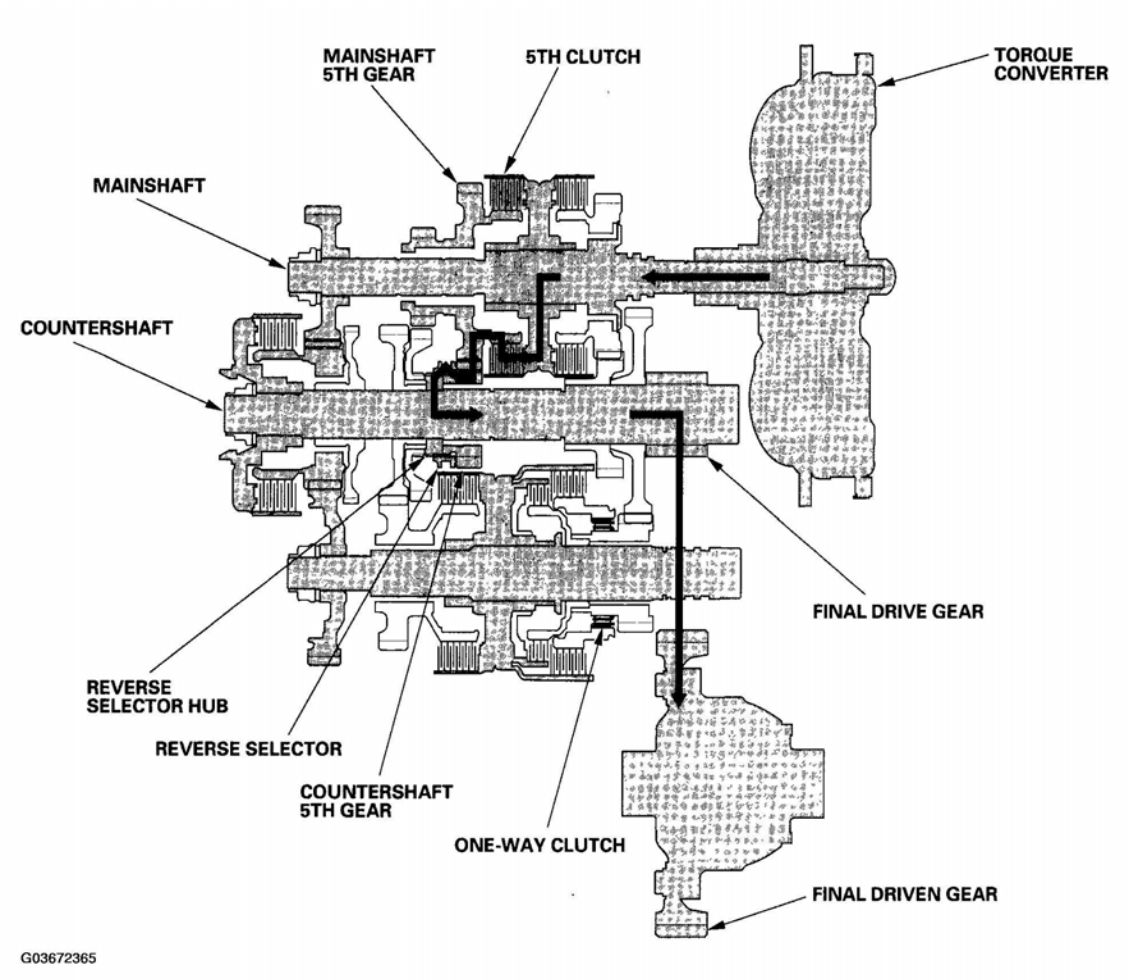


Fig. 11: Automatic Transmission Power Flow (D Position In 5th gear) Courtesy of AMERICAN HONDA MOTOR CO., INC.

R Position

- Hydraulic pressure is applied to the servo valve to engage the reverse selector with the countershaft (reverse gear while the shift lever is in R position).
- Hydraulic pressure is also applied to the 5th clutch, then the 5th clutch engages the mainshaft reverse gear with the mainshaft.
- The mainshaft reverse gear drives the countershaft reverse gear via the reverse

idler gear.

- The rotation direction of the countershaft reverse gear is changed via the reverse idler gear.
- The countershaft reverse gear drives the countershaft via the reverse selector which drives the reverse selector hub.
- Power is transmitted to the final drive gear, which in turn drives the final driven gear.

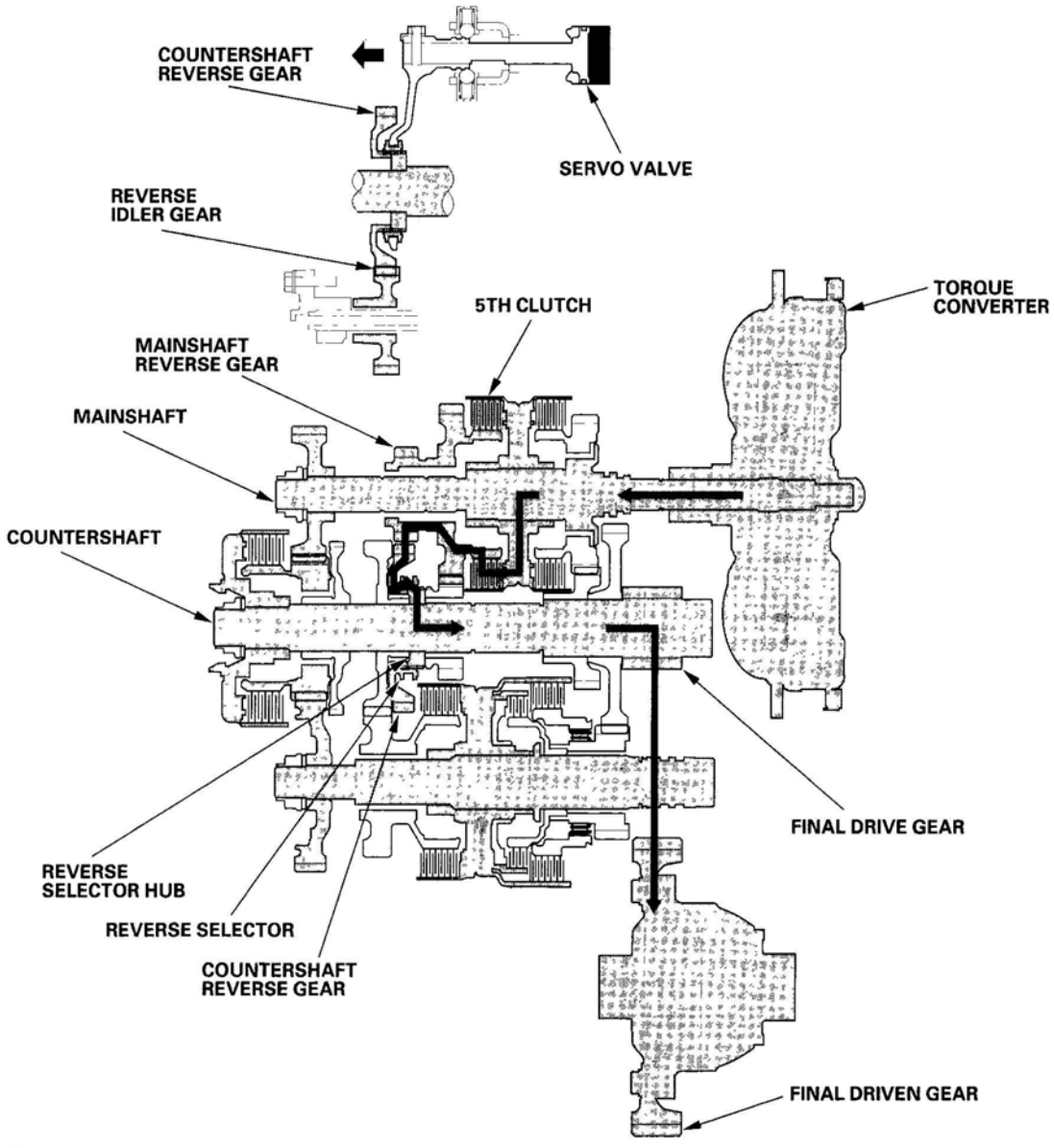


Fig. 12: Automatic Transmission Power Flow (R Position) Courtesy of AMERICAN HONDA MOTOR CO., INC.

Electronic Control System

Functional Diagram

The electronic control system consists of the powertrain control module (PCM), sensors, and solenoid valves. Shifting and lock-up are electronically controlled for comfortable driving under all conditions.

The PCM receives input signals from the sensors, switches, and other control units, perform processing data, and outputs signals for the engine control system and A/T control system. The A/T control system includes shift control, grade logic control, clutch pressure control, and lock-up control is stored in the PCM.

The PCM switches the shift solenoid valves and the A/T clutch pressure control solenoid valves to control shifting transmission gears and lock-up torque converter clutch.

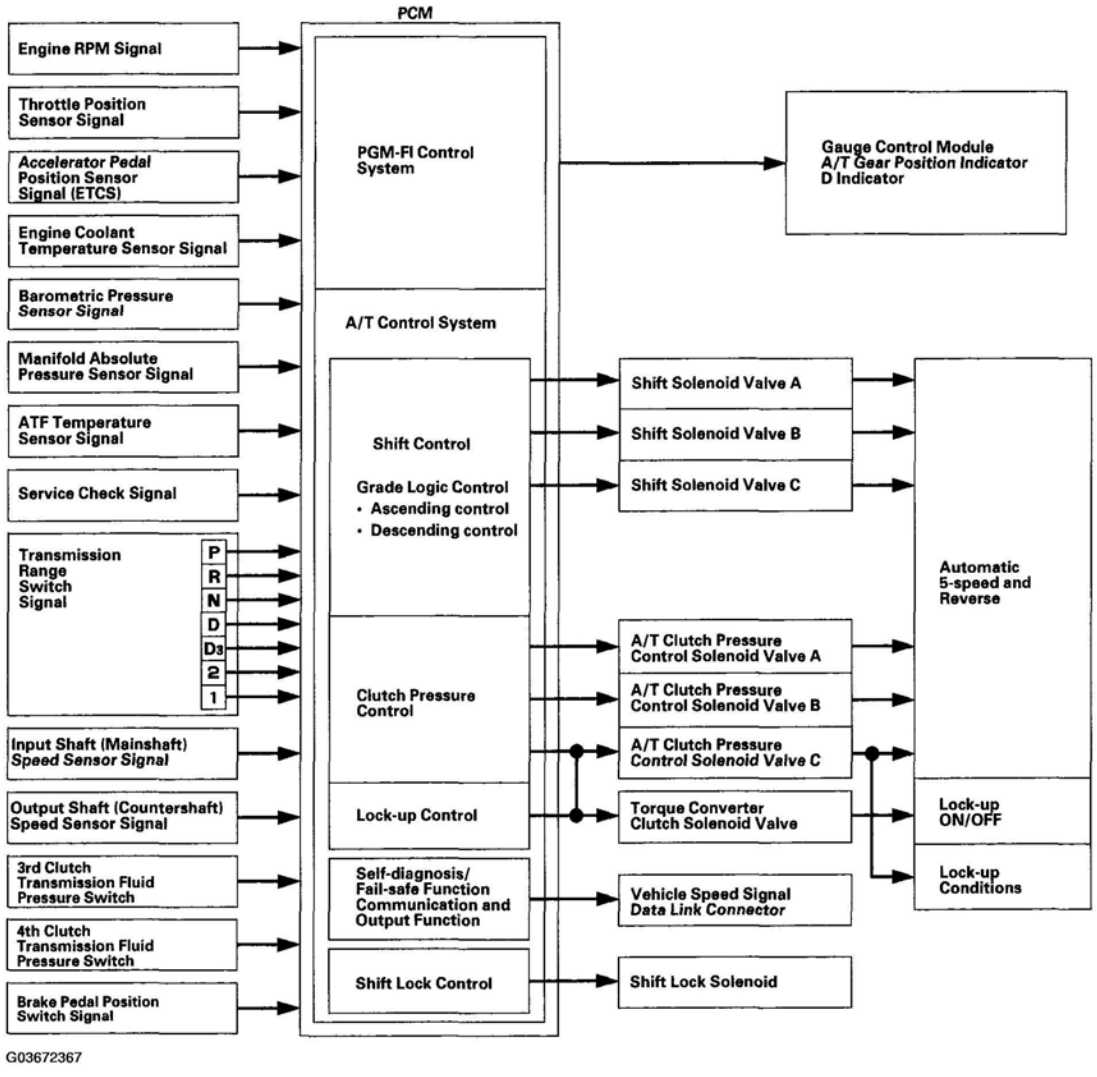


Fig. 13: Automatic Transmission Electronic Control System Functional Diagram

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Electrical Control Locations

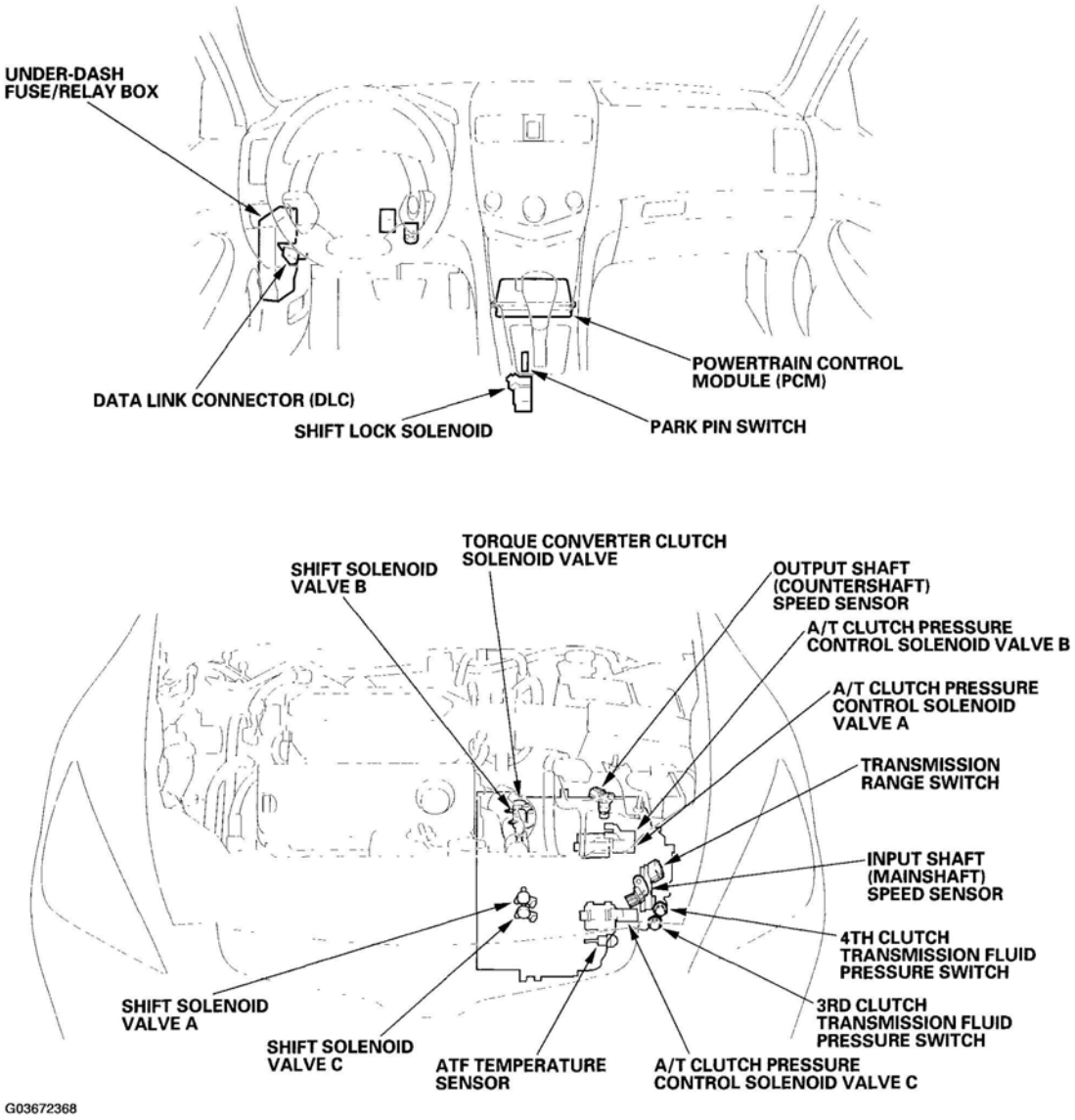


Fig. 14: Locating Automatic Transmission Electrical Control Courtesy of AMERICAN HONDA MOTOR CO., INC.

Shift Control

The PCM instantly determines which gear should be selected by various signals sent from sensors and switches, and it actuates the shift solenoid valves A, B, and C to control shifting.

Also, as grade logic control system has been adopted to control shifting in the D and D3 positions. The PCM compares actual driving conditions with memorized

driving conditions, based on the input from the accelerator pedal position sensor, the engine coolant temperature sensor, the barometric pressure sensor, the brake pedal position switch signal, and the shift lever position signal, to control shifting while the vehicle is ascending or descending a slope.

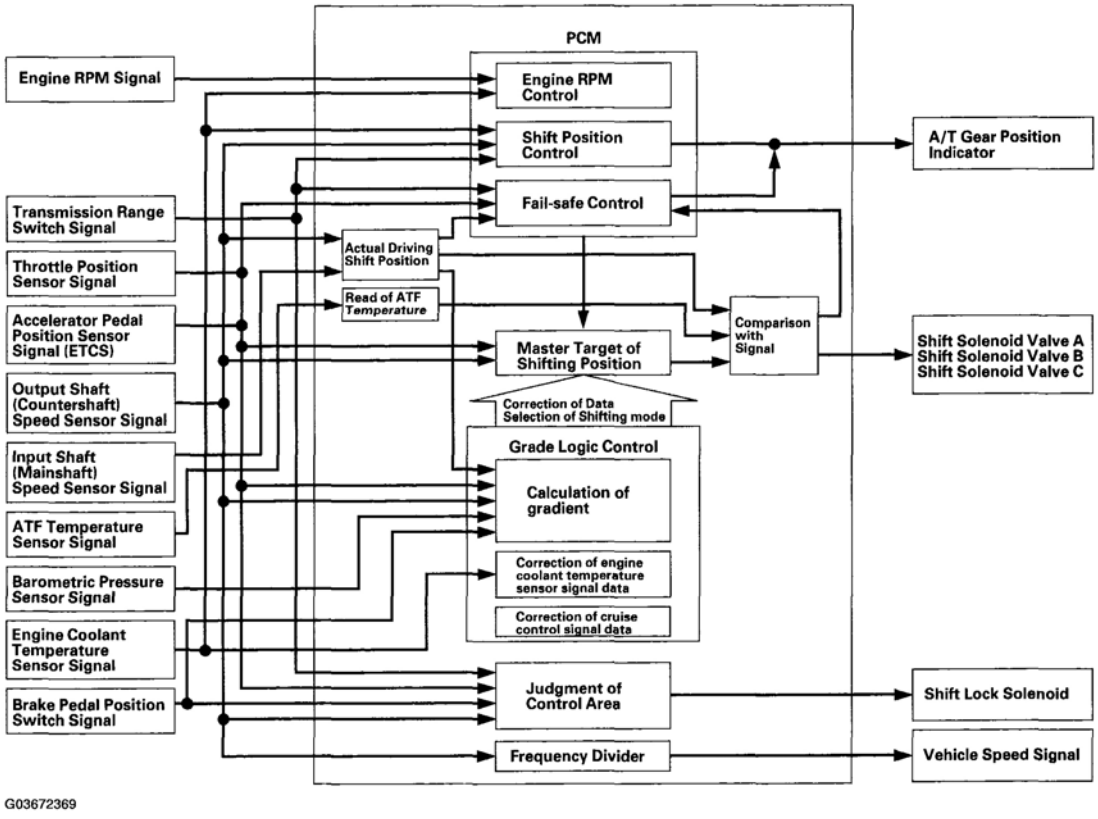


Fig. 15: Automatic Transmission Shift Control Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

The PCM turns on and off the shift solenoid valves A, B, and C to control shifting of the transmission gears. The combination of driving signals to shift solenoid valves A, B, and C are shown in **ON AND OFF SHIFT SOLENOID VALVES A, B, AND C TO CONTROL SHIFTING** .

ON AND OFF SHIFT SOLENOID VALVES A, B, AND C TO CONTROL SHIFTING

Position	Gear position	Shift solenoid valves		
		A	B	C

D, D3	Shifting from the N position	OFF	ON	OFF
	Stays in 1st	ON	ON	ON
	Shifting gears between 1st and 2nd	ON	ON	ON
	Stays in 2nd	ON	ON	OFF
	Shifting gears between 2nd and 3rd	OFF	ON	OFF
	Stays in 3rd	OFF	ON	ON
D	Shifting gears between 3rd and 4th	OFF	OFF	ON
	Stays in 4th	OFF	OFF	OFF
	Shifting gears between 4th and 5th	ON	OFF	OFF
	Stays in 5th	ON	OFF	ON
2	2nd	ON	ON	OFF
1	1st	ON	ON	ON
R	Shifting from the P and N position	OFF	ON	ON
	Stays in reverse	OFF	ON	OFF
	Reverse inhibit	ON	ON	ON
P	Park	OFF	ON	OFF
N	Neutral	OFF	ON	OFF

Grade Logic Control: Ascending Control

When the PCM determines that the vehicle is climbing a hill in the D and D3 positions, the system extends the engagement area of 2nd gear, 3rd gear, and 4th gear to prevent the transmission from frequently shifting between 2nd and 3rd

gears, between 3rd and 4th gears, and between 4th and 5th gears, so the vehicle can run smooth and have more power when needed.

NOTE: Shift schedules stored in the PCM between 2nd and 3rd gears, between 3rd and 4th gears, and between 4th and 5th gears, enable the PCM to automatically select the most suitable gear according to the magnitude of a gradient.

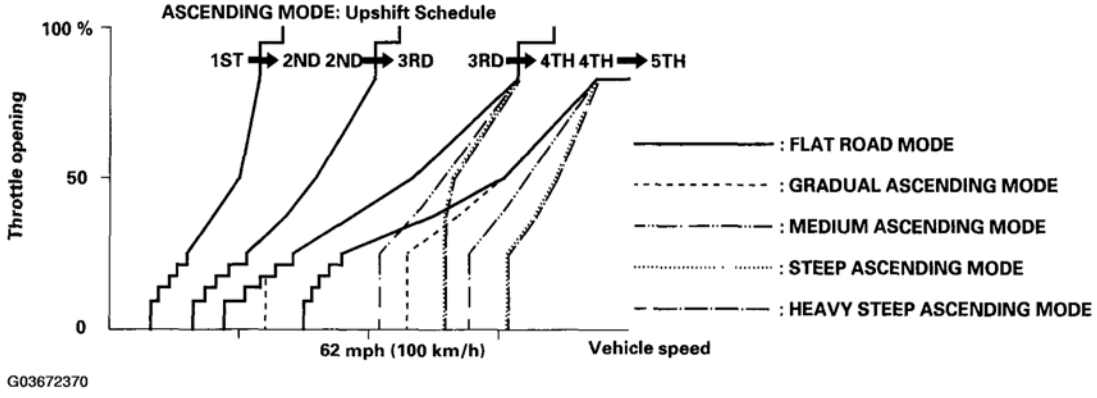


Fig. 16: Ascending Control - Vehicle Speed And Throttle Opening Graph
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Grade Logic Control: Descending Control

When the PCM determines that the vehicle is going down a hill in the D and D3 positions, the shift-up speed from 4th to 5th gear, 3rd to 4th gear, and from 2nd to 3rd (when the throttle is closed) becomes faster than the set speed for flat road driving to widen the 4th gear, 3rd gear, and 2nd gear driving areas. This, in combination with engine braking from the deceleration lock-up, achieves smooth driving when the vehicle is descending. There are three descending modes with different 4th gear driving areas, 3rd gear driving areas and 2nd gear driving areas according to the magnitude of a gradient stored in the PCM. When the vehicle is in 5th or 4th gear and you are decelerating while applying the brakes on a steep hill, the transmission will downshift to a lower gear. When you accelerate, the transmission will then return to a higher gear.

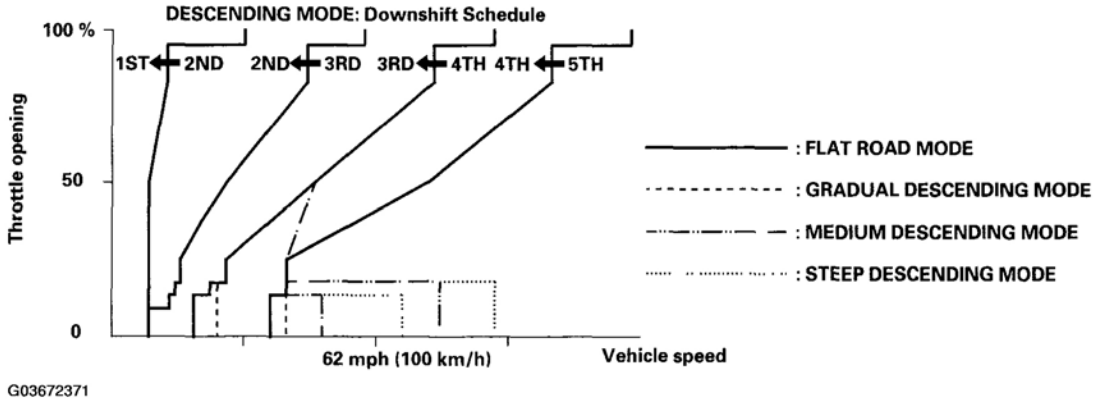


Fig. 17: Descending Control - Vehicle Speed And Throttle Opening Graph
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Deceleration Control

When the vehicle goes around a corner and needs to decelerate first and then accelerate, the PCM sets the data for deceleration control to reduce the number of times the transmission shifts. When the vehicle is decelerating from speeds above 27 mph (43 km/h), the PCM shifts the transmission from 5th or 4th to 2nd earlier than normal to cope with upcoming acceleration.

Clutch Pressure Control

The PCM actuates the A/T clutch pressure control solenoid valves A, B, and C to control the clutch pressure. When shifting between lower and higher gears, the clutch pressure regulated by the A/T clutch pressure control solenoid valves A, B, and C engages and disengages the clutch smoothly.

The PCM receives input signals from the various sensors and switches, performs processing data, and outputs a current to the A/T clutch pressure control solenoid valves A, B, and C.

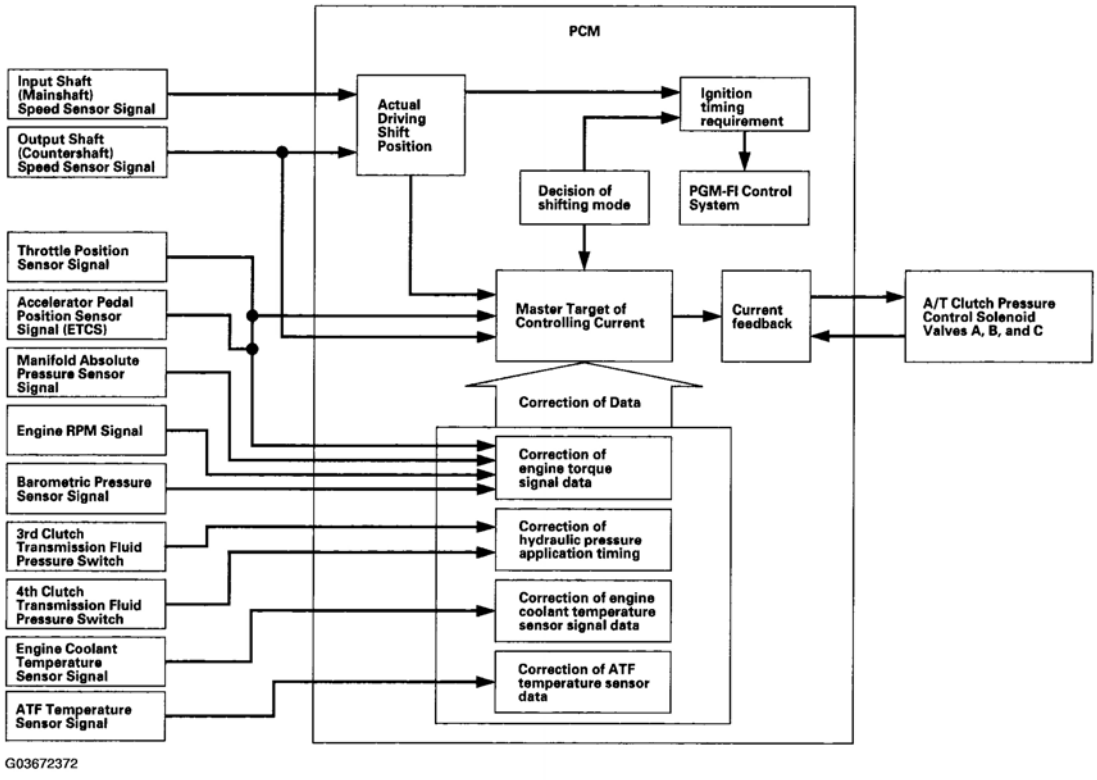


Fig. 18: Automatic Transmission Clutch Pressure Control Functional Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Lock-up Control

The torque converter clutch solenoid valve controls the hydraulic pressure to switch the lock-up shift valve and lock-up ON and OFF. The PCM actuates the torque converter clutch solenoid valve and the A/T clutch pressure control solenoid valve ON, the condition of the lock-up starts. The A/T clutch pressure control solenoid valve C regulates and apply the hydraulic pressure to the lock-up control valve to control the amount of the lock-up. The lock-up mechanism operates in the D position (2nd, 3rd, 4th, and 5th), and in the D3 position (2nd and 3rd).

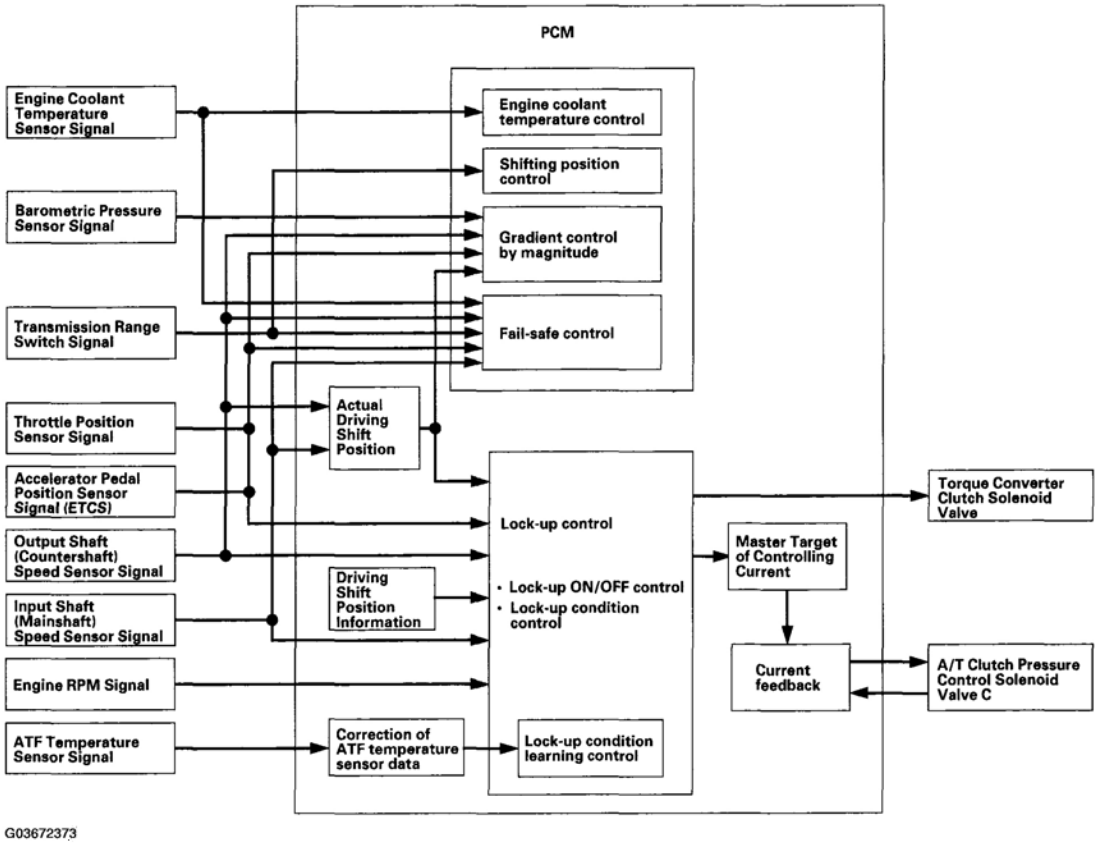


Fig. 19: Automatic Transmission Lock-up Control Functional Diagram Courtesy of AMERICAN HONDA MOTOR CO., INC.

PCM Electrical Connections

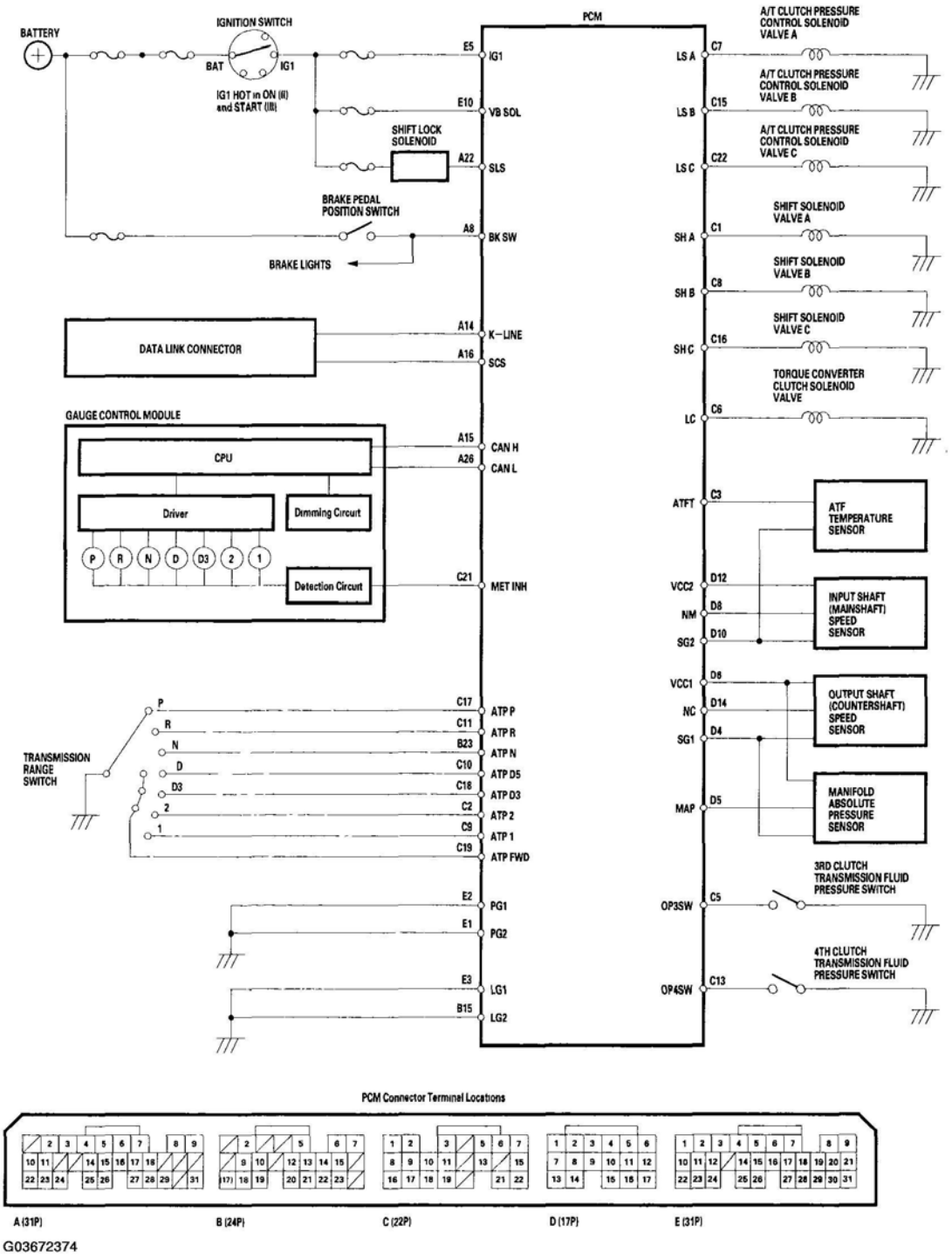
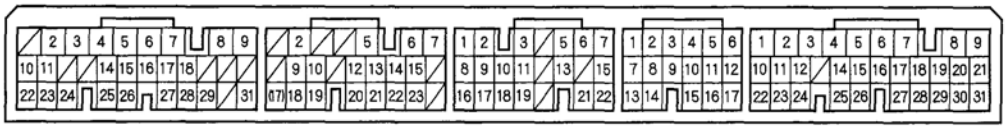


Fig. 20: Automatic Transmission PCM Electrical Connections
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PCM Inputs and Outputs

PCM Connector Terminal Locations



A (31P) B (24P) C (22P) D (17P) E (31P)

PCM CONNECTOR A (31P)

Terminal Number	Wire Color	Signal	Description	Measuring Conditions/Terminal Voltage
A5	RED/BLK	MRLY	Main relay control	With ignition switch ON (II): 0V With ignition switch OFF: Battery voltage
A8	WHT/BLK	BKSW	Brake pedal position switch signal input	Brake pedal pressed: Battery voltage Brake pedal released: 0V
A11	BLU/WHT	VSSOUT	Vehicle speed signal detected from output shaft (countershaft) speed sensor and sent to speedometer and odometer	Depending on vehicle speed: Pulsing signal
A14	BLU	K-LINE	Communication line PCM-to-DLC	With ignition switch ON (II): Battery voltage
A15	WHT	CAN H	F-CAN Communication with network	With ignition switch ON (II): Pulsing signal
A16	BRN	SCS	Detects service check signal	With the SCS shorted with the HDS: About 0 V With the SCS open: About 5 V
A22	YEL/BLK	SLS	Shift lock solenoid control	With ignition switch ON (II), in the P position, brake pedal pressed, and accelerator released: 0 V
A26	RED	CAN L	F-CAN Communication with network	With ignition switch ON (II): Pulsing signal

PCM CONNECTOR B (24P)

Terminal Number	Wire Color	Signal	Description	Measuring Conditions/Terminal Voltage
B15	BRN/YEL	LG2	Ground	Less than 1.0 V at all times
B23	RED/BLK	ATP N	Transmission range switch N position signal input	In the N position: 0 V In other than the N position: About 5 V

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Fig. 21: PCM Inputs And Outputs Chart (Connector A (31P) And Connector B (24P))

Courtesy of AMERICAN HONDA MOTOR CO., INC.

PCM CONNECTOR C (22P)

Terminal Number	Wire Color	Signal	Description	Measuring Conditions/Terminal Voltage
C1	BLU/YEL	SH A	Shift solenoid valve A control	Battery voltage in these positions: • 2 and 1 • D and D3 in 1st and 2nd gear • D in 5th gear 0 V in these positions: • D and D3 in 3rd gear • D in 4th gear • P, R, and N
C2	BLU	ATP 2	Transmission range switch 2 position signal input	In the 2 position: 0 V In other than the 2 position: Battery voltage
C3	BLU/YEL	ATFT	ATF temperature sensor signal input	With ignition switch ON (II): 0.2—0.4 V With ignition switch OFF: 0 V
C5	BLU/WHT	OP3SW	3rd clutch transmission fluid pressure switch signal input	With ignition switch ON (II): • Without 3rd clutch pressure: Battery voltage • With 3rd clutch pressure: About 0 V
C6	YEL	LC	Torque converter clutch solenoid valve control	During lock-up condition: Battery voltage During no lock-up condition: 0 V
C7	RED	LS A	A/T clutch pressure control solenoid valve A control	With ignition switch ON (II): Pulsing signal
C8	GRN/WHT	SH B	Shift solenoid valve B control	Battery voltage in these positions: • 2 and 1 • D and D3 in 1st, 2nd, and 3rd gear • P, R, and N 0 V in these positions: • D in 4th and 5th gear
C9	BRN	ATP 1	Transmission range switch 1 position signal input	In the 1 position: 0 V In other than the 1 position: Battery voltage
C10	YEL/GRN	ATP D5	Transmission range switch D position signal input	In the D position: 0 V In other than the D position: Battery voltage
C11	WHT	ATP R	Transmission range switch R position signal input	In the R position: 0 V In other than the R position: Battery voltage
C13	BLU/YEL	OP4SW	4th clutch transmission fluid pressure switch signal input	With ignition switch ON (II): • Without 4th clutch pressure: Battery voltage • With 4th clutch pressure: About 0 V
C15	BRN/WHT	LS B	A/T clutch pressure control solenoid valve B control	With ignition switch ON (II): Pulsing signal

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Fig. 22: PCM Inputs And Outputs Chart (Connector C (22P) - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PCM CONNECTOR C (22P)

Terminal Number	Wire Color	Signal	Description	Measuring Conditions/Terminal Voltage
C16	GRN	SH C	Shift solenoid valve C control	Battery voltage in these positions: • 1 • D and D3 in 1st, 3rd, and 5th gear 0 V in these positions: • 2 • D and D3 in 2nd gear • D in 4th gear • P, R, and N
C17	BLU/BLK	ATP P	Transmission range switch P position signal input	In the P position: 0 V In other than the P position: Battery voltage
C18	RED	ATP D3	Transmission range switch D3 position signal input	In the D3 position: 0 V In other than the D3 position: Battery voltage
C19	BLU/YEL	ATP FWD	Transmission range switch D, D3, and 2 positions signal input	In the D, D3, and 2 positions: 0 V In other than the D, D3, and 2 positions: Battery voltage
C21	GRN/WHT	MET INH	Communication line PCM-to-gauge control module	With ignition switch ON (II): Battery voltage
C22	GRN/RED	LS C	A/T clutch pressure control solenoid valve C control	With ignition switch ON (II): Pulsing signal

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Fig. 23: PCM Inputs And Outputs Chart (Connector C (22P) - 2 Of 2) Courtesy of AMERICAN HONDA MOTOR CO., INC.

Terminal Number	Wire Color	Terminal Name	Description	Signal
D3	RED/BLU	APSA (ACCELERATOR PEDAL POSITION (APP) SENSOR A)	Detects APP sensor A signal	With ignition switch ON (II) and accelerator pedal fully pressed: About 4.5 V With ignition switch ON (II) and accelerator pedal released: About 0.5 V
D4	GRN/WHT	SG1 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
D5	GRN/RED	MAP (MANIFOLD ABSOLUTE PRESSURE SENSOR)	Detects MAP sensor signal	With ignition switch ON (II): About 3 V At idle: About 1 V (depending on engine speed)
D6	YEL/RED	VCC1 (SENSOR VOLTAGE)	Provides sensor reference voltage	With ignition switch ON (II): About 5 V With ignition switch OFF: About 0 V
D8	WHT/RED	NM (INPUT SHAFT (MAINSHAFT) SPEED SENSOR)	Detect input shaft (mainshaft) speed sensor signal	With ignition switch ON (II): About 0 V or about 5 V With engine idling in N position: About 1.5—3.5 V (pulses)
D9	RED/YEL	APSB (ACCELERATOR PEDAL POSITION (APP) SENSOR B)	Detects APP sensor B signal	With ignition switch ON (II) and accelerator pedal fully pressed: About 2.3 V With ignition switch ON (II) and accelerator pedal released: About 0.2 V
D10	GRN/BLK	SG2 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
D12	YEL/BLU	VCC2 (SENSOR VOLTAGE)	Provides sensor reference voltage	With ignition switch ON (II): About 5 V With ignition switch OFF: About 0 V
D14	BLU	NC (OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR)	Detects output shaft (countershaft) speed sensor signal	With ignition switch ON (II): About 0 V or about 5 V With vehicle moving: About 1.5—3.5 V (pulses)

Terminal Number	Wire Color	Terminal Name	Description	Signal
E1	BLK	PG2 (POWER GROUND)	Ground circuit for PCM	Less than 1.0 V at all times
E2	BLK	PG1 (POWER GROUND)	Ground circuit for PCM	Less than 1.0 V at all times
E3	BRN/YEL	LG1 (LOGIC GROUND)	Ground circuit for PCM	Less than 1.0 V at all times
E4	YEL/BLK	IGP1 (POWER SOURCE)	Power source for PCM circuit	With ignition switch ON (II): Battery voltage With ignition switch OFF: About 0 V
E5	BLK/YEL	IG1 (IGNITION SWITCH)	Detects ignition switch signal	With ignition switch ON (II): Battery voltage
E10	BLK/YEL	VBSOL (POWER SOURCE FOR SOLENOID VALVES)	Power source for solenoid valves	With ignition switch ON (II): Battery voltage With ignition switch OFF: About 0 V

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Fig. 24: PCM Inputs & Outputs Chart (Connector D (17P) And E (31P))

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Hydraulic Controls

The valve body includes the main valve body, the regulator valve body, the servo body, the top accumulator body, and the accumulator body. The ATF pump is driven by splines on the left end of the torque converter which is attached to the engine. Fluid flows through the regulator valve to maintain specified pressure through the main valve body to the manual valve, directing pressure to each of the clutches. The shift solenoid valves A and C are mounted on the outside of the torque converter housing. The shift solenoid valve B and the torque converter clutch solenoid valve are mounted on the torque converter housing. The A/T clutch pressure control solenoid valves A and B, and the A/T clutch pressure control solenoid valve C are mounted on the transmission housing.

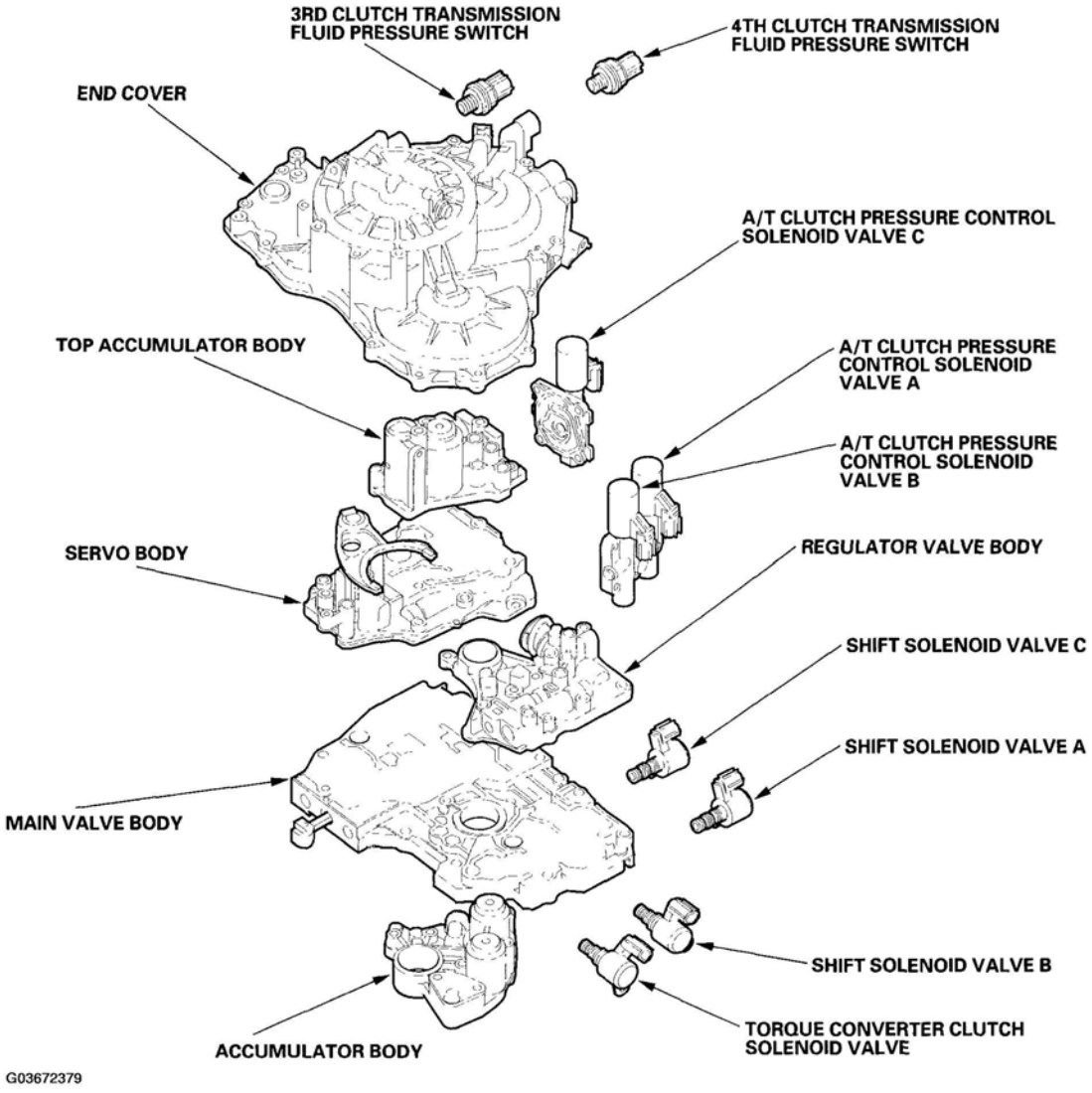


Fig. 25: Identifying Hydraulic Controls
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Main Valve Body

The main valve body contains the manual valve, the modulator valve, the shift valve C, the shift valve D, the servo control valve, the cooler check valve, the torque converter check valve, the reverse CPC valve, the lock-up shift valve, the relief valve, the kick-down valve, the kick-down short valve, and the ATF pump gears. The primary function of the main valve body is to switch fluid pressure on and off and to control hydraulic pressure going to the hydraulic control system.

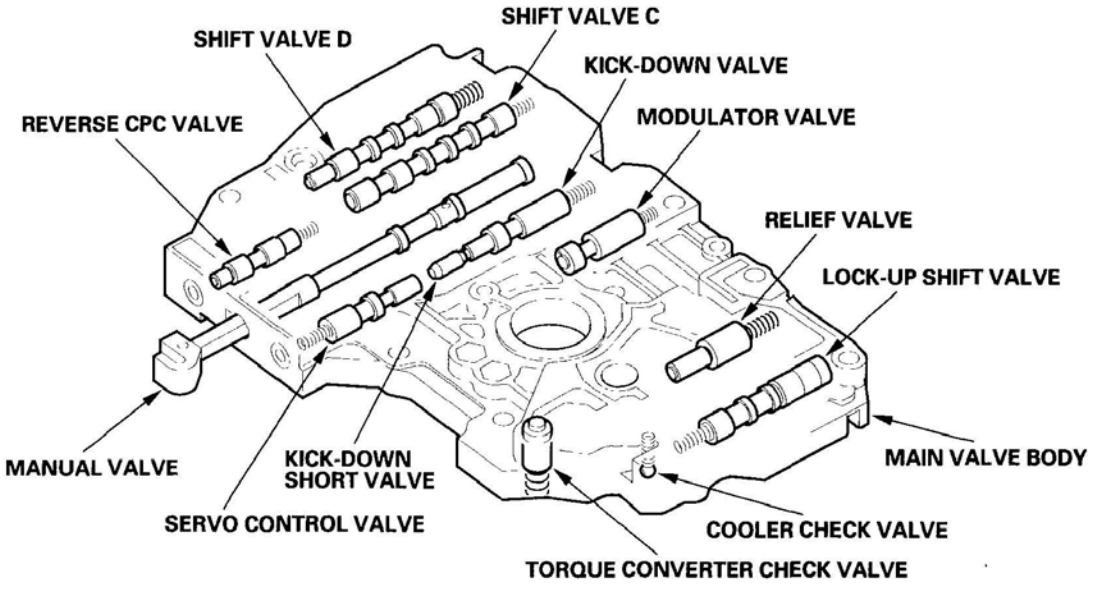


Fig. 26: Identifying Main Valve Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Regulator Valve Body

The regulator valve body is located on the main valve body. The regulator valve body contains the regulator valve, the lock-up timing valve, and the lock-up control valve.

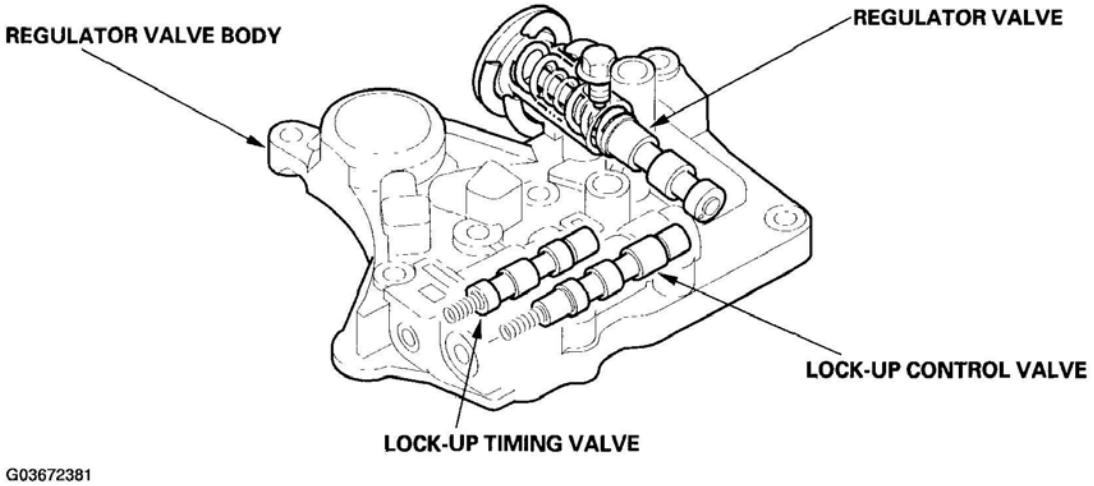


Fig. 27: Identifying Regulator Valve Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Regulator Valve

The regulator valve maintains constant hydraulic pressure from the ATF pump to the hydraulic control system, while also furnishing fluid to the lubricating system and torque converter. Fluid from the ATF pump flows through B and B'. Fluid entering from B flows through the valve orifice to the A cavity. This pressure of the A cavity pushes the regulator valve to the spring side, and this movement of the regulator valve uncovers the fluid port to the torque converter and the relief valve. The fluid flows out to the torque converter and the relief valve, and the regulator valve returns under spring force. According to the level of the hydraulic pressure through B, the position of the regulator valve changes, and the amount of fluid from B' through the torque converter changes. This operation is continued, maintaining the line pressure.

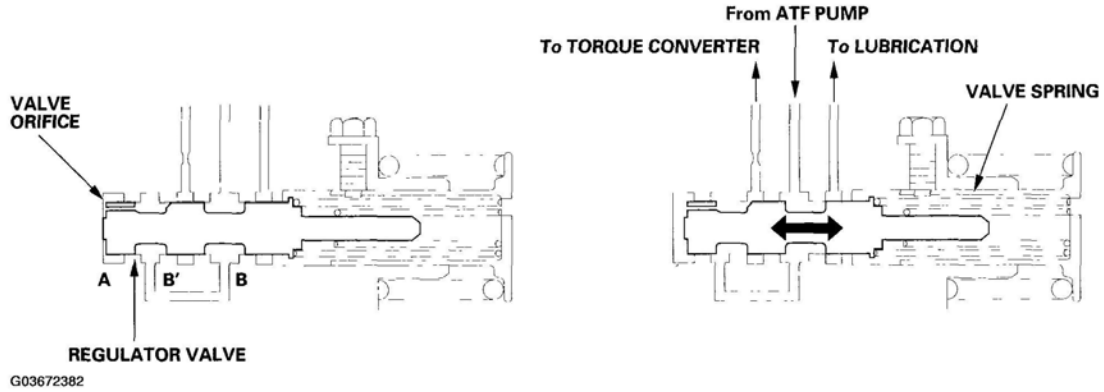


Fig. 28: Identifying Regulator Valve (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Increases in hydraulic pressure according to torque are performed by the regulator valve using stator torque reaction. The stator shaft is splined to the stator in the torque converter, and its arm end contacts the regulator spring cap. When the vehicle is accelerating or climbing (torque converter range), stator torque reaction acts on the stator shaft, and the stator arm pushes the regulator spring cap in the direction of the arrow in proportion to the reaction. The stator reaction spring compresses, and the regulator valve moves to increase the line pressure which is

regulated by the regulator valve. The line pressure reaches its maximum when the stator torque reaction reaches its maximum.

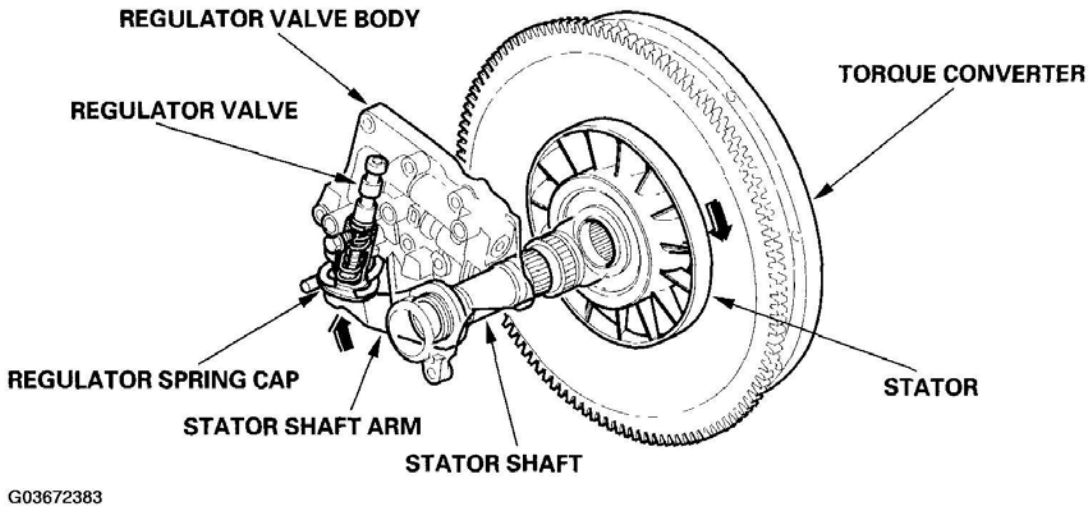


Fig. 29: Identifying Regulator Valve (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Servo Body

The servo body is on the main valve body. It contains the servo valve, shift valve A, shift valve B, and CPC valves A and B.

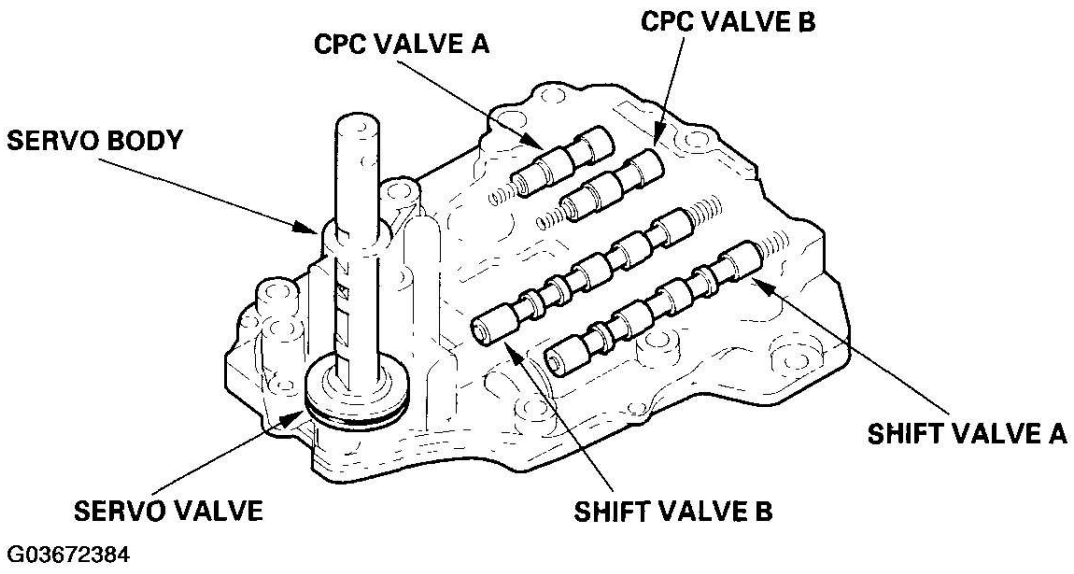


Fig. 30: Identifying Servo Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Top Accumulator Body

The top accumulator body contains shift valve E, CPC valve C, 4th/1st-hold accumulator, and 5th accumulator.

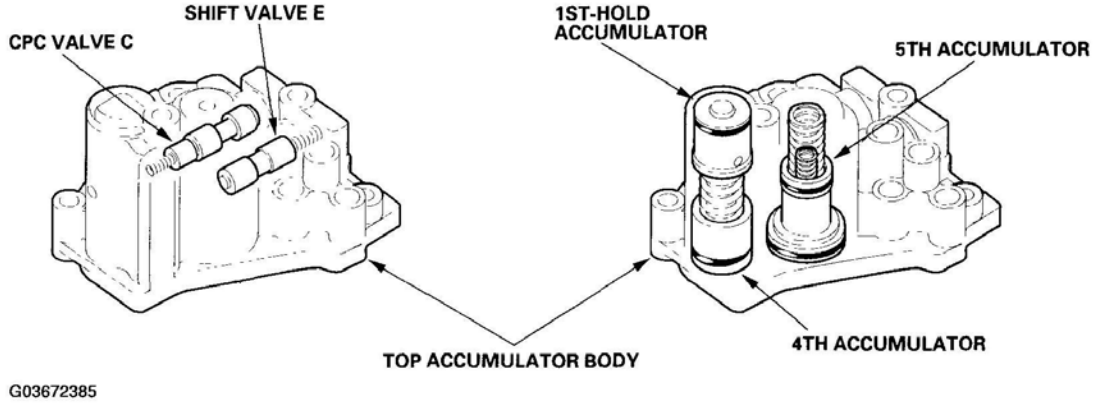


Fig. 31: Identifying Top Accumulator Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Accumulator Body

The accumulator body is on the torque converter housing, next to the main valve body. It contains the 1st and 2nd accumulators and the lubrication check valve.

3rd Accumulator

The 3rd accumulator is in the end cover.

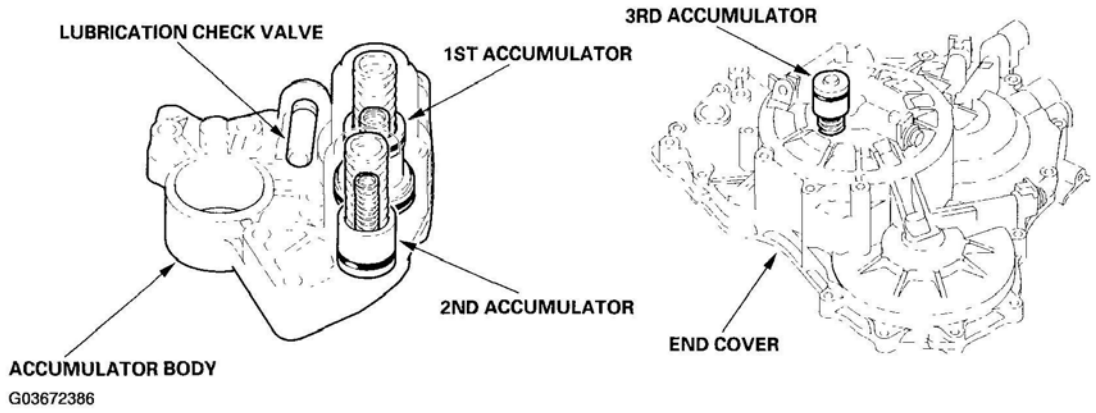


Fig. 32: Identifying 3rd Accumulator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Hydraulic Flow

Distribution of Hydraulic Pressure

As the engine runs, the ATF pump starts to operate. Automatic transmission fluid (ATF) is drawn through the ATF strainer (filter) and discharged into the hydraulic circuit. Then, ATF flowing from the ATF pump becomes line pressure that is regulated by the regulator valve. Torque converter pressure from the regulator valve enters the torque converter through the lock-up shift valve and it is discharged from the torque converter. The torque converter check valve prevents torque converter pressure from rising.

The PCM controls the shift solenoid valves ON and OFF, and the shift solenoid valves control shift solenoid pressure to the shift valves. Applying shift solenoid pressure to the shift valves moves the position of the shift valve, and switches the port of hydraulic pressure. The PCM also controls A/T clutch pressure control solenoid valves A and B. The A/T clutch pressure control solenoid valves A and B regulate the A/T clutch pressure control solenoid pressure and apply the A/T clutch

pressure control solenoid pressure to CPC valves A and B.

When shifting between upper gear and lower gear, the clutch is engaged by pressure from the CPC pressure mode. The PCM controls one of the shift solenoid valves to move the position of the shift valve. This movement switches the port of the CPC and line pressure. Line pressure is then applied to the clutch, and the CPC pressure is intercepted. Engaging the clutch with line pressure happens after CPC pressure mode has completed.

HYDRAULIC PRESSURE AT PORTS

PORT No.	DESCRIPTION OF PRESSURE	PORT No.	DESCRIPTION OF PRESSURE	PORT No.	DESCRIPTION OF PRESSURE
1	LINE	5N	CPC A or LINE	56	LS A
2	LINE	5D	CPC B or LINE	57	LS B
3	LINE	5G	CPC B or LINE	58	LS C
3'	REVERSE CPC or LINE	5K	CPC B or LINE	90	TORQUE CONVERTER
3"	REVERSE CPC or LINE	6	MODULATE	90'	TORQUE CONVERTER
4	LINE	SA	SH A	91	TORQUE CONVERTER
4'	LINE	SB	SH B	91'	TORQUE CONVERTER
4"	LINE	SC	SH C	92	TORQUE CONVERTER
4A	CPC A	LA	LC A	93	ATF COOLER
4B	CPC B	9	LINE	94	TORQUE CONVERTER
4C	CPC C	10	1ST CLUTCH	95	LUBRICATION
5B	CPC A	15	1ST-HOLD CLUTCH	95'	LUBRICATION
5C	CPC B	20	2ND CLUTCH	96	TORQUE CONVERTER
5H	CPC B	25	LINE	99	SUCTION

5J	CPC B	30	3RD CLUTCH	X	DRAIN
5A	CPC A or LINE	40	4TH CLUTCH	HX	HIGH POSITION DRAIN
5E	CPC A or LINE	50	5TH CLUTCH	AX	AIR DRAIN
5F	CPC A or LINE	51	5TH CLUTCH		
5M	CPC A or LINE	55	CPC C or LINE		

NOTE:

- **CPC: Clutch Pressure Control pressure**
- **SH: Shift Solenoid pressure**
- **LS A: A/T Clutch Pressure Control Solenoid A pressure**
- **LS B: A/T Clutch Pressure Control Solenoid B pressure**
- **LS C: A/T Clutch Pressure Control Solenoid C pressure**
- **LC: Torque Converter Clutch Solenoid pressure**

N Position

The PCM controls the shift solenoid valves. The conditions of the shift solenoid valve and positions of the shift valve are as follows:

- Shift solenoid valve A is turned OFF, and shift valve A moves to the left side.
- Shift solenoid valve B is turned ON, and shift valve B stays on the right side.
- Shift solenoid valve C is turned OFF, and shift valve C stays on the left side.

Line pressure (1) passes through the manual valve and becomes line pressure (25). Line pressure (25) stops at shift valve D. Line pressure (1) also flows to the modulator valve and becomes modulator pressure (6). Modulator pressure (6) flows to the shift solenoid valves and the A/T clutch pressure control solenoid valves. Under this condition, hydraulic pressure is not applied to the clutches.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

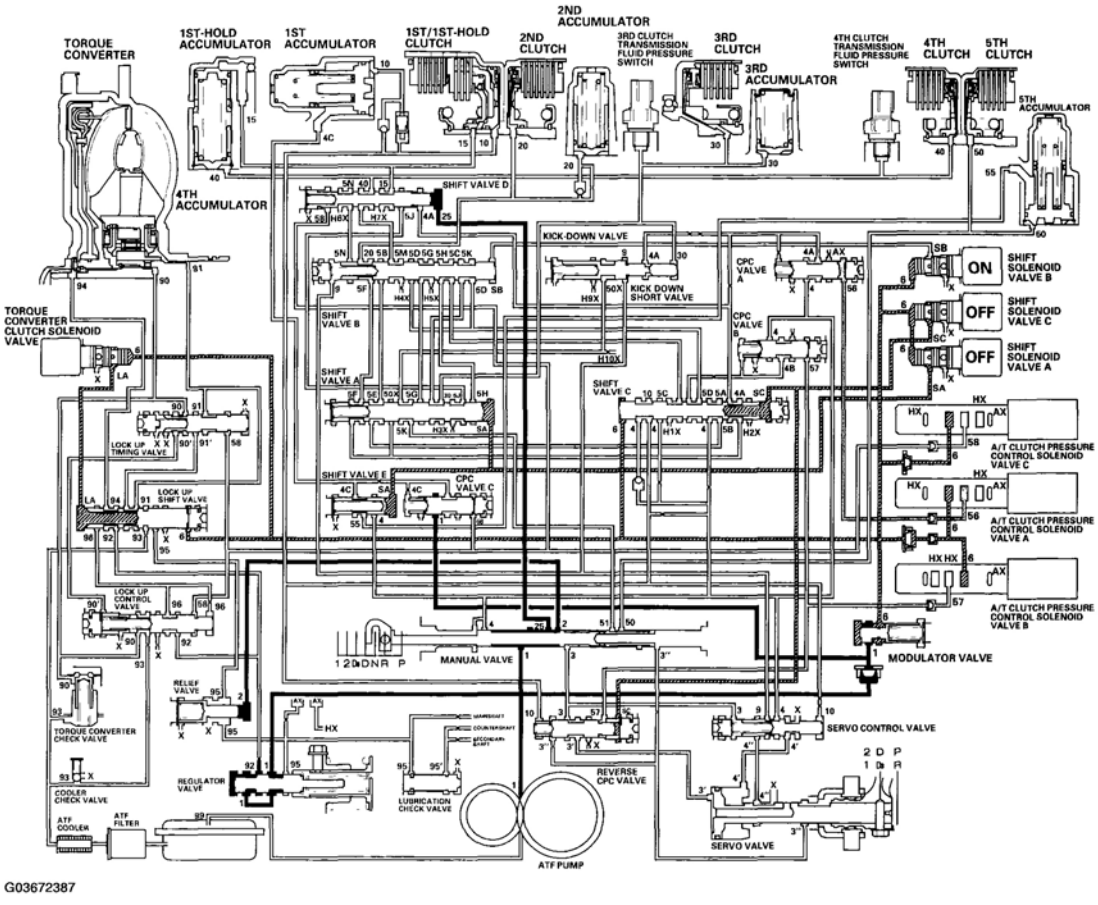


Fig. 33: Hydraulic Flow - N Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

D Position: 1st gear shifting from the N position

Shift solenoid valves remain the same as in the N position when shifting to the D position from the N position. The manual valve is moved to the D position, and switches the port of line pressure (4) leading to shift valve C and CPC valve B. Line pressure (4) flows to the 1st clutch via the orifice. Line pressure (1) becomes CPC C pressure (4C) at CPC valve C, then goes to the 1st accumulator backside. Line pressure (4) also becomes the CPC B pressure (4B) at the CPC B valve. CPC B pressure goes to the 3rd clutch, via the shift valves C, B, and A, and the 3rd clutch is engaged. The 1st clutch is engaged gently when shifting to the D position from the N position.

NOTE: When used, "left" or "right" indicates direction on the

hydraulic circuit.

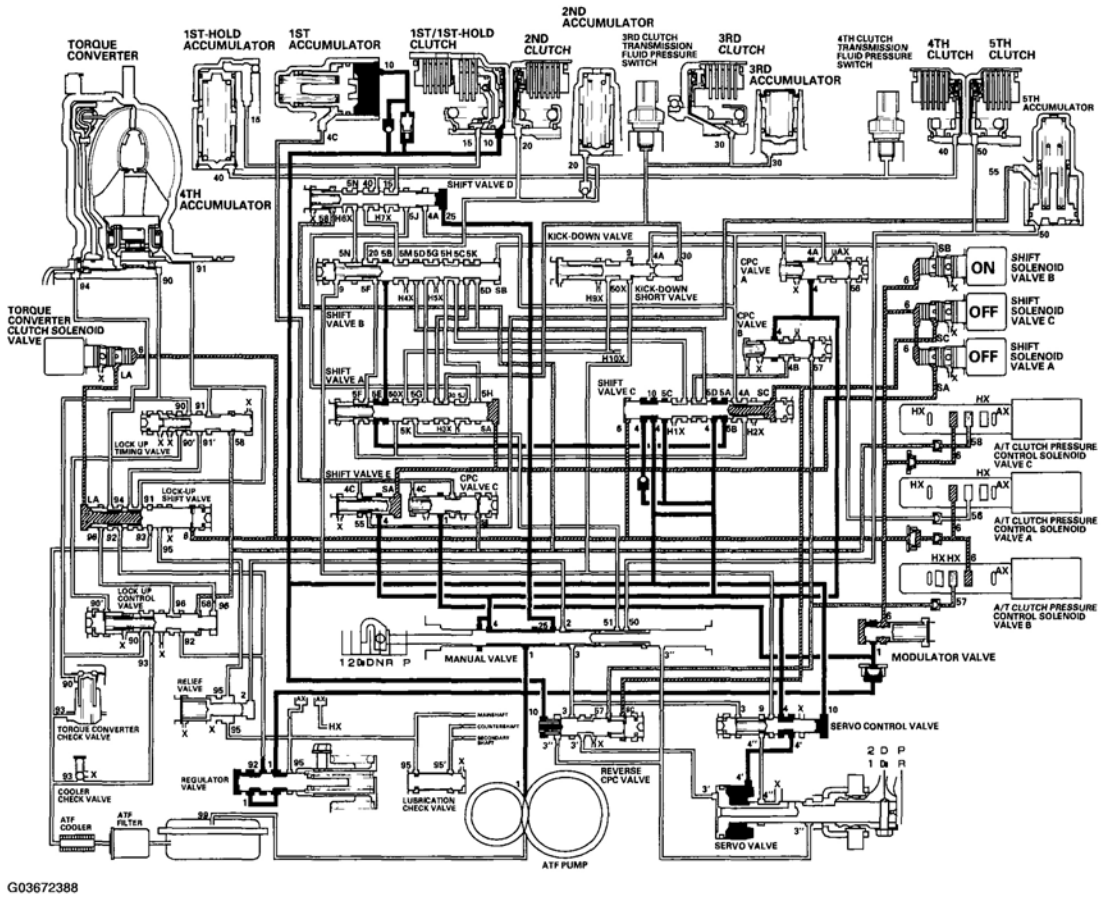


Fig. 34: Hydraulic Flow D Position (1st Gear Shifting From N Position)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

D Position: Driving in 1st gear

The PCM turns shift solenoid valves A and C ON, and shift solenoid valve B stays ON. SH A pressure (SA) in the right side of shift valves A and E is released, and shift valves A and E are moved to the right side. SH C pressure (SC) in the right side of shift valve C is released, and modulator pressure (6) is applied to the left side of shift valve C. Shift valve C is moved to the right side. These valve movements release CPC C pressure (4C) from the back of the 1st accumulator and the 3rd clutch, and the 1st clutch is engaged securely.

NOTE: When used, "left" or "right" indicates direction on the

hydraulic circuit.

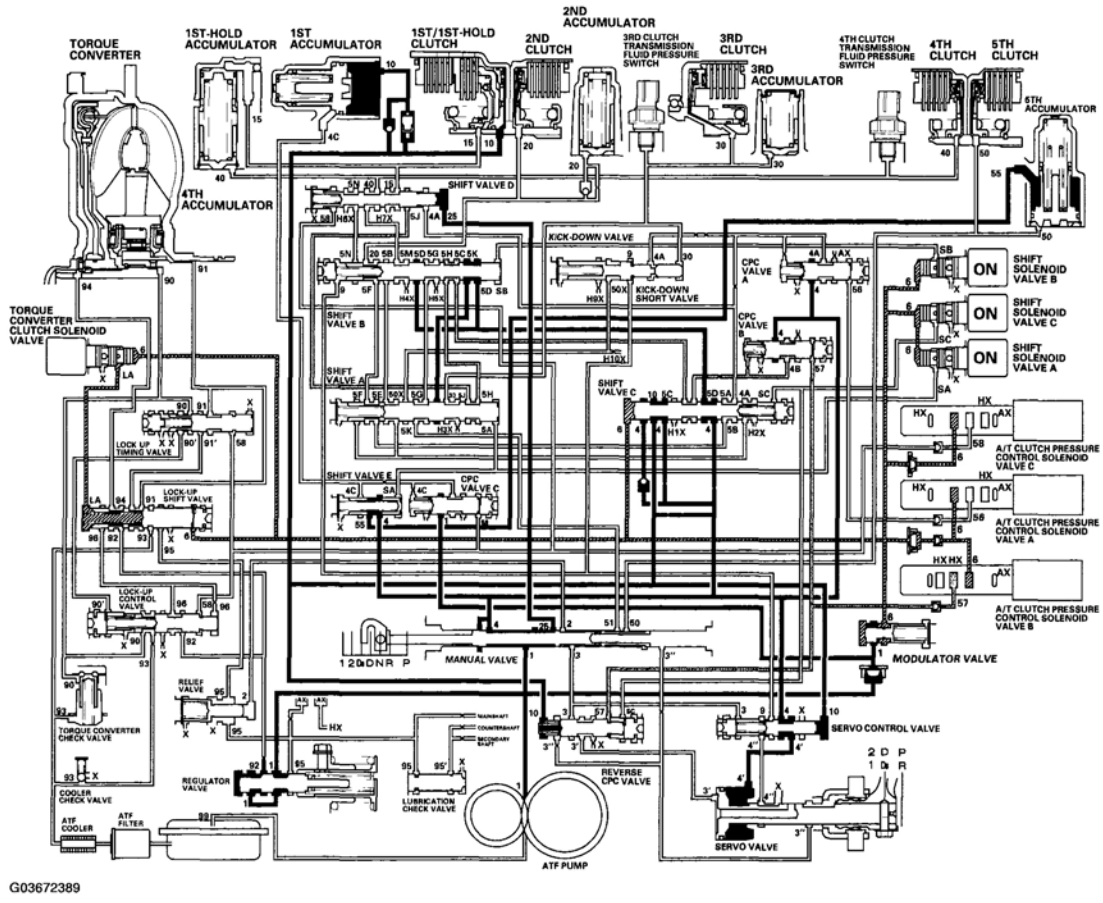


Fig. 35: Hydraulic Flow D Position (Driving In 1st Gear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

D Position: Shifting between 1st gear and 2nd gear

As the speed of the vehicle reaches the programmed value, the PCM controls the A/T clutch pressure control solenoid valves. LS B pressure (57) in the right side of CPC valve B is released, and LS A pressure (56) is applied to the right side of CPC valve A. Line pressure (4) becomes CPC A pressure (4A) at CPC valve A, and CPC A pressure passes through shift valves C, A, and B, to become 2nd clutch pressure. The 2nd clutch is engaged with CPC pressure, and the 1st clutch is also engaged. No power is transmitted because of the one-way clutch.

NOTE: When used, "left" or "right" indicates direction on the

hydraulic circuit.

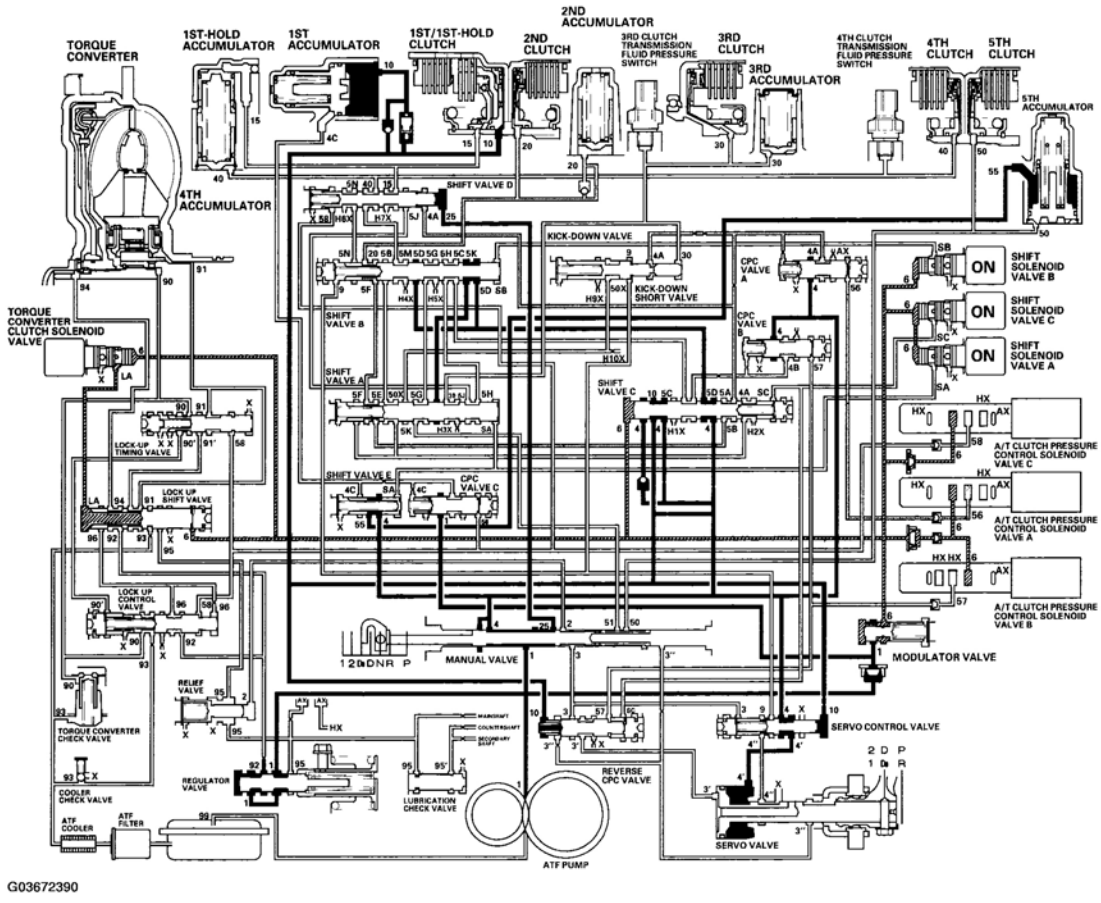


Fig. 36: Hydraulic Flow D Position (Shifting Between 1st And 2nd Gear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

D Position: Driving in 2nd gear

The PCM turns shift solenoid valve C OFF, and shift solenoid valves A and B stays ON. Shift solenoid valve C is turned OFF, and SH C pressure (SC) is applied to the right side of shift valve C. Then shift valve C is moved to the left side to switch the line pressure port and CPC pressure port. The 2nd clutch pressure is changed to line pressure mode, and the 2nd clutch is engaged securely. The 1st clutch is also engaged. No power is transmitted because of the one-way clutch.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

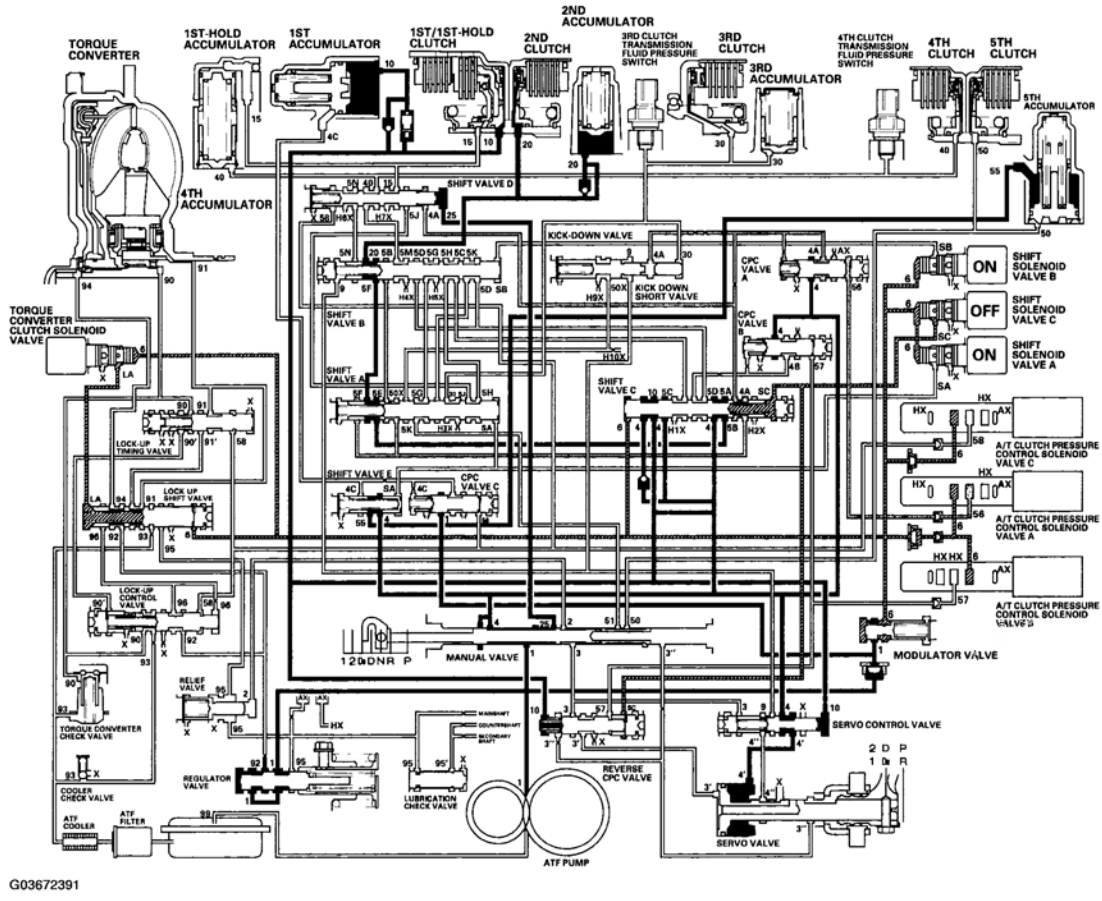


Fig. 37: Hydraulic Pressure Flow Diagram - D Position (Driving in 2nd Gear) Courtesy of AMERICAN HONDA MOTOR CO., INC.

D Position: Shifting between 2nd gear and 3rd gear

As the speed of the vehicle reaches the programmed value, the PCM turns shift solenoid valve A OFF. The PCM also controls the A/T clutch pressure control solenoid valve B to apply LS B pressure (57) to CPC valve B. Shift solenoid valve B stays ON, and C stays OFF. Shift solenoid valve A is turned OFF, and SH A pressure (SA) is applied to the right side of shift valves A and E. Then shift valves A and E are moved to the left side to switch the line pressure port and CPC pressure port. Line pressure (4) becomes CPC A pressure (4A) at CPC valve A, and becomes CPC B pressure (4B) at CPC valve B. CPC B pressure (4B) becomes 3rd clutch pressure (30) at shift valve A via shift valves C and B, and flows to the 3rd clutch. The 2nd clutch pressure is changed to CPC pressure mode by switching the position of shift valve A. The 1st clutch is also engaged. No power is transmitted because of

the one-way clutch.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

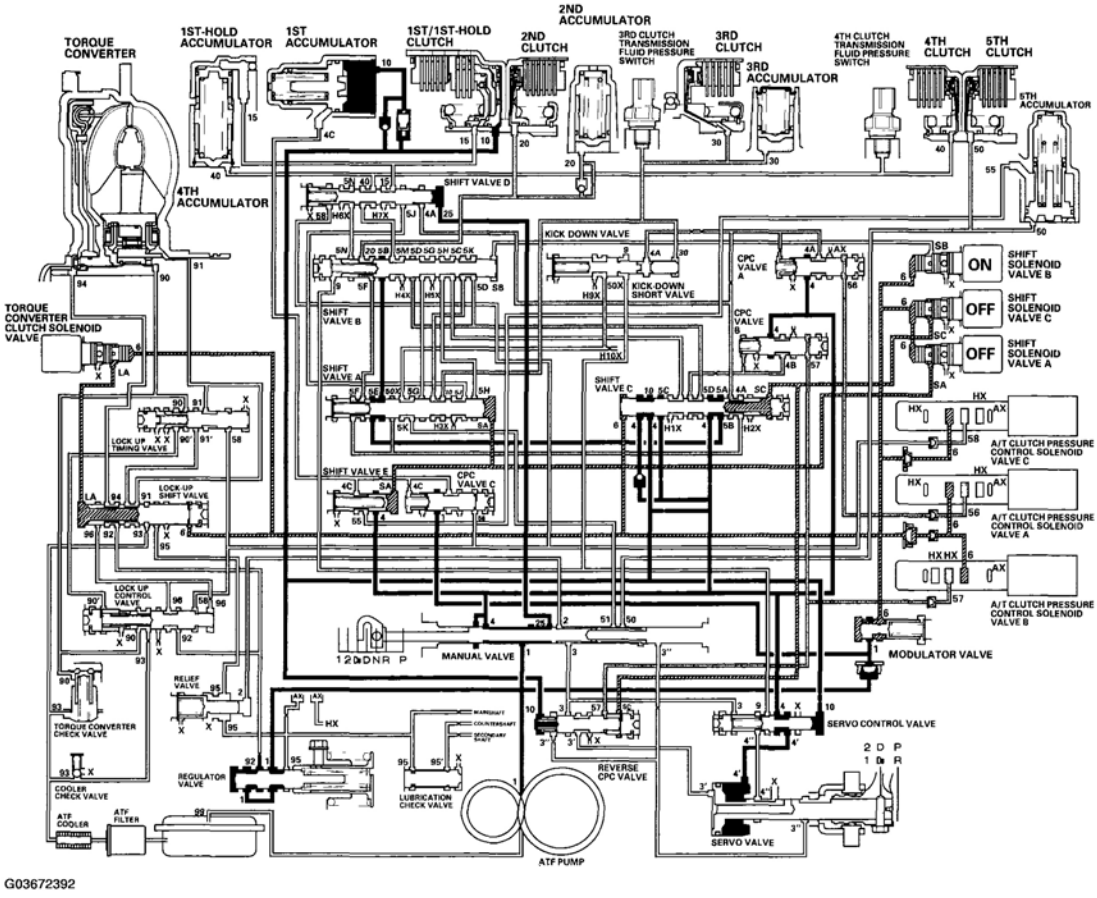


Fig. 38: Hydraulic Flow Diagram - D Position (Shifting Between 2nd And 3rd Gear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

D Position: Driving in 3rd gear

The PCM turns shift solenoid valve C ON, and controls A/T clutch pressure control solenoid valve A to release LS A pressure (56) in CPC valve A. Shift solenoid valve A stays OFF, and B stays ON. Releasing LS A pressure (56) in CPC valve A releases CPC A pressure in the 2nd clutch pressure circuit. Shift solenoid valve C is turned ON, and SH C pressure (SC) in the right side of shift valve C is released.

Then shift valve C is moved to the right side to switch the line pressure port and CPC pressure port. The 3rd clutch pressure is changed to line pressure mode, and the 3rd clutch is engaged securely. The 1st clutch is also engaged. No power is transmitted because of the one-way clutch.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

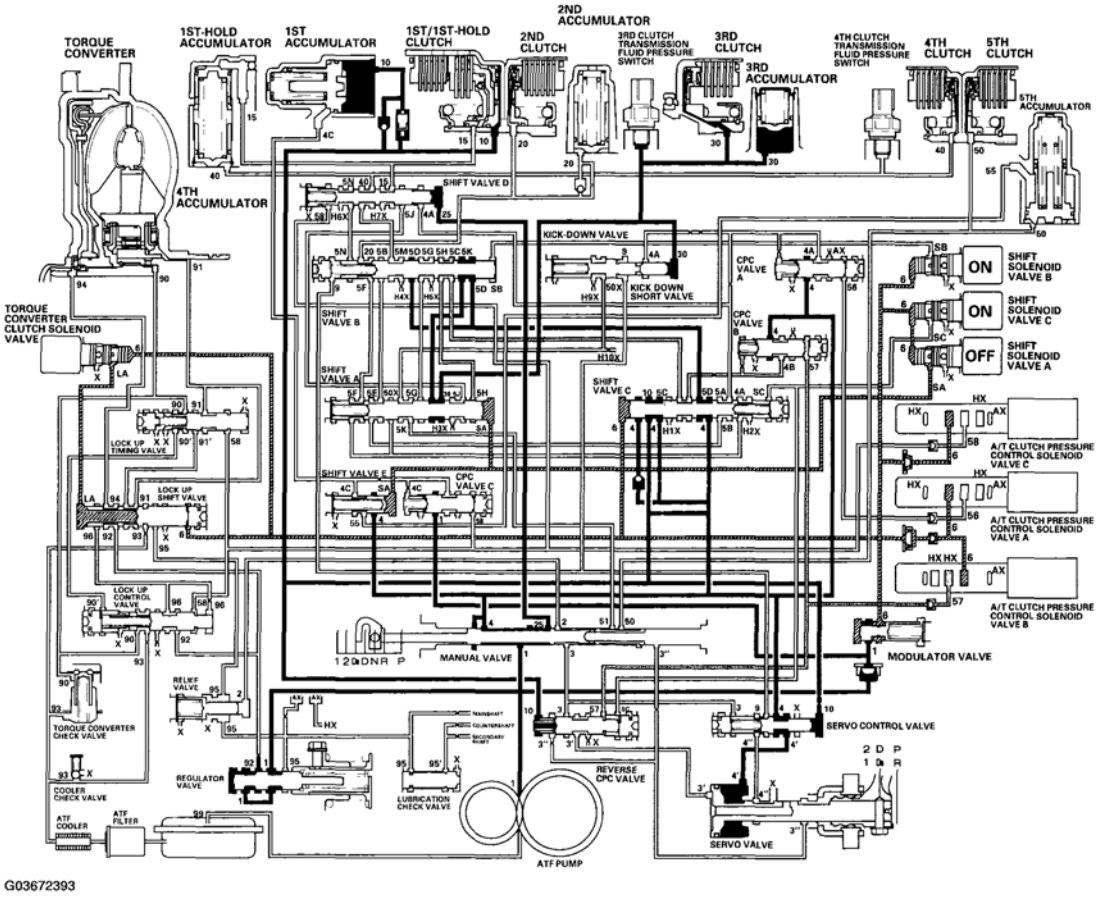


Fig. 39: Hydraulic Flow Diagram -D Position (Driving in 3rd Gear) Courtesy of AMERICAN HONDA MOTOR CO., INC.

D Position: Shifting between 3rd gear and 4th gear

As the speed of the vehicle reaches the programmed value, the PCM turns shift solenoid valve B OFF. The PCM also controls the A/T clutch pressure control solenoid valve A to apply LS A pressure (56) to CPC valve A. Shift solenoid valve

A stays OFF, and C stays ON. Shift solenoid valve B is turned OFF, and SH B pressure (SB) is applied to the right side of shift valve B. Then shift valve B is moved to the left side to switch the line pressure port and CPC pressure port. Line pressure (4) becomes CPC A pressure (4A) at CPC valve A, and becomes CPC B pressure (4B) at CPC valve B. CPC A pressure (4A) becomes 4th clutch pressure (40) at shift valve D via shift valves C, A, and B, and flows to the 4th clutch. The 3rd clutch pressure is changed to CPC pressure mode by switching the position of shift valve B. The 1st clutch is also engaged. No power is transmitted because of the one-way clutch.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

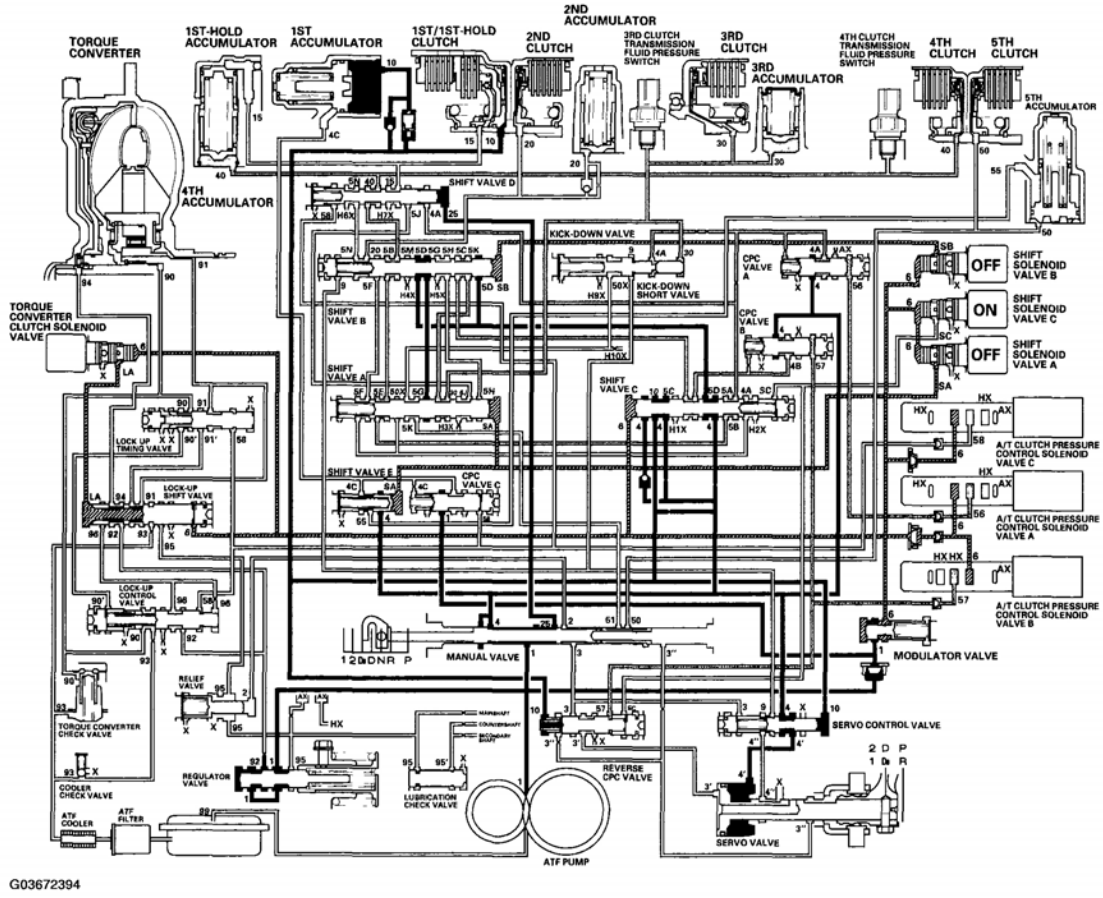


Fig. 40: Hydraulic Flow Diagram-D Position (Shifting Between 3rd And 4th Gear)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

D Position: Driving in 4th gear

The PCM turns shift solenoid valve C OFF, and controls A/T clutch pressure control solenoid valve B to release LS B pressure (57) in CPC valve B. Shift solenoid valves A and B stay OFF. Releasing LS B pressure (57) in CPC valve B releases CPC B pressure in the 3rd clutch pressure circuit. Shift solenoid valve C is turned OFF, and SH C pressure (SC) is applied to the right side of shift valve C. Then shift valve C is moved to the left side to switch the line pressure port and CPC pressure port. Line pressure (4) from the manual valve becomes 4th clutch pressure (40) at shift valve D via shift valves C, A, and B, and flows to the 4th clutch. The 4th clutch pressure is changed to line pressure mode by switching the position of shift valve C, and the 4th clutch is engaged securely. The 1st clutch is also engaged. No power is transmitted because of the one-way clutch.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

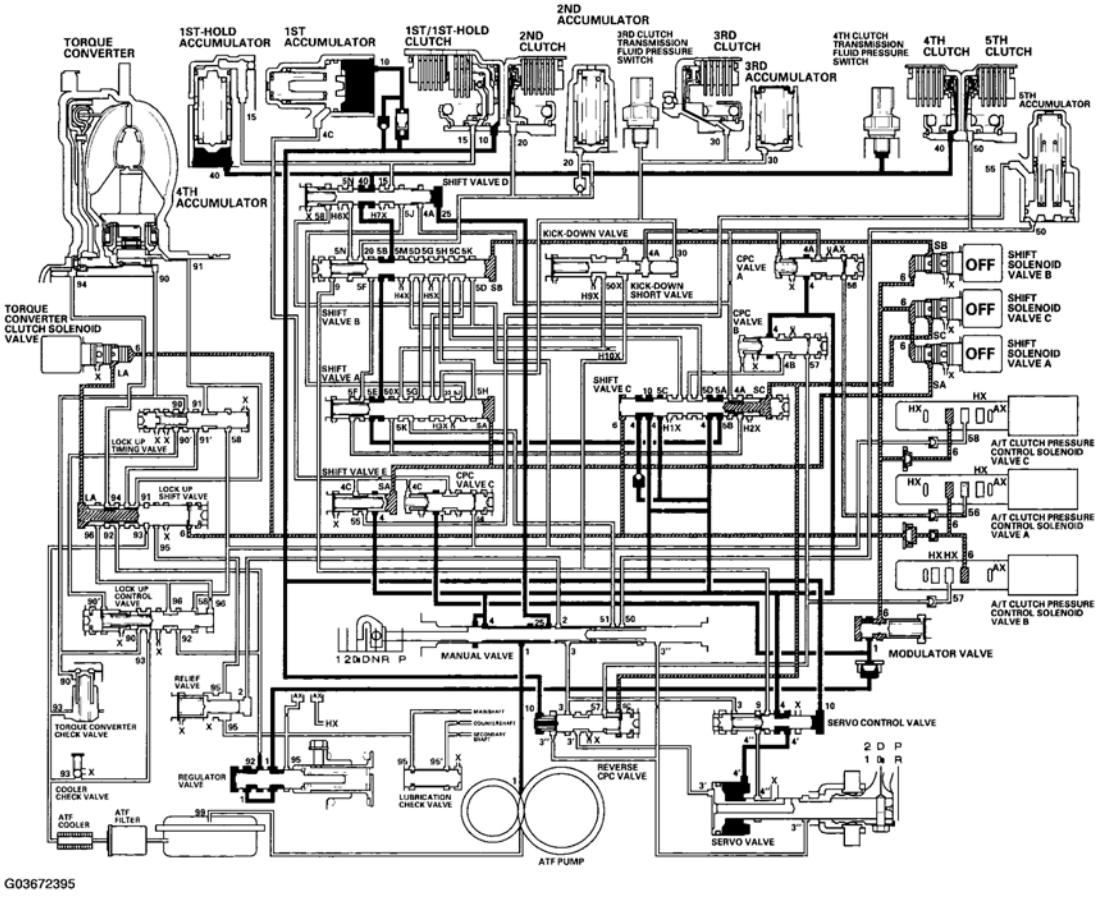


Fig. 41: Hydraulic Flow Diagram - D Position (Driving in 4th Gear) Courtesy of AMERICAN HONDA MOTOR CO., INC.

D Position: Shifting between 4th gear and 5th gear

As the speed of the vehicle reaches the programmed value, the PCM turns shift solenoid valve A ON. The PCM also controls the A/T clutch pressure control solenoid valve B to apply LS B pressure (57) to CPC valve B. Shift solenoid valve B and C stay OFF. Shift solenoid valve A is turned ON, and SH A pressure (SA) in the right side of shift valves A and E is released. Then shift valves A and E are moved to the left side to switch the line pressure port and CPC pressure port. Line pressure (4) becomes CPC A pressure (4A) at CPC valve A, and becomes CPC B pressure (4B) at CPC valve B. CPC B pressure (4B) becomes 5th clutch pressure (50) at shift valve C, and flows to the 5th clutch via shift valves B and A and the manual valve. The 4th clutch pressure is changed to CPC pressure mode by switching the position of shift valve A. The 1st clutch is also engaged. No power is

transmitted because of the one-way clutch.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

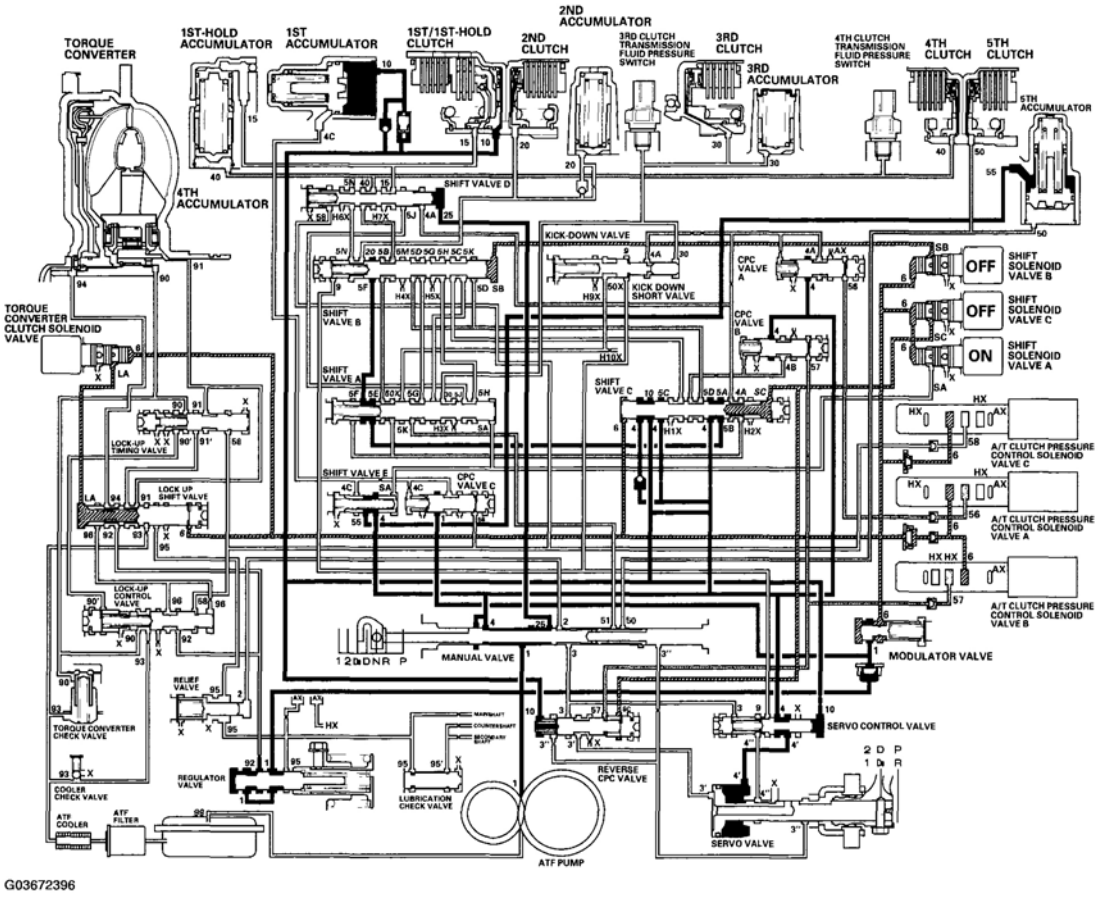


Fig. 42: Hydraulic Flow Diagram - D Position (Shifting Between 4th And 5th Gear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

D Position: Driving in 5th gear

The PCM turns shift solenoid valve C ON, and controls A/T clutch pressure control solenoid valve A to release LS A pressure (56) in CPC valve A. Shift solenoid valve A stays ON, and B stays OFF. Releasing LS A pressure (56) in CPC valve A releases CPC A pressure in the 4th clutch pressure circuit. Shift solenoid valve C is turned ON, and SH C pressure (SC) in the right side of shift valve C is released.

Then shift valve C is moved to the right side to switch the line pressure port and CPC pressure port. Line pressure (4) from the manual valve becomes 5th clutch pressure (50) at the manual valve, via shift valves C, B, and A, and flows to the 5th clutch. The 5th clutch pressure is changed to line pressure mode by switching the position of shift valve C. The 5th clutch is engaged securely, and the 1st clutch is also engaged. No power is transmitted because of the one-way clutch.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

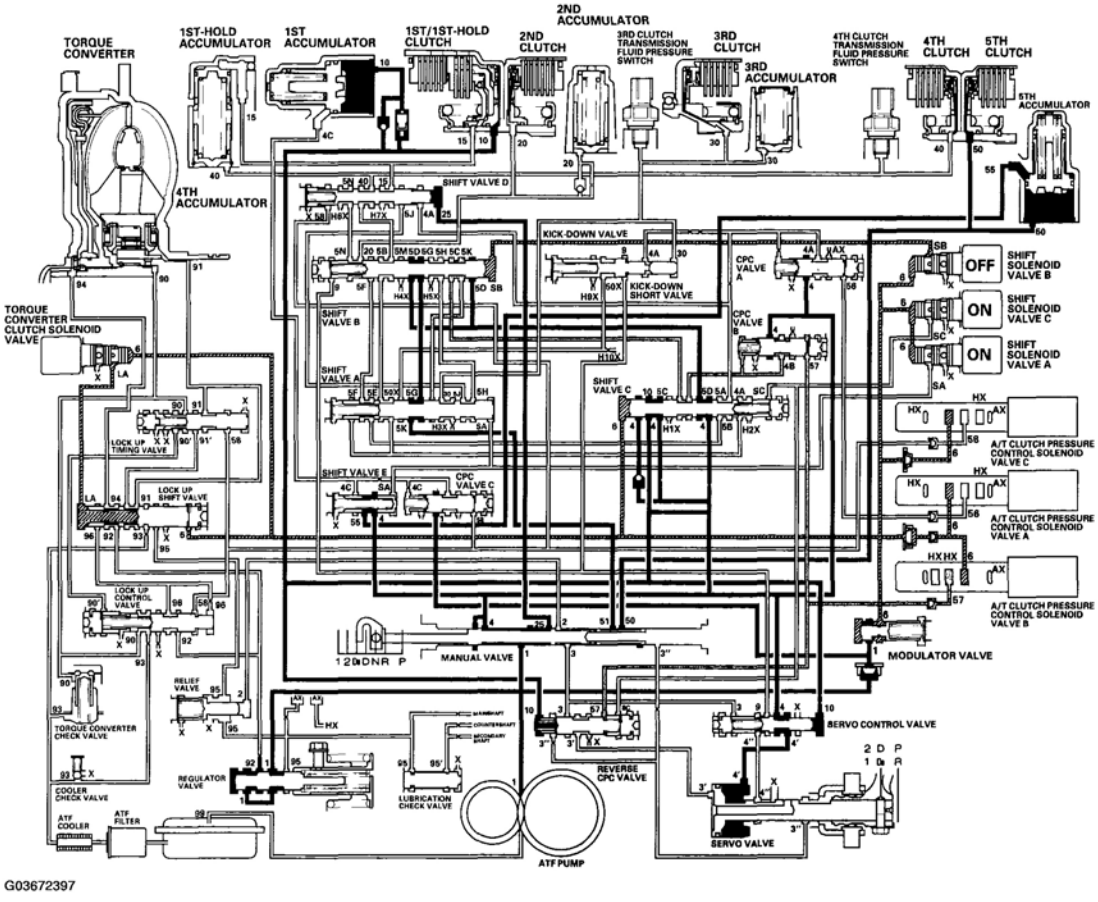


Fig. 43: Hydraulic Flow Diagram - D Position (Driving in 5th Gear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2 Position

The PCM controls the shift solenoid valves and the A/T clutch pressure control

solenoid valves. The conditions of the shift solenoid valves and the positions of shift valves are as follows:

- Shift solenoid valve A is turned ON, and shift valve A stays on the right side.
- Shift solenoid valve B is turned ON, and shift valve B stays on the right side.
- Shift solenoid valve C is turned OFF, and shift valve C stays on the left side.

The PCM also controls A/T clutch pressure control solenoid valve A to apply LS A pressure (56) to CPC valve A. Line pressure (4) from the manual valve becomes 2nd clutch pressure (20) at shift valve B, via shift valves C and A. 2nd clutch pressure (20) is applied to the 2nd clutch, and the 2nd clutch is engaged. The 1st clutch is also engaged. No power is transmitted because of the one-way clutch.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

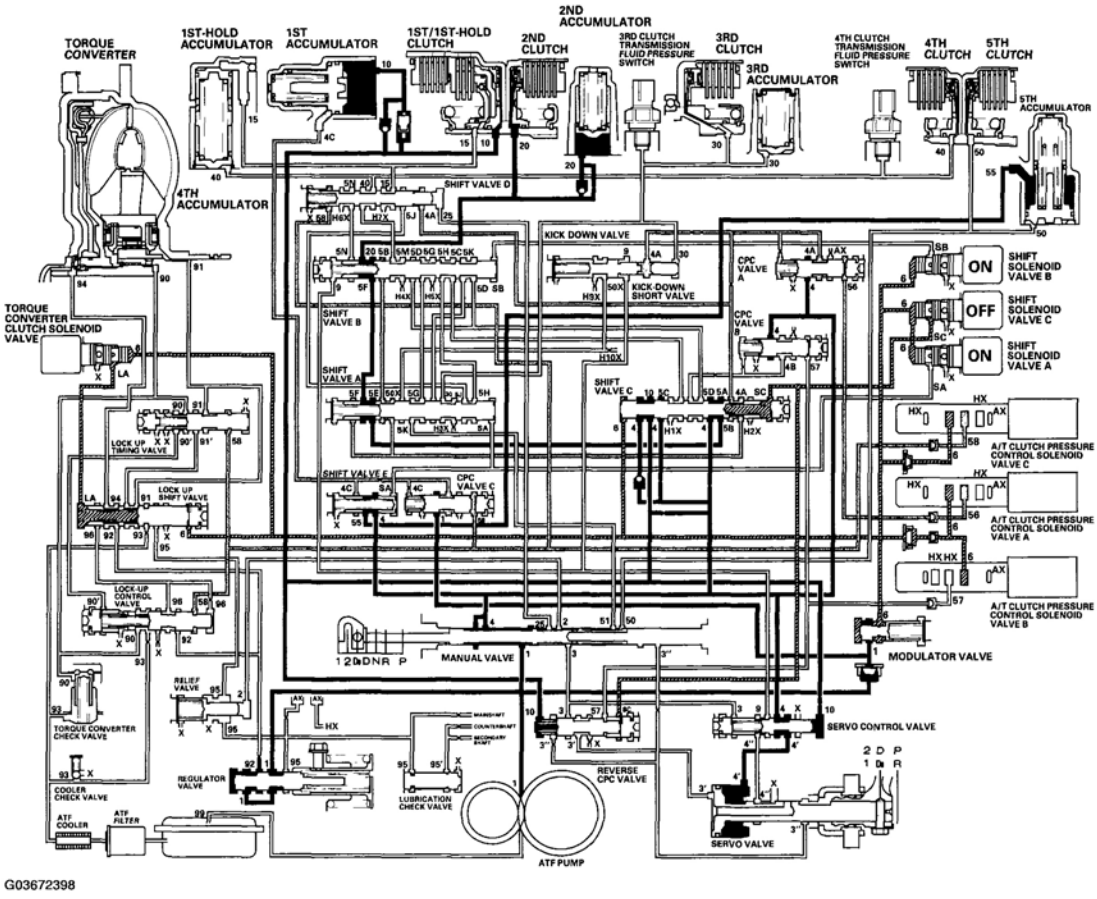


Fig. 44: Hydraulic Flow Diagram - 2nd Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

1 Position

The PCM controls the shift solenoid valves and the A/T clutch pressure control solenoid valves. The conditions of the shift solenoid valves and the positions of shift valves are as follows:

- Shift solenoid valve A is turned ON, and shift valve A stays on the right side.
- Shift solenoid valve B is turned ON, and shift valve B stays on the right side.
- Shift solenoid valve C is turned ON, and shift valve C moves to the right side by modulator pressure (6).

The PCM also controls A/T clutch pressure control solenoid valve B to apply LS B pressure (57) to CPC valve B. Line pressure (4) from the manual valve becomes 1st

clutch pressure (10) at shift valve C. 1st clutch pressure (10) is applied to the 1st clutch, and the 1st clutch is engaged. Line pressure (4) also flows to CPC valve B, and becomes CPC B pressure (4B). CPC B pressure (4B) becomes 1st-hold clutch pressure (15) at shift valve D, via shift valves C, B, and A. 1st-hold clutch pressure (15) is applied to the 1st-hold clutch, and the 1st-hold clutch is engaged.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

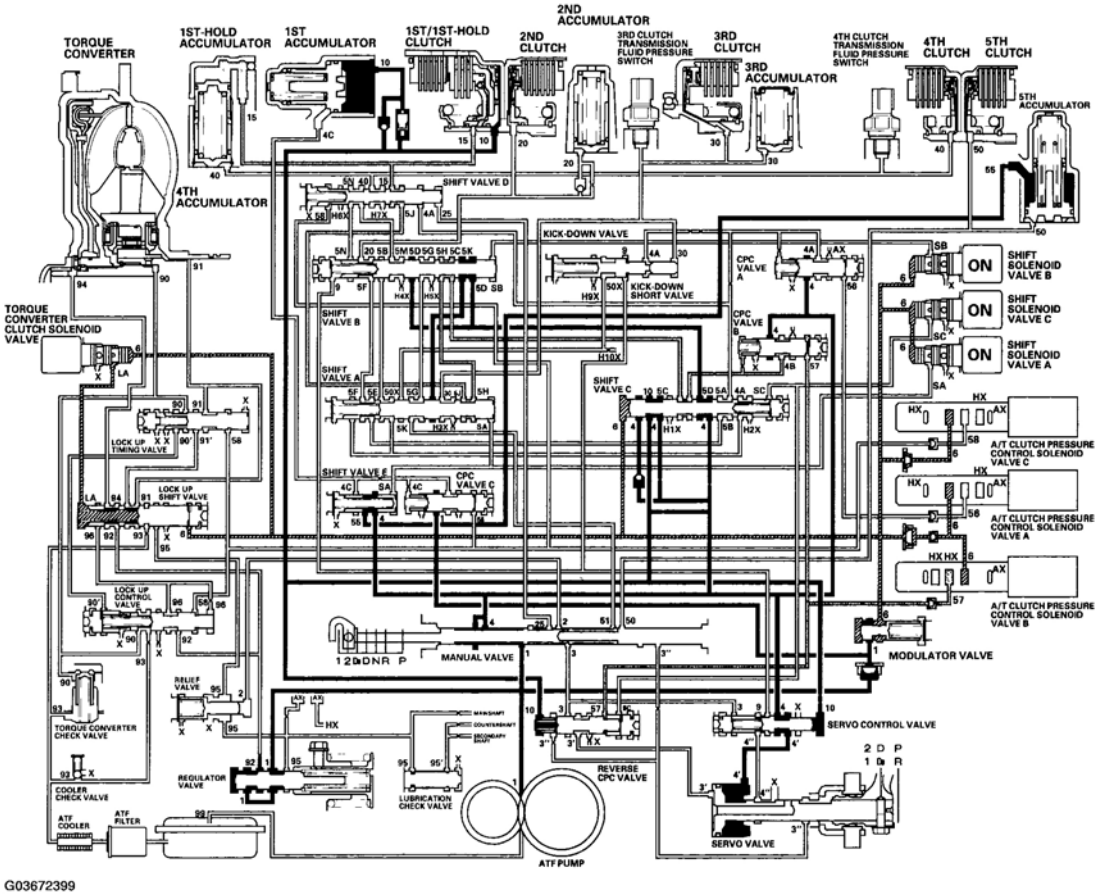


Fig. 45: Hydraulic Flow Diagram - 1st Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

R Position: Shifting to the R position from the P or N position

Line pressure (1) becomes line pressure (3) at the manual valve, and flows to the reverse CPC valve. Line pressure (3) is regulated by the reverse CPC valve and

becomes line pressure (3'). Line pressure (3') pushes the servo valve to the reverse position, passes through the servo valve, and flows to the manual valve. Line pressure (3") becomes 5th clutch pressure (50). The 5th clutch pressure (50) is applied to the 5th clutch, and 5th clutch is engaged with the reverse CPC pressure mode.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

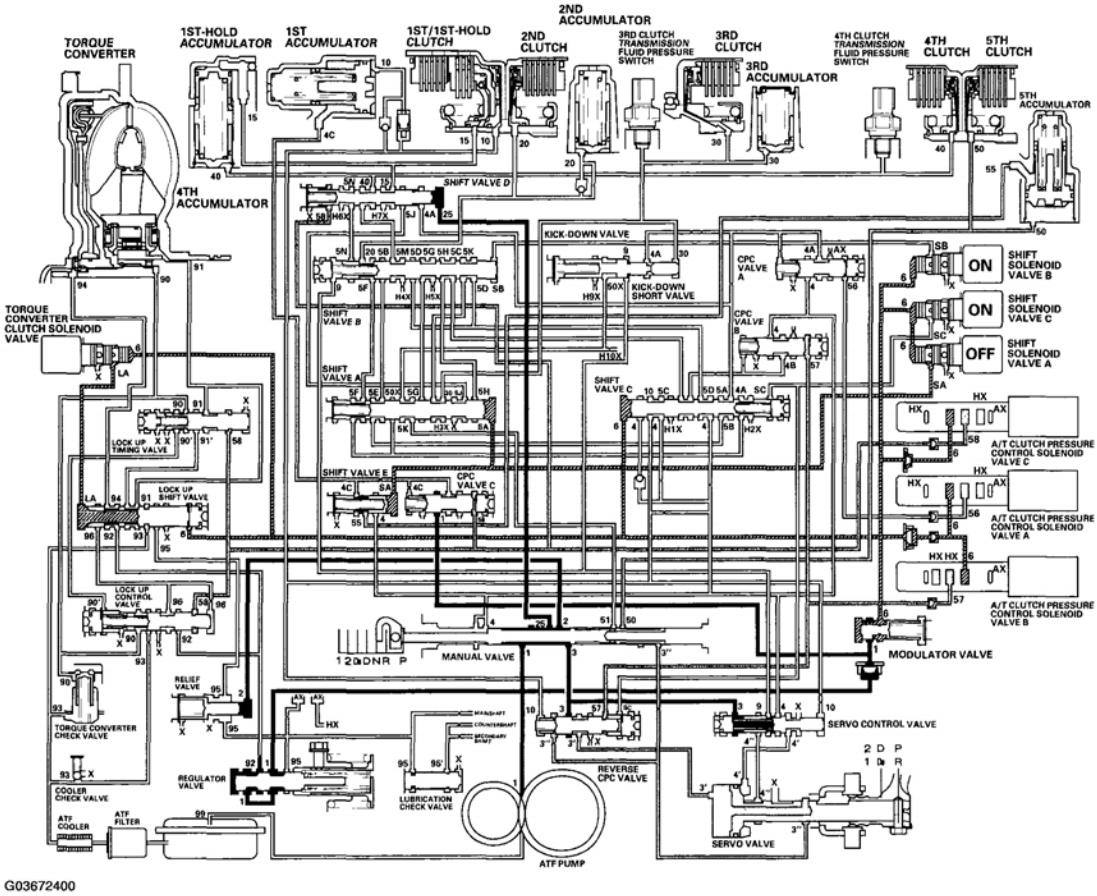


Fig. 46: Hydraulic Flow Diagram - R Position (Shifting to R From P Or N Position)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

R Position: Driving in reverse gear

The PCM turns shift solenoid valve C OFF. Shift solenoid valve A stays OFF and B

stays ON. Shift solenoid valve C is turned OFF, and SH C pressure (SC) is applied to the right side of the reverse CPC valve. Then the reverse CPC valve moves to the left side, creating full line pressure. Line pressure to the 5th clutch is the same as when shifting to the R position, and 5th clutch pressure increases. The 5th clutch is engaged with line pressure mode.

Reverse Inhibitor Control

When the R position is selected while the vehicle is moving forward at speeds over 6mph (10 km/h), the PCM outputs to turn shift solenoid valves A and C ON; and shift solenoid valve B remains ON. The reverse CPC valve is moved to right side and covers the port to stop the line pressure (3') to the servo valve. The line pressure (3') is not applied to the servo valve, and the 5th clutch pressure (50) is not applied to the 5th clutch. As a result, power is not transmitted to the reverse position.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

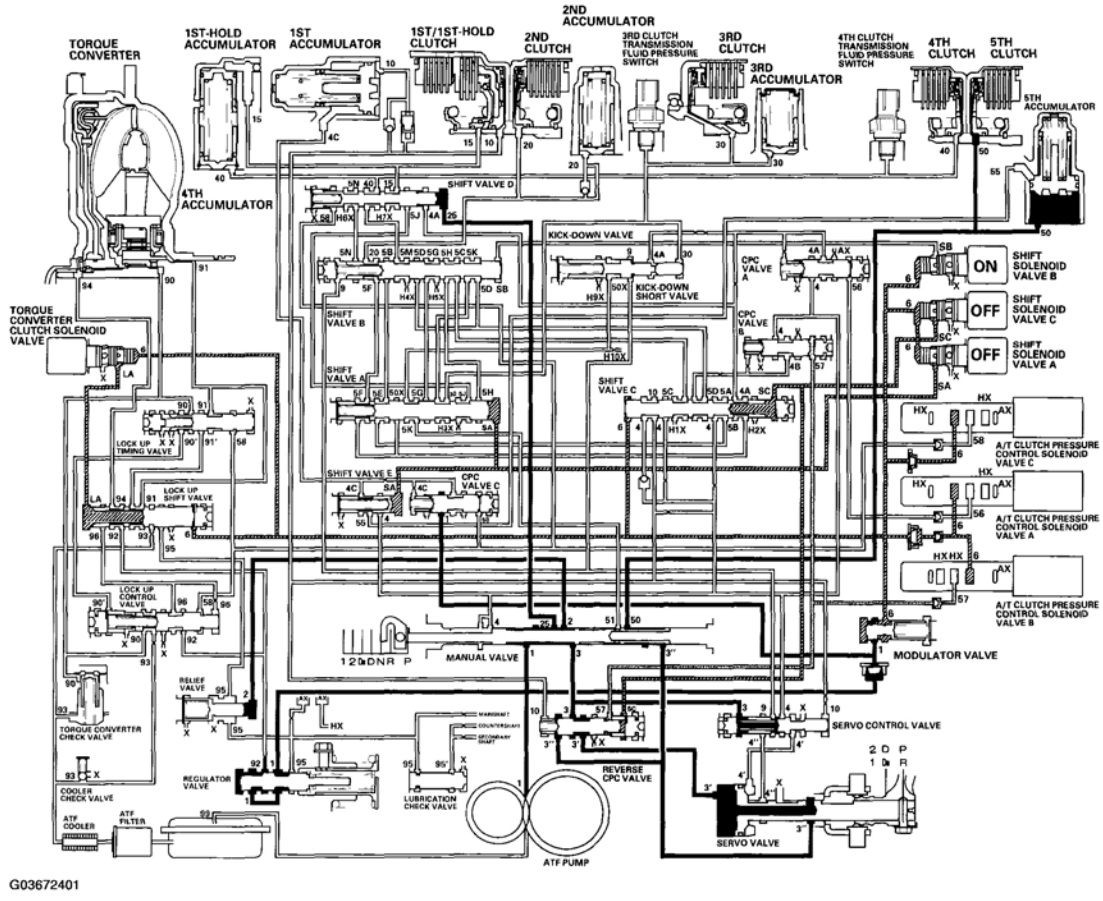


Fig. 47: Hydraulic Flow Diagram - R Position (Driving In Reverse Gear) Courtesy of AMERICAN HONDA MOTOR CO., INC.

P Position

Shift solenoid valve C is turned OFF by the PCM, and SH C pressure (SC) is applied to the right side of the reverse CPC valve. Then the reverse CPC valve is moved to the left side to uncover the port leading line pressure (3) to the servo valve. Line pressure (3') passes through the servo valve and flows to the manual valve. Line pressure (3") is intercepted at the manual valve, and is not applied to the clutches.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

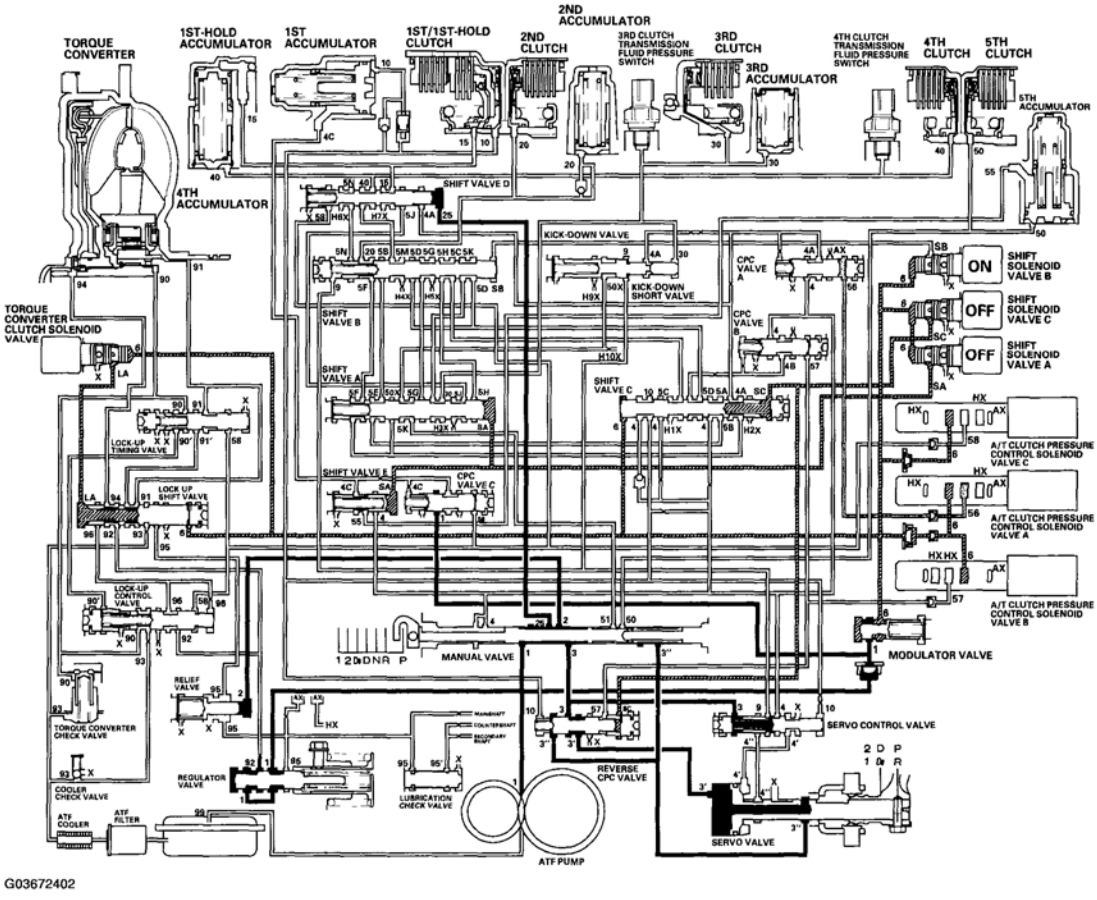


Fig. 48: Hydraulic Flow Diagram - P Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Lock-up System

The lock-up mechanism operates in the D position (2nd, 3rd, 4th, and 5th), and D3 position (2nd and 3rd). The pressurized fluid is drained from the back of the torque converter through a fluid passage, causing the torque converter clutch piston to be held against the torque converter cover. As this takes place, the mainshaft rotates at the same speed as the engine crankshaft. Together with hydraulic control, the PCM optimizes the timing of the lock-up mechanism. When the torque converter clutch solenoid valve activates, modulator pressure changes to switch lock-up ON and OFF. The lock-up control valve and the lock-up timing valve control the amount of lock-up according to A/T clutch pressure control solenoid valve C. The torque converter clutch solenoid valve is mounted on the torque converter housing, and A/T clutch pressure control solenoid valve C is mounted on the transmission

housing. They are controlled by the PCM.

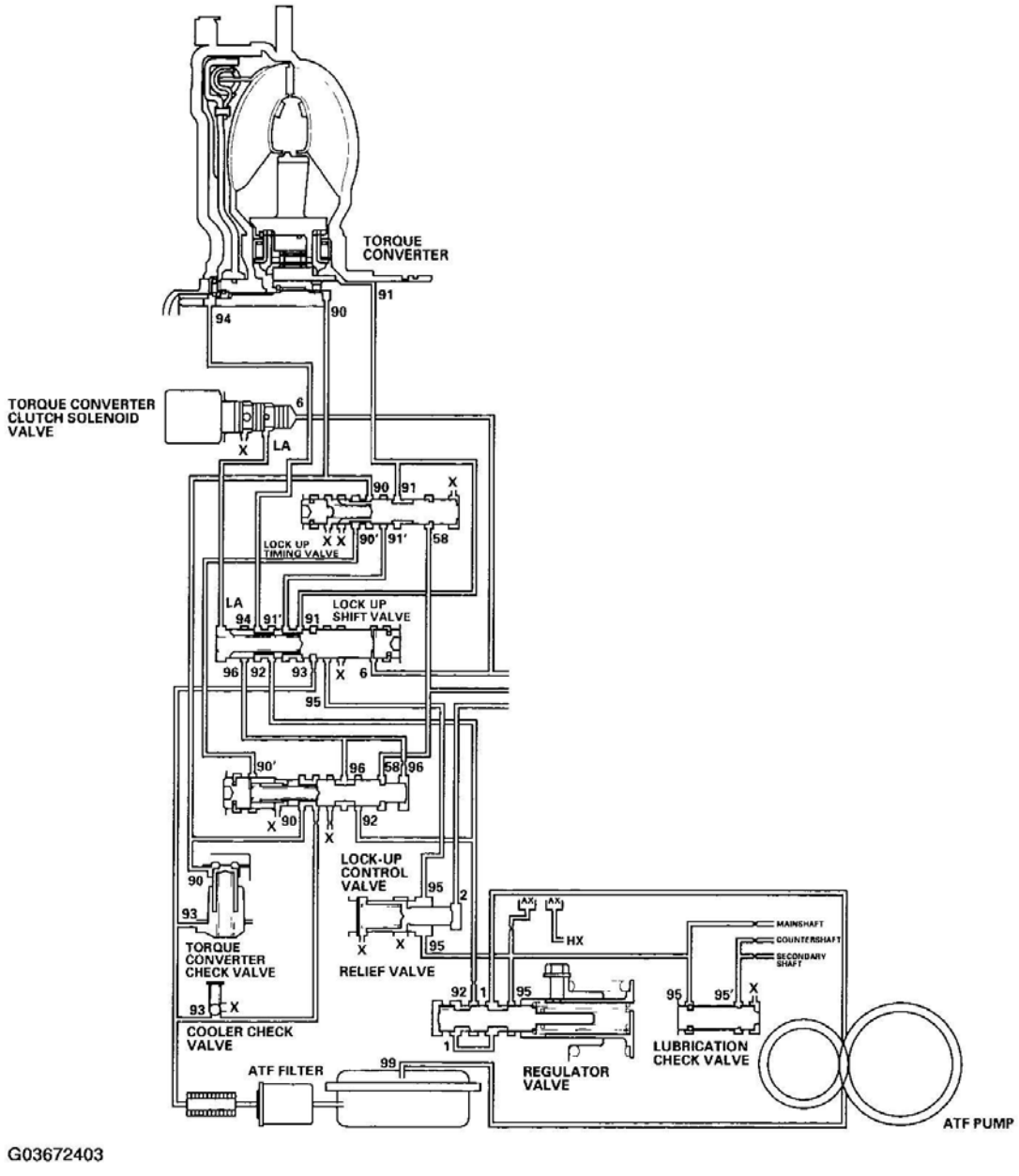


Fig. 49: Identifying Lock-up System
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Torque Converter Clutch Lock-up ON (Engaging Torque Converter Clutch)

Fluid in the chamber between the torque converter cover and the torque converter

clutch piston is drained off, and fluid entering from the chamber between the pump and stator exerts pressure through the torque converter clutch piston against the torque converter cover. The torque converter clutch piston engages with the torque converter cover; torque converter clutch lock-up ON, and the mainshaft rotates at the same speed as the engine.

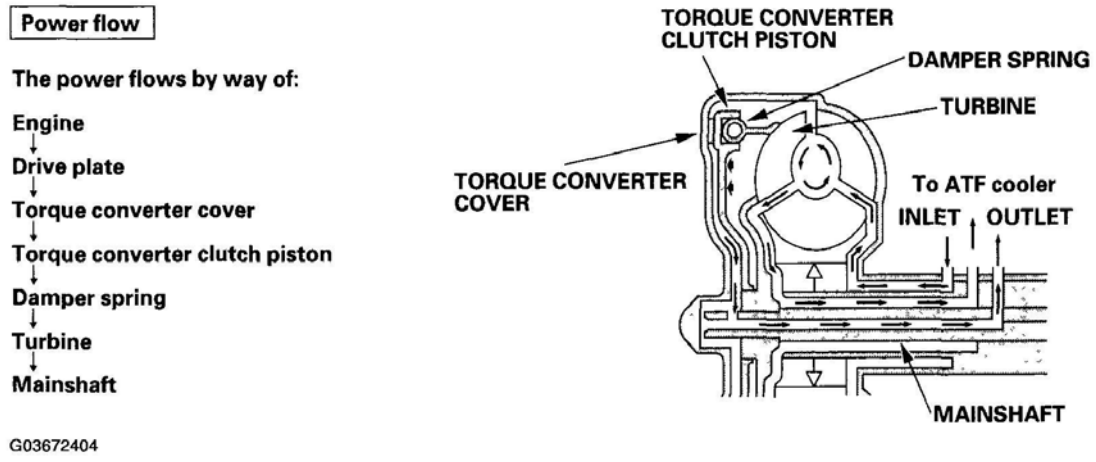


Fig. 50: Identifying Torque Converter Clutch Lock-up ON (Engaging Torque Converter Clutch)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Torque Converter Clutch Lock-up OFF (Disengaging Torque Converter Clutch)

Fluid entered from the chamber between the torque converter cover and the torque converter clutch piston passes through the torque converter and goes out through the chambers between the turbine and the stator, and between the pump and the stator. As a result, the torque converter clutch piston moves away from the torque converter cover, and the torque converter clutch is released; torque converter clutch lock-up OFF.

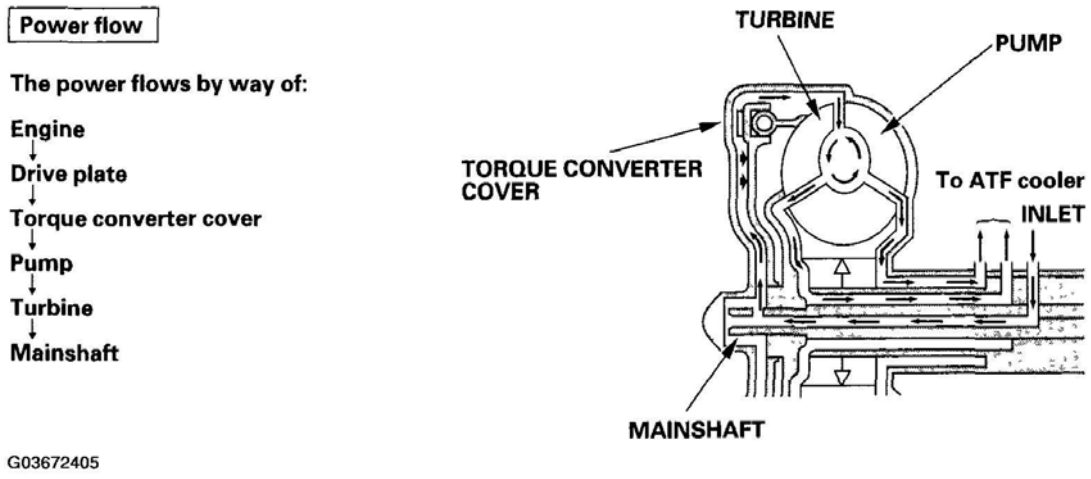


Fig. 51: Identifying Torque Converter Clutch Lock-up OFF (Disengaging Torque Converter Clutch)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

No Lock-up

The torque converter clutch solenoid valve is turned OFF by the PCM. The lock-up shift valve receives LC pressure (LA) on the left side, and modulator pressure (6) on the right side. The lock-up shift valve is in the right side to uncover the port leading torque converter pressure (92) to the left side of the torque converter. Torque converter pressure (92) becomes torque converter pressure (94), and enters into the left side of the torque converter to disengage the torque converter clutch. The lock-up is OFF.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

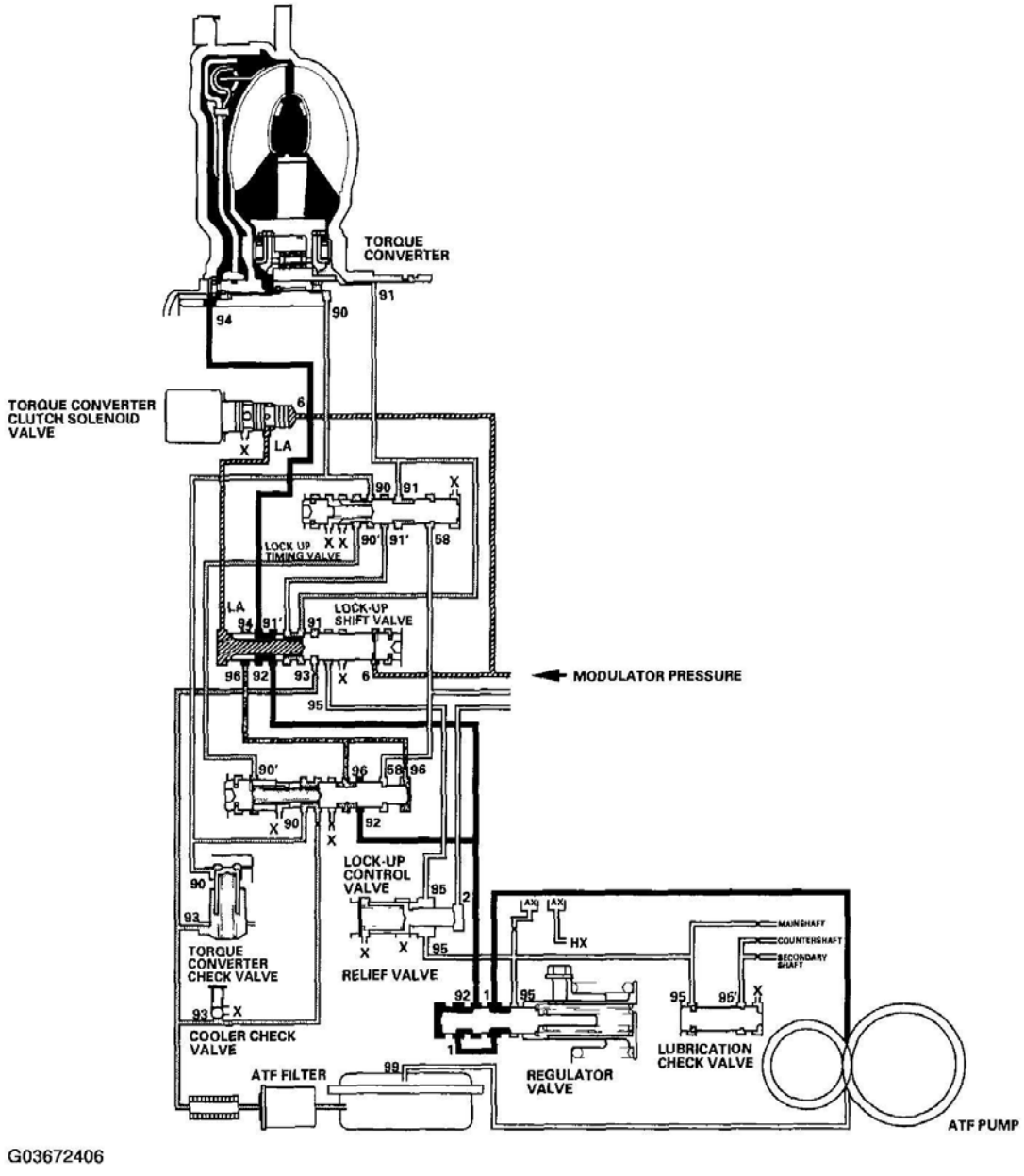


Fig. 52: Identifying No Lock-up
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Partial Lock-up

As the speed of the vehicle reaches the programmed value, the torque converter clutch solenoid valve is turned ON by the PCM to release LC pressure (LA) in the left cavity of the lock-up shift valve. Modulator pressure (6) is applied to the right

side of the lock-up shift valve, then the lock-up shift valve is moved in the left side to switch the port leading torque converter pressure to the right side of the torque converter. Torque converter pressure (91) is applied to the right side of the torque converter to engage the torque converter clutch. The PCM also controls A/T clutch pressure control solenoid valve C, and LS C pressure (58) is applied to the lock-up control valve and the lock-up timing valve. When LS C pressure (58) is lower, torque converter pressure (91) from the lock-up timing valve is lower. The torque converter clutch is engaged partially. LS C pressure (58) increases, and the lock-up timing valve is moved to the left side to uncover the port leading torque converter pressure to high. The torque converter clutch is then engaged securely. Under this condition, the torque converter clutch is engaged by pressure from the right side of the torque converter; this lock-up condition is in partial lock-up.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

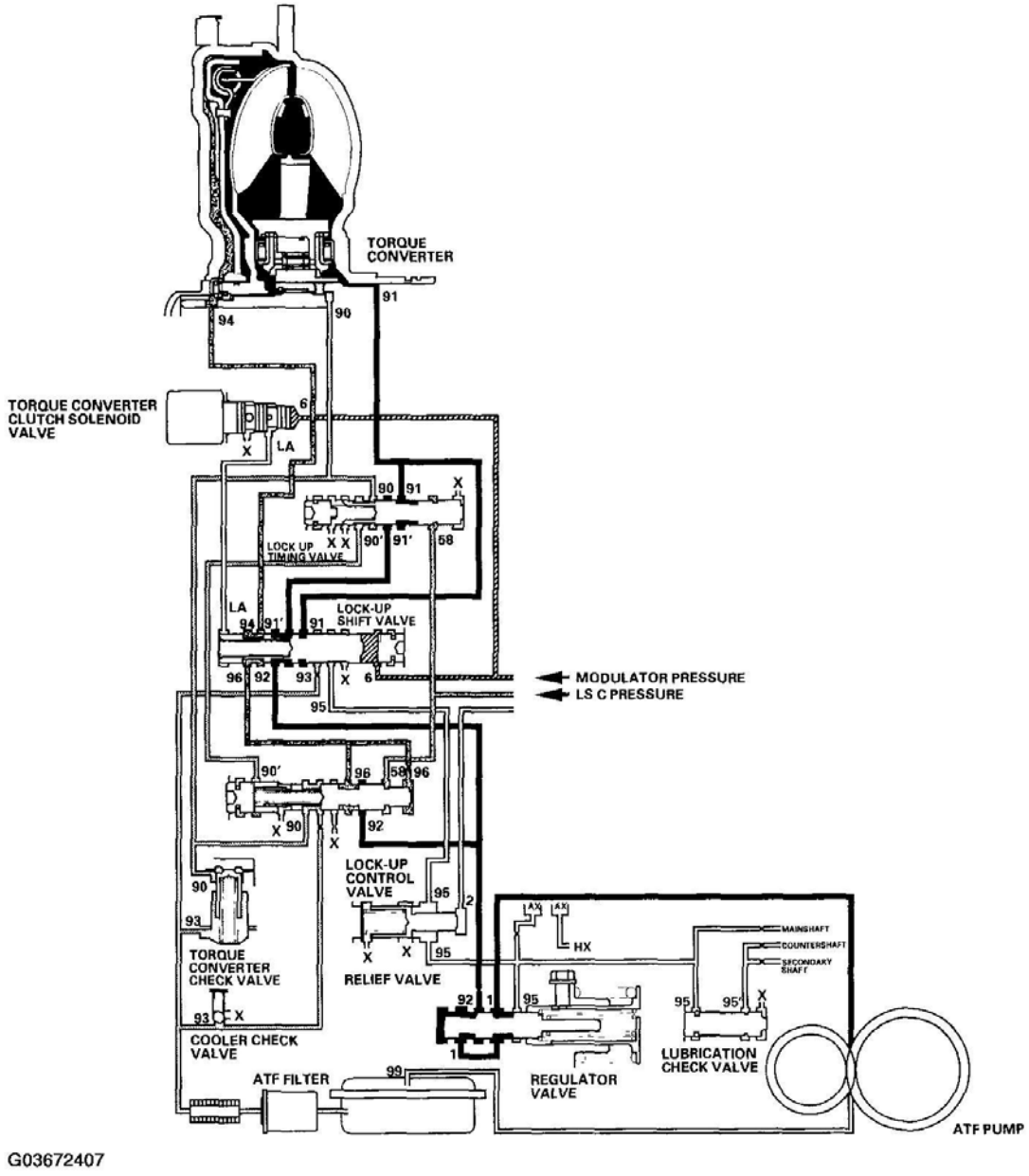


Fig. 53: Identifying Partial Lock-up
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Full Lock-up

When the vehicle speed increases, the PCM sends a signal to the A/T clutch pressure control solenoid valve C to increase LS C pressure (58). The LS C pressure (58) is applied to the lock-up control valve and the lock-up timing valve, and moves

them to the left side. Under this condition, torque converter back pressure (F2) is released fully, causing the torque converter clutch to be fully engaged.

NOTE: When used, "left" or "right" indicates direction on the hydraulic circuit.

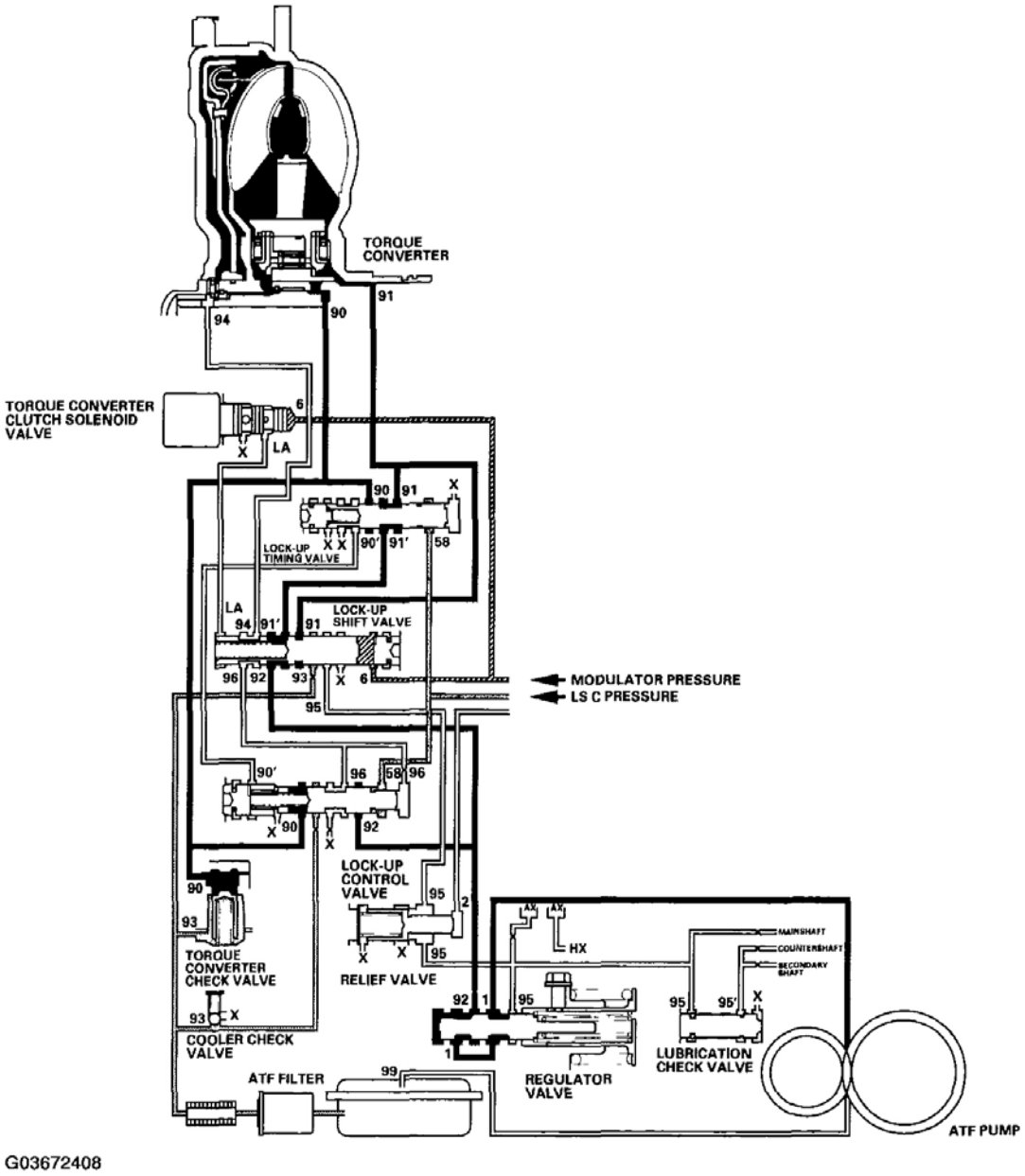


Fig. 54: Identifying Full Lock-up

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Circuit Diagram - PCM A/T Control System

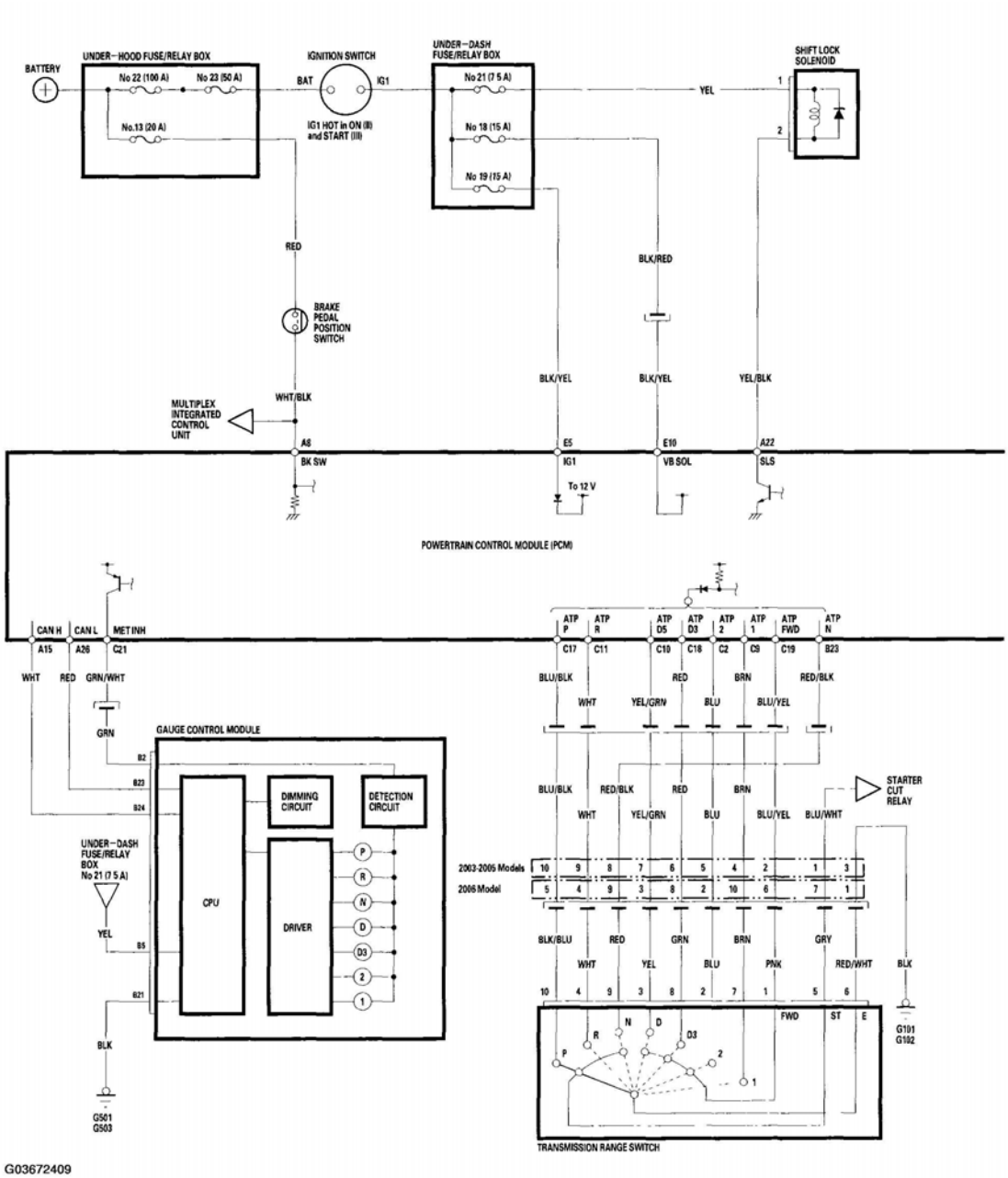


Fig. 55: Circuit Diagram - PCM A/T Control System (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

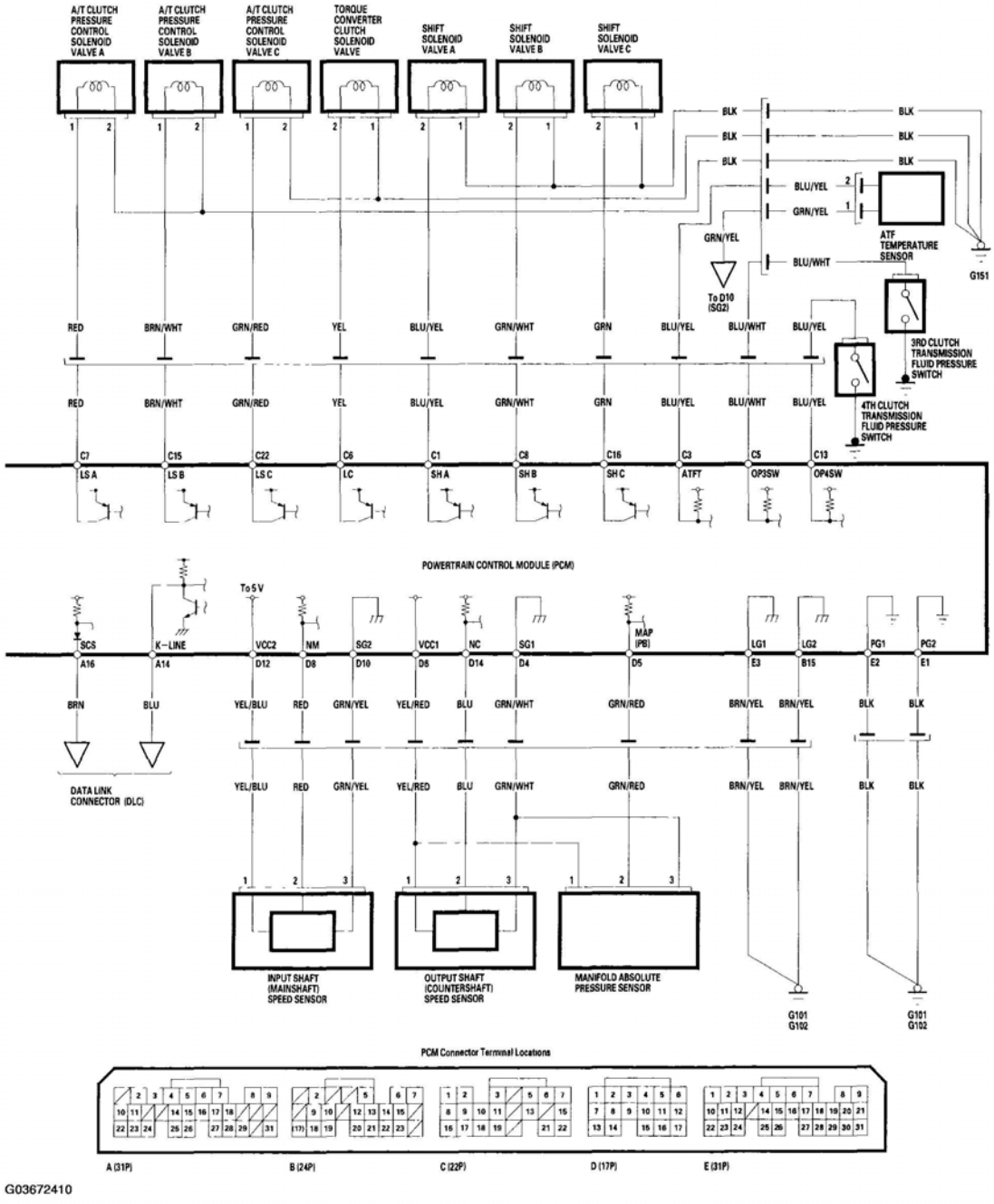


Fig. 56: Circuit Diagram - PCM A/T Control System (2 Of 2) Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC P0705: Short in Transmission Range Switch Circuit (Multiple Shift-position Input)

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine.
4. Press brake pedal. Move the shift lever through all positions. Stop for at least 1 second in each position.
5. Monitor the OBD status for P0705 in the DTCs/Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 4.

   NO - Intermittent failure, the system is OK at this time. Check for an intermittent short in the wires between the transmission range switch and PCM. If the tester indicates NOT COMPLETED, return to step 2 and recheck.
6. Turn the ignition switch OFF.
7. Inspect the transmission range switch (see **TRANSMISSION RANGE SWITCH TEST**).

   Is the switch OK?

   YES - Go to step 5.

   NO - Replace the transmission range switch (see **TRANSMISSION RANGE SWITCH REPLACEMENT**), then go to step 59.
8. Turn the ignition switch ON (II).
9. Shift to all positions other than P.

10. Measure the voltage between PCM connector terminals C17 and E3.

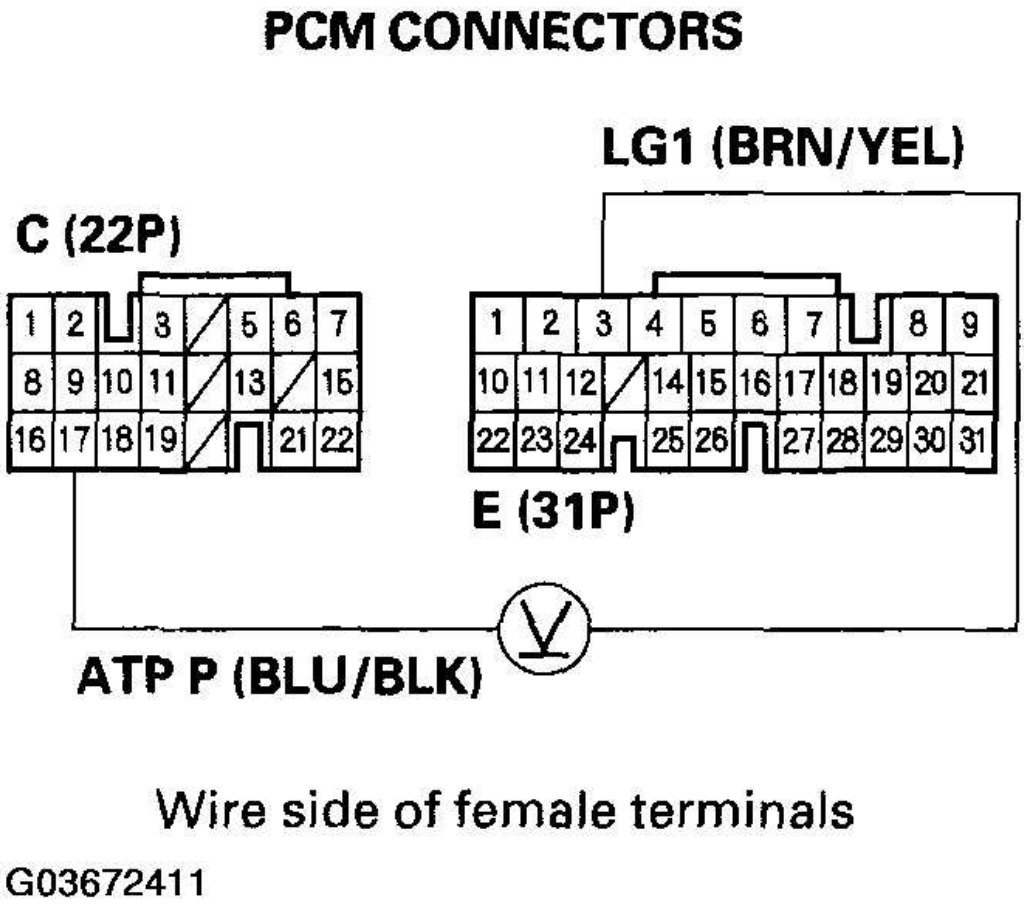


Fig. 57: Measuring Voltage Between PCM Connector Terminals C17 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 17.
NO - Go to step 8.

11. Turn the ignition switch OFF.
12. Jump the SCS line with the HDS.

13. Disconnect PCM connector C (22P).
14. Check for continuity between PCM connector terminal C17 and body ground.

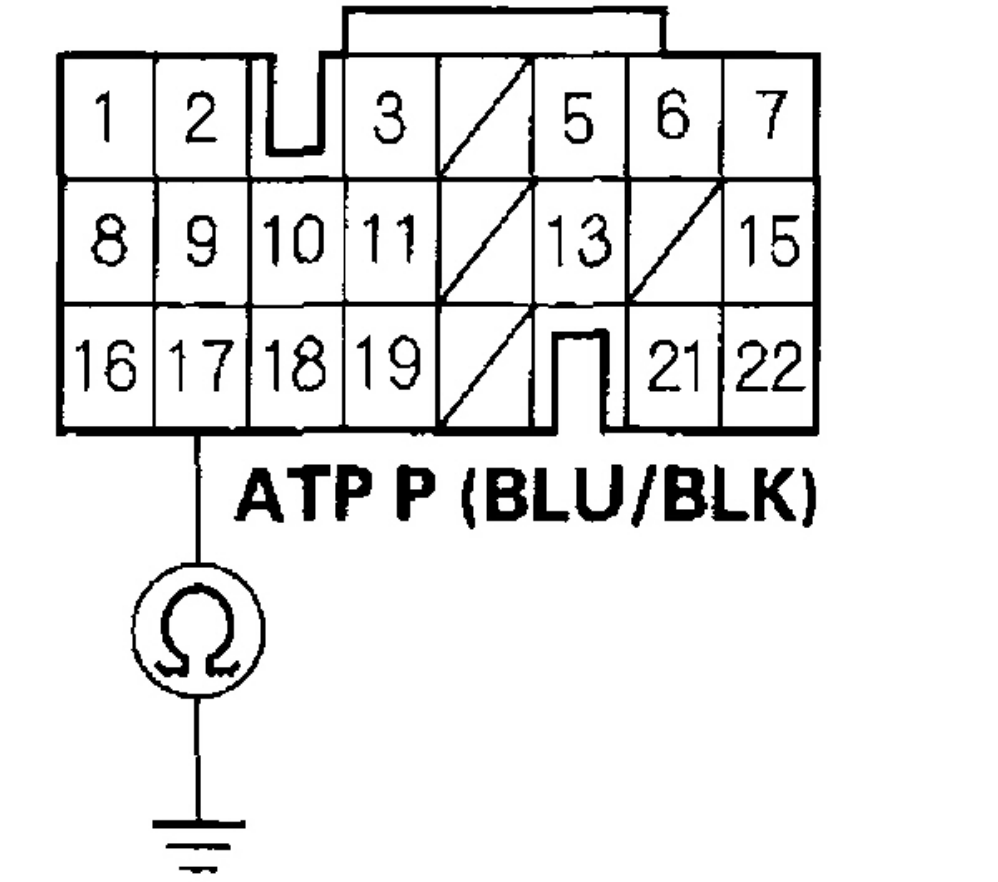


Fig. 58: Checking Continuity Between PCM Connector Terminals C17 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between PCM connector terminal C17 and the transmission range switch, then go to step 59.

NO - Go to step 12.

15. Disconnect PCM connectors B (24P) and E (31P).
16. Check for continuity between PCM connector terminals B15 and body ground, and between E3 and body ground.

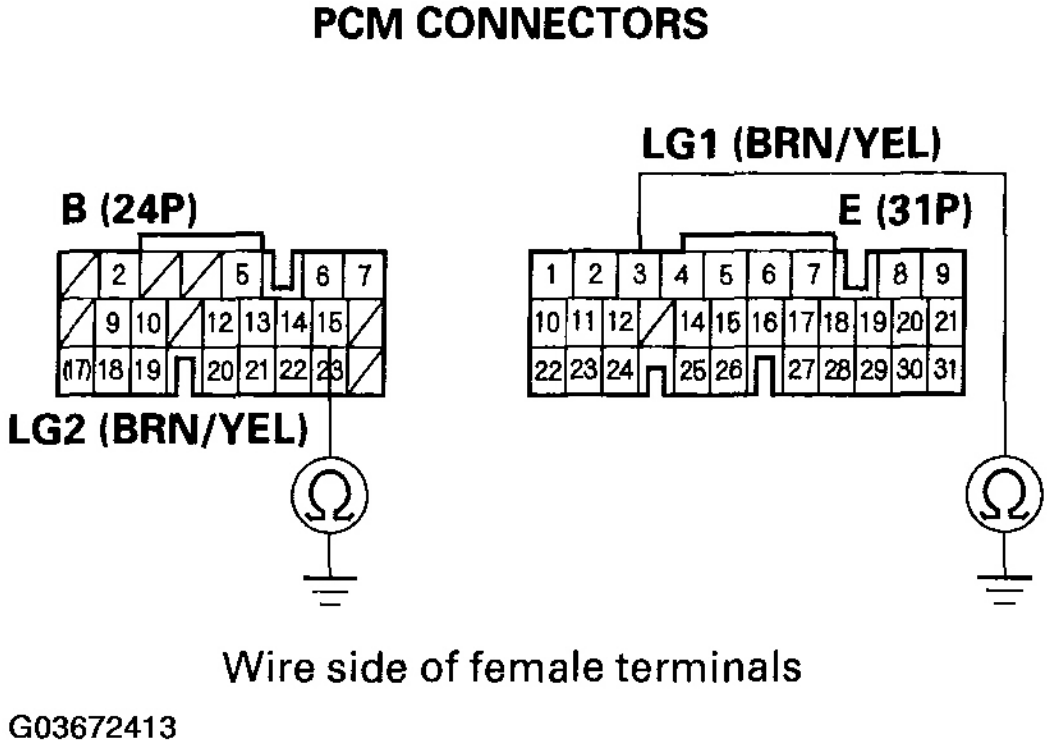


Fig. 59: Checking Continuity Between PCM Connector Terminals B15 & Body Ground And E3 & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 66.

NO - Repair open in the wire between PCM connector terminals B15, E3, and ground (G101, G102), or repair poor ground (G101, G102), then go to step 59.

17. Shift to all positions other than R.
18. Measure the voltage between PCM connector terminals C11 and E3.

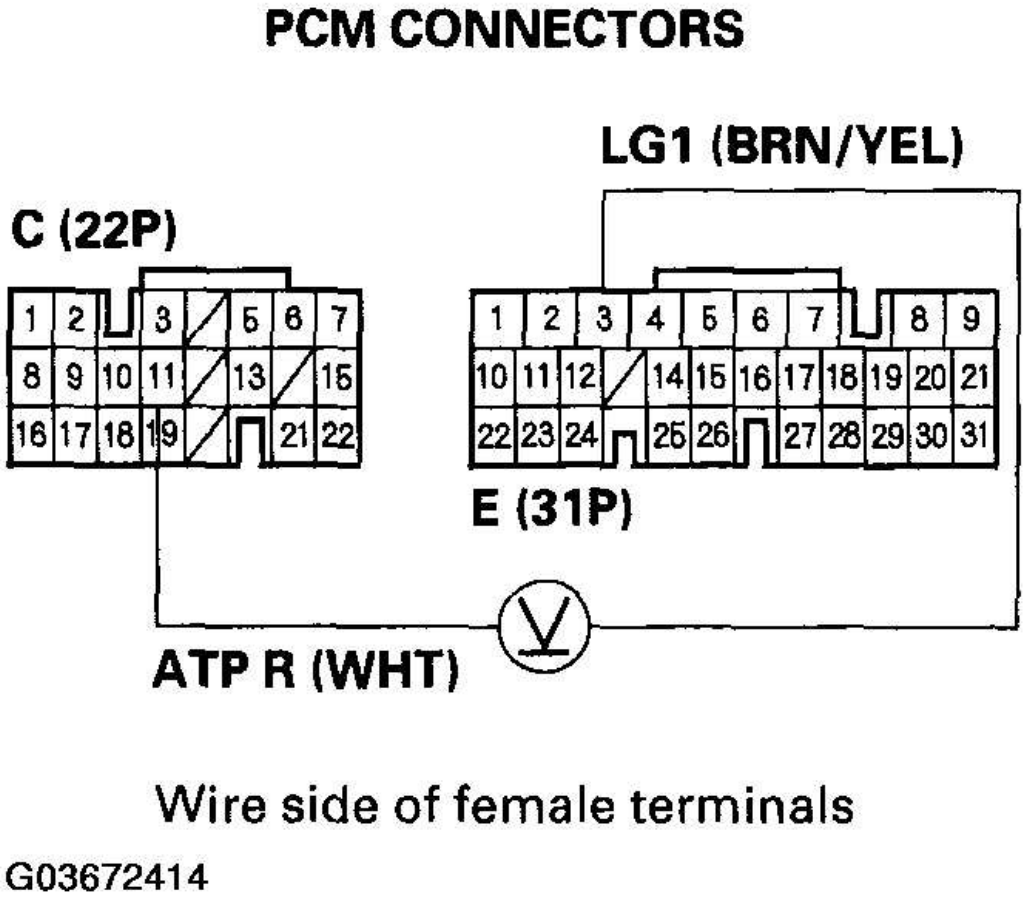


Fig. 60: Measuring Voltage Between PCM Connector Terminals C11 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 23.

NO - Go to step 19.

19. Turn the ignition switch OFF.
20. Jump the SCS line with the HDS.
21. Disconnect PCM connector C (22P).
22. Check for continuity between PCM connector terminal C11 and body ground.

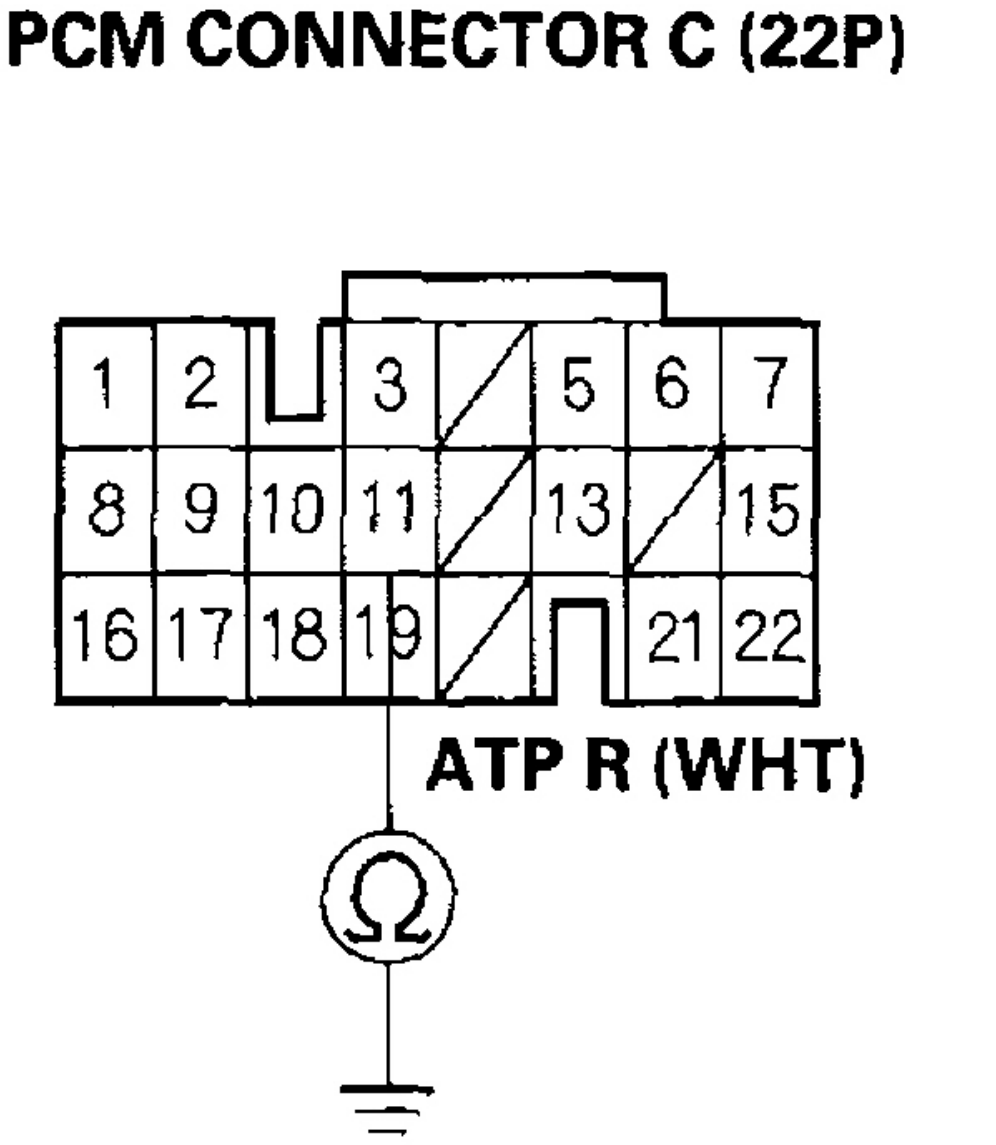


Fig. 61: Checking continuity Between PCM Connector Terminals C11 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between PCM connector terminal C11 and the transmission range switch, then go to step 59.

NO - Go to step 66.

23. Shift to all positions other than N.
24. Measure the voltage between PCM connector terminals B23 and E3.

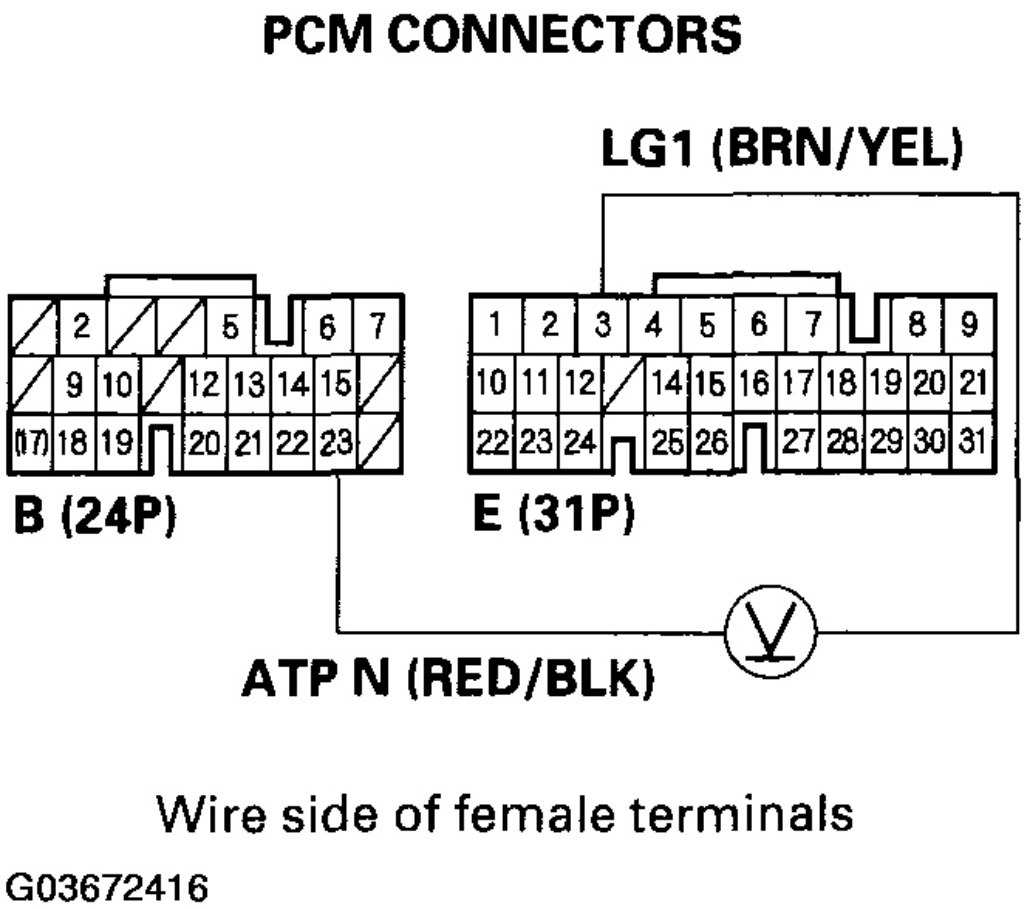


Fig. 62: Measuring Voltage Between PCM Connector Terminals B23 And E3

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 29.

NO - Go to step 25.

25. Turn the ignition switch OFF.
26. Jump the SCS line with the HDS.
27. Disconnect PCM connector B (24P).
28. Check for continuity between PCM connector terminal B23 and body ground.

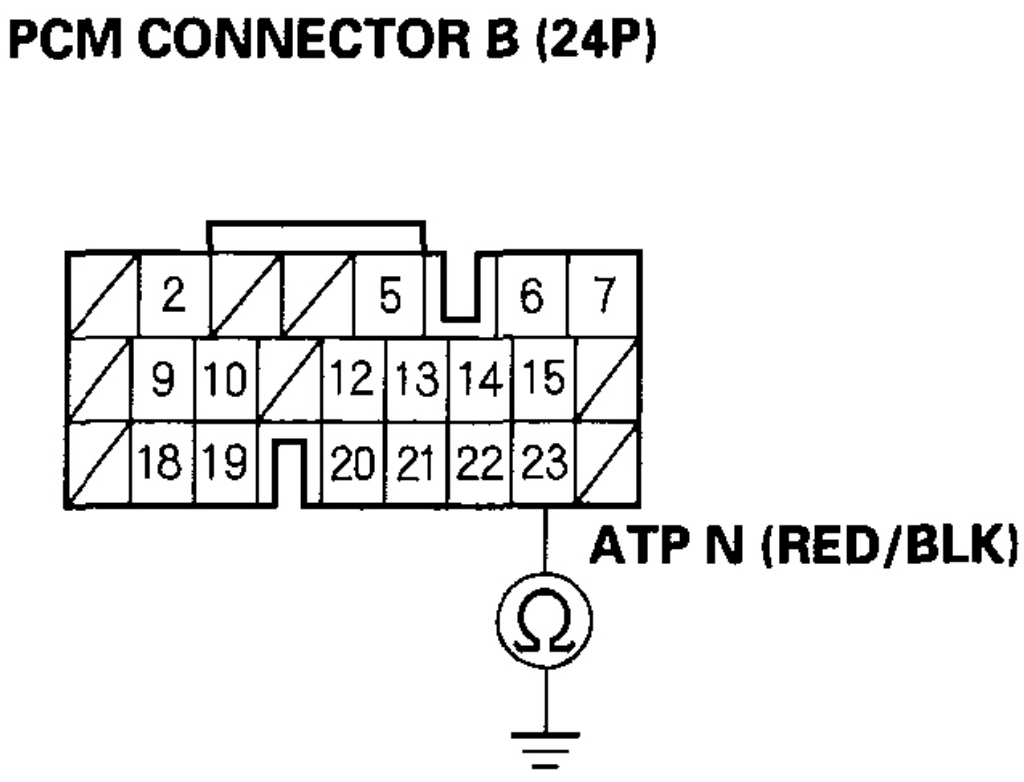


Fig. 63: Checking Continuity Between PCM Connector Terminal B23 and Body Ground.
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between PCM connector terminal B23 and the transmission range switch, then go to step 59.

NO - Go to step 66.

29. Shift to all positions other than D.
30. Measure the voltage between PCM connector terminals C10 and E3.

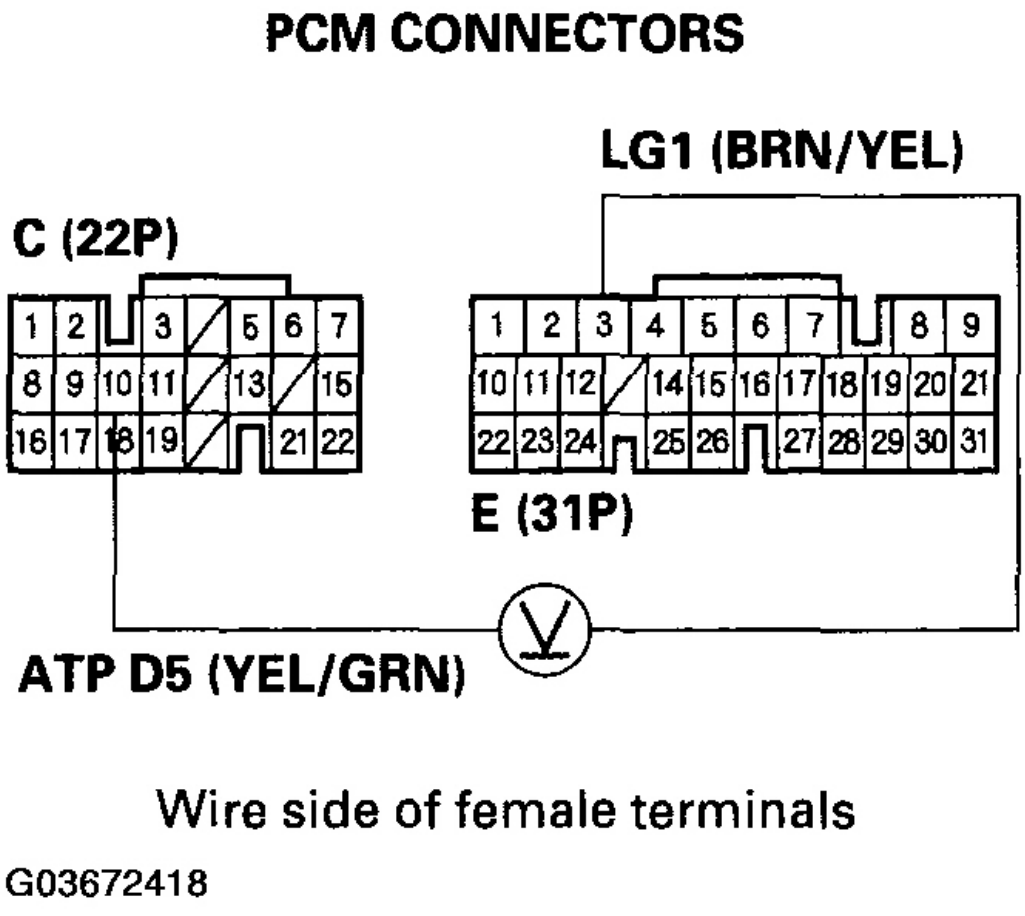


Fig. 64: Measuring Voltage Between PCM Connector Terminals C10 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 35.
NO - Go to step 31.

31. Turn the ignition switch OFF.

32. Jump the SCS line with the HDS.
33. Disconnect PCM connector C (22P).
34. Check for continuity between PCM connector terminal C10 and body ground.

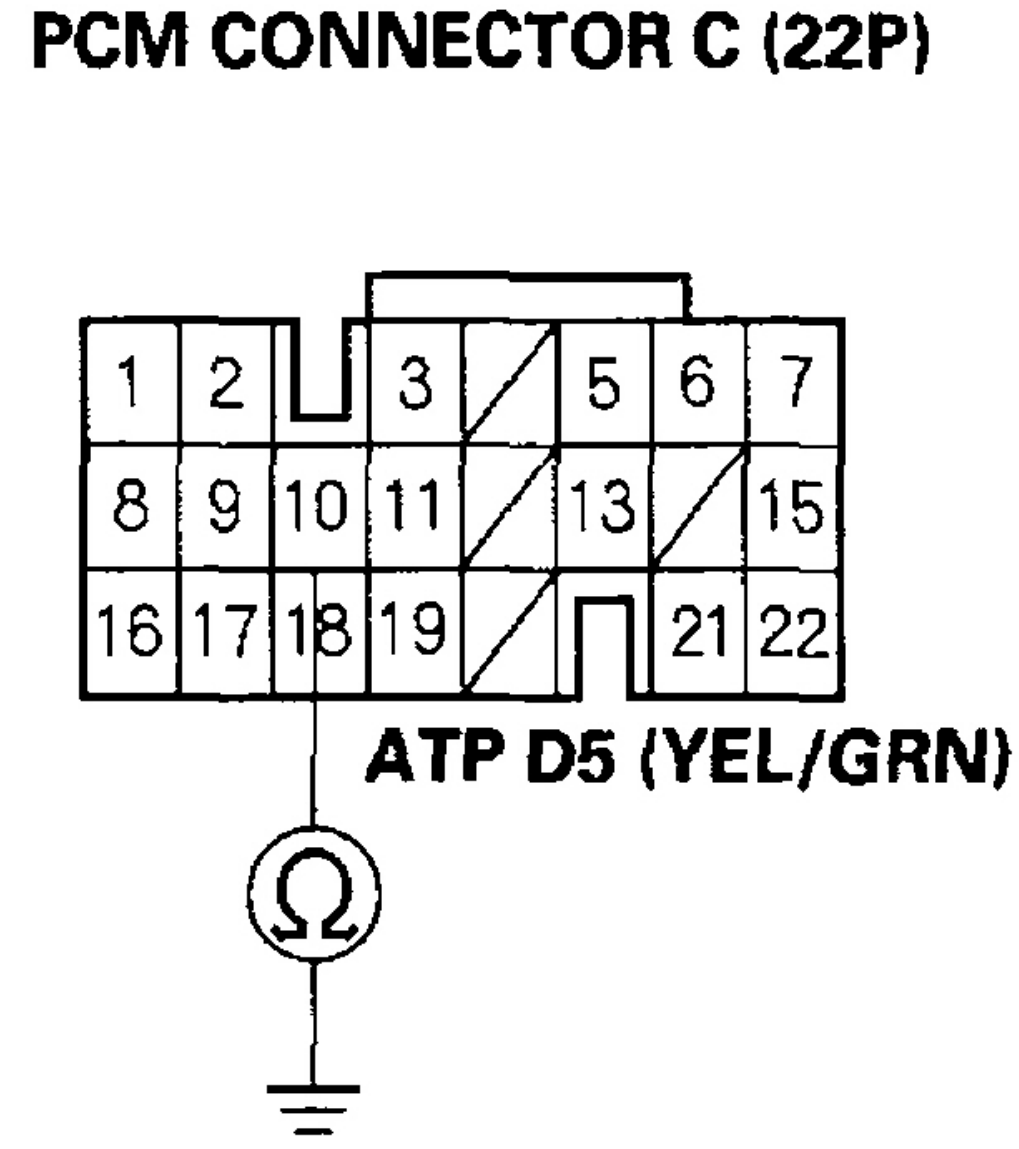


Fig. 65: Checking Continuity Between PCM Connector Terminals C10 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between PCM connector terminal C10 and the transmission range switch, then go to step 59.

NO - Go to step 66.

35. Shift to all positions other than D3.
36. Measure the voltage between PCM connector terminals C18 and E3.

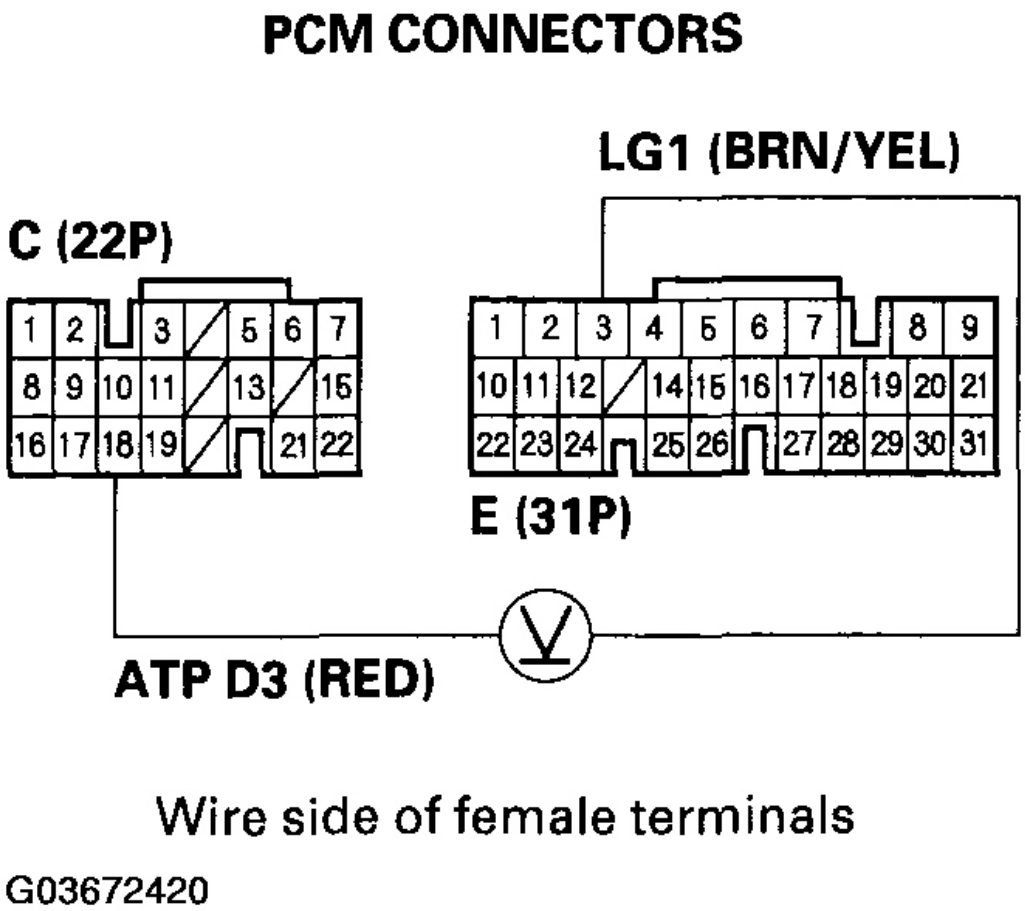


Fig. 66: Measuring Voltage Between PCM Connector Terminals C18 And E3

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 41.

NO - Go to step 37.

37. Turn the ignition switch OFF.
38. Jump the SCS line with the HDS.
39. Disconnect PCM connector C (22P).
40. Check for continuity between PCM connector terminal C18 and body ground.

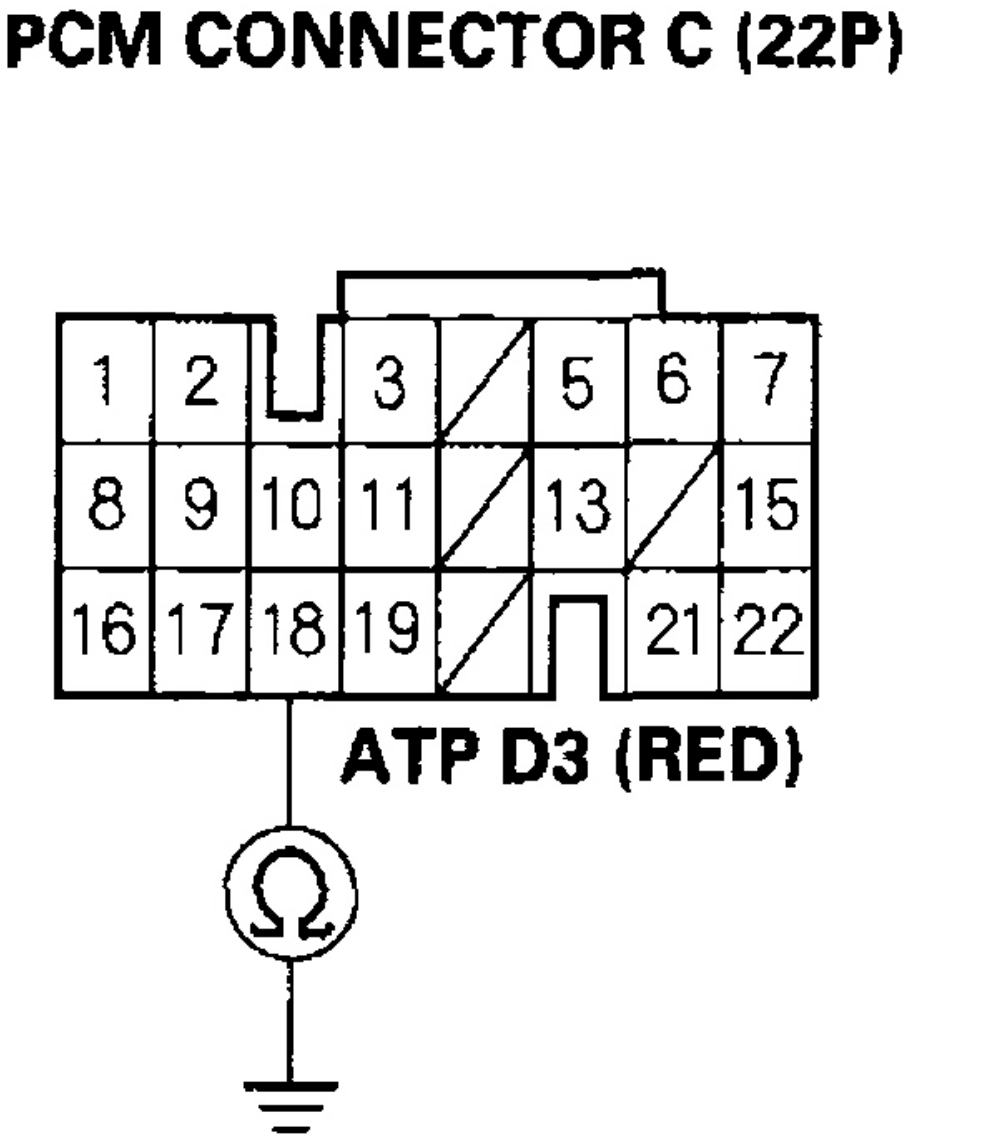


Fig. 67: Checking Continuity Between PCM Connector Terminals A8, A9 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between PCM connector terminal C18 and the transmission range switch, then go to step 59.

NO - Go to step 66.

41. Shift to all positions other than 2.
42. Measure the voltage between PCM connector terminals C2 and E3.

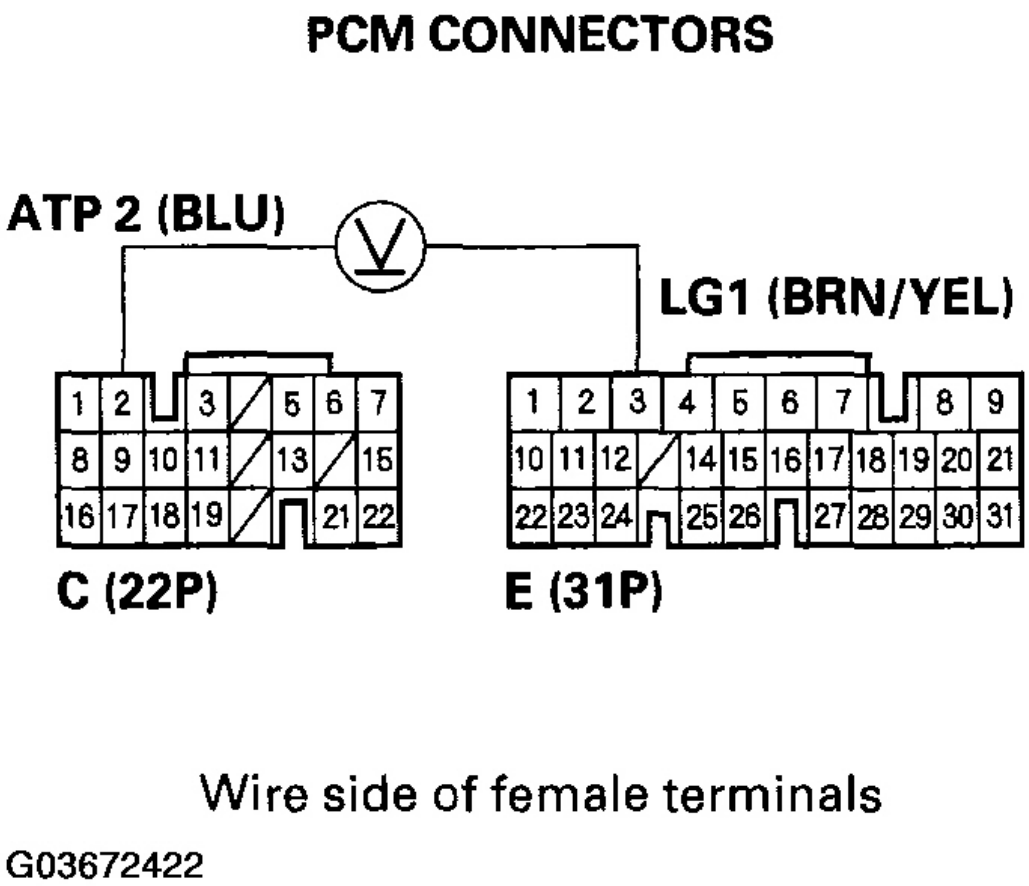


Fig. 68: Measuring Voltage Between PCM Connector Terminals D5 And A9

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 47.

NO - Go to step 43.

43. Turn the ignition switch OFF.
44. Jump the SCS line with the HDS.
45. Disconnect PCM connector C (22P).
46. Check for continuity between PCM connector terminal C2 and body ground.

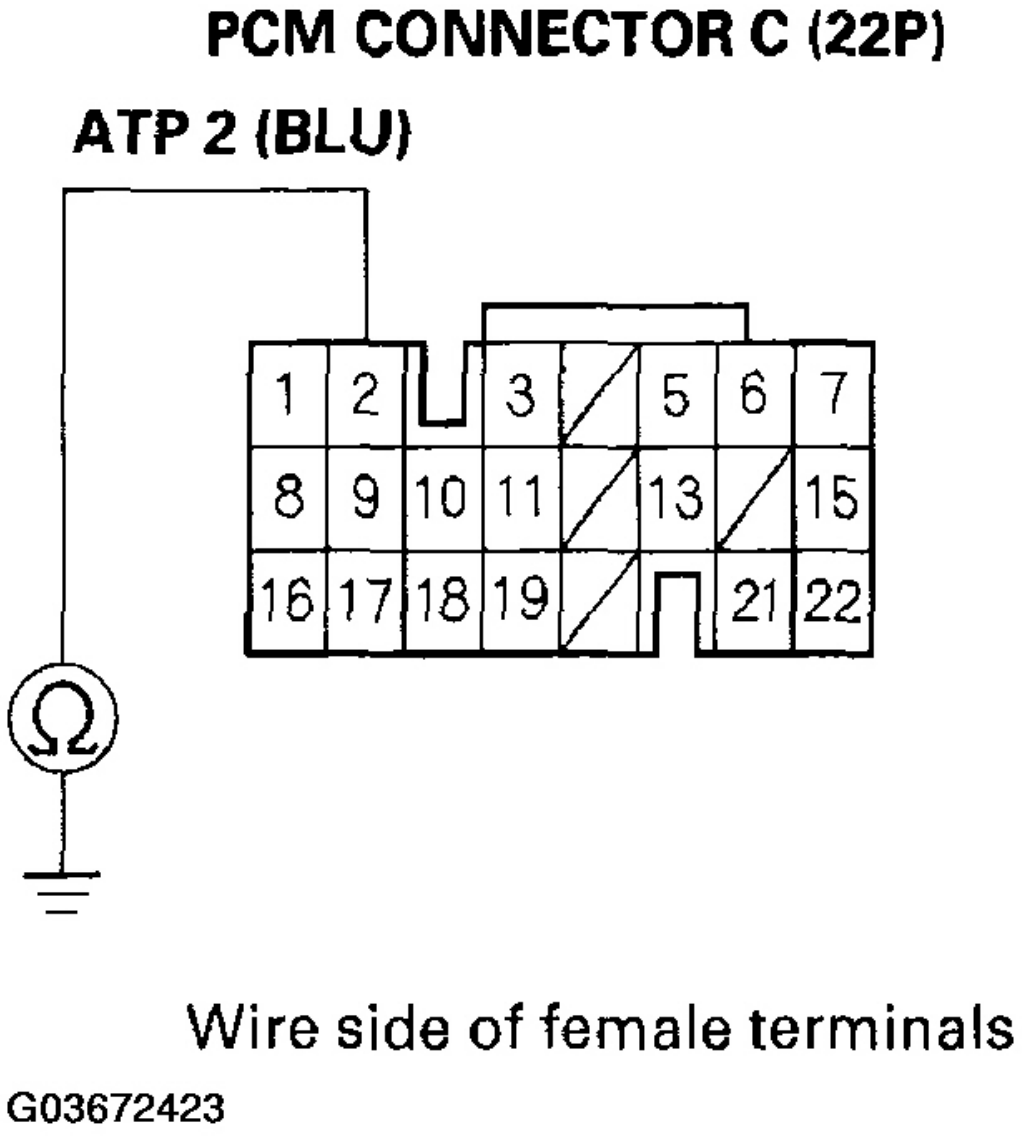


Fig. 69: Checking Continuity Between PCM Connector Terminal C2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between PCM connector terminal C2 and

the transmission range switch, then go to step 59.

NO - Go to step 66.

47. Shift to all positions other than 1.
48. Measure the voltage between PCM connector terminals C9 and E3.

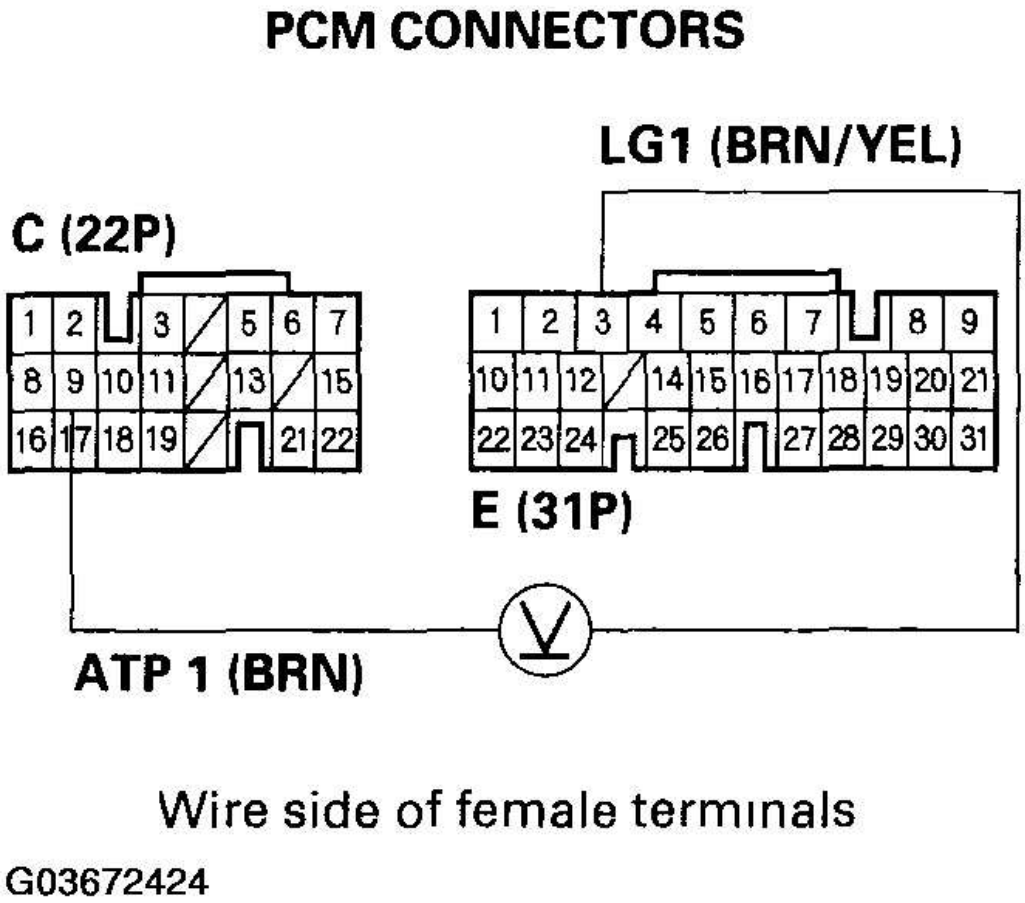


Fig. 70: Measuring Voltage Between PCM Connector Terminals C9 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 53.

NO - Go to step 49.

49. Turn the ignition switch OFF.
50. Jump the SCS line with the HDS.
51. Disconnect PCM connector C (22P).
52. Check for continuity between PCM connector terminal C9 and body ground.

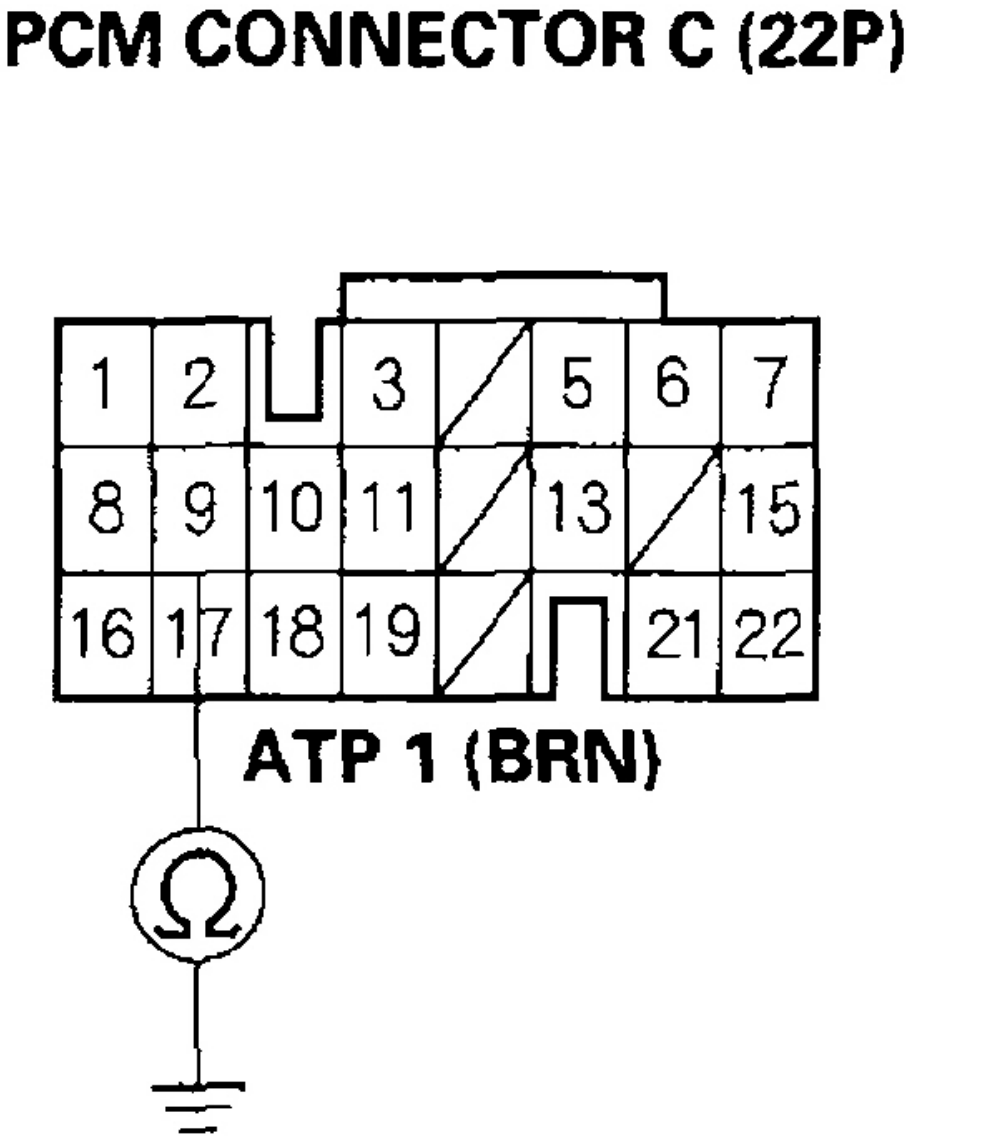


Fig. 71: Checking Continuity Between PCM Connector Terminal C9 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between PCM connector terminal C9 and the transmission range switch, then go to step 59.

NO - Go to step 66.

53. Shift to all positions other than D, D3, and 2.
54. Measure the voltage between PCM connector terminals C19 and E3.

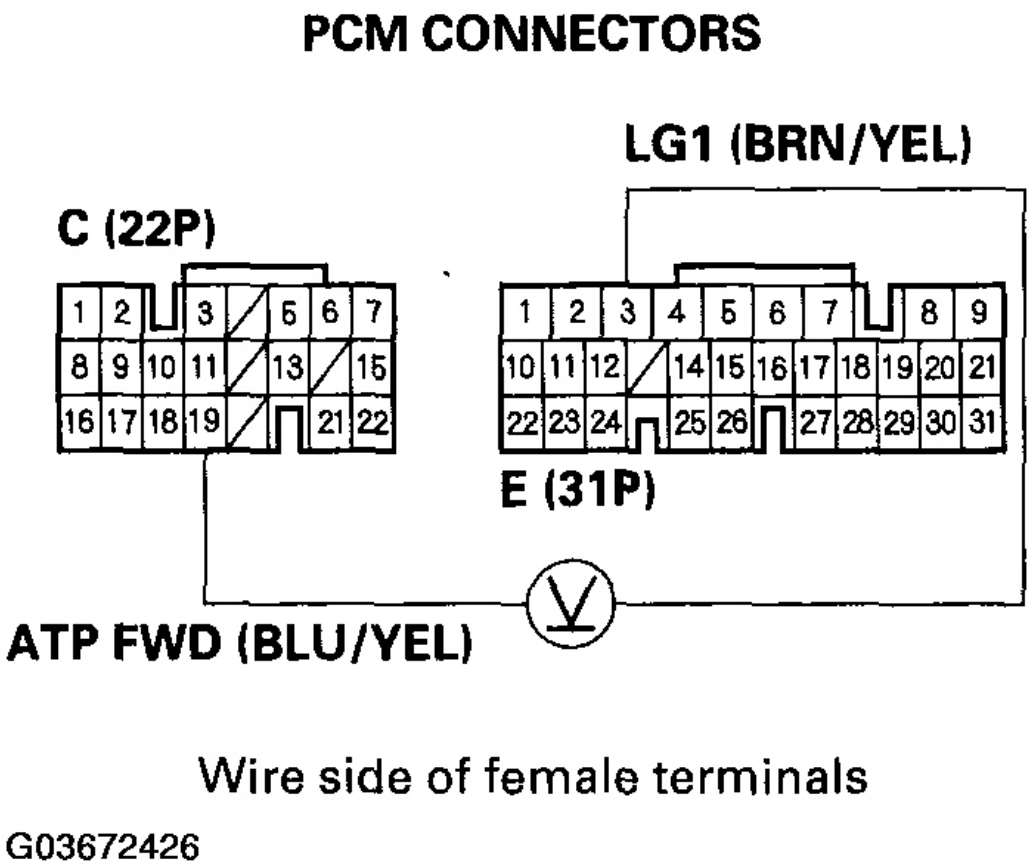


Fig. 72: Measuring Voltage Between PCM Connector Terminals C19 And E3

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 66.

NO - Go to step 55.

55. Turn the ignition switch OFF.
56. Jump the SCS line with the HDS.
57. Disconnect PCM connector C (22P).
58. Check for continuity between PCM connector terminal C19 and body ground.

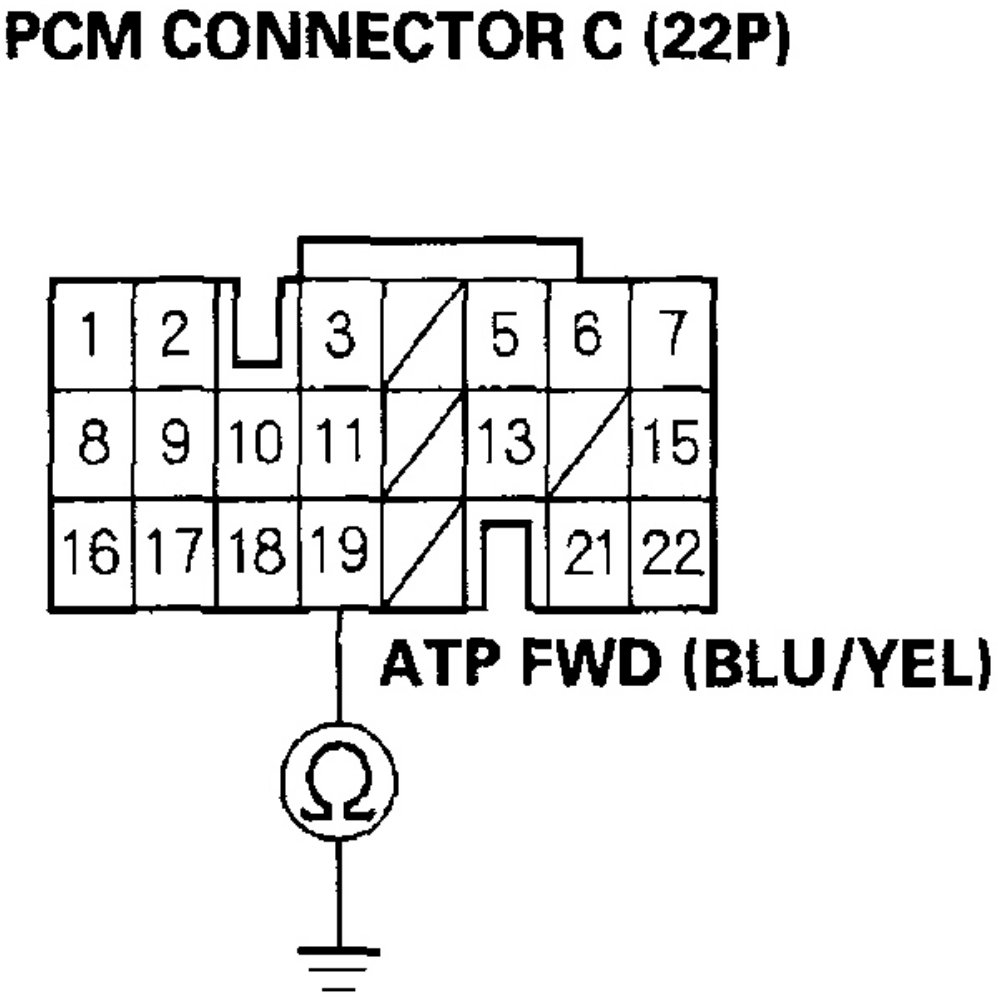


Fig. 73: Checking Continuity Between PCM Connector Terminal C19 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between PCM connector terminal C19 and the transmission range switch, then go to step 59.

NO - Go to step 66.

59. Reconnect all connectors.
60. Turn the ignition switch ON (II).
61. Clear the DTC with the HDS.
62. Start the engine.
63. With the brake pedal pressed, move the shift lever through all positions. Stop for at least 1 second in each position.
64. Check for DTCs with the HDS.

Is DTC P0705 indicated?

YES - Check for intermittent short to body ground in the wire between the transmission range switch and the PCM, then return to step 1 and recheck.

NO - Go to step 65..

65. Monitor the OBD status for P0705 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 64, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for intermittent short to body ground in the wire between the transmission range switch and the PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 62.

66. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then recheck. If the symptom/indication goes away with a known-good PCM, replace the original PCM.
67. Start the engine.
68. With the brake pedal pressed, move the shift lever through all positions. Stop for at least 1 second in each position.

69. Check for DTCs with the HDS.

Is DTC P0705 indicated?

YES - Check for intermittent short to body ground in the wire between the transmission range switch and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 67. If the PCM was substituted, return to step 1 and recheck.

NO - Go to step 70.

70. Monitor the OBD status for P0705 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM, then go to step 69. If any other DTCs were indicated, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for intermittent short to body ground in the wire between the transmission range switch and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 67. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 67.

DTC P0706: Open in Transmission Range Switch Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.

3. Raise the front of the vehicle, make sure it is securely supported, and allow the front wheels to rotate freely.
4. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position until the vehicle speed reaches 35 mph (56 km/h), then slow down and stop the wheels.
5. Monitor the OBD status for P0706 in the DTCs/Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 6.

   NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the transmission range switch and PCM. If the tester indicates NOT COMPLETED, return to step 4 and recheck.
6. Turn the ignition switch OFF.
7. Inspect the transmission range switch (see **TRANSMISSION RANGE SWITCH TEST**).

   Is the switch OK?

   YES - Go to step 8.

   NO - Replace the transmission range switch (see **TRANSMISSION RANGE SWITCH REPLACEMENT**), then go to step 29.
8. Adjust the shift cable, refer to **SHIFT CABLE ADJUSTMENT** .
9. Turn the ignition switch ON (II).
10. Clear the DTC with the HDS.
11. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position until the vehicle speed reaches 35 mph (56 km/h), then slow down and stop the wheels.
12. Monitor the OBD status for P0706 in the DTCs/Freeze Data in A/T Mode Menu for a pass/fail.

    Does the result indicate FAILED?

YES - Go to step 13.

NO - Troubleshooting is complete. If the tester indicates NOT COMPLETED, go to step 11.

13. Shift the shift lever into the D position, and verify the ATP FWD and ATP D in the DATA LIST with the HDS.

Is the ATP FWD and ATP D ON?

YES - Go to step 14.

NO - Go to step 19.

14. Shift the shift lever into the D3 position, and verify the ATP FWD and ATP D3 in the DATA LIST with the HDS.

Is the ATP FWD and ATP D ON?

YES - Go to step 14.

NO - Go to step 19.

15. Shift to the 2 position, and verify the ATP FWD and ATP 2 in the DATA LIST with the HDS.

Is the ATP FWD and ATP 2 ON?

YES - Go to step 16.

NO - Go to step 19.

16. Clear the DTC with the HDS.
17. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position until the vehicle speed reaches 35 mph (56 km/h), then slow down and stop the wheels.
18. Monitor the OBD status for P0706 in the DTCs Menu with the HDS.

Does the result indicate FAILED?

YES - Go to step 19.

NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the transmission range switch and PCM.

If the tester indicates NOT COMPLETED, return to step 17 and recheck.

19. Turn the ignition switch OFF.
20. Disconnect the transmission range switch connector.
21. Check for continuity between transmission range switch connector terminal No. 6 and body ground.

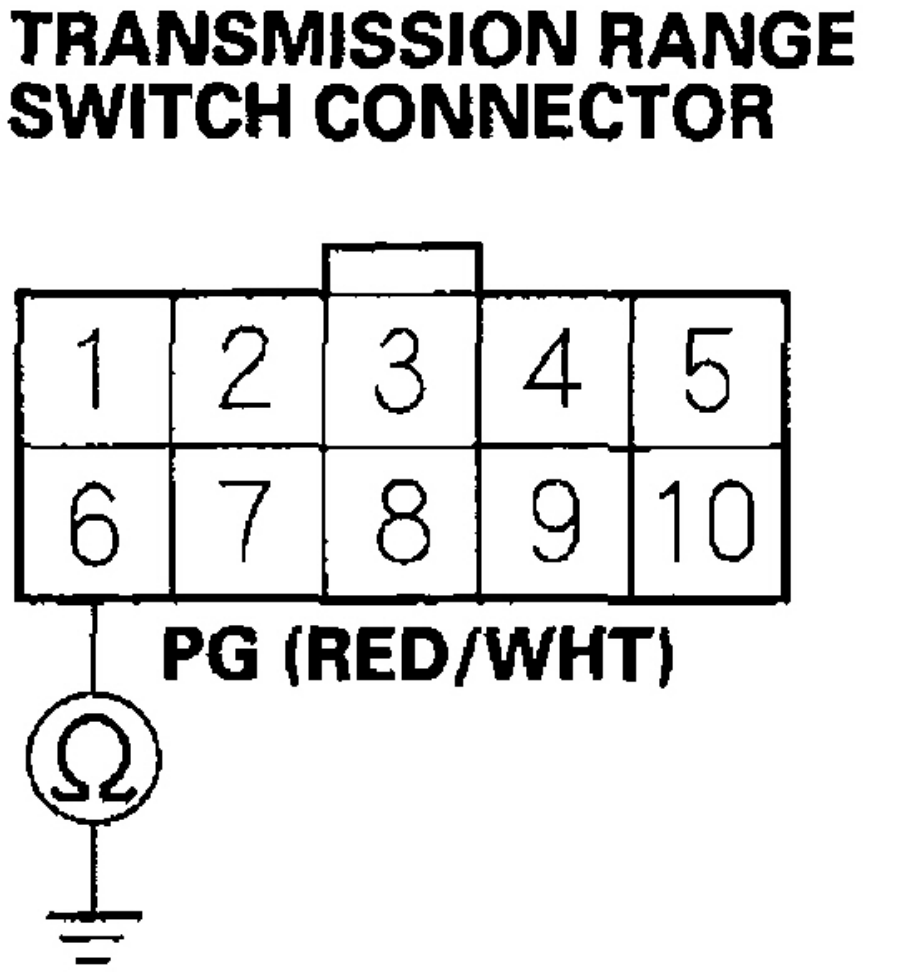


Fig. 74: Checking Continuity Between Transmission Range Switch Connector Terminals No. 6 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 19.

NO - Repair open in the wire between transmission range switch connector terminal No. 6 and ground (G101, G102), or repair poor ground (G101, G102), then go to step 29.

22. Turn the ignition switch ON (II).
23. Measure the voltage between transmission range switch connector terminals No. 1 and No. 6.

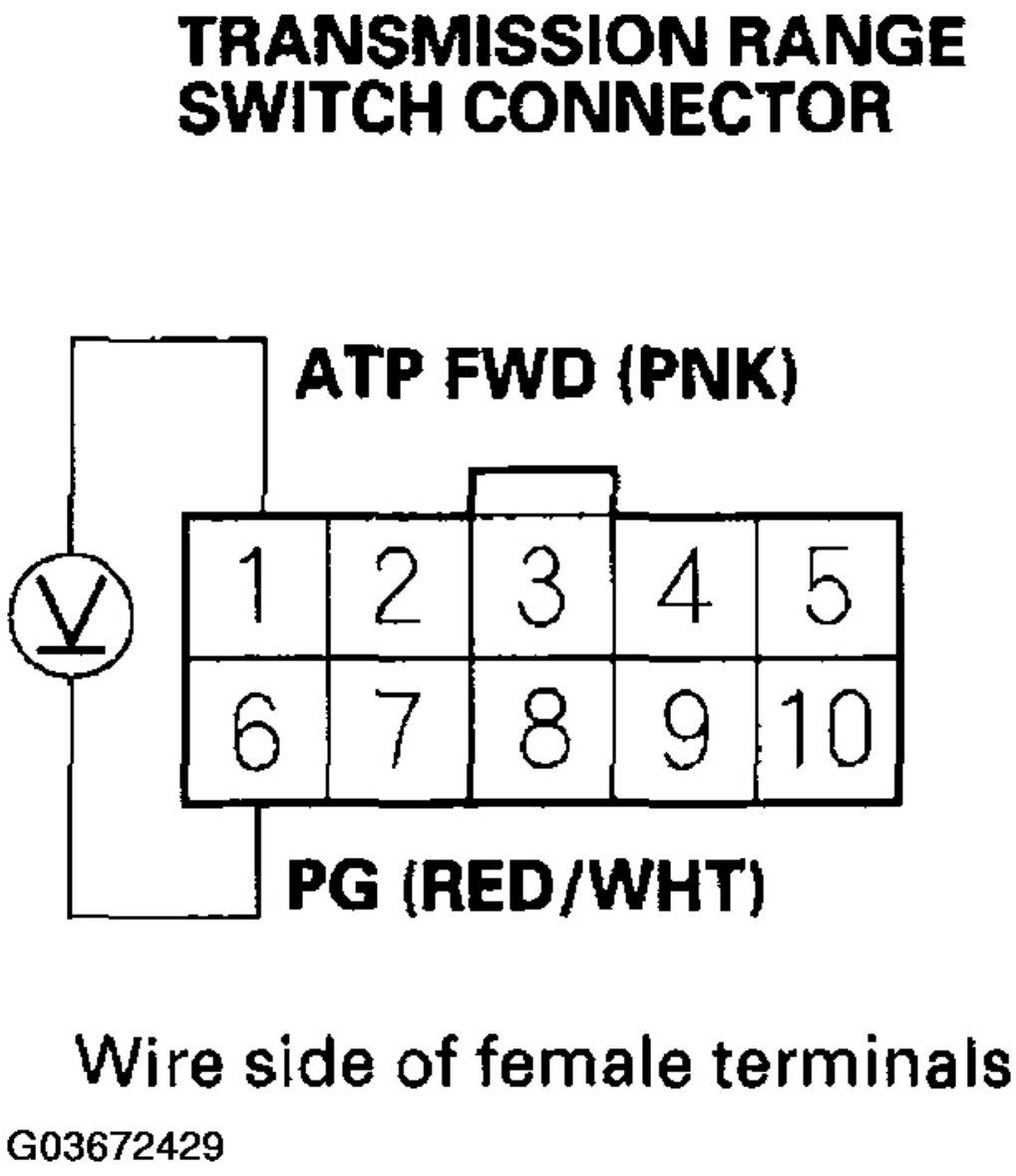


Fig. 75: Measuring Voltage Between Transmission Range Switch Connector Terminals No. 1 And No. 6
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there voltage?

YES - Go to step 24.

NO - Repair open in the wire between the transmission range switch and PCM connector terminal C19, then go to step 29.

24. Measure the voltage between transmission range switch connector terminals No. 3 and No. 6.

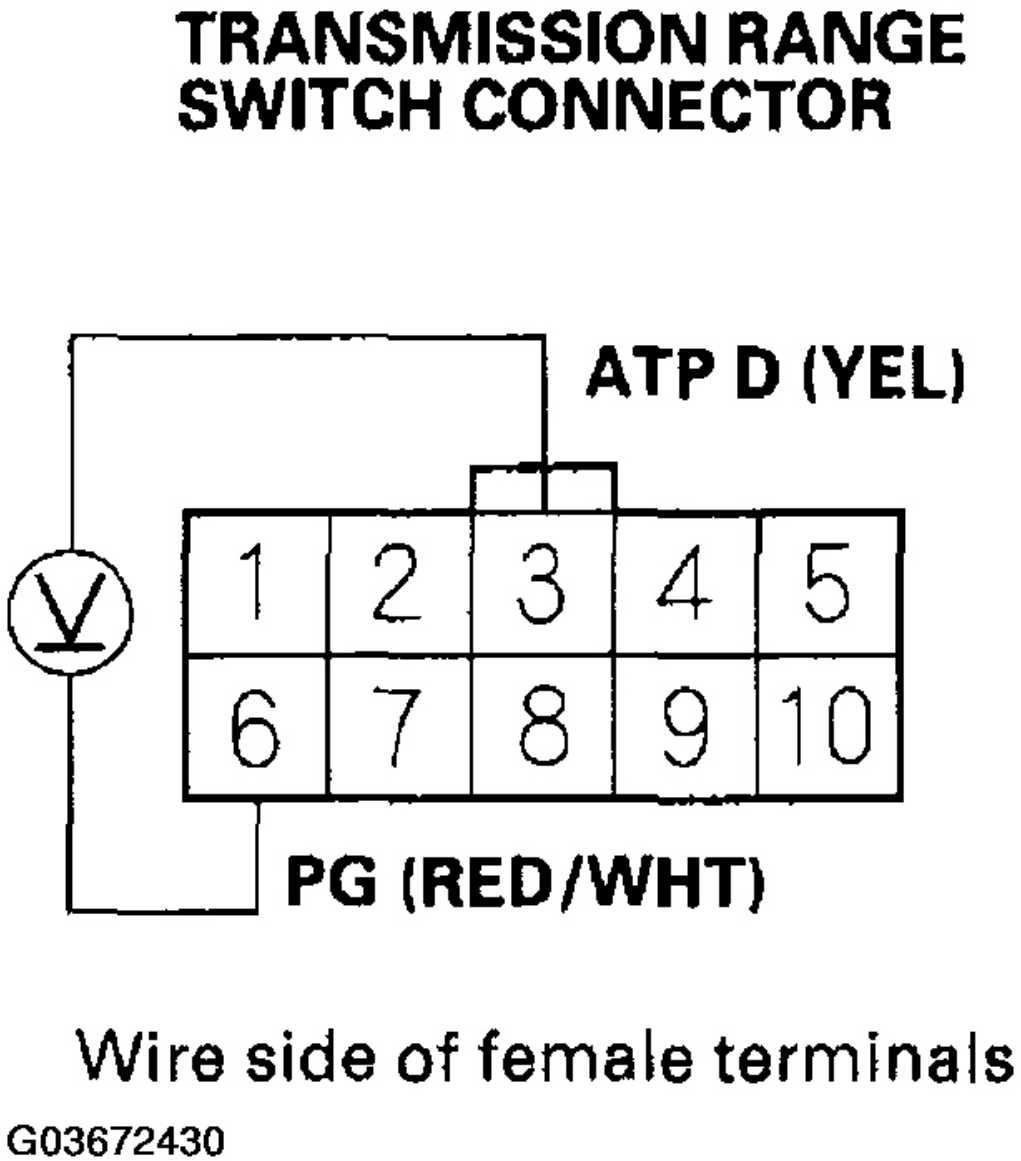


Fig. 76: Measuring Voltage Between Transmission Range Switch Connector Terminals No. 3 And No. 6
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there voltage?

YES - Go to step 25.

NO - Repair open in the wire between the transmission range switch and PCM connector terminal C10, then go to step 29.

25. Measure the voltage between transmission range switch connector terminals No. 6 and No. 8.

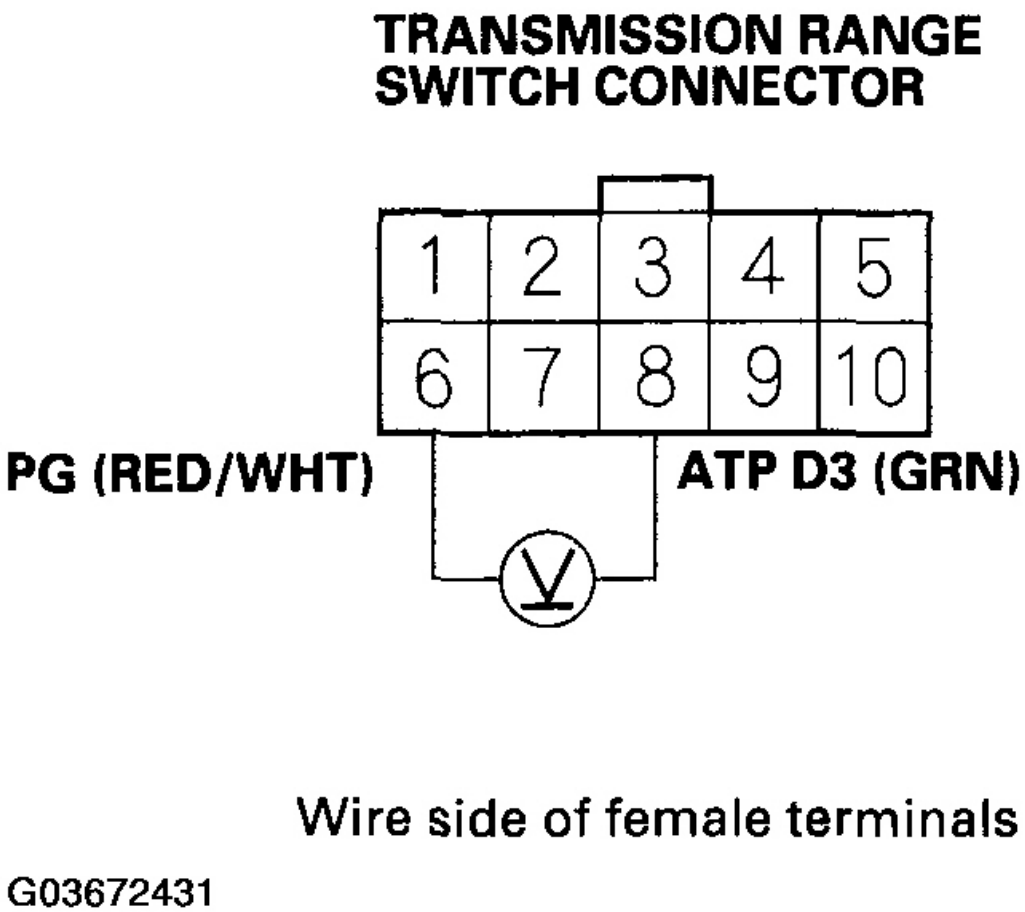


Fig. 77: Measuring Voltage Between Transmission Range Switch Connector Terminals No. 6 And No. 8
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there voltage?

YES - Go to step 26.

NO - Repair open in the wire between the transmission range switch and PCM connector terminal C18, then go to step 29.

26. Measure the voltage between transmission range switch connector terminals No. 2 and No. 6.

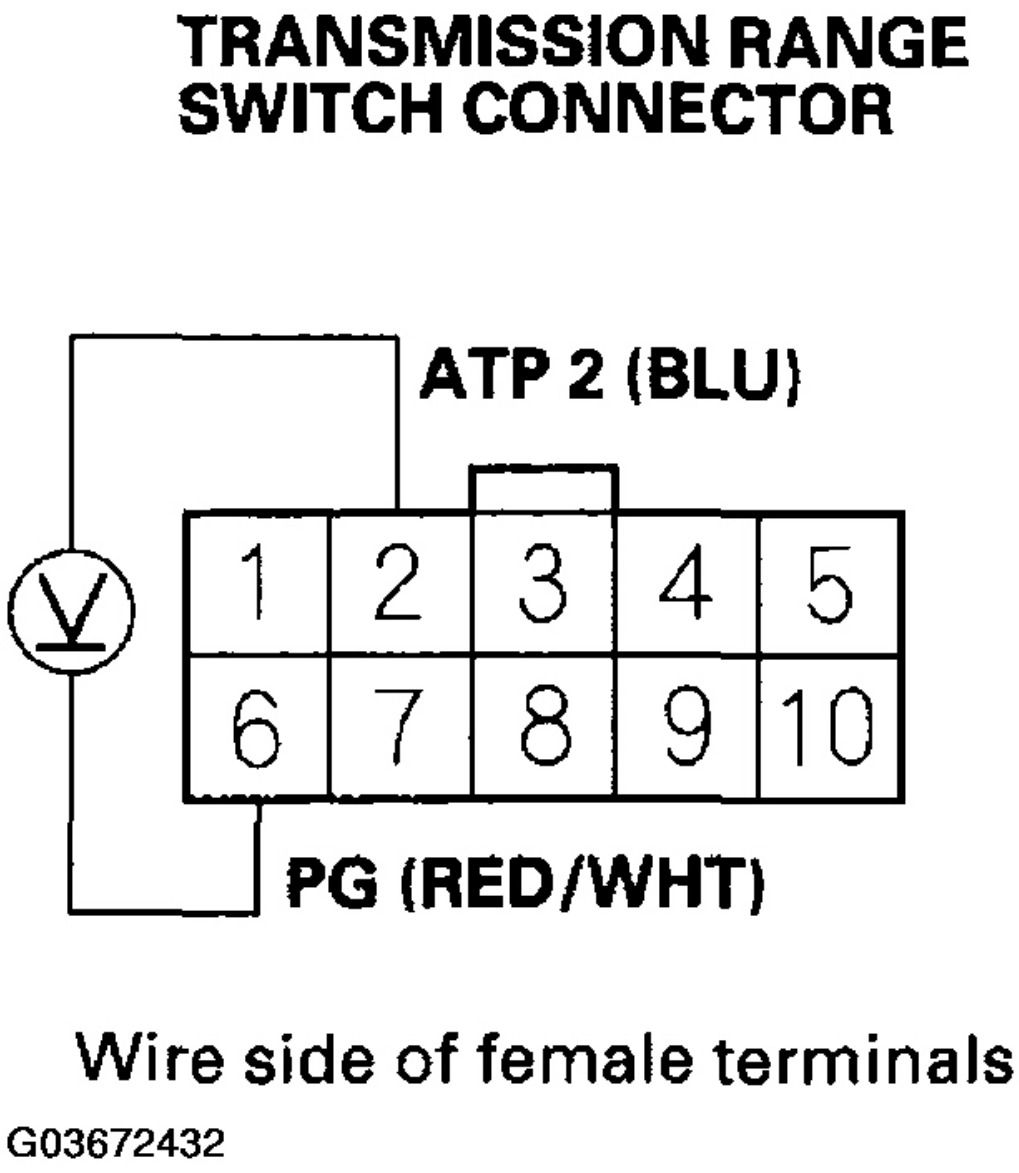


Fig. 78: Measuring Voltage Between Transmission Range Switch Connector Terminals No. 2 And No. 6
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there voltage?

YES - Go to step 33.

NO - Repair open in the wire between the transmission range switch and PCM connector terminal C2, then go to step 24.

27. Reconnect all connectors.
28. Turn the ignition switch ON (II).
29. Clear the DTC with the HDS.
30. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position until the vehicle speed reaches 35 mph (56 km/h), then slow down and stop the wheels.
31. Check for DTCs with the HDS.

Is DTC P0706 indicated?

YES - Check for poor connections or loose terminals between the transmission range switch and the PCM. If the PCM was updated, then return to step 1 and recheck.

NO - Go to step 32.

32. Monitor the OBD status for P0706 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 31, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the transmission range switch and the PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 30.

33. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then recheck. If the symptom/indication goes away with a known-good PCM, replace the original PCM.
34. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position until the vehicle speed reaches 35 mph (56 km/h), then slow down and stop the wheels.

35. Check for DTCs with the HDS.

    Is DTC P0706 indicated?

    YES - Check for poor connections or loose terminals between the transmission range switch and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 34. If the PCM was substituted, return to step 1 and recheck.

    NO - Go to step 36.

36. Monitor the OBD status for P0706 in the DTCs Menu with the HDS.

    Does the result indicate PASSED?

    YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM, then go to step 35. If any other DTCs were indicated, go to the indicated DTC's troubleshooting.

    NO - If screen indicates FAILED, check for poor connections or loose terminals between the transmission range switch and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 34. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 34.

DTC P0711: Problem in ATF Temperature Sensor Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Check the ATF temperature with the HDS in the A/T data list.

Does the ATF temperature exceed the ambient-air temperature?

YES - Record the ATF temperature. Leave the engine off for more than 30 minutes, and go to step 2.

NO - Record the ATF temperature. Test the stall speed RPM three times. See**STALL SPEED TEST**. Go to step 2 after stall speed testing.

3. Check the ATF temperature with the HDS.

Did the ATF temperature change?

YES - Leave the engine off for more than 30 minutes, and go to step 3.

NO - Replace the ATF temperature sensor (see **ATF TEMPERATURE SENSOR REPLACEMENT**), then go to step 6.

4. Check the ECT SENSOR with the HDS.

Is the ECT SENSOR equal to the ambient-air temperature?

YES - Go to step 4.

NO - Leave the engine off until ECT sensor equals ambient-air temperature, then go to step 5.

5. Check the ATF temperature with the HDS.

Is the ATF temperature almost equal to ECT SENSOR?

YES - Go to step 6.

NO - Replace the ATF temperature sensor (see **ATF TEMPERATURE SENSOR REPLACEMENT**), then go to step 5.

6. Reconnect all connectors.
7. Turn the ignition switch ON (II).
8. Clear the DTC with the HDS.
9. Test-drive the vehicle for several minutes in the D position through all five gears.
10. Check for DTCs with the HDS.

Is DTC P0711 indicated?

YES - Check for poor connections or loose terminals between the ATF temperature sensor and the PCM. If the PCM was updated, then return to step 1 and recheck.

NO - Go to step 11.

11. Monitor the OBD status for P0711 in the DTCs/Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 10, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the transmission range switch and the PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 9.

DTC P0712: Short in ATF Temperature Sensor Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Check ATF temperature sensor voltage with the HDS in the A/T data list.

Is ATF temperature sensor voltage 0.07 V or less?

YES - Go to step 2.

NO - Intermittent failure, the system is OK at this time. Check for intermittent short in the wires between the ATF temperature sensor and PCM.

3. Turn the ignitiion switch off.
4. Disconnect the ATF temperature sensor connector at the transmission end cover.
5. Turn the ignition switch ON (II).
6. Check ATF temperature sensor voltage with the HDS.

Is ATF temperature sensor voltage 0.07 V or less?

YES - Go to step 7.

NO - Replace ATF temperature sensor (see **ATF TEMPERATURE SENSOR REPLACEMENT**), then go to step 11.

7. Turn the ignition switch OFF.
8. Jump the SCS line with the HDS.
9. Disconnect PCM connector C (22P).
10. Check for continuity between ATF temperature sensor connector terminal No. 2 and body ground.

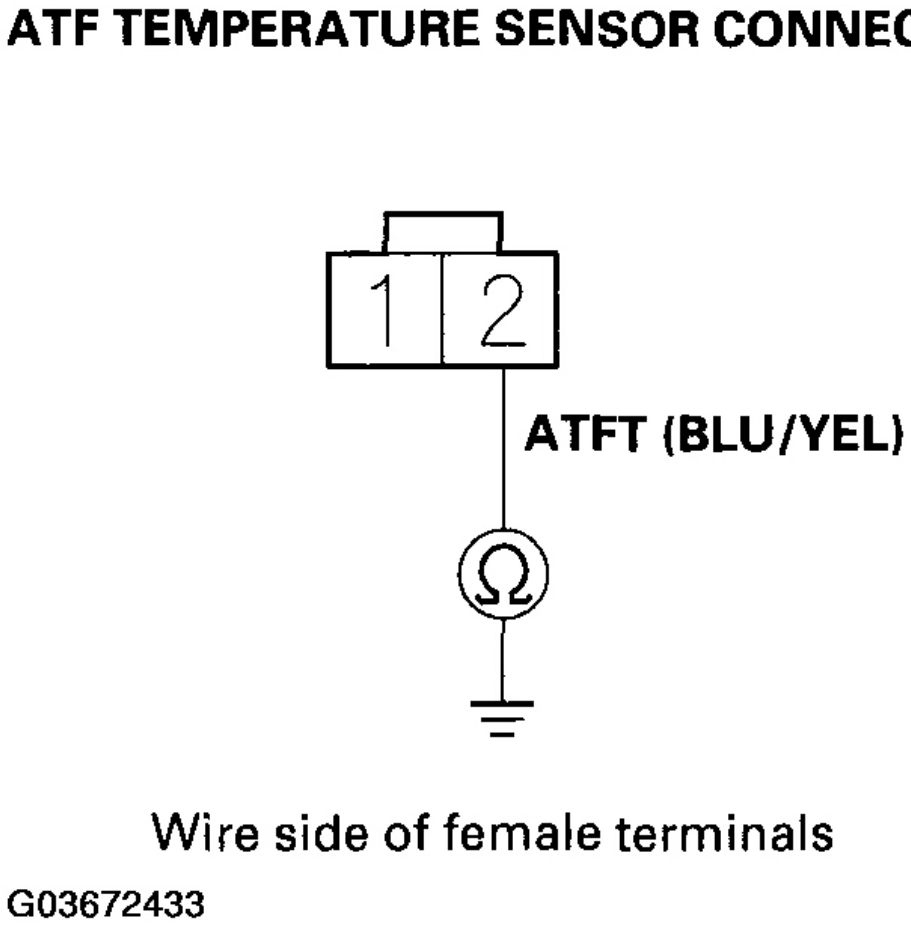


Fig. 79: Checking Continuity Between ATF Temperature Sensor Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground between PCM connector terminal C3 and the ATF temperature sensor connector terminal No. 2 then, go to step 11.

NO - Go to step 17.

11. Reconnect all connectors.
12. Turn the ignition switch ON (II).

13. Clear the DTC with the HDS.
14. Test-drive the vehicle for several minutes in the D position through all five gears.
15. Check for DTCs with the HDS.

Is DTC P0712 indicated?

YES - Check for intermittent short to body ground in the wires between the ATF temperature sensor and PCM, then go to step 1.

NO - Go to step 16.

16. Monitor the OBD status for P0712 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 15, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for intermittent shart to body ground in the wire bewtween the ATF temperature sensor and the PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 14.

17. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then recheck.
18. Test-drive the vehicle for several minutes in the D position through all five gears.
19. Check for DTCs with the HDS.

Is DTC P0712 indicated?

YES - Check for intermittent shart to body ground in the wire bewtween the ATF temperature sensor and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 19. If the PCM was substituted, return to step 1 and recheck.

NO - Go to step 20.

20. Monitor the OBD status for P0712 in the DTCs Menu with the HDS.

    Does the result indicate PASSED?

    YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 19, go to the indicated DTC's troubleshooting.

    NO - If screen indicates FAILED, check for intermittent shart to body ground in the wire bewtween the ATF temperature sensor and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 18. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 18.

DTC P0713: Open in ATF Temperature Sensor Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Check ATF temperature sensor voltage with the HDS in the A/T data list.

   Does ATF temperature sensor voltage exceed 4.93 V?

   YES - Go to step 3.

   NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the ATF temperature sensor and PCM.
3. Turn the ignition switch OFF.
4. Disconnect the ATF temperature sensor connector at the transmission end cover.

5. Connect a jumper wire between ATF temperature sensor connector terminals No. 1 and No. 2.
6. Turn the ignition switch ON (II).
7. Check the ATF TEMP SENSOR voltage in the DATA LIST with the HDS.

   Does the ATF TEMP SENSOR voltage exceed 4.93 V?

   YES - Go to step 8.

   NO - Replace the ATF temperature sensor (see **ATF TEMPERATURE SENSOR REPLACEMENT**), then go to step 24.
8. Turn the ignition switch OFF.
9. Remove the jumper wire from the ATF temperature sensor connector.
10. Turn the ignition switch ON (II).
11. Measure the voltage between ATF temperature sensor connector terminal No. 2 and body ground.

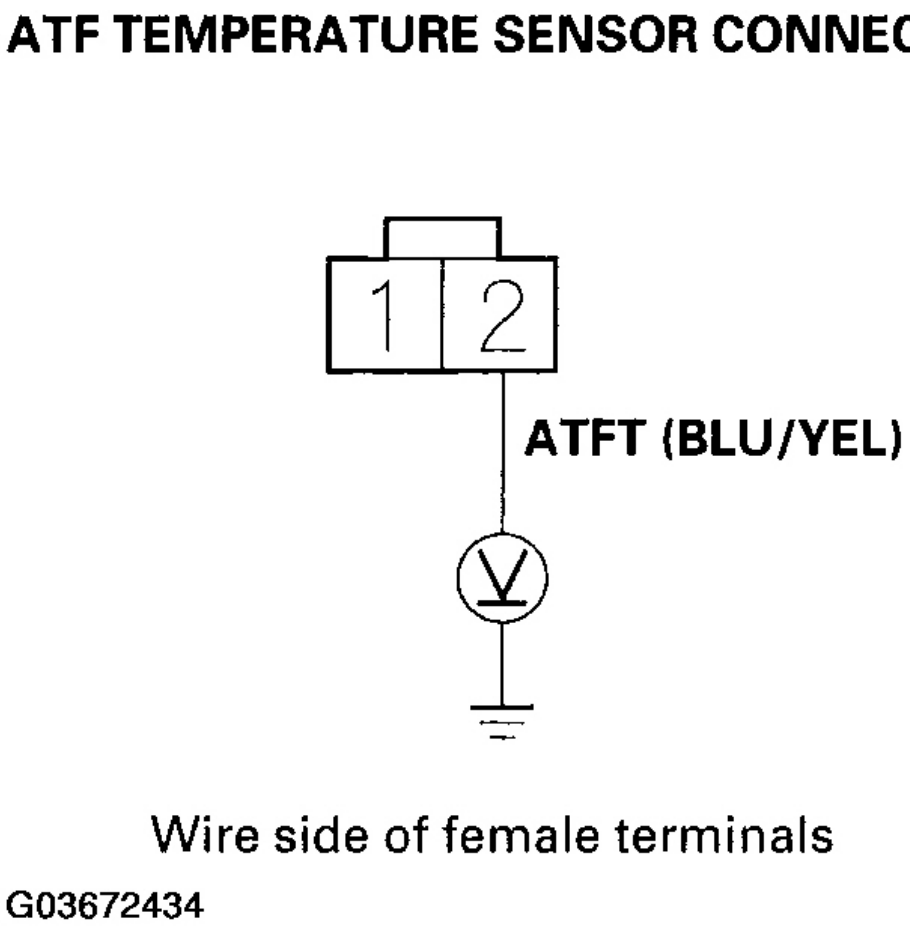


Fig. 80: Measuring Voltage Between ATF Temperature Sensor Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 12.
NO - Go to step 17.

12. Turn the ignition switch OFF.
13. Jump the SCS line with the HDS.
14. Disconnect PCM connector D (17P).

15. Connect ATF temperature sensor connector terminal No. 1 and body ground with a jumper wire.
16. Measure the voltage between PCM connector terminal D10 and body ground.

    Is there continuity?

    YES - Go to step 24.

    NO - Repair open in the wire between PCM connector terminal D10 and the ATF temperature sensor connector, then go to step 18.
17. Measure the voltage between PCM connector terminal C3 and body ground.

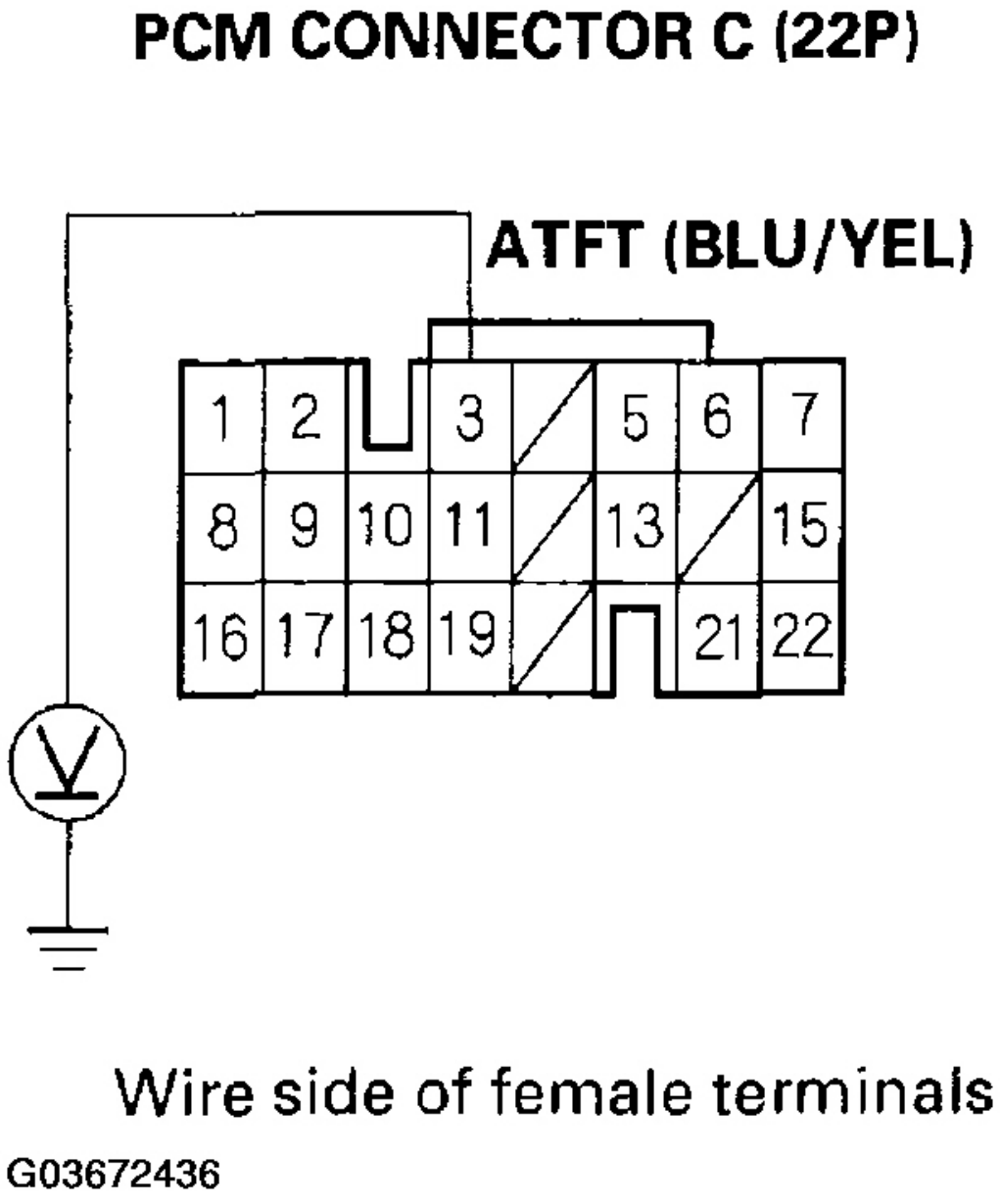


Fig. 81: Measuring Voltage Between PCM Connector Terminal C3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between PCM connector terminal C3 and the ATF temperature sensor connector, then go to step 18.

NO - Go to step 24.

18. Reconnect all connectors.
19. Turn the ignition switch ON (II).
20. Clear the DTC with the HDS.
21. Test-drive the vehicle for several minutes in the D position through all five gears.
22. Check for DTCs with the HDS.

Is DTC P0713 indicated?

YES - Check for poor connections or loose terminanls bewtween the ATF temperature sensor and the PCM, then return to step 1.

NO - Go to step 23.

23. Monitor the OBD status for P0713 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 22, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the ATF temperature sensor and the PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 21.

24. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
25. Test-drive the vehicle for several minutes in the D position through all five gears.
26. Check for DTCs with the HDS.

Is DTC P0713 indicated?

YES - Check for poor connections or loose terminals between the ATF temperature sensor and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 25. If the PCM was substituted, return to step 1.

NO - Go to step 27.

27. Monitor the OBD status for P0713 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 26, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the transmission range switch and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 25. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 25.

28. Monitor the OBD status for P0713 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 26, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the transmission range switch and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 25. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 25.

DTC P0716: Problem in Input Shaft (Mainshaft) Speed Sensor Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Check for proper input shaft (mainshaft) speed sensor installation (see **INPUT SHAFT (MAINSHAFT) SPEED SENSOR REPLACEMENT**).
4. Raise the front of the vehicle, make sure it is securely supported, and allow the front wheels to rotate freely.
5. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position, and hold the vehicle at speeds over 30 mph (48 km/h) for more than 10 seconds. Slow down and stop the wheels.
6. Monitor the OBD status for P0716 in the DTCs/Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 7.

   NO - Intermittent failure, the system is OK at this time. Check for loose or poor connections at the PCM and input shaft (mainshaft) speed sensor connectors. If the tester indicates NOT COMPLETED, return to step 5.
7. Turn the ignition switch OFF.
8. Jump the SCS line with the HDS.
9. Disconnect PCM connectors B (24P) and E (31P), and input shaft (mainshaft) speed sensor connector.
10. Check for continuity between PCM connector terminals B15 and body ground, and between E3 and body ground.

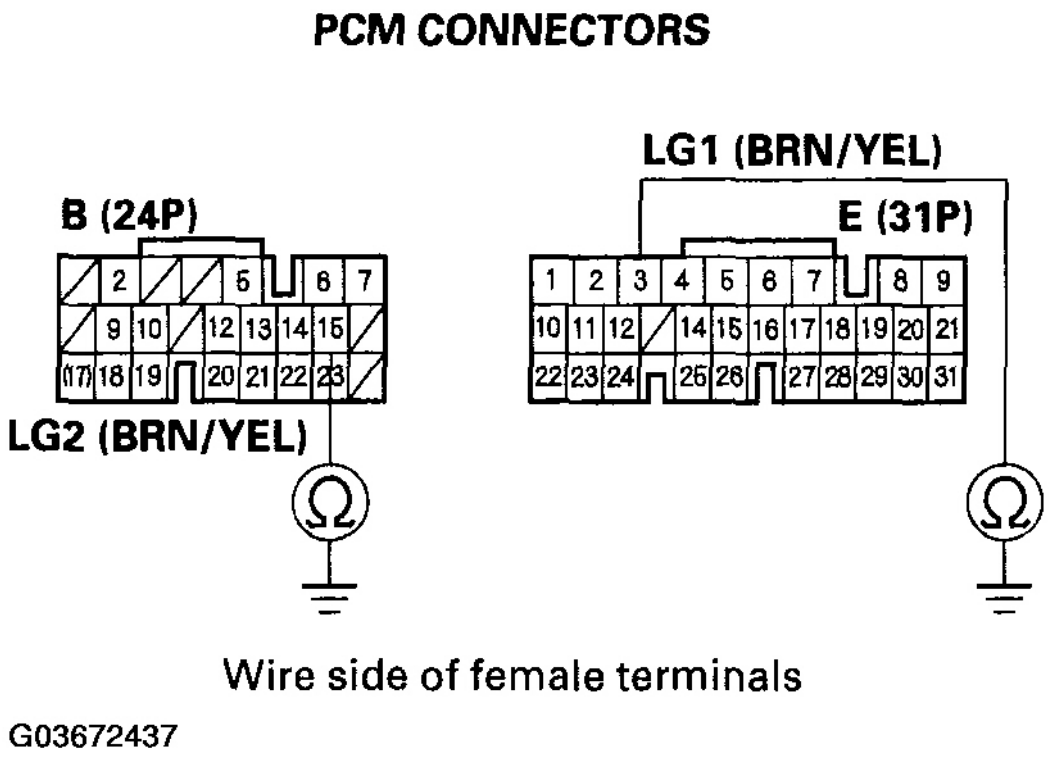


Fig. 82: Checking Continuity Between PCM Connector Terminals B15 & Body Ground And Between E3 & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 11.

NO - Repair open in the wire between PCM connector terminals B15, E3, and ground (G101, G102), or repair poor ground (G101, G102), then go to step 30.

11. Connect PCM connectors B (24P) and E (31P).
12. Turn the ignition switch ON (II).
13. Measure the voltage between input shaft (mainshaft) speed sensor connector terminal No. 1 and body ground.

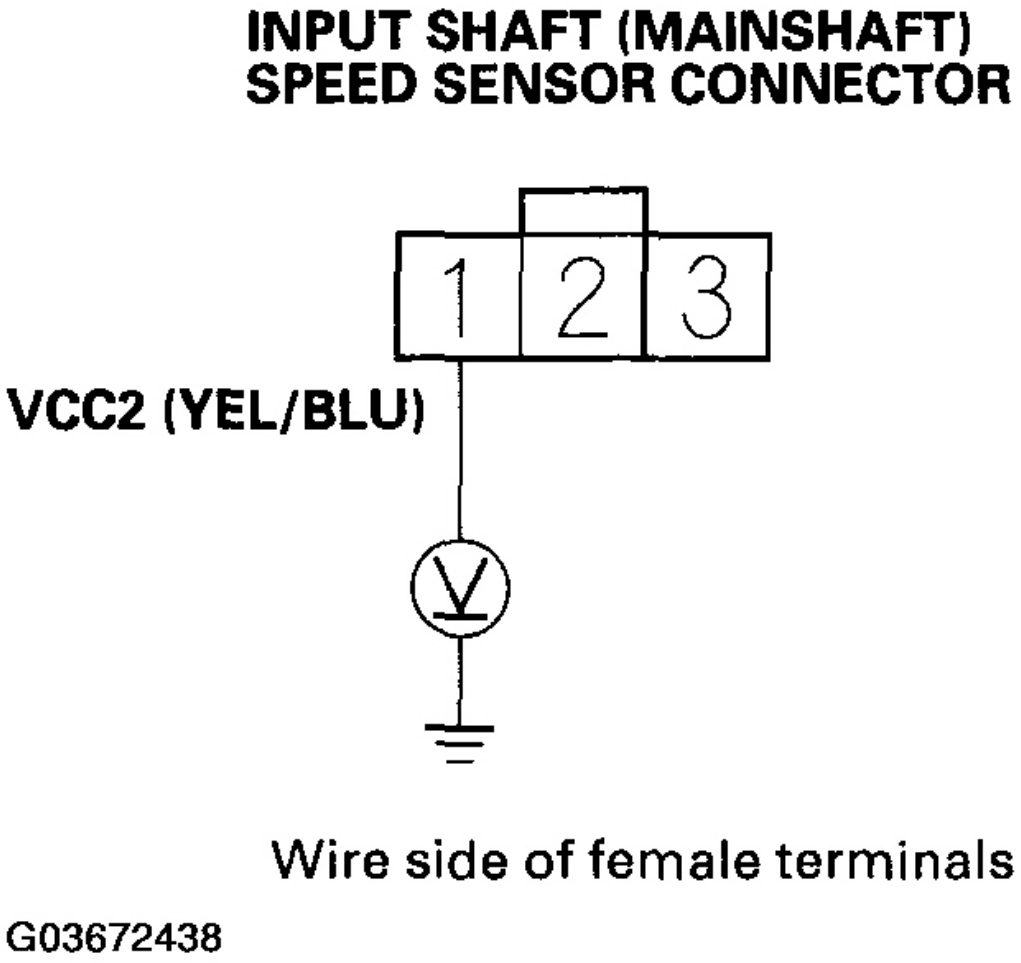


Fig. 83: Measuring Voltage Between Input Shaft (Mainshaft) Speed Sensor Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 14.
NO - Go to step 25.

14. Turn the ignition switch OFF.
15. Disconnect PCM connector D (17P).

16. Check for continuity between input shaft (mainshaft) speed sensor connector terminal No. 2 and body ground.

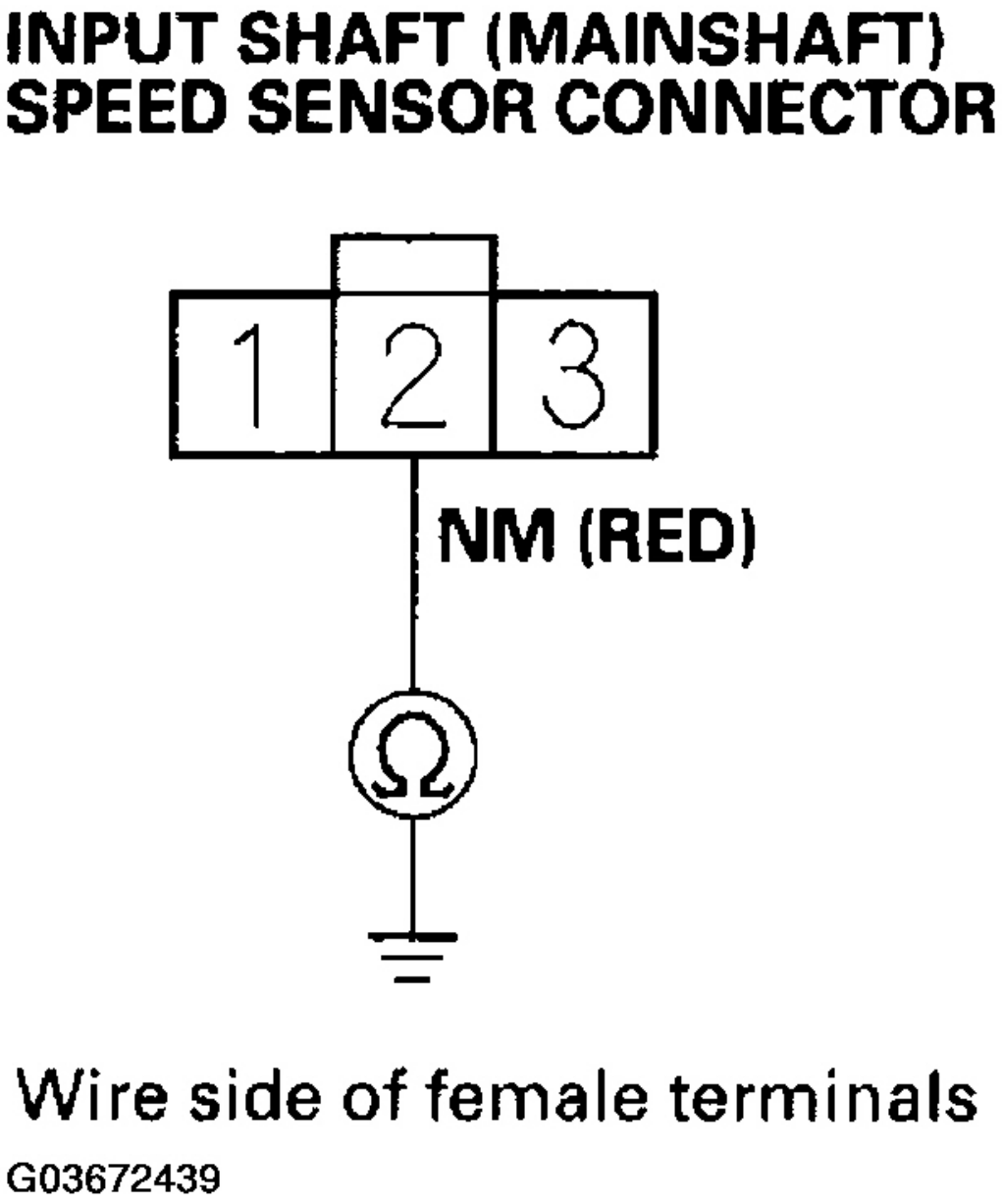


Fig. 84: Checking Continuity Between Input Shaft (Mainshaft) Speed Sensor Connector Terminal No. 2 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal D8 and mainshaft speed sensor, then go to step 30.

NO - Go to step 17.

17. Check for continuity between input shaft (mainshaft) speed sensor connector terminal No. 3 and PCM connector terminal D10.

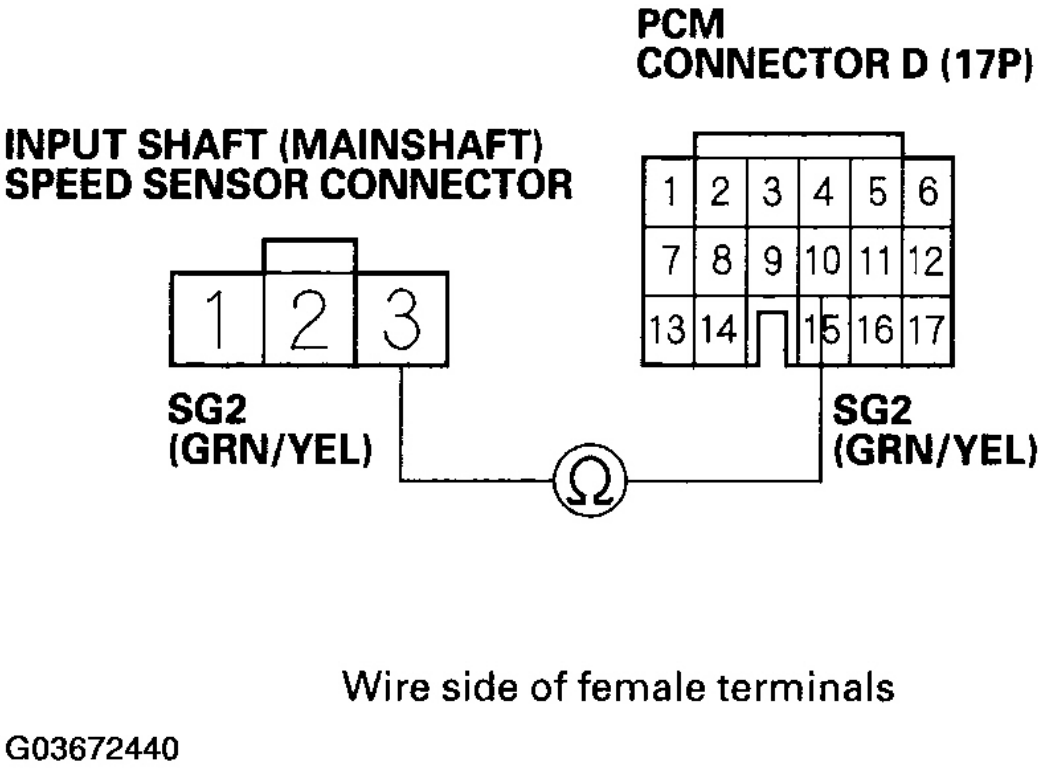


Fig. 85: Checking Continuity Between Input Shaft (Mainshaft) Speed Sensor Connector Terminal No. 3 And PCM Connector Terminal D10
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 18.

NO - Repair open in the wire between the input shaft (mainshaft) speed sensor connector and PCM connector terminal D10, then go to step 30.

18. Reconnect PCM connector D(17P).
19. Turn the ignition switch ON (II).
20. Measure the voltage between input shaft (mainshaft) speed sensor connector terminals No.2 and No. 3.

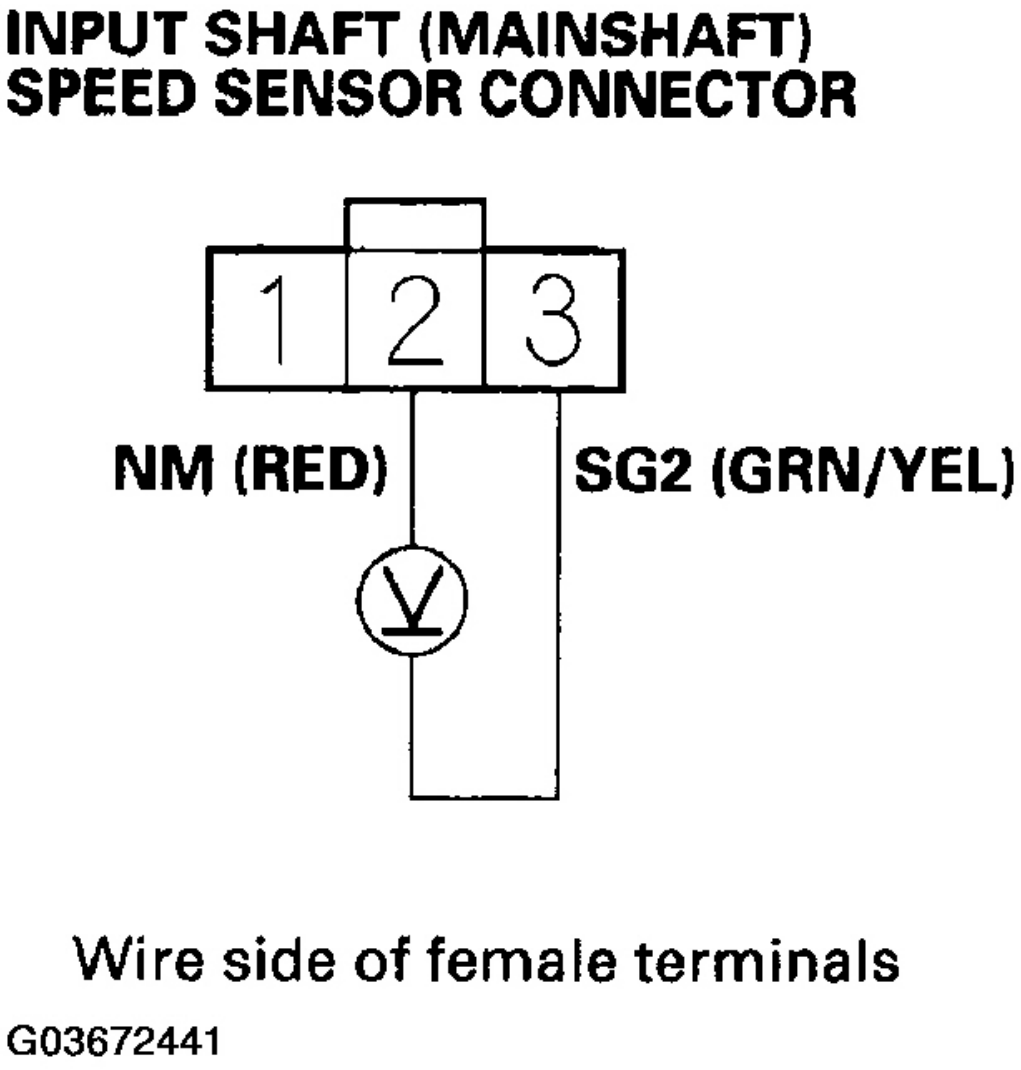


Fig. 86: Measuring Voltage Between Input Shaft (Mainshaft) Speed Sensor Connector Terminals No.2 And No. 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 21.
NO - Go to step 30.

21. Connect the input shaft (mainshaft) speed sensor connector.
22. Measure the voltage between PCM connector terminals D8 and E3.

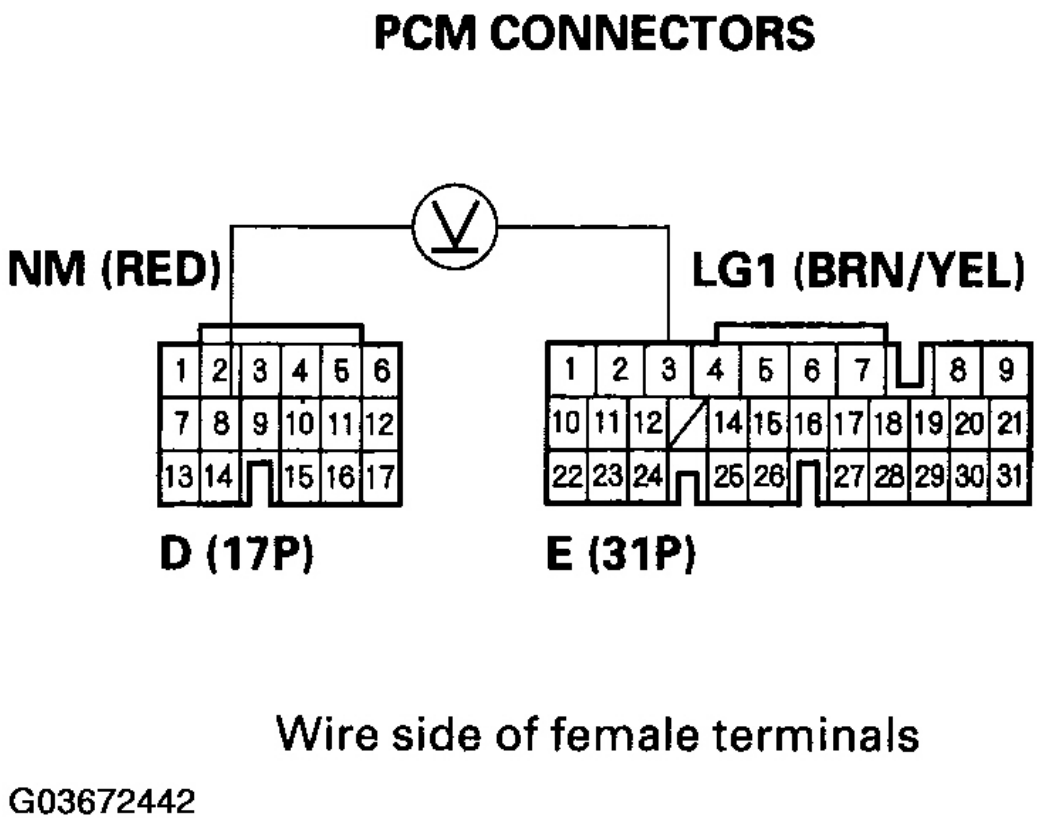


Fig. 87: Measuring Voltage Between PCM Connector Terminals D8 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage 0 V or about 5 V?

YES - Go to step 23.

NO - Replace the input shaft (mainshaft) speed sensor (see **INPUT SHAFT (MAINSHAFT) SPEED SENSOR REPLACEMENT**), then go to step 30.

23. Shift to the P position. Start the engine, and let it idle.

24. With the engine idling, measure the voltage between PCM connector terminals D8 and E3.

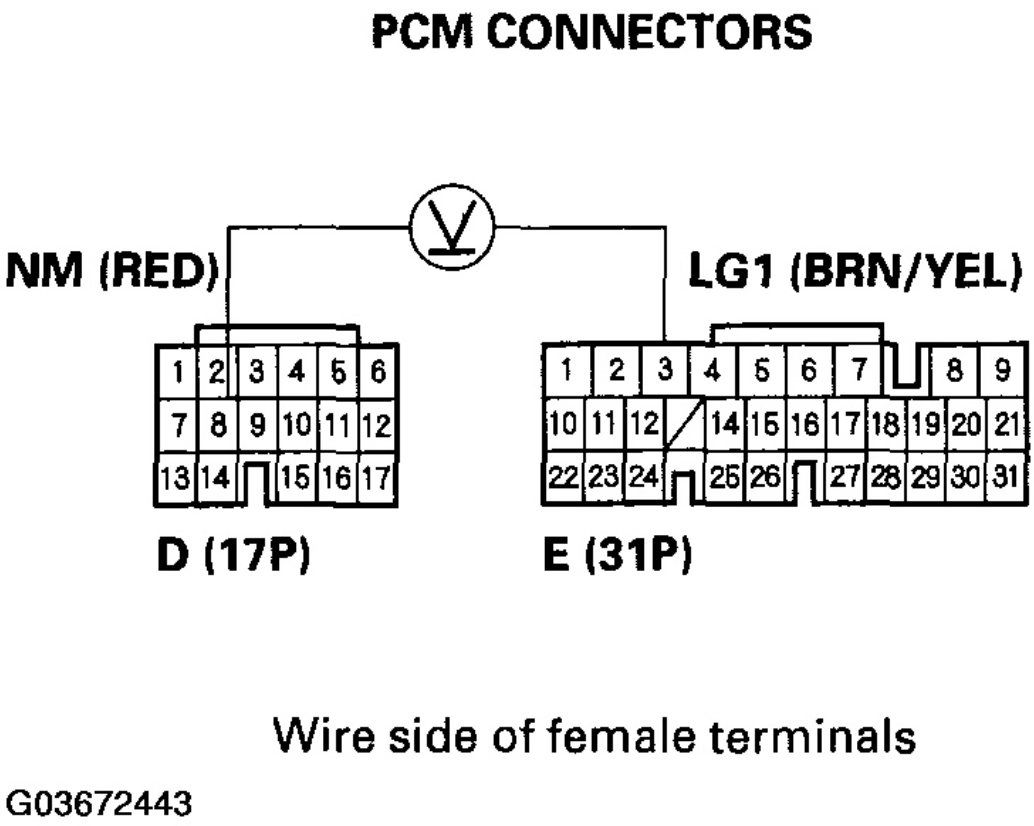


Fig. 88: Measuring Voltage Between PCM Connector Terminals D8 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 1.5 - 3.5 V?

YES - Go to step 36.

NO - Replace the input shaft (mainshaft) speed sensor (see **INPUT SHAFT (MAINSHAFT) SPEED SENSOR REPLACEMENT**), then go to step 30.

25. Measure the voltage between PCM connector terminals D12 and E3.

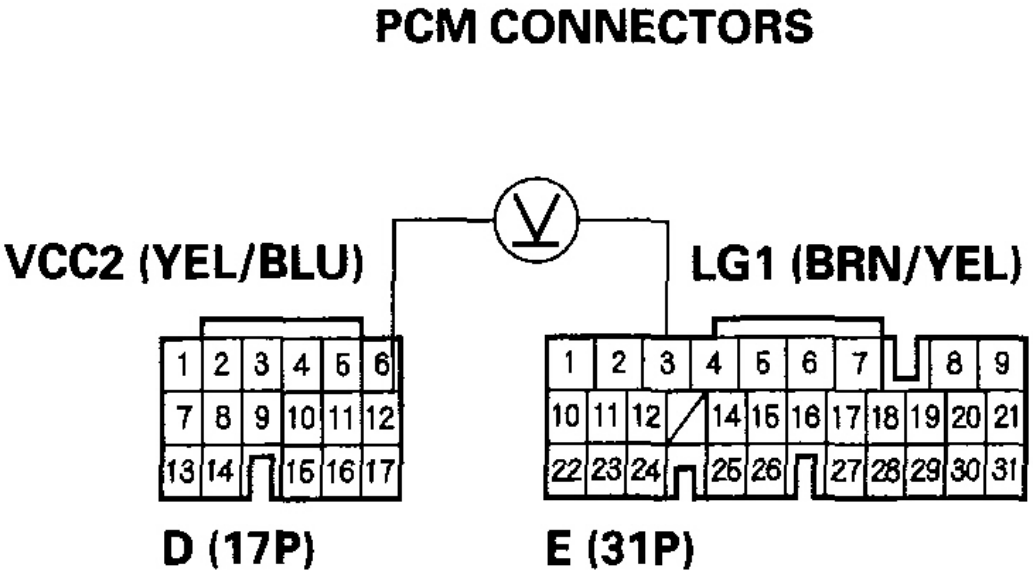


Fig. 89: Measuring Voltage Between PCM Connector Terminal D12 and E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between PCM connector terminal D12 and the input shaft (mainshaft) speed sensor, then go to step 30.

NO - Go to step 26.

26. Turn the ignition switch OFF.
27. Disconnect PCM connector D (17P).
28. Check for continuity between PCM connector terminal D12 and body ground.

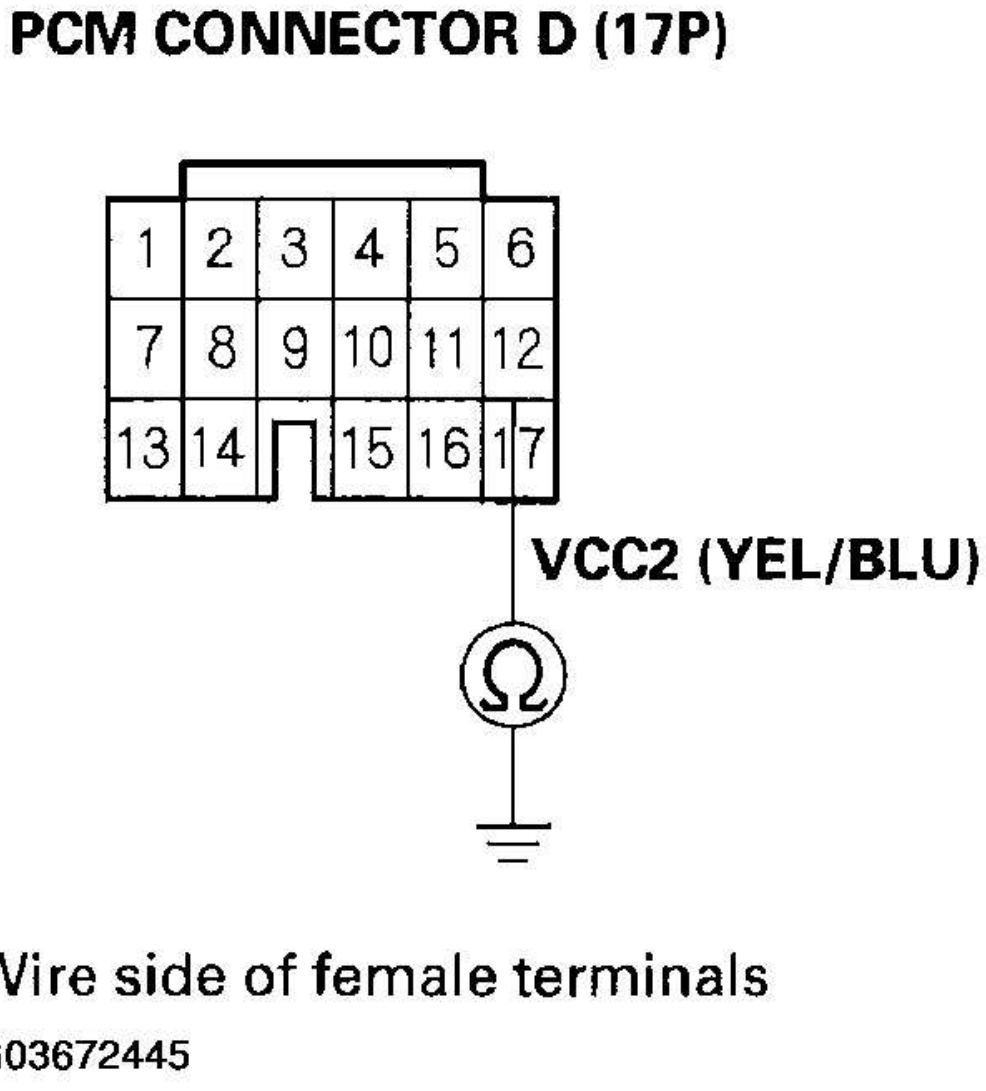


Fig. 90: Checking Continuity Between PCM Connector Terminals D12 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal D12 and the input shaft (mainshaft) speed sensor, then go to step

30.

NO - Check for loose or poor connections at PCM connector terminal D12. If the connection is OK, update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then recheck. If the symptom/indication goes away with a known-good PCM, replace the original PCM.

29. Measure the voltage between PCM connector terminals D8 and E3.

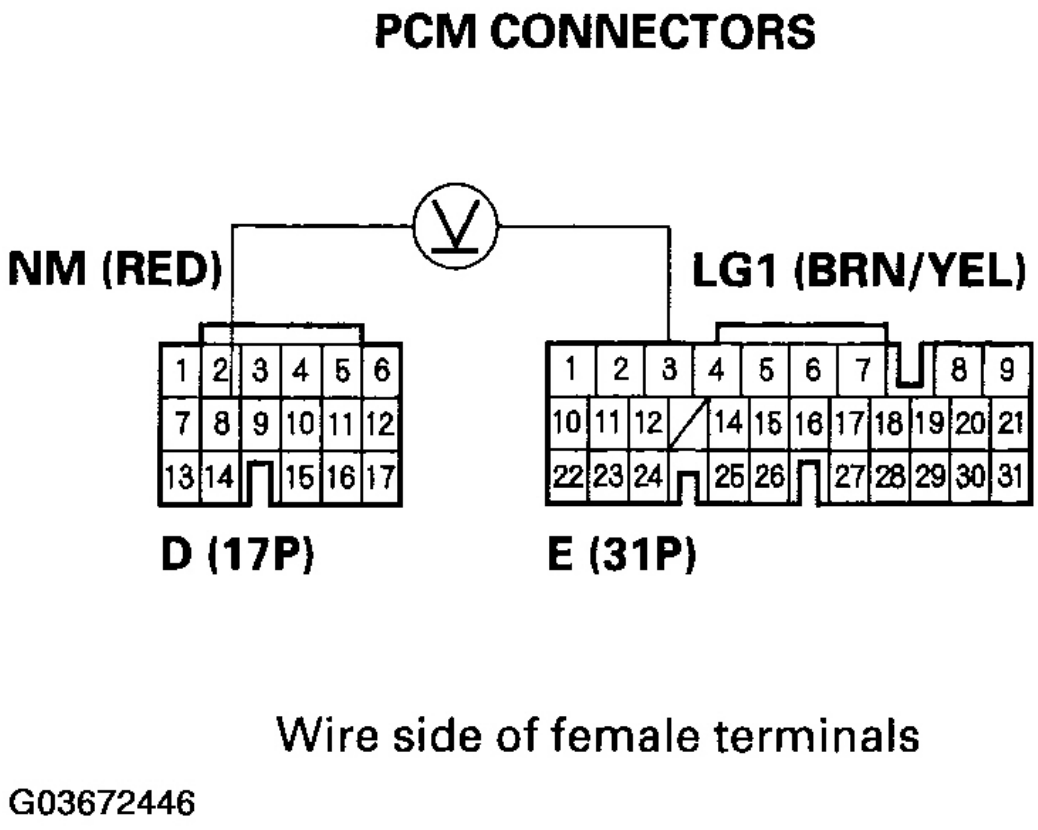


Fig. 91: Measuring Voltage Between PCM Connector Terminals D8 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between PCM connector terminal D8 and the input shaft (mainshaft) speed sensor, then go to step 30.

NO - Go to step 36.

30. Reconnect all connectors.
31. Turn the ignition switch ON (II).
32. Clear the DTC with the HDS.
33. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position, and hold the vehicle at speeds over 30 mph (48 km/h) for more than 10 seconds. Slow down and stop the wheels.
34. Check for DTCs with the HDS.

Is DTC P0716 indicated?

YES - Check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM, return to step 1.

NO - Go to step 35.

35. Monitor the OBD status for P0716 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 34, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM, then return to step 1. If the screen indicates NOT COMPLETED, go to step 33.

36. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
37. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position, and hold the vehicle at speeds over 30 mph (48 km/h) for more than 10 seconds. Slow down and stop the wheels.
38. Check for DTCs with the HDS.

Is DTC P0716 indicated?

YES - Check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 37. If the PCM was substituted, return to step 1.

NO - Go to step 39.

39. Monitor the OBD status for P0716 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 38, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the transmission range switch and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 25. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 37.

DTC P0717: Problem in Input Shaft (Mainshaft) Speed Sensor Circuit (No Signal Input)

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Check for proper input shaft (mainshaft) speed sensor installation (see **INPUT**

SHAFT (MAINSHAFT) SPEED SENSOR REPLACEMENT).

4. Raise the front of the vehicle, make sure it is securely supported, and allow the front wheels to rotate freely.
5. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position, and hold the vehicle at speeds over 30 mph (48 km/h) for more than 10 seconds. Slow down and stop the wheels.
6. Monitor the OBD status for P0717 in the DTCs Menu with the HDS.

Does the result indicate FAILED?

YES - Go to step 7.

NO - Intermittent failure, the system is OK at this time. Check for loose or poor connections at the PCM and input shaft (mainshaft) speed sensor connectors. If the tester indicates NOT COMPLETED, return to step 5 and recheck.

7. Turn the ignition switch OFF.
8. Jump the SCS line with the HDS.
9. Disconnect PCM connectors B (24P) and E (31P), and input shaft (mainshaft) speed sensor connector.
10. Check for continuity between PCM connector terminals B15 and body ground, and between E3 and body ground.

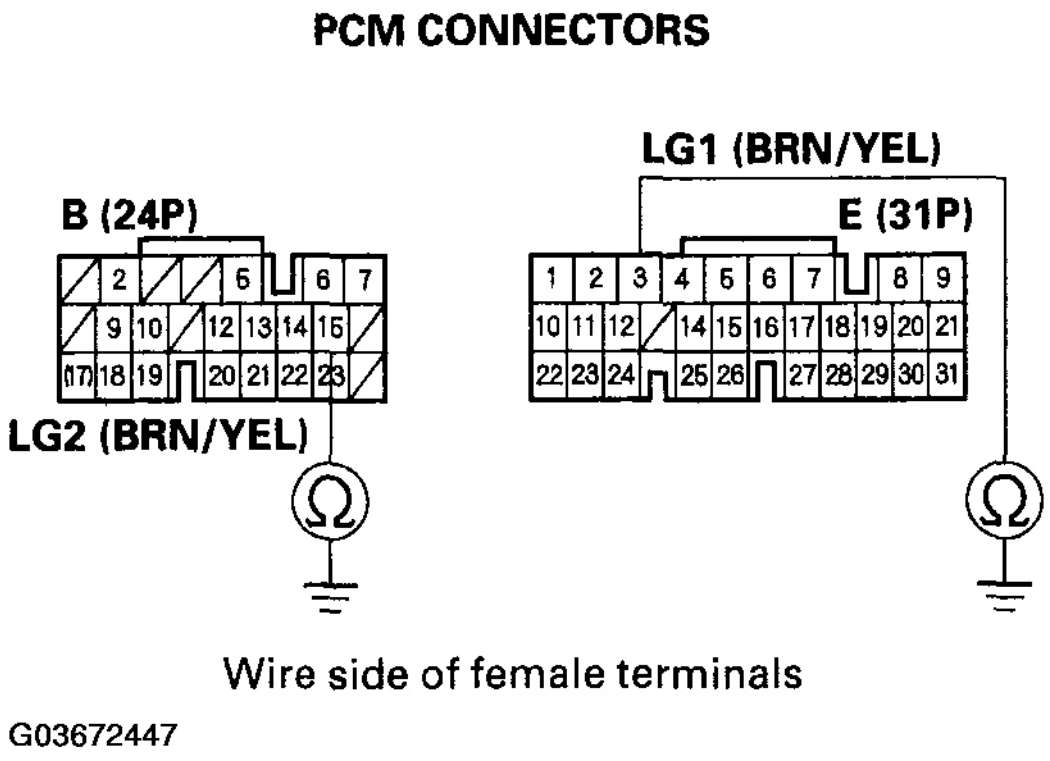


Fig. 92: Checking Continuity Between PCM Connector Terminals B15 & Body Ground And Between E3 & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 11.

NO - Repair open in the wire between PCM connector terminals B15, E3, and ground (G101, G102), or repair poor ground (G101, G102), then go to step 30.

11. Connect PCM connectors B (24P) and E (31P).
12. Turn the ignition switch ON (II).
13. Measure the voltage between input shaft (mainshaft) speed sensor connector terminal No. 1 and body ground.

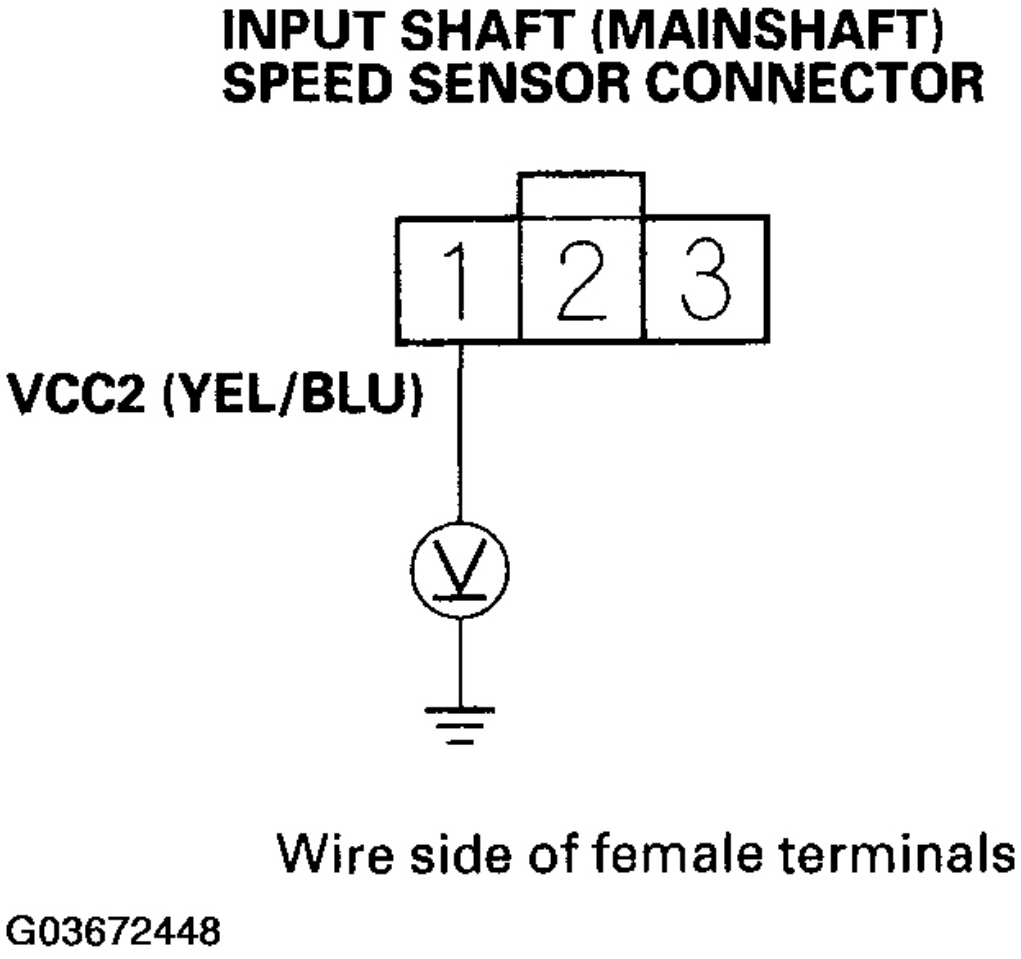


Fig. 93: Measuring Voltage Between Input Shaft (Mainshaft) Speed Sensor Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 14.
NO - Go to step 25.

14. Turn the ignition switch OFF.
15. Disconnect PCM connector D (17P).

16. Check for continuity between input shaft (mainshaft) speed sensor connector terminal No. 2 and body ground.

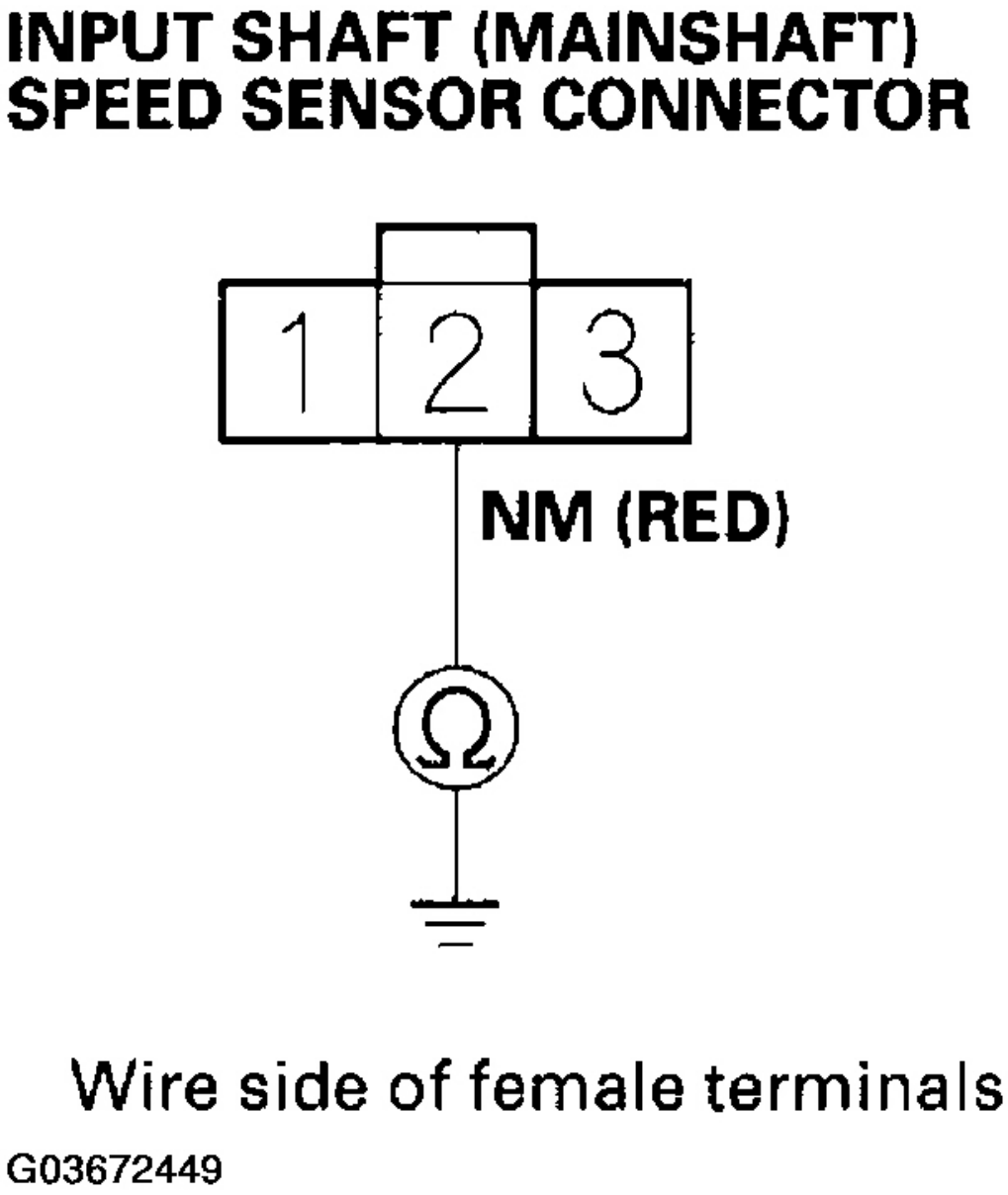


Fig. 94: Checking Continuity Between Input Shaft (Mainshaft) Speed Sensor Connector Terminal No. 2 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal D8 and input shaft (mainshaft) speed sensor, then go to step 30.

NO - Go to step 17.

17. Check for continuity between input shaft (mainshaft) speed sensor connector terminal No. 3 and PCM connector terminal D10.

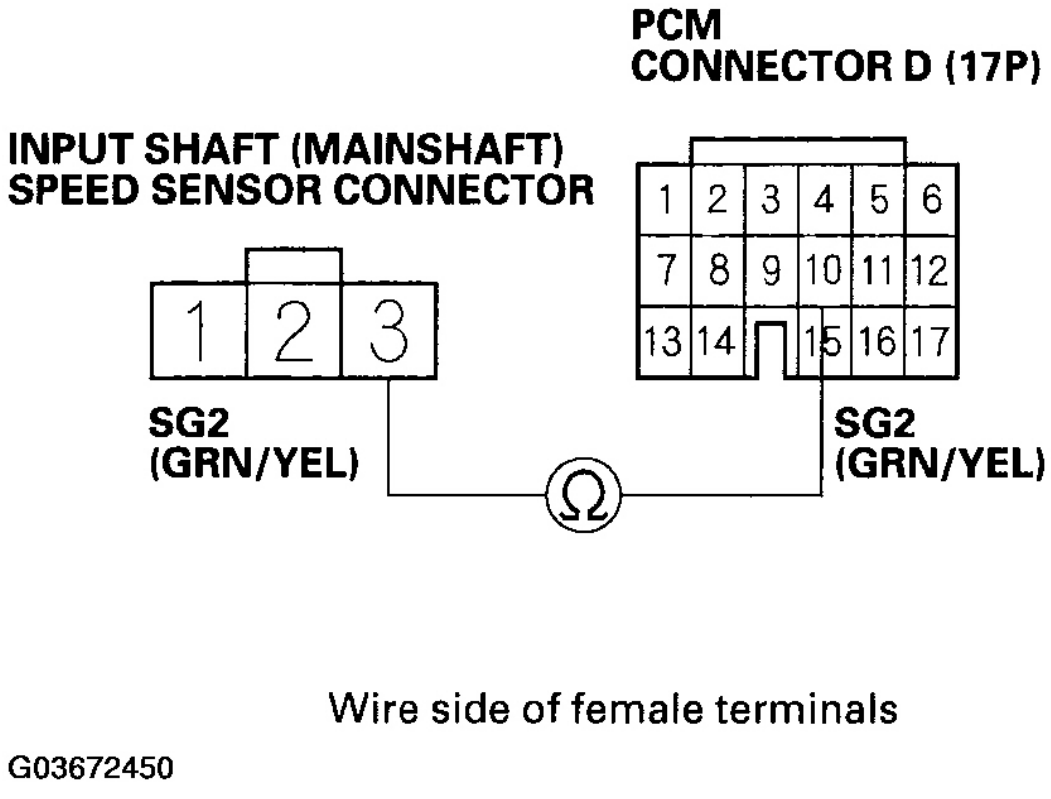


Fig. 95: Checking Continuity Between Input Shaft (Mainshaft) Speed Sensor Connector Terminal No. 3 And PCM Connector Terminal D10
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 18.

NO - Repair open in the wire between the input shaft (mainshaft) speed sensor connector and PCM connector terminal D10, then go to step 30.

18. Connect PCM connector D (17P).
19. Turn the ignition switch ON (II).
20. Measure the voltage between input shaft (mainshaft) speed sensor connector terminals No. 2 and No. 3.

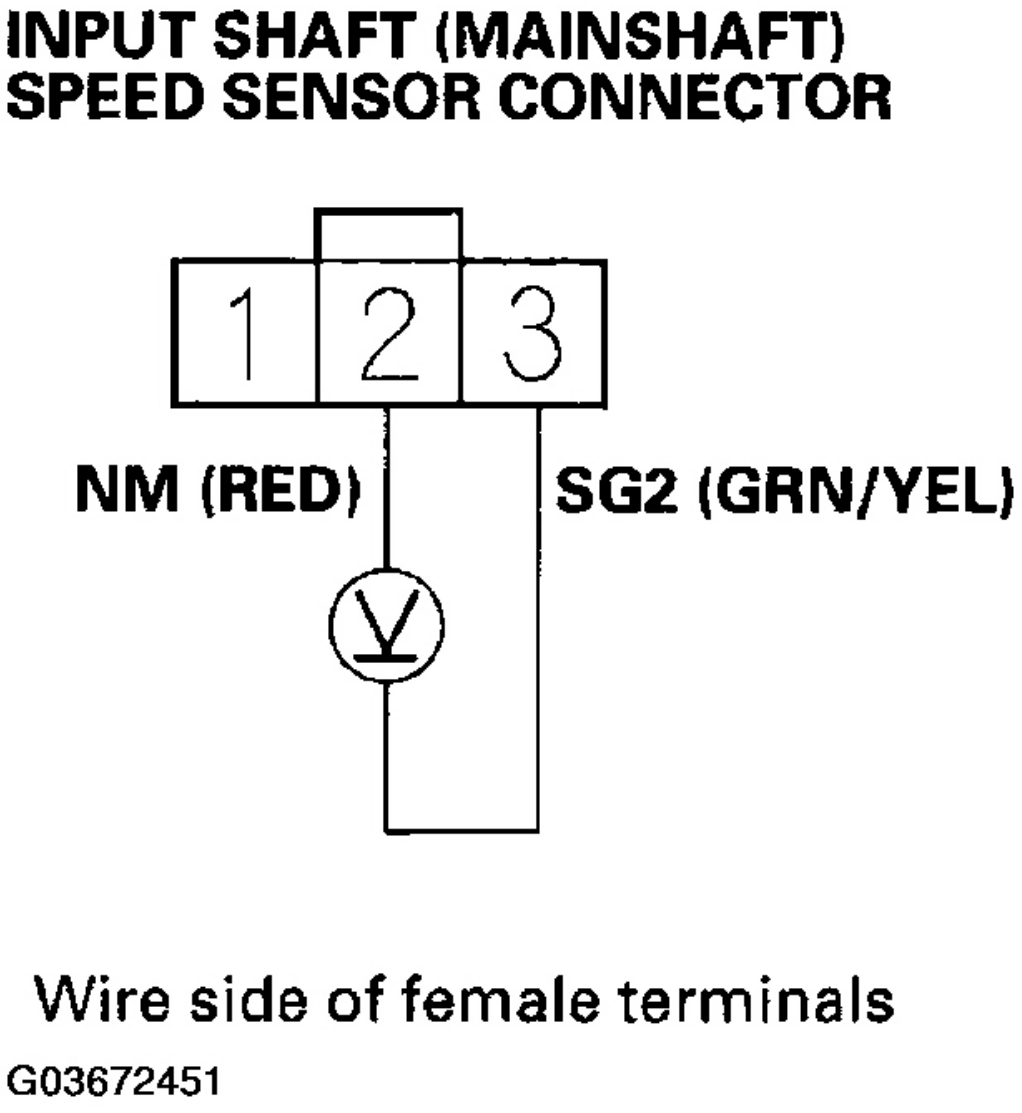


Fig. 96: Measuring Voltage Between Input Shaft (Mainshaft) Speed Sensor Connector Terminals No. 2 And No. 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 21.

NO - Go to step 23.

21. Connect the input shaft (mainshaft) speed sensor connector.
22. Measure the voltage between PCM connector terminals D8 and E3.

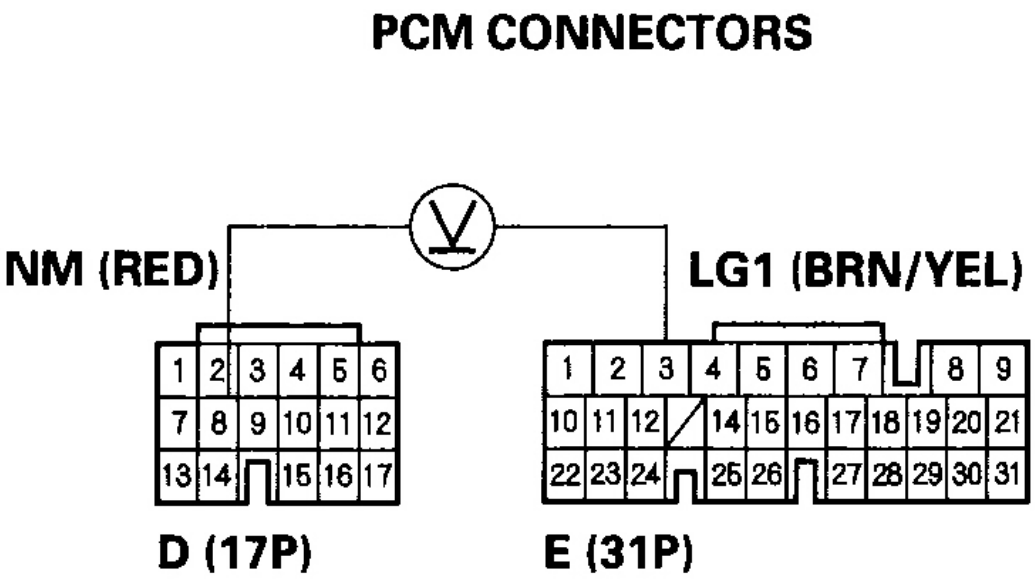


Fig. 97: Measuring Voltage Between PCM Connector Terminals D8 and E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage 0 V or about 5 V?

YES - Go to step 23.

NO - Replace the input shaft (mainshaft) speed sensor (see **INPUT SHAFT (MAINSHAFT) SPEED SENSOR REPLACEMENT**), then go to step 30.

23. Shift to the P position. Start the engine, and let it idle.
24. With the engine idling, measure the voltage between PCM connector terminals D8 and E3.

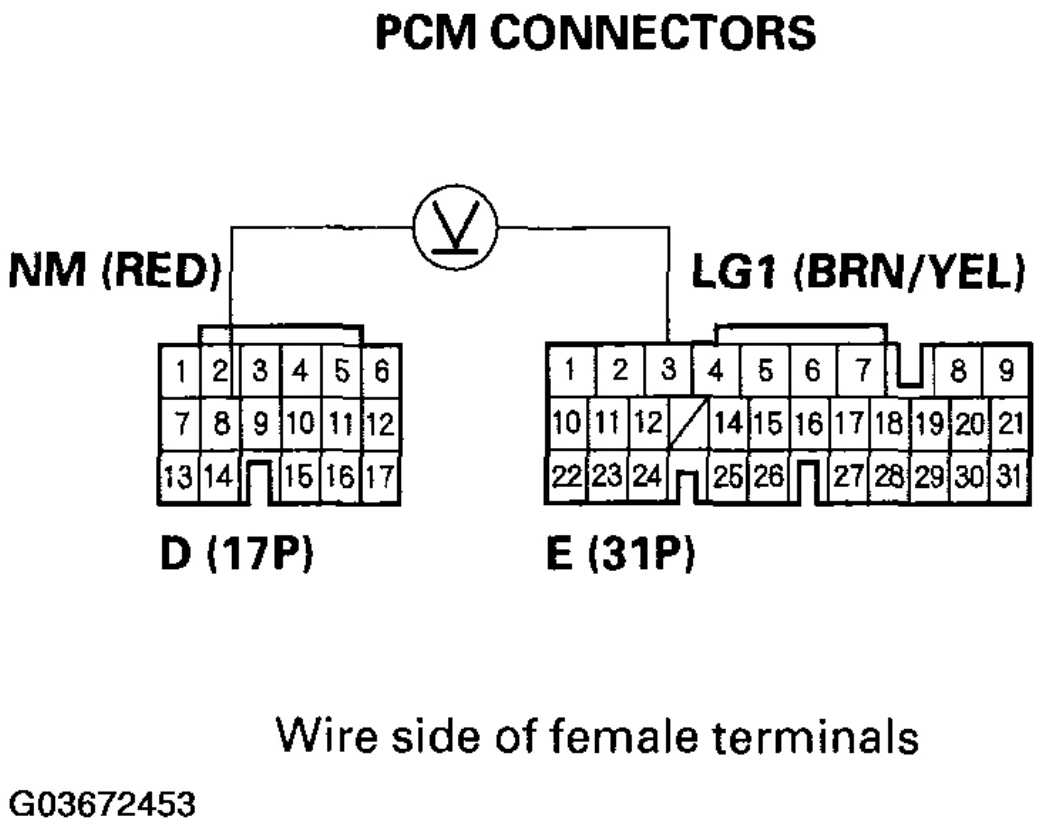


Fig. 98: Measuring Voltage Between PCM Connector Terminals D8 and E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 1.5 - 3.5 V?

YES - Go to step 36.

NO - Replace the input shaft (mainshaft) speed sensor (see **INPUT SHAFT (MAINSHAFT) SPEED SENSOR REPLACEMENT**), then go to step 30.

25. Measure the voltage between PCM connector terminals D12 and E3.

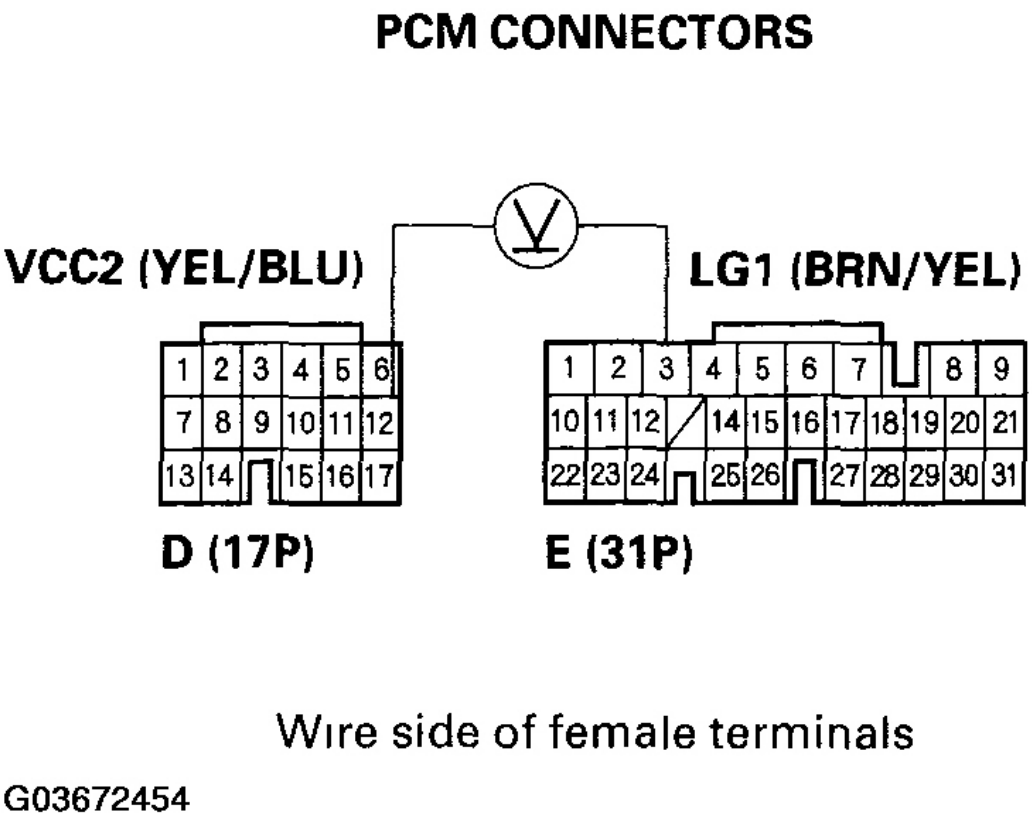


Fig. 99: Measuring Voltage Between PCM Connector Terminals D12 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between PCM connector terminal D12 and the input shaft (mainshaft) speed sensor, then go to step 30.

NO - Go to step 25.

26. Turn the ignition switch OFF.
27. Disconnect PCM connector D (17P).
28. Check for continuity between PCM connector terminal D12 and body ground.

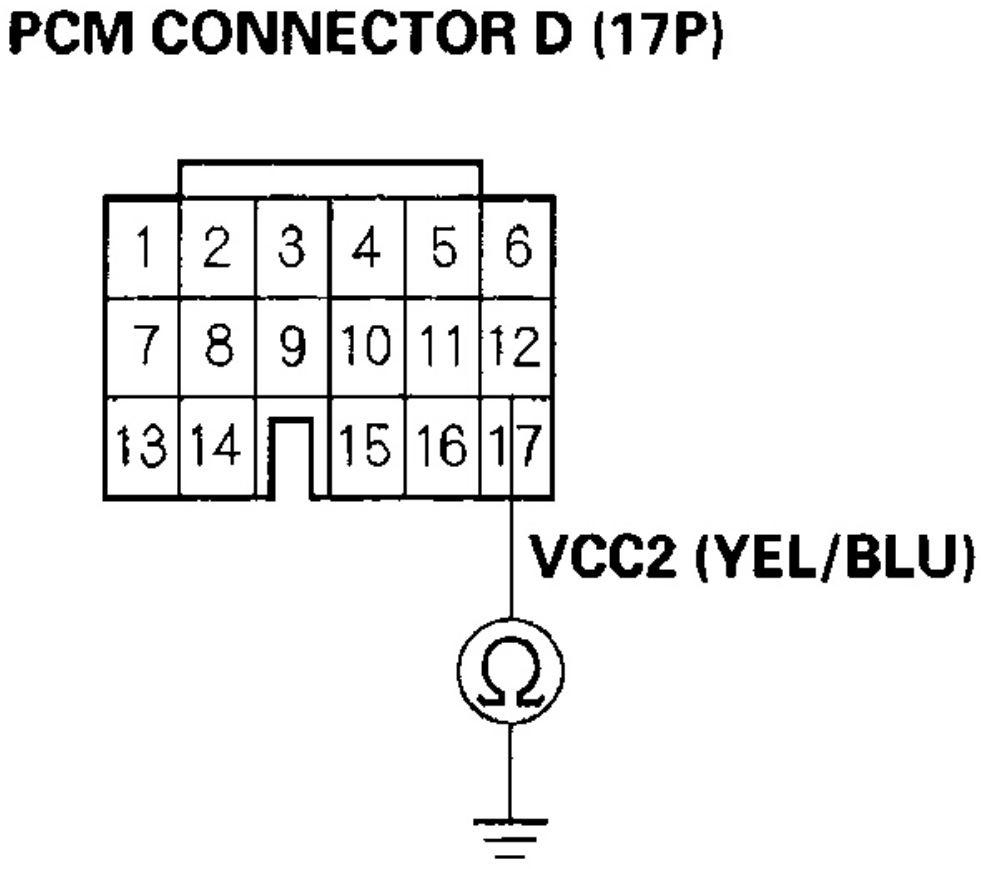


Fig. 100: Checking Continuity Between PCM Connector Terminal D12 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal D12 and the input shaft (mainshaft) speed sensor, then go to step

30.

NO - Go to step 36.

29. Measure the voltage between PCM connector terminals D8 and E3.

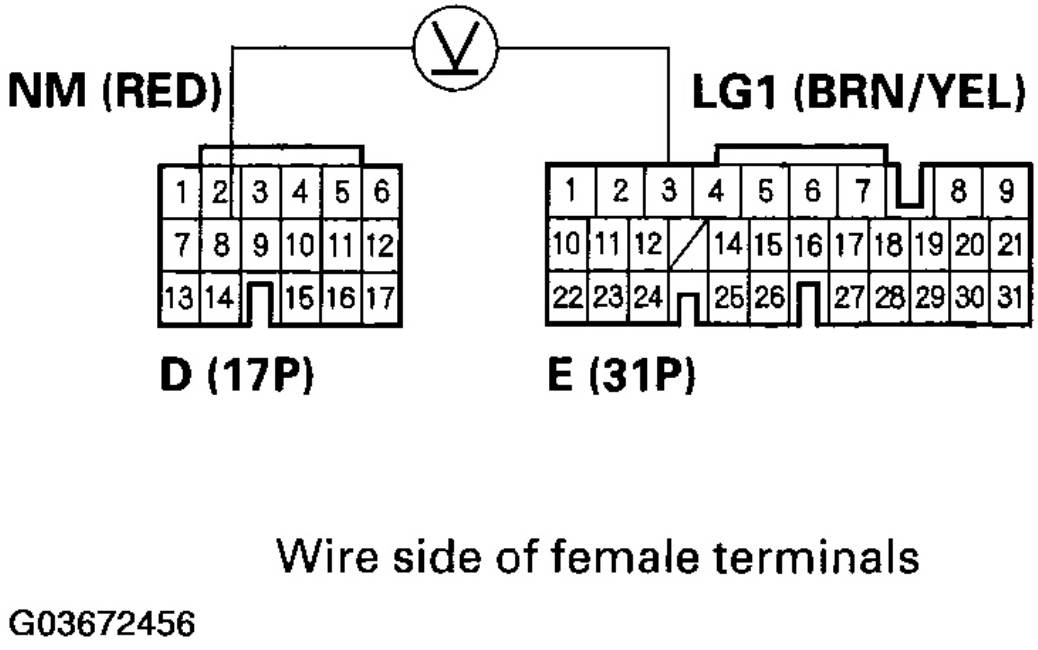


Fig. 101: Measuring Voltage Between PCM Connector Terminals D8 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between PCM connector terminal D8 and the input shaft (mainshaft) speed sensor, then go to step 30.

NO - Go to step 36.

30. Reconnect all connectors.

31. Turn the ignition switch ON (II).
32. Clear the DTC with the HDS.
33. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position, and hold the vehicle at speeds over 30 mph (48 km/h) for more than 10 seconds. Slow down and stop the wheels.
34. Check for DTCs with the HDS.

    Is DTC P0717 indicated?

    YES - Check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM return to step 1.

    NO - Go to step 35.
35. Monitor the OBD status for P0717 in the DTCs Menu with the HDS.

    Does the result indicate PASSED?

    YES - Troubleshooting is complete. If any other DTCs were indicated in step 34, go to the indicated DTC's troubleshooting.

    NO - If screen indicates FAILED, check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM, then return to step 1. If the screen indicates NOT COMPLETED, go to step 33.
36. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
37. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position, and hold the vehicle at speeds over 30 mph (48 km/h) for more than 10 seconds. Slow down and stop the wheels.
38. Check for DTCs with the HDS.

    Is DTC P0717 indicated?

    YES - Check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND**

SUBSTITUTION FOR TESTING , then go to step 37. If the PCM was substituted, return to step 1.

NO - Go to step 39.

39. Monitor the OBD status for P0717 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 38, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the transmission range switch and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 37. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 37.

DTC P0718: Input Shaft (Mainshaft) Speed Sensor Intermittent Failure

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Test-drive the vehicle for several minutes in the D position through all five gears.
4. Monitor the OBD status for P0718 in the DTCs Menu with the HDS.

Does the result indicate FAILED?

YES - Go to step 5.

NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the input shaft (mainshaft) speed sensor and PCM. If the tester indicates NOT COMPLETED, return to step 3 and recheck.

5. Turn the ignition switch OFF.
6. Disconnect the input shaft (mainshaft) speed sensor connector, and inspect the connector and connector terminals to be sure they are making good contact.

Are the connector terminals OK?

YES - Go to step 7.

NO - Repair the connector terminals, then go to step 7.

7. Connect the input shaft (mainshaft) speed sensor connector.
8. Test-drive the vehicle for several minutes in the D position through all five gears.
9. Monitor the OBD status for P0718 in the DTCs Menu with the HDS.

Does the result indicate FAILED?

YES - Go to step 10.

NO - Troubleshooting is complete. If the screen indicates NOT COMPETED, go to step 8.

10. Turn the ignition switch OFF.
11. Jump the SCS line with the HDS.
12. Disconnect PCM connector D (17P).
13. Disconnect the input shaft (mainshaft) speed sensor connector.
14. Check for continuity between input shaft (mainshaft) speed sensor connector terminal No. 2 and body ground.

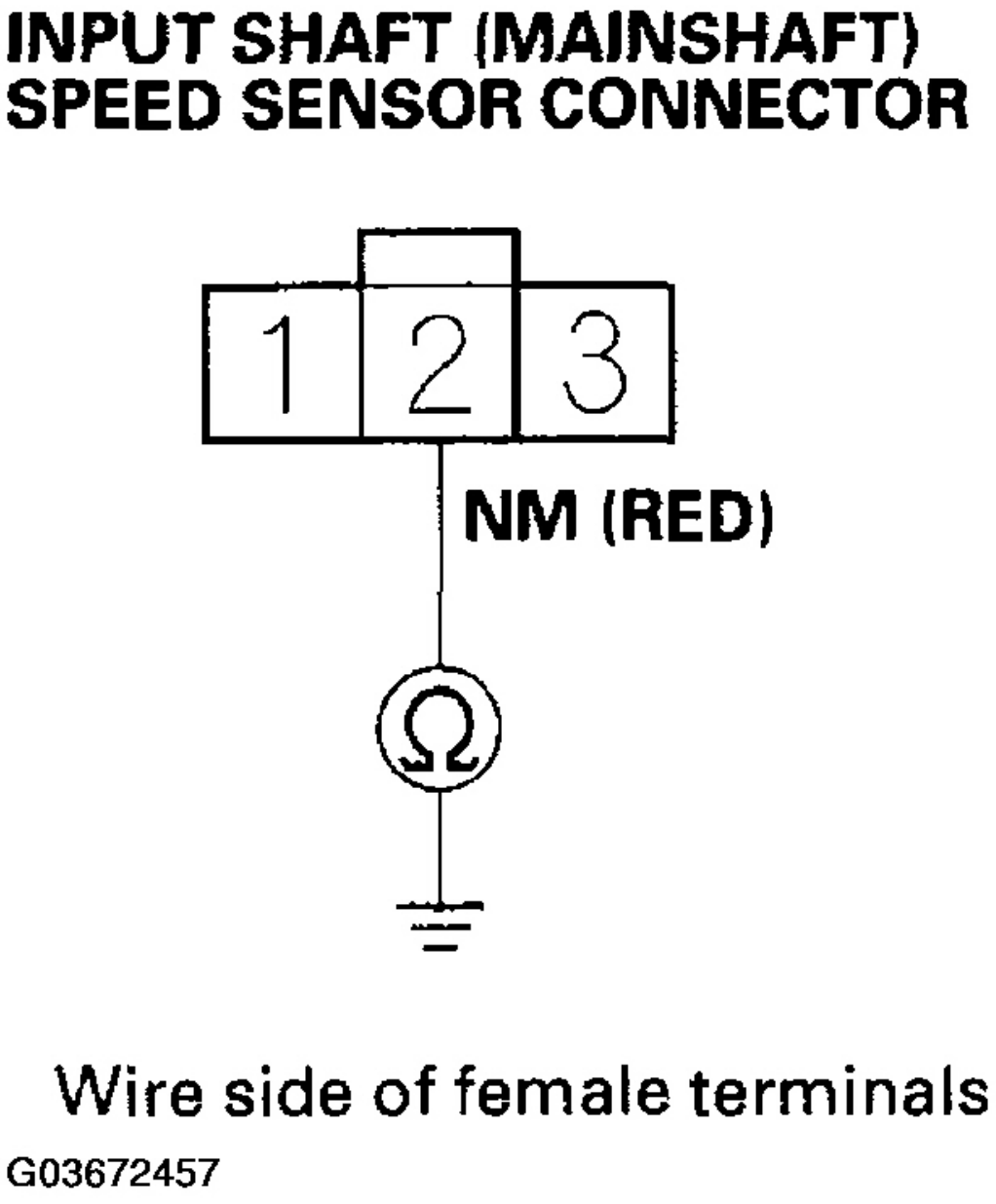


Fig. 102: Checking Continuity Between Input Shaft (Mainshaft) Speed Sensor Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal D8 and the input shaft (mainshaft) speed sensor, then go to step 21.

NO - Go to step 15.

15. Connect PCM connector D (17P).
16. Turn the ignition switch ON (II).
17. Measure the voltage between input shaft (mainshaft) speed sensor connector terminal No. 2 and body ground.

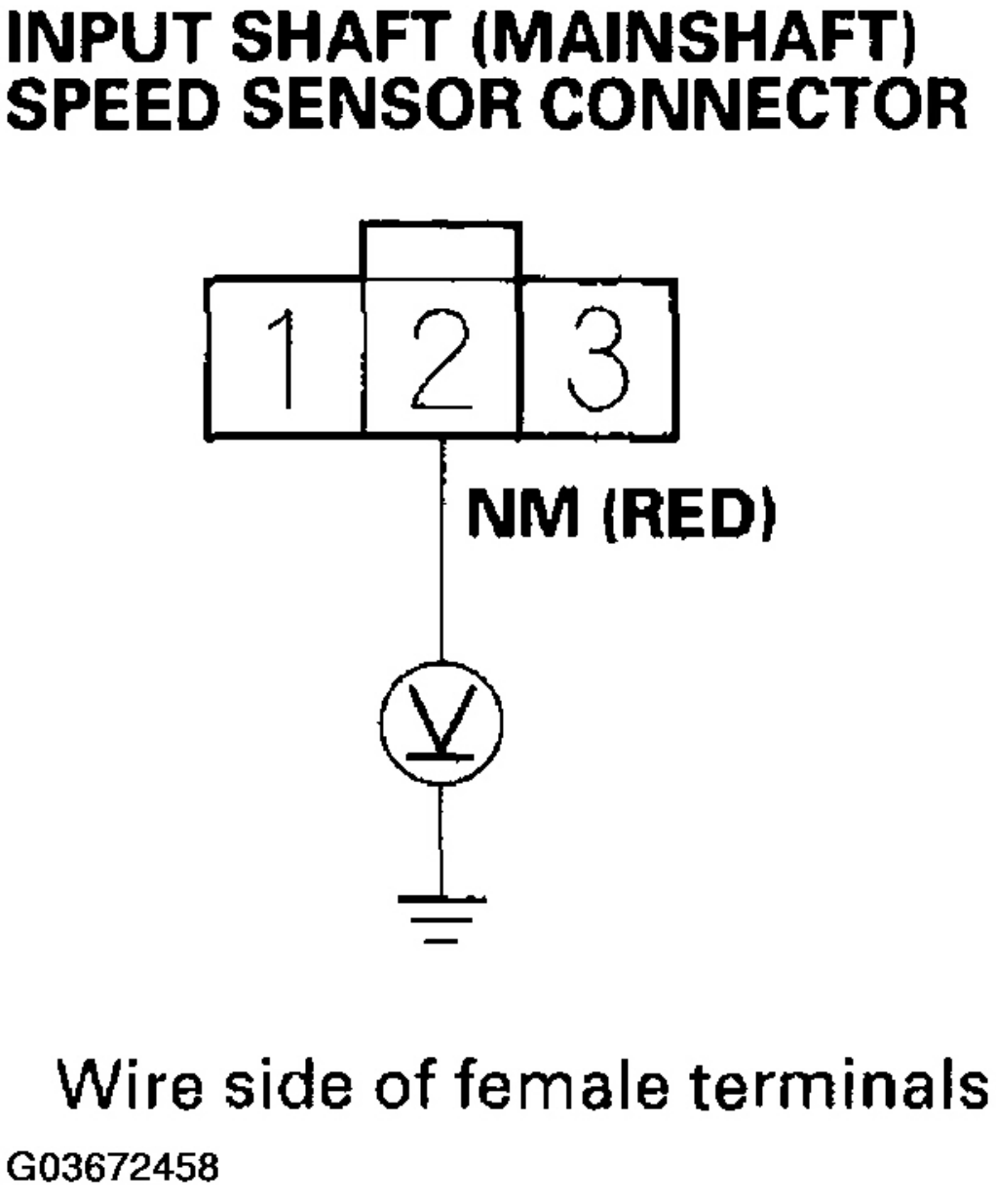


Fig. 103: Measuring Voltage Between Input Shaft (Mainshaft) Speed Sensor Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Replace the input shaft (mainshaft) speed sensor (see **INPUT SHAFT (MAINSHAFT) SPEED SENSOR REPLACEMENT**), then go to step 21.

NO - Go to step 16.

18. Turn the ignition switch OFF.
19. Disconnect PCM connector D (17P).
20. Check for continuity between PCM connector terminal D8 and input shaft (mainshaft) speed sensor connector terminal No. 2.

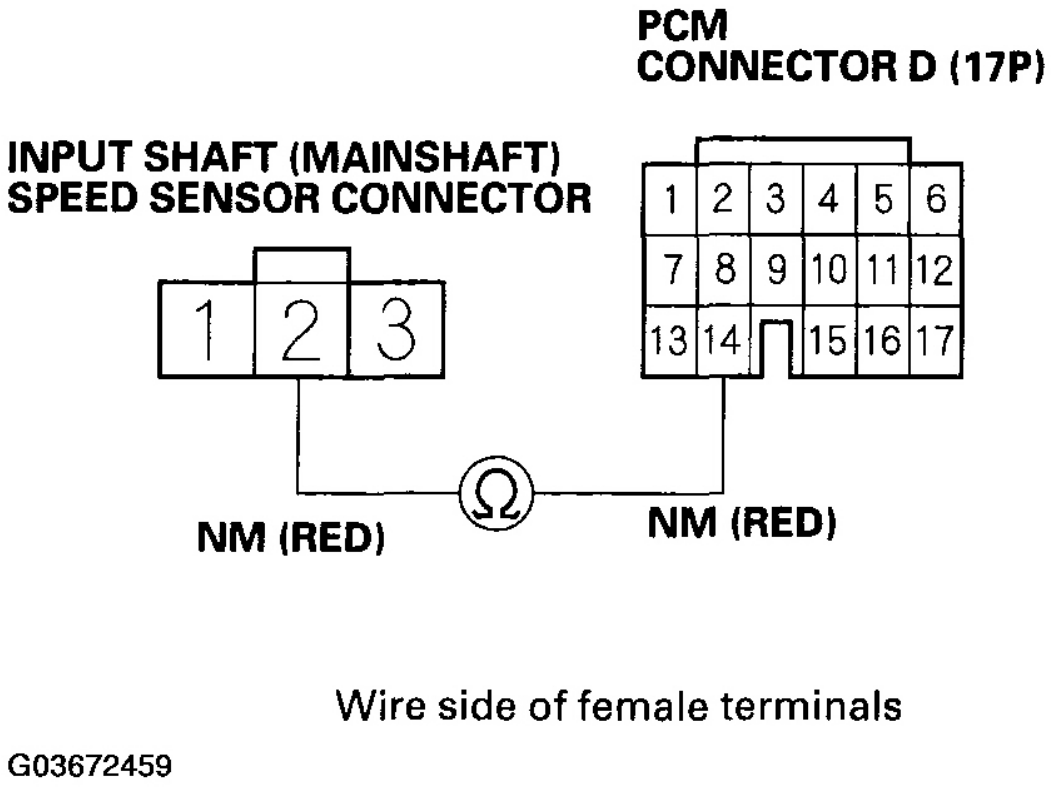


Fig. 104: Checking Continuity Between PCM Connector Terminal D8 And Input Shaft (Mainshaft) Speed Sensor Connector Terminal No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 27.

NO - Repair open in the wire between PCM connector terminal D8 and the input shaft (mainshaft) speed sensor, then go to step 21.

21. Reconnect all connectors.
22. Turn the ignition switch ON (II).
23. Clear the DTC with the HDS.
24. Test-drive the vehicle for several minutes in the D position through all five gears.
25. Check for DTCs with the HDS.

Is DTC P0718 indicated?

YES - Check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM return to step 1.

NO - Go to step 26.

26. Monitor the OBD status for P0718 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 25, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM, then return to step 1. If the screen indicates NOT COMPLETED, go to step 24.

27. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
28. Test-drive the vehicle for several minutes in the D position through all five gears.
29. Check for DTCs with the HDS.

Is DTC P0718 indicated?

YES - Check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 28. If the PCM was substituted, return to step 1.

NO - Go to step 30.

30. Monitor the OBD status for P0718 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 29, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the transmission range switch and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 28. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 28.

DTC P0721: Problem in Output Shaft (Countershaft) Speed Sensor Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Check for proper output shaft (countershaft) speed sensor installation (see **OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR REPLACEMENT**).

4. Raise the front of the vehicle, make sure it is securely supported, and allow the front wheels to rotate freely.
5. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position with engine speed 2,000 rpm or higher for more than 10 seconds. Slow down and stop the wheels.
6. Monitor the OBD status for P0721 in the DTCs Menu with the HDS.

   Does the result indicate FAILED?

   YES - Go to step 7.

   NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the output shaft (countershaft) speed sensor and PCM. If the tester indicates NOT COMPLETED, return to step 5 and recheck.
7. Turn the ignition switch OFF.
8. Jump the SCS line with the HDS.
9. Disconnect PCM connectors B (24P) and E (31P), and output shaft (countershaft) speed sensor connector.
10. Check for continuity between PCM connector terminals B15 and body ground, and between E3 and body ground.

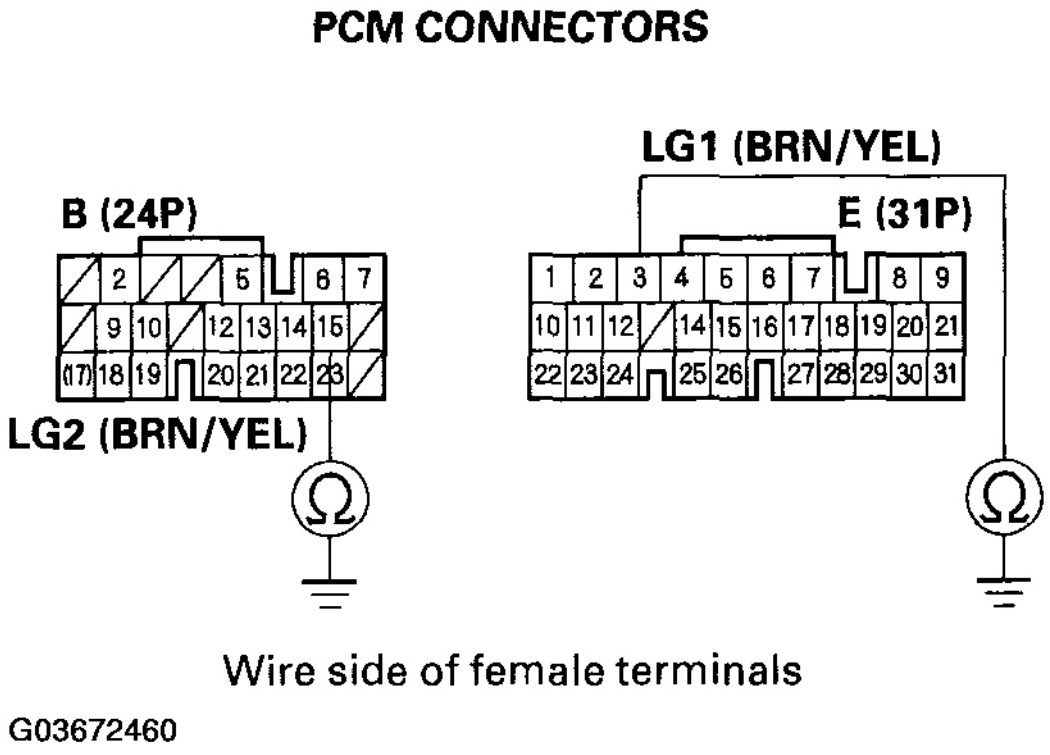


Fig. 105: Checking Continuity Between PCM Connector Terminals B15 & Body Ground And Between E3 & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 11.

NO - Repair open in the wire between PCM connector terminals B15, E3, and ground (G101, G102), or repair poor ground (G101, G102), then go to step 30.

11. Connect PCM connectors B (24P) and E (31P).
12. Turn the ignition switch ON (II).
13. Measure the voltage between output shaft (countershaft) speed sensor connector terminal No. 1 and body ground.

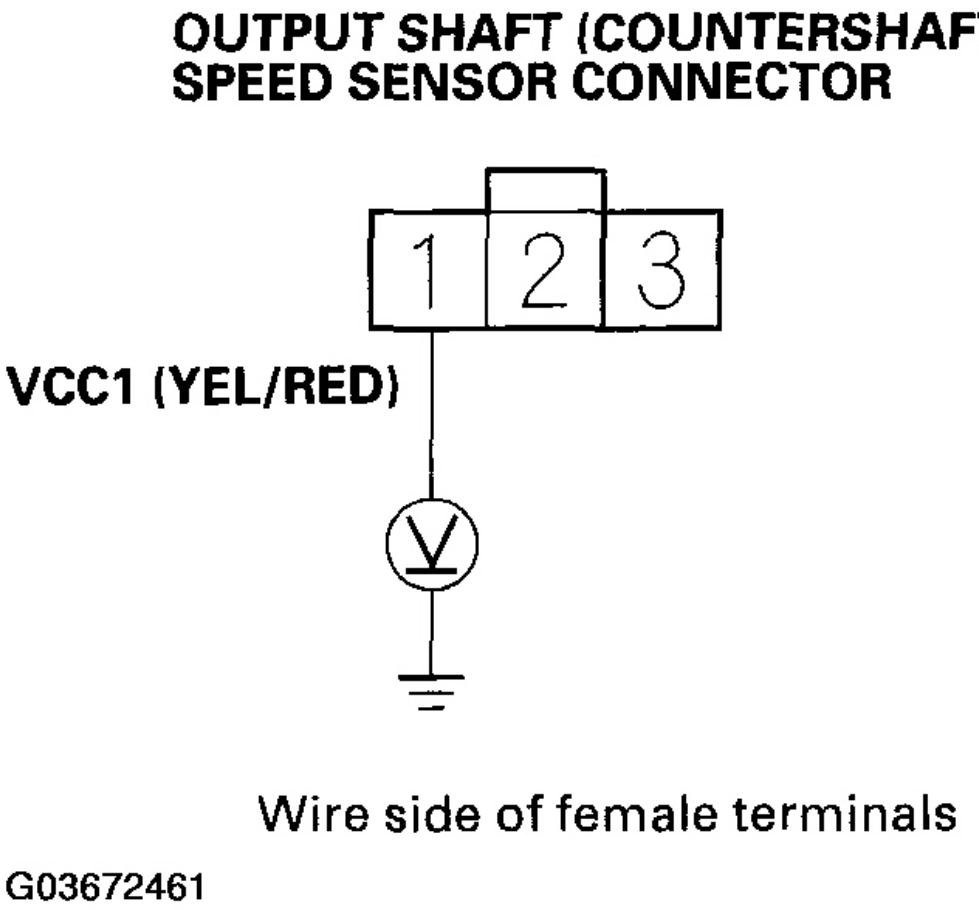


Fig. 106: Measuring Voltage Between Output Shaft (Countershaft) Speed Sensor Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 14.

NO - Go to step 25.

14. Turn the ignition switch OFF.
15. Disconnect PCM connector D (17P).
16. Check for continuity between output shaft (countershaft) speed sensor

connector terminal No. 2 and body ground.

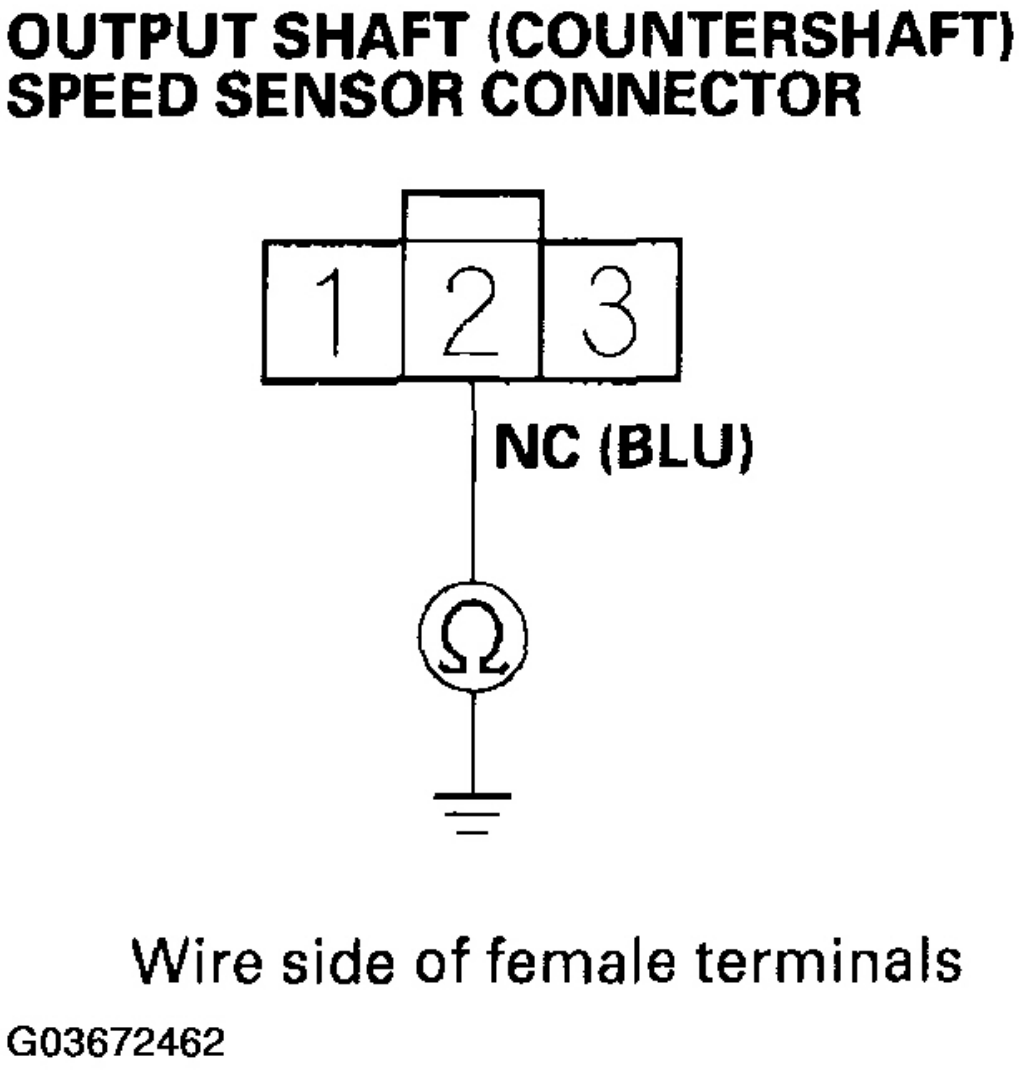


Fig. 107: Checking Continuity Between Output Shaft (Countershaft) Speed Sensor Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector

terminal D14 and output shaft (countershaft) speed sensor, then go to step 30.

NO - Go to step 17.

17. Check for continuity between output shaft (countershaft) speed sensor connector terminal No. 3 and PCM connector terminal D4.

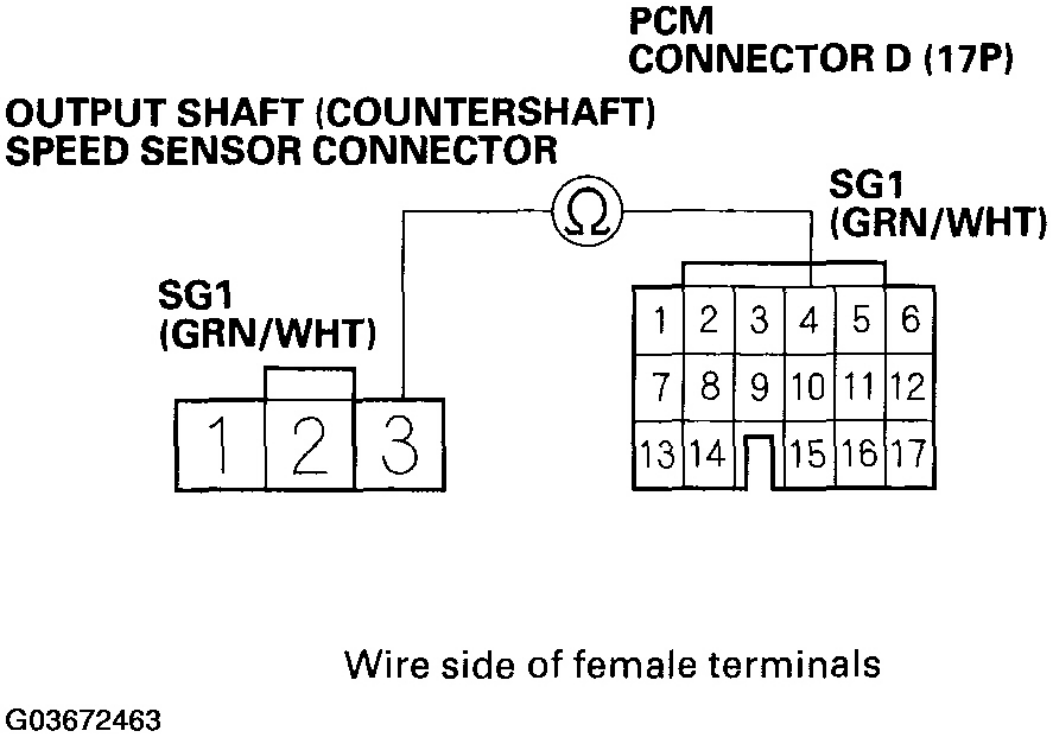


Fig. 108: Checking Continuity Between Output Shaft (Countershaft) Speed Sensor Connector Terminal No. 3 And PCM Connector Terminal D4
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 18.

NO - Repair open in the wire between the output shaft (countershaft) speed sensor connector and PCM connector terminal D4, then go to step

30.

18. Connect PCM connector D (17P).
19. Turn the ignition switch ON (II).
20. Measure the voltage between output shaft (countershaft) speed sensor connector terminals No. 2 and No. 3.

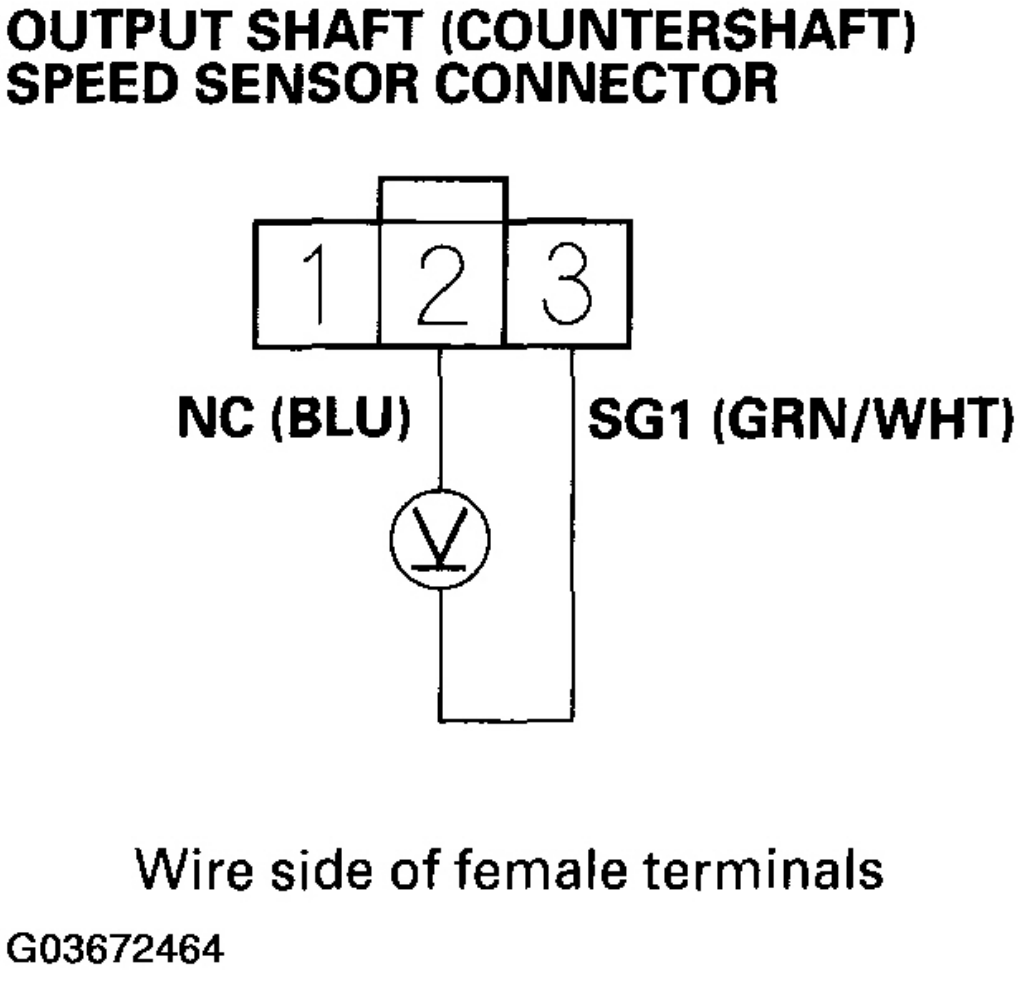


Fig. 109: Measuring Voltage Between Output Shaft (Countershaft) Speed Sensor Connector Terminals No. 2 And No. 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 21.

NO - Go to step 29.

21. Connect the output shaft (countershaft) speed sensor connector.
22. Measure the voltage between PCM connector terminals D14 and E3.

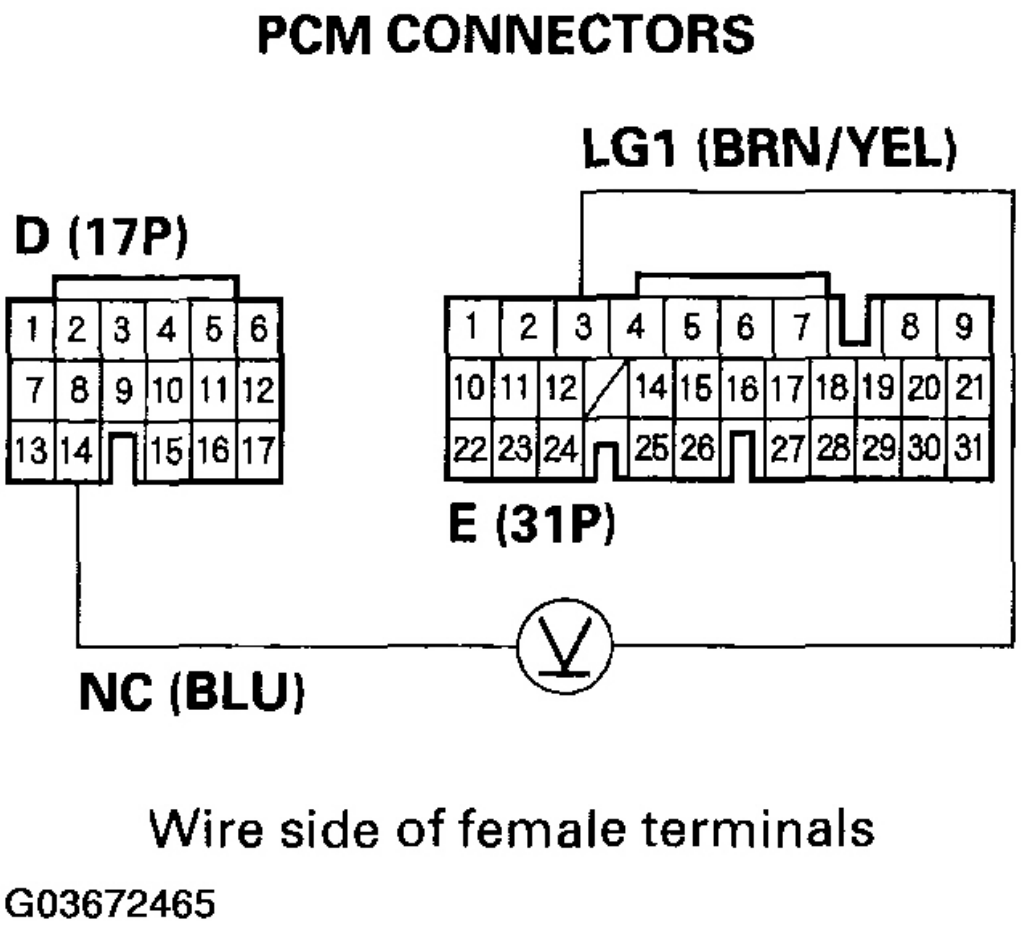


Fig. 110: Measuring Voltage Between PCM Connector Terminals D14 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage 0 V or about 5 V?

YES - Go to step 23.

NO - Replace the output shaft (countershaft) speed sensor (see **OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR REPLACEMENT**), then go to step 30.

23. Shift to the P position. Start the engine, and let it idle.
24. Shift to the D position, and measure the voltage between PCM connector terminals D14 and E3.

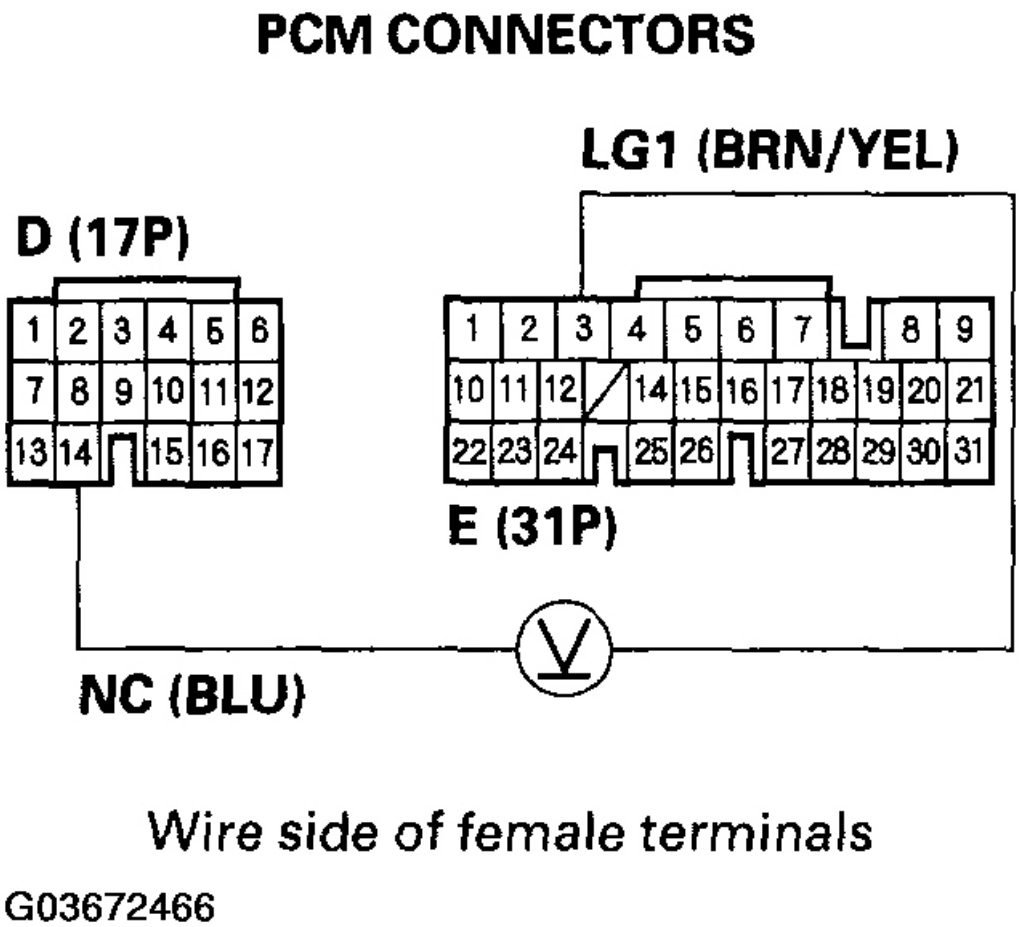


Fig. 111: Measuring Voltage Between PCM Connector Terminals D14 and

E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 1.5 - 3.5 V?

YES - Go to step 36.

NO - Replace the output shaft (countershaft) speed sensor (see **OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR REPLACEMENT**), then go to step 30.

25. Measure the voltage between PCM connector terminals D6 and E3.

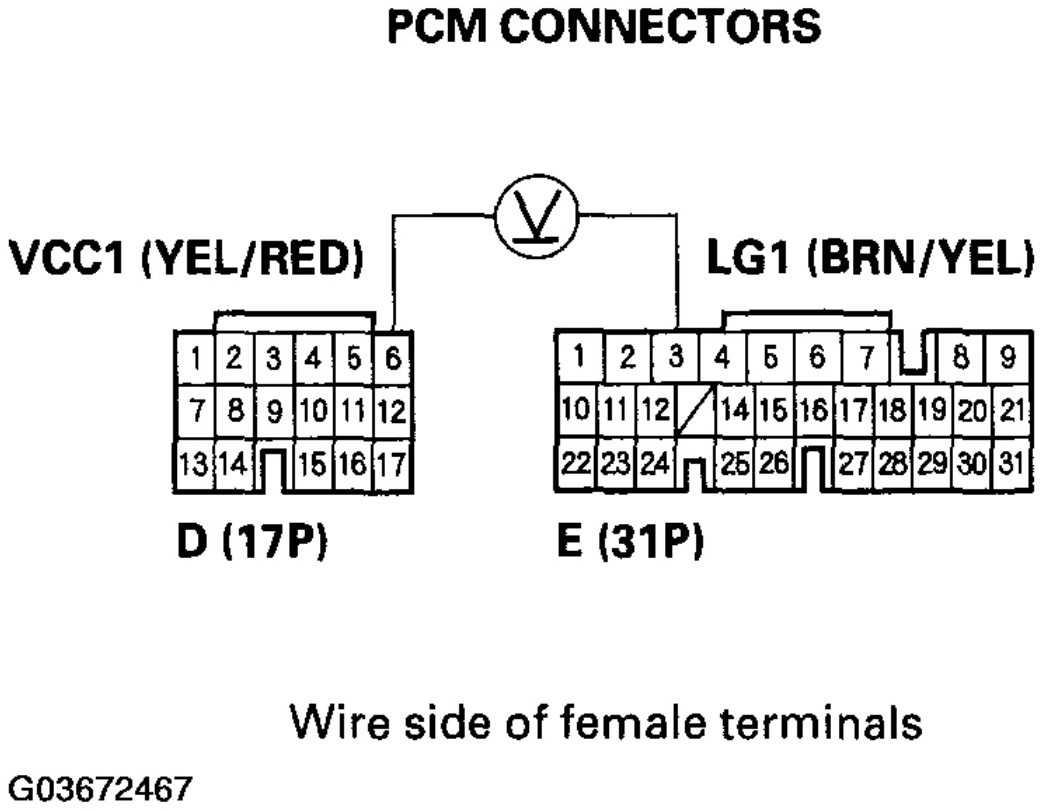


Fig. 112: Measuring Voltage Between PCM Connector Terminals D6 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between PCM connector terminal D6 and the output shaft (countershaft) speed sensor, then go to step 30.

NO - Go to step 26.

26. Turn the ignition switch OFF.
27. Disconnect PCM connector D (17P).
28. Check for continuity between PCM connector terminal D6 and body ground.

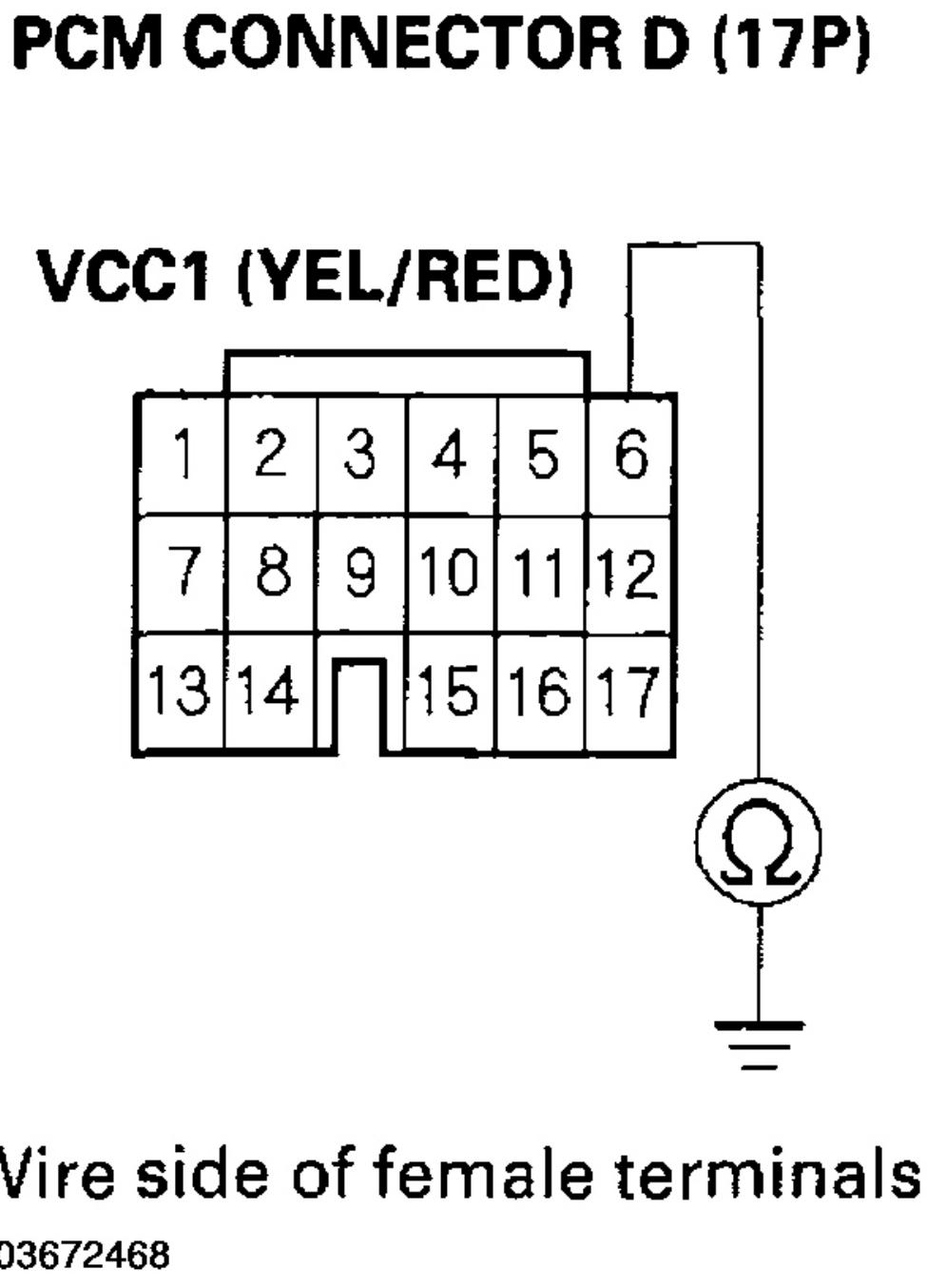


Fig. 113: Checking Continuity Between PCM Connector Terminal D6 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal D6 and the output shaft (countershaft) speed sensor, then go to step 30.

NO - Go to step 36.

29. Measure the voltage between PCM connector terminals D14 and E3.

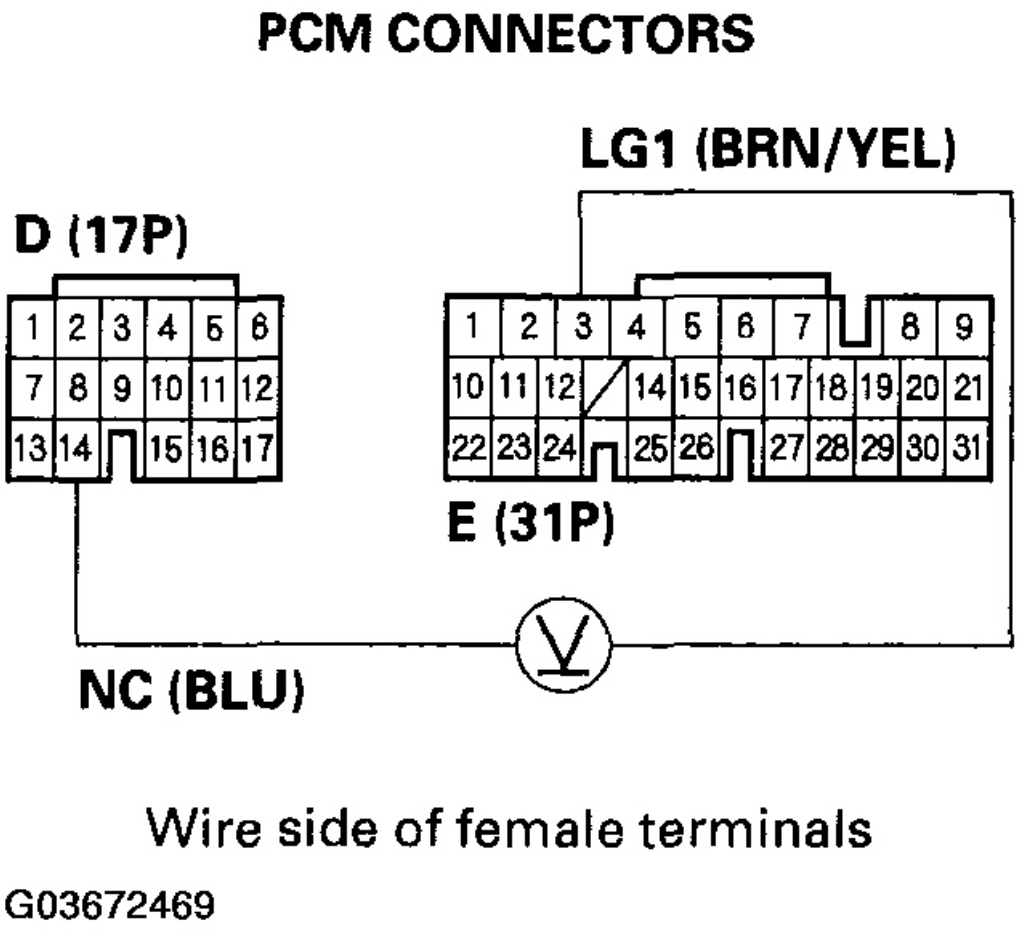


Fig. 114: Measuring Voltage Between PCM Connector Terminals D14

And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between PCM connector terminal D14 and the output shaft (countershaft) speed sensor, then go to step 30.

NO - Go to step 36.

30. Reconnect all connectors.
31. Turn the ignition switch ON (II).
32. Clear the DTC with the HDS.
33. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position with engine speed 2,000 rpm or higher for more than 10 seconds. Slow down and stop the wheels.
34. Check for DTCs with the HDS.

Is DTC P0721 indicated?

YES - Check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM return to step 1.

NO - Go to step 35.

35. Monitor the OBD status for P0721 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 34, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM, then return to step 1. If the screen indicates NOT COMPLETED, go to step 33.

36. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .

37. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position with engine speed 2,000 rpm or higher for more than 10 seconds. Slow down and stop the wheels.
38. Check for DTCs with the HDS.

Is DTC P0721 indicated?

YES - Check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 37. If the PCM was substituted, return to step 1.

NO - Go to step 39.

39. Monitor the OBD status for P0721 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 38, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the transmission range switch and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 37. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 37.

DTC P0722: Problem in Output Shaft (Countershaft) Speed Sensor Circuit (No Signal Input)

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the**

transmission.

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Check for proper output shaft (countershaft) speed sensor installation (See **OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR REPLACEMENT**).
4. Raise the front of the vehicle, make sure it is securely supported, and allow the front wheels to rotate freely.
5. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position with engine speed 2,000 rpm or higher for more than 10 seconds. Slow down and stop the wheels.
6. Monitor the OBD status for P0722 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 7.

   NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the output shaft (countershaft) speed sensor and PCM. If the tester indicates NOT COMPLETED, return to step 5 and recheck.
7. Turn the ignition switch OFF.
8. Jump the SCS line with the HDS.
9. Disconnect PCM connectors B (24P) and E (31P), and output shaft (countershaft) speed sensor connector.
10. Check for continuity between PCM connector terminals B15 and body ground, and between E3 and body ground.

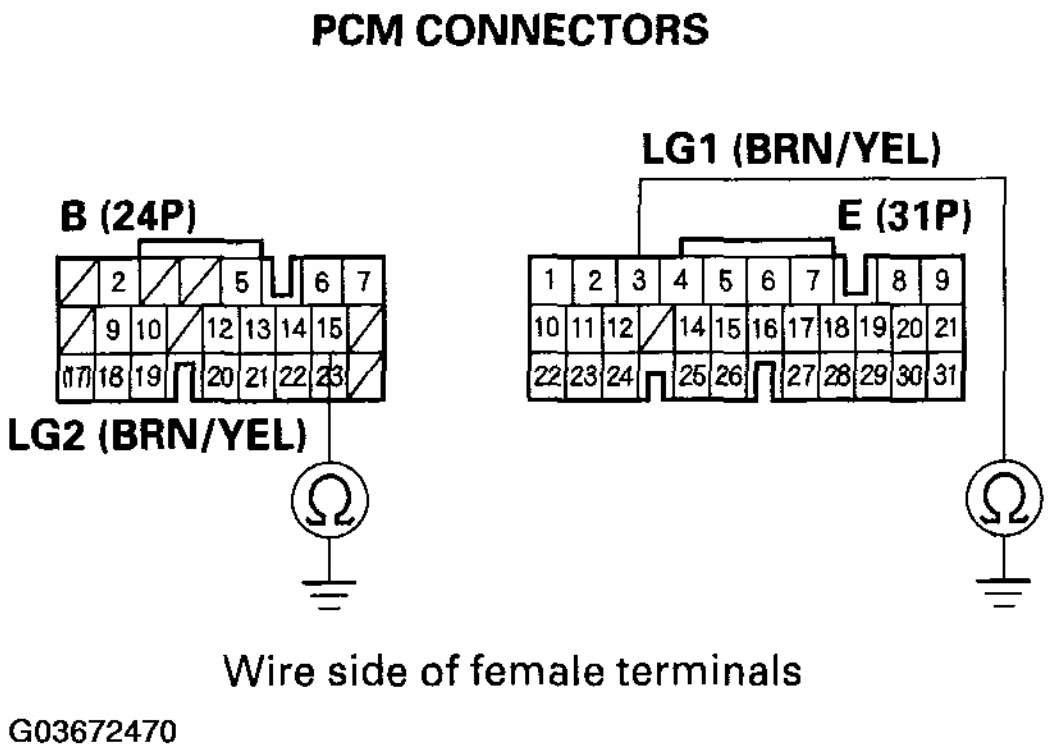


Fig. 115: Checking Continuity Between PCM Connector Terminals B15 & Body Ground And Between E3 & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 11.

NO - Repair open in the wires between PCM connector terminals B15, E3, and ground (G101, G102), or repair poor ground (G101, G102), then go to step 30.

11. Connect PCM connectors B (24P) and E (31P).
12. Turn the ignition switch ON (II).
13. Measure the voltage between output shaft (countershaft) speed sensor connector terminal No. 1 and body ground.

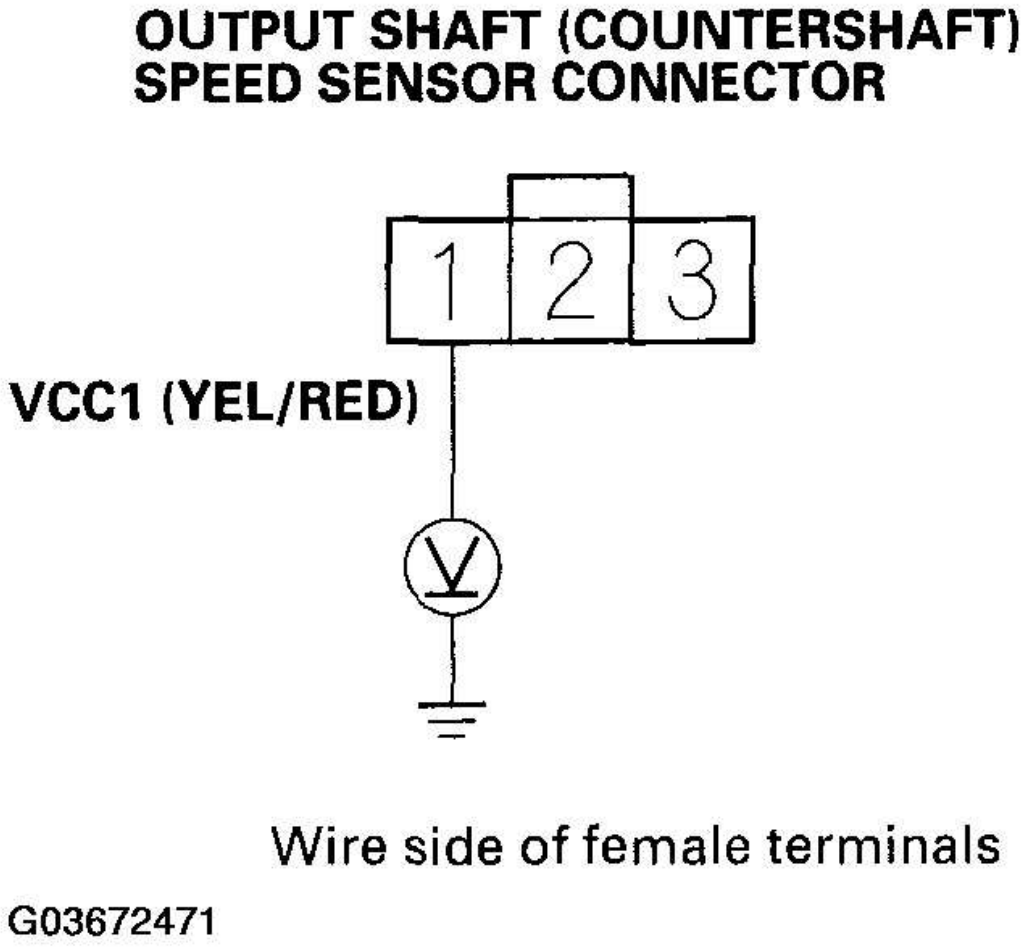


Fig. 116: Measuring Voltage Between Output Shaft (Countershaft) Speed Sensor Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 14.
NO - Go to step 25.

14. Turn the ignition switch OFF.
15. Disconnect PCM connector D (17P).

16. Check for continuity between output shaft (countershaft) speed sensor connector terminal No. 2 and body ground.

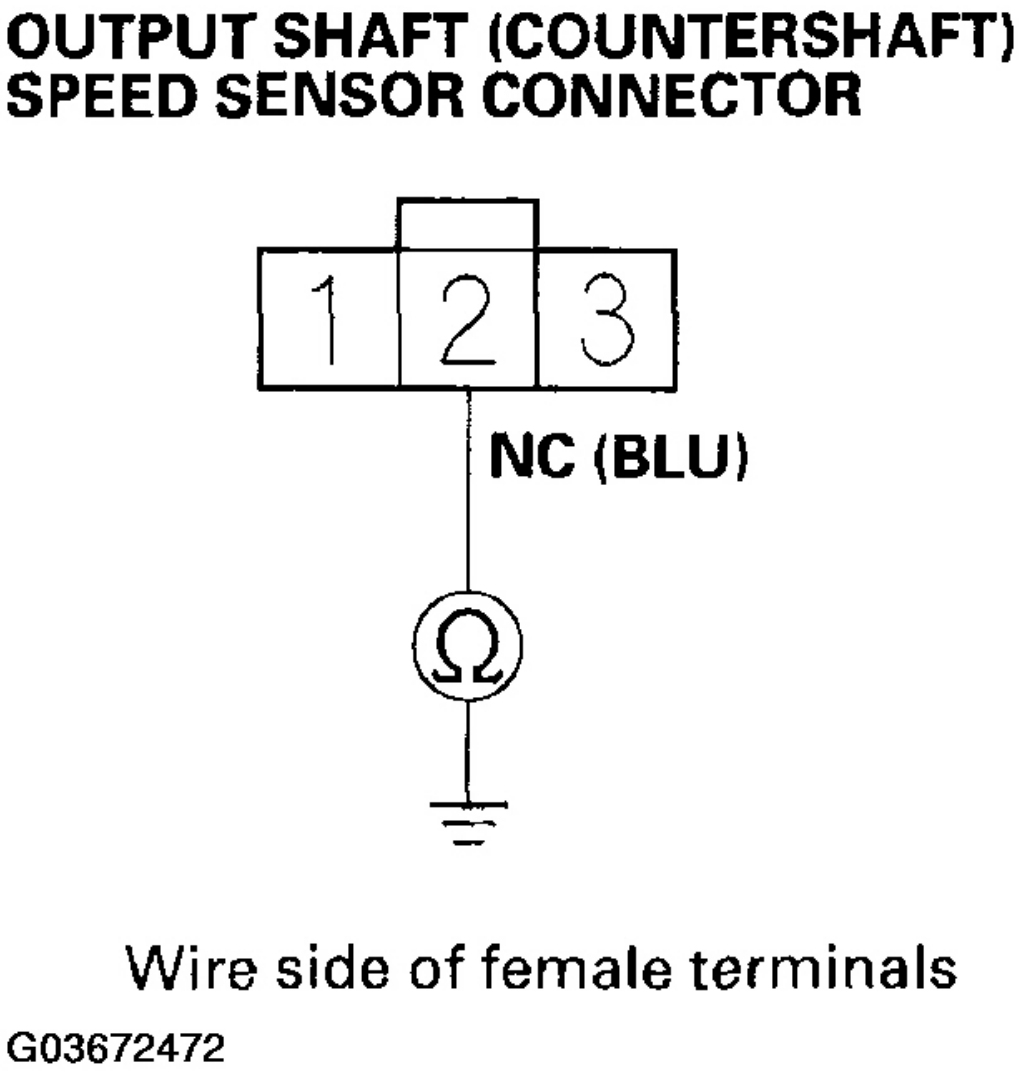


Fig. 117: Checking Continuity Between Output Shaft (Countershaft) Speed Sensor Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal D14 and output shaft (countershaft) speed sensor, then go to step 30.

NO - Go to step 17.

17. Check for continuity between output shaft (countershaft) speed sensor connector terminal No. 3 and PCM connector terminal D4.

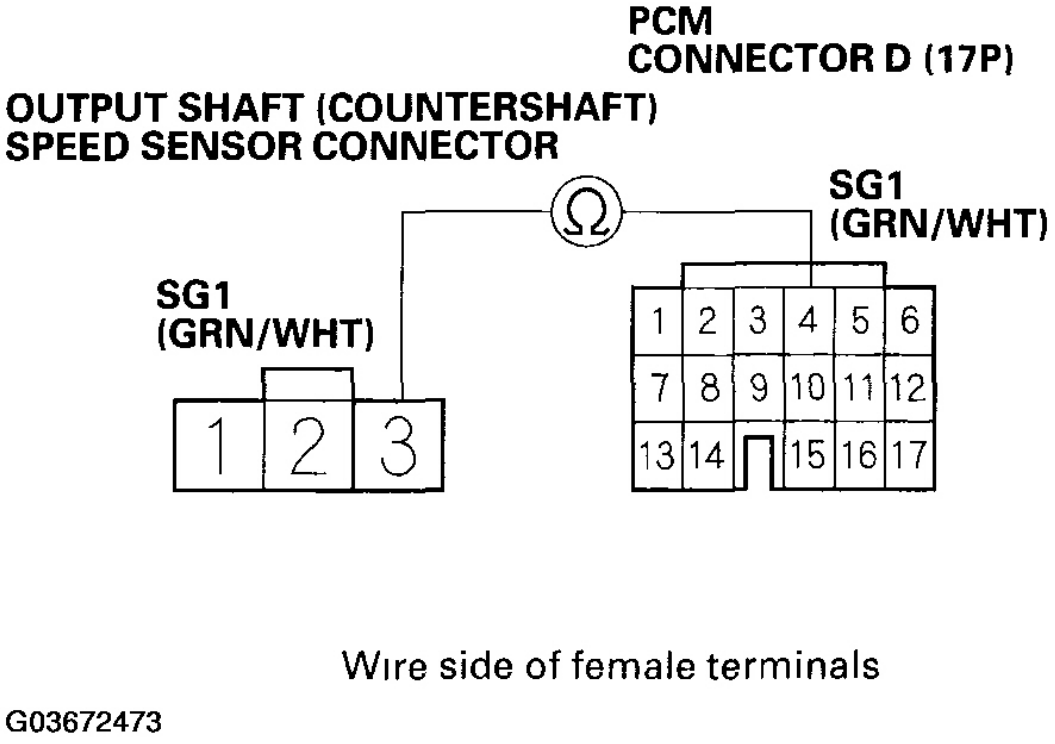


Fig. 118: Checking Continuity Between Output Shaft (Countershaft) Speed Sensor Connector Terminal No. 3 And PCM Connector Terminal D4
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 18.

NO - Repair open in the wire between the output shaft (countershaft)

speed sensor connector and PCM connector terminal D4, then go to step 30.

18. Connect PCM connector D (17P).
19. Turn the ignition switch ON (II).
20. Measure the voltage between output shaft (countershaft) speed sensor connector terminals No. 2 and No. 3.

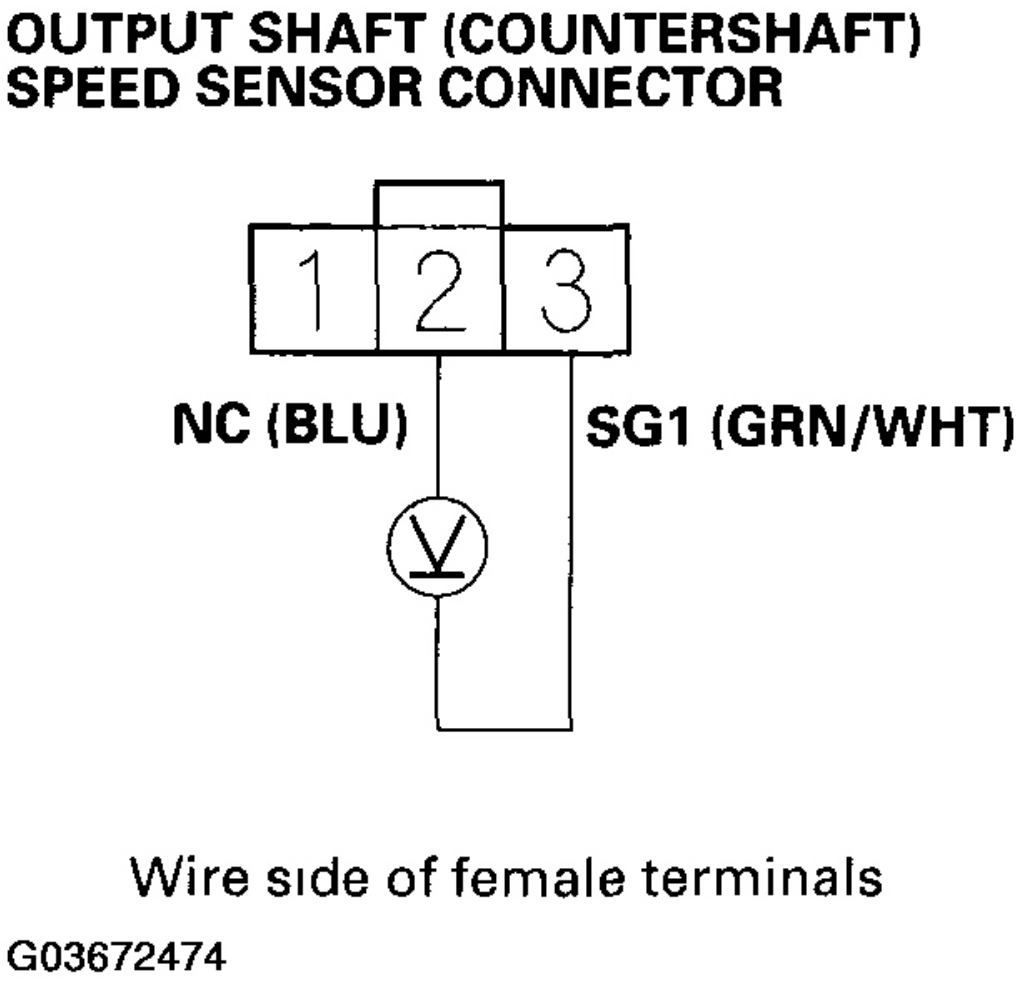


Fig. 119: Measuring Voltage Between Output Shaft (Countershaft) Speed Sensor Connector Terminals No. 2 And No. 3

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 21.
NO - Go to step 29.

21. Connect the output shaft (countershaft) speed sensor connector.
22. Measure the voltage between PCM connector terminals D14 and E3.

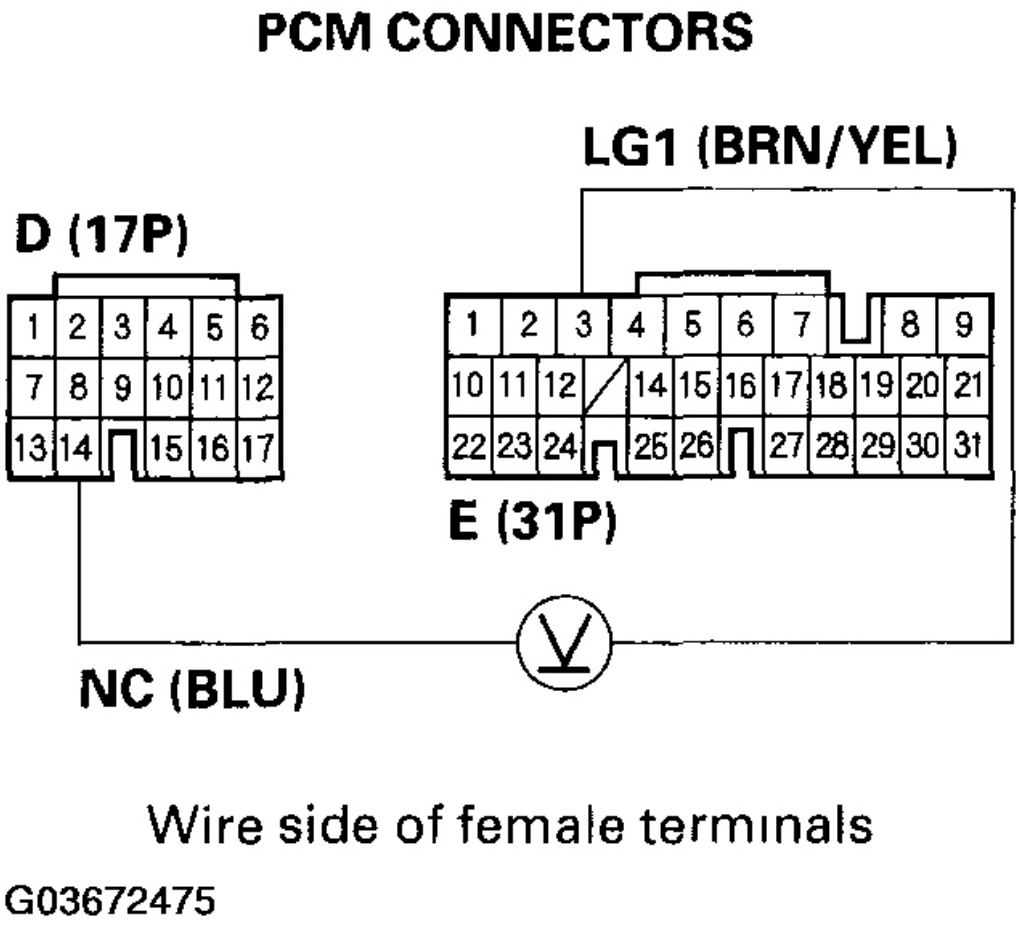


Fig. 120: Measuring Voltage Between PCM Connector Terminals D14 And E3

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the voltage 0 V or about 5 V?

YES - Go to step 23.

NO - Replace the output shaft (countershaft) speed sensor (See **OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR REPLACEMENT**), then go to step 30.

23. Shift to the P position. Start the engine, and let it idle.
24. Shift to the D position, and measure the voltage between PCM connector terminals D14 and E3.

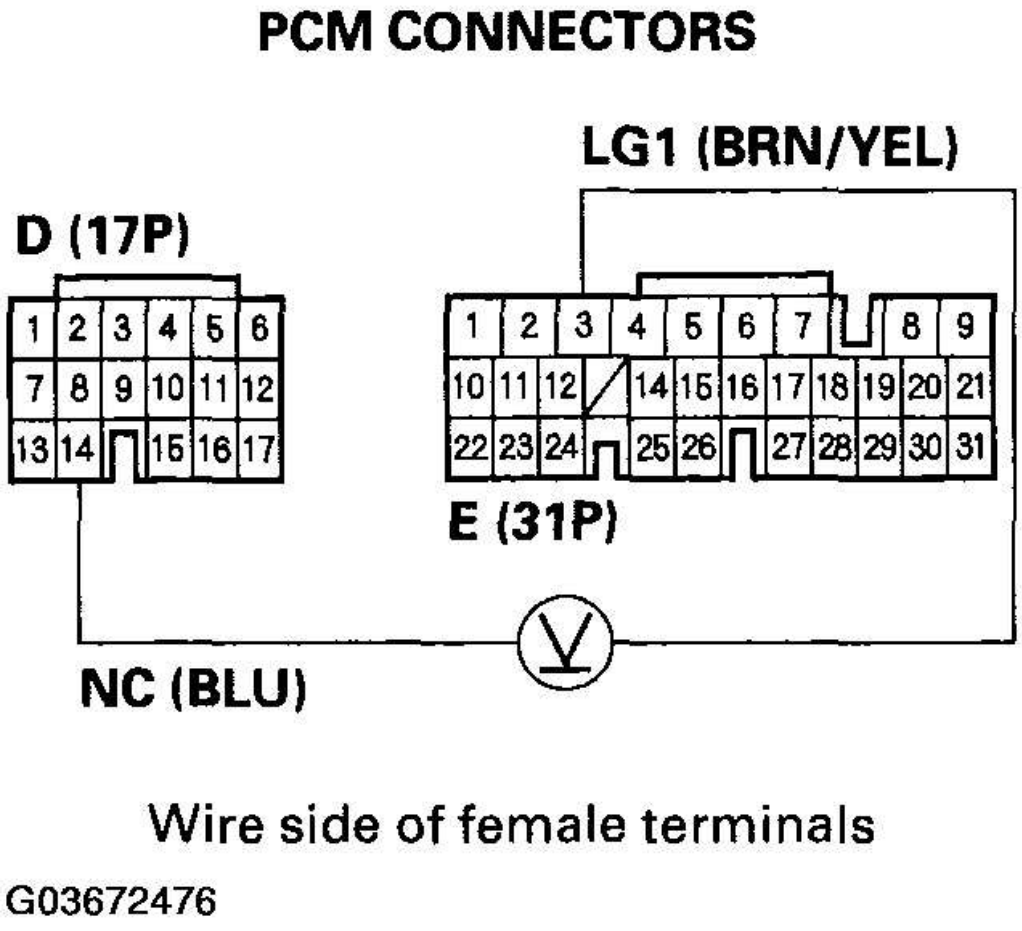


Fig. 121: Measuring Voltage Between PCM Connector Terminals D14 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 1.5 - 3.5 V?

YES - Go to step 36.

NO - Replace the output shaft (countershaft) speed sensor (see **OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR REPLACEMENT**), then go to step 30.

25. Measure the voltage between PCM connector terminals D6 and E3.

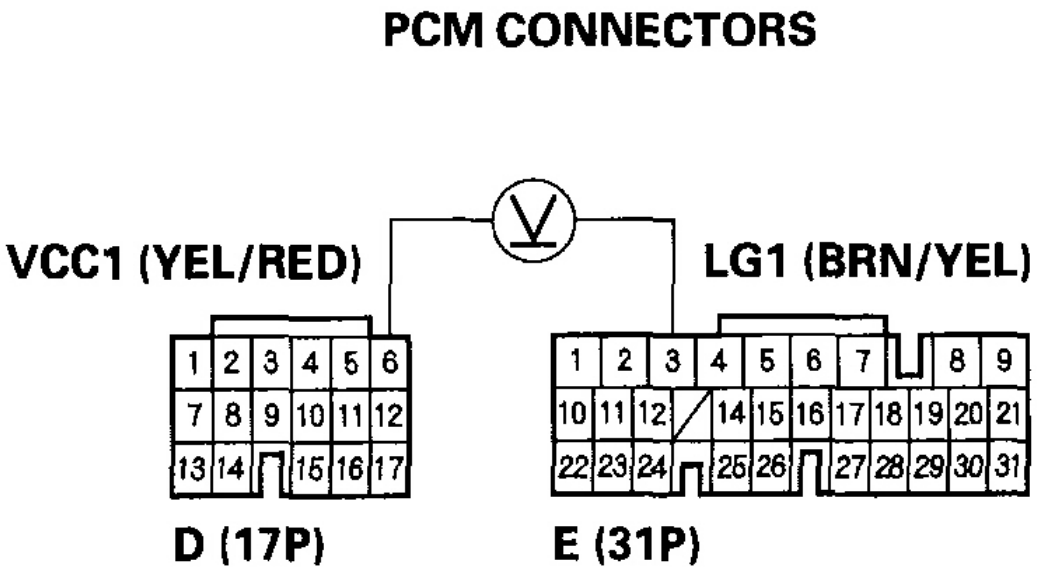


Fig. 122: Measuring Voltage Between PCM Connector Terminals D6 and E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between PCM connector terminal D6 and the output shaft (countershaft) speed sensor, then go to step 30.

NO - Go to step 26.

26. Turn the ignition switch OFF.
27. Disconnect PCM connector D (17P).
28. Check for continuity between PCM connector terminal D6 and body ground.

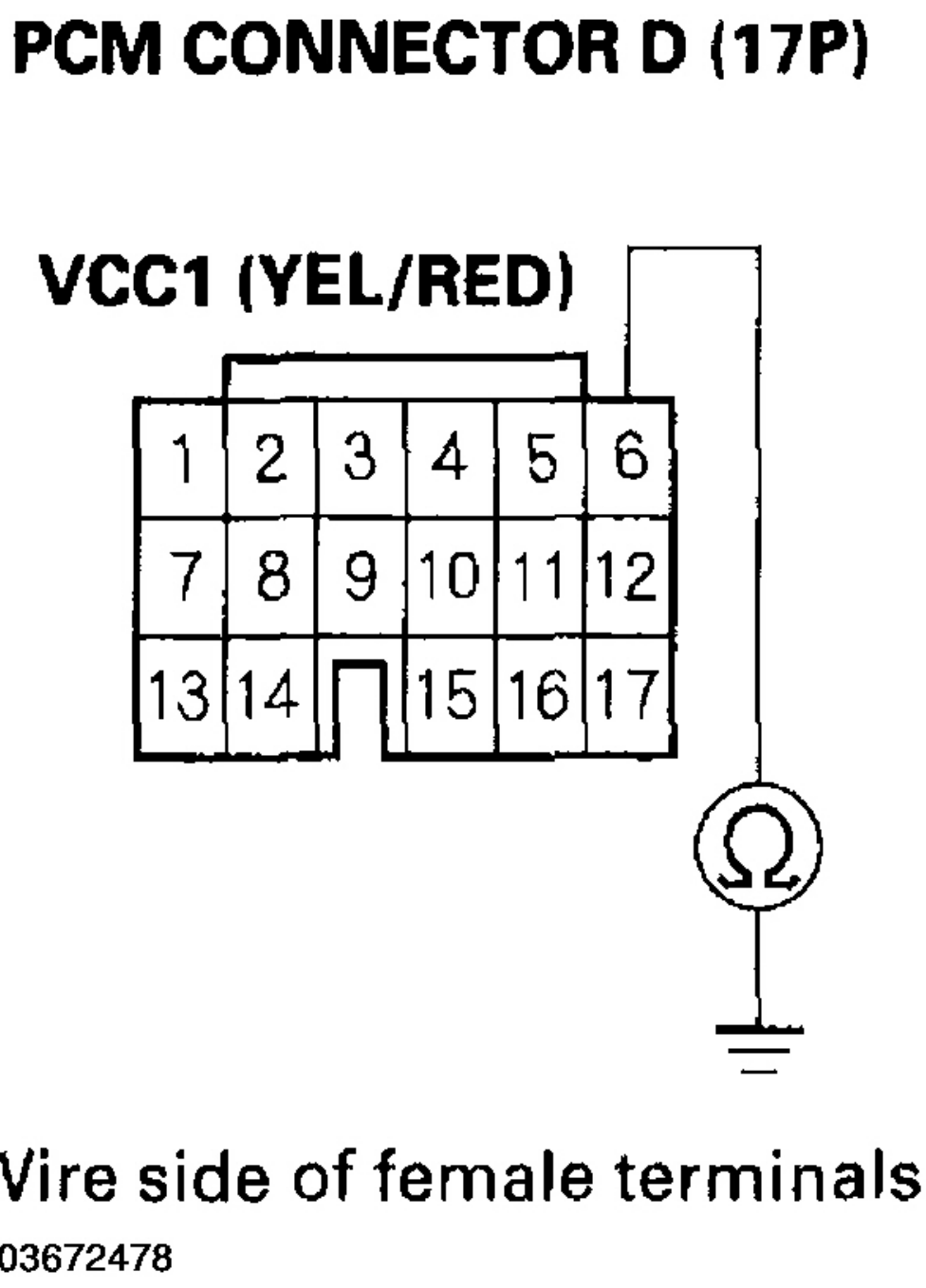


Fig. 123: Checking Continuity Between PCM Connector Terminal D6 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal D6 and the output shaft (countershaft) speed sensor, then go to step 30.

NO - Go to step 36.

29. Measure the voltage between PCM connector terminals D14 and E3.

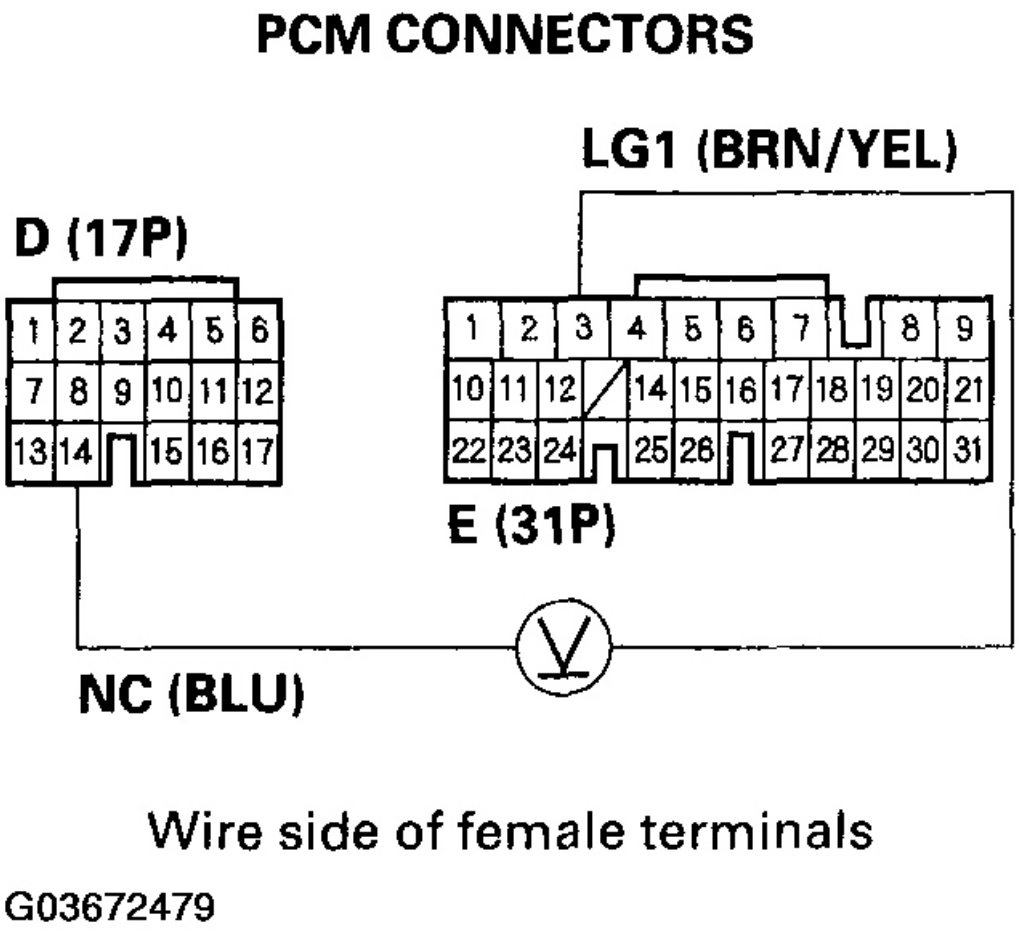


Fig. 124: Measuring Voltage Between PCM Connector Terminals D14

And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between PCM connector terminal D14 and the output shaft (countershaft) speed sensor then go to step 29.

NO - Go to step 36.

30. Reconnect all connectors.
31. Turn the ignition switch ON (II).
32. Clear the DTC with the HDS.
33. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position with engine speed 2,000 rpm or higher for more than 10 seconds. Slow down and stop the wheels.
34. Check for DTCs with the HDS.

Is DTC P0722 indicated?

YES - Check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM return to step 1.

NO - Go to step 35.

35. Monitor the OBD status for P0722 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 34, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM, then return to step 1. If the screen indicates NOT COMPLETED, go to step 33.

36. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .

37. Start the engine. Disable the TCS/VSA by pressing the TCS/VSA OFF switch, run the vehicle in the D position with engine speed 2,000 rpm or higher for more than 10 seconds. Slow down and stop the wheels.
38. Check for DTCs with the HDS.

Is DTC P0722 indicated?

YES - Check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 37. If the PCM was substituted, return to step 1.

NO - Go to step 39.

39. Monitor the OBD status for P0722 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 38, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the transmission range switch and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 37. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 37.

DTC P0723: Output Shaft (Countershaft) Speed Sensor Intermittent Failure

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the**

transmission.

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Test-drive the vehicle for several minutes in the D position through all five gears.
4. Monitor the OBD status for P0723 in the DTCs Menu with the HDS.

   Does the result indicate FAILED?

   YES - Go to step 5.

   NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the output shaft (countershaft) and PCM. If the tester indicates NOT COMPLETED, return to step 3 and recheck.
5. Turn the ignition switch OFF.
6. Disconnect the output shaft (countershaft) speed sensor connector, and inspect the connector and connector terminals to be sure they are making good contact.

   Are the connector terminals OK?

   YES - Go to step 7.

   NO - Repair the connector terminals, then go to step 7.
7. Connect the output shaft (countershaft) speed sensor connector.
8. Test-drive the vehicle for several minutes in the D position through all five gears.
9. Monitor the OBD status for P0723 in the DTCs Menu with the HDS.

   Does the result indicate FAILED?

   YES - Go to step 10.

   NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the output shaft (countershaft) and PCM. If the tester indicates NOT COMPLETED, return to step 8 and recheck.
10. Turn the ignition switch OFF.

11. Jump the SCS line with the HDS.
12. Disconnect PCM connector D (17P).
13. Disconnect the output shaft (countershaft) speed sensor connector.
14. Check for continuity between output shaft (countershaft) speed sensor connector terminal No. 2 and body ground.

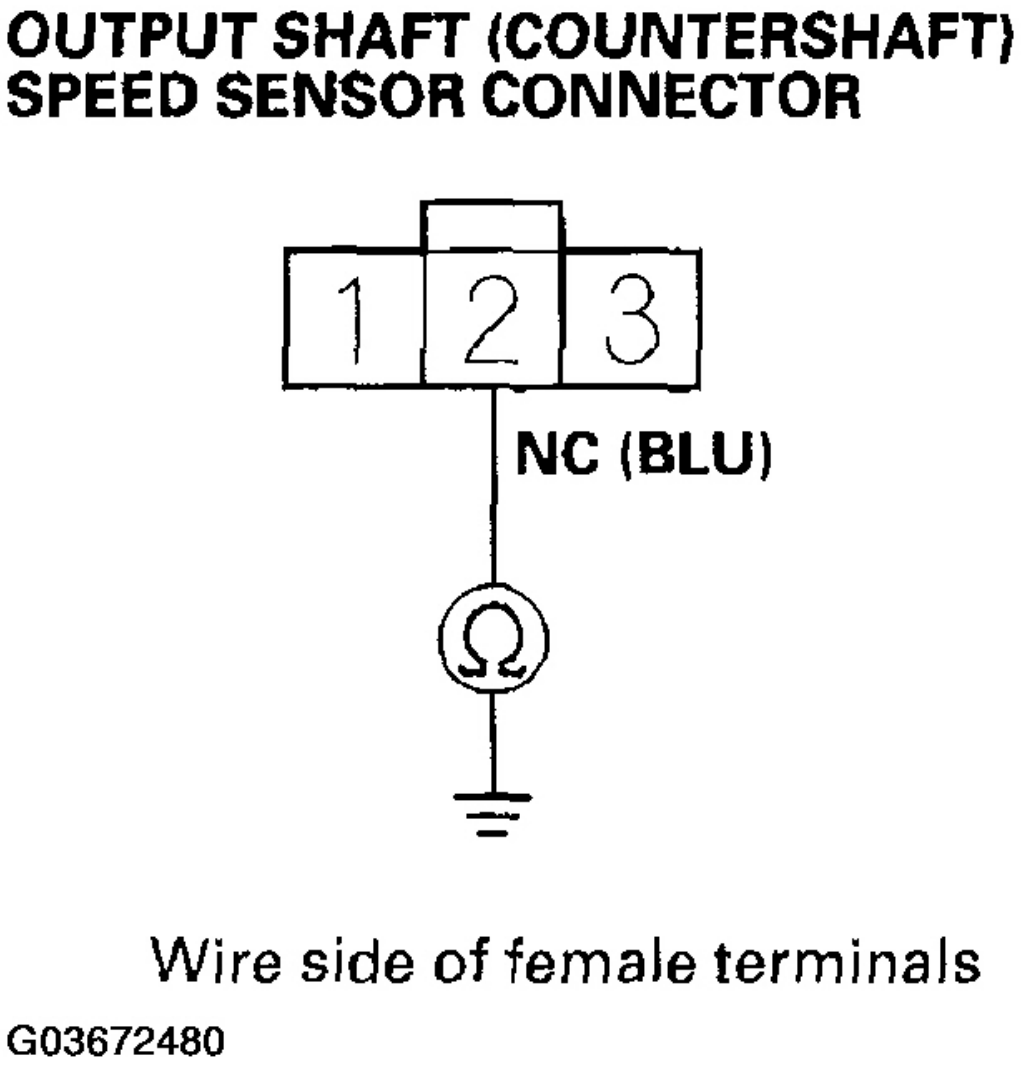


Fig. 125: Checking Continuity Between Output Shaft (Countershaft)

Speed Sensor Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal D14 and the output shaft (countershaft) speed sensor, then go to step 21.

NO - Go to step 15.

15. Connect PCM connector D (17P).
16. Turn the ignition switch ON (II).
17. Measure the voltage between output shaft (countershaft) speed sensor connector terminal No. 2 and body ground.

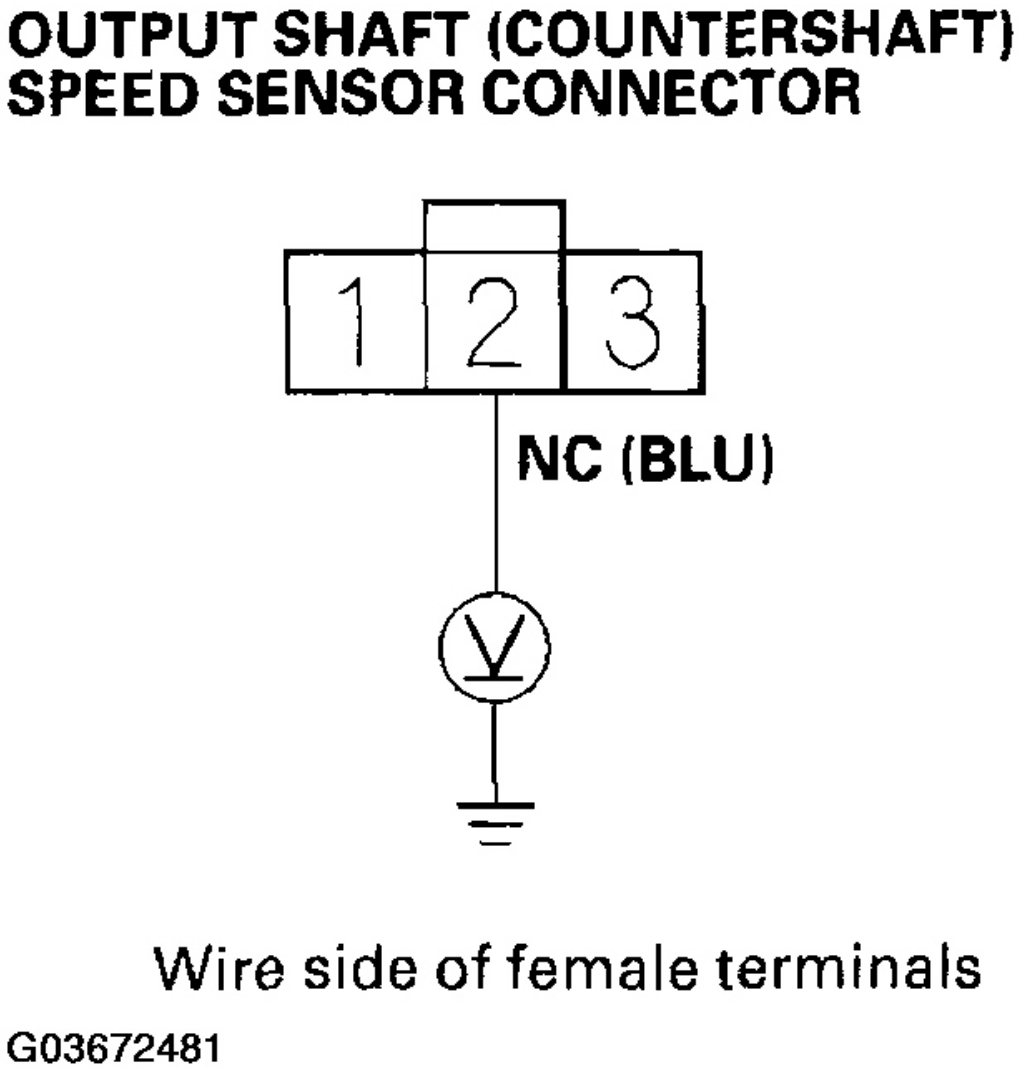


Fig. 126: Measuring Voltage Between Output Shaft (Countershaft) Speed Sensor Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Replace the output shaft (countershaft) speed sensor (see **OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR REPLACEMENT**),

then go to step 21.

NO - Go to step 18.

18. Turn the ignition switch OFF.
19. Disconnect PCM connector D (17P).
20. Check for continuity between PCM connector terminal D14 and output shaft (countershaft) speed sensor connector terminal No. 2.

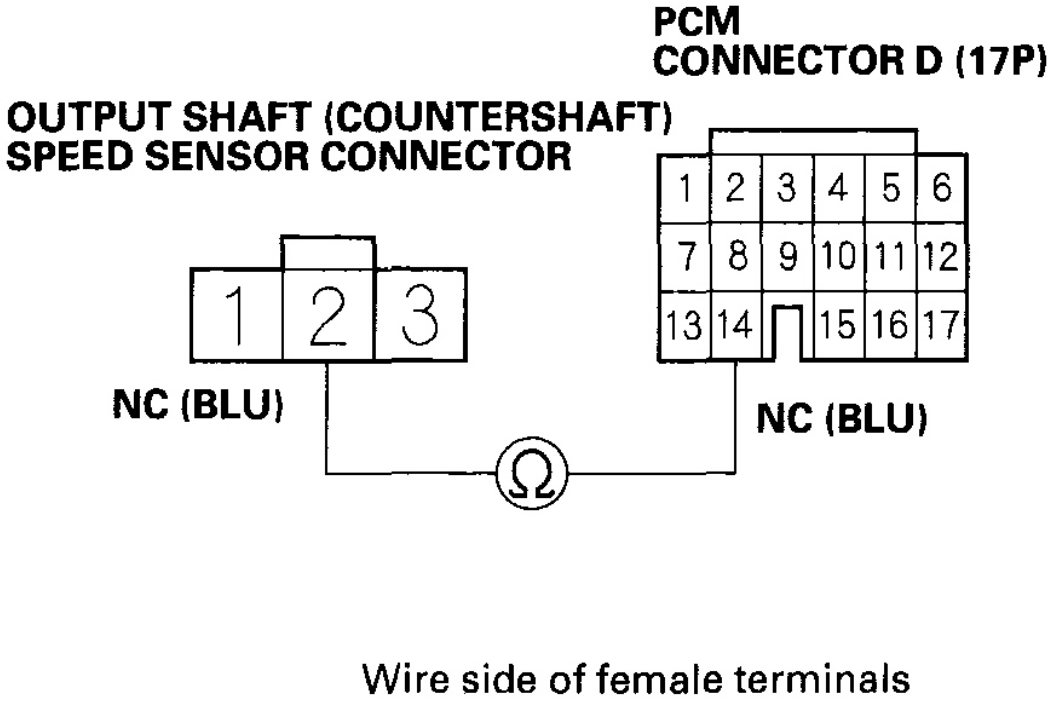


Fig. 127: Checking Continuity Between PCM Connector Terminal D14 And Output Shaft (Countershaft) Speed Sensor Connector Terminal No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Got to step 27.

NO - Repair open in the wire between PCM connector terminal D14 and

the output shaft (countershaft) speed sensor, then go to step 21.

21. Reconnect all connectors.
22. Turn the ignition switch ON (II).
23. Clear the DTC with the HDS.
24. Test-drive the vehicle for several minutes in the D position through all five gears.
25. Check for DTCs with the HDS.

Is DTC P0723 indicated?

YES - Check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM return to step 1.

NO - Go to step 26.

26. Monitor the OBD status for P0723 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 25, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM, then return to step 1. If the screen indicates NOT COMPLETED, go to step 24.

27. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
28. Test-drive the vehicle for several minutes in the D position through all five gears.
29. Check for DTCs with the HDS.

Is DTC P0723 indicated?

YES - Check for poor connections or loose terminals between the input shaft (mainshaft) speed sensor and the PCM. If the PCM was updated,

substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 28. If the PCM was substituted, return to step 1.

NO - Go to step 30.

30. Monitor the OBD status for P0723 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 29, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the transmission range switch and the PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 28. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 28.

DTC P0731: Problem in 1st Clutch and 1st Clutch Hydraulic Circuit

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

Does the strainer contain metal debris or excessive clutch material?

YES - Replace the transmission.

NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.

4. Measure the line pressure (see **PRESSURE TEST**).

   Is the line pressure within service limit?

   YES - Go to step 5.

   NO - Repair the ATF pump and regulator valve, or replace the transmission.
5. Clear the DTC with the HDS.
6. Test-drive the vehicle for several minutes under the same conditions as those indicated by the freeze data, or drive in 1st gear in the D position at speeds over 10 mph (16 km/h) for 20 seconds.
7. Turn the ignition switch OFF, then turn it ON (II) again.
8. Monitor the OBD status for P0731 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Repair 1st clutch, or replace the transmission.

   NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 6 and recheck.

DTC P0732: Problem in 2nd Clutch and 2nd Clutch Hydraulic Circuit

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

   Does the strainer contain metal debris or excessive clutch material?

YES - Replace the transmission.

NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.

4. Measure the line pressure (see **PRESSURE TEST**).

Is the line pressure within service limit?

YES - Go to step 5.

NO - Repair the ATF pump and regulator valve, or replace the transmission.

5. Measure 2nd clutch pressure (see **PRESSURE TEST**).

Is 2nd clutch pressure within service limit?

YES - Go to step 6.

NO - Shift valves A, B, and C are stuck. Repair these shift valves and hydraulic circuit, or replace the transmission.

6. Turn the ignition switch ON (II).
7. Clear the DTC with the HDS.
8. Test-drive the vehicle for several minutes under the same conditions as those indicated by the freeze data, or drive in the 2nd gear in the D position at speeds over 10 mph (16 km/h) for 20 seconds.
9. Turn the ignition switch OFF, then turn it ON (II) again.
10. Monitor the OBD status for P0732 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate FAILED?

YES - Repair the 2nd clutch, or replace the transmission.

NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 8 and recheck.

DTC P0733: Problem in 3rd Clutch and 3rd Clutch Hydraulic Circuit

NOTE: Record all freeze data and review General Troubleshooting

Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

   Does the strainer contain metal debris or excessive clutch material?

   YES - Replace the transmission.

   NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.
4. Measure the line pressure (see **PRESSURE TEST**).

   Is the line pressure within service limit?

   YES - Go to step 5.

   NO - Repair the ATF pump and regulator valve, or replace the transmission.
5. Measure 3rd clutch pressure (see **PRESSURE TEST**).

   Is 3rd clutch pressure within service limit?

   YES - Go to step 6.

   NO - Shift valves A, B, and C are stuck. Repair these shift valves and hydraulic circuit, or replace the transmission.
6. Turn the ignition switch ON (II).
7. Clear the DTC with the HDS.
8. Test-drive the vehicle for several minutes under the same conditions as those indicated by the freeze data, or drive in the 5th gear in the D position at speeds over 10 mph (16 km/h) for 20 seconds.

9. Turn the ignition switch OFF, then turn it ON (II) again.
10. Monitor the OBD status for P0733 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate FAILED?

YES - Repair the 3rd clutch, or replace the transmission.

NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 8 and recheck.

DTC P0734: Problem in 4th Clutch and 4th Clutch Hydraulic Circuit

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

Does the strainer contain metal debris or excessive clutch material?

YES - Replace the transmission.

NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.

4. Measure the line pressure (see **PRESSURE TEST**).

Is the line pressure within service limit?

YES - Go to step 5.

NO - Repair the ATF pump and regulator valve, or replace the transmission.

5. Measure 4th clutch pressure (see **PRESSURE TEST**).

Is 4th clutch pressure within service limit?

YES - Go to step 6.

NO - Shift valves A, B, C, and D are stuck. Repair these valves and hydraulic circuit, or replace the transmission.

6. Turn the ignition switch ON (II).
7. Clear the DTC with the HDS.
8. Test-drive the vehicle for several minutes under the same conditions as those indicated by the freeze data, or drive in the 4th gear in the D position at speeds over 10 mph (16 km/h) for 20 seconds.
9. Turn the ignition switch OFF, then turn it ON (II) again.
10. Monitor the OBD status for P0734 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate FAILED?

YES - Repair the 4th clutch, or replace the transmission.

NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 8 and recheck.

DTC P0735: Problem in 5th Clutch and 5th Clutch Hydraulic Circuit

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

Does the strainer contain metal debris or excessive clutch material?

YES - Replace the transmission.

NO - Replace the ATF (see step 5 in), then go to step 4.

4. Measure the line pressure (see **PRESSURE TEST**).

Is the line pressure within service limit?

YES - Go to step 5.

NO - Repair the ATF pump and regulator valve, or replace the transmission.

5. Measure 5th clutch pressure (see **PRESSURE TEST**).

Is 5th clutch pressure within service limit?

YES - Go to step 6.

NO - Shift valves A, B, and C are stuck. Repair these valves and hydraulic circuit, replace the transmission.

6. Turn the ignition switch ON (II).
7. Clear the DTC with the HDS.
8. Test-drive the vehicle for several minutes under the same conditions as those indicated by the freeze data, or drive in the 5th gear in the D position at speeds over 10 mph (16 km/h) for 20 seconds.
9. Turn the ignition switch OFF, then turn it ON (II) again.
10. Monitor the OBD status for P0735 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate FAILED?

YES - Repair the 5th clutch, or replace the transmission.

NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 8 and recheck.

DTC P0741: Torque Converter Clutch Circuit Stuck OFF

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING

INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

   Does the strainer contain metal debris or excessive clutch material?

   YES - Replace the transmission.

   NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.
4. Turn the ignition switch ON (II).
5. Clear the DTC with the HDS.
6. Choose Lockup Solenoid Test in Miscellaneous Test Menu, and check that the torque converter clutch solenoid valve operates with the HDS.

   Is a clicking sound heard?

   YES - Go to step 6.

   NO - Replace the torque converter clutch solenoid valve (see **TORQUE CONVERTER CLUTCH SOLENOID VALVE REPLACEMENT**), then go to step 13.
7. Run the engine until the engine coolant temperature reaches 176°F (80°C).
8. Choose Clutch Pressure Control (Linear) Solenoid A in Miscellaneous Test Menu, and test the A/T clutch pressure control solenoid valve A with the HDS.

   Is the system OK?

   YES - Go to step 7.

   NO - Follow instructions indicated on the HDS by the tester result. Go to step 13 if any part was replaced.

9. Test-drive the vehicle at 55 mph (88 km/h) for 2 minutes while monitoring the vehicle speed with the HDS.
10. Monitor the OBD status for P0741 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate FAILED?

YES - Repair the faulty torque converter clutch mechanism, torque converter clutch hydraulic circuit, lock-up shift valve, or lock-up control valve, or replace the transmission.

NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 9 and recheck.

11. Reconnect all connectors.
12. Turn the ignition switch ON (II).
13. Clear the DTC with the HDS.
14. Test-drive the vehicle for several minutes under the same conditions as those indicated by the freeze data.
15. Check for DTCs with the HDS.

Is DTC P0741 indicated?

YES - Go to step 6.

NO - Go to step 16.

16. Monitor the OBD status for P0741 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 15, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, go to step 6. If the screen indicates NOT COMPLETED, go to step 14.

DTC P0746: A/T Clutch Pressure Control Solenoid Valve A Stuck OFF

NOTE: Record all freeze data and review General Troubleshooting

Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

   Does the strainer contain metal debris or excessive clutch material?

   YES - Replace the transmission.

   NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.
4. Turn the ignition switch ON (II).
5. Clear the DTC with the HDS.
6. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
7. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
8. Monitor the OBD status for P0746 in the DTCs Menu with the HDS.

   Does the result indicate FAILED?

   YES - Go to step 9.

   NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 6 and recheck.
9. Clear the DTC with the HDS.
10. Choose Clutch Pressure Control (Linear) Solenoid A in Miscellaneous Test Menu, and test the A/T clutch pressure control solenoid valve A with the HDS.

    Is the result NORMAL?

YES - Intermittent failure, the system is OK at this time.

NO - Follow instructions indicated on the HDS by the test result, but the tester has not determined the cause of the failure, go to step 11. If any part was replaced, go to step 12.

11. Inspect A/T clutch pressure control solenoid valve A (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B TEST**).

    Does the A/T clutch pressure control solenoid valve A work properly?

    YES - Repair hydraulic system related with CPC valve A, or replace the transmission, then go to step 12.

    NO - Replace A/T clutch pressure control solenoid valve A (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B REPLACEMENT**), then go to step 12.

12. Turn the ignition switch ON (II).
13. Clear the DTC with the HDS.
14. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
15. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
16. Check for DTCs with the HDS.

    Is DTC P0746 indicated?

    YES - Go to step 9.

    NO - Go to step 17.

17. Monitor the OBD status for P0746 in the DTCs Menu with the HDS.

    Does the result indicate PASSED?

    YES - Troubleshooting is complete. If any other DTCs were indicated in step 16, go to the indicated DTC's troubleshooting.

    NO - If the screen indicates FAILED, go to step 9. If the screen indicates NOT COMPLETED, go to step 14.

DTC P0747: A/T Clutch Pressure Control Solenoid Valve A Stuck ON

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

   Does the strainer contain metal debris or excessive clutch material?

   YES - Replace the transmission.

   NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.
4. Turn the ignition switch ON (II).
5. Clear the DTC with the HDS.
6. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
7. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
8. Monitor the OBD status for P0747 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 9.

   NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 6 and recheck.
9. Clear the DTC with the HDS.
10. Choose Clutch Pressure Control (Linear) Solenoid A in Miscellaneous Test Menu, and test the A/T clutch pressure control solenoid valve A with the HDS.

Is the result NORMAL?

YES - Intermittent failure, the system is OK at this time.

NO - Follow instructions indicated on the HDS by the test result, but the tester has not determined the cause of the failure, go to step 11. If any part was replaced, go to step 12.

11. Inspect A/T clutch pressure control solenoid valve A (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B TEST**).

Does the A/T clutch pressure control solenoid valve A work properly?

YES - Repair hydraulic system related with CPC valve A, or replace the transmission, then go to step 12.

NO - Replace A/T clutch pressure control solenoid valve A (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B REPLACEMENT**), then go to step 12.

12. Turn the ignition switch ON (II).
13. Clear the DTC with the HDS.
14. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
15. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
16. Check for DTCs with the HDS.

Is DTC P0747 indicated?

YES - Go to step 9.

NO - Go to step 17.

17. Monitor the OBD status for P0747 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 16, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, go to step 9. If the screen indicates

NOT COMPLETED, go to step 14.

DTC P0751: Shift Solenoid Valve A Stuck OFF

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

   Does the strainer contain metal debris or excessive clutch material?

   YES - Replace the transmission.

   NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.
4. Turn the ignition switch ON (II).
5. Clear the DTC with the HDS.
6. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
7. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
8. Monitor the OBD status for P0751 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 9.

   NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 6 and recheck.
9. Clear the DTC with the HDS.

10. Choose Shift Solenoid A in Miscellaneous Test Menu, and check that the shift solenoid valve A operates with the HDS.

    Is a clicking sound heard?

    YES - Go to step 11.

    NO - Replace the shift solenoid valve A (see **SHIFT SOLENOID VALVE A REPLACEMENT**), then go to step 14.
11. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
12. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
13. Monitor the OBD status for P0751 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

    Does the result indicate FAILED?

    YES - Repair shift valves A and E, or replace the transmission, then go to step 14.

    NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 11 and recheck.
14. Turn the ignition switch ON (II).
15. Clear the DTC with the HDS.
16. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
17. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
18. Check for DTCs with the HDS.

    Is DTC P0751 indicated?

    YES - Go to step 9.

    NO - Go to step 19.
19. Monitor the OBD status for P0751 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 18, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, go to step 9. If the screen indicates NOT COMPLETED, go to step 16.

DTC P0752: Shift Solenoid Valve A Stuck ON

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

Does the strainer contain metal debris or excessive clutch material?

YES - Replace the transmission.

NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.

4. Turn the ignition switch ON (II).
5. Clear the DTC with the HDS.
6. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
7. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
8. Monitor the OBD status for P0752 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate FAILED?

YES - Go to step 9.

NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 6 and recheck.

9. Clear the DTC with the HDS.
10. Choose Shift Solenoid A in Miscellaneous Test Menu, and check that the shift solenoid valve A operates with the HDS.

Is a clicking sound heard?

YES - Go to step 11.

NO - Replace the shift solenoid valve A (see **SHIFT SOLENOID VALVE A REPLACEMENT**), then go to step 14.

11. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
12. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
13. Monitor the OBD status for P0752 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate FAILED?

YES - Repair shift valves A and E, or replace the transmission, then go to step 13.

NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 11 and recheck.

14. Turn the ignition switch ON (II).
15. Clear the DTC with the HDS.
16. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
17. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
18. Check for DTCs with the HDS.

Is DTC P0742 indicated?

YES - Go to step 9.

NO - Go to step 19.

19. Monitor the OBD status for P0752 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 18, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, go to step . If the screen indicates NOT COMPLETED, go to step 16.

DTC P0756: Shift Solenoid Valve B Stuck OFF

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

Does the strainer contain metal debris or excessive clutch material?

YES - Replace the transmission.

NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.

4. Turn the ignition switch ON (II).
5. Clear the DTC with the HDS.
6. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
7. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.

8. Monitor the OBD status for P0756 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 9.

   NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 6 and recheck.
9. Clear the DTC with the HDS.
10. Choose Shift Solenoid B in Miscellaneous Test Menu, and check that the shift solenoid valve B operates with the HDS.

    Is a clicking sound heard?

    YES - Go to step 11.

    NO - Replace the shift solenoid valve B (see **SHIFT SOLENOID VALVE B REPLACEMENT**), then go to step 14.
11. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
12. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
13. Monitor the OBD status for P0756 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

    Does the result indicate FAILED?

    YES - Repair shift valve B, or replace the transmission, then go to step 14.

    NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 11 and recheck.
14. Turn the ignition switch ON (II).
15. Clear the DTC with the HDS.
16. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
17. Retest-drive the vehicle in the D position through all five gears at speeds over

12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.

18. Check for DTCs with the HDS.

Is DTC P0756 indicated?

YES - Go to step 9.

NO - Go to step 19.

19. Monitor the OBD status for P0756 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 18, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, go to step . If the screen indicates NOT COMPLETED, go to step 16.

DTC P0757: Shift Solenoid Valve B Stuck ON

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

Does the strainer contain metal debris or excessive clutch material?

YES - Replace the transmission.

NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.

4. Turn the ignition switch ON (II).
5. Clear the DTC with the HDS.

6. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
7. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
8. Monitor the OBD status for P0757 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 9.

   NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 6 and recheck.
9. Clear the DTC with the HDS.
10. Choose Shift Solenoid B in Miscellaneous Test Menu, and check that the shift solenoid valve B operates with the HDS.

    Is a clicking sound heard?

    YES - Go to step 11.

    NO - Replace the shift solenoid valve B (see **SHIFT SOLENOID VALVE B REPLACEMENT**), then go to step 14.
11. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
12. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
13. Monitor the OBD status for P0757 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

    Does the result indicate FAILED?

    YES - Repair shift valve B, or replace the transmission, then go to step 14.

    NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 11 and recheck.
14. Turn the ignition switch ON (II).

15. Clear the DTC with the HDS.
16. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
17. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
18. Check for DTCs with the HDS.

Is DTC P0757 indicated?

YES - Go to step 9.

NO - Go to step 19.

19. Monitor the OBD status for P0757 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 18, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, go to step 9. If the screen indicates NOT COMPLETED, go to step 16.

DTC P0761: Shift Solenoid Valve C Stuck OFF

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

Does the strainer contain metal debris or excessive clutch material?

YES - Replace the transmission.

NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.

4. Turn the ignition switch ON (II).
5. Clear the DTC with the HDS.
6. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
7. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
8. Monitor the OBD status for P0761 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate FAILED?

YES - Go to step 9.

NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 6 and recheck.

9. Clear the DTC with the HDS.
10. Choose Shift Solenoid C in Miscellaneous Test Menu, and check that the shift solenoid valve C operates with the HDS.

Is a clicking sound heard?

YES - Go to step 11.

NO - Replace the shift solenoid valve C (see **SHIFT SOLENOID VALVE C REPLACEMENT**), then go to step 14.

11. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
12. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
13. Monitor the OBD status for P0761 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate FAILED?

YES - Repair shift valves C and E, or replace the transmission, then go to step 14.

NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 11 and recheck.

14. Turn the ignition switch ON (II).
15. Clear the DTC with the HDS.
16. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
17. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
18. Check for DTCs with the HDS.

Is DTC P0761 indicated?

YES - Go to step 9.

NO - Go to step 19.

19. Monitor the OBD status for P0761 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 18, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, go to step 9. If the screen indicates NOT COMPLETED, go to step 16.

DTC P0762: Shift Solenoid Valve C Stuck ON

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.

3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

   Does the strainer contain metal debris or excessive clutch material?

   YES - Replace the transmission.

   NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.
4. Turn the ignition switch ON (II).
5. Clear the DTC with the HDS.
6. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
7. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
8. Monitor the OBD status for P0762 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 9.

   NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 6 and recheck.
9. Clear the DTC with the HDS.
10. Choose Shift Solenoid C in Miscellaneous Test Menu, and check that the shift solenoid valve C operates with the HDS.

    Is a clicking sound heard?

    YES - Go to step 11.

    NO - Replace the shift solenoid valve C (see **SHIFT SOLENOID VALVE C REPLACEMENT**), then go to step 14.
11. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
12. Retest-drive the vehicle in the D position through all five gears at speeds over

12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.

13. Monitor the OBD status for P0762 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate FAILED?

YES - Repair shift valves C and E, or replace the transmission, then go to step 14.

NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 11 and recheck.

14. Turn the ignition switch ON (II).
15. Clear the DTC with the HDS.
16. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
17. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
18. Check for DTCs with the HDS.

Is DTC P074? indicated?

YES - Go to step 9.

NO - Go to step 19.

19. Monitor the OBD status for P0762 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 18, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, go to step 9. If the screen indicates NOT COMPLETED, go to step 16.

DTC P0776: A/T Clutch Pressure Control Solenoid Valve B Stuck OFF

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING

INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

   Does the strainer contain metal debris or excessive clutch material?

   YES - Replace the transmission.

   NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.
4. Turn the ignition switch ON (II).
5. Clear the DTC with the HDS.
6. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
7. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
8. Monitor the OBD status for P0776 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 9.

   NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 6 and recheck.
9. Clear the DTC with the HDS.
10. Choose Clutch Pressure Control (Linear) Solenoid B in Miscellaneous Test Menu, and test the A/T clutch pressure control solenoid valve B with the HDS.

    Is the result NORMAL?

YES - Intermittent failure, the system is OK at this time.

NO - Follow instructions indicated on the HDS by the test result, but the tester has not determined the cause of the failure, go to step 10. If any part was replaced, go to step 13.

11. Inspect A/T clutch pressure control solenoid valve B (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B TEST**).

    Does the A/T clutch pressure control solenoid valve B work properly?

    YES - Repair hydraulic system related with CPC valve B, or replace the transmission, then go to step 12.

    NO - Replace A/T clutch pressure control solenoid valve B (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B REPLACEMENT**), then go to step 12.

12. Turn the ignition switch ON (II).
13. Clear the DTC with the HDS.
14. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
15. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
16. Check for DTCs with the HDS.

    Is DTC P0776 indicated?

    YES - Go to step 9.

    NO - Go to step 17.

17. Monitor the OBD status for P0776 in the DTCs Menu with the HDS.

    Does the result indicate PASSED?

    YES - Troubleshooting is complete. If any other DTCs were indicated in step 16, go to the indicated DTC's troubleshooting.

    NO - If the screen indicates FAILED, go to step 9. If the screen indicates NOT COMPLETED, go to step 14.

DTC P0777: A/T Clutch Pressure Control Solenoid Valve B Stuck ON

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

   Does the strainer contain metal debris or excessive clutch material?

   YES - Replace the transmission.

   NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.
4. Turn the ignition switch ON (II).
5. Clear the DTC with the HDS.
6. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
7. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
8. Monitor the OBD status for P0777 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 9.

   NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 6 and recheck.
9. Clear the DTC with the HDS.
10. Choose Clutch Pressure Control (Linear) Solenoid B in Miscellaneous Test Menu, and test the A/T clutch pressure control solenoid valve B with the HDS.

Is the result NORMAL?

YES - Intermittent failure, the system is OK at this time.

NO - Follow instructions indicated on the HDS by the test result, but the tester has not determined the cause of the failure, go to step 11. If any part was replaced, go to step 12.

11. Inspect A/T clutch pressure control solenoid valve B (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B TEST**).

Does the A/T clutch pressure control solenoid valve B work properly?

YES - Repair hydraulic system related with CPC valve B, or replace the transmission, then go to step 11.

NO - Replace A/T clutch pressure control solenoid valve B (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B REPLACEMENT**), then go to step 11.

12. Turn the ignition switch ON (II).
13. Clear the DTC with the HDS.
14. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
15. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
16. Check for DTCs with the HDS.

Is DTC P074? indicated?

YES - Go to step 9.

NO - Go to step 17.

17. Monitor the OBD status for P0777 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 16, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, go to step 9. If the screen indicates

NOT COMPLETED, go to step 14.

DTC P0780: Problem in Shift Control System

NOTE: Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Make sure that the transmission is filled to the proper level, and check for fluid leaks.
3. Drain the ATF (see step 3 in **ATF Replacement**) through a strainer. Inspect the strainer for metal debris or excessive clutch material.

   Does the strainer contain metal debris or excessive clutch material?

   YES - Replace the transmission.

   NO - Replace the ATF (see step 5 in **ATF Replacement**), then go to step 4.
4. Turn the ignition switch ON (II).
5. Clear the DTC with the HDS.
6. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
7. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
8. Monitor the OBD status for P0780 in the DTCs Menu with the HDS.

   Does the result indicate FAILED?

   YES - Go to step 9.

   NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, return to step 6 and recheck.
9. Clear the DTC with the HDS.
10. Run the engine until the engine coolant temperature reaches 176°F (80°C).

11. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
12. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
13. Monitor the OBD status for P0780 in the DTCs Menu with the HDS.

Does the result indicate FAILED?

YES - Repair shift valve D, or replace the transmission, then go to step 14.

NO - Intermittent failure, the system is OK at this time. If the tester indicates NOT COMPLETED, go to step 11.

14. Turn the ignition switch ON (II).
15. Clear the DTC with the HDS.
16. Test-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
17. Retest-drive the vehicle in the D position through all five gears at speeds over 12 mph (20 km/h) for more than 20 seconds, then slow down to a stop.
18. Check for DTCs with the HDS.

Is DTC P0780 indicated?

YES - Go to step 9.

NO - Go to step 19.

19. Monitor the OBD status for P0780 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 18, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, go to step 9. If the screen indicates NOT COMPLETED, go to step 16.

DTC P0847: Short in 3rd Clutch Transmission Fluid Pressure Switch Circuit, or 3rd Clutch Transmission Fluid Pressure Switch Stuck ON

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Check the 3rd PRES SWITCH signal with the HDS in the A/T data list when not in 3rd gear.

   Is the 3rd PRES SWITCH ON?

   YES - Go to step 3.

   NO - Go to step 7.
4. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
5. Drive the vehicle in 3rd gear in the D3 position for about 5 seconds, then shift to the D position, and drive in 4th gear for about 5 seconds. Slow down and stop the wheels.
6. Monitor the OBD status for P0847 in the DTC Menu with the HDS.

   Does the result indicate FAILED?

   YES - Go to step 7.

   NO - Intermittent failure, the system is OK at this time. Check the BLU/WHT wire for an intermittent short to ground between the 3rd clutch transmission fluid pressure switch and PCM. If the tester indicates NOT COMPLETED, return to step 4 and recheck.
7. Turn the ignition switch OFF.
8. Disconnect the 3rd clutch transmission fluid pressure switch connector.
9. Turn the ignition switch ON (II).

10. Check the 3rd PRES SWITCH signal with the HDS in the A/T data list.

    Is the 3rd PRES SWITCH OFF?

    YES - Replace the 3rd clutch transmission fluid pressure switch (see **3RD CLUTCH TRANSMISSION FLUID PRESSURE SWITCH REPLACEMENT**), then go to step 15.

    NO - Go to step 11.
11. Turn the ignition switch OFF.
12. Jump the SCS line with the HDS.
13. Disconnect PCM connector C (22P).
14. Check for continuity between PCM connector terminal C5 and body ground.

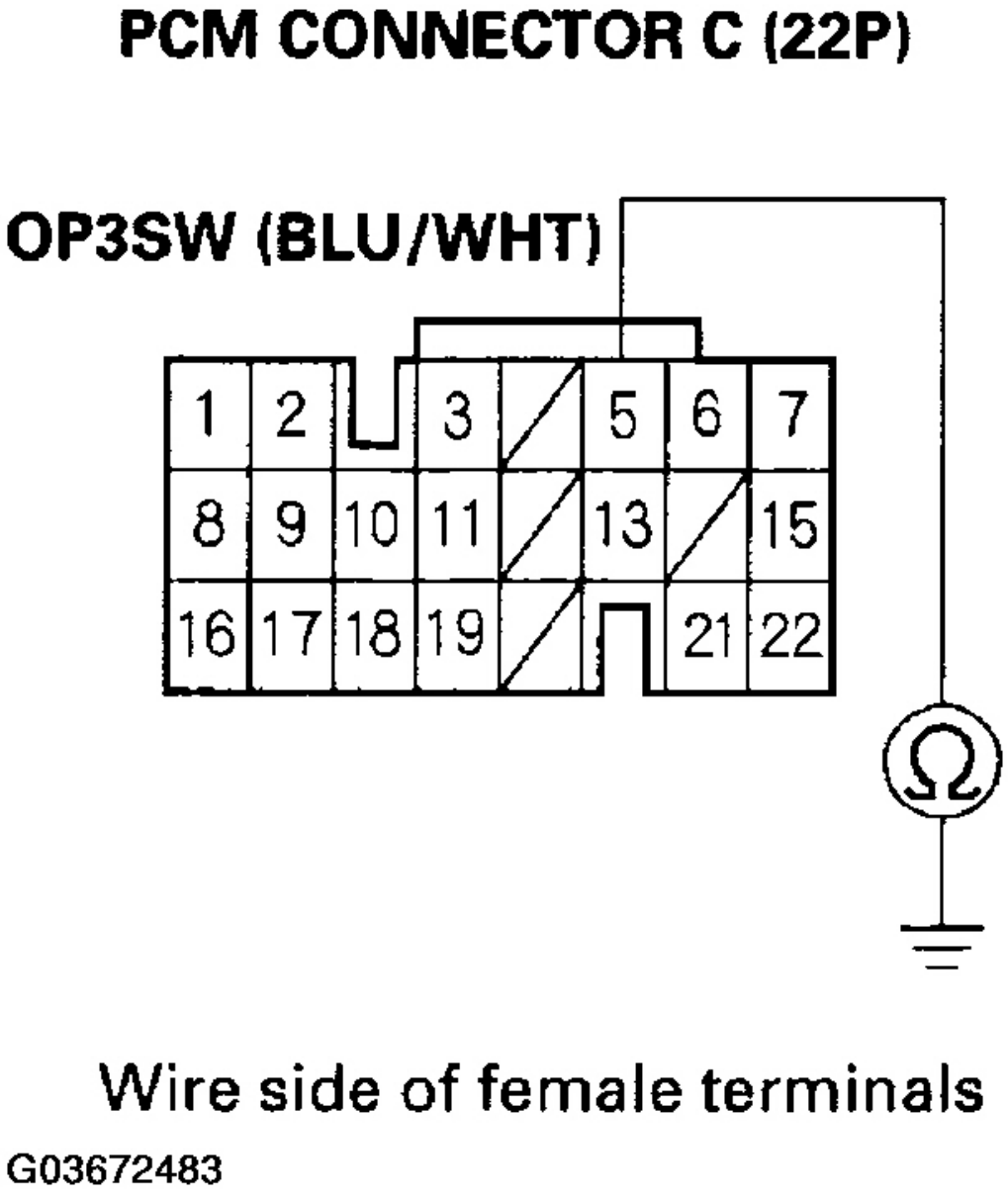


Fig. 128: Checking Continuity Between PCM Connector Terminal C5 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal C5 and the 3rd clutch transmission fluid pressure switch, then go to step 15.

NO - Go to step 22.

15. Reconnect all connectors.
16. Turn the ignition switch ON (II).
17. Clear the DTC with the HDS.
18. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
19. Drive the vehicle in 3rd gear in the D3 position for about 5 seconds, then shift to the D position, and drive in 4th gear for about 5 seconds. Slow down and stop the wheels.
20. Check for DTC's with the HDS.

Is DTC P0847 indicated?

YES - Check the BLU/WHT wire for an intermittent short to ground between the 3rd clutch transmission fluid pressure switch and PCM, then return to step 1 and recheck.

NO - Go to step 21.

21. Monitor the OBD status for P0847 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete.

NO - Return to step 1 and recheck.

22. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
23. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
24. Drive the vehicle in 3rd gear in the D3 position for about 5 seconds, then shift to the D position, and drive in 4th gear for about 5 seconds. Slow down and

stop the wheels.

25. Check for DTCs with the HDS.

Is DTC P0847 indicated?

YES - Check the BLU/WHT wire for an intermittent short to ground between the 3rd clutch transmission fluid pressure switch and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 23. If the PCM was substituted, return to step 1.

NO - Go to step 26.

26. Monitor the OBD status for P0723 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 25, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check the BLU/WHT wire for an intermittent short to ground between the 3rd clutch transmission fluid pressure switch and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 23. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 23.

DTC P0848: Open in 3rd Clutch Transmission Fluid Pressure Switch Circuit, or 3rd Clutch Transmission Fluid Pressure Switch Stuck OFF

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
4. Drive the vehicle in the 3rd gear in the D3 position, and verify that the SHIFT MAP NUMBER indicates 3rd with the HDS in the A/T data list.
5. Check the 3rd PRES SWITCH signal with the HDS in the A/T data list.

   Is the 3rd PRES SWITCH ON?

   YES - Go to step 6.

   NO - Go to step 8.
6. Drive the vehicle in 3rd gear in the D3 position for about 5 seconds, then shift to D position, and drive in 4th gear for about 5 seconds. Slow down and stop the wheels.
7. Monitor the OBD status for P0848 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 8.

   NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the 3rd clutch transmission fluid pressure switch and PCM. If the tester indicates NOT COMPLETED, return to step 6 and recheck.
8. Turn the ignition switch OFF.
9. Disconnect the 3rd clutch transmission fluid pressure switch connector.
10. Turn the ignition switch ON (II).
11. Measure the voltage between the 3rd clutch transmission fluid pressure switch connector terminal and body ground.

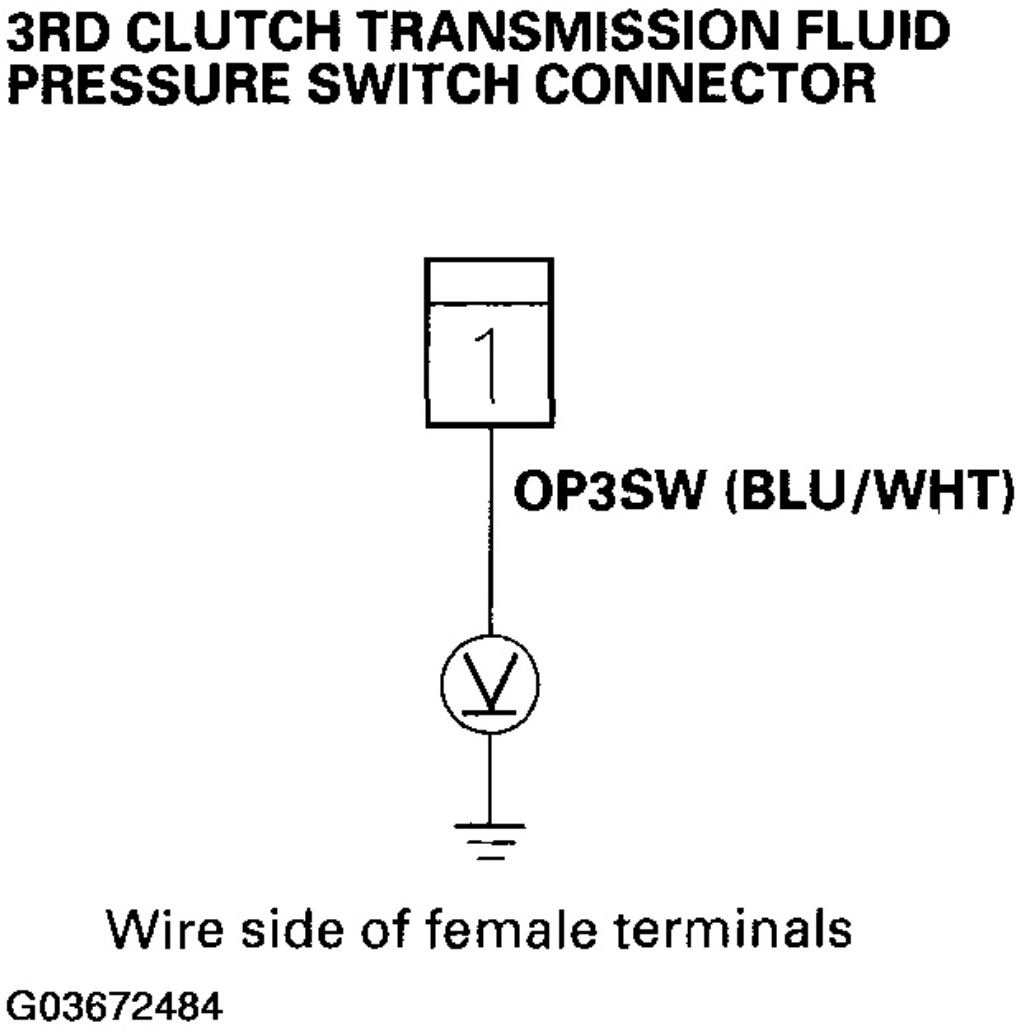


Fig. 129: Measuring Voltage Between 3rd Clutch Transmission Fluid Pressure Switch Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Replace the 3rd clutch transmission fluid pressure switch (see **3RD CLUTCH TRANSMISSION FLUID PRESSURE SWITCH REPLACEMENT**), then go to step 13.

NO - Go to step 12.

12. Measure the voltage between PCM connector terminal C5 and body ground.

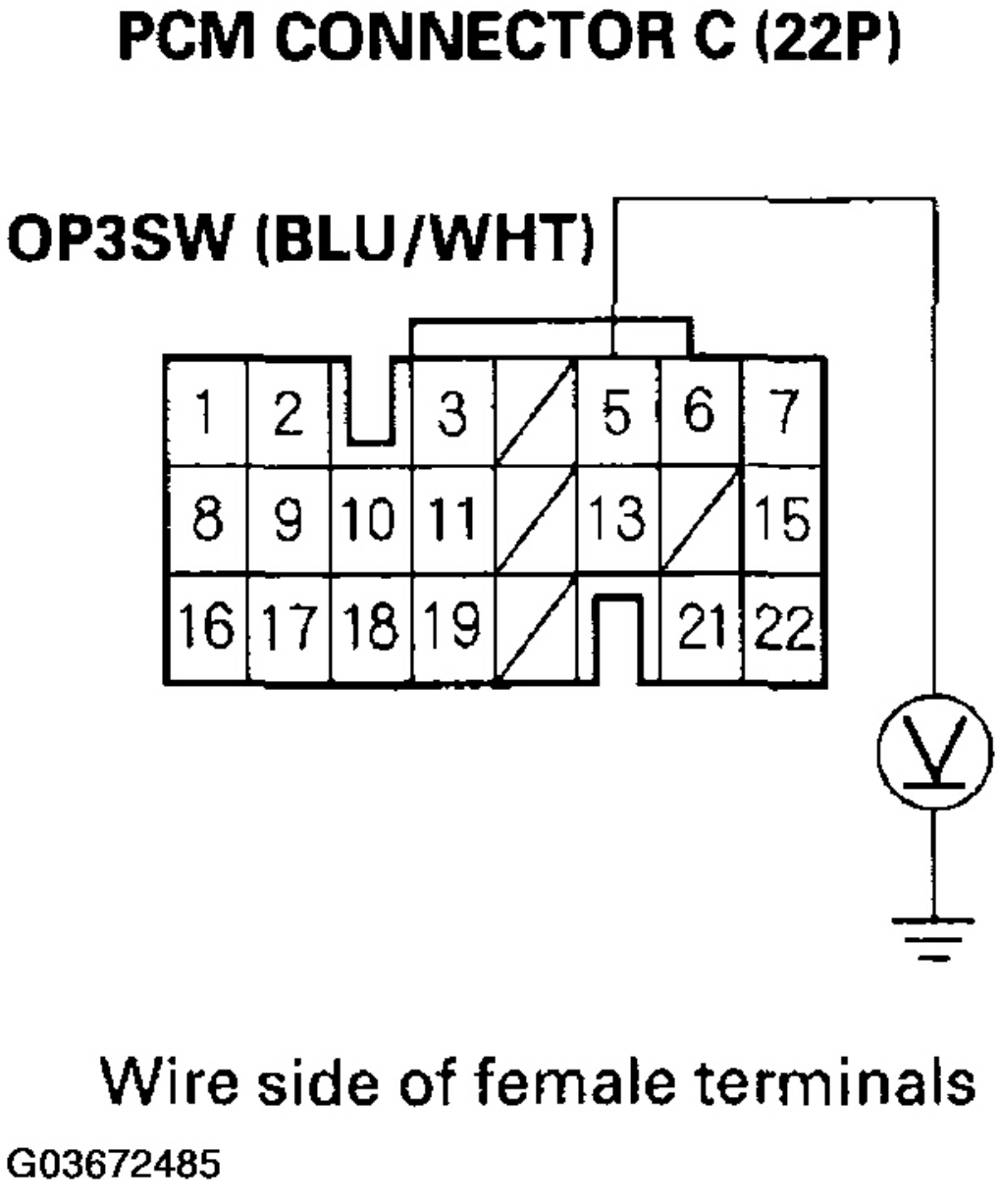


Fig. 130: Measuring Voltage Between PCM Connector Terminal C5 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between PCM connector terminal C5 and the 3rd clutch transmission fluid pressure switch, then go to step 13.

NO - Go to step 20.

13. Reconnect the connectors.
14. Turn the ignition switch ON (II).
15. Clear the DTC with the HDS.
16. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
17. Drive the vehicle in 3rd gear in the D3 position for about 5 seconds, then shift to the D position, and drive in 4th gear for about 5 seconds. Slow down and stop the wheels.
18. Check for DTC's with the HDS.

Is DTC P0848 indicated?

YES - Check for poor connections or loose terminals between the 3rd clutch transmission fluid pressure switch and PCM, then return to step 1 and recheck.

NO - Go to step 19.

19. Monitor the OBD status for P0848 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 18, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the 3rd clutch transmission fluid pressure switch and the PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 16.

20. Update the PCM if it does not have the latest software, or substitute a known-

good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .

21. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
22. Drive the vehicle in 3rd gear in the D3 position for about 5 seconds, then shift to the D position, and drive in 4th gear for about 5 seconds. Slow down and stop the wheels.
23. Check for DTCs with the HDS.

Is DTC P0848 indicated?

YES - Check for poor connections or loose terminals between the 3rd clutch transmission fluid pressure switch and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 21. If the PCM was substituted, return to step 1.

NO - Go to step 24.

24. Monitor the OBD status for P0848 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 25, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between the 3rd clutch transmission fluid pressure switch and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 21. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 21.

DTC P0872: Short in 4th Clutch Transmission Fluid Pressure Switch Circuit, or 4th Clutch Transmission Fluid Pressure Switch Stuck ON

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL**

TROUBLESHOOTING INFORMATION before you troubleshoot.

- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Check the 4th PRES SWITCH signal with the HDS in the A/T data list when not in 4th gear.

   Is the 4th PRES SWITCH ON?

   YES - Go to step 4.

   NO - Go to step 7.
4. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
5. Drive the vehicle in 4th gear in the D position for about 5 seconds. Slow down and stop the wheels.
6. Monitor the OBD status for P0872 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 7.

   NO - Intermittent failure, the system is OK at this time. Check the BLU/YEL wire for an intermittent short to ground between the 4th clutch transmission fluid pressure switch and PCM. If the tester indicates NOT COMPLETED, return to step 4 and recheck.
7. Turn the ignition switch OFF.
8. Disconnect the 4th clutch transmission fluid pressure switch connector.
9. Turn the ignition switch ON (II).
10. Check the 4th PRES SWITCH signal with the HDS in the A/T data list.

Is the 4th PRES SWITCH OFF?

YES - Replace the 4th clutch transmission fluid pressure switch (see **4TH CLUTCH TRANSMISSION FLUID PRESSURE SWITCH REPLACEMENT**), then go to step 15.

NO - Go to step 11.

11. Turn the ignition switch OFF.
12. Jump the SCS line with the HDS.
13. Disconnect PCM connector C (22P).
14. Check for continuity between PCM connector terminal C13 and body ground.

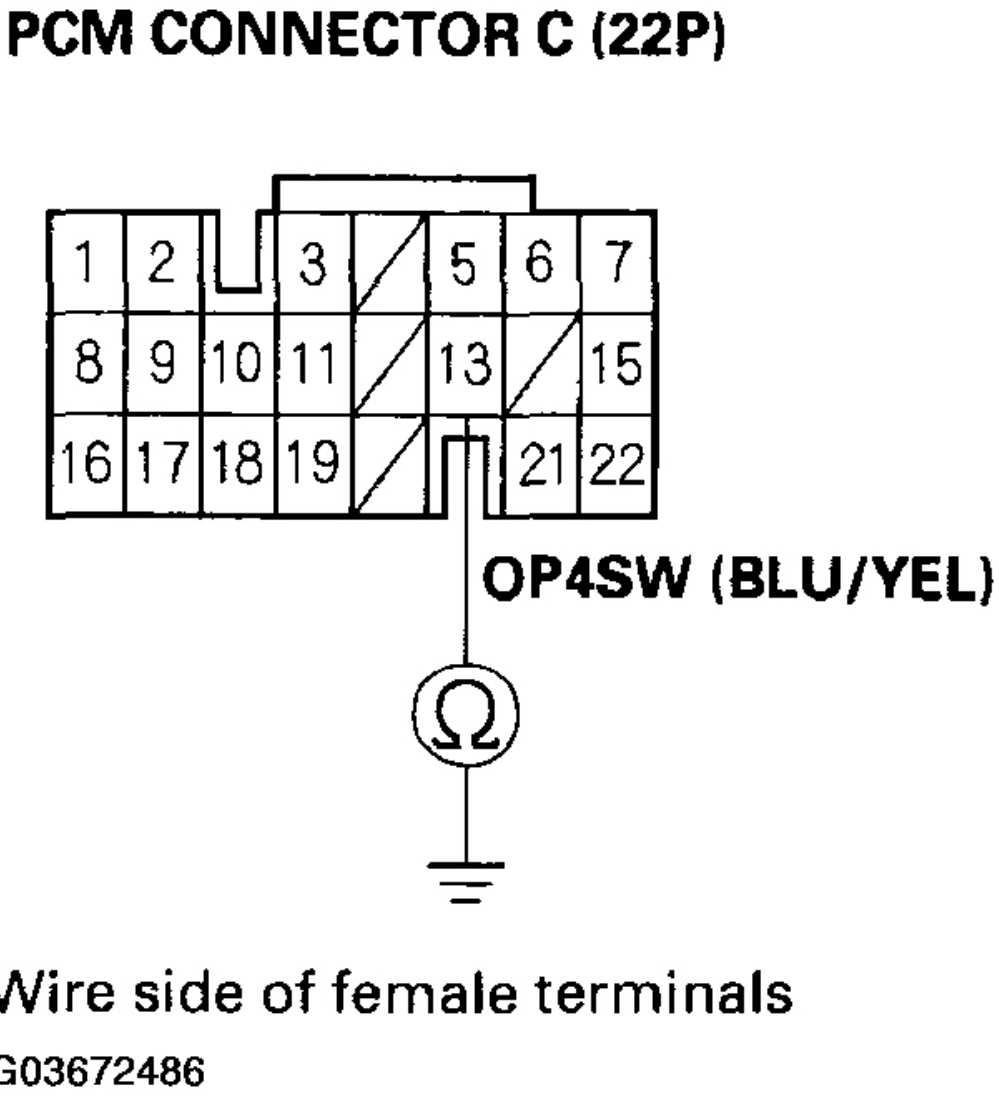


Fig. 131: Checking Continuity Between PCM Connector Terminal C13 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal C13 and the 4th clutch transmission fluid pressure switch, then go

to step 15.

NO - Go to step 22.

15. Reconnect all connectors.
16. Turn the ignition switch ON (II).
17. Clear the DTC with the HDS.
18. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
19. Drive the vehicle in 4th gear in the D position for about 5 seconds. Slow down and stop the wheels.
20. Check for DTC's with the HDS.

Is DTC P0872 indicated?

YES - Check the BLU/YEL wire for an intermittent short to ground between the 4th clutch transmission fluid pressure switch and PCM, then return to step 1 and recheck.

NO - Go to step 21.

21. Monitor the OBD status for P0872 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 20, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check the BLU/YEL wire for an intermittent short to ground between the 4th clutch transmission fluid pressure switch and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 18.

22. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
23. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
24. Drive the vehicle in 3rd gear in the D3 position for about 5 seconds, then shift to the D position, and drive in 4th gear for about 5 seconds. Slow down and

stop the wheels.

25. Check for DTCs with the HDS.

Is DTC P0872 indicated?

YES - Check the BLU/YEL wire for an intermittent short to ground between the 4th clutch transmission fluid pressure switch and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 23. If the PCM was substituted, return to step 1.

NO - Go to step 26.

26. Monitor the OBD status for P0872 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 25, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check the BLU/YEL wire for an intermittent short to ground between the 4th clutch transmission fluid pressure switch and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 23. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 23.

DTC P0873: Open in 4th Clutch Transmission Fluid Pressure Switch Circuit, or 4th Clutch Transmission Fluid Pressure Switch Stuck OFF

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION) before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
4. Drive the vehicle in 4th gear in the D position, and verify that the SHIFT MAP NUMBER indicates 4th with the HDS in the A/T data list.
5. Check the 4th PRES SWITCH signal with the HDS in the A/T data list.

   Is the 4th PRES SWITCH ON?

   YES - Go to step 6.

   NO - Go to step 8.
6. Drive the vehicle in 4th gear in the D position for about 5 seconds, then slow down and stop the wheels.
7. Monitor the OBD status for P0873 in the DTCs Menu with the HDS.

   Does the result indicate FAILED?

   YES - Go to step 8.

   NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the 4th clutch transmission fluid pressure switch and PCM. If the tester indicates NOT COMPLETED, return to step 6 and recheck.
8. Turn the ignition switch OFF.
9. Disconnect the 4th clutch transmission fluid pressure switch connector.
10. Turn the ignition switch ON (II).
11. Measure the voltage between the 4th clutch transmission fluid pressure switch connector terminal and body ground.

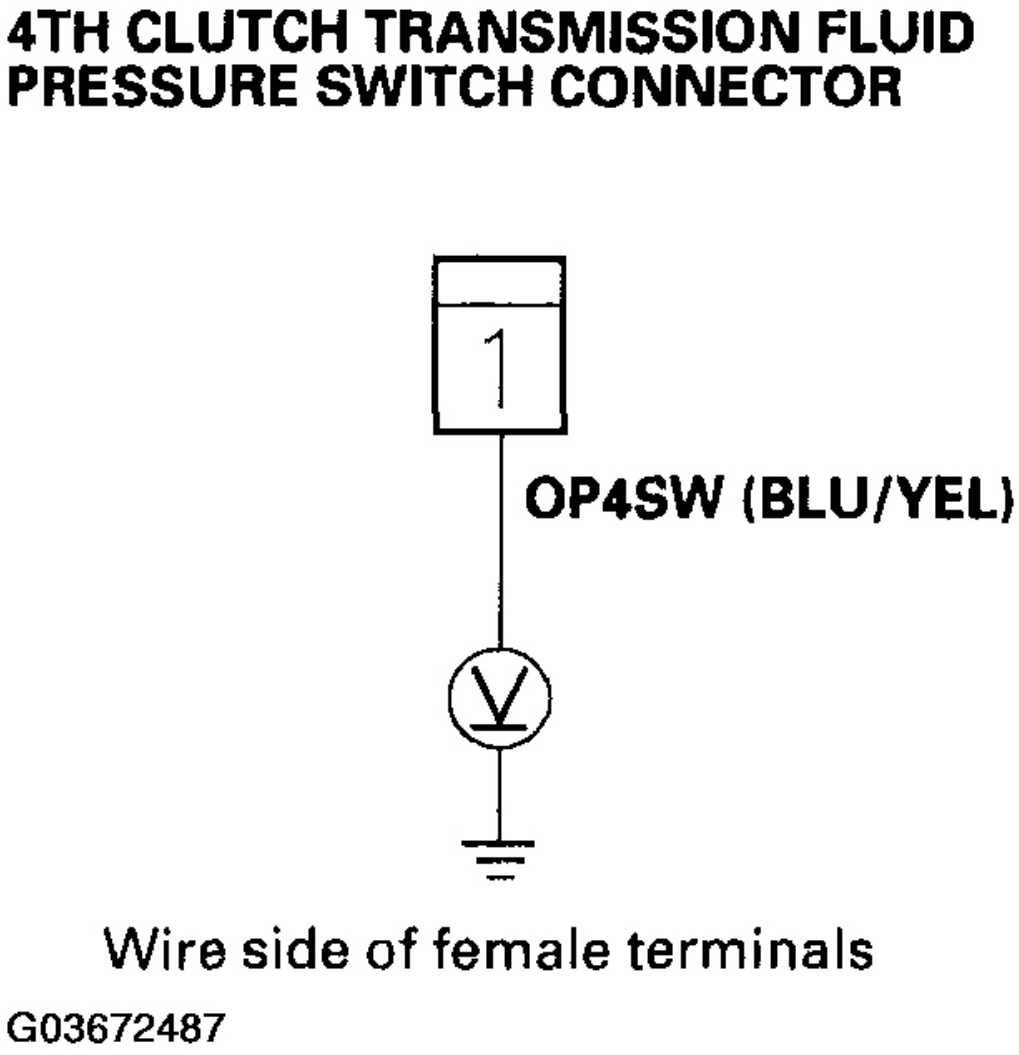


Fig. 132: Measuring Voltage Between 4th Clutch Transmission Fluid Pressure Switch Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES -Replace the 4th clutch transmission fluid pressure switch (see **4TH CLUTCH TRANSMISSION FLUID PRESSURE SWITCH REPLACEMENT**), then go to step 13.

NO - Go to step 12.

12. Measure the voltage between PCM connector terminal C13 and body ground.

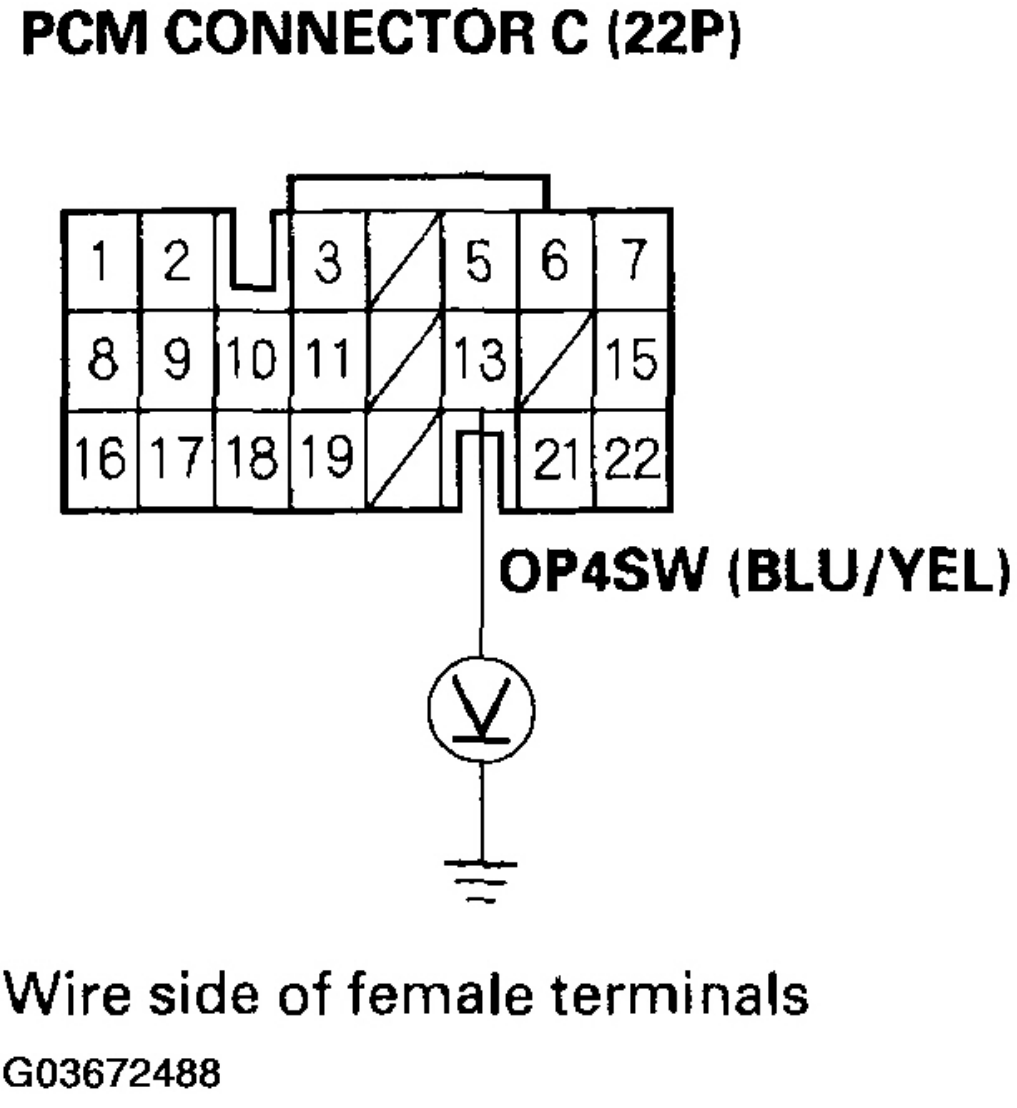


Fig. 133: Measuring Voltage Between PCM Connector Terminals C13 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between PCM connector terminal C13 and the 4th clutch transmission fluid pressure switch, then go to step 13.

NO - Go to step 20.

13. Reconnect all connectors.
14. Turn the ignition switch ON (II).
15. Clear the DTC with the HDS.
16. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
17. Drive the vehicle in 4th gear in the D position for about 5 seconds. Slow down and stop the wheels.
18. Check for DTC's with the HDS.

Is DTC P0873 indicated?

YES - Check for poor connections or loose terminals at the 4th clutch transmission fluid pressure switch and PCM, then return to step 1 and recheck.

NO - Go to step 19.

19. Monitor the OBD status for P0873 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 18, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals at the 4th clutch transmission fluid pressure switch and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 16.

20. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
21. Start the engine, and warm it up to normal operating temperature (the radiator

fan comes on).

22. Drive the vehicle in 4th gear in the D position for about 5 seconds. Slow down and stop the wheels.
23. Check for DTCs with the HDS.

Is DTC P0873 indicated?

YES - Check for poor connections or loose terminals at the 4th clutch transmission fluid pressure switch and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 21. If the PCM was substituted, return to step 1.

NO - Go to step 24.

24. Monitor the OBD status for P0873 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 23, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals at the 4th clutch transmission fluid pressure switch and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 21. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 21.

DTC P0962: Problem in A/T Clutch Pressure Control Solenoid Valve A Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the**

transmission.

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Check that DTC P0962 recurs.

Is DTC P0962 indicated?

YES - Go to step 7.

NO - Go to step 4.

4. Choose Clutch Pressure Control Solenoid Control in Miscellaneous Test Menu, and test the A/T clutch pressure control solenoid valve A with the HDS.

Is the result NORMAL?

YES - Go to step 5

NO - Go to step 7.

5. Command the A/T clutch pressure control solenoid valve A at 1.0A in Clutch Pressure Control Solenoid Control menu.
6. Monitor the OBD status for P0962 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate FAILED?

YES - Go to step 7.

NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the A/T clutch pressure control solenoid valve A and PCM. If the tester indicates NOT COMPLETED, return to step 4 and recheck.

7. Turn the ignition switch OFF.
8. Disconnect the A/T clutch pressure control solenoid valve A connector.
9. Measure A/T clutch pressure control solenoid valve A resistance at the solenoid connector.

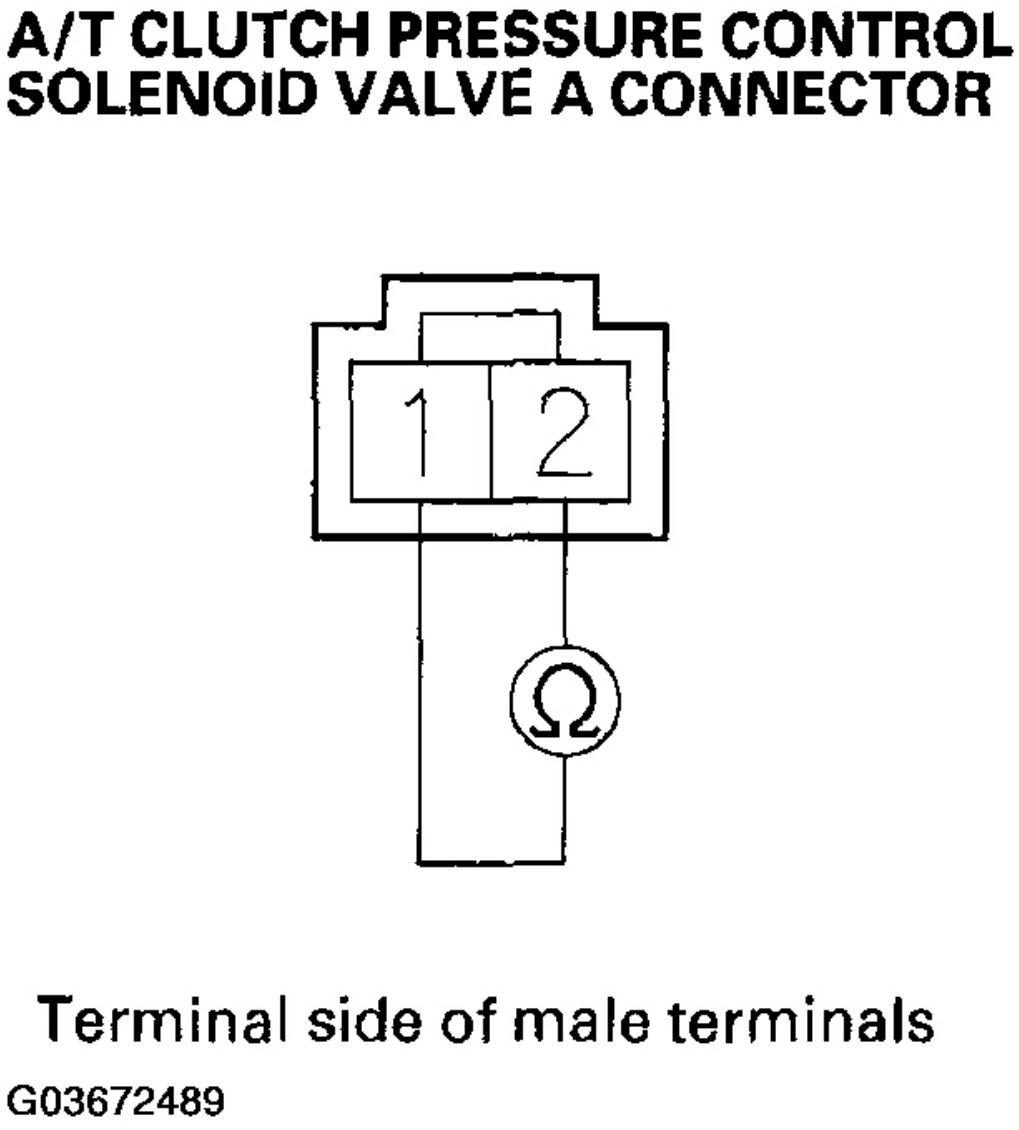


Fig. 134: Measuring A/T Clutch Pressure Control Solenoid Valve A Resistance At Solenoid Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 3 - 10 ohms?

YES - Go to step 10.

NO - Replace A/T clutch pressure control solenoid valve A (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B REPLACEMENT**), then go to step 14.

10. Check for continuity between A/T clutch pressure control solenoid valve A connector terminal No.2 and body ground.

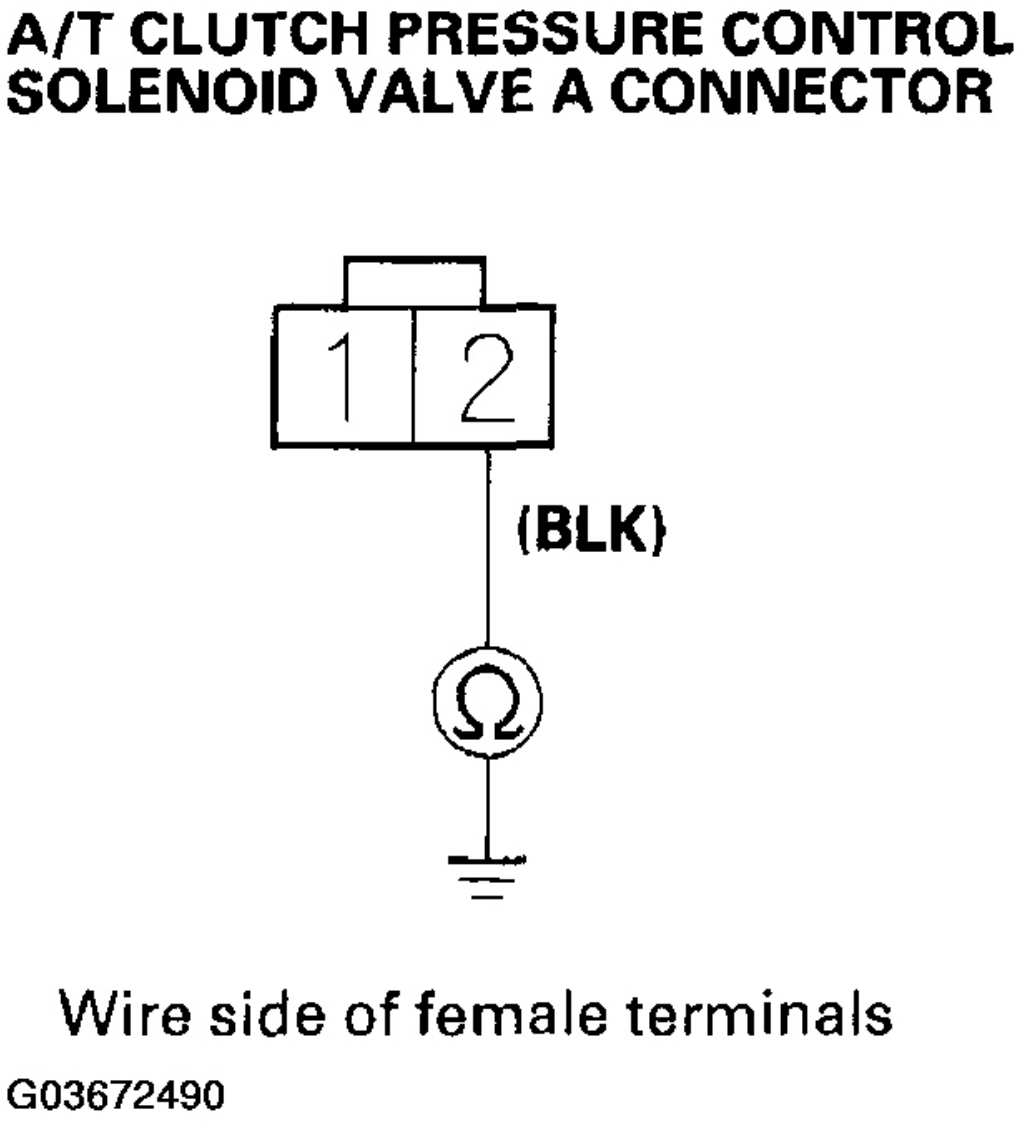


Fig. 135: Checking Continuity Between PCM Connector Terminal A20

And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 11.

NO - Repair open in the wire between the A/T clutch pressure control solenoid valve A and ground (G151), or repair poor ground (G151), or repair poor ground (G151), then go to step 14.

11. Turn the ignition switch ON (II).
12. Measure the voltage between A/T clutch pressure control solenoid valve A connector terminals No. 1 and No. 2 as the ignition switch is turned ON.

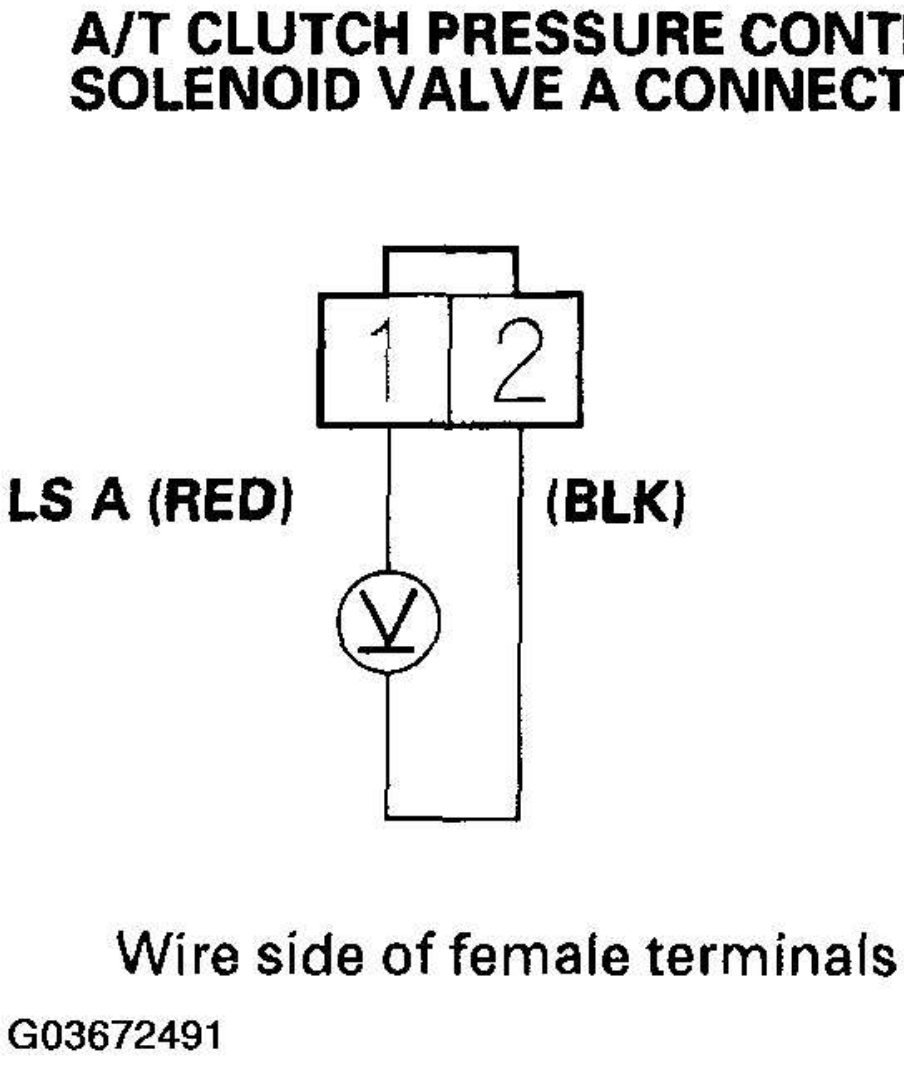


Fig. 136: Measuring Voltage Between A/T Clutch Pressure Control Solenoid Valve A Connector Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 13.

NO - Repair open or short in the wire between PCM connector terminal

C7 and A/T clutch pressure control solenoid valve A, then go to step 14.

13. Measure the voltage between PCM connector terminals E10 and E3.

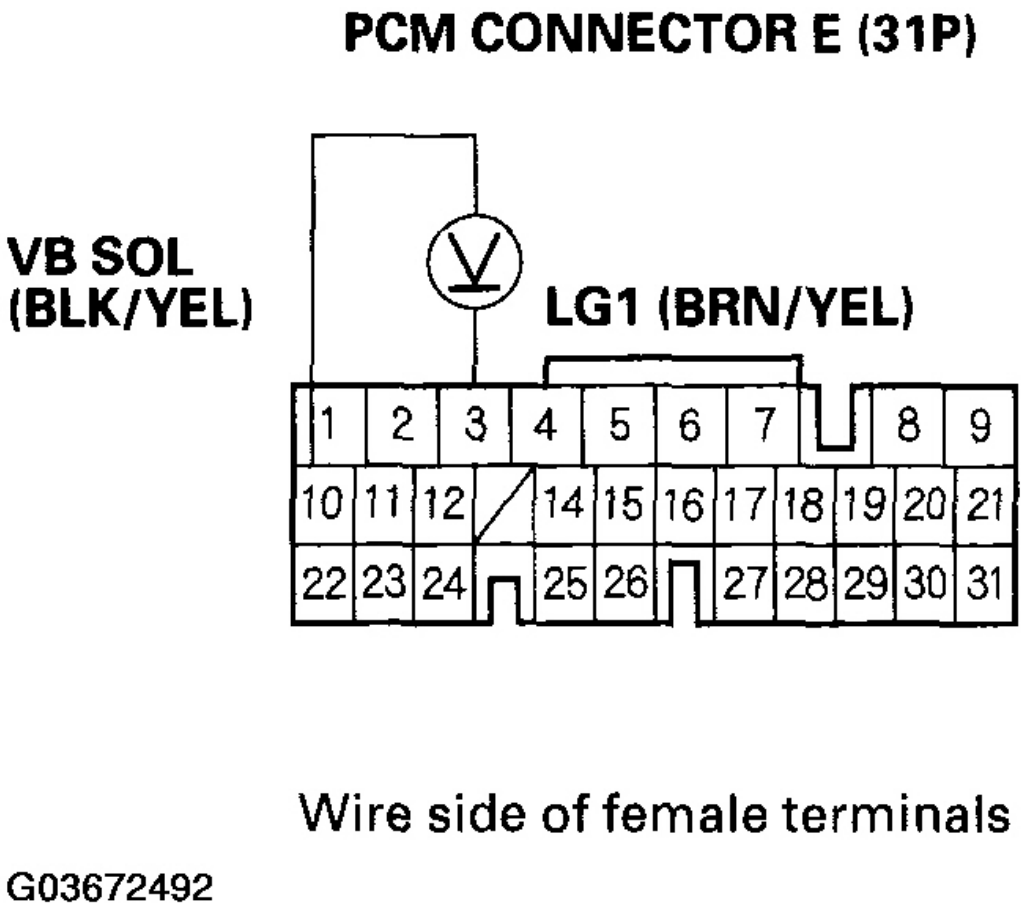


Fig. 137: Measuring Voltage Between PCM Connector Terminals E10 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Check for loose or poor connections at PCM connector terminal E10. If the connection is OK, update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING**

AND SUBSTITUTION FOR TESTING , then recheck. If the symptom/indication goes away with a known-good PCM, replace the original PCM.

NO - Check for blown No. 18 fuse in the under-dash fuse/relay box. If the fuse is OK, repair open in the wire between PCM connector terminal E10 and the under-dash fuse/relay box, then go to step 13.

14. Reconnect all connectors.
15. Turn the ignition switch ON (II).
16. Clear the DTC with the HDS.
17. Test-drive the vehicle for several minutes in the D position through all five gears.
18. Check for DTC's with the HDS.

Is DTC P0962 indicated?

YES - Check for poor connections or loose terminals between A/T clutch pressure control solenoid valve A and PCM, then return to step 1 and recheck.

NO - Go to step 19.

19. Monitor the OBD status for P0962 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 18, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between A/T clutch pressure control solenoid valve A and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 17.

20. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
21. Test-drive the vehicle for several minutes in the D position through all five gears.

22. Check for DTCs with the HDS.

    Is DTC P0962 indicated?

    YES - Check for poor connections or loose terminals between A/T clutch pressure control solenoid valve A and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 21. If the PCM was substituted, return to step 1.

    NO - Go to step 23.

23. Monitor the OBD status for P0962 in the DTCs Menu with the HDS.

    Does the result indicate PASSED?

    YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 22, go to the indicated DTC's troubleshooting.

    NO - If screen indicates FAILED, check for poor connections or loose terminals between A/T clutch pressure control solenoid valve A and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 21. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 21.

DTC P0963: Problem in A/T Clutch Pressure Control Solenoid Valve A

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.

3. Check that DTC P0963 recurs.

   Is DTC P0963 indicated?

   YES - Go to step 7.

   NO - Go to step 4.

4. Choose Clutch Pressure Control Solenoid Control in Miscellaneous Test Menu, and test the A/T clutch pressure control solenoid valve A with the HDS.

   Is the result NORMAL?

   YES - Go to step 5

   NO - Go to step 7.

5. Command the A/T clutch pressure control solenoid valve A at 0.2 A in Clutch Pressure Control Solenoid Control menu.
6. Monitor the OBD status for P0963 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 7.

   NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the A/T clutch pressure control solenoid valve A and PCM. If the tester indicates NOT COMPLETED, return to step 4 and recheck.

7. Turn the ignition switch OFF.
8. Disconnect the A/T clutch pressure control solenoid valve A connector.
9. Measure A/T clutch pressure control solenoid valve A resistance at the solenoid connector.

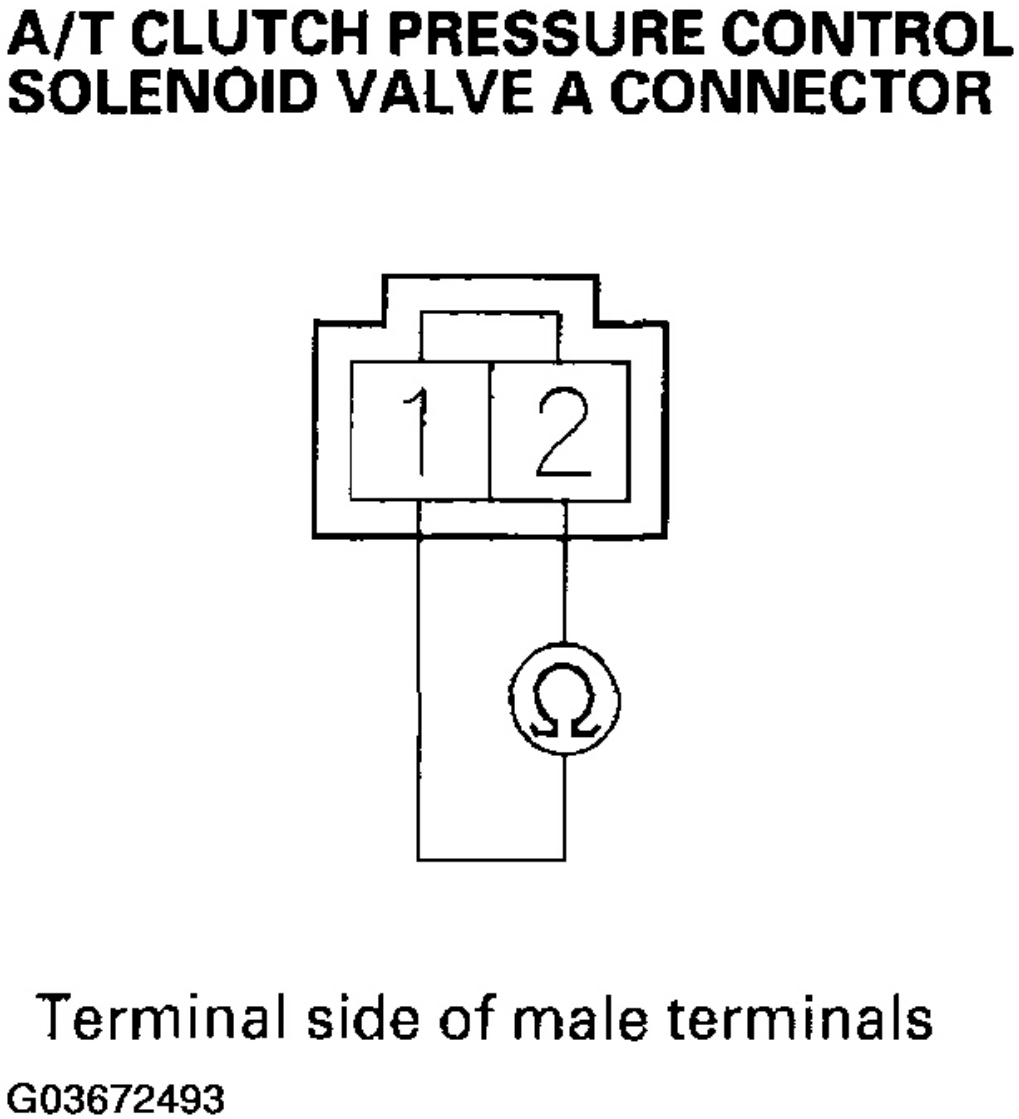


Fig. 138: Measuring A/T Clutch Pressure Control Solenoid Valve A Resistance At Solenoid Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 3 - 10 ohms?

YES - Go to step 10.

NO - Replace A/T clutch pressure control solenoid valve A (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B REPLACEMENT**), then go to step 11.

10. Check for continuity between A/T clutch pressure control solenoid valve A connector terminal No. 2 and body ground.

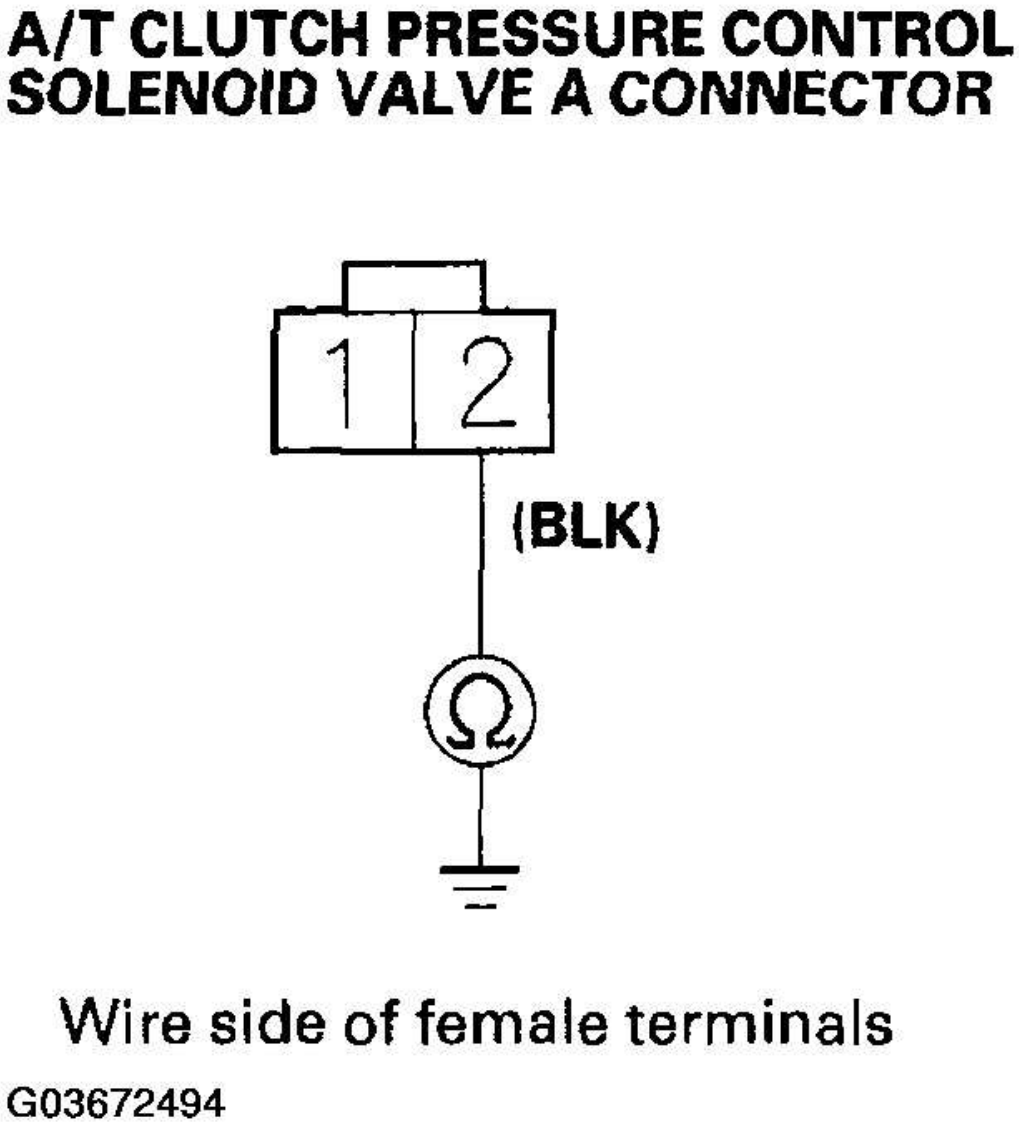


Fig. 139: Checking Continuity Between A/T Clutch Pressure Control

Solenoid Valve A Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 17.

NO - Repair open in the wire between the A/T clutch pressure control solenoid valve A and ground (G151), or repair poor ground (G151), then go to step 11.

11. Reconnect all connectors.
12. Turn the ignition switch ON (II).
13. Clear the DTC with the HDS.
14. Test-drive the vehicle for several minutes in the D position through all five gears.
15. Check for DTC's with the HDS.

Is DTC P0963 indicated?

YES - Check for poor connections or loose terminals between A/T clutch pressure control solenoid valve A and PCM, then return to step 1 and recheck.

NO - Go to step 16.

16. Monitor the OBD status for P0963 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 15, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between A/T clutch pressure control solenoid valve A and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 14.

17. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .

18. Test-drive the vehicle for several minutes in the D position through all five gears.
19. Check for DTCs with the HDS.

Is DTC P0963 indicated?

YES - Check for poor connections or loose terminals between A/T clutch pressure control solenoid valve A and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 18. If the PCM was substituted, return to step 1.

NO - Go to step 20.

20. Monitor the OBD status for P0963 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 19, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between A/T clutch pressure control solenoid valve A and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 18. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 18.

DTC P0966: Problem in A/T Clutch Pressure Control Solenoid Valve B Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Check that DTC P0966 recurs.

   Is DTC P0966 indicated?

   YES - Go to step 7.

   NO - Go to step 4.
4. Choose Clutch Pressure Control Solenoid Control in Miscellaneous Test Menu, and test the A/T clutch pressure control solenoid valve B with the HDS.

   Is the result NORMAL?

   YES - Go to step 5

   NO - Go to step 7.
5. Command the A/T clutch pressure control solenoid valve B at 1.0 A in Clutch Pressure Control Solenoid Control menu.
6. Monitor the OBD status for P0966 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 7.

   NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the A/T clutch pressure control solenoid valve B and PCM. If the tester indicates NOT COMPLETED, return to step 4 and recheck.
7. Turn the ignition switch OFF.
8. Disconnect the A/T clutch pressure control solenoid valve B connector.
9. Measure A/T clutch pressure control solenoid valve B resistance at the solenoid connector.

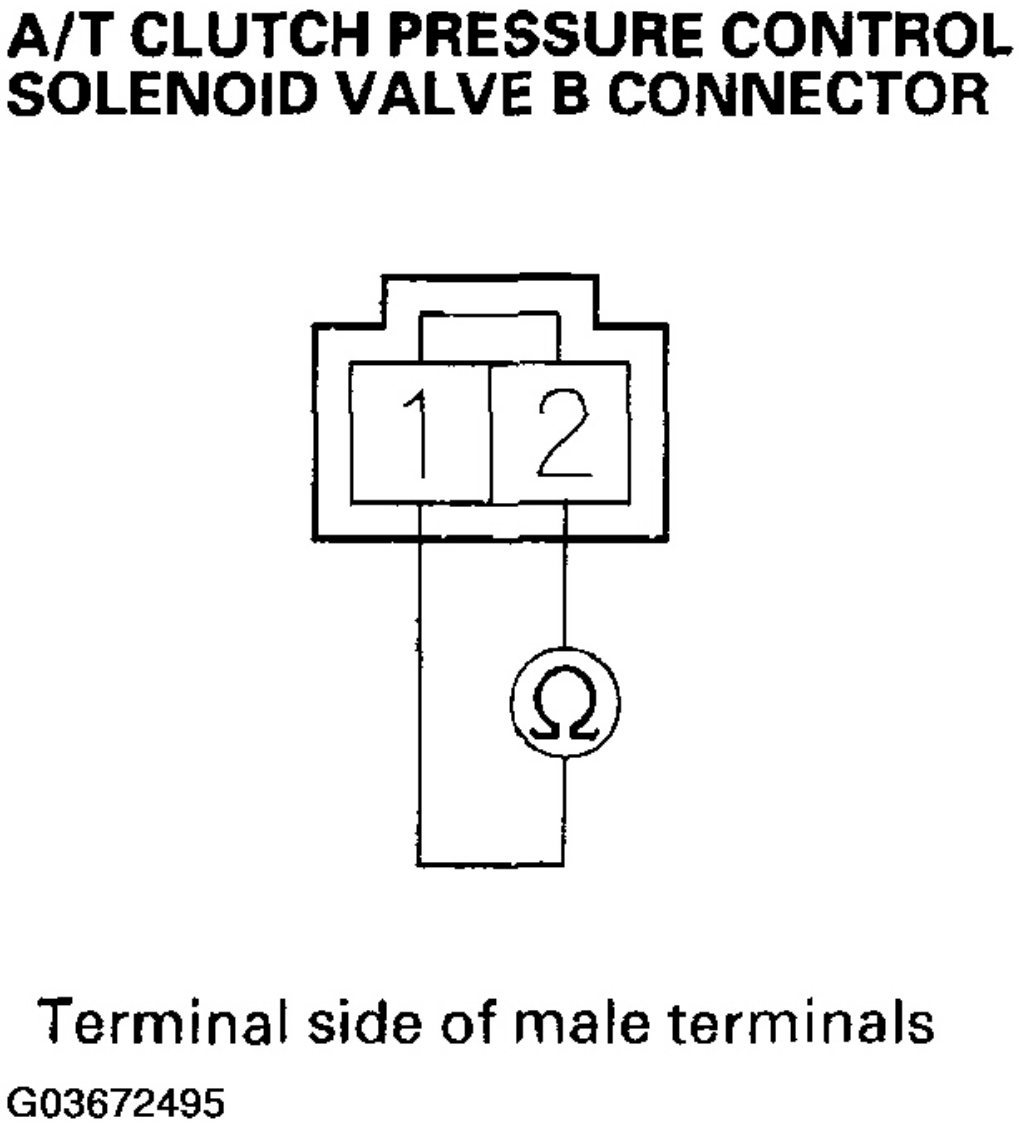


Fig. 140: Measuring A/T Clutch Pressure Control Solenoid Valve B Resistance At Solenoid Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 3 - 10 ohms?

YES - Go to step 10.

NO - Replace A/T clutch pressure control solenoid valve B (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B REPLACEMENT**), then go to step 14.

10. Check for continuity between A/T clutch pressure control solenoid valve B connector terminal No. 2 and body ground.

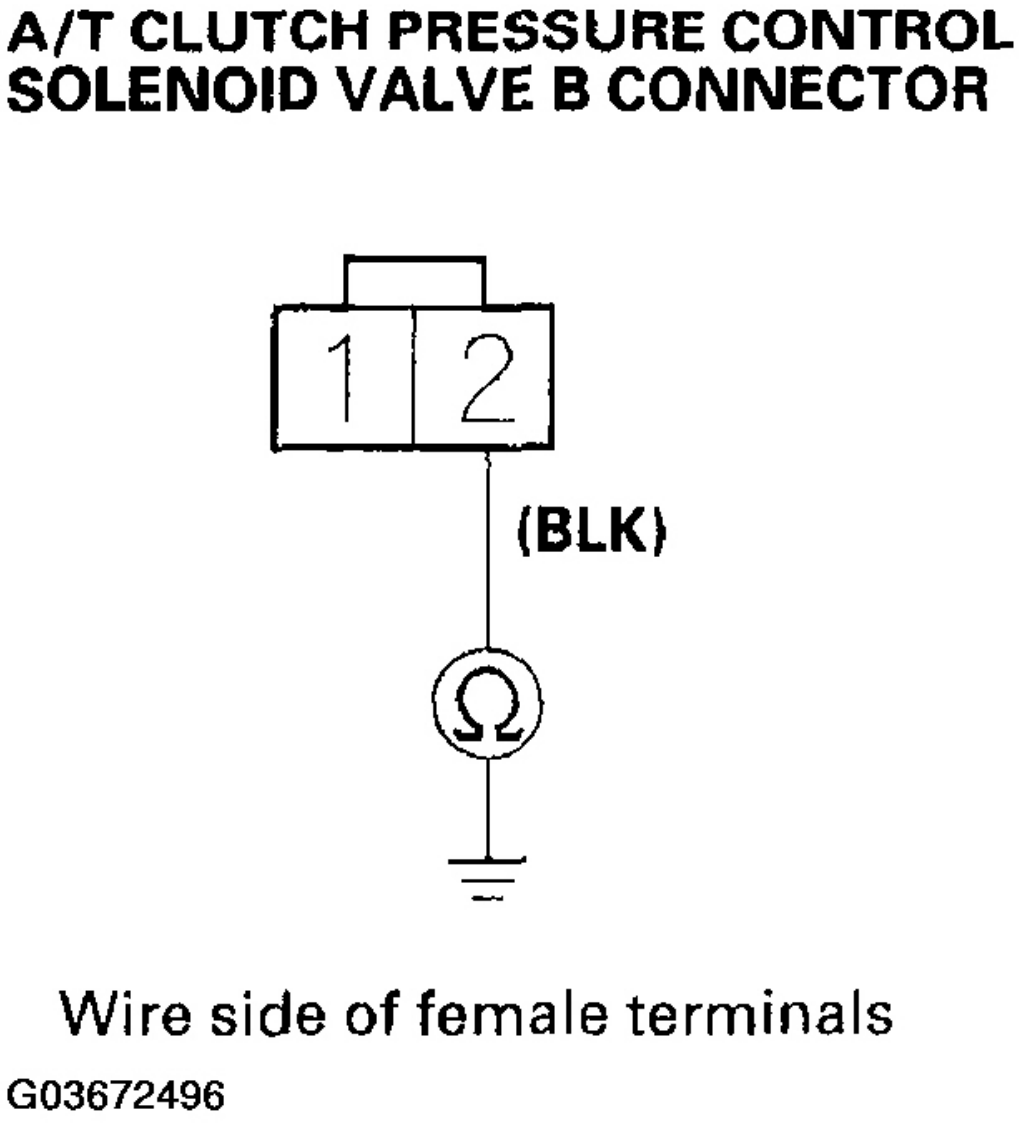


Fig. 141: Checking Continuity Between A/T Clutch Pressure Control

Solenoid Valve B Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 11.

NO - Repair open in the wire between the A/T clutch pressure control solenoid valve B and ground (G151), or repair poor ground (G151), then go to step 14.

11. Turn the ignition switch ON (II).
12. Measure the voltage between A/T clutch pressure control solenoid valve B connector terminals No. 1 and No. 2 as the ignition switch is turned ON.

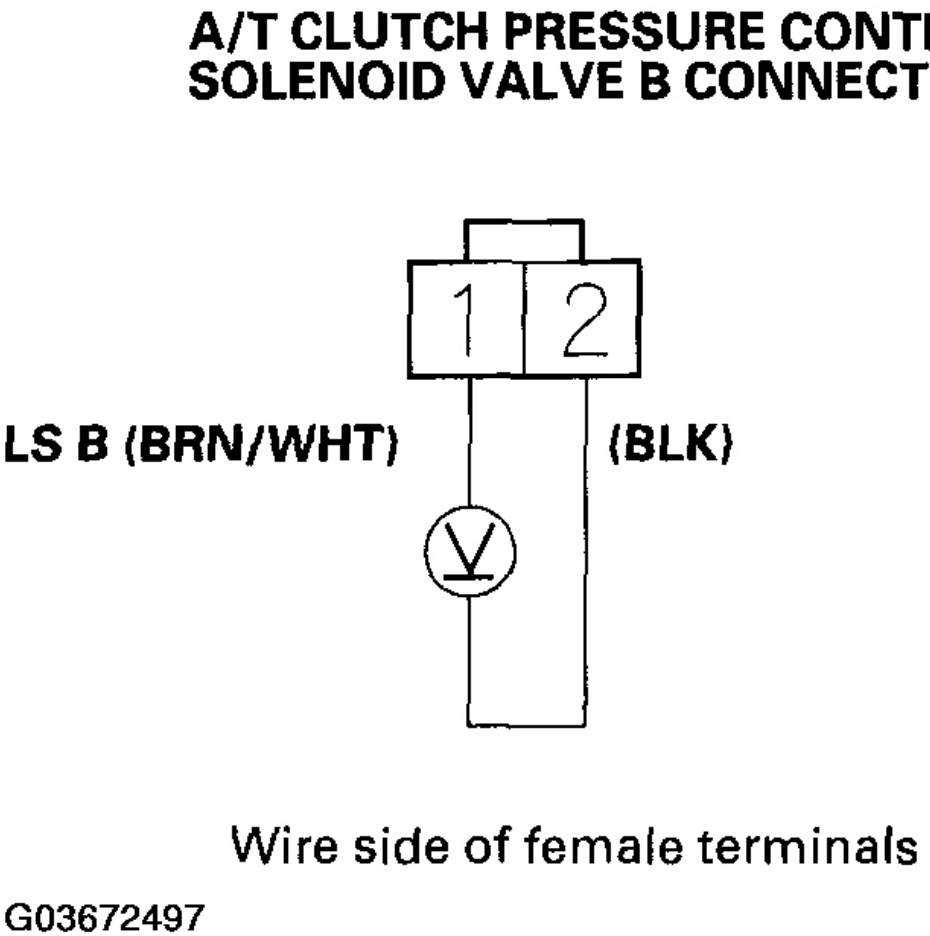


Fig. 142: Measuring Voltage Between A/T Clutch Pressure Control Solenoid Valve B Connector Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 12.

NO - Repair open or short in the wire between PCM connector terminal C15 and A/T clutch pressure control solenoid valve B, then go to step 14.

13. Measure the voltage between PCM connector terminals E10 and E3.

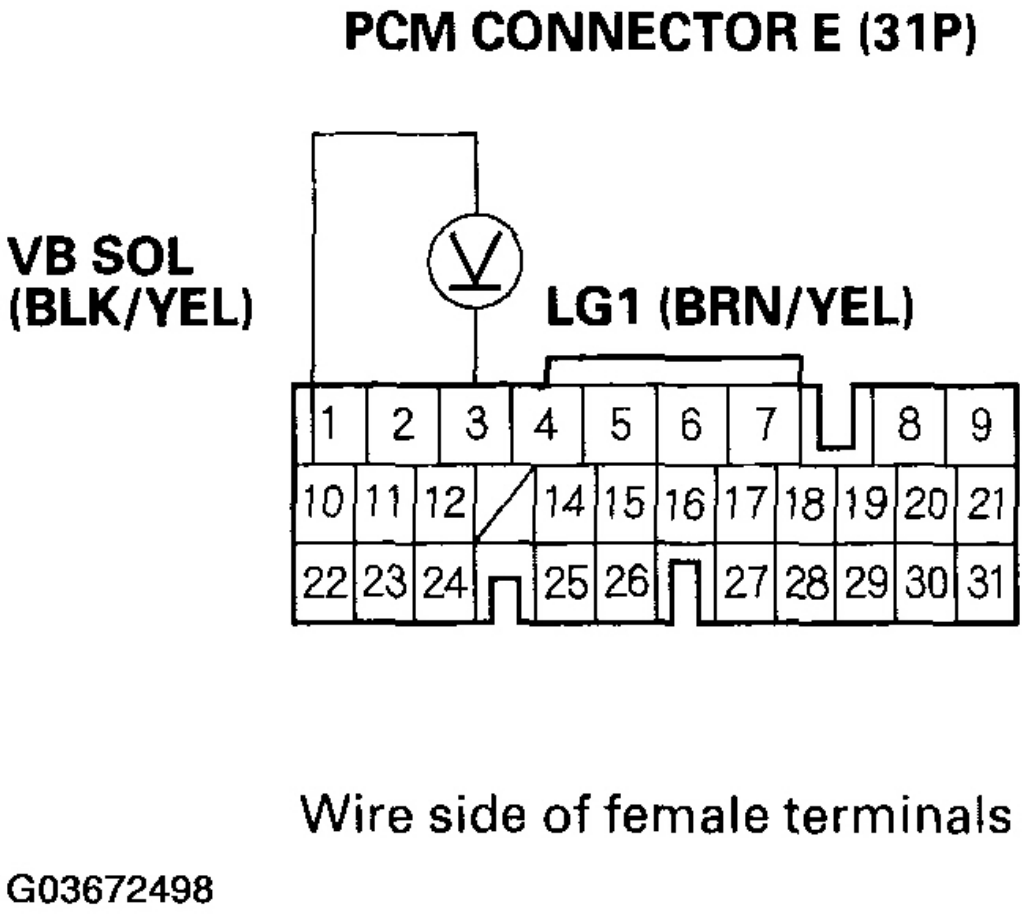


Fig. 143: Measuring Voltage Between PCM Connector Terminals E10 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 20.

NO - Check for blown No. 18 fuse in the under-dash fuse/relay box. If the fuse is OK, repair open in the wire between PCM connector terminal E10 and the under-dash fuse/relay box, then go to step 13.

14. Reconnect all connectors.

15. Turn the ignition switch ON (II).
16. Clear the DTC with the HDS.
17. Test-drive the vehicle for several minutes in the D position through all five gears.
18. Check for DTC's with the HDS.

Is DTC P0966 indicated?

YES - Check for poor connections or loose terminals between A/T clutch pressure control solenoid valve B and PCM, then return to step 1 and recheck.

NO - Go to step 19.

19. Monitor the OBD status for P0966 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 18, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between A/T clutch pressure control solenoid valve B and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 17.

20. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
21. Test-drive the vehicle for several minutes in the D position through all five gears.
22. Check for DTCs with the HDS.

Is DTC P0966 indicated?

YES - Check for poor connections or loose terminals between A/T clutch pressure control solenoid valve B and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 21. If the PCM was

substituted, return to step 1.

NO - Go to step 23.

23. Monitor the OBD status for P0966 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 22, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between A/T clutch pressure control solenoid valve B and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 21. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 21.

DTC P0967: Problem in A/T Clutch Pressure Control Solenoid Valve B

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Check that DTC P0967 recurs.

Is DTC P0967 indicated?

YES - Go to step 7.

NO - Go to step 4.

4. Choose Clutch Pressure Control Solenoid Control in Miscellaneous Test Menu,

and test the A/T clutch pressure control solenoid valve B with the HDS.

Is the result NORMAL?

YES - Go to step 5

NO - Go to step 7.

5. Command the A/T clutch pressure control solenoid valve B at 0.2 A in Clutch Pressure Control Solenoid Control menu.
6. Monitor the OBD status for P0967 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate FAILED?

YES - Go to step 7.

NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the A/T clutch pressure control solenoid valve B and PCM. If the tester indicates NOT COMPLETED, return to step 4 and recheck.

7. Turn the ignition switch OFF.
8. Disconnect the A/T clutch pressure control solenoid valve B connector.
9. Measure A/T clutch pressure control solenoid valve B resistance at the solenoid connector.

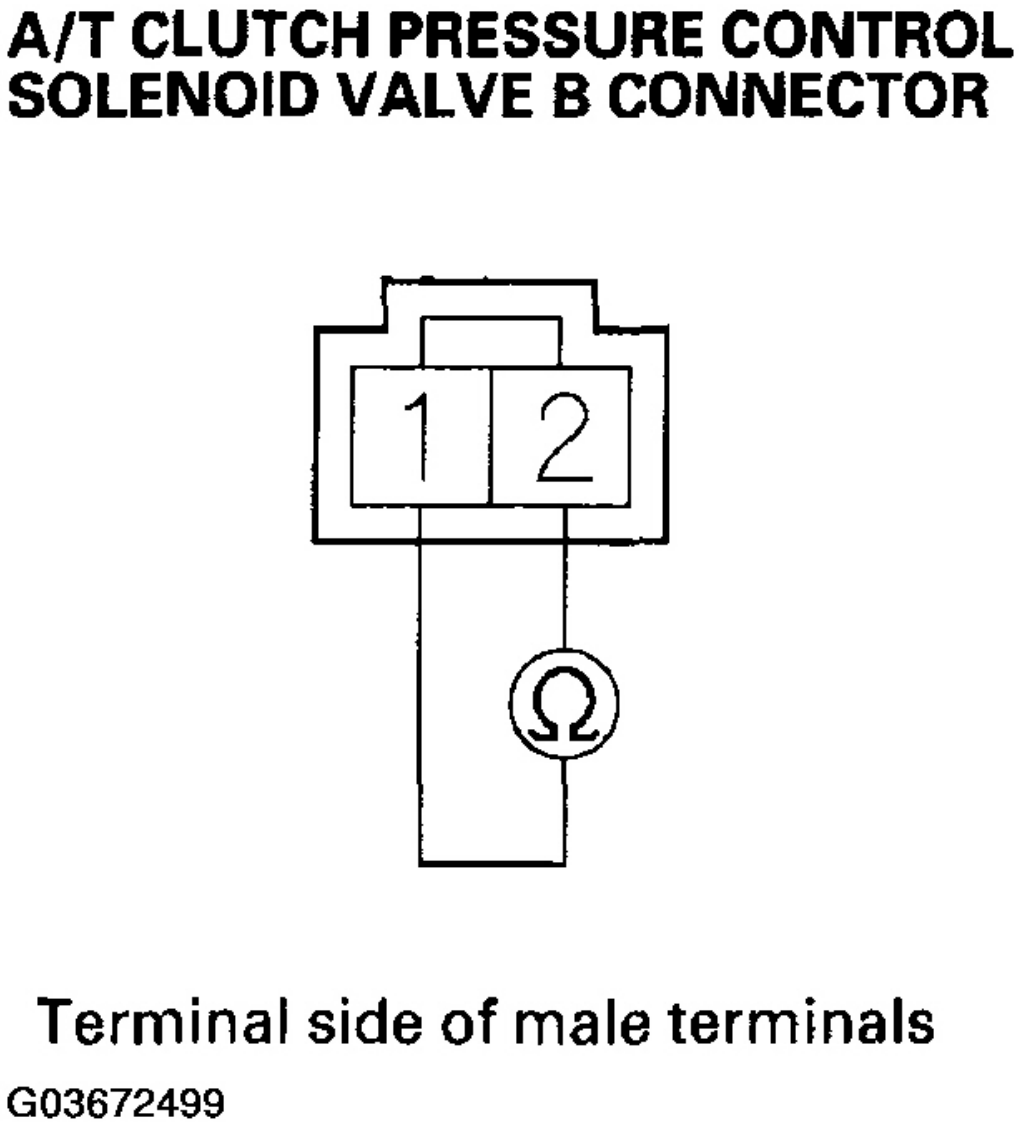


Fig. 144: Measuring A/T Clutch Pressure Control Solenoid Valve B Resistance At Solenoid Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 3 - 10 ohms?

YES - Go to step 10.

NO - Replace A/T clutch pressure control solenoid valve B (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B REPLACEMENT**), then go to step 11.

10. Check for continuity between A/T clutch pressure control solenoid valve B connector terminal No. 2 and body ground.

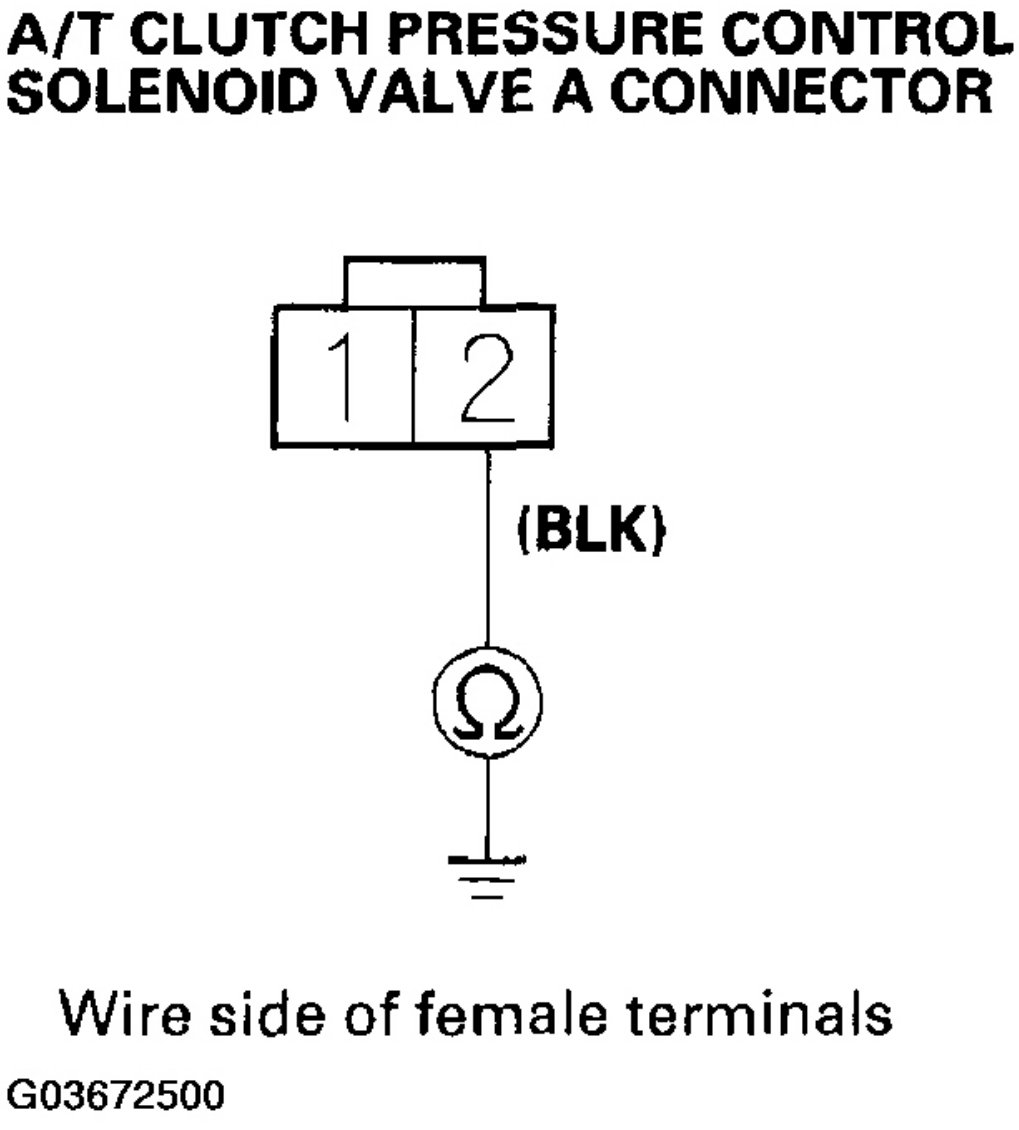


Fig. 145: Checking Continuity Between A/T Clutch Pressure Control

Solenoid Valve B Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 17.

NO - Repair open in the wire between the A/T clutch pressure control solenoid valve B and ground (G151), or repair poor ground (G151), then go to step 11.

11. Reconnect all connectors.
12. Turn the ignition switch ON (II).
13. Clear the DTC with the HDS.
14. Test-drive the vehicle for several minutes in the D position through all five gears.
15. Check for DTC's with the HDS.

Is DTC P0967 indicated?

YES - Check for poor connections or loose terminals between A/T clutch pressure control solenoid valve B and PCM, then return to step 1 and recheck.

NO - Go to step 16.

16. Monitor the OBD status for P0967 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 15, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between A/T clutch pressure control solenoid valve B and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 14.

17. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .

18. Test-drive the vehicle for several minutes in the D position through all five gears.
19. Check for DTCs with the HDS.

Is DTC P0967 indicated?

YES - Check for poor connections or loose terminals between A/T clutch pressure control solenoid valve B and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 18. If the PCM was substituted, return to step 1.

NO - Go to step 20.

20. Monitor the OBD status for P0967 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 19, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between A/T clutch pressure control solenoid valve B and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 18. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 18.

DTC P0970: Problem in A/T Clutch Pressure Control Solenoid Valve C Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Check that DTC P0970 recurs.

   Is DTC P0970 indicated?

   YES - Go to step 7.

   NO - Go to step 4.
4. Choose Clutch Pressure Control Solenoid Control in Miscellaneous Test Menu, and test the A/T clutch pressure control solenoid valve C with the HDS.

   Is the result NORMAL?

   YES - Go to step 5

   NO - Go to step 7.
5. Command the A/T clutch pressure control solenoid valve C at 1.0 A in Clutch Pressure Control Solenoid Control menu.
6. Monitor the OBD status for P0970 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 7.

   NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the A/T clutch pressure control solenoid valve C and PCM. If the tester indicates NOT COMPLETED, return to step 4 and recheck.
7. Turn the ignition switch OFF.
8. Disconnect the A/T clutch pressure control solenoid valve C connector.
9. Measure A/T clutch pressure control solenoid valve C resistance at the solenoid connector.

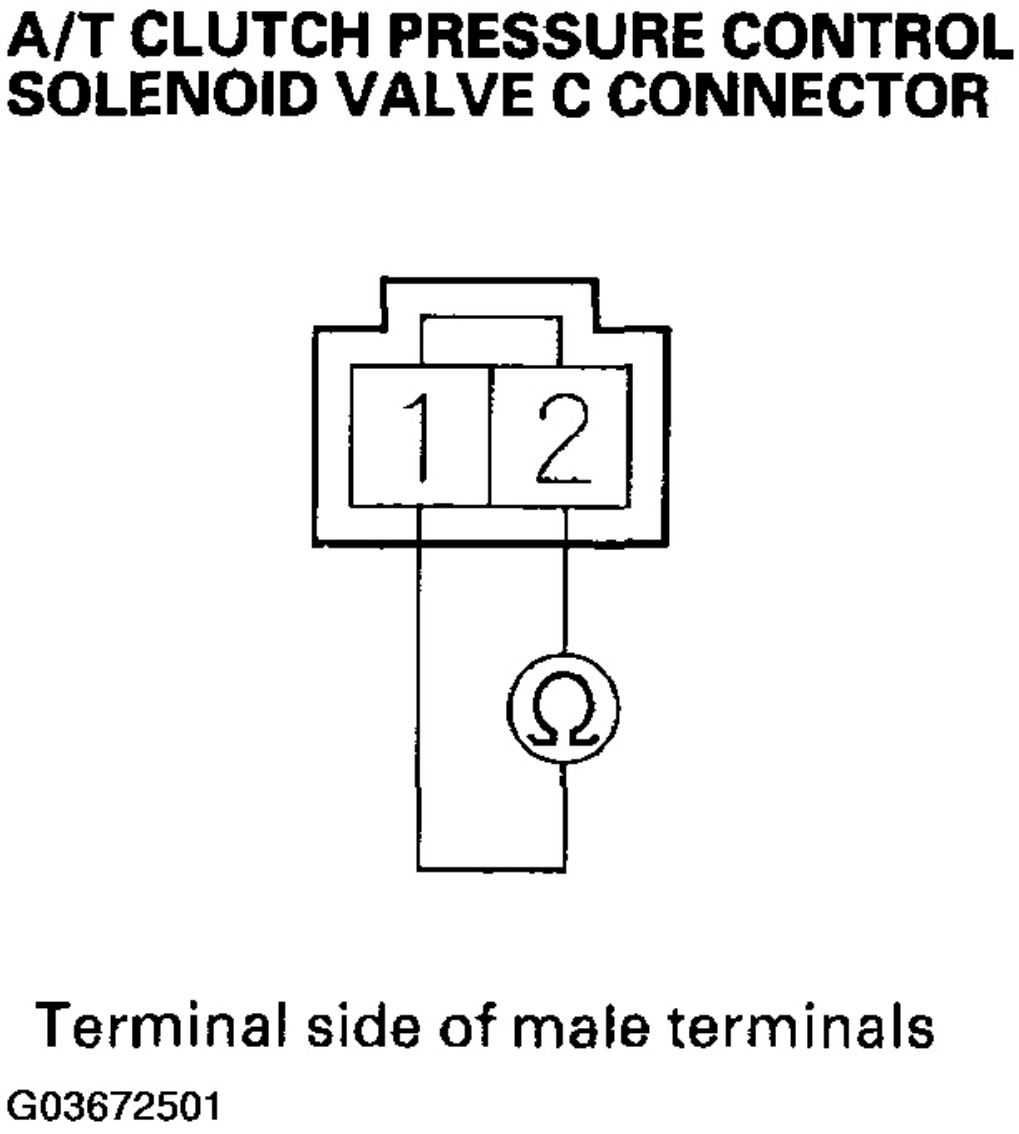


Fig. 146: Measuring A/T Clutch Pressure Control Solenoid Valve C Resistance At Solenoid Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 3 - 10 ohms?

YES - Go to step 10.

NO - Replace the A/T clutch pressure control solenoid valve C (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE C REPLACEMENT**), then go to step 14.

10. Check for continuity between A/T clutch pressure control solenoid valve C connector terminal No. 2 and body ground.

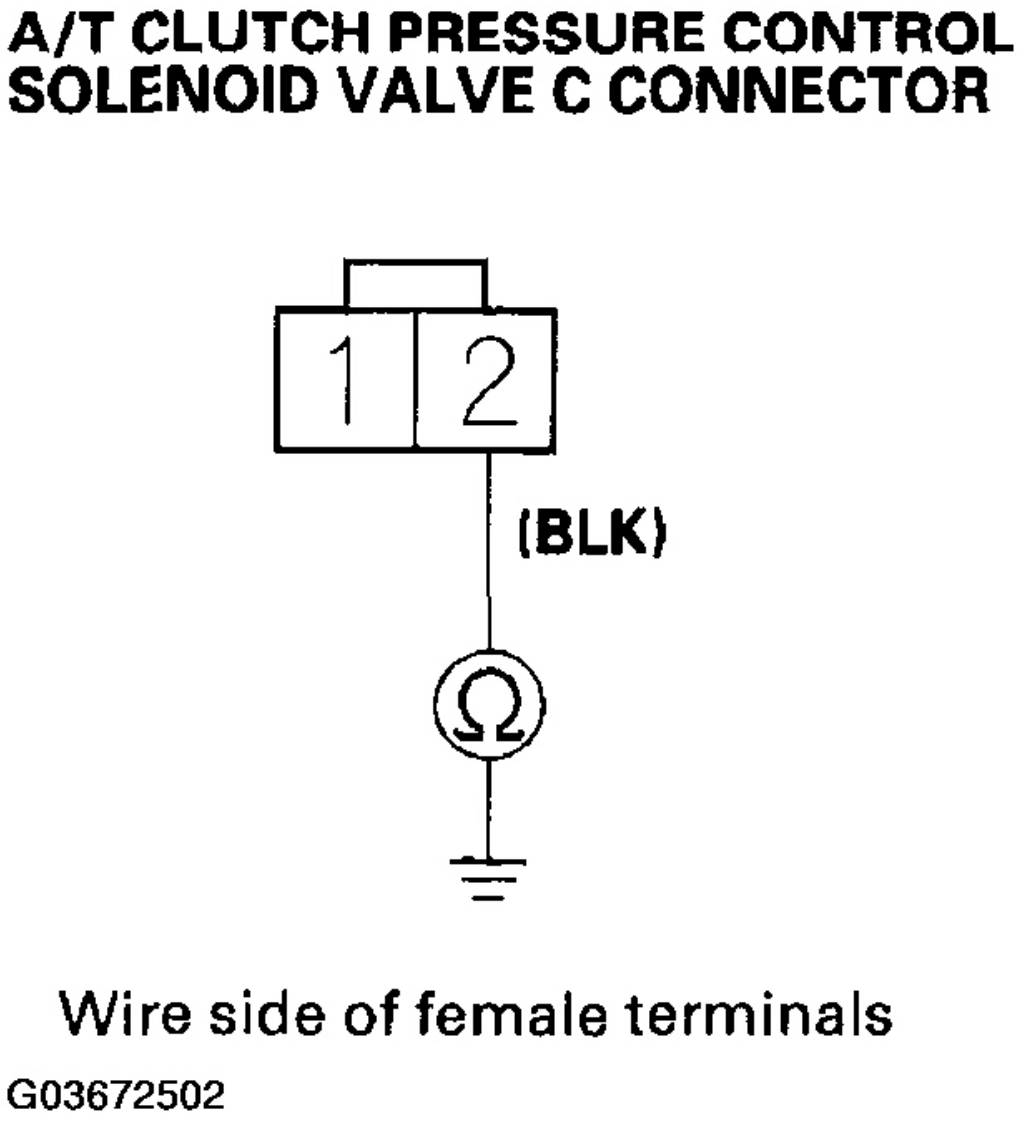


Fig. 147: Checking Continuity Between A/T Clutch Pressure Control

Solenoid Valve C Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 11.

NO - Repair open in the wire between the A/T clutch pressure control solenoid valve C and ground (G101), or repair poor ground (G101), then go to step 14.

11. Turn the ignition switch ON (II).
12. Measure the voltage between A/T clutch pressure control solenoid valve C connector terminals No. 1 and No. 2 as the ignition switch is turned ON.

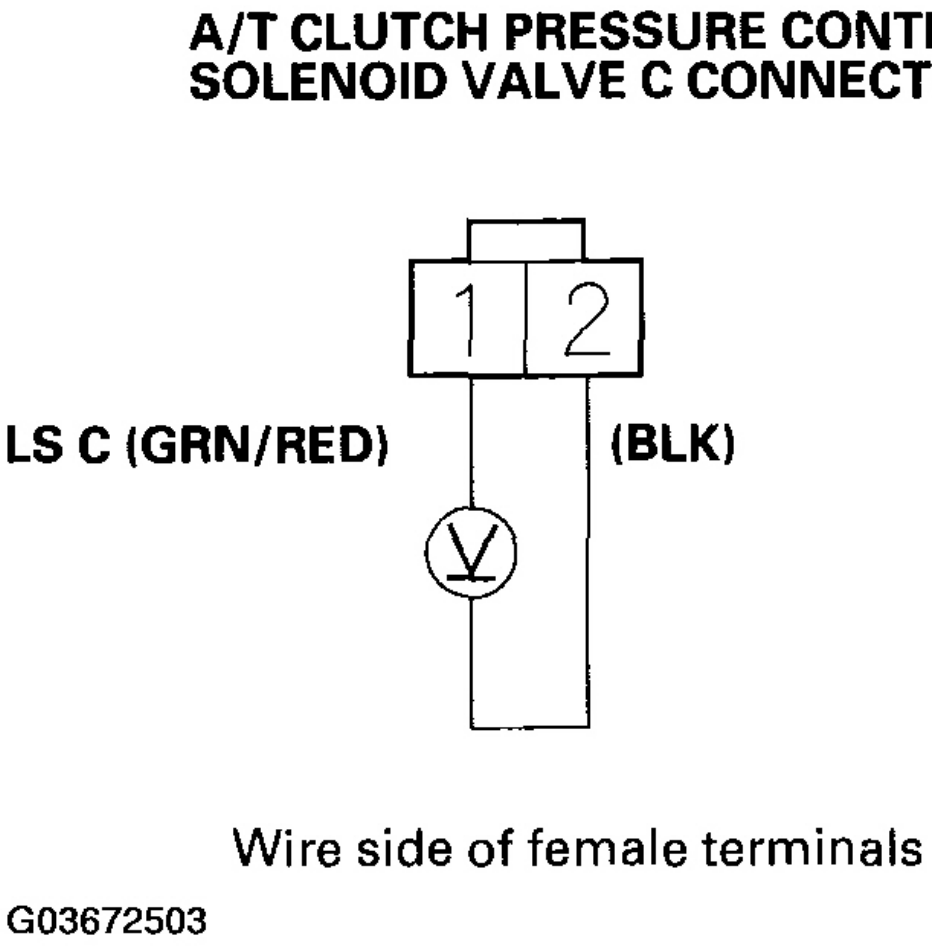


Fig. 148: Measuring Voltage Between A/T Clutch Pressure Control Solenoid Valve C Connector Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 13.

NO - Repair open or short in the wire between PCM connector terminal C22 and A/T clutch pressure control solenoid valve C, then go to step 14.

13. Measure the voltage between PCM connector terminals E10 and E3.

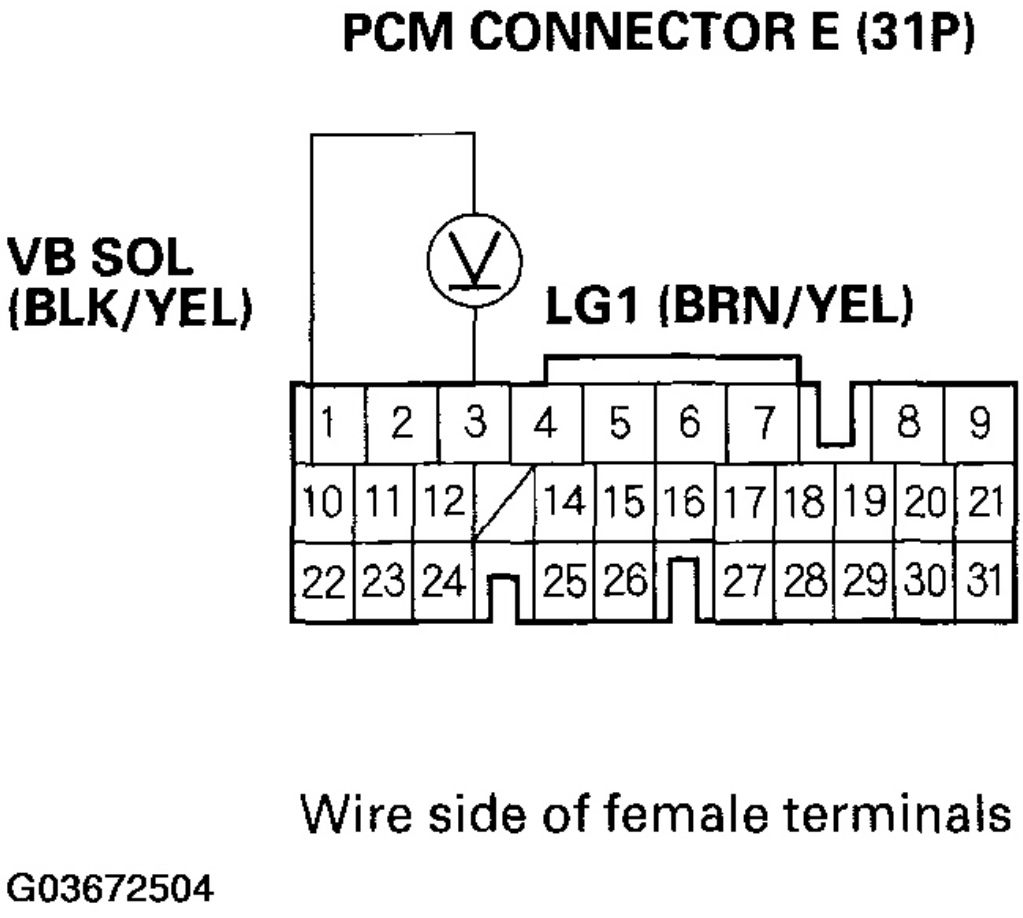


Fig. 149: Measuring Voltage Between PCM Connector Terminals E10 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 20.

NO - Check for blown No. 18 fuse in the under-dash fuse/relay box. If the fuse is OK, repair open in the wire between PCM connector terminal E10 and the under-dash fuse/relay box, then go to step 13.

14. Reconnect all connectors.

15. Turn the ignition switch ON (II).
16. Clear the DTC with the HDS.
17. Test-drive the vehicle for several minutes in the D position through all five gears.
18. Check for DTC's with the HDS.

    Is DTC P0970 indicated?

    YES - Check for poor connections or loose terminals between A/T clutch pressure control solenoid valve C and PCM, then return to step 1 and recheck.

    NO - Go to step 19.
19. Monitor the OBD status for P0970 in the DTCs Menu with the HDS.

    Does the result indicate PASSED?

    YES - Troubleshooting is complete. If any other DTCs were indicated in step 18, go to the indicated DTC's troubleshooting.

    NO - If screen indicates FAILED, check for poor connections or loose terminals between A/T clutch pressure control solenoid valve C and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 17.
20. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
21. Test-drive the vehicle for several minutes in the D position through all five gears.
22. Check for DTCs with the HDS.

    Is DTC P0970 indicated?

    YES - Check for poor connections or loose terminals between A/T clutch pressure control solenoid valve C and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 21. If the PCM was

substituted, return to step 1.

NO - Go to step 23.

23. Monitor the OBD status for P0970 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 22, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between A/T clutch pressure control solenoid valve C and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 21. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 21.

DTC P0971: Problem in A/T Clutch Pressure Control Solenoid Valve C

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer toGENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Check that DTC P0971 recurs.

Is DTC P0971 indicated?

YES - Go to step 7.

NO - Go to step 4.

4. Choose Clutch Pressure Control Solenoid Control in Miscellaneous Test Menu,

and test the A/T clutch pressure control solenoid valve C with the HDS.

Is the result NORMAL?

YES - Go to step 5

NO - Go to step 7.

5. Command the A/T clutch pressure control solenoid valve C at 0.2 A in Clutch Pressure Control Solenoid Control menu.
6. Monitor the OBD status for P0971 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate FAILED?

YES - Go to step 7.

NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at the A/T clutch pressure control solenoid valve C and PCM. If the tester indicates NOT COMPLETED, return to step 4 and recheck.

7. Turn the ignition switch OFF.
8. Disconnect the A/T clutch pressure control solenoid valve C connector.
9. Measure A/T clutch pressure control solenoid valve C resistance at the solenoid connector.

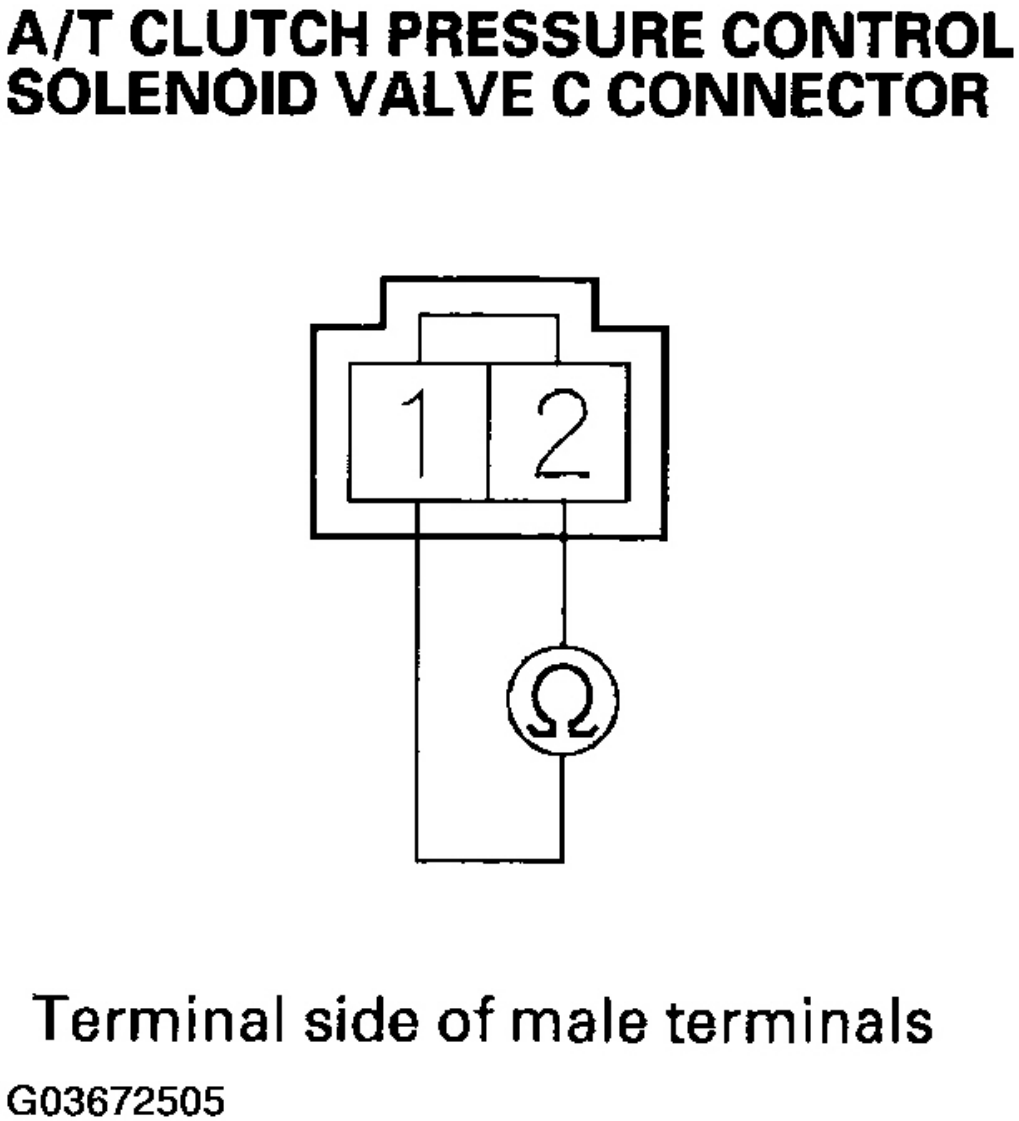


Fig. 150: Measuring A/T Clutch Pressure Control Solenoid Valve C Resistance At Solenoid Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 3 - 10 ohms?

YES - Go to step 10.

NO - Replace the A/T clutch pressure control solenoid valve C (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE C REPLACEMENT**), then go to step 11.

10. Check for continuity between A/T clutch pressure control solenoid valve A connector terminal No.2 and body ground.

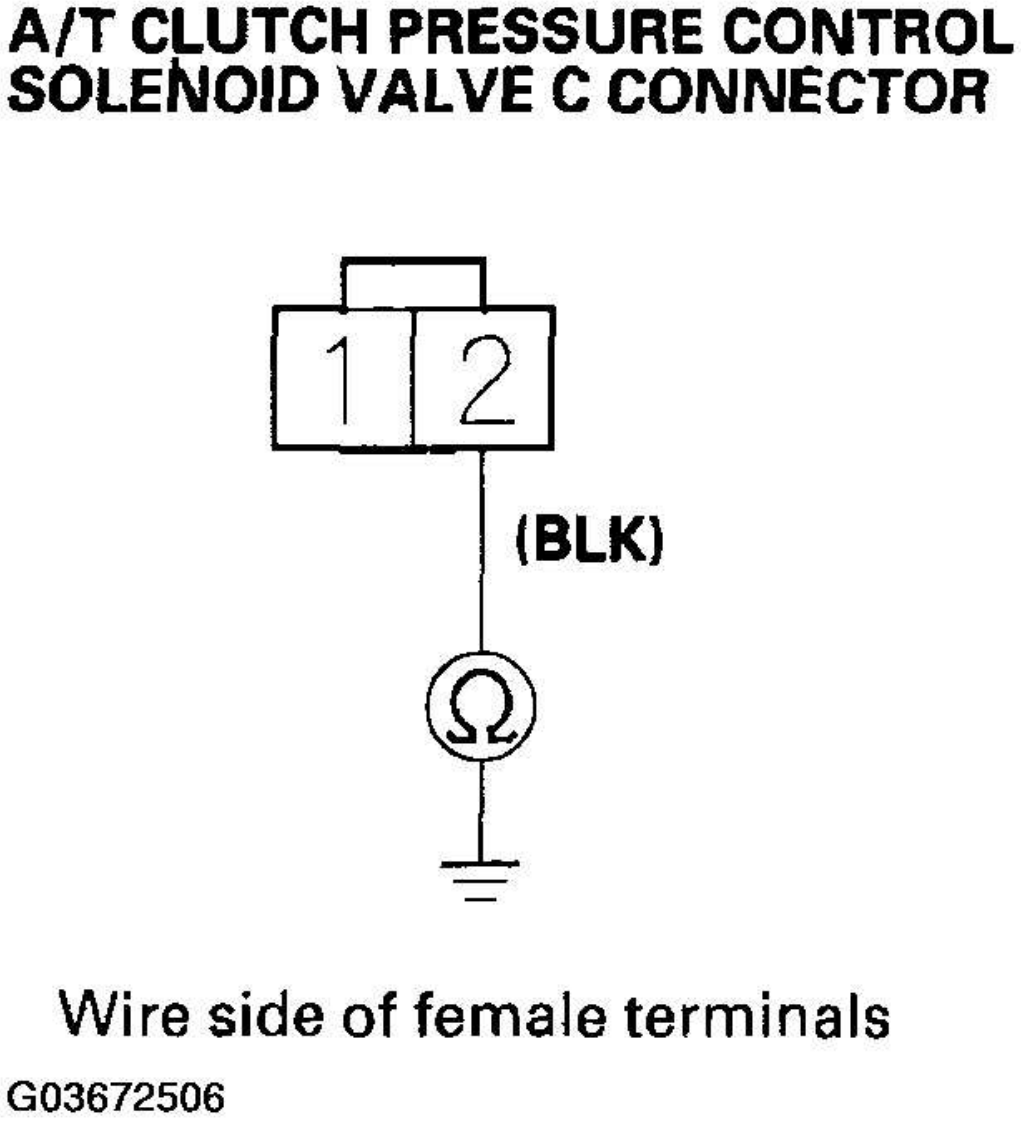


Fig. 151: Checking Continuity Between A/T Clutch Pressure Control

Solenoid Valve A Connector Terminal No.2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 17.

NO - Repair open in the wire between the A/T clutch pressure control solenoid valve C and ground (G151), or repair poor ground (G151), then go to step 11.

11. Reconnect all connectors.
12. Turn the ignition switch ON (II).
13. Clear the DTC with the HDS.
14. Test-drive the vehicle for several minutes in the D position through all five gears.
15. Check for DTC's with the HDS.

Is DTC P0971 indicated?

YES - Check for poor connections or loose terminals between A/T clutch pressure control solenoid valve C and PCM, then return to step 1 and recheck.

NO - Go to step 16.

16. Monitor the OBD status for P0971 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 15, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between A/T clutch pressure control solenoid valve C and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 14.

17. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .

18. Test-drive the vehicle for several minutes in the D position through all five gears.
19. Check for DTCs with the HDS.

Is DTC P0971 indicated?

YES - Check for poor connections or loose terminals between A/T clutch pressure control solenoid valve C and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 18. If the PCM was substituted, return to step 1.

NO - Go to step 20.

20. Monitor the OBD status for P0971 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 19, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between A/T clutch pressure control solenoid valve C and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 18. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 18.

DTC P0973: Short in Shift Solenoid Valve A Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION) before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Test-drive the vehicle for several minutes in the D position through all five gears.
4. Check for DTCs with the HDS.

   Is DTC P0973 indicated?

   YES - Go to step 8.

   NO - Go to step 5.
5. Choose Shift Solenoid A in Miscellaneous Test Menu, and test the shift solenoid valve A with the HDS.

   Is a clicking sound heard?

   YES - Go to step 6.

   NO - Go to step 8.
6. Test drive the vehicle for several minutes in the D position through all five gears.
7. Monitor the OBD status for P0973 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 8.

   NO - Intermittent failure, the system is OK at this time. Check the BLU/YEL wire for an intermittent short to ground between shift solenoid valve A and PCM. If the tester indicates NOT COMPLETED, return to step 5 and recheck.
8. Turn the ignition switch OFF.
9. Jump the SCS line with the HDS.
10. Disconnect PCM connectors B (24P), C (22P), and E (31P).
11. Measure the resistance between PCM connector terminals C1 and E3.

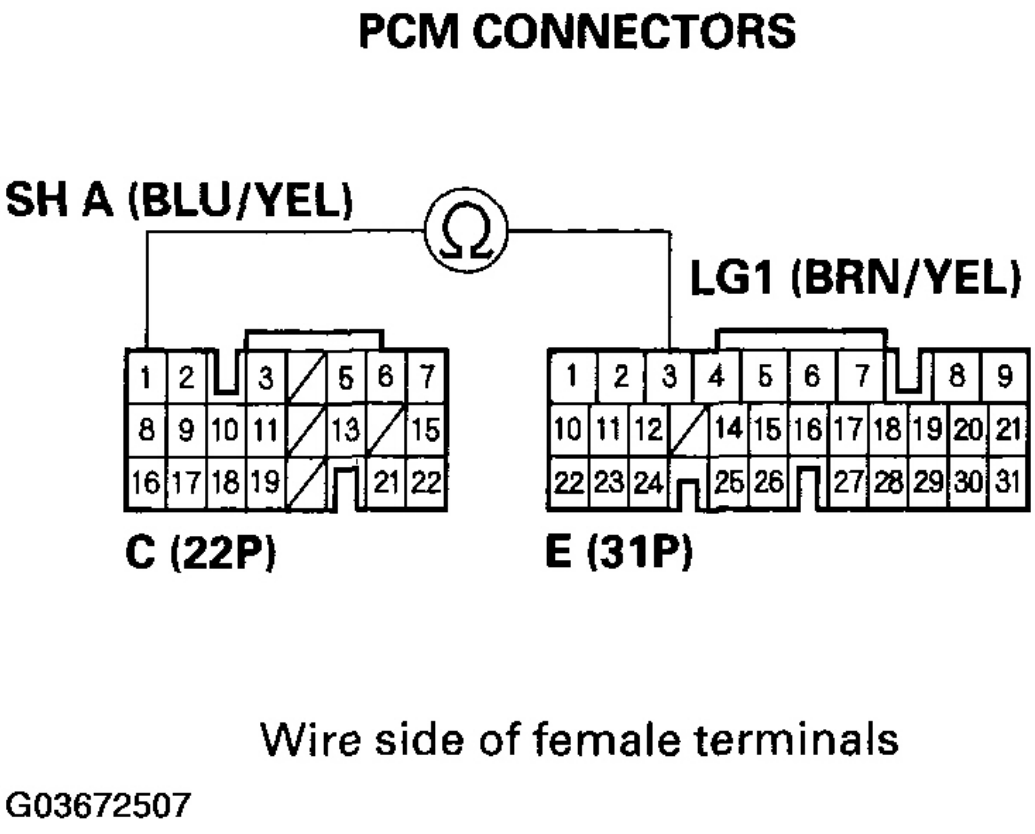


Fig. 152: Measuring Resistance Between PCM Connector Terminals C1 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there less than 12 ohms ?

YES - Go to step 12.
NO - Go to step 23.

12. Disconnect shift solenoid valve A connector.
13. Check for continuity between PCM connector terminals C1 and E3.

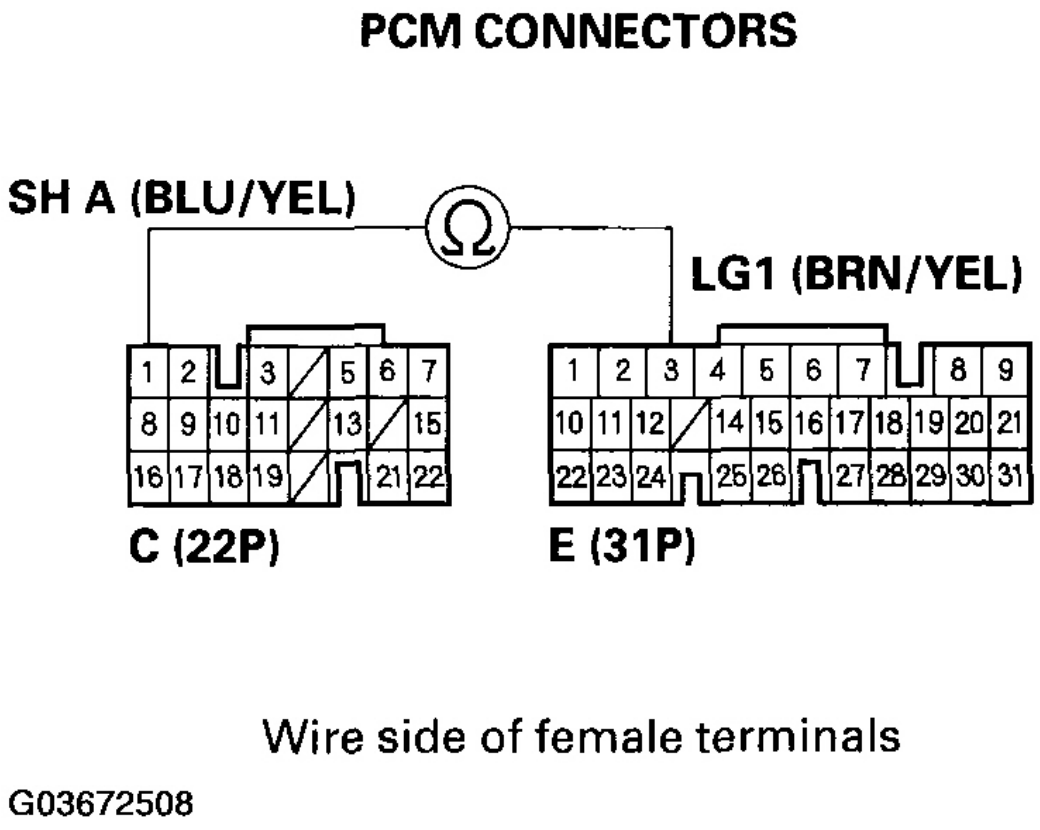


Fig. 153: Checking Continuity Between PCM Connector Terminals C1 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal C1 and shift solenoid valve A, then go to step 17.

NO - Go to step 14.

14. Measure shift solenoid valve A resistance at the solenoid valve connector.

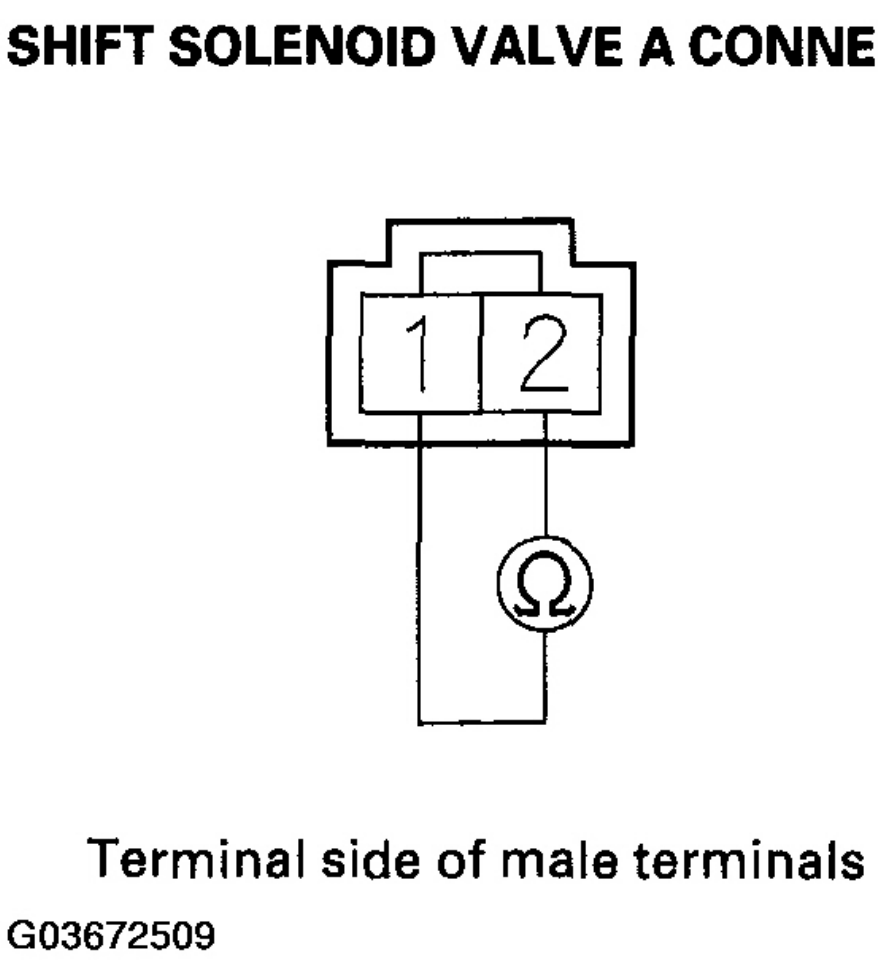


Fig. 154: Measuring Shift Solenoid Valve A Resistance At Solenoid Valve Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 12 - 15 ohms?

YES - Go to step 15.

NO - Replace the shift solenoid valve A (see **SHIFT SOLENOID VALVE A REPLACEMENT**), then go to step 17.

15. Turn the ignition switch ON (II).
16. Measure the voltage between PCM connector terminals E10 and E3.

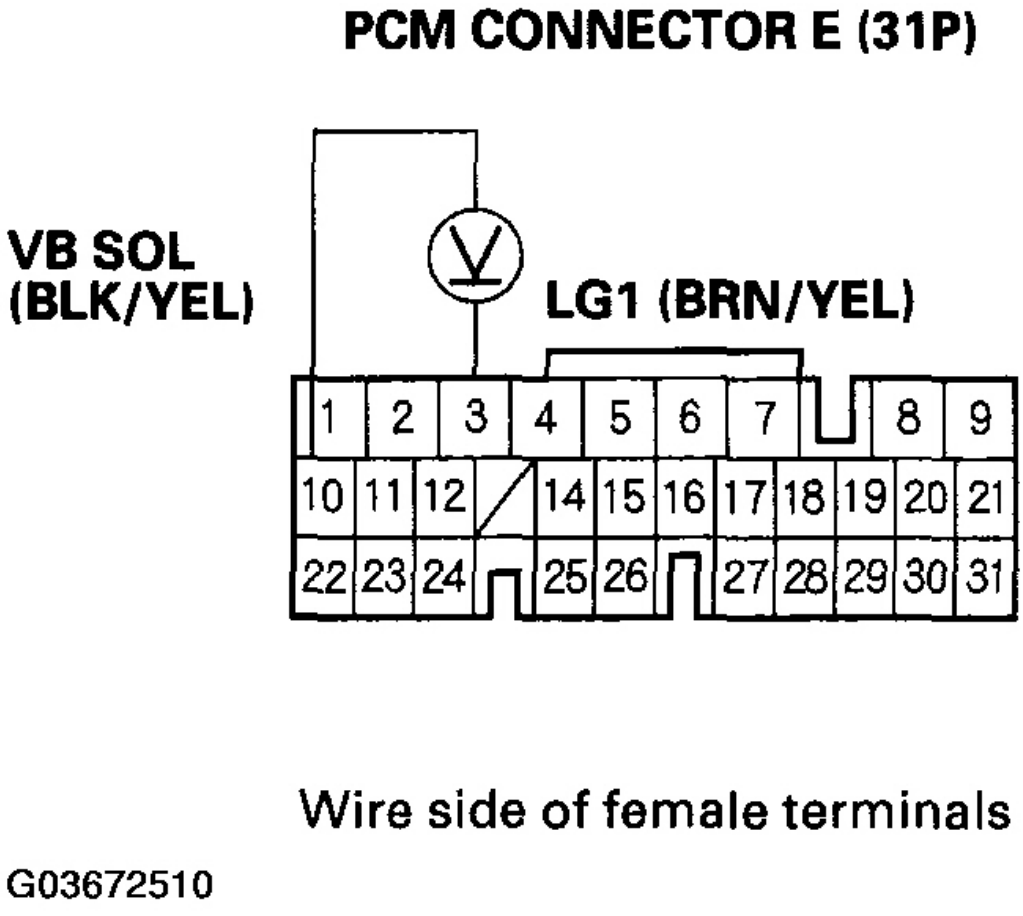


Fig. 155: Measuring Voltage Between PCM Connector Terminals E10 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 23.

NO - Check for blown No. 18 fuse in the under-dash fuse/relay box. If the fuse is OK, repair open in the wire between PCM connector terminal E10 and the under-dash fuse/relay box, then go to step 17.

17. Reconnect all connectors.

18. Turn the ignition switch ON (II).
19. Clear the DTC with the HDS.
20. Test-drive the vehicle for several minutes in the D position through all five gears.
21. Check for DTC's with the HDS.

Is DTC P0973 indicated?

YES - Check for intermittent short to body ground in the wire between shift solenoid valve A and PCM, then return to step 1 and recheck.

NO - Go to step 22.

22. Monitor the OBD status for P0973 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 21, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check intermittent short to body ground in the wire between shift solenoid valve A and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 20.

23. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
24. Test-drive the vehicle for several minutes in the D position through all five gears.
25. Check for DTCs with the HDS.

Is DTC P0973 indicated?

YES - Check for intermittent short to body ground in the wire between shift solenoid valve A and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 24. If the PCM was substituted, return to step 1.

NO - Go to step 26.

26. Monitor the OBD status for P0973 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 25, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for intermittent short to body ground in the wire between shift solenoid valve A and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 24. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 24.

DTC P0974: Open in Shift Solenoid Valve A Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION) before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Test-drive the vehicle for several minutes in the D position through all five gears.
4. Check that DTC P0974 recurs.

Is DTC P0974 indicated?

YES - Go to step 8.

NO - Go to step 5.

5. Choose Shift Solenoid A in Miscellaneous Test Menu, and test the shift solenoid valve A with the HDS.

   Is a clicking sound heard?

   YES - Go to step 6.

   NO - Go to step 8.
6. Test-drive the vehicle for several minutes in the D position through all five gears.
7. Monitor the OBD status for P0974 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 8.

   NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at shift solenoid valve A and PCM. If the tester indicates NOT COMPLETED, return to step 5 and recheck.
8. Turn the ignition switch OFF.
9. Jump the SCS line with the HDS.
10. Disconnect PCM connectors B (24P), C (22P), and E (31P).
11. Measure the resistance between PCM connector terminals C1 and E3.

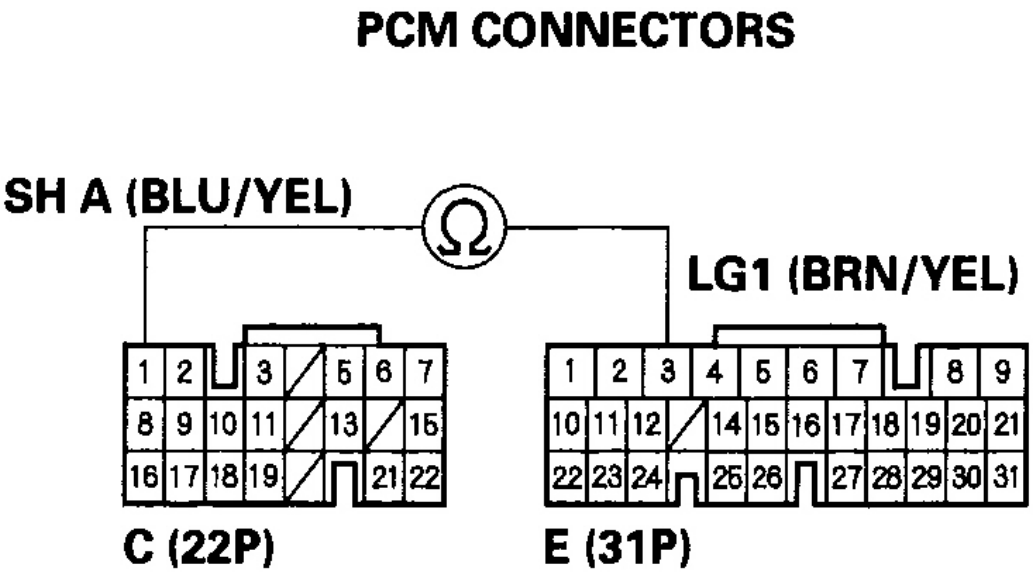


Fig. 156: Measuring Resistance Between PCM Connector Terminals C1 and E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 12 - 25 ohms?

YES - Go to step 21.
NO - Go to step 12.

12. Disconnect shift solenoid valve A connector.
13. Measure shift solenoid valve A resistance at the solenoid valve connector.

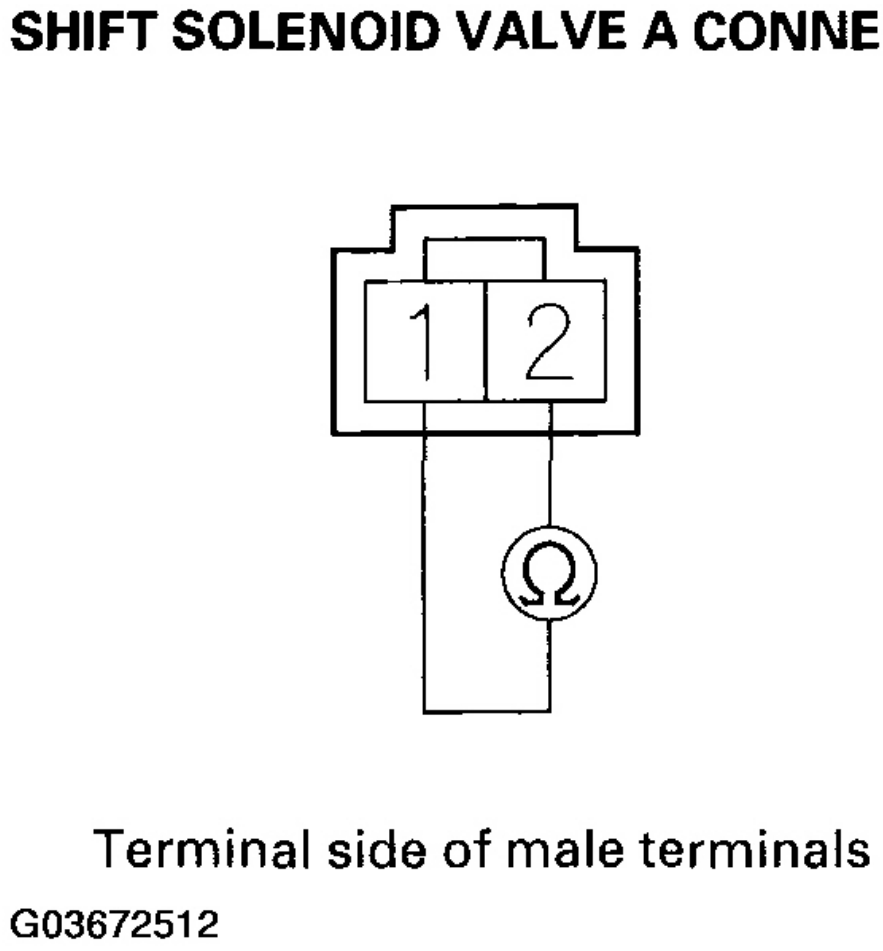


Fig. 157: Measuring Shift Solenoid Valve A Resistance At Solenoid Valve Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 12 - 25 ohms?

YES - Go to step 14.

NO - Replace the shift solenoid valve A (see **SHIFT SOLENOID VALVE A REPLACEMENT**), then go to step 15.

14. Check for continuity between shift solenoid valve A connector terminal No. 1 and body ground.

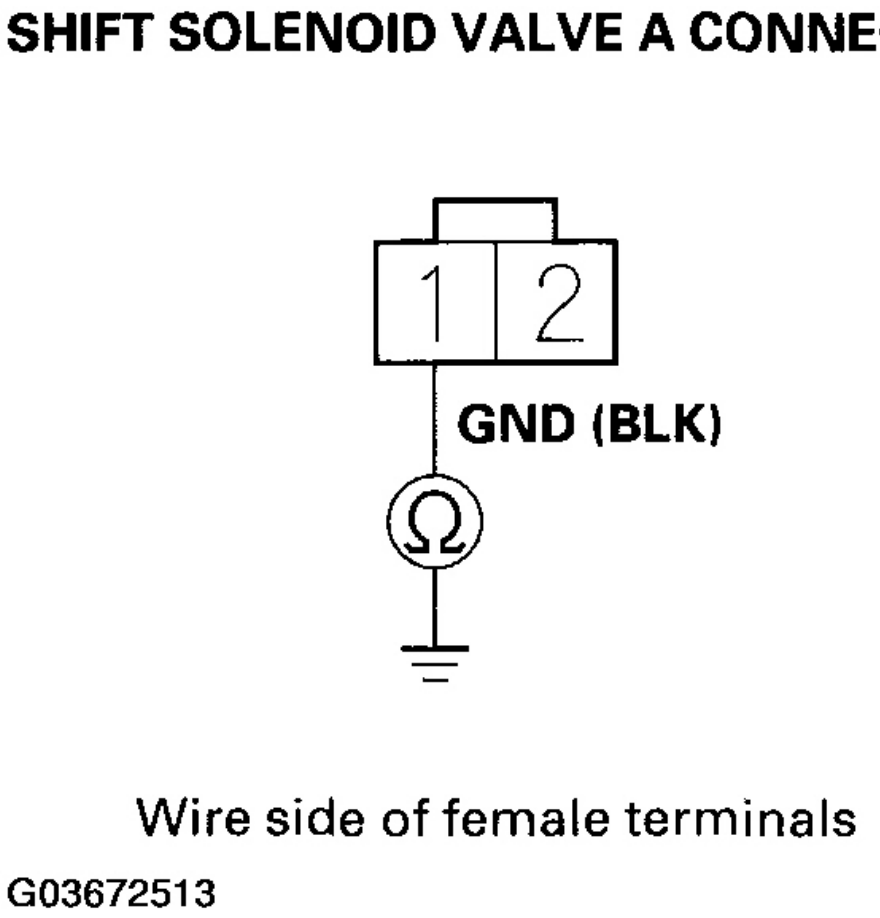


Fig. 158: Checking Continuity Between Shift Solenoid Valve A Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair open in the wire between PCM connector terminal C1 and shift solenoid valve A, then go to step 15.

NO - Repair open in the wire between shift solenoid valve A and ground (G151), or repair poor ground (G151) then go to step 15.

15. Reconnect all connectors.

16. Turn the ignition switch ON (II).
17. Clear the DTC with the HDS.
18. Test-drive the vehicle for several minutes in the D position through all five gears.
19. Check for DTC's with the HDS.

Is DTC P0974 indicated?

YES - Check for intermittent short to body ground in the wire between shift solenoid valve A and PCM, then return to step 1 and recheck.

NO - Go to step 20.

20. Monitor the OBD status for P0974 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 21, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check intermittent short to body ground in the wire between shift solenoid valve A and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 18.

21. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
22. Test-drive the vehicle for several minutes in the D position through all five gears.
23. Check for DTCs with the HDS.

Is DTC P0974 indicated?

YES - Check for intermittent short to body ground in the wire between shift solenoid valve A and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 22. If the PCM was substituted, return to step 1.

NO - Go to step 24.

24. Monitor the OBD status for P0974 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 23, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for intermittent short to body ground in the wire between shift solenoid valve A and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 22. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 22.

DTC P0976: Short in Shift Solenoid Valve B Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION) before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Test-drive the vehicle for several minutes in the D position through all five gears.
4. Check that DTC P0976 recurs.

Is DTC P0976 indicated?

YES - Go to step 8.

NO - Go to step 5.

5. Choose Shift Solenoid B in Miscellaneous Test Menu, and test the shift solenoid valve B with the HDS.

   Is a clicking sound heard?

   YES - Go to step 6.

   NO - Go to step 8.
6. Test-drive the vehicle for several minutes in the D position through all five gears.
7. Monitor the OBD status for P0976 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 7.

   NO - Intermittent failure, the system is OK at this time. Check the GRN/WHT wire for an intermittent short to ground between shift solenoid valve B and PCM. If the tester indicates NOT COMPLETED, return to step 5 and recheck.
8. Turn the ignition switch OFF.
9. Jump the SCS line with the HDS.
10. Disconnect PCM connectors B (24P), (22P), and E (31P).
11. Measure the resistance between PCM connector terminals C8 and E3.

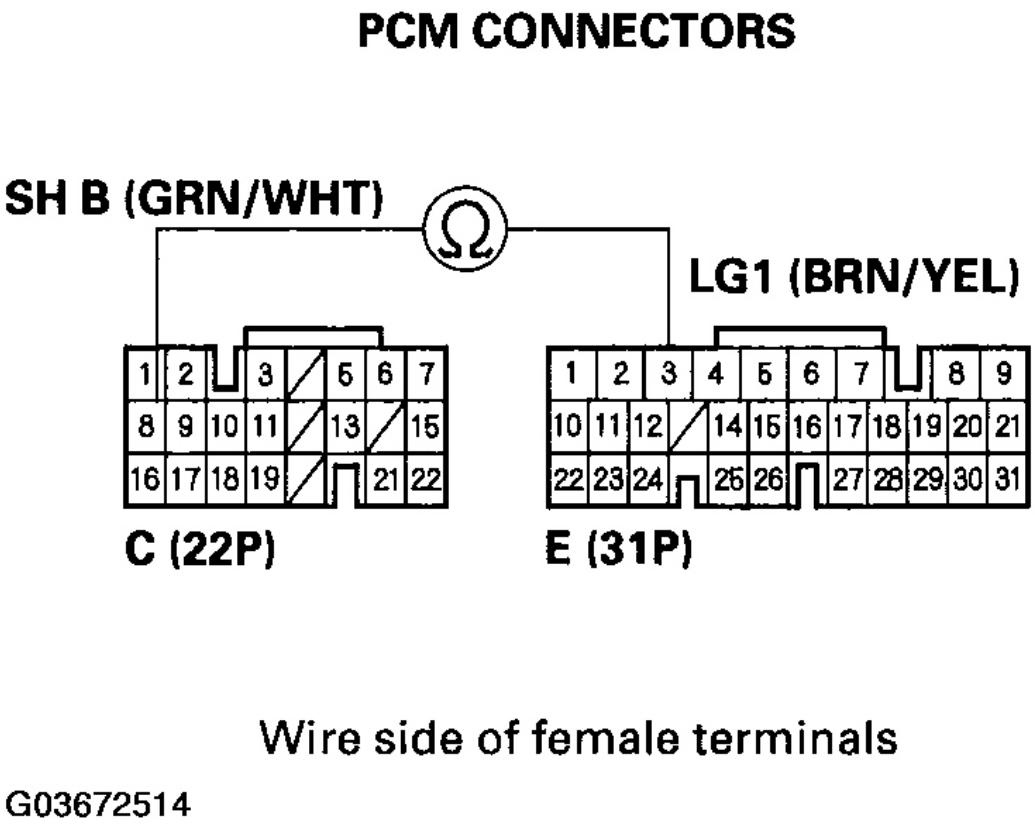


Fig. 159: Measuring Resistance Between PCM Connector Terminals C8 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there less than 12 ohms?

YES - Go to step 12.
NO - Go to step 23.

12. Disconnect shift solenoid valve B connector.
13. Check for continuity between PCM connector terminals C8 and E3.

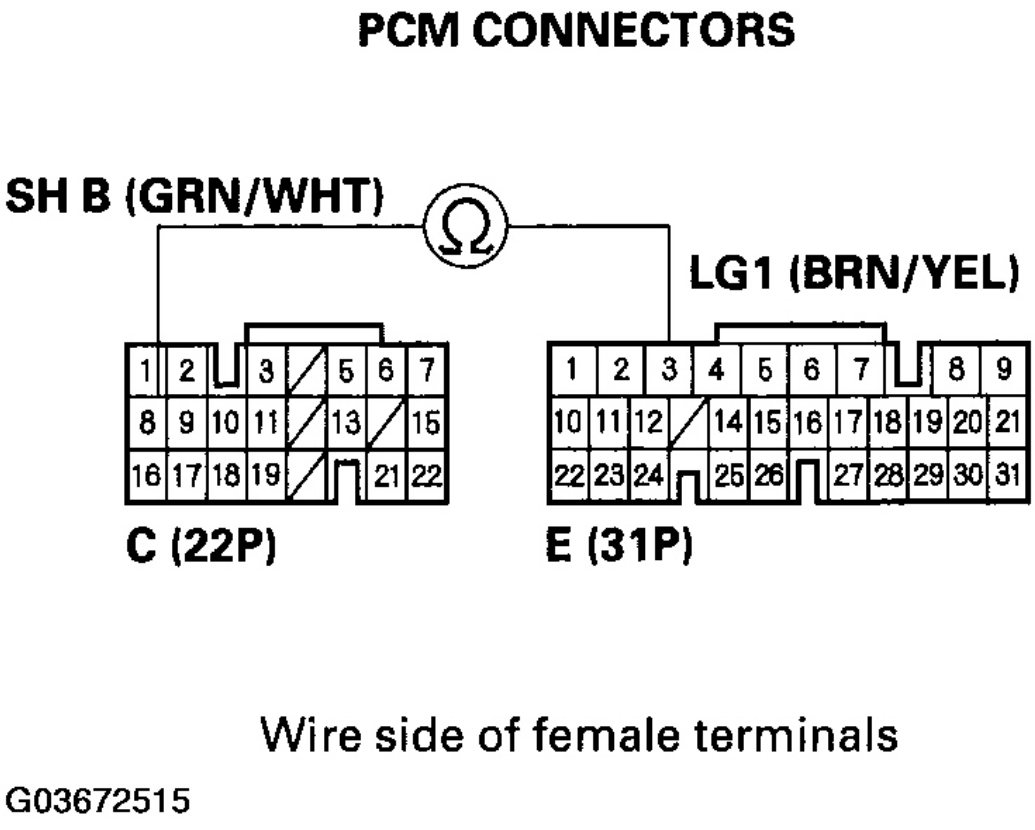


Fig. 160: Checking Continuity Between PCM Connector Terminals C8 and E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal C8 and shift solenoid valve B, then go to step 17.

NO - Go to step 14.

14. Measure shift solenoid valve B resistance at the solenoid valve connector.

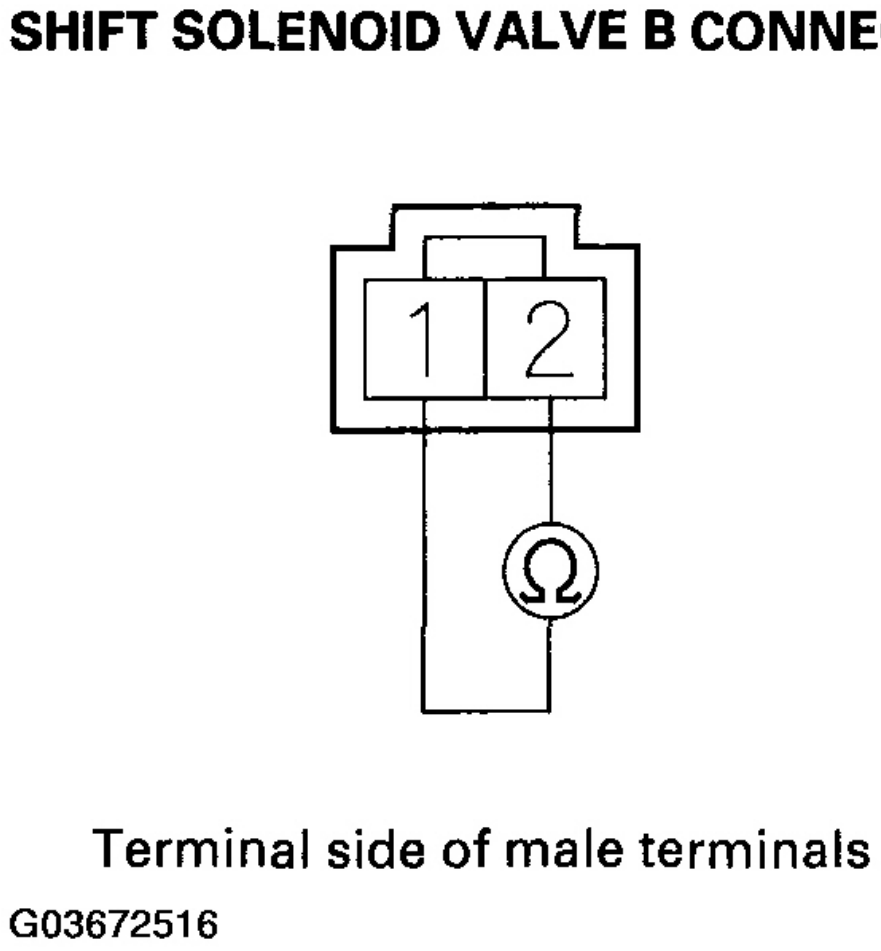


Fig. 161: Measuring Shift Solenoid Valve B Resistance At Solenoid Valve Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 12 - 15 ohms?

YES - Go to step 15.

NO - Replace the shift solenoid valve B (see **SHIFT SOLENOID VALVE B REPLACEMENT**), then go to step 17.

15. Turn the ignition switch ON (II).
16. Measure the voltage between PCM connector terminals E10 and E3.

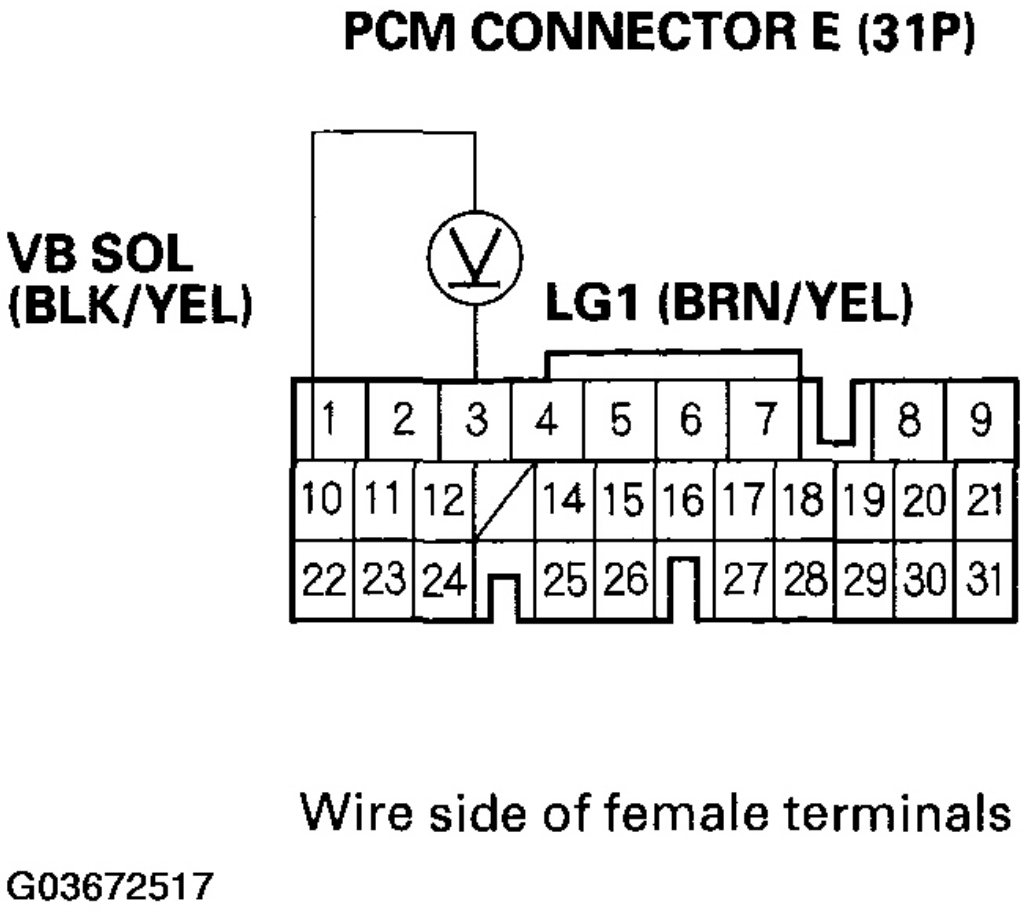


Fig. 162: Measuring Voltage Between PCM Connector Terminals E10 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Check for loose or poor connections at PCM connector terminal E10. If the connection is OK, update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING**), then recheck. If the symptom/indication goes away with a known-good PCM, replace the original PCM.

NO - Check for blown No. 18 fuse in the under-dash fuse/relay box. If the fuse is OK, repair open in the wire between PCM connector terminal E10 and the under-dash fuse/relay box, then go to step 17.

17. Reconnect all connectors.
18. Turn the ignition switch ON (II).
19. Clear the DTC with the HDS.
20. Test-drive the vehicle for several minutes in the D position through all five gears.
21. Check for DTC's with the HDS.

Is DTC P0976 indicated?

YES - Check for intermittent short to body ground in the wire between shift solenoid valve B and PCM, then return to step 1 and recheck.

NO - Go to step 22.

22. Monitor the OBD status for P0976 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 21, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check intermittent short to body ground in the wire between shift solenoid valve B and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 20.

23. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
24. Test-drive the vehicle for several minutes in the D position through all five gears.
25. Check for DTCs with the HDS.

Is DTC P0976 indicated?

YES - Check for intermittent short to body ground in the wire between

shift solenoid valve B and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 24. If the PCM was substituted, return to step 1.

NO - Go to step 26.

26. Monitor the OBD status for P0976 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 25, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for intermittent short to body ground in the wire between shift solenoid valve B and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 24. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 24.

DTC P0977: Open in Shift Solenoid Valve B Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Test-drive the vehicle for several minutes in the D position through all five gears.
4. Check that DTC P0977 recurs.

Is DTC P0977 indicated?

YES - Go to step 8.

NO - Go to step 5.

5. Choose Shift Solenoid B in Miscellaneous Test Menu, and test the shift solenoid valve B with the HDS.

Is a clicking sound heard?

YES - Go to step 6.

NO - Go to step 8.

6. Test-drive the vehicle for several minutes in the D position through all five gears.
7. Monitor the OBD status for P0977 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

Does the result indicate FAILED?

YES - Go to step 8.

NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at shift solenoid valve B and PCM. If the tester indicates NOT COMPLETED, return to step 5 and recheck.

8. Turn the ignition switch OFF.
9. Jump the SCS line with HDS.
10. Disconnect PCM connectors B (24P), C (22P), and E (31P).
11. Measure the resistance between PCM connector terminals C8 and E3.

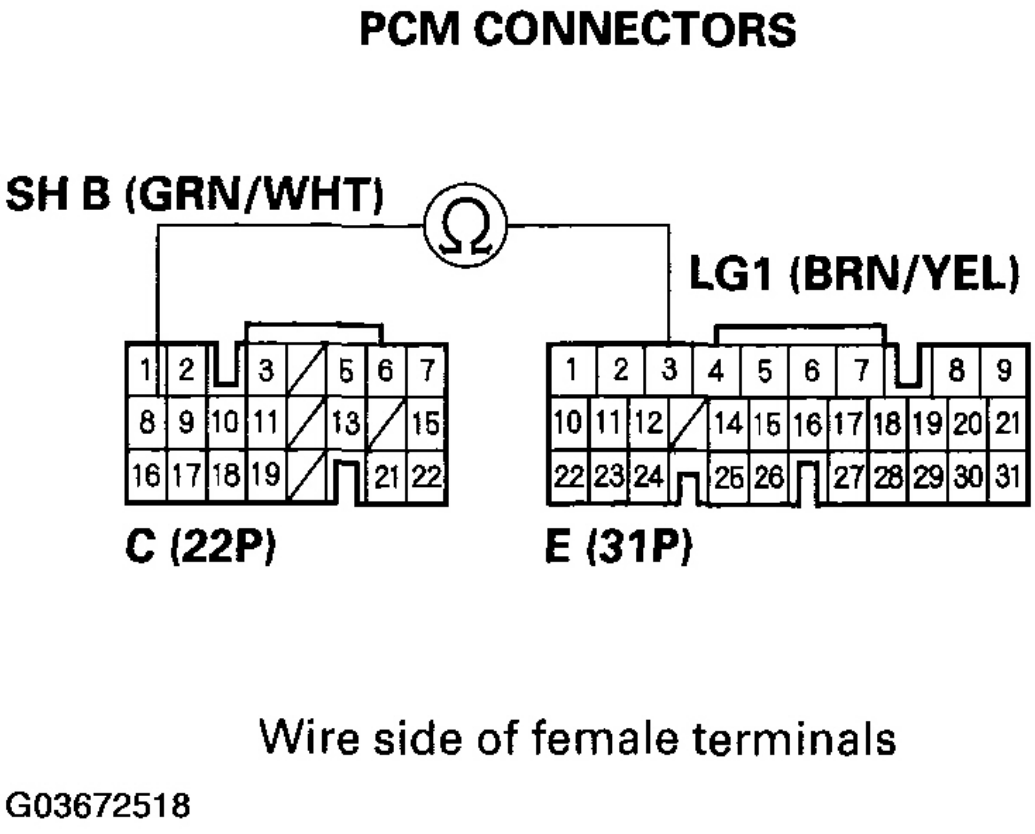


Fig. 163: Measuring Resistance Between PCM Connector Terminals C8 and E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 12 - 25 ohms?

YES - Go to step 21.
NO - Go to step 12.

12. Disconnect shift solenoid valve B connector.
13. Measure shift solenoid valve B resistance at the solenoid valve connector.

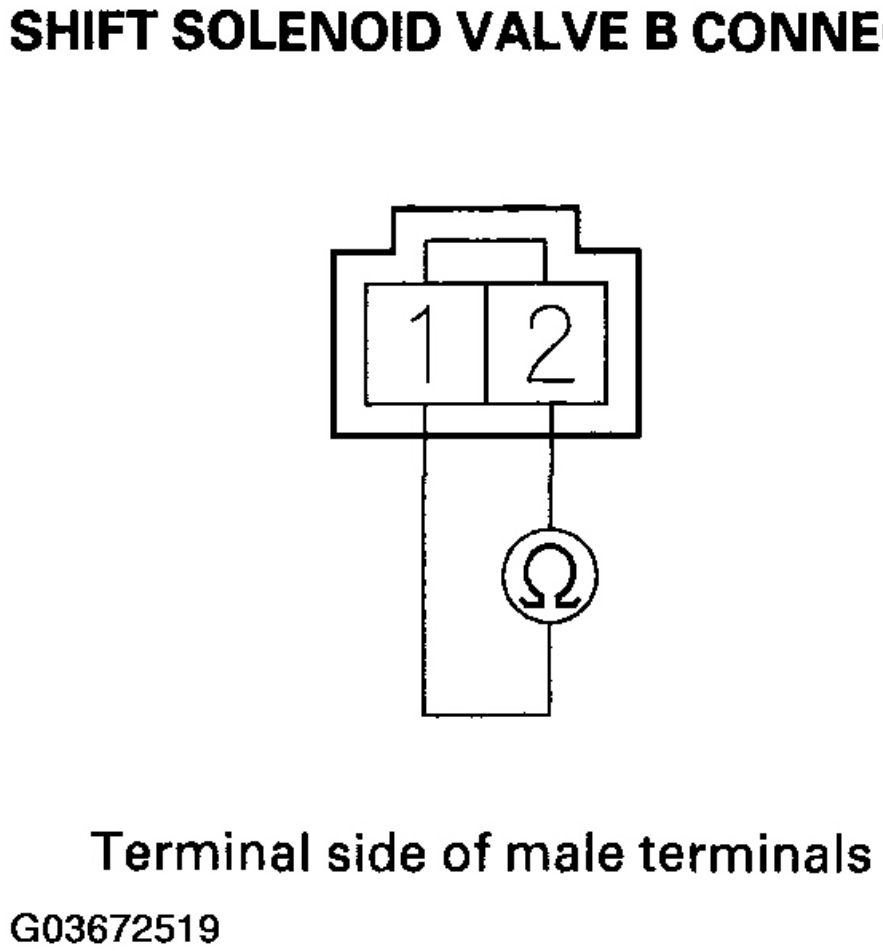


Fig. 164: Measuring Shift Solenoid Valve B Resistance At Solenoid Valve Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 12 - 25 ohms?

YES - Go to step 14.

NO - Replace the shift solenoid valve B (see **SHIFT SOLENOID VALVE B REPLACEMENT**), then go to step 15.

14. Check for continuity between shift solenoid valve B connector terminal No. 1 and body ground.

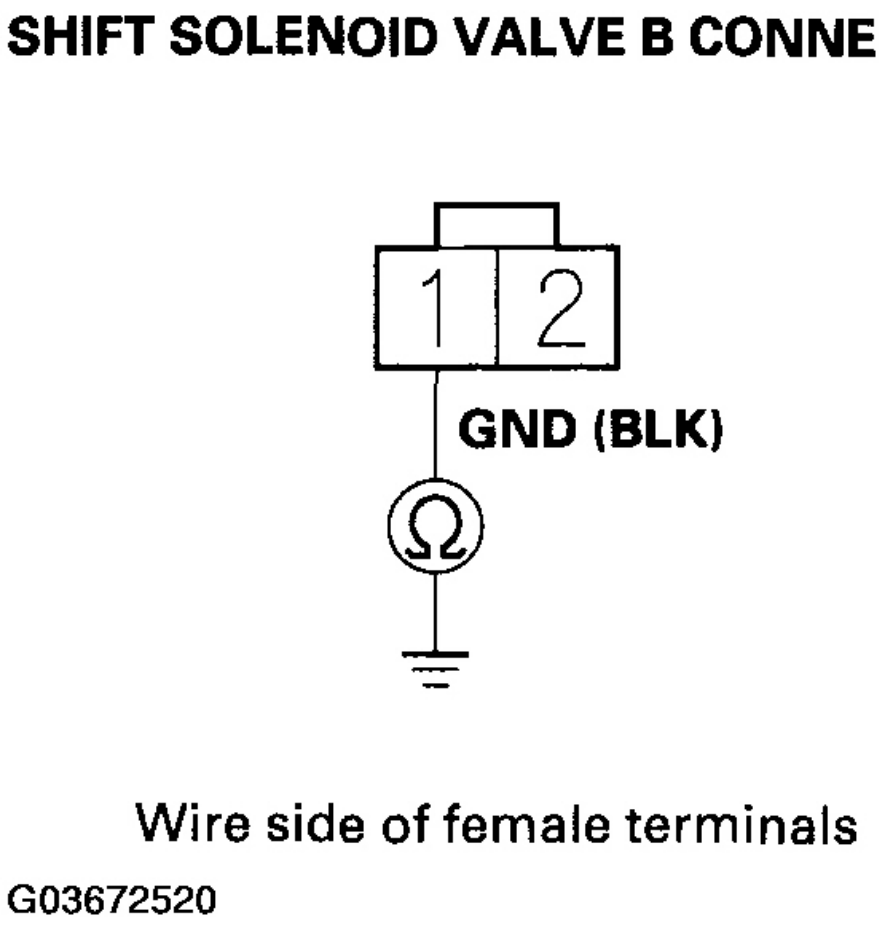


Fig. 165: Checking Continuity Between Shift Solenoid Valve B Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair open in the wire between PCM connector terminal C8 and shift solenoid valve B, then go to step 15.

NO - Repair open in the wire between shift solenoid valve B and ground (G151), or repair poor ground (G151), then go to step 15.

15. Reconnect all connectors.

16. Turn the ignition switch ON (II).
17. Clear the DTC with the HDS.
18. Test-drive the vehicle for several minutes in the D position through all five gears.
19. Check for DTC's with the HDS.

Is DTC P0977 indicated?

YES - Check for intermittent short to body ground in the wire between shift solenoid valve B and PCM, then return to step 1 and recheck.

NO - Go to step 22.

20. Monitor the OBD status for P0977 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 21, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between shift solenoid valve B and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 18.

21. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
22. Test-drive the vehicle for several minutes in the D position through all five gears.
23. Check for DTCs with the HDS.

Is DTC P0977 indicated?

YES - Check for poor connections or loose terminals between shift solenoid valve B and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 22. If the PCM was substituted, return to step 1.

NO - Go to step 24.

24. Monitor the OBD status for P0977 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 23, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between shift solenoid valve B and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 22. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 22.

DTC P0979: Short in Shift Solenoid Valve C Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Test-drive the vehicle for several minutes in the D position through all five gears.
4. Check for DTCs using the HDS.

Is DTC P0979 indicated?

YES - Go to step 8.

NO - Go to step 5.

5. Choose Shift Solenoid C in Miscellaneous Test Menu, and test the shift solenoid valve C with the HDS.

   Is a clicking sound heard?

   YES - Go to step 6.

   NO - Go to step 8.
6. Test-drive the vehicle for several minutes in the D position through all five gears.
7. Monitor the OBD status for P0979 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 8.

   NO - Intermittent failure, the system is OK at this time. Check the GRN wire for an intermittent short to ground between shift solenoid valve C and PCM. If the tester indicates NOT COMPLETED, return to step 5 and recheck.
8. Turn the ignition switch OFF.
9. Jump the SCS line with the HDS.
10. Disconnect PCM connectors B (24P), C (22P), and E (31P).
11. Measure the resistance between PCM connector terminals C16 and E3.

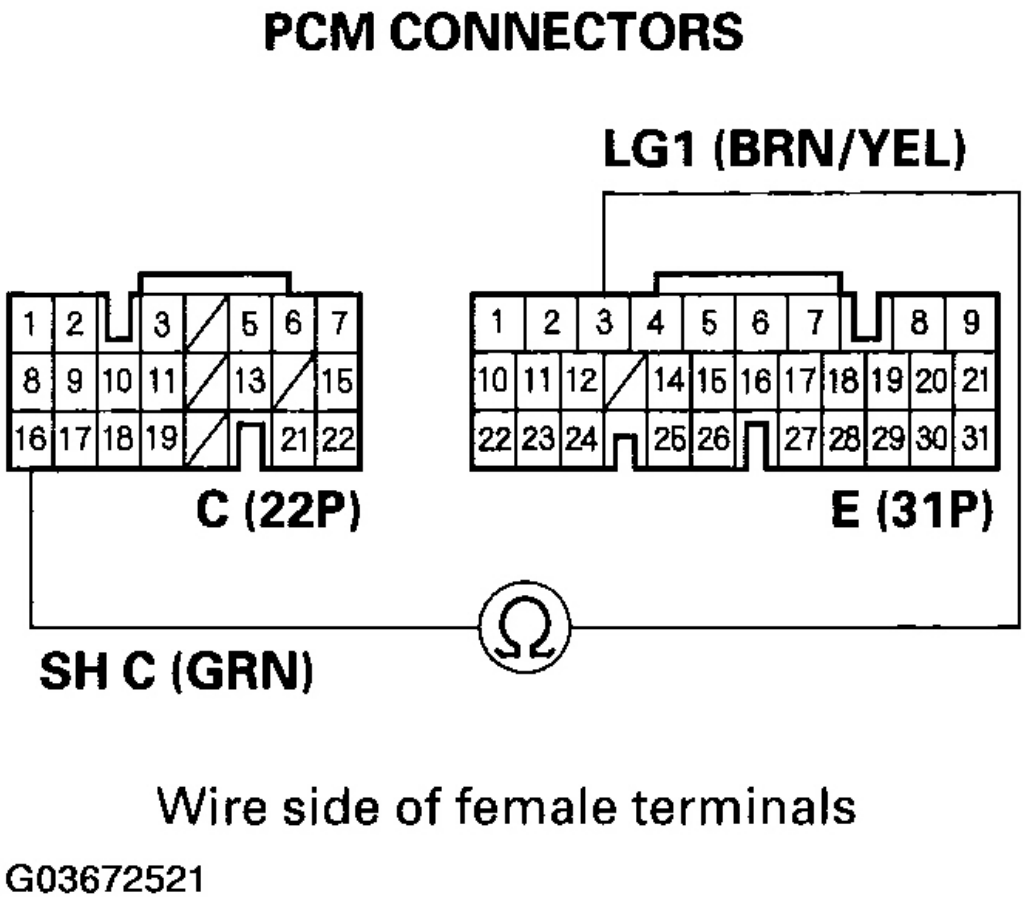


Fig. 166: Measuring Resistance Between PCM Connector Terminals C16 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there less than 12 ohms?

YES - Go to step 12.
NO - Go to step 23.

12. Disconnect shift solenoid valve C connector.
13. Check for continuity between PCM connector terminals C16 and E3.

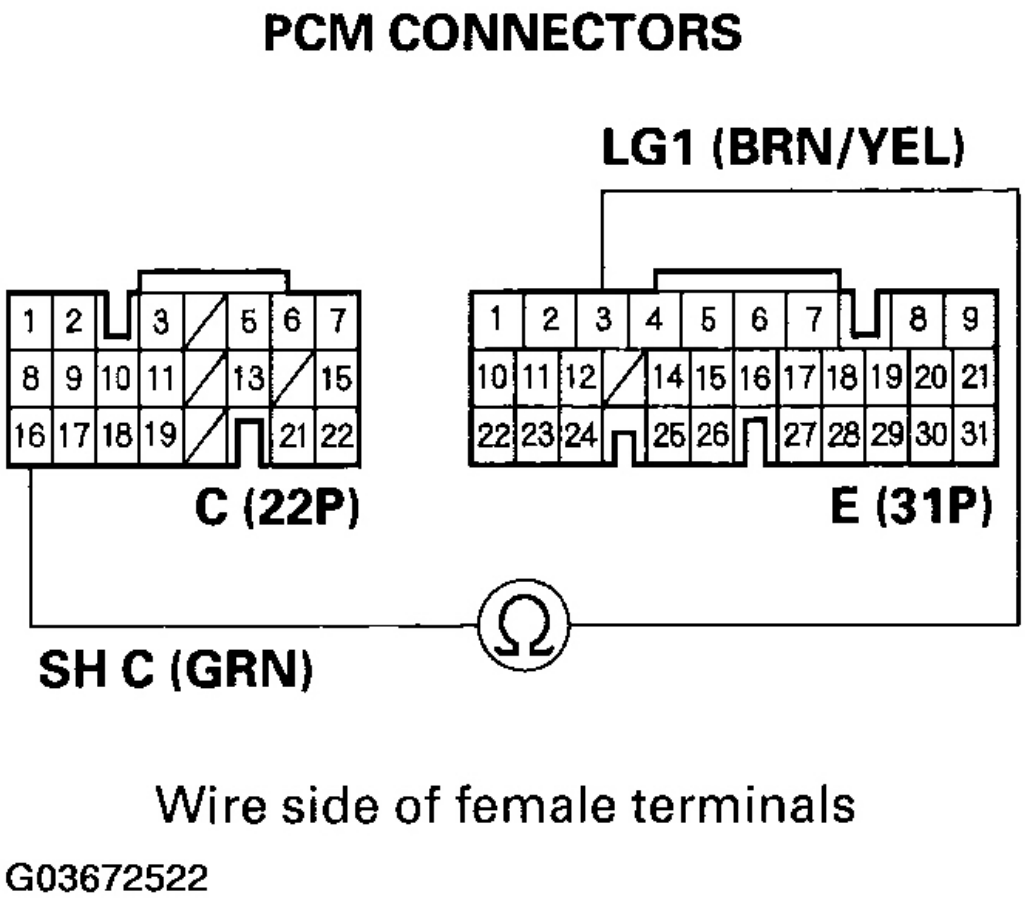


Fig. 167: Checking Continuity Between PCM Connector Terminals C16 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal C16 and the shift solenoid valve C, then go to step 17.

NO - Go to step 14.

14. Measure shift solenoid valve C resistance at the solenoid valve connector.

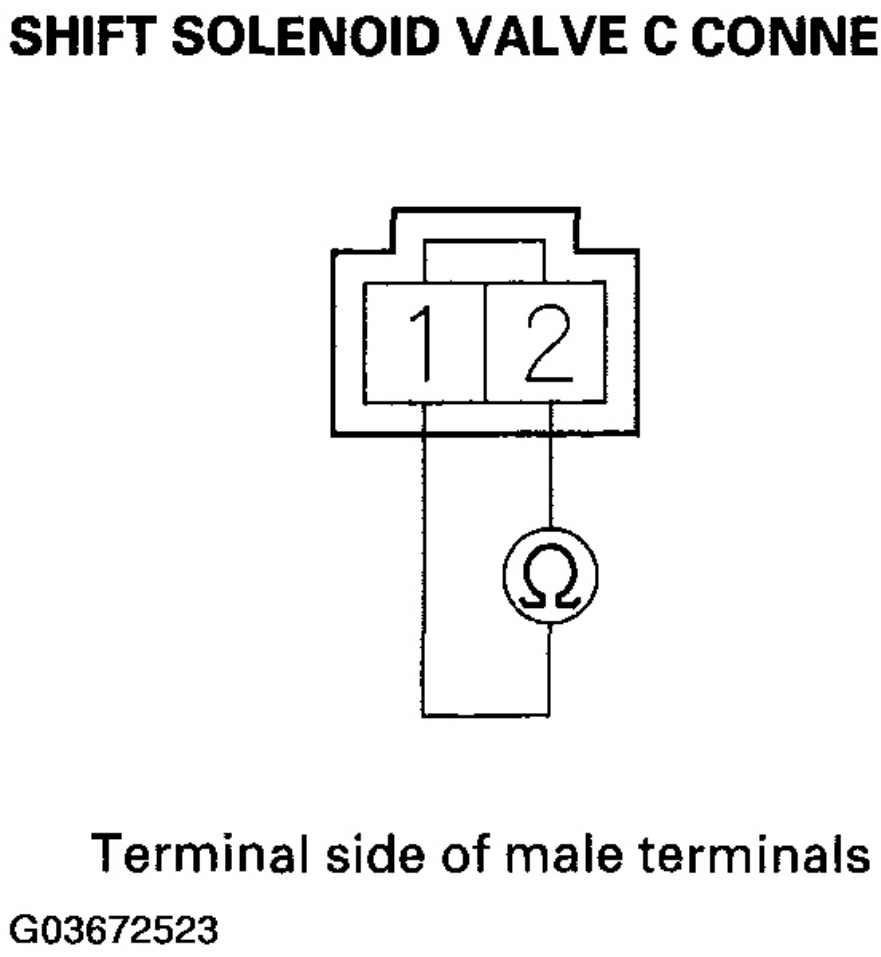


Fig. 168: Measuring Shift Solenoid Valve C Resistance At Solenoid Valve Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 12 - 25 ohms?

YES - Go to step 15.

NO - Replace the shift solenoid valve C (see **SHIFT SOLENOID VALVE C REPLACEMENT**), then go to step 17.

15. Turn the ignition switch ON (II).
16. Measure the voltage between PCM connector terminals E10 and E3.

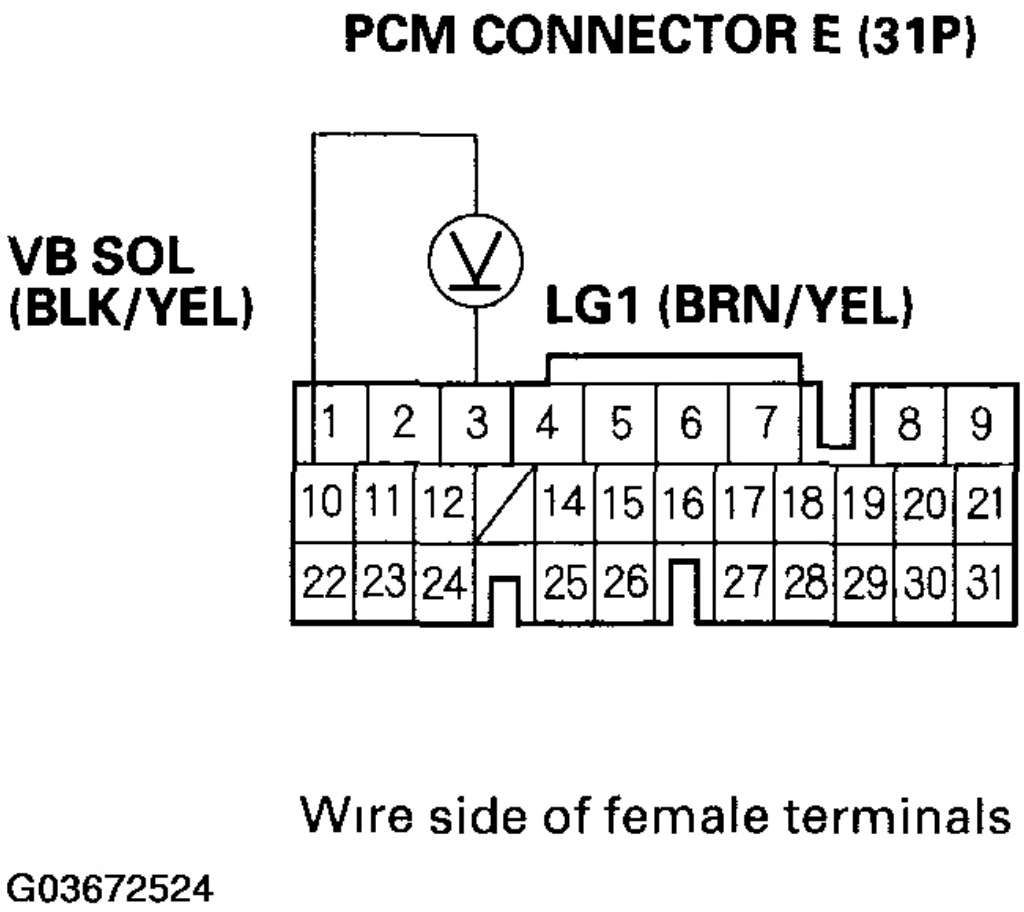


Fig. 169: Measuring Voltage Between PCM Connector Terminals E10 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 23.

NO - Check for blown No. 18 fuse in the under-dash fuse/relay box. If the fuse is OK, repair open in the wire between PCM connector terminal E10 and the under-dash fuse/relay box, then go to step 16.

17. Reconnect all connectors.

18. Turn the ignition switch ON (II).
19. Clear the DTC with the HDS.
20. Test-drive the vehicle for several minutes in the D position through all five gears.
21. Check for DTC's with the HDS.

Is DTC P0979 indicated?

YES - Check for intermittent short to body ground in the wire between shift solenoid valve B and PCM, then return to step 1 and recheck.

NO - Go to step 22.

22. Monitor the OBD status for P0979 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 21, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check intermittent short to body ground in the wire between shift solenoid valve C and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 20.

23. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
24. Test-drive the vehicle for several minutes in the D position through all five gears.
25. Check for DTCs with the HDS.

Is DTC P0979 indicated?

YES - Check for intermittent short to body ground in the wire between shift solenoid valve C and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 24. If the PCM was substituted, return to step 1.

NO - Go to step 26.

26. Monitor the OBD status for P0979 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 25, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for intermittent short to body ground in the wire between shift solenoid valve C and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 24. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 24.

DTC P0980: Open in Shift Solenoid Valve C Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Test-drive the vehicle for several minutes in the D position through all five gears.
4. Check that DTC P0980 recurs.

Is DTC P0980 indicated?

YES - Go to step 8.

NO - Go to step 5.

5. Choose Shift Solenoid C in Miscellaneous Test Menu, and test the shift solenoid valve C with the HDS.

   Is a clicking sound heard?

   YES - Go to step 6.

   NO - Go to step 8.
6. Test-drive the vehicle for several minutes in the D position through all five gears.
7. Monitor the OBD status for P0980 in the DTCs Menu using the HDS.

   Does the result indicate FAILED?

   YES - Go to step 8.

   NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at shift solenoid valve C and PCM. If the tester indicates NOT COMPLETED, return to step 5 and recheck.
8. Turn the ignition switch OFF.
9. Jump the SCS line with the HDS.
10. Disconnect PCM connectors B (24P), C (22P), and E (31P).
11. Measure the resistance between PCM connector terminals C16 and E3.

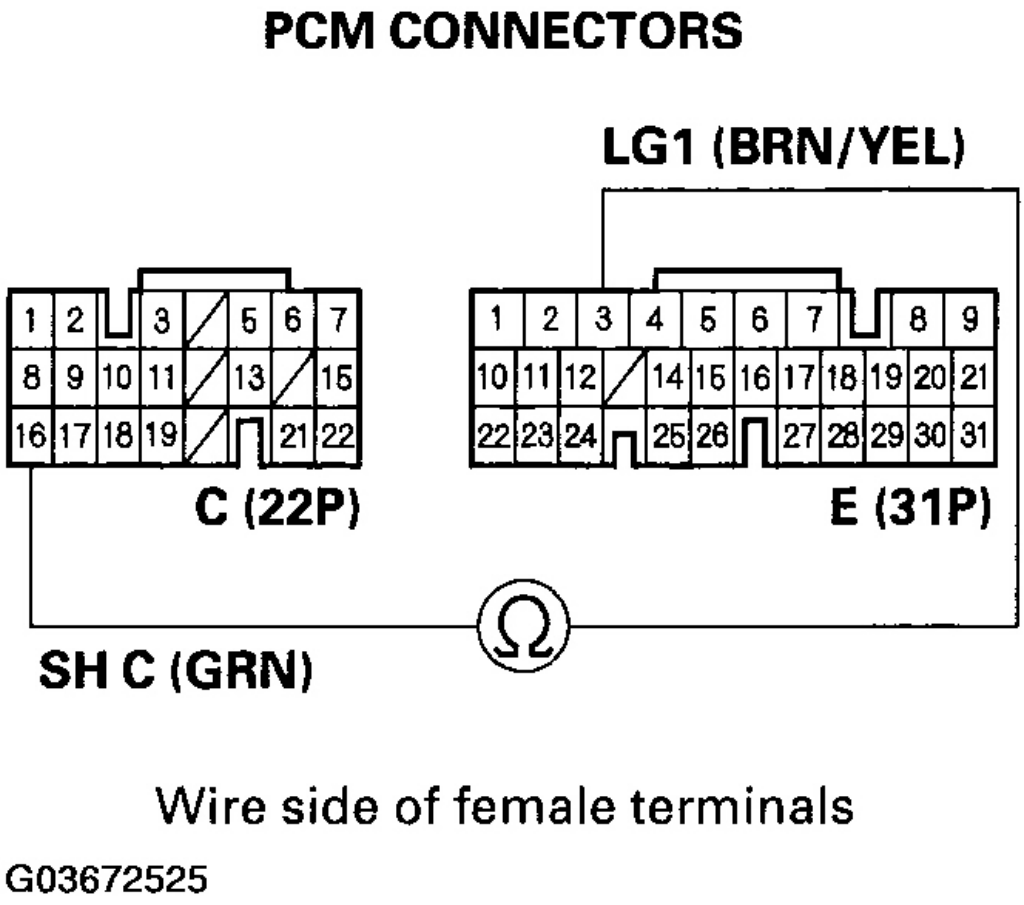


Fig. 170: Measuring Resistance Between PCM Connector Terminals C16 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 12 - 25 ohms?

YES - Go to step 21.
NO - Go to step 12.

12. Disconnect shift solenoid valve C connector.
13. Measure shift solenoid valve C resistance at the solenoid valve connector.

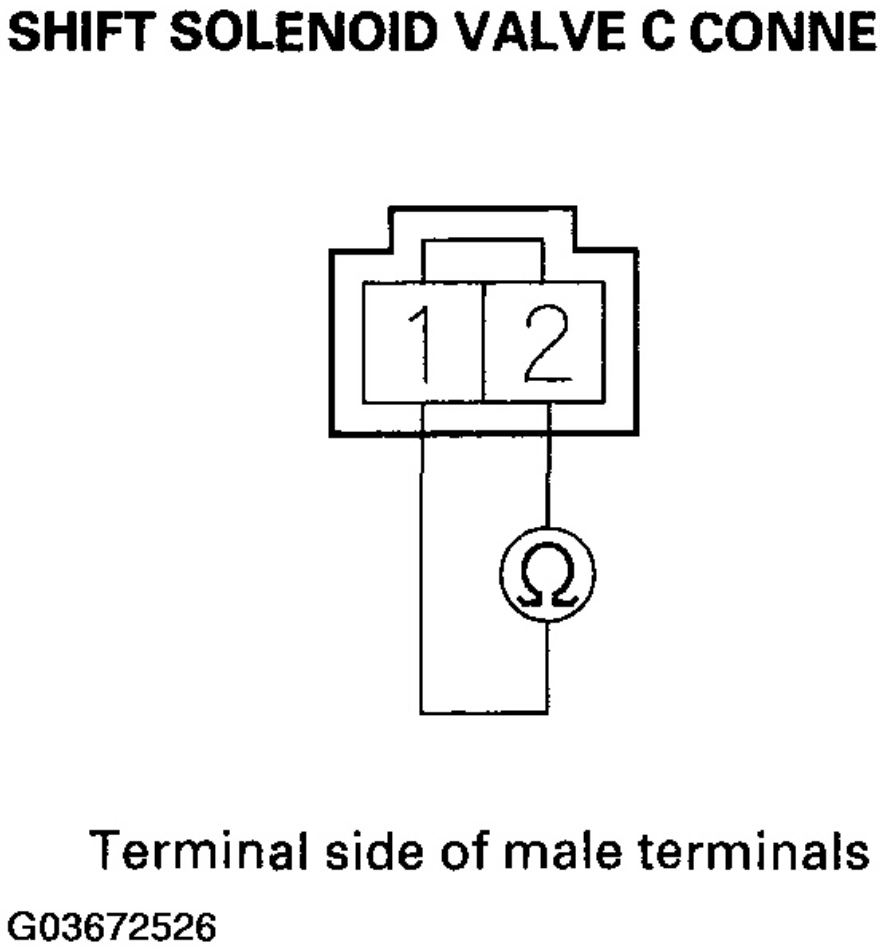


Fig. 171: Measuring Shift Solenoid Valve C Resistance At The Solenoid Valve Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 12 - 25 ohms?

YES - Go to step 14.

NO - Replace the shift solenoid valve C (see **SHIFT SOLENOID VALVE C REPLACEMENT**), then go to step 15.

14. Check for continuity between shift solenoid valve C connector terminal No. 1 and body ground.

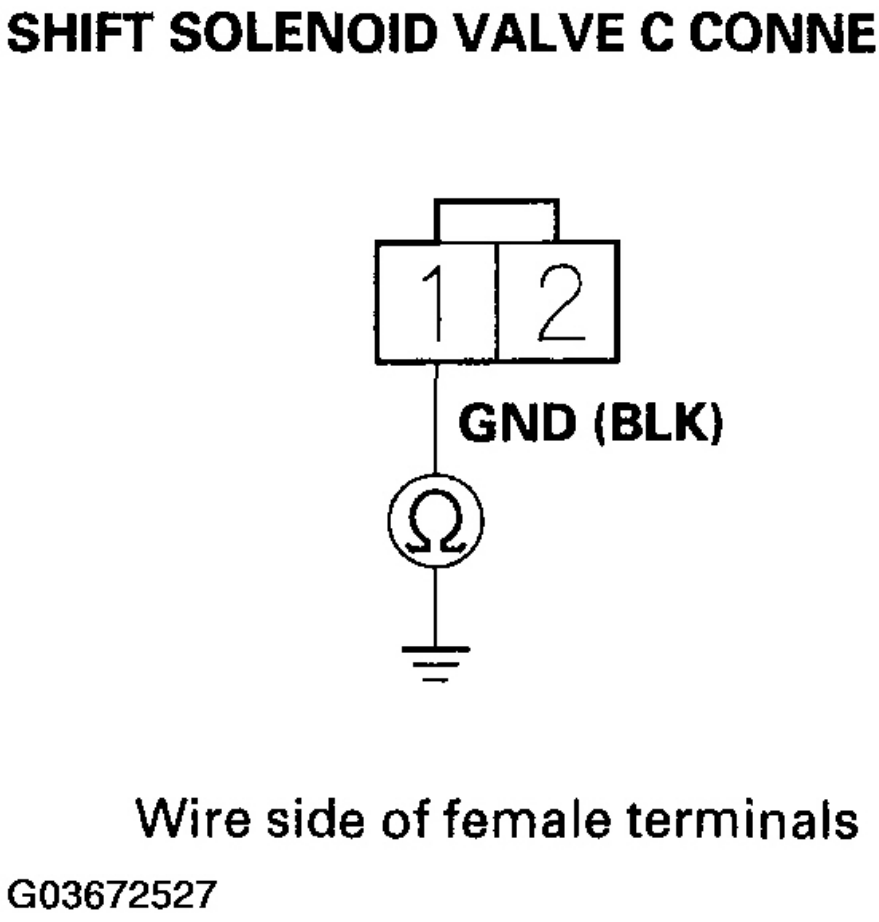


Fig. 172: Checking Continuity Between Shift Solenoid Valve C Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair open in the wire between PCM connector terminal C16 and shift solenoid valve C, then go to step 14.

NO - Repair open in the wire between shift solenoid valve C and ground (G151), or repair poor ground (G151), then go to step 15.

15. Reconnect all connectors.

16. Turn the ignition switch ON (II).
17. Clear the DTC with the HDS.
18. Test-drive the vehicle for several minutes in the D position through all five gears.
19. Check for DTC's with the HDS.

Is DTC P0980 indicated?

YES - Check for poor connections or loose terminals between shift solenoid valve C and PCM, then return to step 1 and recheck.

NO - Go to step 20.

20. Monitor the OBD status for P0980 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 21, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between shift solenoid valve C and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 18.

21. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
22. Test-drive the vehicle for several minutes in the D position through all five gears.
23. Check for DTCs with the HDS.

Is DTC P0980 indicated?

YES - Check for poor connections or loose terminals between shift solenoid valve C and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 22. If the PCM was substituted, return to step 1.

NO - Go to step 24.

24. Monitor the OBD status for P0980 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 23, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between shift solenoid valve C and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 22. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 22.

DTC P2769: Short in Torque Converter Clutch Solenoid Valve Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
4. Test drive the vehicle for several minutes in the D position through all five gears.
5. Check for DTCs with HDS.

Is DTC P2769 indicated?

YES - Go to step 10.

NO - Go to step 4.

6. Choose Lockup Solenoid Test in Miscellaneous Test Menu, and test the torque converter clutch solenoid valve with the HDS.

   Is a clicking sound heard?

   YES - Go to step 7.

   NO - Go to step 10.
7. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
8. Test drive the vehicle for several minutes in the D position through all five gears.
9. Monitor the OBD status for P2769 in the DTCs/ Freeze Data in A/T Mode Menu for a pass/fail.

   Does the result indicate FAILED?

   YES - Go to step 10.

   NO - Intermittent failure, the system is OK at this time. Check the YEL wire for an intermittent short to ground between torque converter clutch solenoid valve and PCM. If the tester indicates NOT COMPLETED, return to step 8 and recheck.
10. Turn the ignition switch OFF.
11. Jump the SCS line with the HDS.
12. Disconnect PCM connectors B (24P), C (22P), and E (31P).
13. Measure the resistance between PCM connector terminals C6 and E3.

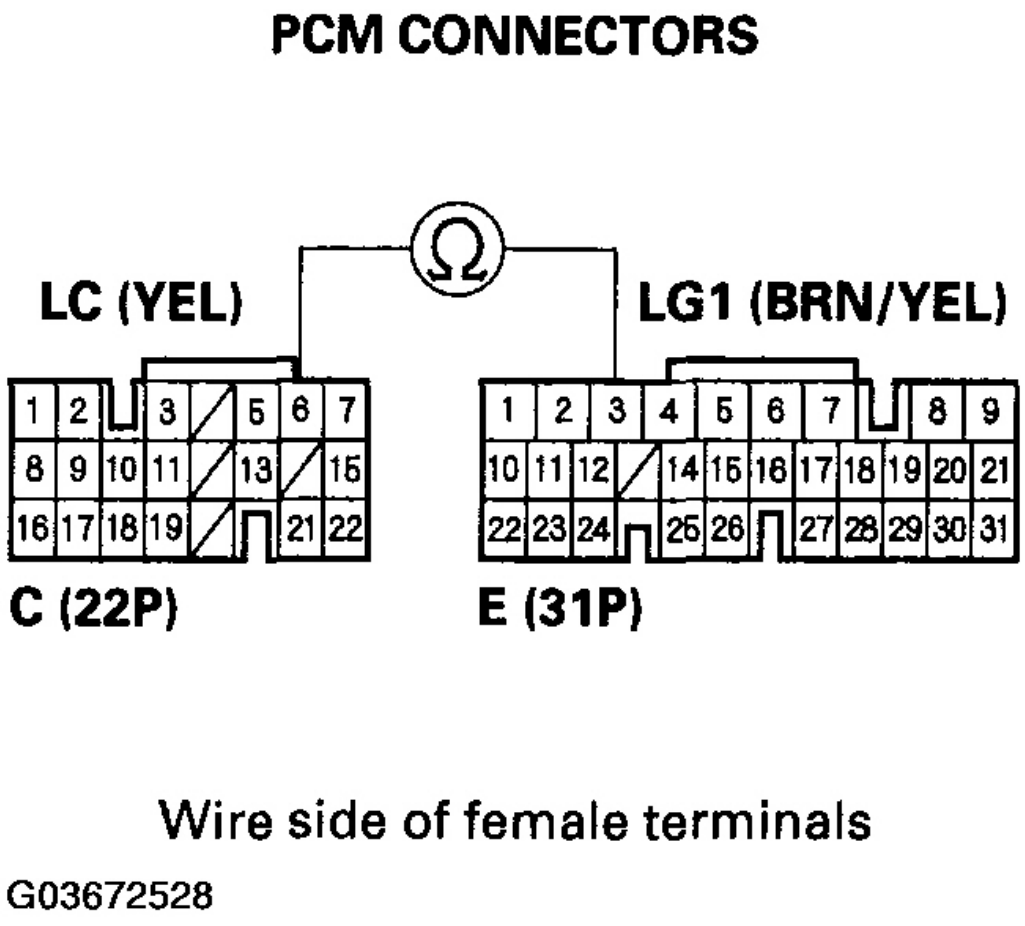


Fig. 173: Measuring Resistance Between PCM Connector Terminals C6 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there less than 12 ohms?

YES - Go to step 14.
NO - Go to step 26.

14. Disconnect torque converter clutch solenoid valve connector.
15. Check for continuity between PCM connector terminals C6 and E3.

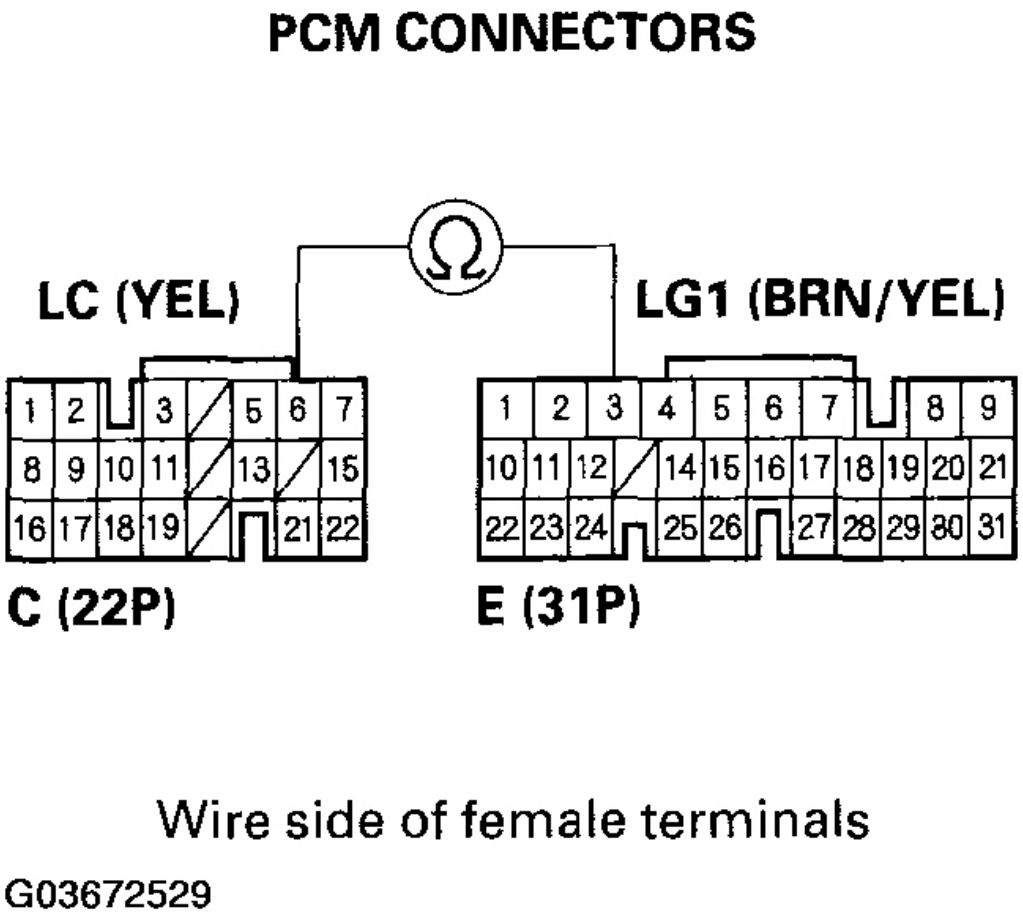


Fig. 174: Checking Continuity Between PCM Connector Terminals C6 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal C6 and torque converter clutch solenoid valve, then go to step 19.

NO - Go to step 16.

16. Measure torque converter clutch solenoid valve resistance at the solenoid valve connector.

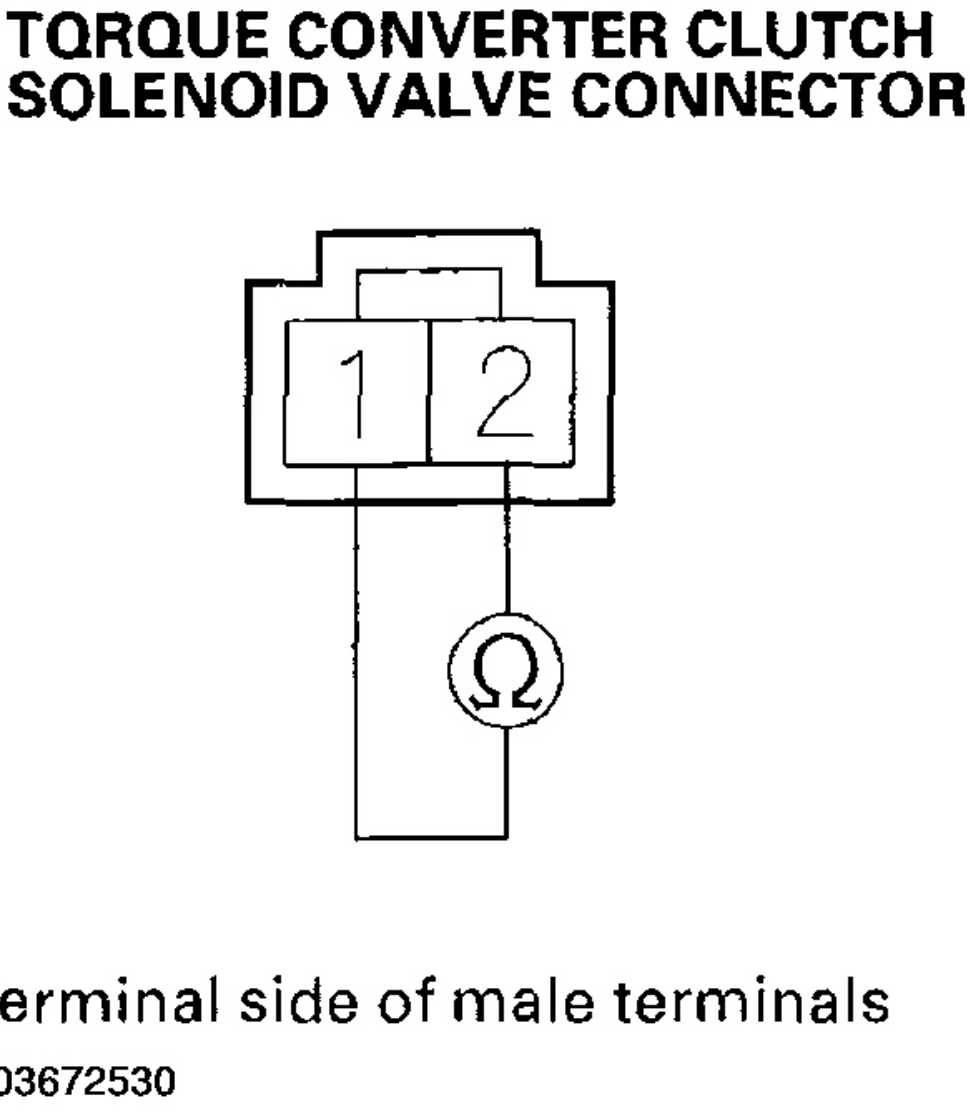


Fig. 175: Measuring Torque Converter Clutch Solenoid Valve Resistance At Solenoid Valve Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 12 - 25 ohms?

YES - Go to step 17.

NO - Replace the torque converter clutch solenoid valve (see **TORQUE CONVERTER CLUTCH SOLENOID VALVE REPLACEMENT**), then go to step 19.

17. Turn the ignition switch ON (II).
18. Measure the voltage between PCM connector terminals E10 and E3.

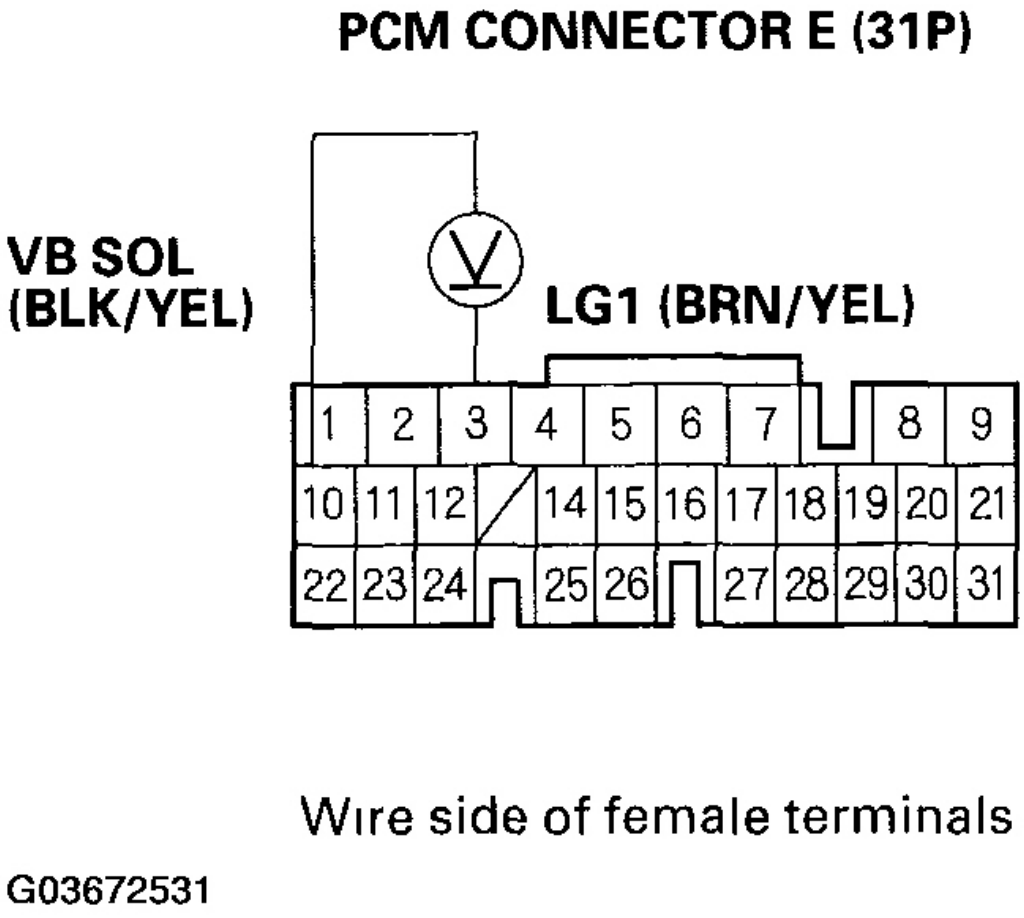


Fig. 176: Measuring Voltage Between PCM Connector Terminals E10 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 26.

NO - Check for blown No. 18 fuse in the under-dash fuse/relay box. If the fuse is OK, repair open in the wire between PCM connector terminal E10 and the under-dash fuse/relay box, then go to step 19.

19. Reconnect all connectors.
20. Turn the ignition switch ON (II).
21. Clear the DTC with the HDS.
22. Start the engine, and warm it to normal operating temperature (the radiator fan comes on).
23. Test drive the vehicle for several minutes in the D position through all five gears.
24. Check for DTC's with the HDS.

Is DTC P2769 indicated?

YES - Check for intermittent short to body ground in the wire between torque converter clutch solenoid valve and PCM, then return to step 1 and recheck.

NO - Go to step 25.

25. Monitor the OBD status for P2769 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 24, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check intermittent short to body ground in the wire between torque converter clutch solenoid valve and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 23.

26. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
27. Test drive the vehicle for several minutes in the D position through all five gears.

28. Check for DTCs with the HDS.

    Is DTC P2769 indicated?

    YES - Check for intermittent short to body ground in the wire between torque converter clutch solenoid valve and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 27. If the PCM was substituted, return to step 1.

    NO - Go to step 29.

29. Monitor the OBD status for P2769 in the DTCs Menu with the HDS.

    Does the result indicate PASSED?

    YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 28, go to the indicated DTC's troubleshooting.

    NO - If screen indicates FAILED, check for intermittent short to body ground in the wire between torque converter clutch solenoid valve and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 27. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 27.

DTC P2770: Open in Torque Converter Clutch Solenoid Valve Circuit

NOTE:

- **Record all freeze data and review General Troubleshooting Information, refer to GENERAL TROUBLESHOOTING INFORMATION before you troubleshoot.**
- **This code is caused by an electrical circuit problem and cannot be caused by a mechanical problem in the transmission.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.

3. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
4. Test drive the vehicle for several minutes in the D position through all five gears.
5. Check that DTC P2770 recurs.

Is DTC P2770 indicated?

YES - Go to step 10.

NO - Go to step 6.

6. Choose Lockup Solenoid Test in Miscellaneous Test Menu, and test the torque converter clutch solenoid valve with the HDS.

Is a clicking sound heard?

YES - Go to step 7.

NO - Go to step 10.

7. Start the engine, and warm it up to normal operating temperature (the radiator fan comes on).
8. Test drive the vehicle for several minutes in the D position through all five gears.
9. Monitor the OBD status for P2770 in the DTCs Menu with the HDS.

Does the result indicate FAILED?

YES - Go to step 10.

NO - Intermittent failure, the system is OK at this time. Check for poor connections or loose terminals at torque converter clutch solenoid valve and PCM. If the tester indicates NOT COMPLETED, return to step 8 and recheck.

10. Turn the ignition switch OFF.
11. Jump the SCS line with the HDS.
12. Disconnect PCM connectors B (24P), C (22P), and E (31P).
13. Measure the resistance between PCM connector terminals C6 and E3.

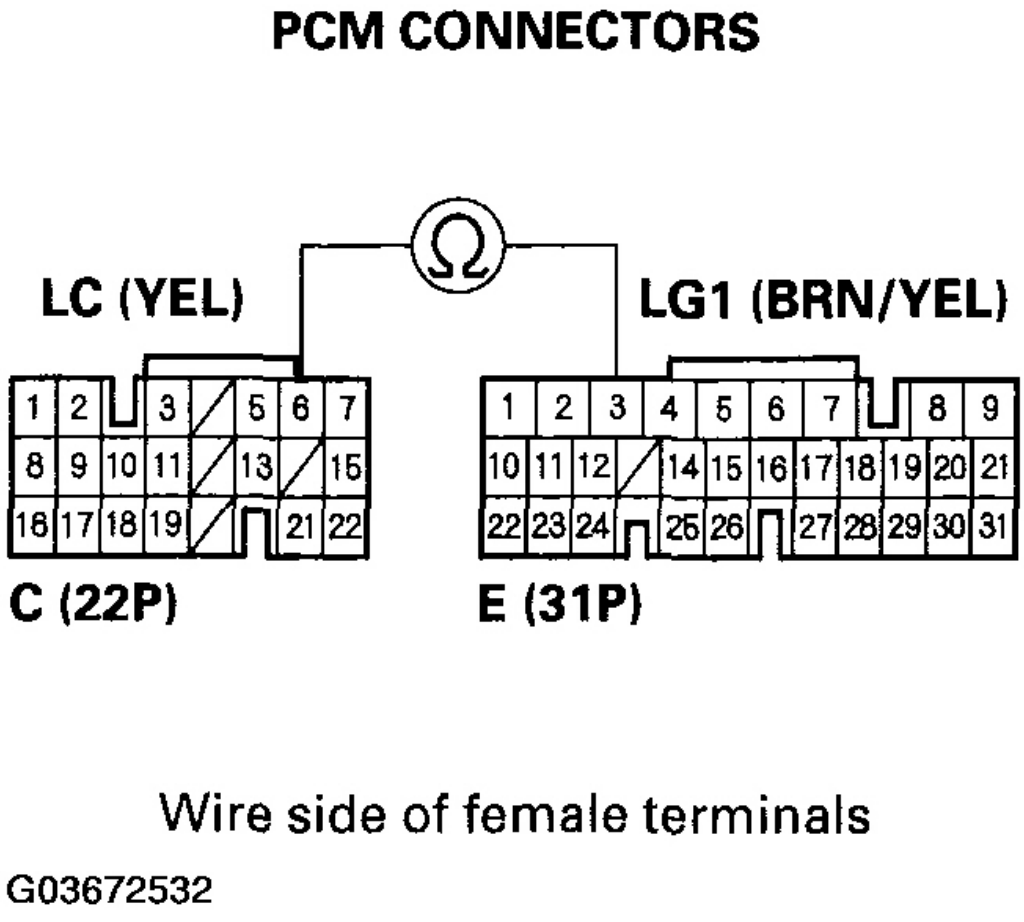


Fig. 177: Measuring Resistance Between PCM Connector Terminals C6 And E3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 12 - 25 ohms?

YES - Go to step 24.
NO - Go to step 14.

14. Disconnect torque converter clutch solenoid valve connector.
15. Measure torque converter clutch solenoid valve resistance at the solenoid valve connector.

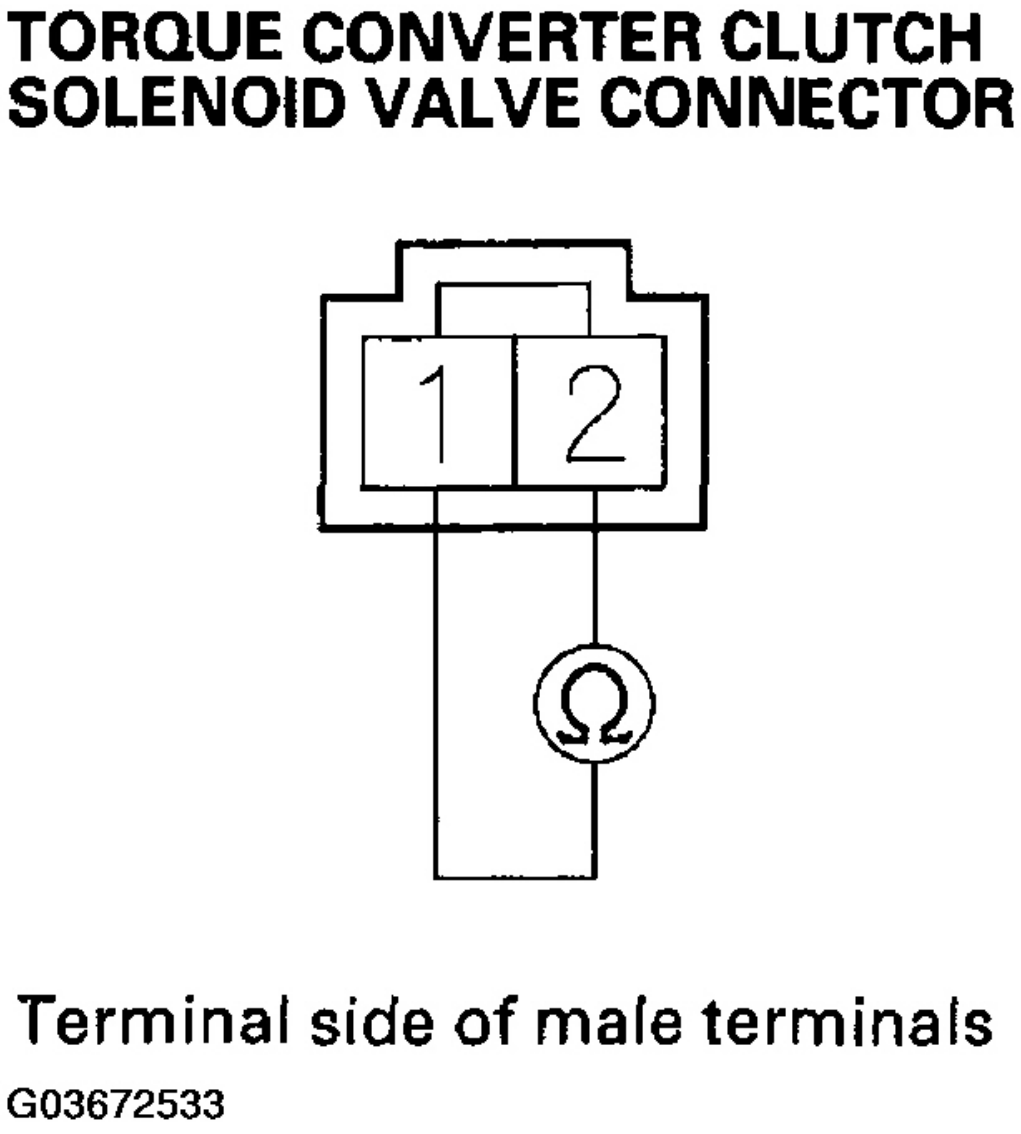


Fig. 178: Measuring Torque Converter Clutch Solenoid Valve Resistance At Solenoid Valve Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 12 - 25 ohms?

YES - Go to step 16.

NO - Replace the torque converter clutch solenoid valve (see **TORQUE CONVERTER CLUTCH SOLENOID VALVE REPLACEMENT**), then go to step 17.

16. Check for continuity between torque converter clutch solenoid valve connector terminal No. 1 and body ground.

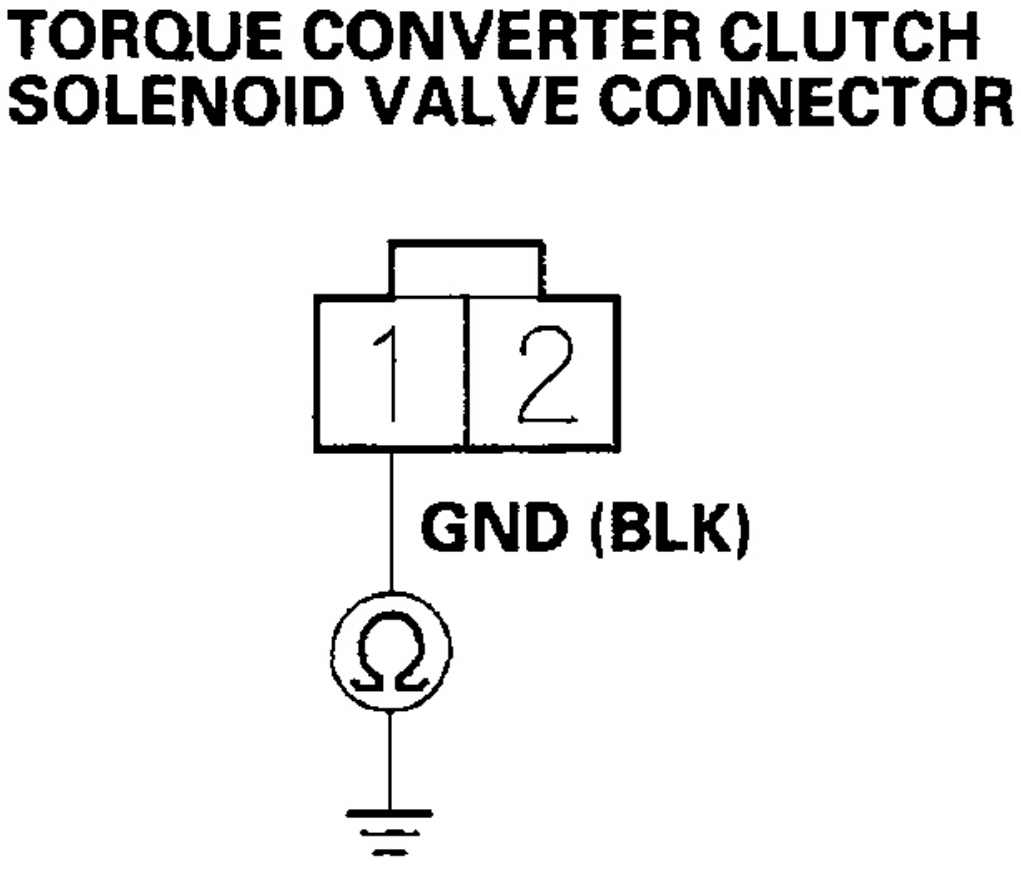


Fig. 179: Checking Continuity Between Torque Converter Clutch Solenoid Valve Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair open in the wire between PCM connector terminal C6 and torque converter clutch solenoid valve, then go to step 17.

NO - Repair open in the wire between torque converter clutch solenoid valve and ground (G151), or repair poor ground (G151), then go to step 17.

17. Reconnect all connectors.
18. Turn the ignition switch ON (II).
19. Clear the DTC with the HDS.
20. Start the engine, and warm it to normal operating temperature (the radiator fan comes on).
21. Test drive the vehicle for several minutes in the D position through all five gears.
22. Check for DTC's with the HDS.

Is DTC P2770 indicated?

YES - Check for poor connections or loose terminals between torque converter clutch solenoid valve and PCM, then return to step 1 and recheck.

NO - Go to step 20.

23. Monitor the OBD status for P2770 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - Troubleshooting is complete. If any other DTCs were indicated in step 22, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between torque converter clutch solenoid valve and PCM, then return to step 1 and recheck. If the screen indicates NOT COMPLETED,

go to step 21.

24. Update the PCM if it does not have the latest software, or substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** .
25. Test-drive the vehicle for several minutes in the D position through all five gears.
26. Check for DTCs with the HDS.

Is DTC P2770 indicated?

YES - Check for poor connections or loose terminals between torque converter clutch solenoid valve and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 25. If the PCM was substituted, return to step 1.

NO - Go to step 27.

27. Monitor the OBD status for P2770 in the DTCs Menu with the HDS.

Does the result indicate PASSED?

YES - If the PCM was updated, troubleshooting is complete. If the PCM was substituted, replace the original PCM. If any other DTCs were indicated in step 26, go to the indicated DTC's troubleshooting.

NO - If screen indicates FAILED, check for poor connections or loose terminals between shift solenoid valve C and PCM. If the PCM was updated, substitute a known-good PCM, refer to **PCM UPDATING AND SUBSTITUTION FOR TESTING** , then go to step 25. If the PCM was substituted, return to step 1 and recheck. If the screen indicates NOT COMPLETED, go to step 25.

ROAD TEST

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Apply the parking brake, and block both rear wheels. Start the engine, then shift to the D position while pressing the brake pedal. Press the accelerator

pedal, and release it suddenly. The engine should not stall.

3. Repeat step 2 in the D3 position.
4. Connect the HDS to the DLC (A), and go to the A/T data list.

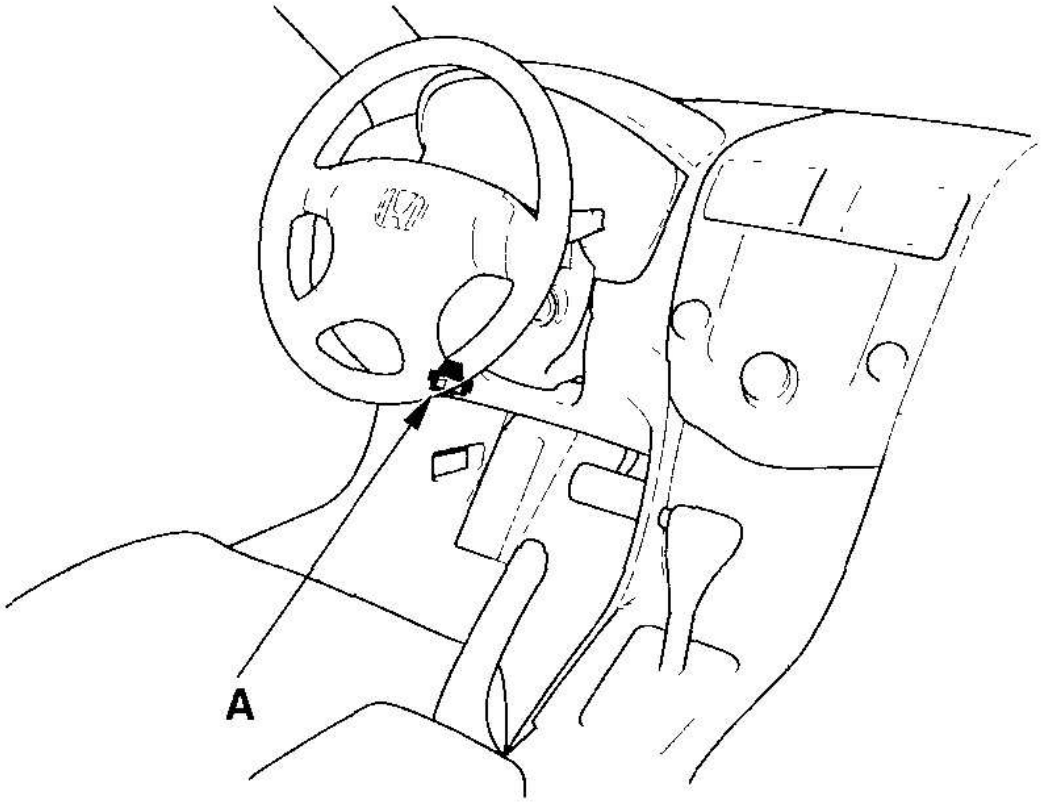


Fig. 180: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Test-drive the vehicle on a flat road in the D position. Check for abnormal noise and clutch slippage. While driving, check that the shift points occur at the proper speeds by monitoring the accelerator pedal position sensor voltage with the HDS and comparing your shift point speeds and voltage to those in the table. (The accelerator pedal position sensor voltage represents the throttle opening.)

UPSHIFT: D POSITION

Accelerator pedal position sensor voltage: 1.02 V	
1st --> 2nd	9-12 mph (14-19 km/h)
2nd --> 3rd	19-22 mph (30-35 km/h)
3rd --> 4th	30-34 mph (48-54 km/h)
4th --> 5th	45-50 mph (73-81 km/h)
Lock-up ON	41-48 mph (66-78 km/h)
Accelerator pedal position sensor voltage: 2.58 V	
1st --> 2nd	23-27 mph (37-44 km/h)
2nd --> 3rd	42-47 mph (67-75 km/h)
3rd --> 4th	63-69 mph (101-111 km/h)
4th --> 5th	90-100 mph (145-161 km/h)
Lock-up ON	91-101 mph (147-163 km/h)
Fully-opened throttle Accelerator pedal position sensor voltage: 4.65 V	
1st --> 2nd	35-40 mph (57-65 km/h)
2nd --> 3rd	60-68 mph (96-109 km/h)
3rd --> 4th	94-105 mph (151-169 km/h)
4th --> 5th	-
Lock-up ON	122-134 mph (196-216 km/h)

DOWNSHIFT: D POSITION

Accelerator pedal position sensor voltage: 1.02 V	
Lock-up OFF	40-47 mph (65-75 km/h)
5th --> 4th	29-34 mph (46-54 km/h)
4th --> 3rd	17-19 mph (27-31 km/h)
3rd --> 1st	6-9 mph (10-15 km/h)
Accelerator pedal position sensor voltage: 2.58 V	
Lock-up OFF	76-86 mph (123-138 km/h)
Fully-opened throttle Accelerator pedal position sensor voltage: 4.65 V	
Lock-up OFF	107-117 mph (172-188 km/h)
5th --> 4th	134-146 mph (215-235 km/h)
4th --> 3rd	83-93 mph (134-150 km/h)

3rd --> 2nd	52-58 mph (84-93 km/h)
2nd --> 1st	27-30 mph (43-49 km/h)

6. Accelerate to about 35 mph (57 km/h) so the transmission is in 4th or 5th, then shift from the D position to the 2 position. The vehicle should immediately begin slowing down from engine braking.
7. Check for abnormal noise and clutch slippage in the following positions.

   1 (1st Gear) Position

   Accelerate from a stop at full throttle. Check that there is no abnormal noise or clutch slippage. Upshifts should not occur with the shift lever in this position.

   2 (2nd Gear) Position

   Accelerate from a stop at full throttle. Check that there is no abnormal noise or clutch slippage. Upshifts and downshifts should not occur with the shift lever in this position.

   R (Reverse) Position

   Accelerate from a stop at full throttle, and check for abnormal noise and clutch slippage.
8. Test in P (Park) Position.

   Park the vehicle on a slope (about 16°), apply the brake, and shift into the P position. Release the brake; the vehicle should not move.

NOTE: Always use the brake to hold the vehicle, when stopped on an incline in gear. Depending on the grade of the incline, the vehicle could roll backwards if the brake is released.

STALL SPEED TEST

1. Make sure the transmission fluid is filled to the proper level (see **ATF LEVEL CHECK**).
2. Apply the parking brake, and block all four wheels.
3. Connect the HDS to the DLC (A), and go to the A/T data list .

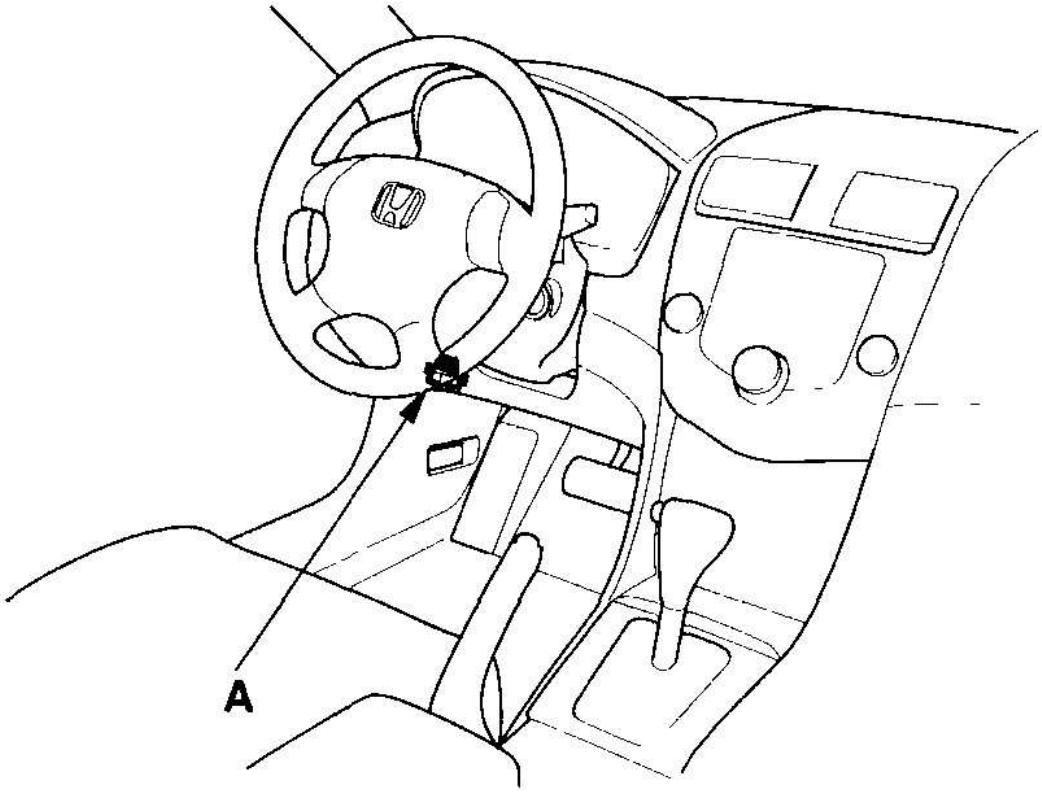


Fig. 181: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Make sure the A/C switch is OFF.
5. After the engine has warmed up to normal operating temperature (the radiator fan comes on), shift to the 2 position.
6. Firmly press the brake pedal and accelerator pedal for 6 to 8 seconds, and note the engine speed. Do not move the shift lever while raising the engine speed.
7. Allow 2 minutes for cooling, then repeat the test in the D, 1, and R positions.

NOTE:

- **Do not test stall speed for more than 10 seconds at a time.**
- **Stall speed tests should be used for diagnostic**

purposes only.

- **Stall speed should be the same in D, 2,1, and R positions.**
- **Do not test stall speed with the A/T pressure gauges installed.**

Stall Speed rpm:

Specification: 2,000 rpm

Service Limit: 1,850-2,150 rpm

8. If the measurements are out of the service limit, problems and probable causes are listed in the table.

STALL SPEED RPM SPECIFICATIONS

Problem	Probable causes
Stall speed rpm high in the D, 2, 1, and R positions	• ATF pump output low • Clogged ATF strainer • Regulator valve stuck • Slipping clutch
Stall speed rpm high in the 1 position	Slippage of 1st clutch or 1st gear one-way clutch defective
Stall speed rpm high in the 2 position	Slippage of 2nd clutch
Stall speed rpm high in the R position	Slippage of 5th clutch
Stall speed low in the D, 2, 1, and R positions	• Engine output low • Engine throttle valve closed • Torque converter one-way clutch slipping

PRESSURE TEST

Special Tools Required

- A/T clutch pressure gauge set 07406-0020400 or 07406-0020401
- A/T pressure hose, 2,210 mm 07MAJ-PY4011A
- A/T pressure hose adapter 07MAJ-PY40120

1. Make sure the transmission fluid is filled to the proper level (see **ATF LEVEL CHECK**).
2. Lift the vehicle up on a hoist or apply the parking brake, block rear wheels, and raise the front of the vehicle. Make sure it is securely supported.
3. Remove the splash shield.
4. Allow the front wheels to rotate freely.
5. Connect the oil pressure gauges to the line pressure inspection port (A), 2nd clutch pressure inspection port (B), and 1st-hold clutch pressure inspection port (C). Do not allow dust or other foreign particles to enter the holes while connecting the gauges.

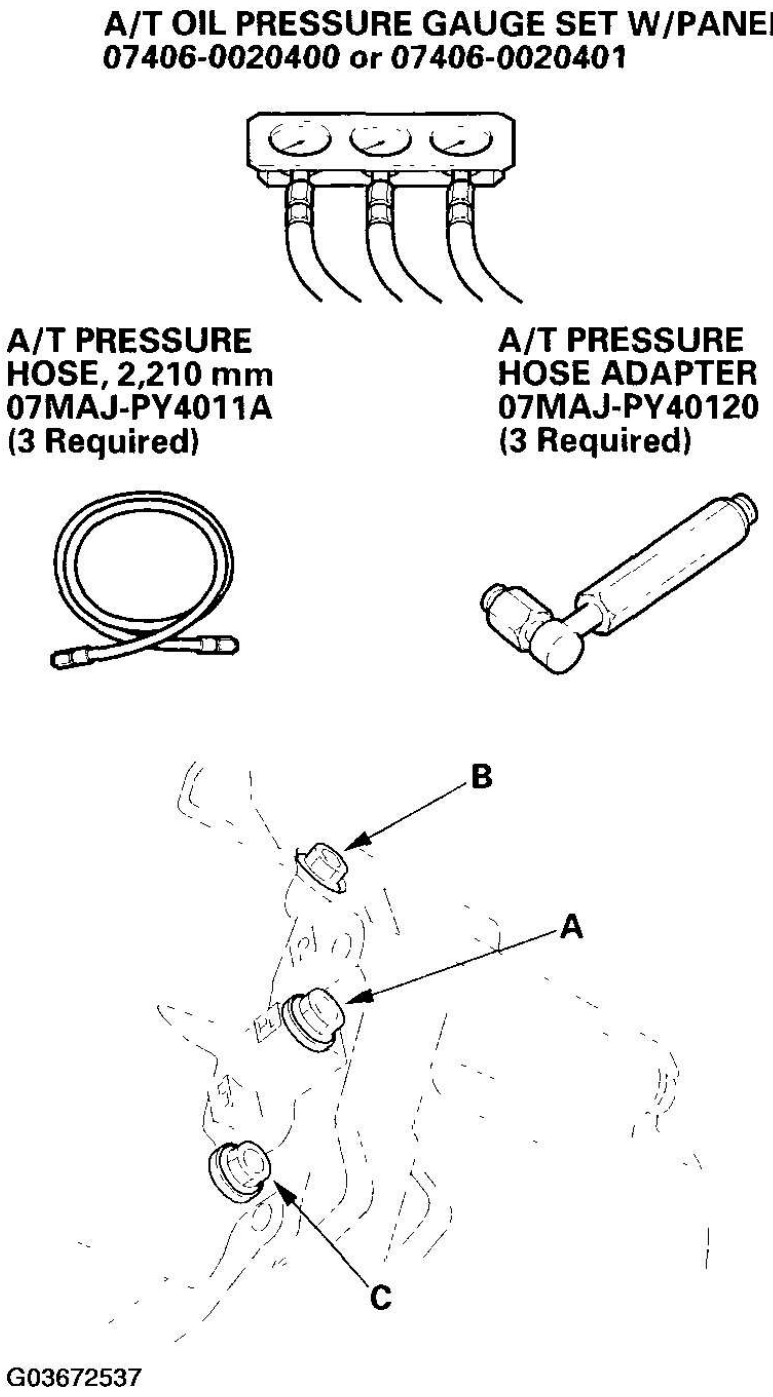


Fig. 182: Connecting Oil Pressure Gauges To Line Pressure Inspection Port

Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Connect the oil pressure gauges to the 3rd clutch pressure inspection port (D), 4th clutch pressure inspection port (E), and 5th clutch pressure inspection port (F).

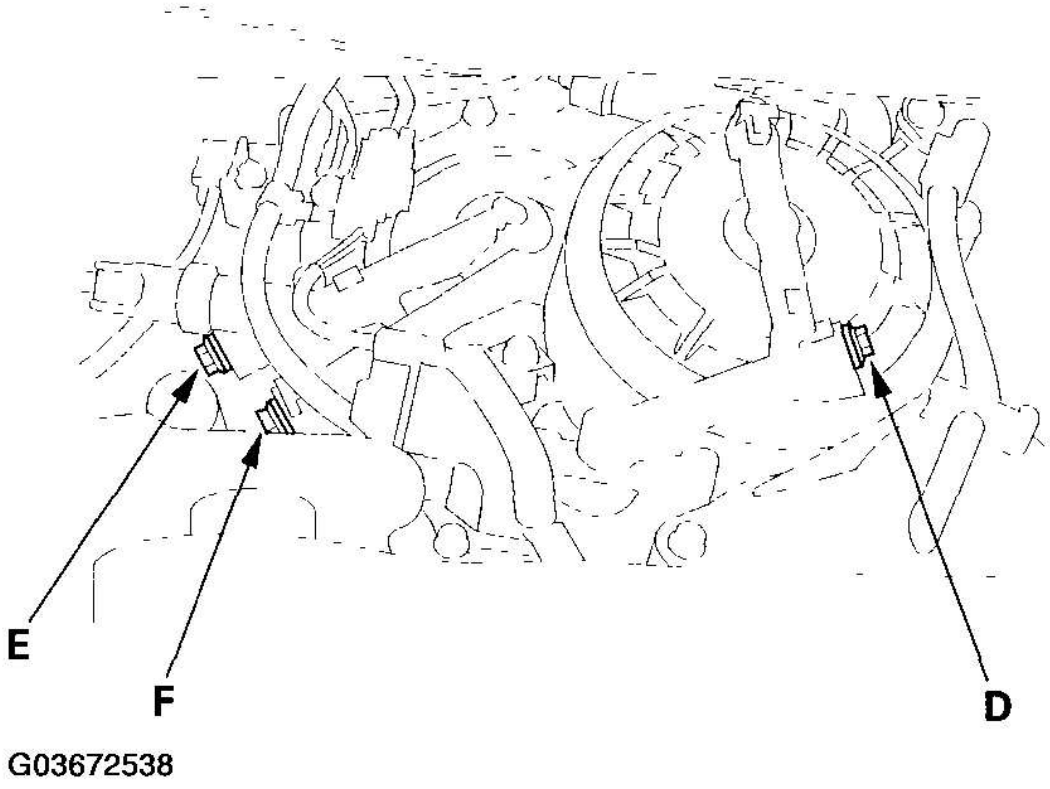


Fig. 183: Connecting Oil Pressure Gauges To 3rd Clutch Pressure Inspection Port
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Connect the oil pressure gauge to the 1st clutch pressure inspection port (G).

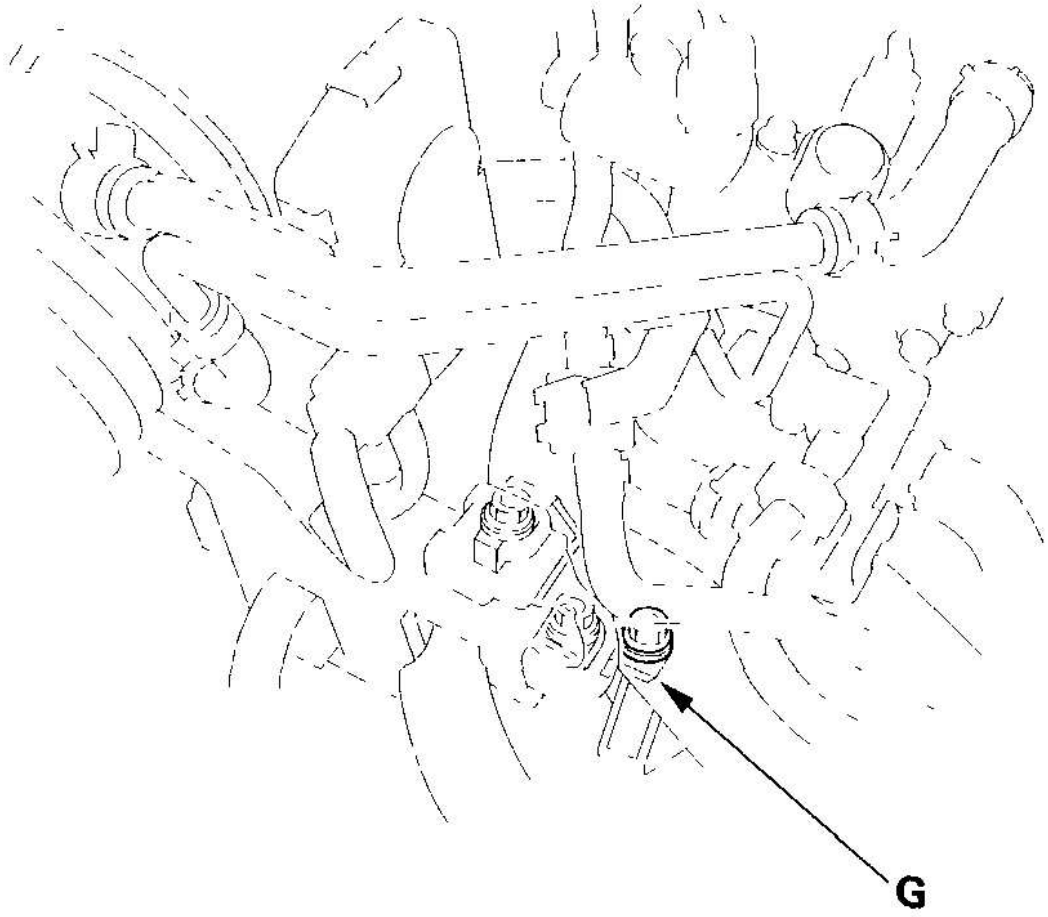


Fig. 184: Connecting Oil Pressure Gauge To 1st Clutch Pressure Inspection Port
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Warm up the engine (the radiator fan comes on), then stop it and connect the HDS to the DLC.
9. Start the engine, and run it at 2,000 rpm in the P or N position.
10. Measure the line pressure at the line pressure inspection port (A).

NOTE: Higher pressure may be indicated if measurements are made in shift lever position other than N or P.

FLUID PRESSURE

Pressure	Fluid Pressure	
	Standard	Service Limit
Line (A)	900-960 kPa (9.2-9.8 kgf/cm2, 130-140 psi)	850 kPa (8.7 kgf/cm2, 120 psi)

11. Shift to the 1 position, and measure the 1st clutch pressure at the 1st clutch pressure inspection port (G) and 1st-hold clutch pressure at the 1st-hold clutch pressure inspection port (C).
12. Shift to the 2 position, and measure the 2nd clutch pressure at the 2nd clutch pressure inspection port (B).
13. Shift to the P position, then press the brake pedal and hold it.
14. Shift to the D3 position, press the accelerator pedal to increase the engine speed to 2,500 rpm; the transmission shifts into 2nd gear.
15. Release the accelerator pedal; the engine speed decreases to 1,000 rpm with the transmission in 2nd gear.
16. Press the accelerator pedal very slowly so that the engine speed increases to 2,000 rpm on 5 seconds, then hold the accelerator; the transmission shifts into 3rd gear. Measure the 3rd clutch pressure at the 3rd clutch pressure inspection port (D) while holding the engine speed at 2,000 rpm.
17. Shift to the D position, and measure the 4th clutch pressure at the 4th clutch pressure inspection port (E) while holding the engine speed at 2,000 rpm, then in about 15 seconds, the transmission will shift to 5th gear.
18. Measure the 5th clutch pressure at the 5th clutch pressure inspection port (F) while holding the engine speed 2,000 rpm.
19. Bring the engine back to an idle, then apply the brake to stop the wheels from rotating.
20. Shift to the R position. Raise the engine rpm to 2,000 rpm, and measure the reverse clutch pressure at the 5th clutch pressure inspection port (F).

FLUID PRESSURE (R POSITION)

Pressure	Fluid Pressure	
	Standard	Service Limit

1st-hold clutch (C)	760-830 kPa (7.7-8.5 kgf/cm2, 110-120 psi)	710 kPa (7.2 kgf/cm2, 100 psi)
1st clutch (G)	890-970 kPa (9.1-9.9 kgf/cm2, 130-140 psi)	840 kPa (8.6 kgf/cm2, 120 psi)
2nd clutch (B)		
3rd clutch (D)		
4th clutch (E)		
5th clutch (F)		

21. If the measurements are out of service limit, problems and probable causes are listed in the table.

OUT OF SERVICE LIMIT

Problem	Probable causes
No or low line pressure	• Torque converter • ATF pump • Regulator valve • Torque converter check valve
No or low 1st clutch pressure	• 1st clutch • O-rings
No or low 2nd clutch pressure	• 2nd clutch • O-rings
No or low 3rd clutch pressure	• 3rd clutch • O-rings
No or low 4th clutch pressure	• 4th clutch • O-rings
No or low 5th clutch pressure	• 5th clutch • O-rings
No or low 5th clutch pressure in the R position	• Servo valve • 5th clutch

	• O-rings

22. Install the sealing bolts with the new sealing washers, and tighten the bolts to the specified torque. Do not reuse old sealing washers.

    Torque: 18 N.m (1.8 kgf.m,13 lbf.ft)

23. Install the splash shield.

SHIFT SOLENOID VALVE A TEST

1. Connect the HDS to the DLC (A).

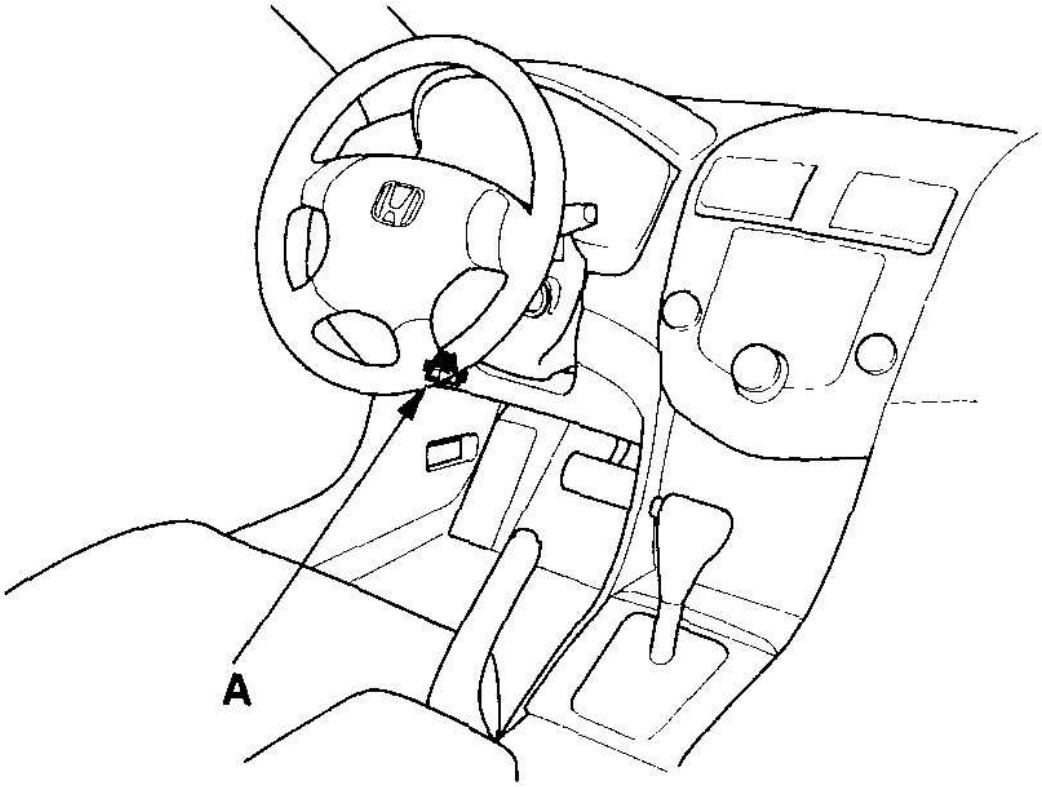


Fig. 185: Connect HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Choose Shift Solenoid A in Miscellaneous Test Menu on the HDS.
3. Check that the shift solenoid valve A operates with the HDS. A clicking sound should be heard.
    - If a clicking sound is heard, the valve is OK.
    - If no clicking sound is heard, go to step 4.
4. Get the audio and navigation anti-theft codes, and write down the audio presets.
5. Disconnect the negative cable from the battery, then disconnect the positive cable from the battery.
6. Remove the battery hold-down bracket, then remove the battery cover, battery, and battery tray.
7. Remove the intake air duct and air cleaner housing.
8. Loosen the two bolts securing the battery base from under the vehicle, and remove the two bolts securing the battery base in the engine compartment, then remove the battery base.
9. Remove the starter.
10. Disconnect shift solenoid valve A connector.

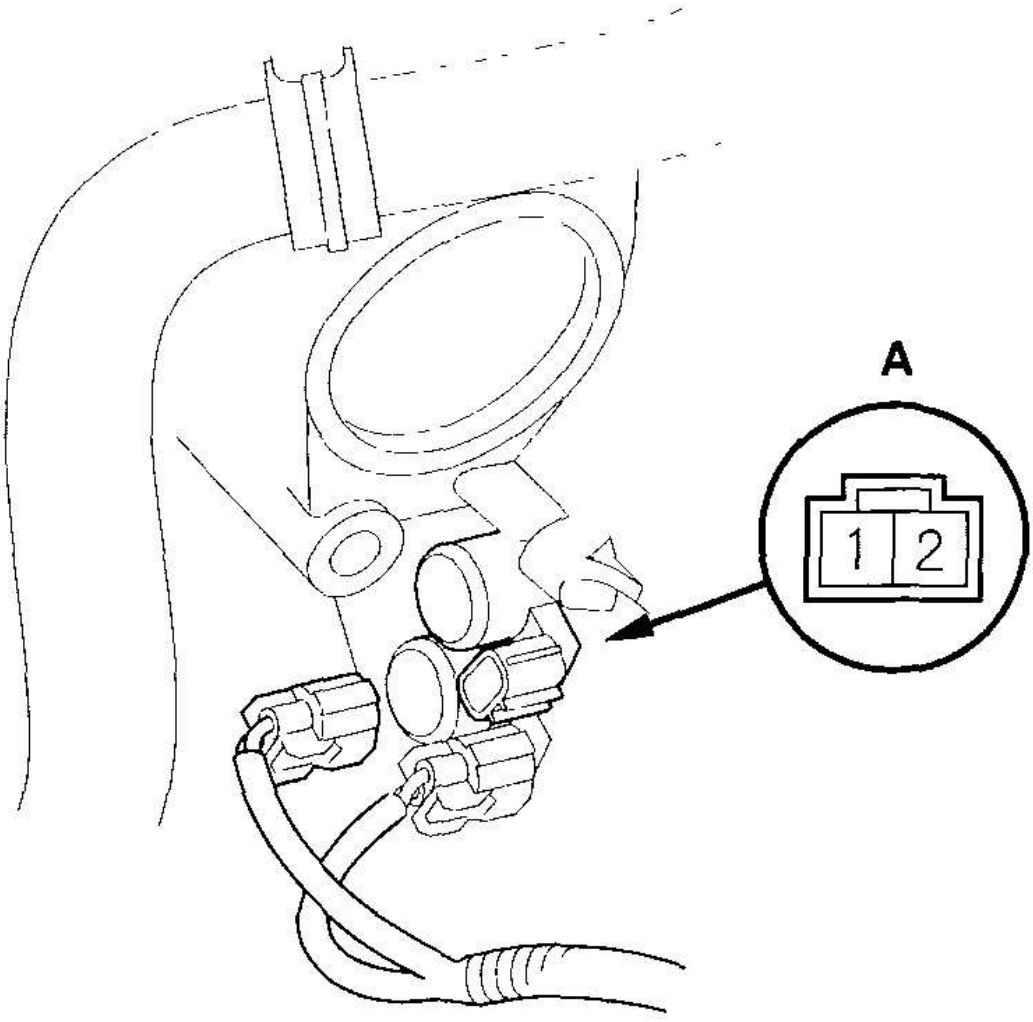


Fig. 186: Disconnecting Shift Solenoid Valve A Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Measure shift solenoid valve A resistance at the solenoid valve connector terminals.

    Standard: 12 - 25 ohms

12. Replace shift solenoid valve A if the resistance is out of standard (see **SHIFT**

SOLENOID VALVE A REPLACEMENT).

13. If the resistance is within the standard, connect the battery negative terminal to shift solenoid valve A connector terminal No. 1, and connect the battery positive terminal to the terminal No. 2.
    - If a clicking sound is heard, the valve is OK.
    - If no clicking sound is heard, Replace the shift solenoid valve A (see **SHIFT SOLENOID VALVE A REPLACEMENT**).
14. Install the starter.
15. Install the battery base, then install the air cleaner housing and intake air duct.
16. Install the battery tray, battery, and battery cover, then secure the battery with its hold-down bracket.
17. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
18. Enter the audio and navigation anti-theft codes, then enter the presets, and set the clock.
19. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

SHIFT SOLENOID VALVE A REPLACEMENT

1. Get the audio and navigation anti-theft codes, and write down the audio presets.
2. Disconnect the negative cable from the battery, then disconnect the positive cable from the battery.
3. Remove the battery hold-down bracket, then remove the battery cover, battery, and battery tray.
4. Remove the intake air duct and air cleaner housing.
5. Loosen the two bolts securing the battery base from under the vehicle, and remove the two bolts securing the battery base in the engine compartment, then remove the battery base.
6. Remove the starter.
7. Disconnect shift solenoid valve A connector, and remove shift solenoid valve A.

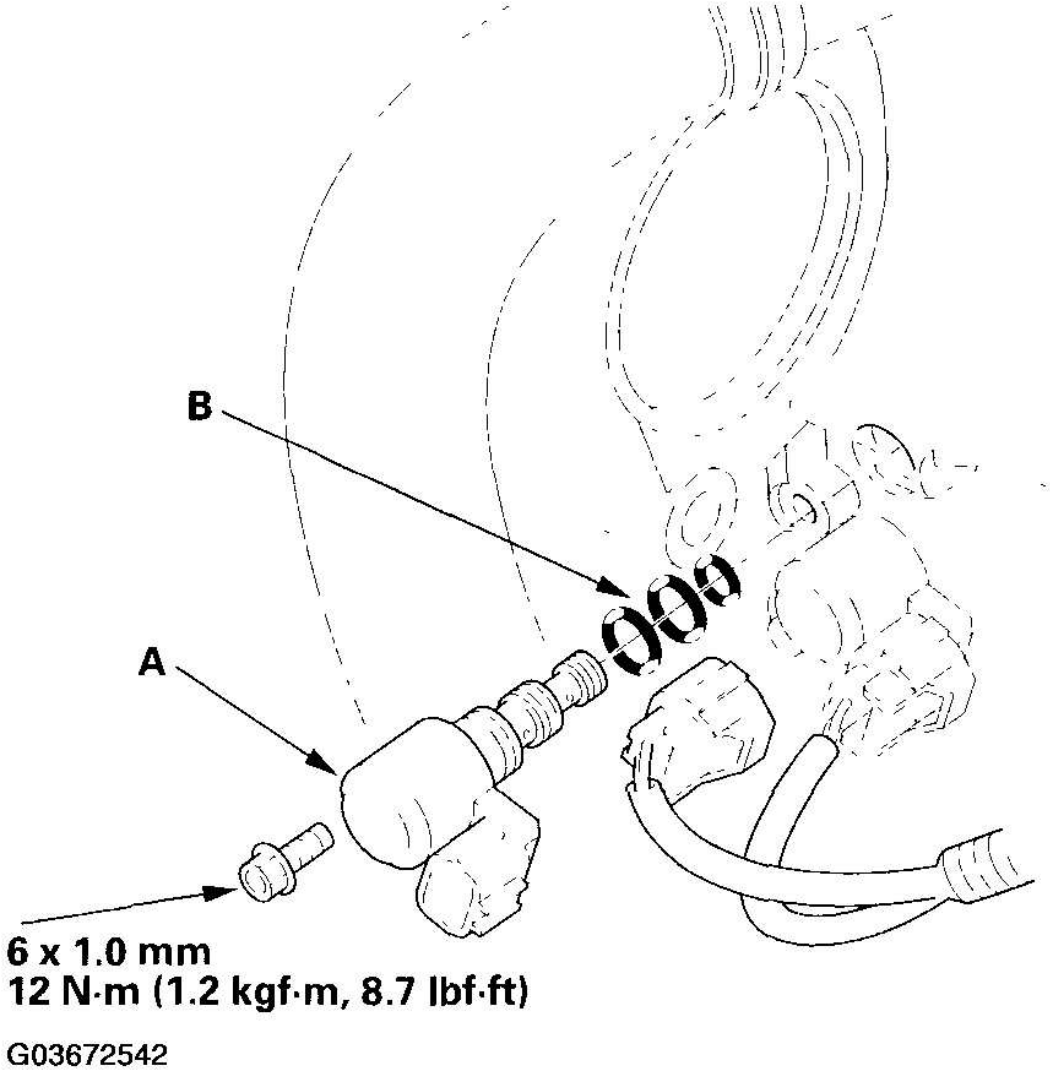


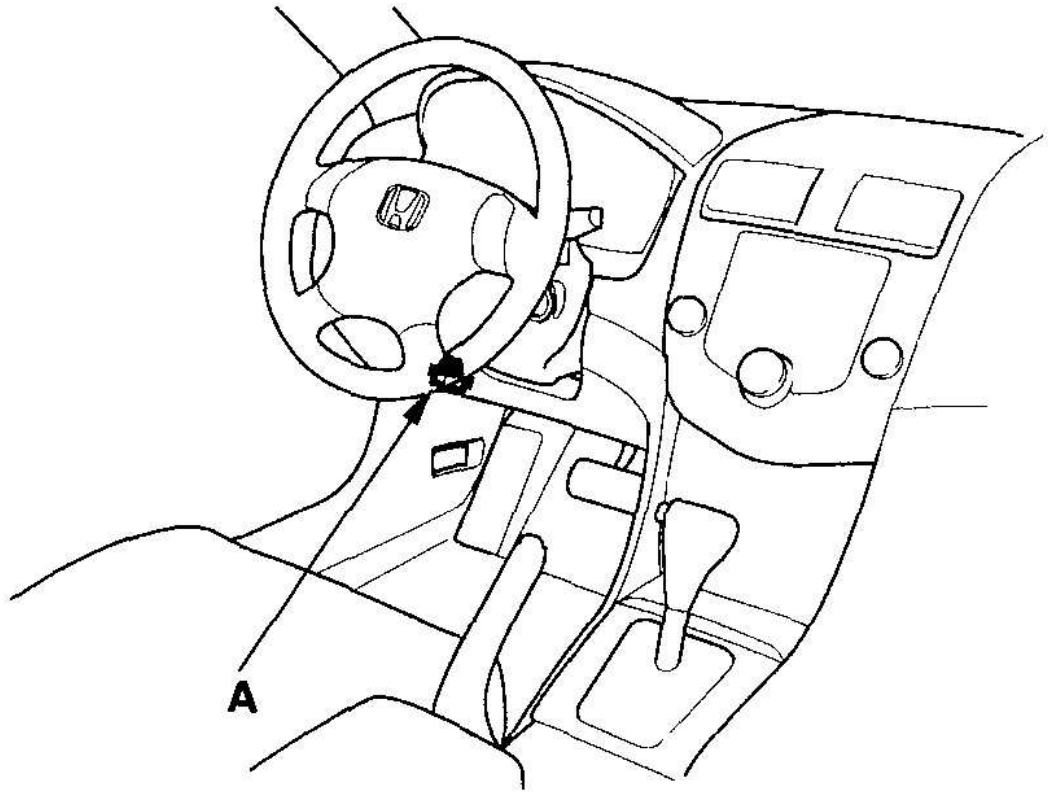
Fig. 187: Removing Shift Solenoid Valve A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install a new shift solenoid valve A with new O-rings (B). While installing the solenoid valve, do not allow dust or other foreign particles to enter the transmission.
9. Check the connector for rust, dirt, or oil, then connect the connector.
10. Install the starter.
11. Install the battery base, then install the air cleaner housing and intake air duct.

12. Install the battery tray, battery, and battery cover, then secure the battery with its hold-down bracket.
13. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
14. Enter the audio and navigation anti-theft codes, then enter the presets, and set the clock.
15. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

SHIFT SOLENOID VALVE B TEST

1. Connect the HDS to the DLC (A).



G03672543

Fig. 188: Connecting HDS To DLC

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Choose Shift Solenoid B in Miscellaneous Test Menu on the HDS.
3. Check that the shift solenoid valve B operates with the HDS. A clicking sound should be heard.
    - If a clicking sound is heard, the valve is OK.
    - If no clicking sound is heard, go to step 4.
4. Remove the intake air duct and air cleaner housing.
5. Disconnect shift solenoid valve B connector.

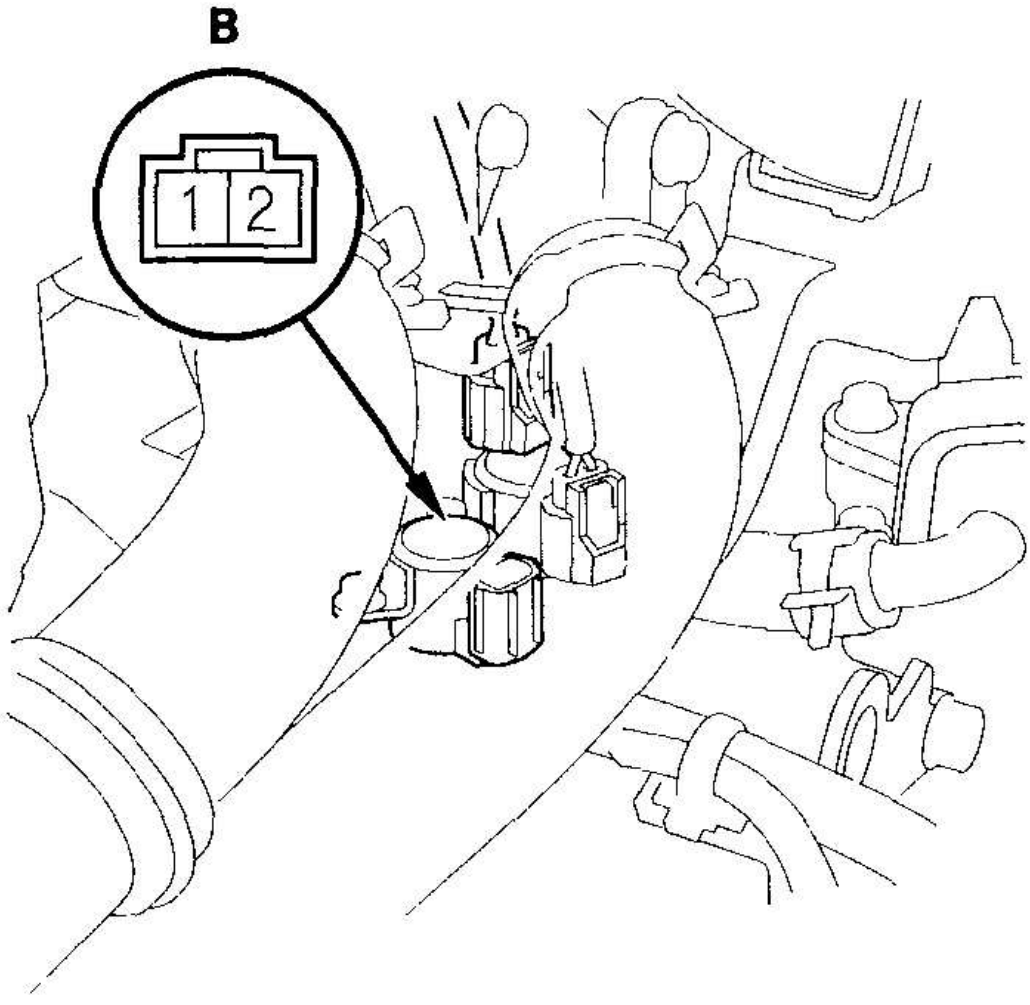


Fig. 189: Disconnecting Shift Solenoid Valve B Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Measure shift solenoid valve B resistance at the solenoid valve connector terminals.

   Standard: 12-25 ohms

7. Replace shift solenoid valve B if the resistance is out of standard (see **SHIFT**

SOLENOID VALVE B REPLACEMENT).

8. If the resistance is within the standard, connect the battery negative terminal to shift solenoid valve B connector terminal No. 1, and connect the battery positive terminal to the terminal No. 2.
   - If a clicking sound is heard, the valve is OK.
   - If no clicking sound is heard, Replace the shift solenoid valve B (see **SHIFT SOLENOID VALVE B REPLACEMENT**).
9. Install the air cleaner housing and intake air duct.

SHIFT SOLENOID VALVE B REPLACEMENT

1. Remove the intake air duct and air cleaner housing.
2. Disconnect shift solenoid valve B connector, and remove shift solenoid valve B.

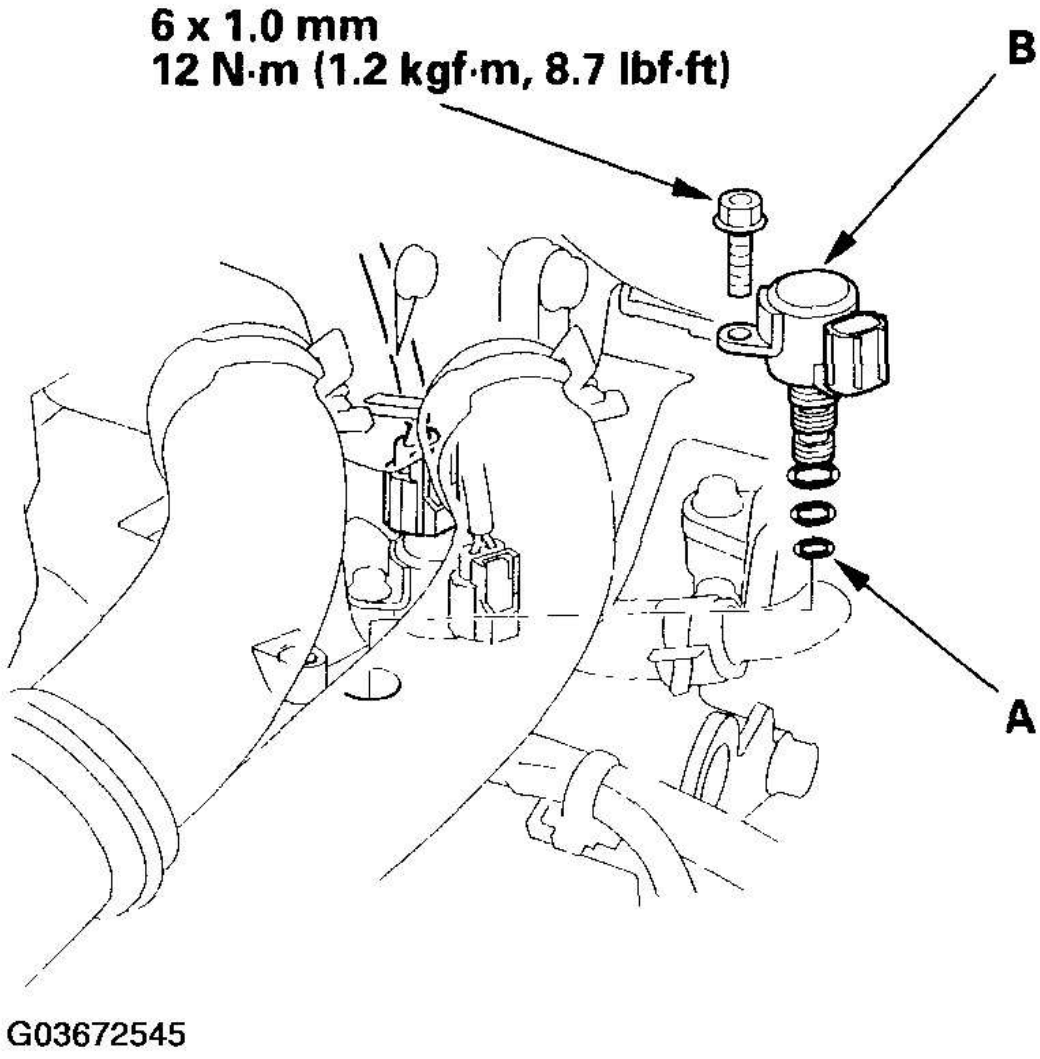


Fig. 190: Removing Shift Solenoid Valve B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install a new shift solenoid valve B with new O-rings (A). While installing the solenoid valve, do not allow dust or other foreign particles to enter the transmission.
4. Check the connector for rust, dirt, or oil, then connect the connector.
5. Install the air cleaner housing and intake air duct.

SHIFT SOLENOID VALVE C TEST

1. Connect the HDS to the DLC (A).

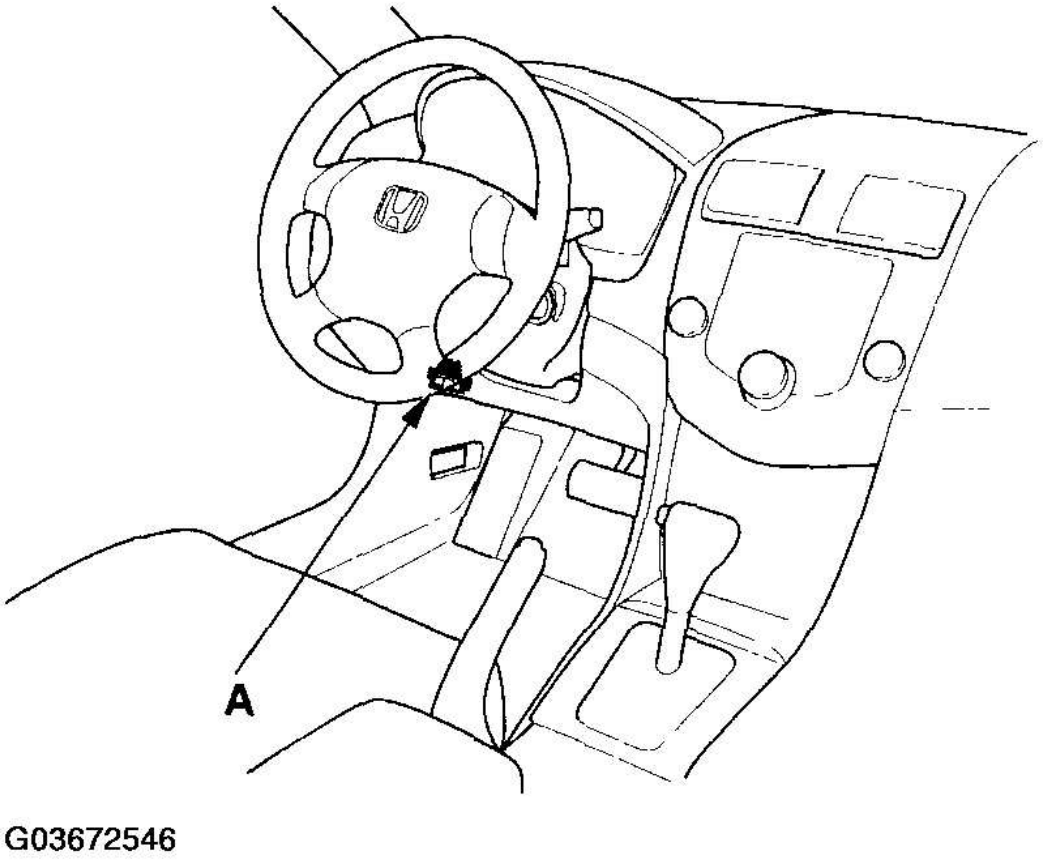


Fig. 191: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Choose Shift Solenoid C in Miscellaneous Test Menu on the HDS.
3. Check that the shift solenoid valve C operates with the HDS. A clicking sound should be heard.
   - If a clicking sound is heard, the valve is OK.
   - If no clicking sound is heard, go to step 4.
4. Get the audio and navigation anti-theft codes, and write down the audio

presets.

5. Disconnect the negative cable from the battery, then disconnect the positive cable from the battery.
6. Remove the battery hold-down bracket, then remove the battery cover, battery, and battery tray.
7. Remove the intake air duct and air cleaner housing.
8. Loosen the two bolts securing the battery base from under the vehicle, and remove the two bolts securing the battery base in the engine compartment, then remove the battery base.
9. Disconnect shift solenoid valve C connector.

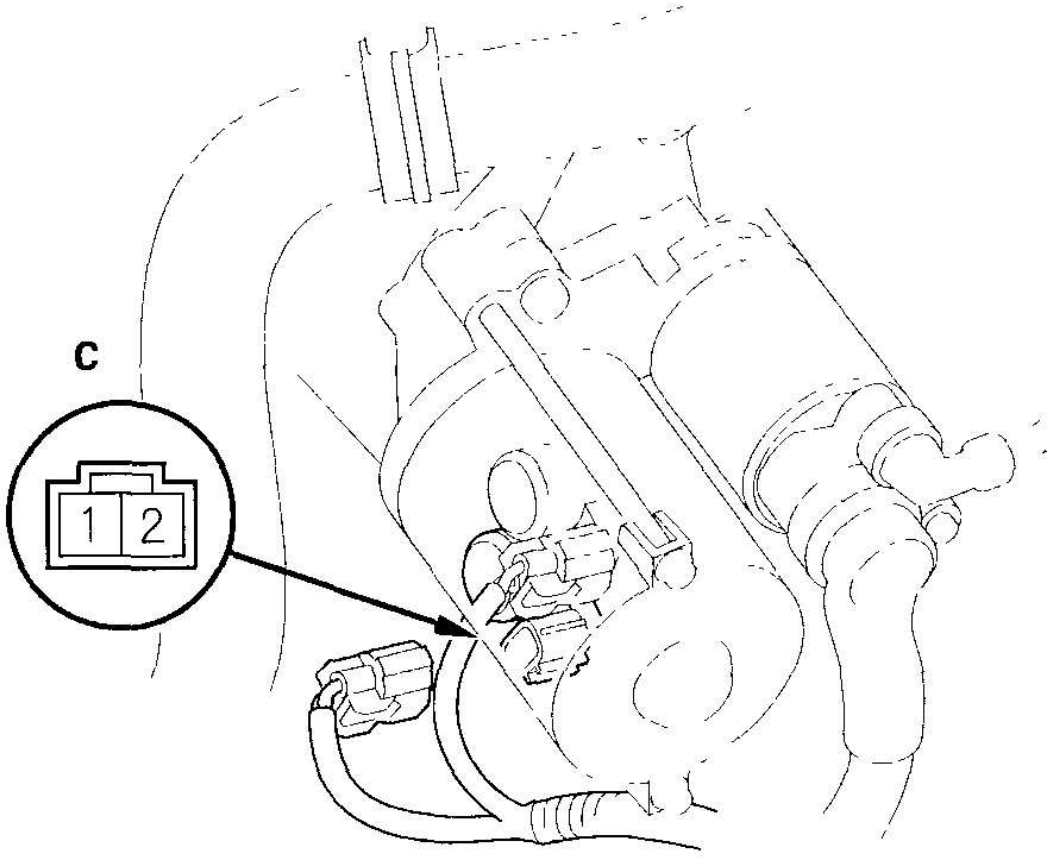


Fig. 192: Disconnecting Shift Solenoid Valve C Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Measure shift solenoid valve C resistance at the solenoid valve connector terminals.

    Standard: 12-25 ohms

11. Replace shift solenoid valve C if the resistance is out of standard (see **SHIFT SOLENOID VALVE C REPLACEMENT**).
12. If the resistance is within the standard, connect the battery negative terminal to shift solenoid valve C connector terminal No. 1, and connect the battery positive terminal to the terminal No. 2.
    - If a clicking sound is heard, the valve is OK.
    - If no clicking sound is heard, Replace the shift solenoid valve C (see **SHIFT SOLENOID VALVE C REPLACEMENT**).
13. Install the battery base, then install the air cleaner housing and intake air duct.
14. Install the battery tray, battery, and battery cover, then secure the battery with its hold-down bracket.
15. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
16. Enter the audio and navigation anti-theft codes, then enter the presets, and set the clock.
17. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

SHIFT SOLENOID VALVE C REPLACEMENT

1. Get the audio and navigation anti-theft codes, and write down the audio presets.
2. Disconnect the negative cable from the battery, then disconnect the positive cable from the battery.
3. Remove the battery hold-down bracket, then remove the battery cover, battery, and battery tray.
4. Remove the intake air duct and air cleaner housing.

5. Loosen the two bolts securing the battery base from under the vehicle, and remove the two bolts securing the battery base in the engine compartment, then remove the battery base.
6. Disconnect shift solenoid valve C connector, and remove shift solenoid valve C.

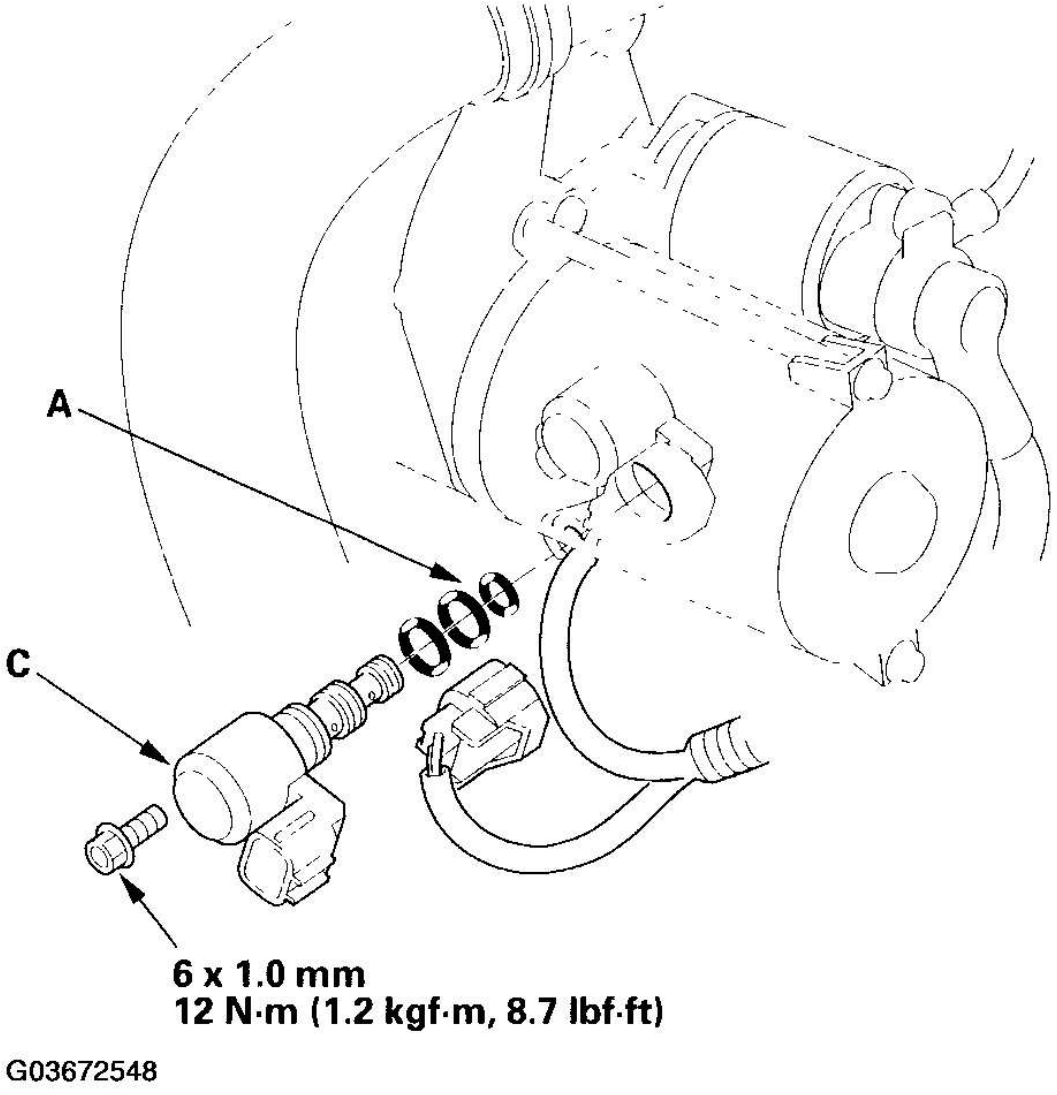


Fig. 193: Removing Shift Solenoid Valve C
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install a new shift solenoid valve C with new O-rings (A). While installing the solenoid valve, do not allow dust or other foreign particles to enter the transmission.
8. Check the connector for rust, dirt, or oil, then connect the connector.
9. Install the battery base, then install the air cleaner housing and intake air duct.
10. Install the battery tray, battery, and battery cover, then secure the battery with its hold-down bracket.
11. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
12. Enter the audio and navigation anti-theft codes, then enter the presets, and set the clock.
13. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

TORQUE CONVERTER CLUTCH SOLENOID VALVE TEST

1. Connect the HDS to the DLC (A).

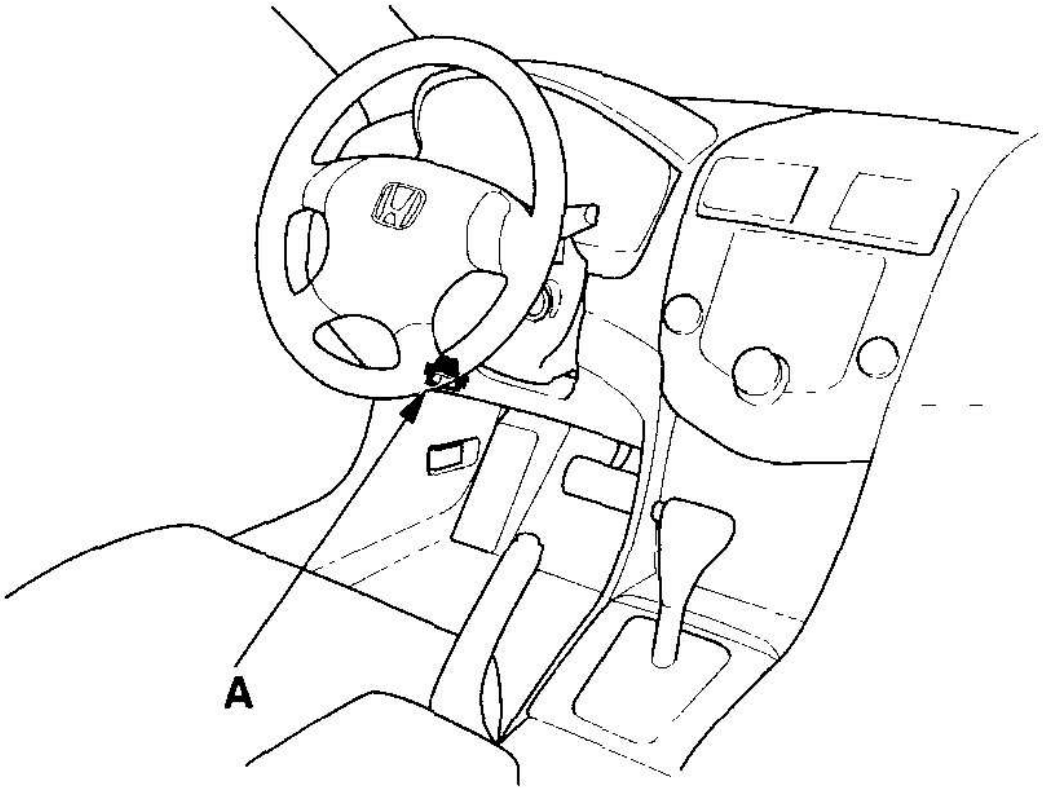


Fig. 194: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Choose Lock up Solenoid Test in Miscellaneous Test Menu on the HDS.
3. Check that the torque converter clutch solenoid valve operates with the HDS. A clicking sound should be heard.
   - If a clicking sound is heard, the valve is OK.
   - If no clicking sound is heard, go to step 4.
4. Remove the intake air duct and air cleaner housing.
5. Disconnect torque converter clutch solenoid valve connector.

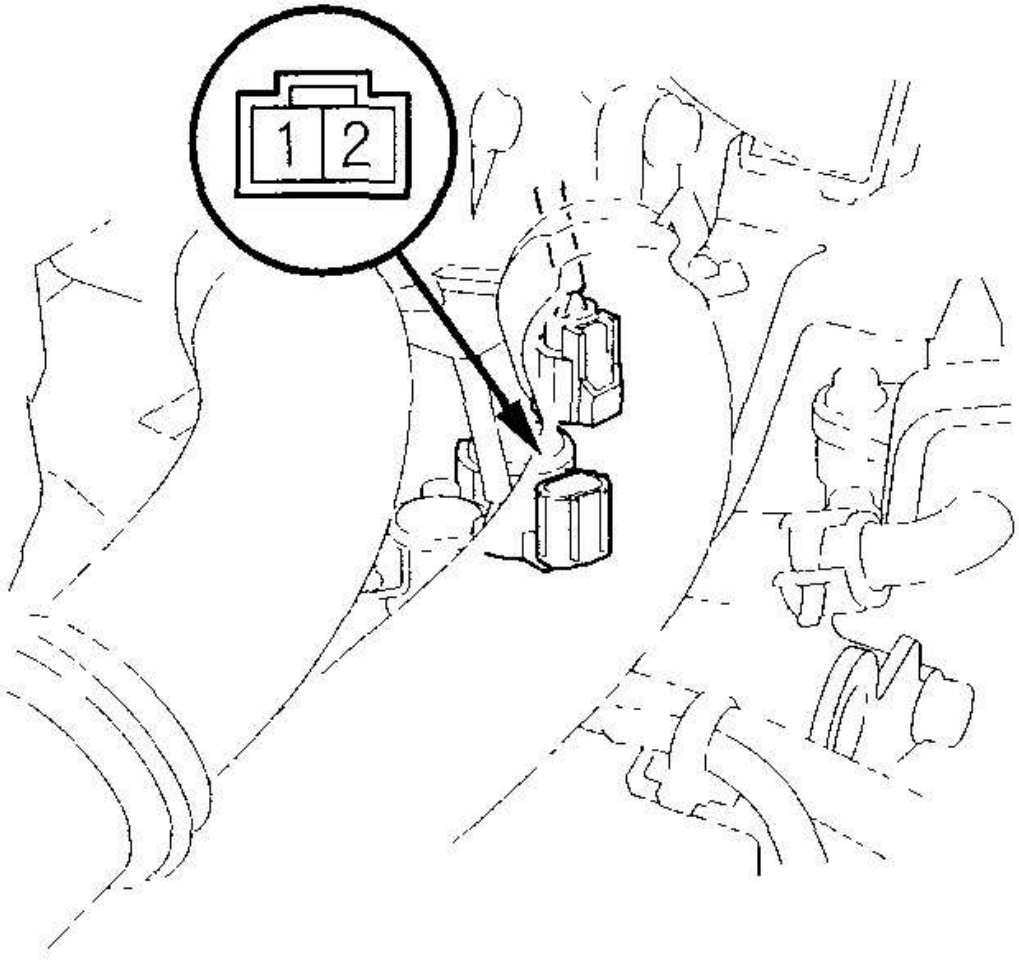


Fig. 195: Disconnecting Torque Converter Clutch Solenoid Valve Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Measure torque converter clutch solenoid valve resistance at the solenoid valve connector terminals.

Standard: 12-25 ohms

7. Replace torque converter clutch solenoid valve if no resistance is out of standard (see **TORQUE CONVERTER CLUTCH SOLENOID VALVE REPLACEMENT**).
8. If the resistance is within the standard, connect the battery negative terminal to torque converter clutch solenoid valve connector terminal No. 1, and connect the battery positive terminal to the terminal No. 2.
   - If a clicking sound is heard, the valve is OK.
   - If no clicking sound is heard, Replace the torque converter clutch solenoid valve (see **TORQUE CONVERTER CLUTCH SOLENOID VALVE REPLACEMENT**).
9. Install the air cleaner housing and intake air duct.

TORQUE CONVERTER CLUTCH SOLENOID VALVE REPLACEMENT

1. Remove the intake air duct and air cleaner housing.
2. Disconnect torque converter clutch solenoid valve connector, and remove torque converter clutch solenoid valve (A).

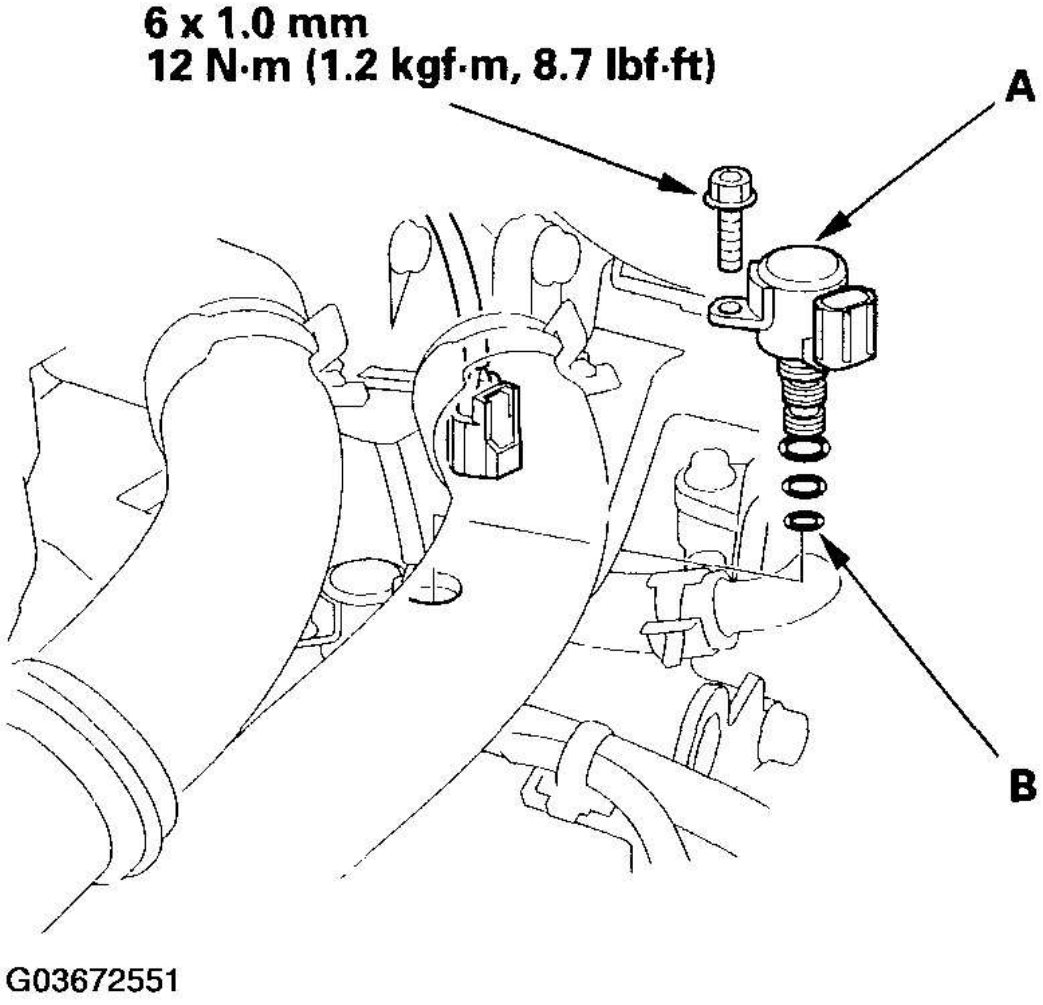


Fig. 196: Removing Torque Converter Clutch Solenoid Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install a new torque converter clutch solenoid valve with new O-rings (B). While installing the solenoid valve, do not allow dust or other foreign particles to enter the transmission.
4. Check connector for rust, dirt, or oil, then connect the connector.
5. Install the air cleaner housing and intake air duct.

A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B TEST

1. Connect the HDS to the DLC (A).

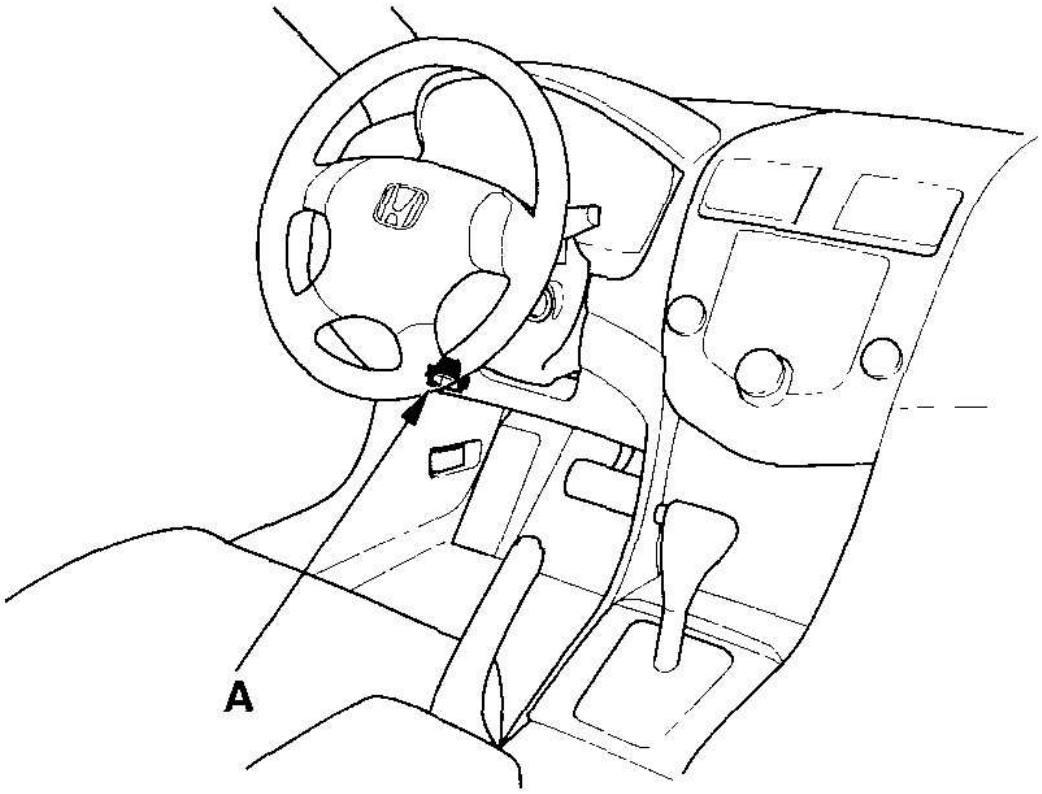


Fig. 197: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Choose Clutch Pressure Control (Linear) Solenoid A and B in Miscellaneous Test Menu on the HDS.
3. Test the A/T clutch pressure control solenoid valve A and B with the HDS.
4. Follow instructions on the HDS.
   - If the test results are OK, the valves are OK.
   - If the test results are not OK, go to step 5.
5. Get the audio and navigation anti-theft codes, and write down the audio presets.

6. Disconnect the negative cable from the battery, then disconnect the positive cable from the battery.
7. Remove the battery hold-down bracket, then remove the battery cover, battery, and battery tray.
8. Remove the intake air duct and air cleaner housing.
9. Loosen the two bolts securing the battery base from under the vehicle, and remove the two bolts securing the battery base in the engine compartment, then remove the battery base.
10. Disconnect A/T clutch pressure control solenoid valve A connector and solenoid valve B connector.

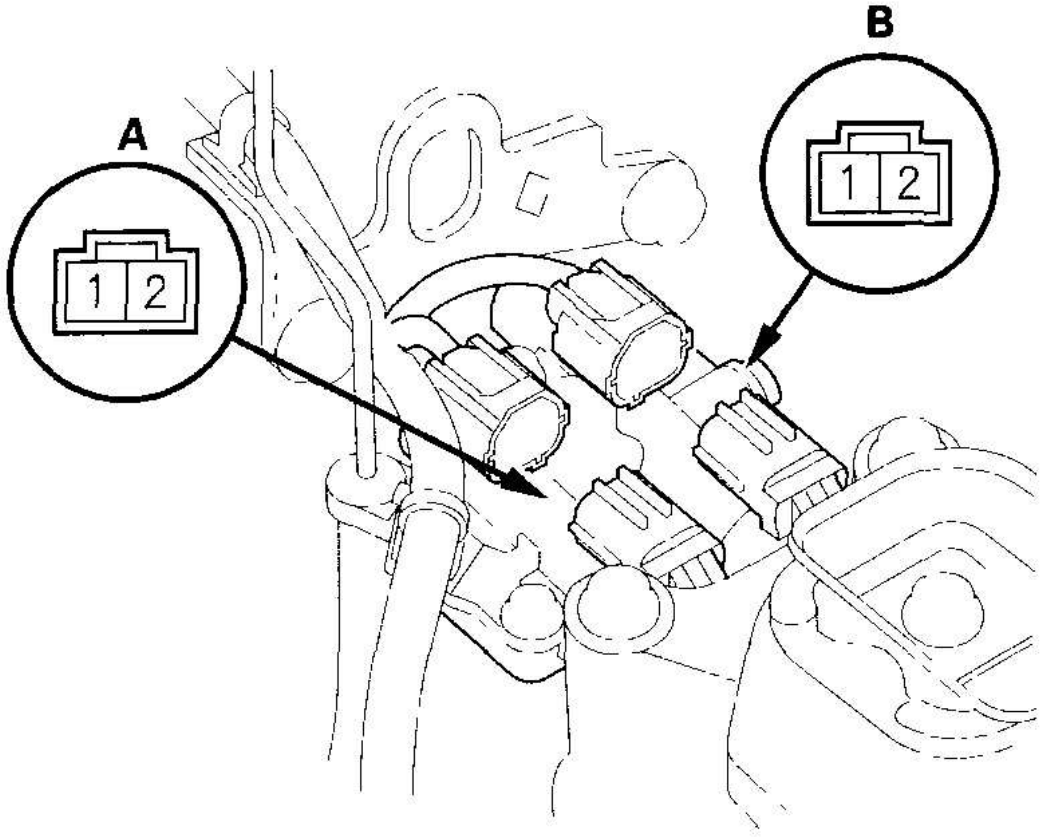


Fig. 198: Disconnecting A/T Clutch Pressure Control Solenoid Valve A

And B Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Measure A/T clutch pressure control solenoid valve A and B resistances at each solenoid valve connector.

    Standard: 3-10 ohms

12. If the resistance of either solenoid valve is out of standard, replace A/T clutch pressure control solenoid valve A and B (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B REPLACEMENT**).
13. If the resistance is within the standard, connect the battery negative terminal to A/T clutch pressure control solenoid valve A and B connector terminal No. 2, and connect the battery positive terminal to the terminal No. 1.
    - If a clicking sound is heard, go to step 24.
    - If no clicking sound is heard, go to step 14 and remove A/T clutch pressure control solenoid valve.
14. Remove the transmission upper mount bracket (A) and bracket plate (B).

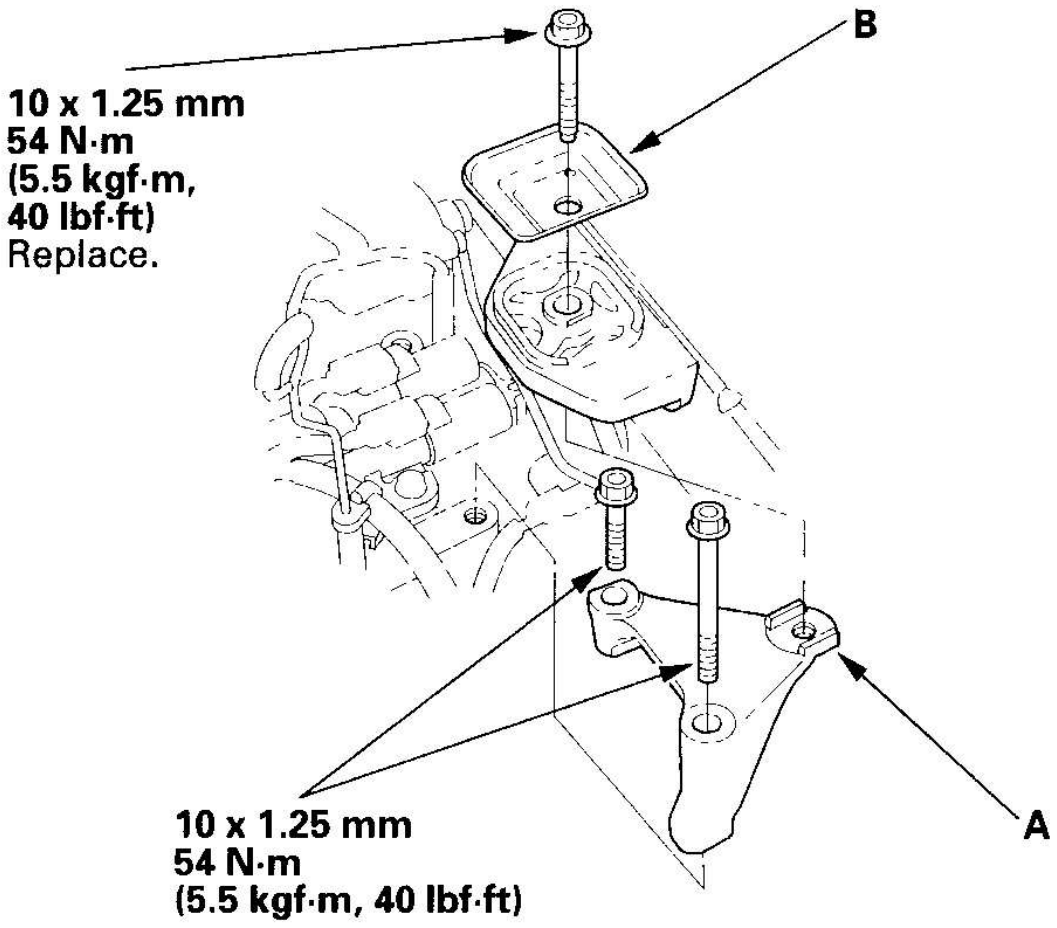


Fig. 199: Removing Transmission Upper Mount Bracket & Bracket Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the harness clamp (C) from the clamp bracket (D), and remove A/T clutch pressure control solenoid valve A and B.

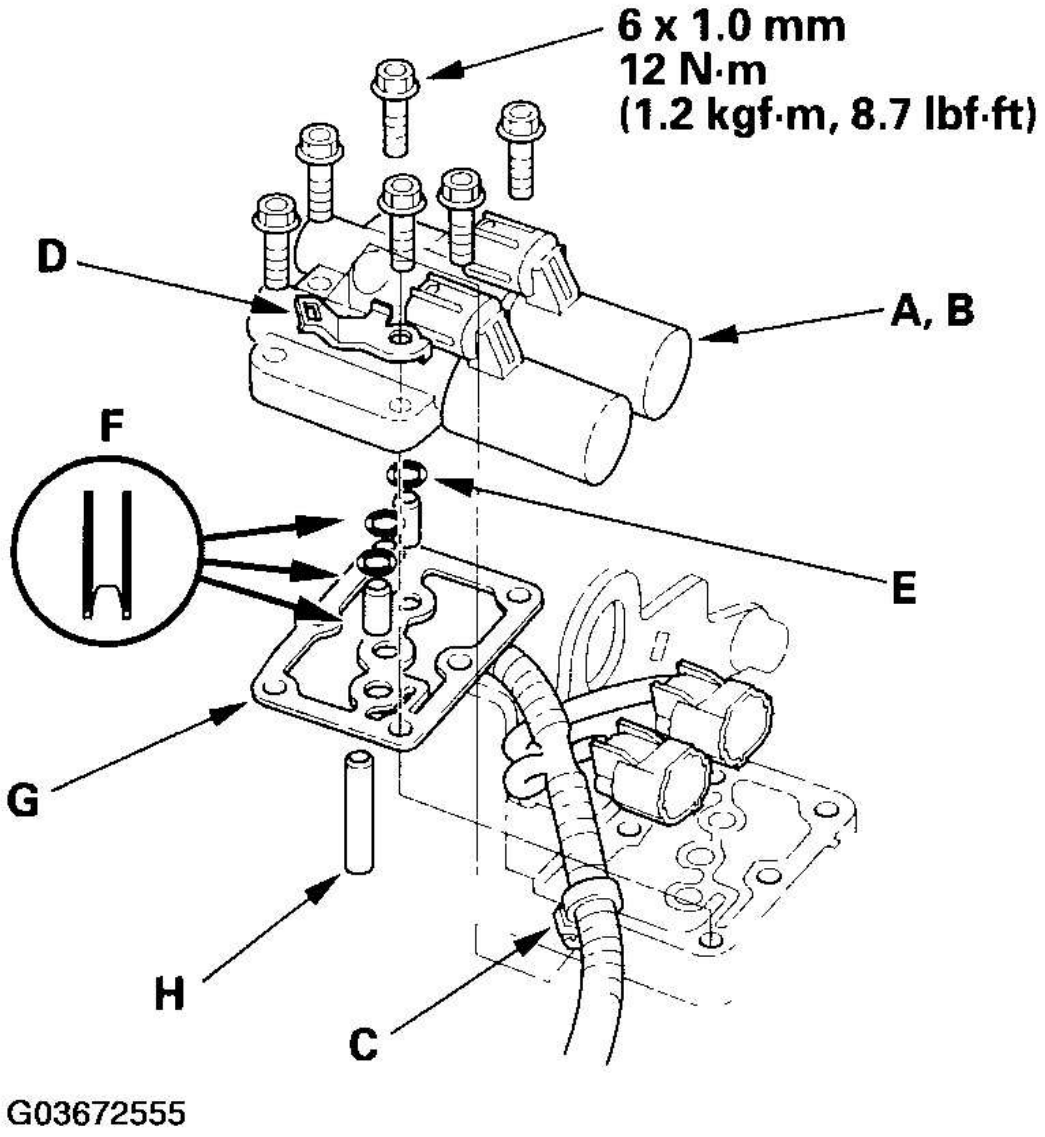


Fig. 200: Removing Harness Clamp From Clamp Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Remove the O-rings (E), 8 x 18 mm ATF feed pipes (F), gasket (G), and 8 x 40 mm ATF feed pipe (H).
17. Connect the battery negative terminal to A/T clutch pressure control solenoid valve A and B connector terminal No. 2, and connect the battery positive

terminal to the terminal No. 1. Make sure A/T clutch pressure control solenoid valve A and B move.

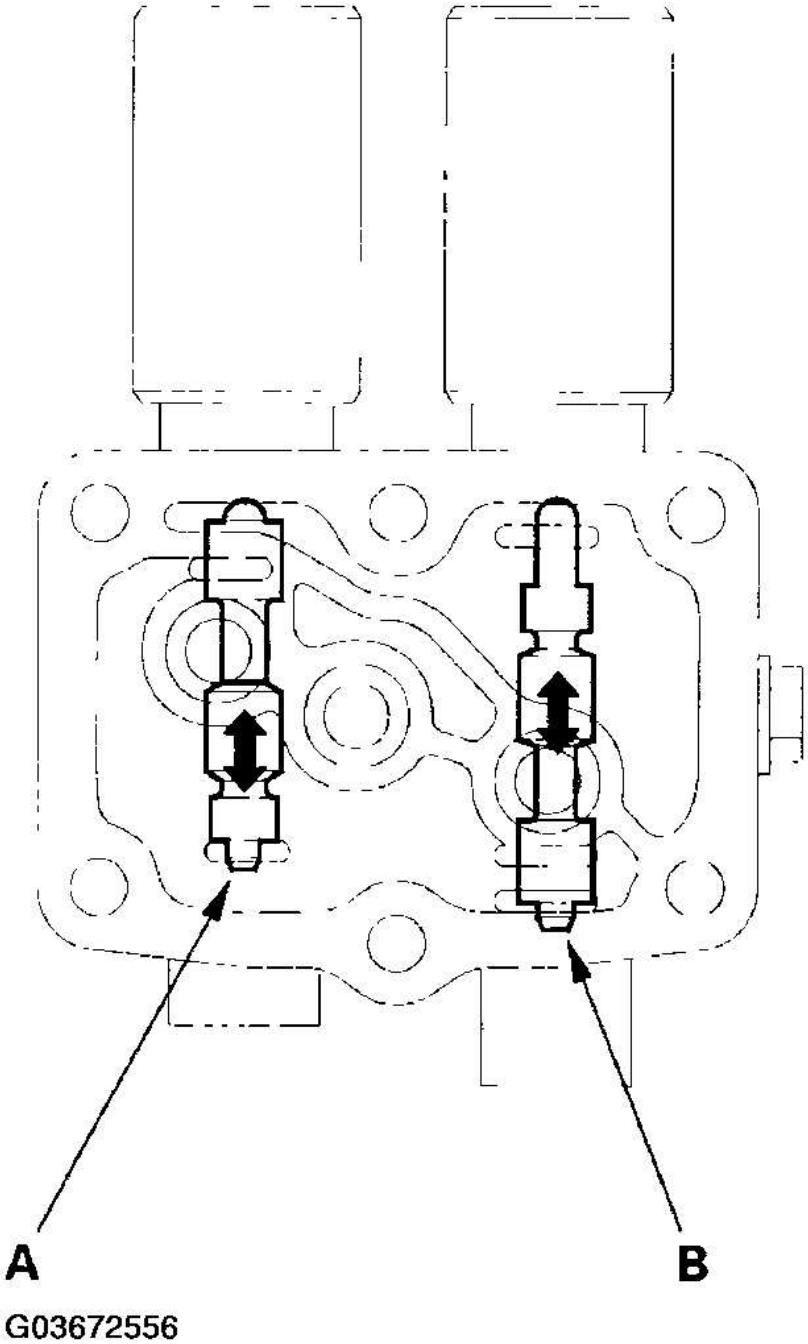


Fig. 201: Connecting Battery Terminal To A/T Clutch Pressure Control Solenoid Valve A And B Connector Terminal No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Disconnect one of the battery terminals and check valve movement at the fluid passage in valve body mounting surface.
19. If either valve binds or moves sluggishly, or if the solenoid valve does not operate, replace A/T clutch pressure control solenoid valve A and B (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B REPLACEMENT**).
20. Check the fluid passage of the A/T clutch pressure control solenoid valve for dust and dirt, and clean the passage if necessary.
21. Place a new gasket on the transmission housing, then install the 8 x 18 mm ATF feed pipes with their filter side into the transmission housing.
22. Install new O-rings over the feed pipes, and install the 8 x 40 mm ATF feed pipe.
23. Install the new A/T clutch pressure control solenoid valve A and B, and harness clamp.
24. Check the A/T clutch pressure control solenoid valve A and B connectors for rust, dirt, or oil, then connect them securely.
25. Install the transmission upper mount bracket and bracket plate.
26. Install the battery base, then install the air cleaner housing and intake air duct.
27. Install the battery tray, battery, and battery cover, then secure the battery with its hold-down bracket.
28. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
29. Enter the audio and navigation anti-theft codes, then enter the presets, and set the clock.
30. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A AND B REPLACEMENT

1. Get the audio and navigation anti-theft codes, and write down the audio

presets.

2. Disconnect the negative cable from the battery, then disconnect the positive cable from the battery.
3. Remove the battery hold-down bracket, then remove the battery cover, battery, and battery tray.
4. Remove the intake air duct and air cleaner housing.
5. Loosen the two bolts securing the battery base from under the vehicle, and remove the two bolts securing the battery base in the engine compartment, then remove the battery base.
6. Remove the transmission upper mount bracket (A) and bracket plate (B).

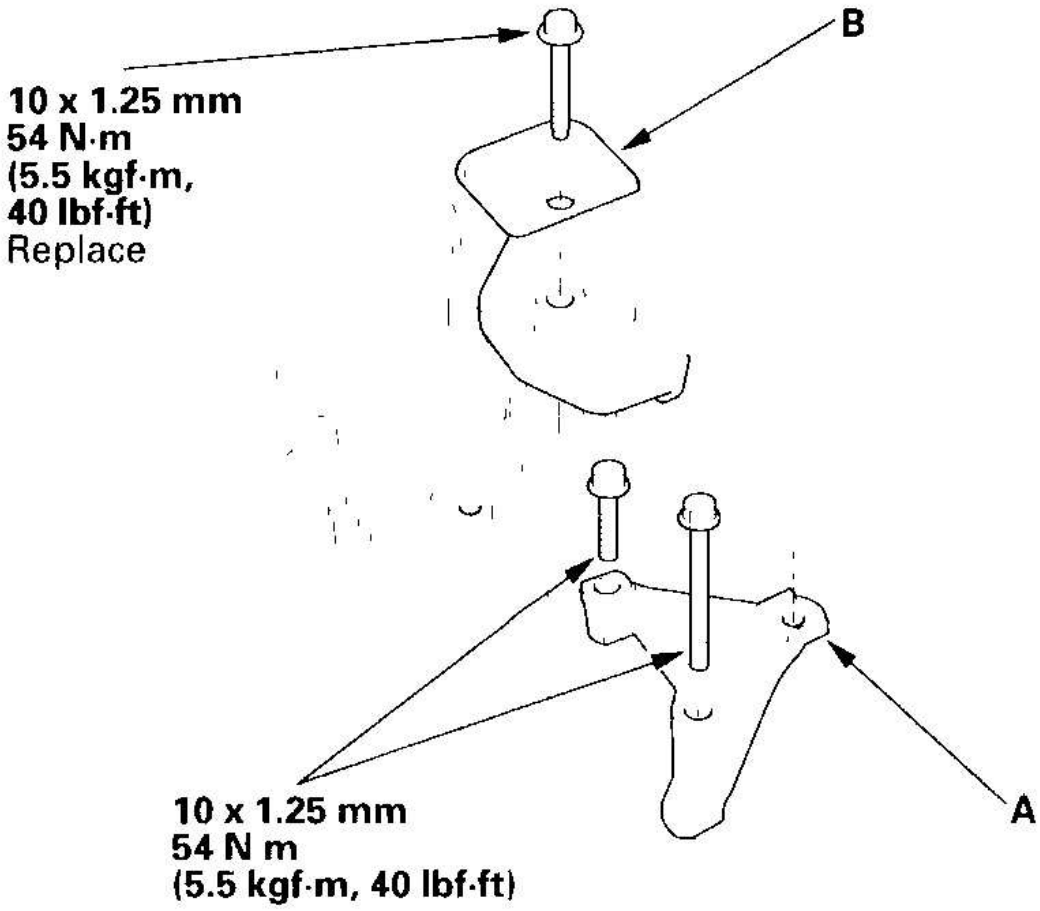


Fig. 202: Removing Transmission Upper Mount Bracket And Bracket Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the harness clamp (C) from the clamp bracket (D), and disconnect A/T clutch pressure control solenoid valve A and B connectors.

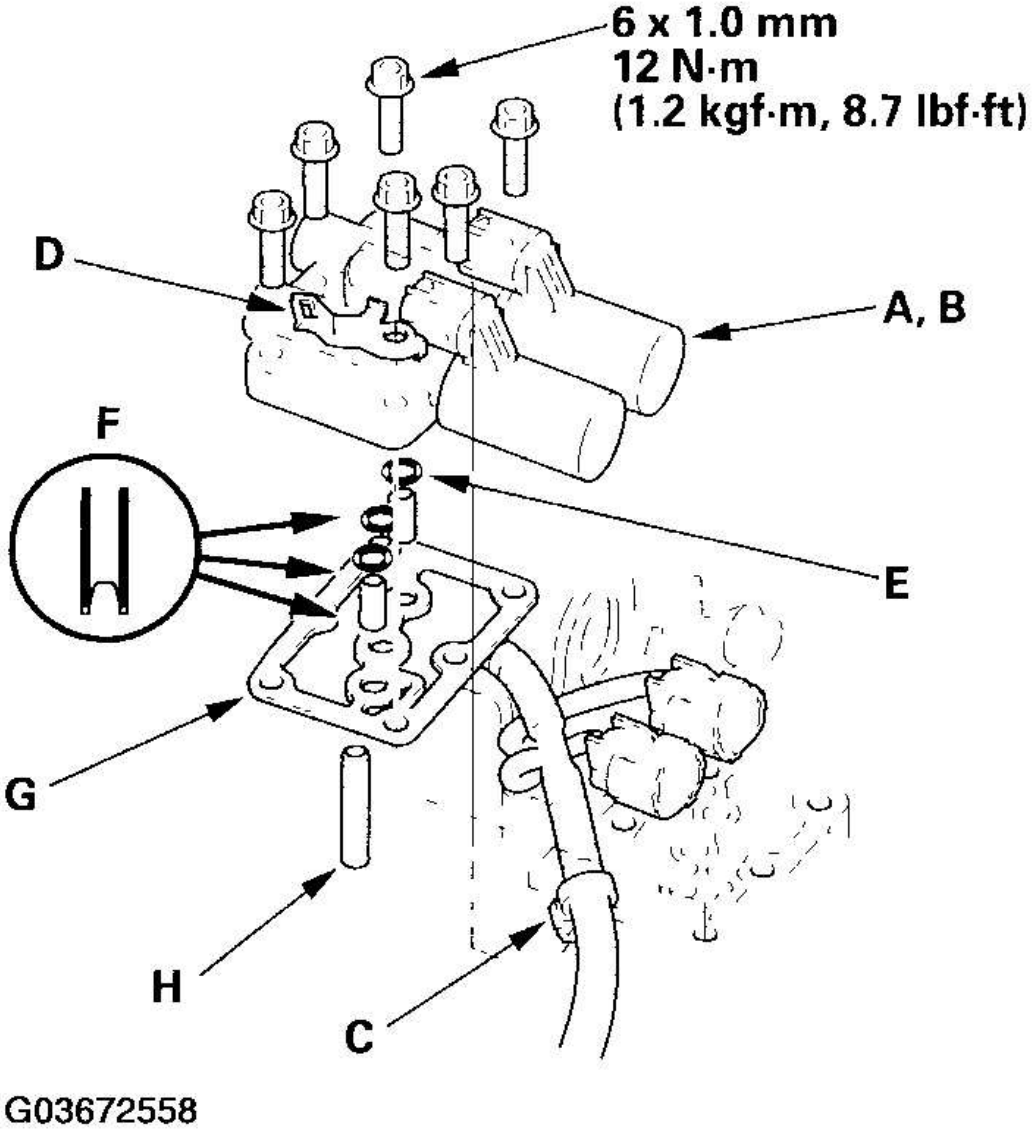


Fig. 203: Removing Harness Clamp From Clamp Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove A/T clutch pressure control solenoid valve A and B, O-rings (E), 8 x 8 mm ATF feed pipes (F), gasket (G), and 8 x 40 mm ATF feed pipe (H).
9. Place a new gasket on the transmission housing, then install the 8 x 18 mm ATF feed pipes with their filter side into the transmission housing.

10. Install new O-rings over the feed pipes, and install the 8 x 40 mm ATF feed pipe.
11. Install the new A/T clutch pressure control solenoid valve A and B, and harness clamp.
12. Check the A/T clutch pressure control solenoid valve A and B connectors for rust, dirt, or oil, then connect them securely.
13. Install the transmission upper mount bracket and bracket plate.
14. Install the battery base, then install the air cleaner housing and intake air duct.
15. Install the battery tray, battery, and battery cover, then secure the battery with its hold-down bracket.
16. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
17. Enter the audio and navigation anti-theft codes, then enter the presets, and set the clock.
18. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE C TEST

1. Connect the HDS to the DLC (A).

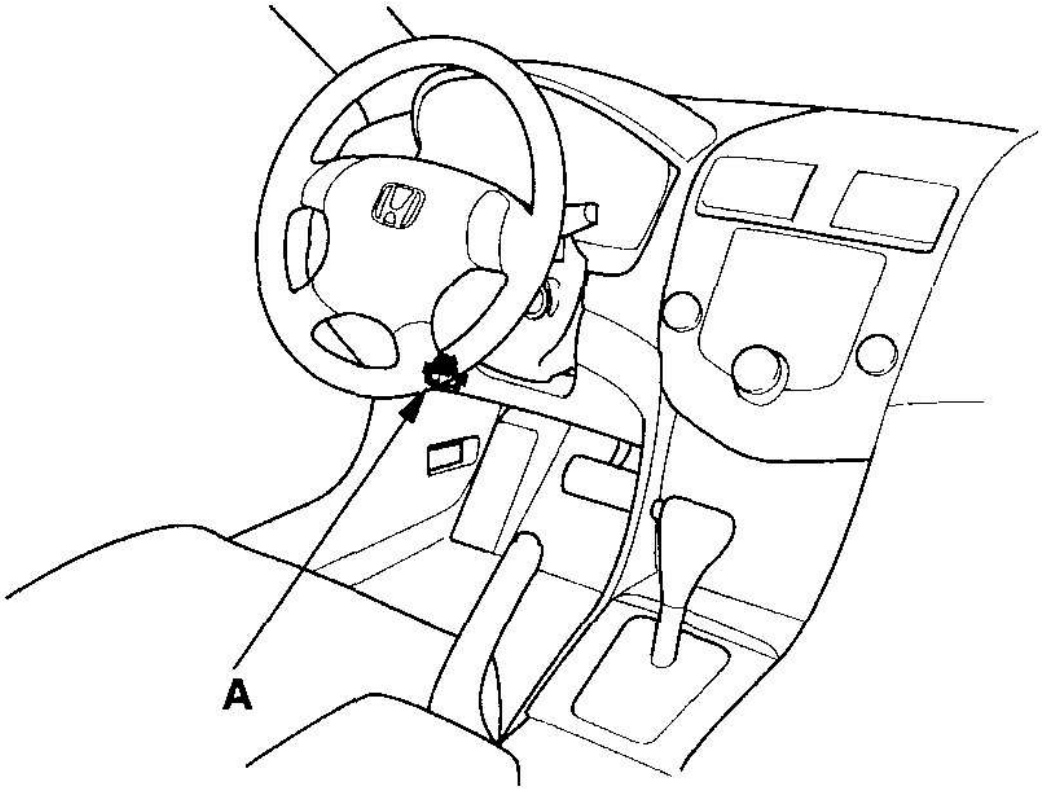


Fig. 204: Connect HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Choose Clutch Pressure Control (Linear) Solenoid C in Miscellaneous Test Menu on the HDS.
3. Test the A/T clutch pressure control solenoid C with the HDS.
4. Follow instructions on the HDS.
    - If the test result is OK, the valve is OK.
    - If the test result is not OK, go to step 5.
5. Get the audio and navigation anti-theft codes, and write down the audio presets.
6. Disconnect the negative cable from the battery, then disconnect the positive cable from the battery.

7. Remove the battery hold-down bracket, then remove the battery cover, battery, and battery tray.
8. Remove the intake air duct and air cleaner housing.
9. Loosen the two bolts securing the battery base from under the vehicle, and remove the two bolts securing the battery base in the engine compartment, then remove the battery base.
10. Disconnect A/T clutch pressure control solenoid valve C connector.

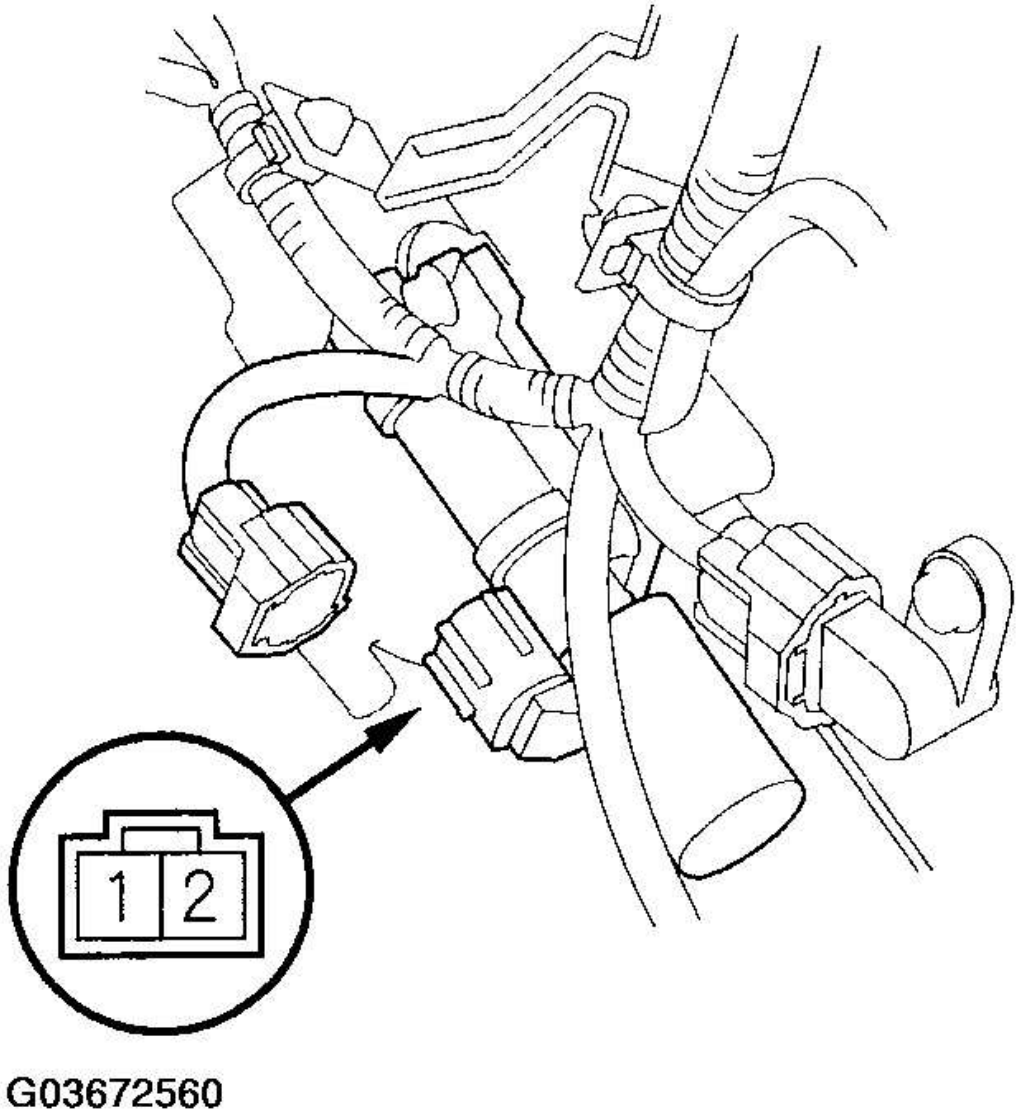


Fig. 205: Disconnecting A/T Clutch Pressure Control Solenoid Valve C Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Measure A/T clutch pressure control solenoid valve C resistance at the solenoid valve connector.

Standard: 3 - 10 ohms

12. If the resistance of the solenoid valve is out of standard, Replace the A/T clutch pressure control solenoid valve C (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE C REPLACEMENT**).
13. If the resistance is within the standard, connect the battery negative terminal to A/T clutch pressure control solenoid valve C connector terminal No. 2, and connect the battery positive terminal to the terminal No. 1.
    - If a clicking sound is heard, go to step 22.
    - If no clicking sound is heard, go to step 14 and remove A/T clutch pressure control solenoid valve.
14. Remove A/T clutch pressure control solenoid valve C.

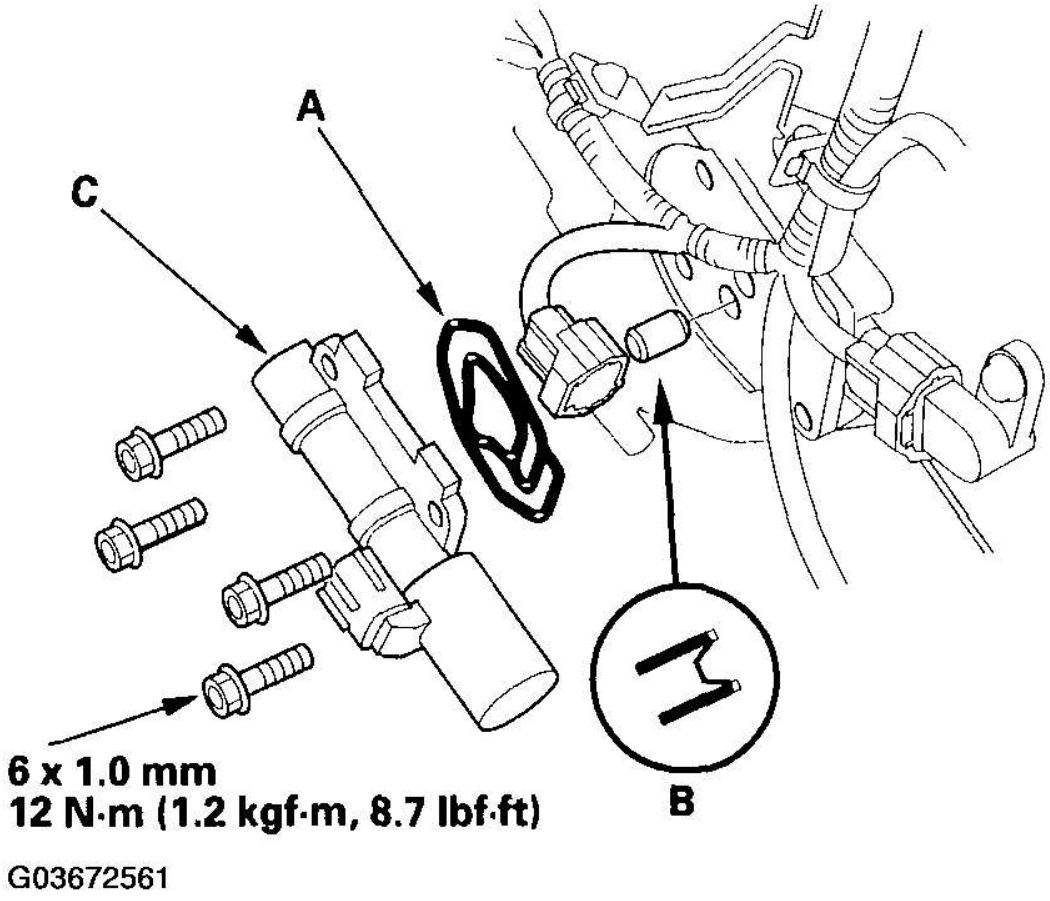


Fig. 206: Removing A/T Clutch Pressure Control Solenoid Valve C
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the gasket (A) and 8 x 12 mm ATF feed pipe (B).
16. Connect the battery negative terminal to A/T clutch pressure control solenoid valve C connector terminal No. 2, and connect the battery positive terminal to the terminal No. 1. Make sure A/T clutch pressure control solenoid valve C moves.

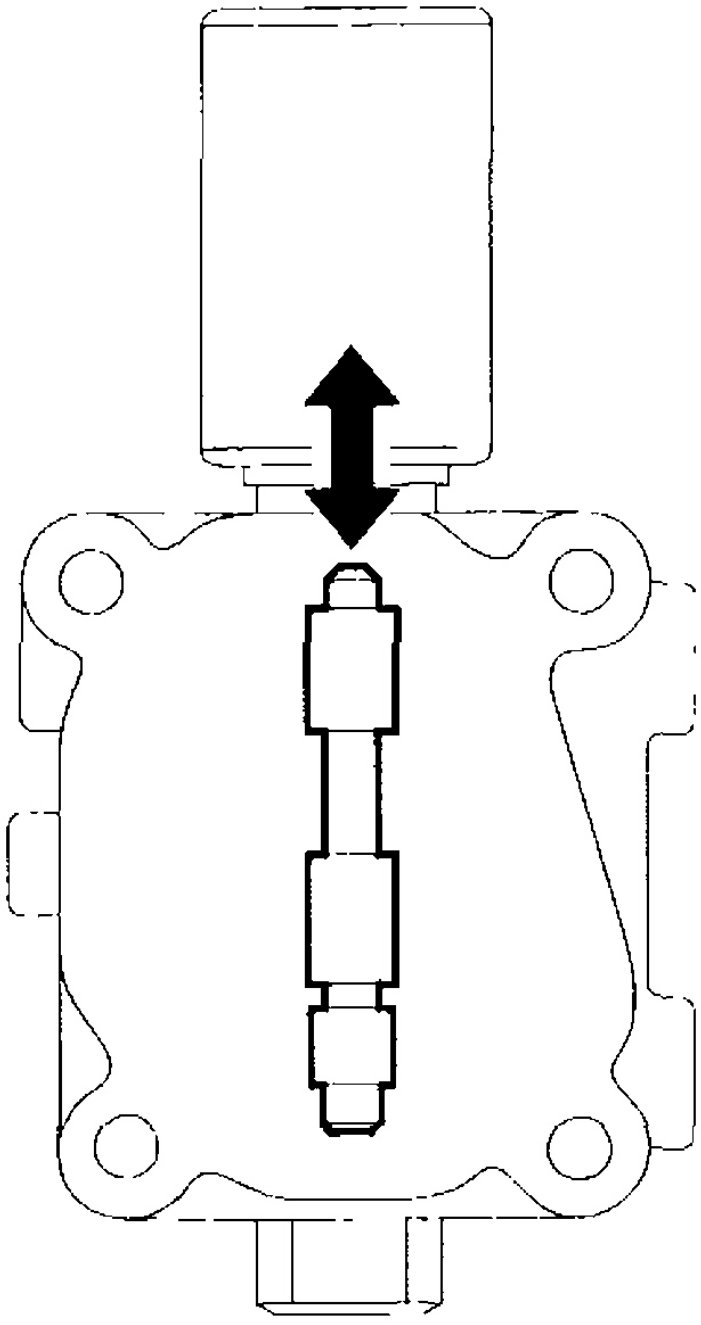


Fig. 207: Connecting Battery Negative Terminal To A/T Clutch Pressure Control Solenoid Valve C Connector Terminal No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Disconnect one of the battery terminals and check valve movement at the fluid passage in valve body mounting surface.
18. If the valve binds or moves sluggishly, or if the solenoid valve does not operate, Replace the A/T clutch pressure control solenoid valve C (see **A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE C REPLACEMENT**).
19. Check the fluid passage of the A/T clutch pressure control solenoid valve for dust and dirt, and clean the passage if necessary.
20. Install the 8 x 12 mm ATF feed pipe with its filter side into the transmission housing.
21. Install the new gasket in the mounting groove of the A/T clutch pressure control solenoid valve C body properly, then install A/T clutch pressure control solenoid valve C on the transmission housing. Do not pinch the gasket.
22. Check the A/T clutch pressure control solenoid valve C connector for rust, dirt, or oil, then connect it securely.
23. Install the battery base, then install the air cleaner housing and intake air duct.
24. Install the battery tray, battery, and battery cover, then secure the battery with its hold-down bracket.
25. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
26. Enter the audio and navigation anti-theft codes, then enter the presets, and set the clock.
27. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE C REPLACEMENT

1. Get the audio and navigation anti-theft codes, and write down the audio presets.
2. Disconnect the negative cable from the battery, then disconnect the positive cable from the battery.
3. Remove the battery hold-down bracket, then remove the battery cover, battery, and battery tray.

4. Remove the intake air duct and air cleaner housing.
5. Loosen the two bolts securing the battery base from under the vehicle, and remove the two bolts securing the battery base in the engine compartment, then remove the battery base.
6. Disconnect A/T clutch pressure control solenoid valve C connector.
7. Remove A/T clutch pressure control solenoid valve C.

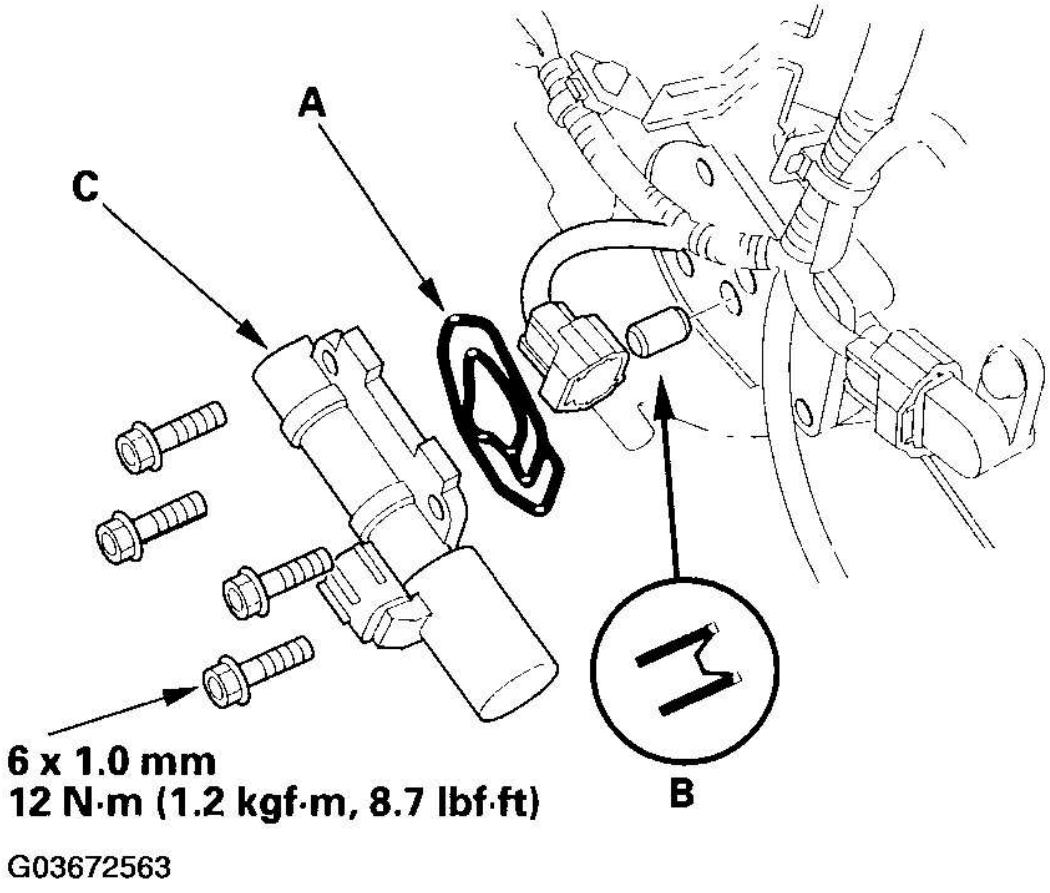


Fig. 208: Removing A/T Clutch Pressure Control Solenoid Valve C
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the gasket (A) and 8 x 12 mm ATF feed pipe (B).
9. Check the fluid passage of the A/T clutch pressure control solenoid valve for

dust and dirt, and clean the passage if necessary.

10. Install the 8 x 12 mm ATF feed pipe with its filter side into the transmission housing.
11. Install the new gasket in the mounting groove of the A/T clutch pressure control solenoid valve C body properly, then install A/T clutch pressure control solenoid valve C on the transmission housing. Do not pinch the gasket.
12. Check the A/T clutch pressure control solenoid valve C connector for rust, dirt, or oil, then connect it securely.
13. Install the battery base, then install the air cleaner housing and intake air duct.
14. Install the battery tray, battery, and battery cover, then secure the battery with its hold-down bracket.
15. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
16. Enter the audio and navigation anti-theft codes, then enter the presets, and set the clock.
17. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

INPUT SHAFT (MAINSHAFT) SPEED SENSOR REPLACEMENT

1. Get the audio and navigation anti-theft codes, and write down the audio presets.
2. Disconnect the negative cable from the battery, then disconnect the positive cable from the battery.
3. Remove the battery hold-down bracket, then remove the battery cover, battery, and battery tray.
4. Loosen the two bolts securing the battery base from under the vehicle, and remove the two bolts securing the battery base in the engine compartment, then remove the battery base.
5. Disconnect input shaft (mainshaft) speed sensor connector.
6. Remove the bolt securing the input shaft (mainshaft) speed sensor, then remove the input shaft (mainshaft) speed sensor (A) from the end cover.

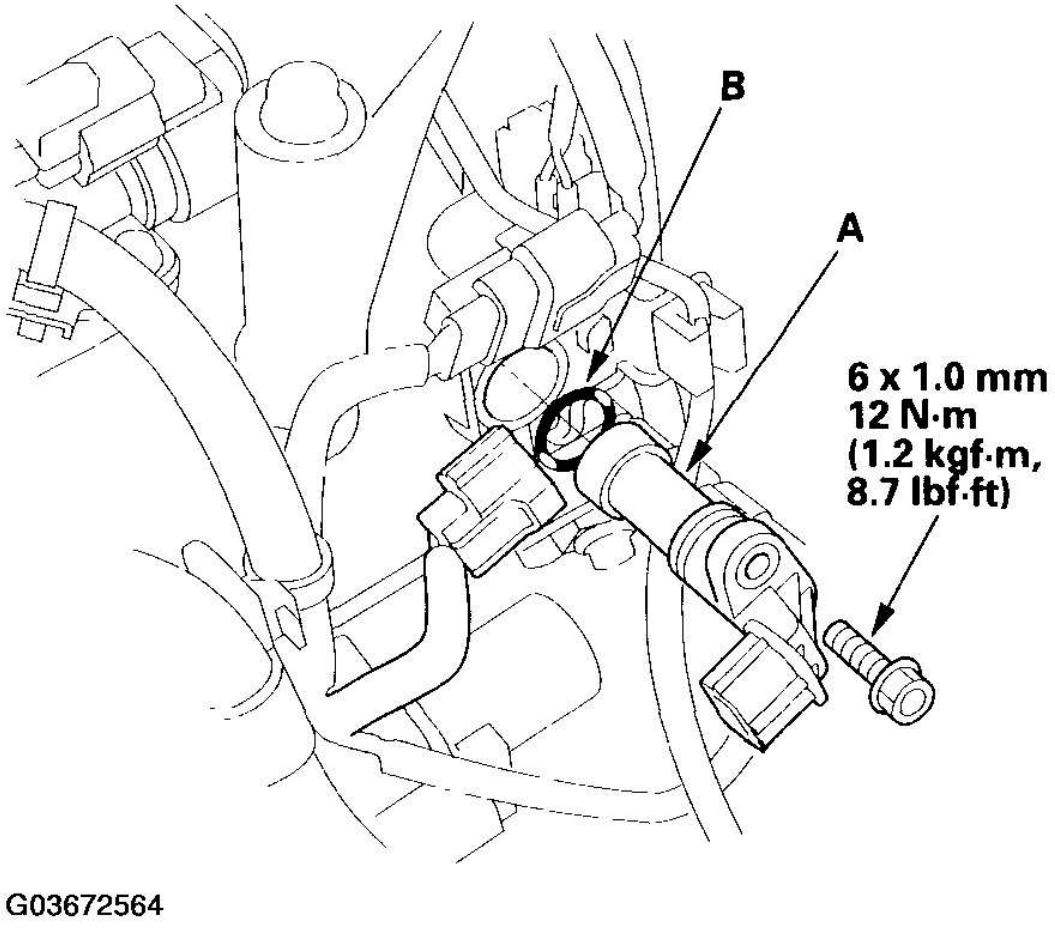


Fig. 209: Removing Input Shaft (Mainshaft) Speed Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the new O-ring (B) on the input shaft (mainshaft) speed sensor, then install the input shaft (mainshaft) speed sensor in the end cover. Do not allow dust or foreign particles to enter the transmission.
8. Check the connector for rust, dirt, or oil, then connect the connector securely.
9. Install the battery base and battery, then connect the battery terminals.
10. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
11. Enter the audio and navigation anti-theft codes, then enter the presets, and set the clock.

12. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR REPLACEMENT

1. Get the audio and navigation anti-theft codes, and write down the audio presets.
2. Disconnect the negative cable from the battery, then disconnect the positive cable from the battery.
3. Unbolt the under-hood fuse/relay box.
4. Reposition the under-hood fuse/relay box to gain access to the output shaft (countershaft) speed sensor.
5. Remove the battery hold-down bracket, then remove the battery cover, battery, and battery tray.
6. Loosen the two bolts securing the battery base from under the vehicle, and remove the two bolts securing the battery base in the engine compartment, then remove the battery base.
7. Disconnect output shaft (countershaft) speed sensor connector.
8. Remove the bolt securing the output shaft (countershaft) speed sensor (A) from the transmission housing.

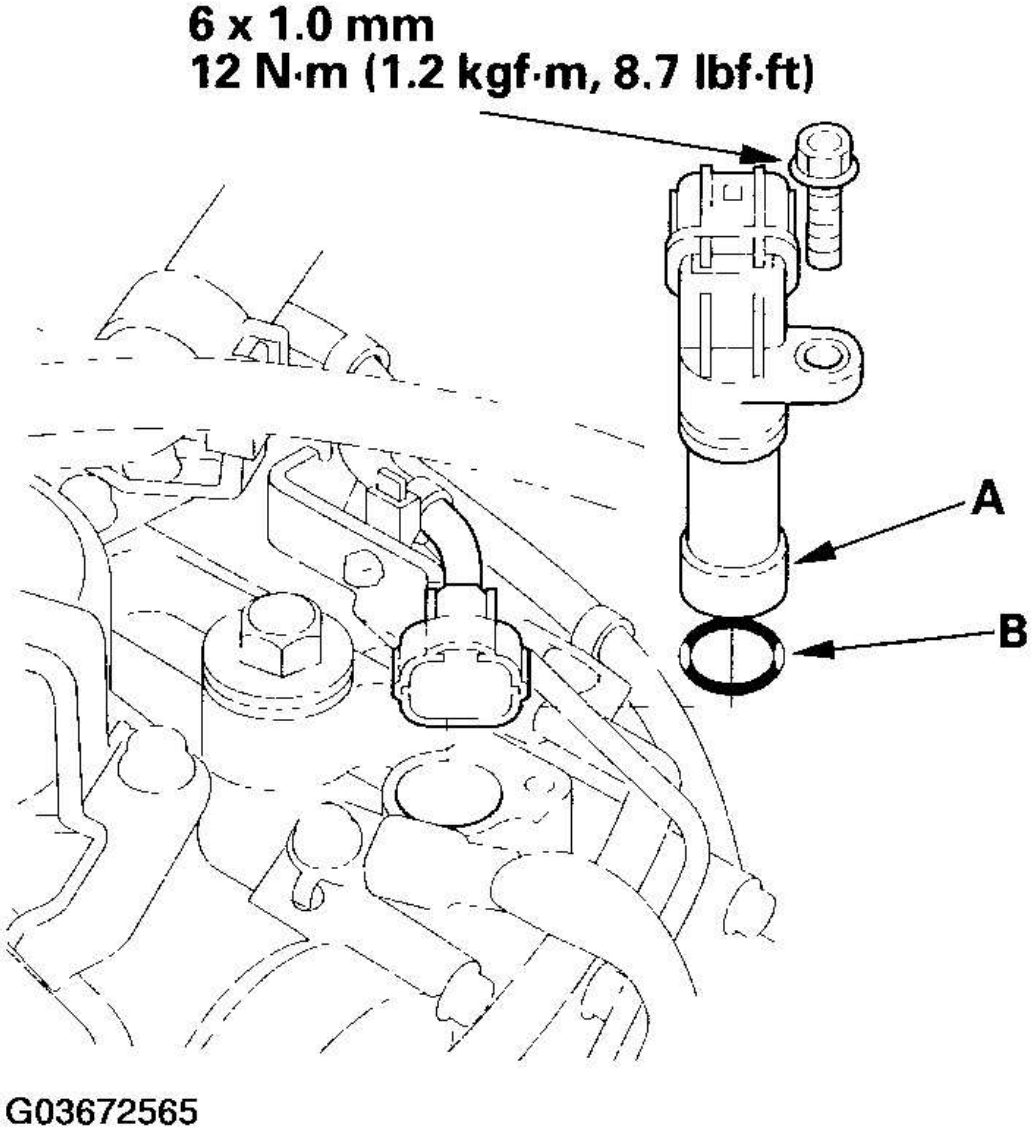


Fig. 210: Removing Output Shaft (Countershaft) Speed Sensor Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the new O-ring (B) on the output shaft (countershaft) speed sensor, then install the output shaft (countershaft) speed sensor in the transmission housing. Do not allow dust or foreign particles to enter the transmission.
10. Check for rust, dirt, or oil, then connect the connector securely.

11. Install the battery base and battery, then connect the battery terminals.
12. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
13. Enter the audio and navigation anti-theft codes, then enter the presets, and set the clock.
14. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

3RD CLUTCH TRANSMISSION FLUID PRESSURE SWITCH REPLACEMENT

1. Lift the vehicle up on a hoist or apply the parking brake, block rear wheels, and raise the front of the vehicle. Make sure it is securely supported.
2. Remove the splash shield.
3. Disconnect the ATF temperature sensor connector (A).

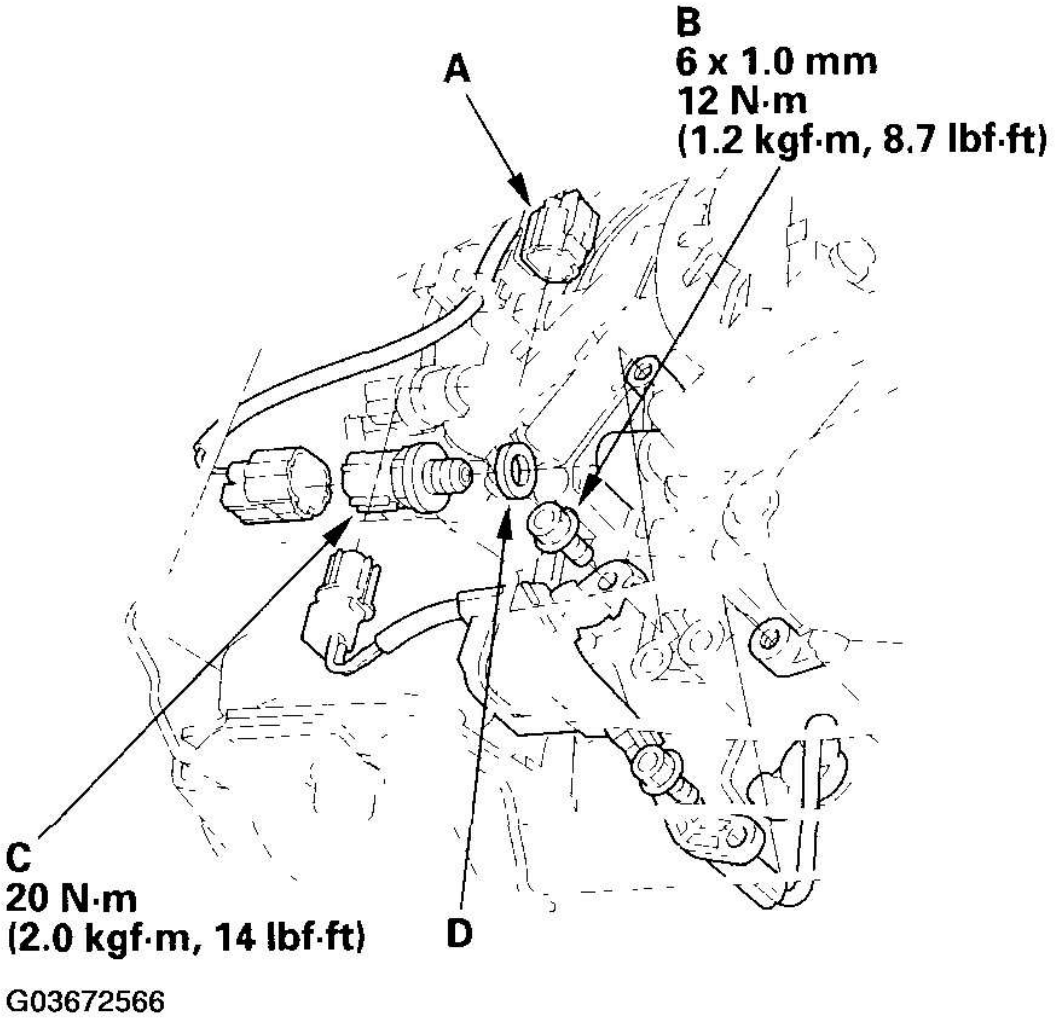


Fig. 211: Disconnecting ATF Temperature Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove ATF temperature sensor harness clamp bolt (B).
5. Disconnect the connector from the 3rd clutch transmission fluid pressure switch (C).
6. Replace the switch, then install a new one with a new sealing washer (D). Tighten the switch on the metal part, not the plastic part.
7. Check the connector for water, oil, dust, or other particles inside it, and connect the connector securely.

8. Install ATF temperature sensor harness clamp bolt, and connect the ATF temperature sensor connector.
9. Install the splash shield.

4TH CLUTCH TRANSMISSION FLUID PRESSURE SWITCH REPLACEMENT

1. Get the audio and navigation anti-theft codes, and write down the audio presets.
2. Disconnect the negative cable from the battery, then disconnect the positive cable from the battery.
3. Remove the battery hold-down bracket, then remove the battery cover, battery, and battery tray.
4. Loosen the two bolts securing the battery base from under the vehicle, and remove the two bolts securing the battery base in the engine compartment, then remove the battery base.
5. Disconnect the connector from the 4th clutch transmission fluid pressure switch (A).

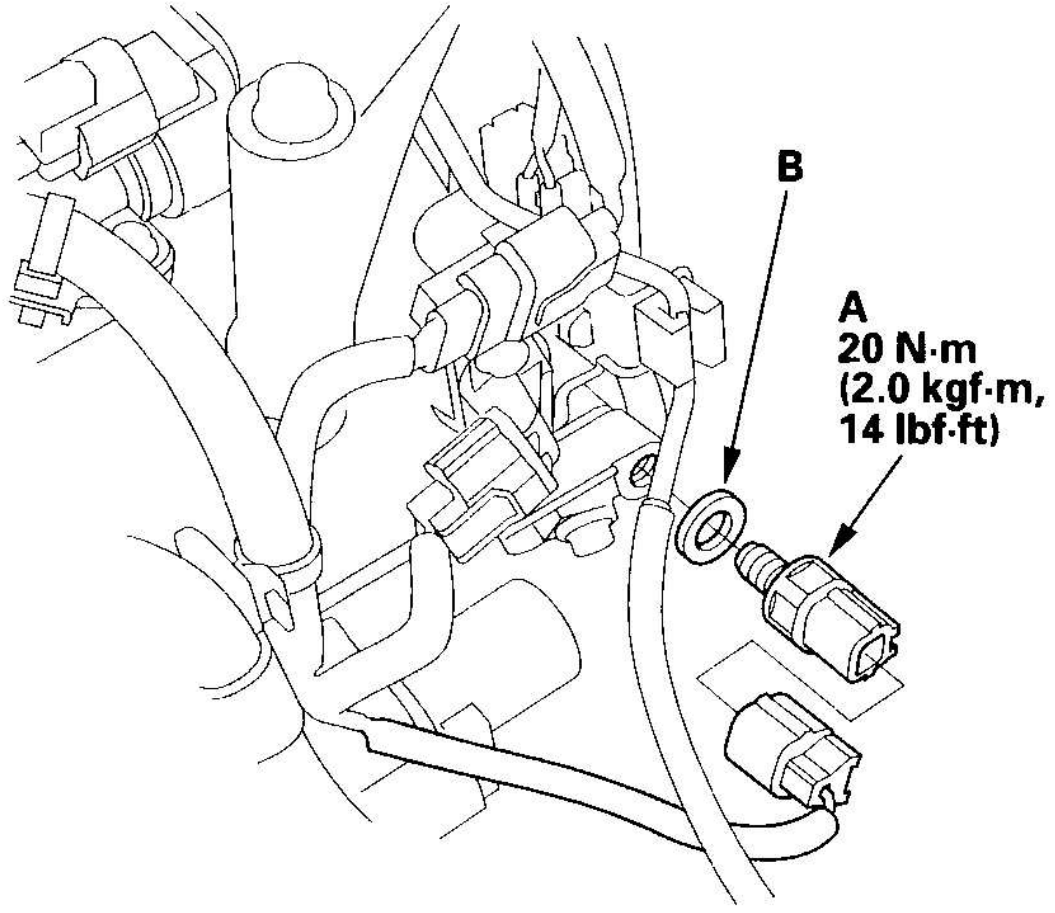


Fig. 212: Disconnecting Connector From 4th Clutch Transmission Fluid Pressure Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Replace the switch, then install a new one with a new sealing washer (B). Tighten the switch on the metal part, not the plastic part.
7. Check the connector for water, oil, dust, or other particles inside it, and connect the connector securely.
8. Install the battery base and battery, then connect the battery terminals.
9. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.

10. Enter the audio and navigation anti-theft codes, then enter the presets, and set the clock.
11. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

ATF TEMPERATURE SENSOR REPLACEMENT

1. Get the audio and navigation anti-theft codes, and write down the audio presets.
2. Lift the vehicle up on a hoist or apply the parking brake, block rear wheels, and raise the front of the vehicle. Make sure it is securely supported.
3. Remove the splash shield.
4. Remove the drain plug (A), and drain the automatic transmission fluid (ATF). Then reinstall the drain plug with a new sealing washer (B).

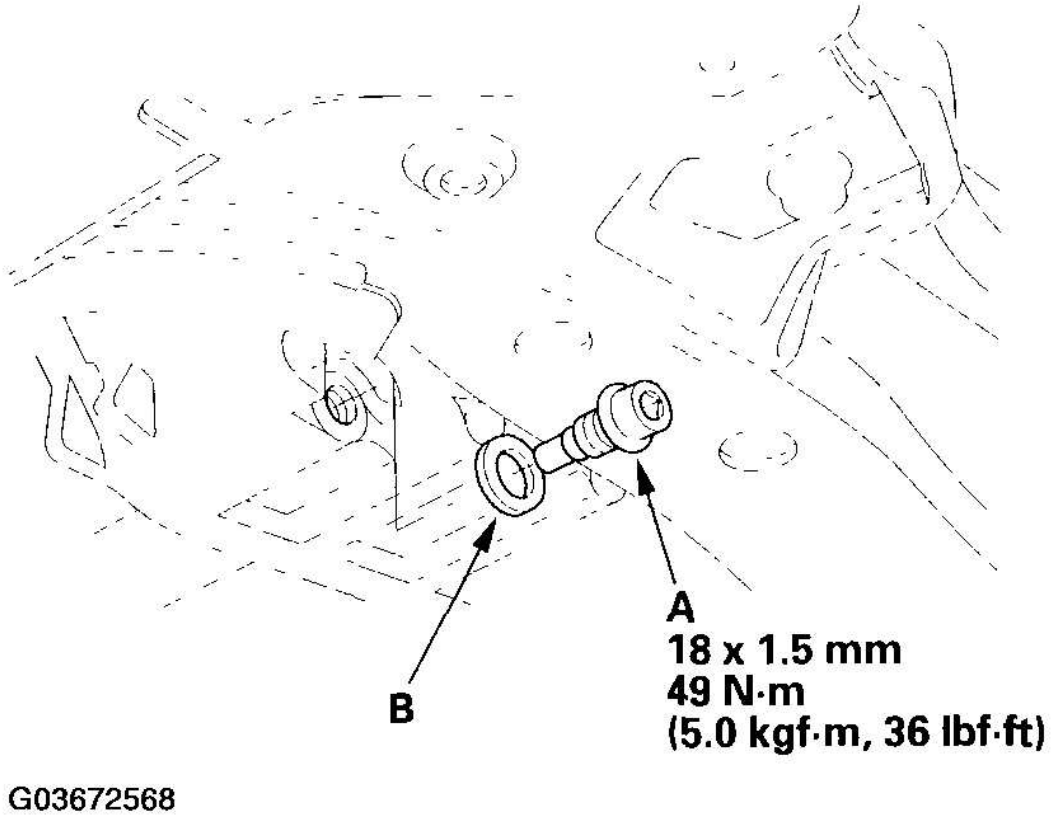


Fig. 213: Removing Drain Plug
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the negative cable from the battery, then disconnect the positive cable from the battery.
6. Remove the battery hold-down bracket, then remove the battery cover, battery, and battery tray.
7. Remove the intake air duct and air cleaner housing.
8. Loosen the two bolts securing the battery base from under the vehicle, and remove the two bolts securing the battery base in the engine compartment, then remove the battery base.
9. Remove the transmission upper mount bracket (A) and bracket plate (B).

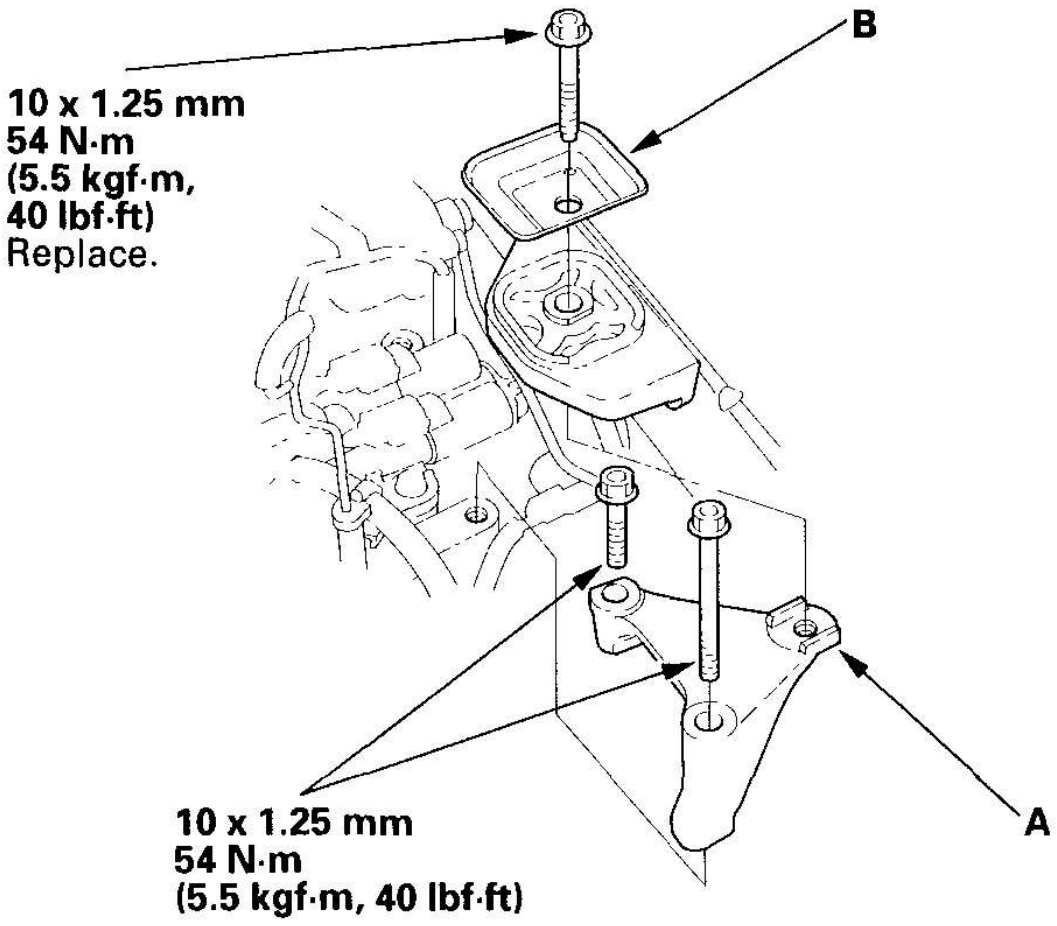


Fig. 214: Removing Transmission Upper Mount Bracket And Bracket Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Place the transmission jack under the transmission, and remove the transmission lower mount nuts.

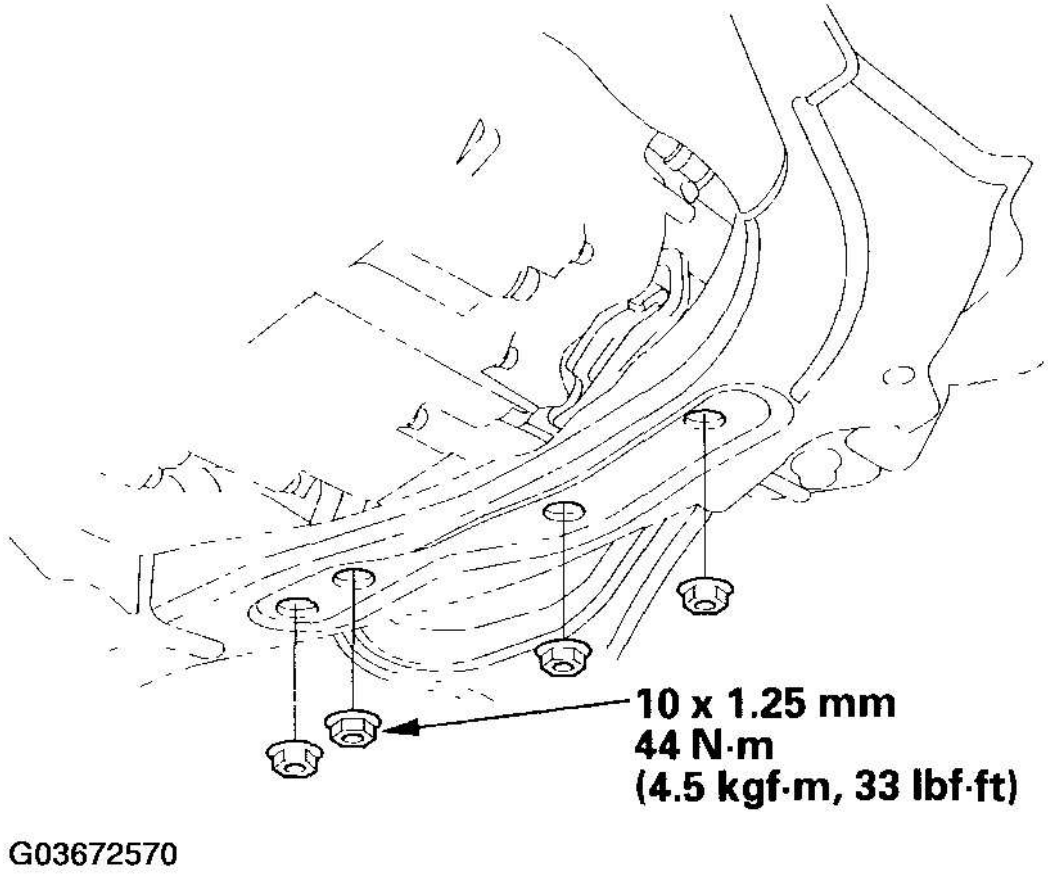


Fig. 215: Removing Transmission Lower Mount Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Lift the transmission up to create clearance between the transmission and front subframe with the jack.
12. Remove the transmission lower front mount.

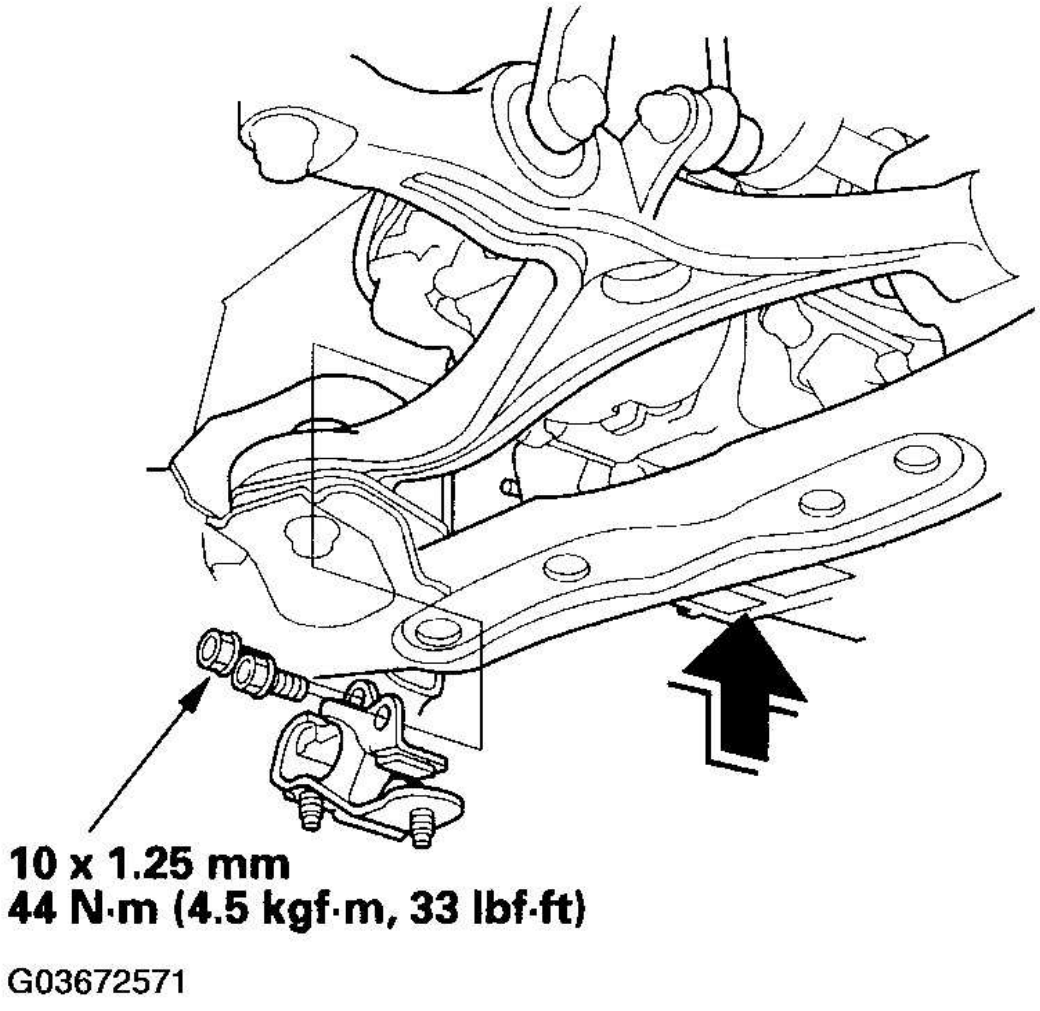


Fig. 216: Removing Transmission Lower Front Mount
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Disconnect the ATF temperature sensor connector (A).

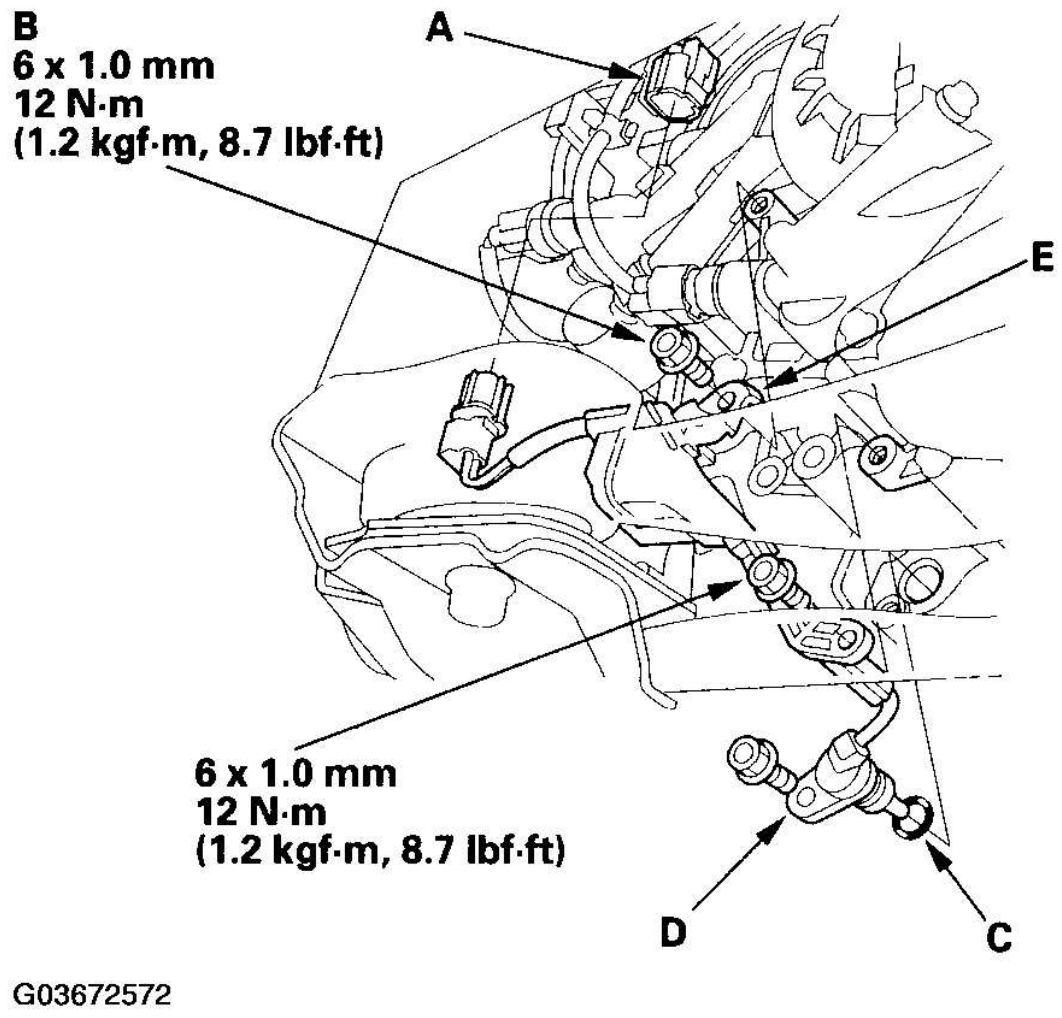


Fig. 217: Disconnecting ATF Temperature Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Remove ATF temperature sensor harness clamp bolt (B), then remove the sensor.
15. Install the new O-ring (C) on the new ATF temperature sensor (D), then install the sensor.
16. Secure the ATF temperature sensor harness clamp (E) with the bolts.
17. Check the connector for rust, dirt, or oil, then connect the connector securely.
18. Install the transmission lower front mount.

19. Install the transmission lower mount nuts.
20. Install the transmission upper mount bracket, bracket plate, and remove the transmission jack.
21. Refill the transmission with ATF (see step 5 in **ATF Replacement**).
22. Install the battery base, then install the air cleaner housing and intake air duct.
23. Install the battery tray, battery, and battery cover, then secure the battery with its hold-down bracket.
24. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
25. Install the splash shield.
26. Enter the audio and navigation anti-theft codes, then enter the presets, and set the clock.
27. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

ATF LEVEL CHECK

NOTE: Keep all foreign particles out of the transmission.

1. Warm up the engine to normal operating temperature (the radiator fan comes on).
2. Park the vehicle on level ground, and turn the engine off.

NOTE: Check the fluid level within 60-90 seconds after turning the engine off.

3. Remove the dipstick (yellow loop) from the ATF dipstick guide pipe, and wipe it with a clean cloth.
4. For 2003 model: Insert the dipstick (A) back with pointing the arrow (B) on the cap (C) to the front of the vehicle.

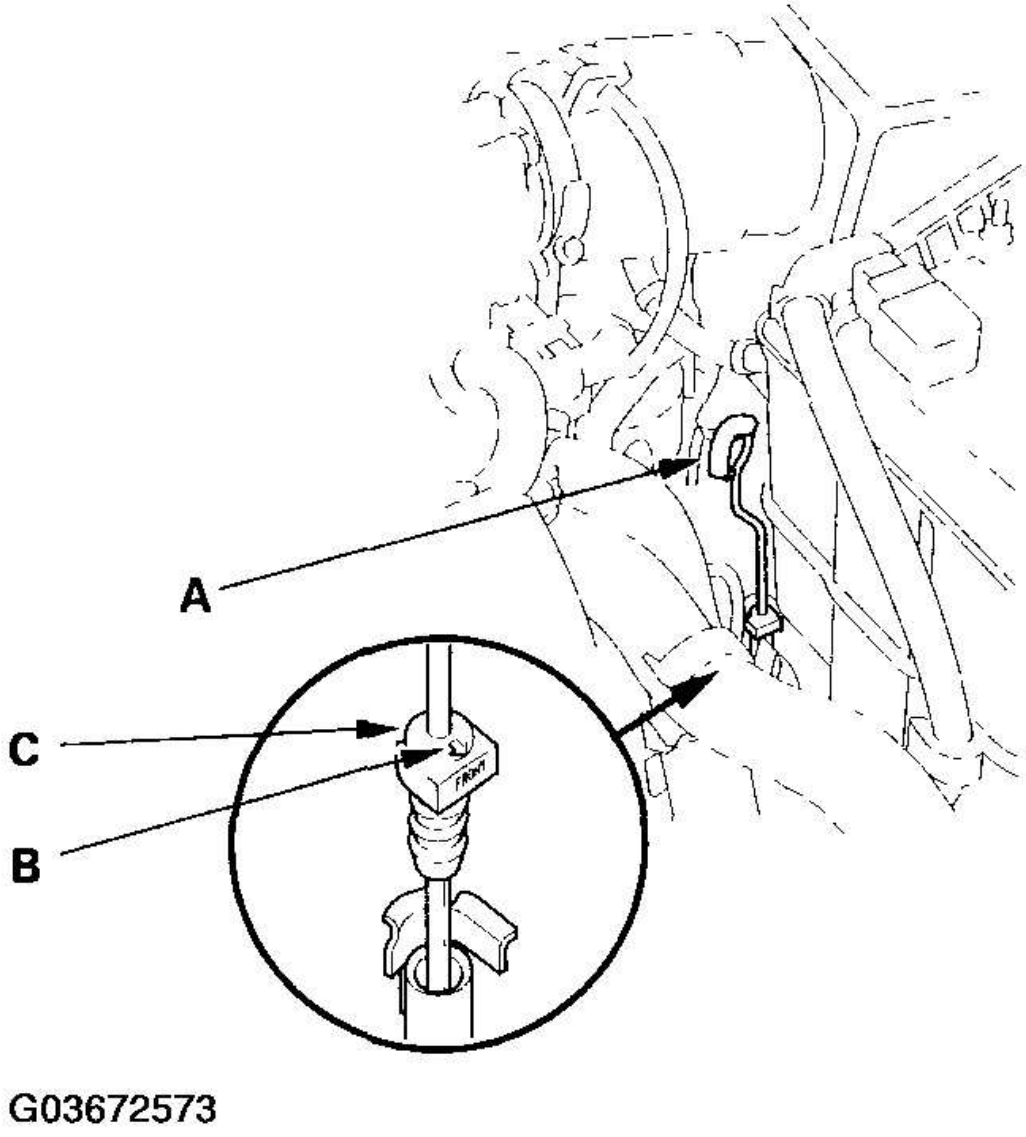


Fig. 218: Inserting Dipstick Back Pointing Arrow On Cap To Front Of Vehicle (2003 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. For 2004-2007 models: Insert the dipstick (A) back with pointing the arrow (B) on the cap (C) to the front of the vehicle, and aligning the notch on the cap with the guide tab (D).

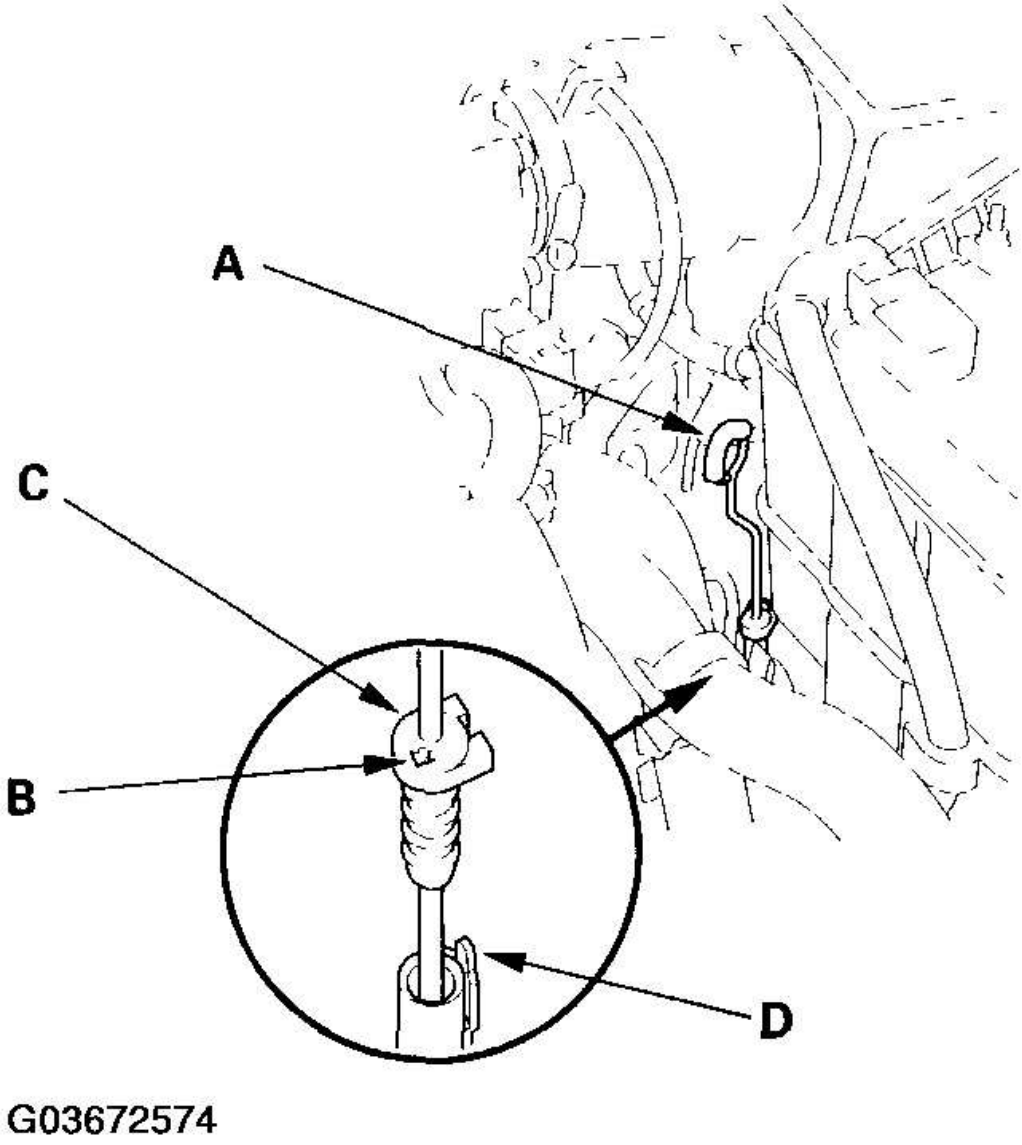


Fig. 219: Inserting Dipstick Back Pointing Arrow On Cap To Front Of Vehicle (2004-06 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the dipstick (A) and check the fluid level. It should be between upper mark (B) and lower mark (C).

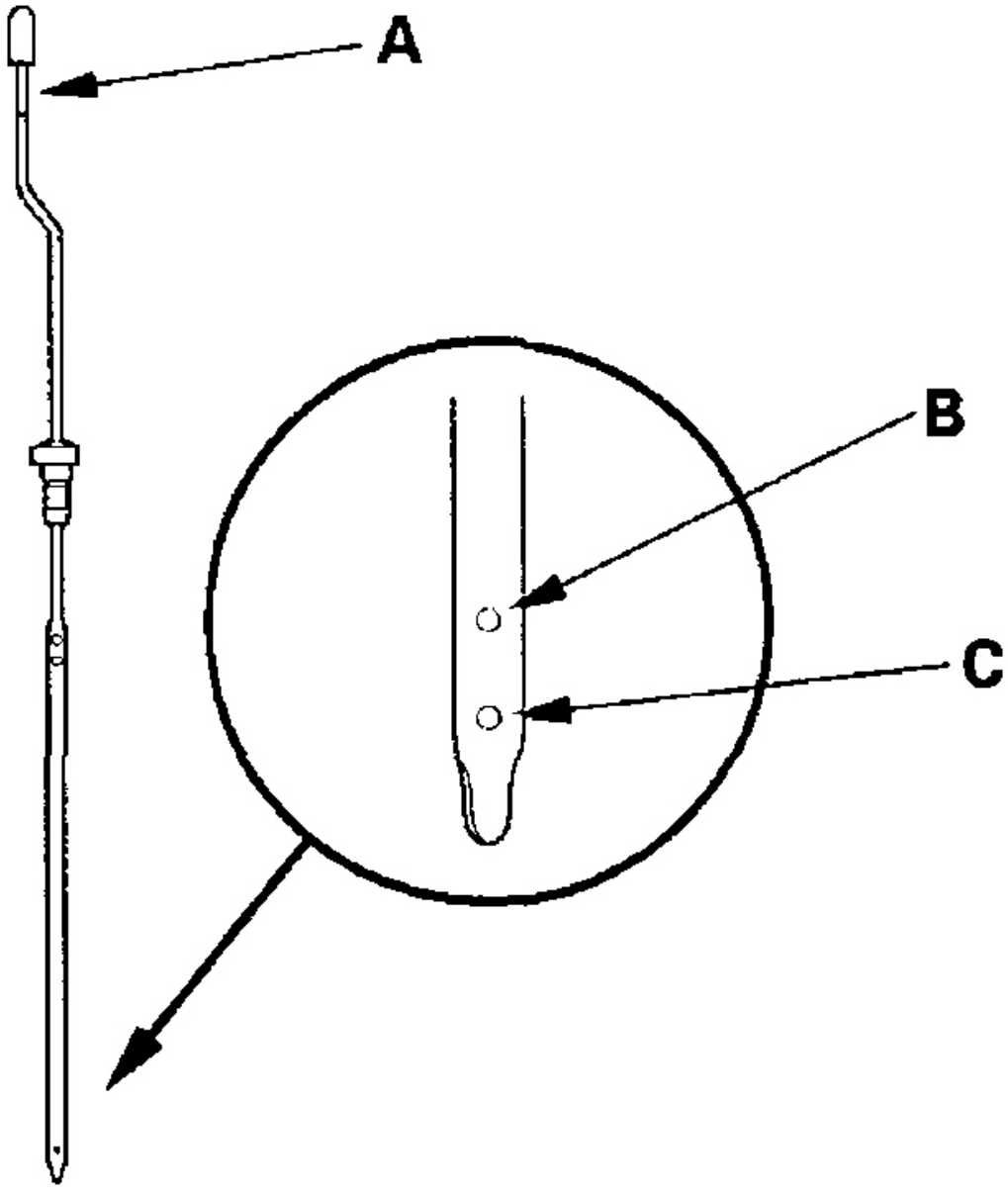


Fig. 220: Removing Dipstick And Checking Fluid Level
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. If the level is below the lower mark, check for fluid leaks at the transmission,

hose and line joints.

If a problem is found, fix it before filling the transmission.

If the level is above the upper mark, drain the ATF to proper level (see step 3 in **ATF Replacement**).

8. If necessary fill the transmission through the dipstick guide pipe opening (A) to bring the fluid level up to the upper mark. Always use Honda ATF-Z1 Automatic Transmission Fluid (ATF). Using a non-Honda ATF can affect shift quality.

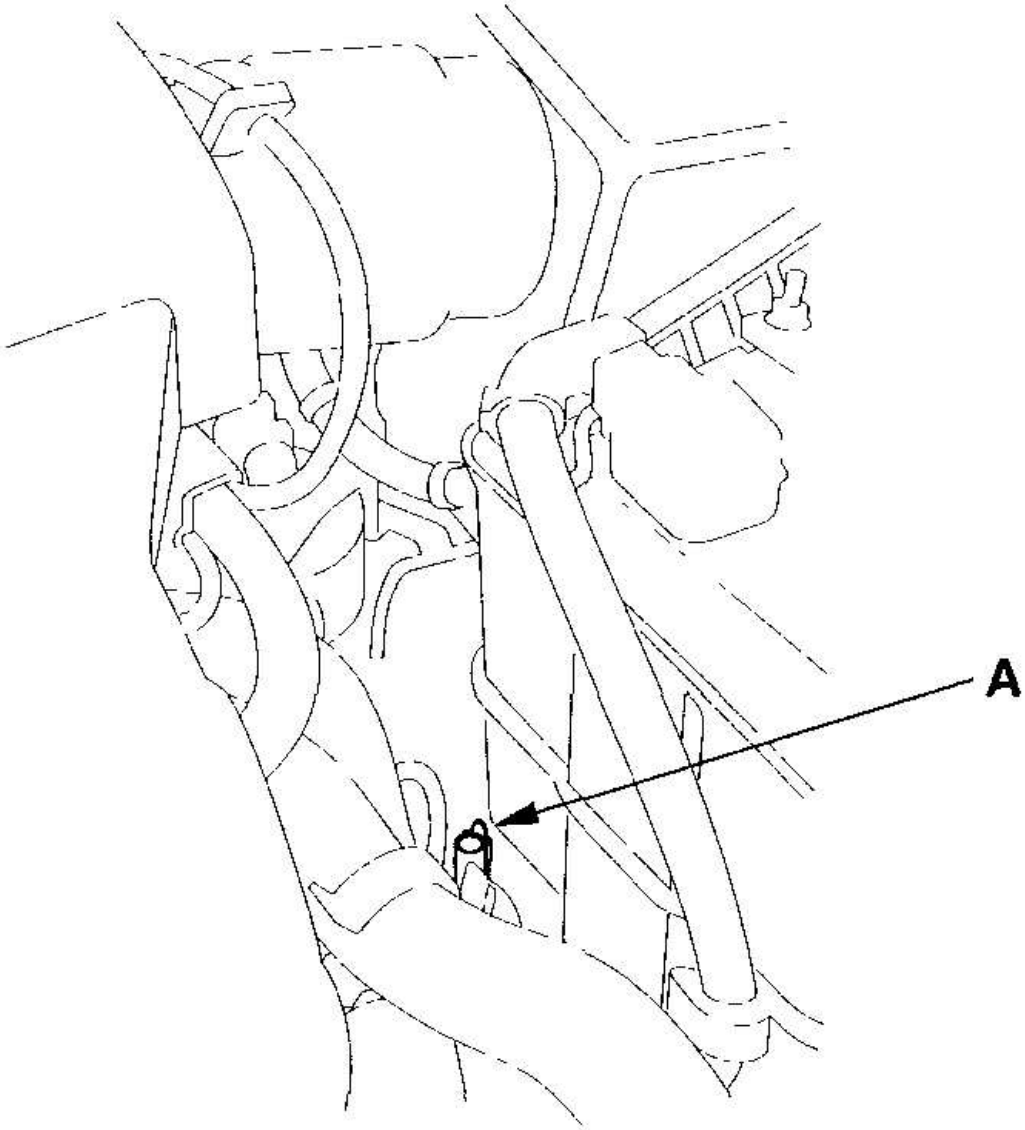


Fig. 221: Filling Transmission Through Dipstick Guide Pipe Opening To Bring Fluid Level Up To Upper Mark
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Insert the dipstick back into the dipstick guide pipe.

ATF REPLACEMENT

NOTE: Keep all foreign particles out of-the transmission.

1. Bring the transmission up to normal operating temperature (the radiator fan comes on).
2. Park the vehicle on level ground, and turn the engine off.
3. Remove the drain plug (A), and drain the automatic transmission fluid (ATF).

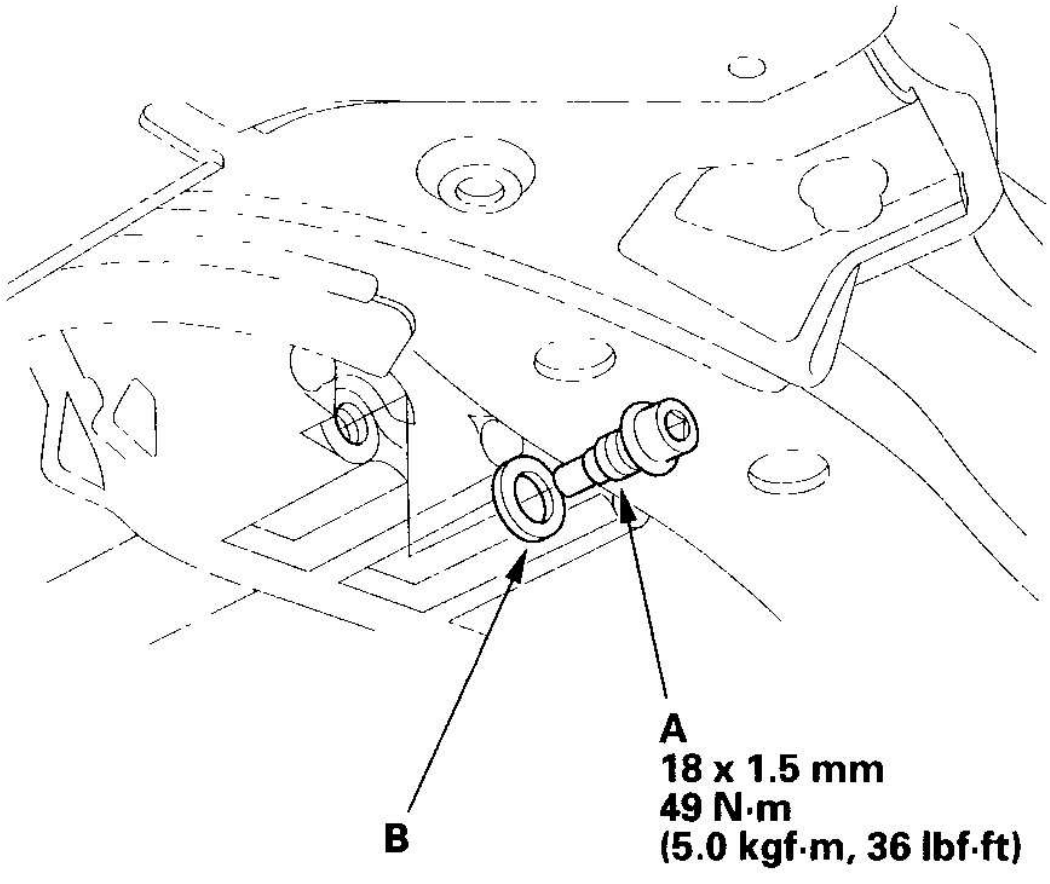


Fig. 222: Removing Drain Plug
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Reinstall the drain plug with a new sealing washer (B).

5. Refill transmission with the recommended fluid into the filler hole (A) to the upper mark on the dipstick. Always use Honda ATF-Z1 Automatic Transmission Fluid (ATF). Using a non-Honda ATF can affect shift quality.

   Automatic Transmission Fluid Capacity:

   3.0 L (3.2 US qt) at change

   7.0 L (7.4 US qt) at overhaul

6. Install the ATF filler bolt (B) with a new sealing washer (C).

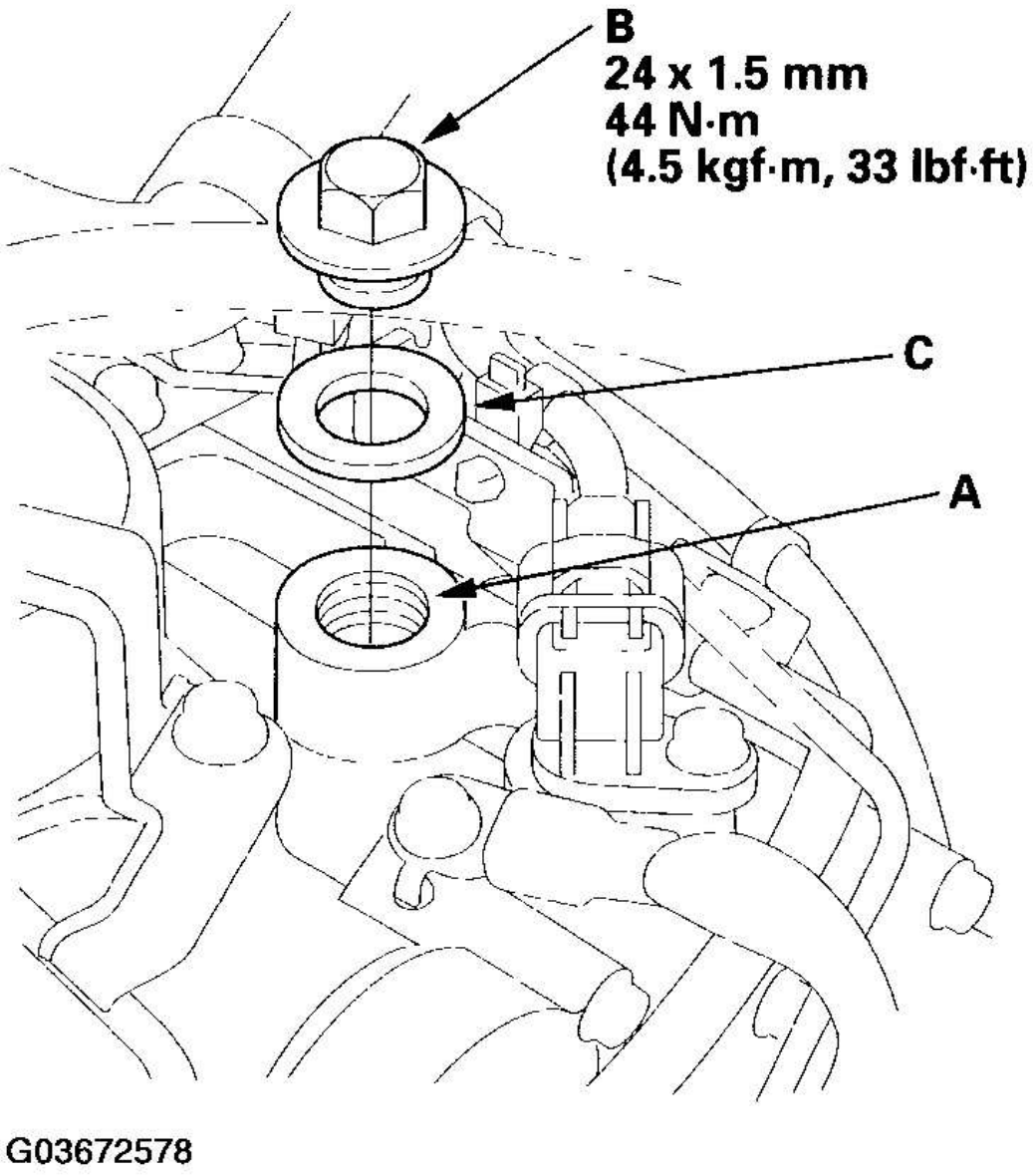


Fig. 223: Installing ATF Filler Bolt With New Sealing Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TRANSMISSION REMOVAL

Special Tools Required

- Engine support hanger, A and Reds AAR-T-12566
- Engine hanger balancer bar VSB02C000019
- Front subframe adapter VSB02C000016

These special tools are available through the Honda Tool and Equipment Program 1-888-424-6857.

NOTE:

- **Use fender covers to avoid damaging painted surfaces.**
- **Special tool Reds engine support hanger AAR-T-12566 must be used with the side engine mount installed.**

1. Get the audio and navigation anti-theft codes, and write down the audio presets.
2. Set the wheels in the straight ahead position.
3. Lock the steering wheel.
4. Drain the power steering system fluid from the reservoir (see **PUMP REPLACEMENT**).
5. Remove the steering joint cover (A).

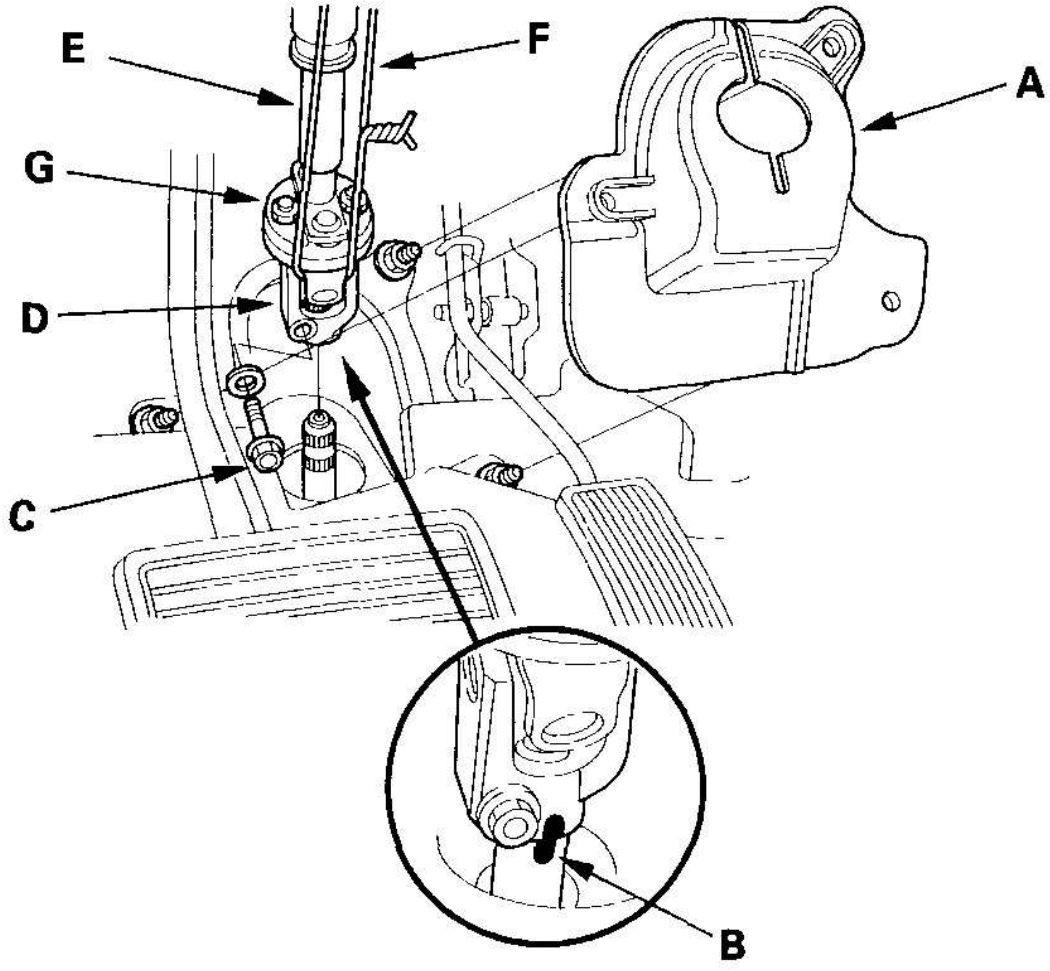
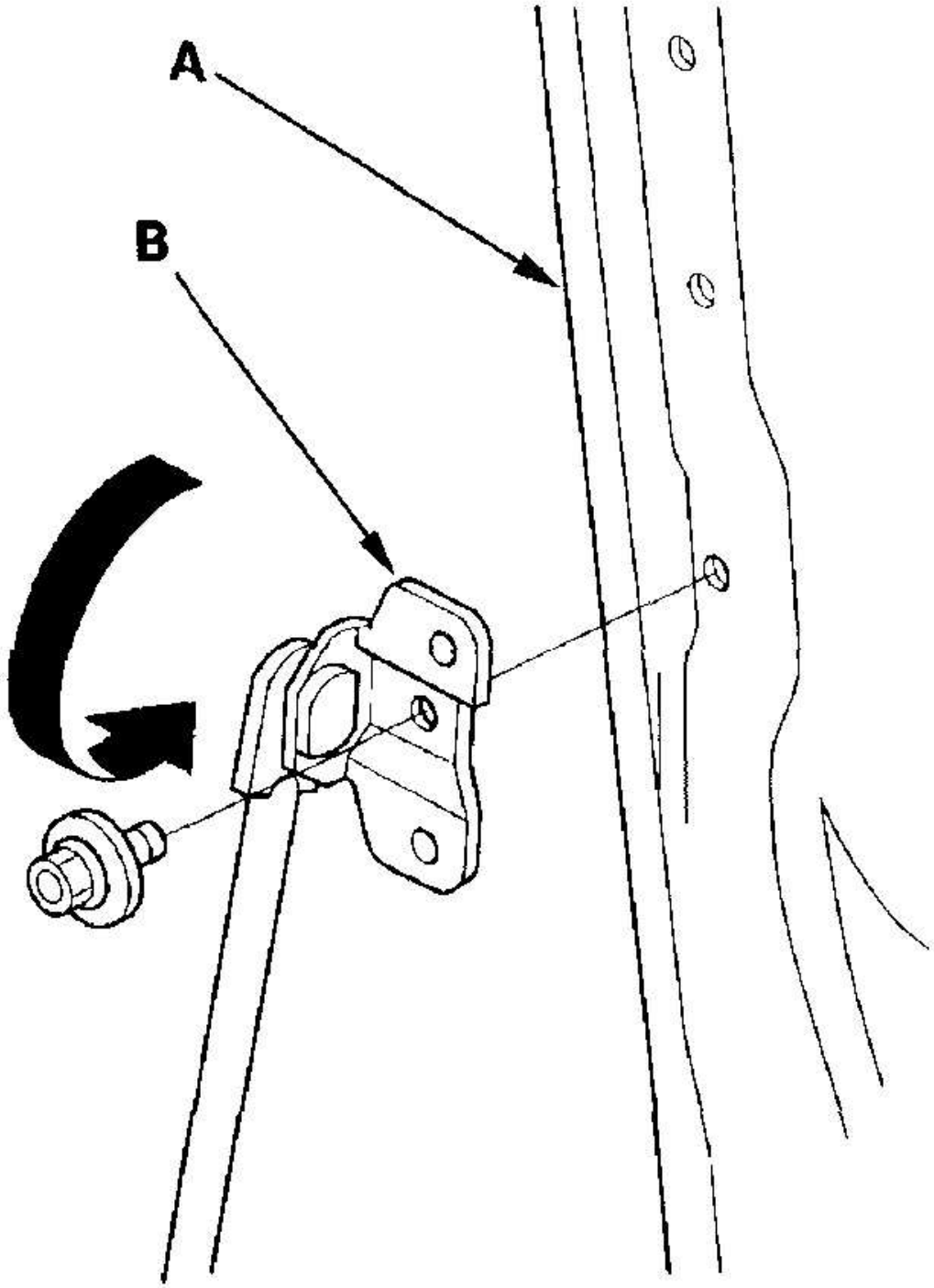


Fig. 224: Removing Steering Joint Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Make a reference mark (B) across the steering joint and steering gearbox pinion shaft. Remove the steering joint bolt (C), and disconnect the steering joint (D) by removing the steering joint toward the steering column. Hold the slider shaft (E) on the column with a peace of wire (F) between the joint yoke (G) on the slider shaft to the joint yoke on the upper shaft, refer to step 8 in **STEERING COLUMN REMOVAL AND INSTALLATION** .
7. Remove the bolts securing the support strut brackets on the both side hood.

Secure the hood (A) in a vertical position, then install the right strut bracket (B) by turning it over with its bolt in lower position.

NOTE: Do not attempt to close the hood with the support strut in the vertical position; it will damage the support strut and hood.



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Fig. 225: Securing Hood In Vertical Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Raise the vehicle, and make sure it is supported securely.
9. Remove the splash shield.
10. Remove the power steering pump outlet line (A) from the power steering pump. Wipe off any spilled fluid at once.

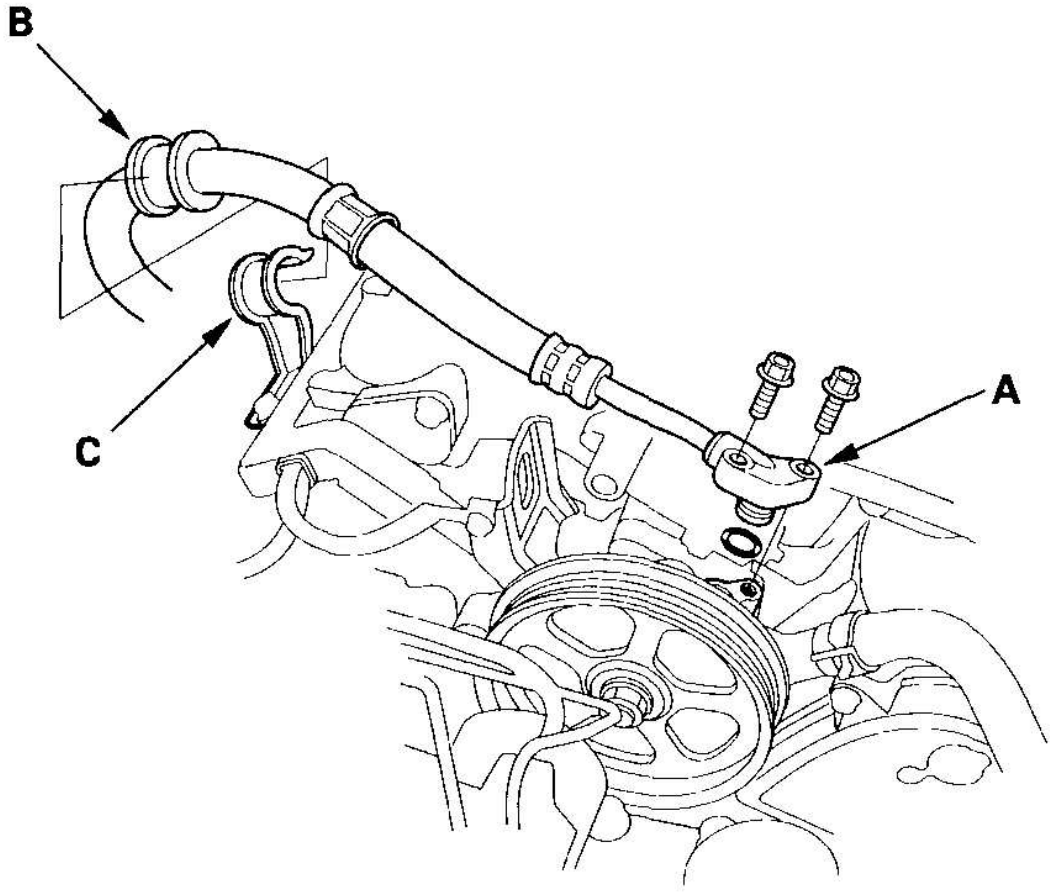


Fig. 226: Removing Power Steering Pump Outlet Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the hose (B) from its clamp (C).

12. Remove the drain plug (A), and drain the automatic transmission fluid (ATF).

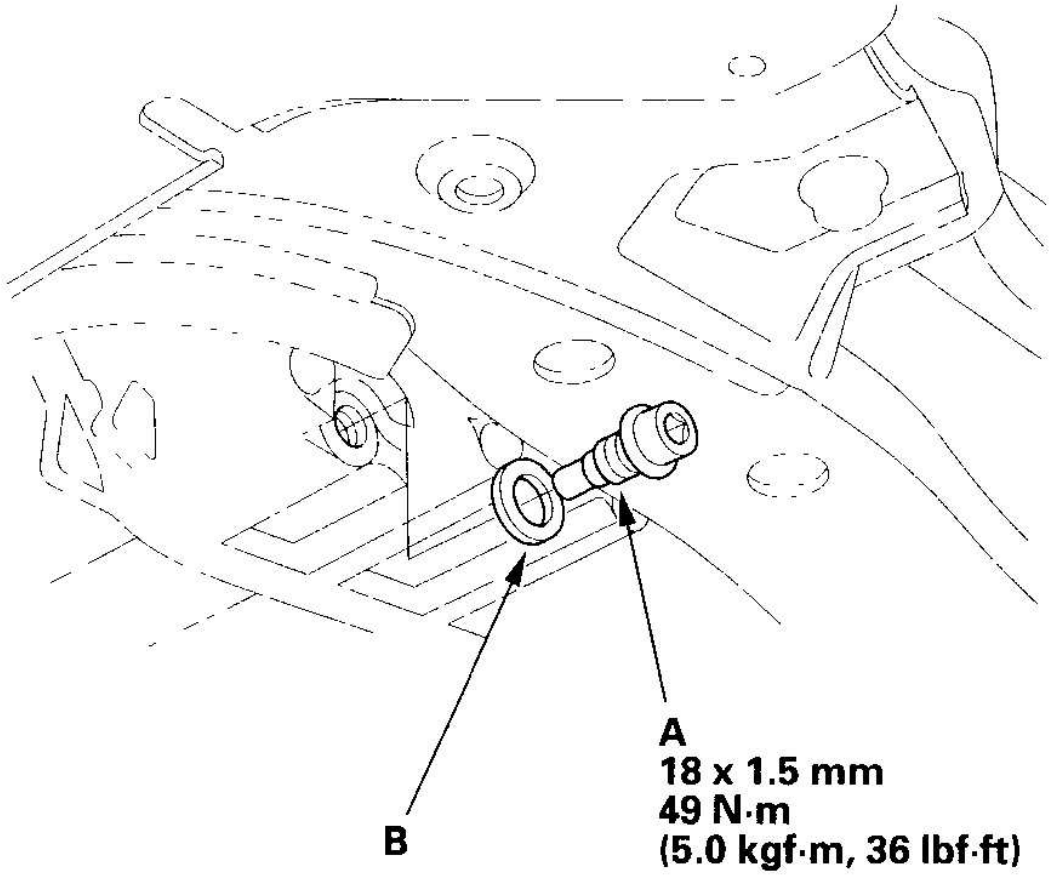


Fig. 227: Removing Drain Plug
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Reinstall the drain plug with a new sealing washer (B).
14. Disconnect the negative cable from the battery, then disconnect the positive cable from the battery.
15. Remove the battery hold-down bracket, then remove the battery cover, battery, and battery tray.
16. Remove the intake air duct and air cleaner housing.
17. Loosen the two bolts securing the battery base from under the vehicle, and

remove the two bolts securing the battery base in the engine compartment, then remove the battery base.

18. Remove the starter cables (A) from the starter (B), then remove the starter.

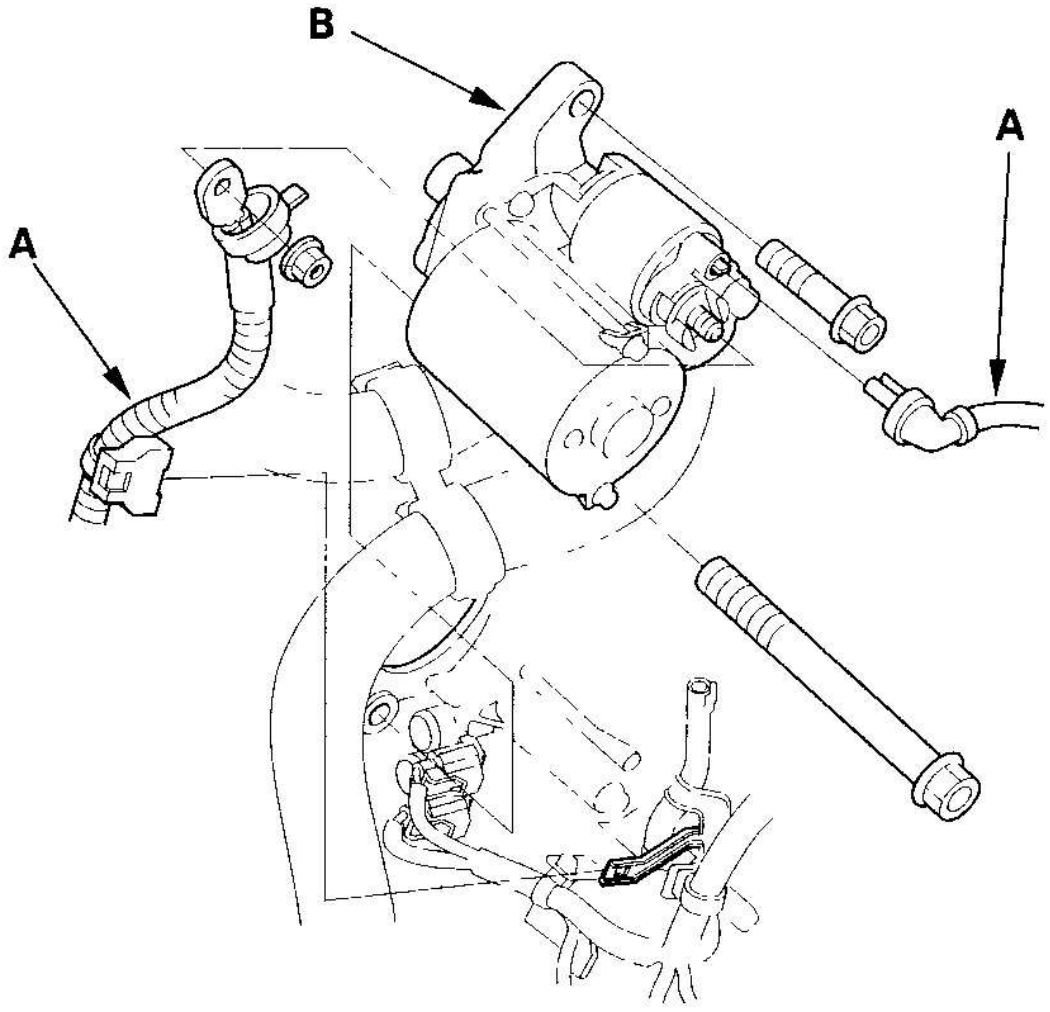


Fig. 228: Removing Starter Cables
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Remove the transmission upper mount bracket (A) and bracket plate (B).

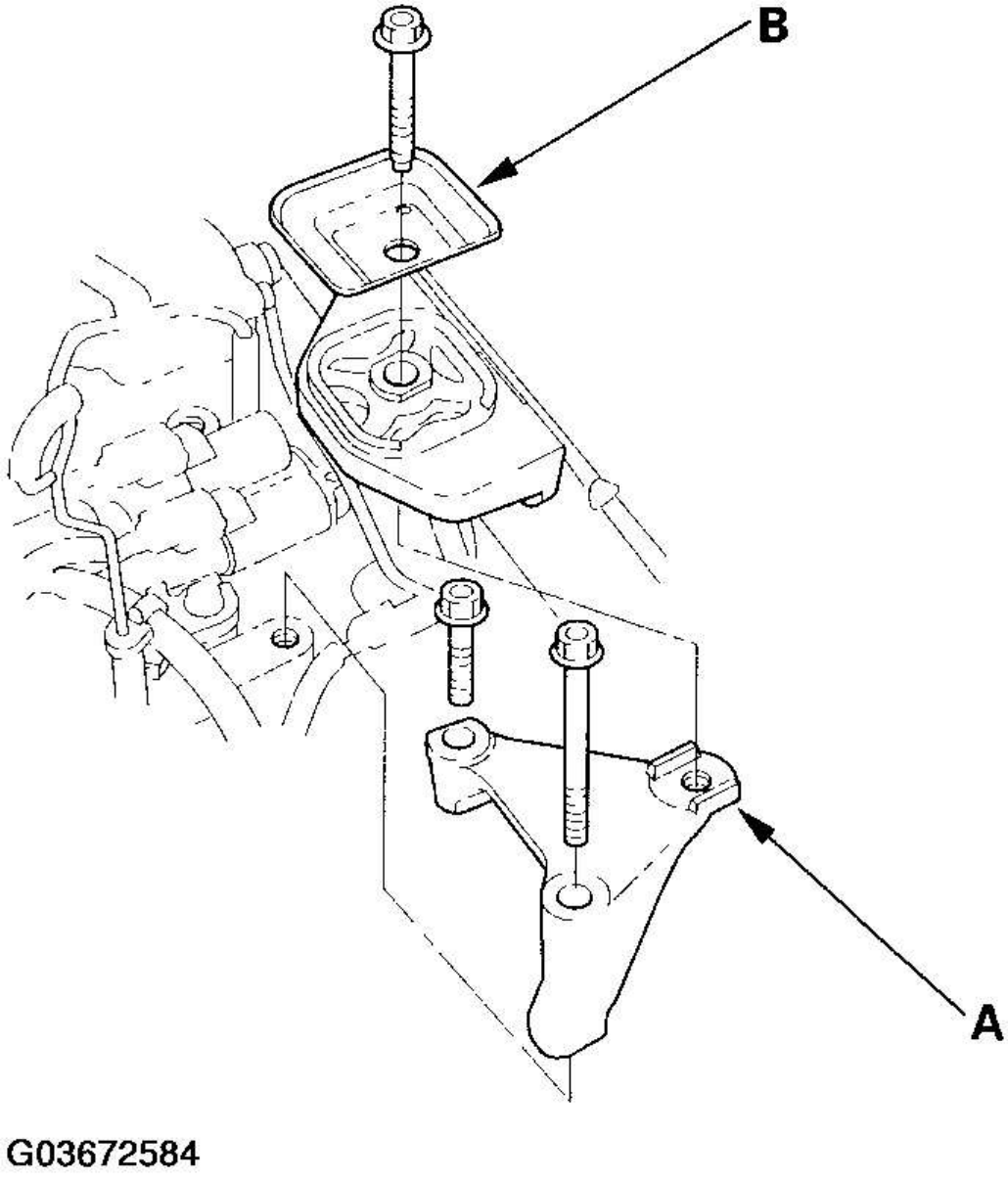


Fig. 229: Removing Transmission Upper Mount Bracket And Bracket Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Remove the transmission sub harness connector (A) from its bracket (B), then disconnect it.

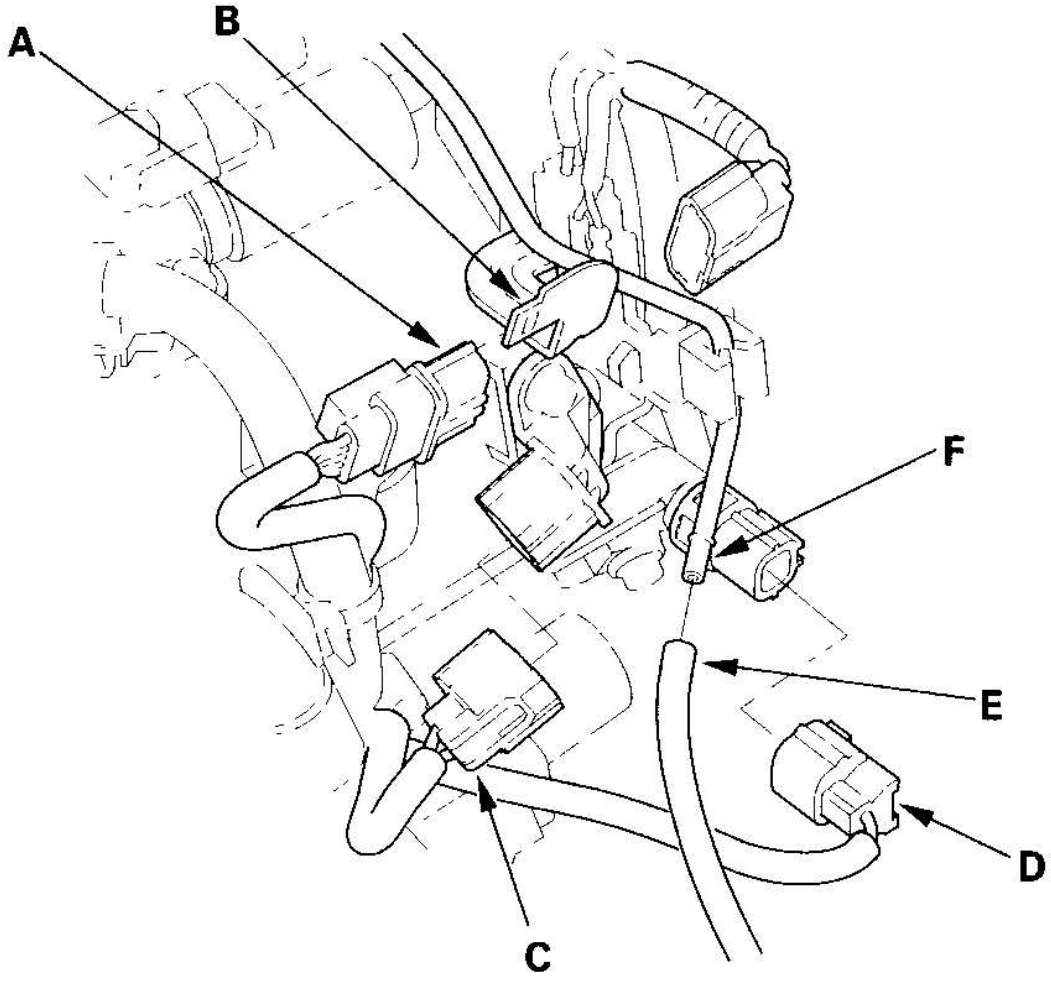


Fig. 230: Removing Transmission Sub Harness Connector From Bracket (B)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Disconnect the input shaft (mainshaft) speed sensor connector (C) and 4th clutch transmission fluid pressure switch connector (D), and disconnect the vacuum hose (E) from the vacuum line (F).
22. Disconnect shift solenoid valve A connector, solenoid valve C connector, and A/T clutch pressure control solenoid valve C connector (B), and remove the harness clamps (D) from the clamp brackets (E).

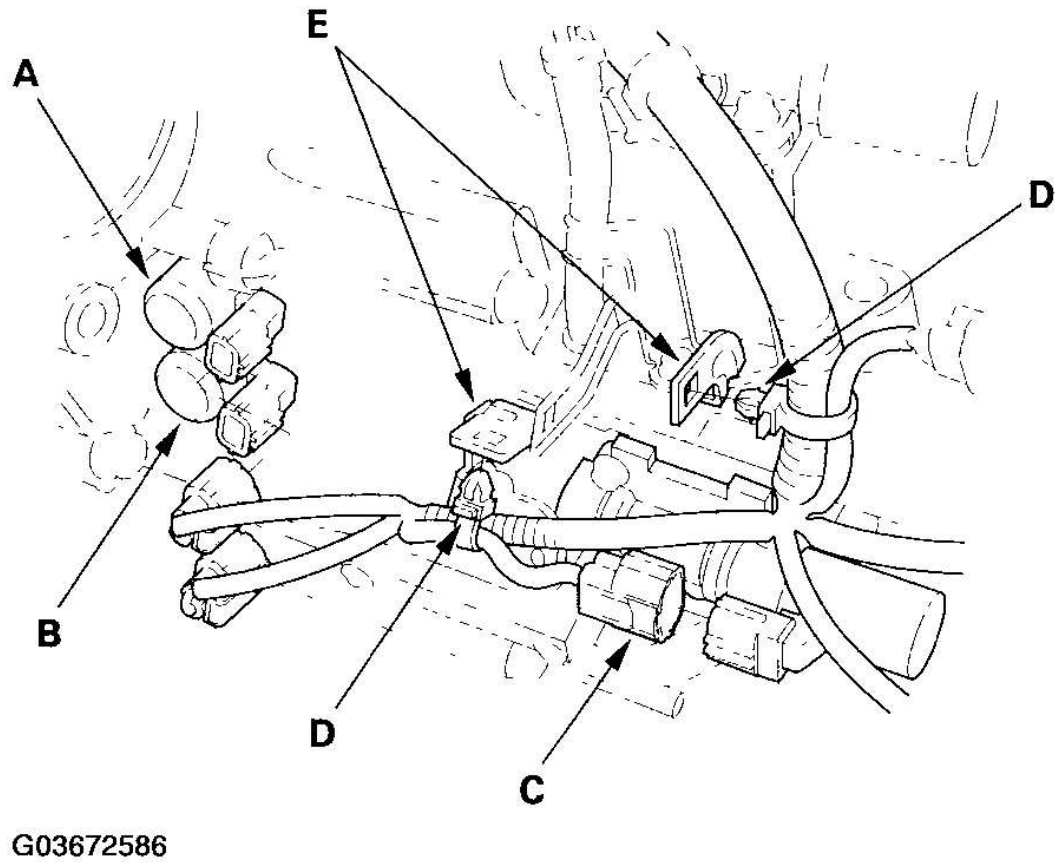


Fig. 231: Disconnecting Shift Solenoid Valve A Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Disconnect the A/T clutch pressure control solenoid valve A connector, and solenoid valve B connector, and remove the harness clamp (C) from the clamp bracket (D).

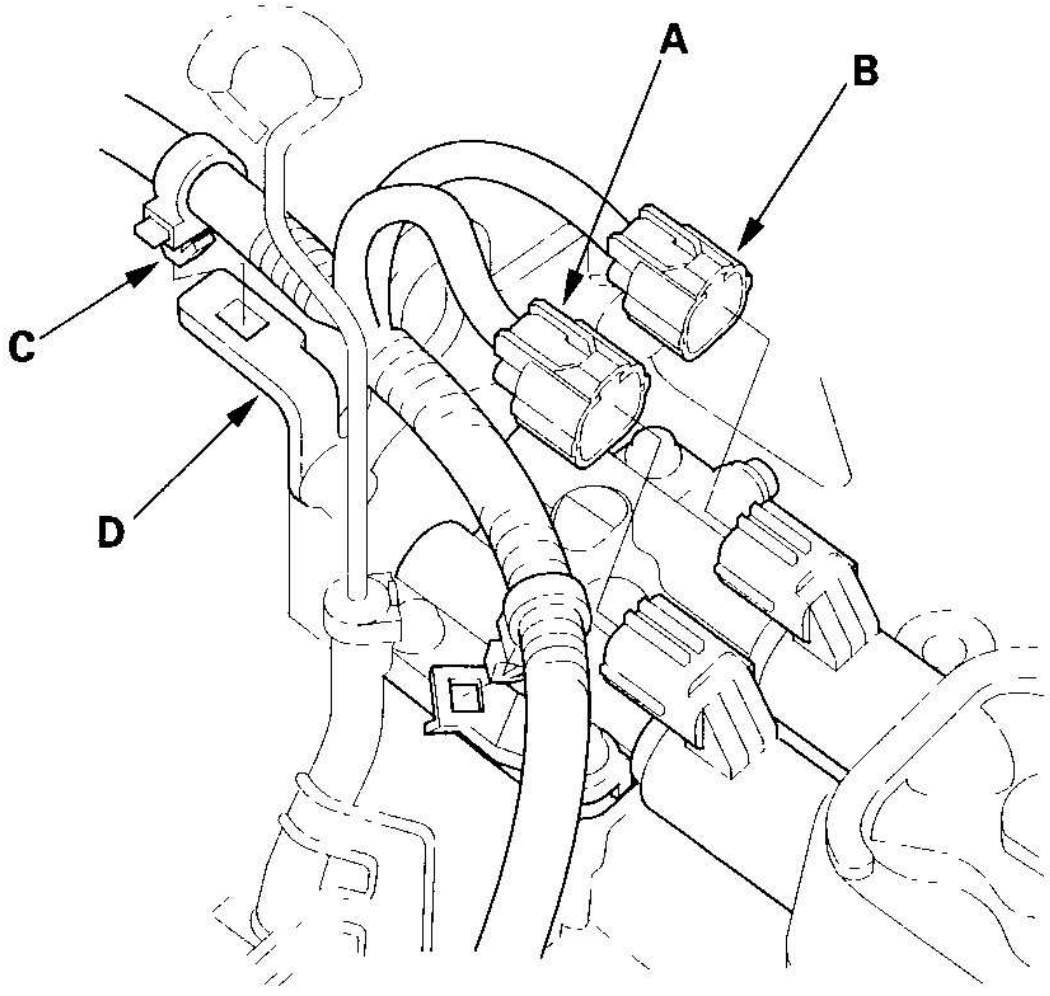


Fig. 232: Disconnecting A/T Clutch Pressure Control Solenoid Valve A Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Disconnect the connectors from the torque converter clutch solenoid valve (A) and shift solenoid valve B.

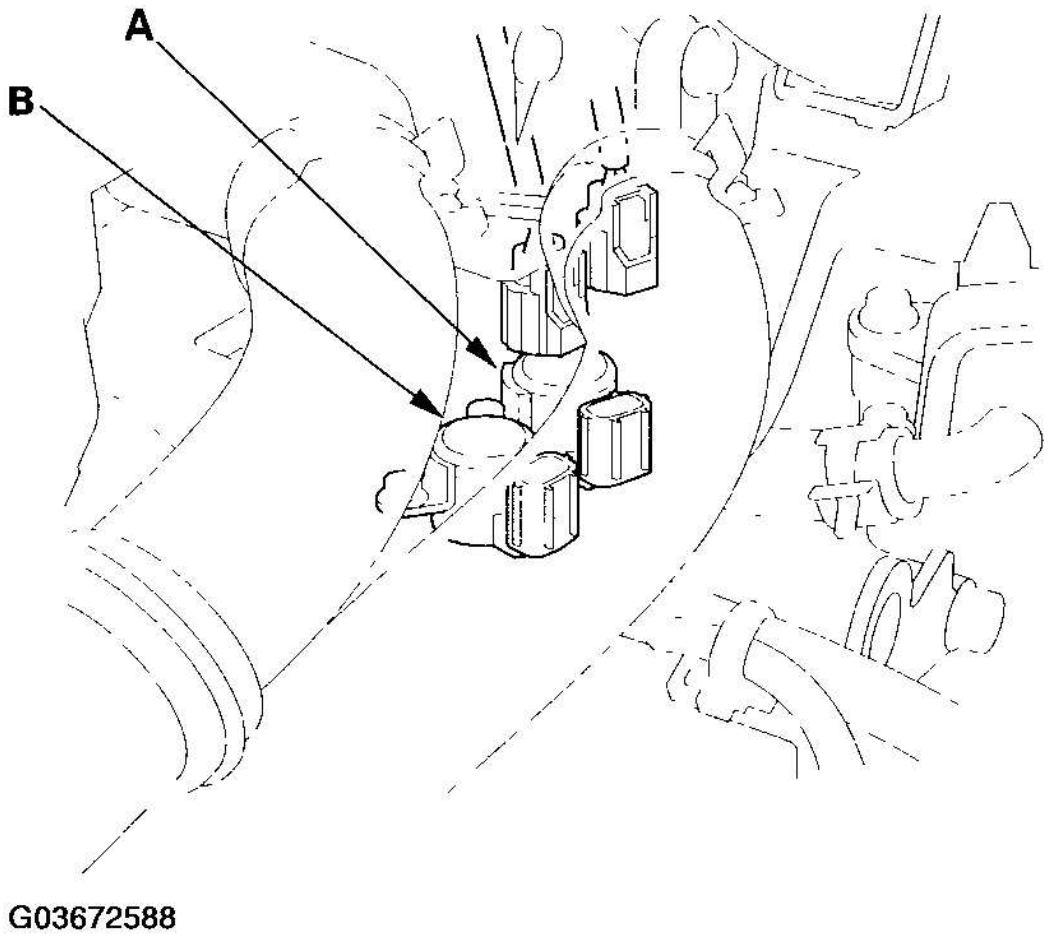


Fig. 233: Disconnecting Connectors From Torque Converter Clutch Solenoid Valve And Shift Solenoid Valve B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

25. Remove the transmission range switch connector (A) from its bracket (B), and disconnect it.

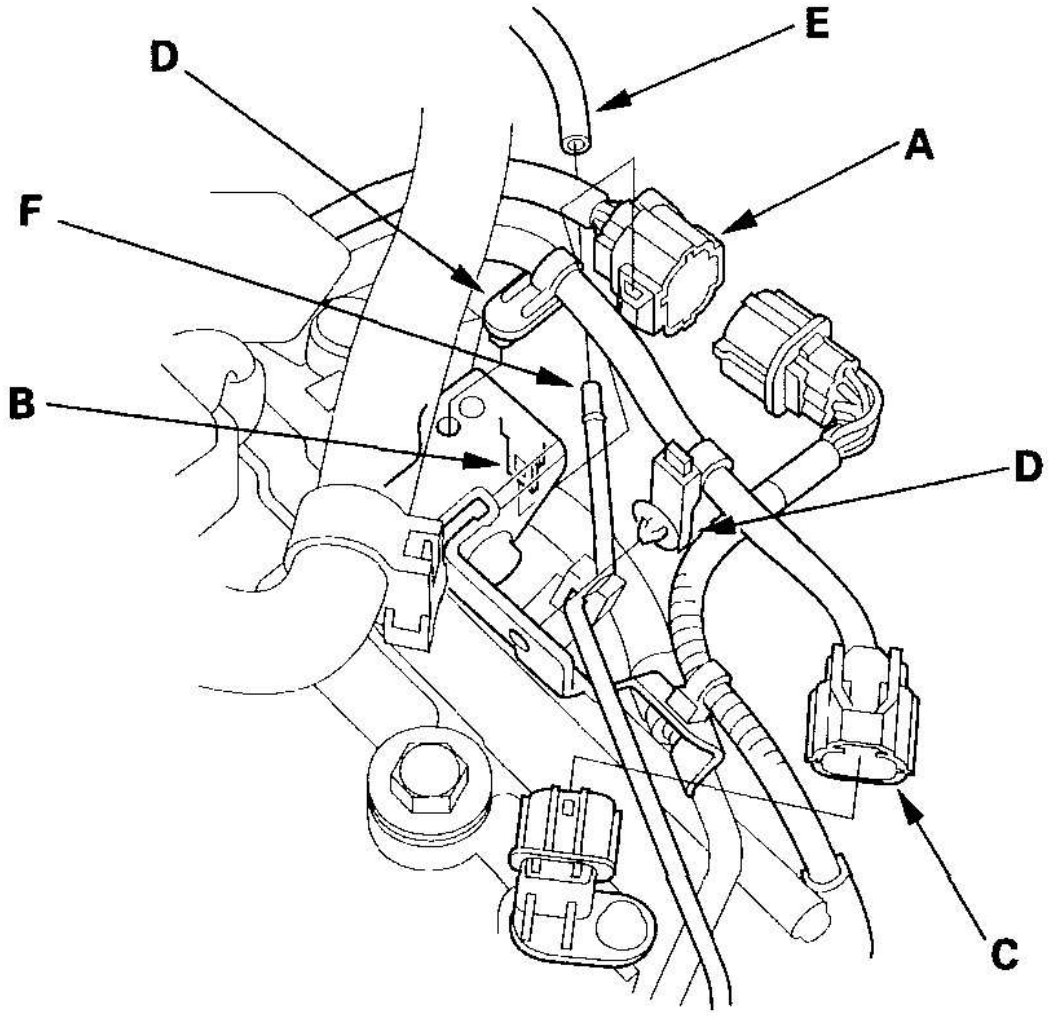


Fig. 234: Removing Transmission Range Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. Disconnect the output shaft (countershaft) speed sensor connector (C), and remove the harness clamps (D) from the brackets. Disconnect the vacuum hose (E) from the vacuum line (F).
27. Remove the harness clamps (A) from the brackets, and remove the bolt securing the bracket.

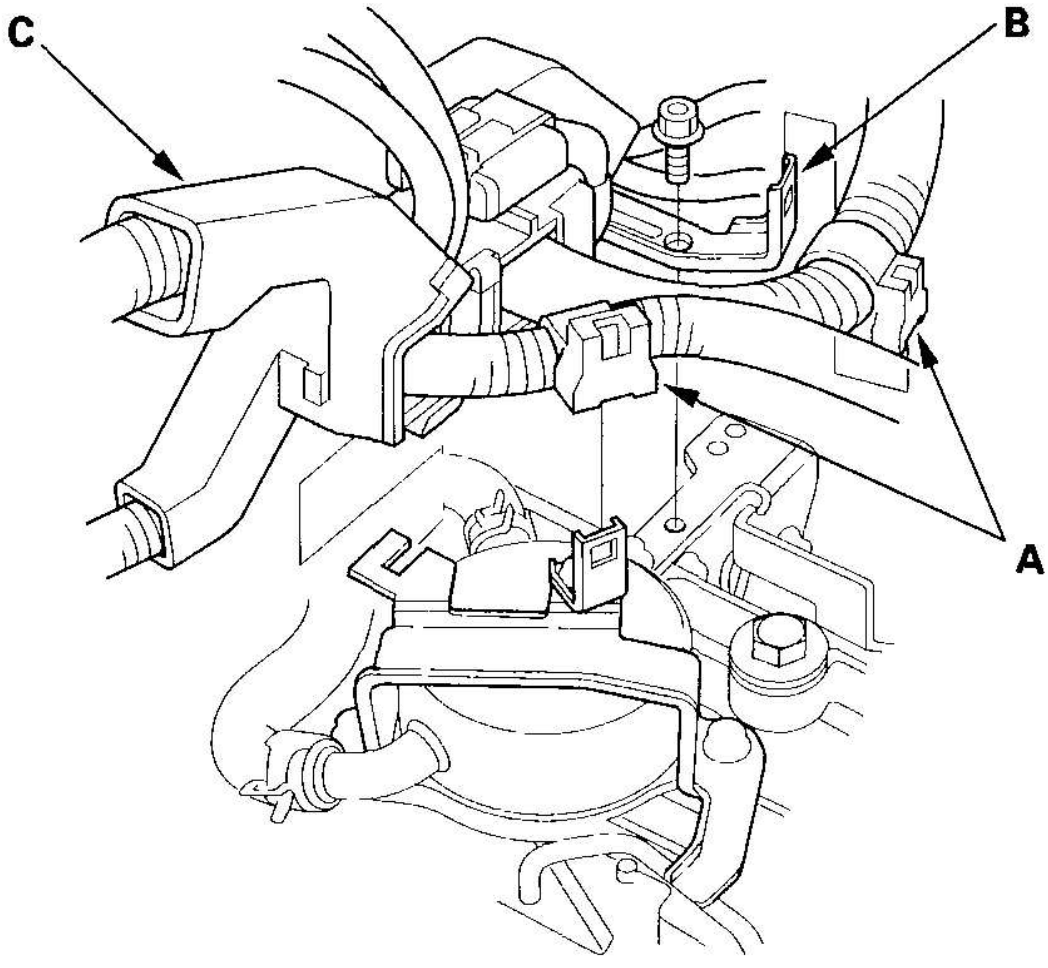


Fig. 235: Removing Harness Clamps From Brackets
Courtesy of AMERICAN HONDA MOTOR CO., INC.

28. Remove the transmission ground cable (A), and disconnect the breather tube (B).

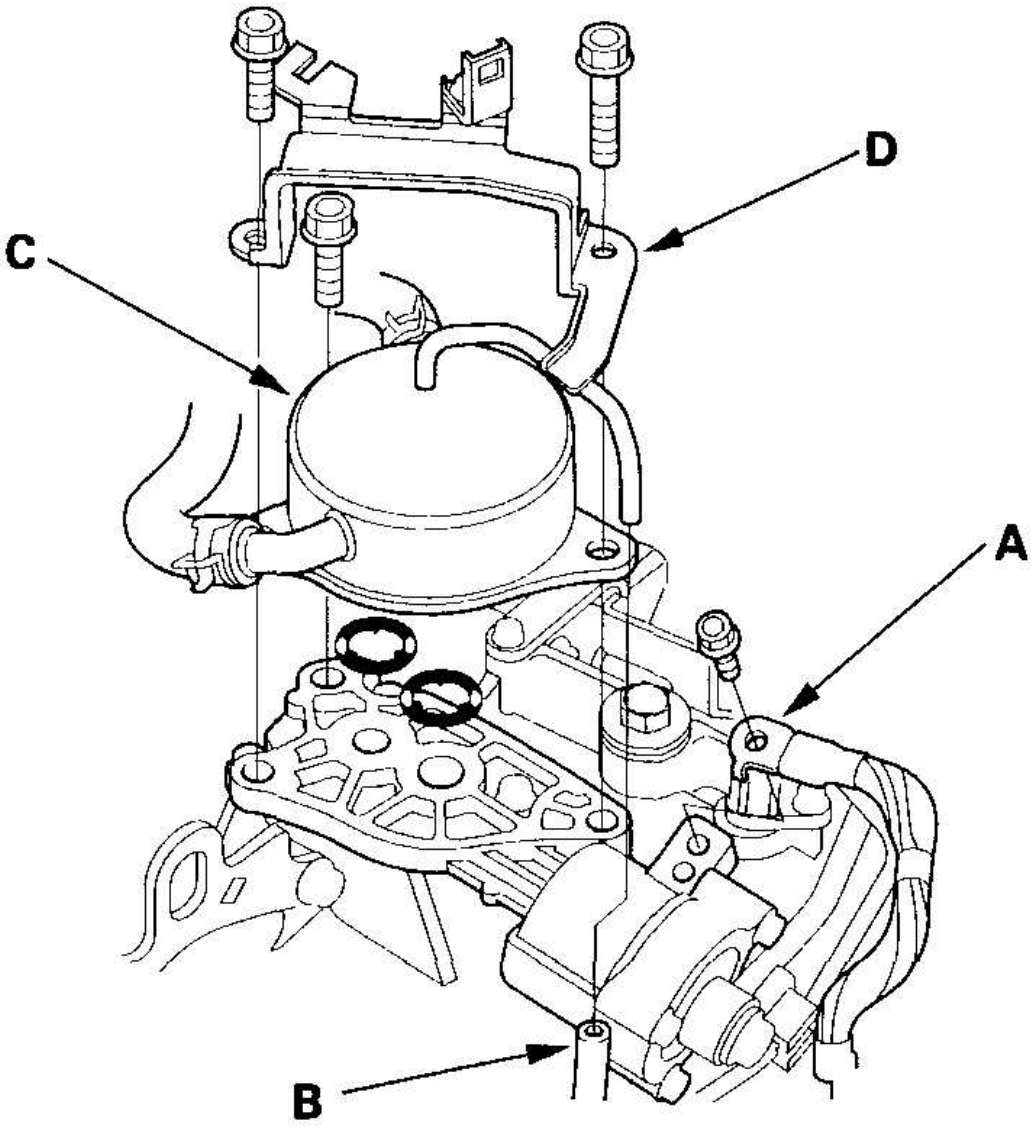


Fig. 236: Removing Transmission Ground Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

29. Put a shop rags around the ATF warmer (C) to remove the ATF that flows out.
30. Remove the bolts securing the ATF warmer and the bracket (D), then remove the ATF warmer from the transmission housing. Cover the fluid passages on

the transmission and ATF warmer with tape. Do not disconnect the hoses.

NOTE: Replace the ATF warmer with a new one whenever the transmission assembly is replaced.

31. Remove the connector bracket from the engine front cylinder head; use the bracket bolt hole to attach engine balancer bar front arm.

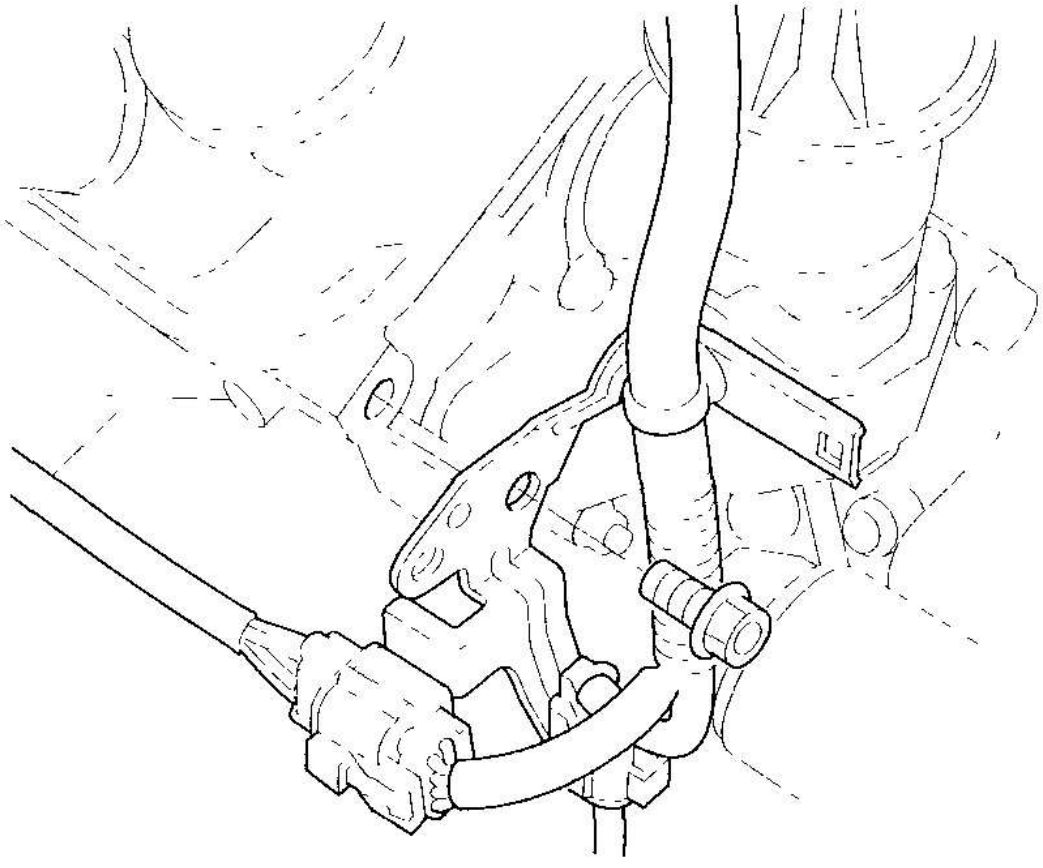
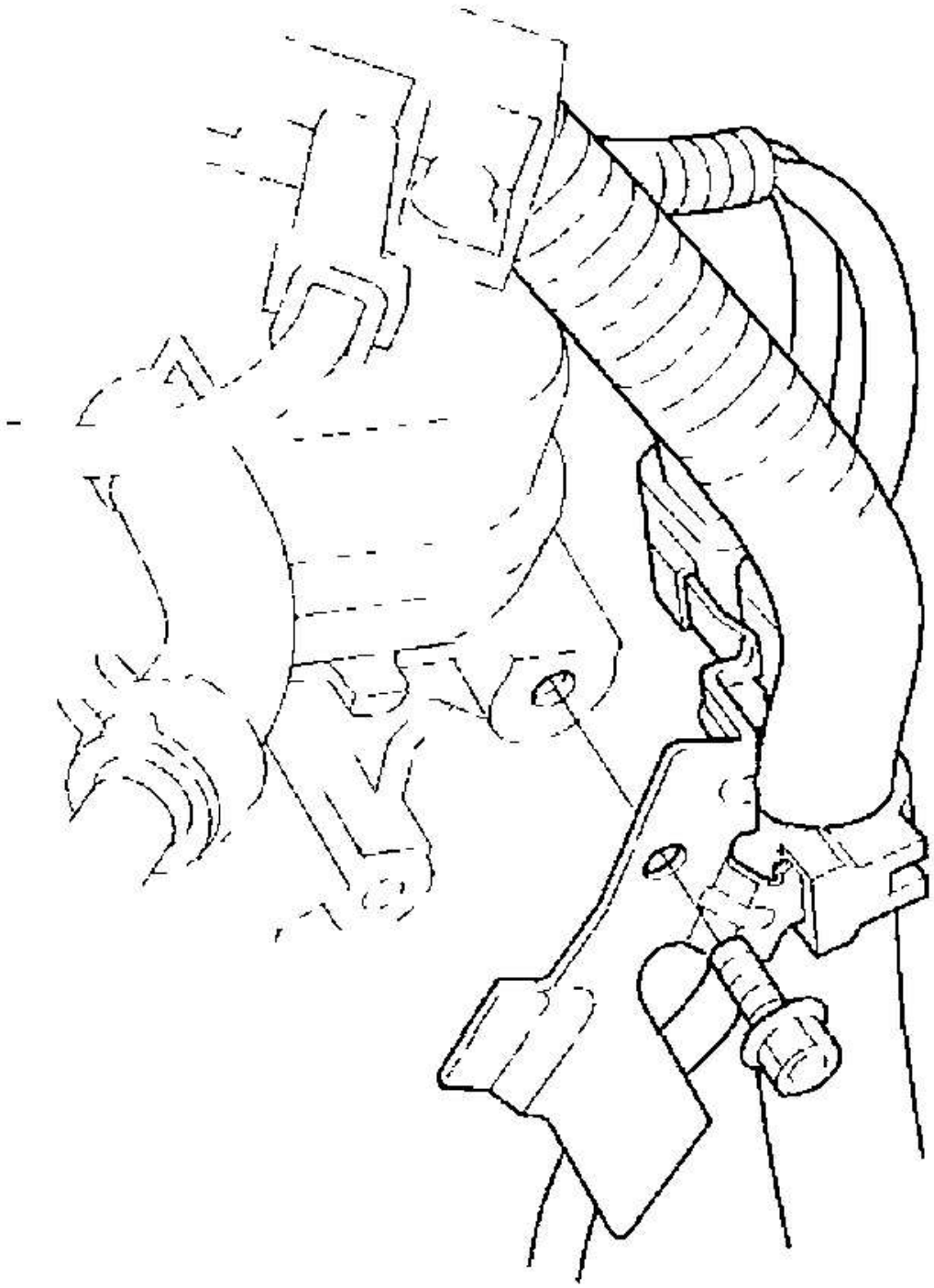


Fig. 237: Removing Connector Bracket From Engine Front Cylinder Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

32. Remove the harness clamp bracket from the engine rear cylinder head; use the bracket bolt hole to attach engine balancer bar rear arm.



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Fig. 238: Remove Harness Clamp Bracket From Engine Rear Cylinder Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

33. Remove the front bulkhead cover, refer to step 1 in **FRONT GRILLE REPLACEMENT** .
34. Lift and support the engine with engine support hanger (A) and engine balance bar (B). Attach the front arm (C) to the front cylinder head with a spacer (D) and the 10 x 1.25 mm bolt (E). Attach the rear arm (F) to the rear cylinder head with the 8 x 1.25 mm bolt (G).

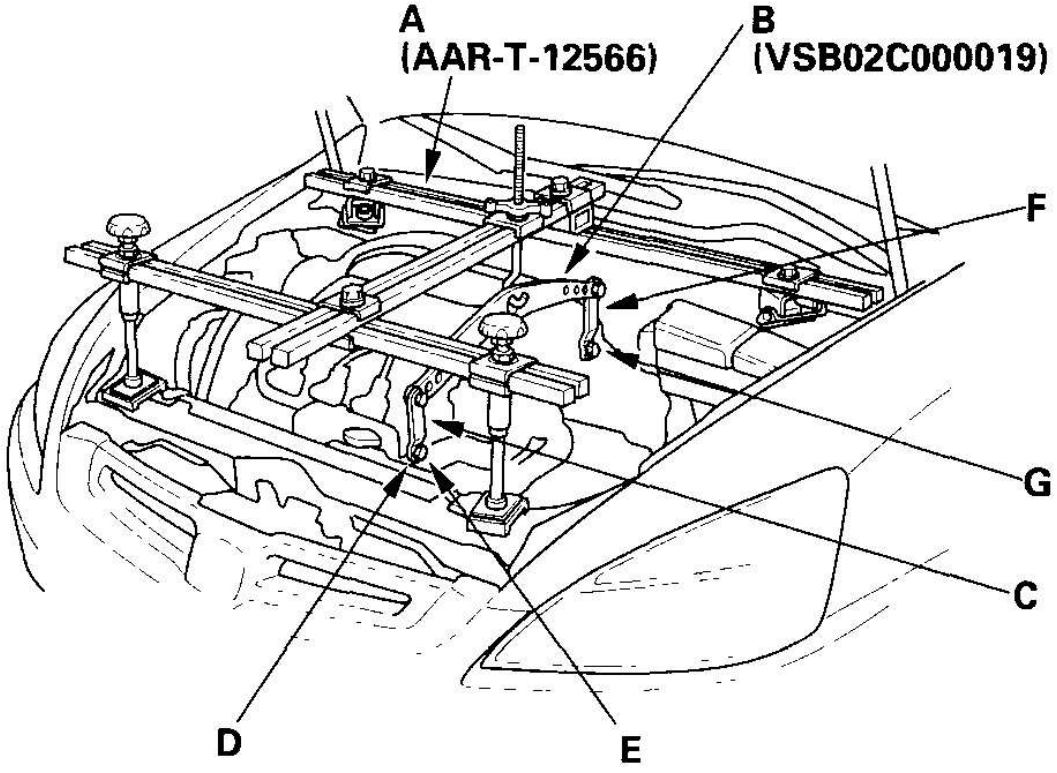


Fig. 239: Lifting And Supporting Engine With Engine Support Hanger & Engine Balance Bar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

35. Remove the front mount stop (A), and remove the front mount bolt (B).

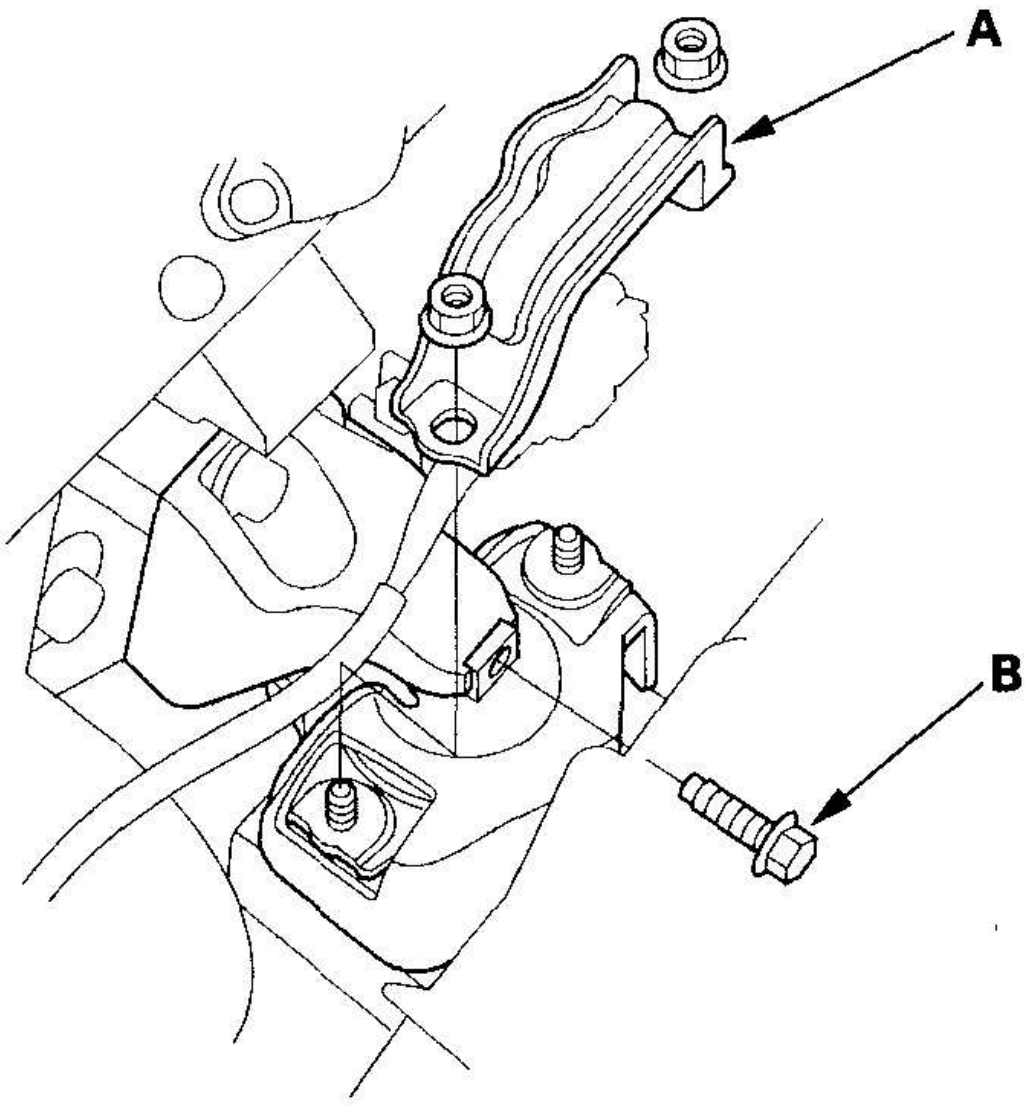


Fig. 240: Removing Front Mount Stop And Front Mount Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

36. Remove the rear mount stop (A), and remove the rear mount bolt (B).

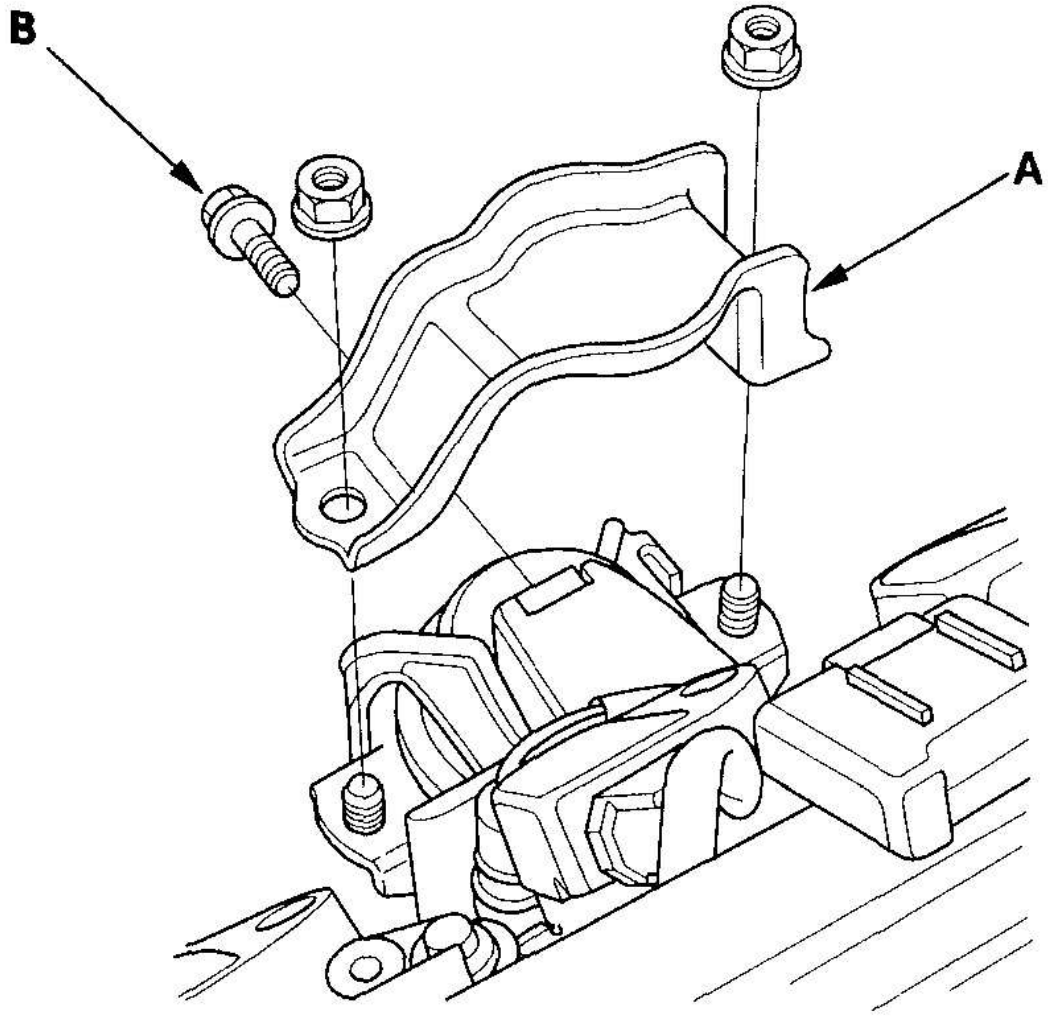


Fig. 241: Removing Rear Mount Stop And Rear Mount Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

37. Insert a 6 mm Allen wrench (A) in the top of the ball joint pin (B), and remove the nuts (C), then separate the stabilizer link (D) from the lower arms (E).

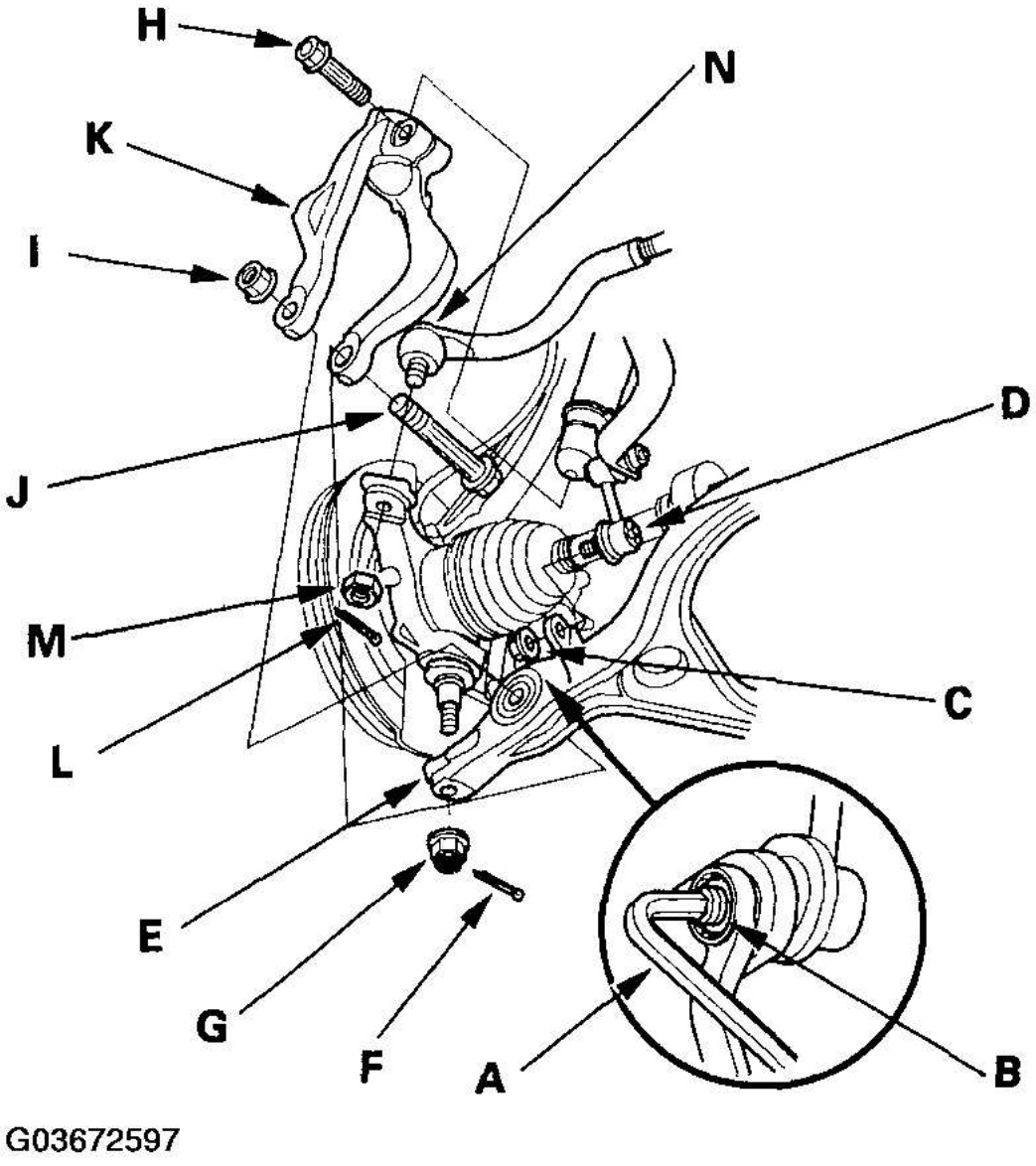
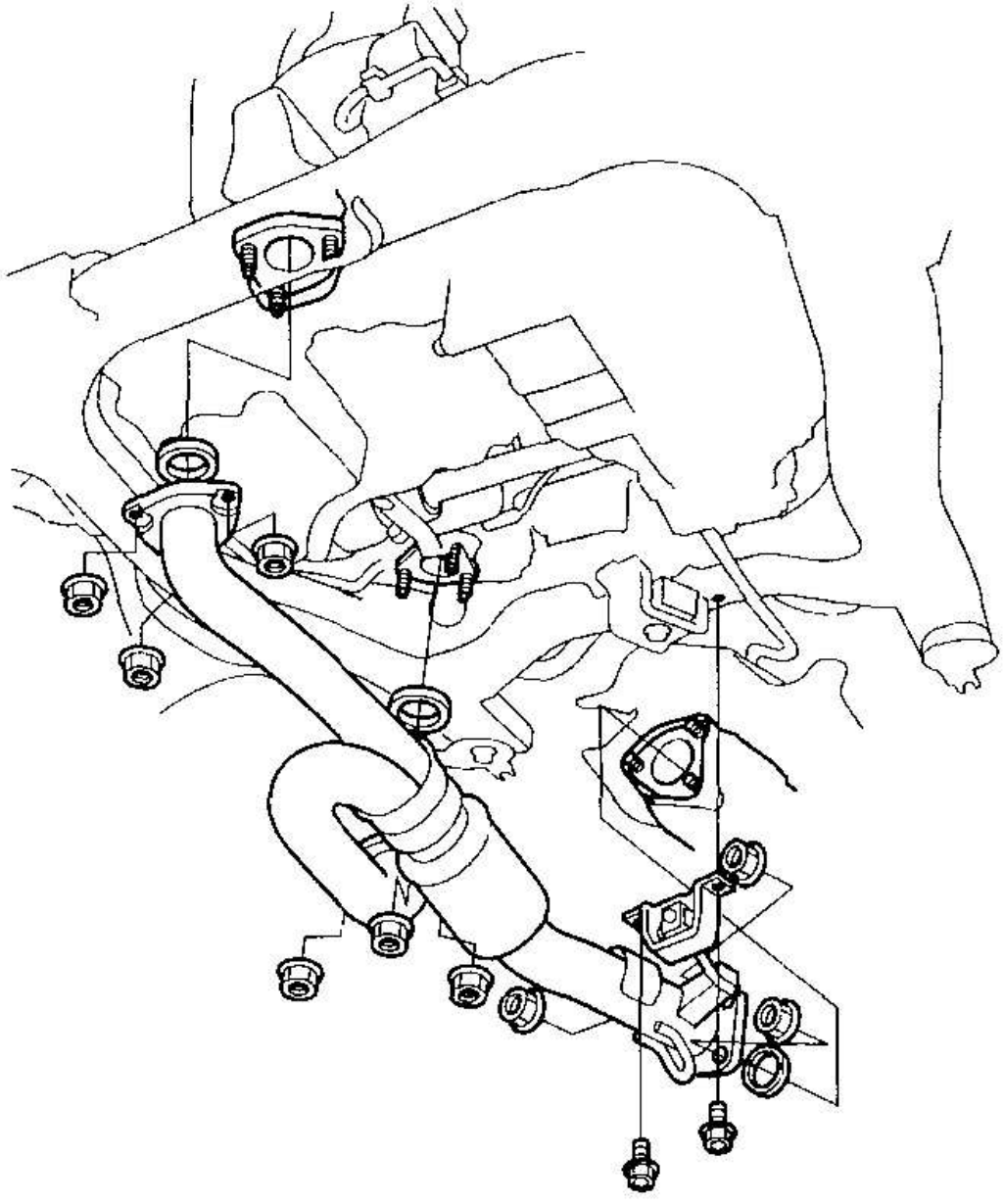


Fig. 242: Inserting Allen Wrench To Top Of Ball Joint Pin
Courtesy of AMERICAN HONDA MOTOR CO., INC.

38. Remove the cotter pins (F), castle nuts (G), damper pinch bolt (H), self-locking nut (I), bolt (J), and damper forks (K), then separate the ball joints from the lower arms, refer to **BALL JOINT REMOVAL** .
39. Remove the cotter pins (L), and nuts (M), and separate the tie-rod end ball

joints (N) from the knuckles, refer to step 10 in **KNUCKLE/HUB REPLACEMENT** .

40. Remove the exhaust pipe A and its mount.



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Fig. 243: Removing Exhaust Pipe A And Mount
Courtesy of AMERICAN HONDA MOTOR CO., INC.

41. Remove the power steering fluid hose from its line on the front subframe.

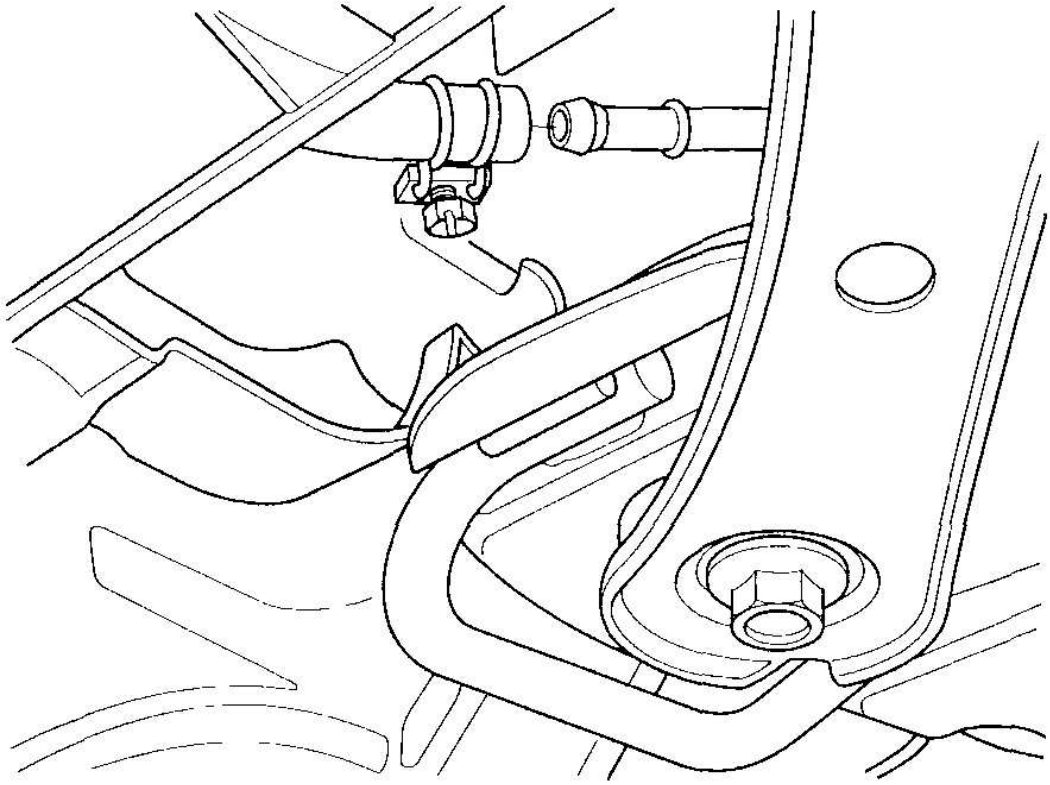
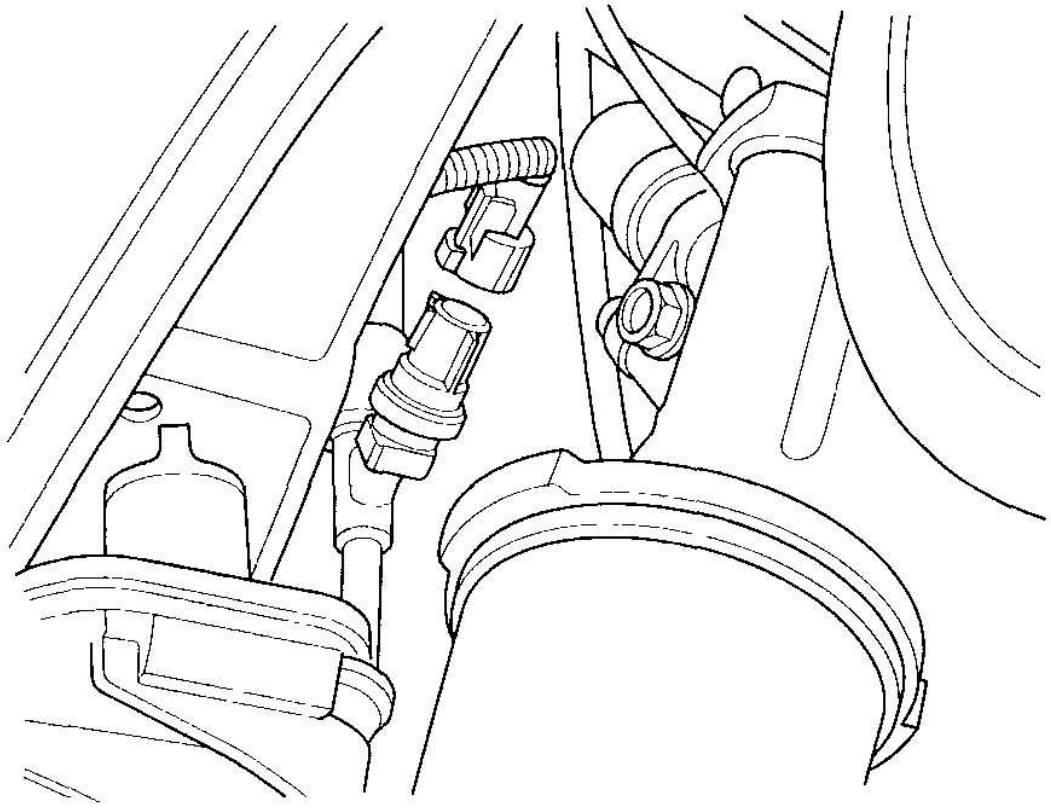


Fig. 244: Removing Power Steering Fluid Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

42. Disconnect the power steering pressure switch connector.



G03672600

Fig. 245: Disconnecting Power Steering Pressure Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

43. Remove the torque converter cover (A), and remove the drive plate bolts (B) while rotating the crankshaft pulley.

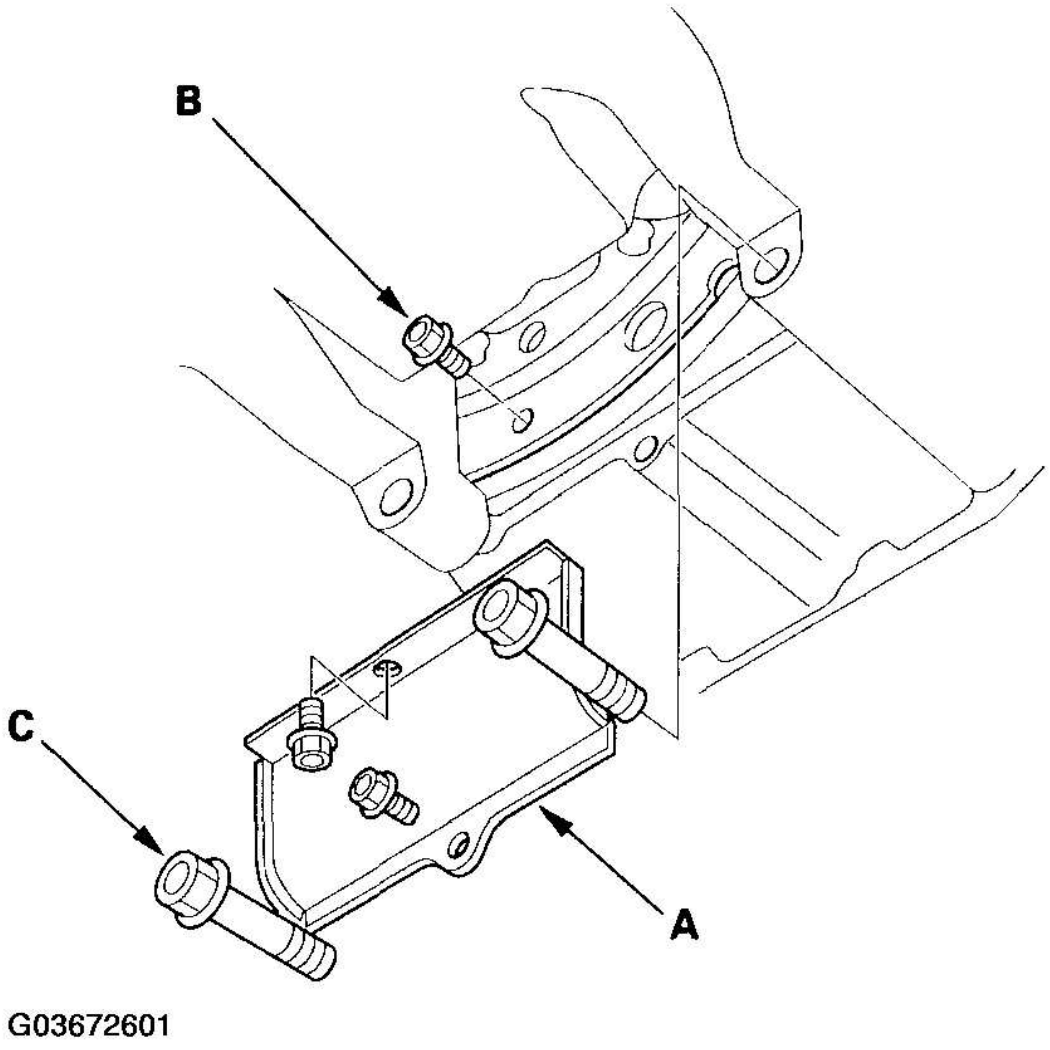


Fig. 246: Removing Torque Converter Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

44. Remove the engine-to-torque converter housing mounting bolts (C).
45. Remove the bolts securing shift cable holder (A), then remove shift cable cover (B).

NOTE: To prevent damage to the control lever joint, remove the bolts securing the holder before removing the bolts securing the cover.

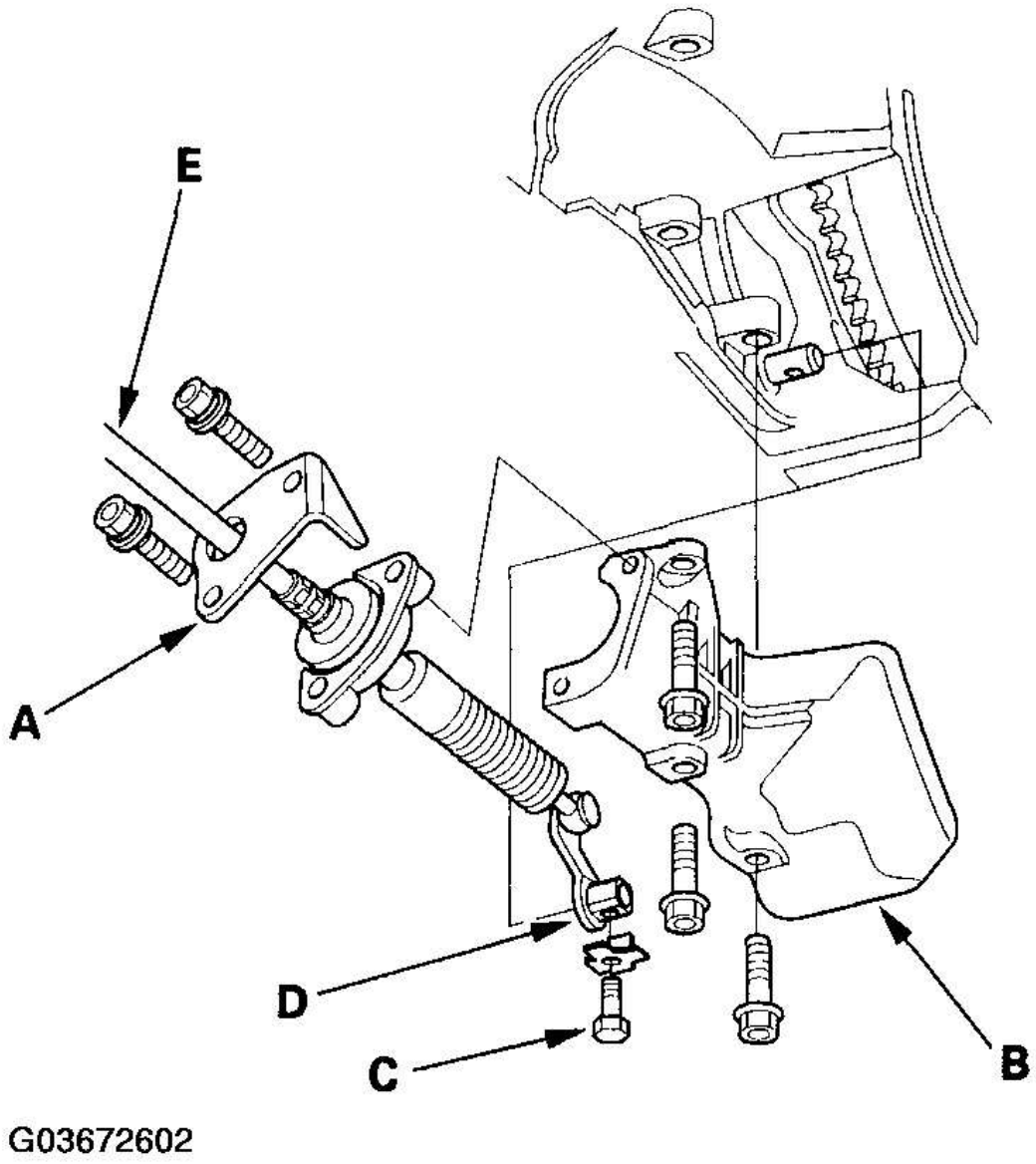


Fig. 247: Removing Shift Cable Holder Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

46. Remove the lock bolt (C) securing the control lever (D), then remove the shift cable (E) and the control lever. Do not bend the shift cable excessively.
47. Install a 6 x 1.0-14 mm bolt (A) and nut (B) on the shift cable cover (C), then reinstall the shift cable cover to the torque converter housing. If you don't do

this, the bolt head of the cable cover may prevent you from removing the torque converter during transmission removal.

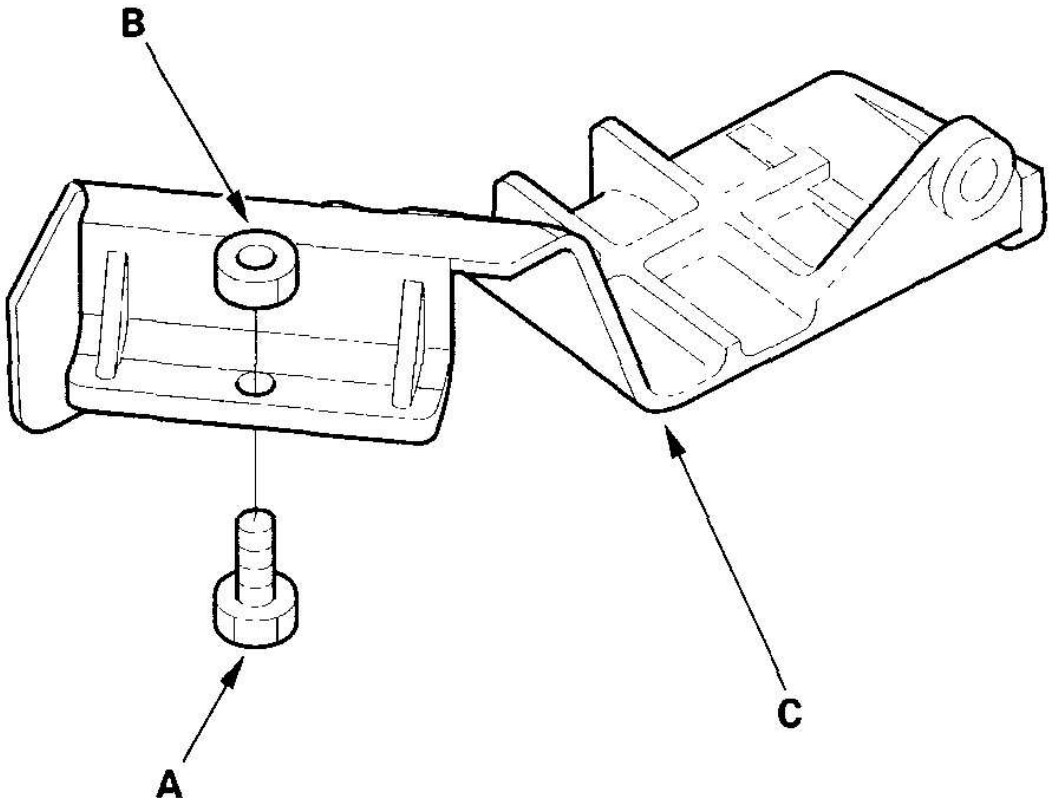


Fig. 248: Installing Shift Cable Cover Bolt And Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

48. Remove the transmission lower mount nuts.

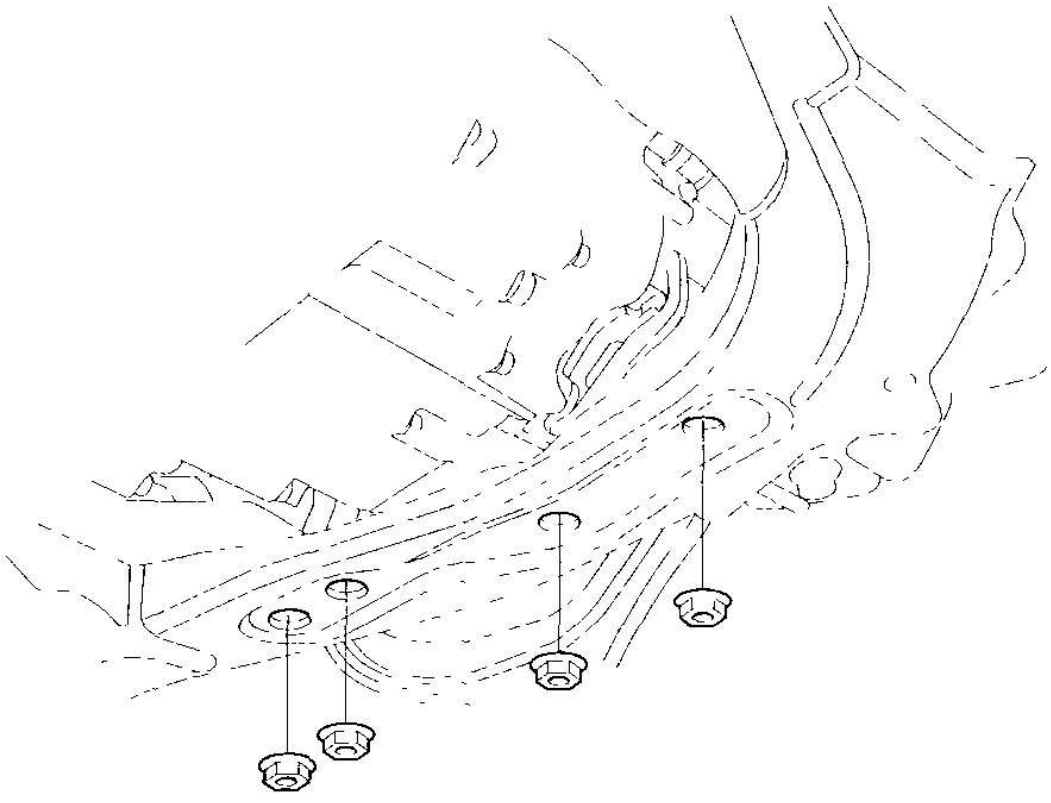
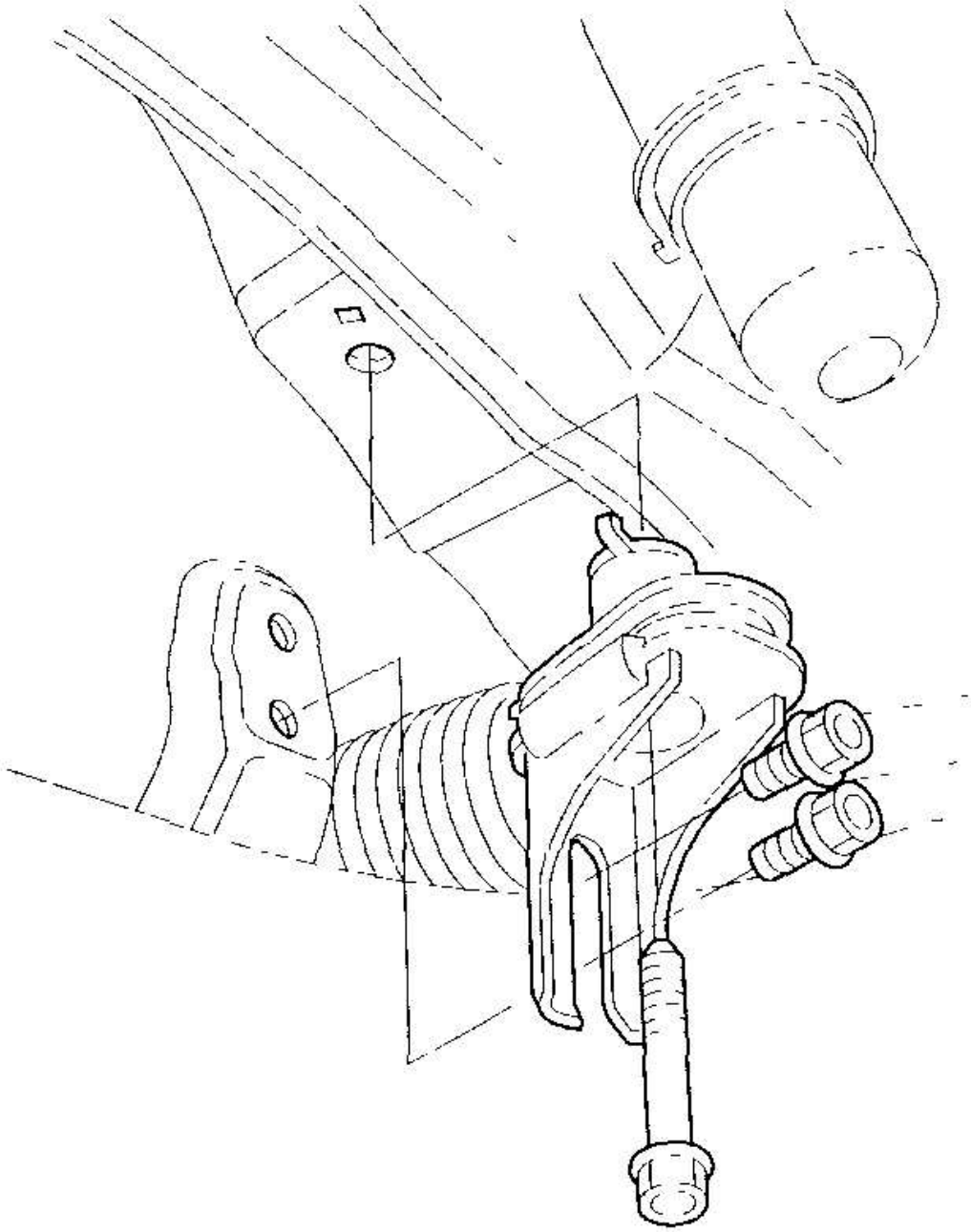


Fig. 249: Removing Transmission Lower Mount Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

49. Remove both middle-mounts.



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Fig. 250: Removing Middle-Mounts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

50. Make the appropriate reference lines (A) at both ends of the subframe (B) that line up with the edge (C) of the stiffeners (D).

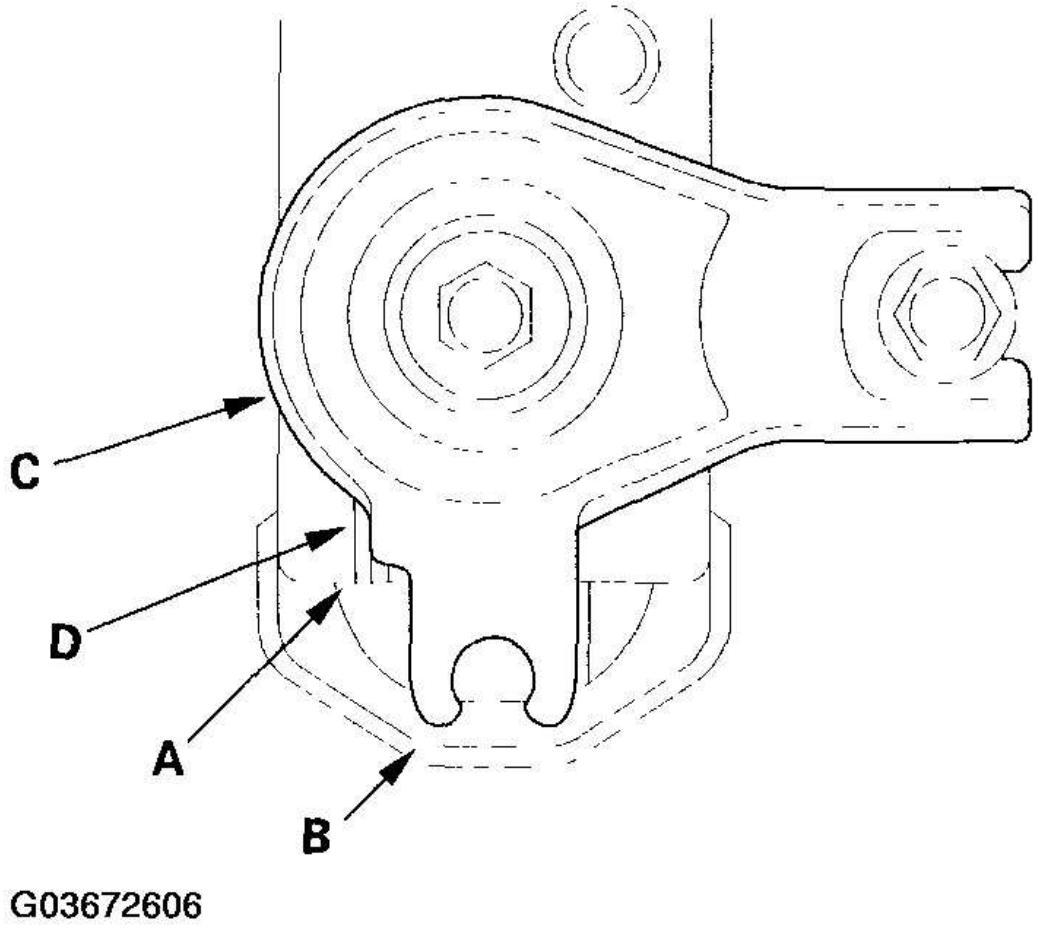
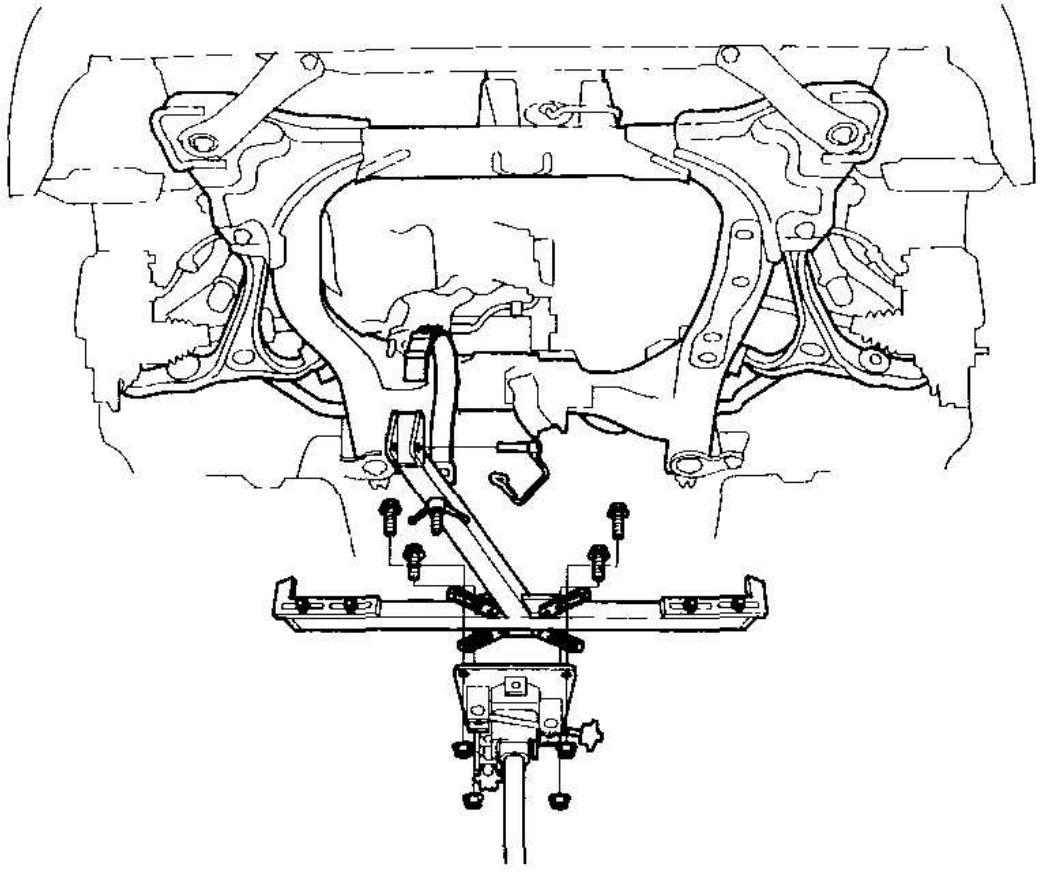


Fig. 251: Making Appropriate Reference Lines At Both Ends Of Subframe Lining Up With Edge Of Stiffeners
Courtesy of AMERICAN HONDA MOTOR CO., INC.

51. Attach the special tool to the subframe by hanging the belt of the special tool over the front of the subframe, then secure the belt with its stop.



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Fig. 252: Attaching Special Tool To Subframe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

52. Raise the jack and line up the slots in the arms with the bolt holes on the corner of the jack base, then attach them with bolts securely.
53. Remove the four bolts securing the stiffeners (A), and four bolts securing the front subframe (B), and lower the front subframe.

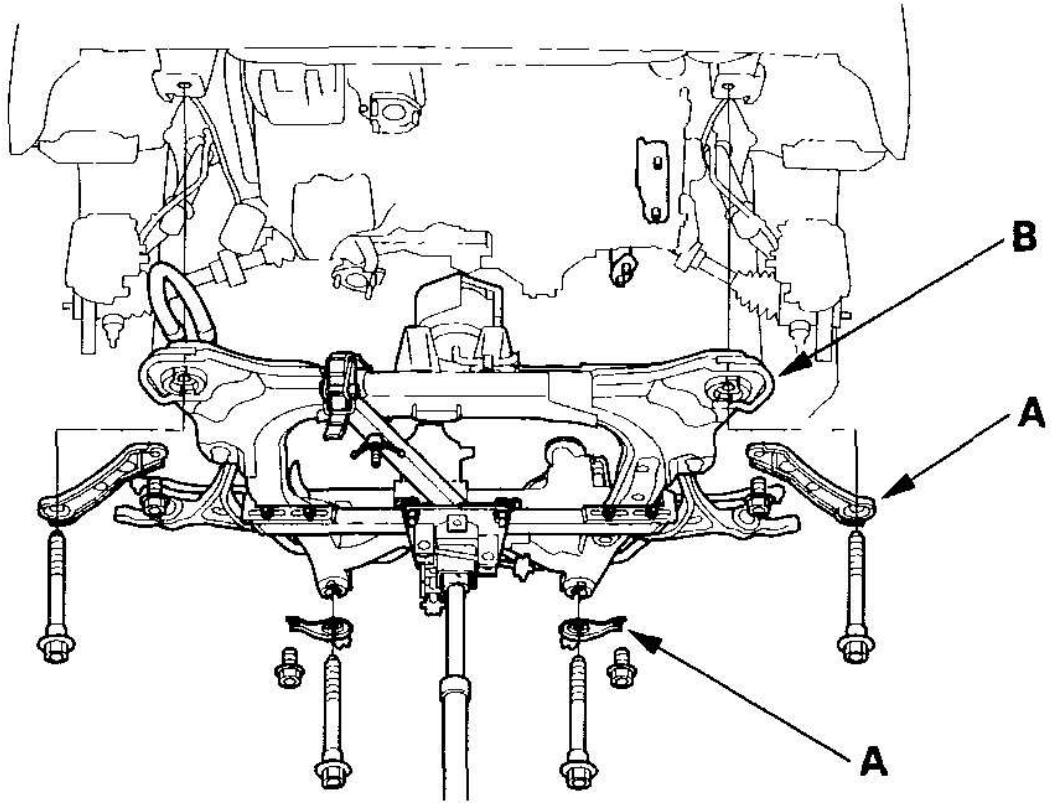
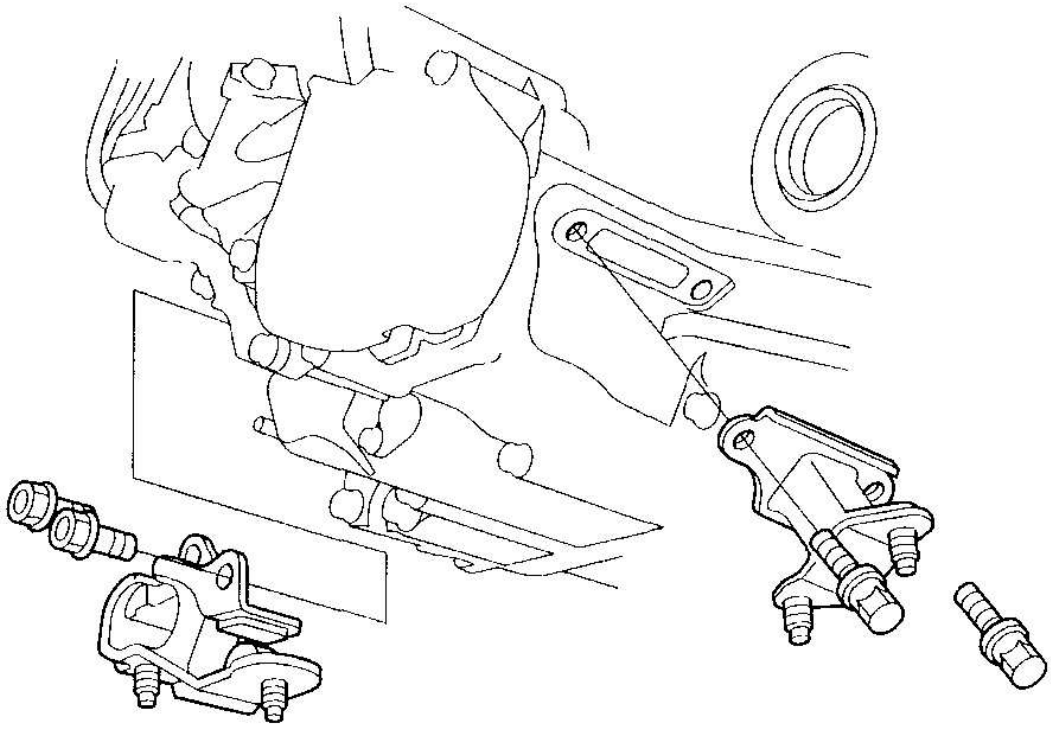


Fig. 253: Removing Stiffeners And Front Subframe Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

54. Remove the transmission lower mounts.



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Fig. 254: Removing Transmission Lower Mounts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

55. Remove the driveshafts from the differential and intermediate shaft (see step 10 in **DRIVESHAFT REMOVAL**).
56. Remove the exhaust manifold bracket (A) and heat shield (B).

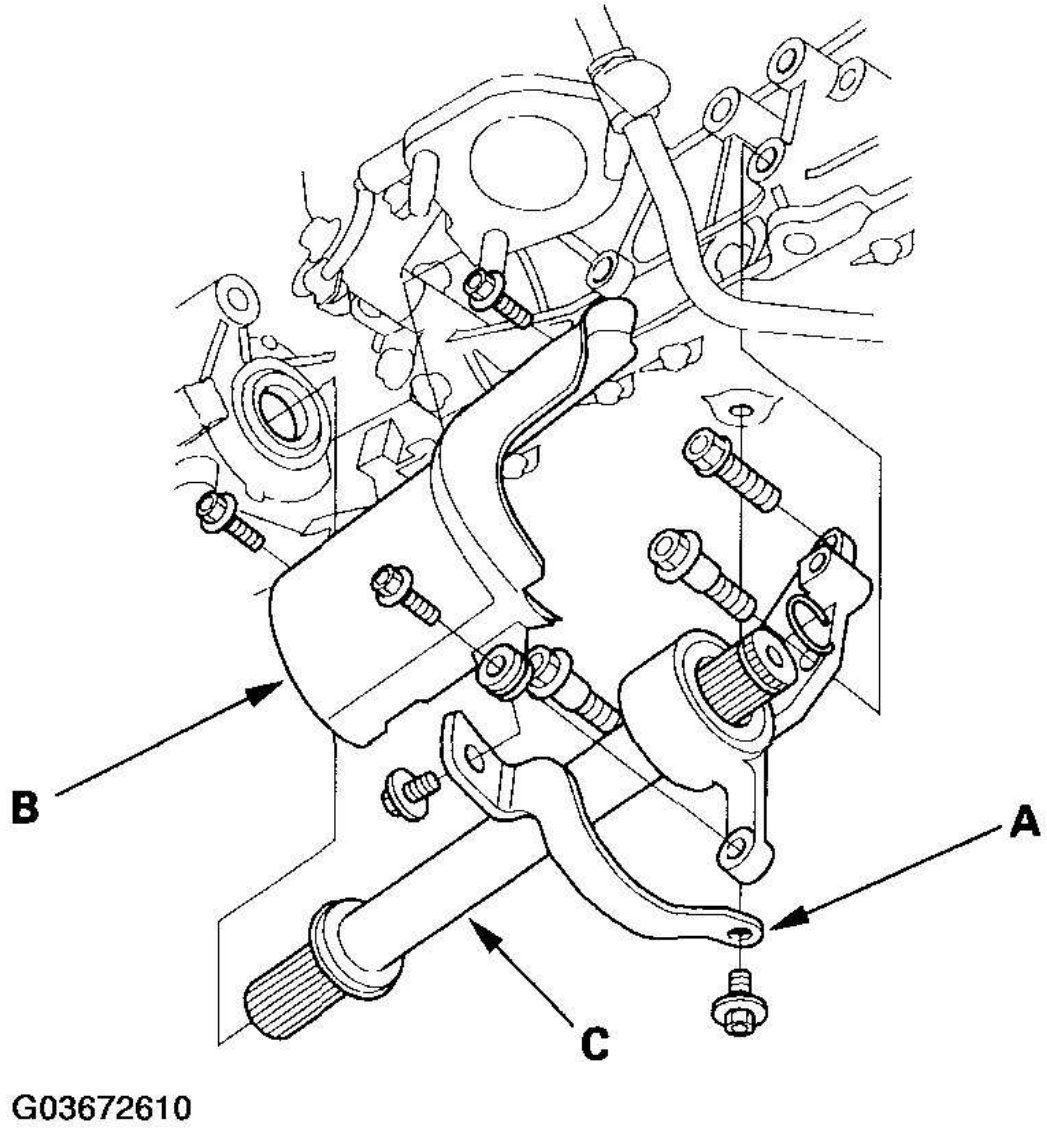
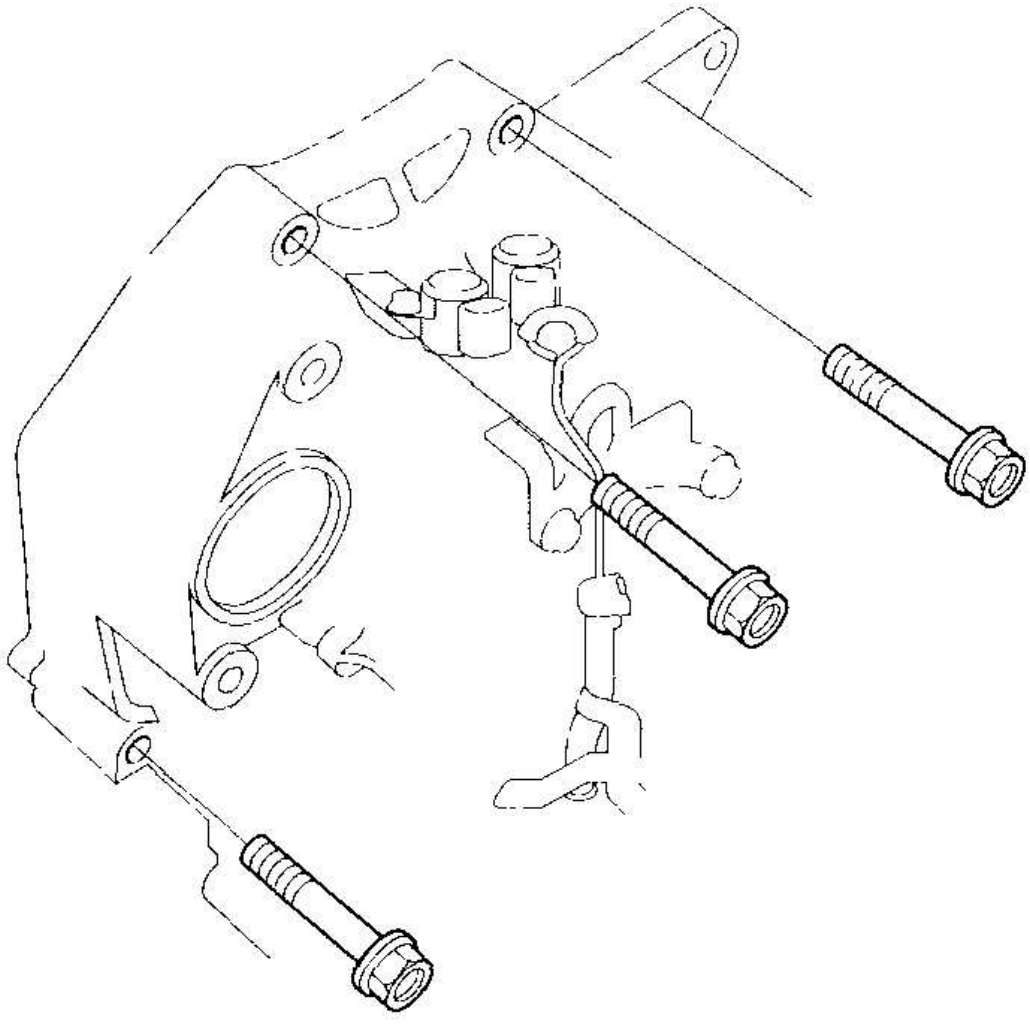


Fig. 255: Removing Exhaust Manifold Bracket And Heat Shield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

57. Remove the intermediate shaft (C).
58. Coat all precision finished surfaces with clean engine oil, then tie plastic bags over both ends of the driveshaft and the intermediate shaft.
59. Place a jack under the transmission.

60. Remove the upper and front transmission housing mounting bolts.



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Fig. 256: Removing Upper And Front Transmission Housing Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

61. Remove the bolt (A) securing the harness clamp bracket, and remove the front mount bracket (B).

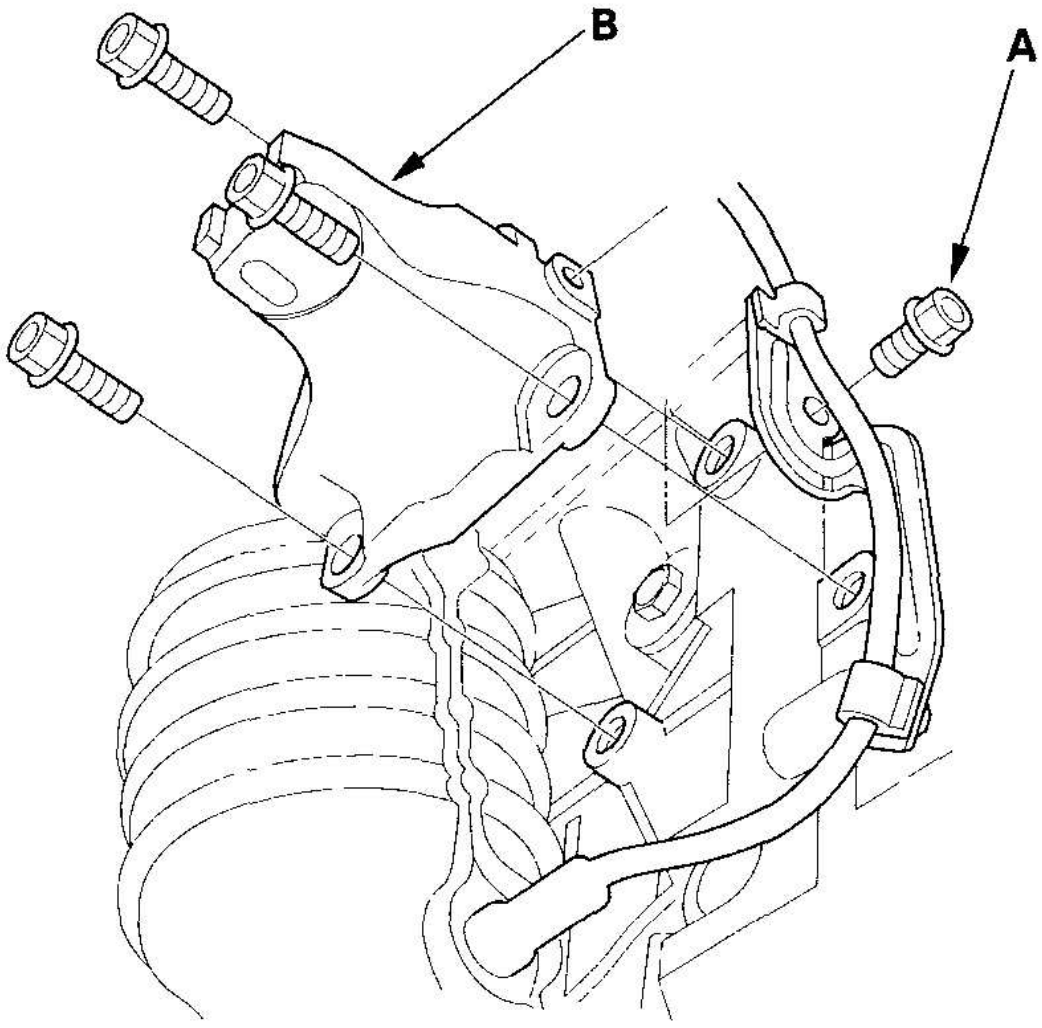
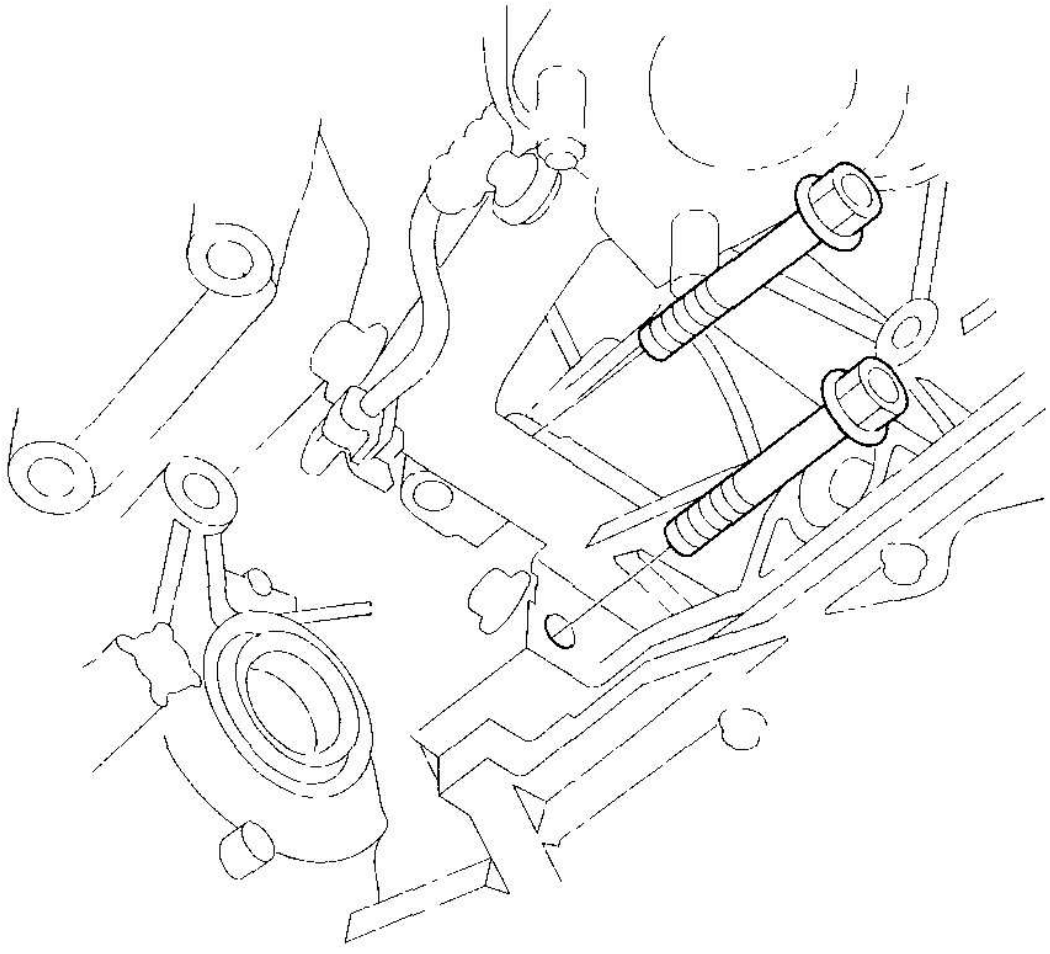


Fig. 257: Removing Harness Clamp Bracket Bolt And Front Mount Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

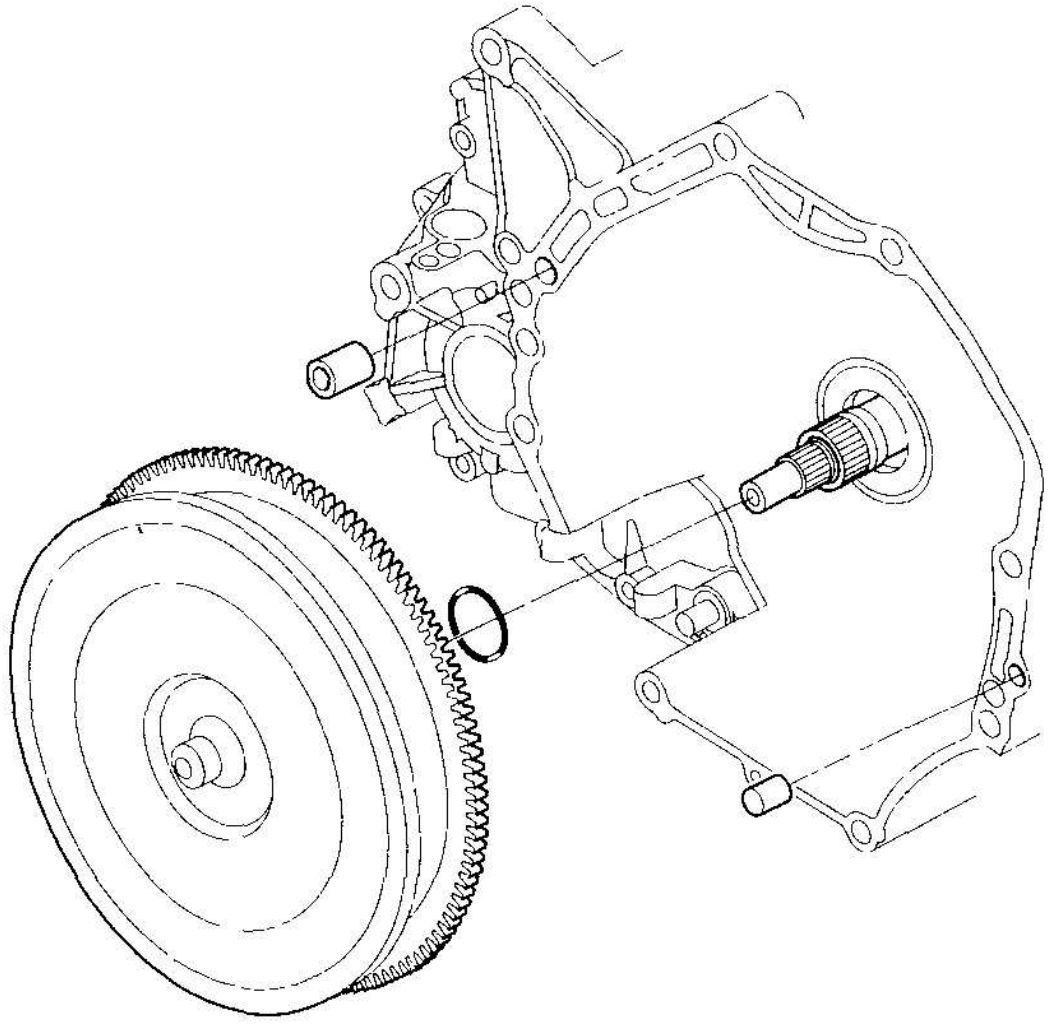
62. Remove the rear transmission housing mounting bolts.



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Fig. 258: Removing Rear Transmission Housing Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

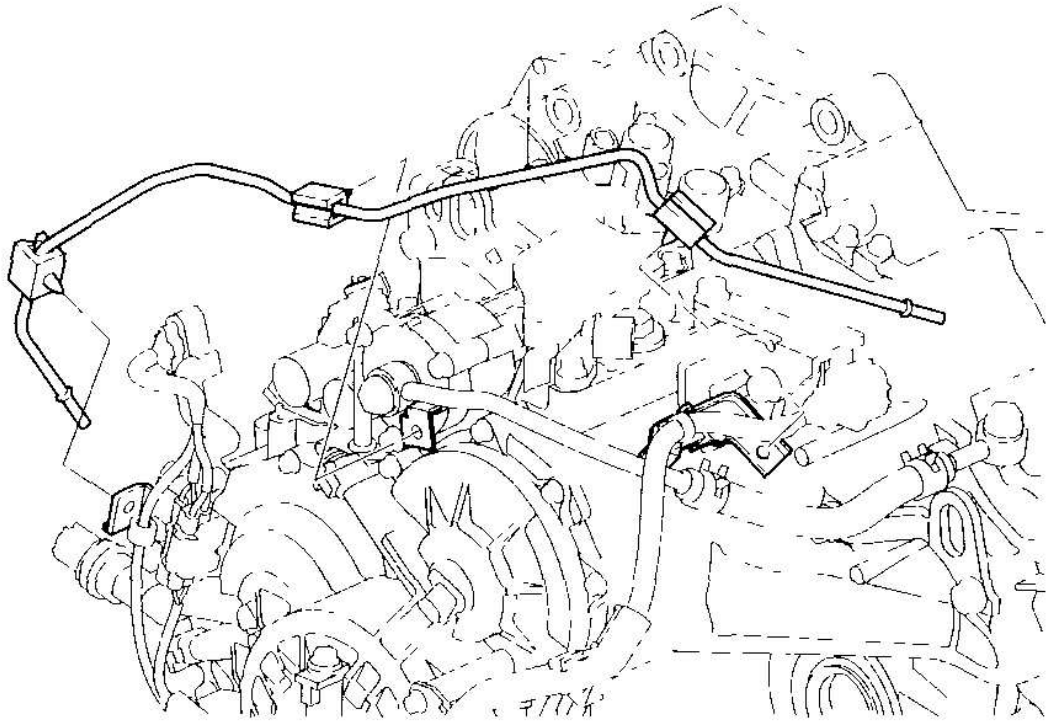
63. Slide the transmission away from the engine to remove it from the vehicle.
64. Remove the shift cable cover, then remove the torque converter.



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Fig. 259: Removing Shift Cable Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

65. Remove the vacuum line from the transmission.



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Fig. 260: Removing Vacuum Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

66. Remove the 6 x 1.0-14 mm bolt and nut that you installed on the shift cable cover in step 47.
67. Inspect the drive plate, and replace it if it's damaged.

DRIVE PLATE REMOVAL AND INSTALLATION

1. Remove the transmission assembly (see **TRANSMISSION REMOVAL**).
2. Remove the drive plate (A) and washer (B) from the engine crankshaft.

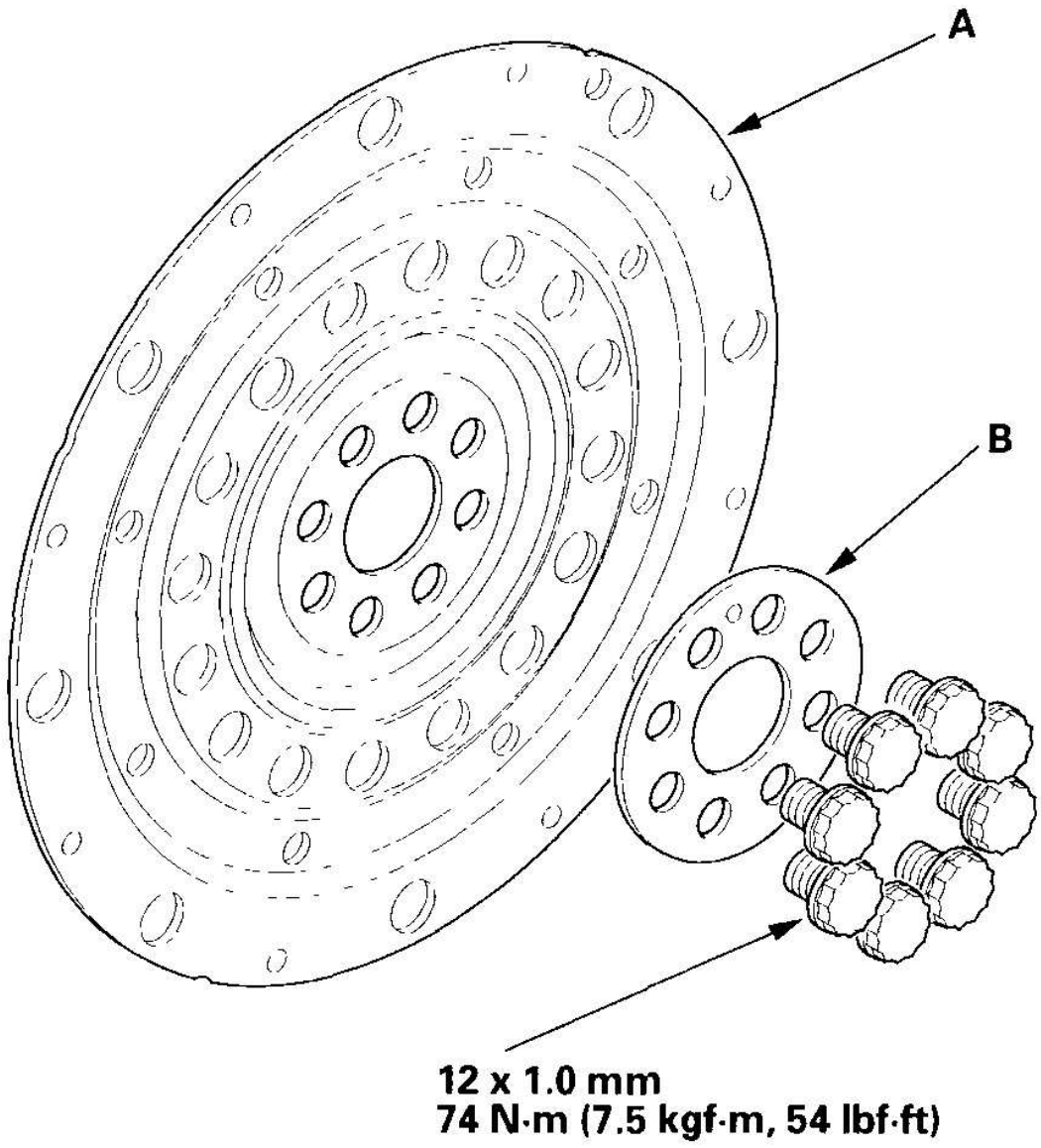


Fig. 261: Removing Drive Plate And Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the drive plate and washer on the engine crankshaft, and tighten the eight bolts in a crisscross pattern in two or more steps.
4. Install the transmission assembly (see **TRANSMISSION INSTALLATION**).

TRANSMISSION INSTALLATION

Special Tools Required

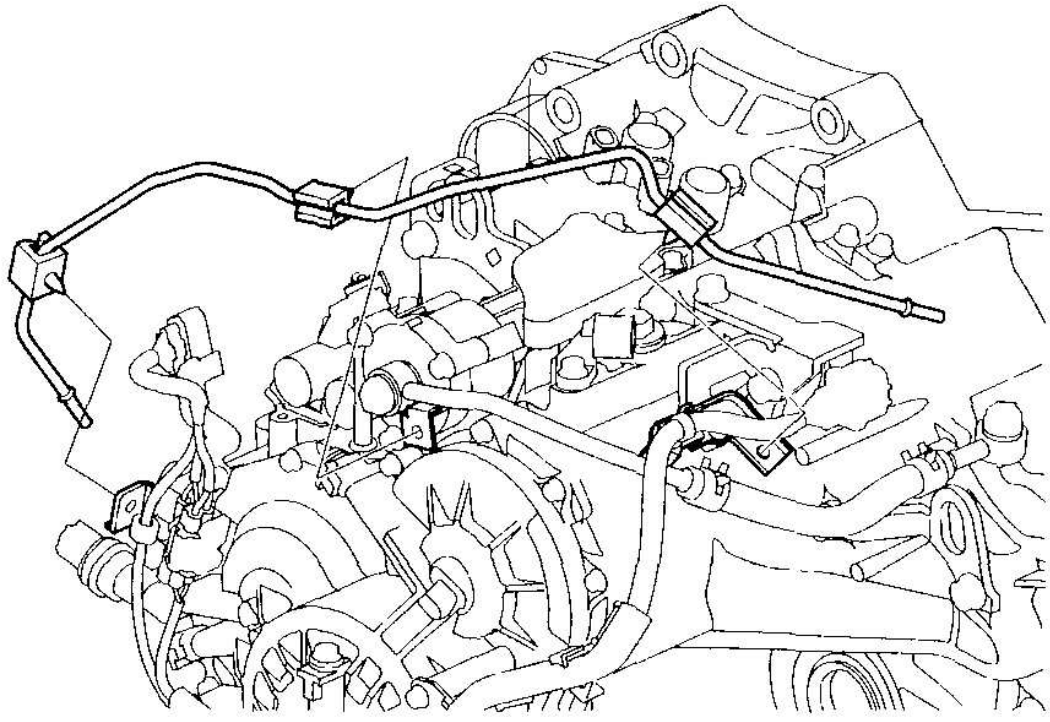
- Engine support hanger, A and Reds AAR-T-12566
- Engine hanger balancer bar VSB02C000019
- Front subframe adapter VSB02C000016

These special tools are available through the Honda Tool and Equipment Program 1-888-424-6857.

NOTE:

- **Use fender covers to avoid damaging painted surfaces.**
- **Replace the ATF warmer with a new one whenever the transmission assembly is replaced.**

1. Install the vacuum line on the transmission.



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Fig. 262: Installing Vacuum Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the torque converter assembly (A) on the mainshaft (B) with the new O-ring (C).

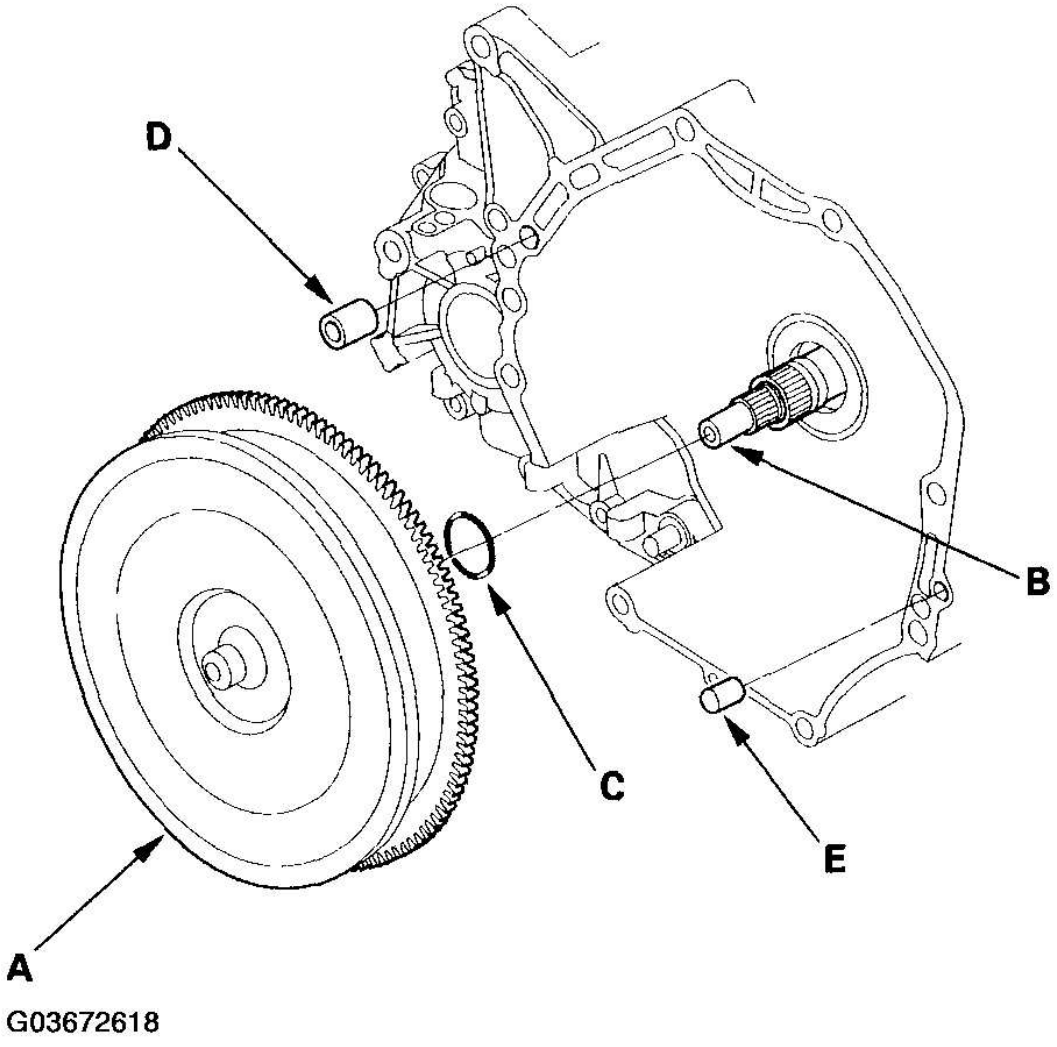


Fig. 263: Installing Torque Converter Assembly On Mainshaft With New O-Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the 14 x 20 mm dowel pin (D) and 10 x 20 mm dowel pin (E) in the torque converter housing.
4. Place the transmission on the jack, and raise the transmission to the engine level.
5. Attach the transmission to the engine, then install the rear transmission housing mounting bolts.

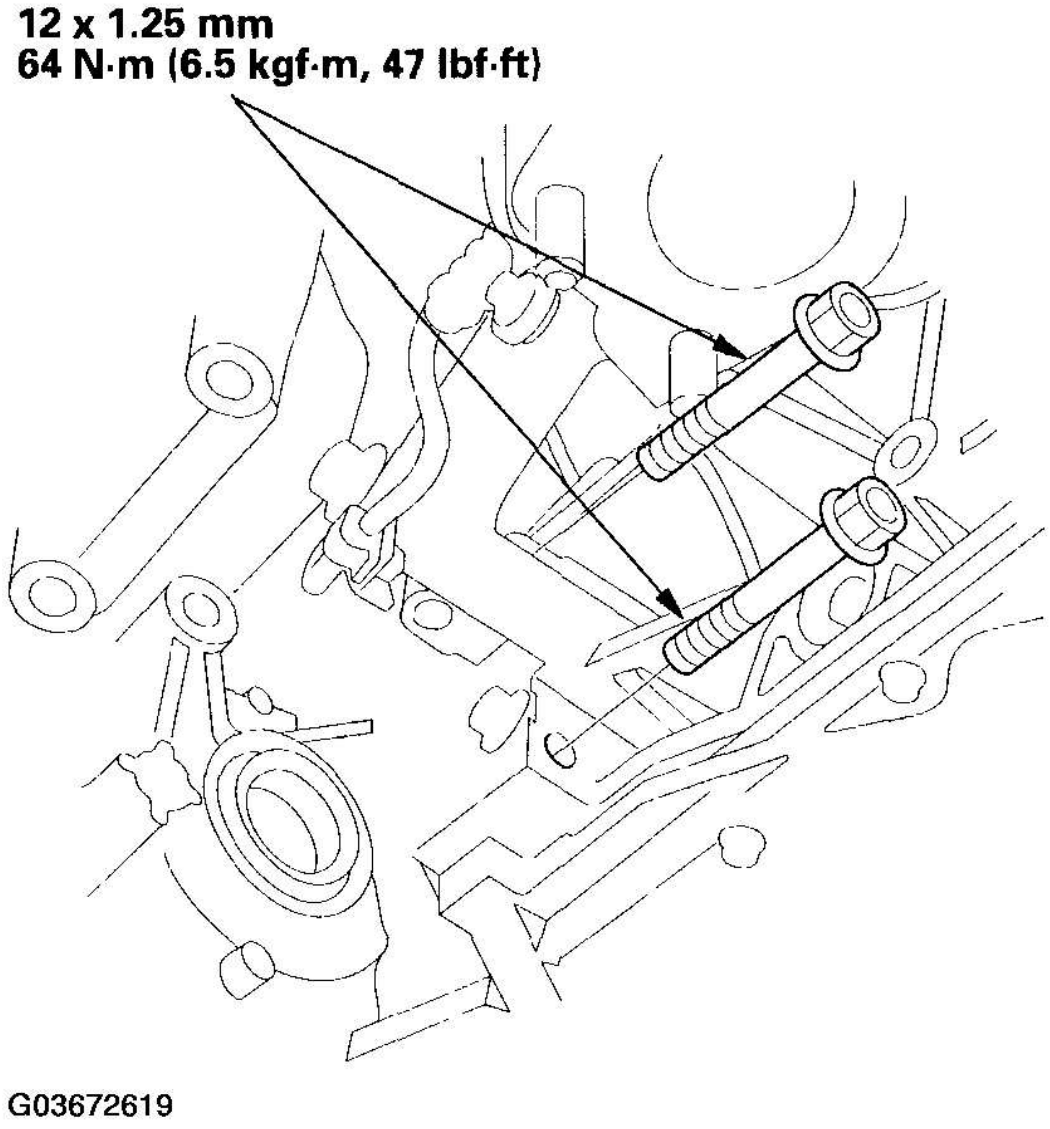


Fig. 264: Installing Rear Transmission Housing Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the upper and front transmission housing mounting bolts.

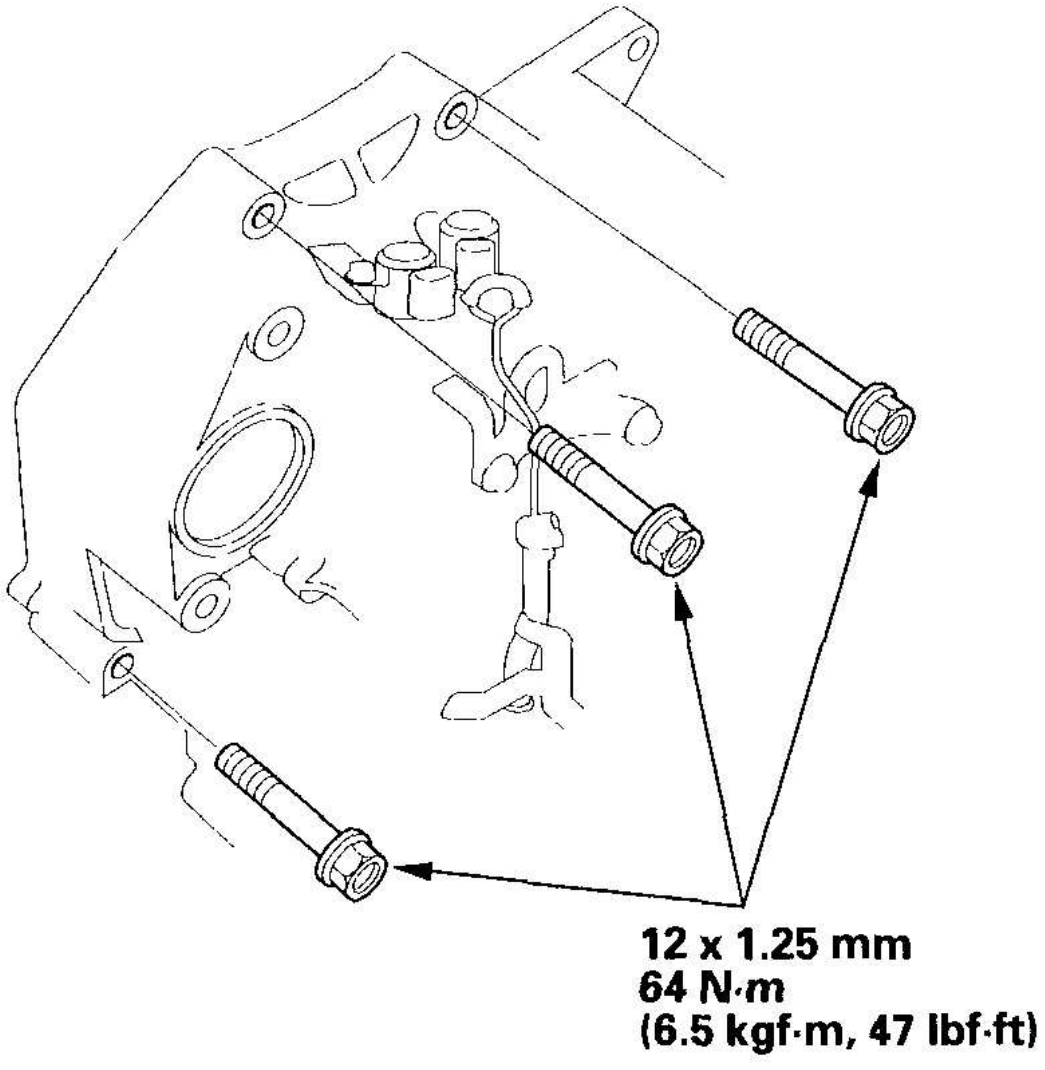


Fig. 265: Installing Upper And Front Transmission Housing Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the jack from the transmission.
8. Install the front mount bracket with the new bolts, and install the harness clamp on the mount bracket.

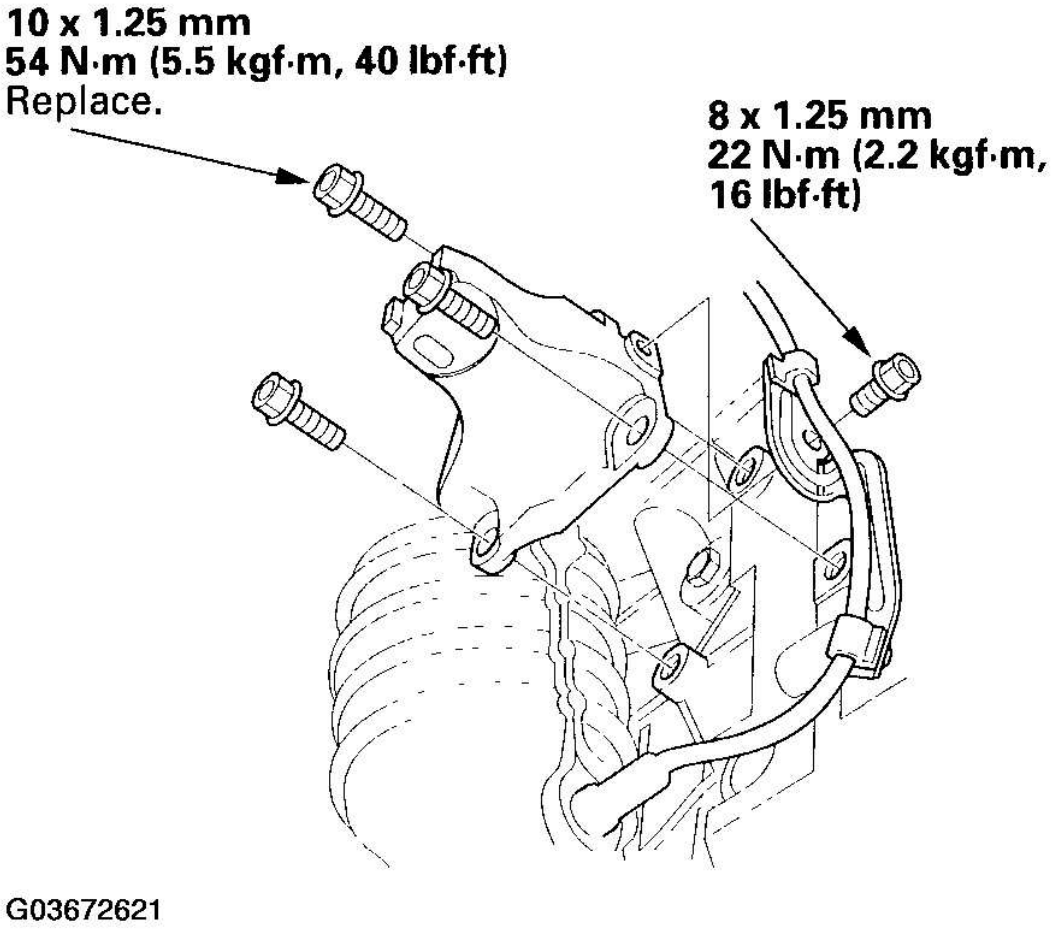


Fig. 266: Installing Front Mount Bracket Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the engine-to-torque converter housing mounting bolts.

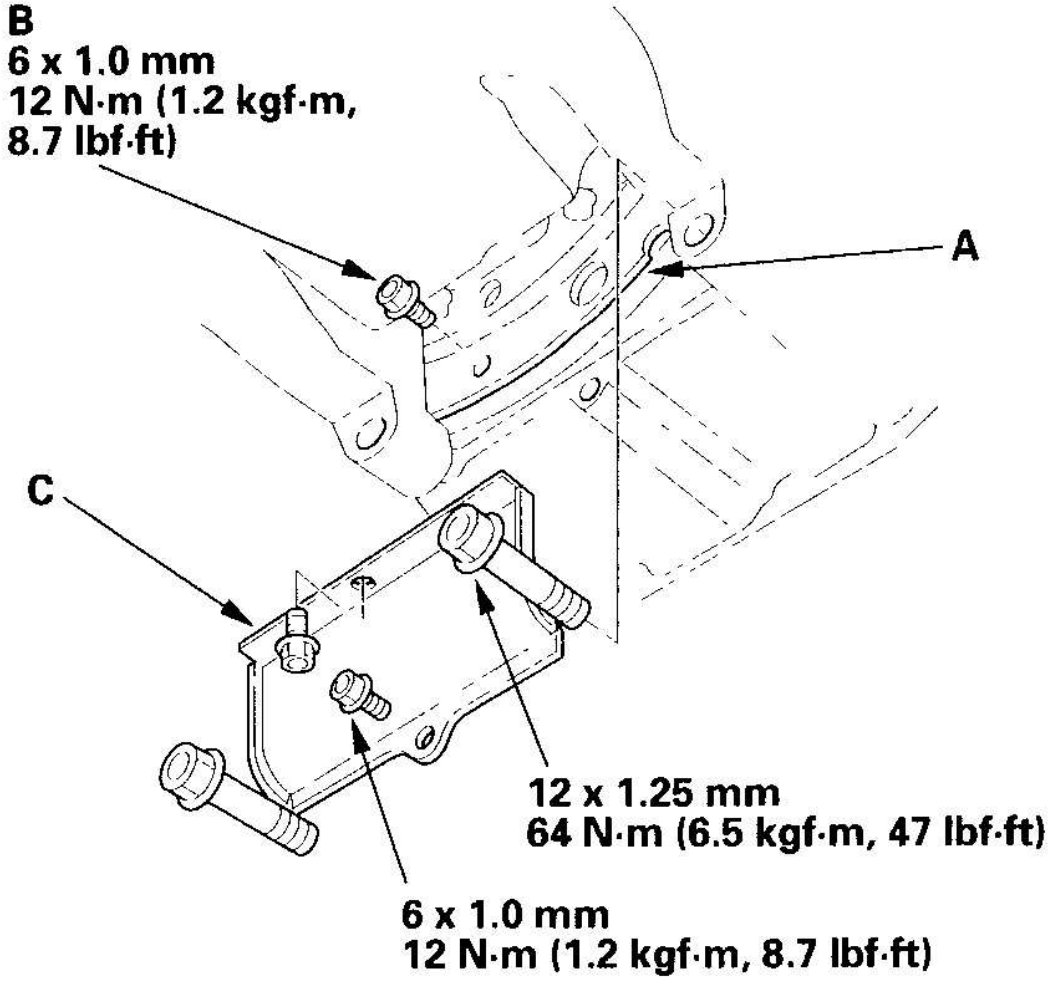


Fig. 267: Installing Engine-To-Torque Converter Housing Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Attach the torque converter to the drive plate (A) with eight bolts (B). Rotate the crankshaft pulley as necessary to tighten the bolts to 1/2 of the specified torque, then to the final torque, in a crisscross pattern. After tightening the last bolt, check that the crankshaft rotates freely.
11. Install the torque converter cover (C).
12. Install the new set ring (A) on the intermediate shaft (B).

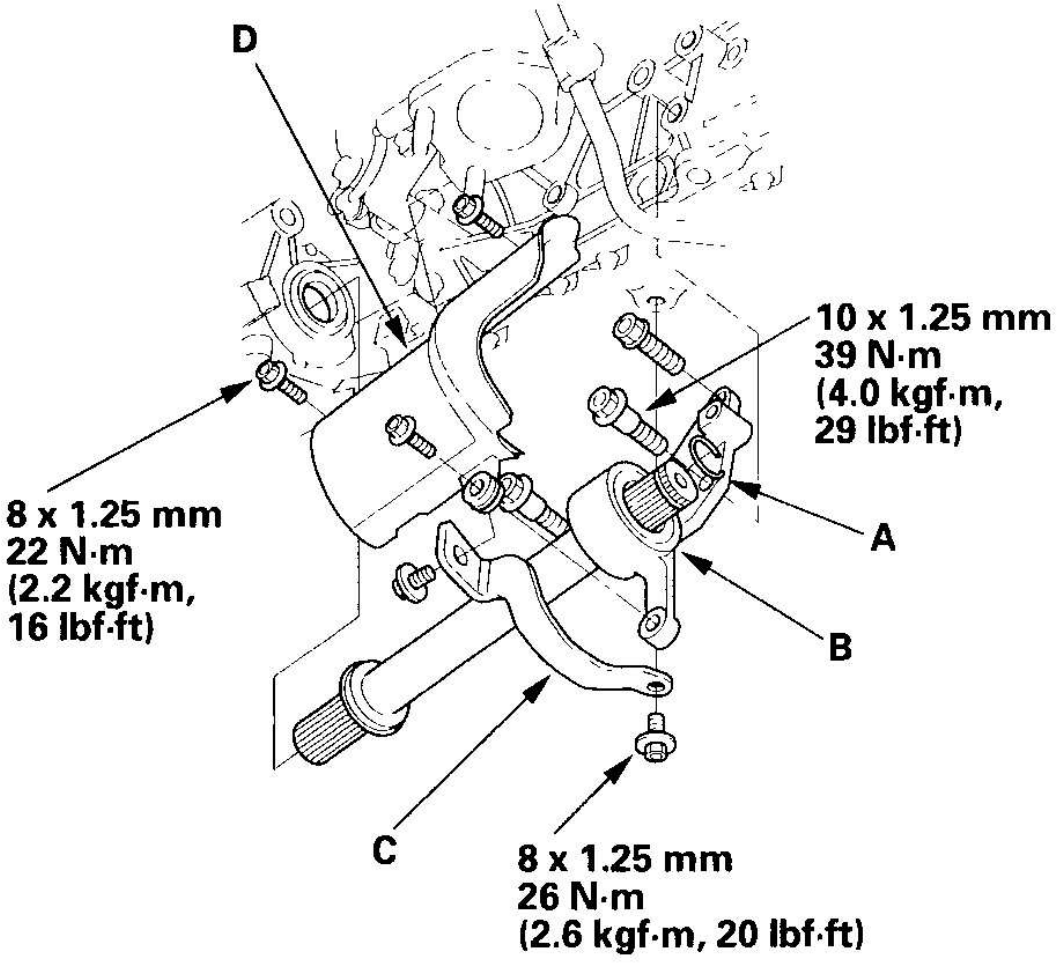


Fig. 268: Installing New Set Ring On Intermediate Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install the exhaust manifold bracket (C) and heat shield (D).
14. Install the new set ring on the left driveshaft, then install the left driveshaft in the differential (see **DRIVESHAFT INSTALLATION**). While installing the driveshaft in the differential, be sure not to allow dust or other foreign particles to enter the transmission. Install the left driveshaft over the intermediate shaft.

NOTE:

- **Clean the areas where the driveshaft and**

intermediate shaft contact the transmission (differential) with solvent or carburetor cleaner, and dry with compressed air.

- **Turn the right and left steering knuckle fully outward, and slide the driveshaft and intermediate shaft into the differential and intermediate shaft until you feel its set ring engage the side gear.**

15. Install the transmission lower mounts.

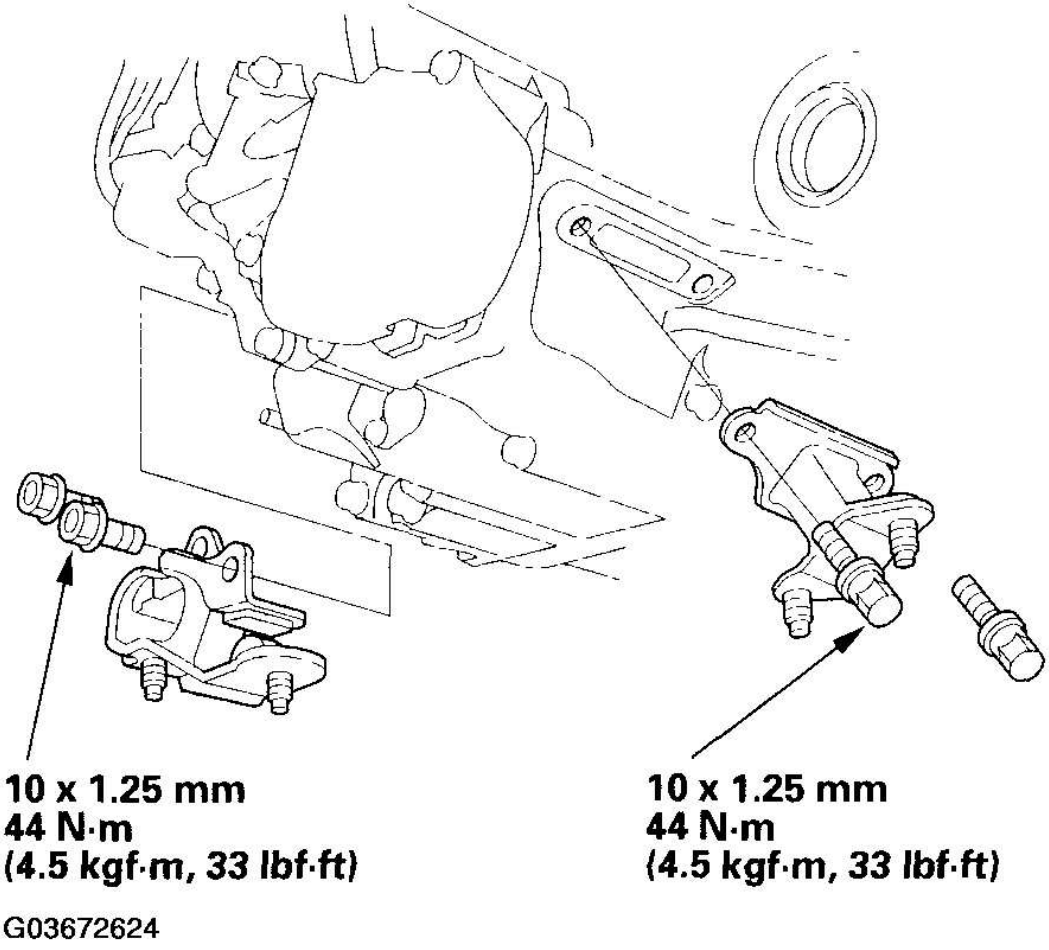


Fig. 269: Installing Transmission Lower Mounts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Support the front subframe (A) with the special tool and a jack, and lift it up to body.

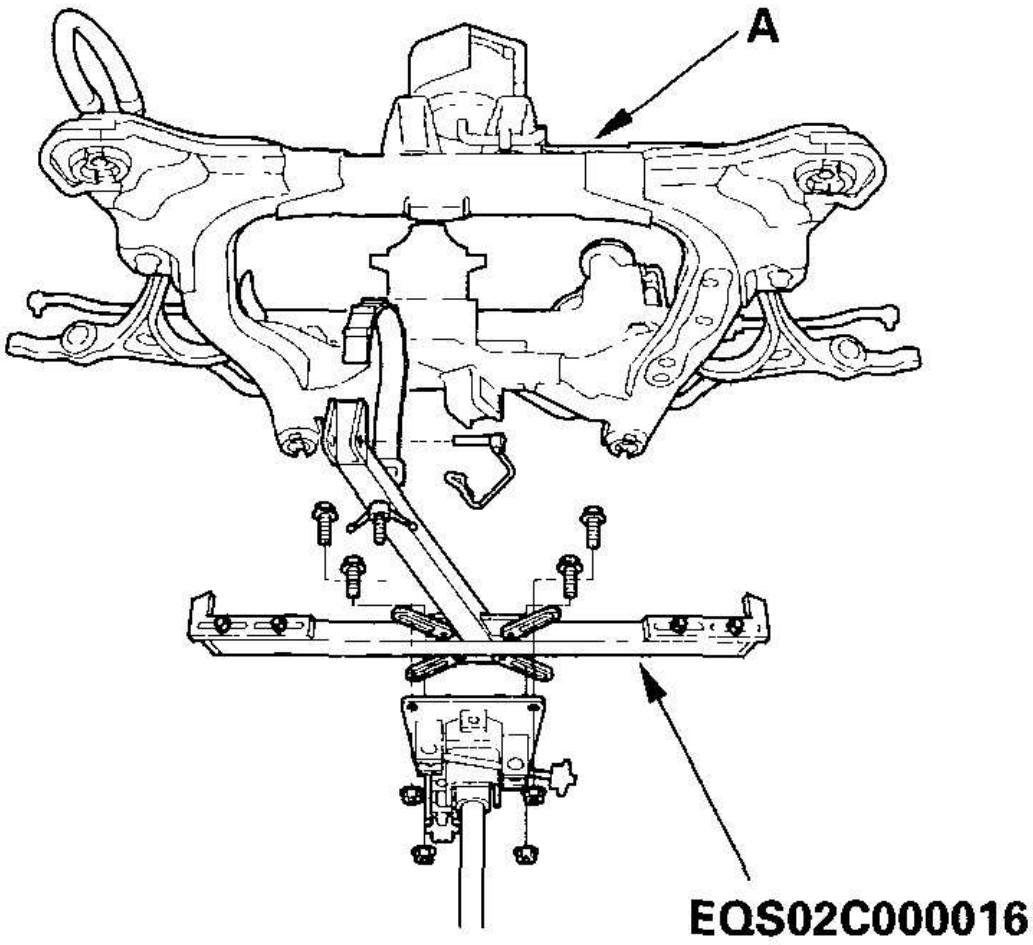


Fig. 270: Supporting Front Subframe With Special Tool And Jack
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Loosely install the new subframe mounting bolts (D), stiffener mounting bolts (E), and new stiffener mounting bolts (F).

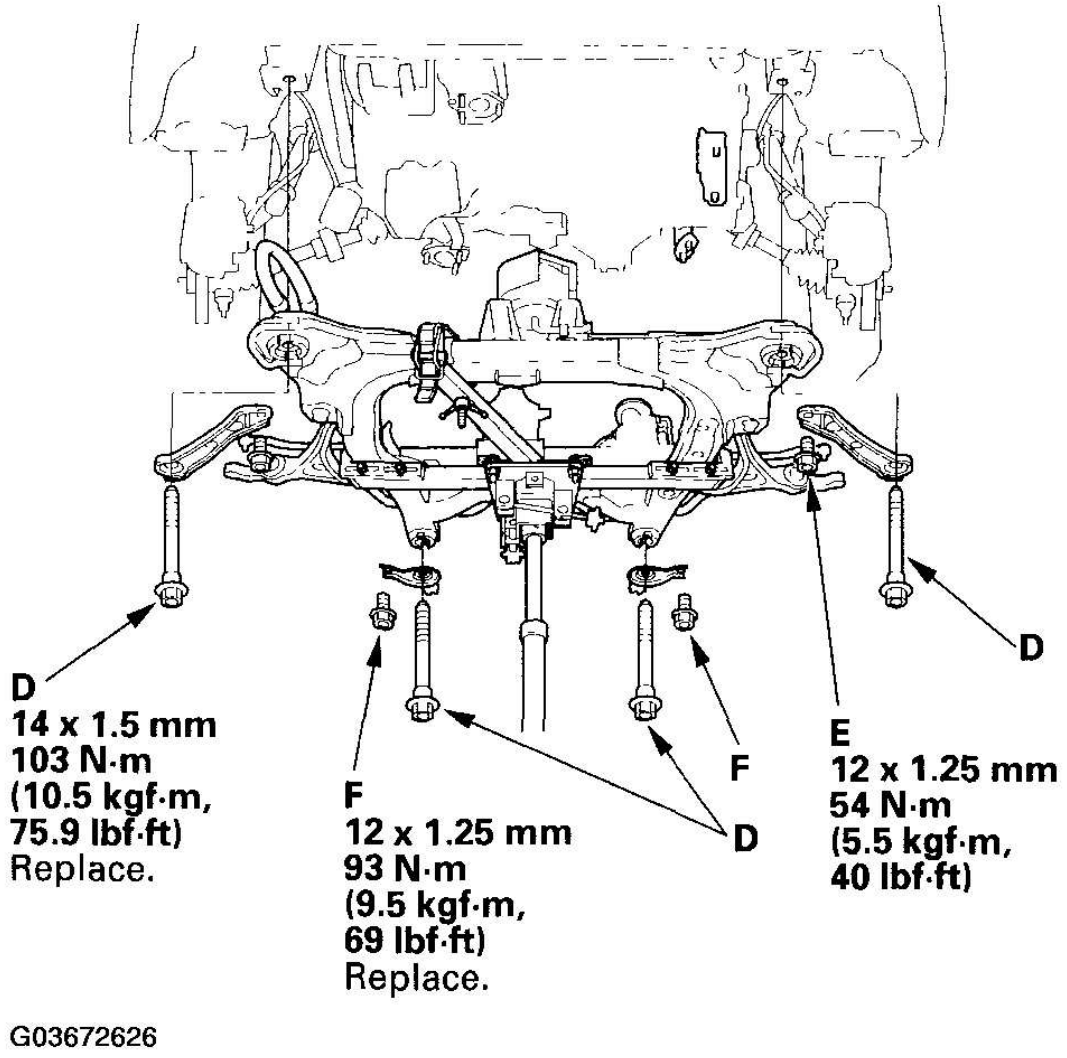


Fig. 271: Installing Subframe Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Loosely install both of the new middle-mount mounting bolts.

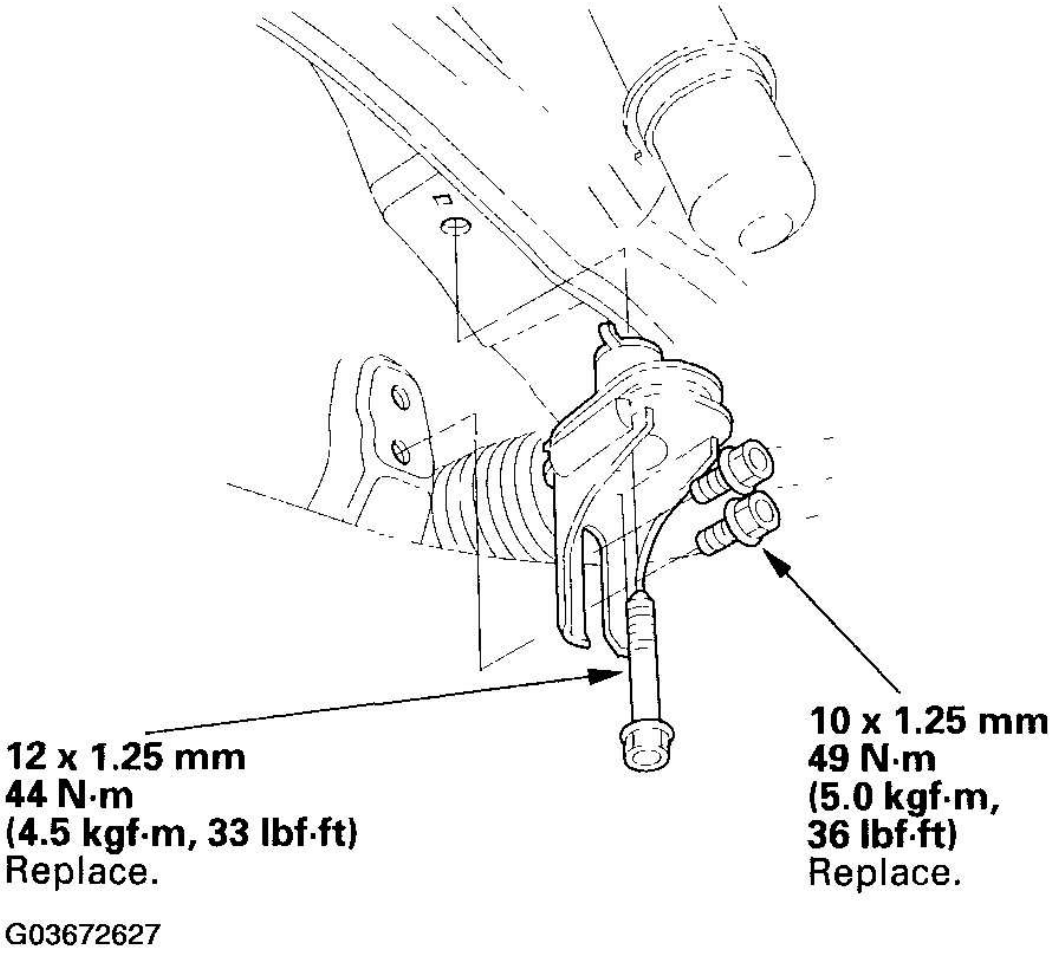


Fig. 272: Installing Both Middle-Mount Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Align the reference marks (A) with edge (B) of both rear stiffener (C), and tighten the rear subframe mounting bolts, then front bolts, and tighten the stiffener bolts to the specified torque.

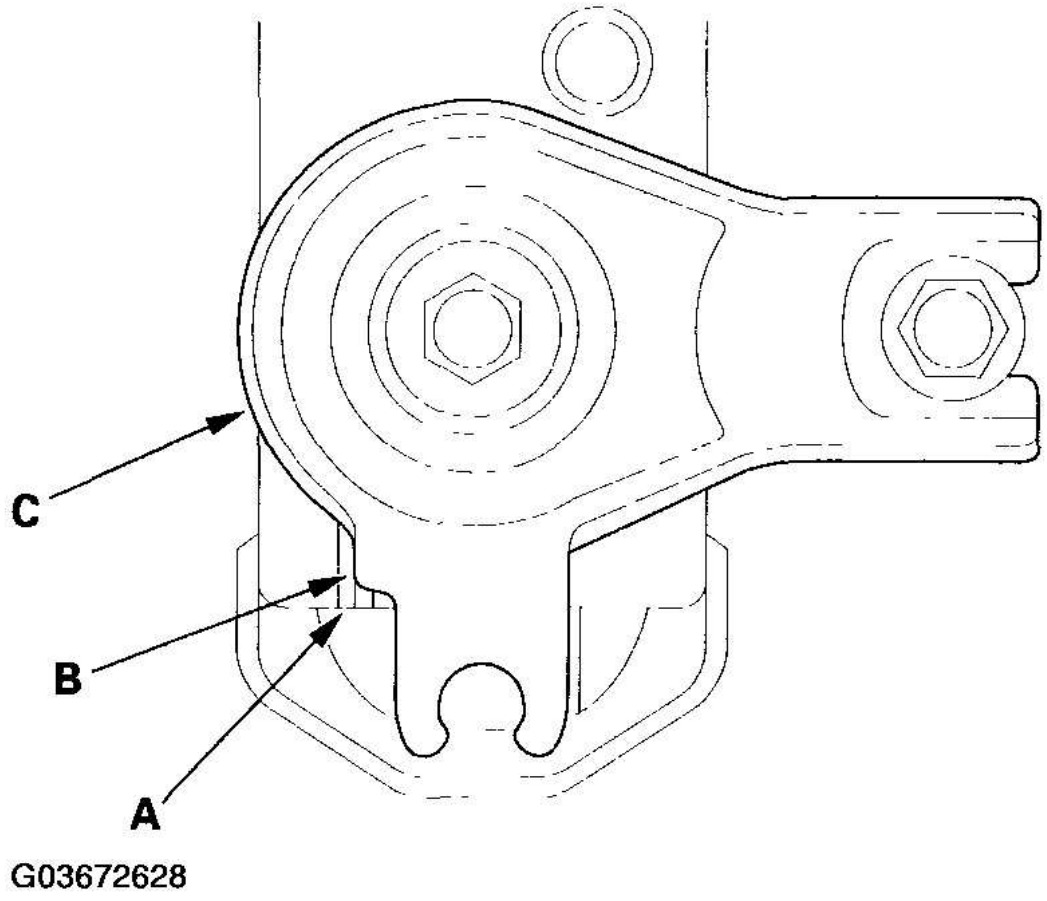


Fig. 273: Aligning Reference Marks With Edge Of Both Rear Stiffener
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Tighten the mid-mount mounting bolts.
21. Install the transmission lower mount nuts.

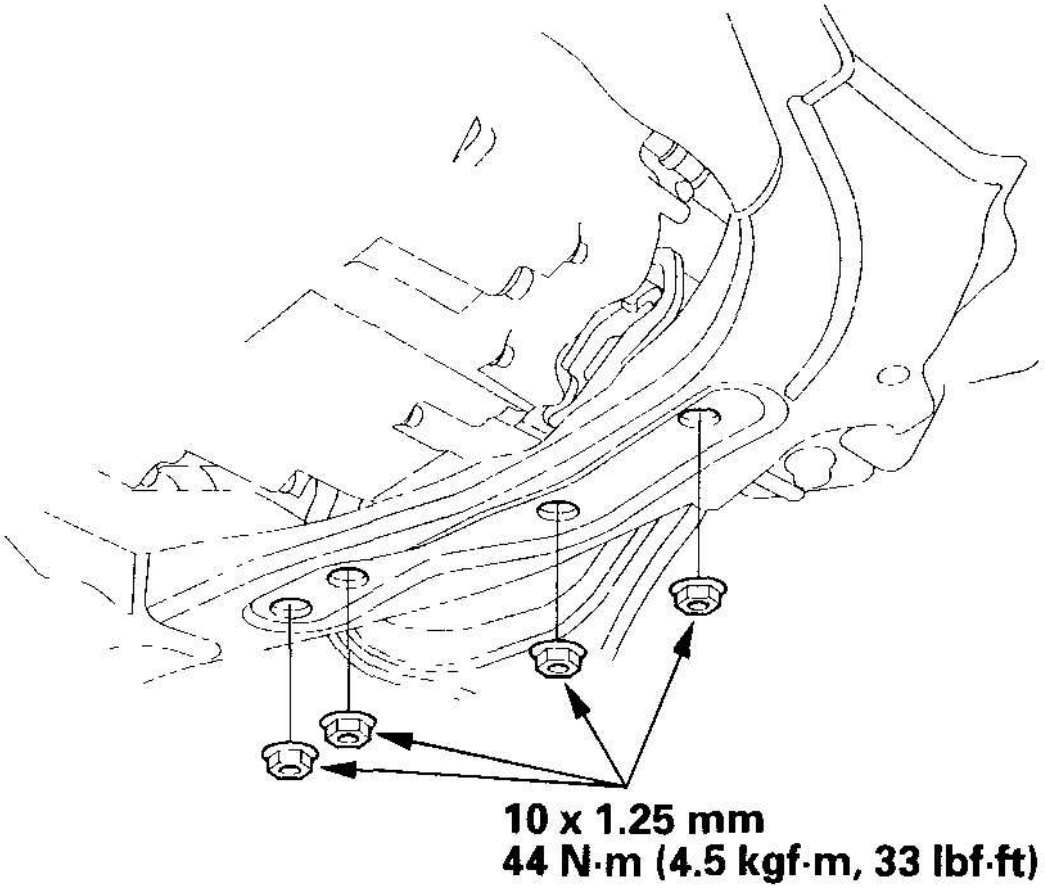


Fig. 274: Installing Transmission Lower Mount Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Install control lever (A) on the selector control shaft (B). Do not bend the shift cable excessively.

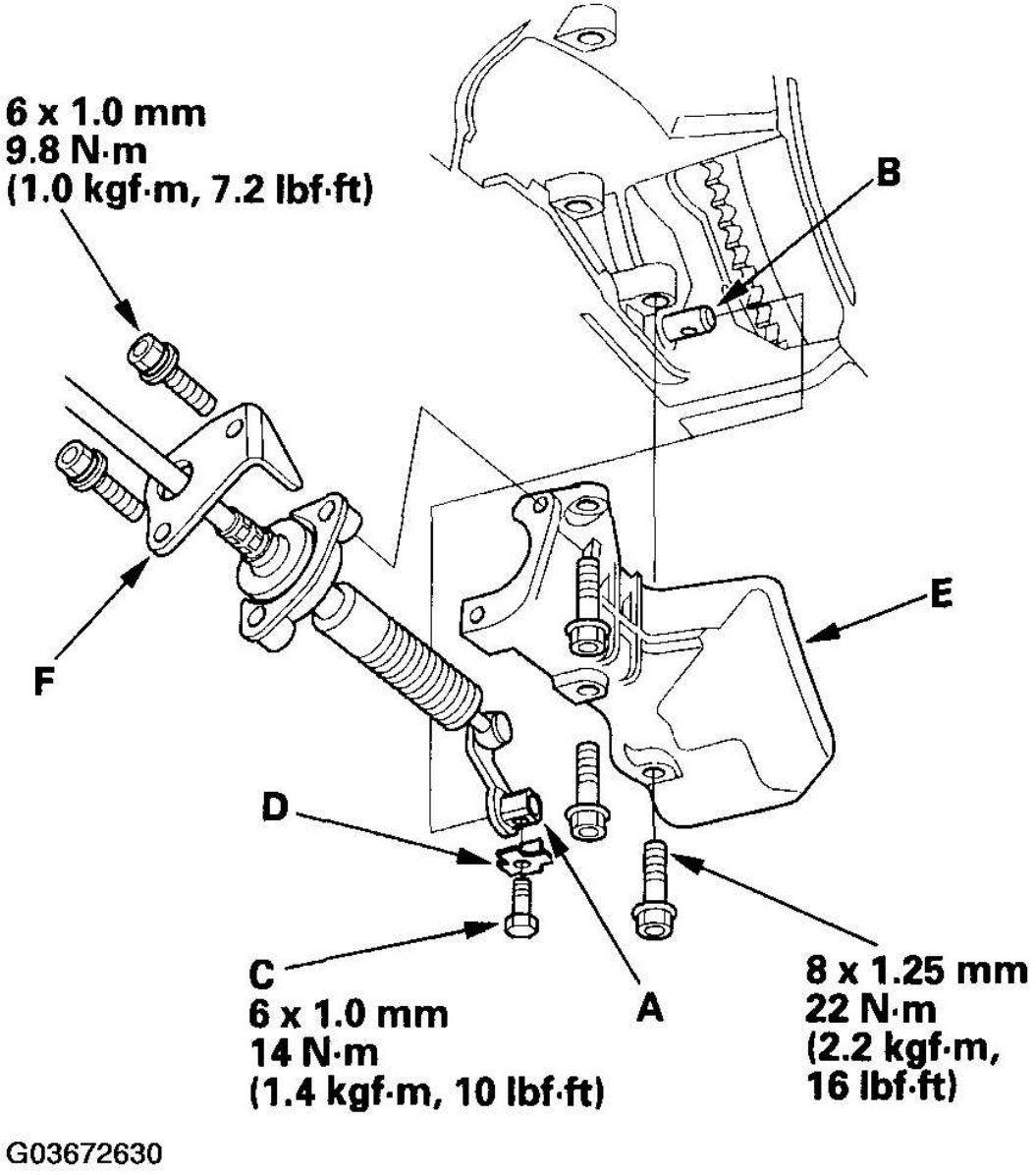


Fig. 275: Installing Control Lever On Selector Control Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Install the lock bolt (C) with a new lock washer (D), then bend the lock washer tab against the bolt head.
24. Install the shift cable cover (E), then secure the shift cable holder (F) on the cover with the bolts.

NOTE: To prevent damage to the control lever joint, be sure install the shift cable holder after installing the shift cable cover to the torque converter housing.

25. Connect the power steering pressure switch connector.

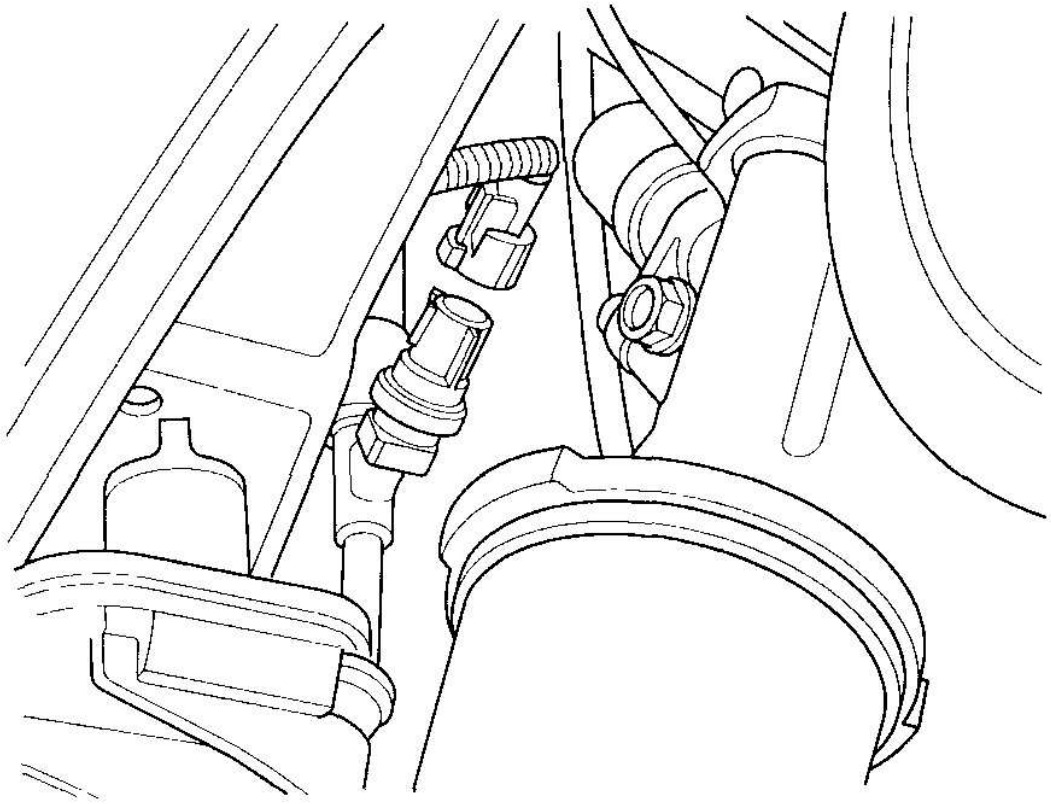


Fig. 276: Connecting Power Steering Pressure Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. Connect the power steering fluid hose to the power steering line on the front subframe.

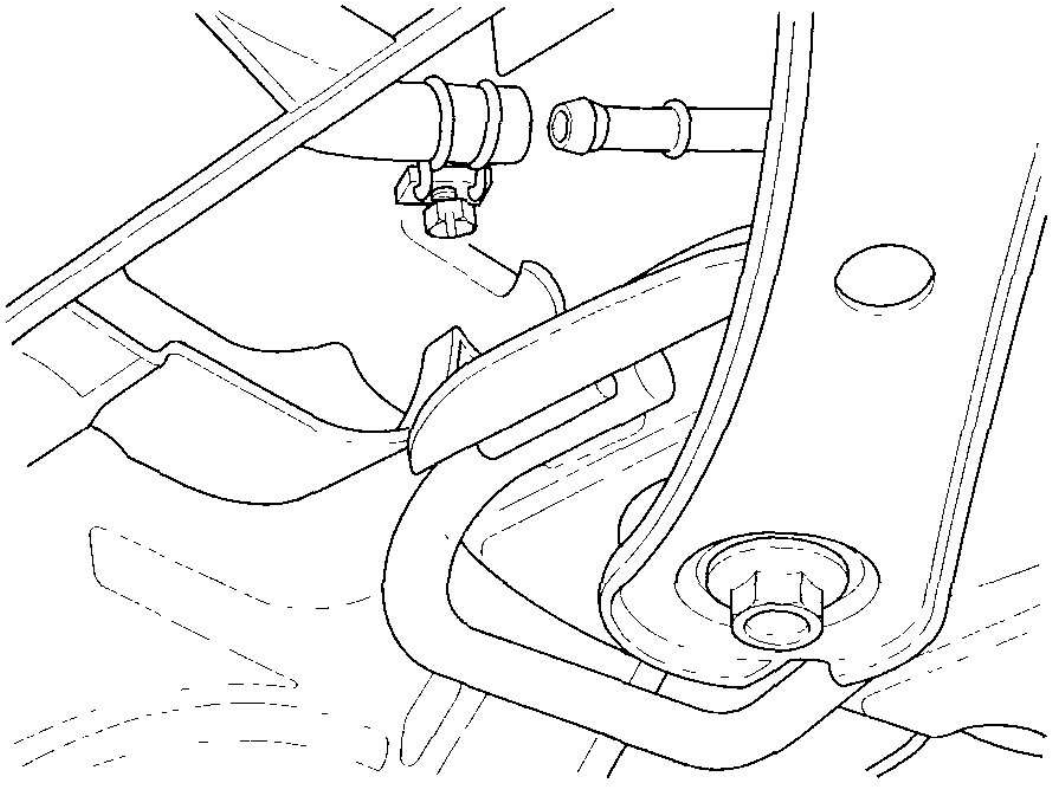


Fig. 277: Connecting Power Steering Fluid Hose To Power Steering Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

27. Install the exhaust pipe A with the new self-locking nuts, its mount (B), and new gaskets (C) (D).

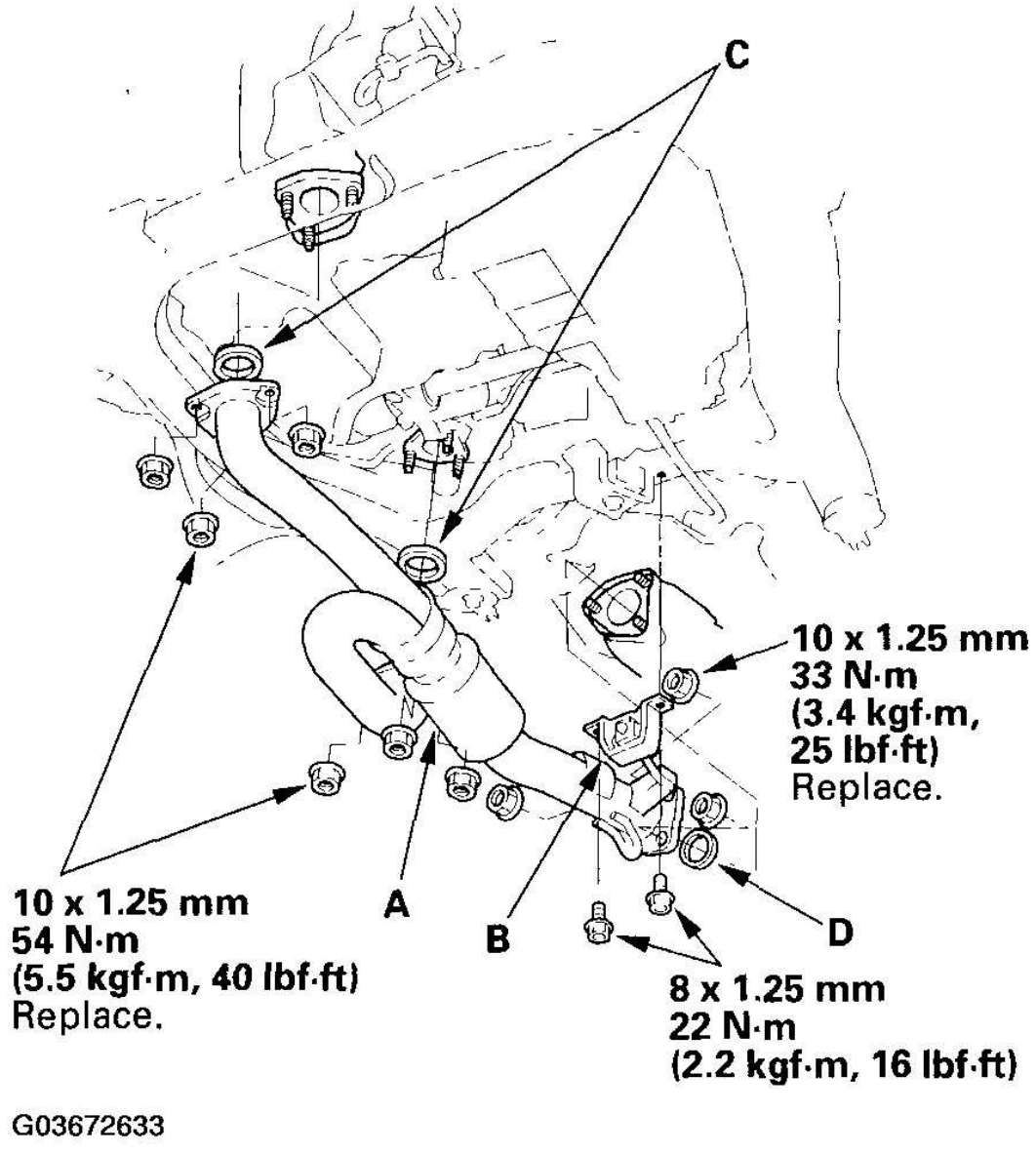


Fig. 278: Installing Exhaust Pipe A With Self-Locking Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

28. Install the damper forks (A) with damper pinch bolts (B) and the new self-locking nuts (C), then install the ball joints on the lower arms (D) with the castle nuts (E) and new cotter pins (F), refer to step 17 in **KNUCKLE/HUB REPLACEMENT** .

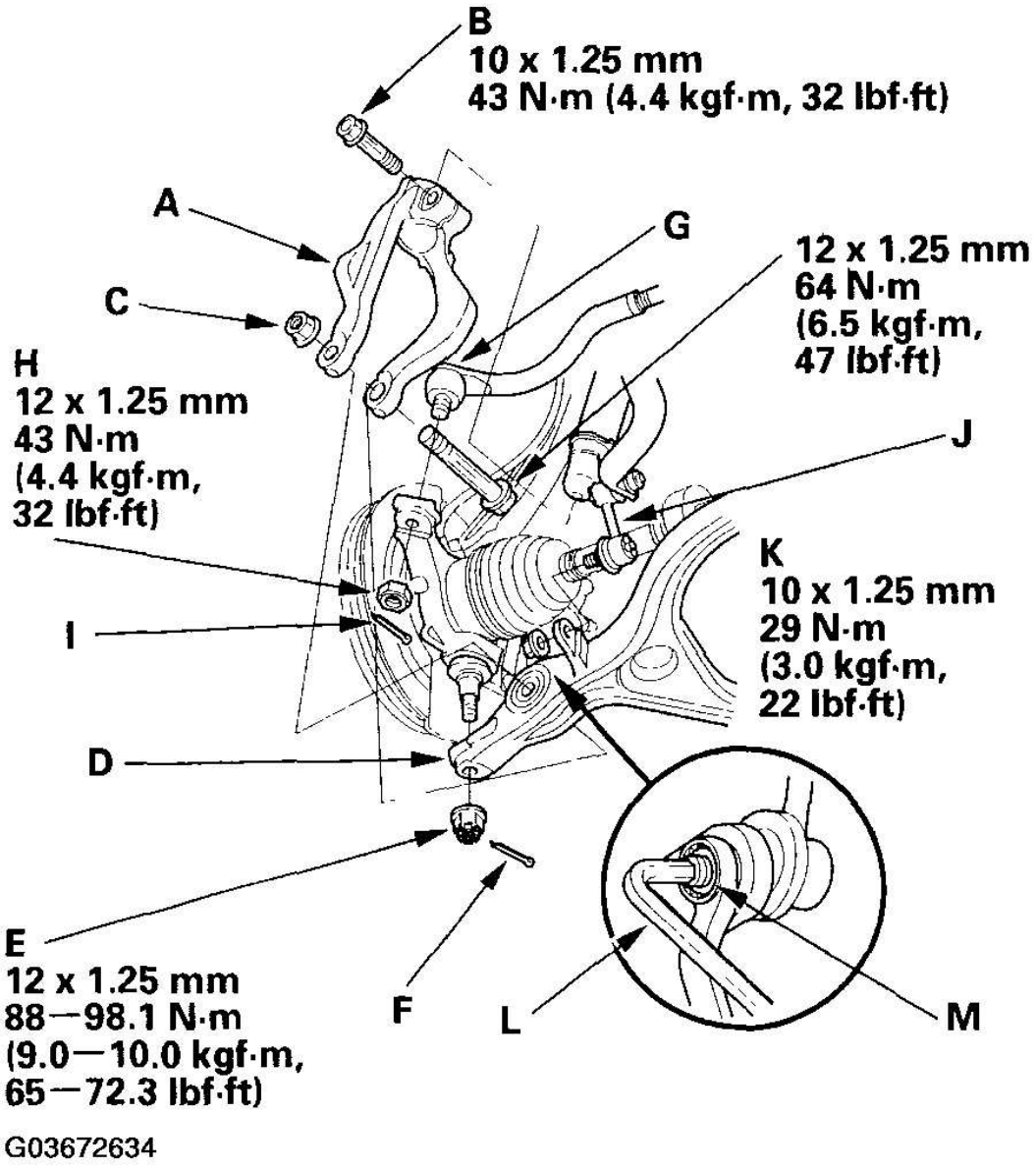


Fig. 279: Installing Damper Forks With Damper Pinch Bolts And Self-Locking Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

29. Install the tie-rod end ball joints (G) to each knuckle with the nuts (H) and new cotter pins (I), refer to step 17 in **KNUCKLE/HUB REPLACEMENT** .
30. Install the stabilizer links (J) to the lower arms, and install the nuts (K). Insert a

6 mm Allen wrench (L) in the ball joint pin (M), and tighten the nuts.

31. Install the new front mount bolt (A).

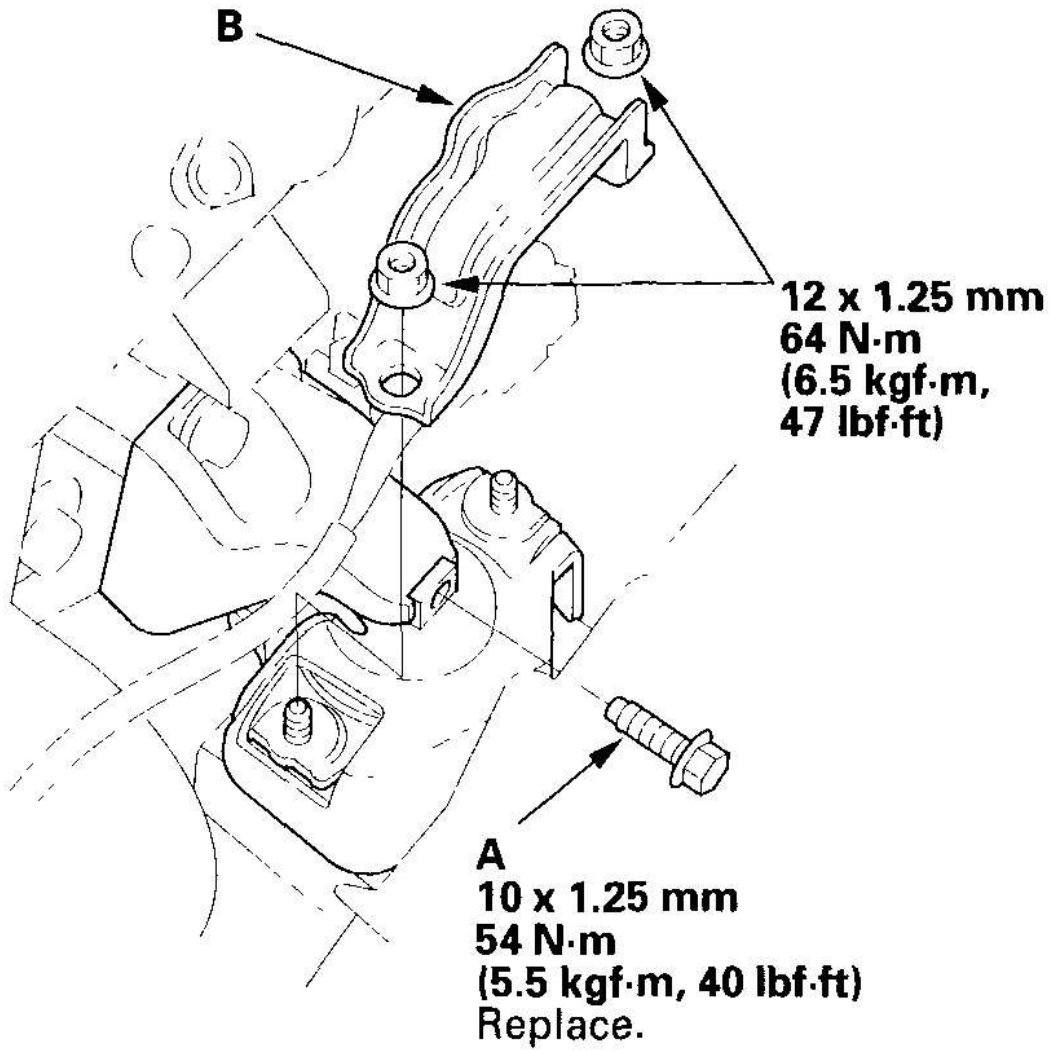


Fig. 280: Installing Front Mount Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

32. Install the front mount stop (B).
33. Install the new rear mount bolt (A).

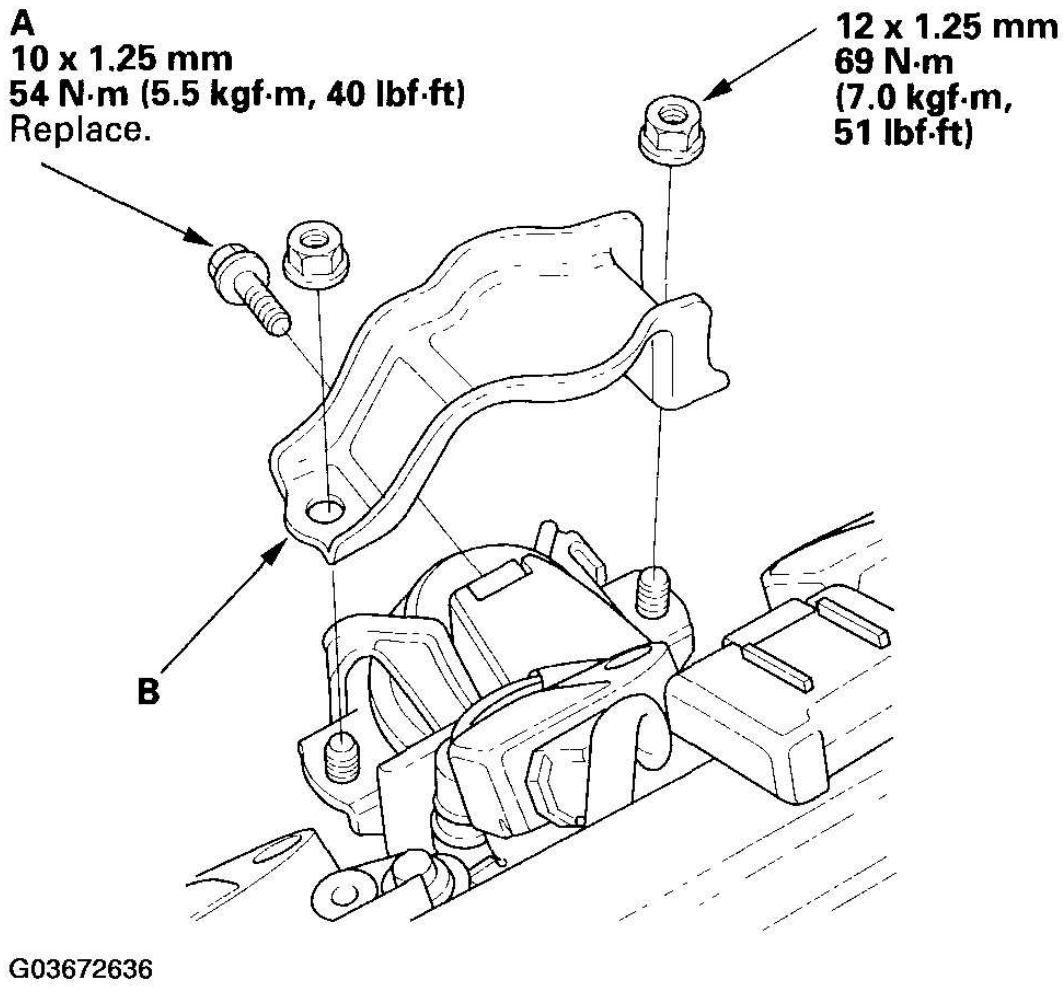
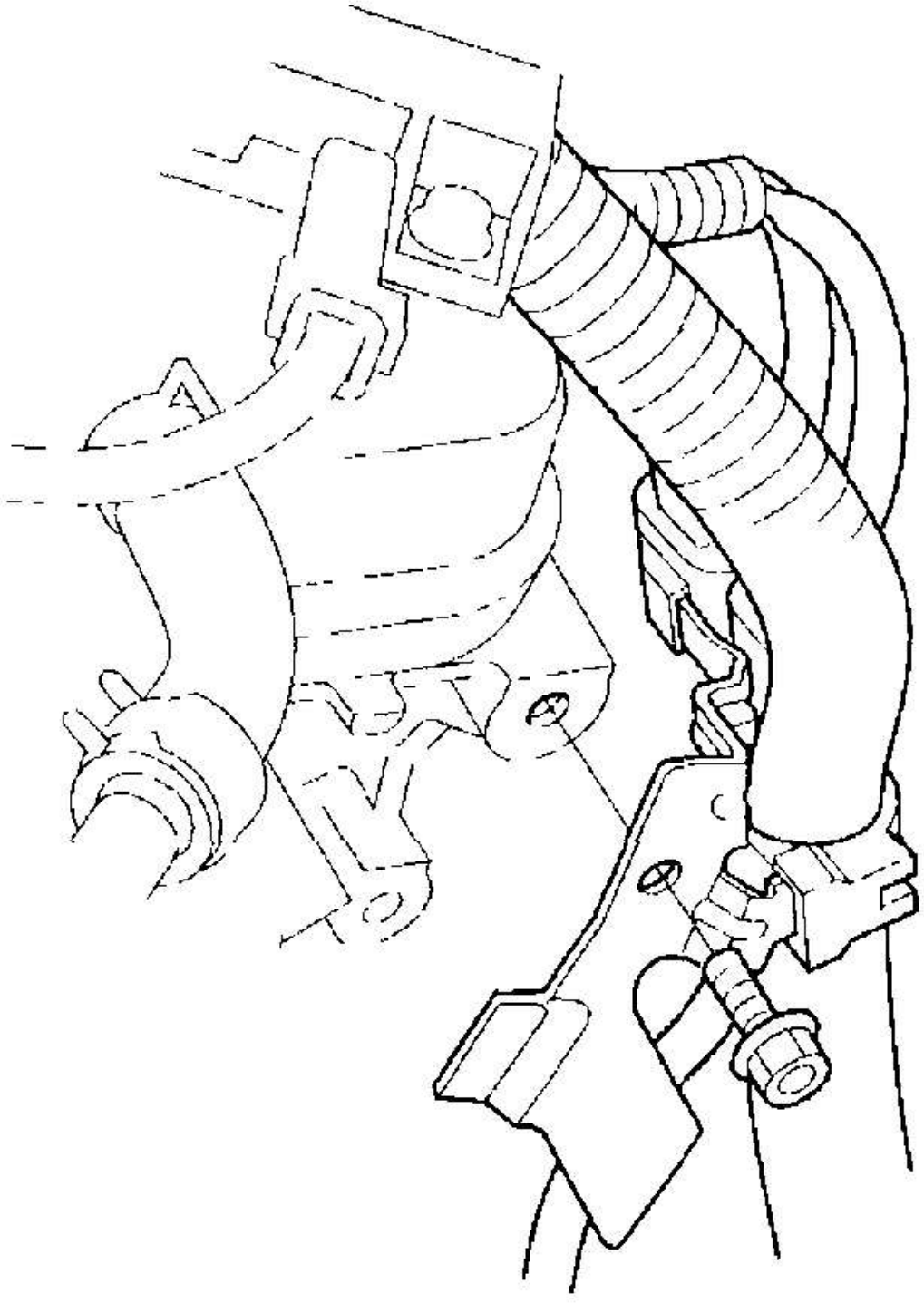


Fig. 281: Installing Rear Mount Bolt (A)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

34. Install the rear mount stop (B).
35. Remove the engine hanger and engine balancer bar.
36. Install the harness clamp bracket to the engine rear cylinder head.



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Fig. 282: Installing Harness Clamp Bracket To Engine Rear Cylinder Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

37. Install the connector bracket to the engine front cylinder head.

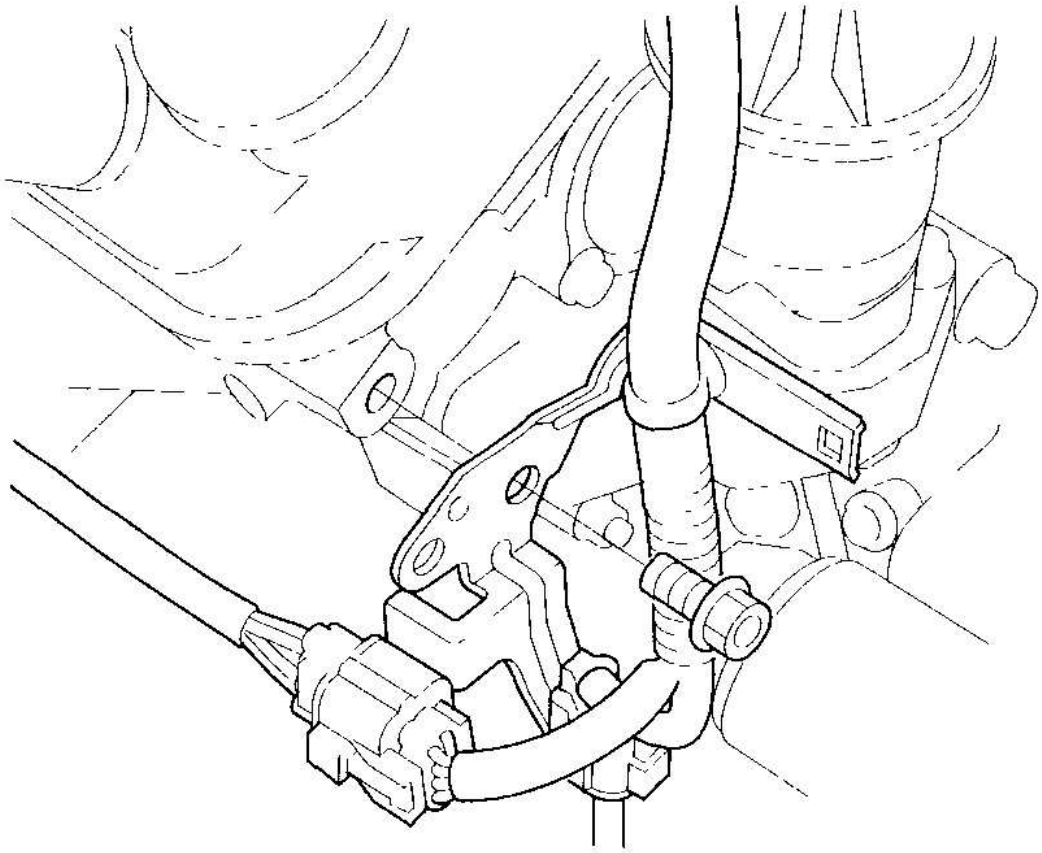


Fig. 283: Install Connector Bracket To Engine Front Cylinder Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

38. Install the ATF warmer (A) with new O-rings (B) and the bracket (C) on the transmission housing. Do not pinch the O-rings.

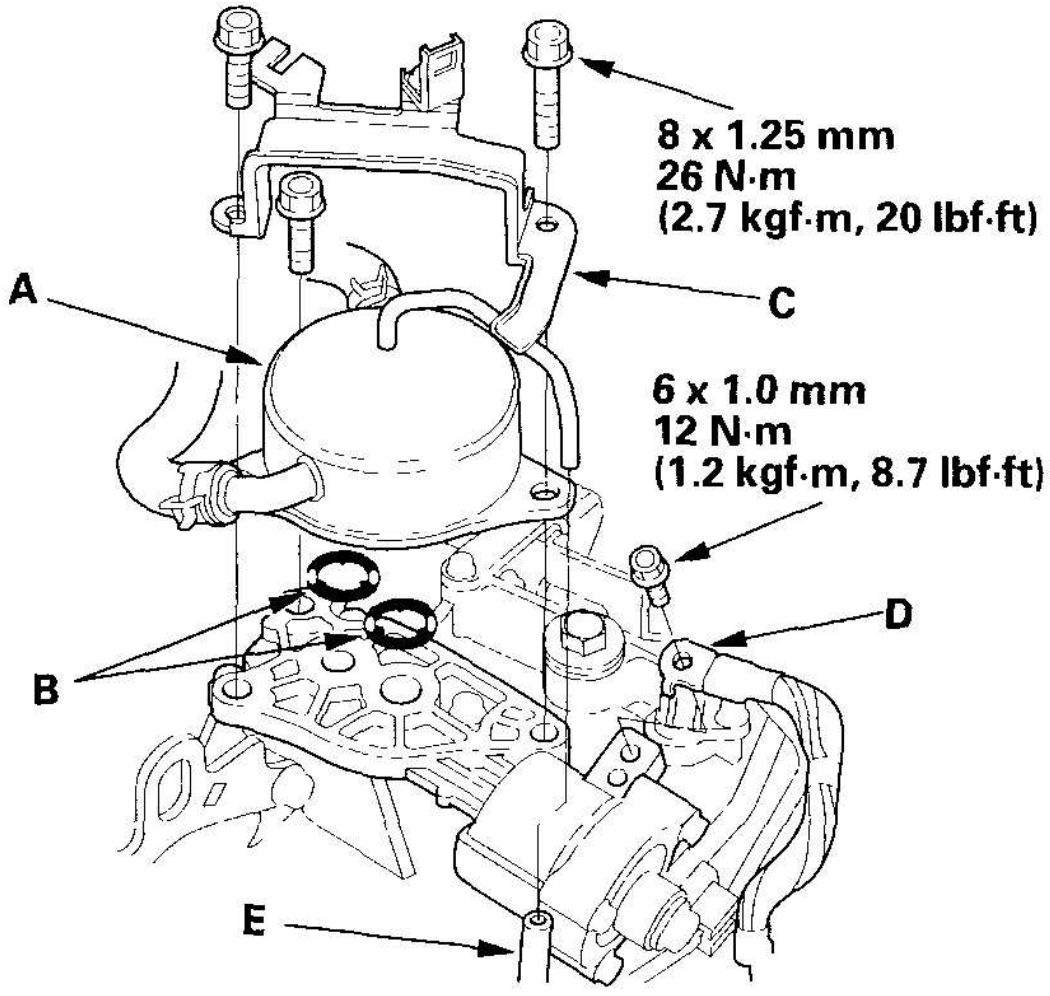


Fig. 284: Installing ATF Warmer With O-Rings And Bracket On Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

39. Install the transmission ground cable (D), and connect the breather tube (E).
40. Install the harness clamp bracket (A), and install the harness cover (B) on the bracket (C).

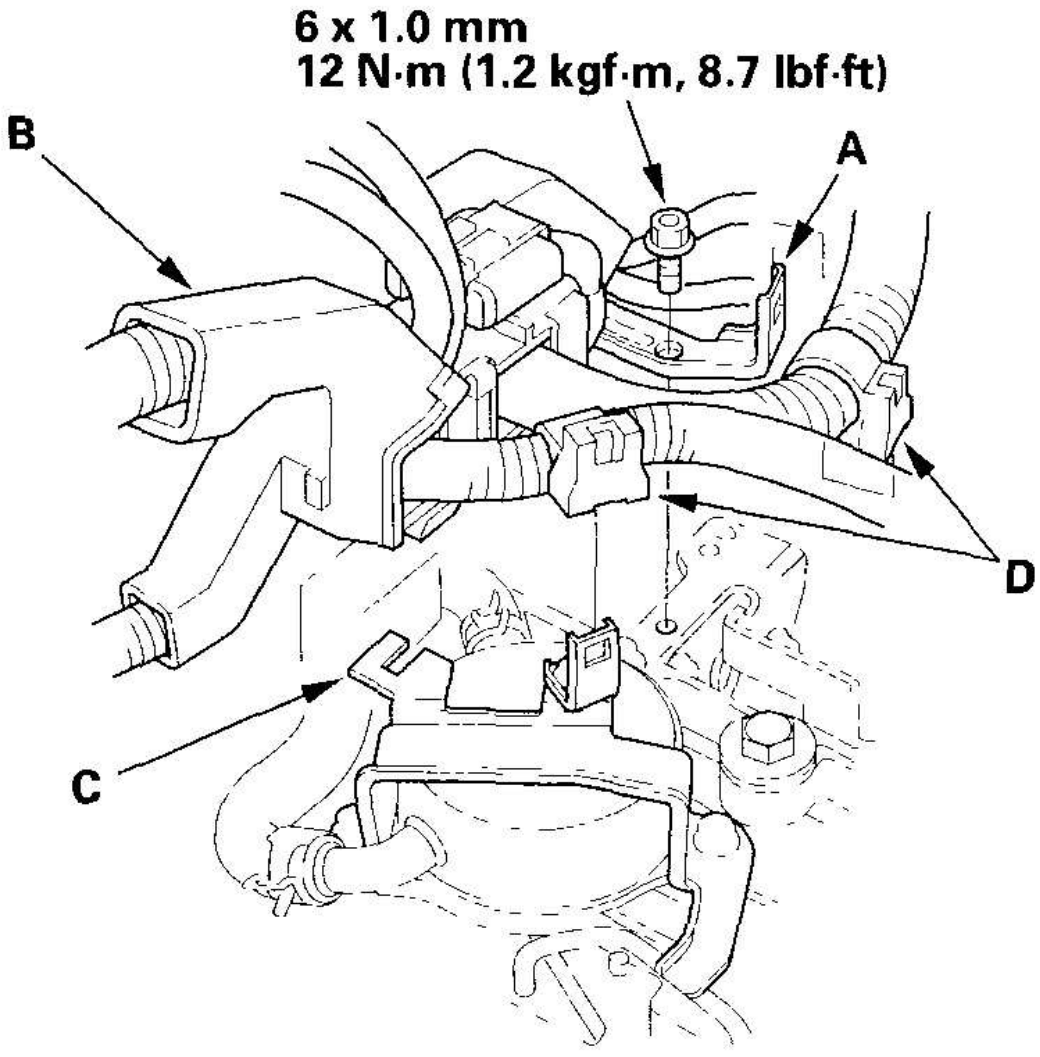


Fig. 285: Installing Harness Clamp Bracket And Harness Cover On Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

41. Install the harness clamps (D) on the clamp brackets.
42. Connect the output shaft (countershaft) speed sensor connector (A), and install the harness clamps (B) on the brackets. Connect the vacuum hose (C) to the vacuum line (D).

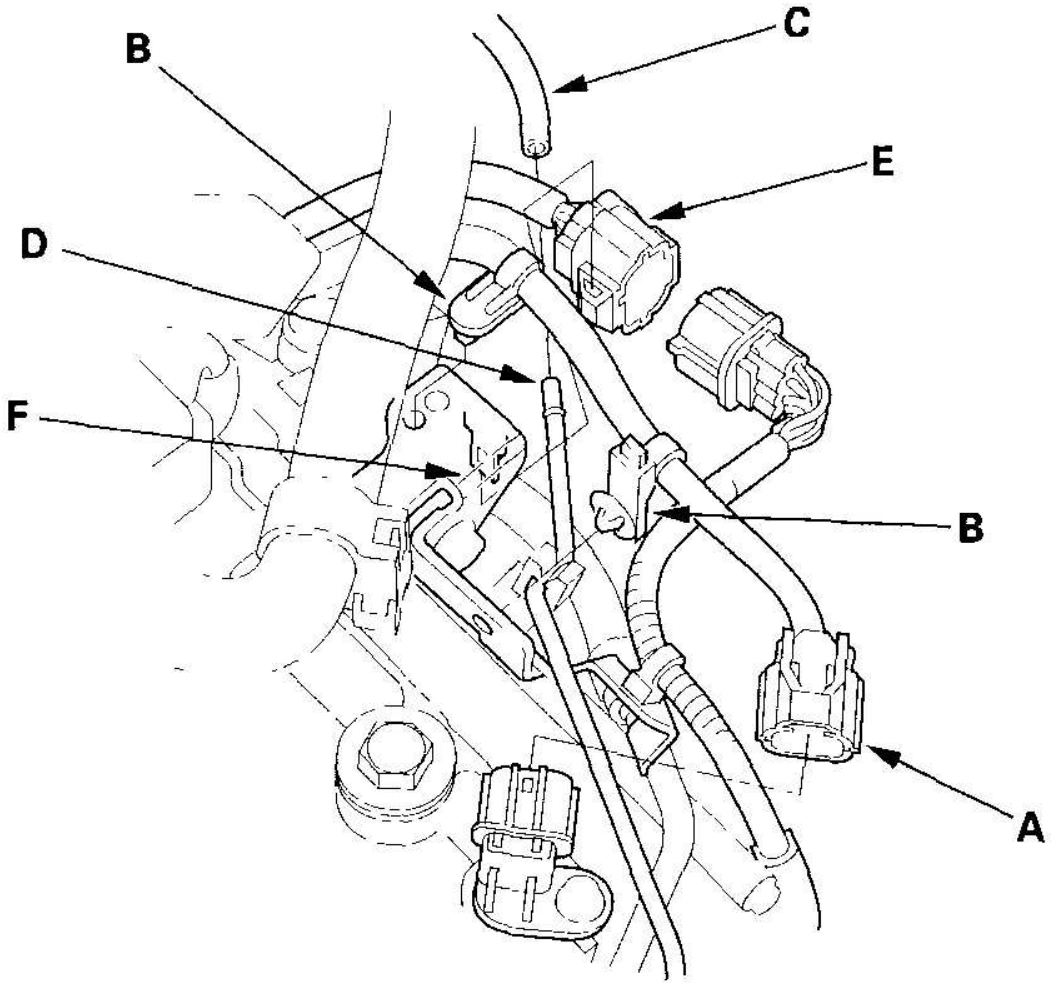


Fig. 286: Connecting Output Shaft (Countershaft) Speed Sensor Connector (A), And Installing Harness Clamps (B)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

43. Connect the transmission range switch connector (E), then install it on its bracket (F).
44. Connect the connectors to the torque converter clutch solenoid valve (A) and shift solenoid valve B.

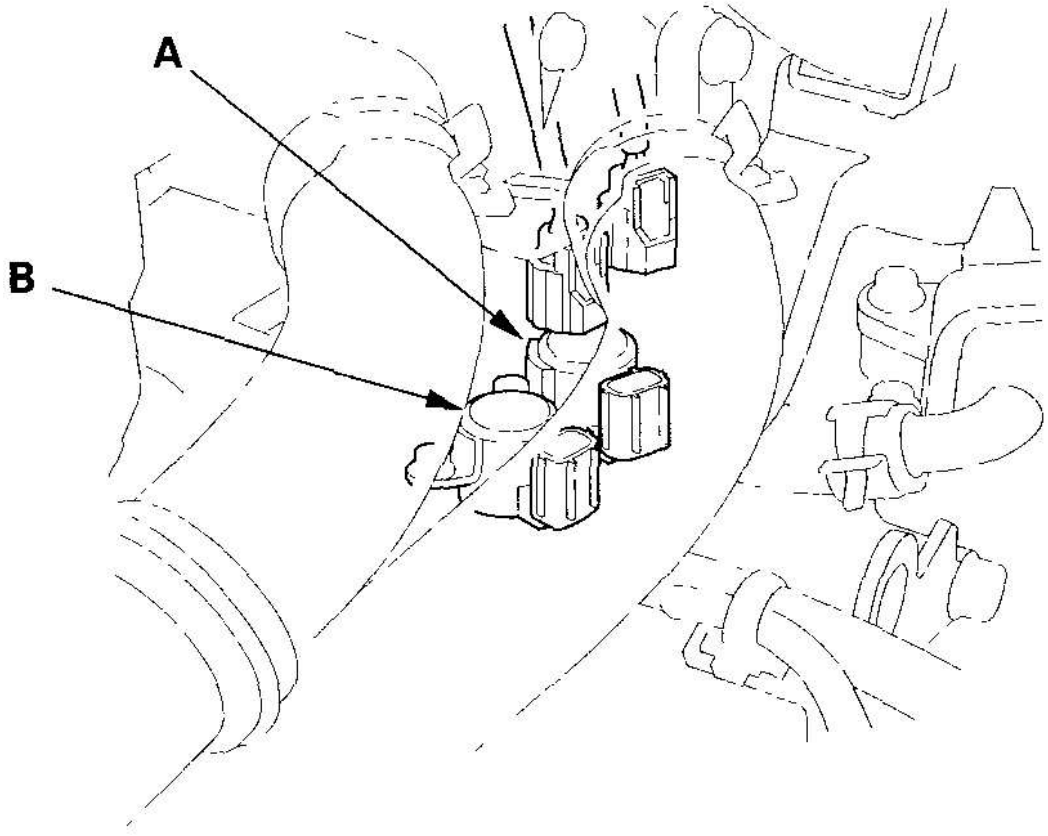


Fig. 287: Connecting Connectors To Torque Converter Clutch Solenoid Valve (A) And Shift Solenoid Valve B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

45. Connect the A/T clutch pressure control solenoid valve A connector, and solenoid valve B connector, and install the harness clamp (C) on the clamp bracket (D).

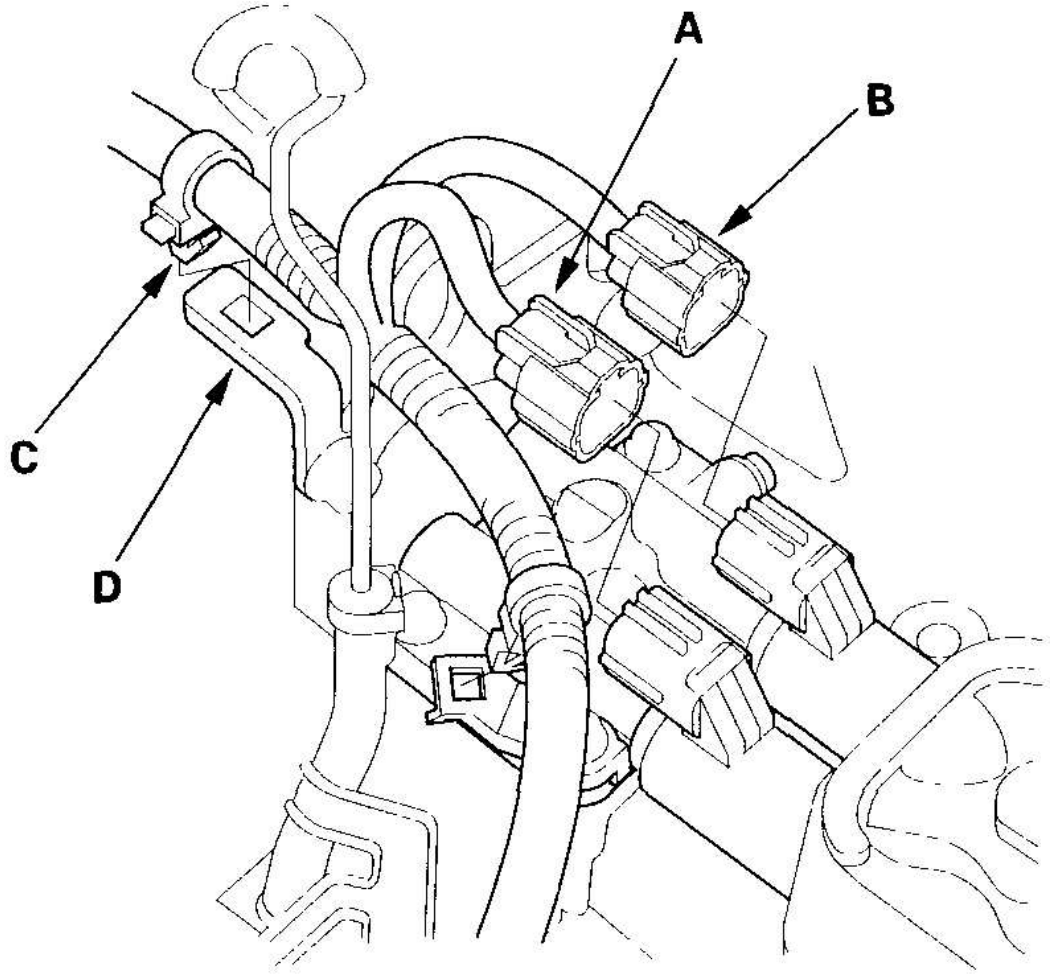


Fig. 288: Installing A/T Clutch Pressure Control Solenoid Valve A And Solenoid Valve B Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

46. Connect shift solenoid valve A connector, solenoid valve C connector, and A/T clutch pressure control solenoid valve C connector (B), and install the harness clamps (D) on the clamp brackets (E).

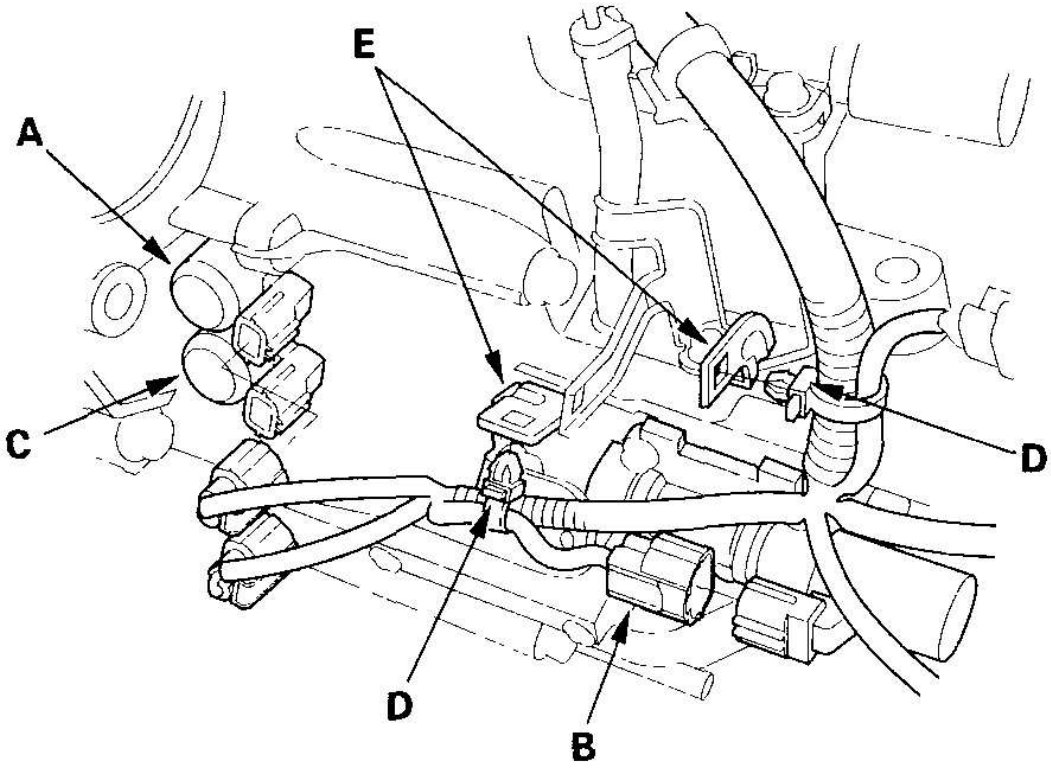


Fig. 289: Connecting Shift Solenoid Valve A And Solenoid Valve C Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

47. Connect the input shaft (mainshaft) speed sensor connector (A) and 4th clutch transmission fluid pressure switch connector (B), and connect the vacuum hose (C) to the vacuum line (D).

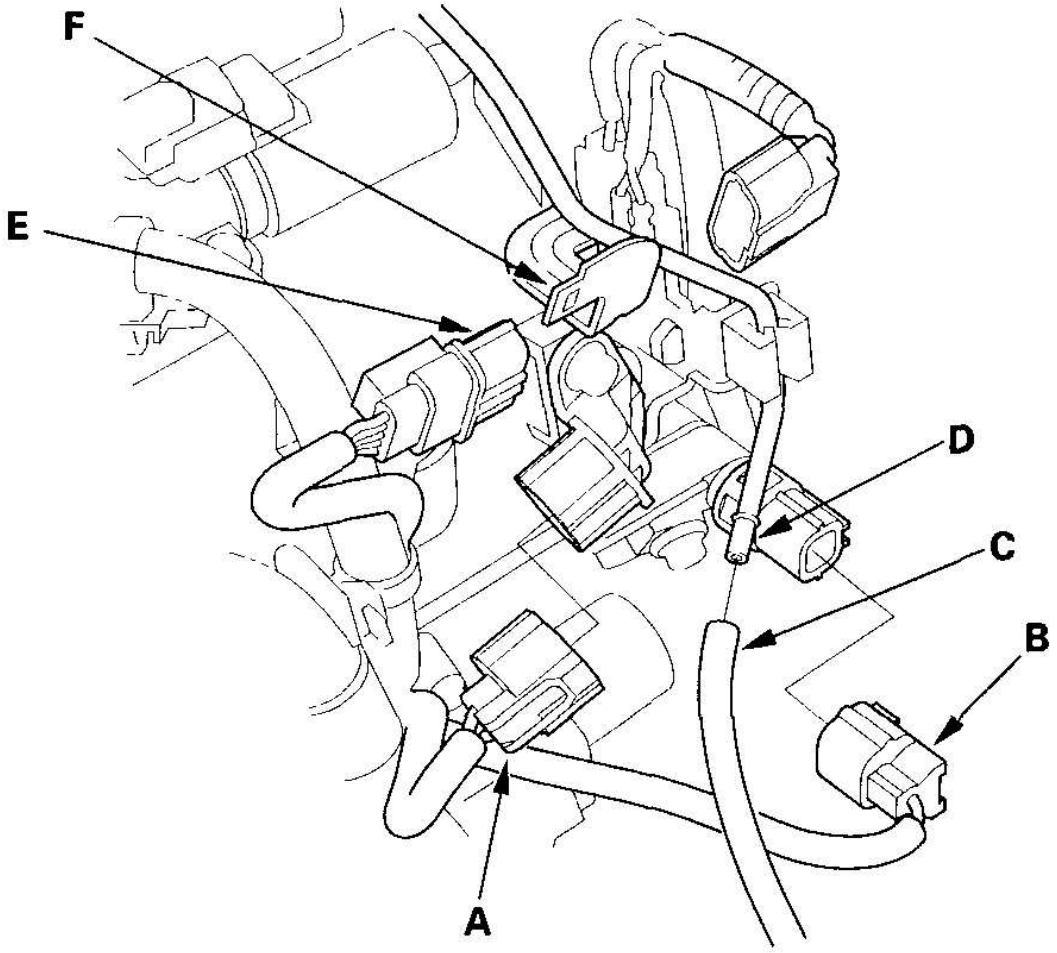


Fig. 290: Connecting Input Shaft (Mainshaft) Speed Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

48. Connect the transmission sub harness connector (E), then install it on its bracket (F).
49. Install the transmission upper mount bracket (A) on the transmission with two bolts.

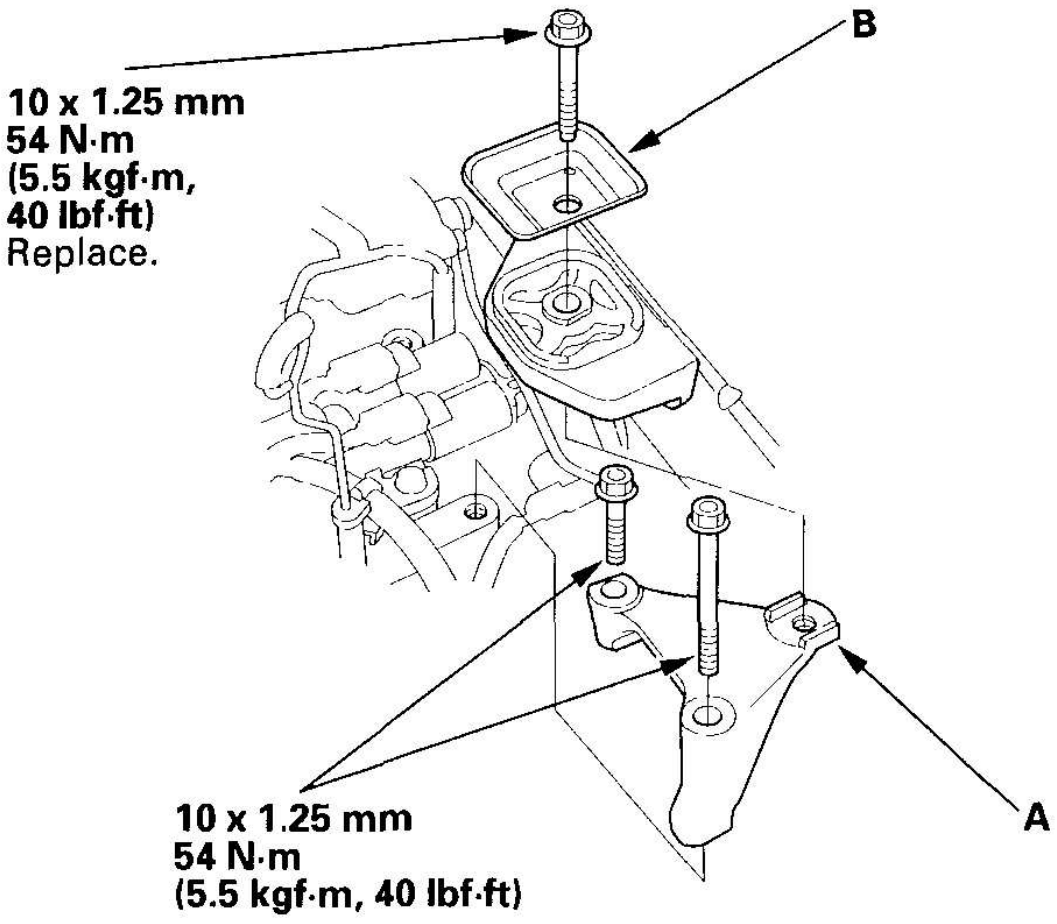


Fig. 291: Installing Transmission Upper Mount Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

50. Install the new upper mount bolt and bracket plate (B).
51. Install the starter (A) on the torque converter housing. Connect the starter cables (B) to the starter, and install the harness clamp on the clamp bracket.

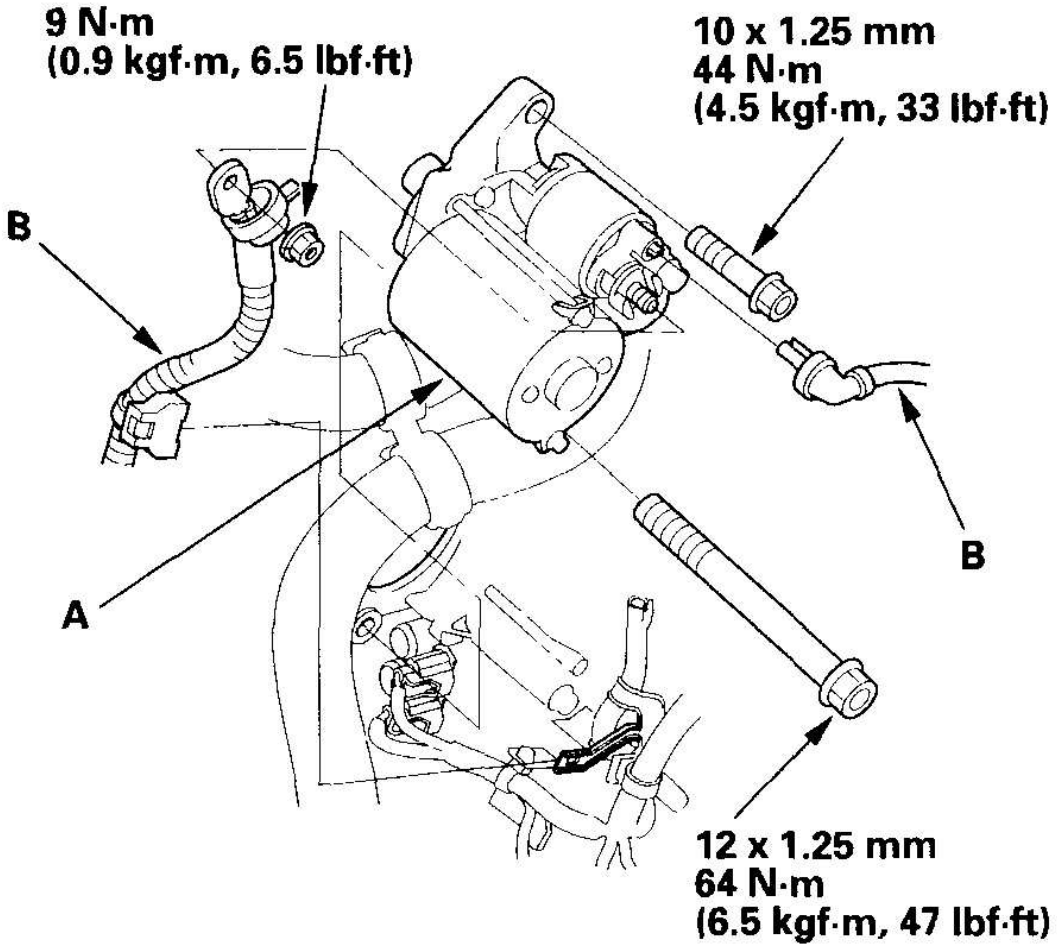


Fig. 292: Installing Starter On Torque Converter Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

52. Install the power steering pump outlet line (A) with a new O-ring (B) to the pump (C), and install the hose (D) in its clamp (E).

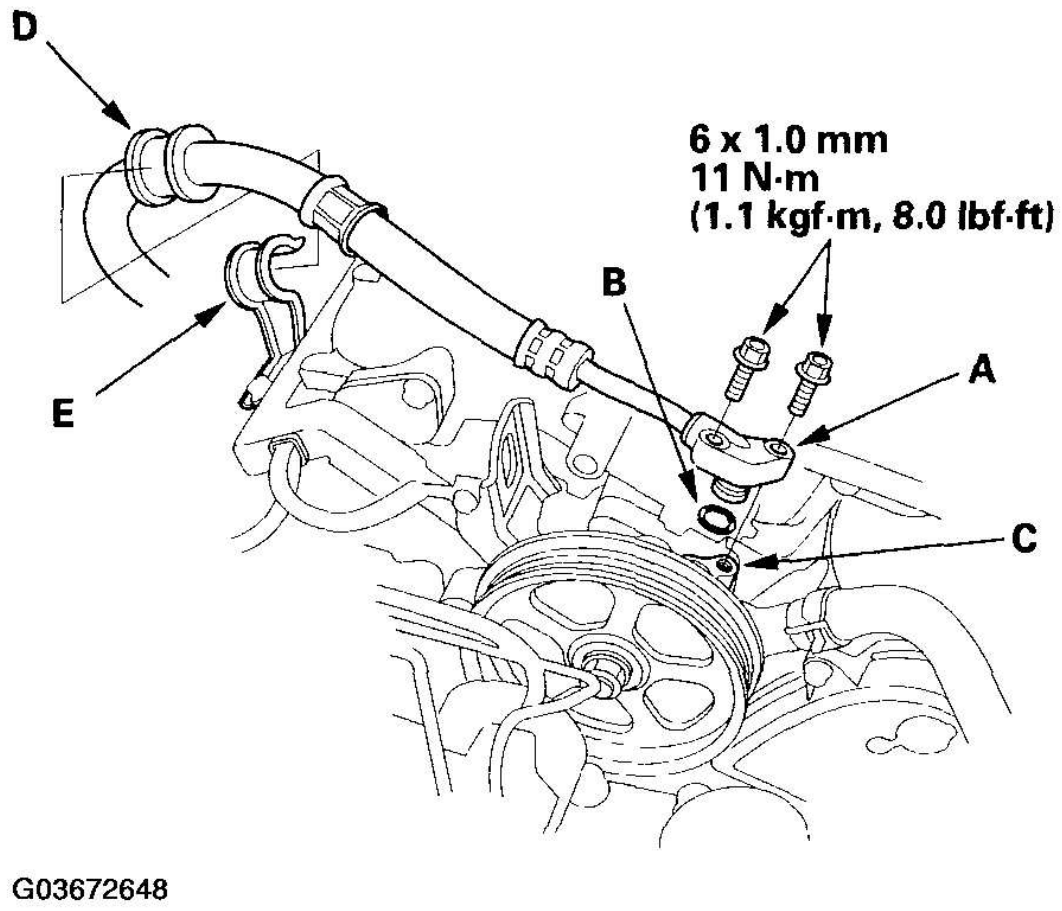


Fig. 293: Installing Power Steering Pump Outlet Line With O-Ring To Pump
Courtesy of AMERICAN HONDA MOTOR CO., INC.

53. Refill the power steering system with fluid (see **FLUID REPLACEMENT**).
54. Refill the transmission with ATF (see step 5 in **ATF Replacement**).
55. Connect the steering joint to the steering gearbox pinion shaft (A) by aligning the reference mark (B), and remove the wire (C) from the joint yoke (D).

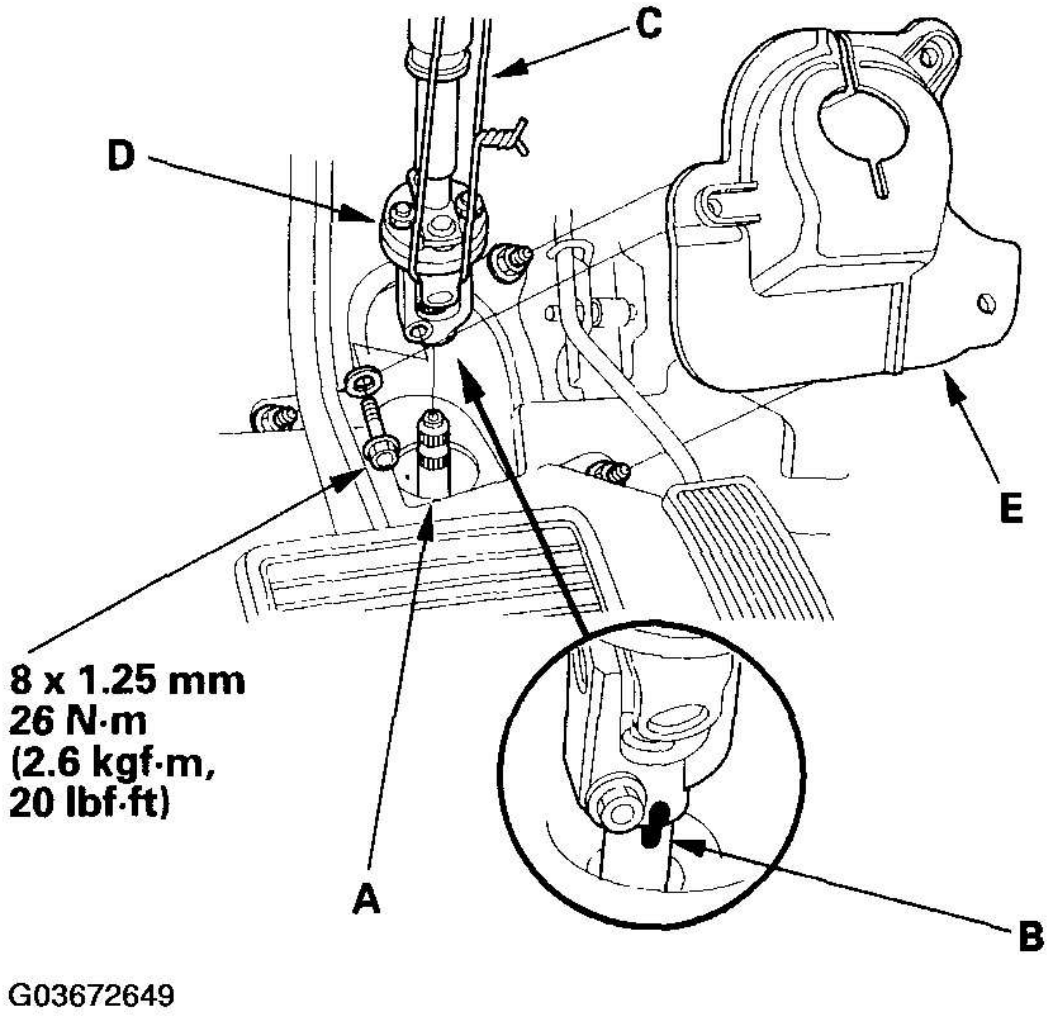


Fig. 294: Connecting Steering Joint To Steering Gearbox Pinion Shaft Aligning Reference Mark
Courtesy of AMERICAN HONDA MOTOR CO., INC.

56. Install the steering joint cover (E).
57. Remove the steering wheel, refer to **STEERING WHEEL REMOVAL** .
58. Center the SRS cable reel and install the steering wheel, refer to **STEERING WHEEL INSTALLATION** .
59. Install the battery base.
60. Install the air cleaner housing and intake air duct.

61. Install the battery tray, battery, and battery cover, then secure the battery with its hold-down bracket.
62. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
63. Reinstall the support strut bracket with the bolts to proper locations on both sides hood.

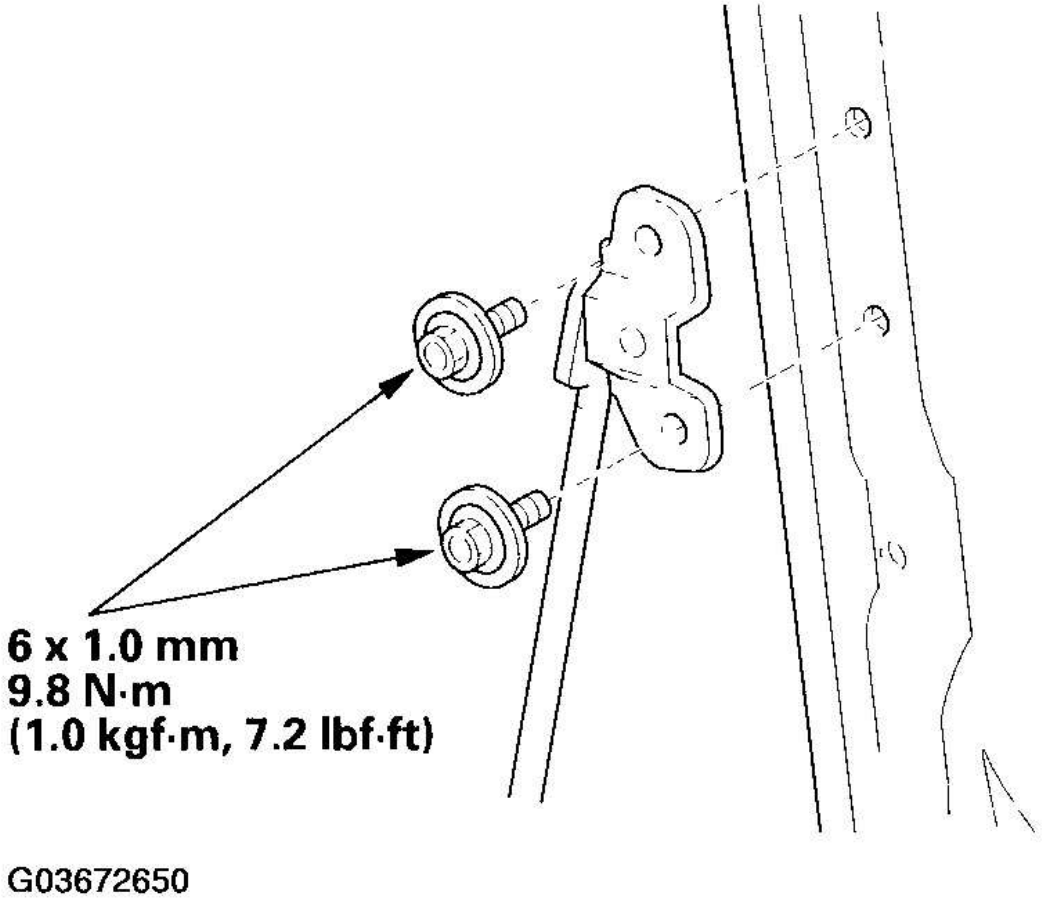


Fig. 295: Reinstalling Support Strut Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

64. Set the parking brake. Start the engine, and shift the transmission through all gears three times.

65. Check the shift lever operation, A/T gear position indicator operation, and shift cable adjustment.
66. Check and adjust the front wheel alignment, refer to **WHEEL ALIGNMENT** .
67. Install the splash shield.
68. Start the engine in the P or N position, and warm it up to normal operating temperature (the radiator fan comes on).
69. Turn off the engine, and check the ATF level (see **ATF LEVEL CHECK**).
70. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .
71. Do the road test (see **ROAD TEST**).
72. Enter the audio and navigation anti-theft codes, then enter the presets, and set the clock.

ATF WARMER REPLACEMENT

NOTE: Replace the ATF warmer with a new one whenever the transmission assembly is replaced.

1. Lift the vehicle up on a lift or apply the parking brake, block rear wheels, and raise the front of the vehicle. Make sure it is securely supported.
2. Remove the splash shield.
3. Drain the engine coolant (see **COOLANT CHECK**).
4. Remove the intake air duct and air cleaner housing.
5. Remove the harness clamps (A) and harness cover (B) from the harness clamp bracket (C), and remove the bolt securing the bracket.

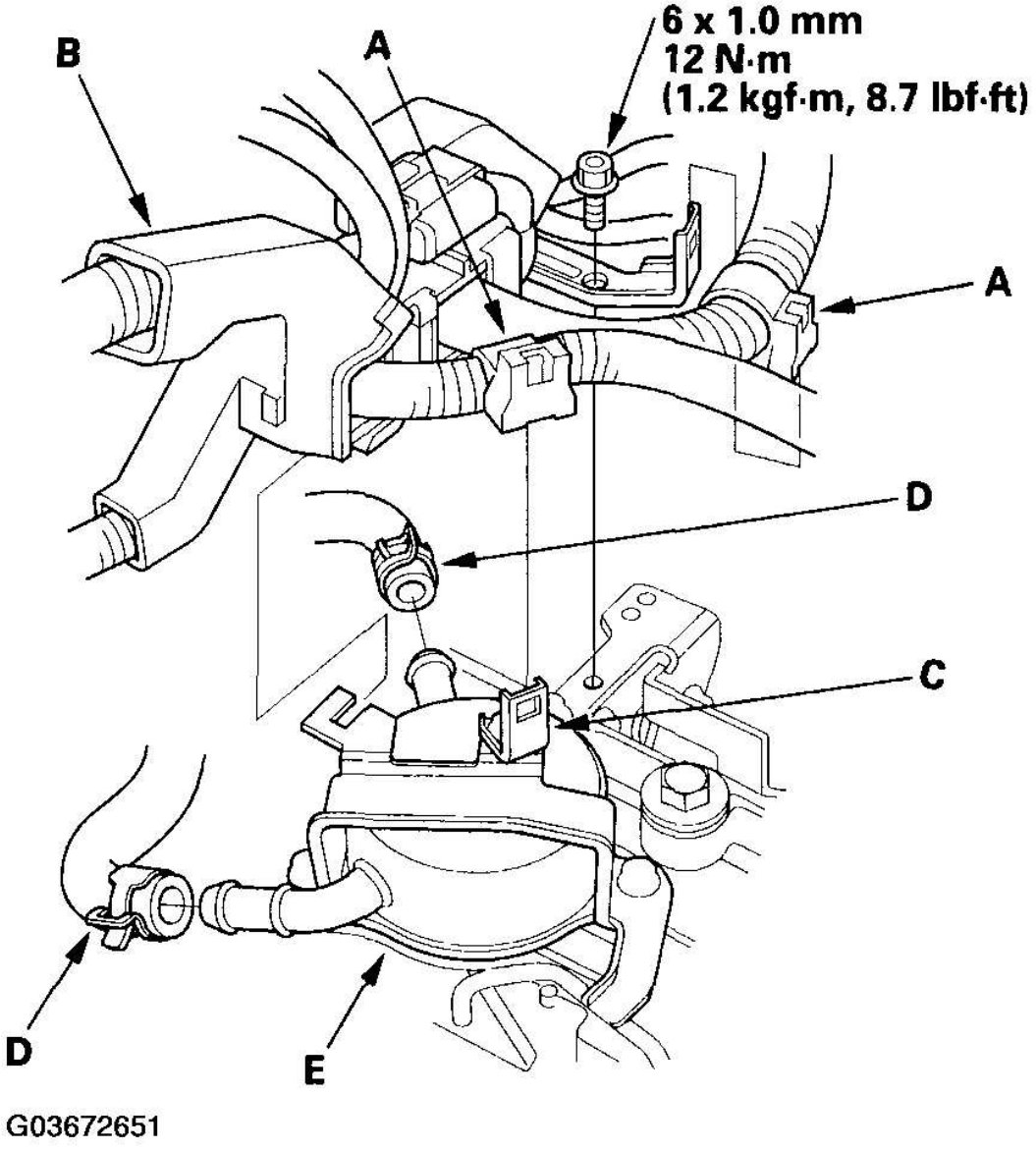


Fig. 296: Removing Harness Clamps And Harness Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Disconnect the water hoses (D) from the ATF warmer (E).
7. Put a shop rugs around the ATF warmer (A) to catch the ATF that flows out.
8. Remove the bolts securing the ATF warmer and the bracket (B), then remove the ATF warmer from the transmission

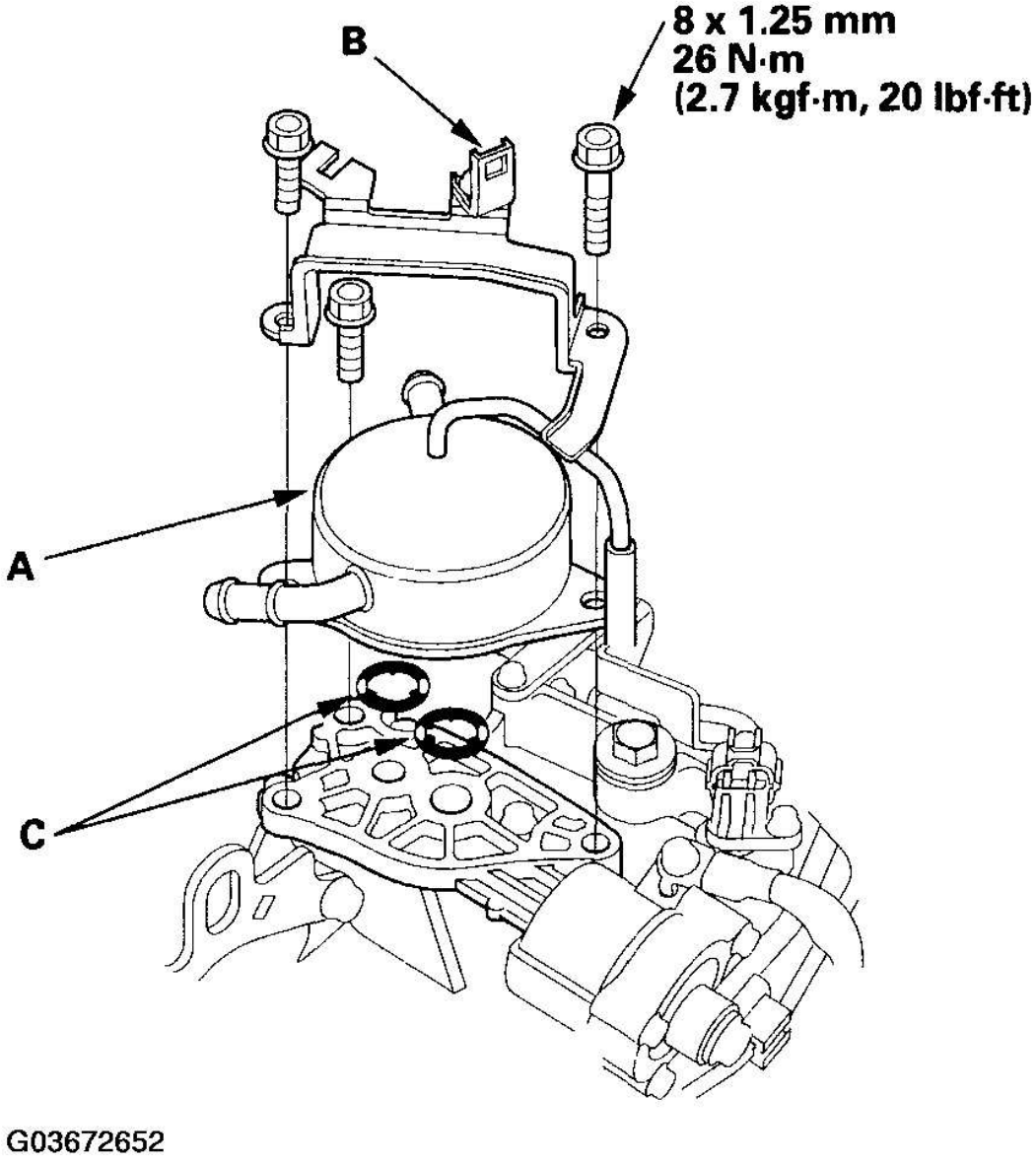


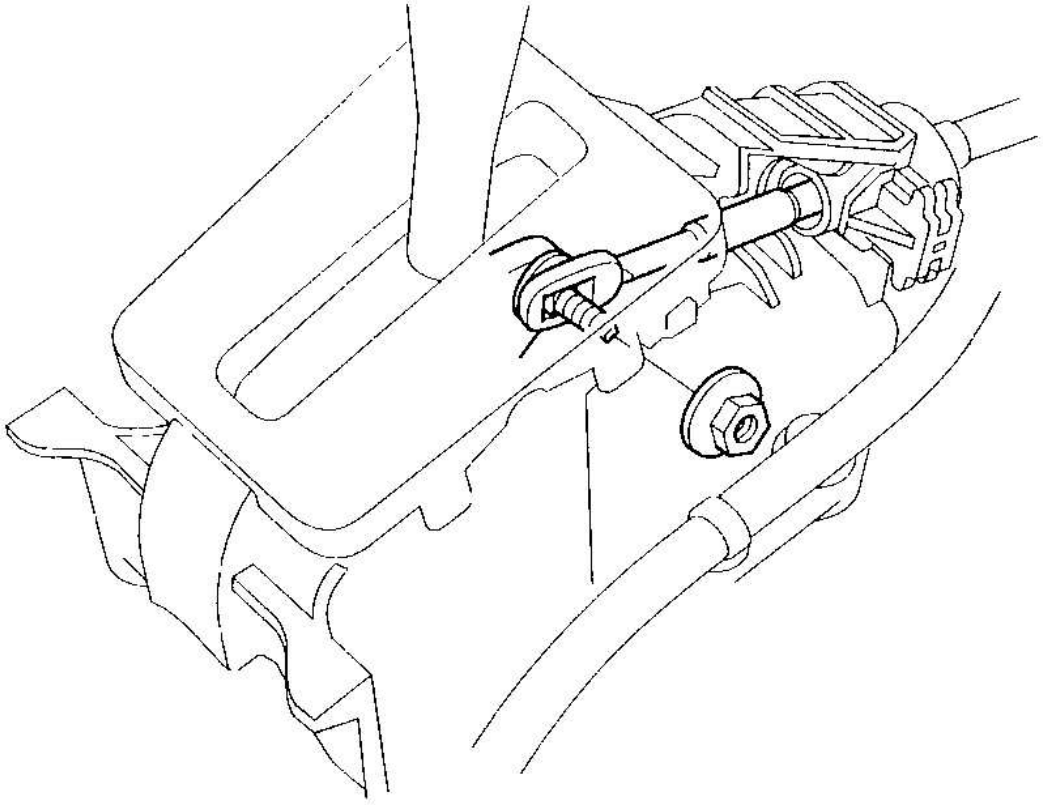
Fig. 297: Removing ATF And Bracket Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Clean the mounting surfaces and fluid passages. Do not allow dust or other foreign particles to enter the transmission
10. Install the new ATF warmer with the new O-rings (C) and the bracket. Do not pinch the O-rings.

11. Connect the water hoses on the ATF warmer, and secure the hoses with the clips.
12. Install the harness clamp bracket bolt, and install the harness clamps and harness cover on the bracket.
13. Install the intake air duct and air cleaner housing.
14. Fill the radiator with the engine coolant, then bleed air from the cooling system (see step 6 in **COOLANT REPLACEMENT**).
15. Install the splash shield.

SHIFT CABLE REPLACEMENT

1. Raise the vehicle, and make sure it is securely supported.
2. Remove the center console, refer to **CENTER CONSOLE REMOVAL/INSTALLATION** .
3. Shift the transmission into the R position.
4. Remove the nut securing the shift cable end.



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Fig. 298: Removing Shift Cable End Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Press the holder lock release (A), and pull out the socket holder (B) on the shift cable (C) of the shift lever bracket base (D).

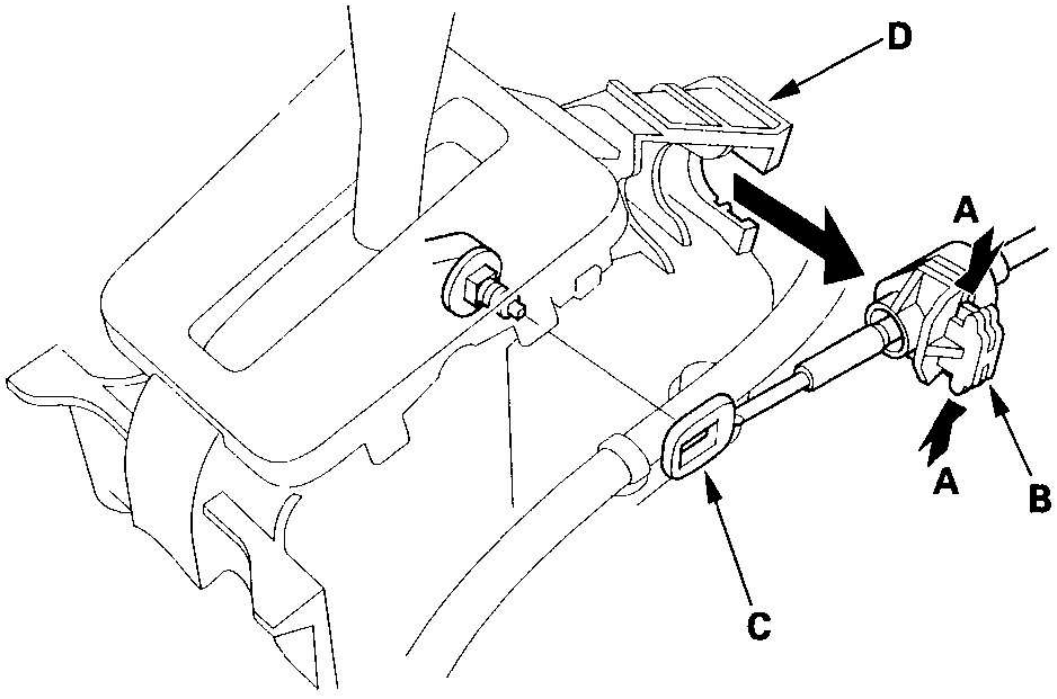


Fig. 299: Pressing Holder Lock Release And Pulling Out Socket Holder On Shift Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the heat shield under the shift cable grommet.
7. Remove the shift cable bracket (A) and grommet (B).

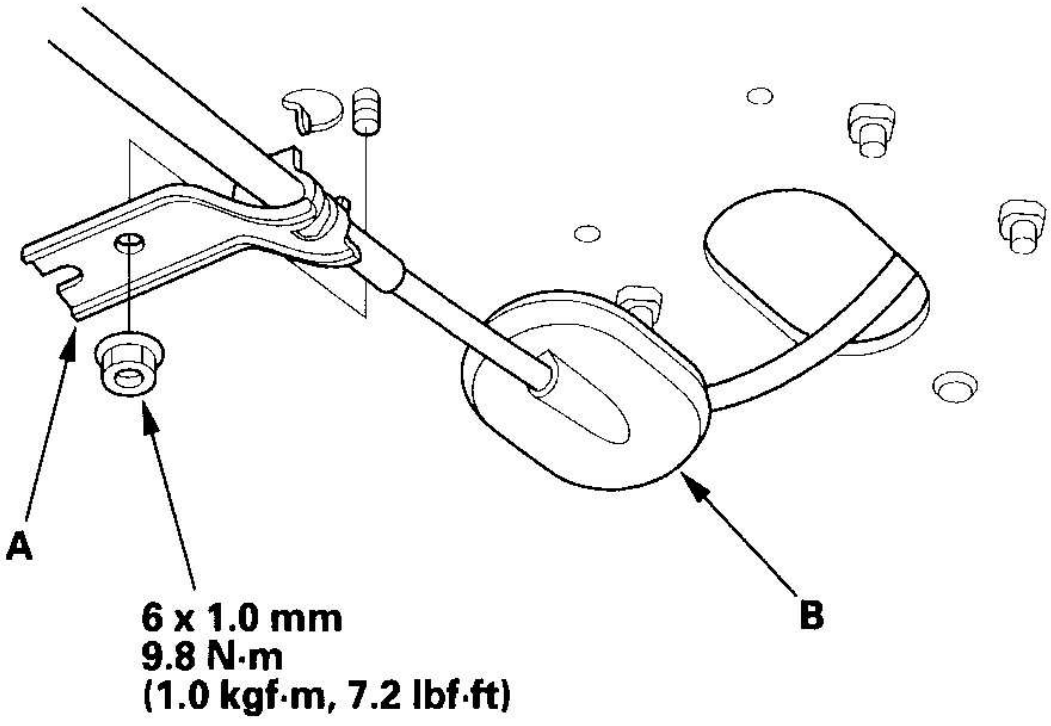


Fig. 300: Removing Shift Cable Bracket And Grommet
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the bolts securing shift cable holder (A), then remove the shift cable cover (B).

NOTE: To prevent damage to the control lever joint, remove the bolts securing the holder before removing the bolts securing the cover.

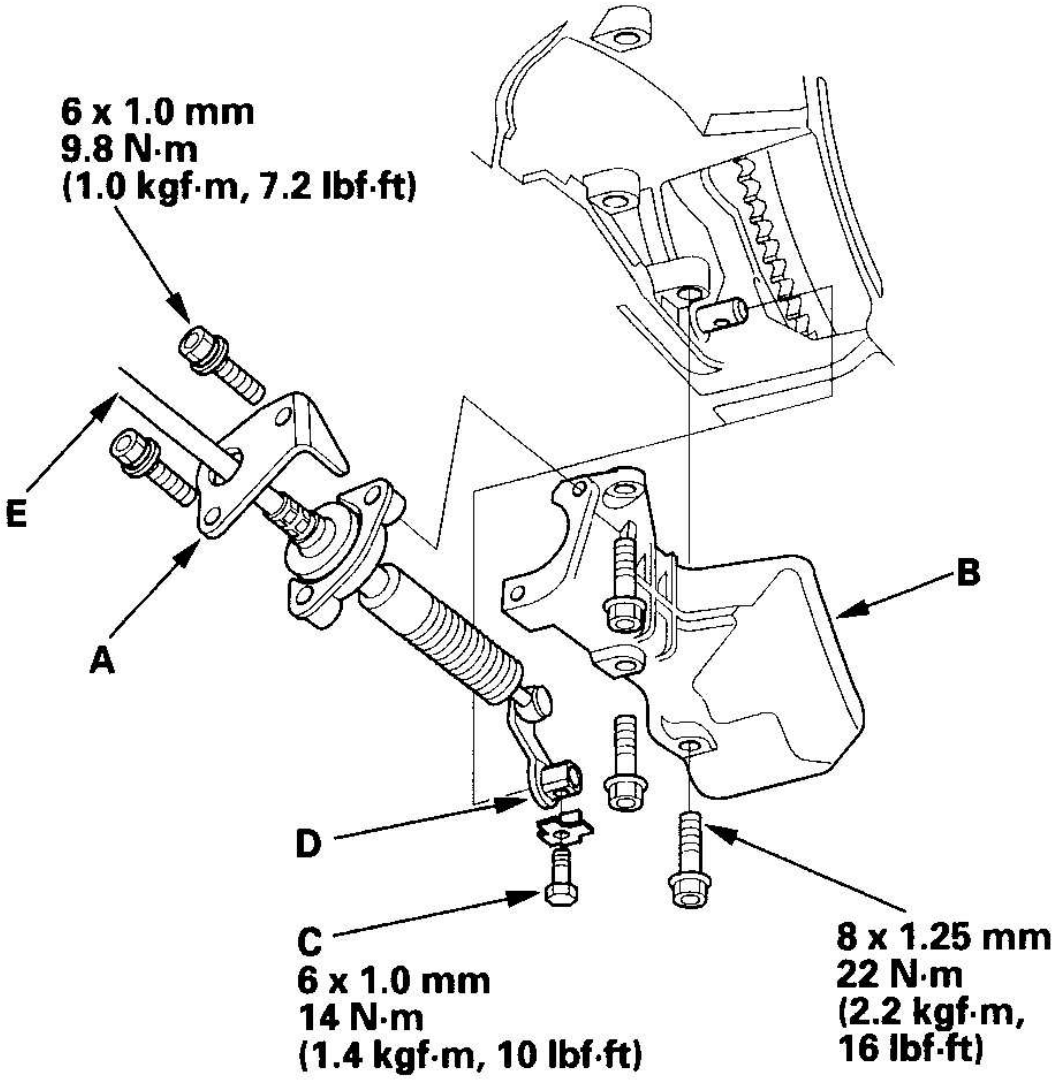


Fig. 301: Removing Shift Cable Holder Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the lock bolt (C) securing the control lever (D), then remove the shift cable (E) and the control lever. Do not bend the shift cable excessively.
10. Insert the new shift cable through the grommet hole. Do not bend the shift cable excessively.
11. Install the shift cable bracket on the body, then install the grommet.

12. Verify that the transmission is in the R position at the control lever.
13. Install the selector control lever on the selector control shaft. Do not bend the shift cable excessively.
14. Install the lock bolt with a new lock washer, then bend the lock washer tab against the bolt head.
15. Install the shift cable cover, then secure the shift cable holder on the cover with the bolts.

NOTE: To prevent damage to the control lever joint, be sure install the shift cable holder after installing the shift cable cover to the torque converter housing.

16. Install the heat shield.
17. Turn the ignition switch ON (II), and verify that the R position indicator comes on.
18. If necessary, push the shift cable until it stops, then release it. Pull the shift cable back one step so that the shift position is in R. Do not hold the shift cable guide (A) to adjust the shift cable (B).

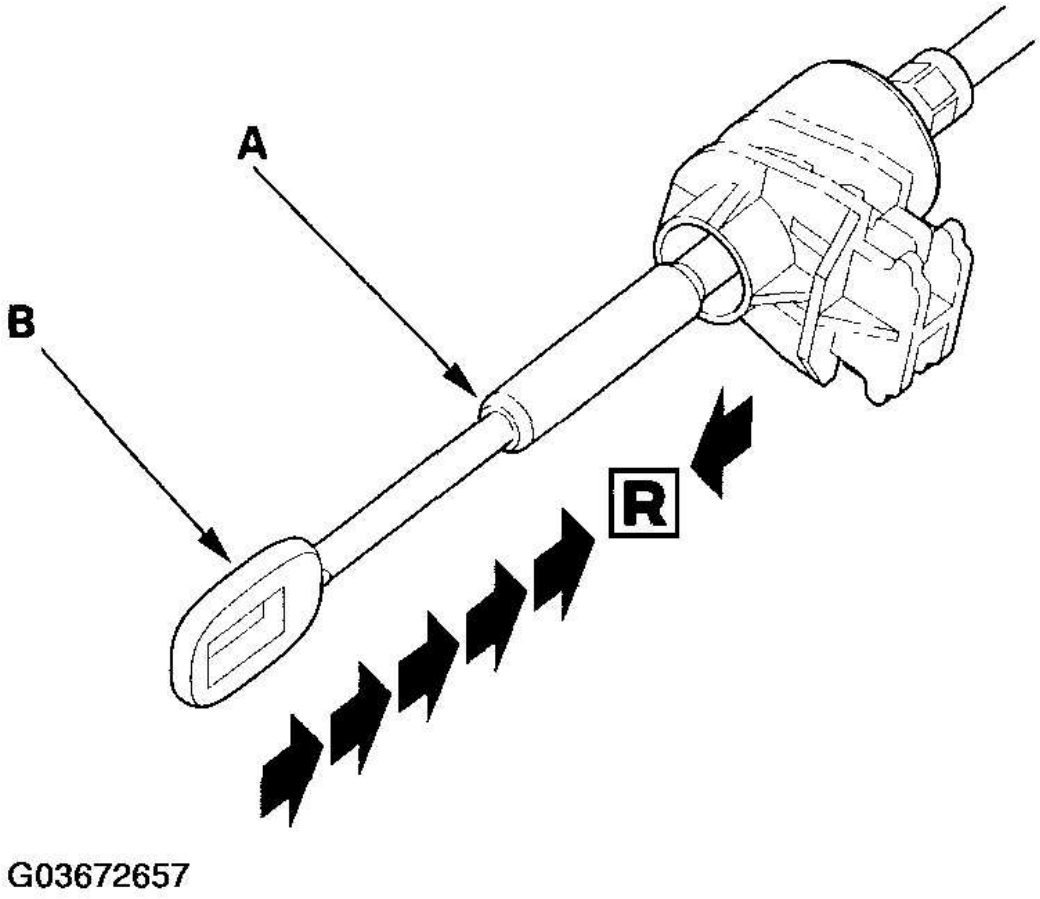


Fig. 302: Pulling Shift Cable Back To R Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Turn the ignition switch OFF.
20. Insert a 6.0 mm (0.24 in.) pin (A) through the positioning hole (B) on the shift lever bracket base and into the positioning hole (C) on the shift lever. The shift lever is secured in the R position.

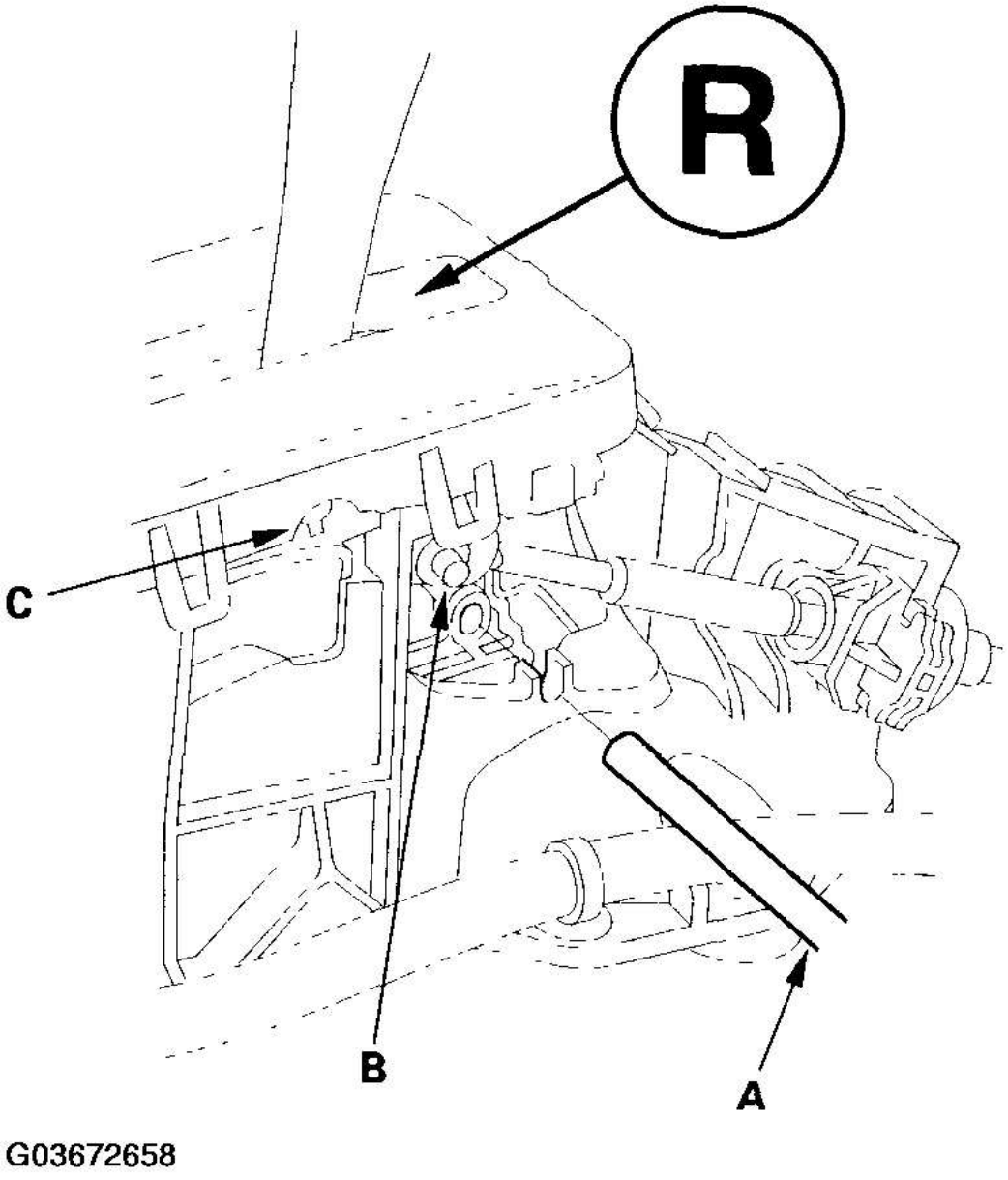


Fig. 303: Inserting Pin Through Positioning Hole On Shift Lever Bracket Base
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Align the socket holder (A) on the shift cable (B) with the slot in the bracket base (C), then slide the holder into base. Install the shift cable end (D) over the

mounting stud (E) by aligning its square hole (F) with the square fitting (G) at the bottom of the stud. Push the holder until it snaps securely in place. Do not install the shift cable by holding the shift cable guide (H).

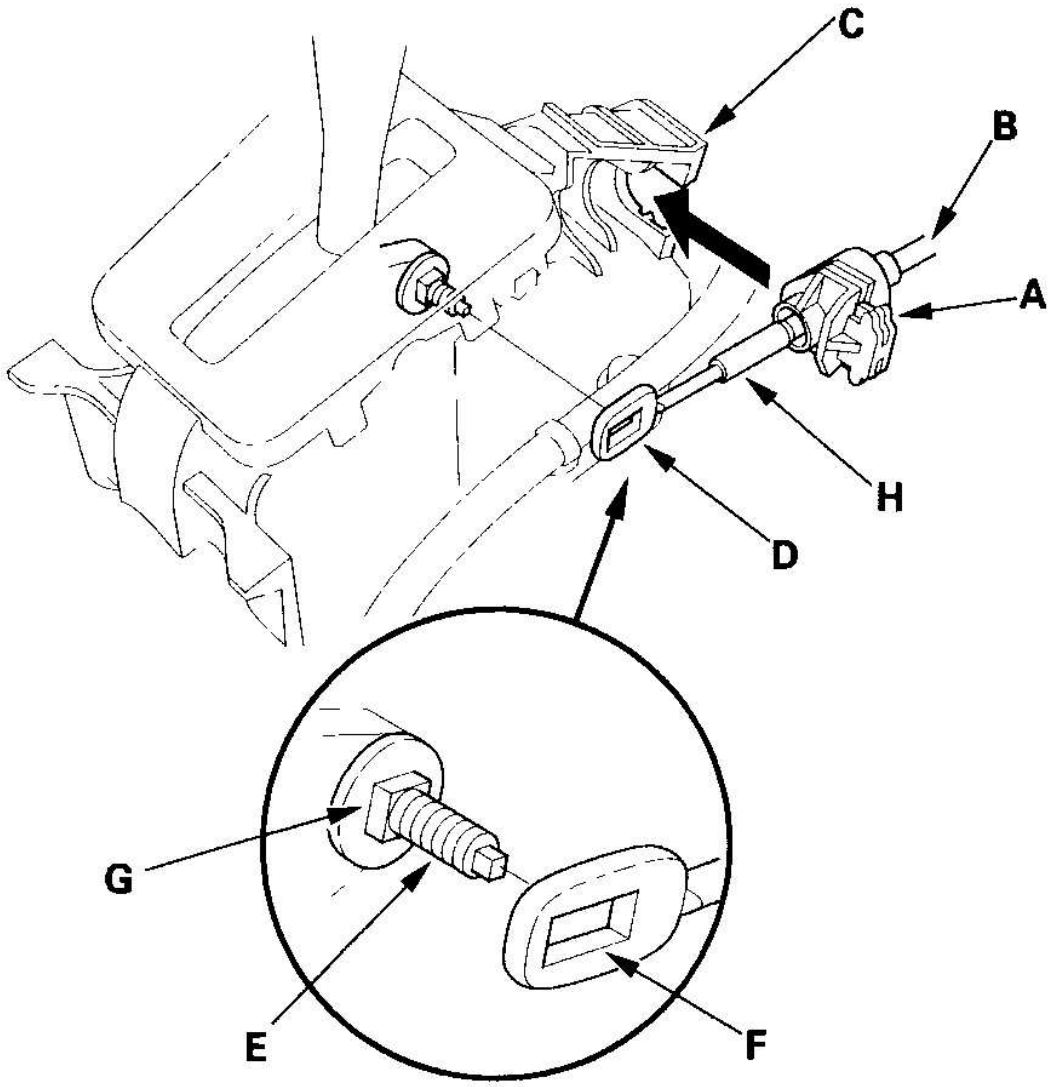


Fig. 304: Aligning Socket Holder On Shift Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Verify that the shift cable end (A) is properly installed on the mounting stud

(B).

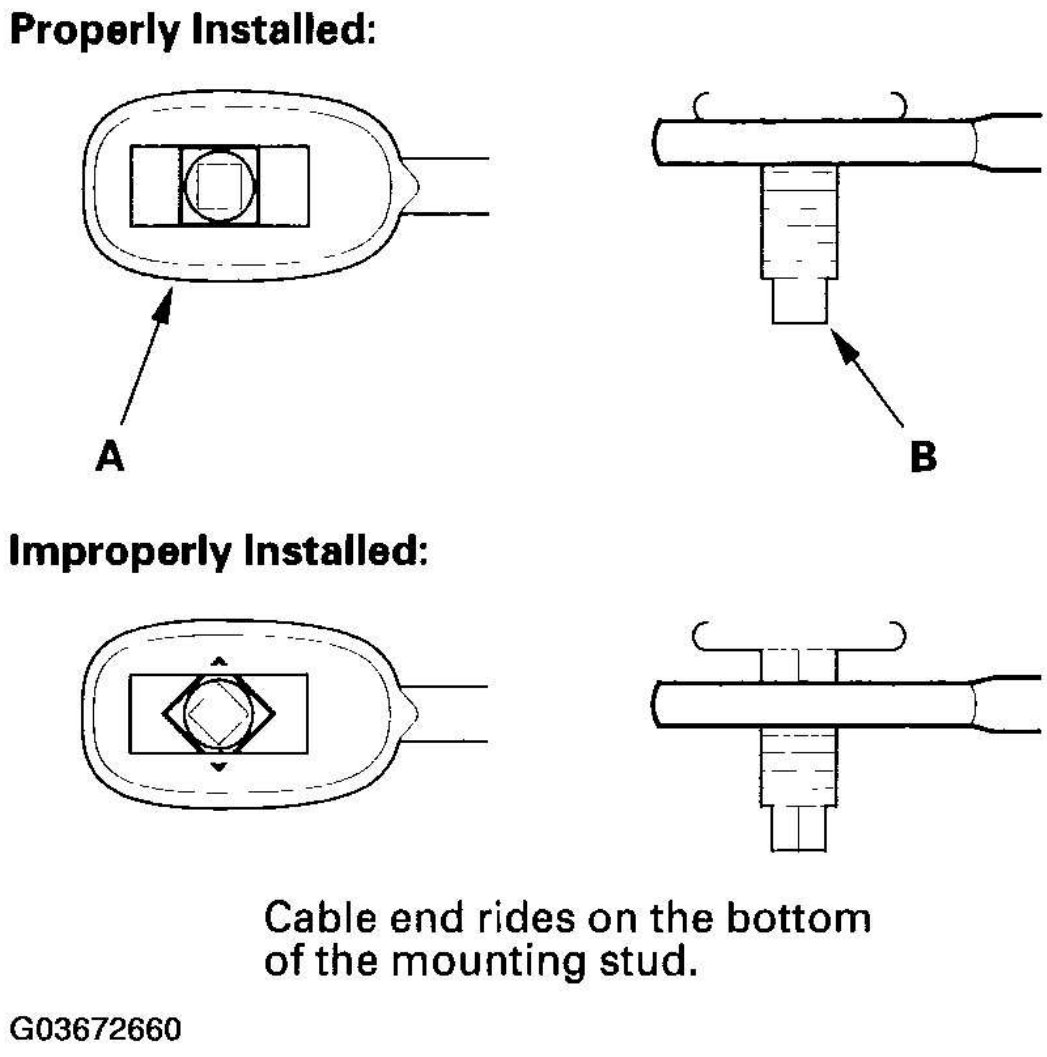


Fig. 305: Verifying Shift Cable End Is Properly Installed
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. If improperly installed, remove the shift cable from the bracket base, and reinstall the shift cable. Do not install the shift cable end on the mounting stud while the shift cable is on the bracket base.
24. Install and tighten the nut.

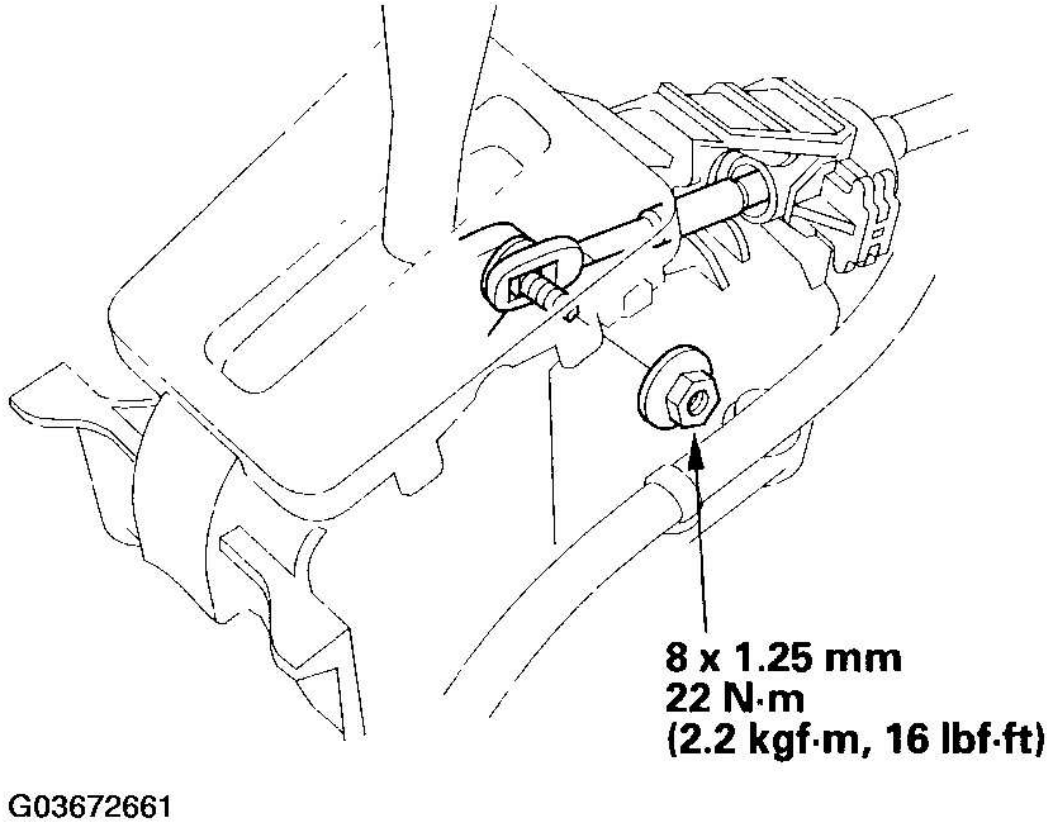


Fig. 306: Tightening Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

25. Remove the 6.0 mm (0.24 in.) pin that was installed to hold the shift lever.
26. Move the shift lever to each position, and verify that the A/T gear position indicator follows the transmission range switch.
27. Allow the front wheels to rotate freely.
28. Start the engine, and check the shift lever operation in all gears.
29. Push the shift lock release, and verify that the shift lever releases.
30. Reinstall the center console, refer to **CENTER CONSOLE REMOVAL/INSTALLATION** .

A/T GEAR POSITION INDICATOR

COMPONENT LOCATION INDEX

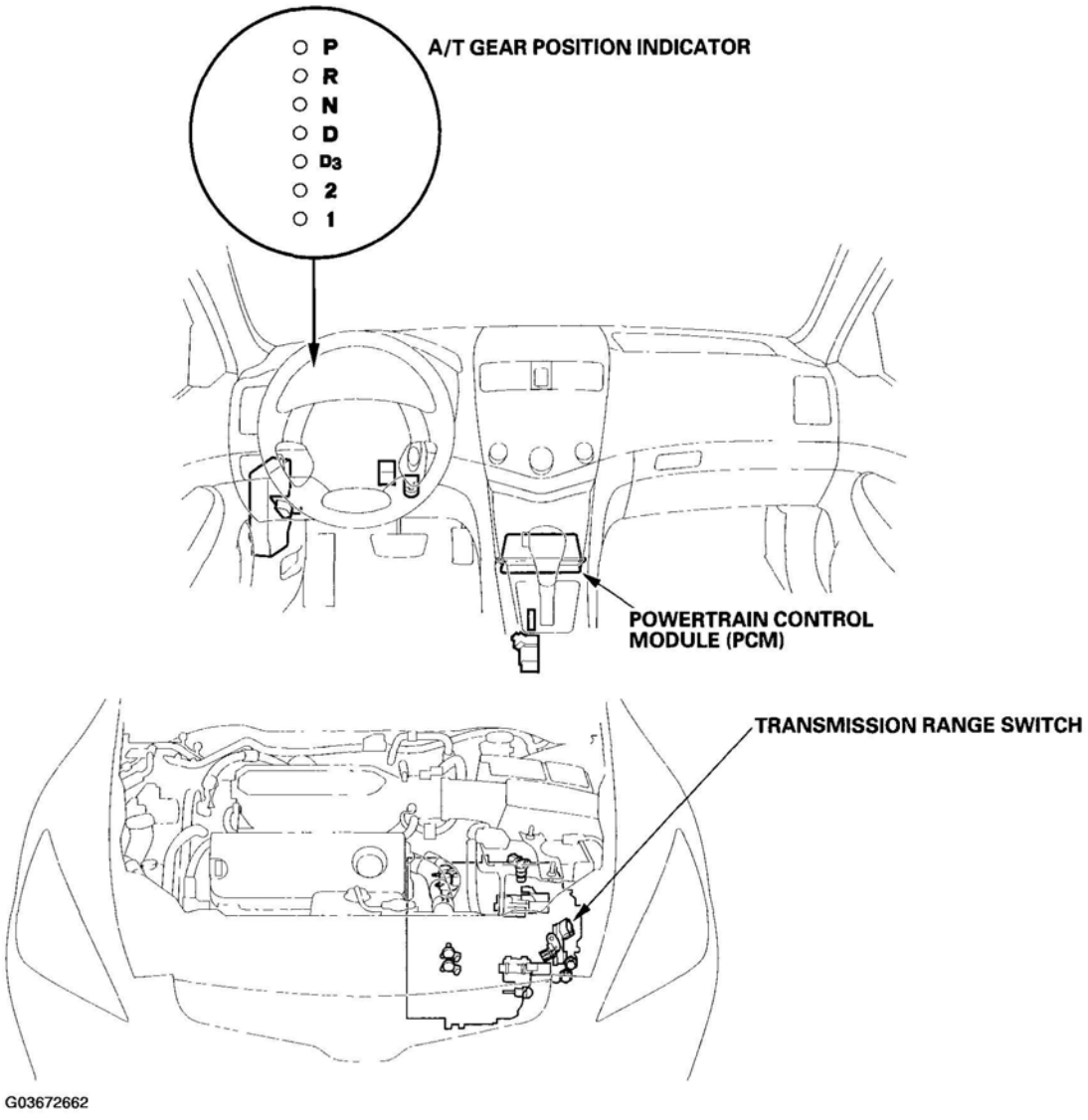
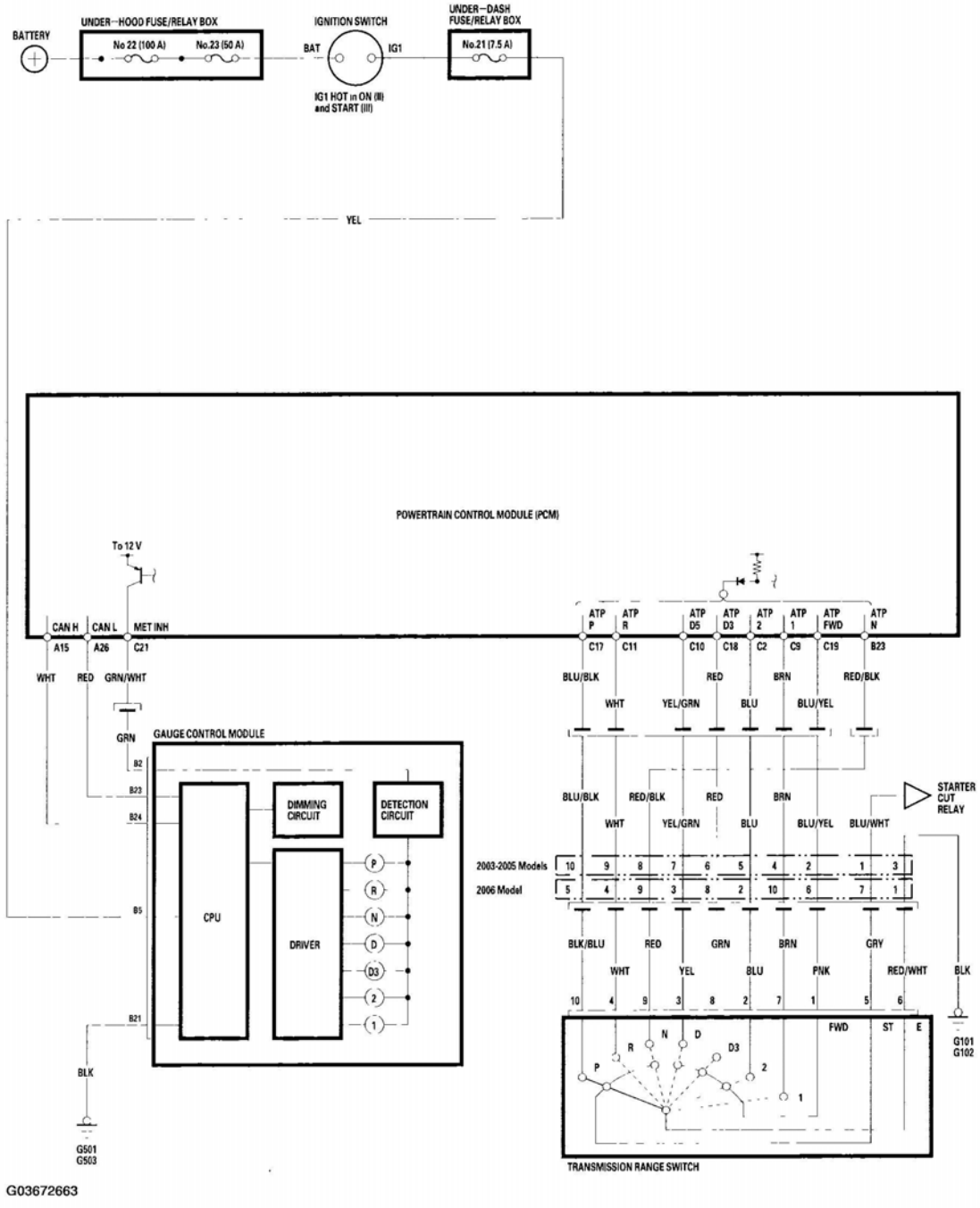


Fig. 307: Locating A/T Gear Position Indicator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM



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Fig. 308: A/T Gear Position Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/T GEAR POSITION INDICATOR CIRCUIT TROUBLESHOOTING

Symptom: A/T gear position indicator does not indicate the shift lever position, the

D indicator does not blink, and no transmission range switch, CAN line DTCs are indicated.

1. Check the indicator drive circuit and communication line in the gauge control module with the self-diagnostic procedure of the gauge control module, refer to **SELF-DIAGNOSTIC FUNCTION** .

   Is the system OK?

   YES - Go to step 2.

   NO - Record the ODO data in the old gauge control module, and replace the gauge control module, refer to **GAUGE CONTROL MODULE REPLACEMENT** . Input the old ODO data in the new gauge control module with the HDS, refer to **GAUGE CONTROL MODULE REPLACEMENT** .
2. Remove the gauge control module.
3. Turn the ignition switch ON (II).
4. Measure the voltage between gauge control module connector terminal B2 and body ground. The shift lever can be in any position.

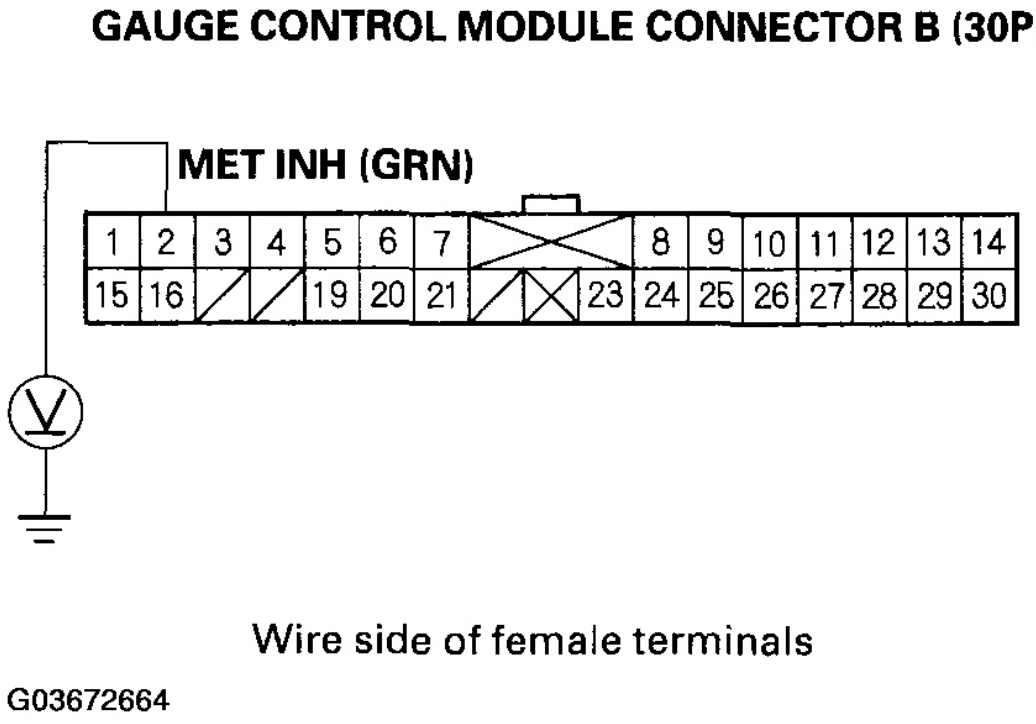


Fig. 309: Measuring Voltage Between Gauge Control Module Connector Terminal B2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Faulty A/T gear position indicator in the gauge control module, replace the gauge control module.

NO - Go to step 5.

5. Measure the voltage between PCM connector terminal C21 and body ground.

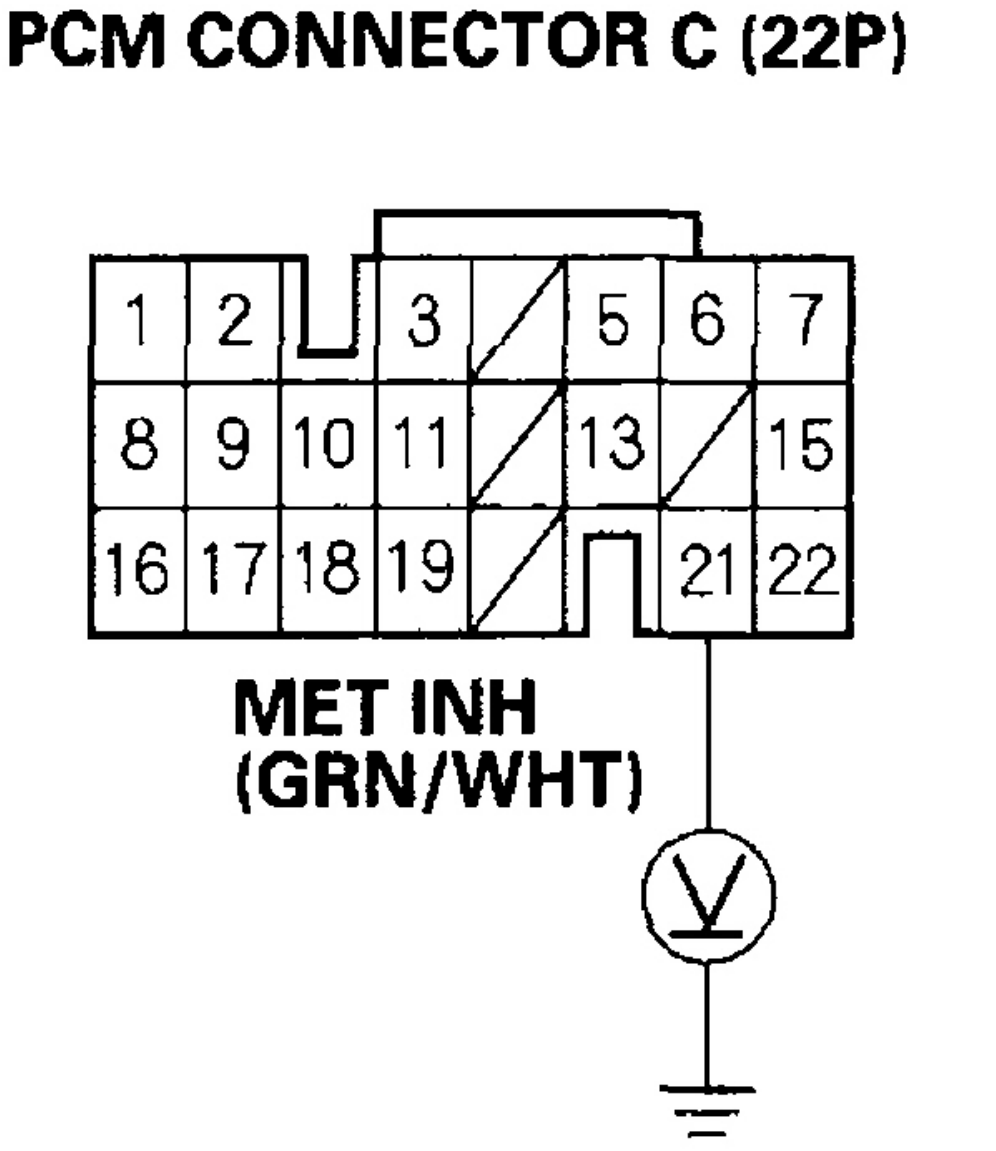


Fig. 310: Measuring Voltage Between PCM Connector Terminal C21 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Repair open or short in the wire between PCM connector terminal C21 and the gauge control module connector terminal B2.

NO - Check for loose terminal fit in the PCM connectors. If necessary, substitute a known-good PCM and recheck.

TRANSMISSION RANGE SWITCH TEST

1. Remove the transmission range switch harness connector (A) from the connector bracket (B), then disconnect the connector.

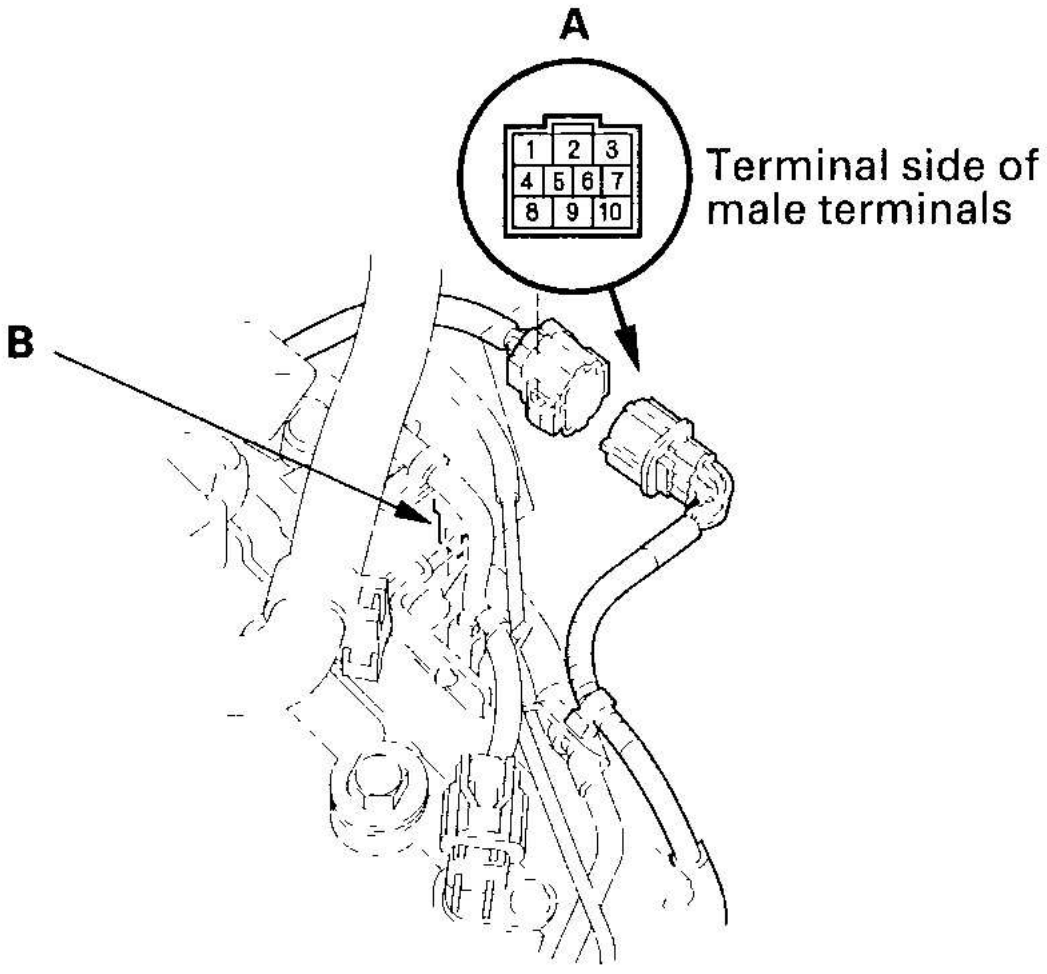


Fig. 311: Removing Transmission Range Switch Harness Connector From Connector Bracket (2003-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2006-07 Model:

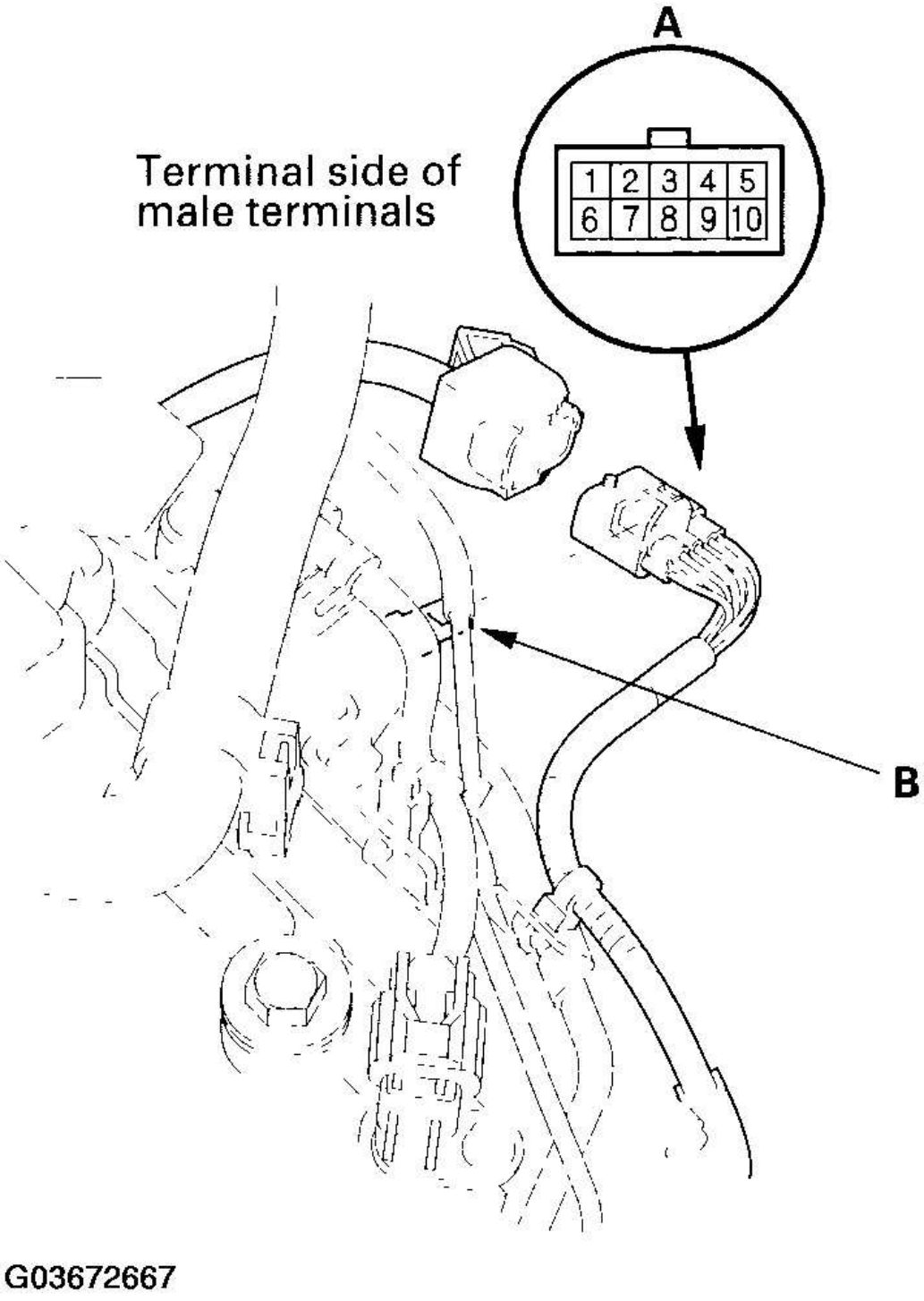


Fig. 312: Removing Transmission Range Switch Harness Connector From

Connector Bracket (2006-07 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check for continuity between terminals at the harness connector. There should be continuity between the terminals in **Fig. 313** or **Fig. 314** for each switch position.
   - If the continuity test for each position is good, the switch is OK. Reconnect the connector.
   - If there is no continuity at one or more switch positions, go to step 3.

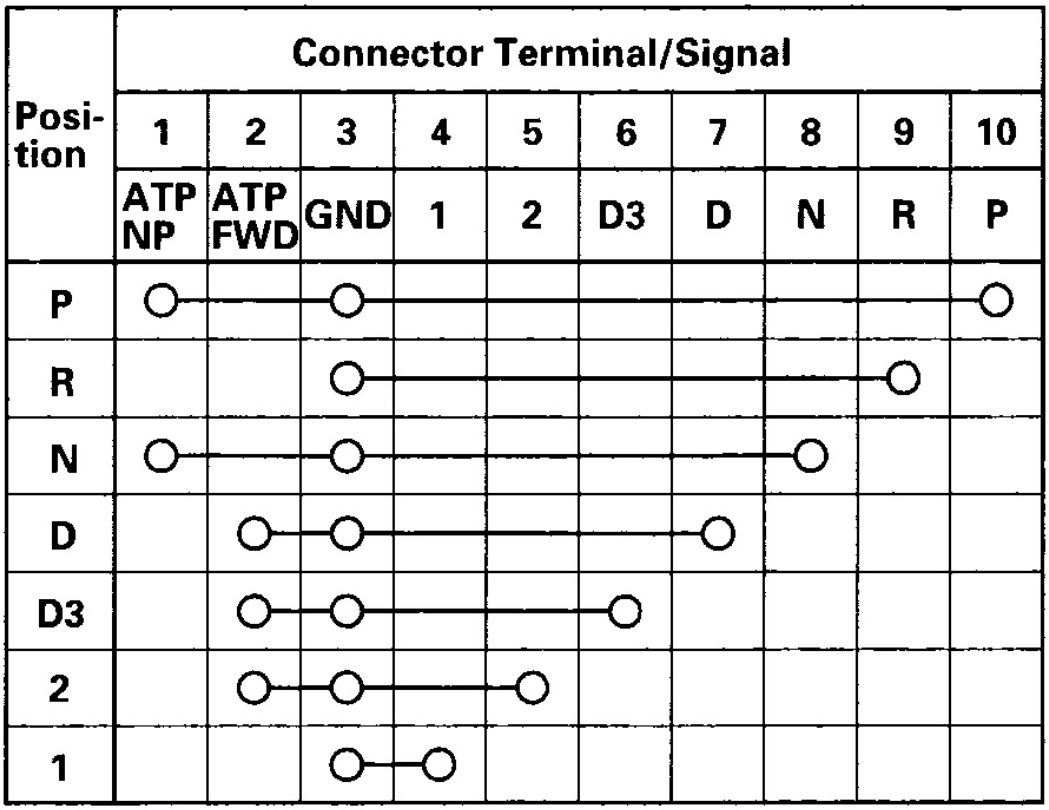
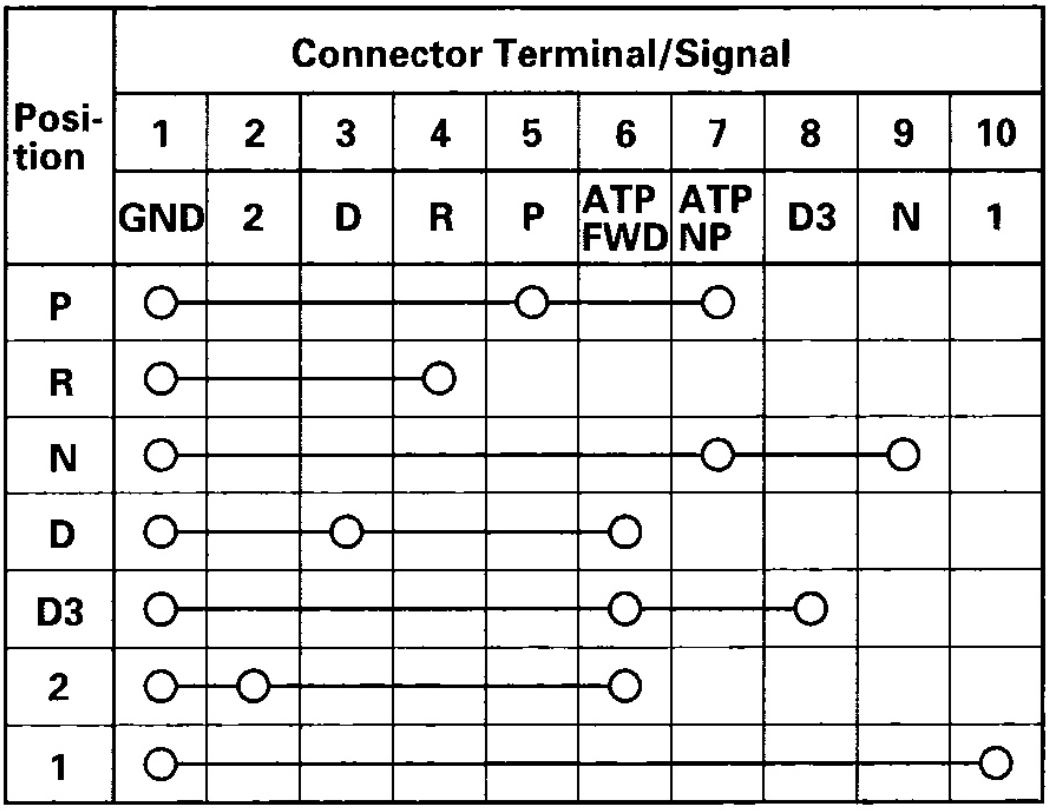


Fig. 313: Transmission Range Switch Harness Connector Chart (2003-2005 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 314: Transmission Range Switch Harness Connector Chart (2006-07 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the transmission range switch cover.

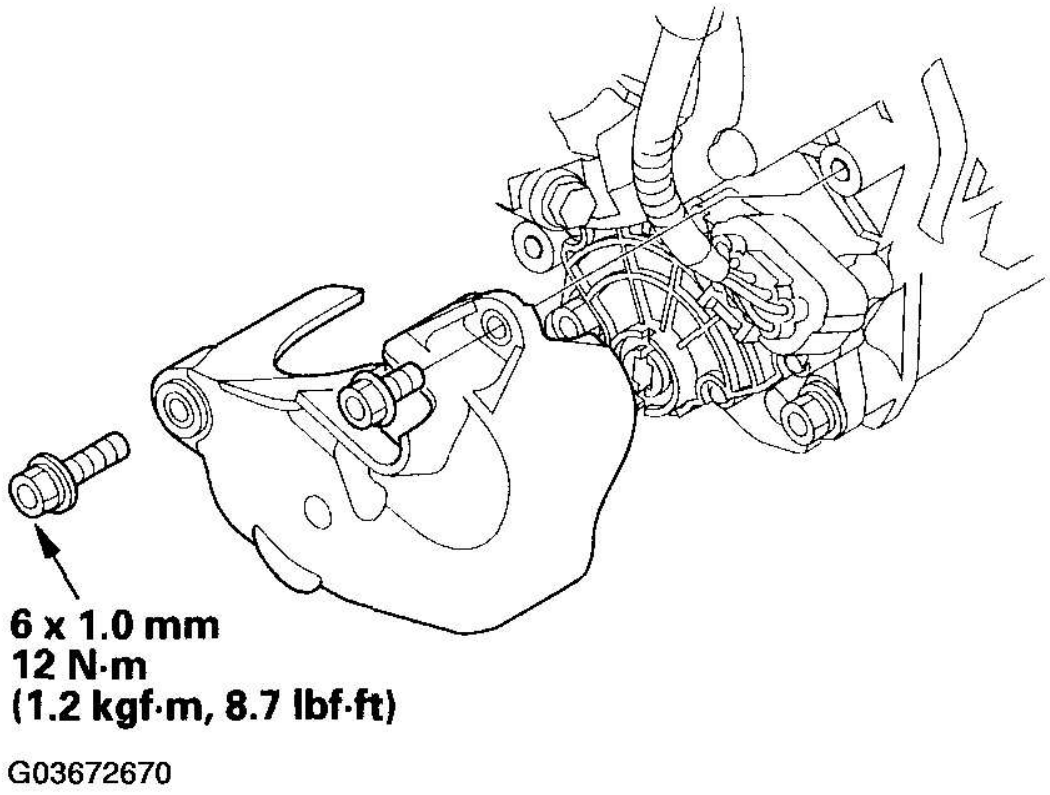


Fig. 315: Removing Transmission Range Switch Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Disconnect the transmission range switch connector.

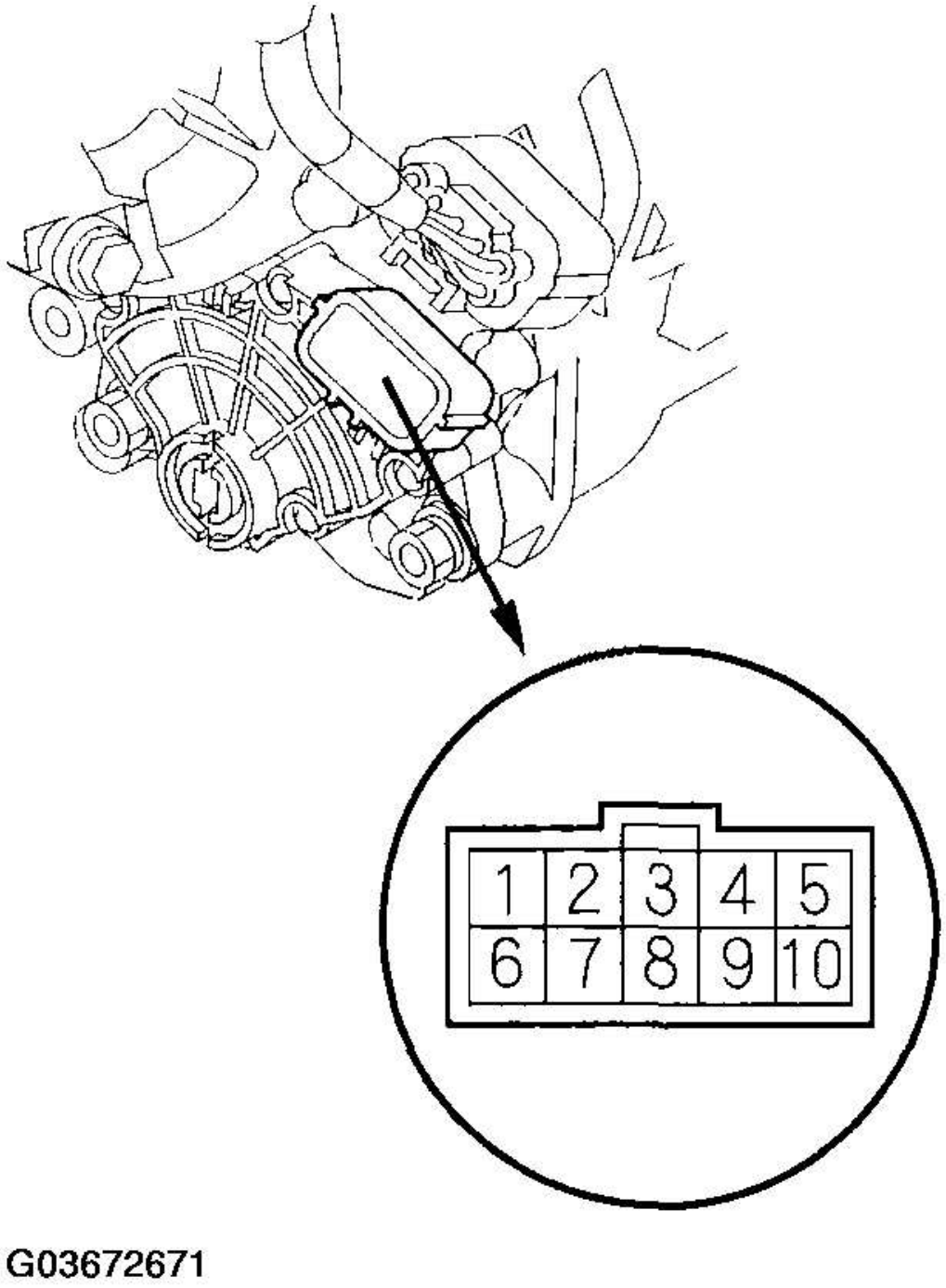


Fig. 316: Disconnect Transmission Range Switch Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Check for continuity between terminals at the switch connector. There should be continuity between the terminals in **Fig. 317** for each switch position.
   - If the transmission range switch continuity check is OK, replace the faulty transmission range switch harness.
   - If there is no continuity at one or more switch positions, go to step 6.

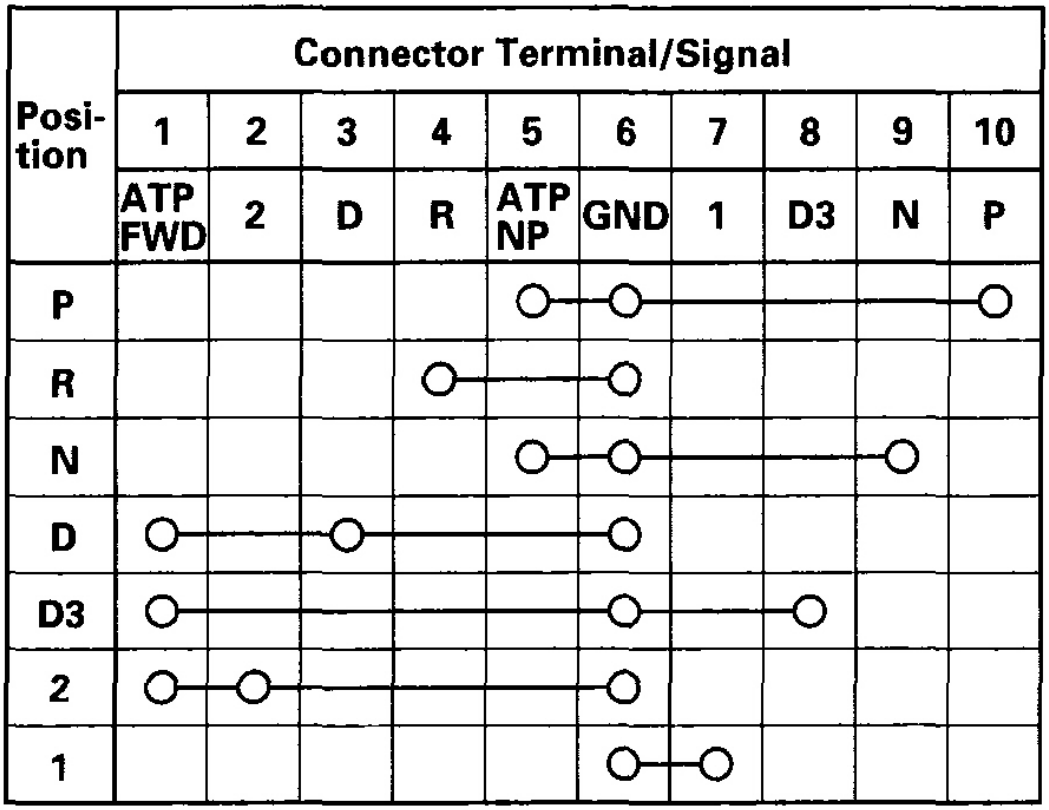


Fig. 317: Transmission Range Switch Connector Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the transmission range switch, and check the end of the selector control shaft (A).

Standard:

Selector Control Shaft Width (B): 6.1-6.2 mm (0.240-0.244 in.)

Selector Control Shaft End Gap (C): 1.8-2.0 mm (0.07-0.08 in.)

- If the measurement of the selector control shaft end is within the standard, replace the transmission range switch (see **TRANSMISSION RANGE SWITCH REPLACEMENT**).
- If the measurement is out of standard, repair the selector control shaft end, and recheck the transmission range switch continuity.

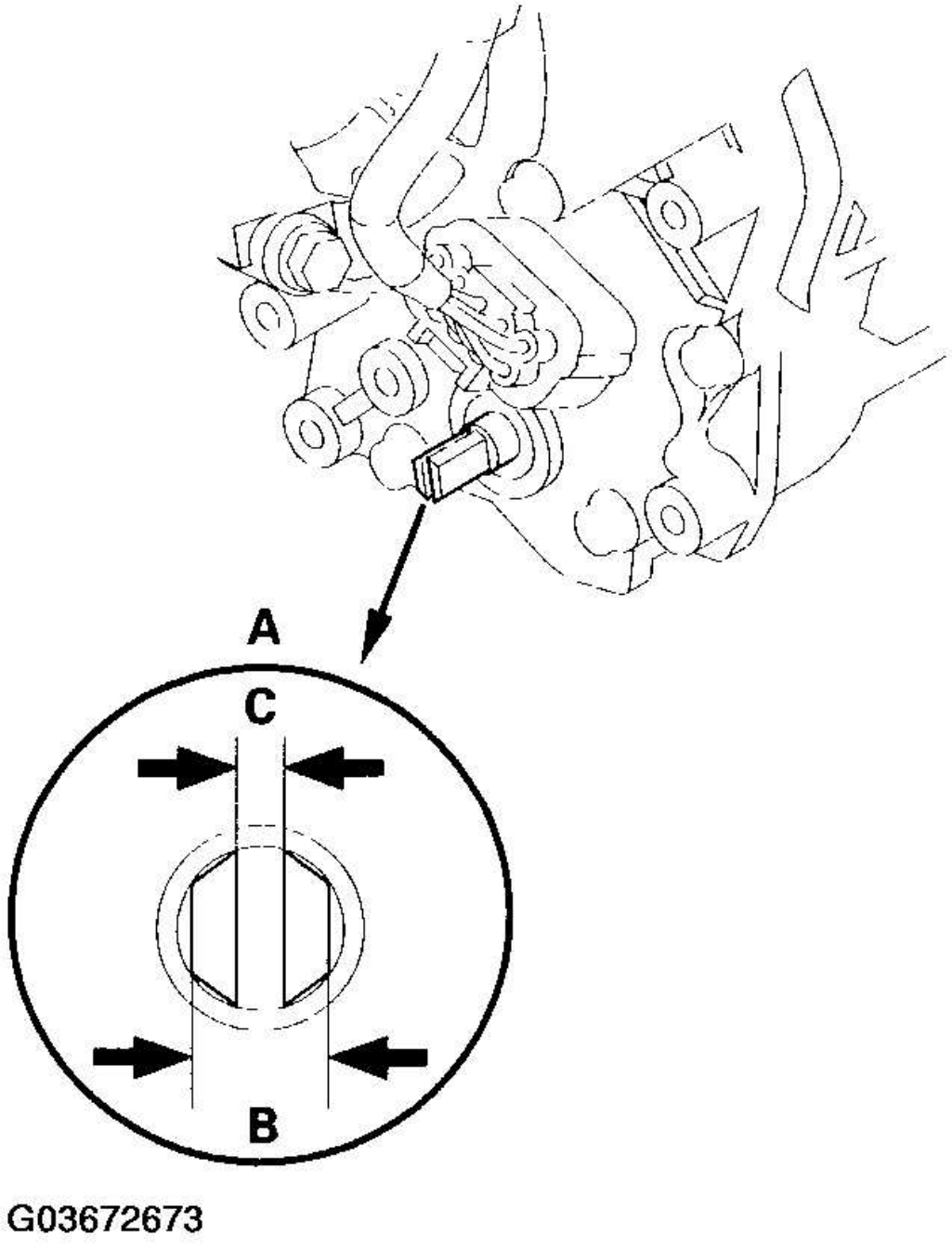


Fig. 318: Checking End Of Selector Control Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TRANSMISSION RANGE SWITCH REPLACEMENT

1. Raise the vehicle, and make sure it is securely supported.
2. Shift to the N position.
3. Remove the transmission range switch cover.

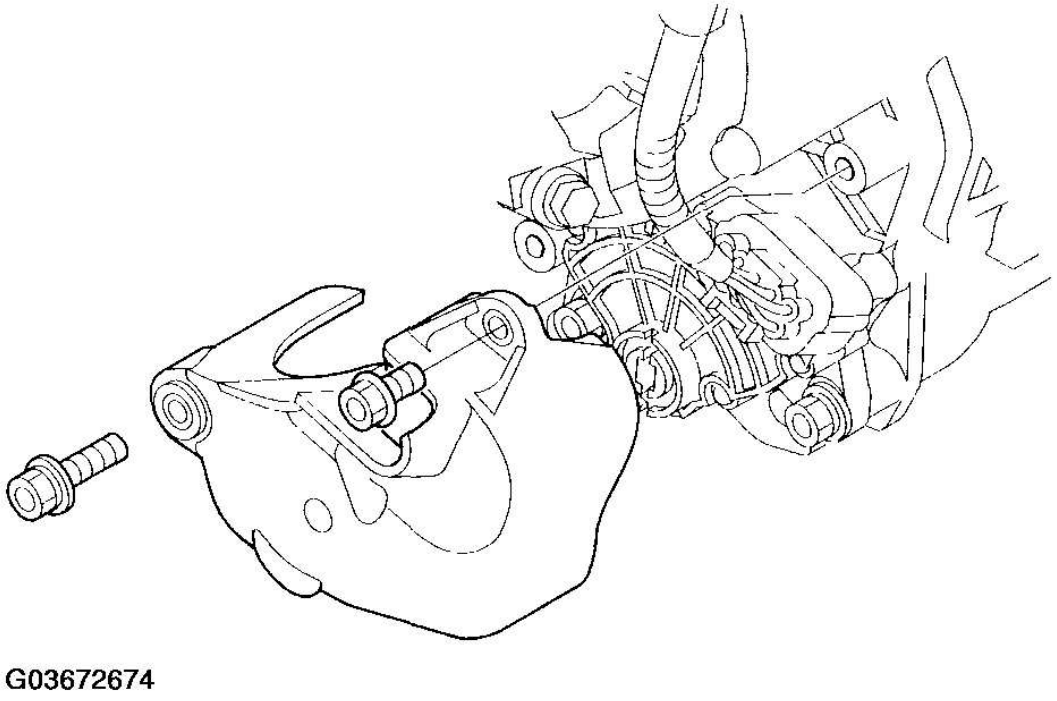


Fig. 319: Removing Transmission Range Switch Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Disconnect the transmission range switch connector.

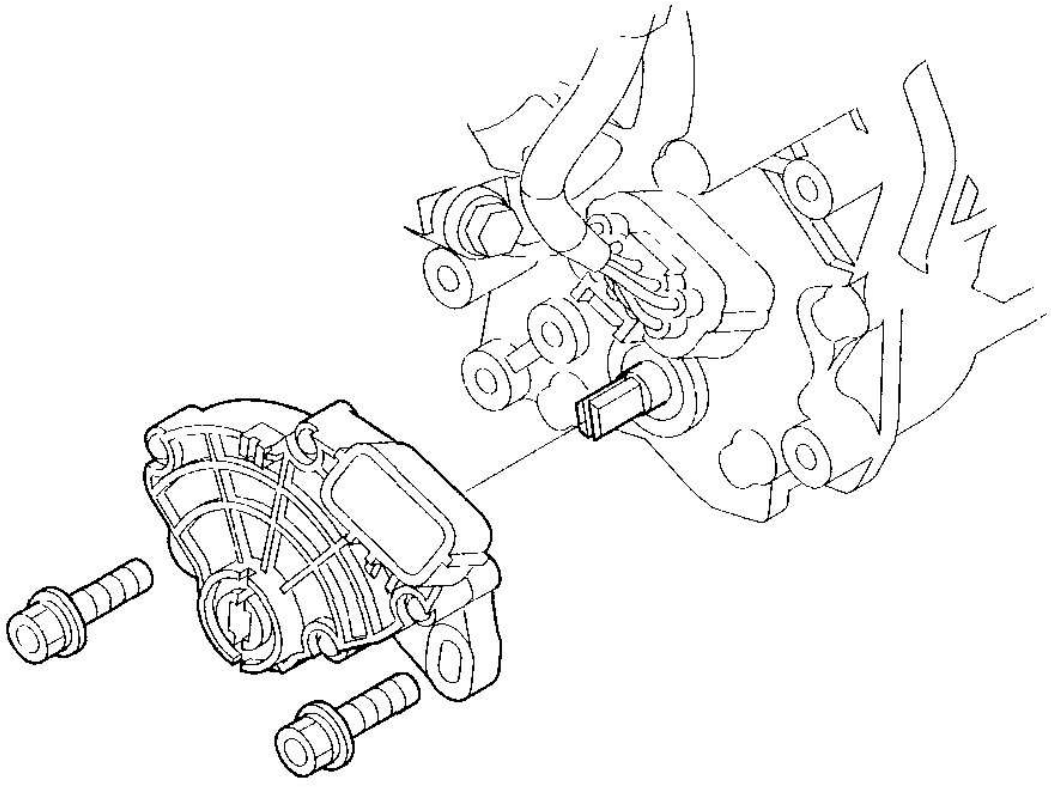


Fig. 320: Disconnecting Transmission Range Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the transmission range switch, and replace the new switch.
6. Make sure the selector control shaft is in the N position. If necessary, move the shift lever to the N position.

NOTE: Do not use the selector control shaft to adjust the shift position. If the selector control shaft tips are squeezed together it will cause a faulty signal or position due to play between the selector control shaft and the switch. The clearance (A) between selector control shaft tips is 2.0 mm (0.08 in.)

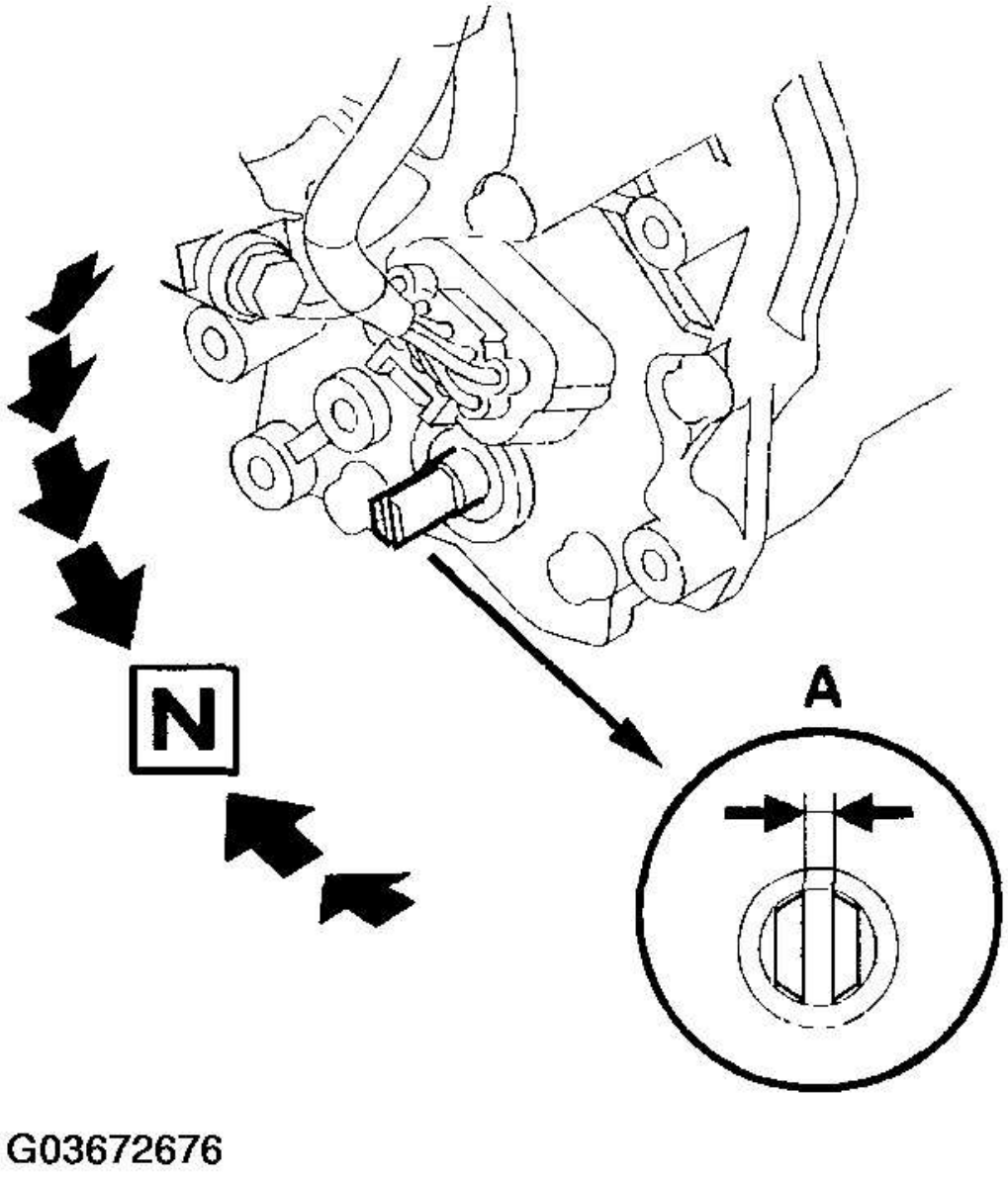


Fig. 321: Making Sure Selector Shaft Is In N Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Align the cutouts (A) on the rotary-frame with the neutral positioning cutouts (B) on the transmission range switch (C), then put a 2.0 mm (0.08 in.) feeler gauge blade (D) in the cutouts to hold the switch in the N position.

NOTE: Be sure to use a 2.0 mm (0.08 in.) blade or equivalent to hold the switch in the N position.

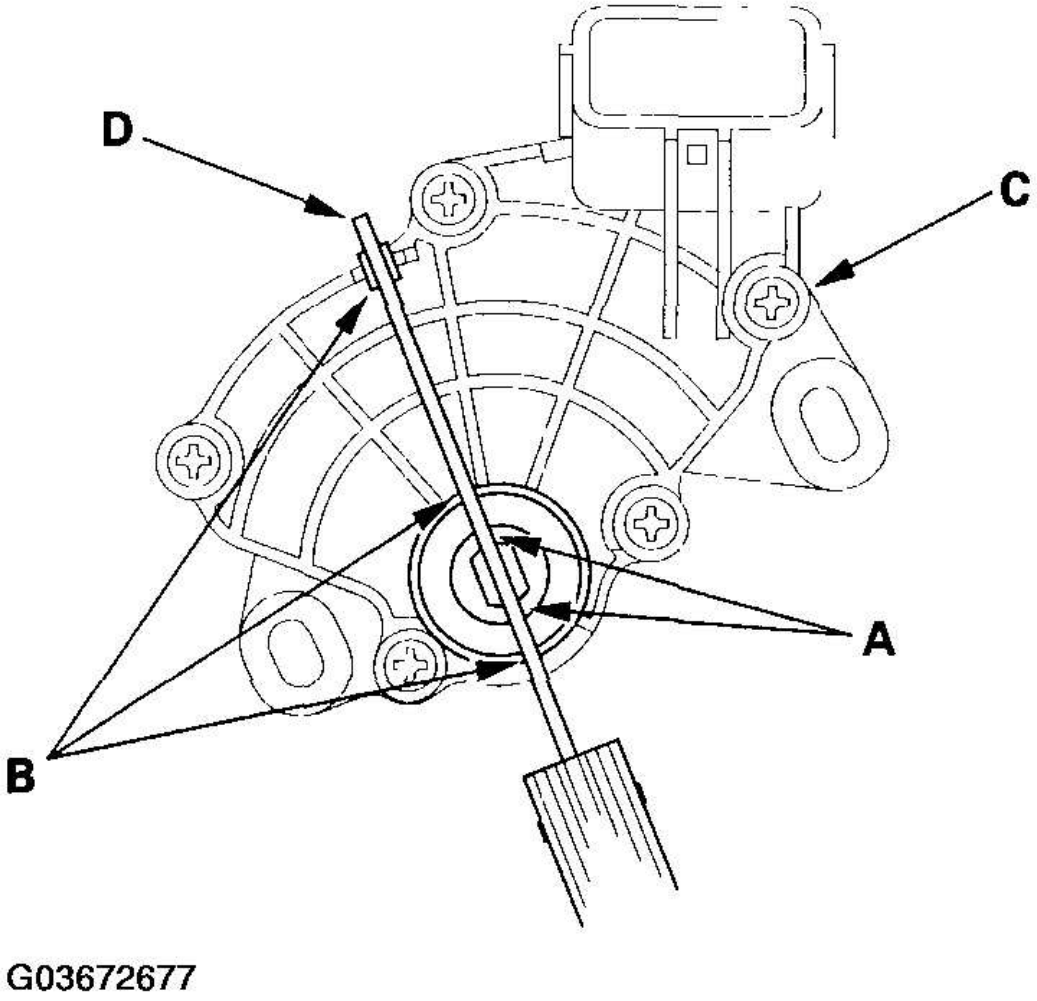


Fig. 322: Aligning Cutouts On Rotary-Frame With Neutral Positioning Cutouts On Transmission Range Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the transmission range switch (A) gently on the selector control shaft (B) while holding it in the N position with the 2.0 mm (0.08 in.) blade (C).

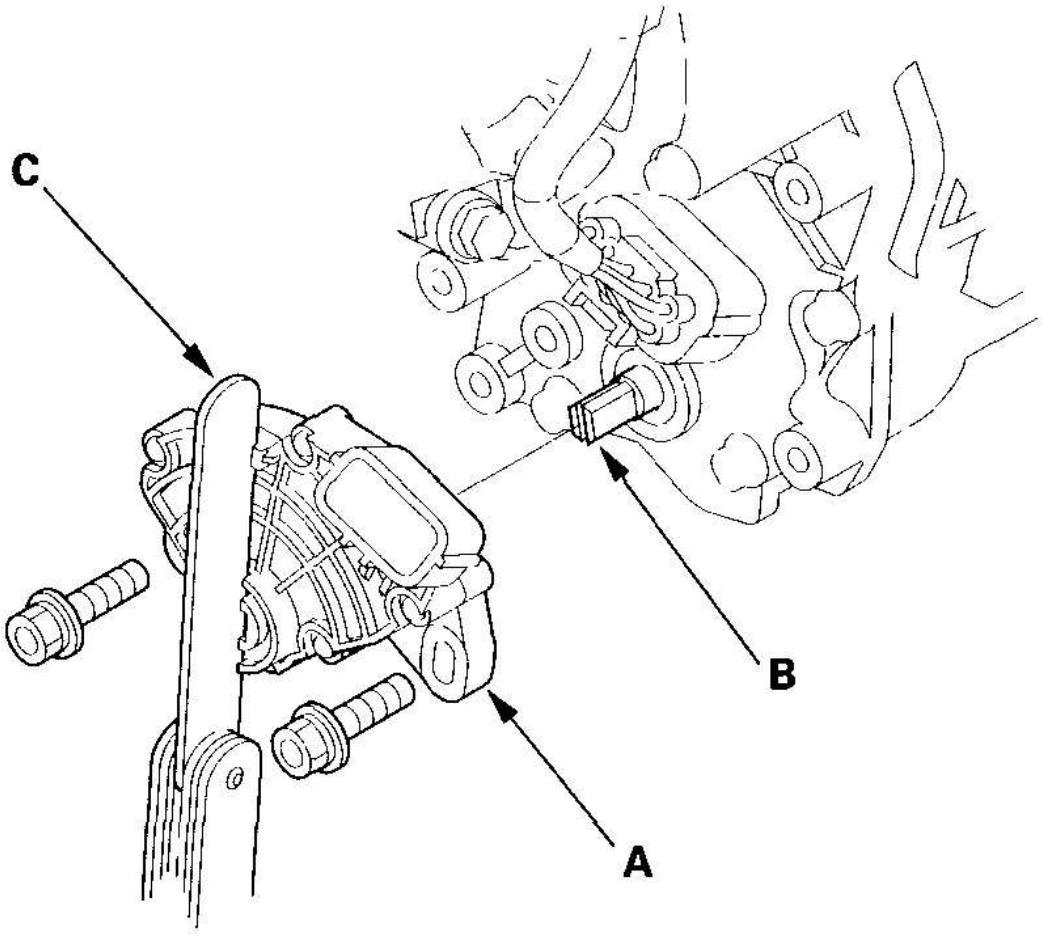


Fig. 323: Installing Transmission Range Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Tighten the bolts on the transmission range switch while you continue to hold the N position. Do not move the transmission range switch when tightening the bolts. Remove the feeler gauge.

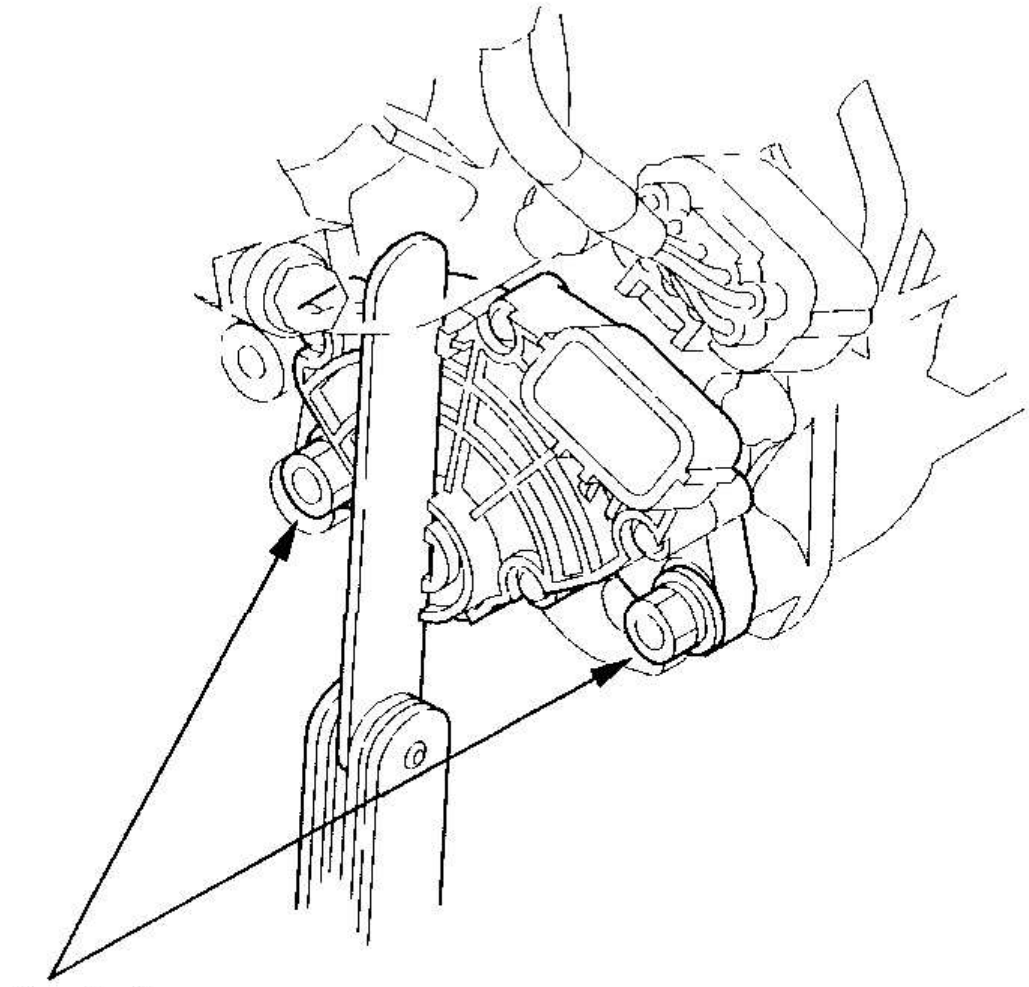


Fig. 324: Tightening Transmission Range Switch Bolts Holding N Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Connect the connector securely, then install the transmission range switch cover (A).

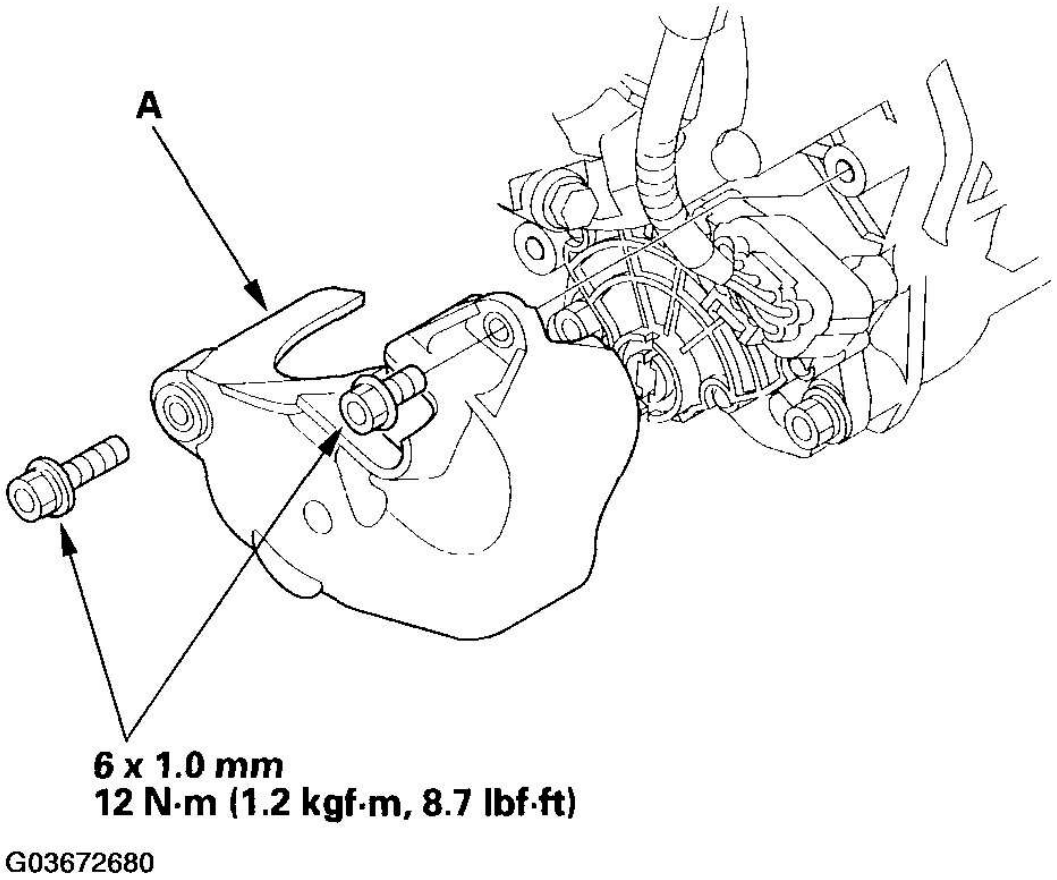


Fig. 325: Installing Transmission Range Switch Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Turn the ignition switch ON (II). Move the shift lever through all positions, and check the transmission range switch synchronization with the A/T gear position indicator.
12. Check that the engine will start in the P and N positions, and will not start in any other shift lever position.
13. Check that the back-up lights come on when the shift lever is in the R position.
14. Allow the front wheels to rotate freely, then start the engine, and check the shift lever operation.

A/T INTERLOCK SYSTEM

COMPONENT LOCATION INDEX

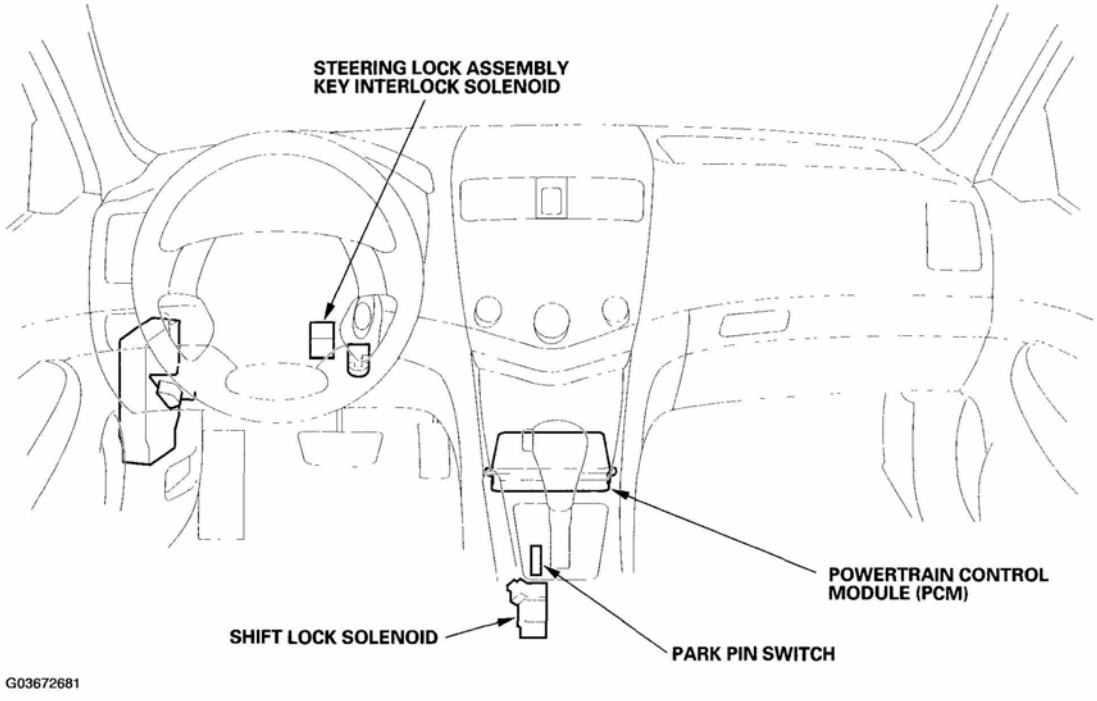


Fig. 326: Locating A/T Interlock System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

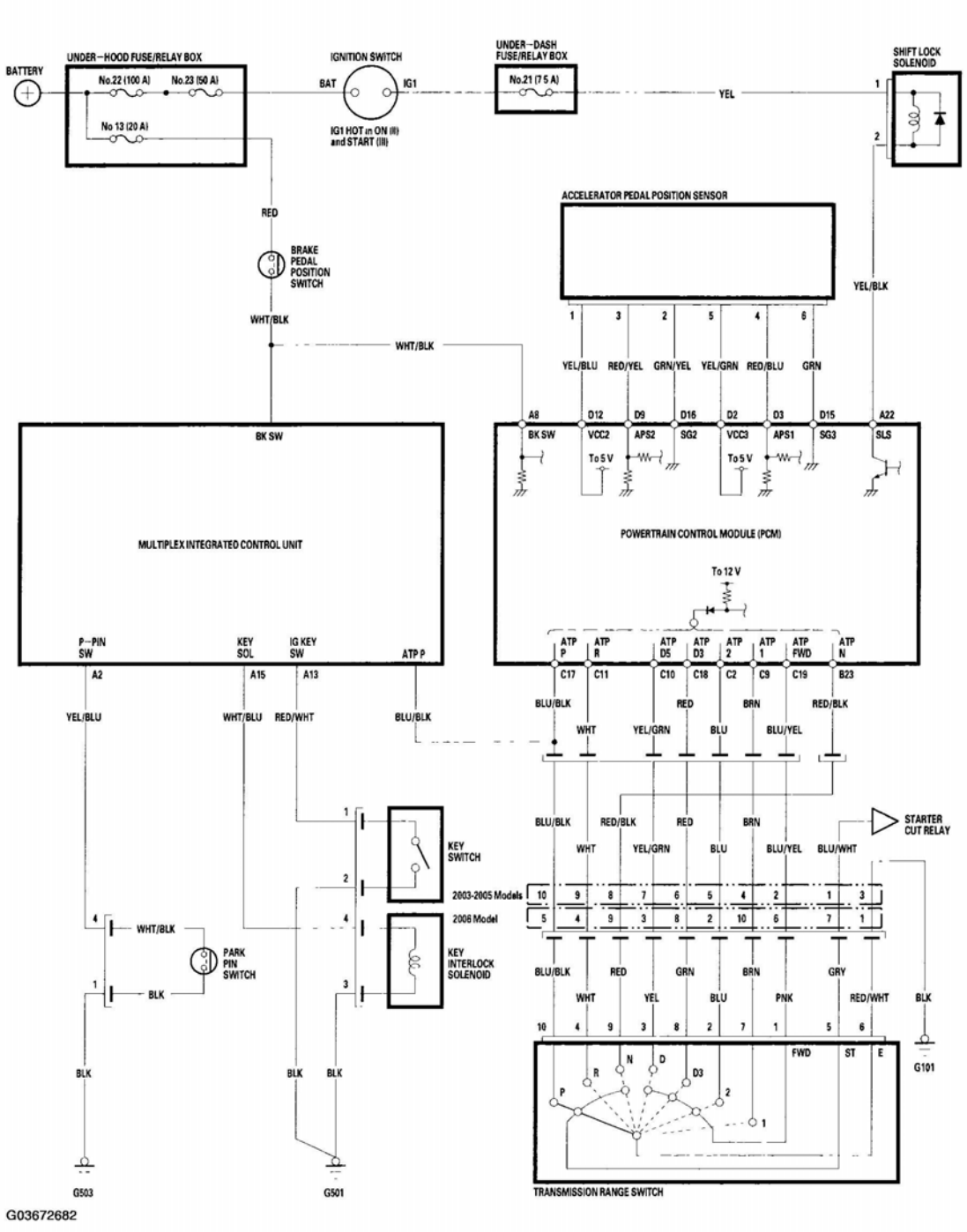


Fig. 327: A/T Interlock Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SHIFT LOCK SYSTEM CIRCUIT TROUBLESHOOTING

1. Connect the HDS to the DLC.

2. Choose Shift Lock Solenoid Test in Miscellaneous Test Menu, and check that the shift lock solenoid operates with the HDS.

   Does the shift lock solenoid work properly?

   YES - Go to step 14.

   NO - Go to step 3.

3. Remove the center console, refer to **CENTER CONSOLE REMOVAL/INSTALLATION** .
4. Disconnect the shift lock solenoid connector.
5. Turn the ignition switch ON (II).
6. Measure the voltage between shift lock solenoid connector terminal No. 1 and body ground.

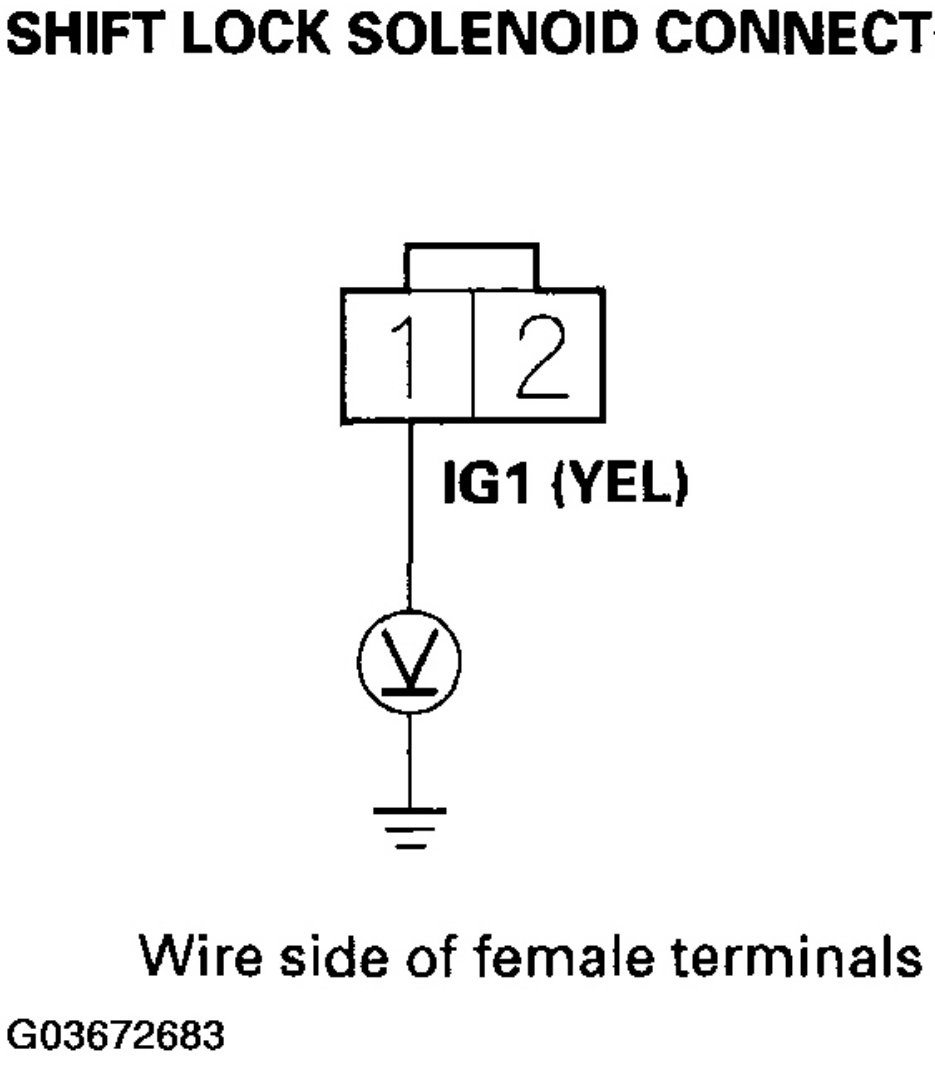


Fig. 328: Measuring Voltage Between Shift Lock Solenoid Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 7.
NO - Check for a blown No. 21 (7.5 A) fuse in the under-dash fuse/relay

box. If the fuse is OK, repair open or short in the wire between the shift lock solenoid connector and the under-dash fuse/relay box.

7. Shift the shift lever into the P position, and press the brake pedal. Do not press the accelerator.
8. Measure the voltage between shift lock solenoid connector terminals No. 1 and No. 2 while pressing the brake pedal.

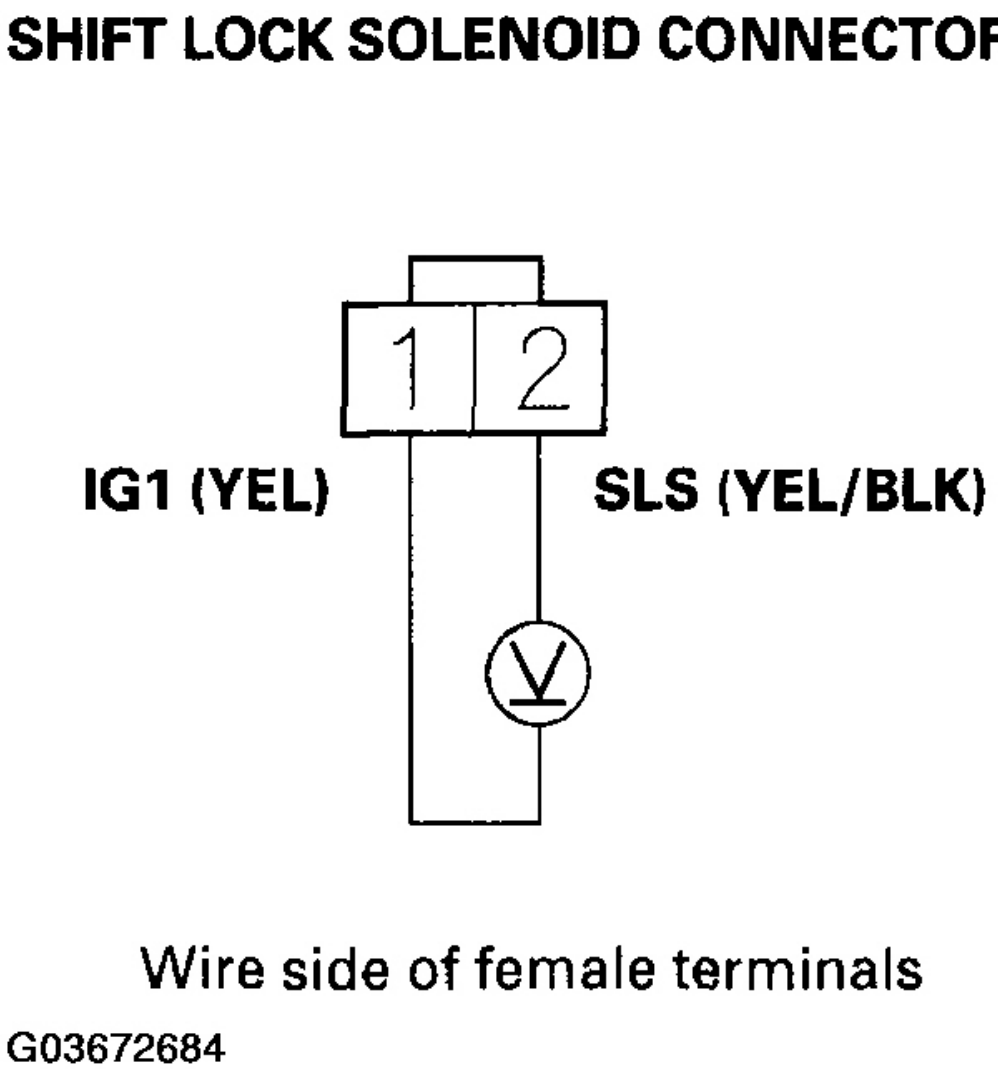


Fig. 329: Measuring Voltage Between Shift Lock Solenoid Connector

Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 9.
NO - Go to step 10.

9. Release the brake pedal, and measure the voltage between connector terminals No. 1 and No. 2. The shift lever must be in the P position.

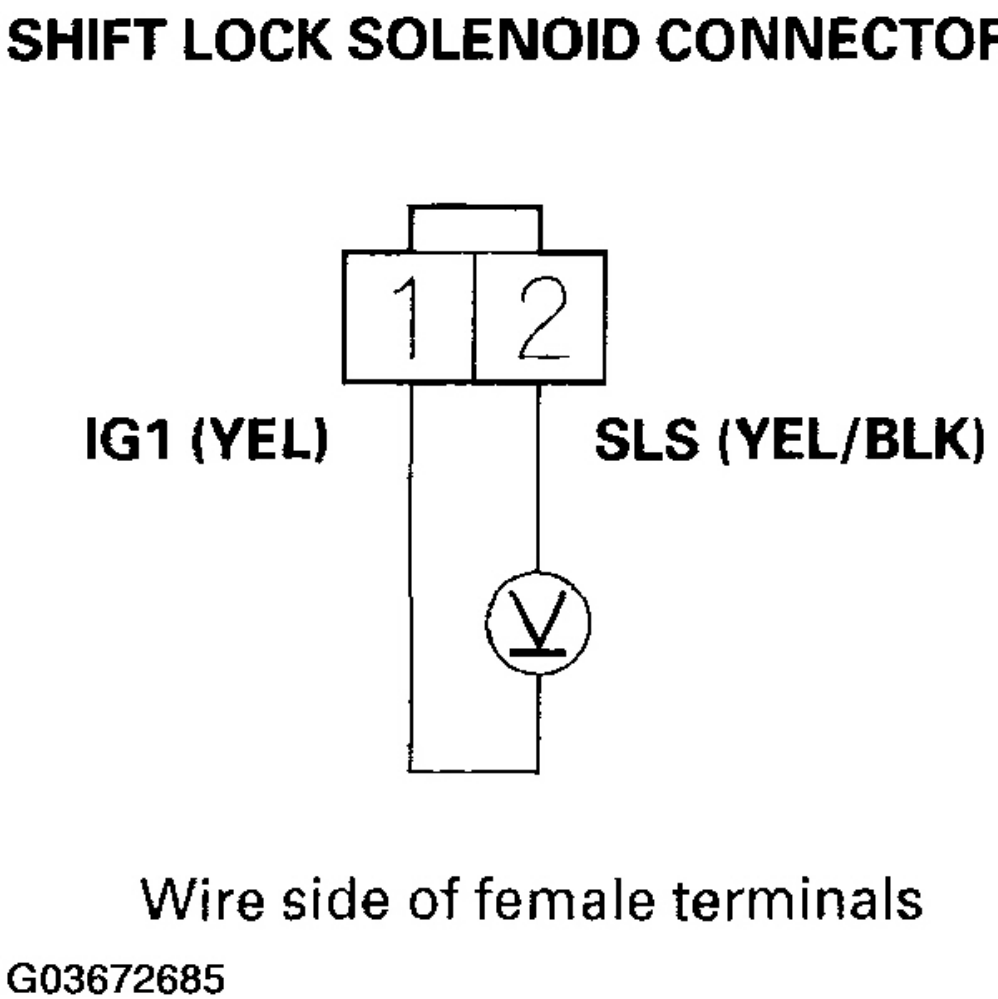


Fig. 330: Measuring Voltage Between Connector Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Repair a short to ground in the wire between PCM connector terminal A22 and the shift lock solenoid.

NO - Check the shift lock mechanism. If the mechanism is OK, replace the shift lock solenoid, refer to **KEY INTERLOCK SOLENOID TEST** .

10. Turn the ignition switch OFF.
11. Jump the SCS line with the HDS.
12. Disconnect PCM connector A (31P).
13. Check for continuity between PCM connector terminal A22 and shift lock solenoid connector terminal No. 2.

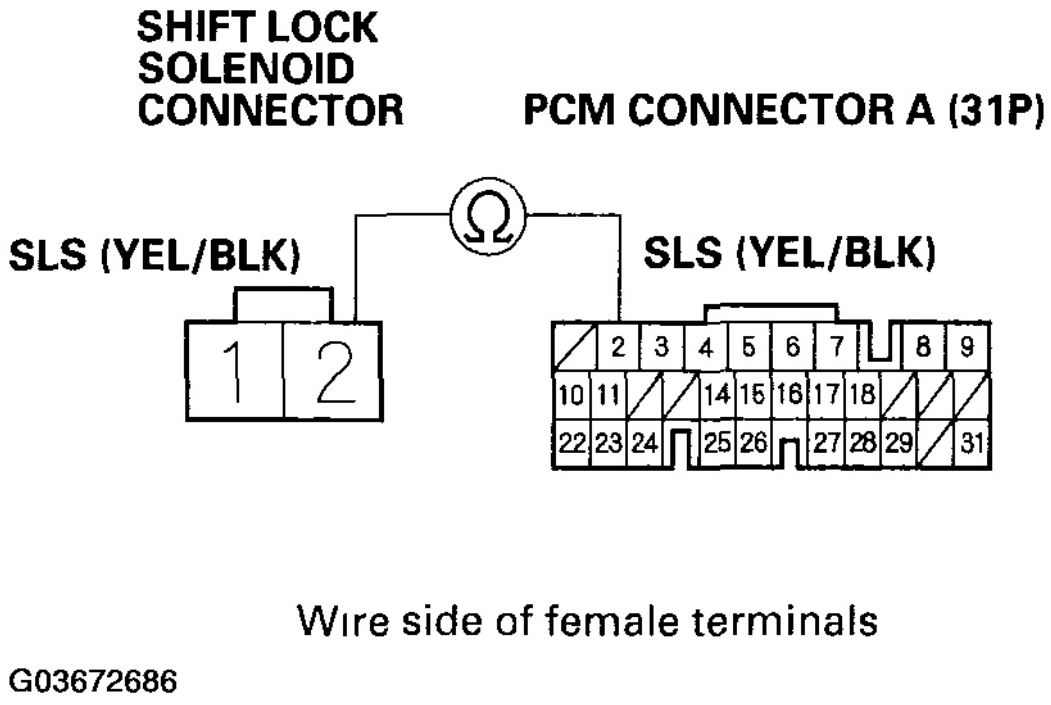


Fig. 331: Checking Continuity Between PCM Connector Terminal A22

And Shift Lock Solenoid Connector Terminal No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Substitute a known-good PCM and recheck.

NO - Repair open in the wire between PCM connector terminal A22 and the shift lock solenoid.

14. Press the brake pedal.

Are the brake lights ON?

YES - Go to step 15.

NO - Repair faulty brake light circuit.

15. Turn the ignition switch OFF.
16. Jump the SCS line with the HDS.
17. Disconnect PCM connector A (31P).
18. Measure the voltage between PCM connector terminal A8 and body ground while pressing the brake pedal and when the brake pedal is released.

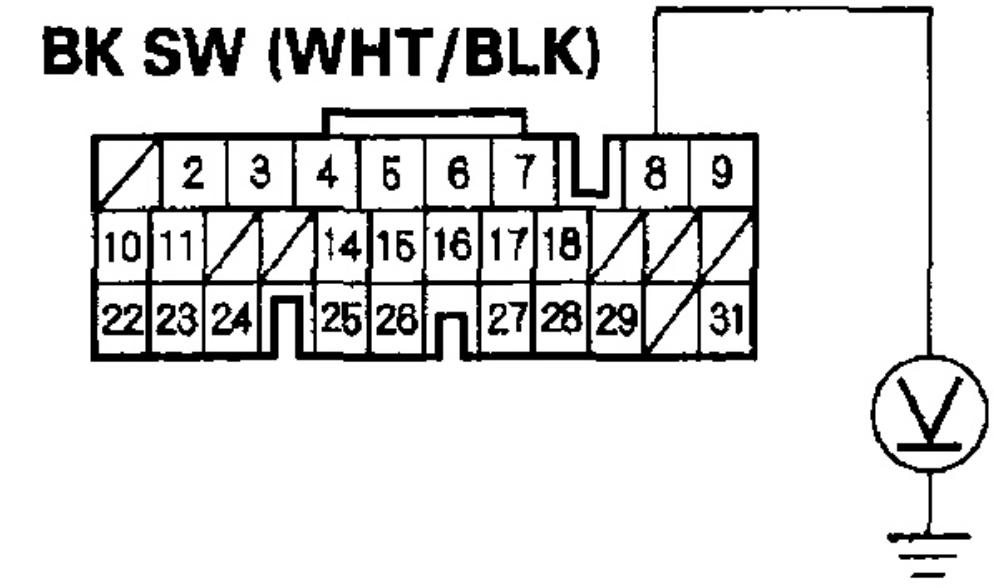


Fig. 332: Measure Voltage Between PCM Connector Terminal A8 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage while the brake pedal is pressing, and no voltage when the pedal is released?

YES - Go to step 20.

NO - Go to step 19.

19. Check for continuity between PCM connector terminal A8 and body ground.

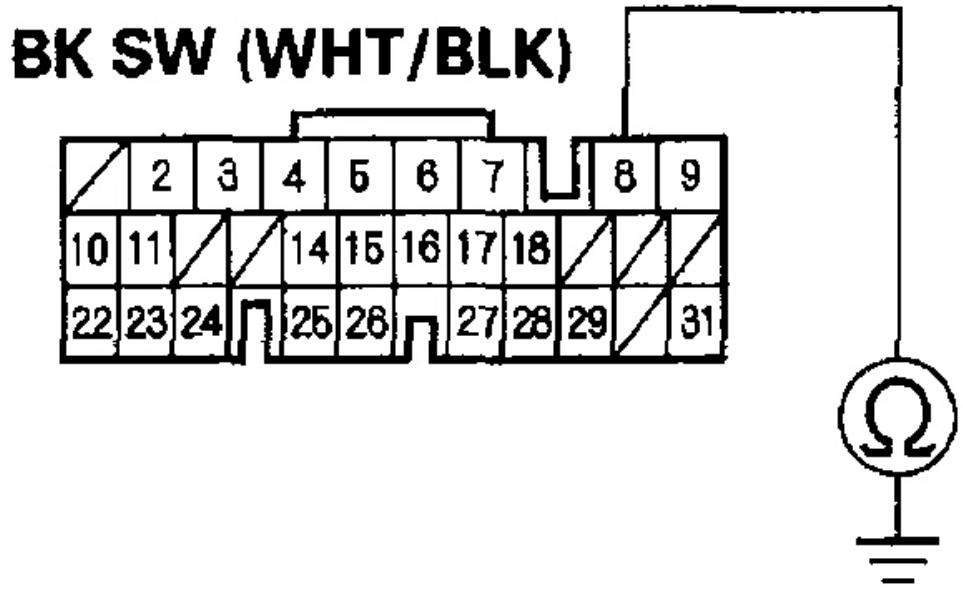


Fig. 333: Checking Continuity Between PCM Connector Terminal A8 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to ground in the wire between PCM connector terminal A8 and the brake pedal position switch.

NO - Repair open in the wire between PCM connector terminal A8 and the brake pedal position switch.

20. Connect PCM connector A (31P).
21. Disconnect the transmission range switch connector.
22. Turn the ignition switch ON (II).
23. Measure the voltage between transmission range switch connector terminals No. 6 and No. 10.

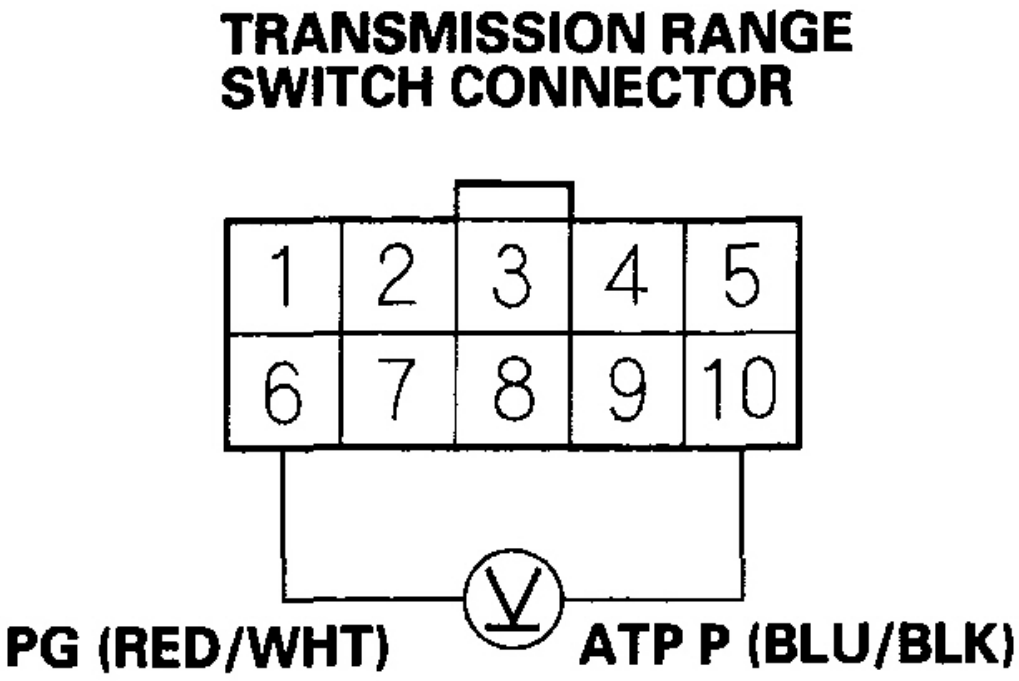


Fig. 334: Measuring Voltage Between Transmission Range Switch Connector Terminals No. 6 And No. 10
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 29.
NO - Go to step 24.

24. Turn the ignition switch OFF.
25. Disconnect PCM connector C (17P).

26. Check for continuity between PCM connector terminal C17 and body ground.

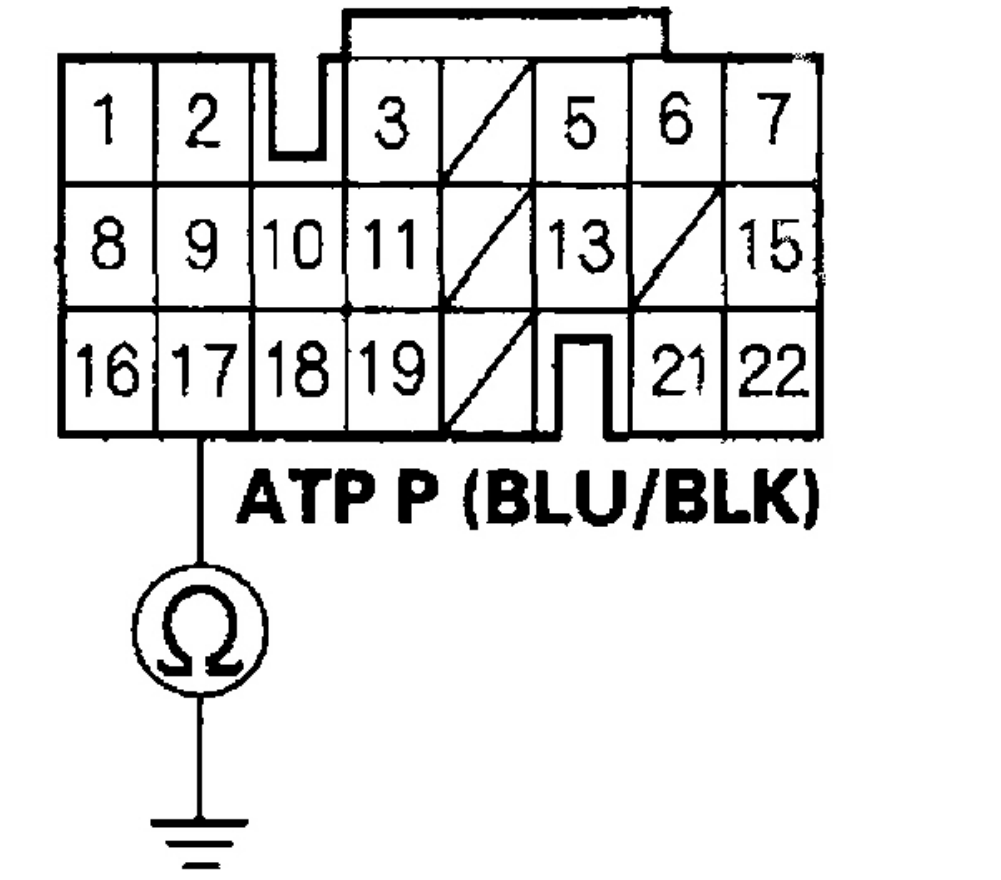


Fig. 335: Checking Continuity Between PCM Connector Terminal C17 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between PCM connector terminal C17 and the transmission range switch.

NO - Go to step 27.

27. Check for continuity between PCM connector terminal C17 and transmission range switch connector terminal No. 10.

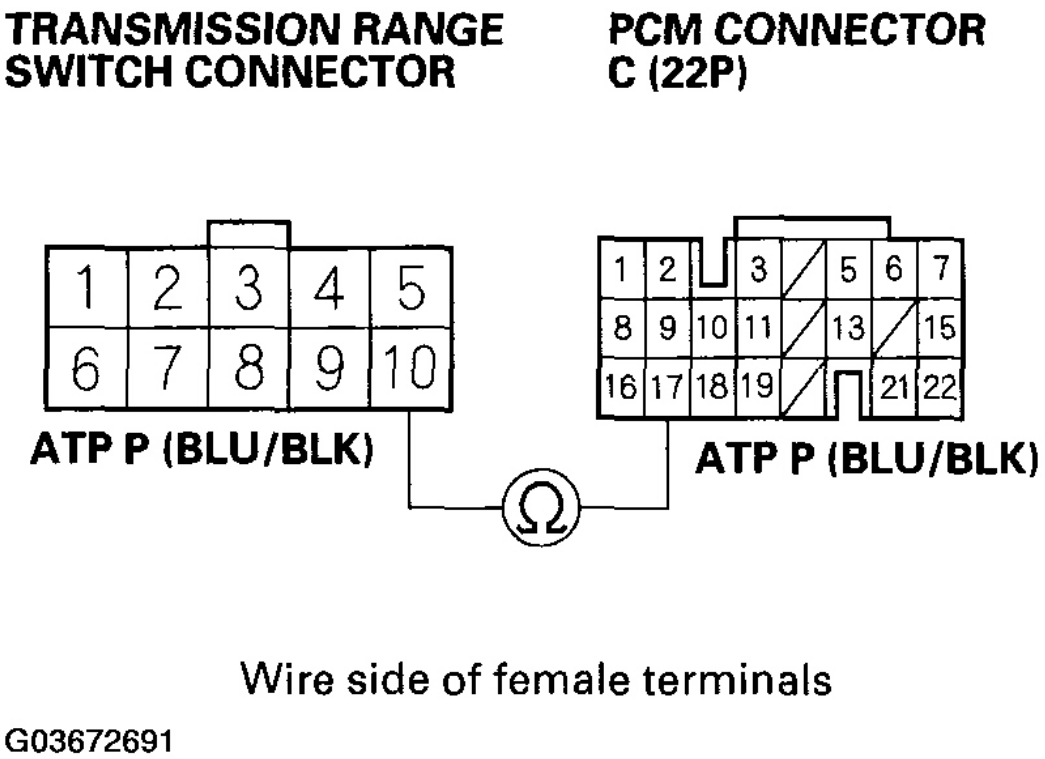


Fig. 336: Checking Continuity Between PCM Connector Terminal C17 And Transmission Range Switch Connector Terminal No. 10
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 28.

NO - Repair open in the wire between PCM connector terminal C17 and the transmission range switch.

28. Check for continuity between transmission range switch connector terminal No. 6 and body ground.

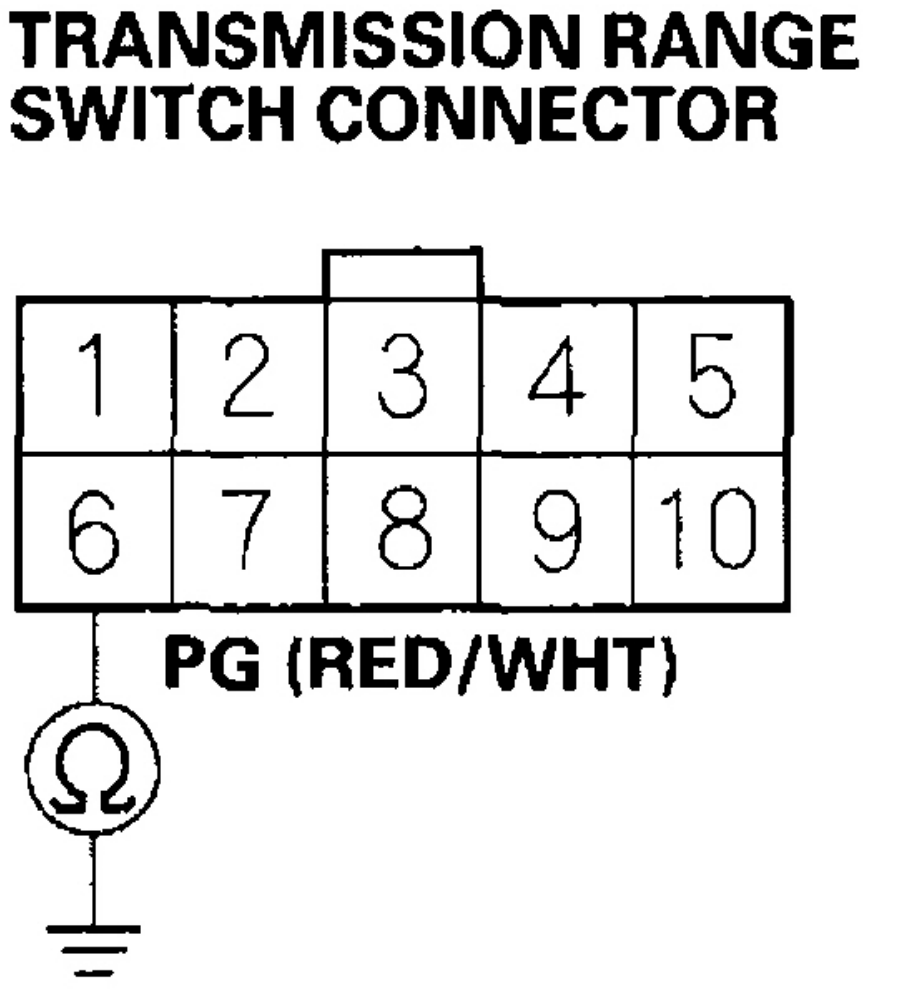


Fig. 337: Checking Continuity Between Transmission Range Switch Connector Terminal No. 6 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Substitute a known-good PCM and recheck.

NO - Repair open in the wire between transmission range switch connector terminal No. 6 and ground (G101), or repair poor ground (G101).

29. Test the transmission range switch (see **TRANSMISSION RANGE SWITCH TEST**).

Is the switch OK?

YES - Go to step 30.

NO - (see**TRANSMISSION RANGE SWITCH REPLACEMENT**).

30. Connect the HDS to the DLC.
31. Check the accelerator pedal position sensor in the A/T data list with the HDS. Do not press the accelerator.

Is the accelerator pedal position sensor opening 11% and above, or the sensor voltage 0.90 V and above?

YES - Check the throttle body (see **THROTTLE BODY TEST**).

NO - Check the throttle cable adjustment (see **THROTTLE CABLE ADJUSTMENT**). If the throttle cable adjustment is OK, substitute a known-good PCM and recheck.

TRANSMISSION END COVER

END COVER, 3RD GEAR, IDLER GEAR, AND 3RD CLUTCH REMOVAL

Special Tools Required

- Mainshaft holder 07GAB-PF50101 or 07GAB-PF50100
- Adjustable bearing puller, 25-40 mm 07736-A01000B or 07736-A01000A

1. Remove the ATF temperature sensor connector (A) from the connector bracket (B), then disconnect the connector, and remove the ATF temperature sensor

(C) (three bolts).

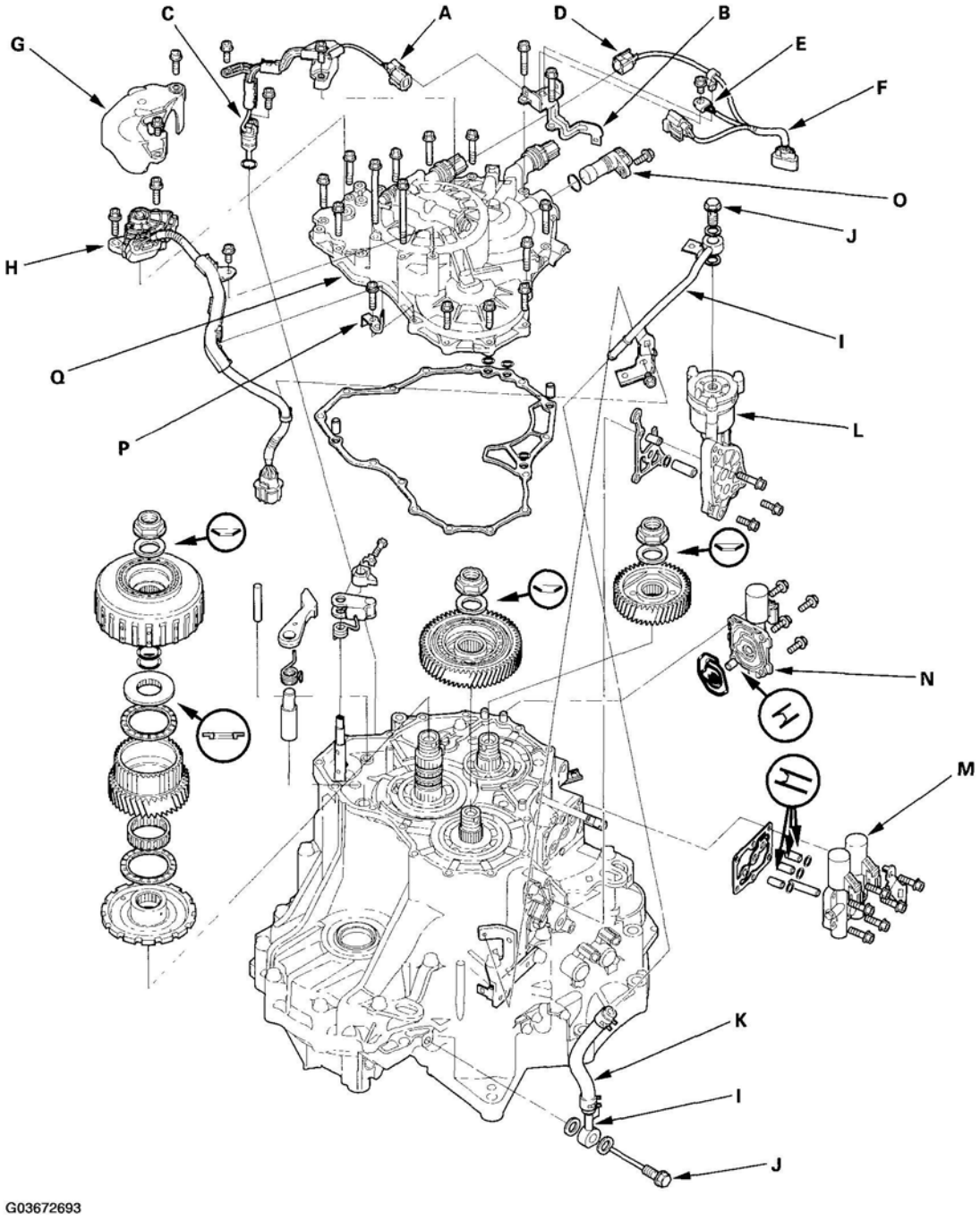


Fig. 338: Removing ATF Temperature Sensor Connector From Connector Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Disconnect the 3rd clutch transmission fluid pressure switch (D), remove the ground terminal (E), then remove the sensor subharness (F).
3. Remove the transmission range switch cover (G), then remove the transmission range switch (H) (three bolts).
4. Remove the 6 mm bolt securing the harness clamp bracket on the ATF line (I), and remove the line bolts (J), then remove the ATF line and sealing washers. Remove the ATF hose (K) from the ATF line if necessary.
5. Remove the ATF passage body (L), ATF pipe, O-ring, dowel pin, and gasket (three bolts).
6. Remove the A/T clutch pressure control solenoid valves A and B (M), clamp bracket, ATF pipes, O-rings, and gasket (six bolts).
7. Remove the A/T clutch pressure control solenoid valve C (N), ATF pipe, and gasket (four bolts).
8. Remove the input shaft (mainshaft) speed sensor (O).
9. Remove the 16 bolts securing the end cover, connector bracket (B), harness cover bracket (P), then remove the end cover (Q), two dowel pins, O-rings, and gasket.
10. Slip the special tool onto the mainshaft.

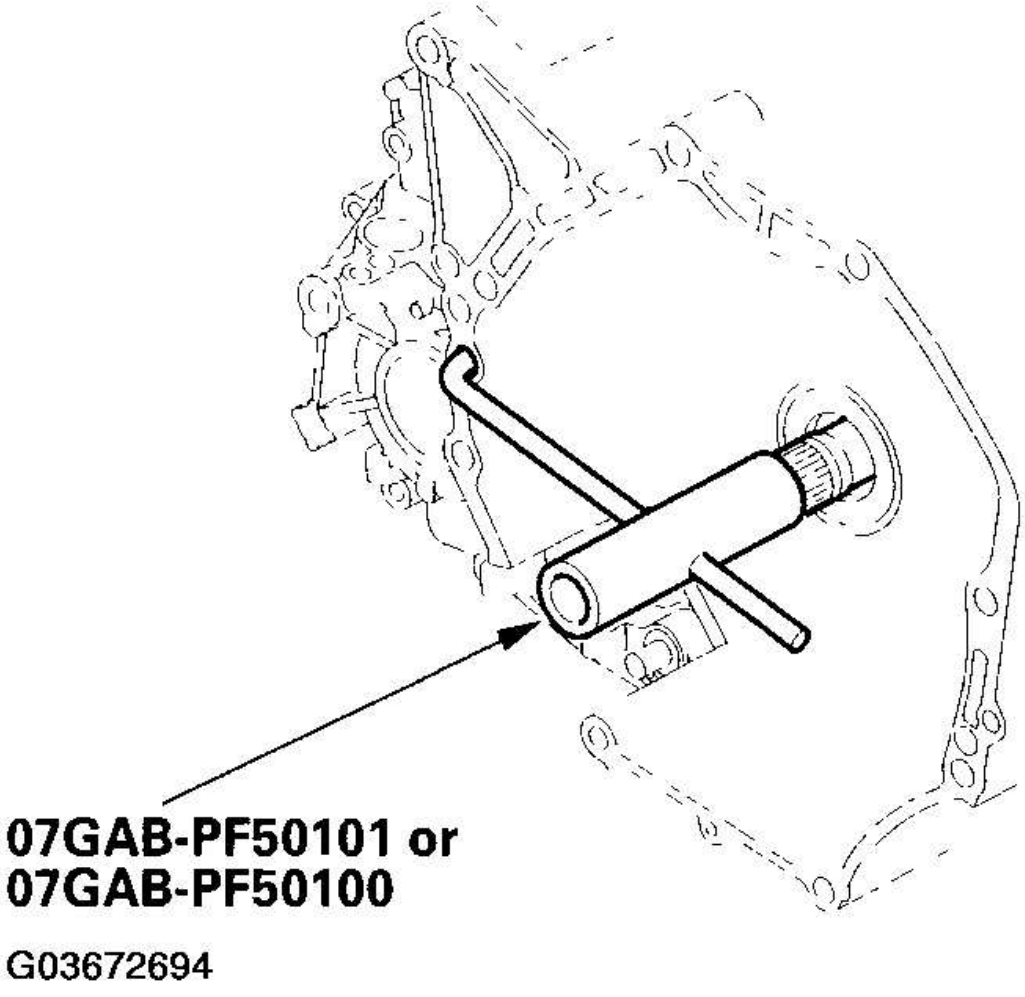


Fig. 339: Slipping Special Tool Onto Mainshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Engage the park pawl with the park gear.
12. Cut the lock tab (A) of each shaft locknut (B) using a chisel (C). Then remove the locknuts and conical spring washers from each shaft.

NOTE:

- **Countershaft and secondary shaft locknuts have left-hand threads.**

- **Keep all of the chiseled particles out of the transmission.**
- **Clean the old locknuts; they are used to install the press fit mainshaft 3rd gear, secondary shaft idler gear, and 3rd clutch assembly on the countershaft.**

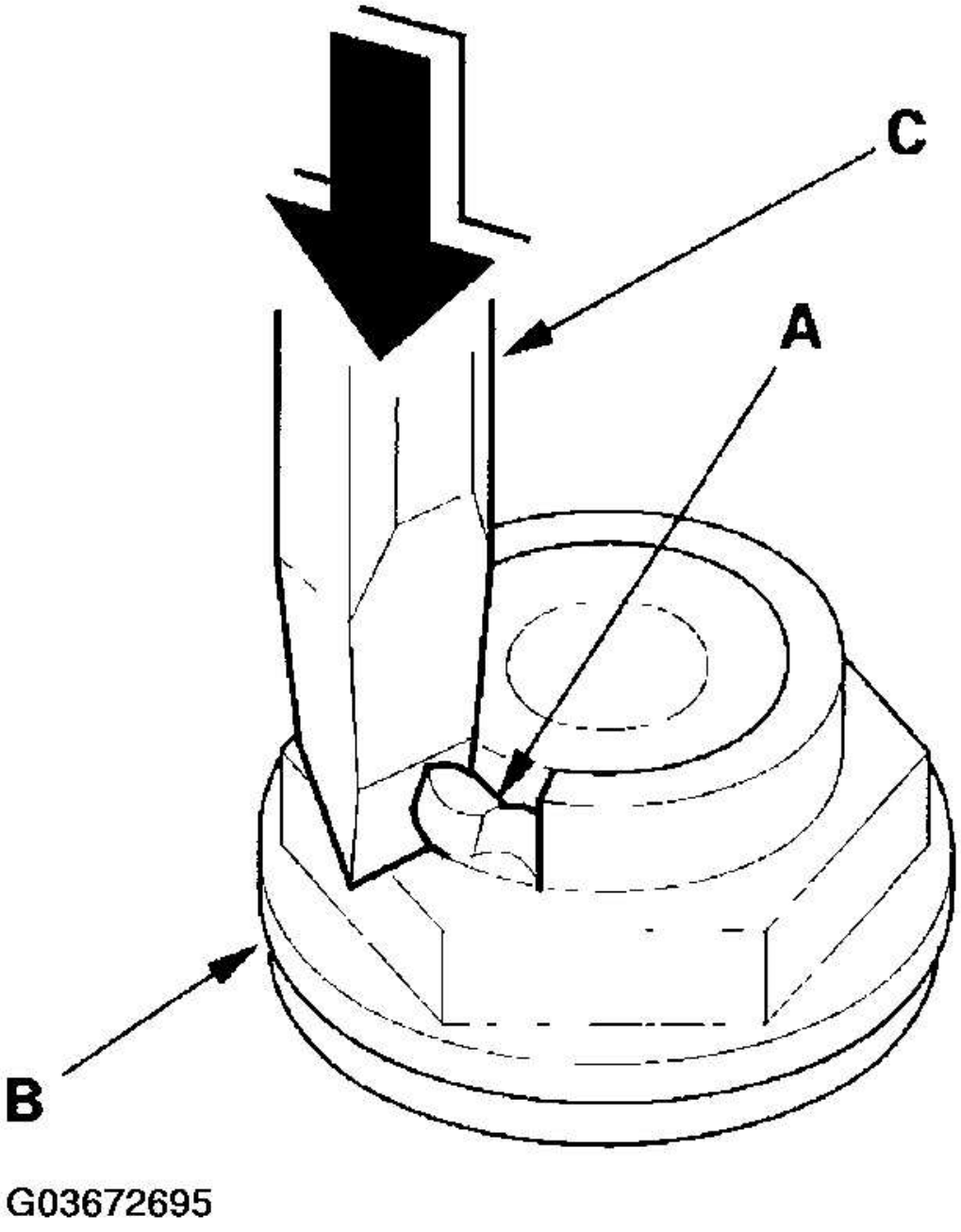


Fig. 340: Cutting Lock Tab Of Each Shaft Locknut Using Chisel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Remove the special tool from the mainshaft.
14. Remove the 3rd clutch assembly using the special tool and a commercially available 3/8" -16 slide hammer (A).

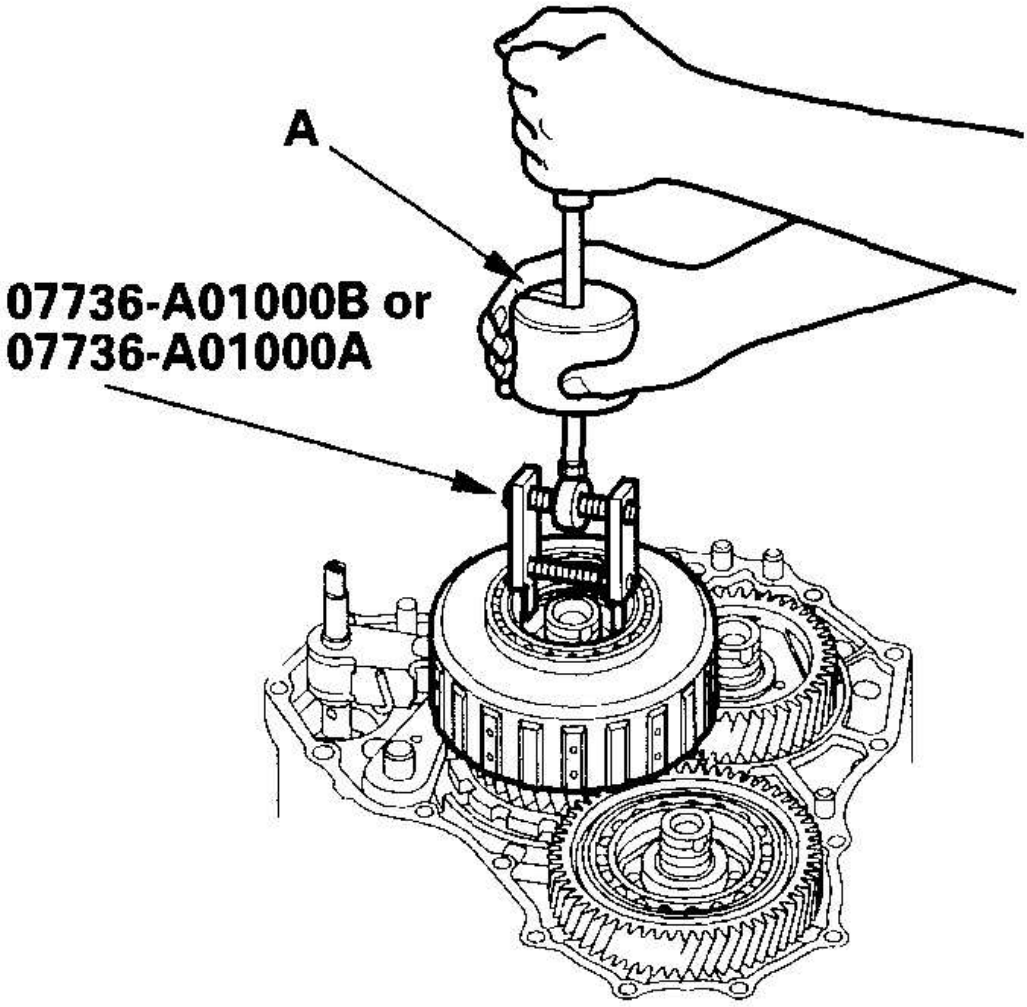


Fig. 341: Removing 3rd Clutch Assembly Using Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the splined washer, thrust needle bearing, countershaft 3rd gear,

needle bearing, and thrust needle bearing from the countershaft.

16. Remove the mainshaft 3rd gear (A), secondary shaft idler gear (B), and park gear (C) with a puller (D).

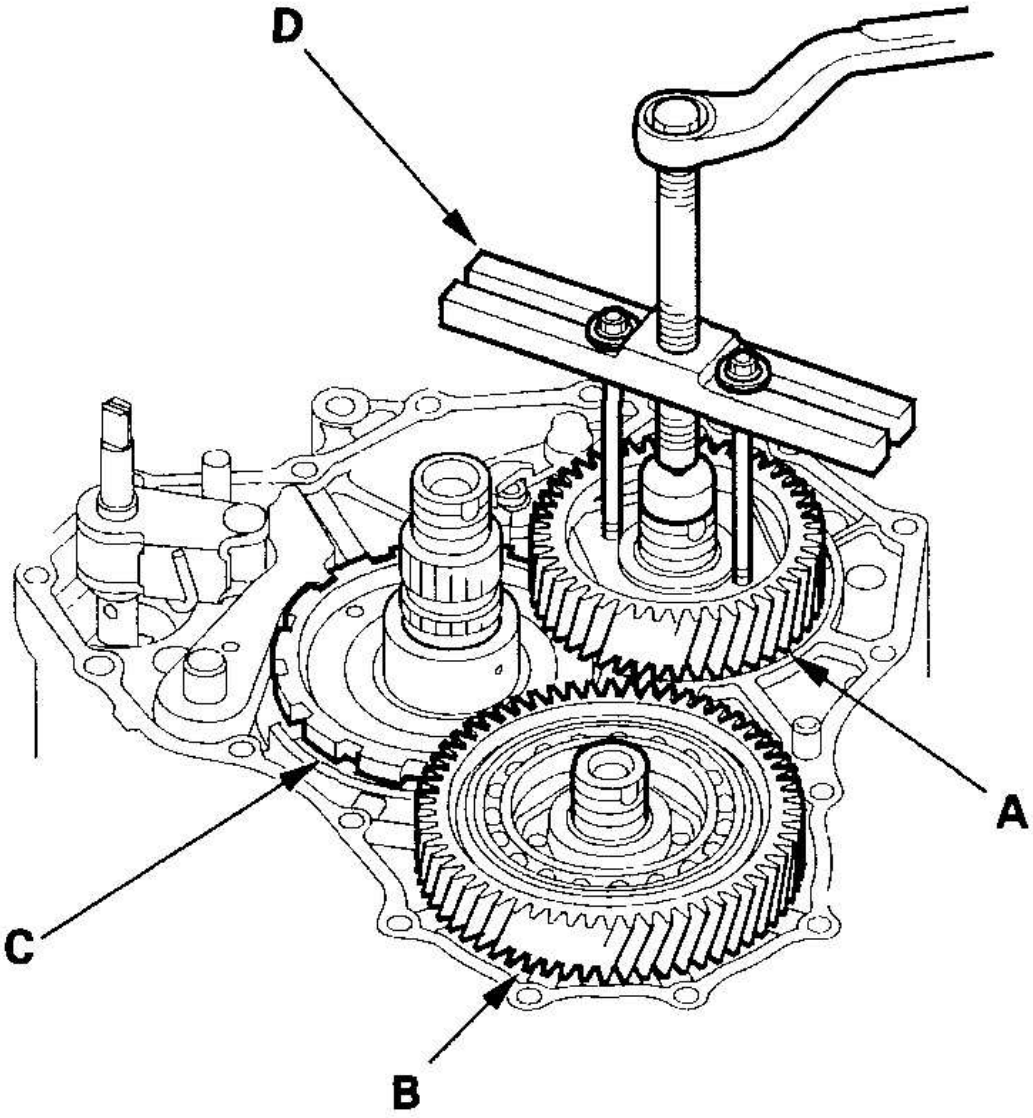


Fig. 342: Removing Mainshaft 3rd Gear, Secondary Shaft Idler Gear And Park Gear With Puller

Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Remove the park pawl, park pawl spring, park pawl shaft, and stop shaft.
18. Remove the park lever from the selector control shaft.

PARK LEVER STOP INSPECTION AND ADJUSTMENT

1. Set the park lever (A) in the P position.

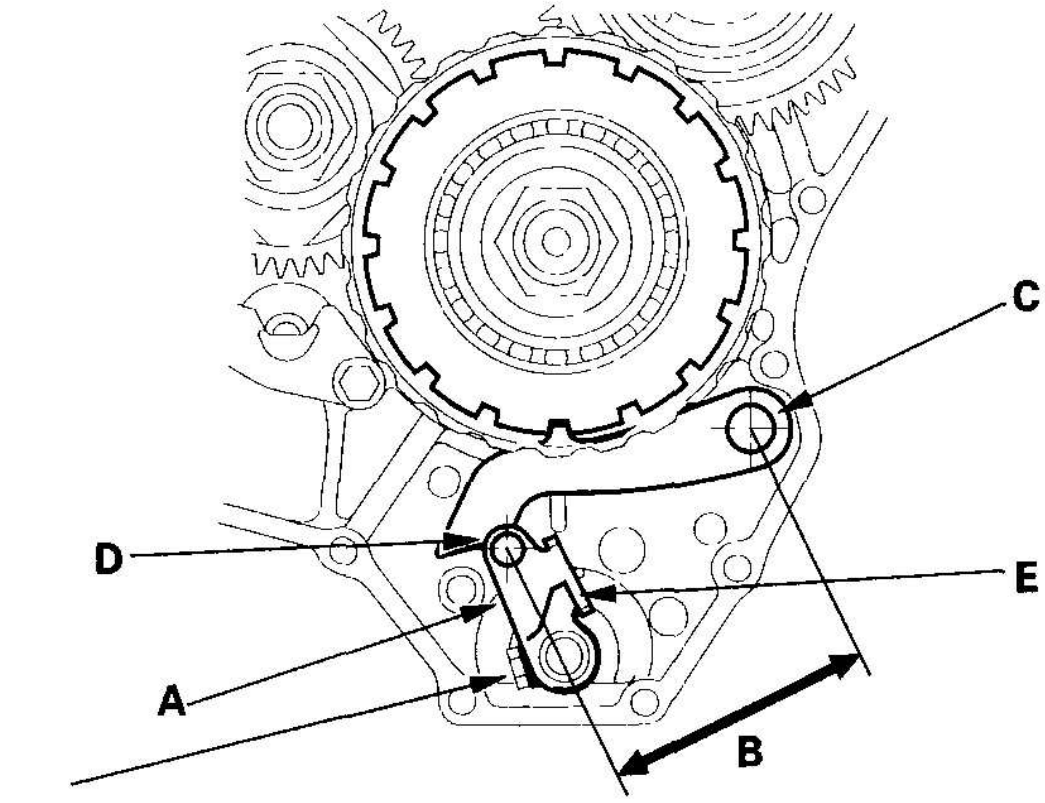


Fig. 343: Setting Park Lever In P Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the distance (B) between the park pawl shaft (C) and the park lever

roller pin (D).

Standard: 84.6-85.6 mm (3.33-3.37 in.)

3. If the measurement is out of tolerance, select and install the appropriate park lever stop (E) from **PARK LEVER STOP** .

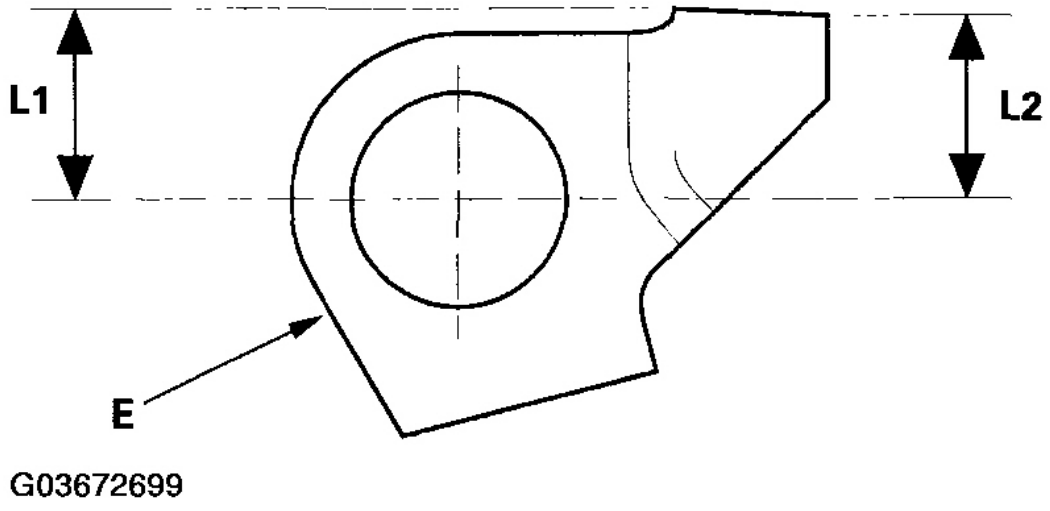


Fig. 344: Installing Appropriate Park Lever Stop
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PARK LEVER STOP

Mark	Part Number	L1	L2
1	24537-PA9-003	11.00 mm (0.433 in.)	11.00 mm (0.433 in.)
2	24538-PA9-003	10.80 mm (0.425 in.)	10.65 mm (0.419 in.)
3	24539-PA9-003	10.60 mm (0.417 in.)	10.30 mm (0.406 in.)

4. After replacing the park lever stop, make sure the distance is within tolerance.

SELECTOR CONTROL SHAFT OIL SEAL REPLACEMENT

Special Tools Required

- Driver 07749-0010000
- Attachment, 22 x 24 mm 07746-0010800

1. Remove the oil seal (A) from the end cover (B).

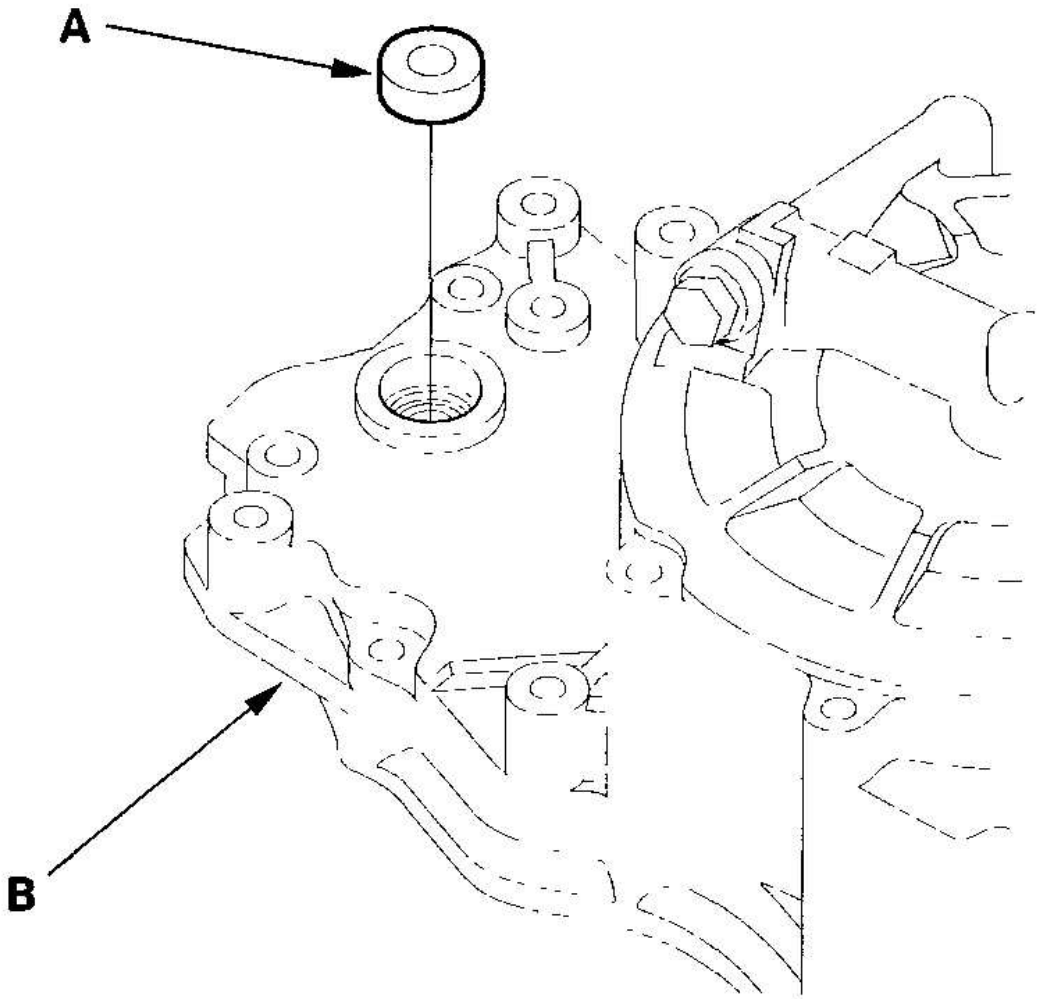


Fig. 345: Remove Oil Seal From End Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the new oil seal flush to the end cover with the special tools.

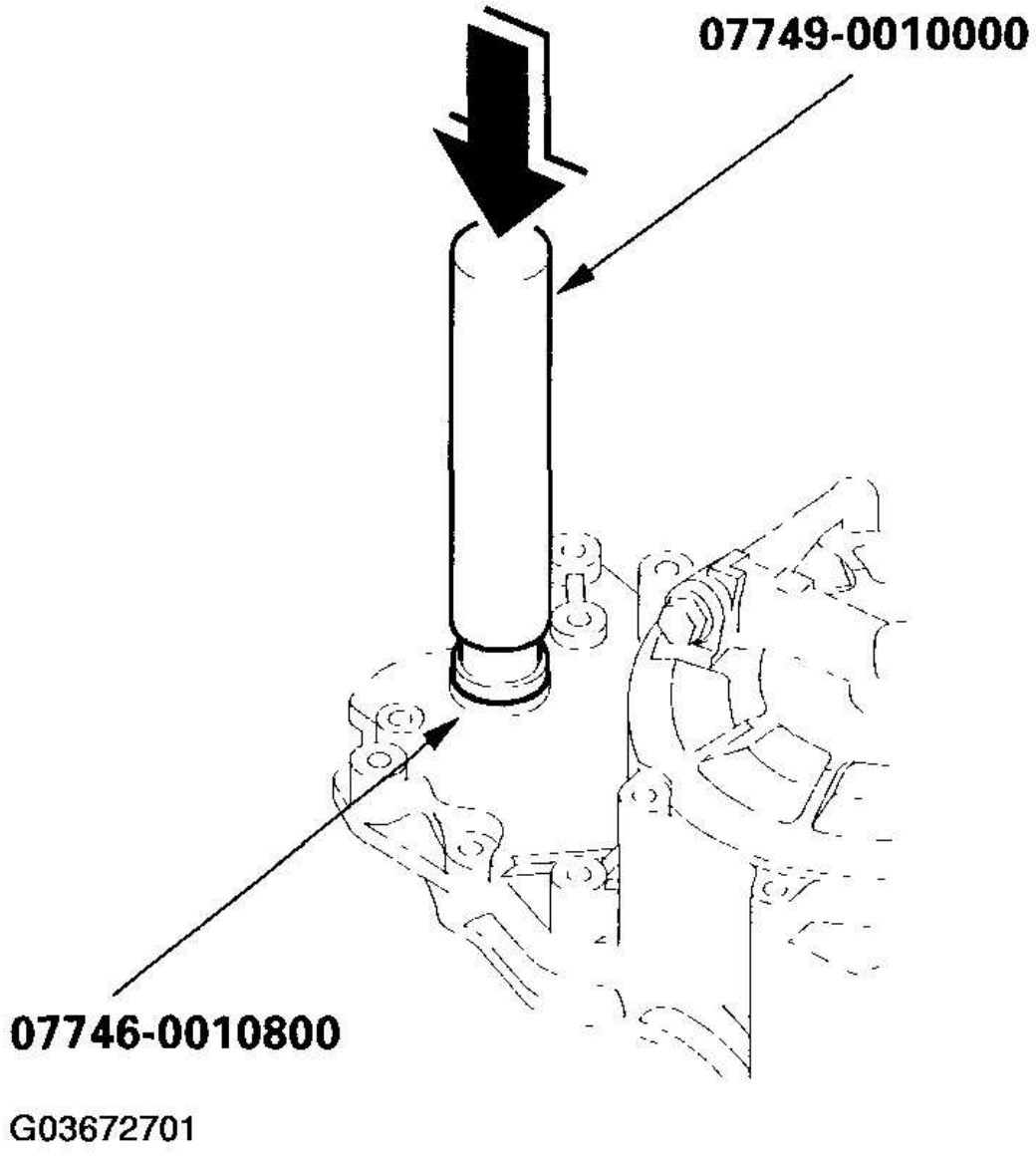


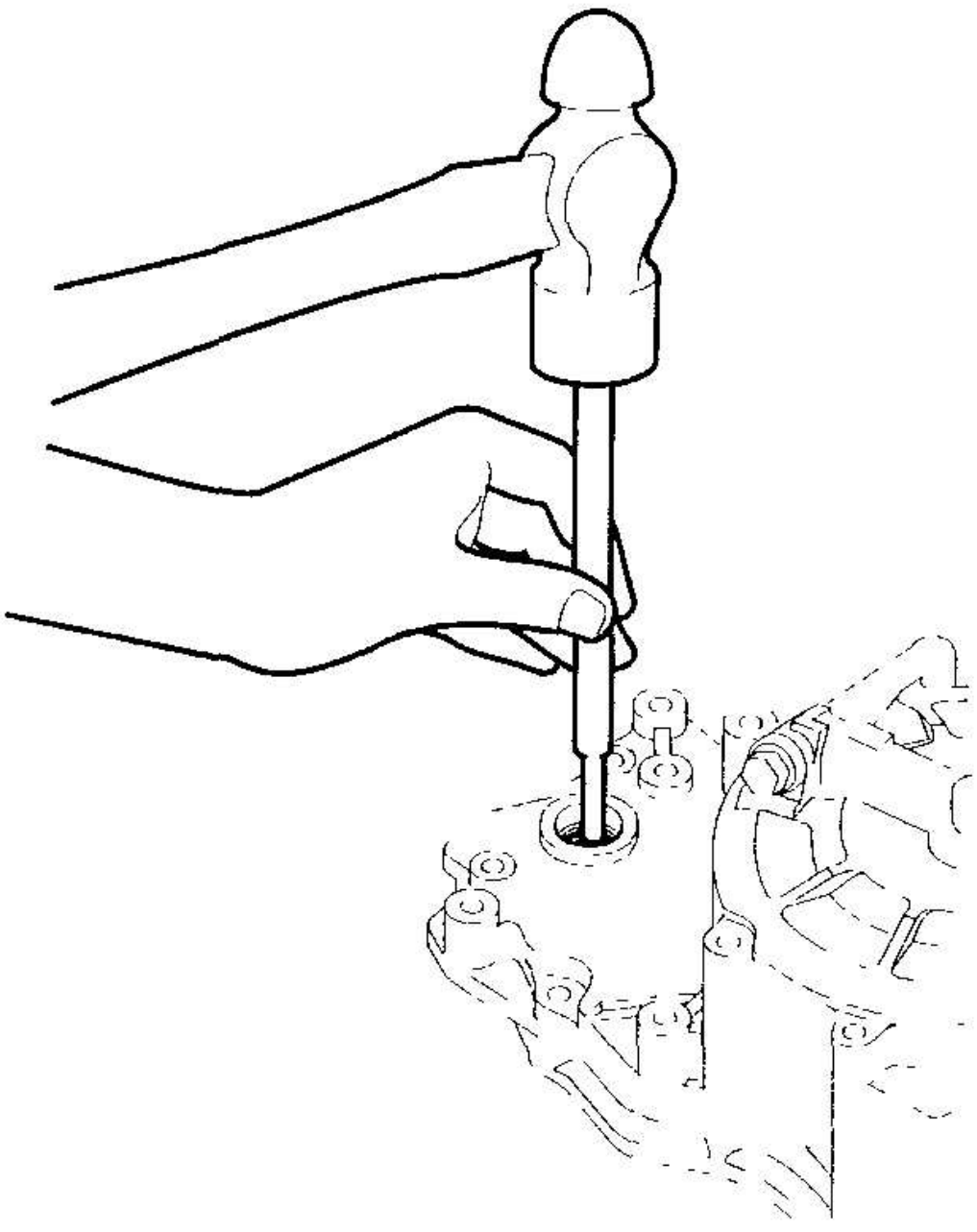
Fig. 346: Installing Oil Seal Flush To End Cover With Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SELECTOR CONTROL SHAFT BEARING REPLACEMENT

Special Tools Required

- Driver 07749-0010000
- Attachment, 22 x 24 mm 07746-0010800

1. Remove the oil seal from the end cover, then remove the bearing.



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Fig. 347: Removing Oil Seal From End Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the new bearing flush to the end cover with the special tools.

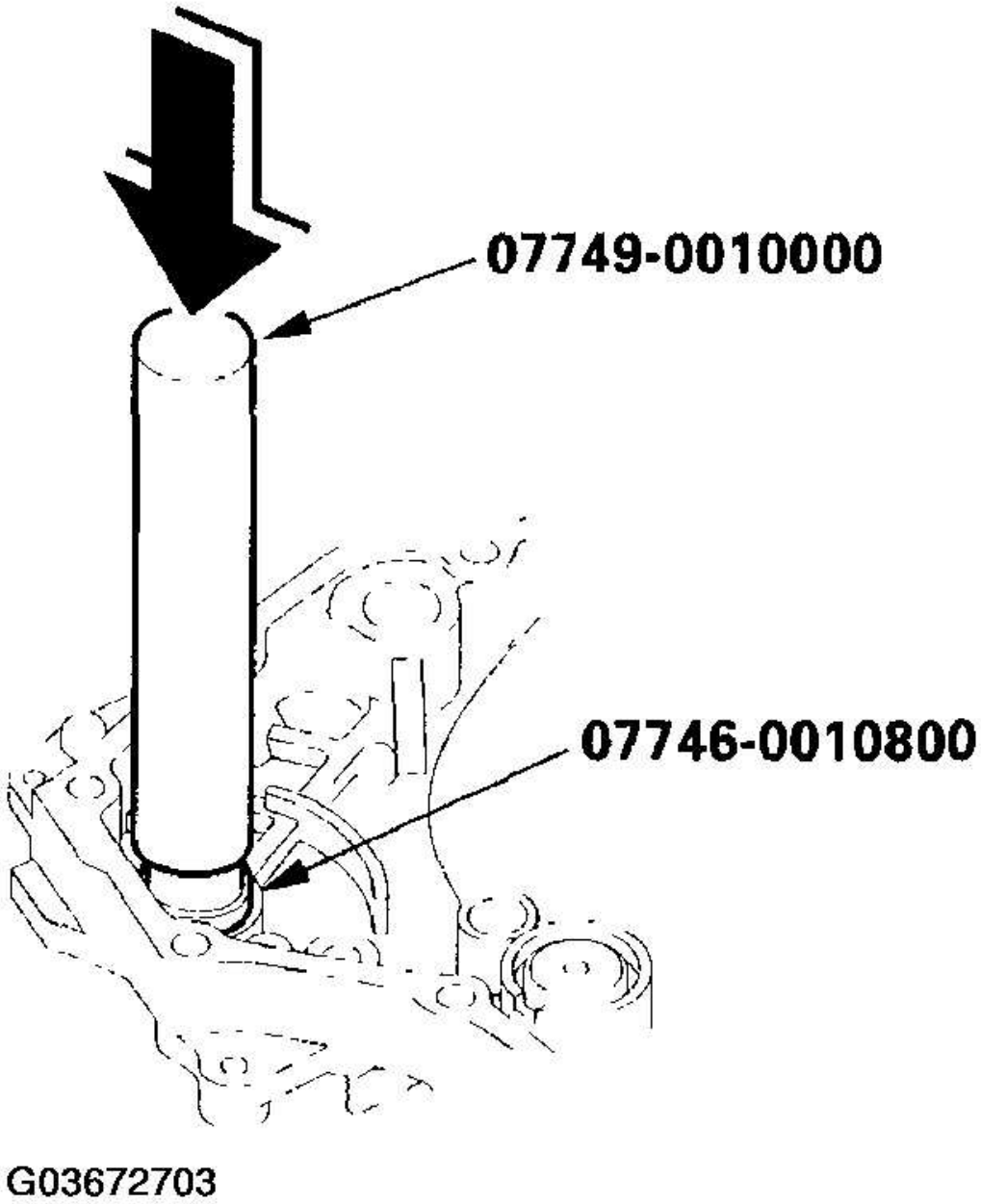
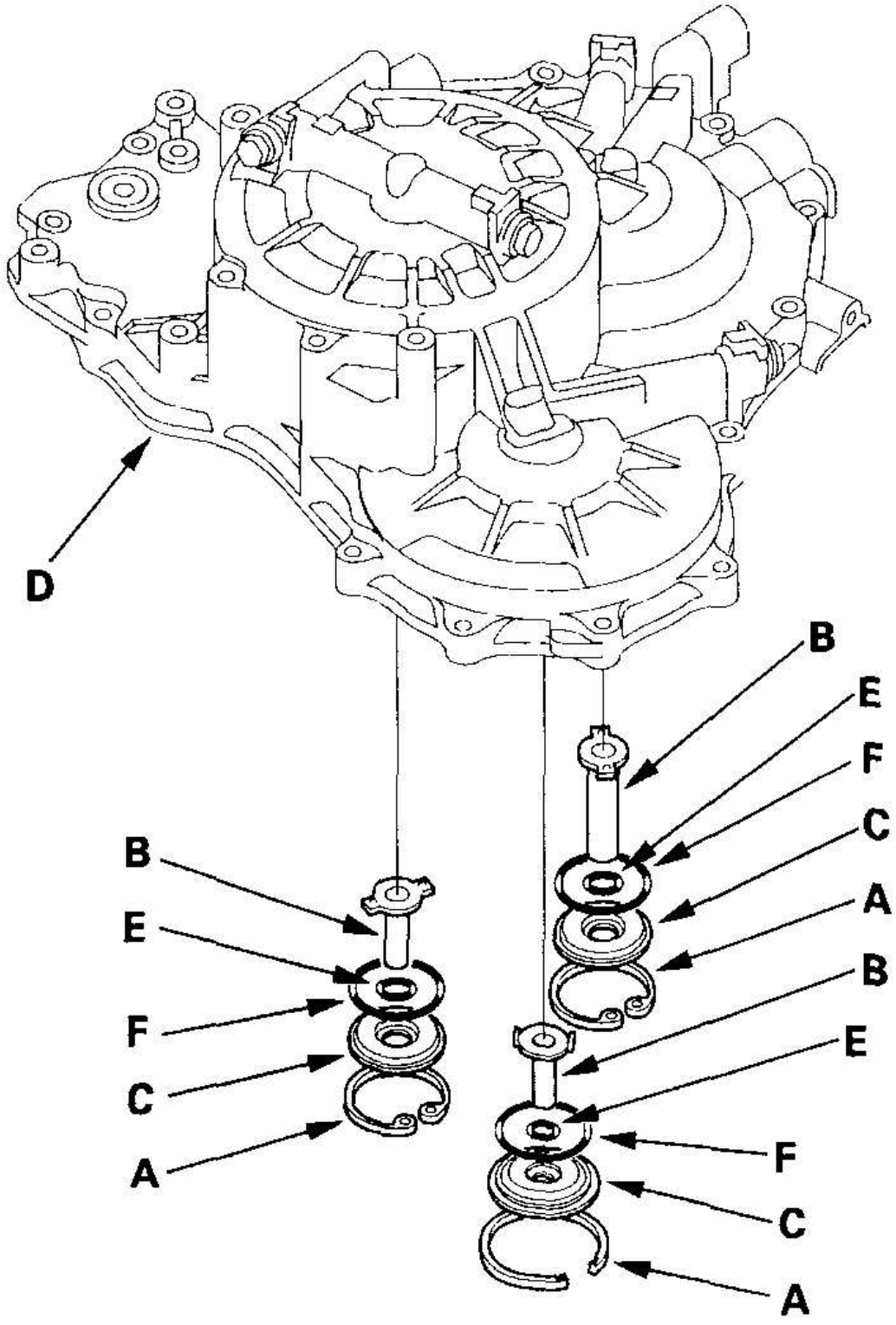


Fig. 348: Installing Bearing Flush To End Cover With Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the new oil seal.

ATF FEED PIPE REPLACEMENT

1. Remove the snap rings (A), ATF feed pipes (B) and feed pipe flanges (C) from the end cover (D).



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Fig. 349: Removing Snap Rings, ATF Feed Pipes And Feed Pipe Flanges
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the new O-ring (E) over the ATF feed pipe.
3. Install the ATF feed pipe in the end cover by aligning the feed pipe tabs with the indentations in the end cover.
4. Install the new O-ring (F) in the end cover, then install the feed pipe flange over the ATF feed pipe and O-rings.
5. Secure the ATF feed pipe and feed pipe flange with the snap ring.

TRANSMISSION HOUSING

HOUSING AND SHAFT ASSEMBLY REMOVAL

Special Tools Required

Housing puller 07HAC-PK40102

1. Remove the ATF dipstick guide pipe (A).

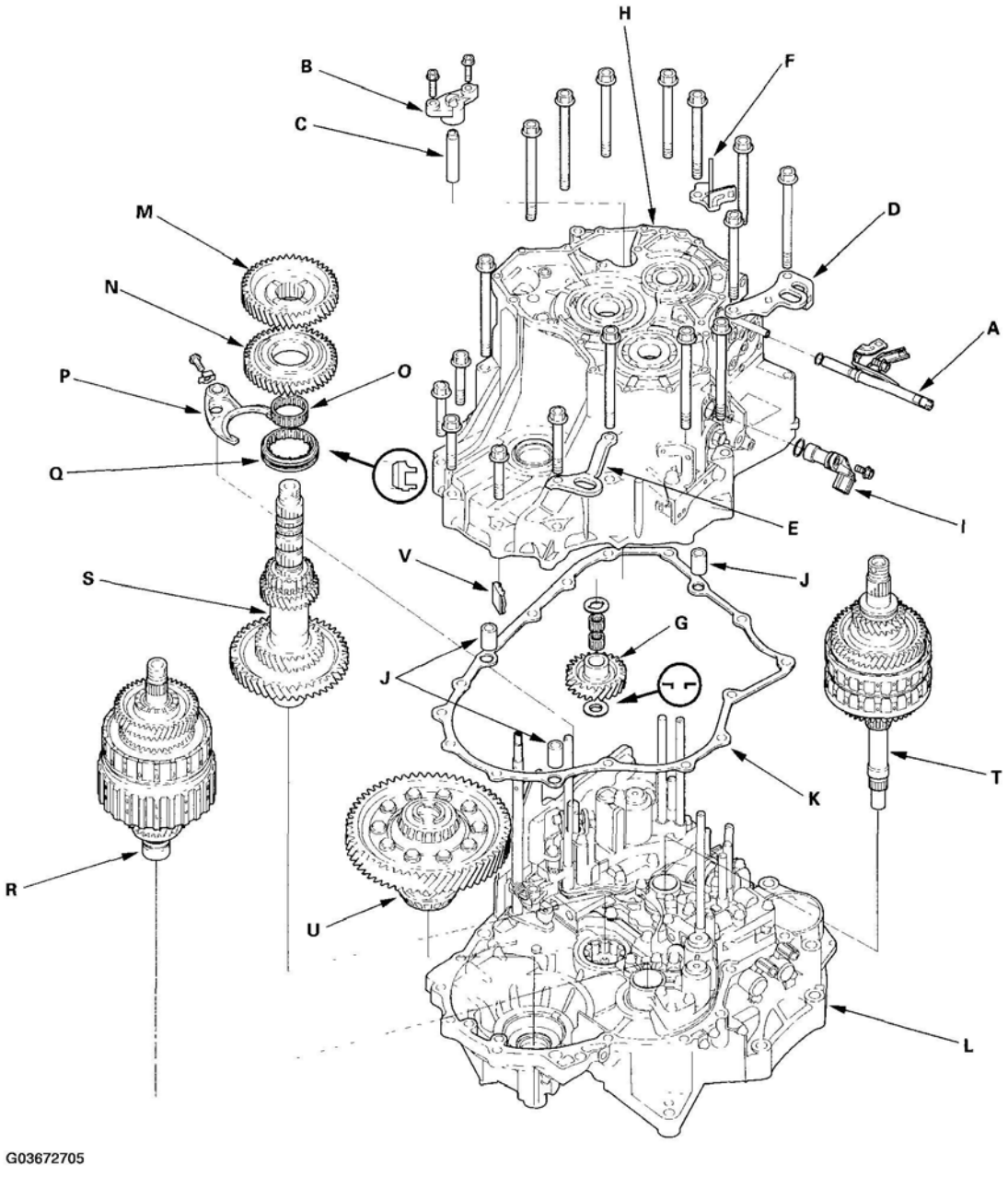


Fig. 350: Removing ATF Dipstick Guide Pipe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the two bolts securing the reverse idler gear shaft holder, then remove the reverse idler gear shaft holder (B) and shaft (C).
3. Remove the transmission housing mounting bolts (17 bolts), transmission hangers (D) (E), and harness clamp bracket (F).

4. Move the reverse idler gear (G) to disengage it from the mainshaft and countershaft idler gear.

NOTE: The transmission housing will not separate from the torque converter housing if the reverse idler gear is not moved.

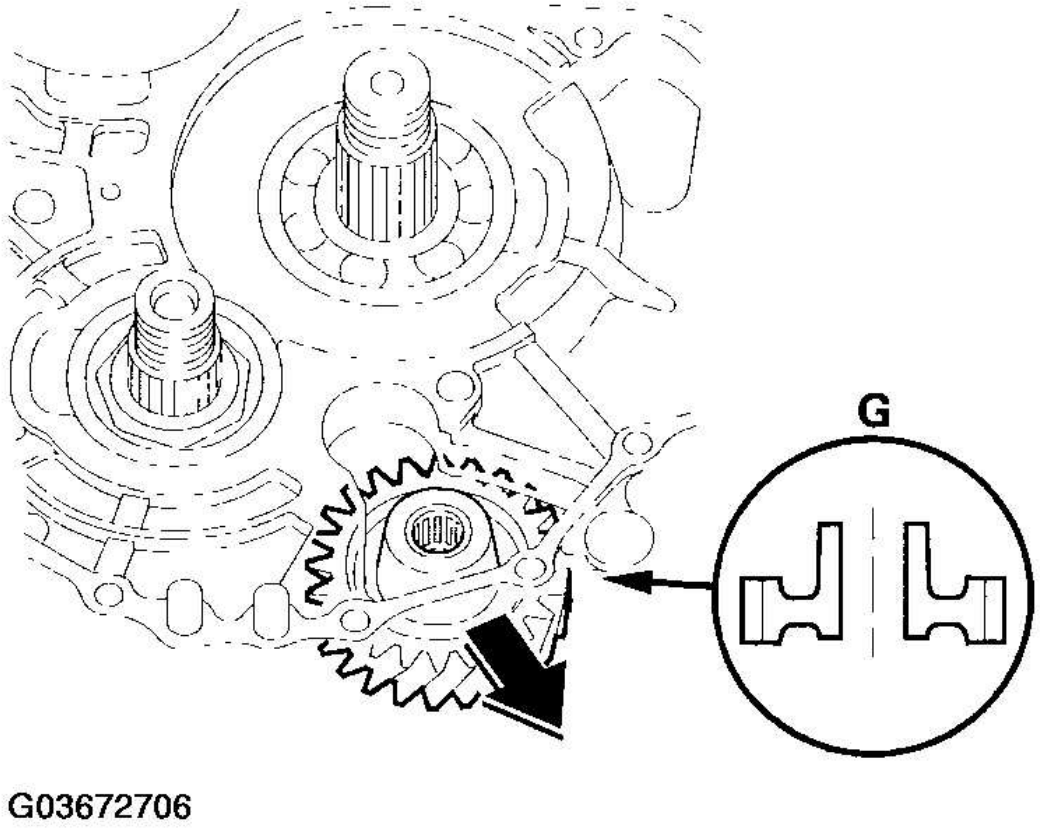


Fig. 351: Moving Reverse Idler Gear To Disengage From Mainshaft And Countershaft Idler Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Align the spring pin (W) on the selector control shaft (X) with the transmission housing groove (Y) by turning the selector control shaft.

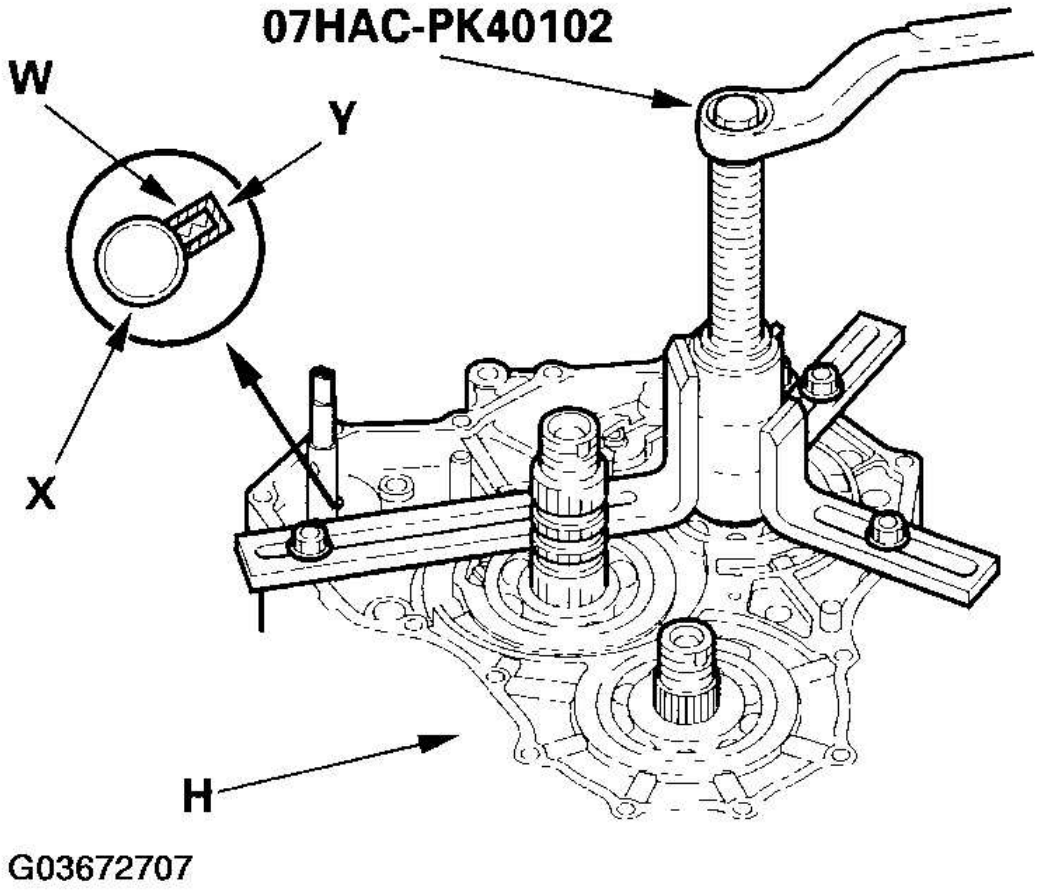


Fig. 352: Aligning Spring Pin On Selector Control Shaft With Transmission Housing Groove
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the special tool over the mainshaft, then remove the transmission housing (H).

NOTE: If the top arm of your housing puller is too short, replace it with Housing Puller Arm, 205 mm T/N07SAC-P0Z0101.

7. Remove the reverse idler gear (G), needle bearings, and washers from the transmission housing.

8. Remove the output shaft (countershaft) speed sensor (I).
9. Remove the three dowel pins (J) and gasket (K) from the torque converter housing (L).
10. Remove the countershaft 2nd gear (M), countershaft reverse gear (N), and needle bearing (O).
11. Remove the lock bolt securing the shift fork, then remove the shift fork (P) and reverse selector (Q). If the reverse selector hub is not press-fitted, remove the reverse selector hub, countershaft 5th gear, and needle bearing from the countershaft.
12. Remove the secondary shaft subassembly (R). If the reverse selector hub is press-fitted, remove the secondary shaft subassembly, countershaft subassembly (S) and mainshaft subassembly (T) together.
13. Remove the countershaft subassembly.
14. Remove the mainshaft subassembly.
15. Remove the differential assembly (U).
16. Remove the ATF magnet (V), and clean it. Reinstall the magnet in the transmission housing.

BEARING REMOVAL AND INSTALLATION

Special Tools Required

- Driver 07749-0010000
- Seal driver attachment 07GAD-PG40101 or 07GAD-PG40100
- Attachment, 62 x 68 mm 07746-0010500
- Attachment, 72 x 75 mm 07746-0010600 (for 2003-2005 models countershaft bearing use)
- Attachment, 78 x 80 mm 07NAD-PX40100 (for 2006-07 model countershaft bearing use)

NOTE: Coat all parts with ATF before assembly.

1. To remove the mainshaft bearing (A), countershaft bearing (B), and secondary shaft bearing (C) from the transmission housing, expand each snap ring with

the snap ring pliers, then push the bearing out.

NOTE: Do not remove the snap rings unless it's necessary to clean the grooves in the housing.

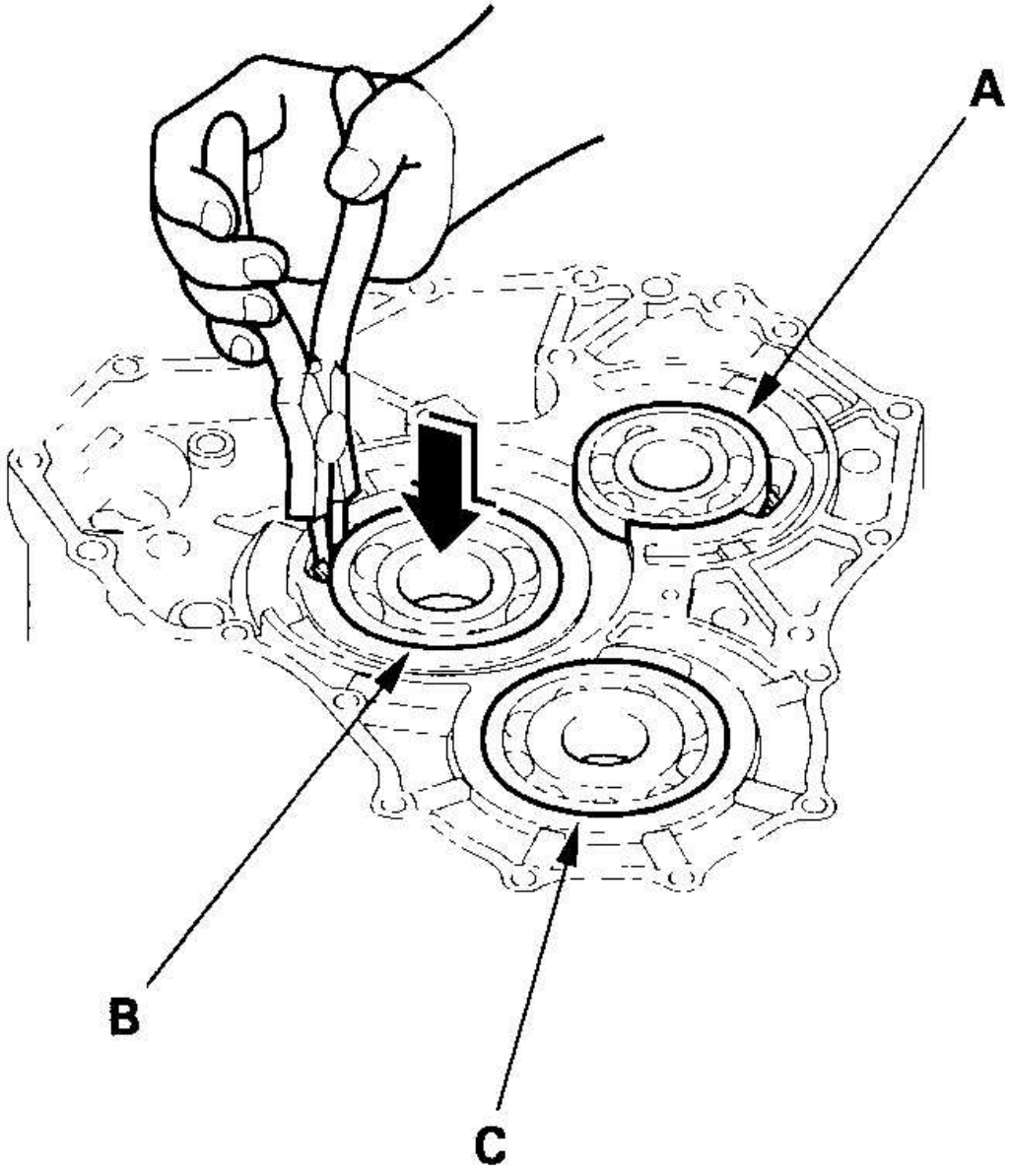


Fig. 353: Expanding Snap Ring With Snap Ring Pliers To Removing Mainshaft, Countershaft And Secondary Shaft Bearings
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the bearings in the direction shown.
3. Expand each snap ring with the snap ring pliers, and insert the bearing part-way into the housing.
4. Release the pliers, then push the bearing down into the housing until the snap ring snaps in place around it.

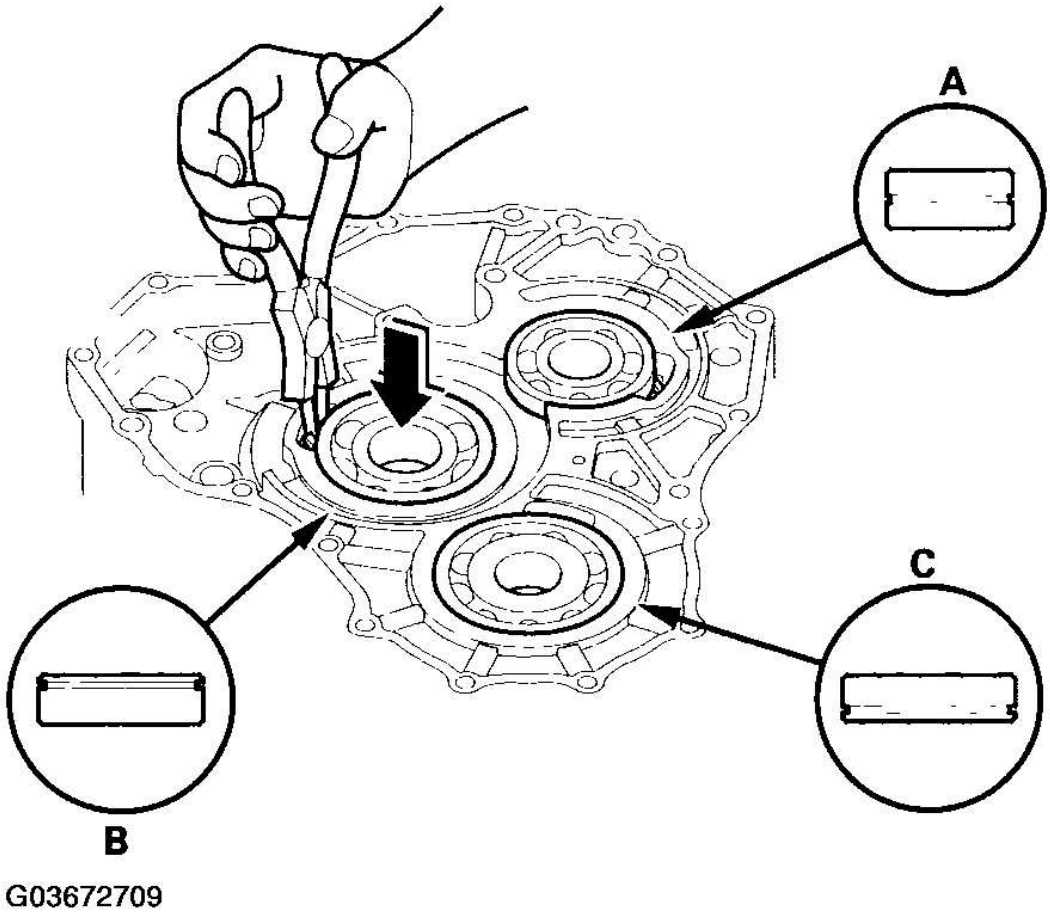


Fig. 354: Pushing Bearing Down Into Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. After installing the bearings verify the following:
   - The snap rings (A) are seated in the bearing and housing grooves.
   - The ring end gaps (B) are correct.

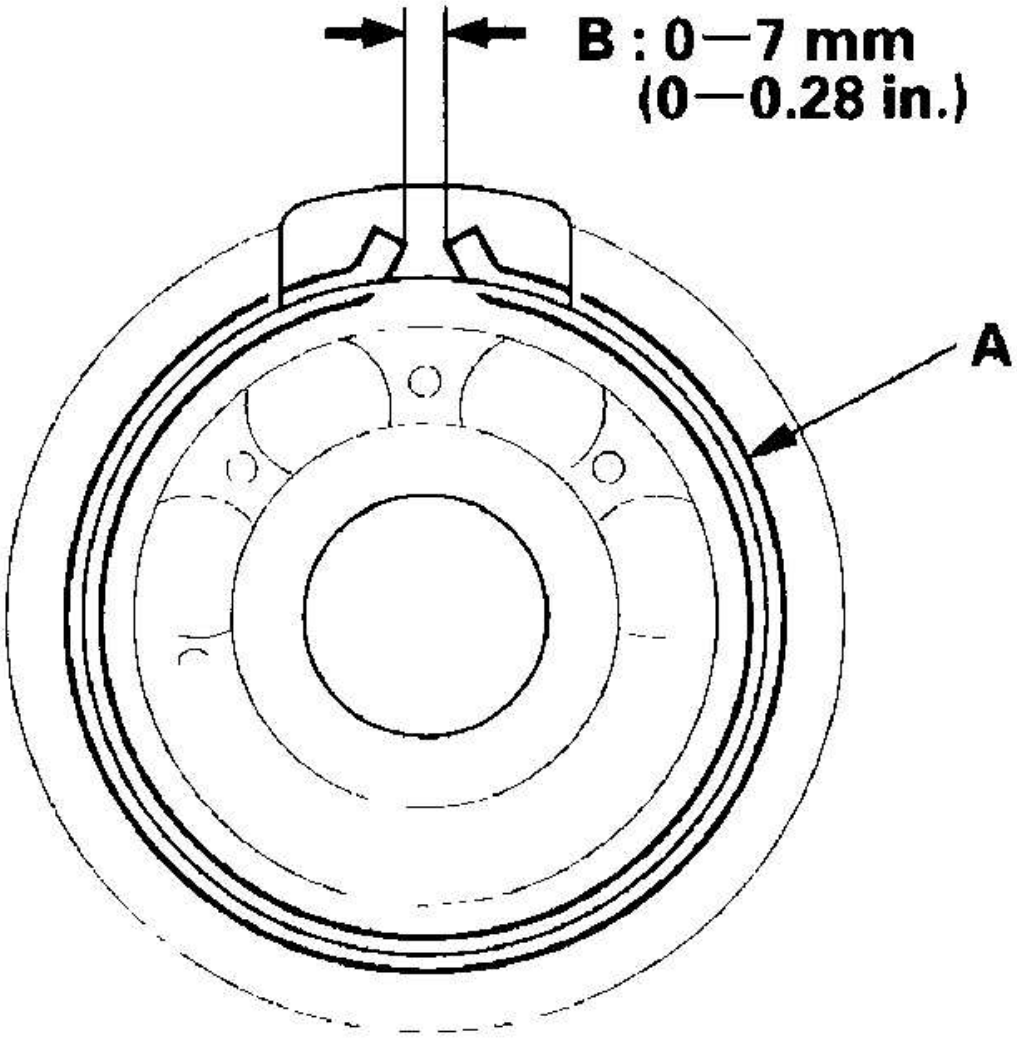


Fig. 355: Verifying Snap Rings Are Seated In Bearing And Housing Grooves
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VALVE BODY

VALVE BODY AND ATF STRAINER REMOVAL

1. Remove the three ATF feed pipes (A) from the regulator valve body (B), four pipes (C) from the top accumulator body (D), one pipe (E) from the servo body (F), and one 10 mm pipe (G) from the accumulator body (H).

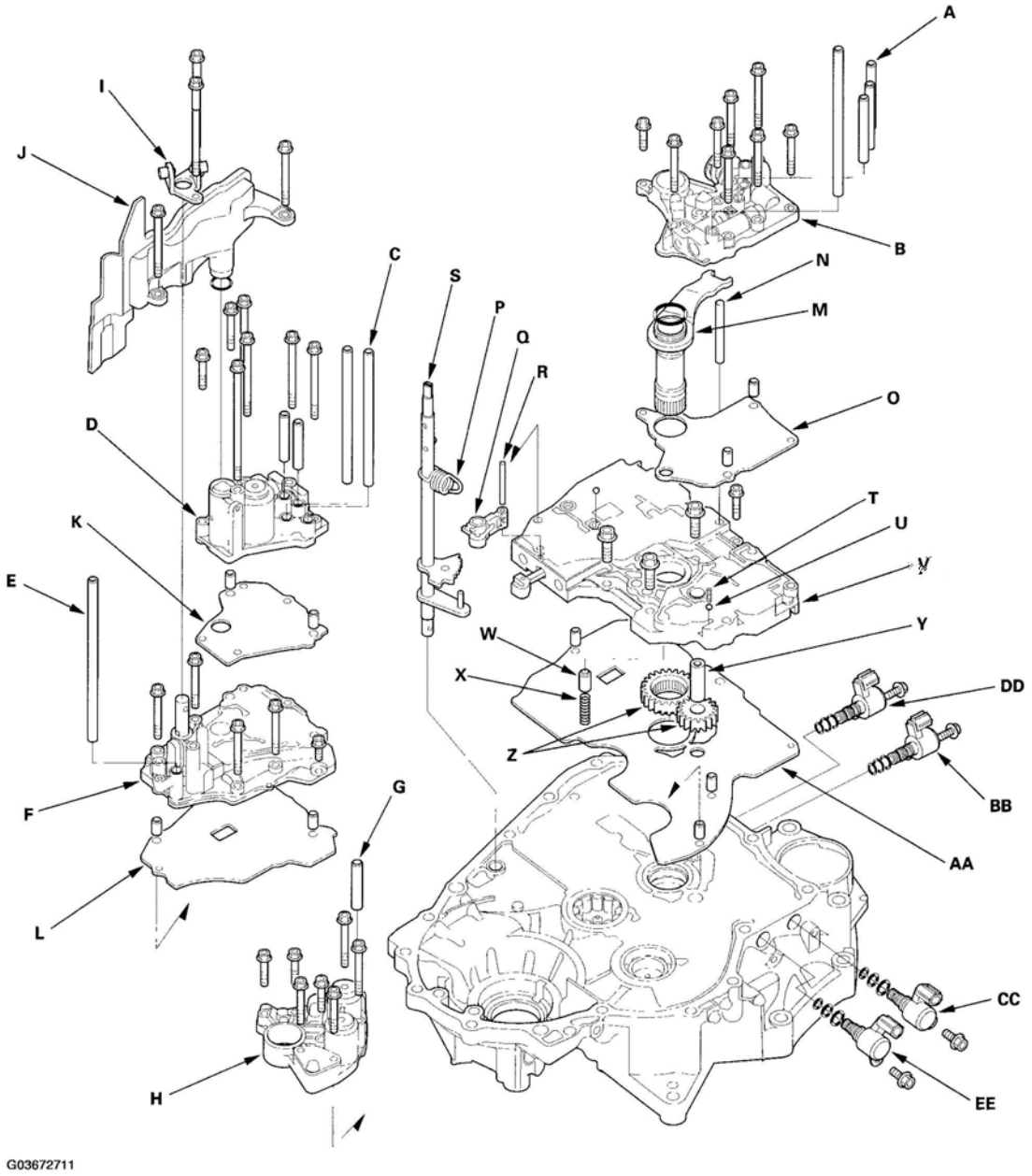


Fig. 356: Removing ATF Feed Pipes From Regulator Valve Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the servo detent base (I) (two bolts).

3. Remove the ATF strainer (J) (two bolts).
4. Remove the top accumulator body (D) (seven bolts), then remove the top accumulator body separator plate (K) and two dowel pins.
5. Remove the servo body (F) (five bolts), then remove servo separator plate (L) and two dowel pins.
6. Remove the regulator valve body (B) (eight bolts).
7. Remove the stator shaft (M) and stator shaft stop (N).
8. Remove the regulator separator plate (O) and two dowel pins.
9. Remove the accumulator body (H) (seven bolts).
10. Unhook the detent spring (P) from the detent arm (Q), then remove the detent arm shaft (R), detent arm, and selector control shaft (S).
11. Remove the cooler check valve spring (T) and cooler check valve (U).
12. Remove the main valve body (V) (four bolts).
13. Remove the torque converter check valve (W) and valve spring (X).
14. Remove the ATF pump driven gear shaft (Y), then remove the ATF pump gears (Z).
15. Remove the main separator plate (AA) and three dowel pins.
16. Remove shift solenoid valves (BB) (CC) (DD) and torque converter clutch solenoid valve (EE) from the torque converter housing.
17. Clean the inlet opening (A) of the ATF strainer (B) thoroughly with compressed air, then check that it is in good condition and that the inlet opening is not clogged.

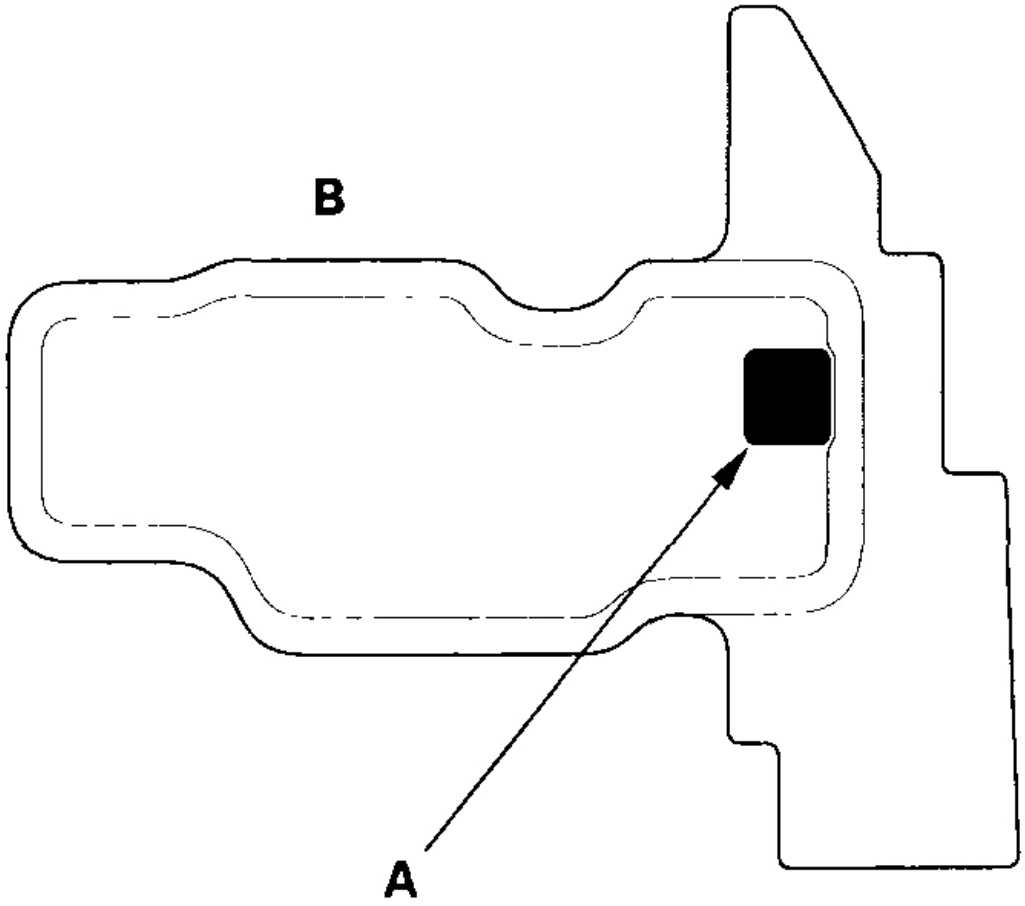


Fig. 357: Cleaning Inlet Opening Of ATF Strainer With Compressed Air
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Test the ATF strainer by pouring clean ATF through the inlet opening, and replace it if it is clogged or damaged.

VALVE BODY REPAIR

NOTE: This repair is only necessary if one or more of the valves in a valve body do not slide smoothly in their bores. Use this procedure to free the valves.

1. Soak a sheet of # 600 abrasive paper in ATF for about 30 minutes.
2. Carefully tap the valve body so the sticking valve drops out of its bore. It may be necessary to use a small screwdriver to pry the valve free. Be careful not to scratch the bore with the screwdriver.
3. Inspect the valve for any scuff marks. Use the ATF-soaked # 600 paper to polish off any burrs that are on the valve, then wash the valve in solvent and dry it with compressed air.
4. Roll up half a sheet of ATF-soaked # 600 paper and insert it in the valve bore of the sticking valve. Twist the paper slightly, so that it unrolls and fits the bore tightly, then polish the bore by twisting the paper as you push it in and out.

NOTE: The valve body is aluminum and doesn't require much polishing to remove any burrs.

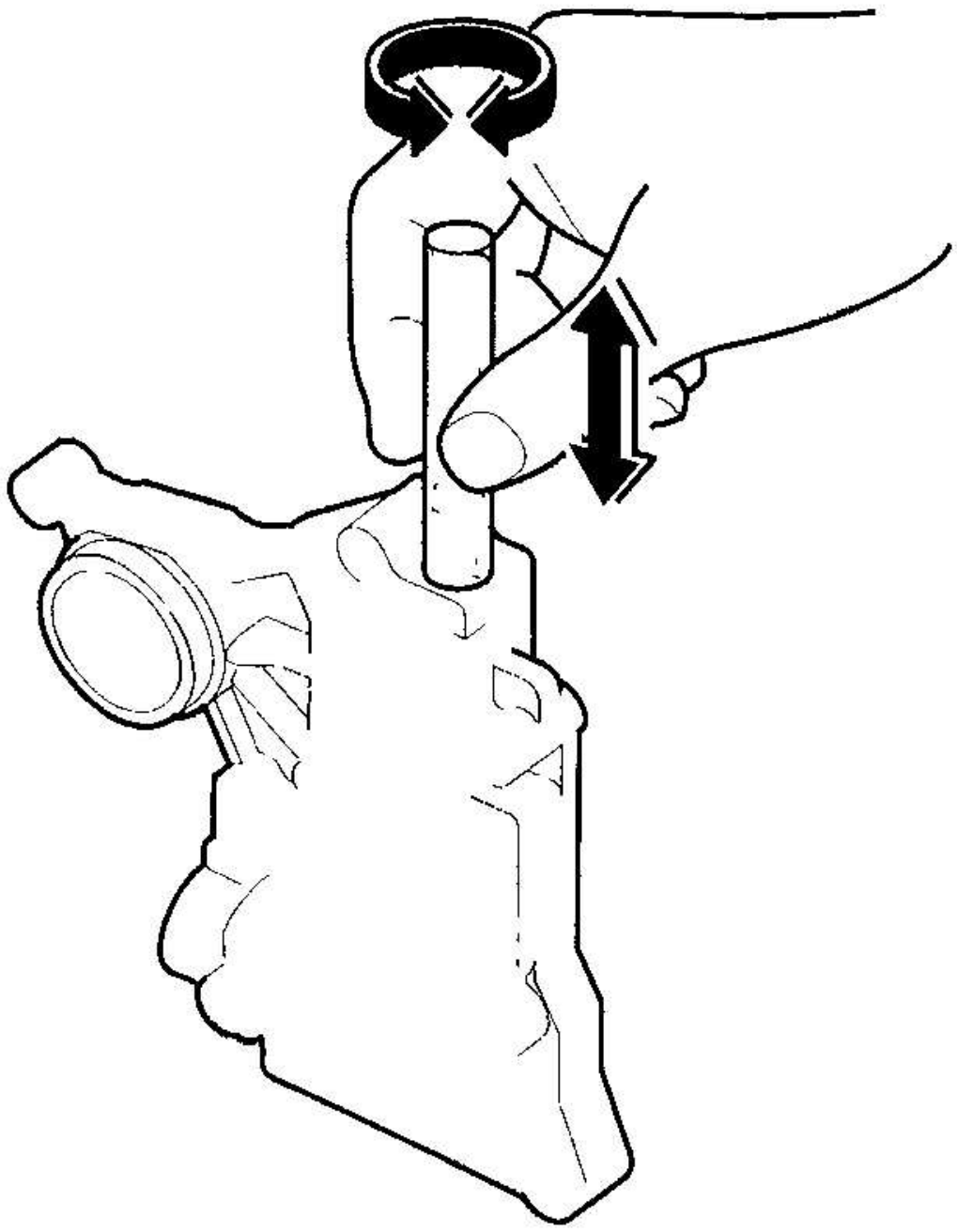
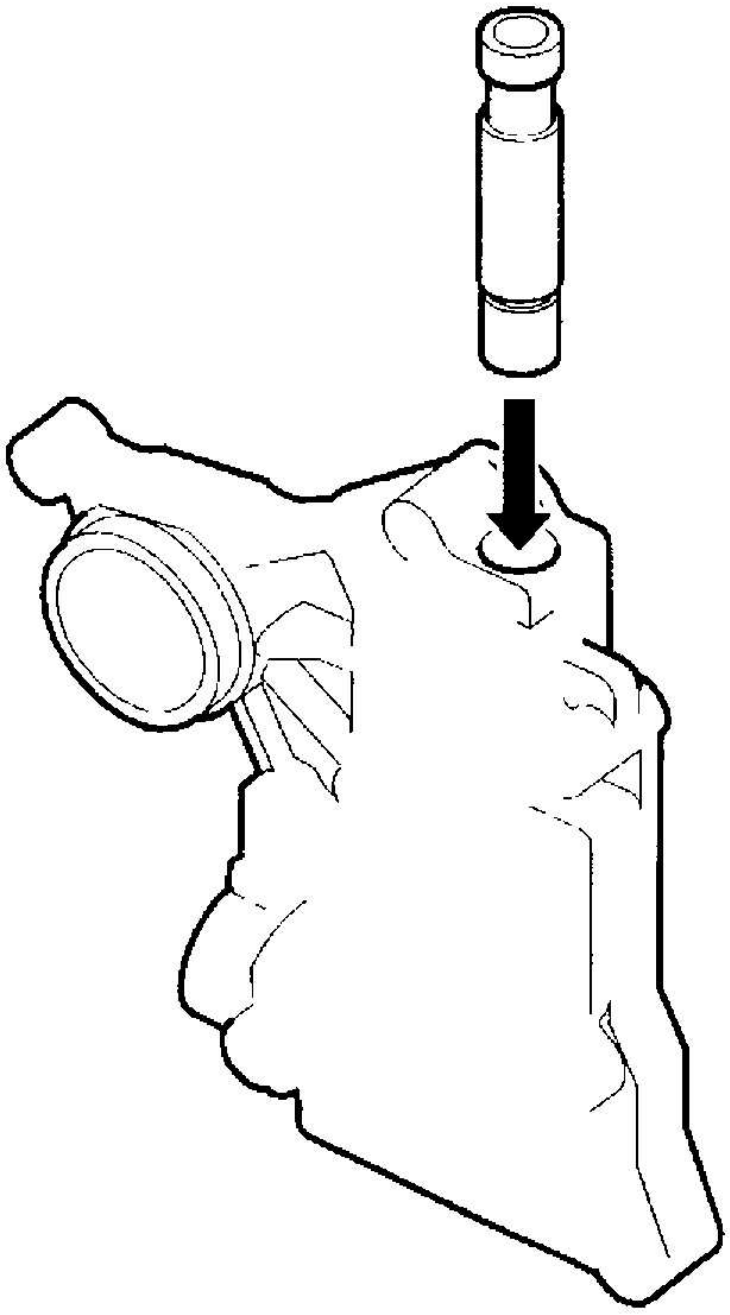


Fig. 358: Inserting Rolled Up Half A Sheet Of ATF-soaked # 600 Paper In

Valve Bore
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the #600 paper. Thoroughly wash the entire valve body in solvent, then dry it with compressed air.
6. Coat the valve with ATF, then drop it into its bore. It should drop to the bottom of the bore under its own weight. If not, repeat steps 4 and 5, then retest. If the valve still sticks, replace the valve body.



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Fig. 359: Dropping Valve Coated With ATF Into Its Bore
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the valve, and thoroughly clean it and the valve body with solvent. Dry all parts with compressed air, then reassemble using ATF as a lubricant.

VALVE BODY VALVE INSTALLATION

1. Coat all parts with ATF before assembly.
2. Install the valves and springs in the sequence shown for the main valve body (see **MAIN VALVE BODY DISASSEMBLY, INSPECTION, AND REASSEMBLY**), regulator valve body (see **REGULATOR VALVE BODY DISASSEMBLY, INSPECTION, AND REASSEMBLY**), servo body (see **SERVO BODY DISASSEMBLY, INSPECTION, AND REASSEMBLY**), and top accumulator body (see **TOP ACCUMULATOR BODY DISASSEMBLY, INSPECTION, AND REASSEMBLY**). Refer to **Fig. 360** valve cap , and install each valve cap so the end shown facing up will be facing the outside of the valve body.

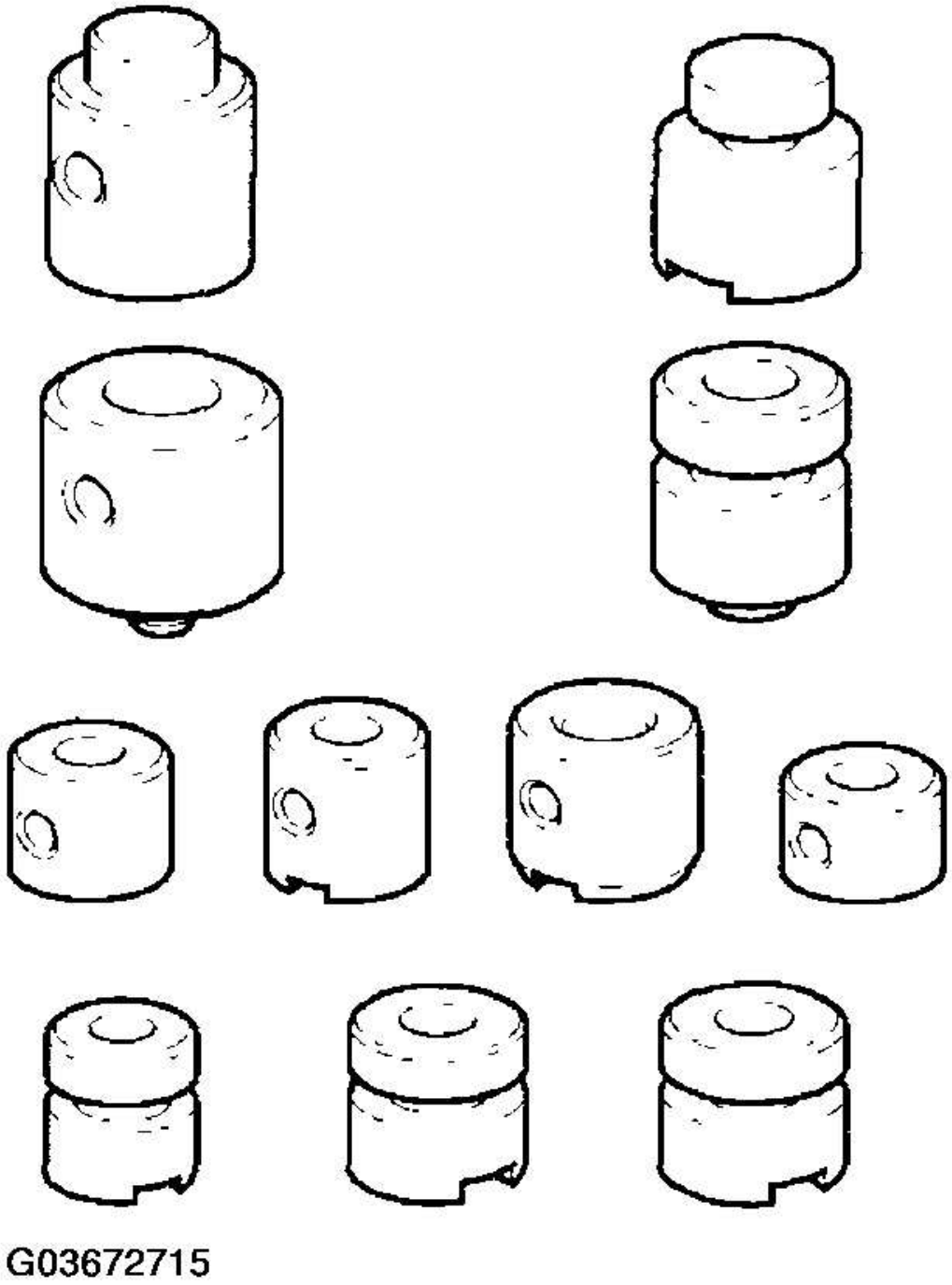


Fig. 360: Installing Valve Cap Facing Up

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install all the springs and seats. Insert the spring (A) in the valve, then install the valve in the valve body (B). Push the spring in with a screwdriver, then install the spring seat (C).

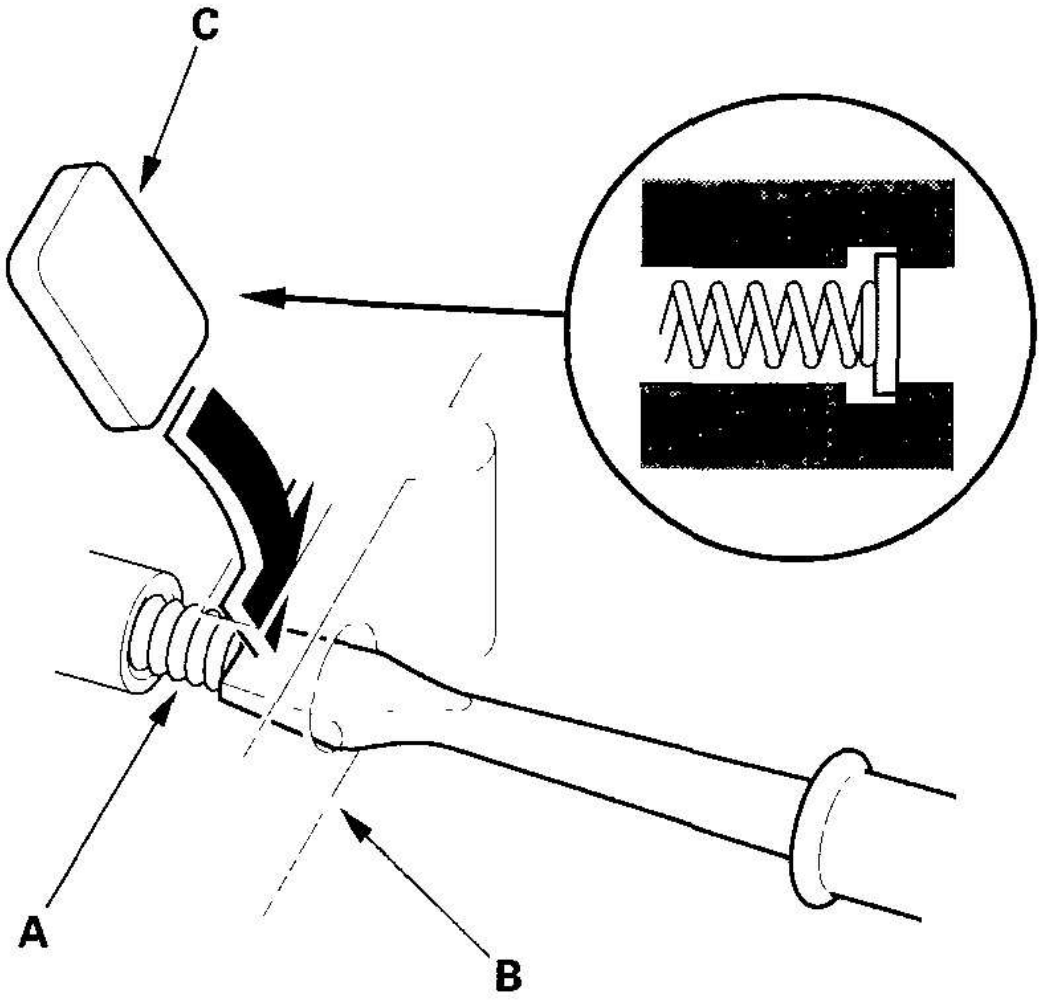


Fig. 361: Inserting Spring In Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MAIN VALVE BODY DISASSEMBLY, INSPECTION, AND REASSEMBLY

1. Clean all parts thoroughly in solvent or carburetor cleaner, and dry them with compressed air. Blow out all passages.
2. Do not use a magnet to remove the check ball, it may magnetize the ball.
3. Inspect the valve body for scoring and damage. Replace the valve body as an assembly if any parts are worn or damaged.
4. Check all valves for free movement. If any fail to slide freely, refer to valve body repair (see **VALVE BODY REPAIR**).
5. Coat all parts with ATF during assembly.
6. Install the new filter in the direction shown in **Fig. 362**.

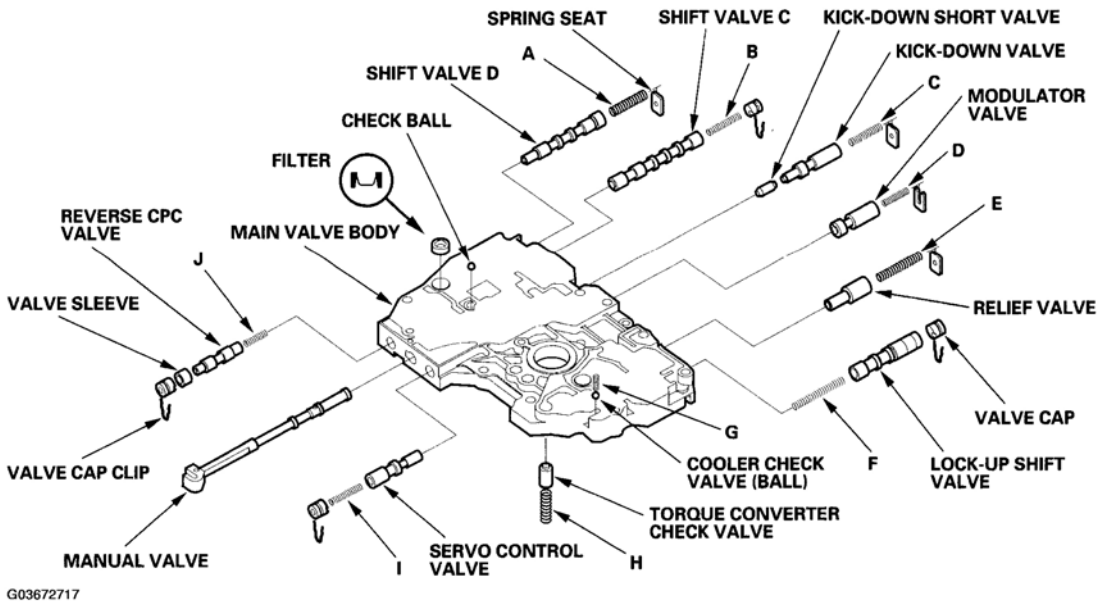


Fig. 362: Installing Filter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SPRING SPECIFICATIONS

Springs		Standard (New) -Unit: mm (in.)			
		Wire Dia.	O.D.	Free Length	No. of Coils
A	Shift valve D spring	0.7 (0.028)	6.6 (0.260)	33.7(1.327)	11.6
		0.8		49.1	

B	Shift valve C spring	(0.031)	6.6 (0.260)	(1.933)	21.7
C	Kick-down valve spring	0.8 (0.031)	6.6 (0.260)	49.1 (1.933)	21.7
D	Modulator valve spring	1.6 (0.063)	10.4 (0.409)	33.5(1.319)	9.8
E	Relief valve spring	1.2 (0.047)	11.1 (0.437)	39.0(1.535)	9.9
F	Lock-up shift valve spring	0.9 (0.035)	7.6 (0.299)	63.0 (2.480)	22.4
G	Cooler check valve spring	0.6 (0.024)	5.8 (0.228)	14.5(0.571)	6.8
H	Torque converter check valve spring	1.2 (0.047)	8.6 (0.339)	34.4(1.354)	11.7
I	Servo control valve spring	0.9 (0.035)	6.4 (0.252)	32.5(1.280)	17.5
J	Reverse CPC valve spring	0.7 (0.028)	6.1 (0.240)	17.8(0.701)	7.9

ATF PUMP INSPECTION

1. Install the ATF pump drive gear (A), driven gear (B), and ATF pump driven gear shaft (C) in the main valve body (D). Lubricate all parts with ATF, and install the ATF pump driven gear with its grooved and chamfered side facing up.

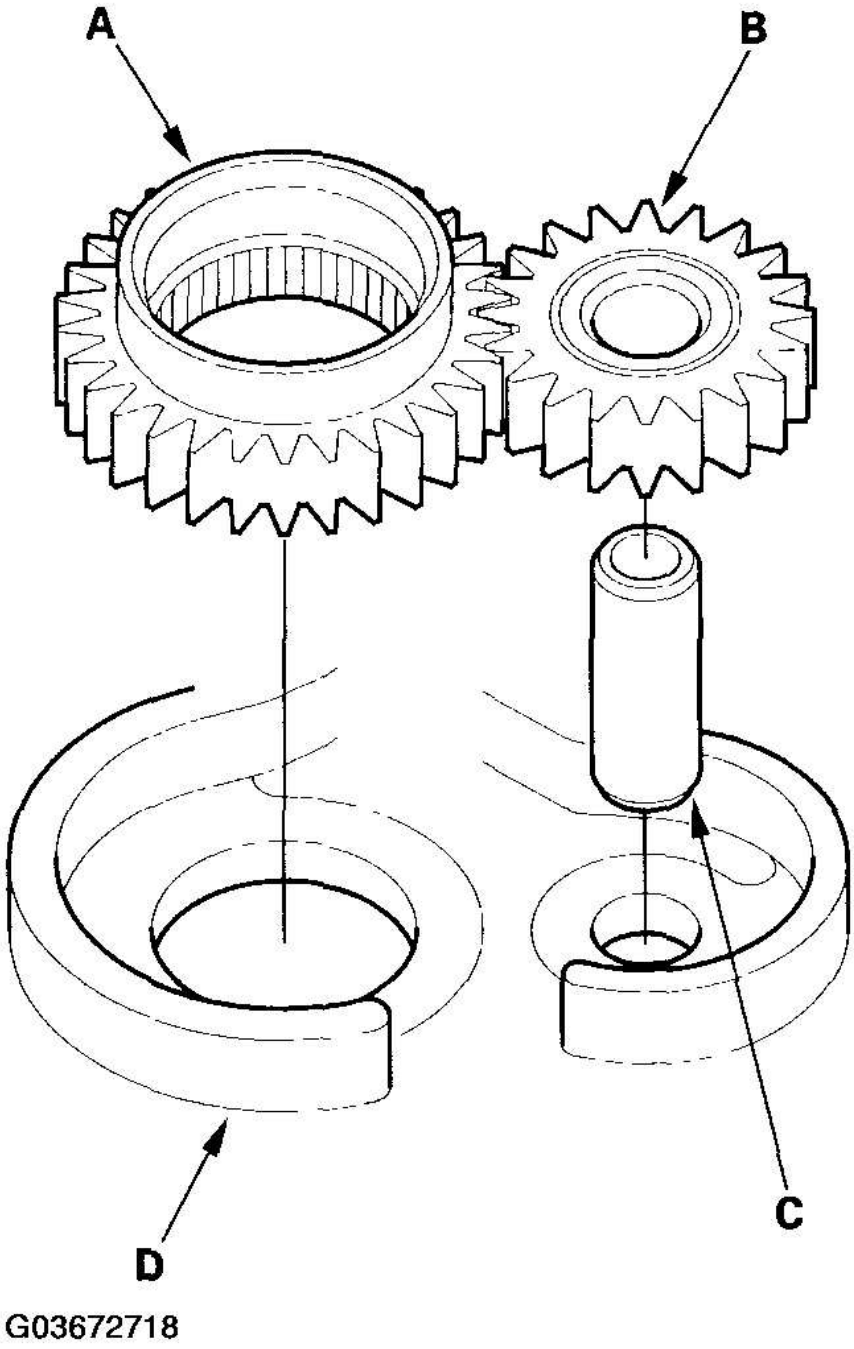


Fig. 363: Installing ATF Pump Drive Gear, Driven Gear And ATF Pump Driven Gear Shaft In Main Valve Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the side clearance of the ATF pump drive gear (A) and driven gear (B).

ATF Pump Gears Side (Radial) Clearance:

Standard (New):

ATF Pump Drive Gear: 0.210-0.265 mm (0.0083-0.00104 in.)
ATF Pump Driven Gear: 0.070-0.125 mm (0.0028-0.0050 in.)

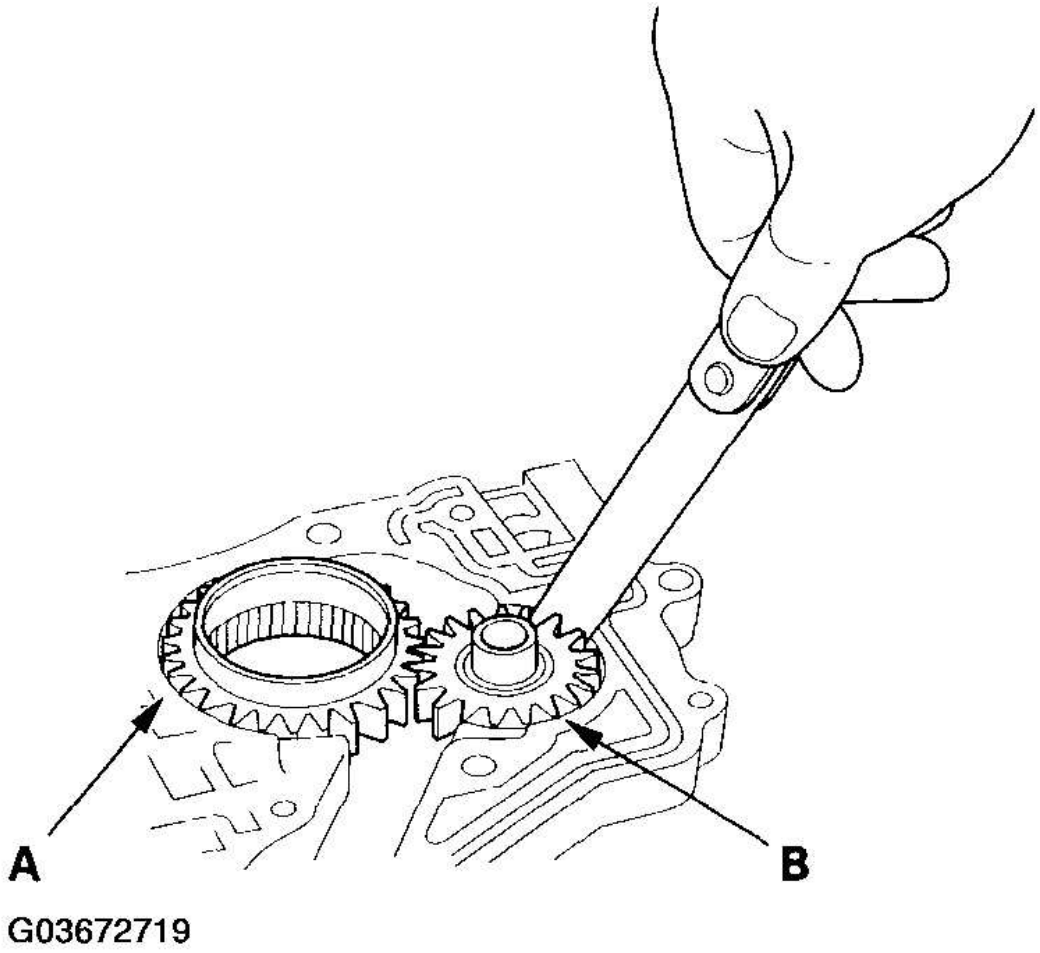


Fig. 364: Measuring Side Clearance Of ATF Pump Drive Gear And Driven Gear

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the ATF pump driven gear shaft. Measure the thrust clearance between the ATF pump driven gear (A) and the valve body (B) with a straight edge (C) and a feeler gauge (D).

ATF Pump Drive/Driven Gear Thrust (Axial) Clearance:

Standard (New): 0.03-0.06 mm (0.001-0.002 in.)
Service Limit: 0.07 mm (0.003 in.)

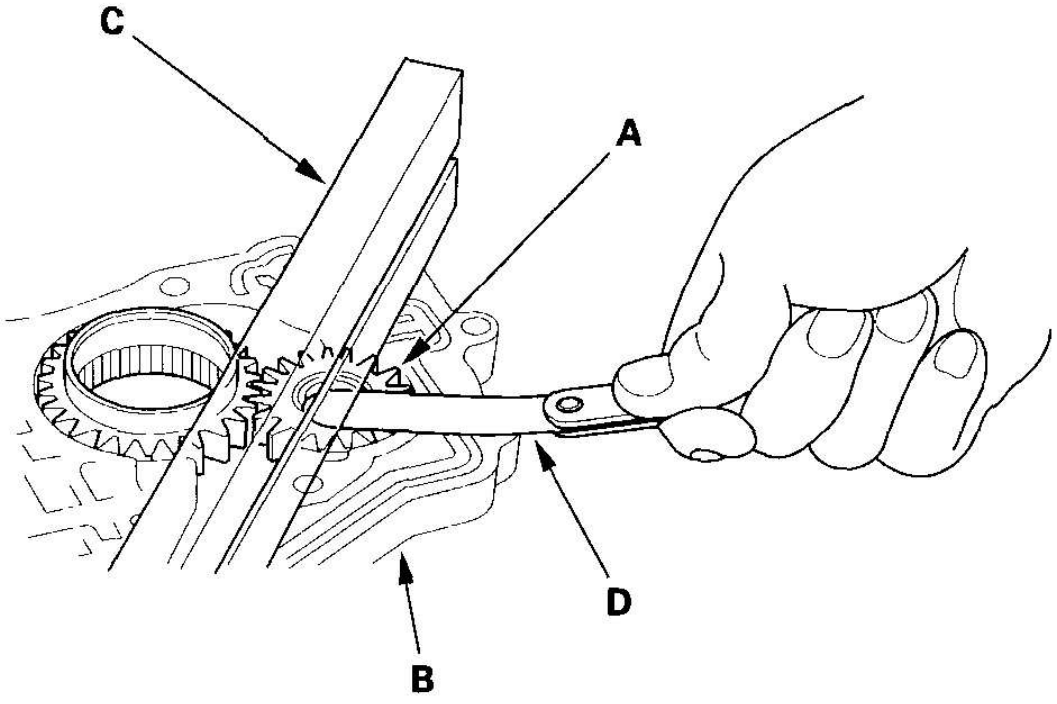


Fig. 365: Measuring Thrust Clearance Between ATF Pump Driven Gear And Valve Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REGULATOR VALVE BODY DISASSEMBLY, INSPECTION, AND REASSEMBLY

1. Clean all parts thoroughly in solvent or carburetor cleaner, and dry them with

compressed air. Blow out all passages.

2. Inspect the valve body for scoring and damage.
3. Check all valves for free movement. If any fail to slide freely, refer to valve body repair (see **VALVE BODY REPAIR**).
4. Replace the valve body as an assembly if any parts are worn or damaged.
5. Hold the regulator spring cap in place while removing the stop bolt. The regulator spring cap is spring loaded. Once the stop bolt is removed, release the spring cap slowly so it does not pop out.
6. Reassembly is the reverse of disassembly. Install the filter in the direction shown in **Fig. 366**.
7. Coat all parts with ATF during assembly.
8. Align the hole in the regulator spring cap with the hole in the valve body, then press the spring cap into the valve body, and tighten the stop bolt.
9. Install the new filter in the direction shown in **Fig. 366**.

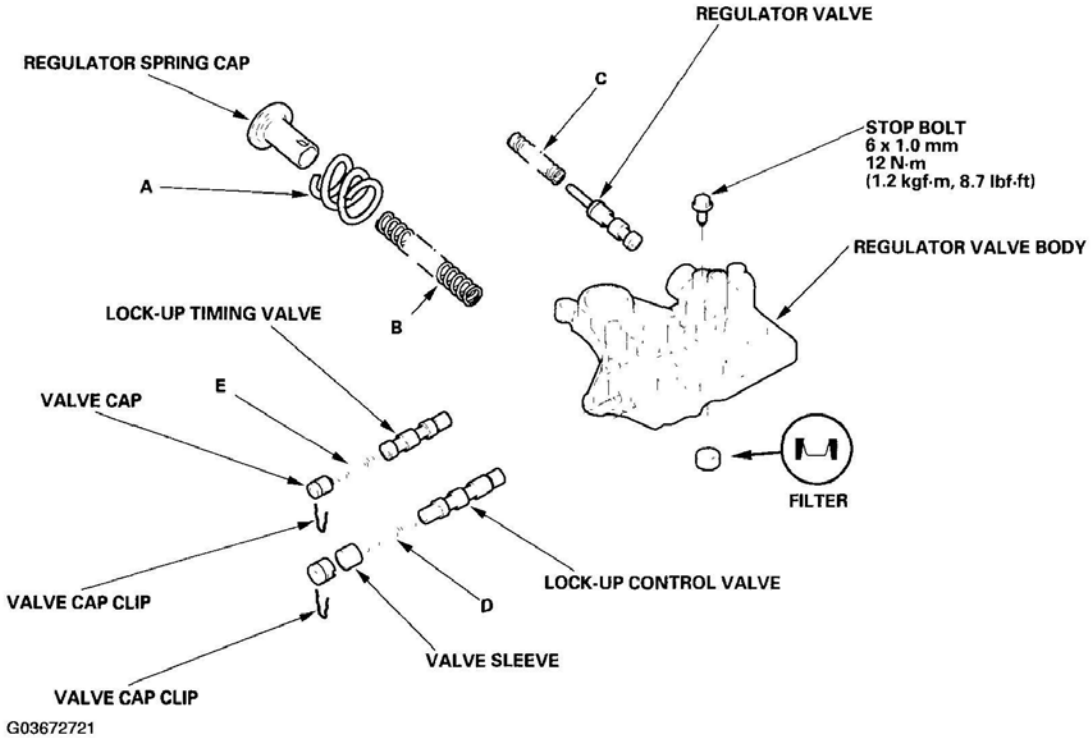


Fig. 366: Installing New Filter

Courtesy of AMERICAN HONDA MOTOR CO., INC.

REGULATOR VALVE BODY SPRING SPECIFICATIONS

Springs		Standard (New)-Unit: mm (in.)			
		Wire Dia.	O.D.	Free Length	No. of Coils
A	Stator reaction spring 2003 model	5.5(0.217)	37.4 (1.472)	30.3(1.193)	2.1
	2004-2007 models	4.5(0.177)	35.4 (1.394)	30.3(1.193)	1.92
B	Regulator valve spring A	1.9(0.075)	14.7 (0.579)	80.6(3.173)	16.1
C	Regulator valve spring B	1.6(0.063)	9.2 (0.362)	44.0(1.732)	12.5
D	Lock-up control valve spring	0.7 (0.028)	6.6 (0.260)	42.9(1.689)	15.3
E	Lock-up timing valve spring	0.65 (0.026)	6.6 (0.260)	34.8(1.370)	15.6

SERVO BODY DISASSEMBLY, INSPECTION, AND REASSEMBLY

1. Clean all parts thoroughly in solvent or carburetor cleaner, and dry them with compressed air. Blow out all passages.
2. Inspect the servo body for scoring and damage. Replace the valve body as an assembly if any parts are worn or damaged.
3. Check all valves for free movement. If any fail to slide freely, refer to valve body repair (see **VALVE BODY REPAIR**).
4. Coat all parts with ATF during reassembly.

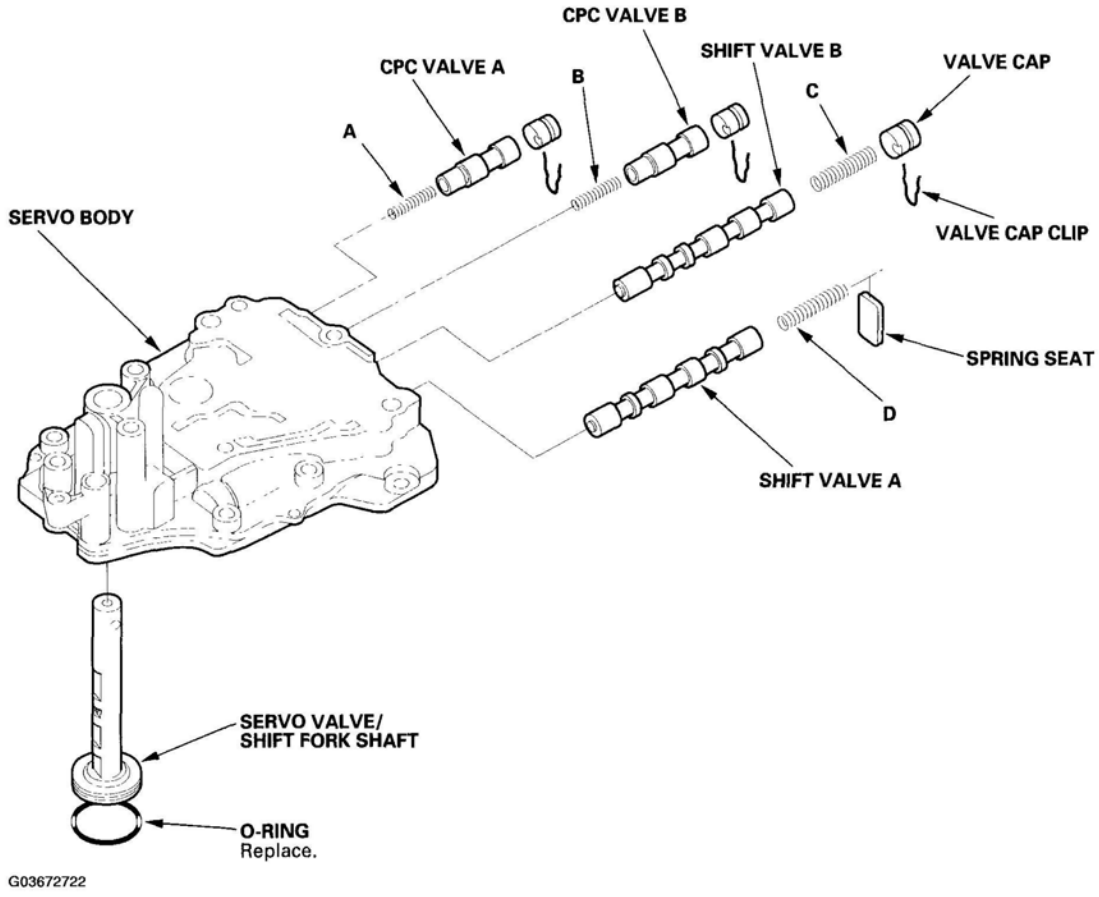


Fig. 367: Identifying Servo Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SERVO BODY SPRING SPECIFICATIONS

Springs		Standard (New)-Unit: mm (in.)			
		Wire Dia.	O.D.	Free Length	No. of Coils
A	CPC valve A spring	0.7 (0.028)	6.1 (0.240)	17.8(0.701)	7.9
B	CPC valve B spring	0.7 (0.028)	6.1 (0.240)	17.8(0.701)	7.9
C	Shift valve B spring	0.8(0.031)	6.6 (0.260)	49.1 (1.933)	21.7
D	Shift valve A spring	0.8(0.031)	6.6 (0.260)	49.1 (1.933)	21.7

TOP ACCUMULATOR BODY DISASSEMBLY, INSPECTION, AND REASSEMBLY

1. Clean all parts thoroughly in solvent or carburetor cleaner, and dry them with compressed air. Blow out all passages.

2. Inspect the top accumulator body for scoring and damage. Replace the valve body as an assembly if any parts are worn or damaged.
3. Check all valves for free movement. If any fail to slide freely, refer to valve body repair (see **VALVE BODY REPAIR**).
4. Coat all parts with ATF during assembly.

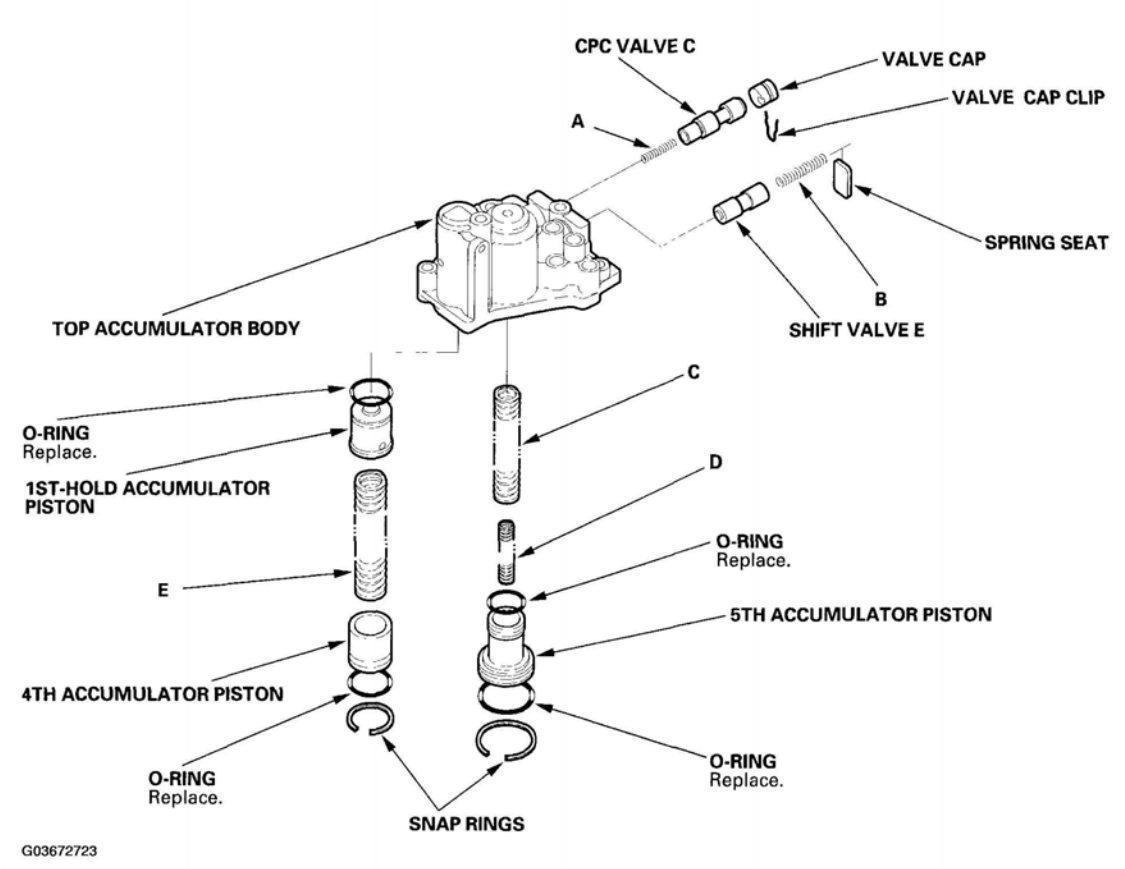


Fig. 368: Identifying Top Accumulator Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TOP ACCUMULATOR BODY SPRING SPECIFICATIONS

Springs		Standard (New)-Unit: mm (in.)			
		Wire Dia.	O.D.	Free Length	No. of Coils
A	CPC valve C spring	0.7 (0.028)	6.1 (0.240)	17.8(0.701)	7.9

B	Shift valve E spring	0.8(0.031)	7.1 (0.280)	49.0(1.929)	17.2
C	5th accumulator spring A	2.2 (0.087)	16.4 (0.646)	75.7 (2.980)	14.2
D	5th accumulator spring B	2.0 (0.079)	10.0 (0.394)	45.5(1.791)	11.6
E	4th/1st-hold accumulator spring	3.4(0.134)	19.6 (0.772)	57.4(2.260)	8.4

ACCUMULATOR BODY DISASSEMBLY, INSPECTION, AND REASSEMBLY

1. Do not use a magnet to remove the check balls; it may magnetize the balls.
2. Inspect the accumulator body for scoring and damage.
3. Clean all parts thoroughly in solvent or carburetor cleaner, and dry them with compressed air. Blow out all passages.
4. Coat all parts with ATF during assembly.

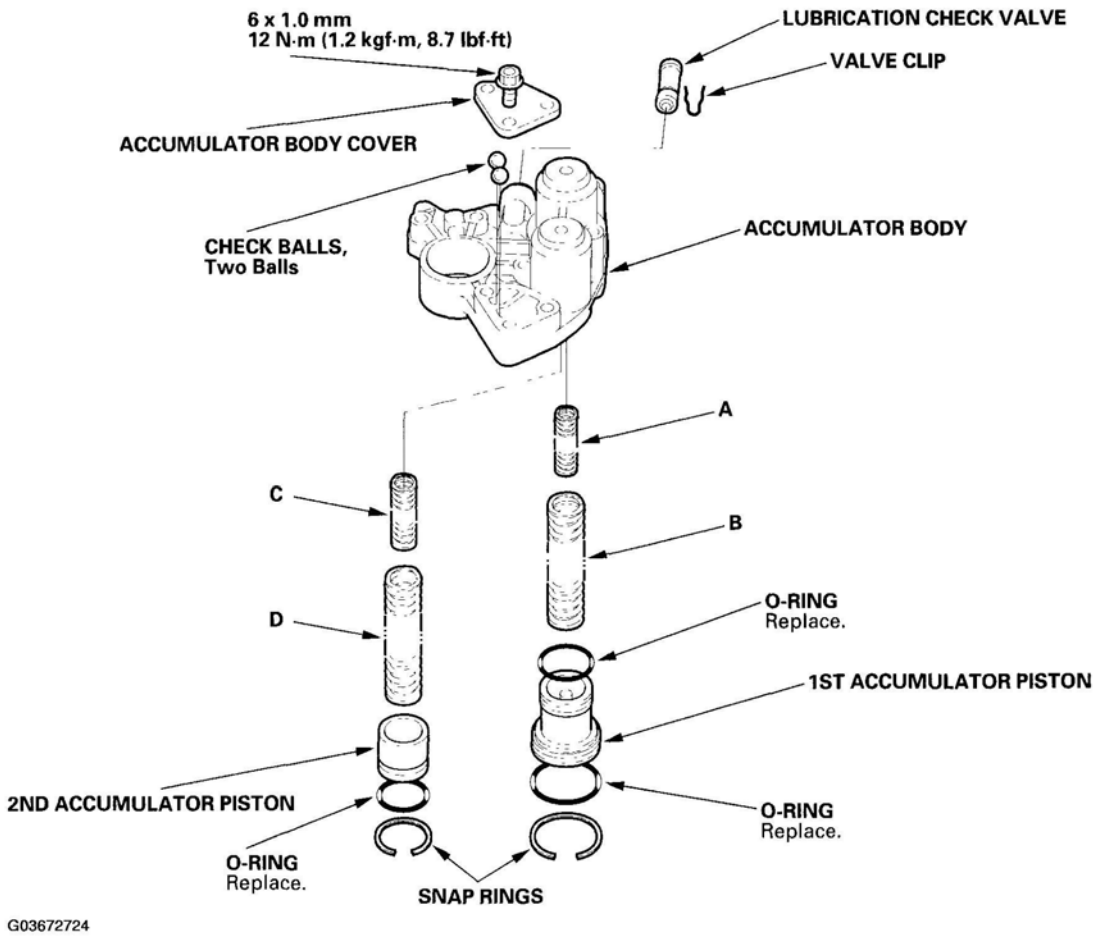


Fig. 369: Identifying Accumulator Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ACCUMULATOR BODY SPRING SPECIFICATIONS

Springs		Standard (New)-Unit: mm (in.)			
		Wire Dia.	O.D.	Free Length	No. of Coils
A	1st accumulator spring B	2.3(0.091)	12.6(0.496)	42.0(1.654)	9.9
B	1st accumulator spring A	2.4 (0.094)	19.5 (0.768)	67.7 (2.665)	10.2
C	2nd accumulator spring B	2.6(0.102)	13.0(0.512)	44.0(1.732)	9.0
D	2nd accumulator spring A	2.5 (0.098)	19.6(0.772)	57.7 (2.272)	9.5

3RD ACCUMULATOR AND END COVER DISASSEMBLY, INSPECTION, AND REASSEMBLY

1. Clean all parts thoroughly in solvent or carburetor cleaner, and dry them with

compressed air, Blow out all passages.

2. Coat all parts with ATF during assembly.

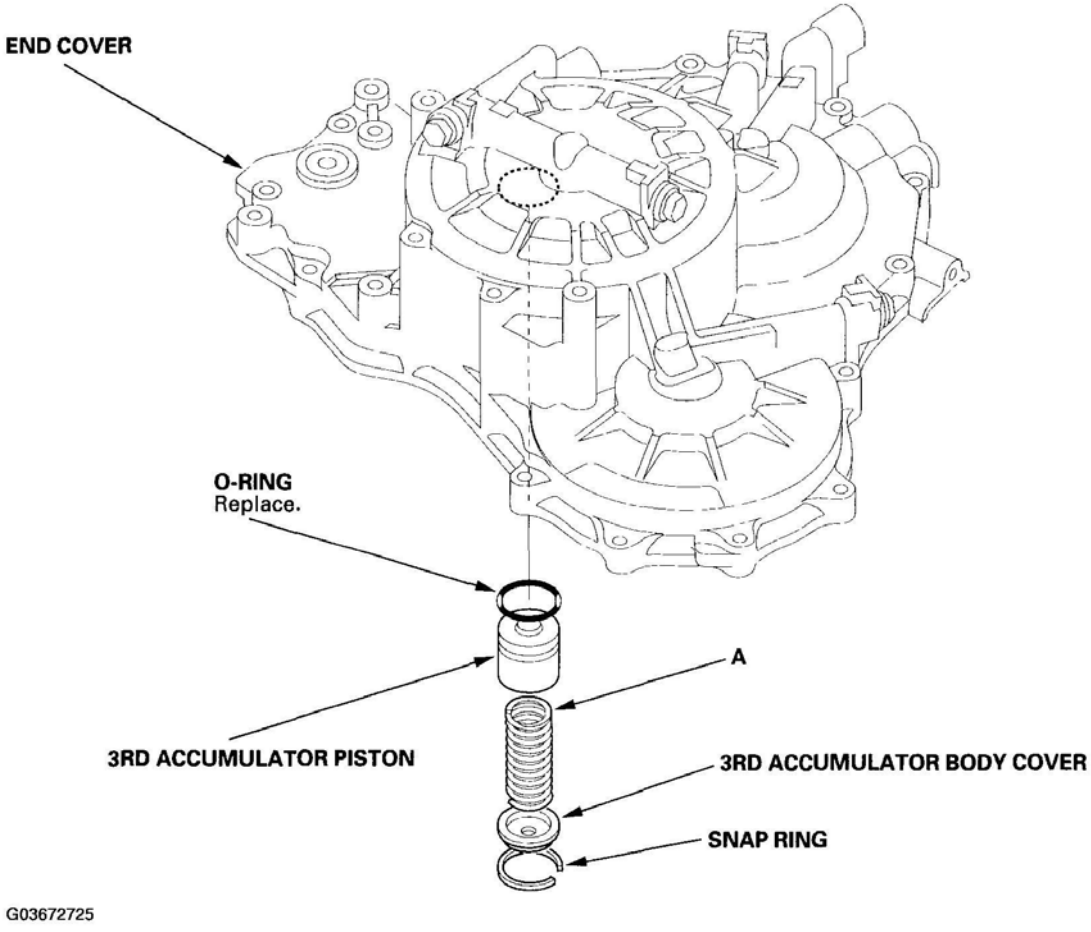


Fig. 370: Identifying 3rd Accumulator And End Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3RD ACCUMULATOR AND END SPRING SPECIFICATIONS

Springs		Standard (New)-Unit: mm (in.)			
		Wire Dia.	O.D.	Free Length	No. of Coils
A	3rd accumulator spring	3.1 (0.122)	19.6(0.772)	39.4(1.551)	5.5

TORQUE CONVERTER HOUSING

MAINSHAFT BEARING AND OIL SEAL REPLACEMENT

Special Tools Required

- Adjustable bearing puller, 25-40 mm 07736-A01000B or 07736-A01000A
- Driver 07749:0010000
- Attachment, 62 x 68 mm 07746-0010500
- Attachment, 72 x 75 mm 07746-0010600

1. Remove the mainshaft bearing and oil seal with the special tool and a commercially available 3/8" -16 slide hammer (A).

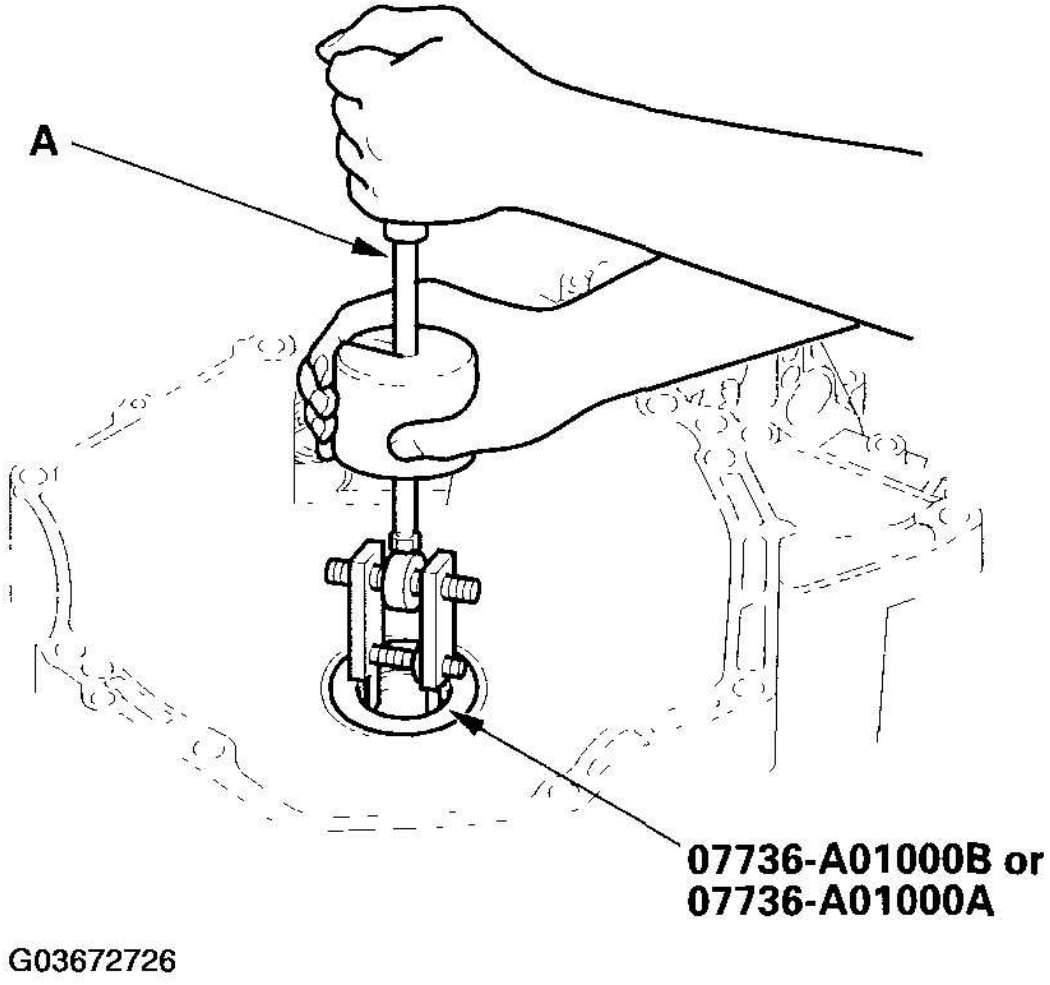


Fig. 371: Removing Mainshaft Bearing And Oil Seal

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the new mainshaft bearing until it bottoms in the housing with the special tools.

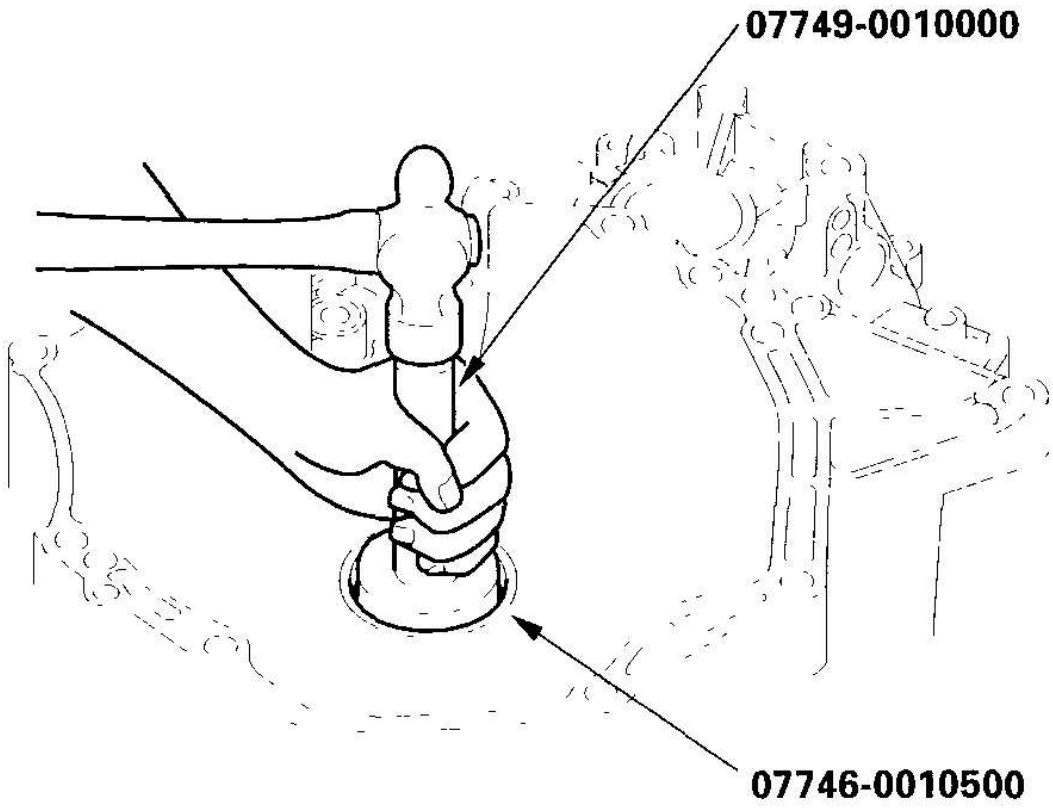


Fig. 372: Installing Mainshaft Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the new oil seal flush to the housing with the special tools.

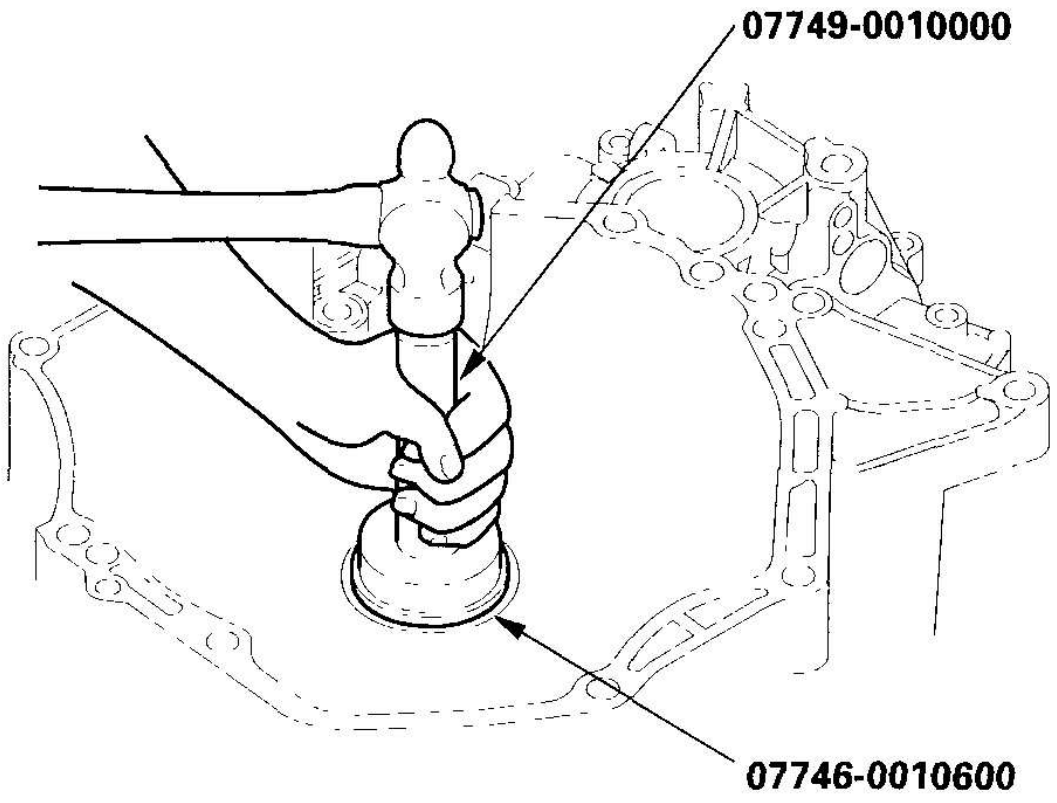


Fig. 373: Installing Oil Seal Flush To Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COUNTERSHAFT BEARING REPLACEMENT

Special Tools Required

- Adjustable bearing puller, 25-40 mm 07736-A01000B or 07736-A01000A
- Driver 07749-0010000
- Attachment, 62 x 68 mm 07746-0010500

1. Remove the countershaft bearing (A) with the special tool and a commercially available 3/8" -16 slide hammer (B).

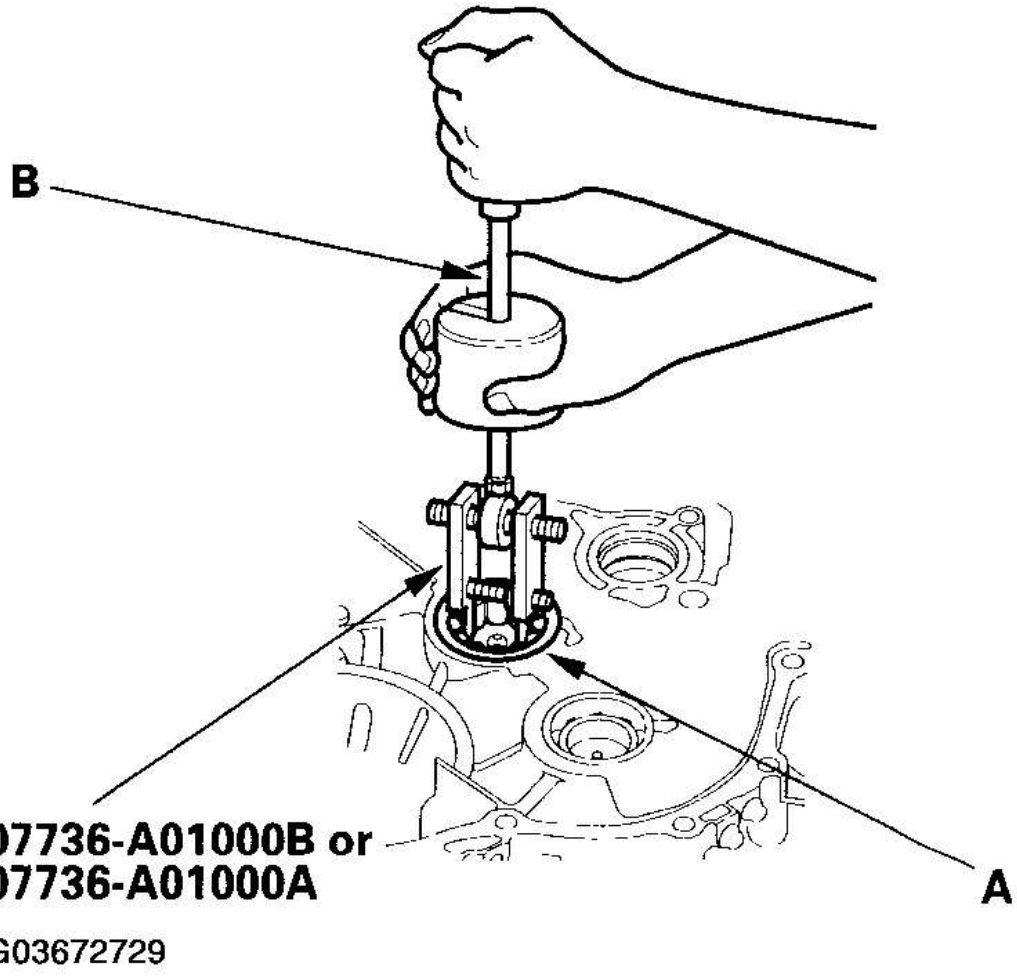


Fig. 374: Remove Countershaft Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the ATF guide plate (A).

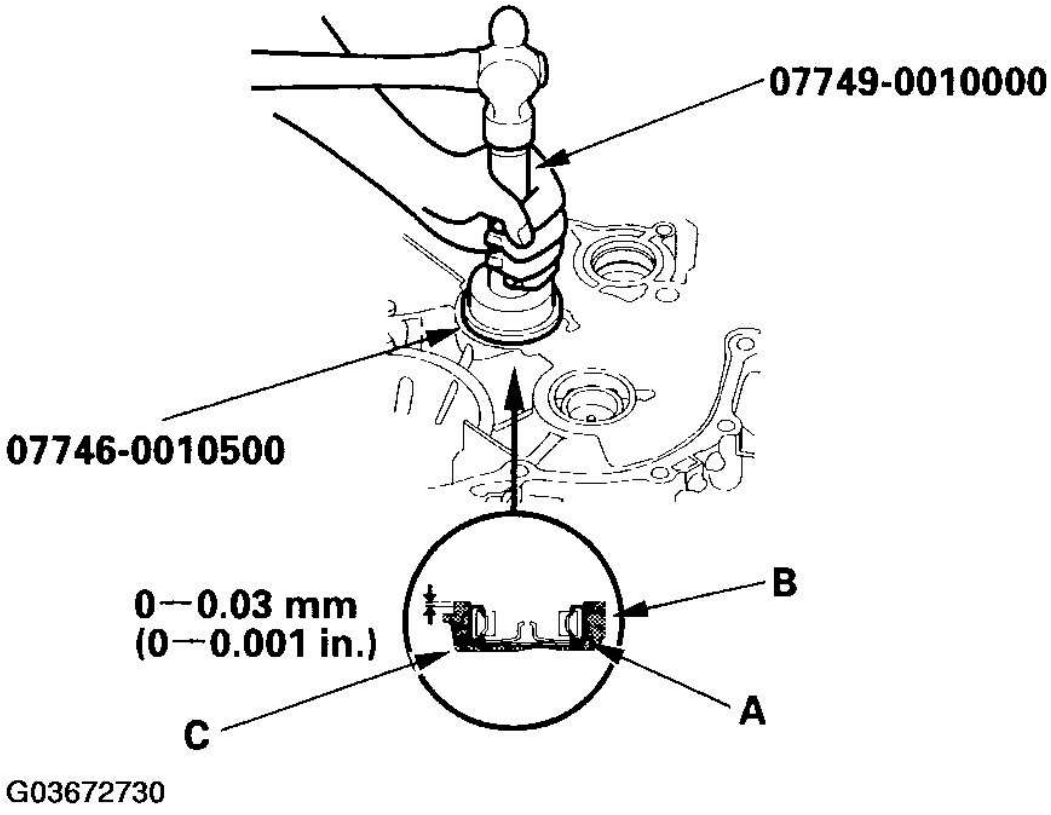


Fig. 375: Installing ATF Guide Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the new bearing (B) into the housing (C) with the special tools.

SECONDARY SHAFT BEARING REPLACEMENT

Special Tools Required

- Adjustable bearing puller, 25-40 mm 07736-A01000B or 07736-A01000A
- Driver 07749-0010000
- Driver attachment 07947-6340500

1. Remove the secondary shaft bearing (A) with the special tool and a commercially available 3/8" -16 slide hammer (B).

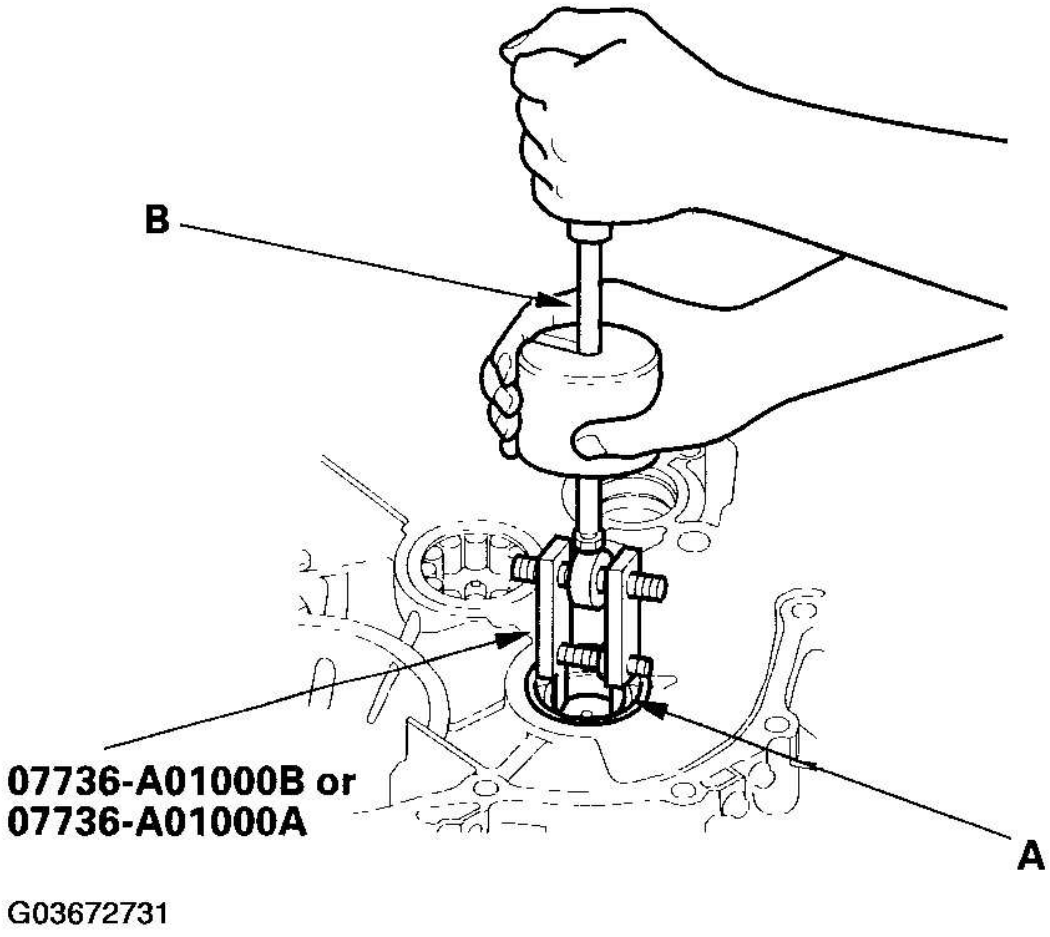


Fig. 376: Remove Secondary Shaft Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the ATF guide plate (A).

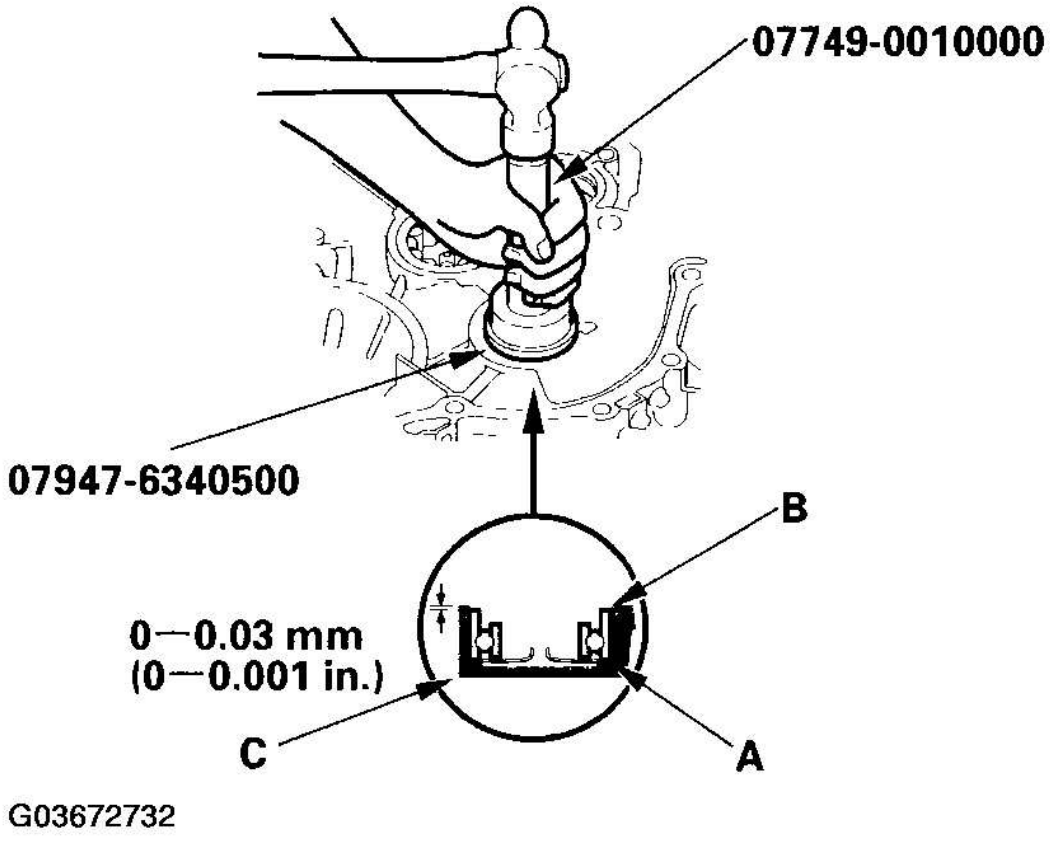


Fig. 377: Installing ATF Guide Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the new bearing (B) into the housing (C) with the special tools.

SELECTOR CONTROL SHAFT OIL SEAL REPLACEMENT

Special Tools Required

- Driver 07749-0010000
- Attachment, 22 x 24 mm 07746-0010800

1. Remove the oil seal (A), from the torque converter housing (B).

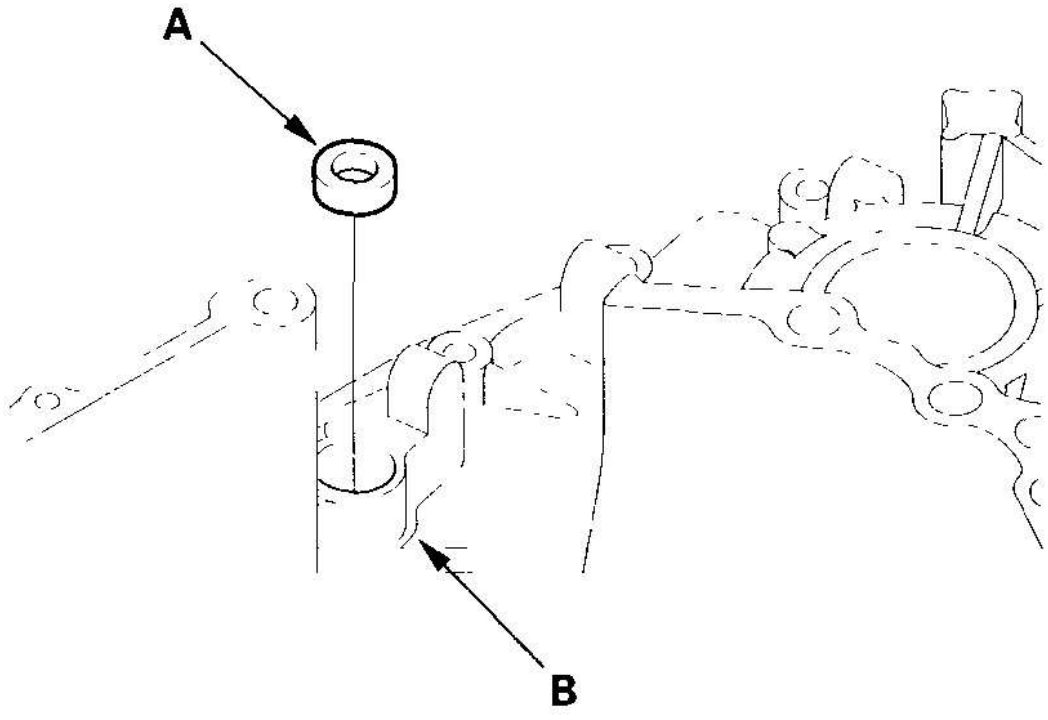


Fig. 378: Removing Oil Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the new oil seal flush to the torque converter housing with the special tools.

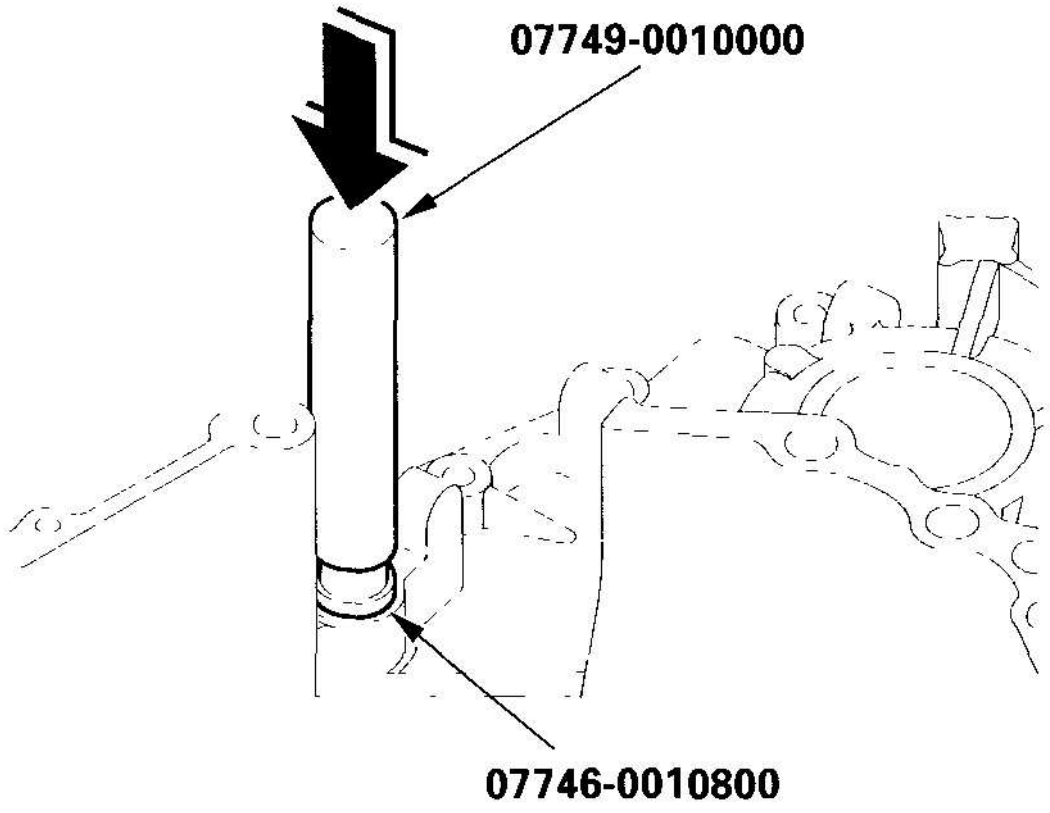


Fig. 379: Installing Oil Seal Flush To Torque Converter Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SHAFTS AND CLUTCHES

MAINSHAFT DISASSEMBLY, INSPECTION, AND REASSEMBLY

1. Lubricate all parts with ATF during assembly.

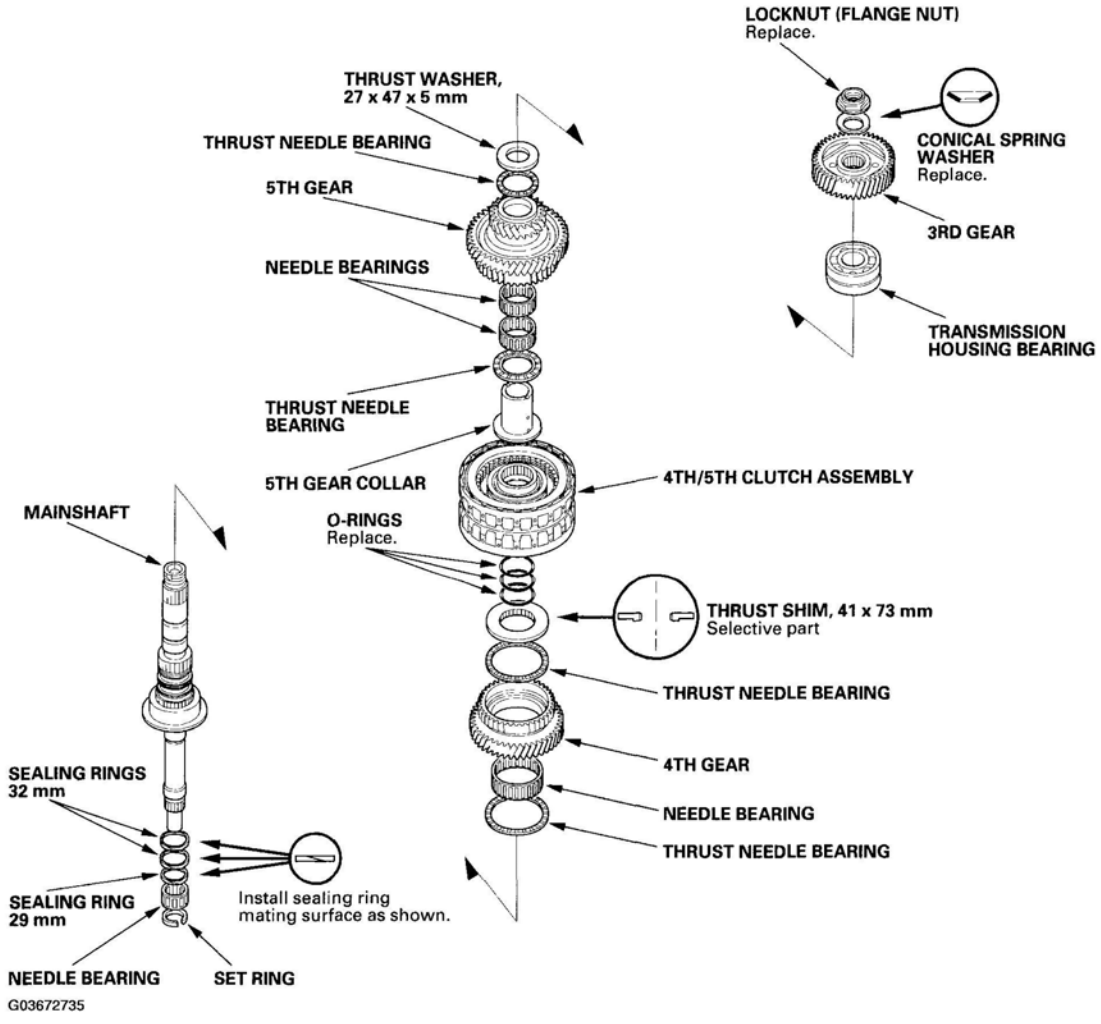


Fig. 380: Lubricating All Parts With ATF During Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check the clearance of the 4th/5th clutch assembly (see **4TH/5TH CLUTCH CLEARANCE INSPECTION**).
3. Inspect the thrust needle bearing and the needle bearing for scoring and rough movement.
4. Inspect the splines for excessive wear and damage.
5. Check shaft bearing surfaces for scoring and excessive wear.
6. Before installing the O-rings, wrap the shaft splines with tape to prevent O-ring damage.
7. Install the 41 x 73 mm thrust shim and conical spring washer in the direction

shown.

8. Inspect the condition of the sealing rings. If the sealing rings are worn, distorted, or damaged, replace them (see **MAINSHAFT SEALING RING REPLACEMENT**).

4TH/5TH CLUTCH CLEARANCE INSPECTION

1. Remove the O-rings from the mainshaft.
2. Assemble the 41 x 73 mm thrust shim (A), 4th/5th clutch assembly (B), and 5th gear collar (C) on the mainshaft (D).

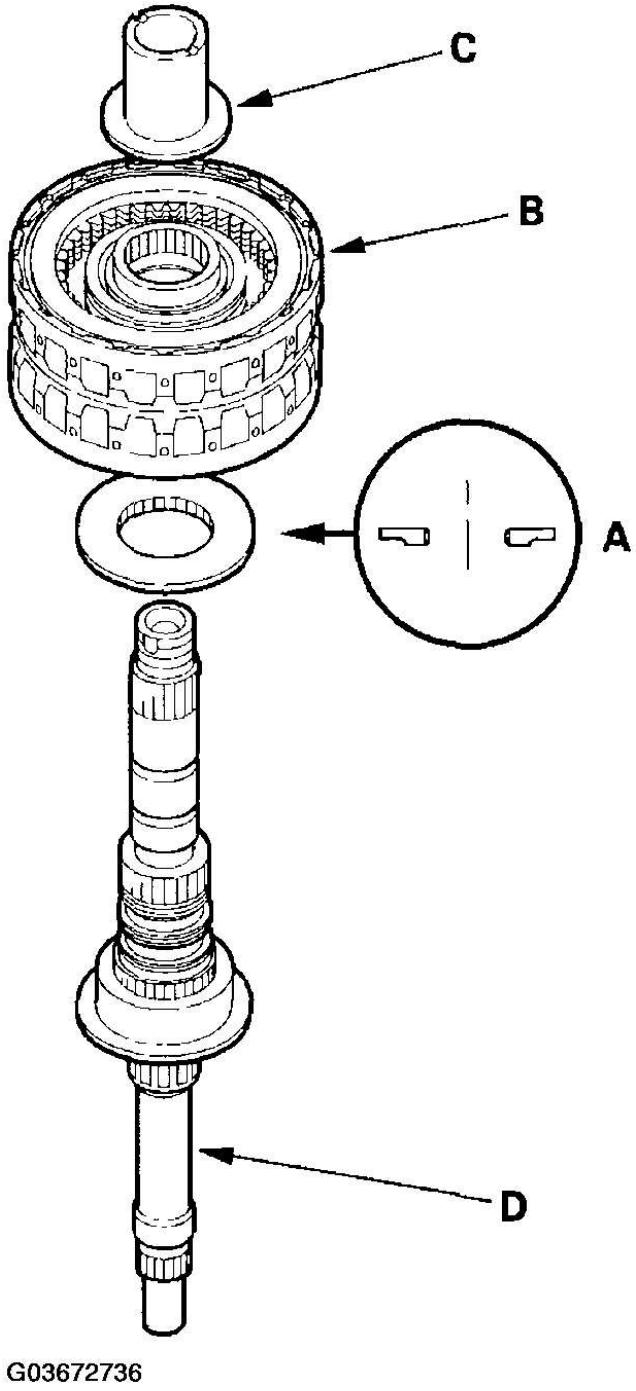


Fig. 381: Assembling Thrust Shim, 4th/5th Clutch Assembly And 5th Gear Collar On Mainshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Hold the 5th gear collar (C) against the clutch assembly (B), then measure the clearance between the clutch guide (E) and the 5th gear collar with a feeler gauge (F) in at least three places. Use the average as the actual clearance.

   Standard: 0.03-0.11 mm (0.001-0.004 in.)

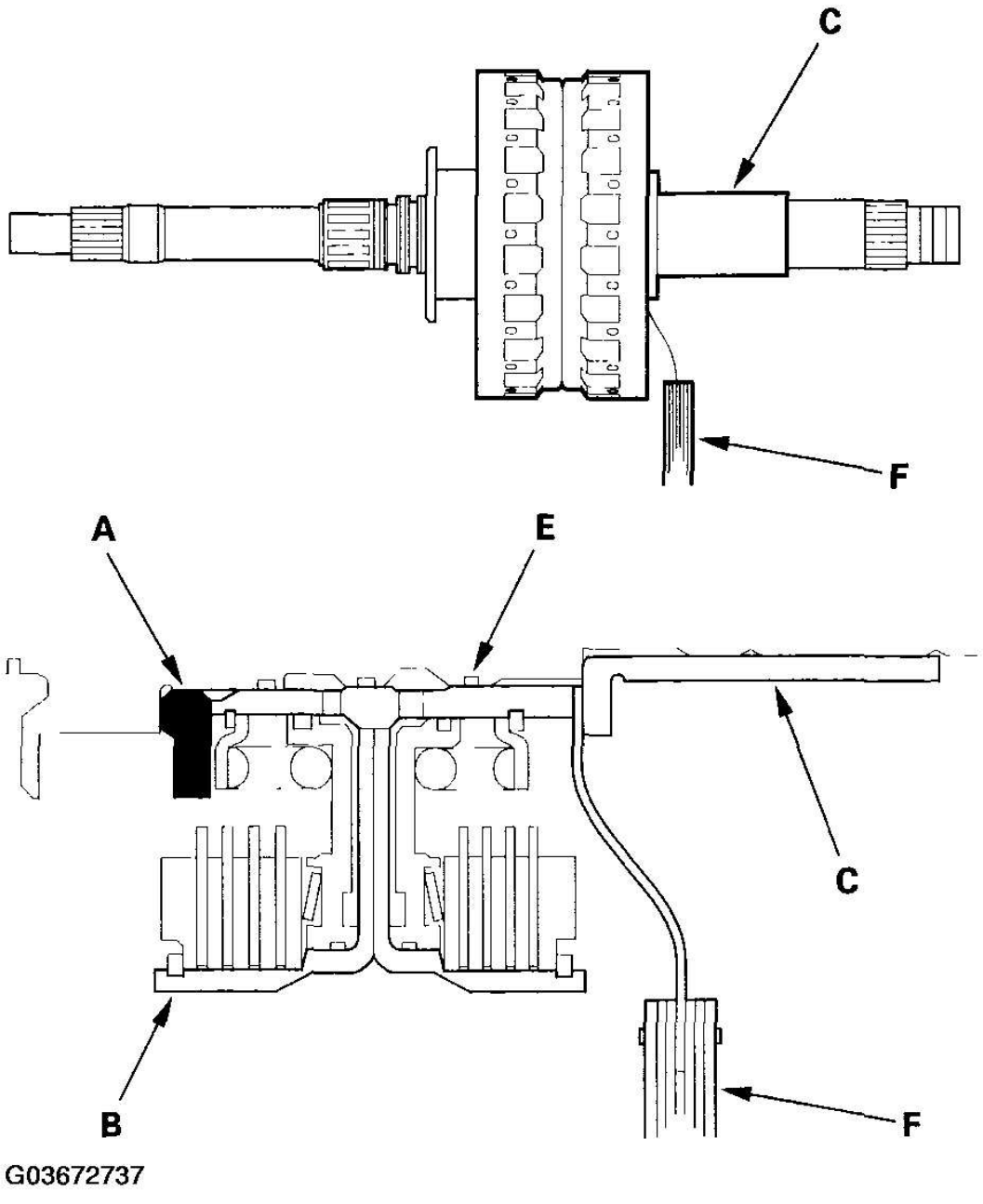


Fig. 382: Holding 5th Gear Collar Against Clutch Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the clearance is out of standard, remove the thrust shim and measure its thickness.

5. Select and install a new shim, then recheck.

THRUST SHIM, 41 x 73 mm

No.	Part Number	Thickness
1	90414-P7W-000	7.85 mm (0.309 in.)
2	90415-P7W-000	7.90 mm (0.311 in.)
3	90416-P7W-000	7.95 mm (0.313 in.)
4	90417-P7W-000	8.00 mm (0.315 in.)
5	90418-P7W-000	8.05 mm (0.317 in.)
6	90419-P7W-000	8.10 mm (0.319 in.)

6. After replacing the thrust shim, make sure the clearance is within standard.

MAINSHAFT SEALING RING REPLACEMENT

The sealing rings are synthetic resin with chamfered ends. Check the condition of the sealing rings, and replace them only if they are worn, distorted, or damaged.

1. For a better fit, squeeze sealing rings together slightly before installing them.

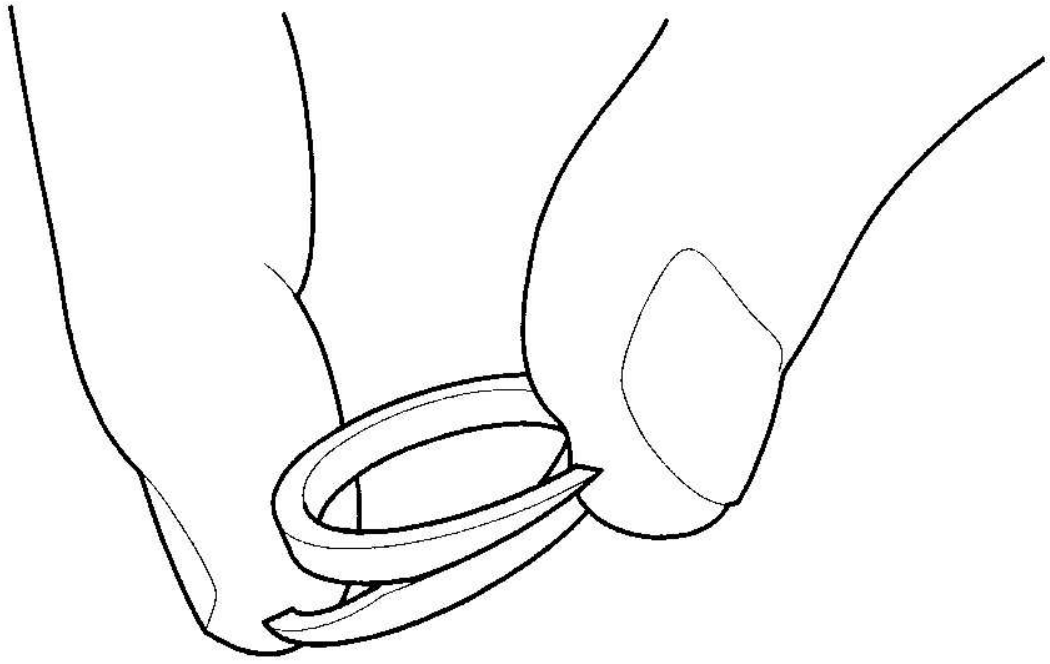
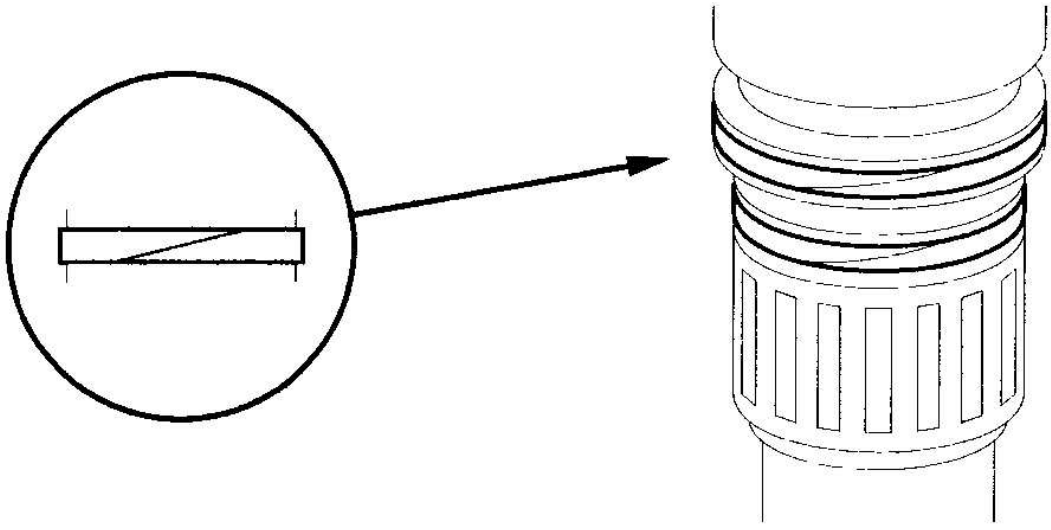


Fig. 383: Squeezing Sealing Rings Together
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Apply ATF to the new sealing rings then install them on the mainshaft.



G03672739

Fig. 384: Applying ATF To Sealing Rings
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. After installing the sealing rings, verify the following:
   - The rings are fully seated in the groove.
   - The rings are not twisted.
   - The chamfered ends of the rings are properly joined.

COUNTERSHAFT DISASSEMBLY, INSPECTION, AND REASSEMBLY

1. Remove the locknut, and take off components down to the reverse selector hub.

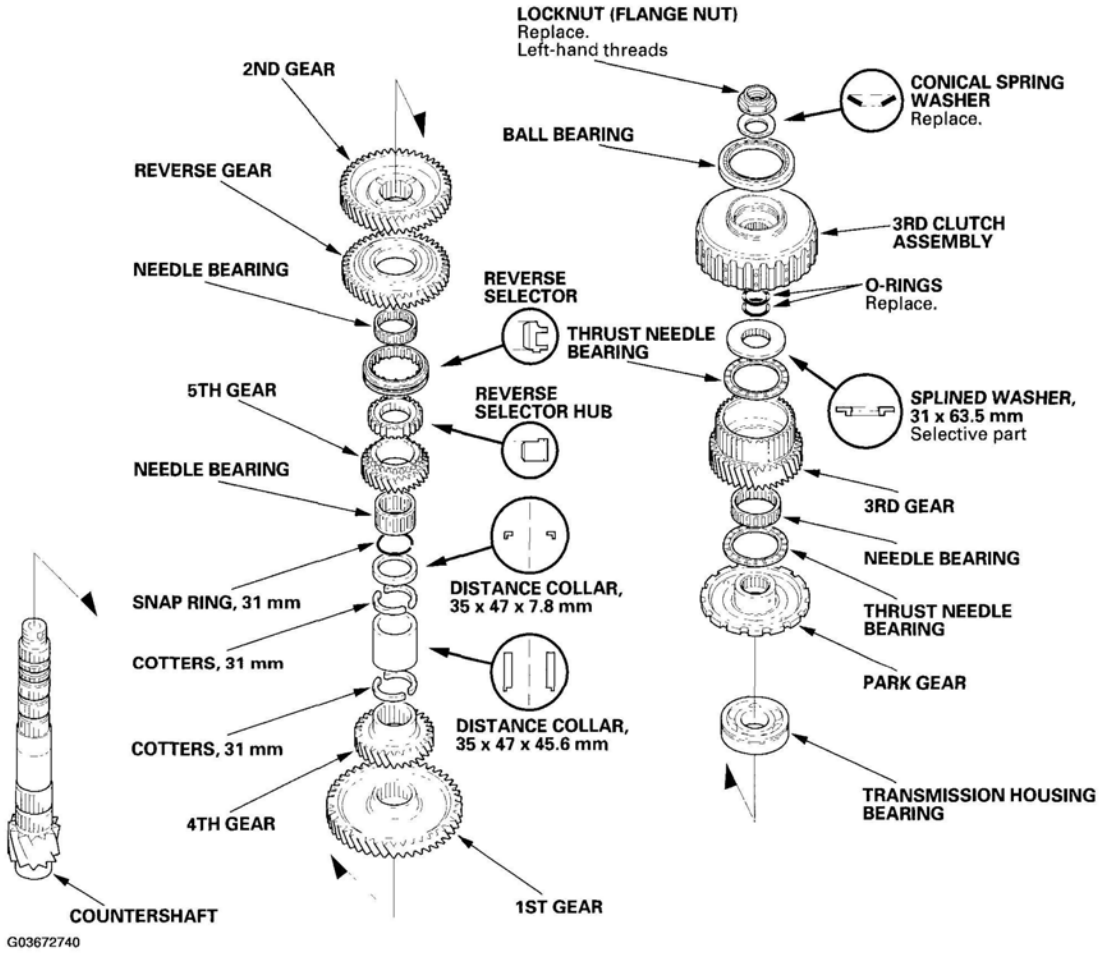


Fig. 385: Identifying Countershaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the reverse selector hub, 4th gear, and 1st gear (see **COUNTERSHAFT REVERSE SELECTOR HUB AND 4TH GEAR REMOVAL**).
3. Check the bearing on the 3rd clutch for wear and rough movement. If the bearing is worn or damaged, replace it (see **3RD CLUTCH BALL BEARING REPLACEMENT**).
4. Inspect the thrust needle bearing and the needle bearing for scoring and rough movement.
5. Check the splines for excessive wear and damage.
6. Check the shaft bearing surfaces for scoring and excessive wear.

7. Lubricate all parts with ATF, and reassemble the shaft and gears.
8. Install the distance collars, reverse selector hub, reverse selector, splined washer, and conical spring washer in the direction shown.

COUNTERSHAFT REVERSE SELECTOR HUB AND 4TH GEAR REMOVAL

1. Remove the reverse selector hub (A) and the 5th gear (B) from the countershaft with a press. Place a shaft protector (C) between the countershaft and press to prevent damaging the countershaft.

NOTE: Some reverse selector hubs are not press-fitted, and can be removed without using a press.

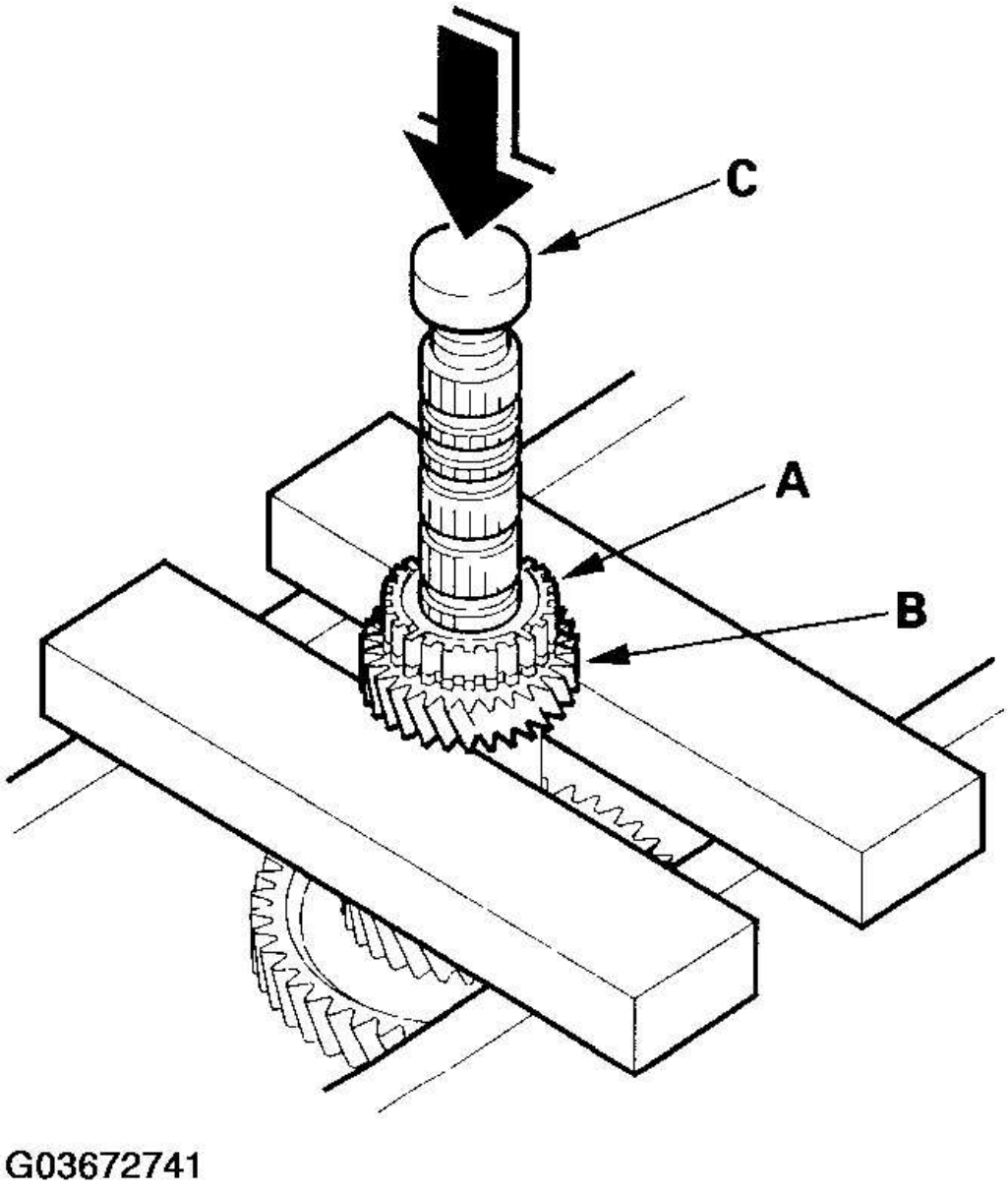


Fig. 386: Removing Reverse Selector Hub And 5th Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the needle bearing, snap ring, 35 x 47 x 7.8 mm distance collar, 31 mm cotters, 35 x 47 x 45.6 mm distance collar, and 31 mm cotters from the countershaft.

3. Remove the 1st gear (A) and 4th gear (B) from the countershaft with a press. Place a shaft protector (C) between the countershaft and press to prevent damaging the countershaft.

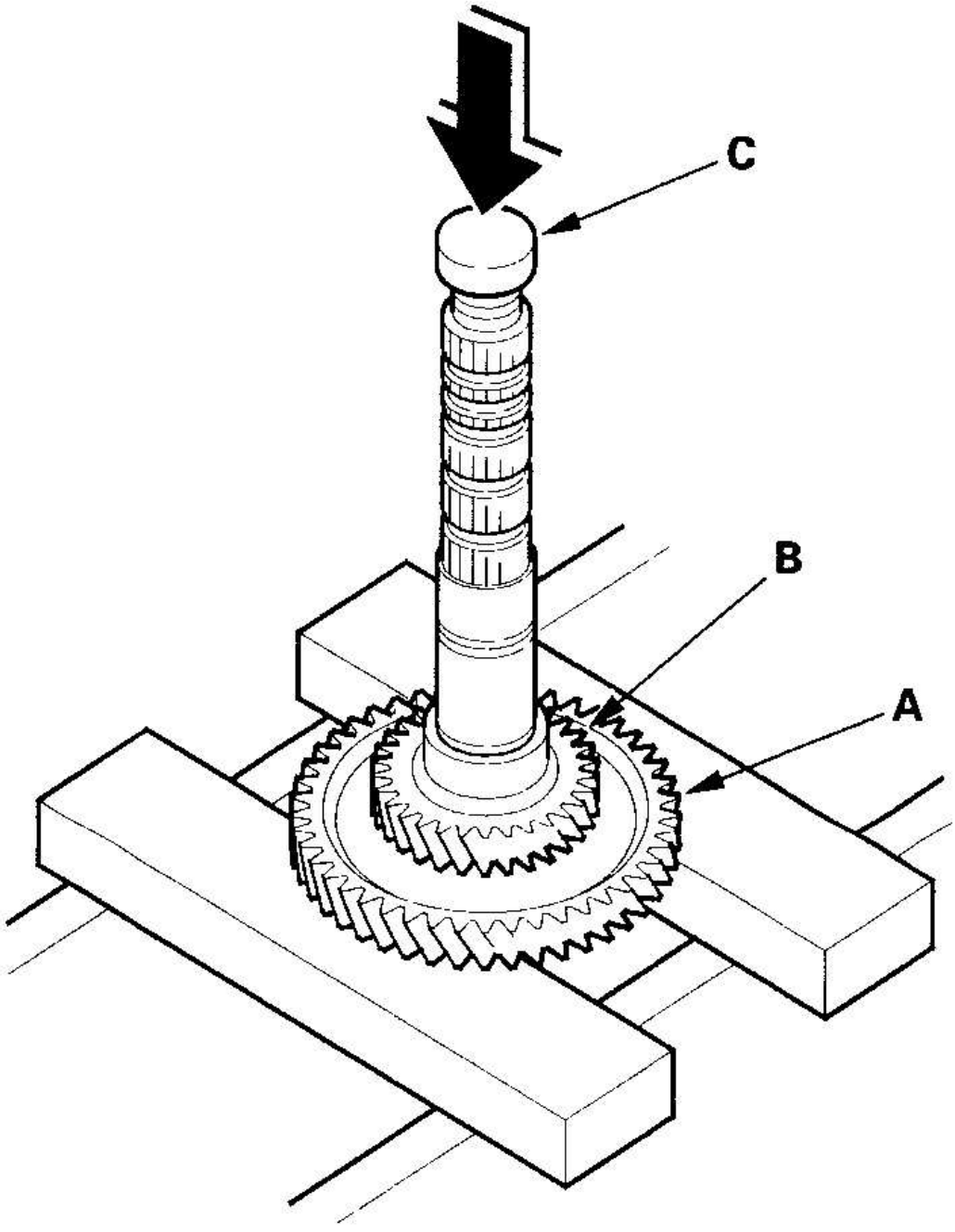


Fig. 387: Remove 1st Gear And 4th Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COUNTERSHAFT 4TH GEAR AND REVERSE SELECTOR HUB INSTALLATION

Special Tools Required

Driver, 40 mm I.D. 07746-0030100

1. Apply ATF to the parts.
2. Install the 1st gear on the countershaft by hand.
3. Align the shaft splines with those on 4th gear, then press the countershaft (A) into the 4th gear with a press. Place a shaft protector (B) between the countershaft and press to prevent damaging the countershaft.

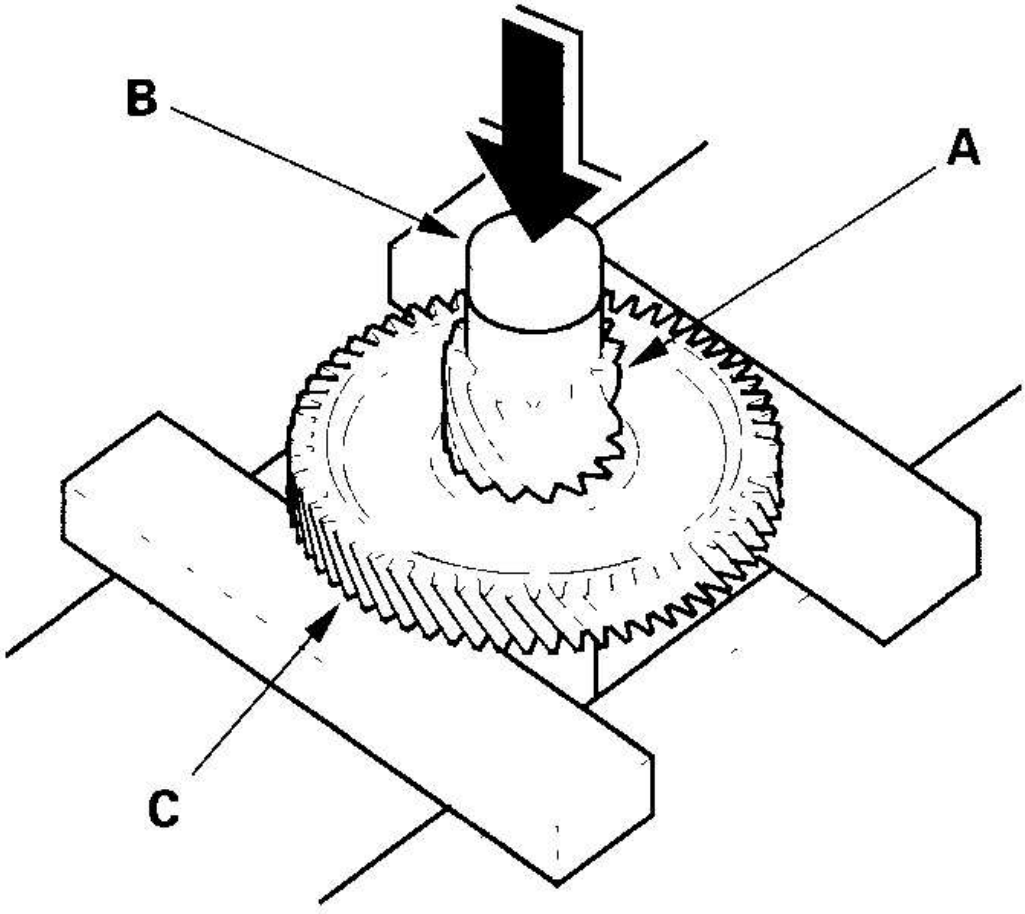


Fig. 388: Pressing Countershaft Into 4th Gear With Press
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Stop pressing the countershaft when the 4th gear contacts the 1st gear (C).
5. Install the 31 mm cotters, 35 x 47 x 45.6 mm distance collar, 31 mm cotters, 35 x 47 x 7.8 mm distance collar, snap ring, needle bearing, and 5th gear (A) on the countershaft.
6. Slide the reverse selector hub (B) over the countershaft (C), then press it into place with the special tool and a press.

NOTE: Some reverse selector hubs are not press fitted, and can be installed without using the special tool and a press.

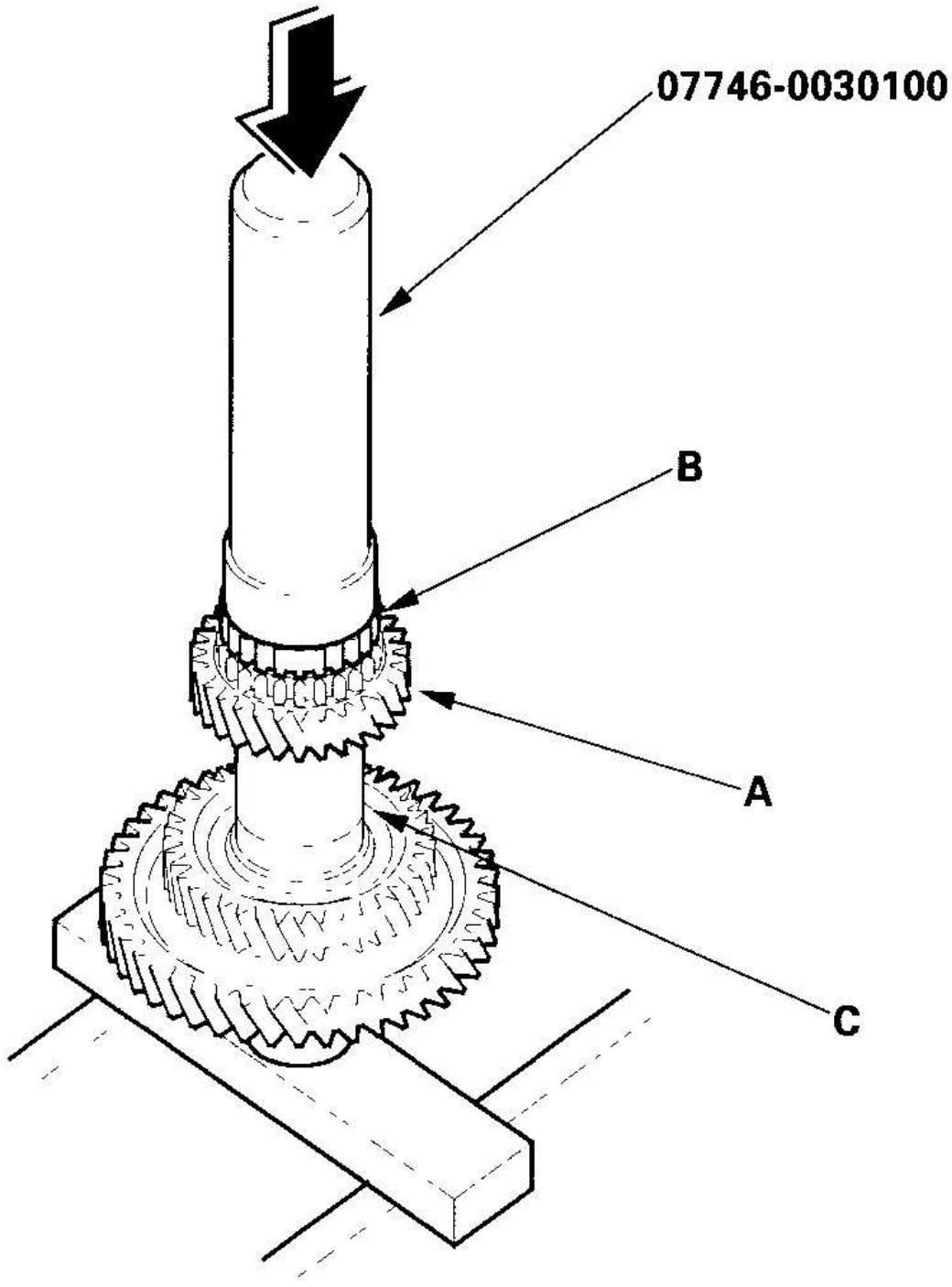

07746-0030100
B
A
C
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Fig. 389: Sliding Reverse Selector Hub Over Countershaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3RD CLUTCH BALL BEARING REPLACEMENT

Special Tools Required

- Driver 07749-0010000
- Attachment, 62 x 68 mm 07746-0010500

NOTE: Check the bearing for wear and rough movement. If the bearing is OK, removal is not necessary.

1. Remove the ball bearing (A) from the 3rd clutch with a commercially available bearing puller (B), bearing separator (C), and stepper adapter (D).

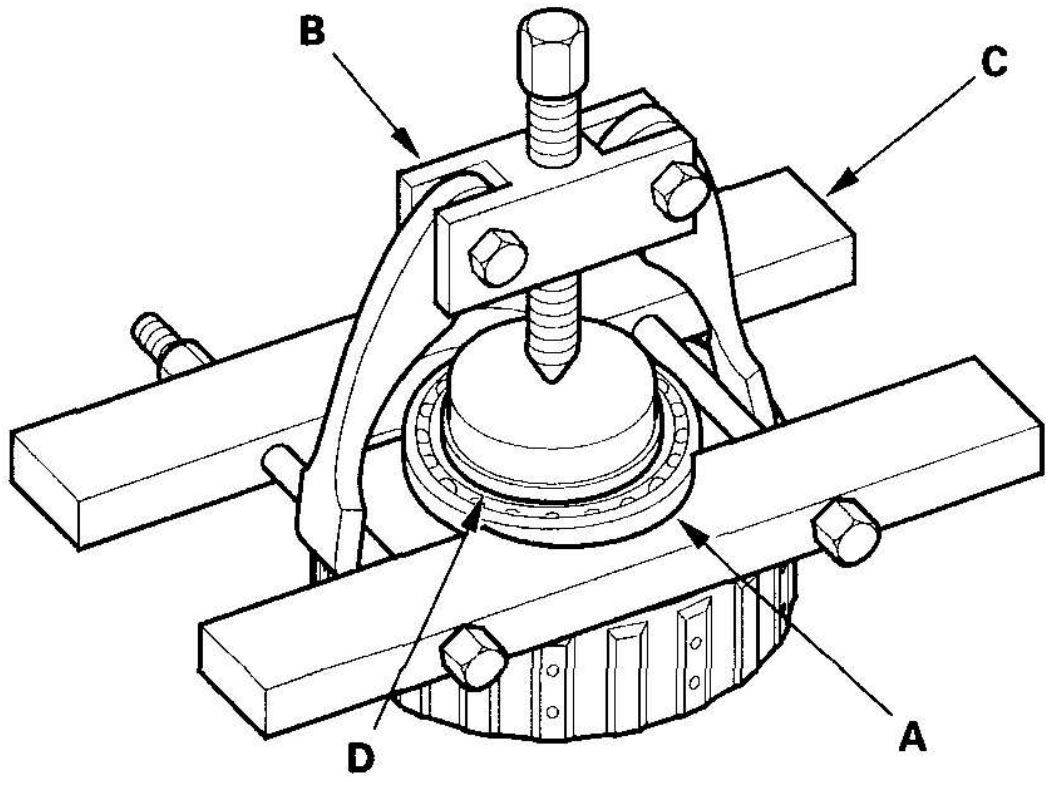


Fig. 390: Removing Ball Bearing From 3rd Clutch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the new bearing on the 3rd clutch with the special tools and a press.

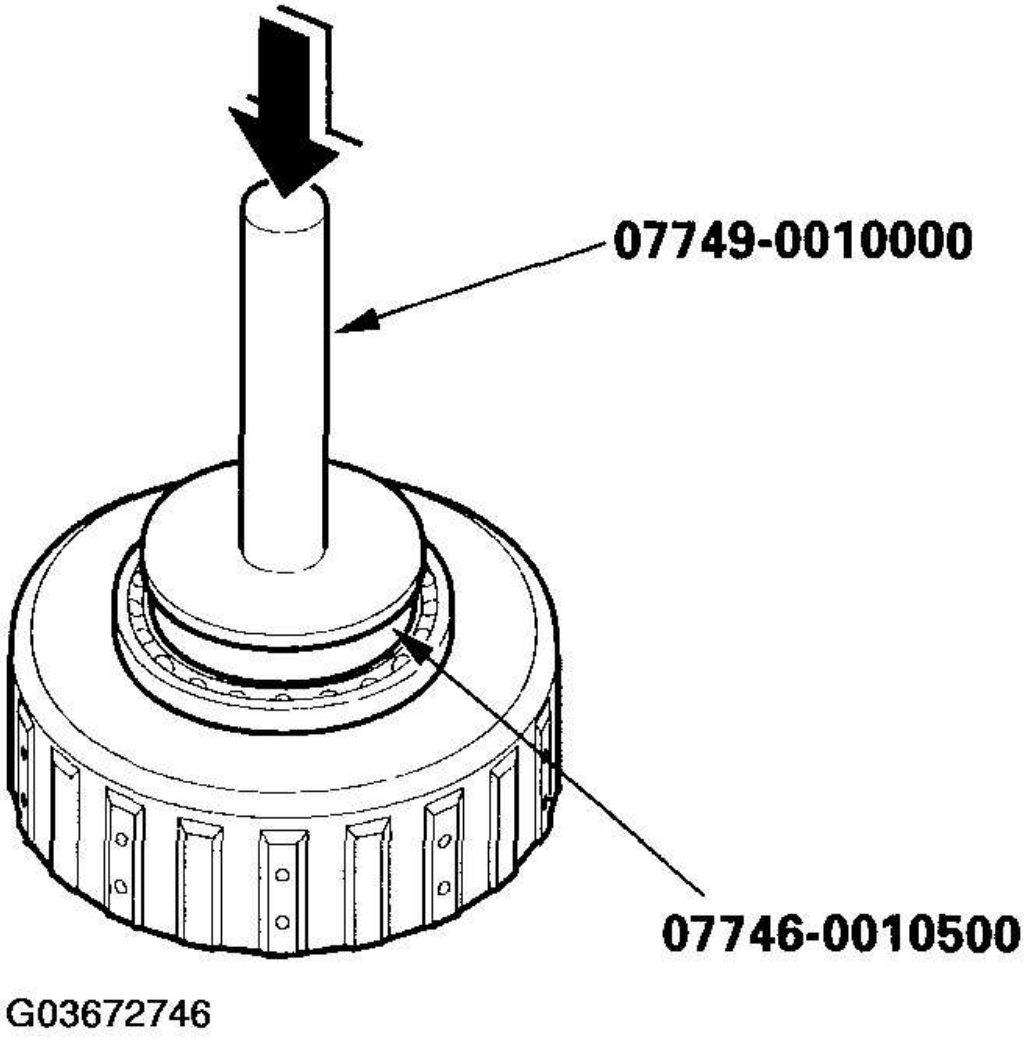


Fig. 391: Installing Bearing On 3rd Clutch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SECONDARY SHAFT DISASSEMBLY, INSPECTION, AND REASSEMBLY

1. Remove the locknut, and disassemble the shaft and gears.

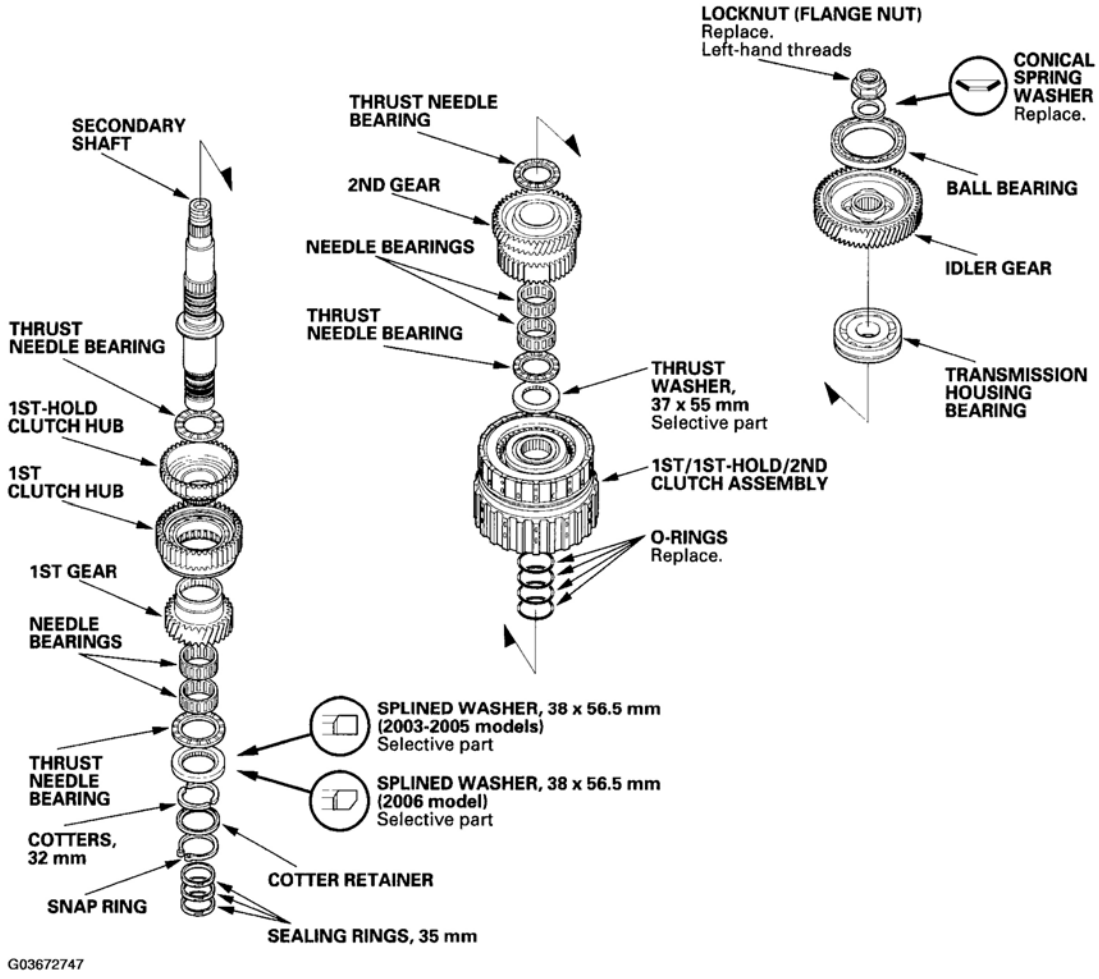


Fig. 392: Disassembling Shaft And Gears
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Inspect the thrust needle bearing and needle bearing for wear and rough movement.
3. Check the clearance of the secondary shaft assembly.
4. Check the splines for excessive wear and damage.
5. Check the shaft bearing surfaces for scoring and excessive wear.
6. Check the idler gear bearing for wear and rough movement. If the bearing is worn or damaged, replace it (see **SECONDARY SHAFT IDLER GEAR BEARING REPLACEMENT**).
7. Before installing the O-rings, wrap the shaft splines with tape to prevent

damage to the O-rings.

8. Lubricate all parts with ATF during reassembly.
9. Install the splined washer and conical spring washer in the direction shown.

SECONDARY SHAFT CLEARANCE INSPECTION

1. Remove the O-rings from the secondary shaft.
2. Assemble the thrust needle bearing (A), 1st gear assembly (B), needle bearings (C), thrust needle bearing (D), 38 x 56.5 mm splined washer (E), 32 mm cotters (F), cotter retainer (G), and snap ring (H) on the secondary shaft (I).

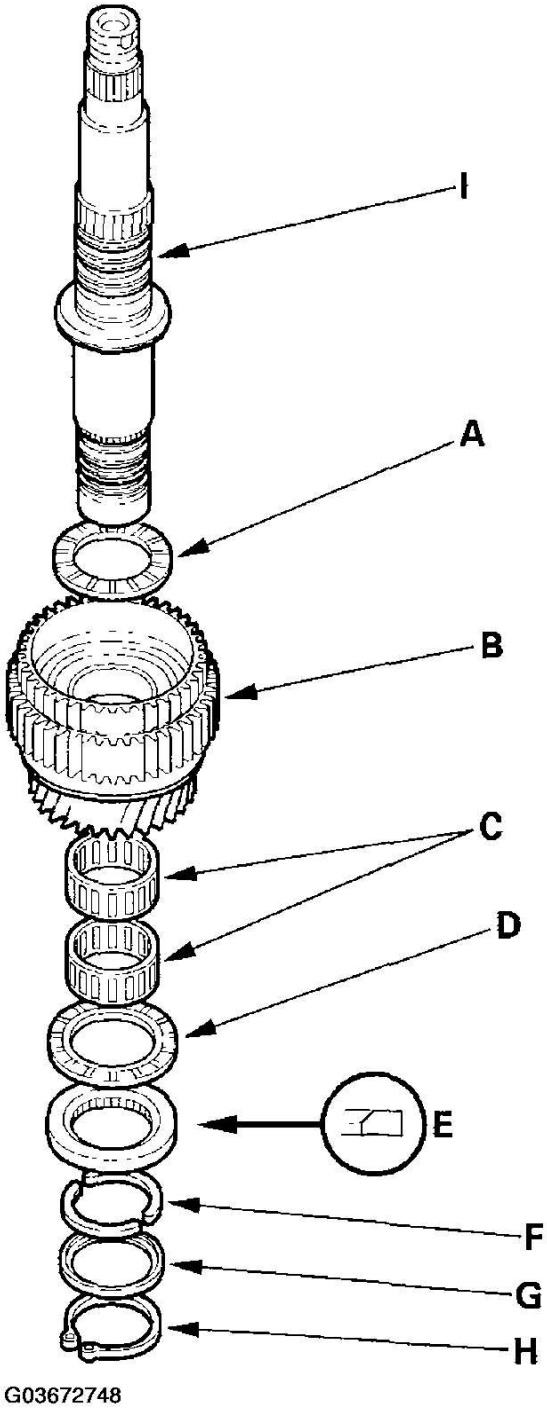


Fig. 393: Assembling Thrust Needle Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Measure the clearance between the 38 x 56.5 mm splined washer (E) and cotters (F) with a feeler gauge (J) in at least three places. Use the average as the actual clearance.

   Standard: 0.07-0.15 mm (0.003-0.006 in.)

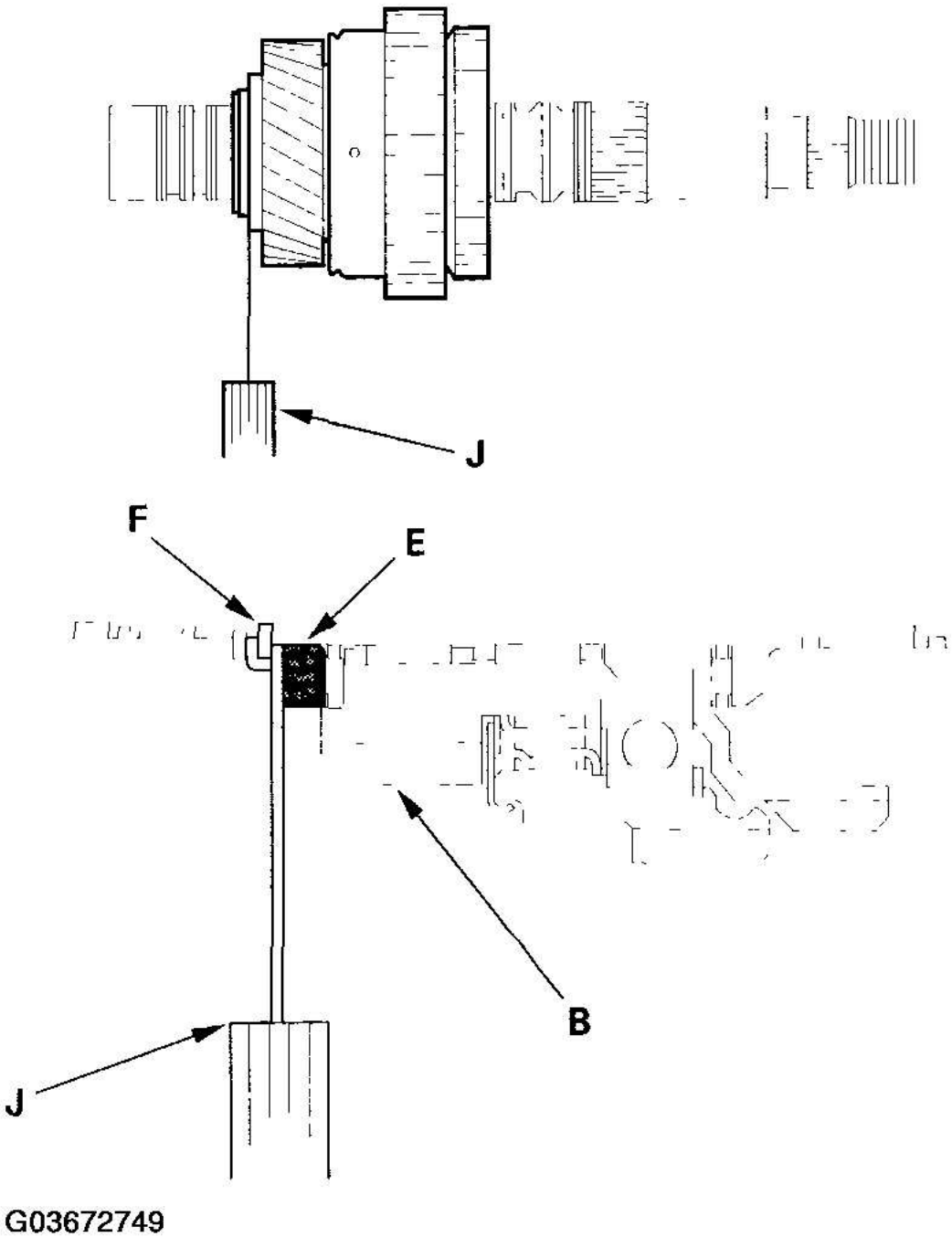


Fig. 394: Measuring Clearance Between Splined Washer And Cotters
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the measurement is out of standard, remove the splined washer, and measure its thickness.
5. Select and install a new splined washer, then recheck the clearance.

SPLINED WASHER, 38 x 56.5 mm (2003-2005 Models)

No.	Part Number	Thickness
1	90502-P0Z-000	6.85 mm (0.270 in.)
2	90503-P0Z-000	6.90 mm (0.272 in.)
3	90504-P0Z-000	6.95 mm (0.274 in.)
4	90505-P0Z-000	7.00 mm (0.276 in.)
5	90506-P0Z-000	7.05 mm (0.278 in.)
6	90507-P0Z-000	7.10 mm (0.280 in.)

SPLINED WASHER, 38 x 56.5 mm (2006-07 Model)

No.	Part Number	Thickness
1	90502-RAY-A00	6.85 mm (0.270 in.)
2	90503-RAY-A00	6.90 mm (0.272 in.)
3	90504-RAY-A00	6.95 mm (0.274 in.)
4	90505-RAY-A00	7.00 mm (0.276 in.)
5	90506-RAY-A00	7.05 mm (0.278 in.)
6	90507-RAY-A00	7.10 mm (0.280 in.)

6. Remove the 27 x 47 x 5 mm thrust washer from the mainshaft.
7. Assemble the 1st/1st-hold/2nd clutch assembly (A), 37 x 55 mm thrust washer (B), thrust needle bearing (C), needle bearings (D), 2nd gear (E), thrust needle bearing (F), and 27 x 47 x 5 mm thrust washer (removed from mainshaft) (G) on the secondary shaft sub-assembly (H).

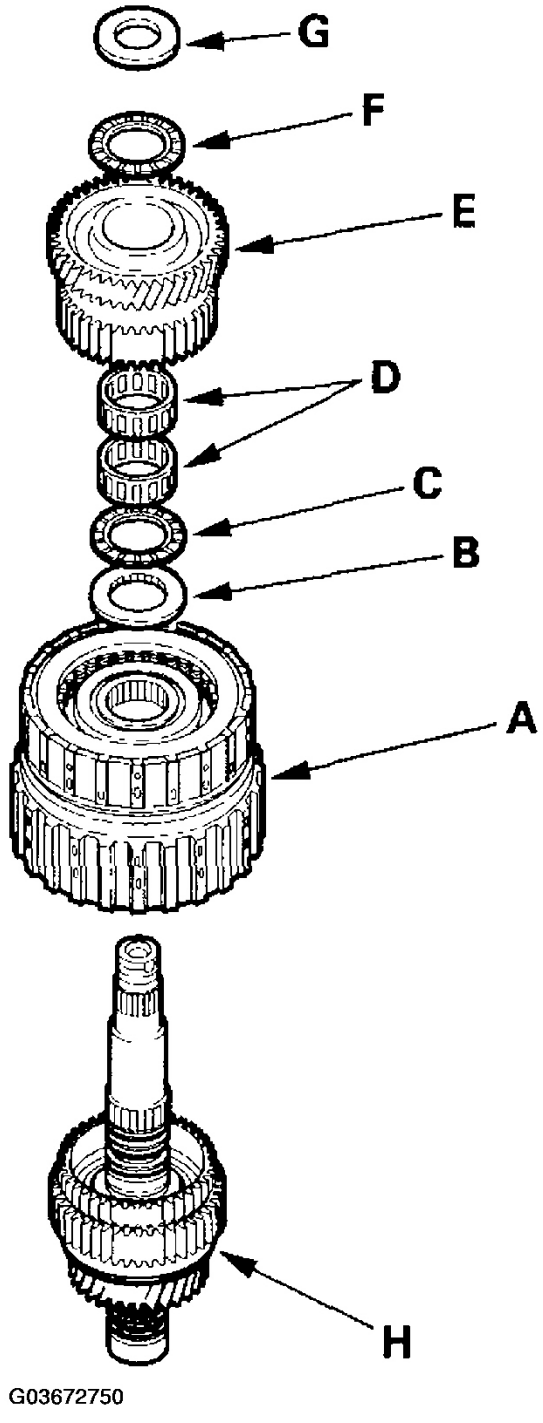


Fig. 395: Assembling 1st/1st-Hold/2nd Clutch Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Set the dial indicator (I) on the 2nd gear (E).

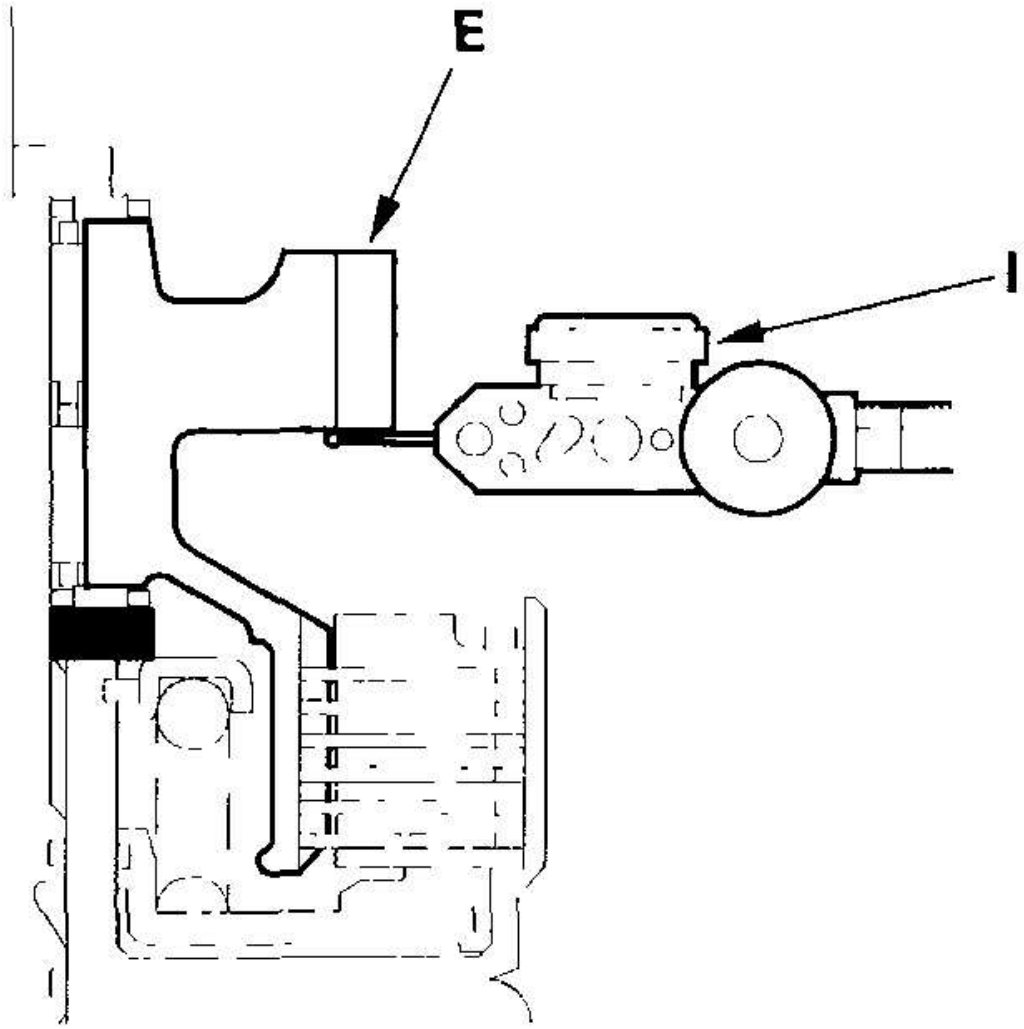


Fig. 396: Setting Dial Indicator On 2nd Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Hold the 27 x 47 x 5 mm thrust washer (G) against the clutch assembly (A), and measure the 2nd gear axial clearance in at least three places while moving

the 2nd gear (E). Use the average as the actual clearance.

Standard: 0.04-0.12 mm (0.002-0.005 in.)

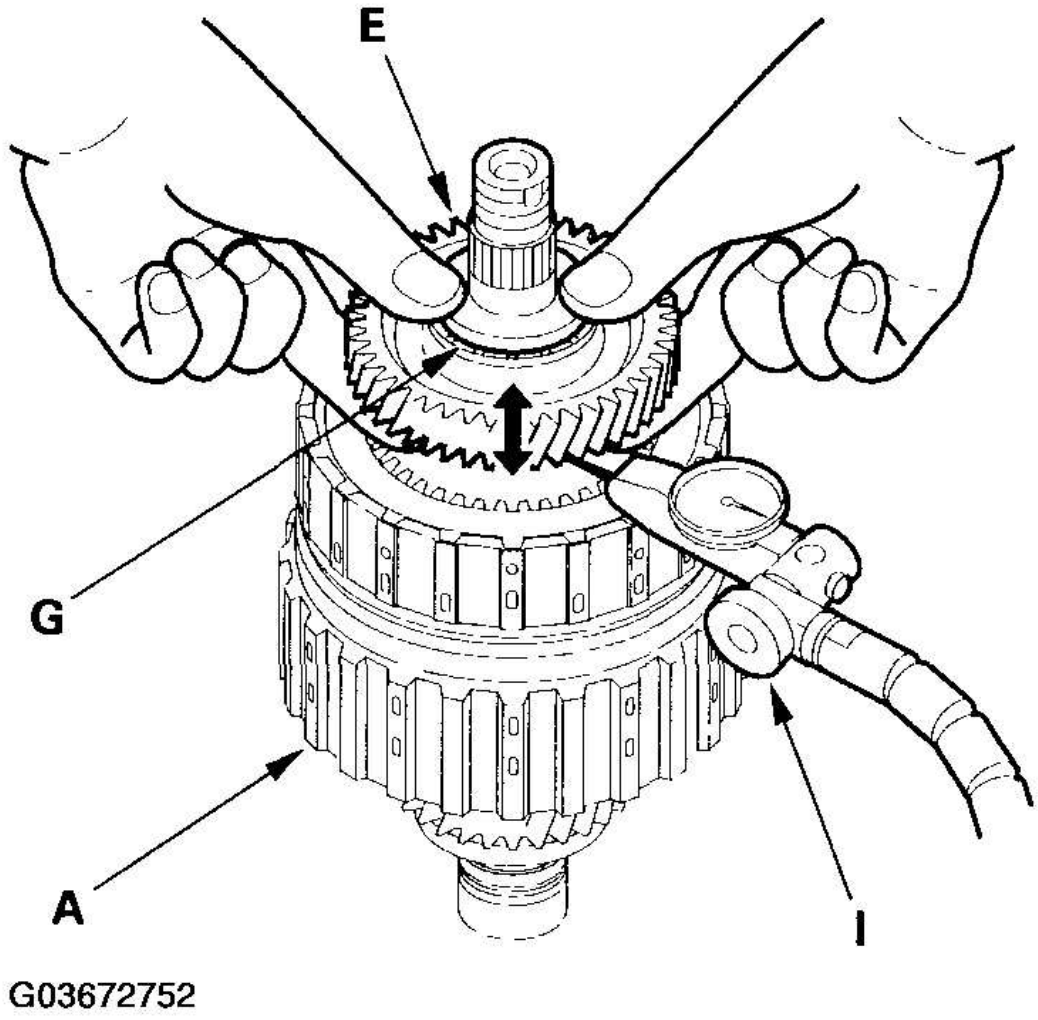


Fig. 397: Holding Thrust Washer Against Clutch Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. If the measurement is out of standard, remove the 37 x 55 mm thrust washer and measure its thickness.
11. Select and install a new thrust washer, then recheck the clearance.

THRUST SHIM, 37 x 55 mm

No.	Part Number	Thickness
1	90406-P0Z-000	4.90 mm (0.193 in.)
2	90407-P0Z-000	4.95 mm (0.195 in.)
3	90408-P0Z-000	5.00 mm (0.197 in.)
4	90409-POZ-000	5.05 mm (0.199 in.)
5	90410-P0Z-000	5.10 mm (0.201 in.)
6	90411-P0Z-000	5.15 mm (0.203 in.)
7	90412-P0Z-000	5.20 mm (0.205 in.)

12. Disassemble the shaft and gears.
13. Reinstall the 27 x 47 x 5 mm thrust washer on the mainshaft.

SECONDARY SHAFT IDLER GEAR BEARING REPLACEMENT

Special Tools Required

- Driver 07749-0010000
- Attachment, 78 x 90 mm 07GAD-SD40101

1. Check the bearing for wear, damage, and rough movement. If the bearing is worn or damaged, go to step 2.
2. Place the secondary shaft idler gear in a vise with soft jaws.
3. Remove the bearing (A) from the secondary shaft idler gear (B) with a commercially available bearing puller (C).

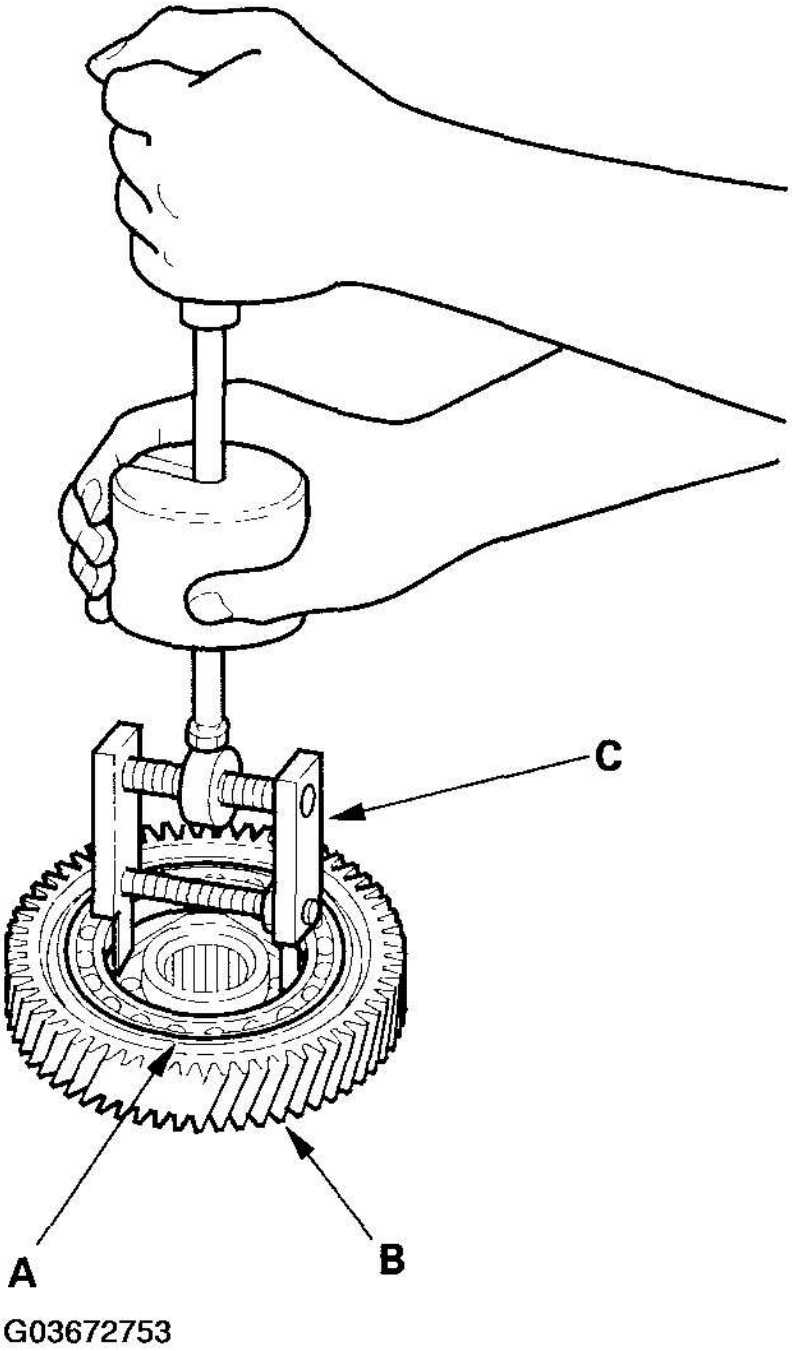


Fig. 398: Removing Bearing From Secondary Shaft Idler Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the bearing on the secondary shaft idler gear with the special tools and a press.

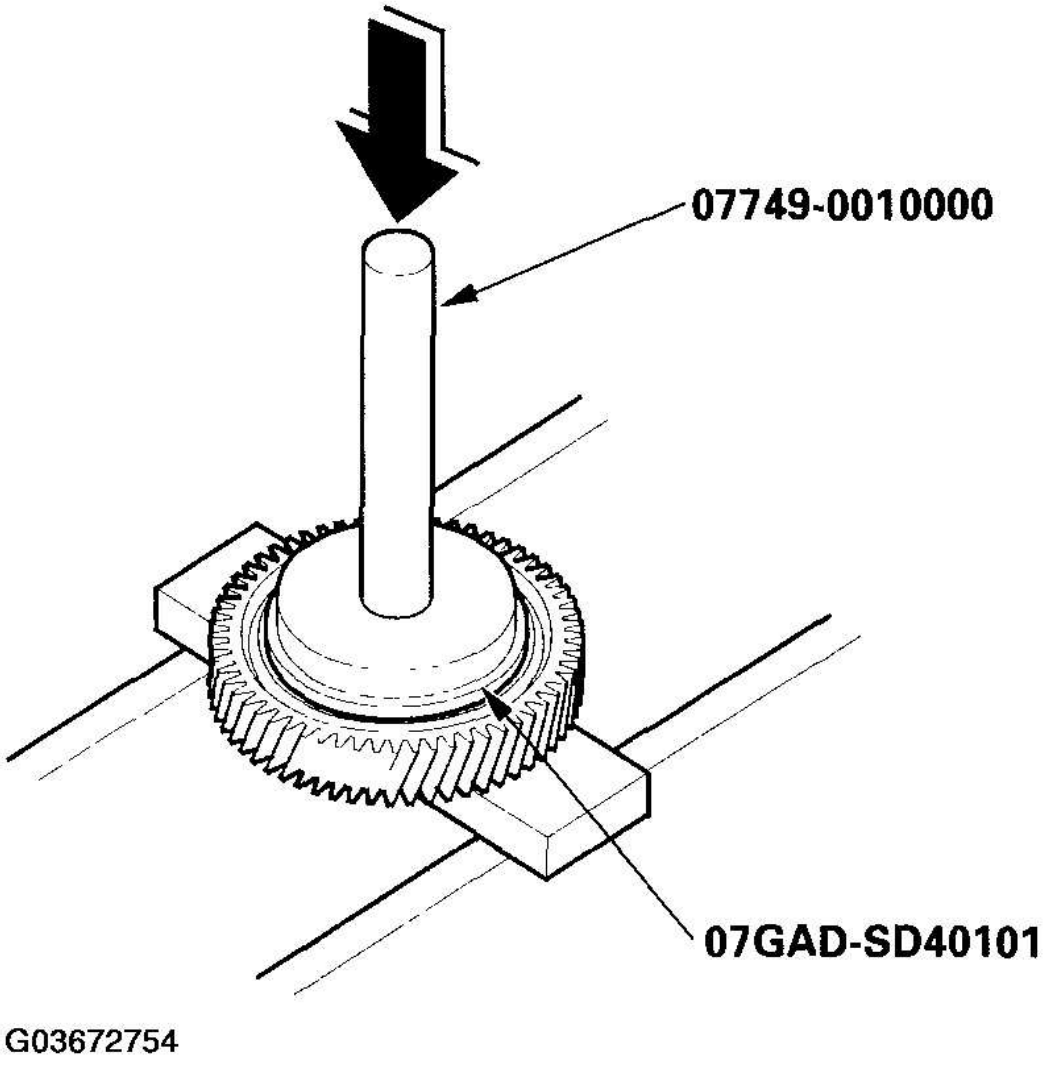
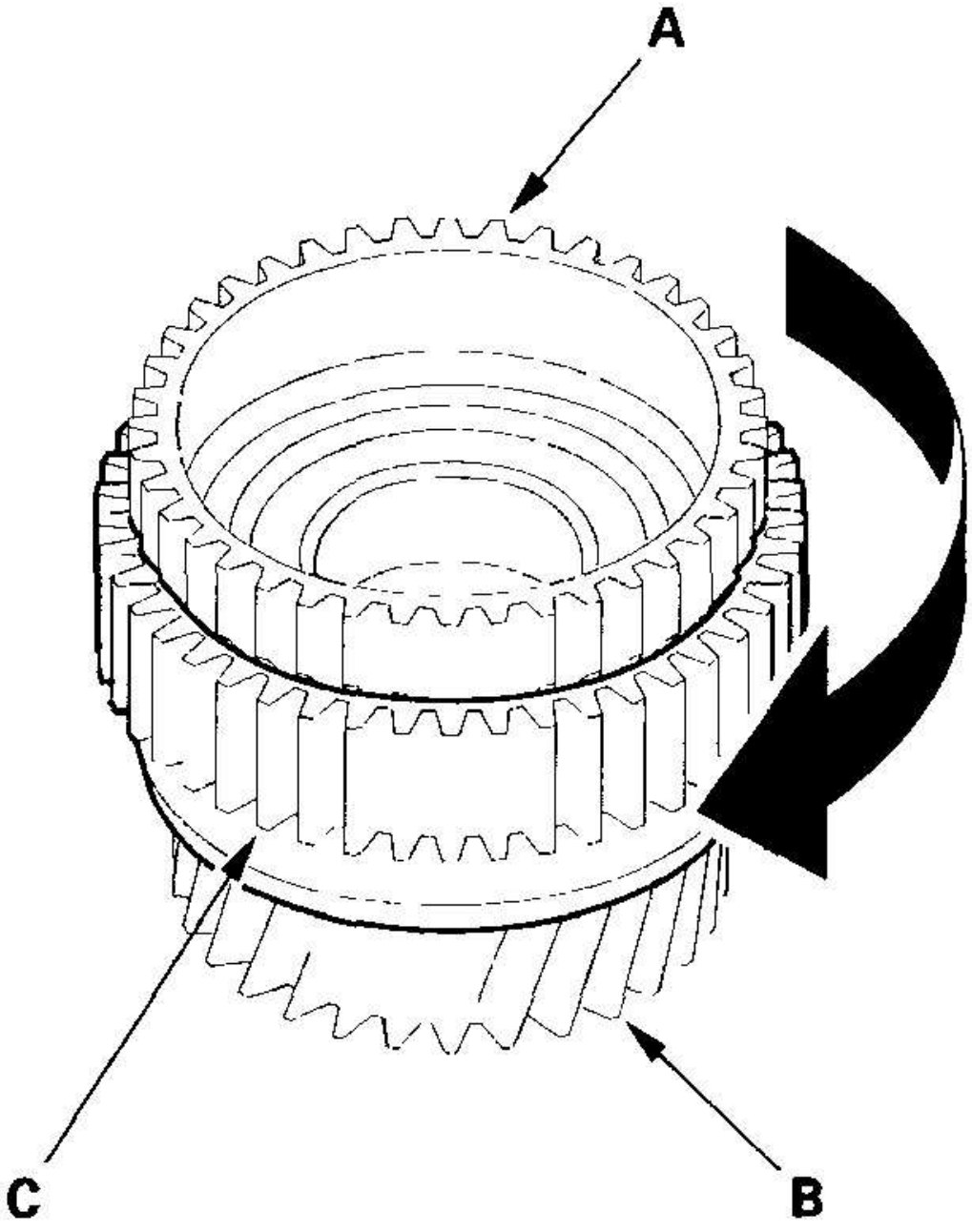


Fig. 399: Installing Bearing On Secondary Shaft Idler Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

1ST GEAR ONE-WAY CLUTCH INSPECTION

1. Hold the 1st-hold clutch hub (A), and turn the 1st gear (B) in the direction shown in **Fig. 400** to be sure it turns freely. Also make sure the 1st gear does

not turn in the opposite direction.



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Fig. 400: Holding 1st-hold Clutch Hub And Turning 1st Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. If any problem occurs on the 1st gear one-way clutch, replace the 1st clutch hub (C). The 1st gear one-way clutch is not available separately from the 1st clutch hub.

1ST CLUTCH HUB REPLACEMENT

Special Tools Required

- Driver 07749-0010000
- Driver attachment 07947-6340500
- Attachment, 78 x 90 mm 07GAD-SD40101

1. Remove the 1st-hold clutch hub (A) from the 1st gear (B) with the special tools and a press.

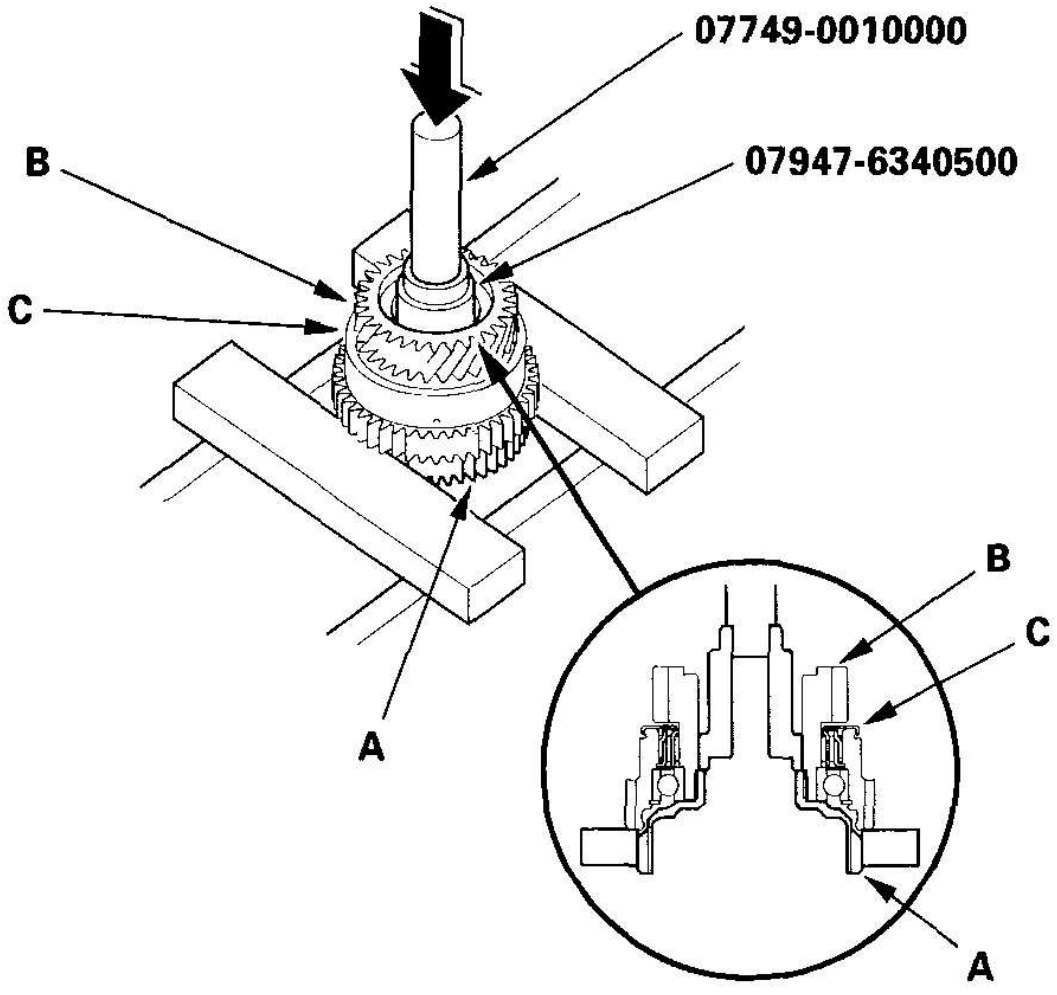


Fig. 401: Removing 1st-Hold Clutch Hub From 1st Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the 1st clutch hub (C) from the 1st gear, then install the new 1st clutch hub in the 1st gear.
3. Install the 1st-hold clutch hub (A) in the 1st gear (B) with the special tools and a press.

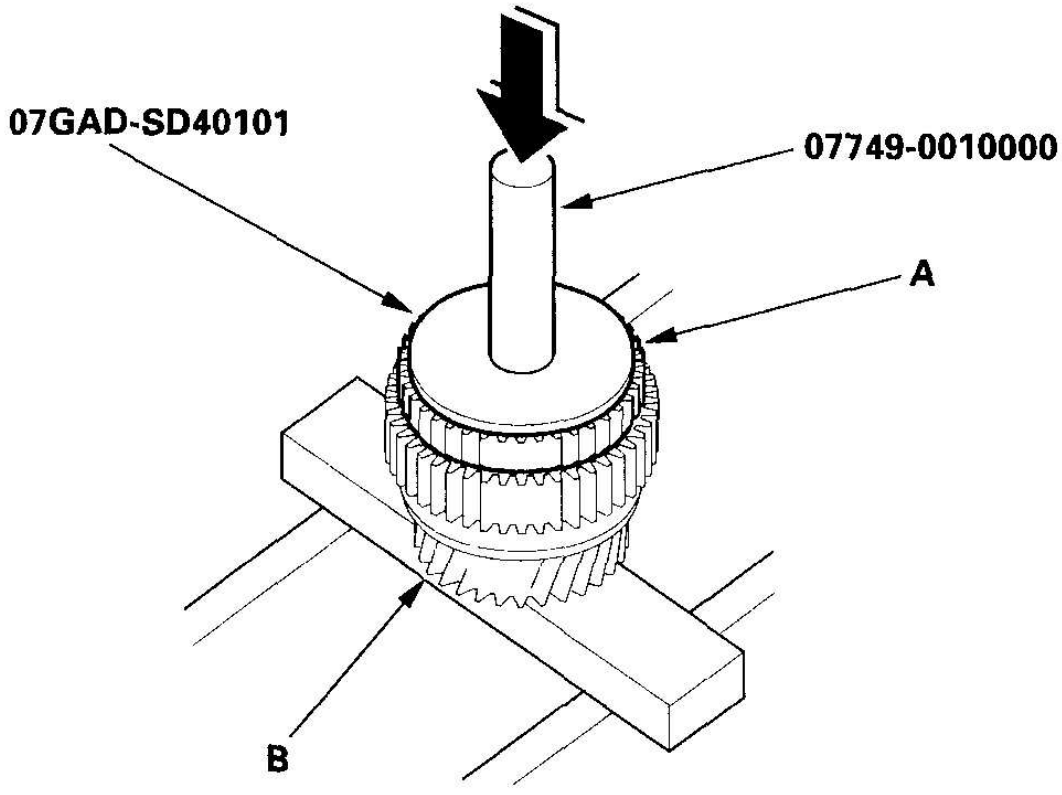


Fig. 402: Installing 1st-Hold Clutch Hub In 1st Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CLUTCH DISASSEMBLY

Special Tools Required

- Clutch spring compressor attachment 07LAE-PX40100 or 07HAE-PL50101
- Clutch spring compressor bolt assembly 07GAE-PG40200 or 07GAE-PG4020A

1. Remove the snap ring (A), then remove the clutch end plate, the clutch discs, and the plates with a screwdriver (B).

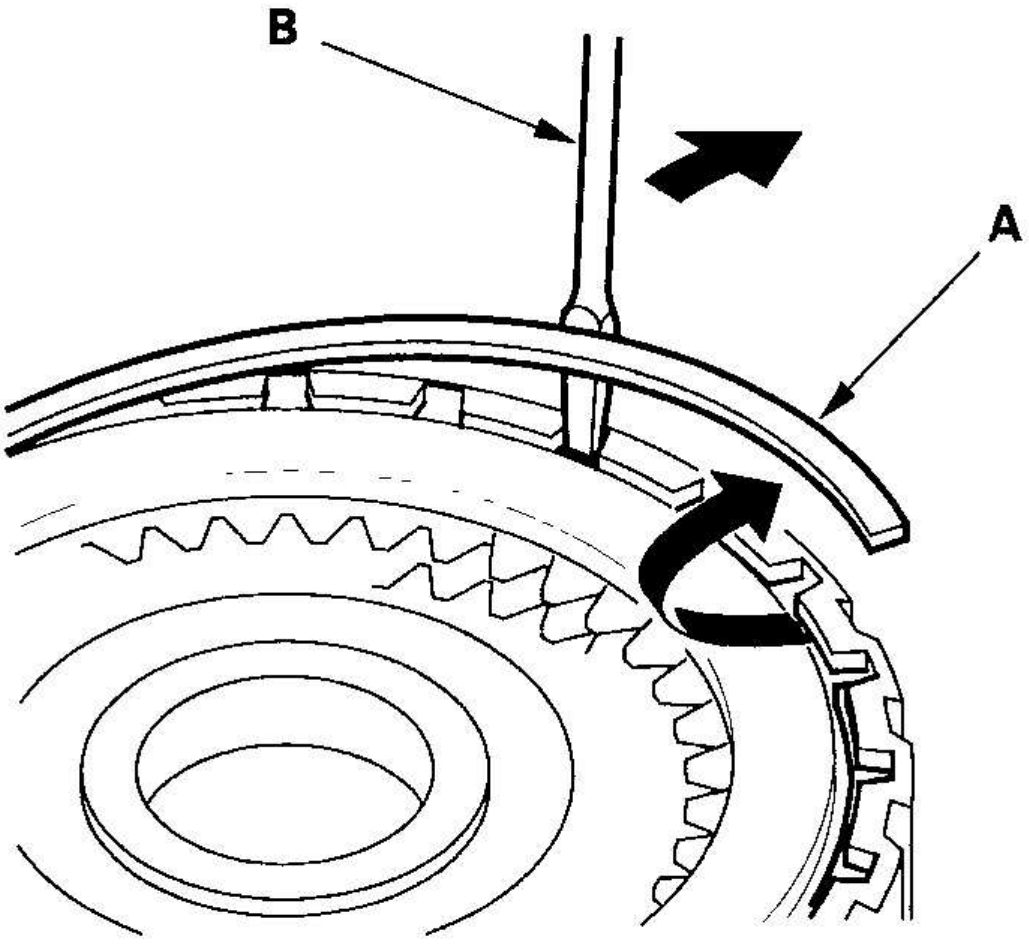
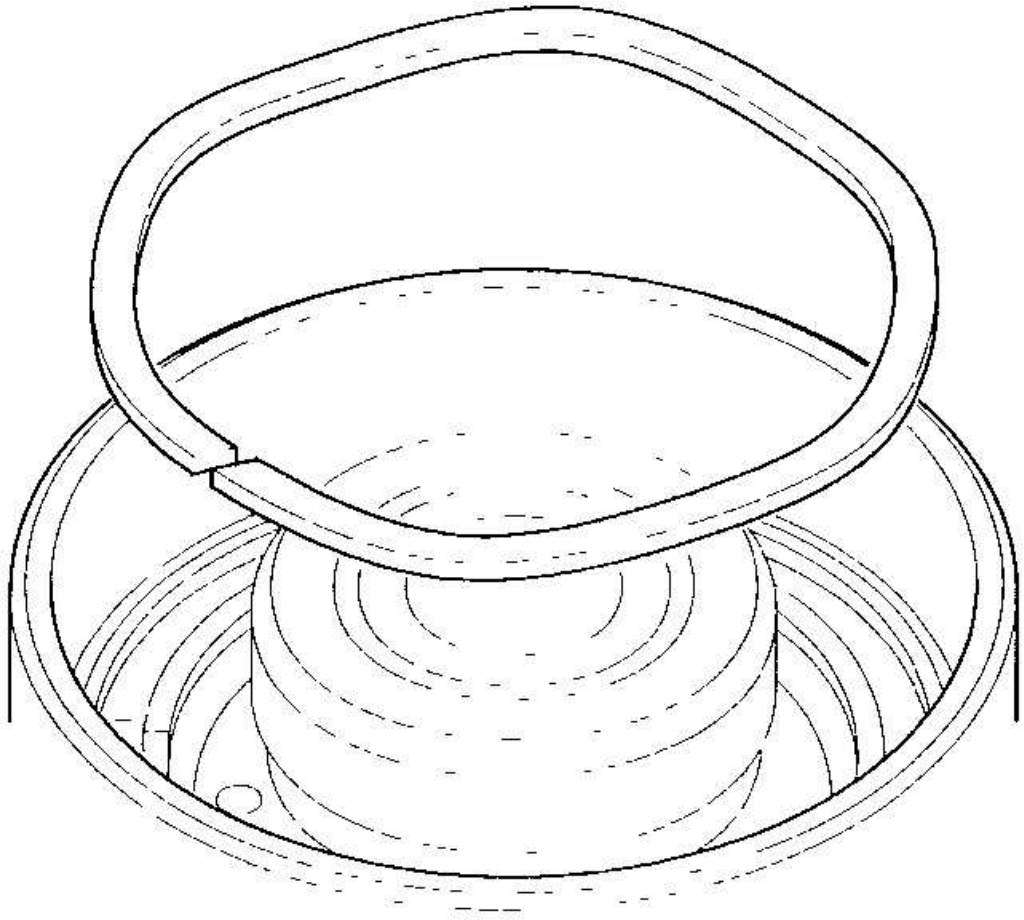


Fig. 403: Removing Snap Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Make reference marks on the 2nd clutch waved-plates on the 2006-07 model.
3. Remove the waved spring from the 3rd clutch (2003 model) and 4th clutch (2003-2004 models).



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Fig. 404: Removing Waved Spring From 3rd Clutch (2003 Model) And 4th Clutch (2003-04 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the disc spring from the 1st clutch, 5th clutch, 3rd clutch (2004-2007 models), and 4th clutch (2005-2007 models).
    - 1ST CLUTCH
    - 3RD CLUTCH (2004-2007 MODELS)
    - 5TH CLUTCH (2003-2004 MODELS)

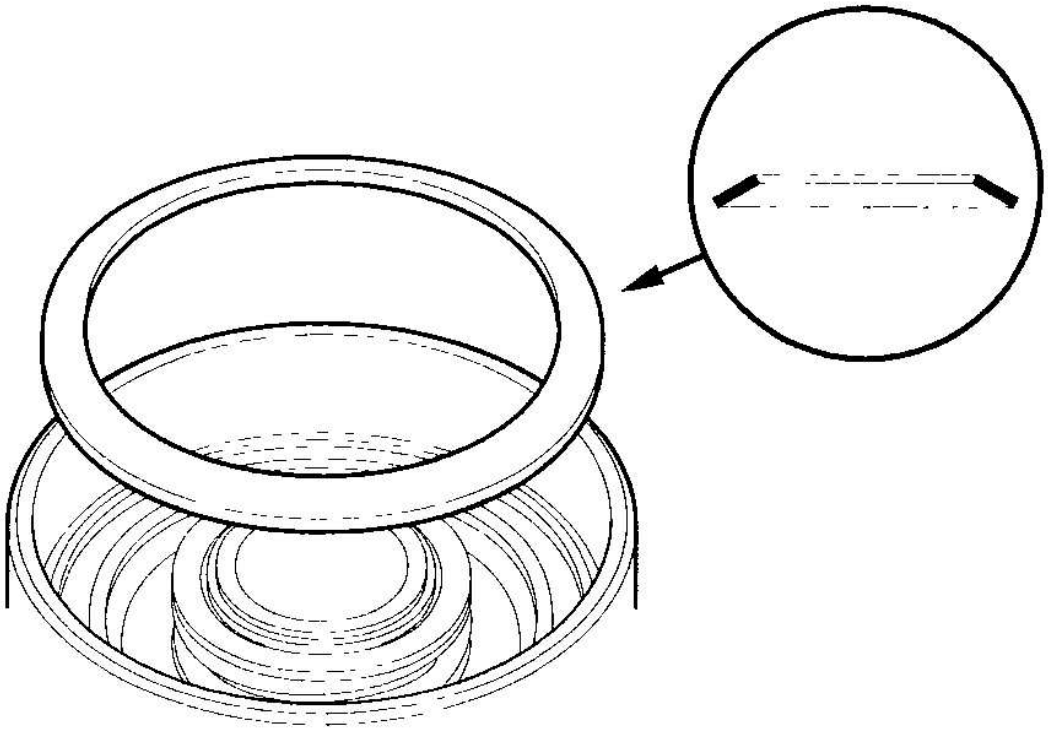


Fig. 405: Removing Disc Spring (1st, 3rd And 5th Clutch)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- 4TH CLUTCH (2005-2007 MODELS)
- 5TH CLUTCH (2005-2007 MODELS)

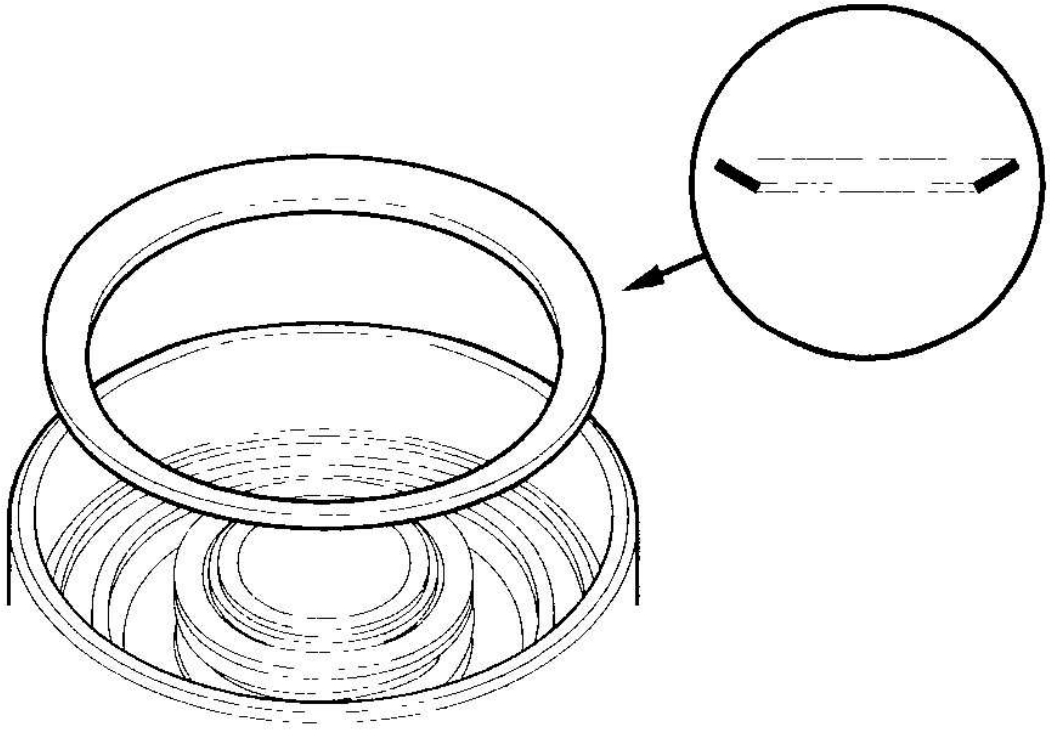


Fig. 406: Removing Disc Spring (4th And 5th Clutch)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the special tools on the clutch assembly.

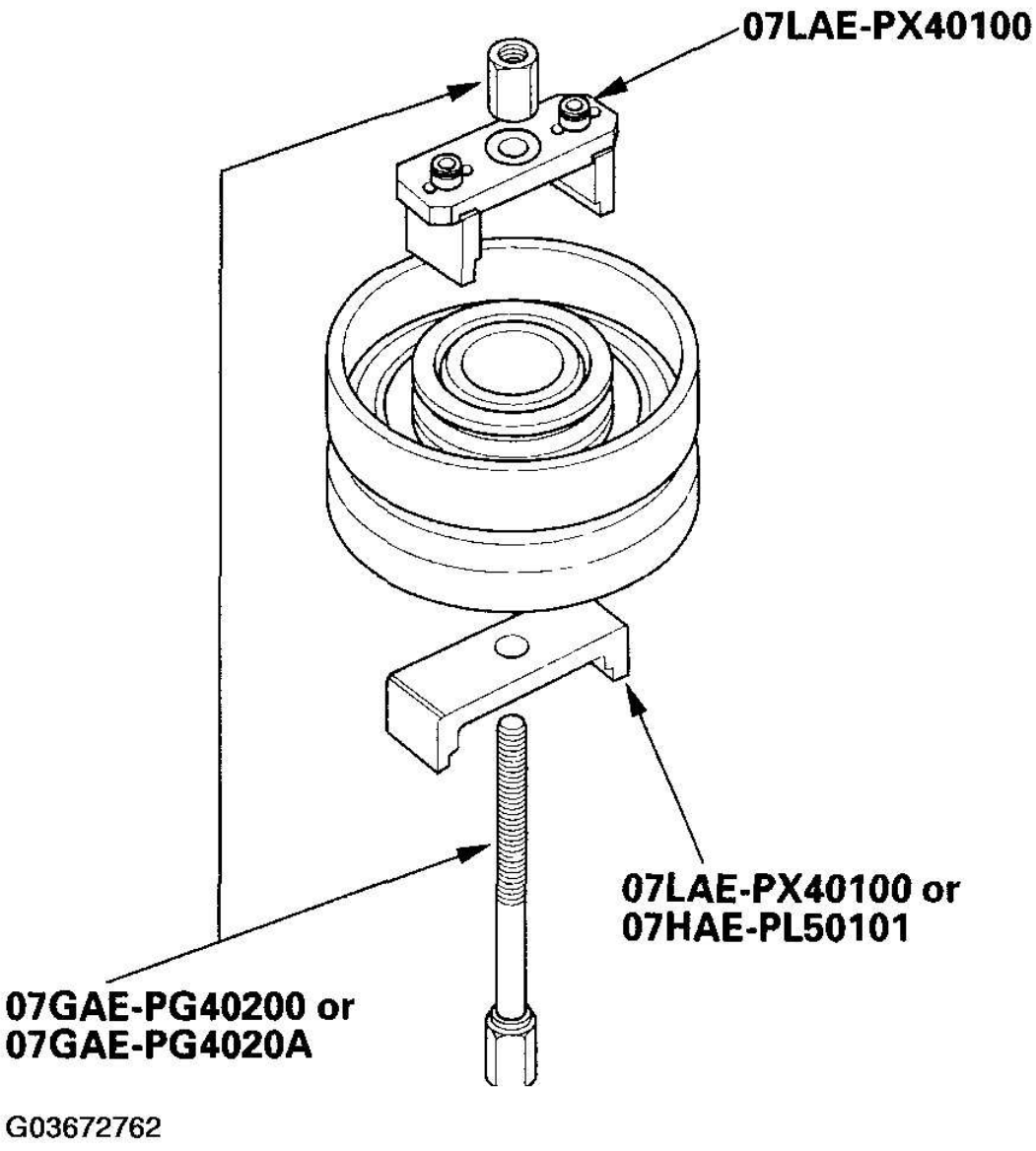


Fig. 407: Installing Special Tools On Clutch Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Be sure the special tool (A) is adjusted to have full contact with the spring retainer (B) on the 1st, 4th, and 5th clutches.

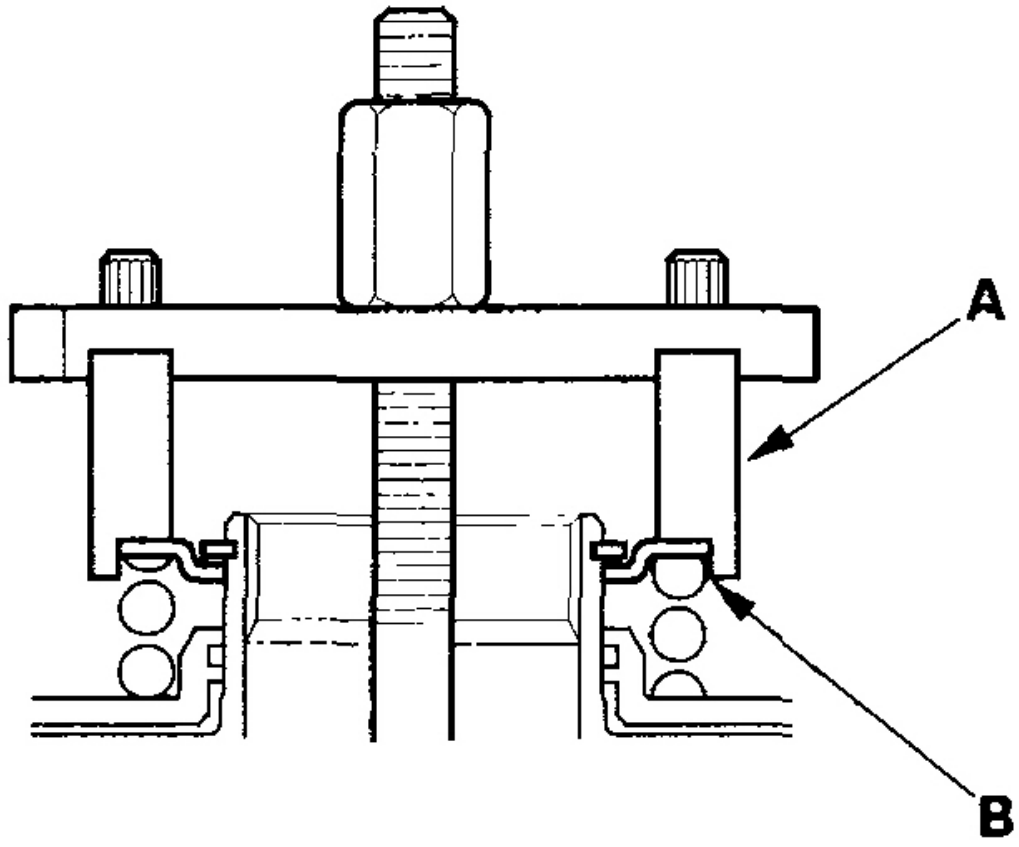


Fig. 408: Adjusting Special To Have Full Contact With Spring Retainer On 1st, 4th And 5th Clutches
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Set the special tool (A) on the spring retainer (B) of the 2nd and 3rd clutches so the special tool works on the clutch return spring (C).

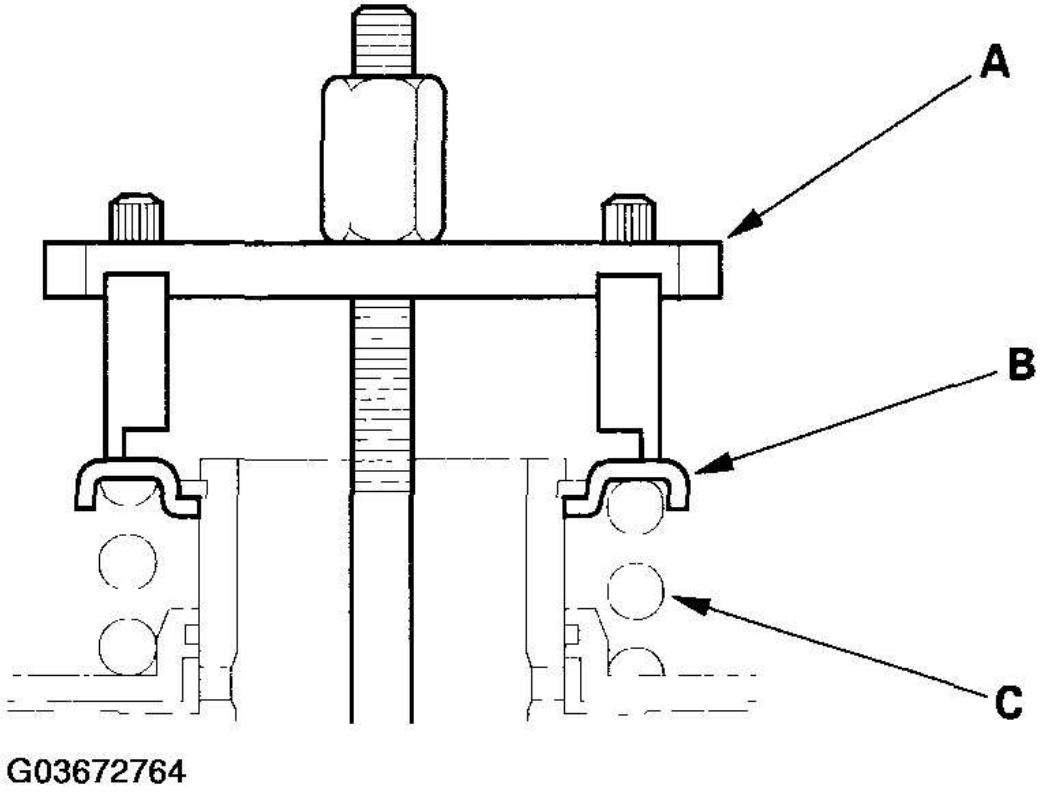
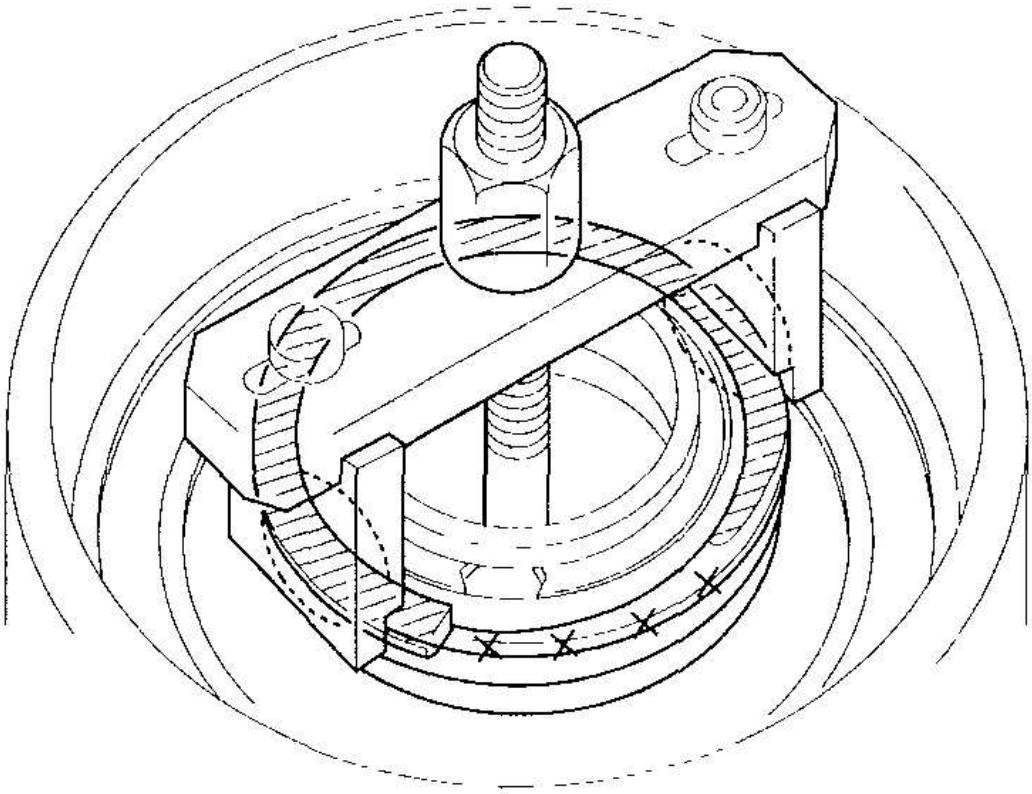


Fig. 409: Setting Special Tool On Spring Retainer Of 2nd And 3rd Clutches
Courtesy of AMERICAN HONDA MOTOR CO., INC.

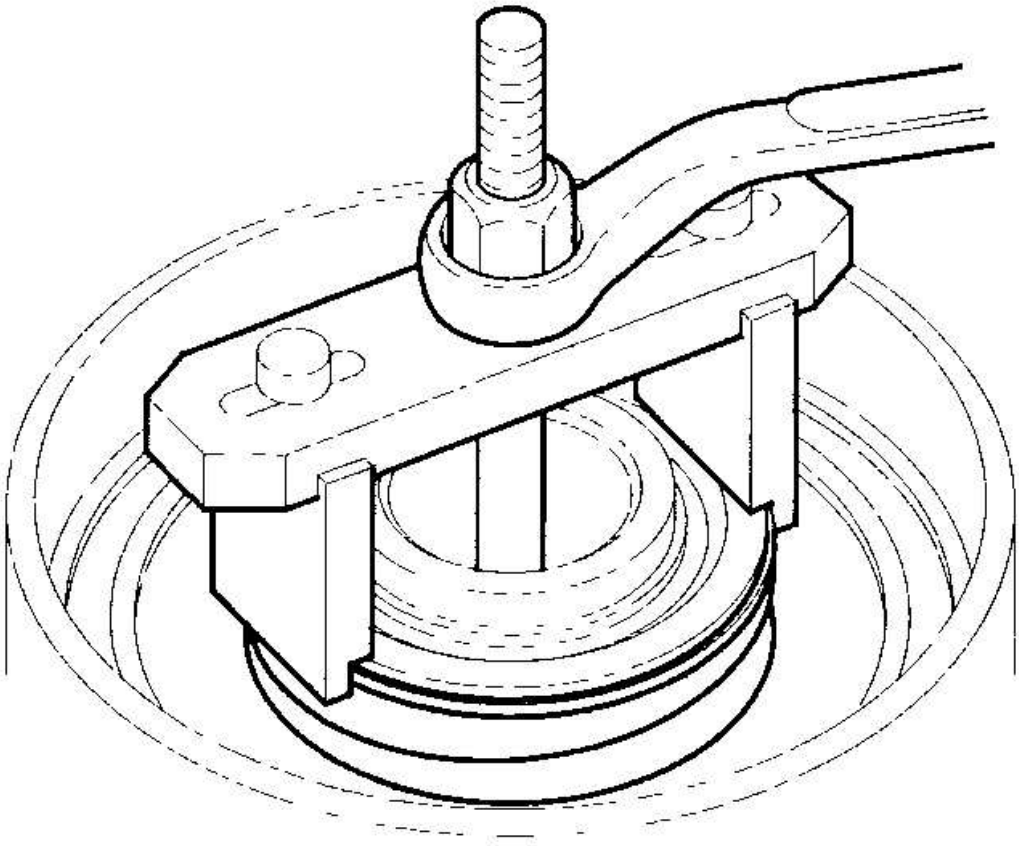
8. If either end of the special tool is set over an area of the spring retainer which is unsupported by the return spring, the retainer may be damaged.



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Fig. 410: Inspecting Special Tools Proper Adjustment With Spring Retainer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Compress the spring until the snap ring can be removed.



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Fig. 411: Removing Snap Ring Compressing Spring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the snap ring (A). Then remove the special tools (B), spring retainer (C), and return spring.

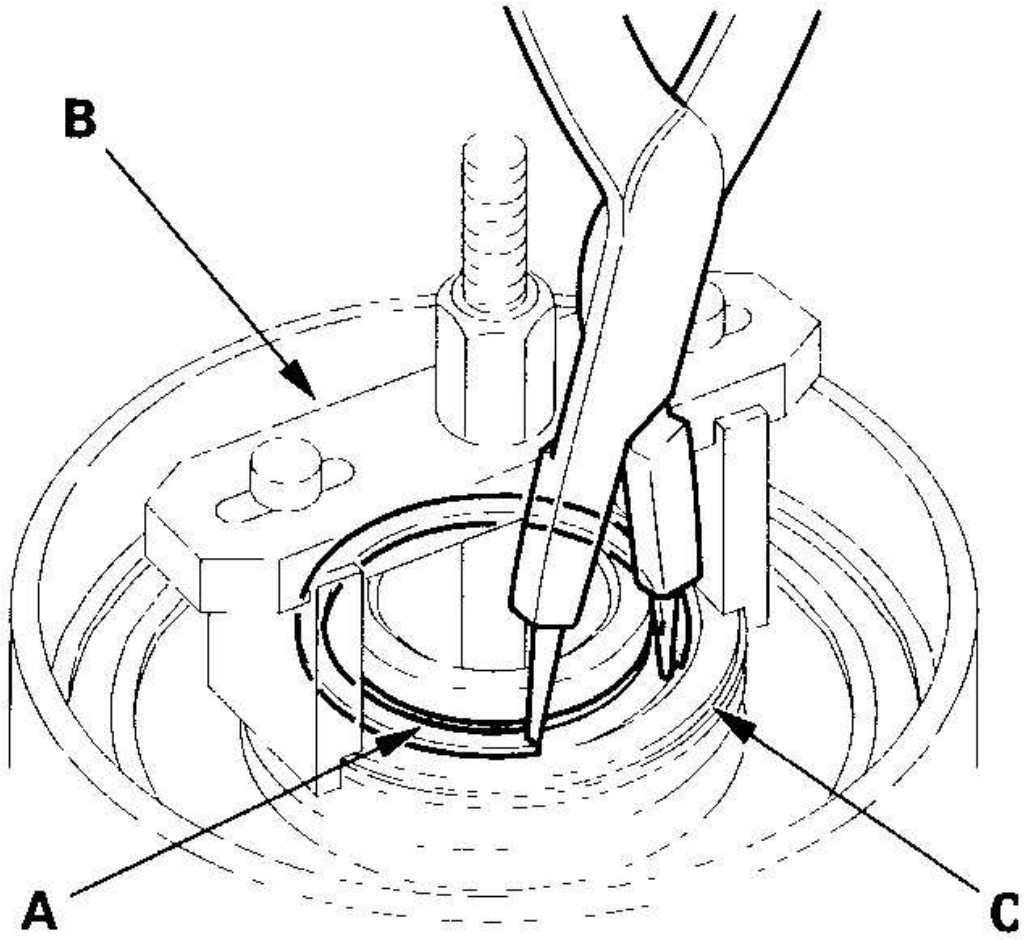


Fig. 412: Removing Snap Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Wrap a shop rag around the clutch drum (A), and apply air pressure to the fluid passage to remove the piston (B). Place a finger tip on the other end while applying air pressure.

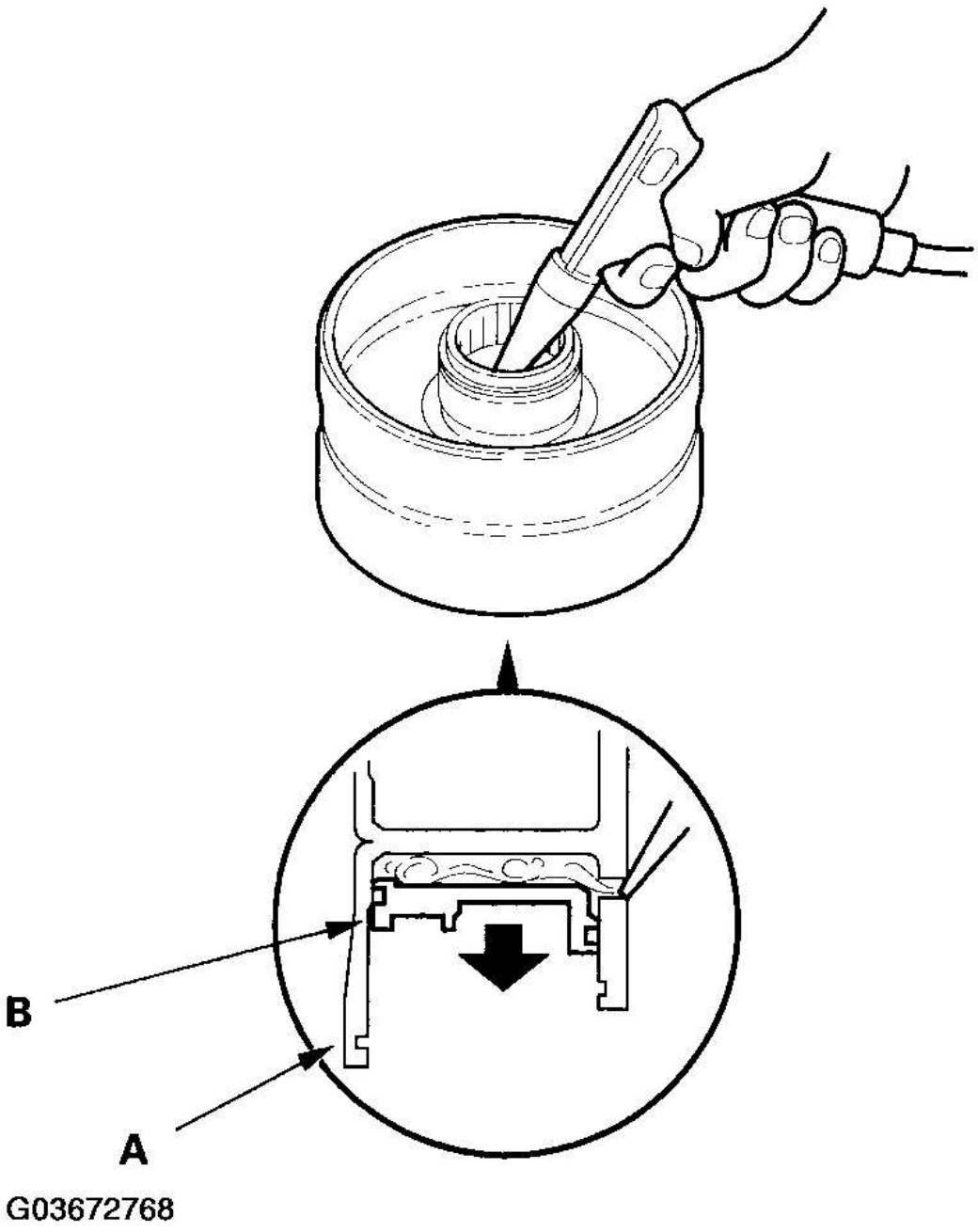


Fig. 413: Wrapping Shop Rag Around Clutch Drum And Applying Air Pressure To Fluid Passage To Remove Piston
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CLUTCH INSPECTION

1st/1st-hold/2nd Clutch (2003-2005 Models)

1. Inspect the clutch piston and clutch piston check valve. If the clutch check valve is loose or stuck damaged, replace the clutch piston.

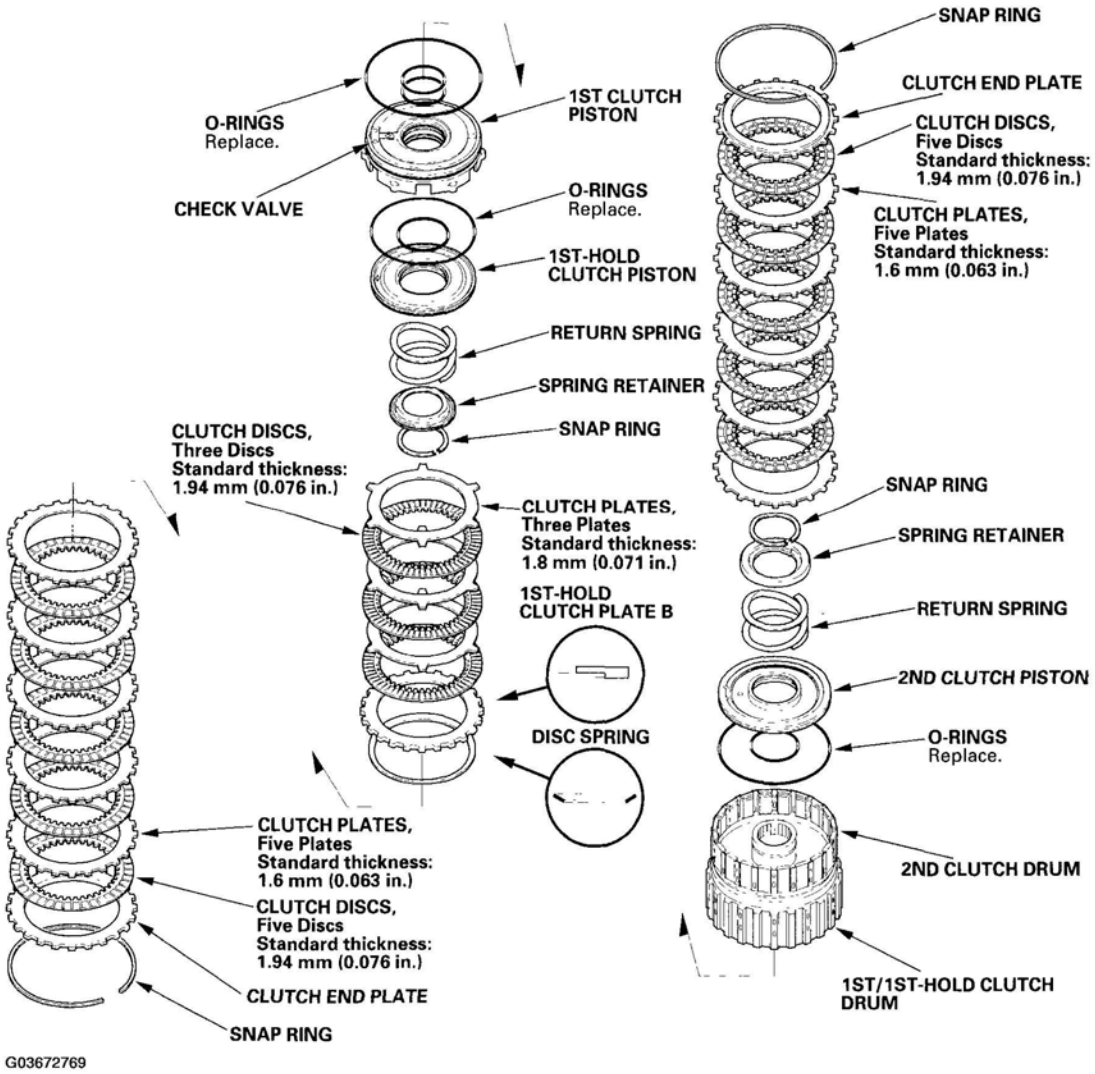


Fig. 414: Inspecting 1st/1st-hold/2nd Clutch (2003-2005 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check the spring retainer for wear and damage.
3. Inspect the clutch discs, clutch plates, and clutch end plate for wear, damage,

and discoloration.

- If the clutch discs are worn or damaged, replace the discs as a set.
- If the clutch plates are worn, damaged, or discolored, replace the plates as a set.
- If the clutch end plate is worn, damaged, or discolored, inspect the clutch end-plate-to-top-disc clearance, then replace the clutch-end-plate.
- If the 1st-hold clutch plate B is worn, damaged, or discoloration, inspect the 1st-hold clutch plate B-to-top-disc clearance, then replace plate B.

1st/1st-hold/2nd Clutch (2006-07 Models)

1. Inspect the clutch piston and clutch piston check valve. If the clutch check valve is loose, stuck, or damaged, replace the clutch piston.

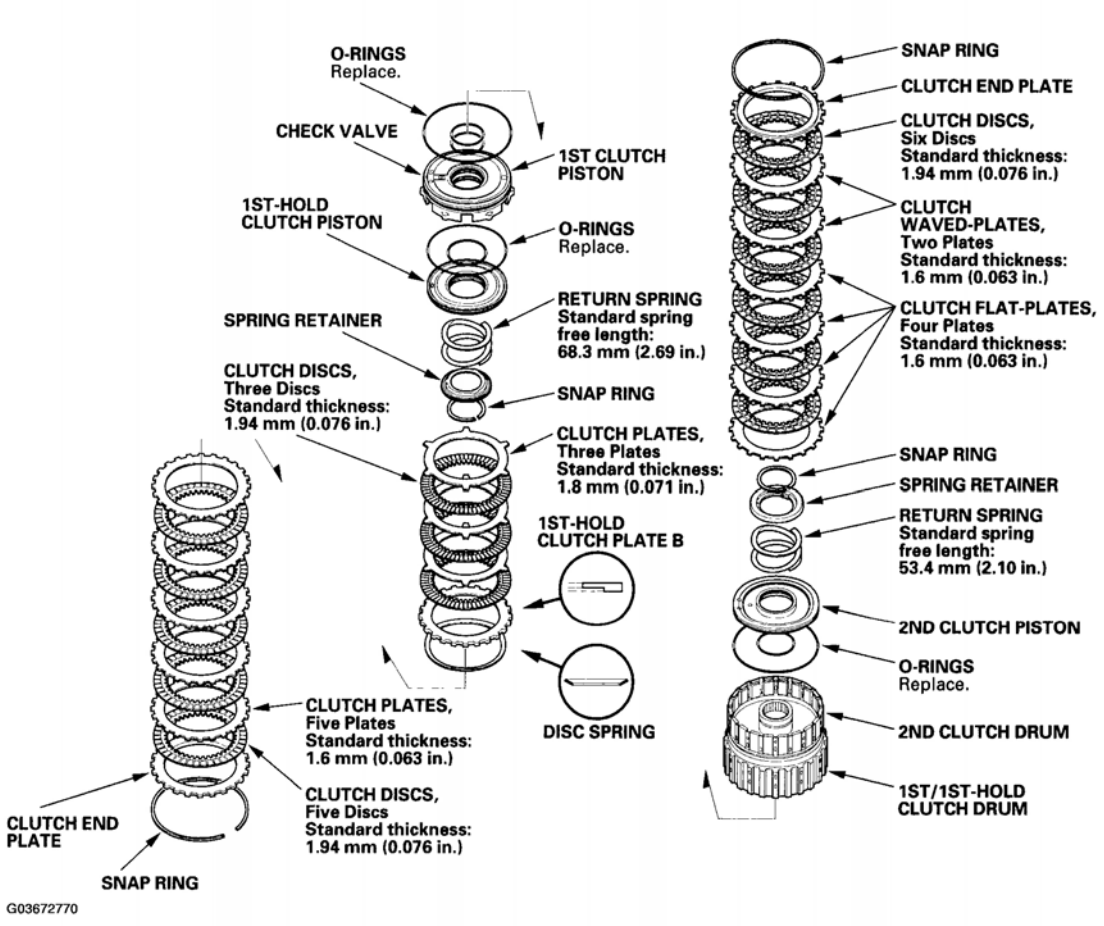


Fig. 415: Inspecting 1st/1st-hold/2nd Clutch Clutch (2006-07 Models)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check the spring retainer for wear and damage.
3. Inspect the clutch discs, clutch plates, and clutch end plate for wear, damage, and discoloration. Inspect the 2nd clutch waved-plate phase difference on the 2006-07 model (see **CLUTCH WAVED-PLATE PHASE DIFFERENCE INSPECTION**).
    - If the clutch discs are worn or damaged, replace the discs as a set.
    - If the clutch plates are worn, damaged, or discolored, replace the plates as a set.
    - If the clutch end plate is worn, damaged, or discolored, inspect the clutch end-plate-to-top-disc clearance, then replace the clutch-end-plate.
    - If the 1st-hold clutch plate B is worn, damaged, or discolored, inspect the 1st-hold clutch plate B-to-top-disc clearance, then replace plate B.

3rd Clutch (2003 Model)

1. Inspect the clutch piston and clutch piston check valve. If the clutch check valve is loose or stuck damaged, replace the clutch piston.

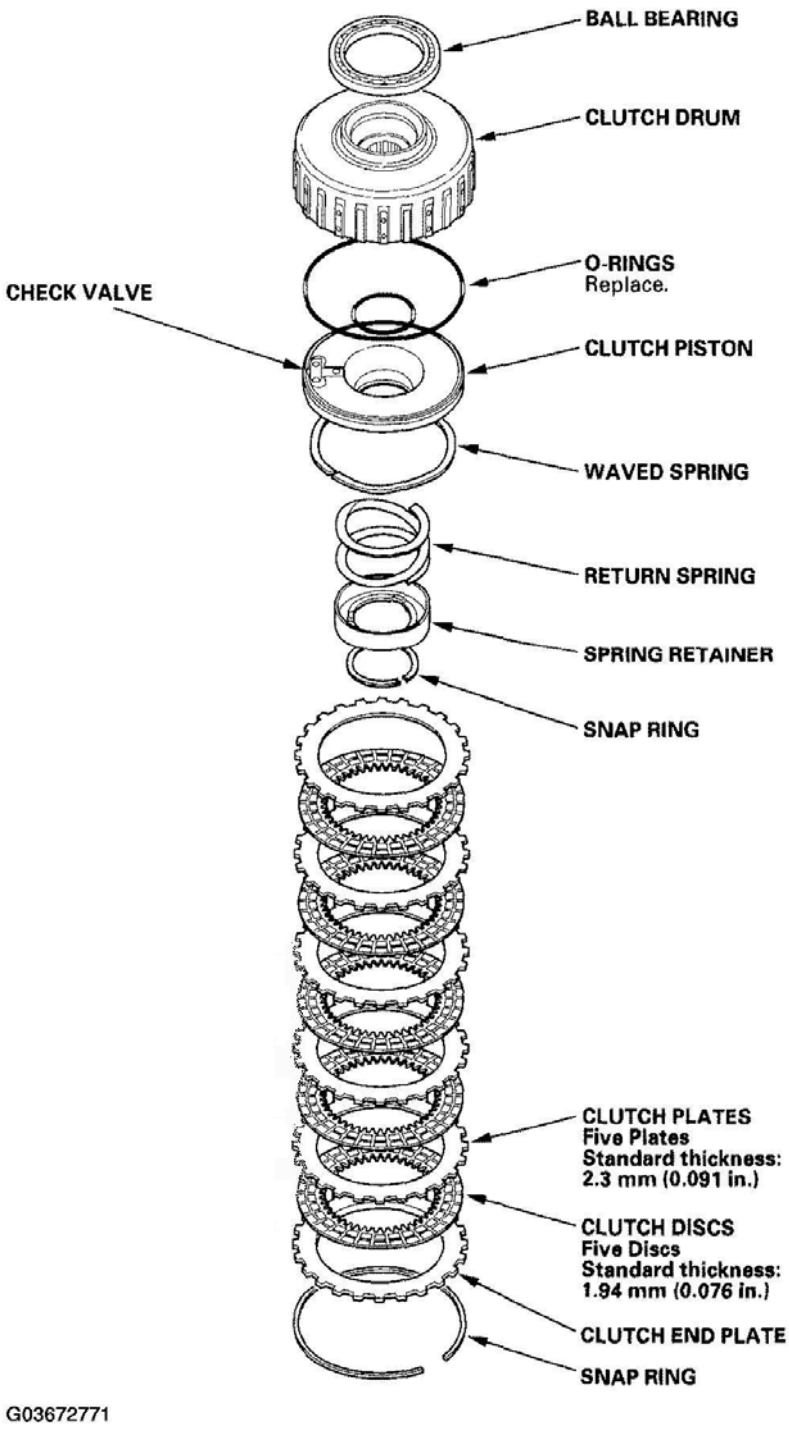


Fig. 416: Inspecting 3rd Clutch (2003 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check the spring retainer for wear and damage.
3. Inspect the clutch discs, clutch plates, and clutch end plate for wear, damage, and discoloration.
   - If the clutch discs are worn or damaged, replace the discs as a set.
   - If the clutch plates are worn, damaged, or discolored, replace the plates as a set.
   - If the clutch end plate is worn, damaged, or discolored, inspect the clutch end-plate-to-top-disc clearance, then replace the clutch end-plate.

3rd Clutch (2004-2007 Models)

1. Inspect the clutch piston and clutch piston check valve. If the clutch check valve is loose, stuck, or damaged, replace the clutch piston.

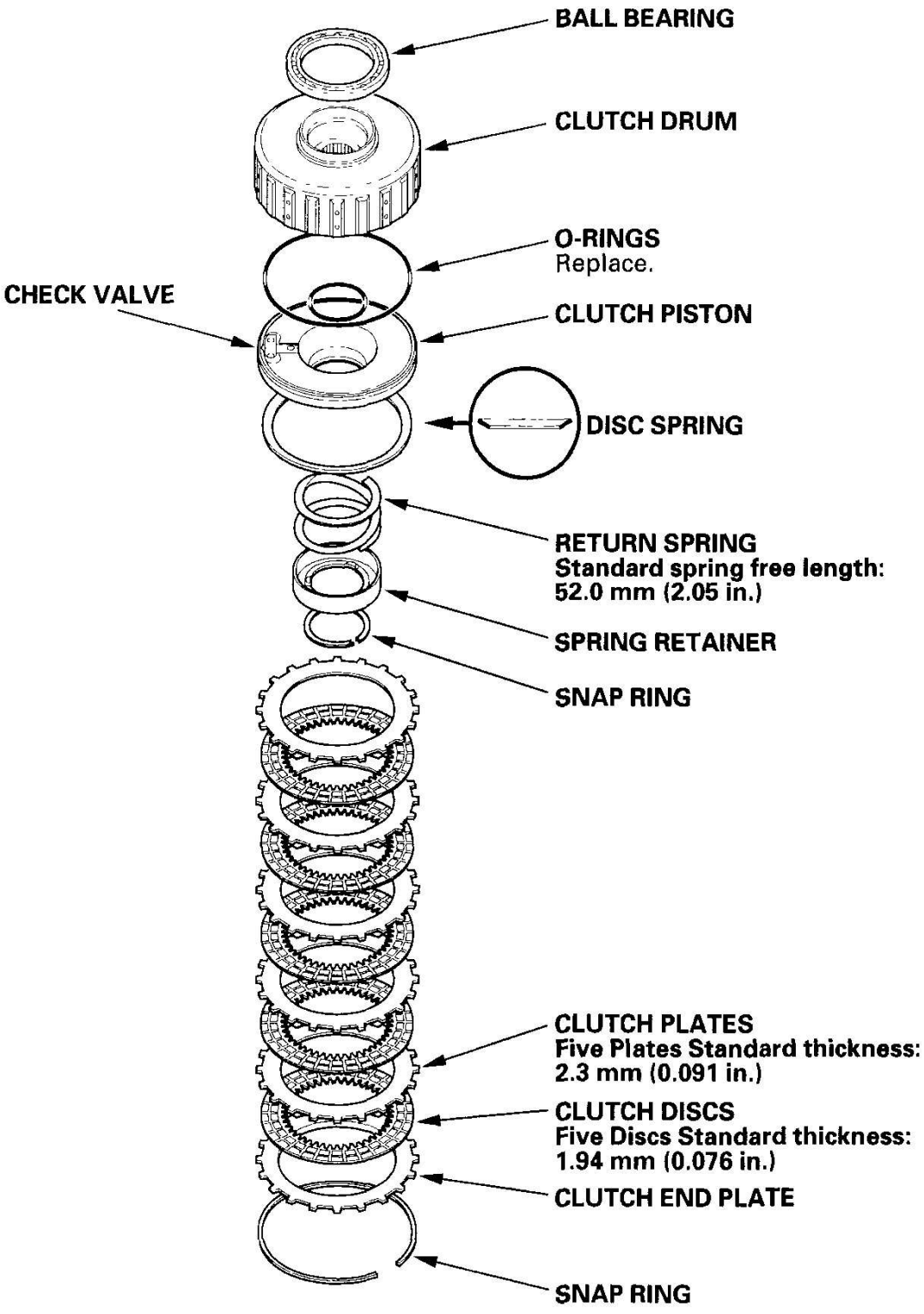

BALL BEARING
CLUTCH DRUM
O-RINGS
Replace.
CHECK VALVE
CLUTCH PISTON
DISC SPRING
RETURN SPRING
Standard spring free length:
52.0 mm (2.05 in.)
SPRING RETAINER
SNAP RING
CLUTCH PLATES
Five Plates Standard thickness:
2.3 mm (0.091 in.)
CLUTCH DISCS
Five Discs Standard thickness:
1.94 mm (0.076 in.)
CLUTCH END PLATE
SNAP RING
G03672772

Fig. 417: Inspecting 3rd Clutch (2004-2007 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check the spring retainer for wear and damage.
3. Inspect the clutch discs, clutch plates, and clutch end plate for wear, damage, and discoloration.
   - If the clutch discs are worn or damaged, replace the discs as a set.
   - If the clutch plates are worn, damaged, or discolored, replace the plates as a set.
   - If the clutch end plate is worn, damaged, or discolored, inspect the clutch end-plate-to-top-disc clearance, then replace the clutch end-plate.

4th/5th Clutch (2003-2004 Models)

1. Inspect the clutch piston and clutch piston check valve. If the clutch check valve is loose or stuck damaged, replace the clutch piston.

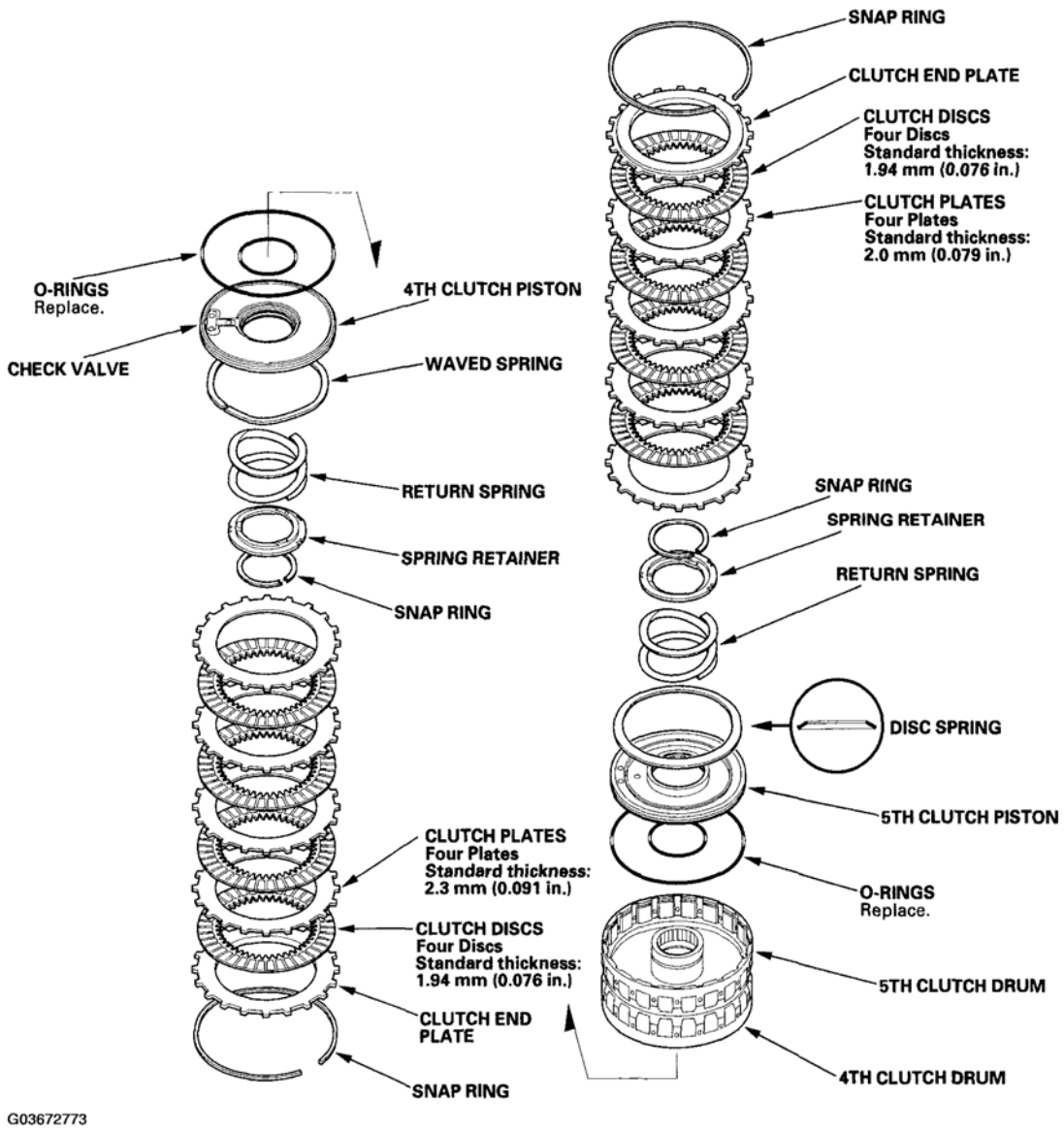


Fig. 418: Inspecting 4th/5th Clutch (2003-2004 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check the spring retainer for wear and damage.
3. Inspect the clutch discs, clutch plates, and clutch end plate for wear, damage, and discoloration.
    - If the clutch discs are worn or damaged, replace the discs as a set.
    - If the clutch plates are worn, damaged, or discolored, replace the plates as a set.

- If the clutch end plate is worn, damaged, or discolored, inspect the clutch end-plate-to-top-disc clearance, then replace the clutch end-plate.

4th/5th Clutch (2005 Model)

1. Inspect the clutch piston and clutch piston check valve. If the clutch check valve is loose or stuck damaged, replace the clutch piston.

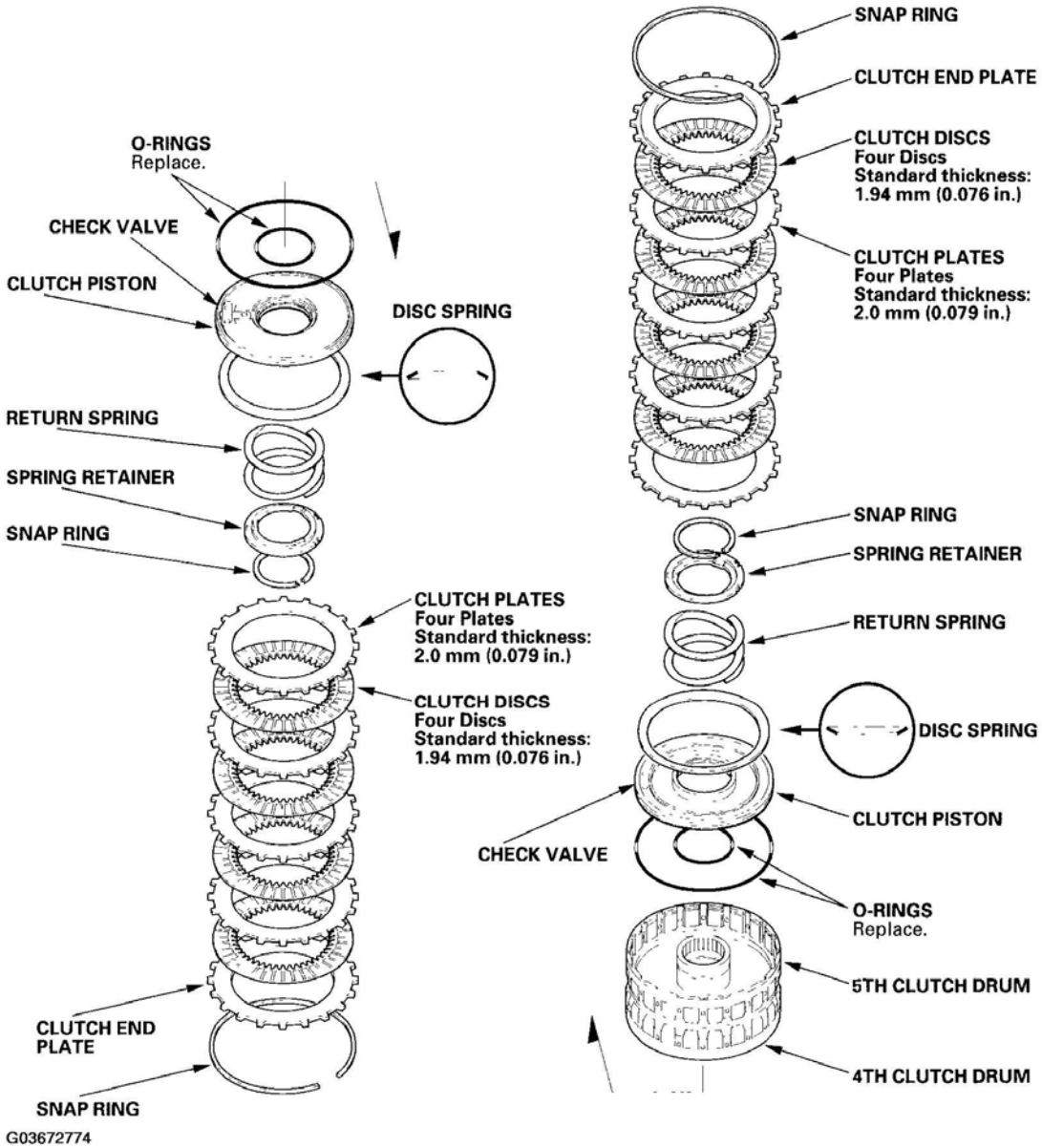


Fig. 419: Inspecting 4th/5th Clutch (2005 Model)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check the spring retainer for wear and damage.
3. Inspect the clutch discs, clutch plates, and clutch end plate for wear, damage, and discoloration.
   - If the clutch discs are worn or damaged, replace the discs as a set.
   - If the clutch plates are worn, damaged, or discolored, replace the plates as a set.
   - If the clutch end plate is worn, damaged, or discolored, inspect the clutch end-plate-to-top-disc clearance, then replace the clutch end-plate.

4th/5th Clutch (2006-07 Model)

1. Inspect the clutch piston and clutch piston check valve. If the clutch check valve is loose, stuck, or damaged, replace the clutch piston.

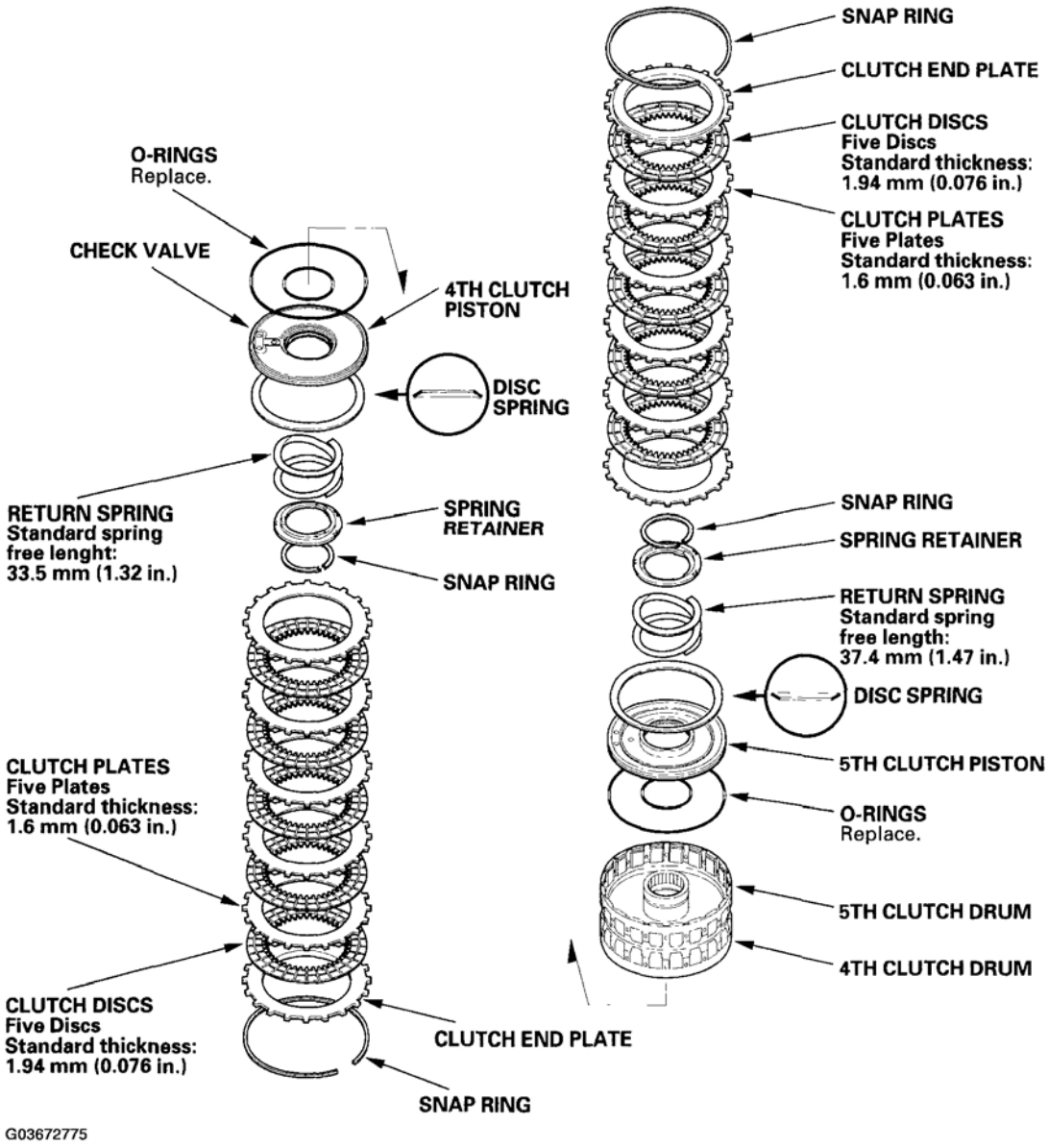


Fig. 420: Inspecting 4th/5th Clutch (2006-07 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check the spring retainer for wear and damage.
3. Inspect the clutch discs, clutch plates, and clutch end plate for wear, damage, and discoloration.
    - If the clutch discs are worn or damaged, replace the discs as a set.
    - If the clutch plates are worn, damaged, or discolored, replace the plates as

a set.

- If the clutch end plate is worn, damaged, or discolored, inspect the clutch end-plate-to-top-disc clearance, then replace the clutch end-plate.

CLUTCH WAVED-PLATE PHASE DIFFERENCE INSPECTION

1. Place the clutch waved-plate (A) on a surface plate, and set a dial indicator (B) on the waved-plate.

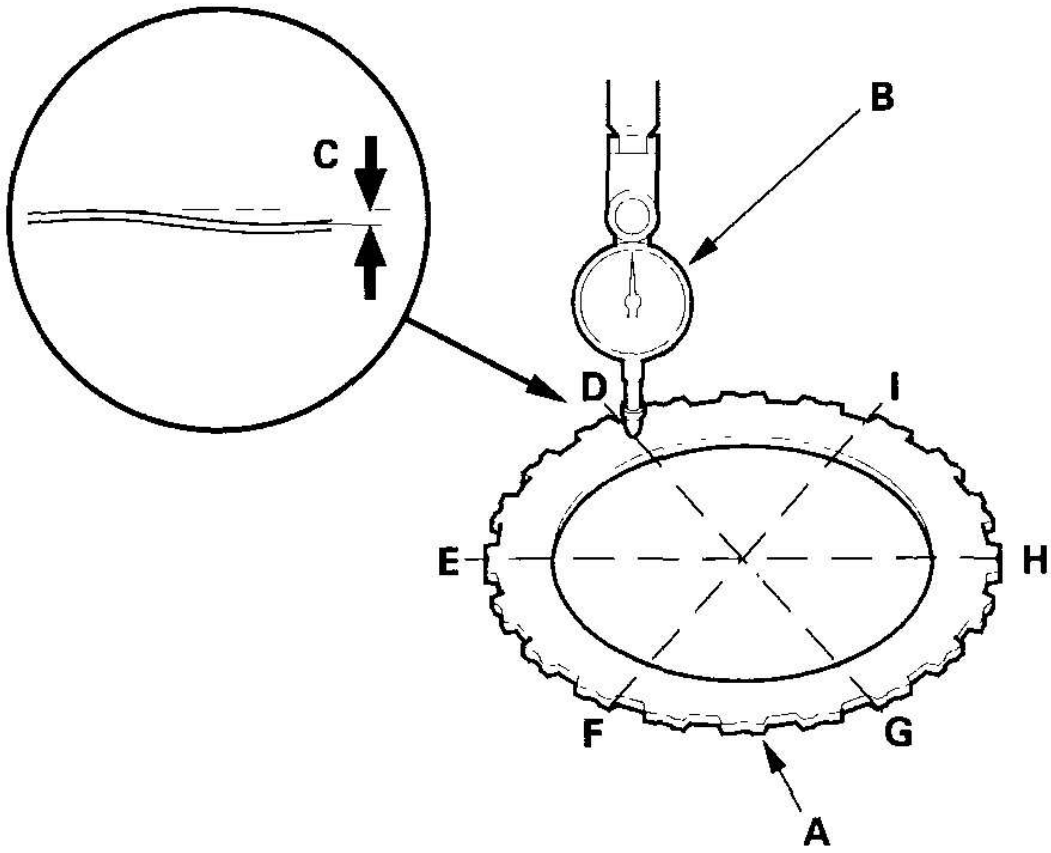


Fig. 421: Placing Clutch Waved-Plate On Surface Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Find the bottom (D) of a phase difference of the waved-plate, zero the dial indicator and make a reference mark on the bottom of the waved-plate.

3. Rotate the waved-plate about 72-degrees or 54-degrees apart from the bottom while holding the waved-plate by its circumference. The dial indicator should be at the top (E) of a phase difference. Do not rotate the waved-plate while holding its surface, always rotate it with holding its circumference.
4. Read the dial indicator. The dial indicator reads the phase difference (C) of the waved-plate between bottom and top.

   Standard: 0.08-0.20 mm (0.003-0.008 in.)

5. Rotate the waved-plate about 54-degrees or 72-degrees. The dial indicator should be at the bottom of a phase difference (F and H), and zero the dial indicator.
6. Measure the phase difference at the other two tops (G and I) of the waved-plate by following steps 3 thru 5.
7. If the two values of the three measurements are within the standard, the waved-plate is OK. If the two values of the three measurements are out of the standard, replace the waved-plate.

CLUTCH CLEARANCE INSPECTION

Special Tools Required

Clutch compressor attachment 07ZAE-PRP0100

1. Inspect the clutch piston, discs, plates, and end plate for wear and damage, and inspect the 2nd clutch waved-plate phase difference (on 2006-07 model) (see **CLUTCH WAVED-PLATE PHASE DIFFERENCE INSPECTION**), if necessary.
2. Install the 1st-hold clutch piston in the 1st clutch piston, and install 1st/1st-hold clutch piston in the 1st/1st-hold clutch drum. Do not install the O-rings on the clutch pistons during inspection.
3. Starting with the 1st-hold clutch plate, alternately install the plates and discs, then install the 1st-hold clutch plate B with the flat side down on the top disc.
4. Measure the 1st-hold clutch plate B-to-top-disc clearance with a feeler gauge (A) while pressing the 1st-hold clutch plate B down. Take measurements in at least three places, and use the average as the actual clearance.

1st-hold Clutch Plate B-to-Top-Disc Clearance

Service Limit: 0.5-0.9 mm (0.020-0.035 in.)

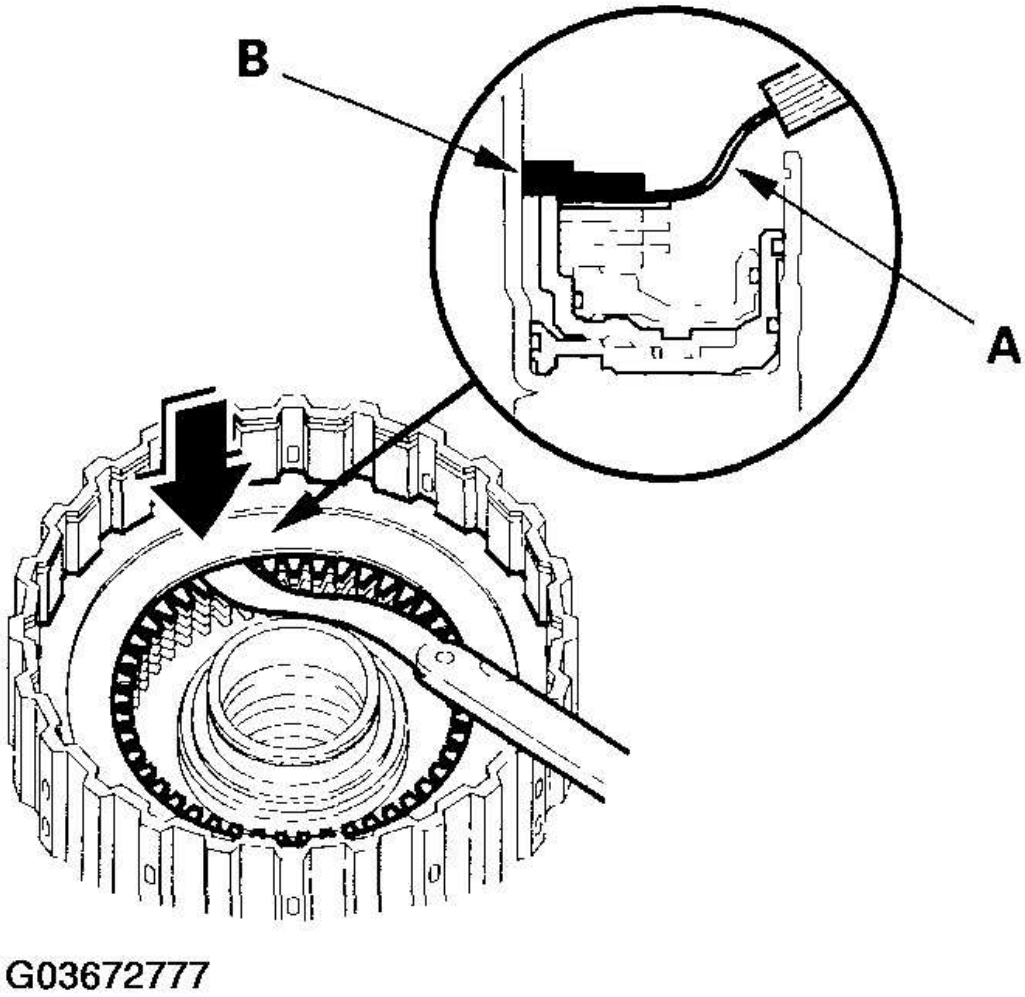
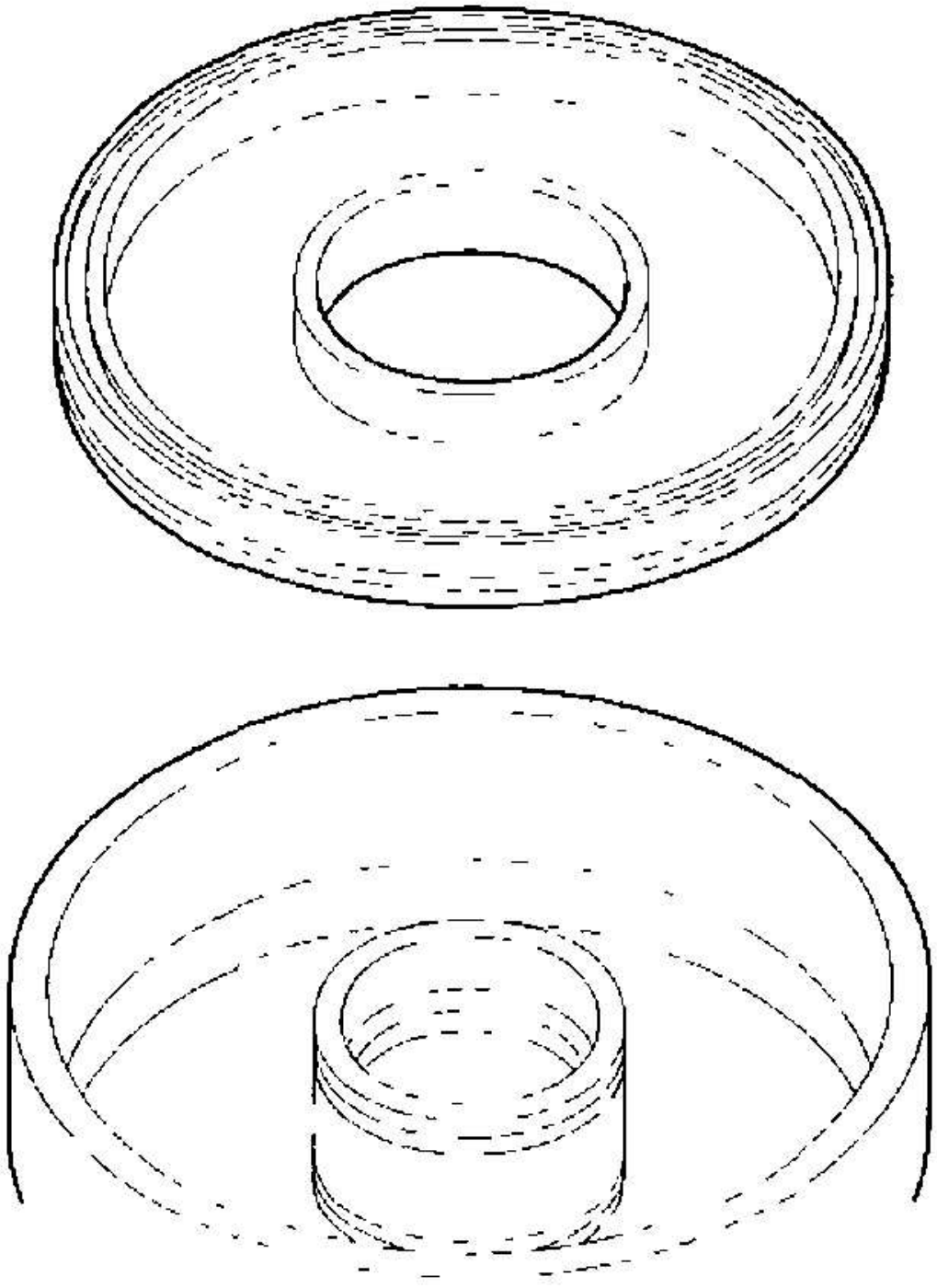


Fig. 422: Measuring 1st-Hold Clutch Plate B-To-Top-Disc Clearance With Feeler Gauge While Pressing 1st-Hold Clutch Plate B Down
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If the clearance is out of standard, replace the 1st-hold clutch plates and discs as a set, and recheck.

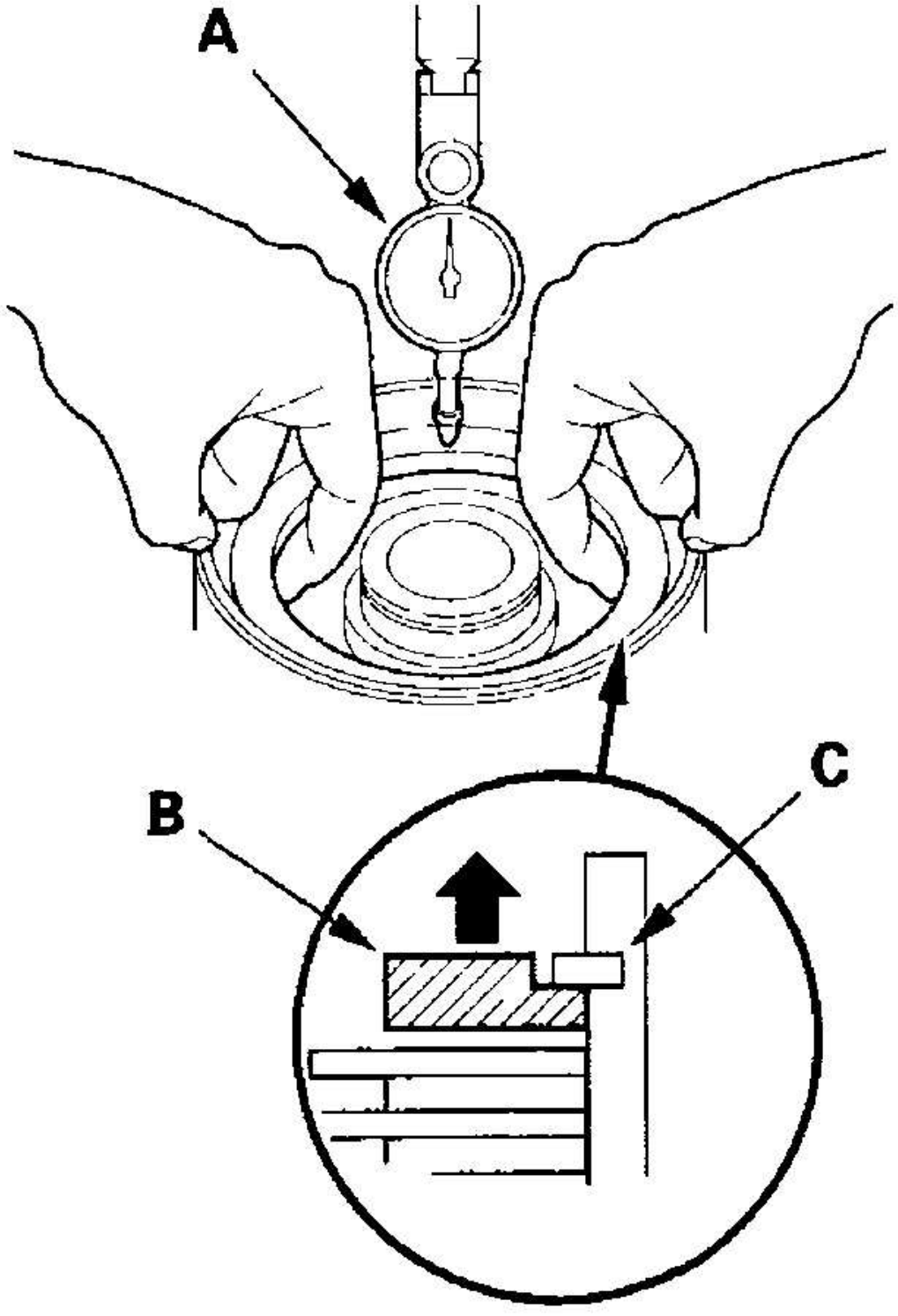
6. Install the disc spring on the 1st-hold clutch plate B with the large end down. Starting with the clutch plate, alternately install the plates and discs in the 1st clutch drum, then install the clutch-end-plate with the flat side down on the top disc. Install the snap ring to secure the clutch-end-plate.
7. Install the clutch pistons in the 2nd, 3rd, 4th, and 5th clutch drums. Do not install the O-rings on the clutch pistons during inspection.



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Fig. 423: Installing Clutch Pistons In 2nd, 3rd, 4th And 5th Clutch Drums
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Starting with the clutch plate, alternately install the clutch plates and discs in the clutch drums, then install the clutch-end-plate with the flat side down on the top disc. Install the snap ring to secure the clutch-end-plate.
9. Set a dial indicator (A) on the clutch-end-plate (B).



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Fig. 424: Setting Dial Indicator On Clutch-End-Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Zero the dial indicator with the clutch-end-plate lifted up to the snap ring (C).
11. Release the clutch-end-plate to lower the clutch-end-plate, then put the special tool on the end-plate (A).

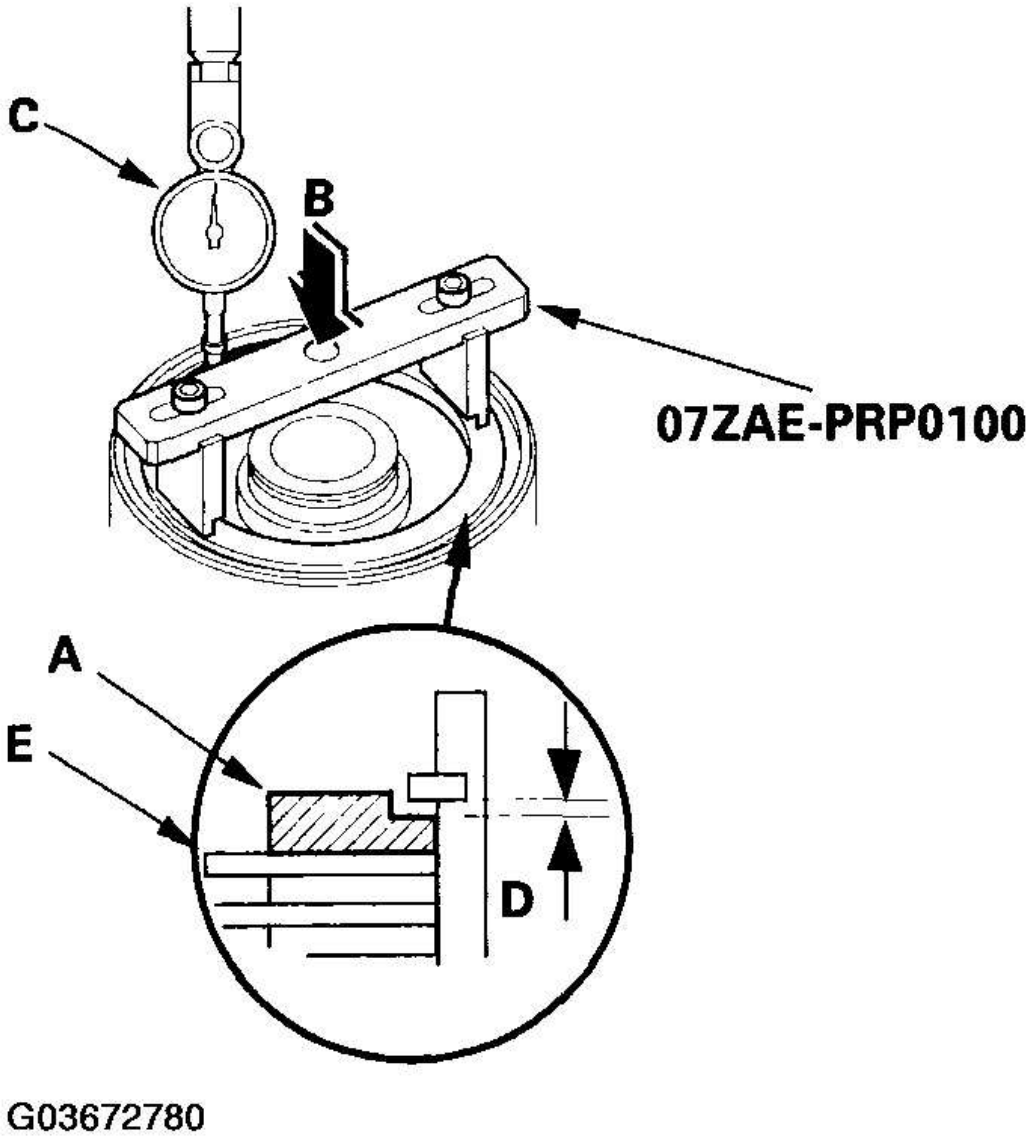


Fig. 425: Releasing Clutch-End-Plate To Lower Clutch-End-Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Press the special tool down with 39 N (4 kgf, 9 lbf) (B) using a force gauge, and read the dial indicator (C). The dial indicator reads the clearance (D) between the clutch-end-plate and top disc (E). Take measurements in at least three places, and use the average as the actual clearance.
13. Only for the 2nd clutch on the 2006-07 model: Press the special tool down with 150-160 N (15-16 kgf, 33-35 lbf) (B) using a force gauge, and read the dial indicator (C). The dial indicator reads the clearance (D) between the clutch-end-plate and top disc (E). Take measurements in at least three places, and use the average as the actual clearance.

Clutch-End-Plate-to-Top Disc Clearance Service Limit:

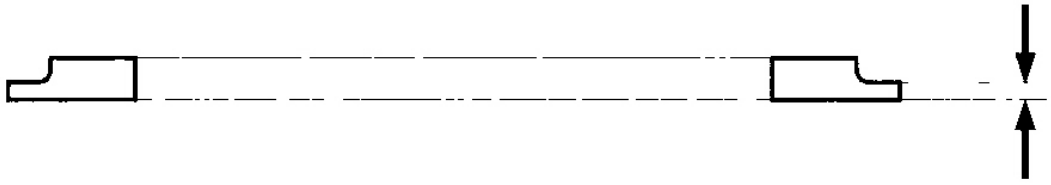
2003-2005 Models

1st clutch: 1.1-1.3 mm (0.043-0.051 in.)
2nd clutch: 0.7-0.9 mm (0.028-0.035 in.)
3rd clutch: 0.7-0.9 mm (0.028-0.035 in.)
4th clutch: 0.55-0.75 mm (0.022-0.030 in.)
5th clutch: 0.55-0.75 mm (0.022-0.030 in.)

2006-07 Model

1st clutch: 1.1-1.3 mm (0.043-0.051 in.)
2nd clutch: 0.85-1.05 mm (0.033-0.041 in.)
3rd clutch: 0.7-0.9 mm (0.028-0.035 in.)
4th clutch: 0.7-0.9 mm (0.028-0.035 in.)
5th clutch: 0.7-0.9 mm (0.028-0.035 in.)

14. If the clearance is out of the service limit, select a new clutch-end-plate from **1ST CLUTCH END PLATES**, **2ND CLUTCH END PLATES**, **3RD CLUTCH END PLATES (2003 model)**, **3RD CLUTCH END PLATES (2004-2007 models)** and **4TH and 5TH CLUTCH END PLATES** .



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Fig. 426: Selecting Clutch-End-Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

1ST CLUTCH END PLATES

Mark	Part Number	Thickness
1	22551-P7W-003	3.1 mm (0.122 in.)
2	22552-P7W-003	3.2 mm (0.126 in.)
3	22553-P7W-003	3.3 mm (0.130 in.)
4	22554-P7W-003	3.4 mm (0.134in.)
5	22555-P7W-003	3.5 mm (0.138 in.)
6	22556-P7W-003	3.6 mm (0.142 in.)
7	22557-P7W-003	3.7 mm (0.146 in.)
8	22558-P7W-003	3.8 mm (0.150 in.)
9	22559-P7W-003	3.9 mm (0.154 in.)

2ND CLUTCH END PLATES

Mark	Part Number	Thickness
1	22551-PY4-003	2.1 mm (0.083 in.)
2	22552-PY4-003	2.2 mm (0.087 in.)
3	22553-PY4-003	2.3 mm (0.091 in.)
4	22554-PY4-003	2.4 mm (0.094 in.)
5	22555-PY4-003	2.5 mm (0.098 in.)
6	22556-PY4-003	2.6 mm (0.102 in.)
7	22557-PY4-003	2.7 mm (0.106 in.)
8	22558-PY4-003	2.8 mm (0.110 in.)

9	22559-PY4-003	2.9 mm (0.114 in.)

3RD CLUTCH END PLATES (2003 model)

Mark	Part Number	Thickness
1	22556-P7T-003	3.1 mm (0.122 in.)
2	22557-P7T-003	3.2 mm (0.126 in.)
3	22558-P7T-003	3.3 mm (0.130 in.)
4	22559-P7T-003	3.4 mm (0.134 in.)
6	22551-P7T-003	2.6 mm (0.102 in.)
7	22552-P7T-003	2.7 mm (0.106 in.)
8	22553-P7T-003	2.8 mm (0.110 in.)
9	22554-P7T-003	2.9 mm (0.114 in.)
0	22555-P7T-003	3.0 mm (0.118 in.)

3RD CLUTCH END PLATES (2004-2007 models)

Mark	Part Number	Thickness
1	22551-RAY-A01	2.1 mm (0.083 in.)
2	22552-RAY-A01	2.2 mm (0.087 in.)
3	22553-RAY-A01	2.3 mm (0.091 in.)
4	22554-RAY-A01	2.4 mm (0.094 in.)
5	22555-RAY-A01	2.5 mm (0.098 in.)
6	22556-RAY-A01	2.6 mm (0.102 in.)
7	22557-RAY-A01	2.7 mm (0.106 in.)
8	22558-RAY-A01	2.8 mm (0.110 in.)
9	22559-RAY-A01	2.9 mm (0.114 in.)
10	22560-RAY-A01	3.0 mm (0.118 in.)
11	22561-RAY-A01	3.1 mm (0.122 in.)

4TH and 5TH CLUTCH END PLATES

Mark	Part Number	Thickness
1	22561-P7T-003	2.1 mm (0.083 in.)
2	22562-P7T-003	2.2 mm (0.087 in.)

3	22563-P7T-003	2.3 mm (0.091 in.)
4	22564-P7T-003	2.4 mm (0.094 in.)
5	22565-P7T-003	2.5 mm (0.098 in.)
6	22566-P7T-003	2.6 mm (0.102 in.)
7	22567-P7T-003	2.7 mm (0.106 in.)
8	22568-P7T-003	2.8 mm (0.110 in.)
9	22569-P7T-003	2.9 mm (0.114 in.)

15. Install the new clutch-end-plate, and recheck the clearance. If the thickest clutch-end-plate is installed, but the clearance is still over the service limit, replace the clutch discs and plates.

CLUTCH REASSEMBLY

Special Tools Required

- Clutch spring compressor attachment 07LAE-PX40100 or 07HAE-PL50101
- Clutch spring compressor bolt assembly 07GAE-PG40200 or 07GAE-PG4020A

1. Soak the clutch discs thoroughly in ATF for a minimum of 30 minutes.
2. Install the new O-rings (A) on the clutch piston.

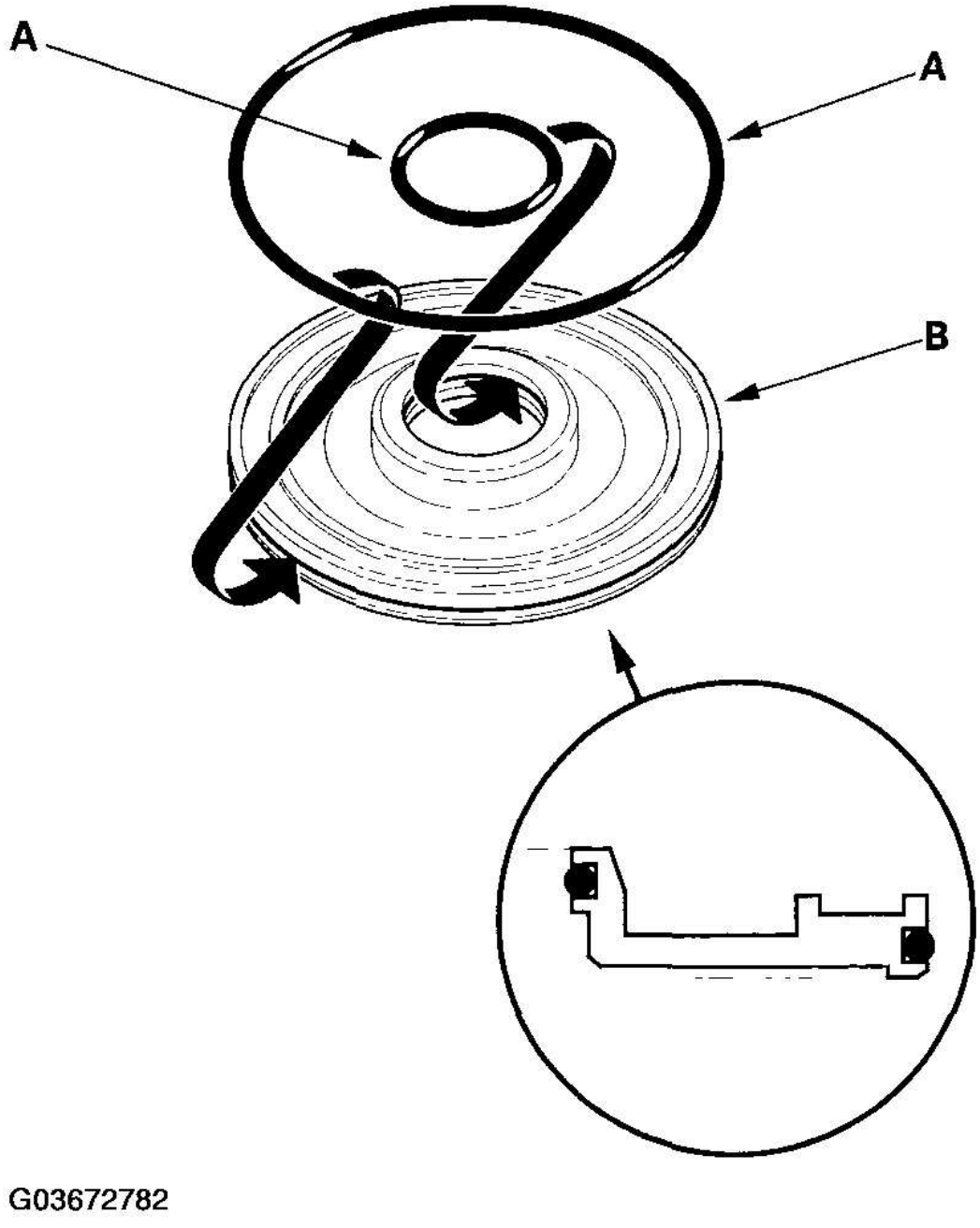


Fig. 427: Installing New O-Rings On Clutch Piston
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the clutch pistons in the clutch drums while applying pressure and

rotating to ensure proper seating. Do not pinch the O-ring.

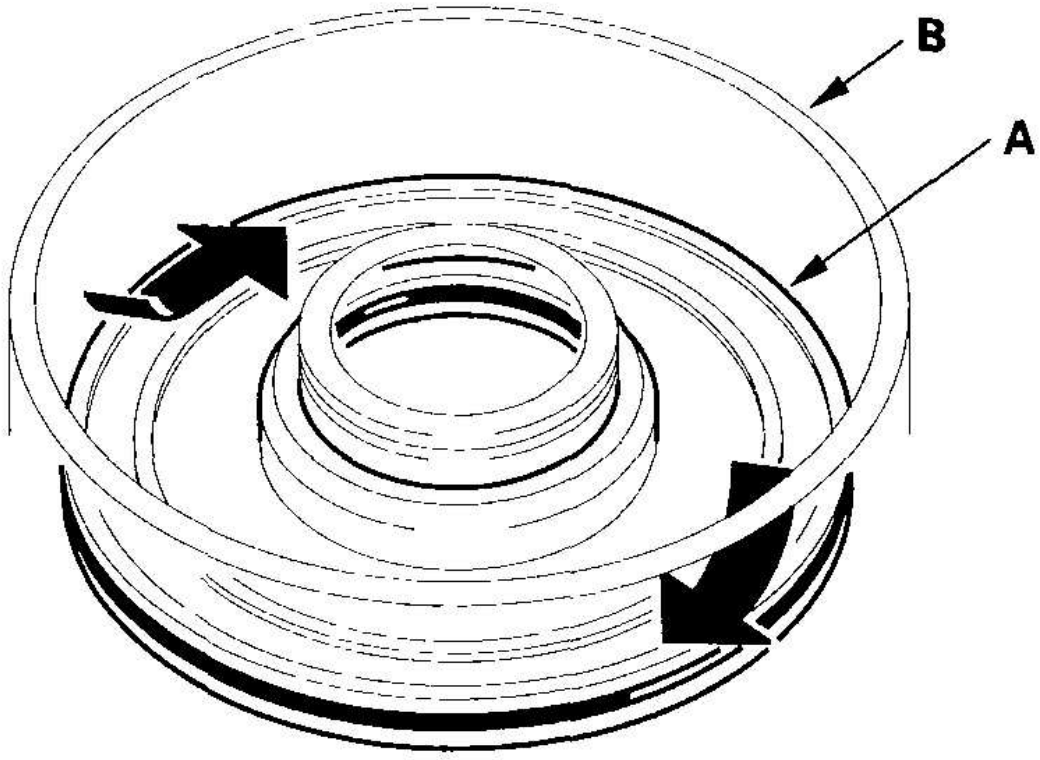
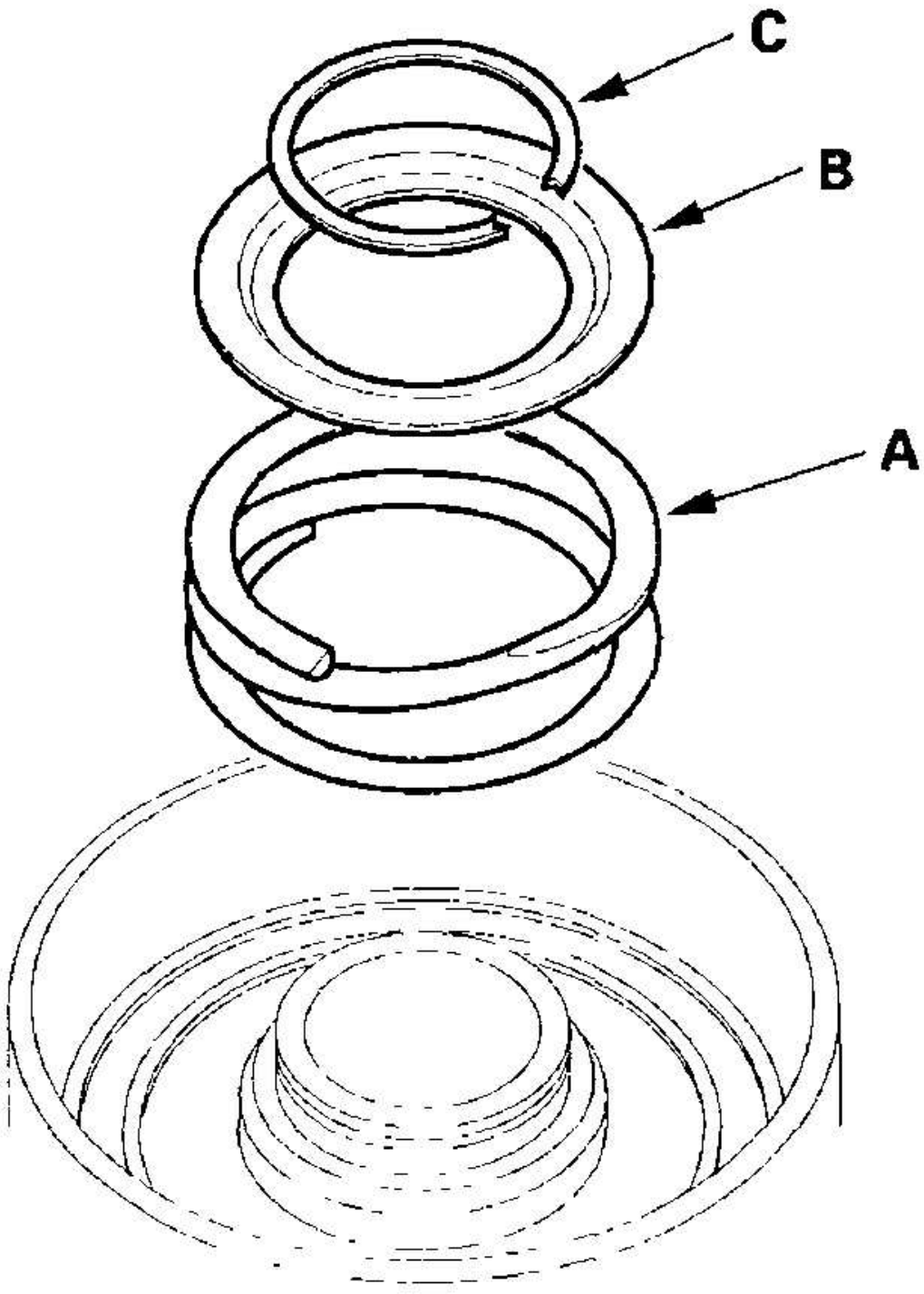


Fig. 428: Installing Clutch Pistons In Clutch Drums Applying Pressure And Rotating To Ensure Proper Seating
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the return spring (A) and spring retainer (B), and position the snap ring (C) on the spring retainer.



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Fig. 429: Installing Return Spring And Spring Retainer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the special tools.

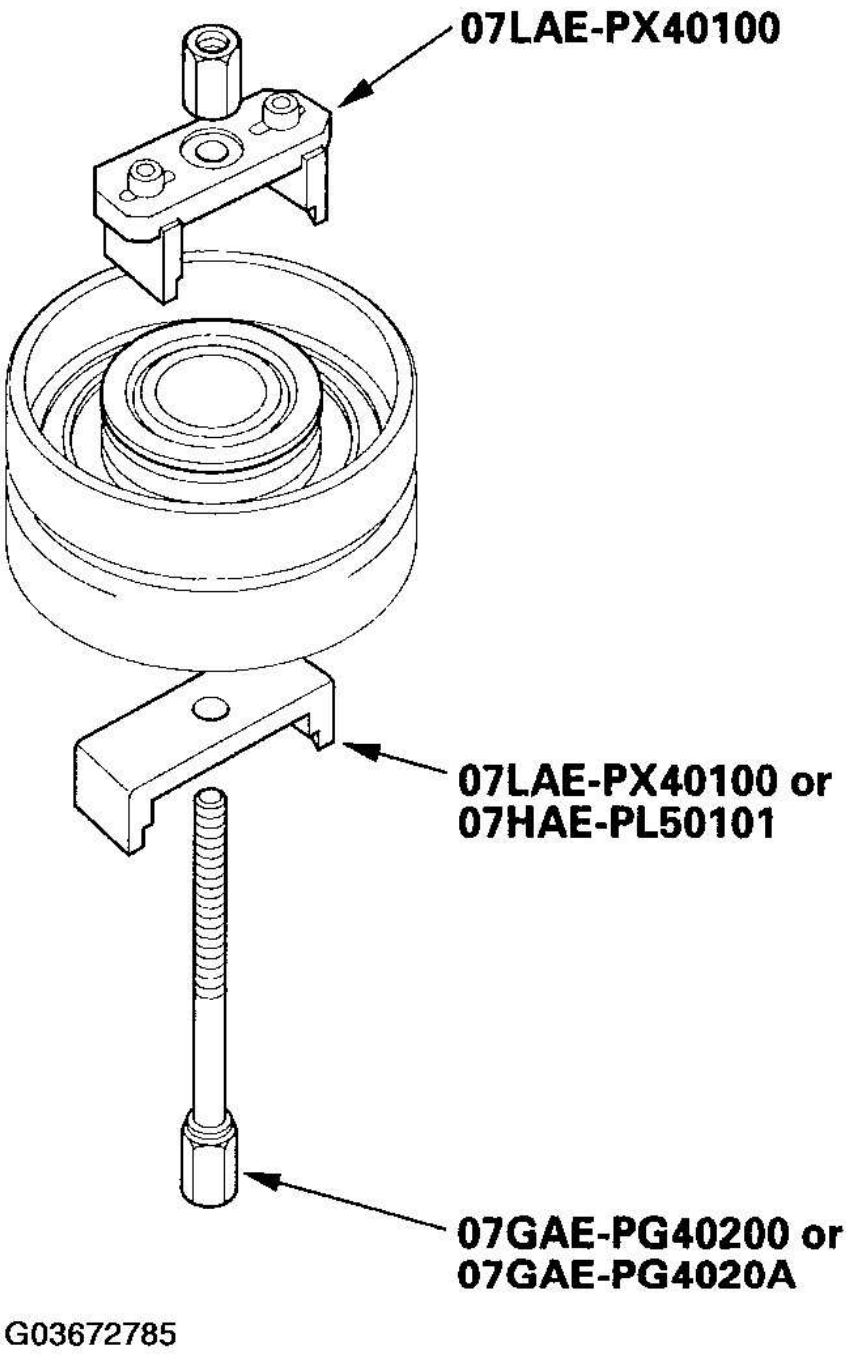


Fig. 430: Installing Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Set the special tool (A) over the spring retainer (B), and make sure the special tool is adjusted to have full contact with the spring retainer on the 1st, 4th, and 5th clutches.

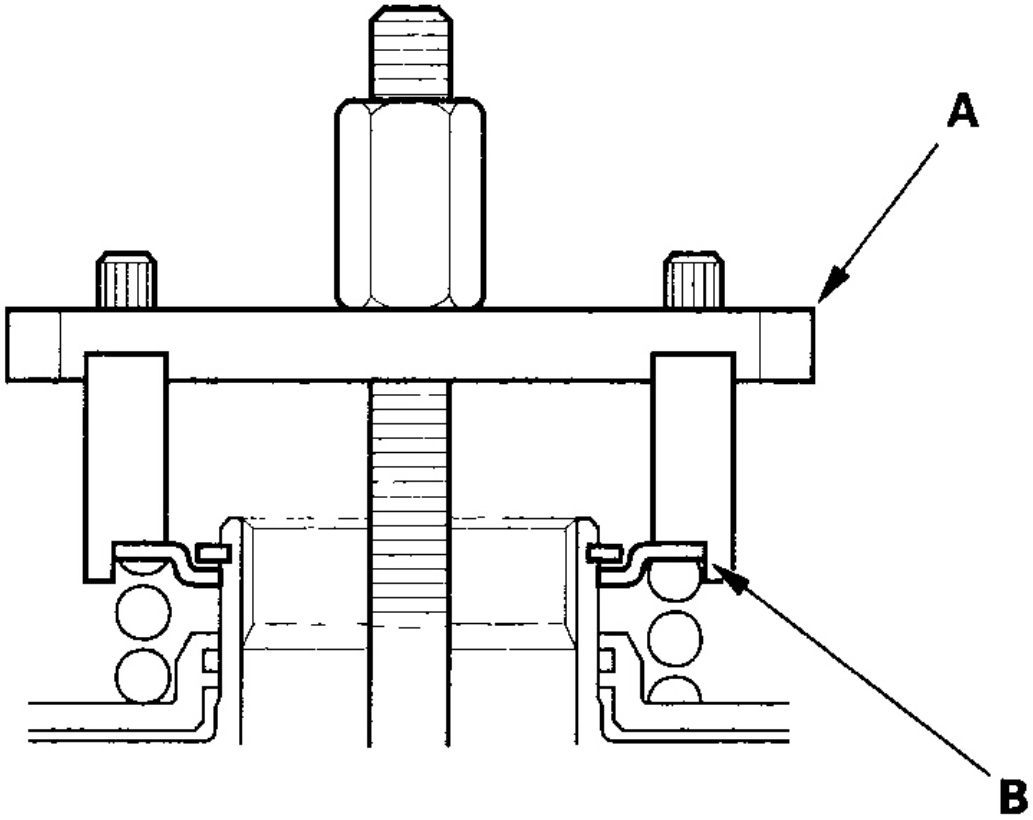


Fig. 431: Setting Special Tool Over Spring Retainer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Set the special tool (A) on the spring retainer (B) of the 2nd clutch so the tool works on the clutch return spring (C).

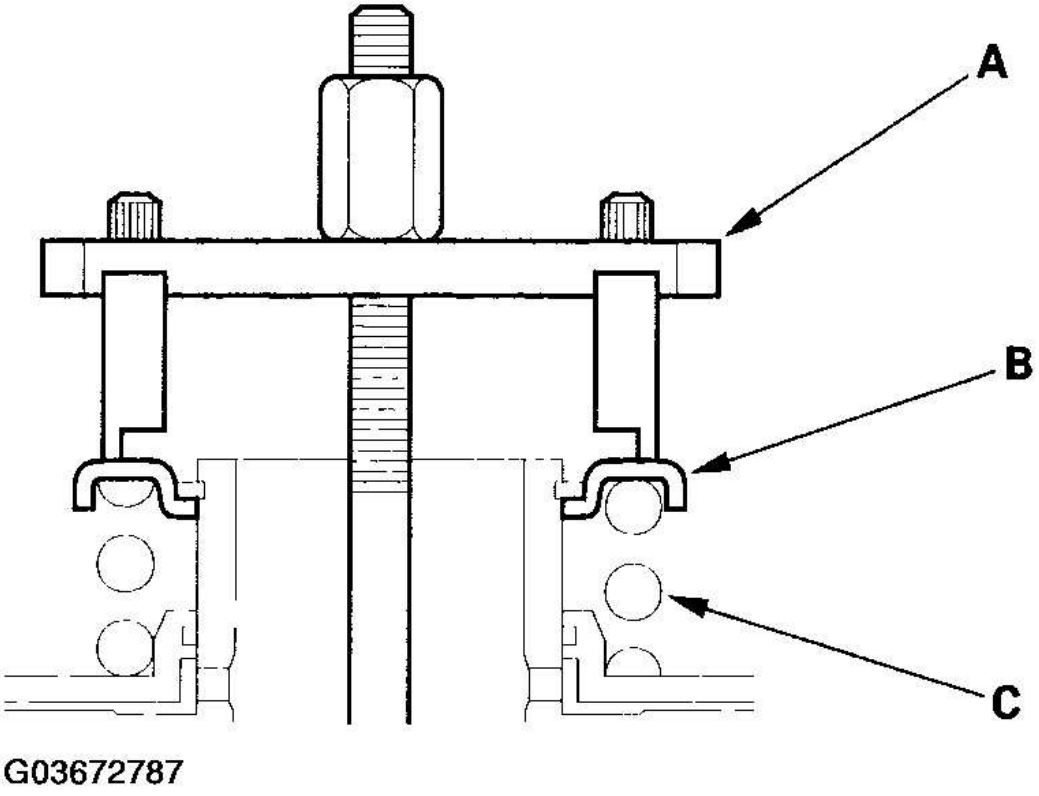
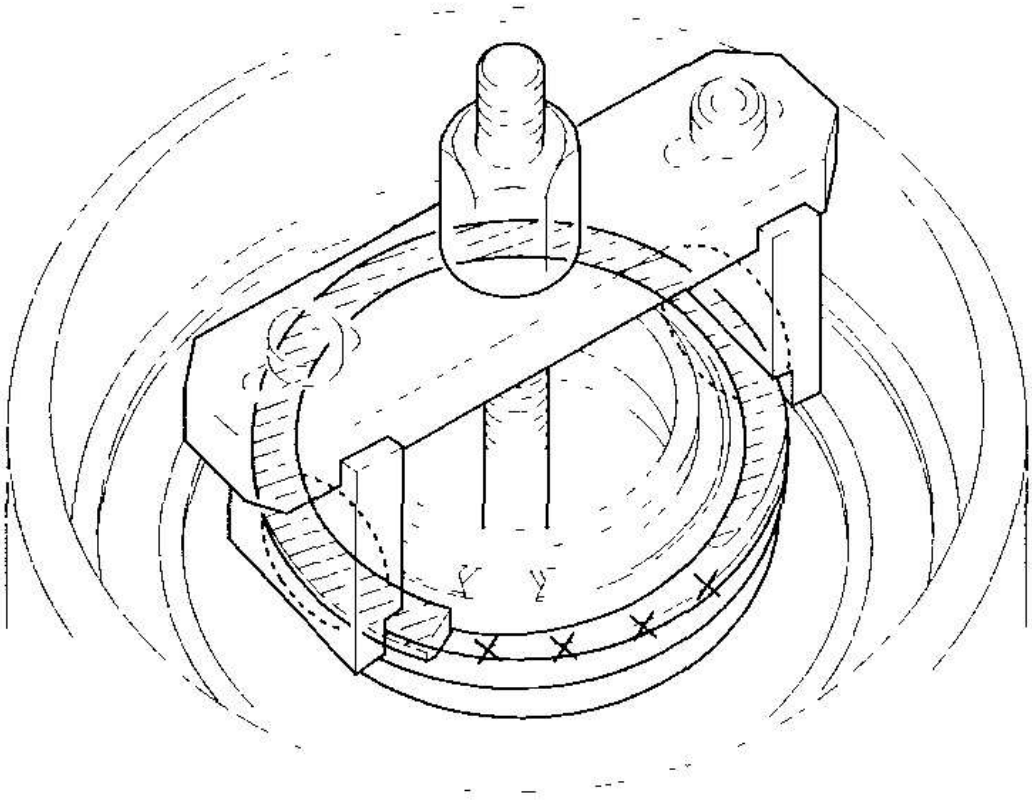


Fig. 432: Setting Special Tool Over Spring Retainer Of 2nd Clutch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. If either end of the special tool is set over an area of the spring retainer that is unsupported by the return spring, the retainer may be damaged.



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Fig. 433: Inspecting Special Tools Proper Adjustment With Spring Retainer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Set the special tool (A) on the spring retainer (B) of the 3rd clutch so the special tool works on the clutch return spring (C).

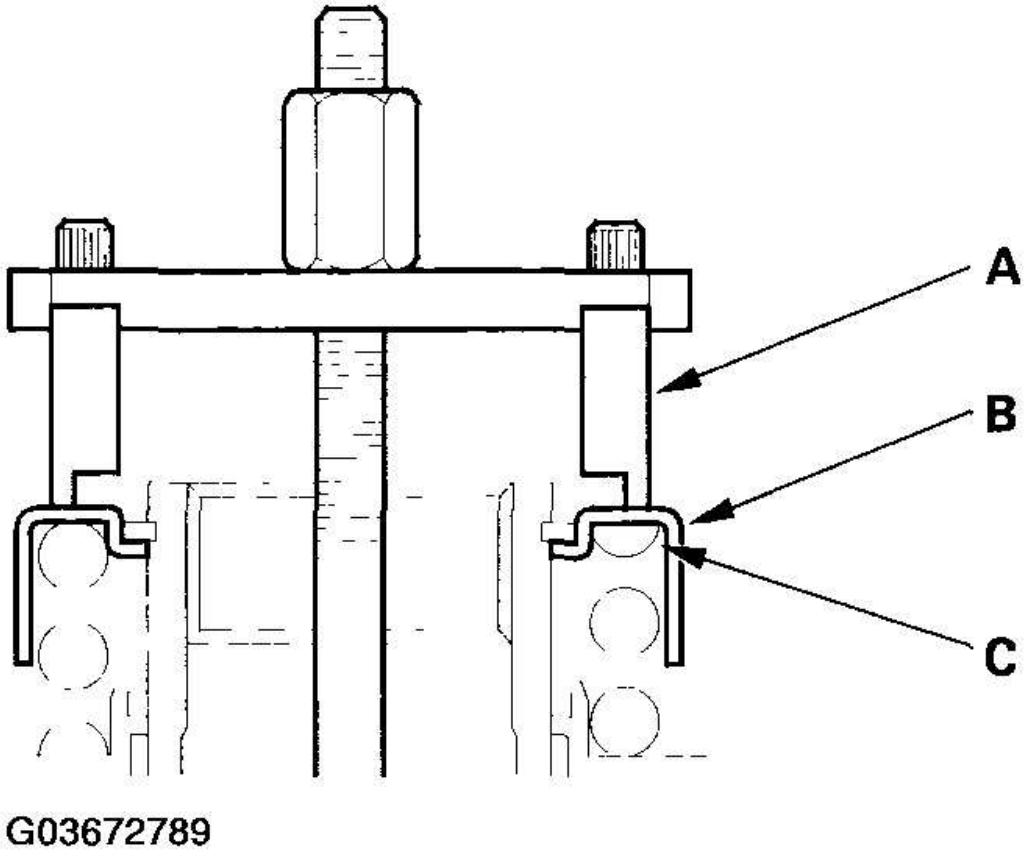


Fig. 434: Setting Special Tool On Spring Retainer Of 3rd Clutch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. If either end of the special tool is not set over the clutch return spring end (A), the retainer may be damaged,

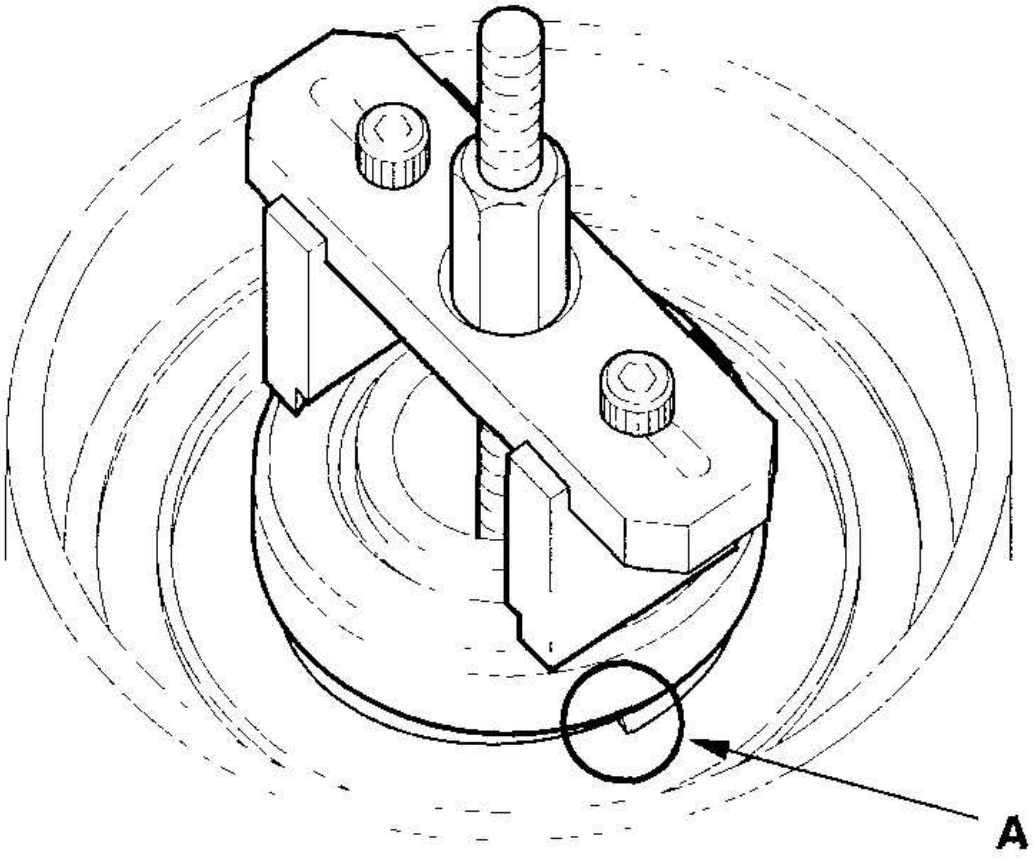
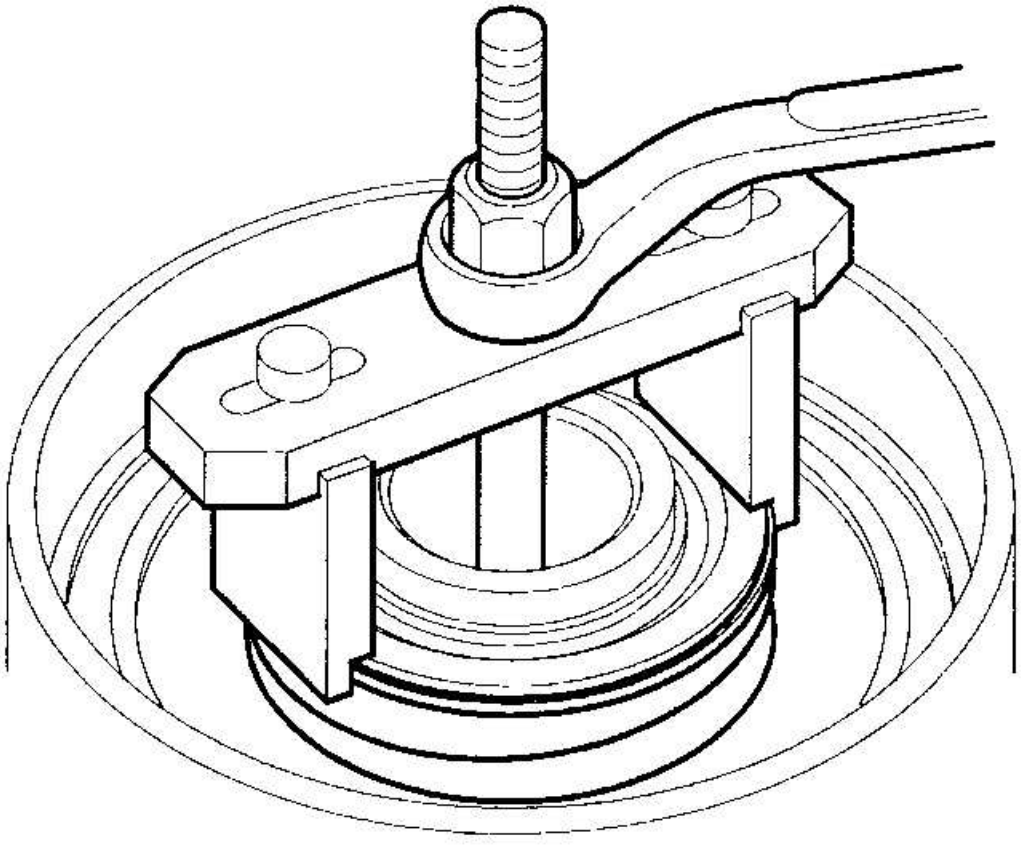


Fig. 435: Properly Setting Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

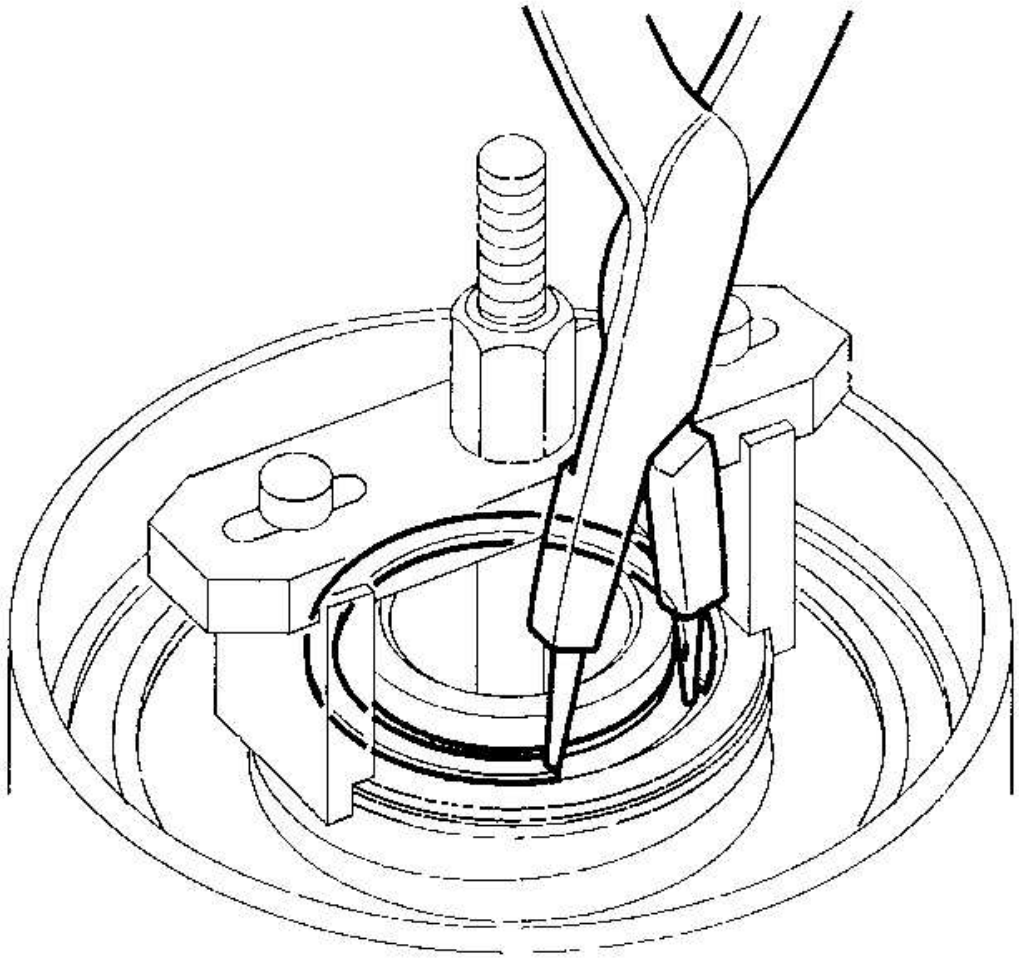
11. Compress the return spring until the snap ring can be installed.



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Fig. 436: Compressing Return Spring Until Snap Ring Is Installed
Courtesy of AMERICAN HONDA MOTOR CO., INC.

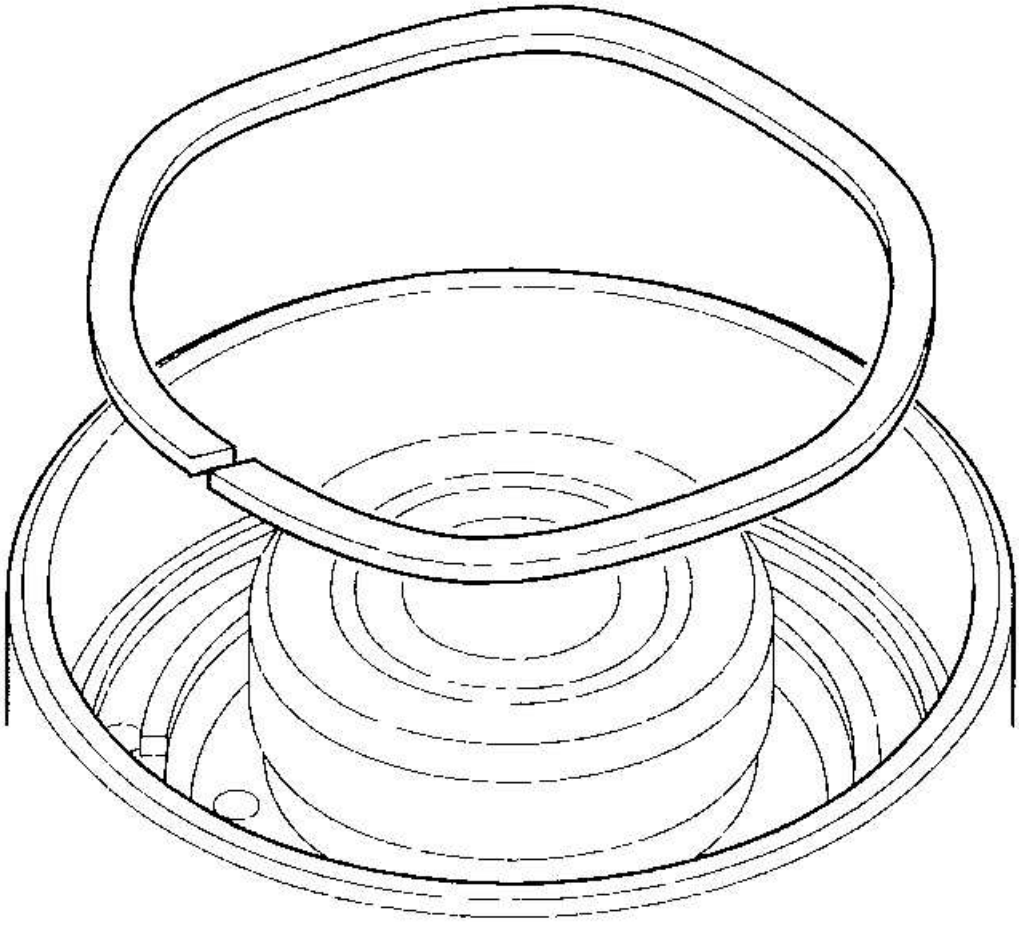
12. Install the snap ring with the snap ring pliers.



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Fig. 437: Installing Snap Ring With Snap Ring Pliers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Remove the special tools.
14. Install the waved spring in the 3rd clutch (2003 model) and 4th clutch (2003-2004 models).



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Fig. 438: Installing Waved Spring In 3rd Clutch (2003 Model) And 4th Clutch (2003-2004 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Install the disc spring in the 1st clutch, 5th clutch, 3rd clutch (2004-2007 models), and 4th clutch (2005-2007 models).
    - **1ST CLUTCH**
    - **3RD CLUTCH (2004-2007 MODELS)**
    - **5TH CLUTCH (2003-2004 MODELS)**

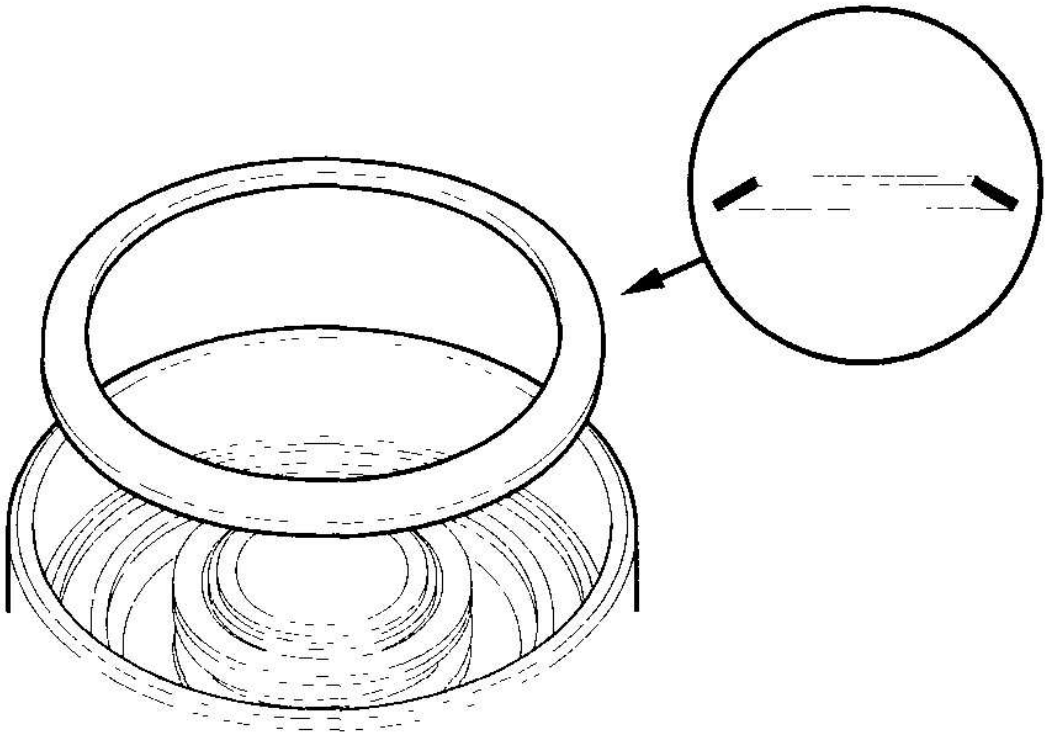


Fig. 439: Installing Disc Spring (1st, 5th And 3rd Clutch)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- **4TH CLUTCH (2005-2007 MODELS)**
- **5TH CLUTCH (2005-2007 MODELS)**

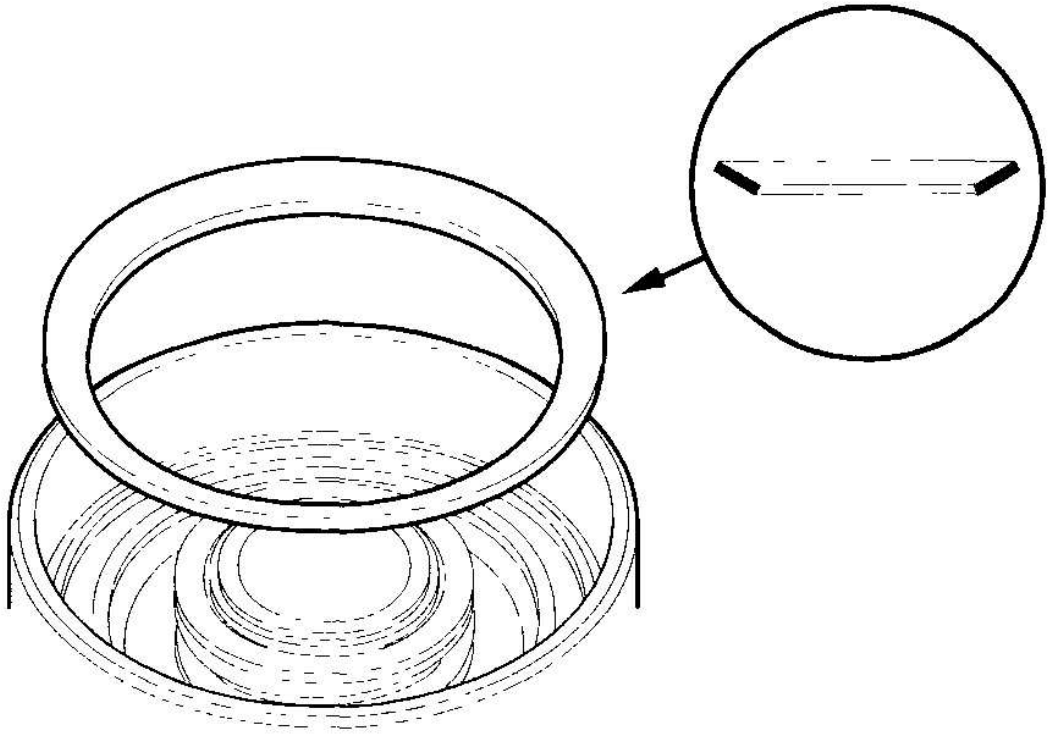
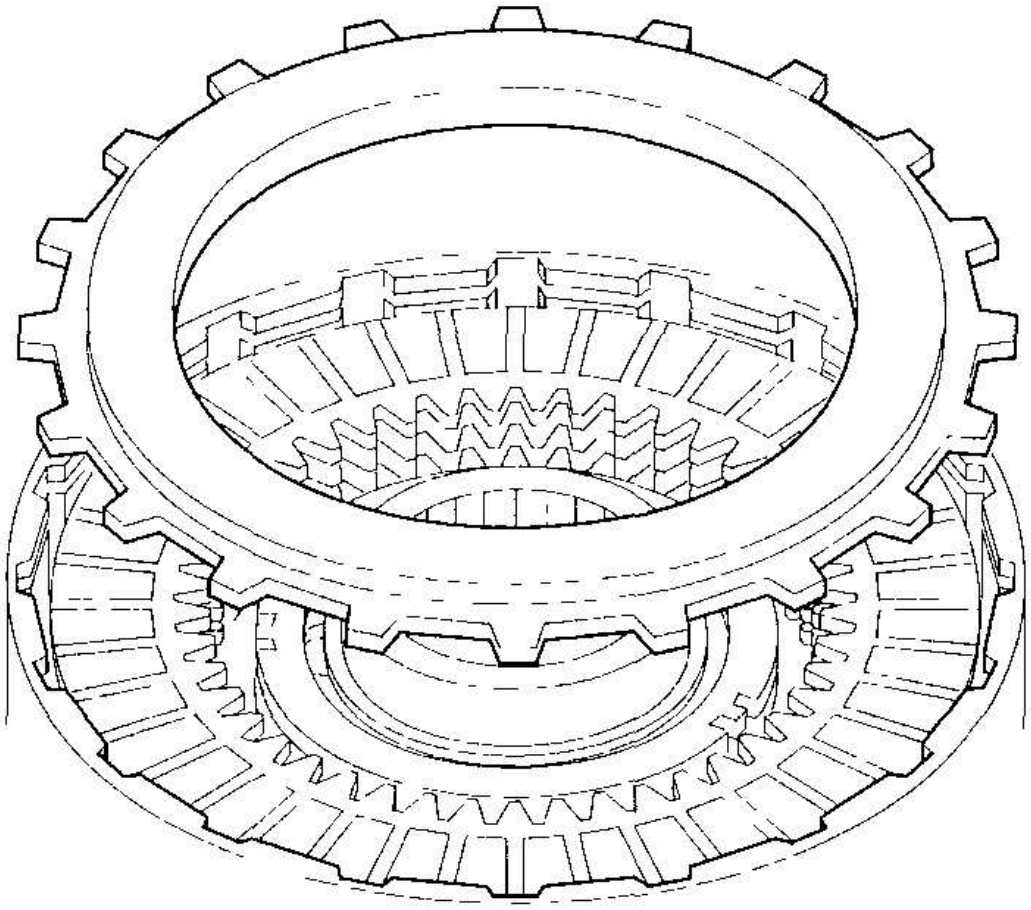


Fig. 440: Installing Disc Spring (4th And 5th Clutch)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Make sure the inside of the clutch drum is free of dirt and other foreign particles.
17. For 1st, 3rd, 4th, and 5th clutches:

    Starting with the clutch plate, alternately install the clutch plates and discs in the clutch drums, then install the clutch-end-plate with the flat side down on the top disc.



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Fig. 441: Installing Clutch Plates And Discs In Clutch Drums (1st, 3rd, 4th And 5th Clutches)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. For 2nd clutch:

    Starting with the 2nd clutch plate, alternately install the clutch flat-plates (4) and discs (4) in the clutch drum, and alternately install the clutch waved-plates (2) and discs (2), then install the clutch-end-plate with the flat side down on the top disc.

19. Install the snap ring with a screwdriver to secure the clutch-end-plate.

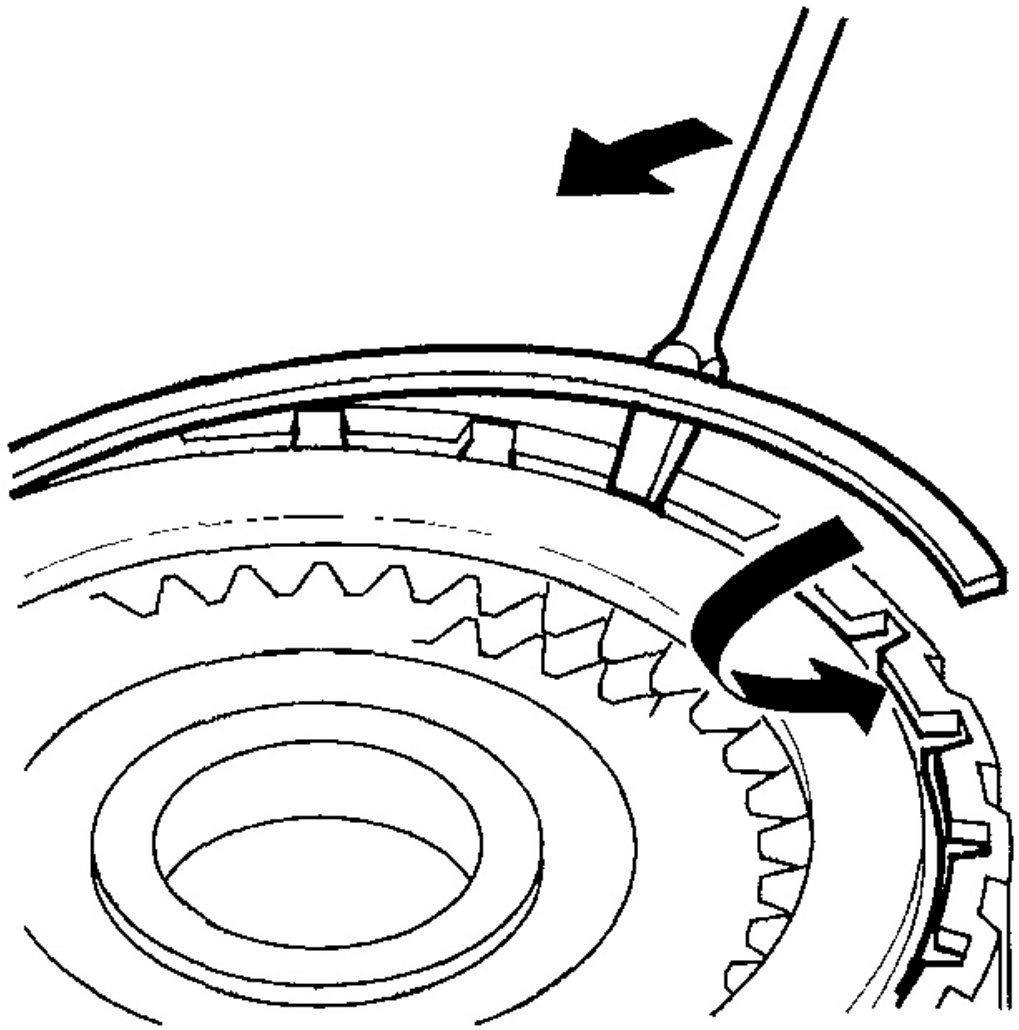


Fig. 442: Installing Snap Ring With Screwdriver
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Check that the clutch piston moves by applying air pressure into fluid passage.

VALVE BODY AND ATF STRAINER INSTALLATION

1. Install the main separator plate (E) and three dowel pins on the torque converter housing (F).

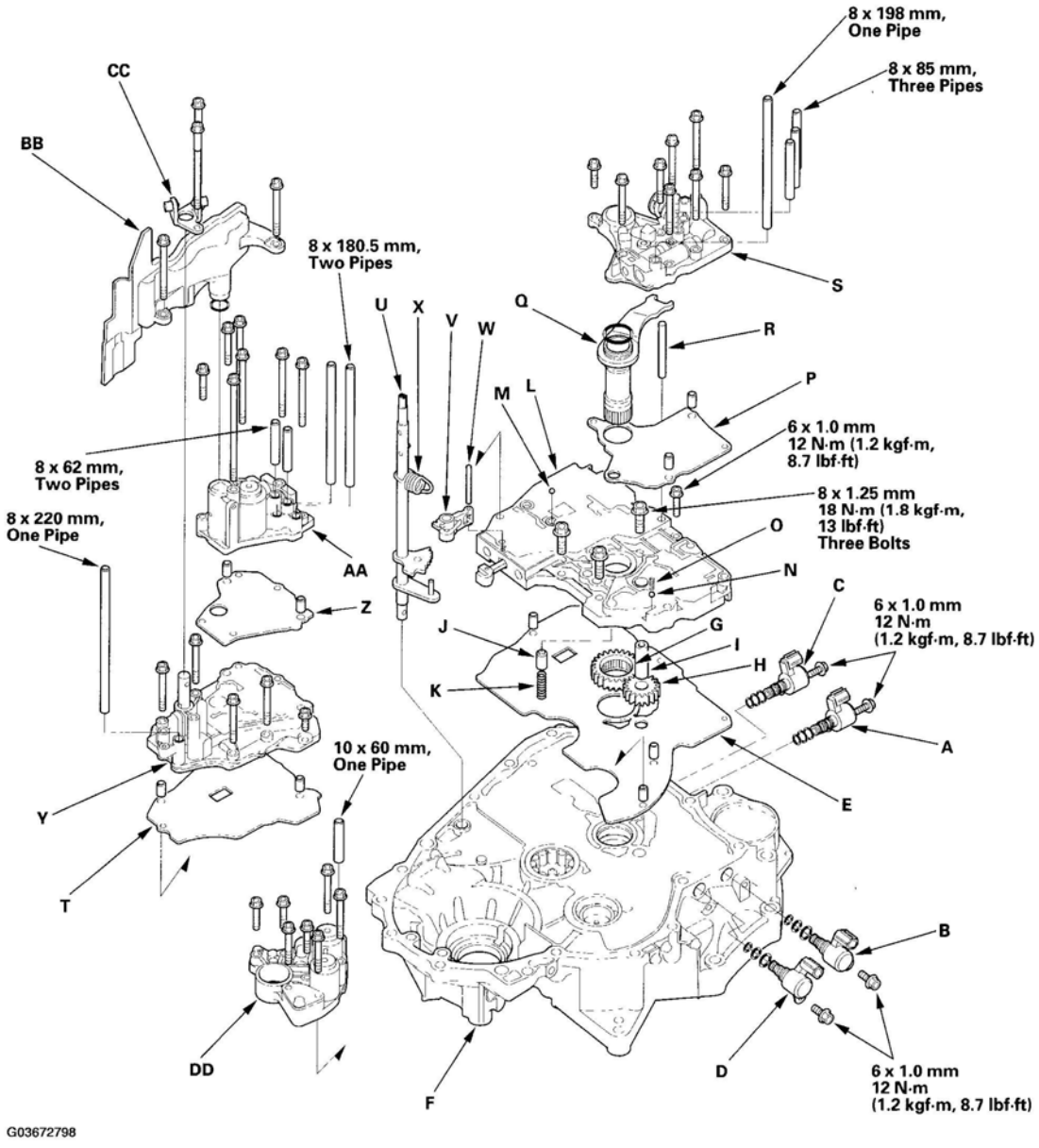


Fig. 443: Installing Main Separator Plate And Dowel Pins
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the ATF pump drive gear (G), driven gear (H), and ATF pump driven gear shaft (I). Install the ATF pump driven gear with it grooved and chamfered side facing down.

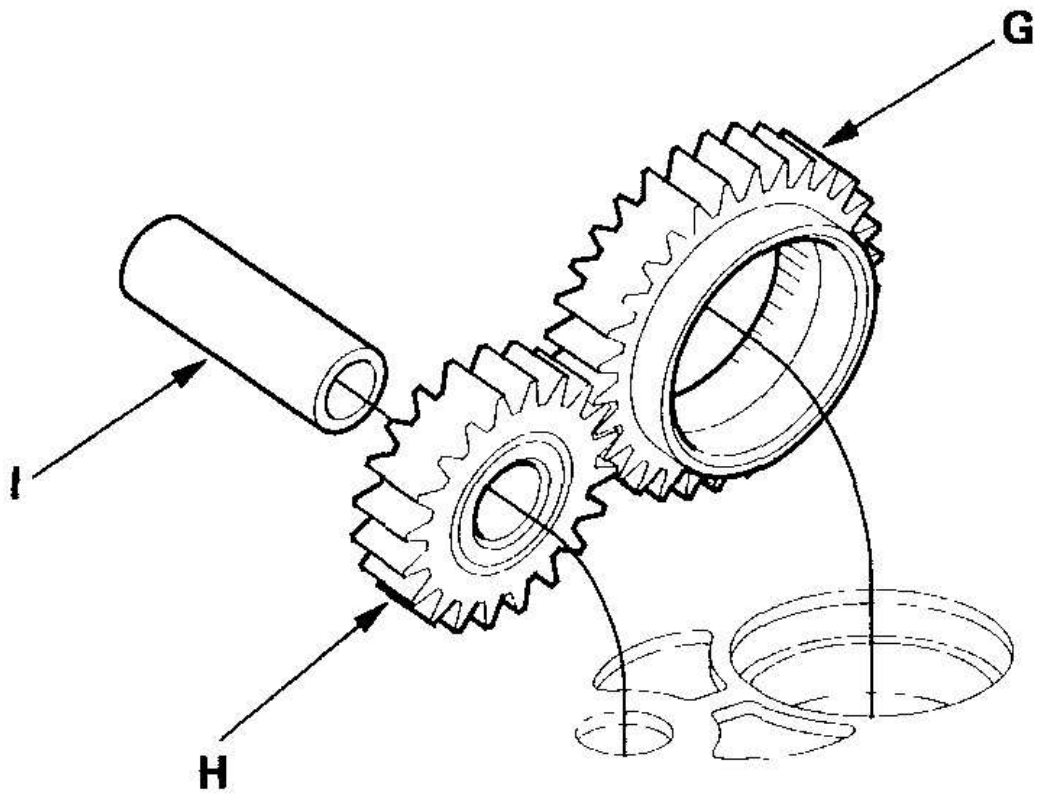
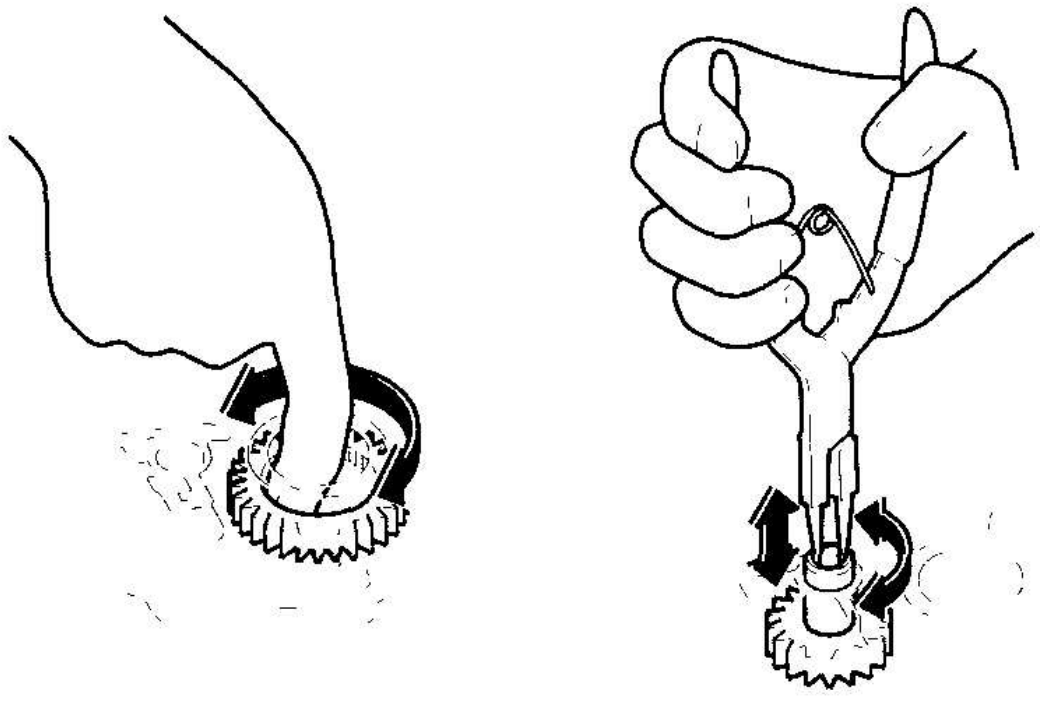


Fig. 444: Installing ATF Pump Drive Gear, Driven Gear And ATF Pump Driven Gear Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the torque converter check valve (J) and spring (K) in the main valve body (L), then install the main valve body.
4. Make sure the ATF pump drive gear (G) rotates smoothly in the normal operating direction, and the ATF pump driven gear shaft (I) moves smoothly in the axial and normal operating direction.



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Fig. 445: Making Sure ATF Pump Drive Gear Rotates Smoothly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If the ATF pump drive gear and ATF pump driven gear shaft do not move smoothly, loosen the main valve body bolts. Realign the ATF pump driven gear shaft, and retighten the bolts to the specified torque, then recheck. Failure to align the ATF pump driven gear shaft correctly will result in a seized ATF pump drive gear or ATF pump driven gear shaft.
6. Make sure that the one check ball (M) and the cooler check valve (N) are in the main valve body, then install the cooler check valve spring (O) on the cooler check valve.
7. Install the regulator separator plate (P) and two dowel pins.
8. Install the new O-ring on the stator shaft (Q), and install it and stator shaft stop (R).
9. Install the regulator valve body (S) (eight bolts).

10. Install the servo separator plate (T) and two dowel pins.
11. Install the selector control shaft (U) in the torque converter housing along with the manual valve.

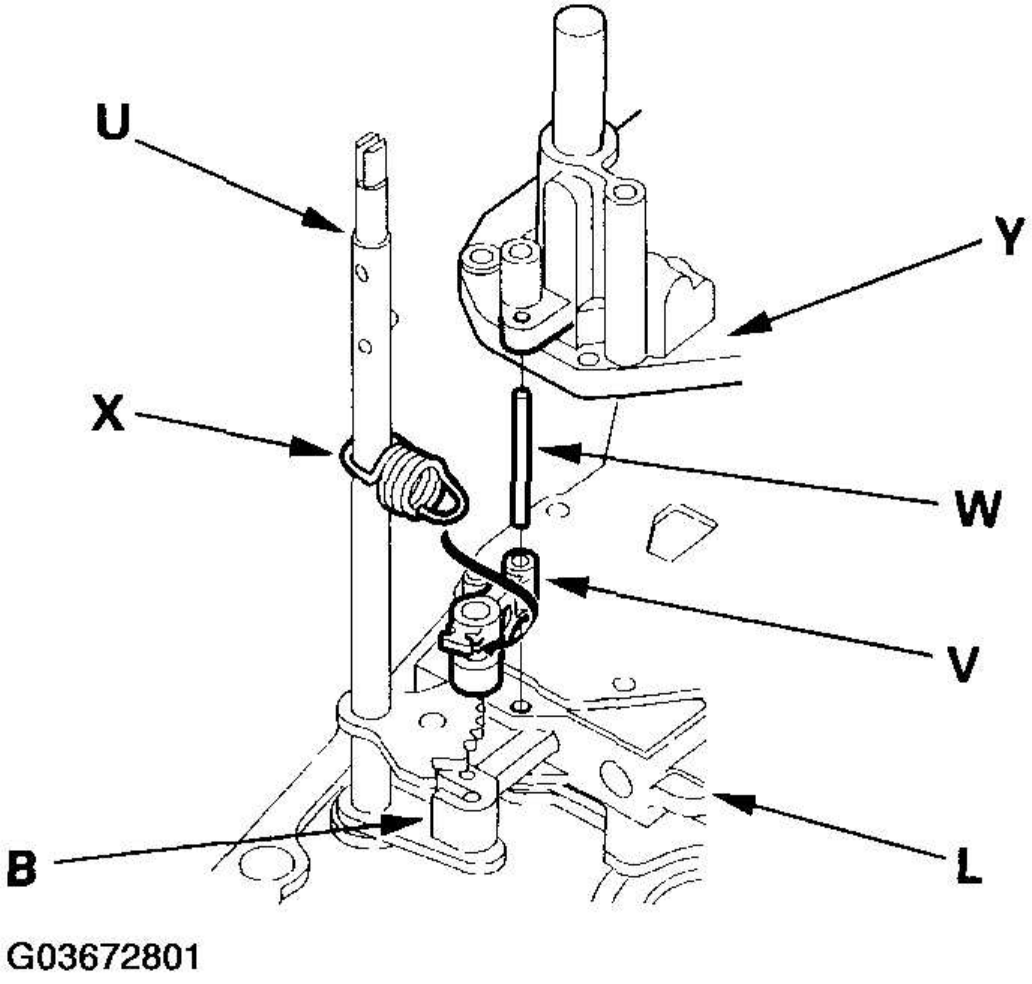


Fig. 446: Installing Selector Control Shaft In Torque Converter Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Install the detent arm (V) and arm shaft (W) in the main valve body (L), then hook the detent arm spring (X) to the detent arm.
13. Install the servo body (Y) (five bolts).

14. Install the top accumulator separator plate (Z) and two dowel pins, then install the top accumulator body (AA) (seven bolts).
15. Install the new O-ring on the ATF strainer (BB), and install it in the top accumulator body (two bolts).
16. Install the servo detent base (CC) (two bolts).
17. Install the accumulator body (DD) (seven bolts).
18. Install the 8 x 198 mm pipe, and three 8 x 85 mm pipes in the regulator valve body.
19. Install two 8 x 180.5 mm pipes, and two 8 x 62 mm pipes in the top accumulator body.
20. Install the 8 x 220 mm pipe in the servo body.
21. Install the 10 x 60 mm pipe in the accumulator body.
22. Install shift solenoid valves A, B, C, and torque converter clutch solenoid valve (D) with the new O-rings.

SHAFT ASSEMBLY AND HOUSING INSTALLATION

1. Install the differential assembly (A) in the torque converter housing (B).

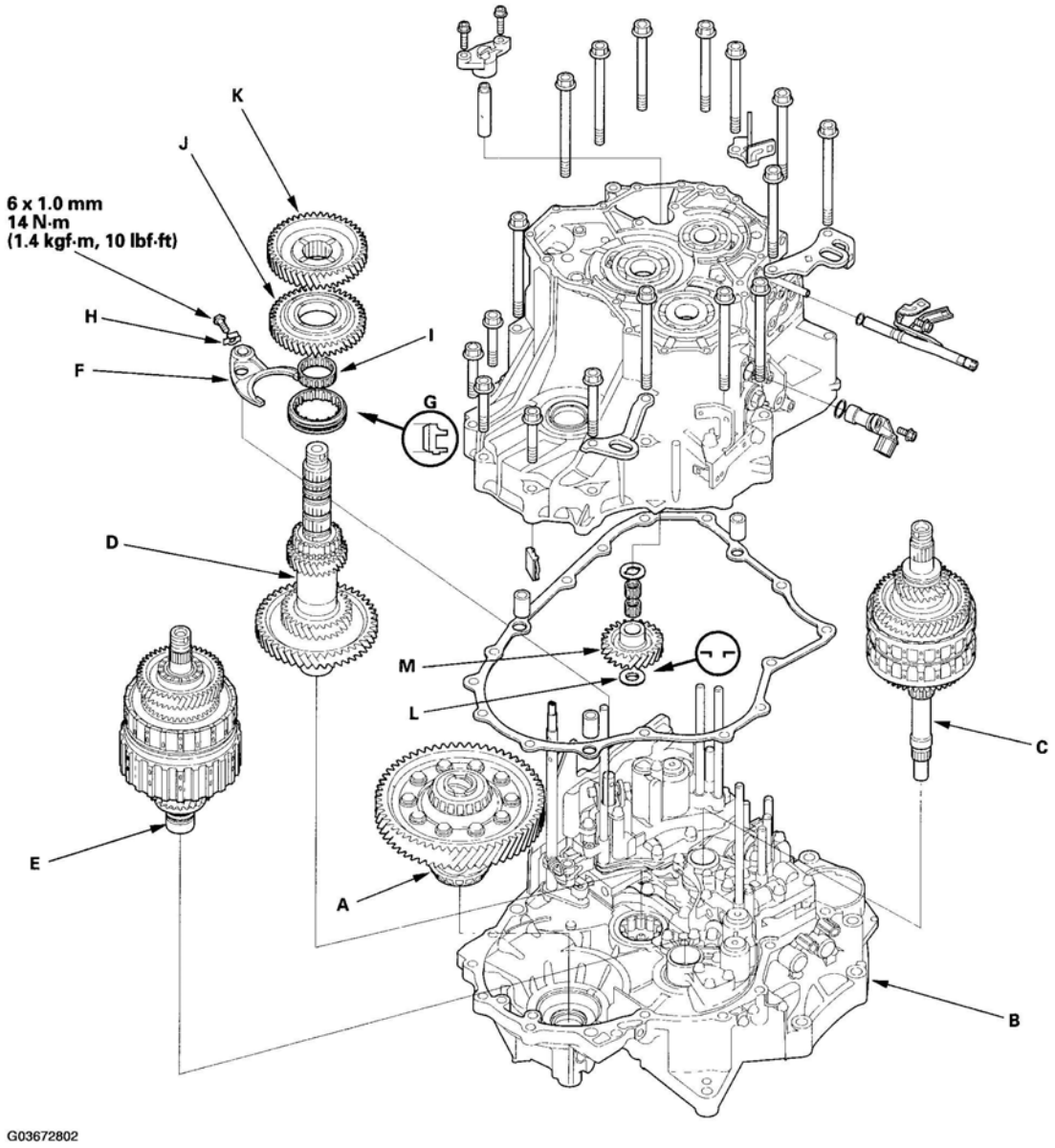


Fig. 447: Installing Differential Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. If the reverse selector hub is press-fitted type, join the mainshaft (C), countershaft (D), and secondary shaft (E) together, then install them in the torque converter housing.
3. If the reverse selector hub in not press-fitted type, install the countershaft, mainshaft, and secondary shaft in the torque converter housing, then install the countershaft 5th gear and reverse selector hub on the countershaft.

4. Turn the shift fork shaft so the large chamfered hole is facing the fork bolt hole.

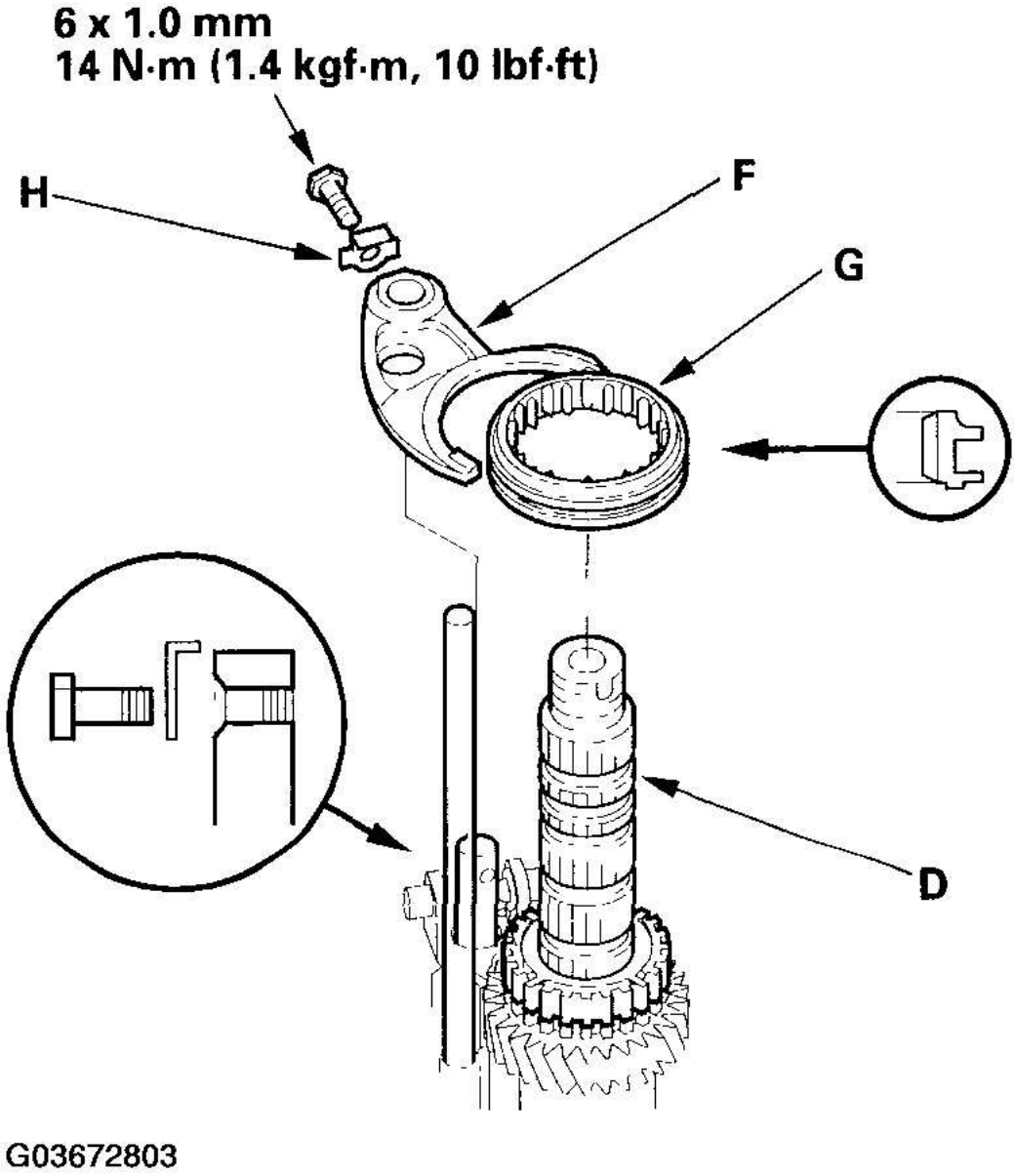


Fig. 448: Turning Shift Fork Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the shift fork (F) and reverse selector (G) together on the shift fork shaft and countershaft (D). Install the reverse selector in the direction shown.
6. Secure the shift fork to the shift fork shaft with the lock bolt and a new lock washer (H), then bend the lock washer against the lock bolt head.
7. Install the needle bearing (I), countershaft reverse gear (J), and countershaft 2nd gear (K) on the countershaft.
8. Place the thrust washer (L) in the transmission housing.

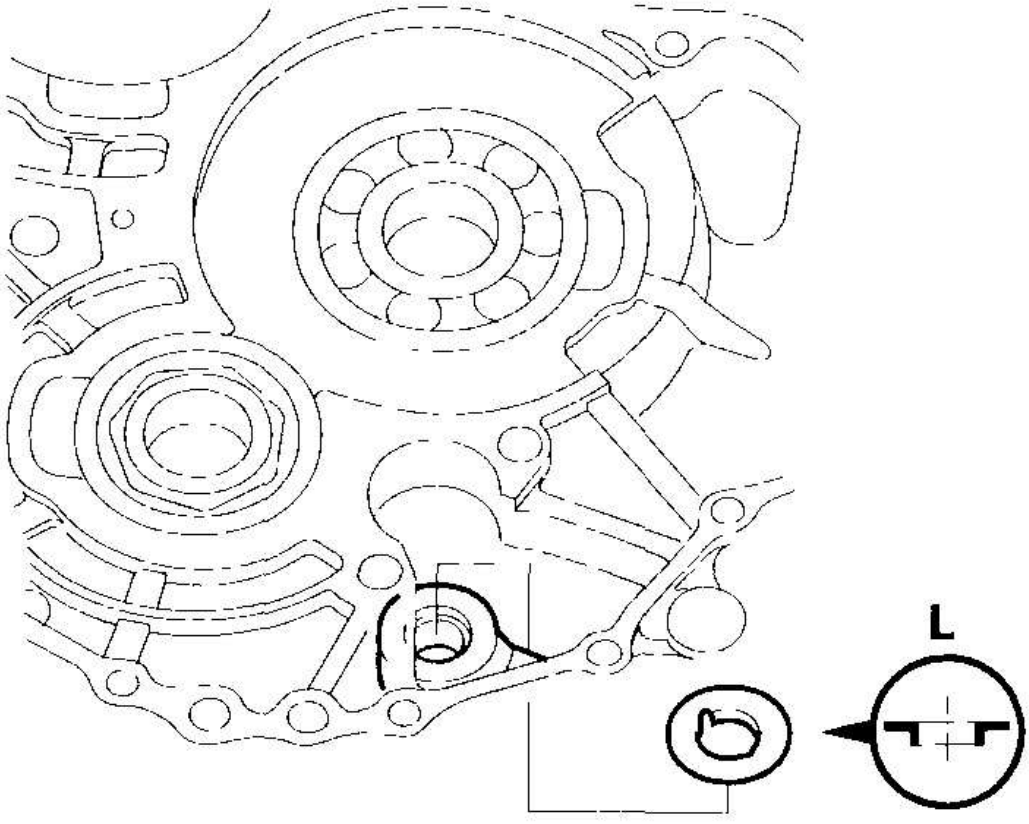


Fig. 449: Placing Thrust Washer In Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Place the reverse idler gear (M) in the transmission housing, and slide it in the

direction shown in **Fig. 450**.

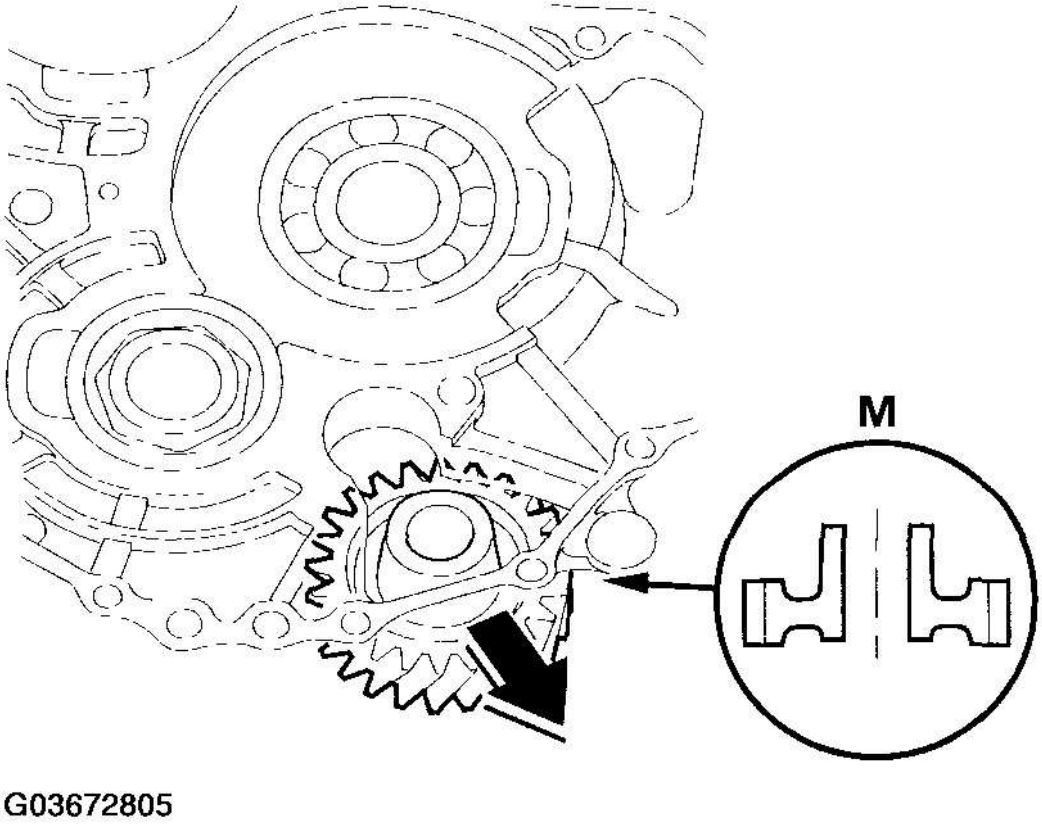


Fig. 450: Placing Reverse Idler Gear In Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Align the spring pin (A) on the selector control shaft (B) with the transmission housing groove (C) by turning the selector control shaft.

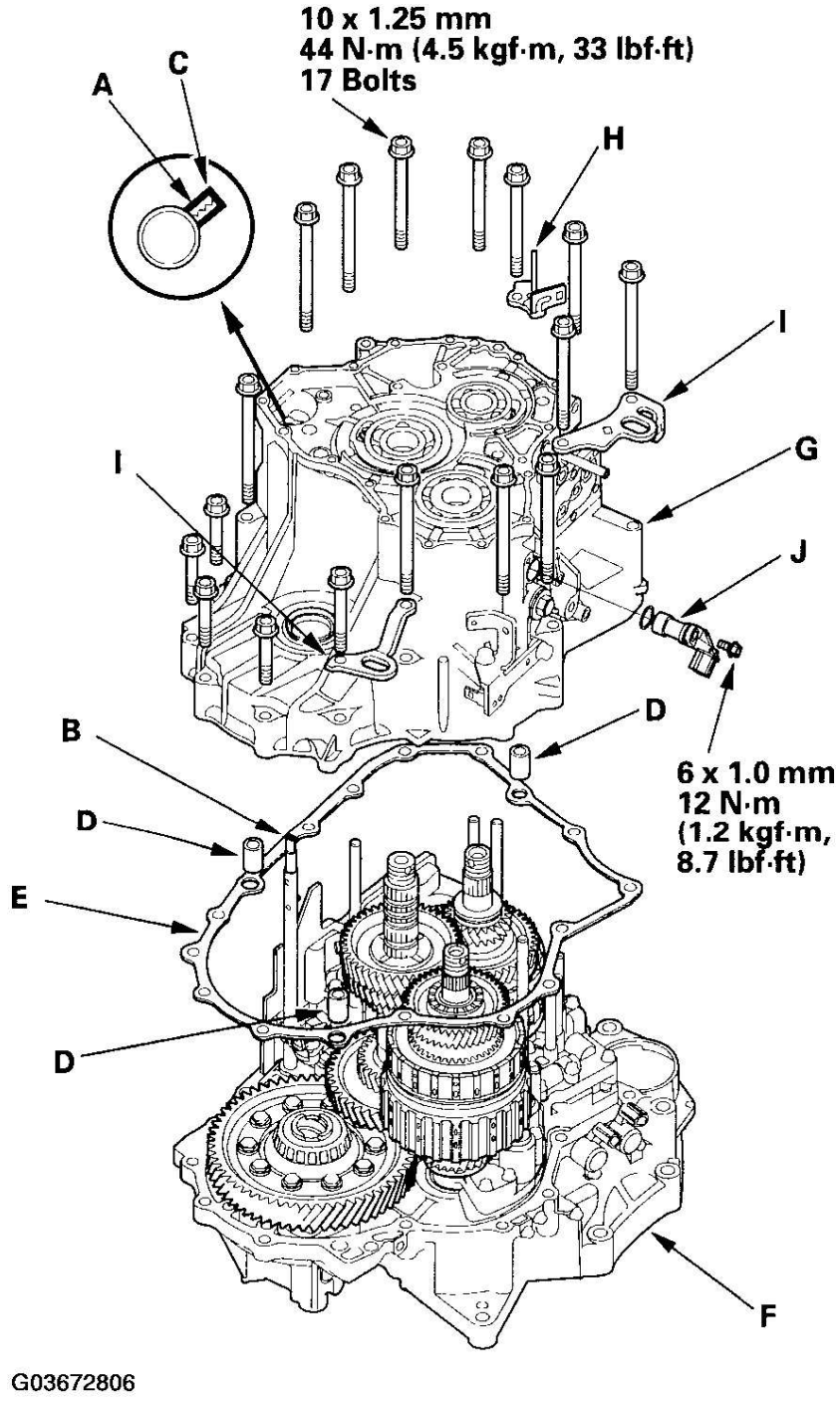


Fig. 451: Aligning Spring Pin On Selector Control Shaft With Transmission Housing Groove

Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install three dowel pins (D) and a new gasket (E) on the torque converter housing (F).
12. Place the transmission housing (G) on the torque converter housing, then install the transmission housing mounting bolts along with the harness clamp bracket (H) and transmission hangers (I).
13. Tighten the mounting bolts in two or more steps in a crisscross pattern.
14. Install the new O-ring on the output shaft (countershaft) speed sensor (J), then install it in the transmission housing.
15. Engage the reverse idler gear with the countershaft reverse gear and mainshaft reverse gear. Then install the needle bearings (A), reverse idler gear shaft (B), and thrust washer (C) in the reverse idler gear, and install the reverse idler gear shaft holder (D) on the transmission housing.

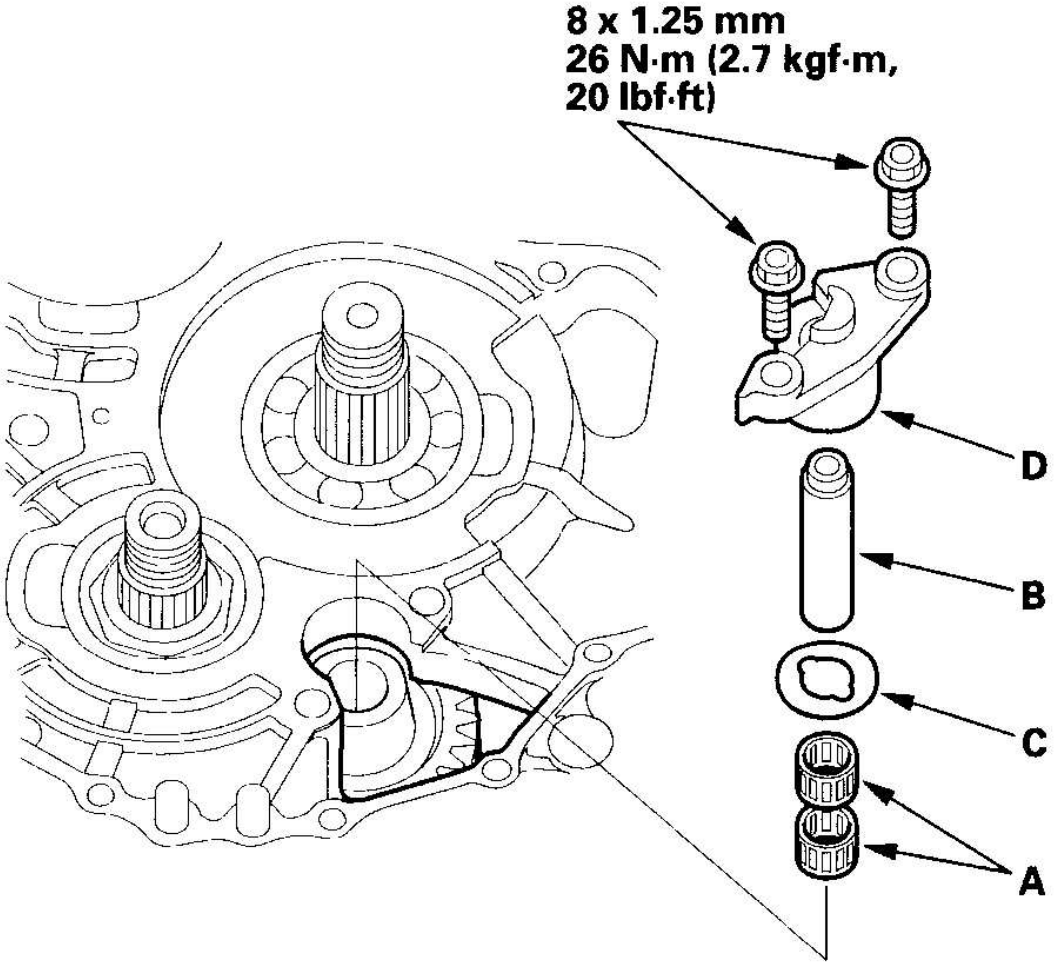


Fig. 452: Installing Needle Bearing, Idler Gear Shaft And Thrust Washer In Reverse Idler Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

END COVER, 3RD GEAR, IDLER GEAR, AND 3RD CLUTCH INSTALLATION

Special Tools Required

- Mainshaft holder 07GAB-PF50101 or 07GAB-PF50100
- Adjustable bearing puller, 25-40 mm 07736-A01000B or 07736-A01000A

1. Install the park lever (A) and park lever stop (B), on the selector control shaft (C), then install the lock bolt (D) with a new lock washer (E). Do not bend the lock tab of the lock washer until step 28.

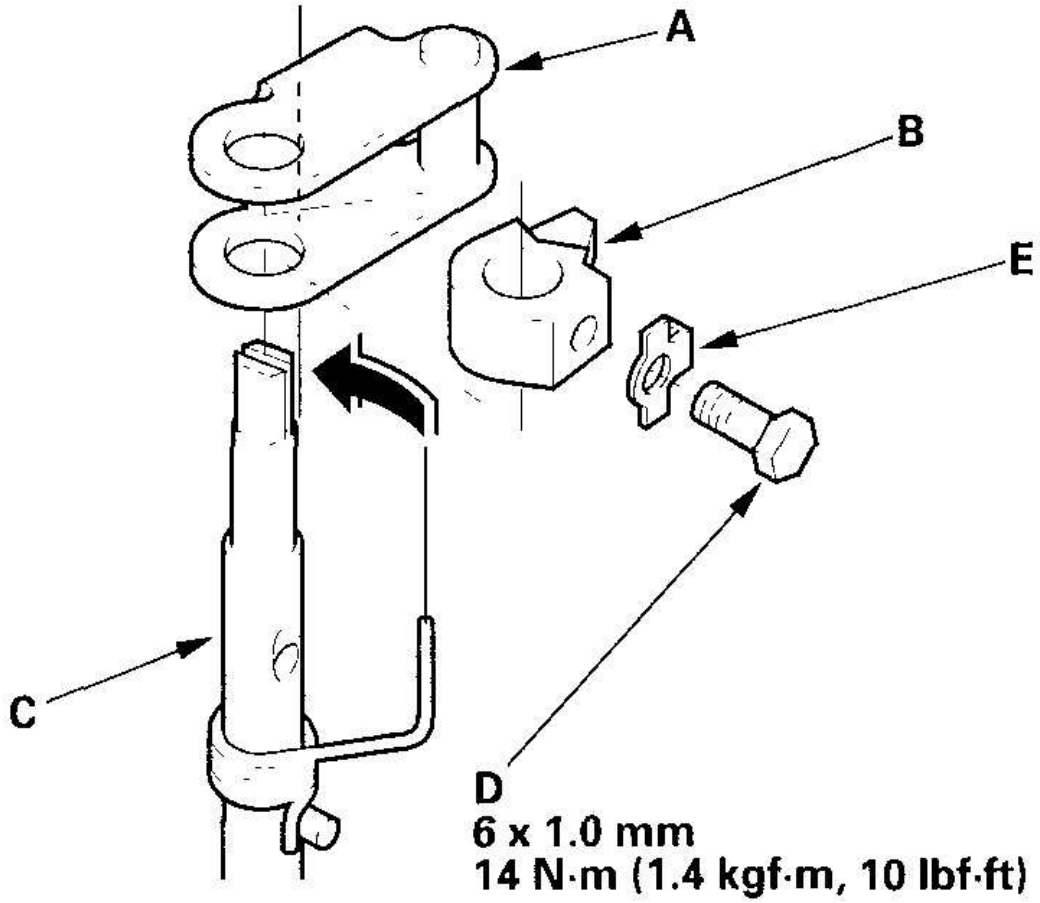


Fig. 453: Installing Park Lever And Park Lever Stop
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Lubricate the following parts with ATF:
   - Splines of the countershaft, the park gear, and the old locknut.
   - Threads of the countershaft and the old locknut.

- Old conical spring washer.

3. Install the park gear (A) using the old locknut (B) and a collar (C). Hold the park pawl (D) against the park gear, then tighten the old locknut until the shaft splines come out over the park gear splines.

NOTE:

- **Do not use an impact wrench.**
- **Countershaft locknut has left-hand threads.**

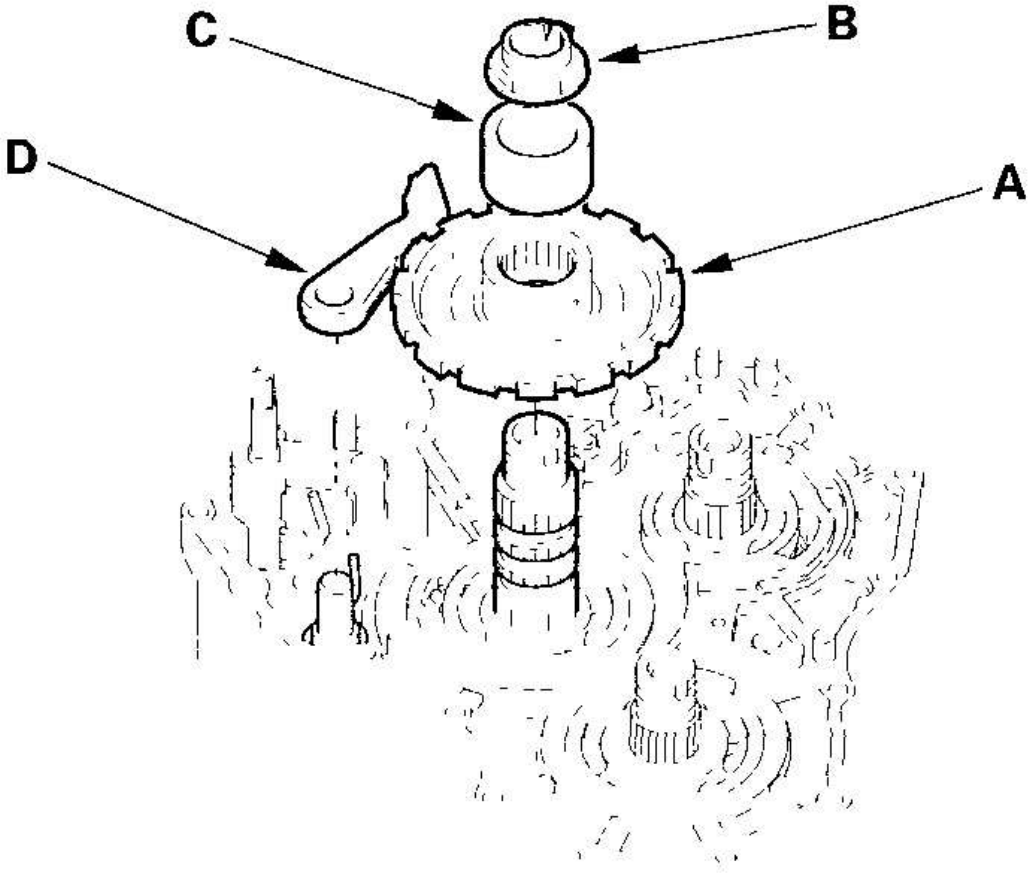


Fig. 454: Installing Park Gear Using Old Locknut And Collar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the locknut and collar.
5. Install the thrust needle bearing (A), needle bearing (B), 3rd gear (C), thrust needle bearing (D), 31 x 63.5 mm splined washer (E), 3rd clutch assembly (F), and old conical spring washer (G) on the countershaft (H). Tighten the old locknut (I) to 226 N.rm (23.0 kgf.m, 166 lbf.ft).

NOTE: Use a torque wrench to tighten the locknut. Do not use an impact wrench.

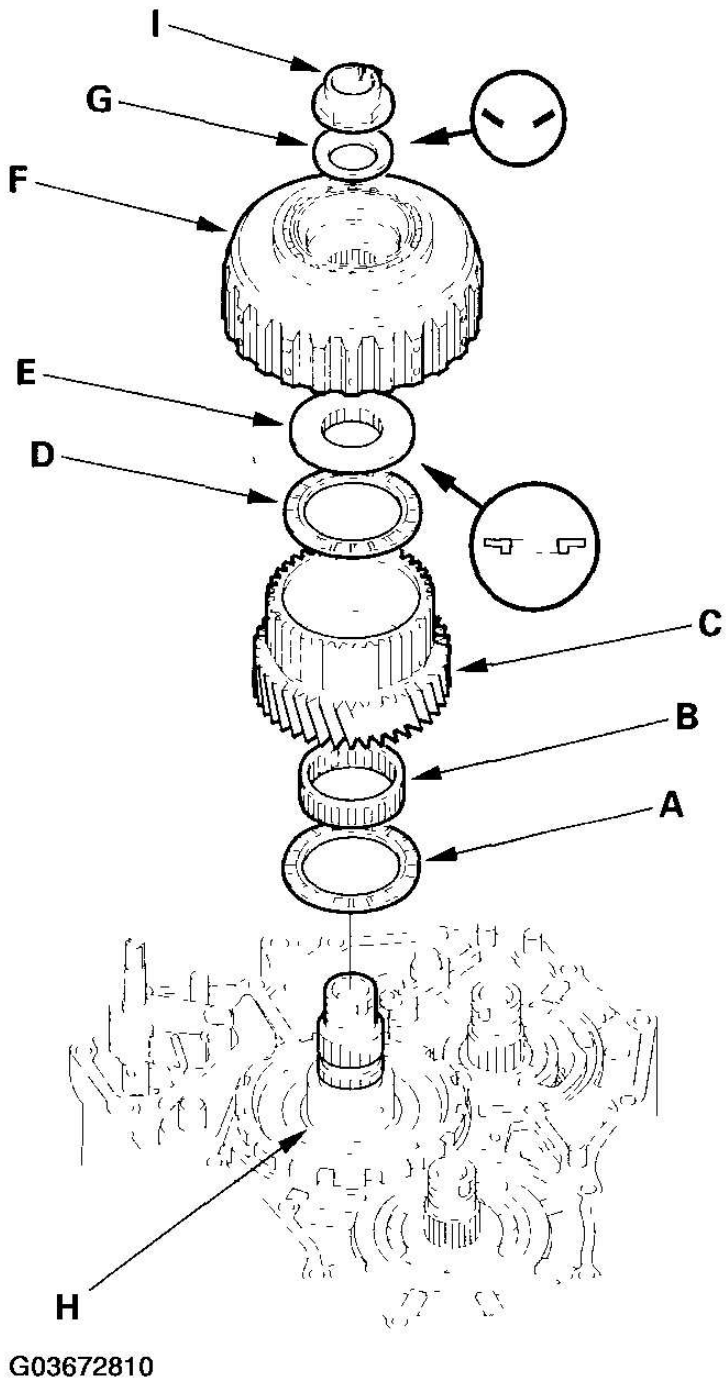


Fig. 455: Installing Thrust Needle Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Set the dial indicator (A) to the countershaft 3rd gear(B).

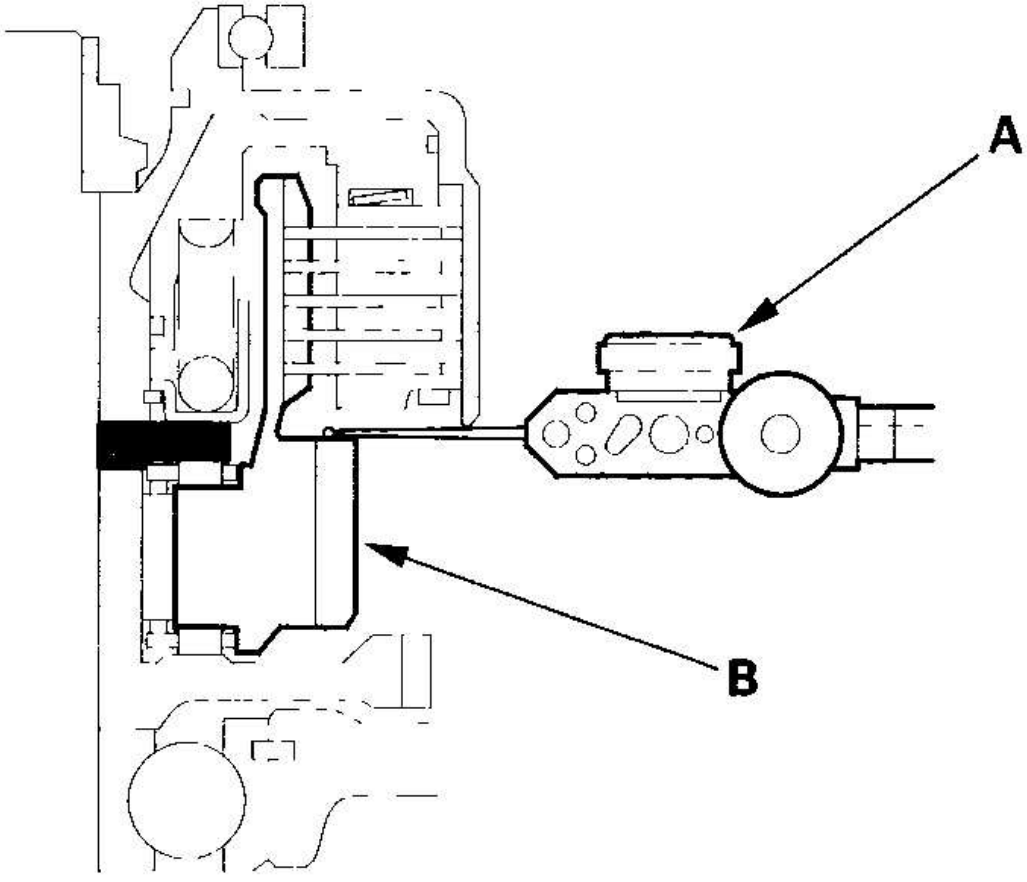


Fig. 456: Setting Dial Indicator To Countershaft 3rd gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Measure the countershaft 3rd gear axial clearance in at least three places, while moving the countershaft 3rd gear (A). Use the average as the actual clearance.

   If the clearance is out of standard, select the appropriate 31 x 63.5 mm splined washer in step 16.

Standard: 0.015-0.045 mm (0.0006-0.0018 in.)

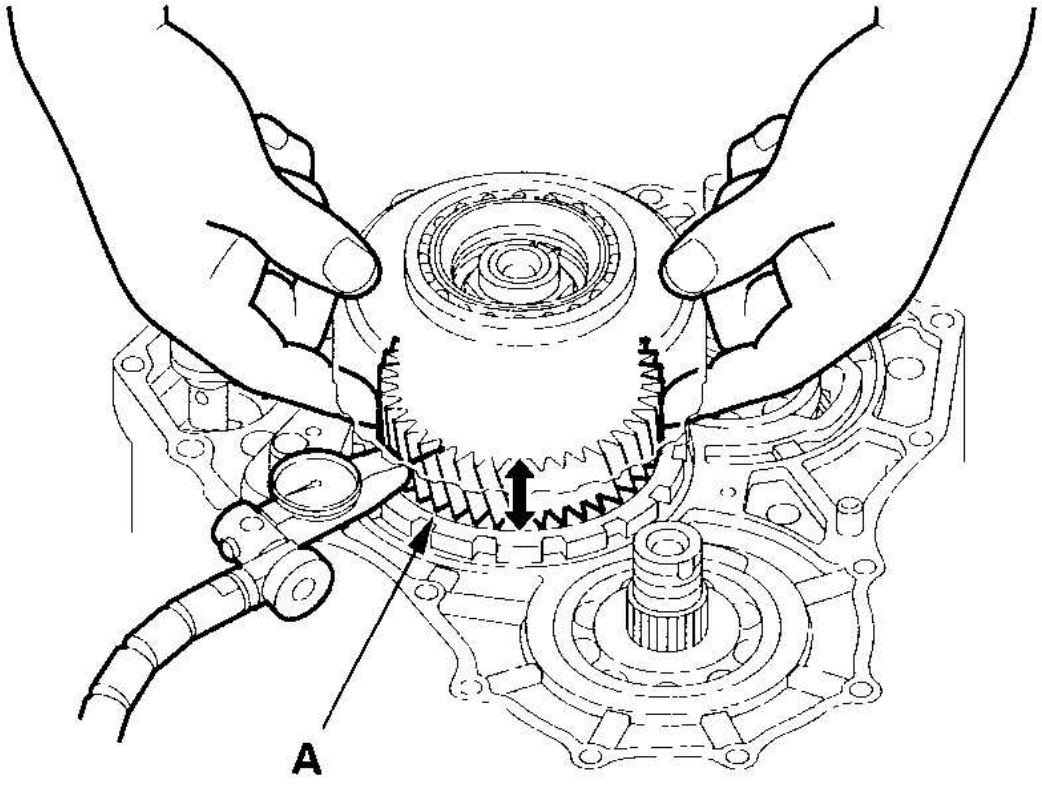


Fig. 457: Moving Countershaft 3rd Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the locknut and conical spring washer.
9. Remove the 3rd clutch assembly (A) with the special tool and a commercially available 3/8" -16 slide hammer (B).

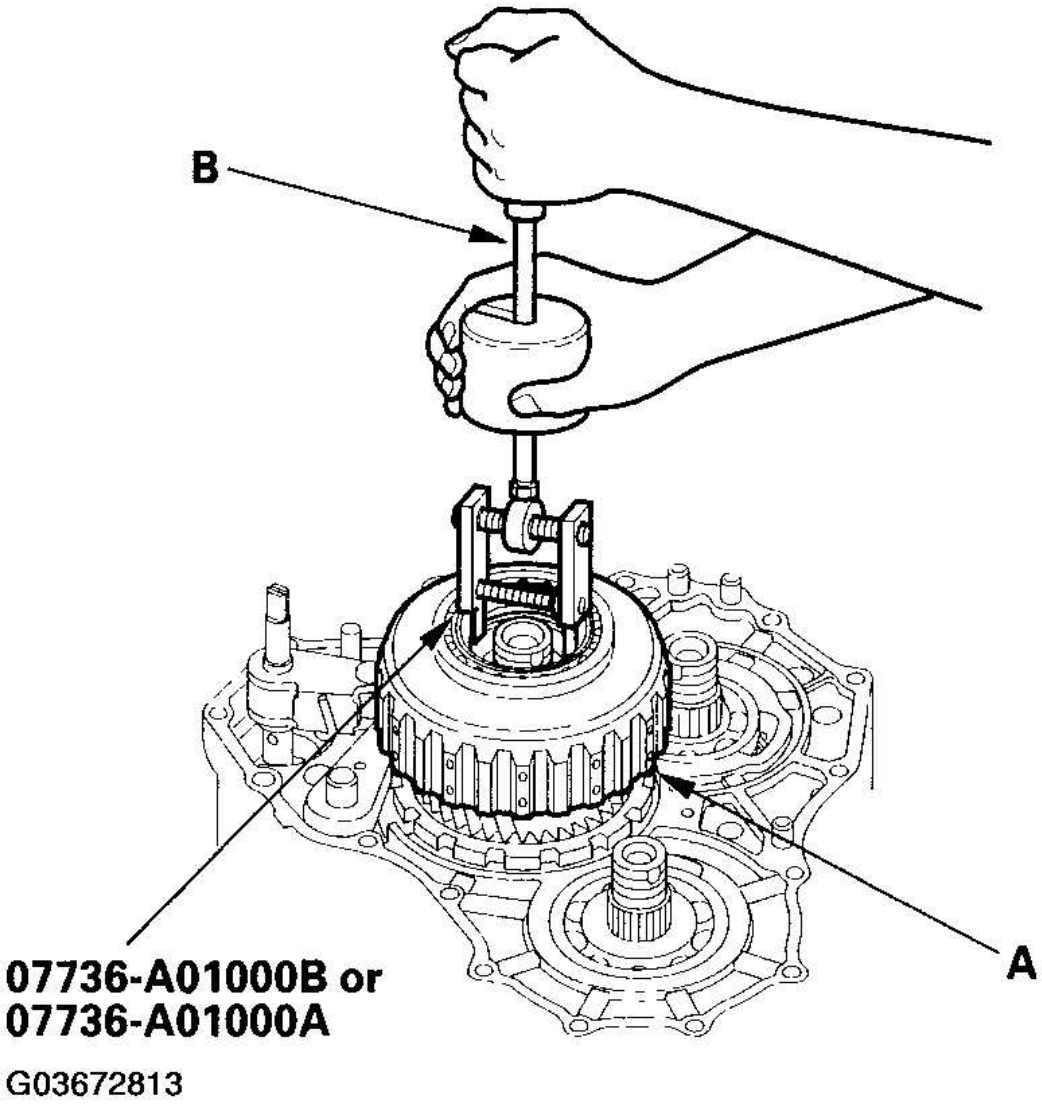


Fig. 458: Removing 3rd Clutch Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the parts that were installed in step 5.
11. Install the special tool onto the mainshaft.

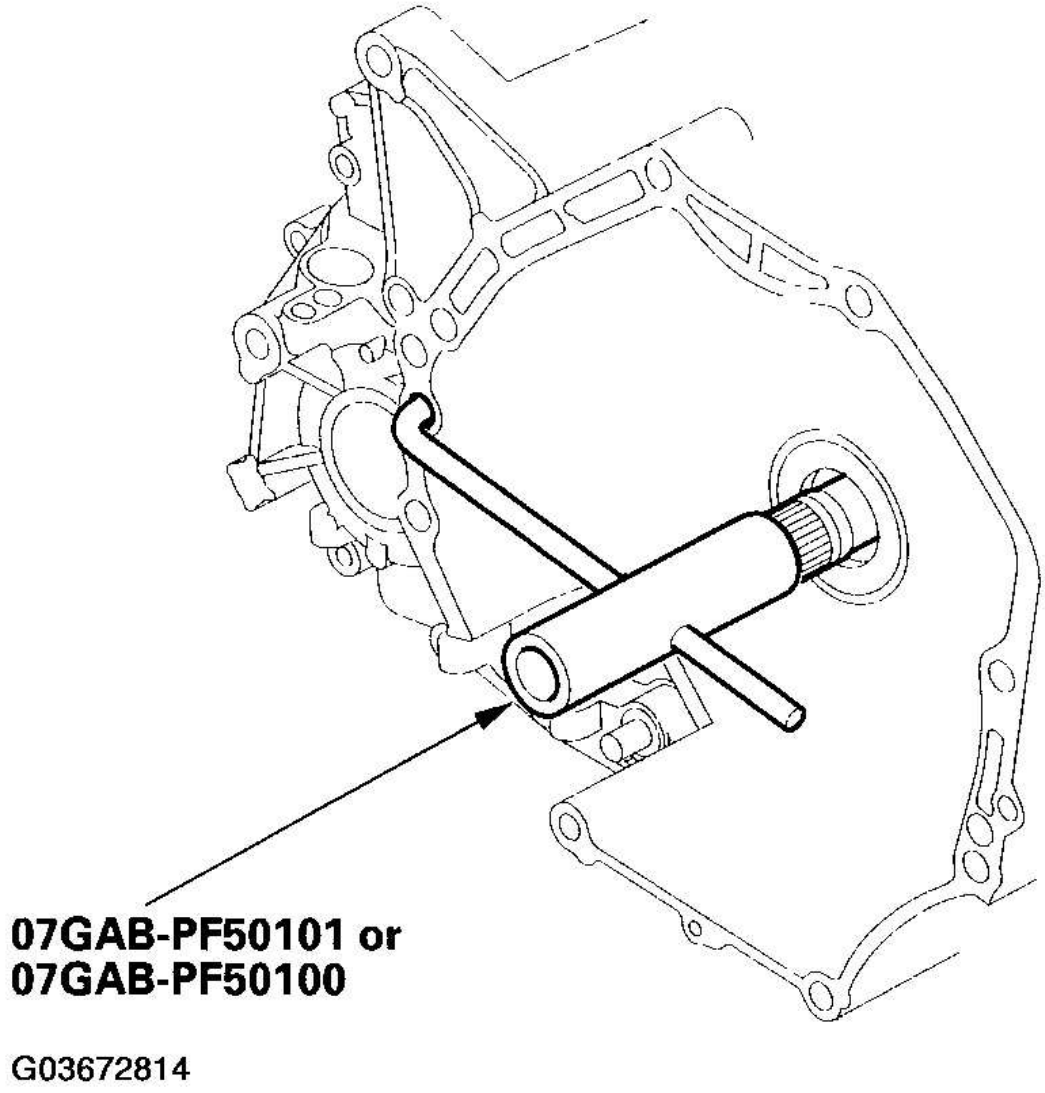


Fig. 459: Installing Special Tool Onto Mainshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Lubricate the following parts with ATF:
    - Splines of the mainshaft 3rd gear and secondary shaft idler gear.
    - Threads of the mainshaft and secondary shaft.
    - Threads of the old mainshaft and secondary shaft locknuts.
    - Old conical spring washer.

13. Install the mainshaft 3rd gear (A) and the old conical spring washer (B) on the mainshaft (C). Tighten the old locknut (D) to seat the 3rd gear to 226 N.m (23.0 kgf.m, 166 lbf.ft).

NOTE: Use a torque wrench to tighten the locknut. Do not use an impact wrench.

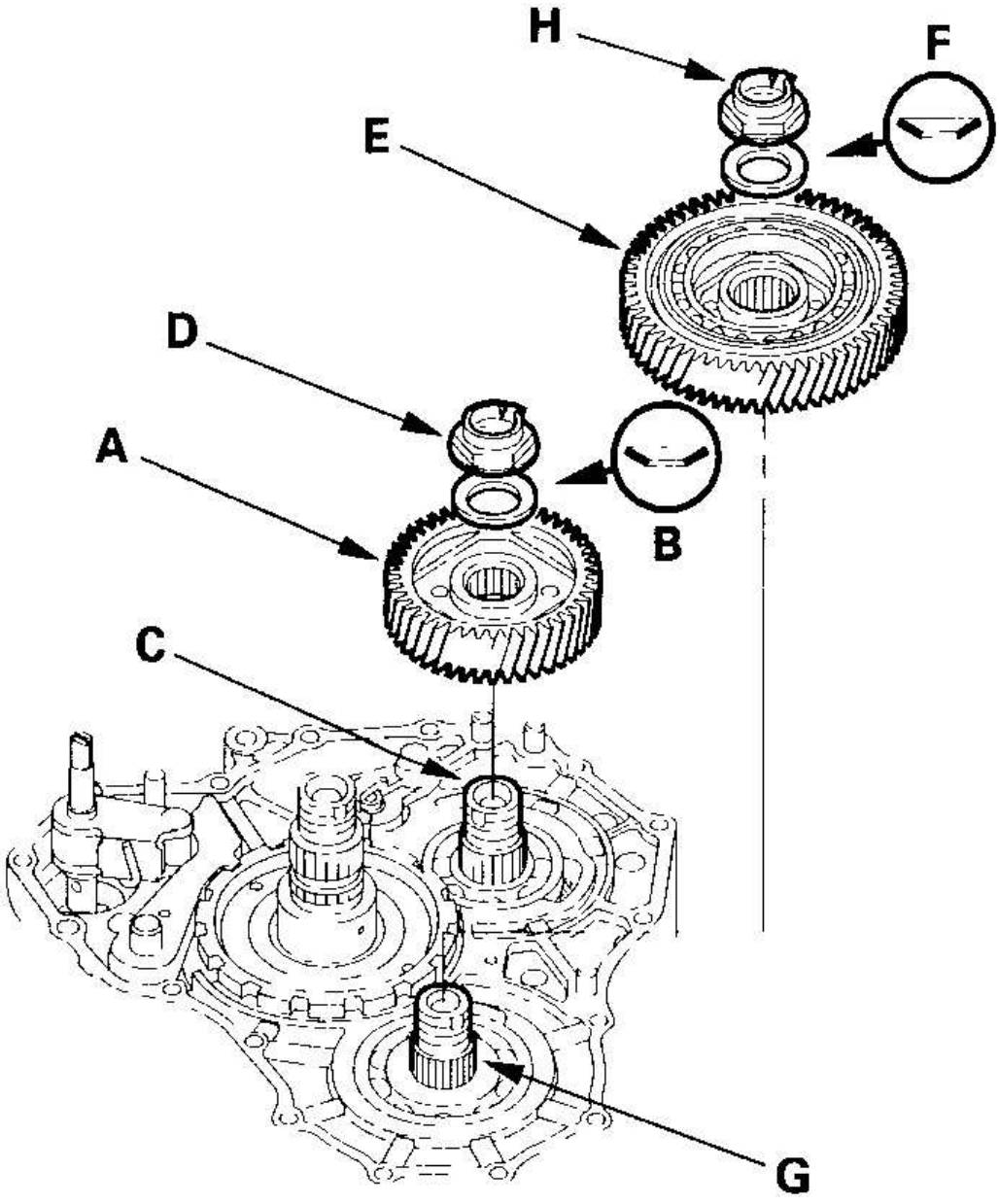


Fig. 460: Installing Mainshaft 3rd Gear And Old Conical Spring Washer On Mainshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Install the secondary shaft idler gear (E) and the old conical spring washer (F) on the secondary shaft (G). Tighten the old locknut (H) to seat the secondary shaft idler gear to 226 N.m (23.0 kgf.m, 166 lbf.ft).

NOTE:

- **Use a torque wrench to tighten the locknut. Do not use an impact wrench.**
- **Secondary shaft locknut has left-hand threads.**

15. Remove the old locknuts and old conical spring washers from the mainshaft and secondary shaft.
16. If the 3rd gear axial clearance is out of standard (measured in step 7), measure the difference of the 31 x 63.5 mm splined washer, and select the appropriate splined washer from **SPLINED WASHER, 31 x 63.5 mm** .

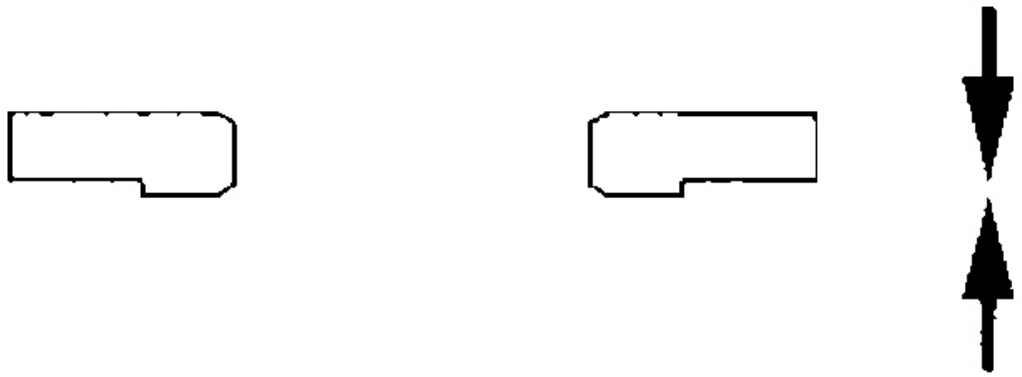


Fig. 461: Measuring Difference Of Splined Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SPLINED WASHER, 31 x 63.5 mm

Mark	Part Number	Difference
A	90520-P7W-000	3.503 mm (0.1379 in.)

B	90521-P7W-000	3.490 mm (0.1374 in.)
C	90522-P7W-000	3.477 mm (0.1369 in.)
D	90523-P7W-000	3.464 mm (0.1364 in.)

17. Install the thrust needle bearing (A), needle bearing (B), 3rd gear (C), thrust needle bearing (D), and 31 x 63.5 mm splined washer (E) on the countershaft (F).

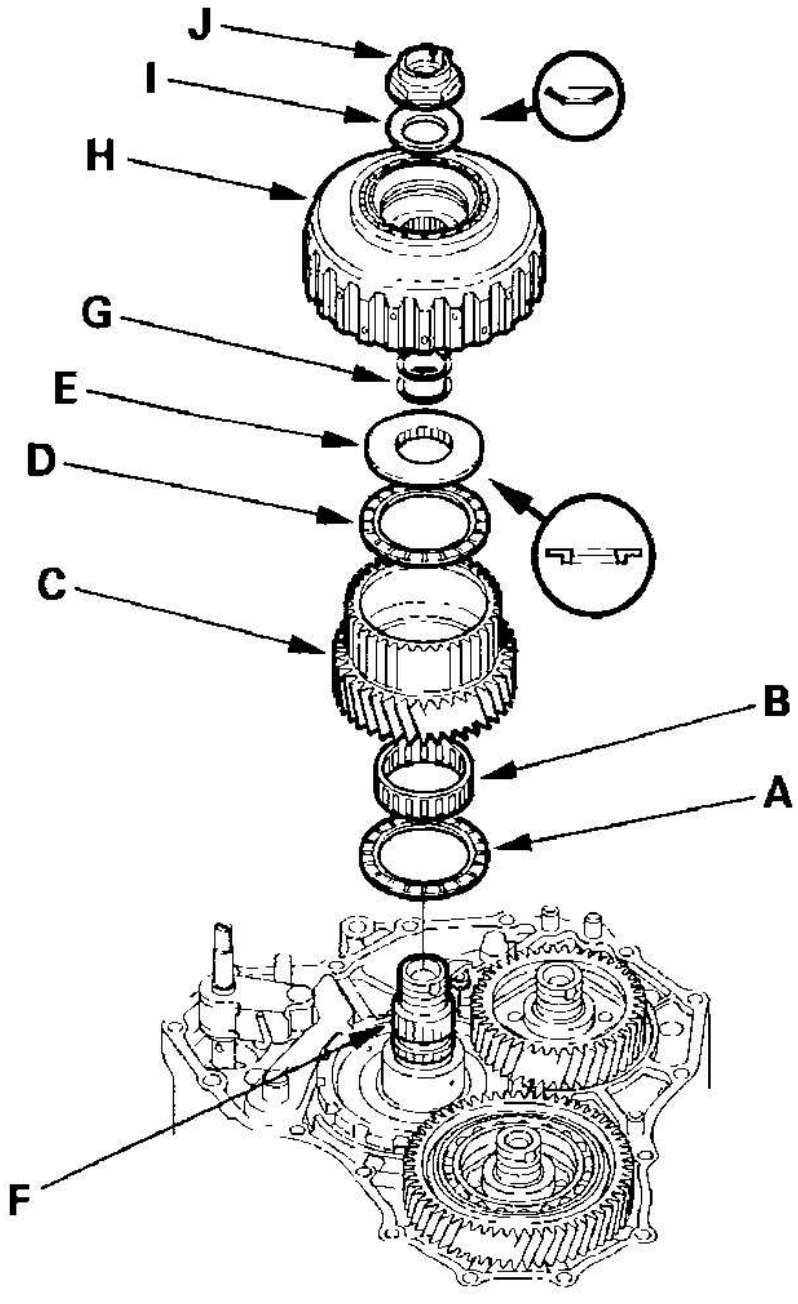
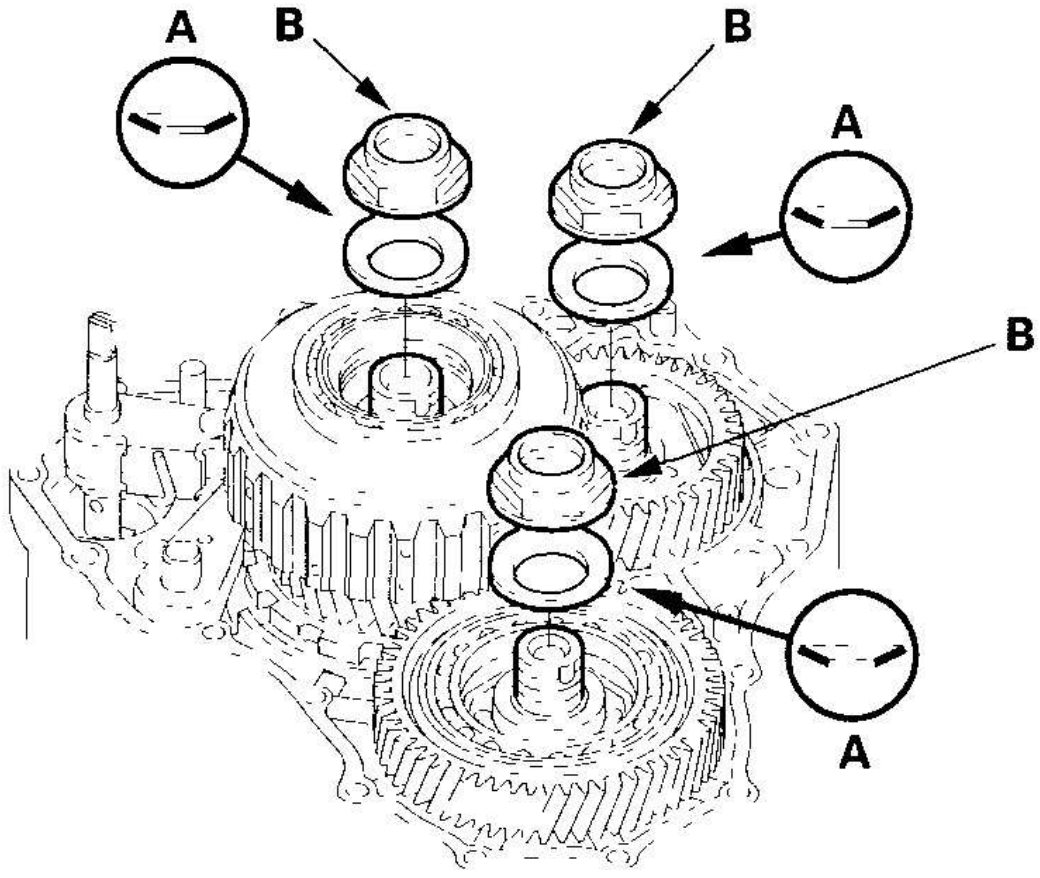


Fig. 462: Installing Thrust Needle Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Wrap the shaft splines with tape to prevent O-ring damage, then install new O-rings (G).
19. Remove the tape, then install the 3rd clutch assembly (H), and old conical spring washer (I). Tighten the old locknut (J) to 226 N.m (23.0 kgf.m, 166 lbf.ft).

NOTE: Use a torque wrench to tighten the locknut. Do not use an impact wrench.

20. Remove the old locknut and old conical spring washer from the countershaft.
21. Lubricate the threads of each shaft, the new locknuts, and new conical spring washers with ATF.
22. Install the new conical spring washers (A) in the direction shown in **Fig. 463**, and install the new locknuts (B).



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Fig. 463: Installing New Conical Spring Washers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Tighten the locknuts to 167 N.m (17.0 kgf.m, 123 lbf.ft).

NOTE:

- **Use a torque wrench to tighten the locknuts. Do not use an impact wrench.**
- **Countershaft and secondary shaft locknuts have left-hand threads.**

24. Remove the special tool from the mainshaft.

25. Stake each locknut into its shaft using 3.5 mm punch.

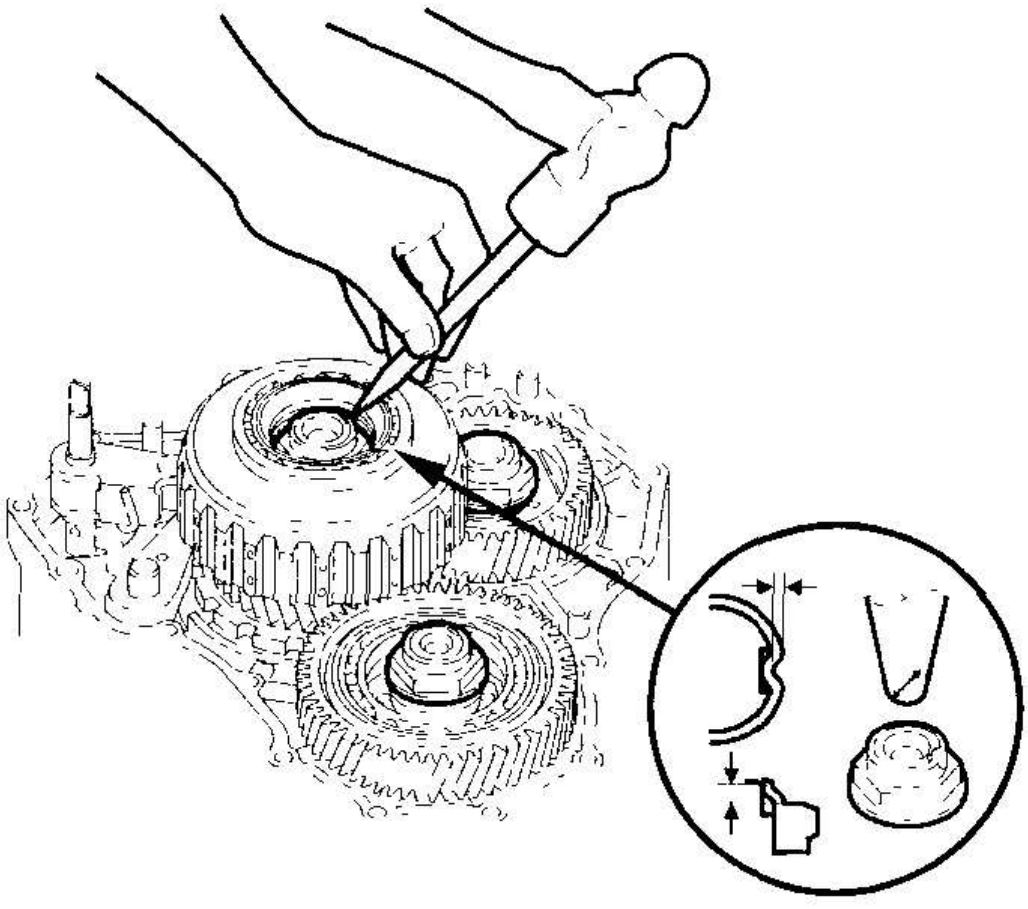


Fig. 464: Staking Each Locknut Into Its Shaft Using Punch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. Set the park lever in P position, then verify that the park pawl (A) engages the park gear (B).

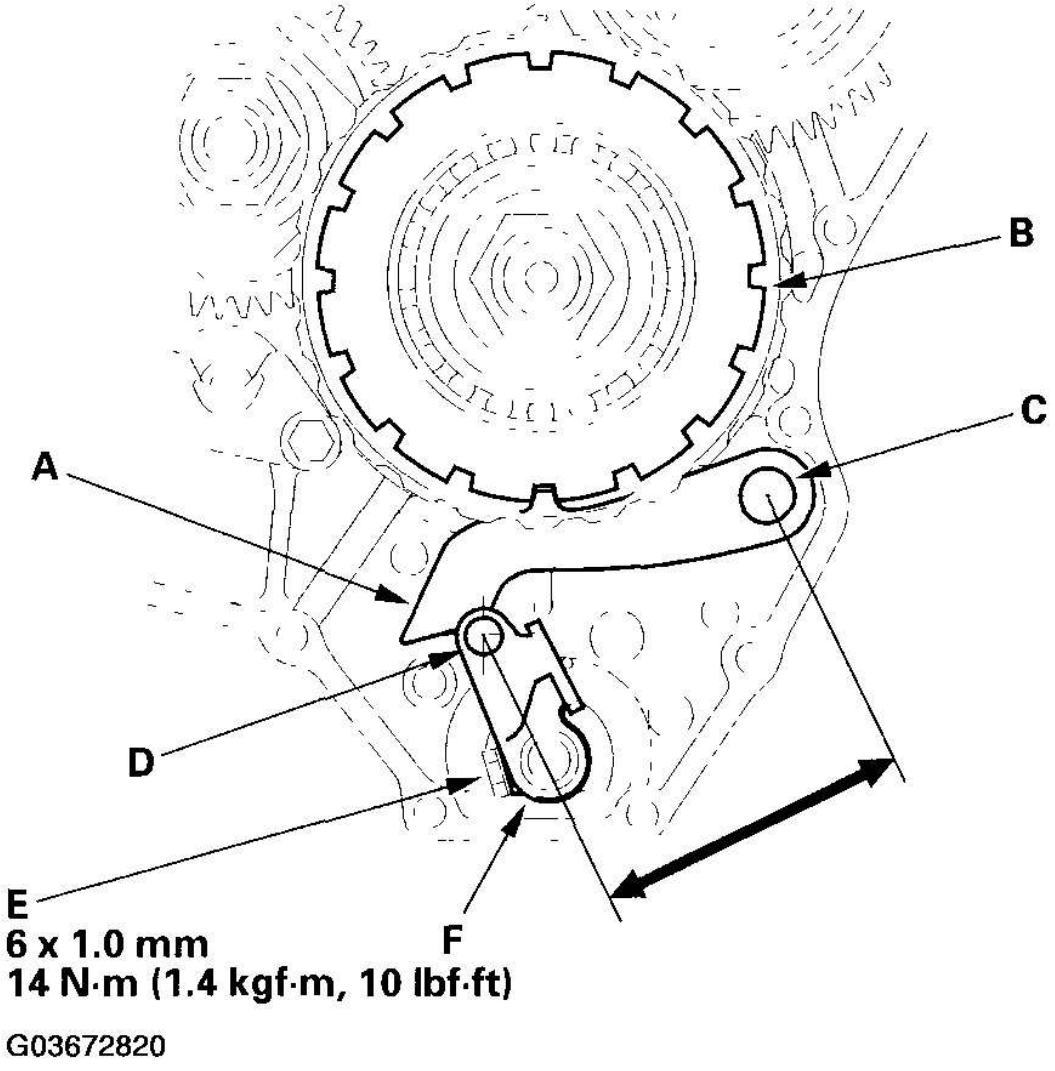


Fig. 465: Verifying Park Pawl Engages Park Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

27. If the park pawl does not engage fully, check the distance between the pawl shaft (C) and the park lever roller pin (D) (see **PARK LEVER STOP INSPECTION AND ADJUSTMENT**).
28. Tighten the lock bolt (E), and bend the lock tab of the lock washer (F) against the lock bolt head.
29. Install the new gasket (A) on the transmission housing, and install the two

dowel pins (6) and new O-rings (C) over the top of the ATF feed pipes.

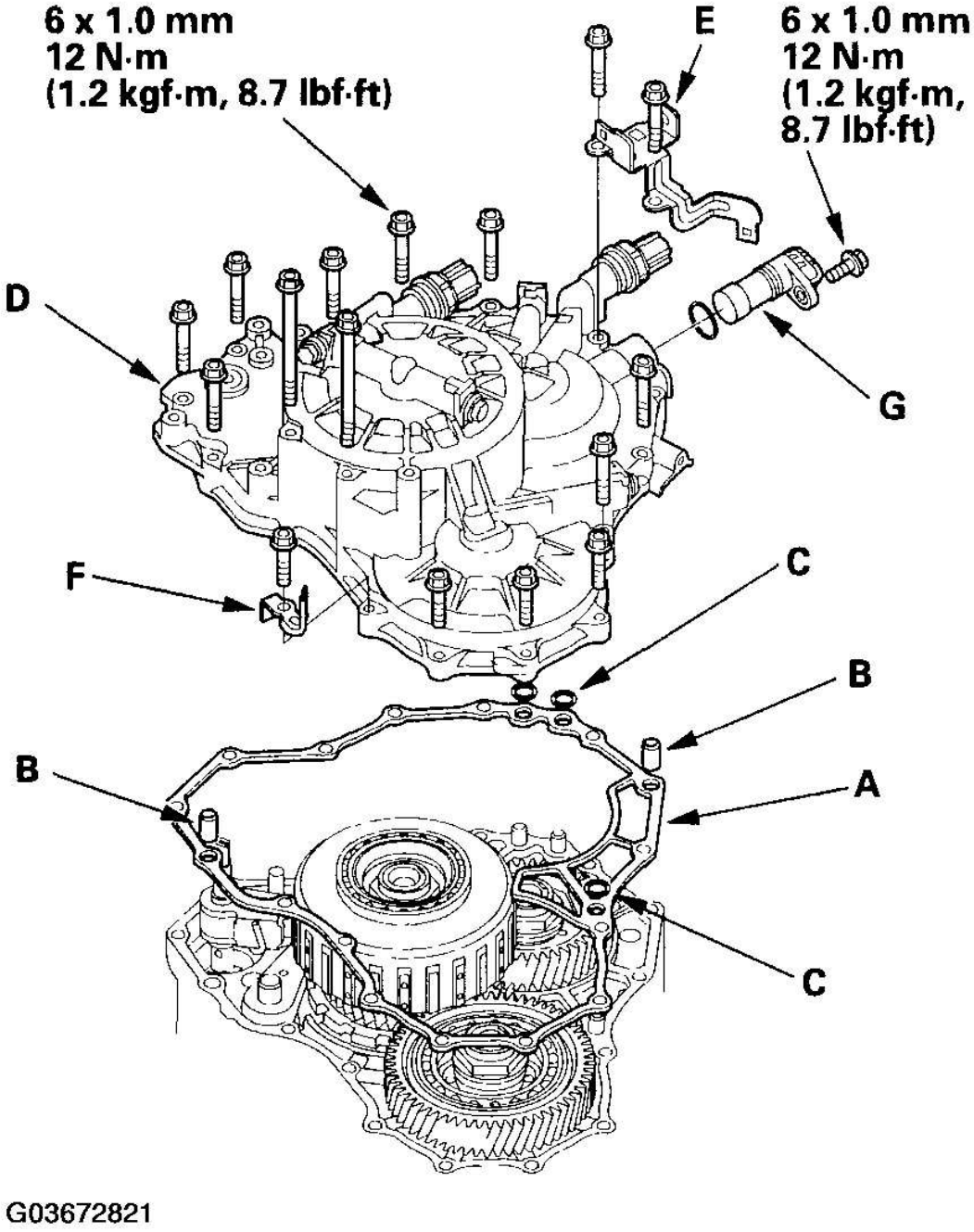


Fig. 466: Installing New Gasket On Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

30. Install the end cover (D), and install the 16 bolts, connector bracket (E) and harness holder bracket (F).
31. Tighten the bolts in two or more steps in a crisscross pattern.
32. Install the new O-ring on the input shaft (mainshaft) speed sensor (G), then install it in the end cover.
33. Install the 8 x 12 mm ATF feed pipe (A) with its filter side into the transmission housing.

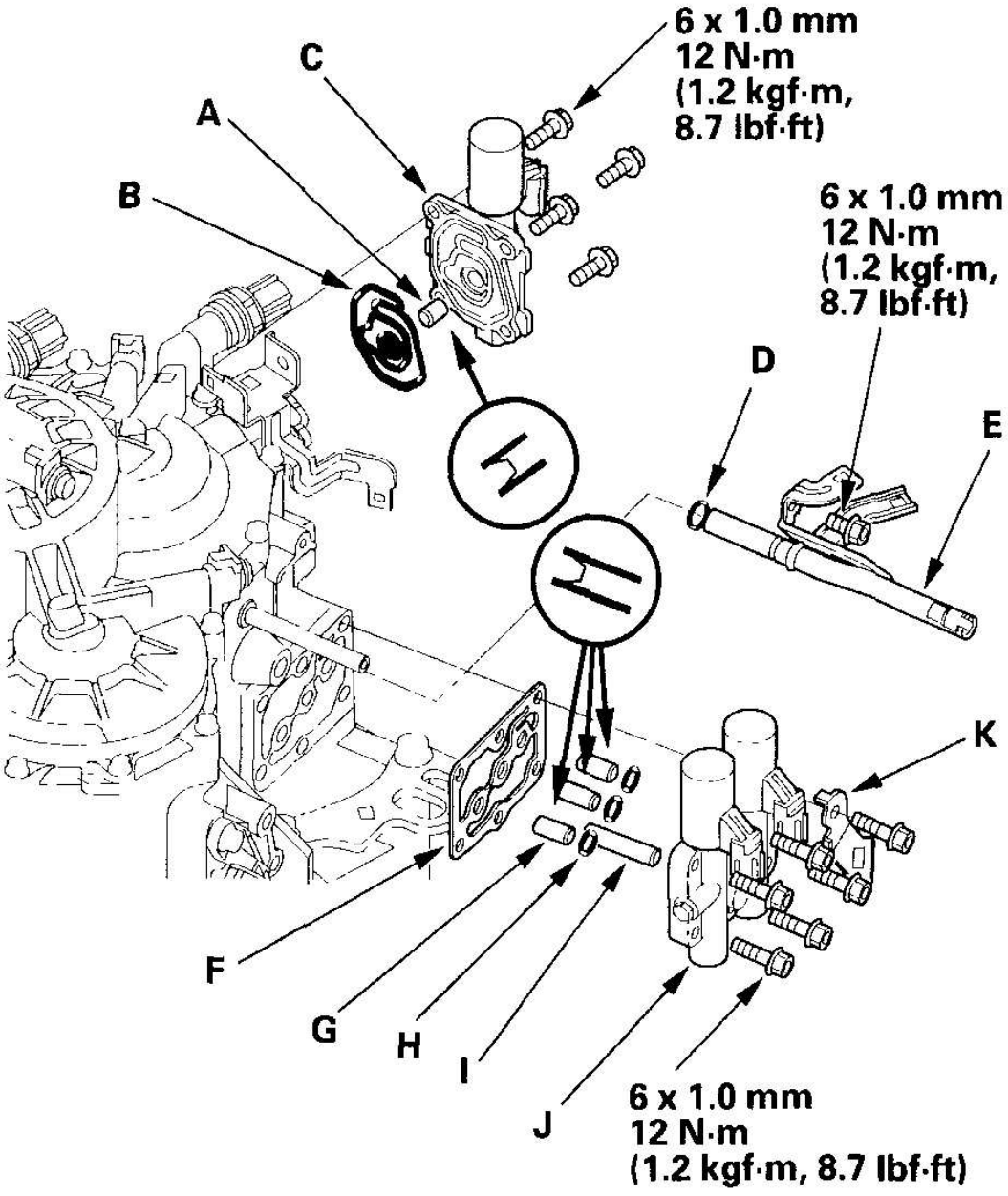


Fig. 467: Installing ATF Feed Pipe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

34. Install the new gasket (B) in the mounting groove of the A/T clutch pressure control solenoid valve C body (C) properly, then install them on the

transmission housing. Do not pinch the gasket.

35. Install the new O-ring (D) on the ATF dipstick guide pipe (E), then install in the transmission housing.
36. Place the new gasket (F) on the transmission housing, then install the 8 x 18 mm ATF feed pipes (G) with their filter side into the transmission housing.
37. Install the new O-rings (H) over the feed pipes, and install the 8 x 40 mm ATF feed pipe (I).
38. Install the A/T clutch pressure control solenoid valves A and B (J) and the harness clamp bracket (K).
39. Install the new gasket (A) on the transmission housing, then install the 8 x 14 mm dowel pin (B), 10 x 25.5 mm ATF feed pipe (C), and new O-ring (D) over the feed pipe. Install the ATF passage body (E).

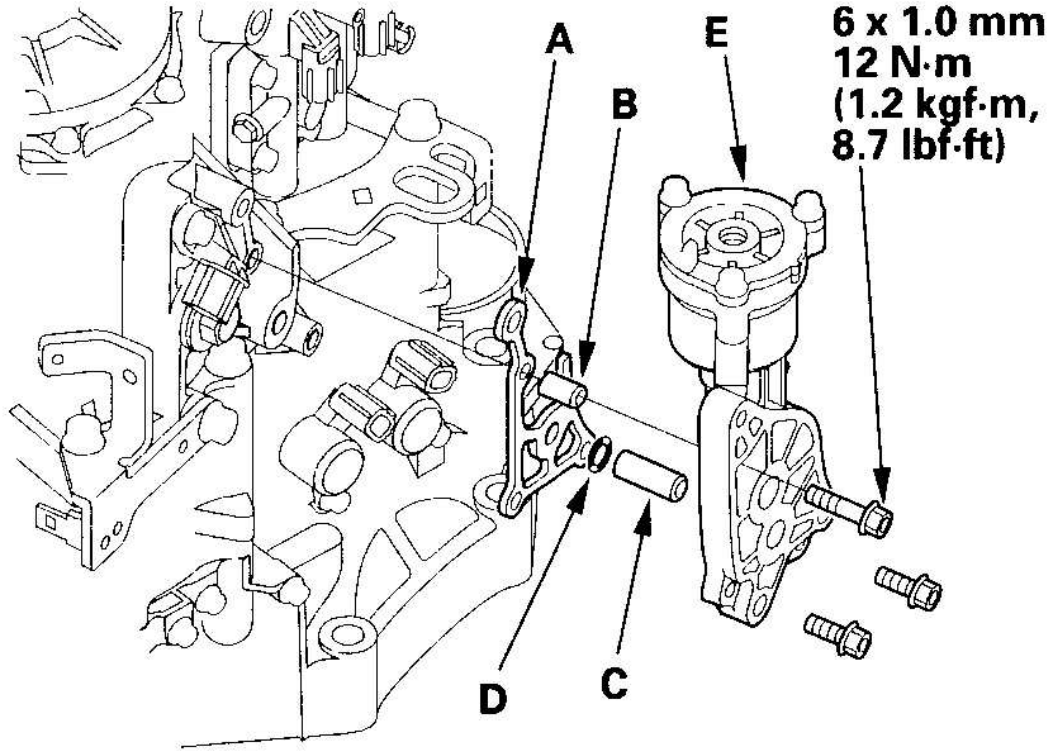


Fig. 468: Installing Gasket On Transmission Housing

Courtesy of AMERICAN HONDA MOTOR CO., INC.

40. Install the ATF line (A) on the ATF passage body (B) with the line bolt and new sealing washers (C). Secure the ATF line with the 6 mm bolt on the harness clamp bracket (D).

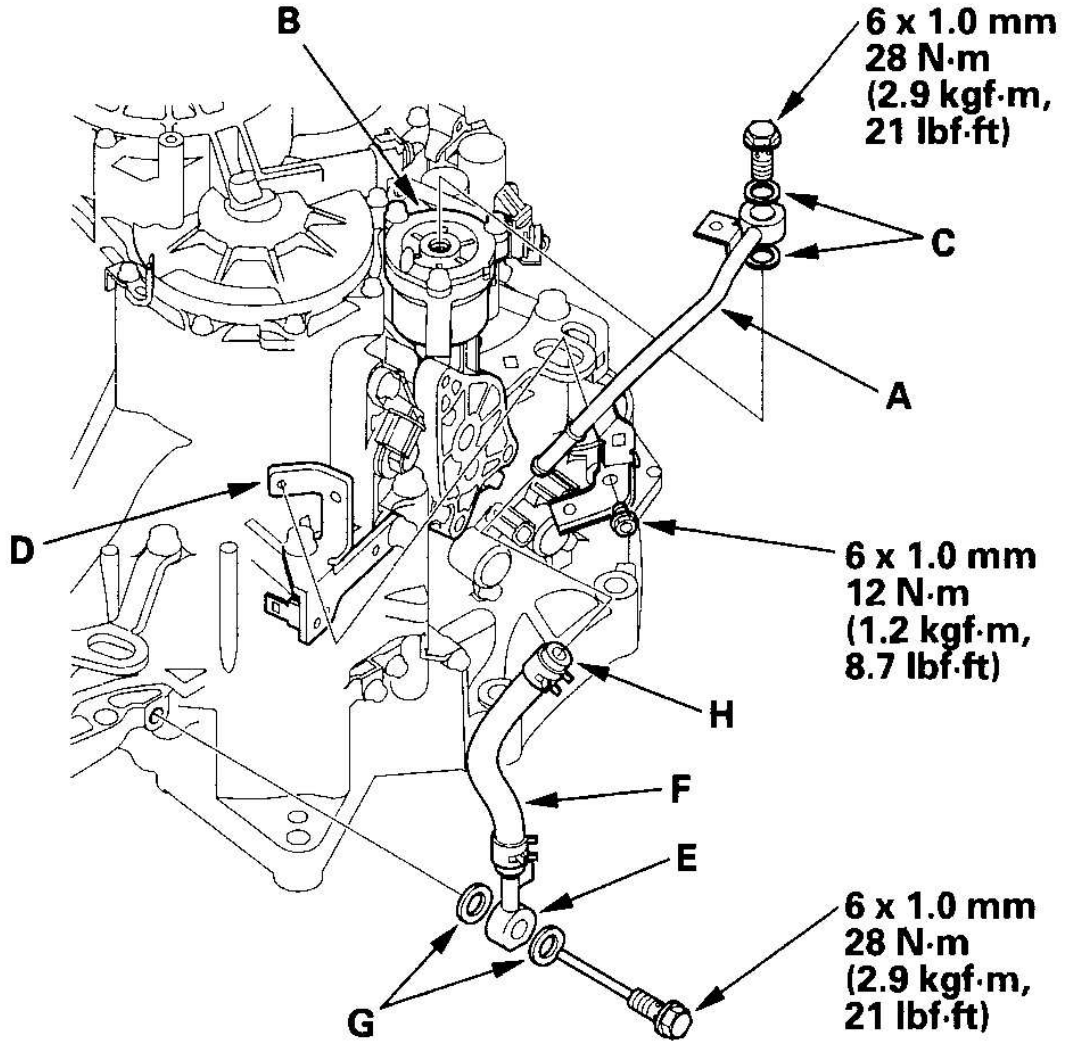


Fig. 469: Installing ATF Line On ATF Passage Body With Line Bolt And Sealing Washers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

41. Install the ATF line (E) and hose (F) on the torque converter housing with the line bolt and new sealing washers (G).
42. Connect the ATF hose to the line, and secure the hose with hose clamp (H).
43. Set the selector control shaft to the N position by turning the control shaft.

NOTE: Do not squeeze the end of the selector control shaft tips together when turning the shaft. If the tips are squeezed together it will cause a faulty shift position signal or position due to the play between the selector control shaft and the switch. The clearance (A) between selector control shaft tips is 2.0 mm (0.08 in.)

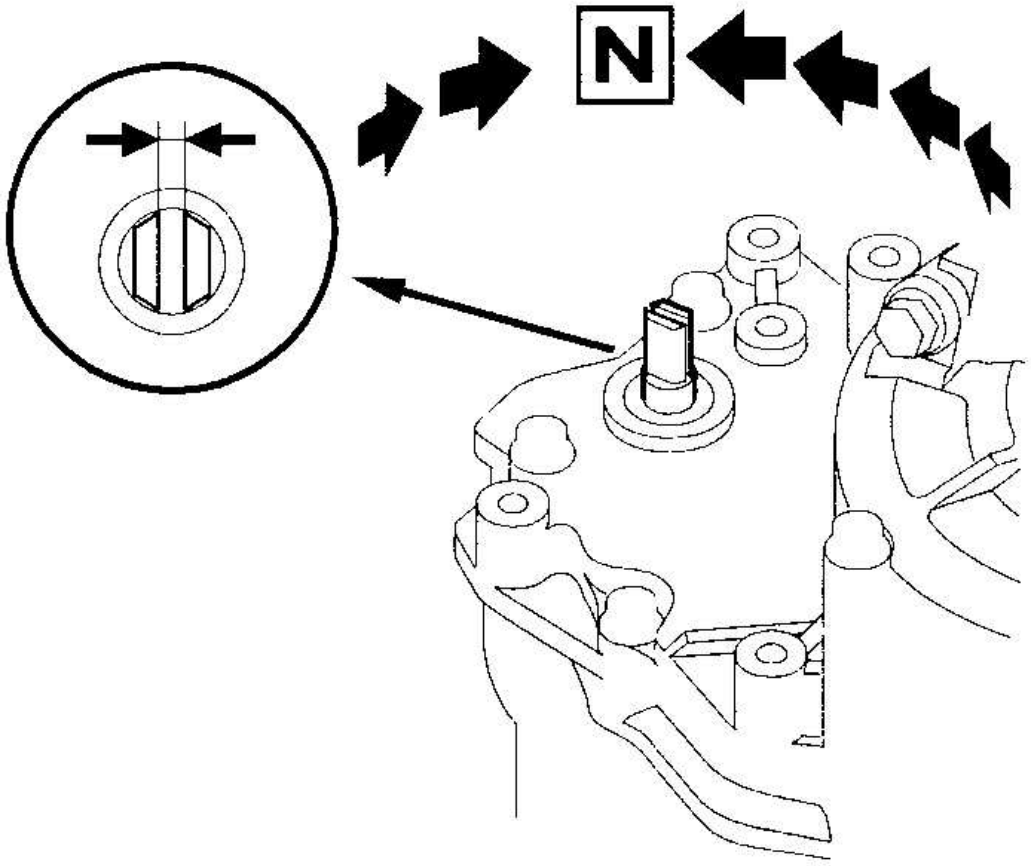


Fig. 470: Setting Selector Control Shaft To N Position Turning Control Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

44. Align the cutouts (A) on the rotary-frame with the neutral positioning cutouts (B) on the transmission range switch (C), then put a 2.0 mm (0.08 in.) feeler gauge blade (D) in the cutouts to hold the switch in the N position.

NOTE: Be sure to use a 2.0 mm (0.08 in.) blade or equivalent to hold the switch in the N position.

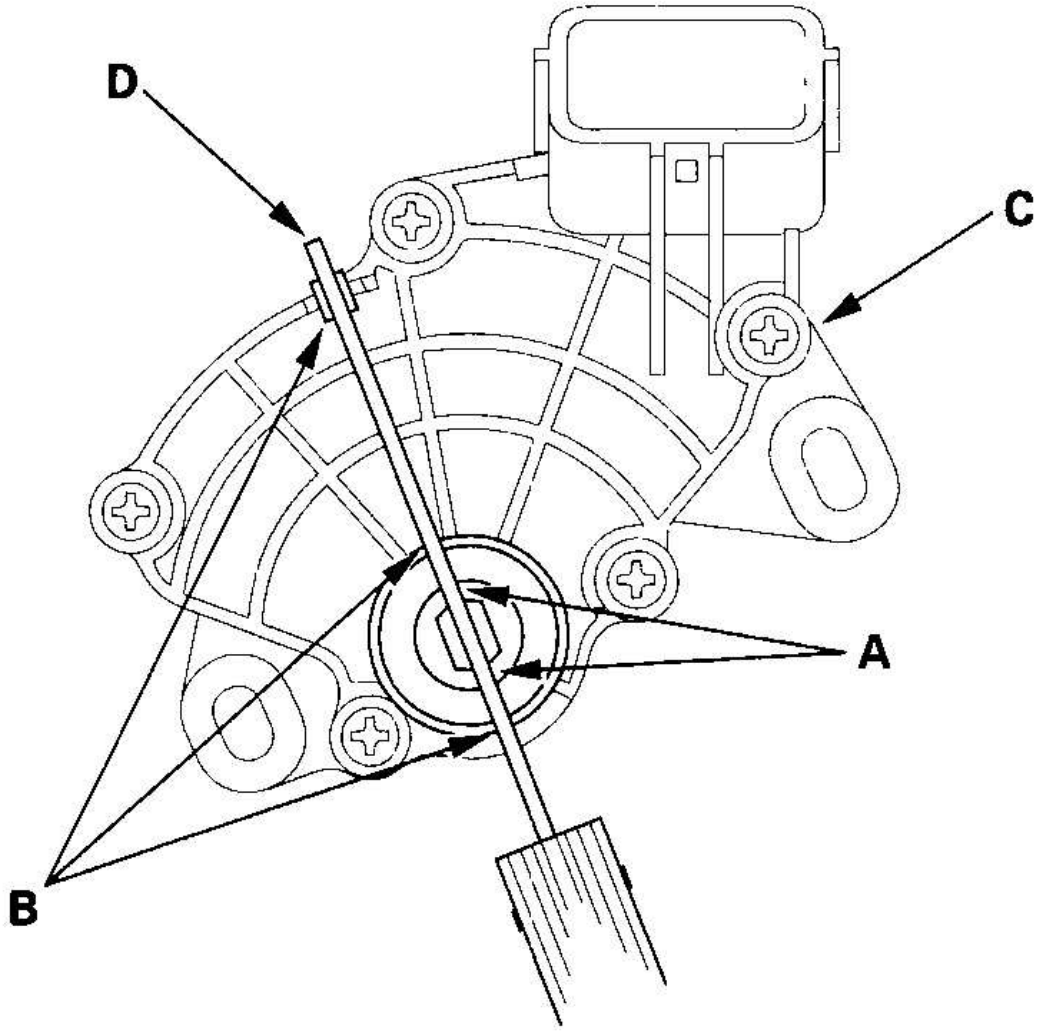
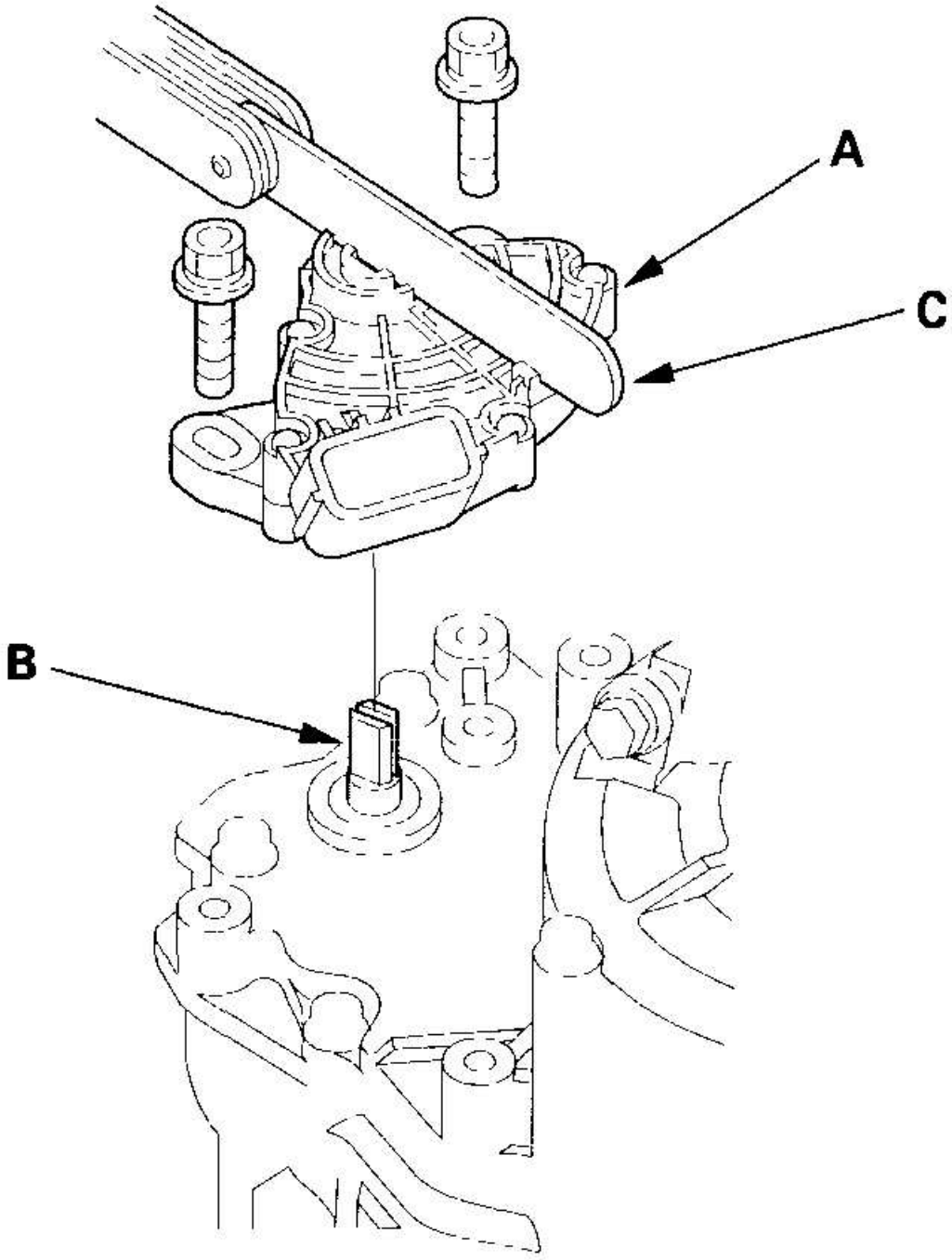


Fig. 471: Aligning Cutouts On Rotary-Frame With Neutral Positioning Cutouts On Transmission Range Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

45. Install the transmission range switch (A) gently on the selector control shaft (B) while holding it in the N position with the 2.0 mm (0.08 in.) blade (C).



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Fig. 472: Installing Transmission Range Switch On Selector Control Shaft In N Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

46. Tighten the bolts on the transmission range switch while you continue to hold it in the N position. Do not move the transmission range switch when tightening the bolts. Remove the feeler gauge.

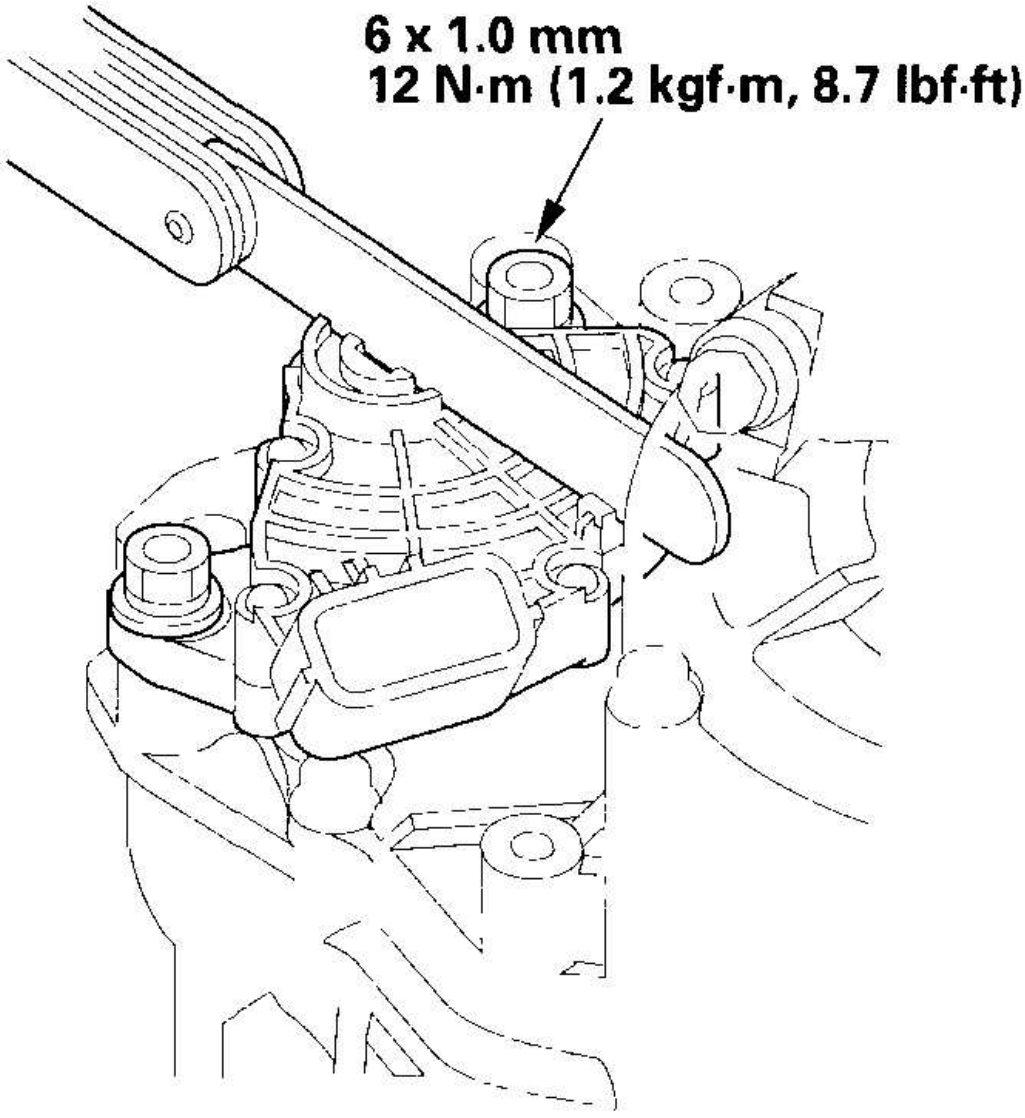


Fig. 473: Tightening Bolts On Transmission Range Switch Holding In N Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

47. Connect the transmission range switch connector (A) securely, then secure the switch harness on the end cover, harness cover bracket (B), and the clamp

bracket (C).

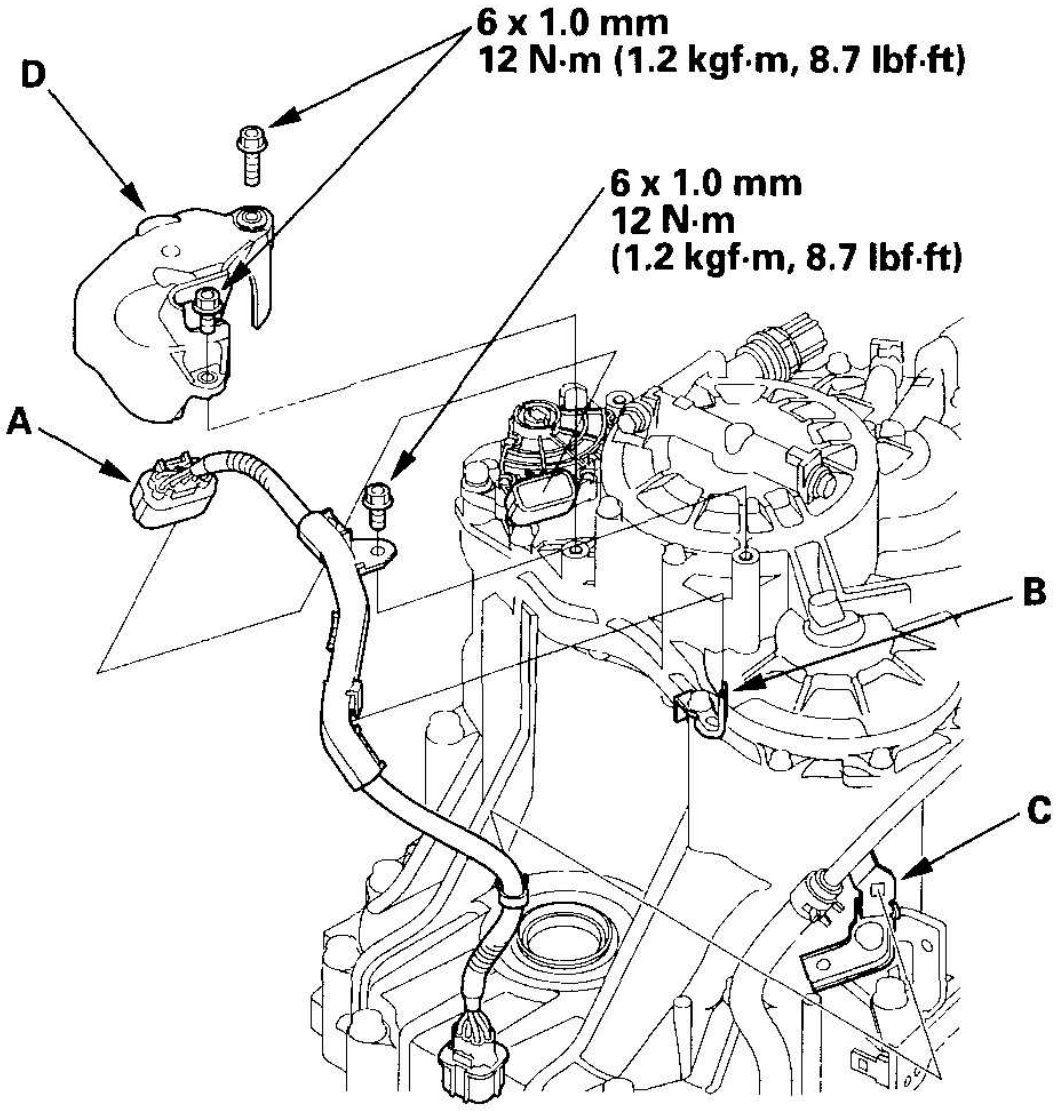


Fig. 474: Connecting Transmission Range Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

48. Install the transmission range switch cover (D).
49. Connect the 3rd clutch transmission fluid pressure switch connector (A), and install the ground terminal (B) and harness clamp (C) on the connector bracket

(D).

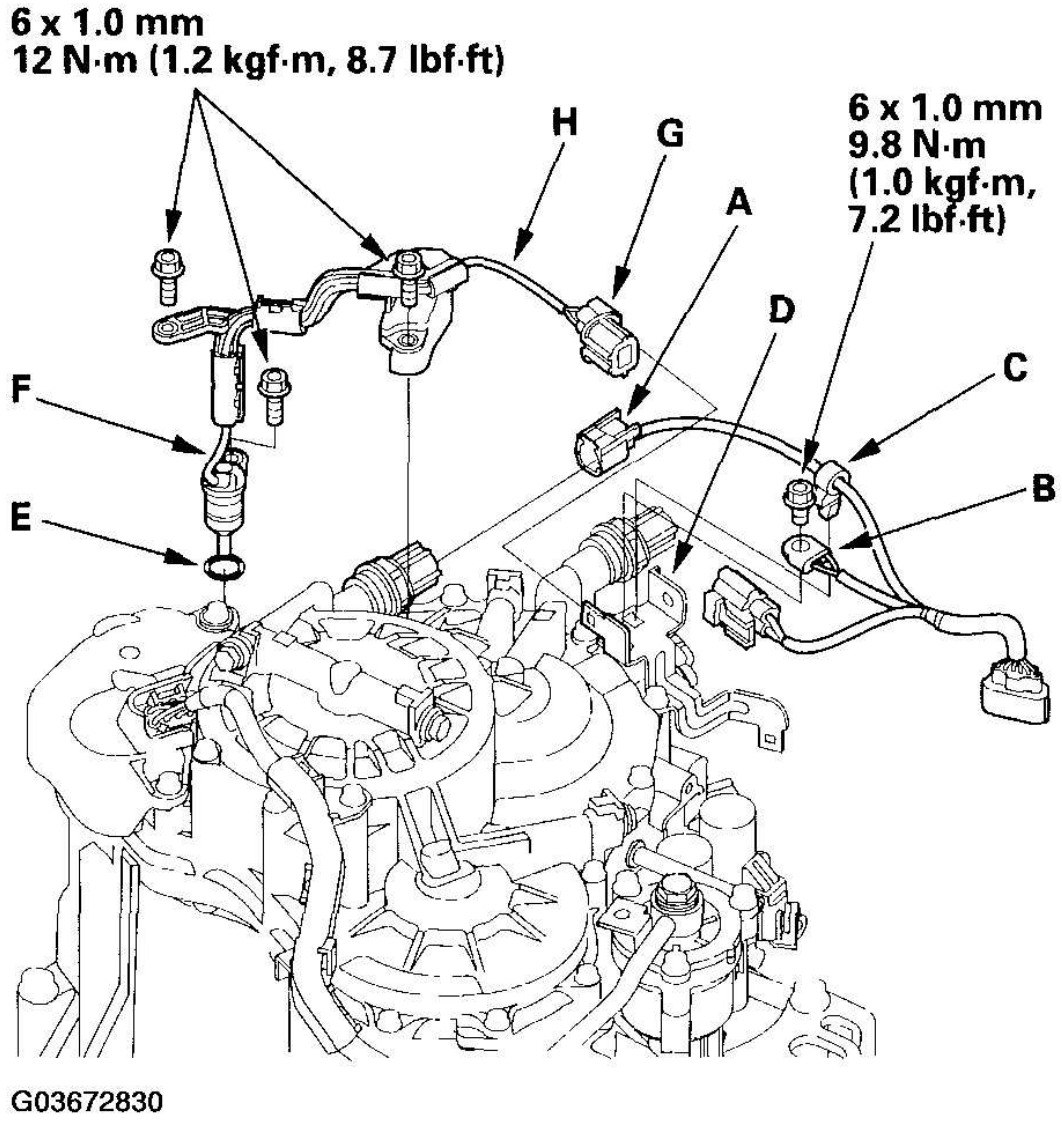


Fig. 475: Connecting 3rd Clutch Transmission Fluid Pressure Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

50. Install the new O-ring (E) on the ATF temperature sensor (F), then install the sensor in the end cover.
51. Connect the sensor connector (G), and install it on the connector bracket.

Secure the sensor harness (H) on the end cover.

52. Install the dipstick in the dipstick guide pipe.

A/T DIFFERENTIAL

COMPONENT LOCATION INDEX

2003-2005 Models:

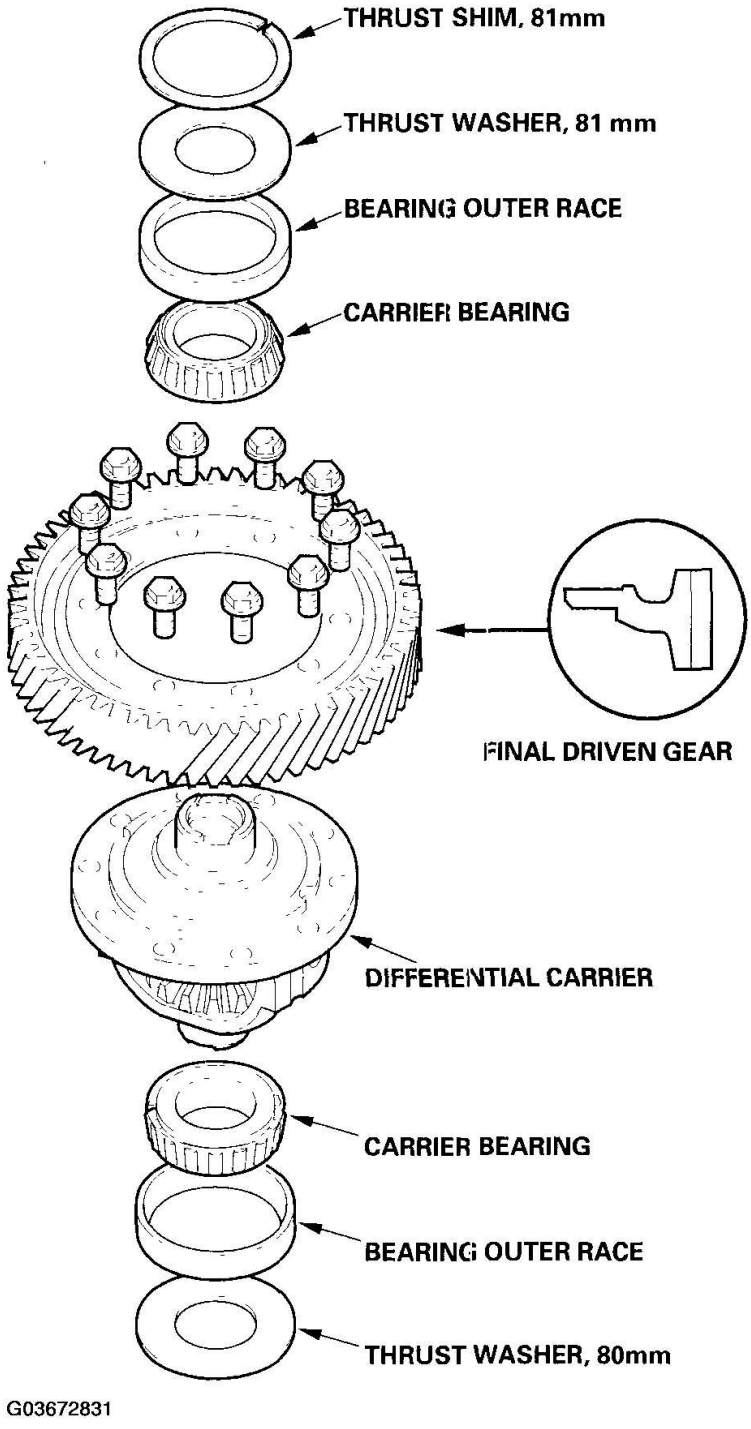


Fig. 476: Exploded View Of A/T Differential (2003-2005 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2006-07 Model:

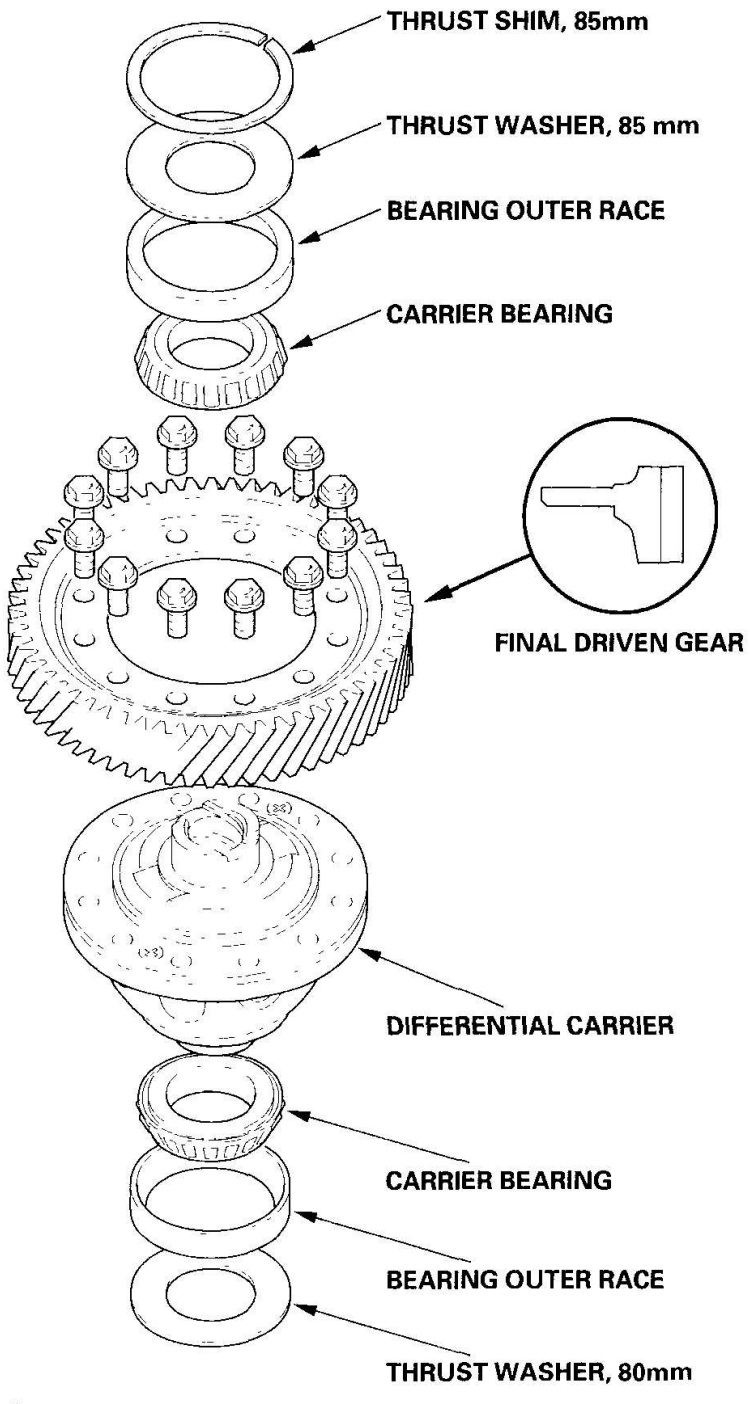


Fig. 477: Exploded View Of A/T Differential (2006-07 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BACKLASH INSPECTION

1. Install both axles into the differential, and place the axles on V-blocks (A).

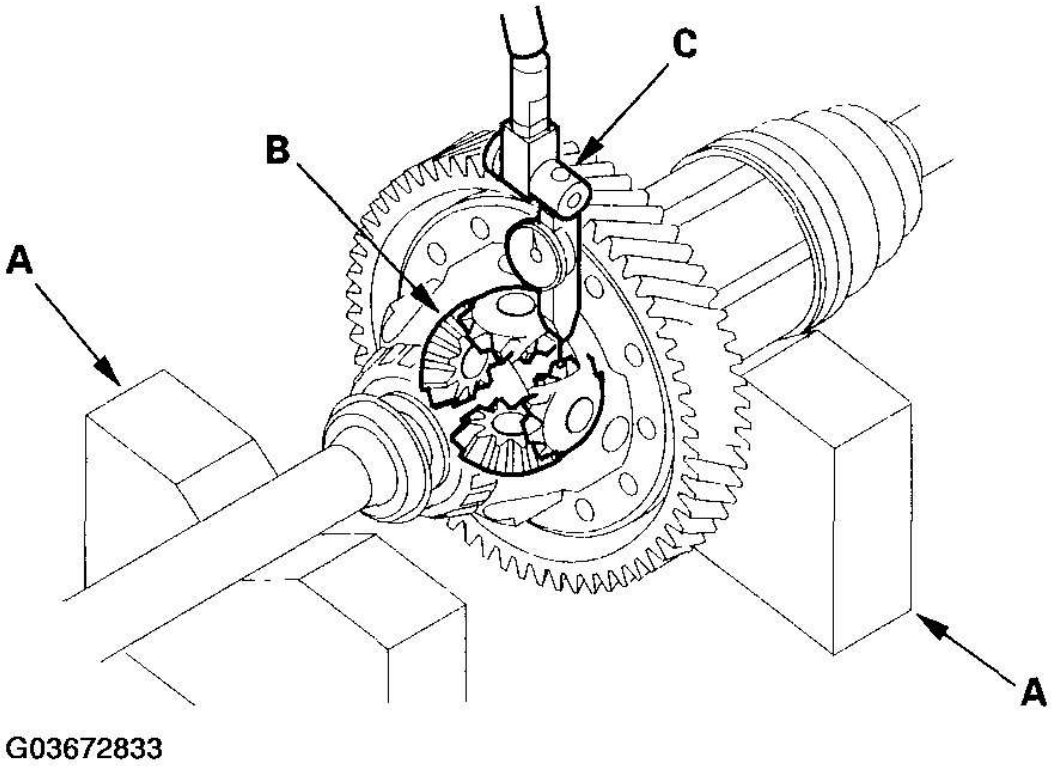


Fig. 478: Placing Axles On V-Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the backlash of the pinion gears (B) with a dial indicator (C).

   Standard: 0.05-0.15 mm (0.002-0.006 in.)

3. If the backlash is out of standard, replace the differential carrier.

DIFFERENTIAL CARRIER, FINAL DRIVEN GEAR REPLACEMENT

NOTE: Inspect and adjust the carrier bearing preload whenever the differential carrier is replaced.

1. Remove the final driven gear (A) from the differential carrier (B). The final

driven gear bolts have left-hand threads.

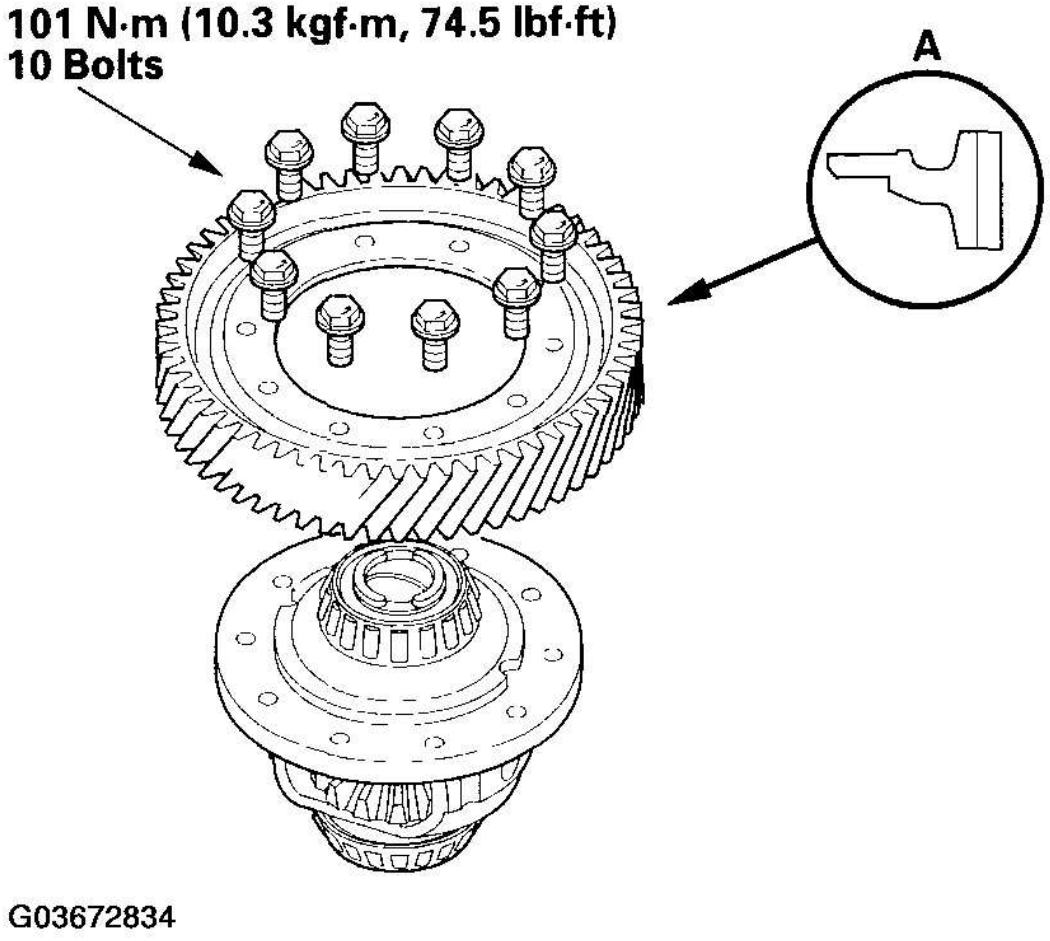


Fig. 479: Removing Final Driven Gear From Differential Carrier (2003-2005 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

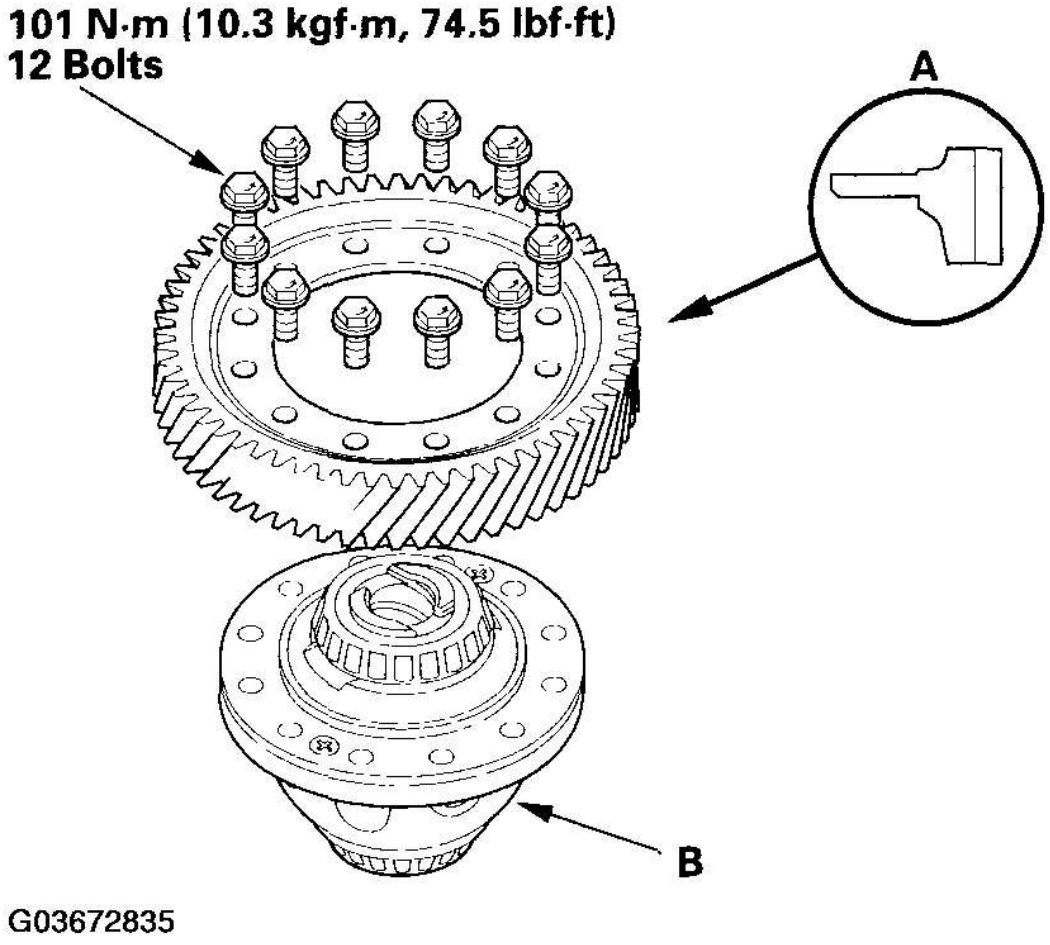


Fig. 480: Removing Final Driven Gear From Differential Carrier (2006-07 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the final driven gear on the differential carrier in the direction shown. Tighten the bolts to 101 N.m (10.3 kgf.m, 74.5 lbf.ft) in a crisscross pattern in two or more steps.

CARRIER BEARING REPLACEMENT

Special Tools Required

Attachment, 45 x 55 mm 07MAD-PR90100

NOTE:

- **The bearing and outer race should be replaced as a set.**
- **Inspect and adjust the bearing preload whenever bearing is replaced.**
- **Check the bearing for wear and rough rotation. If the bearing is OK, removal is not necessary.**

1. Remove the carrier bearing (A) with a commercially available bearing puller (B), bearing separator (C), and stepper adapter (D).

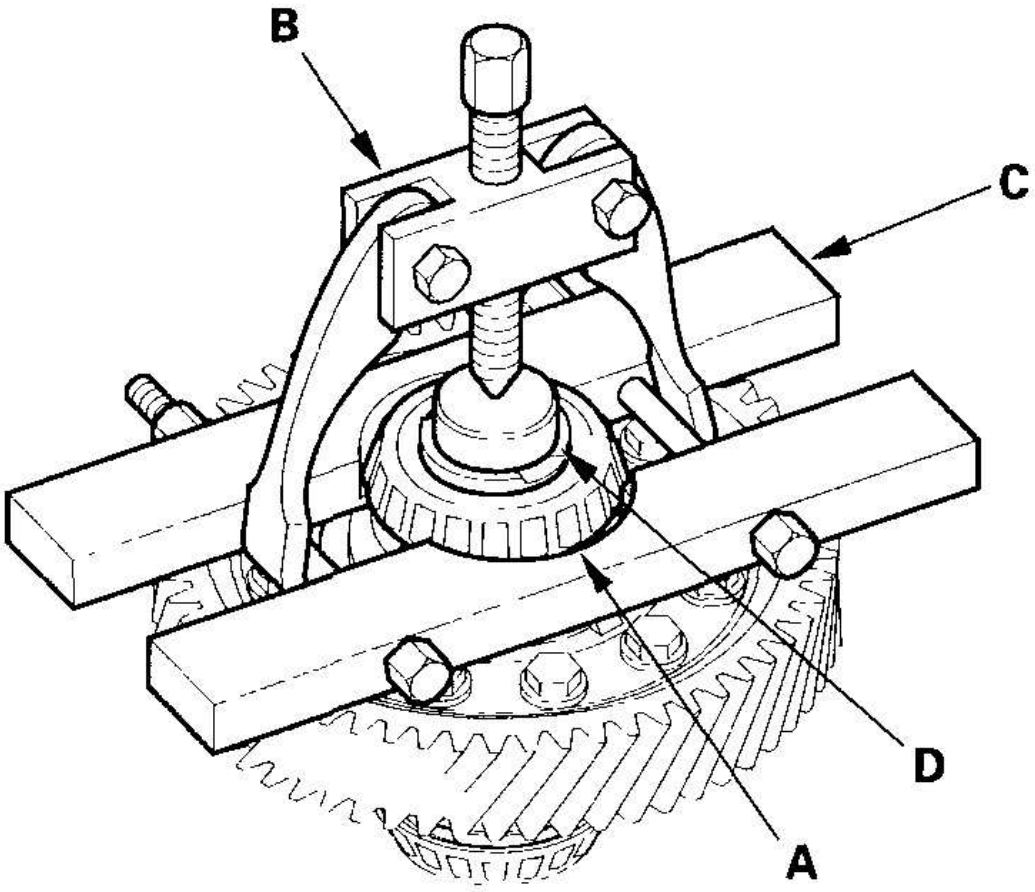


Fig. 481: Removing Carrier Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the carrier bearing with the special tool using the small end and a press until it bottoms. Press the bearing on securely so there is no clearance between the bearing and the differential carrier.

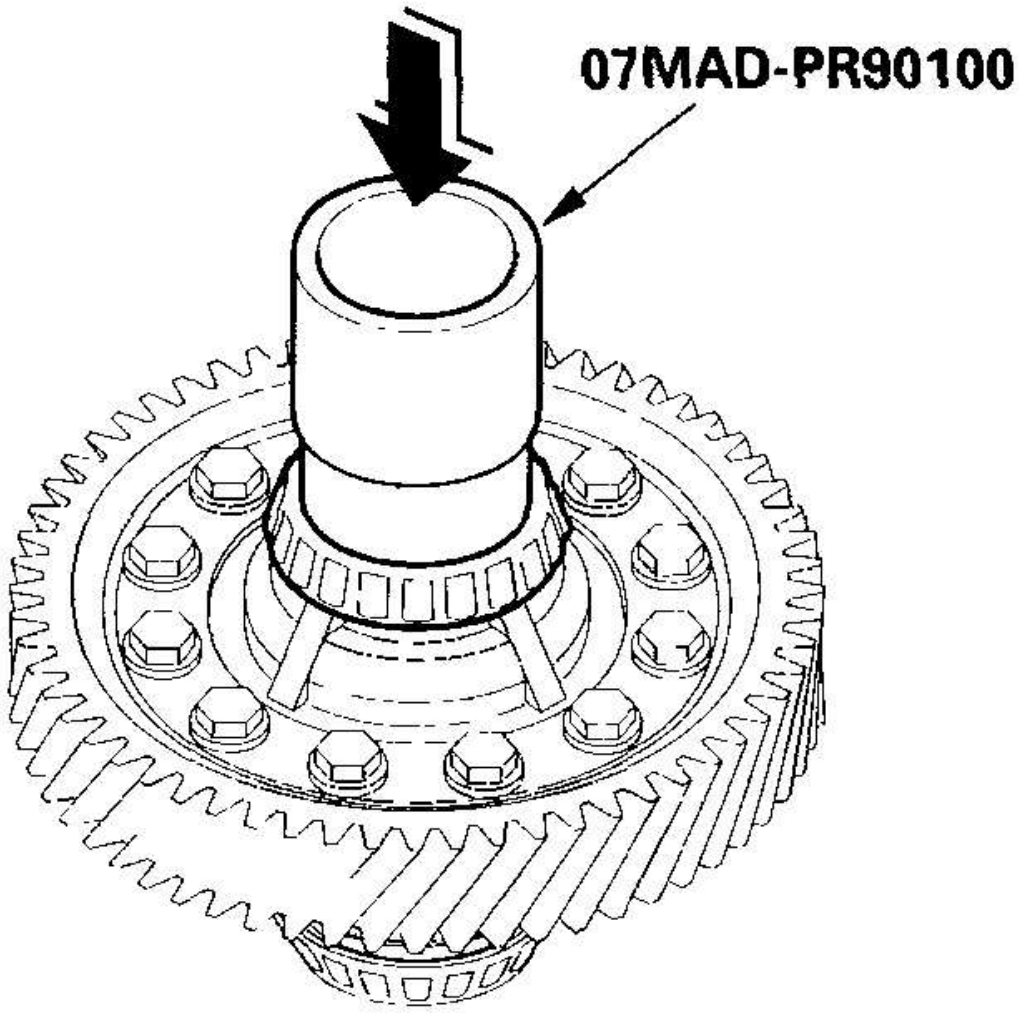


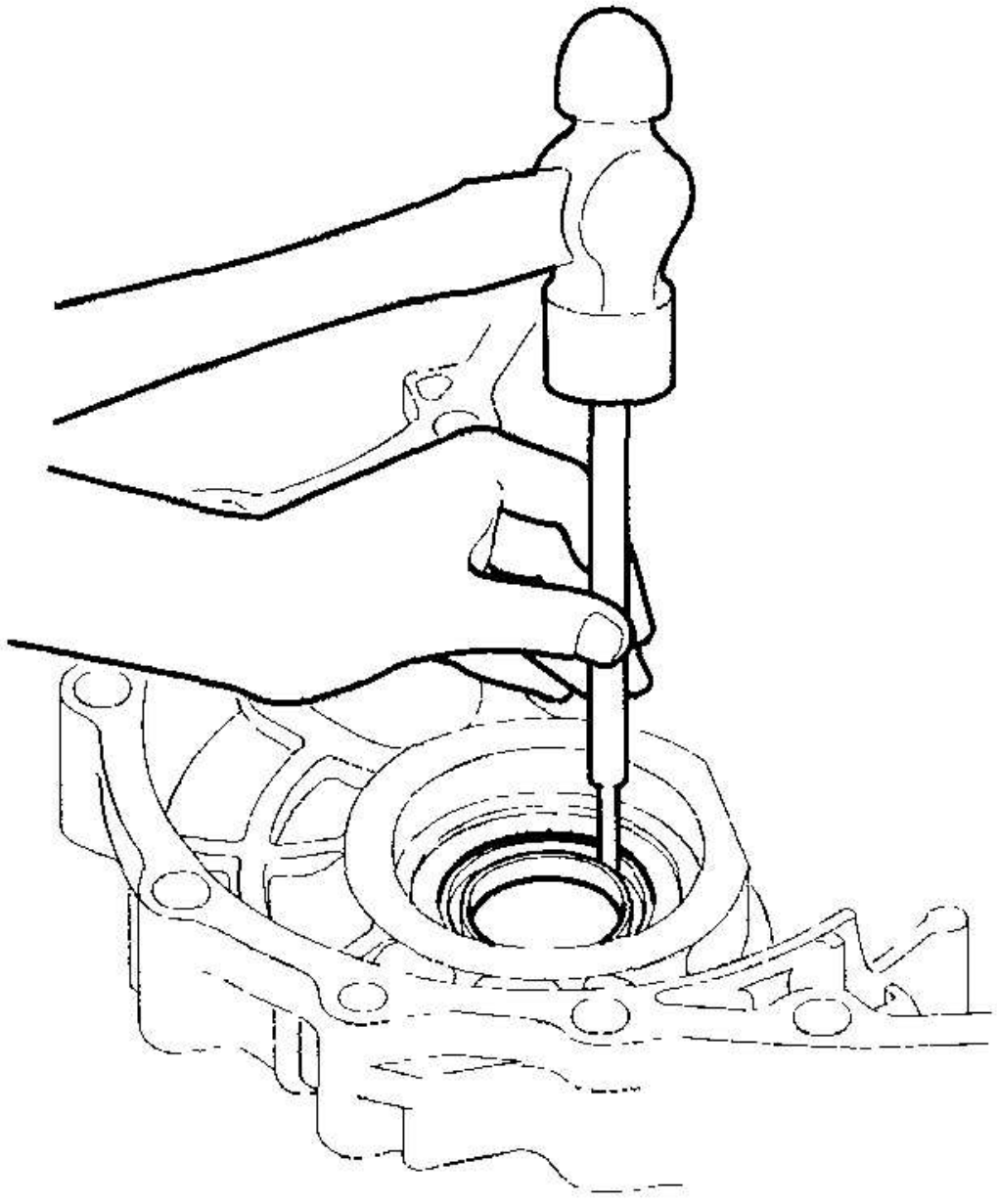
Fig. 482: Installing Carrier Bearing With Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

OIL SEAL REPLACEMENT

Special Tools Required

- Driver 07749-0010000
- Seal driver attachment 07GAD-PG40101 or07GAD-PG40100
- Oil seal driver attachment 07JAD-PH80101

1. Remove the oil seal from the transmission housing.



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Fig. 483: Removing Oil Seal From Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the oil seal from the torque converter housing.

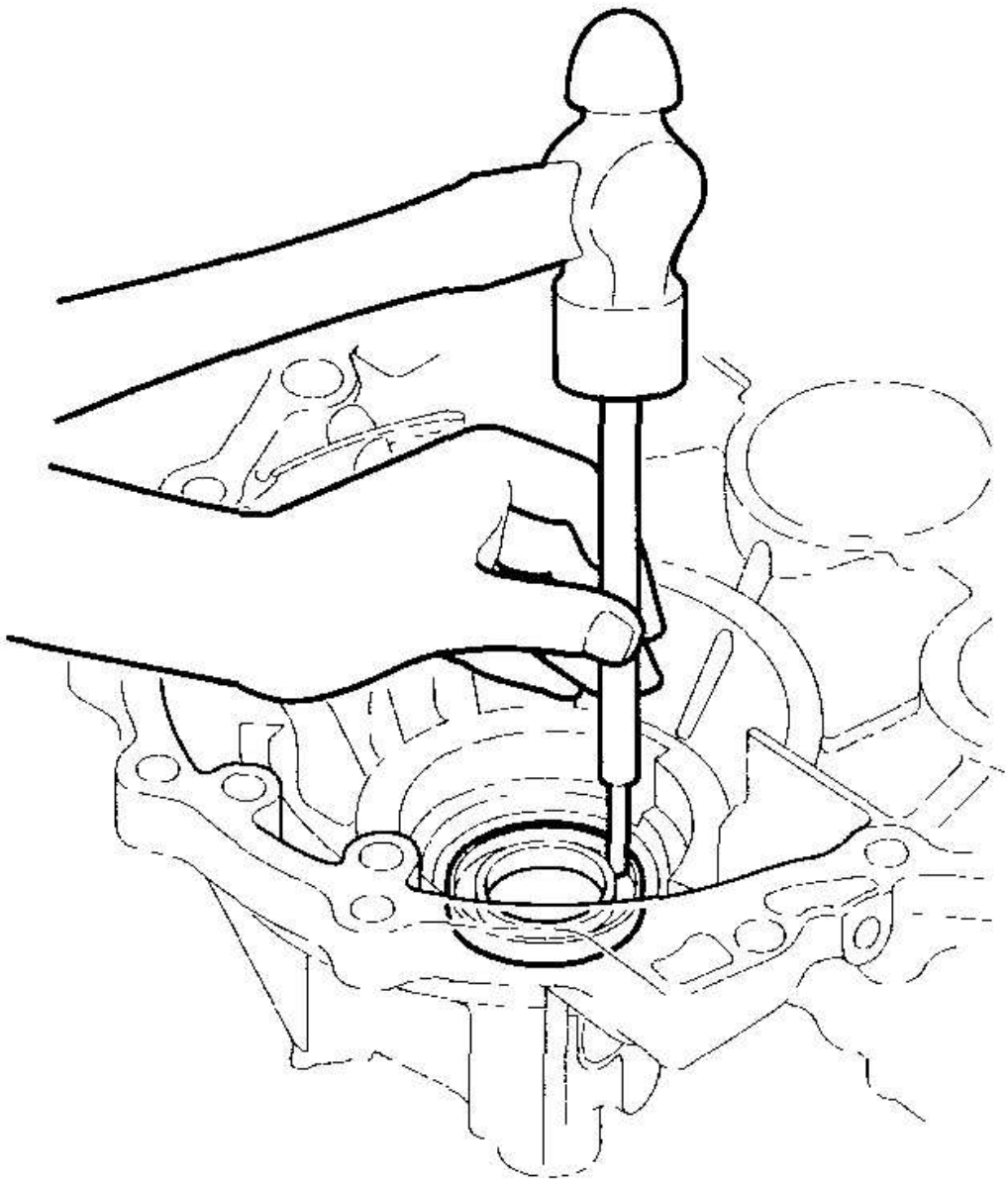


Fig. 484: Removing Oil Seal From Torque Converter Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the new oil seal (A) in the transmission housing with the special tools.

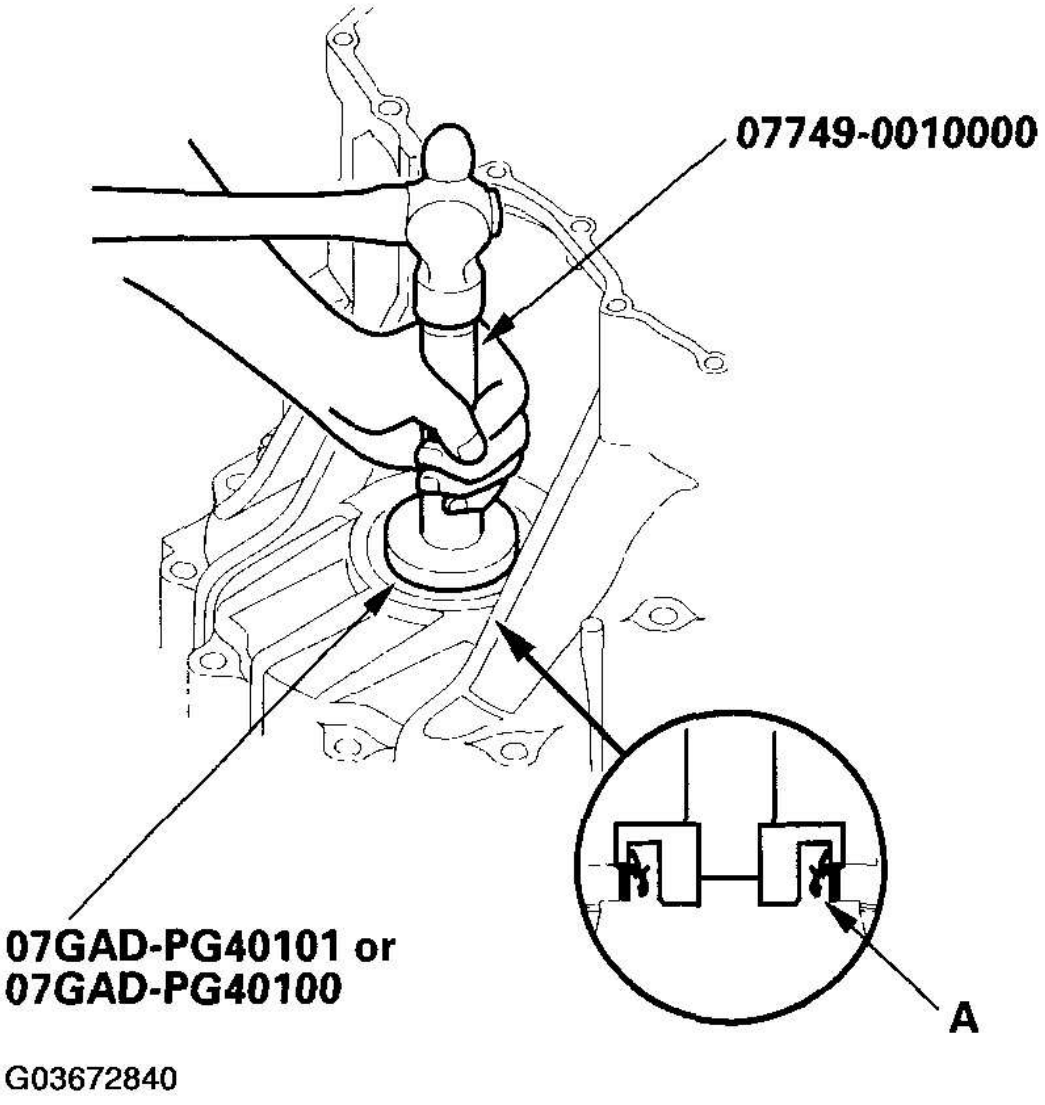


Fig. 485: Installing Oil Seal In Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the oil seal (A) in the torque converter housing with the special tools.

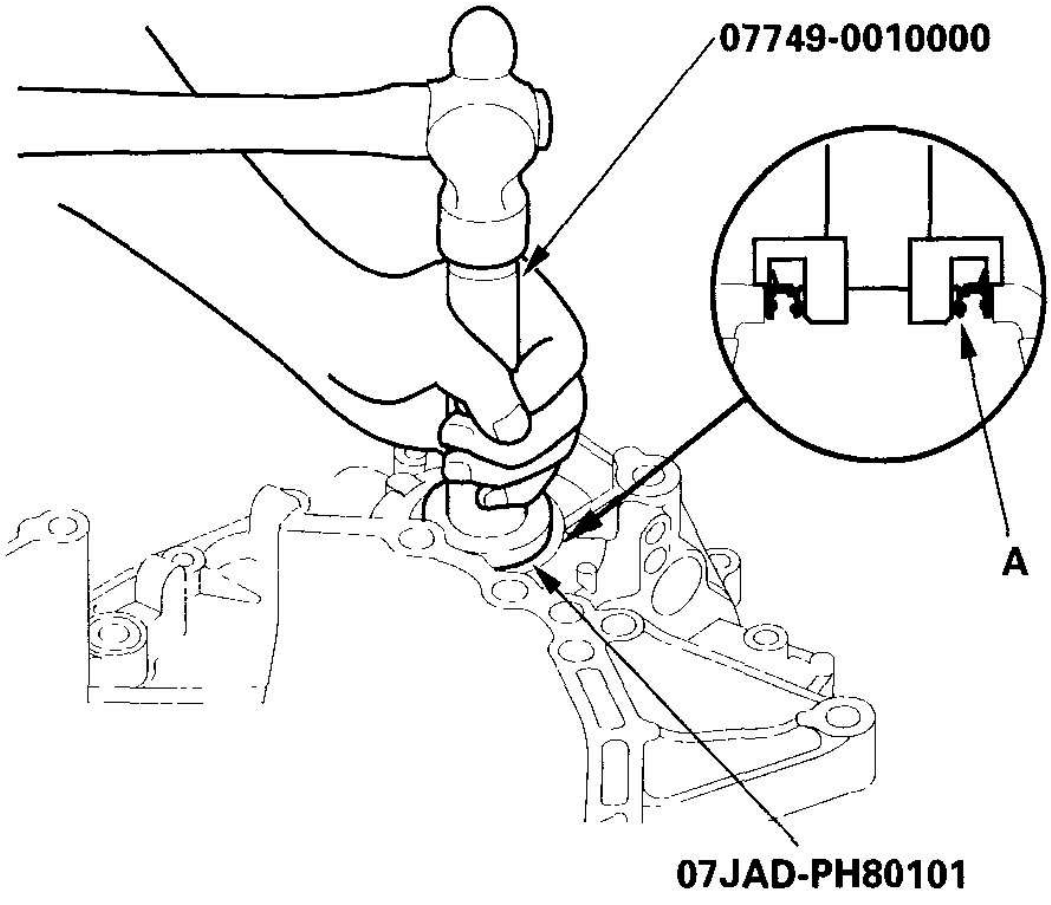


Fig. 486: Installing Oil Seal In Torque Converter Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CARRIER BEARING OUTER RACE REPLACEMENT

Special Tools Required

- Driver 07749-0010000
- Attachment, 78 x 80 mm 07NAD-PX40100
- Attachment, 78 x 90 mm 07GAD-SD4010K(2006-07 model)

NOTE: • **The bearing and bearing outer race should be replaced**

as a set.

- **Replace the bearing with a new one whenever the outer race is replaced.**
- **Do not use shim(s) on the torque converter housing side.**
- **Adjust bearing preload after replacing the bearing and outer race.**
- **Coat all parts with ATF during installation.**

1. Remove the bearing outer race (A), thrust washer (B), and thrust shim (C) from the transmission housing (D) by heating the housing to about 212°F (100°C) with a heat gun (E). Do not heat the housing to more than 212°F (100°C).

NOTE: Let the transmission housing cool to room temperature before installing the bearing outer race.

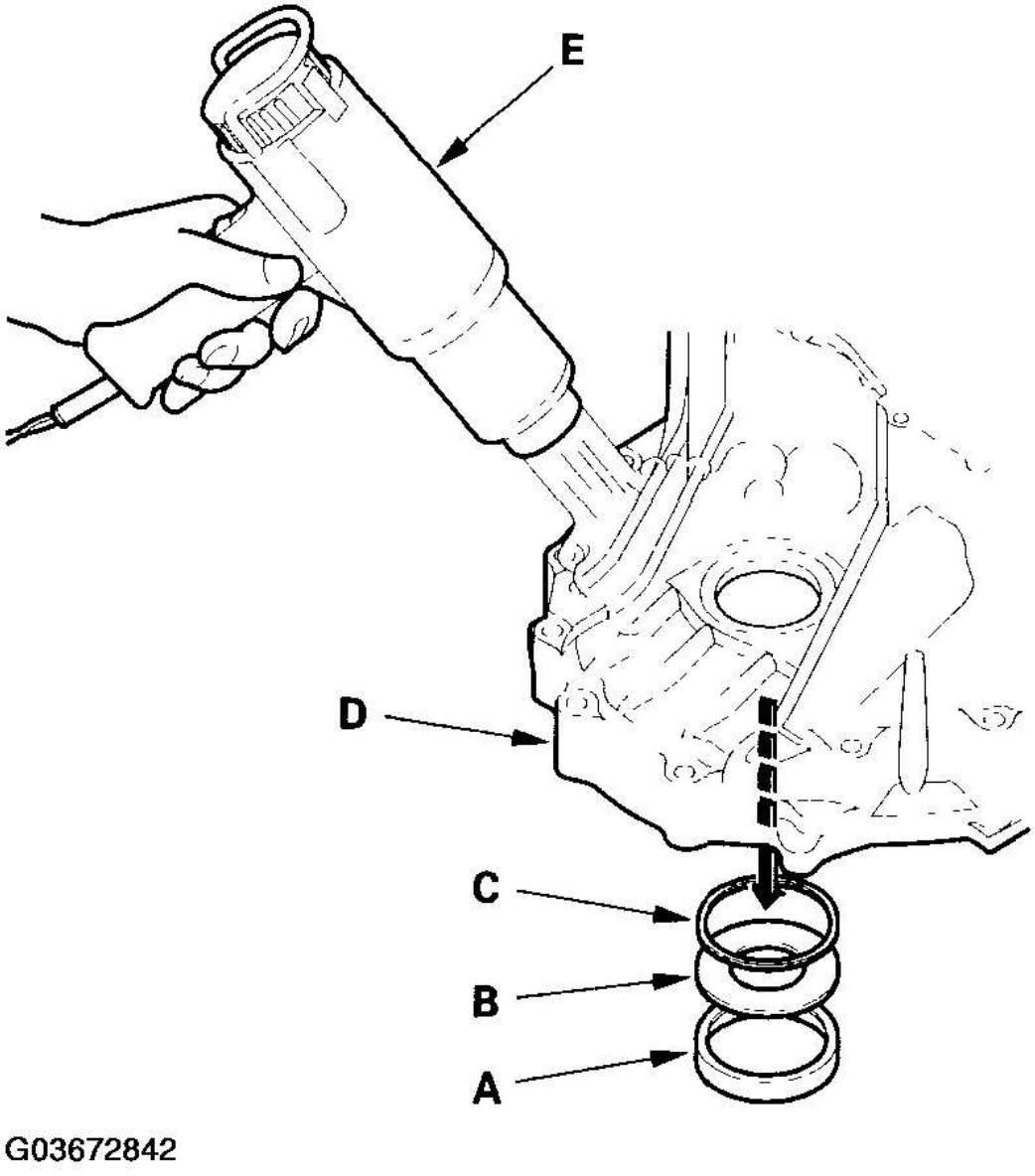


Fig. 487: Removing Bearing Outer Race, Thrust Washer And Thrust Shim From Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the bearing outer race (A) and thrust washer (B) from the torque converter housing (C).

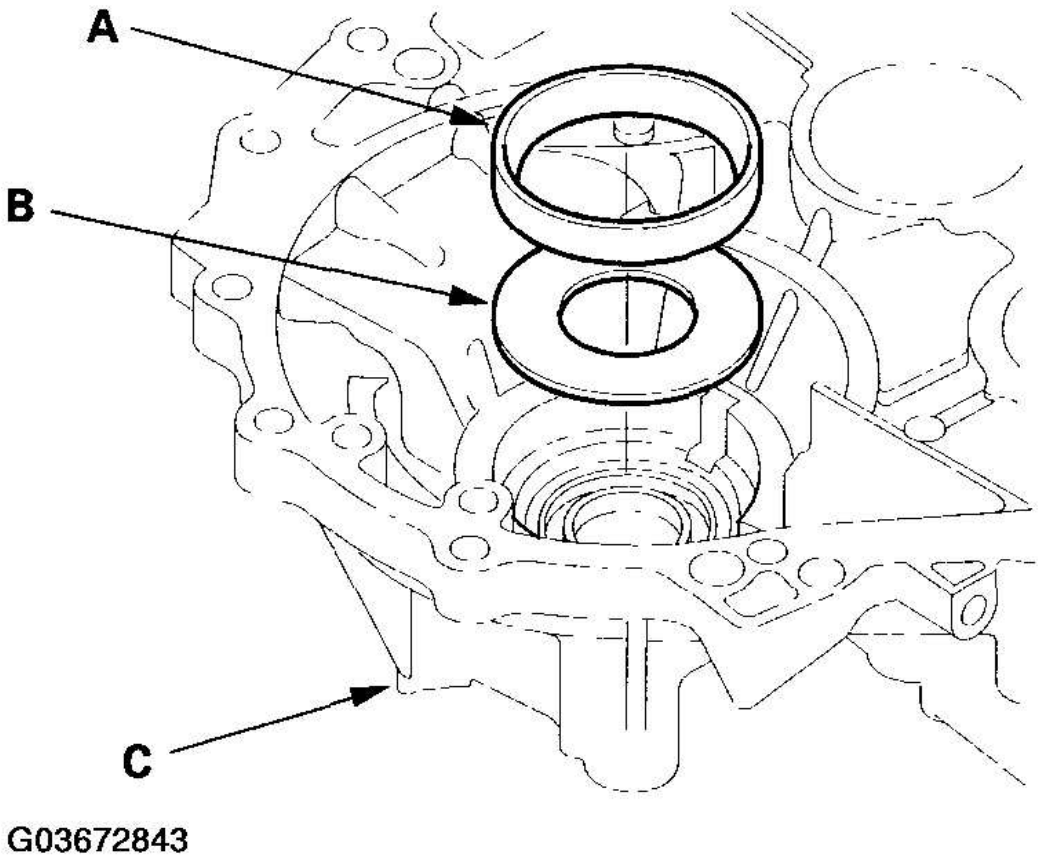


Fig. 488: Removing Bearing Outer Race And Thrust Washer From Torque Converter Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the thrust washer and the new bearing outer race in the torque converter housing.
4. Drive the bearing outer race into the housing with the special tools.

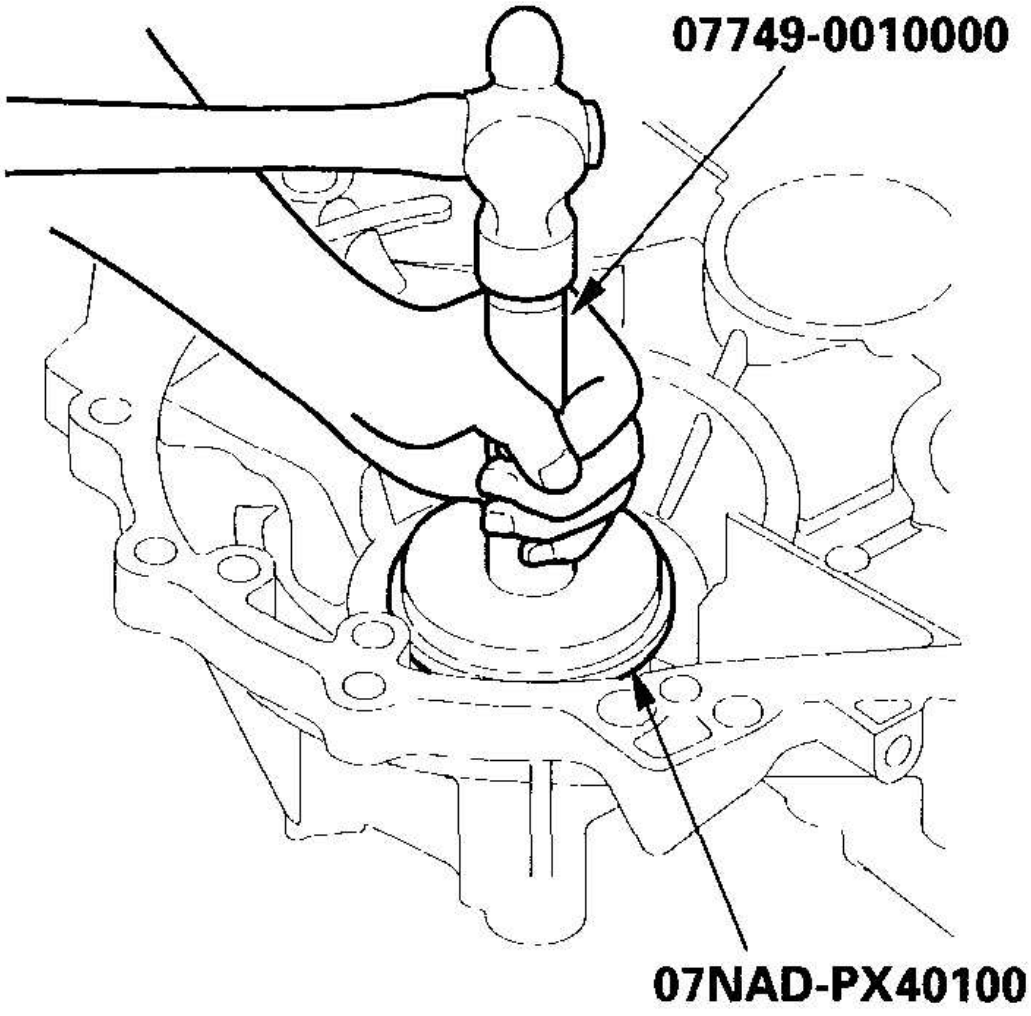


Fig. 489: Driving Bearing Outer Race Into Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the thrust shim (A), thrust washer (B), and the new bearing outer race (C) in the transmission housing (D).

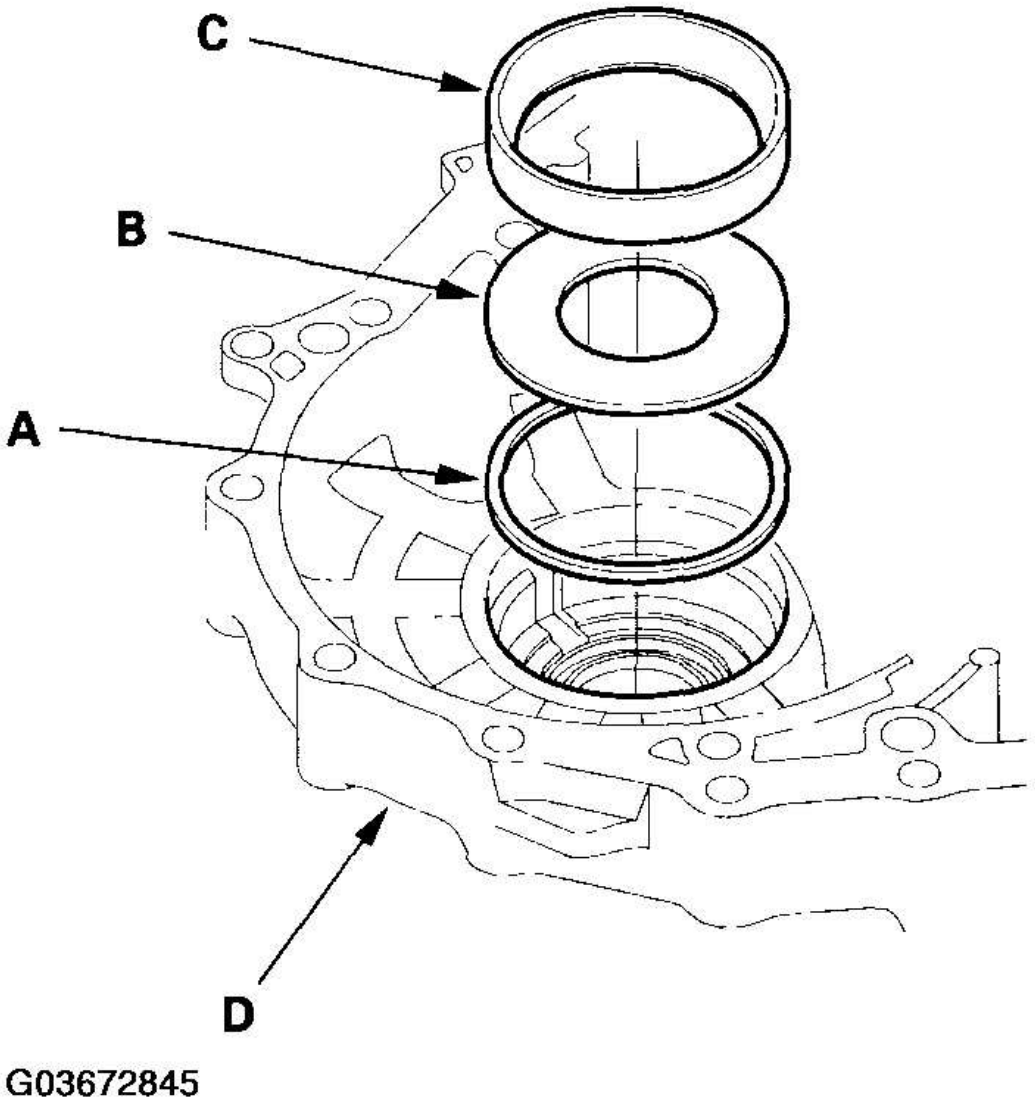


Fig. 490: Installing Thrust Shim, Thrust Washer And Bearing Outer Race
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Drive the bearing outer race into the housing with the special tools so there is no clearance between the outer race, thrust washer, shim and housing.

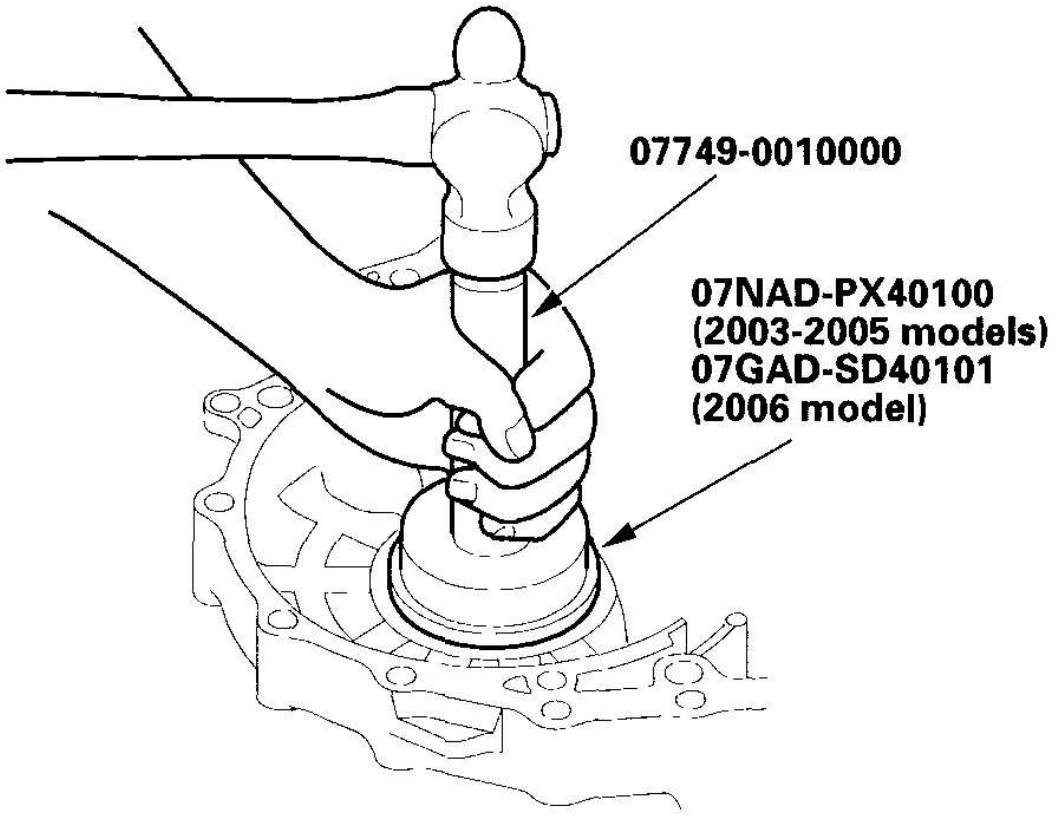


Fig. 491: Driving Bearing Outer Race Into Housing Into Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CARRIER BEARING PRELOAD INSPECTION

Special Tools Required

- Driver 07749-0010000
- Attachment, 78 x 80 mm 07NAD-PX40100
- Preload inspection tool 07HAJ-PK40201

2003-2005 Models

NOTE: If the transmission housing, torque converter housing, differential carrier, tapered roller bearing, outer race, or

thrust shim were replaced, the bearing preload must be adjusted.

1. Remove the bearing outer race (A), thrust washer (B), and thrust shim (C) from the transmission housing (D) by heating the housing to about 212°F (100°C) with a heat gun (E). Do not heat the housing to more than of 212°F (100°C).

NOTE: Let the transmission housing cool to room temperature before adjusting the bearing preload.

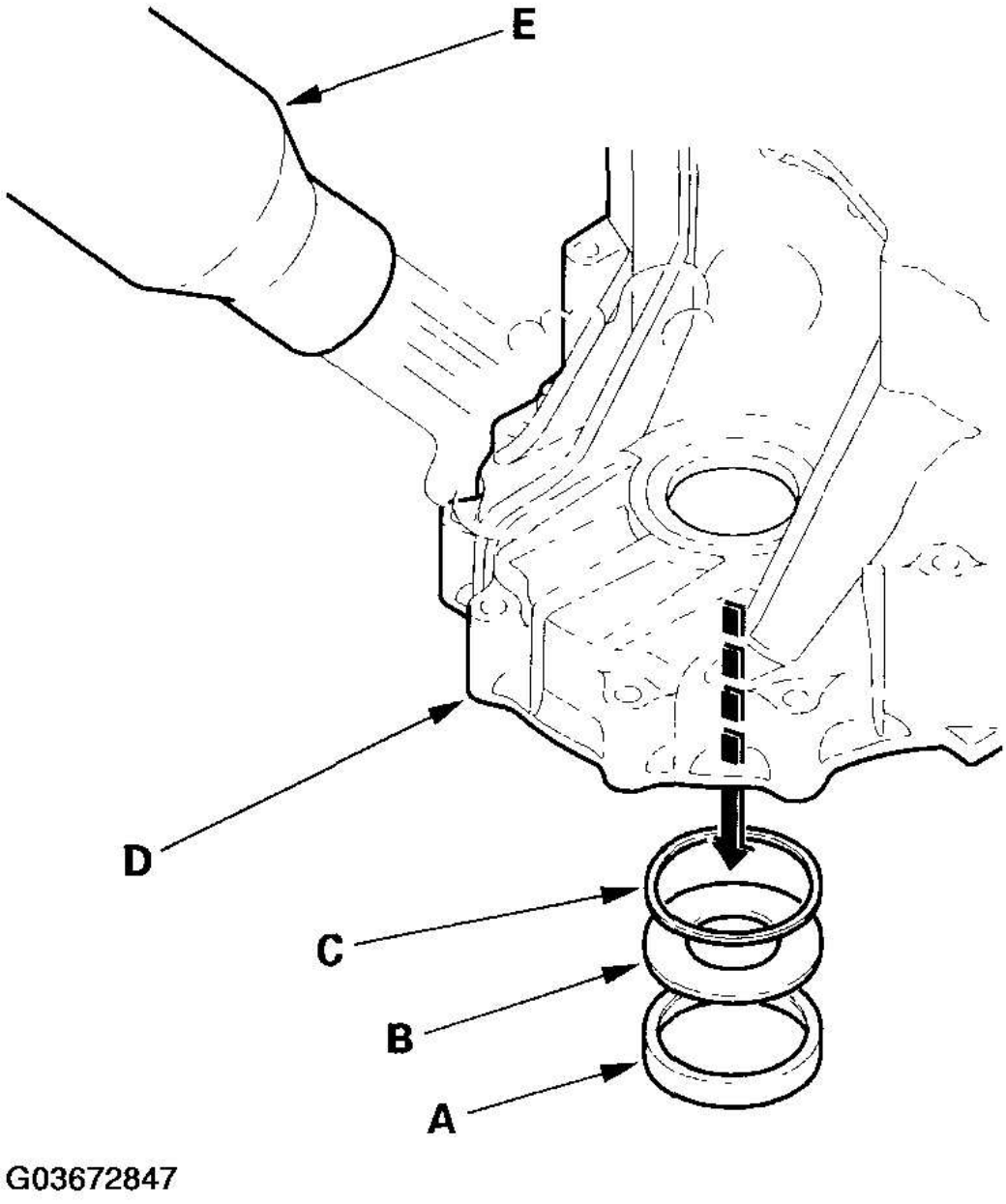


Fig. 492: Removing Bearing Outer Race, Thrust Washer And Thrust Shim From Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Replace the tapered roller bearing when the outer race is to be replaced.

3. Do not use a shim on the torque converter housing side.
4. Install the 81 mm thrust shim (A), thrust washer (B), and bearing outer race (C) in the transmission housing (D).

   If you replace the 81 mm thrust shim with a new one, use the same thickness shim as the old one.

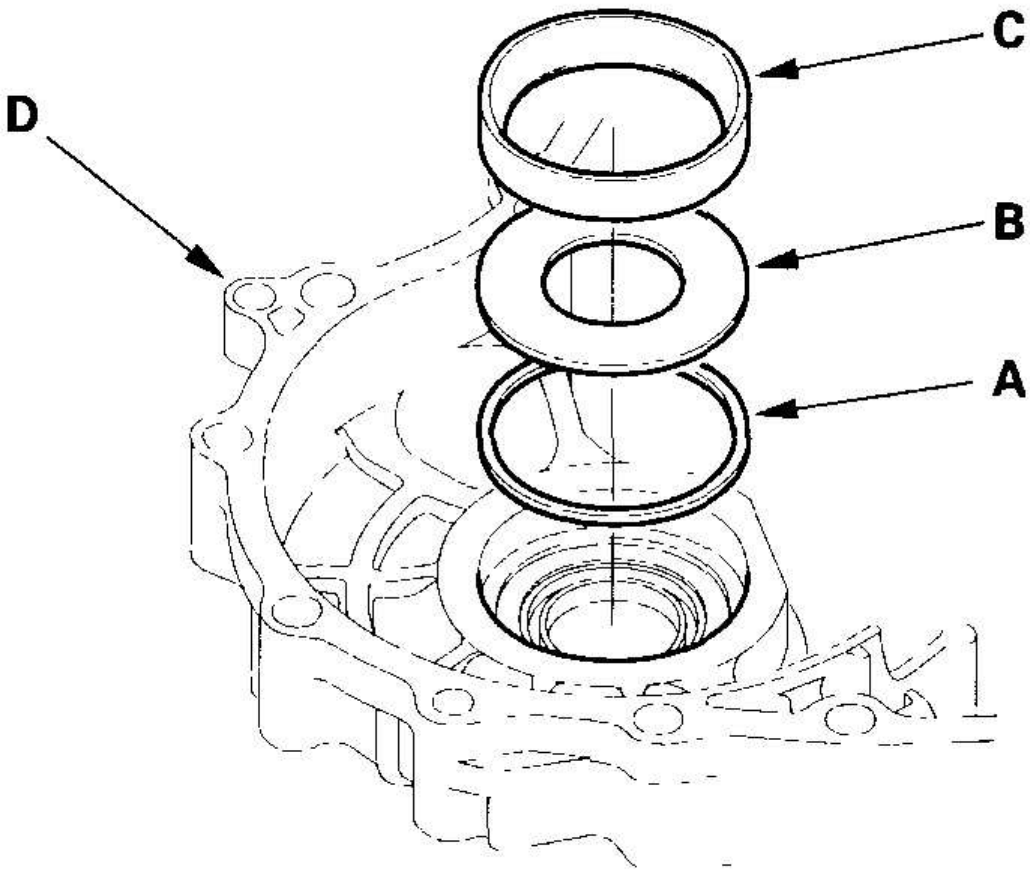


Fig. 493: Installing Thrust Shim, Thrust Washer And Bearing Outer Race In Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Drive in the outer race with the special tools.

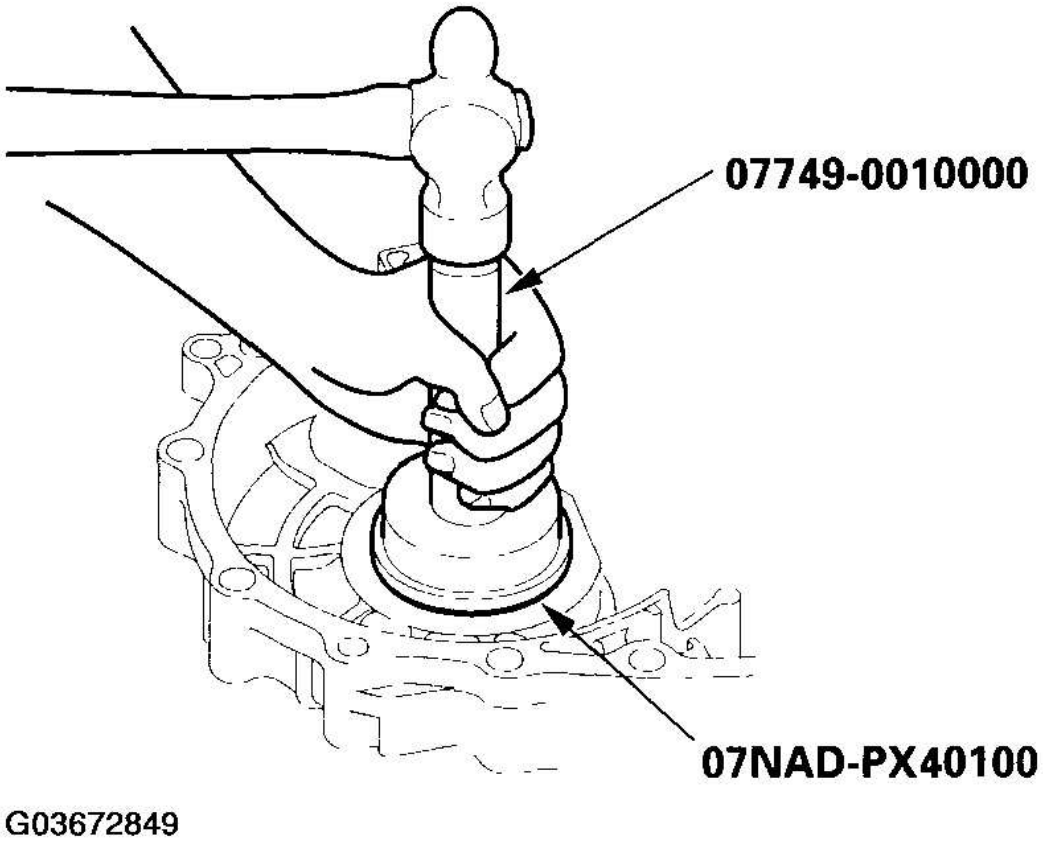


Fig. 494: Driving Outer Race With Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Check that there is no clearance between the thrust washer, outer race, shim, and transmission housing.
7. Install the differential assembly (A) in the torque converter housing (B), and install the gasket (C) and dowel pins (D) on the housing.

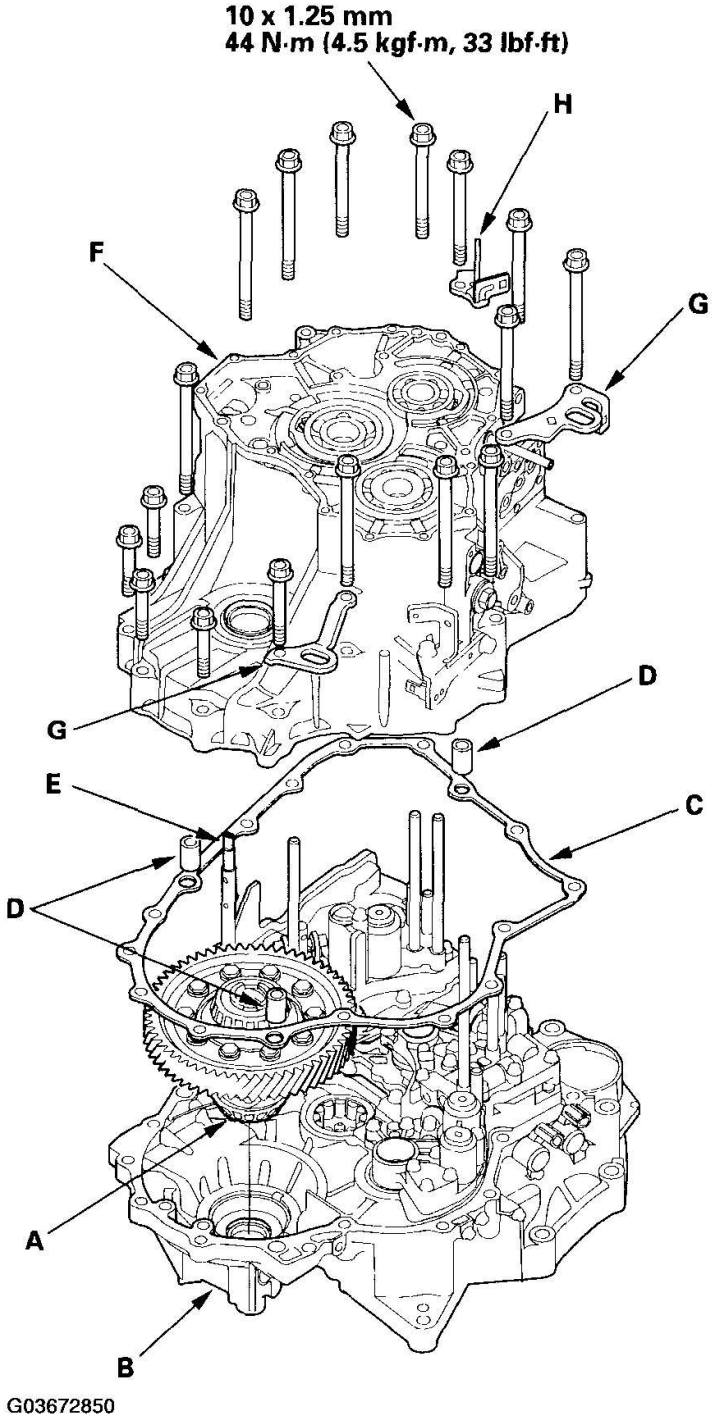


Fig. 495: Installing Differential Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Align the spring pin on the selector control shaft (E) with the transmission housing groove.
9. Install the transmission housing (F), transmission hangers (G), and harness clamp bracket (H) then tighten the bolts.
10. Rotate the differential assembly in both directions to seat the bearing.
11. Measure the starting torque of the differential assembly with the special tool, a torque wrench (A) and socket (B) at normal room temperature in both directions.

Standard

New bearing: 2.7-3.9 Nm (28-40 kgf.cm, 24-35 lbf.in.)
Reused bearings: 2.5-3.6 Nm (25-37 kgf.cm, 22-32 lbf.in.)

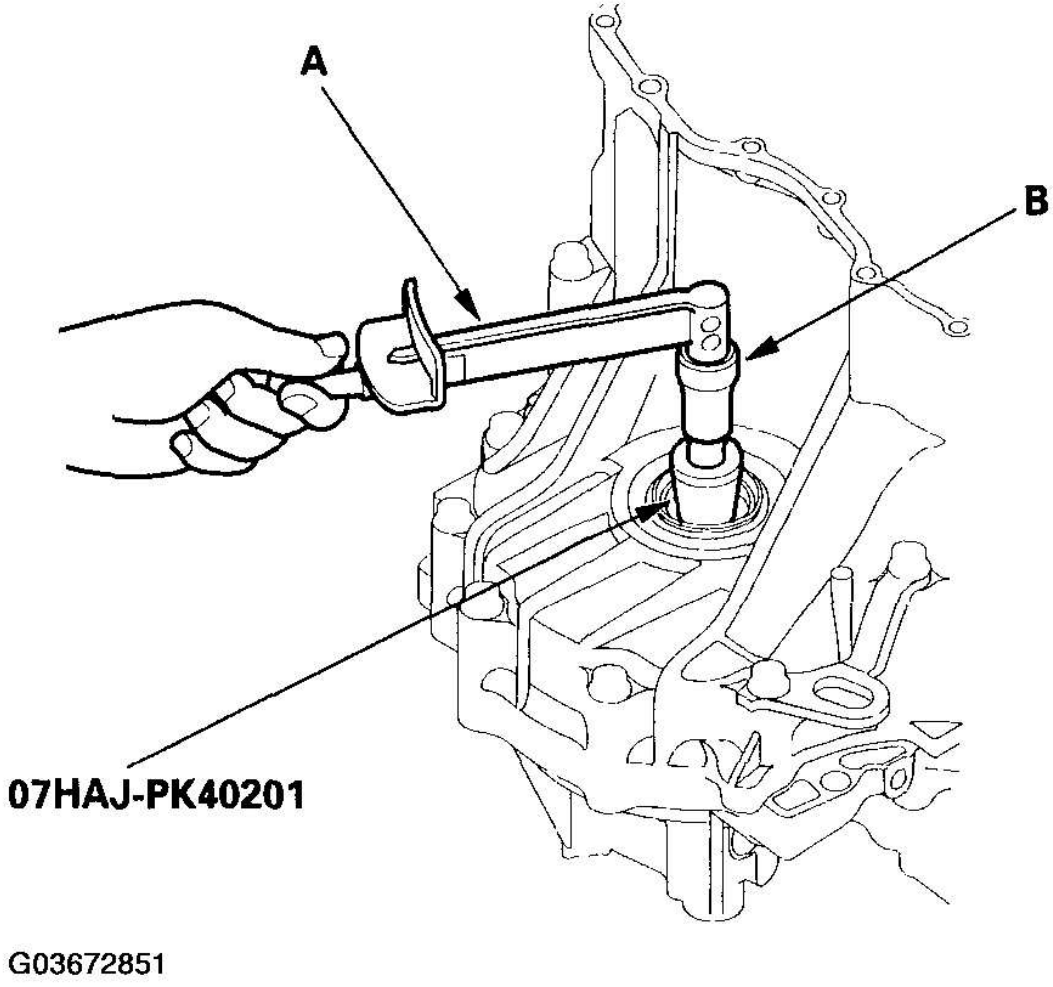


Fig. 496: Measuring Starting Torque With Special Tool, Torque Wrench And Socket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. If the measurement is out of standard, remove the thrust shim and select the thrust shim from **THRUST SHIM, 81 mm** . Install the new thrust shim and recheck. To increase the starting torque, increase the thickness of the thrust shim. To decrease the starting torque, decrease the thickness of the shim. Changing the shim to the next size will increase or decrease starting torque about 0.3-0.4 N.m (3-4 kgf.cm, 3-3 lbf.in.).

THRUST SHIM, 81 mm

No.	Part Number	Thickness
A	41438-P7T-700	2.05 mm (0.081 in.)
AA	41438-PGH-000	2.075 mm (0.082 in.)
B	41439-P7T-700	2.10 mm (0.083 in.)
BB	41439-PGH-000	2.125 mm (0.084 in.)
C	41440-P7T-700	2.15 mm (0.085 in.)
CC	41440-PGH-000	2.175 mm (0.086 in.)
D	41441-P7T-000	2.20 mm (0.087 in.)
DD	41441-PGH-000	2.225 mm (0.088 in.)
E	41442-P7T-000	2.25 mm (0.089 in.)
EE	41442-PGH-000	2.275 mm (0.090 in.)
F	41443-P7T-000	2.30 mm (0.091 in.)
FF	41443-PGH-000	2.325 mm (0.092 in.)
G	41444-P7T-000	2.35 mm (0.093 in.)
GG	41444-PGH-000	2.375 mm (0.094 in.)
H	41445-P7T-000	2.40 mm (0.094 in.)
HH	41445-PGH-000	2.425 mm (0.095 in.)
I	41446-P7T-000	2.45 mm (0.096 in.)
II	41446-PGH-000	2.475 mm (0.097 in.)
J	41447-P7T-000	2.50 mm (0.098 in.)
JJ	41447-PGH-000	2.525 mm (0.099 in.)
K	41448-P7T-000	2.55 mm (0.100 in.)
KK	41448-PGH-000	2.575 mm (0.101 in.)
L	41449-P7T-000	2.60 mm (0.102 in.)
LL	41449-PGH-000	2.625 mm (0.103 in.)
M	41450-P7T-000	2.65 mm (0.104 in.)
MM	41450-PGH-000	2.675 mm (0.105 in.)
N	41451-P7T-000	2.70 mm (0.106 in.)
NN	41451-PGH-000	2.725 mm (0.107 in.)
0	41452-P7T-000	2.75 mm (0.108 in.)
00	41452-PGH-000	2.775 mm (0.109 in.)

P	41453-P7T-000	2.80 mm (0.110 in.)
PP	41453-PGH-000	2.825 mm (0.111 in.)
Q	41454-P7T-000	2.85 mm (0.112 in.)
QQ	41454-PGH-000	2.875 mm (0.113 in.)
R	41455-P7T-000	2.90 mm (0.114 in.)
RR	41455-PGH-000	2.925 mm (0.115 in.)
S	41456-P7T-000	2.95 mm (0.116 in.)
SS	41456-PGH-000	2.975 mm (0.117 in.)
T	41457-P7T-000	3.00 mm (0.118 in.)
TT	41457-PGH-000	3.025 mm (0.119 in.)
U	41458-P7T-000	3.05 mm (0.120 in.)

Special Tools Required

- Driver 07749-0010000
- Attachment, 78 x 90 mm 07GAD-SD40101
- Preload inspection tool 070AJ-0020101

2006-07 Models

NOTE: If the transmission housing, torque converter housing, differential carrier, tapered roller bearing, outer race, or thrust shim were replaced, the bearing preload must be adjusted.

1. Remove the bearing outer race (A), thrust washer (B), and thrust shim (C) from the transmission housing (D) by heating the housing to about 212°F (100°C) with a heat gun (E). Do not heat the housing to more than of 212°F (100°C).

NOTE: Let the transmission housing cool to room temperature before adjusting the bearing preload.

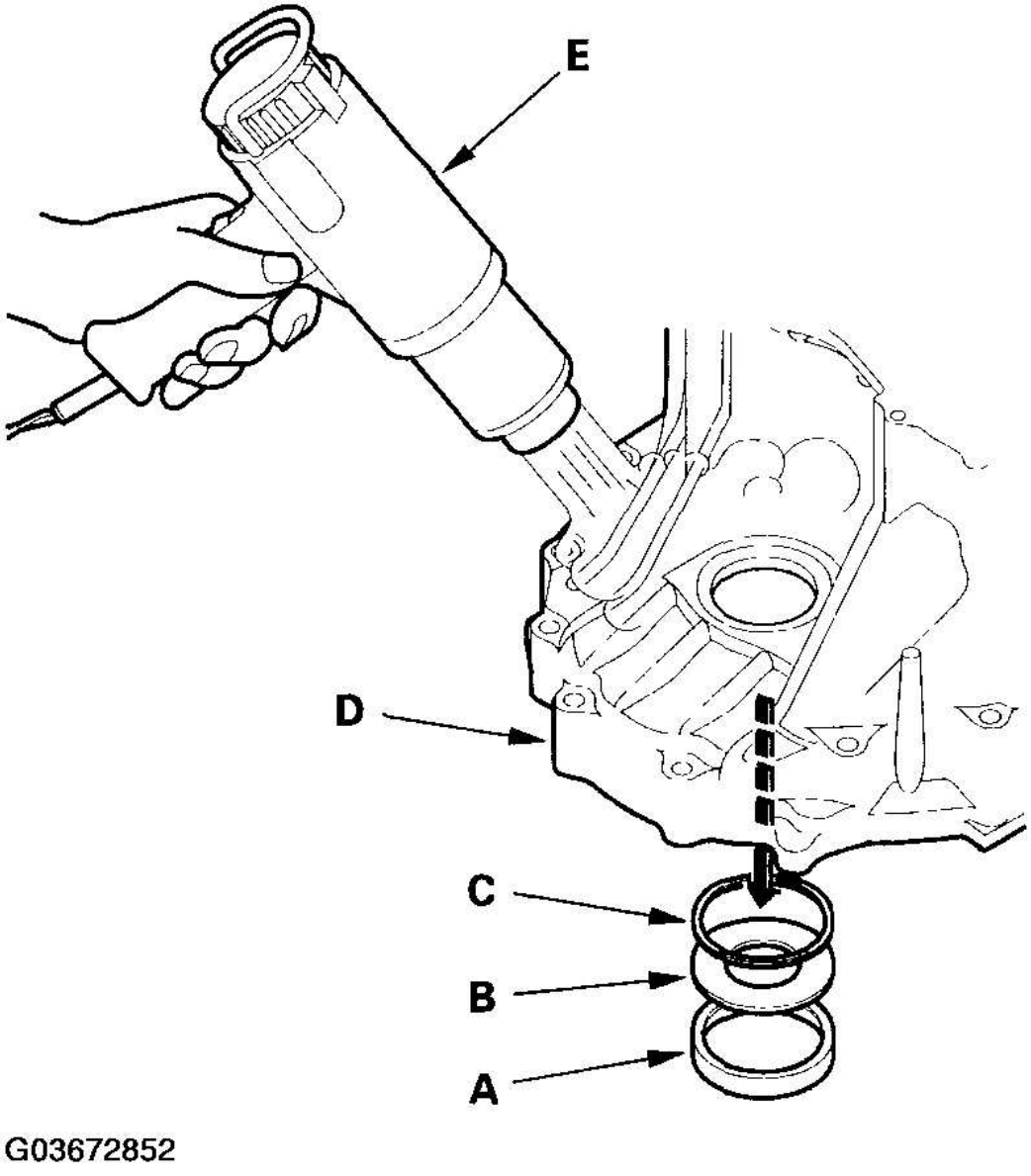


Fig. 497: Removing Bearing Outer Race, Thrust Washer And Thrust Shim From Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Replace the tapered roller bearing when the outer race is to be replaced.
3. Do not use a shim on the torque converter housing side.

4. Install the 85 mm thrust shim (A), thrust washer (B), and bearing outer race (C) in the transmission housing (D). If you replace the 85 mm thrust shim with a new one, use the same thickness shim as the old one.

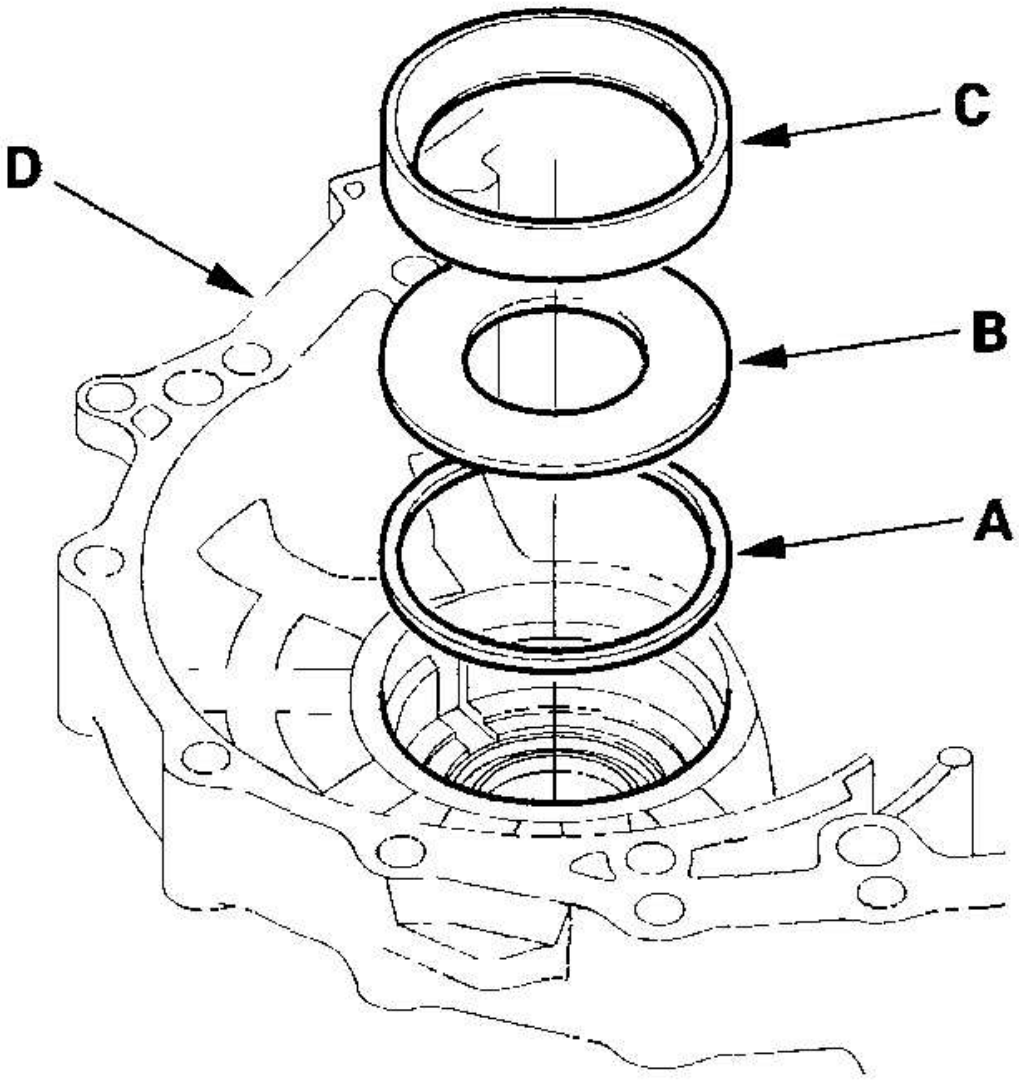


Fig. 498: Installing Thrust Shim, Thrust Washer And Bearing Outer Race In Transmission Housing

Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Drive in the outer race with the special tools.

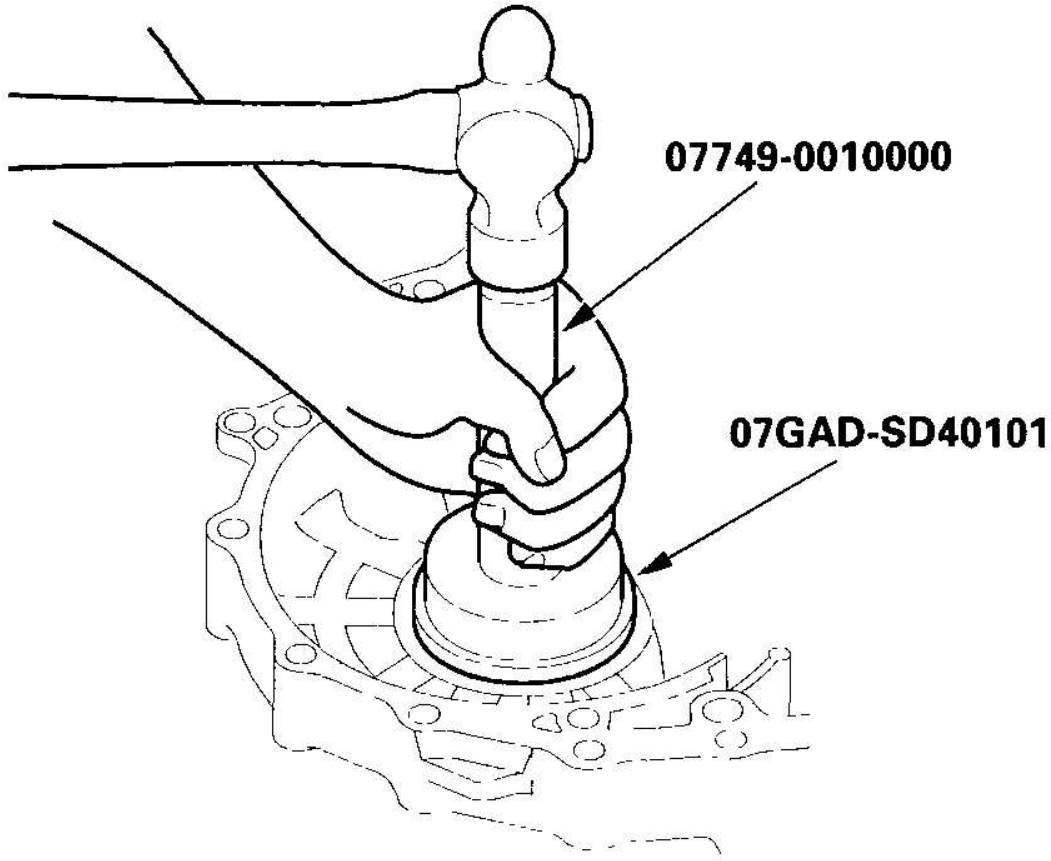


Fig. 499: Driving In Outer Race With Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Check that there is no clearance between the thrust washer, outer race, shim, and transmission housing.
7. Install the differential assembly (A) in the torque converter housing (B), and install the gasket (C) and dowel pins (D) on the housing.

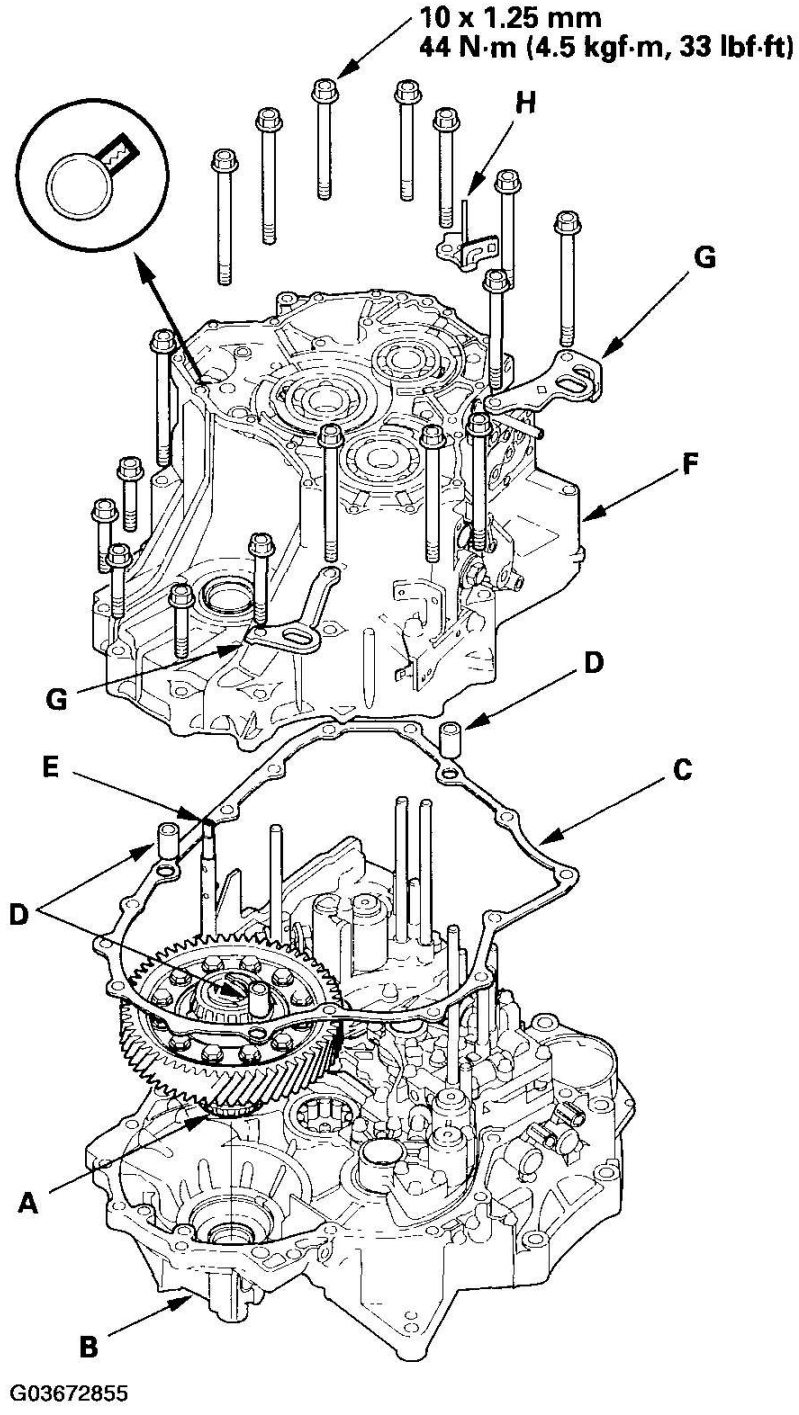


Fig. 500: Installing Differential Assembly In Torque Converter Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Align the spring pin on the selector control shaft (E) with the transmission housing groove.
9. Install the transmission housing (F), transmission hangers (G), and harness clamp bracket (H) then tighten the bolts.
10. Rotate the differential assembly in both directions to seat the bearing.
11. Measure the starting torque of the differential assembly with the special tool, a torque wrench (A) and socket (B) at normal room temperature in both directions.

Standard

New bearing: 2.9-4.1 N.m (30-42 kgf.cm, 26-37 lbf.in.)
Reused bearings: 2.7-3.8 Nm (27-39 kgf.cm, 23-34 lbf.in.)

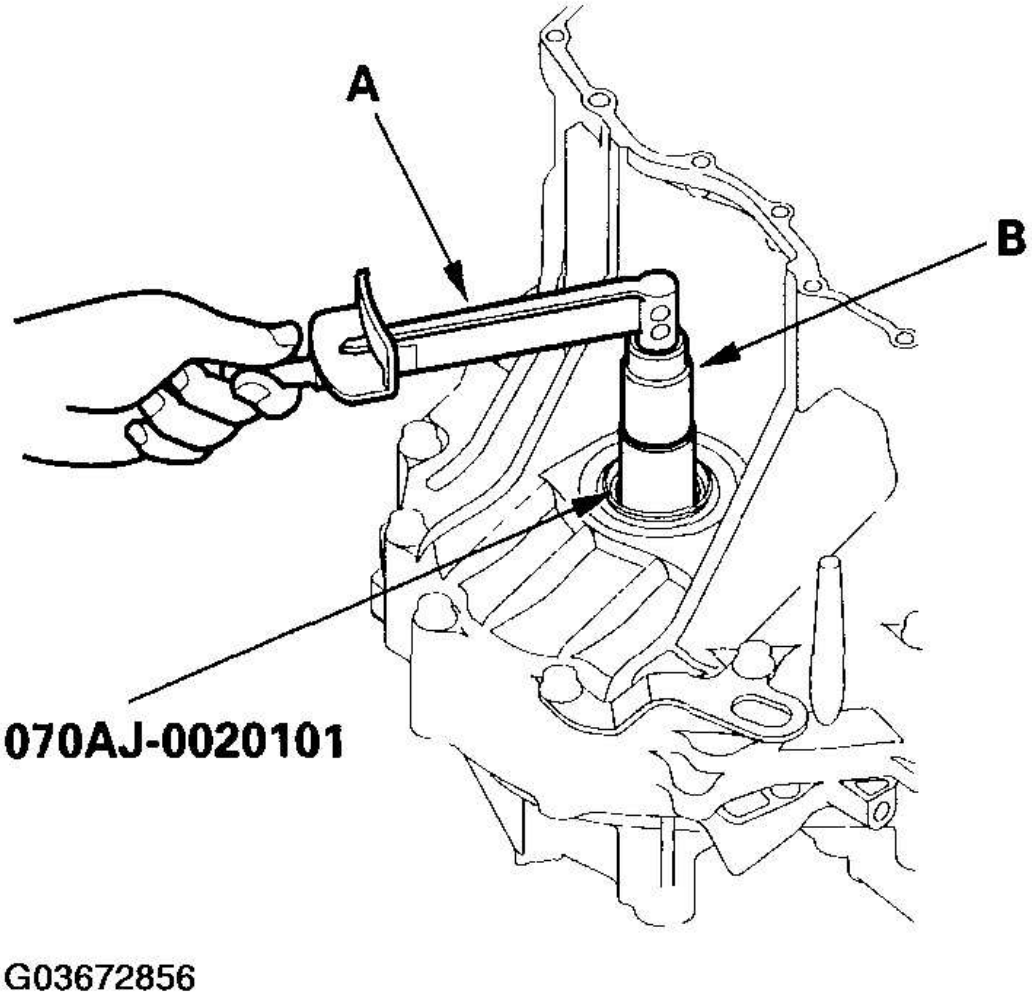


Fig. 501: Measuring Starting Torque With Special Tool, Torque Wrench And Socket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. If the measurement is out of standard, remove the thrust shim and select the thrust shim from **THRUST SHIM, 85 mm** . Install the new thrust shim and recheck. To increase the starting torque, increase the thickness of the thrust shim. To decrease the starting torque, decrease the thickness of the thrust shim. Changing the shim to the next size will increase or decrease starting torque about 0.3-0.4 N.m (3-4 kgf.cm, 2-3 lbf.in.).

THRUST SHIM, 85 mm

No.	Part Number	Thickness
A	41440-RGR-000	1.350 mm (0.053 in.)
B	41441-RGR-000	1.375 mm (0.054 in.)
C	41442-RGR-000	1.400 mm (0.055 in.)
D	41443-RGR-000	1.425 mm (0.056 in.)
E	41444-RGR-000	1.450 mm (0.057 in.)
F	41445-RGR-000	1.475 mm (0.058 in.)
G	41446-RGR-000	1.500 mm (0.059 in.)
H	41447-RGR-000	1.525 mm (0.060 in.)
I	41448-RGR-000	1.550 mm (0.061 in.)
J	41449-RGR-000	1.575 mm (0.062 in.)
K	41450-RGR-000	1.600 mm (0.063 in.)
L	41451-RGR-000	1.625 mm (0.064 in.)
M	41452-RGR-000	1.650 mm (0.065 in.)
N	41453-RGR-000	1.675 mm (0.066 in.)
0	41454-RGR-000	1.700 mm (0.067 in.)
P	41455-RGR-000	1.725 mm (0.068 in.)
Q	41456-RGR-000	1.750 mm (0.069 in.)
R	41457-RGR-000	1.775 mm (0.070 in.)
S	41458-RGR-000	1.800 mm (0.071 in.)
T	41459-RGR-000	1.825 mm (0.072 in.)
U	41460-RGR-000	1.850 mm (0.073 in.)
V	41461-RGR-000	1.875 mm (0.074 in.)
W	41462-RGR-000	1.900 mm (0.075 in.)
X	41463-RGR-000	1.925 mm (0.076 in.)
Y	41464-RGR-000	1.950 mm (0.077 in.)
Z	41465-RGR-000	1.975 mm (0.078 in.)
AA	41466-RGR-000	2.000 mm (0.079 in.)
AB	41467-RGR-000	2.025 mm (0.080 in.)
AC	41468-PGR-000	2.050 mm (0.081 in.)
AD	41469-RGR-000	2.075 mm (0.082 in.)

AE	41470-RGR-000	2.100 mm (0.083 in.)
AF	41471-RGR-000	2.125 mm (0.084 in.)
AG	41472-RGR-000	2.150 mm (0.085 in.)
AH	41473-RGR-000	2.175 mm (0.086 in.)
Al	41474-RGR-000	2.200 mm (0.087 in.)
AJ	41475-RGR-000	2.225 mm (0.088 in.)
AK	41476-RGR-000	2.250 mm (0.089 in.)
AL	41477-RGR-000	2.275 mm (0.090 in.)
AM	41478-RGR-000	2.300 mm (0.091 in.)
AN	41479-RGR-000	2.325 mm (0.092 in.)
AO	41480-RGR-000	2.350 mm (0.093 in.)

2003-07 BRAKES

Conventional Brake Component - Accord (V6)

COMPONENT LOCATION INDEX

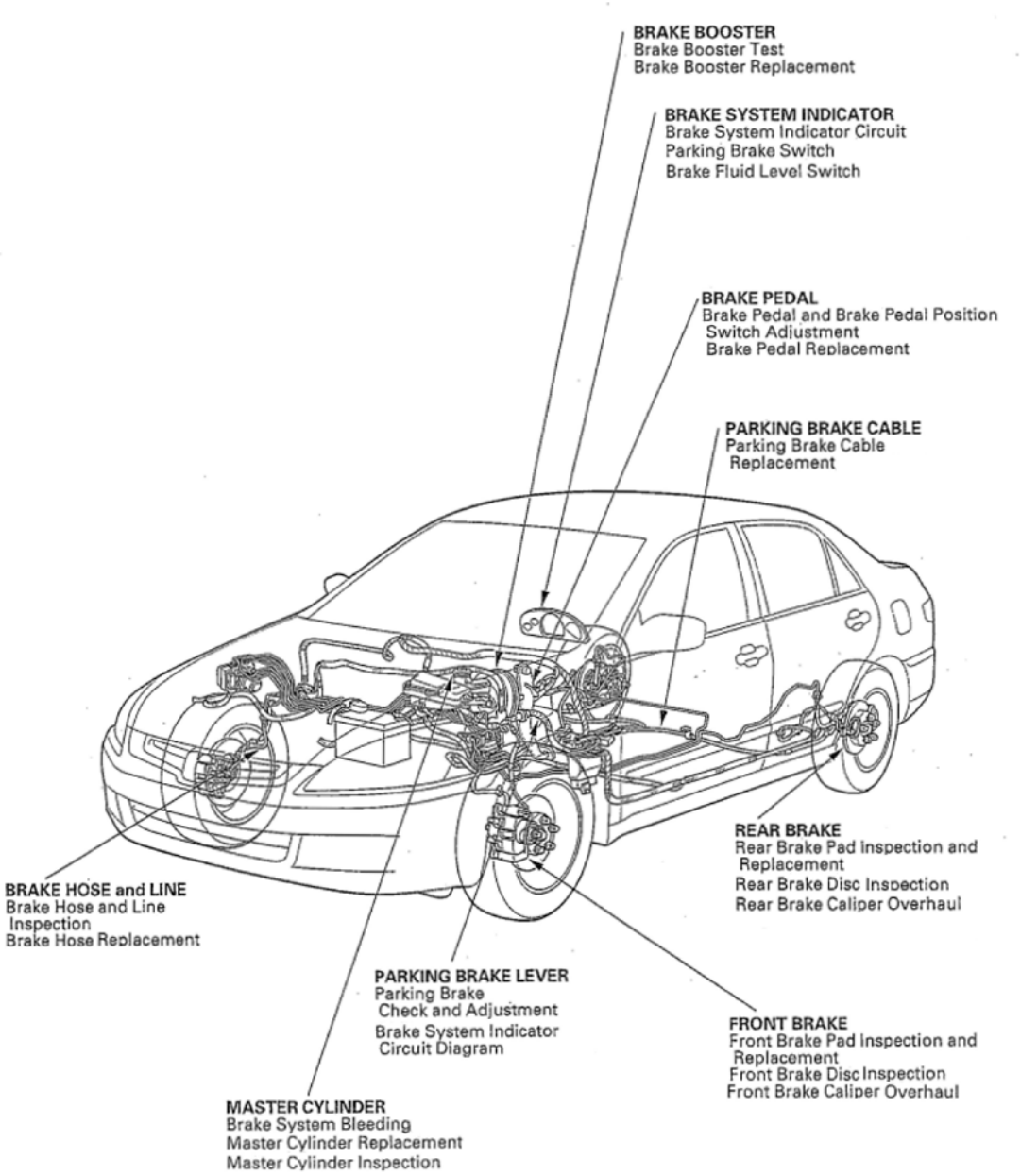


Fig. 1: Identifying Component Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT BRAKE PAD INSPECTION AND REPLACEMENT

CAUTION: Frequent inhalation of brake pad dust, regardless of material composition, could be hazardous to your health.

- **Avoid breathing dust particles.**
- **Never use an air hose or brush to clean brake assemblies. Use an OSHA-approved vacuum cleaner.**

INSPECTION

1. Raise the front of the vehicle, and support it with safety stands in the proper locations. Refer to **LIFT AND SUPPORT POINTS** .
2. Remove the front wheels.
3. Check the thickness of the inner pad (A) and outer pad (B). Do not include the thickness of the brake pad backing plate.

   Brake pad thickness:

   Standard: 10.5-11.5 mm (0.41-0.45 in.)
   Service limit: 1.6 mm (0.06 in.)

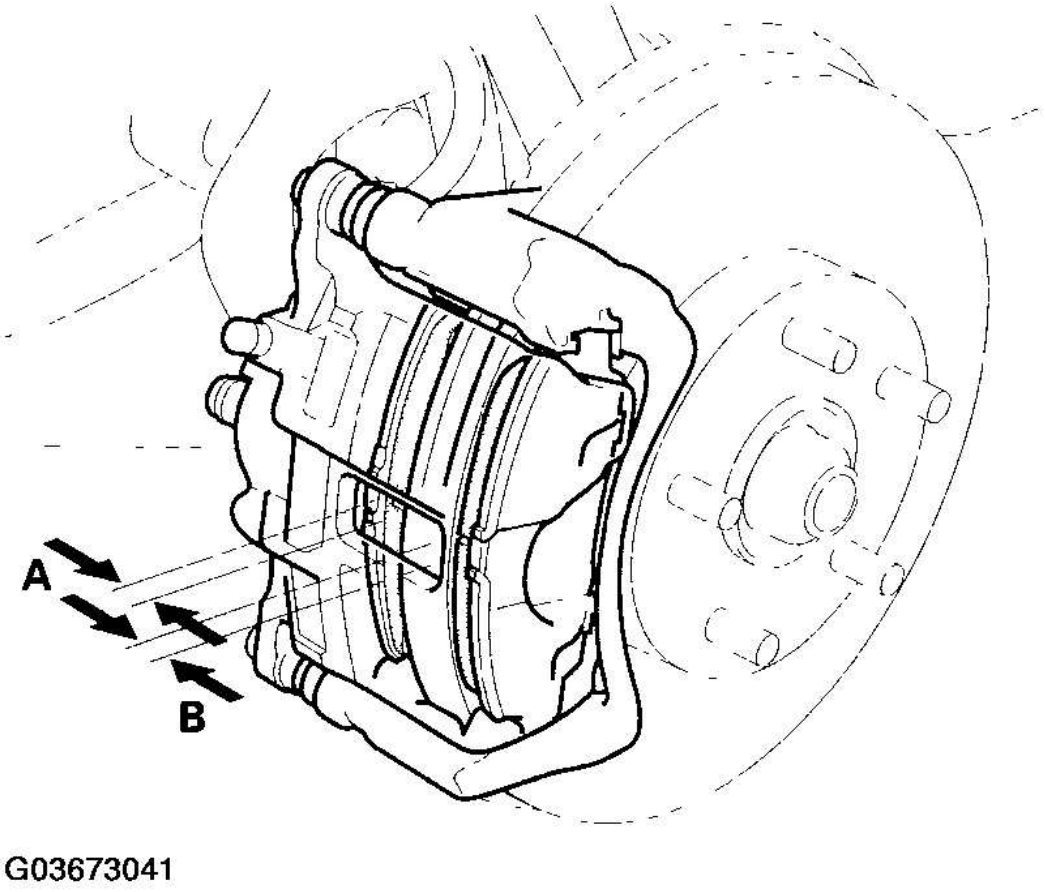


Fig. 2: Checking Thickness Of Inner And Outer Pad
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the brake pad thickness is less than the service limit, replace all the brake pads as a set.

REPLACEMENT

1. Raise the front of the vehicle, and support it with safety stands in the proper locations. refer to **LIFT AND SUPPORT POINTS** .
2. Remove the front wheels.
3. Remove the brake hose mounting bolt (B).

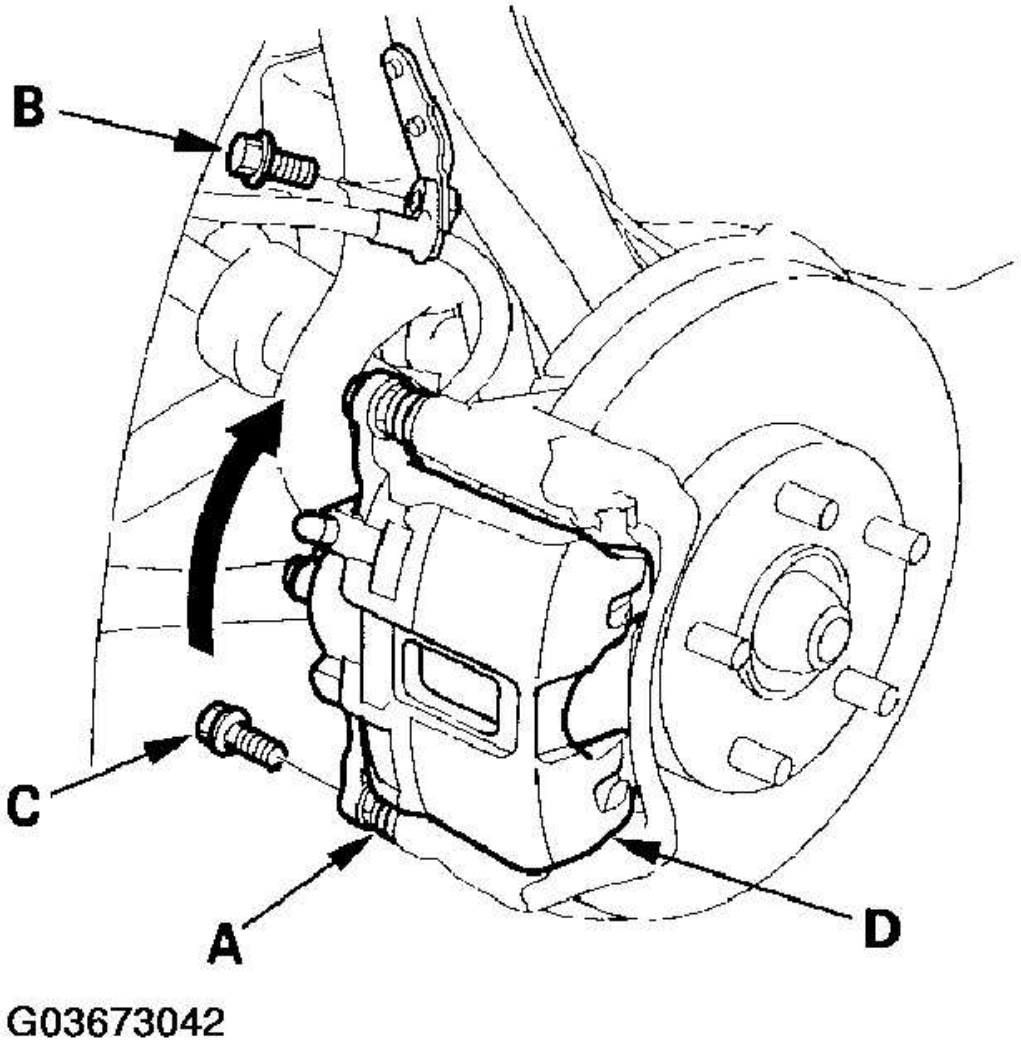


Fig. 3: Removing Brake Hose Mounting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the flange bolt (C) while holding the pin A with a wrench being careful not to damage the pin boot, and pivot the caliper (D) up out of the way. Check the brake hose and pin boots for damage and deterioration.
5. Remove the brake pads (A) and pad shims (B).

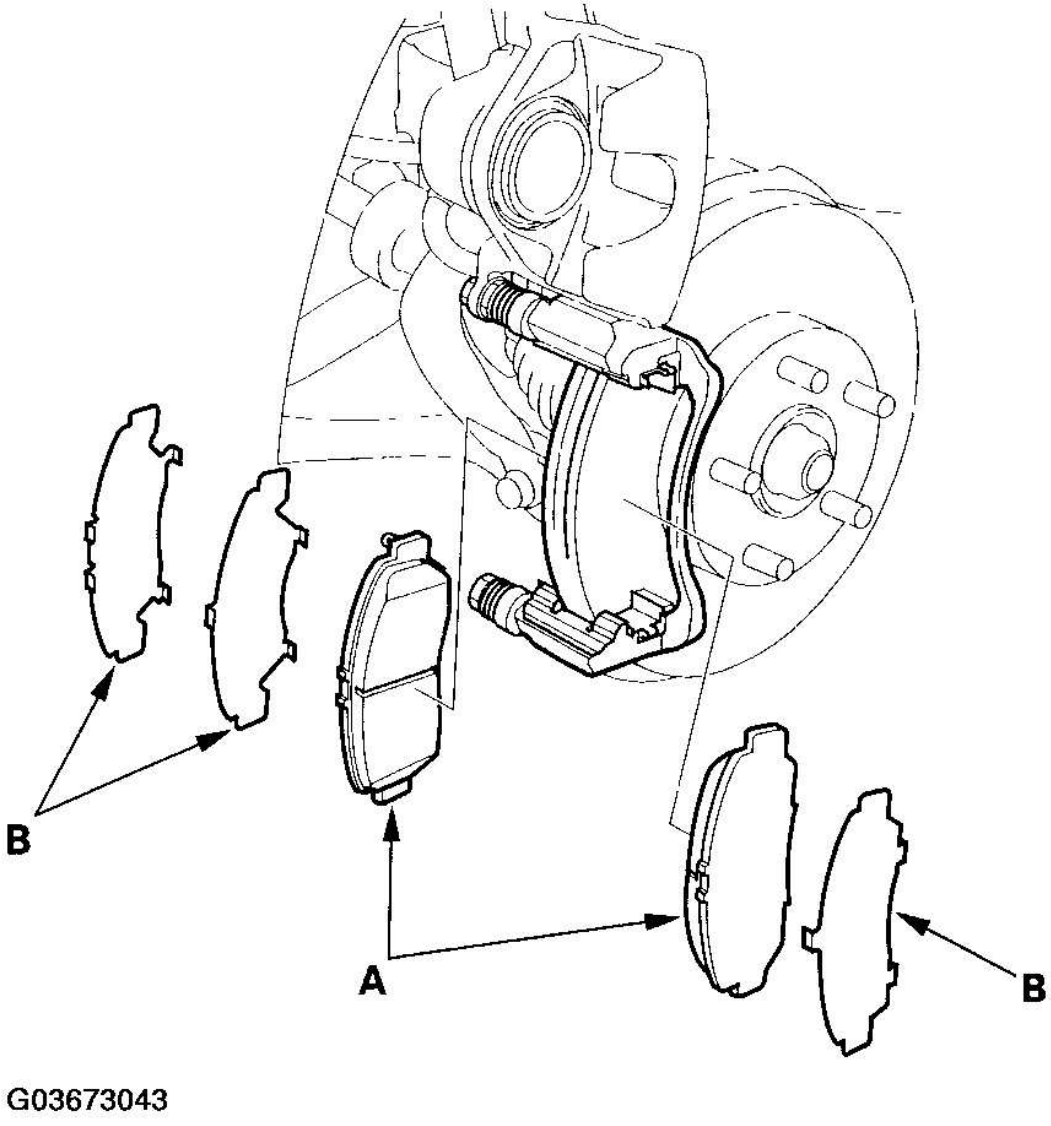


Fig. 4: Removing Brake Pads And Pad Shims
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Check the hose and pin boots for damage and deterioration.
7. Remove the pad retainers (A), and check the caliper pins for free movement.

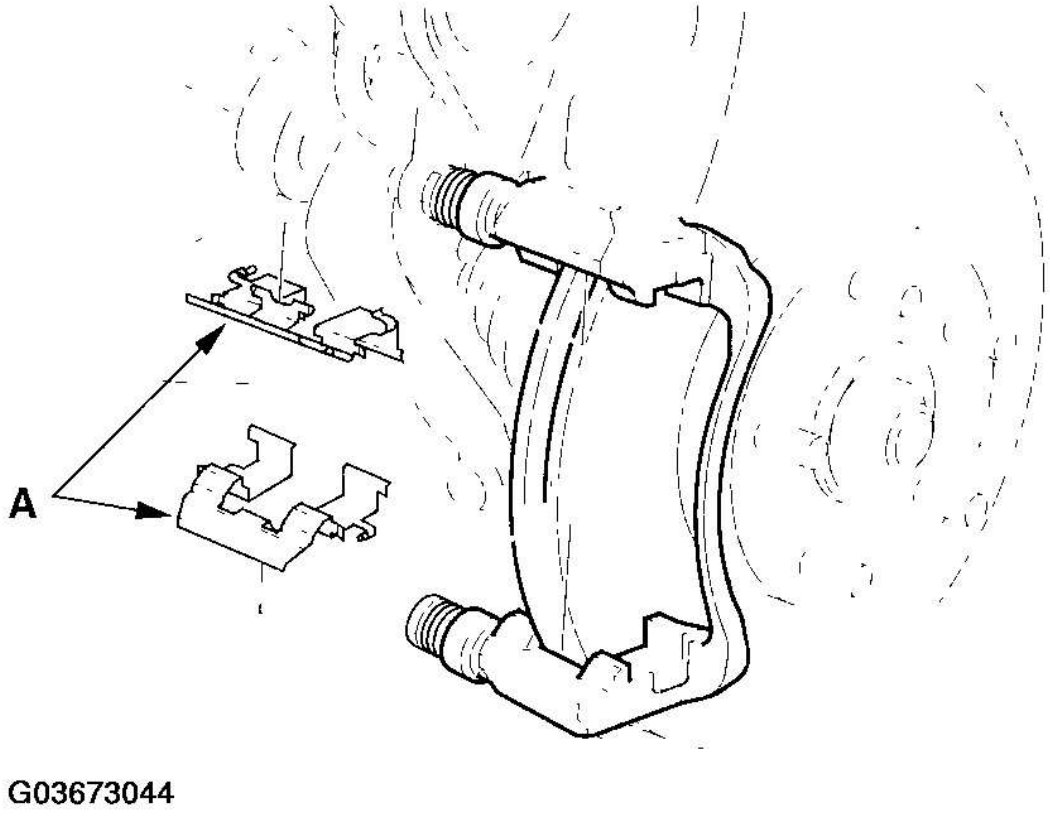


Fig. 5: Removing Pad Retainers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Clean the caliper thoroughly; remove any rust, and check for grooves and cracks.
9. Check the brake disc for damage and cracks
10. Clean and install the pad retainers.
11. Apply a light coat of M-77 assembly paste (P/N 08798-9010) to the pad sides of shims (A), the back of the brake pads (B), and to the other areas indicated by the arrows.

    Wipe excess paste off the pad shim and brake pads. Contaminated brake discs and pads reduce stopping ability. Keep assembly paste off the brake discs and pad material.

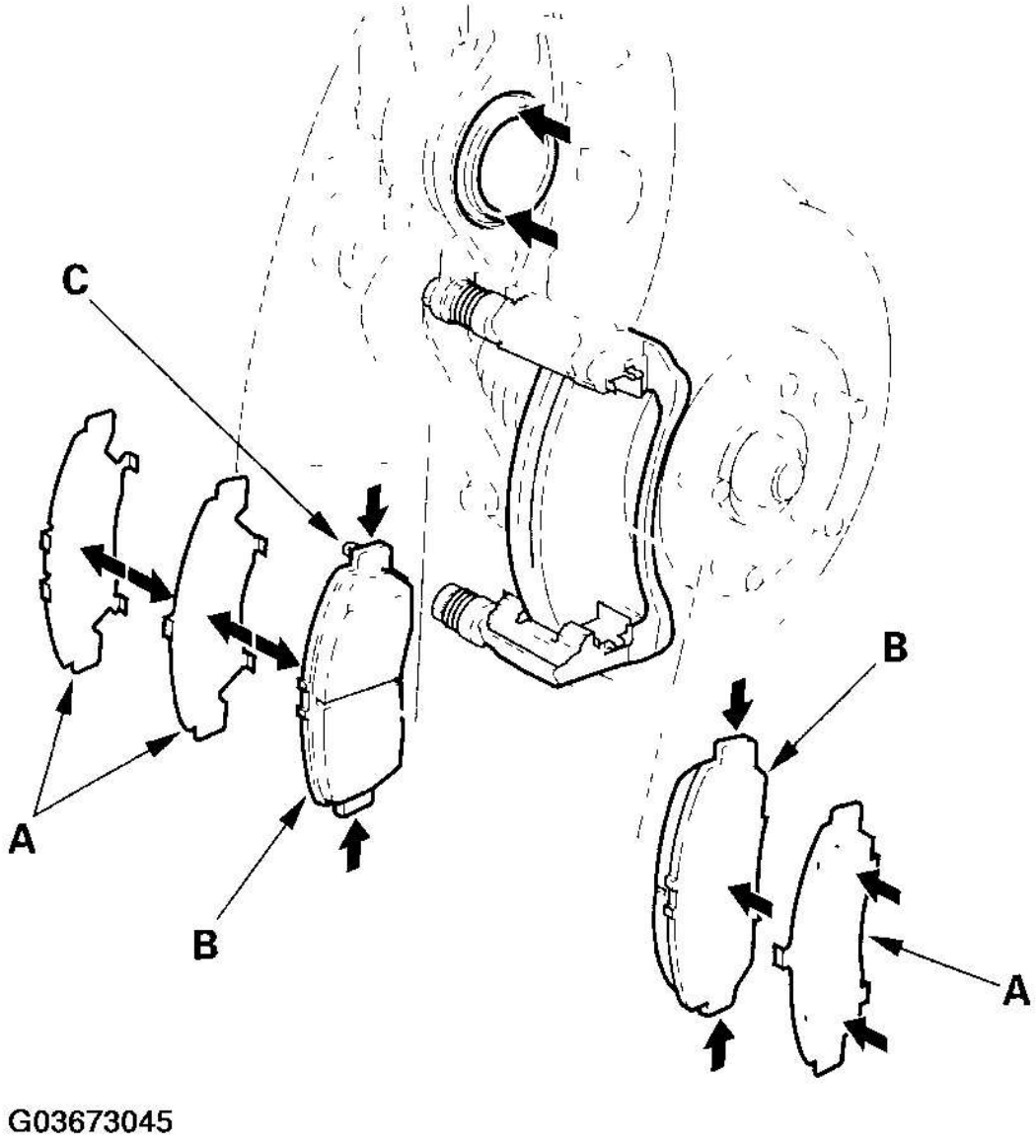


Fig. 6: Applying Assembly Paste To Pad Sides Of Shims
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Install the brake pads and pad shims correctly.

    Install the brake pads with the wear indicator (C) on the inside. The wear indicator should be on the top of the pad.

If you are reusing the pads, always reinstall the brake pads in their original positions to prevent a momentary loss of braking efficiency.

13. Push in the piston (B) so the caliper will fit over the brake pads. Check the brake fluid level. The brake fluid may overflow if the reservoir is too full. Make sure the piston boot is in position to prevent damaging it when pivoting the caliper down.

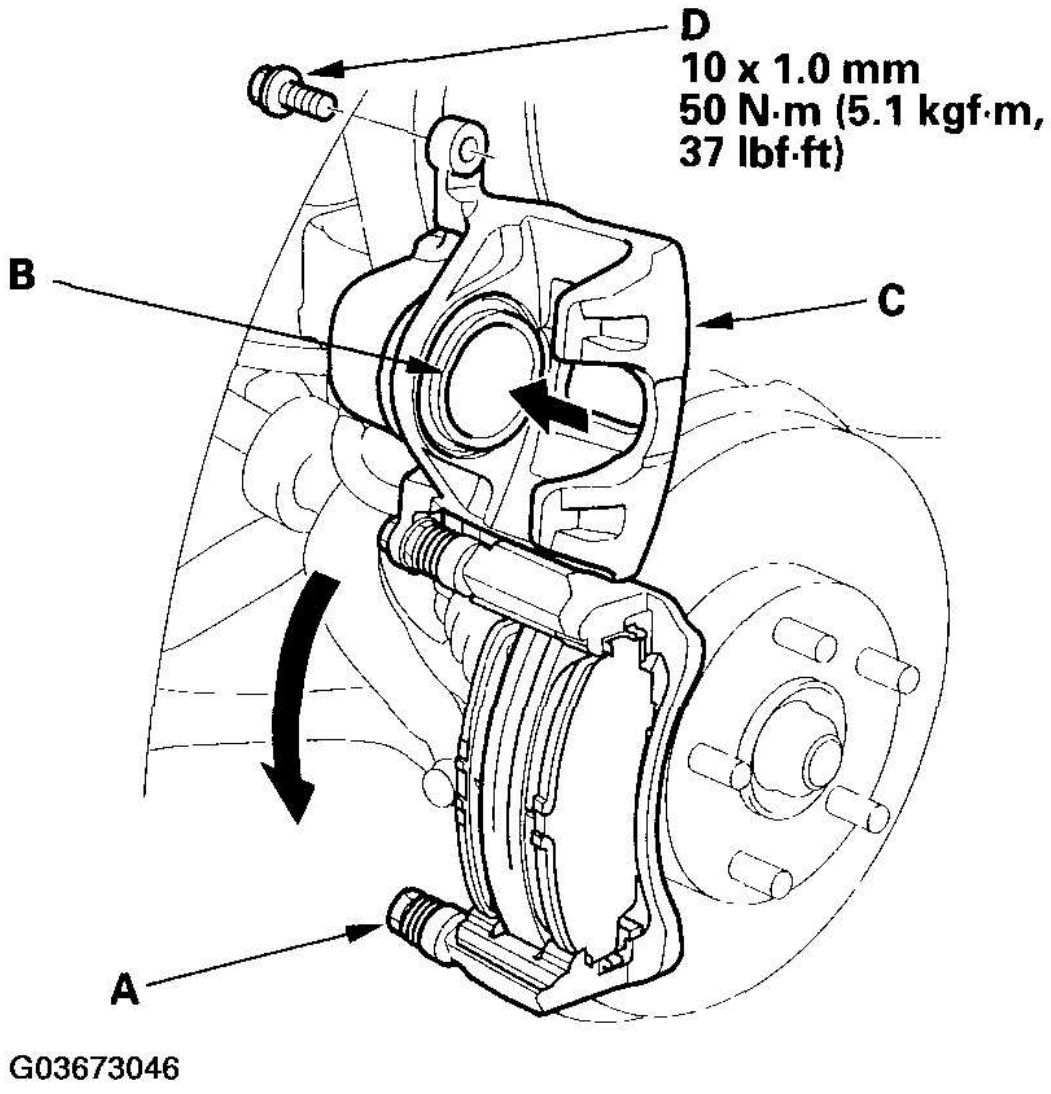


Fig. 7: Pushing In Piston

Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Pivot the caliper (C) down into position. Install the flange bolt (D), and tighten it to the specified torque while holding the pin A with a wrench being careful not to damage the pin boot.
15. Install the brake hose mounting bolt (A), and tighten it to the specified torque.

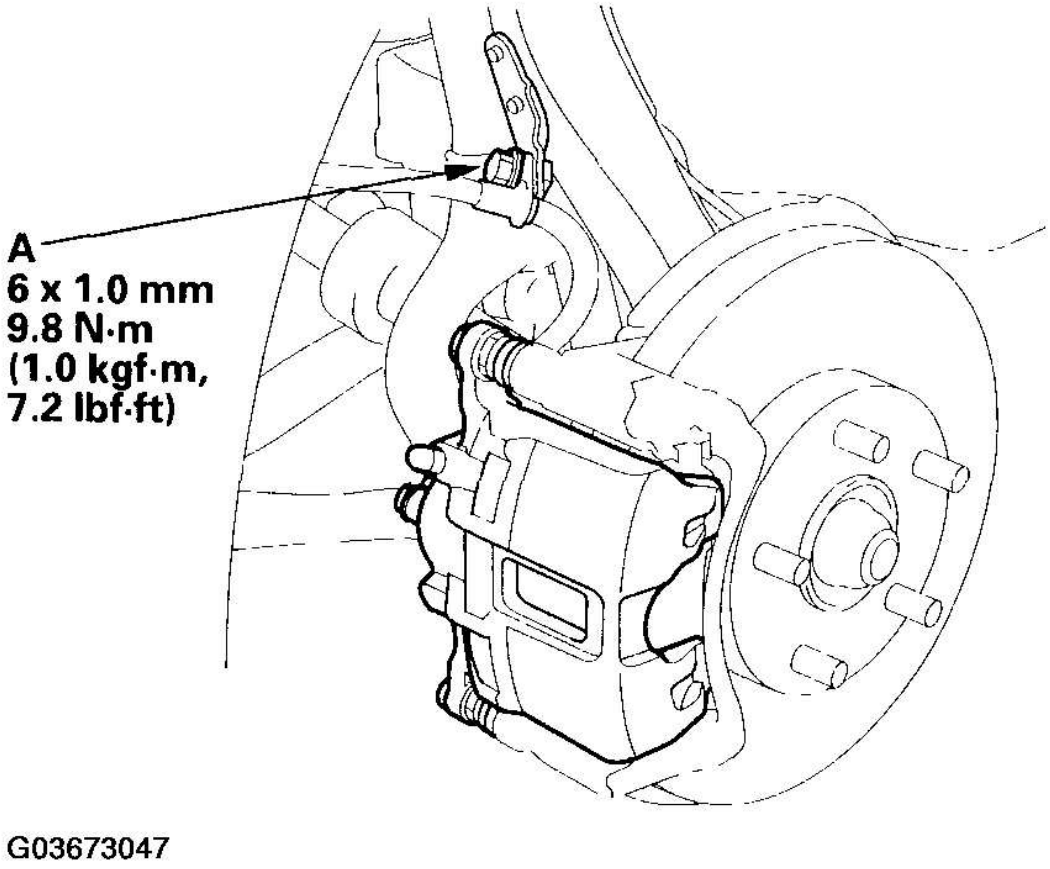


Fig. 8: Installing Brake Hose Mounting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Press the brake pedal several times to make sure the brakes work.

NOTE: Engagement of the brake may require a greater pedal stroke immediately after the brake pads have been

replaced as a set. Several applications of the brake pedal will restore the normal pedal stroke.

17. After installation, check for leaks at hose and line joints or connections, and retighten if necessary. Then test-drive the vehicle.

FRONT BRAKE DISC INSPECTION

RUNOUT

1. Raise the front of the vehicle, and support it with safety stands in the proper locations. refer to **LIFT AND SUPPORT POINTS** .
2. Remove the front wheels.
3. Remove the brake pads (see **Front Brake Pad Inspection and Replacement**).
4. Inspect the brake disc surface for damage and cracks. Clean the brake disc thoroughly, and remove all rust.
5. Install suitable flat washers (A) and wheel nuts, and tighten the nuts to the specified torque to hold the brake disc securely against the hub.

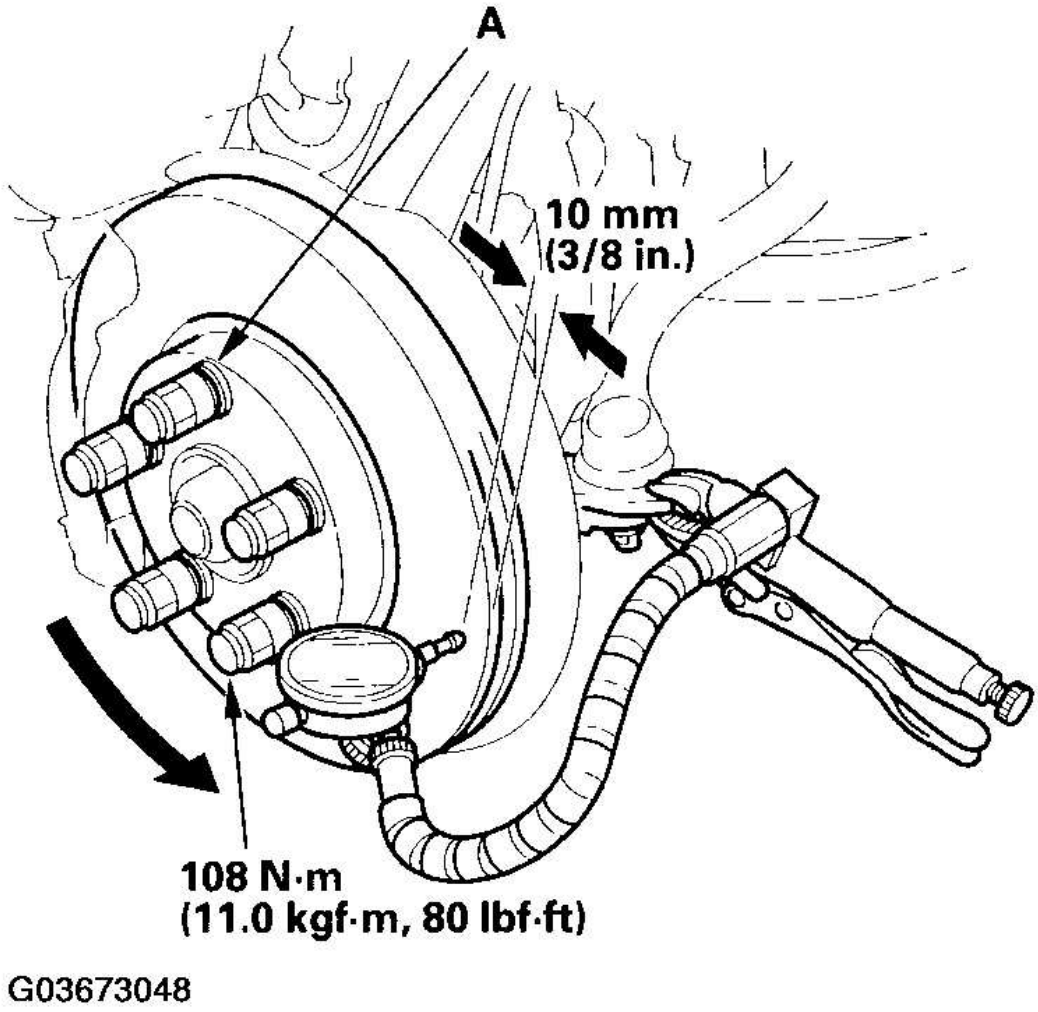


Fig. 9: Installing Suitable Flat Washers And Wheel Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Set up the dial gauge against the brake disc as shown in **Fig. 9**, and measure the runout at 10 mm (3/8 in.) from the outer edge of the brake disc.

   Brake disc runout:

   Service limit: 0.10 mm (0.004 in.)

7. If the brake disc is beyond the service limit, refinish the brake disc with an on-

car brake lathe. The "Front brake Disc Lathe" offered by Snap-on Tools Co. are approved for this operation.

Max. refinish limit: 21.0 mm (0.83 in.)

NOTE:

- **If the brake disc is beyond the service limit for refinishing, replace it.**
- **A new disc should be refinished if its runout is greater than 0.10 mm (0.004 in.).**

THICKNESS AND PARALLELISM

1. Raise the front of the vehicle, and support it with safety stands in the proper locations. Refer to **LIFT AND SUPPORT POINTS** .
2. Remove the front wheels.
3. Remove the brake pads (see **Front Brake Pad Inspection and Replacement**).
4. Using a micrometer, measure brake disc thickness at eight points, approximately 45° apart and 10 mm (3/8 in.) in from the outer edge of the brake disc.

   Replace the brake disc if the smallest measurement is less than the max. refinishing limit.

   A/T model

   Brake disc thickness:

   Standard: 22.9-23.1 mm (0.90-0.91 in.)
   Max. refinishing limit: 21.0 mm (0.83 in.)

   M/T model

   Brake disc thickness: Standard: 27.9-28.1 mm (1.10-1.11 in.)
   Max. refinishing limit: 26.0 mm (1.02 in.)

Brake disc parallelism: 0.015 mm (0.0006 in.) max.

NOTE: This is the maximum allowable difference between the thickness measurements.

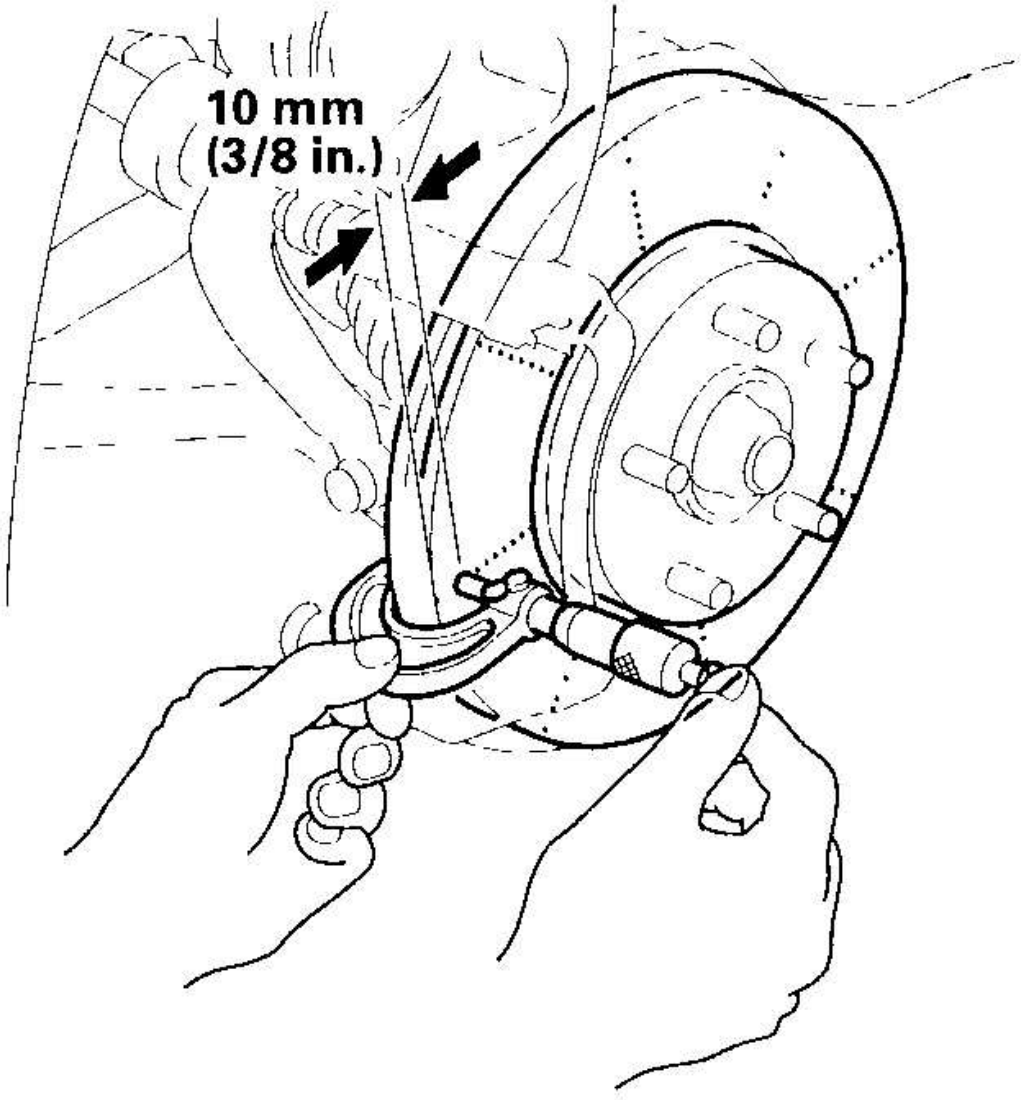


Fig. 10: Measuring Brake Disc Thickness

Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If the smallest measurement is less than the max refinishing limit, replace the brake disc.
6. If the brake disc is beyond the service limit for parallelism, refinish the brake disc with an on-car brake lathe. The "Front Brake Disc Lathe" offered by Snap-on Tools Co. are approved for this operation.

FRONT BRAKE CALIPER OVERHAUL

CAUTION: Frequent inhalation of brake pad dust, regardless of material composition, could be hazardous to your health.

- **Avoid breathing dust particles.**
- **Never use an air hose or brush to clean brake assemblies. Use an OSHA-approved vacuum cleaner.**

Remove, disassemble, inspect, reassemble, and install the caliper, and note these items:

NOTE: Make sure that the caliper pins are installed correctly. The upper and lower caliper pins are different. If the caliper pins are installed in the wrong location, it will cause uneven tire wear, vibration, and or uneven or rapid pad wear.

- Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid gets on the paint, wash it off immediately with water.
- To prevent dripping brake fluid, cover disconnected hose joints with rags or shop towels.
- Clean all parts in brake fluid and air dry; blow out all passages with compressed air.
- Before reassembling, check that all parts are free of dust and other foreign particles.

- Replace parts with new ones as specified in **Fig. 11** .
- Make sure no dirt or other foreign matter get in the brake fluid.
- When reusing brake pads, always reinstall them in their original positions to prevent loss of braking efficiency.
- Do not reuse drained brake fluid. Use only clean Honda DOT 3 Brake Fluid from an unopened container. Using a non-honda brake fluid can cause corrosion and shorten the life of the system.
- Do not mix different brands of brake fluid as they may not be compatible.
- Coat the piston, piston seal groove, and caliper bore with clean brake fluid.
- Make sure no grease or oil gets on the brake discs or pads.
- Replace all rubber parts with new ones whenever disassembled.
- After installing the caliper, check the brake hose and line for leaks, interference, and twisting.

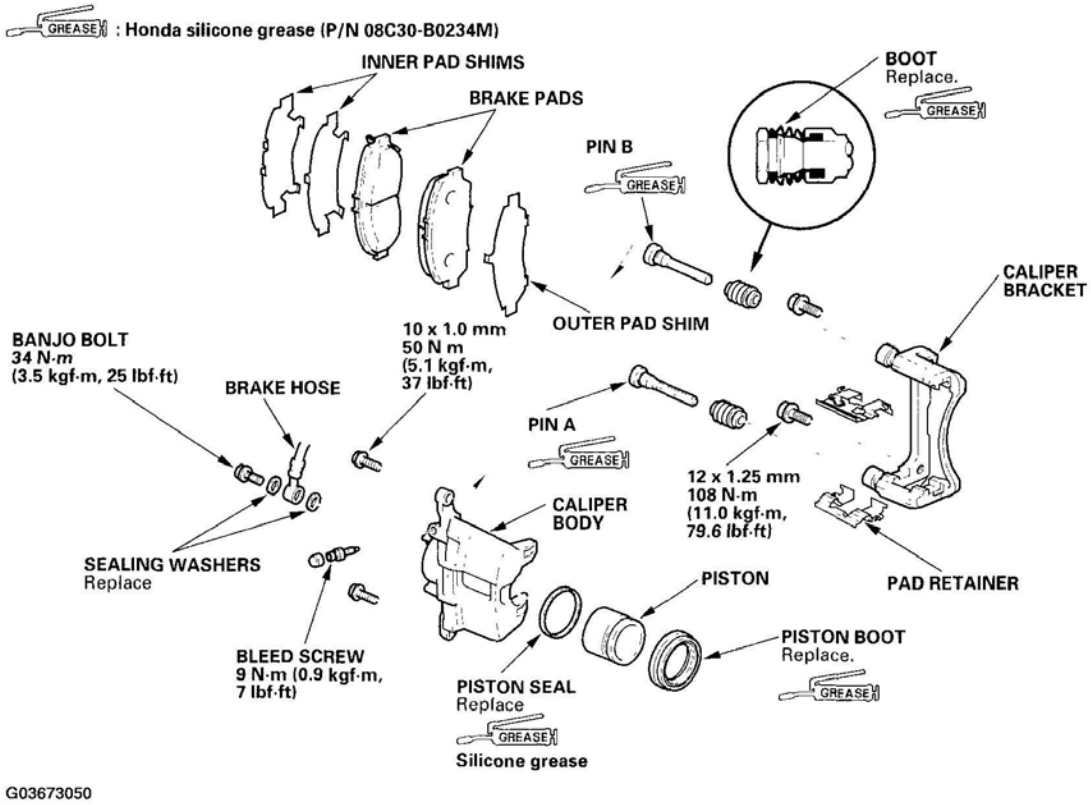


Fig. 11: Exploded View Of Front Brake Caliper Overhaul

Courtesy of AMERICAN HONDA MOTOR CO., INC.

MASTER CYLINDER REPLACEMENT

NOTE: Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid does contact the paint, wash it off immediately with water.

1. Remove the cable clamps from the body.

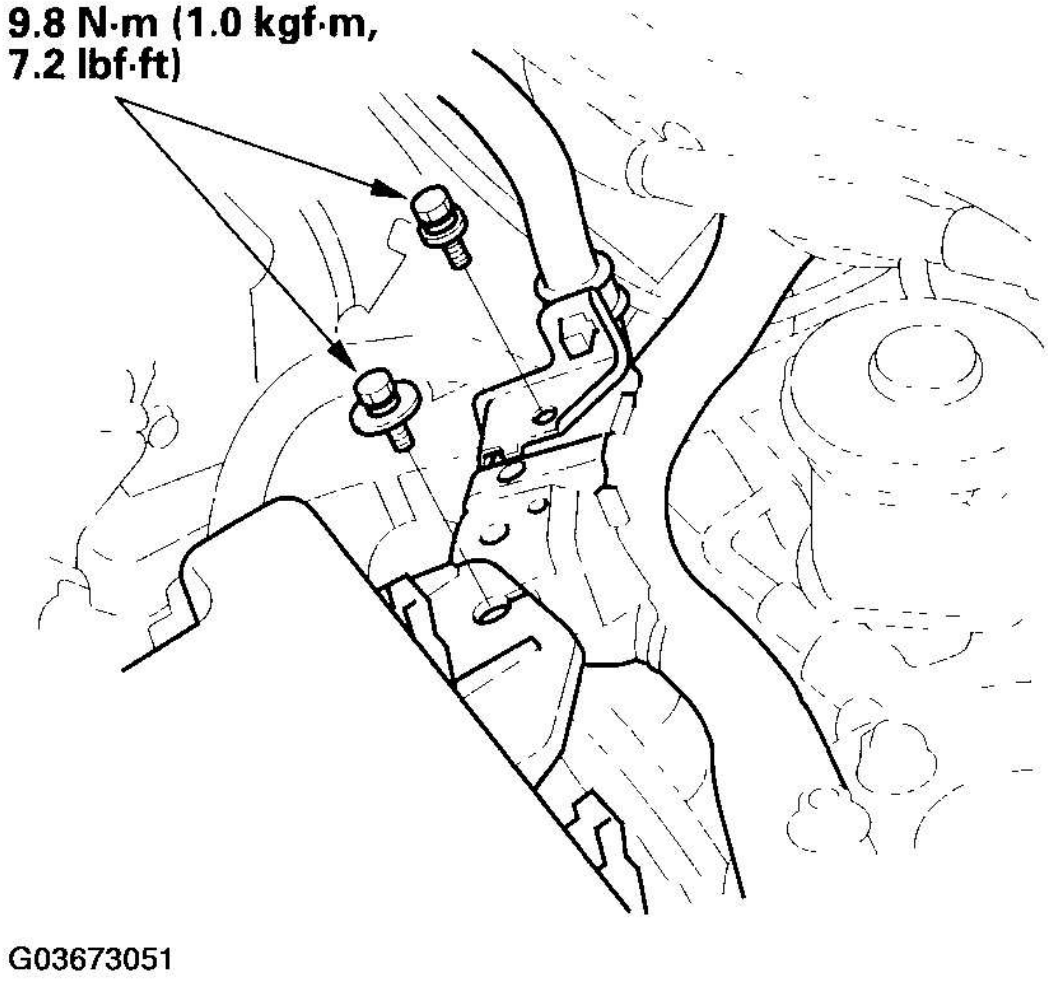


Fig. 12: Removing Cable Clamps From Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the access panel (A), then remove the right strut brace (B).

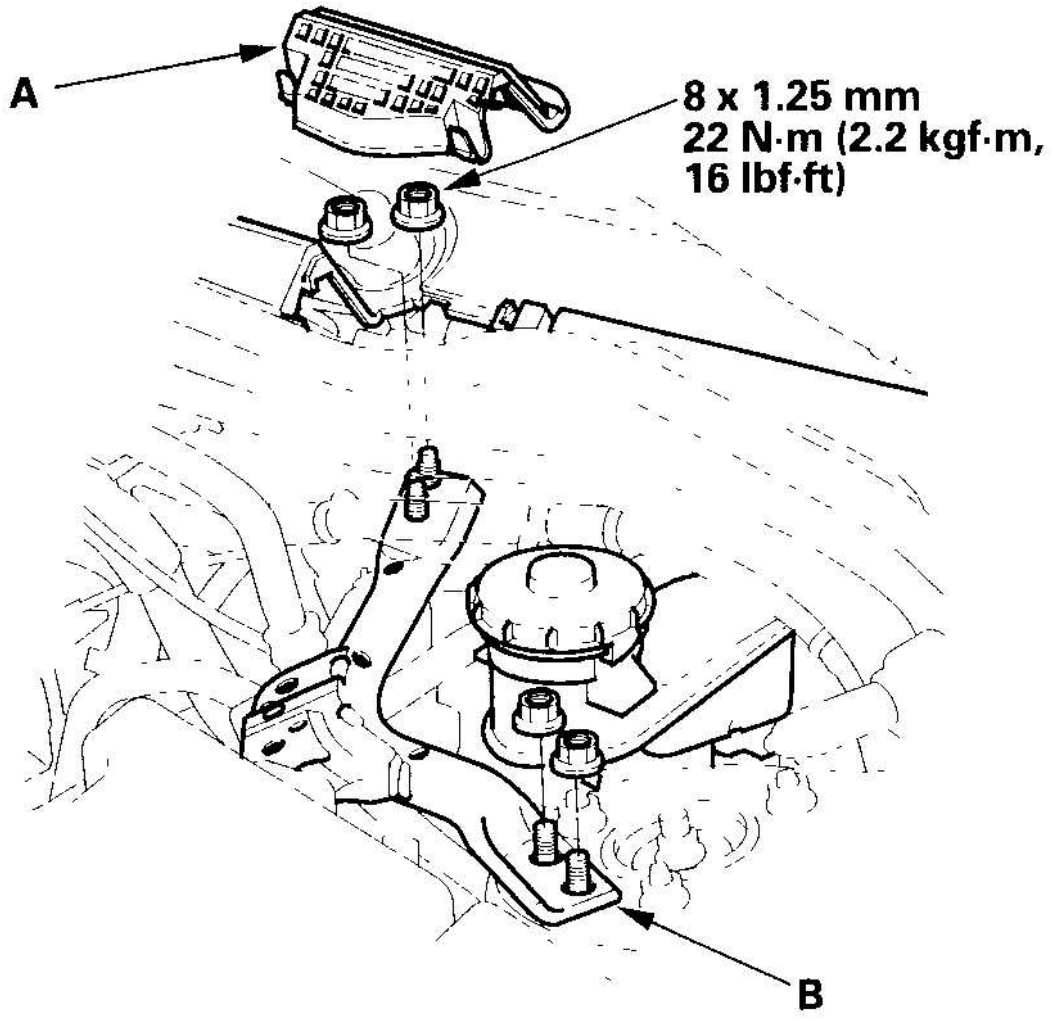


Fig. 13: Removing Access Panel And Right Strut Brace
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the reservoir cap and brake fluid from the master cylinder reservoir.
4. Disconnect the brake fluid level switch connector

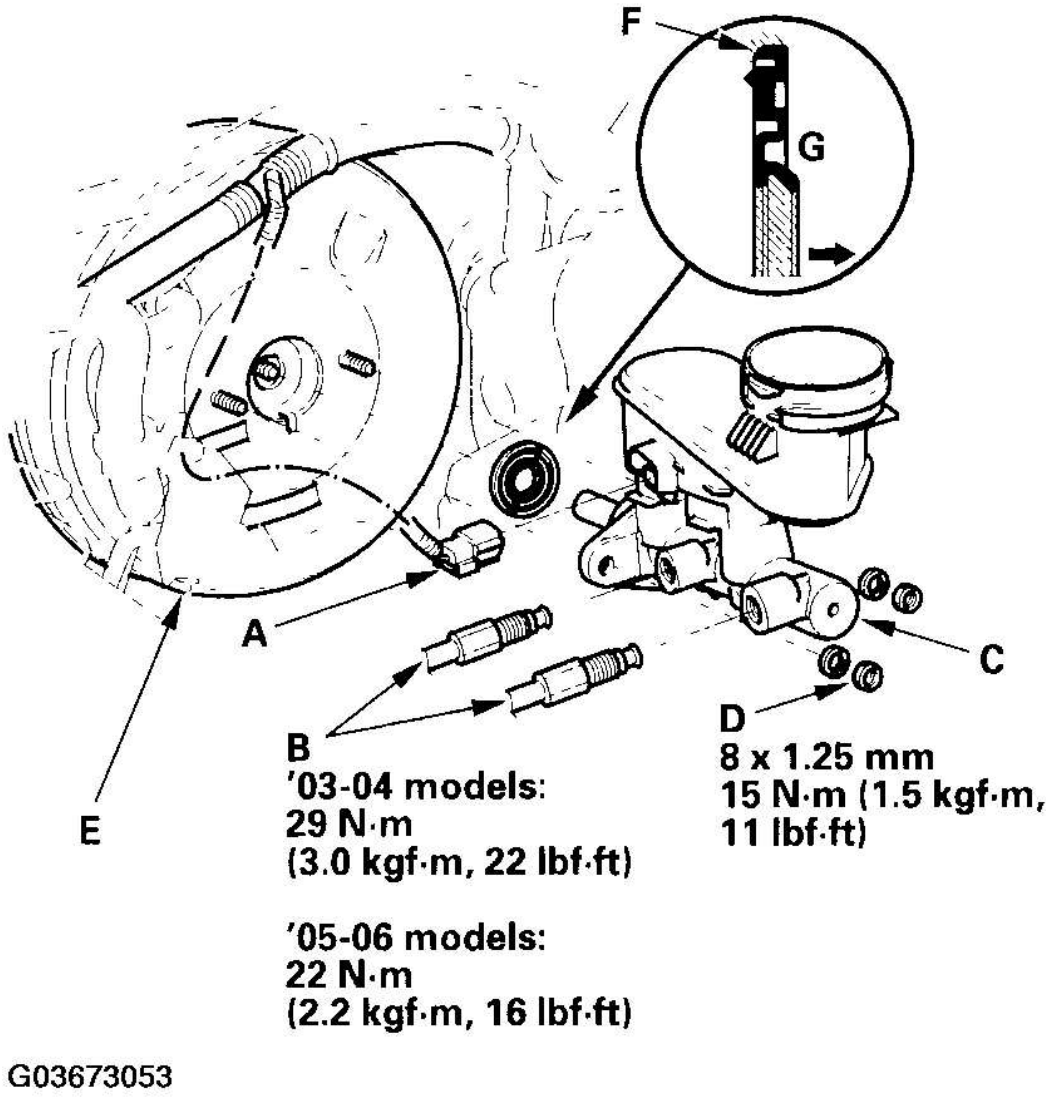


Fig. 14: Disconnecting Brake Fluid Level Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the brake lines (B) from the master cylinder (C). To prevent spills, cover the hose joints with rags or shop towels.
6. Remove the master cylinder mounting nuts (D) and washers.
7. Remove the master cylinder from the brake booster (E). Be careful not to bend or damage the brake lines when removing the master cylinder.

8. Remove the rod seal (F) from the master cylinder or brake booster.
9. Install the master cylinder in the reverse order of removal, and note these items:
   - Replace all the rubber parts with new ones whenever the master cylinder is removed. Use a new rod seal on reassembly.
   - Coat the inner bore lip and outer circumference of the new rod seal with the recommended seal grease in the master cylinder set.
   - Install the rod seal onto the master cylinder with its grooved side (G) toward the master cylinder.
   - Check the brake pedal height and free play after installing the master cylinder, and adjust it if necessary.
10. Bleed system, refer to **BRAKE SYSTEM BLEEDING** .
11. Spin the wheels to check for brake drag. See **BRAKE BOOSTER REPLACEMENT**

BRAKE BOOSTER REPLACEMENT

1. Remove the master cylinder (see **Master Cylinder Replacement**).
2. Disconnect the vacuum hose (A) from the brake booster (B).

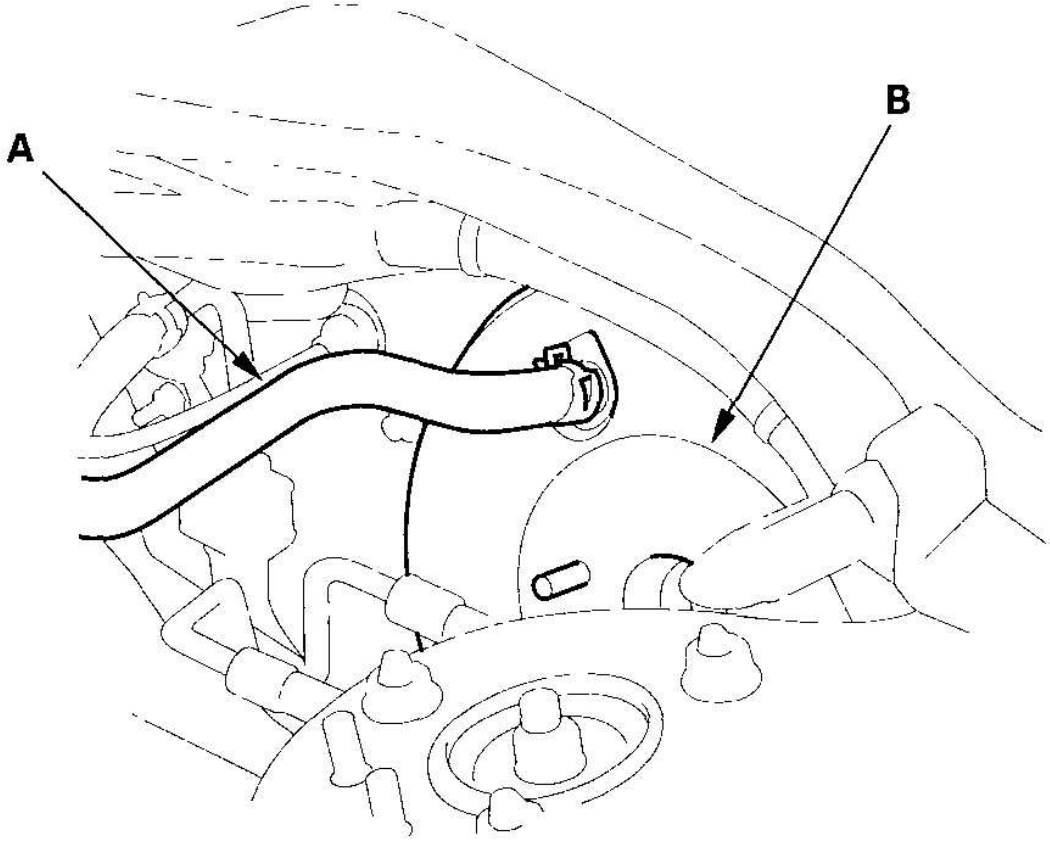


Fig. 15: Disconnecting Vacuum Hose From Brake Booster
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the under-hood fuse/relay box cover.
4. Remove the under-hood fuse/relay box mounting bolt (A), then remove the under-hood fuse/relay box (B) from the body.

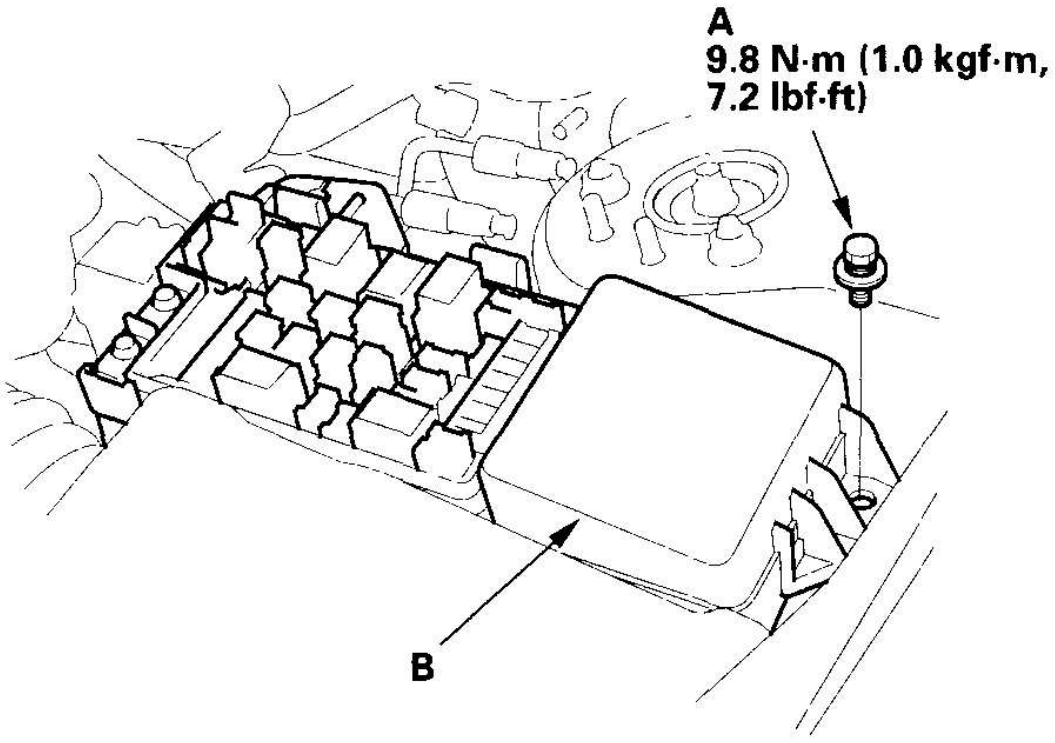


Fig. 16: Removing Under-Hood Fuse/Relay Box Mounting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the air cleaner assembly (A).

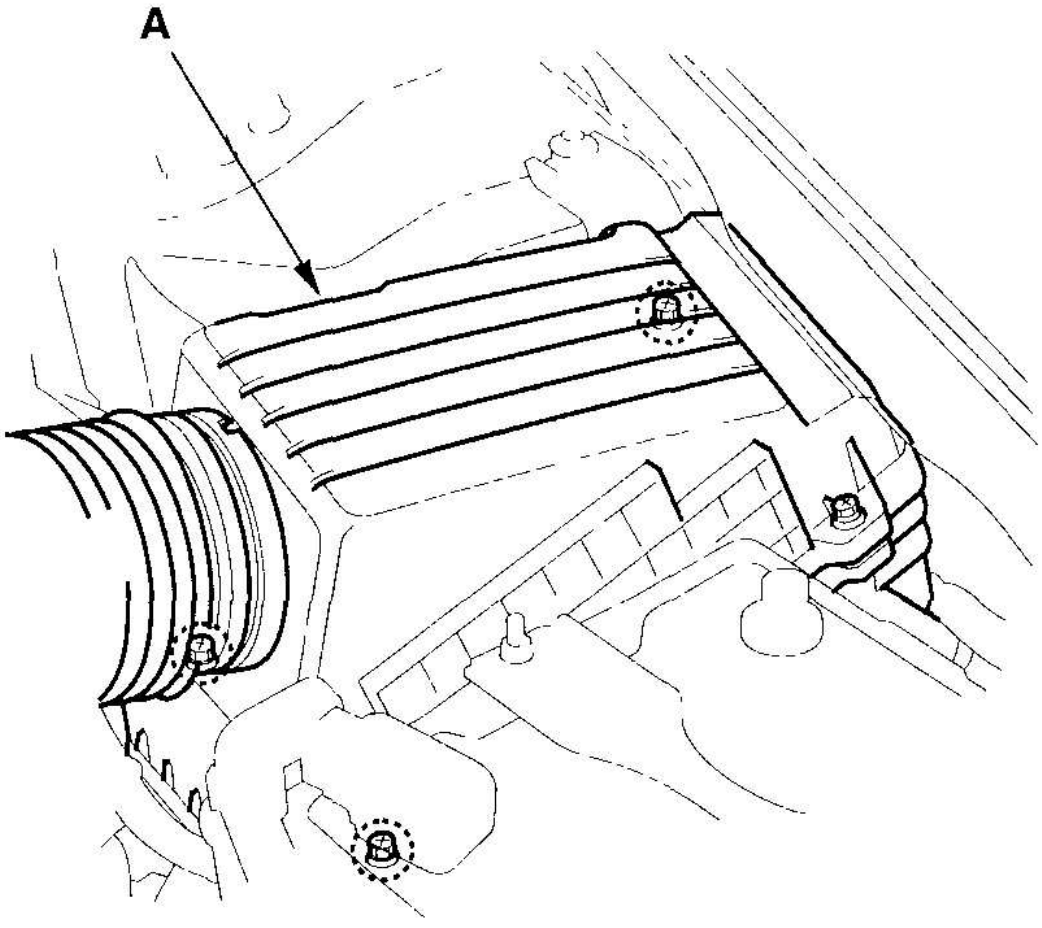


Fig. 17: Removing Air Cleaner Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the primary and secondary brake lines from the hose clamp (A).

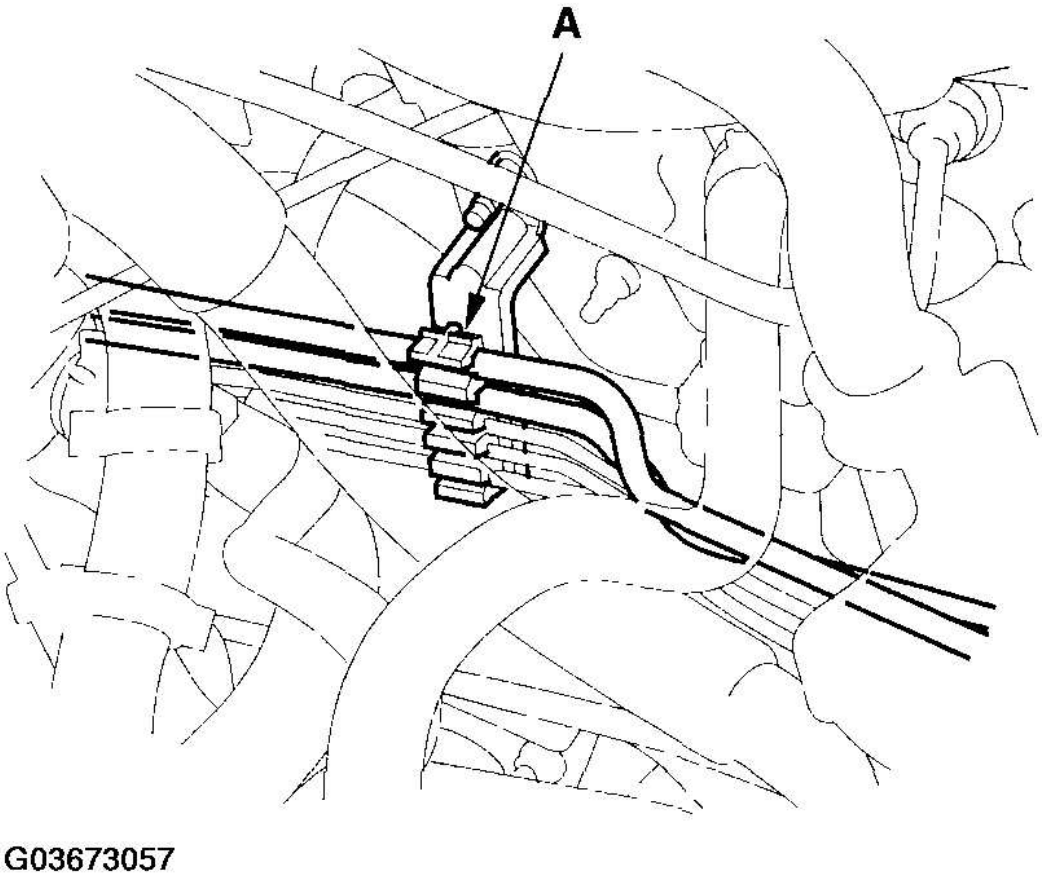


Fig. 18: Removing Primary And Secondary Brake Lines From Hose Clamp
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the lock pin (A) and the joint pin (B), then disconnect the yoke from the brake pedal.

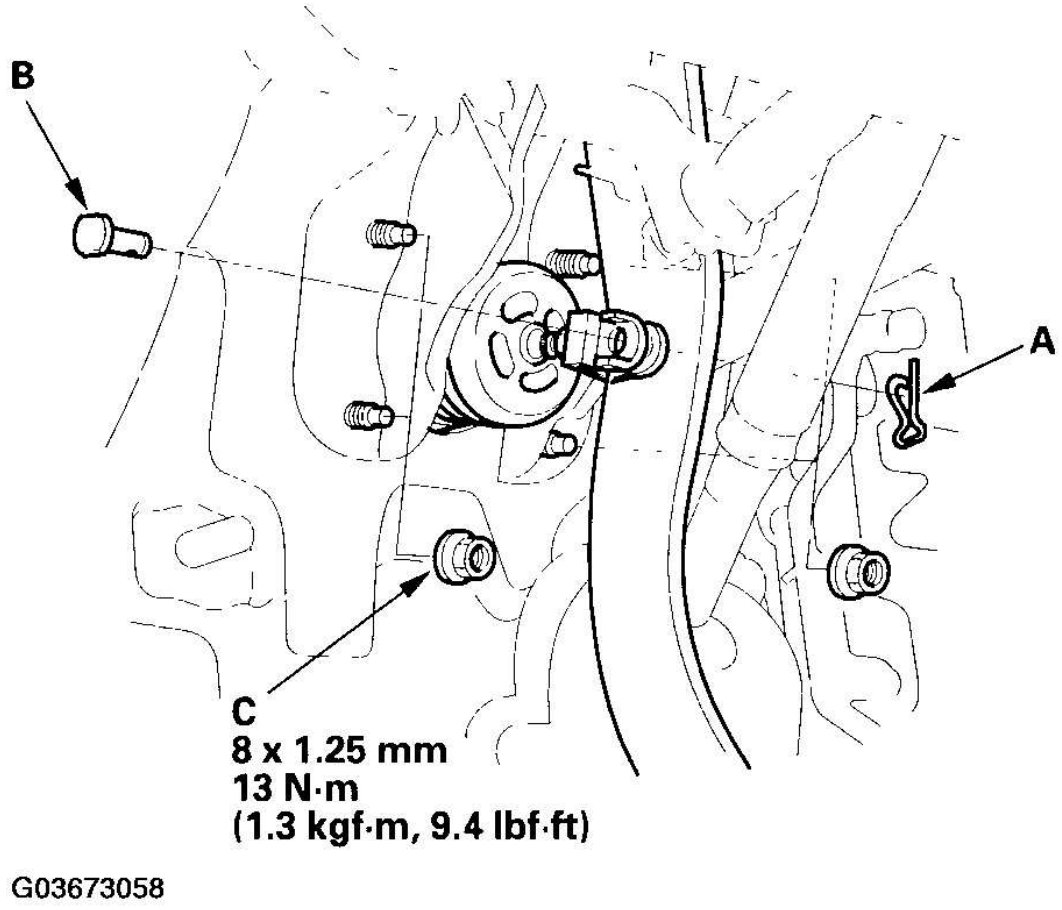


Fig. 19: Removing Lock Pin And Joint Pin
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the brake booster mounting nuts (C).
9. Remove the brake booster (A) from the engine compartment.

NOTE:

- **Be careful not to damage the booster surfaces and threads of the booster stud bolts.**
- **Be careful not to bend or damage the brake lines.**

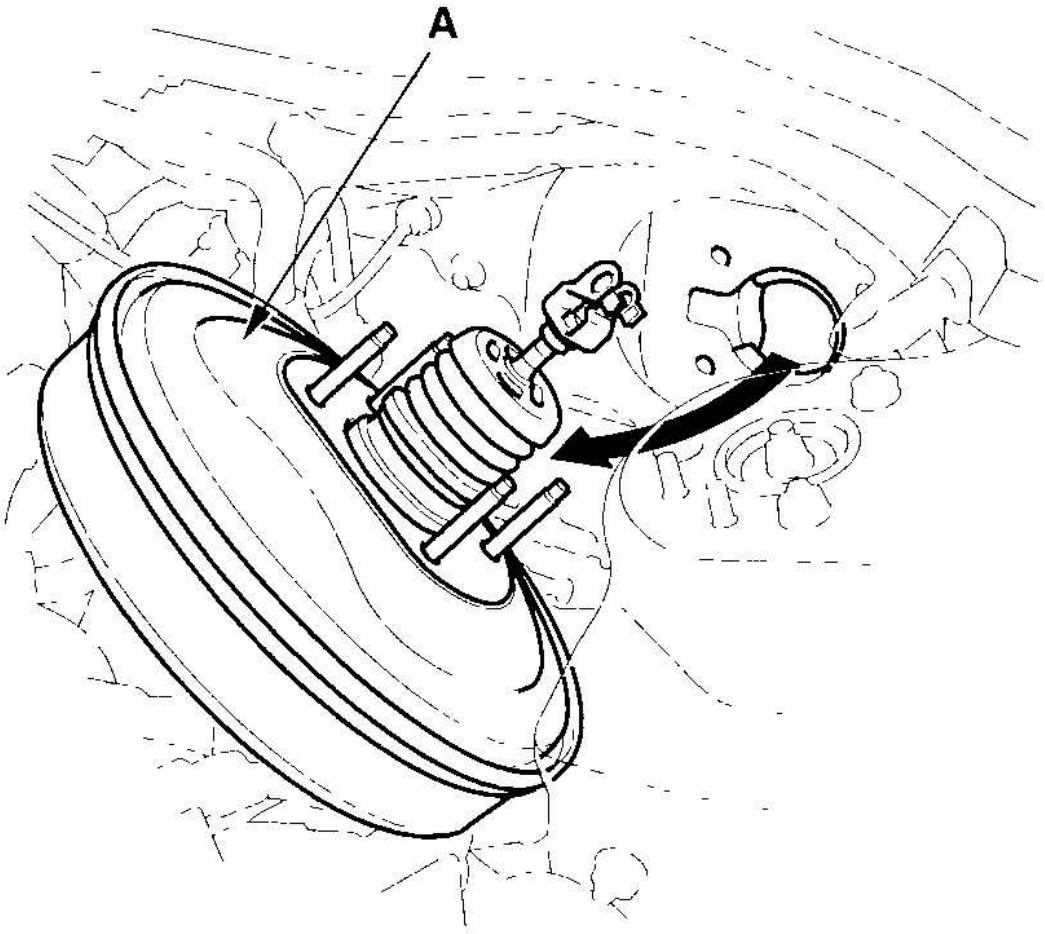


Fig. 20: Removing Brake Booster From Engine Compartment
Courtesy of AMERICAN HONDA MOTOR CO., INC.

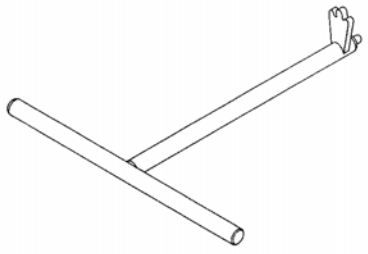
10. Install the brake booster in the reverse order of removal, and note these items:
    - Adjust the pushrod length before installing the brake booster.
    - Use a new lock pin whenever installing.
    - After installing the brake booster and master cylinder, fill the reservoir with new brake fluid, bleed the brake system, and adjust the brake pedal height and free play.

2003-07 BRAKES

Conventional Brake Components - Accord

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07LAF-SM40200	Brake Spring Installer	1



G03648054

Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

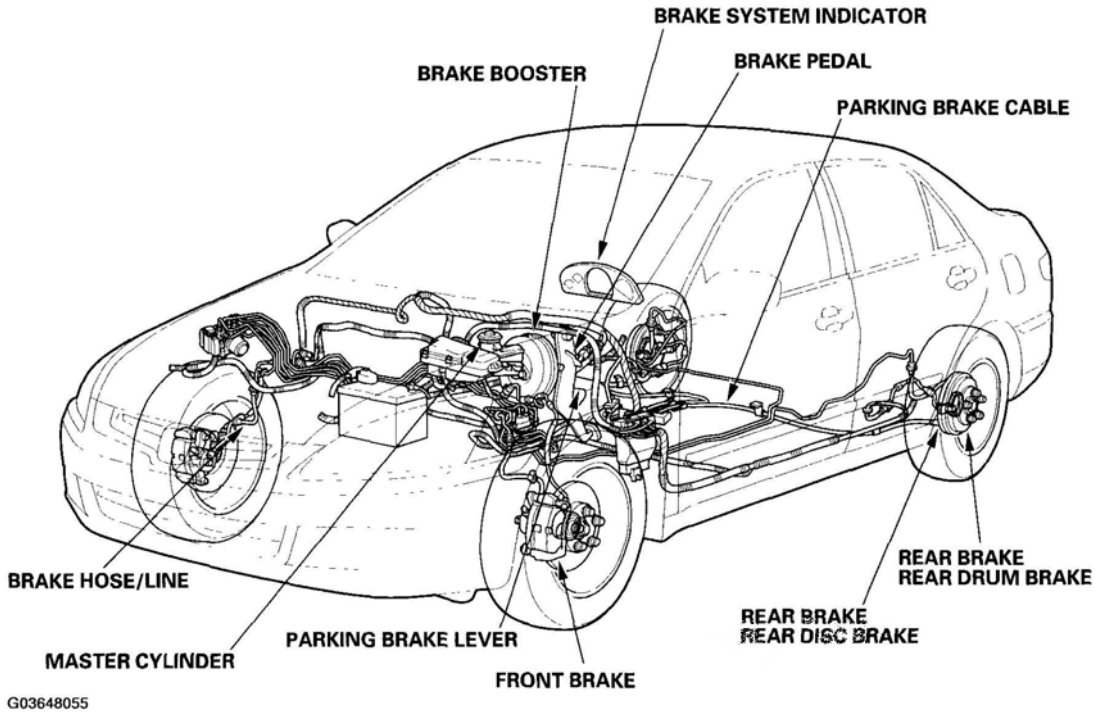


Fig. 2: Identifying Conventional Brake Components Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BRAKE SYSTEM INSPECTION AND TEST

Inspect the brake system components listed. Repair or replace any parts that are leaking or damaged.

COMPONENT INSPECTIONS:

COMPONENT INSPECTIONS CHART

Component	Procedure	Also check for:
Master Cylinder	Look for damage or signs of fluid leakage at: • Reservoir or master cylinder body. • Line, grommets and their joints	Bulging seal at reservoir cap. This is a sign of fluid contamination.

	• Between master cylinder and booster	
Brake Hoses	Look for damage or signs of fluid leakage at: • Line joints and banjo bolt connections • Hoses and lines, also inspect for twisting or damage	Bulging, twisted, or bent lines.
Caliper	Look for damage or signs of fluid leakage at: • Piston seal • Banjo bolt connections • Bleed screw	Seized or sticking caliper pins.
Wheel Cylinder Look for damage or signs of fluid leakage at: • Wheel Cylinder. • Line joints. • Bleed Screw.		
ABS Modulator-Control Unit	Look for damage or signs of fluid leakage at: • Line joints • Modulator-control unit	

BRAKE SYSTEM TEST

Brake pedal sinks/fades when braking

1. Set the parking brake, and start the engine , then turn off the A/C switch. Allow the engine to warm up to normal operating temperature (radiator fan comes on twice).
2. Attach a 50 mm (2 in.) piece of masking tape along the bottom of the steering wheel, and draw a horizontal reference mark across it.
3. With the transmission M/T in Neutral position, A/T in P or N position, press and hold the brake pedal lightly (about the same pressure needed to keep an A/T-equipped vehicle from creeping), then release the parking brake.
4. While still holding the brake pedal, hook the end of the tape measure the brake pedal, then pull the tape up to the steering wheel. Note the measurement between the brake pedal and the reference mark on the steering wheel.
5. Apply steady pressure to the brake pedal for 3 minutes.
6. Watch the tape measure.
   - If the measurement increases 10 mm (3/8 in.) or less, the master cylinder is OK.
   - If the measurement increases more than 10 mm (3/8 in.), replace the master cylinder.

SYMPTOM TROUBLESHOOTING

RAPID BRAKE PAD WEAR, VEHICLE VIBRATION (AFTER A LONG DRIVE), OR HIGH, HARD BRAKE PEDAL

NOTE: Make sure that the caliper pins are installed correctly. The upper and lower caliper pins are different. If the top and bottom caliper pins are installed in the wrong location, it will cause uneven tire wear, vibration, and or uneven or rapid pad wear for proper caliper pin location: AKEBONO type (see AKEBONO Type), NISSIN type (see NISSIN Type).

1. Drive the vehicle until the brakes drag or until the pedal is high and hard. This can take 20 or more brake pedal applications during an extended test-drive.
2. With the engine running, raise the vehicle on a lift, and spin all four wheels by hand.

Is there brake drag at any of the wheels?

YES - Go to step 3.

NO - Look for other causes of the pad wear, high pedal, or vehicle vibration.

3. Turn the engine off, pump the brake pedal to deplete the vacuum in the brake booster, and then spin the wheels again to check for brake drag.

Is there brake drag at any of the wheels?

YES - Go to step 4.

NO - Replace the brake booster (see **BRAKE BOOSTER REPLACEMENT**).

4. Without removing the brake lines, unbolt and separate the master cylinder from the booster, then spin the wheels to check for brake drag.

Is there brake drag at any of the wheels?

YES - Go to step 5.

NO - Check the brake pedal position switch adjustment and pedal free play (see **BRAKE PEDAL AND BRAKE PEDAL POSITION SWITCH ADJUSTMENT**).

5. Loosen the hydraulic lines at the master cylinder, then spin the wheels to check for brake drag.

Is there brake drag at any of the wheels?

YES - Go to step 6.

NO - Replace the master cylinder (see **MASTER CYLINDER REPLACEMENT**).

6. Loosen the bleed screws at each caliper or wheel cylinder, then spin the wheels to check for brake drag.

Is there brake drag at any of the wheels?

YES - Disassemble and repair the caliper or wheel cylinder, on the wheel

(s) with brake drag.

NO - Look for a bulging master cylinder cap seal, discolored or contaminated brake fluid in the master cylinder, or damaged brake lines. If any of these items are damaged, replace them. If all of these items are OK, replace the ABS modulator-control unit (see **ABS MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

BRAKE PEDAL AND BRAKE PEDAL POSITION SWITCH ADJUSTMENT

PEDAL HEIGHT

1. Turn the brake pedal position switch (A) counterclockwise, and pull it back until it is no longer touching the brake pedal.

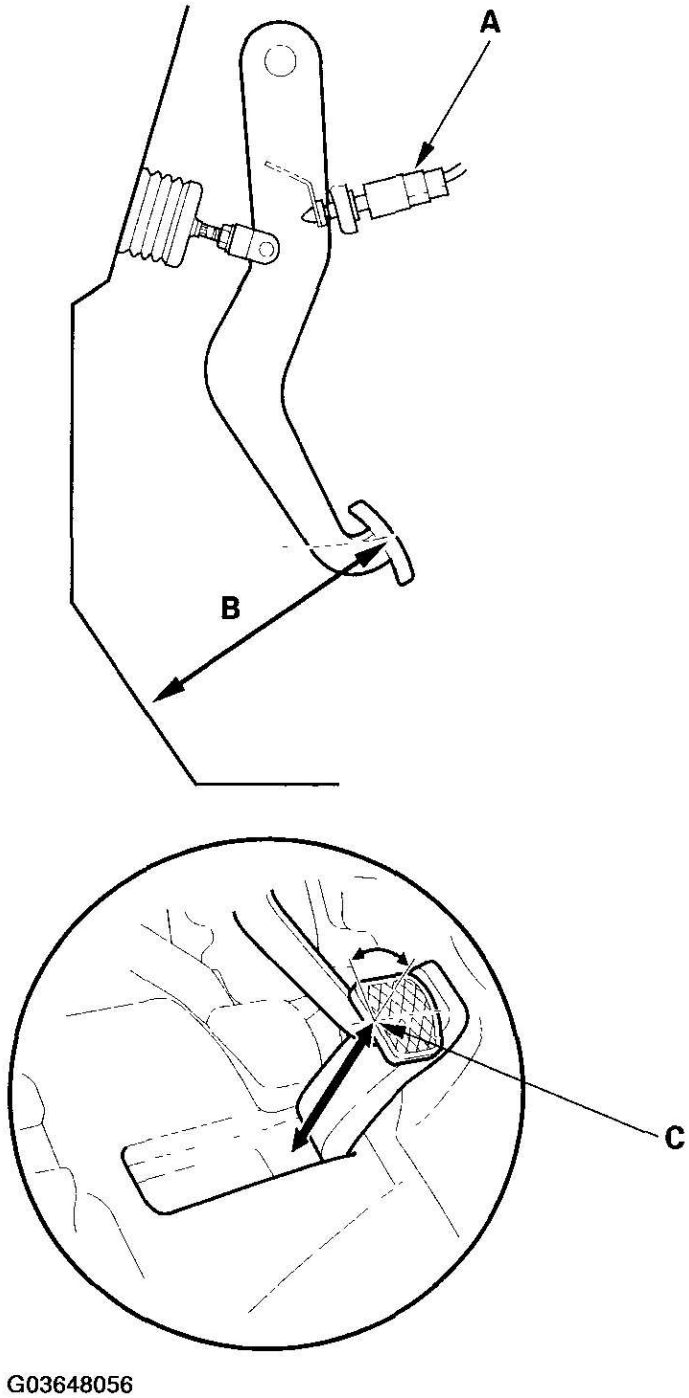


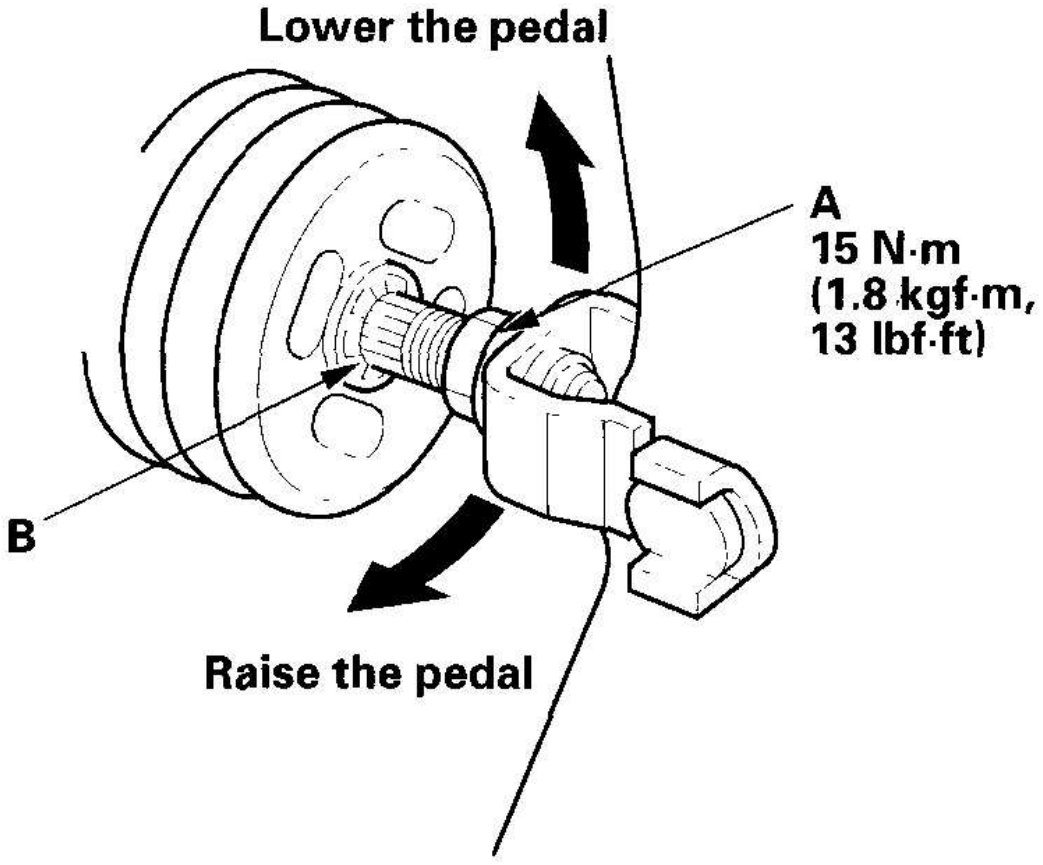
Fig. 3: Turning Brake Pedal Position Switch Counterclockwise
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Lift up the carpet. At the insulator cutout, measure the pedal height (B) from the left side of the pedal pad (C).

   Standard pedal height (with carpet removed):

   M/T: 167 mm (6 9/16 in.)
   A/T: 172 mm (6 13/16 in.)

3. Loosen the pushrod locknut (A), and screw the pushrod in or out with pliers on the knurled part of the push rod (B) until the standard pedal height from the floor is reached. After adjustment, tighten the locknut firmly. Do not adjust the pedal height with the pushrod pressed.

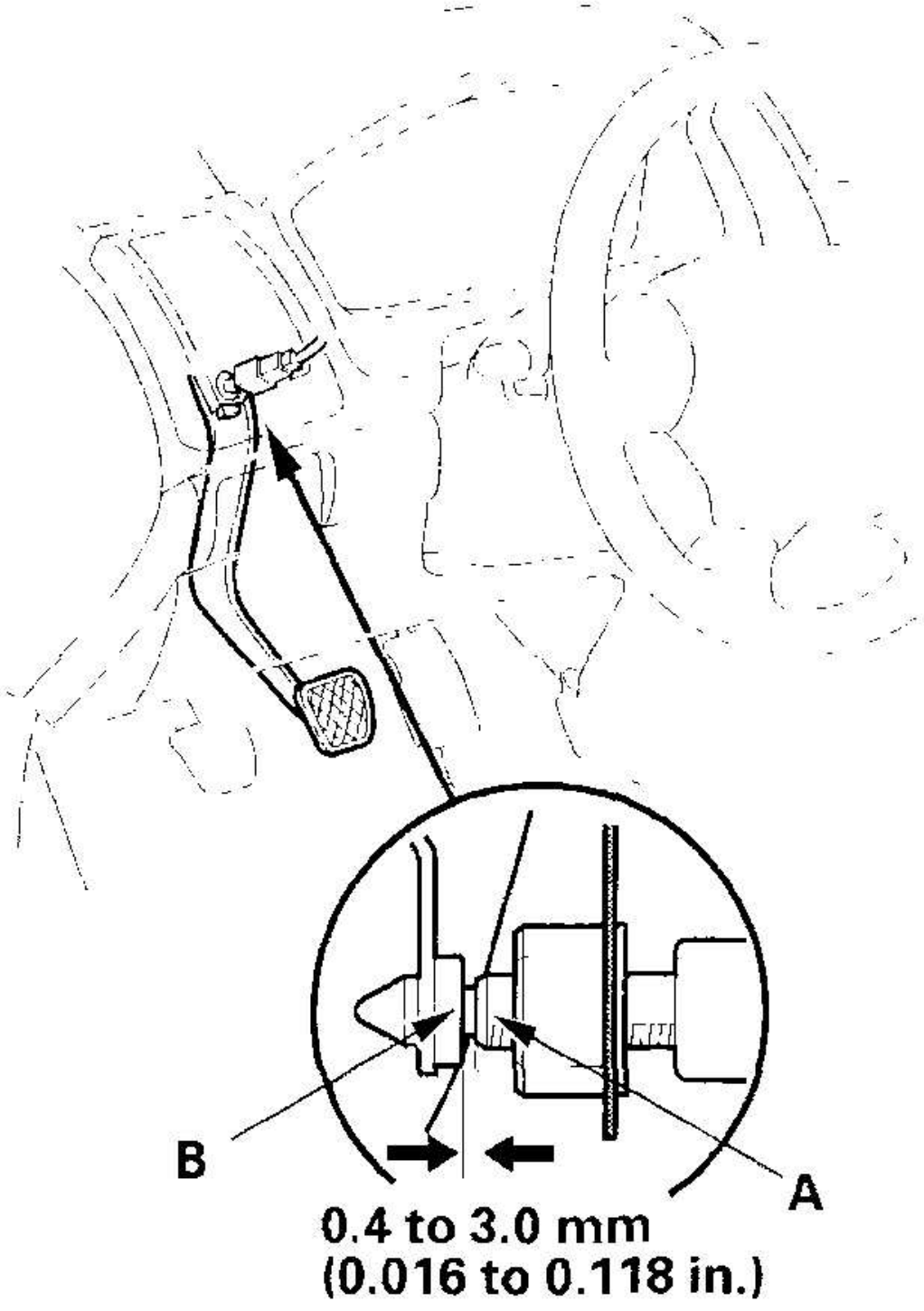


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Fig. 4: Loosening Pushrod Locknut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Brake Pedal Position Switch Clearance

4. Using on hand, lift up on the brake pedal, while doing step 4. Push in the brake pedal position switch until its plunger is fully pressed (threaded end (A) touching the pad (B) on the pedal arm). Then, turn the brake pedal position switch 45° clockwise to lock it. The gap between the brake pedal position switch and the pad is automatically adjusted to 0.7 mm (0.03 in.) by locking the switch. Make sure the brake lights go off when the pedal is released.



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Fig. 5: Measuring Gap Between Brake Pedal Position Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Check the brake pedal free play.

PEDAL FREE PLAY

1. With the engine off, inspect the pedal free play (A) on the pedal pad (B) by pushing the brake pedal by hand.

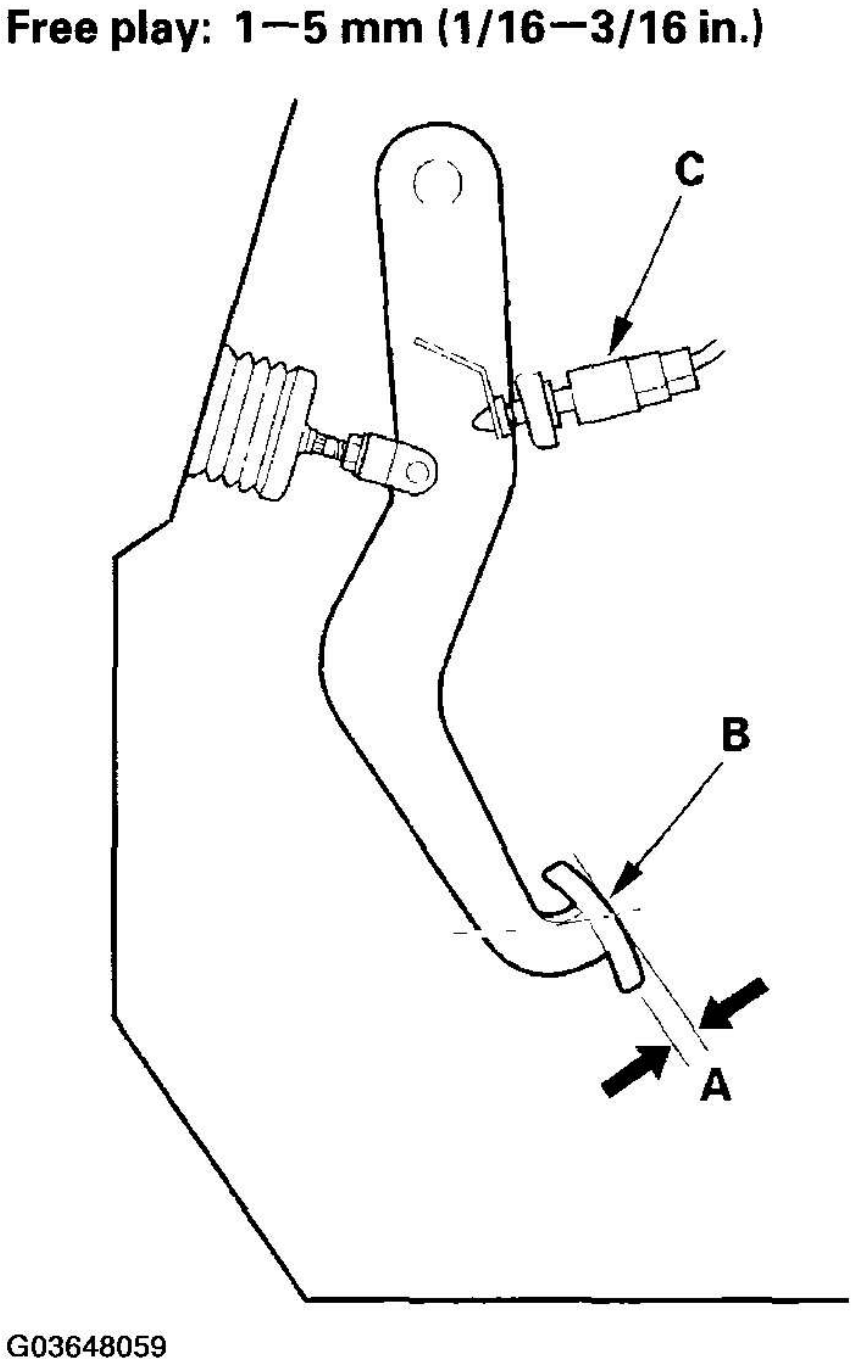


Fig. 6: Inspecting Pedal Free Play On Pedal Pad
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. If the pedal free play is out of specification, adjust the brake pedal position switch (C). If the brake pedal free play is insufficient, it may result in excessive brake drag.

PARKING BRAKE CHECK AND ADJUSTMENT

CHECK

1. Pull the parking brake lever (A) with 196 N (20 kgf, 44 lbf) of force to fully apply the parking brake. The parking brake lever should be locked within the specified number of clicks (B).

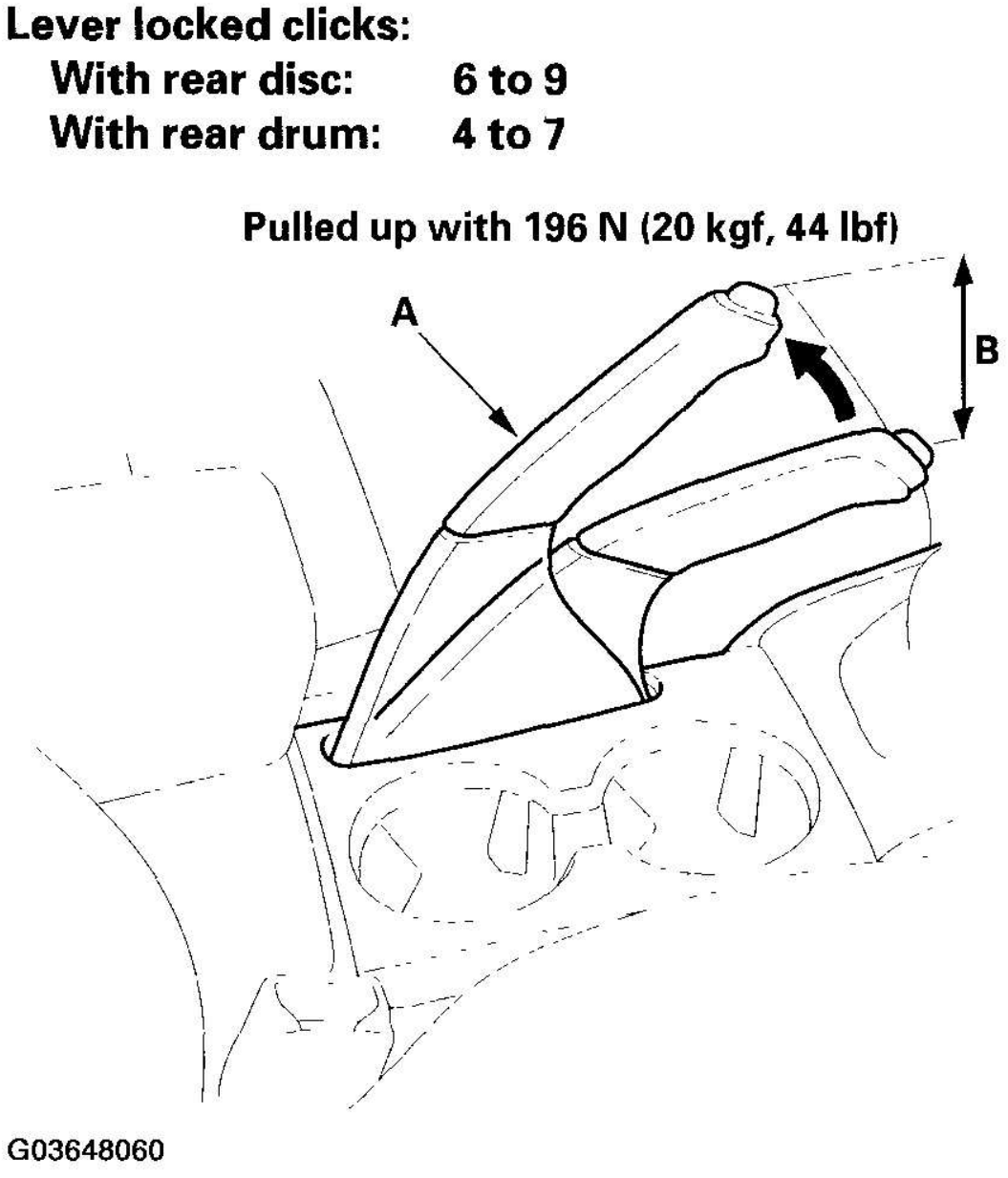


Fig. 7: Pulling Parking Brake Lever With Force To Fully Apply Parking Brake
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Adjust the parking brake if the lever clicks are not within the specification.

ADJUSTMENT

NOTE: After servicing the rear brake shoes, loosen the parking brake adjusting nut, start the engine, and press the brake pedal several times to set the self-adjusting brake before adjusting the parking brake (with rear drum brake).

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the center console (see **CENTER CONSOLE REMOVAL/INSTALLATION**).
3. Release the parking brake lever fully.
4. With rear disc brake: Loosen the parking brake adjusting nut.
5. With rear disc brake: Remove the rear wheels.
6. With rear disc brake: Make sure the parking brake arm (A) on the rear brake caliper contacts the brake caliper pin (B).

NOTE: The parking brake arm will only contact the brake caliper pin when the parking brake adjusting nut is loosened.

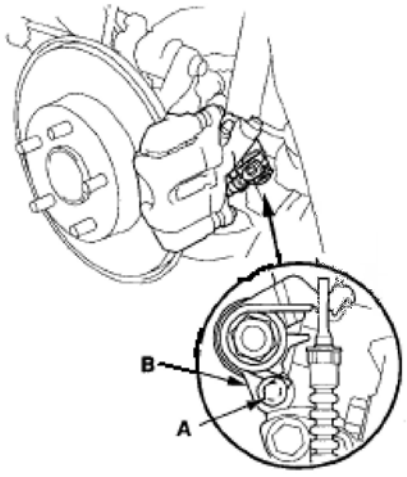
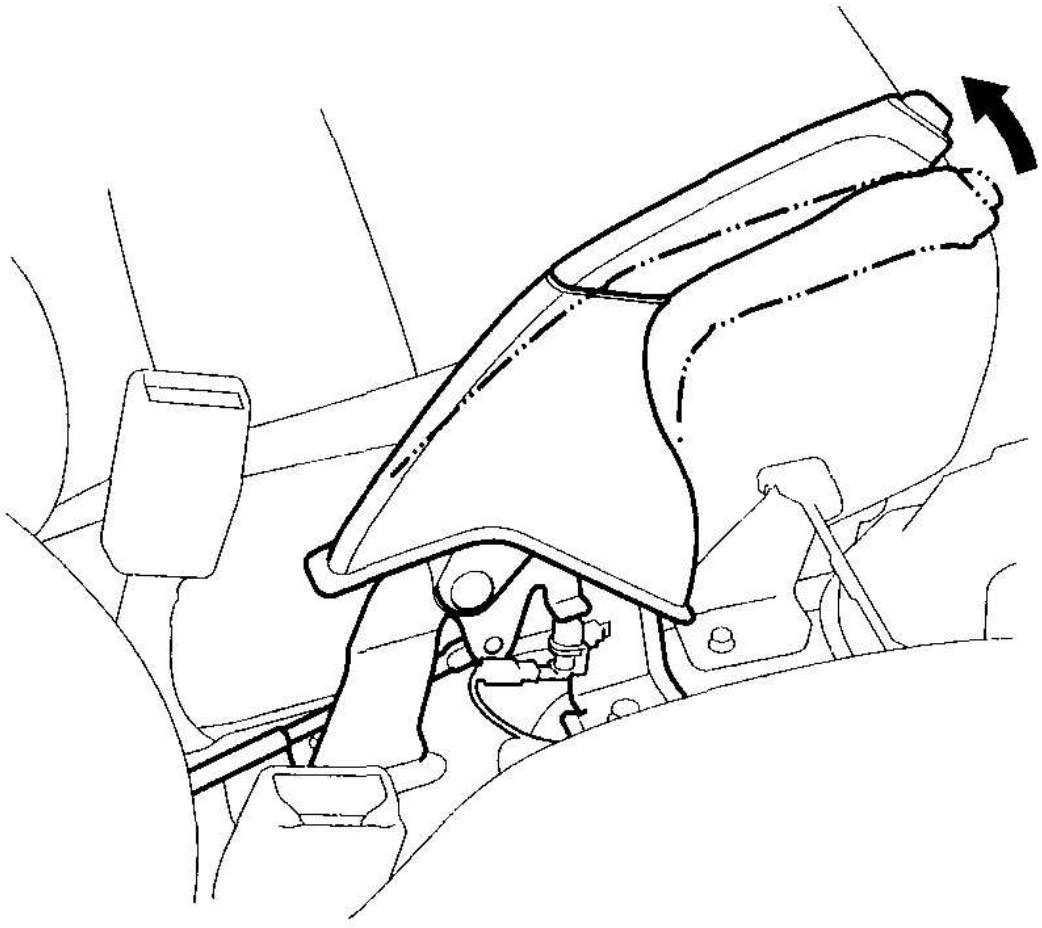


Fig. 8: Identifying Brake Caliper Contacts

7. Reinstall the center console (see **CENTER CONSOLE REMOVAL/INSTALLATION**).



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Fig. 9: Pulling Parking Brake Lever Up One Click
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Tighten the adjusting nut (A) until the parking brakes drag slightly when the rear wheels are turned.

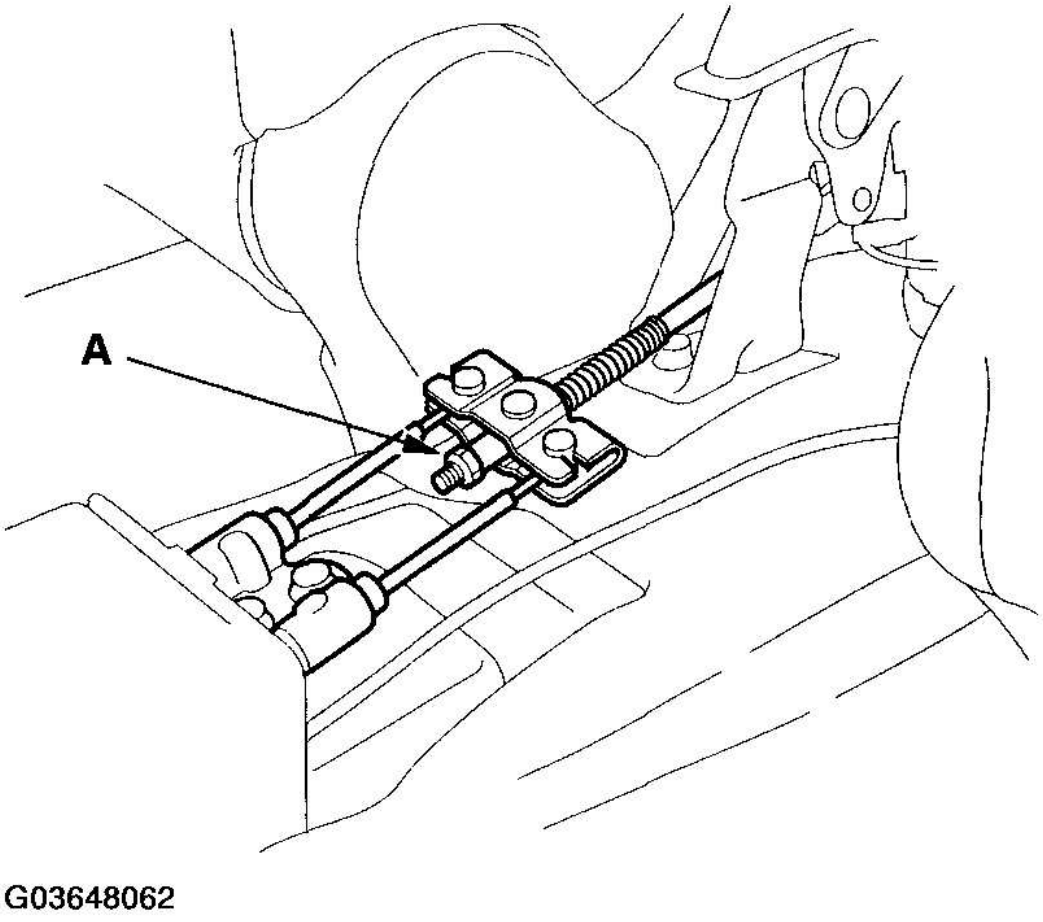


Fig. 10: Tightening Adjusting Nut Until Parking Brakes Drag
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Release the parking brake lever fully, and check that the parking brakes do not drag when the rear wheels are turned. Readjust if necessary.
10. Pull the parking brake all the way up, and make sure the parking brakes are fully applied.
11. Reinstall the center console (see **CENTER CONSOLE REMOVAL/INSTALLATION**).

BRAKE SYSTEM BLEEDING

NOTE:

- **Do not reuse the drained fluid. Use only clean Honda DOT 3 Brake Fluid from an unopened container.**

  Using a non-Honda brake fluid can cause corrosion and shorten the life of the system.
- **Do not mix different brands of brake fluid; they may not be compatible.**
- **Make sure no dirt or other foreign matter is allowed to contaminate the brake fluid.**
- **Do not spill brake fluid on the vehicle, it may damage the paint; if brake fluid does contact the paint, wash it off immediately with water.**
- **The reservoir on the master cylinder must be at the MAX (upper) level mark at the start of the bleeding procedure and checked after bleeding each brake caliper. Add fluid as required.**

1. Make sure the brake fluid level in the reservoir is at the MAX (upper) level line (A).

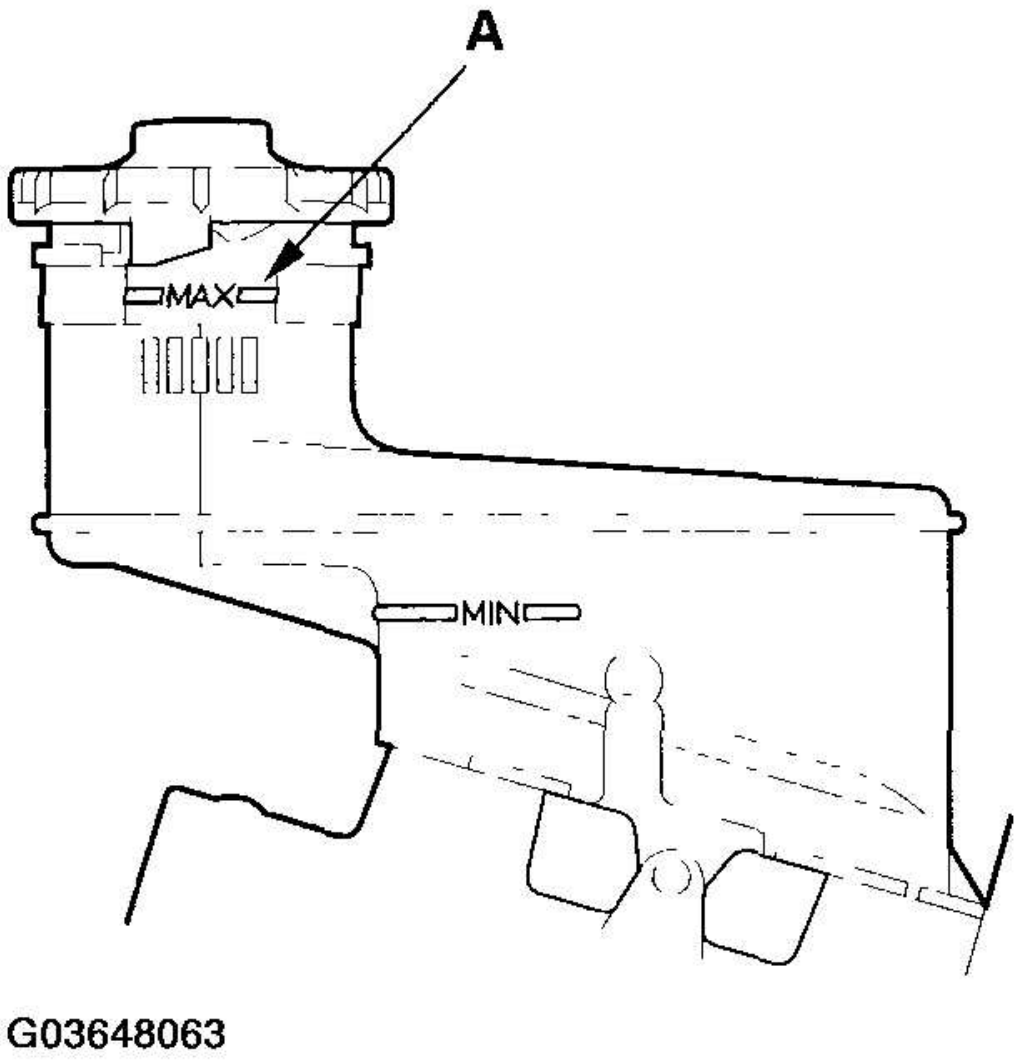


Fig. 11: Making Sure Brake Fluid In Reservoir Is MAX Level Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Attach a length of clear drain tube to the bleed screw.
3. Have someone slowly pump the brake pedal several times, then apply steady pressure.
4. Starting at the left-front, loosen the brake bleed screw to allow air to escape from the system. Then tighten the bleed screw securely.

5. Repeat the procedure for each wheel in the sequence shown below until air bubbles no longer appear in the fluid.

BLEEDING SEQUENCE:

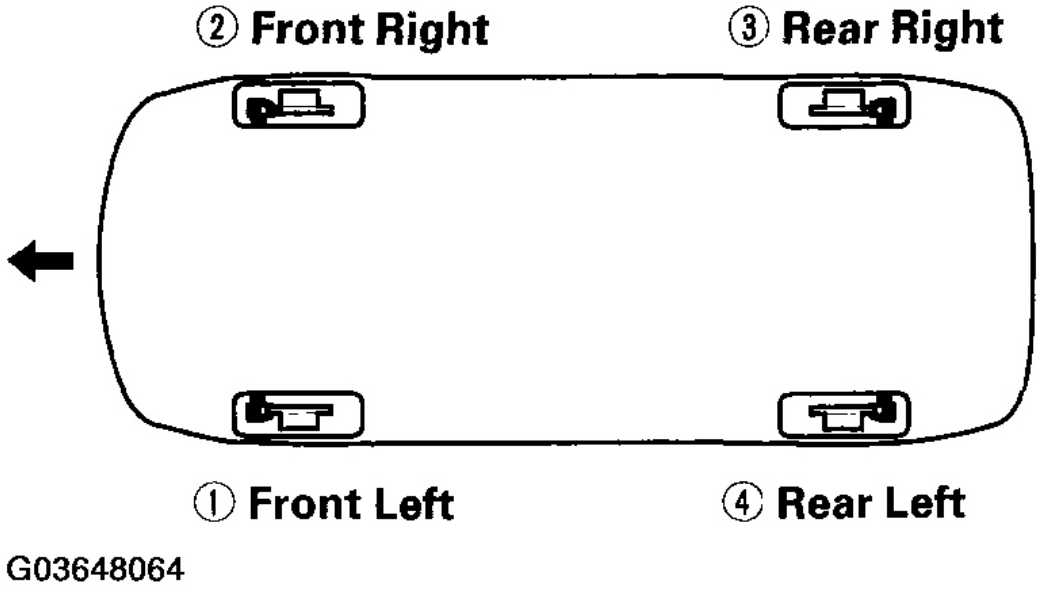


Fig. 12: Bleeding Brake In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

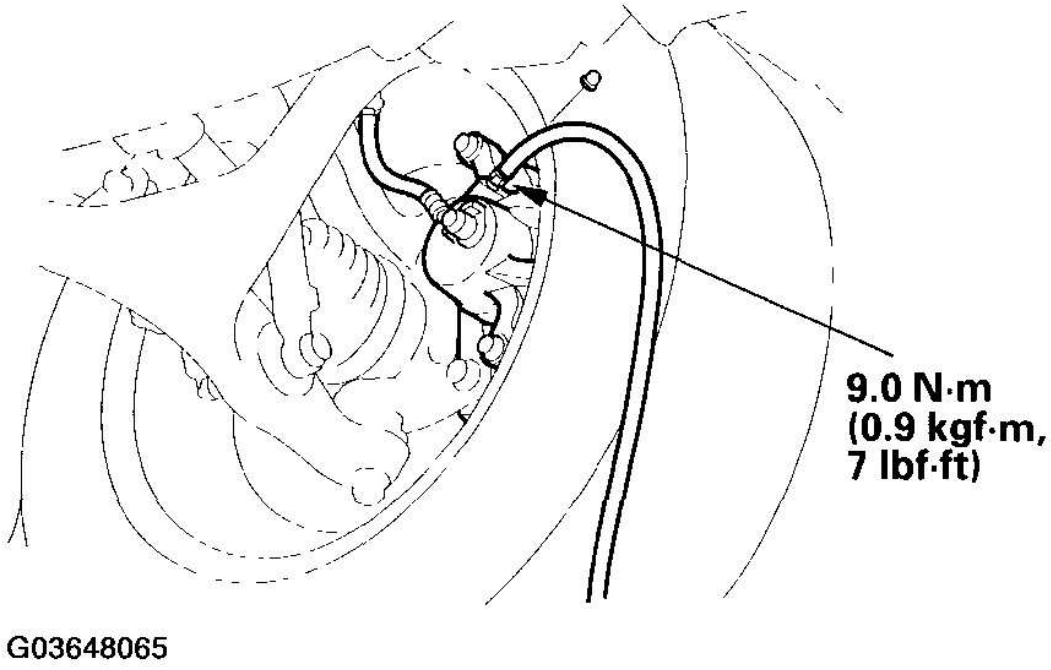


Fig. 13: Identifying Front Brake System Bleeding
Courtesy of AMERICAN HONDA MOTOR CO., INC.

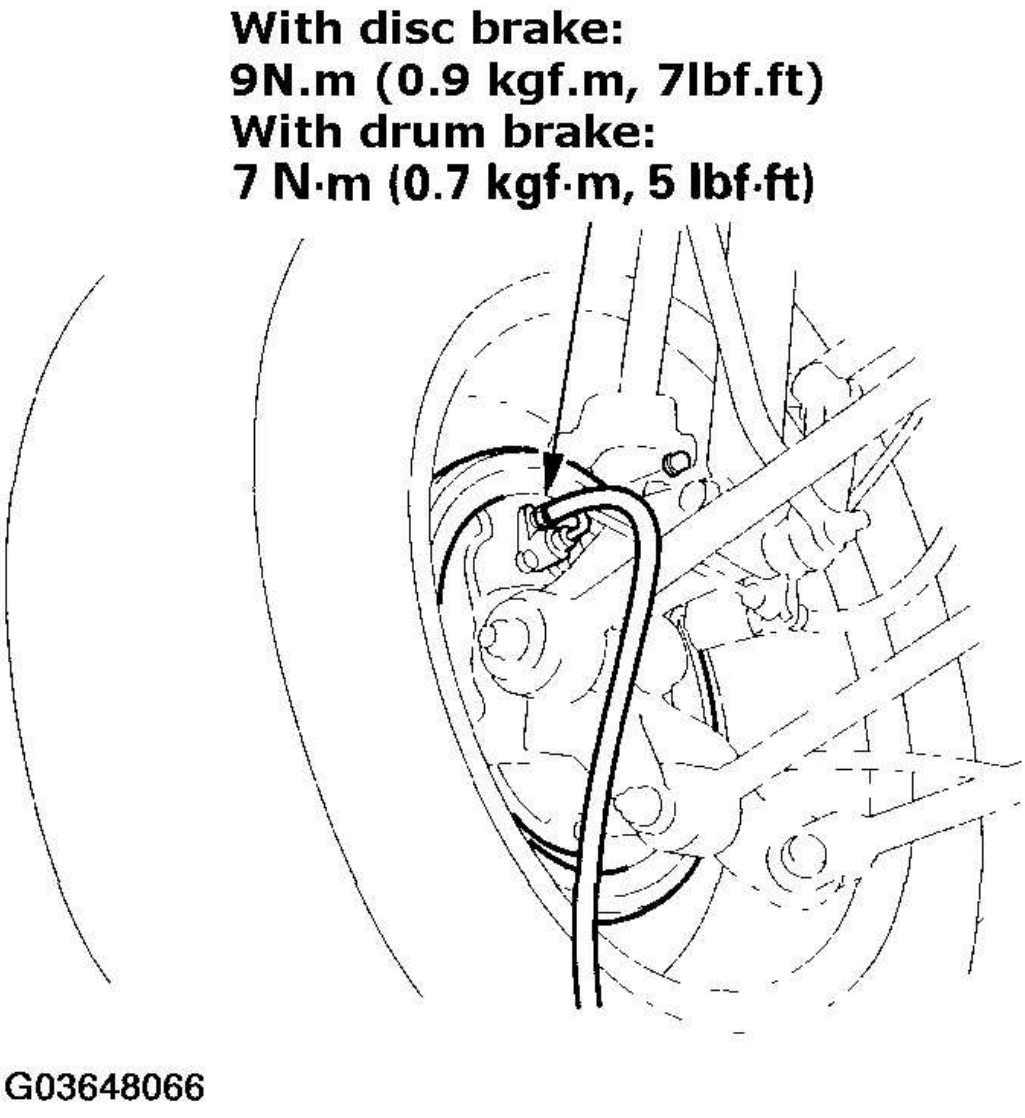


Fig. 14: Identifying Rear Brake System Bleeding
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Refill the master cylinder reservoir to the MAX (upper) level line.

BRAKE SYSTEM INDICATOR CIRCUIT DIAGRAM

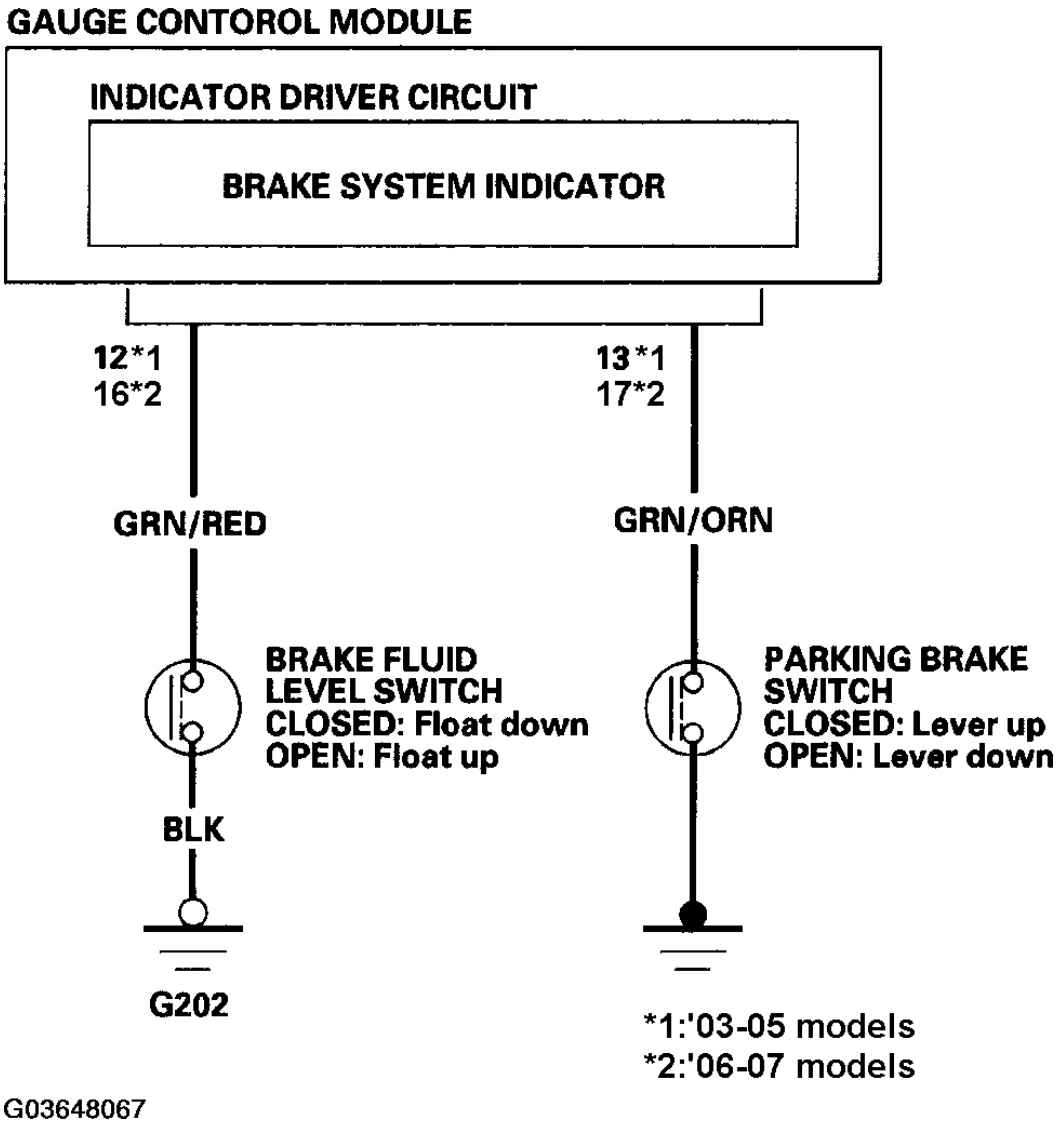


Fig. 15: Brake System Indicator Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PARKING BRAKE SWITCH TEST

1. Remove the center console (see **CENTER CONSOLE REMOVAL/INSTALLATION**).
2. Disconnect the connector (A) from the parking brake switch (B).

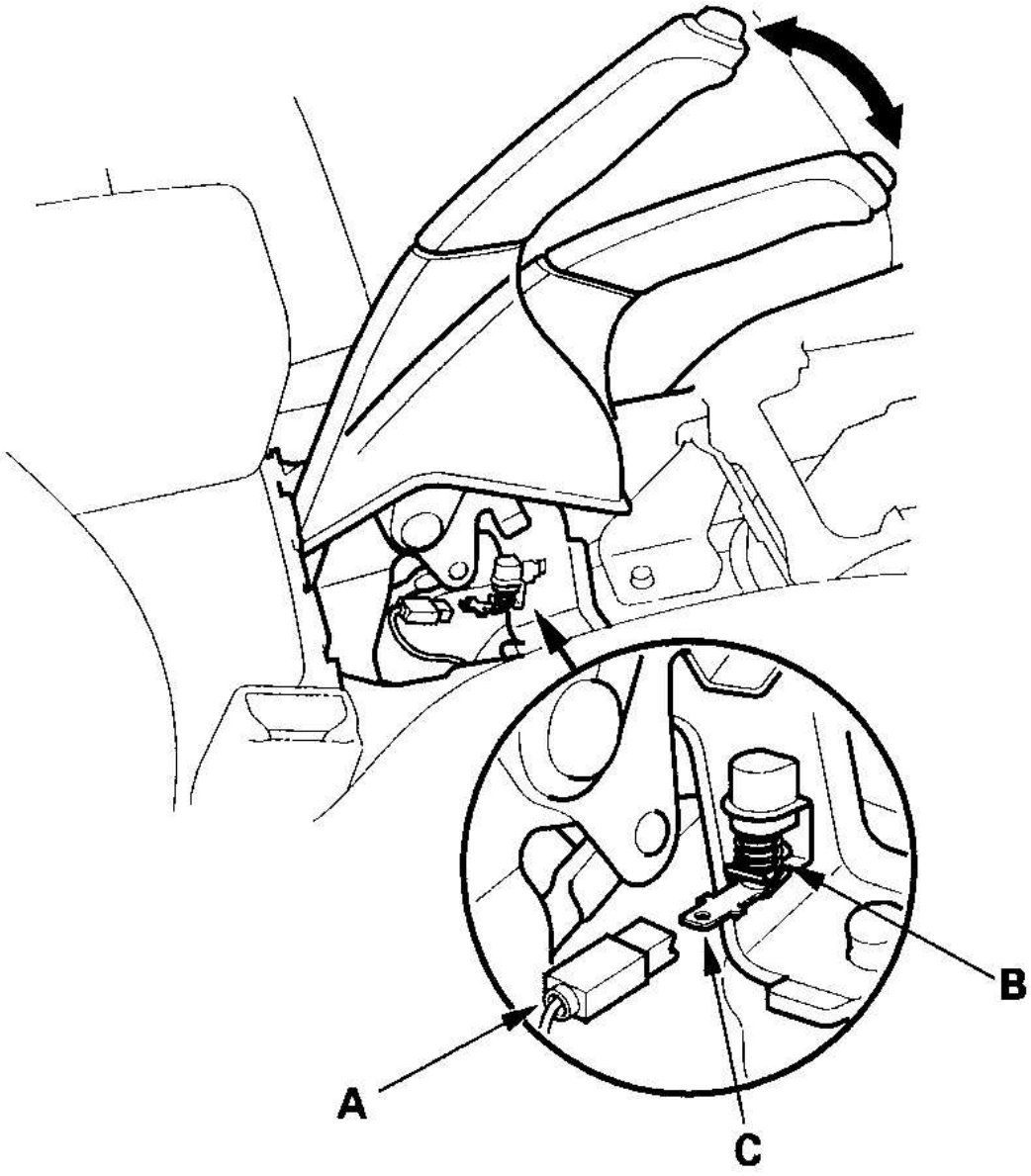


Fig. 16: Disconnecting Connector From Parking Brake Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

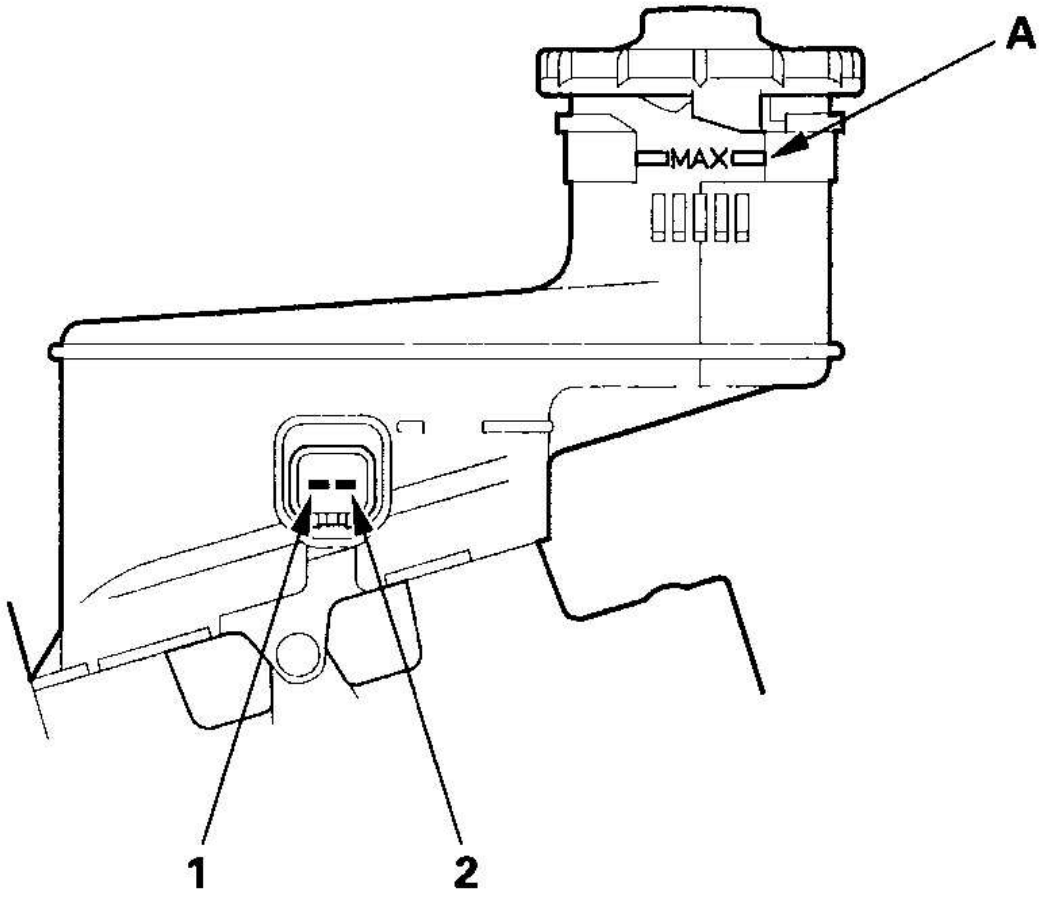
3. Check for continuity between the positive terminal (C) and body ground.
   - With the brake lever up, there should be continuity.

- With the brake lever down, there should be no continuity.

BRAKE FLUID LEVEL SWITCH TEST

Check for continuity between the terminals (1 and 2) with the float in the down position and in the up position.

- Remove the brake fluid completely from the reservoir. With the float down, there should be continuity.
- Fill the reservoir with brake fluid to the MAX (upper) level (A). With the float up, there should be no continuity.



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Fig. 17: Checking Continuity Between Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT BRAKE PAD INSPECTION AND REPLACEMENT

CAUTION: Frequent inhalation of brake pad dust, regardless of material composition, could be hazardous to your health.

- **Avoid breathing dust particles.**
- **Never use an air hose or brush to clean brake assemblies. Use an OSHA-approved vacuum cleaner.**

INSPECTION-AKEBONO TYPE

1. Raise the front of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the front wheels.
3. Check the thickness (A) of the inner pad (B) and outer pad (C). Do not include the thickness of the backing plate.

Brake pad thickness:

Standard: 10.5-11.5 mm (0.41-0.45 in.)
Service limit: 1.6 mm (0.06 in.)

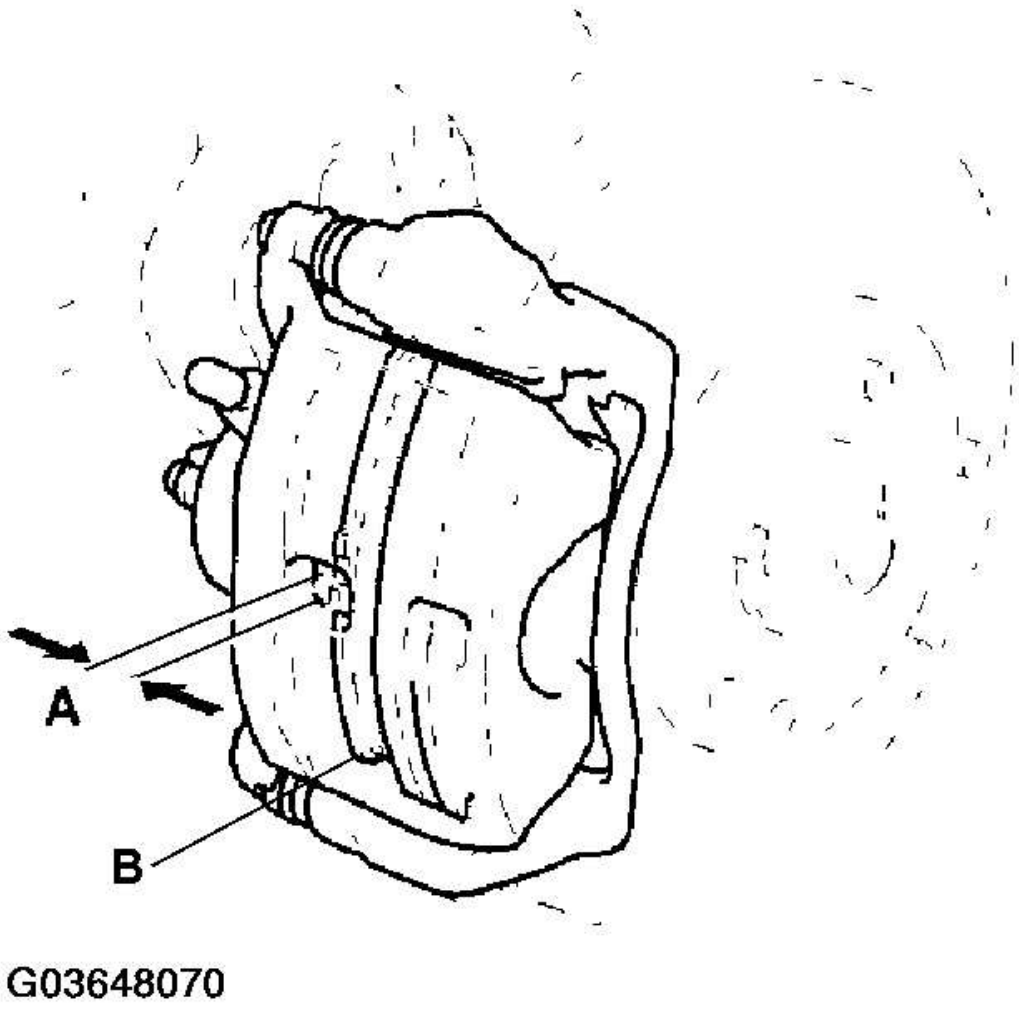


Fig. 18: Checking Thickness Of Inner Pad
Courtesy of AMERICAN HONDA MOTOR CO., INC.

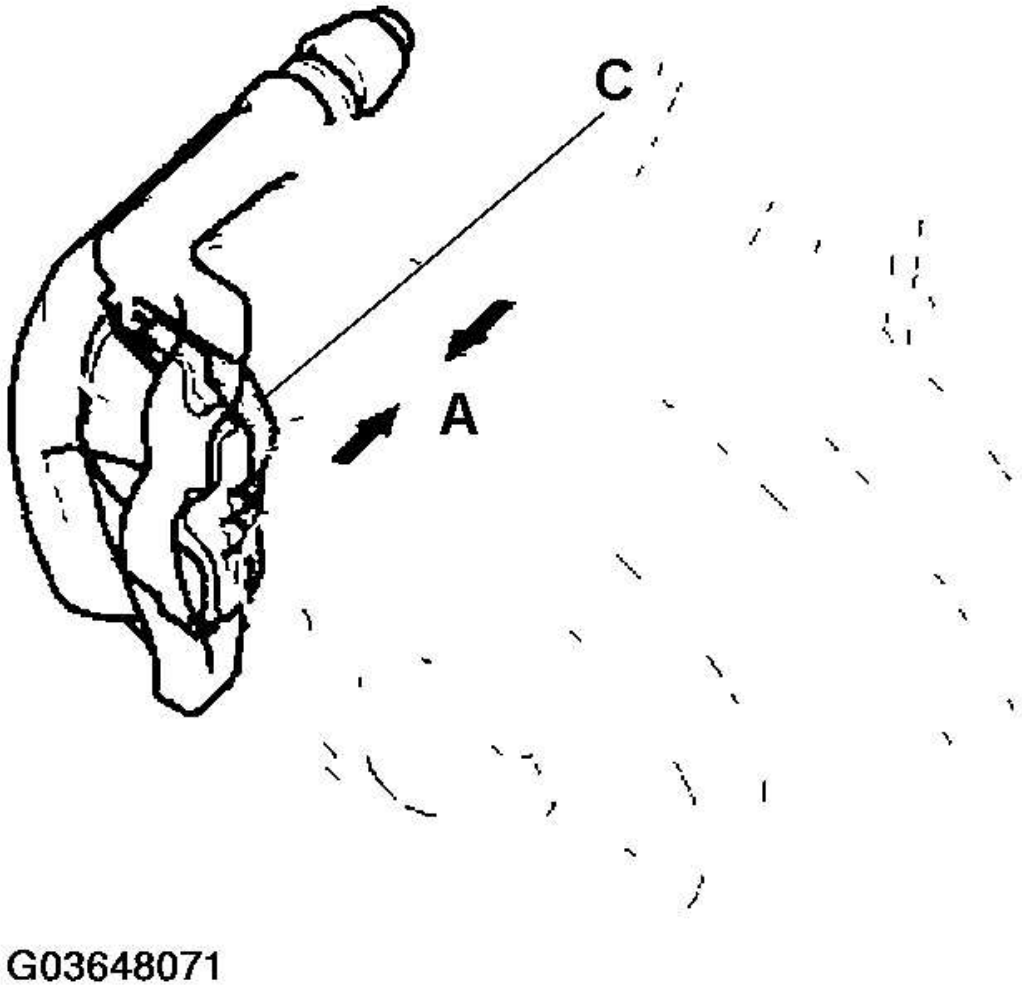


Fig. 19: Checking Thickness Of Outer Pad
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the brake pad thickness is less than the service limit, replace all the front brake pads as a set.

REPLACEMENT-AKEBONO TYPE

1. Remove some brake fluid from the master cylinder.
2. Raise the front of the vehicle, and support it with safety stands in the proper

locations (see **LIFT AND SUPPORT POINTS**).

3. Remove the front wheels.
4. Remove the brake hose mounting bolt (A).

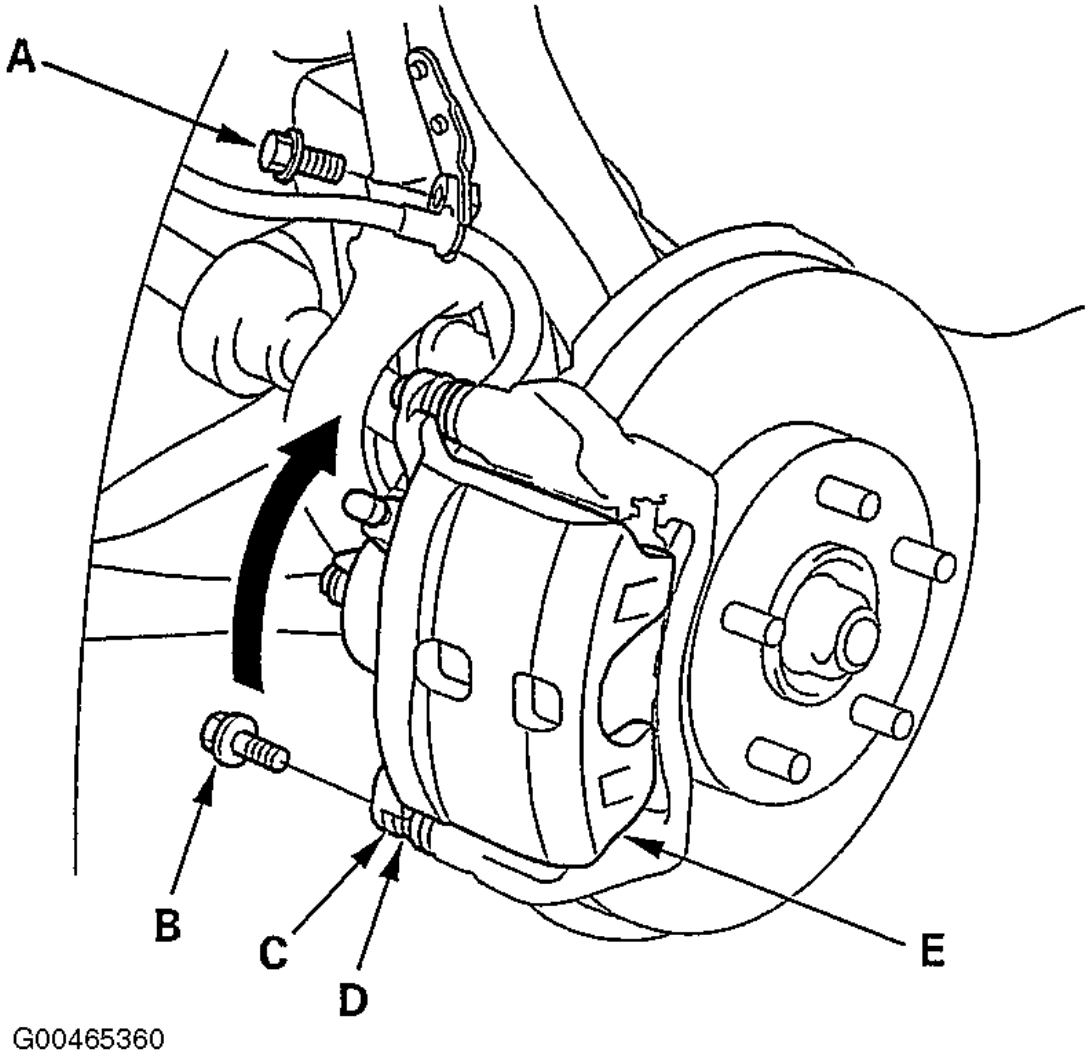


Fig. 20: Identify Brake Hose Mounting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the flange bolt (B) while holding the caliper pin (C) with a wrench being careful not to damage the pin boot (D), and pivot the caliper (E) up out of the way. Check the brake hose and pin boots for damage and deterioration.
6. Remove the brake pads (A) and the pad shims (B).

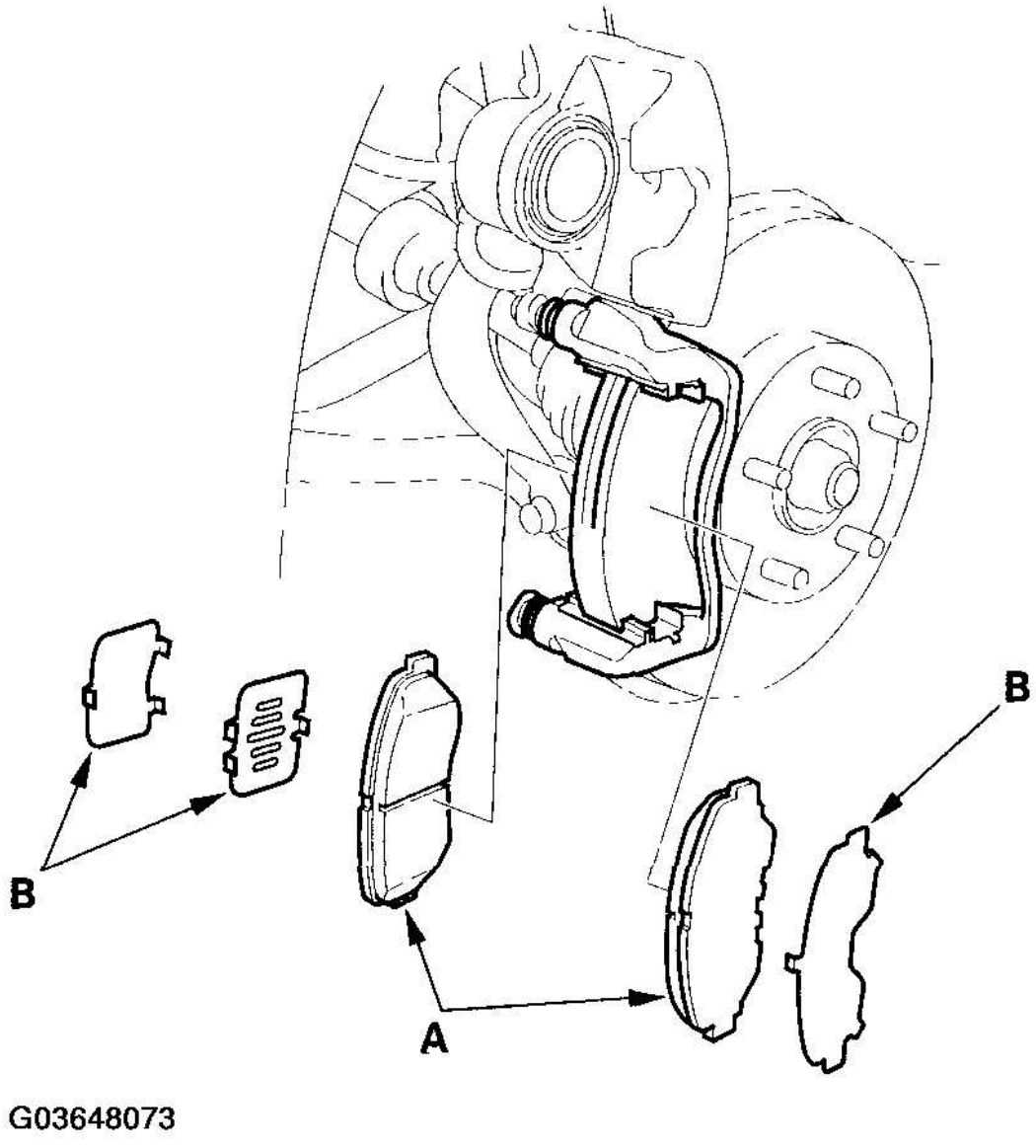


Fig. 21: Removing Pad Shims And Brake Pads
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Check the hose and pin boots for damage and deterioration.
8. Remove the pad retainers (A), and check the caliper pin for free movement.

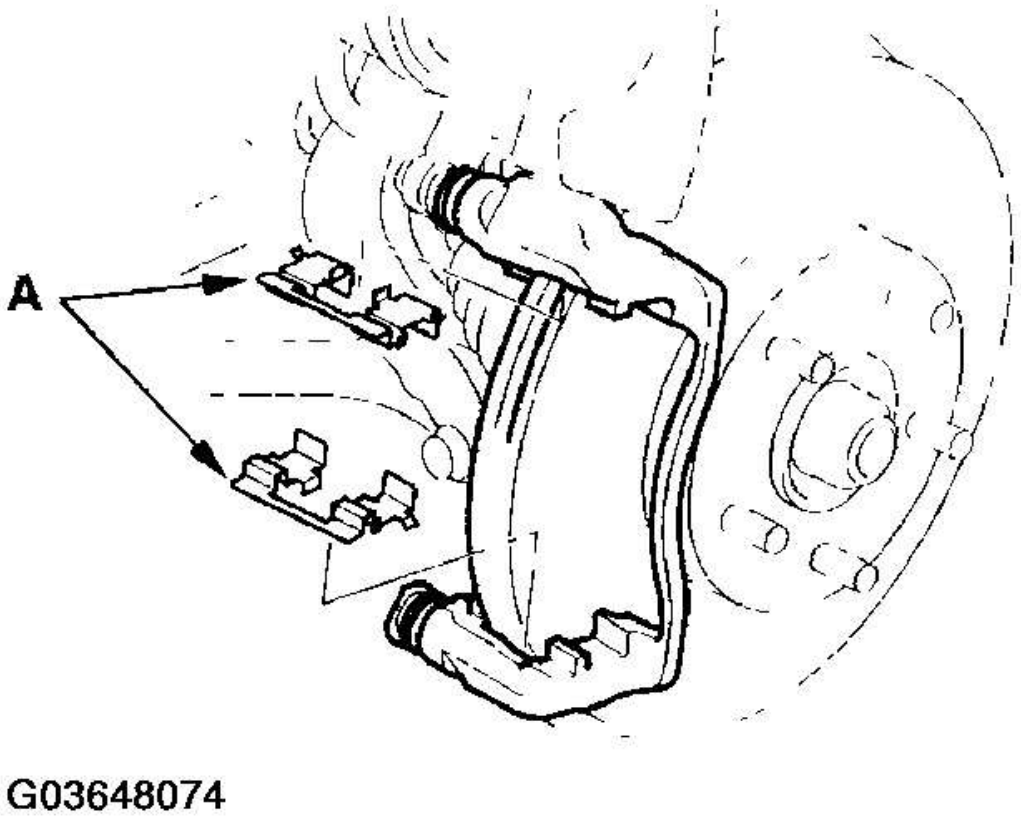


Fig. 22: Removing Pad Retainers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Clean the caliper thoroughly; remove any rust, and check for grooves and cracks.
10. Check the brake disc for damage and cracks.
11. Clean and install the pad retainers.
12. Apply a thin coat of M-77 assembly paste (P/N 08798-9010) to the pad side of shim outer pad shim C, inner pad shim B, both sides of inner pad shim A, the back of brake pads (D), and to the other areas indicated by the arrows. Wipe excess assembly paste off the pad shims and brake pads.

    Contaminated brake discs and pads reduce stopping ability. Keep assembly

paste off the brake discs and brake pad material.

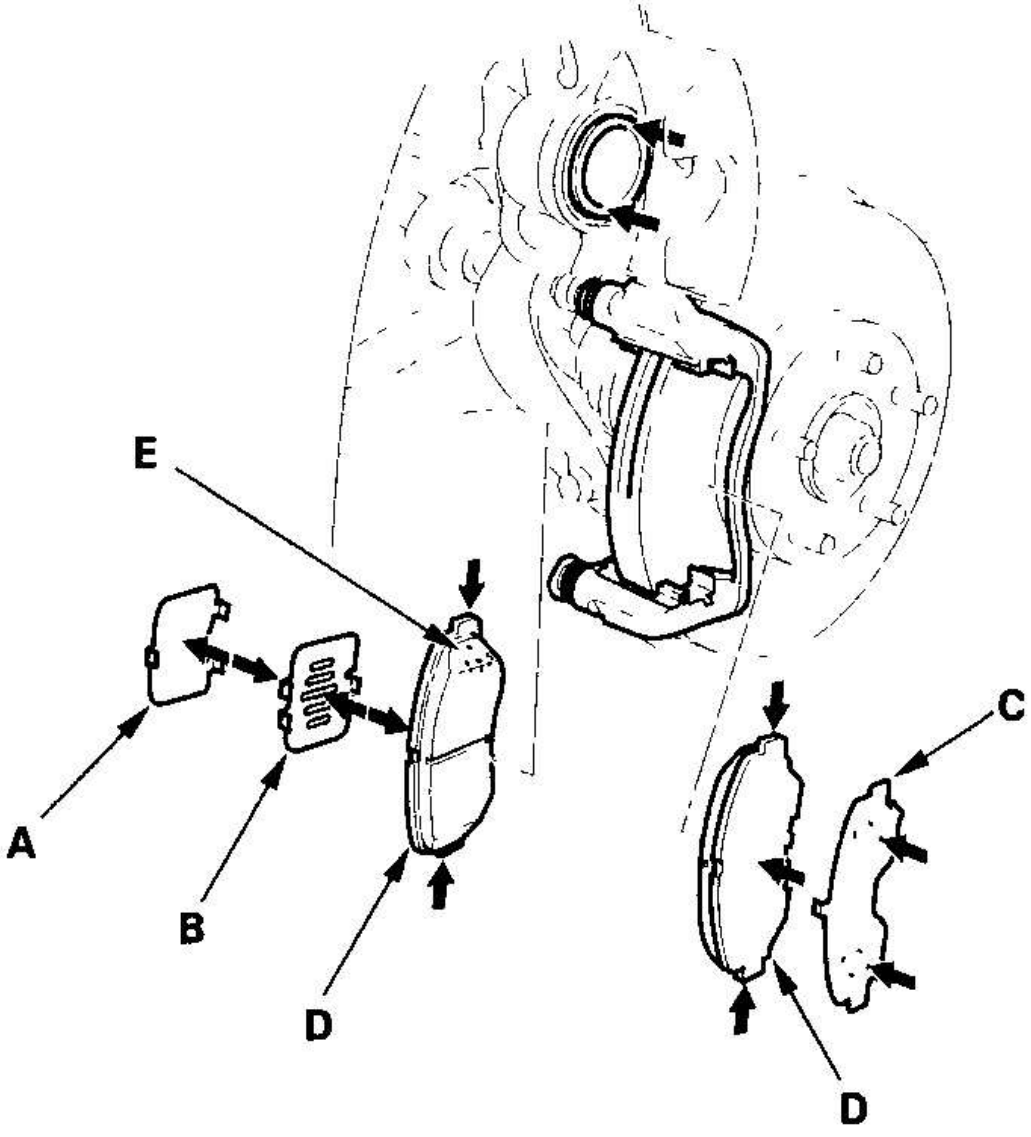


Fig. 23: Applying Thin Coat Of M-77 Assembly Paste To Pad Side Of Shim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install the brake pads and pad shims correctly. Install the brake pads with the wear indicator (E) on top.

    If you are reusing the brake pads, always reinstall the brake pads in their original positions to prevent a momentary loss of braking efficiency.

14. Push in the piston (B) so the caliper will fit over the brake pads. Check the brake fluid level. The brake fluid may overflow if the reservoir is too full. Make sure the piston boot is in position to prevent damaging it when pivoting the caliper down.

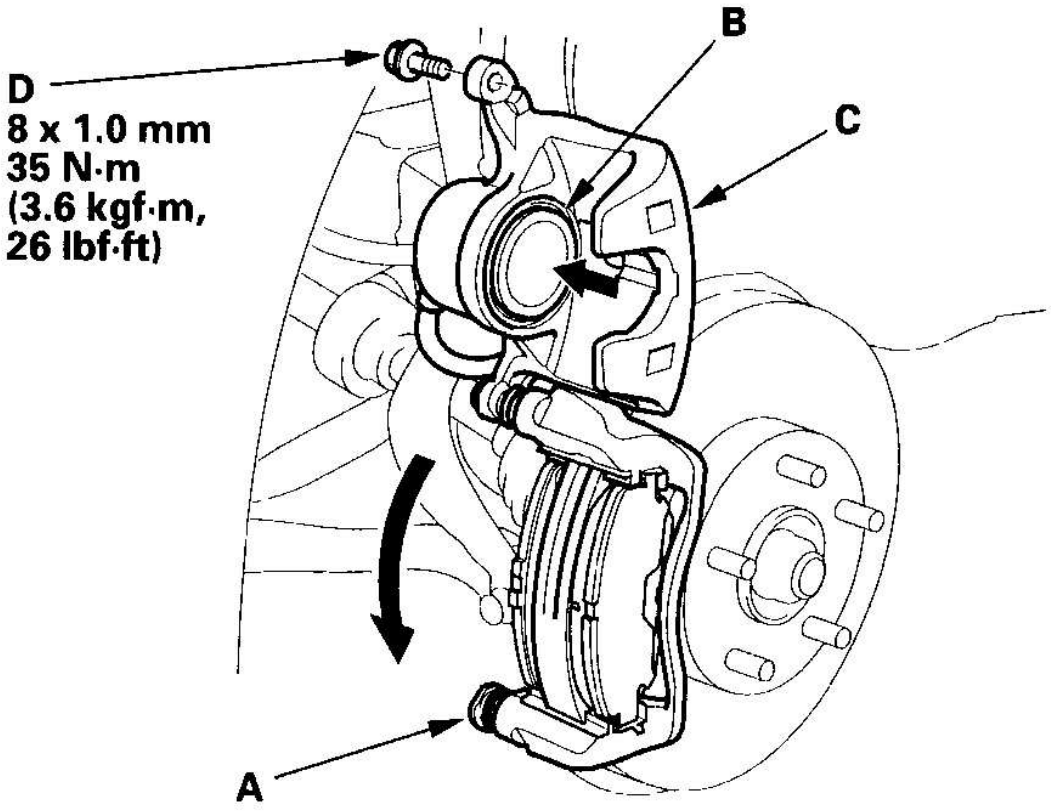


Fig. 24: Pushing Piston So Caliper Will Fit Over Brake Pads
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Pivot the caliper (C) down into position. Install the flange bolt (D), and tighten it to the specified torque while holding the pin A with a wrench being careful not to damage the pin boot.
16. Install the brake hose mounting bolt, and tighten it to the specified torque.

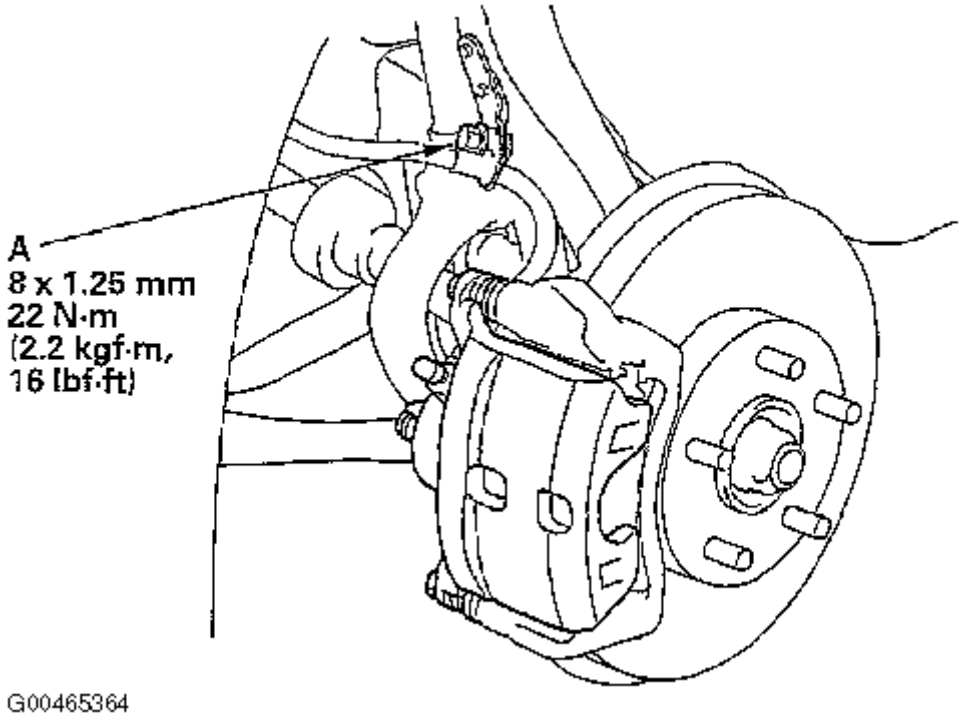


Fig. 25: Installing Brake Hose Mounting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Press the brake pedal several times to make sure the brakes work.

NOTE: Engagement of the brake may require a greater pedal stroke immediately after the brake pads have been replaced as a set. Several applications of the brake pedal will restore the normal pedal stroke.

18. Add brake fluid as needed.
19. After installation, check for leaks at hose and line joints or connections, and retighten if necessary. Then test-drive the vehicle.

INSPECTION-NISSIN TYPE

1. Raise the front of the vehicle, and support it with safety stands in the proper locations (see).
2. Remove the front wheels.
3. Check the thickness (A) of the inner pad (B) and out pad (C). Do not include the thickness of the brake pad backing the plate.

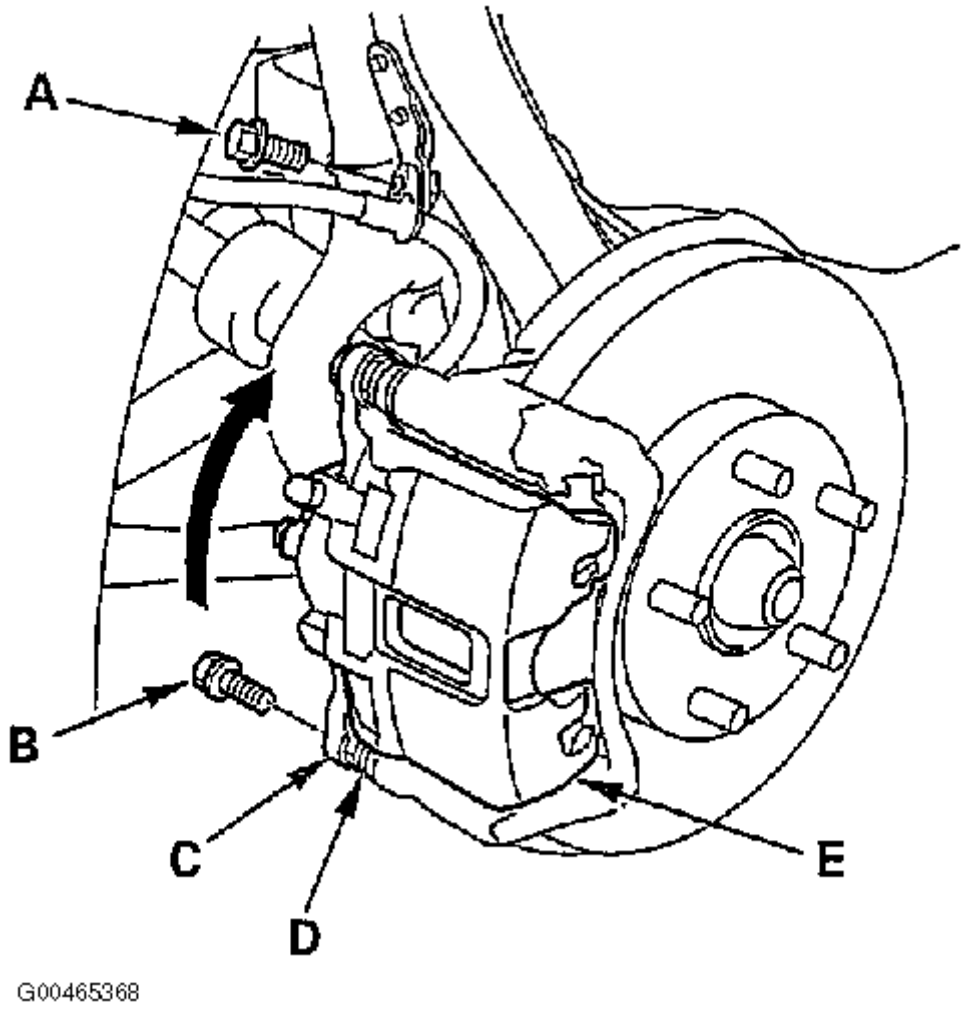


Fig. 26: Removing Brake Hose Mounting Bolts A,B C, D
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the brake pad thickness is less than the service limit, replace all of the front brake pads as a set.

REPLACEMENT-NISSAN TYPE

1. Remove some brake fluid from the master cylinder.
2. Raise the front of the vehicle, and support it with safety stands in the proper locations (see)
3. Remove the front wheels.
4. Remove the brake hose mounting bolt (A)

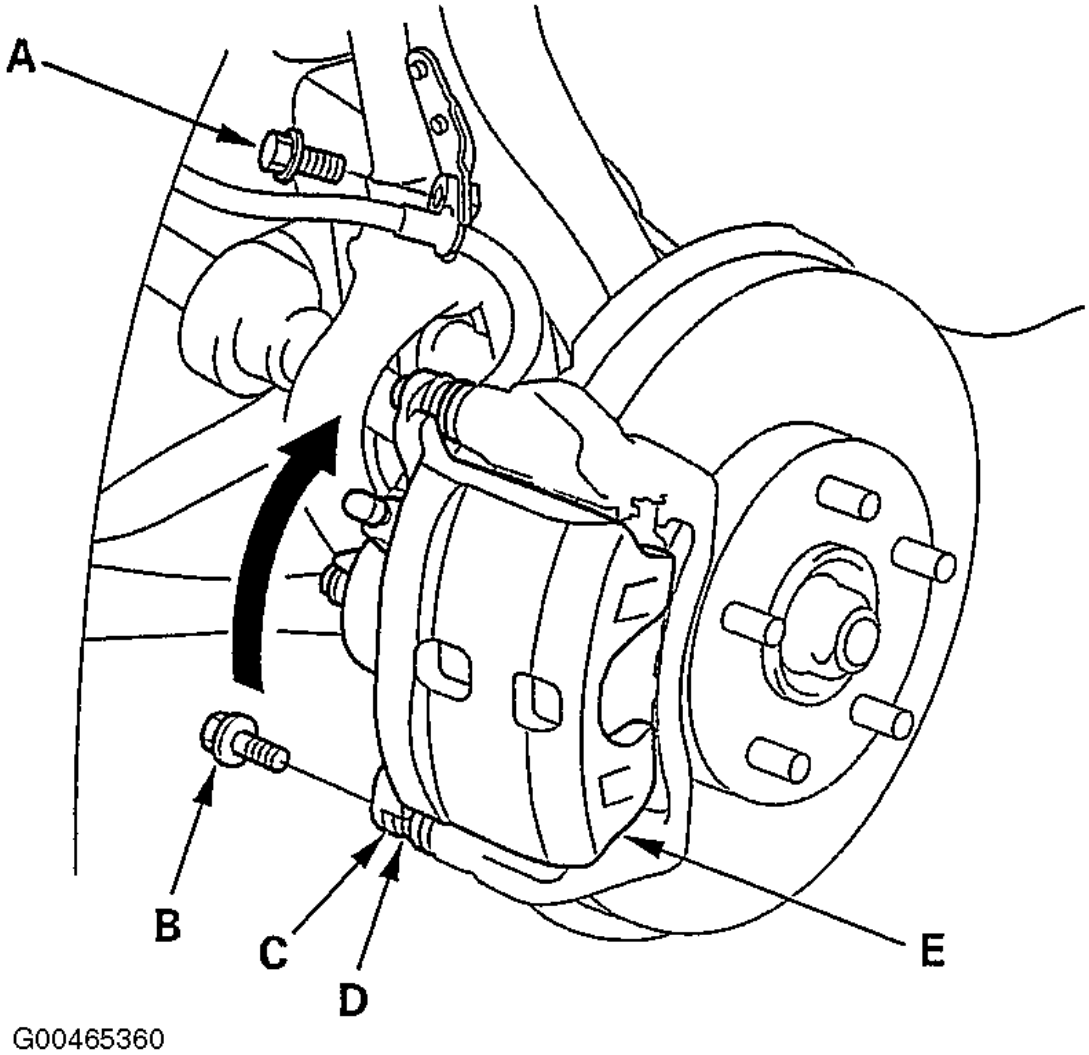


Fig. 27: Identify Brake Hose Mounting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the flange bolt (B) while holding the caliper pin (C) with a wrench being careful not to damage the pin boot (D), and pivot the caliper (E) up out of the way. Check the bake hose and pin boots for damage and deterioration.
6. Remove the brake pads (A) and the pad shims (B).

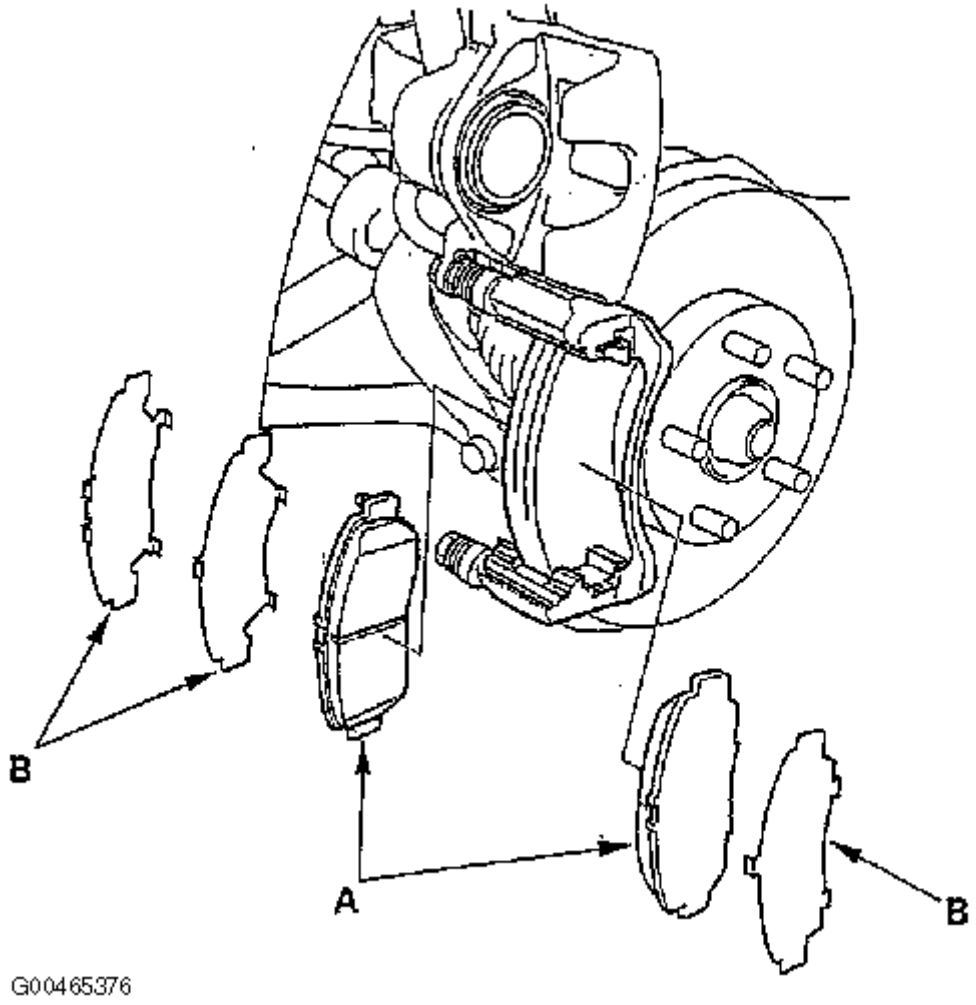


Fig. 28: Removing Brake Pads (A) & Pad Shims (B)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Check the hose and pin boots for damage and deterioration.
8. Remove the pad retainers (A), and check the caliper pins for free movement.

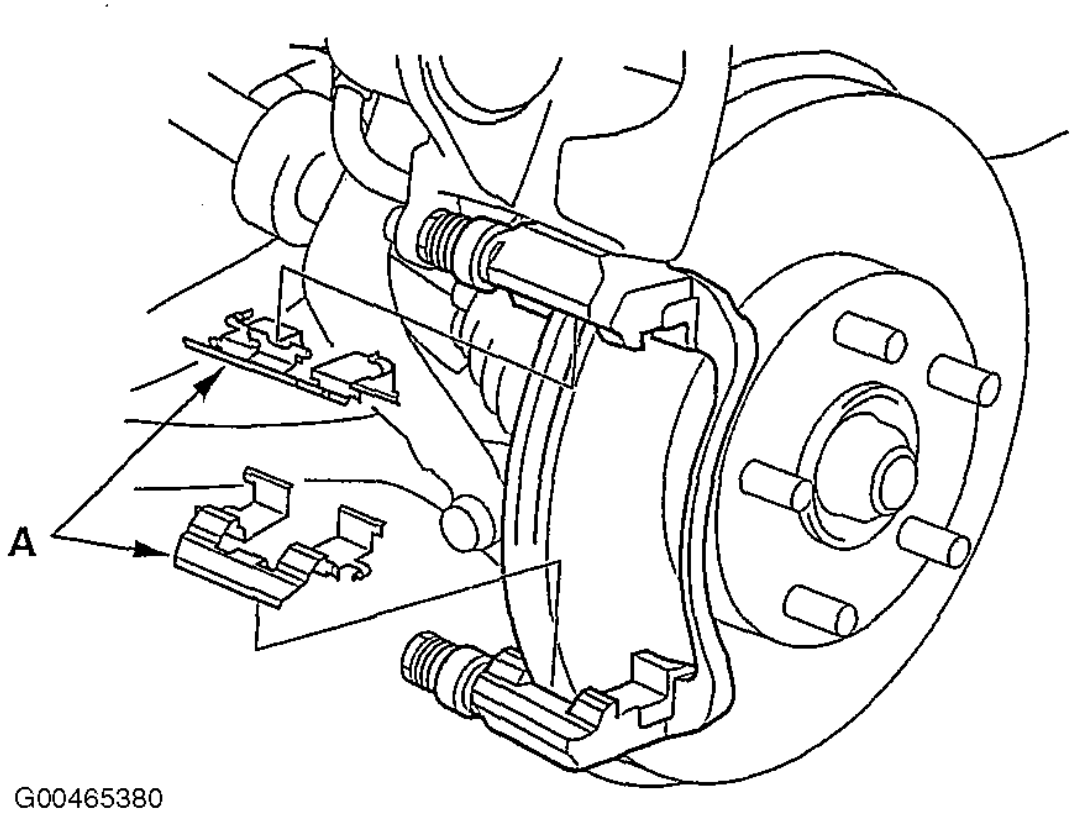


Fig. 29: Removing Pad Retainers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Clean the caliper thoroughly; remove any rust, and check for grooves and cracks.
10. Check the brake disc for damage and cracks.
11. Clean and install the pad retainers.
12. Apply a thin coat of M-77 assembly paste (P/N08798-9010) to the pad sides of shims (A), the back of the brake pads (B), and to the other areas indicated by the arrows. Wipe excess paste off the pad shim and brake pads. Contaminated brake discs and pads reduce stopping ability. Keep assembly paste off the brake discs and pad Material.

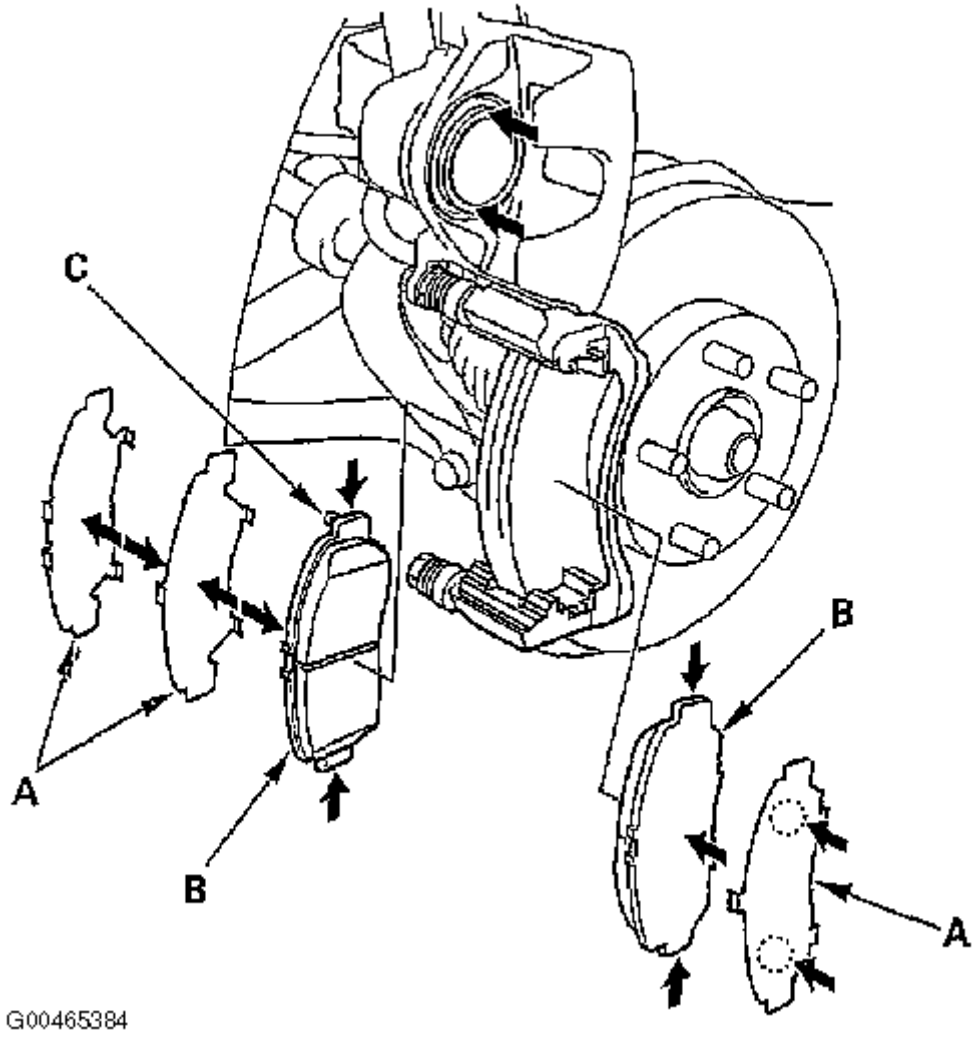


Fig. 30: Installing Brake Pads & Shims
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install the brake pads and pad shims correctly. Install the brake pads with the wear indicator (C) on the inside. The wear indicator should be on the top of the pad. If you are reusing the pads, always reinstall the brake pads in their original positions to prevent a momentary loss of braking efficiency.
14. Push in the piston (B) so the clipper will fit over the brake pads. Check the brake fluid level. The brake fluid may over flow if the reservoir is too full. Make sure the piston boot is in position to prevent damaging it when pivoting the caliper down.

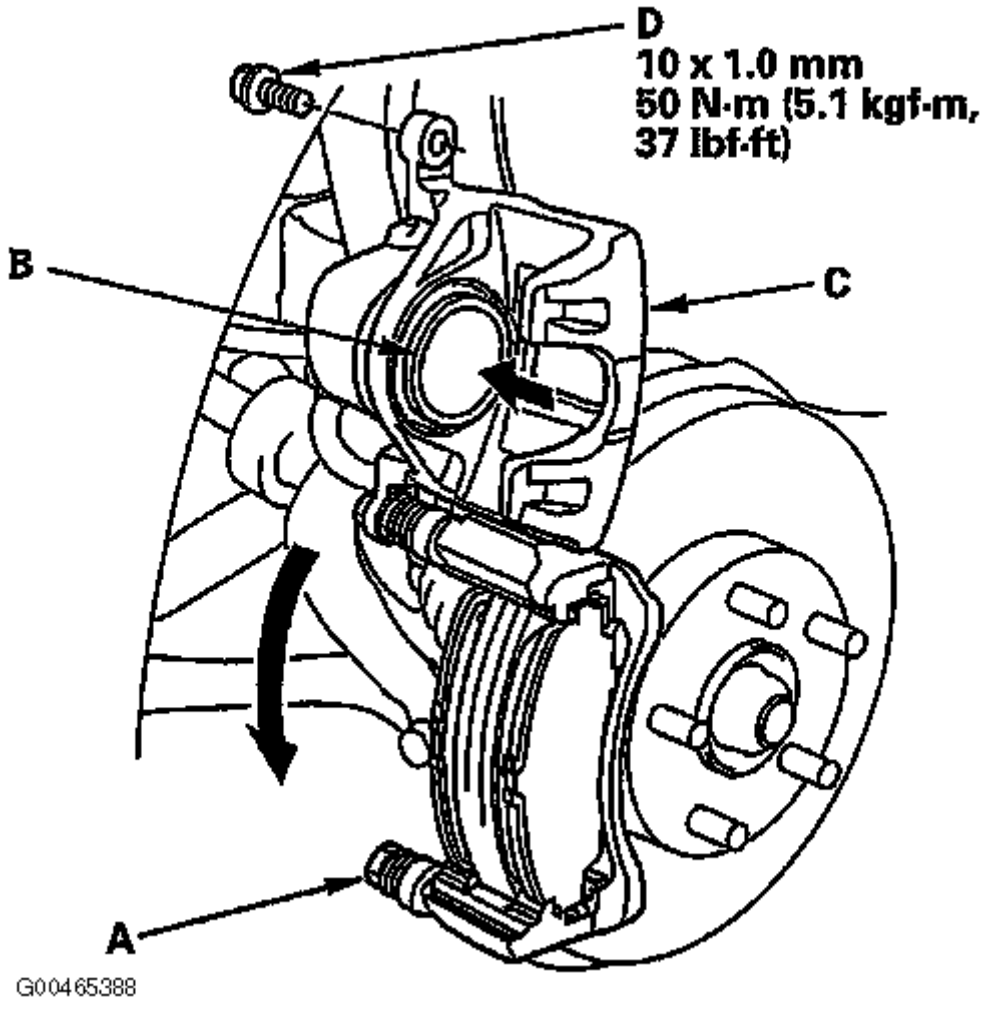


Fig. 31: Identify Pushing Piston
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Pivot the caliper (C) down into position. Install the flange bolt (D), and tighten it to the specified torque while holding the pin A with a wrench being careful not to damage the pin boot.
16. Install the brake hose mounting bolt (A), and tighten it to the specified torque.

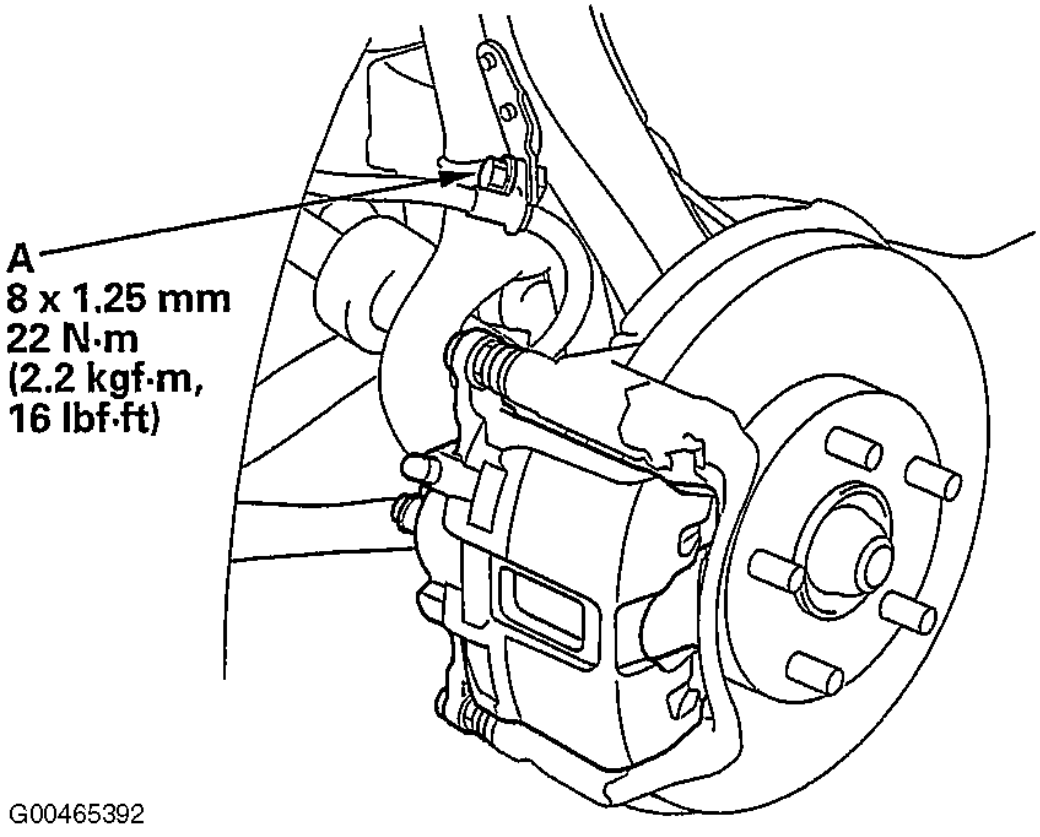


Fig. 32: Identifying Brake Hose Mounting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Press the brake pedal several times to make sure the brakes work.

NOTE: Engagement of the brake may require a greater pedal stroke immediately after the brake pads have been replace as a set. Several applications of the brake pedal will restore the normal pedal stroke.

18. Add bake fluid as needed.
19. After installation, check for leaks at hose and line joints or connections, and retighten if necessary. Then test-drive the vehicle.

FRONT BRAKE DISC INSPECTION

RUNOUT

1. Raise the front of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the front wheels.
3. Remove the brake pads: AKEBONO type (see **REPLACEMENT-AKEBONO Type**), NISSIN type (see **Replacement-NISSAN Type**).
4. Inspect the brake disc surface for damage and cracks. Clean the brake disc thoroughly, and remove all rust.
5. Install suitable flat washers (A) and wheel nuts, and tighten the nuts to the specified torque to hold the brake disc securely against the hub.

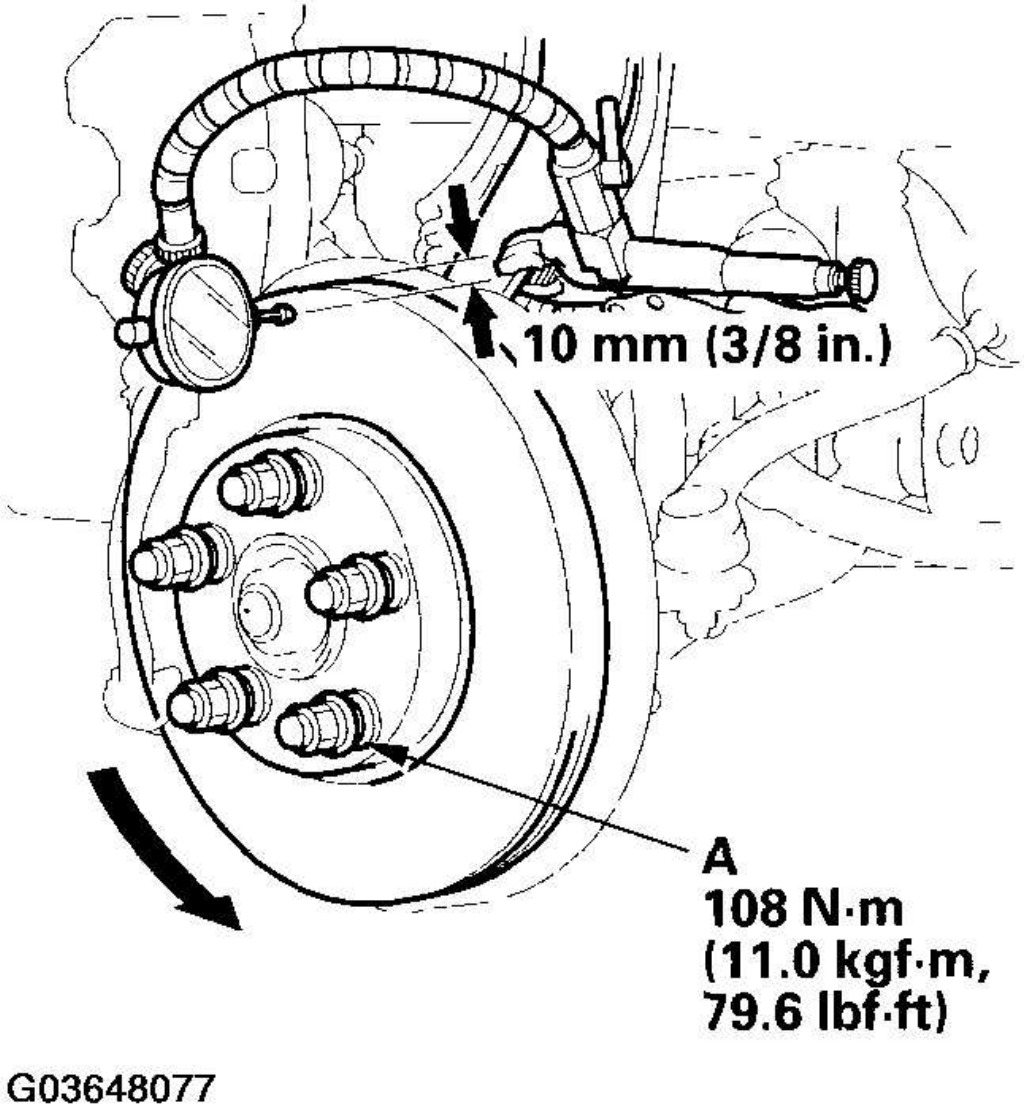


Fig. 33: Installing Flat Washers And Wheel Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Set up the dial gauge against the brake disc as shown above, and measure the runout at 10 mm (3/8 in.) from the outer edge of the brake disc.

Brake disc runout:

Service limit: 0.10 mm (0.004 in.)

7. If the brake disc is beyond the service limit, refinish the brake disc with an on-car brake lathe. The "Front Brake Disc Lathe" offered by Snap-on Tools Co. are approved for this operation.

   Max. refinish limit: 21.0 mm (0.83 in.)

NOTE:
- **If the brake disc is beyond the service limit for refinishing, replace it (see step 3 on KNUCKLE/HUB REPLACEMENT).**
- **A new disc should be refinished if its runout is greater than 0.10 mm (0.004 in.).**

THICKNESS AND PARALLELISM

1. Raise the front of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the front wheels.
3. Remove the brake pads: AKEBONO type (see **REPLACEMENT-AKEBONO Type**), NISSIN type (see **Replacement-NISSAN Type**).
4. Using a micrometer, measure brake disc thickness at eight points, approximately 45° apart and 10 mm (3/8 in.) in from the outer edge of the brake disc. Replace the brake disc if the smallest measurement is less than the max. refinishing limit.

   Brake disc thickness:

   Standard: 22.9-23.1 mm (0.90-0.91 in.)
   Max. refinishing limit: 21.0 mm (0.83 in.)

   Brake disc parallelism: 0.015 mm (0.0006 in.) max.

NOTE: **This is the maximum allowable difference between the thickness measurements.**

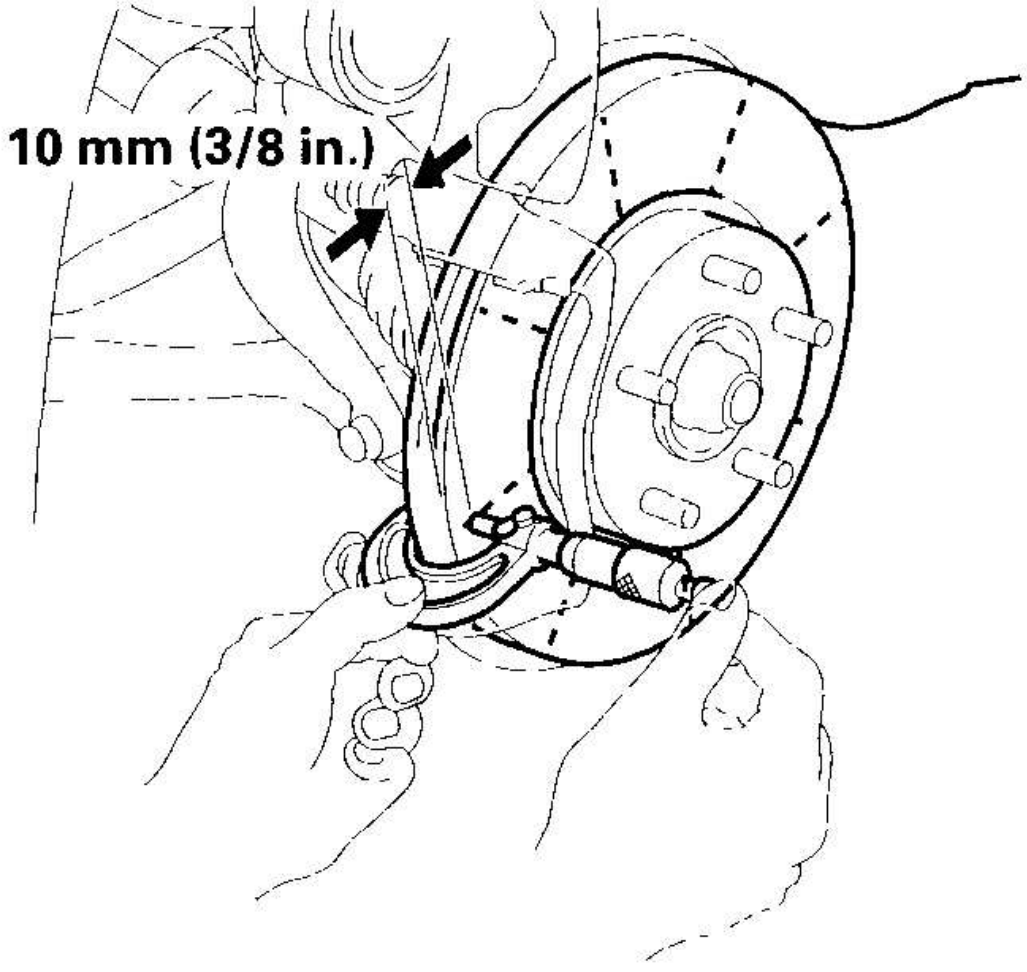


Fig. 34: Measuring Brake Disc Thickness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If the brake disc is beyond the service limit for parallelism, refinish the brake disc with an on-car brake lathe. The "Front Brake Disc Lathe" offered by Snap-on Tools Co. are approved for this operation.).

NOTE: If the brake disc is beyond the service limit for refinishing, replace it (see KNUCKLE/HUB

REPLACEMENT).

FRONT BRAKE CALIPER OVERHAUL

CAUTION: Frequent inhalation of brake pad dust, regardless of material composition, could be hazardous to your health.

- **Avoid breathing dust particles.**
- **Never use an air hose or brush to clean brake assemblies. Use an OSHA-approved vacuum cleaner.**

AKEBONO TYPE

Remove, disassemble, inspect, reassemble, and install the caliper, and note these items:

NOTE: Make sure that the caliper pins are installed correctly. The upper and lower caliper pins are different. If the caliper pins are installed in the wrong location, it will cause uneven tire wear, vibration, and or uneven or rapid pad wear.

- Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid gets on the paint, wash it off immediately with water.
- To prevent dripping brake fluid, cover disconnected hose joints with rags or shop towels.
- Clean all parts in brake fluid and air dry; blow out all passages with compressed air.
- Before reassembling, check that all parts are free of dust and other foreign particles.
- Replace parts with new ones as specified in **Fig. 35** .
- Make sure no dirt or other foreign matter gets in the brake fluid.
- Make sure no grease or oil gets on the brake discs or pads.
- When reusing brake pads, always reinstall them in their original positions to

prevent loss of braking efficiency.

- Do not reuse drained brake fluid. Use only clean Honda DOT 3 Brake Fluid from an unopened container. Using a non-Honda brake fluid can cause corrosion and shorten the life of the system.
- Do not mix different brands of brake fluid as they may not be compatible.
- Coat the pistons, piston seals grooves, and caliper bore with clean brake fluid.
- Replace all rubber parts with new ones whenever disassembled.
- After installing the caliper, check the brake hose and line for leaks, interference, and twisting.

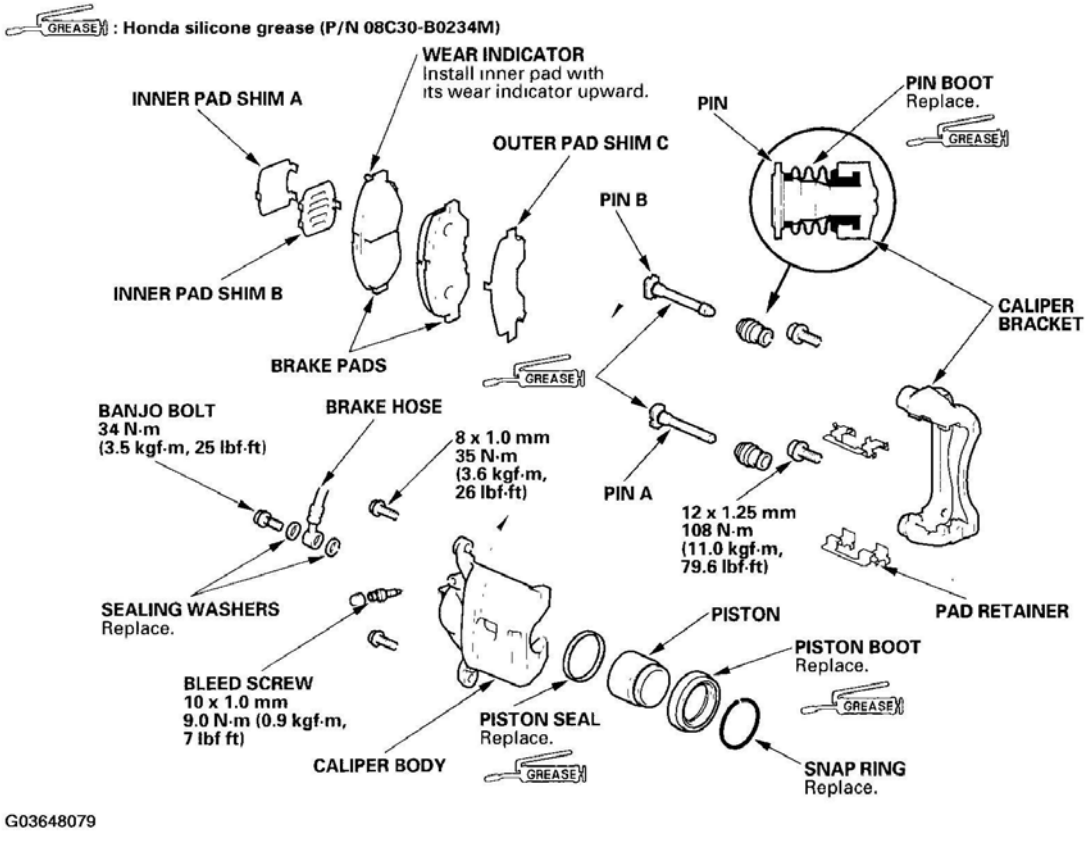


Fig. 35: Identifying Front Brake Caliper Overhaul
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NISSIN TYPE

Remove, disassemble, inspect, reassemble, and install the caliper, and note these

items:

NOTE: Make sure that the caliper pins are installed correctly. The upper and lower caliper pins are different. If the caliper pins are installed in the wrong location, it will cause uneven tire wear, vibration, and or uneven or rapid pad wear.

- Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid gets on the paint, wash it off immediately with water.
- To prevent dripping brake fluid, cover disconnected hose joints with rags or shop towels.
- Clean all parts in brake fluid and air dry; blow out all passages with compressed air.
- Before reassembling, check that all parts are free of dust and other foreign particles.
- Replace parts with new ones as specified in .
- Make sure no dirt or other foreign matter gets in the brake fluid.
- Make sure no grease or oil gets on the brake discs or pads.
- When reusing brake pads, always reinstall them in their original positions to prevent loss of braking efficiency.
- Do not reuse drained brake fluid. Use only clean Honda DOT 3 Brake Fluid from an unopened container. Using a non-Honda brake fluid can cause corrosion and shorten the life of the system.
- Do not mix different brands of brake fluid as they may not be compatible.
- Coat the pistons, piston seals grooves, and caliper bore with clean brake fluid.
- Replace all rubber parts with new ones whenever disassembled.
- After installing the caliper, check the brake hose and line for leaks, interference, and twisting.

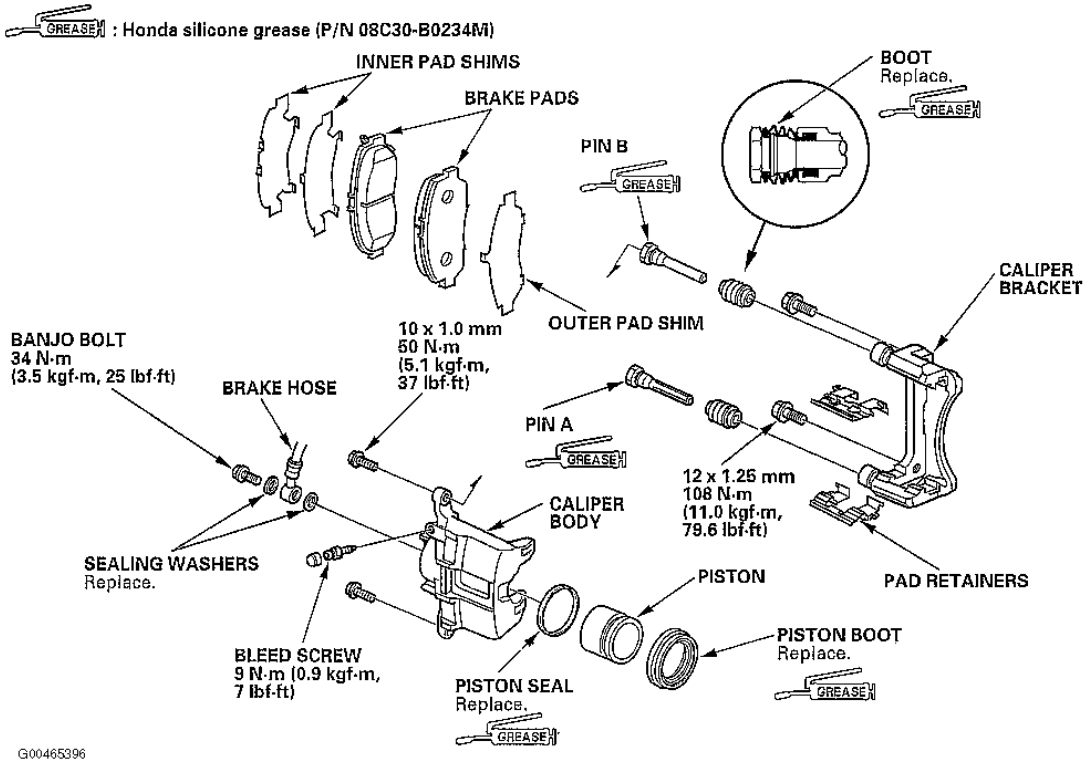


Fig. 36: Identifying Front Brake Caliper Overhaul
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MASTER CYLINDER REPLACEMENT

NOTE: Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid does contact the paint, wash it off immediately with water.

1. Remove the cable clamps from the body.

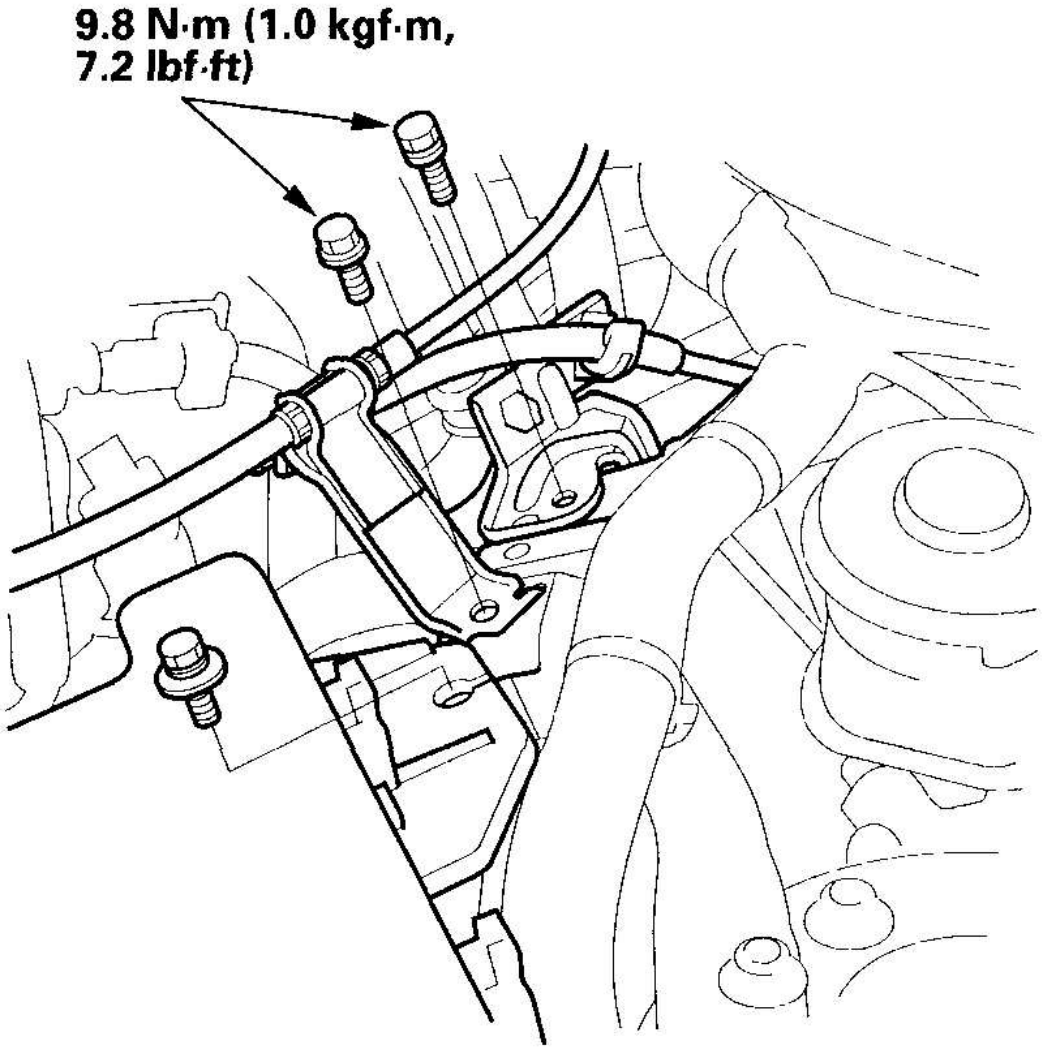


Fig. 37: Removing Cable Clamps From Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the access panel (A), then remove the right strut brace (B).

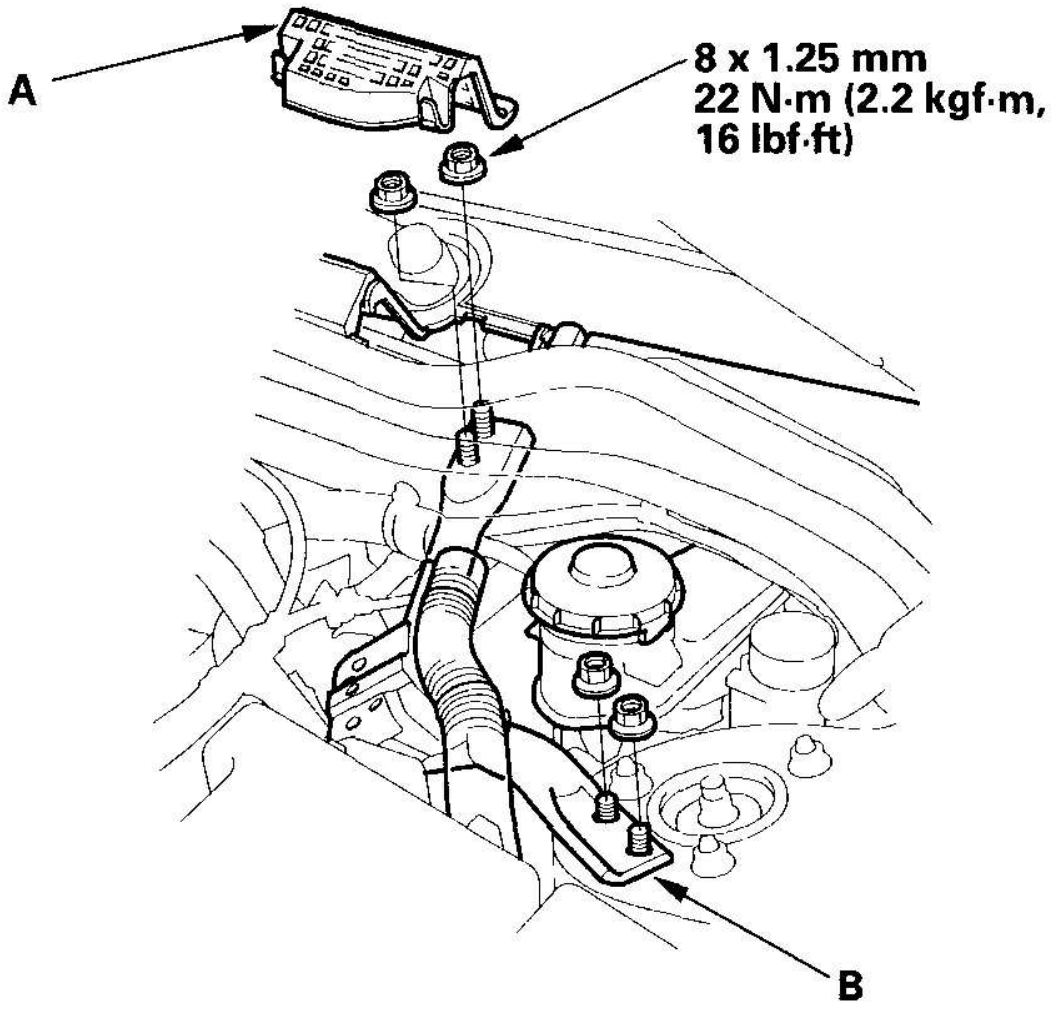


Fig. 38: Removing Access Panel And Right Strut Brace
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the reservoir cap and brake fluid from the master cylinder reservoir.
4. Disconnect the brake fluid level switch connector (A).

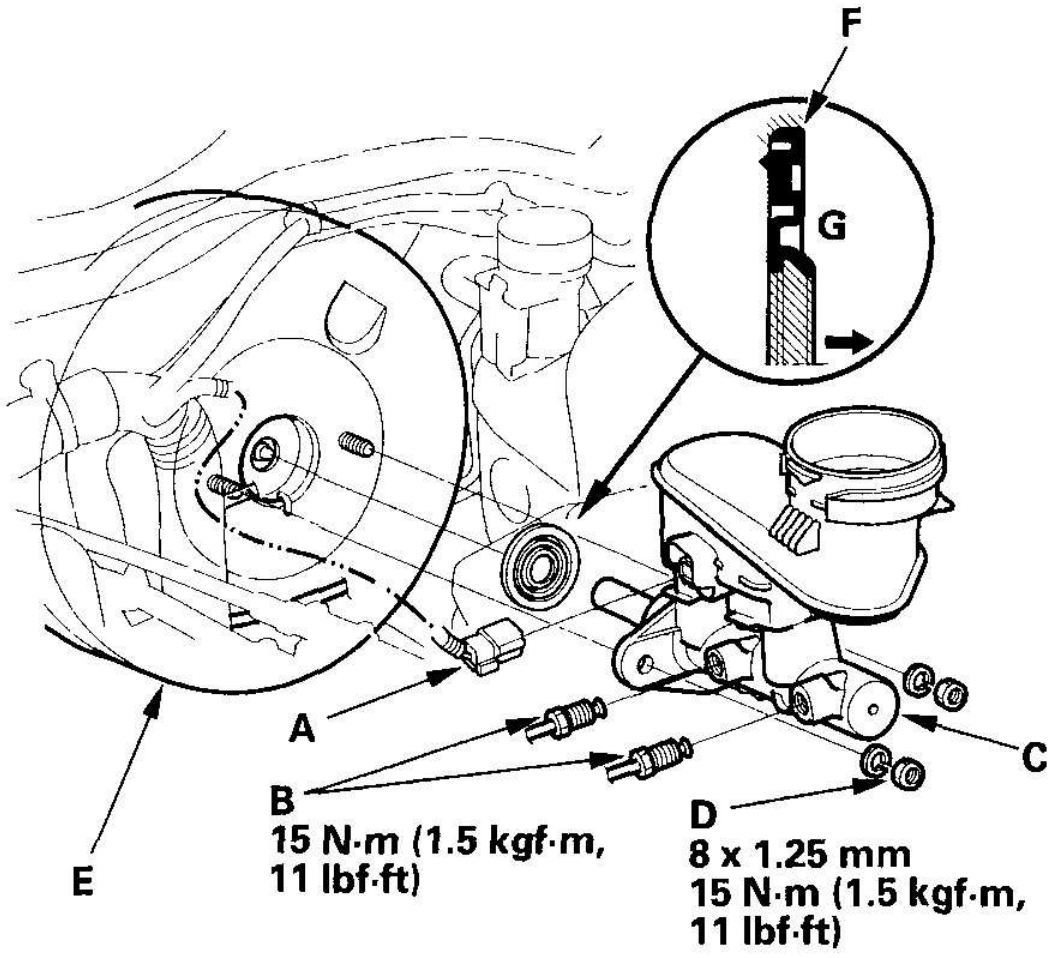


Fig. 39: Disconnecting Brake Fluid Level Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the brake lines (B) from the master cylinder (C). To prevent spills, cover the hose joints with rags or shop towels.
6. Remove the master cylinder mounting nuts (D) and washers.
7. Remove the master cylinder from the brake booster (E). Be careful not to bend or damage the brake lines when removing the master cylinder.
8. Remove the rod seal (F) from the master cylinder.
9. Install the master cylinder in the reverse order of removal, and note these

items:

- Replace all the rubber parts with new ones whenever the master cylinder is removed.
- Use a new rod seal on reassembly.
- Coat the inner bore lip and outer circumference of the new rod seal with the Shin-Etsu silicone grease (P/N 08798-9013).
- Install the rod seal onto the master cylinder with its grooved side (G) toward the master cylinder.
- Check the brake pedal height and free play after installing the master cylinder, and adjust it if necessary (see **BRAKE PEDAL AND BRAKE PEDAL POSITION SWITCH ADJUSTMENT**).

10. Bleed system (see **BRAKE SYSTEM BLEEDING**).
11. Spin the wheels to check for brake drag.

MASTER CYLINDER INSPECTION

NOTE:

- **Before reassembling, check that all parts are free of dirt and other foreign particles.**
- **Do not try to disassemble the master cylinder assembly. Replace the master cylinder assembly with a new part if necessary.**
- **Do not allow dirt or foreign matter to contaminate the brake fluid.**

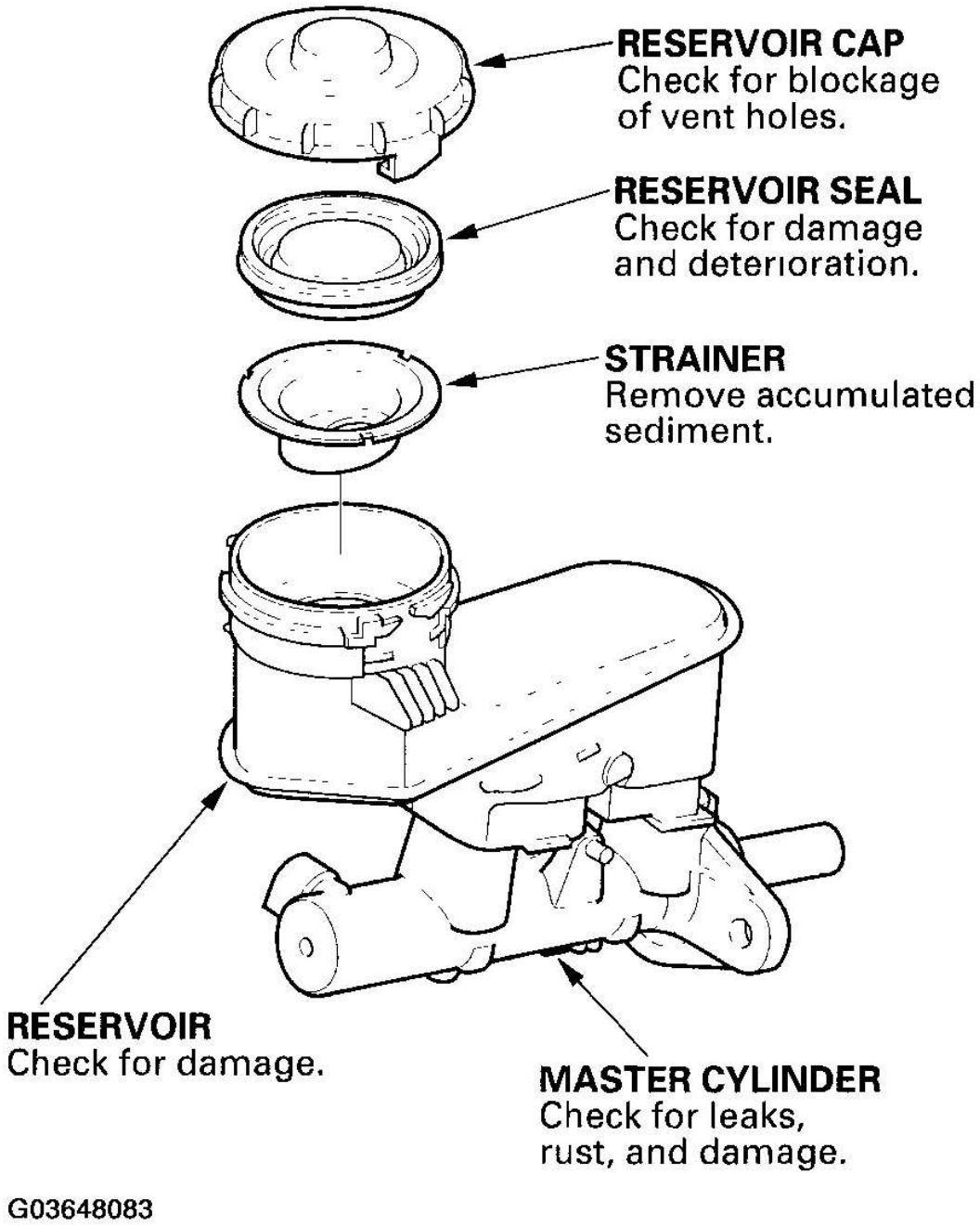


Fig. 40: Inspecting Master Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BRAKE BOOSTER TEST

FUNCTIONAL TEST

1. With the engine stopped, press the brake pedal several times to deplete the vacuum reservoir, then press the brake pedal hard, and hold it for 15 seconds. If the brake pedal sinks, either the master cylinder is bypassing internally, or the brake system is leaking (see **Brake Hose and Line Inspection**).
2. Start the engine with the brake pedal pressed. If the pedal sinks slightly, the vacuum booster is operating normally. If the brake pedal height does not vary, do the leak test.
3. Do the brake system test. (see **Brake System Inspection and Test**).

LEAK TEST

1. Press the brake pedal with the engine running, then stop the engine. If the brake pedal height does not vary while pressed for 30 seconds, the vacuum booster is OK. If the pedal rises go to step 6. If it does not rise go to step 2.
2. Start the engine and let it idle for 30 seconds. Turn the ignition switch off, and wait 30 seconds. Press the brake pedal several times using normal pressure. When the pedal is first pressed it should be low. On consecutive applications, the pedal height should gradually rise. Does the pedal rise on each consecutive application? If it rises the booster is OK. If it does not go to step 3.
3. Disconnect the brake booster vacuum hose (A) at the booster . The check valve (B) is built into the hose.

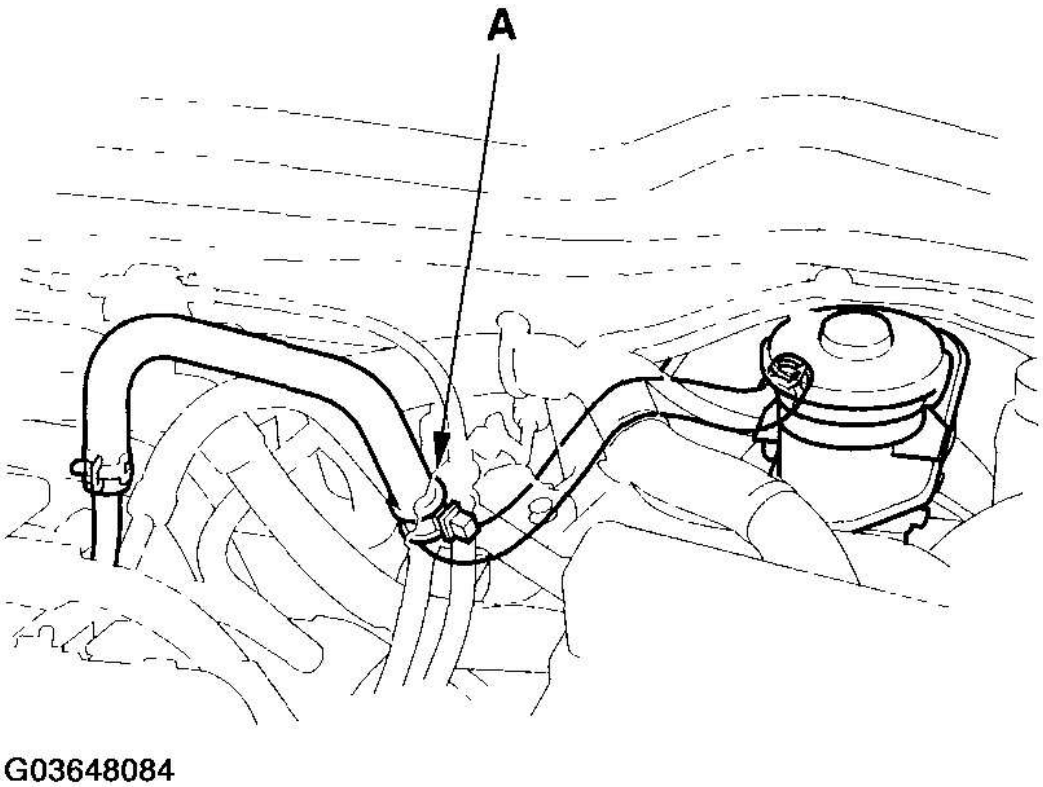


Fig. 41: Disconnecting Brake Booster Vacuum Hose At Booster
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Start the engine, and let it idle. There should be vacuum available. If no vacuum is available, the check valve is not working properly. Replace the brake booster vacuum hose and check valve, and retest. If vacuum is found, go to step 5.
5. With the engine off, reconnect the vacuum hose to the brake booster.
6. Start the engine, and then pinch the brake booster vacuum hose between the check valve and the booster.
7. Turn the ignition switch off, and wait 30 seconds. Press the brake pedal several times using normal pressure. When the pedal is first pressed, it should be low. On consecutive applications, the pedal height should gradually rise.
    - If the brake pedal position does not vary, inspect the seal between the

master cylinder and booster. If the seal is OK, replace the brake booster.

- If the pedal position varies, replace the brake booster vacuum hose/check valve assembly.

BRAKE BOOSTER REPLACEMENT

1. Make sure you have the anti-theft codes for the audio and navigation system, then write down the audio presets.
2. Disconnect the negative cable from the battery.
3. Remove the master cylinder (see **MASTER CYLINDER REPLACEMENT**).
4. Disconnect the vacuum hose (A) from the brake booster (B).

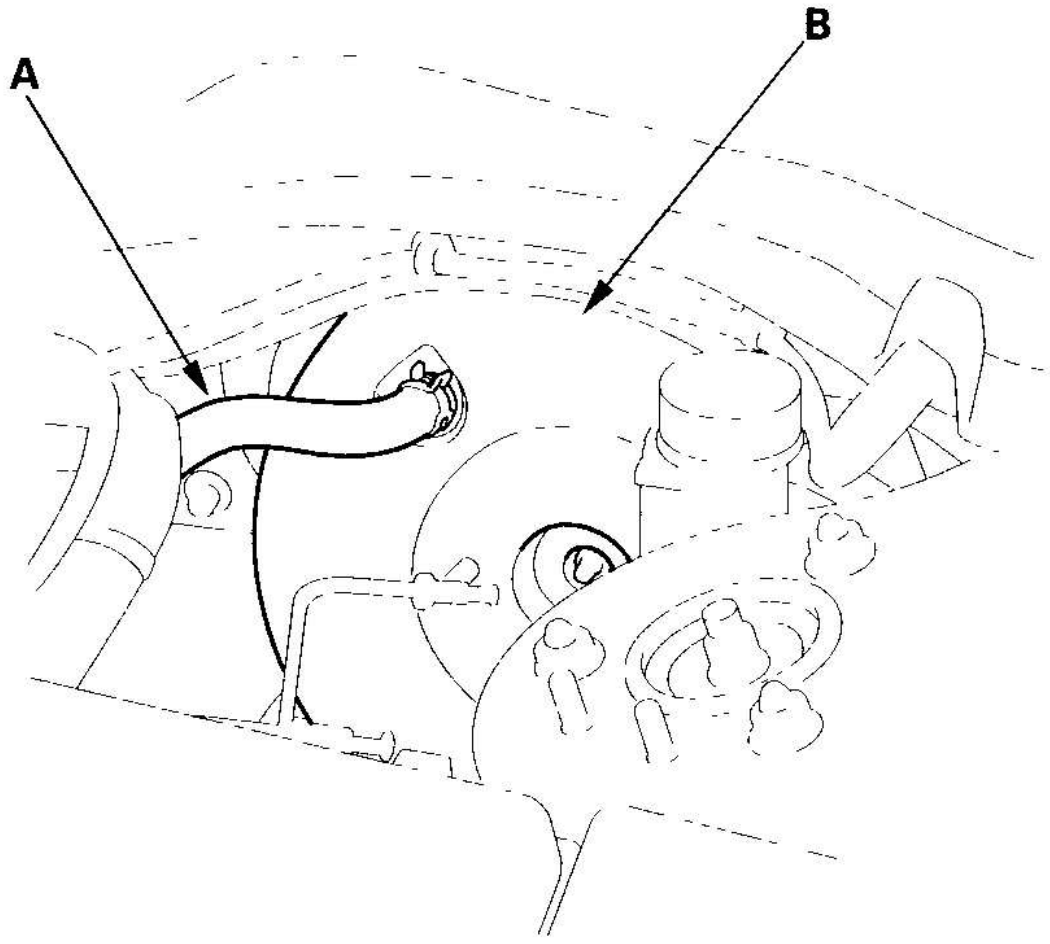


Fig. 42: Disconnecting Vacuum Hose From Brake Booster
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the under-hood fuse/relay box cover.
6. Disconnect (+) and (-) terminals (A) of the under-hood fuse/relay box (B).

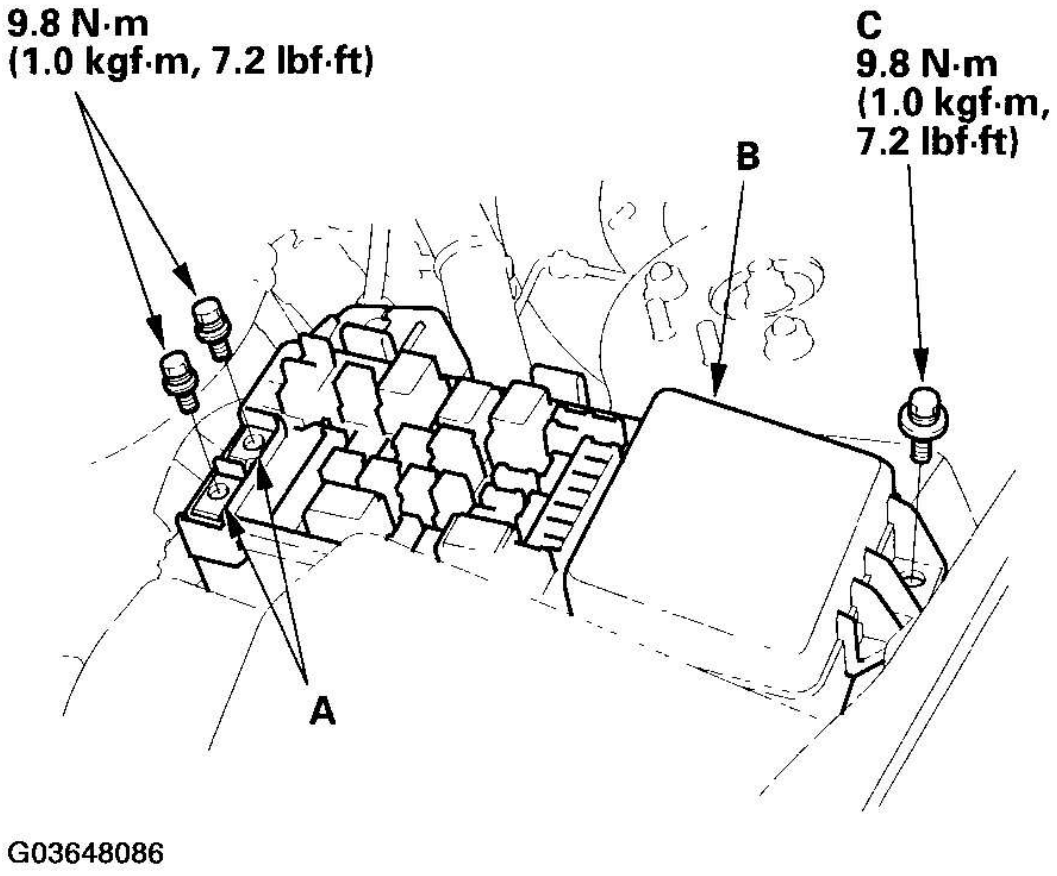


Fig. 43: Disconnecting Terminals Of Under-Hood Fuse/Relay Box
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the under-hood fuse/relay box mounting bolt (C), then remove the under-hood fuse/relay box from the body.
8. Remove the air cleaner assembly (A).

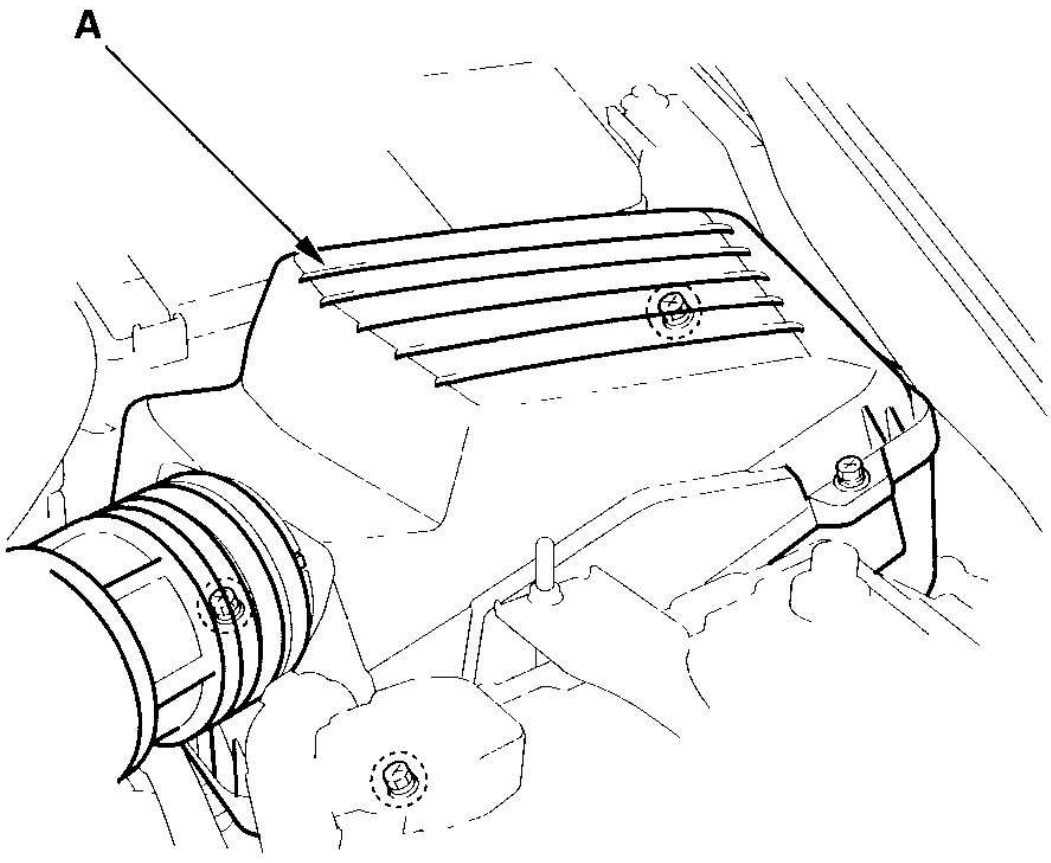


Fig. 44: Removing Air Cleaner Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the primary and secondary brake lines from the hose clamp (A).

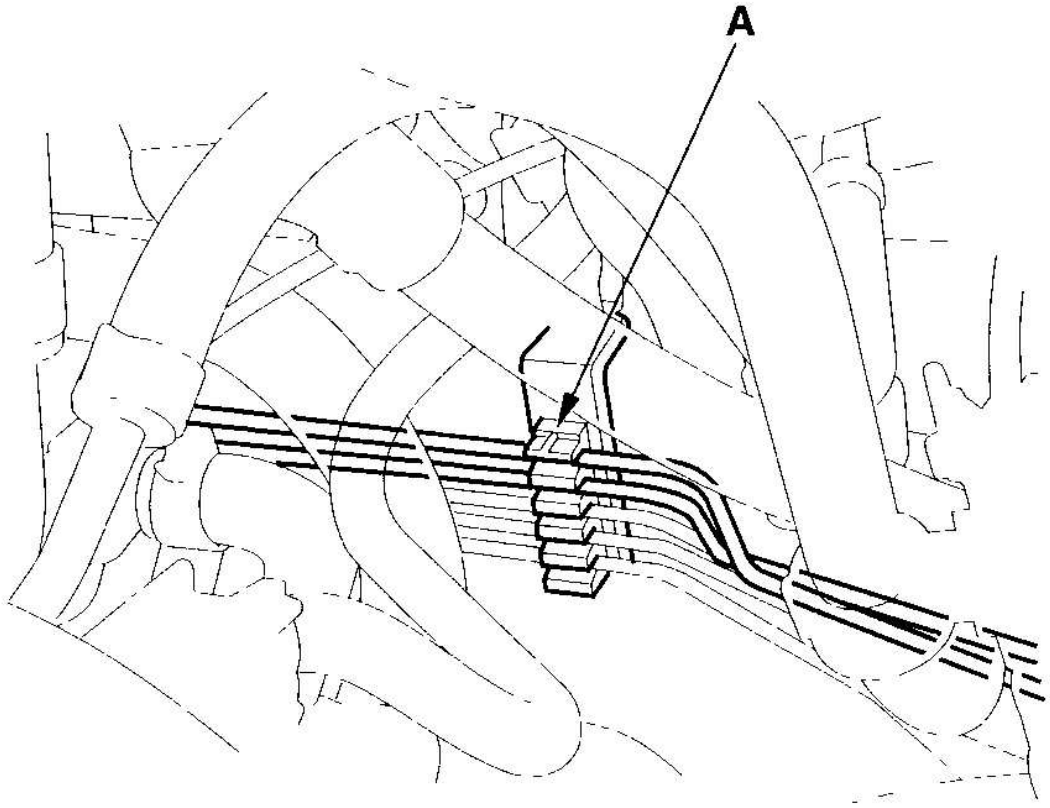


Fig. 45: Removing Primary And Secondary Brake Lines From Hose Clamp
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the lock pin (A) and the joint pin (B), then disconnect the yoke from the brake pedal.

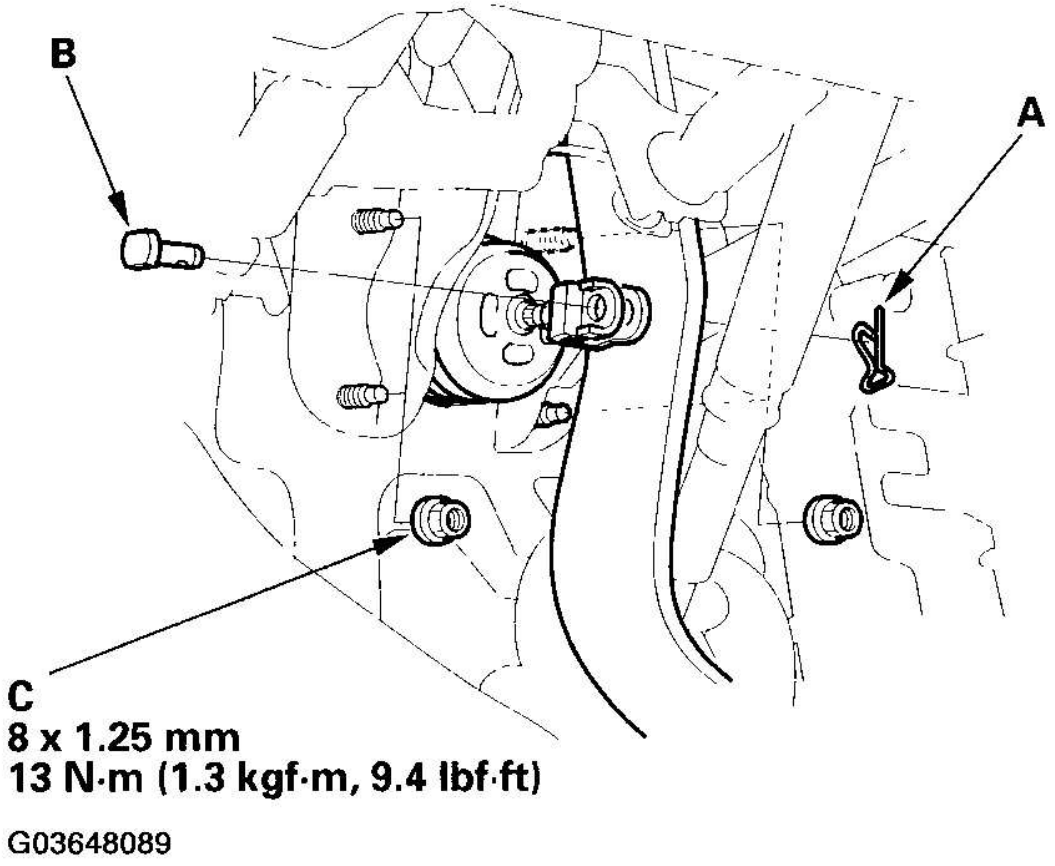


Fig. 46: Removing Lock Pin And Joint Pin
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the brake booster mounting nuts (C).
12. Remove the brake booster (A) from the engine compartment.

NOTE:

- **Be careful not to damage the booster surfaces and threads of the booster stud bolts.**
- **Be careful not to bend or damage the brake lines.**

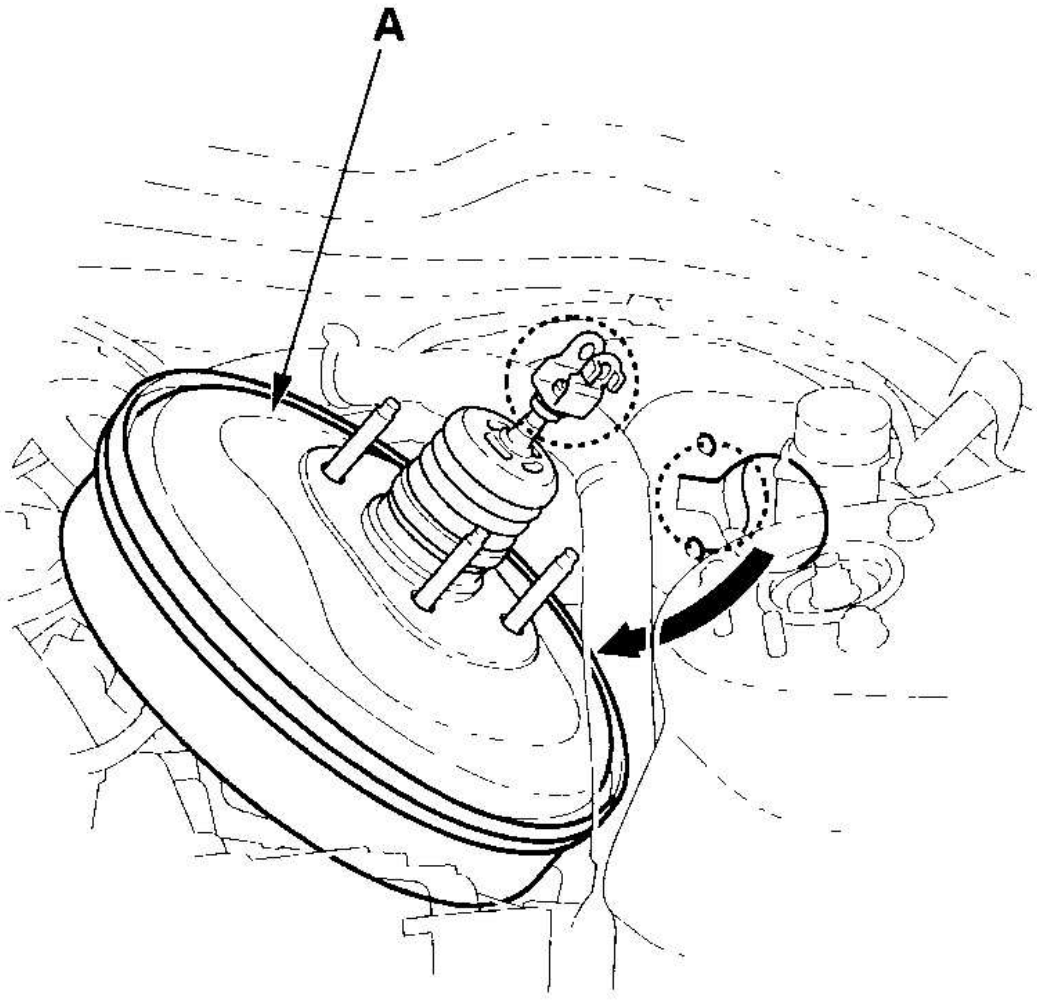


Fig. 47: Removing Brake Booster From Engine Compartment
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install the brake booster in the reverse order of removal, and note these items:
    - Use a new lock pin whenever installing.
    - After installing the brake booster and master cylinder, fill the reservoir with new brake fluid, bleed the brake system (see **BRAKE SYSTEM**

BLEEDING), and adjust the brake pedal height and free play (see **BRAKE PEDAL AND BRAKE PEDAL POSITION SWITCH ADJUSTMENT**).

REAR BRAKE PAD INSPECTION AND REPLACEMENT

CAUTION: Frequent inhalation of brake pad dust, regardless of material composition, could be hazardous to your health.

- **Avoid breathing dust particles.**
- **Never use an air hose or brush to clean brake assemblies. Use an OSHA-approved vacuum cleaner.**

INSPECTION

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheels.
3. Check the thickness (A) of the inner pad (B) and outer pad (C). Do not include the thickness of the backing plate.

Brake pad thickness:

Standard: 8.9-9.1 mm (0.35-0.36 in.)

Service limit: 1.6 mm (0.06 in.)

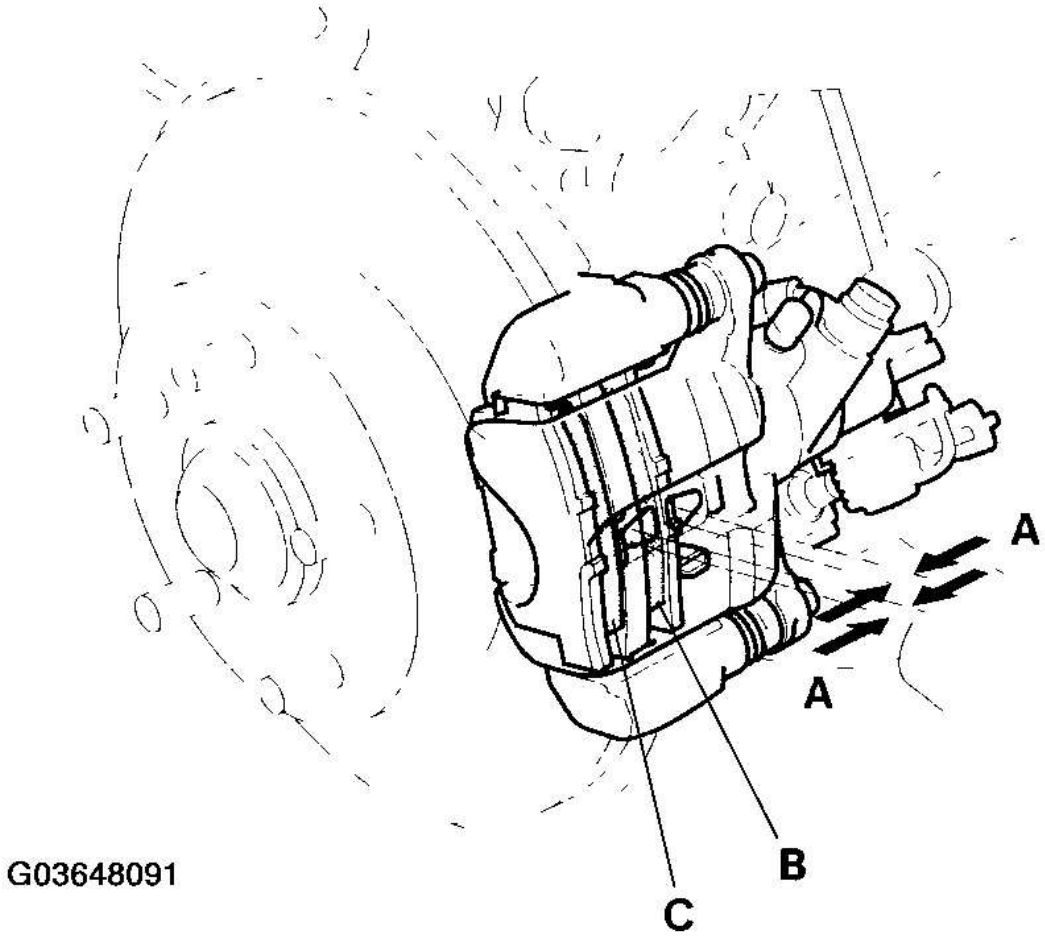


Fig. 48: Checking Thickness Of Inner Pad And Outer Pad
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the brake pad thickness is less than the service limit, replace all the rear brake pads as a set.

REPLACEMENT

1. Remove some brake fluid from the master cylinder.
2. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
3. Remove the rear wheels.

4. Remove the flange bolts (C) while holding the pin A and pin B with a wrench being careful not to damage the pin boots, and remove the caliper (D). Check the hose and pin boots for damage and deterioration.

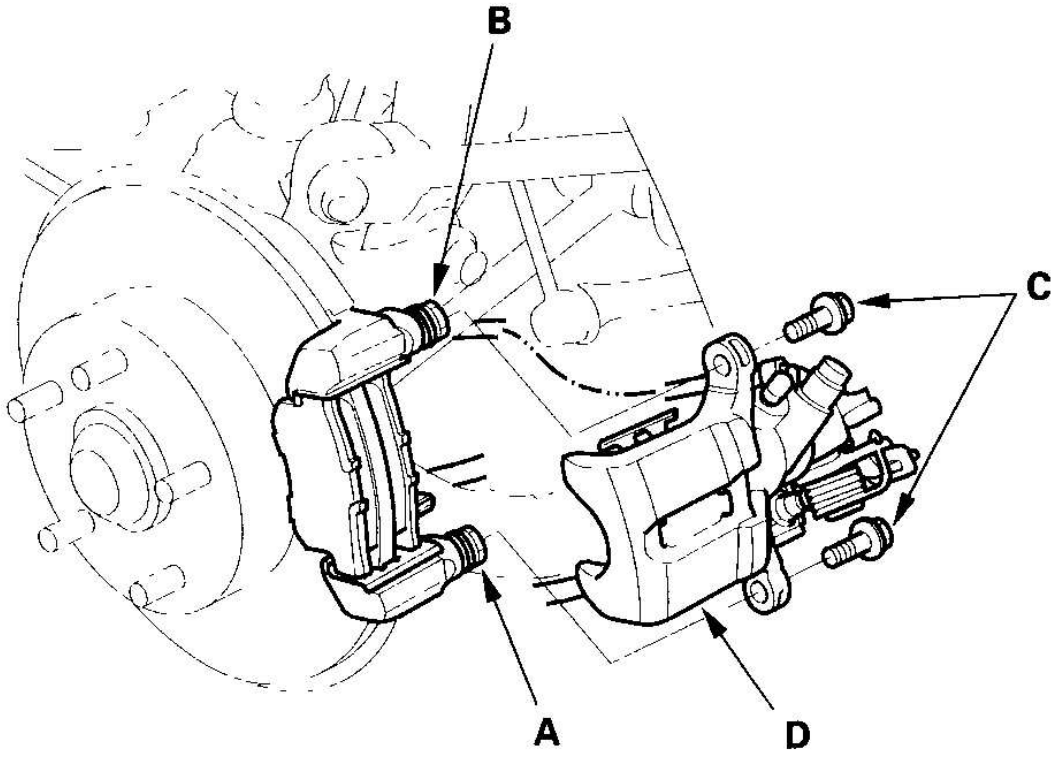


Fig. 49: Removing Flange Bolts Holding Pin A And B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the pad shim (A) and brake pads (B).

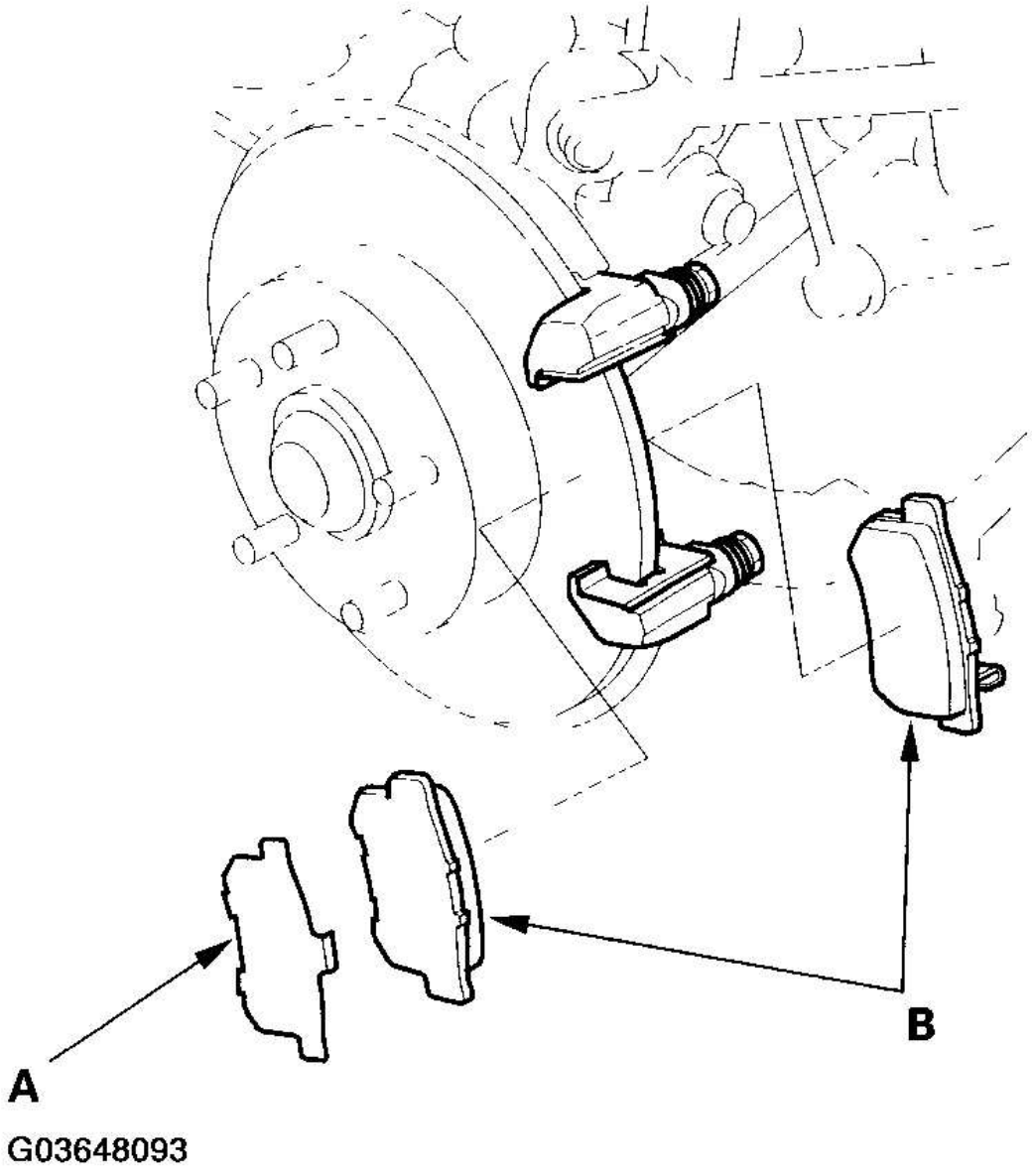


Fig. 50: Removing Pad Shim And Brake Pads
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the pad retainers (A).

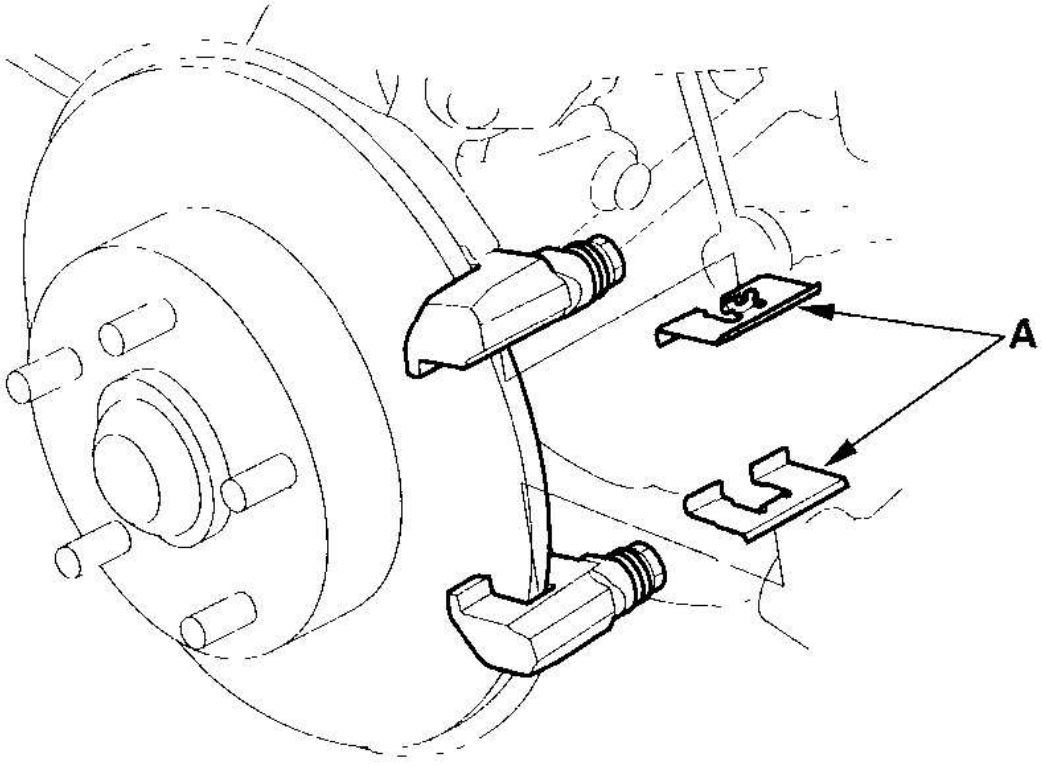


Fig. 51: Removing Pad Retainers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Clean the caliper thoroughly; remove any rust and check for grooves and cracks.
8. Check the brake disc for damage and cracks.
9. Install the pad retainers.
10. Apply a thin coat of M-77 assembly paste (P/N 08798-9010) to both sides of the pad shim (A), the back of brake pads (B), and the other areas indicated by the arrows. Wipe excess assembly paste off the pad shims and brake pads. Contaminated brake discs or pads reduce stopping ability. Keep assembly paste off the brake discs and pad material.

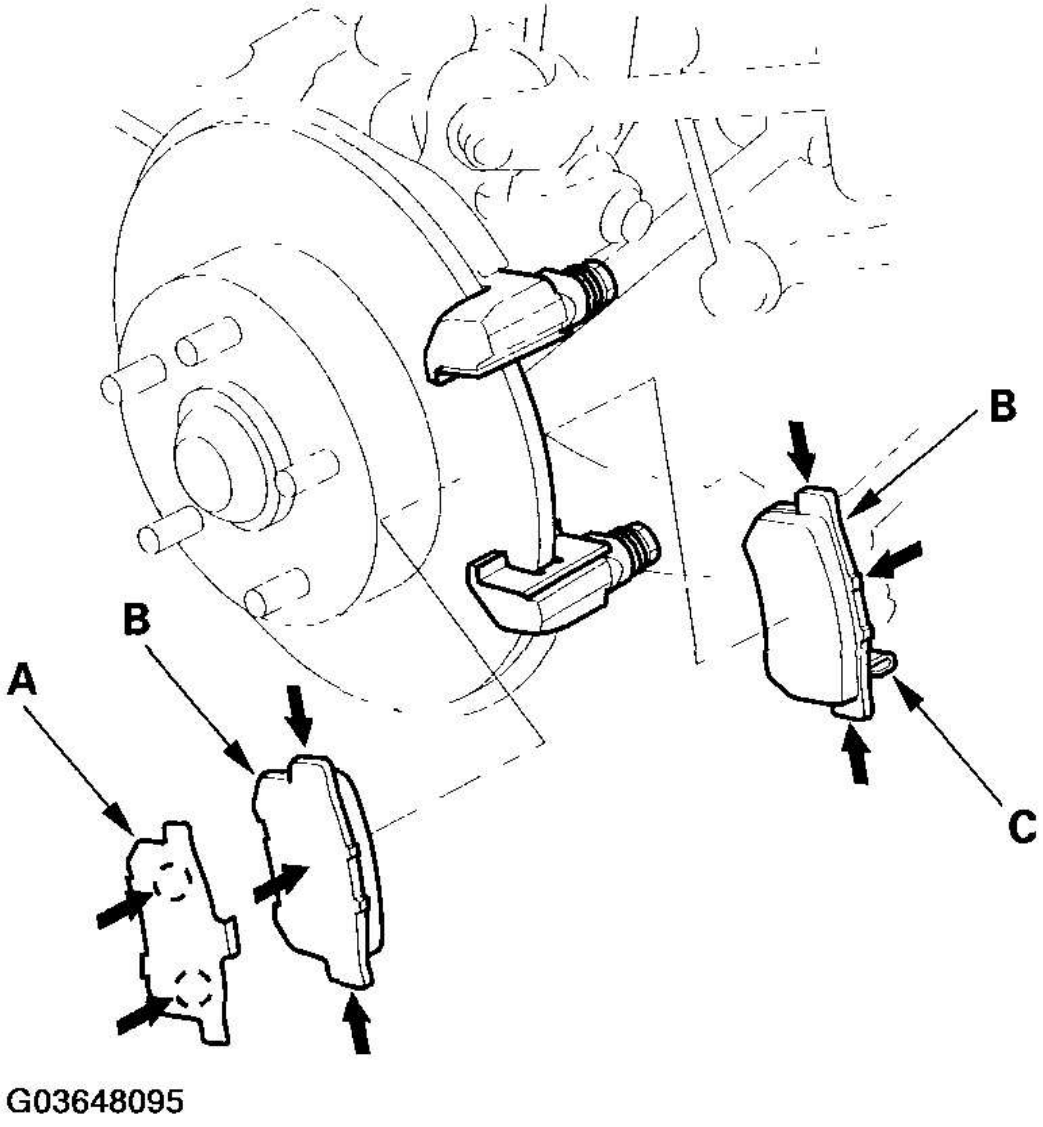


Fig. 52: Applying Thin Coat Of M-77 Assembly Paste To Pad Shim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the brake pads and pad shims correctly. Install the brake pad with the wear indicator (C) on the inside bottom.

    If you are reusing the brake pads, always reinstall the brake pads in their original positions to prevent a momentary loss of braking efficiency.

12. Rotate the caliper piston (C) clockwise into the cylinder, then align the cutout (D) in the piston with the tab (E) on the inner pad by turning the piston back. Lubricate the boot with rubber grease to avoid twisting the piston boot. If the piston boot is twisted, back it out so it is positioned properly.

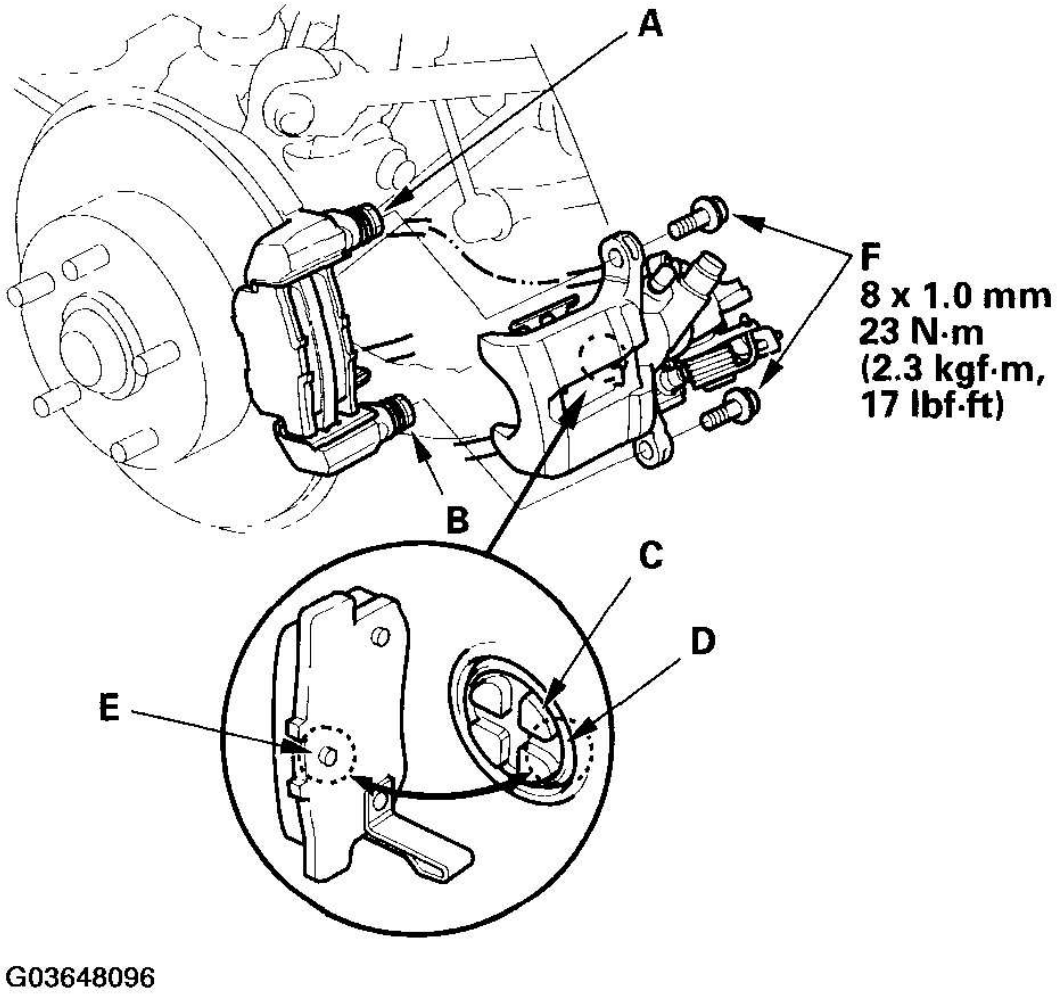


Fig. 53: Rotating Caliper Piston Clockwise Into Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install the caliper. Install the flange bolts (F), and tighten it to the specified torque while holding the pin A and pin B with a wrench. Be careful not to damage the pin boots.

14. Press the brake pedal several times to make sure the brakes work.

NOTE: Engagement of the brake may require a greater pedal stroke immediately after the brake pads have been replaced as a set. Several applications of the brake pedal will restore the normal pedal stroke.

15. After installation, check for leaks at hose and line joints or connections, and retighten if necessary. Then test-drive the vehicle.

REAR BRAKE DISC INSPECTION

RUNOUT

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheels.
3. Remove the brake pads (see **REAR BRAKE PAD INSPECTION AND REPLACEMENT**).
4. Inspect the brake disc surface for damage and cracks. Clean the brake disc thoroughly, and remove all rust.
5. Install suitable flat washers (A) and wheel nuts, and tighten the wheel nuts to the specified torque to hold the brake disc securely against the hub.

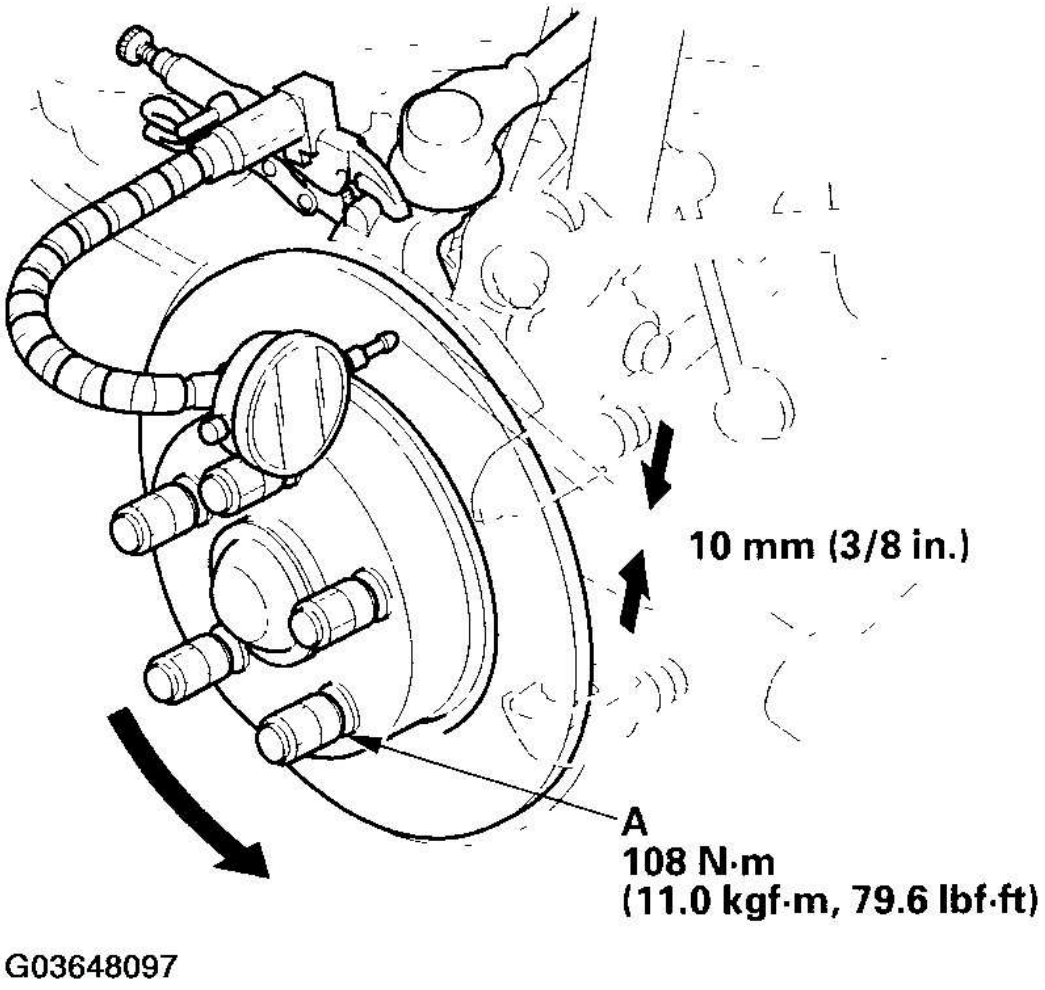


Fig. 54: Installing Flat Washers And Wheel Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Set up the dial gauge against the brake disc as shown above, and measure the runout at 10 mm (3/8 in.) from the outer edge of the brake disc.

   Brake disc runout:

   Service limit: 0.10 mm (0.004 in.)

7. If the brake disc is beyond the service limit, refinish the brake disc with an on-car brake lathe. The "Front Brake Disc Lathe" offered by Snap-on Tools Co.

are approved for this operation.

Max. refinish limit: 8.0 mm (0.31 in.)

NOTE:

- **If the brake disc is beyond the service limit for refinishing, replace it (see step 3 on HUB REPLACEMENT-DISC BRAKE).**
- **A new disc should be refinished if its runout is greater than 0.10 mm (0.004 in.).**

THICKNESS AND PARALLELISM

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheels.
3. Remove the brake pads (see **REAR BRAKE PAD INSPECTION AND REPLACEMENT**).
4. Using a micrometer, measure the brake disc thickness at eight points, about 45° apart and 10 mm (3/8 in.) in from the outer edge of the brake disc. Replace the brake disc if the smallest measurement is less than the max. refinishing limit.

Brake disc thickness:

Standard: 8.9-9.1 mm (0.35-0.36 in.)
Max. refinishing limit: 8.0 mm (0.31 in.)

Brake disc parallelism: 0.015 mm (0.0006 in.) max.

NOTE: This is the maximum allowable difference between the thickness measurements.

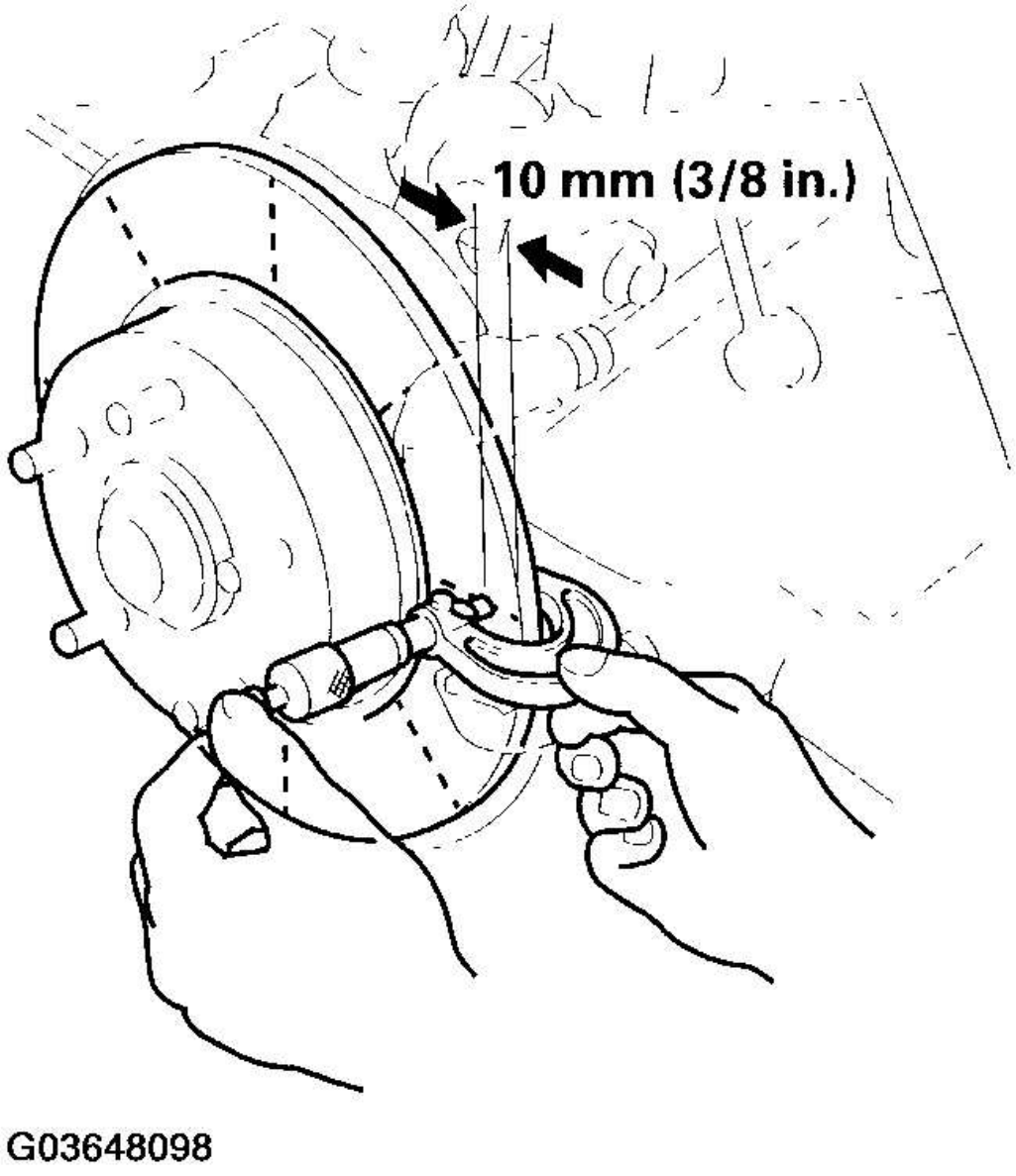


Fig. 55: Measuring Disc Thickness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If the brake disc is beyond the service limit for parallelism, refinish the brake disc with an on-car brake lathe. The "Front Brake Disc Lathe" offered by Snap-on Tools Co. are approved for this operation.

NOTE: If the brake disc is beyond the service limit for refinishing, replace it (see step 3 on HUB REPLACEMENT-DISC BRAKE).

REAR BRAKE CALIPER OVERHAUL

CAUTION: Frequent inhalation of brake pad dust, regardless of material composition, could be hazardous to your health.

- **Avoid breathing dust particles.**
- **Never use an air hose or brush to clean brake assemblies. Use an OSHA-approved vacuum cleaner.**

Remove, disassemble, inspect, reassemble, and install the caliper, and note these items:

- Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid gets on the paint, wash it off immediately with water.
- To prevent dripping brake fluid, cover disconnected hose joints with rags or shop towels.
- Clean all parts in brake fluid and air dry; blow out all passages with compressed air.
- Before reassembling, check that all parts are free of dirt and other foreign particles.
- Replace parts with new ones as specified in **Fig. 56** .
- Make sure no dirt or other foreign matter gets into the brake fluid.
- Make sure no grease or oil gets on the brake discs or pads.
- When reusing brake pads, always reinstall them in their original positions to prevent loss of braking efficiency.
- Do not reuse drained brake fluid. Use only clean Honda DOT 3 Brake Fluid from an unopened container. Using a non-Honda brake fluid can cause corrosion and shorten the life of the system.

- Do not mix different brands of brake fluid as they may not be compatible.
- Coat the piston, piston seal groove, and caliper bore with clean brake fluid.
- Replace all rubber parts with new ones whenever disassembled.
- After installing the caliper, check the brake hose and line for leaks, interference, and twisting.

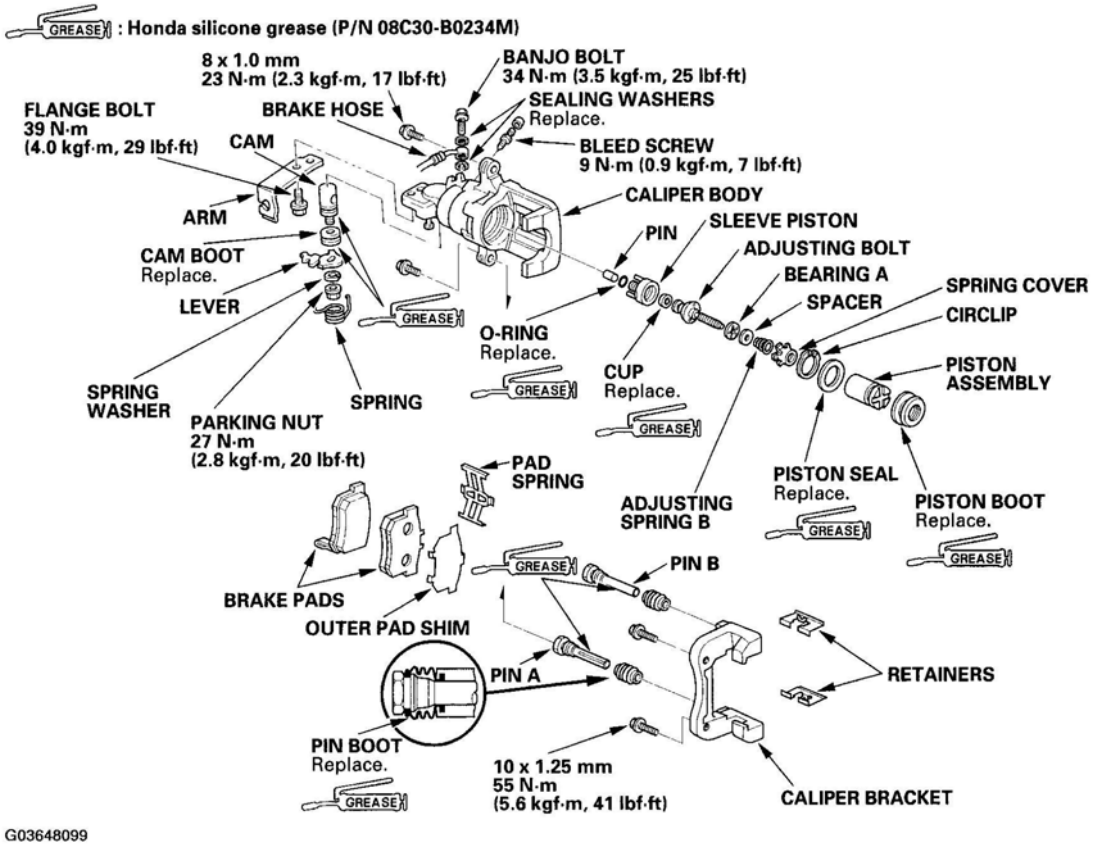


Fig. 56: Identifying Rear Brake Caliper Overhaul
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REAR DRUM BRAKE INSPECTION

CAUTION: Frequent inhalation of brake pad dust, regardless of material composition, could be hazardous to your health.

- **Avoid breathing dust particles.**
- **Never use an air hose or brush to clean brake assemblies. Use an OSHA-approved vacuum cleaner.**

NOTE:

- **Contaminated brake linings or drums reduce stopping ability.**
- **Block the front wheels before jacking up the rear of the vehicle.**

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheels.
3. Release the parking brake, and remove the rear brake drum (see step 5 on **HUB REPLACEMENT-DRUM BRAKE**).

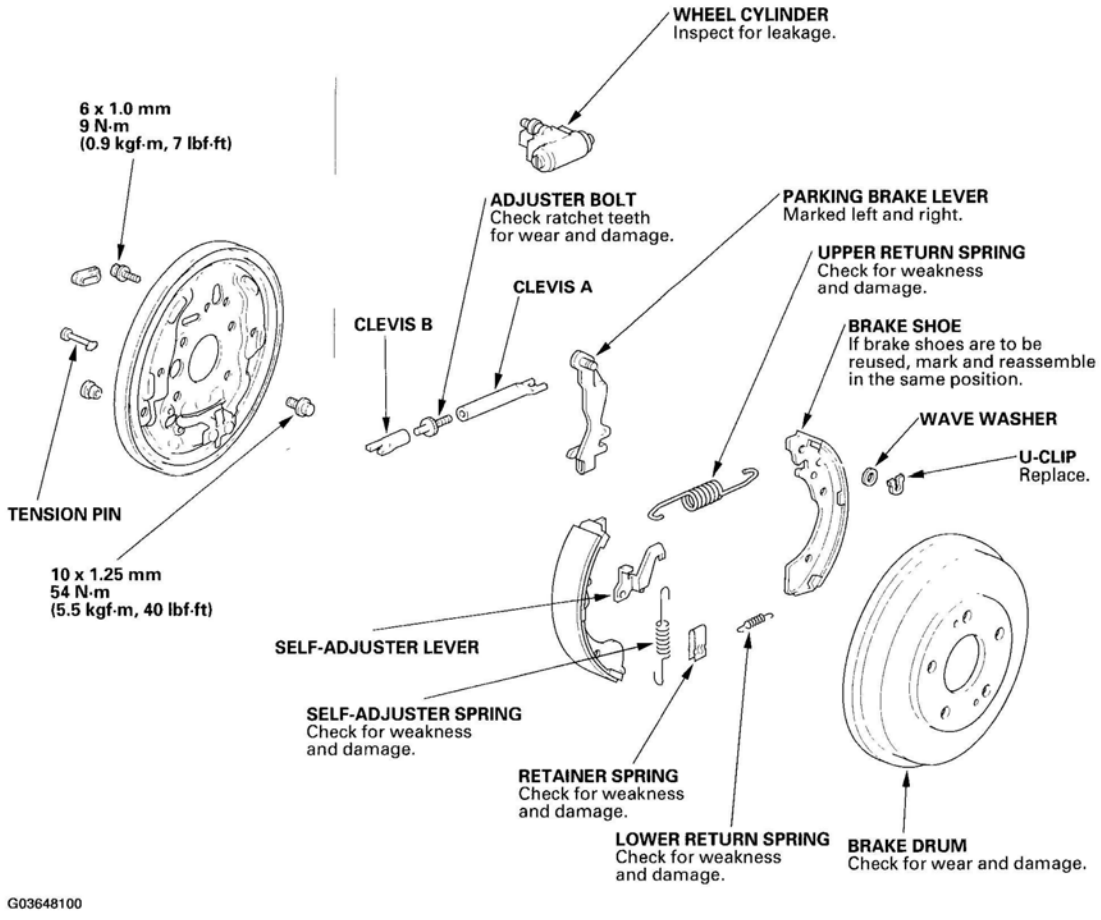


Fig. 57: Removing Rear Brake Drum
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check the wheel cylinder (A) for leakage.

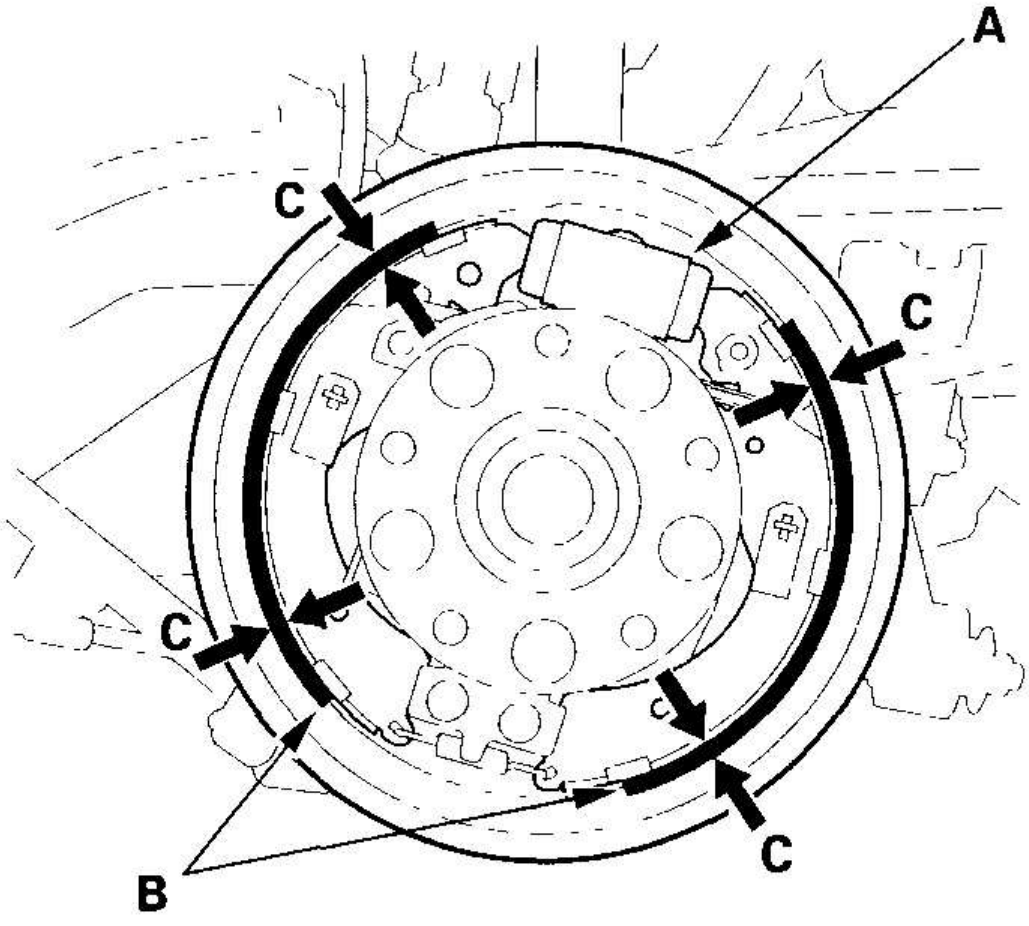


Fig. 58: Checking Wheel Cylinder Leakage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Check the brake linings (B) for cracking, glazing, wear, and contamination.
6. Measure the brake lining thickness (C). Measurement does not include brake shoe thickness.

Brake lining thickness:

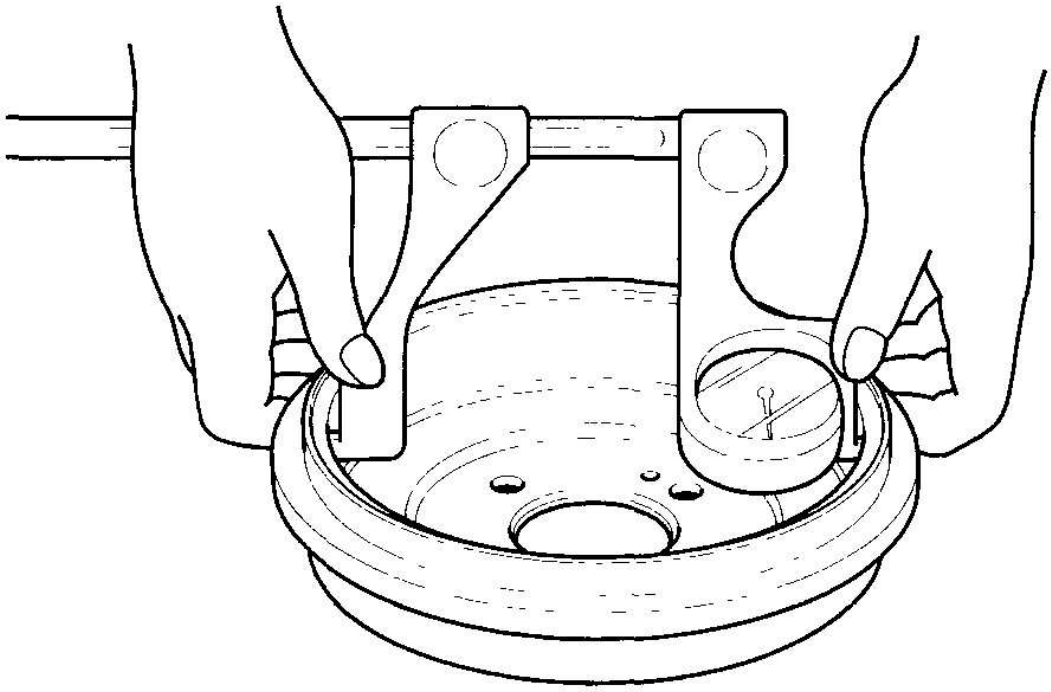
Standard: 4.5 mm (0.18 in.)

Service limit: 2.0 mm (0.08 in.)

7. If the brake lining thickness is less than the service limit, replace the brake shoes as a set.
8. Check the hub bearing for smooth operation. If it requires servicing, replace it (see **HUB REPLACEMENT-DRUM BRAKE**).
9. Measure the inside diameter of the brake drum with inside vernier calipers.

Drum inside diameter:

Standard: 219.9-220 mm (8.657-8.661 in.)
Service limit: 221 mm (8.701 in.)



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Fig. 59: Measuring Inside Diameter Of Brake Drum With Inside Vernier Calipers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. If the inside diameter of the brake drum is more than the service limit, replace the brake drum.
11. Check the brake drum for scoring, grooves, corrosion, and cracks.

REAR BRAKE SHOE REPLACEMENT

Special Tools Required

Brake spring installer 07LAF-SM40200

CAUTION: Frequent inhalation of brake pad dust, regardless of material composition, could be hazardous to your health.

- **Avoid breathing dust particles.**
- **Never use an air hose or brush to clean brake assemblies. Use an OSHA-approved vacuum cleaner.**

REMOVAL/DISASSEMBLY

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**
2. Remove the rear wheels.
3. Release the parking brake, and remover the brake drum (see **KNUCKLE/HUB BEARING UNIT REPLACEMENT**).
4. Unhook the upper return spring (A) from the rearward shoe using the special tool (B).

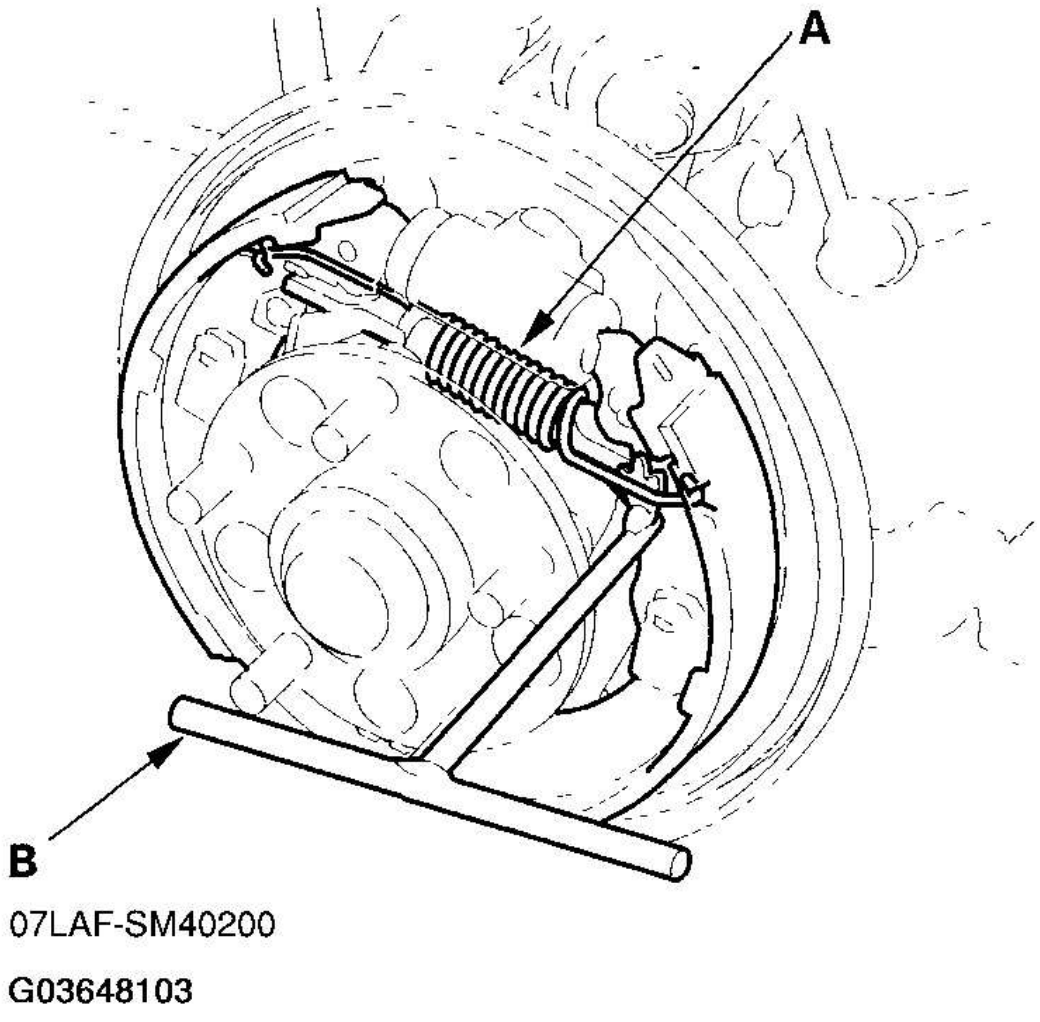


Fig. 60: Unhooking Upper Return Spring From Rearward Shoe Using Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the tension pins (A) by pushing each retainer spring (B) and turning the pins.

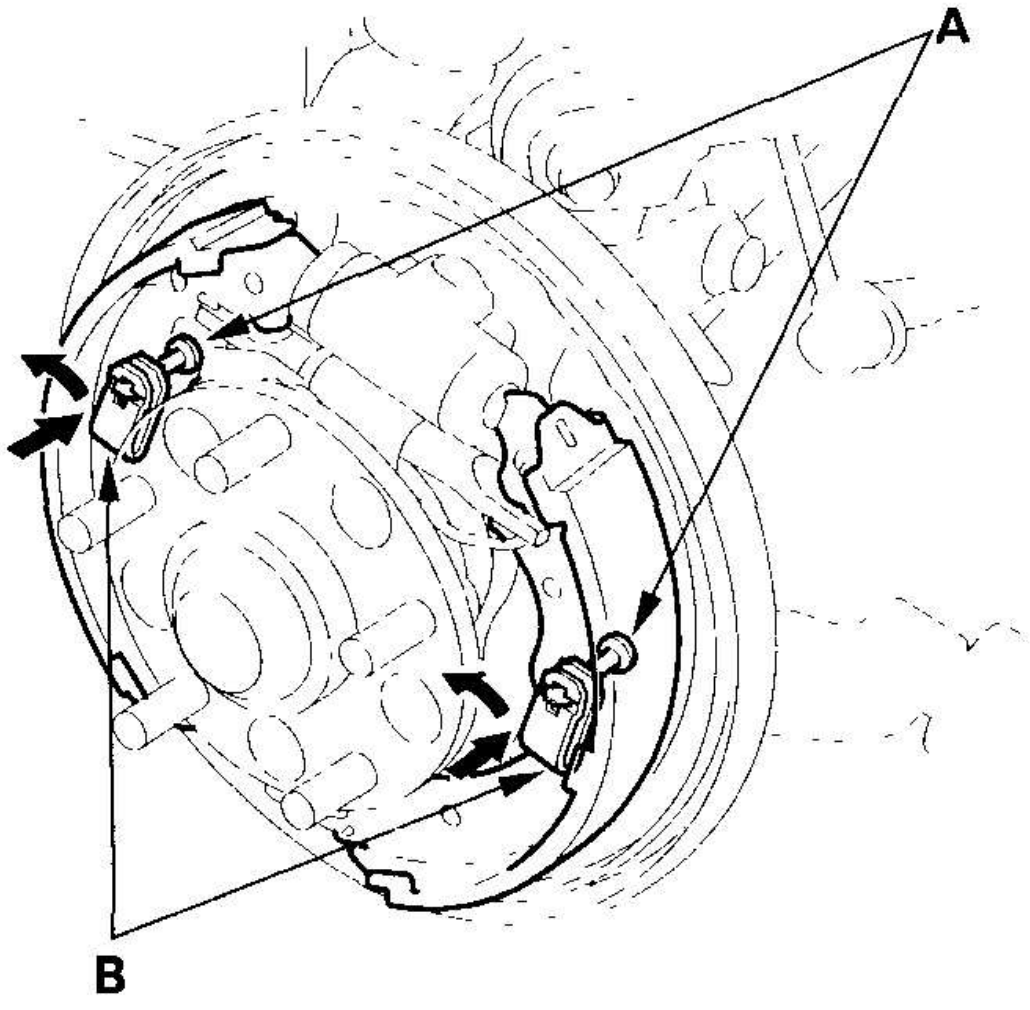


Fig. 61: Removing Tension Pins
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Lower the brake shoe assembly, and remove the lower return spring (A). Be careful not to damage the wheel cylinder dust cover.

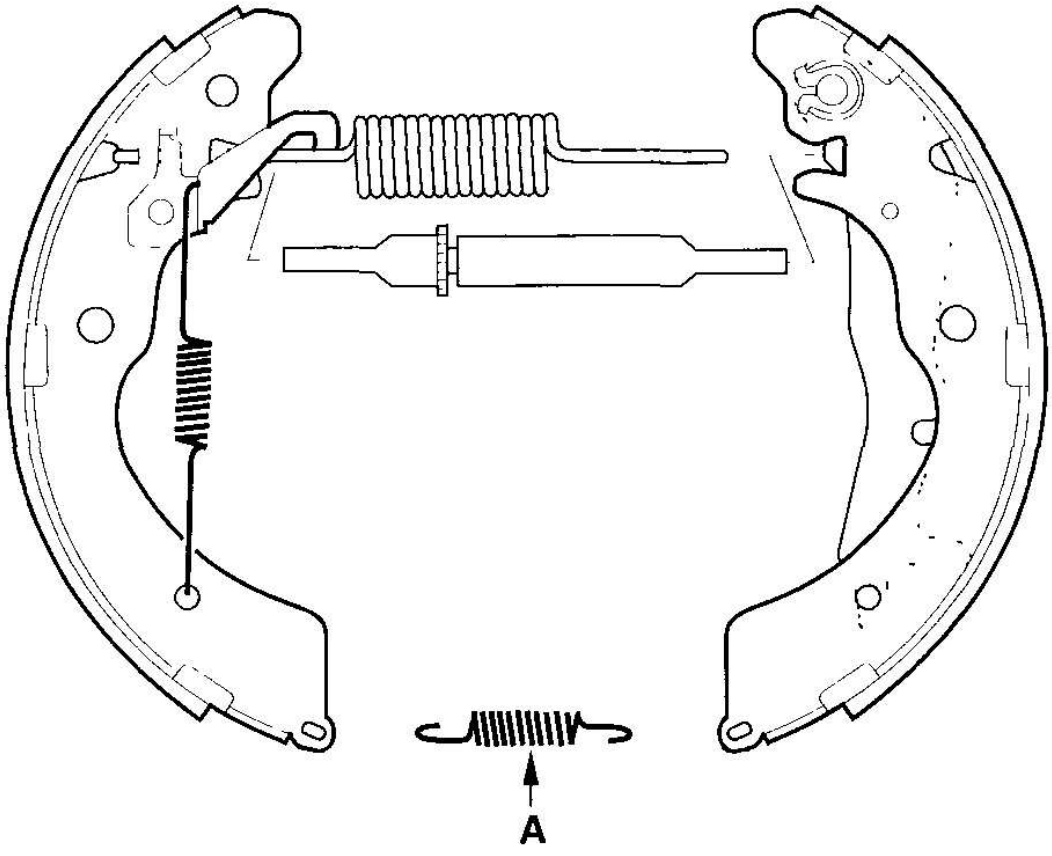


Fig. 62: Removing Lower Return Spring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the brake shoe assembly from the backing plate, and disassemble the brake shoe assembly.
8. Disconnect the parking brake cable from the parking brake lever, and remove the brake shoe.
9. Remove the U-clip (A), and wave washer (B), and separate the parking brake lever (C) from the brake shoe (D).

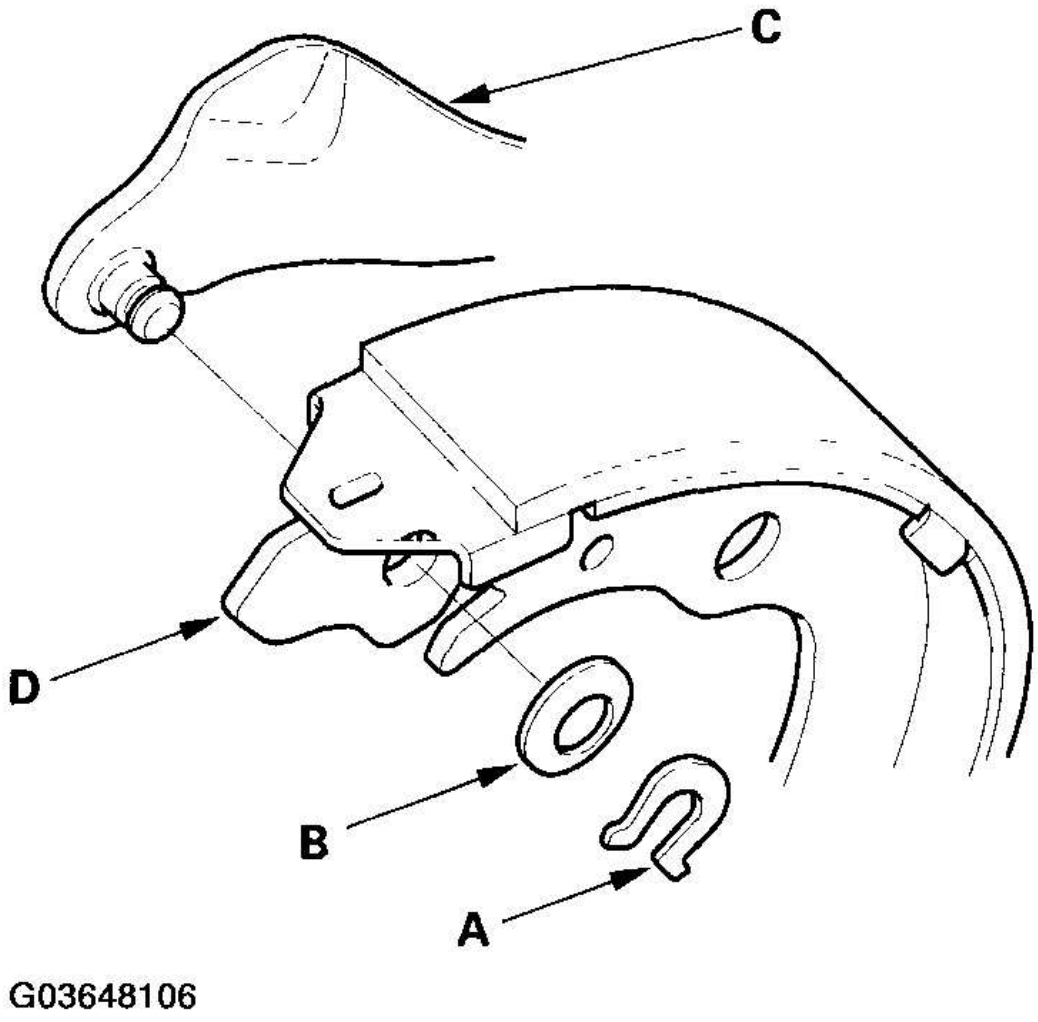


Fig. 63: Removing U-Clip And Wave Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REASSEMBLY

1. Apply a thin coat of rubber grease onto the sliding surfaces as illustrated below. Wipe off any excess assembly paste. Do not get assembly paste on the brake lining material.

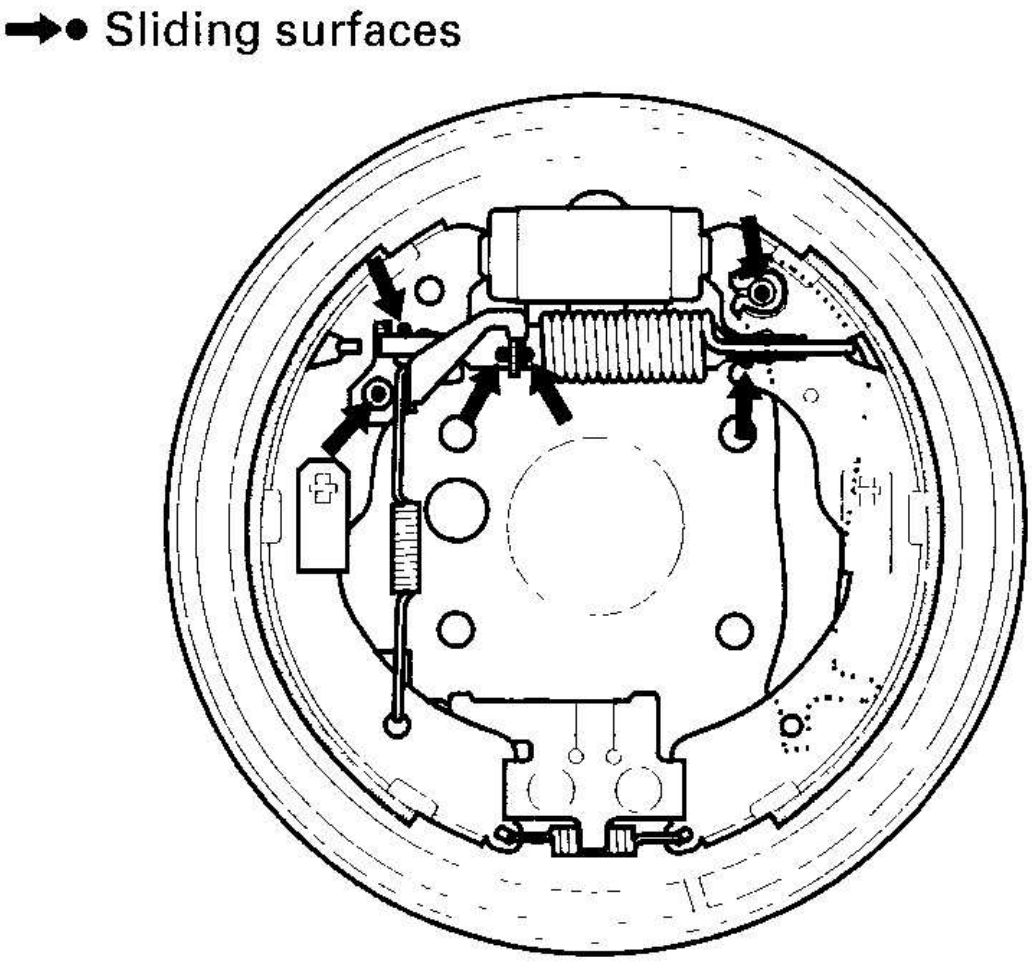


Fig. 64: Applying Thin Coat Of 44 Ma Assembly Paste Onto Sliding Surfaces
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the parking brake lever (A) to the rearward brake shoe (B), and secure it with the wave washer (C), and a new U-clip (D). Pinch the U-clip securely to prevent it from coming off.

NOTE: Install the wave washer with its convex side facing outside.

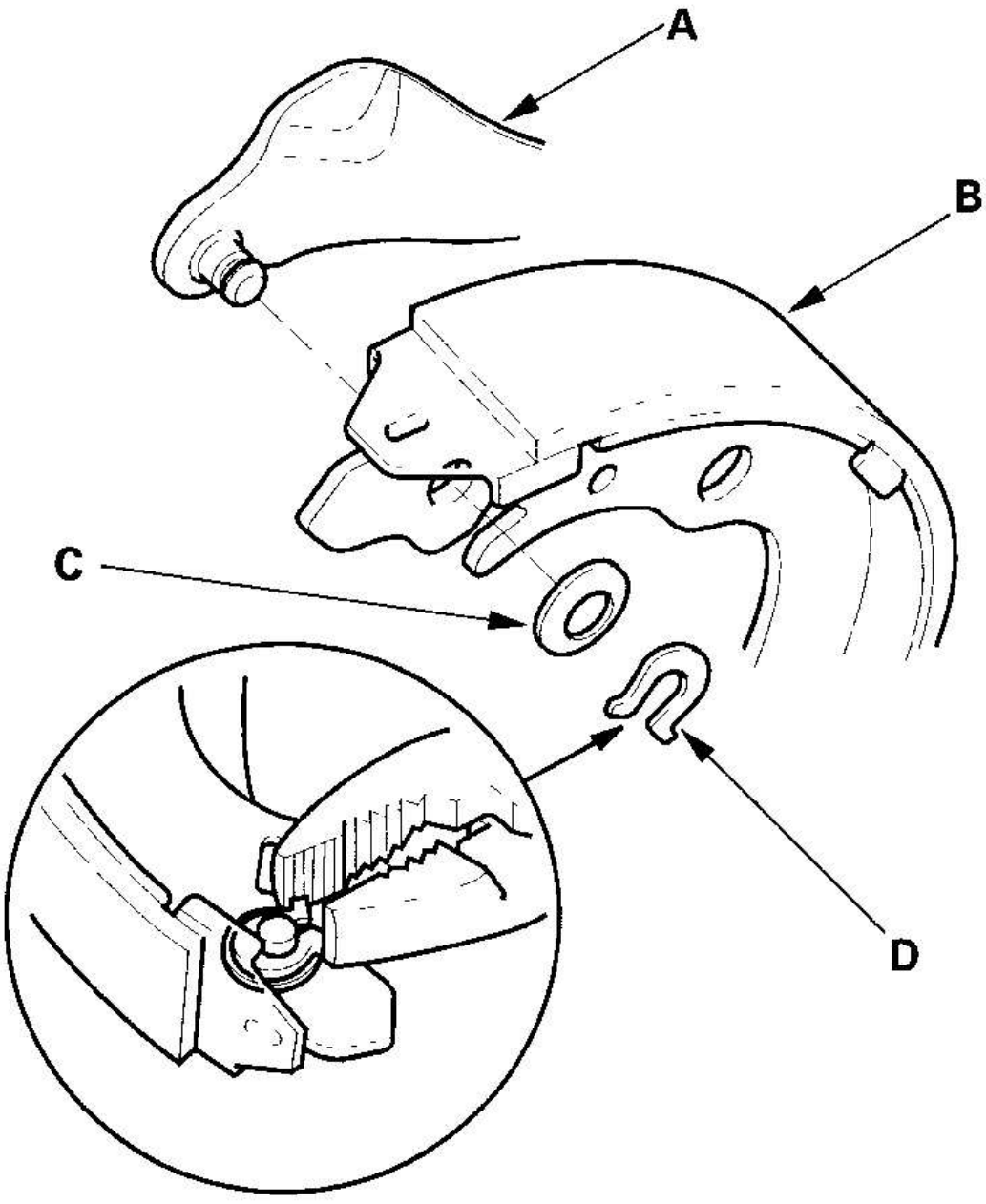


Fig. 65: Installing Parking Brake Lever To Rearward Brake Shoe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Connect the parking brake cable to the rearward brake shoe.

4. Install the self-adjuster lever (C) and self-adjuster spring (D) on the front side brake shoe (E).

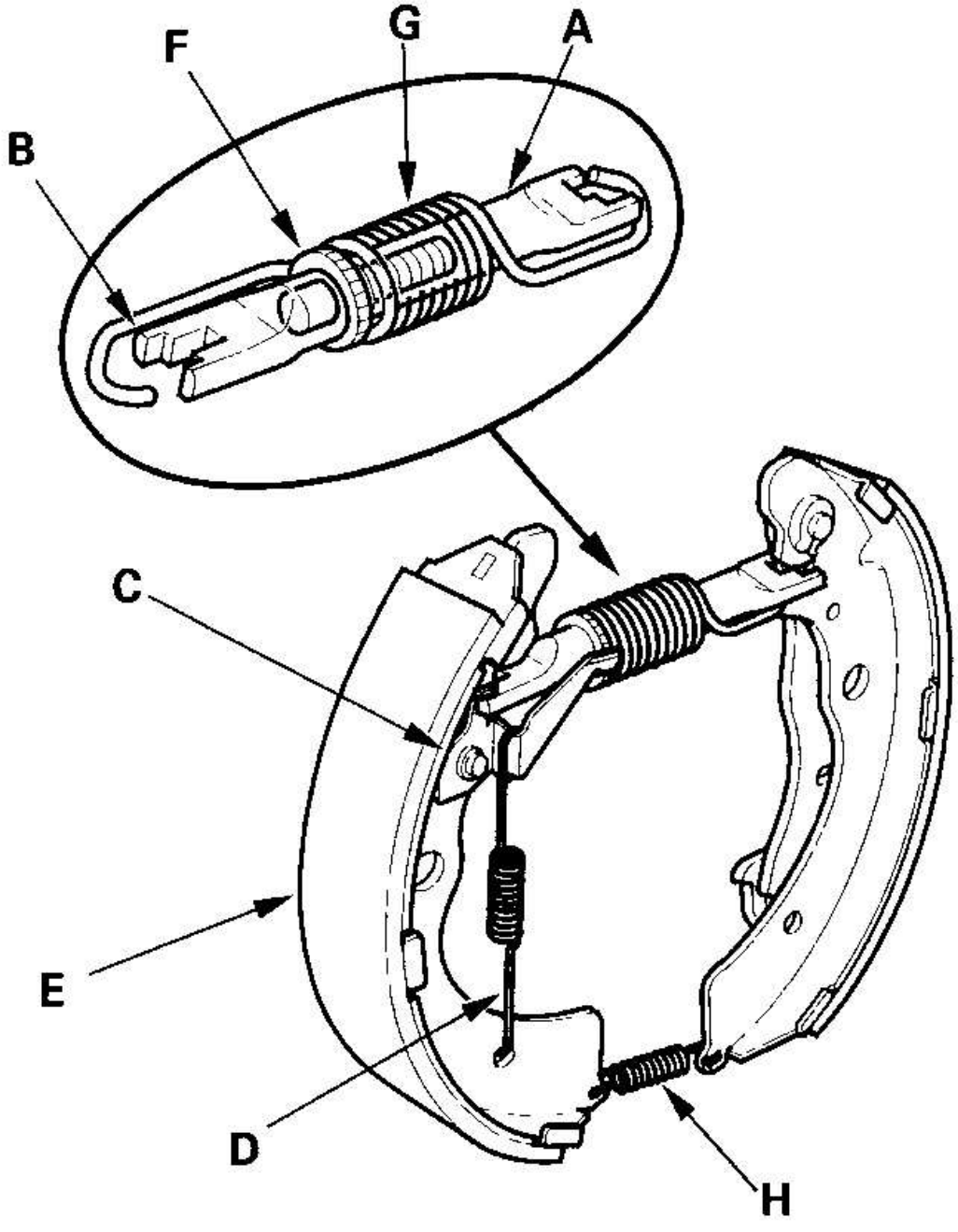


Fig. 66: Installing Self-Adjuster Lever And Self-Adjuster Spring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Assemble the brake shoes with the clevis A, adjuster bolt (F), clevis B, upper return spring (G), and lower return spring (H).

NOTE: Fully turn the adjuster bolt into the clevis A.

6. Apply a thin coat of Molykote 44 MA assembly paste onto the sliding surfaces as illustrated below. Wipe off any excess assembly paste. Do not get assembly paste on the brake lining material.

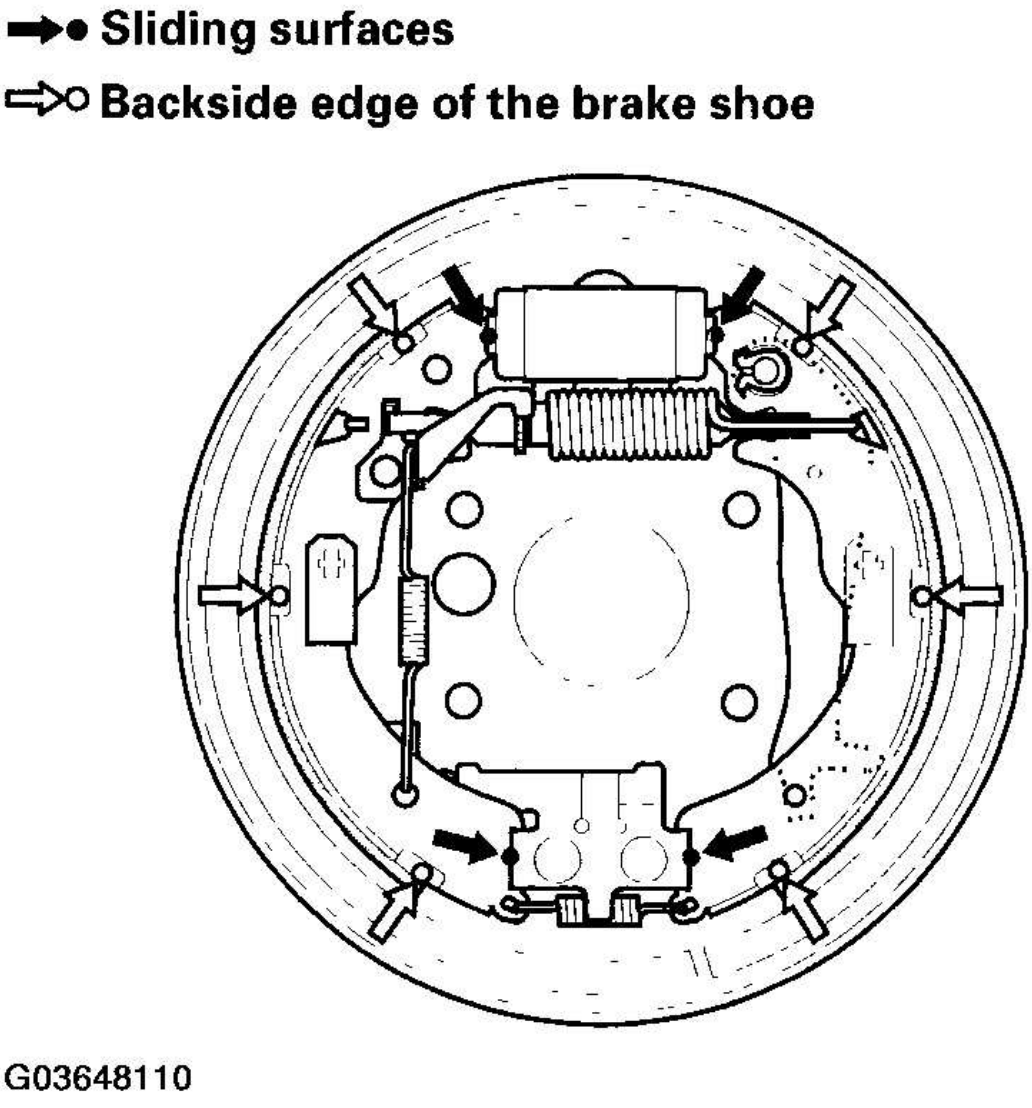


Fig. 67: Applying Thin Coat Of Assembly Paste Onto Sliding Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the brake shoe assembly on the backing plate fitting the top of the brake shoes onto the wheel cylinder pistons and the bottom of the brake shoes onto the locating plate.
8. Install the tension pins (A), and secure with the retainer springs (B) by pushing it and turning each pin.

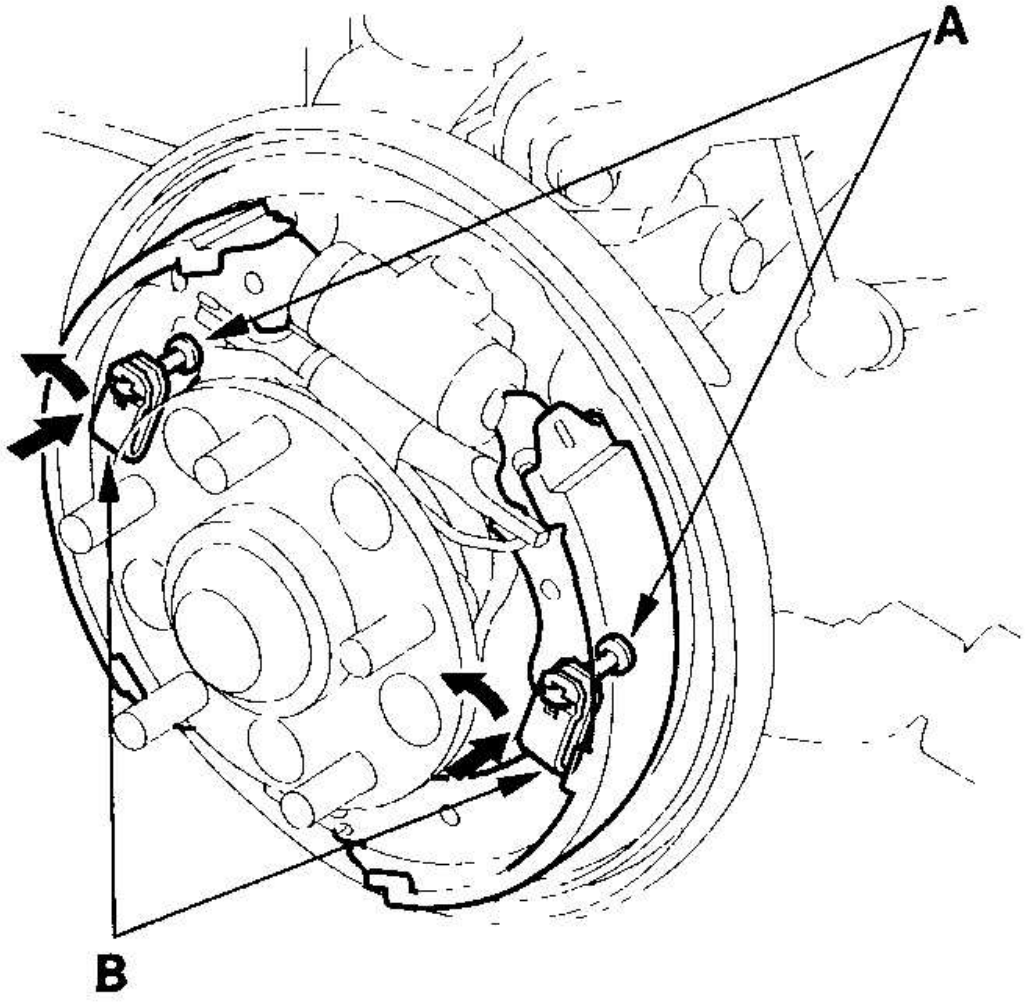


Fig. 68: Installing Tension Pins
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Hook the end (A) of the upper return spring (B) with the brake spring installer.

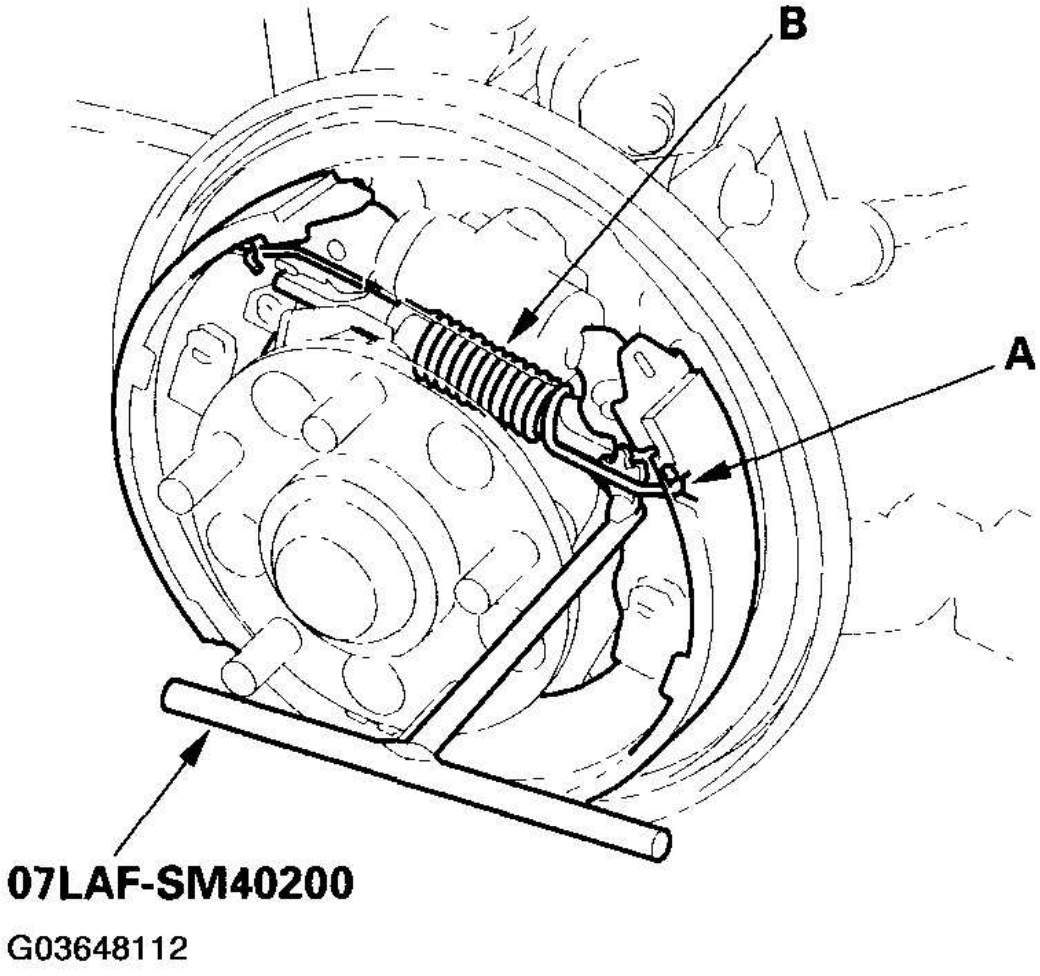


Fig. 69: Hooking End Of Upper Return Spring With Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Install the brake drum and rear wheel.
11. If the wheel cylinder has been removed, bleed the brake system (see **BRAKE SYSTEM BLEEDING**).
12. Press the brake pedal several times to set the self-adjusting brake.
13. Adjust the parking brake (see **PARKING BRAKE CHECK AND ADJUSTMENT**).

REAR WHEEL CYLINDER REPLACEMENT

NOTE:

- **Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid does contact the paint, wash it off immediately with water.**
- **To prevent spills, cover the hose joints with rags or shop towels.**
- **Use only a Honda wheel cylinder special bolt.**

1. Remove the brake shoes (see **REAR BRAKE SHOE REPLACEMENT**).
2. Disconnect the brake line (A) from the wheel cylinder (B).

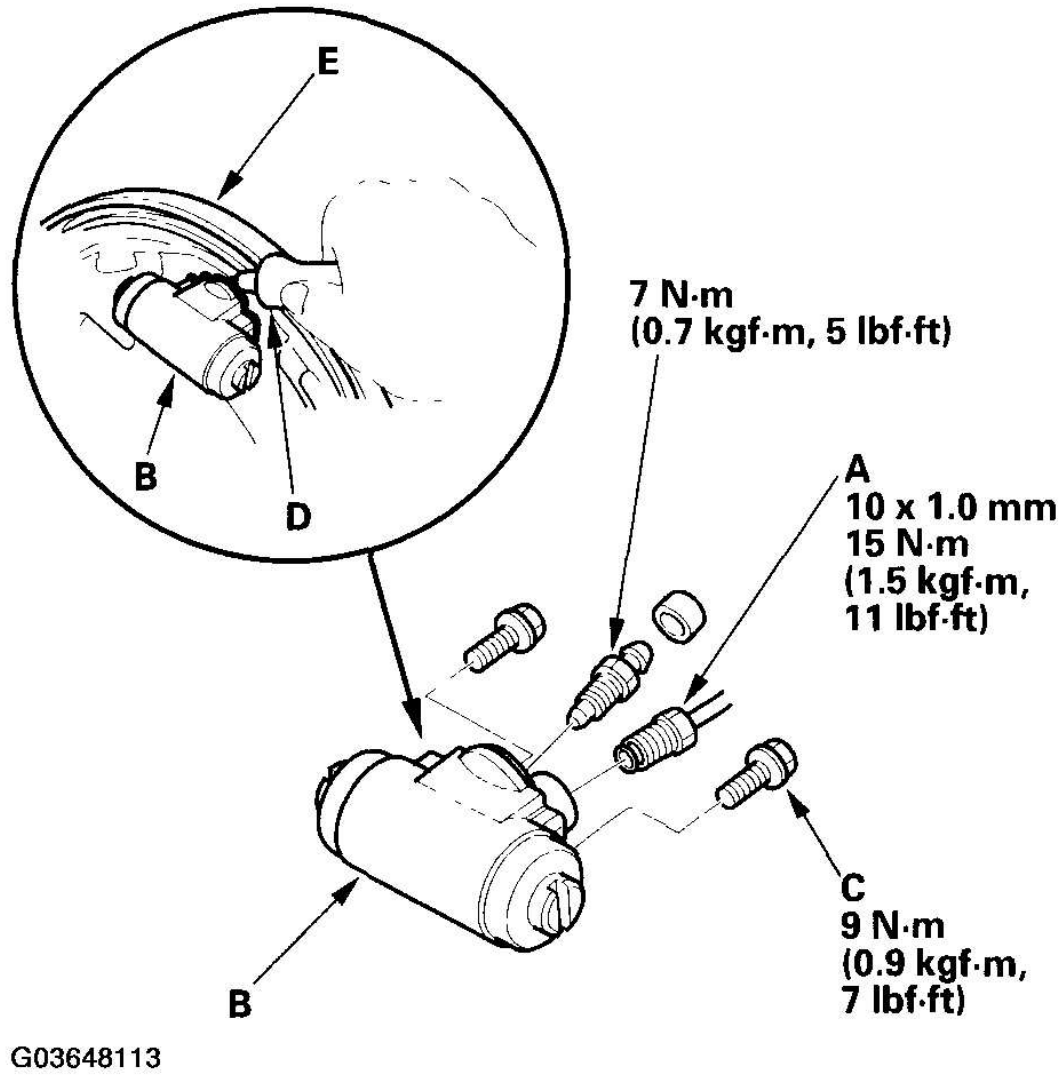


Fig. 70: Disconnecting Brake Line From Wheel Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the bolt (C) and the wheel cylinder from the backing plate.
4. Apply Cemedienne 366E sealant or equivalent (D) between the wheel cylinder and backing plate (E), and install the wheel cylinder.
5. Install the removed parts in the reverse order of removal.
6. Bleed the brake system (see **BRAKE SYSTEM BLEEDING**).
7. Do the parking brake inspection and adjustment (see **Parking Brake Check**

and Adjustment).

8. Spin the wheels to check for brake drag.
9. Check for leaks at the line joint and bleed screw, and retighten if necessary.

BRAKE PEDAL REPLACEMENT

1. Disconnect the brake pedal position switch connector (E).

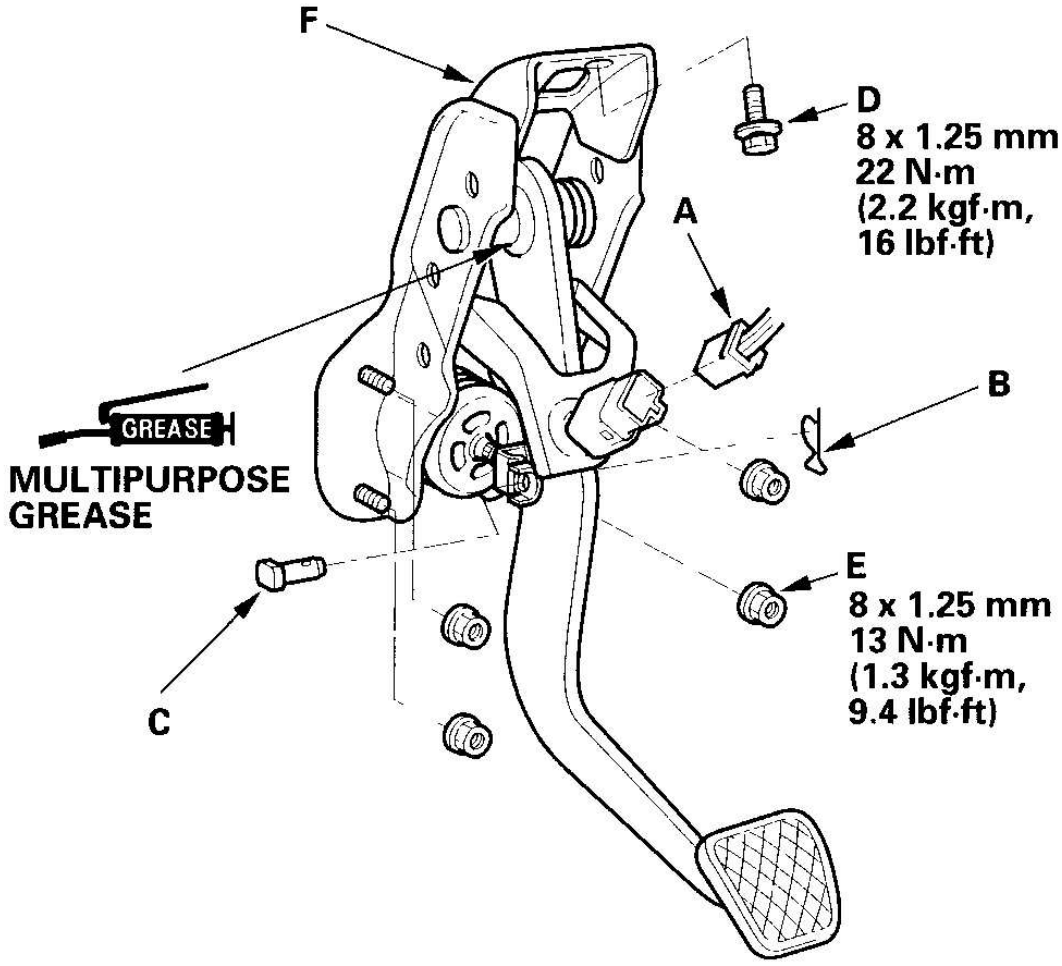


Fig. 71: Removing Lock Pin And Pin
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the brake pedal bracket mounting bolt (C) and nuts (D).
3. Remove the lock pin (A) and pin (B).
4. Remove the brake pedal with bracket (F).
5. Install in the reverse order of removal.

NOTE: Replace the lock pin whenever the brake pedal is replaced.

6. Do the brake pedal and brake pedal position switch adjustment (see **BRAKE PEDAL AND BRAKE PEDAL POSITION SWITCH ADJUSTMENT**).

BRAKE HOSE AND LINE INSPECTION

1. Inspect the brake hoses for damage, deterioration, leaks, interference, and twisting.
2. Check the brake lines for damage, rusting, and leaks. Also check for bent brake lines.
3. Check for leaks at hose and line joints and connections, and retighten if necessary.
4. Check the master cylinder and ABS modulator-control unit for damage and leakage.

NOTE: Replace the brake hose clip whenever the brake hose is serviced.

Connection Point	Component	Connected to	Specified Torque Value	Note
A	Front brake caliper	Brake hose	34 N·m (3.5 kgf·m, 25 lbf·ft)	Banjo bolt
		Breed screw	9.0 N·m (0.9 kgf·m, 7.0 lbf·ft)	
B	Rear brake caliper	Brake hose	34 N·m (3.5 kgf·m, 25 lbf·ft)	Banjo bolt
		Breed screw	9.0 N·m (0.9 kgf·m, 7.0 lbf·ft)	
C	Rear wheel cylinder	Brake line	15 N·m (1.5 kgf·m, 11 lbf·ft)	Flare nut
		Breed screw	7.0 N·m (0.7 kgf·m, 5.0 lbf·ft)	
D	Brake hose	Brake line	15 N·m (1.5 kgf·m, 11 lbf·ft)	Flare nut
E	Master cylinder	Brake line	15 N·m (1.5 kgf·m, 11 lbf·ft)	Flare nut
F	ABS modulator-control unit	Brake line (12 mm nut)	22 N·m (2.2 kgf·m, 16 lbf·ft)	Flare nut
		Brake line (10 mm nut)	15 N·m (1.5 kgf·m, 11 lbf·ft)	Flare nut
G	4-way joint (with EBD)	Brake line	15 N.m (1.5 kgf.m, 11 lbf.ft)	Flare nut
	Proportioning control valve (without EBD)			

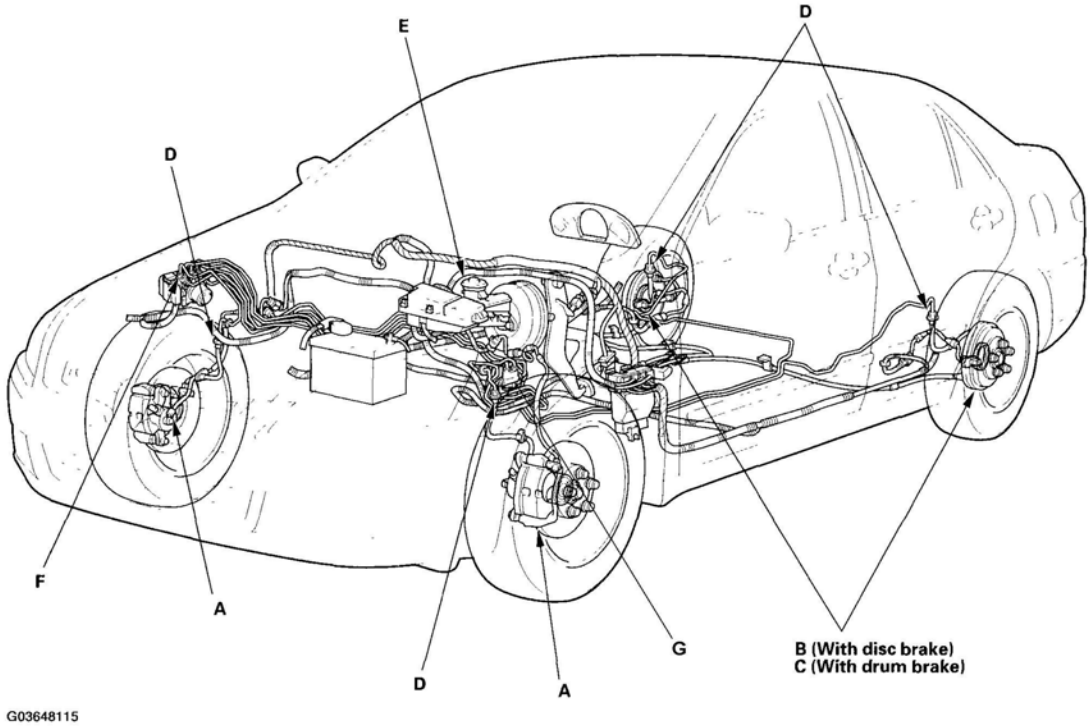


Fig. 72: Inspecting Brake Hose And Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

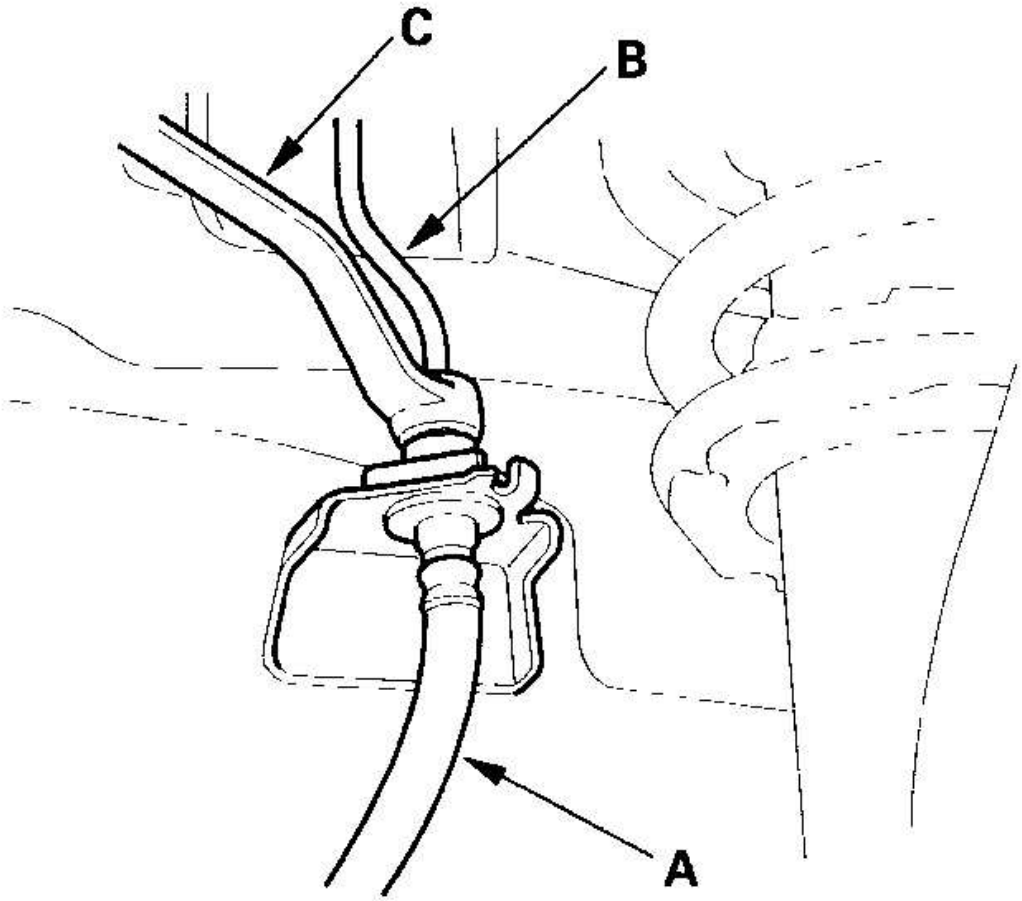
BRAKE HOSE REPLACEMENT

NOTE:

- **Before reassembling, check that all parts are free of dirt and other foreign particles.**

- **Replace parts with new ones whenever specified to do so.**
- **Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid gets on the paint, wash it off immediately with water.**
- **To prevent dripping, cover disconnecting line joints with rags or shop towels.**

1. Replace the brake hose (A) if the hose is twisted, cracked, or if it leaks.



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Fig. 73: Replacing Brake Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Disconnect the brake hose from the brake line (B) using a 10 mm flare-nut wrench (C).
3. Remove and discard the brake hose clip (A) from the brake hose (B).

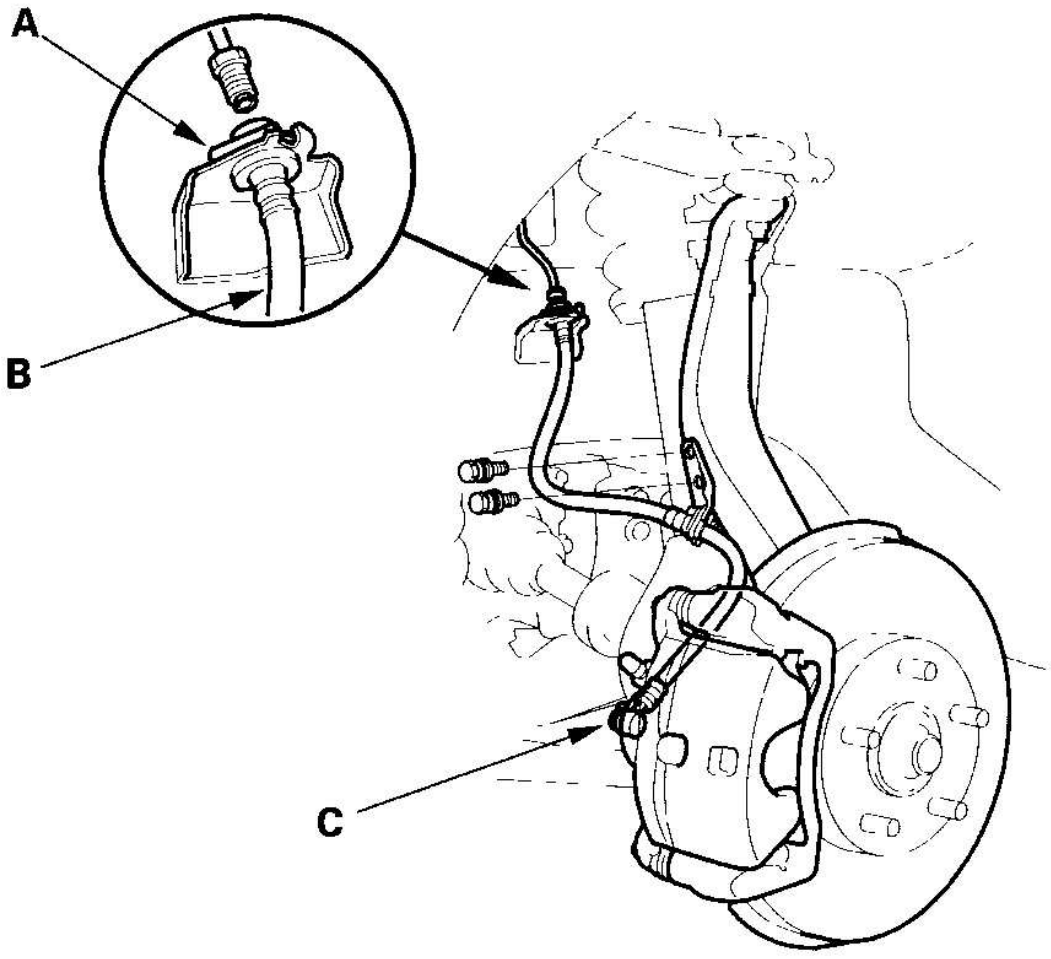


Fig. 74: Removing Brake Hose Clip From Brake Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the banjo bolt (C), and disconnect the brake hose from the caliper.

5. Remove the brake hose from the knuckle.
6. Install the brake hose (A) on the damper with flange bolts (B) first, then connect the brake hose to the caliper with the banjo bolt (C) and new sealing washers (D).

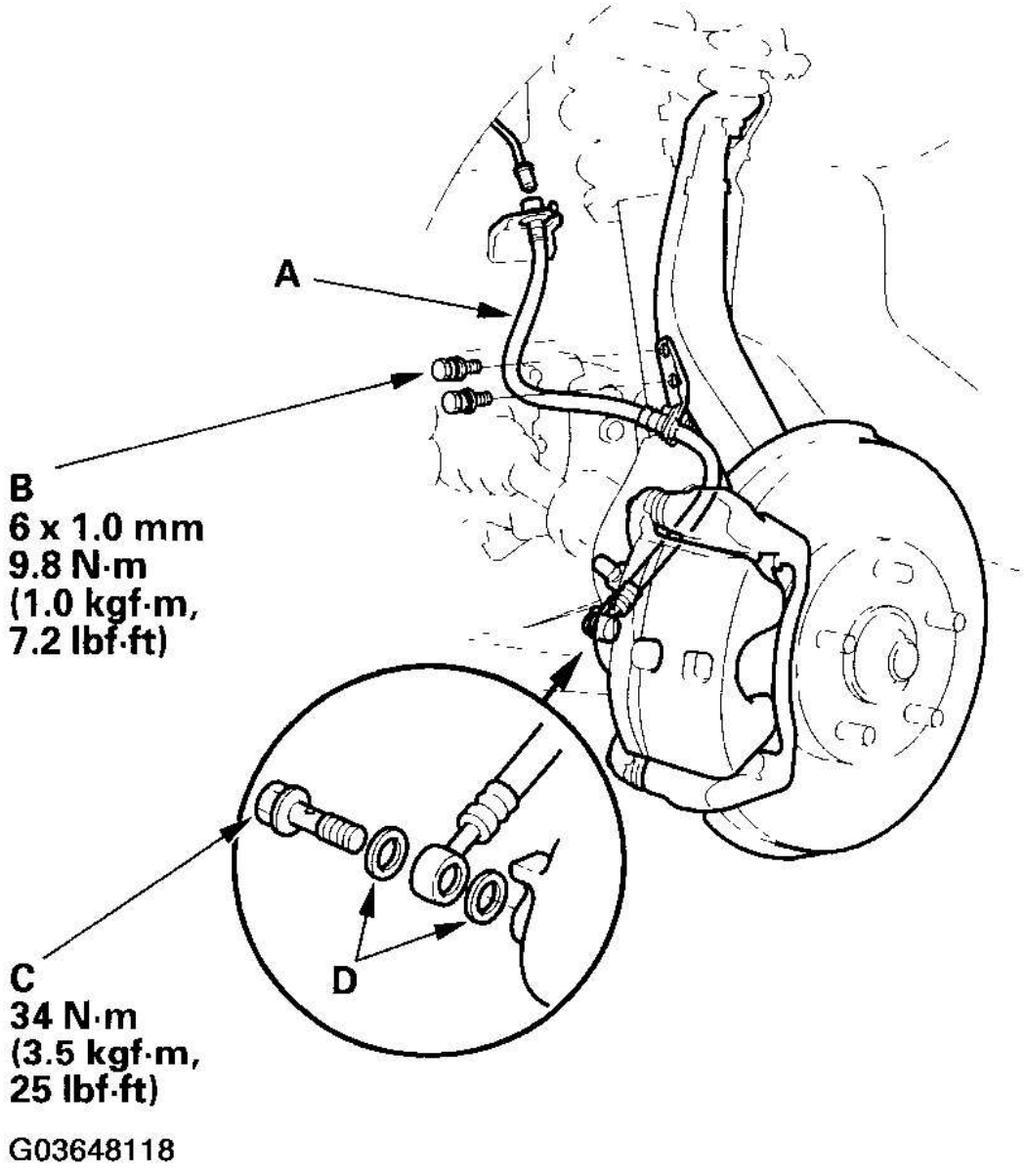


Fig. 75: Installing Brake Hose On Damper With Flange Bolts

Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the brake hose (A) on the upper brake hose bracket (B) with a new brake hose clip (C).

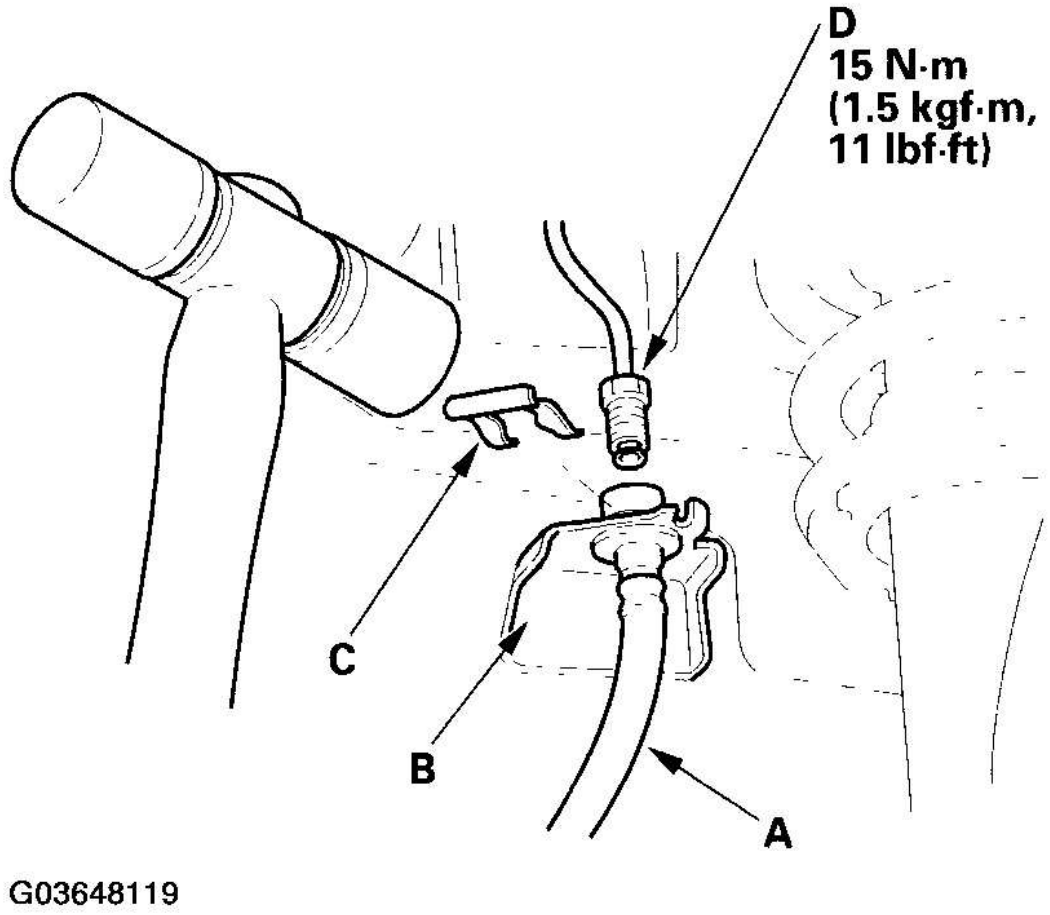


Fig. 76: Installing Brake Hose On Upper Brake Hose Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Connect the brake line (D) to the brake hose.
9. After installing the brake hose, bleed the brake system (see **BRAKE SYSTEM BLEEDING**).
10. Do the following checks:

- Check the brake hose and line joint for leaks, and tighten if necessary.
- Check the brake hoses for interference and twisting.

PARKING BRAKE CABLE REPLACEMENT

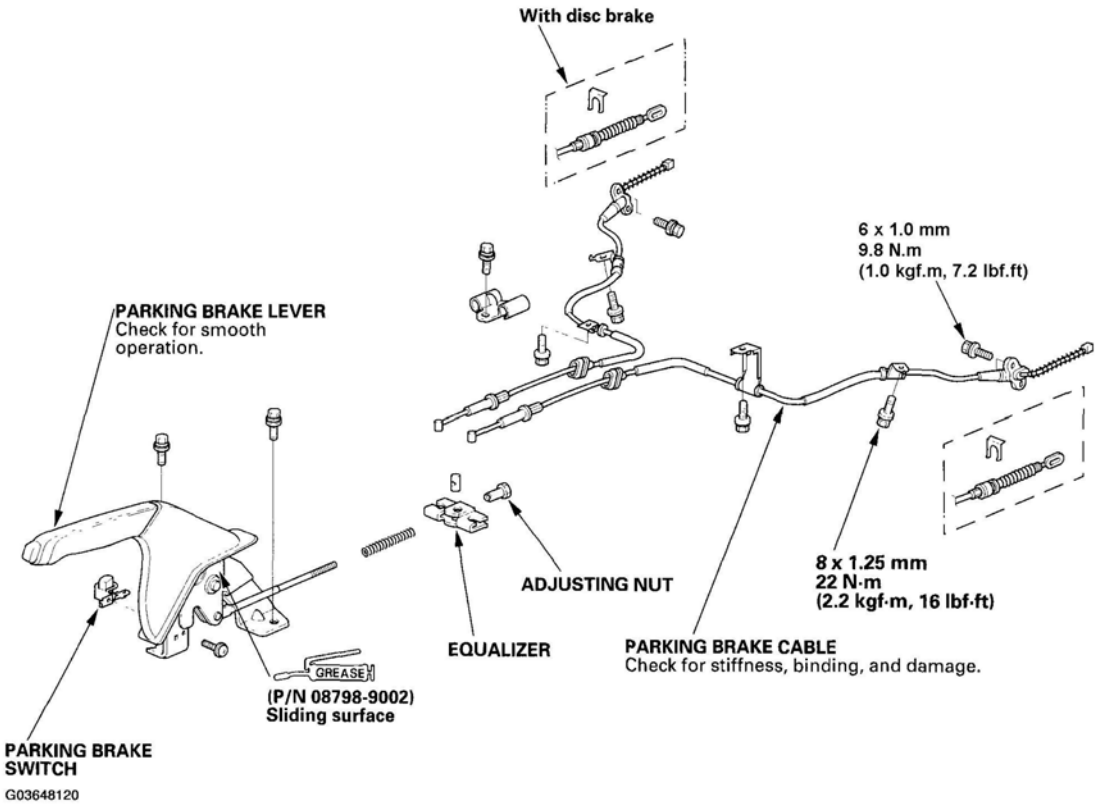


Fig. 77: Exploded View Of Parking Brake Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NOTE: The parking brake cable must not be bent or distorted. This will lead to stiff operation and premature cable failure. Refer to the Exploded View as needed during this procedure.

WITH REAR DISC BRAKE

1. Release the parking brake lever fully.
2. Remove the clip (A) from the rear brake caliper.

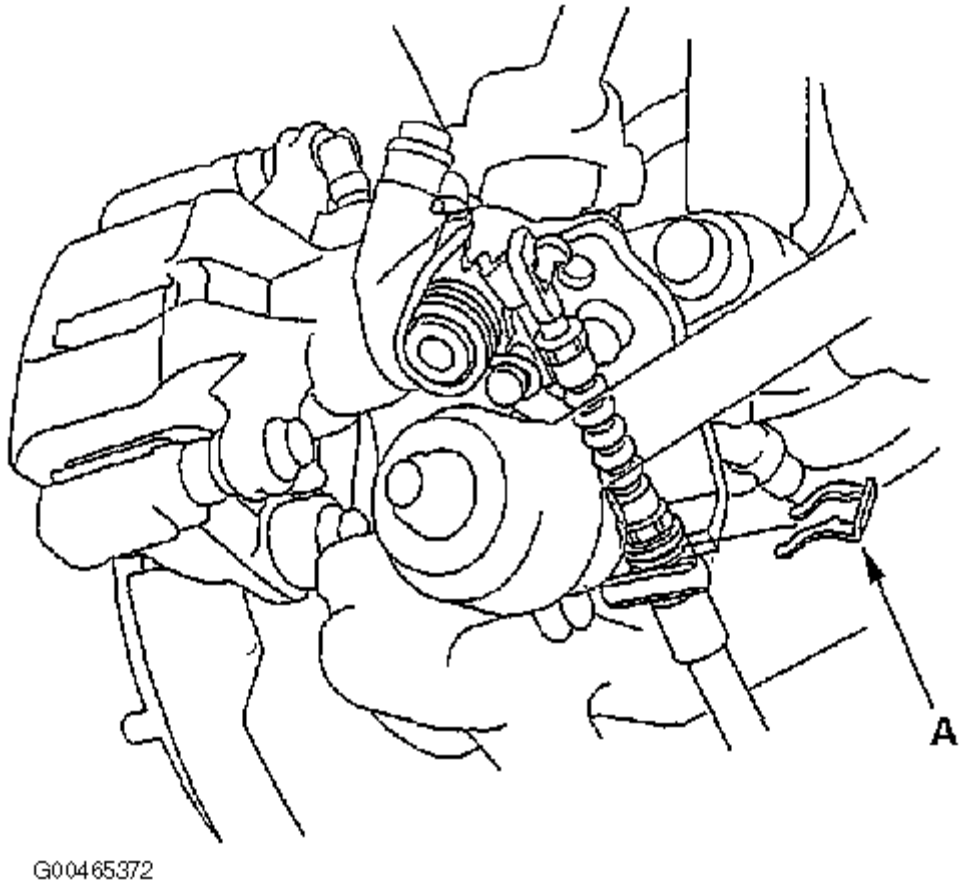


Fig. 78: Removing Clip A From Rear Brake Caliper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the parking brake cable from the rear brake caliper.
4. Reinstall the parking brake cable in the reverse order of removal, and note these items:
   - Before installing the brake disc, clean the mating surface of the rear hub and the inside of the brake disc.
   - Before installing the wheel, clean the mating surfaces on the brake disc and inside of the wheel.
   - Adjust the parking brake (see **PARKING BRAKE CHECK AND ADJUSTMENT**). Apply the parking brake firmly 10 times then adjust it again.

WITH REAR DRUM BRAKE

1. Remove the brake drum and shoes, and disconnect the parking brake cable from the brake shoe (see **Rear Brake Shoe Replacement**).
2. Remove the flange bolts (A) and parking brake cable (B) from the backing plate (C).

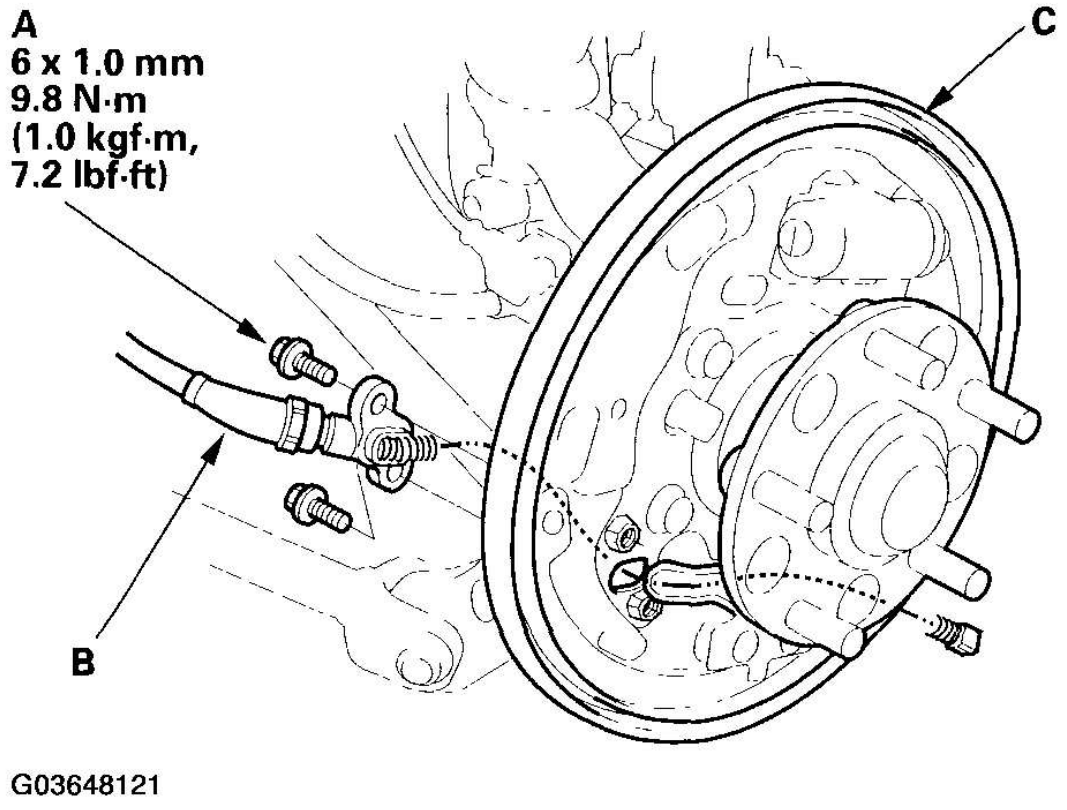


Fig. 79: Removing Flange Bolts And Parking Brake Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Reinstall the parking brake cable in the reverse order of removal, and note these items:
   - Before installing the brake drum, clean the mating surface of the rear hub and the inside of the brake drum.
   - Before installing the wheel, clean the mating surfaces on the brake drum and inside of the wheel.

- Adjust the parking brake (see **Parking Brake Check and Adjustment**). Apply the parking brake firmly 10 times then adjust it again.

2003-07 ACCESSORIES & EQUIPMENT

Bumpers - Accord (V6)

REAR BUMPER REMOVAL/INSTALLATION

Special Tools Required

KTC trim tool set SOJATP2014

'06-07 MODEL 2-DOOR

NOTE:

- **Have an assistant help you when removing and installing the rear bumper.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Take care not to scratch the rear bumper and body.**
- **Put on gloves to protect your hands.**

1. Remove the rear bumper as shown in .
2. Install the bumper in the reverse order of removal, and note these items:
   - Make sure the rear bumper engages the hooks of the side spacers and upper brackets on both sides securely.
   - Check the clips for damage or stress-whitening, and replace them with new one.

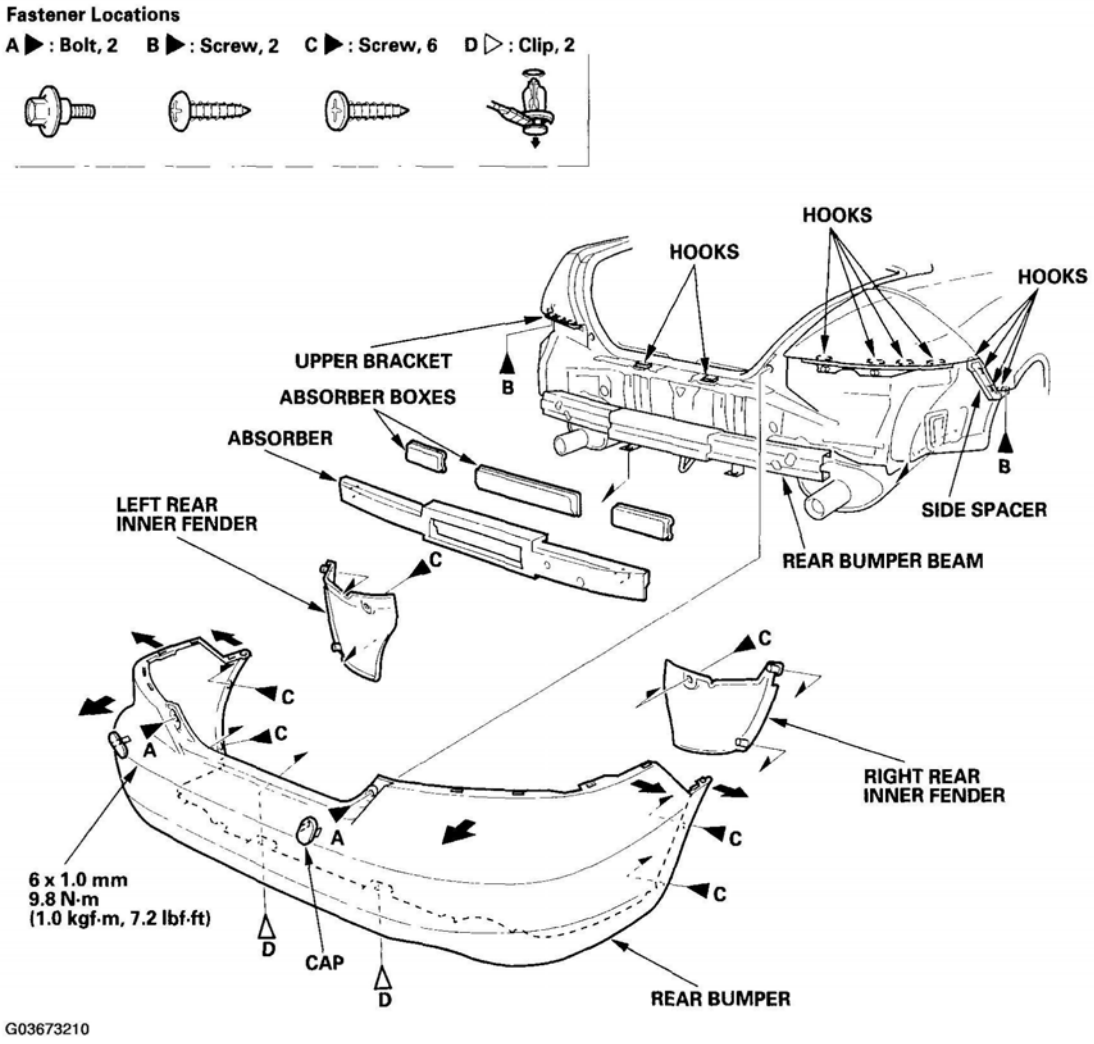


Fig. 1: Identifying Rear Bumper ('06-07 Model 2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

KTC trim tool set SOJATP2014

'06-07 MODEL 4-DOOR

NOTE:

- **Have an assistant help you when removing and installing the rear bumper.**
- **Use the appropriate tool from the KTC trim tool set to**

avoid damage when prying components.

- **Take care not to scratch the rear bumper and body.**
- **Put on gloves to protect your hands.**

1. Remove the rear bumper as shown in .
2. Install the bumper in the reverse order of removal, and note these items:
   - Make sure the rear bumper engages the hooks of the side spacers and upper brackets on both sides securely.
   - Check the clips for damage or stress-whitening, and replace them with new one.

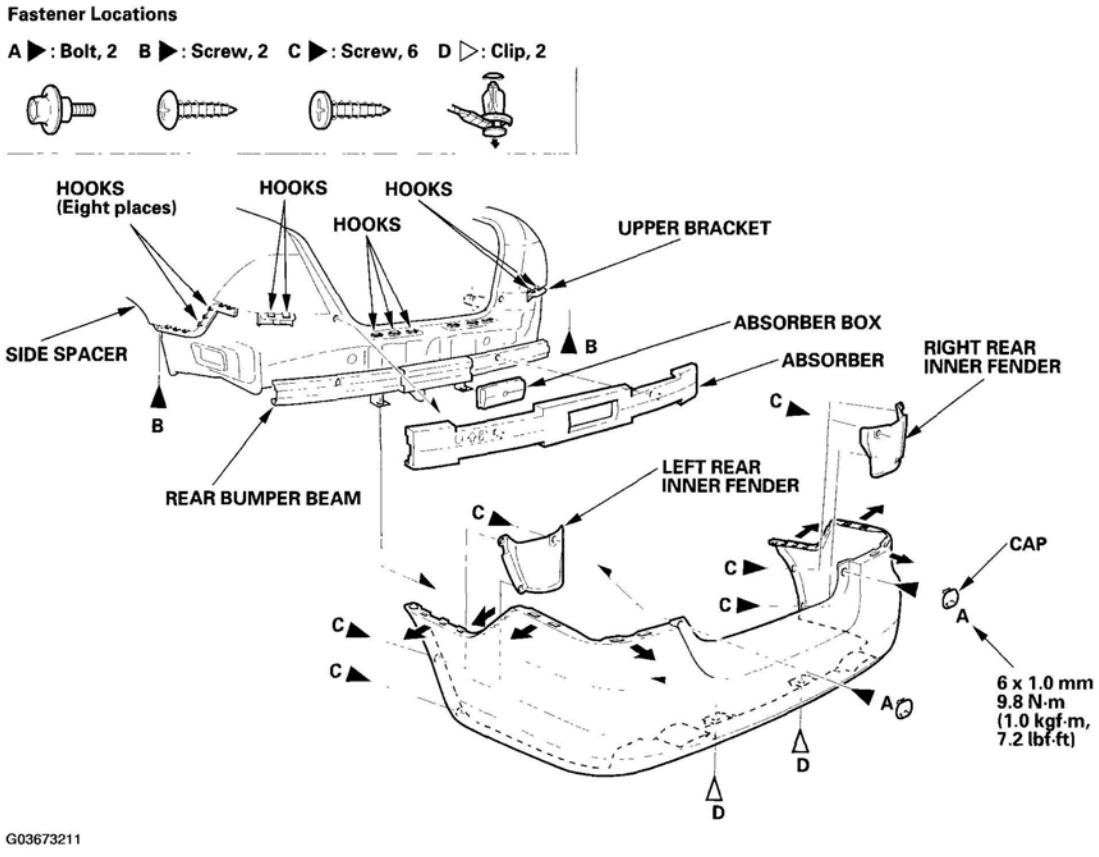


Fig. 2: Identifying Rear Bumper ('06-07 Model 4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ACCESSORIES & EQUIPMENT

Bumpers - Accord

FRONT BUMPER REMOVAL/INSTALLATION

2-DOOR

NOTE:

- **Have an assistant help you when removing and installing the front bumper.**
- **Take care not to scratch the front bumper and body.**
- **Put on gloves to protect your hands.**

1. Remove the front bumper as shown in **Fig. 1**.
2. Install the bumper in the reverse order of removal, and note these items:
   - Make sure the front bumper engages the hooks of the side spacers and upper beams on both sides securely.
   - Check if the clip is damaged or stress-whitened, and if necessary, replace it with new one.

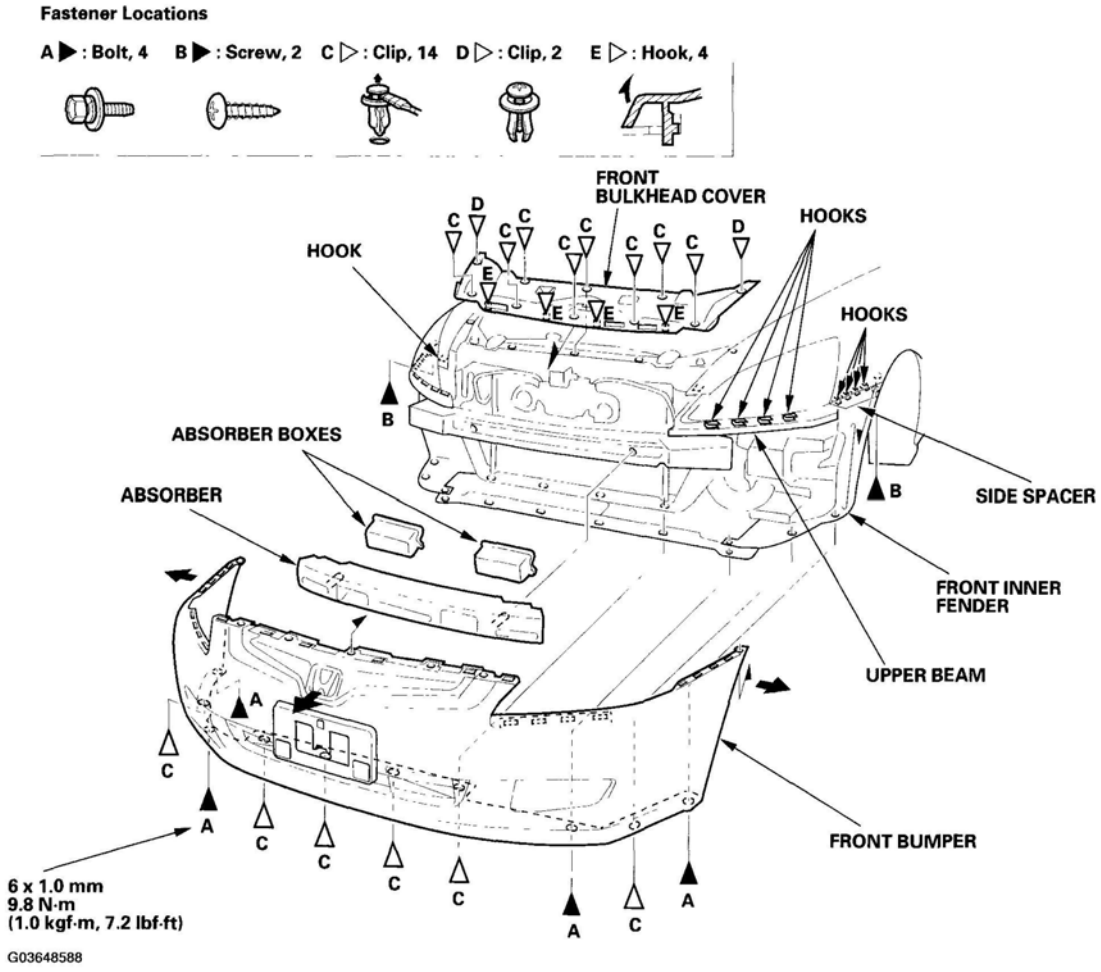


Fig. 1: Removing Front Bumper (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR

NOTE:

- **Have an assistant help you when removing and installing the front bumper.**
- **Take care not to scratch the front bumper and body.**
- **Put on gloves to protect your hands.**

1. Remove the front bumper as shown below.
2. Install the bumper in the reverse order of removal, and note these items:
   - Make sure the front bumper engages the hooks of the side spacers and

upper beams on both sides securely.

- Check if the clip is damaged or stress-whitened, and if necessary, replace it with new one.

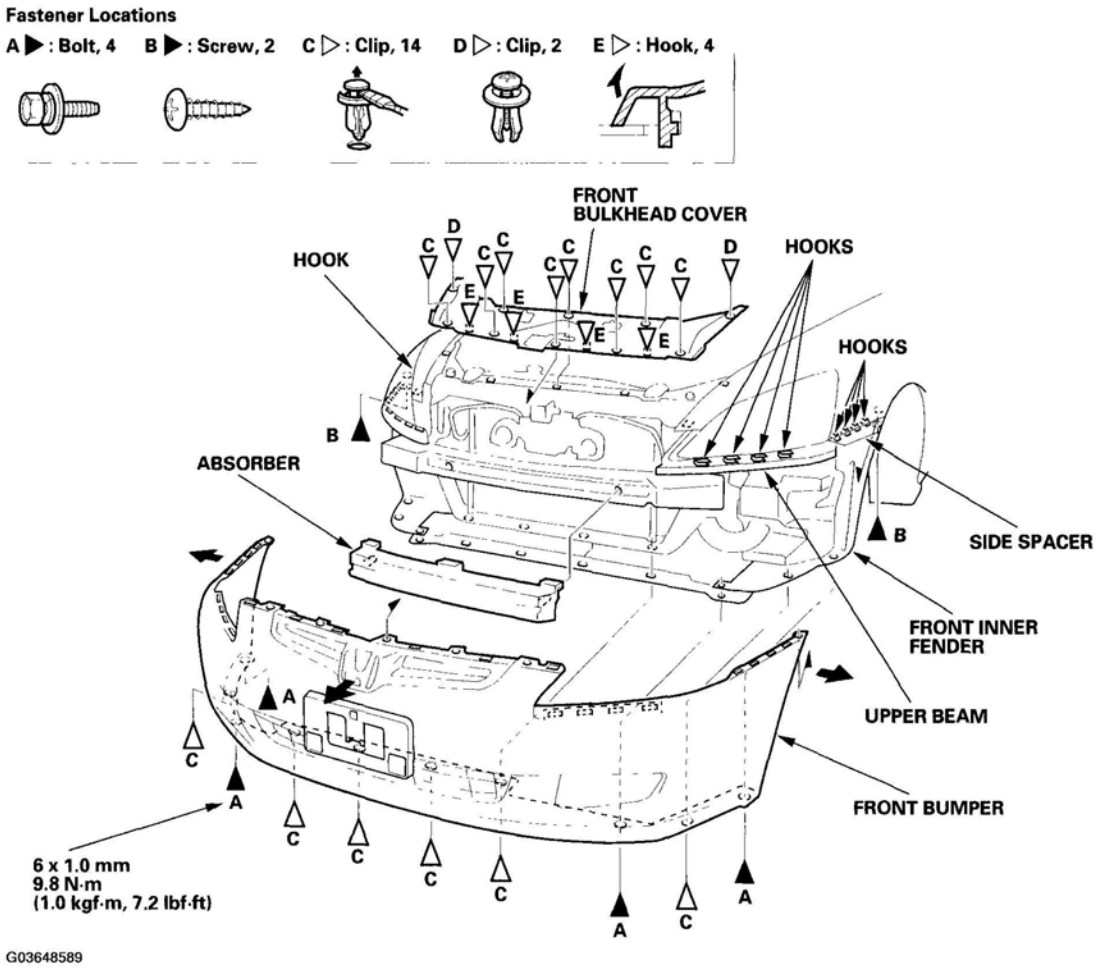


Fig. 2: Removing Front Bumper (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

LOWER GRILLE REPLACEMENT

Special Tools Required

KTC trim tool set SOJATP2014

'06-07 MODEL

NOTE:

- **Put on gloves to protect your hands.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Take care not to scratch the front bumper.**

1. Remove the front bumper (see **FRONT BUMPER REMOVAL/INSTALLATION**).
2. Remove the license plate.
3. Remove the bolts (A) and screw (B), then remove the license plate base (C) from the front bumper (D).

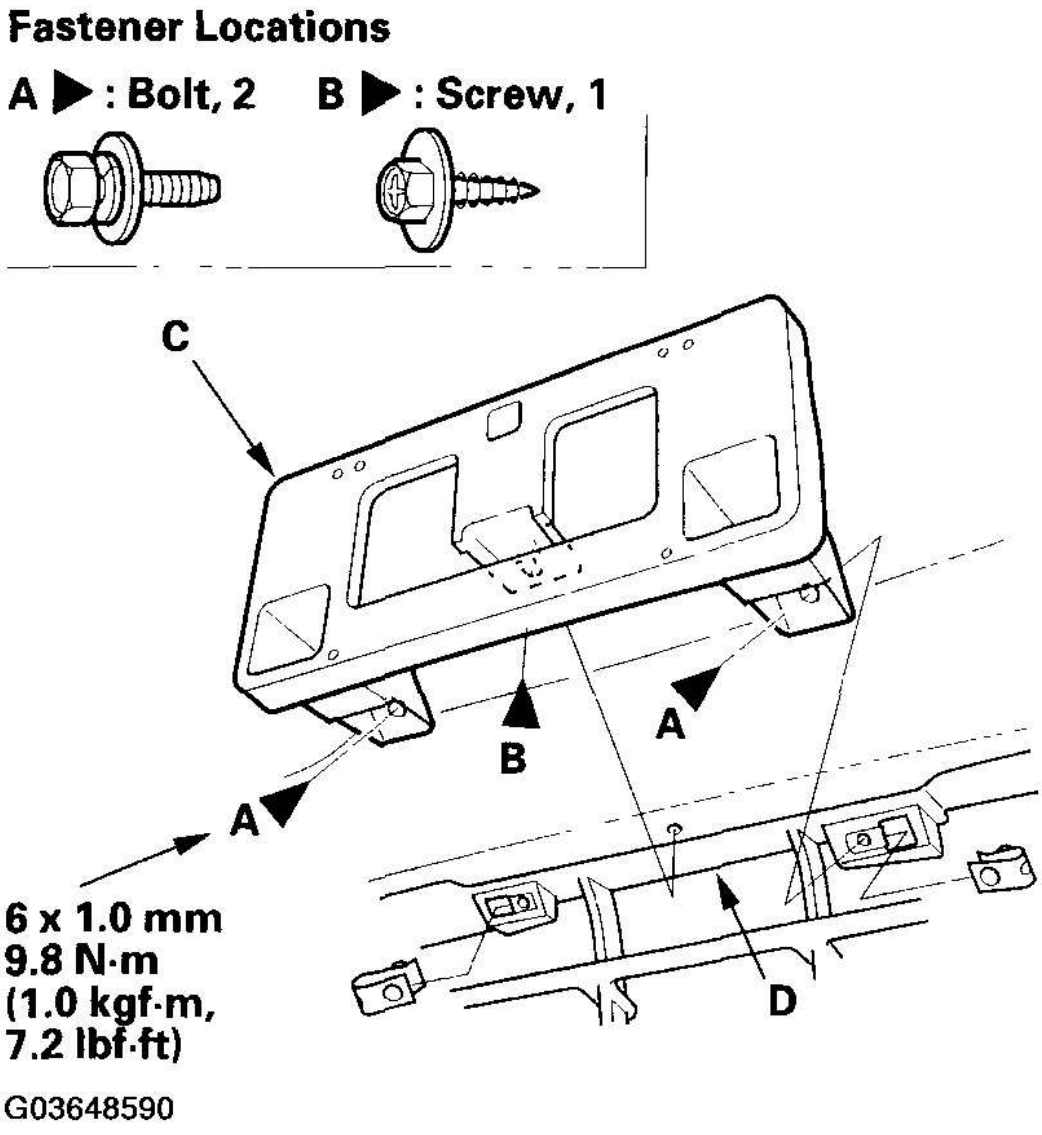


Fig. 3: Removing License Plate Base
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. From the back of the front bumper (A), remove the screws (B), securing the front bumper lower grille (C).

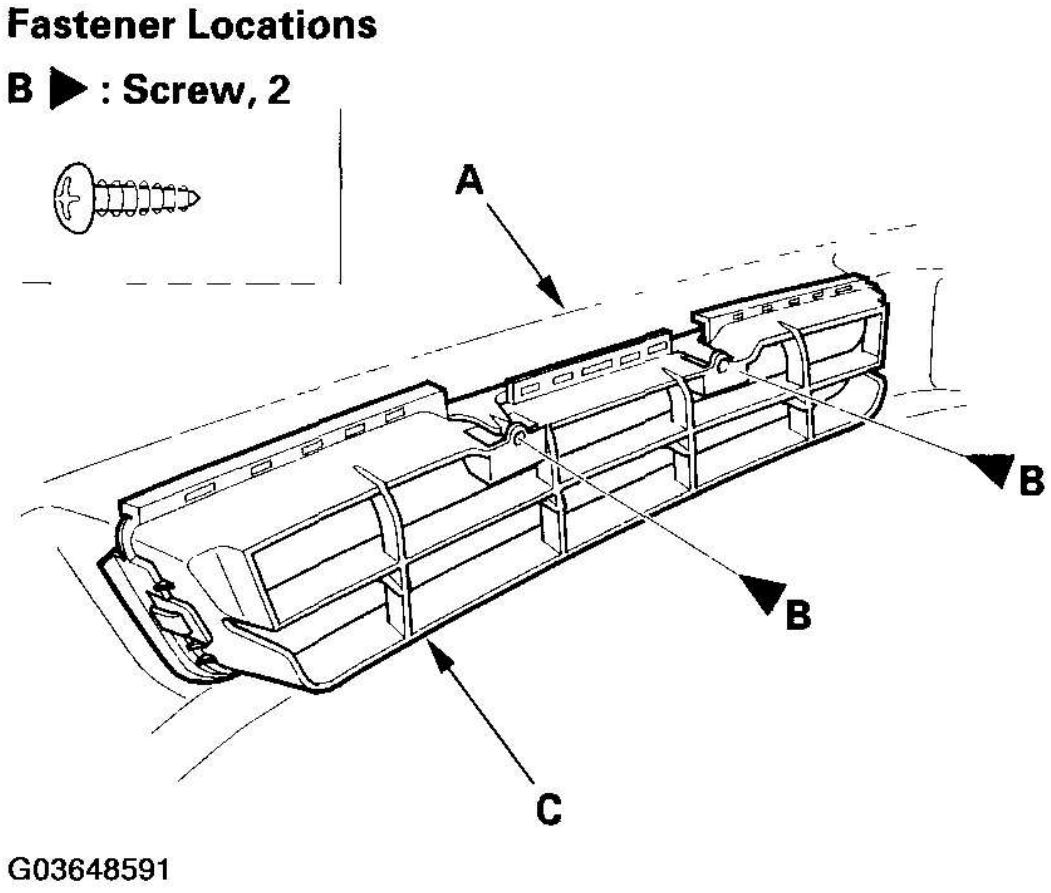


Fig. 4: Securing Front Bumper Lower Grille
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Detach the hooks (A) on the bottom of the front bumper lower grille (B), then remove the grille from the front bumper (C).

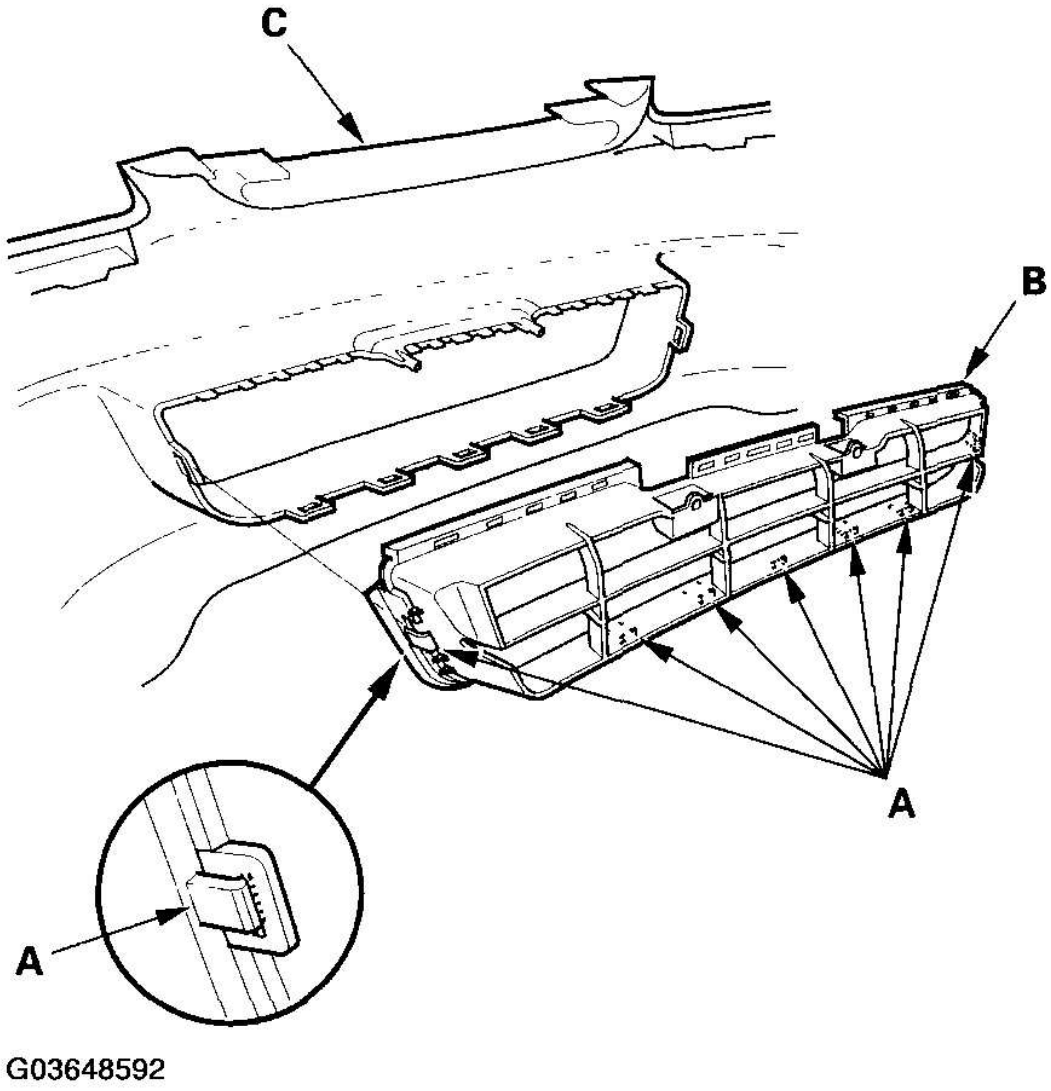


Fig. 5: Removing Grille From Front Bumper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the grille in the reverse order of removal, and note these items: Push the hooks into place securely.

FRONT BUMPER SIDE COVER REPLACEMENT

Special Tools Required

KTC trim tool set SOJATP2014 * Available through the American Honda Tool and Equipment Program; call 888-424-6857.

'06-07 MODELS

NOTE:

- **Put on gloves to protect your hands.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Take care not to scratch the front bumper.**

1. Remove the front bumper (see **FRONT BUMPER REMOVAL/INSTALLATION**).
2. From the back of the front bumper (A), release the hooks (B), and pull out the front bumper side cover (C), then remove the cover.

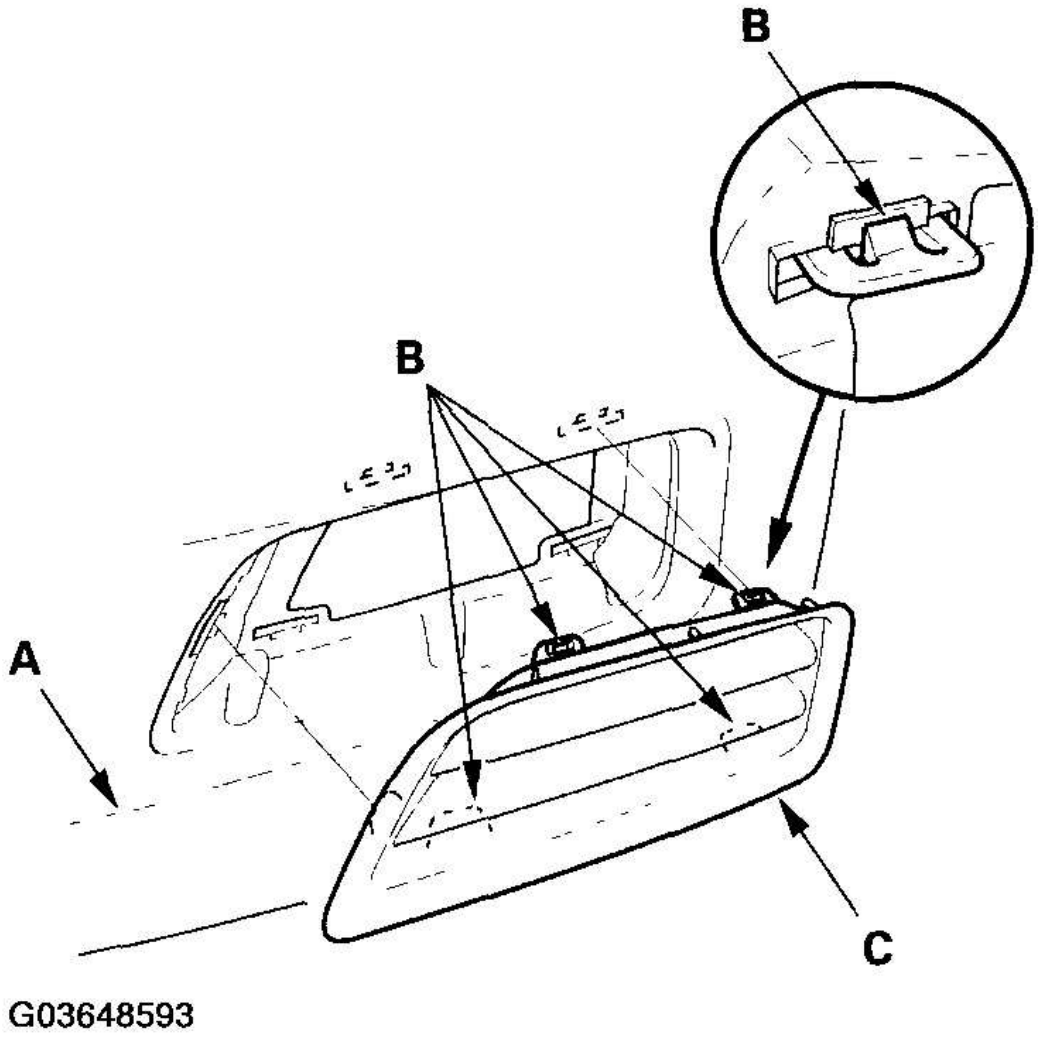


Fig. 6: Removing Front Bumper Side Cover (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

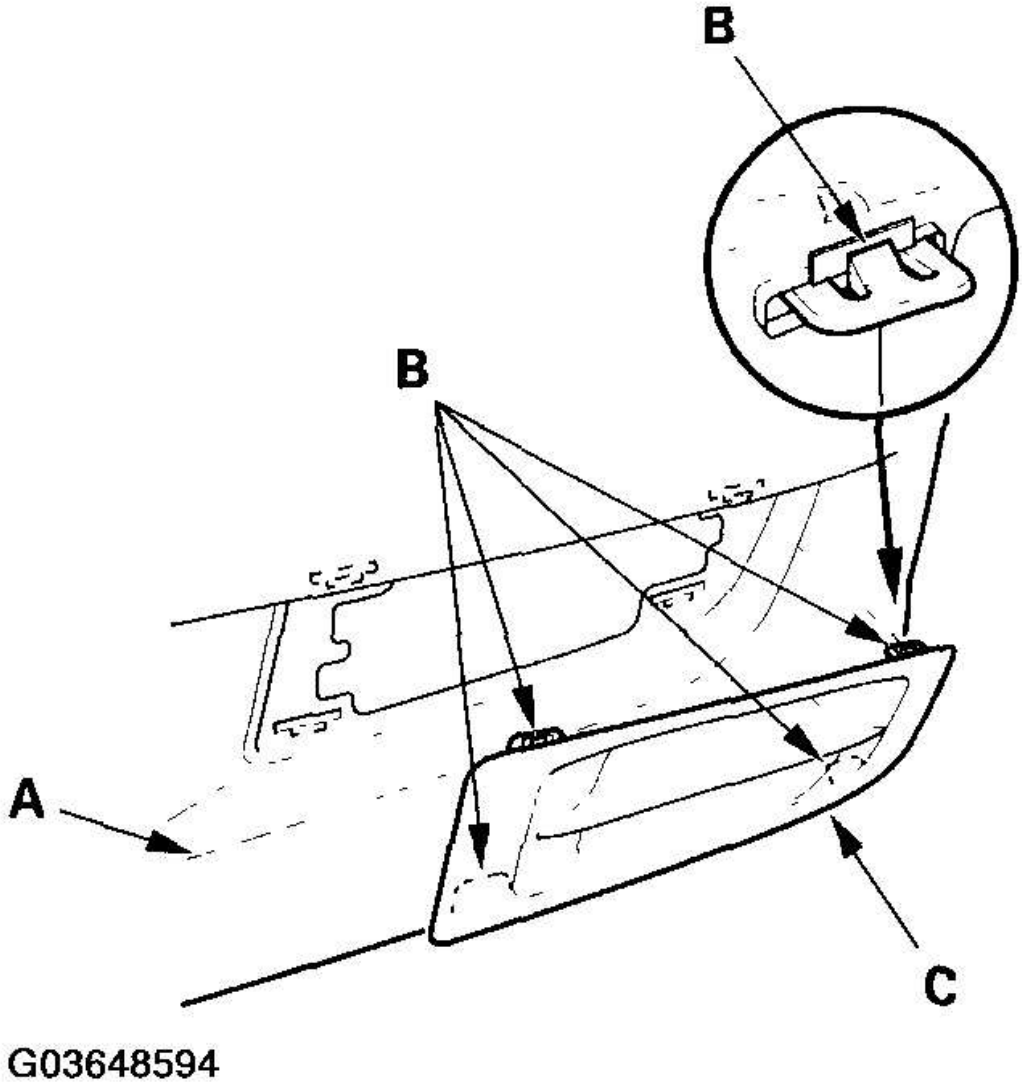


Fig. 7: Removing Front Bumper Side Cover (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the cover in the reverse order of removal, and push the hooks into place securely.

REAR BUMPER REMOVAL/INSTALLATION

Special Tools Required

KTC trim tool set SOJATP2014 *Available through the American Honda Tool and Equipment Program; call 888-424-6857.

2-DOOR

NOTE:

- **Have an assistant help you when removing and installing the rear bumper.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Take care not to scratch the rear bumper and body.**
- **Put on gloves to protect your hands.**

1. Remove the rear bumper as shown in **Fig. 8**.
2. Install the bumper in the reverse order of removal, and note these items:
   - Make sure the rear bumper engages the hooks of the side spacers and upper brackets on both sides securely.
   - Check the clips for damage or stress-whitening, and replace them with new ones.

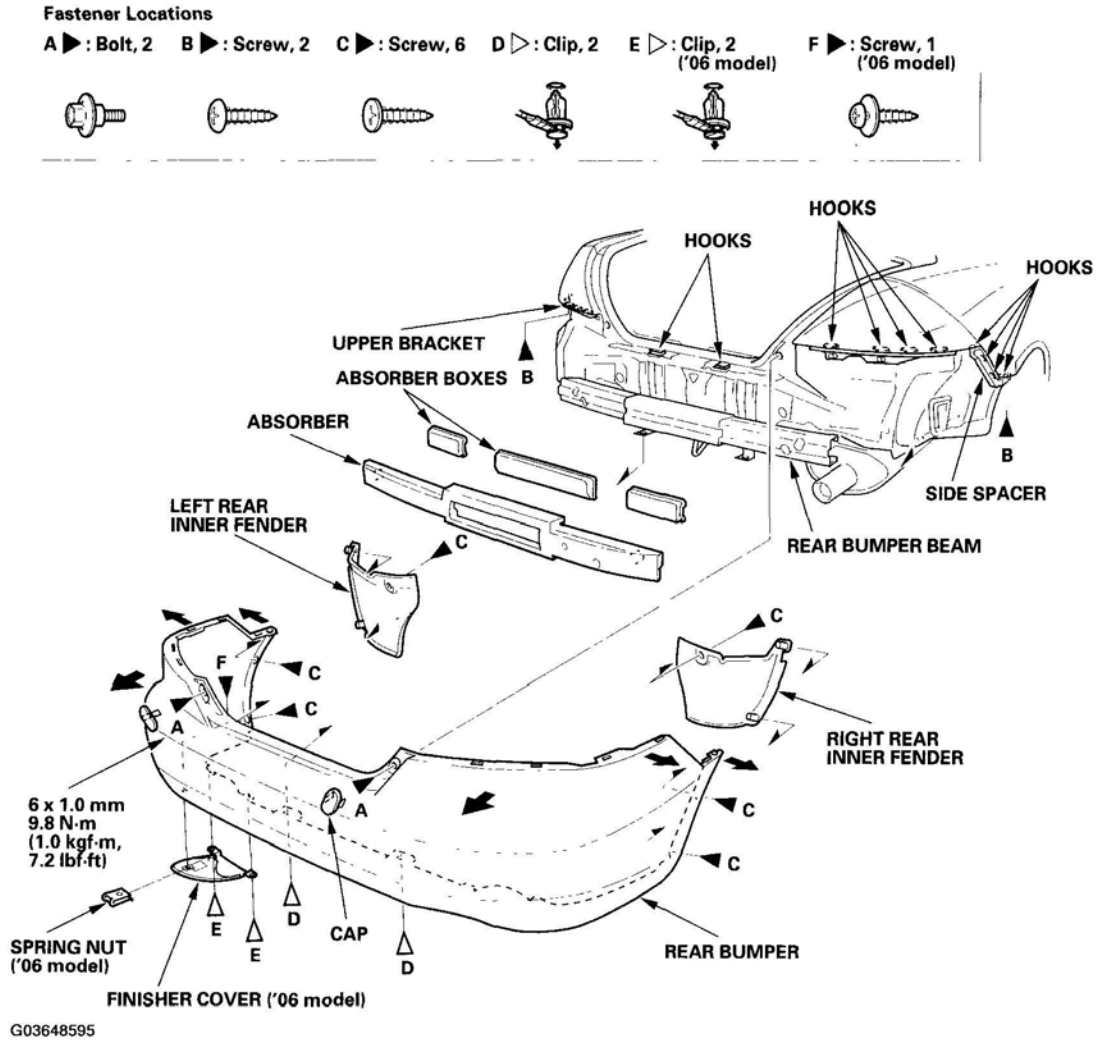


Fig. 8: Removing Rear Bumper (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

KTC trim tool set SOJATP2014*Available through the American Honda Tool and Equipment Program; call 888-424-6857.

4-DOOR

NOTE:

- **Have an assistant help you when removing and installing the rear bumper.**

- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Take care not to scratch the rear bumper and body.**
- **Put on gloves to protect your hands.**

1. Remove the rear bumper as shown in **Fig. 9**.
2. Install the bumper in the reverse order of removal, and note these items:
   - Make sure the rear bumper engages the hooks of the side spacers and upper brackets on both sides securely.
   - Check if the clip is damaged or stress-whitened, and if necessary, replace it with new one.

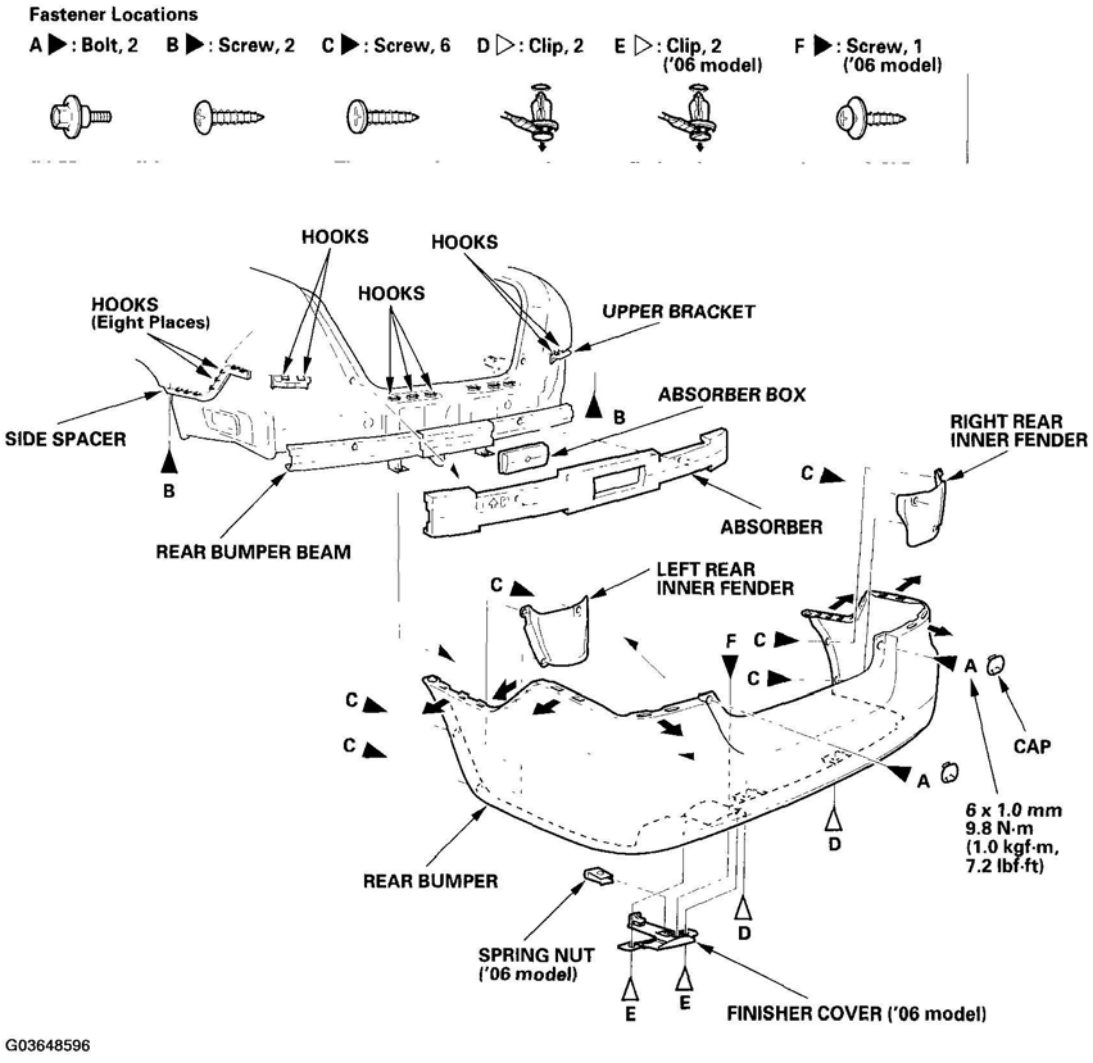


Fig. 9: Removing Rear Bumper (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CABIN AIR FILTERS

Dust & Pollen Filter - Accord & Accord Hybrid

REMOVAL & INSTALLATION

NOTE: Manufacturer's terminology for this filter is dust and pollen filter.

CABIN AIR FILTER

Removal & Installation

1. Open the glove box. Remove the damper from the glove box then let the glove box hang down. See **Fig. 1**.

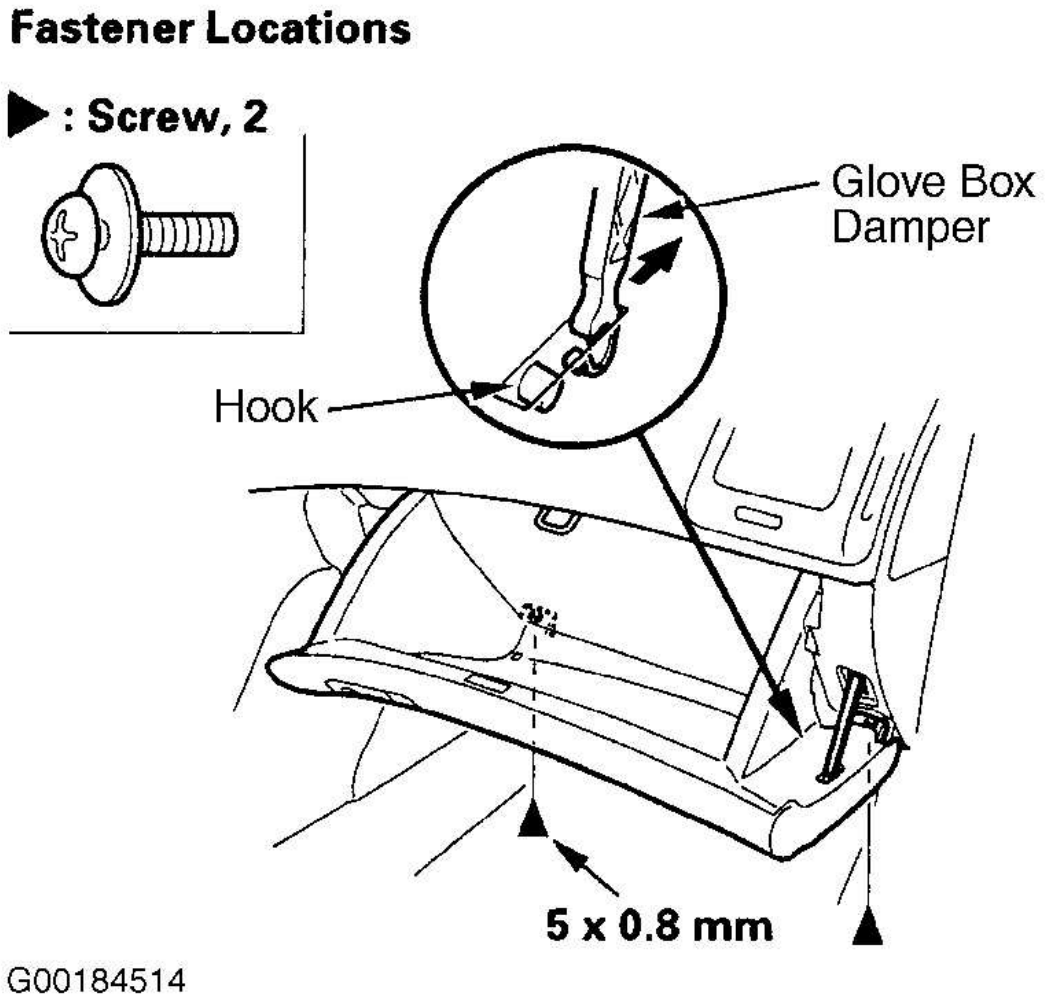


Fig. 1: Releasing Glove Box Damper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the dust and pollen filter assembly from the evaporator case. See **Fig. 2**.

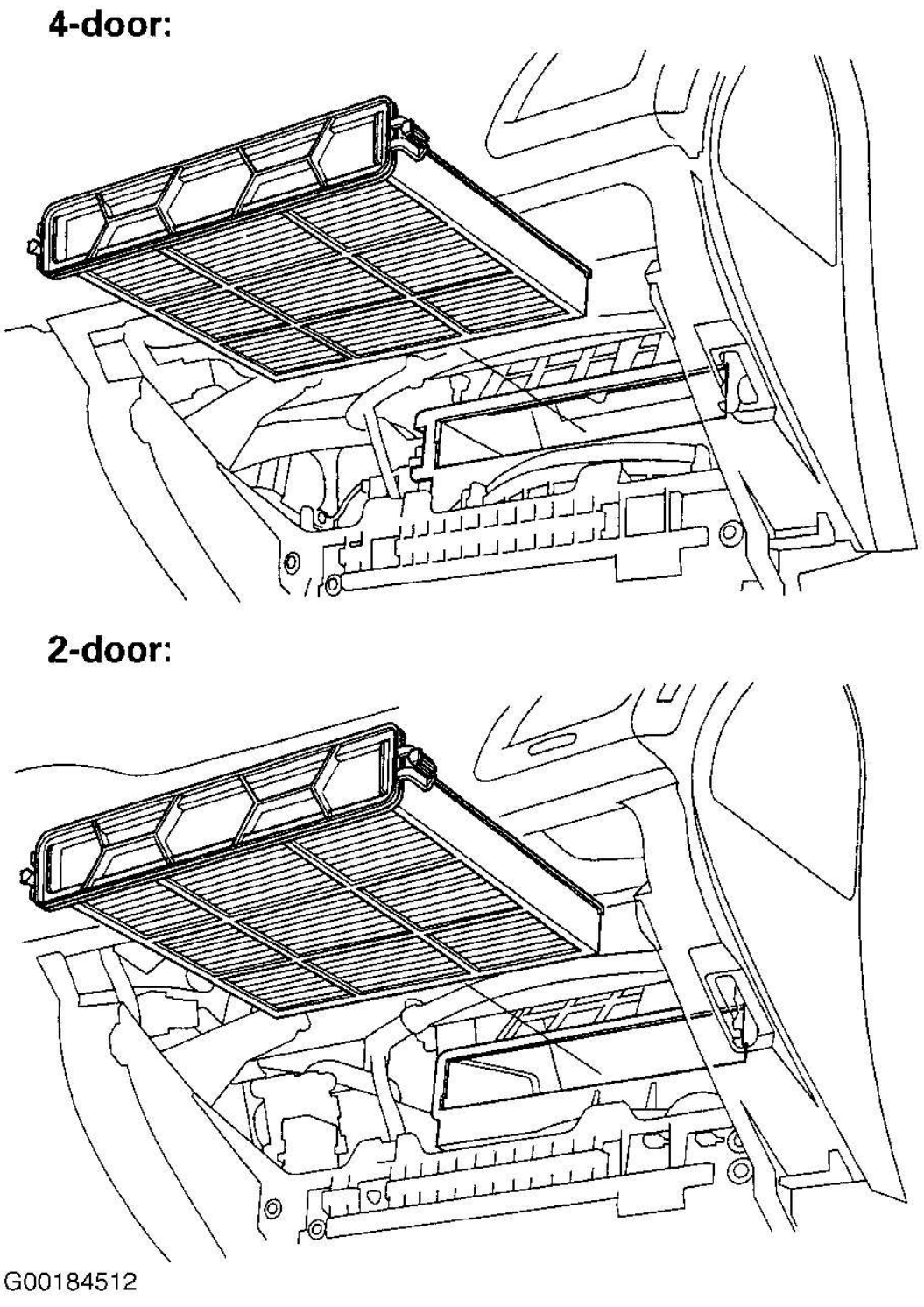


Fig. 2: Removing Filter Assembly From Evaporator Case

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the filter from the housing and replace the filter. See **Fig. 3**.
4. Install the filter in the reverse order of removal. Ensure arrow marks on edge of filter point in direction of air flow. Make sure that there is no air leaking out of the evaporator.

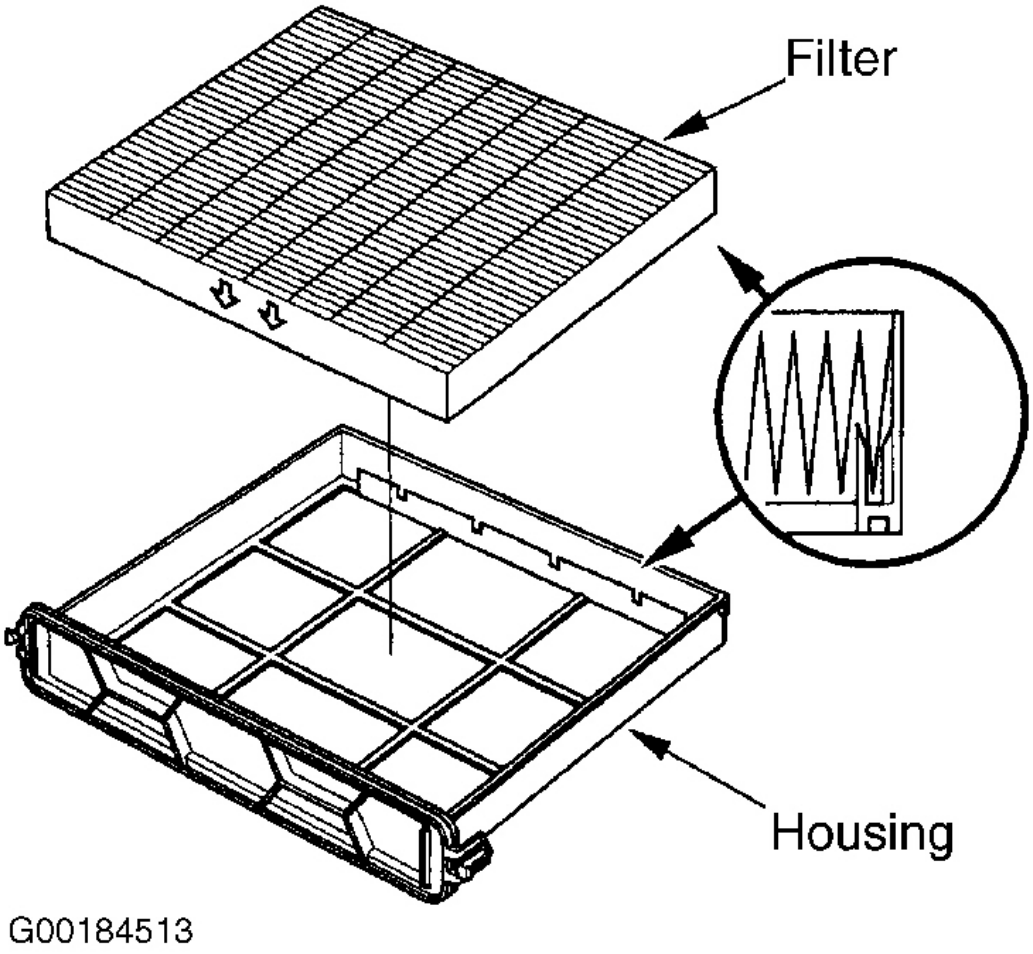


Fig. 3: Removing Filter From Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ENGINE PERFORMANCE

Catalytic Converter System - Accord (V6)

DTC CODES

DTC CHART

DTC	Description
DTC P0420	Rear Bank Catalyst System Efficiency Below Threshold (Bank 1) (2003-2004 models)
DTC P0430	Front Bank Catalyst System Efficiency Below Threshold (Bank 2) (2003-2004 models)
DTC P0420	Rear Bank Catalyst System Efficiency Below Threshold (Bank 1) (2005-2006 models)
DTC P0430	Front Bank Catalyst System Efficiency Below Threshold (Bank 2) (2005-2006 models)

DTC TROUBLESHOOTING

DTC P0420: REAR BANK CATALYST SYSTEM EFFICIENCY BELOW THRESHOLD (BANK 1) (2003-2004 MODELS); DTC P0430: FRONT BANK CATALYST SYSTEM EFFICIENCY BELOW THRESHOLD (BANK 2) (2003-2004 MODELS)

NOTE:

- **Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**
- **If some of the DTCs listed below are stored at the same time as DTC P0420 and/or P0430*, troubleshoot those DTCs first, then recheck for DTC P0420 and/or P0430*.**

  P0137, P0138, P0157, P0158: Secondary HO2S (Sensor 2)

P0141.P0161: Secondary HO2S (Sensor 2) heater

- **Poor quality fuel can cause these DTCs.**
- **Information marked with an asterisk (*) applies to the front bank (Bank 2).**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Test-drive under these conditions:
   - Engine coolant temperature above 158°F (70°C)
   - Transmission in 5th gear (A/T in D position)
   - Vehicle speed between 50-55 mph (80-88 km/h) with cruise control set
   - Drive about 2 minutes, decelerate for at least 4 seconds with the throttle completely closed, then maintain 55 mph (88 km/h) for 20 minutes with cruise control set
5. Monitor the OBD STATUS for DTC P0420 and/or P0430* in the DTCs MENU with the HDS.

   Does the screen indicate EXECUTING?

   YES - Go to step 6.

   NO - Go to step and recheck.

6. Continue test driving until a result comes on.
7. Monitor the OBD STATUS for DTC P0420 and/or P0430* in the DTCs MENU with the HDS.

   Does the screen indicate FAILED?

   YES - Go to step 8.

   NO - If the screen indicates PASSED, intermittent failure, system is OK at this

time. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step and recheck.

8. Turn the ignition switch OFF.
9. Replace the WU-TWC (see **WARM UP THREE WAY CATALYTIC CONVERTER REMOVAL/INSTALLATION**).
10. Turn the ignition switch ON (II).
11. Reset the ECM/PCM with the HDS.
12. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
13. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
14. Test-drive for about 10 minutes, continually changing the vehicle speed.
15. Check the CATA MON TEMP in the DATA LIST with the HDS.

    Is the temperature OK?

    YES - Go to step 16.

    NO - Go to step 13 and recheck.

16. Test-drive under these conditions:
    - Engine coolant temperature above 158°F(70°C)
    - Transmission in 5th gear (A/T in D position)
    - Vehicle speed between 50-55 mph (80-88 km/h) with cruise control set
    - Drive about 2 minutes, decelerate for at least 4 seconds with the throttle completely closed, then maintain 55 mph (88 km/h) for 20 minutes with cruise control set
17. Monitor the OBD STATUS for DTC P0420 and/or P0430* in the DTCs MENU with the HDS.

    Does the screen indicate EXECUTING?

    YES - Go to step 18.

NO - Go to step 16 and recheck.

18. Continue test driving until a result comes on.
19. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs Indicated?

    YES - Go to the indicated **DTC TROUBLESHOOTING**

    NO - Go to step 20.

20. Monitor the OBD STATUS for DTC P0420 and/or P0430* in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete.

    NO - If the screen indicates FAILED, check the fuel quality. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 13 and recheck.

DTC P0420: REAR BANK CATALYST SYSTEM EFFICIENCY BELOW THRESHOLD (BANK 1) (2005-2006 MODELS); DTC P0430: FRONT BANK CATALYST SYSTEM EFFICIENCY BELOW THRESHOLD (BANK 2) (2005-2006 MODELS)

NOTE:

- **Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**
- **If some of the DTCs listed below are stored at the same time as DTC P0420 and/or P0430*, troubleshoot those DTCs first, then recheck for DTC P0420 and/or P0430*.**

  P0137, P0138, P0157, P0158, P2270, P2271, P2272*, P2273*: Secondary HO2S (Sensor 2)

  P0141, P0161: Secondary HO2S (Sensor 2) heater

- **Poor quality fuel can cause these DTCs.**
- **Information marked with an asterisk (*) applies to the front bank (Bank 2).**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Test-drive under these conditions:
   - Engine coolant temperature above 158°F (70°C)
   - Transmission in 5th gear (A/T in D position)
   - Vehicle speed between 45-75 mph (72-120 km/h) for 5 minutes or more with cruise control set
   - Maintain the vehicle speed at 55 mph (88 km/h) for 5 minutes or more with cruise control set
5. Monitor the OBD STATUS for DTC P0420 and/or P0430* in the DTCs MENU with the HDS.

   Does the screen indicate EXECUTING?

   YES - Go to step 6.

   NO - Go to step 4 and recheck.

6. Continue test driving until a result comes on.
7. Monitor the OBD STATUS for DTC P0420 and/or P0430* in the DTCs MENU with the HDS.

   Does the screen indicate FAILED?

   YES - Go to step 8.

   NO - If the screen indicates PASSED, intermittent failure, system is OK at this time. If the screen indicates EXECUTING, keep driving until a result comes

on. If the screen indicates OUT OF CONDITION, go to step 4 and recheck.

8. Turn the ignition switch OFF.
9. Replace the WU-TWC (see **WARM UP THREE WAY CATALYTIC CONVERTER REMOVAL/INSTALLATION**).
10. Turn the ignition switch ON (II).
11. Reset the ECM/PCM with the HDS.
12. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
13. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
14. Test-drive for about 10 minutes, continually changing the vehicle speed.
15. Check the CATA MON TEMP in the DATA LIST with the HDS.

    Is the temperature OK?

    YES - Go to step 16.

    NO - Go to step 13 and recheck.

16. Test-drive under these conditions:
    - Engine coolant temperature above 158°F (70°C)
    - Transmission in 5th gear (A/T in D position)
    - Vehicle speed at 55 mph (88 km/h) for 5 minutes or more with cruise control set
17. Monitor the OBD STATUS for DTC P0420 and/or P0430* in the DTCs MENU with the HDS.

    Does the screen indicate EXECUTING?

    YES - Go to step 18.

    NO - Go to step 16 and recheck.

18. Continue test driving until a result comes on.

19. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

    YES - Go to the indicated **DTC TROUBLESHOOTING**

    NO - Go to step 20.

20. Monitor the OBD STATUS for DTC P0420 and/or P0430* in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete.

    NO - If the screen indicates FAILED, check the fuel quality. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 13 and recheck.

WARM UP THREE WAY CATALYTIC CONVERTER REMOVAL/INSTALLATION

FRONT

1. Remove the condenser fan shroud (see **RADIATOR AND FAN REPLACEMENT**).
2. Disconnect the front air fuel ratio (A/F) sensor connector and front secondary heated oxygen sensor (secondary HO2S) connector.
3. Remove the front WU-TWC.

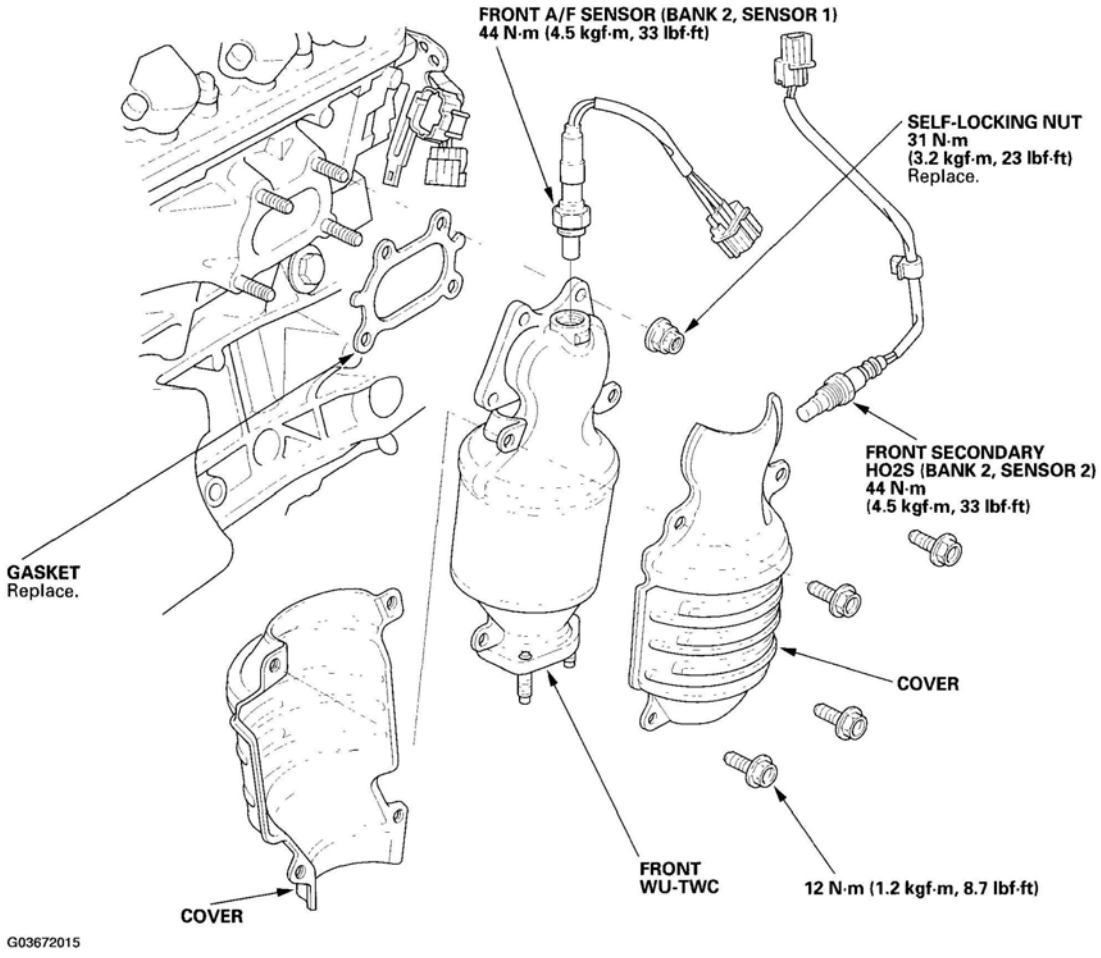


Fig. 1: Removing Front WU-TWC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the front WU-TWC, and tighten the nuts in a crisscross pattern in two or three steps.
5. Install the other parts in the reverse order of removal.

REAR

1. Remove the intermediate shaft (see **INTERMEDIATE SHAFT REMOVAL**).
2. Disconnect the rear air fuel ratio (A/F) sensor connector and rear secondary heated oxygen sensor (secondary HO2S) connector.
3. Remove the rear WU-TWC bracket, then remove the rear WU-TWC.

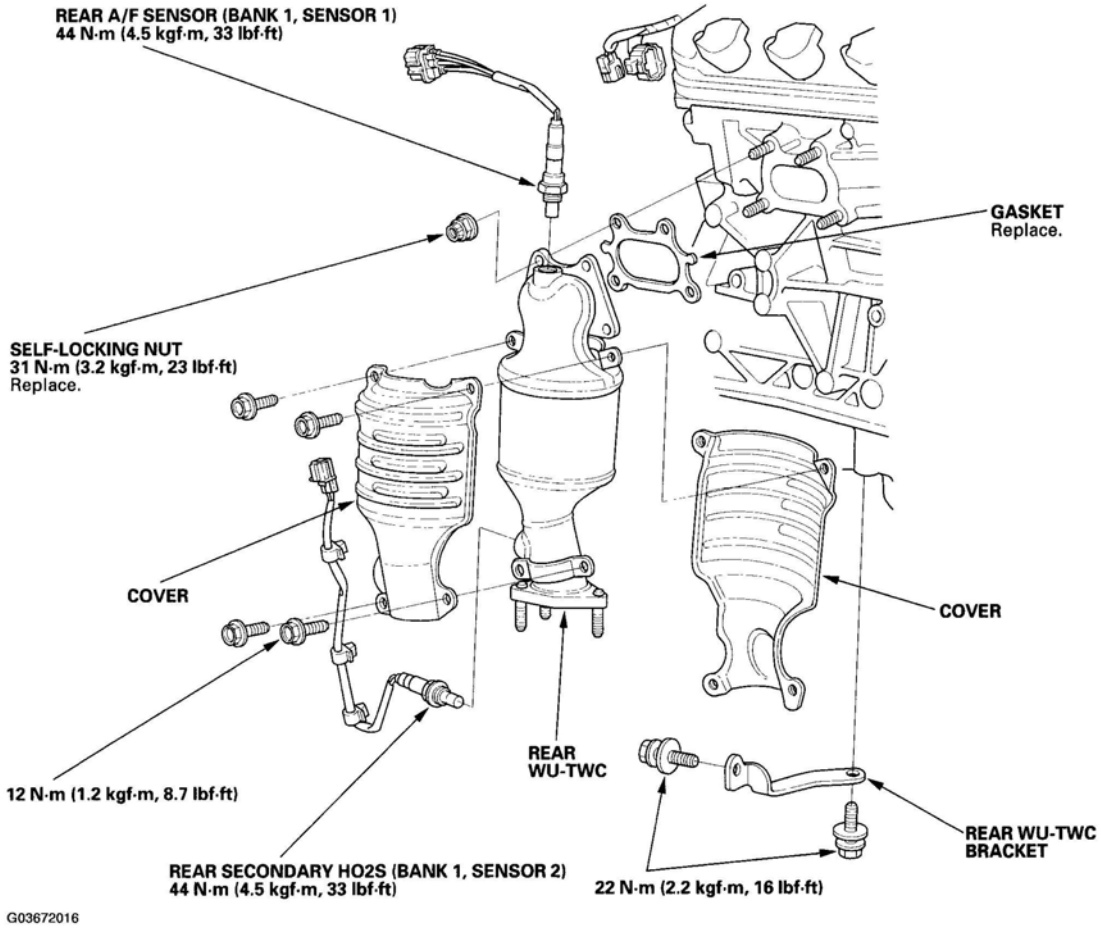


Fig. 2: Removing Rear WU-TWC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the rear WU-TWC, and tighten the nuts in a crisscross pattern in two or three steps.
5. Install the other parts in the reverse order of removal.

2003-07 ENGINE PERFORMANCE

Catalytic Converter System - Accord

DTC CODES

DTC INDEX

DTC	Description
DTC P0420	Catalyst System Efficiency Below Threshold (2003-2004 models)
DTC P0420	Catalyst System Efficiency Below Threshold (2005-2006 models)

DTC TROUBLESHOOTING

DTC P0420: CATALYST SYSTEM EFFICIENCY BELOW THRESHOLD '03-04 MODELS)

NOTE:

- **If some of the DTCs listed below are stored at the same time as DTC P0420, troubleshoot them first, then recheck for DTC P0420.**

  P0137, P0138: Secondary HO2S (Sensor 2)

  P0141: Secondary HO2S (Sensor 2) heater

- **Poor quality fuel may cause this DTC.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Test-drive under these conditions:
   - ETC SENSOR above 158 °F (70 °C)
   - A/T in D position (M/T in 5th gear)
   - Vehicle speed between 50 mph (80 km/h) and 55 mph (88 km/h) with cruise control set

- Drive about 2 minutes, decelerate for at least 4 seconds with the throttle completely closed, then maintain 55 mph (88 km/h) for 20 minutes with cruise control set

5. Monitor the OBD STATUS for DTC P0420 in the DTCs MENU with the HDS.

   Does the screen indicate EXECUTING?

   YES - Go to step 6.

   NO - If the screen indicates OUT OF CONDITION, got to step 4 and recheck. If the screen indicates PASSED, intermittent failure, the system is OK at this time. If the screen indicates FAILED, go to step 8.
6. Continue test driving until a result comes on.
7. Monitor the OBD STATUS for DTC P0420 in the DTCs MENU with the HDS.

   Does the screen indicate FAILED?

   YES - Go to step 8.

   NO - If the screen indicates PASSED, intermittent failure, system is OK at this time. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 4 and recheck.
8. Turn the ignition switch OFF.
9. Replace the TWC (see **EXHAUST PIPE AND MUFFLER REPLACEMENT**).
10. Turn the ignition switch ON (II).
11. Reset the ECM/PCM with the HDS.
12. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
13. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
14. Test-drive for about 10 minutes, varying the vehicle speed.

15. Check the CATA MONITOR CONDITION in the DATA LIST with the HDS.

    Is the temperature OK?

    YES - Go to step 16.

    NO - Go to step 13 and recheck.

16. Test-drive under these conditions:
    - ECT SENSOR above 158 °F (70 °C)
    - A/T in D position (M/T in 5th gear)
    - Vehicle speed between 50 mph (80 km/h) and 55 mph (88 km/h) with cruise control set
    - Drive about 2 minutes, decelerate for at least 4 seconds with the throttle completely closed, then maintain 55 mph (88 km/h) for 20 minutes with cruise control set
17. Monitor the OBD STATUS for DTC P0420 in the DTCs MENU with the HDS.

    Does the screen indicate EXECUTING?

    YES - Go to step 18.

    NO - Go to step 16 and recheck.

18. Continue test driving until a result comes on.
19. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0420 indicated?

    YES - Check for poor connections or loose terminals at the secondary H02S (sensor 2) and the ECM/PCM, then to step1.

    NO - Go to step 20.

20. Monitor the OBD STATUS for DTC P0420 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 19, got to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the secondary HO2S (sensor 2) and the ECM/PCM, then go to step 1. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 16.

DTC P0420: CATALYST SYSTEM EFFICIENCY BELOW THRESHOLD ('05-07 MODELS)

NOTE:

- **Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION .**
- **If some of the DTCs listed below are stored at the same time as DTC P0420, troubleshoot them first, then recheck for DTC P0420.**

  P0137, P0138: Secondary HO2S (Sensor 2)

  P0141: Secondary HO2S (Sensor 2) heater

- **Poor quality fuel may cause this DTC.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Test-drive under these conditions:
   - ETC SENSOR 1 above 158 °F (70 °C)
   - A/T in D position (M/T in 5th gear)
   - Vehicle speed between 45-75 mph (72 - 120 km/h) for 5 minutes or more with cruise control set
   - Maintain the vehicle speed at 55 mph (88 km/h) for 5 minutes or more

with cruise control set

5. Monitor the OBD STATUS for DTC P0420 in the DTCs MENU with the HDS.

   Does the screen indicate EXECUTING?

   YES - Go to step 6.

   NO - If the screen indicates OUT OF CONDITION, got to step 4 and recheck. If the screen indicates PASSED, intermittent failure the system is OK at them time. If the screen indicates FAILED, go to step 8.
6. Continue test driving until a result comes on.
7. Monitor the OBD STATUS for DTC P0420 in the DTCs MENU with the HDS.

   Does the screen indicate FAILED?

   YES - Go to step 8.

   NO - If the screen indicates PASSED, intermittent failure, system is OK at this time. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 4 and recheck.
8. Turn the ignition switch OFF.
9. Replace the TWC; '05 model (see **EXHAUST PIPE AND MUFFLER REPLACEMENT** , '06-07 models (see **2006 MODEL**).
10. Turn the ignition switch ON (II).
11. Reset the ECM/PCM with the HDS.
12. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
13. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
14. Test-drive for about 10 minutes, varying the vehicle speed.
15. Check the CATA MONITOR CONDITION in the DATA LIST with the HDS.

    Is the temperature OK?

YES - Go to step 16.

NO - Go to step 13 and recheck.

16. Test-drive under these conditions:
    - ECT SENSOR 1 above 158 °F (70 °C)
    - A/T in D position (M/T in 5th gear)
    - Vehicle speed at 55 mph (88 km/h) for 5 minutes or more with cruise control set
17. Monitor the OBD STATUS for DTC P0420 in the DTCs MENU with the HDS.

    Does the screen indicate EXECUTING?

    YES - Go to step 18.

    NO - Go to step 16 and recheck.
18. Continue test driving until a result comes on.
19. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0420 indicated?

    YES - Check for poor connections or loose terminals at the secondary HO2S (sensor 2) and the ECM/PCM, the got to step 1.

    NO - Go to step 20.
20. Monitor the OBD STATUS for DTC P0420 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 19 go to the indicated DTC's troubleshooting.

    NO - If the screen indicates FAILED, check for poor connections or loose terminals at the secondary HO2S (sensor 2) and the EMC/PCM, then go to step 1. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 13.

2003-07 TRANSMISSION

Clutch - Accord (V6)

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07AAE-P8EA000	Pressure Plate Compressor	1
②	07AAF-P8EA000	Clutch Alignment Shaft	1
③	07AAK-P8EA000	Pressure Plate Compressor Adapter	1
④	07LAB-PV00100 or 07924-PD20003	Ring Gear Holder	1
⑤	07746-0010200	Attachment, 37 x 40 mm	1
⑥	07749-0010000	Driver	1

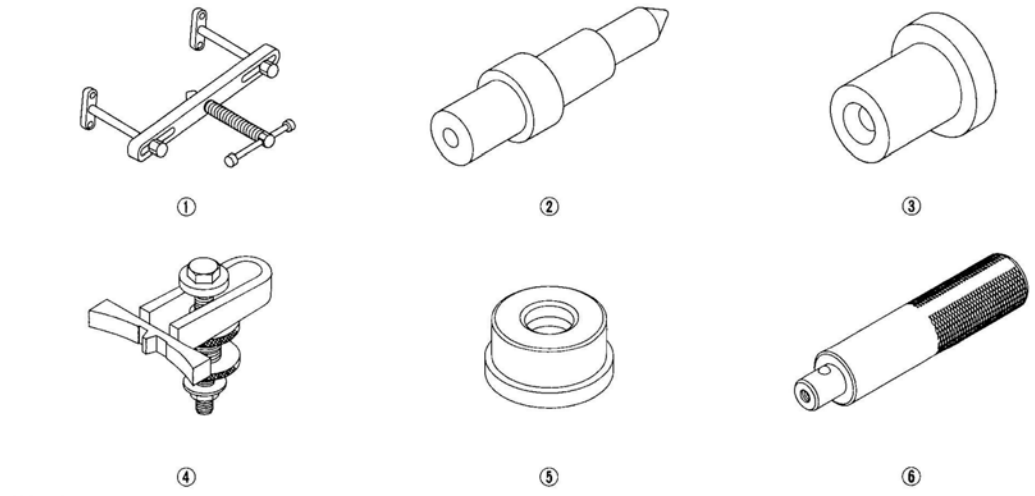


Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

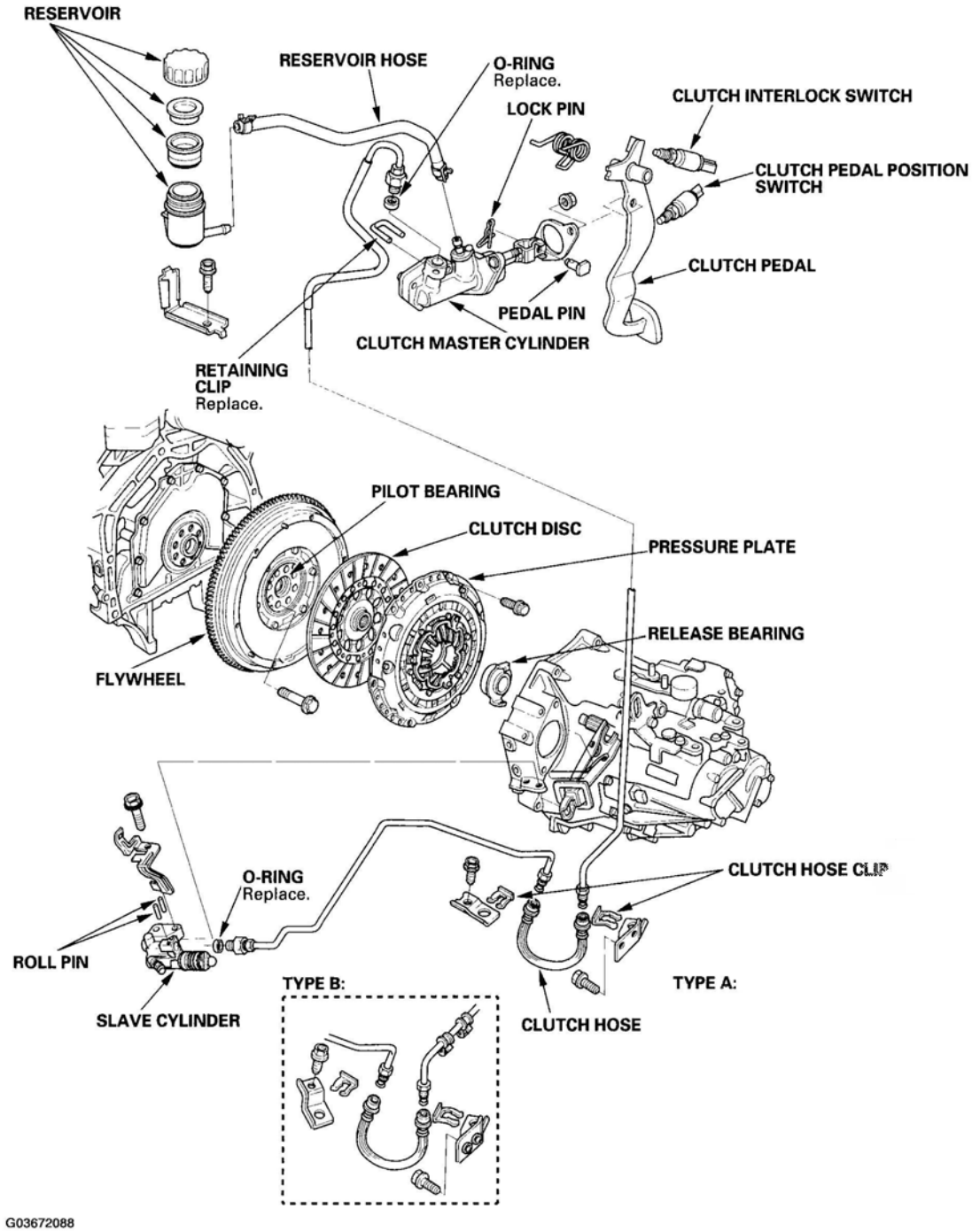


Fig. 2: Identifying Clutch Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYSTEM DESCRIPTION

SELF-ADJUSTING CLUTCH (SAC)

Function

On ordinary clutches, the clutch pedal load increases as the clutch disc wears. The self-adjusting clutch is designed so the clutch pedal load will not increase even when the clutch disc wears. This is done by automatically adjusting the fulcrum of the diaphragm spring in accordance with the wear of the clutch disc. The clutch pedal load stays consistent even when the clutch disc is worn.

Construction

The self-adjusting clutch consists of a pressure plate, a sensor spring, a diaphragm spring, an adjusting ring, three coil springs, a pressure plate cover, and a compensation spring. They are riveted together and must not be disassembled. If there is problem with any part of the pressure plate or clutch disc, they must be replaced as a set.

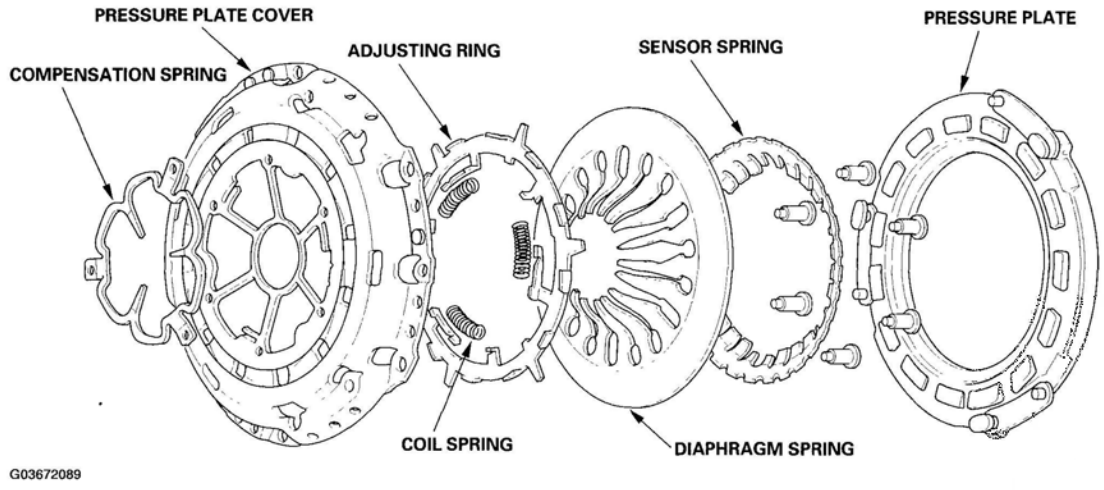


Fig. 3: Identifying Clutch Construction
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Operation

1. When the clutch disc wears slightly.

   As the clutch begins to wear, the release load increases slightly. However, this does not affect operation of the clutch because the release load does not exceed

that of the sensor.

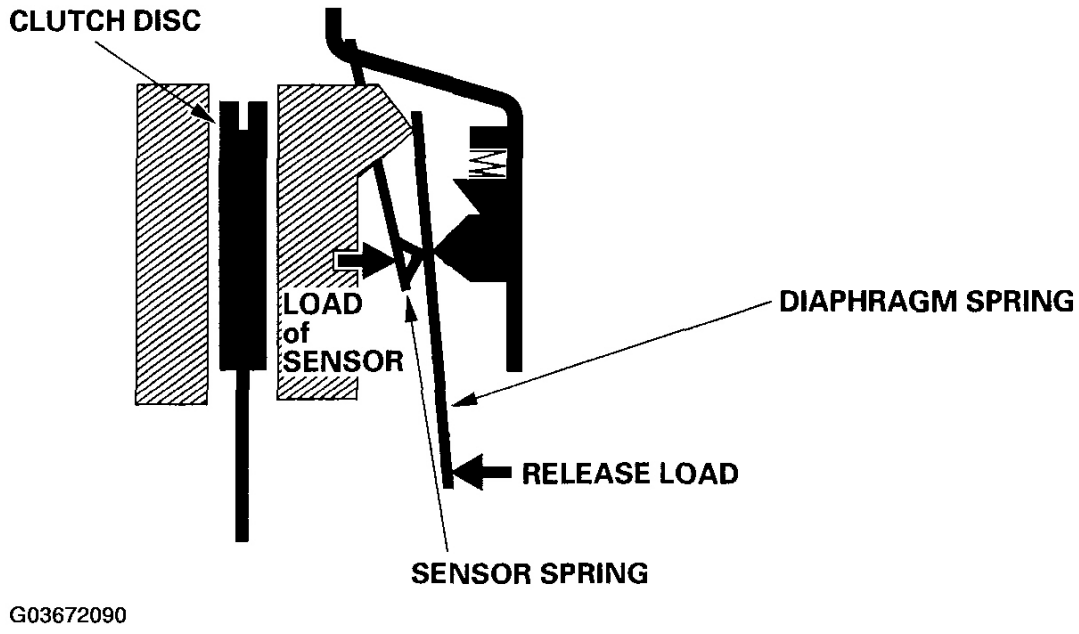


Fig. 4: Identifying Clutch Disc Wears Slightly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. When the clutch disc wears considerably.

   The sensor spring starts to deflect as the clutch disc is worn further and the release load exceeds that of the sensor.

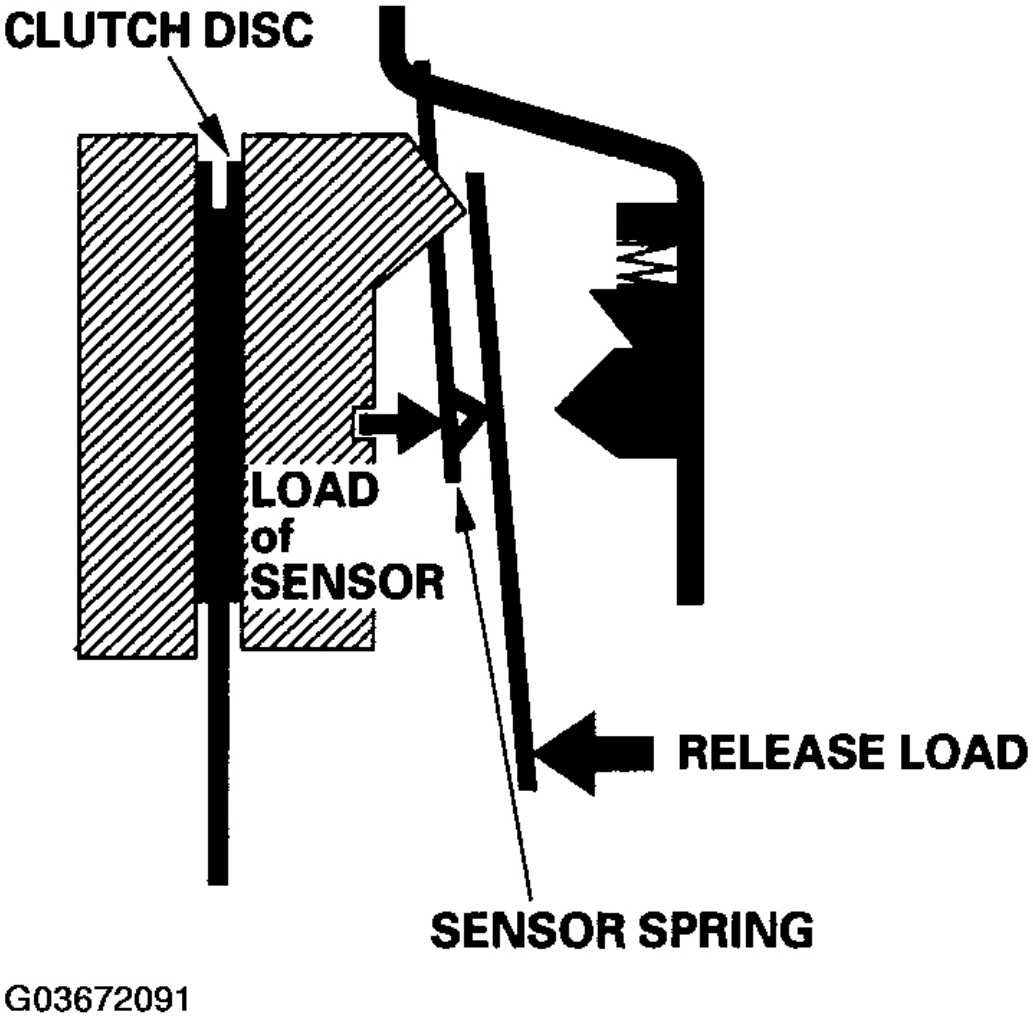


Fig. 5: Identifying Clutch Disc Wears Considerably (Sensor Spring Starts To Deflect)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

The fulcrum then moves following the amount of sensor spring deflection. As this takes place, the fulcrum of the diaphragm spring is adjusted, keeping the release load consistent.

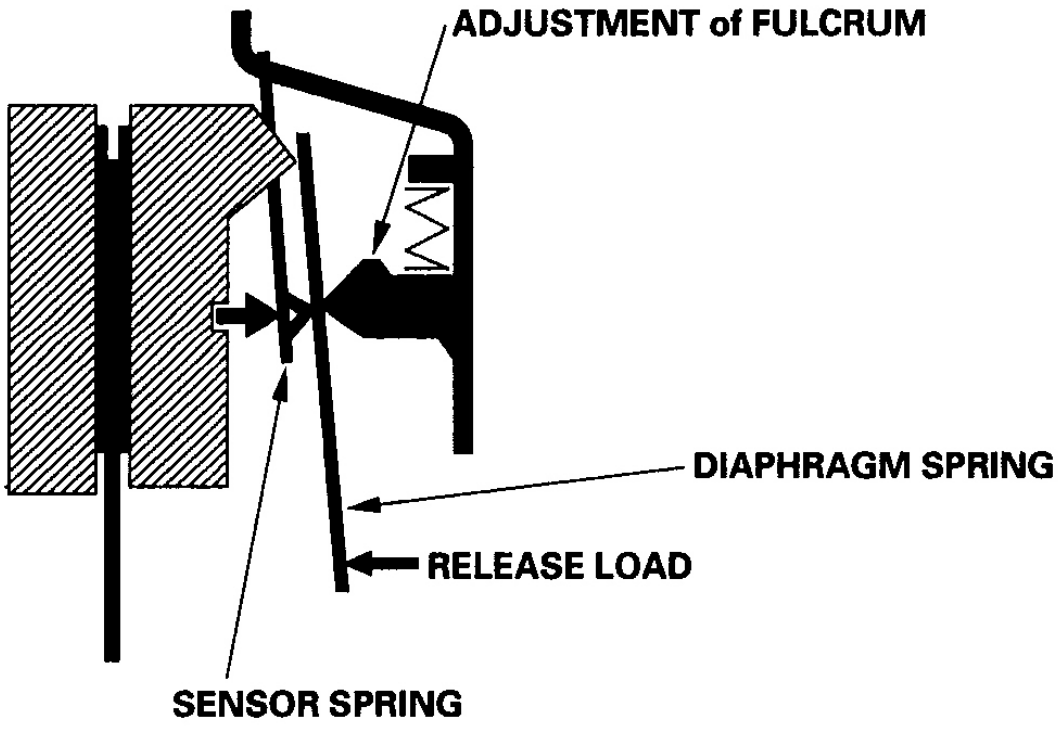


Fig. 6: Identifying Clutch Disc Wears Considerably (Fulcrum Moves Following Amount Of Sensor Spring Deflection)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CLUTCH PEDAL, CLUTCH PEDAL POSITION SWITCH, AND CLUTCH INTERLOCK SWITCH ADJUSTMENT

NOTE:

- **Check the clutch pedal position switch (see CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT).**
- **Check the clutch interlock switch (see CLUTCH INTERLOCK SWITCH TEST).**
- **Remove the driver's floor mat before adjusting the clutch pedal.**
- **The clutch is self-adjusting to compensate for wear.**

- **If there is no clearance between the master cylinder piston and pushrod, the release bearing will be held against the diaphragm spring, which can result in clutch slippage or other clutch problems.**

1. Loosen the clutch pedal position switch locknut (A), and back off the clutch pedal position switch (B) until it no longer touches the clutch pedal (C).

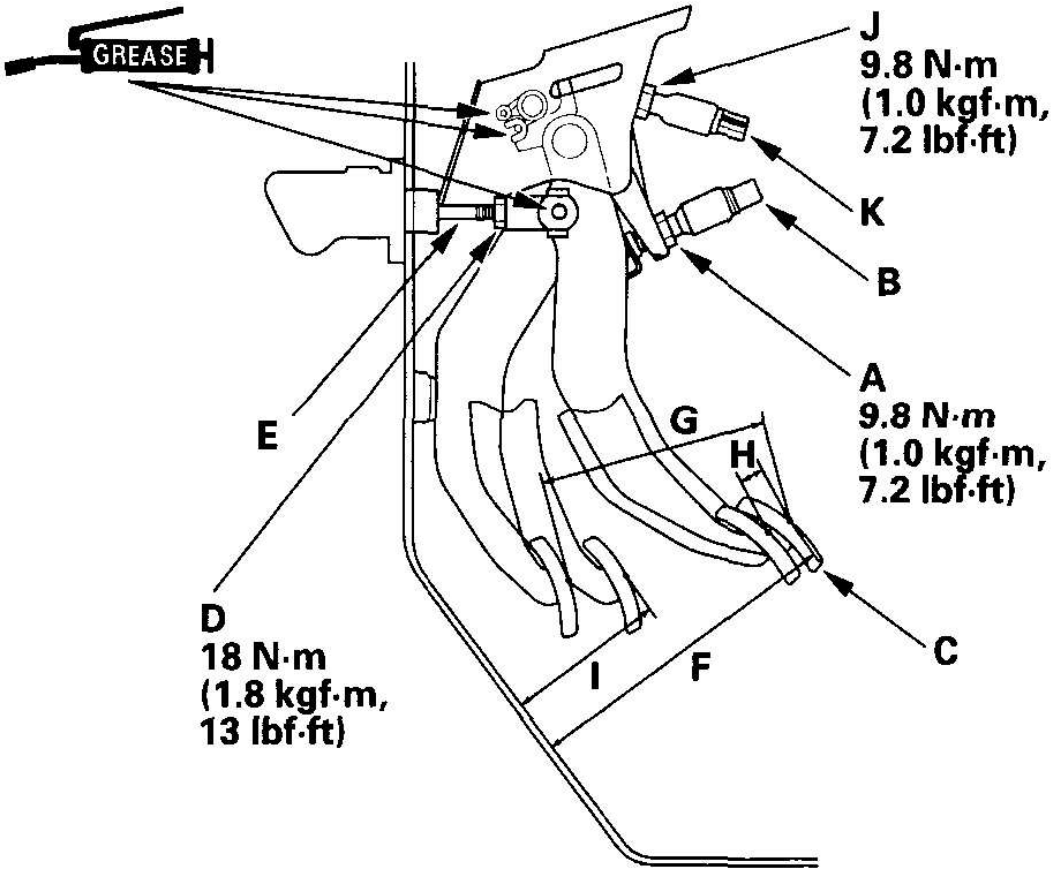


Fig. 7: Loosening Clutch Pedal Position Switch Locknut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Loosen the clutch pushrod locknut (D), and turn the pushrod (E) in or out to get the specified height (F), stroke (G), free play (H), and disengagement

height (I) at the clutch pedal.

Clutch Pedal Stroke: 130-140 mm (5.12-5.51 in.)

Clutch Pedal Free

Play: 10-18 mm (0.39-0.71 in.)
Clutch Pedal Height: 191 mm (7.52 in.)

Clutch Pedal

Disengagement

Height: 90.5 mm (3.56 in.)

3. Tighten the clutch pushrod locknut.
4. With the clutch pedal released, turn in the clutch pedal position switch until it contacts the clutch pedal.
5. Turn in the clutch pedal position switch an additional 3/4 to 1 turn.
6. Tighten the clutch pedal position switch locknut.
7. Loosen the clutch interlock switch locknut (J)
8. Press the clutch pedal to the floor.
9. Release the clutch pedal 9-12 mm (0.35-0.47 in.) from the fully pressed position, and hold it there. Adjust the position of the clutch interlock switch (K) so the engine will start with the clutch pedal in this position.
10. Tighten the clutch interlock switch locknut (J).

CLUTCH PEDAL REPLACEMENT

1. Disconnect the clutch pedal position switch connector (A) and clutch interlock switch connector (B).

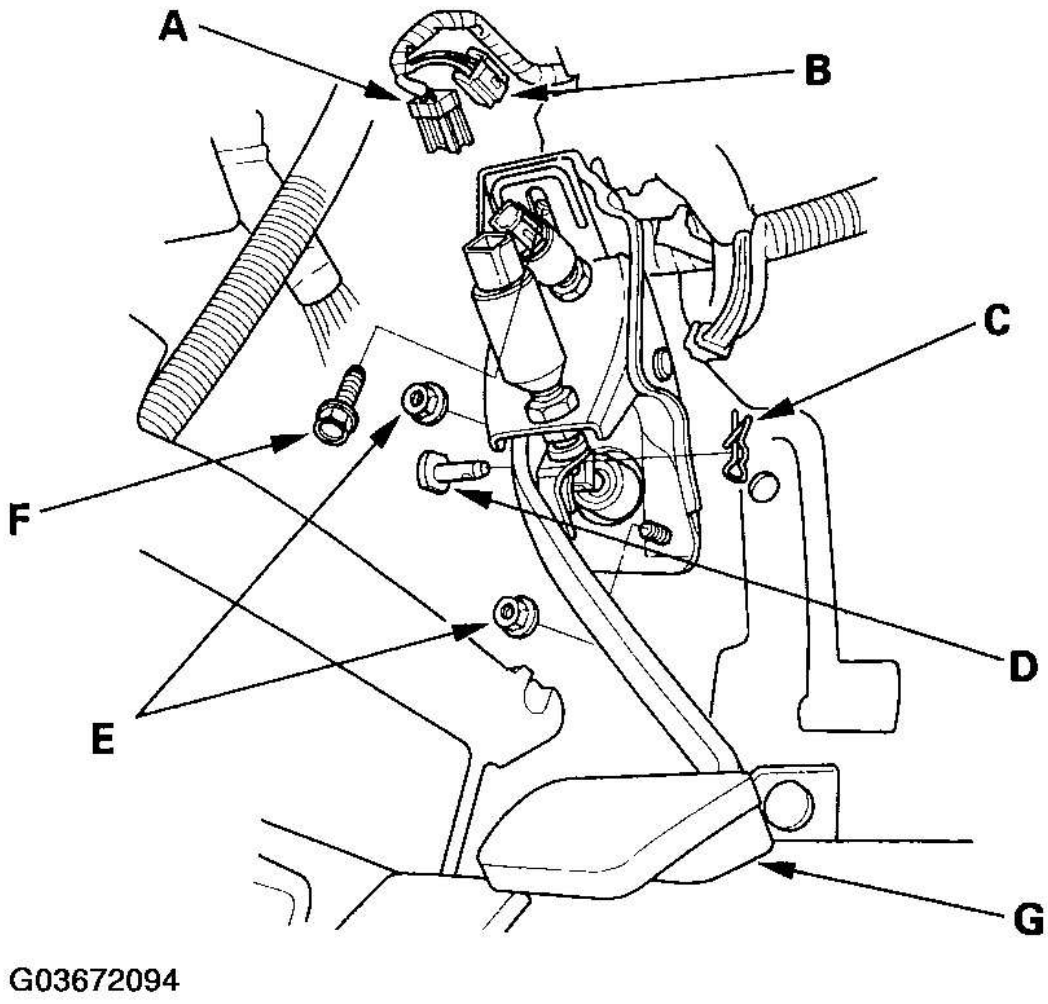


Fig. 8: Disconnecting Clutch Pedal Position Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Pry out the lock pin (C), and pull the pedal pin (D) out of the yoke.
3. Remove the master cylinder mounting nuts (E) and clutch pedal mounting bolt (F).
4. Remove the clutch pedal (G).
5. Install the clutch pedal (A).

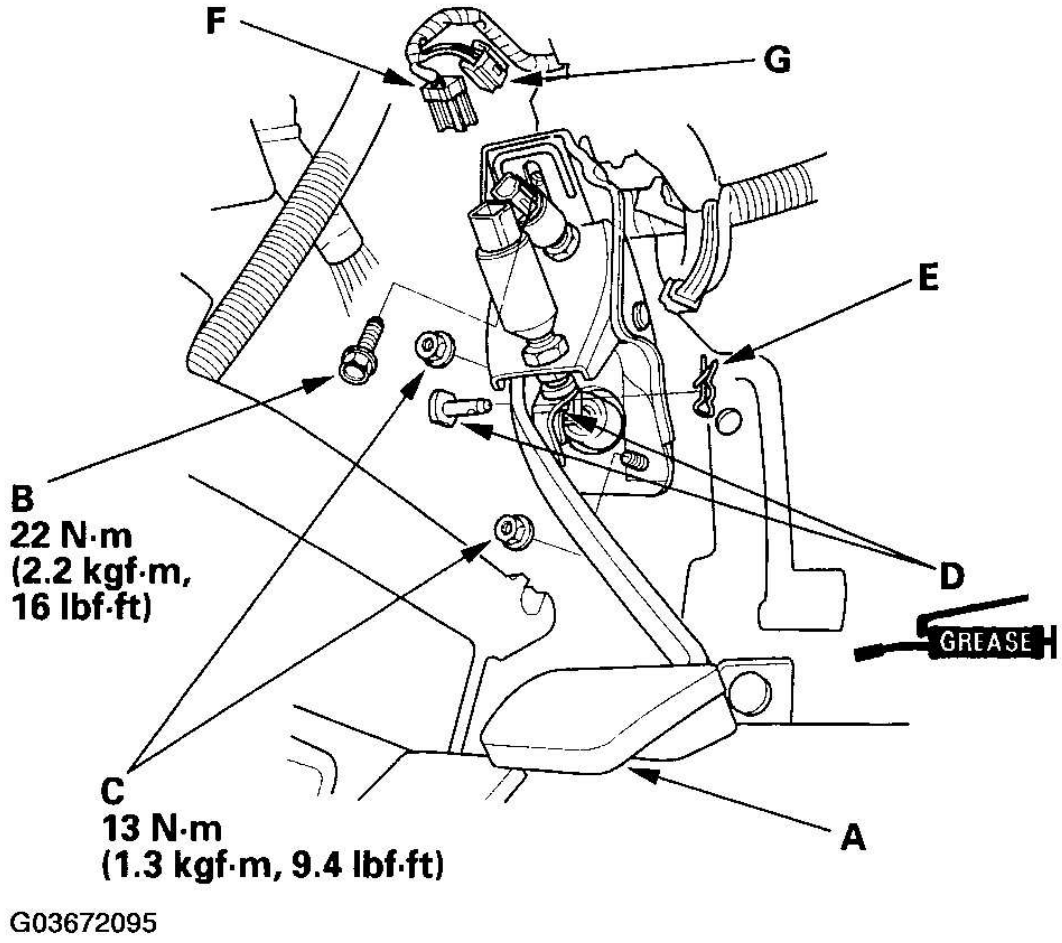


Fig. 9: Installing Clutch Pedal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the clutch pedal mounting bolt (B) and master cylinder mounting nuts (C).
7. Apply grease to the pedal pin (D), and slide it into the yoke, then install a new lock pin (E).
8. Connect the clutch pedal position switch connector (F) and clutch interlock switch connector (G).
9. Adjust the clutch pedal, clutch pedal position switch, and clutch interlock switch (see **CLUTCH PEDAL, CLUTCH PEDAL POSITION SWITCH, AND CLUTCH INTERLOCK SWITCH ADJUSTMENT**).

10. Check the clutch operation

CLUTCH MASTER CYLINDER REPLACEMENT

NOTE: Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid does contact the paint, wash it off immediately with water.

1. Remove the brake fluid from the clutch master cylinder reservoir with a syringe.
2. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the customer's radio station and XM radio channel presets.
3. Disconnect the negative cable from the battery first, then disconnect the positive cable. Remove the battery.
4. Remove the battery
5. Remove the air cleaner housing (see **AIR CLEANER REMOVAL/INSTALLATION**).
6. Remove the battery base (see step 6 **TRANSMISSION REMOVAL**).
7. Pry out the lock pin (A), and pull the pedal pin (B) out of the yoke. Remove the master cylinder mounting nuts (C).

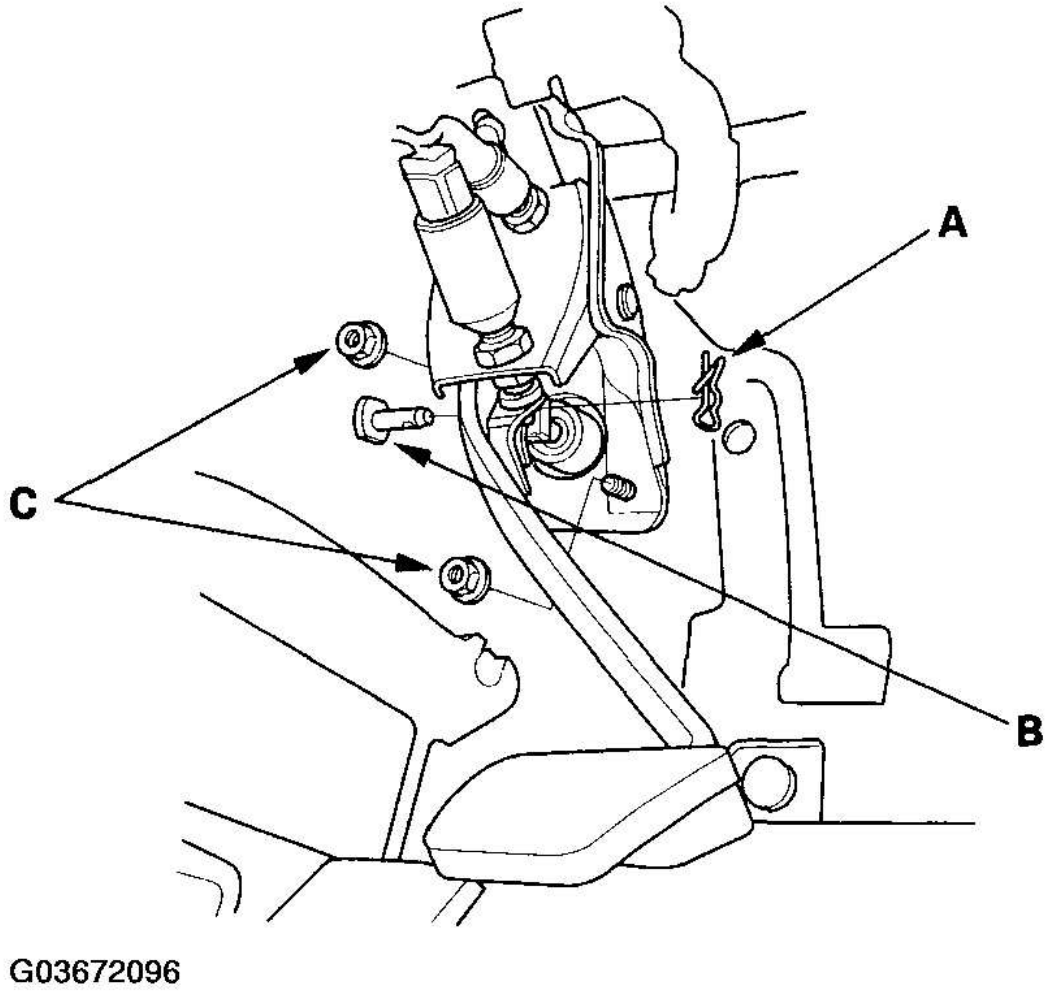


Fig. 10: Prying Out Lock Pin
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the reservoir mounting bolt (A). Type A:

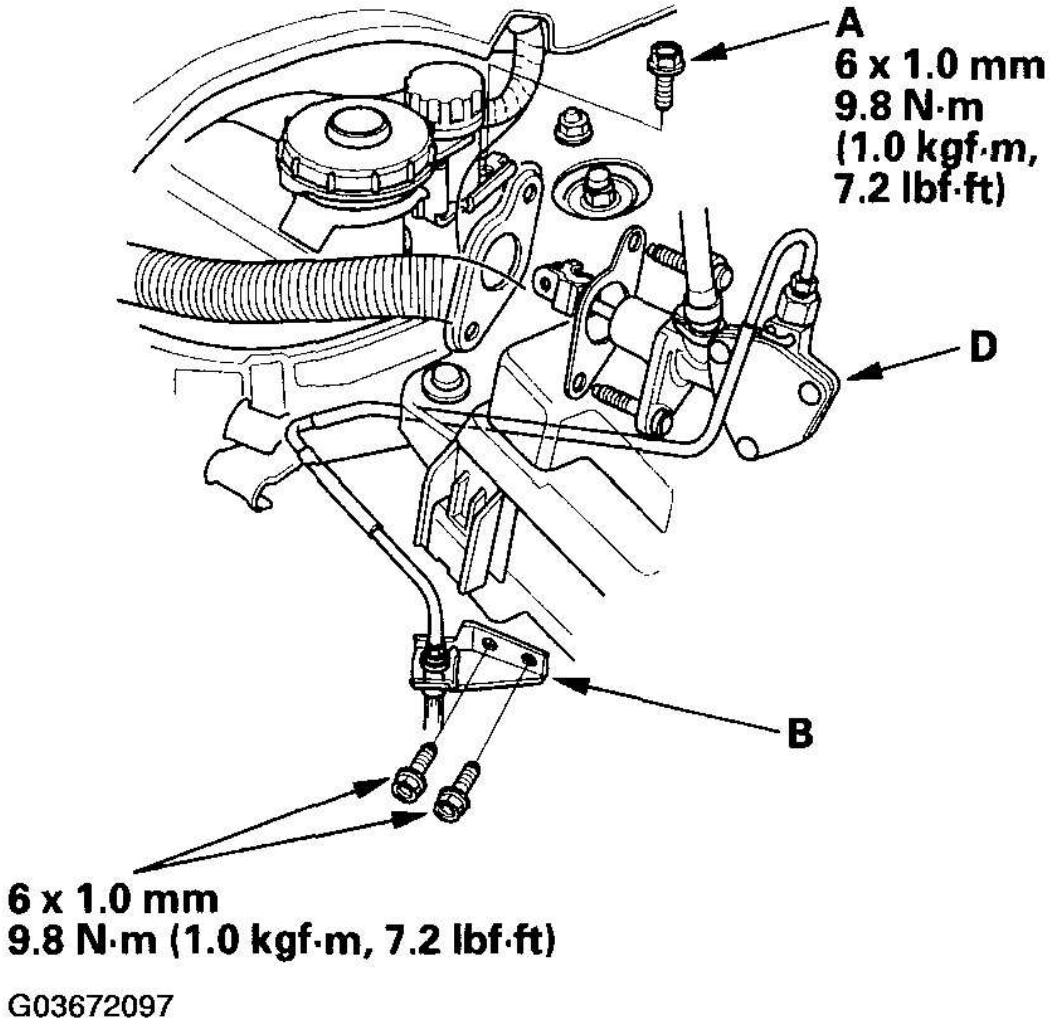


Fig. 11: Removing Reservoir Mounting Bolt (Type A)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

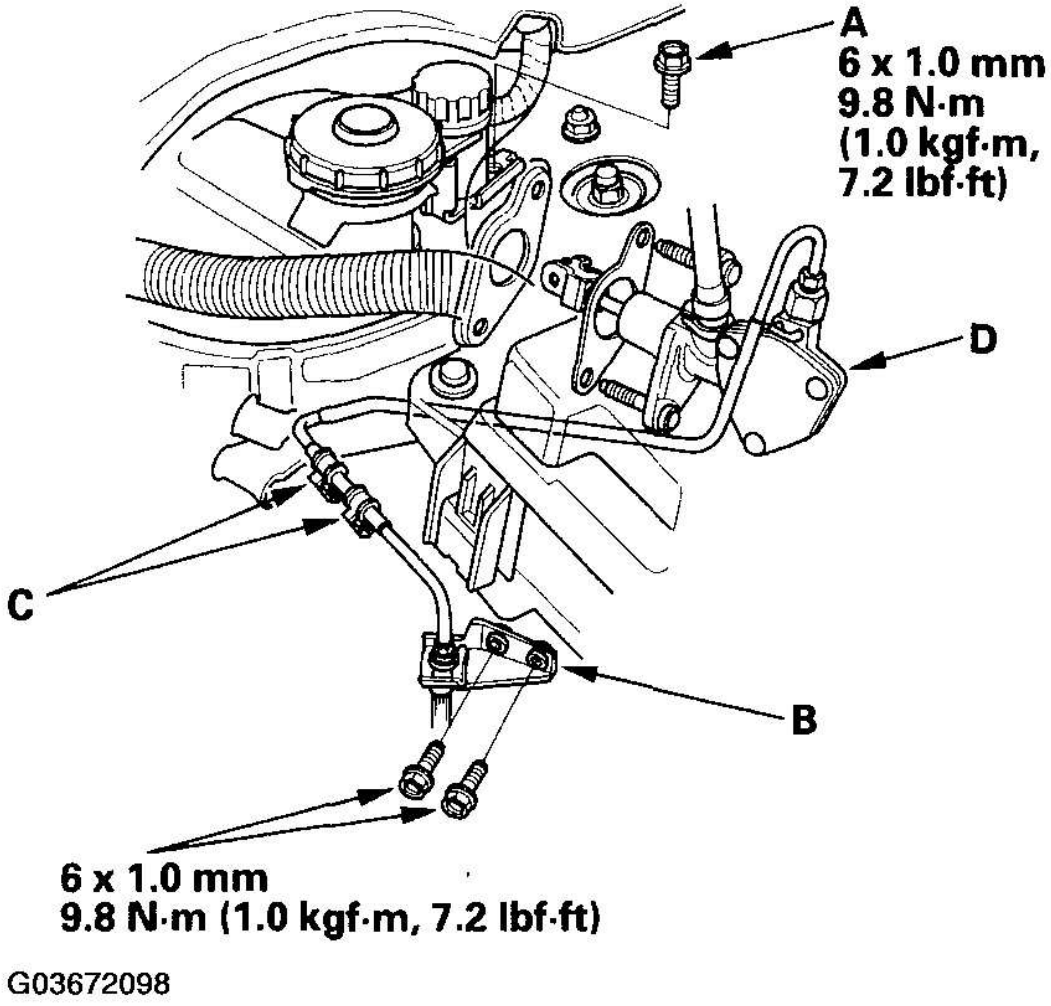


Fig. 12: Removing Reservoir Mounting Bolt (Type B)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the clutch line bracket (B).
10. Remove the clutch line clips (C).
11. Remove the clutch master cylinder (D).
12. Disconnect the reservoir hose (A), then remove the retaining clip (B), and remove clutch line (C) from the clutch master cylinder (D). Plug the end of the reservoir hose and clutch line with a shop towel to prevent brake fluid from coming out.

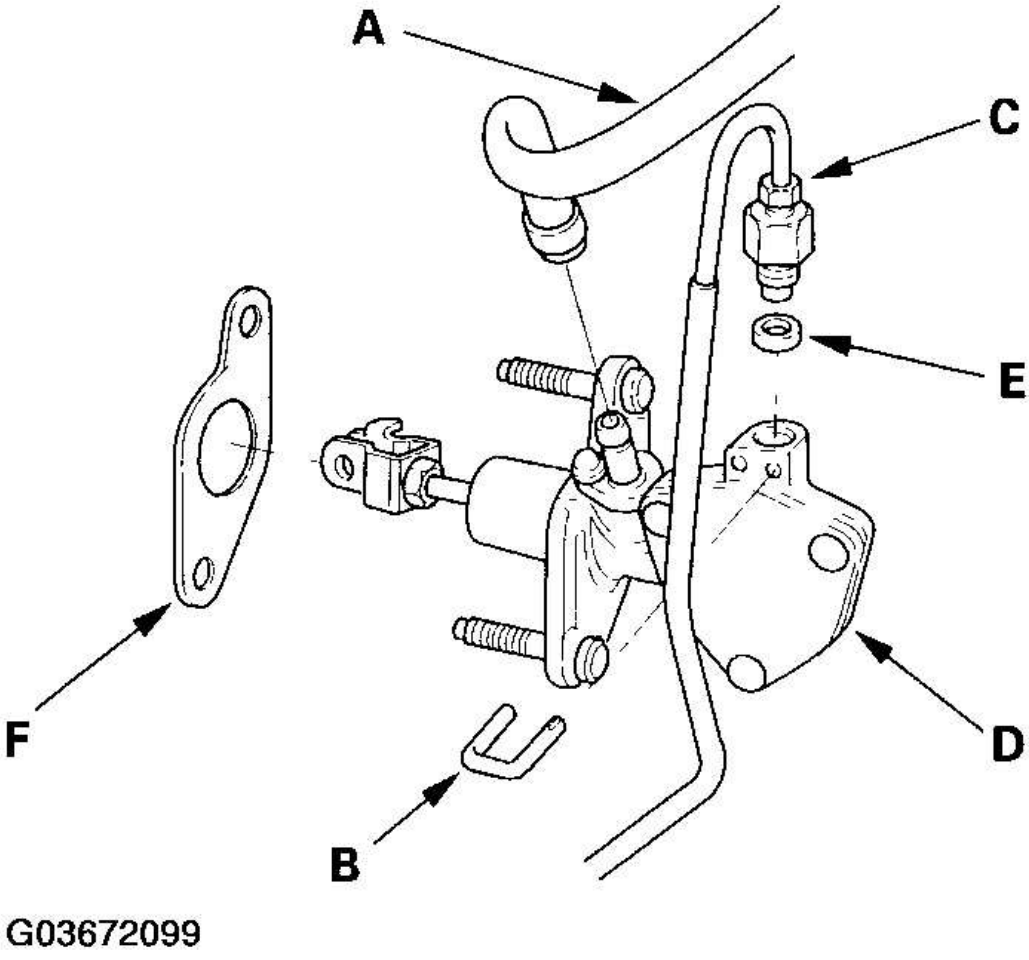


Fig. 13: Disconnecting Reservoir Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Remove the O-ring (E) and clutch master cylinder seal (F) from the clutch master cylinder.
14. Install the clutch master cylinder in the reverse order of removal, and note these items.
    - Apply brake assembly lube to the clutch line, and install a new O-ring.
    - Tighten the master cylinder mounting nuts to 13N.m (1.3 kgf.m, 9.4 lbf.ft).

- Install the battery base (see step 45 **TRANSMISSION INSTALLATION**).
- Install the air cleaner housing (see **AIR CLEANER REMOVAL/INSTALLATION**).
- Install the battery. Connect the positive cable to the battery first, then connect the negative cable.
- Enter the anti-theft codes for the radio and the navigation system, then enter the customer's radio station and XM radio channel presets.
- Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

15. Make sure the hose clamps (A) are positioned on the master cylinder (B) and reservoir (C) as shown in **Fig. 14**.

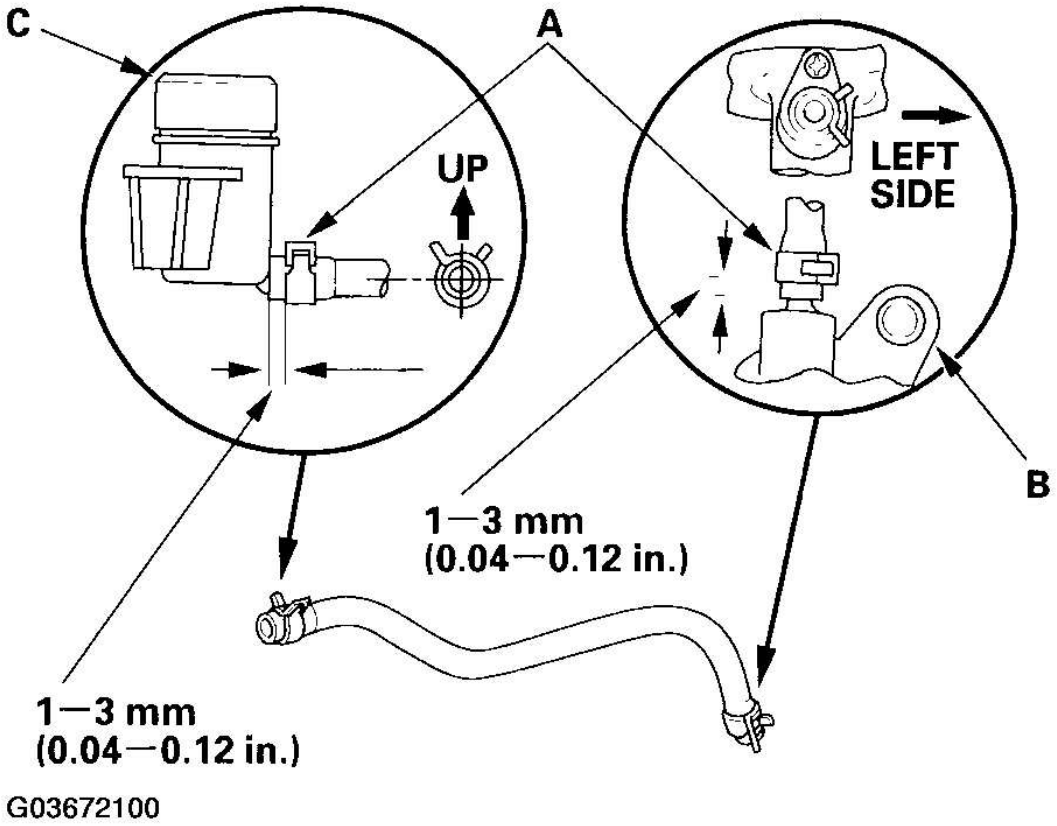


Fig. 14: Making Sure Hose Clamps Are Positioned ON Master Cylinder

And Reservoir
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. To prevent the retaining clip (A) from coming off, pry apart the tip of the retaining clip (B) with a screwdriver.

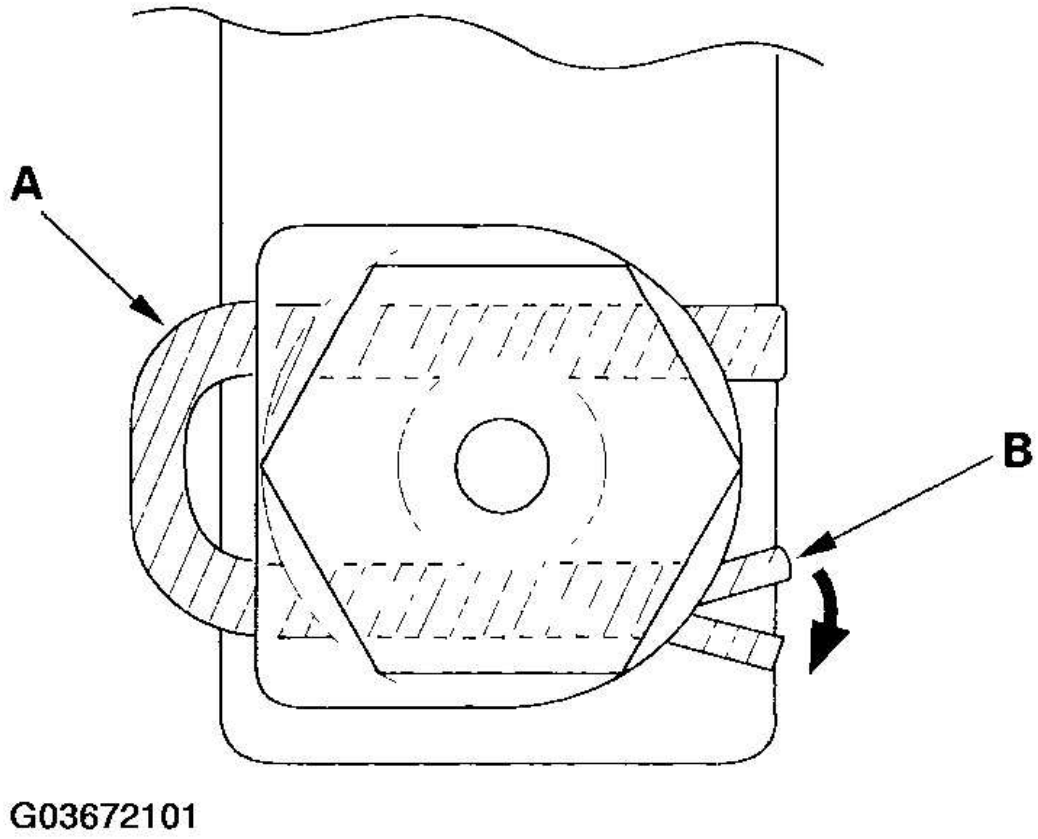


Fig. 15: Securing Retaining Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Bleed the clutch master hydraulic system (see step 8 in **Slave Cylinder Replacement**).
18. Make sure the fluid level in the reservoir is at the MAX (upper) level line.
19. Adjust the clutch pedal, clutch pedal position switch, and clutch interlock switch

20. Check the clutch operation and check for leaks
21. Test drive the vehicle

NOTE: Reservoir filling is covered in the bleeding procedure.

SLAVE CYLINDER REPLACEMENT

NOTE:

- **Use fender covers to avoid damaging painted surfaces.**
- **Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid does contact the paint, wash it off immediately with water.**

1. Make sure you have the anti-theft codes for the radio and navigation system, then write down the customer's radio station and XM radio channel presets.
2. Disconnect the negative cable from the battery first, then disconnect the positive cable. Remove the battery.
3. Remove the battery
4. Remove the mounting bolts (A), harness bracket (B), and slave cylinder (C).

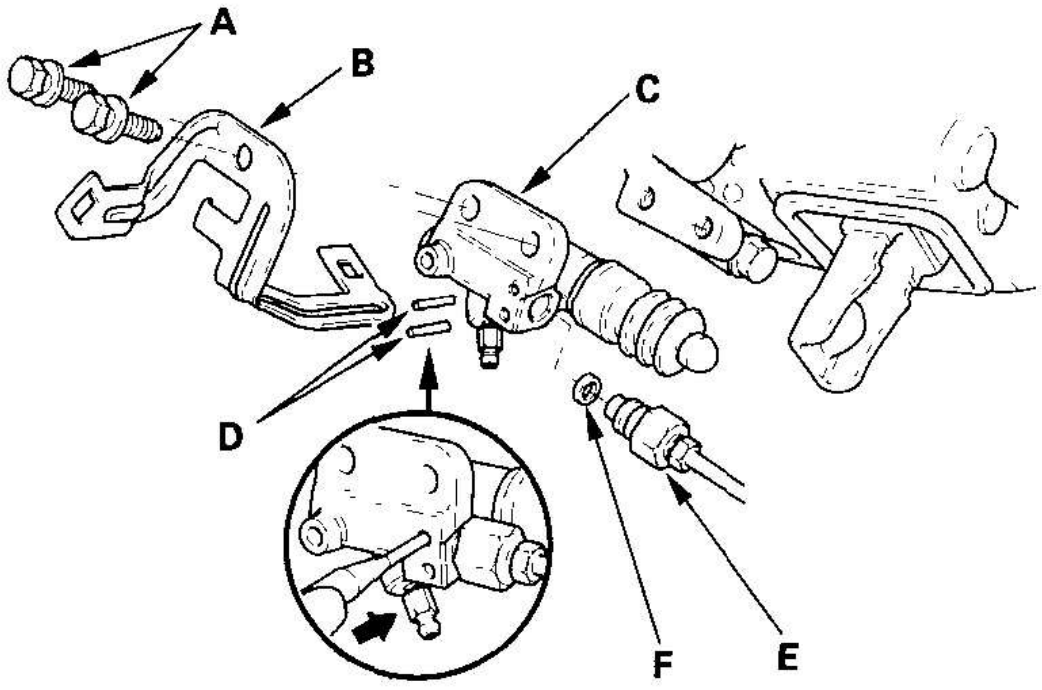


Fig. 16: Identifying Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the roll pins (D). Disconnect the clutch line (E), and remove the O-ring (F). Plug the end of the clutch line to prevent brake fluid from coming out.
6. Install the slave cylinder in the reverse order of removal. Install a new O-ring (A).

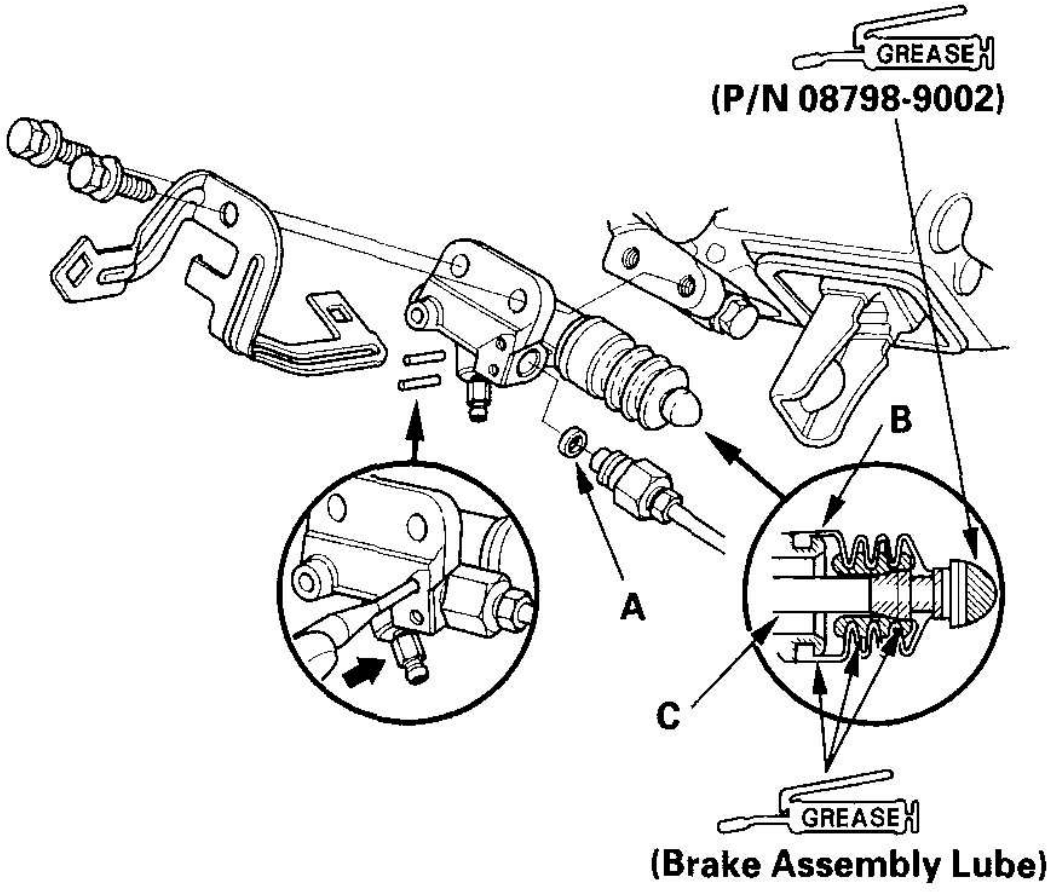


Fig. 17: Identifying New O-Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Pull back the boot (B), and apply brake assembly lube to the boot and slave cylinder rod (C). Reinstall the boot.
8. Apply super high temp urea grease (P/N 08798-9002) to the pushrod of the slave cylinder. Tighten the slave cylinder mounting bolts to 22 N.m (2.2 kgf.m, 16 lbf.ft).
9. Bleed the clutch hydraulic system.
    - Attach a hose to the bleeder screw (A), and suspend the hose in a container of brake fluid.

- Make sure there is an adequate supply of fluid in the reservoir, then slowly pump the clutch pedal until no more bubbles appear at the bleeder hose.
- It may be necessary to limit the movement of the release fork (B) with a block of wood to remove all the air from the system.
- Tighten the bleeder screw to 8 N.m (0.8 kgf.m, 5.8 lbf.ft); do not overtighten it.
- After bleeding, refill the reservoir to the MAX mark with fluid.
- Use only Honda DOT 3 brake fluid from an unopened container.
- Confirm clutch operation, and check for leaking fluid.

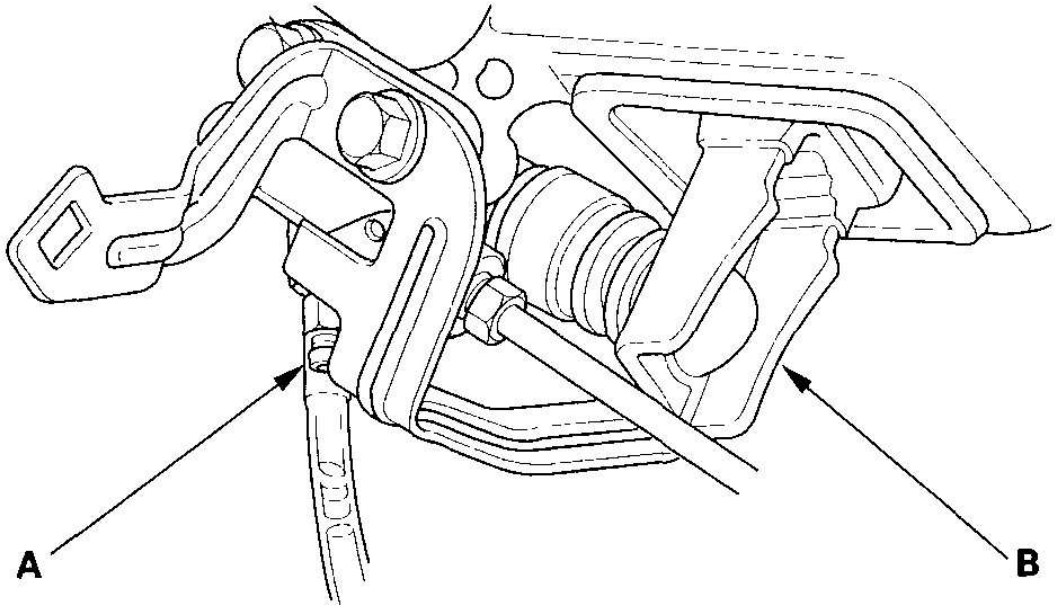


Fig. 18: Bleeding Clutch Hydraulic System
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Reconnect the positive cable to the battery first, then connect the negative cable.
11. Enter the anti-theft codes for the radio and navigation system, then enter the customer's radio station and XM radio channel presets.

12. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

CLUTCH REPLACEMENT

Special Tools Required

- Pressure plate compressor 07AAE-P8EA000
- Clutch alignment shaft 07AAF-P8EA000
- Pressure plate compressor adapter 07AAK-P8EA000
- Ring gear holder 07LAB-PV00100 or 07924-PD20003
- Attachment, 37 x 40 mm 07746-0010200
- Driver 07749-0010000

NOTE: You must use the special tools required to remove and install the clutch pressure plate or you will irreversibly damage it.

PRESSURE PLATE AND CLUTCH DISC REMOVAL

1. Check the diaphragm spring fingers for height using the special tool and a feeler gauge. If the height is more than the service limit, replace the pressure plate and clutch disc as a set.

   Standard (New): 0.6 mm (0.02 in.) max.

   Service Limit: 0.8 mm (0.03 in.)

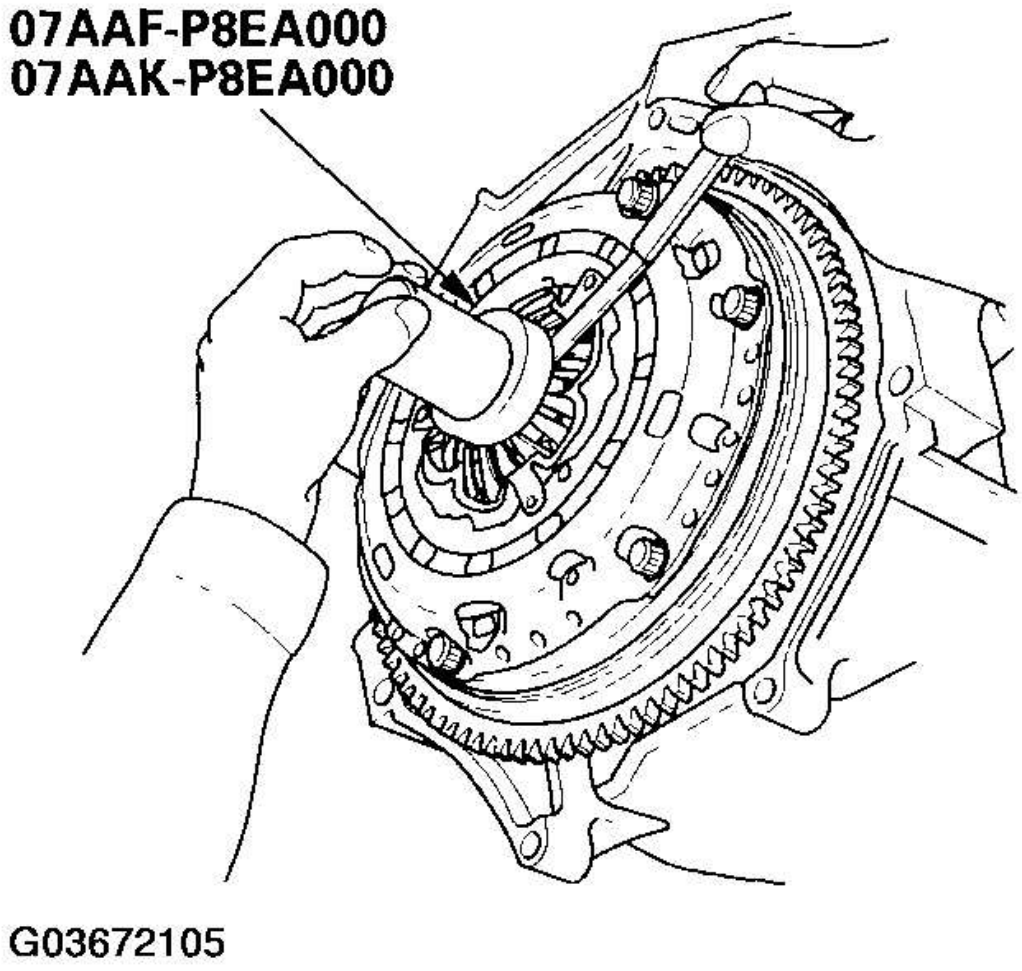


Fig. 19: Checking Diaphragm Spring Fingers For Height Using Special And Feeler Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the special tools.

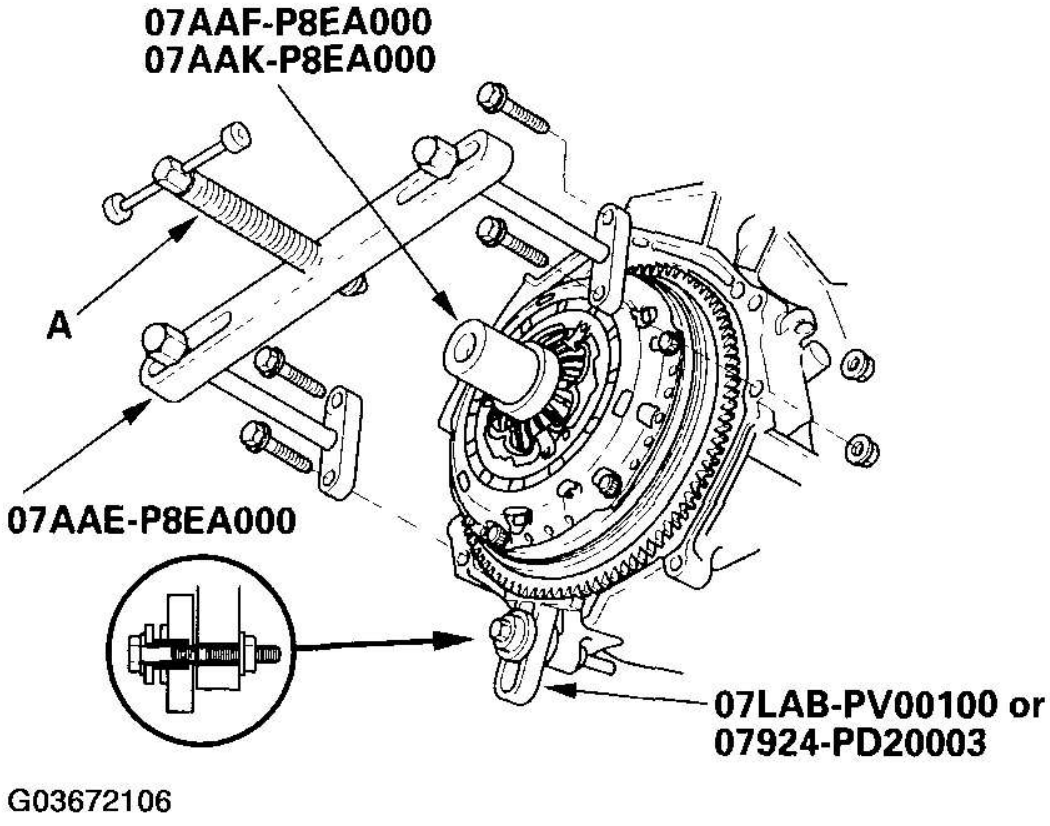


Fig. 20: Installing Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the center screw (A) clockwise by hand to apply pressure on the diaphragm spring. Continue turning the center screw until it stops.
4. Loosen the pressure plate mounting bolts (A) in the pattern shown in **Fig. 21** several steps, then remove the bolts.

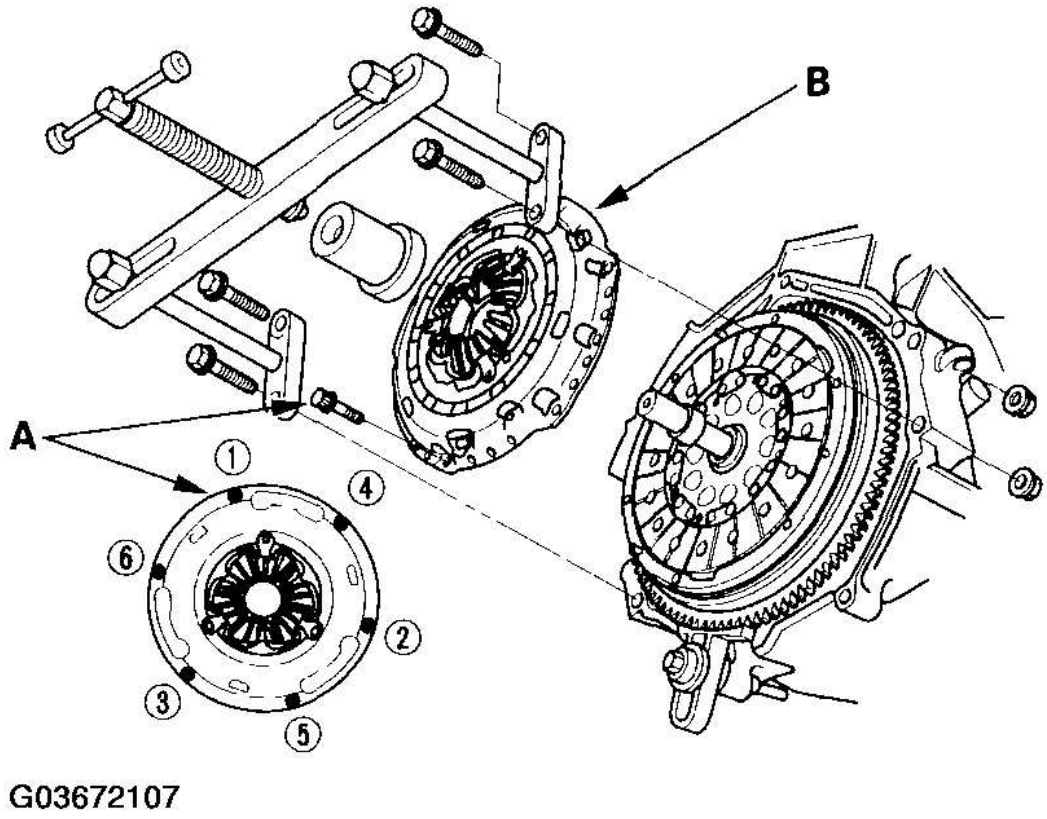


Fig. 21: Loosening Pressure Plate Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Turn the center screw on the pressure plate compressor counterclockwise by hand to release the pressure, then install two pressure plate mounting bolts, hand-tight, to hold the pressure plate (B). Remove the special tools and the pressure plate.
6. Inspect the fingers of the diaphragm spring (A) for wear at the release bearing contact area.

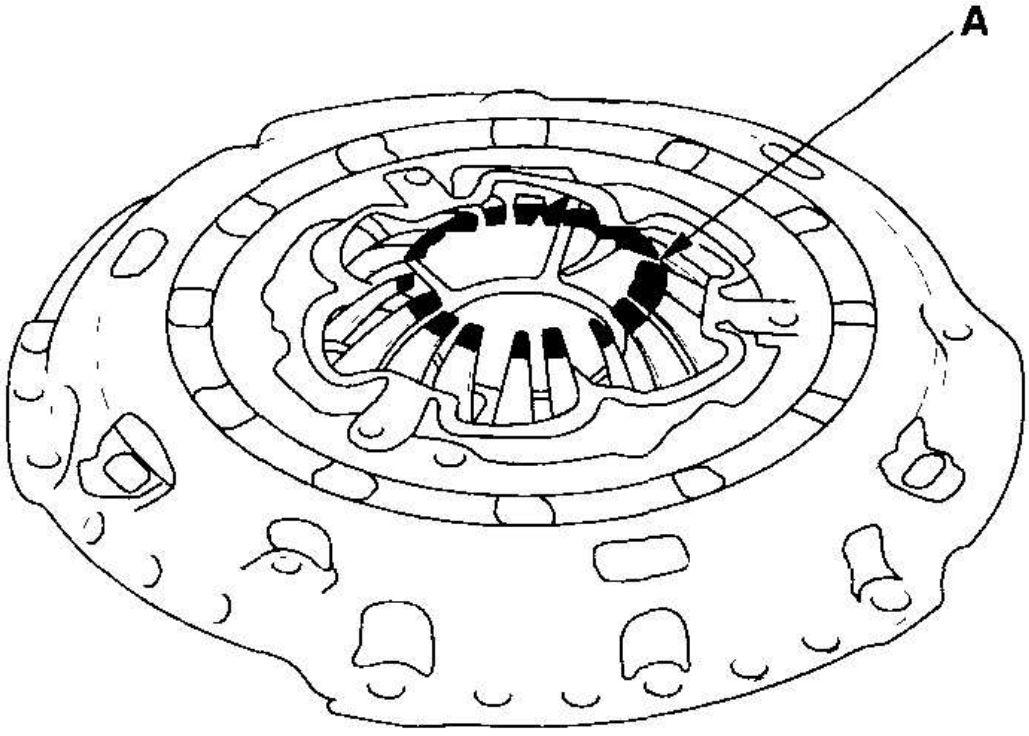


Fig. 22: Inspecting Fingers Of Diaphragm Spring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Inspect the pressure plate surface (A) for wear, cracks, and burning.

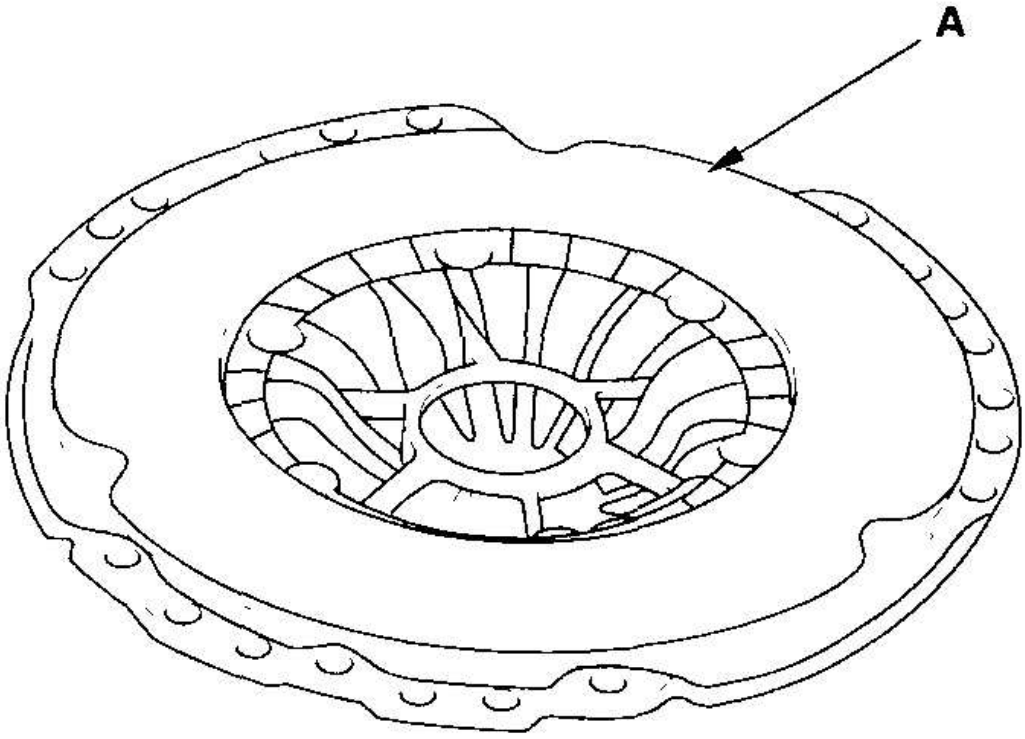


Fig. 23: Inspecting Pressure Plate Surface For Wear, Cracks And Burning
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Inspect for warpage using a straight edge (A) and a feeler gauge (B). Measure across the pressure plate (C). If the warpage is more than the service limit, replace the pressure plate and clutch disc as a set.

   Standard (New): 0.03 mm (0.001 in.) max.

   Service Limit: 0.15 mm (0.006 in.)

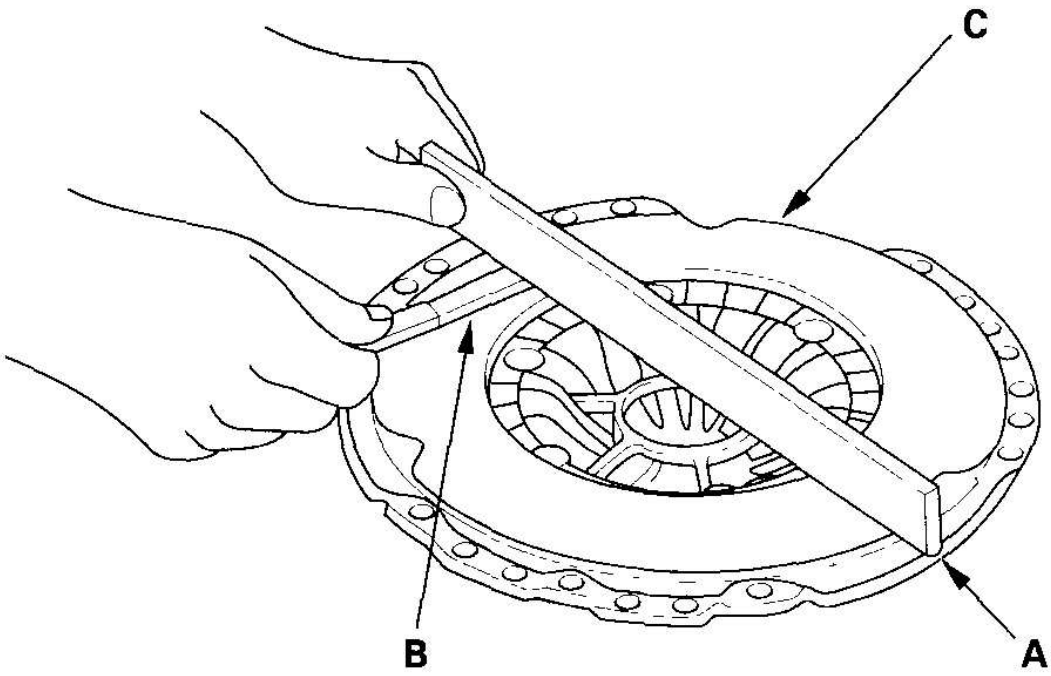


Fig. 24: Inspecting Warpage Using Straight Edge And Feeler Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the clutch disc and special tools.

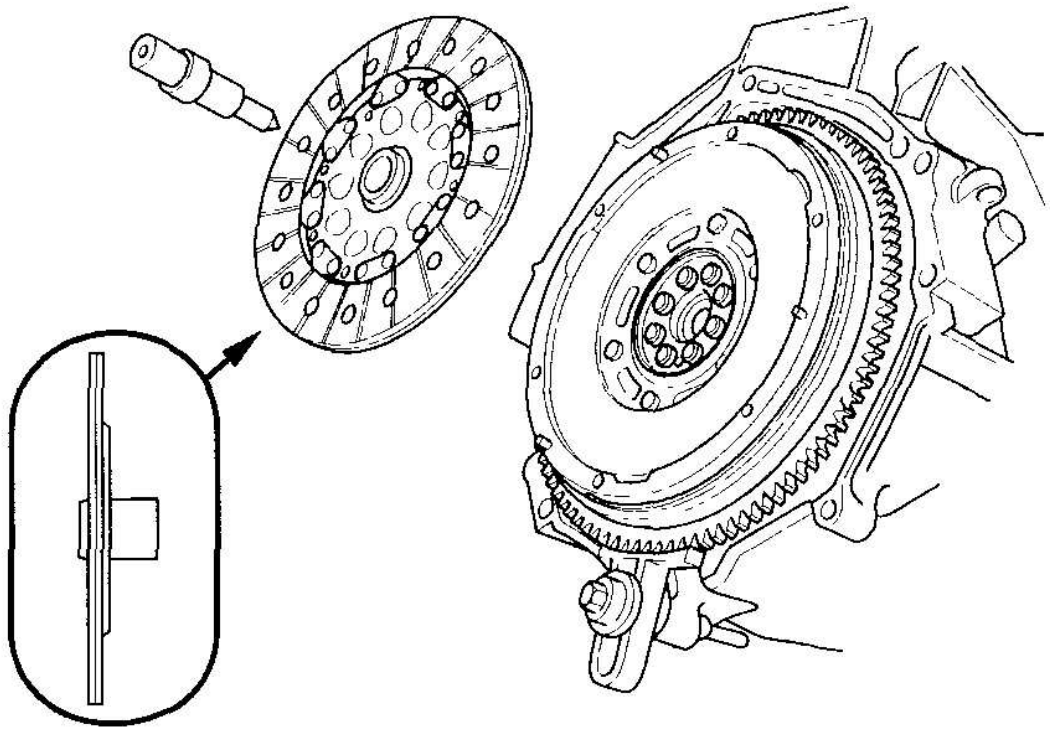


Fig. 25: Removing Clutch Disc And Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Inspect the lining of the clutch disc for signs of slippage or oil. If the clutch looks burnt or is oil soaked, replace it and the pressure plate as a set. Find and repair the source of the oil leak if the clutch disc is soaked.
11. Measure the clutch disc thickness. If the thickness is less than the service limit, replace the clutch disc and pressure plate as a set.

    Standard (New): 8.68-9.53 mm (0.342-0.375 in.)

    Service Limit: 7.2 mm (0.283 in.)

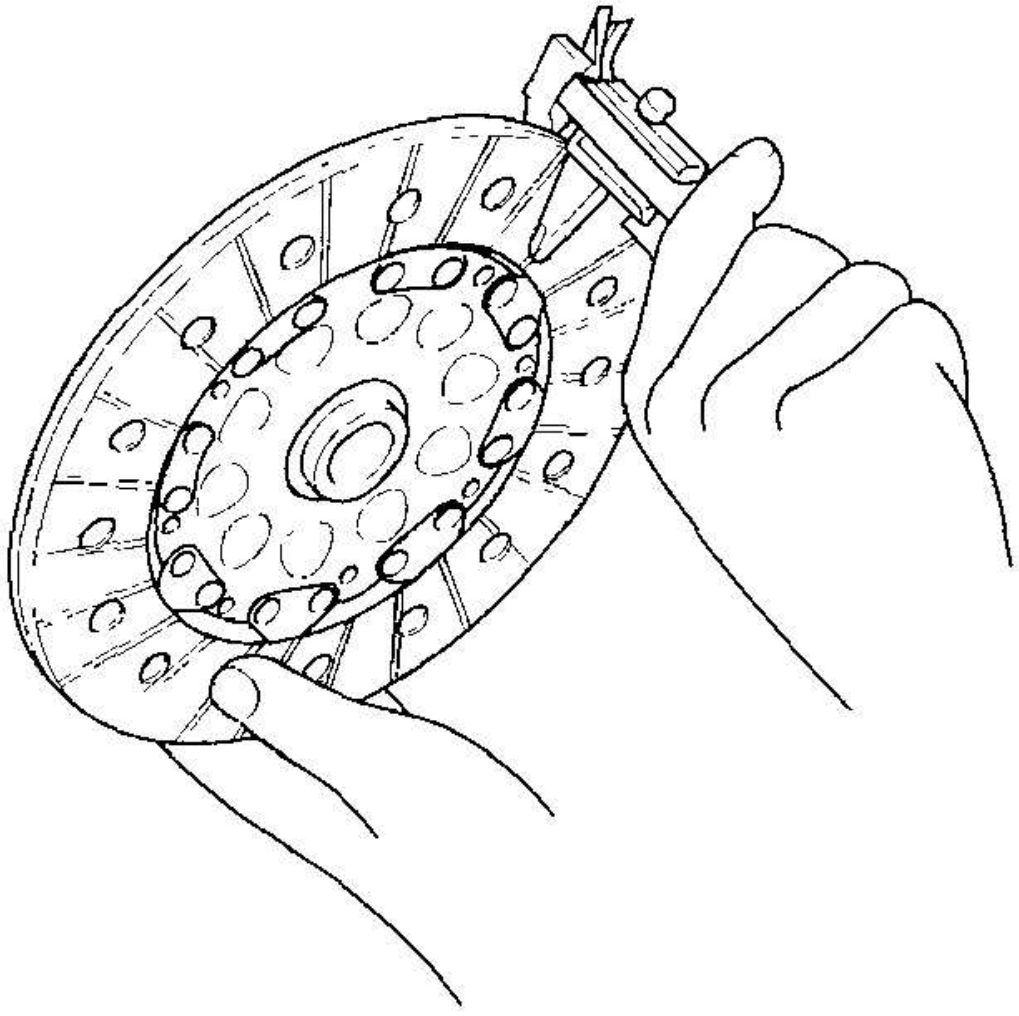


Fig. 26: Measuring Clutch Disc Thickness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Measure the rivet depth from the clutch disc lining surface (A) to the rivets (B) on both sides. If the rivet depth is less than the service limit, replace the clutch disc and the pressure plate as a set.

Standard (New): 1.0 mm (0.039 in.)

Service Limit: 0.2 mm (0.008 in.)

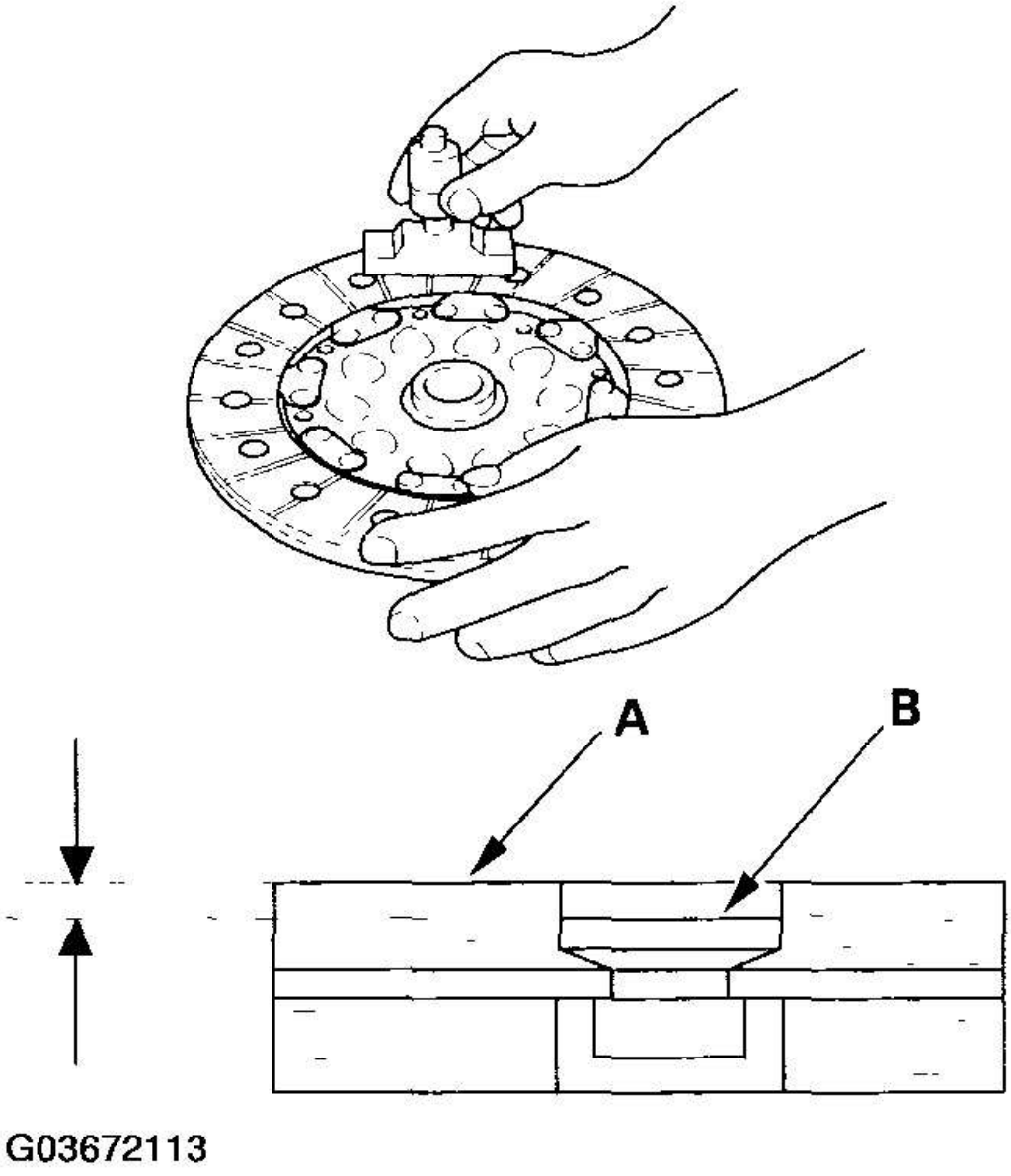


Fig. 27: Measuring Rivet Depth From Clutch Disc Lining Surface To Rivets
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FLYWHEEL AND PILOT BEARING INSPECTION

1. Inspect the ring gear teeth for wear and damage.
2. Inspect the clutch disc mating surface on the flywheel for wear, cracks, and burning.
3. Measure the flywheel runout with the flywheel (A) installed on the engine. Set the dial indicator (B). Turn the flywheel at least two turns while pressing the flywheel. If the runout is not within the standard, replace the flywheel, and recheck the runout. Resurfacing the flywheel is not recommended.

   Standard (New): 0.05-0.45 mm (0.002-0.018 in.)

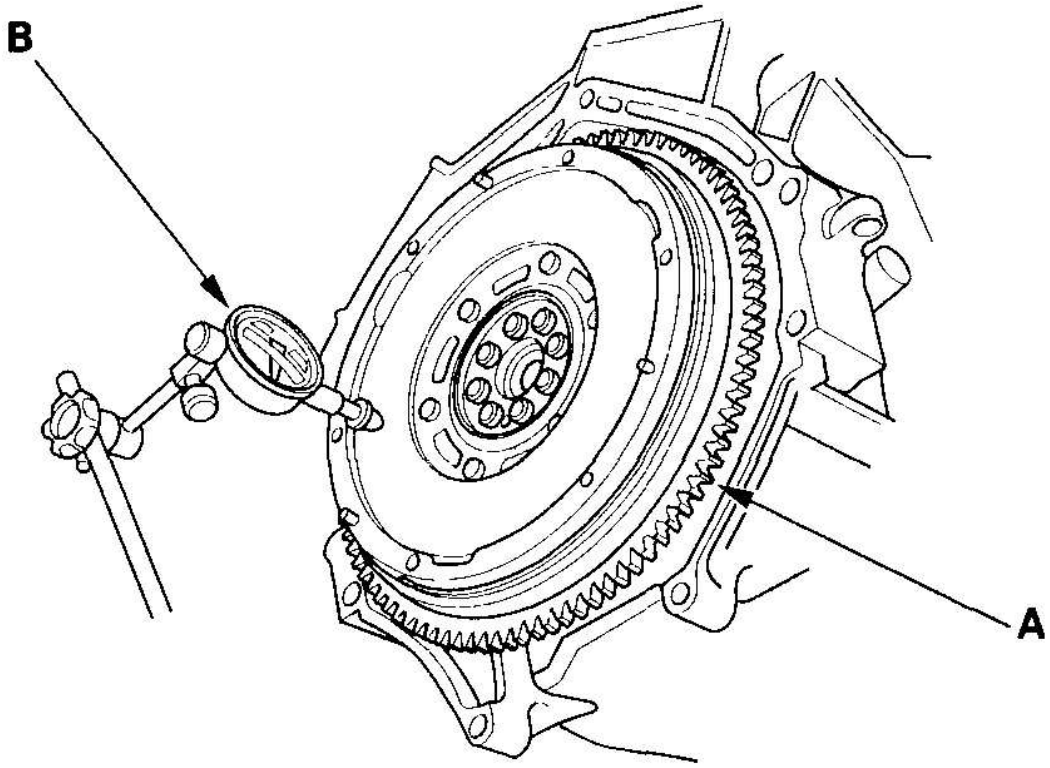


Fig. 28: Measuring Flywheel Runout
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Turn the inner race of the pilot bearing with your finger. The pilot bearing should turn smoothly and quietly. Check that the pilot bearing outer race fits tightly in the flywheel. If the race does not turn smoothly, quietly, or fit tight in the flywheel, replace the pilot bearing.

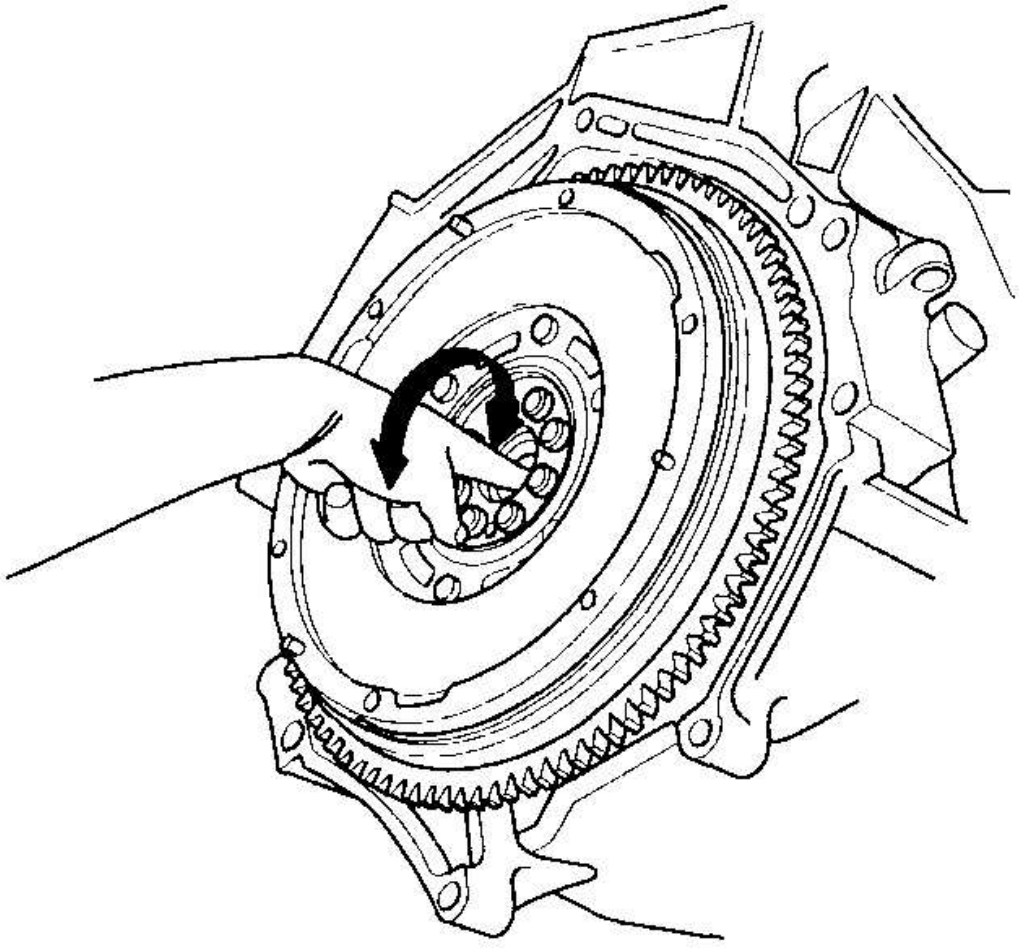


Fig. 29: Turning Inner Race Of Pilot Bearing With Your Finger
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FLYWHEEL AND PILOT BEARING REPLACEMENT

1. Install the special tool.

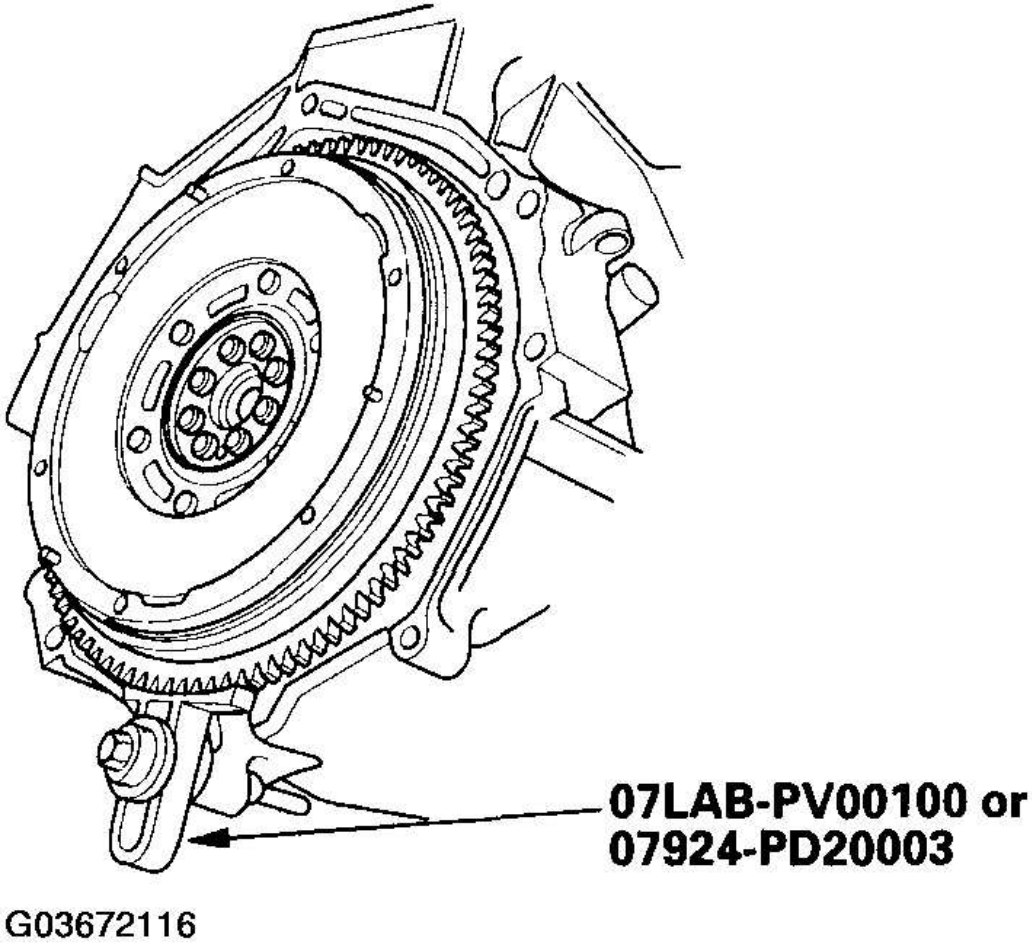


Fig. 30: Installing Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Loosen the flywheel mounting bolts in a crisscross pattern in several steps. Remove the bolts, then remove the flywheel.
3. Remove the pilot bearing (A) from the flywheel (B).

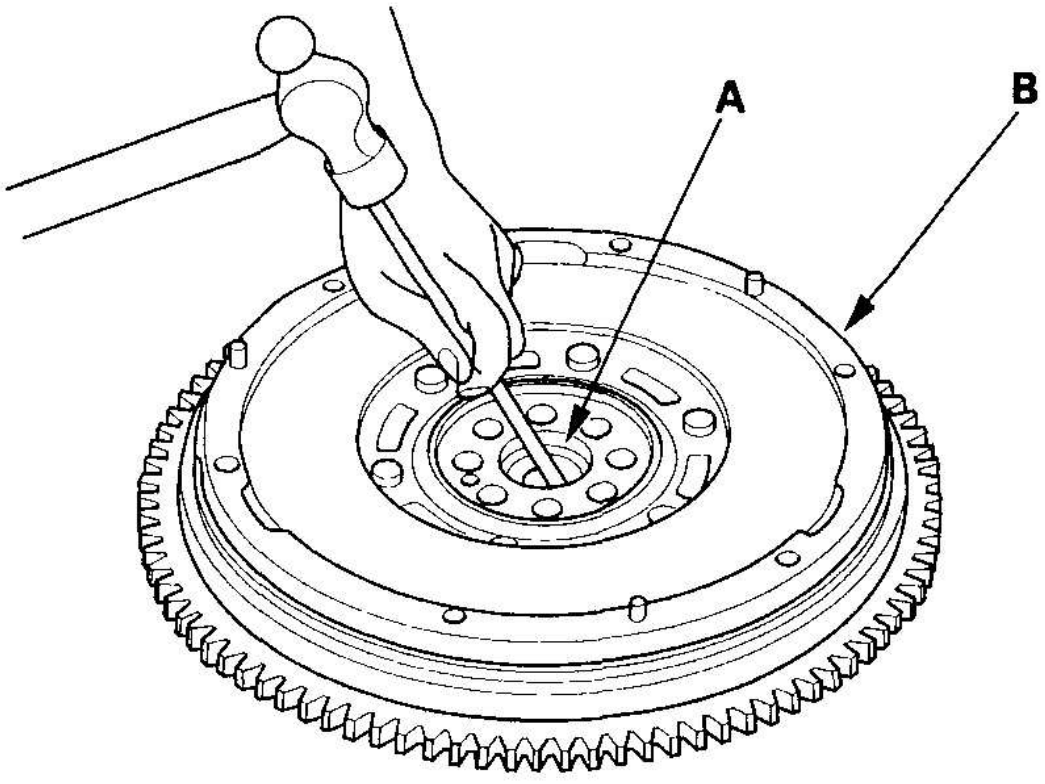


Fig. 31: Removing Pilot Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the new pilot bearing (A) into the flywheel using the special tools. Apply a light coat of oil to the bearing surface.

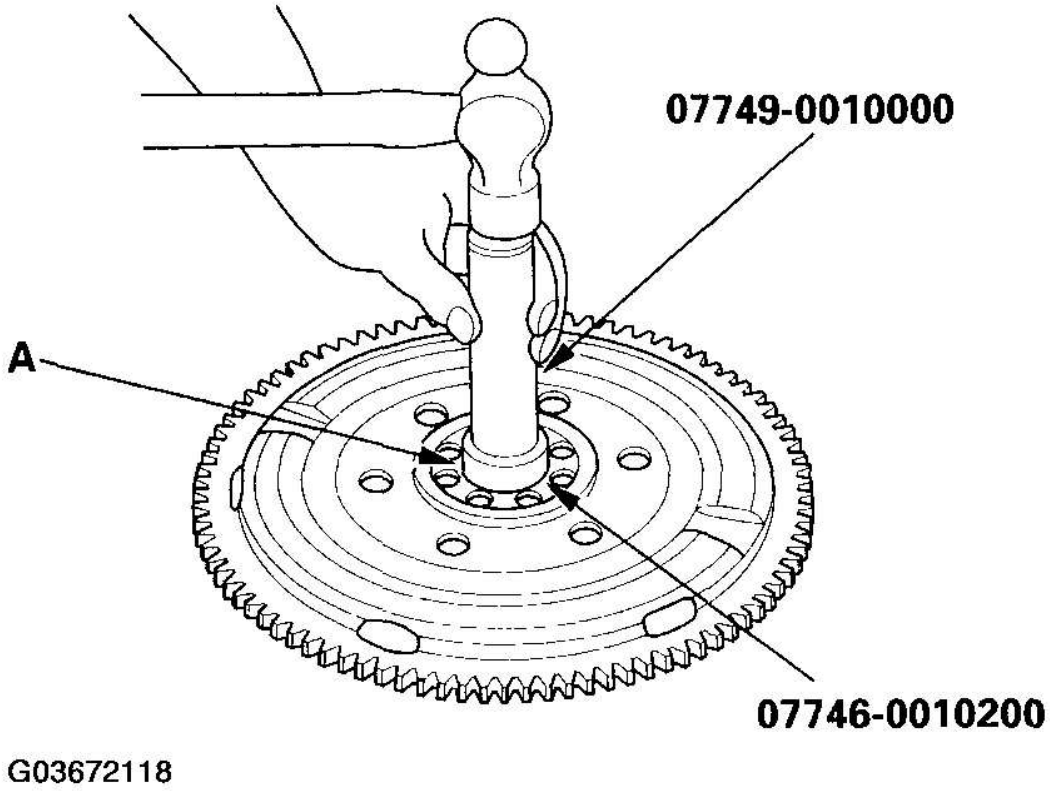


Fig. 32: Installing New Pilot Bearing Into Flywheel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the flywheel and mounting bolts, finger-tight.
6. Install the special tool, then torque the flywheel mounting bolts in a crisscross pattern in several steps.

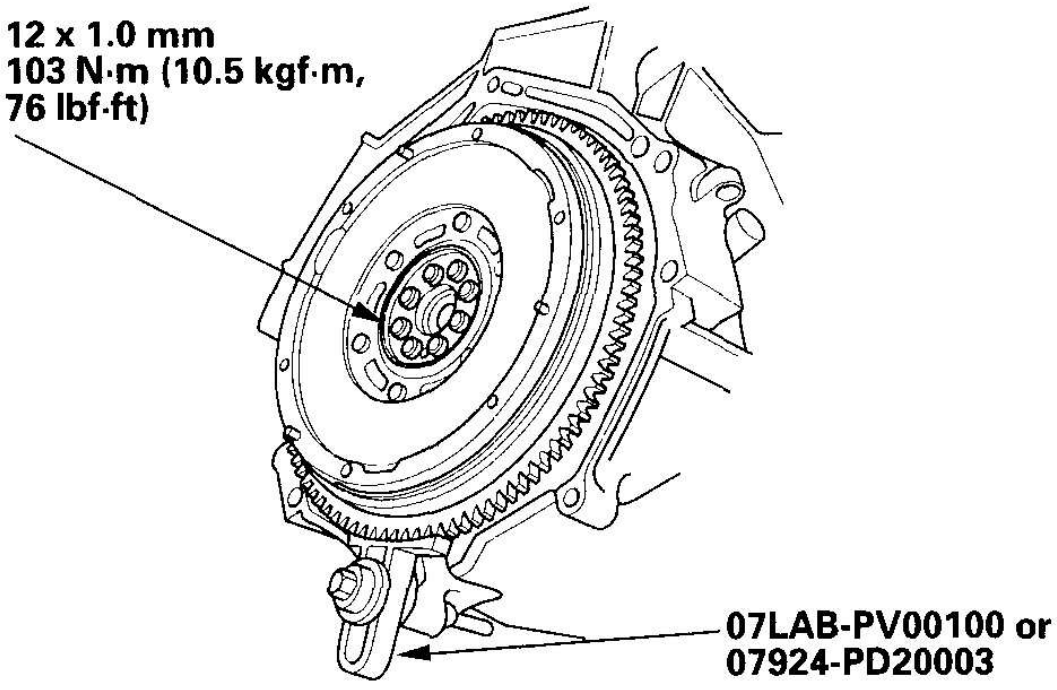


Fig. 33: Tightening Mounting Bolts In Crisscross Pattern
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CLUTCH DISC AND PRESSURE PLATE INSTALLATION

1. Temporarily install the clutch disc onto the splines of the transmission mainshaft. Make sure the clutch disc slides freely on the mainshaft.
2. Install the ring gear holder.

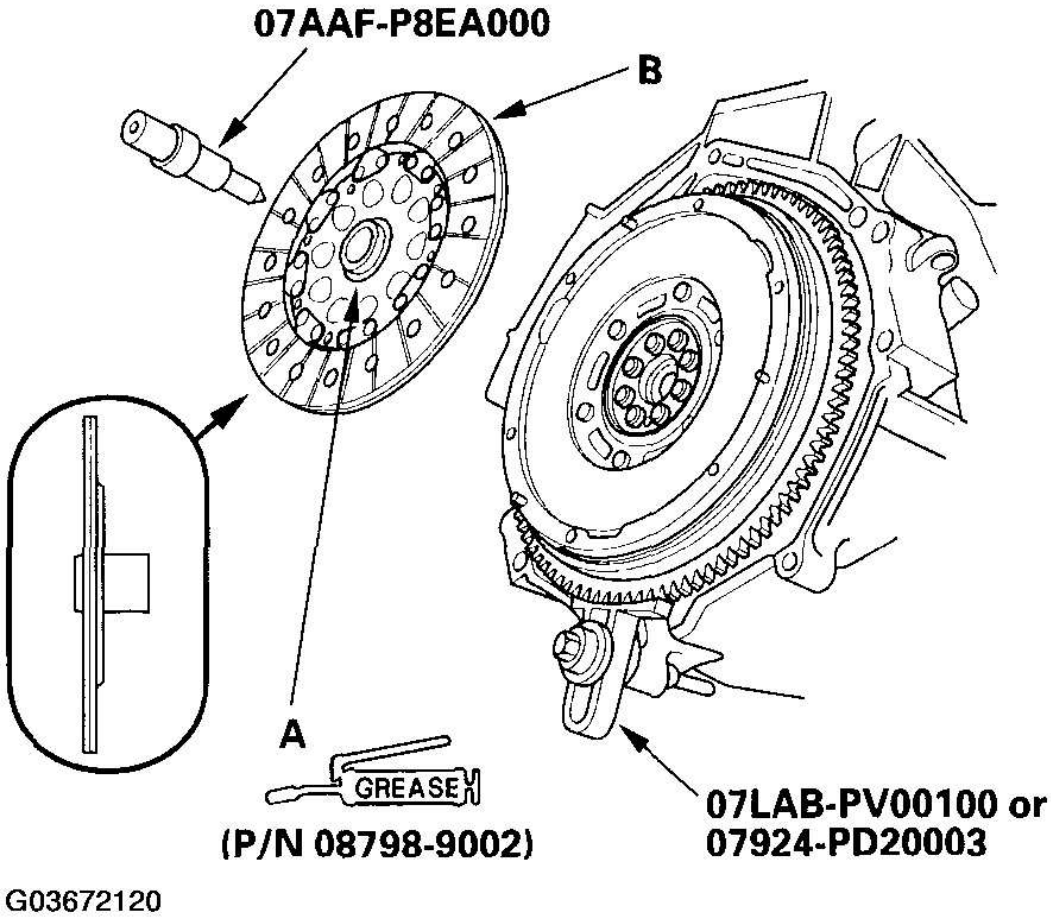


Fig. 34: Installing Ring Gear Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Apply super high temp urea grease (P/N 08798-9002) to the splines (A) of the clutch disc (B), then install the clutch disc using the special tools.
4. Align a white mark (A) across the pressure plate (B) and flywheel (C).

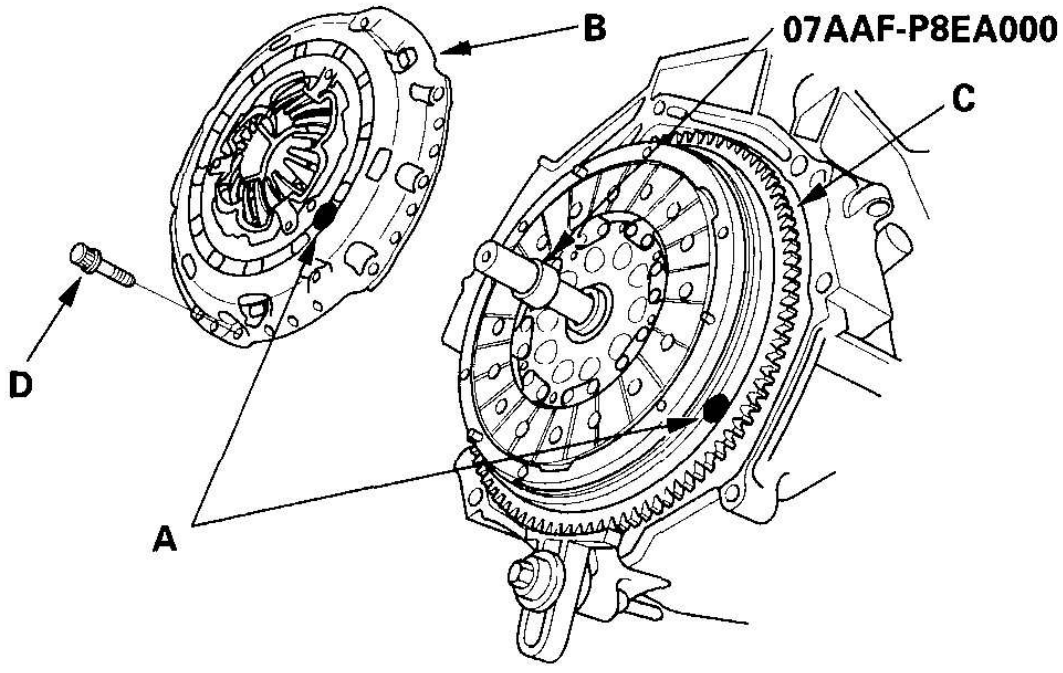


Fig. 35: Aligning White Mark Across Pressure Plate And Flywheel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the pressure plate and the mounting bolts (D), finger-tight.
6. Install the special tools.

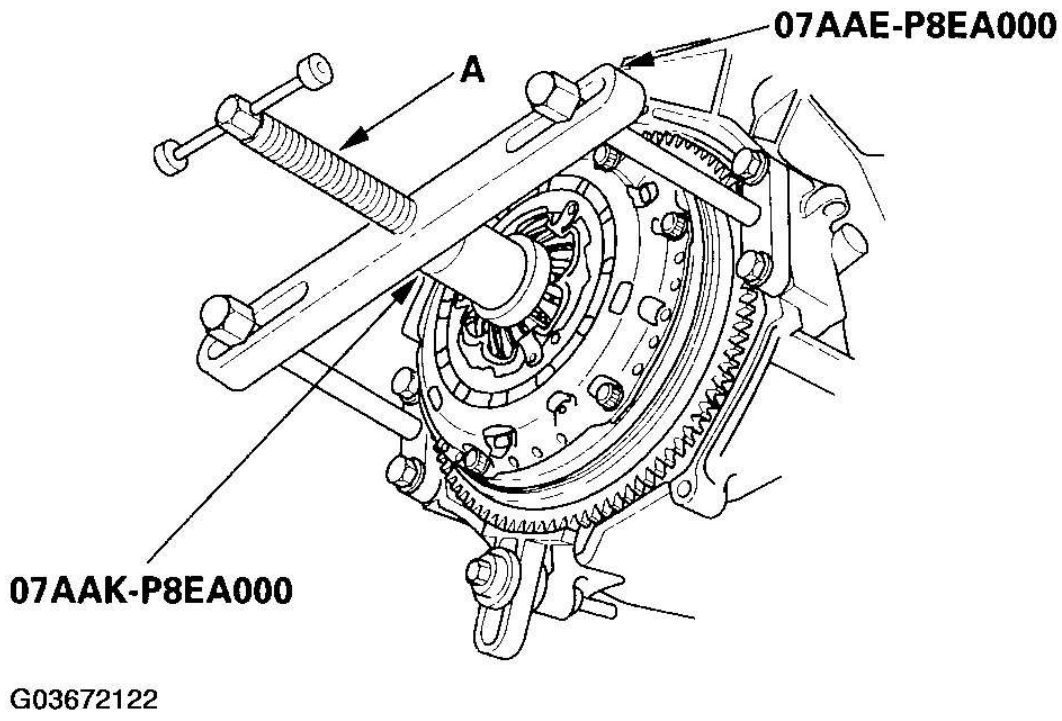
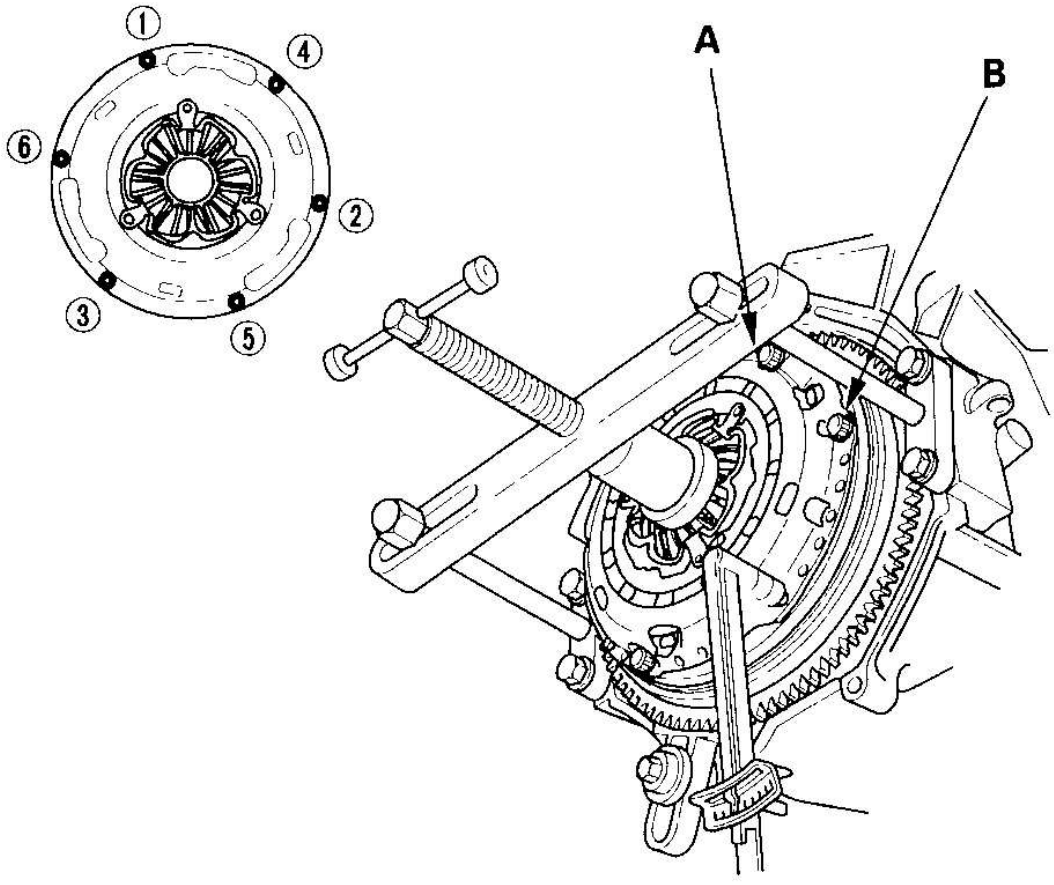


Fig. 36: Installing Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Turn the center screw (A) clockwise by hand to apply pressure on the diaphragm spring. Continue turning the center screw unit it stops.
8. Be careful not to damage the pressure plate (A). Tighten (180 degrees apart) the pressure plate mounting bolts (B) in a star pattern in several steps.

PRESSURE PLATE MOUNTING BOLT TORQUE: 25 N.m (2.6 kgf.m, 19 lbf.ft)



G03672123

Fig. 37: Tightening Pressure Plate Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Turn the center screw on the pressure plate compressor counterclockwise by hand to release the pressure, then remove the special tools.
10. Make sure the diaphragm spring fingers are all the same height.

RELEASE BEARING REPLACEMENT

1. Remove the release fork boot (A) from the clutch housing (B).

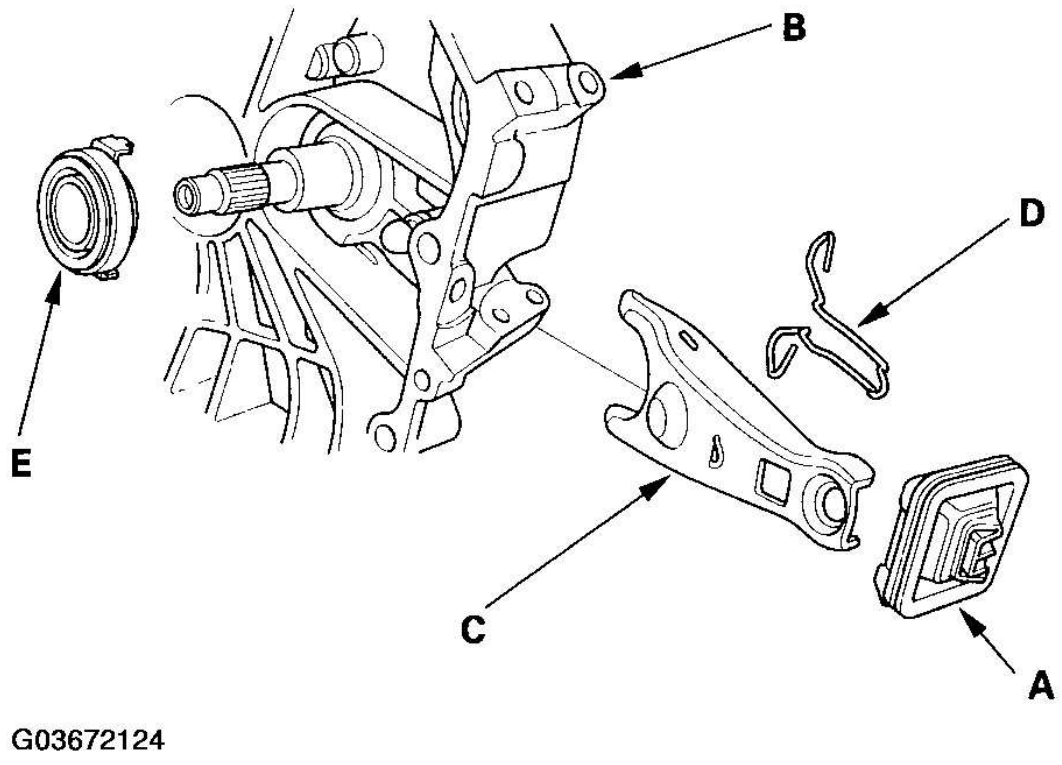


Fig. 38: Removing Release Fork Boot
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the release fork (C) from the clutch housing by squeezing the release fork set spring (D). Remove the release bearing (E).
3. Check the play of the release bearing by spinning it with your hand. If there is excessive play, replace the release bearing.

NOTE: The release bearing is packed with grease. Do not wash it in solvent.

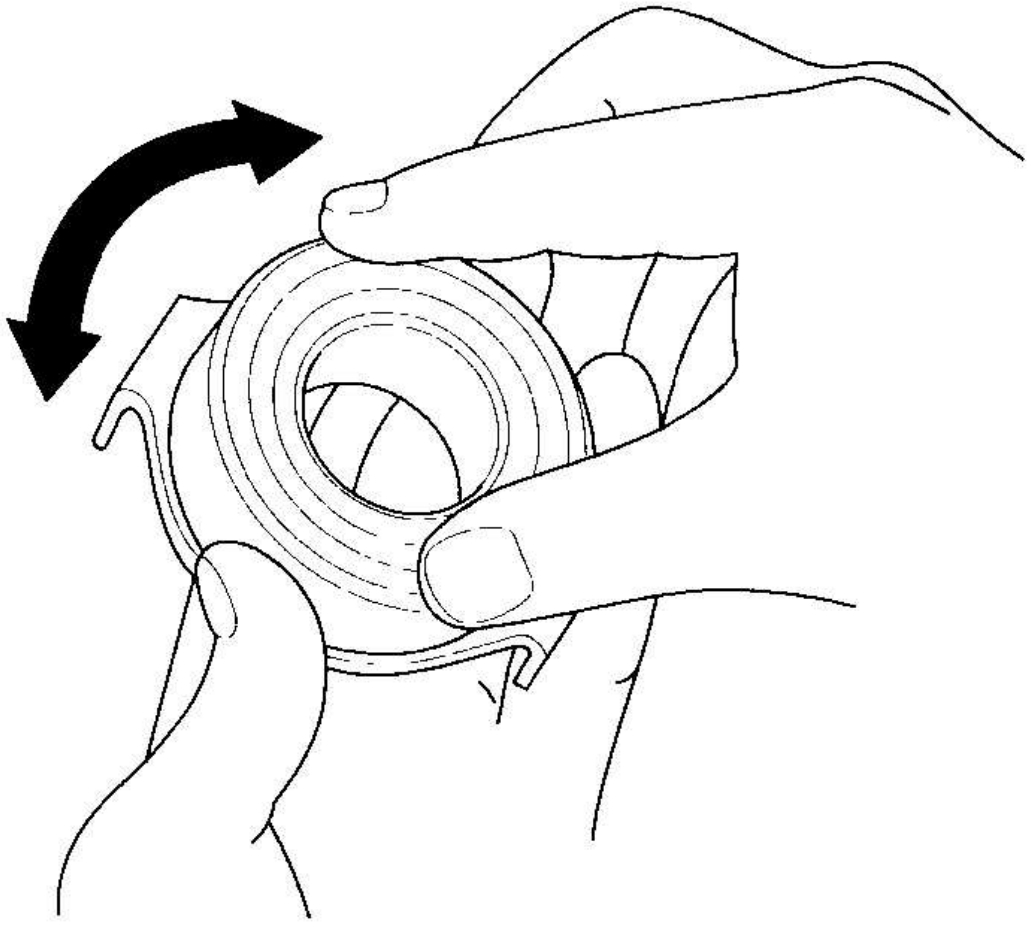


Fig. 39: Checking play of release bearing by spinning
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Apply super high temp urea grease (P/N 08798-9002) to the release fork (A), the release fork bolt (B), the release bearing (C), and the release fork set spring (D) in the shaded areas.

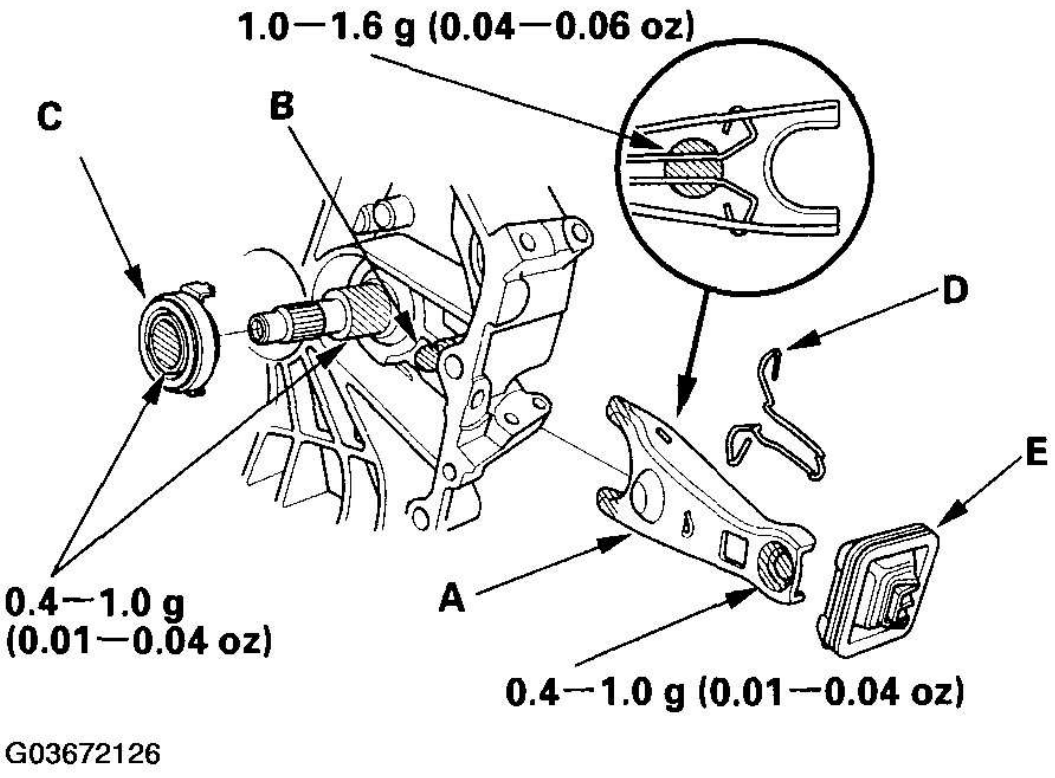


Fig. 40: Applying Super High Temp Urea Grease To Release Fork
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. With the release fork slid between the release bearing pawls, install the release bearing on the mainshaft while inserting the release fork through the hole in the clutch housing.
6. Align the detent of the release fork with the release fork bolt, then press the release fork over the release fork bolt squarely.
7. Install the release fork boot (E). Make sure the boot seals around the release fork and the clutch housing.
8. Move the release fork (A) right and left to make sure it fits properly against the release bearing (B) and the release bearing slides smoothly. Wipe off the excess grease.

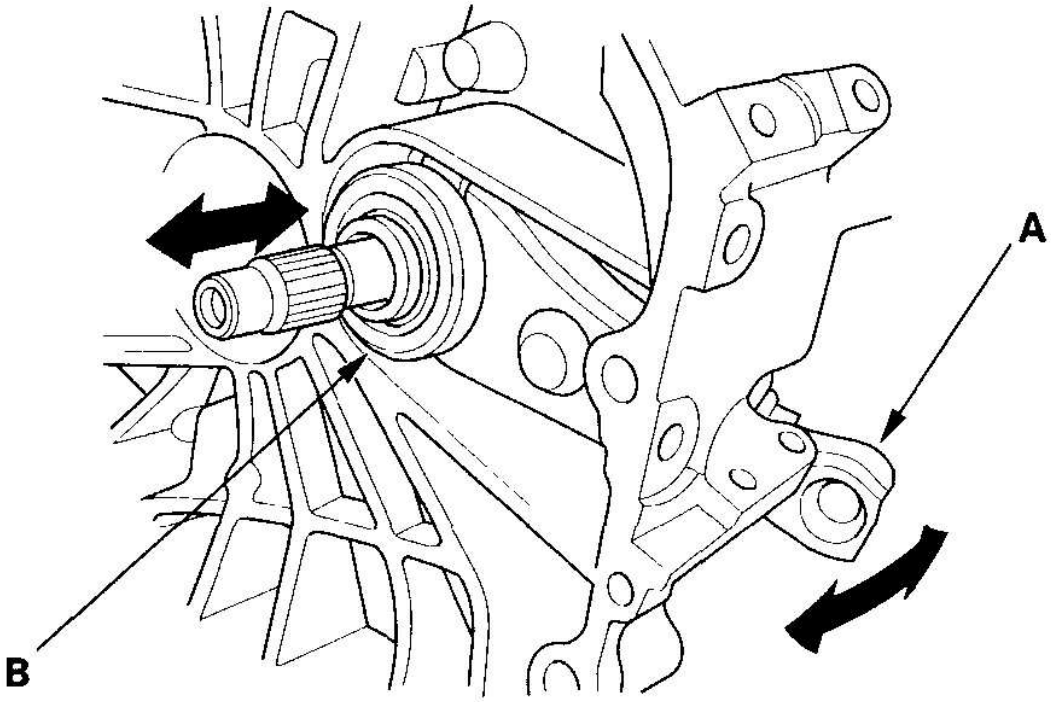


Fig. 41: Moving Release Fork Right And Left To Fit Properly Against Release Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 TRANSMISSION

Clutch - Accord

SPECIAL TOOLS

Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

Fig. 2: Exploded View Of Clutch System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CLUTCH PEDAL, CLUTCH PEDAL POSITION SWITCH, AND CLUTCH INTERLOCK SWITCH ADJUSTMENT

NOTE:

- **Check the clutch pedal position switch (see CLUTCH PEDAL POSITION SWITCH TEST).**
- **Check the clutch interlock switch (see CLUTCH INTERLOCK SWITCH TEST).**
- **Remove the driver's floor mat before adjusting the clutch pedal.**
- **The clutch is self-adjusting to compensate for wear.**
- **If there is no clearance between the master cylinder piston and push rod, the release bearing will be held against the diaphragm spring, which can result in clutch slippage or other clutch problems.**

1. Loosen the clutch pedal position switch locknut (A), and back off the clutch pedal position switch (B) until it no longer touches the clutch pedal (C).

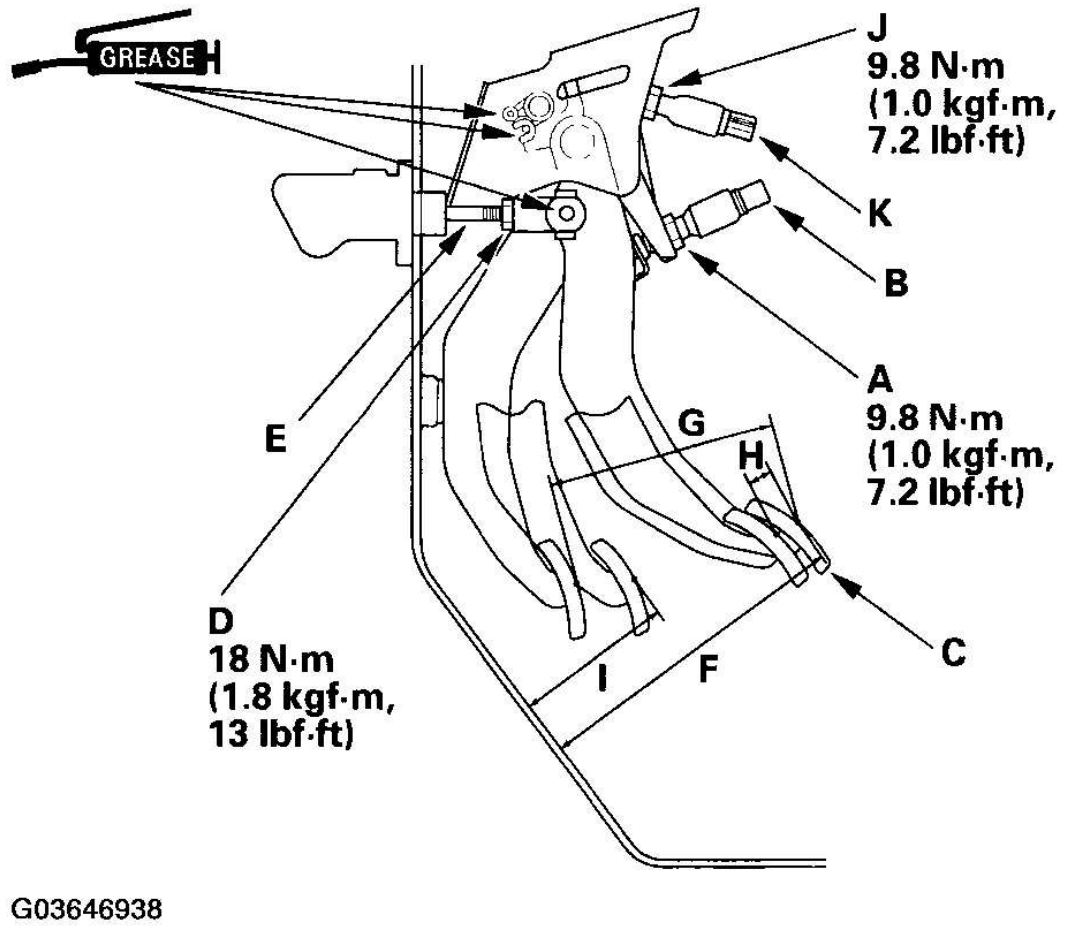


Fig. 3: Loosening Clutch Pedal Position Switch Lock Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Loosen the clutch pushrod locknut (D), and turn the pushrod (E) in or out to get the specified height (F), stroke (G), free play (H), and disengagement height (I) at the clutch pedal.

   Clutch Pedal Stroke: 130-140 mm (5.12-5.51 in.)

   Clutch Pedal Free

   Play: 10-18 mm (0.39-0.71 in.)

   Clutch Pedal Height: 191 mm (7.52 in.)

Clutch Pedal

Disengagement

Height: 95 mm (3.74 in.)

3. Tighten the clutch pushrod locknut.
4. With the clutch pedal released, turn in the clutch pedal position switch until it contacts the clutch pedal.
5. Turn in the clutch pedal position switch an additional 3/4 to 1 turn.
6. Tighten the clutch pedal position switch locknut.
7. Press the clutch pedal to the floor.
8. Release the clutch pedal 9-12 mm (0.35-0.47 in.) from the fully pressed position, and hold it there. Adjust the position of the clutch interlock switch (K) so the engine will start with the clutch pedal in this position.
9. Tighten the clutch interlock switch locknut.

CLUTCH PEDAL REPLACEMENT

1. Disconnect the clutch pedal position switch connector (A) and clutch interlock switch connector (B).

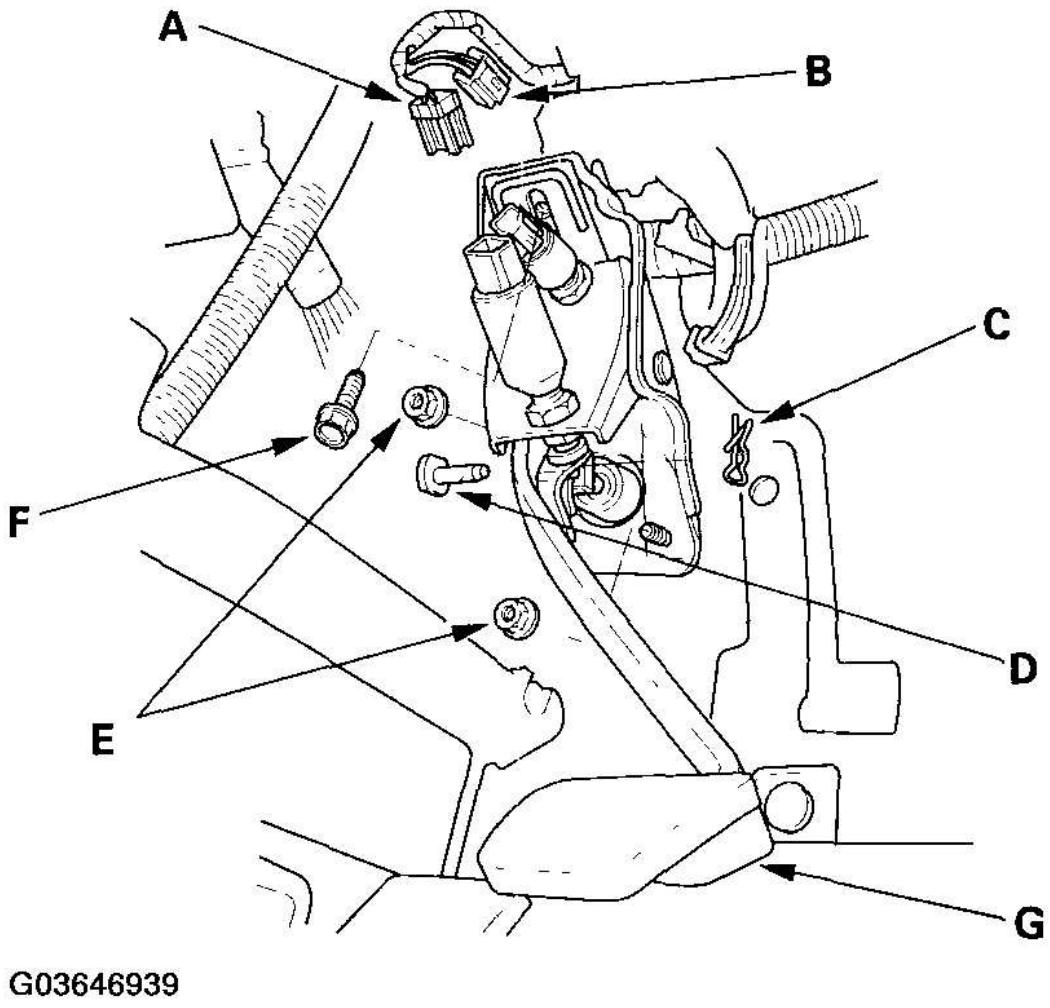


Fig. 4: Disconnecting Clutch Pedal Position Switch And Clutch Interlock Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Pry out the lock pin (C), and pull the pedal pin (D) out of the yoke.
3. Remove the master cylinder mounting nuts (E) and clutch pedal mounting bolt (F).
4. Remove the clutch pedal (G).
5. Install the clutch pedal (A).

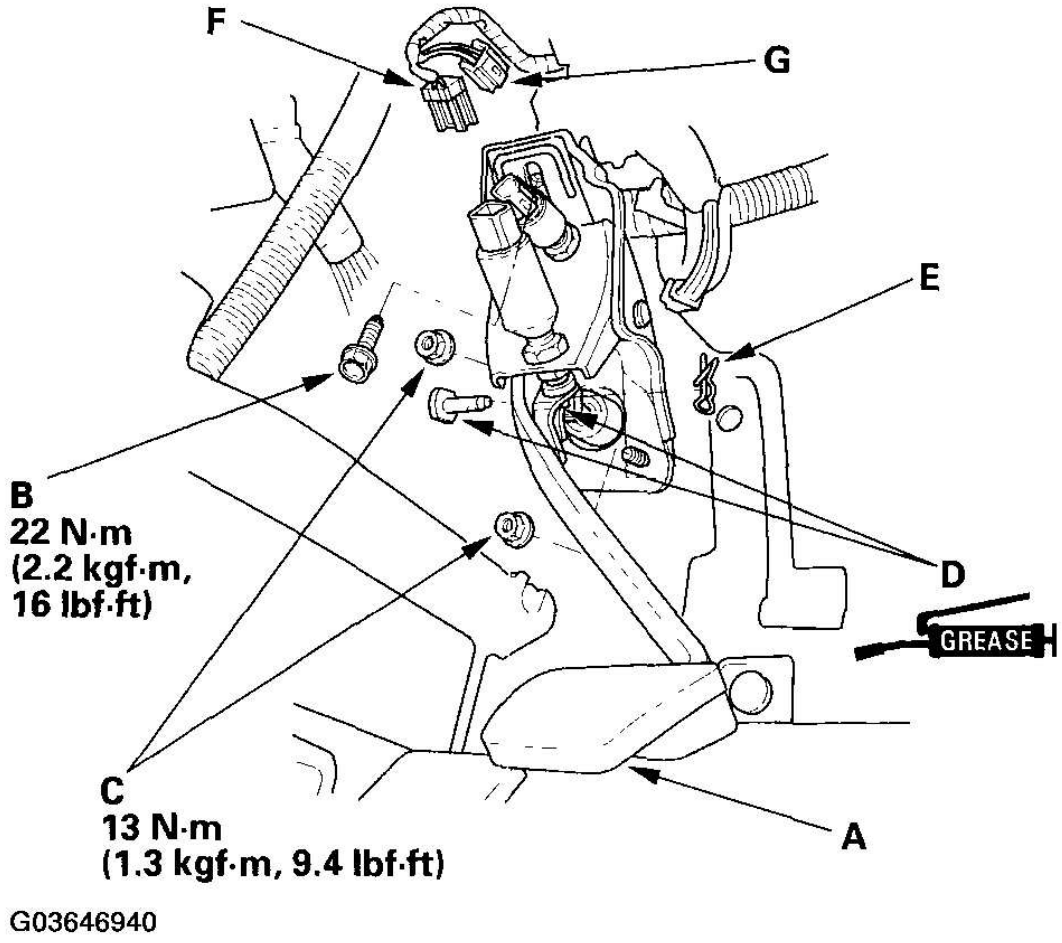


Fig. 5: Installing Clutch Pedal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the clutch pedal mounting bolt (B) and master cylinder mounting nuts (C).
7. Apply grease to the pedal pin (D), and slide it into the yoke, then install a new lock pin (E).
8. Connect the clutch pedal position switch connector (F) and clutch interlock switch connector (G).
9. Adjust the clutch pedal, clutch pedal position switch, and clutch interlock switch (see **CLUTCH PEDAL, CLUTCH PEDAL POSITION SWITCH, AND CLUTCH INTERLOCK SWITCH ADJUSTMENT**).

10. Check the clutch operation.

CLUTCH MASTER CYLINDER REPLACEMENT

NOTE:

- **Use fender covers to avoid damage painted surfaces.**
- **Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid does contact the paint, wash it off immediately with water.**

1. Remove the brake fluid from the clutch master cylinder reservoir with a syringe.
2. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the customer's audio presets.
3. Disconnect the negative cable from the battery first, then disconnect the positive cable.
4. Remove the battery.).
5. Remove the air cleaner housing (see **AIR CLEANER REMOVAL/INSTALLATION**
6. Remove the battery base (see step 10 in **ENGINE REMOVAL**
7. Pry out the lock pin (A), and pull the pedal pin (B) out of the yoke. Remove the master cylinder mounting nuts (C).

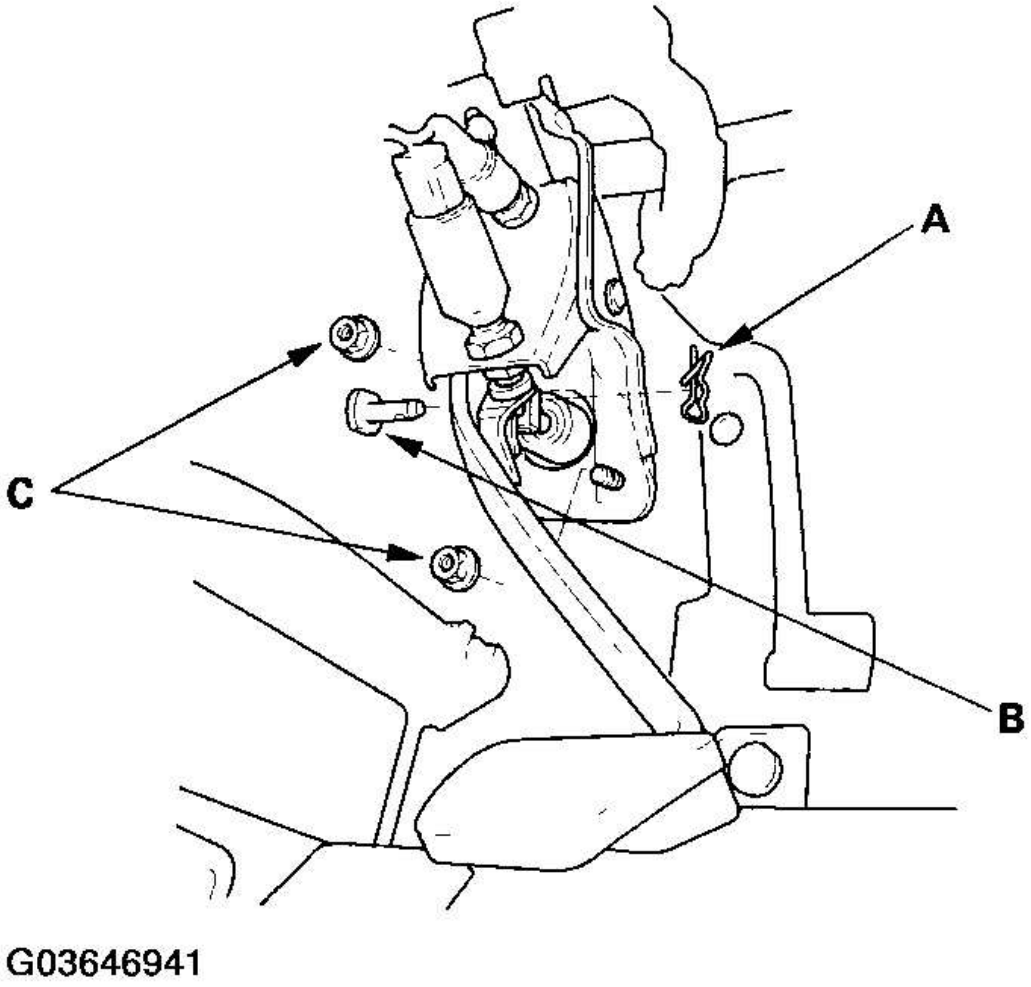


Fig. 6: Prying Lock Pin And Pulling Pedal Pin Out Of Yoke
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the reservoir mounting bolt (A).

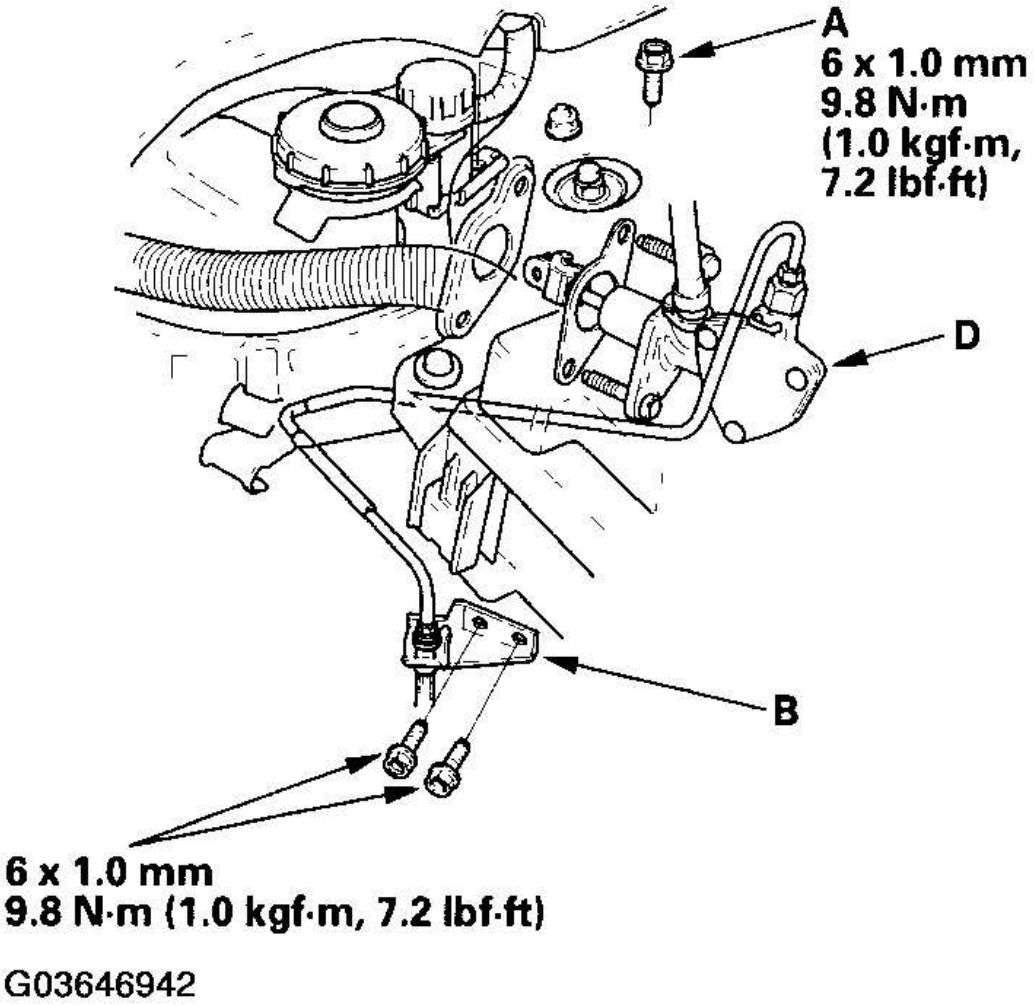


Fig. 7: Removing Reservoir Mounting Bolt (Type A)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

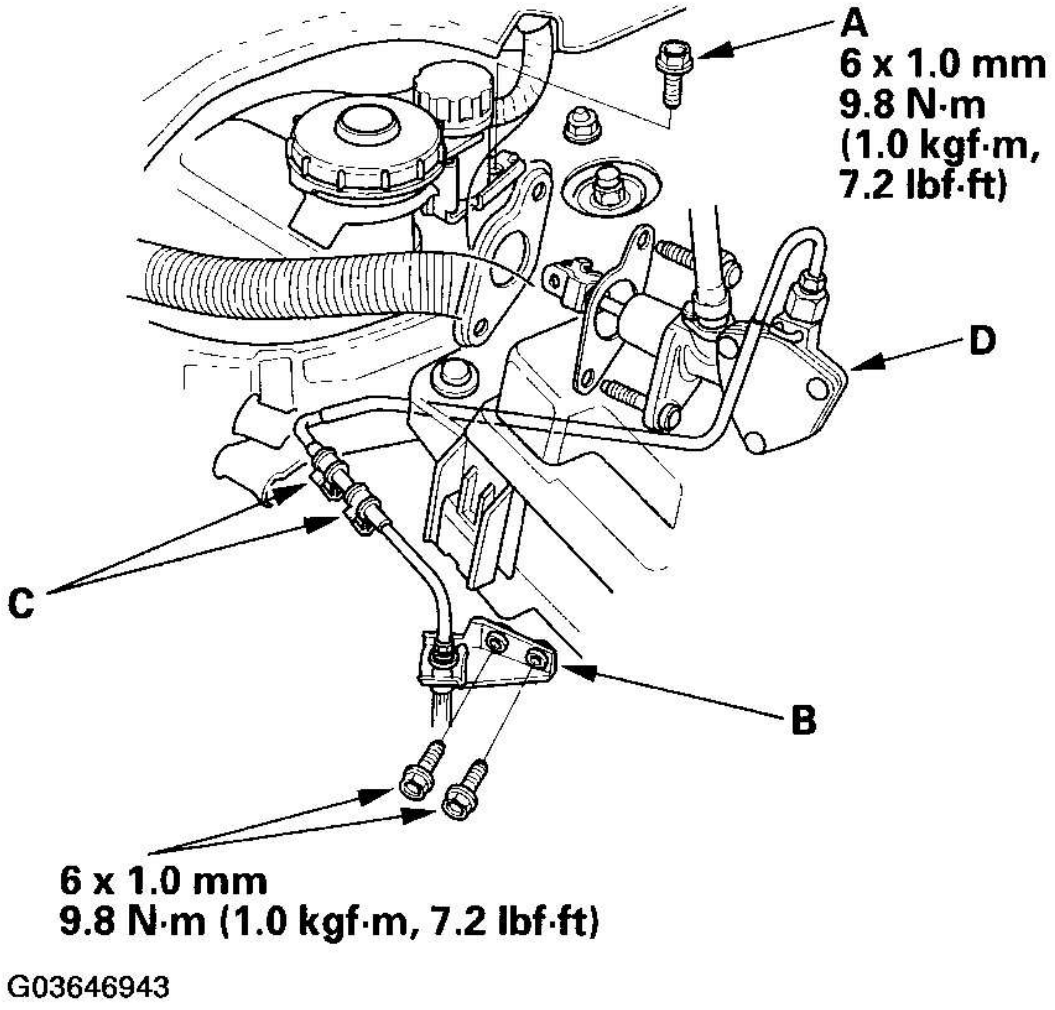


Fig. 8: Removing Reservoir Mounting Bolt (Type B)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the clutch line bracket (B).
10. Remove the clutch line clips (C).
11. Remove the clutch master cylinder (D).
12. Disconnect the reservoir hose (A), then remove the retaining clip (B) and remove clutch line (C) from the clutch master cylinder (D). Plug the end of the reservoir hose and clutch line to prevent brake fluid from coming out.

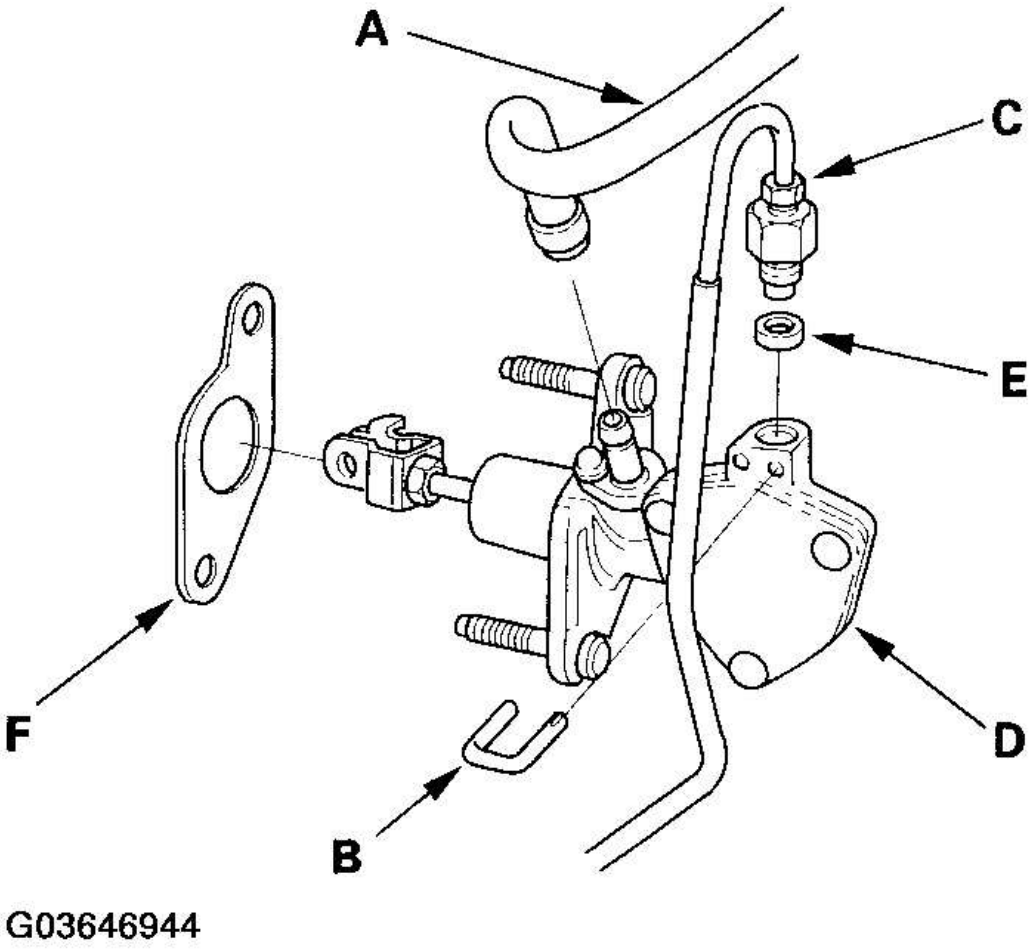


Fig. 9: Disconnecting Reservoir Hose And Removing Clutch Line From Clutch Master Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Remove the O-ring (E) and clutch master cylinder seal (F) from the clutch master cylinder.

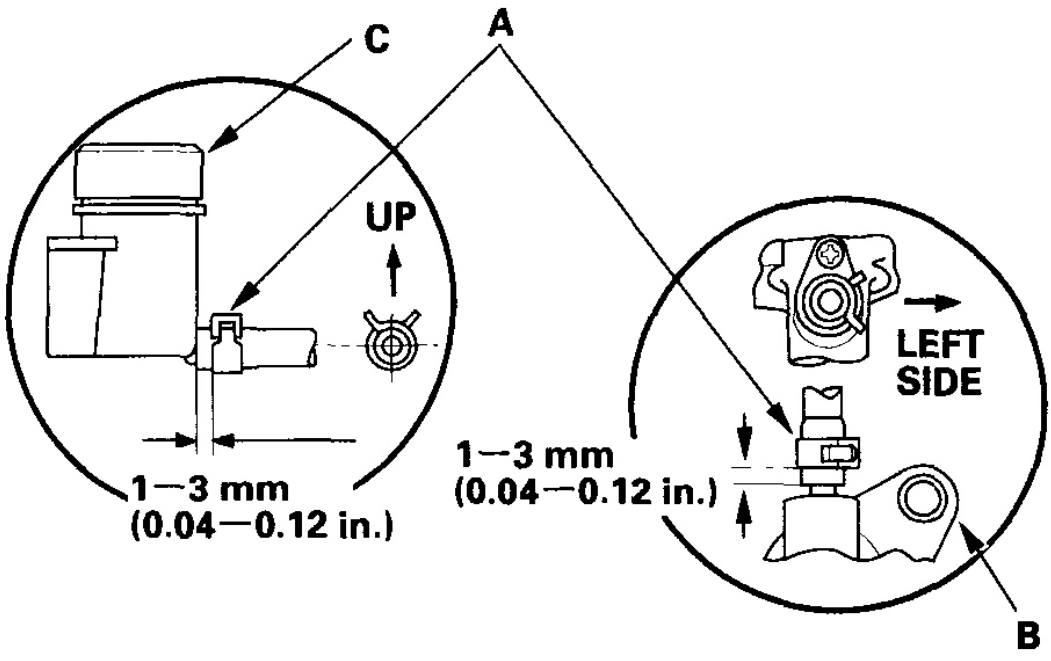


Fig. 10: Identifying Hose Clamps Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Install the clutch master cylinder in the reverse order of removal, and note these items.
    - Apply brake assembly lube to the clutch line, and install a new O-ring.
    - Tighten the master cylinder mounting nuts to 13 N.m (1.3 kgf.m, 9.4 lbf.ft).
    - Install the battery base (see step 47 on **ENGINE INSTALLATION**).
    - Install the air cleaner housing (see **AIR CLEANER REMOVAL/INSTALLATION**).
    - Install the battery. Connect the positive cable to the battery first, then connect the negative cable.
    - Enter the anti-theft code for the radio and the navigation system, then enter the customer's audio presets.
    - Do the power window control unit reset procedure (see **RESETTING**

THE POWER WINDOW CONTROL UNIT).

15. Make sure the hose clamps (A) are positioned on the master cylinder (B) and reservoir (C) as shown in **Fig. 10**
16. To prevent the retaining clip (A) from coming off, pry apart the tip of the retaining clip (B) with a screwdriver.

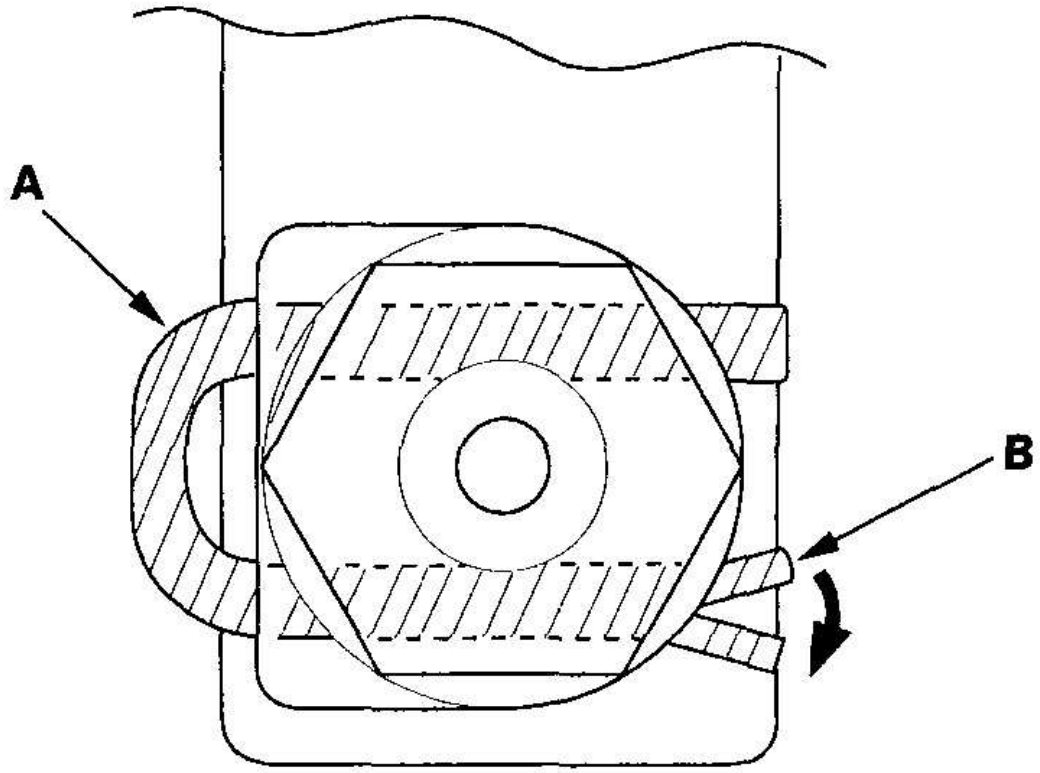


Fig. 11: Prying Tip Of Retaining Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Bleed the clutch master hydraulic system (see step 12 in **Slave Cylinder Replacement**).

NOTE: Reservoir filling is covered in the bleeding procedure.

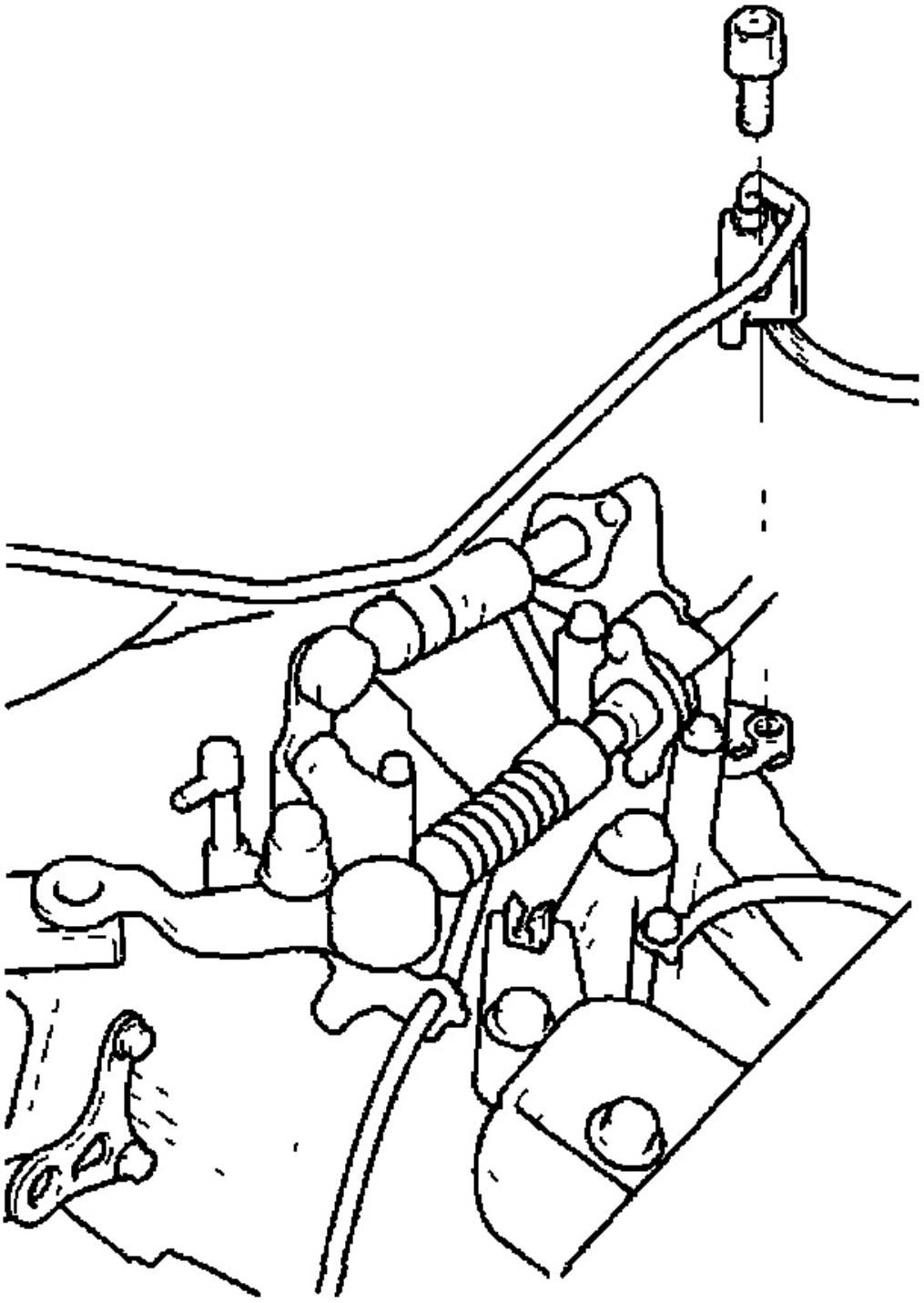
18. Make sure the fluid level in the reservoir is at the MAX (upper) level line (see step 13 in **Slave Cylinder Replacement**
19. Adjust the clutch pedal, clutch pedal position switch, and clutch interlock switch (see **Clutch Pedal, Clutch Pedal Position Switch, and Clutch Interlock Switch Adjustment**.
20. Check the clutch operation and check for leaks.
21. Test-drive the vehicle.

SLAVE CYLINDER REPLACEMENT

NOTE:

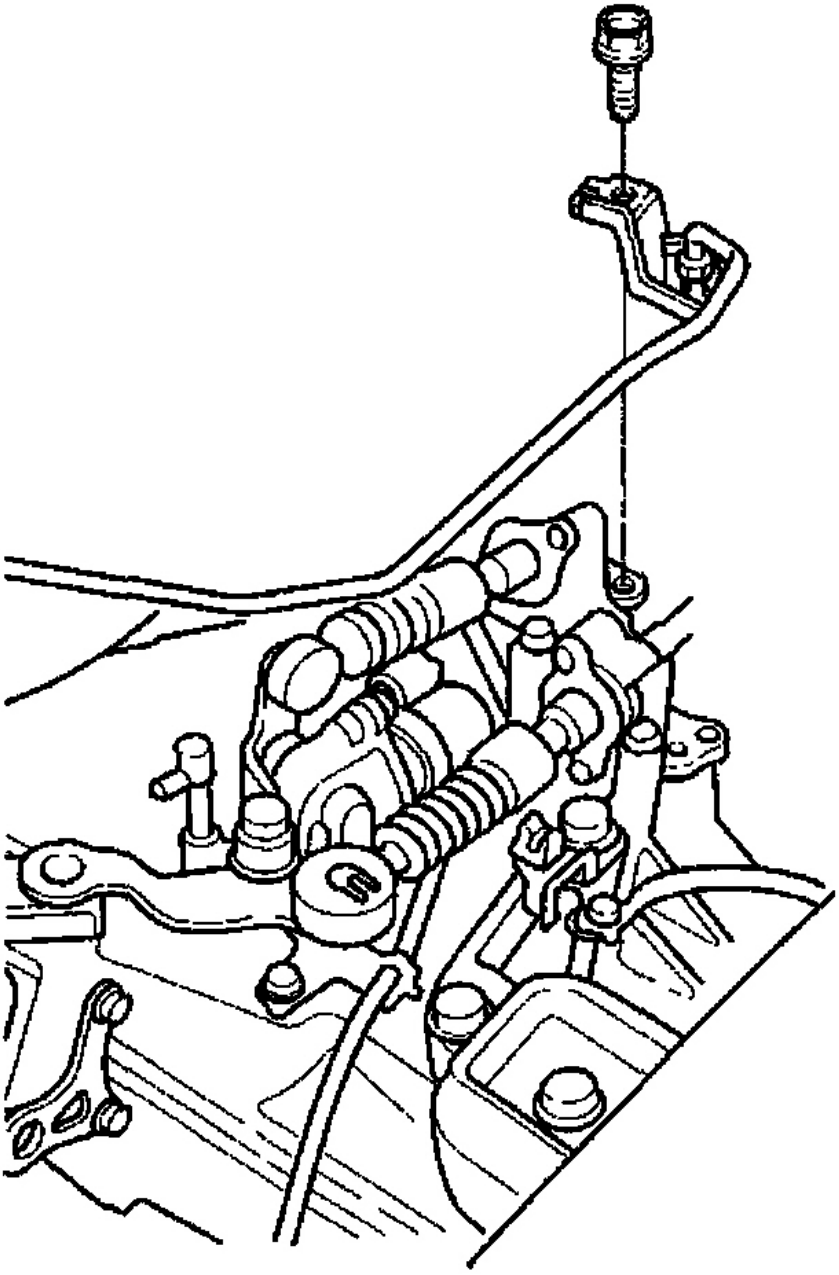
- **Use fender covers to avoid damaging painted surfaces.**
- **Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid does contact the paint, wash it off immediately with water.**

1. Make sure you have the anti-theft codes for the audio unit and the navigation system, then write down the audio presets.
2. Disconnect the negative cable from the battery first, then disconnect the positive cable.
3. Remove the battery.).
4. Remove the air cleaner housing (see **AIR CLEANER REMOVAL/INSTALLATION**).
5. Remove the battery base (see step 10 on **ENGINE REMOVAL** .
6. Remove the clutch line bracket.



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Fig. 12: Removing Clutch Line Bracket (Type A)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 13: Removing Clutch Line Bracket (Type B)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the mounting bolts (A) and the slave cylinder (B)

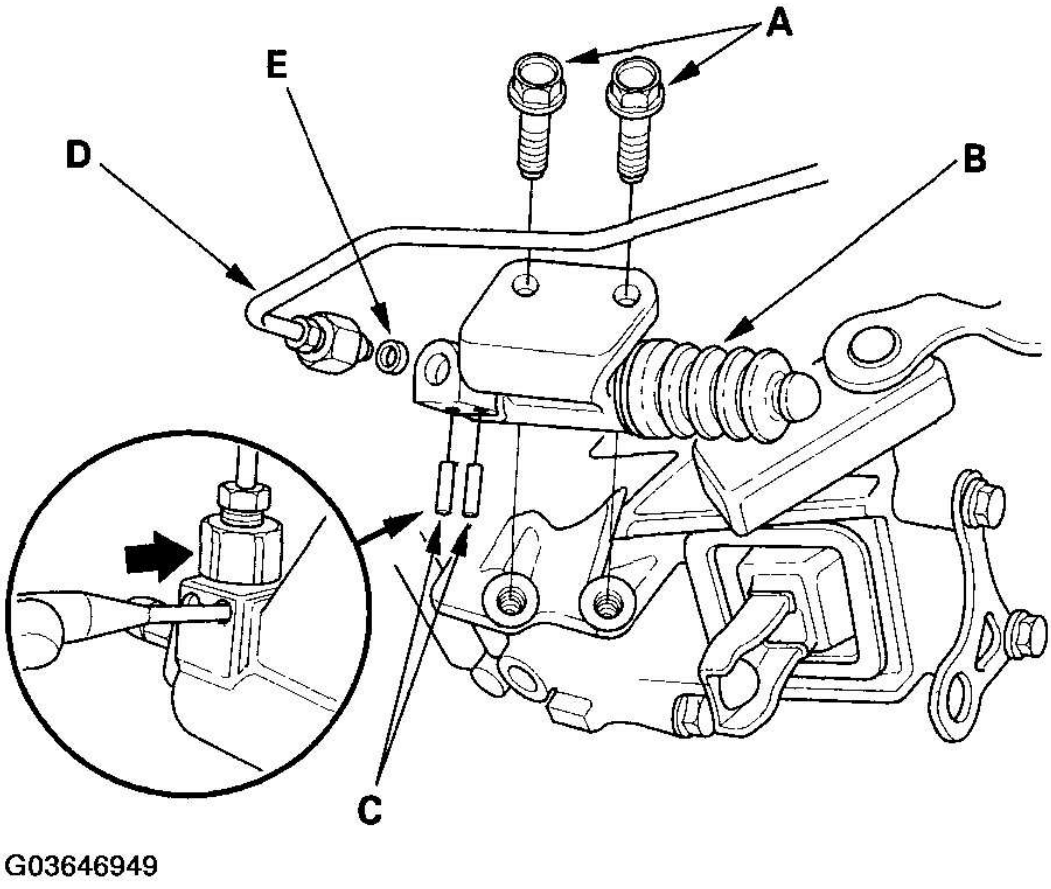


Fig. 14: Removing Mounting Bolts And Slave Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the roll pins (C). Disconnect the clutch line (D), and remove the O-ring (E). Plug the end of the clutch line to prevent brake fluid from coming out.
9. Install the slave cylinder in the reverse order of removal. Install a new O-ring (A).

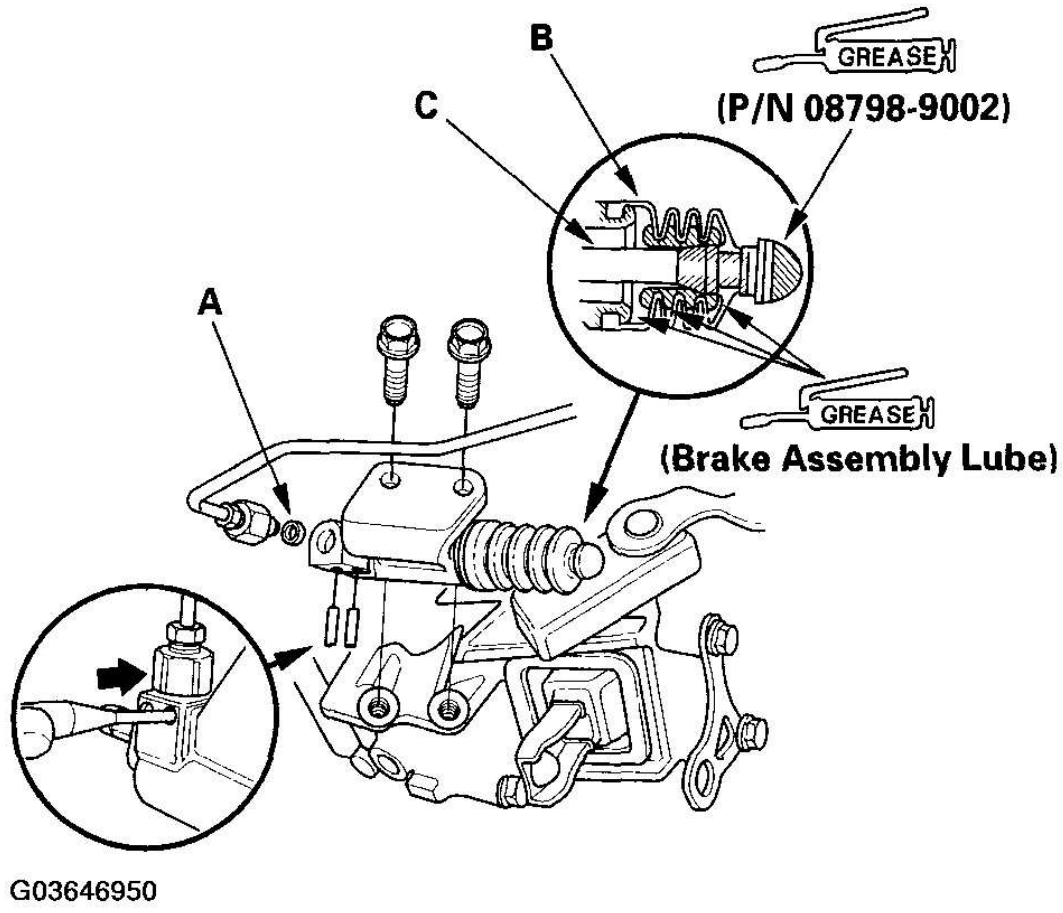


Fig. 15: Installing Slave Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Pull back the boot (B), and apply brake assembly lube to the boot and slave cylinder rod (C). Reinstall the boot.
11. Apply super high temp urea grease (P/N 08798-9002) to the pushrod of the slave cylinder. Tighten the slave cylinder mounting bolts to 22 N.m (2.2 kgf.m, 16 lbf.ft).
12. Bleed the clutch hydraulic system.
    - Attach a hose to the bleeder screw (A), and suspend the hose in a container of brake fluid.
    - Make sure there is an adequate supply of fluid in the reservoir, then slowly

pump the clutch pedal until no more bubbles appear at the bleeder hose.

- It may be necessary to limit the movement of the release fork (B) with a block of wood to remove all the air from the system.
- Tighten the bleeder screw to 8 N.m (0.8 kgf.m, 5.8 lbf.ft); do not overtighten it.
- After bleeding, refill the reservoir to the MAX mark with fluid.
- Use only Honda DOT 3 brake fluid from an unopened container.

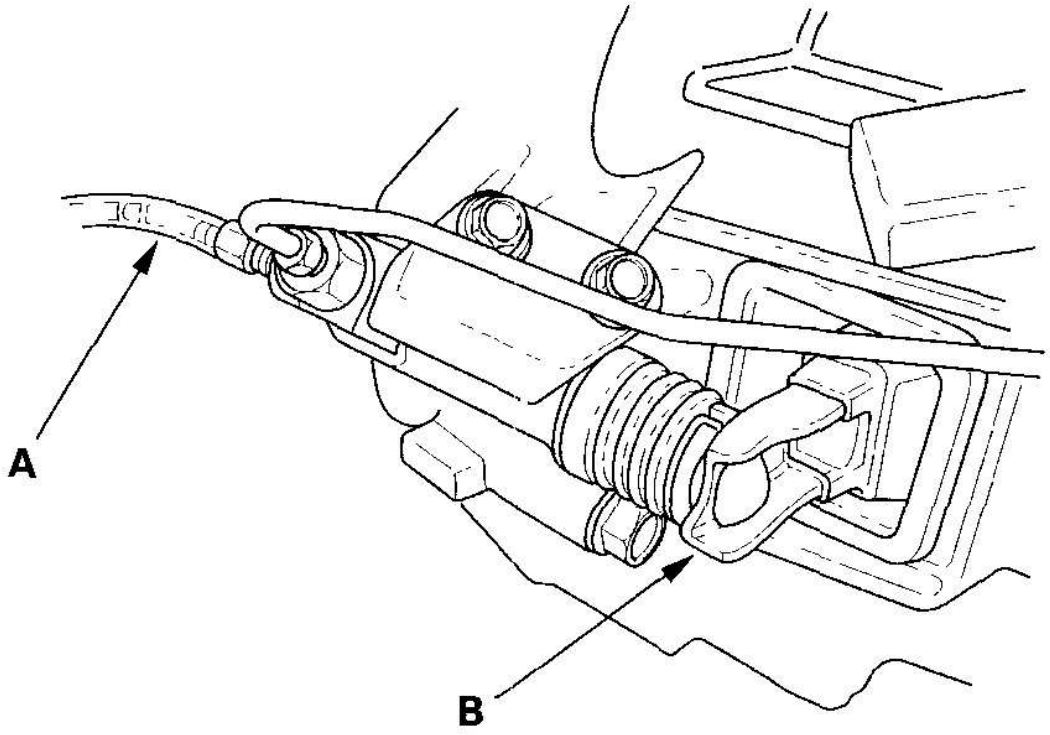


Fig. 16: Bleeding Clutch Hydraulic System
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Make sure the fluid level in the reservoir is at the MAX (upper) level line (A).

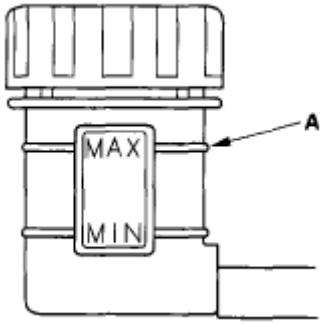


Fig. 17: Identifying Brake Fluid In Reservoir To MAX (Upper) Level

14. Install the air cleaner assembly (see **AIR CLEANER REMOVAL/INSTALLATION**).
15. Install the battery base (see step 47 on **ENGINE INSTALLATION**
16. Install the battery. Clean the battery posts and cable terminals. Connect the positive cable to the battery first, then connect the negative cable.
17. Check the clutch operation and check for leaks.
18. Test-drive vehicle.
19. Enter the anti-theft codes for the radio and navigation system, then enter the audio presets, and set the clock.

CLUTCH REPLACEMENT

Special Tools Required

- Clutch alignment disc 07 JAF-PM7011A
- Ring gear holder 07LAB-PV00100 or 07924-PD20003
- Clutch alignment shaft 07ZAF-PR8A100
- Remover handle 07936-3710100

PRESSURE PLATE AND CLUTCH DISC REMOVAL

1. Check the height of the diaphragm spring fingers using clutch alignment disc (A), clutch alignment shaft (B), remover handle (C), and a feeler gauge (D). If the height is more than the service limit, replace the pressure plate.

   Standard (New): 0.6 mm (0.02 in.) max.

Service Limit: 0.8 mm (0.03 in.)

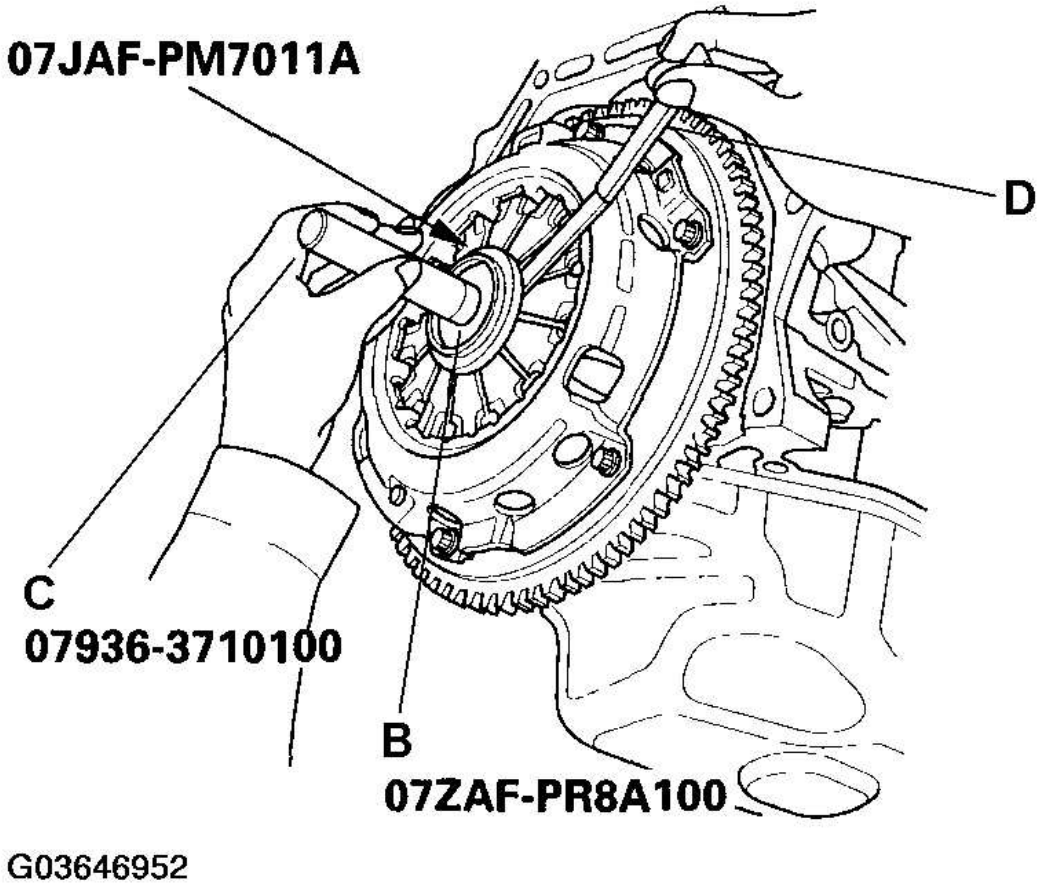


Fig. 18: Checking Diaphragm Spring Fingers Height
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the ring gear holder (A), clutch alignment shaft (B), and remover handle (C).

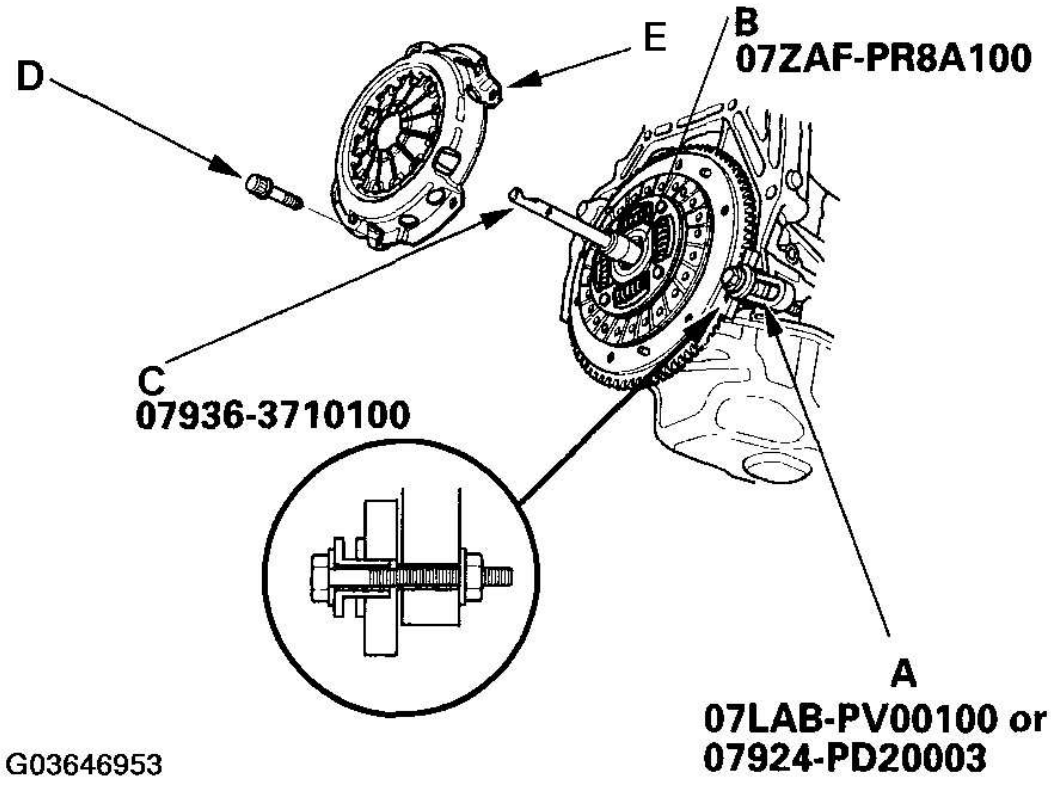


Fig. 19: Installing Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. To prevent warping, unscrew the pressure plate mounting bolts (D) in a crisscross pattern in several steps, then remove the pressure plate (E).
4. Inspect the fingers of the diaphragm spring (A) for wear at the release bearing contact area.

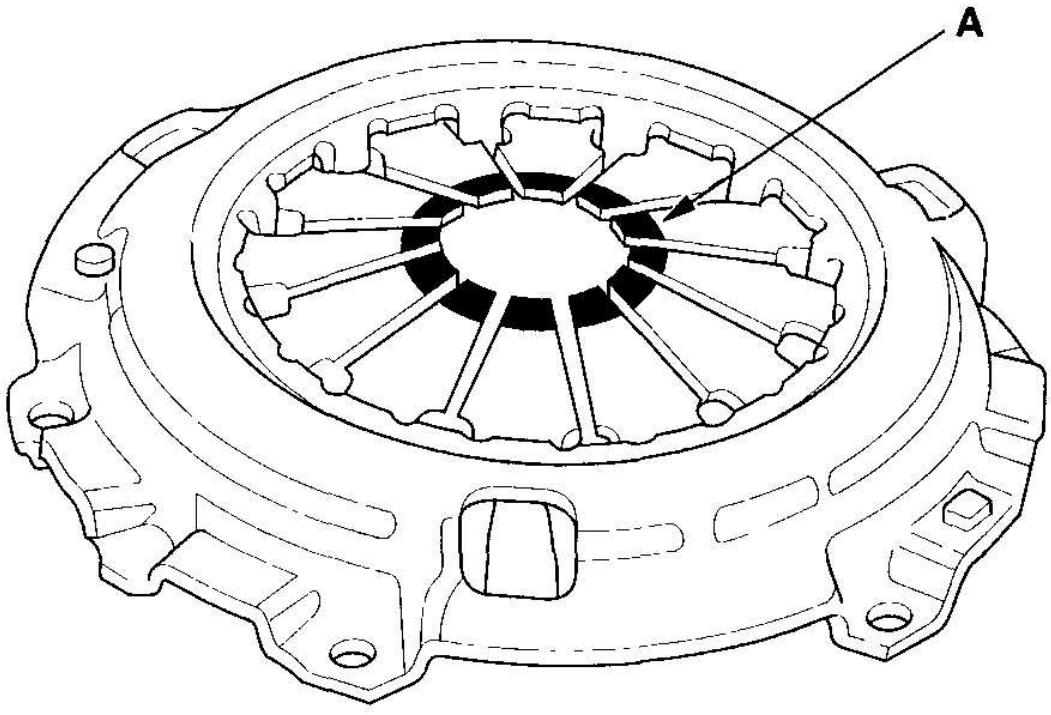


Fig. 20: Inspecting Fingers Of Diaphragm Spring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Inspect the pressure plate surface (A) for wear, cracks, and burning.

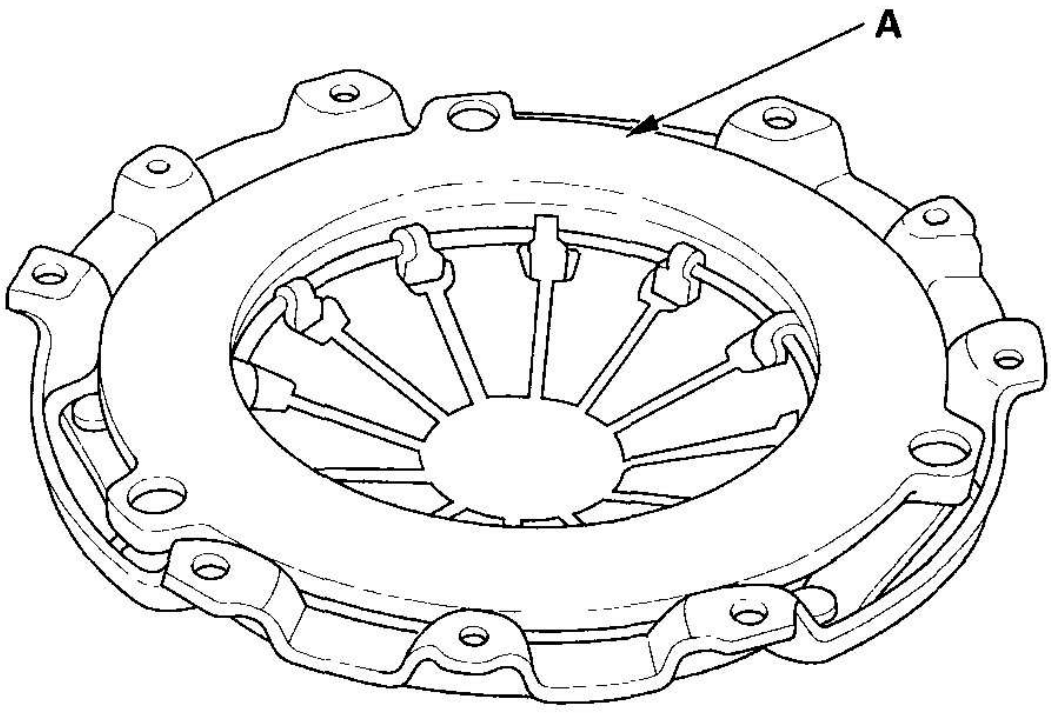


Fig. 21: Inspecting Pressure Plate Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Inspect for warpage using a straight edge (A) and a feeler gauge (B). Measure across the pressure plate (C). If the warpage is more than the service limit, replace the pressure plate.

   Standard (New): 0.03 mm (0.001 in.) max.

   Service Limit: 0.15 mm (0.006 in.)

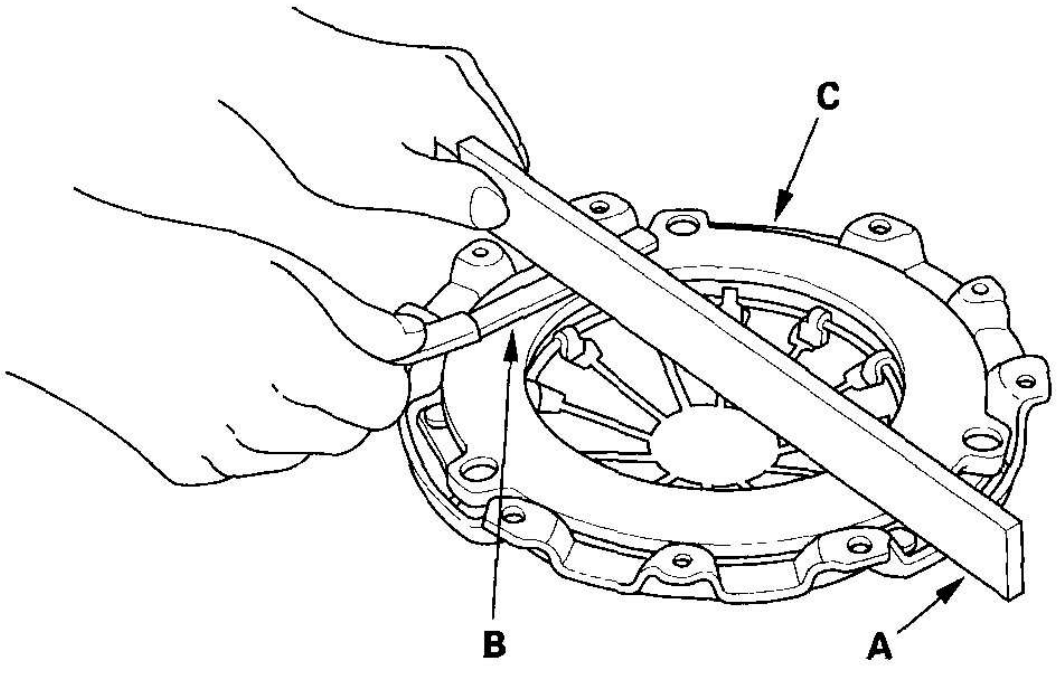


Fig. 22: Inspecting Warpage Using Straight Edge And Feeler Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the clutch disc, clutch alignment shaft (B) and remover handle (C).

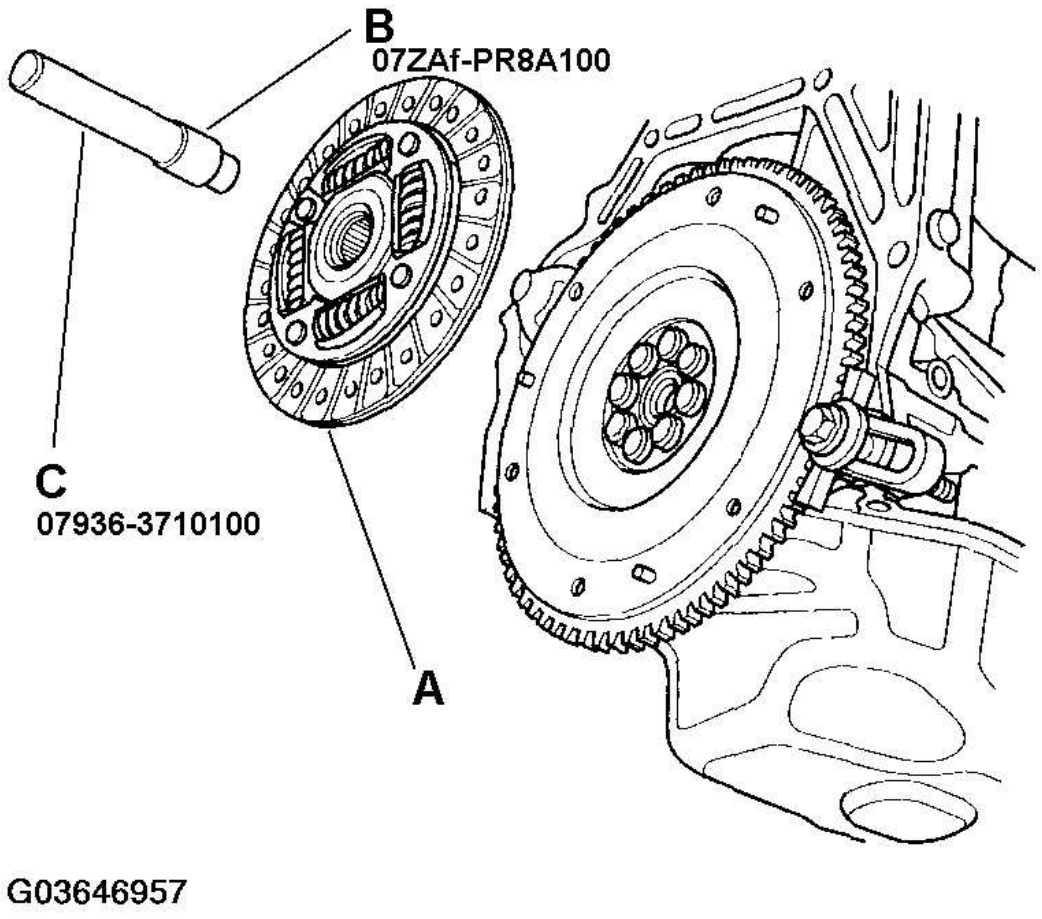
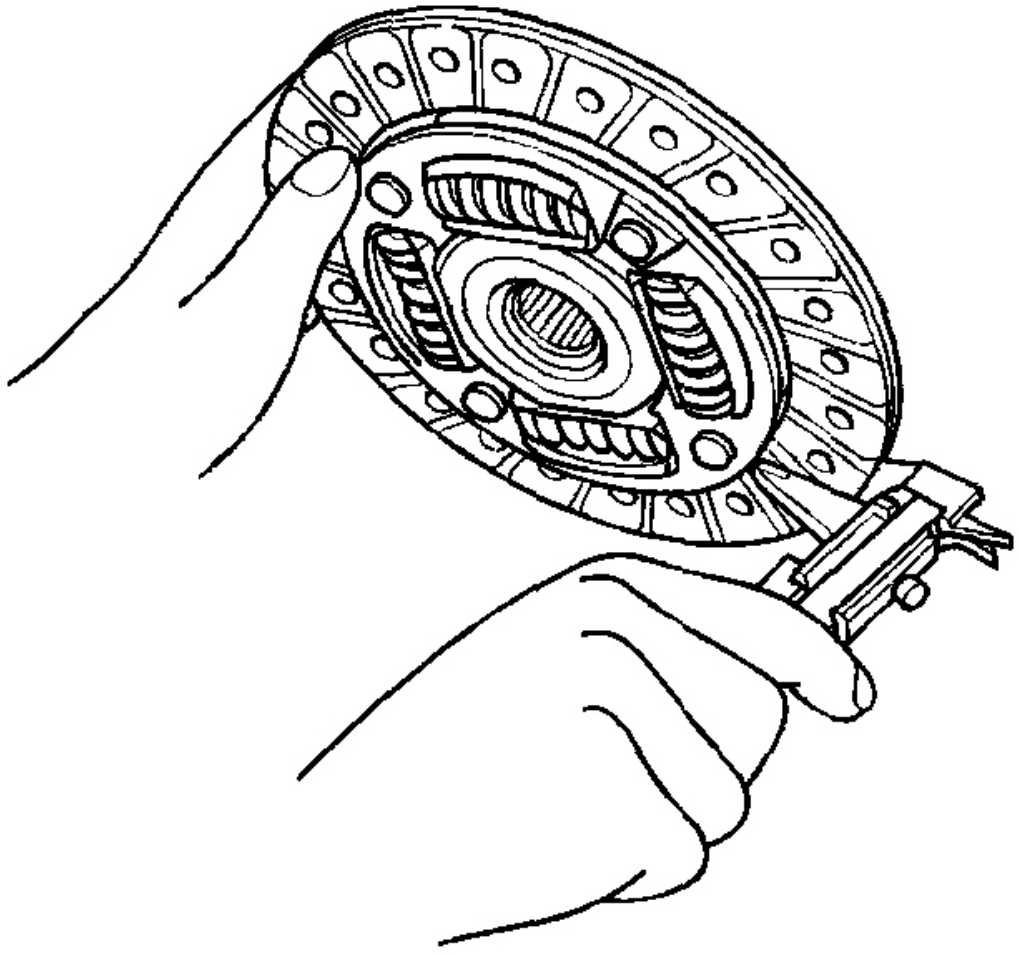


Fig. 23: Removing Clutch Disc And Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Inspect the lining of the clutch disc for signs of slippage or oil. If the clutch disc looks burnt or is oil soaked, replace it. Find and repair the source of the oil leak, if the clutch disc is soaked.
9. Measure the clutch disc thickness. If the thickness is less than the service limit, replace the clutch disc.

   Standard (New): 8.6-9.2 mm (0.343-0.366 in.)

   Service Limit: 6.0 mm (0.24 in.)



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Fig. 24: Measuring Clutch Disc Thickness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Measure the rivet depth from the clutch disc lining surface (A) to the rivets (B) on both sides. If the rivet depth is less than the service limit, replace the clutch disc.

Standard (New): 1.65-2.25 mm (0.065-0.089 in.)

Service Limit: 0.7 mm (0.03 in.)

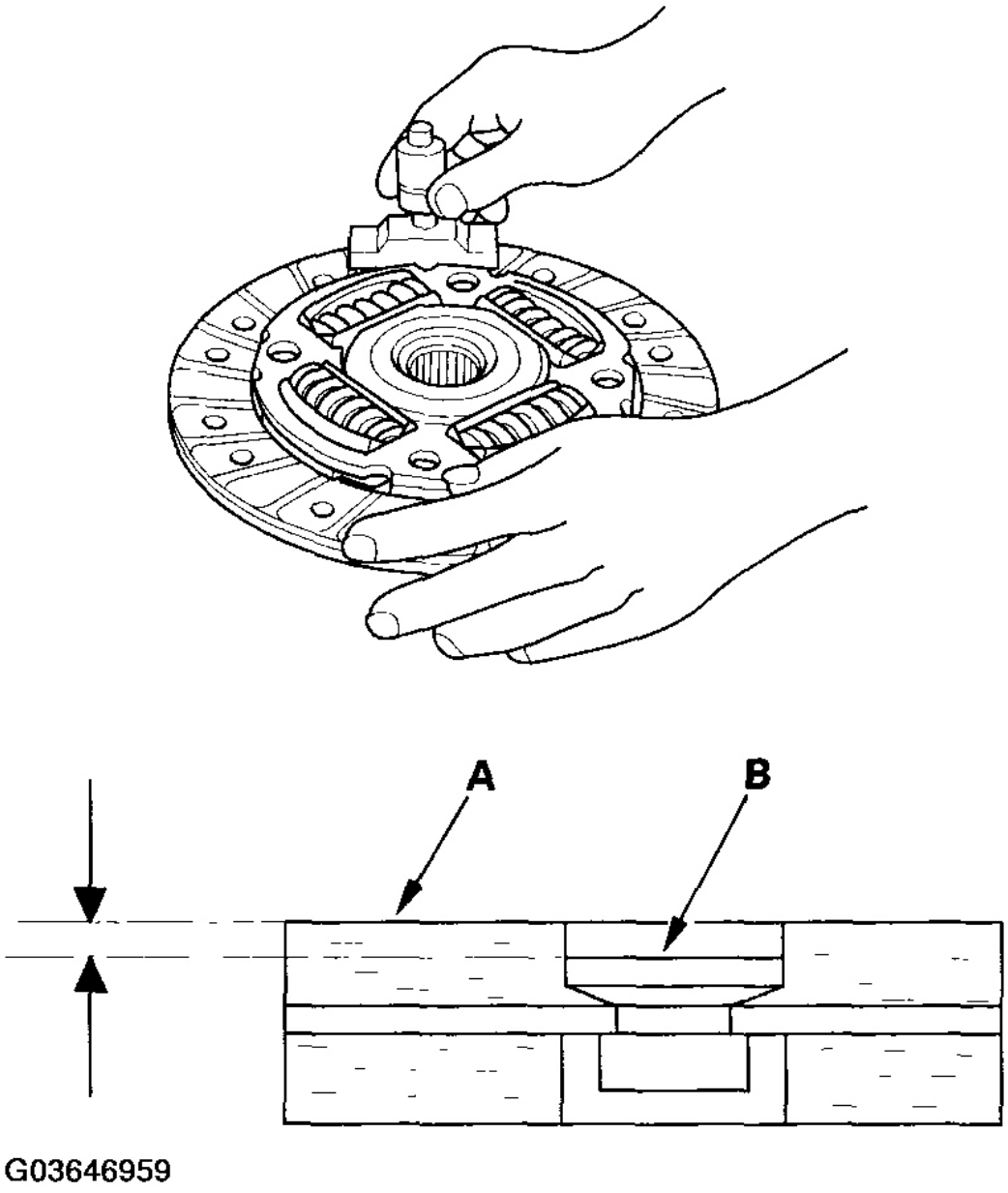


Fig. 25: Measuring Rivet Depth From Clutch Disc Lining Surface To Rivets
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FLYWHEEL INSPECTION

1. Inspect the ring gear teeth for wear and damage.
2. Inspect the clutch disc mating surface on the flywheel for wear, cracks, and burning.
3. Measure the flywheel runout with the flywheel (A) installed on the engine. Set the dial indicator (B). Turn the flywheel at least two turns while pressing the flywheel. If the runout is more than the service limit, replace the flywheel, and recheck the runout. Resurfacing the flywheel is not recommended.

   Standard (New): 0.05 mm (0.002 in.) max.

   Service Limit: 0.15 mm (0.006 in.)

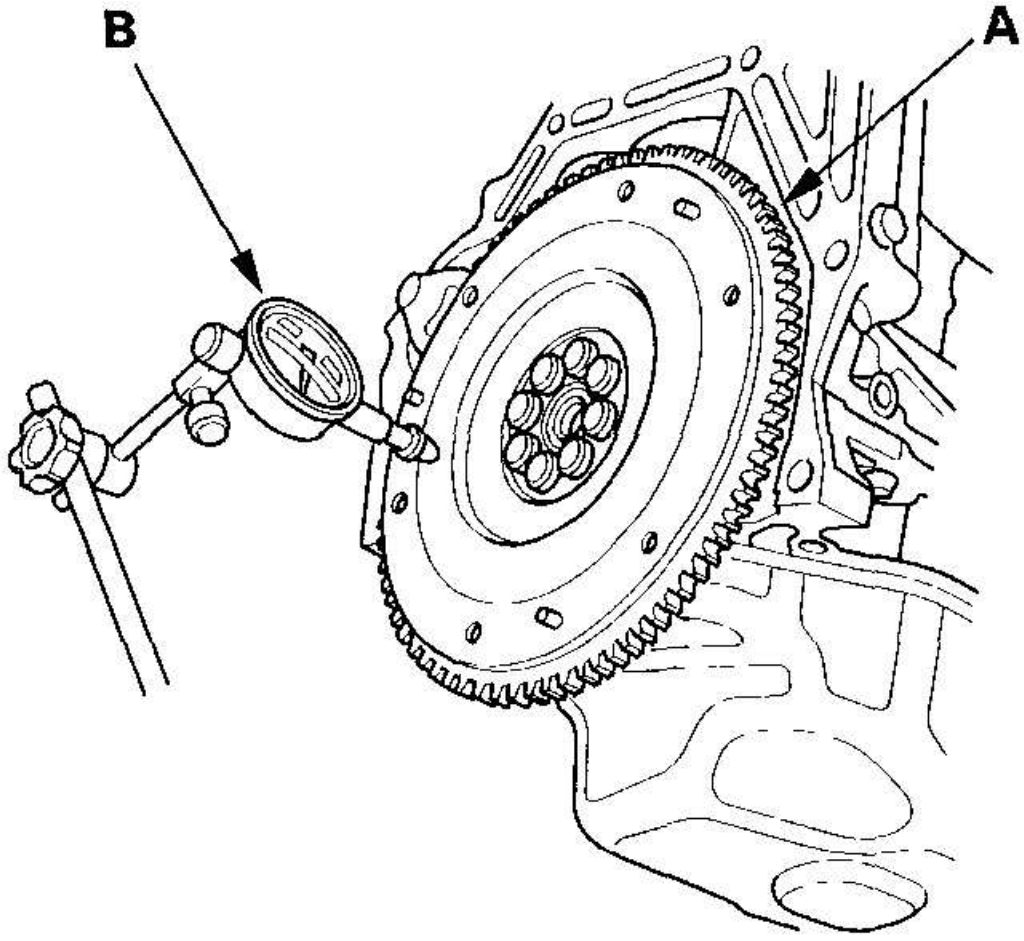


Fig. 26: Measuring Flywheel Runout
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FLYWHEEL REPLACEMENT

1. Install the ring gear holder (A).

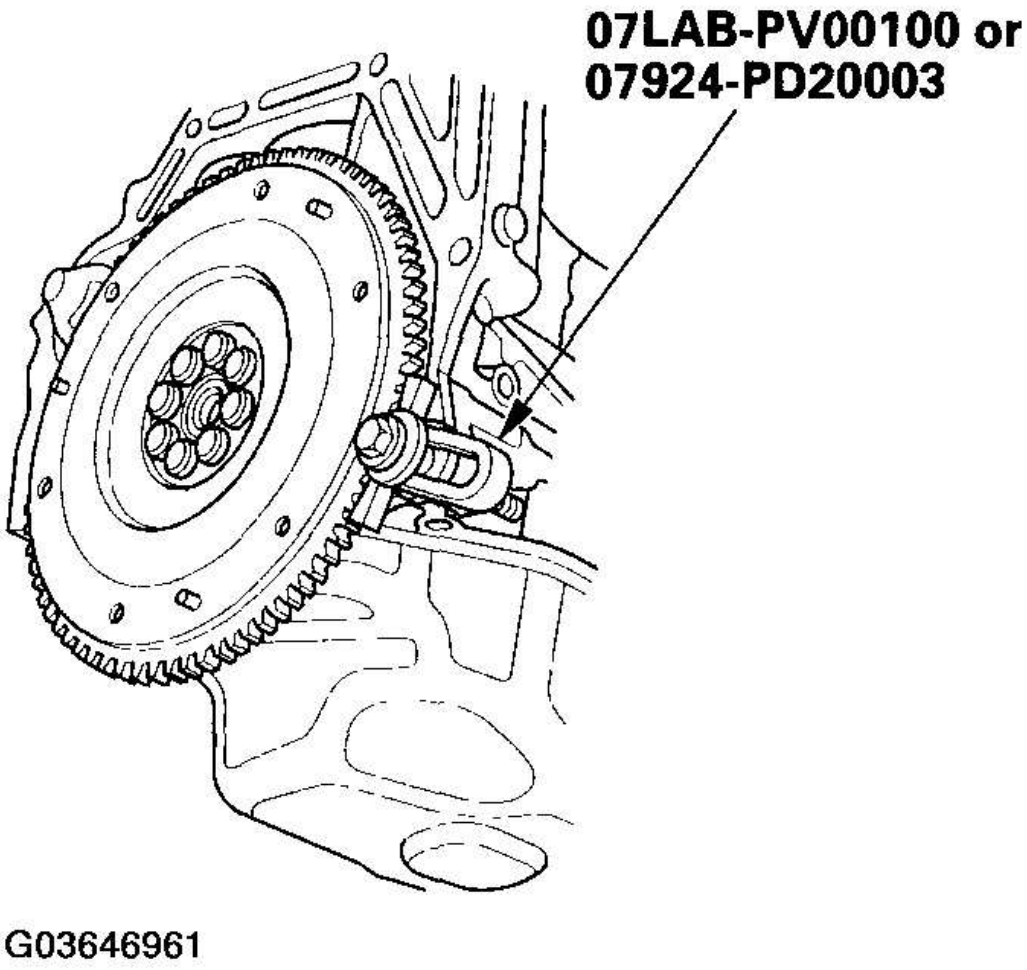


Fig. 27: Installing Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Loosen the flywheel mounting bolts in a crisscross pattern in several steps. Remove the bolts, then remove the flywheel.
3. Install the flywheel on the crankshaft, and install the mounting bolts, finger-tight.
4. Install the ring gear holder (A), then torque the flywheel mounting bolts (B) in a crisscross pattern in several steps.

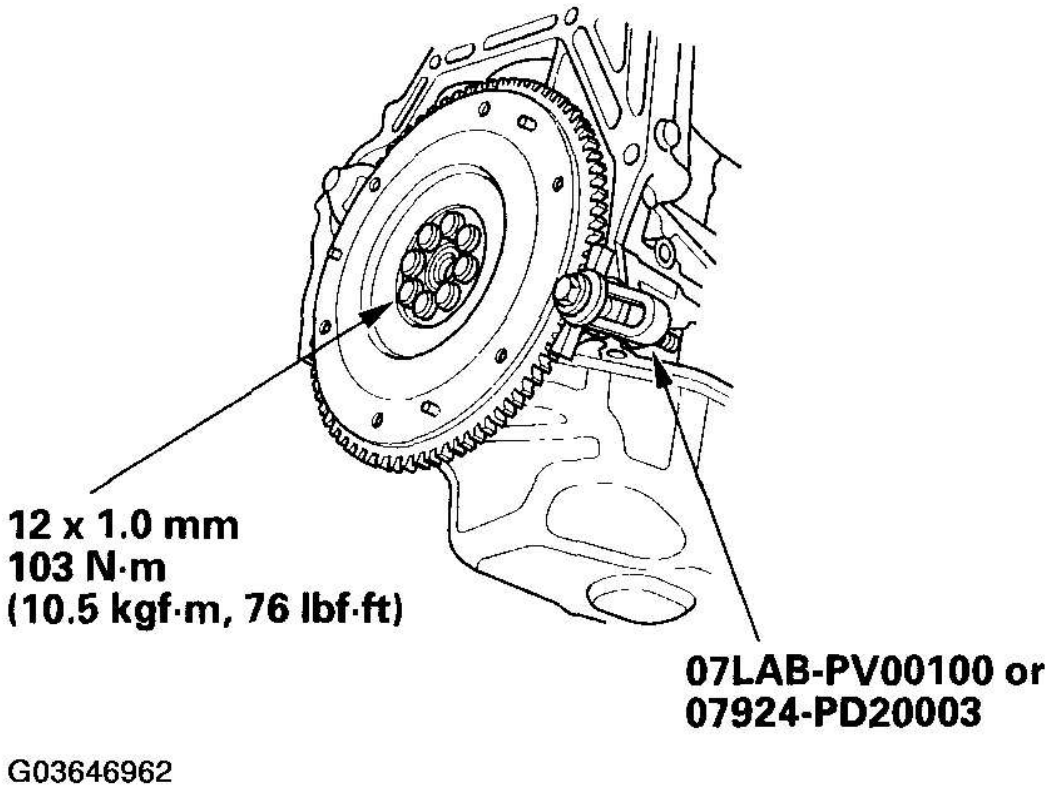


Fig. 28: Installing Special Tool And Tightening Flywheel Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CLUTCH DISC AND PRESSURE PLATE INSTALLATION

1. Temporarily install the clutch disc onto the splines of the transmission mainshaft. Make sure the clutch disc slides freely on the mainshaft.
2. Install the ring gear holder.

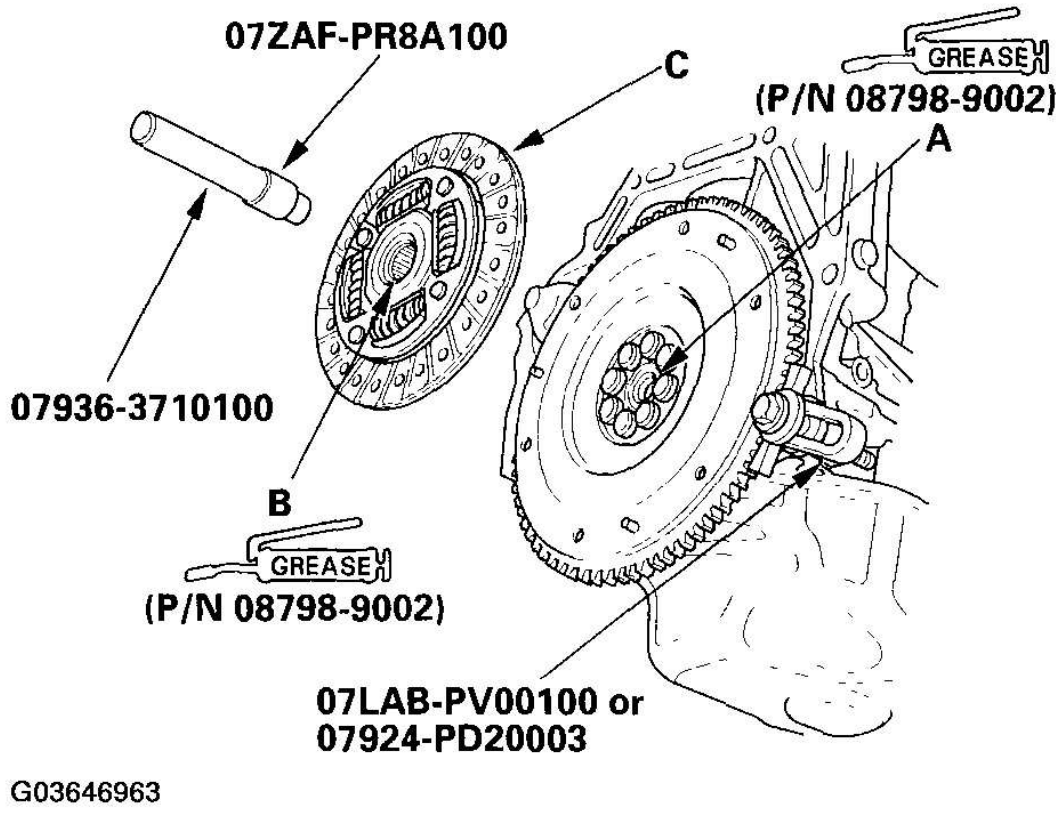


Fig. 29: Installing Ring Gear Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Apply a light coat of super high temp urea grease (P/N 08798-9002) to the crankshaft pilot bushing (B).
4. Apply super high temp urea grease (P/N 08798-9002) to the splines (C) of the clutch disc (D), then install the clutch disc using the clutch alignment shaft (E) and remover handle (F).
5. Install the pressure plate (A) and the mounting bolts (B), finger-tight.

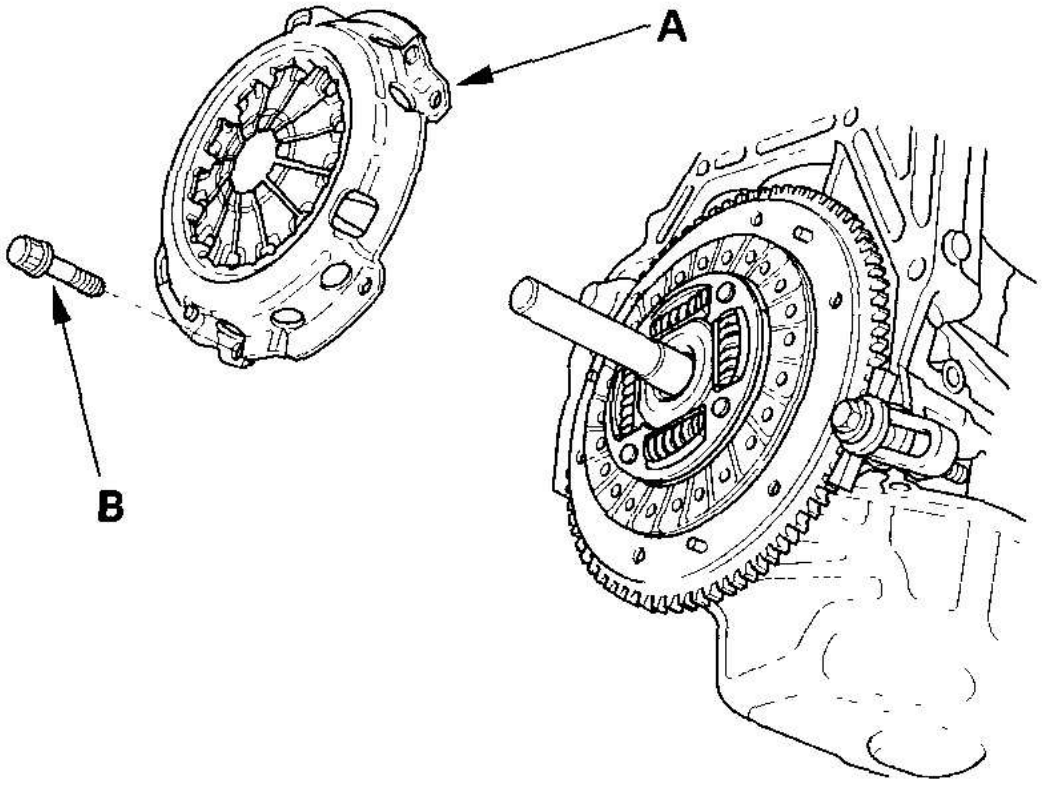
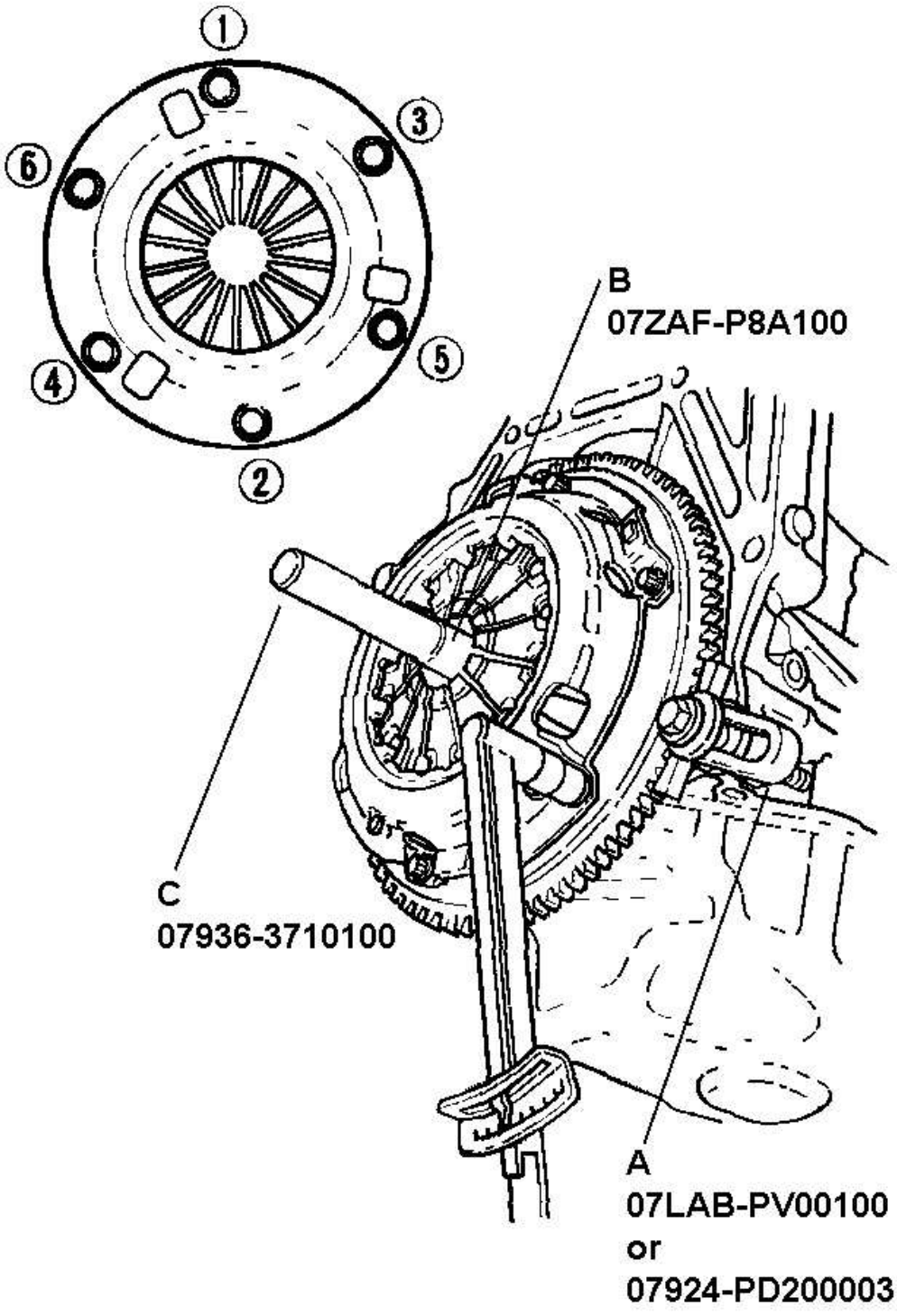


Fig. 30: Installing Pressure Plate And Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Torque the mounting bolts in a crisscross pattern. Tighten the bolts in several steps to prevent warping the diaphragm spring.


1
2
3
4
5
6
B
07ZAF-P8A100
C
07936-3710100
A
07LAB-PV00100
or
07924-PD200003

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Fig. 31: Tightening Mounting Bolts In Crisscross Pattern
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the ring gear holder (A), clutch alignment shaft (B), and remover handle (C).
8. Make sure the diaphragm spring fingers are all the same height.

RELEASE BEARING REPLACEMENT

1. Remove the release fork boot (A) from the clutch housing (B).

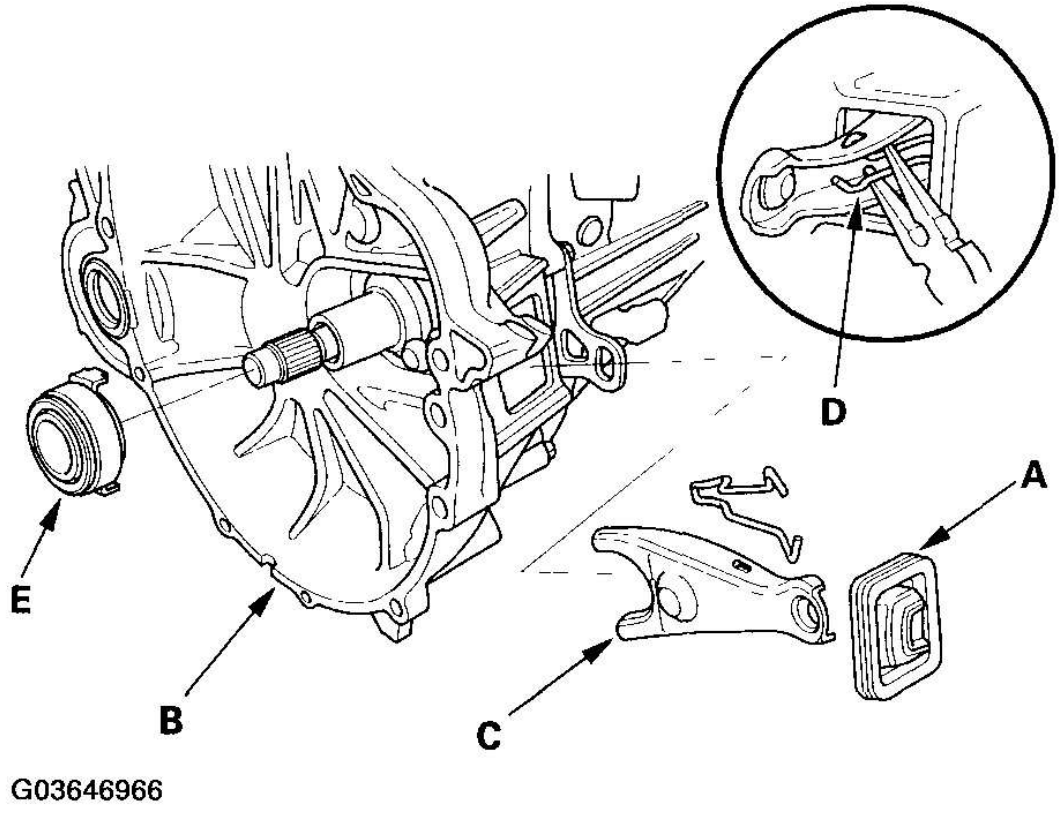


Fig. 32: Removing Release Fork From Clutch Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the release fork (C) from the clutch housing by squeezing the release fork set spring (D) with pliers. Remove the release bearing (E).

3. Check the play of the release bearing by spinning it by hand. If there is excessive play, replace the release bearing.

NOTE: The release bearing is packed with grease. Do not wash it in solvent.

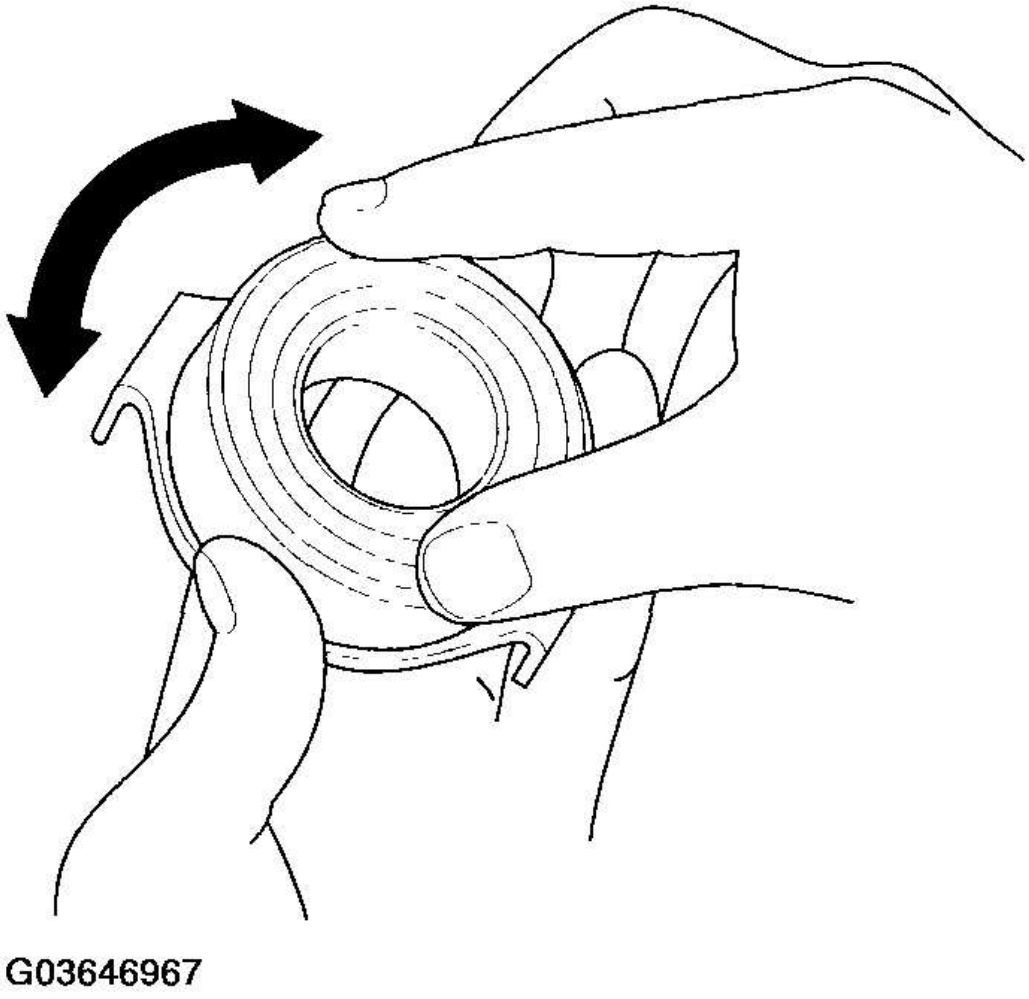


Fig. 33: Inspecting Release Bearing Play
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Apply super high temp urea grease (P/N 08798-9002) to the release fork (A),

the release fork bolt (B), the release bearing (C), and the release bearing guide (D) in the shaded areas.

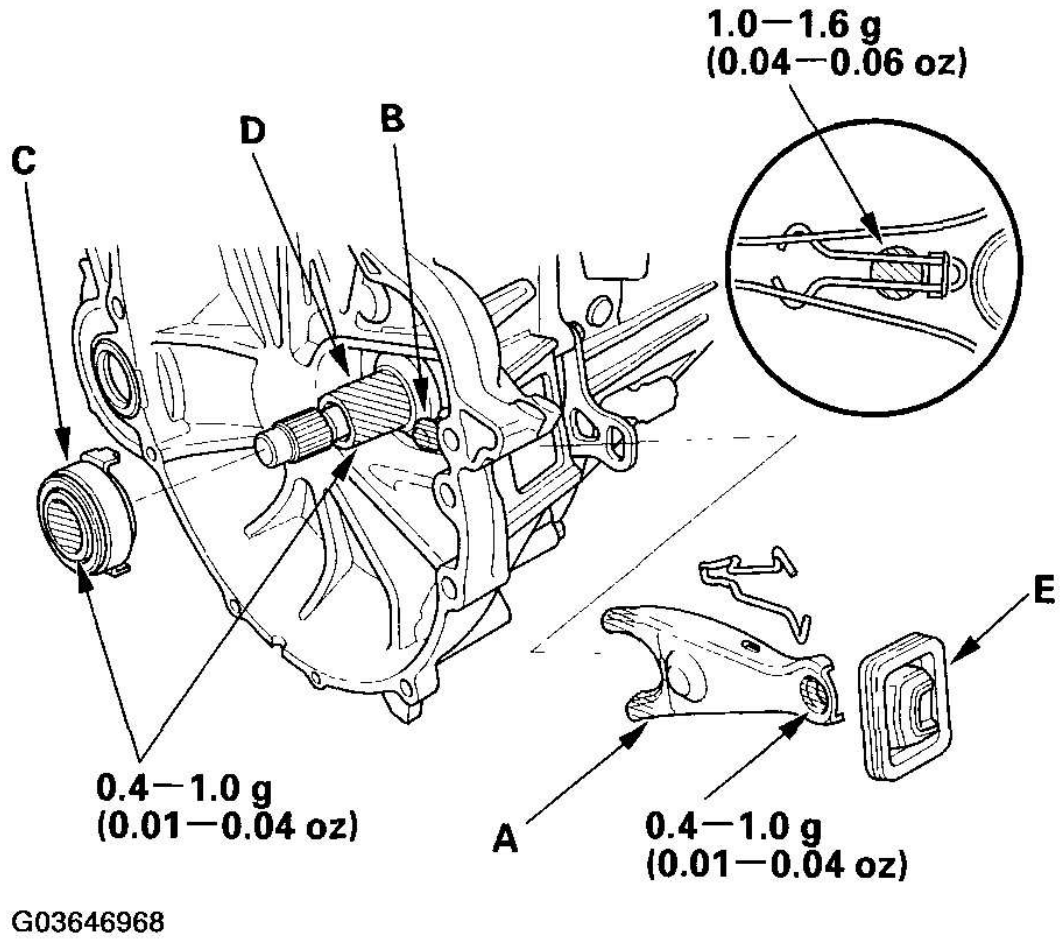


Fig. 34: Applying Grease To Release Fork
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. With the release fork slid between the release bearing pawls, install the release bearing on the mainshaft while inserting the release fork through the hole in the clutch housing.
6. Align the detent of the release fork with the release fork bolt, then press the release fork over the release fork bolt squarely.
7. Install the release fork boot (E). Make sure the boot seals around the release

fork and clutch housing.

8. Move the release fork (A) right and left to make sure that it fits properly against the release bearing (B) and that the release bearing slides smoothly.

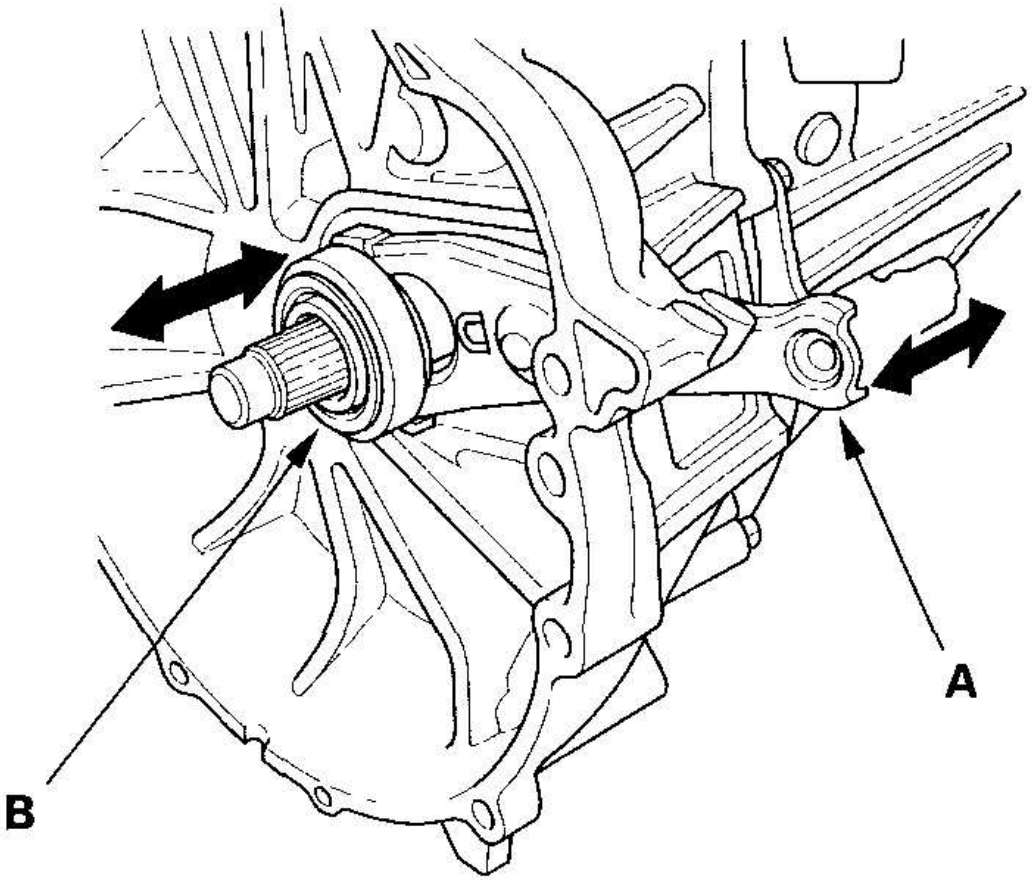


Fig. 35: Moving Release Fork Right And Left To Fit Properly Against Release Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ACCESSORIES & EQUIPMENT

Consoles - Accord

CENTER CONSOLE REMOVAL/INSTALLATION

Special Tools Required

KTC trim tool set SOJATP2014* *Available through the American Honda Tool and Equipment Program; call 888-424-6857

NOTE:

- **Take care not to scratch the front seat, dashboard, and related parts.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. M/T model: Remove the shift knob (A).
   -1 Lower the shift lever boot (B) to release the hooks (C) from the knob.
   -2 Remove the shift knob.

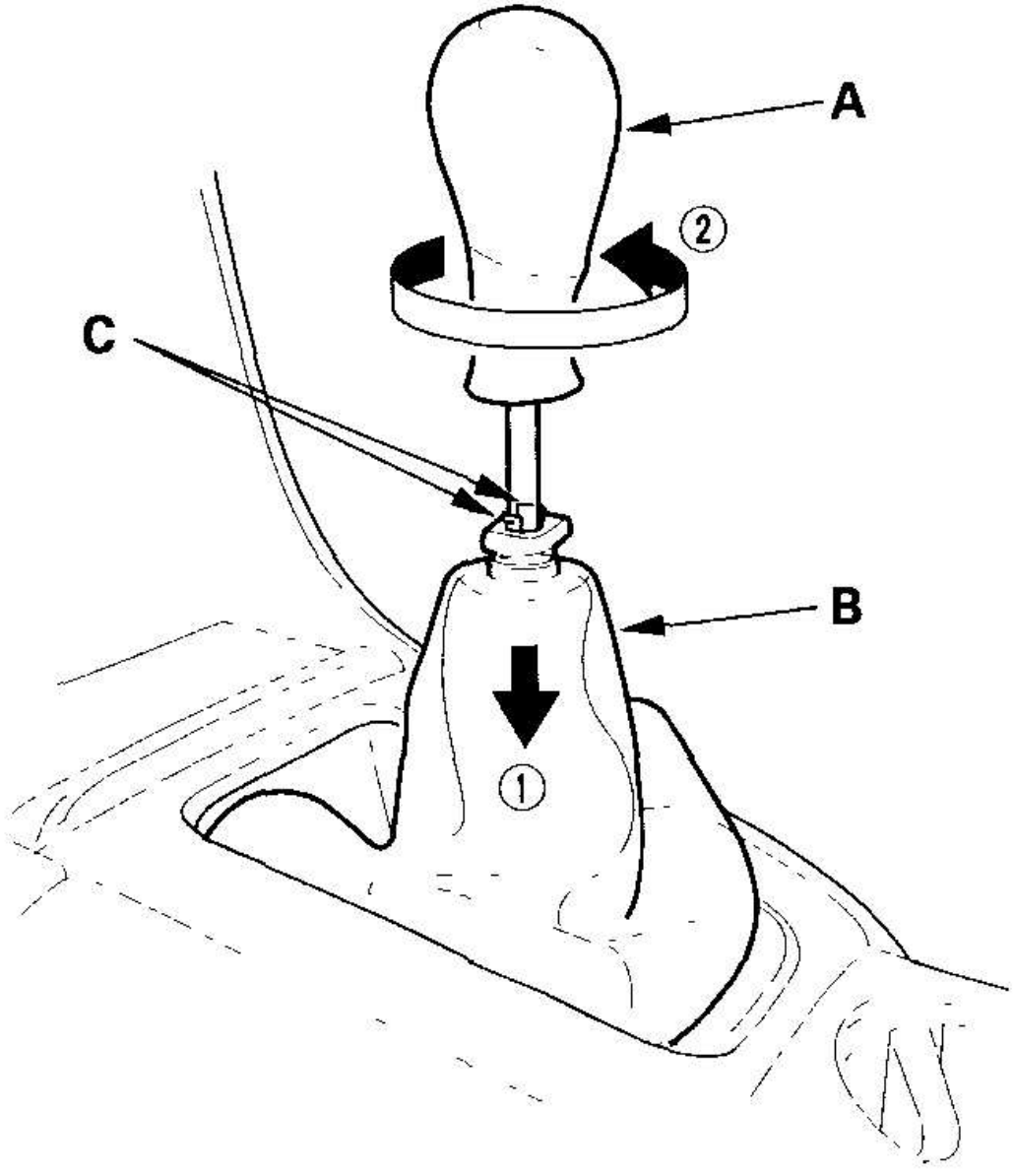


Fig. 1: Removing Shift Knob (M/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Detach the clips (A, B) by pulling the center console front panel (C) up. If

equipped, disconnect the seat heater switch connectors (D).

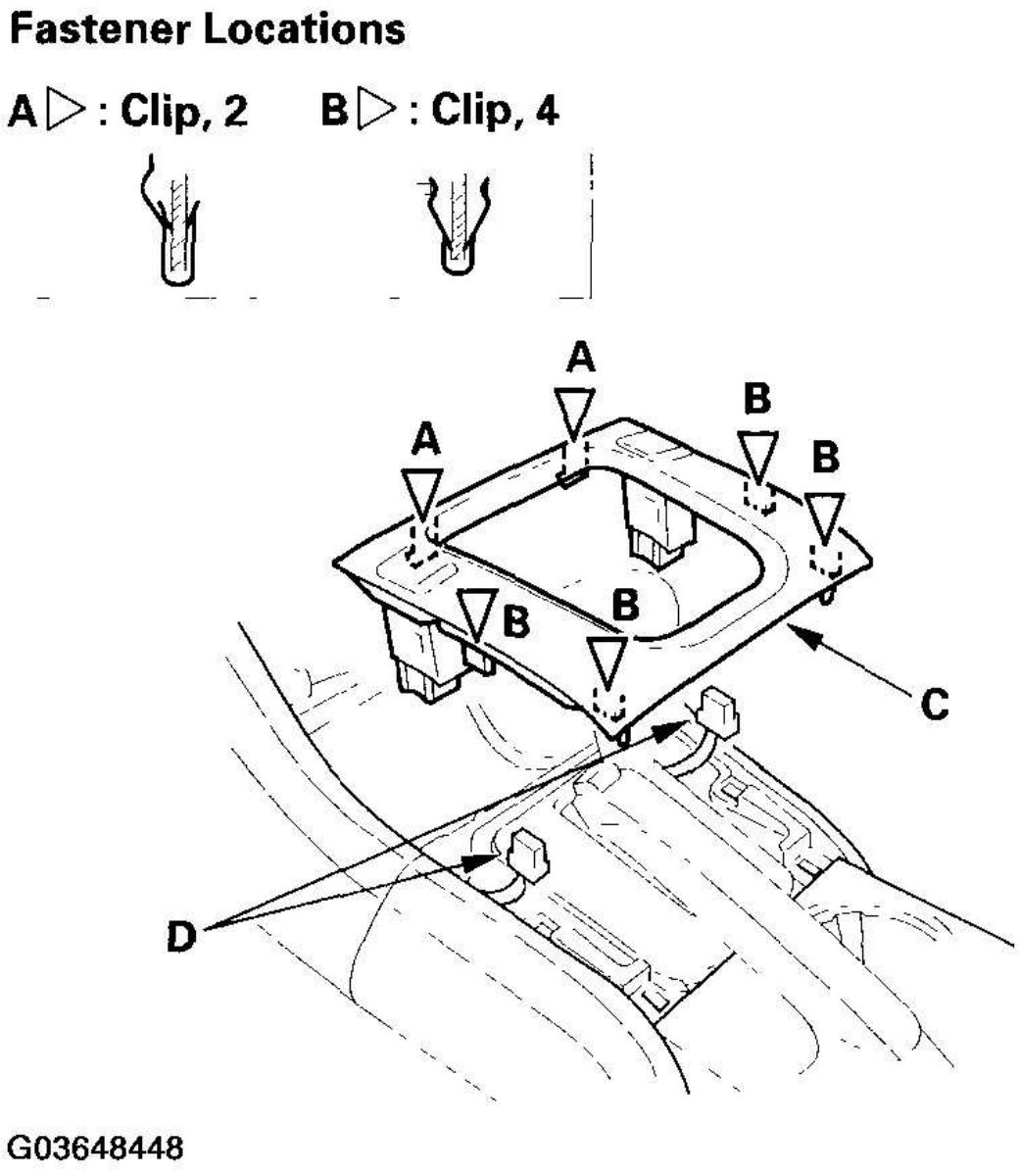


Fig. 2: Detaching Clips Pulling Center Console Front Panel Up
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Pry up on the right of the console pocket (A) with a trim tool, and detach the clips, then remove the pocket.

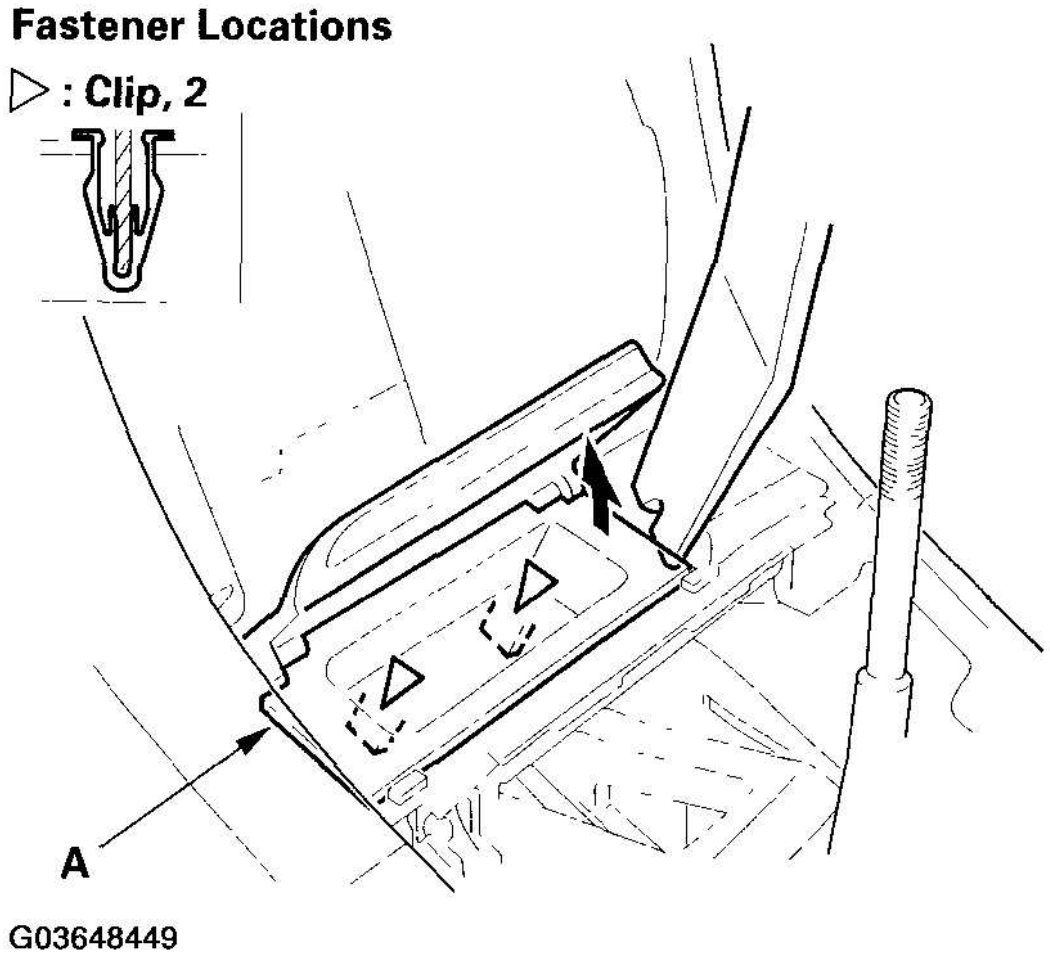


Fig. 3: Prying Right Of Console Pocket With Trim Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the screws (A), detach the clips (B) and hook (C) by pulling the center holder (D) up, and disconnect the front accessory power socket connector (E).

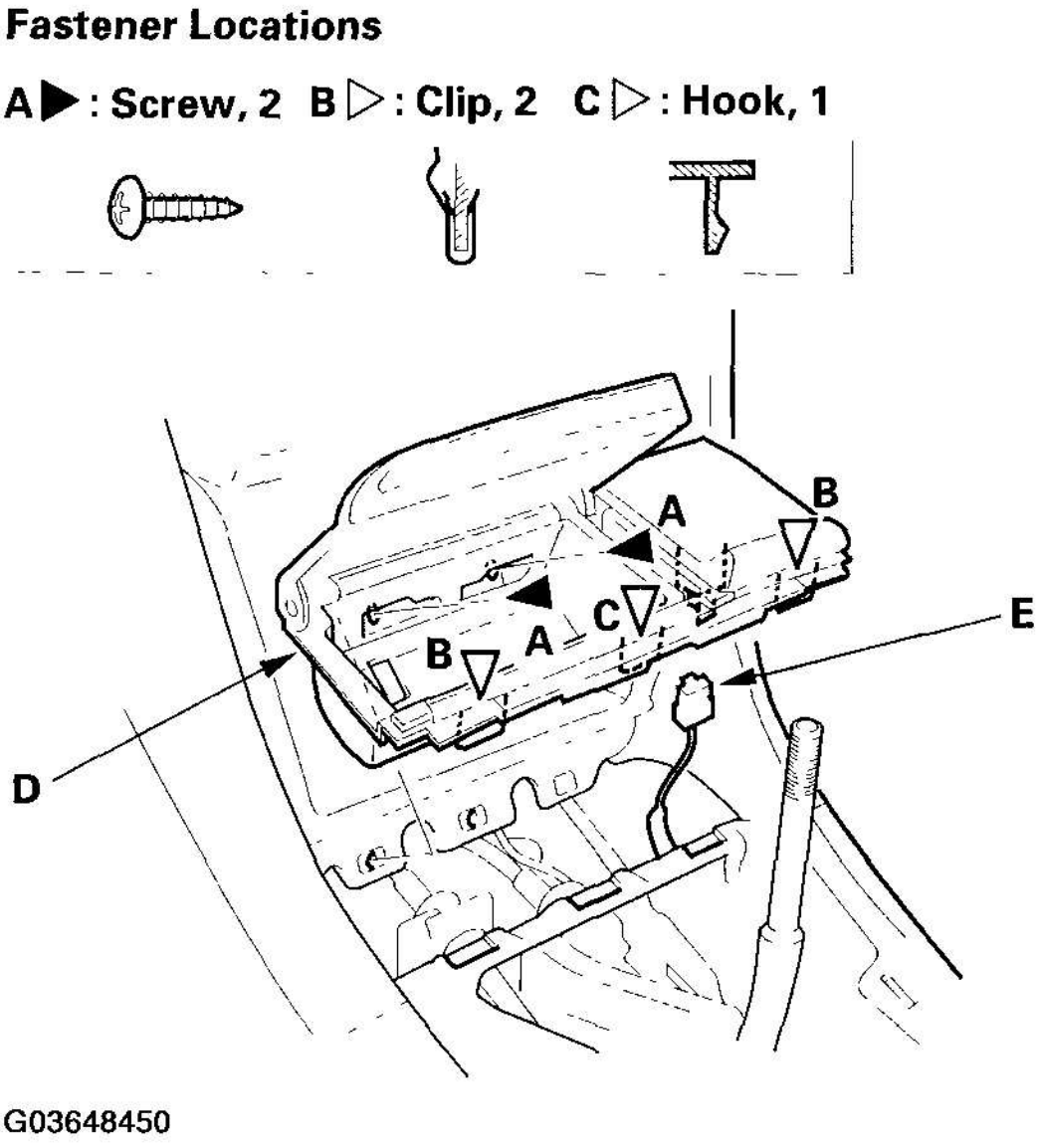


Fig. 4: Disconnecting Front Accessory Power Socket Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Detach the clips (A, B) by pulling the center console rear panel (C) up.

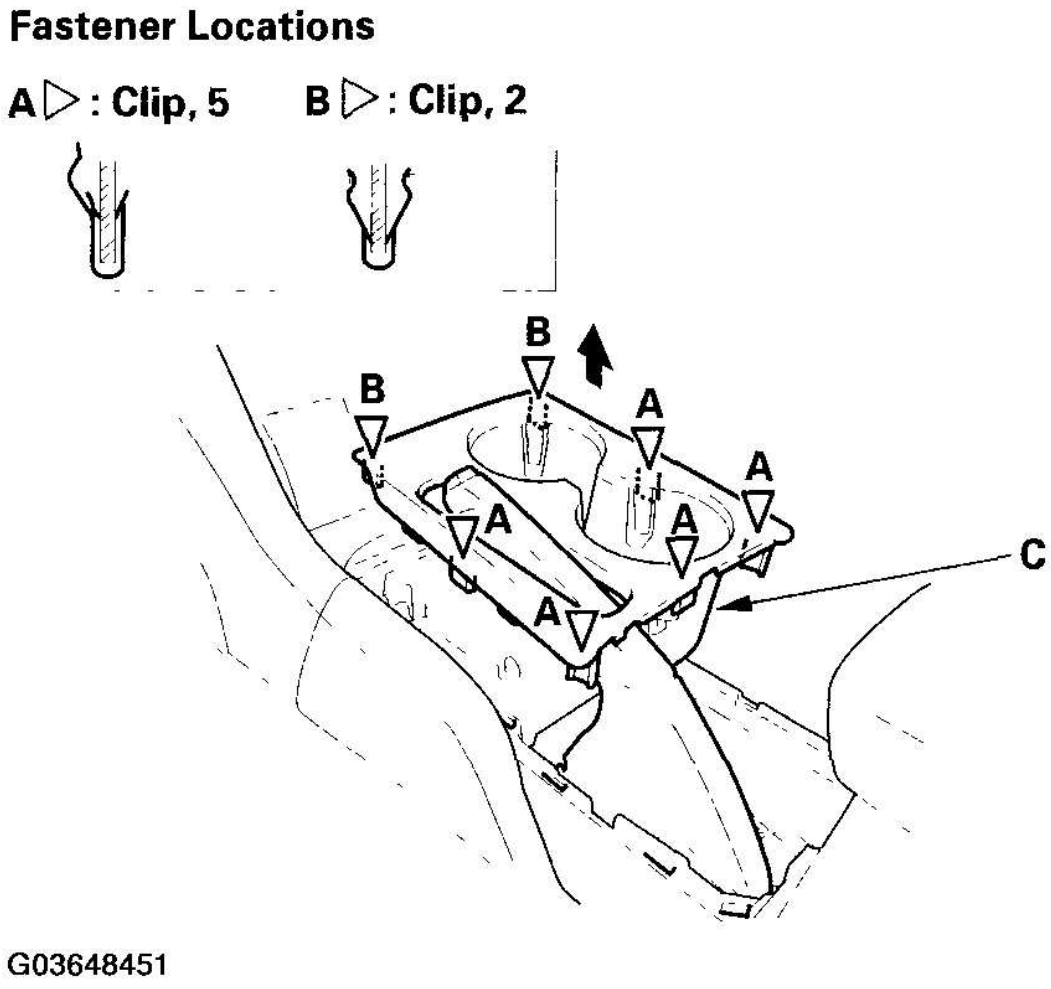


Fig. 5: Detaching Clips Pulling Center Console Rear Panel Up
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the center console (A).

   -1 Open the console box lid (B) then remove the console mat (C).

   -2 If equipped, disconnect the rear accessory power socket connector (D), and detach the clip (E).

   -3 Remove the screws (F, G), then pull the rear portion of the console up to release the hooks (H), then remove it.

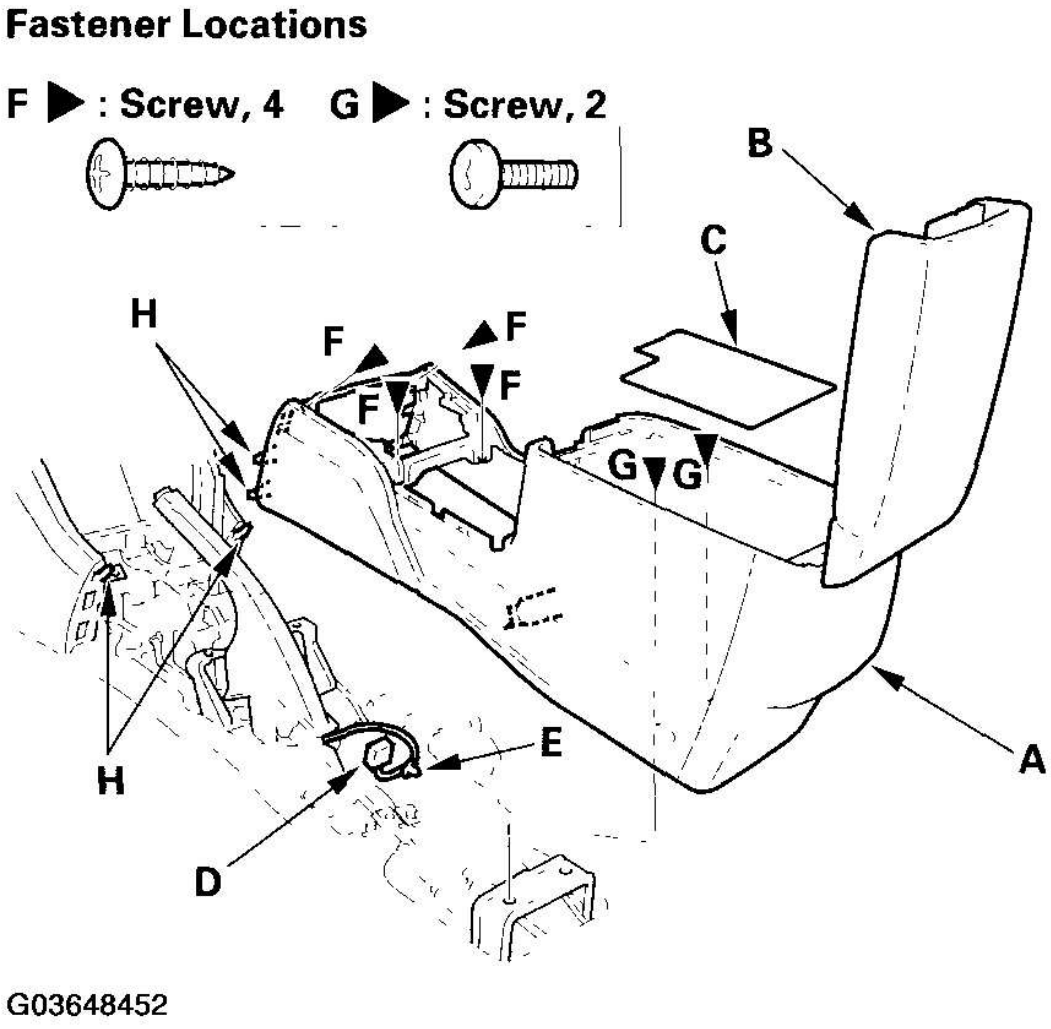


Fig. 6: Removing Center Console
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the console in the reverse order of removal, and check if the clip is damaged or stress-whitened, and if necessary, replace it with new one.

CENTER CONSOLE ARMREST DISASSEMBLY/REASSEMBLY

NOTE:

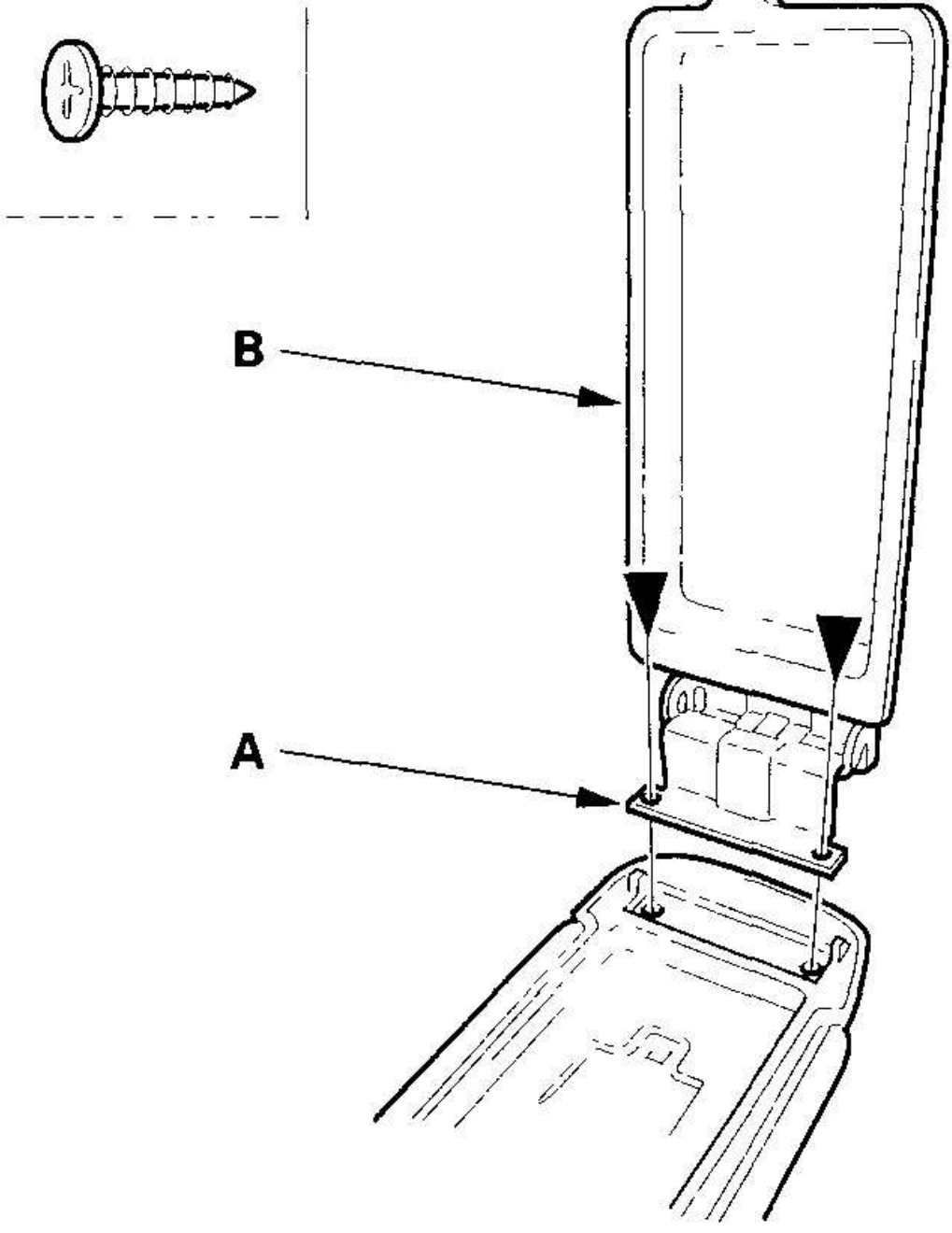
- **When prying with a flat-tip screwdriver, wrap it with protective tape to prevent damage.**

- **Take care not to scratch armrest.**

1. Remove the center console armrest (see step 2 in **CENTER CONSOLE REAR COVER REPLACEMENT**).
2. Remove the screws, then remove the armrest hinge (A) and the console tray (B) as an assembly.

Fastener Locations

▶ : Screw, 2



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Fig. 7: Removing Armrest Hinge & Console Tray
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Slide the console armrest forward fully.
4. Insert a large flat-tip screwdriver wrapped with protective tape into the center of the gap between the console armrest (A) and the console armrest base (B), and gently push it straight down until both inside hooks (C) of the console armrest come off the stop portions (D) of the console base.

NOTE: Apply protective tape (E) to the projection in the back surface of the console armrest to prevent damage.

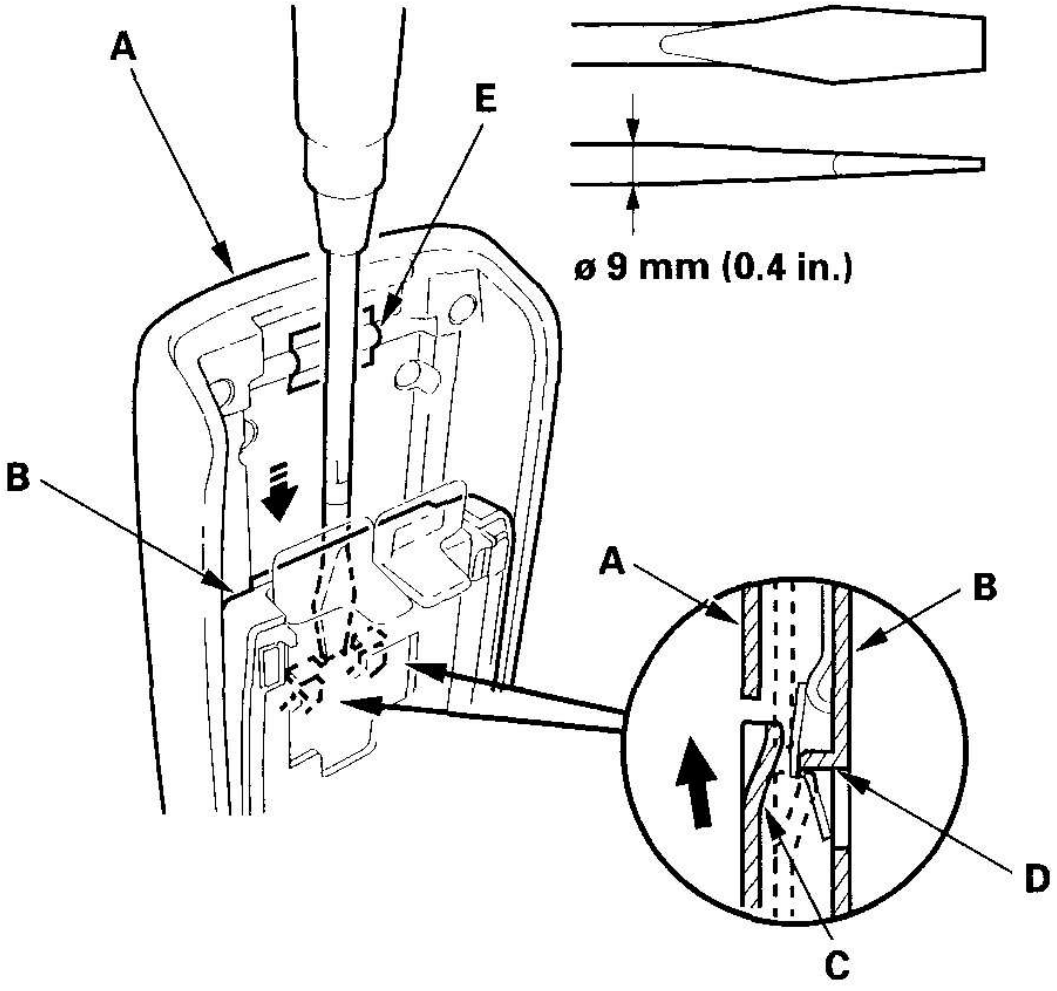
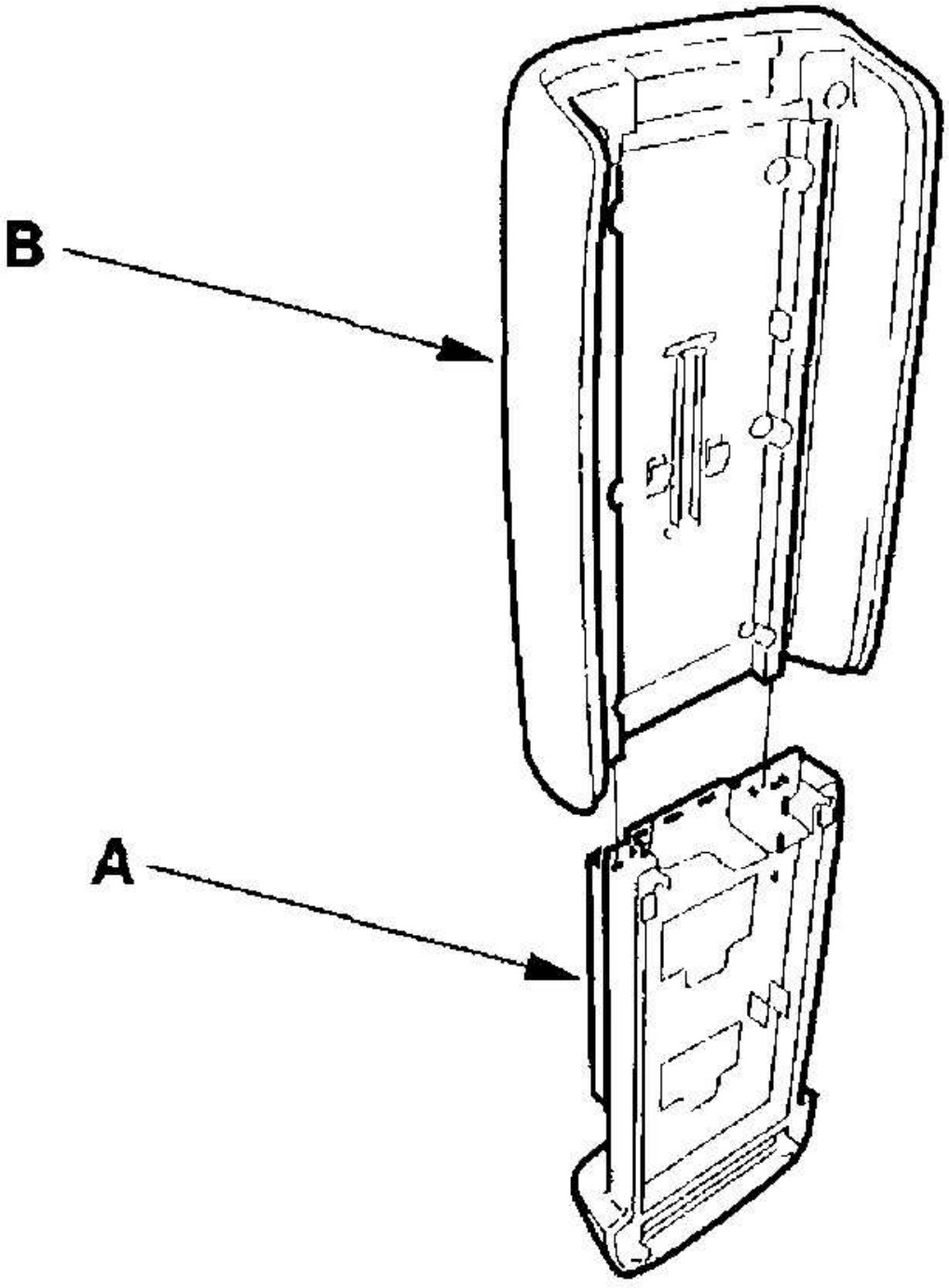


Fig. 8: Inserting Screwdriver Into Center Of Gap Between Console Armrest & Console Armrest Base
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Slightly slide the console armrest forward to get the inside hooks over the stop portions, then remove the flat-tip screwdriver from the gap.
6. Remove the console armrest (A) from the guide rails of the console armrest base (B).



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Fig. 9: Removing Console Armrest From Guide Rails Of Console Armrest Base

Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the screws, then remove the slide bracket (A).

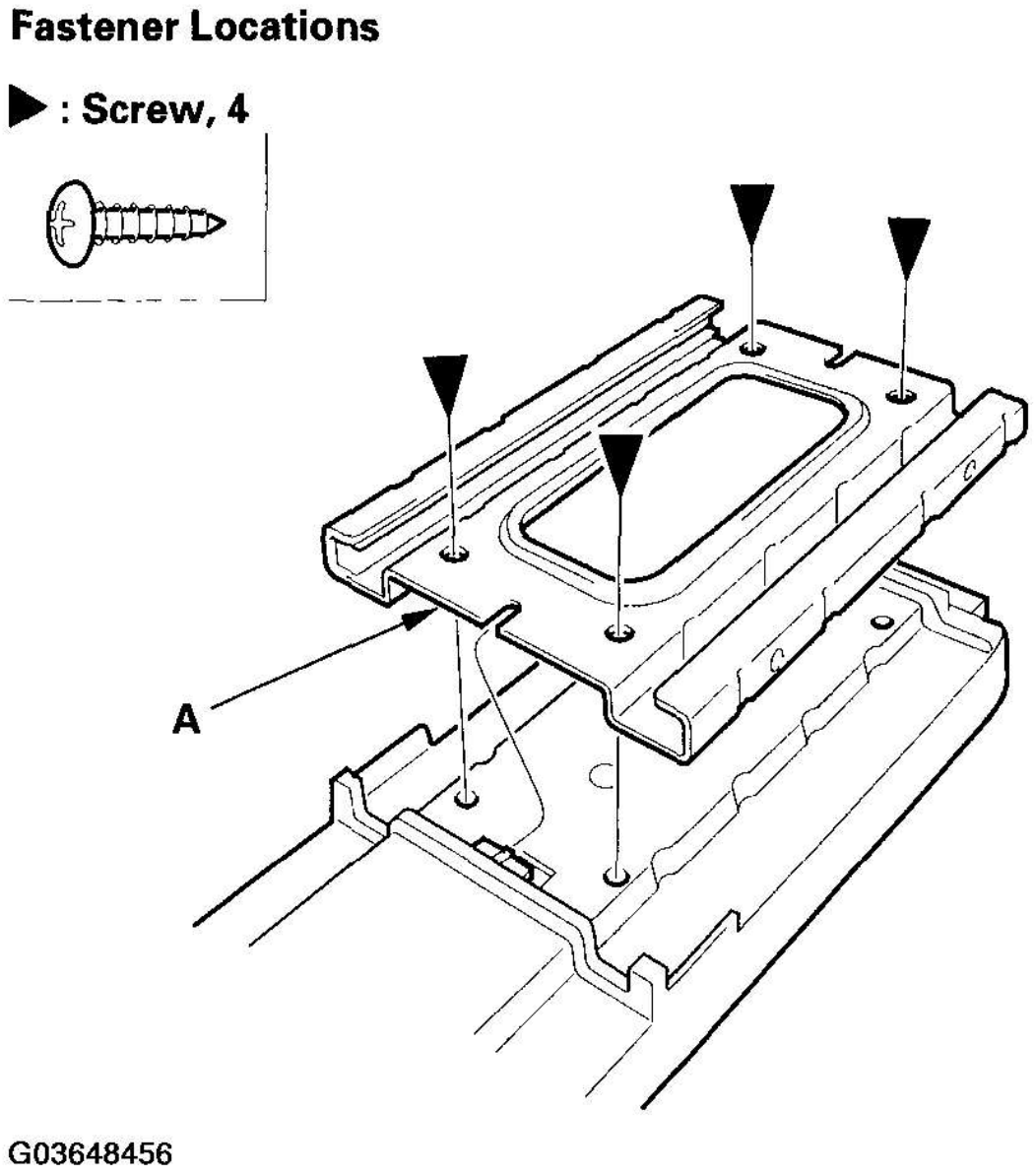


Fig. 10: Removing Slide Bracket

Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Separate the console armrest upper base (A) from the lower base (B). Remove the screws, then remove the armrest lock (C) and the tray lock (D) from the upper base.

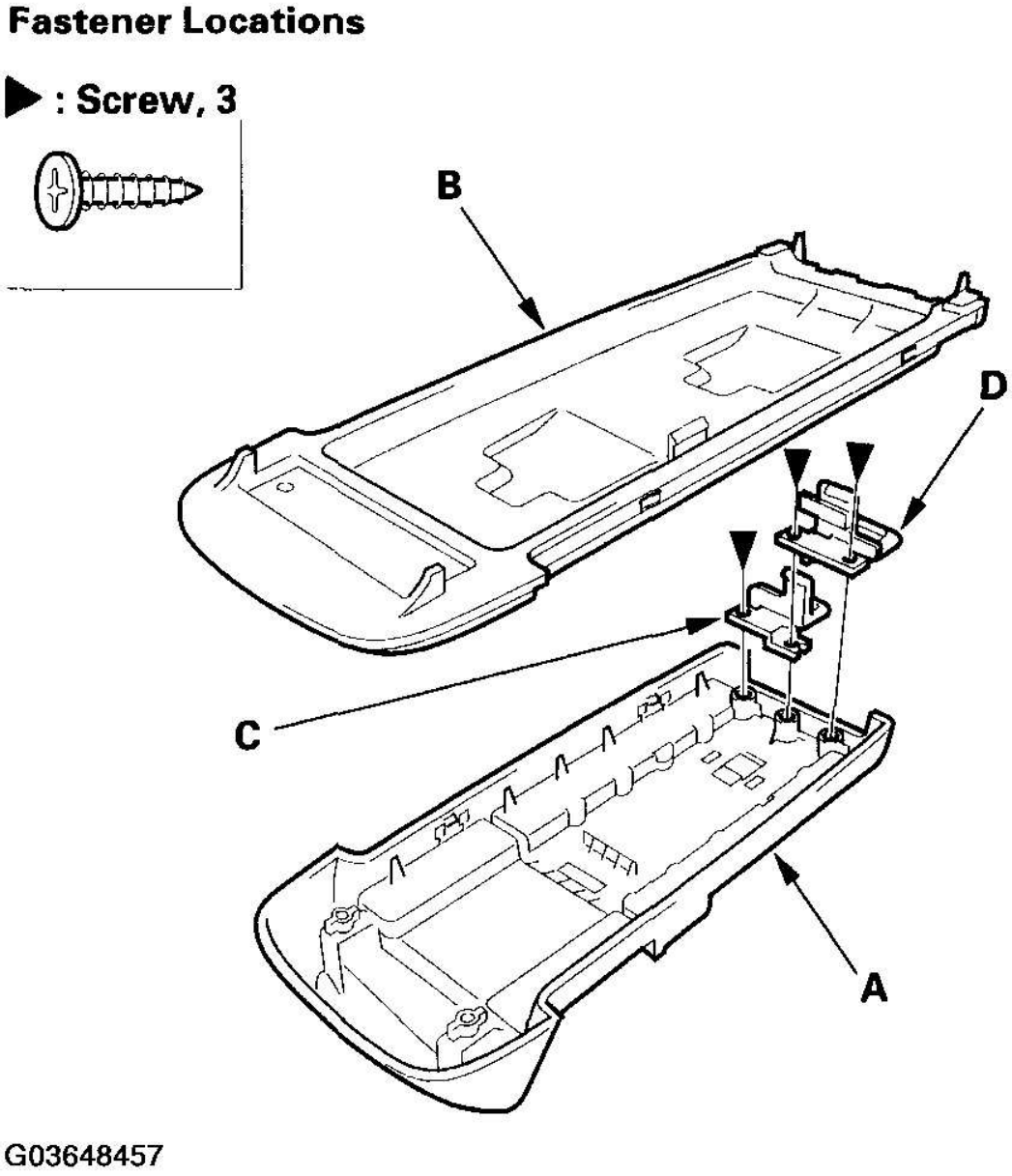


Fig. 11: Separating Console Armrest Upper Base From Lower Base

Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Reassemble the console armrest in the reverse order of disassembly.

CENTER CONSOLE REAR COVER REPLACEMENT

NOTE: Take care not to scratch the center console.

1. Remove the center console (see **CENTER CONSOLE REMOVAL/INSTALLATION**).
2. Open the center console armrest (A) and remove the hinge mounting screws, then remove the armrest.

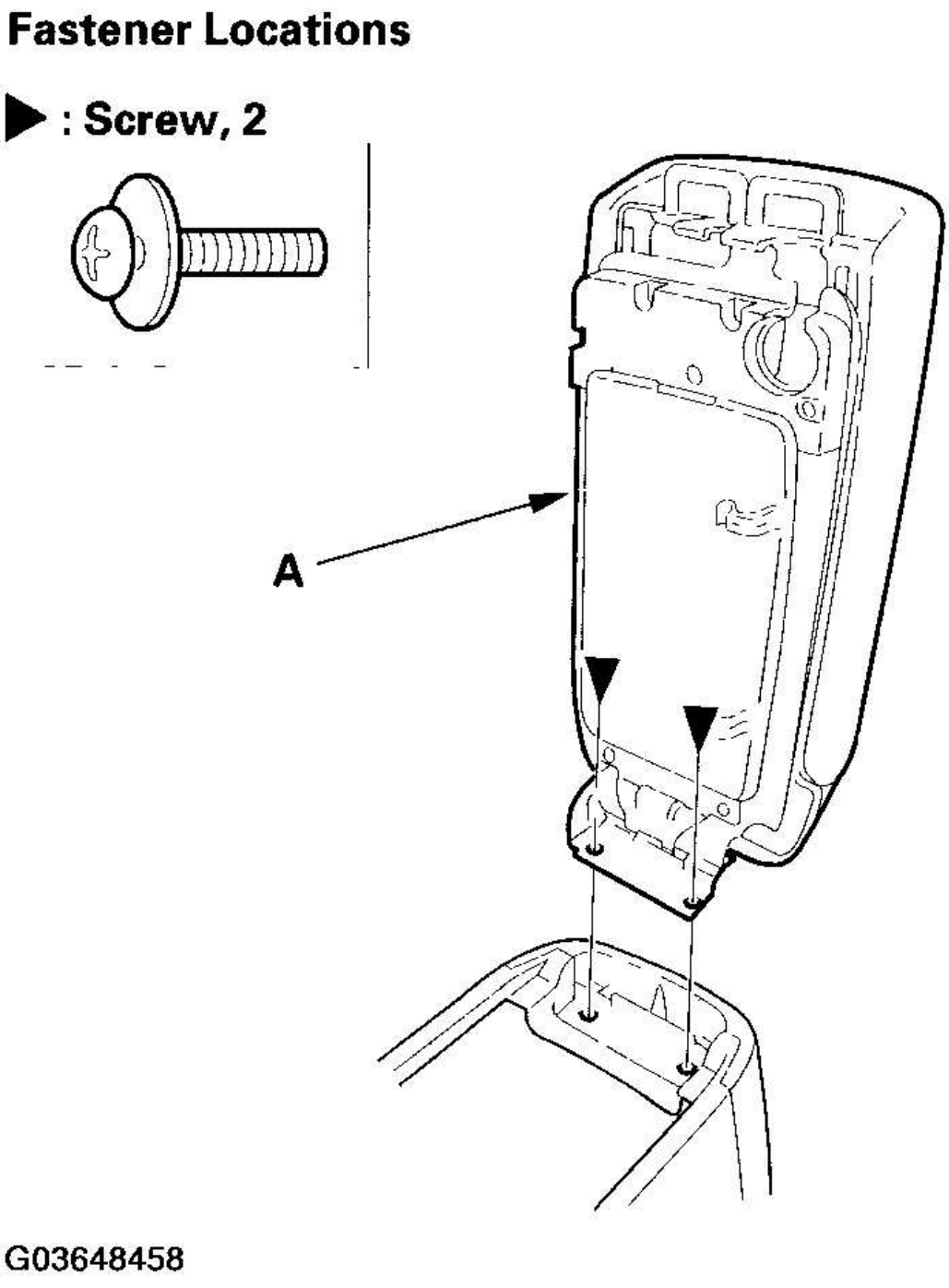


Fig. 12: Removing Hinge Mounting Screws
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the screws (A) and detach the clips (B) then remove the center console rear cover (C).

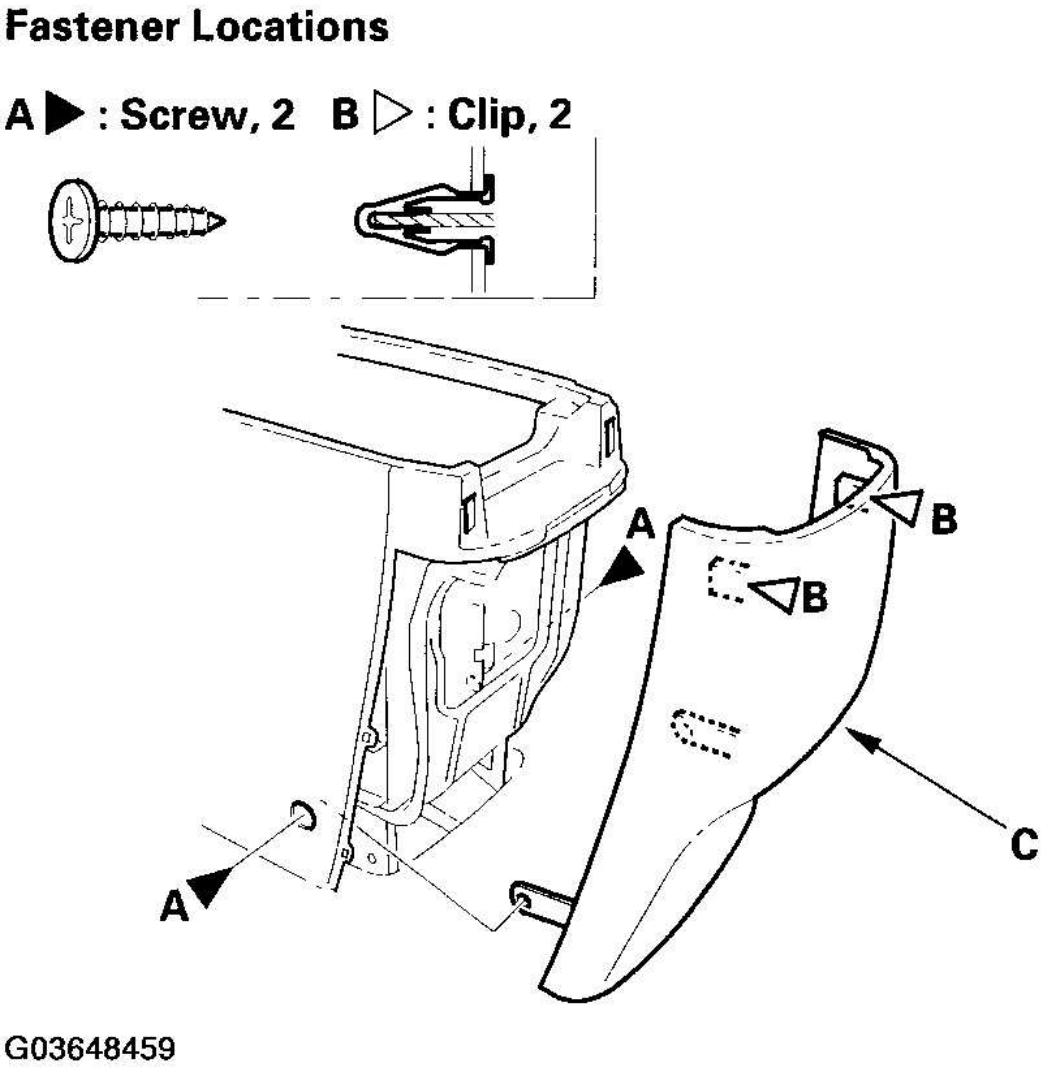


Fig. 13: Removing Center Console Rear Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the cover the reverse order of removal.

2003-07 ENGINE

Cooling System - Accord (V6)

COMPONENT LOCATION INDEX

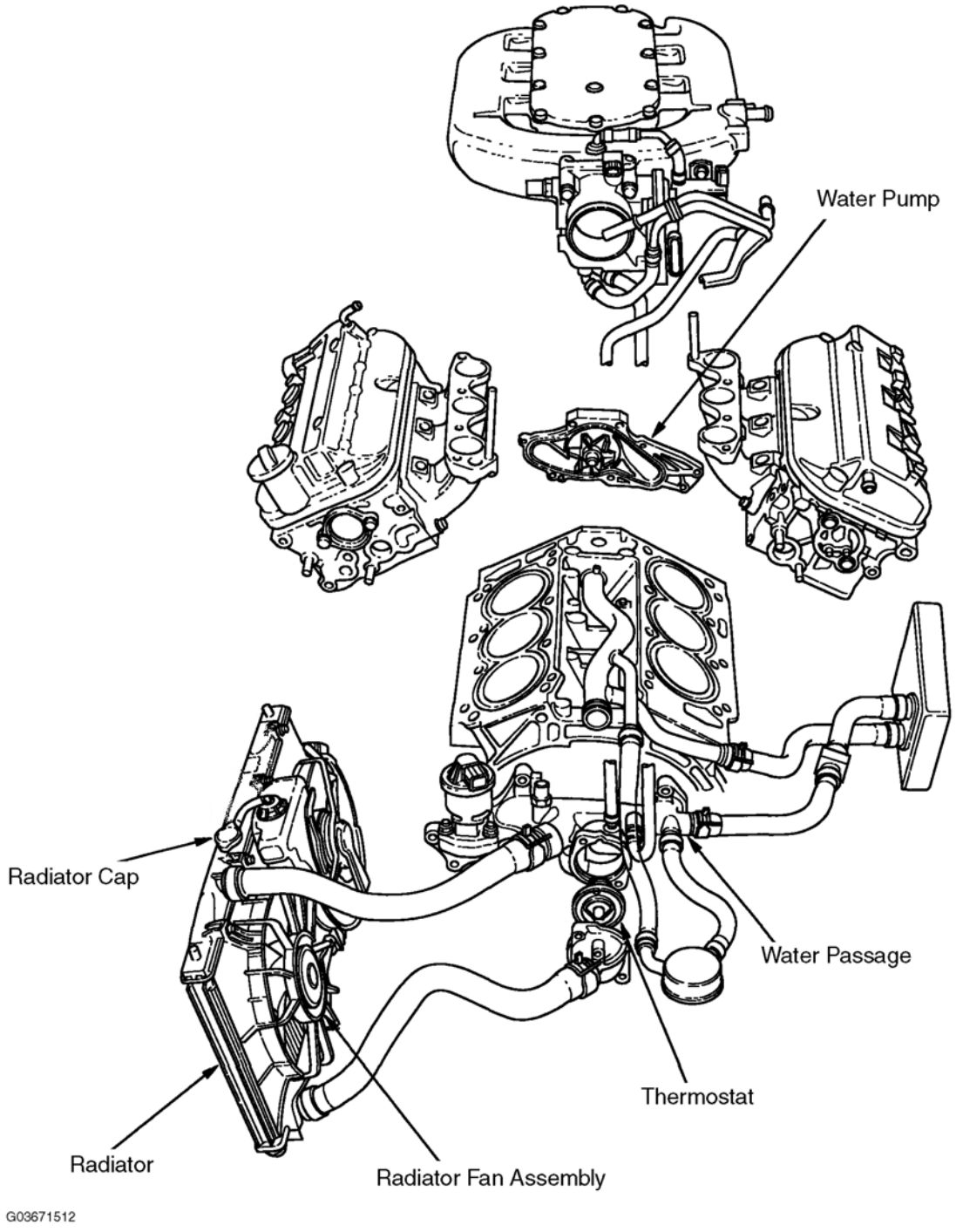


Fig. 1: Locating Cooling System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

RADIATOR CAP TEST

1. Remove the radiator cap (A), wet its seal with engine coolant, then install it on a commercially available pressure tester (B).

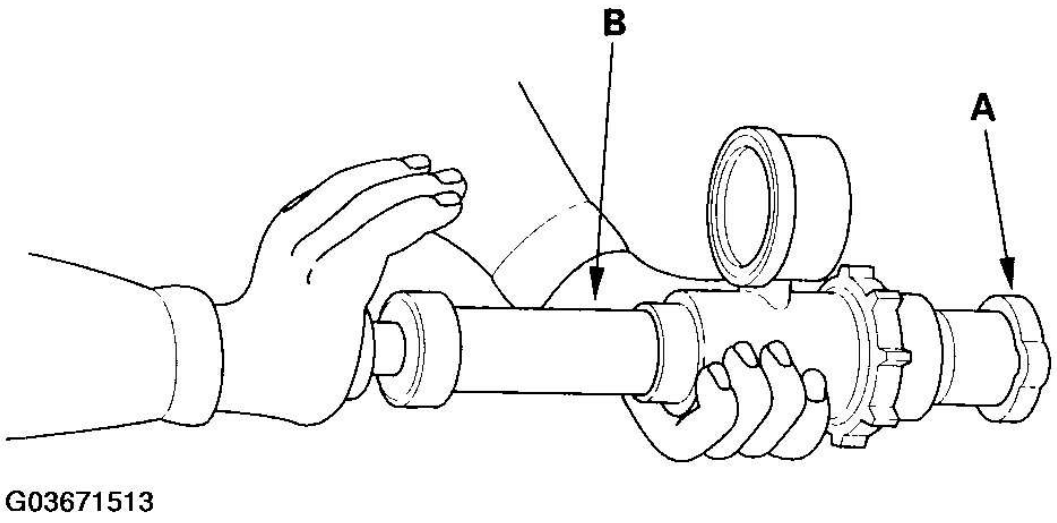


Fig. 2: Testing Radiator Cap
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Apply a pressure of 93- 123 kPa (0.95- 1.25 kgf/cm^2 , 14-18 psi).
3. Check for a drop in pressure.
4. If the pressure drops, replace the cap.

RADIATOR TEST

1. Wait until the engine is cool, then carefully remove the radiator cap, and fill the radiator with engine coolant to the top of the filler neck.
2. Attach a commercially available pressure tester (A) to the radiator, and apply a pressure of 93-123 kPa (0.95-1.25 kgf/cm^2 , 14-18 psi).

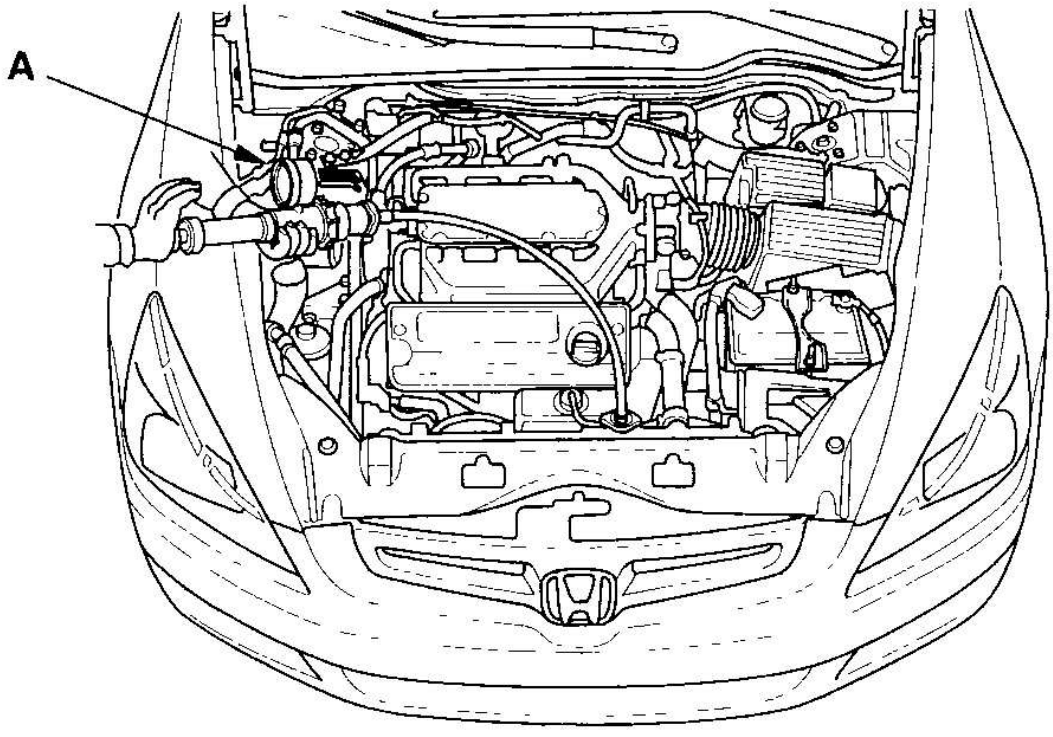


Fig. 3: Attaching Pressure Tester to Radiator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Inspect for engine coolant leaks and a drop in pressure.
4. Remove the tester, then reinstall the radiator cap.

FAN MOTOR TEST

1. Disconnect the 2P connectors from the radiator fan motor (A) and condenser fan motor (B).

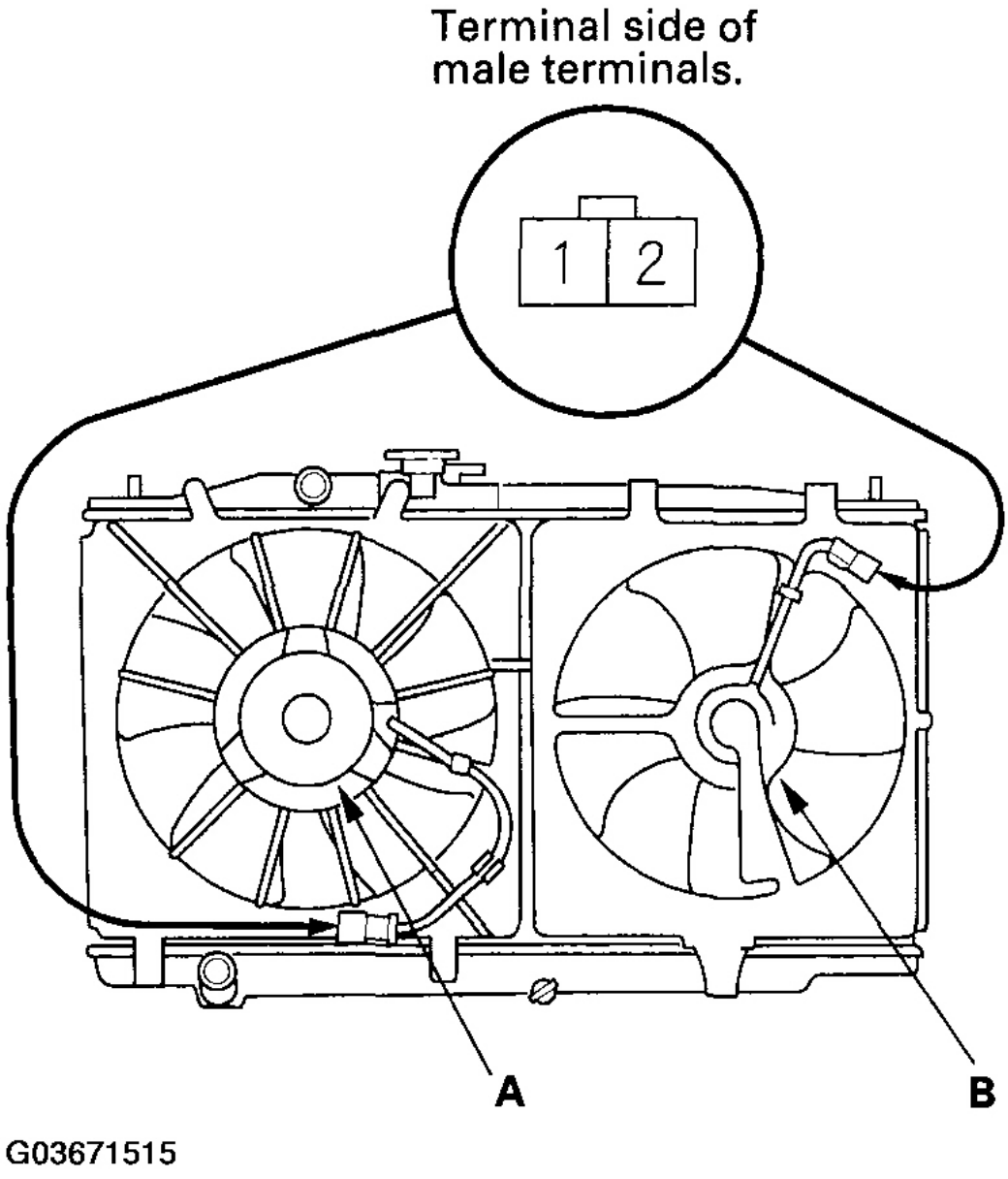


Fig. 4: Disconnecting 2P Connectors From Radiator Fan Motor And Condenser Fan Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Test each motor by connecting battery power to the terminal No. 1 and ground to the terminal No. 2.

3. If the motor fails to run or does not run smoothly, replace it (see **RADIATOR AND FAN REPLACEMENT**).

THERMOSTAT TEST

Replace the thermostat if it is open at room temperature.

To test a closed thermostat:

1. Suspend the thermostat (A) in a container of water. Do not let the thermometer (B) touch the bottom of the hot container.

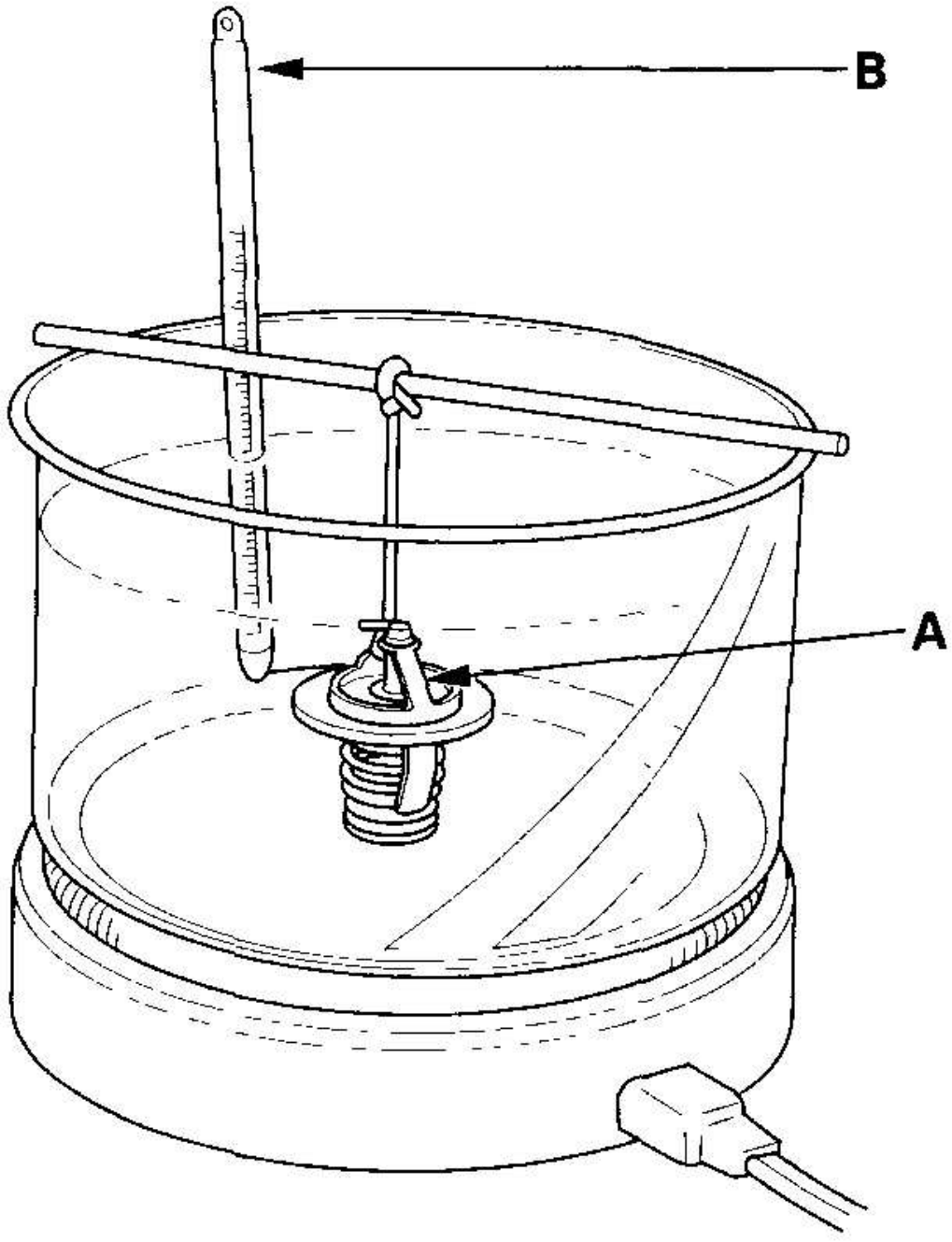


Fig. 5: Suspending Thermostat In Container Of Water

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Heat the water and check the temperature with a thermometer. Check the temperature at which the thermostat first opens, and at which it is fully open.
3. Measure the lift height of the thermostat when it is fully open.

Standard Thermostat

Lift Height: Above 10.0 mm (0.39 in.)
Starts Opening: 169-176°F (76-80°C)
Fully Open: 194°F (90°C)

WATER PUMP INSPECTION

1. Remove the timing belt (see **TIMING BELT REMOVAL**).
2. Turn the water pump pulley counterclockwise. Check that it turns freely. If it doesn't turn smoothly, replace the water pump (see **WATER PUMP INSPECTION**).

NOTE: When you check the water pump pulley, you may see a small amount of "weeping" from the bleed holes (A). This is normal.

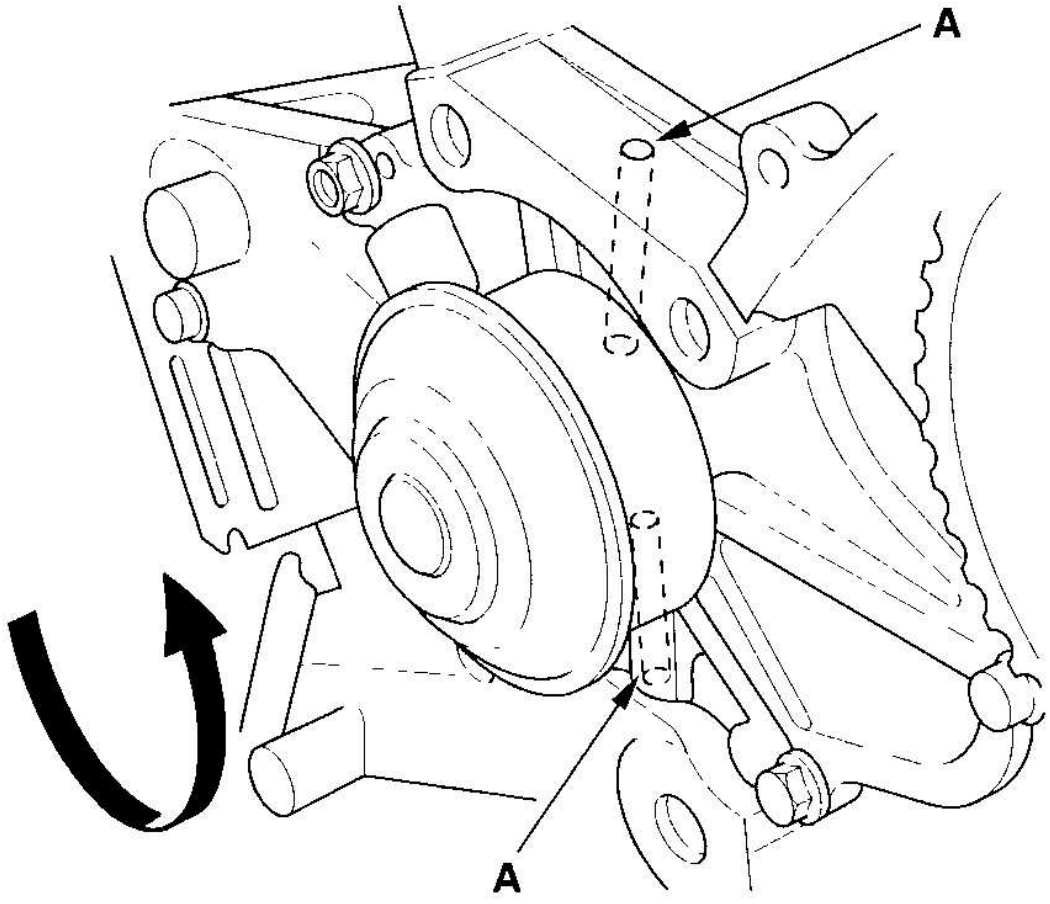


Fig. 6: Inspecting Water Pump
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the timing belt (see **TIMING BELT INSTALLATION**).

WATER PUMP REPLACEMENT

1. Drain the engine coolant (see **COOLANT CHECK**).
2. Remove the timing belt (see **TIMING BELT REMOVAL**).
3. Remove the timing belt adjuster (see **TIMING BELT ADJUSTER REPLACEMENT**).
4. Remove the water pump (A) by removing the five bolts.

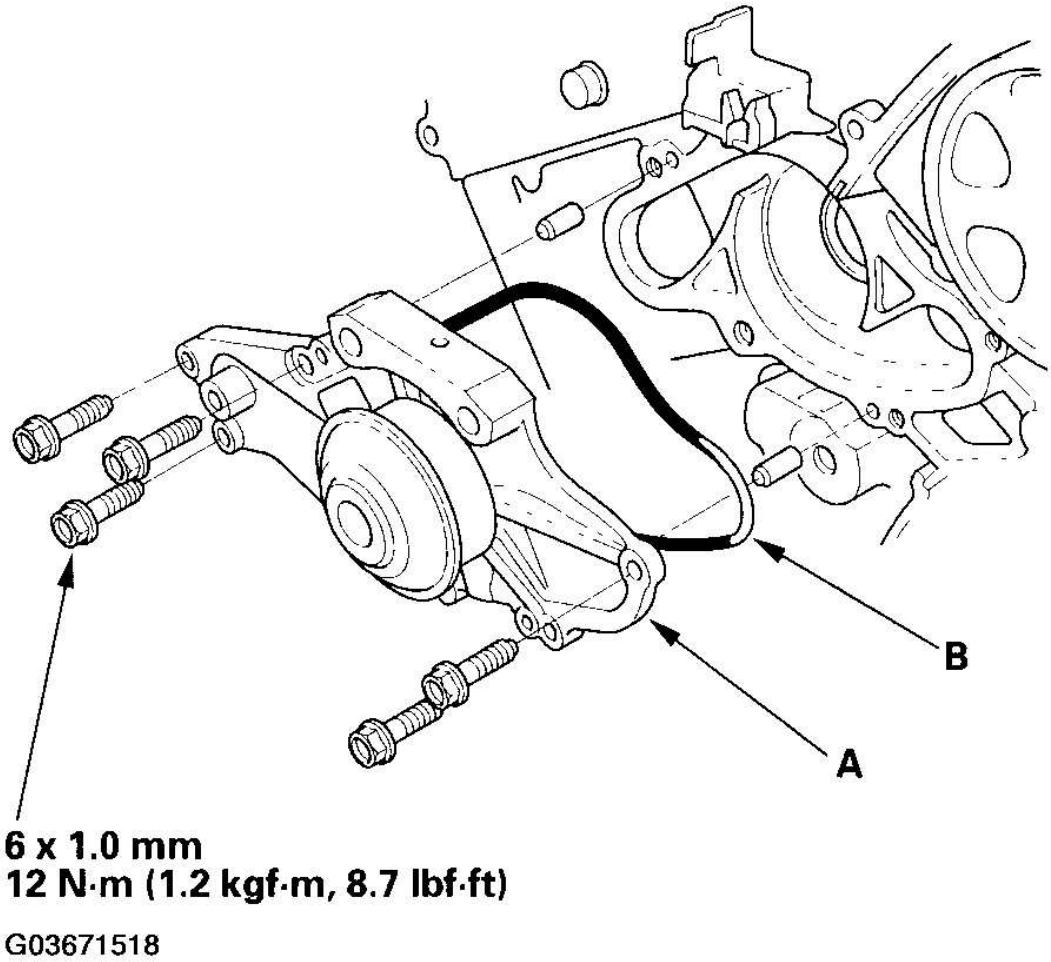


Fig. 7: Identifying Water Pump
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Inspect and clean the O-ring groove and the mating surface with the engine block.
6. Install the water pump with a new O-ring (B) in the reverse order of removal.
7. Clean up any spilled engine coolant.
8. Install the timing belt adjuster (see **TIMING BELT ADJUSTER REPLACEMENT**).
9. Install the timing belt (see **TIMING BELT INSTALLATION**).
10. Refill the radiator with engine coolant, then bleed the air from the cooling

system (see step 8).

COOLANT CHECK

1. Look at the coolant level in the coolant reservoir. Make sure it is between the MAX mark (A) and MIN mark (B).

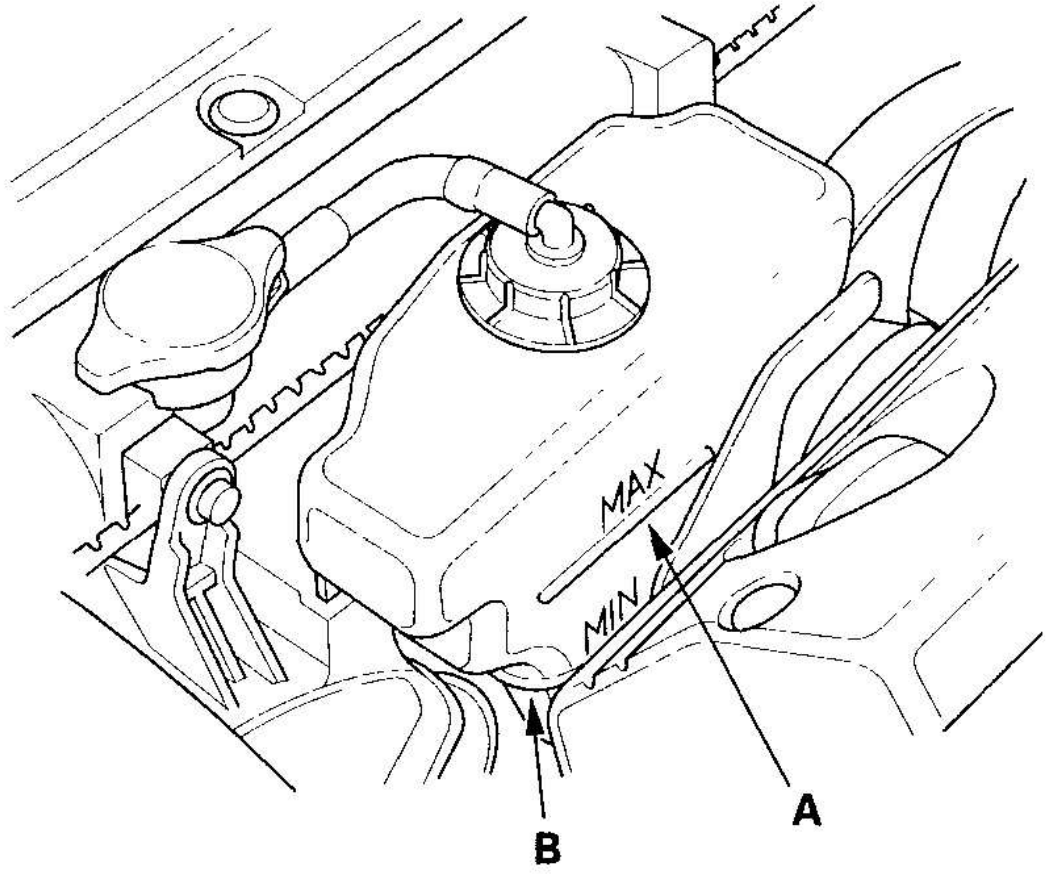


Fig. 8: Checking Coolant Level
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. If the coolant level in the coolant reservoir is at or below the MIN mark, add coolant to bring it between the MIN and MAX mark, then inspect the cooling system for leaks.

COOLANT REPLACEMENT

1. Start the engine. Set the heater temperature control dial to maximum heat, then turn off the ignition switch. Make sure the engine and radiator are cool to the touch.
2. Remove the radiator cap.
3. Loosen the drain plug (A), and drain the coolant.

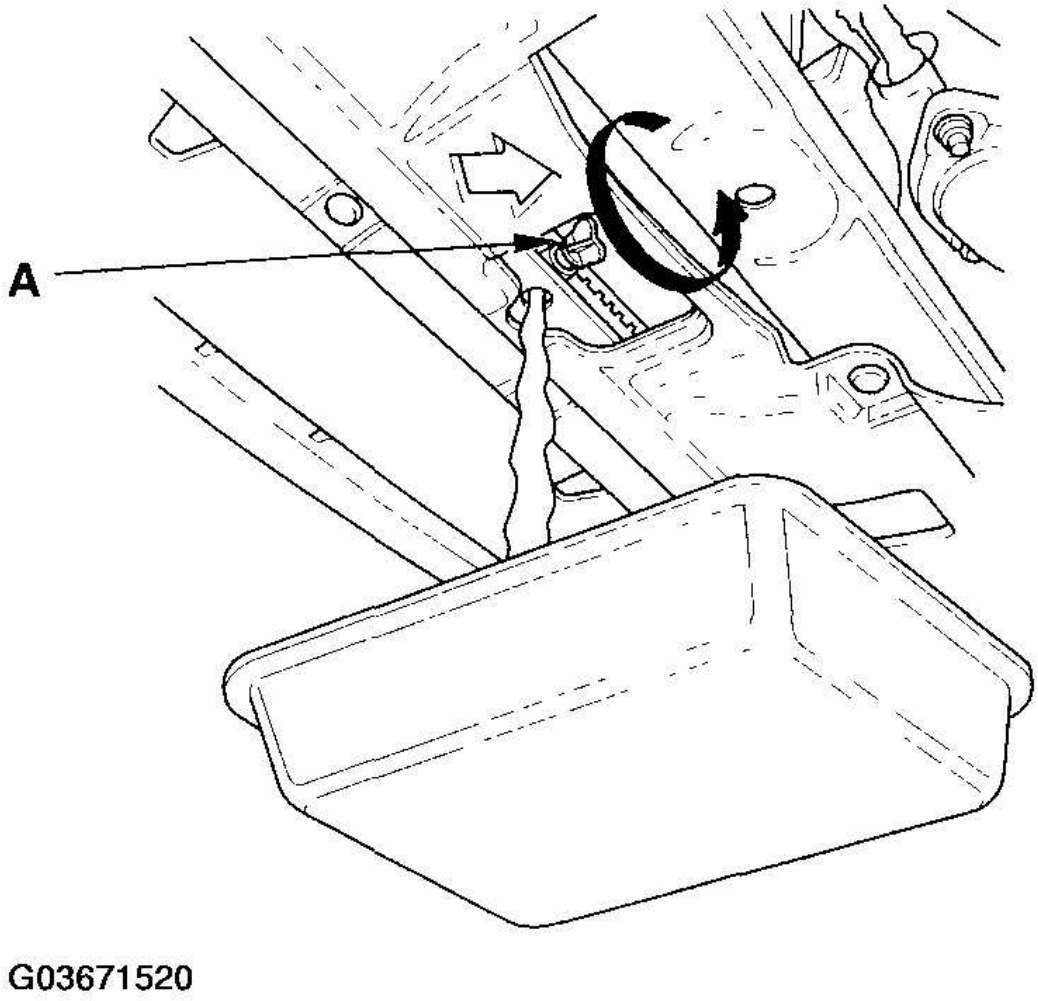


Fig. 9: Draining Coolant
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install a rubber hose (A) on the drain bolt (B) located at the rear of the cylinder block, then loosen the drain bolt.

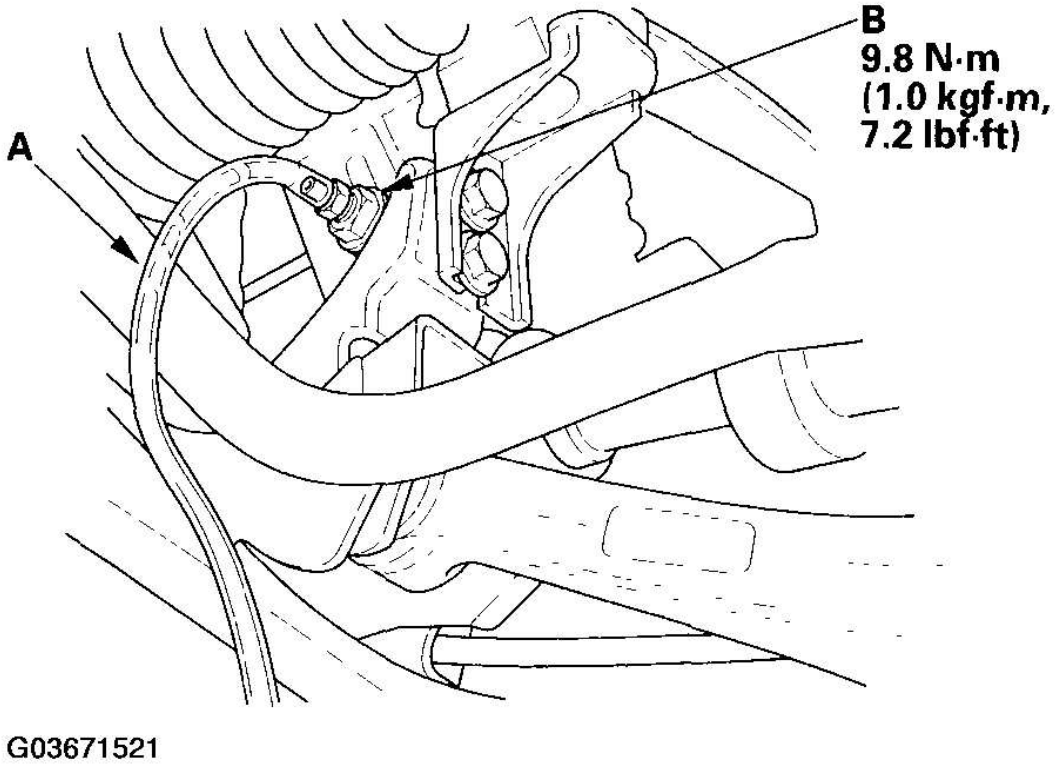


Fig. 10: Identifying Rubber Hose On Drain Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. When the coolant stops draining, tighten the drain bolt. Remove the rubber hose.
6. Tighten the radiator drain plug securely.
7. Remove, drain, and reinstall the reserve tank.
8. Fill the reserve tank to the MAX mark (A) with Honda Long Life Antifreeze/Coolant Type 2 (P/N OL999-9001).

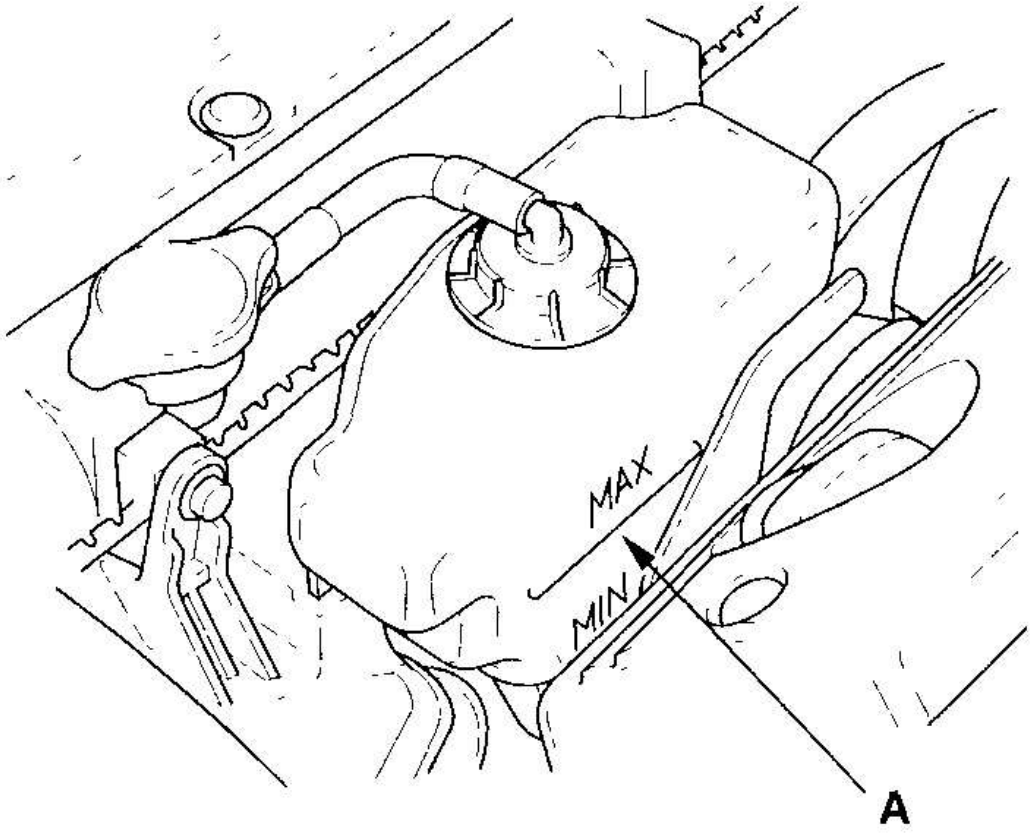


Fig. 11: Filling Reserve Tank To MAX
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Pour Honda Long Life Antifreeze/Coolant Type 2 into the radiator up to the base of the filler neck.

NOTE:

- **Always use Honda Long Life Antifreeze/Coolant Type 2**

  (P/N OL999-9001). Using a non-Honda coolant can result in corrosion, causing the cooling system to malfunction or fail.

- **Honda Long Life Antifreeze/Coolant Type 2 is a mixture of 50% antifreeze and 50% water. Do not add water.**

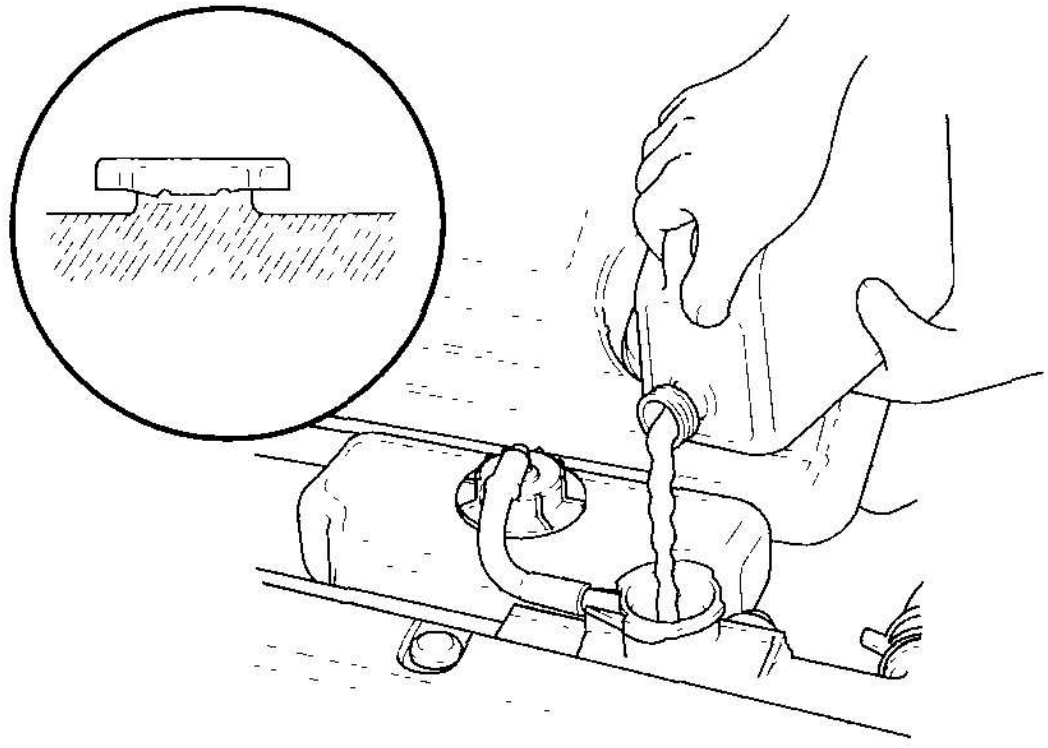
Engine Coolant Refill Capacities (including the reserve tank capacity of 0.6 L (0.16 US gal))

After Coolant Change:

M/T: 6.6 L (1.74 US gal)
A/T: 6.7 L (1.77 US gal)

After Engine Overhaul:

M/T: 8.2 L (2.17 US gal)
A/T: 8.4 L (2.22 US gal)



G03671523

Fig. 12: Pouring Antifreeze/Coolant Up To Base Of Filler Neck
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Install the radiator cap loosely.
11. Start the engine and let it run until it warms up (the radiator fan comes on at least twice).
12. Turn off the engine. Check the level in the radiator and add Honda Long Life Antifreeze/Coolant Type 2, if needed.
13. Put the radiator cap on tightly, then run the engine again, and check for leaks.
14. Clean up any spilled engine coolant.

THERMOSTAT REPLACEMENT

1. Make sure you have the anti-theft codes for the radio and navigation system, then write down the customer's audio presets. Make sure the ignition switch is

OFF.

2. Disconnect the negative cable from the battery first, then the positive cable, then remove the battery.
3. Drain the engine coolant (see **COOLANT CHECK**).
4. Remove the ground cable and thermostat cover, then remove the thermostat.

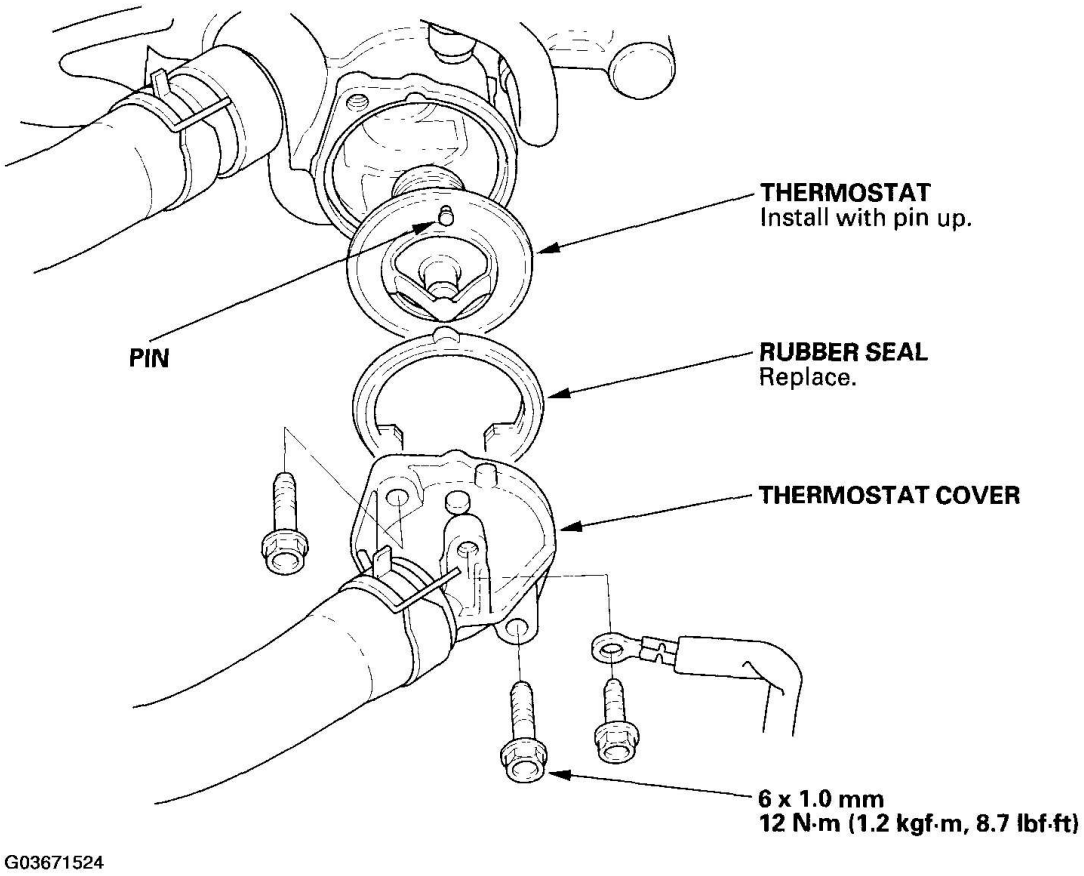


Fig. 13: Identifying Thermostat
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the thermostat with new rubber seal.
6. Install the battery. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
7. Refill the radiator with engine coolant, then bleed air from the cooling system (see step 8).

8. Clean up any spilled engine coolant.
9. Enter the anti-theft codes for the radio and the navigation system, then enter the customer's audio presets.
10. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .
11. Set the clock.

WATER PASSAGE REPLACEMENT

1. Make sure you have the anti-theft codes for the radio and navigation system, then write down the customer's audio presets. Make sure the ignition switch is OFF.
2. Disconnect the negative cable from the battery first, then the positive cable. Remove the battery.
3. Drain the engine coolant (see **COOLANT CHECK**).
4. Remove the vacuum hoses, breather pipe, and the intake air duct.
5. Remove the upper radiator hose, lower radiator hose, heater hoses, and water bypass hoses from the water passage. Remove the water passage.

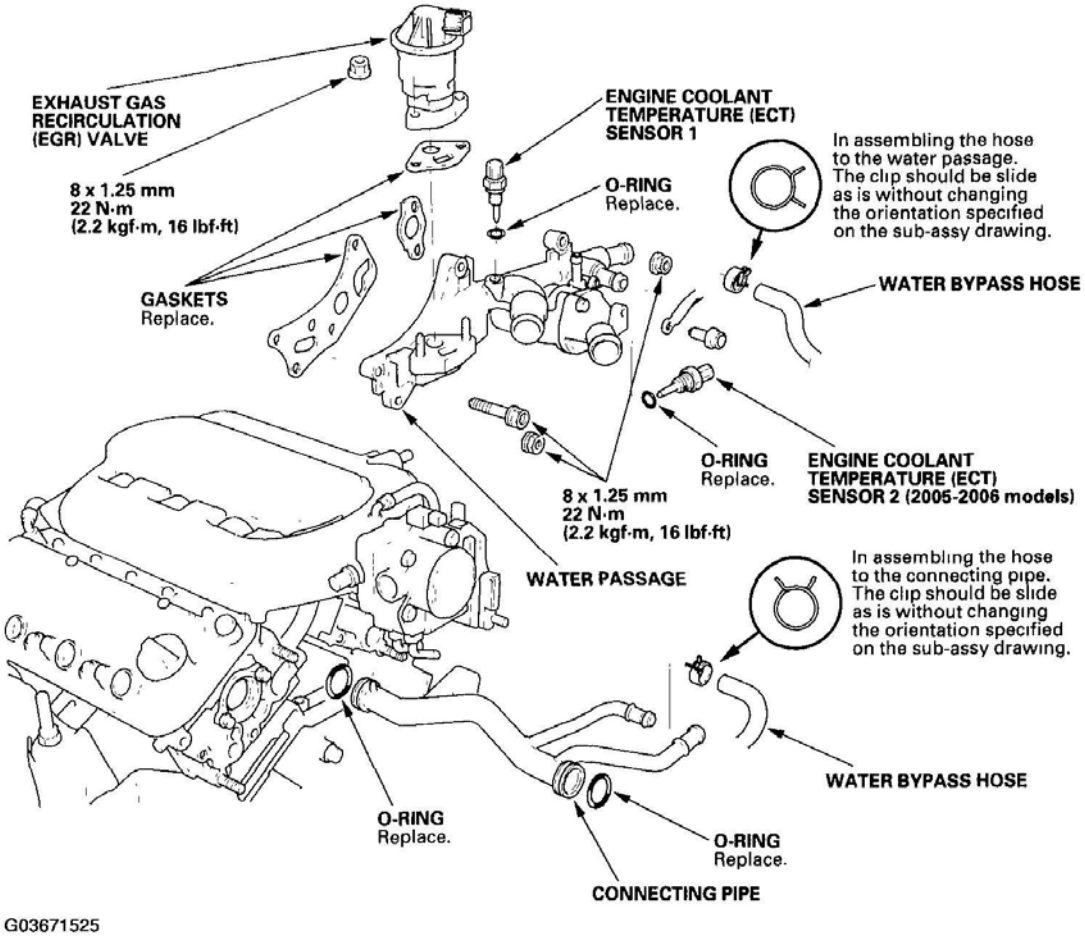


Fig. 14: Identifying Upper Radiator Hose And Lower Radiator Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the water passage in the reverse order of removal.
7. Install the battery. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
8. Refill the radiator with engine coolant, then bleed air from the cooling system (see step 8).
9. Clean up any spilled engine coolant.
10. Enter the anti-theft codes for the radio and the navigation system, then enter the customer's audio presets.
11. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

12. Set the clock.

RADIATOR AND FAN REPLACEMENT

1. Drain engine coolant (see **COOLANT CHECK**).
2. Remove the front bulkhead cover:
   - 2-door, refer to **2-DOOR**
   - 4-door, refer to **4-DOOR**
3. A/T model: Remove the automatic transmission fluid (ATF) cooler hoses from the radiator (see **ATF FEED PIPE REPLACEMENT**).
4. Remove the upper radiator hose and lower radiator hose from the radiator.

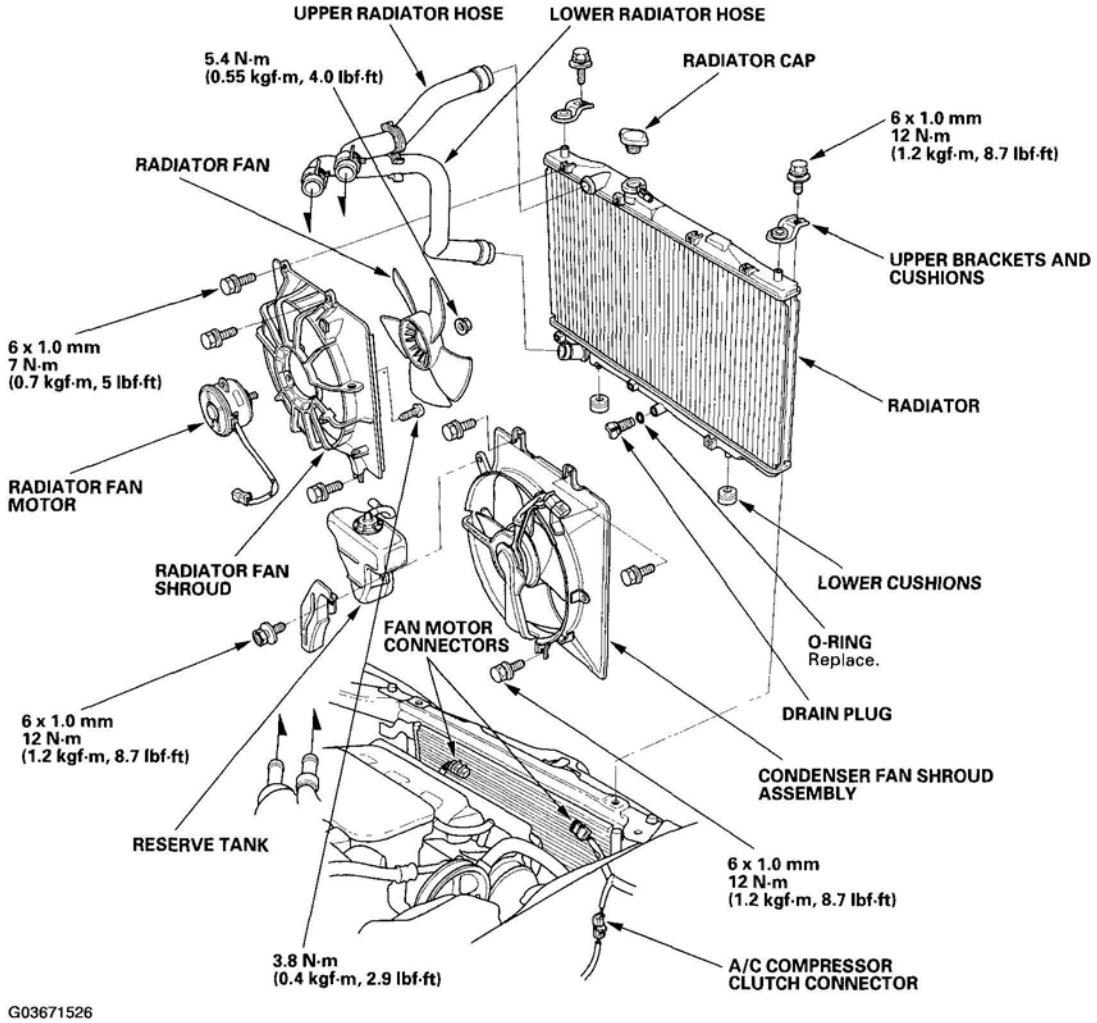


Fig. 15: Identifying Upper Radiator Hose And Lower Radiator Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the harness clamps and A/C compressor clutch connector.
6. Remove the upper bracket cushions, then pull up the radiator.
7. Disconnect the fan motor connectors, then remove the fan shroud assemblies and other parts from the radiator.
8. Install the radiator in the reverse order of removal. Make sure the upper and lower cushions are set securely.
9. Fill the radiator with engine coolant, then bleed air from the cooling system (see step 8).

2003-07 ENGINE

Cooling System - Accord

COMPONENT LOCATION INDEX

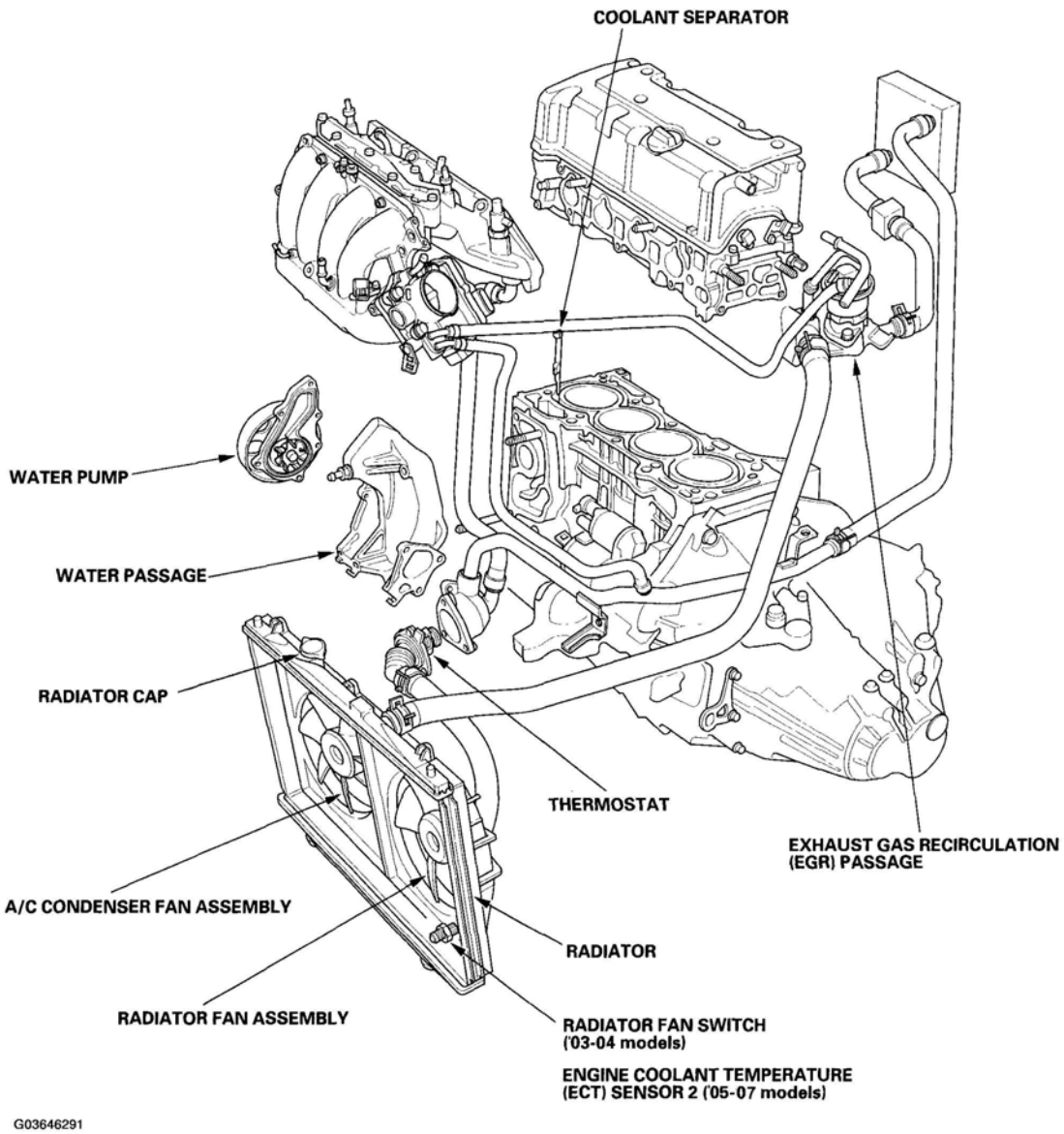


Fig. 1: Locating Cooling System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

RADIATOR CAP TEST

1. Remove the radiator cap (A), wet its seal with engine coolant, then install it on the pressure tester (B).

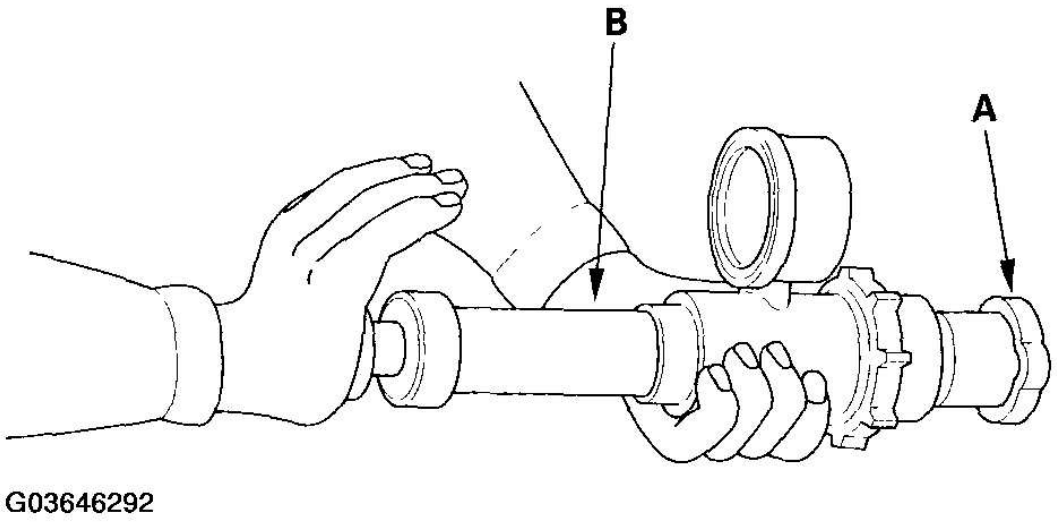


Fig. 2: Testing Radiator Cap
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Apply a pressure of 93-123 kPa (0.95-1.25 kgf/cm^2 , 14-18 psi).
3. Check for a drop in pressure.
4. If the pressure drops, replace the cap.

RADIATOR TEST

1. Wait until the engine is cool, then carefully remove the radiator cap and fill the radiator with engine coolant to the top of the filler neck.
2. Attach a commercially available pressure tester (A) to the radiator, Apply a pressure of 93-123 kPa (0.95-1.25 kgf/cm ^{2} 14-18 psi).

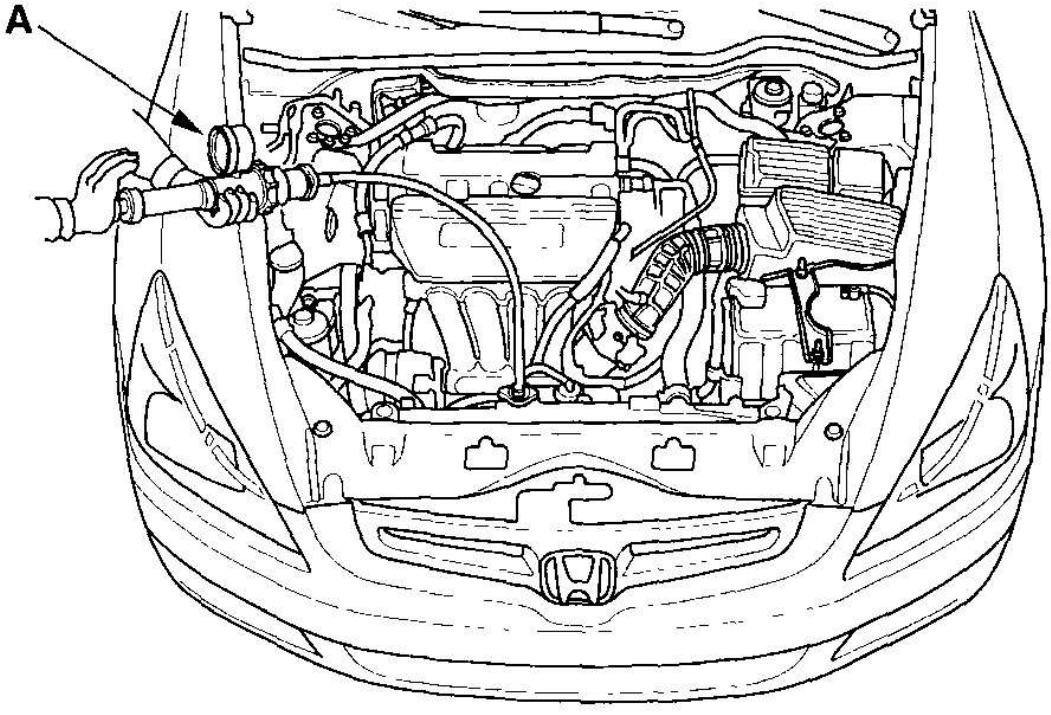


Fig. 3: Attaching Pressure Tester to Radiator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Inspect for engine coolant leaks and a drop in pressure.
4. Remove the tester, and reinstall the radiator cap.
5. Check for engine oil in the coolant and/or coolant in the engine oil.

FAN MOTOR TEST

1. Disconnect the 2P connectors from the radiator fan motor and condenser fan motor.

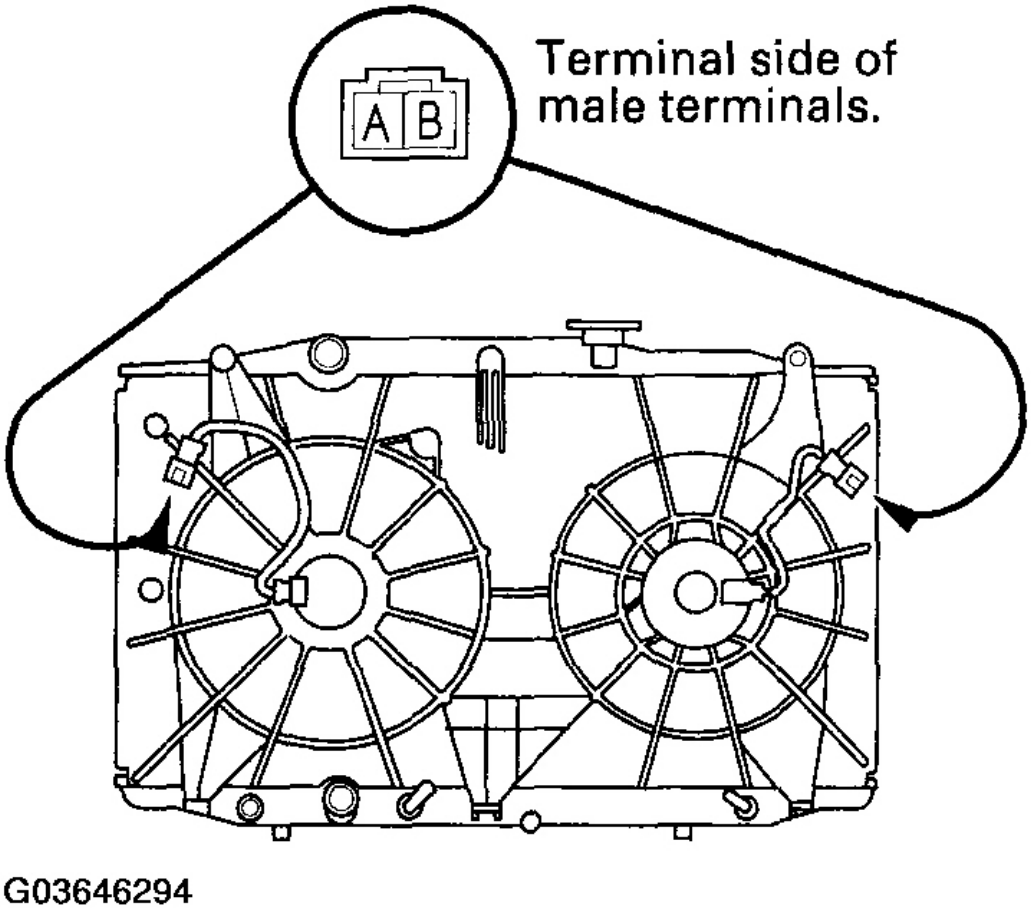


Fig. 4: Disconnecting 2P Connectors From Radiator Fan And Condenser Fan Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Test the motor by connecting battery power to No. 2 terminal and ground to No. 1 terminal.
3. If the motor fails to run or does not run smoothly, replace it (see **RADIATOR AND FAN REPLACEMENT**).

THERMOSTAT TEST

Replace the thermostat if it is in the stuck open position at room temperature.

To test a closed thermostat:

1. Suspend the thermostat (A) in a container of water. Do not let the thermometer (B) touch the bottom of the hot container.

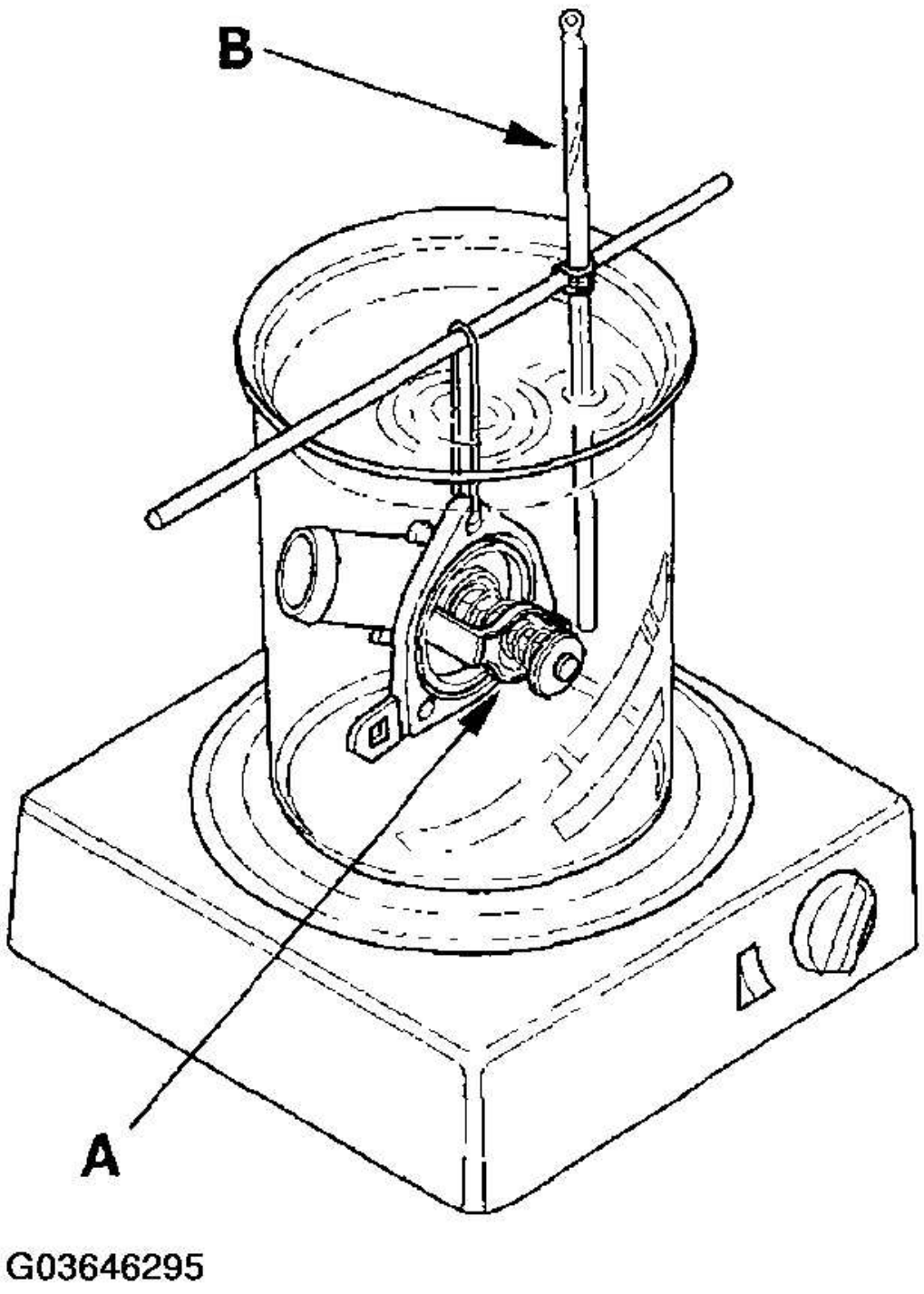


Fig. 5: Suspending Thermostat In Container Of Water

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Heat the water, and check the temperature with a thermometer. Check the temperature at which the thermostat first opens, and at which it is fully open.
3. Measure the lift height of the thermostat when it is fully open.

Standard Thermostat

Lift Height: above 8.0 mm (0.31 in.)
Starts Opening: 169-176°F (76-80°C)
Fully Open: 194°F (90°C)

WATER PUMP INSPECTION

1. Remove the drive belt (see **DRIVE BELT REPLACEMENT**).
2. Turn the water pump pulley counterclockwise. Check that it turns freely. If it doesn't turn smoothly, replace the water pump (see **Water Pump Replacement**).

NOTE: When you check the water pump pulley, you may see a small amount of "weeping" from the bleed holes (A). This is normal.

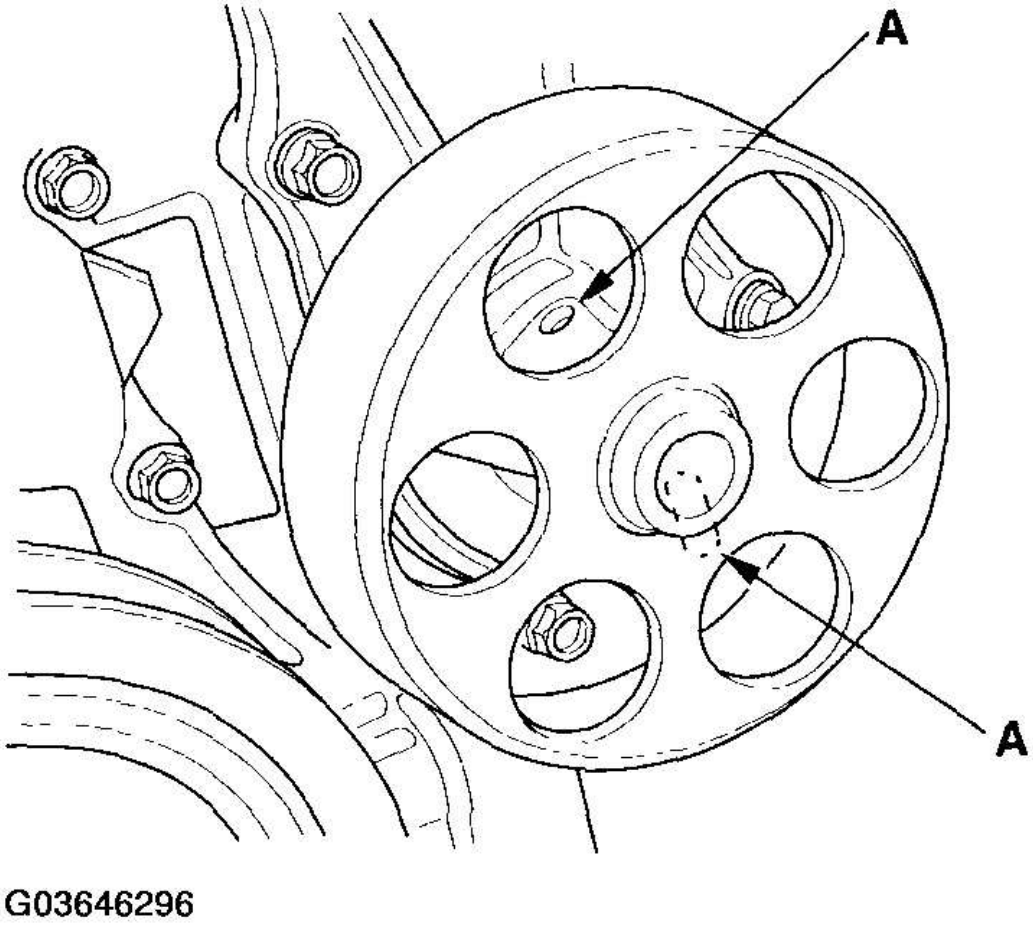


Fig. 6: Identifying Bleed Holes
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the drive belt (see **DRIVE BELT REPLACEMENT**).

WATER PUMP REPLACEMENT

1. Remove the drive belt (see **DRIVE BELT REPLACEMENT**).
2. Drain the engine coolant (see **Coolant Replacement**).
3. Remove the drive belt auto-tensioner (see **DRIVE BELT AUTO-TENSIONER REPLACEMENT**).
4. Remove the six bolts securing the water pump, then remove the water pump

(A).

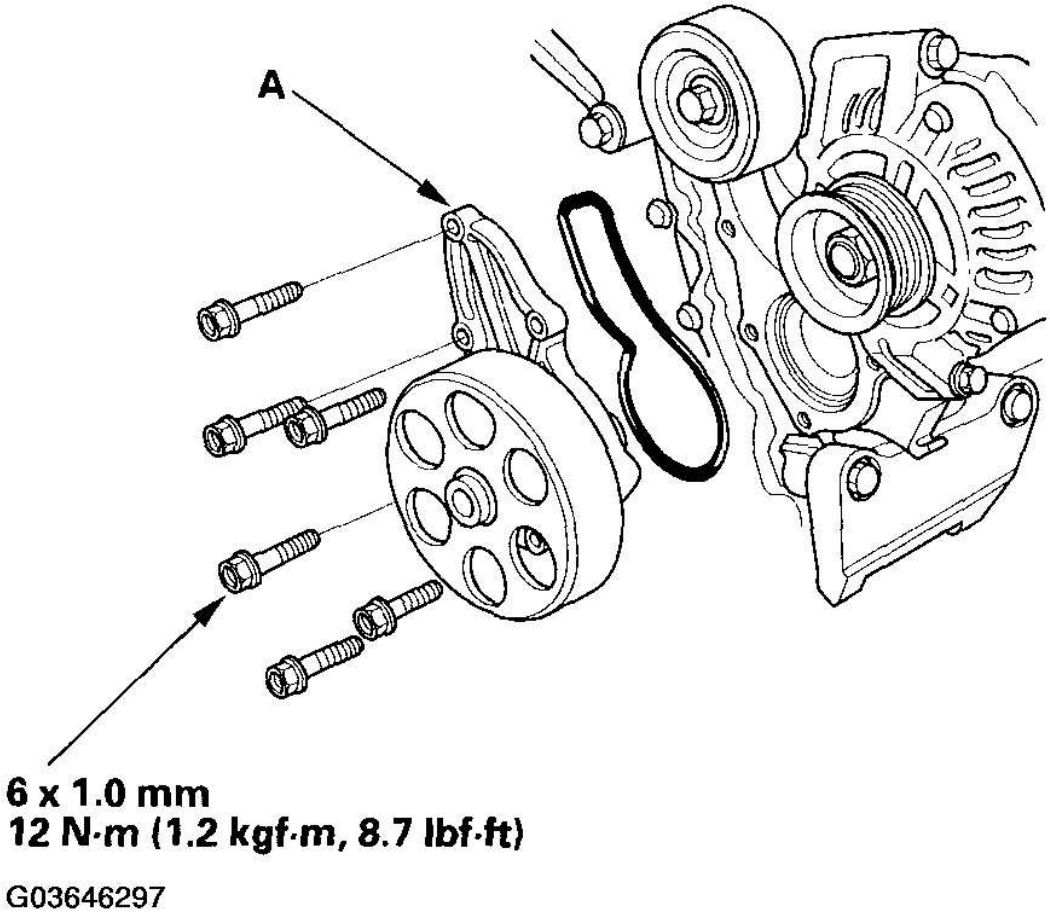


Fig. 7: Removing Water Pump
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Inspect and clean the O-ring groove and mating surface with the water passage.
6. Install the water pump with new O-rings in the reverse order of removal.
7. Clean up any spilled engine coolant.
8. Install the drive belt auto-tensioner (see **DRIVE BELT AUTO-TENSIONER REPLACEMENT**).
9. Refill the radiator with engine coolant, and bleed air from the cooling system with the heater valve open (see step 6 in **Coolant Replacement**).

COOLANT CHECK

1. Look at the coolant level in the reserve tank. Make sure it is between the MAX mark (A) and MIN mark (B).

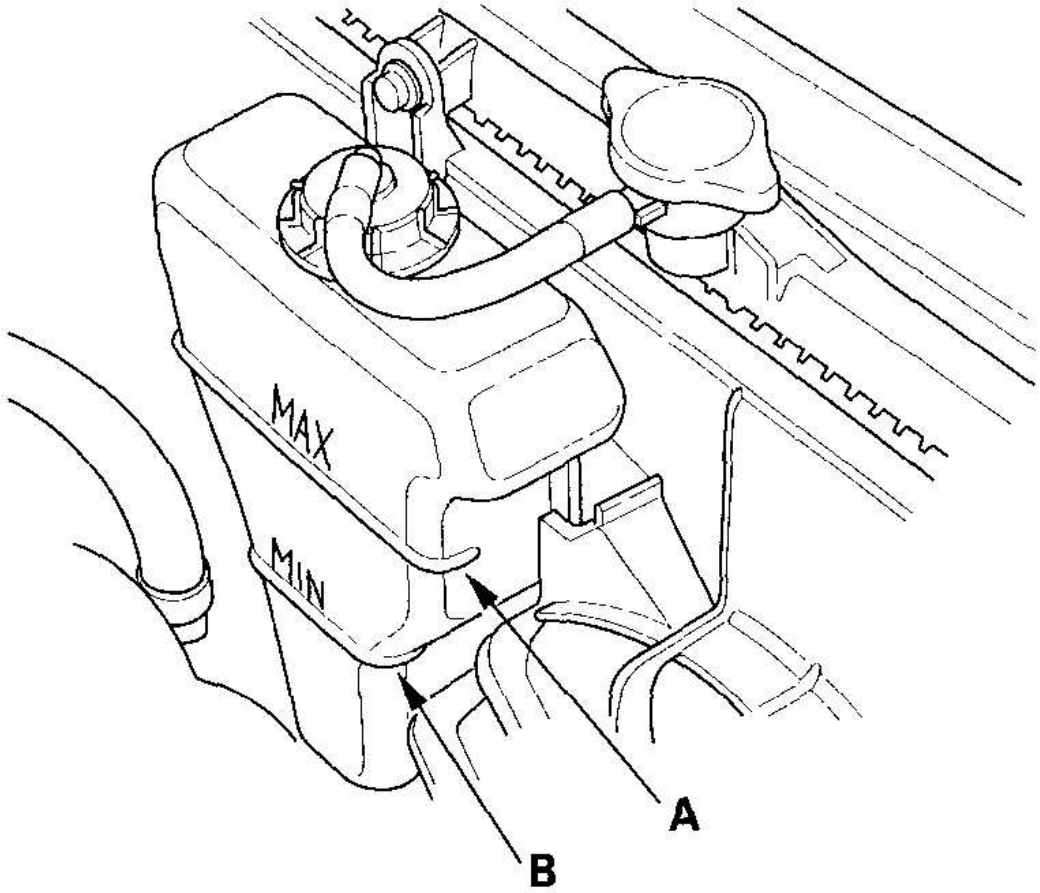


Fig. 8: Identifying Coolant Level
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. If the coolant level in the reserve tank is at or below the MIN mark, add coolant to bring it up to the MAX mark, and inspect the cooling system for leaks.

COOLANT REPLACEMENT

1. Start the engine. Set the heater temperature control dial to maximum heat, or climate control system to HI, then turn off the ignition switch. Make sure the engine and radiator are cool to the touch.
2. Remove the radiator cap.
3. Loosen the drain plug (A), and drain the coolant.

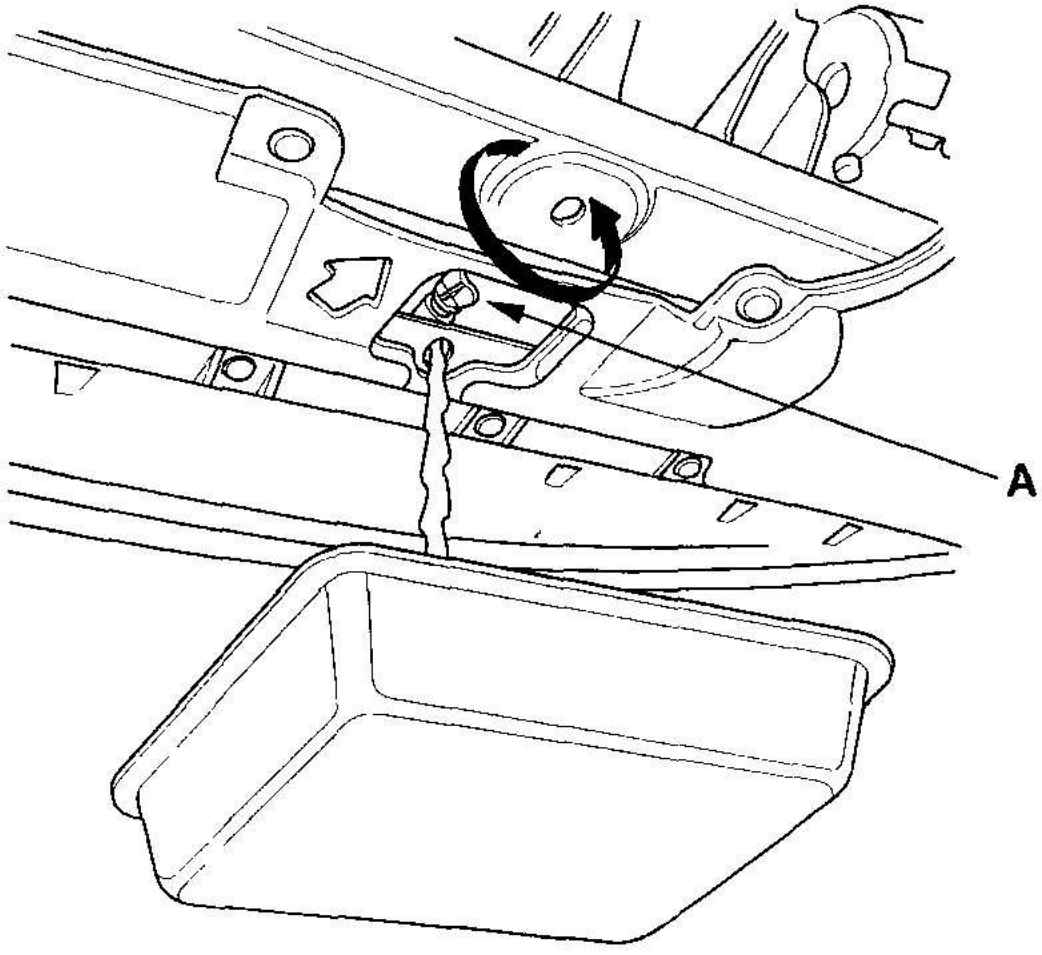
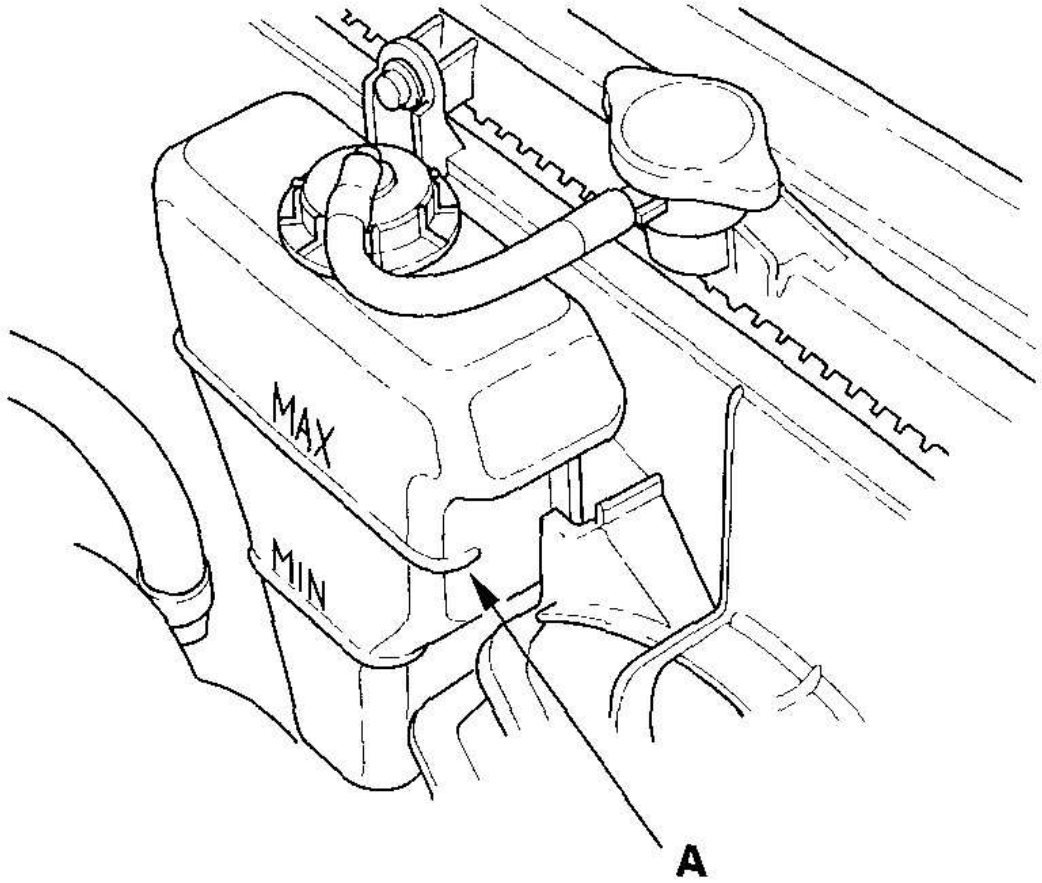


Fig. 9: Loosening Drain Plug And Drain Coolant
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. After the coolant has drained, tighten the radiator drain plug.
5. Remove, drain and reinstall the reverse tank.
6. Fill the reserve tank to the MAX mark (A) with Honda Antifreeze/Coolant Type 2 (P/N OL999-9001).



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Fig. 10: Identifying MAX Mark
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Pour Honda Antifreeze/Coolant Type 2 into the radiator up to the base of the filler neck.

NOTE:

- **Always use Honda Antifreeze/Coolant Type 2 (P/N OL999-9001). Using a non-Honda coolant can result in corrosion, causing the cooling system to malfunction or fail.**
- **Honda Antifreeze/Coolant Type 2 is a mixture of 50% antifreeze and 50% water. Do not add water.**

Engine Coolant Capacities (including the reserve tank capacity of 0.6 L (0.16 US gal))

After Coolant Change:

M/T: 5.1 L (1.35 US gal)
A/T: 5.0 L (1.32 US gal)

After Engine Overhaul:

M/T: 7.2 L (1.90 US gal)
A/T: 7.1 L (1.88 US gal)

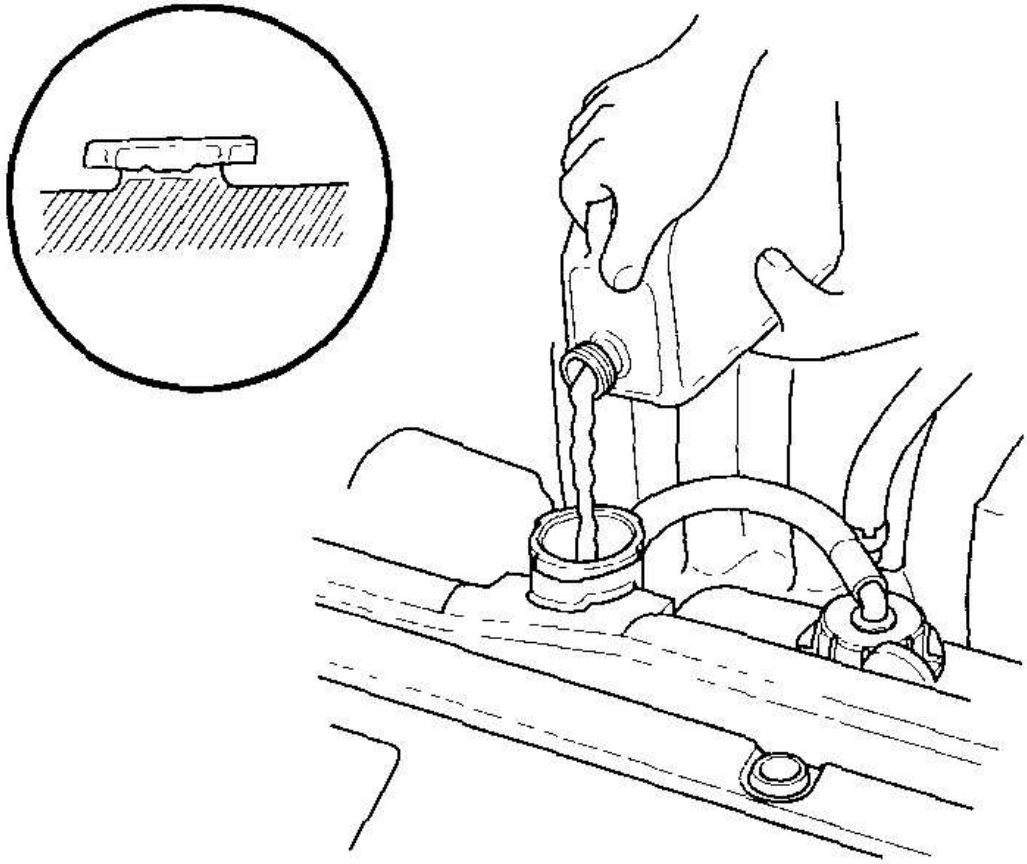


Fig. 11: Pouring Honda Antifreeze/Coolant Type 2 Into Radiator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the radiator cap loosely.
9. Start the engine, and let it run until it warms up (the radiator fan comes on at least twice).
10. Turn off the engine. Check the level in the radiator and add Honda Antifreeze/Coolant Type 2 if needed.
11. Put the radiator cap on tightly, then run the engine again and check for leaks.

THERMOSTAT REPLACEMENT

1. Drain the engine coolant (see **Coolant Replacement**).
2. Clean any dirt off the quick connector (A), thermostat cover, and lower radiator hose.

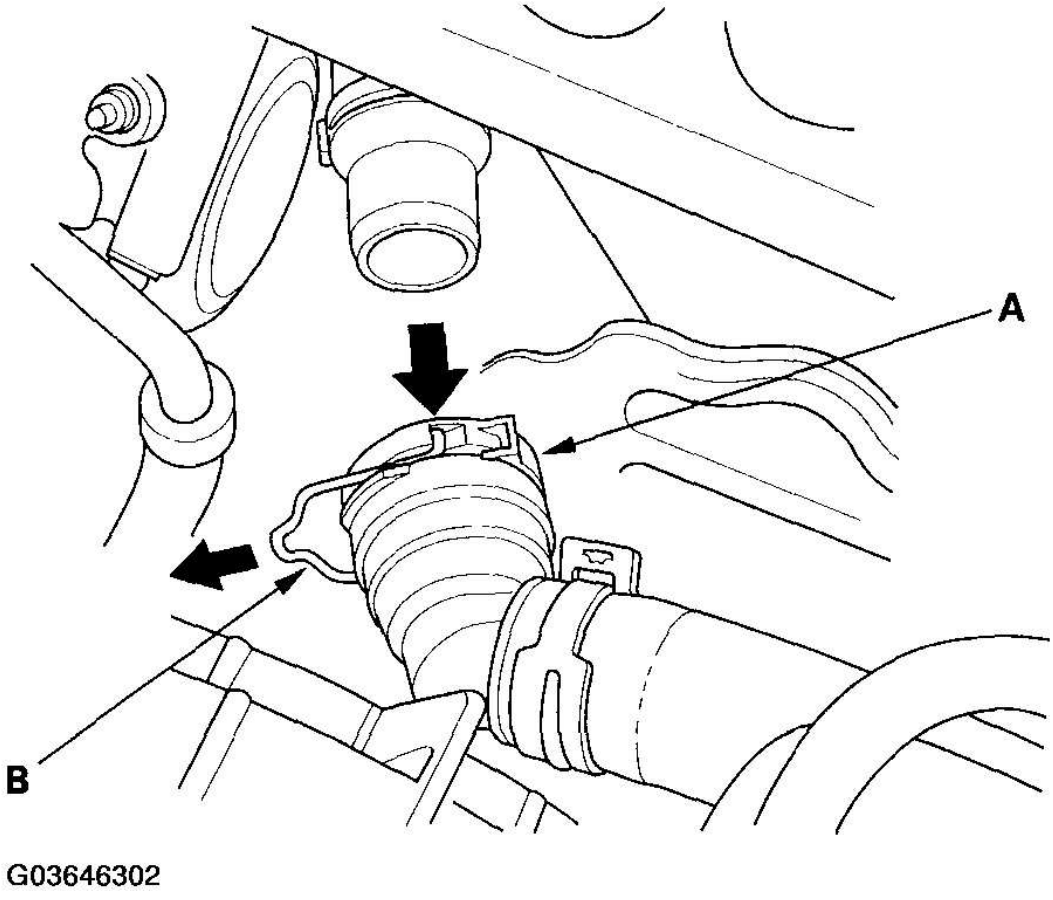


Fig. 12: Cleaning Dirt Off Quick Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Pull out lock (B) by hand, then wiggle the quick connector loose, and remove it from the thermostat cover. Do not use any tools to remove the quick connector.
4. Remove the thermostat (A).

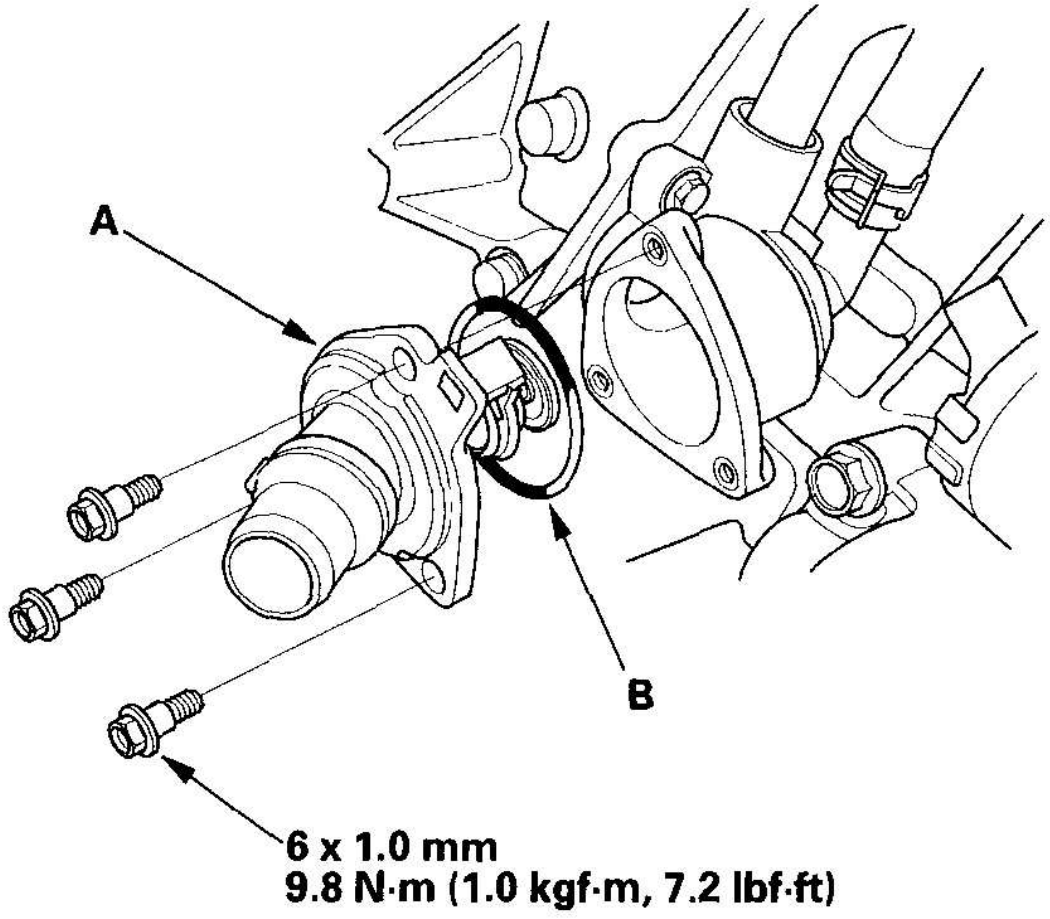


Fig. 13: Removing Thermostat
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the thermostat with a new O-ring (B).
6. Check the quick connector (A) and set ring (B) for cracks or damage. If the connector and/or set ring are cracked or damaged, replace the connector.

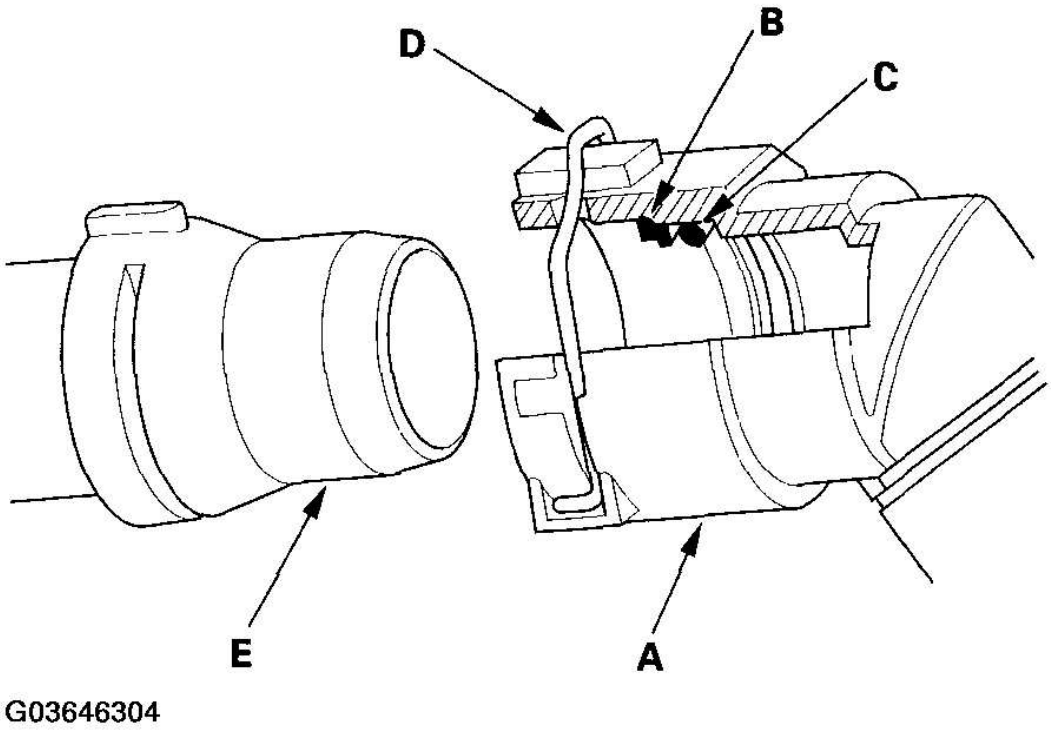


Fig. 14: Checking Quick Connector And Set Ring For Cracks Or Damage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Make sure the set ring is in place inside the quick connector. If the set ring is off the connector, replace the quick connector.
8. Replace the O-ring (C) in the quick connector.
9. Check the lock (D). If the lock is damaged or deformed, replace it. When installing the new lock on the connector, press it straight down along the groove.
10. Clean the connecting surface of the thermostat cover (E), then apply clean engine coolant around the connecting surface.
11. Push down the lock (A), then push the quick connector (B) onto the thermostat cover until you hear it click.

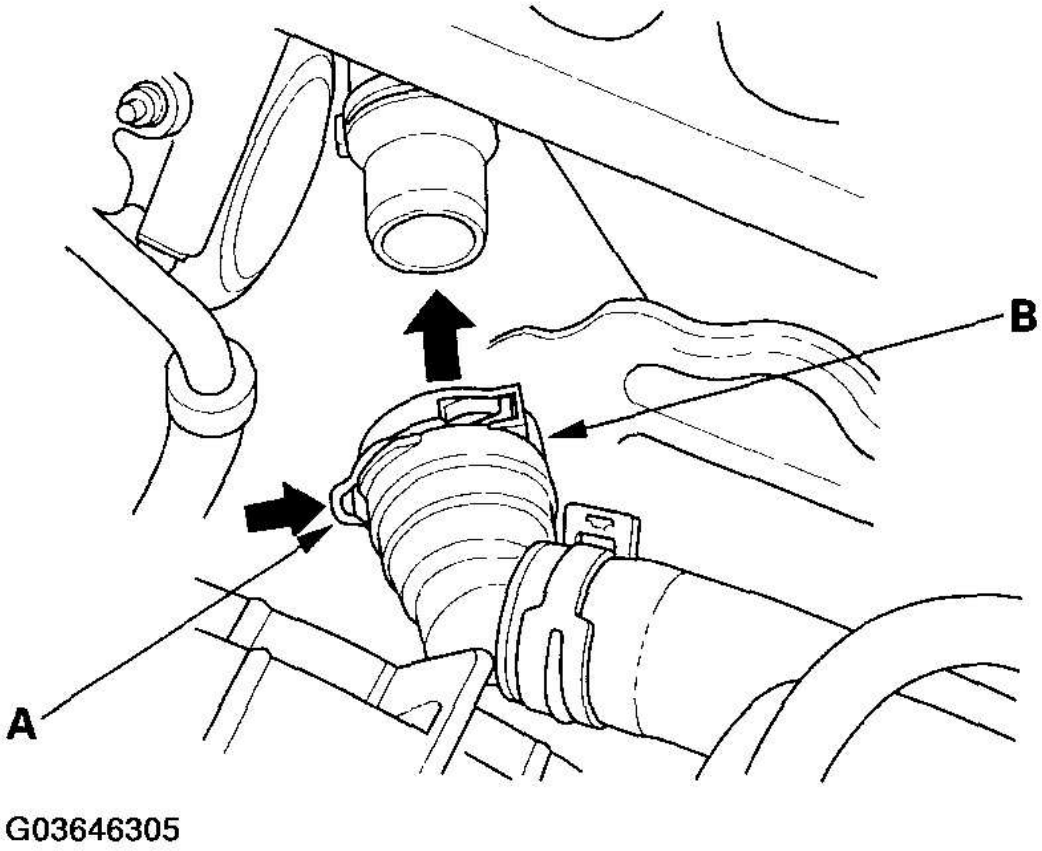


Fig. 15: Pushing Down Lock
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Refill the radiator with engine coolant, and bleed air from the cooling system with the heater valve open (see step 6 in **Coolant Replacement**).

WATER PASSAGE REPLACEMENT

1. Drain the engine coolant (see **Coolant Replacement**).
2. Clean any dirt off the quick connector (A), thermostat cover, and lower radiator hose.

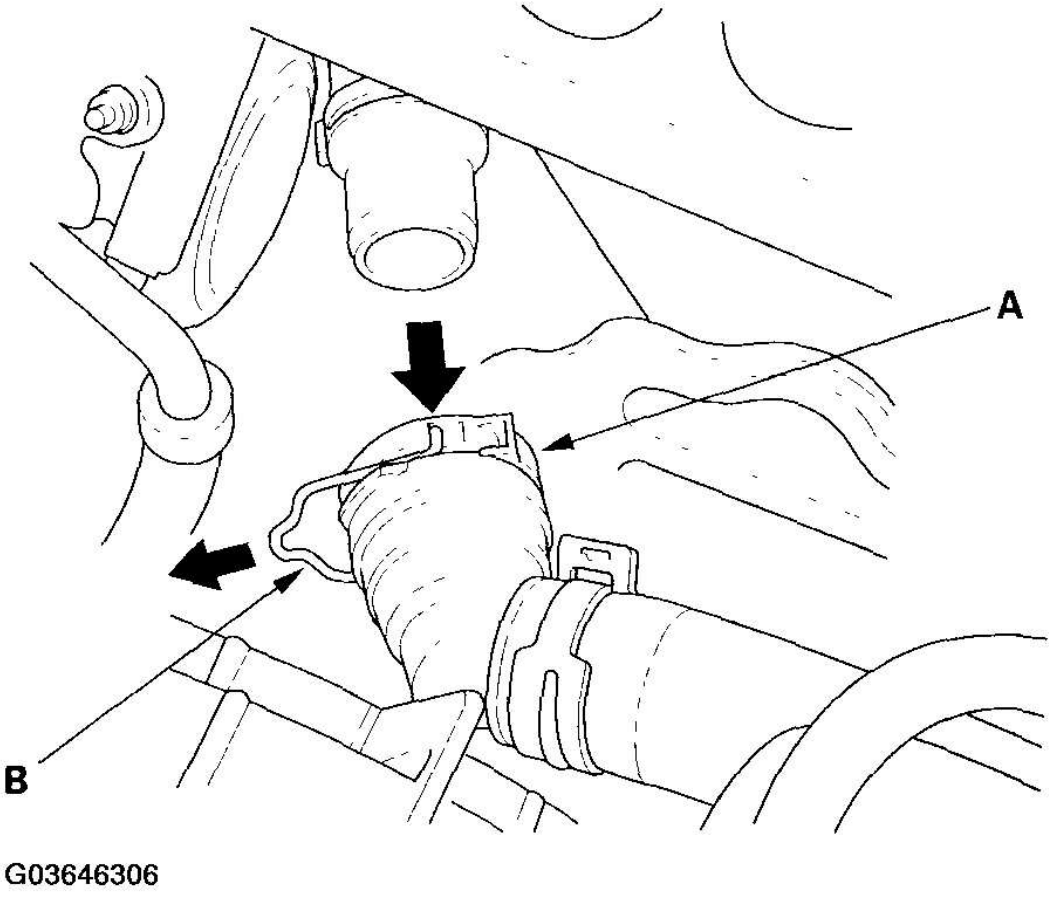


Fig. 16: Cleaning Dirt Off Quick Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Pull out the lock (B) by hand, then wiggle the quick connector loose, and remove it from the thermostat cover. Do not use any tools to remove the quick connector.
4. Remove the alternator (see **ALTERNATOR REMOVAL AND INSTALLATION**).
5. Remove the splash shield (see step 25 on **TRANSMISSION REMOVAL**).
6. Remove the A/C compressor without disconnecting the A/C hoses (see step 26 on **ENGINE REMOVAL**).
7. Remove the intake manifold:).

- '03-05 models (see **REMOVAL ('03-05 MODELS)**
- '06-07 models (see **REMOVAL ('06--07 MODELS)**

8. Remove a bolt (A) securing the connecting pipe.

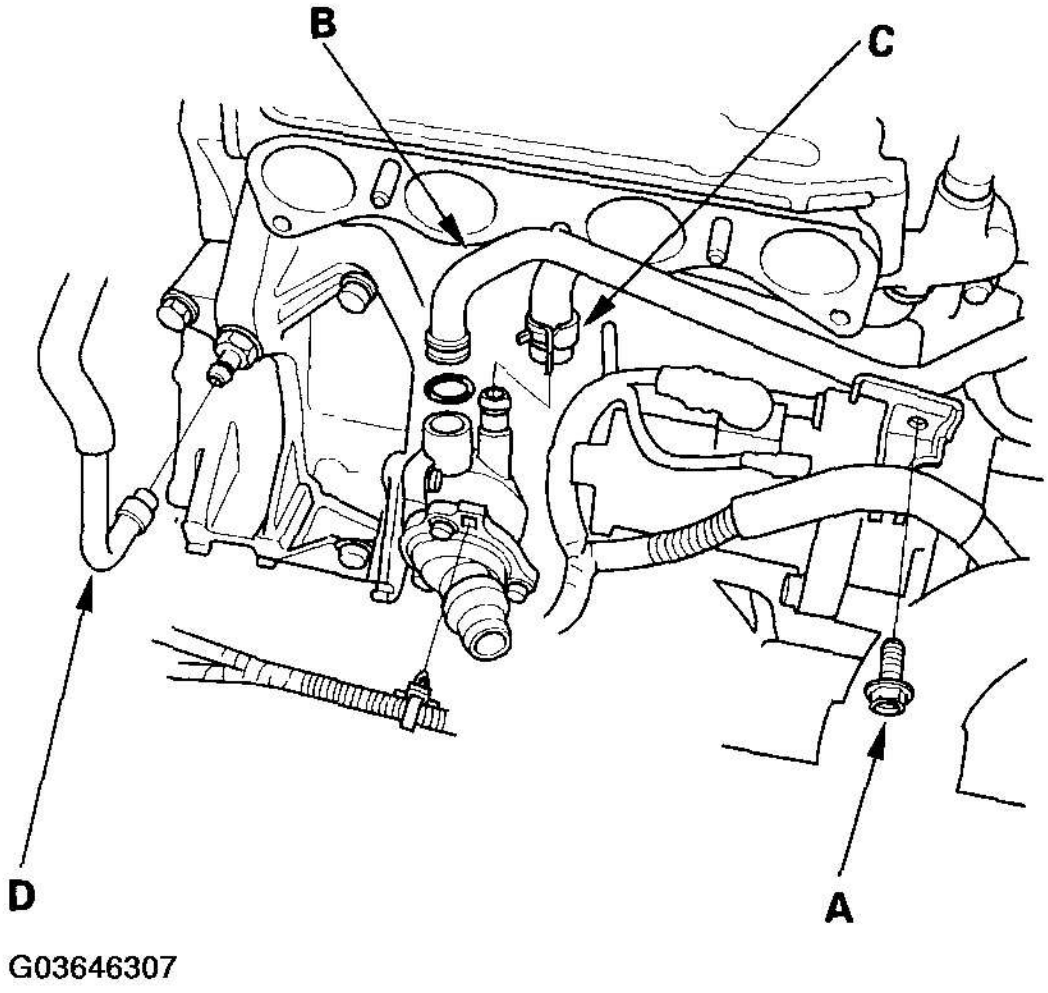


Fig. 17: Removing Connecting Pipe Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the connecting pipe (B), water bypass hose (C), and positive crankcase ventilation (PCV) hose (D).
10. Remove the water passage (A).

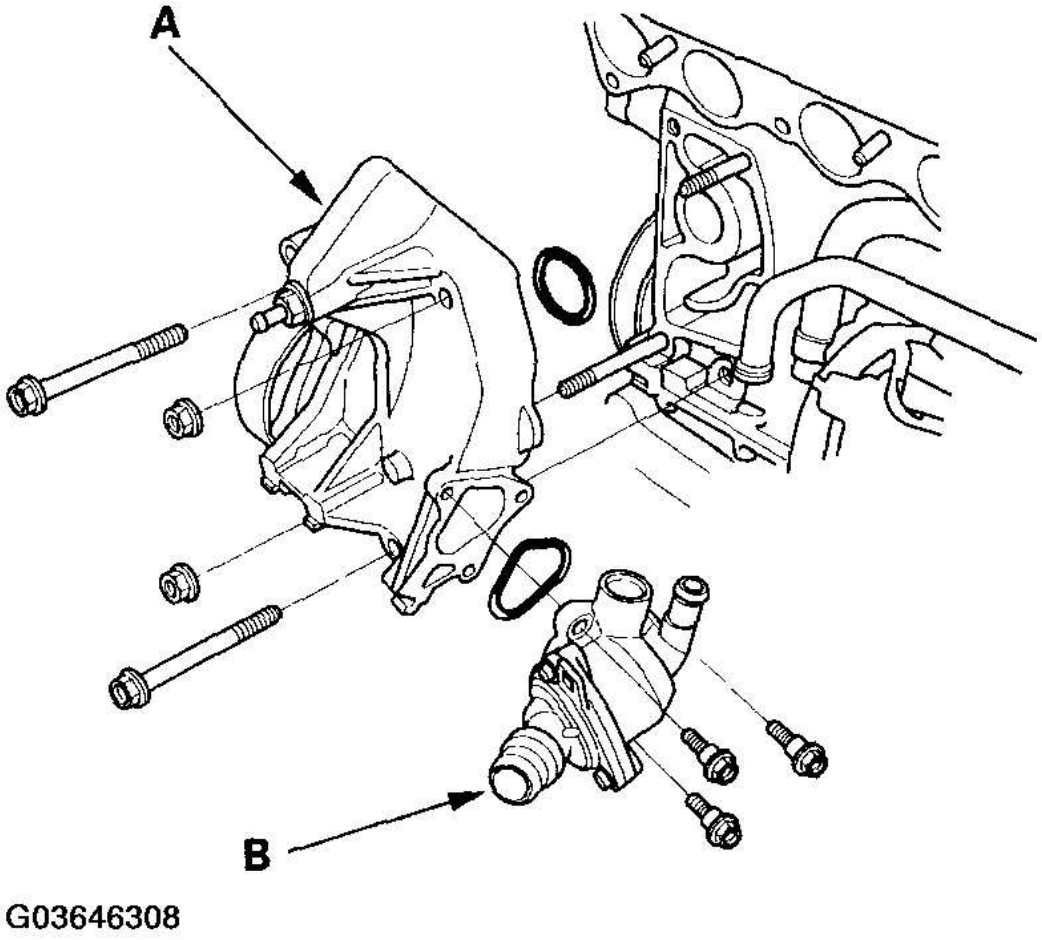


Fig. 18: Removing Water Passage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

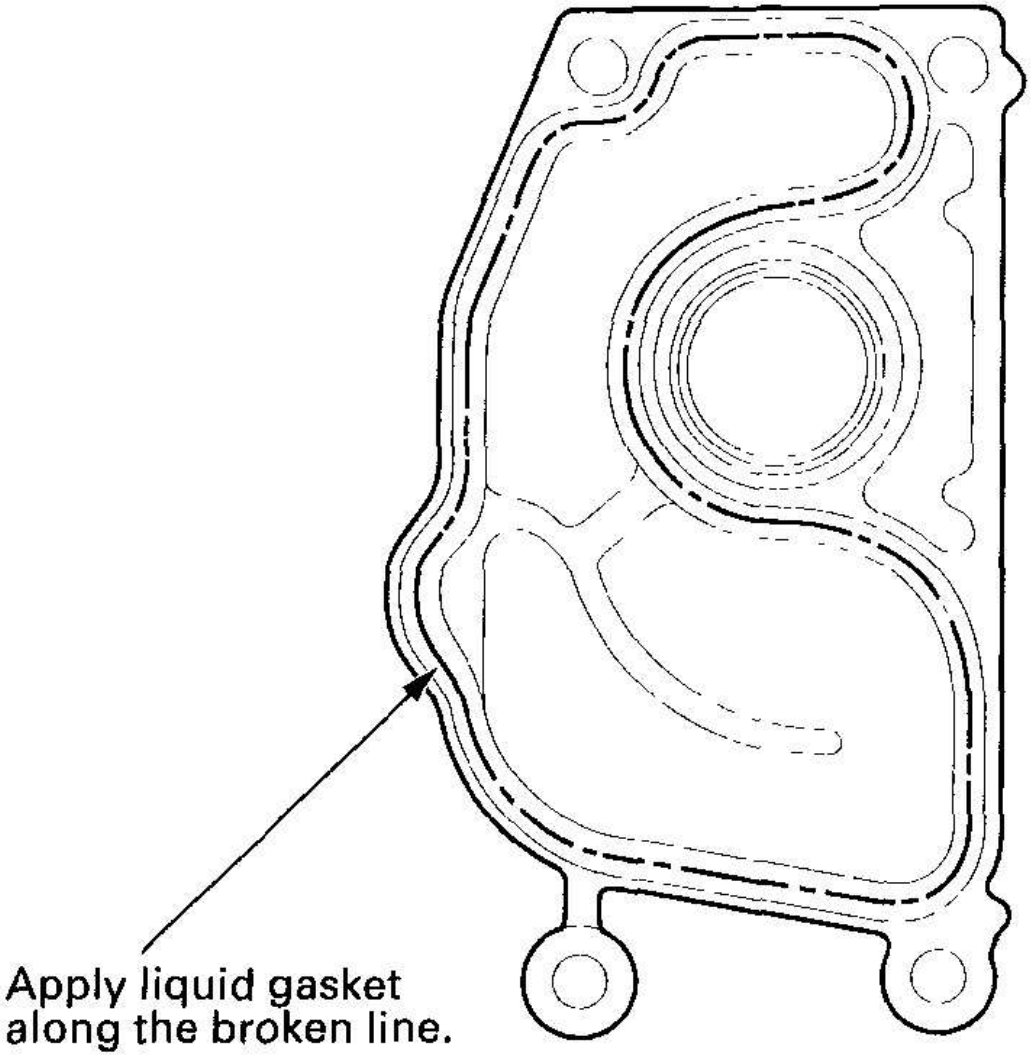
11. Remove the thermostat housing (B).
12. Remove the water pump (see **Water Pump Replacement**).
13. Clean and dry the water passage mating surfaces.
14. Apply liquid gasket, P/N 08717-0004, 08718-0001, 08718-0002, 08718-0003, or 08718-0009, evenly to the cylinder block mating surface of the water passage and to the inner threads of the bolt holes.

NOTE:

- **Do not install components if too much time has**

passed after applying the liquid gasket (for P/N 08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply the liquid gasket.

- **Do not run the engine for at least 3 hours after installing the water passage.**



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Fig. 19: Applying Liquid Gasket To Cylinder Block Mating Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Install the water pump (see **Water Pump Replacement**).
16. Install the thermostat housing (A) with a new O-ring (B).

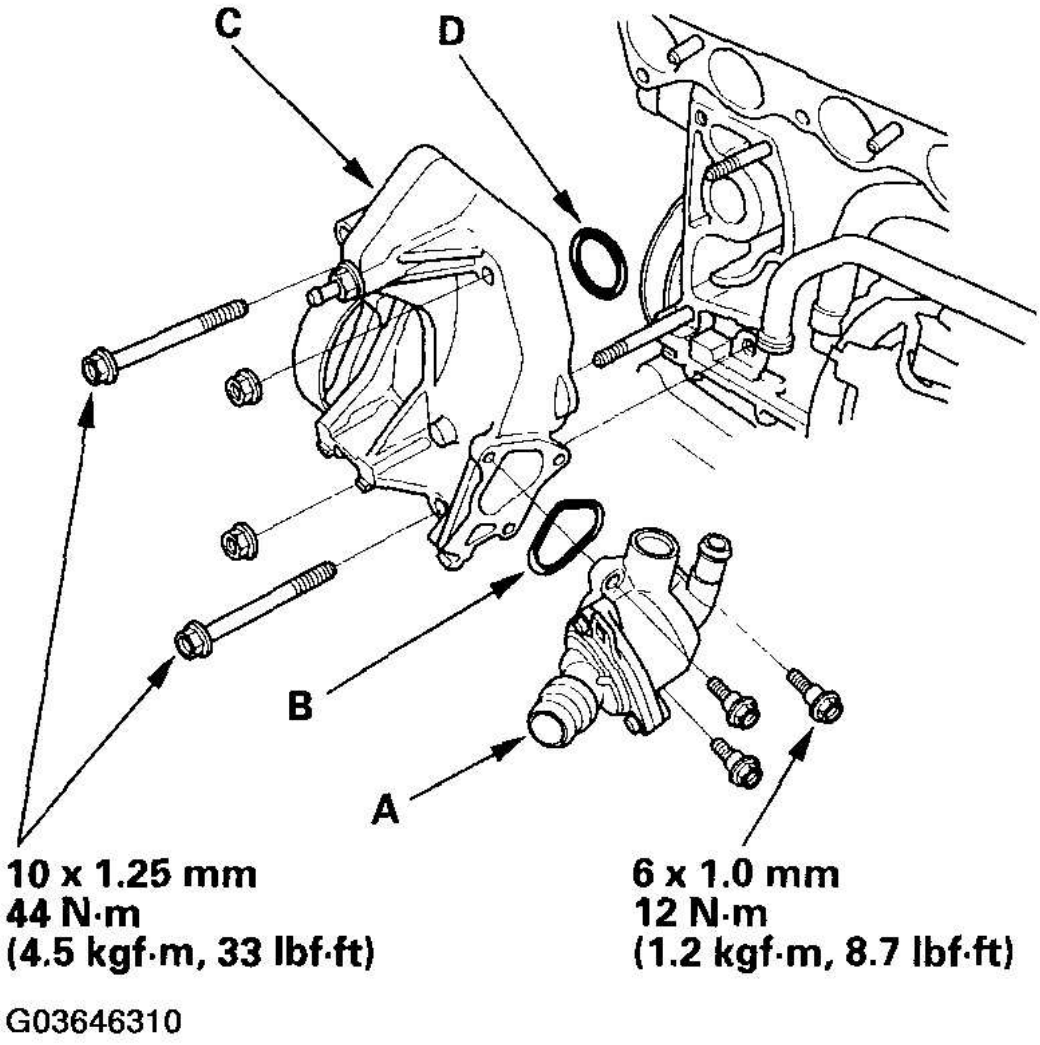


Fig. 20: Installing Thermostat Housing With New O-Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Install the water passage (C) with a new O-ring (D).

18. Install the connecting pipe (A) with a new O-ring (B).

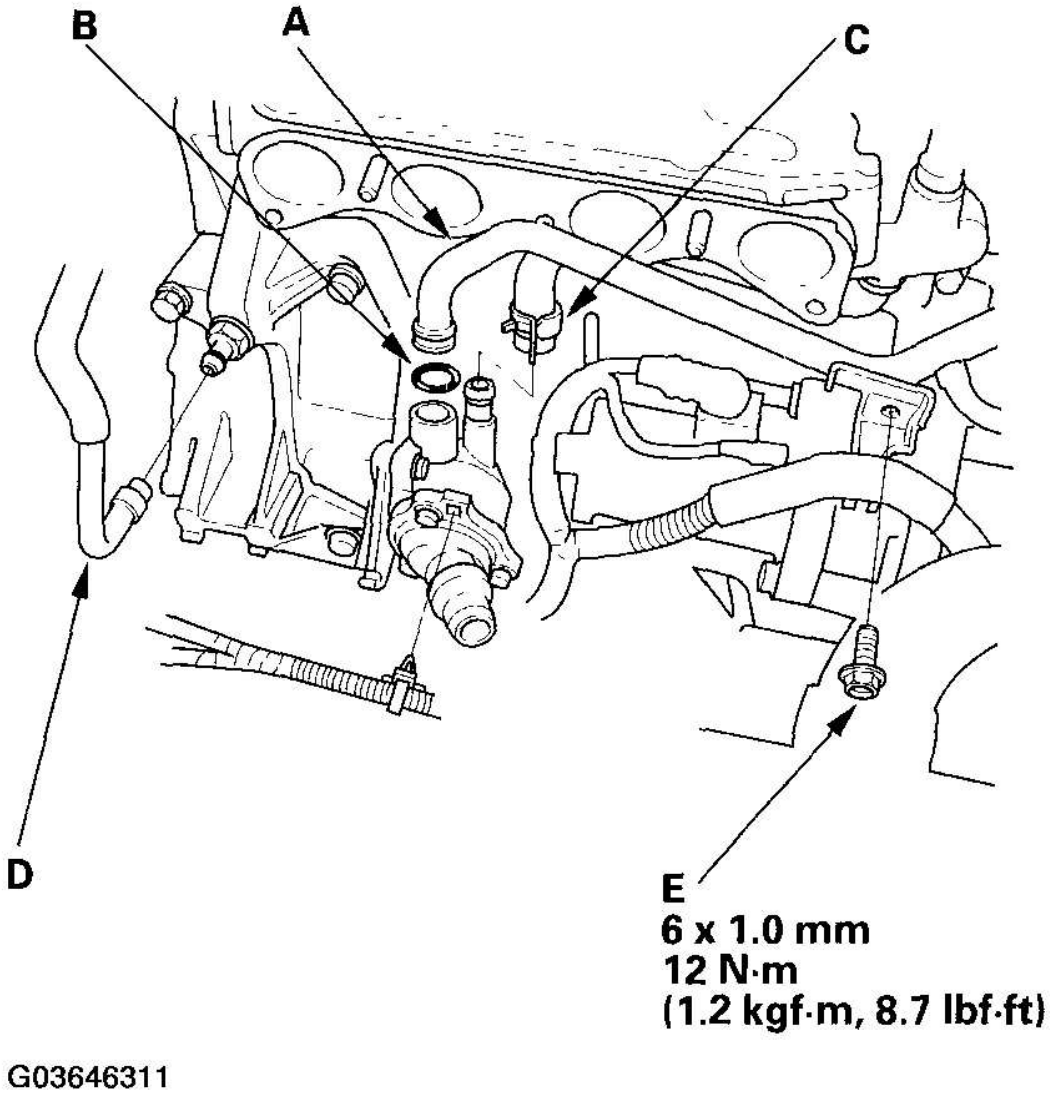


Fig. 21: Installing Connecting Pipe With New O-Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Install the water bypass hose (C), and PCV hose (D), then tighten a bolt (E) securing the connecting pipe.
20. Install the intake manifold.

- '03-05 models (see **INSTALLATION ('03-05 MODELS)**)
- '06-07 models (see **INSTALLATION '06--07 MODEL)**).

21. Install the A/C compressor (see step 30 on **ENGINE INSTALLATION**).
22. Install the splash shield (see step 25 on **TRANSMISSION INSTALLATION**).
23. Install the alternator (see **ALTERNATOR REMOVAL AND INSTALLATION**).
24. Check the quick connector (A) and set ring (B) for cracks or damage. If the connector and/or set ring are cracked or damaged, replace the connector.

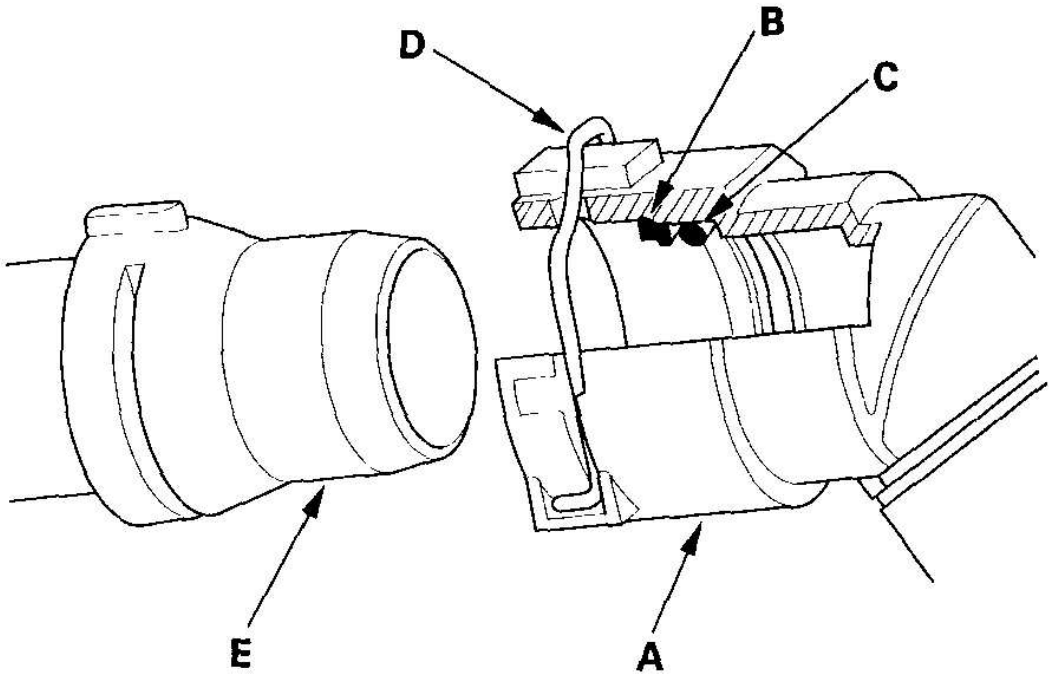


Fig. 22: Checking Quick Connector And Set Ring For Cracks Or Damage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

25. Make sure the set ring is in place inside the quick connector. If the set ring is off the connector, replace the quick connector.

26. Replace the O-ring (C) in the quick connector.
27. Check the lock (D). If the lock is damaged or deformed, replace it. When installing the new lock on the connector, press it straight down along the groove.
28. Clean the connecting surface of the thermostat cover (E), then apply clean engine coolant around the connecting surface.
29. Push down the lock (A), then push the quick connector (B) onto the thermostat cover until you here it click.

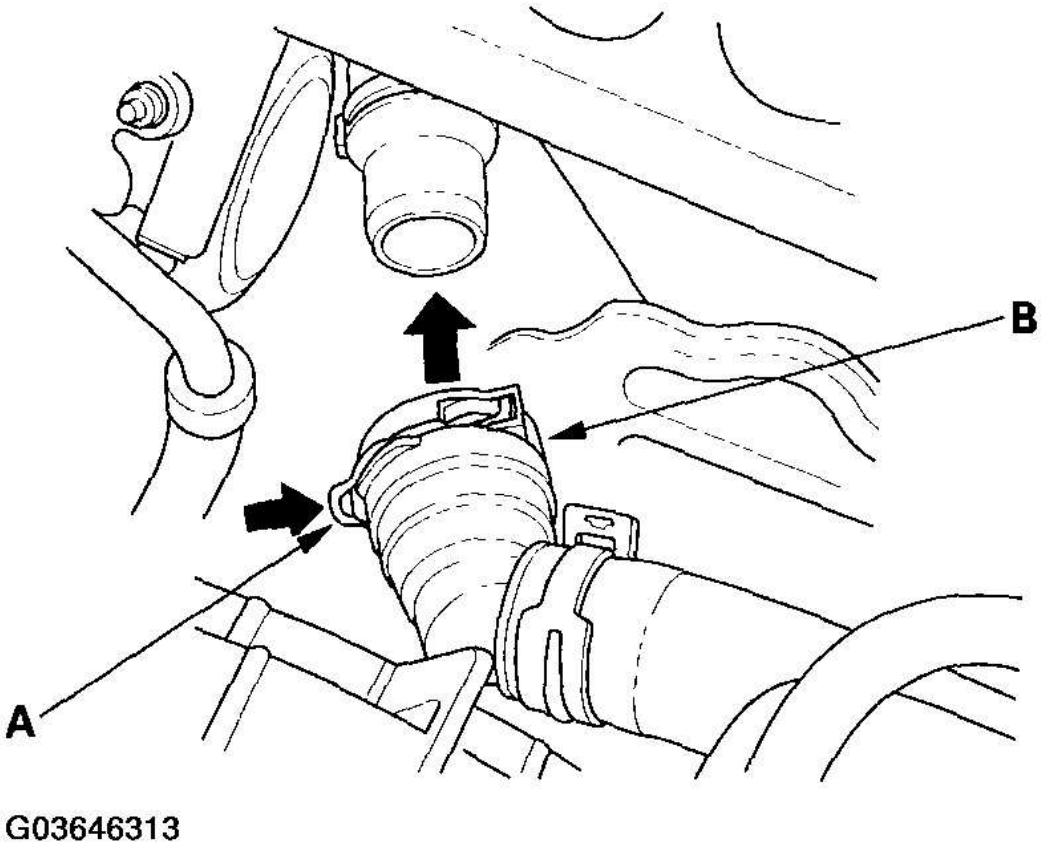


Fig. 23: Pushing Down Lock And Quick Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

30. After assembly, wait at least 30 minutes before filling the engine with coolant

or oil.

EGR PASSAGE REPLACEMENT

1. Drain the engine coolant (see **COOLANT CHECK**).
2. Remove the two bolts (A) securing the EVAP canister purge valve bracket and remove the bolt (B) securing the harness bracket.

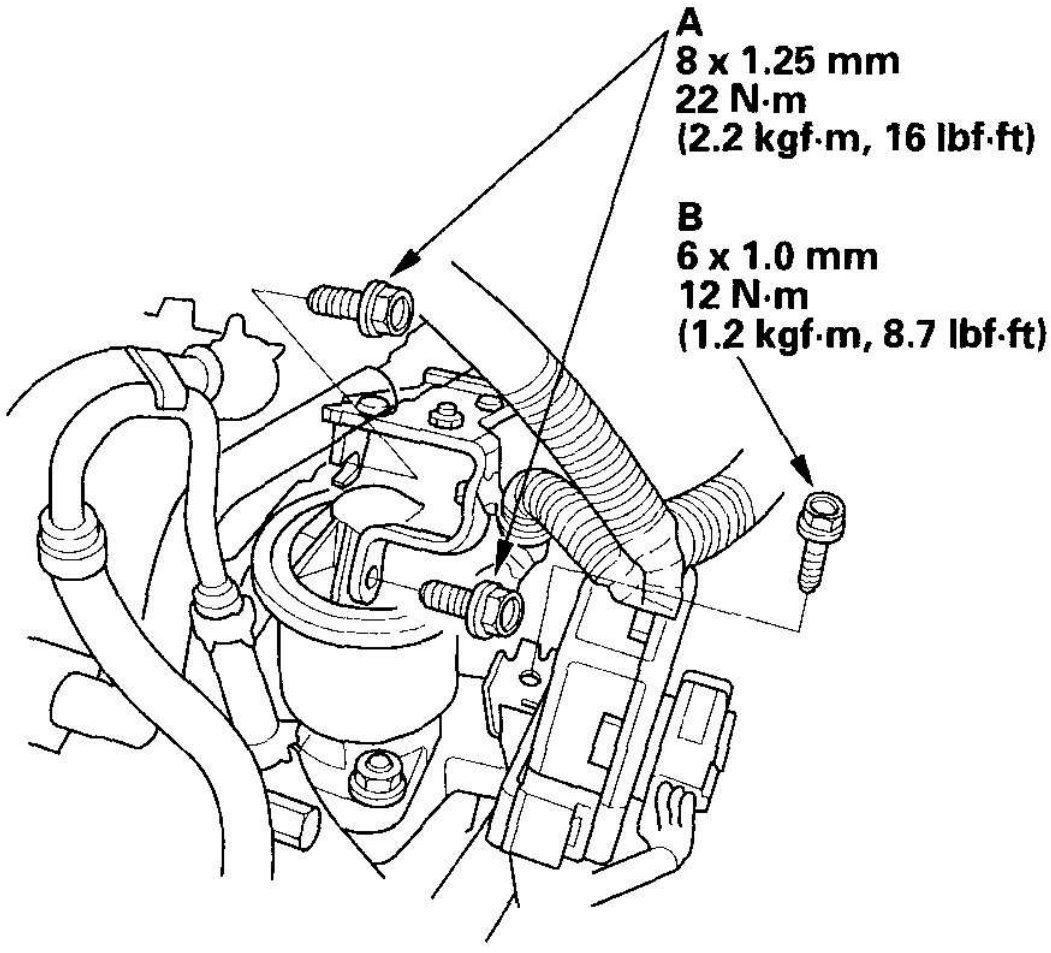


Fig. 24: Removing EVAP Canister Purge Valve Bracket Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the upper radiator hose (A), heater hose (B), water bypass hose (C), and connecting pipe mounting bolt (D).

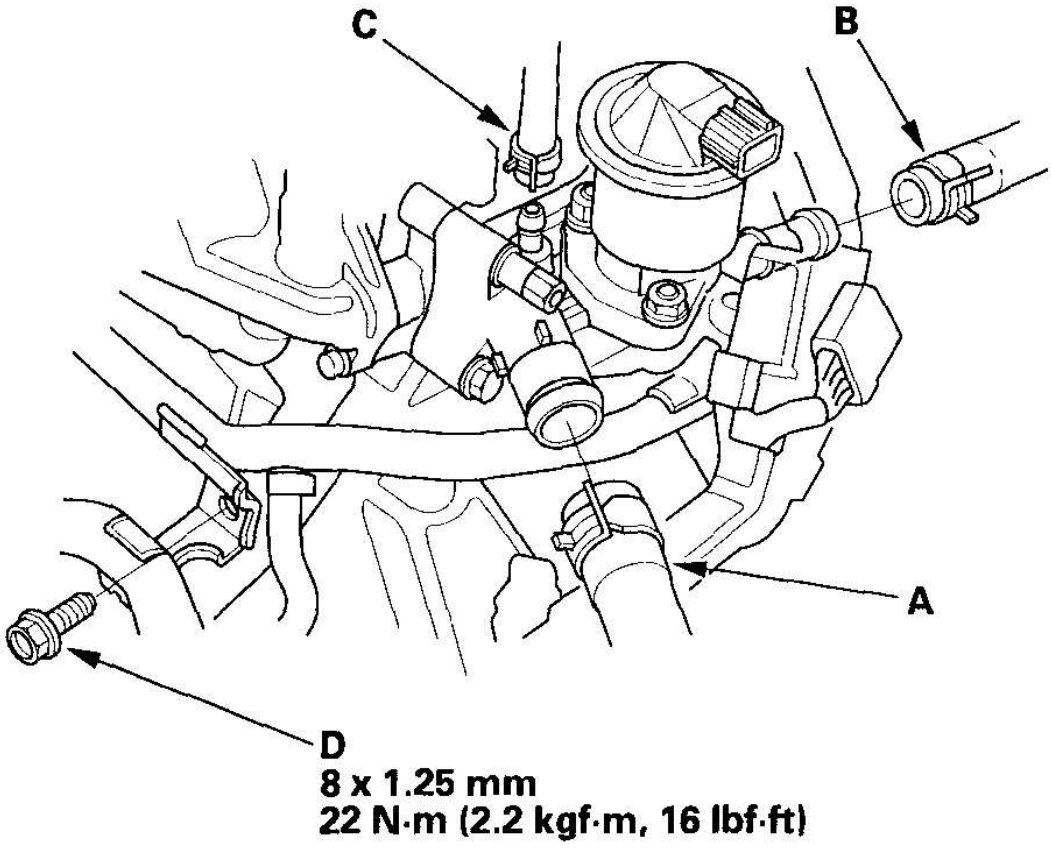


Fig. 25: Removing Upper Radiator Hose, Heater Hose, Water Bypass Hose And Connecting Pipe Mounting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Disconnect the exhaust gas recirculation (EGR) valve connector.
5. Remove the EGR passage (A).

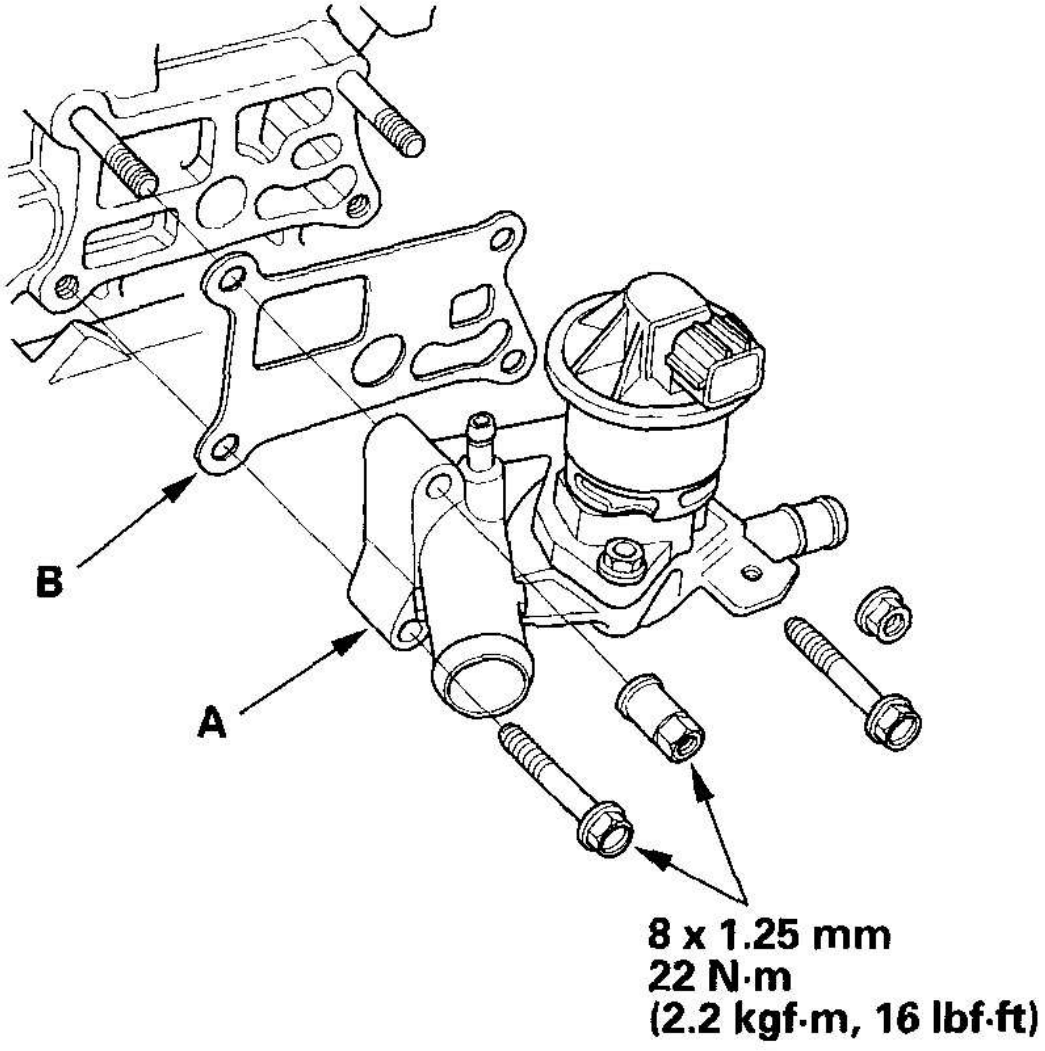


Fig. 26: Removing EGR Passage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the EGR passage with a new gasket (B).
7. Install the other parts in the reverse order of removal.
8. Refill the radiator with engine coolant, and bleed air from the cooling system with the heater valve open (see step 6 in **Coolant Replacement**).

RADIATOR AND FAN REPLACEMENT

1. Drain the engine coolant (see **Coolant Replacement**).
2. Remove the front bulkhead cover:
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
3. Remove the automatic transmission fluid (ATF) cooler hoses (A/T). Plug the ATF cooler hoses and lines.

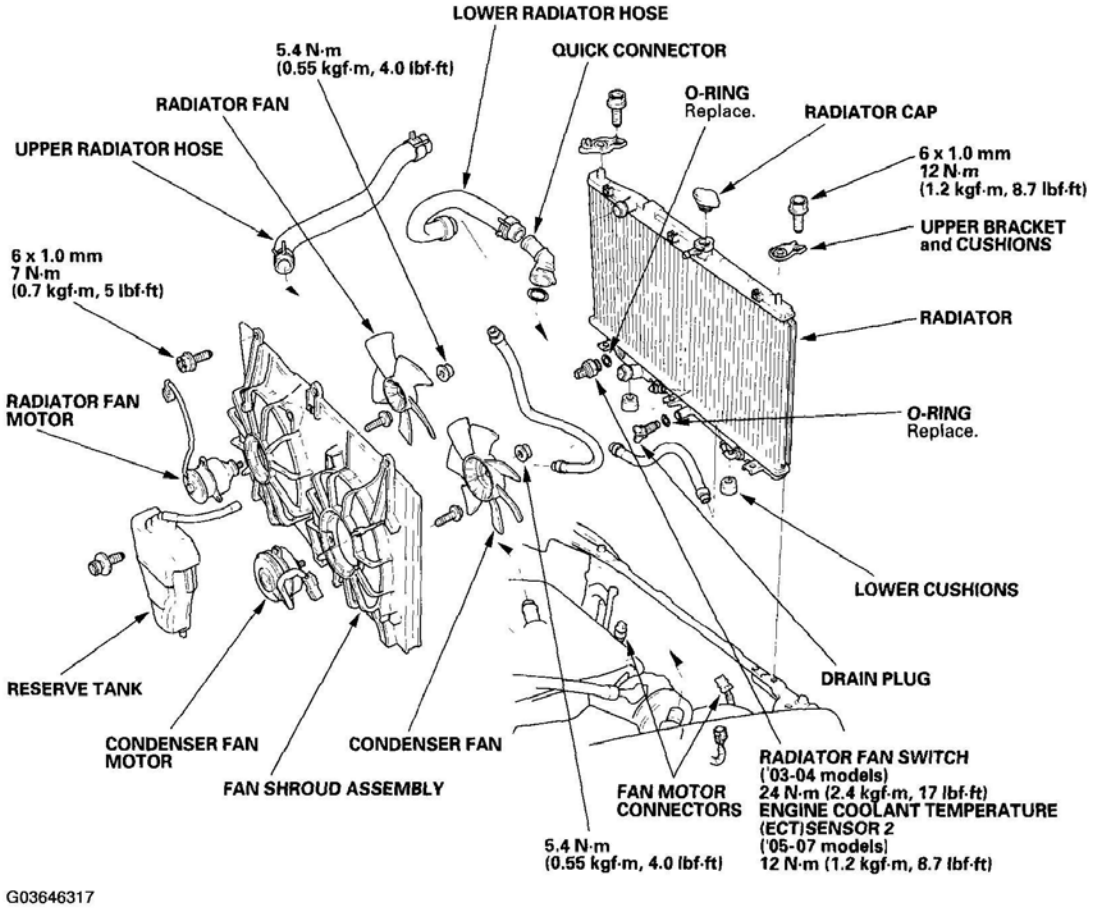


Fig. 27: Removing ATF Cooler Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the upper radiator hose and lower radiator hose from the radiator.
5. Disconnect the fan motor connectors and radiator fan switch connector ('03-

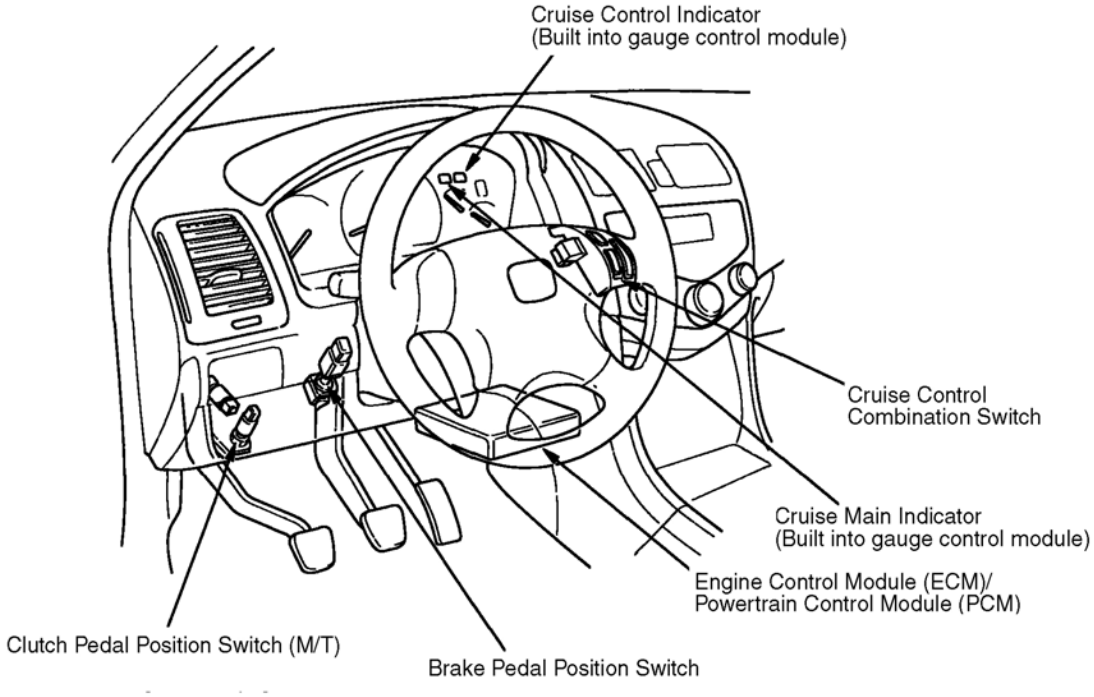
2004 models)/engine coolant temperature (ECT) sensor 2 connector ('05-07 models).

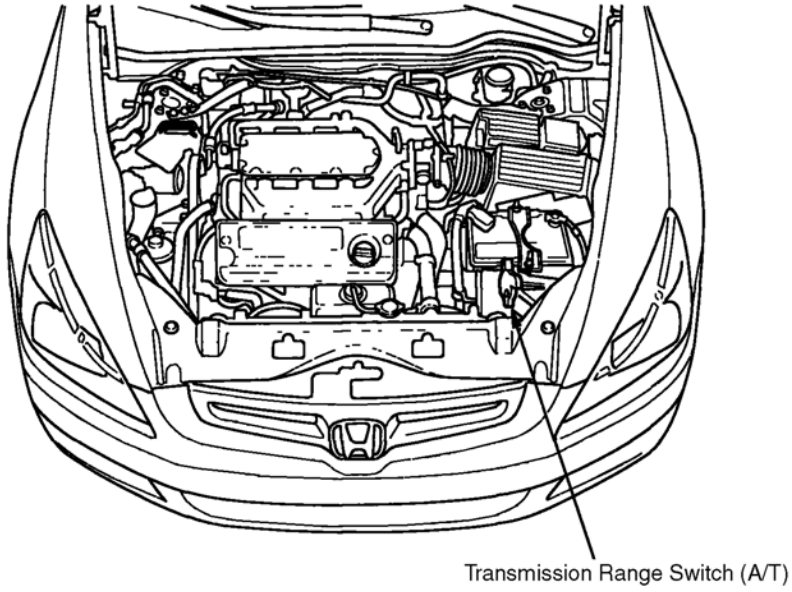
6. Remove the A/C compressor clutch connector.
7. Remove the upper bracket and cushions, then pull up the radiator.
8. Remove the fan shroud assemblies and other parts from the radiator.
9. Install the radiator in the reverse order of removal. Make sure the upper and lower cushions are set securely.
10. Fill the radiator with engine coolant, then bleed air from the cooling system (see step 6 in **Coolant Replacement**).
11. Check the ATF level in the automatic transmission (A/T) (see **ATF LEVEL CHECK**).

2003-07 ACCESSORIES & EQUIPMENT

Cruise Control - Accord (V6)

COMPONENT LOCATION INDEX





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Fig. 1: Locating Cruise Control Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

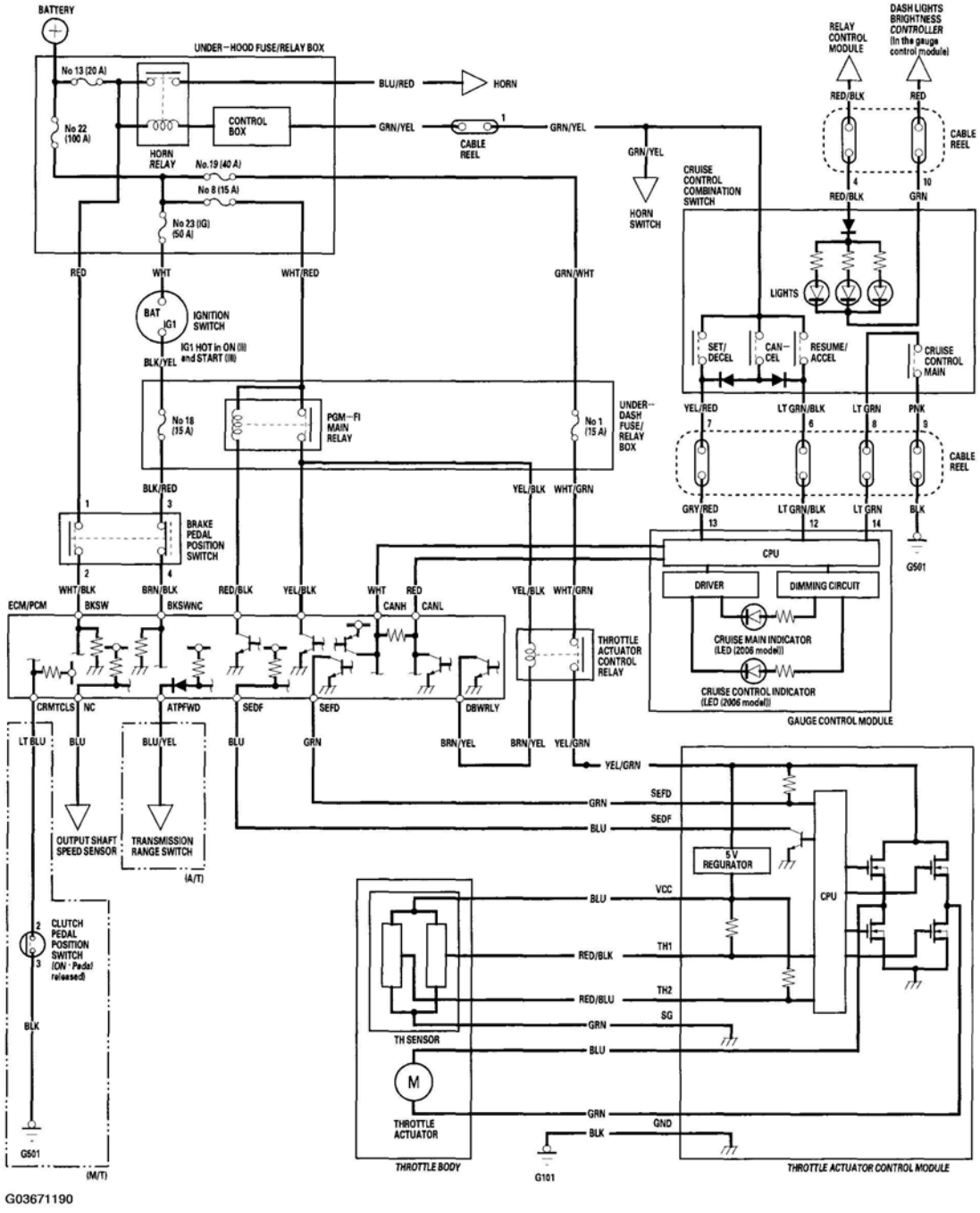


Fig. 2: Cruise Control Circuit Diagram

Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for
Cruise control cannot be set	1. Check for PGM-FI and body DTCs. 2. Check the No. 13 (20 A) fuse in the under-hood fuse/ relay box, and the No. 18 (15 A) fuse in the under-dash fuse/relay box. 3. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). 4. Do the cruise control combination switch test (see **CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**).	Poor ground G501
Cruise control can be set, but the CRUISE MAIN indicator does not come on	1. Check for PGM-FI and body DTCs. 2. Do the gauge control module self-diagnostic function procedure, refer to **SELF-DIAGNOSTIC FUNCTION** . 3. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). Test the cruise	Faulty gauge control module

	control master button signal input	
Cruise control can be set, but the CRUISE CONTROL indicator does not come on	1. Check for PGM-FI and body DTCs. 2. Do the gauge control module self-diagnostic function, procedure, refer to the 2003-2006 Accord Service 3. Manual (See **HORNS (EXCEPT HYBRID & V6)** . Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). Test the cruise control indicator signal input.	Faulty gauge control module
Vehicle does not decelerate or accelerate accordingly when the set/decel or resume/accel switch is pressed	1. Check for PGM-FI and body DTCs. 2. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). Test the cruise control Set/decel and Resume/accel switch signal inputs. 3. Do the cruise control combination switch test (see **CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**).	Open circuit, loose or disconnected terminals: YEL/RED or GRY/RED wire
	1. Check for PGM-FI and body DTCs.	

Set speed does not cancel when the brake pedal is pressed	2. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). Test the brake pedal position switch signal input. 3. Do the brake pedal position switch test, refer to **BRAKE PEDAL POSITION SWITCH TEST** .	• Short in the BRN/BLK wire • Faulty brake pedal position switch
Set speed does not cancel (engine rpm stays high) when the clutch pedal is pressed (M/T)	1. Check for PGM-FI and body DTCs. 2. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). Test the clutch pedal position switch signal input. 3. Do the clutch pedal position switch test (see **CLUTCH PEDAL POSITION SWITCH TEST**).	• Short in the LT BLU wire • Faulty clutch pedal position switch
Set speed does not cancel when the cruise control main switch is turned off	1. Check for PGM-FI and body DTCs. 2. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). Test the cruise control main switch signal input. 3. Do the cruise control	Short to ground in the LT GRN wire

	combination switch test (see **CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**).	
Set speed does not cancel when the cancel switch is pressed	1. Check for PGM-FI and body DTCs. 2. Check the No. 13 (20 A) fuse in the under-hood fuse/ relay box. 3. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). Test the cruise control Cancel switch signal input. 4. Do the cruise control combination switch test (see **CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**).	Open circuit, loose or disconnected terminals: YEL/RED or GRY/RED wire
Set speed will not resume when the	1. Check for PGM-FI and body DTCs. 2. Check the brake pedal position switch adjustment, refer to the 2003-2006 Accord Service Manual (see **FRONT BRAKE CALIPER OVERHAUL**). 3. Check the No. 13 (20 A) fuse in the under-hood fuse/relay box, and No. 18	• Open circuit, loose or

resume/accel switch is pressed (with the cruise control main switch turned on, and set speed temporarily canceled by pressing the brake pedal)	(15 A) fuse in the under-dash fuse/ relay box. 4. Do the cruise control input test (see **CIRCUIT DIAGRAM**). Test the cruise control Resume/accel switch signal input. Test the brake pedal position switch signal input. 5. Do the cruise control combination switch test (see **CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**).	disconnected terminals: LT GRN/BLK, GRY/RED wire • Faulty brake pedal position switch
Set speed will not resume when the resume/accel switch is pressed (with the cruise control main switch turned on, and set speed temporarily canceled by pressing the clutch pedal) (IWT)	1. Check for PGM-FI and body DTCs. 2. Do the cruise control input test (see **CIRCUIT DIAGRAM**). Test the cruise control Resume/accel switch signal input. Test the clutch pedal position switch signal input. 3. Do the cruise control combination switch test (see **CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**).	• Open circuit, loose or disconnected terminals: LT GRN/BLK wire • Faulty clutch pedal position switch

CRUISE CONTROL INPUT TEST

1. Connect the Honda Diagnostic System (HDS) to the data link connector (DLC) (see step 2 **IF THE MIL (MALFUNCTION INDICATOR LAMP) HAS COME ON**).
2. Go to B-CAN System Diagnosis Test Mode A, and check for DTCs.
3. Go to **PGM-FI SYSTEM (V6)** , and check for DTCs.
4. Turn the ignition switch ON (II).
5. Do the following tests while monitoring parameters in the PGM-FI DATA LIST with the HDS.

NOTE: Intermittent failures are often caused by loose circuit connections. While monitoring cruise control inputs, flex their circuits, and note if any of the test result change.

TEST CONDITION AND POSSIBLE CAUSE

Signal to be tested	Test condition	Parameter: Desired result	Possible cause if result is not obtained
Brake switch signal	Brake pedal pressed, then released	CRUISE BRAKE SW should indicate OFF when the brake pedal is pressed and ON when the brake pedal is released.	• Faulty brake pedal position switch • Blown No. 18 (15A) fuse in the under-dash fuse/relay box • An open in the wire between the ECM/ PCM and the brake pedal position switch • A wire shorted to ground

			between the ECM/PCM and the brake pedal position switch
Clutch pedal position switch signal (M/T)	Clutch pedal pressed, then released	SHIFT/CLUTCH SW should indicate OFF when the clutch pedal is pressed and ON when the clutch pedal is released.	• Faulty clutch pedal position switch • An open in the wire between the ECM and the clutch pedal position switch • A wire shorted to ground between the ECM and the clutch pedal position switch • Poor ground G501
Transmission range switch signal (A/T)	Shift in lever D, D3, or 2 position	SHIFT/CLUTCH SW should indicate OFF in P, R, and N position and ON in D, D3, and 2 position.	• Faulty transmission range switch • An open in the wire between the PCM and the transmission range switch • A wire shorted to ground between the PCM and the

			transmission range switch • Poor ground G101
Cruise control main switch signal	Cruise control main switch ON and OFF	CRUISE CONTROL MAIN SW should indicate ON when the cruise control main switch is turned ON and OFF when the cruise control main switch is turned OFF.	• Faulty cruise control main switch • An open in the wire between the gauge control module and the cruise control main switch • A wire shorted to ground between the gauge assembly and the cruise control main switch • An open in the wire between the cruise control main switch and ground
			• Faulty cruise control combination switch • An open in the wire between

Set switch signal	Set/decel switch pressed and released	CRUISE CONTROL SET SW should indicate ON when the Set/decel switch is pressed and OFF when the Set/ decel switch is released.	the gauge control module and the cruise control combination switch • A wire shorted to ground between the gauge control module and the cruise control combination switch
Resume switch signal	Resume/accel switch pressed and released	CRUISE CONTROL RESUME SW should indicate ON when the resume/accel switch is pressed and OFF when the resume/accel switch is released.	• Faulty cruise control combination switch • An open in the wire between the gauge control module and the cruise control combination switch • A wire shorted to ground between the gauge control module and the cruise control combination switch

Cancel switch signal	Cancel switch pressed and released	CRUISE CONTROL CANCEL SW should indicate ON when the cancel switch is pressed and OFF when the cancel switch is released.	Faulty cruise control combination switch
Cruise control indicator signal	Start the engine, turn the cruise control main switch on, and drive the vehicle to speeds over 25 mph (40km/h). Set and cancel the cruise	CRUISE INDICATOR should indicate ON when the cruise control is set and OFF when the cruise control is canceled.	• Faulty gauge control module • A burnt cruise control indicator bulb (2003-2005 models).

CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT

SRS components are located in this area. Review the SRS component locations, and the precautions and procedures, refer to **SRS (SUPPLEMENTAL RESTRAINT SYSTEM) Accord (Except Hybrid & V6)** , before performing repairs or service.

1. Remove the driver's airbag, refer to **SRS (SUPPLEMENTAL RESTRAINT SYSTEM) Accord (Except Hybrid & V6)** .
2. Remove the two screws, then disconnect the connector, and remove the switch.

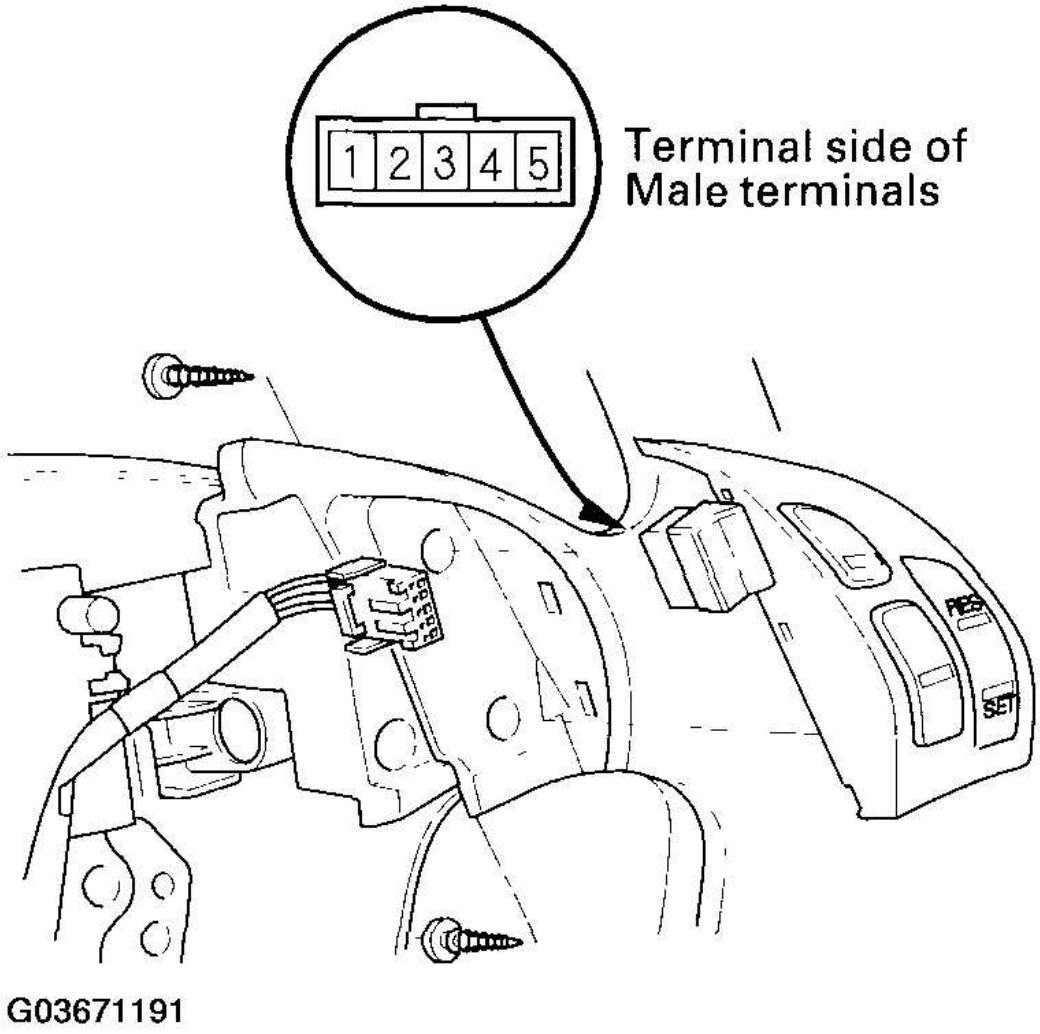


Fig. 3: Identifying Cruise Control Main Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the terminals in each switch position according to .
    - If there is continuity, and it matches the table, but switch failure occurred on the cruise control unit input test, check and repair the wire harness on the switch circuit.
    - If there is no continuity in one or both positions, replace the switch.

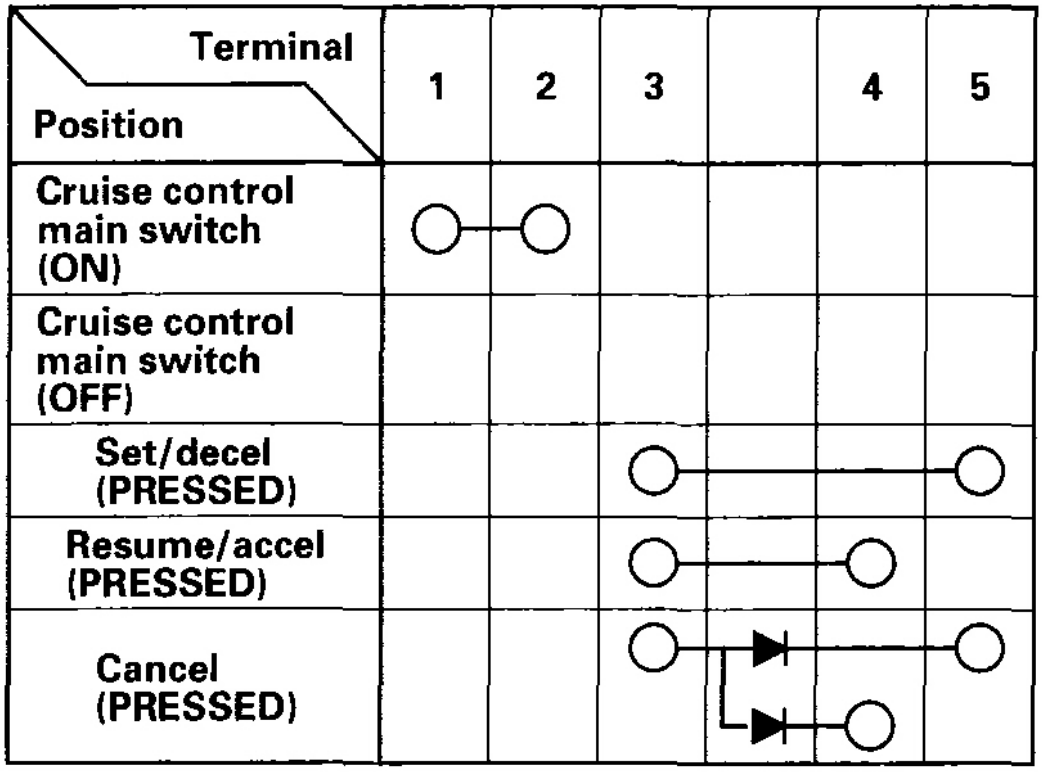


Fig. 4: Cruise Control Main Switch Connector Continuity Check Table
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CLUTCH PEDAL POSITION SWITCH TEST

1. Disconnect the 3P connector from the clutch pedal position switch (A).

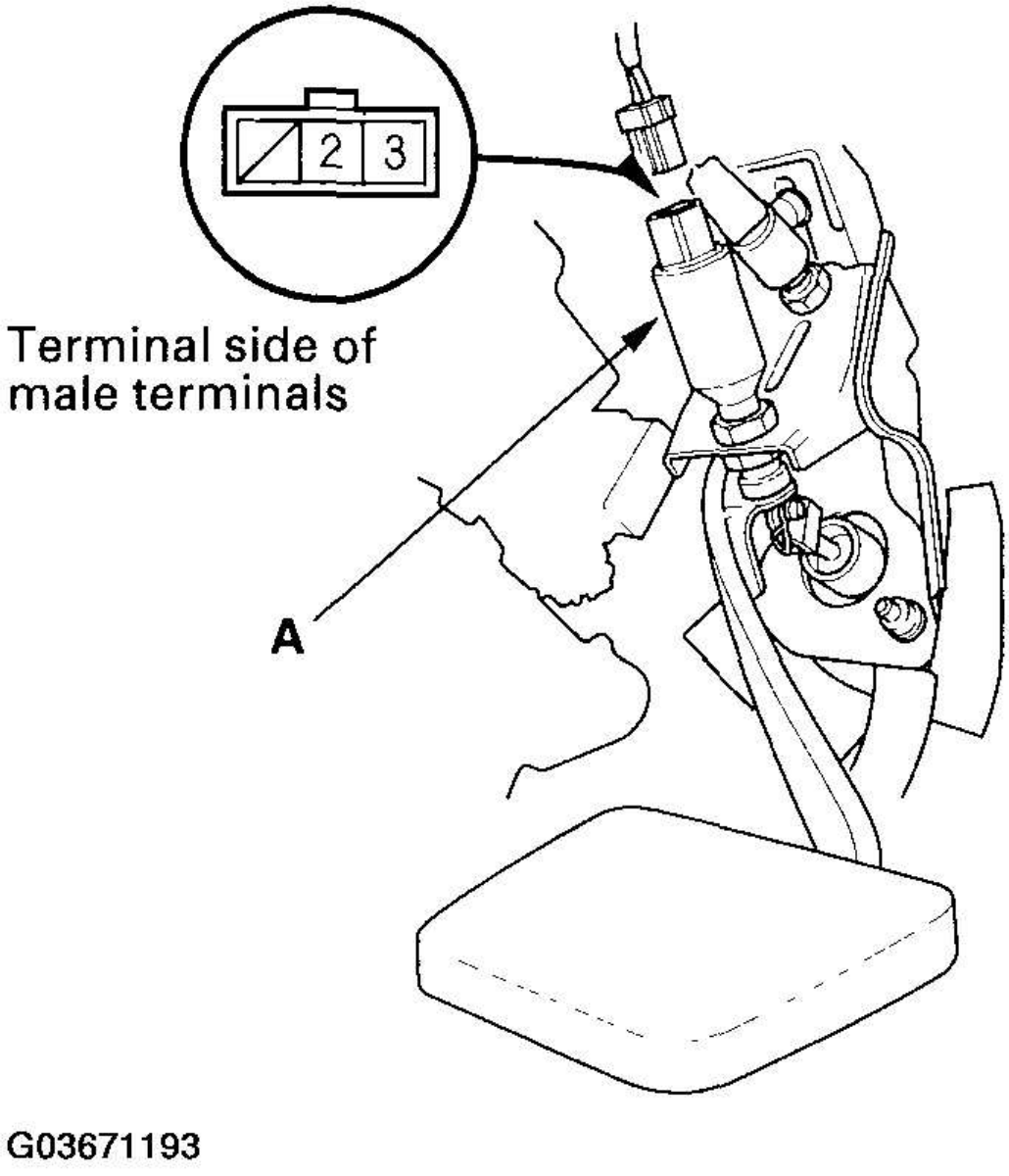


Fig. 5: Identifying 3P Connector And Clutch Pedal Position Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the clutch pedal position switch.
3. Check for continuity between the terminals according to .
    - If the continuity is not as specified, replace the clutch pedal position

switch.

- If OK, install the clutch pedal position switch, and adjust the pedal height (see **CLUTCH PEDAL, CLUTCH PEDAL POSITION SWITCH, AND CLUTCH INTERLOCK SWITCH ADJUSTMENT).**).

Terminal / Clutch Pedal Position Switch	1	2	3
PRESSED			
RELEASED		O——	——O

G03671194

Fig. 6: Clutch Pedal Position Switch Connector Continuity Check Table
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ACCESSORIES & EQUIPMENT

Cruise Control - Accord

COMPONENT LOCATION INDEX

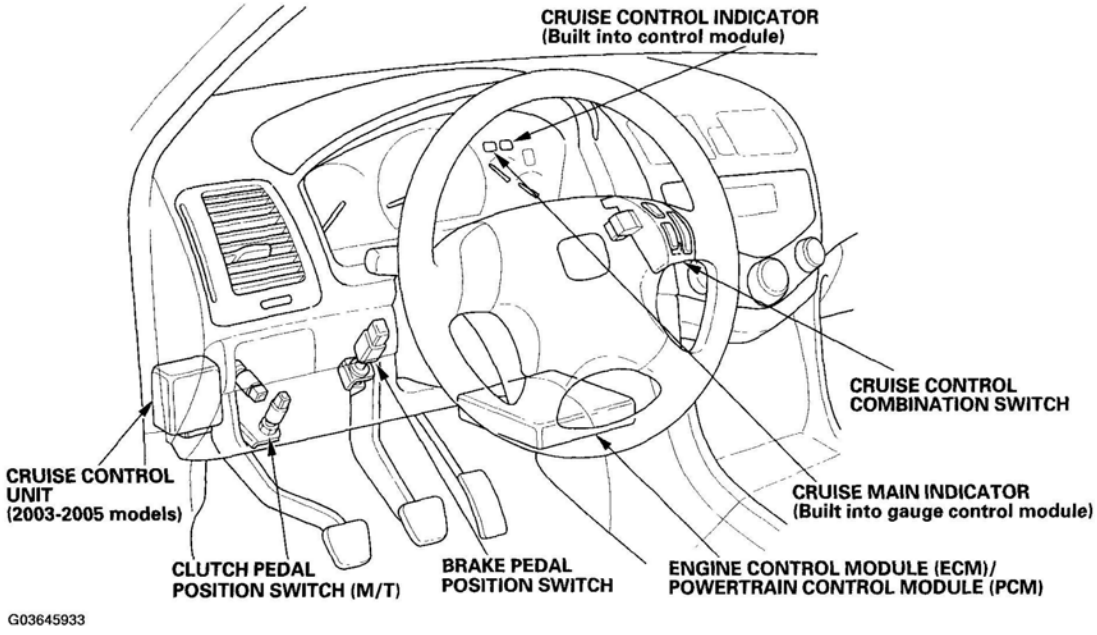


Fig. 1: Locating Cruise Control Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

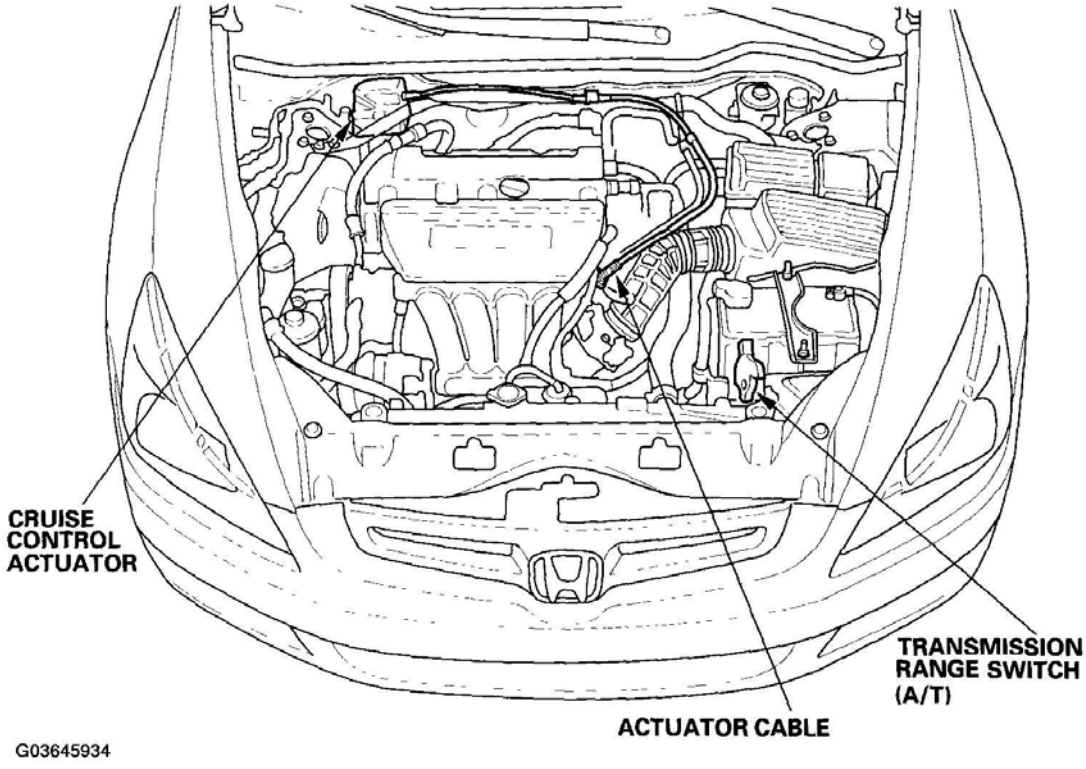


Fig. 2: Locating Cruise Control Components (2003-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

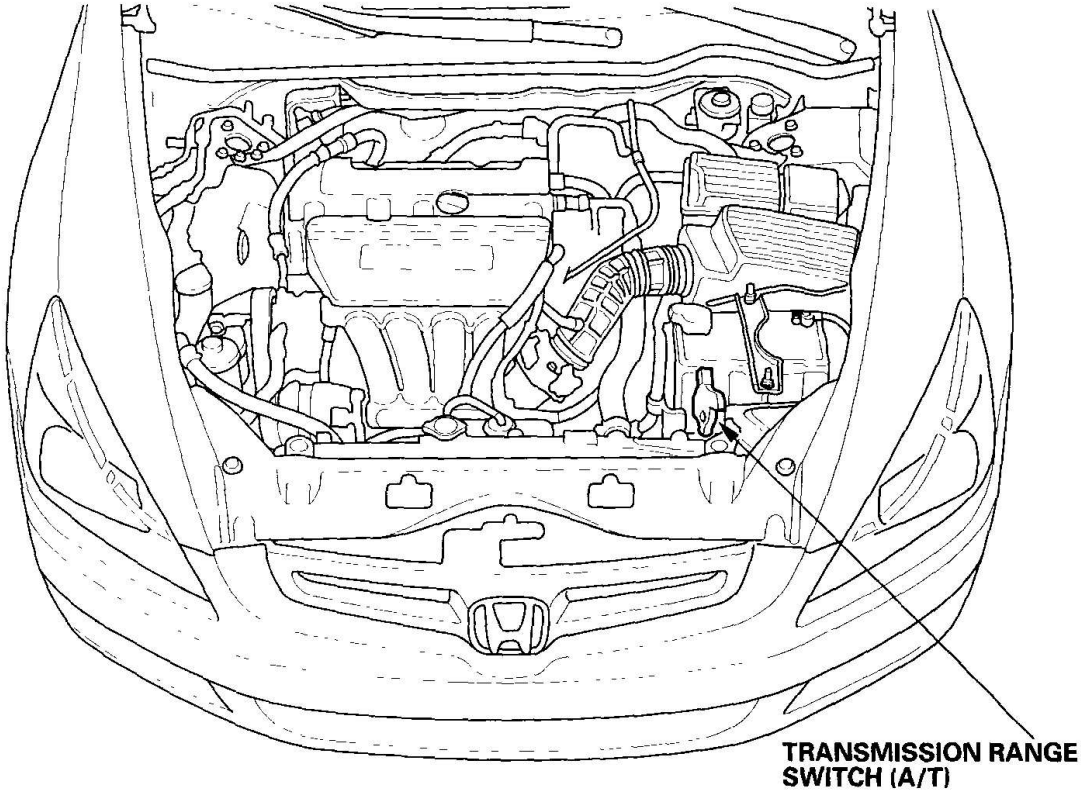


Fig. 3: Locating Cruise Control Components (2006 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

'03-05 MODELS

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for
	1. Check for PGM-FI and body DTCs. 2. Check horn operation. 3. Check the cruise control combination switch (see **CRUISE CONTROL COMBINATION**	

Cruise control cannot be set	**SWITCH TEST/REPLACEMENT**). 4. Test the brake pedal position switch (see **BRAKE SYSTEM TEST**), and check its adjustment (see **BRAKE PEDAL AND BRAKE PEDAL POSITION SWITCH ADJUSTMENT**). 5. Test the clutch pedal position switch (see **CLUTCH PEDAL POSITION SWITCH TEST**), and check its adjustment (M/T) (see **CLUTCH PEDAL, CLUTCH PEDAL POSITION SWITCH, AND CLUTCH INTERLOCK SWITCH ADJUSTMENT**). 6. Do the cruise control unit input test (see **CRUISE CONTROL UNIT INPUT TEST**). 7. Check for continuity between engine control module (ECM)/powertrain control module (PCM) connector terminal E26 and cruise control unit 14P connector terminal No. 12.	• Blown No. 13 (20A) fuse in the under-hood fuse/relay box • Blown No. 18 (15A) fuse in the under-dash fuse/relay box • Poor ground: G202, G501 • Faulty horn relay • Faulty ECM/PCM • Open circuit, loose or disconnected terminals: GRN/YEL, LT GRN, PNK, LT GRN/BLK, GRY/RED, LT BLU (M/T), PNK (A/T)

	• If there is continuity, replace the ECM/PCM (see **ECM/PCM REPLACEMENT**). • If there is no continuity, repair open or short in the wire.	
Cruise control can be set, but the cruise main indicator does not come on	Do the gauge control module self-diagnostic function (see **SELF-DIAGNOSTIC FUNCTION**).	• Faulty gauge control module • Open circuit, loose or disconnected terminals: LT GRN
Cruise control can be set, but the cruise control indicator does not come on	1. Do the gauge control module self-diagnostic function (see **SELF-DIAGNOSTIC FUNCTION**). 2. Do the cruise control unit input test on terminal No. 10 (see **CRUISE CONTROL UNIT INPUT TEST**).	• Faulty gauge control module • Open circuit, loose or disconnected terminals: BLU/YEL • Poor ground: G501
Cruise speed is noticeably higher or lower than what was set	1. Check the cruise control actuator (see **CRUISE CONTROL ACTUATOR TEST**). 2. Adjust the cruise control actuator cable (see **CRUISE CONTROL ACTUATOR CABLE ADJUSTMENT**). 3. Do the cruise control unit	

	input test on terminal No. 12 (see **CRUISE CONTROL UNIT INPUT TEST**).
Excessive overshooting or undershooting when trying to set speed	1. Check the cruise control actuator (see **CRUISE CONTROL ACTUATOR TEST**). 2. Adjust the cruise control actuator cable (see **CRUISE CONTROL ACTUATOR CABLE ADJUSTMENT**). 3. Do the cruise control unit input test on terminal No. 12 (see **CRUISE CONTROL UNIT INPUT TEST**).
Speed fluctuates on a flat road with the cruise control set	1. Check the cruise control actuator (see **CRUISE CONTROL ACTUATOR TEST**). 2. Adjust the cruise control actuator cable (see **CRUISE CONTROL ACTUATOR CABLE ADJUSTMENT**). 3. Do the cruise control unit input test on terminal No. 12 (see **CRUISE CONTROL UNIT INPUT TEST**).
	1. Check the cruise control combination switch (see

Vehicle does not decelerate or accelerate accordingly when the set/decel, resume/accel, or cancel switch is pressed	**CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**). 2. Do the cruise control unit input test on terminals No. 6 and No. 7 (see **CRUISE CONTROL UNIT INPUT TEST**).	Open circuit, loose or disconnected terminals: GRN/RED, LT GRN/BLK
Set speed does not cancel (engine rpm stays high) when the clutch pedal is pressed (M/T)	1. Do the cruise control unit input test on terminal No. 14 (see **CRUISE CONTROL UNIT INPUT TEST**). 2. Test the clutch pedal position switch (see **CLUTCH PEDAL POSITION SWITCH TEST**), and check its adjustment (see **CLUTCH PEDAL, CLUTCH PEDAL POSITION SWITCH, AND CLUTCH INTERLOCK SWITCH ADJUSTMENT**).	• Short to ground in the LT BLU wire • Faulty clutch pedal position switch
Set speed does not cancel (engine rpm stays high) when the shift lever is moved to N (A/T)	Do the cruise control unit input test on terminal No. 14 (see **CRUISE CONTROL UNIT INPUT TEST**).	• Short to ground in the PNK wire • Faulty transmission range switch
	1. Do the cruise control unit input test on terminals No. 1 and No. 5 (see **CRUISE CONTROL UNIT INPUT**	

Set speed does not cancel when the brake pedal is pressed	**TEST**). 2. Test the brake pedal position switch (see **BRAKE SYSTEM INSPECTION AND TEST**), and check its adjustment (see **BRAKE PEDAL AND BRAKE PEDAL POSITION SWITCH ADJUSTMENT**).	• Short to power on BRN/BLK wire • Open circuit, loose or disconnected terminals: WHT/BLK • Faulty brake pedal position switch
Set speed does not cancel when the cruise control main switch is pressed	1. Check the cruise control combination switch (see **CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**). 2. Do the cruise control unit input test on terminal No. 2 (see **CRUISE CONTROL UNIT INPUT TEST**).	Short to power on PNK wire
Set speed does not cancel when the cancel switch is pressed	1. Check the cruise control combination switch (see **CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**). 2. Do the cruise control unit input test on terminals No. 6 and No. 7 (see **CRUISE CONTROL UNIT INPUT TEST**).	Open circuit, loose or disconnected terminals: LT GRN/BLK or GRY/RED
Set speed will not	1. Check the cruise control combination switch (see	

resume when the resume/accel switch is pressed (with the cruise control main switch turned on, and set speed temporarily canceled by pressing the brake pedal)	**CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**). 2. Do the cruise control unit input test on terminals No. 1, No. 5 and No. 7 (see **CRUISE CONTROL UNIT INPUT TEST**).	Open circuit, loose or disconnected terminals: BRN/BLK, WHT/BLK, LT GRN/BLK
The transmission shifts down slower than normal when going uphill with the cruise control on (A/T)	Troubleshoot the cruise control communication circuit (see **CRUISE CONTROL COMMUNICATION CIRCUIT TROUBLESHOOTING**).	Open circuit, loose or disconnected terminals: BLU/BLK

2006-07 MODELS

SYMPTOM TROUBLESHOOTING INDEX ('06-07 MODELS)

Symptom	Diagnostic procedure	Also check for
Cruise control cannot be set	1. Check for PGM-FI and body DTCs. 2. Check the No. 13 (20 A) fuse in the under-hood fuse/relay box, and the No. 18 (15 A) fuse in the under-dash fuse/relay box. 3. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). 4. Do the cruise control combination switch test (see **CRUISE CONTROL**	Poor ground G501

	COMBINATION SWITCH TEST/REPLACEMENT).	
Cruise control can be set, but the cruise main indicator does not come on	1. Check for PGM-FI and body DTCs. 2. Do the gauge control module self-diagnostic function procedure (see **SELF-DIAGNOSTIC FUNCTION**). 3. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). Test the cruise control master button signal input.	Faulty gauge control module
Cruise control can be set, but the cruise control indicator does not come on	1. Check for PGM-FI and body DTCs. 2. Do the gauge control module self-diagnostic function procedure (see **SELF-DIAGNOSTIC FUNCTION**). 3. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). Test the cruise control indicator signal input.	Faulty gauge control module
	1. Check for PGM-FI and body DTCs. 2. Do the cruise control input	

Vehicle does not decelerate or accelerate accordingly when the set/decel or resume/accel switch is pressed	test (see **CRUISE CONTROL INPUT TEST**). Test the cruise control Set/decel and Resume/accel switch signal inputs. 3. Do the cruise control combination switch test (see **CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**).	Open circuit, loose or disconnected terminals: LT GRN/BLK or GRY/RED wire
Set speed does not cancel when the brake pedal is pressed	1. Check for PGM-FI and body DTCs. 2. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). Test the brake pedal position switch signal input. 3. Do the brake pedal position switch test (see **BRAKE SYSTEM INSPECTION AND TEST**).	• Short in the BRN/BLK wire • Faulty brake pedal position switch
Set speed does not cancel (engine rpm	1. Check for PGM-FI and body DTCs. 2. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**).	• Short in the LT

stays high) when the clutch pedal is pressed (M/T)	Test the clutch pedal position switch signal input. 3. Do the clutch pedal position switch test (see **CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**).	BLU wire • Faulty clutch pedal position switch
Set speed does not cancel when the cruise control main switch is turned off	1. Check for PGM-FI and body DTCs. 2. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). Test the cruise control main switch signal input. 3. Do the cruise control combination switch test (see **CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**).	Short to ground in the LT GRN wire
Set speed does not cancel when the cancel switch is pressed	1. Check for PGM-FI and body DTCs. 2. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). Test the cruise control Cancel switch signal input.	Open circuit, loose or disconnected terminals: LT GRN/BLK or GRY/RED wire

	3. Do the cruise control combination switch test (see **CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**).	
Set speed will not resume when the resume/accel switch is pressed (with the cruise control main switch turned on, and set speed temporarily canceled by pressing the brake pedal)	1. Check for PGM-FI and body DTCs. 2. Check the brake pedal position switch adjustment (see **SYMPTOM TROUBLESHOOTING**). 3. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). Test the cruise control Resume/accel switch signal input. Test the brake pedal position switch signal input. 4. Do the cruise control combination switch test (see **CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**).	• Open circuit, loose or disconnected terminals: LT GRN/BLK, GRY/RED wire • Faulty brake pedal position switch
	1. Check for PGM-FI and body DTCs. 2. Check the clutch pedal position switch adjustment (see **CLUTCH PEDAL, CLUTCH PEDAL**	

Set speed will not resume when the resume/accel switch is pressed (with the cruise control main switch turned on, and set speed temporarily canceled by pressing the clutch pedal) (M/T)	**POSITION SWITCH, AND CLUTCH INTERLOCK SWITCH ADJUSTMENT**). 3. Do the cruise control input test (see **CRUISE CONTROL INPUT TEST**). Test the cruise control Resume/accel switch signal input. Test the clutch pedal position switch signal input. 4. Do the cruise control combination switch test (see **CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT**).	• Open circuit, loose or disconnected terminals: LT GRN/BLK wire • Faulty clutch pedal position switch

CIRCUIT DIAGRAM

'03-05 MODELS

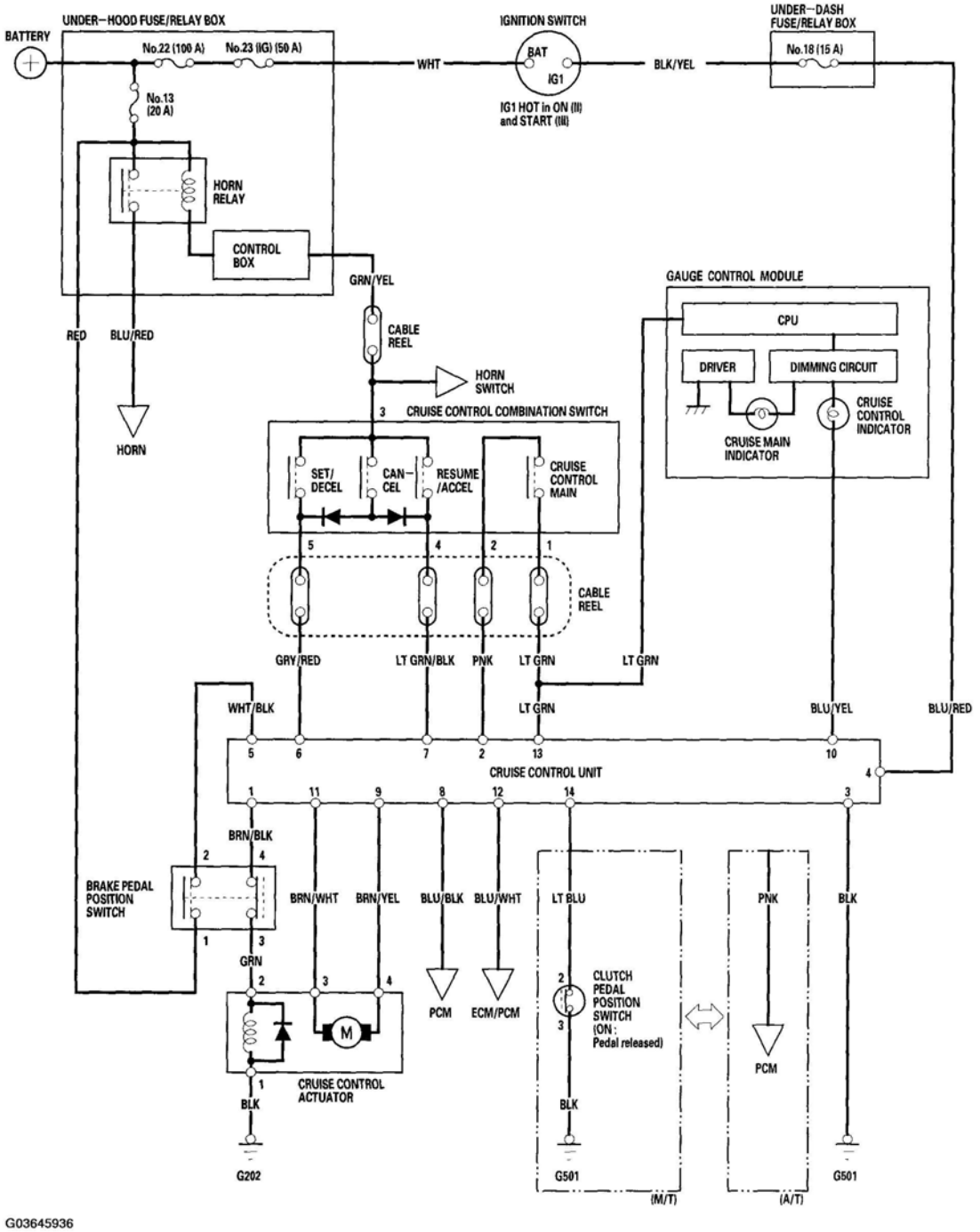


Fig. 4: Cruise Control Circuit Diagram (2003-05 Models) Courtesy of AMERICAN HONDA MOTOR CO., INC.

'06-07 MODELS

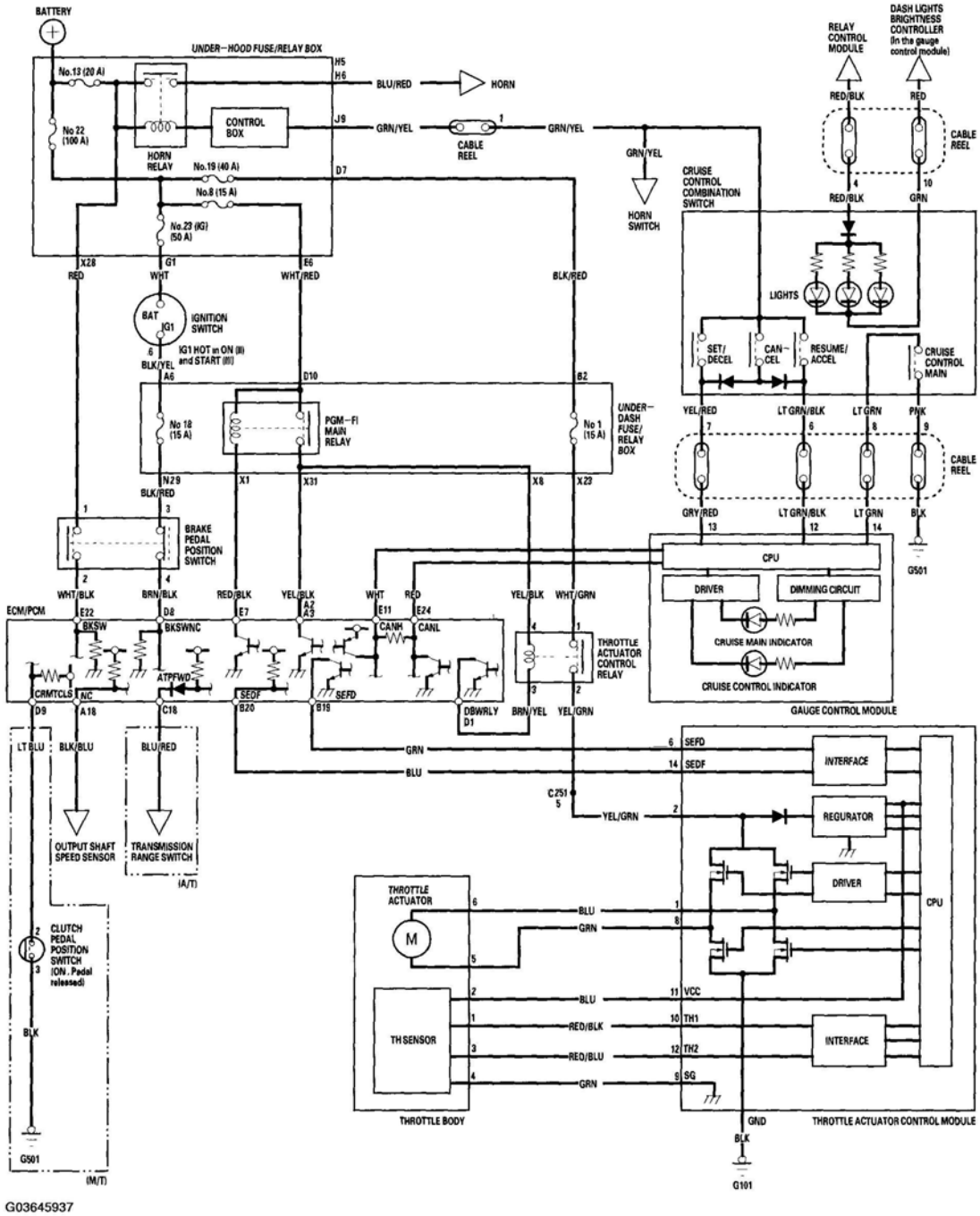


Fig. 5: Cruise Control Circuit Diagram (2006 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CRUISE CONTROL COMMUNICATION CIRCUIT TROUBLESHOOTING

A/T ('03-05 MODELS)

1. Start the engine.
2. Turn on the cruise control main switch, then drive the vehicle at speeds over 25 mph (40 km/h) with the cruise control.

   Does the cruise control operate?

   YES - Go to step 3.

   NO - Check the cruise control unit (see **CRUISE CONTROL UNIT INPUT TEST**) or cruise control actuator.
3. Turn the ignition switch OFF.
4. Connect the Honda Diagnostic System (HDS) to the data link connector (DLC) (see step 2 in **HOW TO USE THE HDS (HONDA DIAGNOSTIC SYSTEM)**). Turn the ignition switch ON (II), and jump the SCS line with the HDS, then turn the ignition switch OFF.

   NOTE: This step must be done to protect the powertrain control module (PCM) from damage.

5. Disconnect PCM connector D (17P) and cruise control unit 14P connector.
6. Check for continuity between PCM connector terminal D12 and body ground.

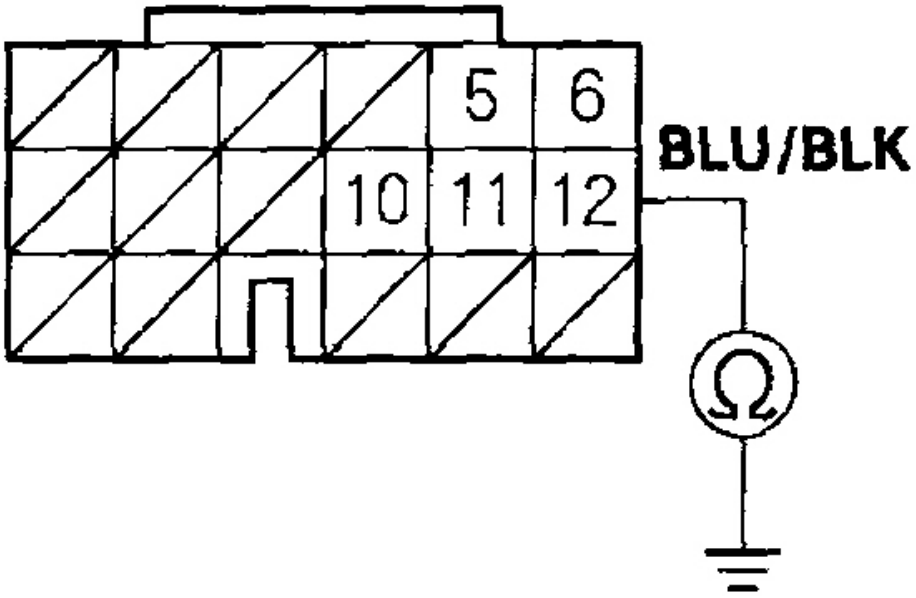


Fig. 6: Checking Continuity Between PCM Connector Terminal D12 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair a short to ground in the wire between PCM connector terminal D12 and the cruise control unit 14P connector terminal No. 8.

NO - Go to step 7.

7. Reconnect PCM connector D (17P) and the cruise control unit 14P connector.
8. Connect a voltmeter between cruise control unit 14P connector terminal No. 8 and body ground. Test-drive the vehicle at speeds over 25 mph (40 km/h) with the cruise control set, and watch the voltmeter.

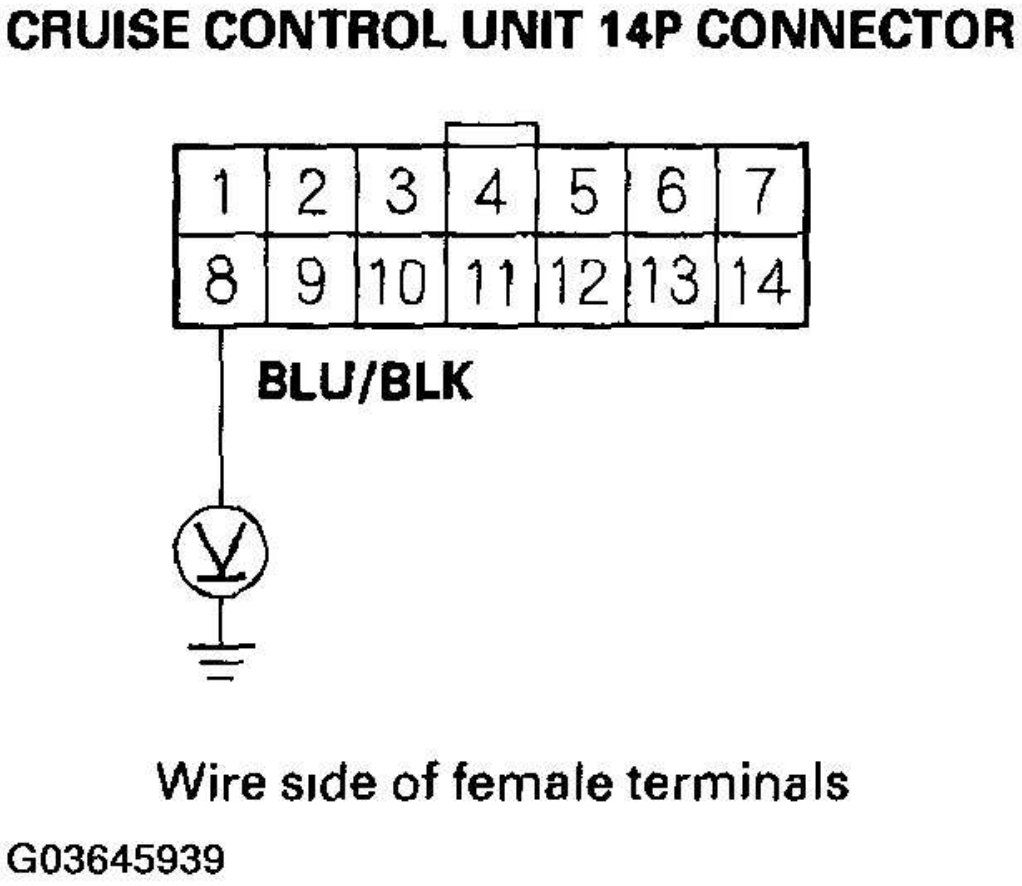


Fig. 7: Connecting Voltmeter Between Cruise Control Unit 14P Connector Terminal No. 8 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 1 V?

YES - Go to step 9.

NO - Substitute a known-good cruise control unit. If the system works properly, replace the cruise control unit.

9. Connect a voltmeter between PCM connector terminal D12 and body ground. Drive the vehicle at speeds over 25 mph (40 km/h) with the cruise control set, and watch the voltmeter.

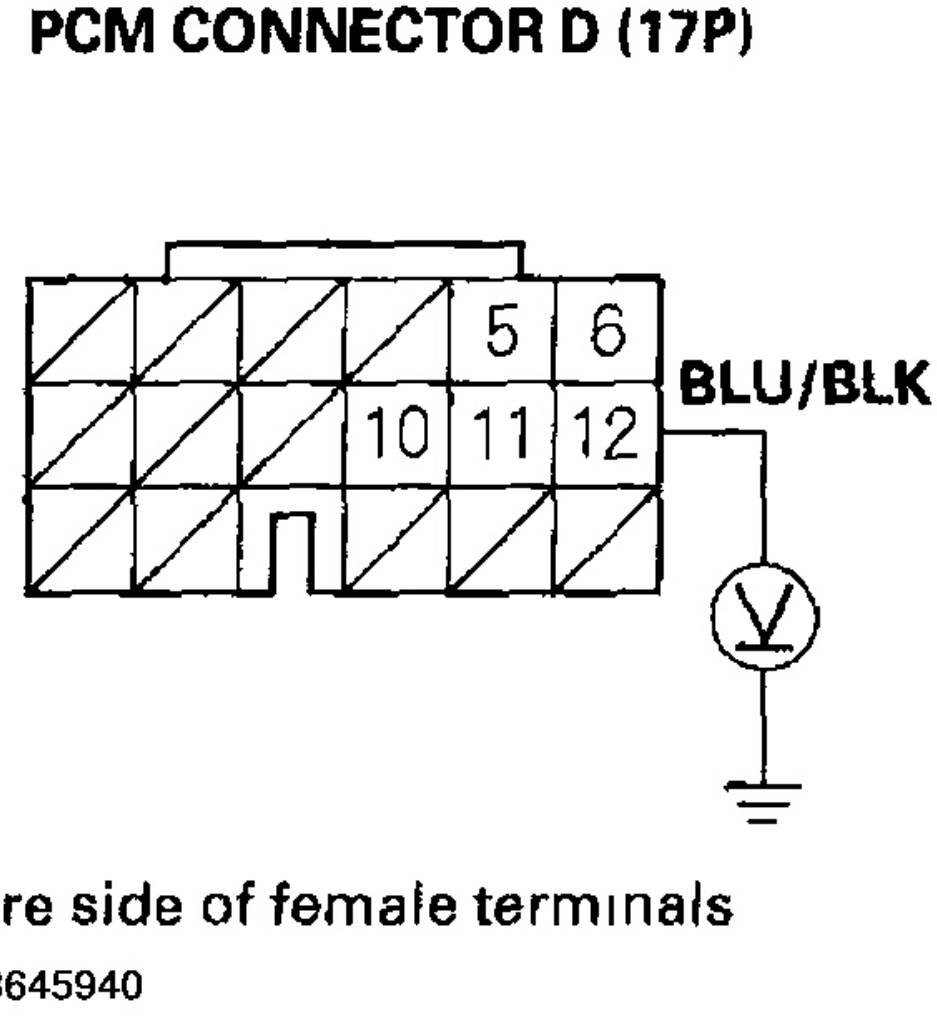


Fig. 8: Connecting Voltmeter Between PCM Connector Terminal D12 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 1 V?

YES - Check for a loose connector or wire between the cruise control unit and the PCM. If the wire is OK, update the PCM. If it does not have the latest software (see **UPDATING THE ECM/PCM**), substitute a known-good PCM (see **SUBSTITUTE THE ECM/PCM**), and recheck. If the system works properly, replace the original PCM (see **ECM/PCM REPLACEMENT**).

NO - Repair an open in the wire between PCM connector terminal D12 and the control unit 14P connector terminal No. 8.

CRUISE CONTROL UNIT INPUT TEST

'03-05 MODELS

There are SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and precautions and procedures (see **PRECAUTIONS AND PROCEDURES**), before doing repairs or service.

1. Disconnect the 14P connector from the control unit.
2. Inspect the connector and socket terminals to make sure they are all making good contact.
   - If the terminals are bent, loose, or corroded, repair them as necessary, and recheck the system.
   - If the terminals look OK, go to step 3.

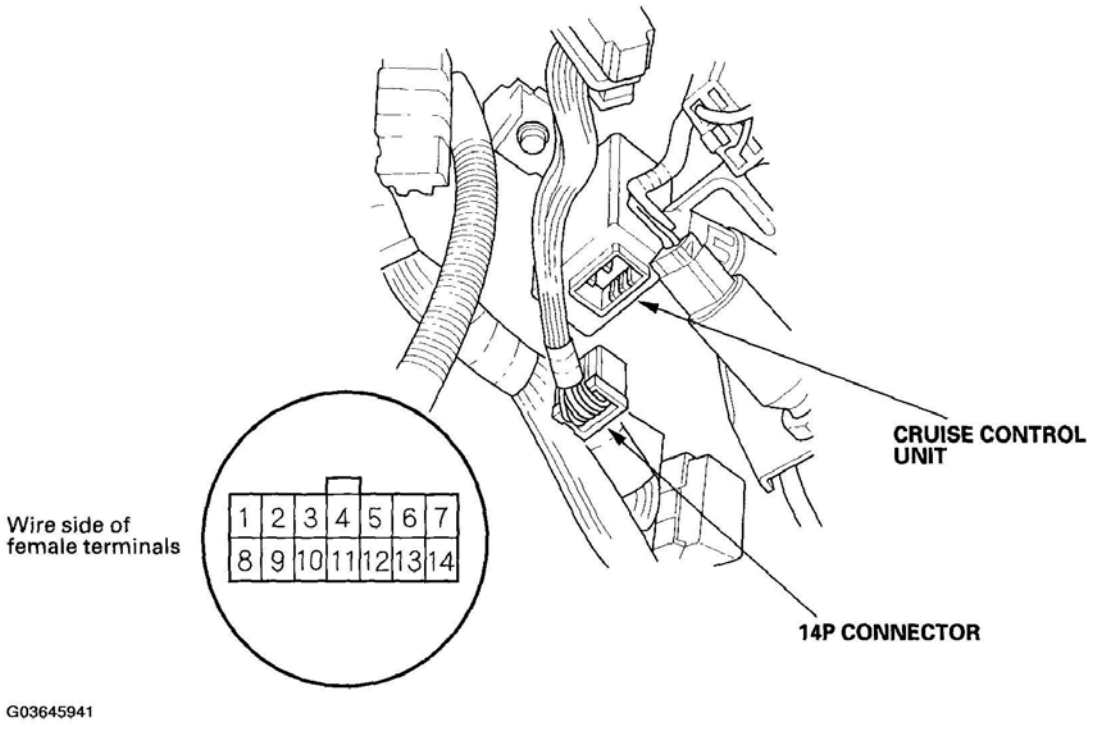


Fig. 9: Inspecting Connector And Socket Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. With the 14P connector disconnected, do these input tests.
   - If test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, the cruise control unit may by faulty. Substitute a known-good cruise control unit, and retest. If the system works properly, replace the cruise control unit.

CRUISE CONTROL UNIT INPUT TEST (2003-05 MODELS)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
			Check the operation of the magnetic	• Faulty brake pedal position switch

1	BRN/BLK	Connect battery power	clutch: Clutch should click and output link should be locked.	• Faulty actuator • Poor ground (G202) • An open in the wire • Short to ground
3	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G501) • An open in the wire
4	BLK/RED	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Blown No. 18 (15A) fuse in the under-dash fuse/relay box • An open in the wire
5	WHT/BLK	Brake pedal pressed, then released	Check for voltage to ground: There should be battery voltage with the pedal pressed, and 0 V with the pedal released.	• Blown No. 13 (20A) fuse in the under-hood fuse/relay box • Faulty brake pedal position switch • An open in the wire
			Check for voltage to ground: There	

6	GRY/RED	Set/decel switch pressed	should be battery voltage. When testing terminal No. 6, there should be no voltage on terminal No. 7.	• Blown No. 13 (20A) fuse in the under-hood fuse/relay box • Faulty horn relay • Faulty cruise control combination switch • Faulty cable reel • An open in the wire
7	LT GRN/BLK	Resume/accel switch pressed	Check for voltage to ground: There should be battery voltage. When testing terminal No. 7, there should be no voltage on terminal No. 6.	
9	BRN/YEL	Connect battery power to the BRN/YEL terminal and ground to the BRN/WHT terminal	Check the operation of the actuator motor: You should hear the motor.	• Faulty actuator • An open in the wire
11	BRN/WHT			
			Attach to	

10	BLU/YEL	Ignition switch ON (II)	ground: CRUISE CONTROL indicator in the gauge assembly should comes on.	• Blown bulb • Faulty gauge control module • An open in the wire
12	BLU/WHT	Ignition switch ON (II) and cruise control main switch ON; raise the front of the vehicle, and rotate one wheel slowly while holding the other wheel **NOTE:** **This input test must be done with the 14P connector reconnected.**	Check for voltage between the BLU/WHT (+) and BLK (-) terminal: There should be 0---5 V or more repeatedly.	• Faulty ECM/PCM • An open in the wire • Short to ground
		Cruise control	Check for continuity between No. 2 terminal and No. 13 terminal: There should be continuity	• Faulty cruise control combination switch

13	LT GRN	main switch ON, then OFF	with the cruise control main switch ON and no continuity with the cruise control main switch OFF.	• Faulty cable reel • An open in the wire
14	M/T: LT BLU	Clutch pedal released	Check for continuity to ground: There should be continuity. **NOTE:** **There should be no continuity when the clutch pedal is pressed.**	• Faulty clutch pedal position switch • Poor ground (G501) • An open in the wire
	A/T: PNK	Shift lever in D, D3	Check for continuity to ground: There should be continuity. **NOTE:** **There should be no continuity when shift lever is in other positions.**	• Faulty ECM/PCM • An open in the wire

2	PNK	Reconnect the cruise control unit 14P connector, turn the ignition switch ON (II), and cruise control main switch ON	Check for voltage to ground: There should be battery voltage.	• Blown No. 18 (15A) fuse in the under-dash fuse/relay box • Faulty cruise control unit • Short to ground
8	BLU/BLK	Reconnect the cruise control unit 14P connector, start the engine, press the cruise control main switch ON, and drive the vehicle at speeds over 25 mph (40 km/h) with the cruise control set	Check for voltage to ground: There should be about 1V	• Blown No. 18 (15A) fuse in the under-hood fuse/relay box • Faulty cruise control unit • Short to ground • Cruise control communication circuit problem (see **CRUISE CONTROL COMMUNICATION CIRCUIT TROUBLESHOOTING**)

CRUISE CONTROL INPUT TEST

'06-07 MODELS

1. Connect the Honda Diagnostic System (HDS) to the data link connector (DLC).
2. Go to B-CAN System Diagnosis Test Mode A, and check for DTCs.
3. Go to PGM-FI, and check for DTCs.

4. Turn the ignition switch ON (II).
5. Do the following tests while monitoring parameters in the PGM-FI DATA LIST with the HDS.

NOTE: Intermittent failures are often caused by loose circuit connections. While monitoring cruise control inputs, flex the circuits, and note if any of the test result change.

CRUISE CONTROL INPUT TEST ('06-07 MODEL)

Signal to be tested	Test condition	Parameter: Desired result	Possible cause if result is not obtained
Brake switch signal	Brake pedal pressed, then released	CRUISE BRAKE SW should indicate OFF when the brake pedal is pressed and ON when the brake pedal is released.	• Faulty brake pedal position switch • Blown No. 18 (15 A) fuse in the under-dash fuse/relay box • An open in the wire between the ECM/PCM and the brake pedal position switch • A wire shorted to ground between the ECM/PCM and the brake pedal position switch
			• Faulty clutch pedal position switch

Clutch pedal position switch signal (M/T)	Clutch pedal pressed, then released	SHIFT/CLUTCH SW should indicate OFF when the clutch pedal is pressed and ON when the clutch pedal is released.	• An open in the wire between the ECM and the clutch pedal position switch • A wire shorted to ground between the ECM and the clutch pedal position switch • Poor ground G501
Transmission range switch signal (A/T)	Shift lever in D, or D3 position	SHIFT/TRANS RANGE SW should indicate OFF in P, R, and N position and ON in D, and D3 position.	• Faulty transmission range switch • An open in the wire between the PCM and the transmission range switch • A wire shorted to ground between the PCM and the transmission range switch • Poor ground G101
			• Faulty cruise control combination

Cruise control main switch signal	Cruise control main switch ON and OFF	CRUISE MASTER SW should indicate ON when the cruise control main switch is turned ON and OFF when the cruise control main switch is turned OFF.	switch • An open in the wire between the gauge assembly and the cruise control combination switch • A wire shorted to ground between the gauge assembly and the cruise control combination switch • An open in the wire between the cruise control combination switch and the ground
		CRUISE SET SW should indicate ON	• Faulty cruise control combination switch • An open in the wire between the gauge assembly and the cruise

		when the Set/decel switch is pressed and OFF when the Set/decel switch is released.	control combination switch • A wire shorted to ground between the gauge assembly and the cruise control combination switch
Set switch signal	Set/decel switch pressed and released		
Resume switch signal	Resume/accel pressed and released	CRUISE RESUME SW should indicate ON when the Resume/accel is pressed and OFF when the Resume/accel is released.	• Faulty cruise control combination switch • An open in the wire between the gauge assembly and the cruise control combination switch • A wire shorted to ground between the gauge assembly and the cruise control combination switch
		CRUISE CANCEL	

Cancel switch signal	Cancel switch pressed and released	SW should indicate ON when the Cancel switch is pressed and OFF when the Cancel switch is released.	• Faulty cruise control combination switch

CRUISE CONTROL COMBINATION SWITCH TEST/REPLACEMENT

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and precautions and procedures (see **PRECAUTIONS AND PROCEDURES**), before doing repairs or service.

1. Remove the driver's airbag (see **DRIVER'S AIRBAG REPLACEMENT**).
2. Remove the two screws, then disconnect the connector, and remove the switch.

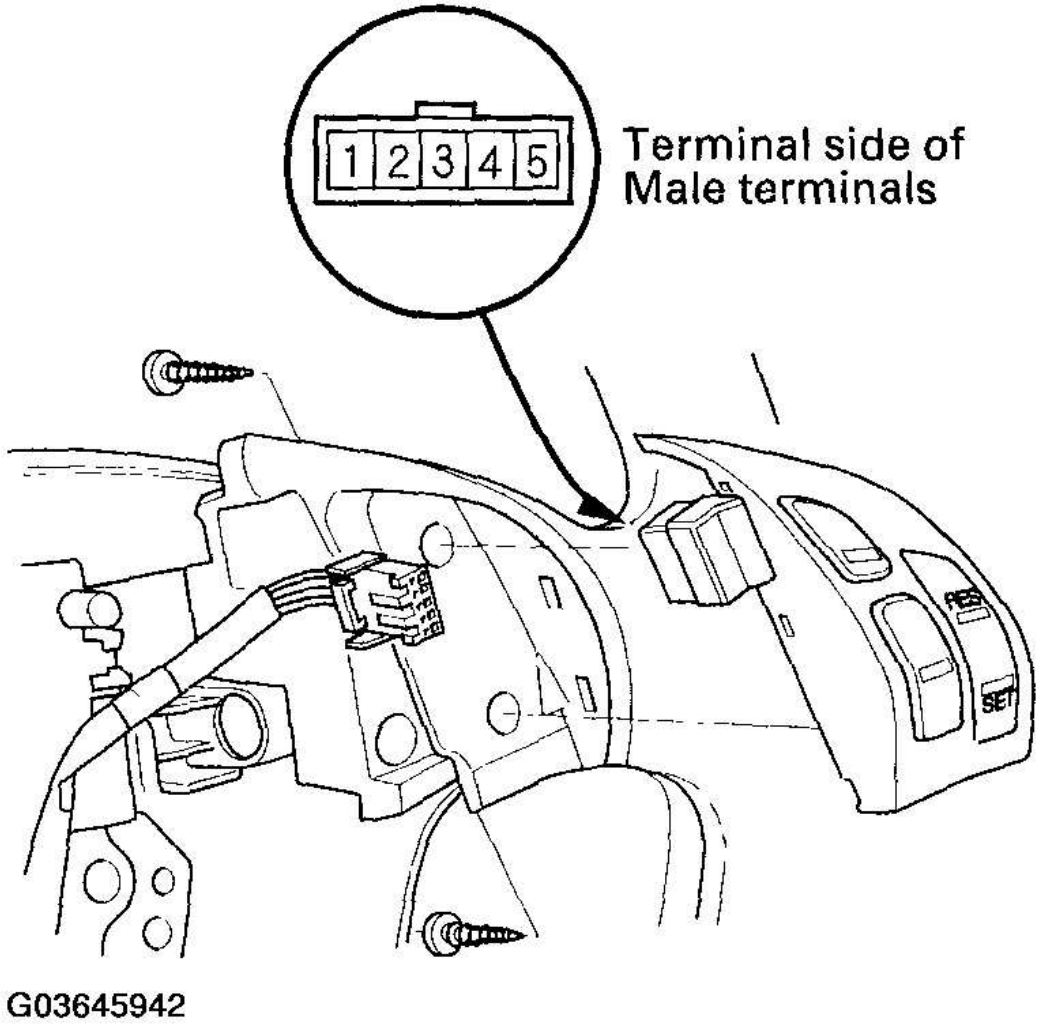


Fig. 10: Disconnecting Connector And Removing Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the terminals in each switch position according to **Fig. 11** .
   - If there is continuity, and it matches the table, but switch failure occurred on the cruise control unit input test, check and repair the wire harness on the switch circuit.
   - If there is no continuity in one or both positions, replace the switch.

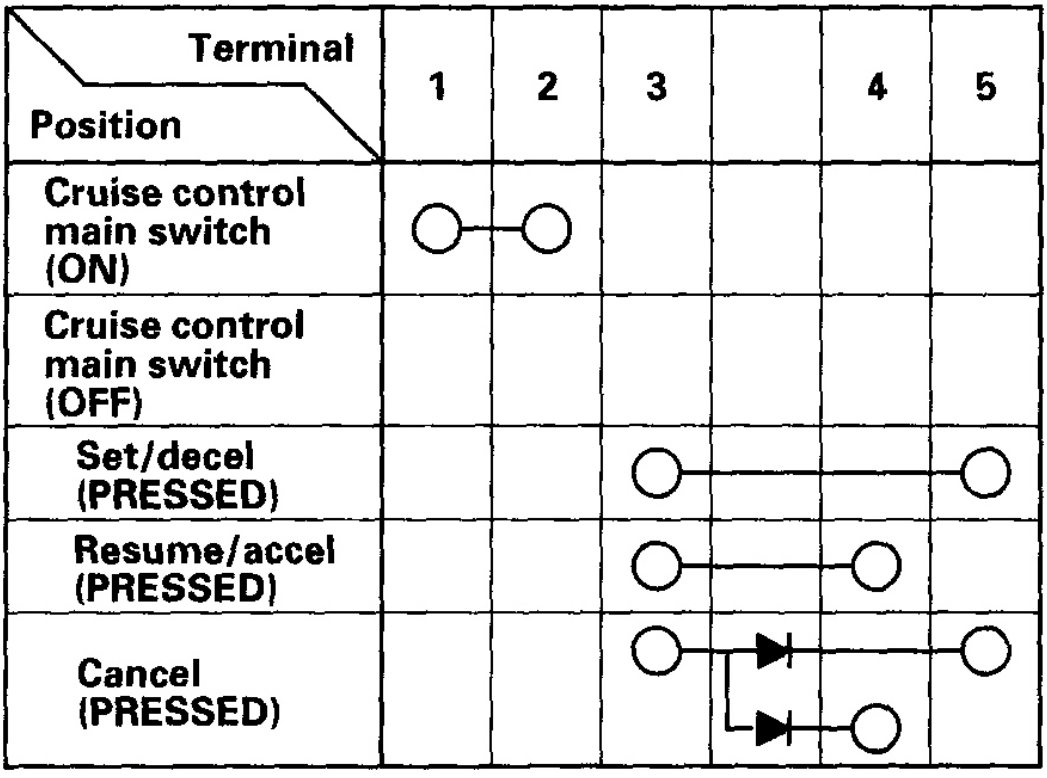


Fig. 11: Checking Continuity Between Terminals Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CRUISE CONTROL ACTUATOR TEST

'03-05 MODELS

1. Disconnect the 4P connector (A) from the actuator (B).

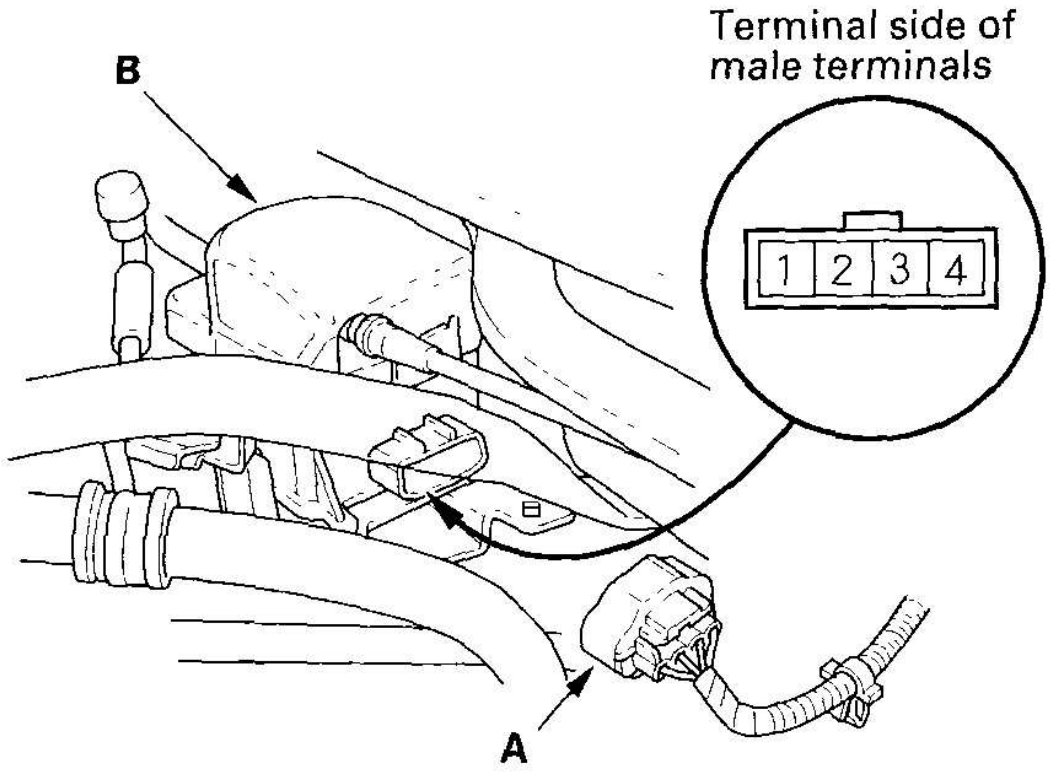
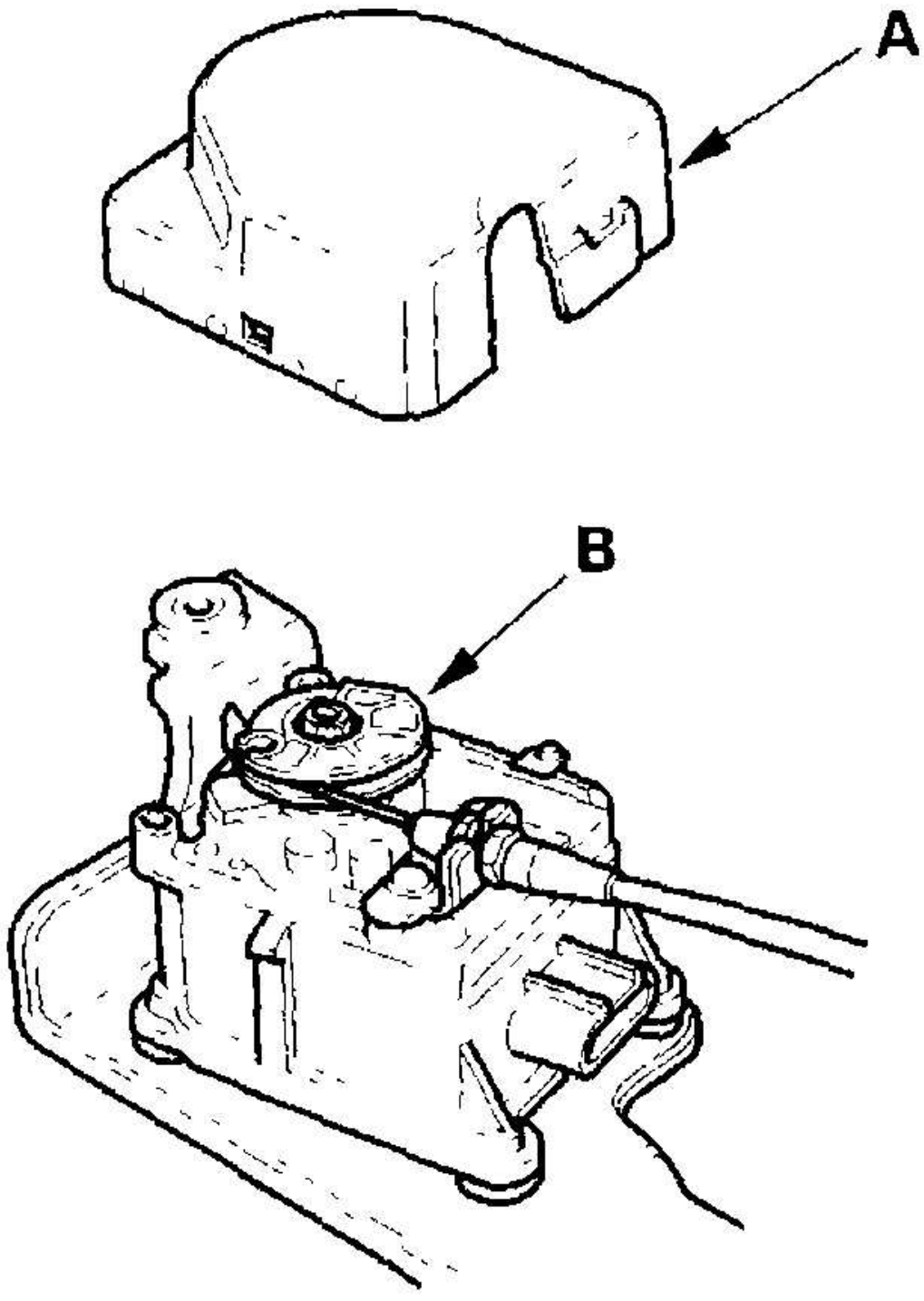


Fig. 12: Disconnecting 4P Connector From Actuator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the cover (A), and check the output linkage (B) for smooth movement.



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Fig. 13: Removing Cover And Checking Output Linkage For Smooth Movement
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Connect battery power to the No. 2 terminal and ground to the No. 1 terminal.
4. Check for a clicking sound from the magnetic clutch. The output linkage should be locked. If the output linkage is not locked, replace the actuator assembly.
5. Check the operation of the actuator motor in each output linkage position according to the table below. You should hear the motor.

ACTUATOR MOTOR OPERATION

Battery power polarities		Output linkage position		
(+)	(-)	FULL CLOSE	MIDDLE POSITION	FULL OPEN
No. 4 Terminal	No. 3 Terminal	The motor runs.	The motor runs.	The motor stops.
No. 3 Terminal	No. 4 Terminal	The motor stops.	The motor runs.	The motor runs.

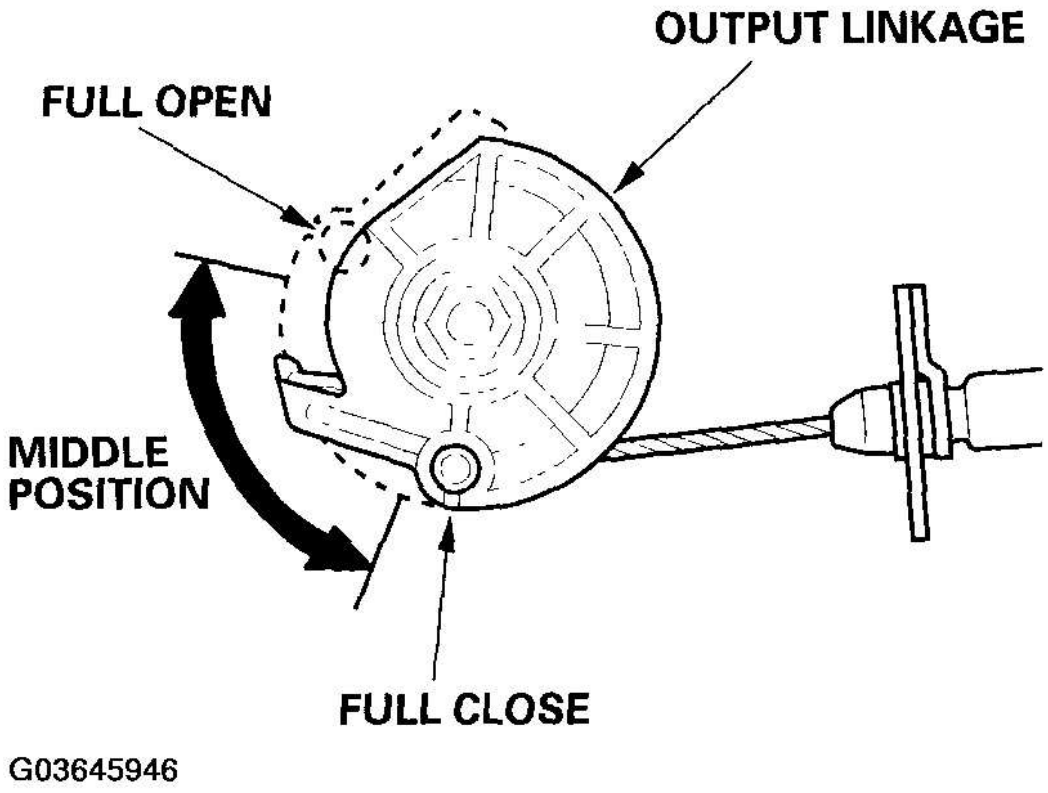


Fig. 14: Checking Operation Of Actuator Motor In Each Output Linkage Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. If the actuator motor does not operate as specified, replace the actuator assembly.

CRUISE CONTROL ACTUATOR/CABLE REPLACEMENT

'03-05 MODELS

1. Loosen the locknut (A), then remove the cruise control cable (B) from the throttle linkage.

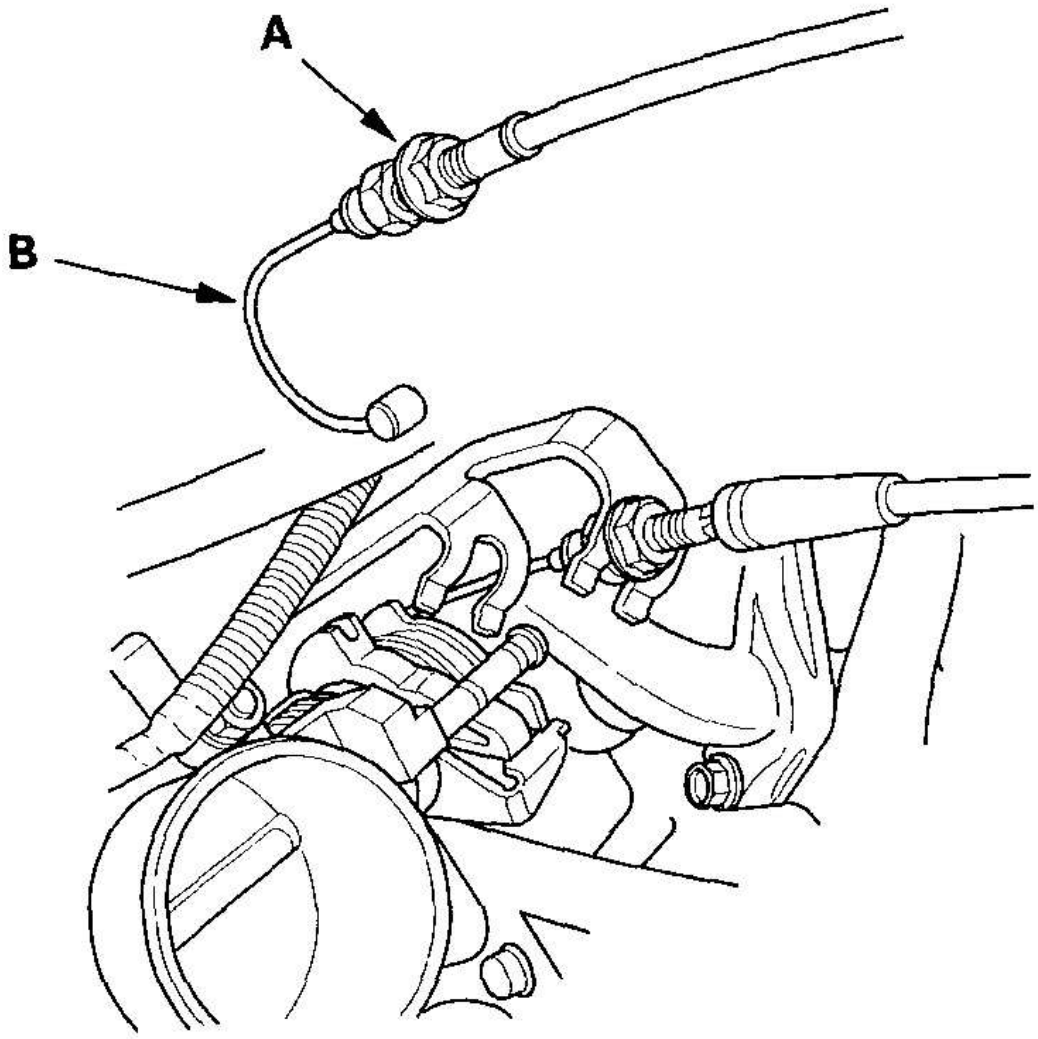


Fig. 15: Removing Cruise Control Cable From Throttle Linkage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Disconnect the 4P connector (A), and remove the actuator cover (B), then remove the bolts securing the actuator.

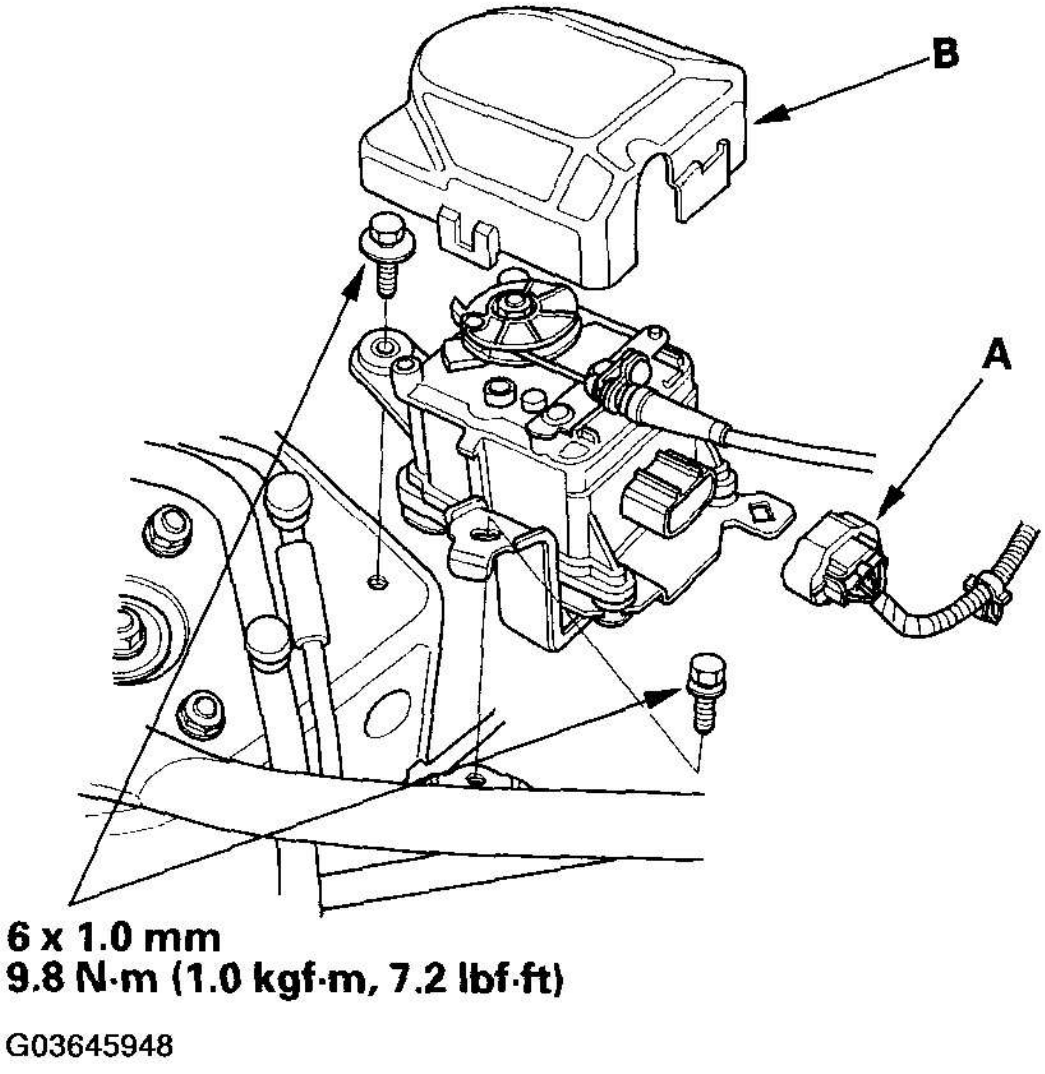
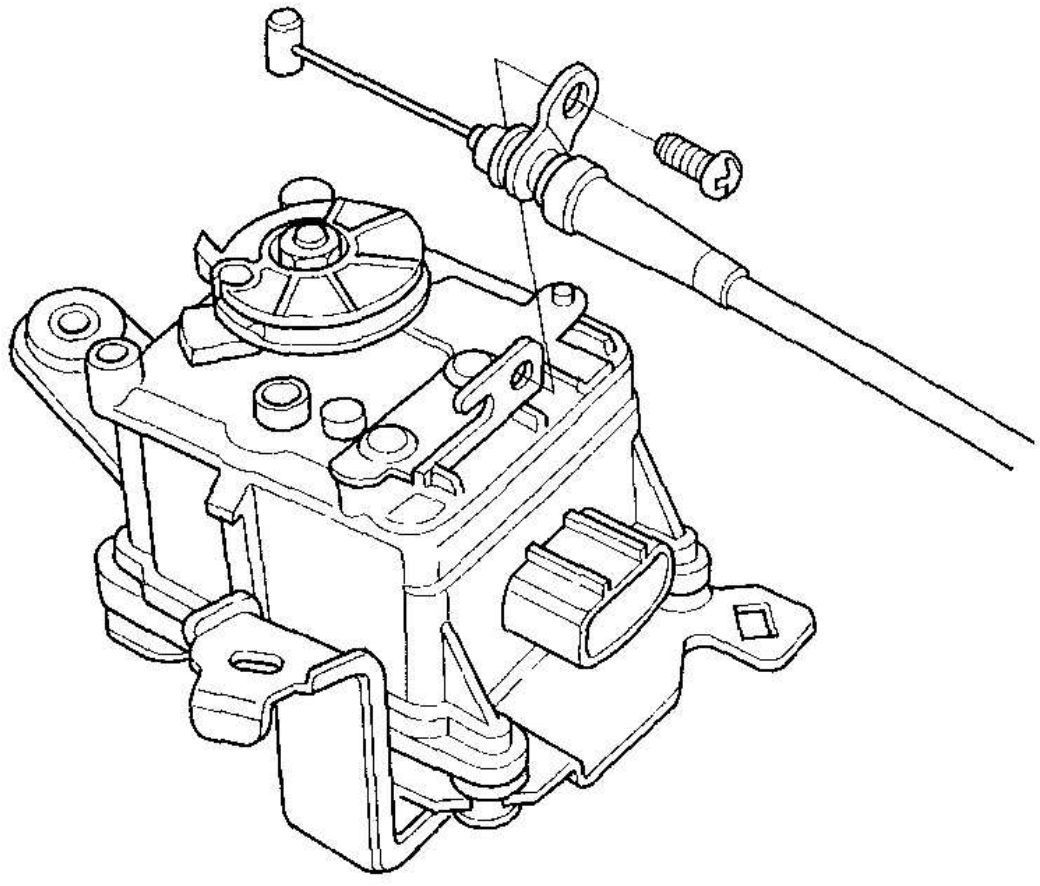


Fig. 16: Disconnecting 4P Connector And Removing Actuator Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the actuator cable from the actuator.



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Fig. 17: Removing Actuator Cable From Actuator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install in the reverse order of removal, and adjust the free play at the throttle linkage after connecting the cruise control cable.

CRUISE CONTROL ACTUATOR CABLE ADJUSTMENT

'03-05 MODELS

1. Check that the actuator cable (A) moves smoothly with no binding or sticking.

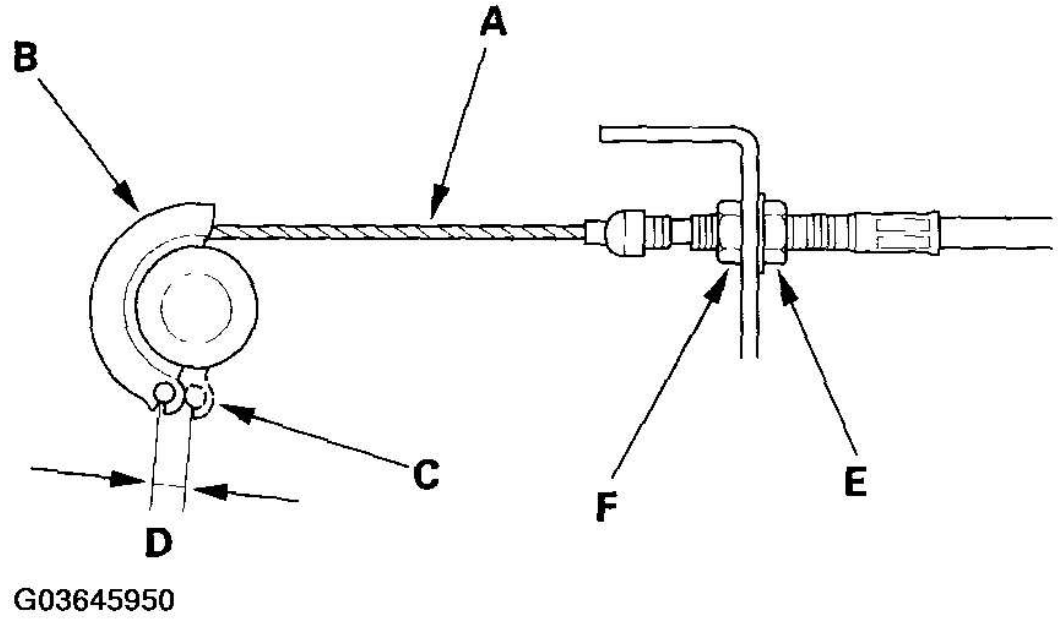


Fig. 18: Checking Actuator Cable Moves Smoothly With No Binding Or Sticking
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the amount of movement of the output linkage (B) until the engine speed starts to increase. At first, the output linkage should be located at the fully closed position (C). The free play (D) should be 3.75+/-0.5 mm (0.15+/-0.02 in.).
3. If the free play is not within specifications, loosen the locknut (E), and turn the adjusting nut (F) until the free play is as specified, then retighten the locknut.

CLUTCH PEDAL POSITION SWITCH TEST

1. Disconnect the 3P connector from the clutch pedal position switch.

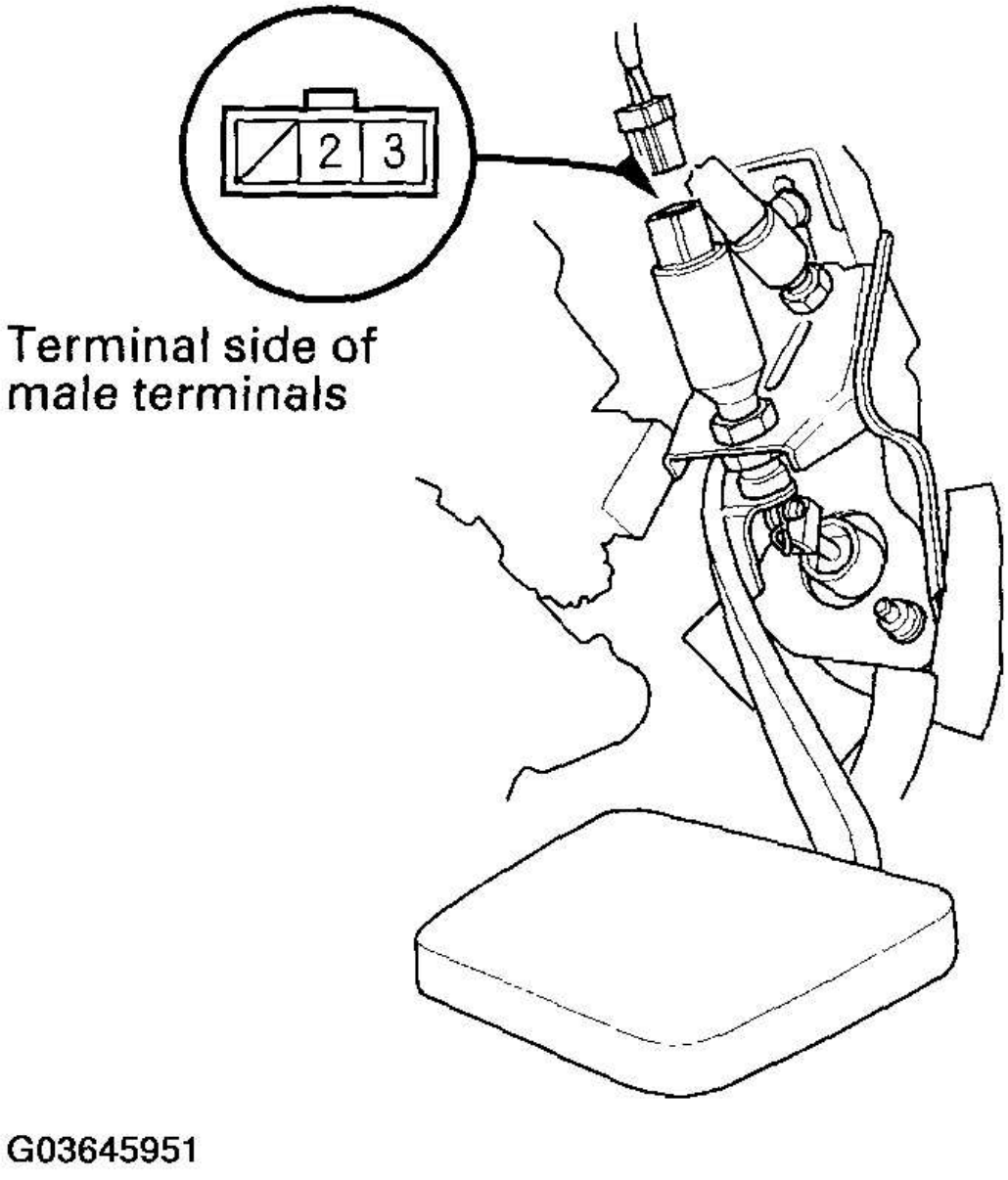


Fig. 19: Disconnecting 3P Connector From Clutch Pedal Position Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check for continuity between the terminals according to **Fig. 20** .
   - If the continuity is not as specified, replace the clutch pedal position switch.

- If OK, install the clutch pedal position switch, and adjust the pedal height (see **CLUTCH PEDAL, CLUTCH PEDAL POSITION SWITCH, AND CLUTCH INTERLOCK SWITCH ADJUSTMENT**).

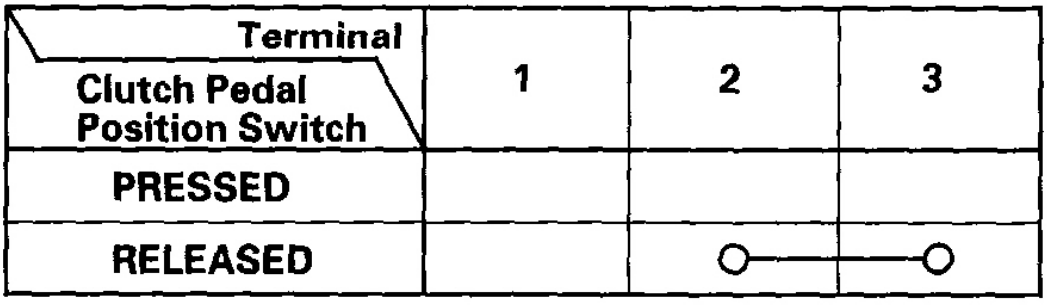


Fig. 20: Checking Continuity Between Terminals Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ENGINE

Cylinder Head - Accord (V6)

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07AAJ-PNAA100	Air Pressure Regulator	1
②	07HAH-PJ7A100	Valve Guide Reamer, 5.5 mm	1
③	07JAA-001020A	Socket, 19 mm	1
④	07JAB-001020A	Holder Handle	1
⑤	07MAB-PY3010A	Holder Attachment, 50 mm, Offset	1
⑥	07PAD-0010000	Stem Seal Driver	1
⑦	07VAJ-P8A010A	VTEC Air Adapter	1
⑧	070AJ-0030100	VTEC Air Stopper	1
⑨	07742-0010100	Valve Guide Driver, 5.5 mm	1
⑩	07757-PJ1010A	Valve Spring Compressor Attachment	1

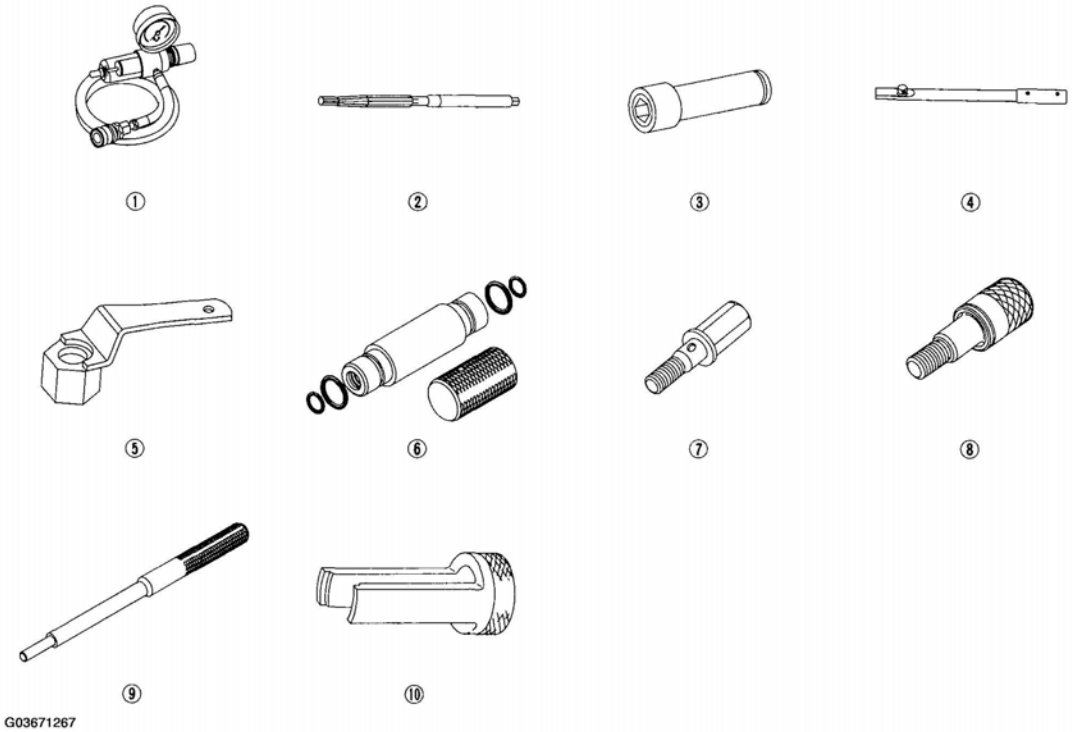


Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

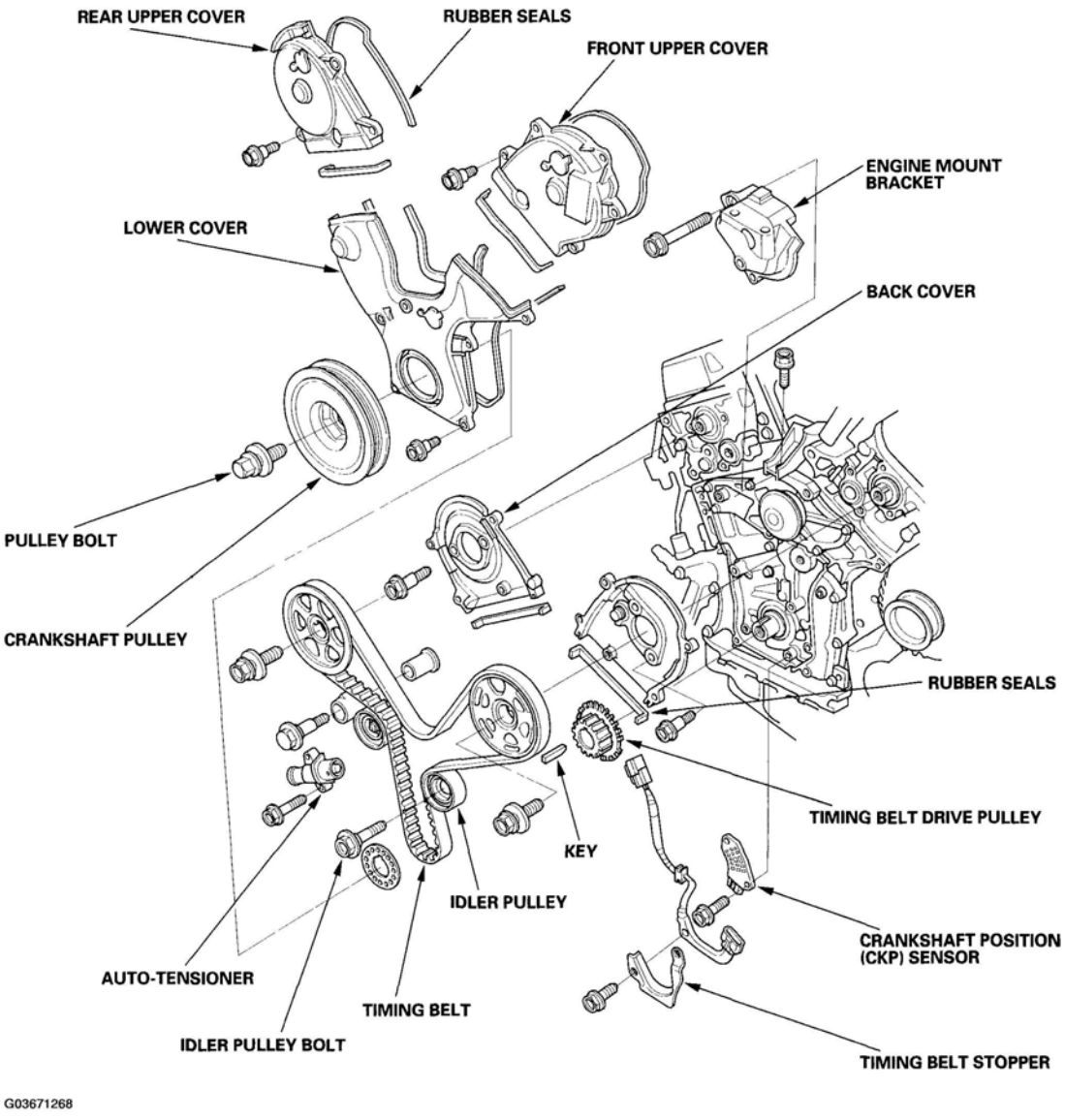


Fig. 2: Locating Cylinder Head Components (1 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

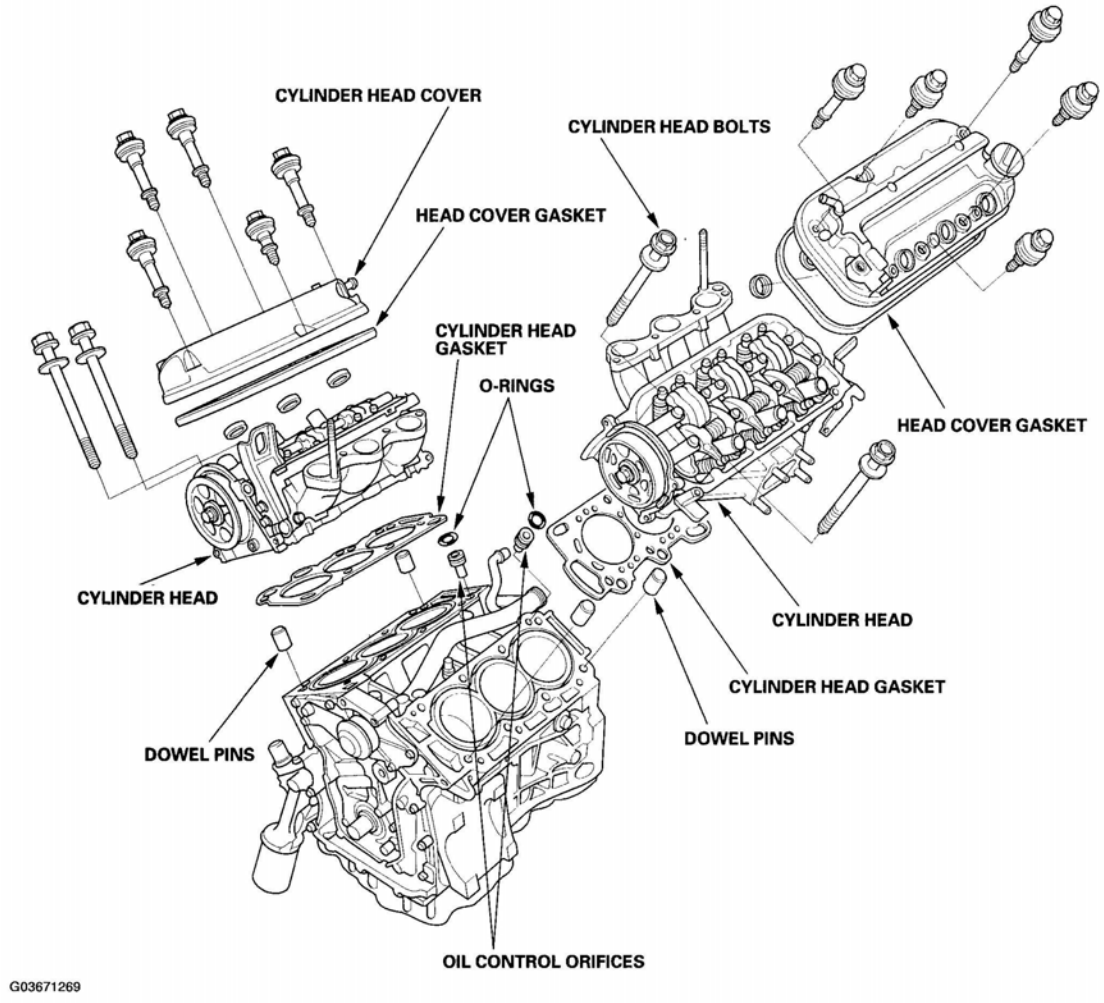


Fig. 3: Locating Cylinder Head Components (2 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

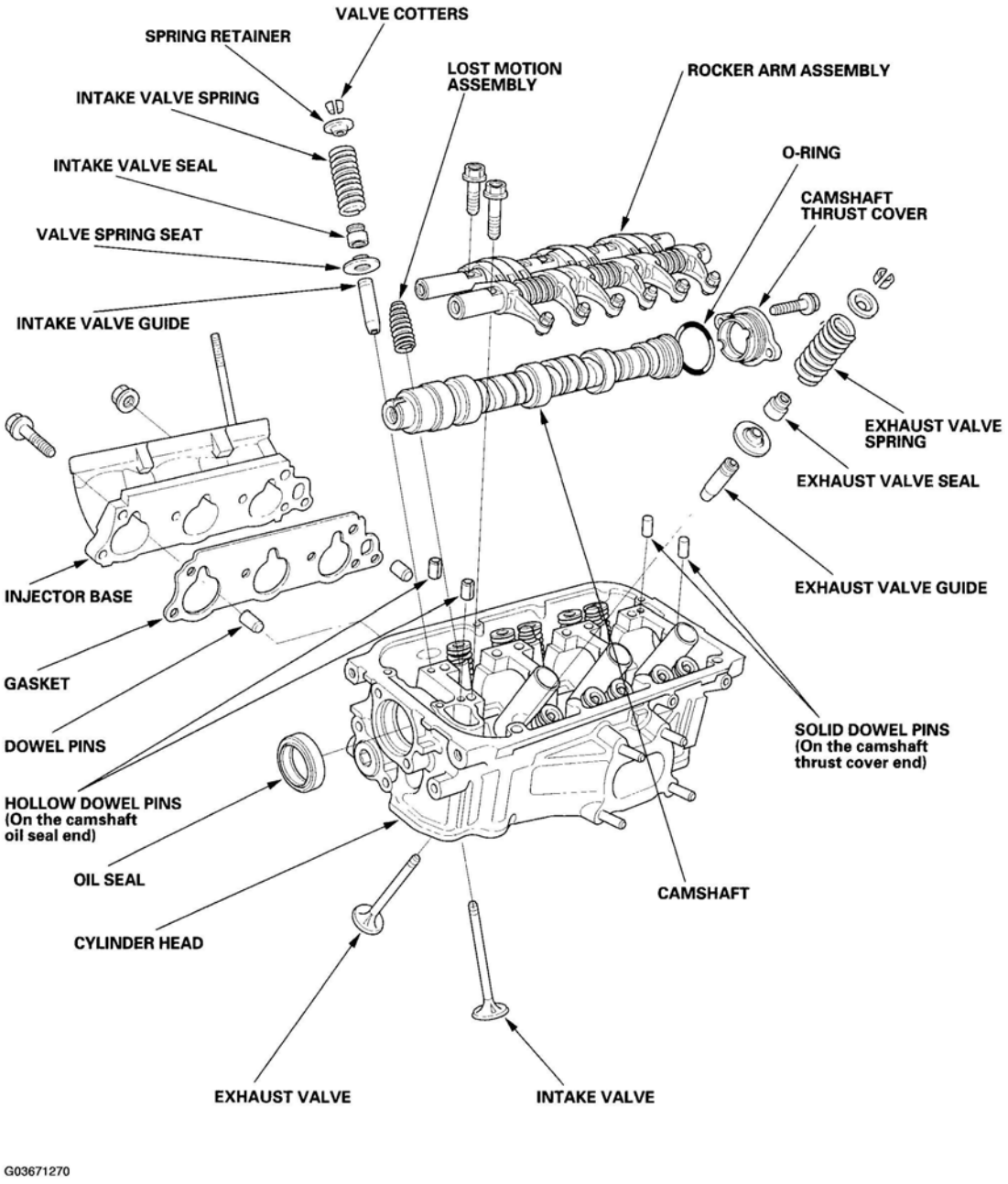


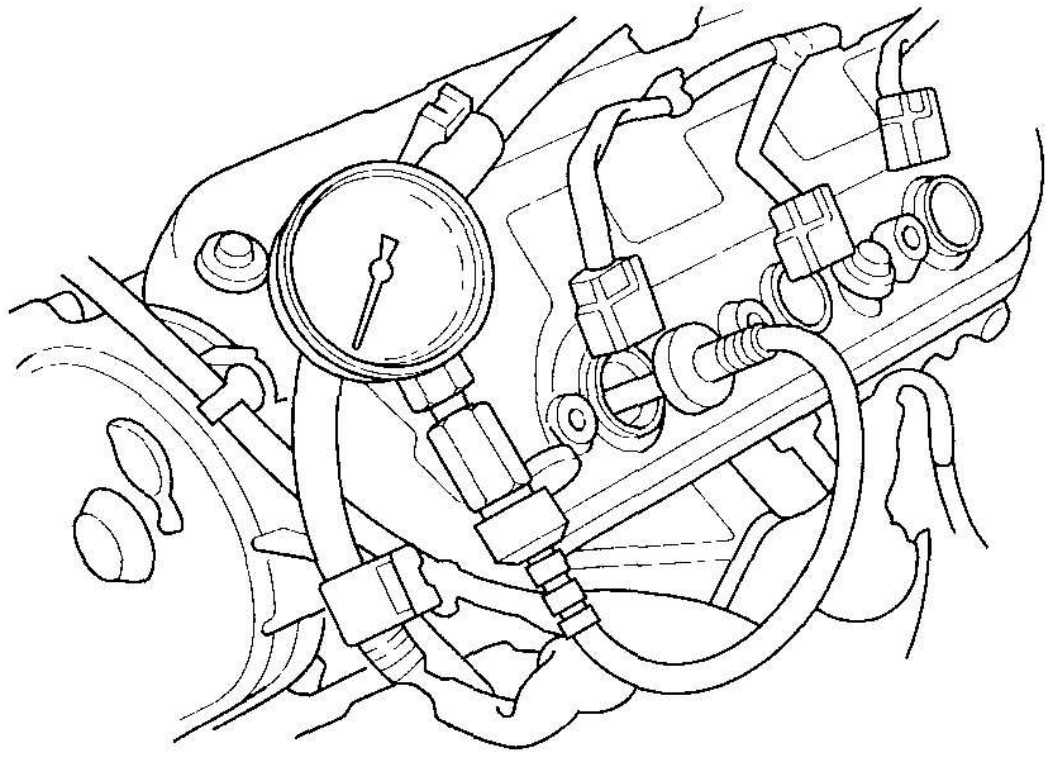
Fig. 4: Locating Cylinder Head Components (3 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ENGINE COMPRESSION INSPECTION

NOTE: After this inspection, you must select engine control module (ECM)/powertrain control module (PCM) reset using

the Honda Diagnostic System (HDS) (see HDS CLEAR COMMAND), otherwise ECM/PCM continues to stop the fuel injectors from operating.

1. Warm up the engine to normal operating temperature (cooling fan comes on).
2. Turn the ignition switch OFF.
3. Connect the HDS to the data link connector (DLC) (see **GENERAL TROUBLESHOOTING INFORMATION**).
4. Select PGM-FI, INSPECTION, and then ALL INJECTORS OFF on the HDS.
5. Remove the six ignition coils (see **IGNITION COIL REMOVAL/INSTALLATION**).
6. Remove the six spark plugs.
7. Attach the compression gauge to the spark plug hole.



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Fig. 5: Attaching Compression Gauge To Spark Plug Hole
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Open the throttle fully, then crank the engine with the starter motor and measure the compression.

   Compression Pressure:

   Above 930 kPa (9.5 kgf/cm^2 , 135 psi)

9. Measure the compression on the remaining cylinders.

   Maximum Variation:

   Within 200 kPa (2.0 kgf/cm^2 , 28 psi)

10. If the compression is not within specifications, check the following items, then remeasure the compression.
    - Damaged or worn valves and seats
    - Damaged cylinder head gaskets
    - Damaged or worn piston rings
    - Damaged or worn piston and cylinder bore
11. Select ECM/PCM reset (see **ECM/PCM RESET**) to cancel the ALL INJECTORS OFF function on the HDS.

VTEC ROCKER ARM TEST

Special Tools Required

- VTEC air adapter 07VAJ-P8A010A
- VTEC air stopper 070AJ-0030100
- Air pressure regulator 07AAJ-PNAA100

1. Start the engine and let it run for 5 minutes, then turn OFF the ignition switch.
2. Remove the cylinder head covers (see **CYLINDER HEAD COVER**

REMOVAL).

3. Set the No. 1 piston at top dead center (TDC) (see step 2 **VALVE CLEARANCE ADJUSTMENT**).
4. Push on the intake mid rocker arm (A) for the No. 1 cylinder. The mid rocker arm should move independently of the primary rocker arm (B) and secondary rocker arm (C).
   - If the intake mid rocker arm does not move, remove the mid, primary, and secondary intake rocker arms as an assembly, then check that the pistons in the mid and primary rocker arms move smoothly. If any rocker arm needs replacing, replace the mid, primary, and secondary rocker arms as an assembly, and retest.
   - If the mid rocker arm moves freely repeat the above procedure for the remaining intake mid rocker arms with each piston at TDC. When all the mid rocker arms pass the test, go to step 5.

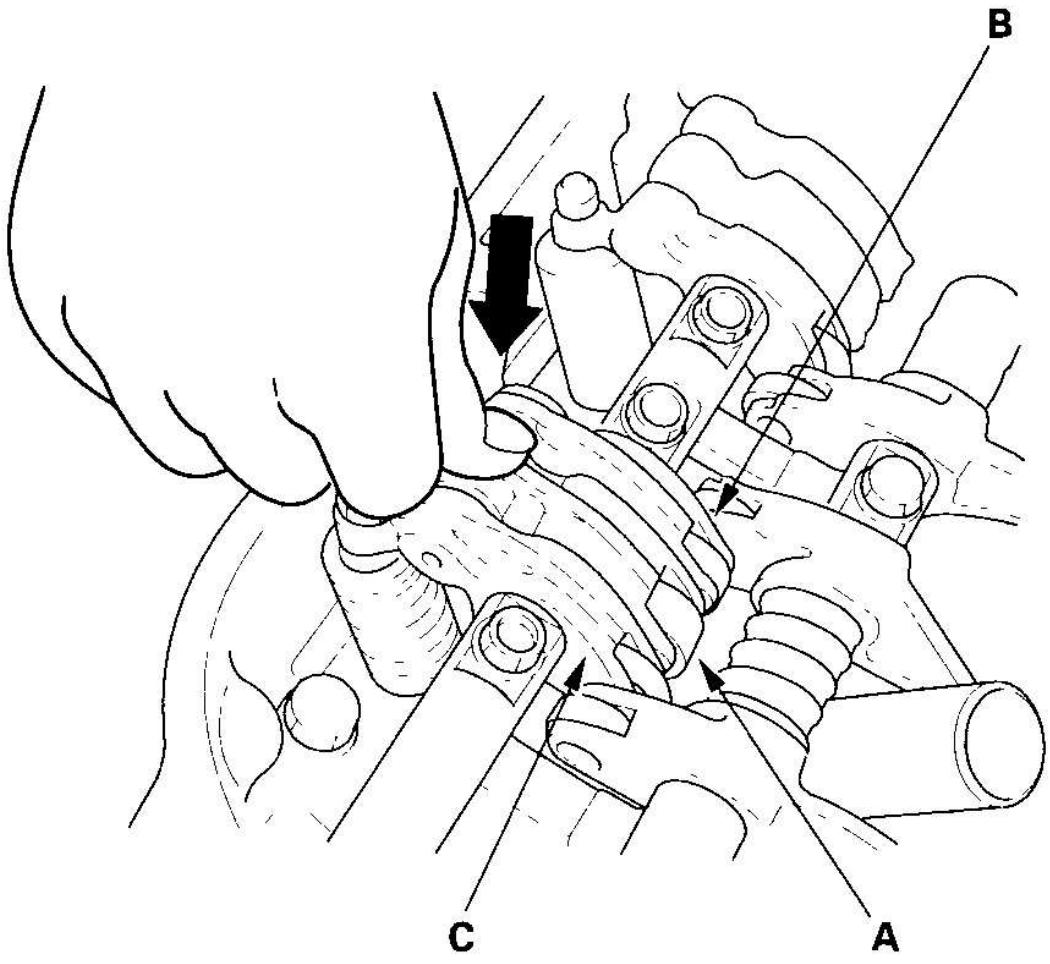


Fig. 6: Pushing On Intake Mid Rocker Arm For No. 1 Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Check that the air pressure on the shop air compressor gauge indicates over 690 kPa (7.0 kgf/cm^2 , 100 psi).
6. Inspect the valve clearance (see step 3).
7. Remove the No. 1 and No. 6 intake rocker shaft mounting bolts, then install and connect the special tools as shown in **Fig. 7** or **Fig. 8**.

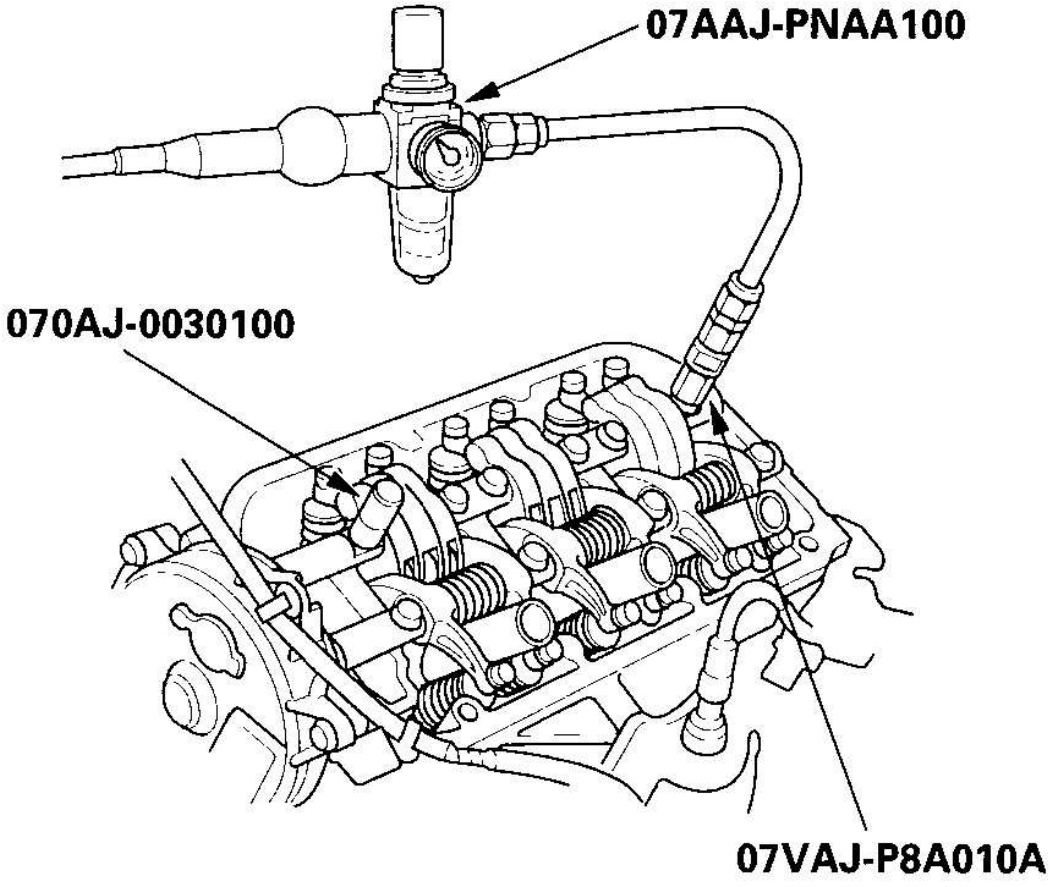


Fig. 7: Removing Intake Rocker Shaft Mounting Bolts Using Special Tool (Front)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

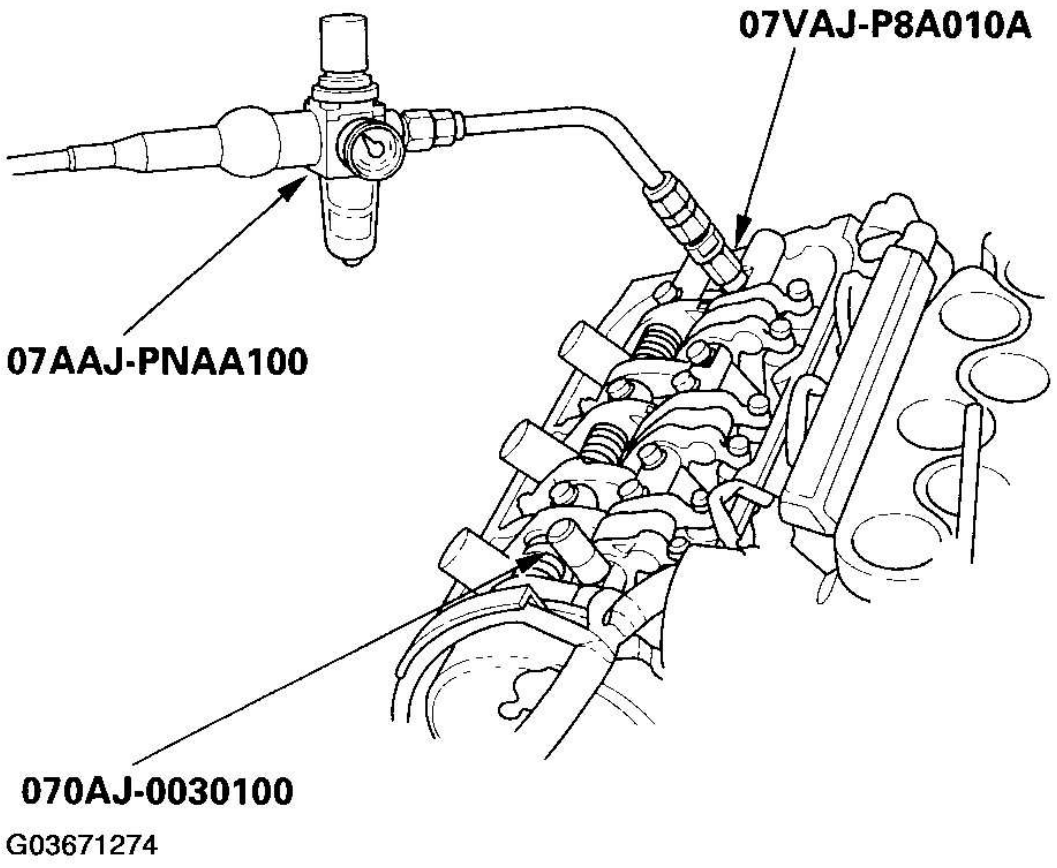


Fig. 8: Removing Intake Rocker Shaft Mounting Bolts Using Special Tool (Rear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Loosen the valve on the regulator, and apply the specified air pressure.

Specified Air Pressure:

440-540 kPa (4.5-5.5 kgf/cm^2 , 64-78 psi)

NOTE: If the synchronizing pistons do not move after applying air pressure, move the primary or secondary rocker arm up and down manually.

9. Make sure that the intake primary rocker arm (A) and intake secondary rocker arm (B) are mechanically connected by the piston and that the mid rocker arm (C) does not move when pushed manually. If any intake mid rocker arm moves independently of the primary and secondary rocker arms, replace the rocker arms as a set.

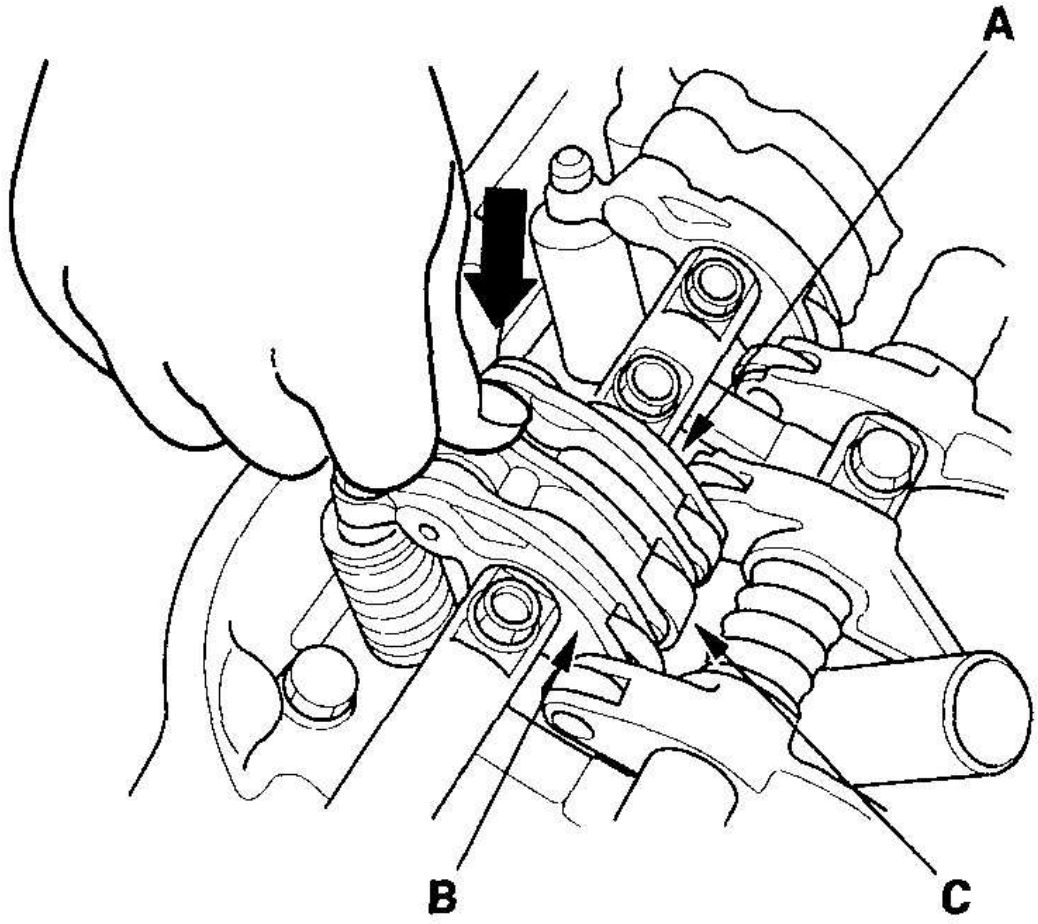


Fig. 9: Making Sure Intake Primary And Secondary Arm Are Connected By Piston
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the special tools.

11. Tighten the rocker shaft bolts to 24 N.m (2.4 kgf.m, 17 lbf.ft)
12. Install the cylinder head covers (see **CYLINDER HEAD COVER INSTALLATION**).

VALVE CLEARANCE ADJUSTMENT

NOTE: Adjust the valves only when the cylinder head temperature is less than 100°F (38°C).

1. Remove the cylinder head covers (see **CYLINDER HEAD COVER REMOVAL**).
2. Set the No. 1 piston at top dead center (TDC).

   Align the pointer (A) on the front upper cover with the No. 1 piston TDC mark (B) on the front camshaft pulley.

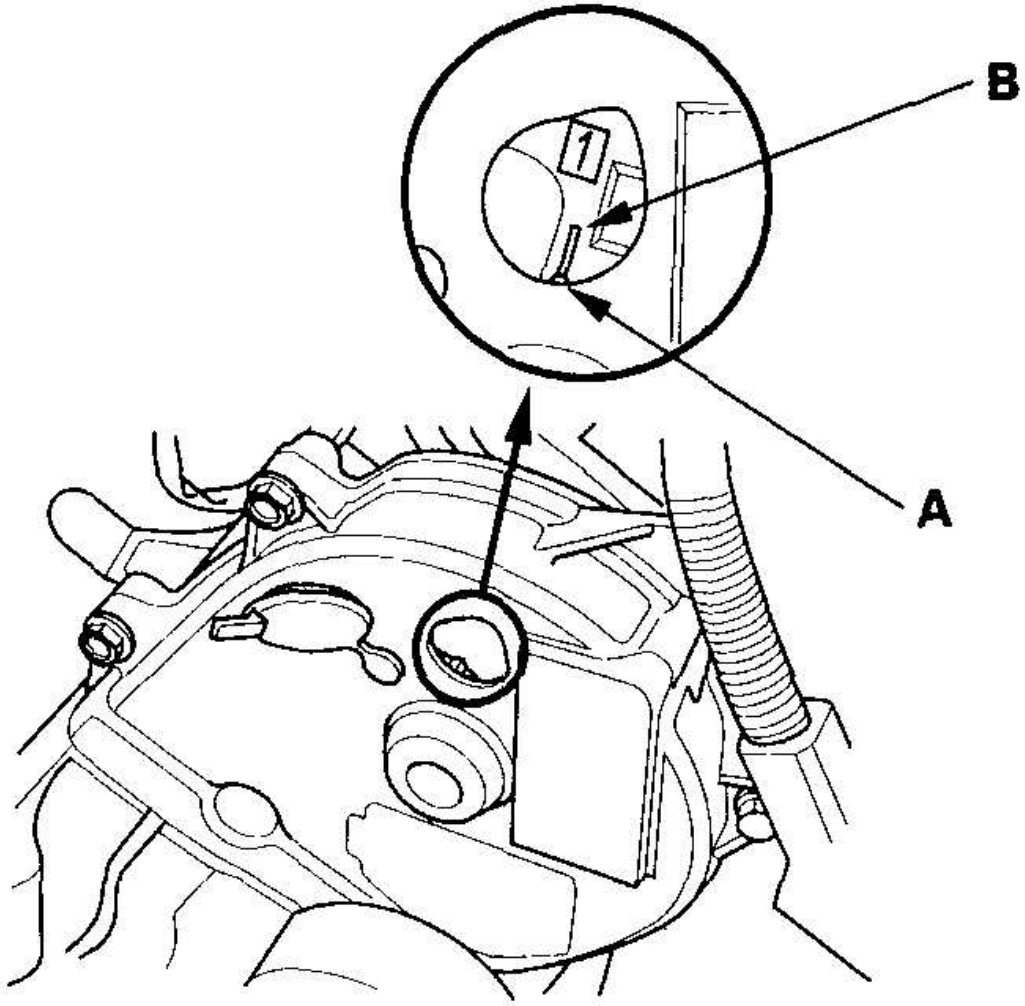


Fig. 10: Aligning Pointer On Front Upper Cover With No. 1 Piston TDC Mark On Front Camshaft Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Select the correct thickness feeler gauge for the valves you're going to check.

Valve Clearance

Intake: 0.20-0.24 mm (0.008-0.009 in.)

Exhaust: 0.28-0.32 mm (0.011-0.013 in.)

Adjusting screw locations:

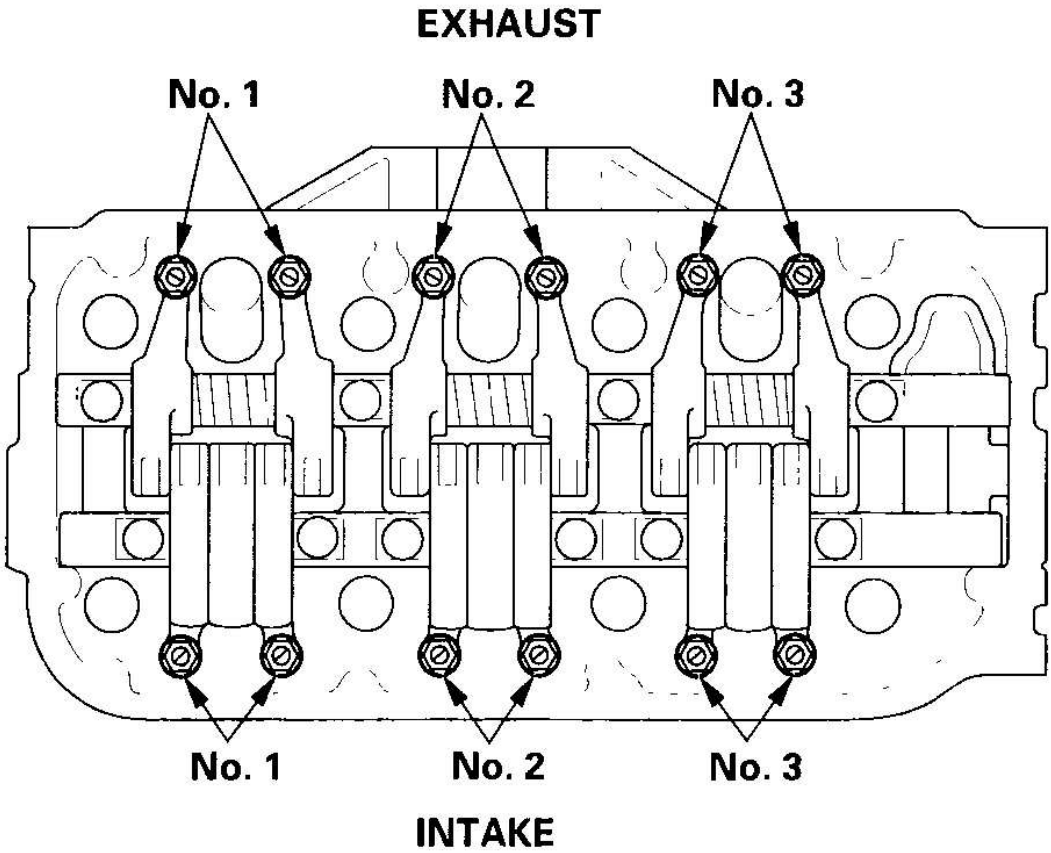


Fig. 11: Adjusting Screw Locations (Rear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

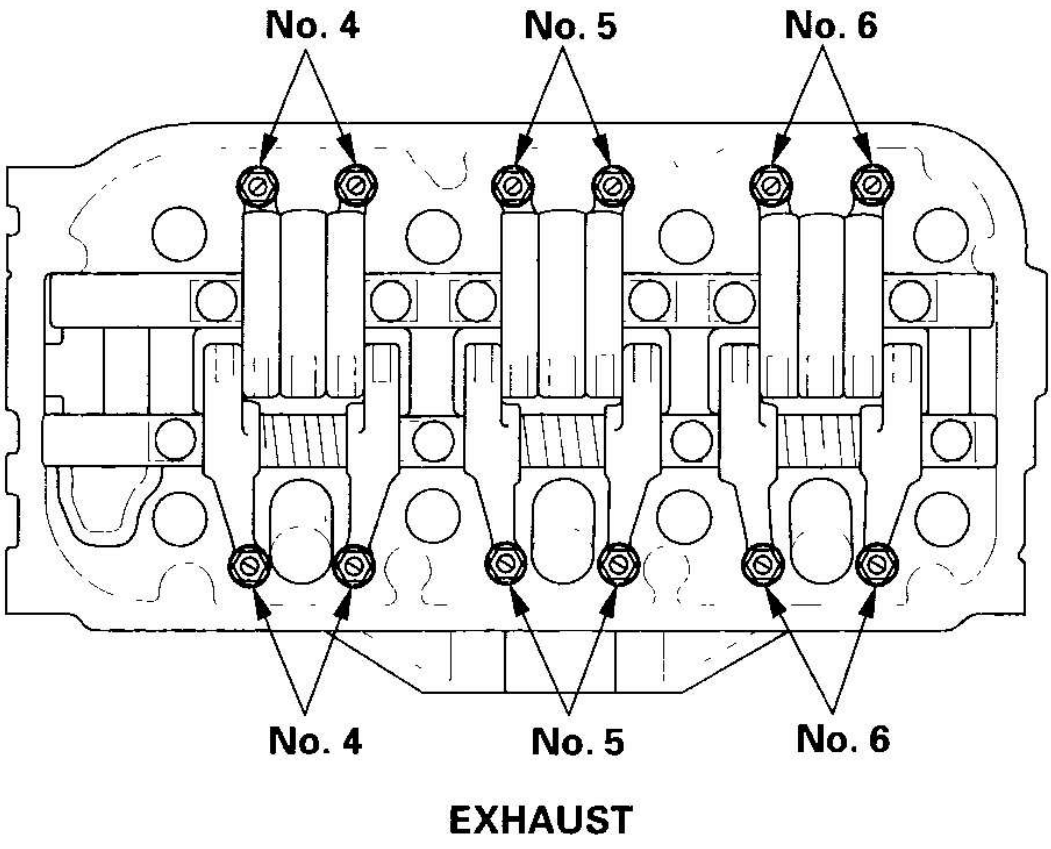


Fig. 12: Adjusting Screw Locations (Front)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Insert the feeler gauge (A) between the adjusting screw and the end of the valve stem on No. 1 cylinder, and slide it back and forth; you should feel a slight amount of drag.

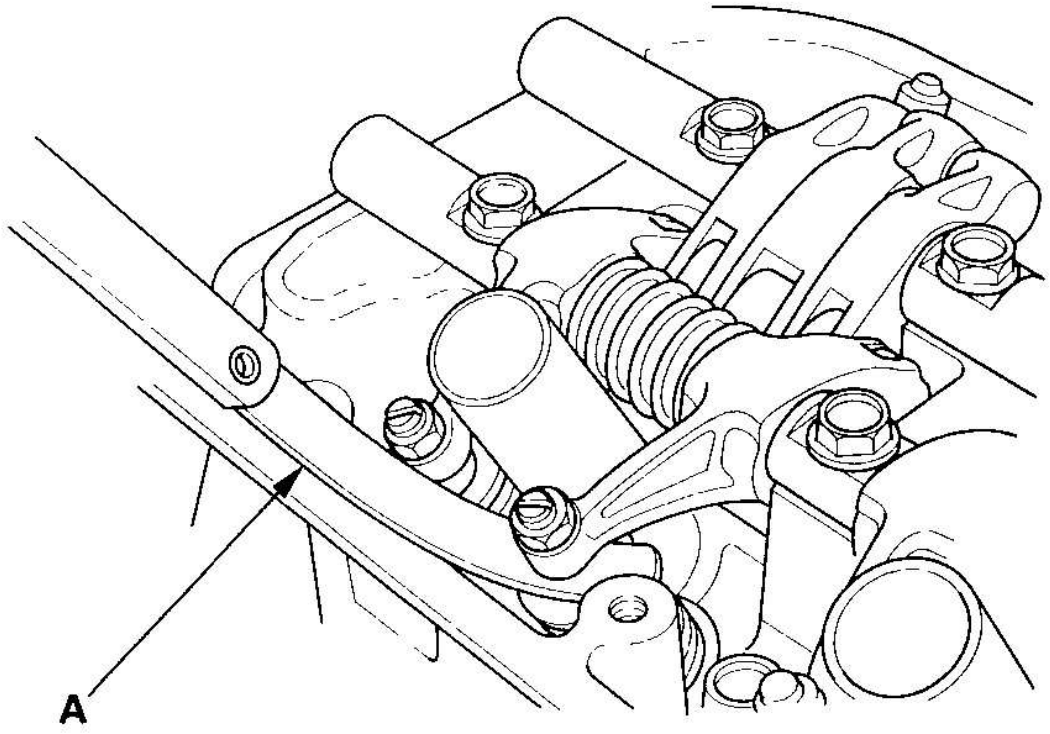


Fig. 13: Inserting Feeler Gauge Between Adjusting Screw And End Of Valve Stem On No. 1 Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If you feel too much or too little drag, loosen the locknut (A), and turn the adjusting screw (B) until the drag on the feeler gauge is correct.

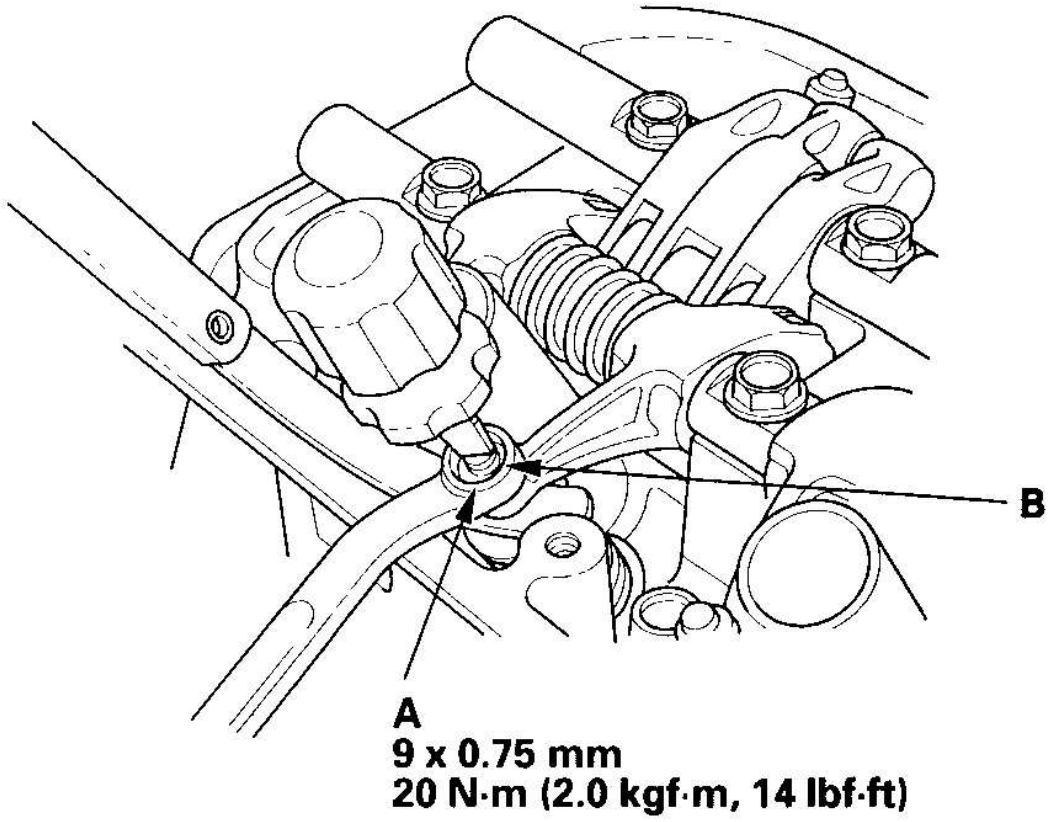


Fig. 14: Loosening Locknut And Turning Adjusting Screw
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Tighten the locknut and recheck the clearance. Repeat the adjustment, if necessary.
7. Rotate the crankshaft clockwise. Align the pointer (A) on the front upper cover with the No. 4 piston TDC mark (B) on the front camshaft pulley.

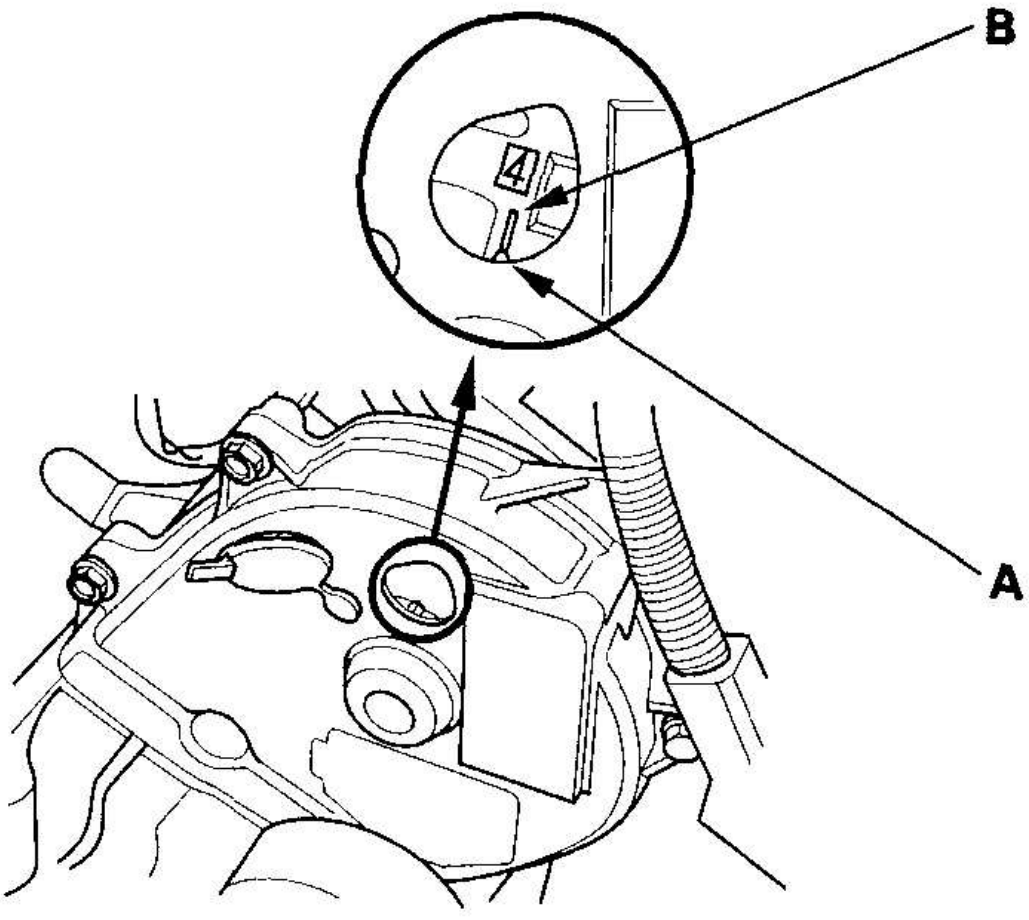


Fig. 15: Aligning Pointer On Front Upper Cover With No. 4 Piston TDC Mark On Front Camshaft Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Check and, if necessary, adjust the valve clearance on No. 4 cylinder.
9. Rotate the crankshaft clockwise. Align the pointer (A) on the front upper cover with the No. 2 piston TDC mark (B) on the front camshaft pulley.

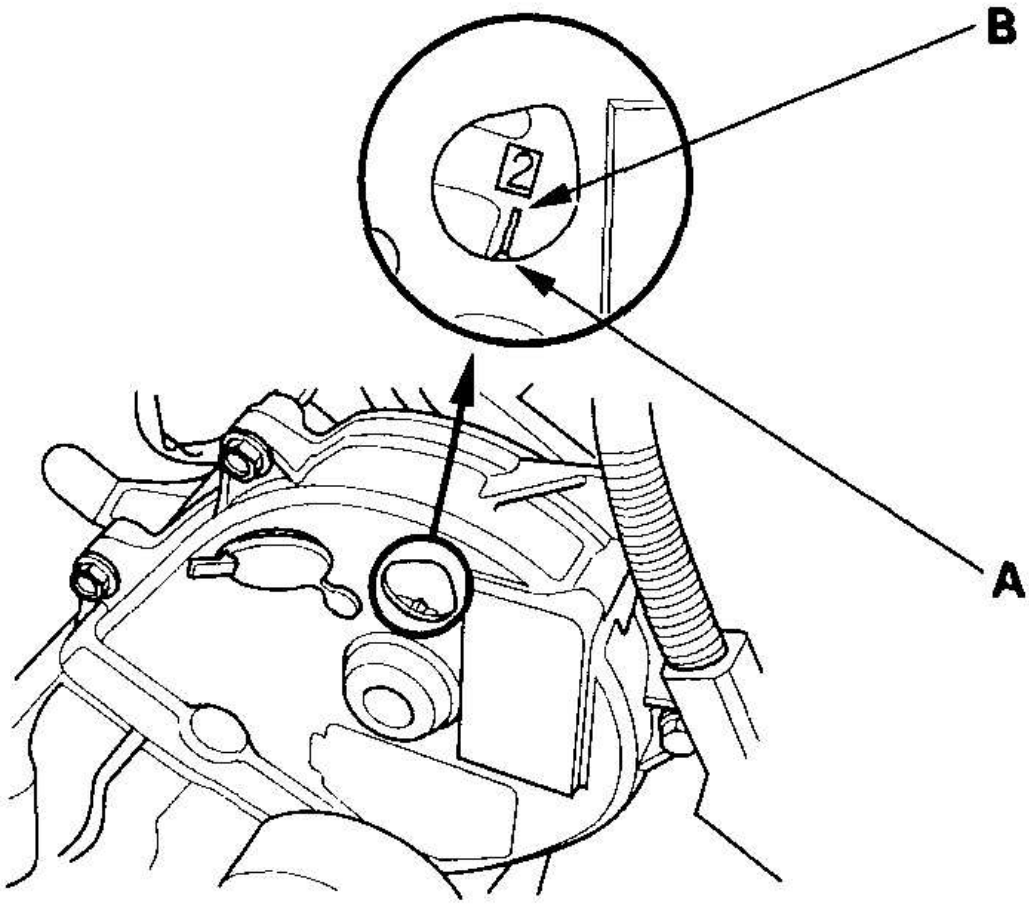


Fig. 16: Aligning Pointer On Front Upper Cover With No. 2 Piston TDC Mark On Front Camshaft Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Check and, if necessary, adjust the valve clearance on No. 2 cylinder.
11. Rotate the crankshaft clockwise. Align the pointer (A) on the front upper cover with the No. 5 piston TDC mark (B) on the front camshaft pulley.

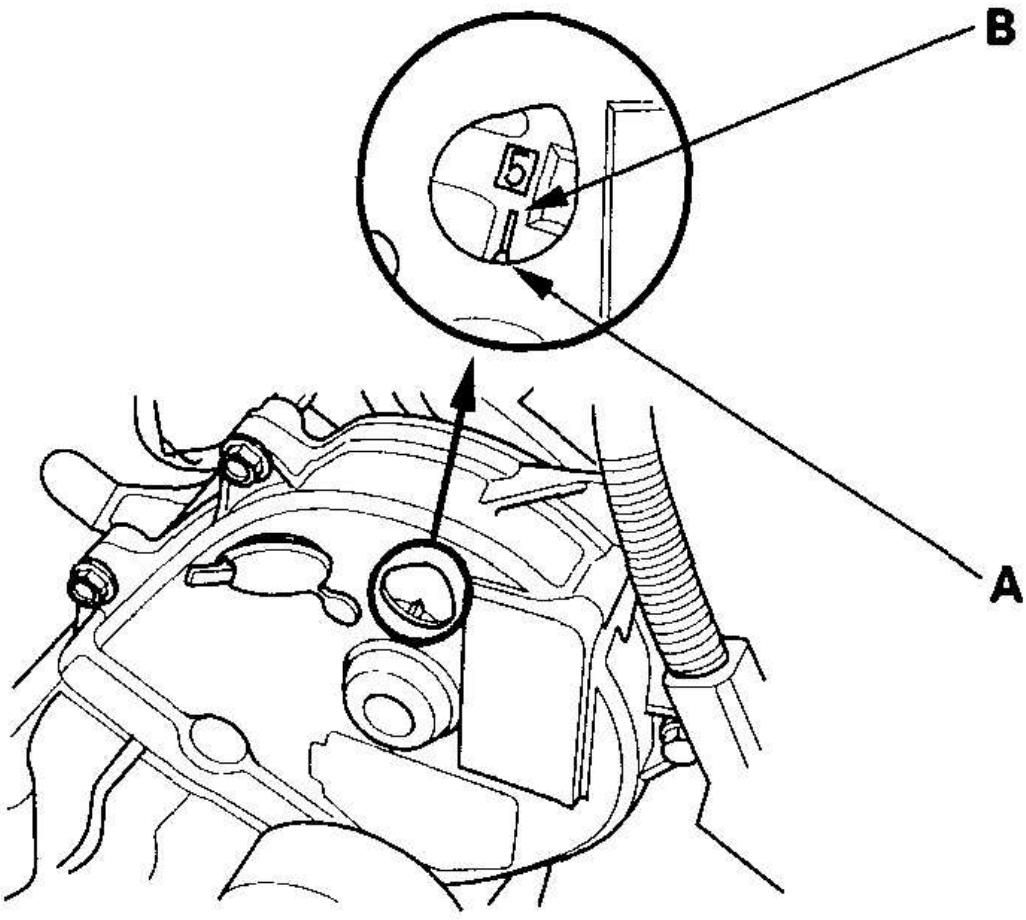


Fig. 17: Aligning Pointer On Front Upper Cover With No. 5 Piston TDC Mark On Front Camshaft Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Check and, if necessary, adjust the valve clearance on No. 5 cylinder.
13. Rotate the crankshaft clockwise. Align the pointer (A) on the front upper cover with the No. 3 piston TDC mark (B) on the front camshaft pulley.

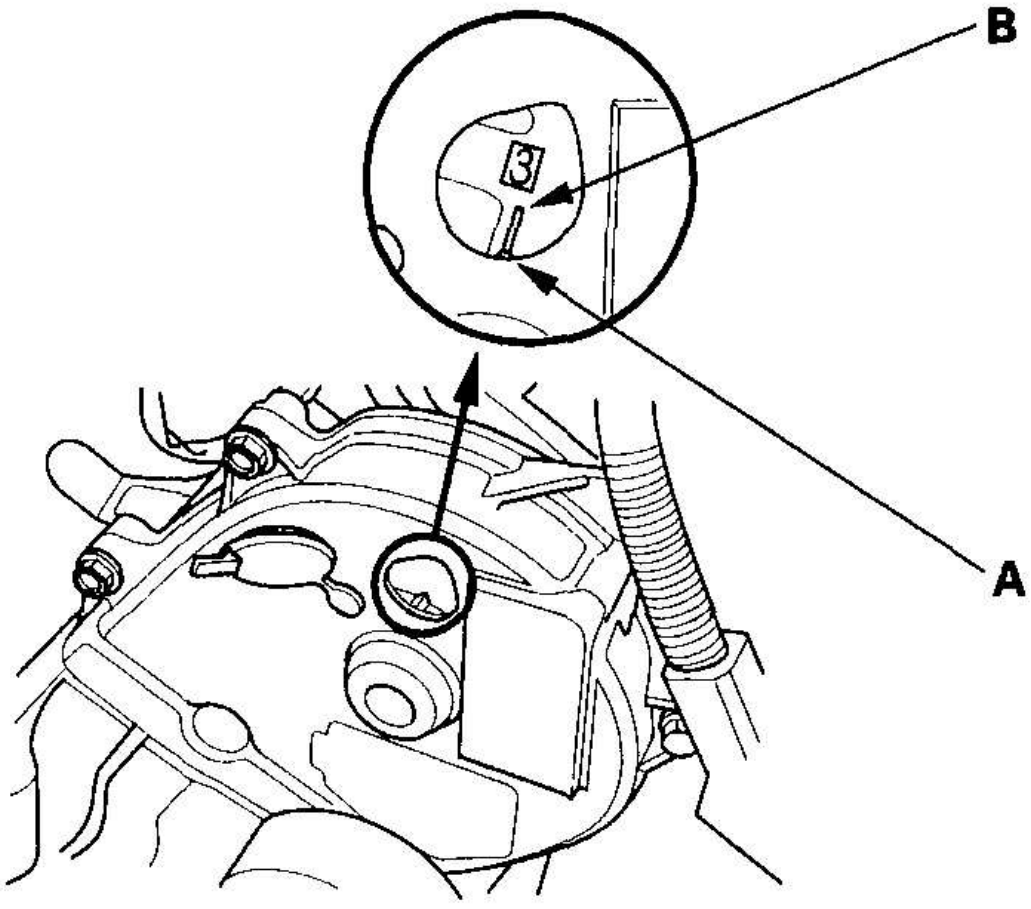


Fig. 18: Aligning Pointer On Front Upper Cover With No. 3 Piston TDC Mark On Front Camshaft Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Check and, if necessary, adjust the valve clearance on No. 3 cylinder.
15. Rotate the crankshaft clockwise. Align the pointer (A) on the front upper cover with the No. 6 piston TDC mark (B) on the front camshaft pulley.

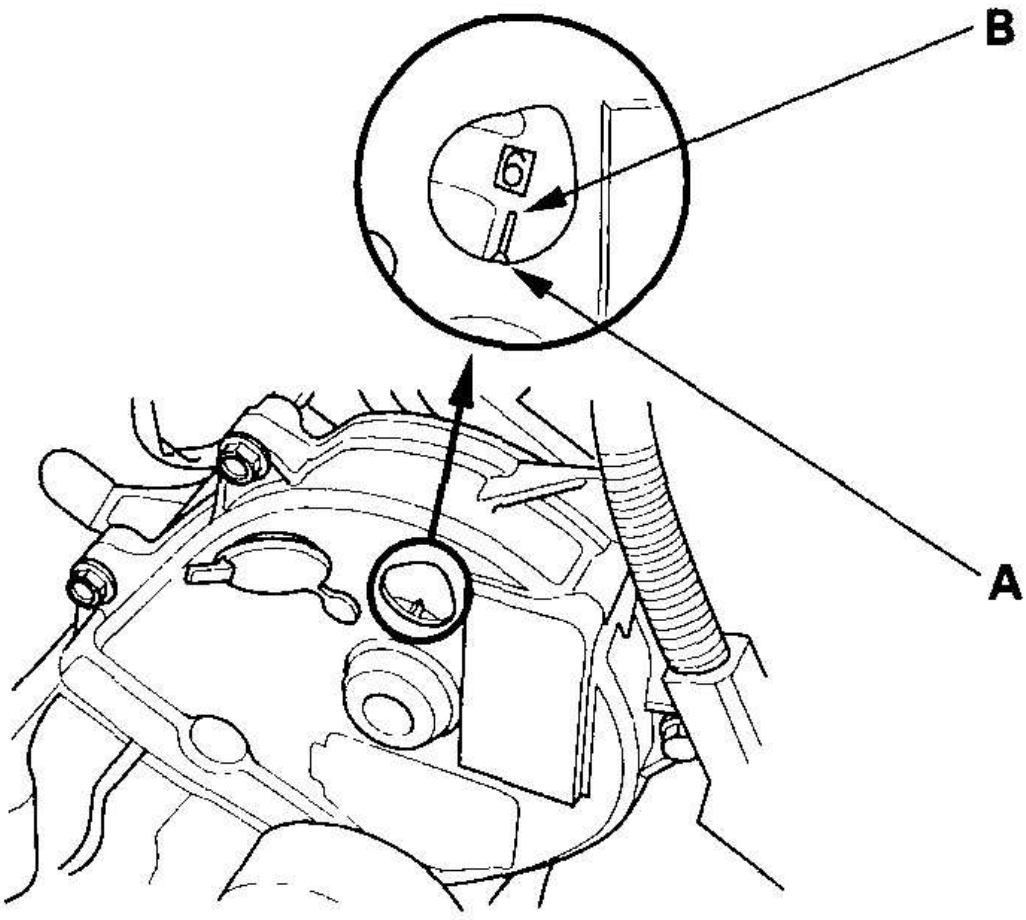


Fig. 19: Aligning Pointer On Front Upper Cover With No. 6 Piston TDC Mark On Front Camshaft Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Check and, if necessary, adjust the valve clearance on No. 6 cylinder.
17. Install the cylinder head covers (see **CYLINDER HEAD COVER INSTALLATION**).

CRANKSHAFT PULLEY REMOVAL AND INSTALLATION

Special Tools Required

- Holder handle 07JAB-001020A
- Holder attachment, 50 mm, offset 07MAB-PY3010A
- Socket, 19 mm 07JAA-001020A, or a commercially available 19 mm socket

REMOVAL

1. Remove the right front tire/wheel.
2. Remove the splash shield.

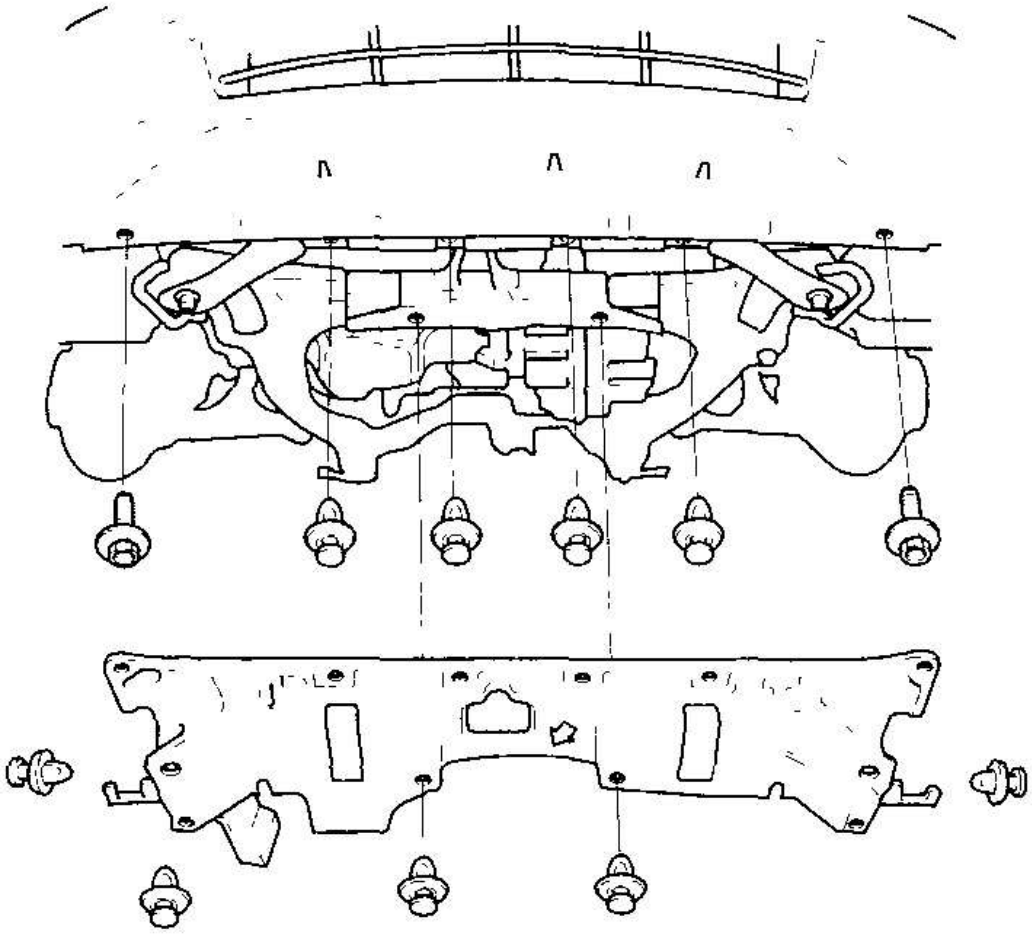


Fig. 20: Identifying Splash Shield

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the drive belt (see **DRIVE BELT REPLACEMENT**).
4. Hold the pulley with the holder handle (A) and holder attachment (B).

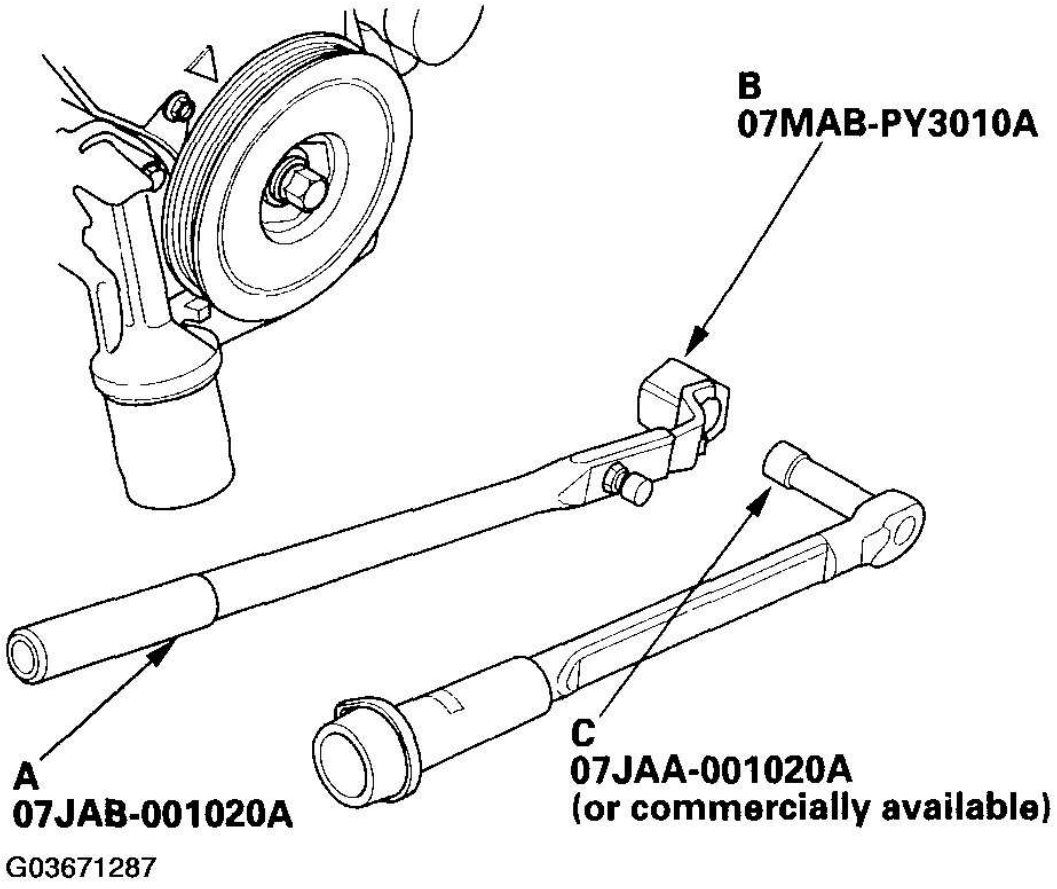


Fig. 21: Holding Pulley With Holder Handle & Attachment
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the bolt with a heavy duty 19 mm socket (C) and breaker bar, then remove the crankshaft pulley.

INSTALLATION

1. Remove any oil or clean the pulleys (A), crankshaft (B), bolt (C), and washer

(D). Lubricate with new engine oil as shown in **Fig. 22**.

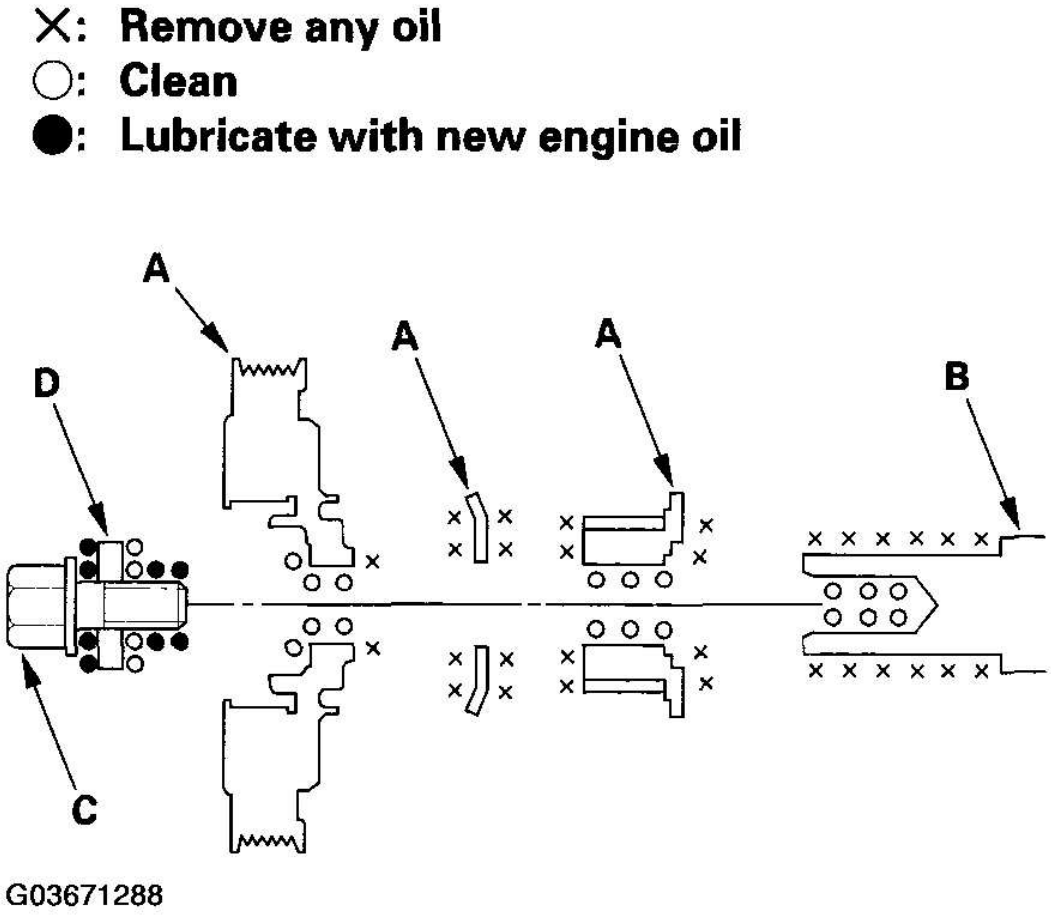


Fig. 22: Identifying Lubricating Points
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the crankshaft pulley, and tighten the bolt. Do not use an impact wrench.

   -1 Hold the pulley with the holder handle (A) and holder attachment (B), then tighten the bolt to 64 N.m (6.5 kgf.m, 47 lbf.ft) with a torque wrench and 19 mm socket (C).

   -2 Mark (D) the bolt head and crankshaft pulley as shown in **Fig. 23**, then tighten the bolt an additional 60 ° (The mark on the bolt head line up with the mark on the crankshaft pulley).

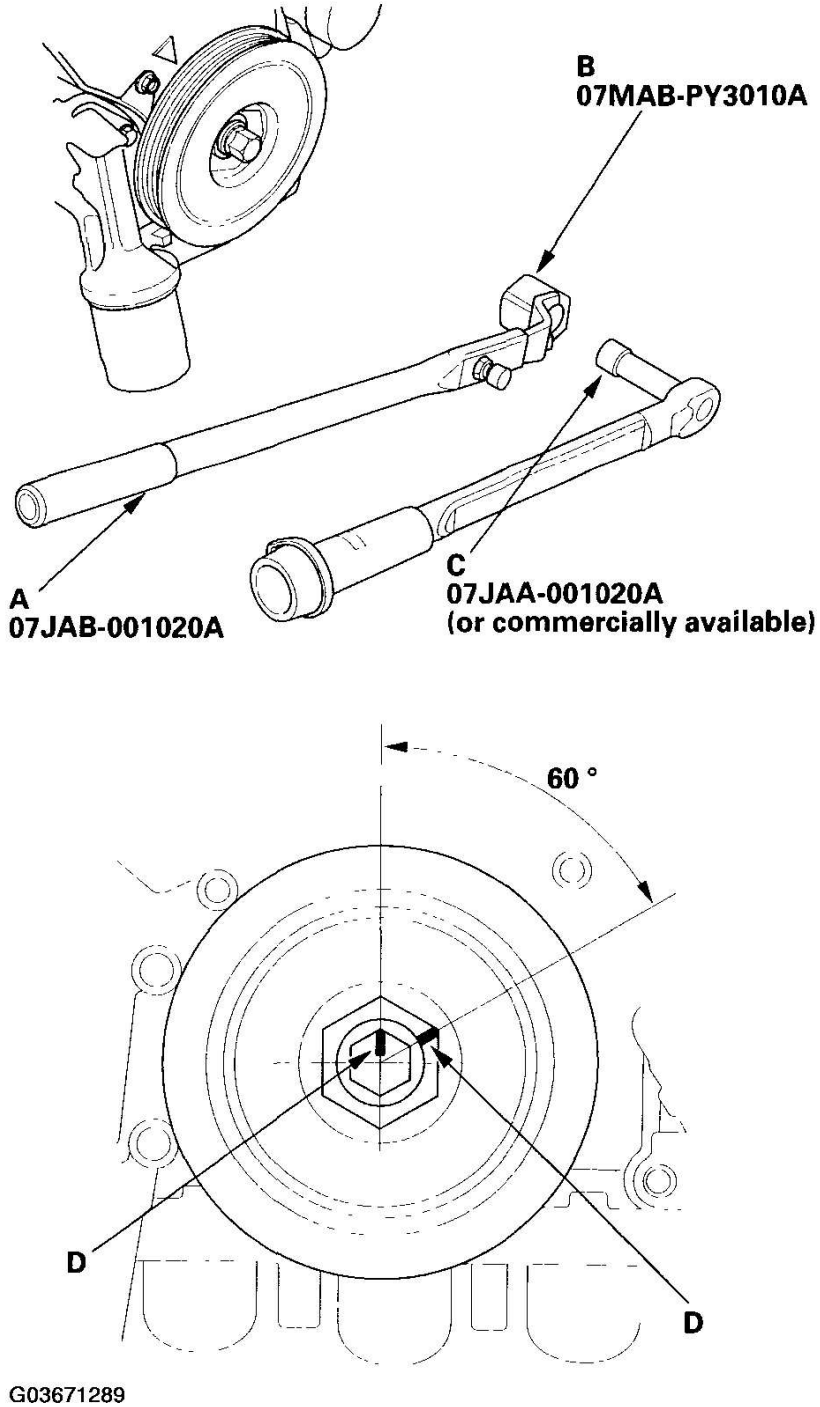
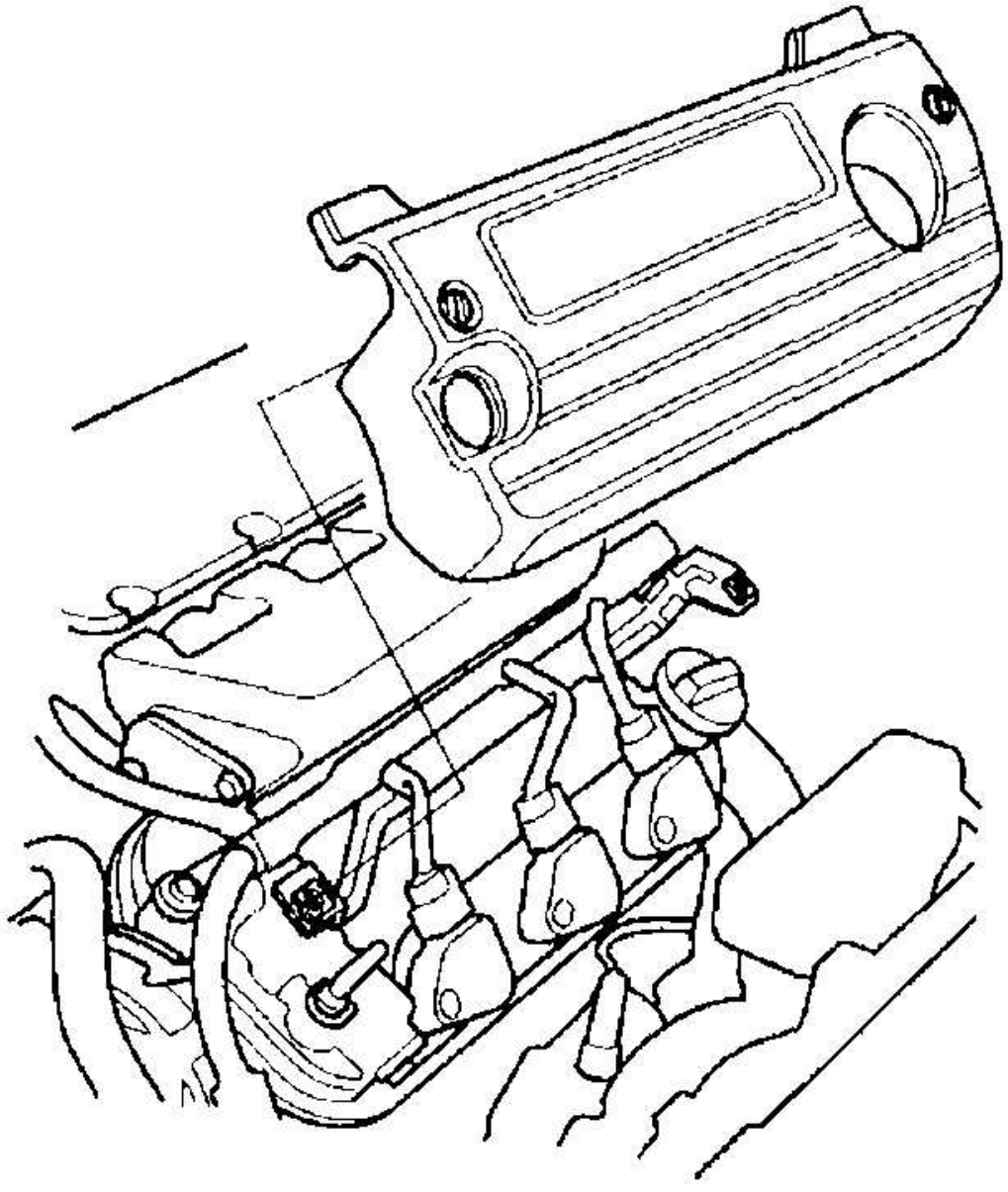


Fig. 23: Identifying Crankshaft Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the drive belt (see **DRIVE BELT REPLACEMENT**).
4. Install the splash shield.
5. Install the right front tire/wheel.

TIMING BELT INSPECTION

1. Remove the ignition coil cover.



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Fig. 24: Identifying Ignition Coil Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the drive belt auto-tensioner (see **DRIVE BELT AUTO-**

TENSIONER REPLACEMENT).

3. Remove the front upper cover.

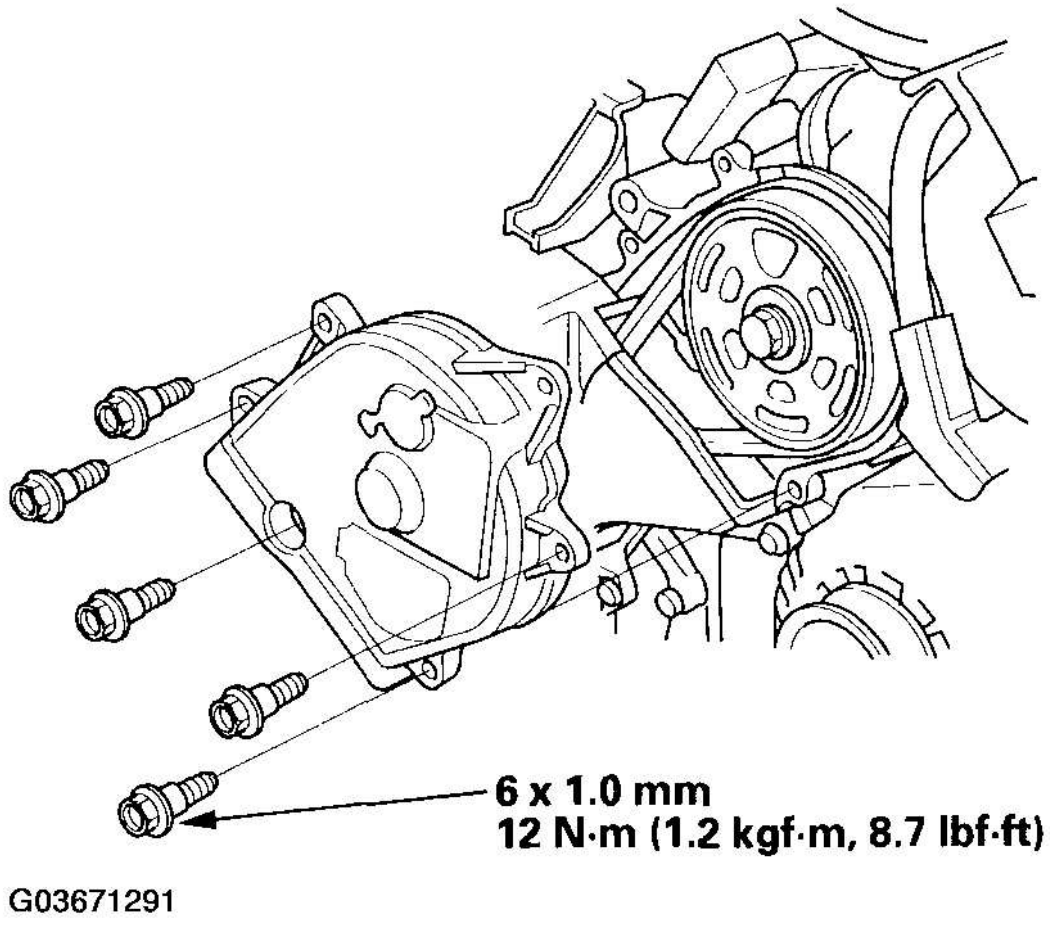
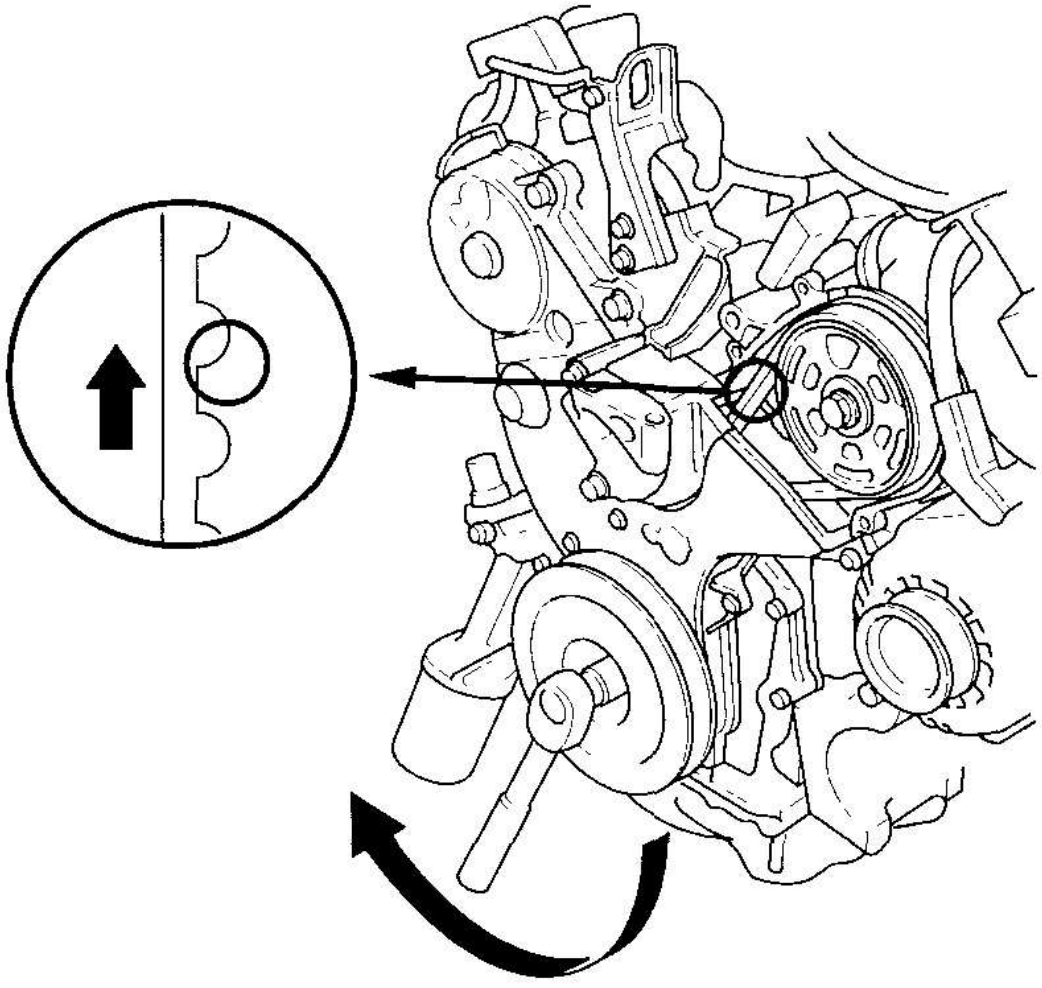


Fig. 25: Identifying Front Upper Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Inspect the timing belt for cracks and oil or coolant soaking. Replace the belt if it is cracked or soaked. Remove any oil or solvent that gets on the belt.



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Fig. 26: Inspecting Timing Belt For Cracks And Oil Or Coolant Soaking
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TIMING BELT REMOVAL

1. Turn the crankshaft so its white mark (A) lines up with the pointer (B).

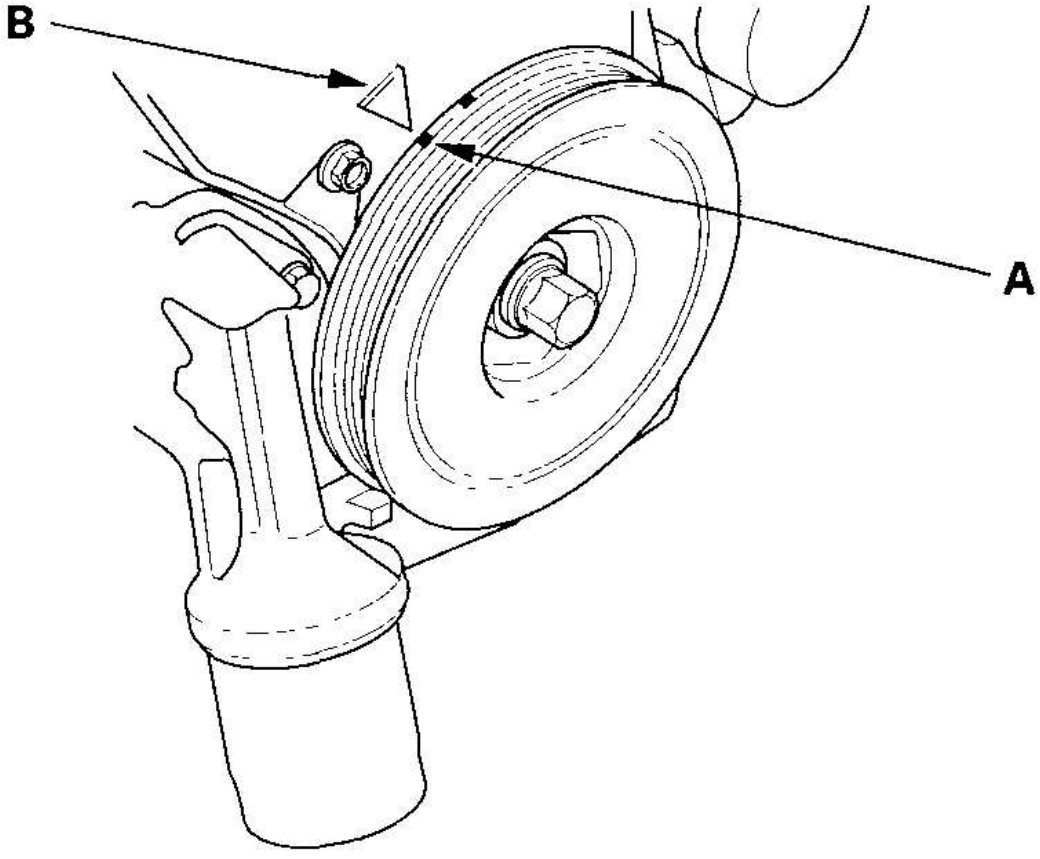


Fig. 27: Aligning White Mark With Pointer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check that the No. 1 piston top dead center (TDC) mark (A) on the front camshaft pulley and the pointer (B) on the front upper cover are aligned.

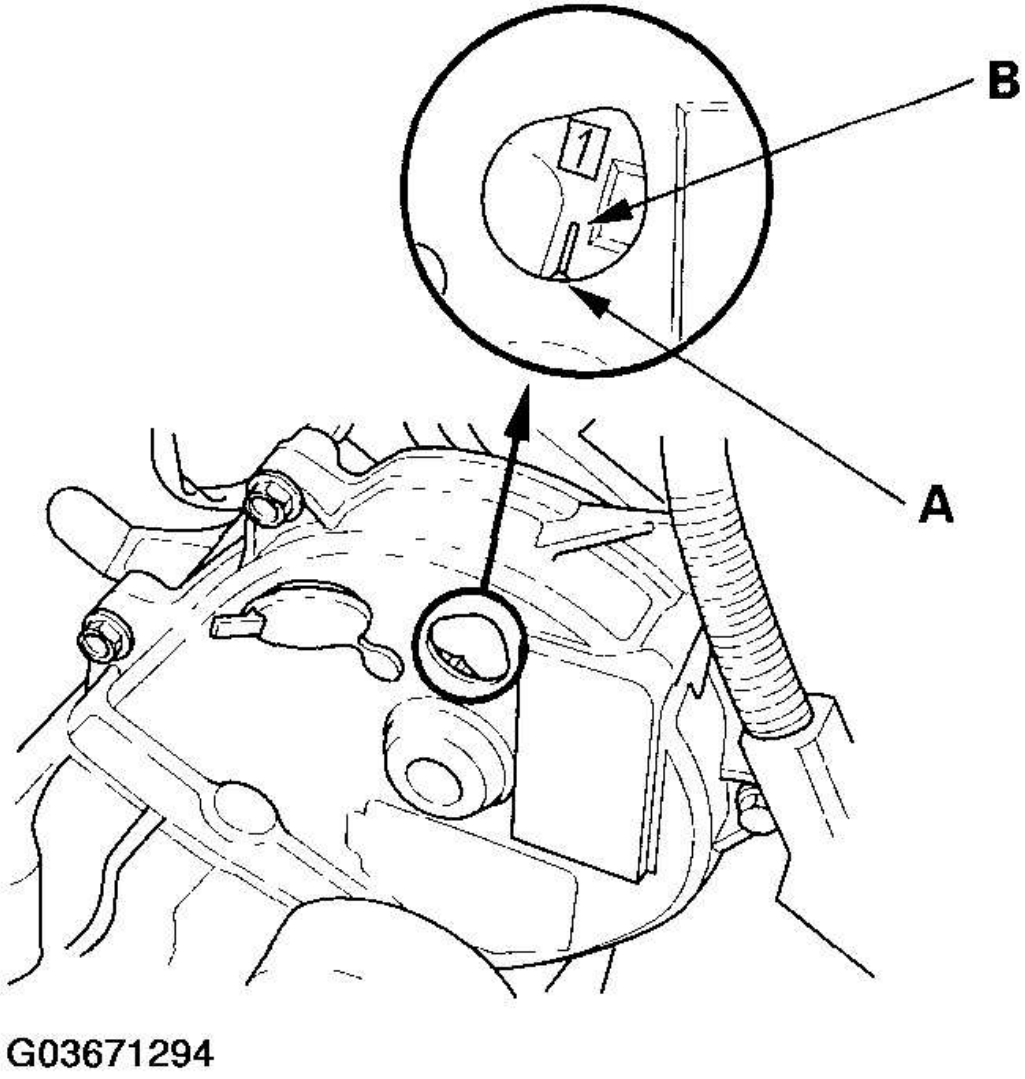
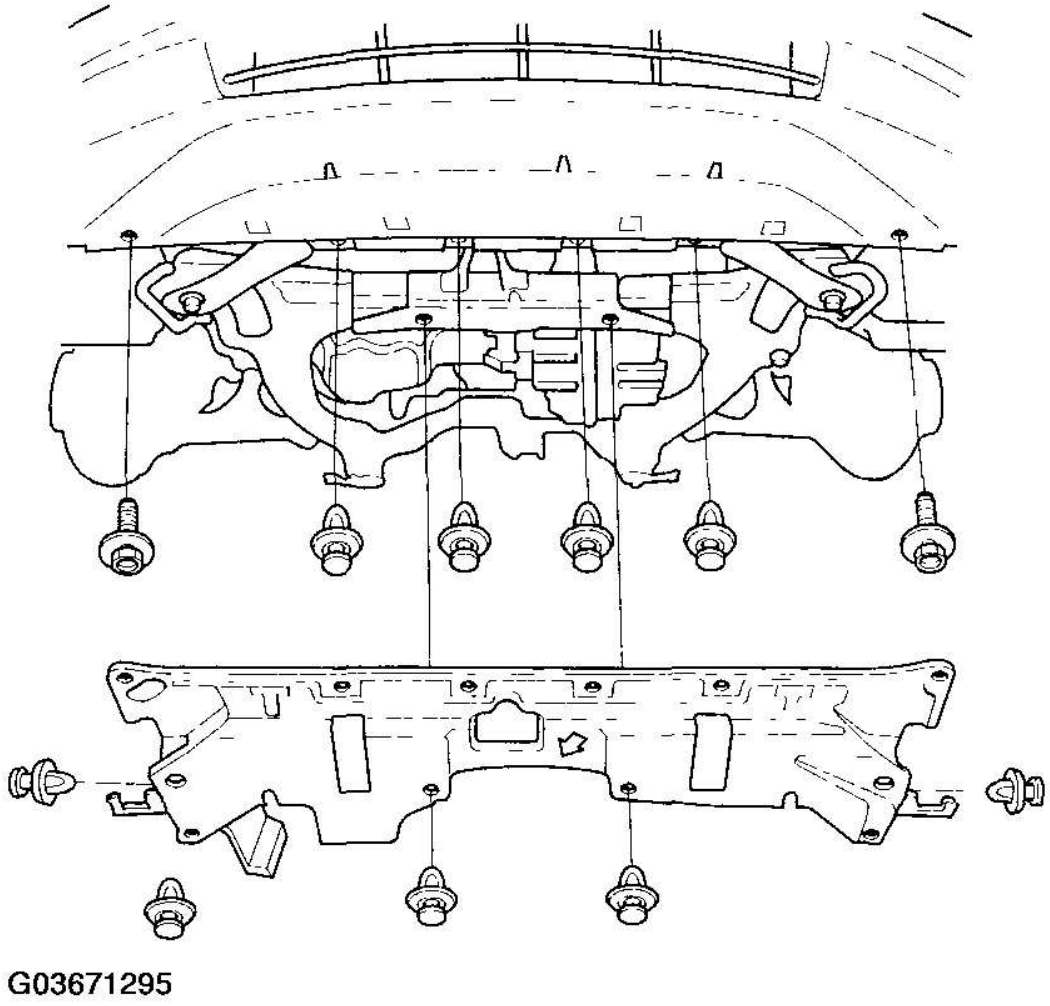


Fig. 28: Aligning No. 1 Piston TDC Mark With Pointer On Front Upper Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

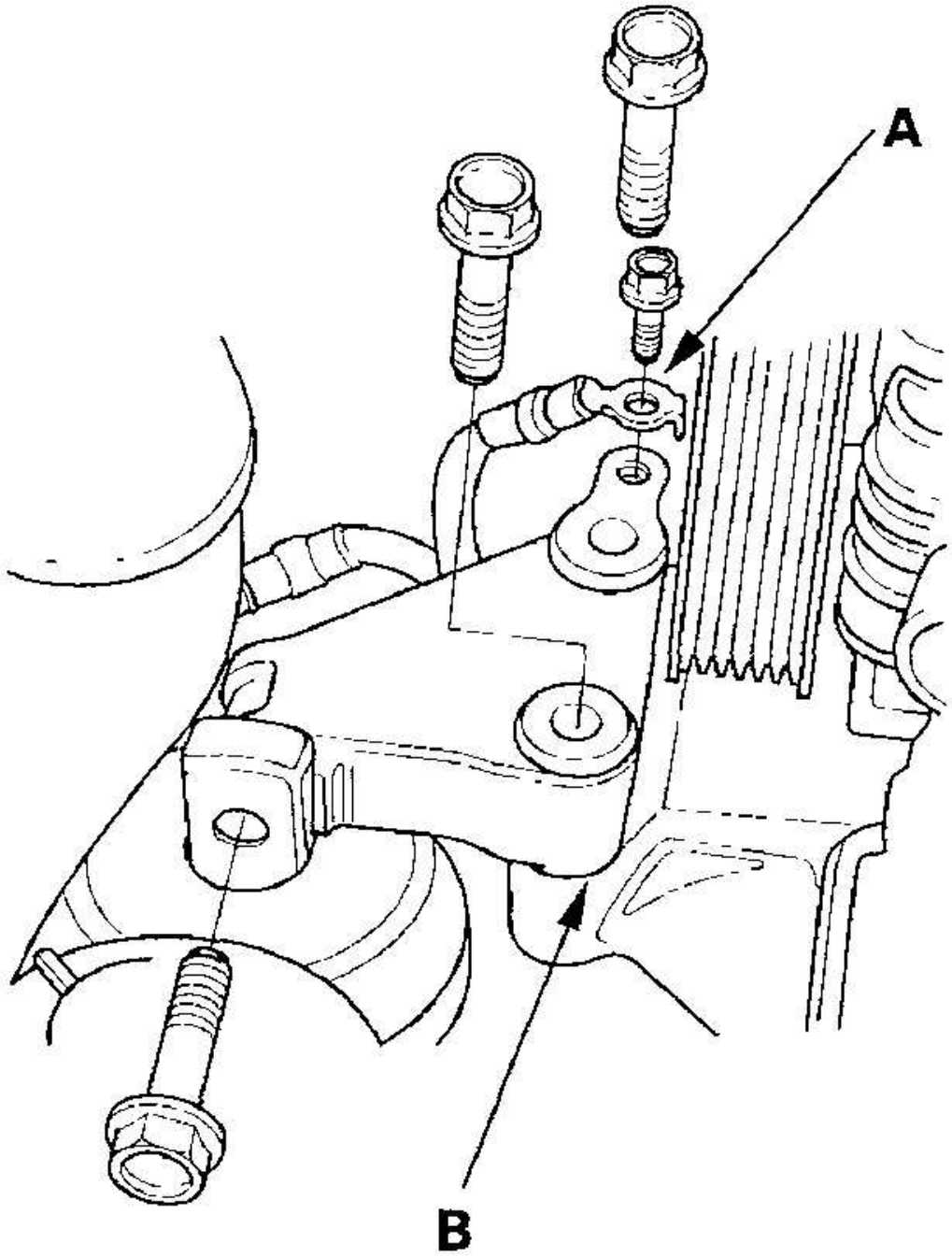
3. Remove the right front tire/wheel.
4. Remove the splash shield.



G03671295

Fig. 29: Identifying Splash Shield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the drive belt (see **DRIVE BELT REPLACEMENT**).
6. Remove the drive belt auto-tensioner (see **DRIVE BELT AUTO-TENSIONER REPLACEMENT**).
7. Support the engine with a jack and wood block under the oil pan.
8. Remove the ground cable (A), then remove the side engine mount bracket (B).



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Fig. 30: Identifying Ground Cable And Side Engine Mount Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the front upper cover (A) and rear upper cover (B).

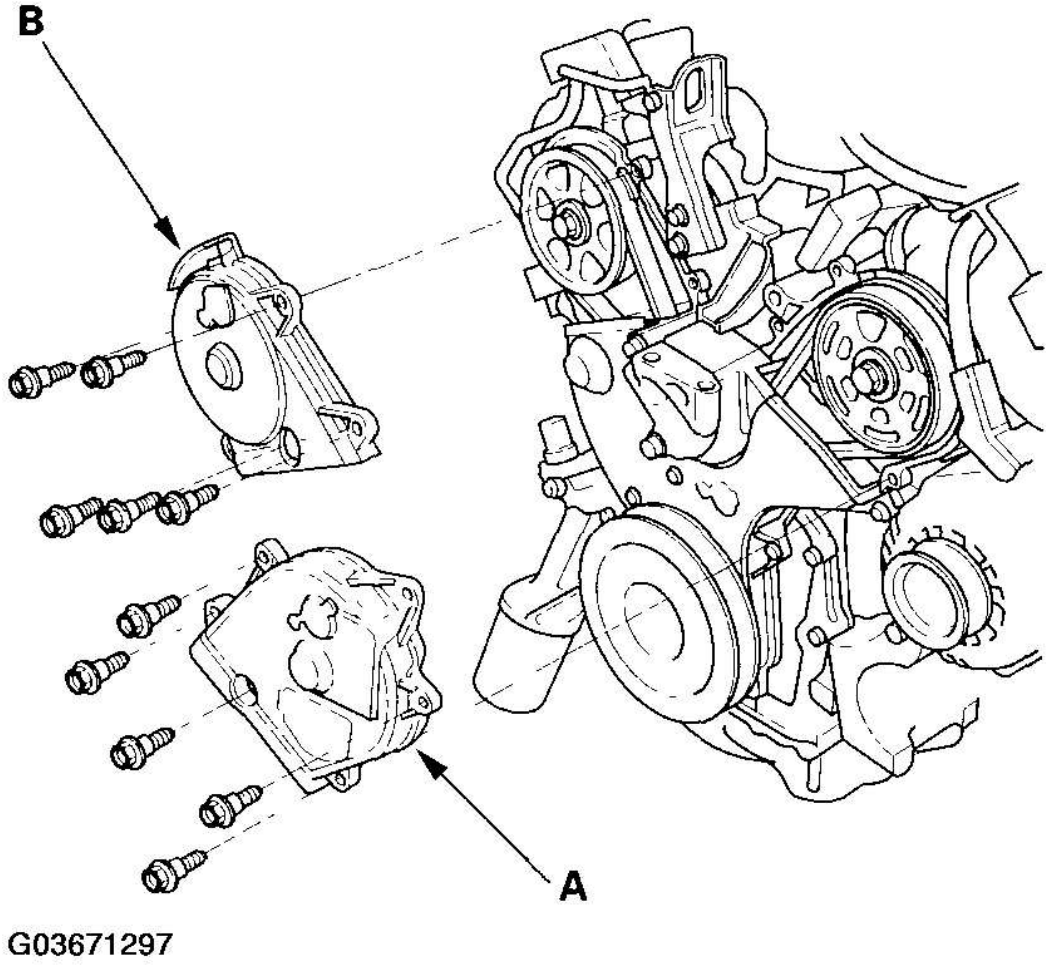
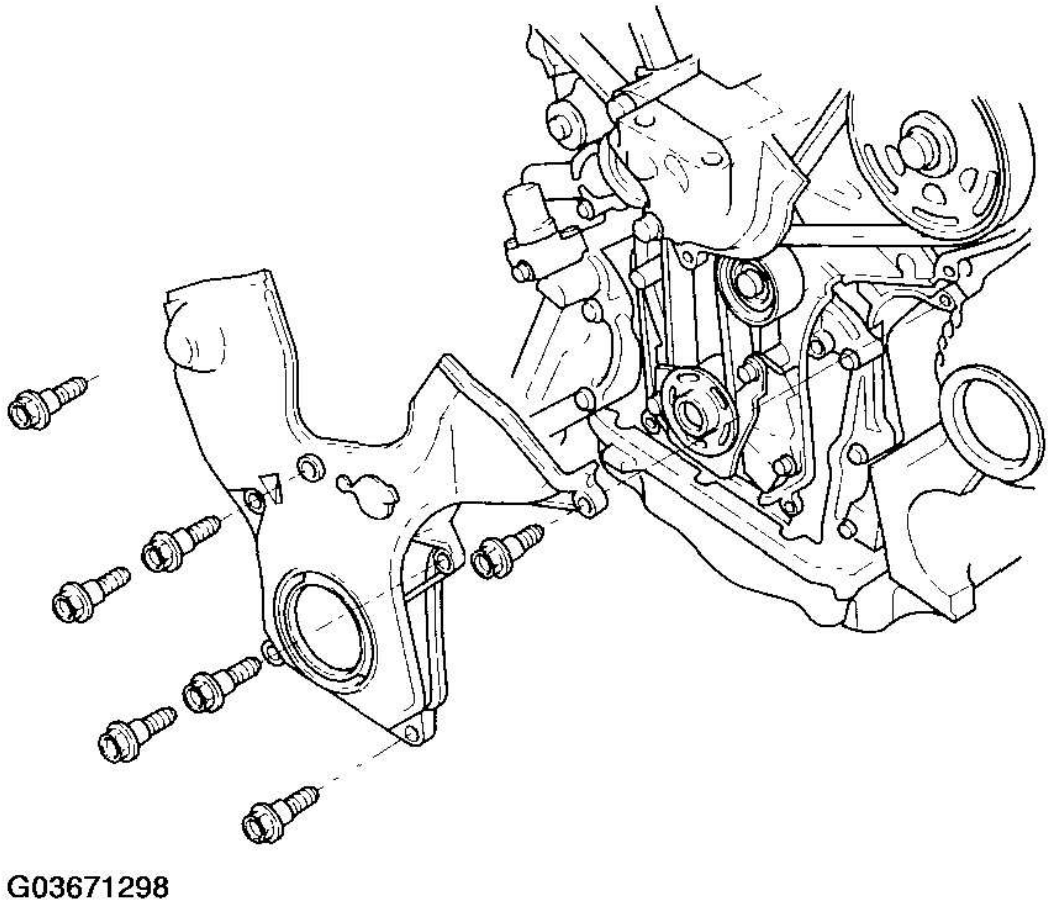


Fig. 31: Identifying Front Upper Cover And Rear Upper Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

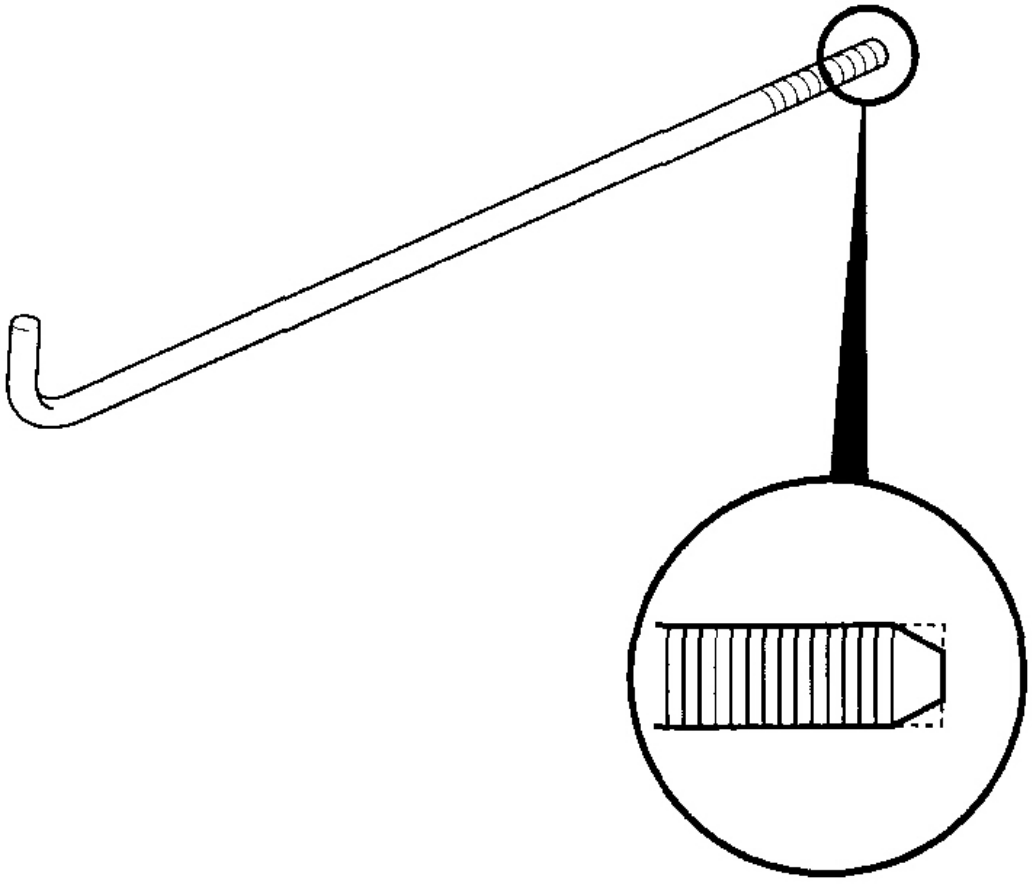
10. Remove the crankshaft pulley (see step 4).
11. Remove the lower cover.



G03671298

Fig. 32: Identifying Lower Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove one of the battery clamp bolts from the battery tray, and grind the end of it as shown in **Fig. 33**.

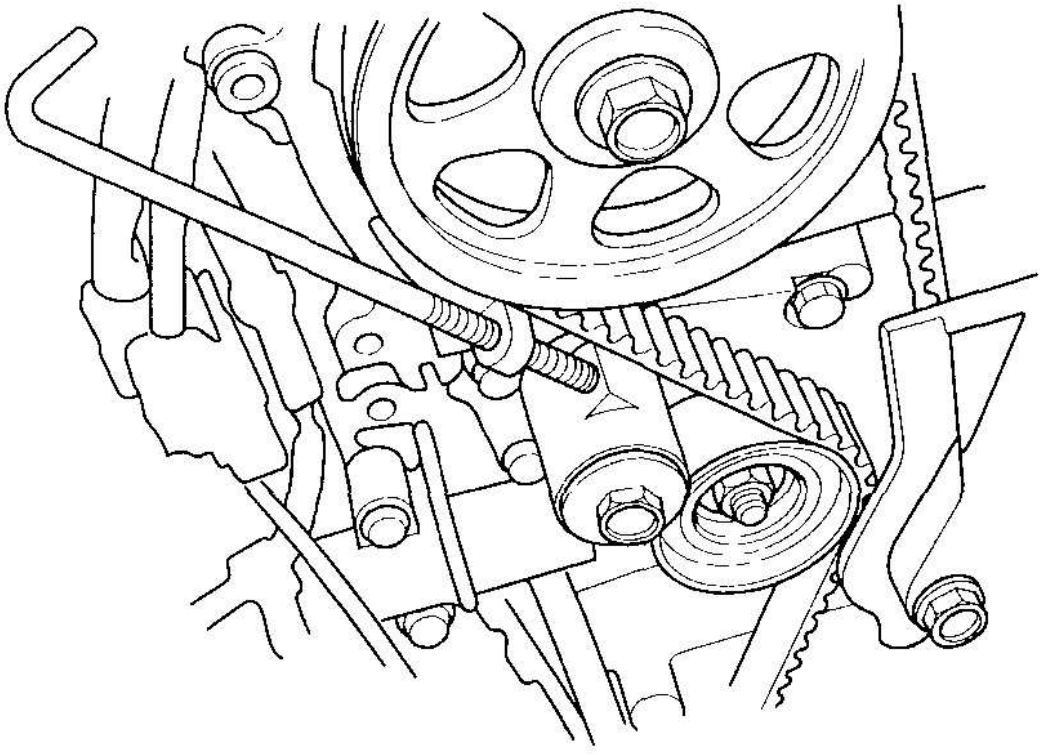


G03671299

Fig. 33: Removing Battery Clamp Bolts From Battery Tray
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Screw the battery clamp bolt in as shown in **Fig. 34** to hold the timing belt adjuster in its current position.

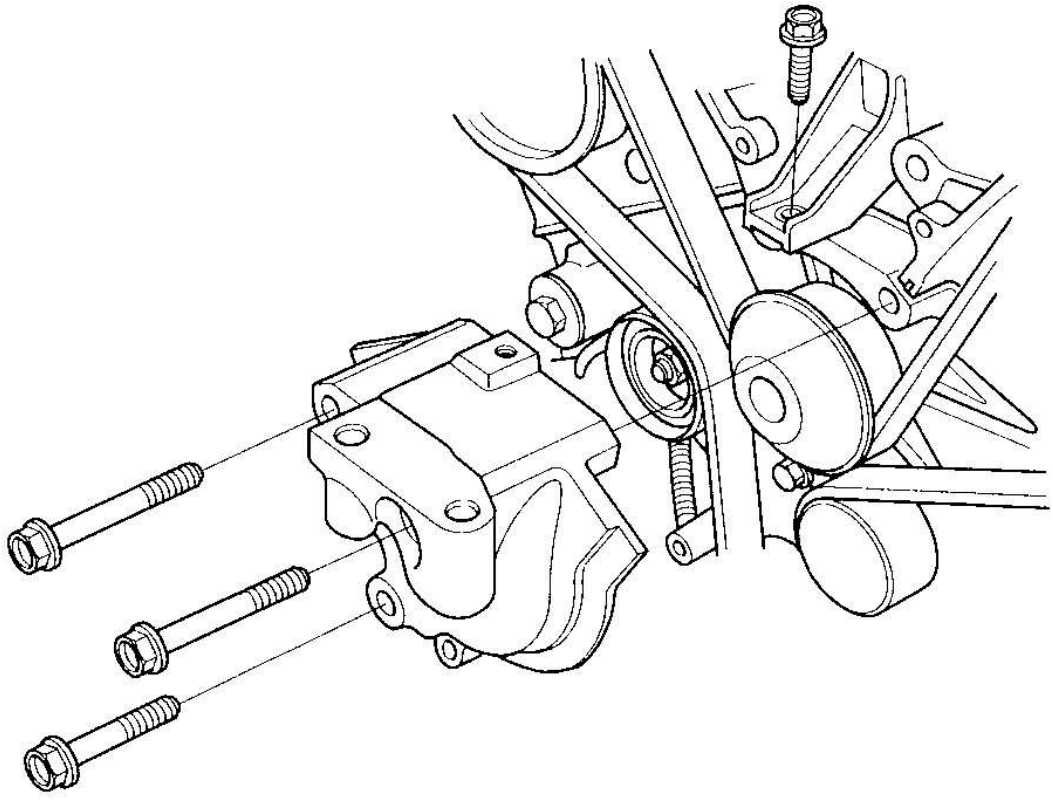
    Tighten it by hand; do not use a wrench.



G03671300

Fig. 34: Identifying Battery Clamp Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Remove the engine mount bracket.



G03671301

Fig. 35: Removing Engine Mount Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the idler pulley bolt (A) and idler pulley (B), then remove the timing belt.

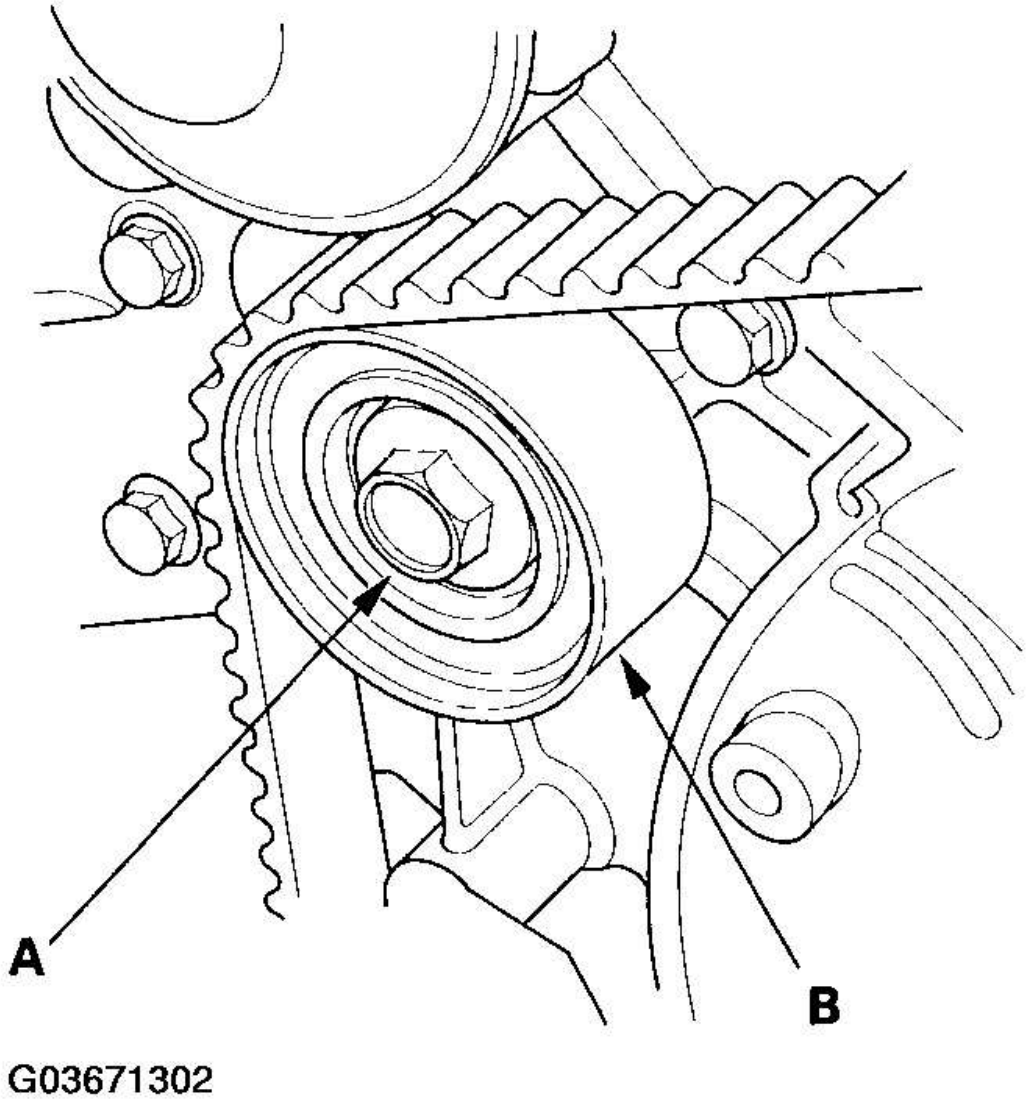


Fig. 36: Identifying Idler Pulley Bolt And Idler Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TIMING BELT INSTALLATION

NOTE: The following procedure is for installation of a used belt. If you are installing a new belt, refer to the TIMING BELT REPLACEMENT .

1. Clean the timing belt pulleys, timing belt guide plate, and the upper and lower covers.
2. Set the timing belt drive pulley to top dead center (TDC) by aligning the TDC mark (A) on the tooth of the timing belt drive pulley with the pointer (B) on the oil pump.

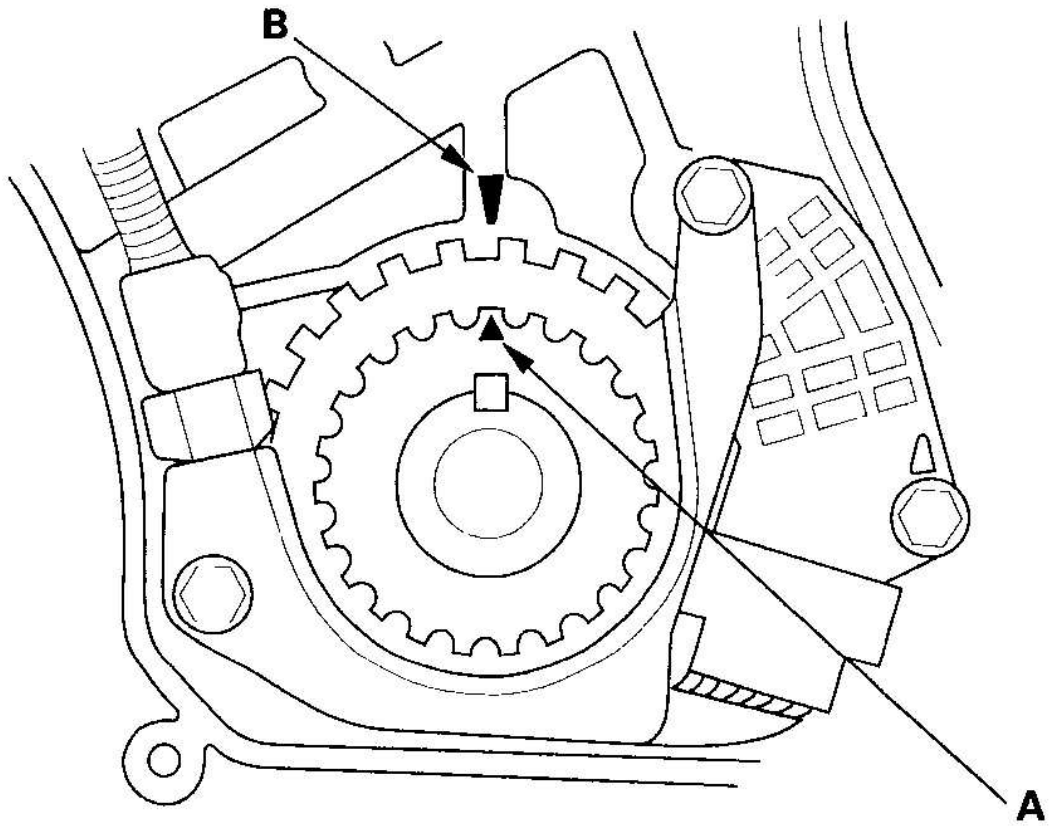
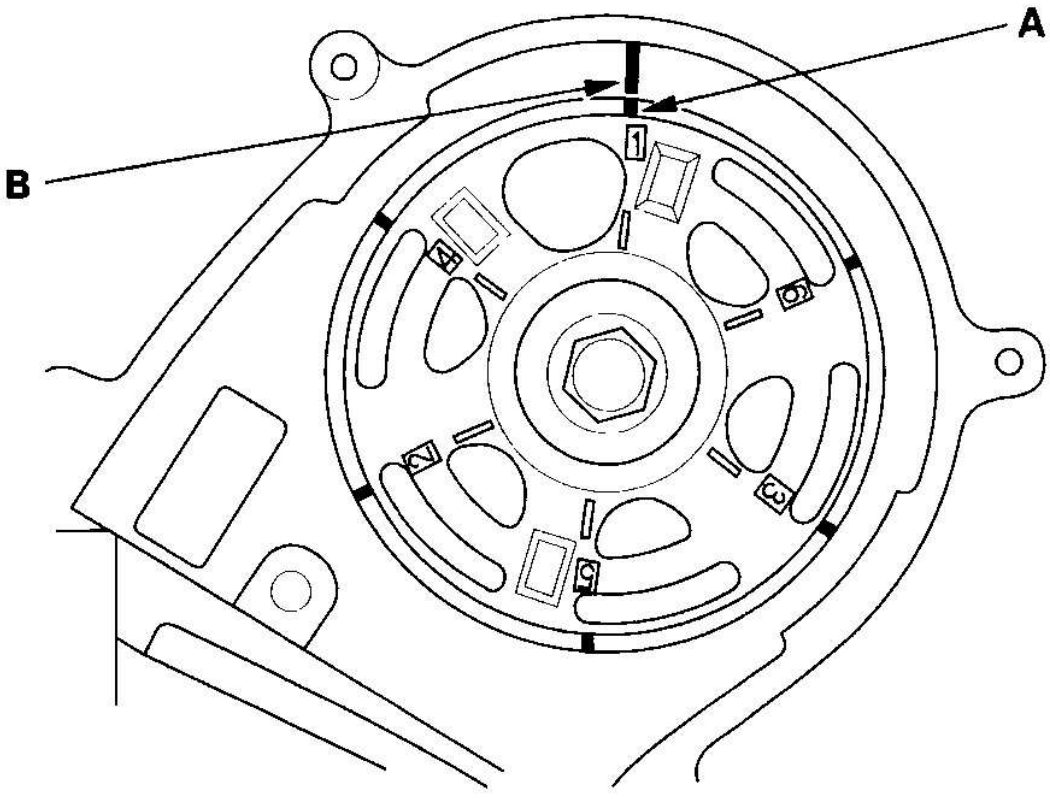


Fig. 37: Aligning Timing Marks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Set the camshaft pulleys to TDC by aligning the TDC marks (A) on the camshaft pulleys with the pointers (B) on the back covers.



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Fig. 38: Aligning TDC Marks On Camshaft Pulleys With Pointers On Back Covers (Front)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

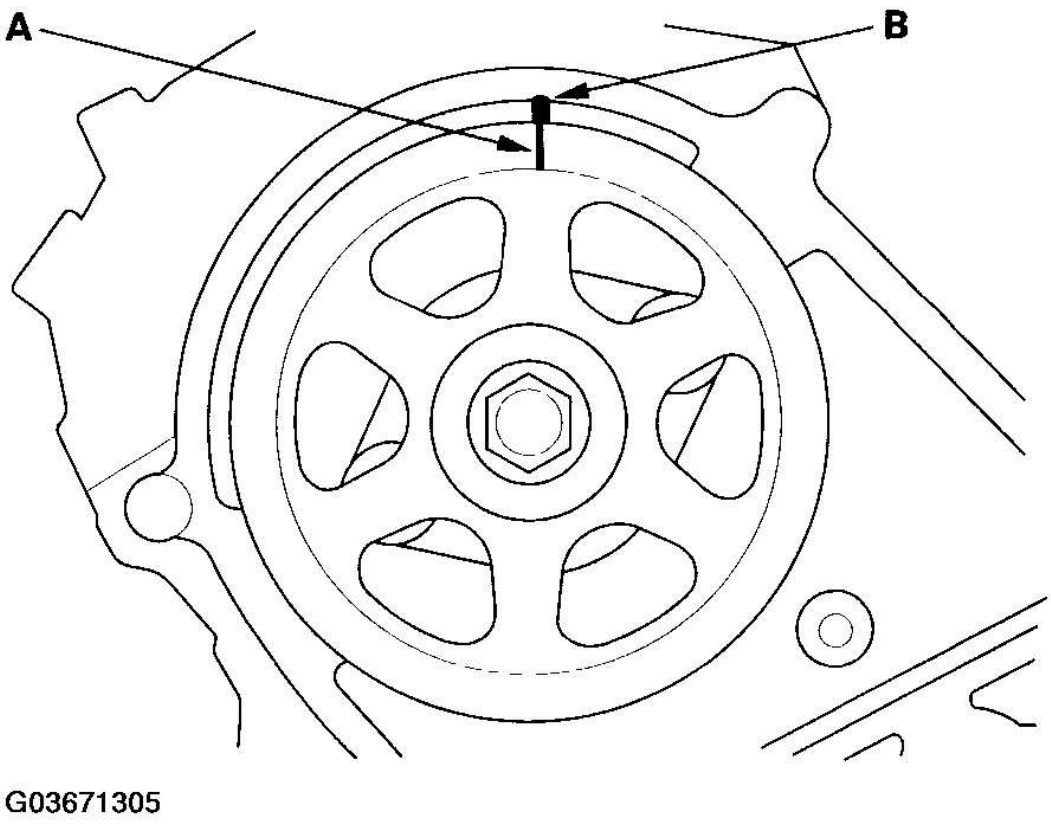


Fig. 39: Aligning TDC Marks On Camshaft Pulleys With Pointers On Back Covers (Rear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Apply liquid thread lock (P/N 08713-0001) to the idler pulley bolt, then loosely install the idler pulley.
5. If the auto-tensioner has extended and the timing belt cannot be installed, perform the **TIMING BELT REPLACEMENT** .
6. Install the timing belt in a counterclockwise sequence starting with the drive pulley. Take care not to damage the timing belt when installing it.

–1 Drive pulley (A)
–2 Idler pulley (B)
–3 Front camshaft pulley (C)
–4 Water pump pulley (D)
–5 Rear camshaft pulley (E)
–6 Adjusting pulley (F)

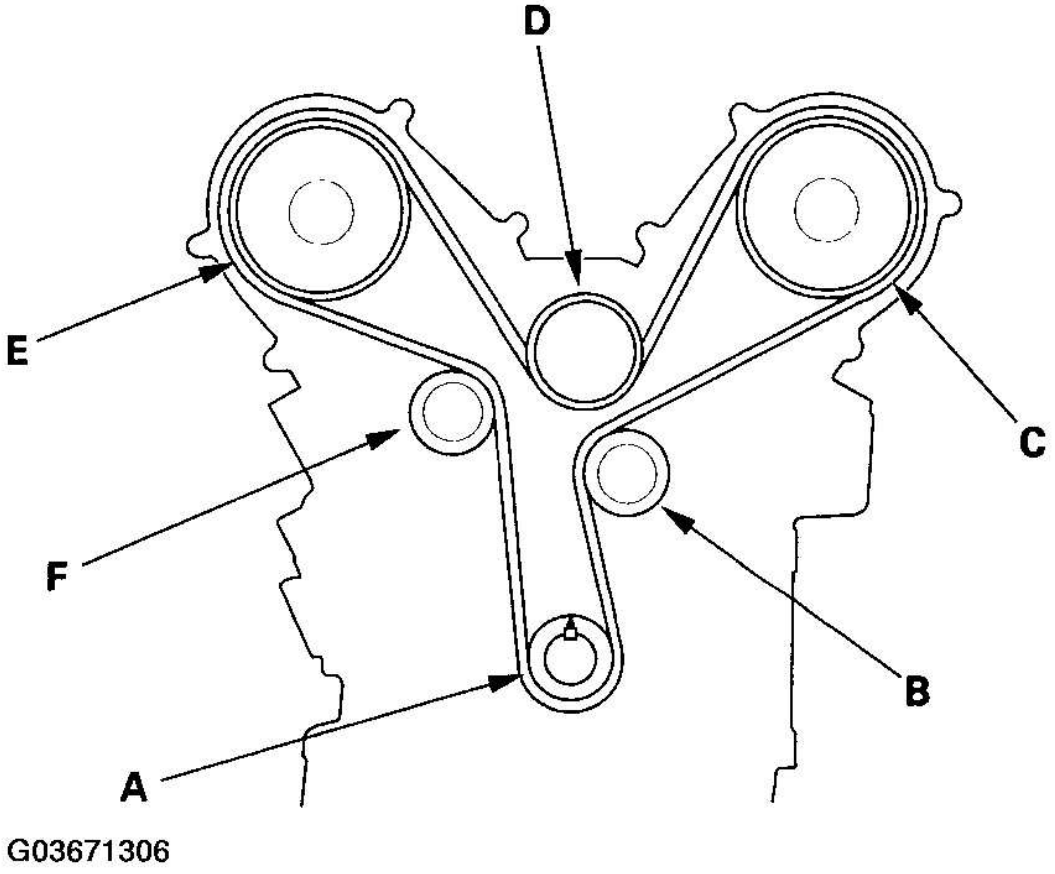


Fig. 40: Installing Timing Belt Counterclockwise In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Tighten the idler pulley bolt.

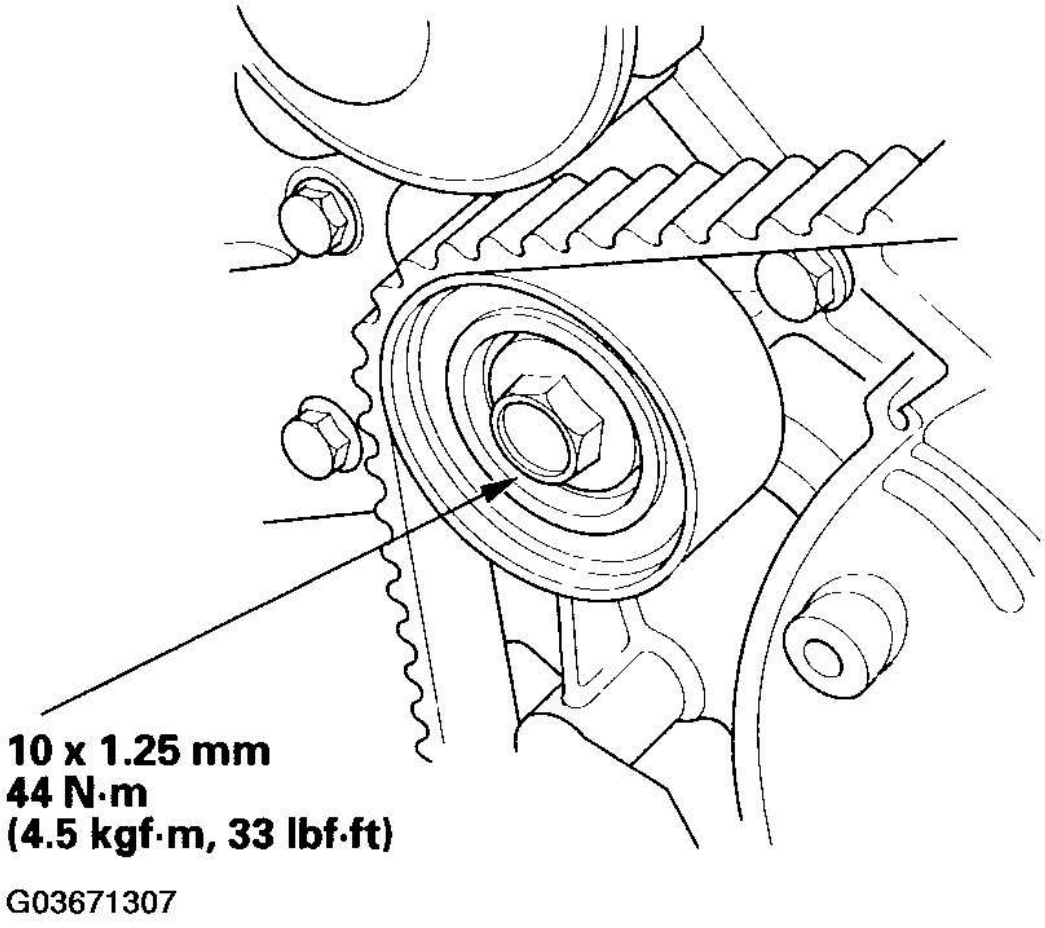
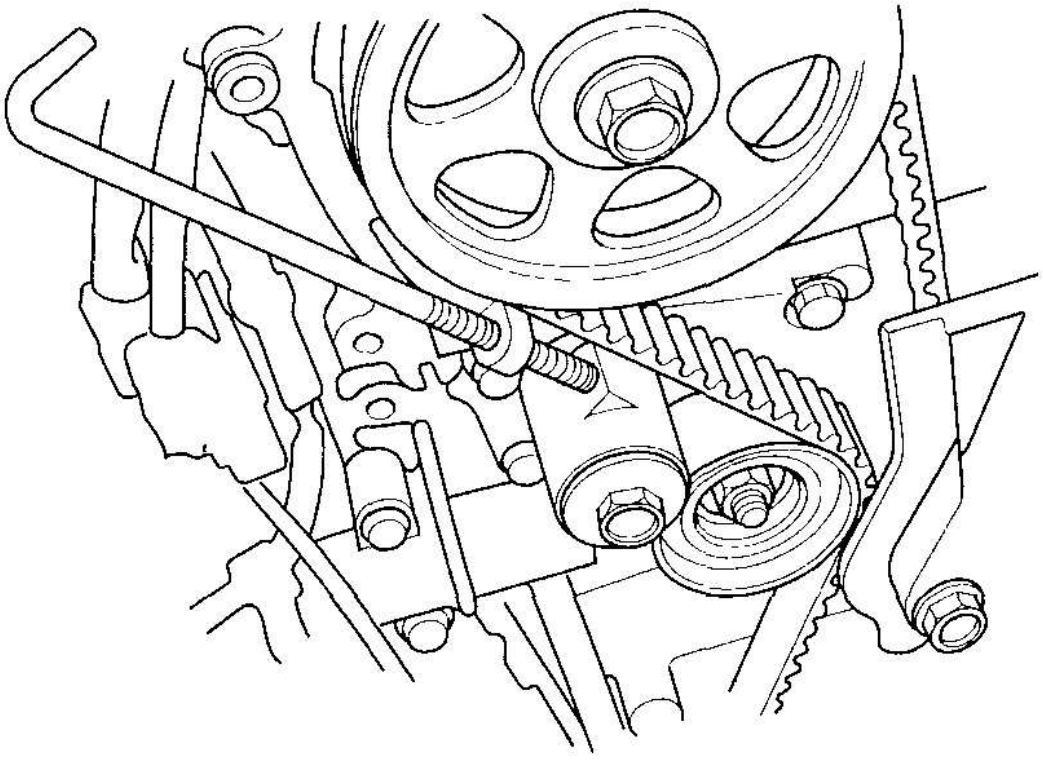


Fig. 41: Tightening Idler Pulley Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the battery clamp bolt from the back cover.



G03671308

Fig. 42: Identifying Battery Clamp Bolt From Back Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the engine mount bracket.

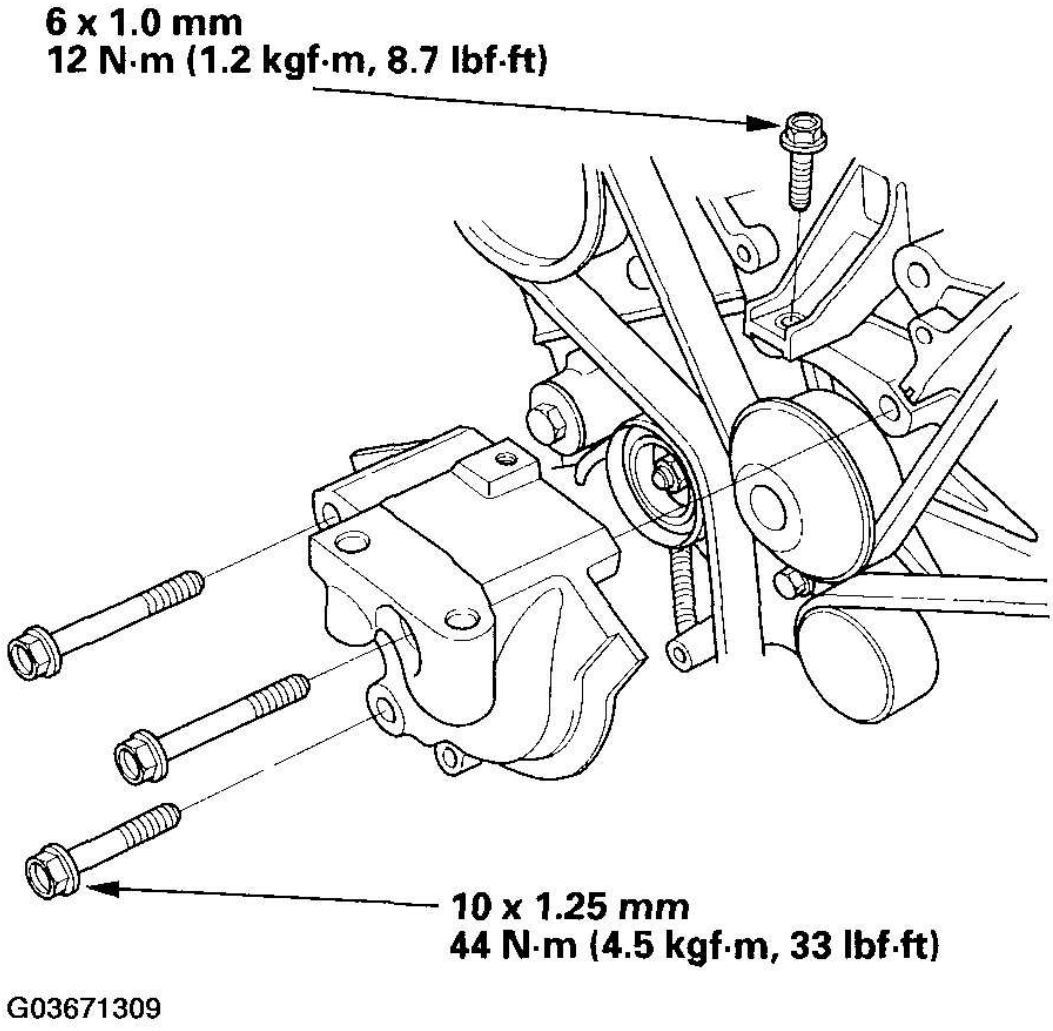
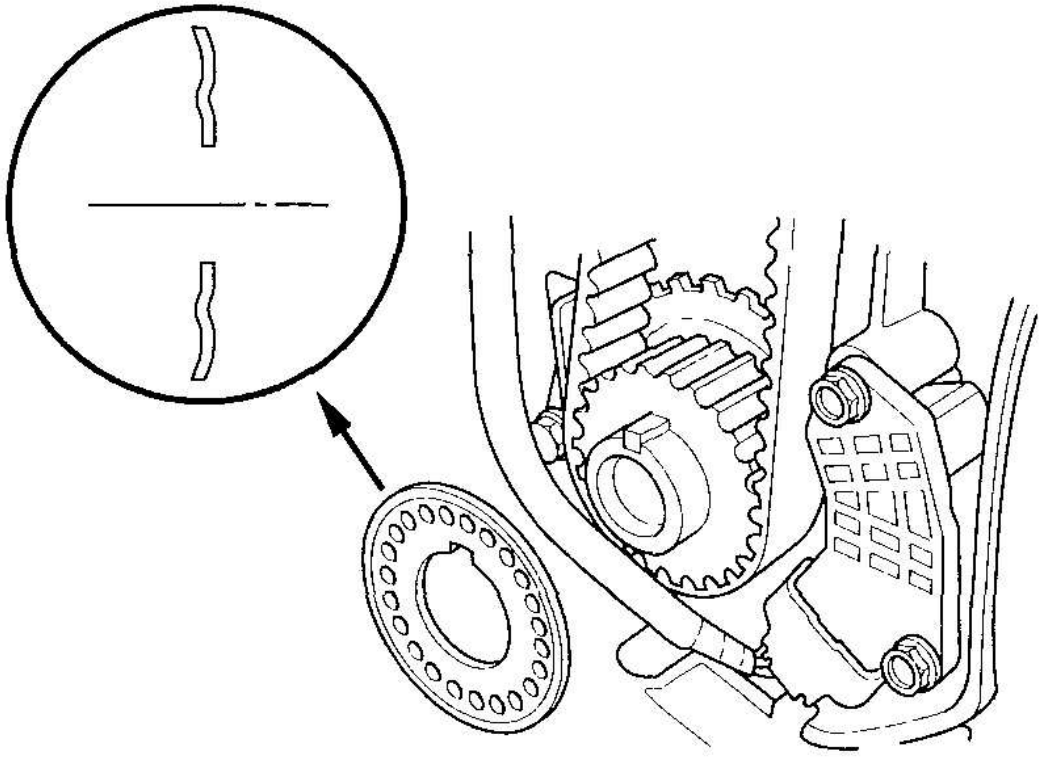


Fig. 43: Identifying Engine Mount Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Install the timing belt guide plate as shown in **Fig. 44**.



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Fig. 44: Identifying Timing Belt Guide Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the lower cover.

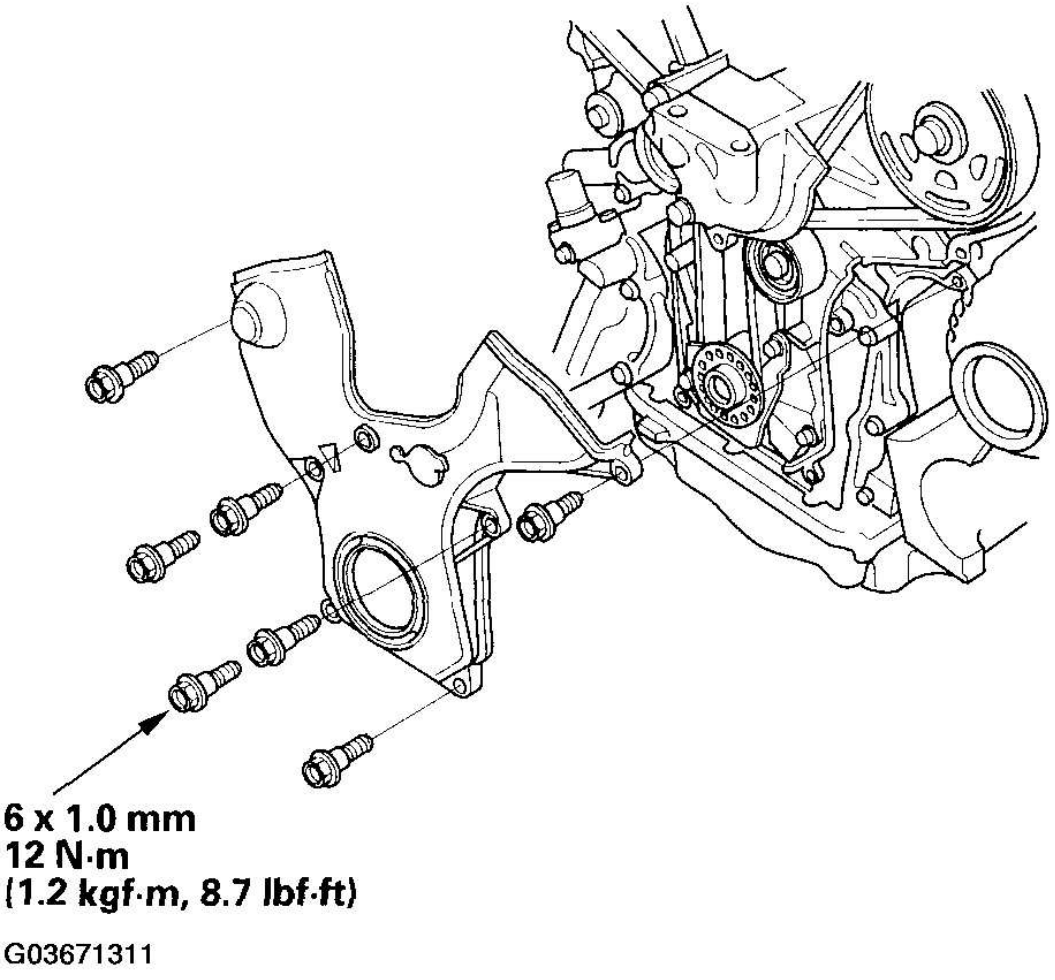


Fig. 45: Identifying Lower Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Install the crankshaft pulley (see **INSTALLATION**).
13. Install the front upper cover (A) and rear upper cover (B).

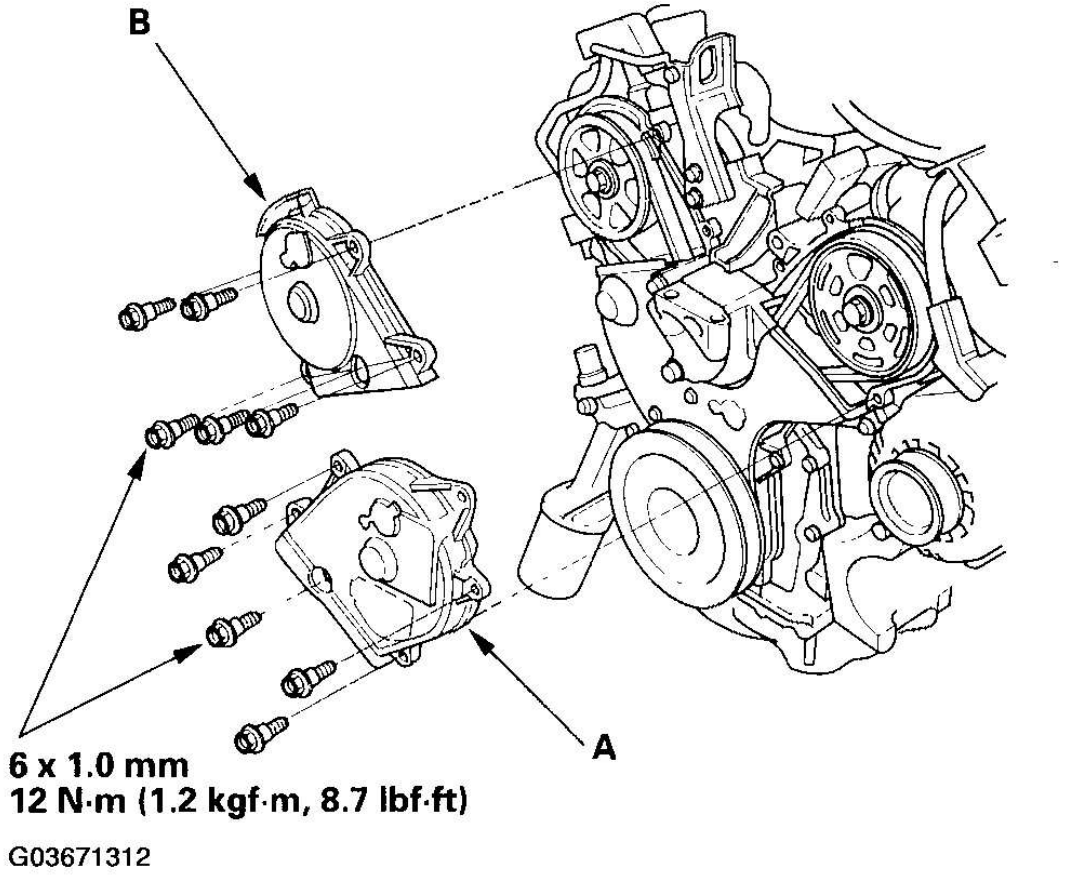


Fig. 46: Identifying Front Upper Cover And Rear Upper Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Rotate the crankshaft pulley about five or six turns clockwise so the timing belt positions itself on the pulleys.
15. Turn the crankshaft pulley so its white mark (A) lines up with the pointer (B).

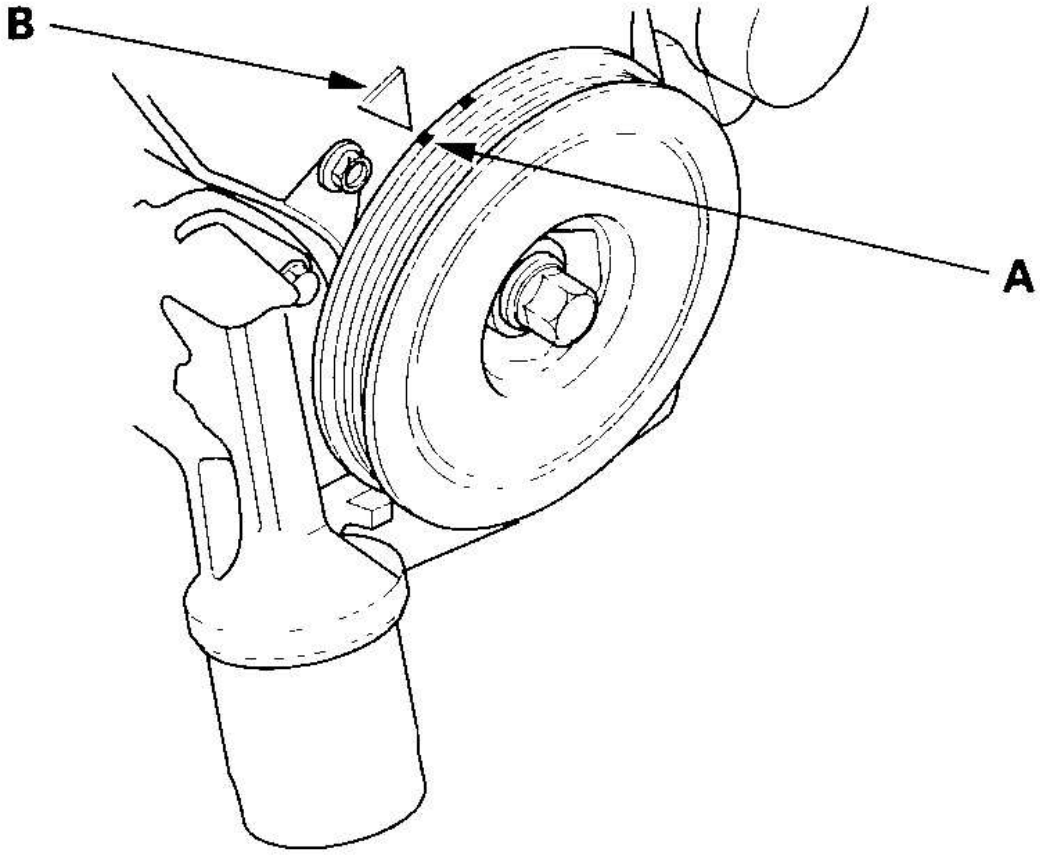


Fig. 47: Aligning Crankshaft Pulley Marks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Check the camshaft pulley marks.
    - If the camshaft pulley marks are at TDC, go to step 17.
    - If the camshaft pulley marks are not at TDC, remove the timing belt and repeat steps 2 through 16.

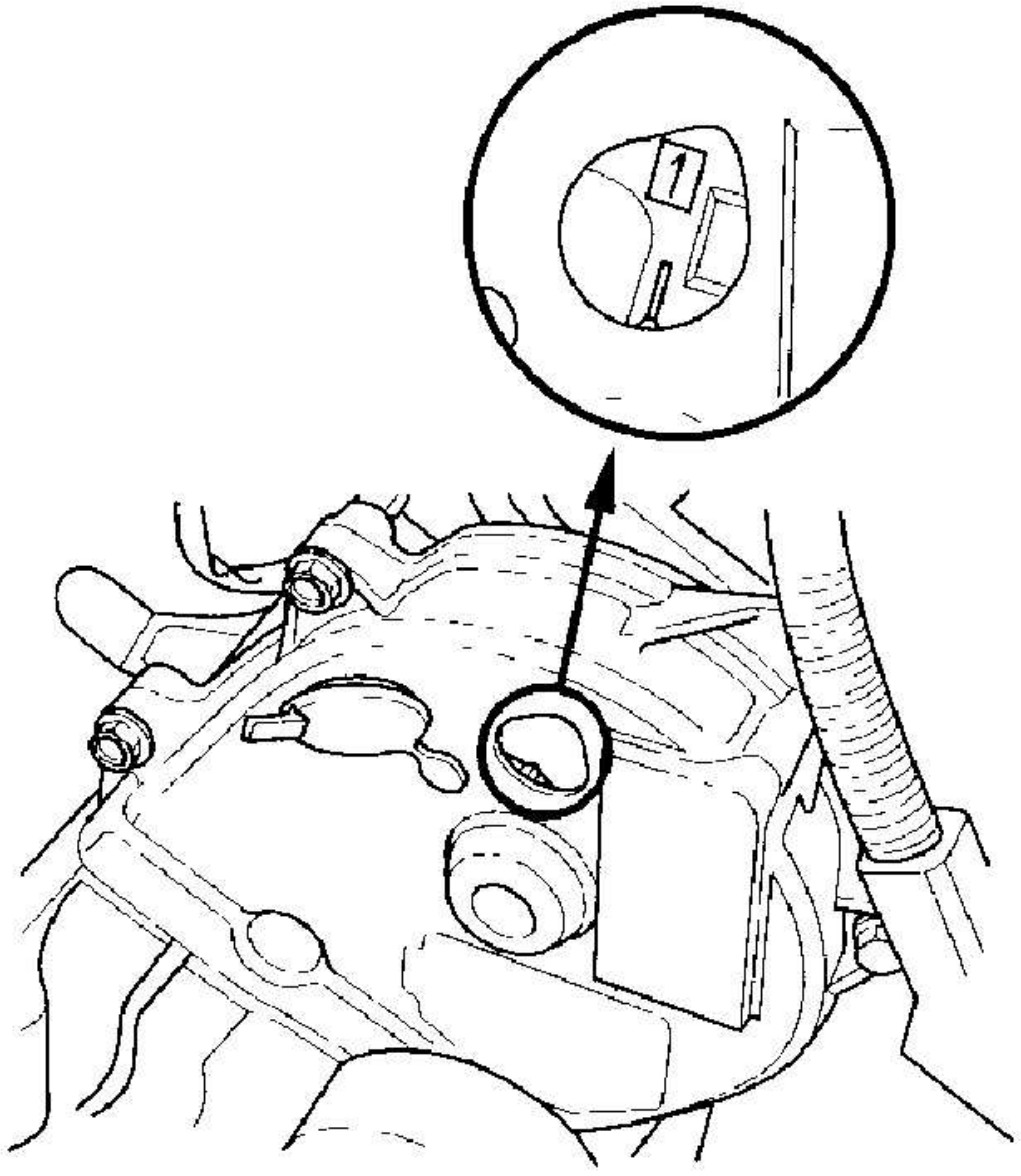


Fig. 48: Identifying Front Camshaft Pulley Marks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

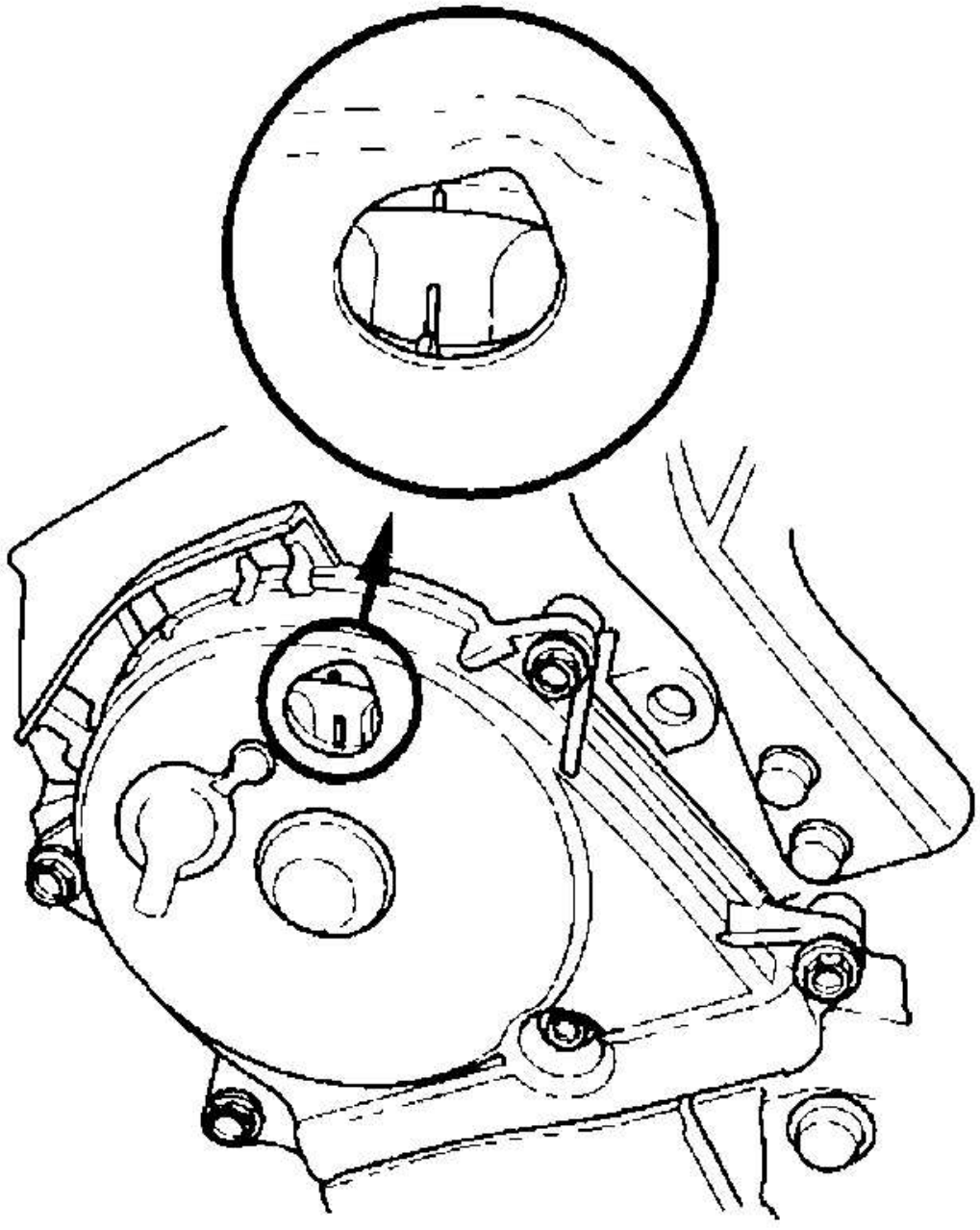


Fig. 49: Identifying Rear Camshaft Pulley Marks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Install the side engine mount bracket (A), then tighten the bolts in the numbered sequence shown in **Fig. 50**.

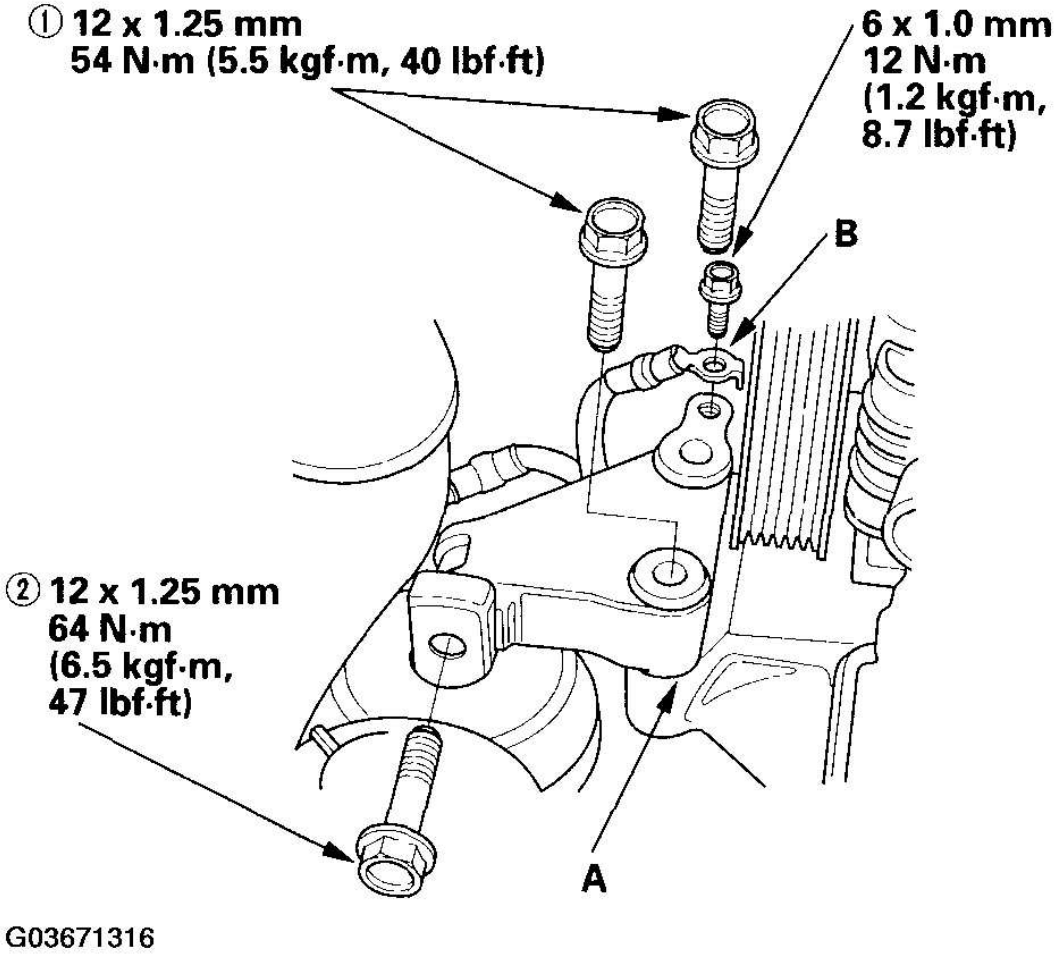


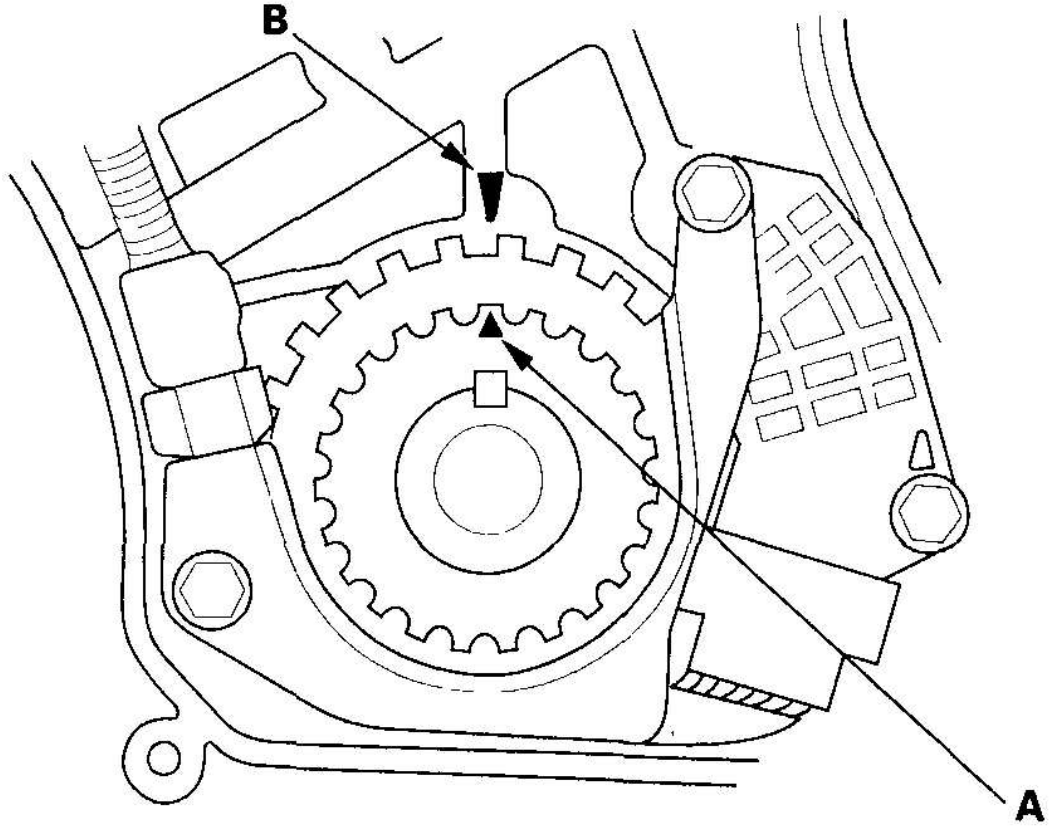
Fig. 50: Identifying Side Engine Mount Bracket In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Install the ground cable (B).
19. Install the drive belt auto-tensioner (see **DRIVE BELT AUTO-TENSIONER REPLACEMENT**).
20. Install the drive belt (see **DRIVE BELT REPLACEMENT**).
21. Install the splash shield.

22. Install the right front tire/wheel.
23. Do the crankshaft position (CKP) pattern clear/CKP pattern learn procedure (see **CKP PATTERN CLEAR/CKP PATTERN LEARN**).

TIMING BELT REPLACEMENT

1. Remove the timing belt (see **TIMING BELT REMOVAL**).
2. Clean the timing belt pulleys, timing belt guide plate, and the upper and lower covers.
3. Set the timing belt drive pulley to TDC by aligning the TDC mark (A) on the tooth of the timing belt drive pulley with the pointer (B) on the oil pump.



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Fig. 51: Aligning Timing Marks

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Set the camshaft pulleys to TDC by aligning the TDC marks (A) on the camshaft pulleys with the pointers (B) on the back covers.

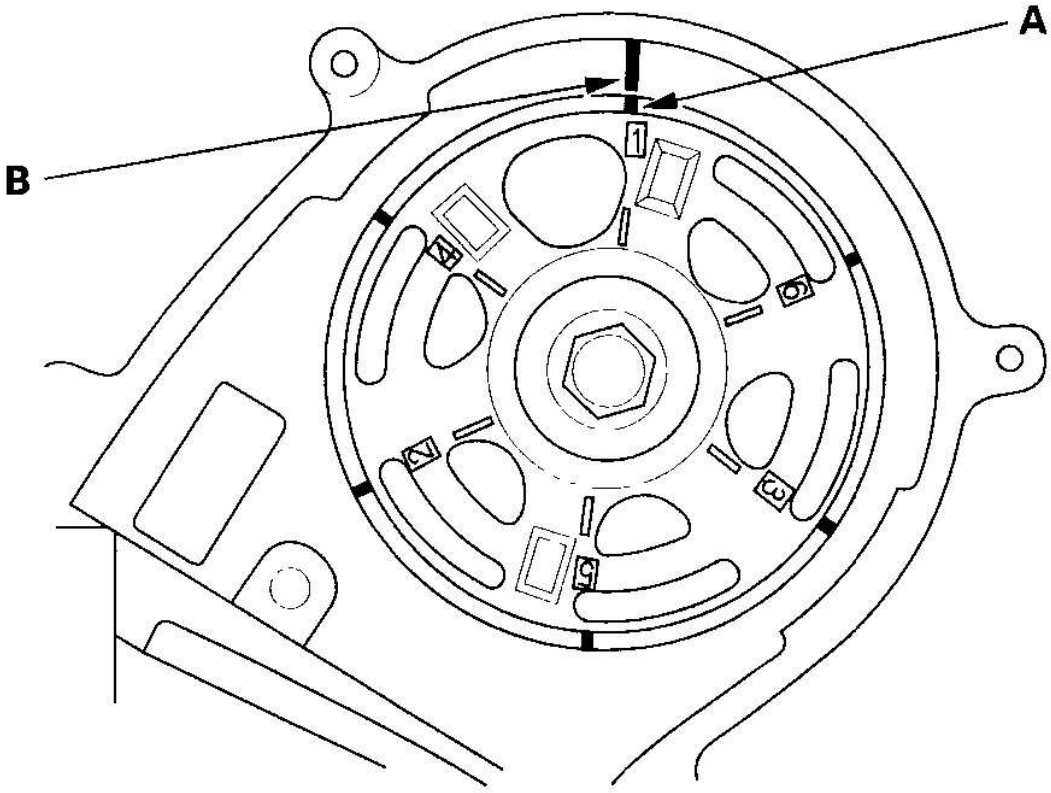


Fig. 52: Aligning TDC Marks On Camshaft Pulleys With Pointers On Back Covers (Front)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

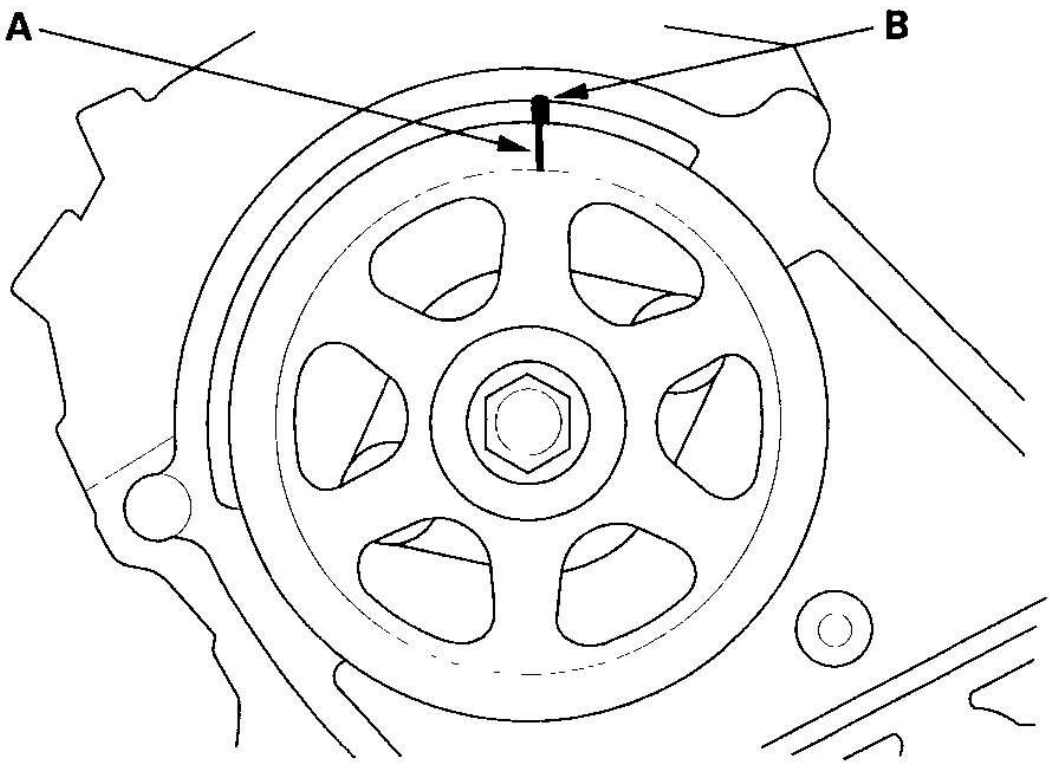


Fig. 53: Aligning TDC Marks On Camshaft Pulleys With Pointers On Back Covers (Rear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the battery clamp bolt from the back cover.
6. Remove the auto-tensioner.

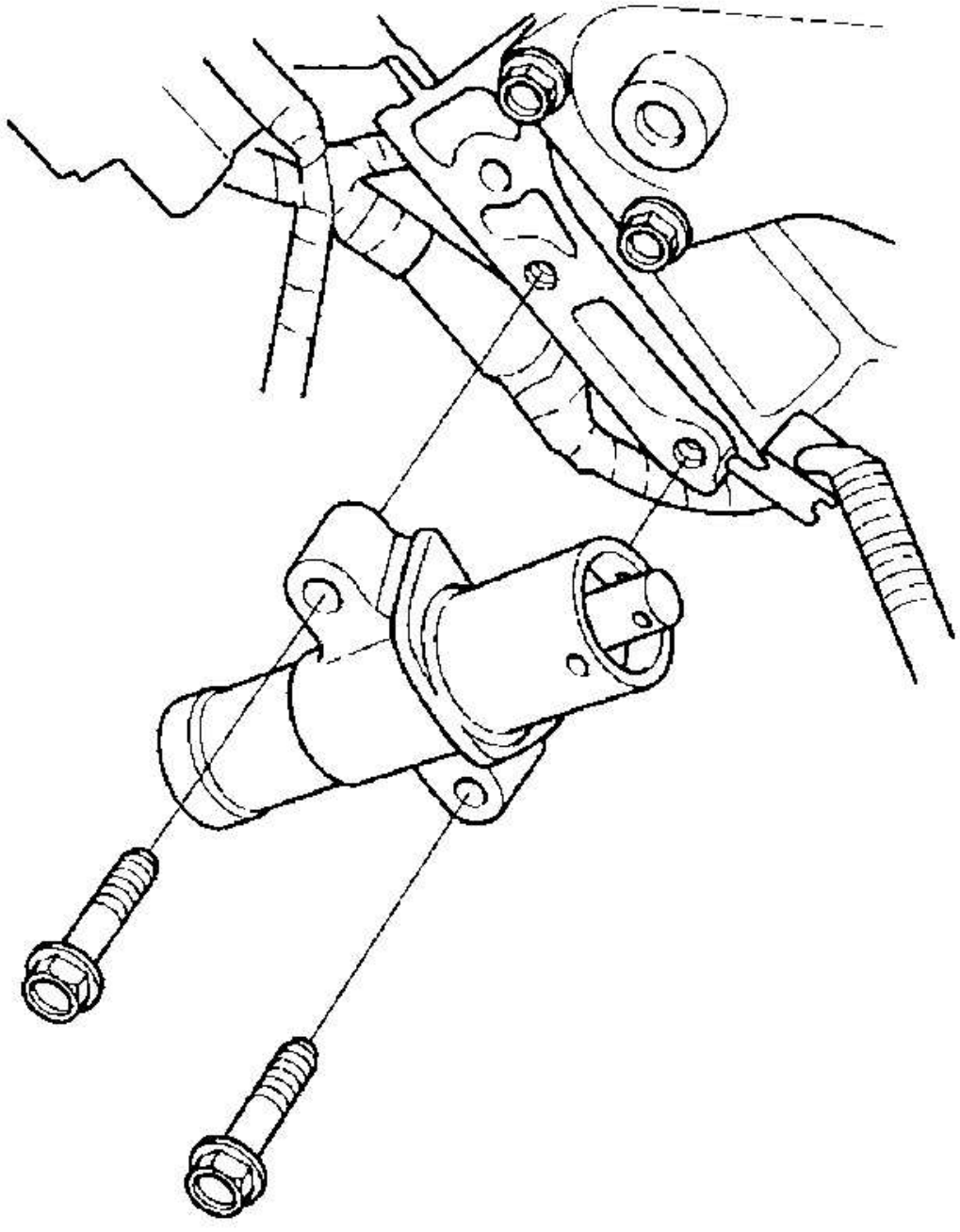


Fig. 54: Identifying Auto-Tensioner

Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Align the holes on the rod and housing of the auto-tensioner.

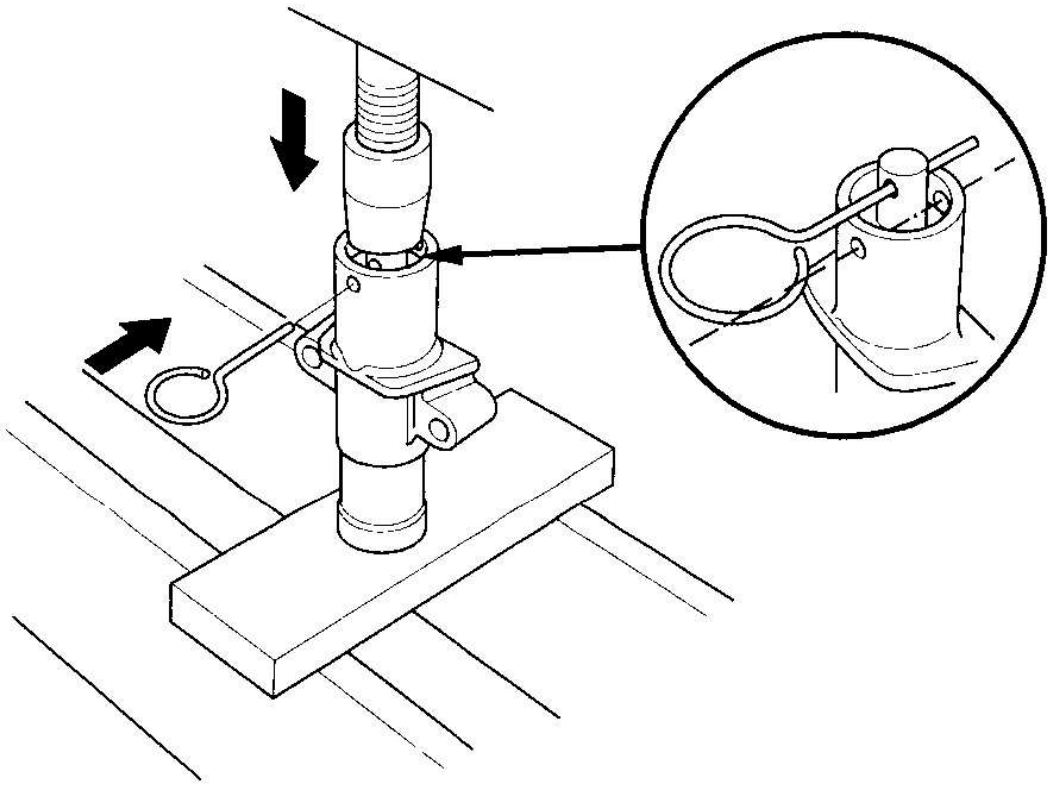


Fig. 55: Aligning Holes On Rod And Housing Of Auto-Tensioner
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Use a hydraulic press to slowly compress the auto-tensioner. Insert a 2.0 mm (0.08 in.) pin through the housing and the rod.

NOTE: The compression pressure should not exceed 9,800 N (1,000 kgf, 2,200 lbf).

9. Install the auto-tensioner.

NOTE: Make sure the pin stays in place.

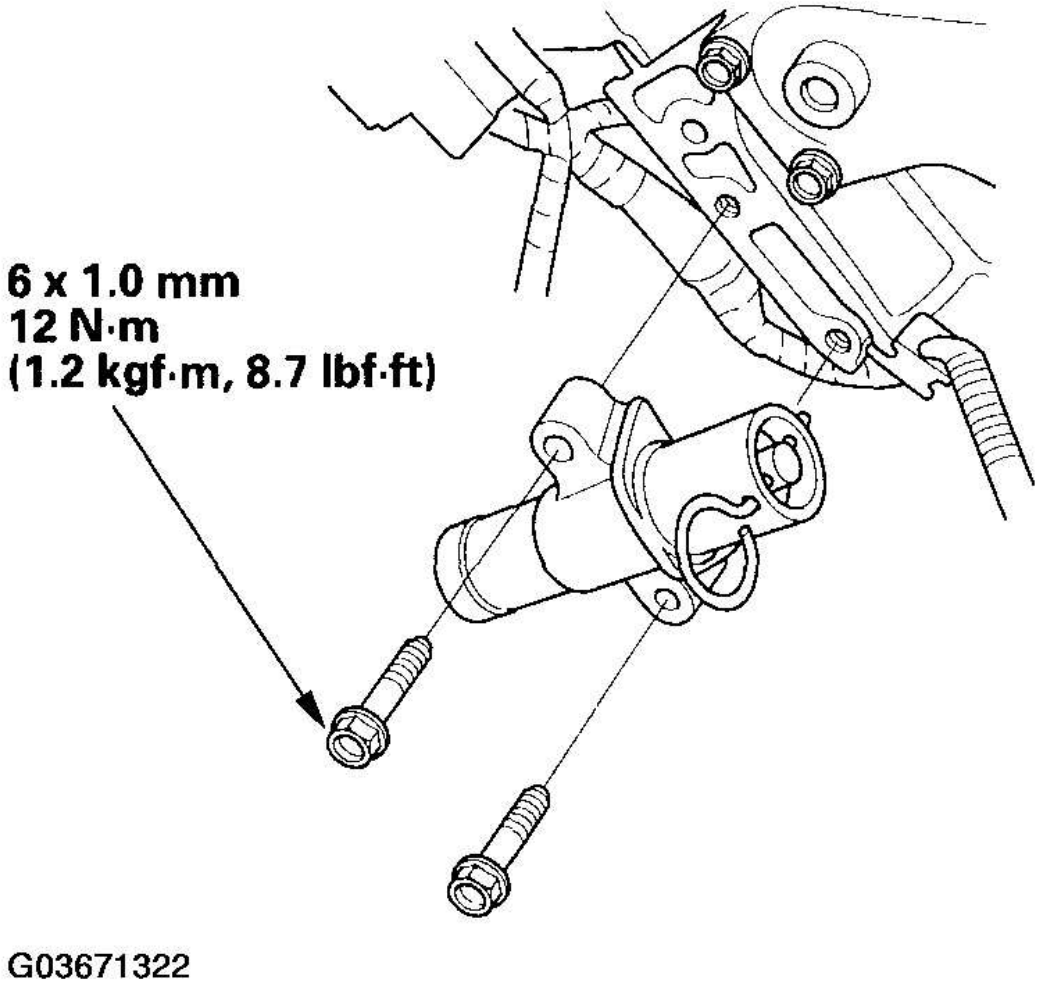
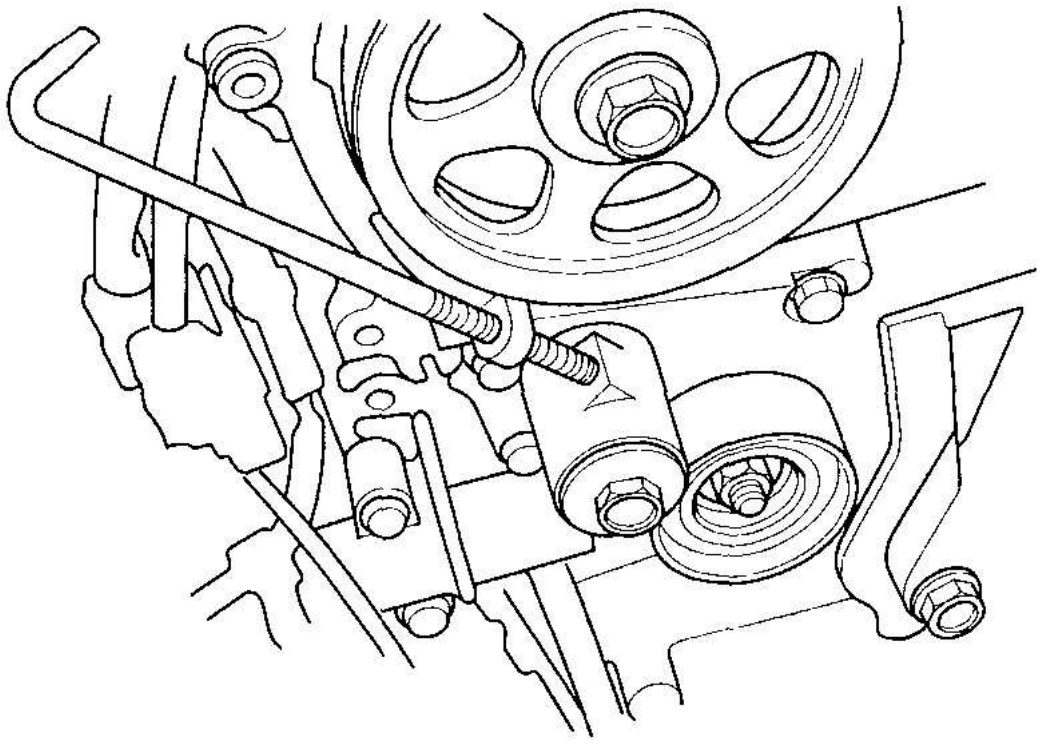


Fig. 56: Identifying Auto-Tensioner
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Screw the battery clamp bolt in as shown in **Fig. 57** to hold the timing belt adjuster. Tighten it by hand; do not use a wrench.



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Fig. 57: Screwing Battery Clamp Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Apply liquid thread lock (P/N 08713-0001) to the idler pulley bolt, then loosely install the idler pulley.
12. Install the timing belt in a counterclockwise sequence starting with the drive pulley.

–1 Drive pulley (A)
–2 Idler pulley (B)
–3 Front camshaft pulley (C)
–4 Water pump pulley (D)
–5 Rear camshaft pulley (E)
–6 Adjusting pulley (F)

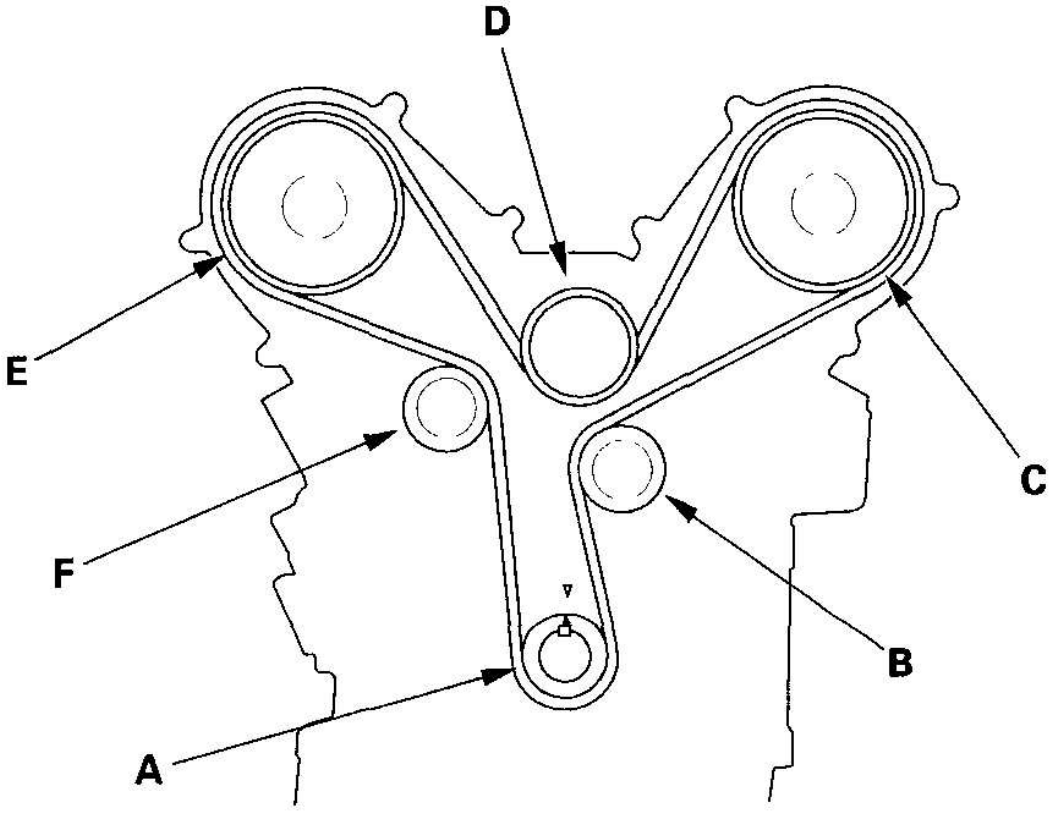


Fig. 58: Installing Timing Belt Counterclockwise In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Tighten the idler pulley bolt.

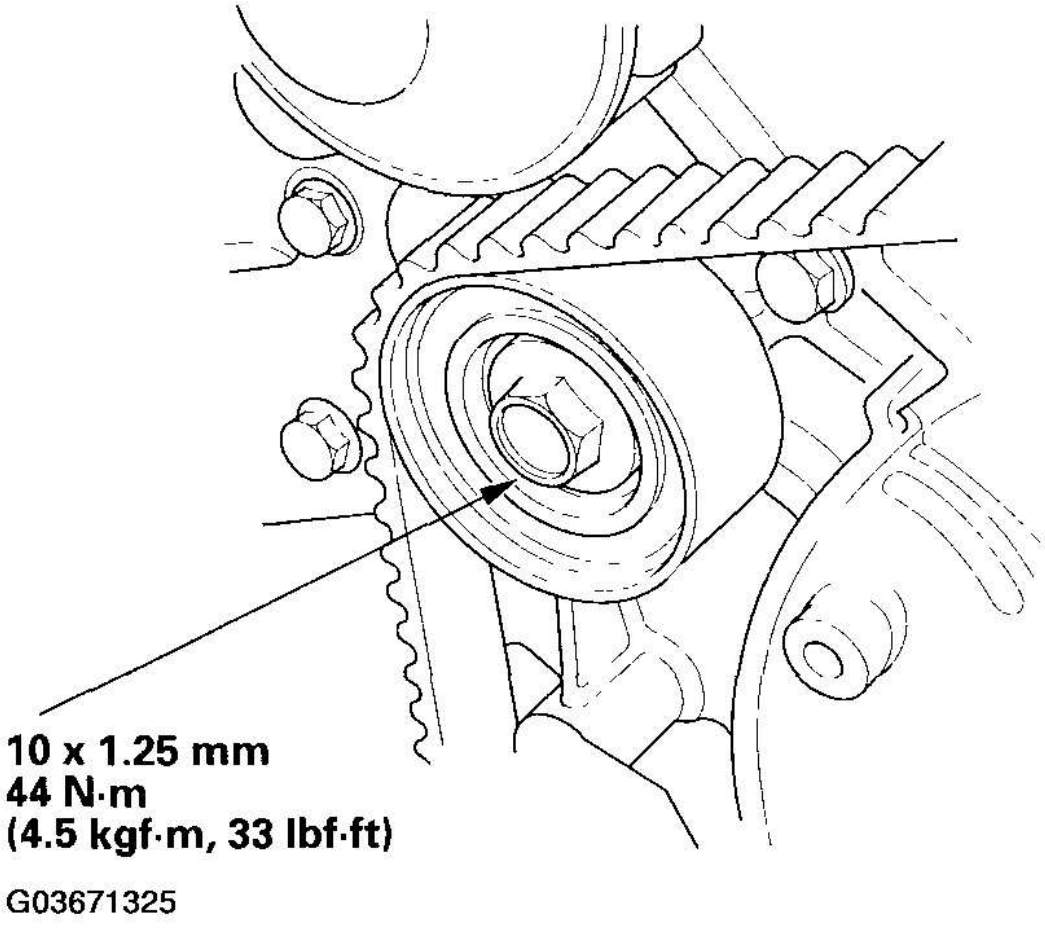


Fig. 59: Tightening Idler Pulley Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Remove the pin from the auto-tensioner.

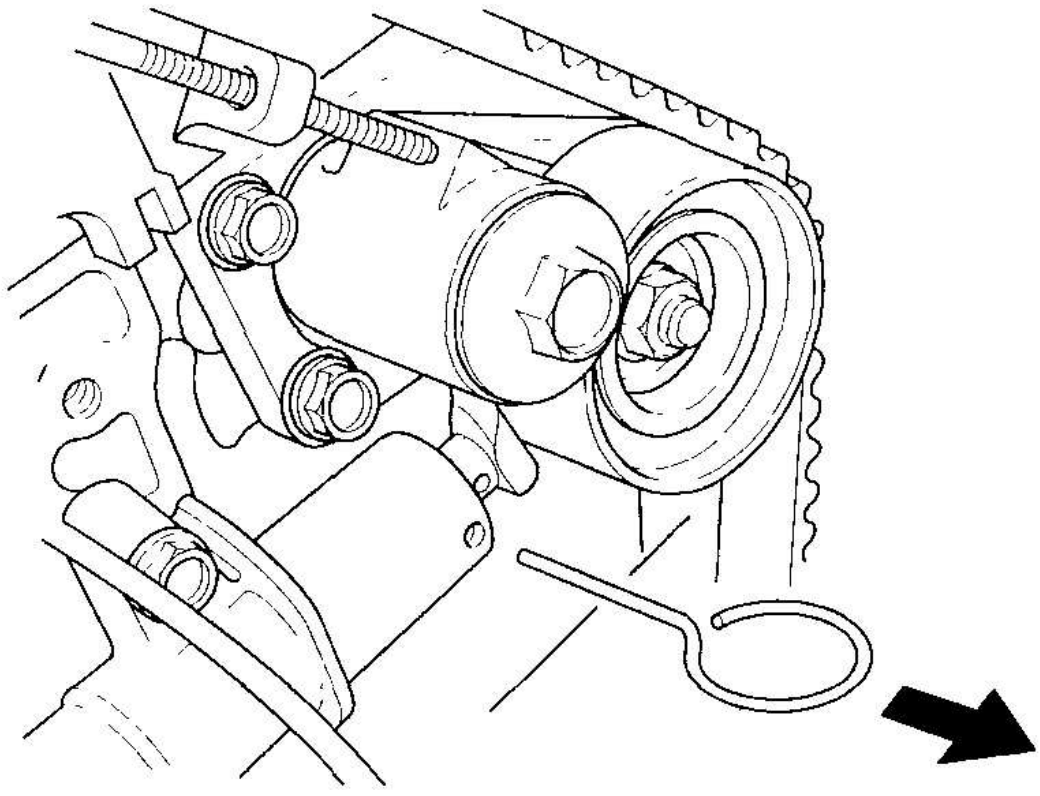


Fig. 60: Removing Pin From Auto-Tensioner
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the battery clamp bolt from the back cover.
16. Install the engine mount bracket.

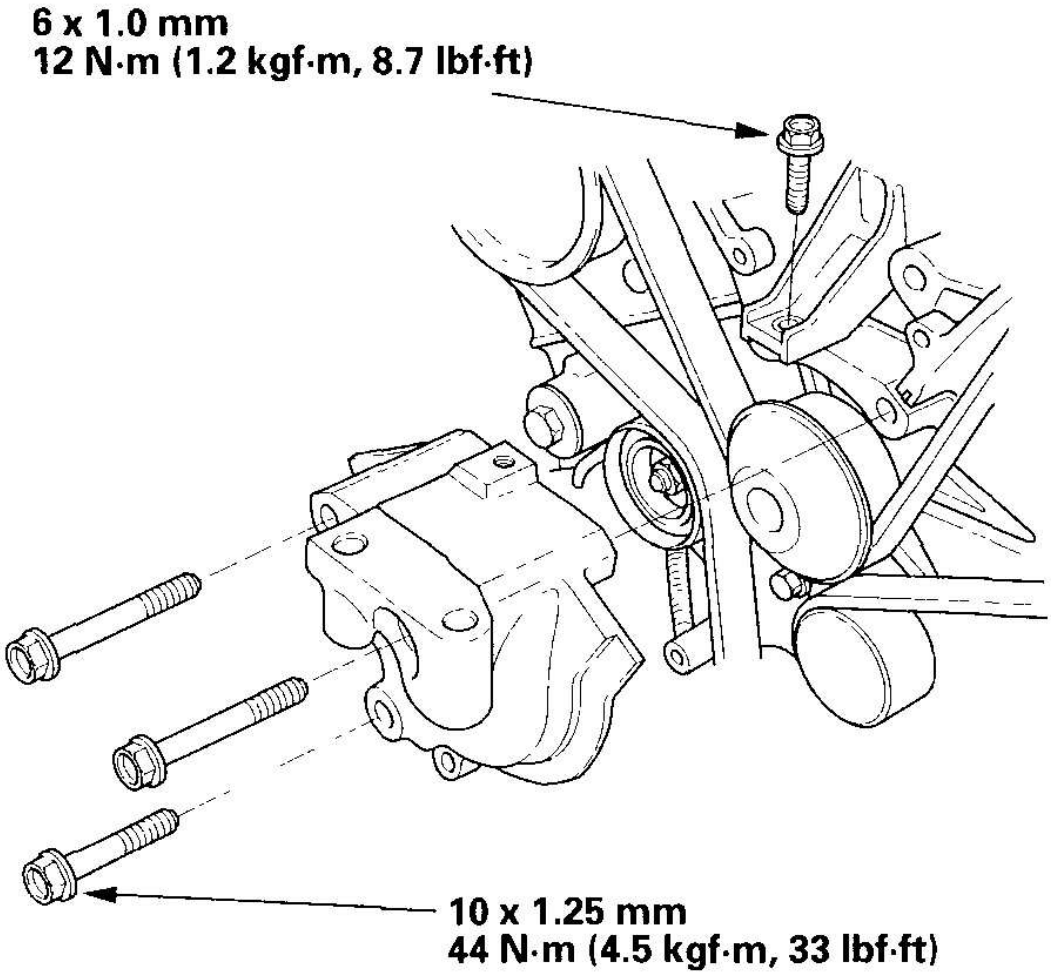
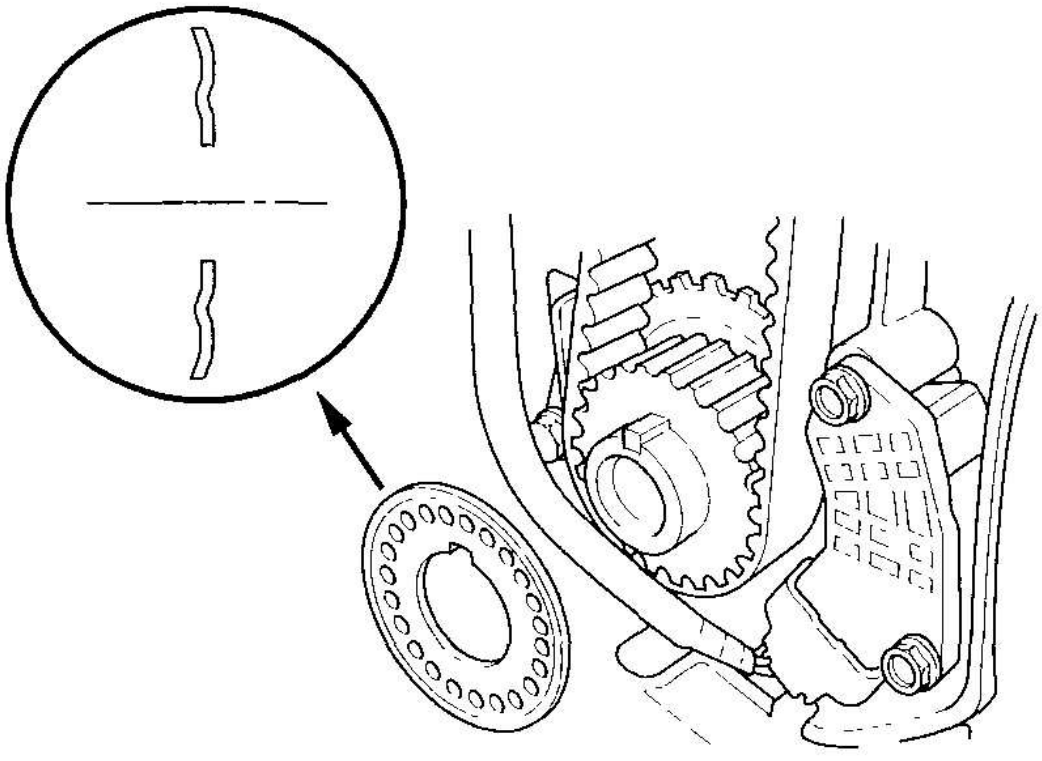


Fig. 61: Identifying Battery Clamp Bolt From Back Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Install the timing belt guide plate as shown in **Fig. 62**.



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Fig. 62: Identifying Timing Belt Guide Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Install the lower cover.

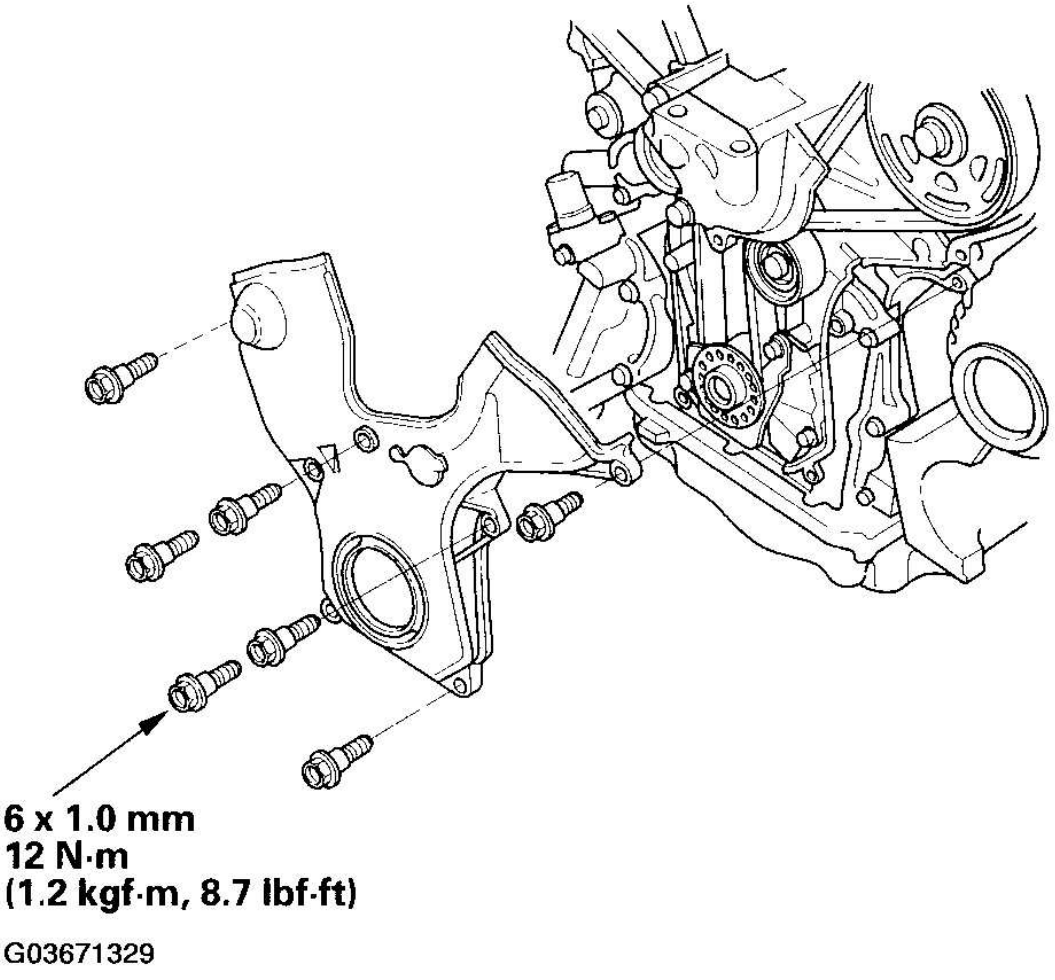


Fig. 63: Identifying Lower Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Install the crankshaft pulley (see **INSTALLATION**).
20. Install the front upper cover (A) and rear upper cover (B).

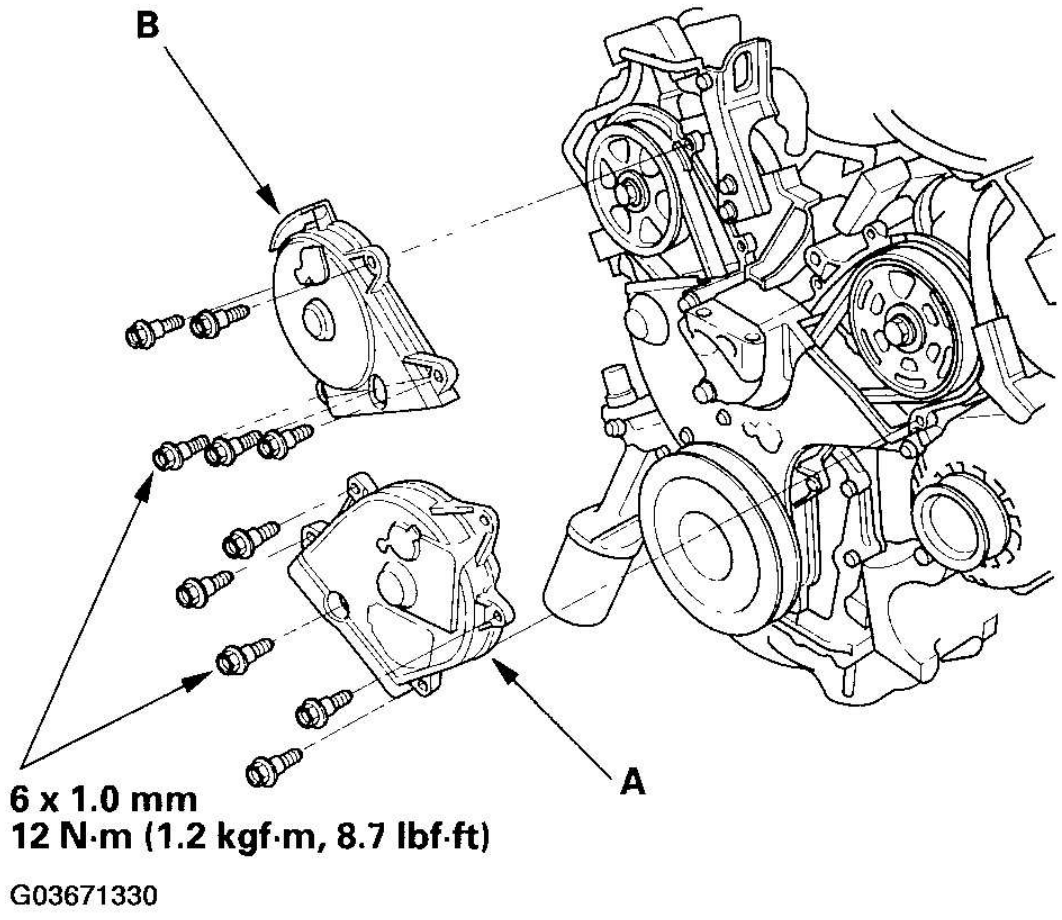


Fig. 64: Identifying Front Upper Cover (A) And Rear Upper Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Rotate the crankshaft pulley about five or six turns clockwise so the timing belt positions itself on the pulleys.
22. Turn the crankshaft pulley so its white mark (A) lines up with the pointer (B).

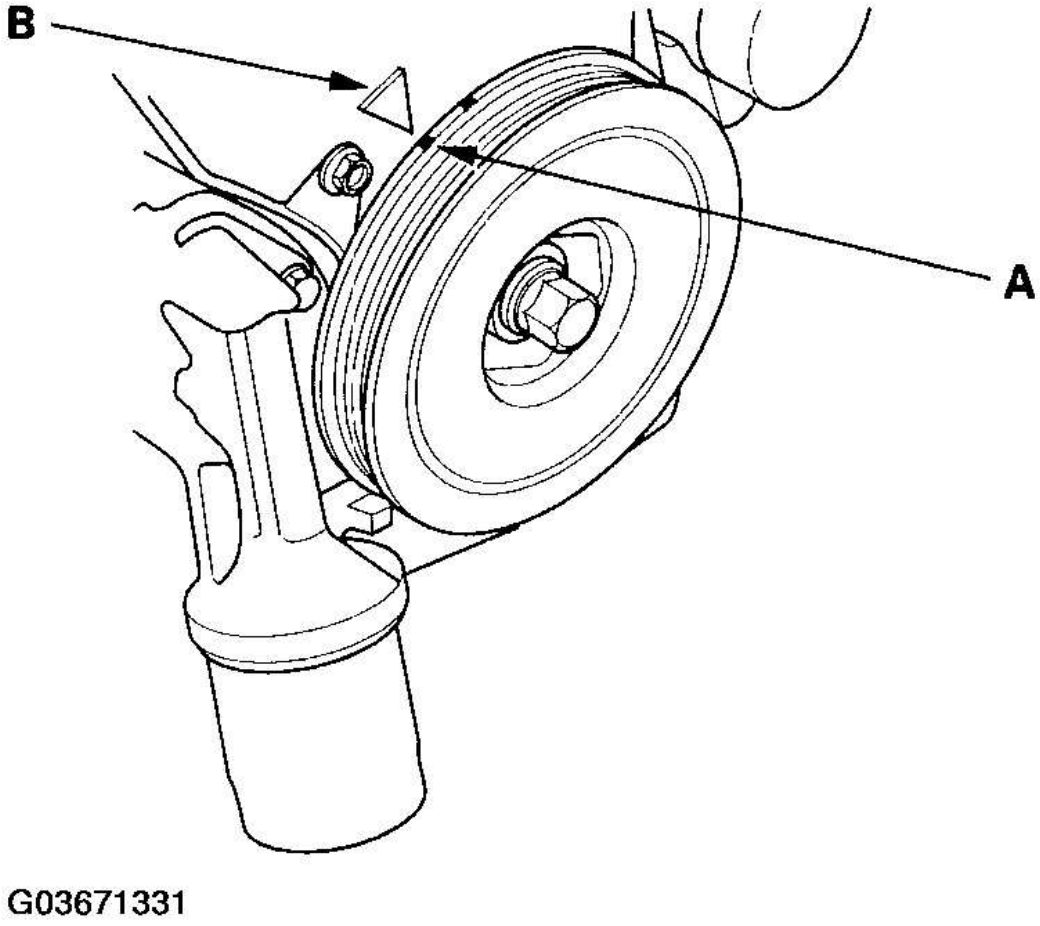


Fig. 65: Aligning Crankshaft Pulley Marks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Check the camshaft pulley marks.
    - If the camshaft pulley marks are at TDC, go to step 24.
    - If the camshaft pulley marks are not at TDC, remove the timing belt and repeat steps 2 through 23.

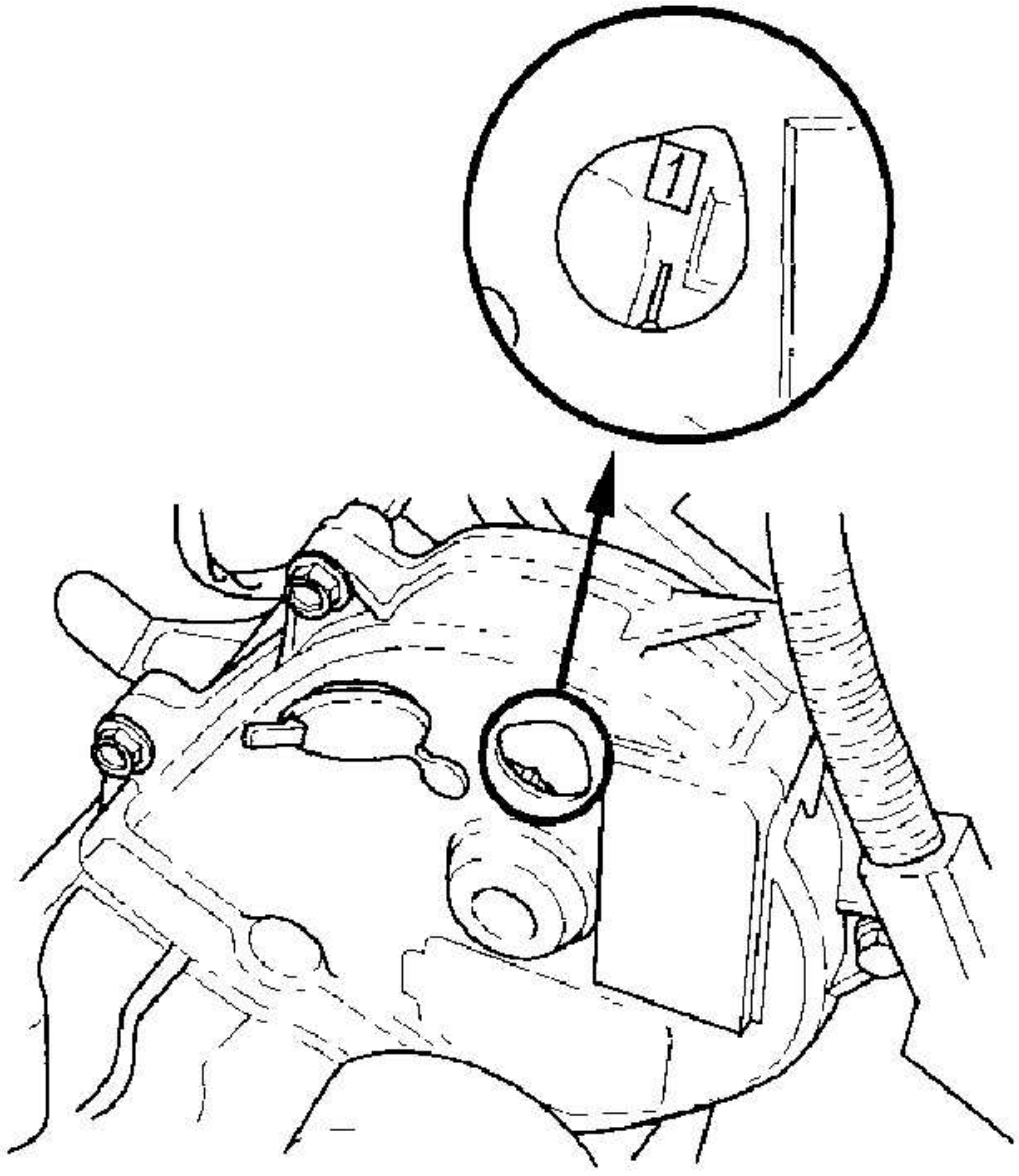


Fig. 66: Identifying Front Camshaft Pulley Marks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

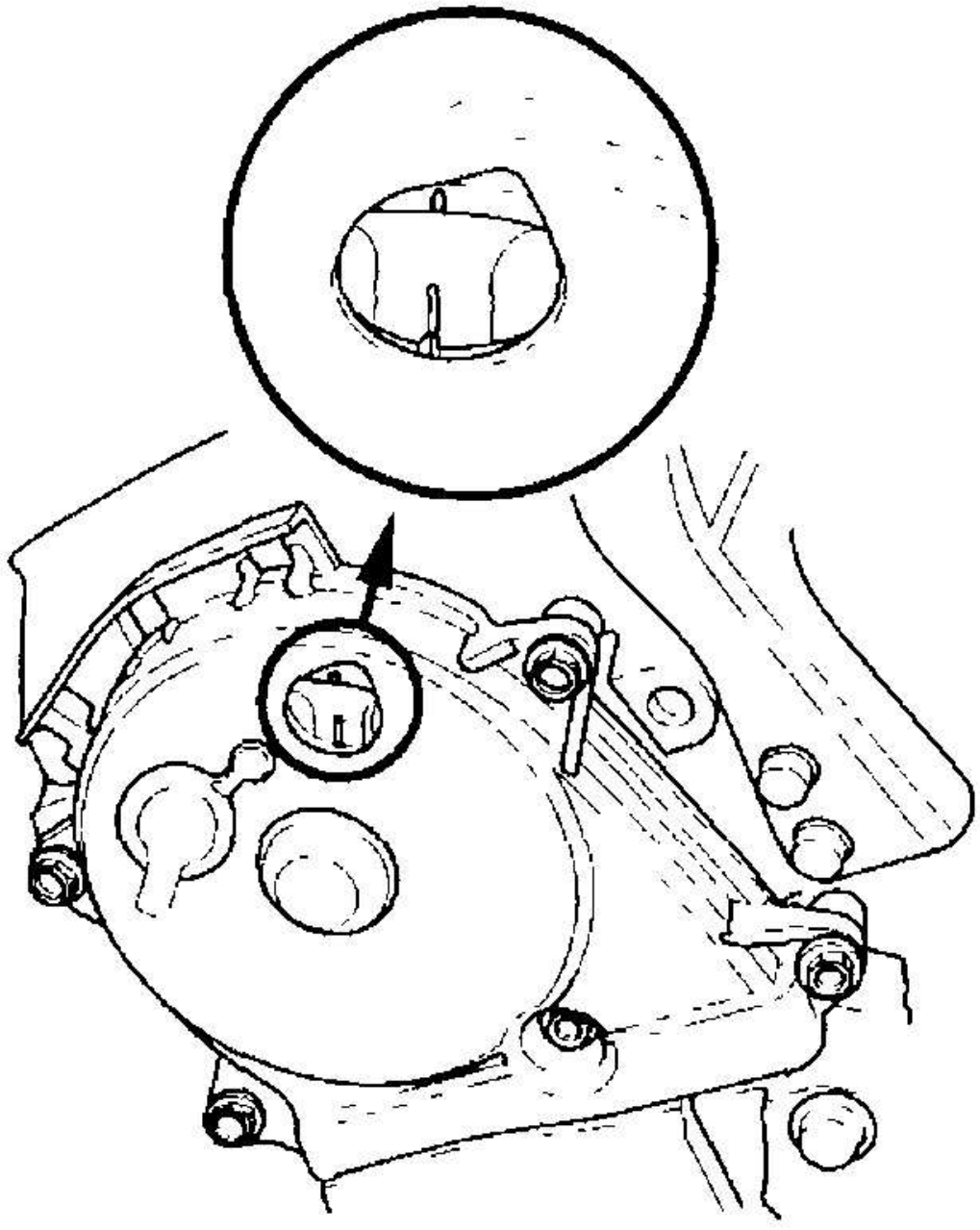


Fig. 67: Identifying Rear Camshaft Pulley Marks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Install the side engine mount bracket (A), then tighten the bolts in the numbered sequence shown in **Fig. 68**.

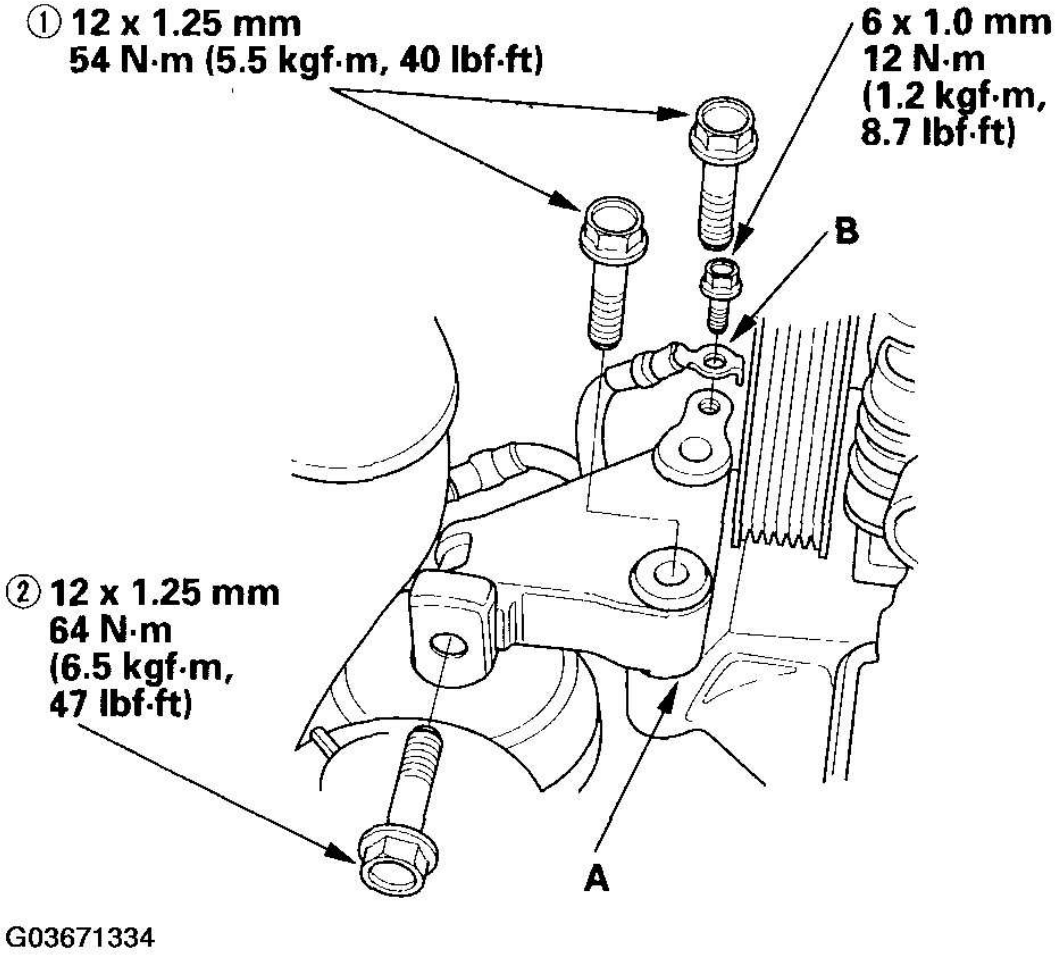


Fig. 68: Tightening Side Engine Mount Bracket Bolt In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

25. Install the ground cable (B).
26. Install the drive belt auto-tensioner (see **DRIVE BELT AUTO-TENSIONER REPLACEMENT**).
27. Install the drive belt (see **DRIVE BELT REPLACEMENT**).
28. Install the splash shield.

29. Install the right front tire/wheel.
30. Do the crankshaft position (CKP) pattern clear/CKP pattern learn procedure (see **CKP PATTERN CLEAR/CKP PATTERN LEARN**).

TIMING BELT DRIVE PULLEY REPLACEMENT

1. Remove the timing belt (see **TIMING BELT REMOVAL**).
2. Remove the crankshaft position (CKP) sensor (see**CKP SENSOR REPLACEMENT**).
3. Remove the timing belt drive pulley.

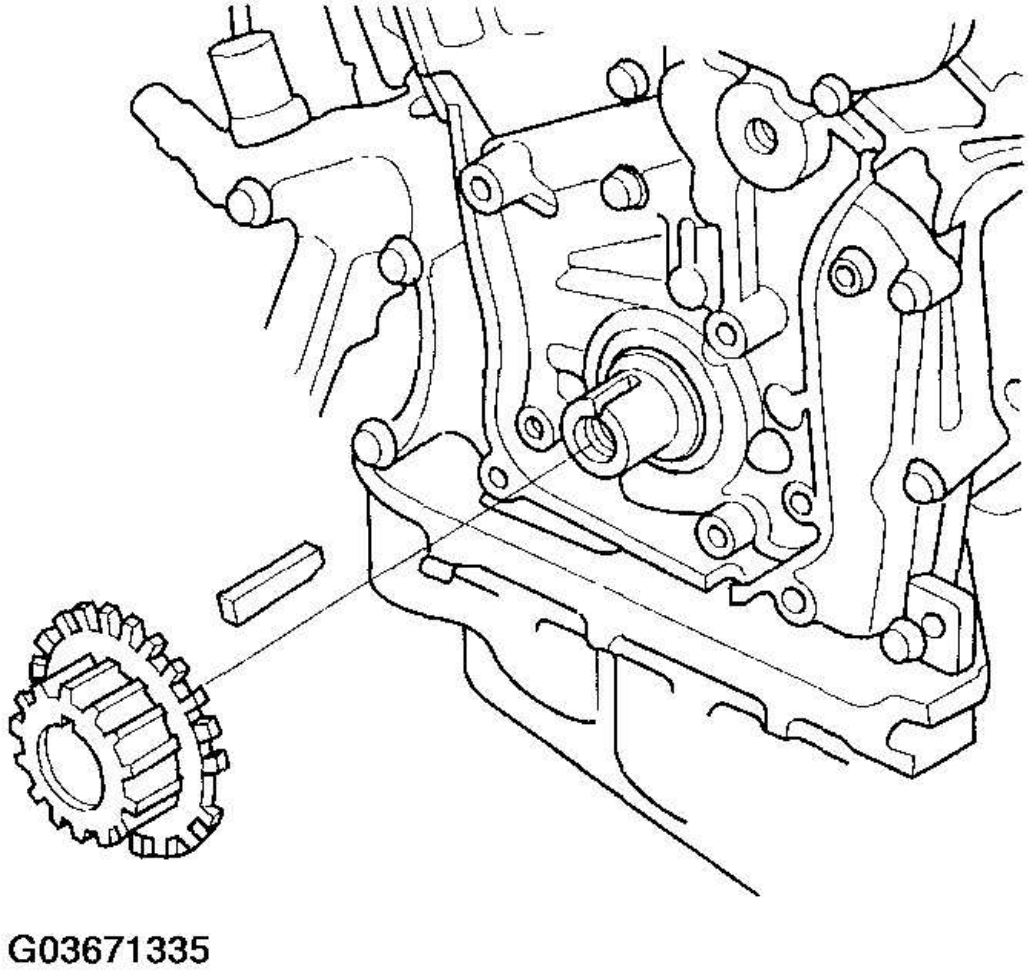


Fig. 69: Identifying Timing Belt Drive Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the new timing belt drive pulley.
5. Install the CKP sensor (see **CKP SENSOR REPLACEMENT**).
6. Install the timing belt (see **TIMING BELT INSTALLATION**).

TIMING BELT ADJUSTER REPLACEMENT

1. Remove the timing belt (see **TIMING BELT REMOVAL**).

2. Remove the auto-tensioner (see step 5).
3. Remove the bolt (A), then remove the timing belt adjuster (B) and collar (C).

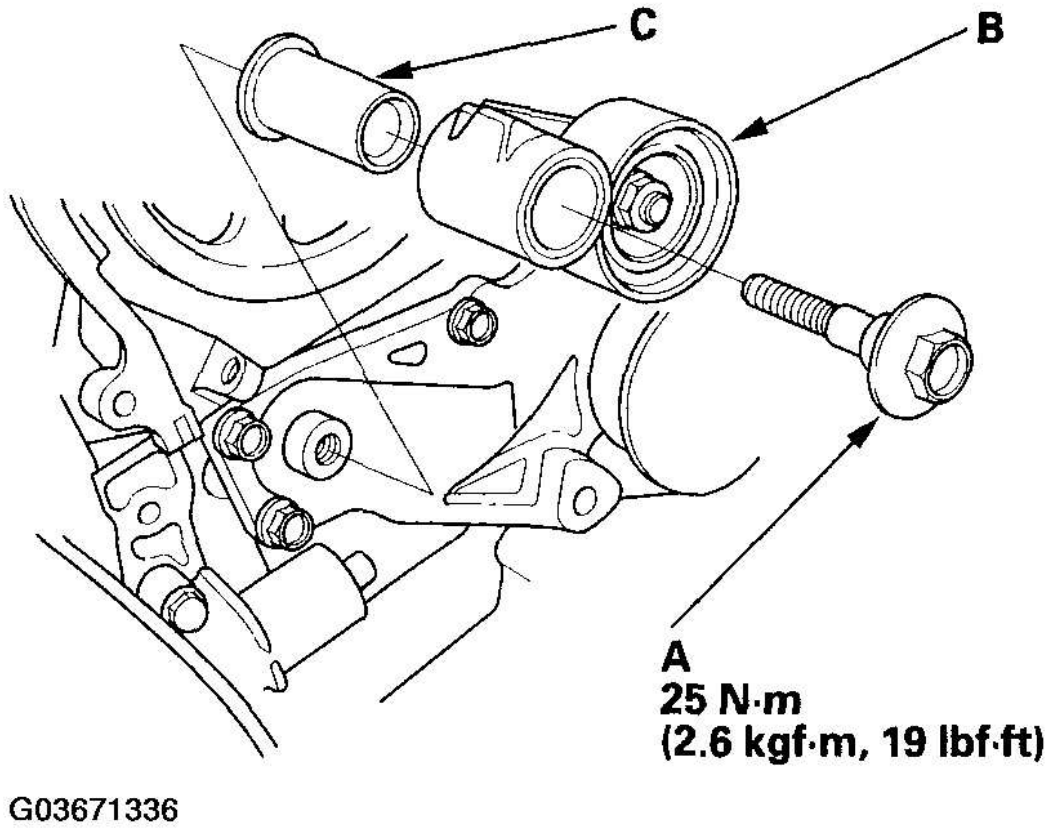


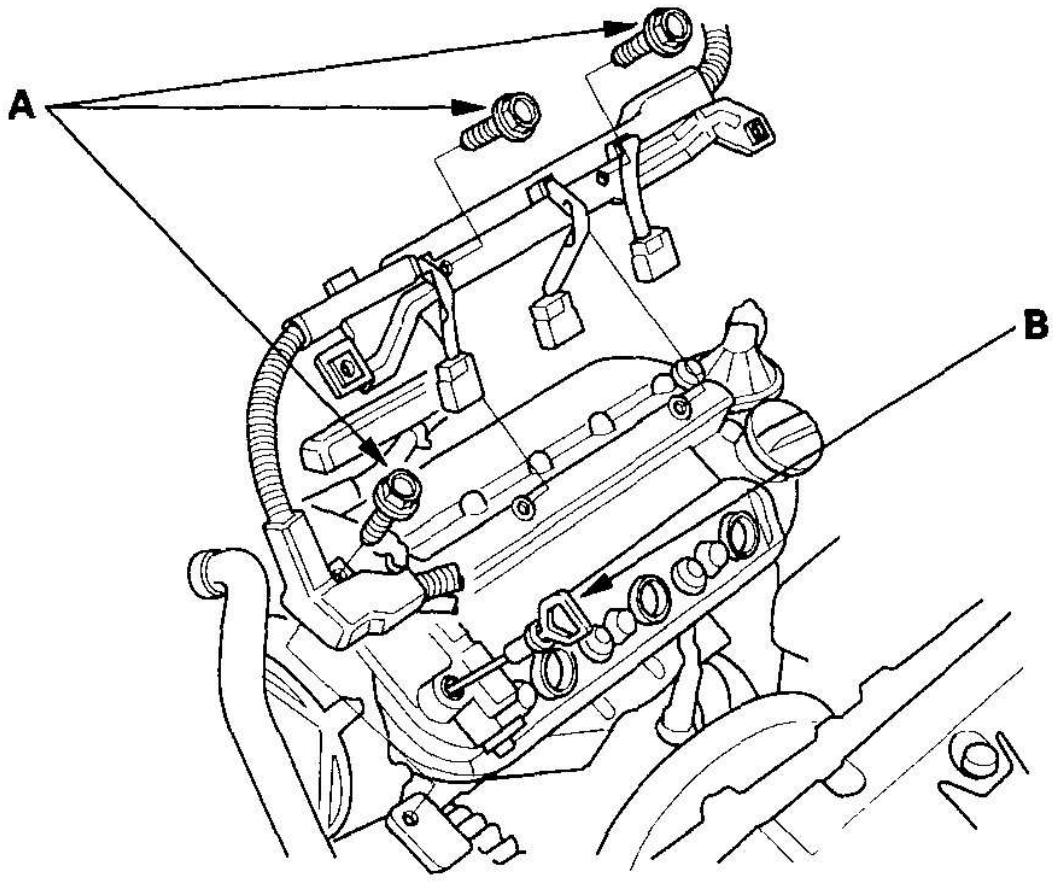
Fig. 70: Identifying Timing Belt Adjuster And Collar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the timing belt adjuster.
5. Install the timing belt (see **TIMING BELT INSTALLATION**).

CYLINDER HEAD COVER REMOVAL

1. Remove the intake manifold (see **REMOVAL**).
2. Remove the six ignition coils (see **IGNITION COIL REMOVAL/INSTALLATION**).

3. Remove the three bolts (A) securing the harness holder, and remove the dipstick (B).



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Fig. 71: Identifying Harness Holder Bolts And Dipstick
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the bolt (A) securing the power steering hose clamp.

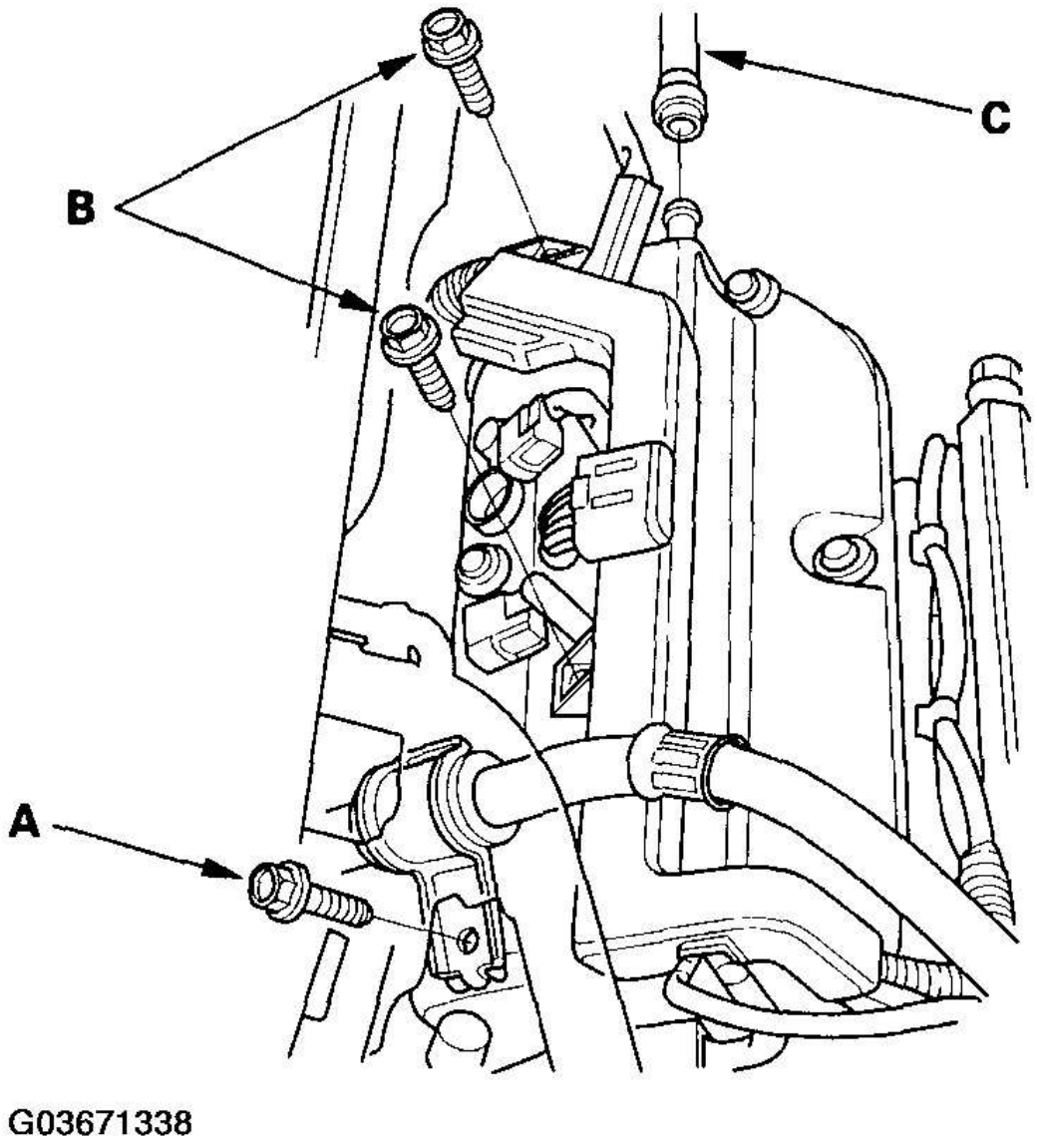
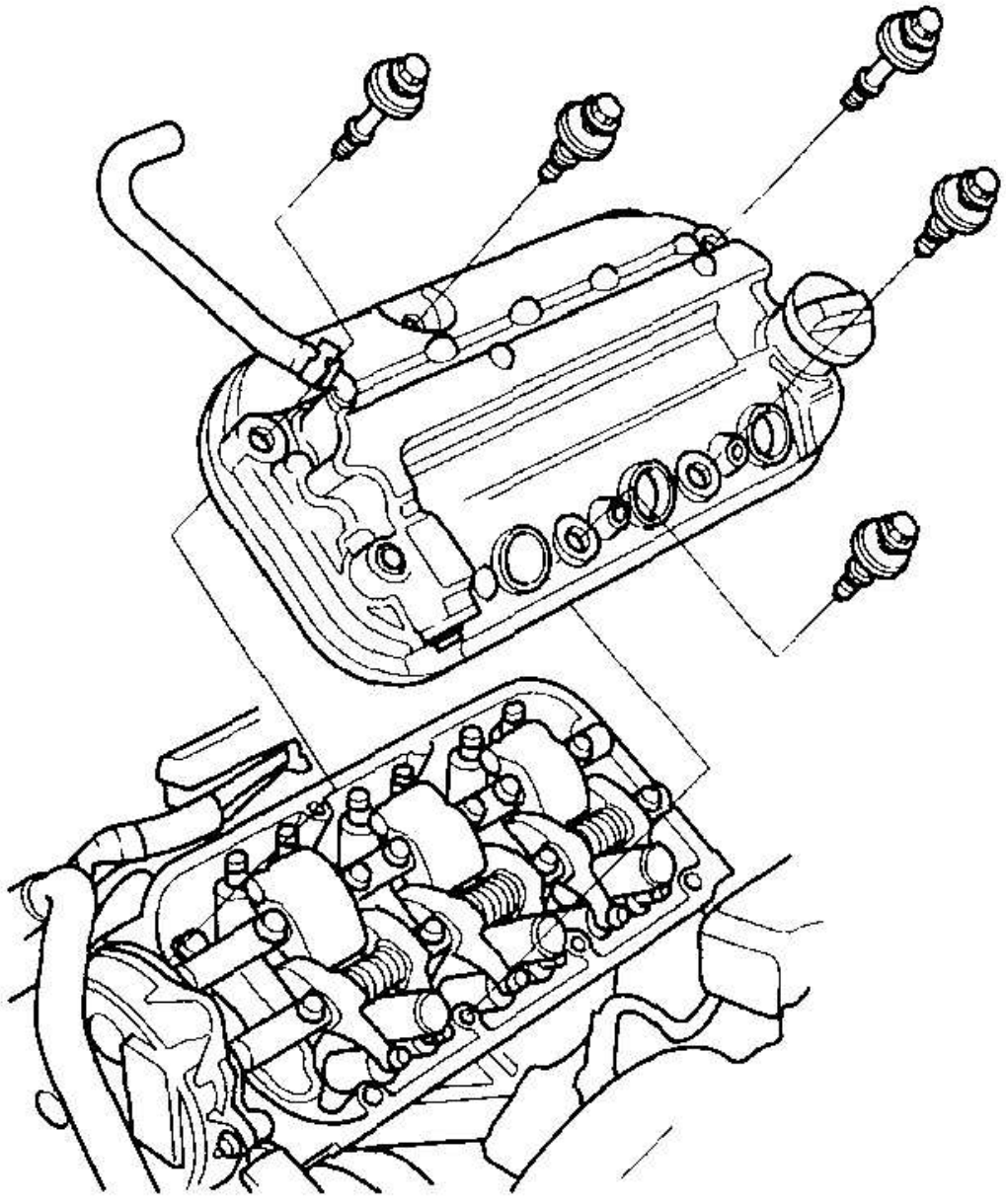


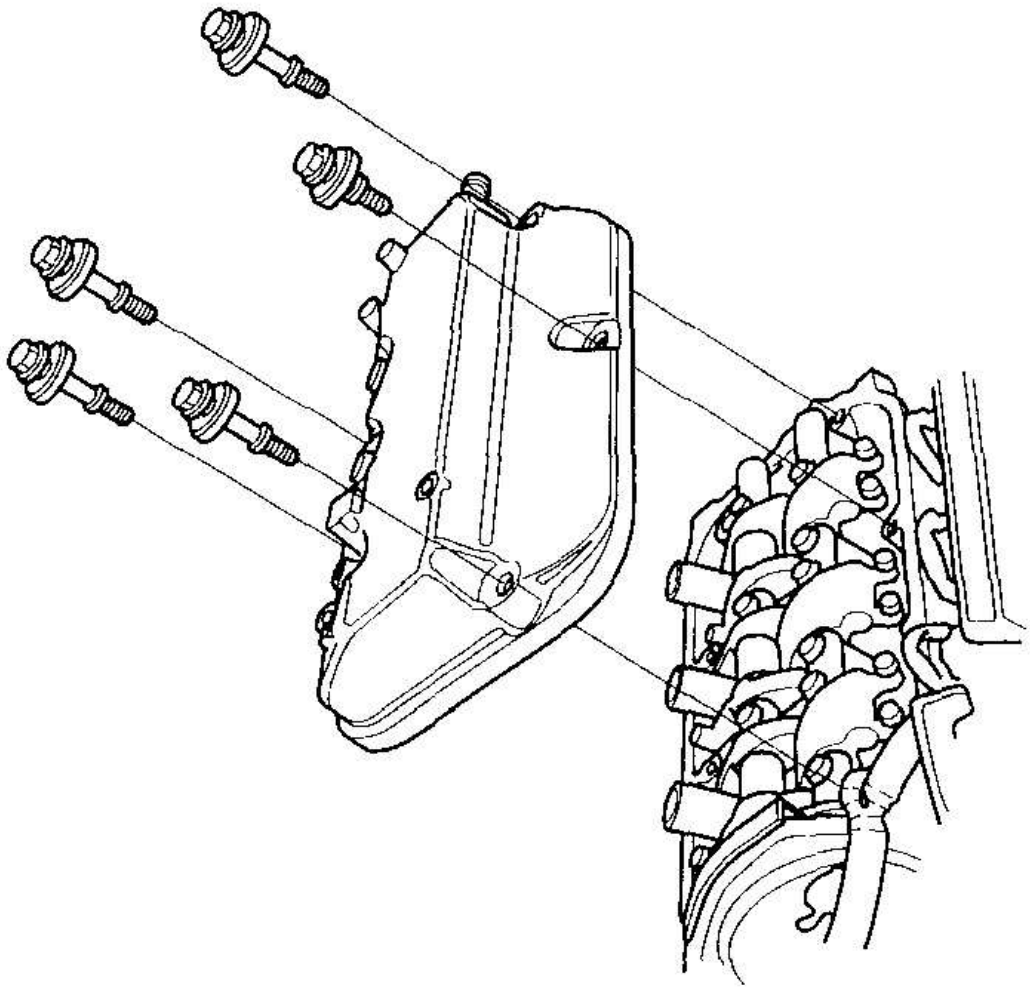
Fig. 72: Identifying Power Steering Hose Clamp Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the two bolts (B) securing the harness holder.
6. Remove the breather hose (C).
7. Remove the cylinder head covers.



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Fig. 73: Identifying Cylinder Head Covers (Front)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 74: Identifying Cylinder Head Covers (Rear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CYLINDER HEAD COVER INSTALLATION

1. Check the spark plug seals for damage. If the seal is damaged, replace it.
2. Clean the head cover contacting surfaces with a shop towel.
3. Set the spark plug seals (A) on the spark plug tubes, and install the cylinder head covers (B).

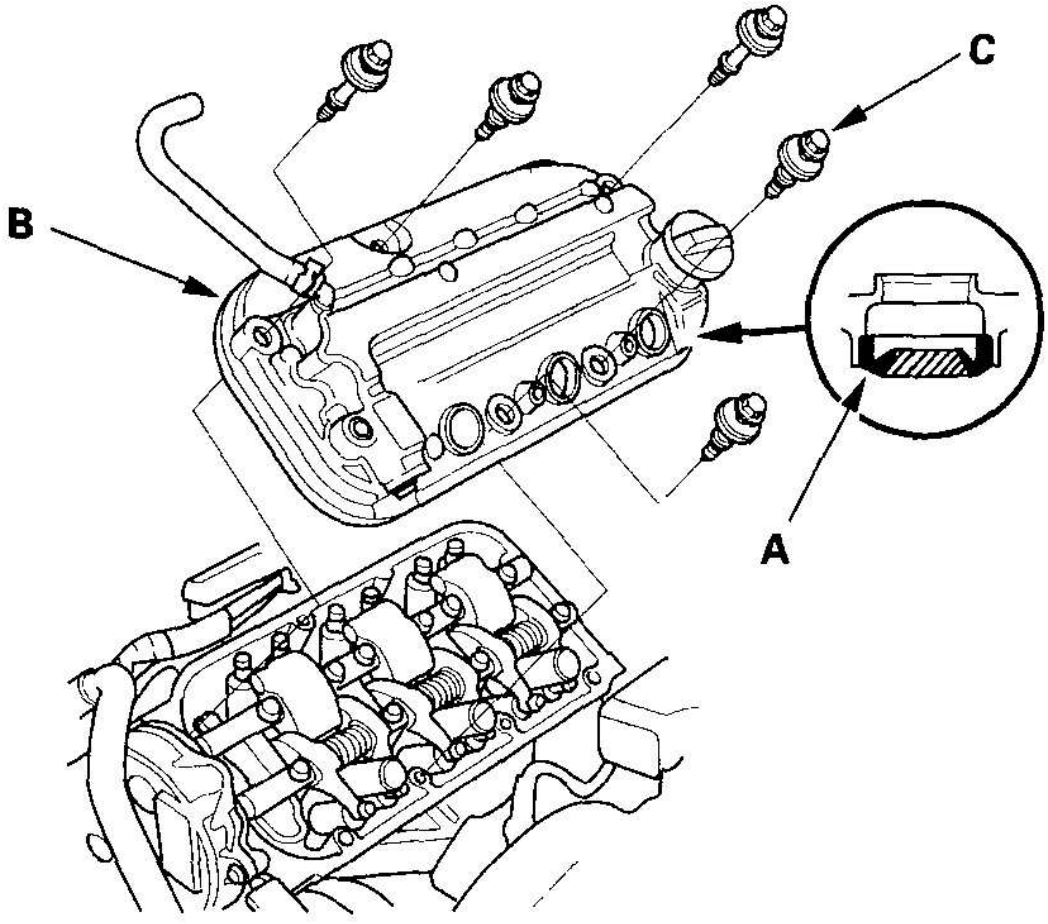


Fig. 75: Identifying Cylinder Head Cover (Front)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

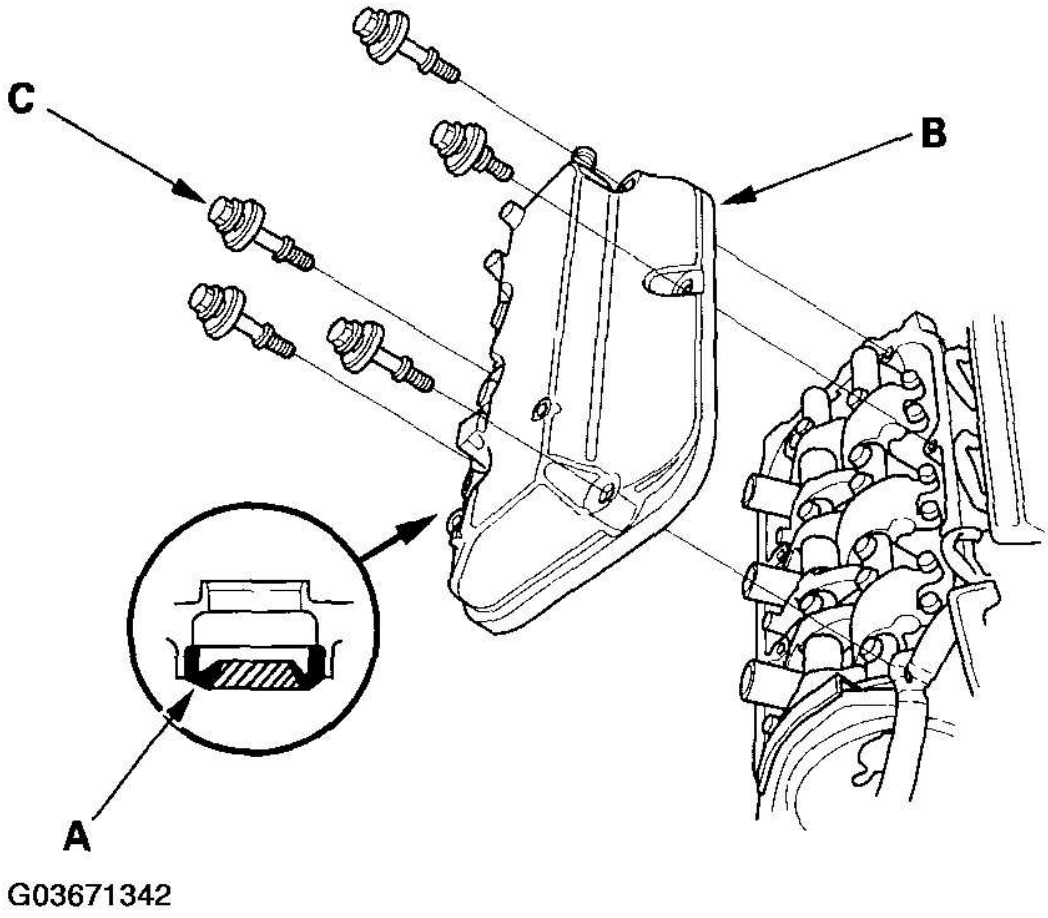


Fig. 76: Identifying Cylinder Head Cover (Rear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the head cover gasket (A) in the groove of the cylinder head cover (B). Make sure the head cover gasket is seated securely, then install new spark plug seals (C) on the spark spug tubes, and install the sylinder head covers.
5. Visually check the spark plug seals for damage.
6. Inspect the cover washers (C). Replace any washer that is damaged or deteriorated.
7. Tighten the bolts in two or three steps. In the final step, tighten all bolts in sequence, 12 N.m (1.2 kgf.m, 8.7 lbf.ft).

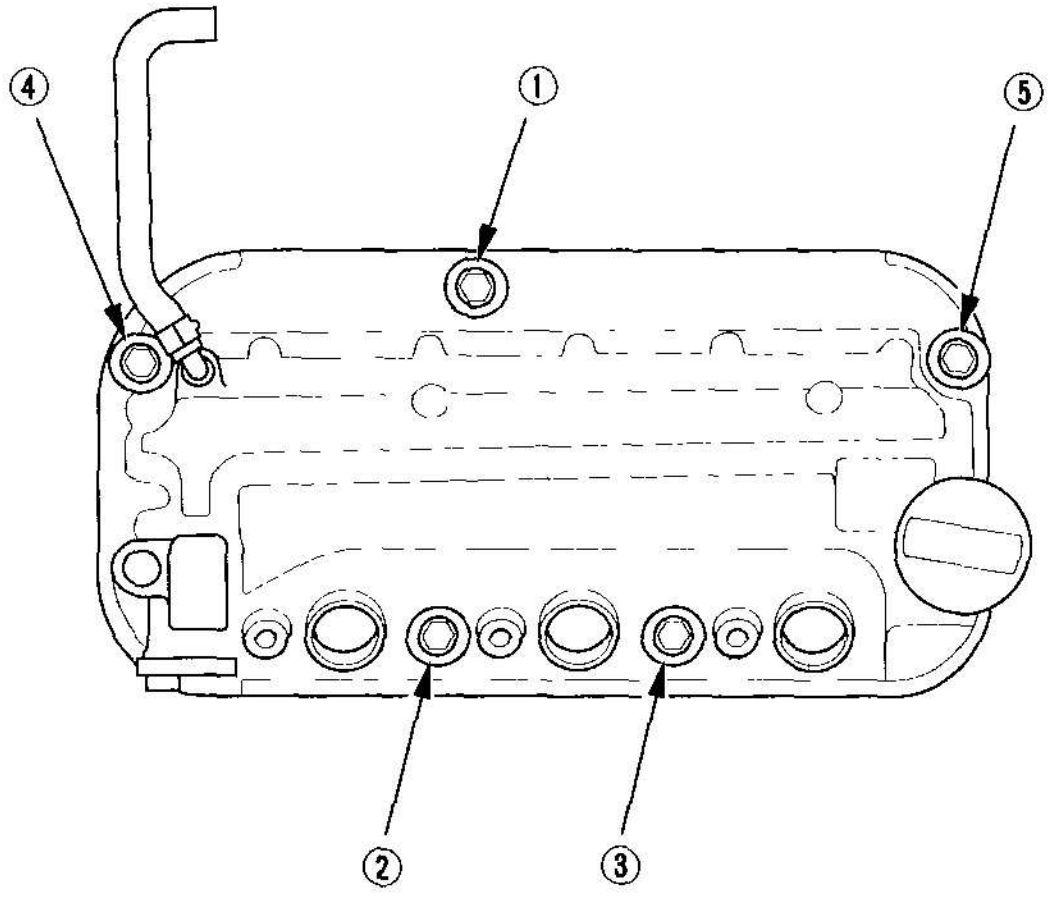


Fig. 77: Tightening Cylinder Head Cover Bolts In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the breather hose (A).

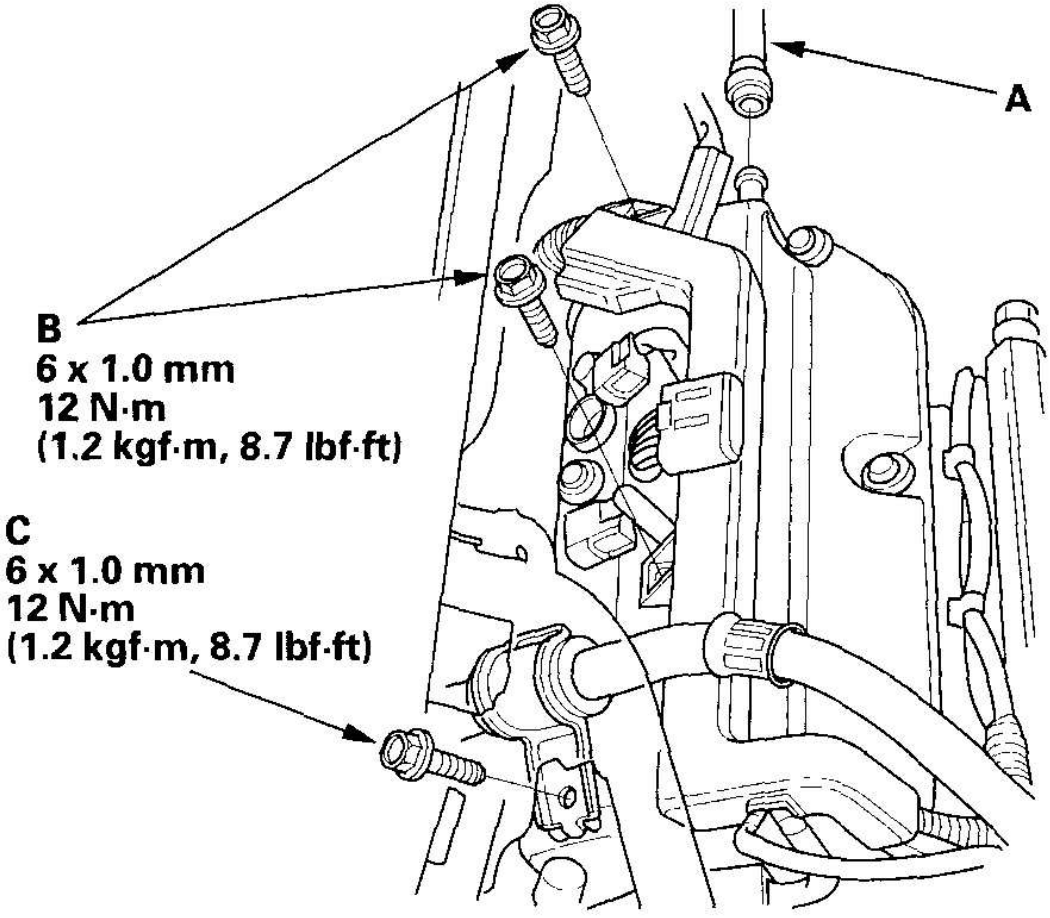


Fig. 78: Identifying Breather Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Tighten the two bolts (B) securing the harness holder.
10. Tighten the bolt (C) securing the power steering hose bracket.
11. Tighten the three bolts (A) securing the harness holder, and Install the dipstick (B).

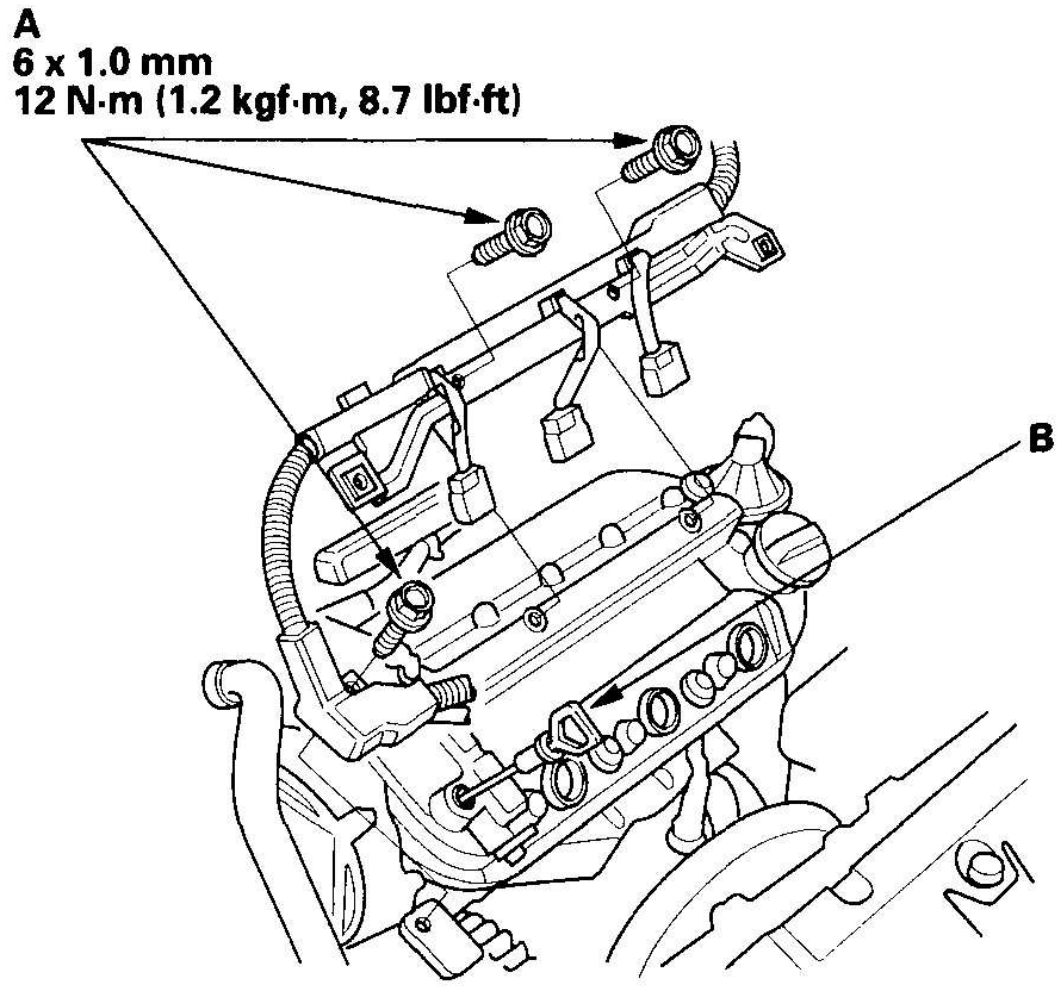


Fig. 79: Tightening Harness Holder Bolts And Identifying Dipstick
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Install the six ignition coils (see **IGNITION COIL REMOVAL/INSTALLATION**).
13. Install the intake manifold (see **INSTALLATION**).

CYLINDER HEAD REMOVAL

NOTE:
- **Use fender covers to avoid damaging painted surfaces.**

- **To avoid damage, unplug the wiring connectors carefully while holding the connector portion.**
- **To avoid damaging the cylinder head, wait until the engine coolant temperature drops below 100 ℉ (38 ° C) before loosening the cylinder head bolts.**
- **Mark all wiring and hoses to avoid misconnection. Also, be sure that they do not contact other wiring or hoses, or interfere with other parts.**

1. Make sure you have the anti-theft codes for the radio and navigation system, then write down the customer's audio presets. Make sure the ignition switch is OFF.
2. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
3. Disconnect the negative cable from the battery.
4. Drain the engine coolant (see **COOLANT CHECK**).
5. Remove the air cleaner, refer to **AIR CLEANER REMOVAL/INSTALLATION**).
6. Remove the drive belt (see **DRIVE BELT REPLACEMENT**).
7. Remove the timing belt (see **TIMING BELT REMOVAL**).
8. Remove the power steering (P/S) pump (A), and P/S hose clamp (B).

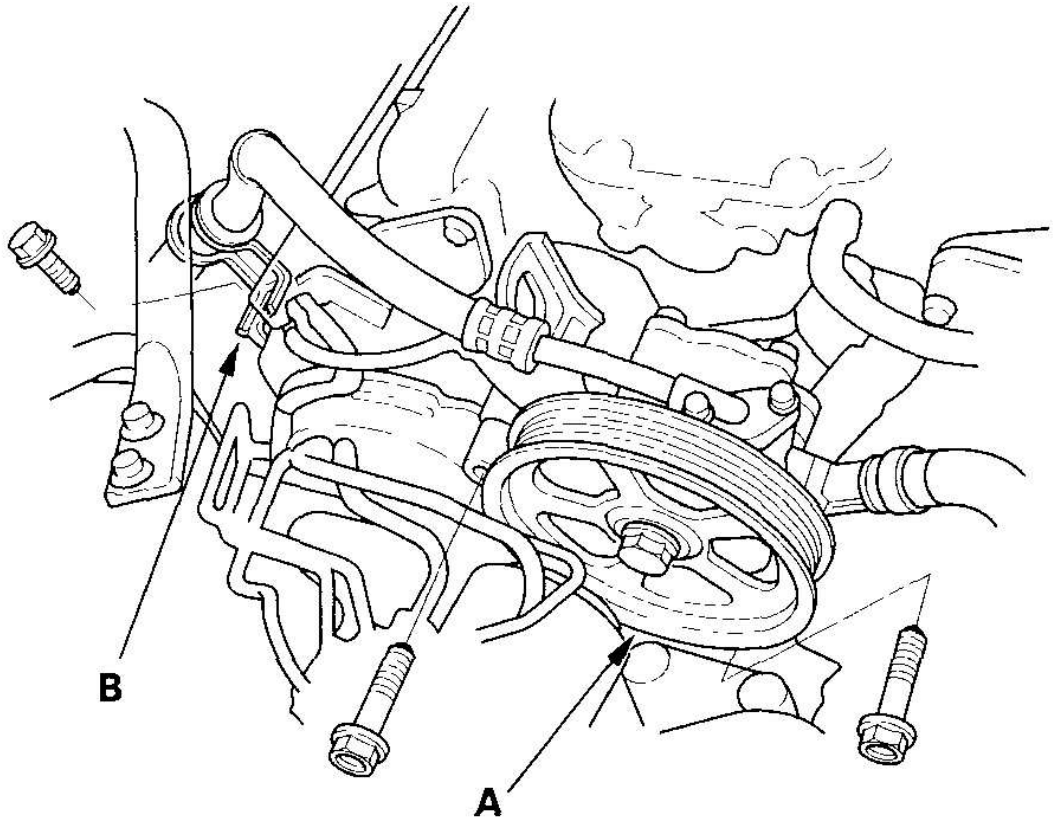


Fig. 80: Identifying P/S Pump And P/S Hose Clamp
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the alternator (see **ALTERNATOR REMOVAL AND INSTALLATION**).
10. Remove the intake manifold (see **REMOVAL**).
11. Remove the six ignition coils (see **IGNITION COIL REMOVAL/INSTALLATION**).
12. Remove these engine wire harness connectors and wire harness clamps from the cylinder head.
    - Six injector connectors
    - Engine coolant temperature (ECT) sensor 1 connector

- Engine coolant temperature (ECT) sensor 2 connector (2005-2007 models)
- Crankshaft position (CKP) sensor connector
- Exhaust gas recirculation (EGR) valve connector
- Rocker arm oil control solenoid (VTEC solenoid valve) connector
- Rocker arm oil pressure switch (VTEC oil pressure switch) connector
- Oil pressure switch connector
- Two air fuel ratio (A/F) sensor connectors
- Two secondary heated oxygen sensor (secondary HO2S) connectors

13. Remove the upper radiator hose (A), and lower radiator hose (B).

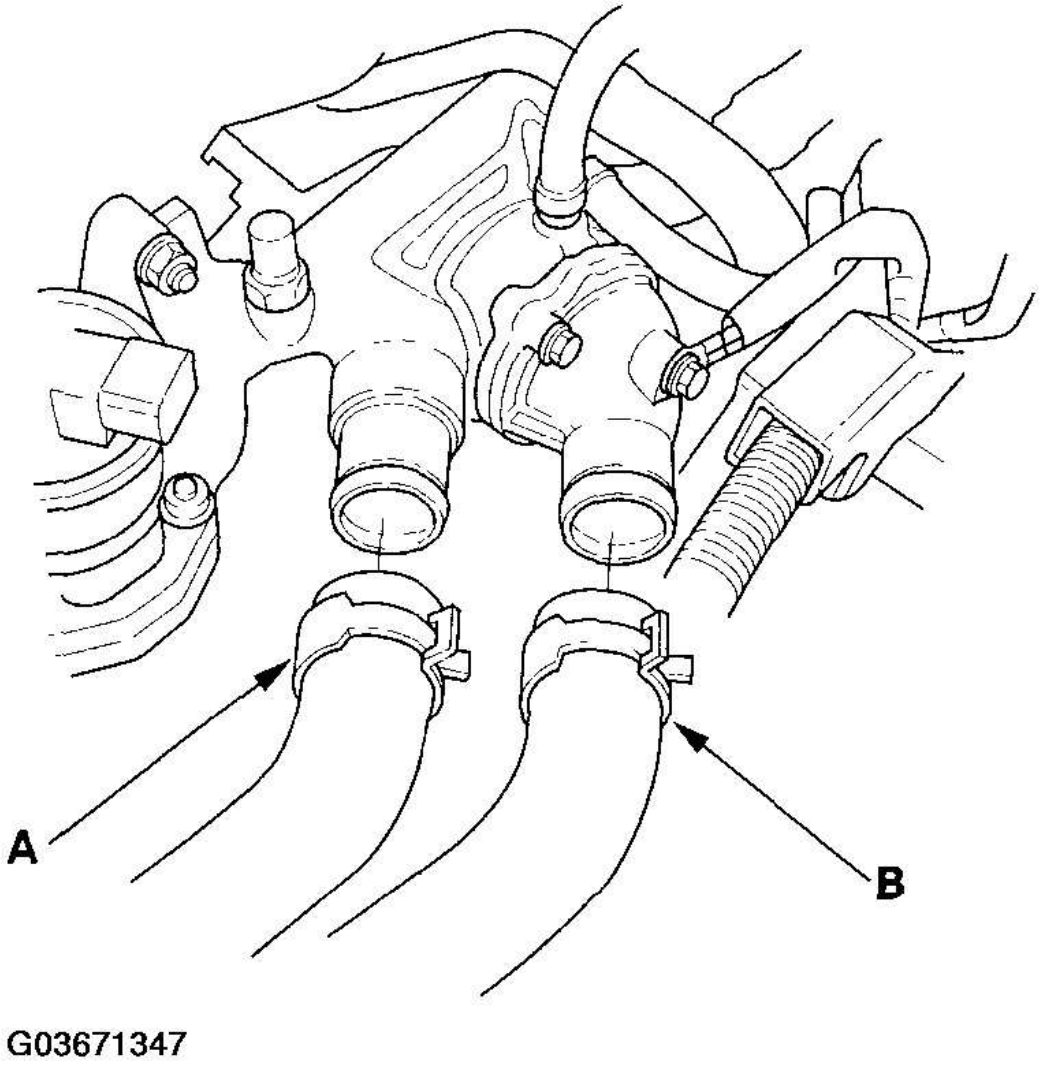


Fig. 81: Identifying Upper Radiator Hose And Lower Radiator Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Remove the heater hose (A) and water bypass hoses (B).

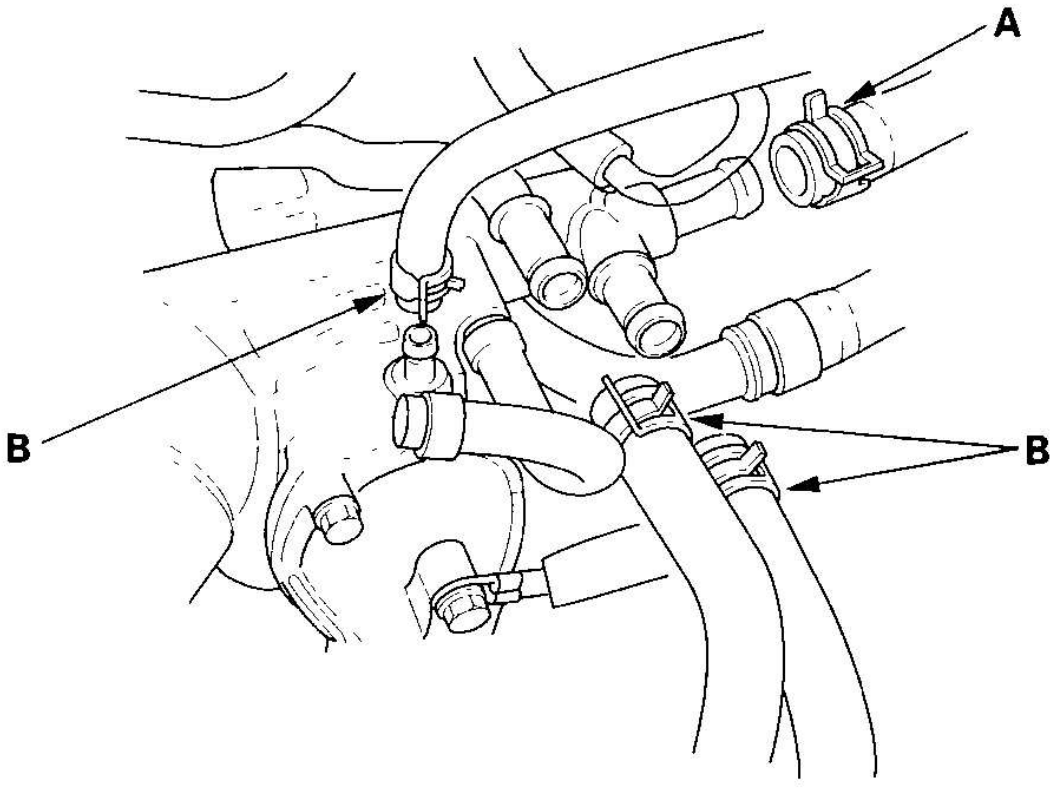


Fig. 82: Identifying Heater Hose And Water Bypass Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the ground cable (A).

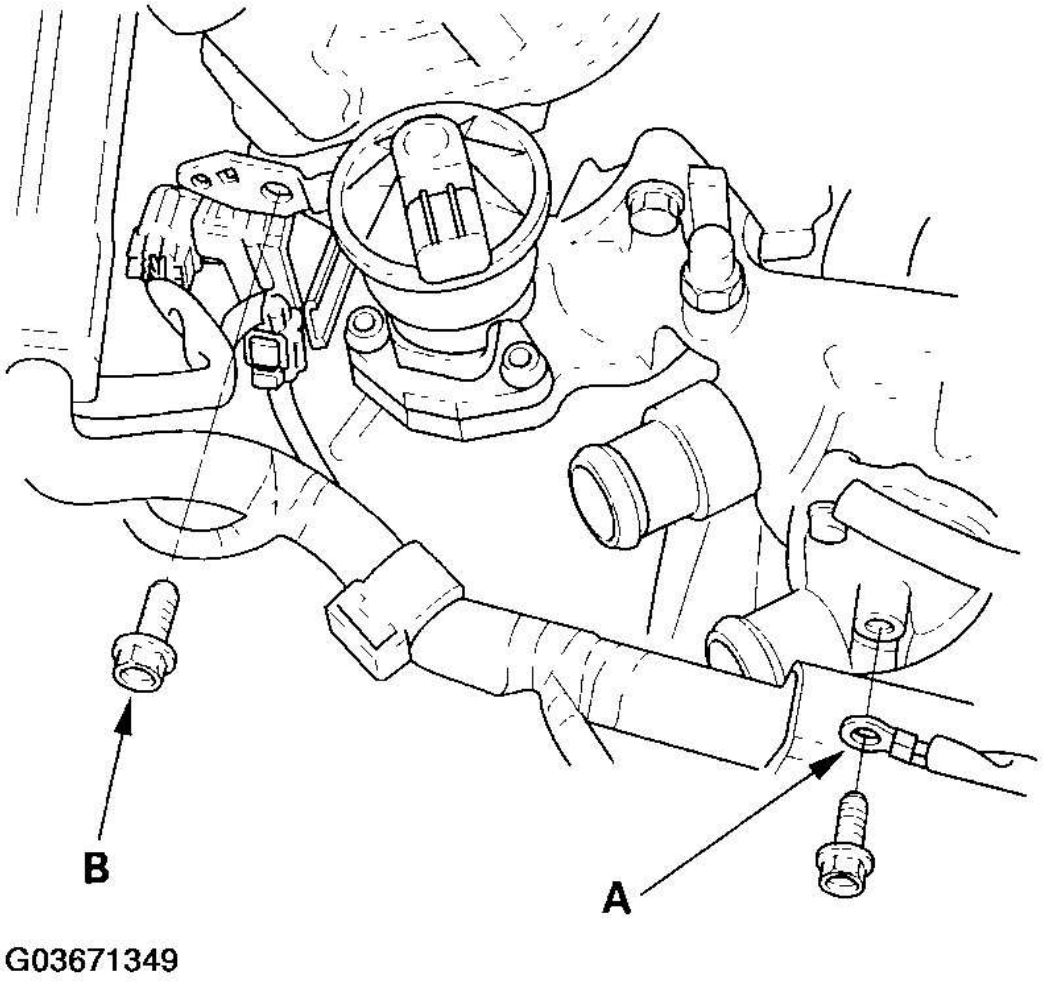


Fig. 83: Identifying Ground Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Remove the bolt (B) securing the harness bracket.
17. Remove the fuel rails.

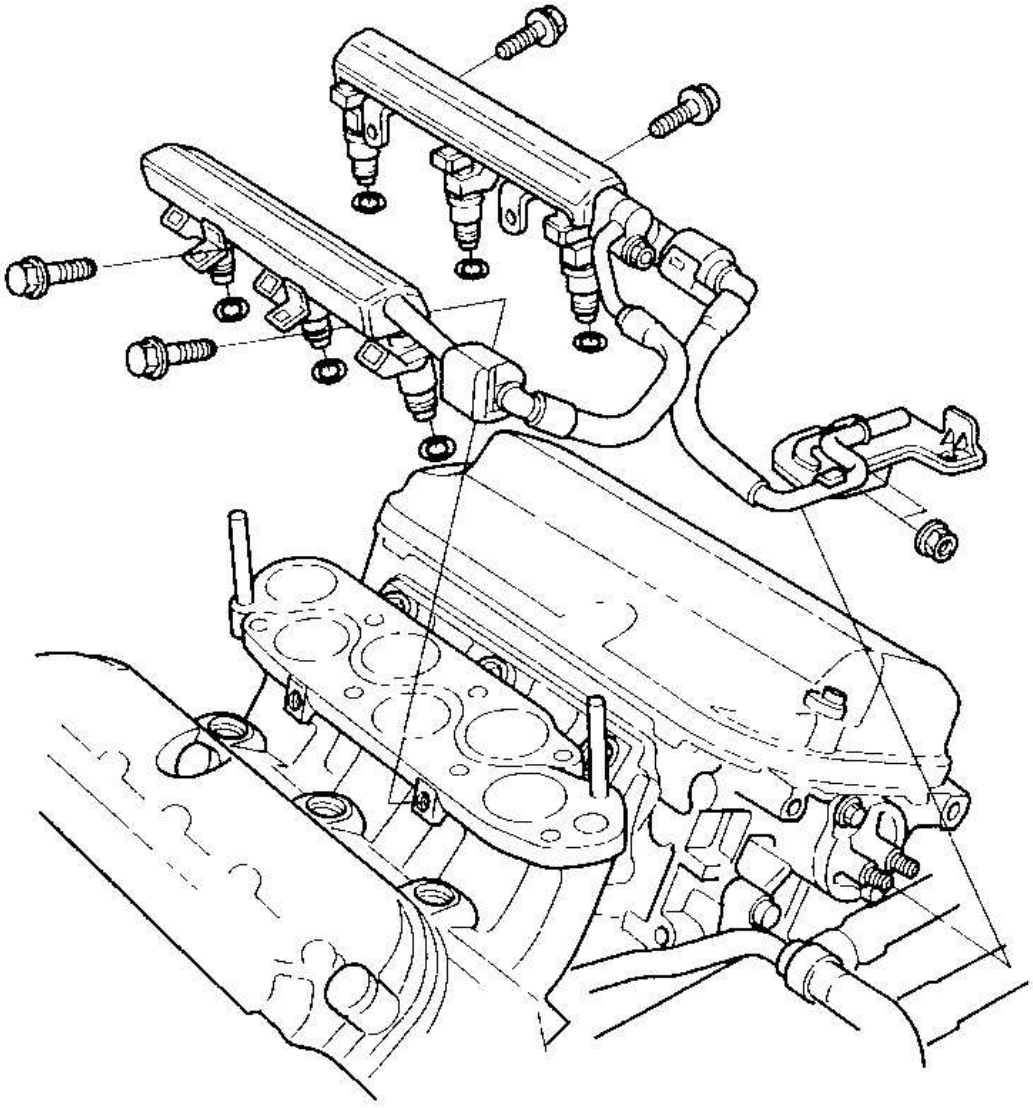
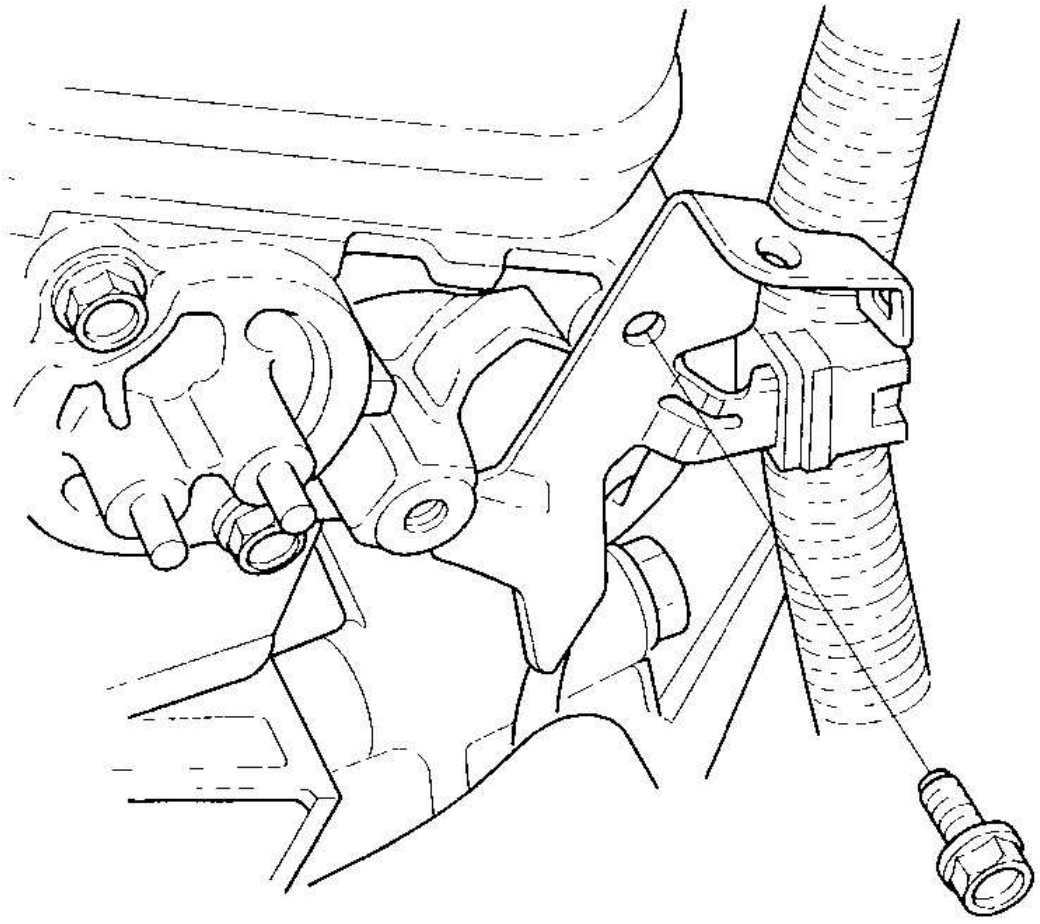


Fig. 84: Identifying Fuel Rails
Courtesy of AMERICAN HONDA MOTOR CO., INC.

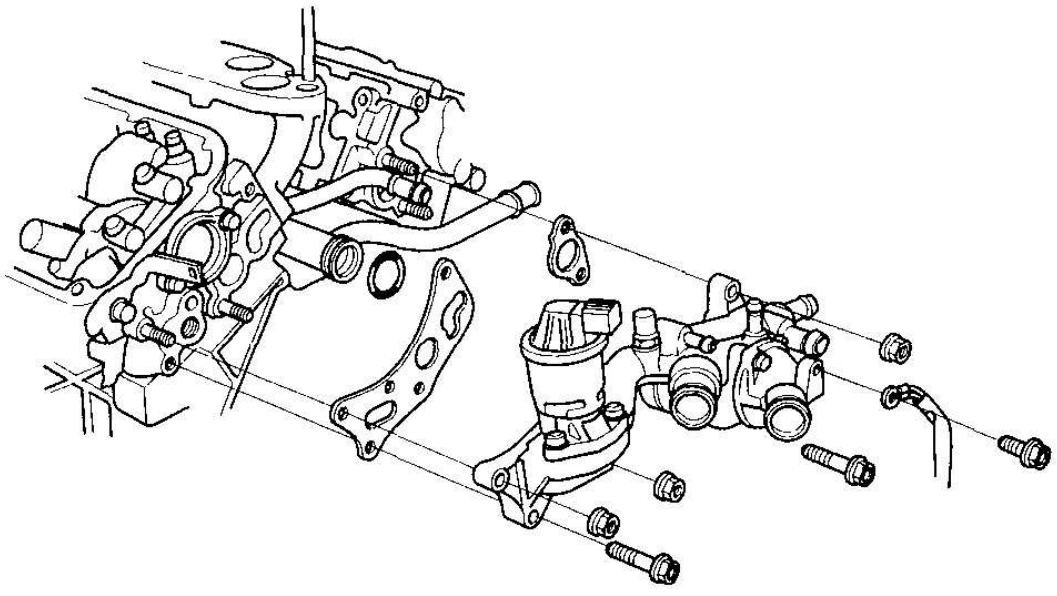
18. Remove the bolt securing the harness bracket.



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Fig. 85: Identifying Harness Bracket Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Remove the front and rear warm up three way catalytic converter (WU-TWC) (see **WARM UP THREE WAY CATALYTIC CONVERTER REMOVAL/INSTALLATION**).
20. Remove the water passage.



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Fig. 86: Identifying Water Passage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Remove the front and rear camshaft pulleys (A) and front and rear back covers (B).

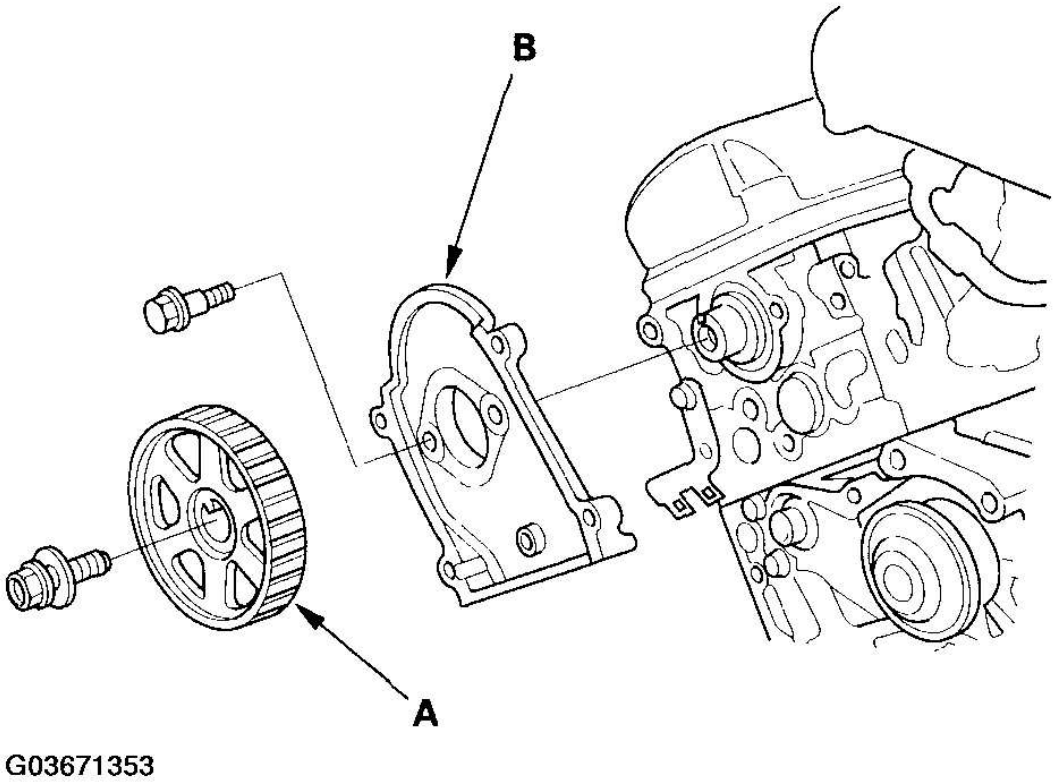


Fig. 87: Identifying Front And Rear Camshaft Pulleys And Front And Rear Back Covers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Remove the cylinder head covers (see **CYLINDER HEAD COVER REMOVAL**).
23. Remove the cylinder head bolts. To prevent warpage, unscrew the bolts in sequence 1/3 turn at a time; repeat the sequence until all bolts are loosened.

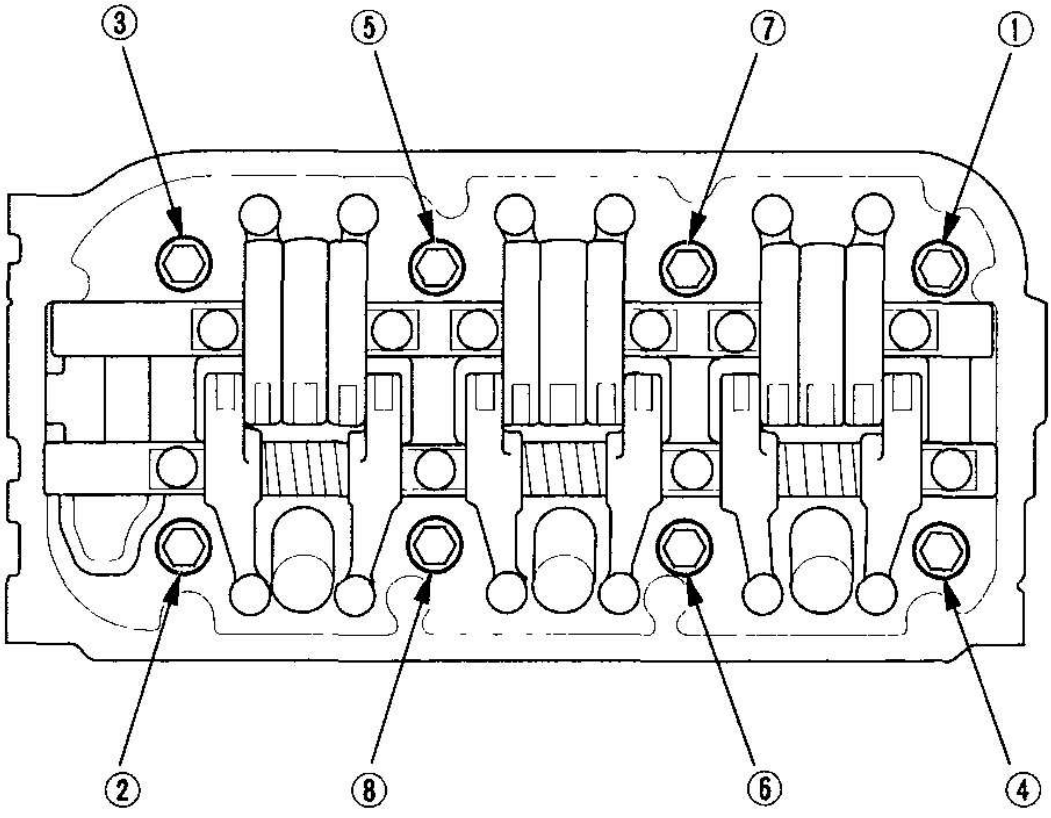


Fig. 88: Identifying Cylinder Head Cover Bolts In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Remove the cylinder heads.

CAMSHAFT REPLACEMENT

FRONT

1. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the customer's audio presets. Make sure the ignition switch is OFF.
2. Disconnect the negative cable from the battery first, then disconnect the positive cable.

3. Remove the battery.
4. Drain the engine coolant (see **COOLANT CHECK**).
5. Remove the upper radiator hose.

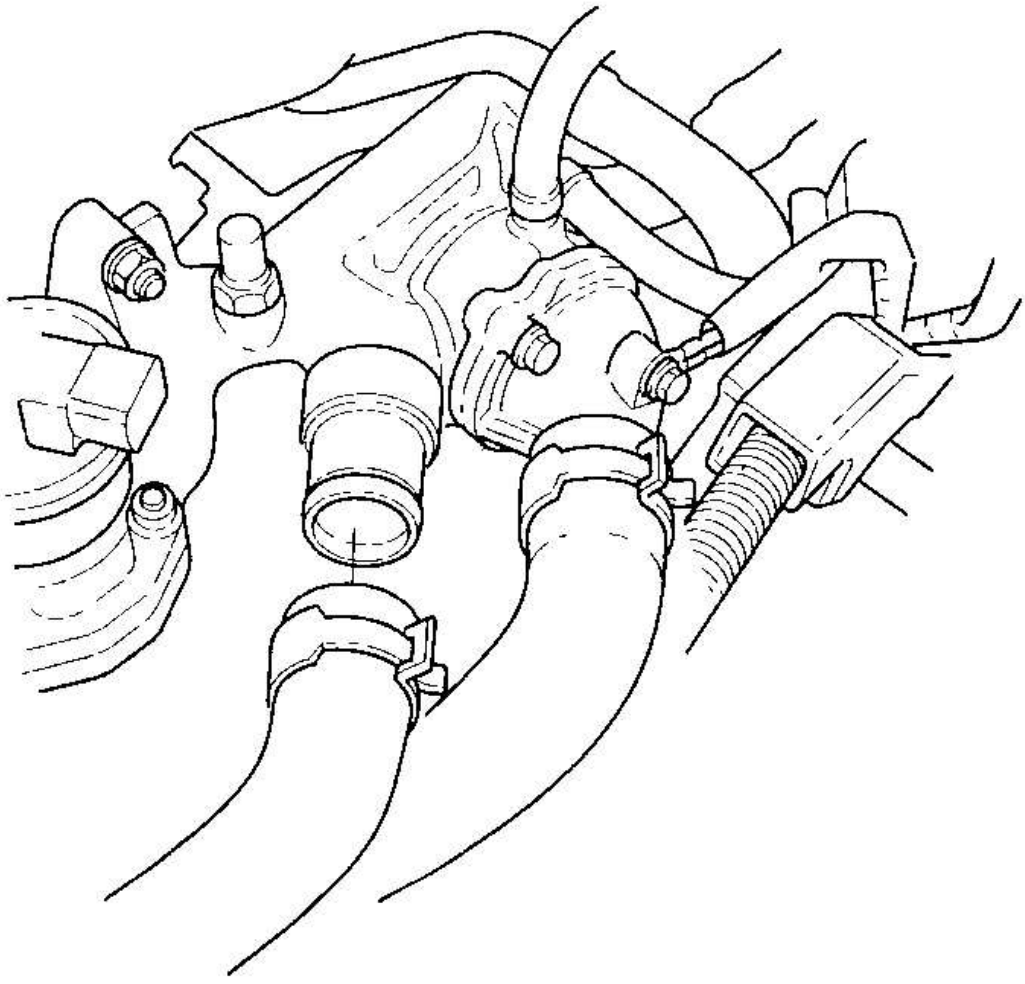


Fig. 89: Identifying Upper Radiator Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the exhaust gas recirculation (EGR) valve (see **EGR VALVE**

REPLACEMENT).

7. Remove the timing belt (see **TIMING BELT REMOVAL**).
8. Remove the rocker arm assembly (see **CYLINDER HEAD INSPECTION FOR WARPAGE**).
9. Remove the front camshaft pulley.
10. Remove the thrust cover (A), then remove the front camshaft (B).

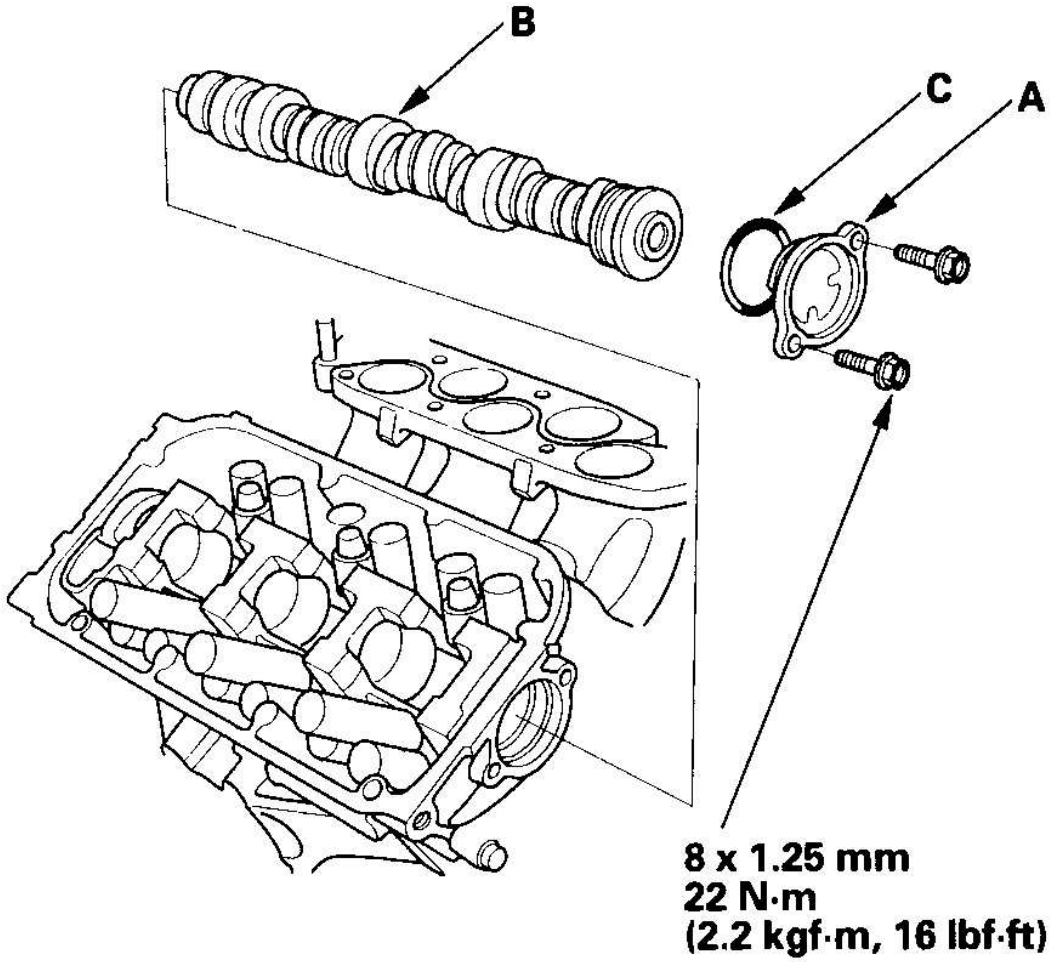


Fig. 90: Identifying Thrust Cover And Front Camshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the front camshaft in the reverse order of removal with a new O-ring (C). Apply new engine oil to the journals and camshaft lobes.
12. Apply new engine oil to the threads of the camshaft pulley mounting bolt, then install the front camshaft pulley (see step 11).
13. Install the rocker arm assembly, then tighten the mounting bolts (see step 8 .
14. Install the timing belt (see **TIMING BELT INSTALLATION**).
15. Adjust the valve clearance (see **VALVE CLEARANCE ADJUSTMENT**).
16. Fill the radiator with engine coolant and bleed the air out (see step 8 in **COOLANT REPLACEMENT**).
17. Install the battery. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
18. Do the crankshaft position (CKP) pattern clear/CKP pattern learn procedure (see **CKP PATTERN CLEAR/CKP PATTERN LEARN**).
19. Enter the anti-theft codes for the radio and the navigation system, then enter the customer's audio and XM radio channel presets. Set the clock.
20. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

REAR

1. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
2. Remove the under-hood fuse/relay box.
3. Drain the engine coolant (see **COOLANT CHECK**).
4. Remove the heater hose (A), and two nuts (B) securing the fuel line.

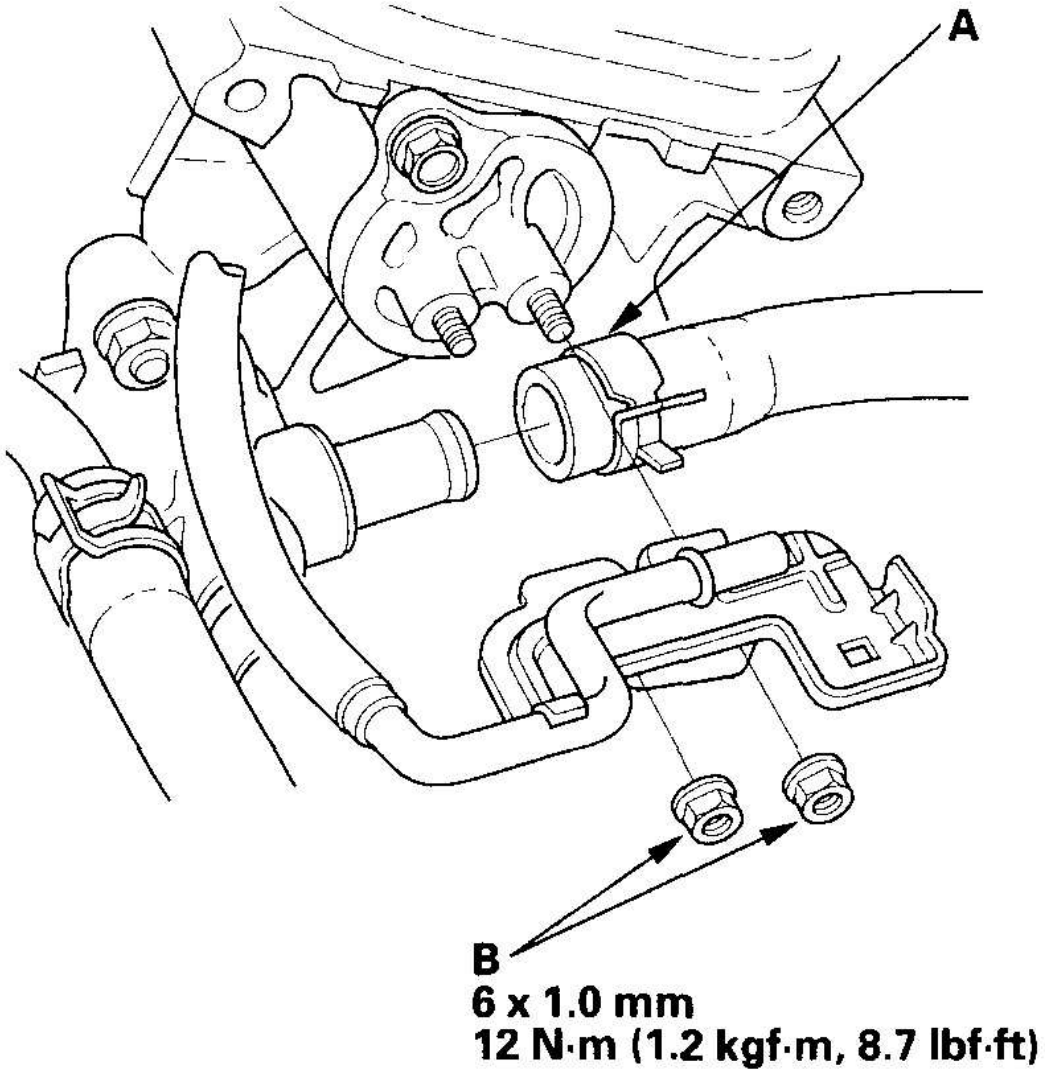


Fig. 91: Identifying Heater Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the timing belt (see **TIMING BELT REMOVAL**).
6. Remove the rocker arm assembly (see **CYLINDER HEAD INSPECTION FOR WARPAGE**).
7. Remove the rear camshaft pulley.

8. Remove the thrust cover (A), then remove the rear camshaft (B).

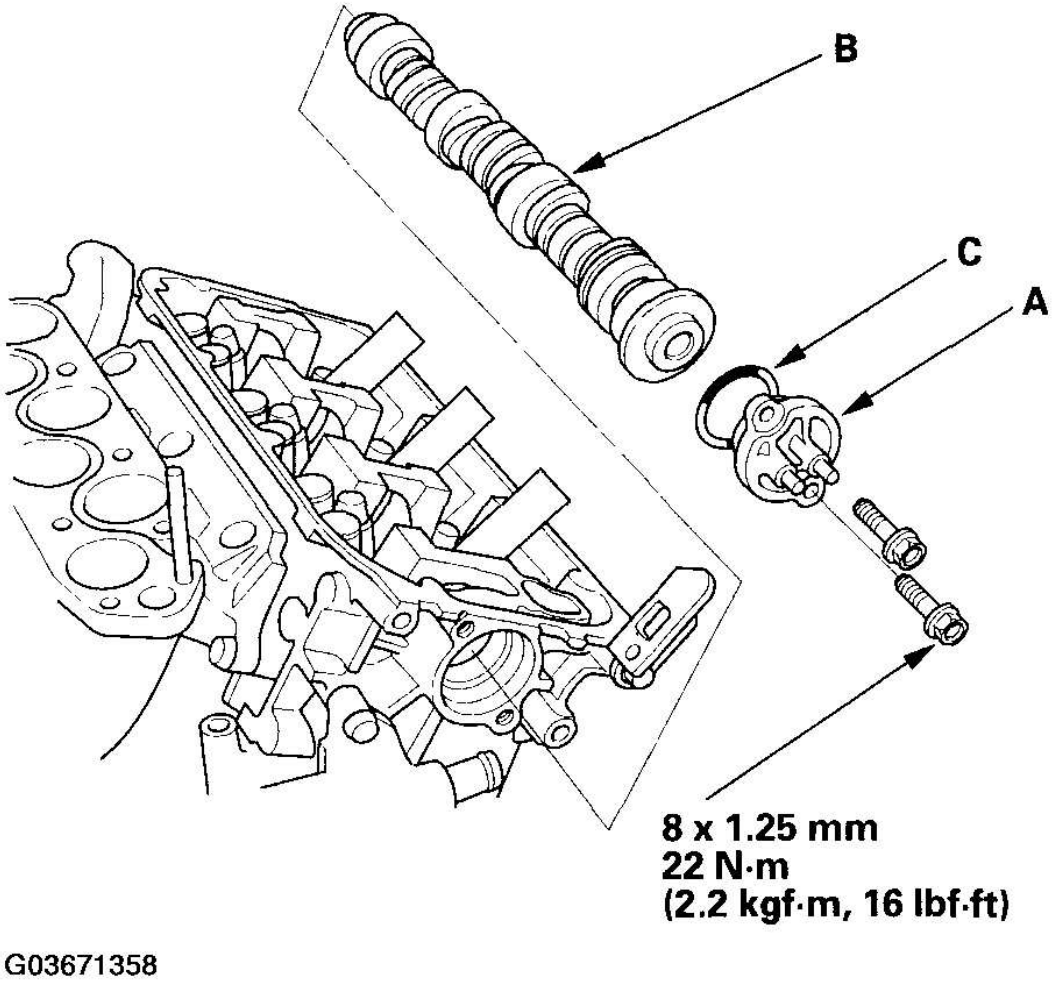


Fig. 92: Identifying Thrust Cover And Rear Camshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the rear camshaft in the reverse order of removal with a new O-ring (C). Apply new engine oil to the journals and camshaft lobes.
10. Apply new engine oil to the threads of the camshaft pulley mounting bolt, then install the rear camshaft pulley (see step 11).
11. Install the rocker arm assembly, then tighten the mounting bolts (see step 8 .
12. Install the timing belt (see **TIMING BELT INSTALLATION**).

13. Adjust the valve clearance (see **VALVE CLEARANCE ADJUSTMENT**).
14. Fill the radiator with engine coolant and bleed the air out (see step 8 in **COOLANT REPLACEMENT**).
15. Do the crankshaft position (CKP) pattern clear/CKP pattern learn procedure (see **CKP PATTERN CLEAR/CKP PATTERN LEARN**).

CYLINDER HEAD INSPECTION FOR WARPAGE

1. Remove the cylinder head (see **CYLINDER HEAD REMOVAL**).
2. Inspect the camshaft (see **CAMSHAFT INSPECTION**).
3. Check the cylinder head for warpage. Measure along the edges, and three ways across the center.
   - If warpage is less than 0.05 mm (0.002 in.), cylinder head resurfacing is not required.
   - If warpage is between 0.05 mm (0.002 in.) and 0.2 mm (0.008 in.), resurface the cylinder head.
   - Maximum resurface limit is 0.2 mm (0.008 in.) based on a height of 121 mm (4.76 in.).

   Cylinder Head Height

   Standard (New): 120.95-121.05 mm (4.762-4.766 in.)

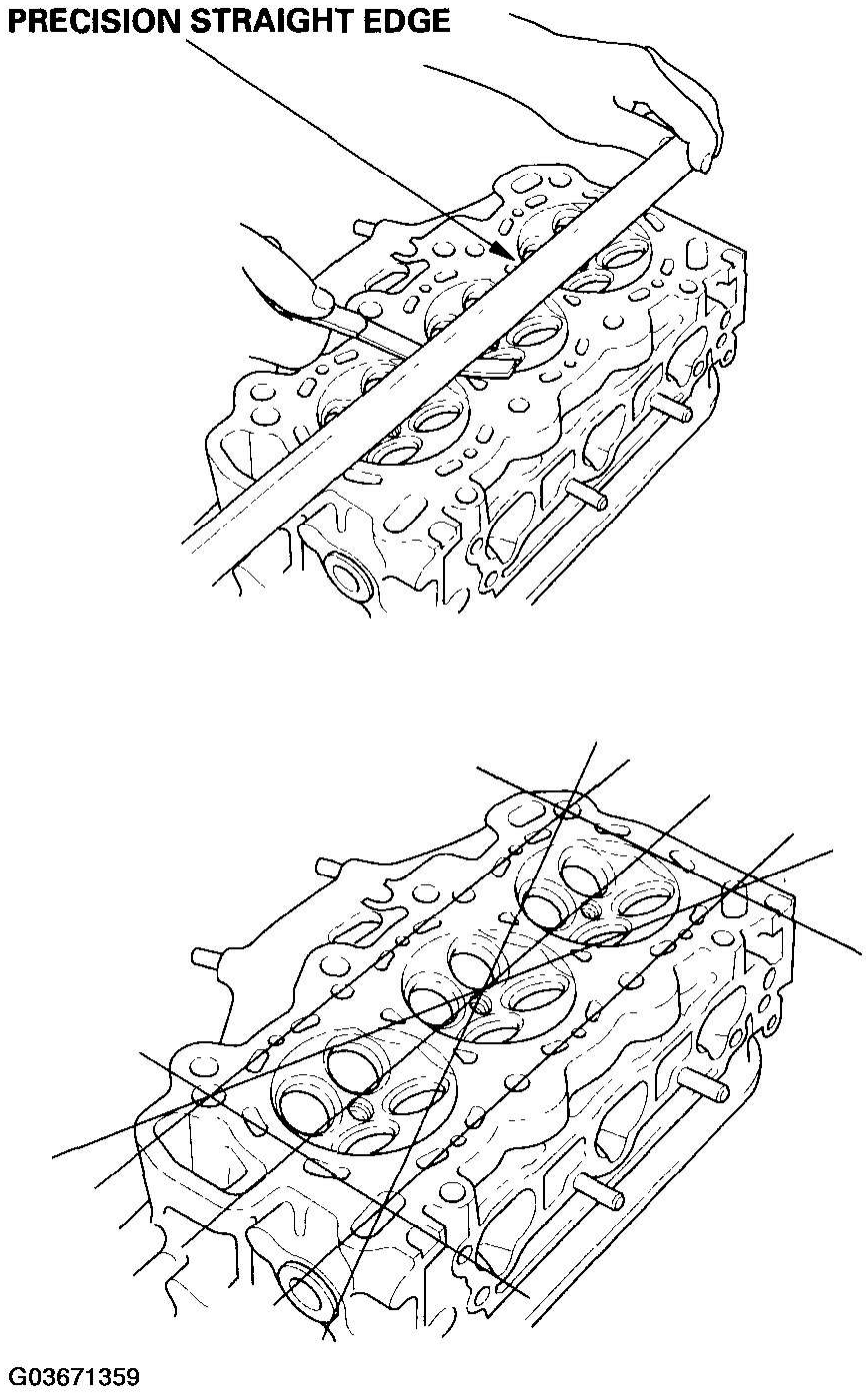


Fig. 93: Measuring Cylinder Head Height
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ROCKER ARM ASSEMBLY REMOVAL

1. Remove the cylinder head cover (see **CYLINDER HEAD COVER REMOVAL**).
2. Loosen the adjusting screws (A).

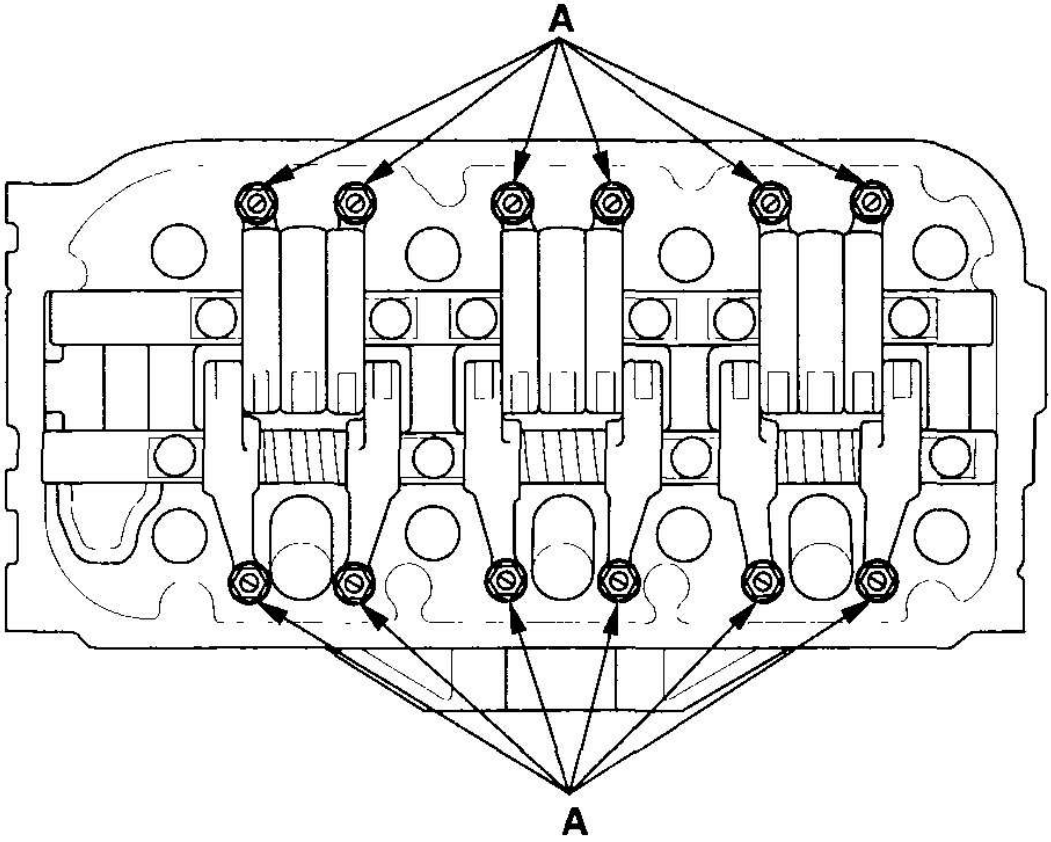


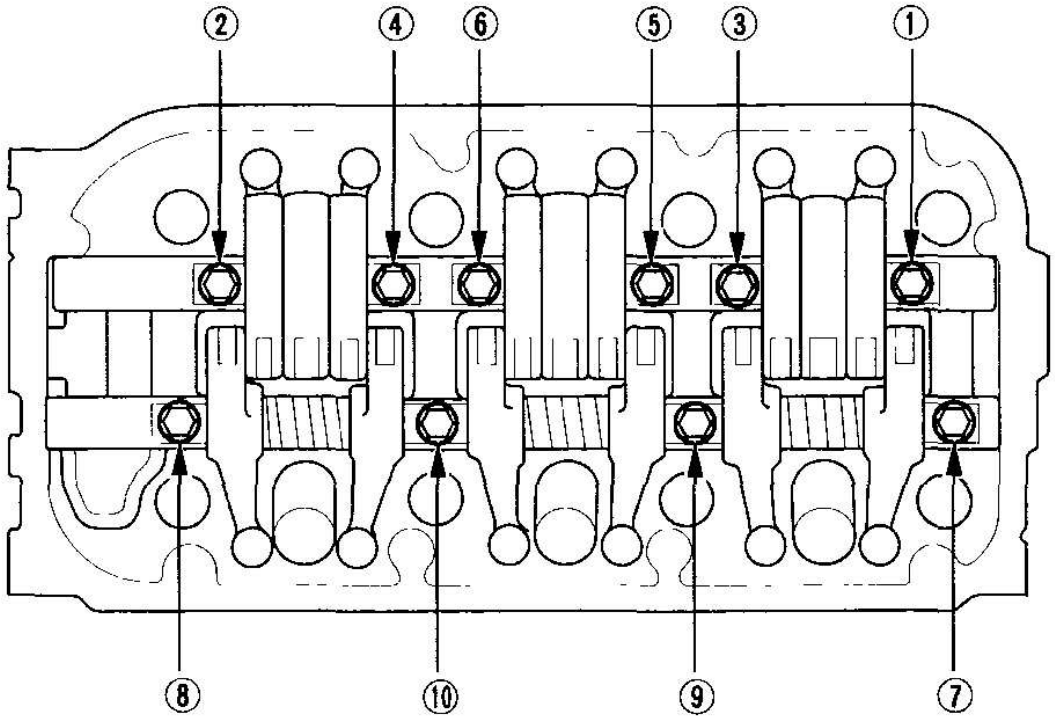
Fig. 94: Loosening Adjusting Screws
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the bolts and the rocker arm assembly.

   -1 Unscrew the rocker shaft mounting bolts two turns at a time, in a crisscross pattern, to prevent damaging the valves or rocker arm assembly.

   -2 When Identifying the rocker arm assembly, do not remove the rocker

shaft mounting bolts. The bolts will keep the springs and the rocker arms on the shafts.



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Fig. 95: Identifying Rocker Arm Assembly In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ROCKER ARM AND SHAFT DISASSEMBLY/REASSEMBLY

NOTE:

- **Identify parts as they are removed so they can be reinstalled in their original locations.**
- **Inspect the rocker shafts and rocker arms (see ROCKER ARM AND SHAFT INSPECTION).**
- **Rocker arms must be installed in the same positions if reused.**
- **When removing or installing the rocker arm assembly,**

do not remove the rocker shaft mounting bolts. The bolts will keep the springs and rocker arms on the shaft.

- **Bundle the intake rocker arms with rubber bands to keep them together as a set.**
- **Prior to reassembling, clean all the parts in solvent, dry them and apply new engine oil to any contact points.**
- **When replacing the intake rocker arm assembly, remove the fastening hardware from the new intake rocker arm assembly.**

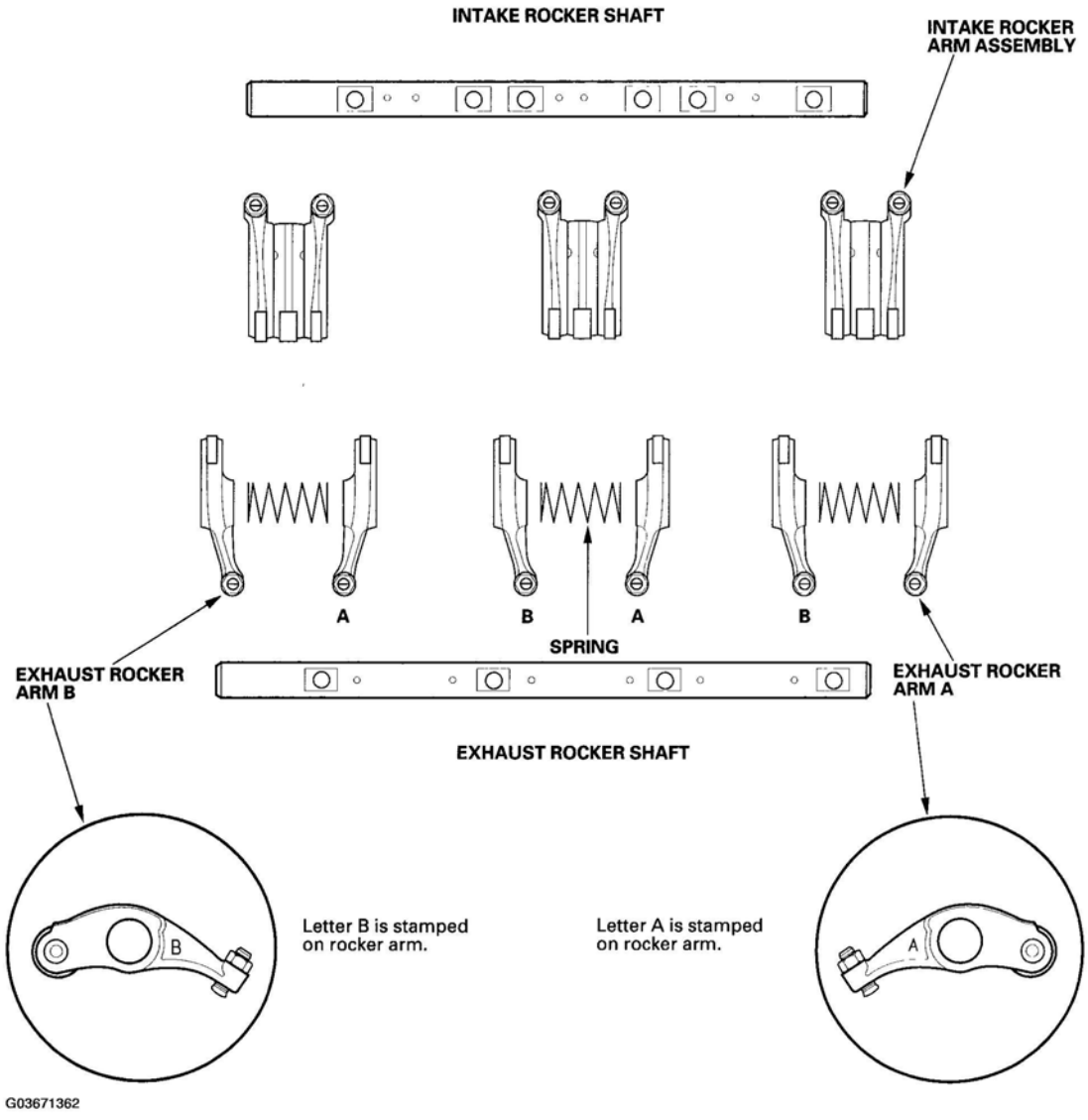
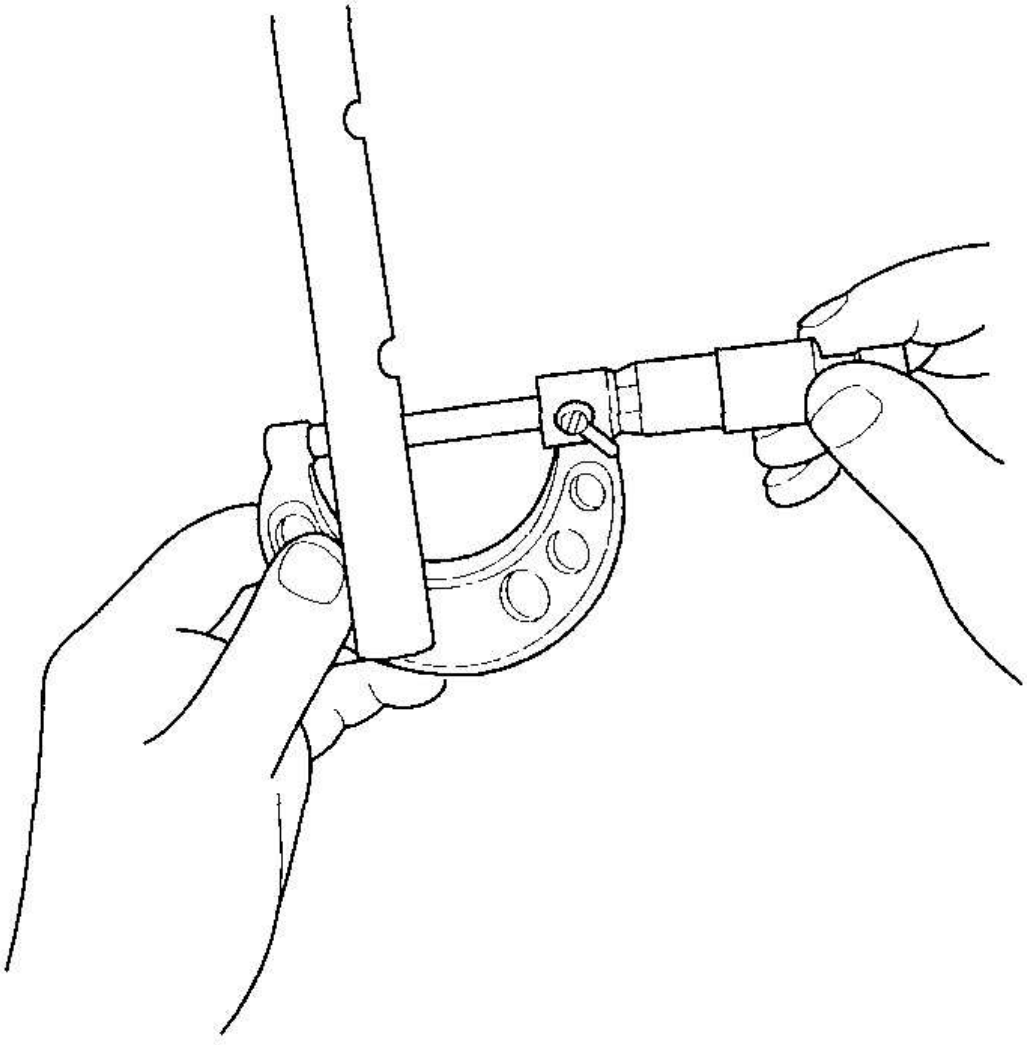


Fig. 96: Disassembly And Reassembly Of Rocker Arm And Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ROCKER ARM AND SHAFT INSPECTION

1. Remove the rocker arm assembly (see **CYLINDER HEAD INSPECTION FOR WARPAGE**), then disassemble the rocker arm assembly (see **ROCKER ARM AND SHAFT DISASSEMBLY/REASSEMBLY**).
2. Measure the diameter of the shaft at the first rocker location.



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Fig. 97: Measuring Shaft Diameter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Zero the gauge (A) to the shaft diameter.

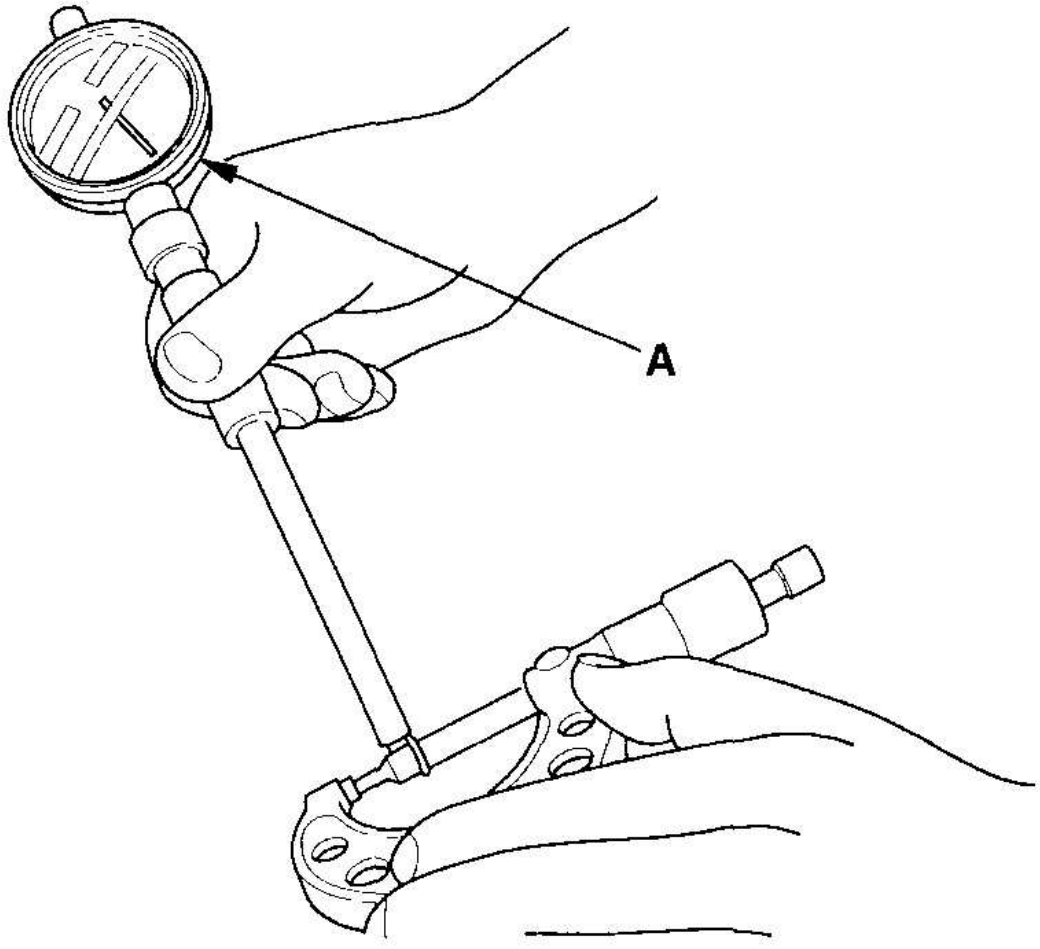


Fig. 98: Identifying Shaft Diameter Is At Zero Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the inside diameter of the rocker arm, and check it for an out-of-round condition.

Rocker Arm-to-Shaft Clearance

Standard (New):

Intake: 0.026-0.067 mm (0.0010-0.0026 in.)

Service Limit: 0.067 mm (0.0026 in.)

Standard (New):

Exhaust: 0.026-0.077 mm (0.0010-0.0030 in.)
Service Limit: 0.077 mm (0.0030 in.)

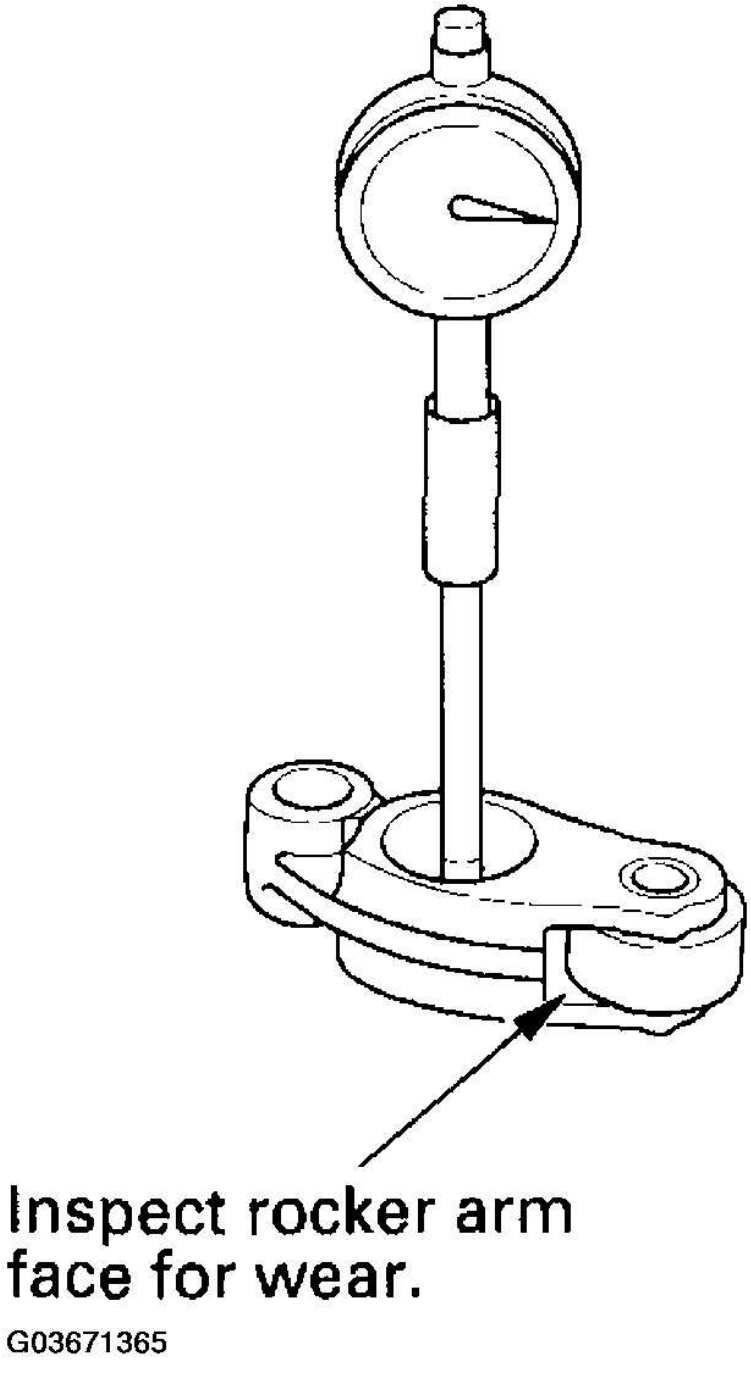


Fig. 99: Measuring Inside Diameter Of Rocker Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Repeat for all rockers and both shafts. If the clearance is over the limit, replace the rocker shaft and all over-tolerance rocker arms. If any intake rocker arm needs replacement, replace all three rocker arms in that set (primary, mid, and secondary).

VTEC Rocker Arms

6. Inspect the rocker arm synchronizing pistons (A).

   Slide them into the rocker arms. If they do not move smoothly, replace the rocker arm set.

NOTE:

- **Apply new engine oil to the pistons when reassembling.**
- **When reassembling the primary rocker arm (B), carefully apply air pressure to the oil passage of the rocker arm.**

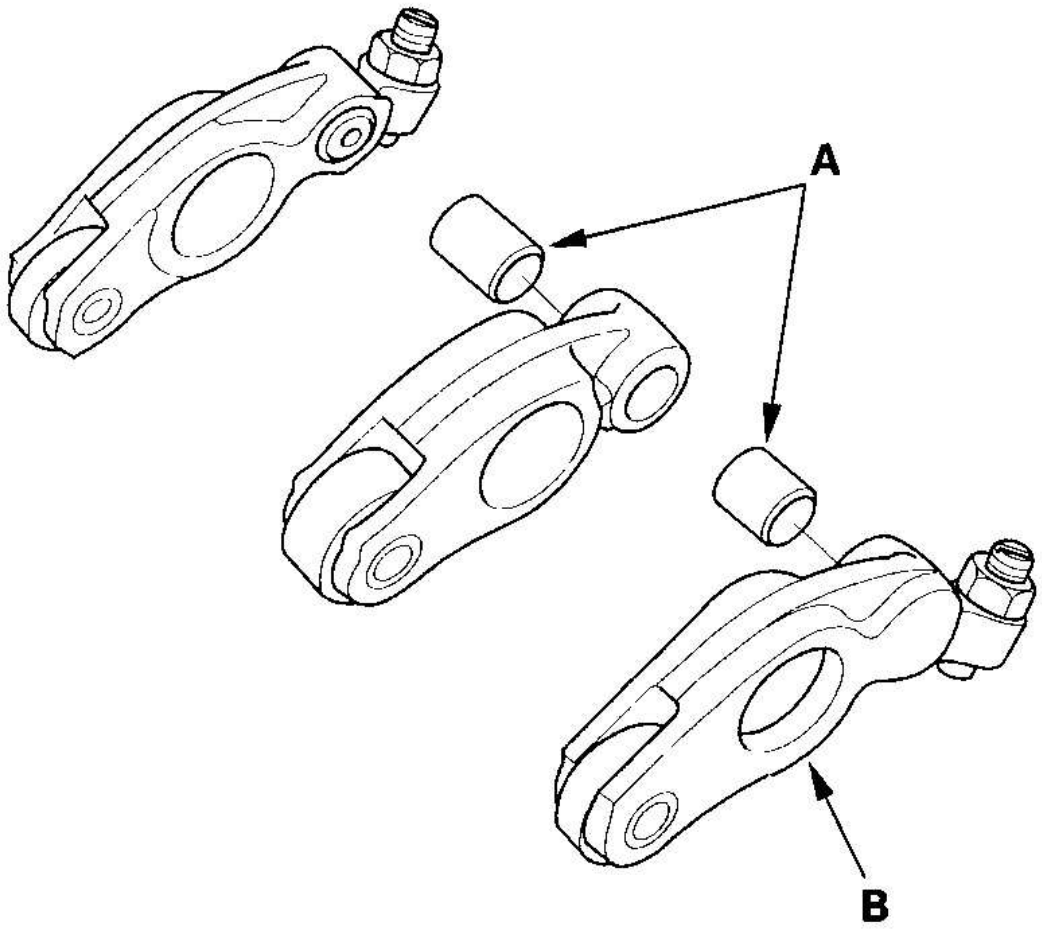


Fig. 100: Inspecting Rocker Arm Synchronizing Pistons
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the rocker arm assembly (see **CAMSHAFT, ROCKER ARM, CAMSHAFT SEAL, AND PULLEY INSTALLATION**).

CAMSHAFT INSPECTION

1. Remove the cylinder head (see **CYLINDER HEAD REMOVAL**).
2. Remove the rocker arms (see **CYLINDER HEAD INSPECTION FOR WARPAGE**).

3. Put the rocker shafts on the cylinder head, then tighten the bolts to the specified torque.

NOTE: Apply new engine oil to the threads and flange of the exhaust rocker shaft mounting bolts.

Specified torque

8 x 1.25 mm: 24 N.m (2.4 kgf.m, 17 lbf.ft)

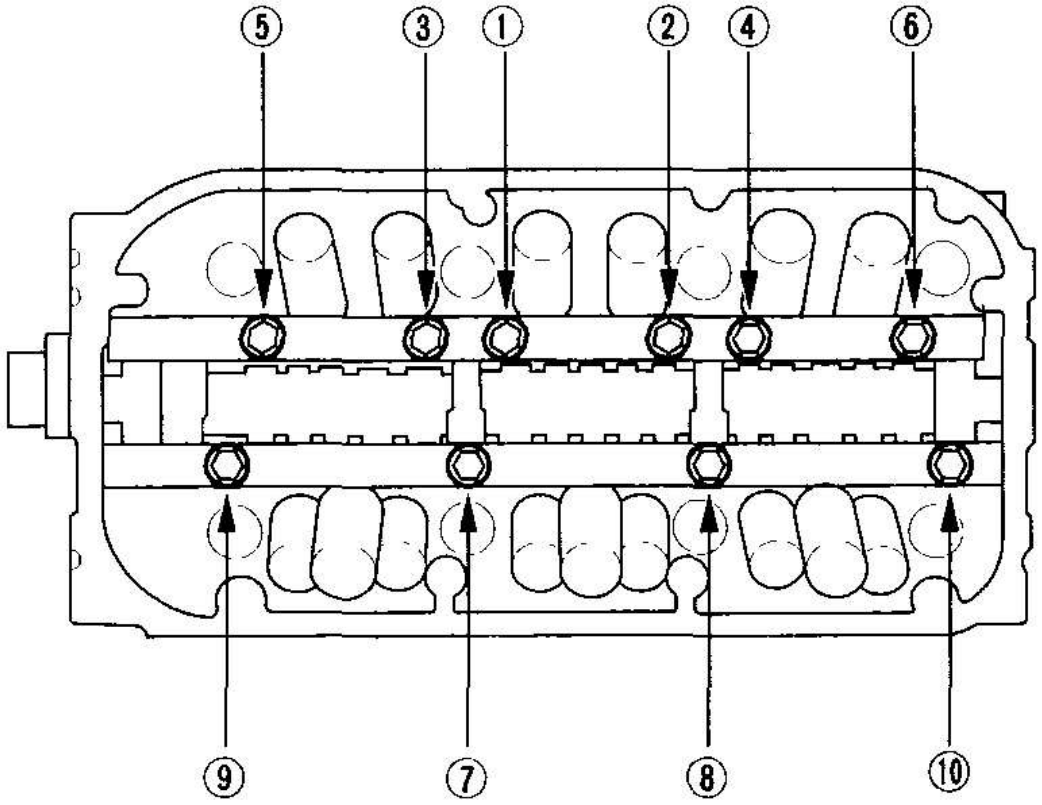


Fig. 101: Tightening Cylinder Head In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Seat the camshaft by pushing it toward the rear of the cylinder head.

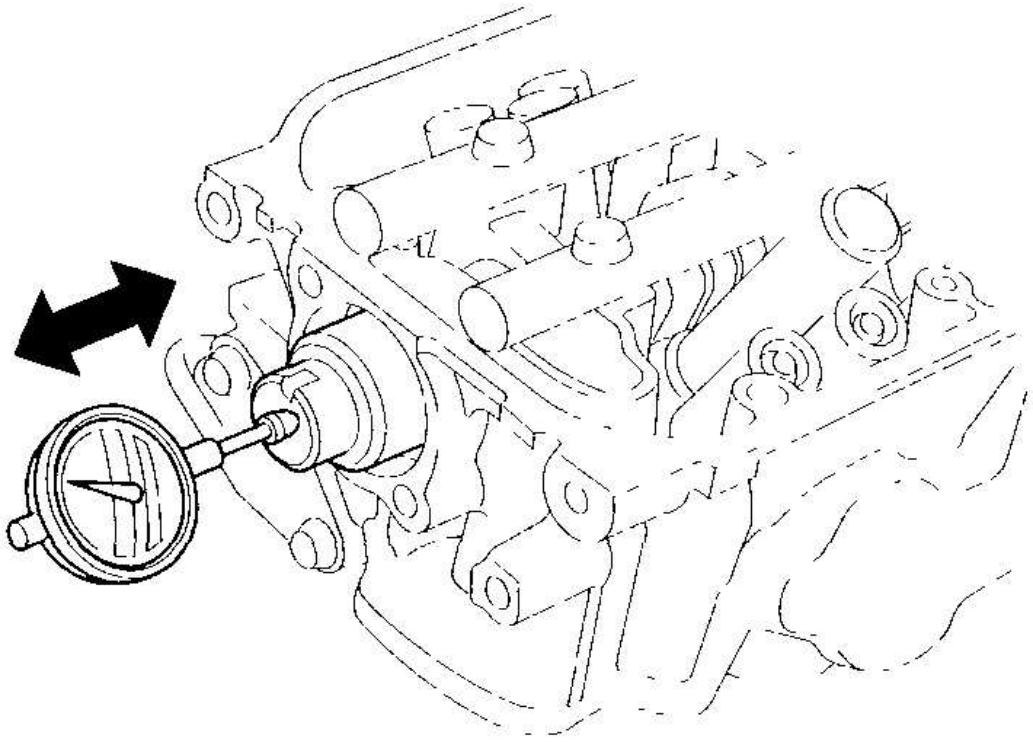
5. Zero the dial indicator against the end of the camshaft. Push the camshaft back and forth and read the end play. If the end play is beyond the service limit, replace the thrust cover and recheck.

   If it is still beyond the service limit, replace the camshaft.

   Camshaft End Play

   Standard (New): 0.05-0.20 mm (0.002-0.008 in.)

   Service Limit: 0.20 mm (0.008 in.)



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Fig. 102: Checking Camshaft Endplay
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the camshaft thrust cover (A), then pull out the camshaft (B).

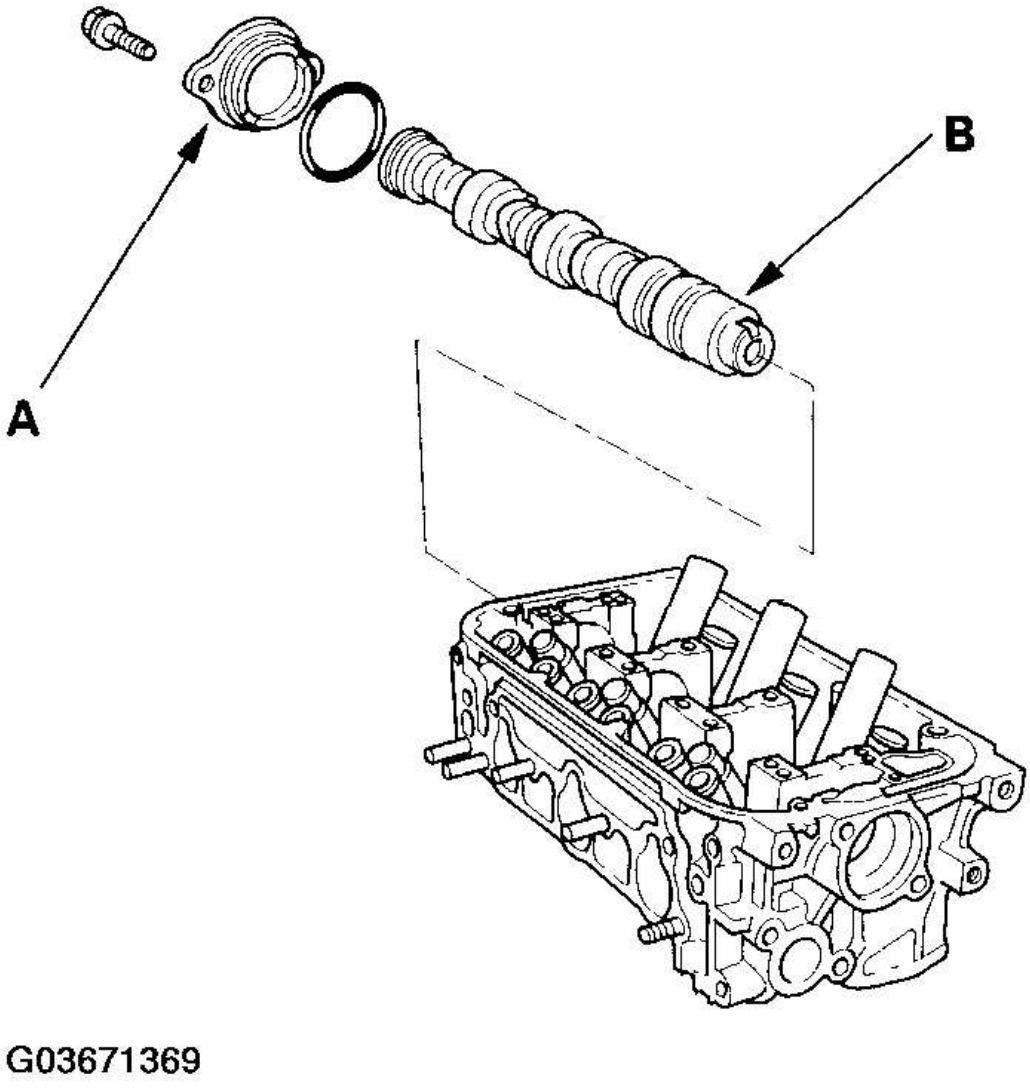


Fig. 103: Identifying Camshaft Thrust Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Wipe the camshaft clean, then inspect the lift ramps. Replace the camshaft if any lobes are pitted, scored, or excessively worn.
8. Measure the diameter of each camshaft journal.

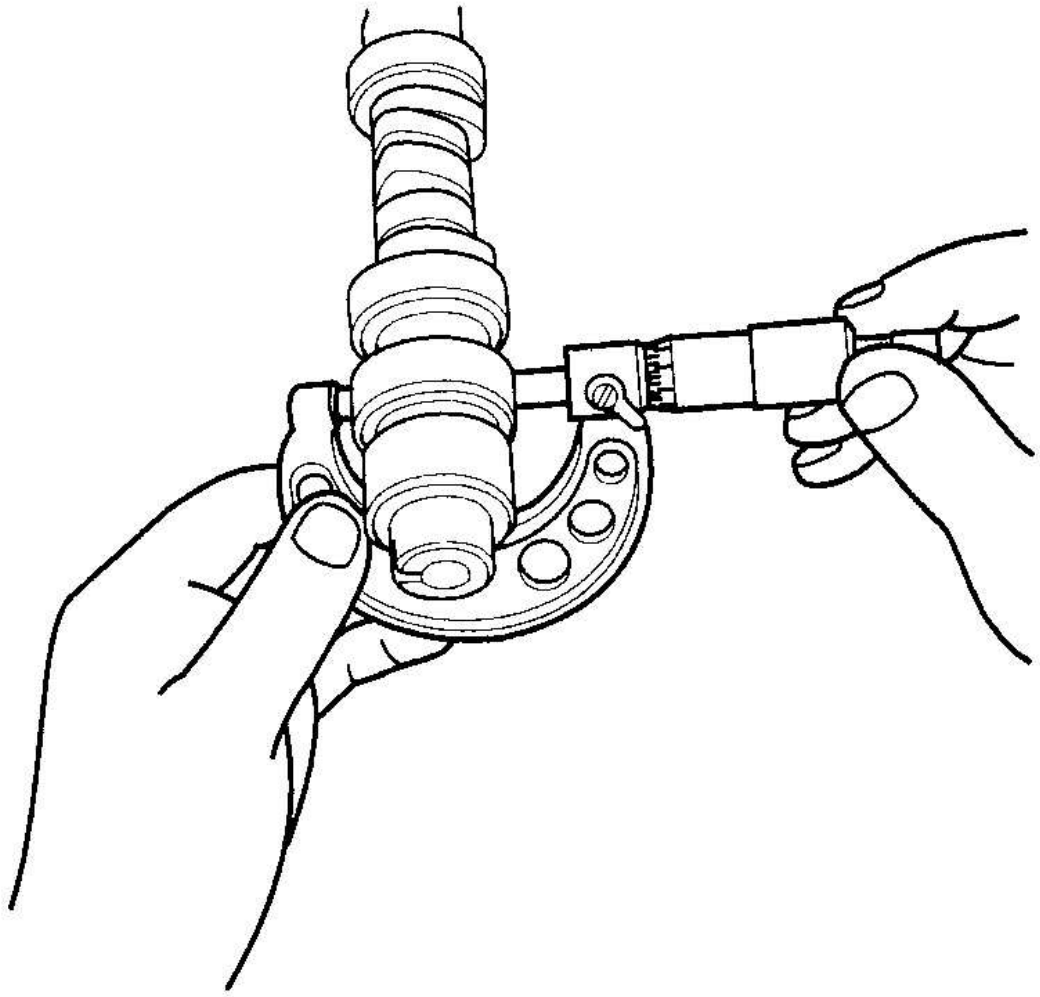
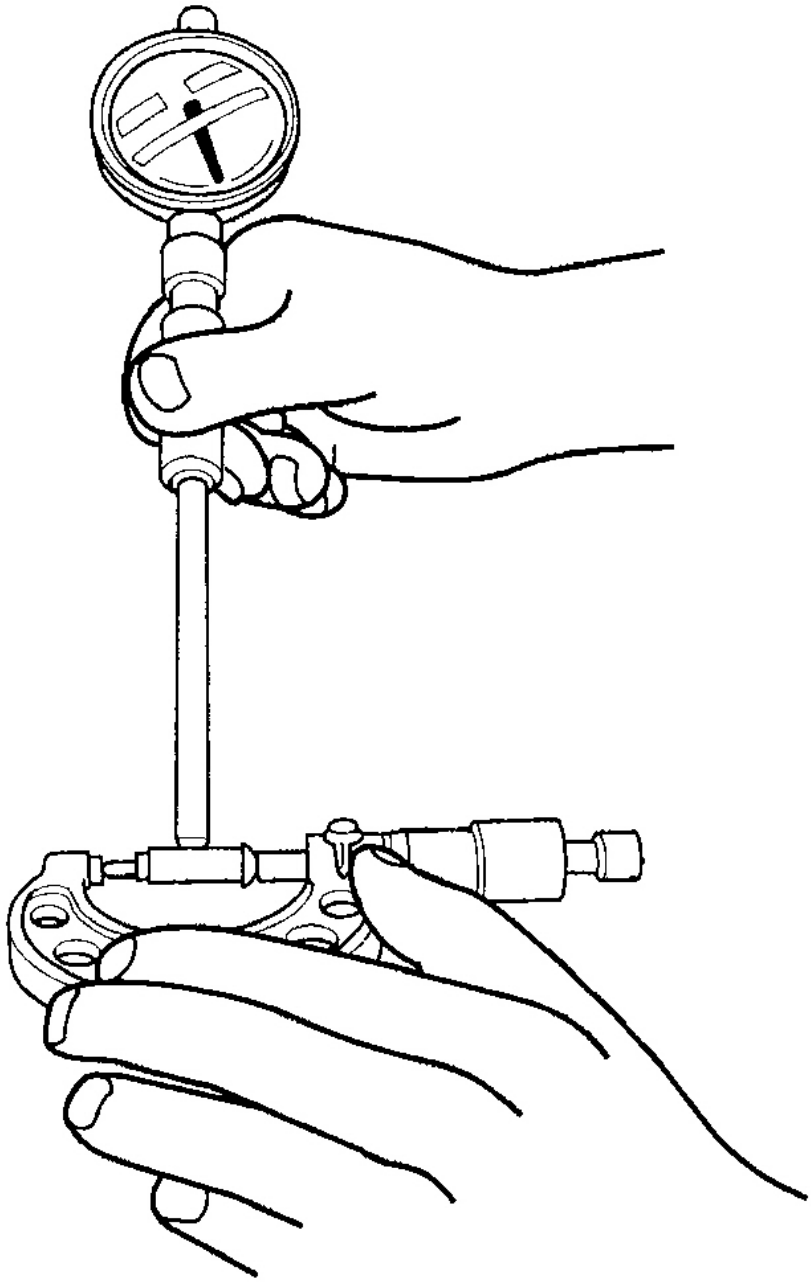


Fig. 104: Measuring Camshaft Journal Diameter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Zero the gauge to the journal diameter.



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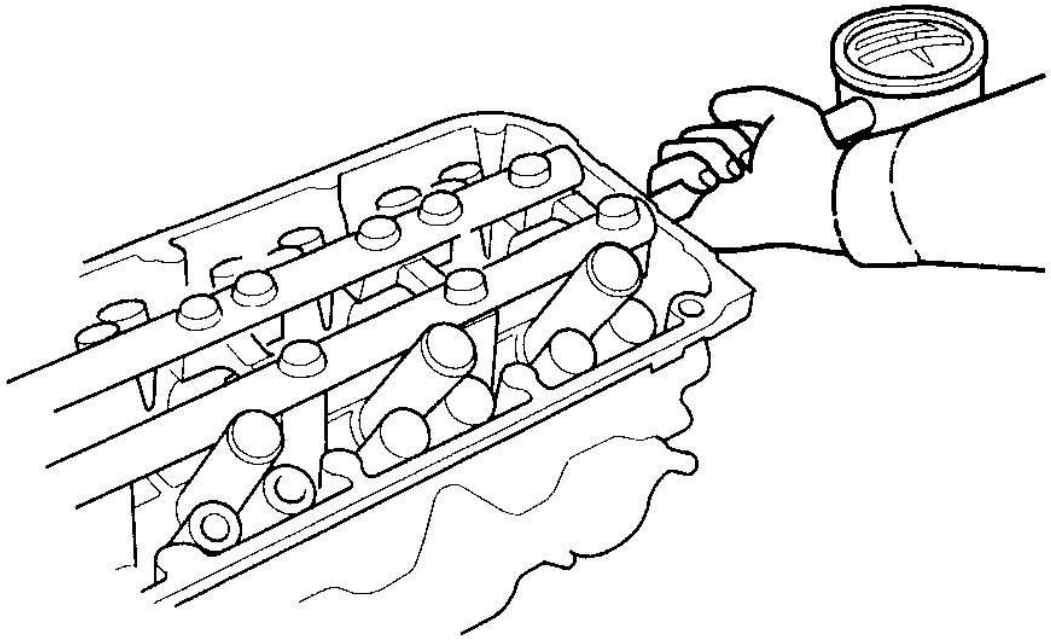
Fig. 105: Inspecting Camshaft Journal Diameter With Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Clean the camshaft bearing surfaces in the cylinder head. Measure the inside diameter of each camshaft bearing surface, and check for an out-of-round condition.
    - If the camshaft-to-holder clearance is within limits, go to step 12.
    - If the camshaft-to-holder clearance is beyond the service limit and the camshaft has been replaced, replace the cylinder head.
    - If the camshaft-to-holder clearance is beyond the service limit and the camshaft has not been replaced, go to step 11.

Camshaft-to-Holder Oil Clearance

Standard (New): 0.050-0.089 mm (0.0020-0.0035 in.)

Service Limit: 0.15 mm (0.006 in.)



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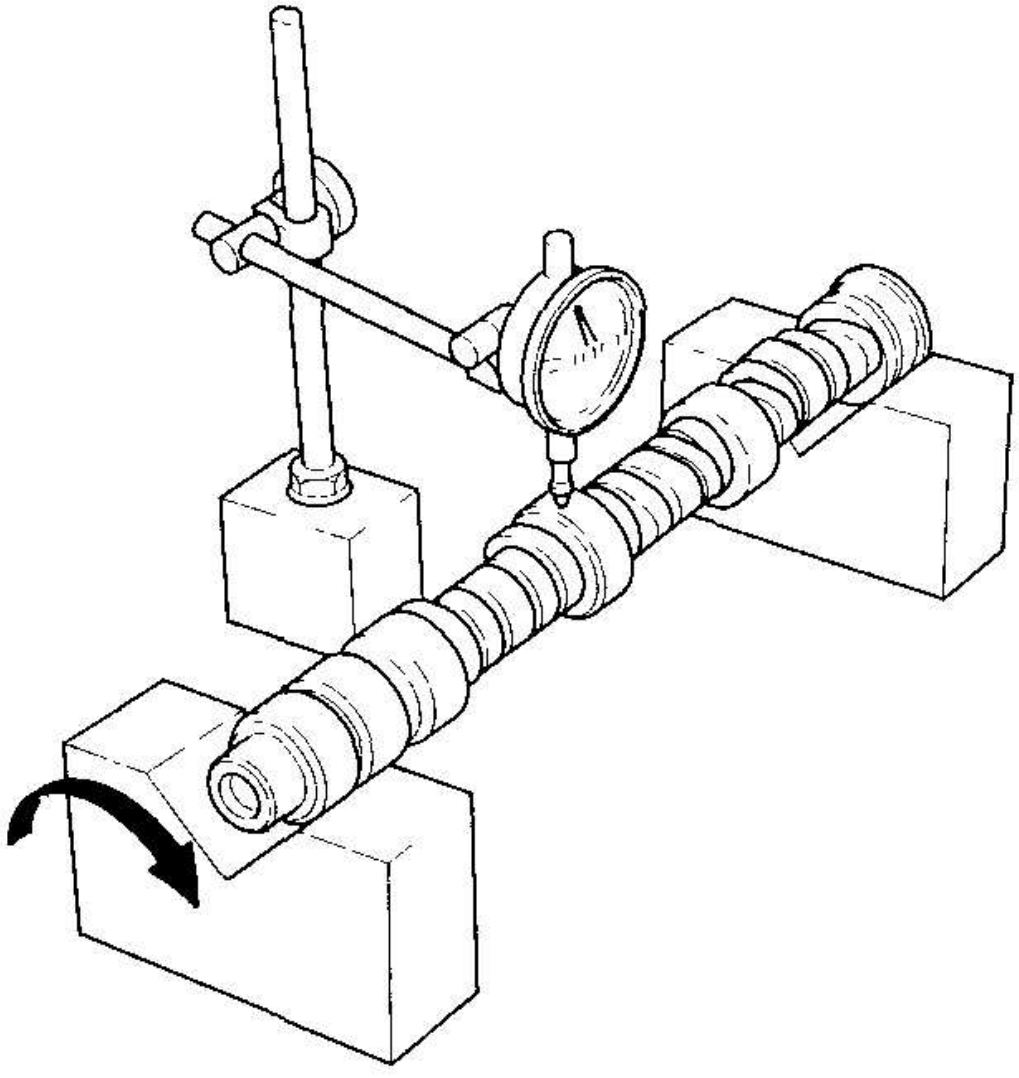
Fig. 106: Measuring Inside Diameter Of Camshaft Bearing Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Check total runout with the camshaft supported on V-blocks.
    - If the total runout of the camshaft is within the service limit, replace the cylinder head.
    - If the total runout is beyond the service limit, replace the camshaft and recheck the oil clearance. If the oil clearance is still out of tolerance, replace the cylinder head.

    Camshaft Total Runout

    Standard (New): 0.03 mm (0.001 in.) max.

    Service Limit: 0.04 mm (0.002 in.)



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Fig. 107: Checking Total Runout With Camshaft Supported On V-Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Measure cam lobe height.

CAM LOBE HEIGHT STANDARD (NEW)

	INTAKE	EXHAUST
PRI	35.041 mm (1.3796 in.)	36.326 mm (1.4302 in.)
MID	36.445 mm (1.4348 in.)	
SEC	35.284 mm (1.3891 in.)	

PRI: Primary MID: Mid SEC: Secondary

IN: Intake EX: Exhaust T/B: Timing belt

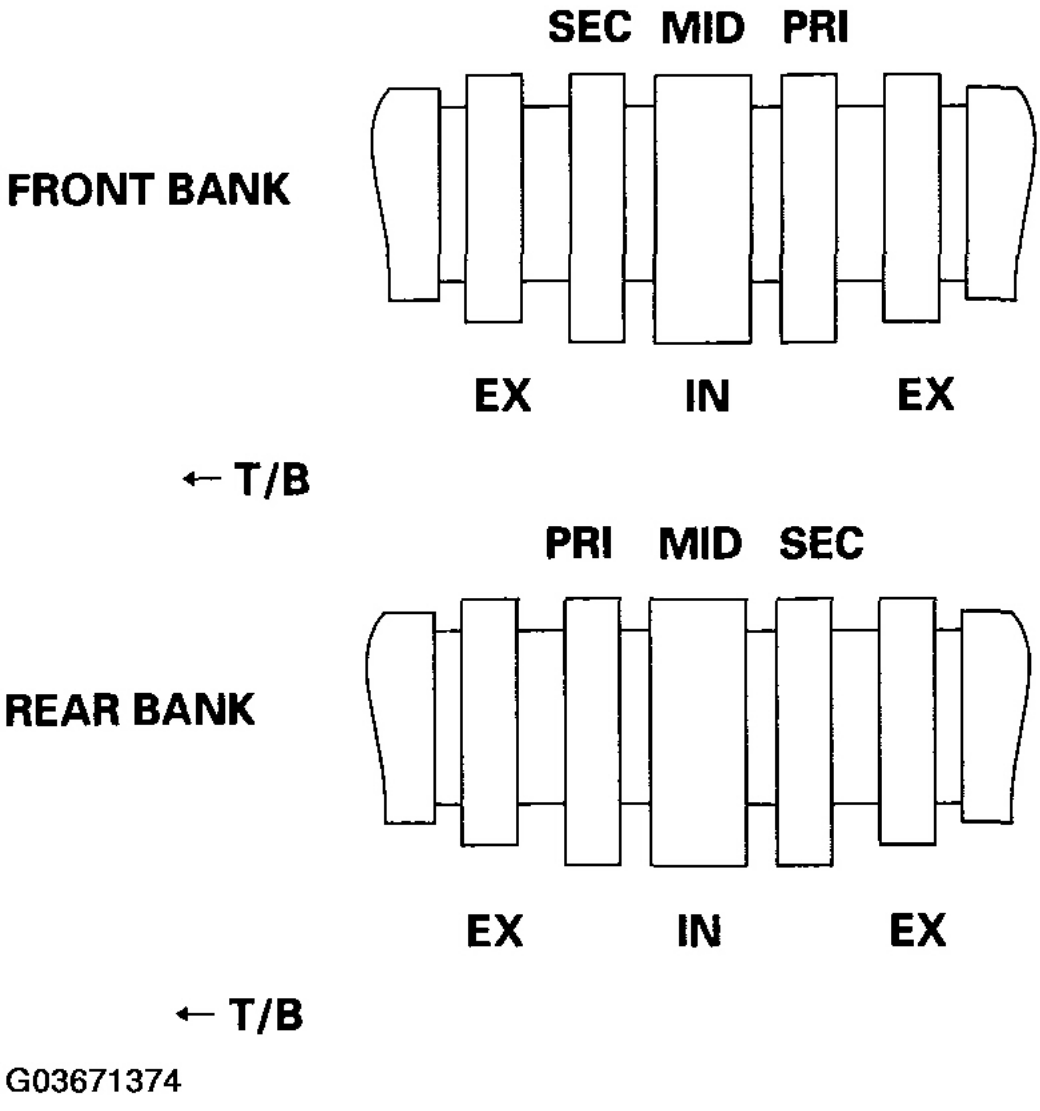


Fig. 108: Identifying Intake And Exhaust Cam Lobe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VALVE, SPRING, AND VALVE SEAL REMOVAL

Special Tools Required

Valve spring compressor attachment

07757-PJ1010A

Identify the valves and valve springs as they are removed so that each item can be reinstalled in its original position.

1. Remove the cylinder head (see **CYLINDER HEAD REMOVAL**).
2. Using an appropriate-sized socket (A) and plastic mallet (B), lightly tap the valve retainer to loosen the valve cotters.

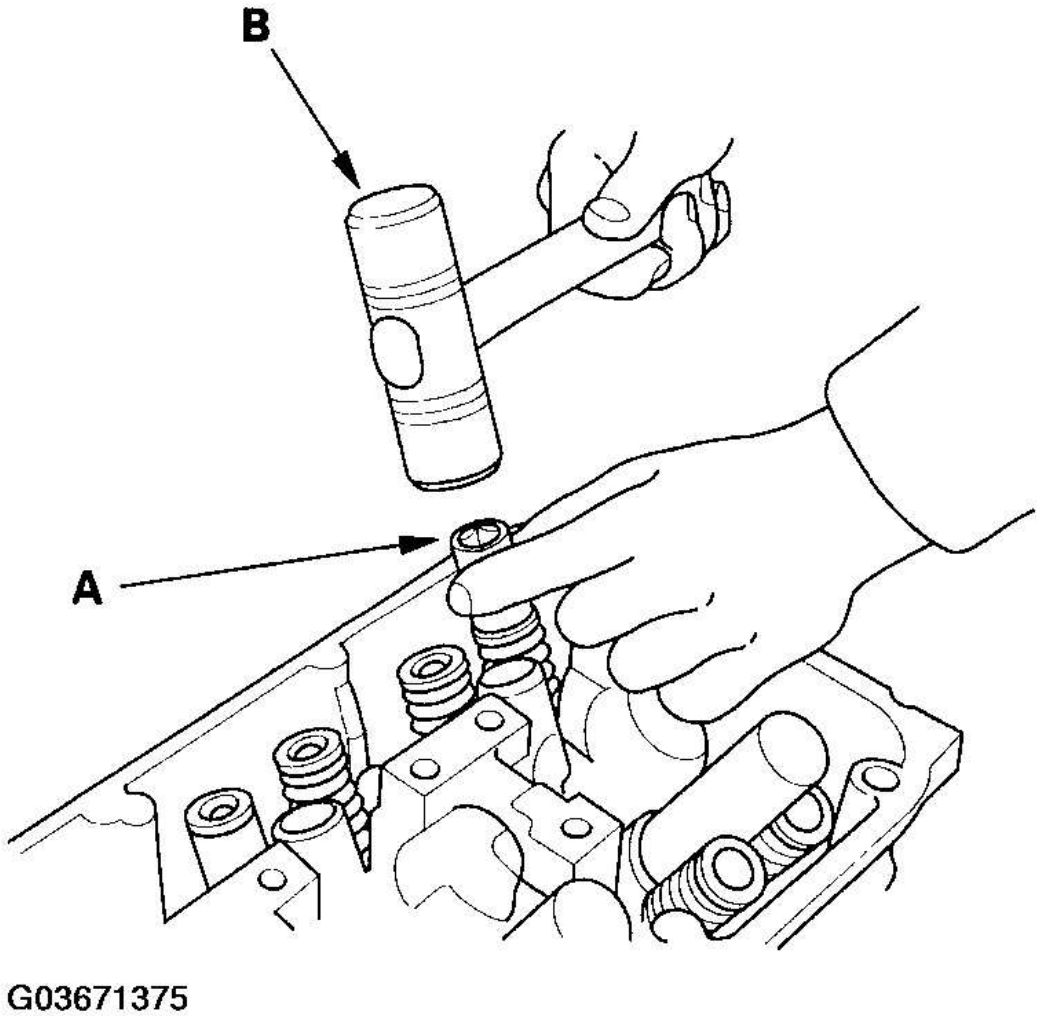


Fig. 109: Tapping Valve Retainer Using Appropriate-Sized Socket And

Plastic Mallet
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the valve spring compressor. Compress the spring and remove the valve cotters.

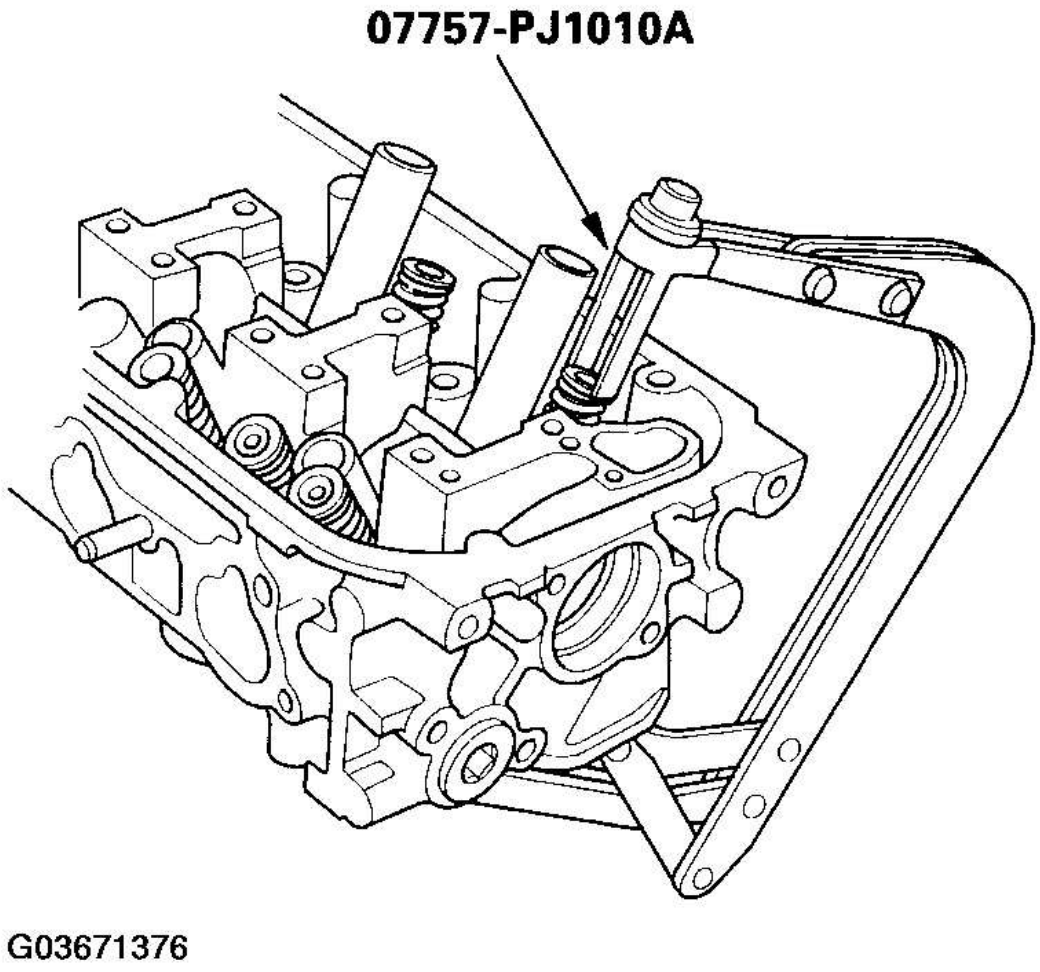
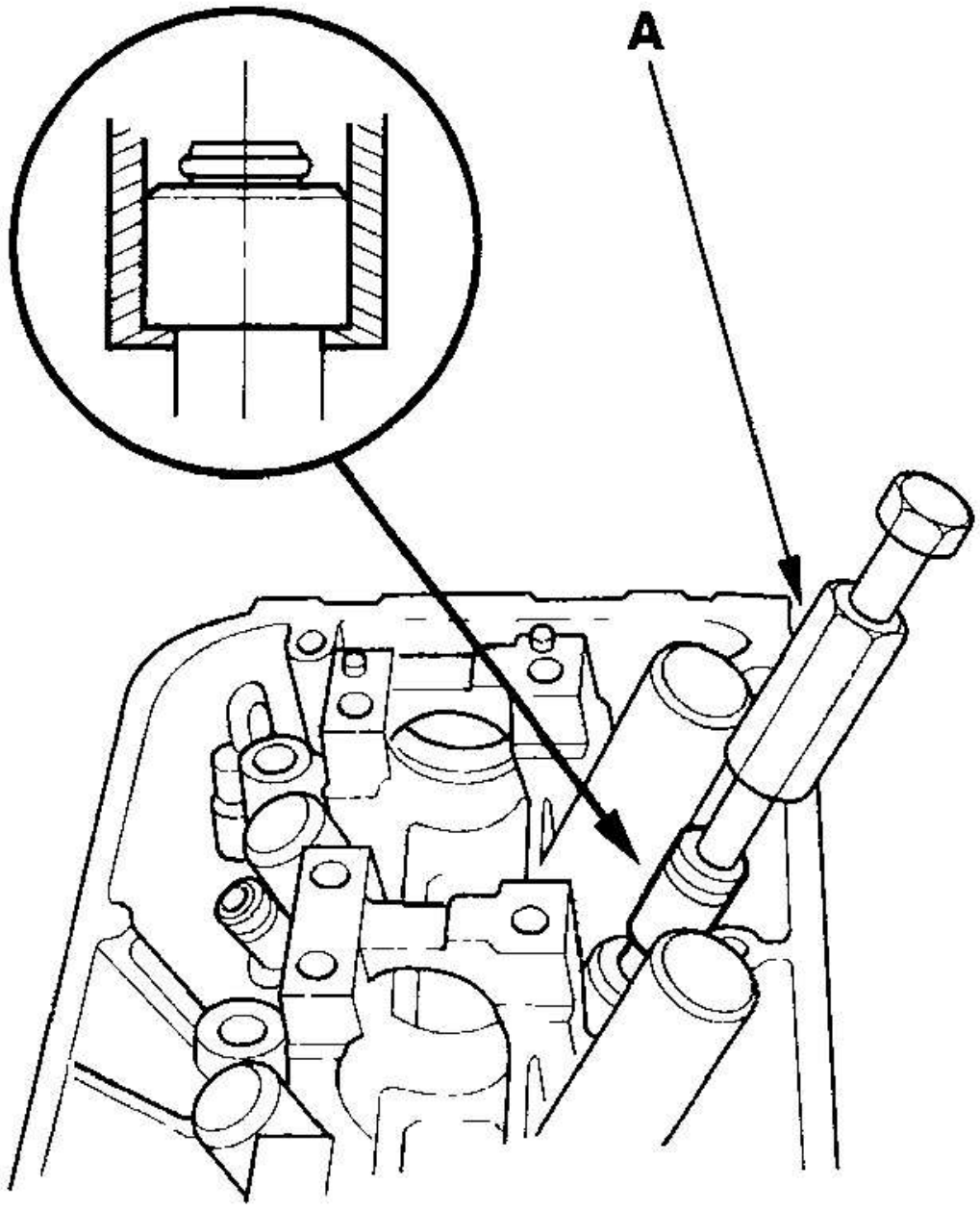


Fig. 110: Identifying Valve Spring Compressor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the valve spring compressor, then remove the valve retainer, valve spring, and valve.

5. Install the valve guide seal remover (A).



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Fig. 111: Identifying Valve Guide Seal Remover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the valve seal.

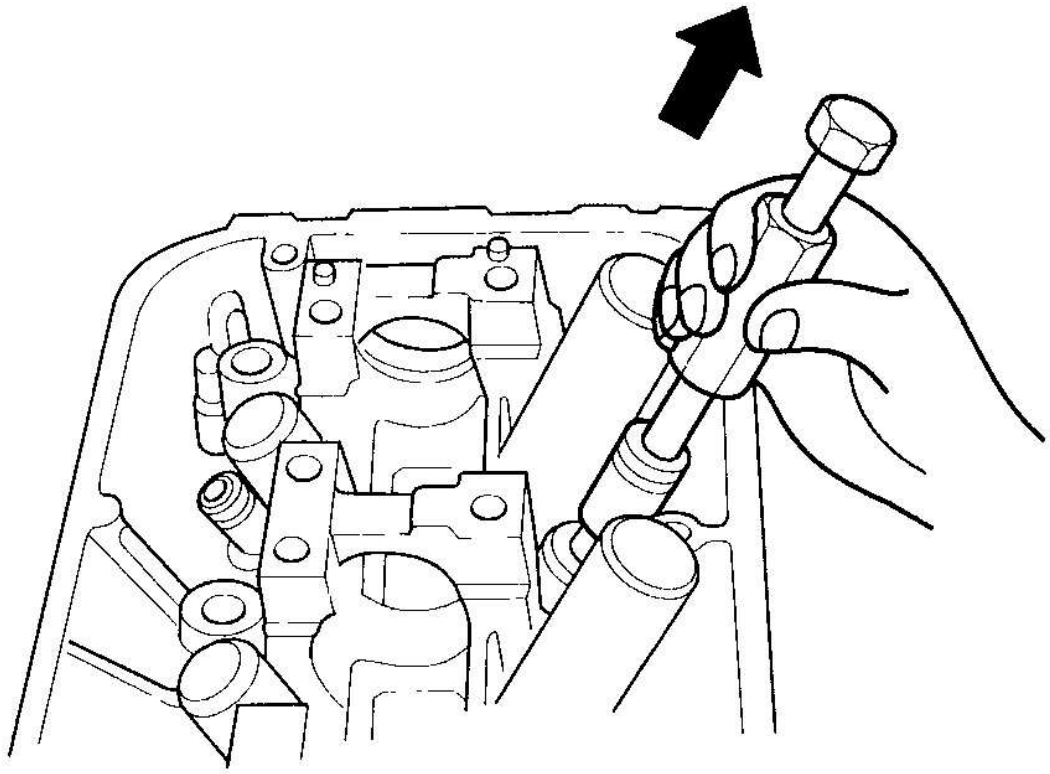


Fig. 112: Identifying Valve Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VALVE INSPECTION

1. Remove the valves (see **VALVE, SPRING, AND VALVE SEAL REMOVAL**).
2. Measure the valve in these areas.

Intake Valve Dimensions

A Standard (New): 34.90-35.10 mm (1.374-1.382 in.)
B Standard (New): 115.70-116.30 mm (4.555-4.579 in.)
C Standard (New): 5.485-5.495 mm (0.2159-0.2163 in.)
C Service Limit: 5.455 mm (0.2148 in.)

Exhaust Valve Dimensions

A Standard (New): 29.90-30.10 mm (1.177-1.185 in.)
B Standard (New): 113.90-114.50 mm (4.484-4.508 in.)
C Standard (New): 5.450-5.460 mm (0.2146-0.2150 in.)
C Service Limit: 5.420 mm (0.2134 in.)

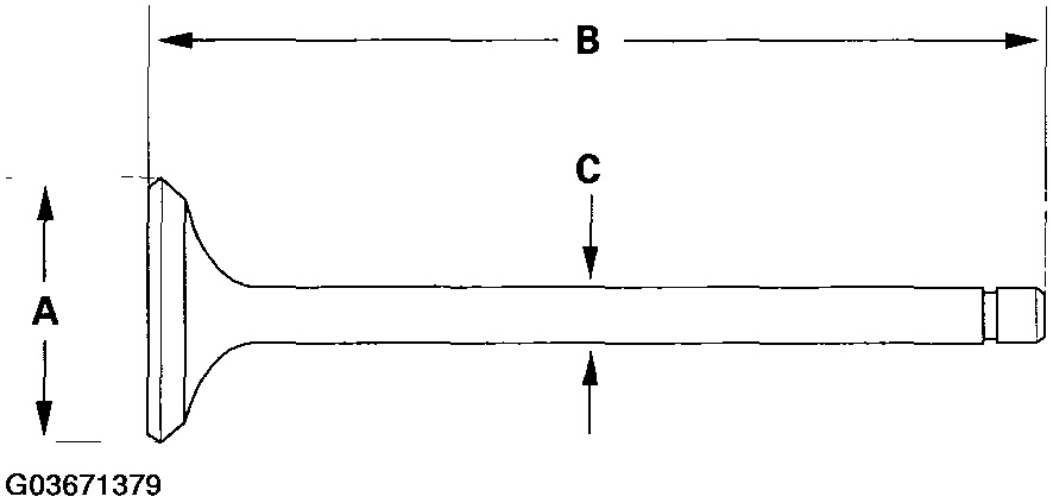


Fig. 113: Measuring Intake And Exhaust Valve Dimensions
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VALVE STEM-TO-GUIDE CLEARANCE INSPECTION

1. Remove the valves (see **VALVE, SPRING, AND VALVE SEAL REMOVAL**).
2. Slide the valve out of its guide about 10 mm (0.39 in.), then measure the guide-to-stem clearance with a dial indicator while rocking the stem in the direction

of normal thrust (wobble method).

- If the measurement exceeds the service limit, recheck it using a new valve.
- If the measurement is now within the service limit, reassemble using a new valve.
- If the measurement with a new valve still exceeds the service limit, go to step 3.

Intake Valve Stem-to-Guide Clearance

Standard (New): 0.04-0.09 mm (0.002-0.004 in.)
Service Limit: 0.16 mm (0.006 in.)

Exhaust Valve Stem-to-Guide Clearance

Standard (New): 0.11 -0.16 mm (0.004-0.006 in.)
Service Limit: 0.22 mm (0.009 in.)

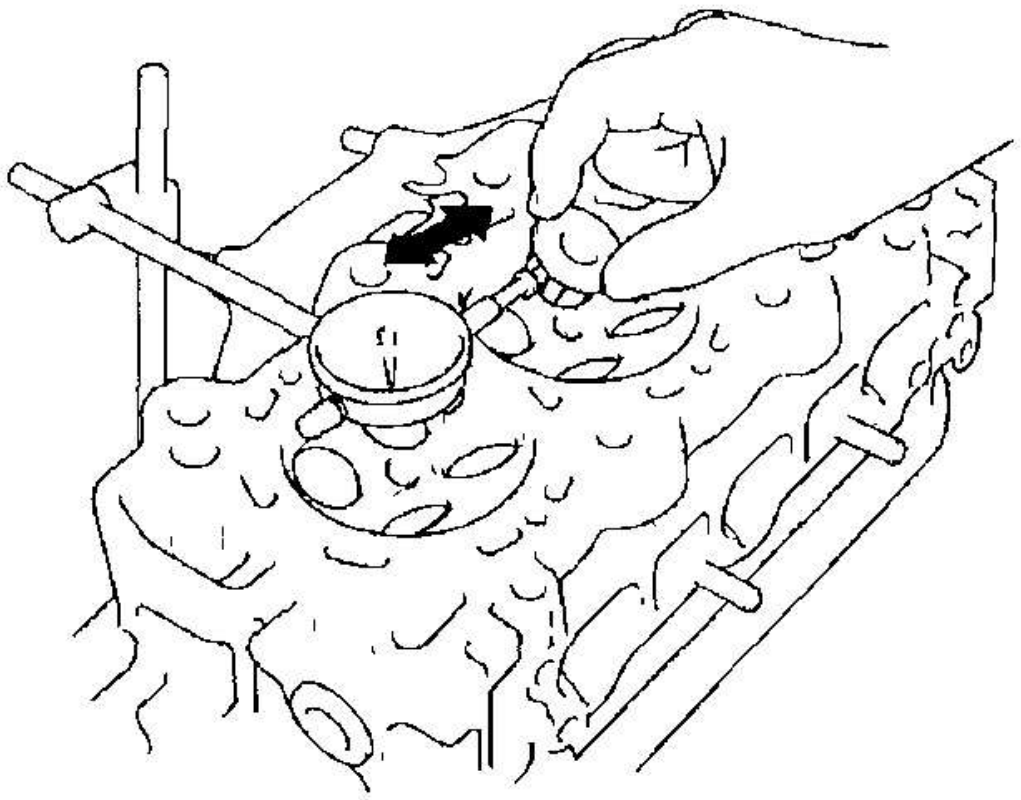


Fig. 114: Measuring Guide-To-Stem Clearance With Dial Indicator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Subtract the O.D. of the valve stem, measured with a micrometer, from the I.D. of the valve guide, measured with an inside micrometer or ball gauge.

   Take the measurements in three places along the valve stem and three places inside the valve guide.

   The difference between the largest guide measurement and the smallest stem measurement should not exceed the service limit.

Intake Valve Stem-to-Guide Clearance

Standard (New): 0.020-0.045 mm (0.0008-0.0018 in.)
Service Limit: 0.08 mm (0.003 in.)

Exhaust Valve Stem-to-Guide Clearance

Standard (New): 0.055-0.080 mm (0.0022-0.0031 in.)
Service Limit: 0.11 mm (0.004 in.)

VALVE GUIDE REPLACEMENT

Special Tools Required

- Valve guide driver, 5.5 mm 07742-0010100
- Valve guide reamer, 5.5 mm 07HAH-PJ7A100

1. Inspect valve stem-to-guide clearance (see **VALVE INSPECTION**).
2. As illustrated in **Fig. 115**, use a commercially available air-impact valve guide driver (A) modified to fit the diameter of the valve guides. In most cases, the same procedure can be done using the special tool.

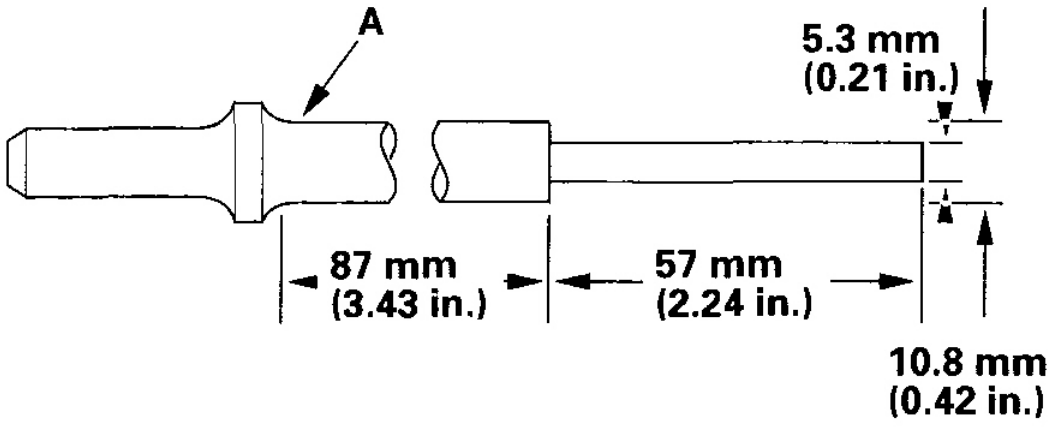
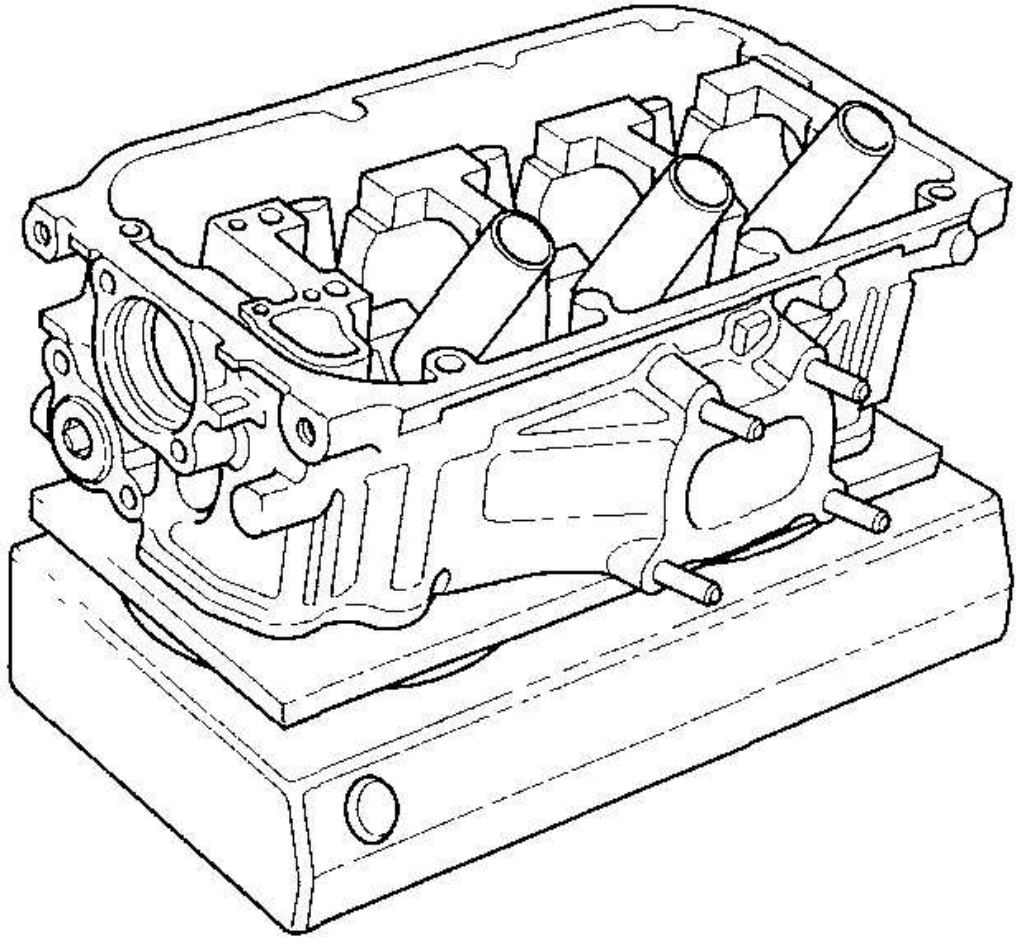


Fig. 115: Identifying Air-Impact Valve Guide Driver
Courtesy of AMERICAN HONDA MOTOR CO., INC.

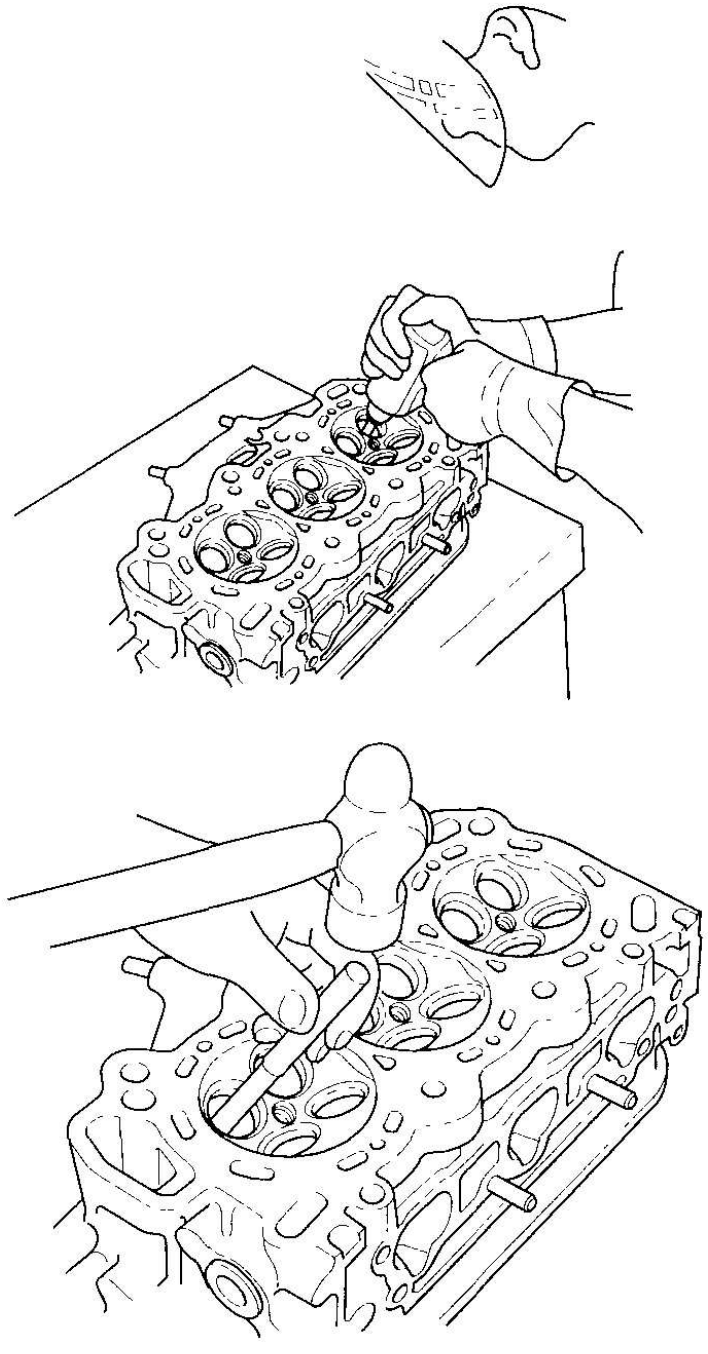
3. Select the proper replacement guides, and chill them in the freezer section of a refrigerator for about an hour.
4. Use a hot plate or oven to evenly heat the cylinder head to 300°F (150°C). Monitor the temperature with a cooking thermometer. Do not get the head hotter than 300 °F (150 °C); excessive heat may loosen the valve seats.



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Fig. 116: Heating Cylinder Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Working from the camshaft side, use the driver and an air hammer to drive the guide about 2 mm (0.1 in.) towards the combustion chamber. This will knock off some of the carbon and make removal easier. Hold the air hammer directly in line with the valve guide to prevent damaging the driver. Wear safety goggles or a face shield.
6. Turn the head over, and drive the guide out toward the camshaft side of the head.



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Fig. 117: Identifying Valve Guide
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. If a valve guide still won't move, drill it out with a 8 mm (5/16 in.) bit, then try again.

NOTE: Drill guides only in extreme cases; you could damage the cylinder head if the guide breaks.

8. Remove the new guide(s) from the freezer, one at a time, as you need them.
9. Apply a thin coat of clean engine oil to the outside of the new valve guide. Install the guide from the camshaft side of the head; use the special tool to drive the guide to the specified installed height (A) of the guide (B). If you have all 12 guides to do, you may have to reheat the head.

Valve Guide Installed Height

Intake: 21.20-22.20 mm (0.835-0.874 in.)

Exhaust: 20.63-21.63 mm (0.812-0.852 in.)

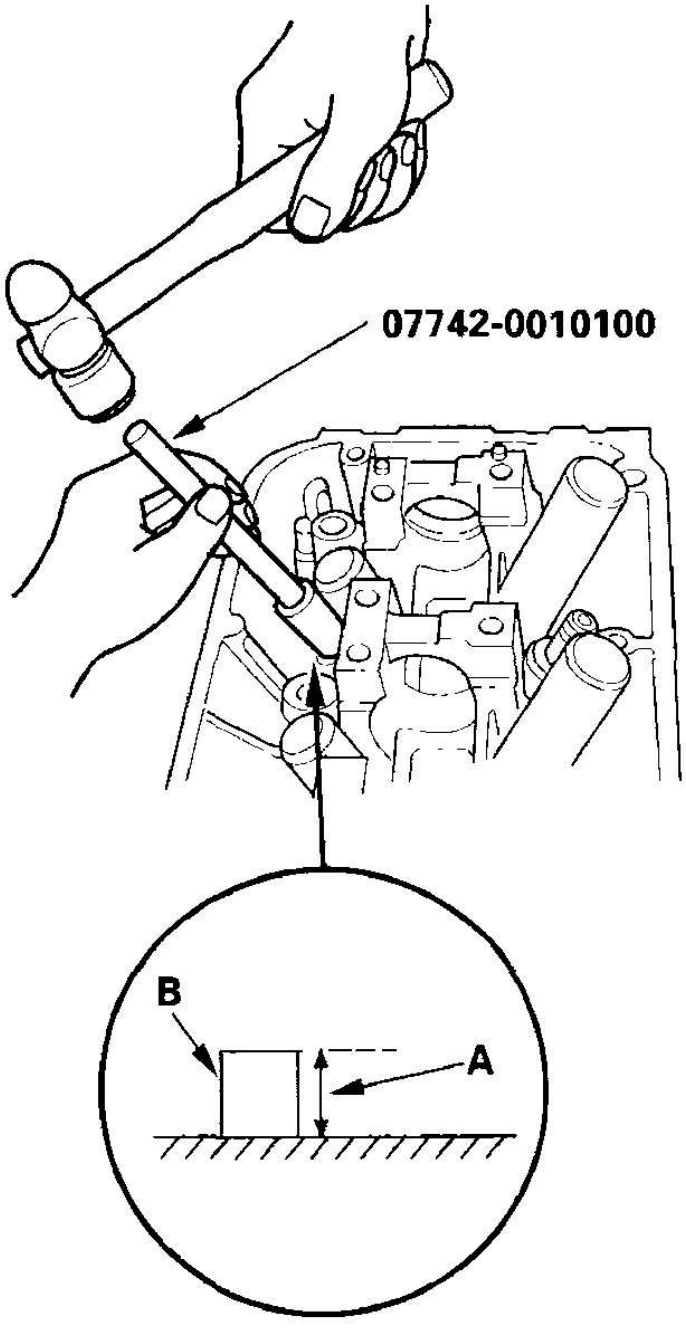


Fig. 118: Identifying Valve Guide Installed Height
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Coat both the reamer and the valve guide with cutting oil.
11. Rotate the reamer clockwise the full length of the valve guide bore.

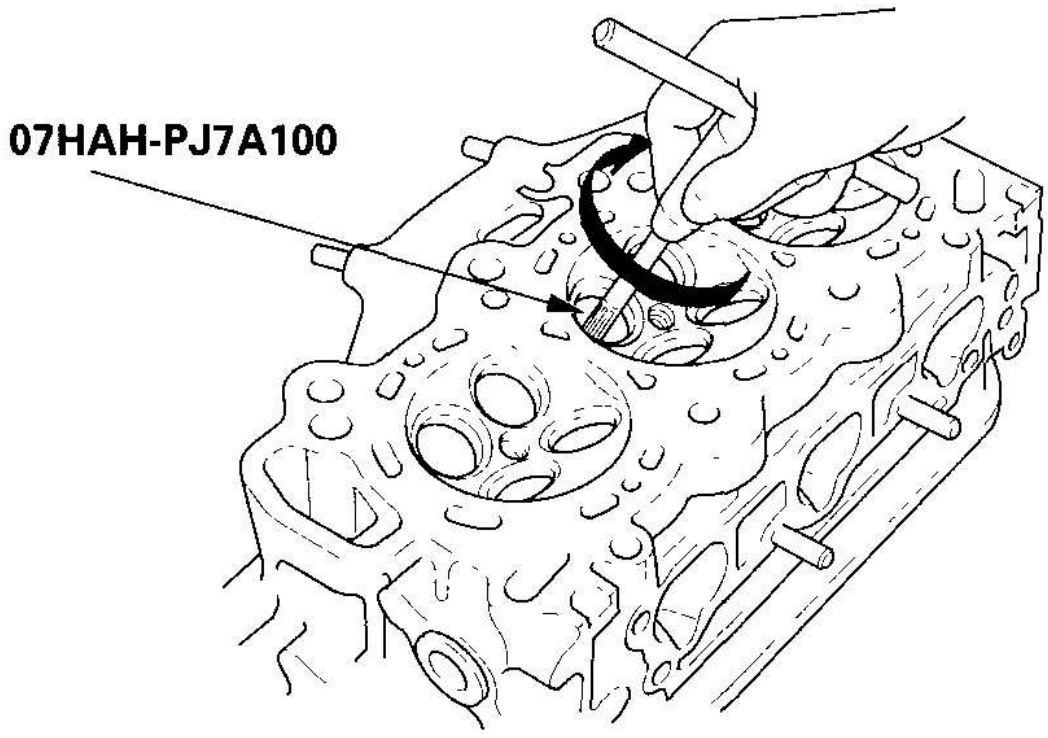


Fig. 119: Rotating Reamer Clockwise Full Length Of Valve Guide Bore
Courtesy of AMERICAN HONDA MOTOR CO., INC.

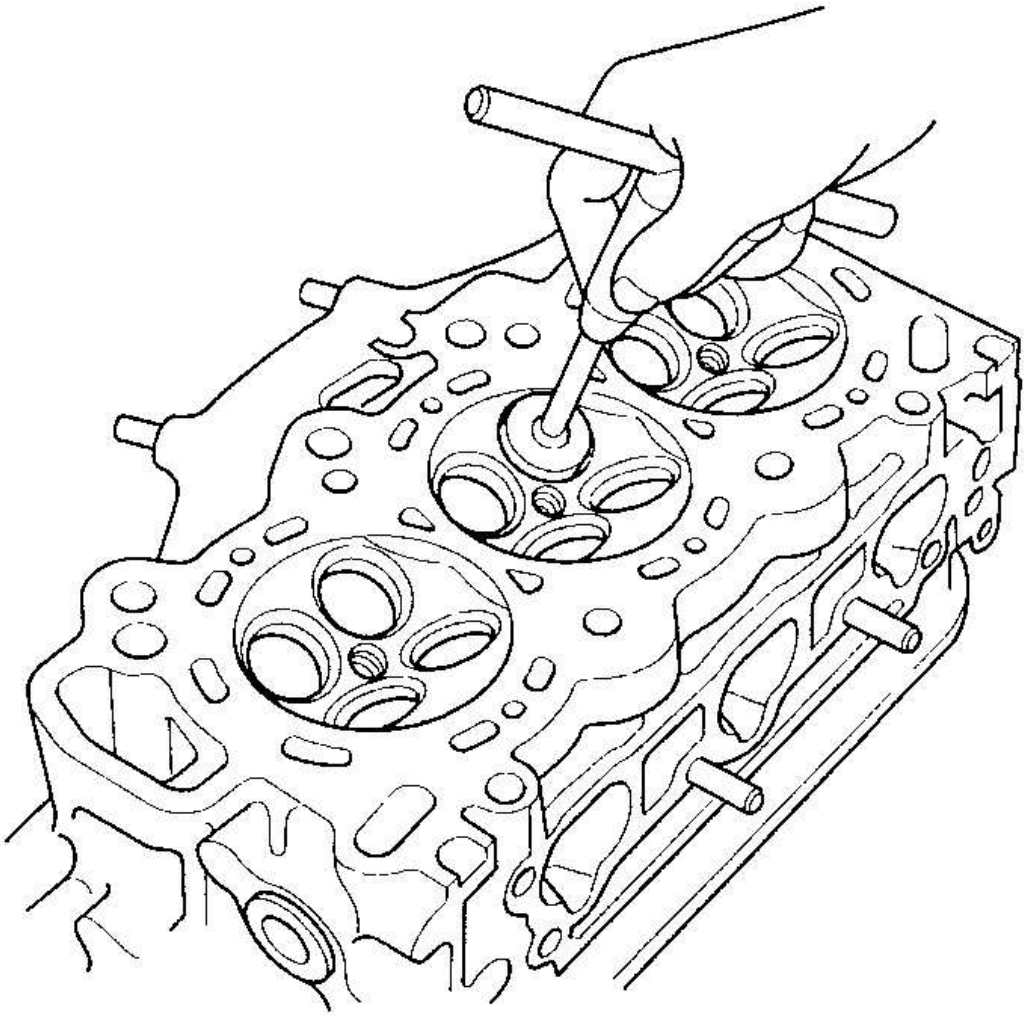
12. Continue to rotate the reamer clockwise while removing it from the bore.
13. Thoroughly wash the guide in detergent and water to remove any cutting residue.
14. Check the clearance with a valve (see **VALVE INSPECTION**). Verify that a valve slides in the intake and exhaust valve guides without exerting pressure.

VALVE SEAT RECONDITIONING

1. Inspect valve stem-to-guide clearance (see **VALVE INSPECTION**). If the

valve guides are worn, replace them (see **VALVE GUIDE REPLACEMENT**) before cutting the valve seats.

2. Renew the valve seats in the cylinder head using a valve seat cutter.



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Fig. 120: Renewing Valve Seats In Cylinder Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Carefully cut a 45° seat, removing only enough material to ensure a smooth

and concentric seat.

4. Bevel the upper edge of the seat with the 30° cutter and the lower edge of the seat with the 67.5° cutter (intake seat) or the 60° cutter (exhaust seat). Check the width of the seat and adjust accordingly.

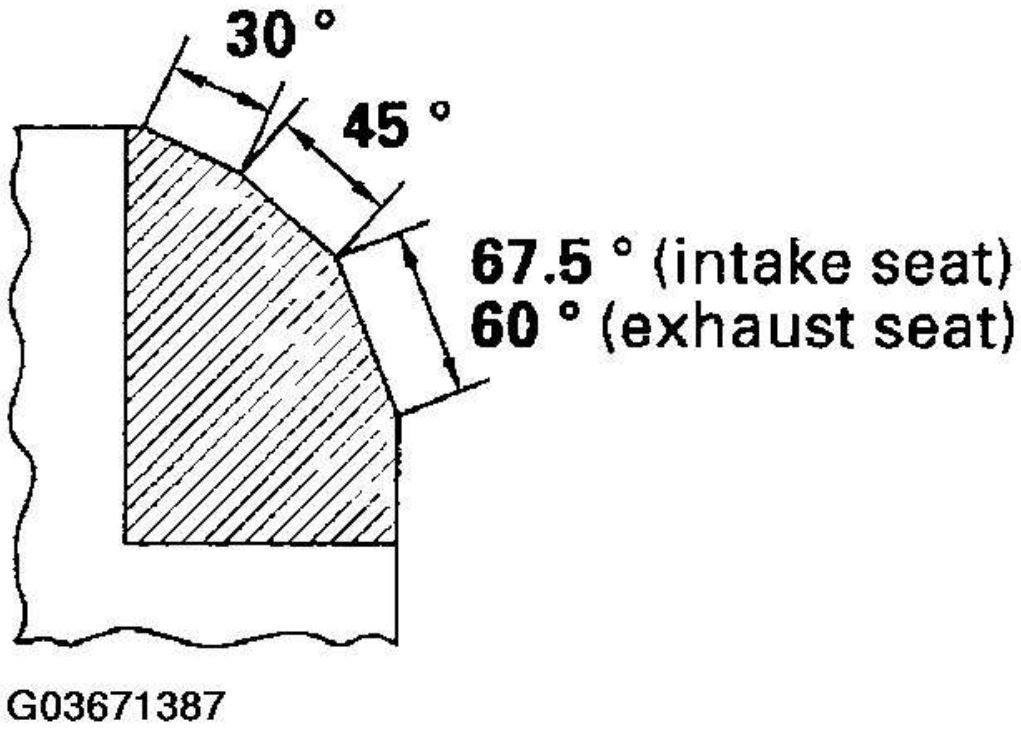


Fig. 121: Identifying Angle Of Intake And Exhaust Seat
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Make one more very light pass with the 45° cutter to remove any possible burrs caused by the other cutters.

Valve Seat Width

Standard (New): 1.25-1.55 mm (0.049-0.061 in.)

Service Limit: 2.00 mm (0.079 in.)

6. After resurfacing the seat, inspect it for even valve seating: Apply Prussian Blue compound (A) to the valve face. Insert the valve in its original location in the head, then lift it and snap it closed against the seat several times.

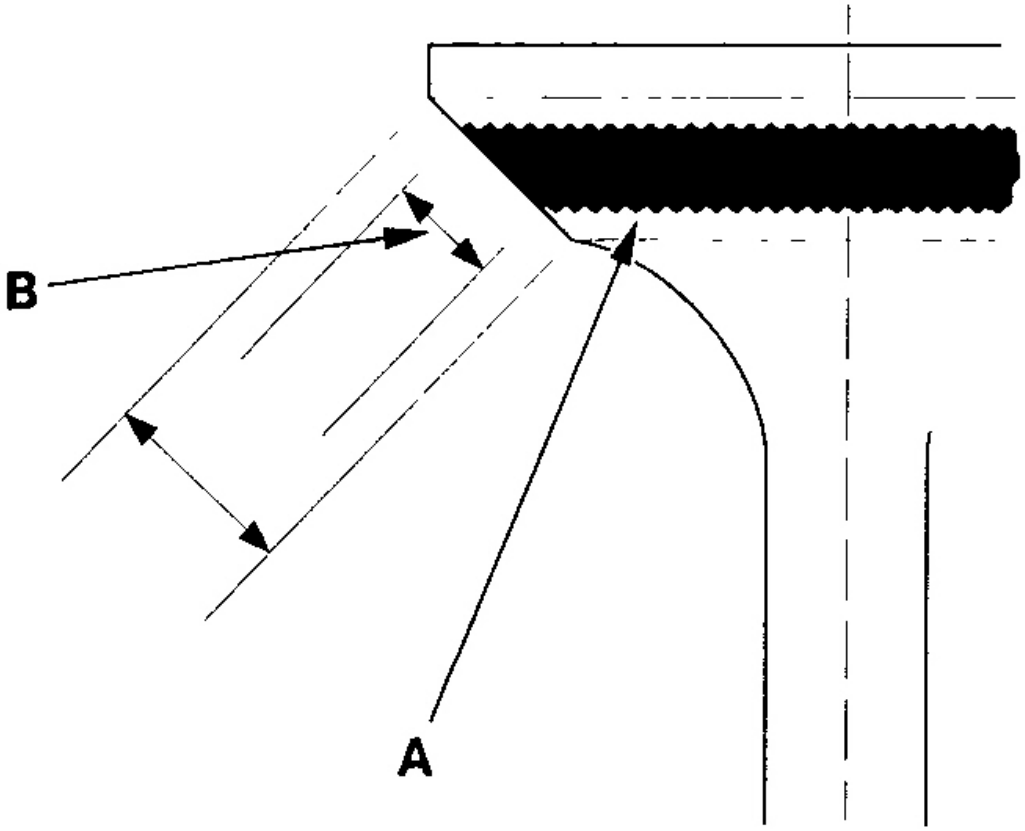


Fig. 122: Applying Prussian Blue Compound To Valve Face
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. The actual valve seating surface (B), as shown in **Fig. 122** by the blue compound, should be centered on the seat.
   - If it is too high (closer to the valve stem), you must make a second cut with the 67.5° cutter (intake seat) or the 60° cutter (exhaust seat) to move it down, then one more cut with the 45° cutter to restore seat width.

- If it is too low (closer to the valve edge), you must make a second cut with the 30° cutter to move it up, then one more cut with the 45° cutter to restore seat width.

NOTE: The final cut should always be made with the 45° cutter.

8. Insert the intake and exhaust valves in the head, and measure the valve stem installed height (A).

Intake Valve Stem Installed Height

Standard (New): 46.75-47.55 mm (1.841 -1.872 in.)
Service Limit: 47.80 mm (1.882 in.)

Exhaust Valve Stem Installed Height

Standard (New): 46.68-47.48 mm (1.838-1.869 in.)
Service Limit: 47.73 mm (1.879 in.)

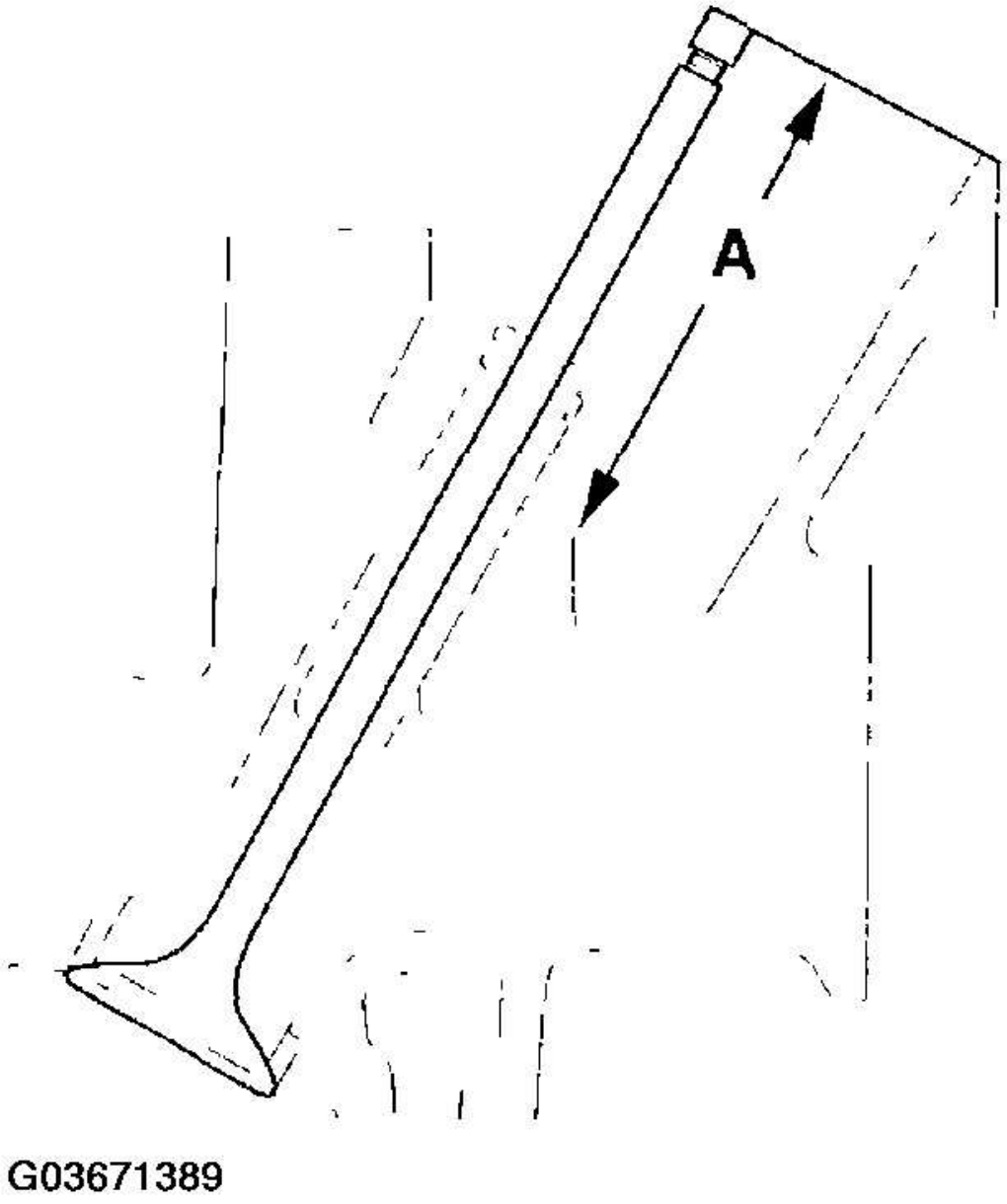


Fig. 123: Identifying Valve Stem Installed Height
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. If the valve stem installed height is over the service limit, replace the valve and recheck. If it is still over the service limit, replace the cylinder head; the valve

seat in the head is too deep.

VALVE, SPRING, AND VALVE SEAL INSTALLATION

Special Tools Required

- Stem seal driver 07PAD-0010000
- Valve spring compressor attachment 07757-PJ1010A

1. Coat the valve stems with new engine oil. Install the valves in the valve guides.
2. Check that the valves move up and down smoothly.
3. Install the spring seats on the cylinder head.
4. Install the new valve seals (A) using the valve guide seal installer (B).

NOTE: Exhaust valve seals (C) have a black spring (D) and intake valve seals (E) have a white spring (F). They are not interchangeable.

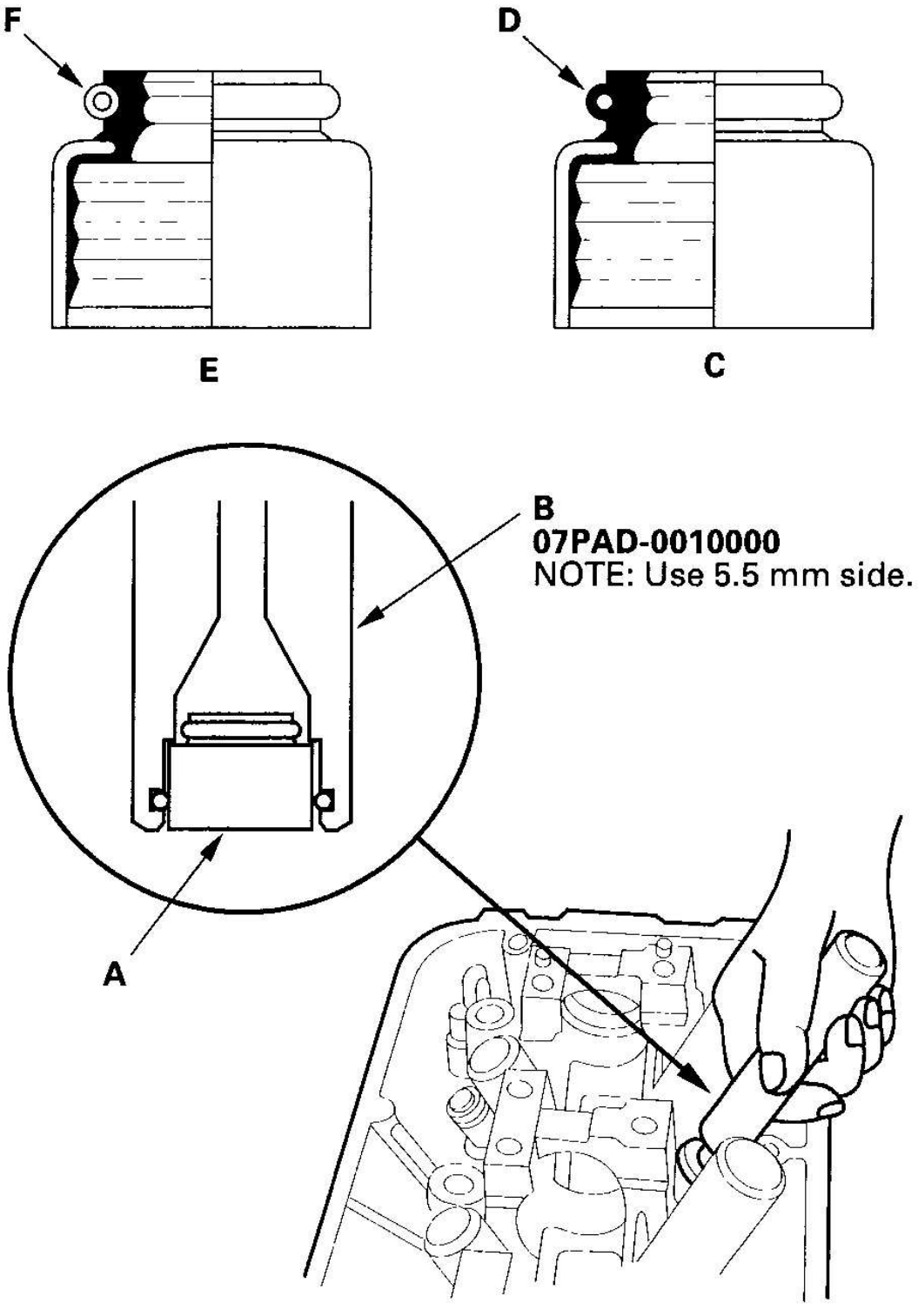

F
D
E
C
B
07PAD-0010000
NOTE: Use 5.5 mm side.
A
G03671390

Fig. 124: Identifying Valve Seals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the valve spring and valve retainer. Place the end of the valve spring with closely wound coils toward the cylinder head.
6. Install the valve spring compressor. Compress the spring and install the valve cotters.

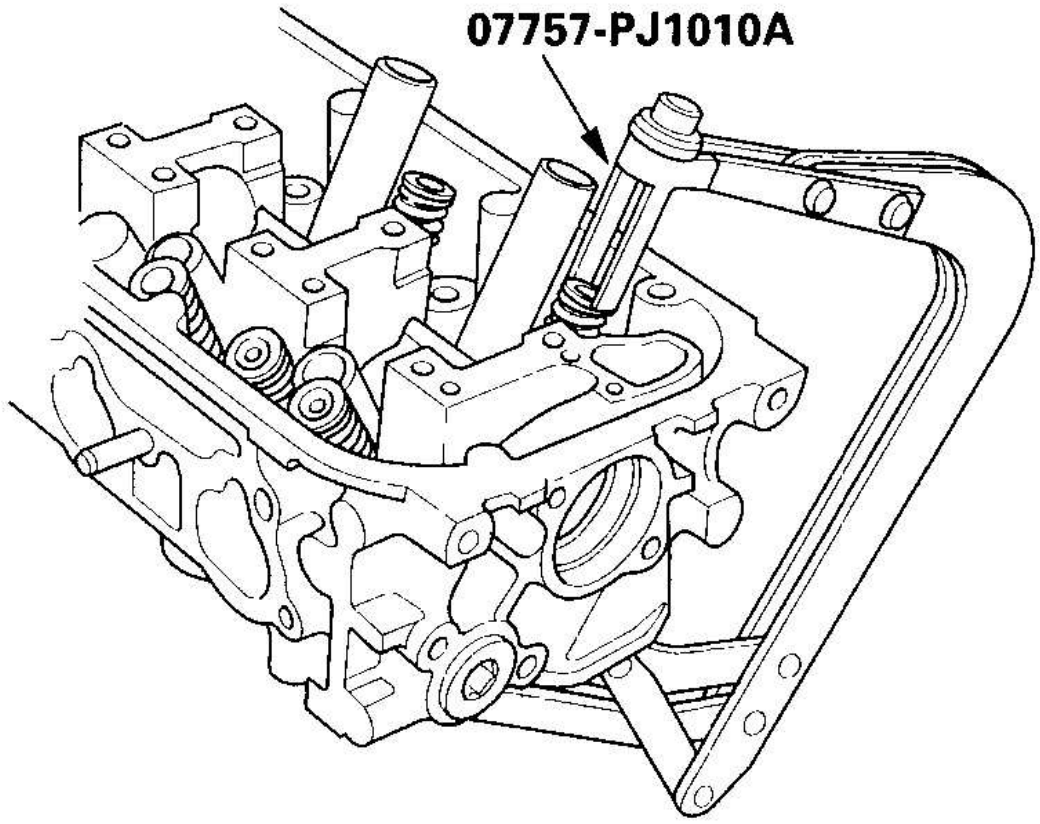


Fig. 125: Identifying Valve Spring Compressor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the valve spring compressor.
8. Lightly tap the end of each valve stem two or three times with a plastic mallet

(A) to ensure proper seating of the valve and valve cotters. Tap the valve stem only along its axis so you do not bend the stem.

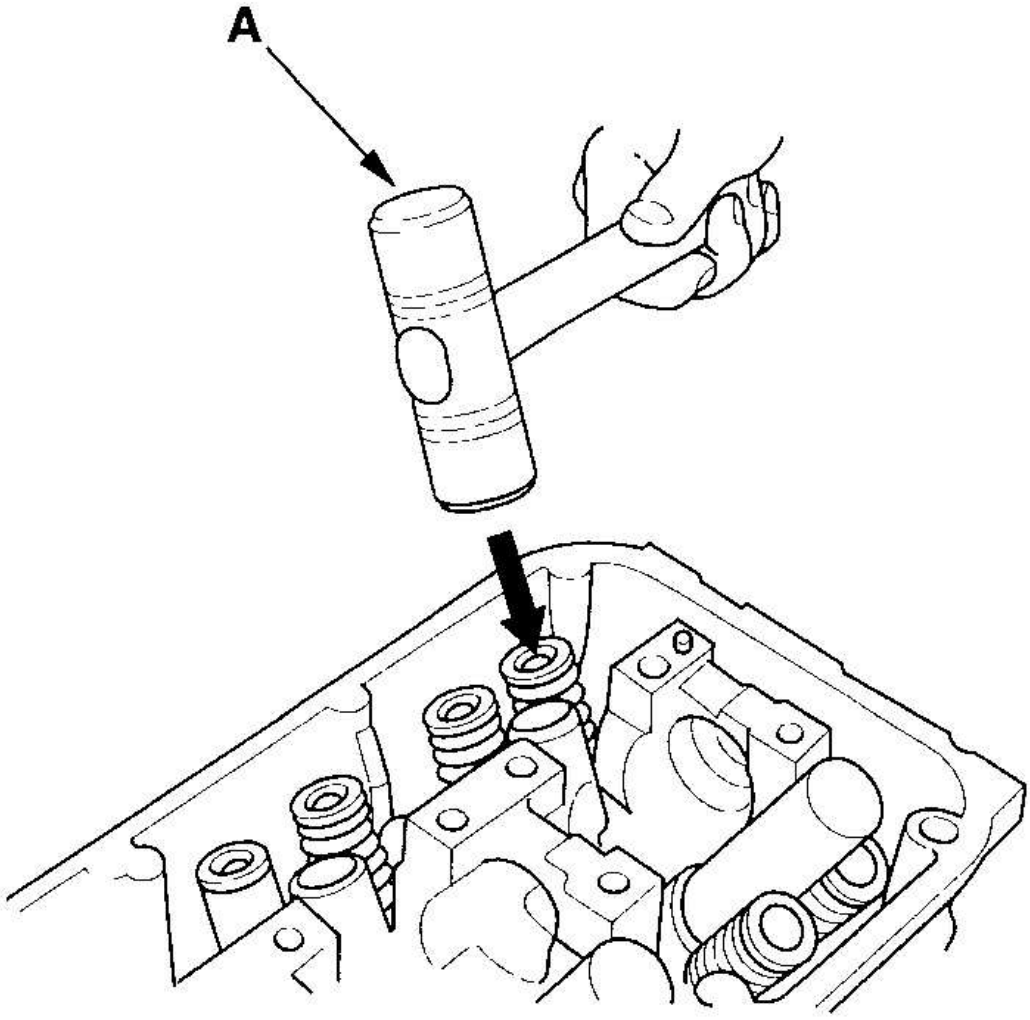


Fig. 126: Tapping End Of Each Valve Stem With Plastic Mallet
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CAMSHAFT, ROCKER ARM, CAMSHAFT SEAL, AND PULLEY INSTALLATION

1. Apply a light coat of oil around the camshaft oil seal.
2. Gently tap the new camshaft oil seal (A) into the cylinder head.

   -1 Tap the camshaft oil seal in squarely.

   -2 Install the oil seal about 0.5-1.5 mm (0.02-0.06 in.) below the surface of the cylinder head.

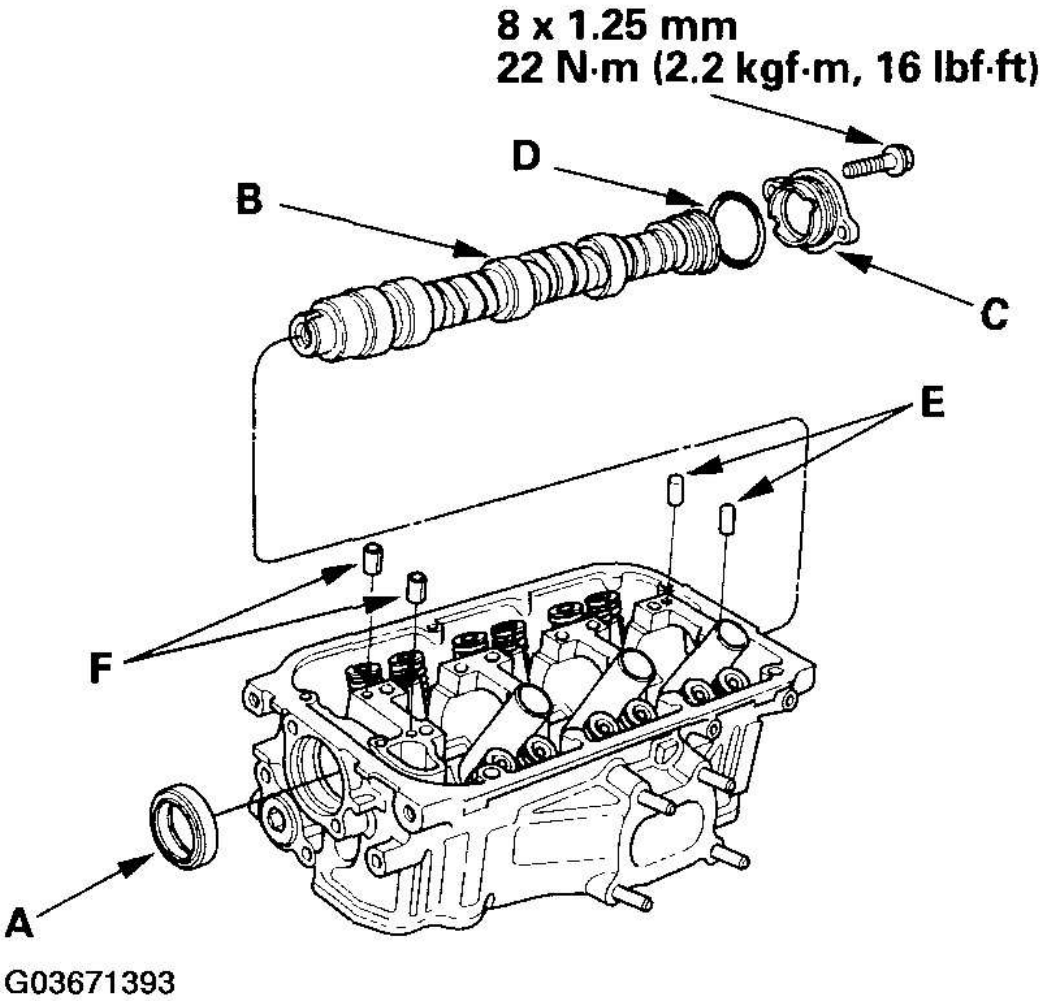


Fig. 127: Identifying Camshaft (Front)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

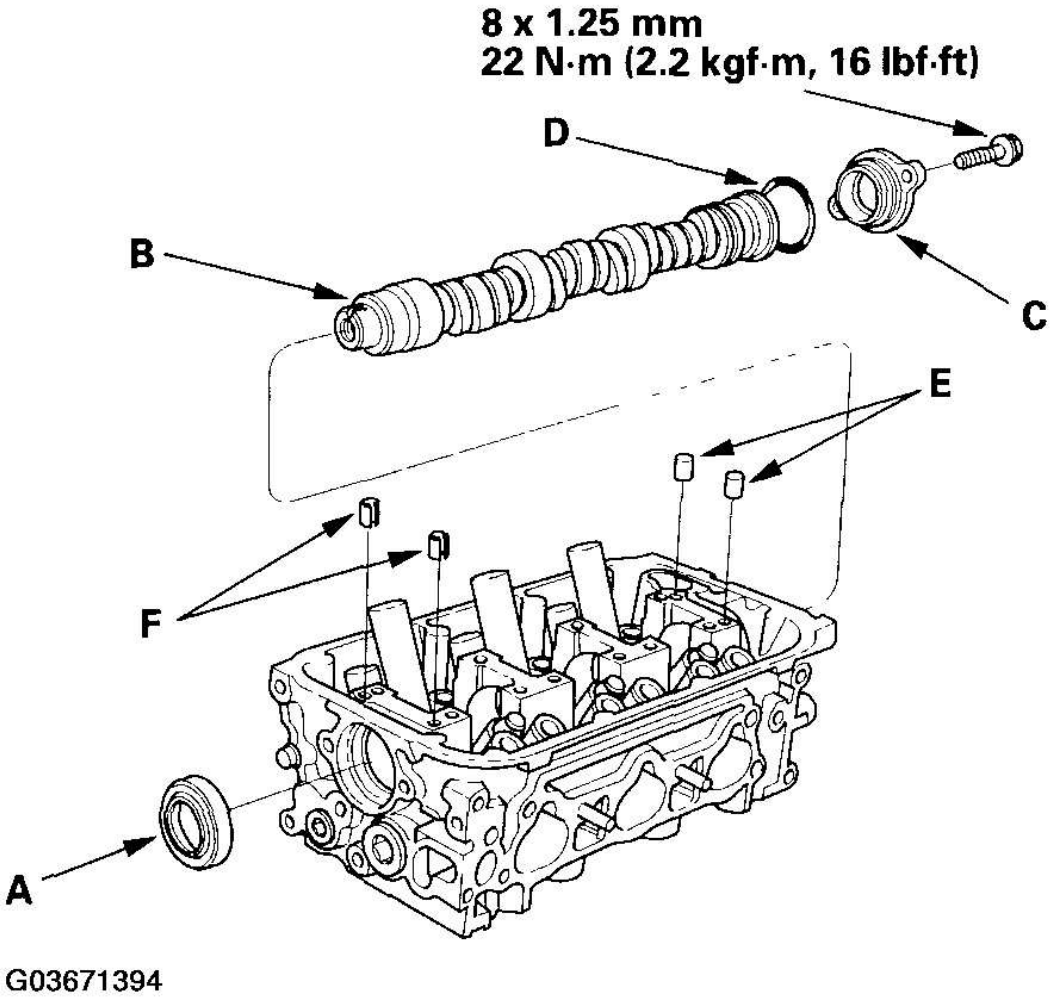


Fig. 128: Identifying Camshaft (Rear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

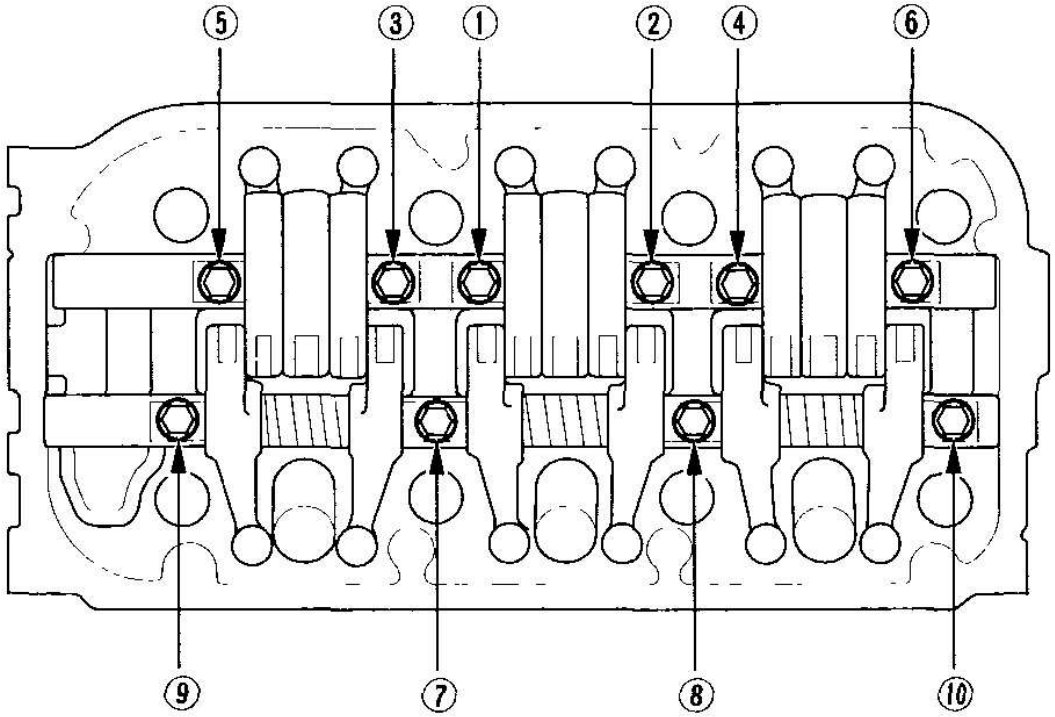
3. Insert the camshaft (B) into the cylinder head, then install the camshaft thrust cover (C). Always use a new O-ring (D).
4. Check that the oil seal lips are not distorted.
5. Install the solid dowel pins (E) and the hollow dowel pins (F).
6. Reassemble the rocker arm assembly (see **ROCKER ARM AND SHAFT DISASSEMBLY/REASSEMBLY**).
7. Loosen the valve adjusting screws.

8. Set the rocker arm assembly in place, and loosely install the bolts. Make sure that the rocker arms are properly positioned on the valve stems.
9. Tighten each bolt two turns at a time in the sequence shown in **Fig. 129** to ensure that the rockers do not bind on the valves.

NOTE: Apply new engine oil to the threads and flange of the exhaust rocker shaft mounting bolts.

Specified torque

8 x 1.25 mm: 24 N.m (2.4 kgf.m, 17 lbf.ft)



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Fig. 129: Tightening Rocker Arm Bolts In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Install the injector base (A). Always use a new gasket (B).

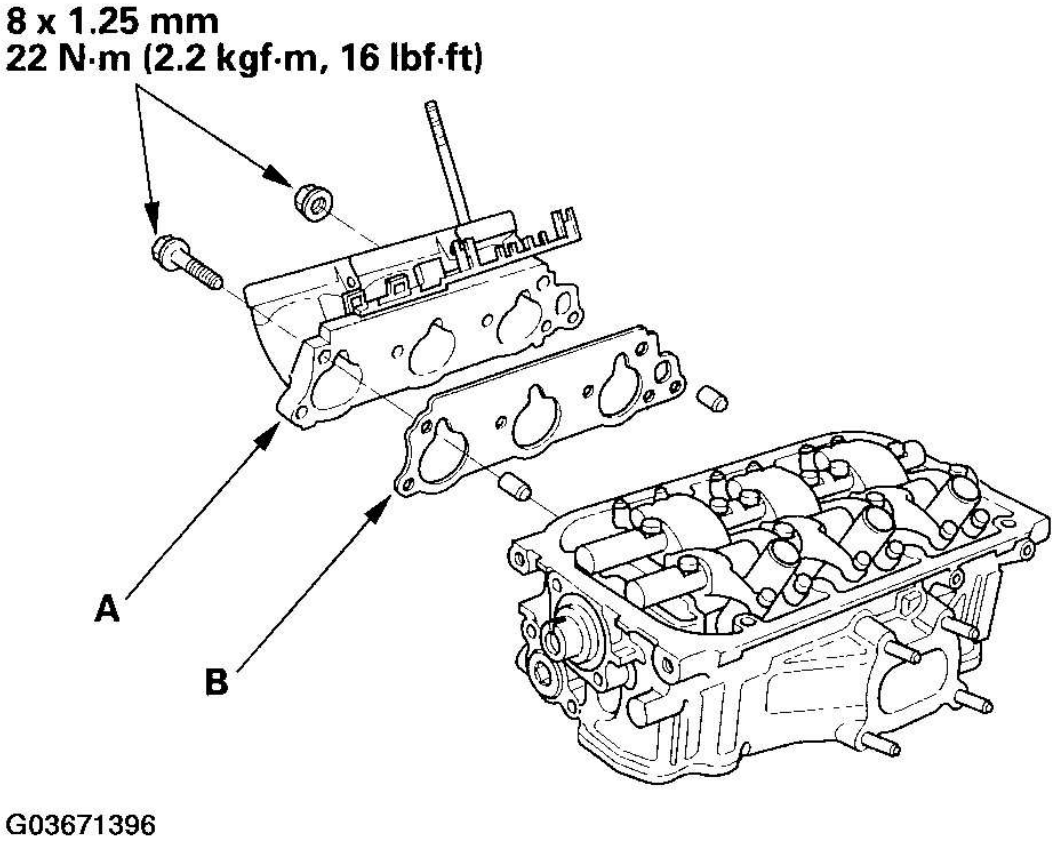


Fig. 130: Identifying Injector Base And Gasket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Apply new engine oil to the threads of the camshaft pulley mounting bolt (A). Install the back cover (B), then install the camshaft pulley (C).

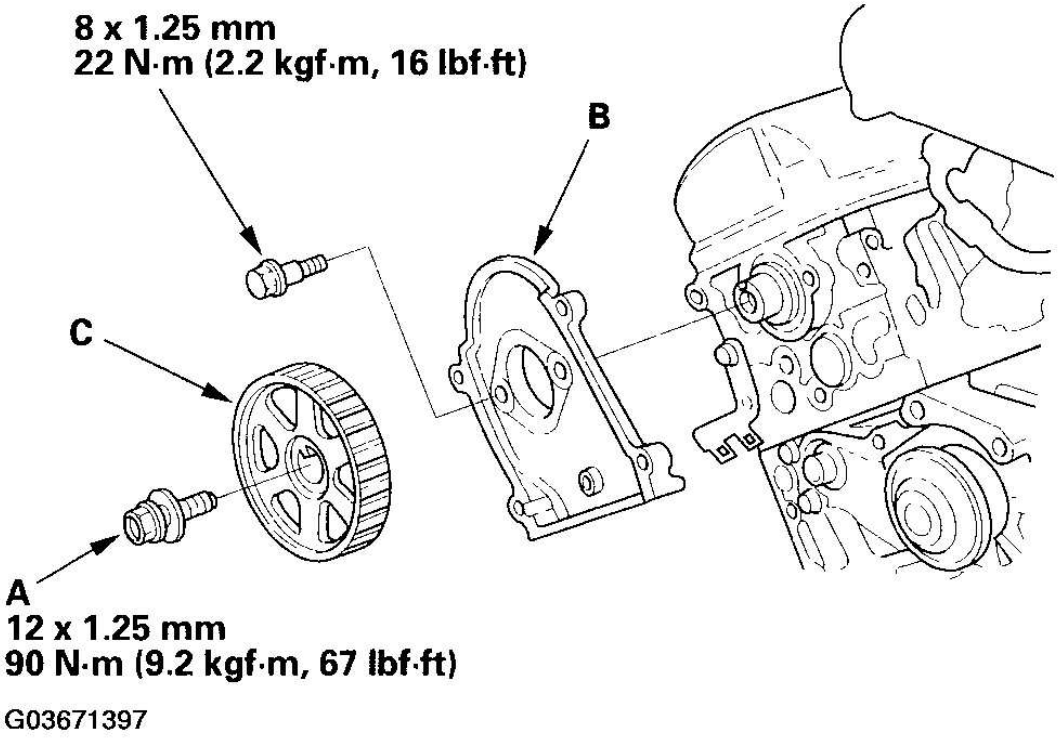


Fig. 131: Identifying Camshaft Pulley And Back Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CYLINDER HEAD INSTALLATION

1. Clean the cylinder head and block surface.
2. Clean and install the oil control orifices (A) with new O-rings (B).

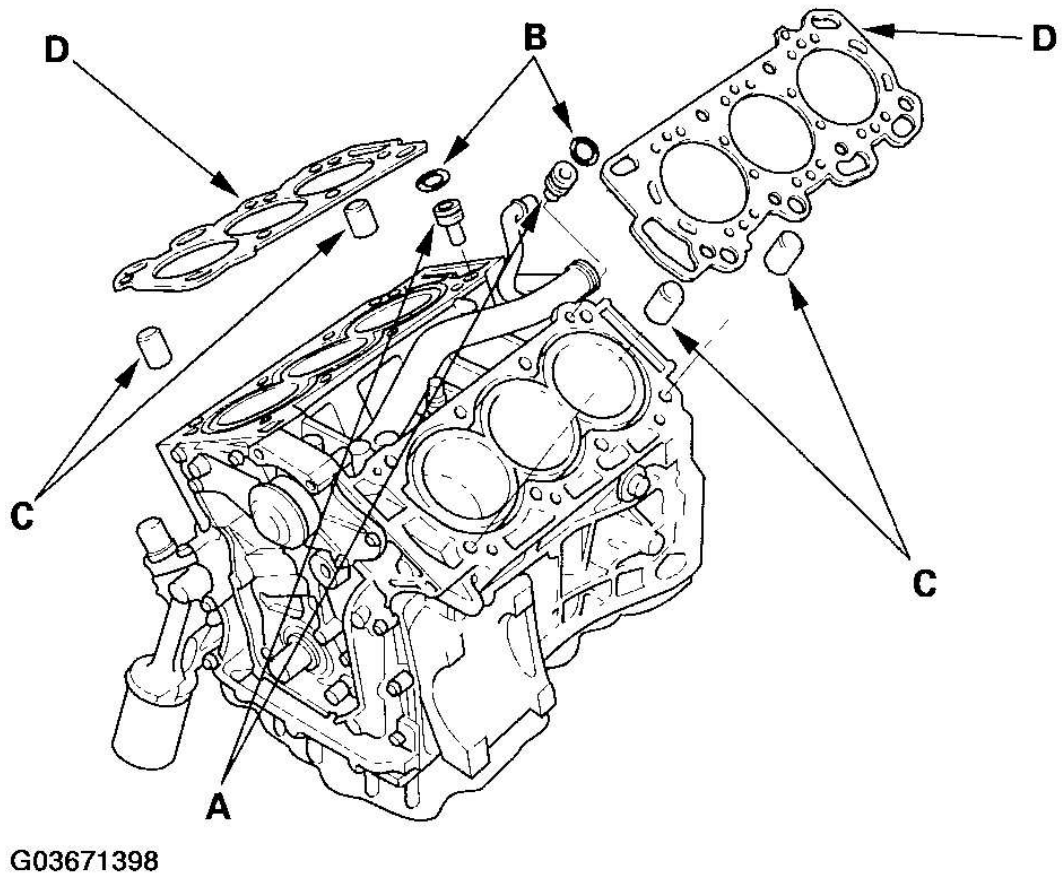


Fig. 132: Cleaning And Identifying Oil Control Orifices With O-Rings
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the dowel pins (C) and new cylinder head gaskets (D).
4. Clean the timing belt pulleys, timing belt guide plate, and the upper and lower covers.
5. Set the timing belt drive pulley to top dead center (TDC) by aligning the TDC mark (A) on the tooth of the timing belt drive pulley with the pointer (B) on the oil pump.

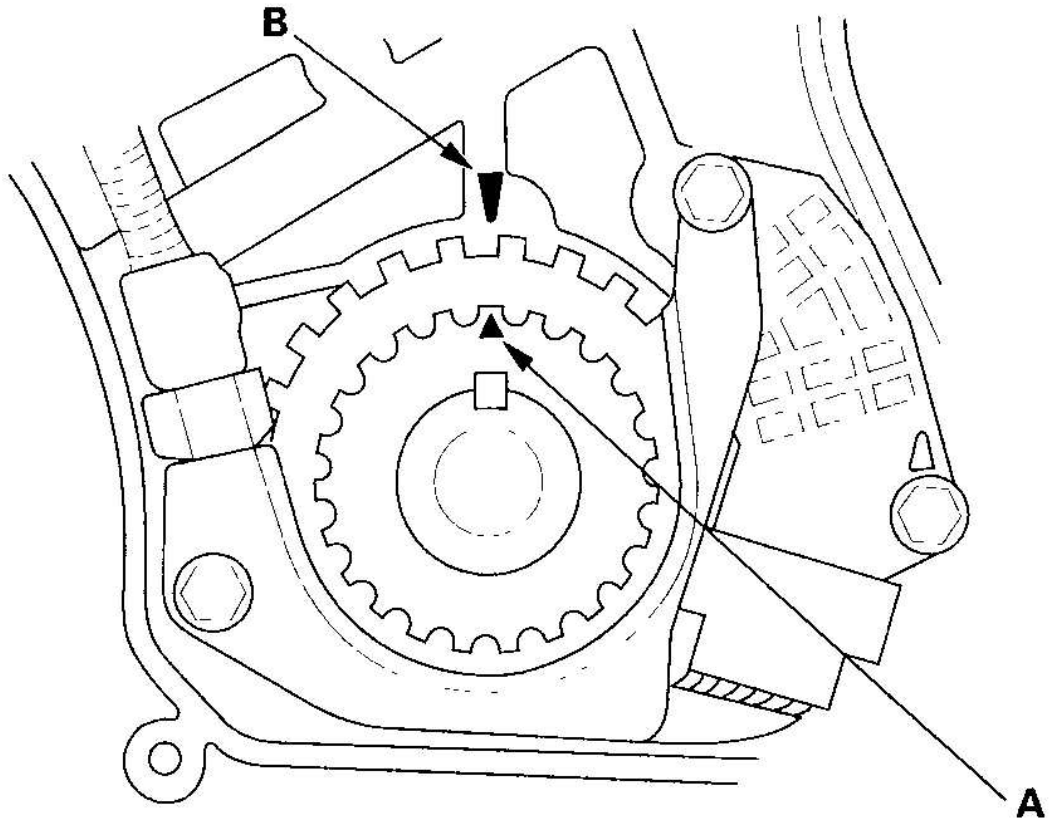
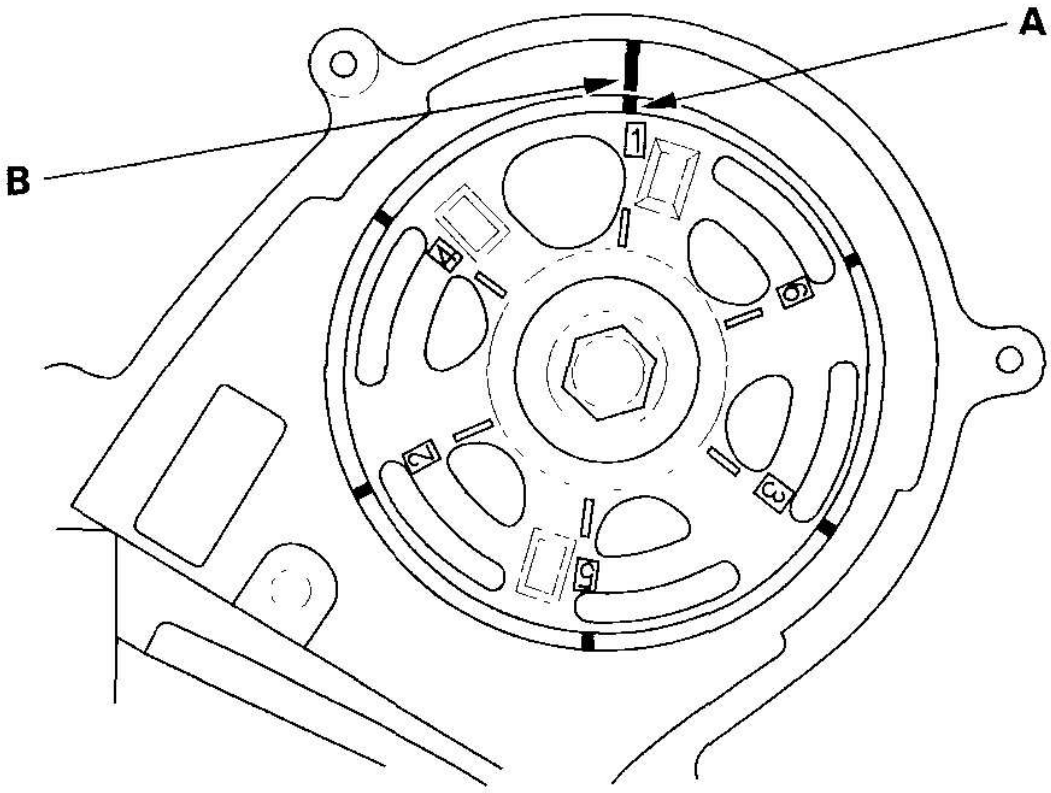


Fig. 133: Aligning TDC Mark On Tooth Of Timing Belt Drive Pulley With Pointer On Oil Pump
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Set the camshaft pulleys to TDC by aligning the TDC marks (A) on the camshaft pulleys with the pointers (B) on the back covers.



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Fig. 134: Aligning TDC Marks On Front Camshaft Pulleys With Pointers On Back Covers (Front)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

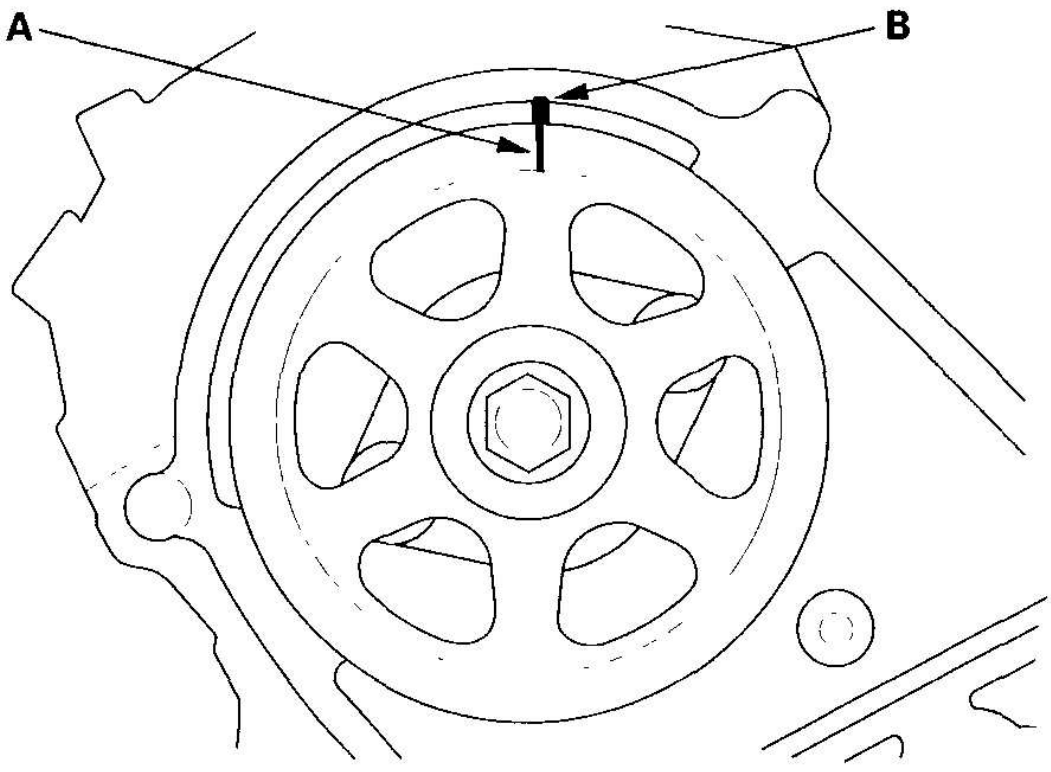


Fig. 135: Aligning TDC Marks On Front Camshaft Pulleys With Pointers On Back Covers (Rear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Put the cylinder head onto the engine block. If the head bolt is dodecagon type, go to step 8. Or if the head bolt is hexagon type, go to step 13.

Dodecagon Bolt Type

8. Measure the diameter of each cylinder head bolt at point A and point B.

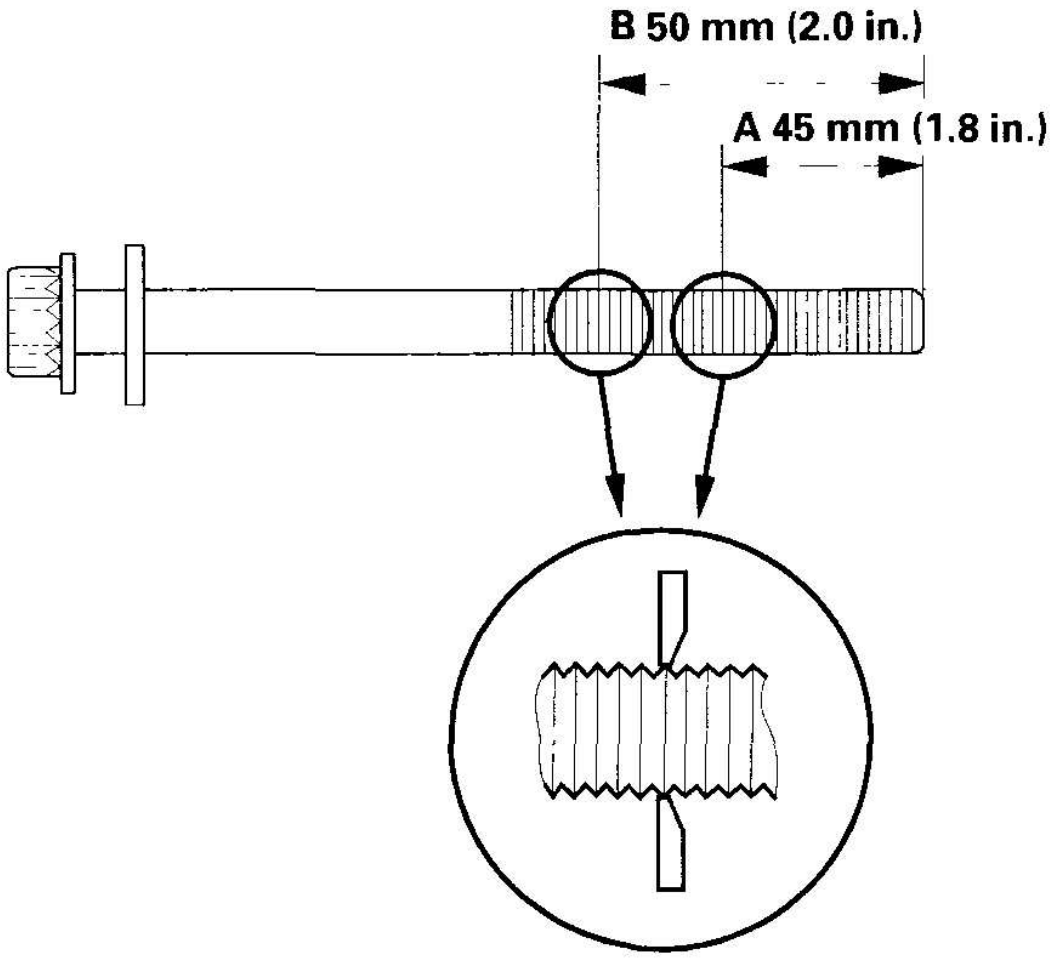


Fig. 136: Measuring Diameter Of Each Cylinder Head Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. If either diameter is less than 10.6 mm (0.42 in.), replace the cylinder head bolt.
10. Apply engine oil to the threads and under the bolt heads of all cylinder head bolts.
11. Tighten the cylinder head bolts in sequence to 39 N.m (4.0 kgf.m, 29 lbf.ft). Use a beam-type torque wrench. When using a preset-type torque wrench, be sure to tighten slowly and do not overtighten. If a bolt makes any noise while

you are torquing it, loosen the bolt and retighten it from the first step.

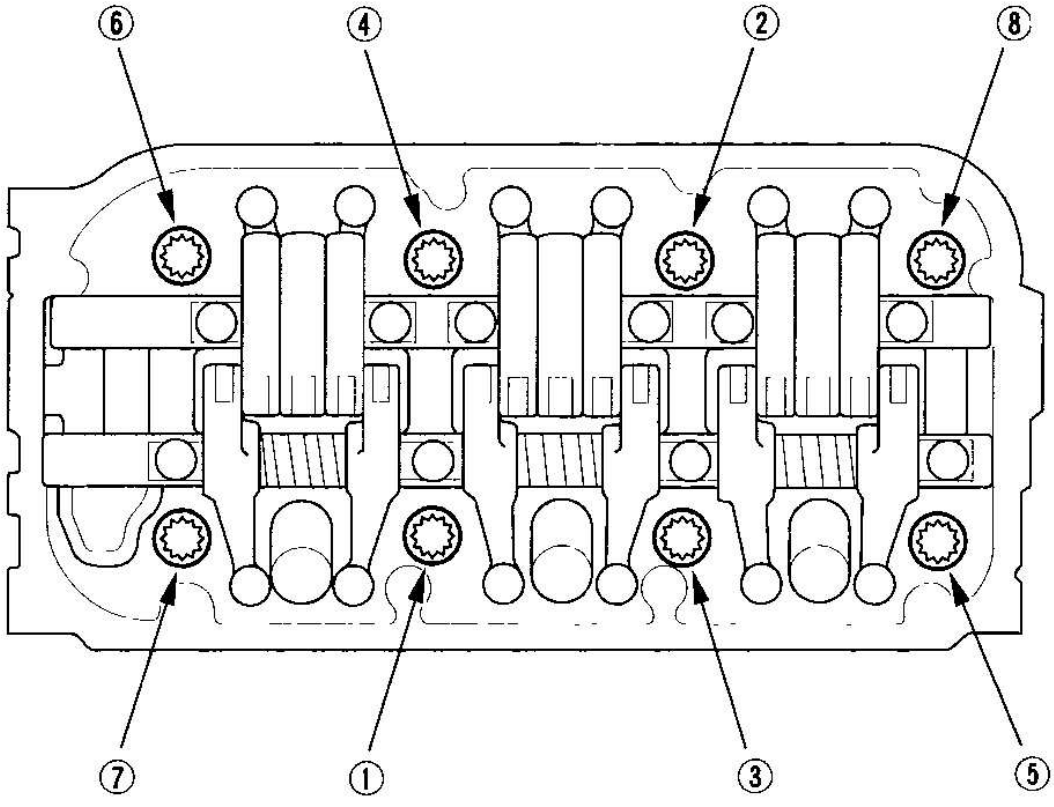


Fig. 137: Tightening Cylinder Head Bolts In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. After torquing, tighten all cylinder head bolts in two steps (90° per step). If you are using a new cylinder head bolt, tighten the bolt an extra 90°, then go to step 15.

NOTE: Remove the cylinder head bolt if you tightened it beyond the specified angle, and go back to step 8 of the procedure. Do not loosen it back to the specified angle.

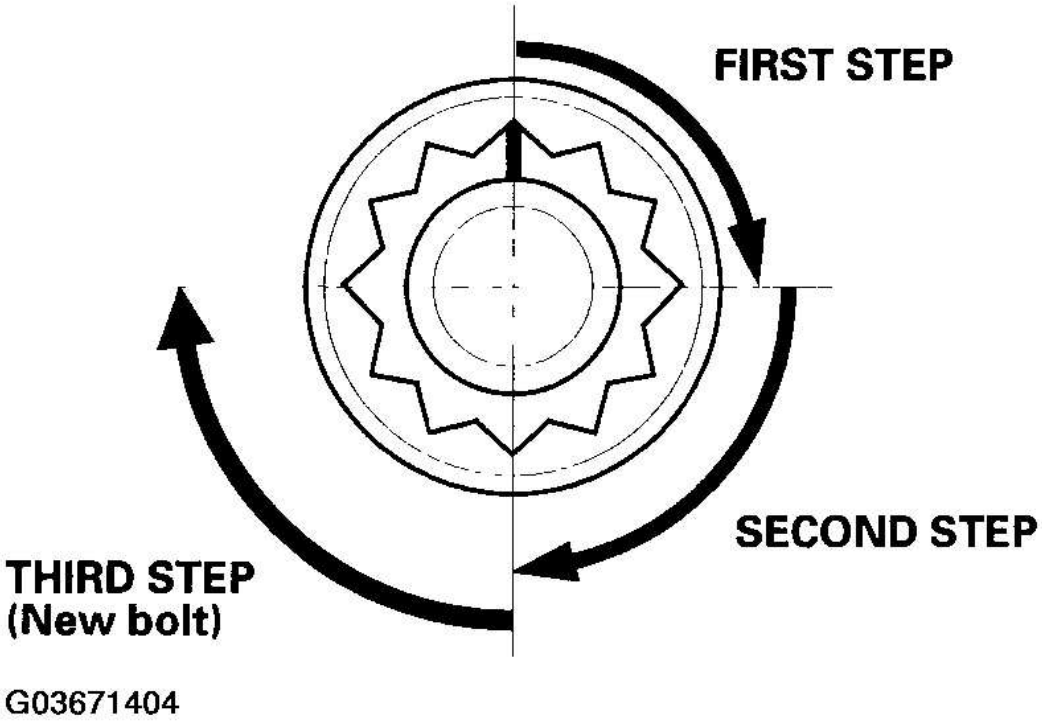


Fig. 138: Tightening Cylinder Head Bolts An Additional 90°
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Hexagon Bolt Type

13. Apply new engine oil to the threads and flanges of the cylinder head bolts.
14. Tighten the cylinder head bolts sequentially in three steps.

NOTE: Perform each step twice.

1st Step Torque: 39 N.m (4.0 kgf.m, 29 lbf.ft)

2nd Step Torque: 69 N.m (7.0 kgf.m, 51 lbf.ft)

3rd Step Torque: 98.1 N.m (10.0 kgf.m, 72.3 lbf.ft)

Use a beam-type torque wrench. When using a preset-type torque wrench, be

sure to tighten slowly and not to overtighten. If a bolt makes any noise while you are torquing it, loosen the bolt, and retighten it from the first step, then go to step 15.

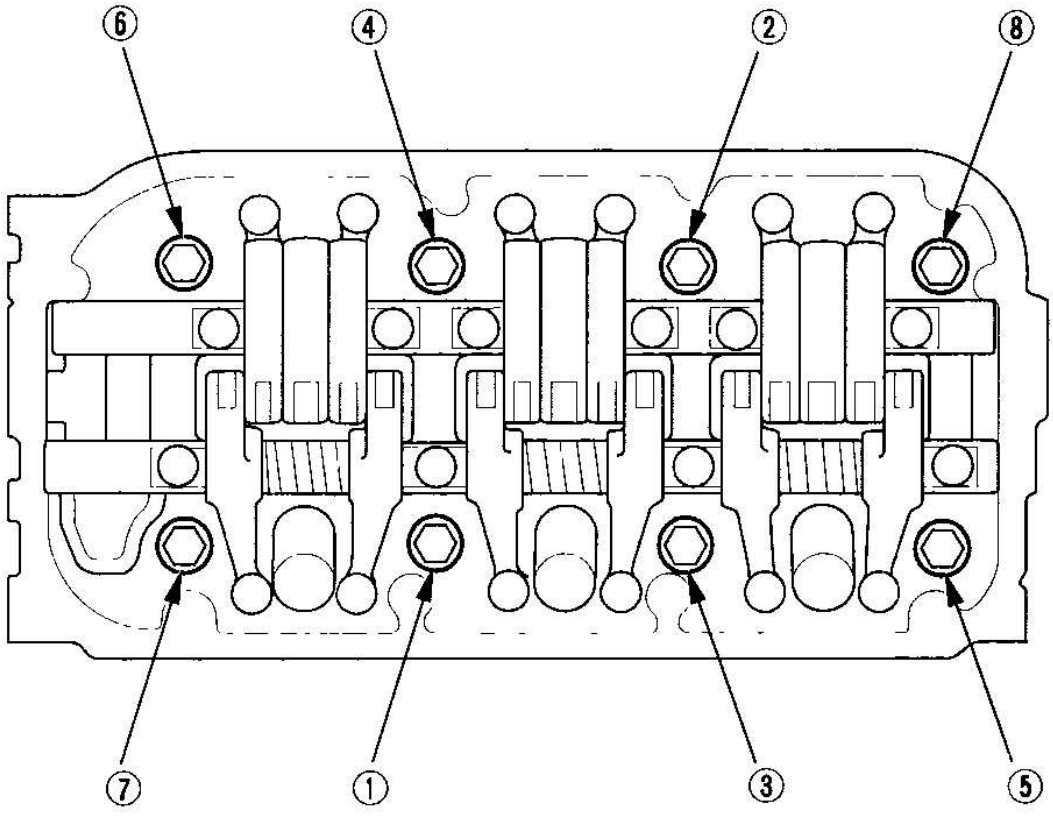


Fig. 139: Tightening Cylinder Head Bolts In Three Steps
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Install the front and rear warm up three way catalytic converter (WU-TWC) (see **WARM UP THREE WAY CATALYTIC CONVERTER REMOVAL/INSTALLATION**).
16. Install the water passage (A). Always use a new O-ring (B) and new gaskets (C).

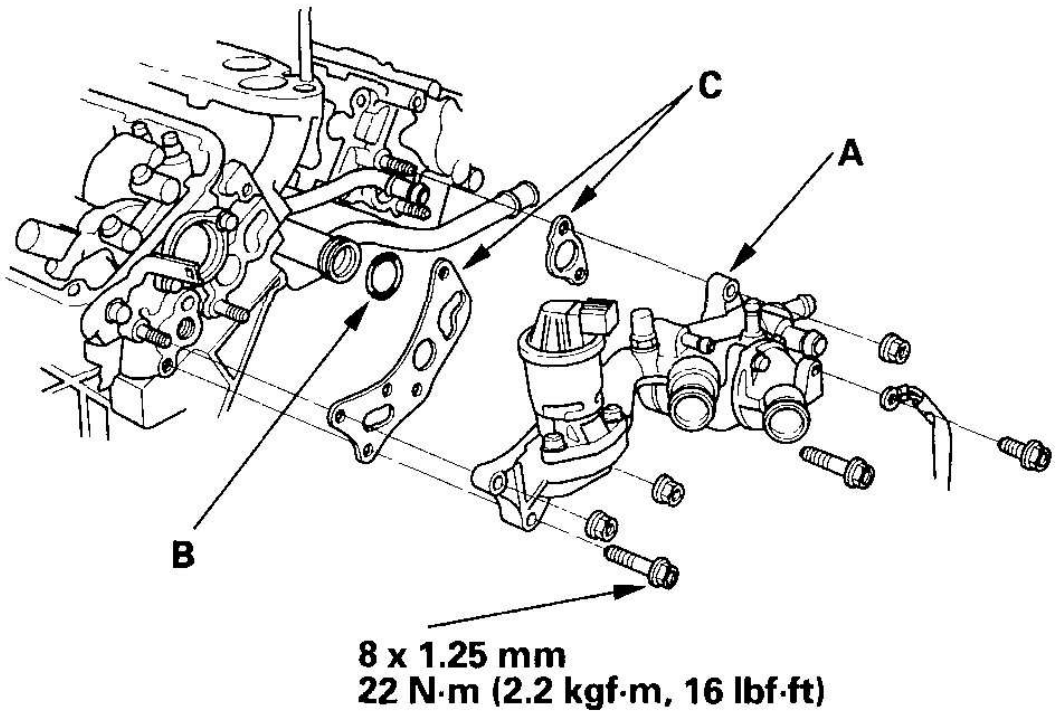


Fig. 140: Identifying Water Passage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Tighten the bolt securing the harness bracket.

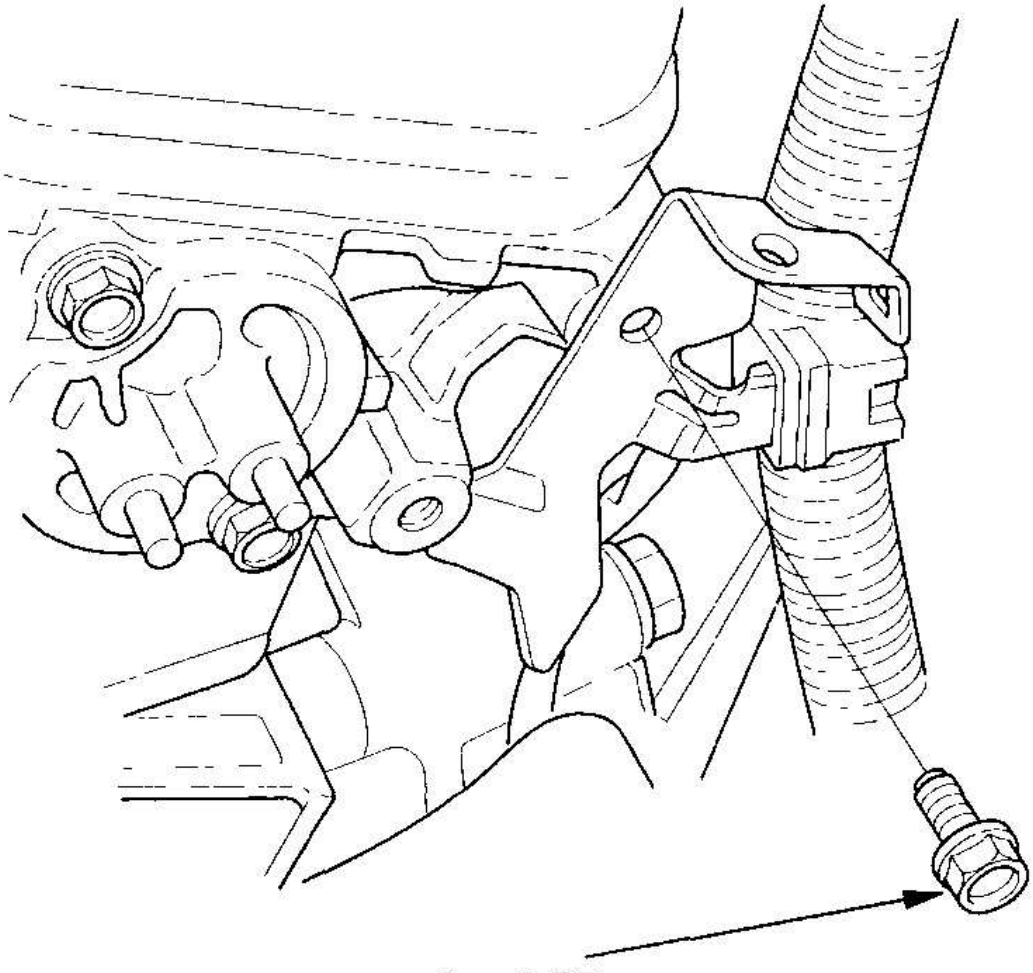


Fig. 141: Tightening Harness Bracket Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Set the new O-ring on the injectors, then install the fuel rails.

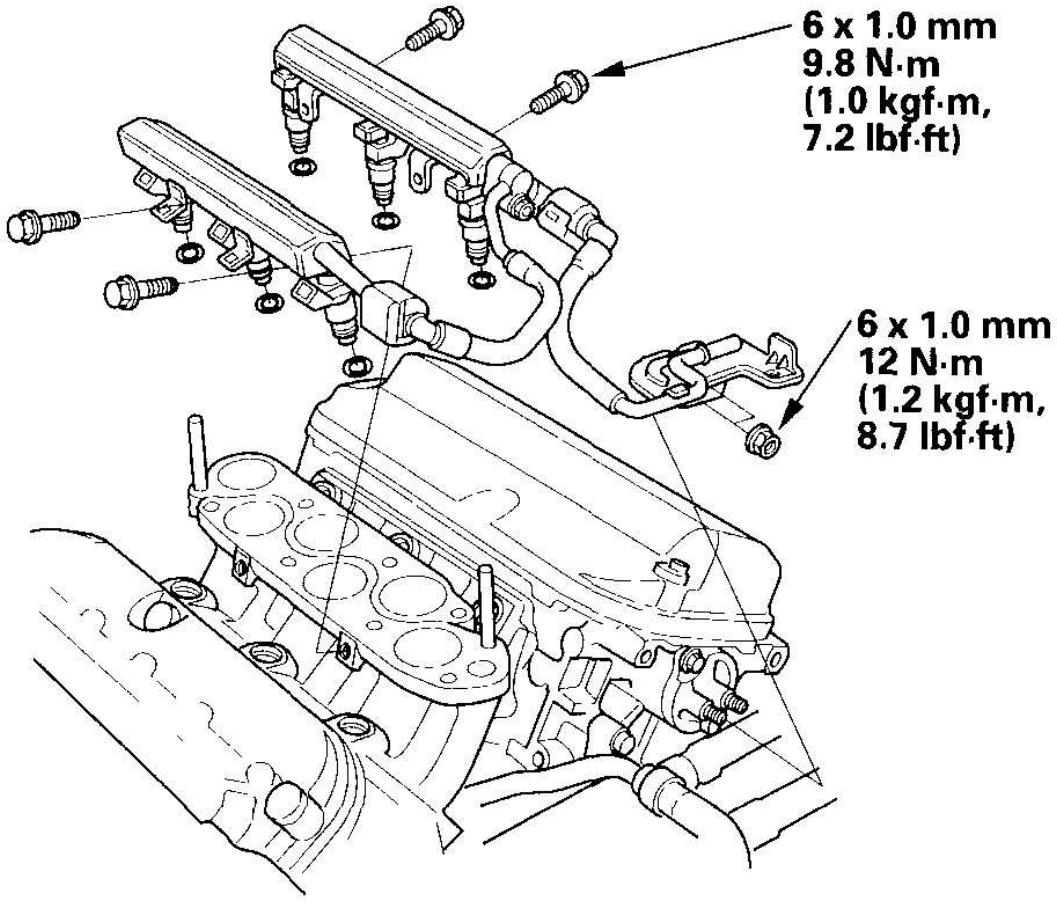


Fig. 142: Identifying Fuel Rails
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Install the ground cable (A).

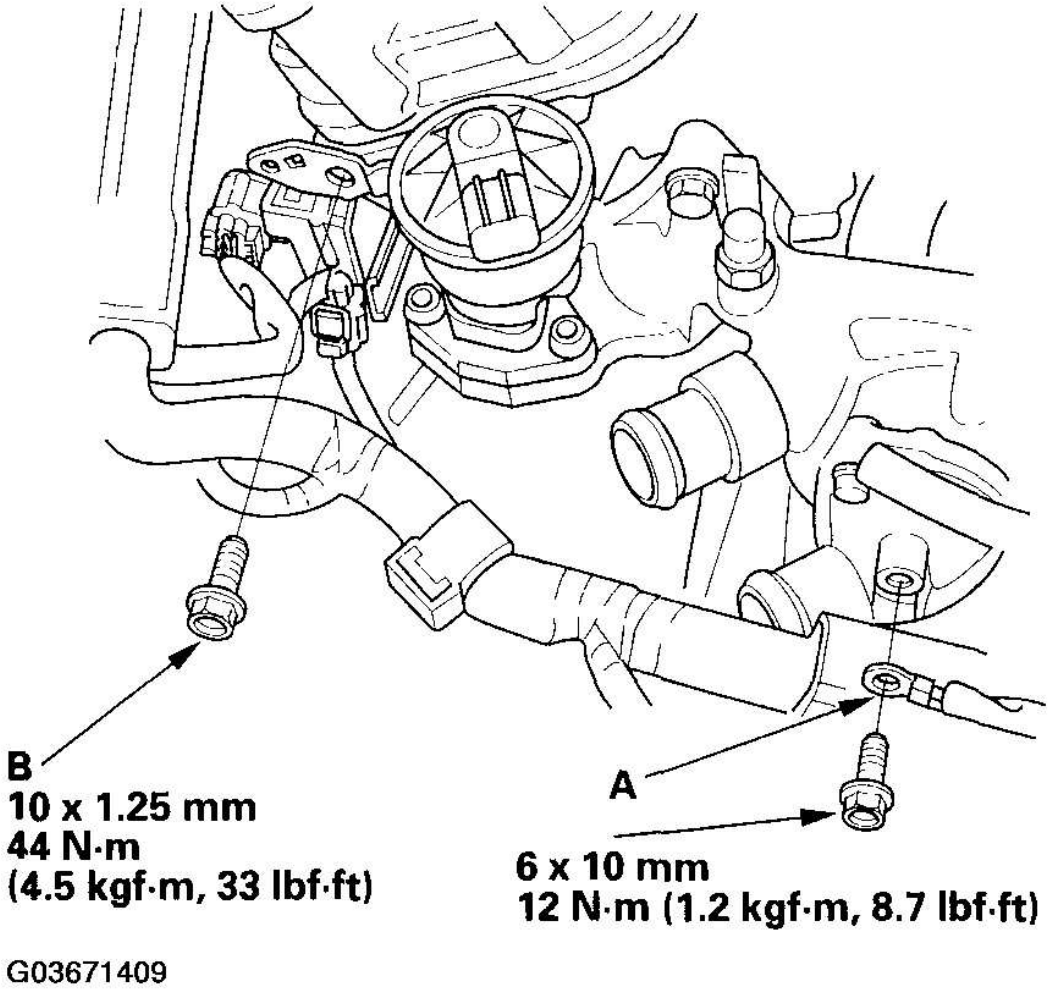


Fig. 143: Identifying Ground Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Tighten the bolt (B) securing the harness bracket.
21. Install the heater hose (A) and water bypass hoses (B).

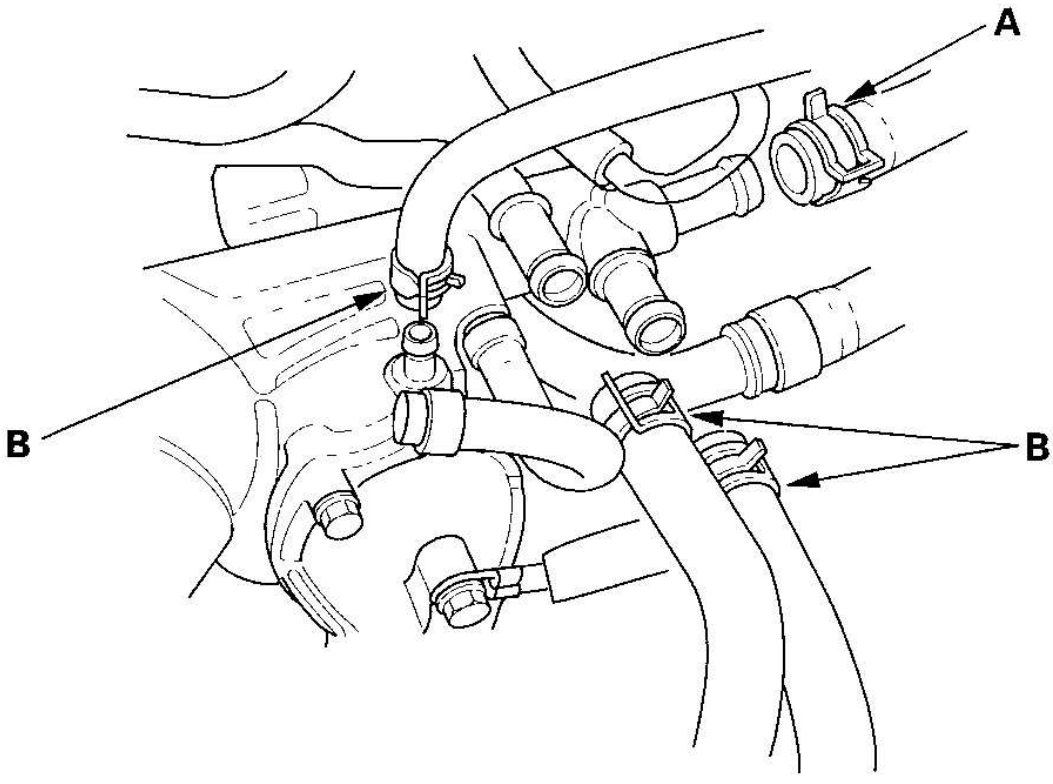


Fig. 144: Identifying Heater Hose And Water Bypass Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Install the upper radiator hose (A), and lower radiator hose (B).

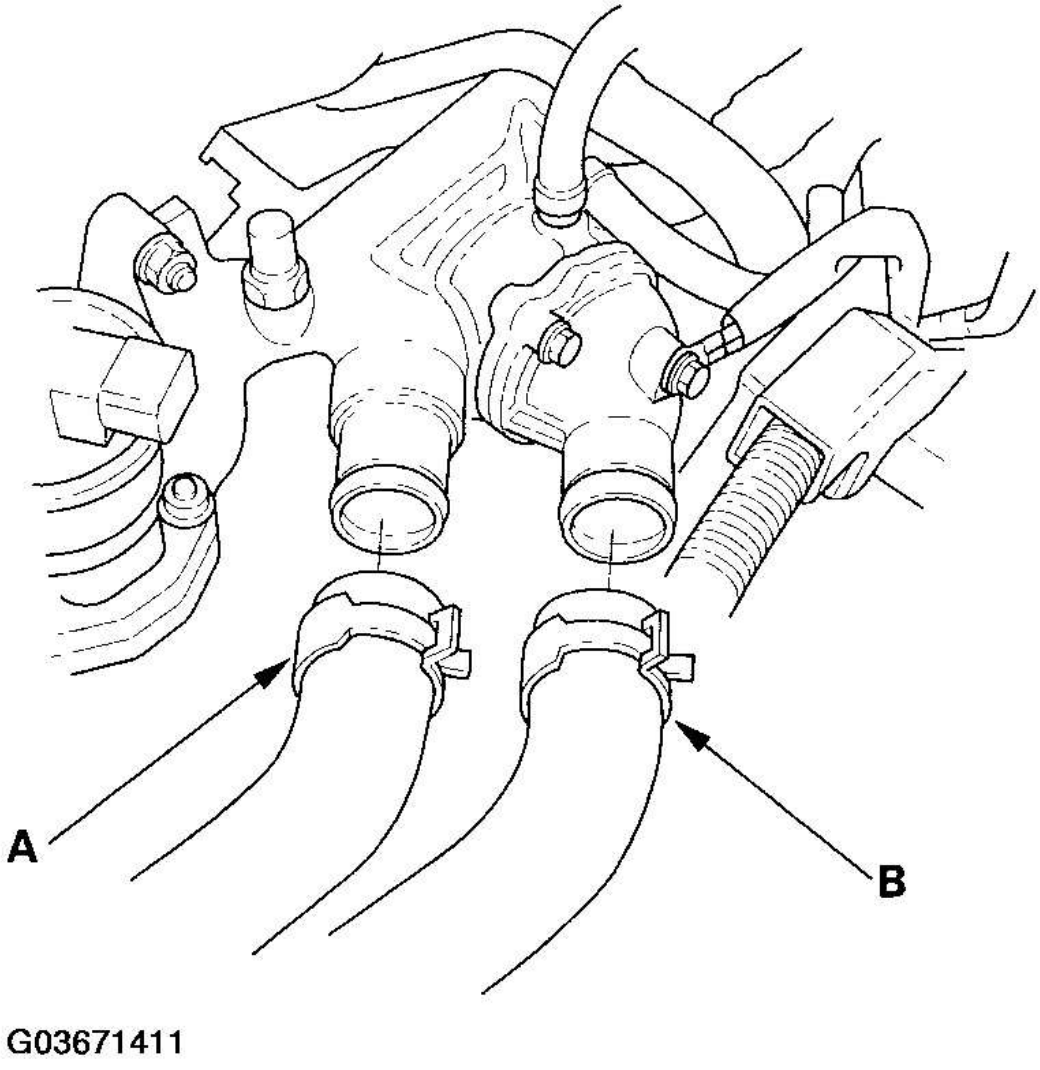


Fig. 145: Identifying Upper Radiator Hose And Lower Radiator Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Install the power steering (P/S) pump (A) and P/S hose bracket (B).

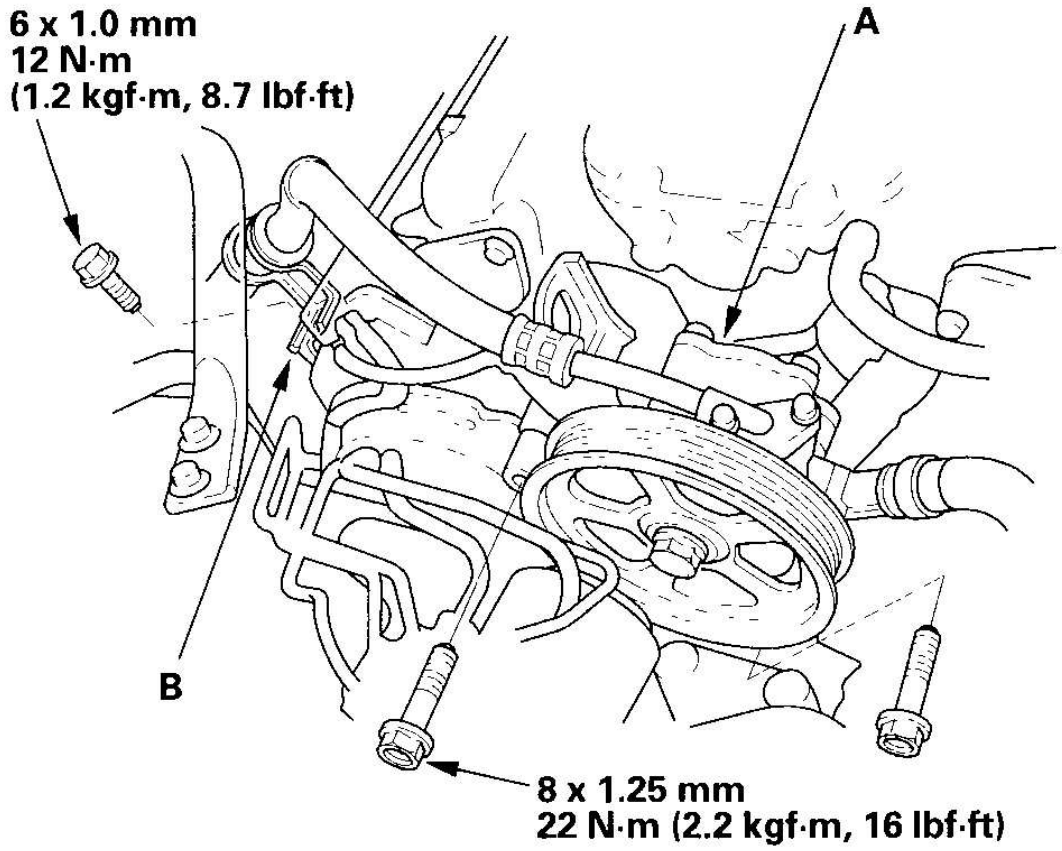


Fig. 146: Identifying P/S Pump And P/S Hose Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Install the timing belt (see **TIMING BELT INSTALLATION**).
25. Adjust the valve clearance (see **VALVE CLEARANCE ADJUSTMENT**).
26. Install the cylinder head covers (see **CYLINDER HEAD COVER INSTALLATION**).
27. Install the intake manifold (see **INSTALLATION**).
28. 28. Install the alternator (see **ALTERNATOR REMOVAL AND INSTALLATION**).
29. Install the drive belt.
30. Install the fuel line (see **FUEL LINE/QUICK-CONNECT FITTING**

INSTALLATION).

31. Clean the battery posts and cable terminals with sandpaper. Assemble them and apply grease to prevent corrosion.
32. After installation, check that all tubes, hoses, and connectors are installed correctly.
33. Inspect for fuel leaks. Turn the ignition switch ON (II) (do not operate the starter) so the fuel pump runs for about 2 seconds and pressurizes the fuel line. Repeat this operation two or three times, then check for fuel leakage at any point in the fuel line.
34. Refill the radiator with engine coolant, and bleed air from the cooling system with the heater valve open (see step 8 in **COOLANT REPLACEMENT**).
35. Perform the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .
36. Inspect the idle speed (see **IDLE SPEED INSPECTION**).
37. Inspect the ignition timing (see **IGNITION TIMING INSPECTION**).
38. Enter the anti-theft codes for the radio and the navigation system, then enter the customer's audio presets.
39. Set the clock.

CAMSHAFT OIL SEAL INSTALLATION - IN CAR

Special Tools Required

Camshaft oil seal driver 07PAF-0030100

1. Remove the timing belt (see **TIMING BELT REMOVAL**).
2. Remove the camshaft pulley and back cover (see step 21).
3. Remove the camshaft oil seal.
4. Dry the camshaft oil seal housing.
5. Apply a light coat of multipurpose grease to the lip of the camshaft oil seal.
6. Using the special tool (A), washer (B), and a 12 x 75 x 1.25 mm bolt (C), press in the camshaft oil seal (D) about 0.5-1.5 mm (0.02-0.06 in.) below the surface of the cylinder head.

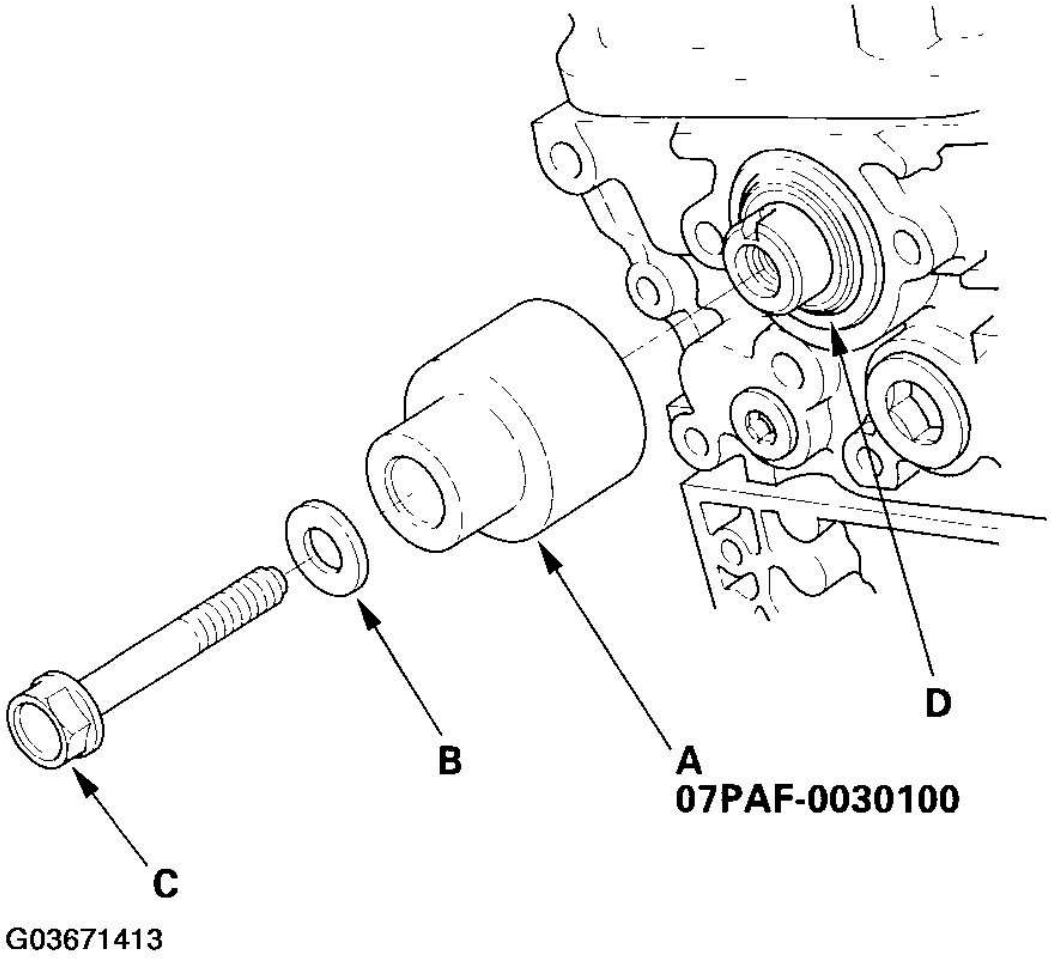


Fig. 147: Pressing Camshaft Oil Seal Using Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Apply new engine oil to the threads of the camshaft pulley mounting bolt. Install the back cover, then install the camshaft pulley (see step 11).
8. Install the timing belt (see **TIMING BELT INSTALLATION**).

SEALING BOLT INSTALLATION

NOTE: When installing the sealing bolt (A), always use new washer (B).

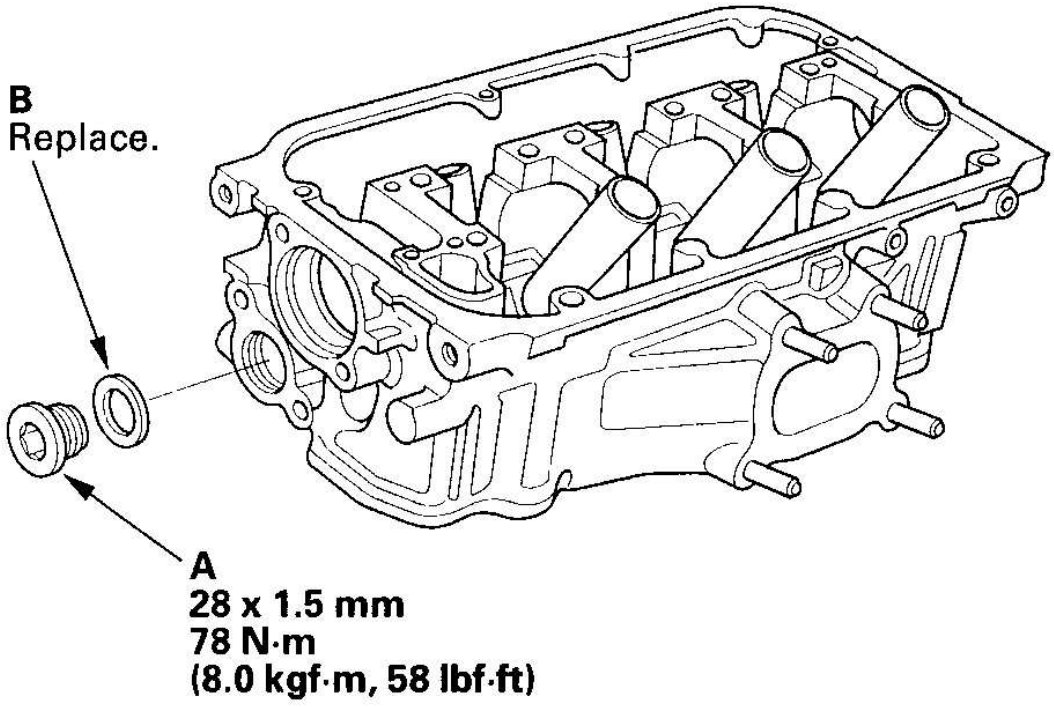


Fig. 148: Identifying Sealing Bolt And Washer (Front)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

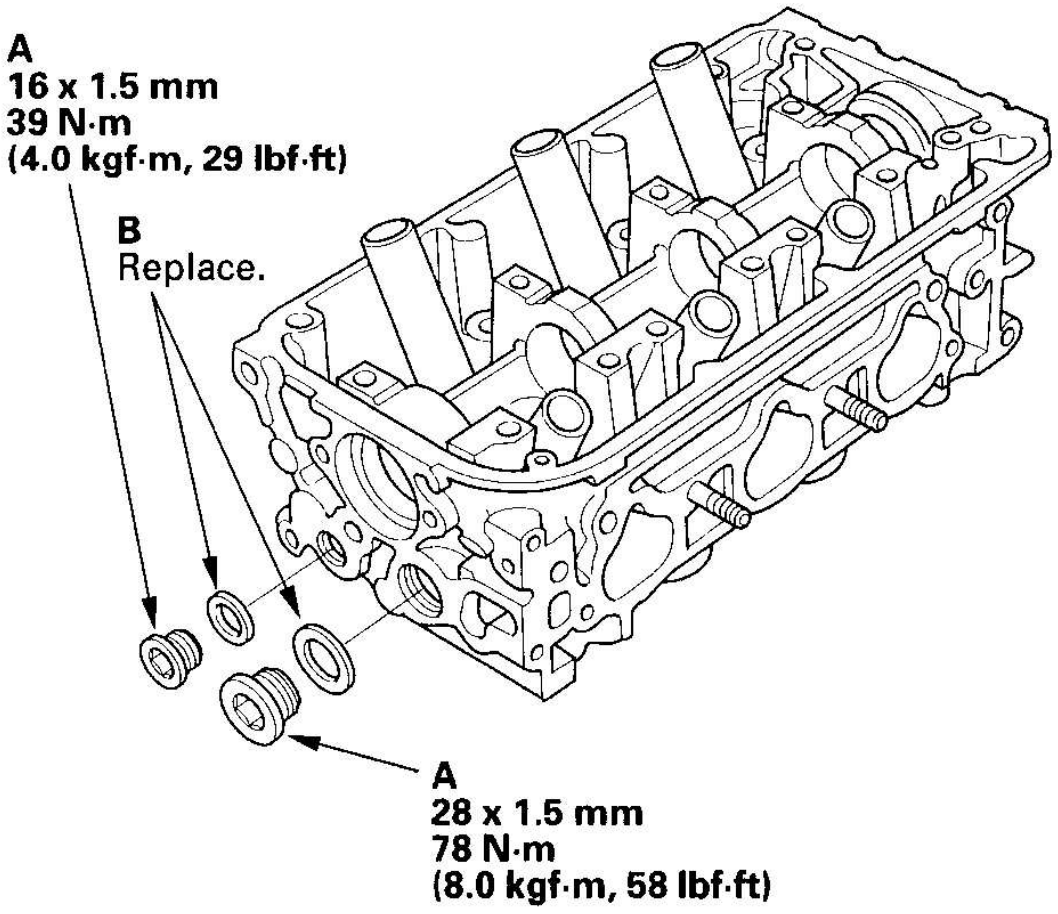


Fig. 149: Identifying Sealing Bolt And Washer (Rear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ENGINE

Cylinder Head - Accord

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07AAJ-PNAA100	Air Pressure Regulator	1
②	07HAH-PJ7A100	Valve Guide Reamer, 5.5 mm	1
③	07JAA-001020A	Socket, 19 mm	1
④	07JAB-001020A	Holder Handle	1
⑤	07MAA-PR70100	Tappet Adjust Wrench Set	1
⑥	07NAB-001040A	Holder Attachment, 50 mm	1
⑦	07PAD-0010000	Stem Seal Driver	1
⑧	07ZAJ-PNAA100	VTEC Air Adapter	2
⑨	07ZAJ-PNAA200	VTEC Air Stopper	1
⑩	07ZAJ-PNAA300	Air Joint Adapter	1
⑪	07742-0010100	Valve Guide Driver, 5.5 mm	1
⑫	07746-0010400	Attachment, 52 x 55 mm	1
⑬	07749-0010000	Driver	1
⑭	07757-PJ1010A	Valve Spring Compressor Attachment	1

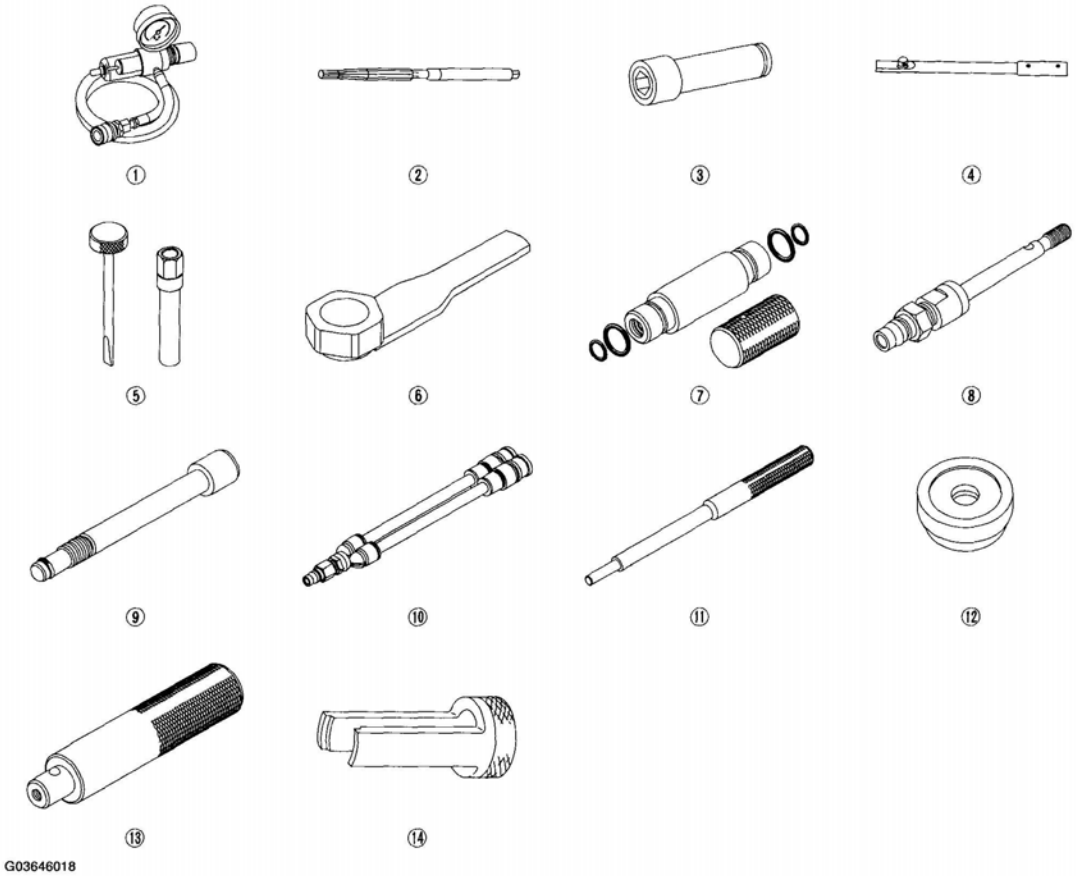


Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

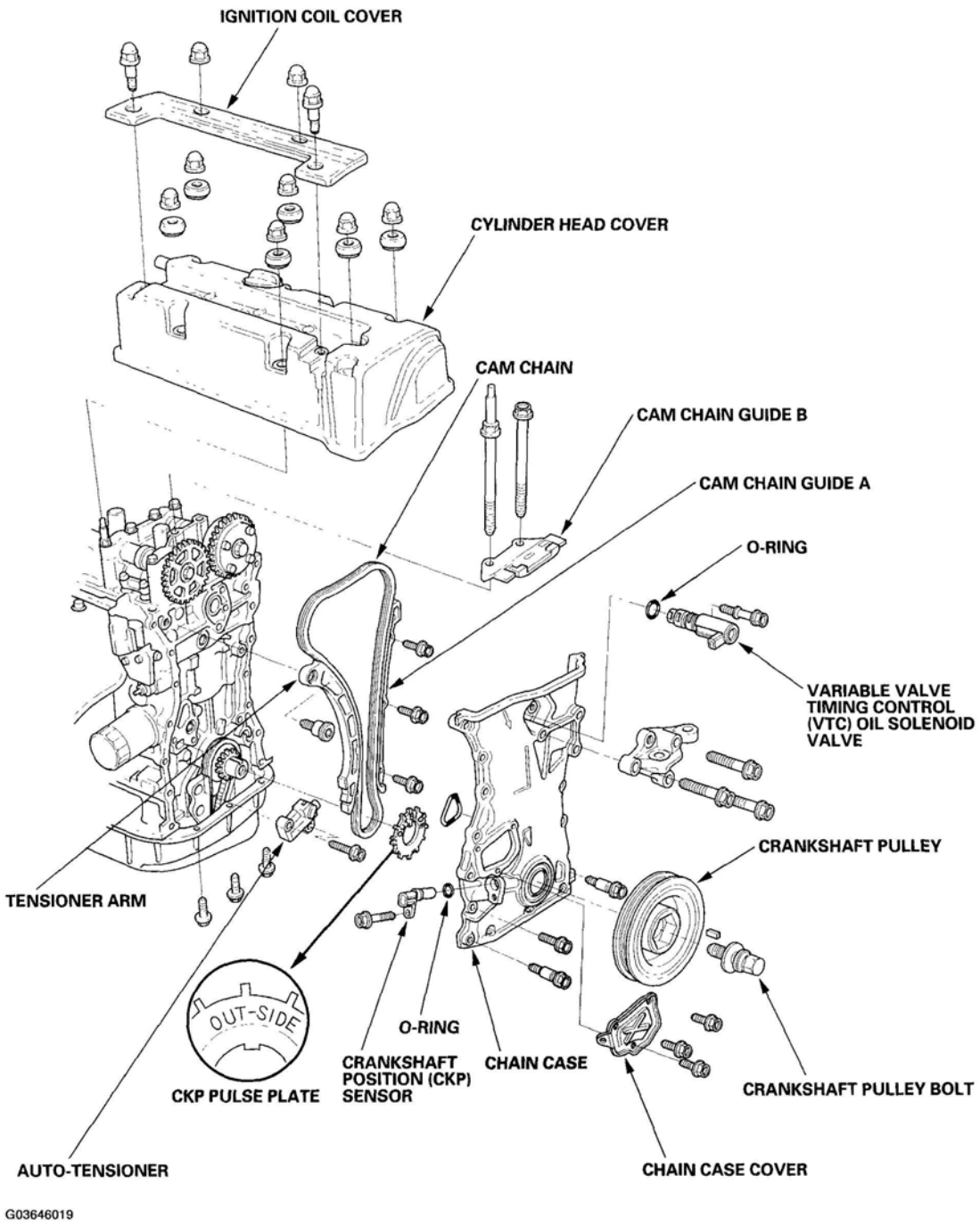


Fig. 2: Identifying Cylinder Head Component (1 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

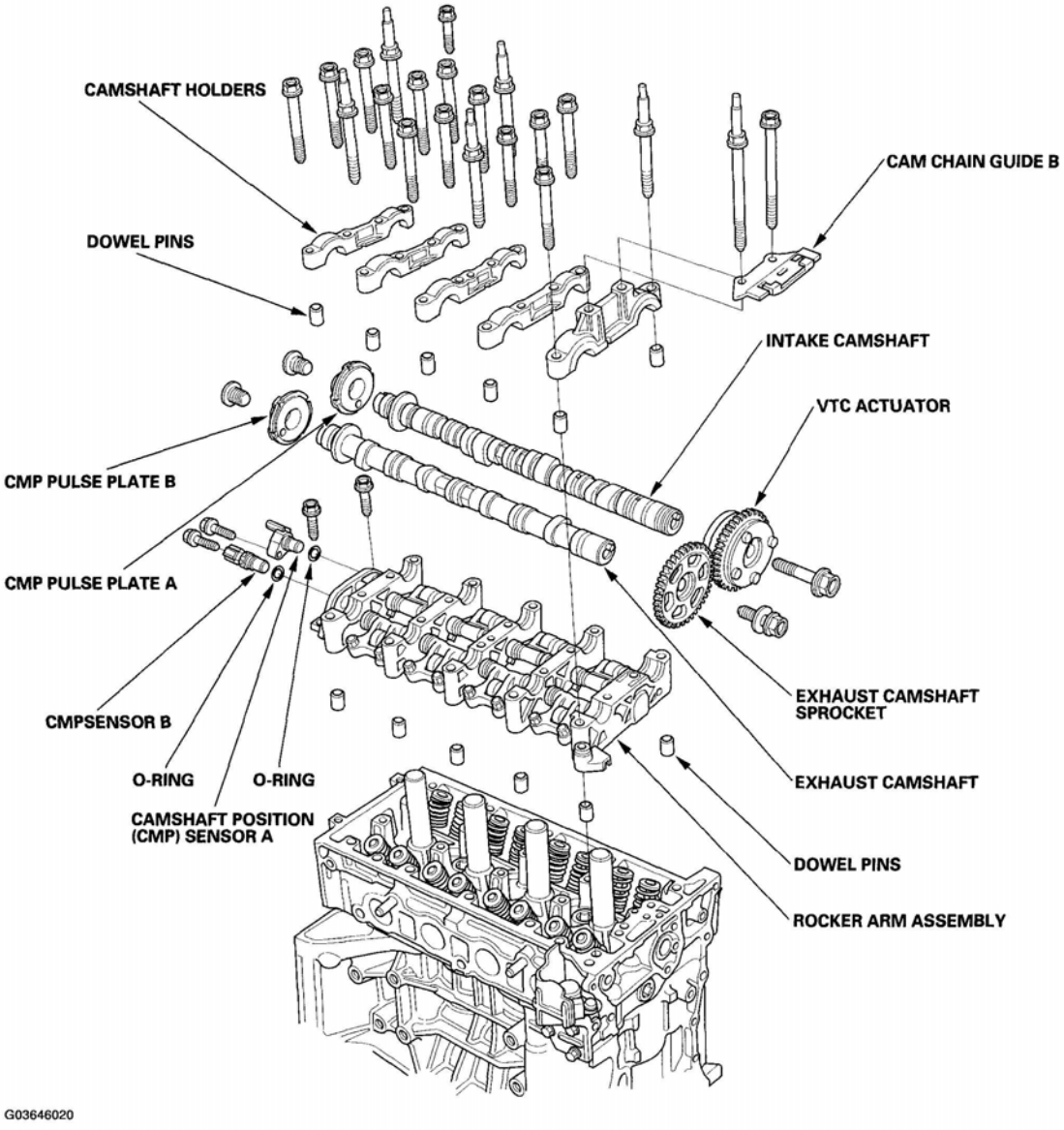


Fig. 3: Identifying Cylinder Head Component (2 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

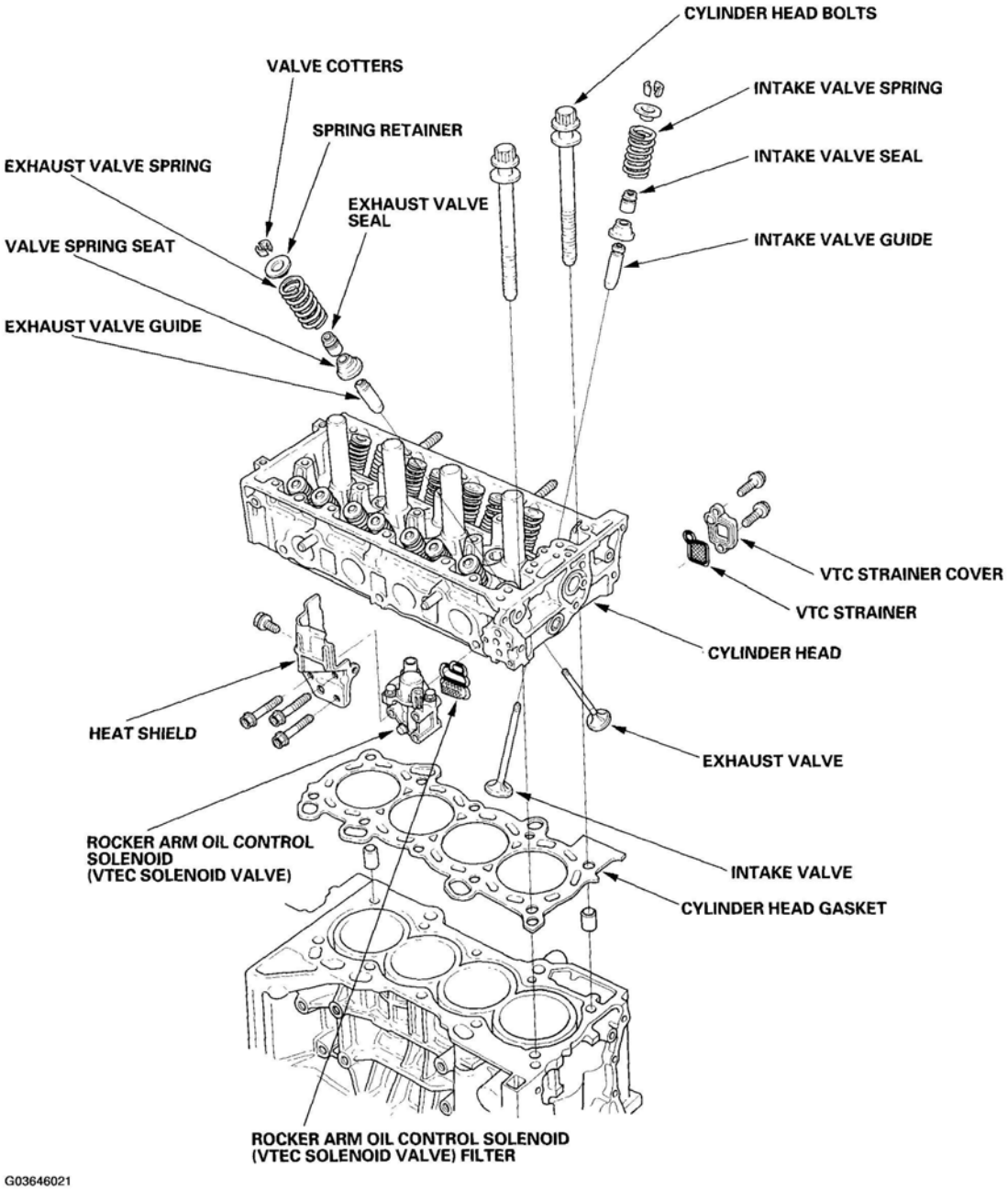


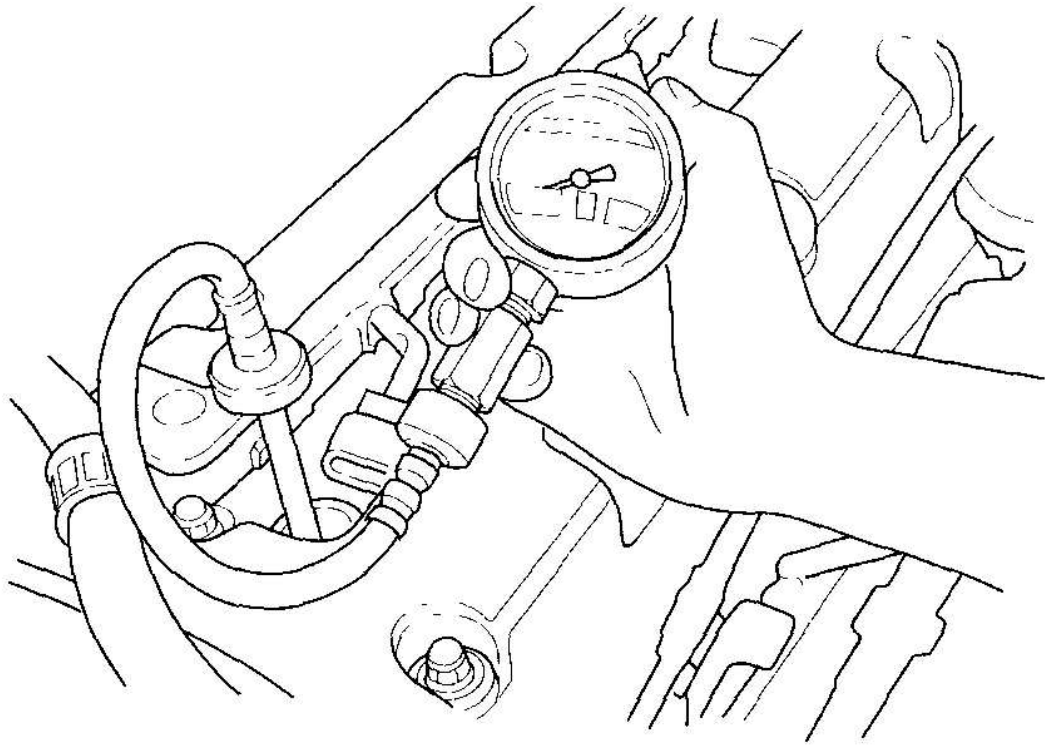
Fig. 4: Identifying Cylinder Head Component (3 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ENGINE COMPRESSION INSPECTION

After this inspection, you must reset the engine control module (ECM)/the powertrain control module (PCM) will continue to stop the injectors from

functioning. Select ECM/PCM reset using the Honda Diagnostic System (HDS) (see **HDS CLEAR COMMAND**).

1. Warm up the engine to normal operating temperature (cooling fan comes on).
2. Turn the ignition switch OFF.
3. Connect the HDS to the data link connector (DLC) (see step 2 on **HOW TO USE THE HDS (HONDA DIAGNOSTIC SYSTEM)**).
4. Turn the ignition switch ON (II), select PGM-FI, INSPECTION, then ALL INJECTORS OFF on the HDS.
5. Remove the four ignition coils (see **IGNITION COIL REMOVAL/INSTALLATION**).
6. Remove the four spark plugs.
7. Attach the compression gauge to the spark plug hole.



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Fig. 5: Attaching Compression Gauge To Spark Plug Hole
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Open the throttle fully, then crank the engine with the starter motor and measure the compression.

   Compression Pressure:

   Above 930 kPa (9.5 kgf/cm^2 ,135 psi)

9. Measure the compression on the remaining cylinders.

   Maximum Variation:

   Within 200 kPa (2.0 kgf/cm^2 ,28 psi)

10. If the compression is not within specifications, check the following items, then remeasure the compression.
    - Damaged or worn valves and seats
    - Damaged cylinder head gasket
    - Damaged or worn piston rings
    - Damaged or worn piston and cylinder bore
11. Select ECM/PCM reset (see **ECM/PCM RESET**) to cancel the ALL INJECTORS OFF function on the HDS.

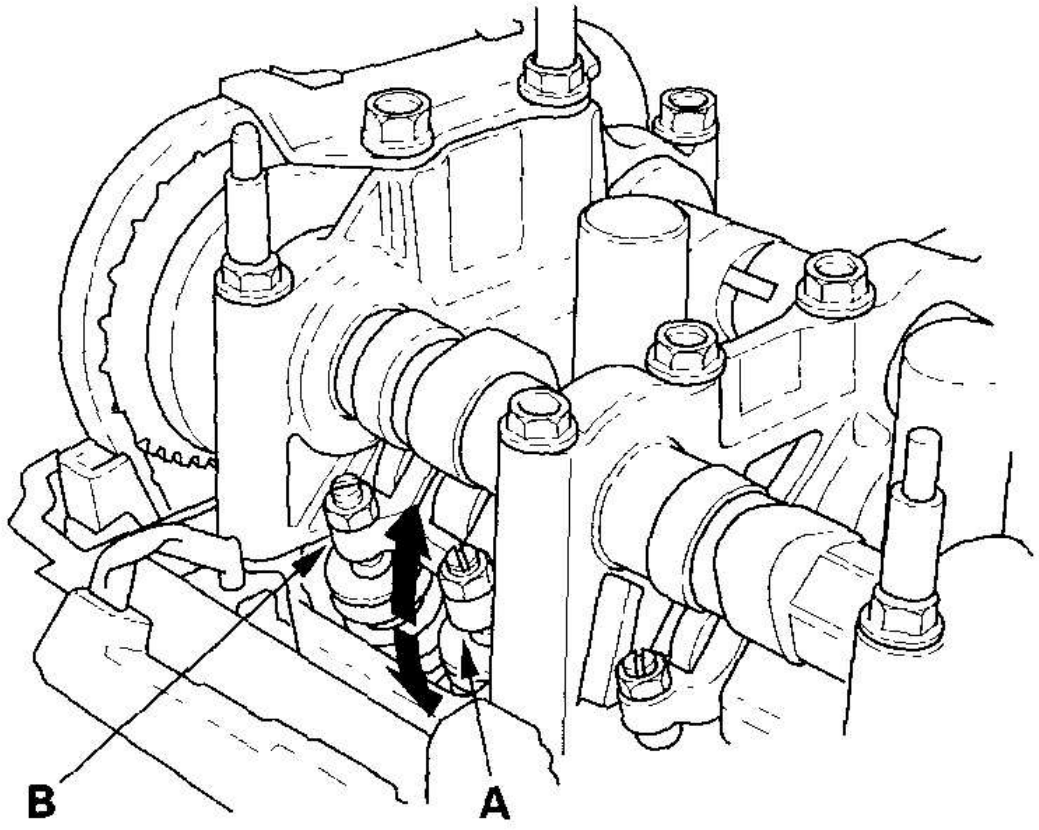
VTEC ROCKER ARM TEST

Special Tools Required

- Air pressure regulator 07AAJ-PNAA100
- VTEC air adapter 07ZAJ-PNAA100
- VTEC air stopper 07ZAJ-PNAA200
- Air joint adapter 07ZAJ-PNAA300

1. Start the engine and let it run for 5 minutes, then turn the ignition switch OFF.

2. Remove the cylinder head cover (see **CYLINDER HEAD COVER REMOVAL**).
3. Set the No. 1 piston at top dead center (TDC) (see step 1).
4. Verify that the intake primary rocker arm (A) moves independently of the intake secondary rocker arm (B).
    - If the intake primary rocker arm does not move, remove the primary and secondary rocker arms as an assembly, then check that the pistons in the secondary and primary rocker arms move smoothly. If any rocker arm needs replacing, replace the primary and secondary rocker arms as an assembly, and test.
    - If the intake primary rocker arm moves freely, go to step 4.



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Fig. 6: Checking Intake Primary Rocker Arm Moves Independently Of Intake Secondary Rocker Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Repeat step 3 on the remaining intake primary rocker arms with each piston at TDC. When all the primary rocker arms pass the test, go to step 5.
6. Check that the air pressure on the shop air compressor gauge indicates over 400 kPa (4 kgf/cm^2 , 57 psi).
7. Inspect the valve clearance (see **VALVE CLEARANCE ADJUSTMENT**).
8. Remove the sealing bolt (A) from the relief hole, and install the VTEC air stopper (B).

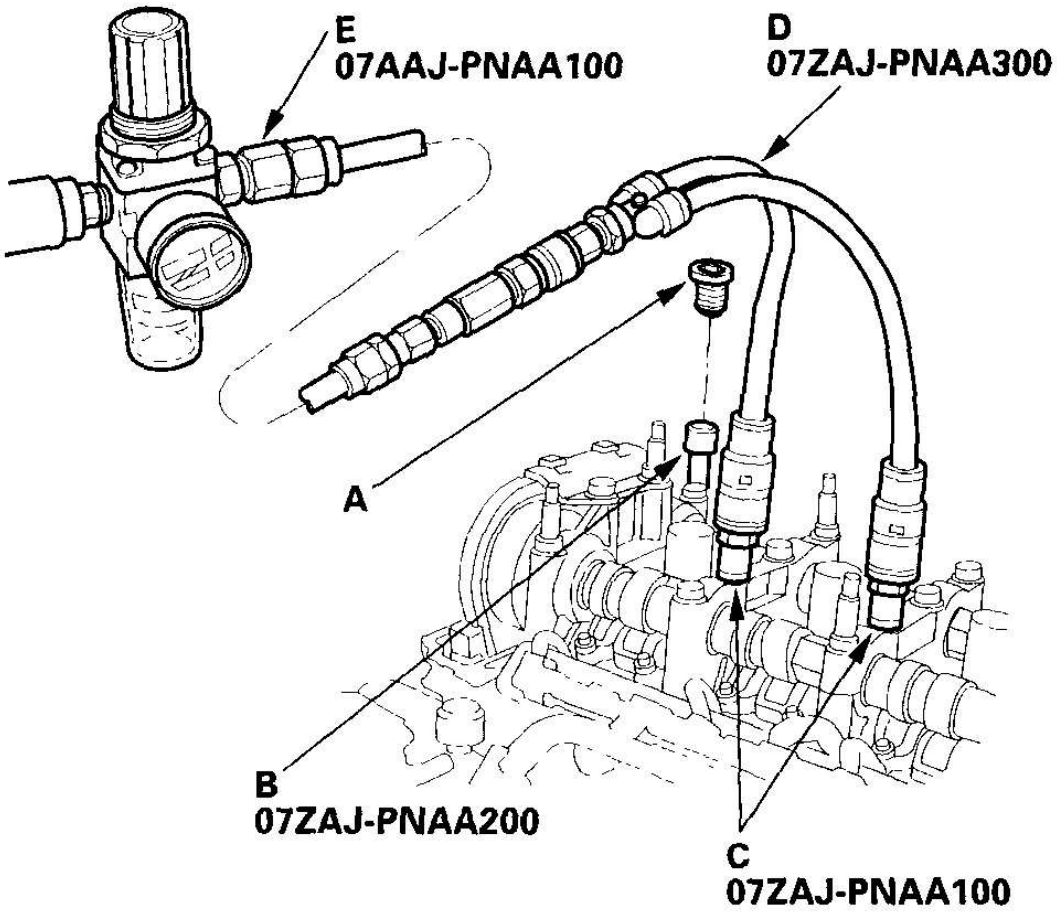


Fig. 7: Installing VTEC Air Stopper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the No. 2 and No. 3 camshaft holder bolts, and install the VTEC air adapters (C) finger-tight.
10. Connect the air joint adapter (D) and air pressure regulator (E).
11. Loosen the valve on the regulator, and apply the specified air pressure.

Specified air pressure:

290 kPa (3.0 kgf/cm^2 ,42 psi)

NOTE: If the synchronizing piston does not move after applying air pressure, move the primary or secondary rocker arm up and down manually by rotating the crankshaft clockwise.

12. With the specified air pressure applied, move the intake primary rocker arm (A) for the No. 1 cylinder. The primary rocker arm and secondary rocker arm (B) should move together.

    If the intake secondary rocker arm does not move, remove the primary and secondary rocker arms as an assembly, and check that the pistons in the primary and secondary rocker arms move smoothly. If any rocker arm needs replacing, replace the primary and secondary rocker arms as an assembly, and test.

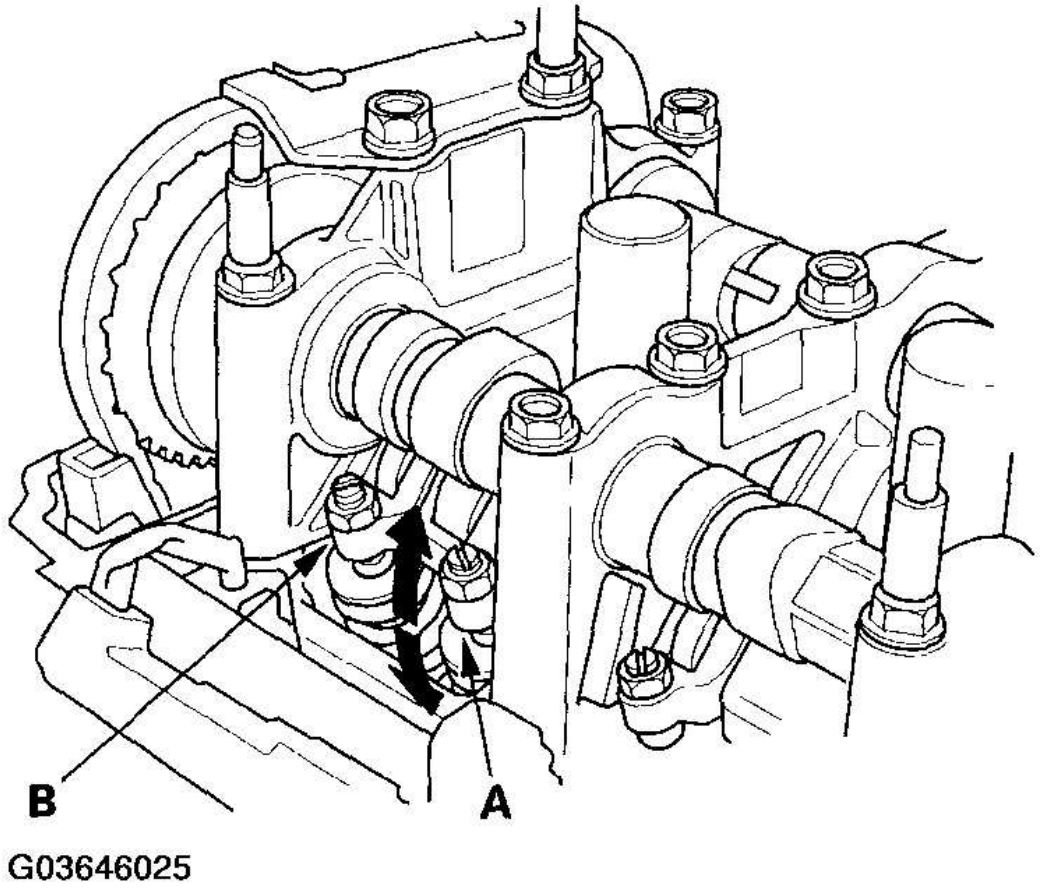


Fig. 8: Moving Intake Primary Rocker Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Remove the special tools.
14. Tighten the camshaft holder mounting bolts to 22 N.m (2.2 kgf.m, 16 lbf.ft).
15. Tighten the sealing bolt to 20 N.m (2.0 kgf.m, 14 lbf.ft).
16. Install the cylinder head cover (see **CYLINDER HEAD COVER INSTALLATION**).

VTC ACTUATOR INSPECTION

1. Remove the cam chain (see **Cam Chain Removal**).

2. Loosen the rocker arm adjusting screws (see step 2).
3. Remove the camshaft holder (see step 3).
4. Remove the intake camshaft.
5. Check that the variable valve timing control (VTC) actuator is locked by turning the VTC actuator clockwise and counterclockwise. If the VTC actuator is not locked, replace the VTC actuator.
6. Seal the advance holes (A) and retard holes (B) in the No. 1 camshaft journal with tape.

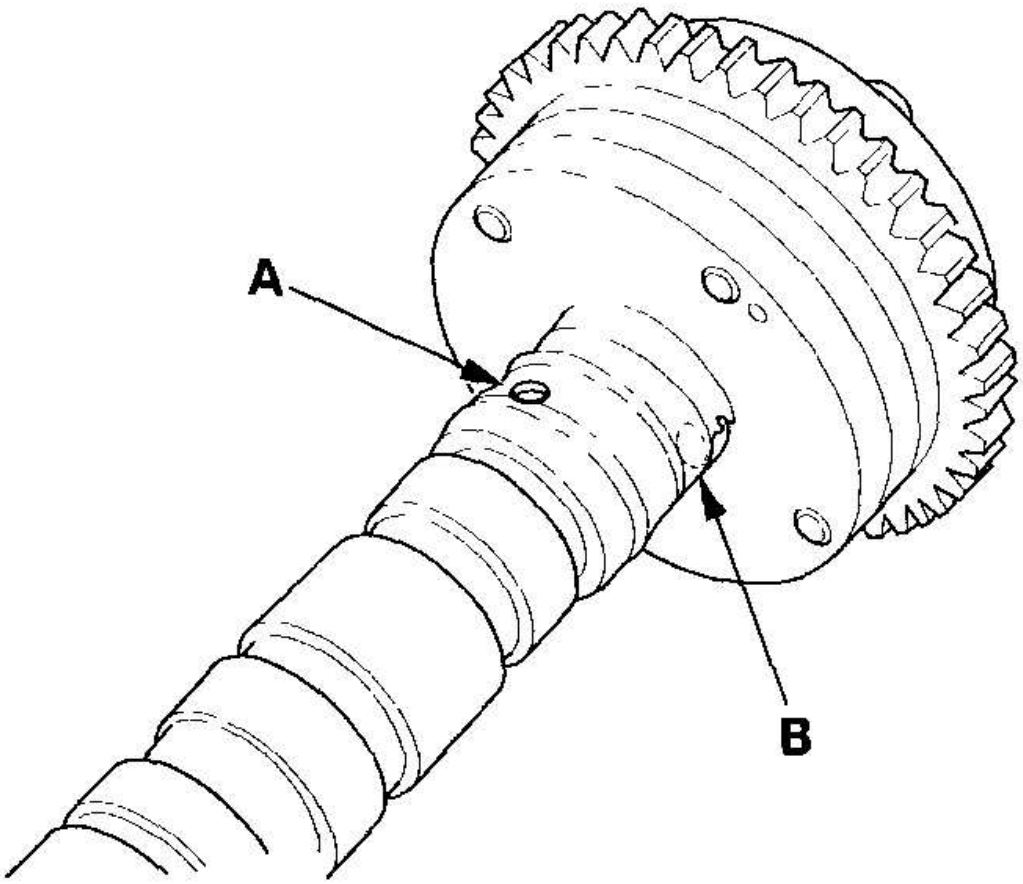


Fig. 9: Sealing Advance Holes And Retard Holes

Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Punch a hole in the tape over one of the advance holes.
8. Apply air to the advance hole to release the lock.

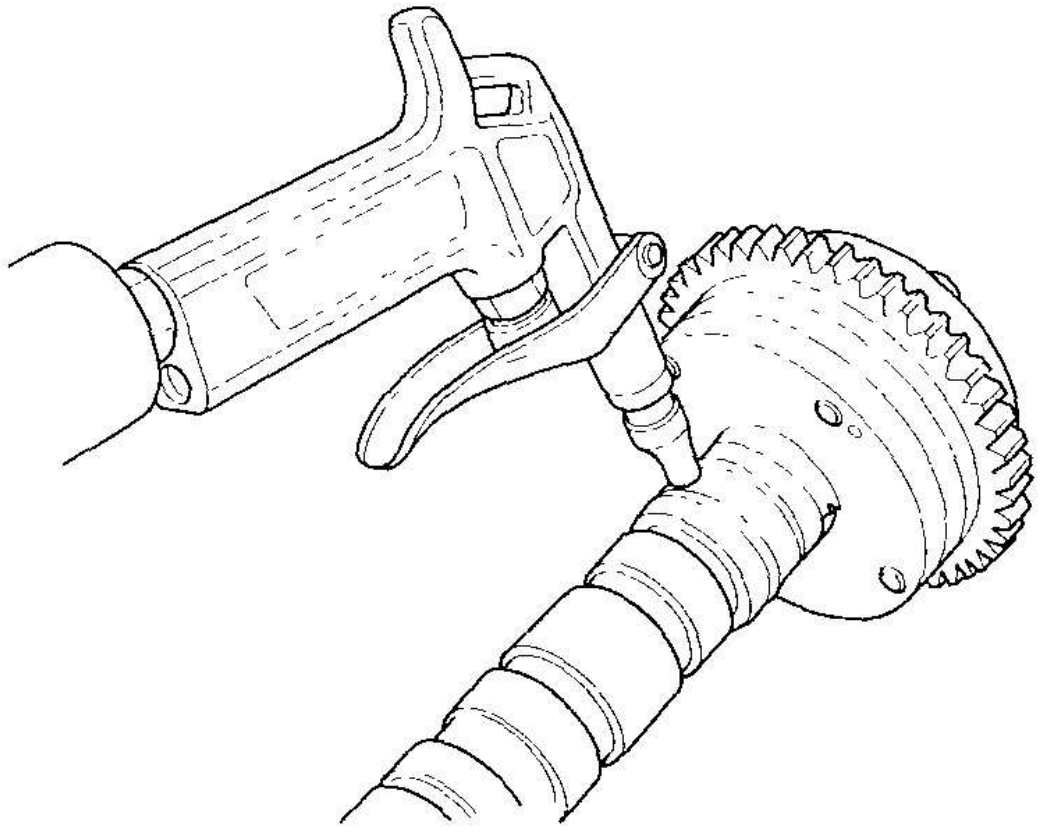


Fig. 10: Applying Air To Advance Hole To Release Lock
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Check that the VTC actuator moves smoothly. If the VTC actuator does not move smoothly, replace the VTC actuator.

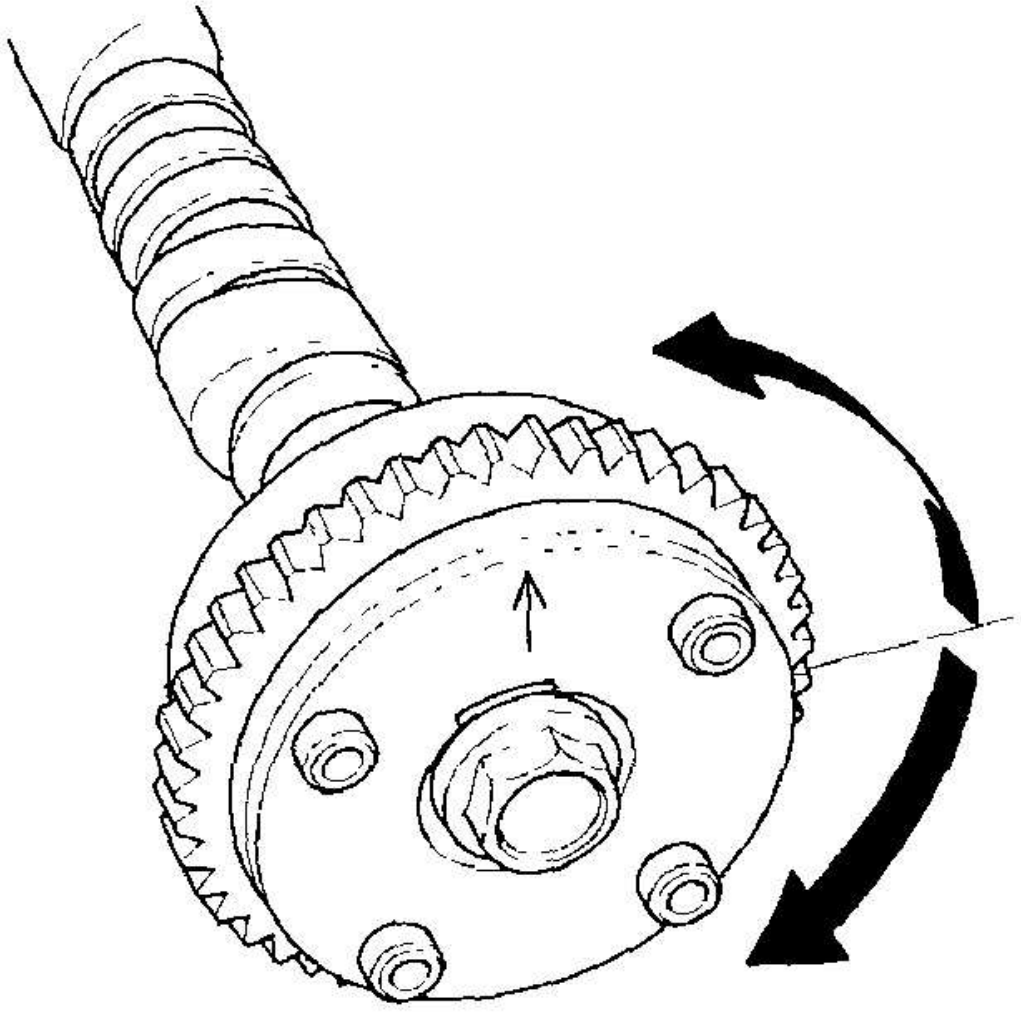


Fig. 11: Checking That VTC Actuator Moves Smoothly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Make sure the punch marks on the VTC actuator and exhaust camshaft sprocket are facing up, then set the camshafts in the rocker shaft holder (see step 6).
11. Set the camshaft holders and chain guide B in place (see step 7).

12. Tighten the camshaft holder bolts to the specified torque (see step 8).
13. Check that the variable valve timing control (VTC) actuator is locked by turning the VTC actuator counterclockwise. If not locked, turn the VTC actuator clockwise until it stops, then recheck it. If it is still not locked, replace the VTC actuator.
14. Install the cam chain (see **CAM CHAIN INSTALLATION**).
15. Adjust the valve clearance (see **VALVE CLEARANCE ADJUSTMENT**).

VALVE CLEARANCE ADJUSTMENT

Special Tools Required

Tappet adjust wrench set 07MAA-PR70100

NOTE: Adjust the valves only when the cylinder head temperature is less than 100 ℉ (38 ℃).

1. Remove the cylinder head cover (see **CYLINDER HEAD COVER REMOVAL**).
2. Set the No. 1 piston at top dead center (TDC). The punch mark (A) on the variable valve timing control (VTC) actuator and the punch mark (B) on the exhaust camshaft sprocket should be at the top. Align the TDC marks (C) on the VTC actuator and exhaust camshaft sprocket.

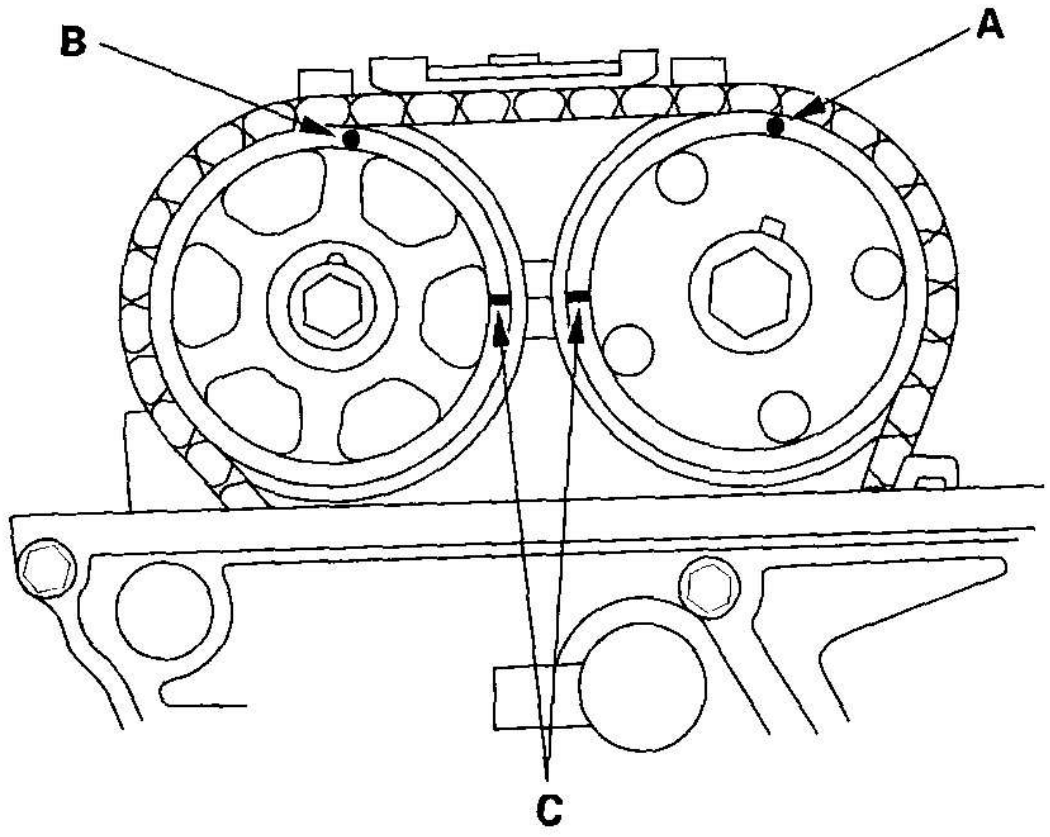


Fig. 12: Identifying Punch Mark On Variable Valve Timing Control (VTC) Actuator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Select the correct thickness feeler gauge for the valves you're going to check.

   Valve Clearance

   Intake: 0.21---0.25 mm (0.008---0.010 in.)

   Exhaust: 0.28---0.32 mm (0.011---0.013 in.)

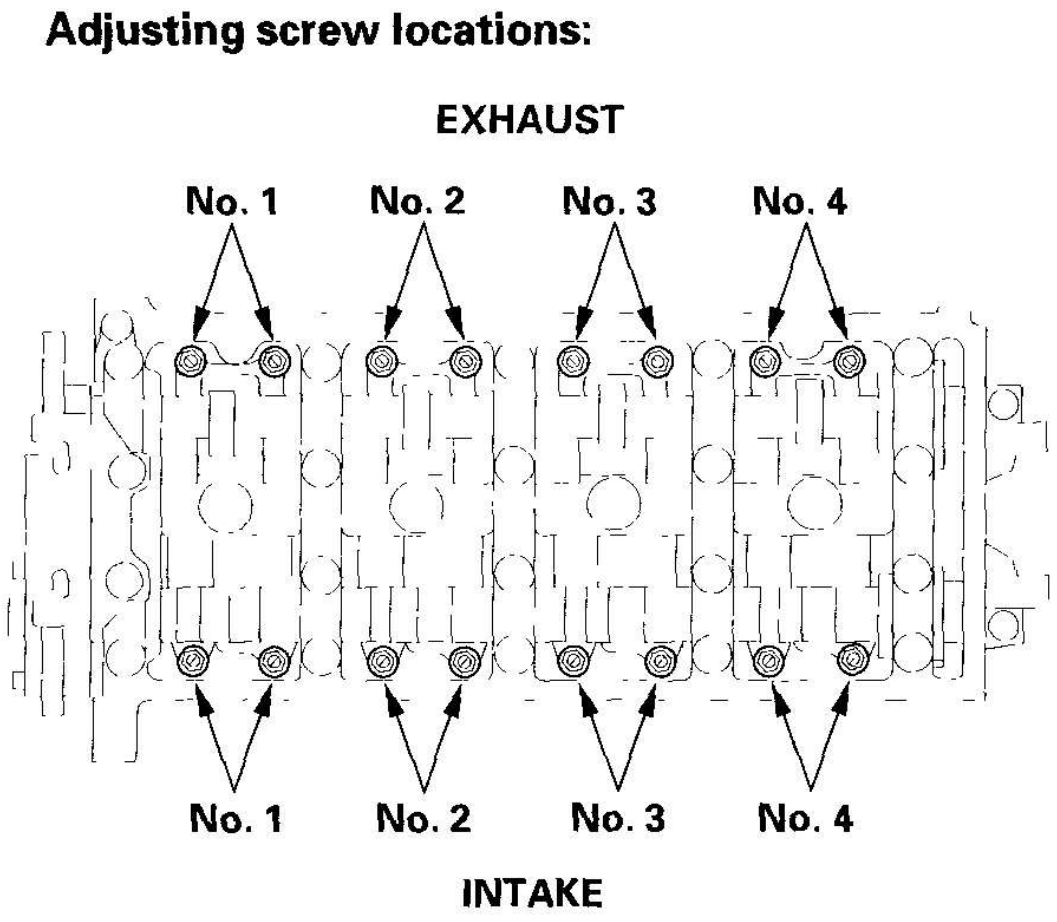


Fig. 13: Identifying Adjusting Screw Location Exhaust And Intake
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Insert the feeler gauge (A) between the adjusting screw (B) and the end of the valve stem, and slide it back and forth; you should feel a slight amount of drag.

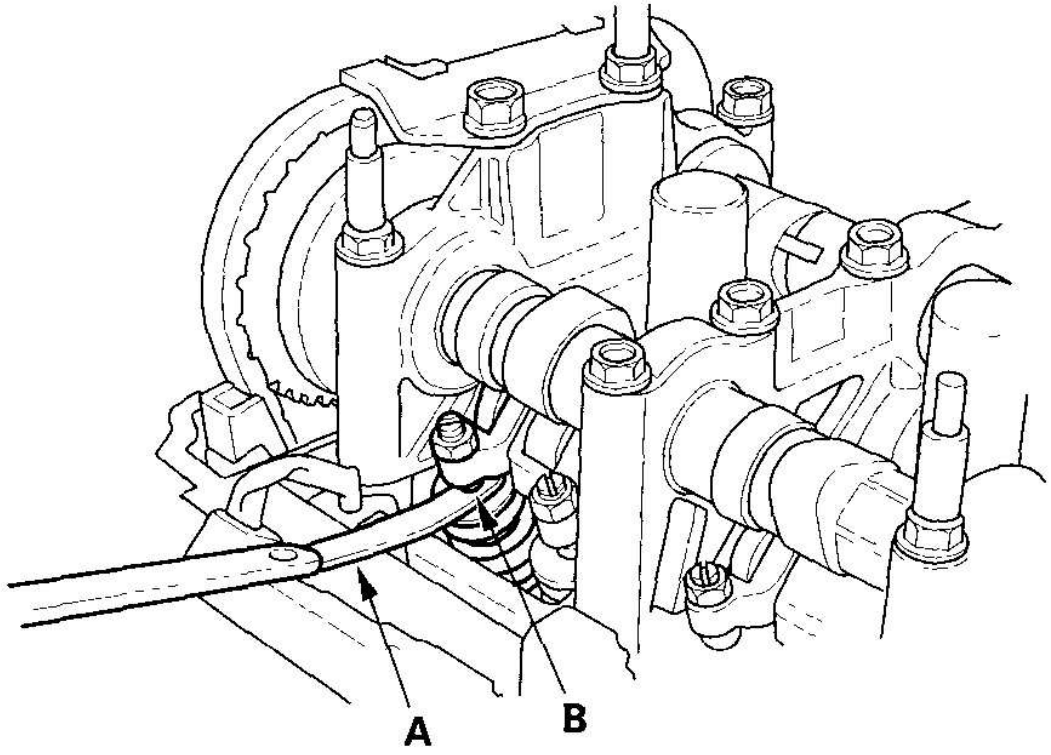


Fig. 14: Inserting Feeler Gauge Between Adjusting Screw And End Of Valve Stem
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If you feel too much or too little drag, loosen the locknut with the special tools, and turn the adjusting screw until the drag on the feeler gauge is correct.

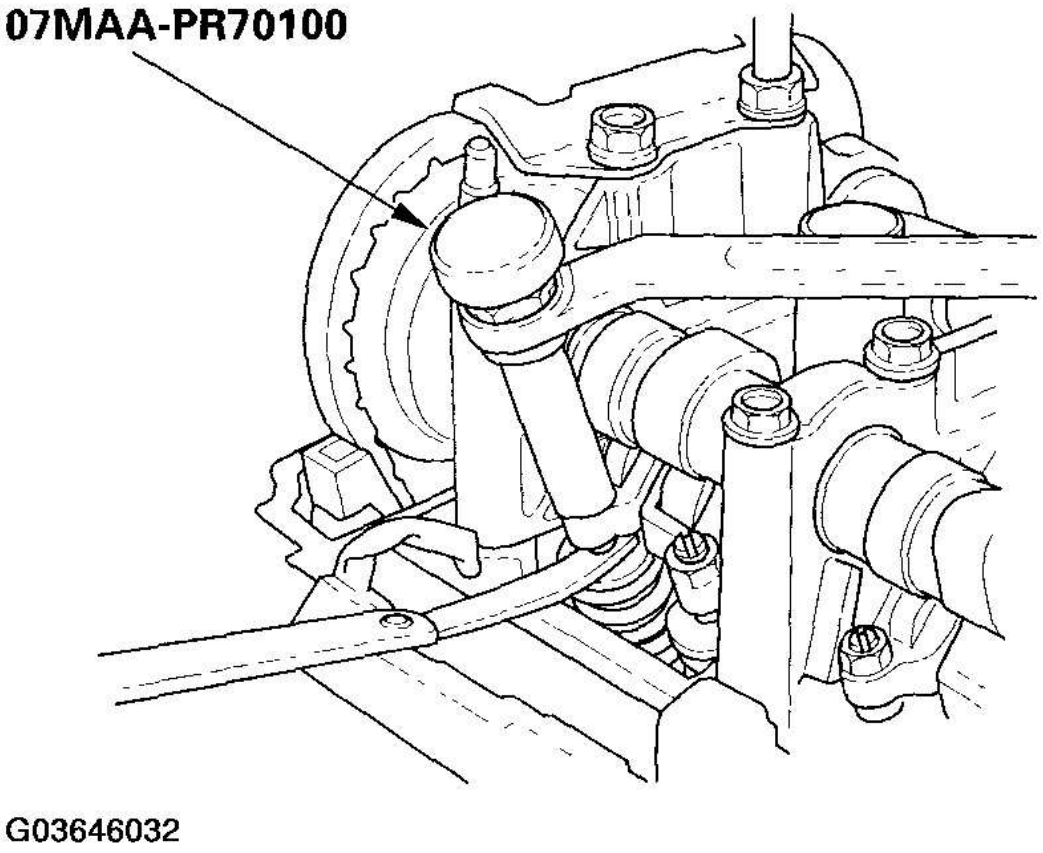


Fig. 15: Loosening Locknut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Tighten the locknut.

Specified torque

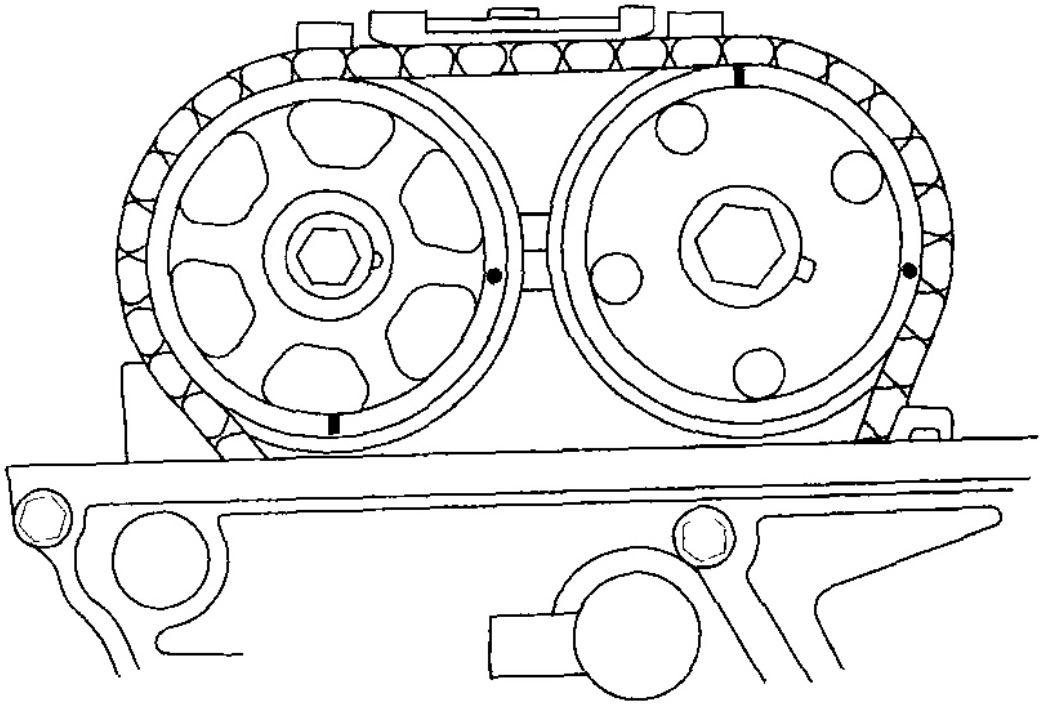
Intake: 20 N.m (2.0 kgf.m, 14 lbf.ft)

Apply engine oil to the nut threads.

Exhaust: 14 N.m (1.4 kgf.m, 10 lbf.ft)

Apply engine oil to the nut threads.

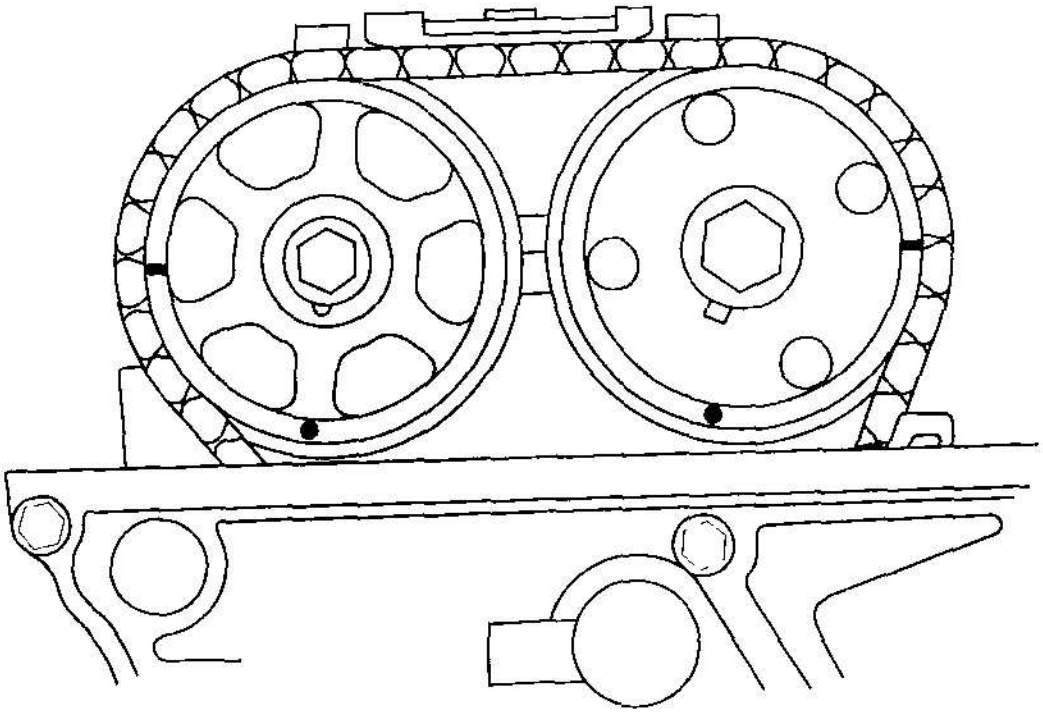
7. Recheck the valve clearance. Repeat the adjustment if necessary.
8. Rotate the crankshaft 180° clockwise (camshaft pulley turns 90°).



G03646033

Fig. 16: Rotating Crankshaft 180° Clockwise (Camshaft Pulley Turns 90°)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

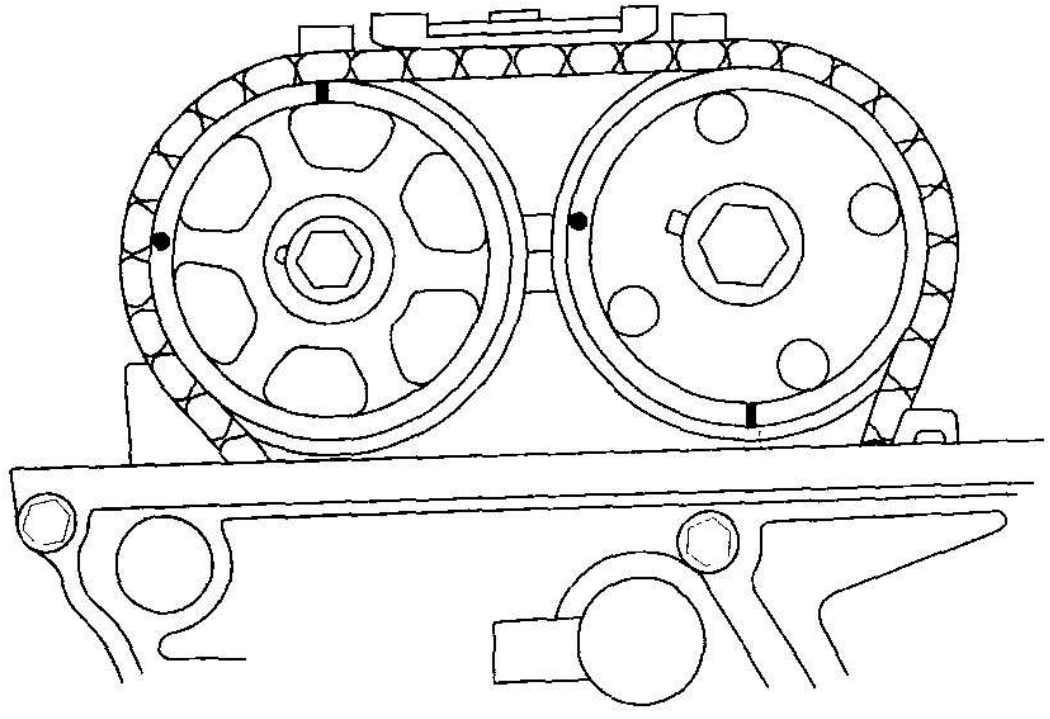
9. Check and, if necessary, adjust the valve clearance on No. 3 cylinder.
10. Rotate the crankshaft 180° clockwise (camshaft pulley turns 90°).



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Fig. 17: Rotating Crankshaft 180° Clockwise (Camshaft Pulley Turns 90°)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Check and, if necessary, adjust the valve clearance on No. 4 cylinder.
12. Rotate the crankshaft 180° clockwise (camshaft pulley turns 90°).



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Fig. 18: Rotating Crankshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Check and, if necessary, adjust the valve clearance on No. 2 cylinder.
14. Install the cylinder head cover (see **CYLINDER HEAD COVER INSTALLATION**).

CRANKSHAFT PULLEY REMOVAL AND INSTALLATION

Special Tools Required

- Holder handle 07JAB-001020A
- Holder attachment, 50 mm 07NAB-001040A
- Socket, 19 mm 07JAA-001020A or a commercially available 19 mm socket

REMOVAL

1. Remove the front tires/wheels.
2. Remove the splash shield (see step 25 on **TRANSMISSION REMOVAL**).
3. Remove the drive belt (see **DRIVE BELT REPLACEMENT**).
4. Hold the pulley with holder handle (A) and holder attachment (B).

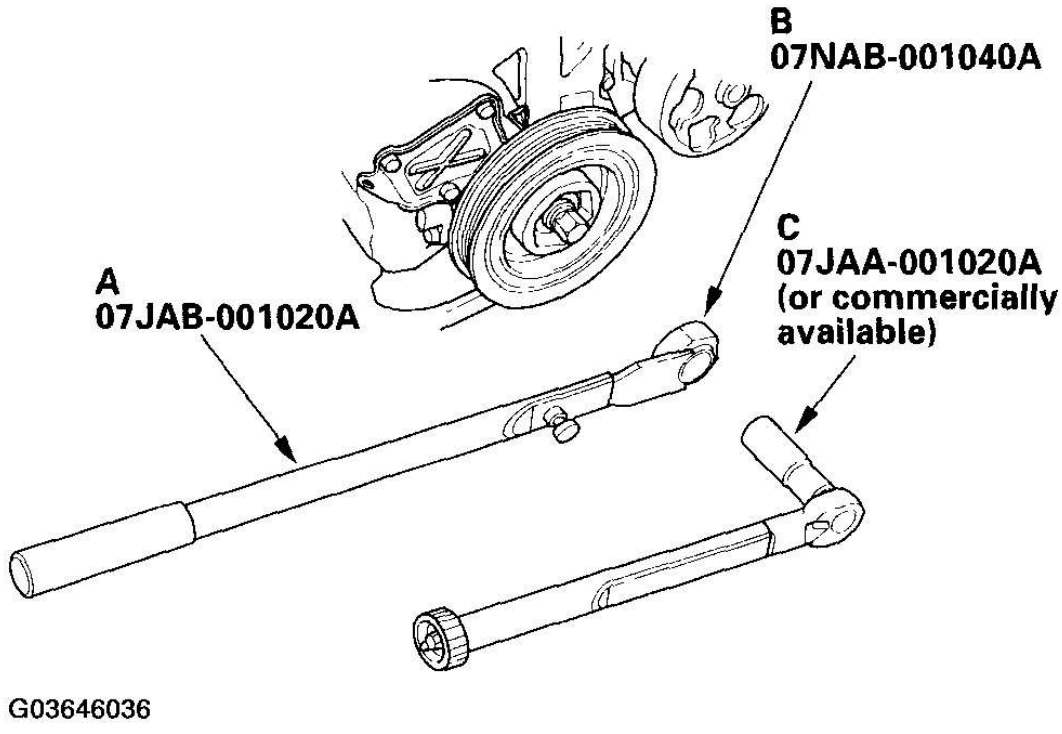


Fig. 19: Holding Pulley With Holder Handle And Holder Attachment
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the bolt with a 19 mm socket (C) and breaker bar.

INSTALLATION

1. Clean the crankshaft pulley (A), crankshaft (B), bolt (C), and washer (D). Lubricate new engine oil as shown in **Fig. 20**.

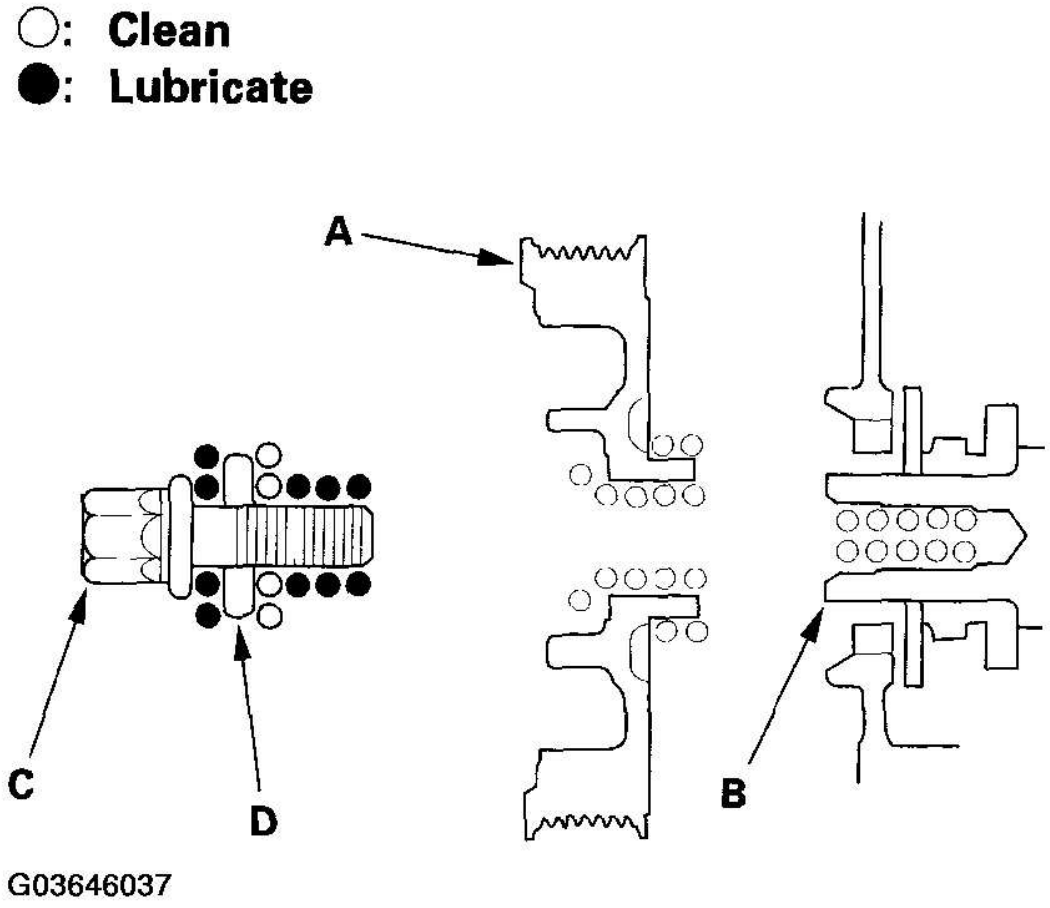


Fig. 20: Cleaning Crankshaft Pulley, Crankshaft, Bolt, And Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the crankshaft pulley, and hold the pulley with holder handle (A) and holder attachment (B).

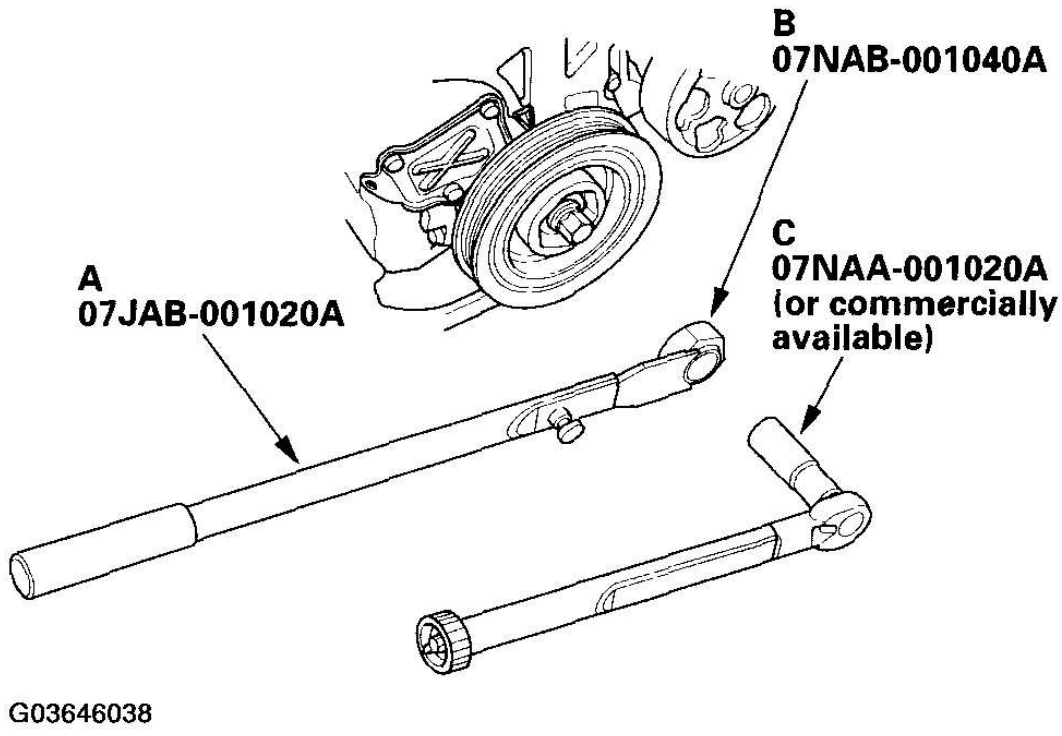


Fig. 21: Installing Crankshaft Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Tighten the bolt to 49 N.m (5.0 kgf.m, 36 lbf.ft) with a torque wrench and 19 mm socket (C). Do not use an impact wrench.
4. Mark the bolt head (A) and the crankshaft pulley (B) as shown, then tighten the bolt an additional 90° (The mark on the bolt head line up with the mark on the crankshaft pulley).

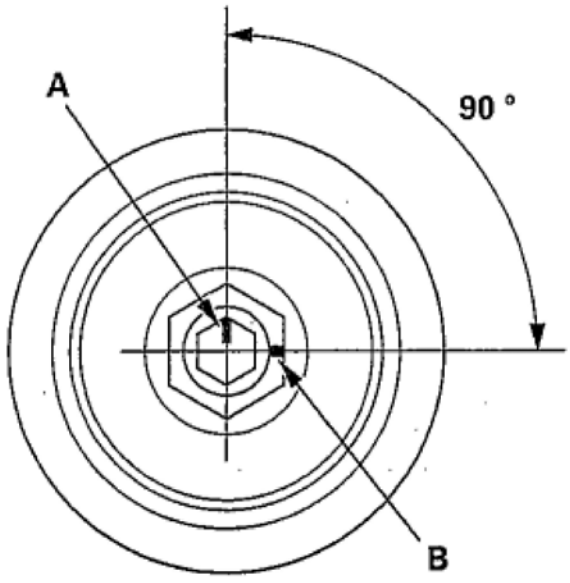


Fig. 22: Marking The Bolt Head And The Crankshaft Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the drive belt (see **DRIVE BELT REPLACEMENT**).
6. Install the splash shield (see step 25 on **TRANSMISSION INSTALLATION**).
7. Install the front tires/wheels.

CAM CHAIN REMOVAL

NOTE: Keep the cam chain away from magnetic fields.

1. Turn the crankshaft pulley so its top dead center (TDC) mark (A) lines up with the pointer (B).

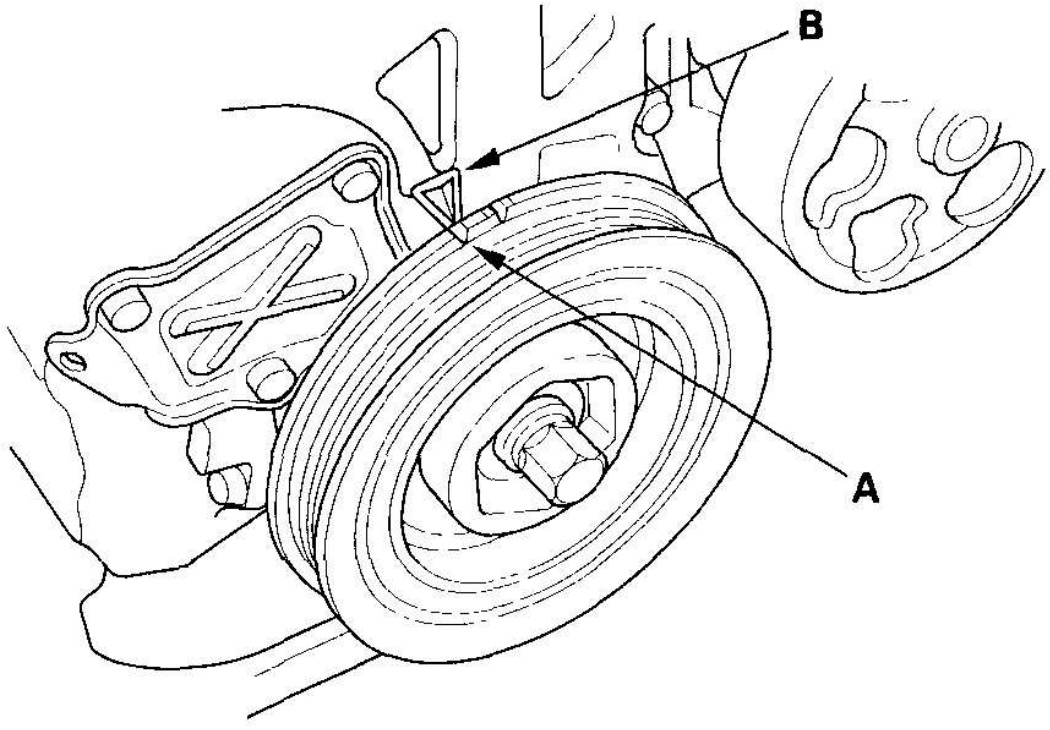


Fig. 23: Turning Crankshaft Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the front tires/wheels.
3. Remove the splash shield (see step 25 on **TRANSMISSION REMOVAL**).
4. Remove the drive belt (see **DRIVE BELT REPLACEMENT**).
5. Remove the cylinder head cover (see **CYLINDER HEAD COVER REMOVAL**).
6. Check that the No. 1 piston TDC marks (A) on the variable valve timing control (VTC) actuator and exhaust camshaft sprocket are aligned.

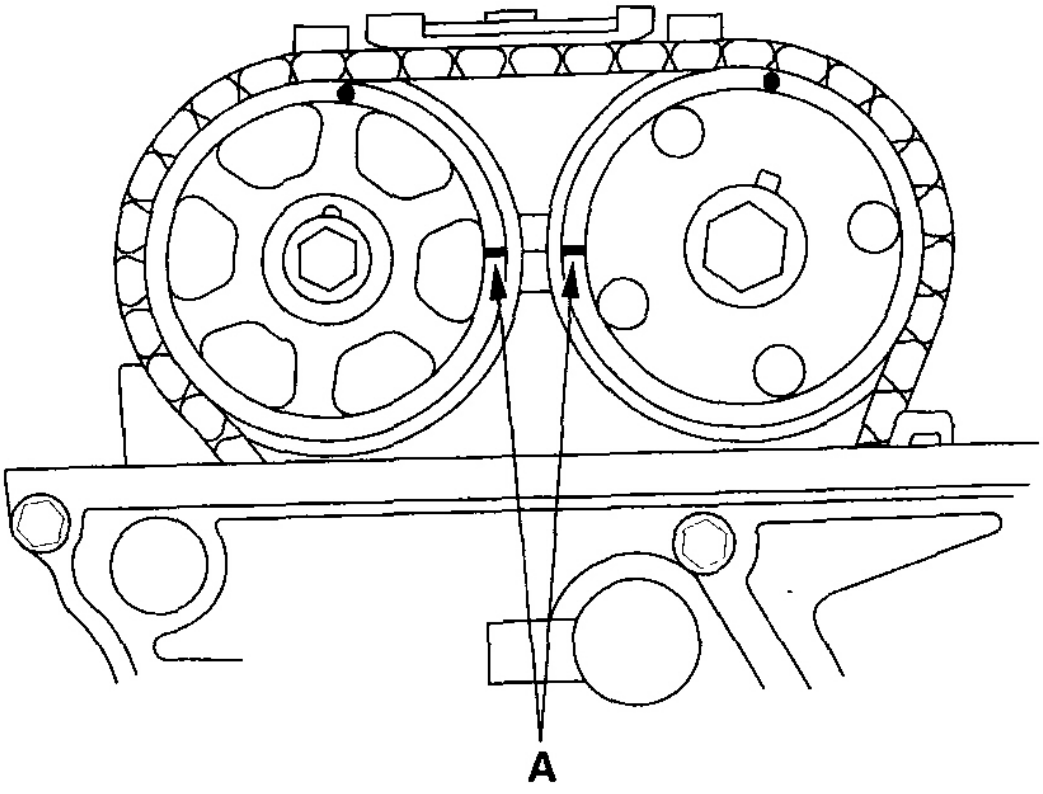


Fig. 24: Checking No. 1 Piston TDC Marks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the crankshaft pulley (see step 4).
8. Disconnect the crankshaft position (CKP) sensor connector (A) and variable valve timing control (VTC) oil control solenoid valve connector (B).

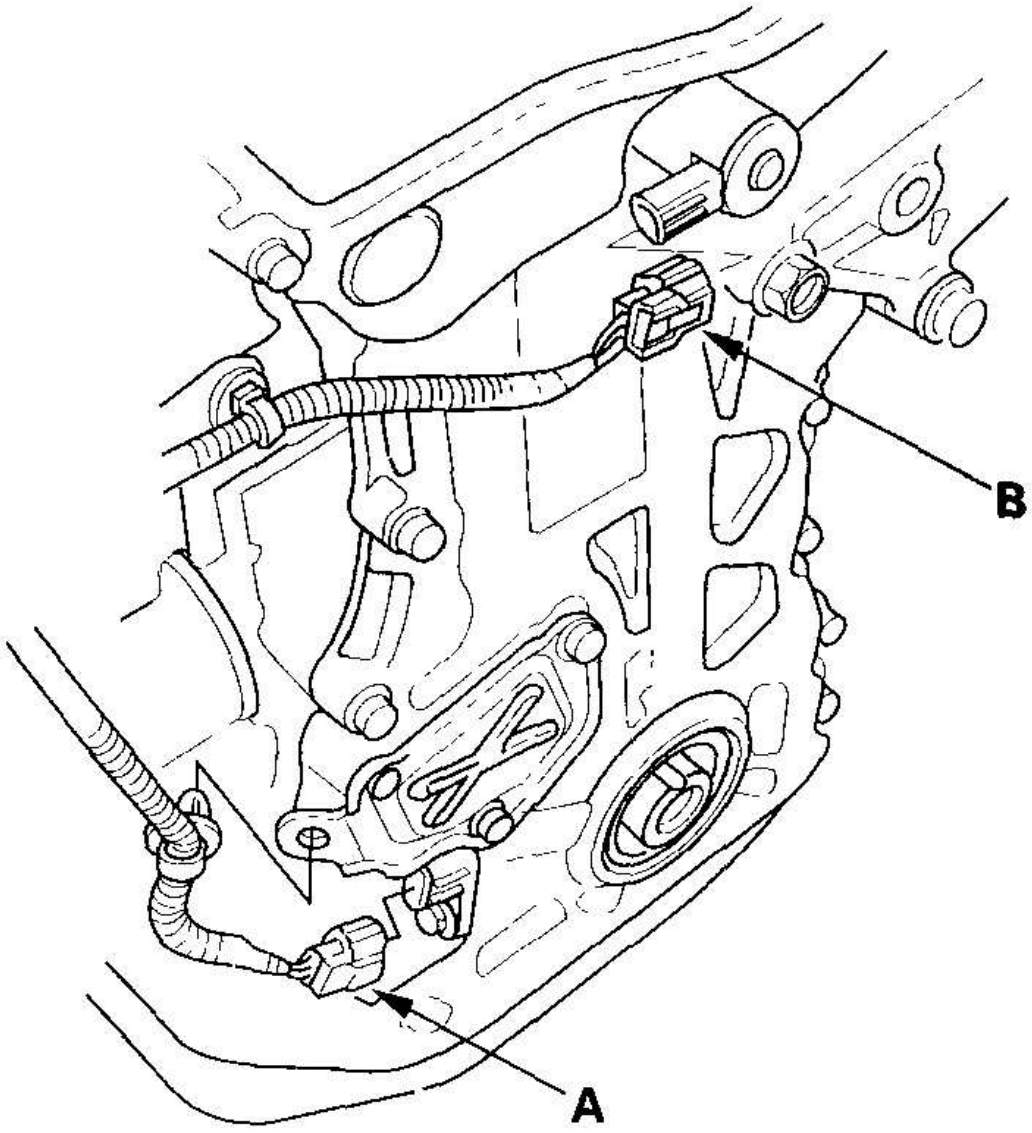


Fig. 25: Disconnecting Crankshaft Position (CKP) Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the VTC oil control solenoid valve (see **VTC OIL CONTROL SOLENOID VALVE REMOVAL/TEST/INSTALLATION**).
10. Support the engine with a jack and wood block under the oil pan.

11. Remove the ground cable (A), and remove the upper bracket (B).

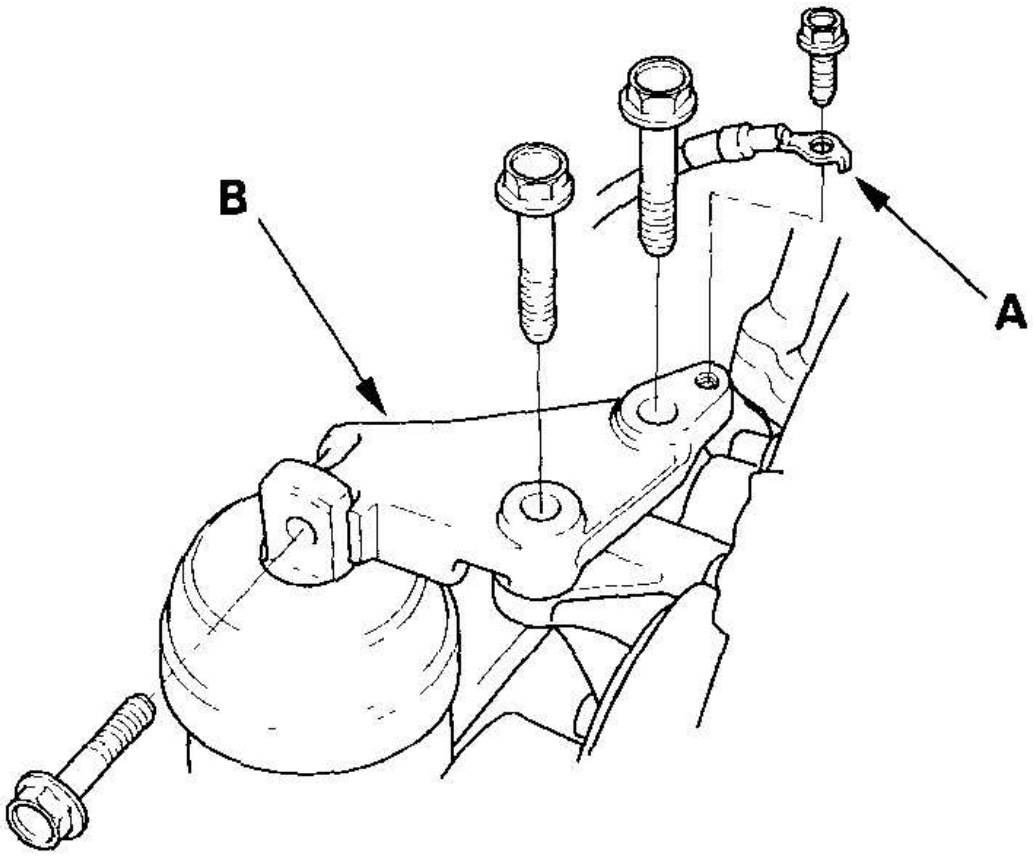


Fig. 26: Removing Ground Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the side engine mount bracket.

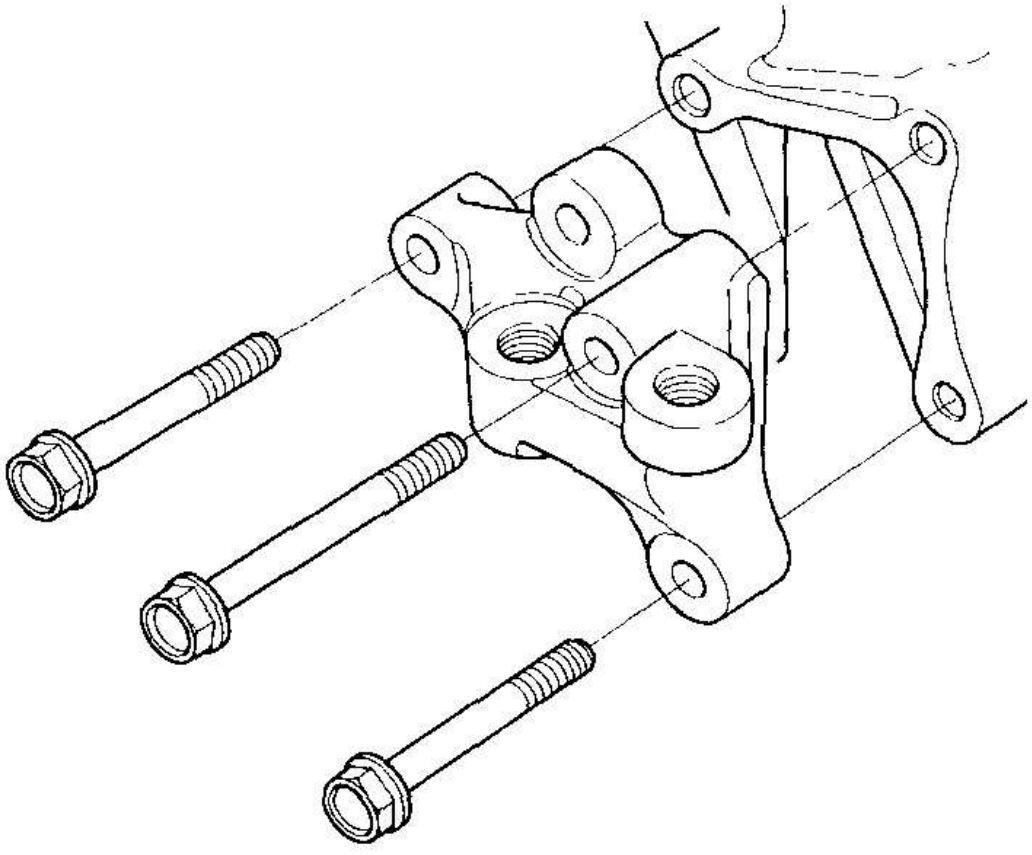
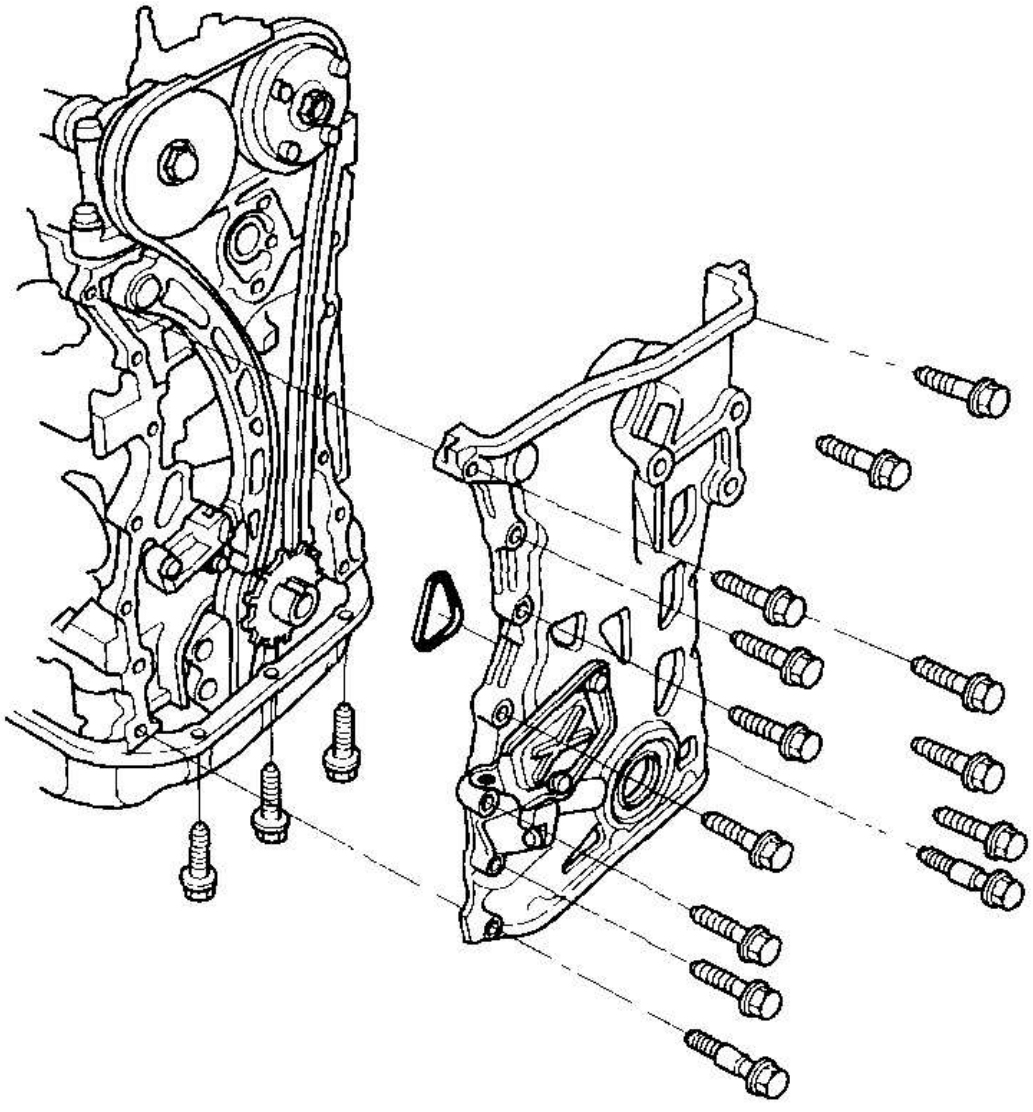


Fig. 27: Removing Side Engine Mount Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

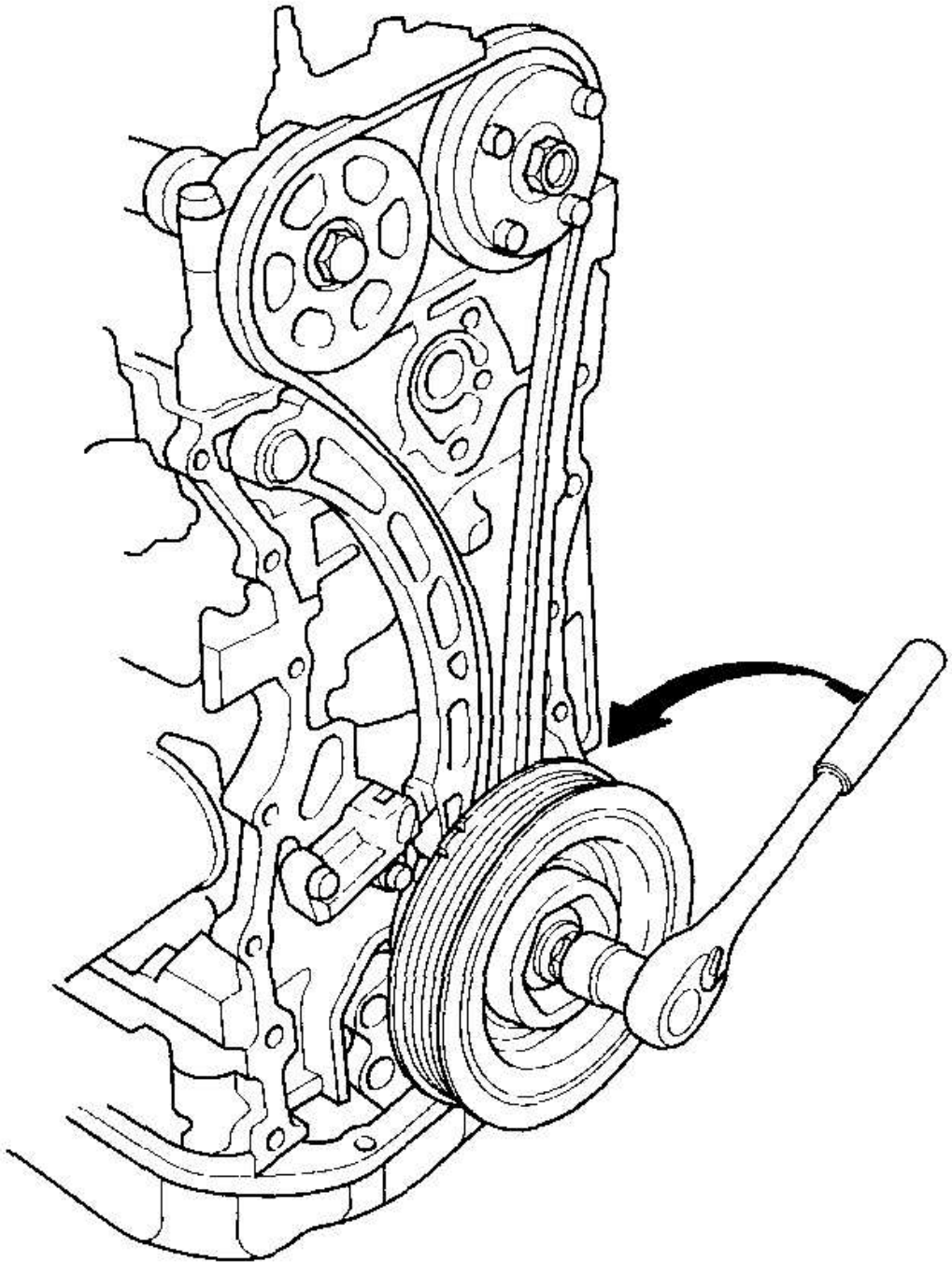
13. Remove the chain case.



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Fig. 28: Removing Chain Case
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Loosely install the crankshaft pulley.
15. Turn the crankshaft counterclockwise to compress the auto-tensioner.



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Fig. 29: Turning Crankshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Align the holes on the lock (A) and the auto-tensioner (B), then insert a 1.2 mm (0.05 in.) diameter pin or lock pin (P/N 14511-PNA-003) (C) into the holes. Turn the crankshaft clockwise to secure the pin.

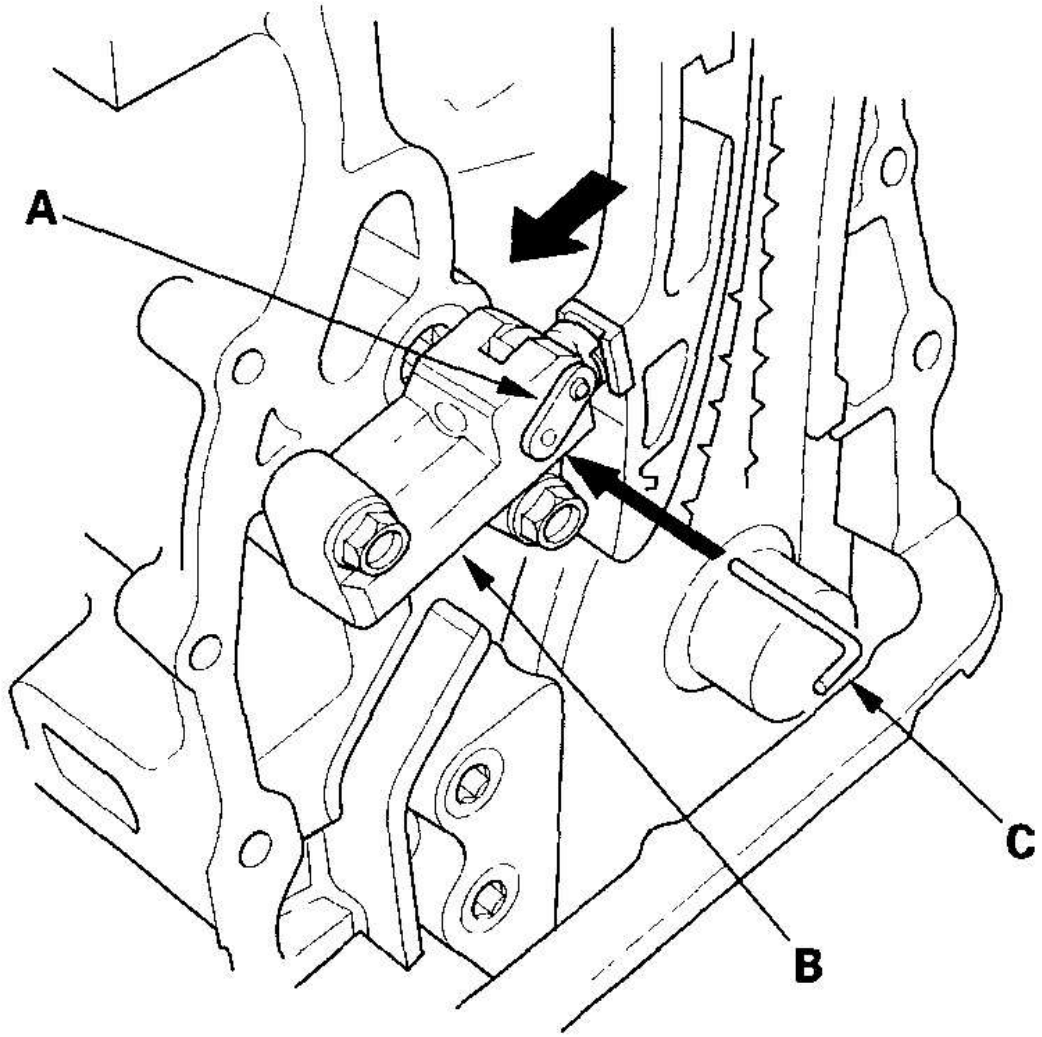


Fig. 30: Aligning Holes On Lock And Auto-tensioner

Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Remove the auto-tensioner.

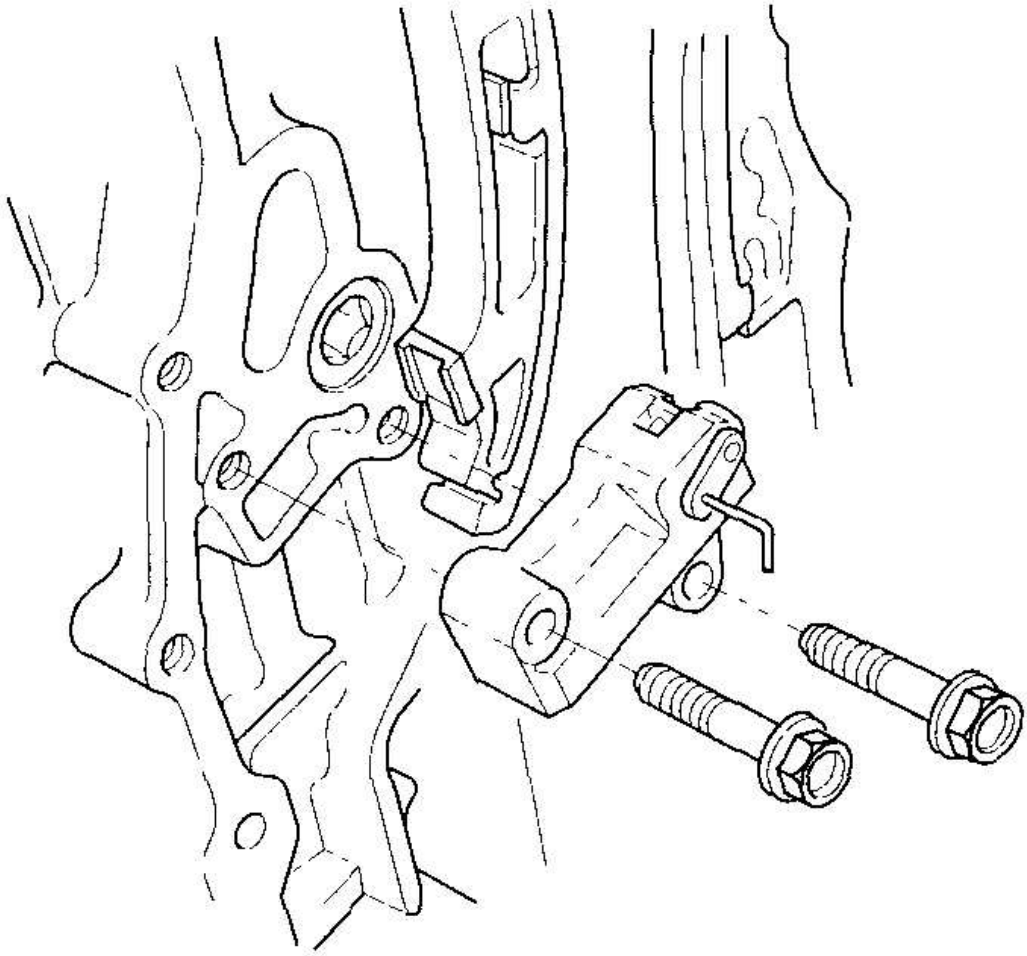
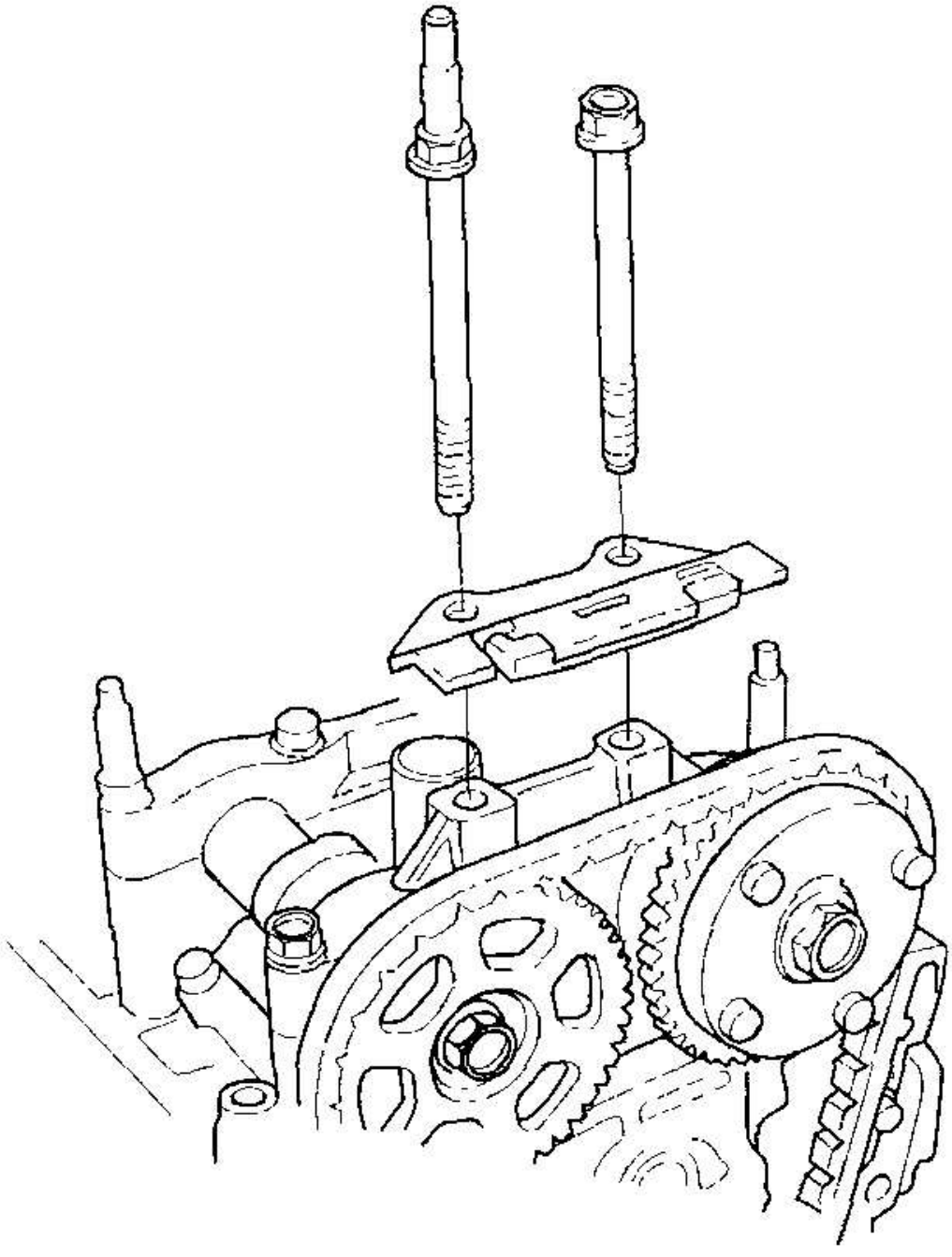


Fig. 31: Removing Auto-Tensioner
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Remove the cam chain guide B.



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Fig. 32: Removing CAM Chain Guide

Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Remove the cam chain guide A and tensioner arm (B).

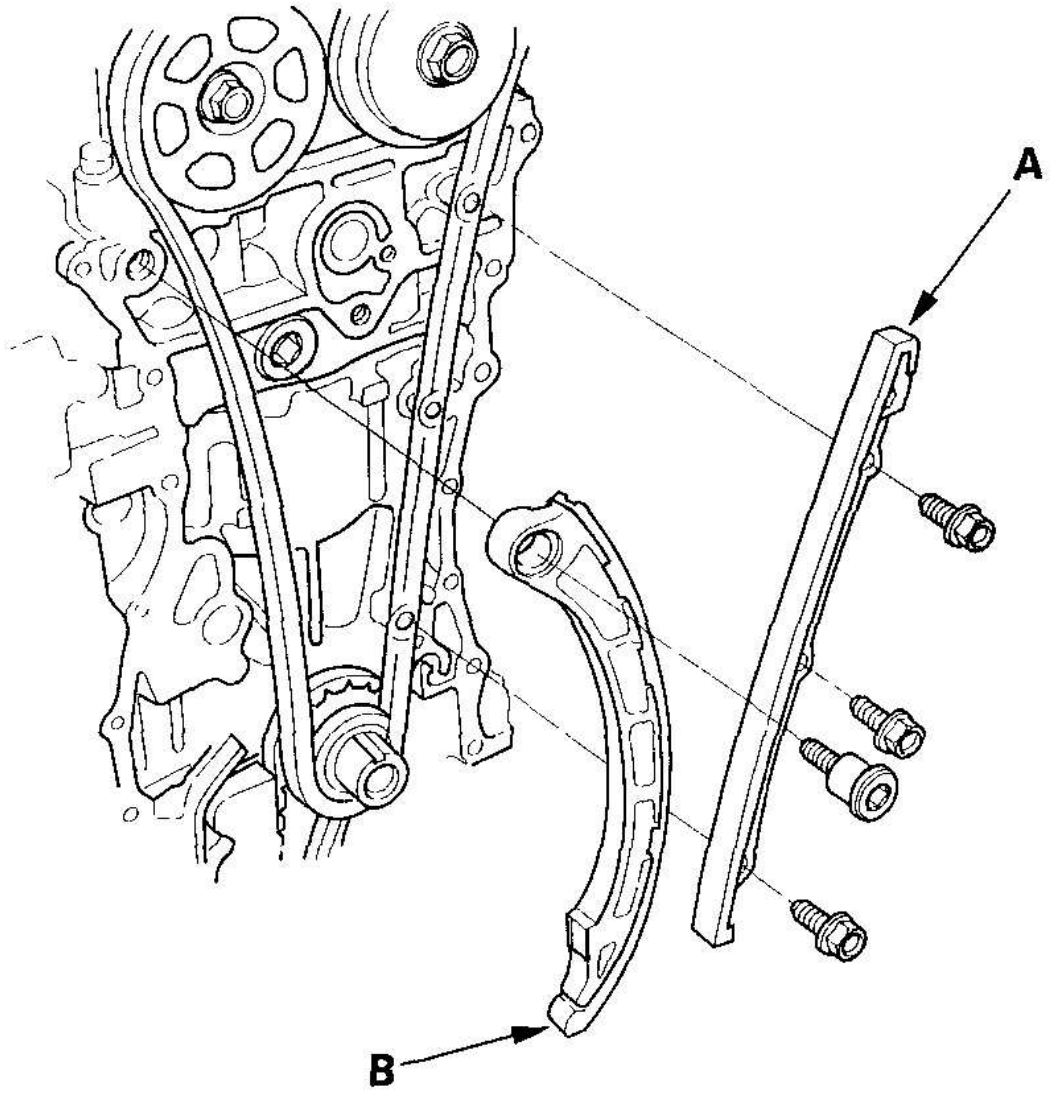


Fig. 33: Removing CAM Chain Guide And Tensioner Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Remove the cam chain.

CAM CHAIN INSTALLATION

NOTE:

- **Keep the cam chain away from magnetic fields.**
- **Before this procedure, check that the variable valve timing control (VTC) actuator is locked by turning the VTC actuator counterclockwise. If not locked, turn the VTC actuator clockwise until it stops, then recheck it. If it is still not locked, replace the VTC actuator.**

1. Set the crankshaft to top dead center (TDC). Align the TDC mark (A) on the crankshaft sprocket with the pointer (B) on the engine block.

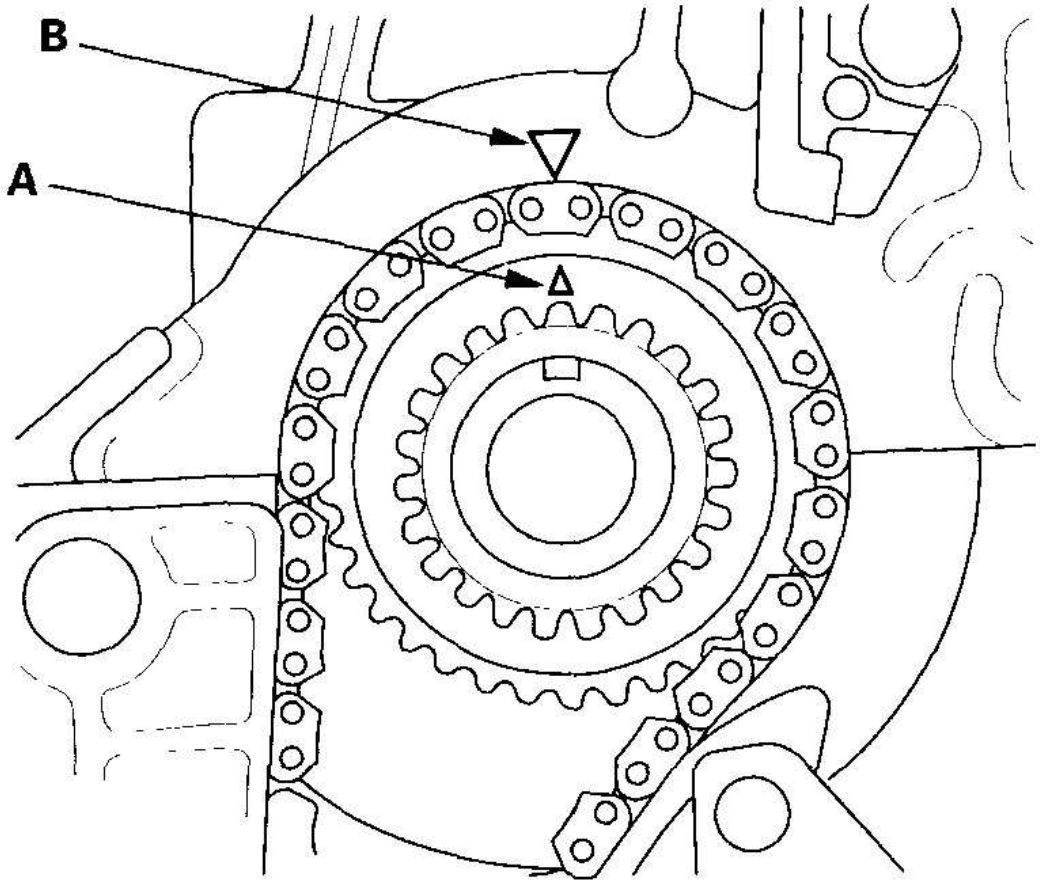


Fig. 34: Identifying Marks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Set the camshafts to TDC. The punch mark (A) on the variable valve timing control (VTC) actuator and the punch mark (B) on the exhaust camshaft sprocket should be at the top. Align the TDC marks (C) on the VTC actuator and exhaust camshaft sprocket.

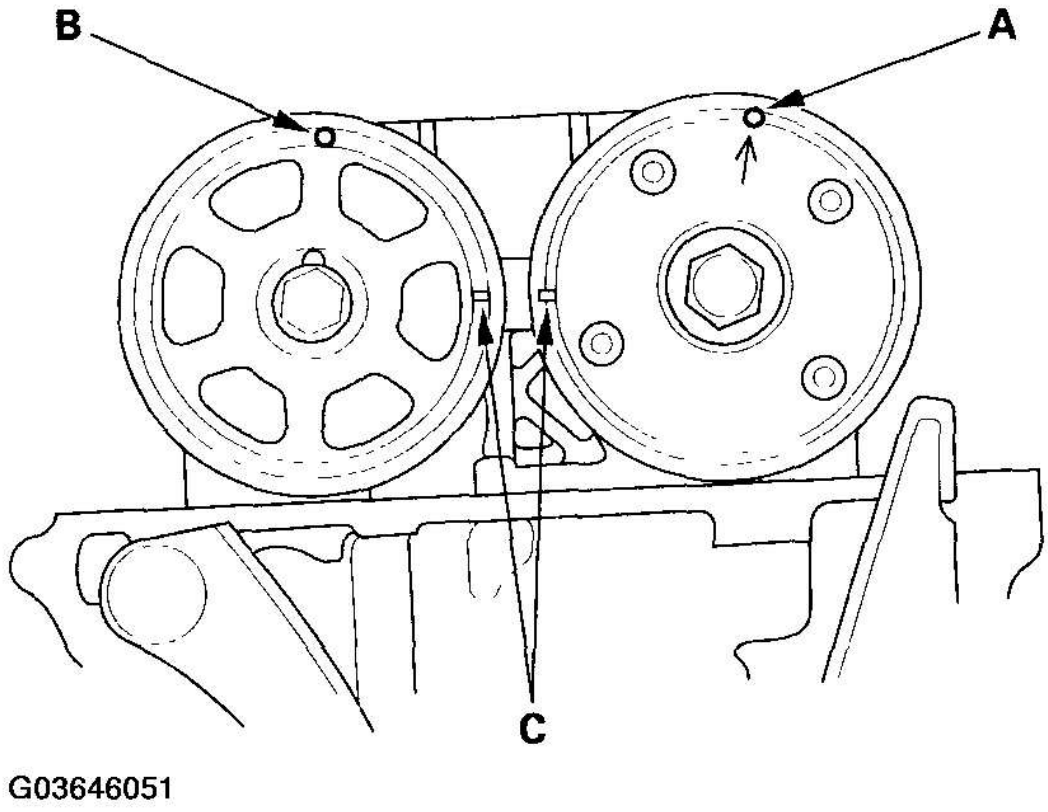


Fig. 35: Identifying Punch Mark
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the cam chain on the crankshaft sprocket with the colored piece (A) aligned with the mark (B) on the crankshaft sprocket.

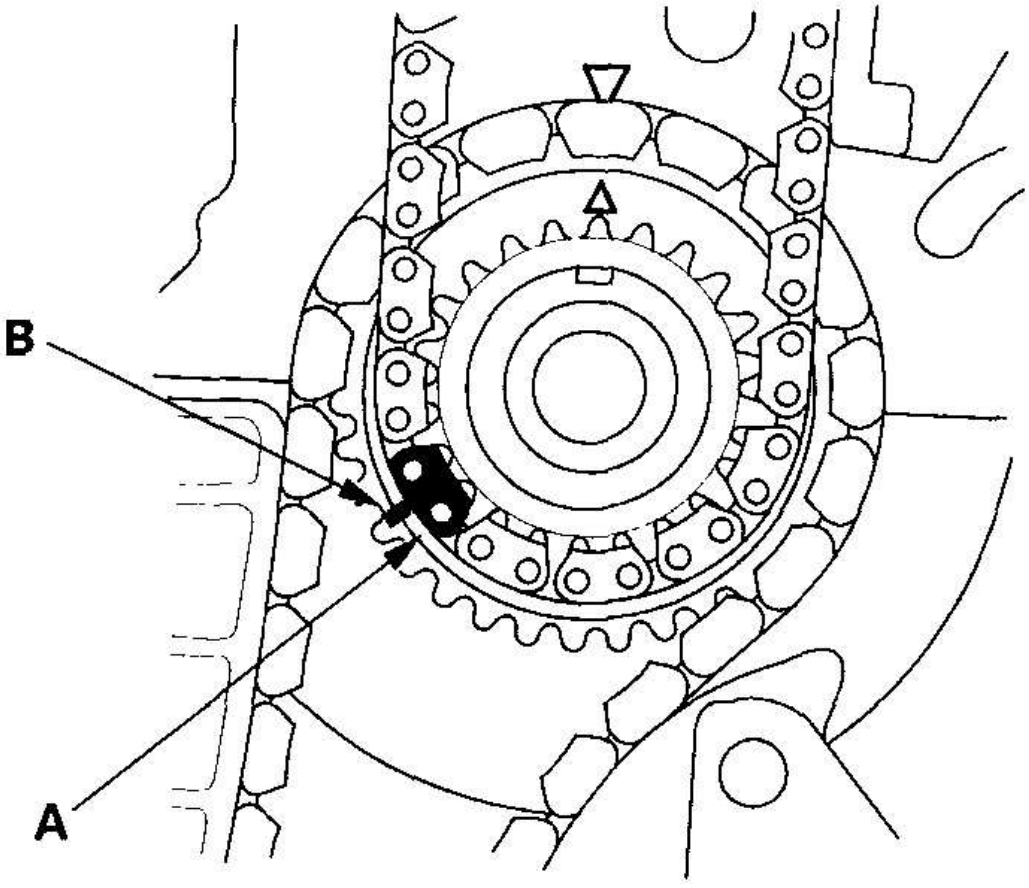


Fig. 36: Installing CAM Chain On Crankshaft Sprocket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the cam chain on the VTC actuator and the exhaust camshaft sprocket with the punch marks (A) aligned with the center of the two colored pieces (B).

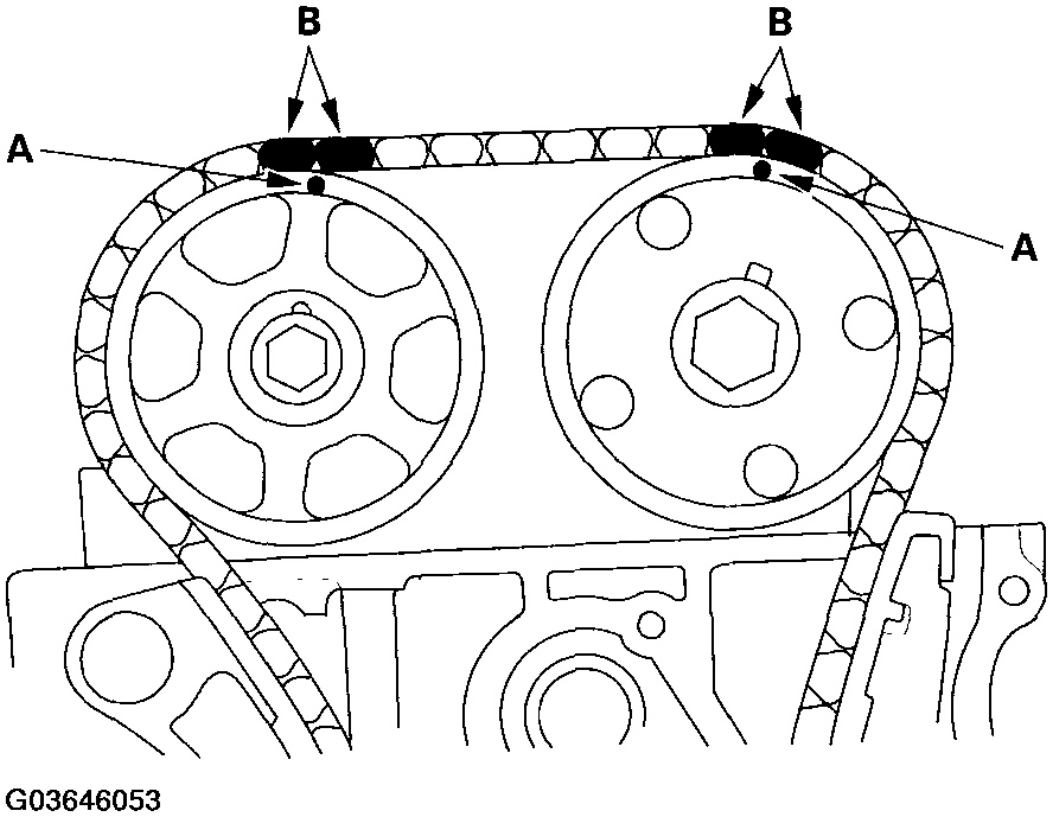


Fig. 37: Installing CAM Chain On VTC Actuator And Exhaust Camshaft Sprocket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the cam chain guide A and tensioner arm (B).

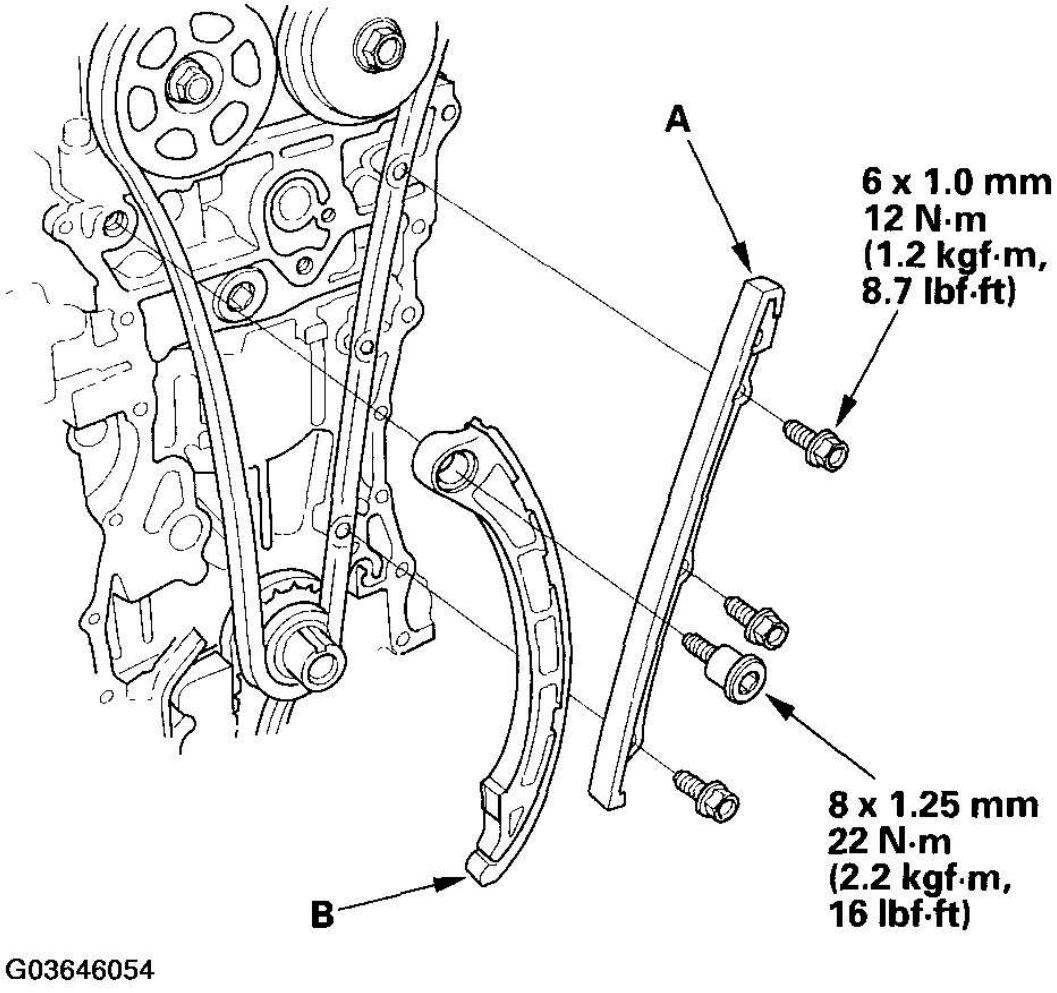


Fig. 38: Installing CAM Chain Guide And Tensioner Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the auto-tensioner.

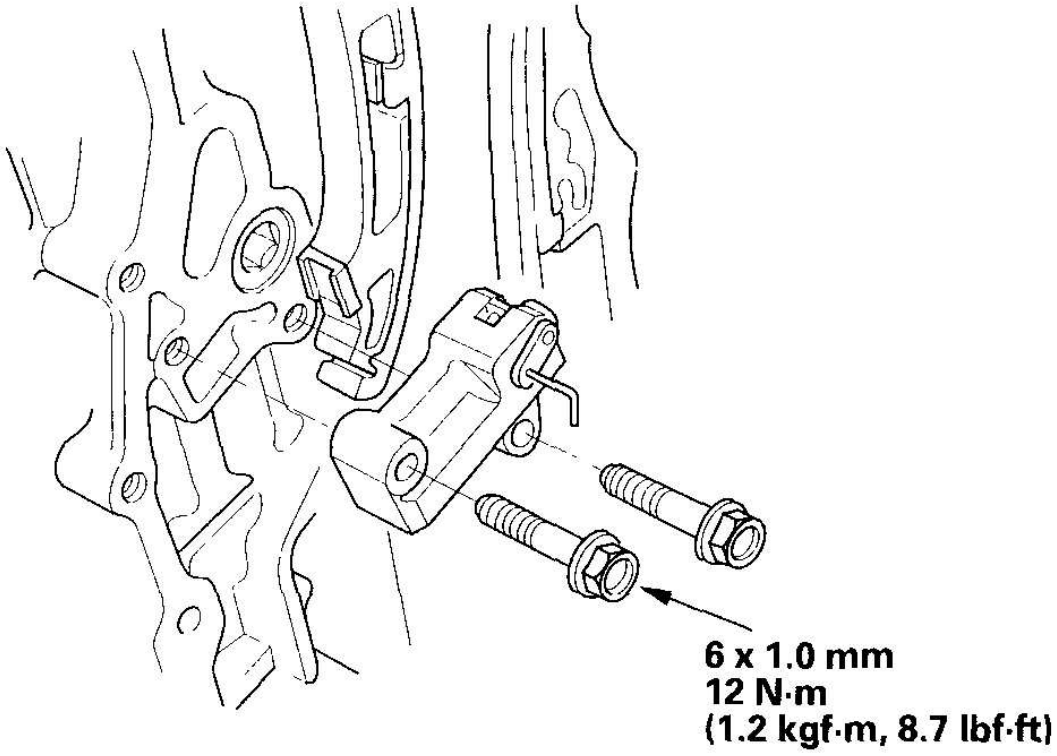


Fig. 39: Installing Auto-Tensioner
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the cam chain guide B.

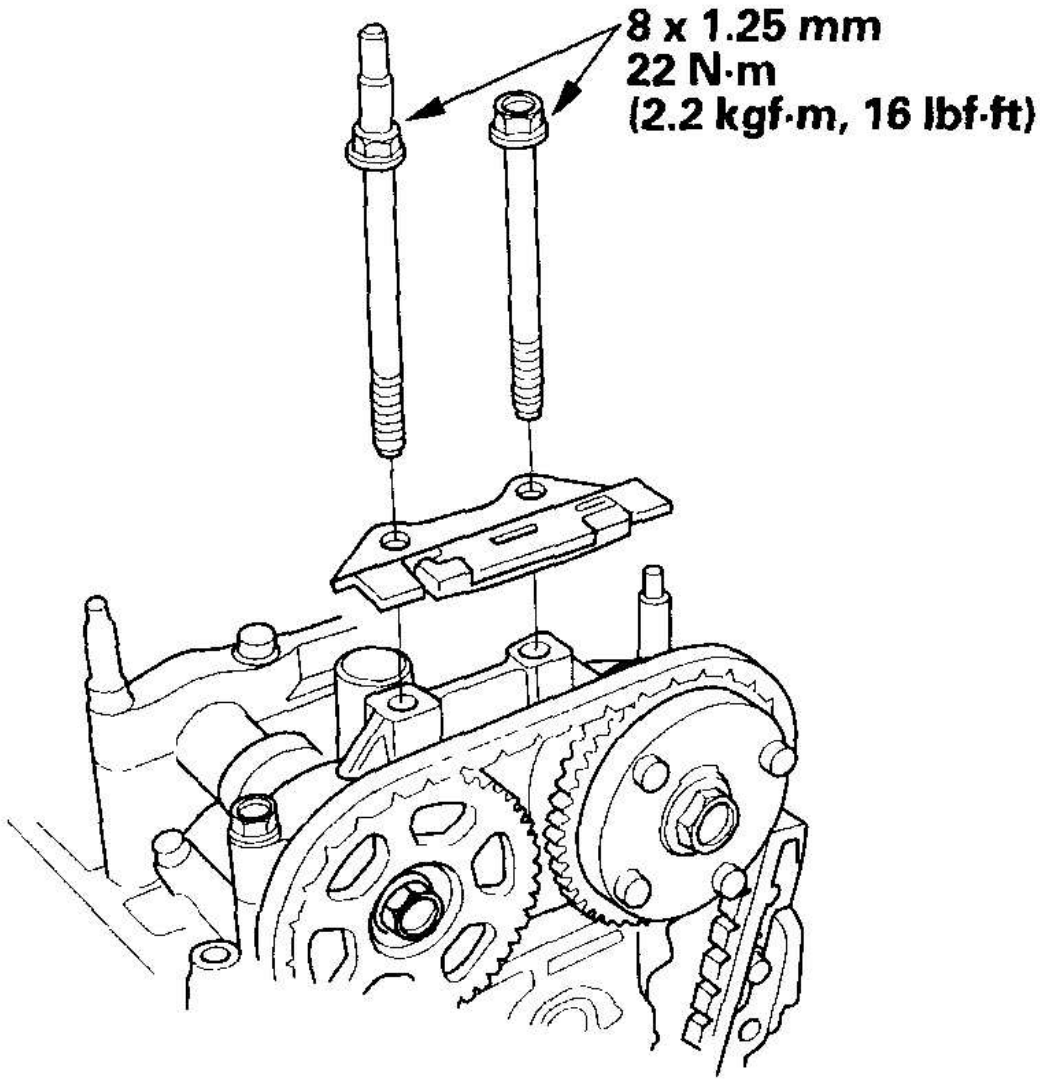
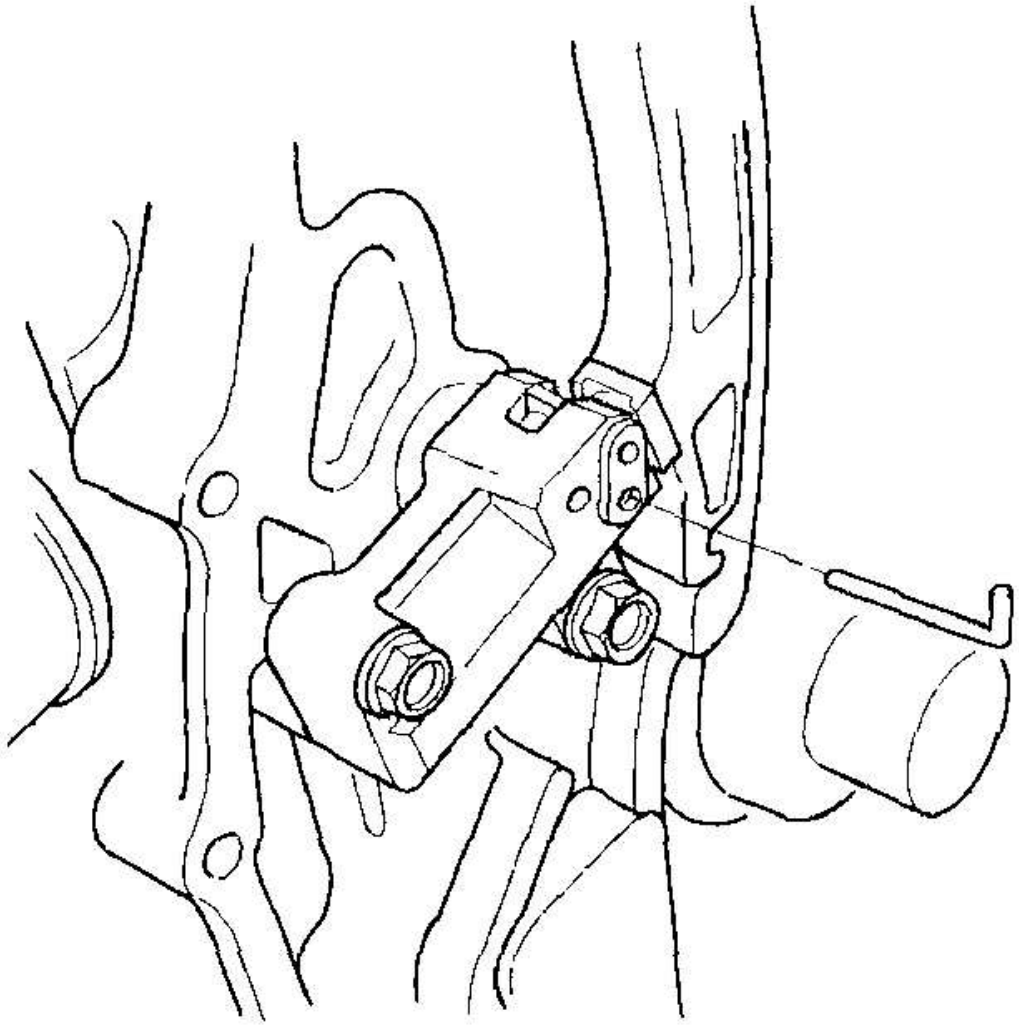


Fig. 40: Installing CAM Chain Guide B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the pin or lock pin (P/N 14511-PNA-003) from the auto-tensioner.



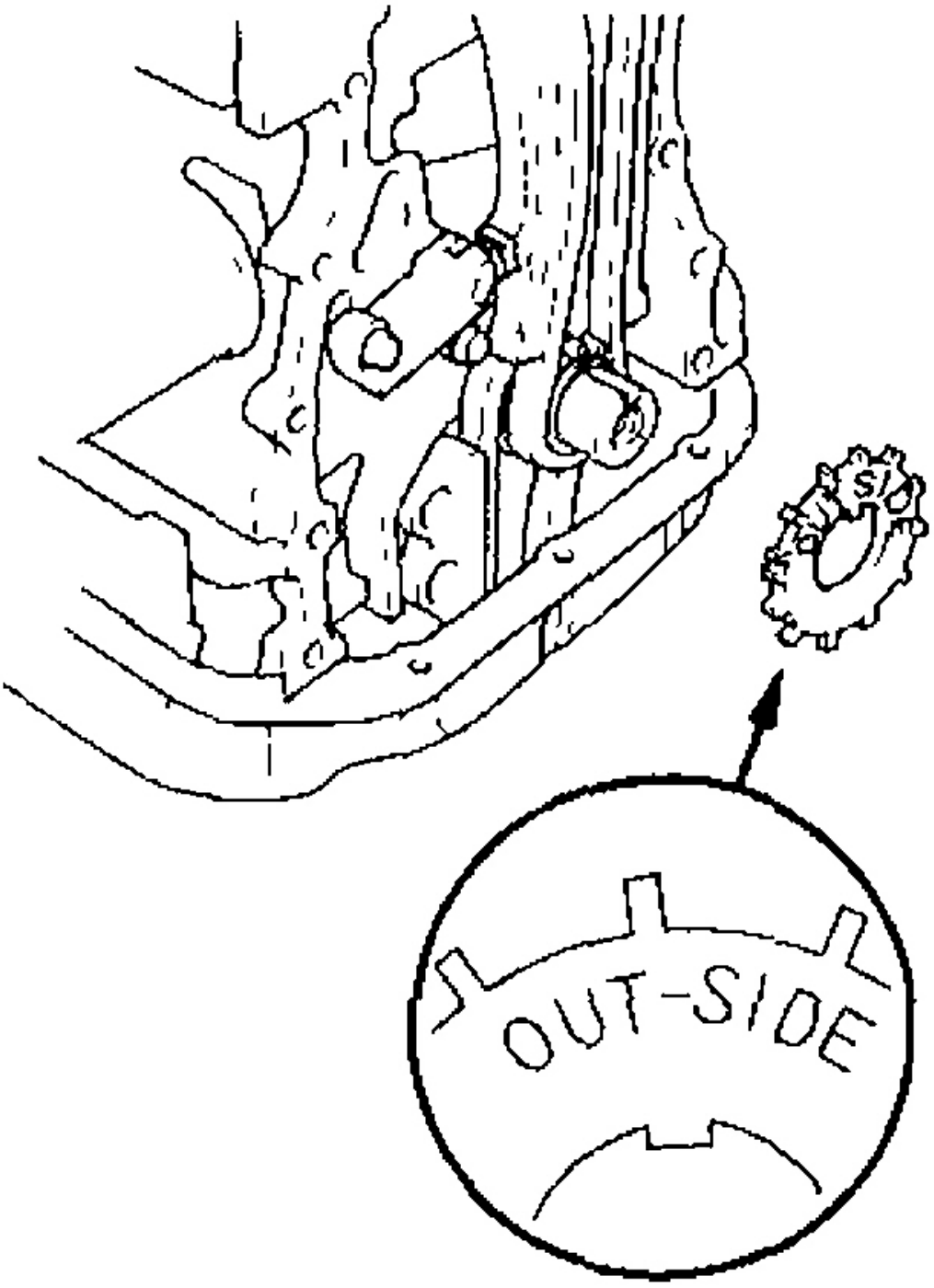
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Fig. 41: Removing Pin Or Lock Pin (P/N 14511-Pna-003) From Auto-Tensioner
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Check the chain case oil seal for damage. If the oil seal is damaged, replace the chain case oil seal (see **CHAIN CASE OIL SEAL INSTALLATION**).
10. Remove all of the old liquid gasket from the chain case mating surfaces, bolts,

and bolt holes.

11. Clean and dry the chain case mating surfaces.
12. Install the crankshaft position (CKP) pulse plate (A) on the crankshaft (B).



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Fig. 42: Identifying CKP Pulse Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Apply liquid gasket, P/N 08717-0004,08718-0001, 08718-0002,08718-0003, or 08718-0009, evenly to the engine block mating surface of the chain case.

NOTE: Do not install components if too much time has passed after applying the liquid gasket (for P/N 08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply the liquid gasket.

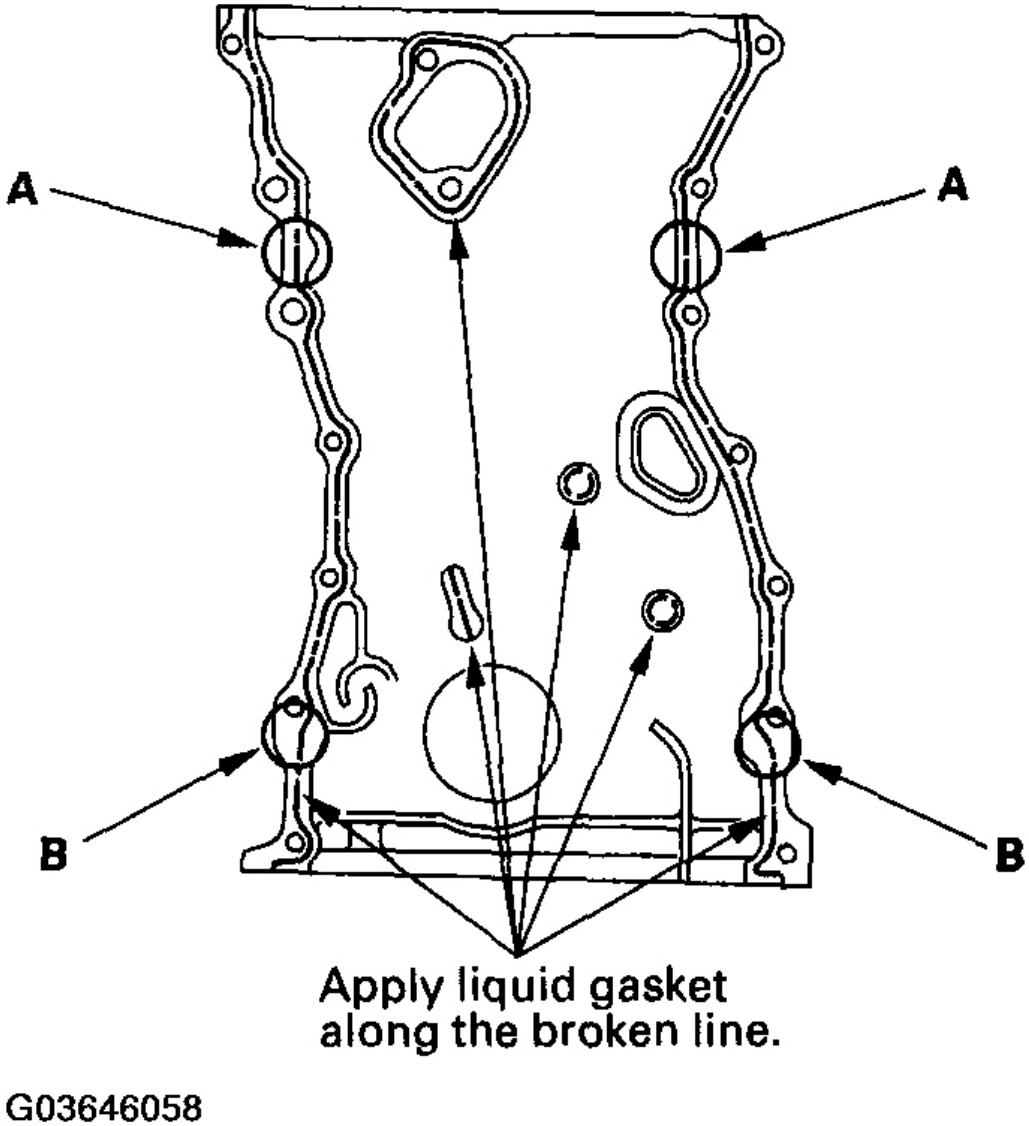


Fig. 43: Applying Liquid Gasket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Apply liquid gasket to the engine block upper surface contact areas (A) on the chain case and lower block upper surface contact areas (B) on the chain case.
15. Apply liquid gasket, P/N 08718-0001, 08718-0002, or 08718-0009, evenly to the oil pan mating surface of the chain case.

NOTE: Do not install components if too much time has passed after applying the liquid gasket (for P/N 08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply the liquid gasket.

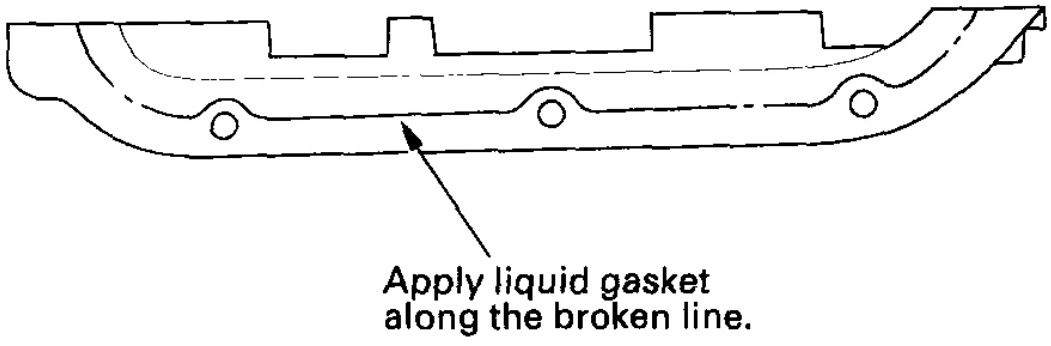


Fig. 44: Applying Liquid Gasket To Engine Block Upper Surface Contact Areas
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Install the new O-ring (A) on the chain case. Set the edge of the chain case (B) to the edge of the oil pan (C), then install the chain case on the engine block (D). Wipe off all of the excess liquid gasket on the oil pan and chain case mating area.

NOTE:

- **When installing the chain case, do not slide the bottom surface on the oil pan mounting surface.**
- **Wait at least 30 minutes before filling the engine with oil.**
- **Do not run the engine within 3 hours after installing the chain case.**

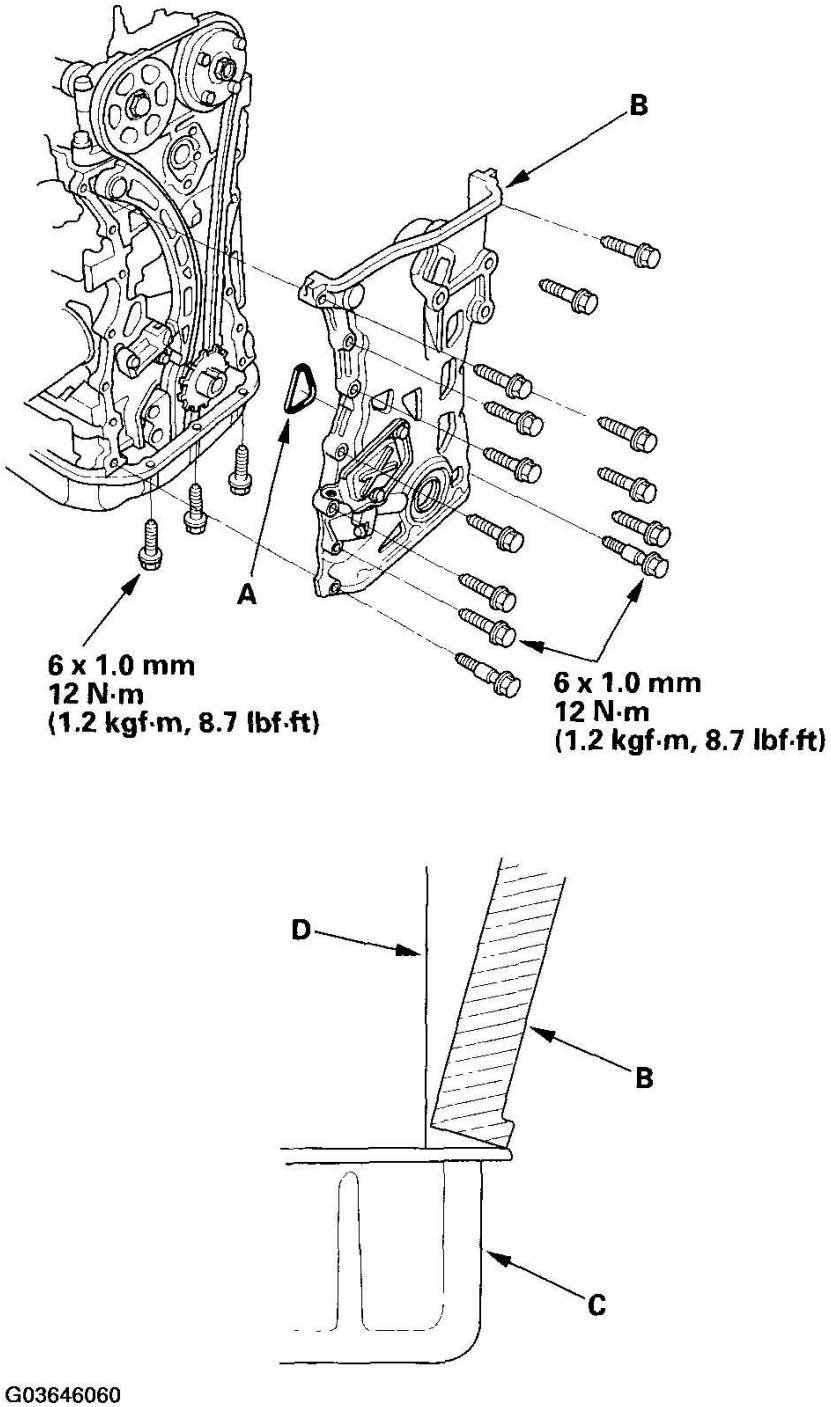


Fig. 45: Installing CAM Chain
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Install the side engine mount bracket.

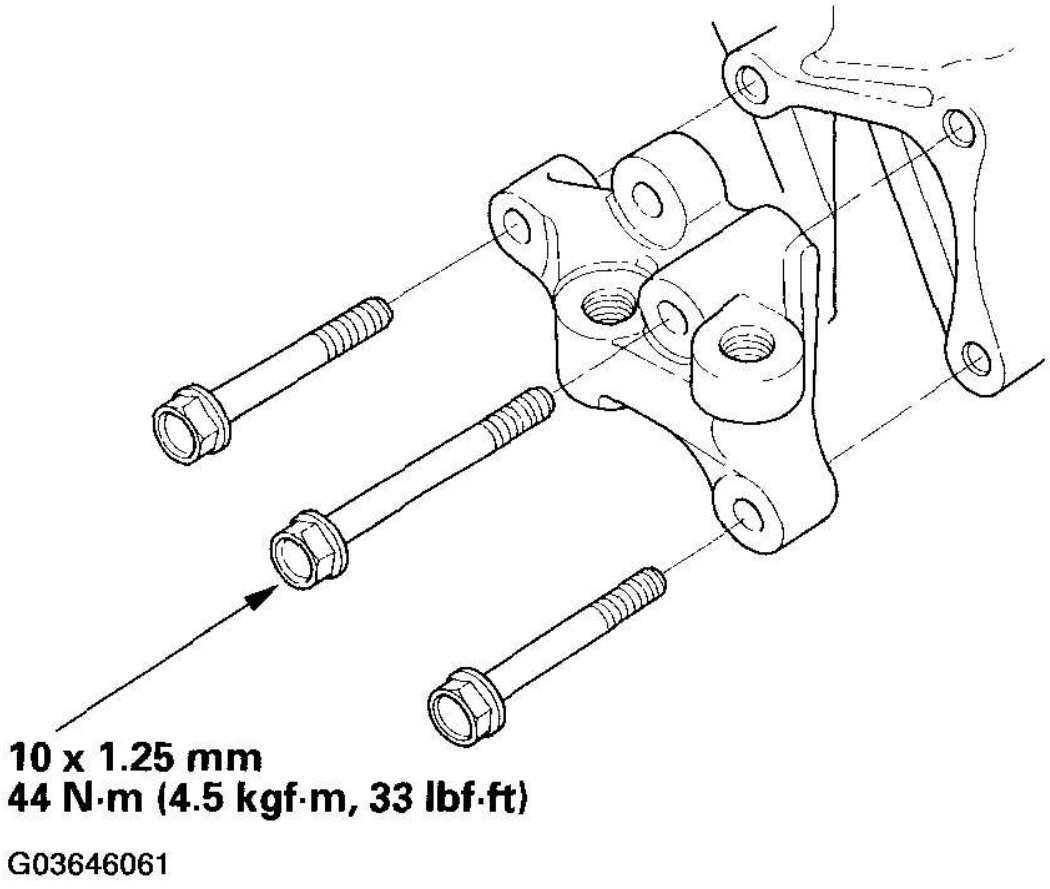


Fig. 46: Installing Side Engine Mount Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Install the upper bracket (A), then tighten the bolt in the numbered sequence shown in **Fig. 47**.

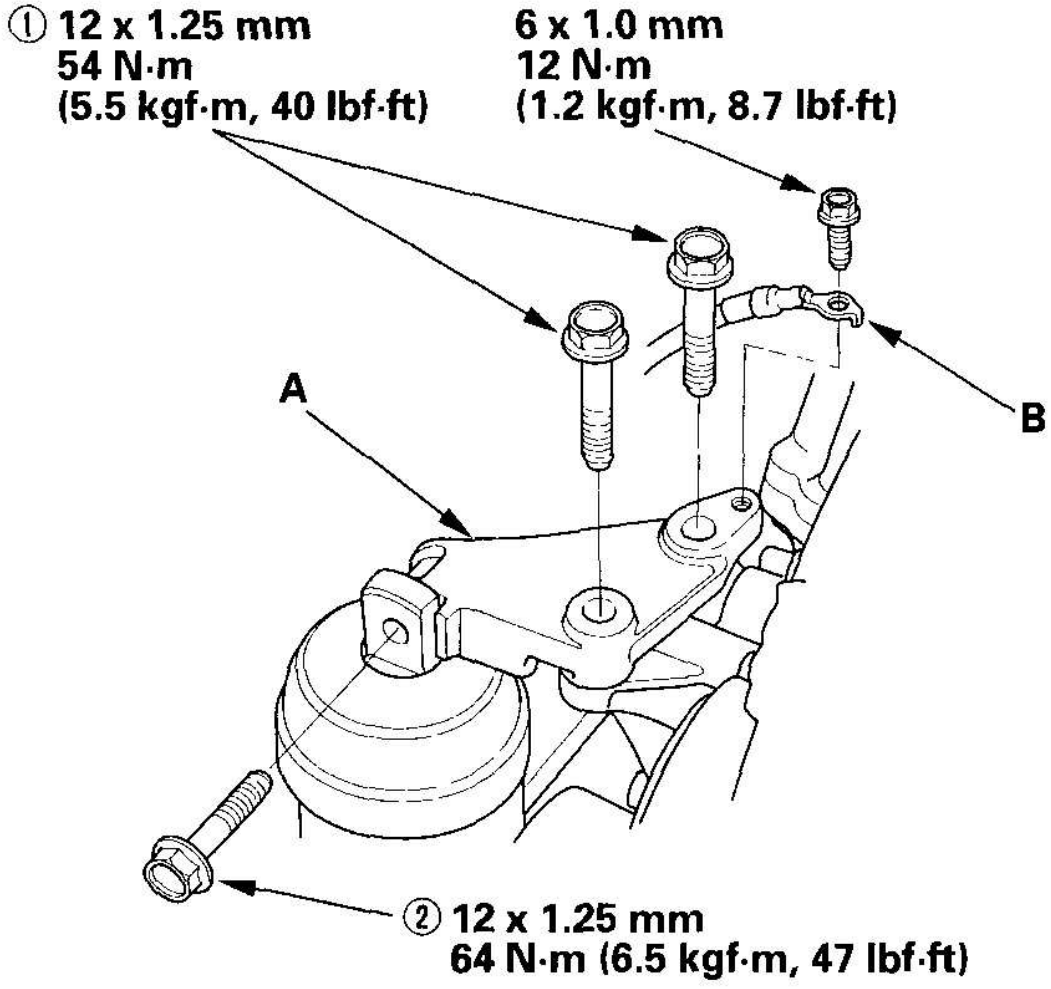


Fig. 47: Installing Upper Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Install the ground cable (B).
20. Install the variable valve timing control (VTC) oil control solenoid valve (see **VTC OIL CONTROL SOLENOID VALVE REMOVAL/TEST/INSTALLATION**).
21. Connect the crankshaft position (CKP) sensor connector (A) and VTC oil control solenoid valve connector (B).

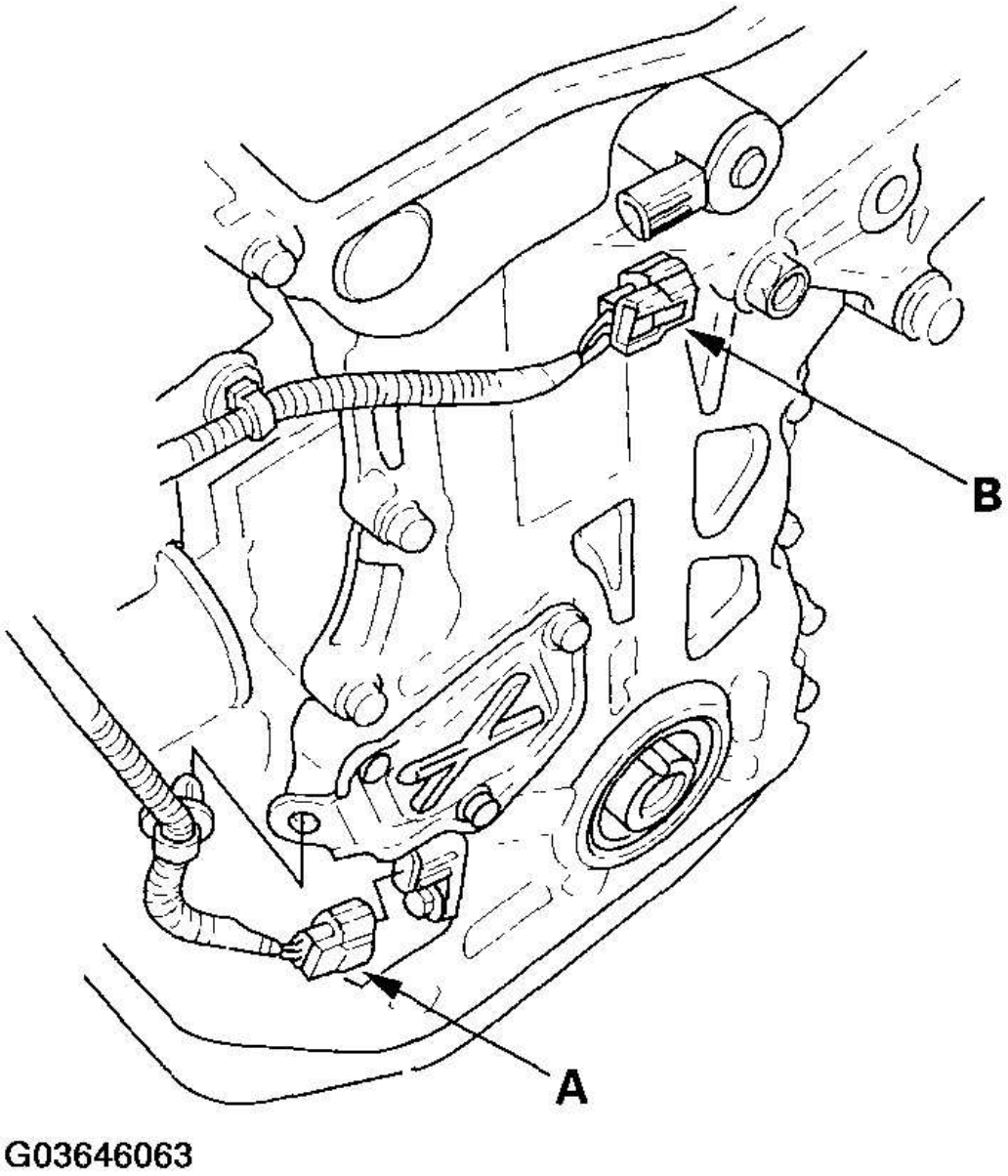


Fig. 48: Connecting Crankshaft Position (CKP) Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Install the crankshaft pulley (see **INSTALLATION**).
23. Install the cylinder head cover (see **CYLINDER HEAD COVER INSTALLATION**).

24. Install the drive belt.
25. Install the splash shield (see step 25 on **TRANSMISSION INSTALLATION**).
26. Do the CKP pattern clear/CKP learn procedure (see **CKP PATTERN CLEAR/CKP PATTERN LEARN**).

AUTO-TENSIONER REMOVAL AND INSTALLATION

REMOVAL

1. Remove the chain case cover.

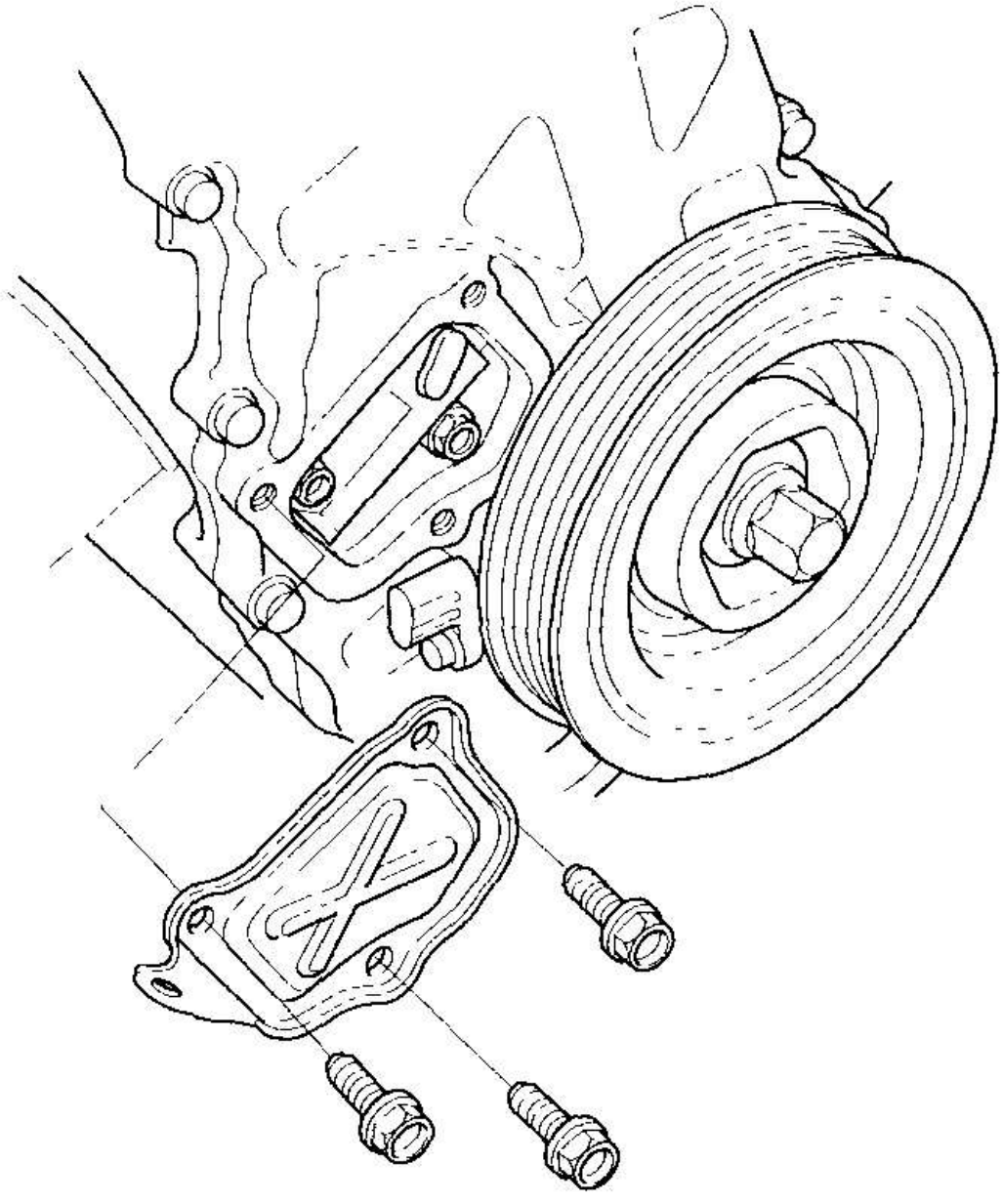


Fig. 49: Removing Chain Case Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Turn the crankshaft counterclockwise to compress the auto-tensioner.

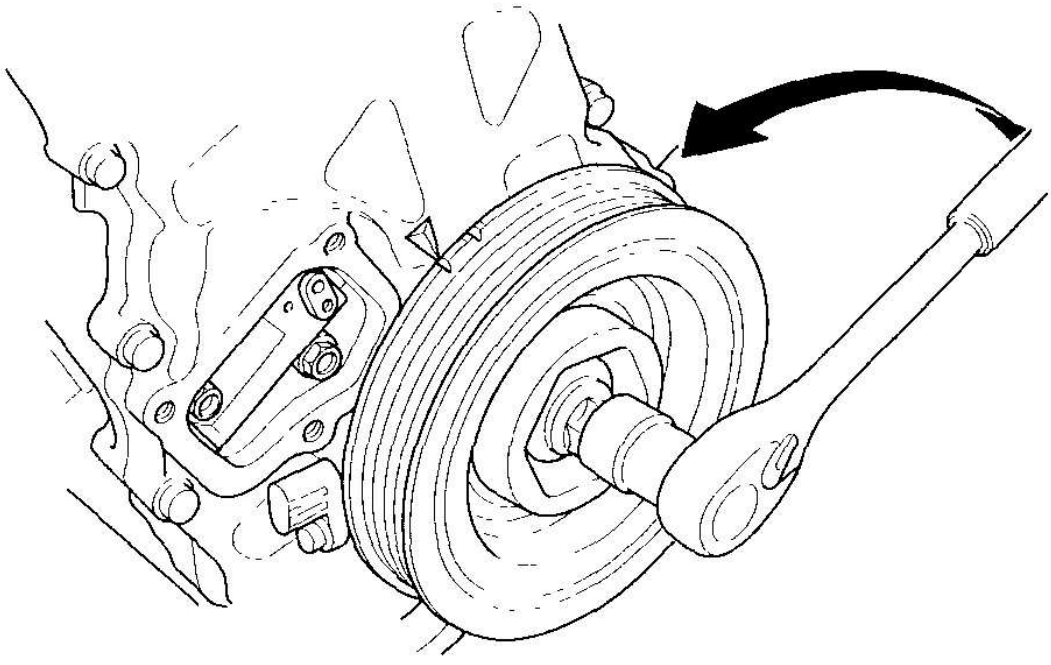


Fig. 50: Turning Crankshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Align the holes on the lock (A) and the auto-tensioner (B), then insert a 1.2 mm (0.05 in.) diameter pin or lock pin (P/N 14511-PNA-003) (C) into the holes. Turn the crankshaft clockwise to secure the pin.

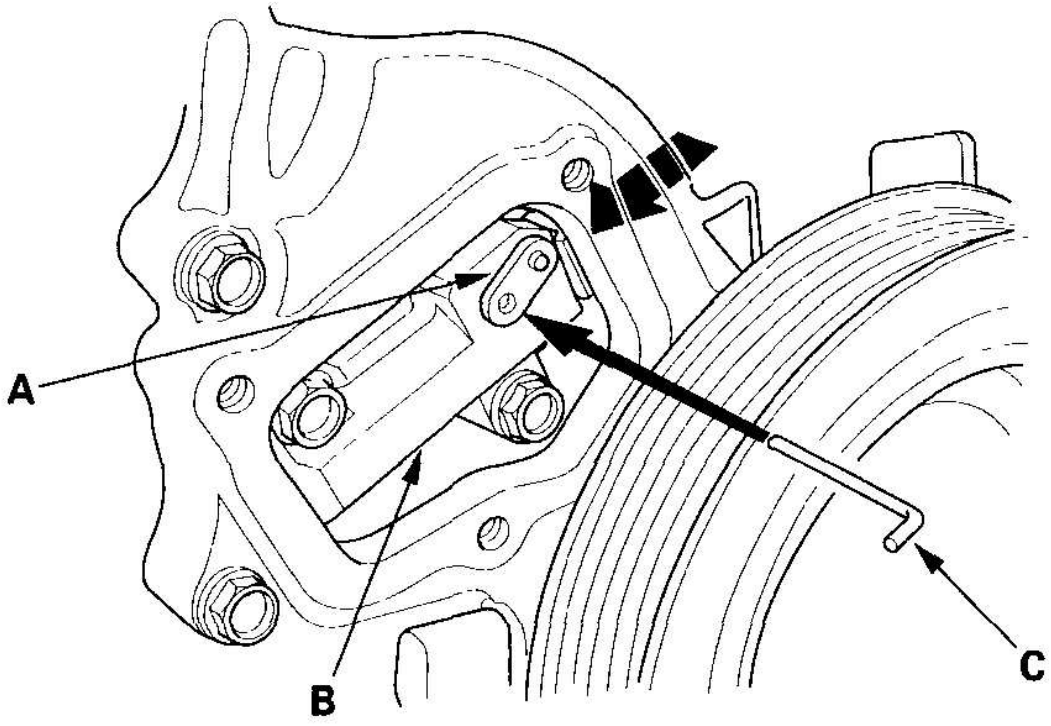
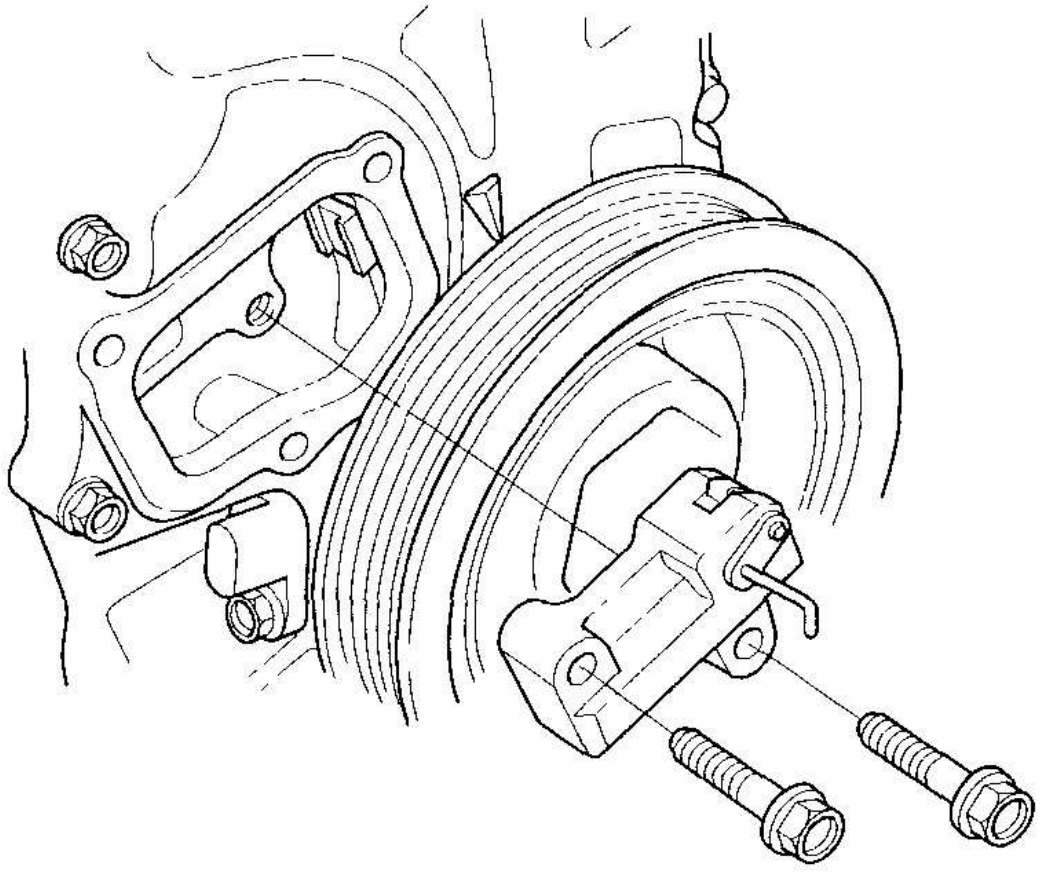


Fig. 51: Aligning Holes On Lock
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the auto-tensioner.



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Fig. 52: Removing Auto-Tensioner
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INSTALLATION

1. Install the auto-tensioner.

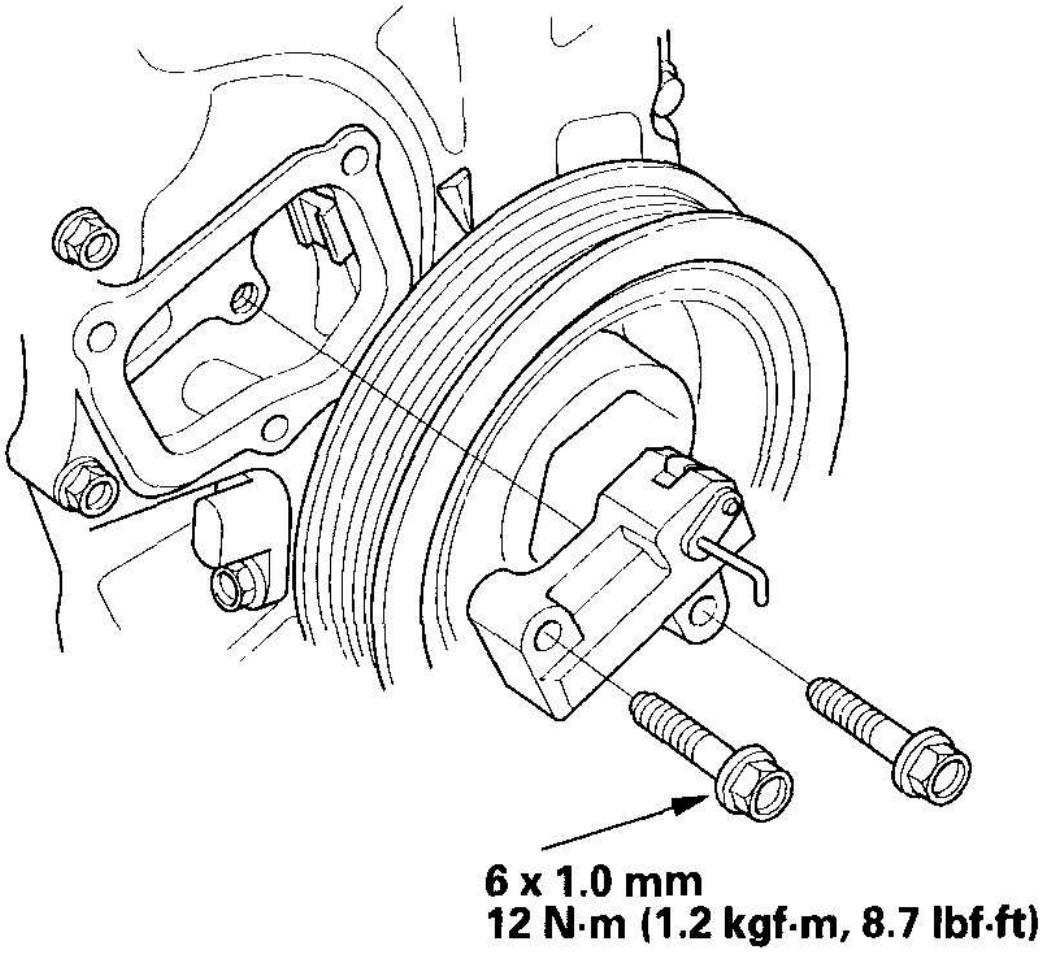


Fig. 53: Installing Auto-Tensioner
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the pin or lock pin (P/N 14511-PNA-003) from the auto-tensioner.

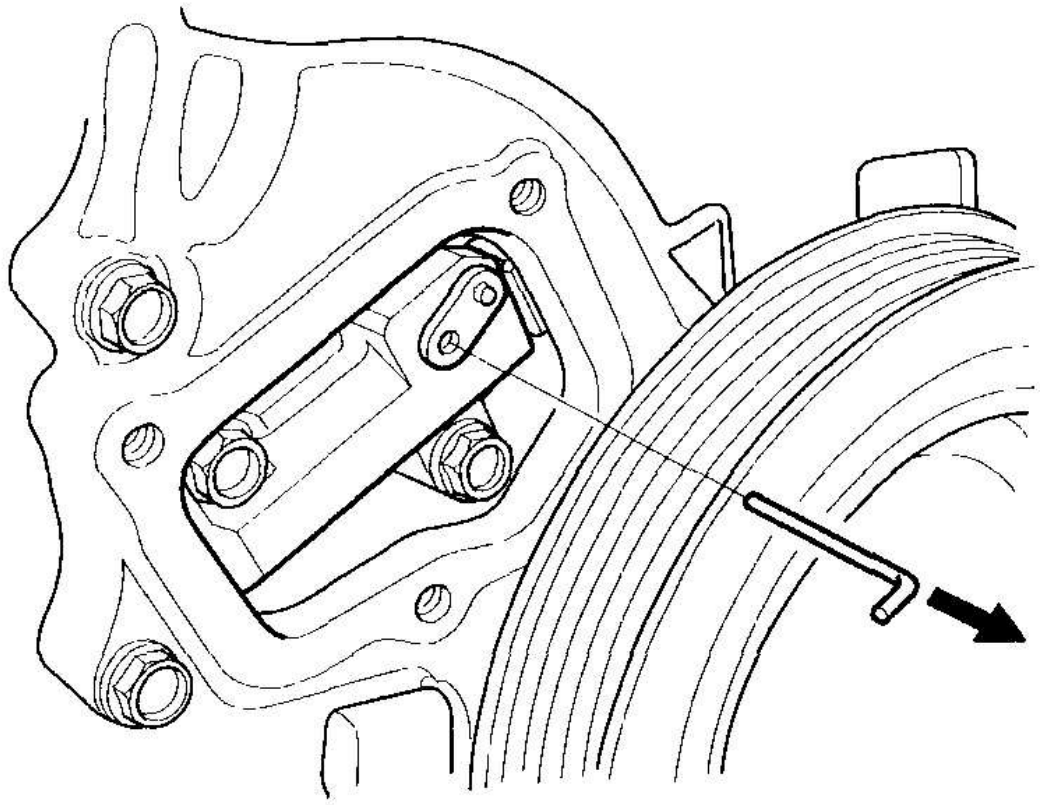


Fig. 54: Removing Pin Or Lock Pin
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove old liquid gasket from the chain case cover mating surfaces, bolts, and bolt holes.
4. Clean and dry the chain case cover mating surfaces.
5. Apply liquid gasket, P/N 08717-0004, 08718-0001, 08718-0002, 08718-0003, or 08718-0009, evenly to the chain case mating surface of the chain case cover.

NOTE: Do not install components if too much time has passed after applying the liquid gasket (for P/N 08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply

the liquid gasket.

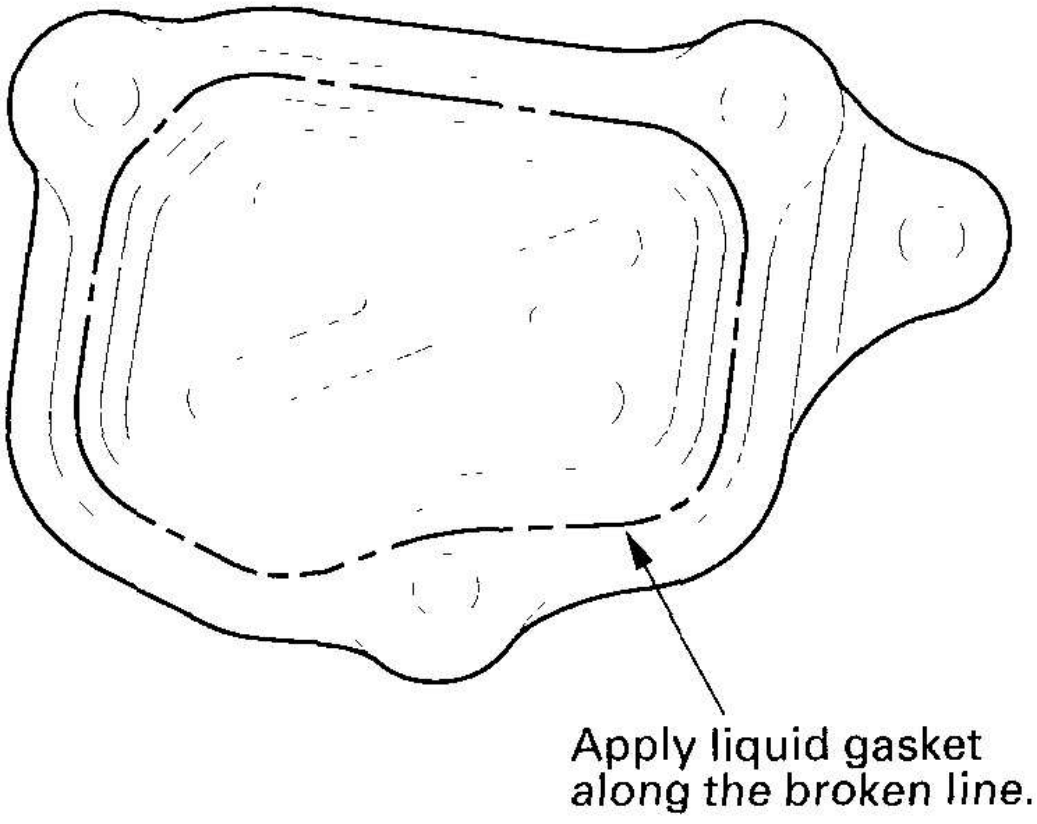


Fig. 55: Applying Liquid Gasket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the chain case cover.

NOTE:
- **Wait at least 30 minutes before filling the engine with oil.**
- **Do not run the engine within 3 hours after installing the chain case cover.**

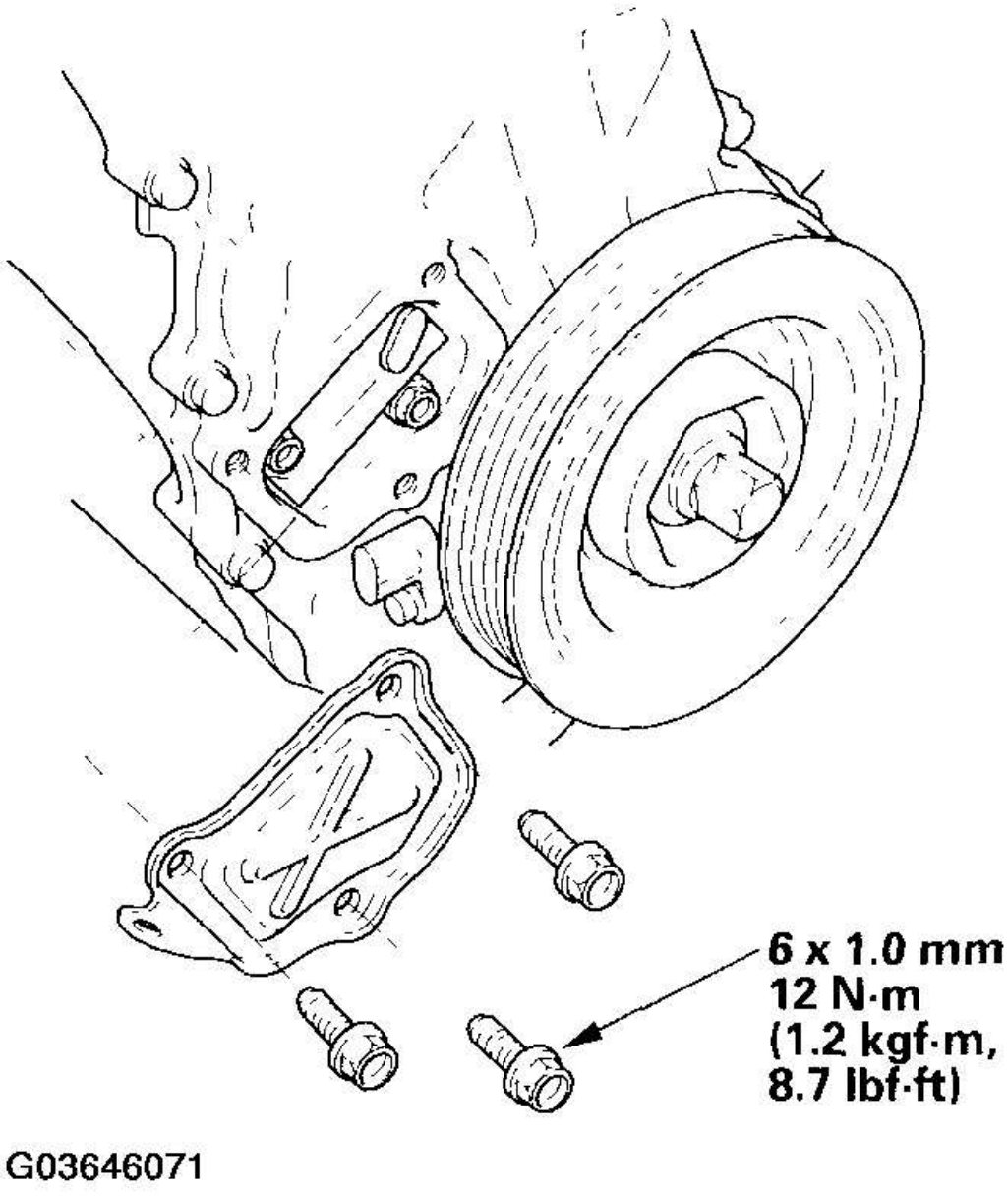


Fig. 56: Installing Chain Case Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CHAIN CASE OIL SEAL INSTALLATION

Special Tools Required

- Driver 07749-0010000
- Attachment, 52 x 55 mm 07746-0010400

1. Use the special tools to drive a new oil seal squarely into the chain case to the specified installed height.

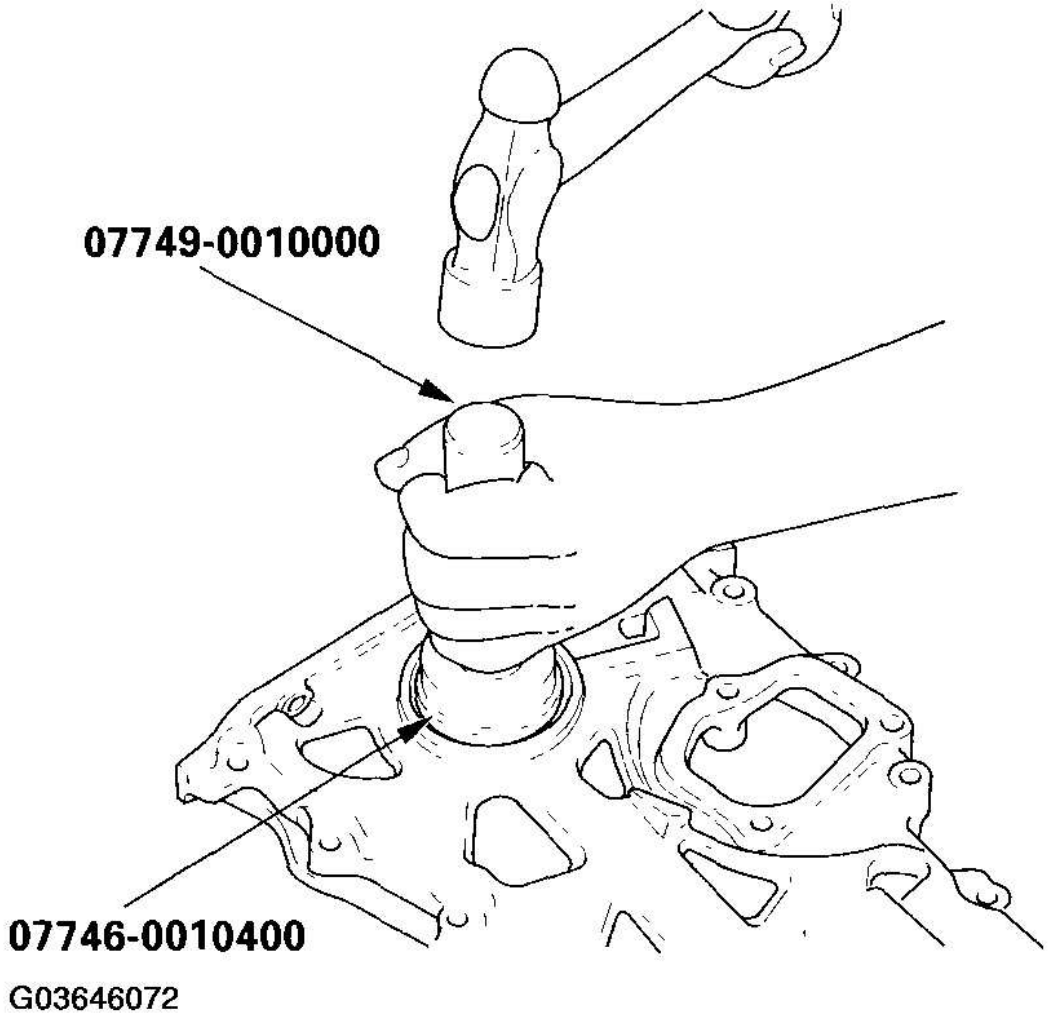


Fig. 57: Driving Oil Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the distance between the chain case surface (A) and oil seal (B).

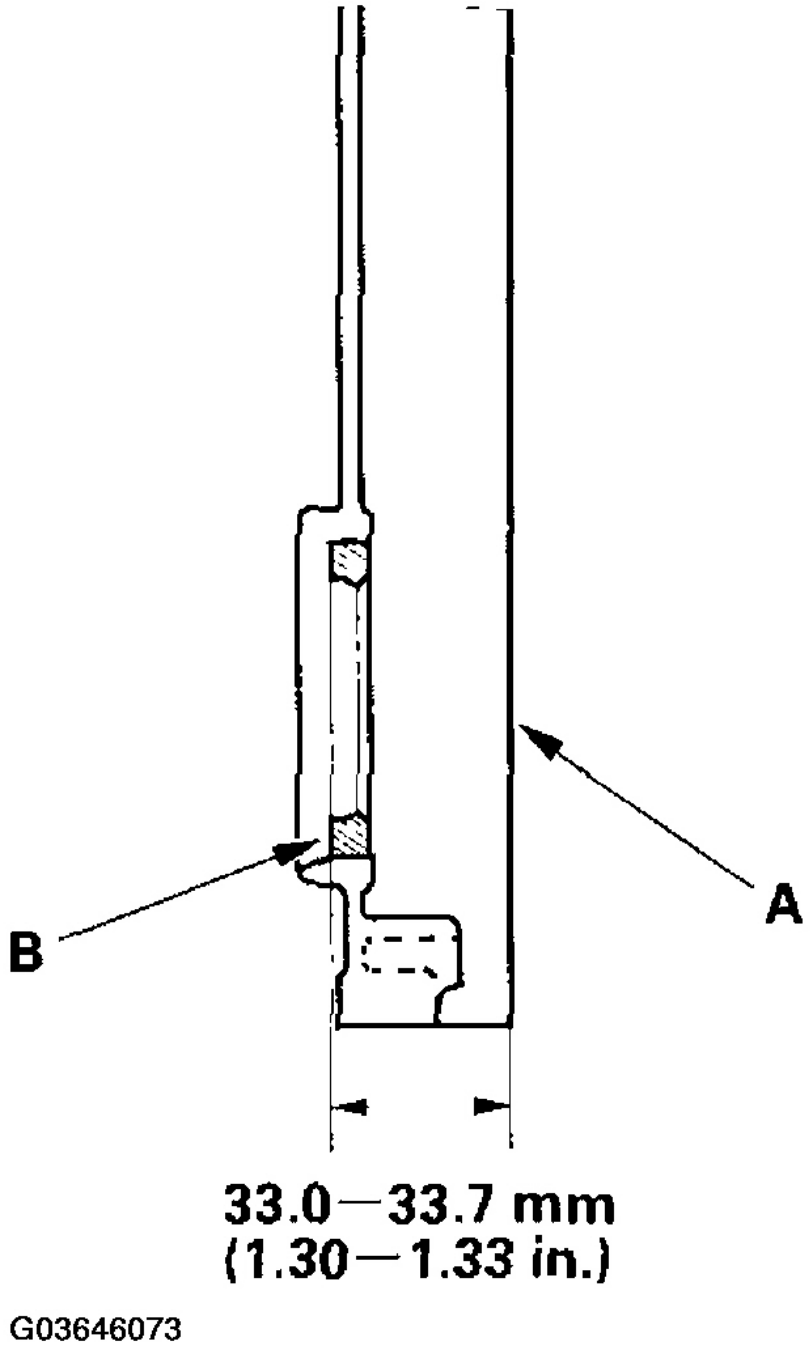


Fig. 58: Measuring Distance Between Chain Case Surface And Oil Seal

Courtesy of AMERICAN HONDA MOTOR CO., INC.

CAM CHAIN INSPECTION

1. Remove the front wheels.
2. Remove the splash shield.
3. Remove the drive belt (see **DRIVE BELT REPLACEMENT**).
4. Remove the cylinder head cover (see **CYLINDER HEAD COVER REMOVAL**).
5. Remove the crankshaft pulley (see **CRANKSHAFT PULLEY REMOVAL AND INSTALLATION**).
6. Disconnect the crankshaft position (CKP) sensor connector and variable valve timing control (VTC) oil control solenoid valve connector (see step 8).
7. Remove the VTC oil control solenoid valve (see **VTC OIL CONTROL SOLENOID VALVE REMOVAL/TEST/INSTALLATION**).
8. Support the engine with a jack and wood block under the oil pan.
9. Remove the ground cable, and remove the upper bracket (see step 11).
10. Remove the side engine mount bracket (see step 12).
11. Remove the chain case (see step 13).
12. Measure the tensioner rod length between the tensioner body and bottom of the flat surface section on the tensioner rod. If the length is over the tolerance, replace the cam chain and oil pump chain.

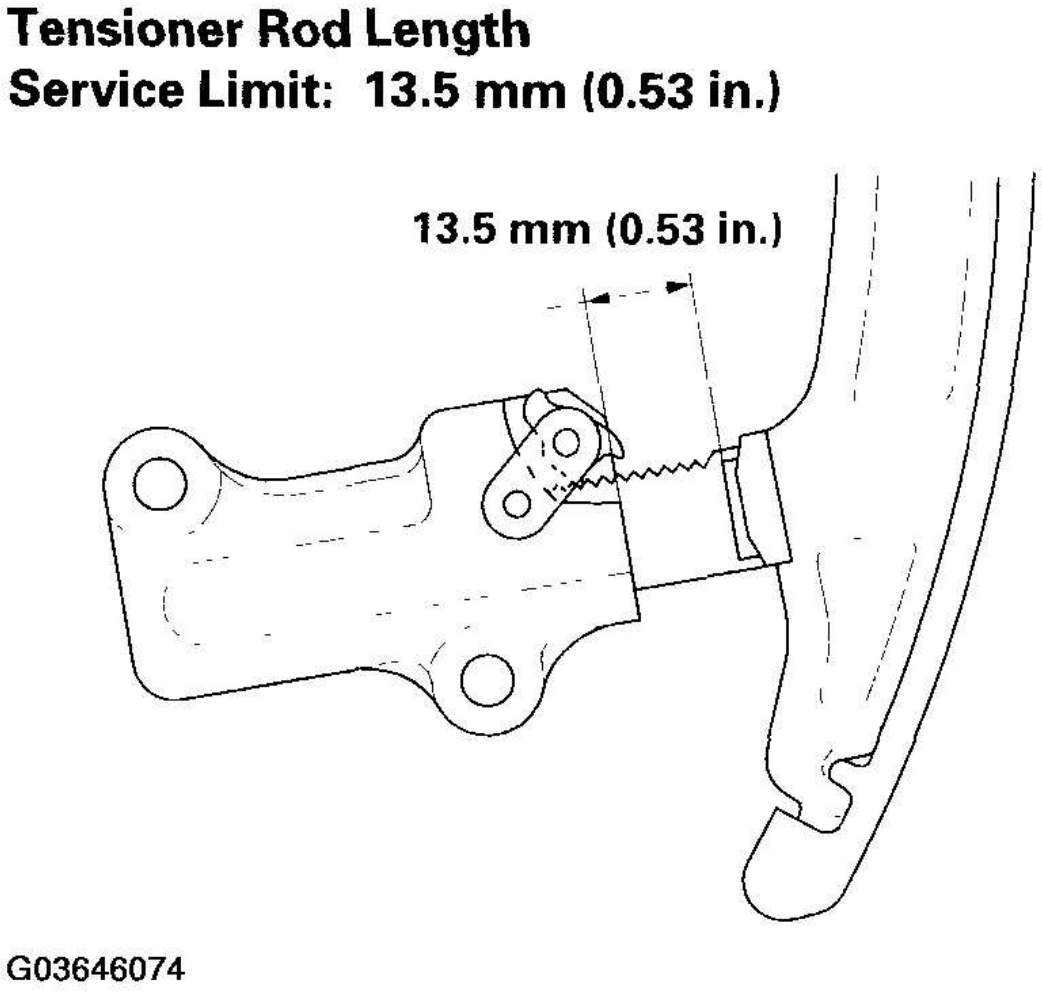


Fig. 59: Measuring Tensioner Rod Length Between Tensioner Body And Bottom Of Flat Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Check the chain case oil seal for damage. If the oil seal is damaged, replace the chain case oil seal (see **CHAIN CASE OIL SEAL INSTALLATION**).
14. Remove all of the old liquid gasket from the chain case mating surfaces, bolt, and bolt holes.
15. Clean and dry the chain case mating surfaces.
16. Apply liquid gasket, P/N 08717-0004, 08718-0001, 08718-0002, 08718-0003,

or 08718-0009, evenly to the engine block mating surface of the chain case (see step 13).

17. Apply liquid gasket to the engine block upper surface contact areas on the chain case and lower block upper surface contact areas on the chain case (see step 14).
18. Apply liquid gasket, P/N 08717-0004, 08718-0001, 08718-0002,08718-0003, or 08718-0009, evenly to the oil pan mating surface of the chain case (see step 15).

NOTE: Do not install components if too much time has passed after applying the liquid gasket (for P/N 08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply the liquid gasket.

19. Install the new O-ring on the chain case. Set the edge of the chain case to the edge of the oil pan, then install the chain case on the engine block (see step 16). Wipe off the excess liquid gasket on the oil pan and chain case mating area.

NOTE:

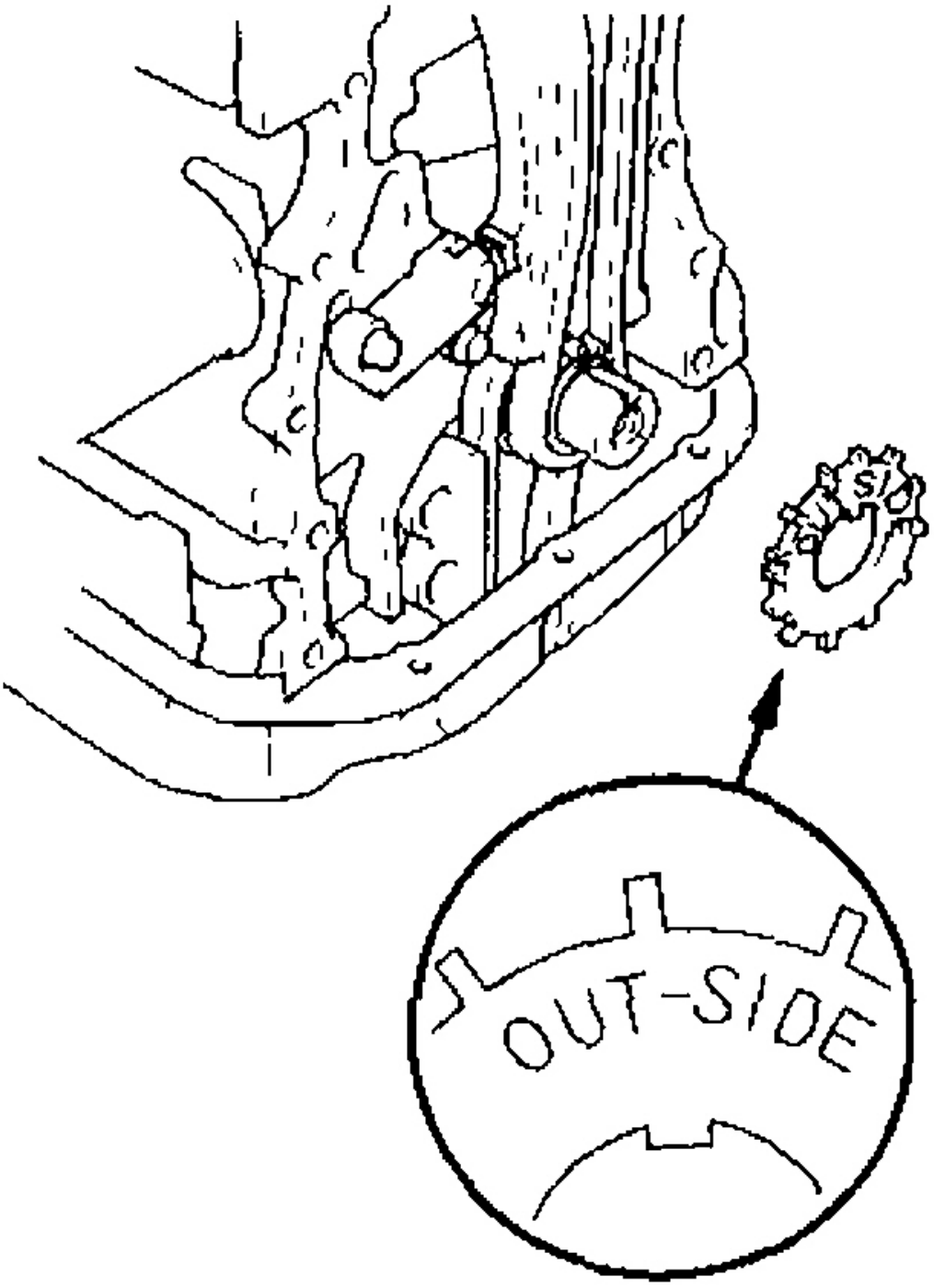
- **When installing the chain case, do not slide the bottom surface on the oil pan mounting surface.**
- **Wait at least 30 minutes before filling the engine with oil.**
- **Do not run the engine for at least 3 hours after installing the chain case.**

20. Install the side engine mount bracket (see step 17).
21. Install the upper bracket and the ground cable (see step 18).
22. Install the VTC oil control solenoid valve (see **VTC OIL CONTROL SOLENOID VALVE REMOVAL/TEST/INSTALLATION**).
23. Connect the CKP sensor connector and VTC oil control solenoid valve connector (see step 21).
24. Install the crankshaft pulley (see **INSTALLATION**).

25. Install the cylinder head cover (see **CYLINDER HEAD COVER INSTALLATION**).
26. Install the drive belt (see **DRIVE BELT REPLACEMENT**).
27. Install the splash shield.
28. Install the front wheels.
29. Do the CKP pattern clear/CKP learn procedure (see **CKP PATTERN CLEAR/CKP PATTERN LEARN**).

CKP PULSE PLATE REPLACEMENT

1. Remove the front tires/wheels.
2. Remove the splash shield (see step 25 on **TRANSMISSION REMOVAL**).
3. Remove the drive belt (see **DRIVE BELT REPLACEMENT**).
4. Remove the cylinder head cover (see **CYLINDER HEAD COVER REMOVAL**).
5. Remove the crankshaft pulley (see **CRANKSHAFT PULLEY REMOVAL AND INSTALLATION**).
6. Disconnect the crankshaft position (CKP) sensor connector and variable valve timing control (VTC) oil control solenoid valve connector (see step 8).
7. Remove the VTC oil control solenoid valve (see **VTC OIL CONTROL SOLENOID VALVE REMOVAL/TEST/INSTALLATION**).
8. Support the engine with a jack and wood block under the oil pan.
9. Remove the ground cable, and remove the upper bracket (see step 11).
10. Remove the side engine mount bracket (see step 12).
11. Remove the chain case (see step 13).
12. Remove the CKP pulse plate.



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Fig. 60: Removing CKP Pulse Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install the CKP pulse plate.
14. Check the chain case oil seal for damage. If the oil seal is damaged, replace the chain case oil seal (see **CHAIN CASE OIL SEAL INSTALLATION**).
15. Remove all of the old liquid gasket from the chain case mating surfaces, bolts, and bolt holes.
16. Clean and dry the chain case mating surfaces.
17. Apply liquid gasket, P/N 08717-0004, 08718-0001, 08717-0002, 08718-0003, or 08718-0009, evenly to the engine block mating surface of the chain case (see step 13).

NOTE: Do not install components if too much time has passed after applying the liquid gasket (for P/N 08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply the liquid gasket.

18. Apply liquid gasket to the engine block upper surface contact areas on the chain case and lower block upper surface contact areas on the chain case (see step 14).
19. Apply liquid gasket, P/N 08717-0004,08718-0001, 08718-0002, 08718-0003, or 08718-0009, evenly to the oil pan mating surface of the chain case (see step 15).

NOTE: Do not install components if too much time has passed after applying the liquid gasket (for P/N 08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply the liquid gasket.

20. Install the new O-ring on the chain case. Set the edge of the chain case to the edge of the oil pan, then install the chain case on the engine block (see step 16). Wipe off the excess liquid gasket on the oil pan and chain case mating

area.

NOTE:

- **When installing the chain case, do not slide the bottom surface on the oil pan mounting surface.**
- **Wait at least 30 minutes before filling the engine with oil.**
- **Do not run the engine within 3 hours after installing the chain case.**

21. Install the side engine mount bracket (see step 17).
22. Install the upper bracket and the ground cable (see step 18).
23. Install the VTC oil control solenoid valve (see **VTC OIL CONTROL SOLENOID VALVE REMOVAL/TEST/INSTALLATION**).
24. Connect the CKP sensor connector and VTC oil control solenoid valve connector (see step 21).
25. Install the crankshaft pulley (see **INSTALLATION**).
26. Install the cylinder head cover (see **CYLINDER HEAD COVER INSTALLATION**).
27. Install the drive belt.
28. Install the splash shield (see step 25 on **TRANSMISSION INSTALLATION**).
29. Install the front tires/wheels.
30. Do the CKP pattern clear/CKP learn procedure (see **CKP PATTERN CLEAR/CKP PATTERN LEARN**).

CYLINDER HEAD COVER REMOVAL

1. Remove the intake manifold cover.

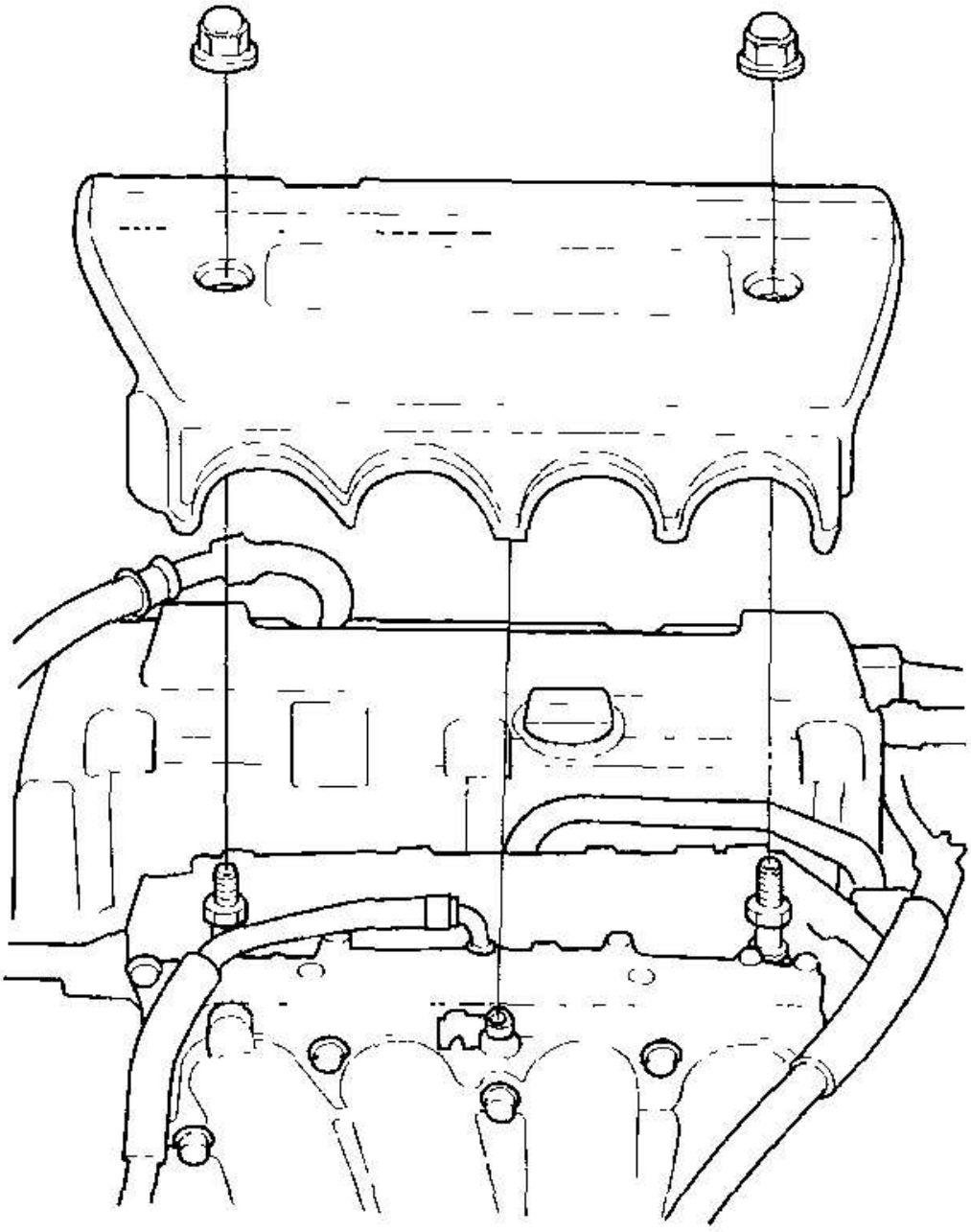


Fig. 61: Removing Intake Manifold Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the four ignition coils (see **IGNITION COIL REMOVAL/INSTALLATION**).
3. Remove the two bolts (A) securing the vacuum line.

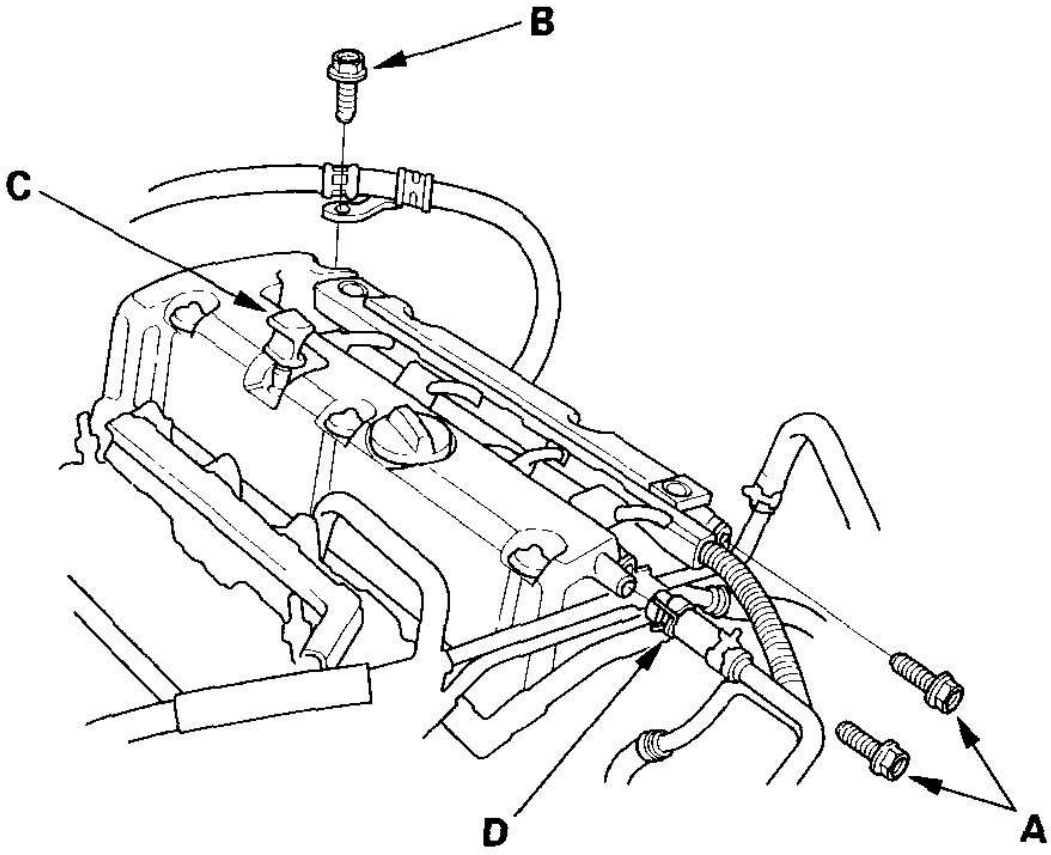
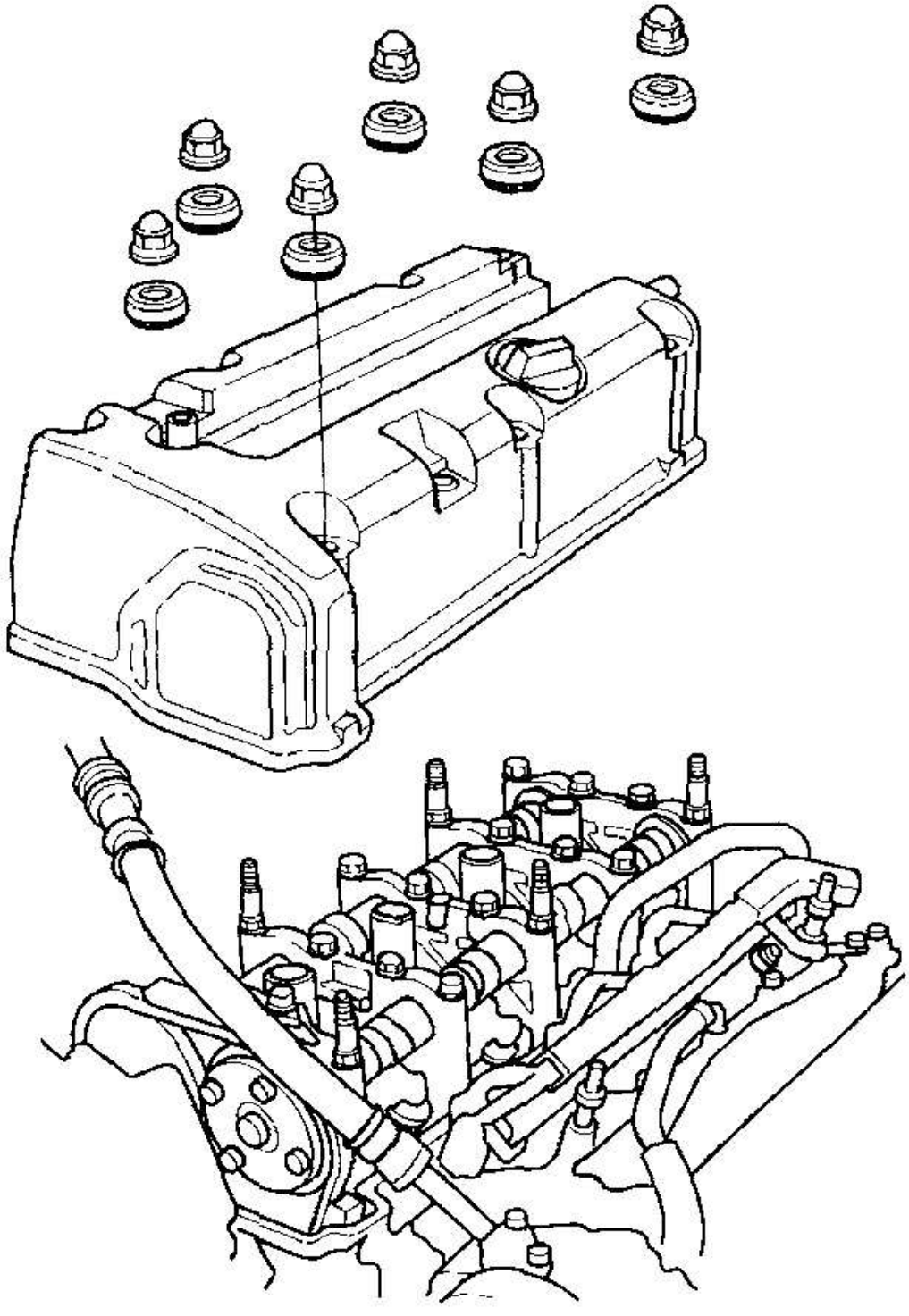


Fig. 62: Removing Bolts Securing Vacuum Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the bolt (B) securing the power steering hose bracket.
5. Remove the dipstick (C) and breather hose (D).
6. Remove the cylinder head cover.



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Fig. 63: Removing Dipstick And Breather Hose & Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CYLINDER HEAD COVER INSTALLATION

1. Thoroughly clean the head cover gasket and the groove.
2. Install the head cover gasket (A) in the groove of the cylinder head cover (B).

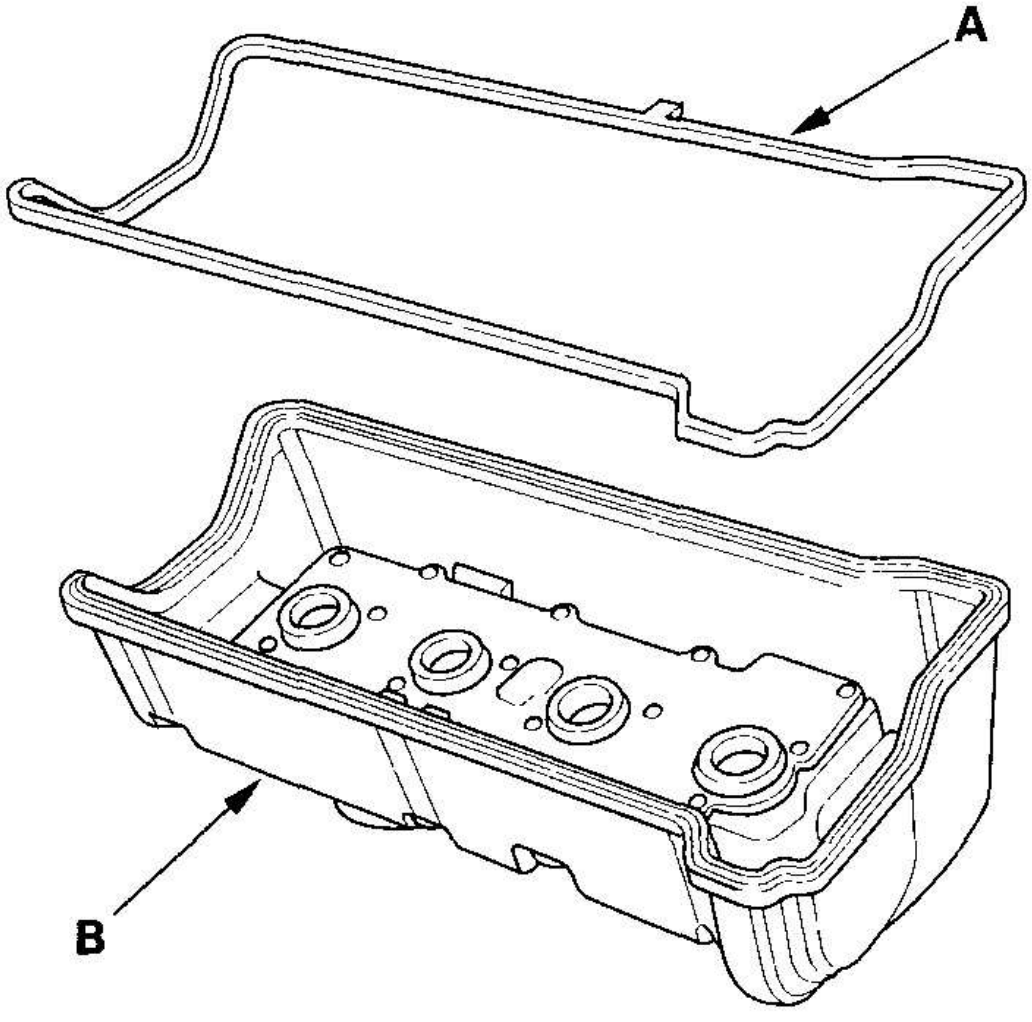


Fig. 64: Installing Head Cover Gasket In Groove

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check that the mating surfaces are clean and dry.
4. Apply liquid gasket, P/N 08717-0004, 08718-0001, 08718-0002, 08718-0003, or 08718-0009, on the chain case and the No. 5 rocker shaft holder mating areas.

NOTE: Do not install components if too much time has passed after applying the liquid gasket (for P/N 08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply the liquid gasket.

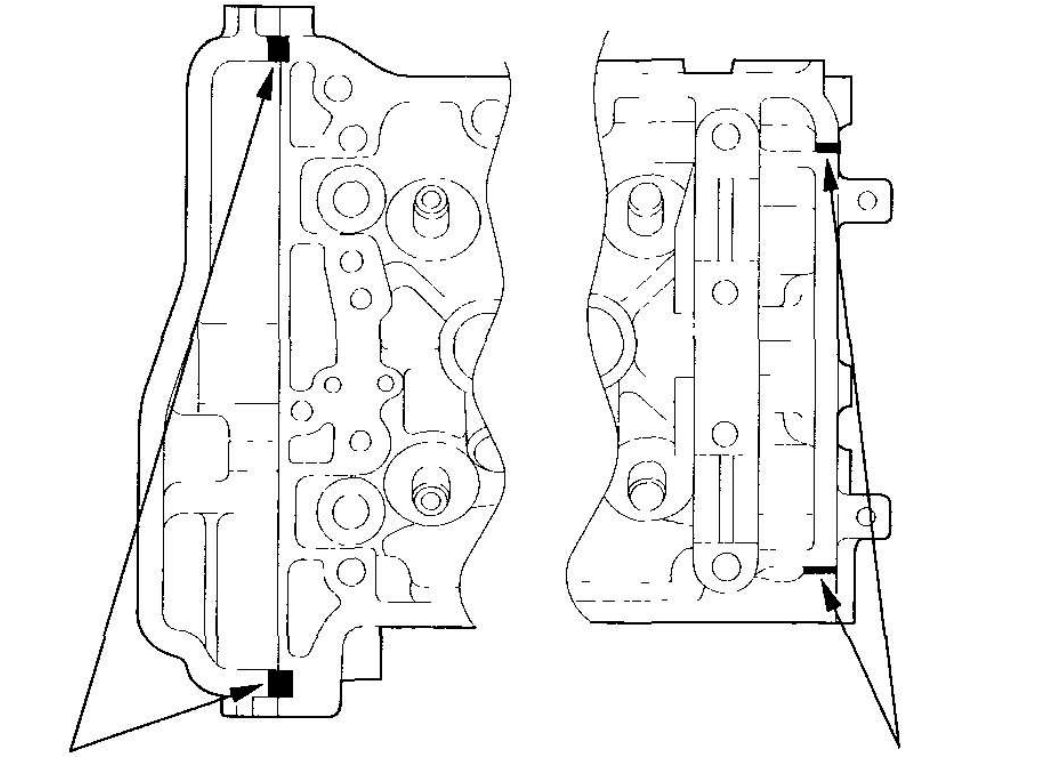


Fig. 65: Applying Liquid Gasket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Set the spark plug seals (A) on the spark plug tubes. Place the cylinder head cover (B) on the cylinder head, then slide the cover slightly back and forth to seat the head cover gasket.

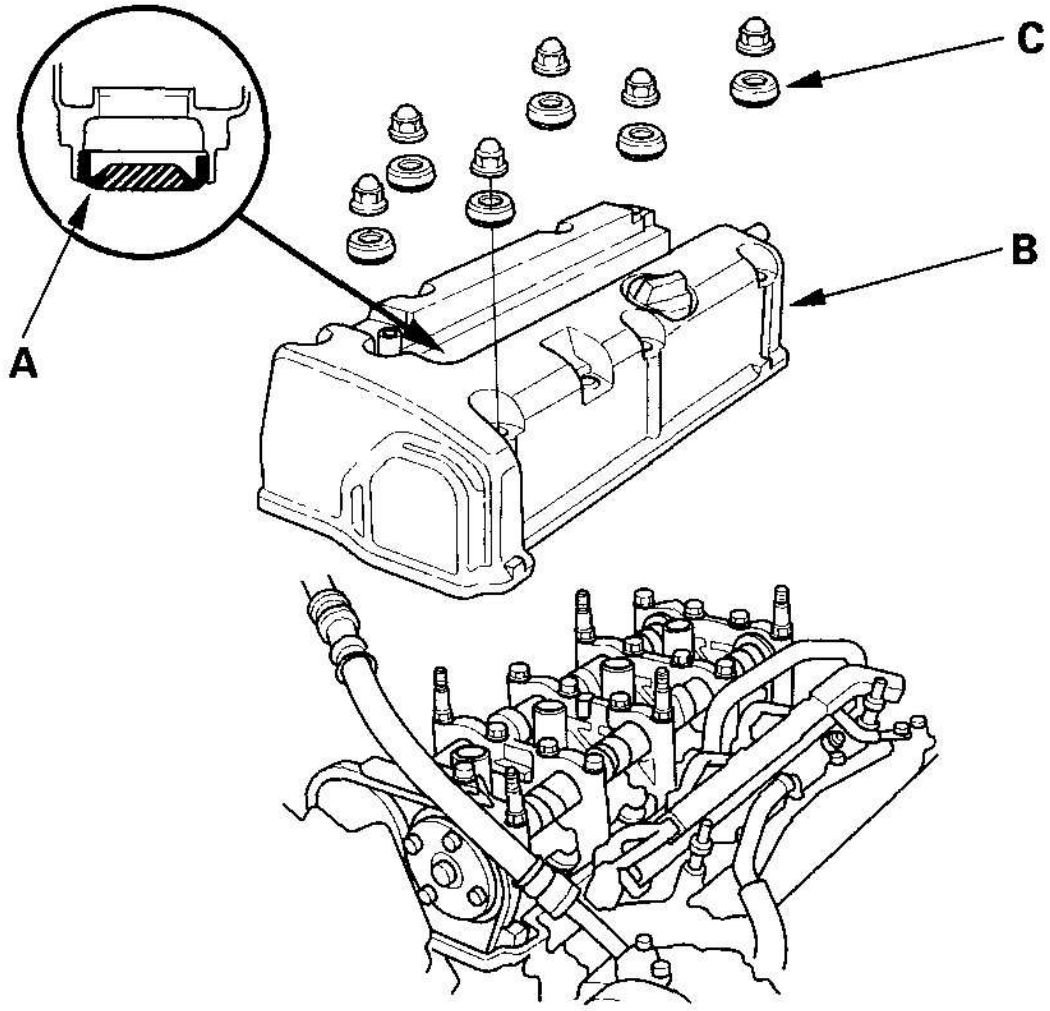


Fig. 66: Setting Spark Plug Seal On Spark Plug Tubes
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Inspect the cover washers (C). Replace any washer that is damaged or deteriorated.
7. Tighten the bolts in two or three steps. In the final step tighten all bolts, in sequence, to 12 N.m (1.2 kgf.m, 8.7 lbf.ft).

NOTE:

- **Wait at least 30 minutes before filling the engine with oil.**
- **Do not run the engine for at least 3 hours after installing the head cover.**

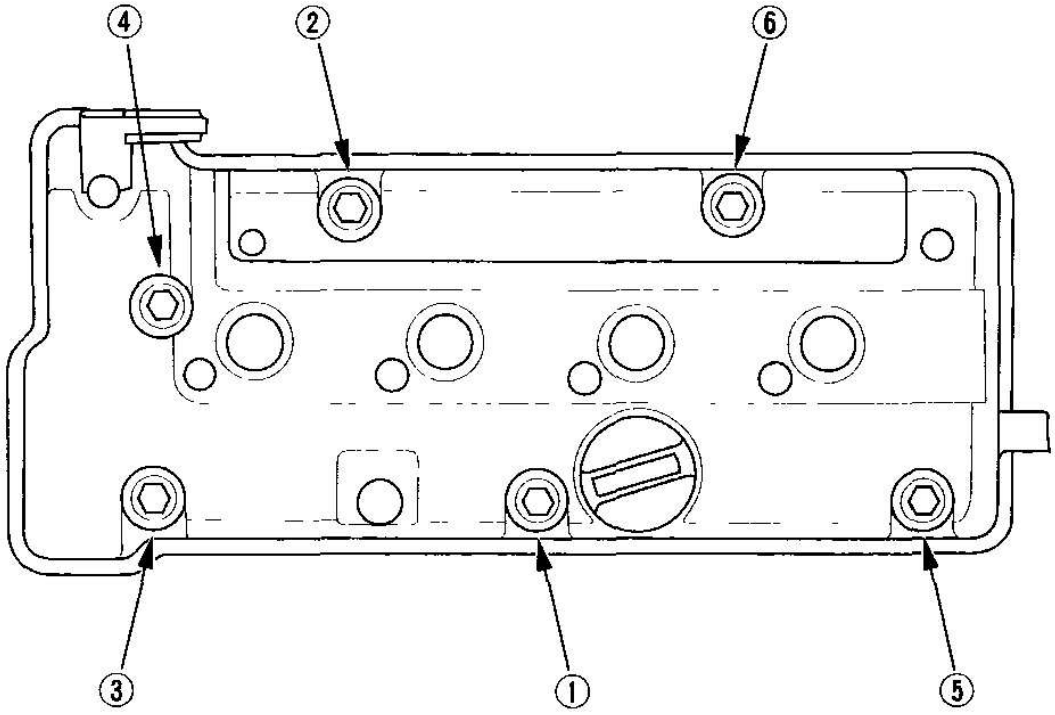


Fig. 67: Tightening Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the dipstick (A) and breather hose (B).

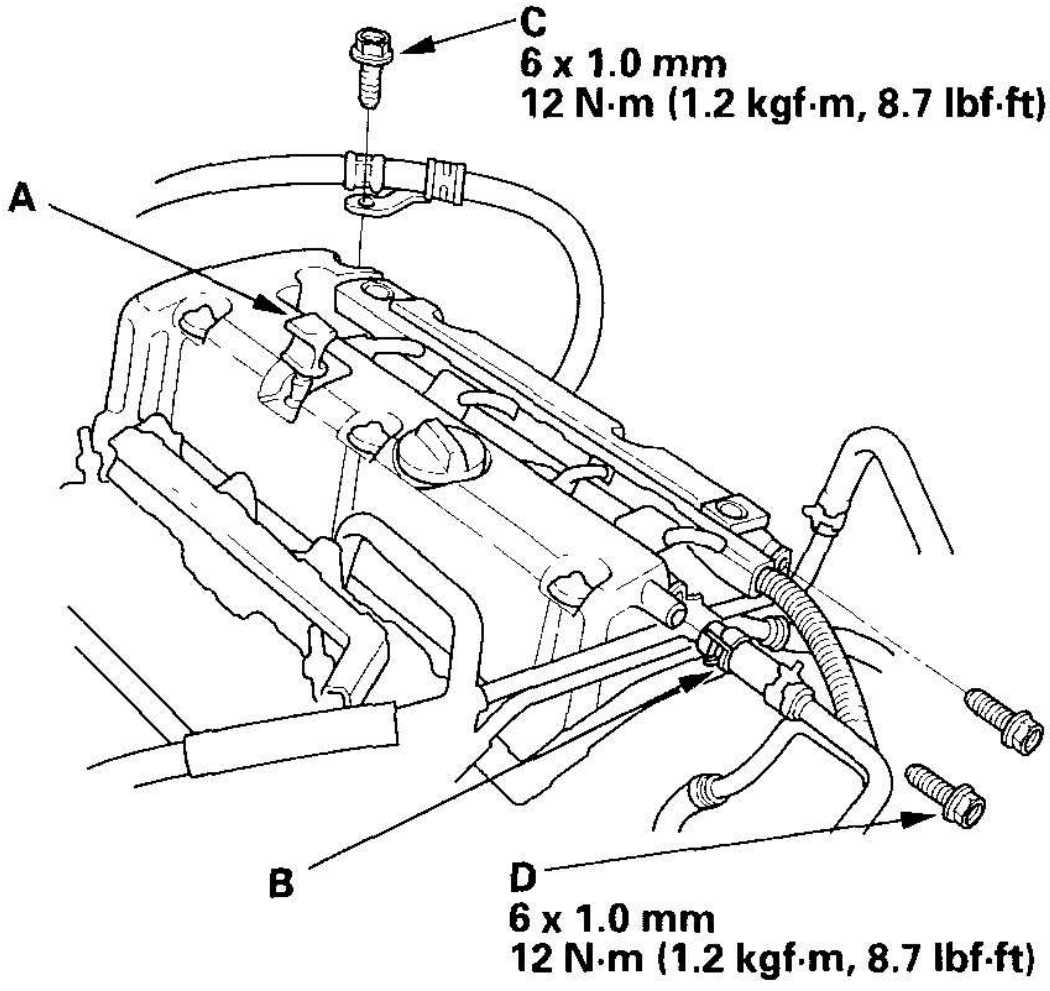


Fig. 68: Installing Dipstick And Breather Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Tighten the bolt (C) securing the power steering hose bracket.
10. Tighten the two bolts (D) securing the vacuum line.
11. Install the four ignition coils (see **IGNITION COIL REMOVAL/INSTALLATION**).
12. Check that all tubes, hoses, and connectors are installed correctly.
13. Install the intake manifold cover.

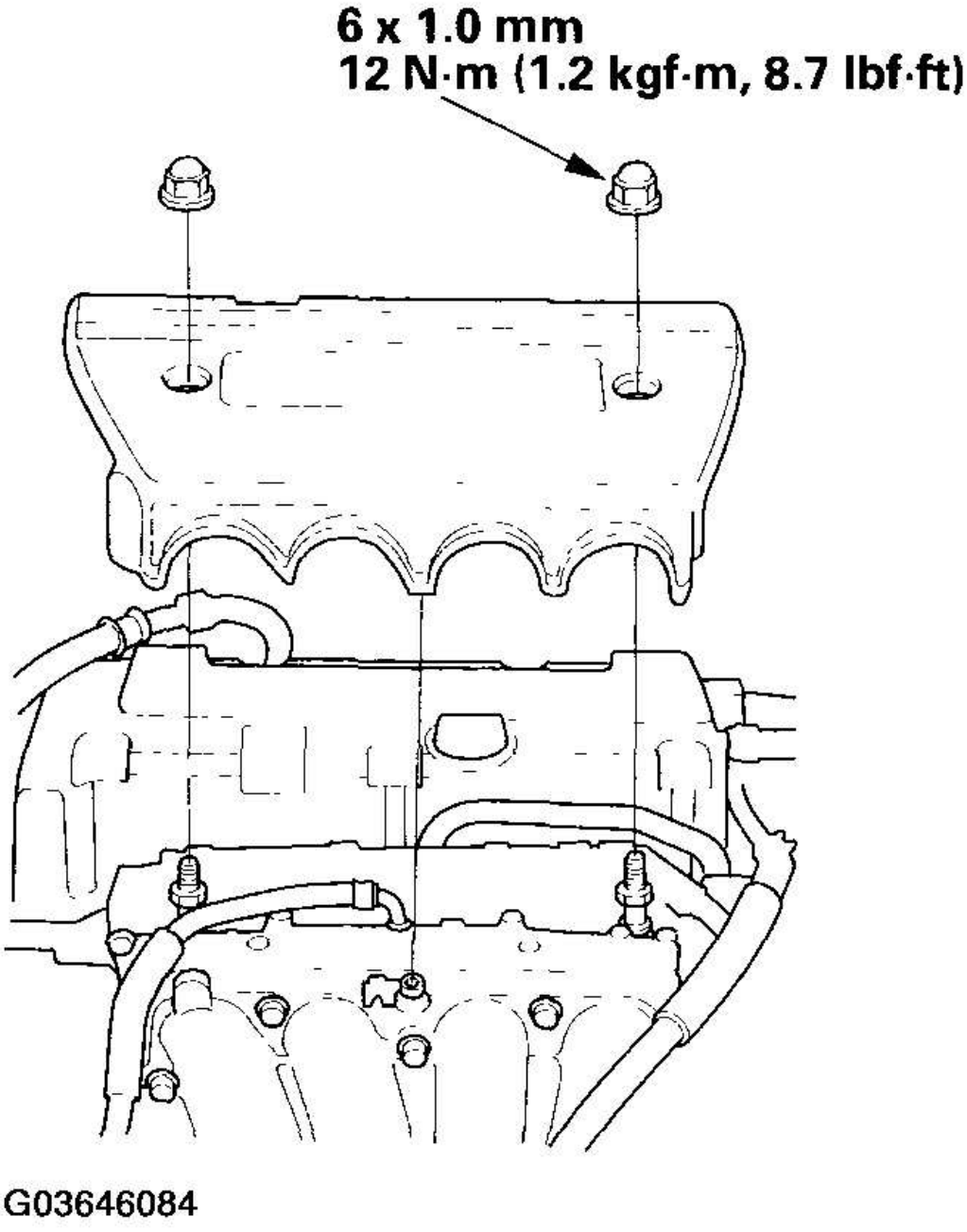


Fig. 69: Installing Intake Manifold Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CYLINDER HEAD REMOVAL

NOTE:

- **Use fender covers to avoid damaging painted surfaces.**
- **To avoid damaging the wires and terminals, unplug the wiring connectors carefully while holding the connector portion.**
- **To avoid damaging the cylinder head, wait until the engine coolant temperature drops below 100 ℉ (38 ° C) before loosening the cylinder head bolts.**
- **Mark all wiring and hoses to avoid misconnection.**

  Also, be sure that they do not contact other wiring or hoses, or interfere with other parts.

1. Make sure you have the anti-theft codes for the audio unit (and navigation code, if equipped), then write down the audio presets.
2. Relieve fuel pressure (see **FUEL PRESSURE RELIEVING**).
3. Disconnect the negative cable from the battery.
4. Drain the engine coolant (see **COOLANT CHECK**).
5. Remove the drive belt (see **DRIVE BELT REPLACEMENT**).
6. Disconnect the intake air temperature (IAT) sensor connector (A).

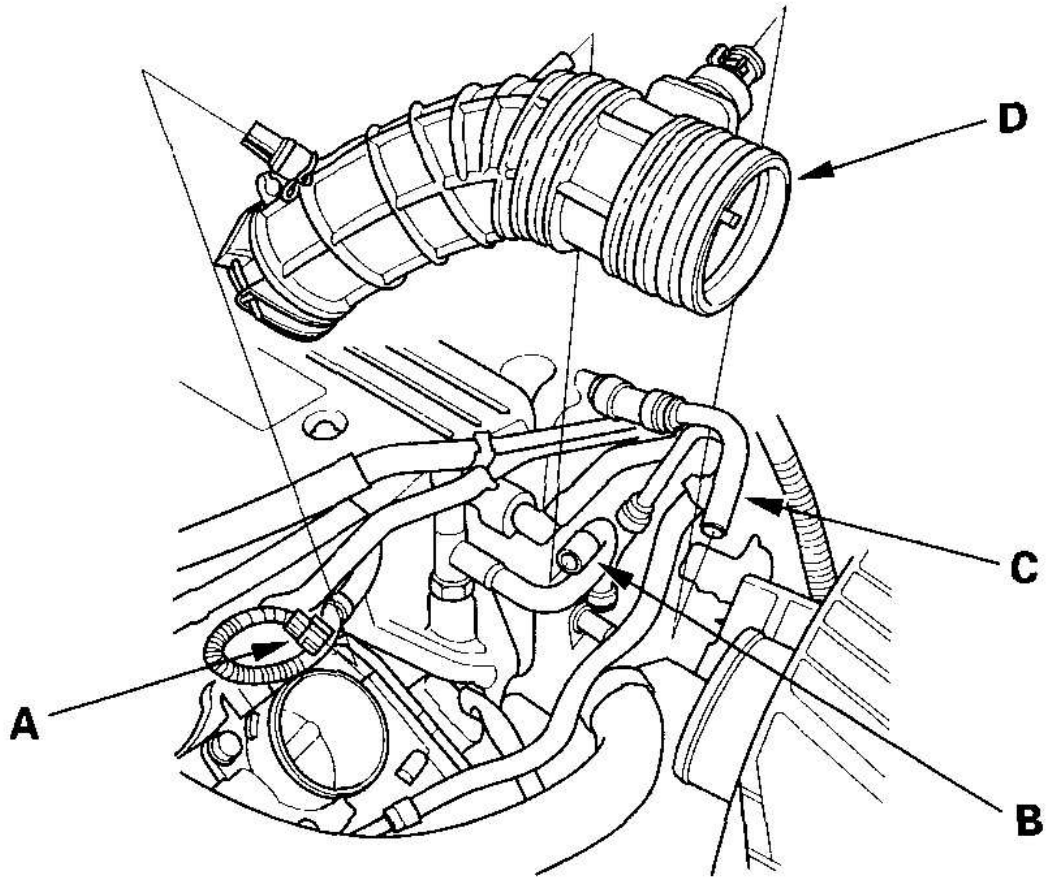


Fig. 70: Disconnecting Intake Air Temperature (IAT) Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the vacuum hose (B) and breather pipe (C), then remove the intake air duct (D).
8. Remove the quick-connect fitting cover (A), then disconnect the fuel feed hose (see **FUEL LINE/QUICK-CONNECT FITTING REMOVAL**).

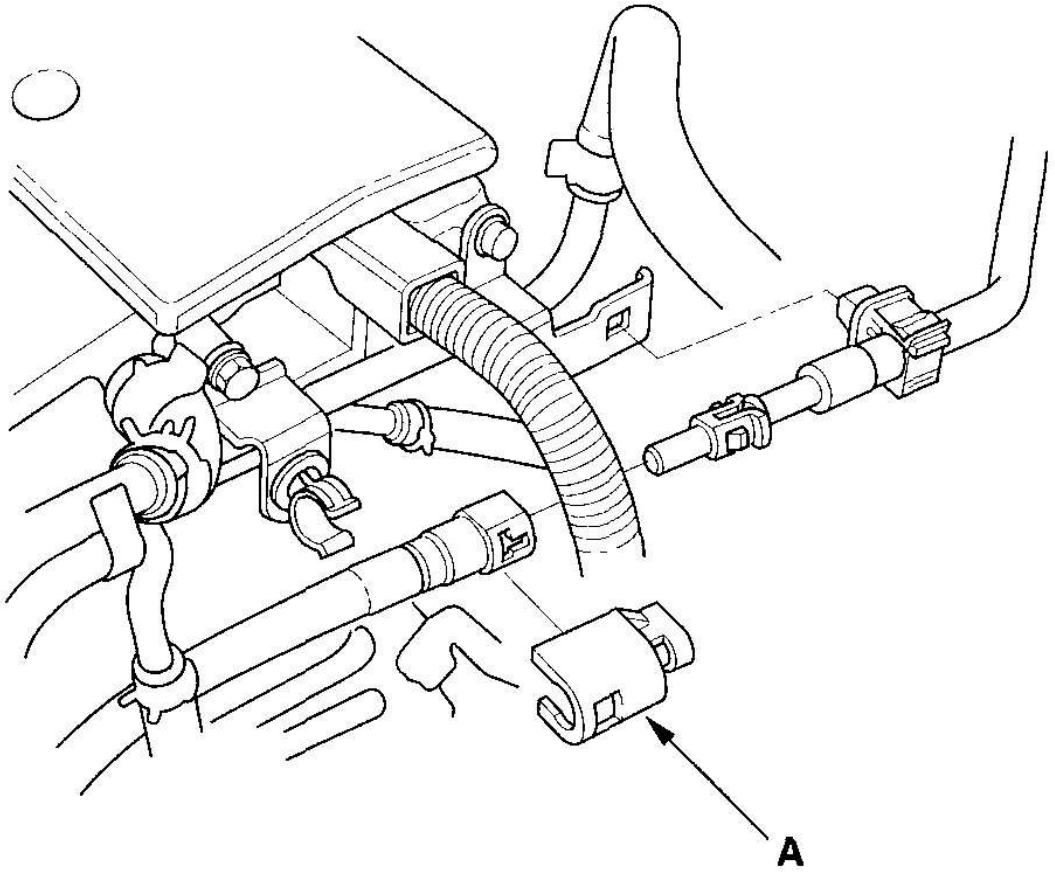


Fig. 71: Removing Vacuum Hose And Breather Pipe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the intake manifold:
   - 2003-2005 models (see **REMOVAL (2003-2005 MODELS)**)
   - 2006-07 models (see **REMOVAL (2006-07 MODELS)**)
10. Remove the exhaust manifold (see **EXHAUST MANIFOLD REMOVAL AND INSTALLATION**).
11. Remove the bolt (A) securing the connecting pipe.

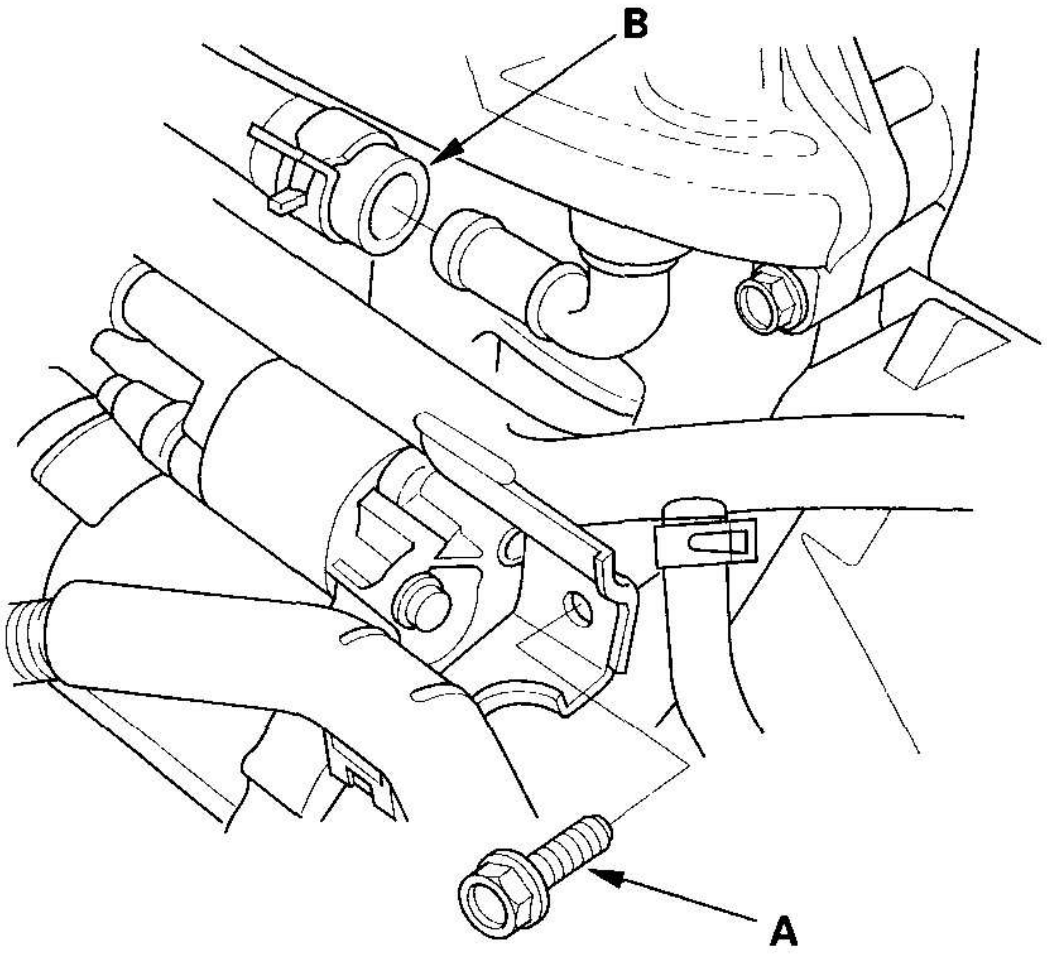


Fig. 72: Removing Bolt Securing Connecting Pipe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the water bypass hose (B).
13. Remove the evaporative emission (EVAP) canister hose (A) and brake booster vacuum hose (B).

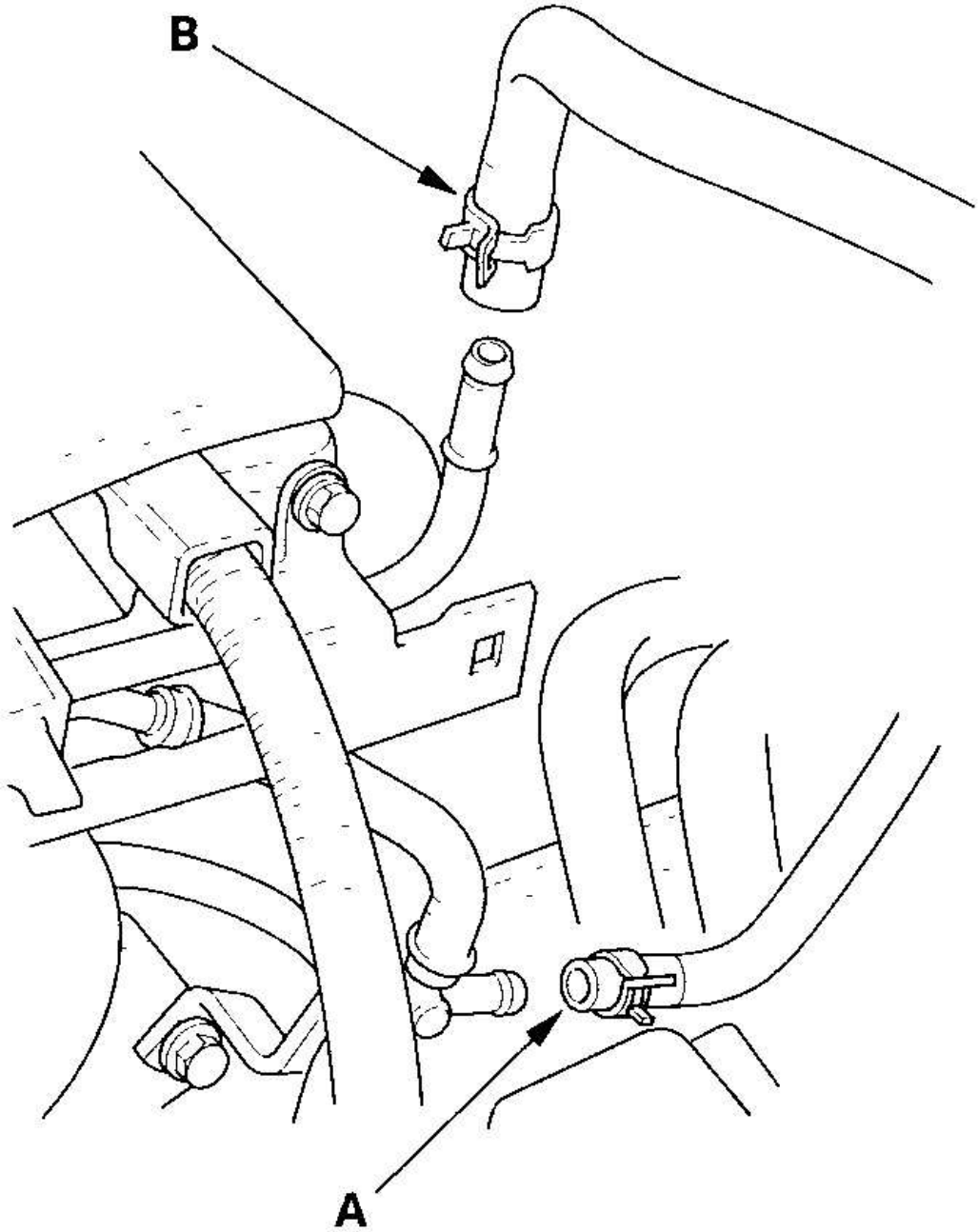


Fig. 73: Removing Evaporative Emission (EVAP) Canister Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Remove the positive crankcase ventilation (PCV) hose (A) and ground cable (B).

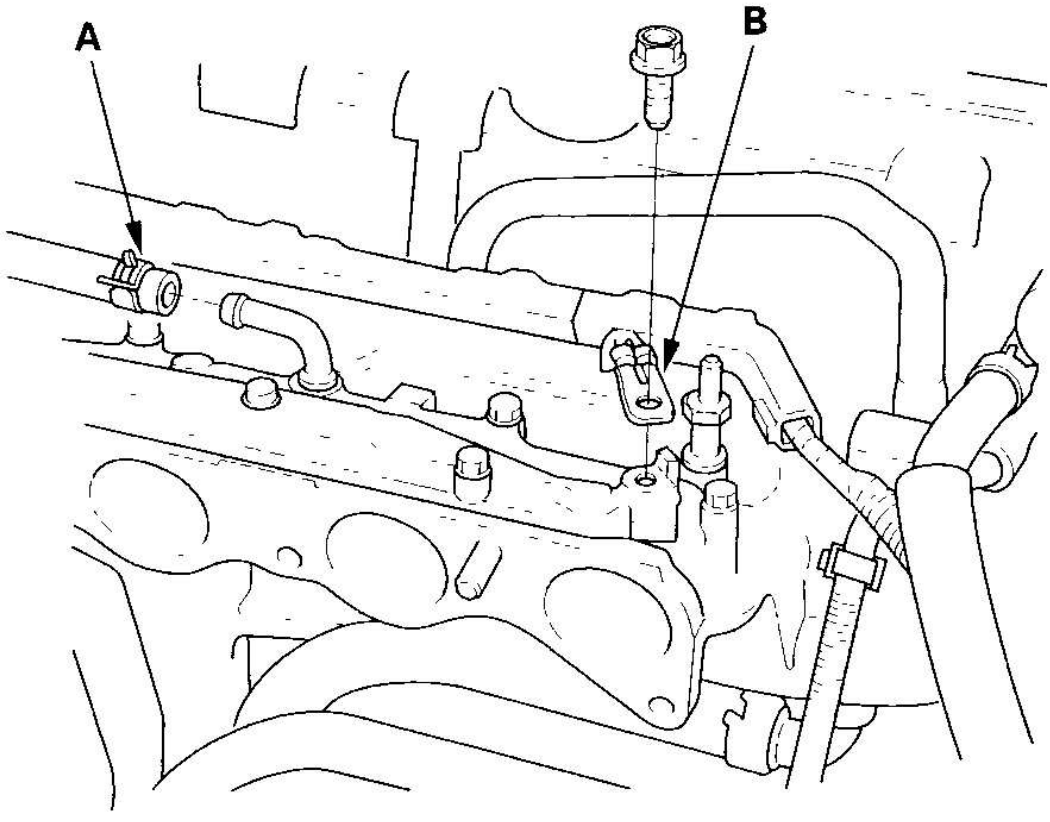


Fig. 74: Removing Positive Crankcase Ventilation (PCV) Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the upper radiator hose (A) and heater hoses (B).

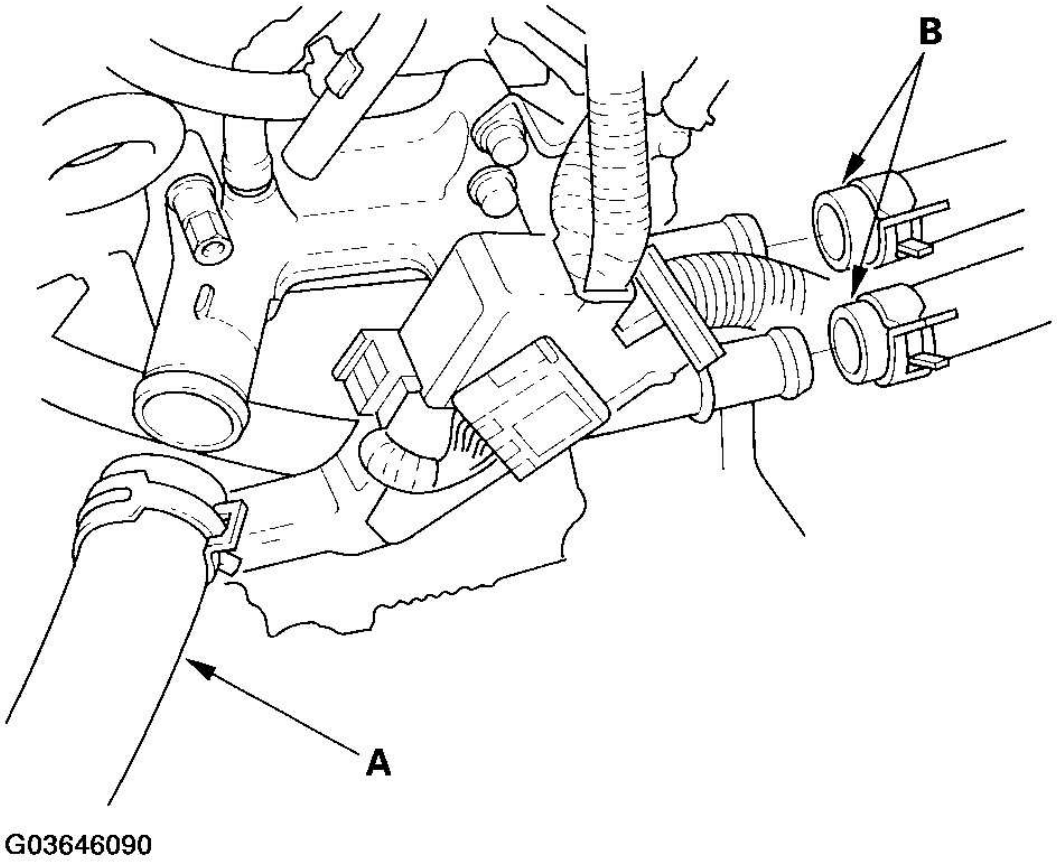


Fig. 75: Removing Upper Radiator Hoses And Heater Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Remove the engine wire harness connectors and wire harness clamps from the cylinder head.
    - Four injector connectors
    - Engine coolant temperature (ECT) sensor connector
    - Camshaft position (CMP) sensor A/B connectors
    - Exhaust gas recirculation (EGR) valve connector
    - Rocker arm oil control solenoid (VTEC solenoid valve) connector
    - Engine oil pressure (EOP) sensor connector
17. Remove the two bolts (A) securing the EVAP canister purge valve bracket and remove the bolt (B) securing the harness bracket.

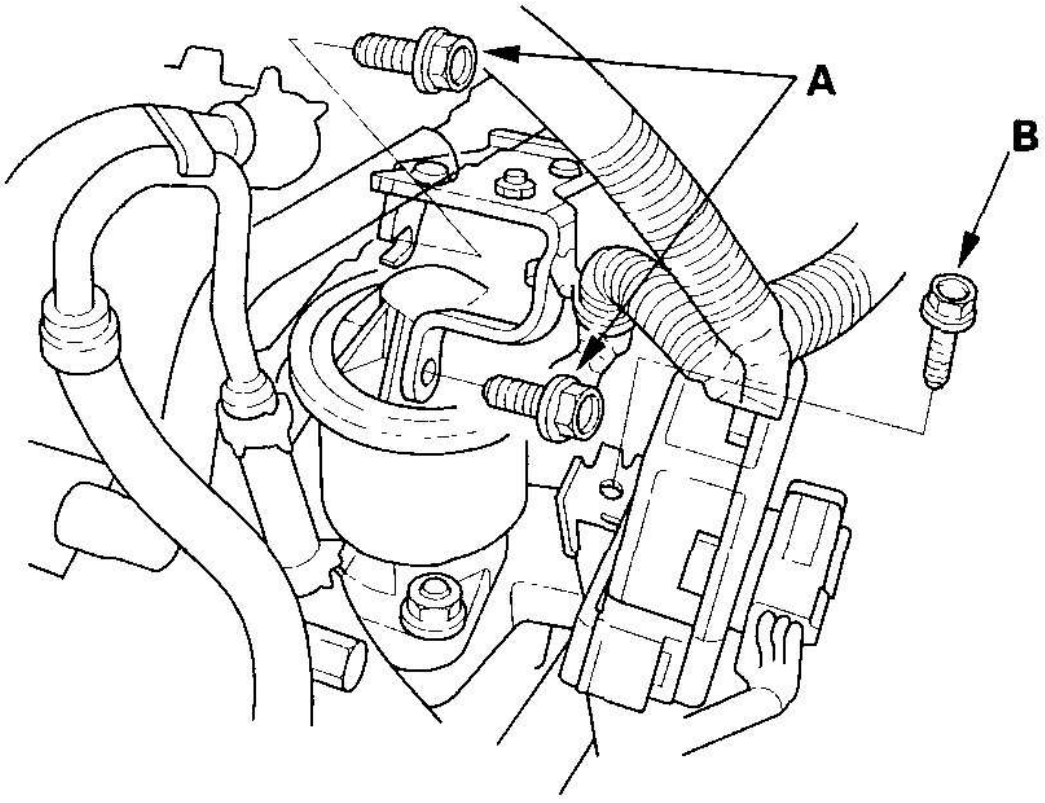


Fig. 76: Removing Bolts Securing EVAP Canister Purge Valve Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Remove the cam chain (see **Cam Chain Removal**).
19. Remove the rocker arm assembly (see **ROCKER ARM ASSEMBLY REMOVAL**).
20. Remove the cylinder head bolts. To prevent warpage, unscrew the bolts in sequence 1/3 turn at a time; repeat the sequence until all bolts are loosened.

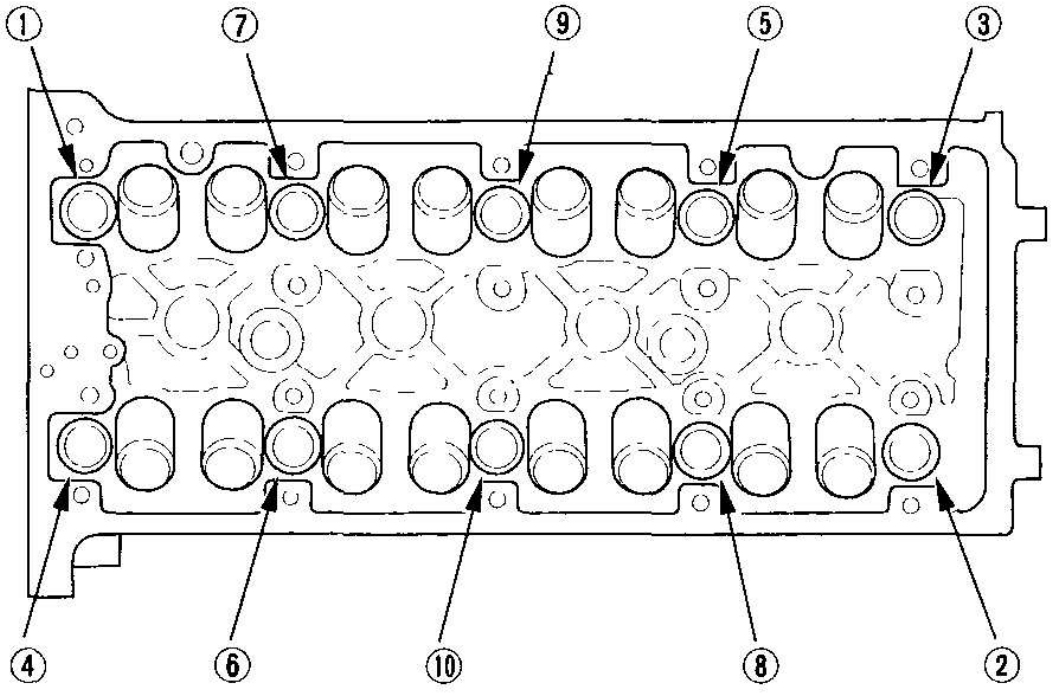
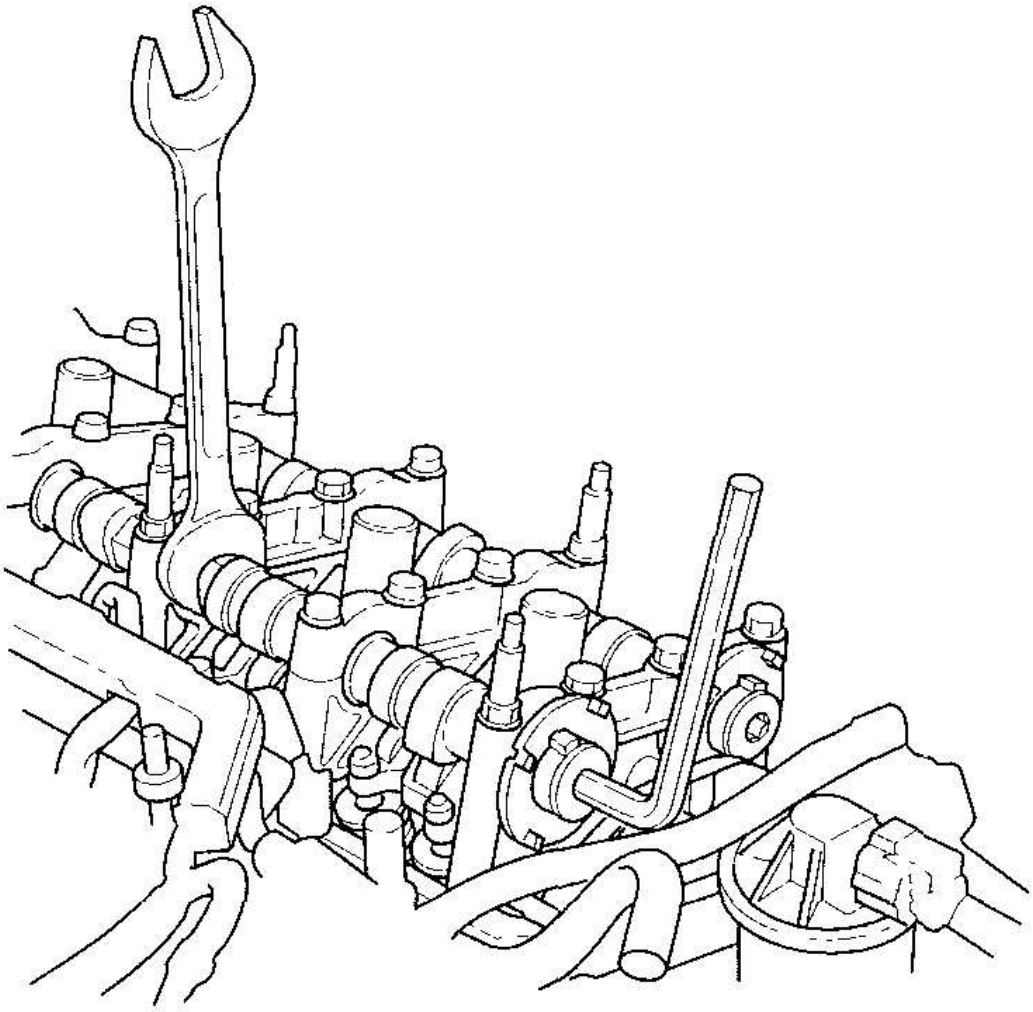


Fig. 77: Removing Cylinder Head Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Remove the cylinder head.

CMP PULSE PLATE A REPLACEMENT

1. Remove the cylinder head cover (see **CYLINDER HEAD COVER REMOVAL**).
2. Hold the camshaft with an open-end wrench, then loosen the bolt.



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Fig. 78: Holding Camshaft With An Open-End Wrench
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the camshaft position (CMP) pulse plate A.

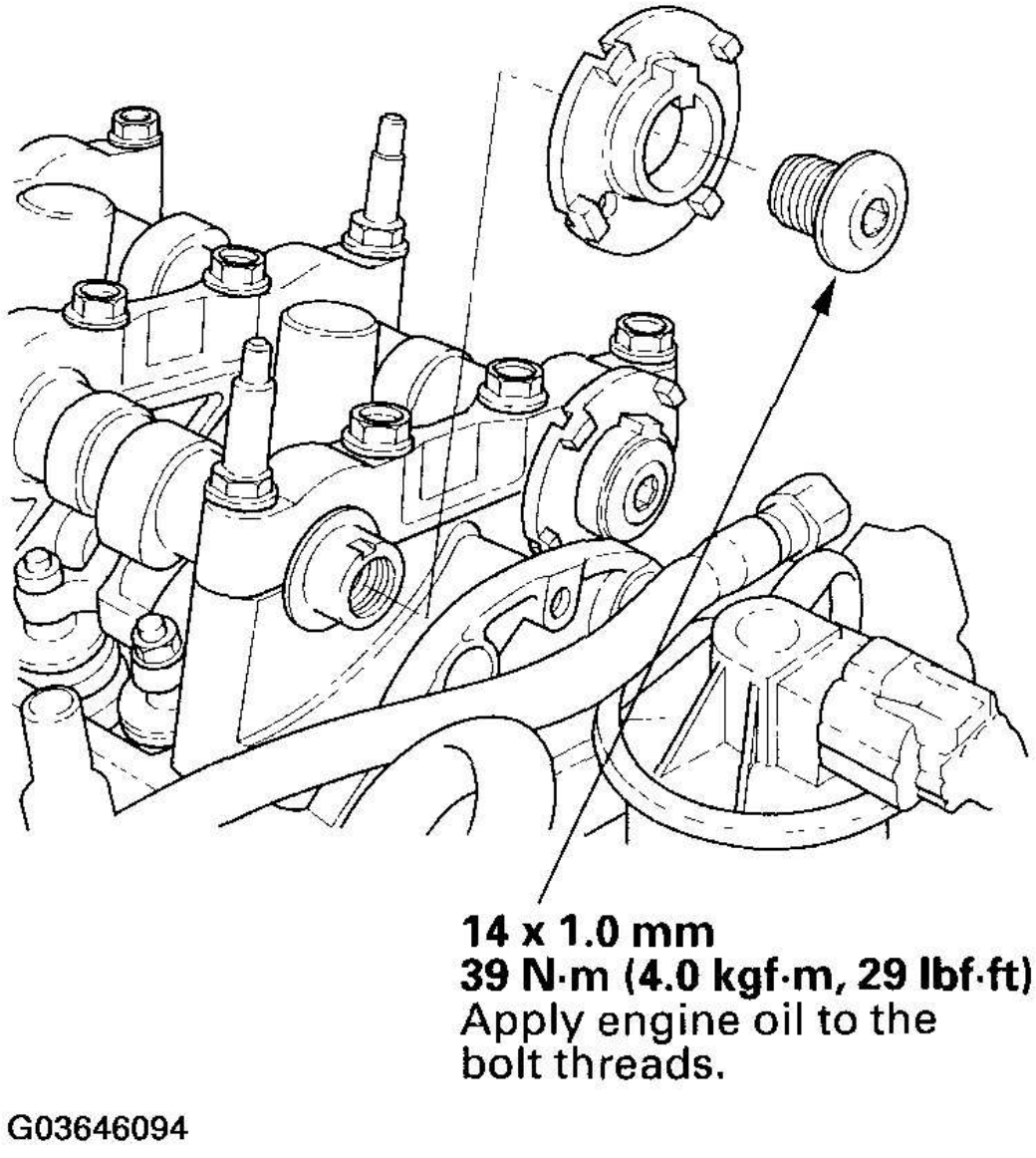


Fig. 79: Removing Camshaft Position (CMP) Pulse Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the CMP pulse plate A in the reverse order of removal.

CMP PULSE PLATE B REPLACEMENT

1. Remove the cylinder head cover (see **CYLINDER HEAD COVER**

REMOVAL).

2. Hold the camshaft with an open-end wrench, then loosen the bolt.

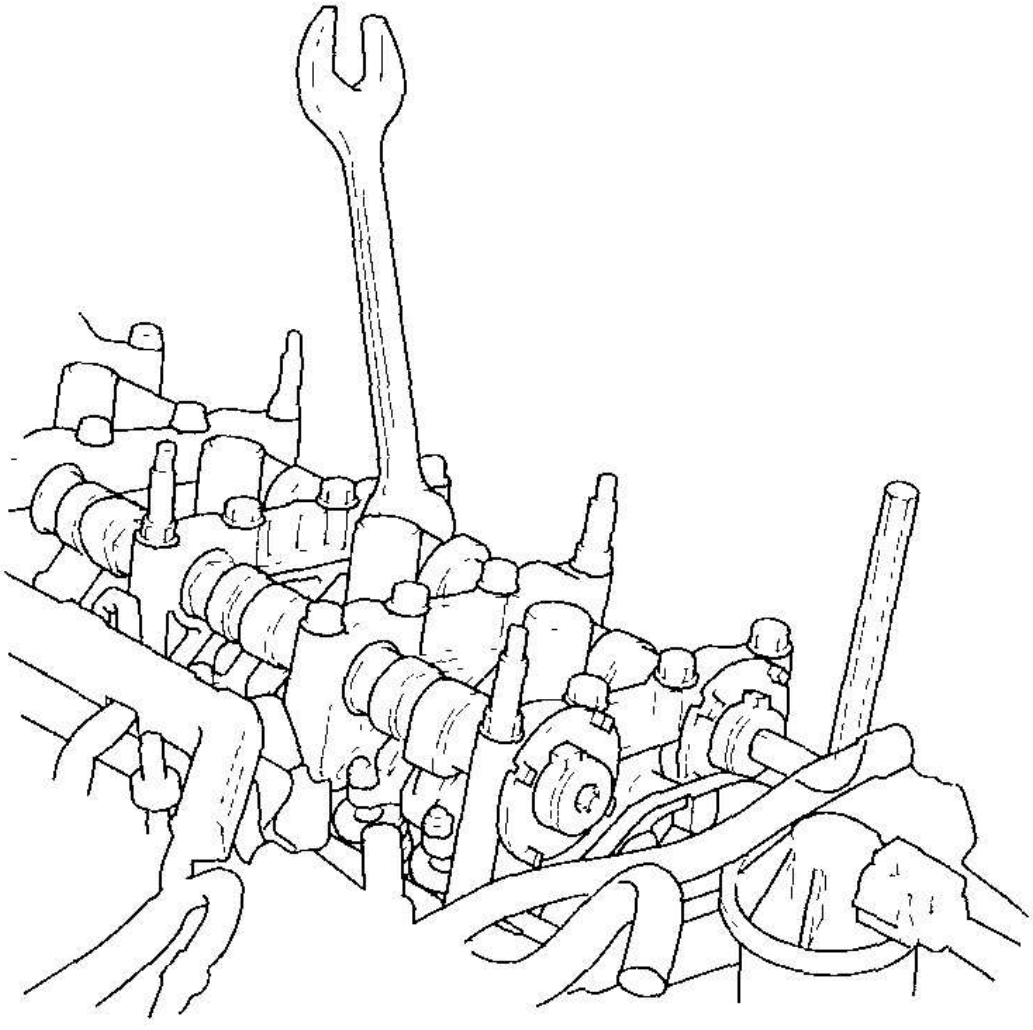


Fig. 80: Holding Camshaft With An Open-End Wrench
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the camshaft position (CMP) pulse plate B.

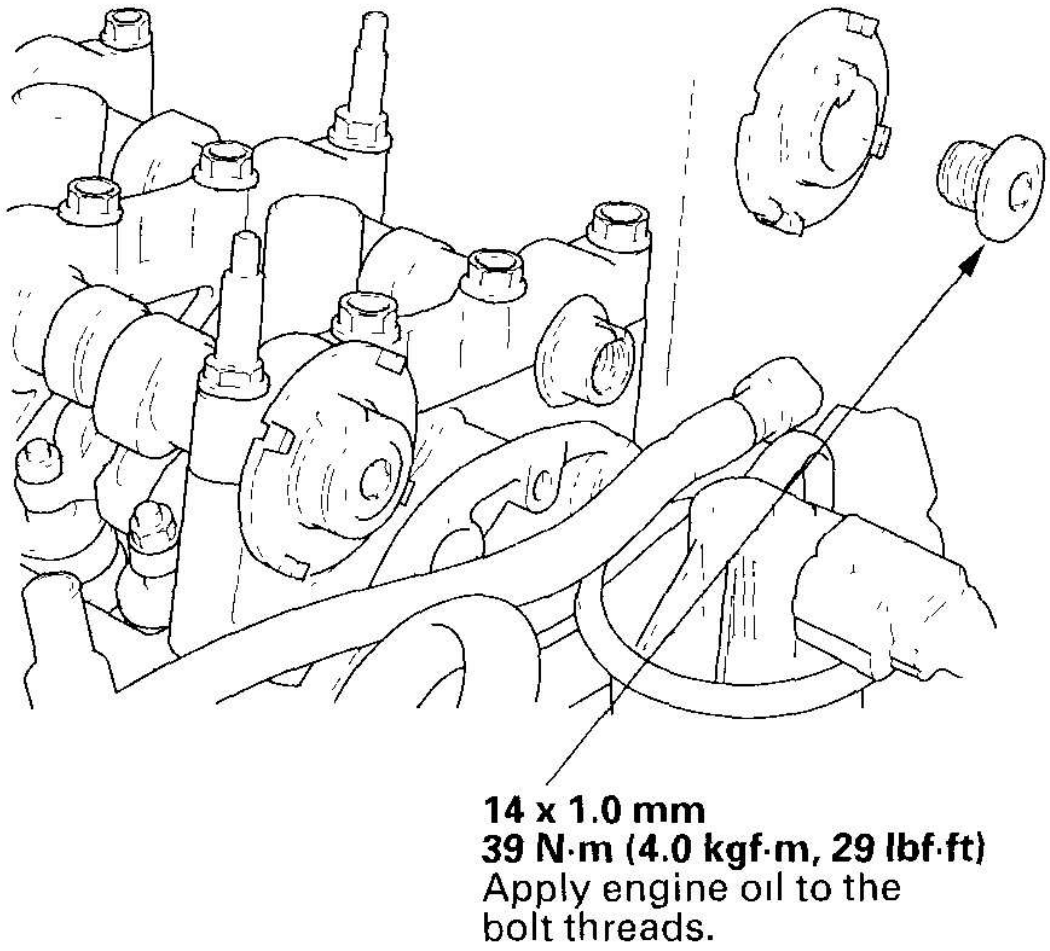


Fig. 81: Removing Camshaft Position (CMP) Pulse Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

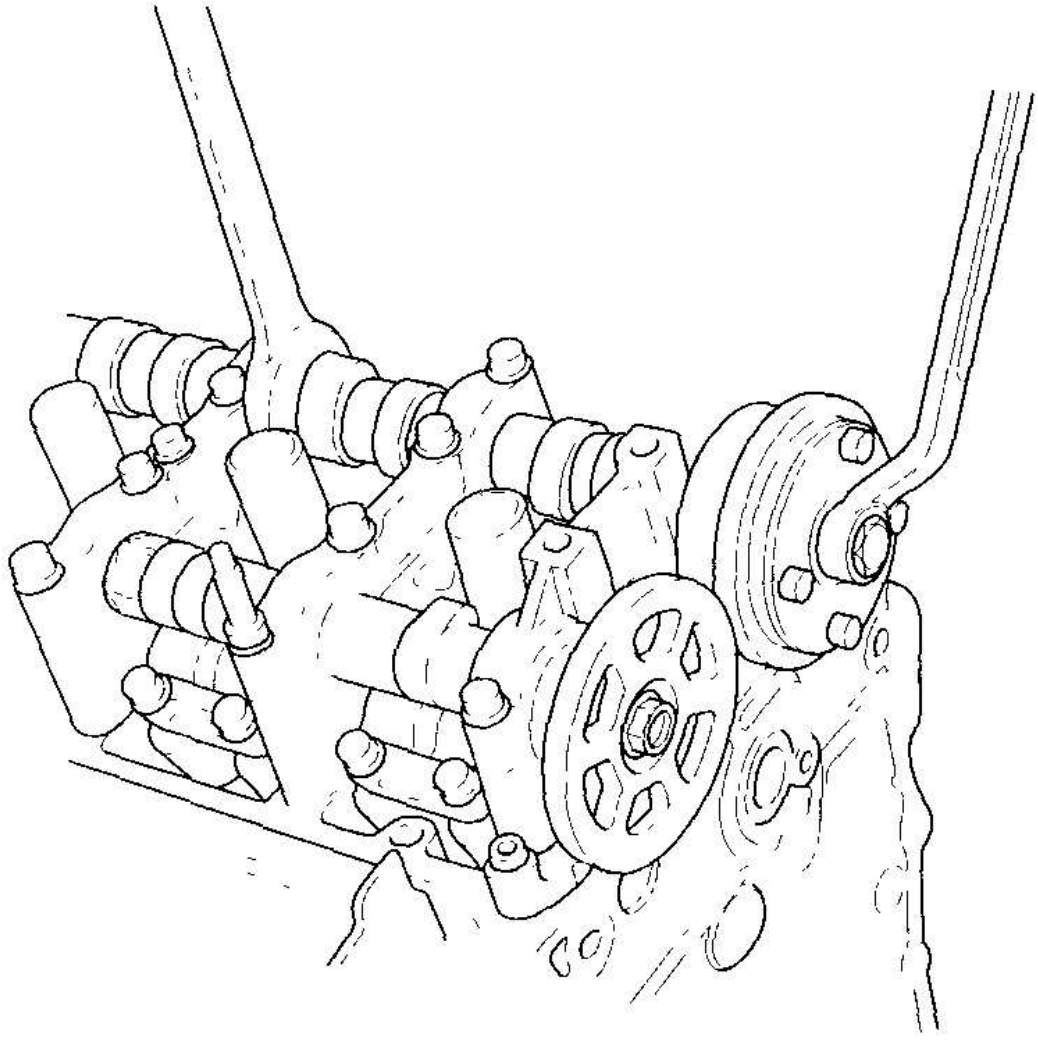
4. Install the CMP pulse plate B in the reverse order of removal.

VTC ACTUATOR, EXHAUST CAMSHAFT SPROCKET REMOVAL AND INSTALLATION

REMOVAL

1. Remove the cam chain (see **Cam Chain Removal**).
2. Hold the camshaft with an open-end wrench, then loosen the variable valve

timing control (VTC) actuator mounting bolt and exhaust camshaft sprocket mounting bolt.



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Fig. 82: Holding Camshaft With An Open-End Wrench
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the VTC actuator is reused, do the following steps.
    - 1 Remove the intake camshaft, and seal the advance holes and retard holes

in the No. 1 camshaft journal with tape (see step 6).
- 2 Punch a hole in the tape over one of the advance holes (see step 7).
- 3 Apply air to the advance hole to release the lock (see step 8).
- 4 Remove the tape from the No. 1 camshaft journal.

4. Remove the VTC actuator and exhaust camshaft sprocket.

INSTALLATION

1. Install the VTC actuator and exhaust camshaft sprocket.

NOTE: Installing the VTC actuator to unlock position.

2. Apply engine oil to the threads of the VTC actuator mounting bolt and exhaust camshaft mounting bolt, then install them.
3. Hold the camshaft with an open-end wrench, then tighten the bolts.

Specified torque

VTC actuator mounting bolt:

113 N.m (11.5 kgf.m, 83 lbf.ft)

Exhaust camshaft sprocket mounting bolt:

72 N.m (7.3 kgf.m, 53 lbf.ft)

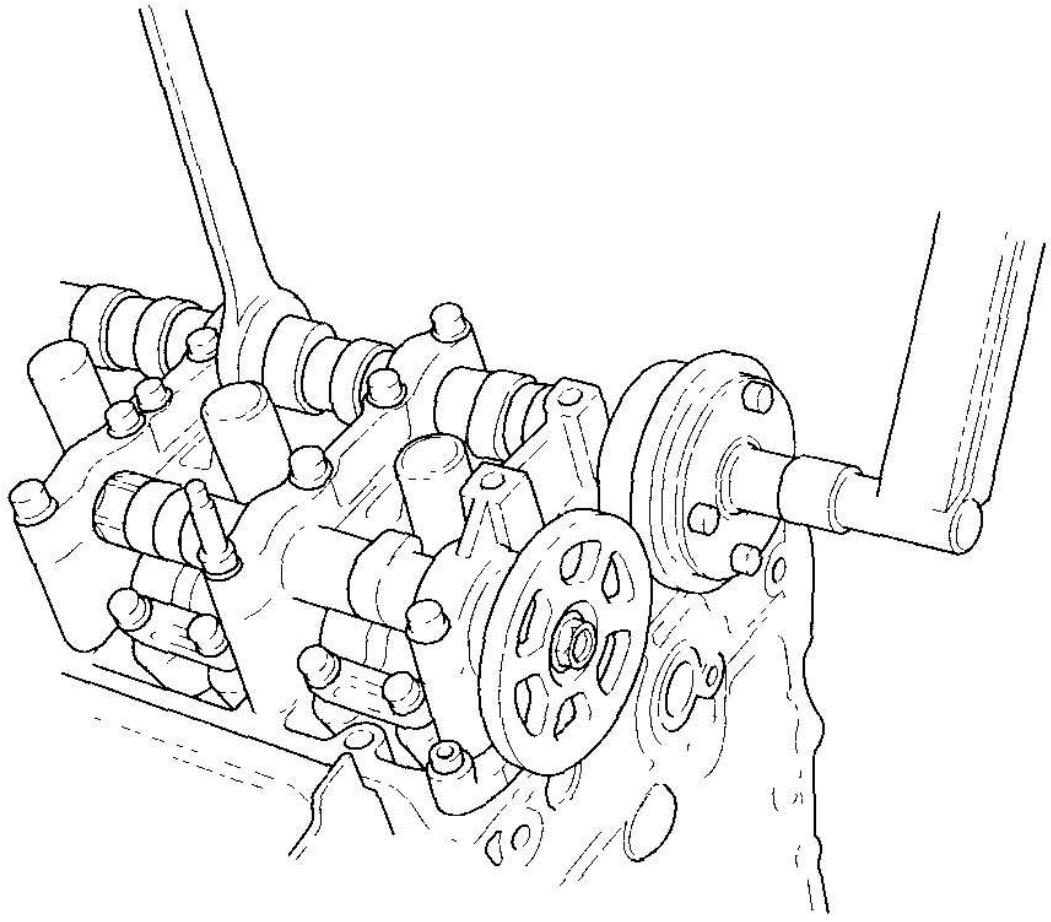


Fig. 83: Installing VTC Actuator To Unlock Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Hold the camshaft, and turn the VTC actuator clockwise until you hear it click.
5. Install the cam chain (see **CAM CHAIN INSTALLATION**).

CYLINDER HEAD INSPECTION FOR WARPAGE

1. Remove the cylinder head (see **CYLINDER HEAD REMOVAL**).
2. Inspect the camshaft (see **CAMSHAFT INSPECTION**).
3. Check the cylinder head for warpage. Measure along the edges, and three ways

across the center.

- If warpage is less than 0.05 mm (0.002 in.) cylinder head resurfacing is not required.
- If warpage is between 0.05 mm (0.002 in.) and 0.2 mm (0.008 in.), resurface the cylinder head.
- Maximum resurface limit is 0.2 mm (0.008 in.) based on a height of 104 mm (4.09 in.).

Cylinder Head Height
Standard (New): 103.95—104.05 mm
(4.093—4.096 in.)

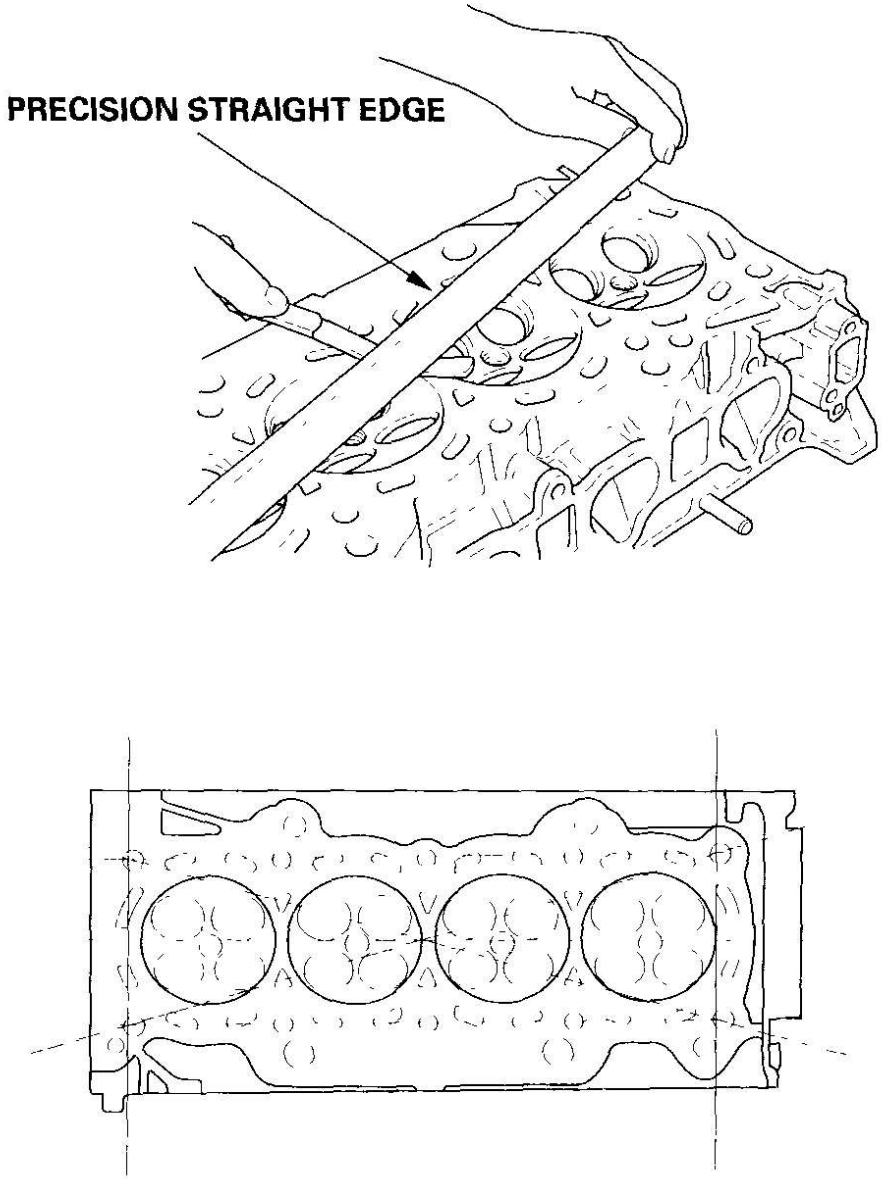


Fig. 84: Checking Cylinder Head For Warpage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ROCKER ARM ASSEMBLY REMOVAL

1. Remove the cam chain (see **Cam Chain Removal**).
2. Loosen the rocker arm adjusting screws (A).

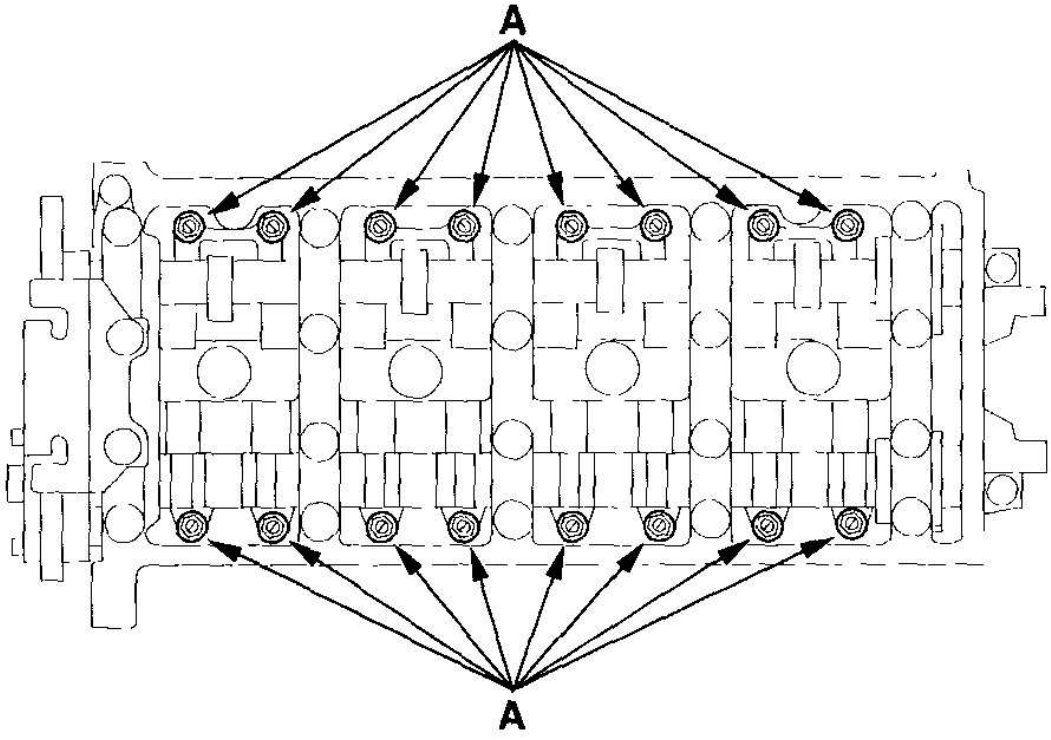


Fig. 85: Loosening Rocker Arm Adjusting Screws
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the camshaft holder bolts. To prevent damaging the camshafts, unscrew the bolts two turns at a time, in a crisscross pattern.

NOTE: Bolt (1) is not on all engines.

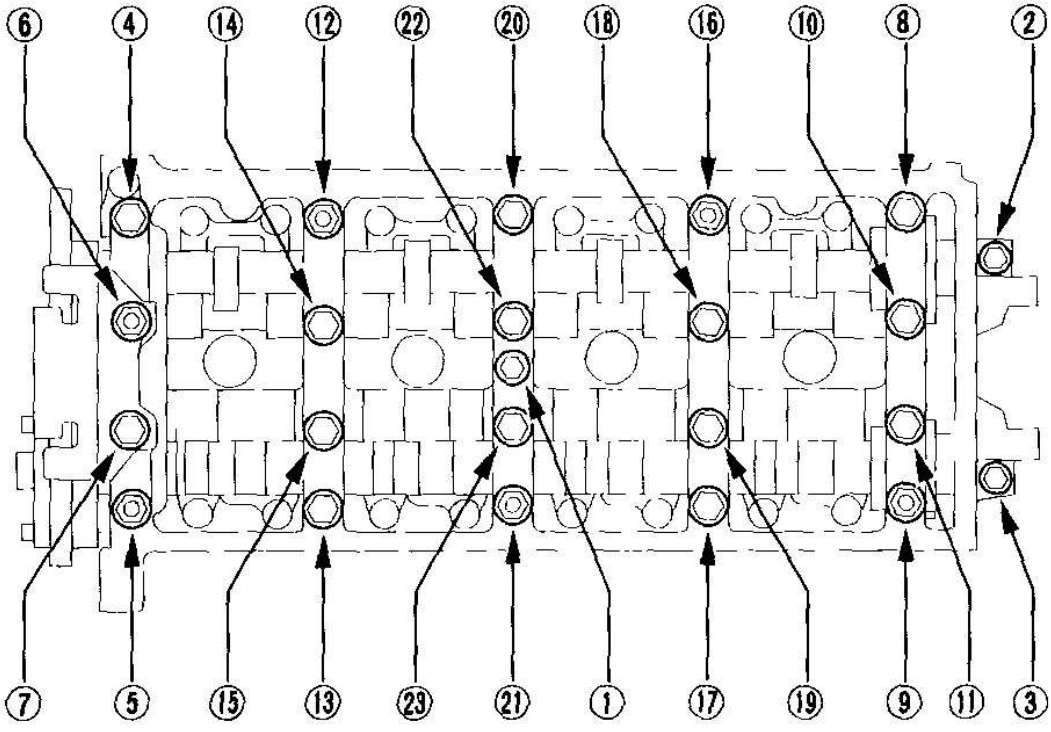


Fig. 86: Removing Camshaft Holder Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the cam chain guide B, camshaft holders, and camshafts.
5. Insert the bolts (A) into the rocker shaft holder, then remove the rocker arm assembly (B).

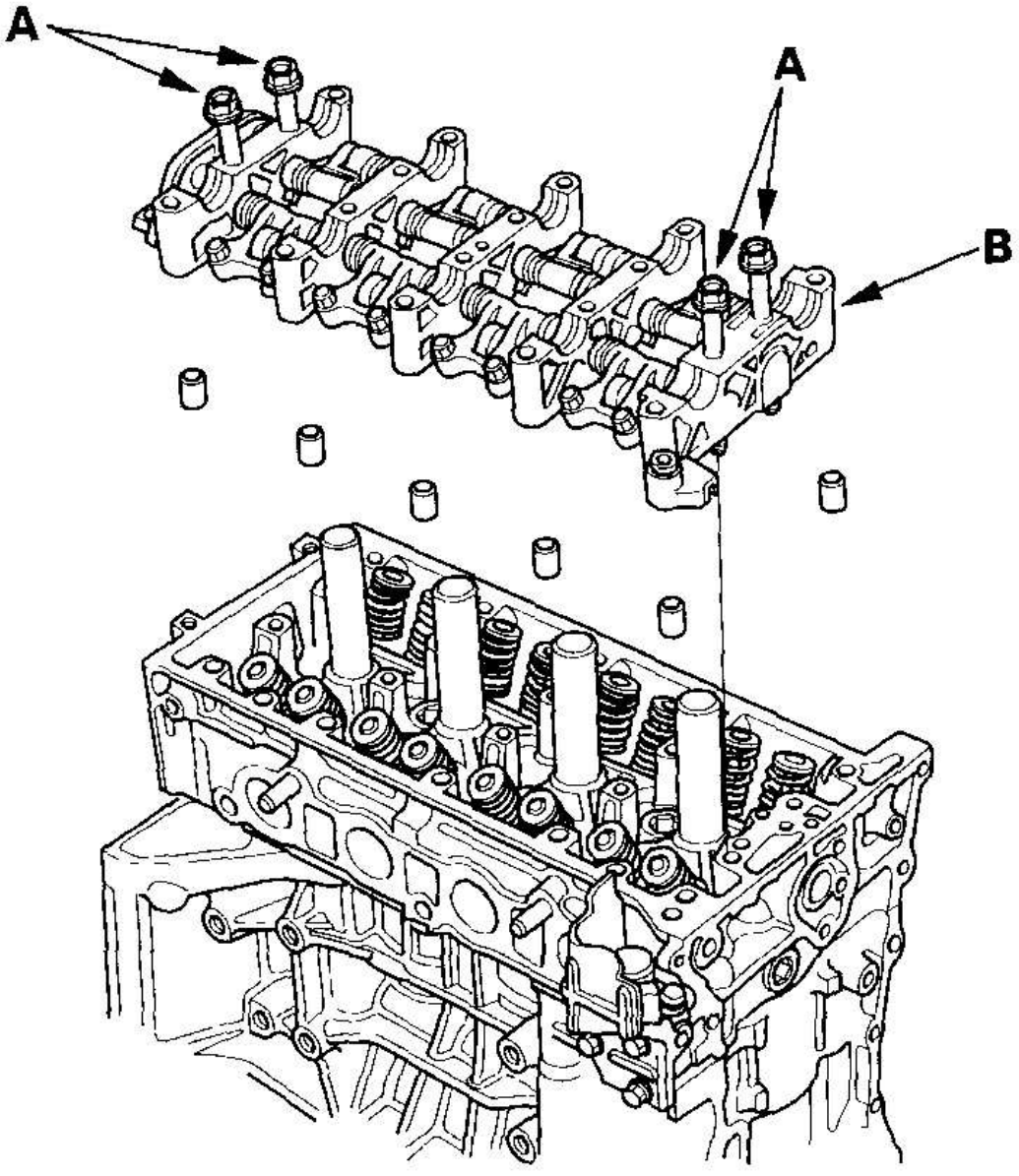


Fig. 87: Inserting Bolts Into Rocker Shaft Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ROCKER ARM AND SHAFT DISASSEMBLY/REASSEMBLY

NOTE:

- **Identify parts as they are removed to ensure reinstallation in original location.**
- **Inspect the rocker arm shaft and rocker arms (see ROCKER ARM AND SHAFT INSPECTION).**
- **The rocker arms must be installed in the same positions if reused.**
- **When removing or installing the rocker arm assembly, do not remove the camshaft holder bolts. The bolts will keep the holders and rocker arms on the shaft.**
- **Prior to reassembling, clean all the parts in solvent, dry them, and apply lubricant to any contact points.**
- **Bundle the intake rocker arms with rubber bands to keep them together as a set.**
- **When replacing the intake rocker arm assembly, remove the fastening hardware from the new intake rocker arm assembly.**

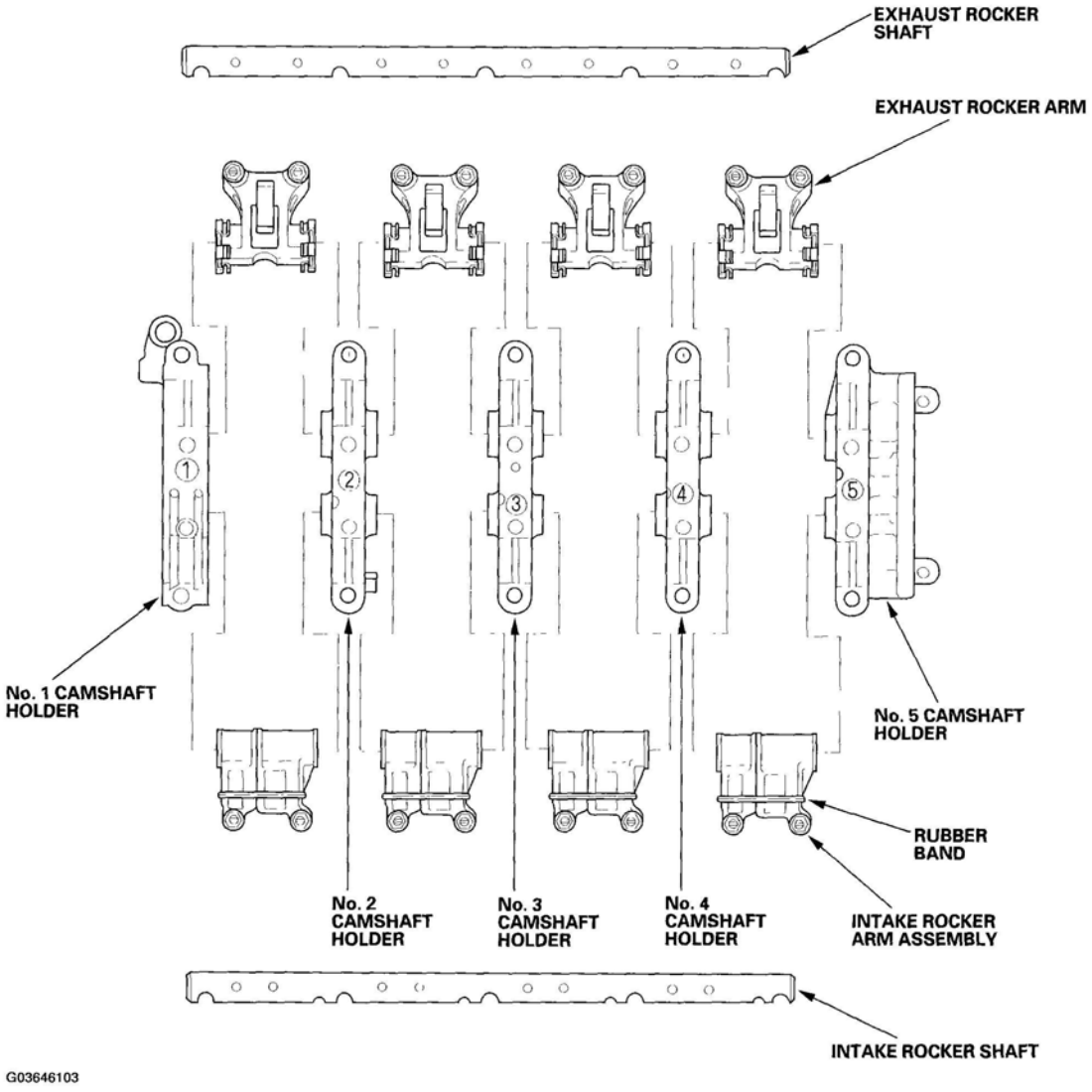
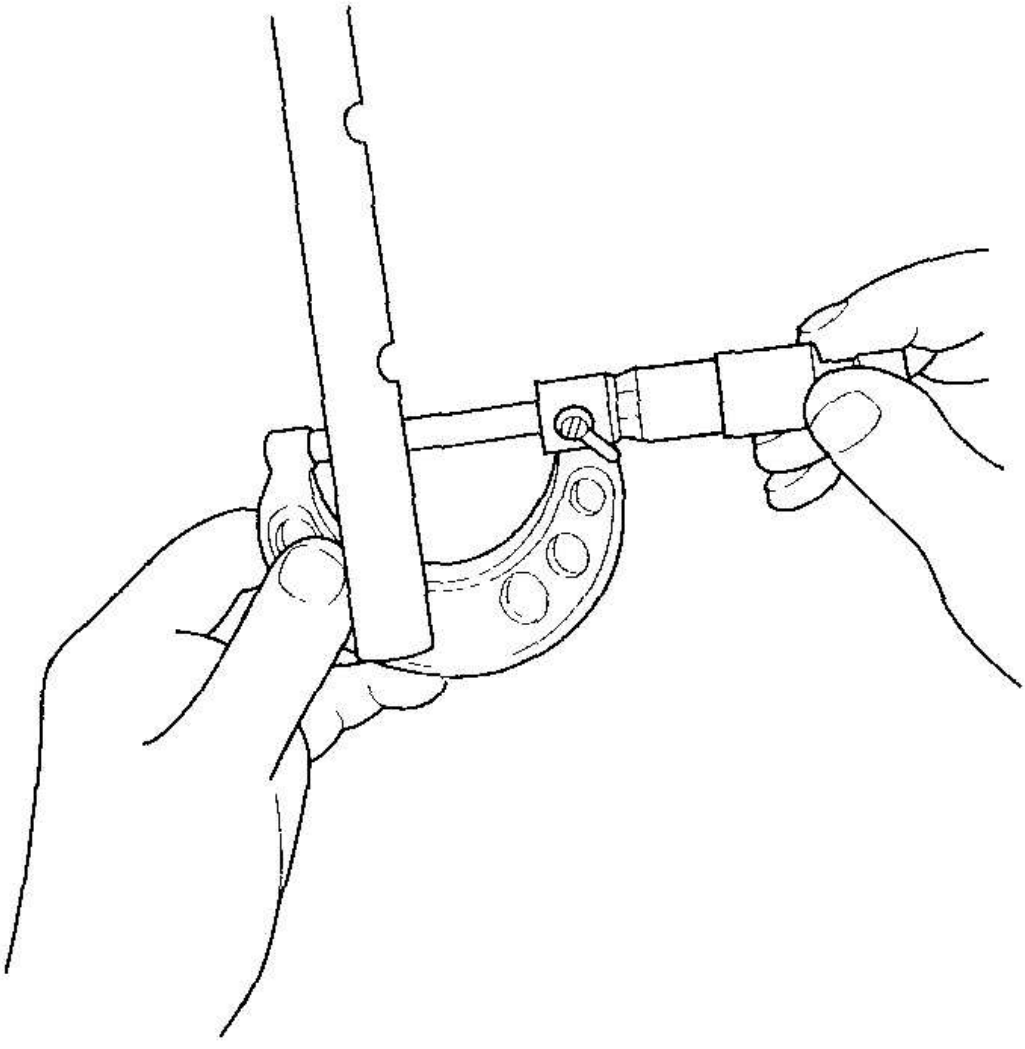


Fig. 88: Disassembling Rocker Arm And Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ROCKER ARM AND SHAFT INSPECTION

1. Remove the rocker arm assembly (see **ROCKER ARM ASSEMBLY REMOVAL**), then disassemble the rocker arm assembly (see **ROCKER ARM AND SHAFT DISASSEMBLY/REASSEMBLY**).
2. Measure the diameter of the shaft at the first rocker location.



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Fig. 89: Measuring Diameter Of Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Zero the gauge (A) to the shaft diameter.

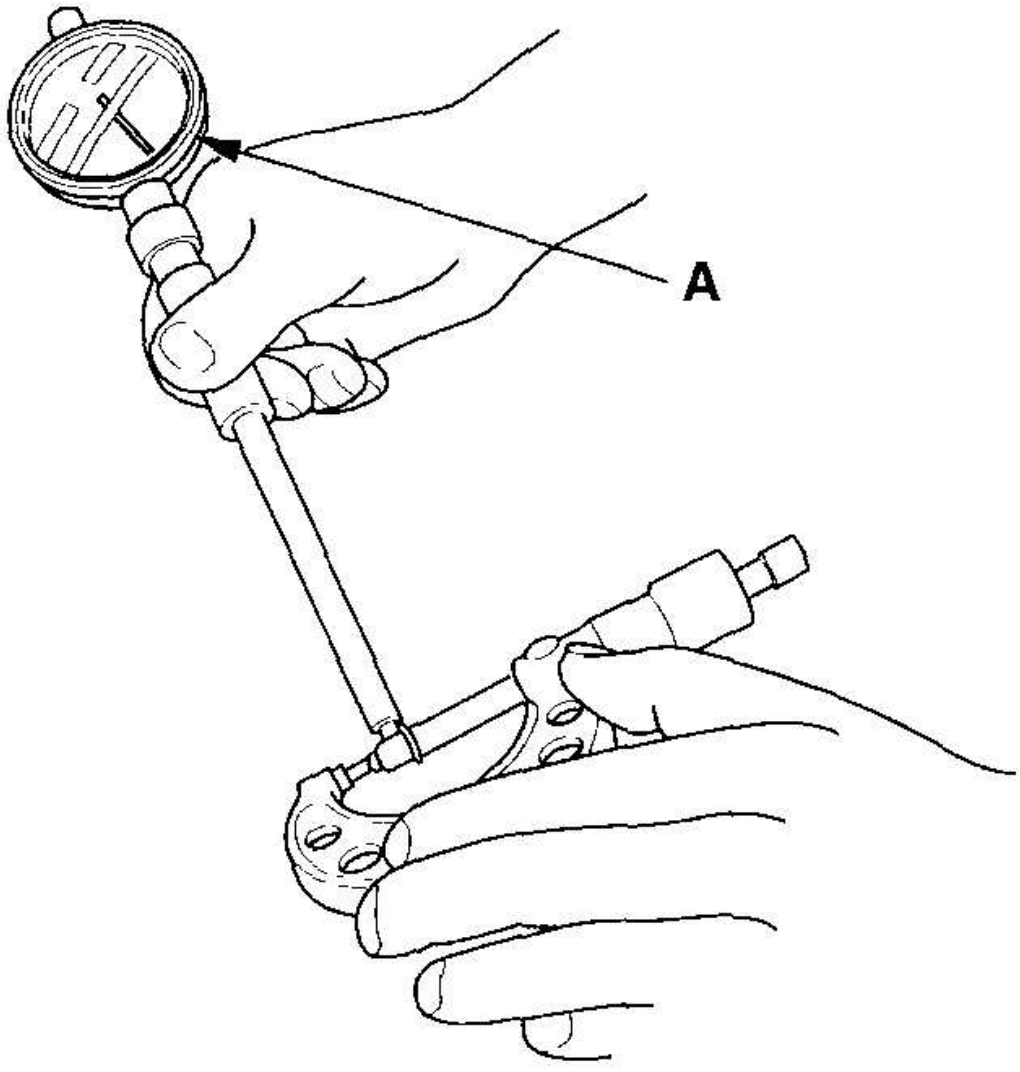


Fig. 90: Zero Gauge To Shaft Diameter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

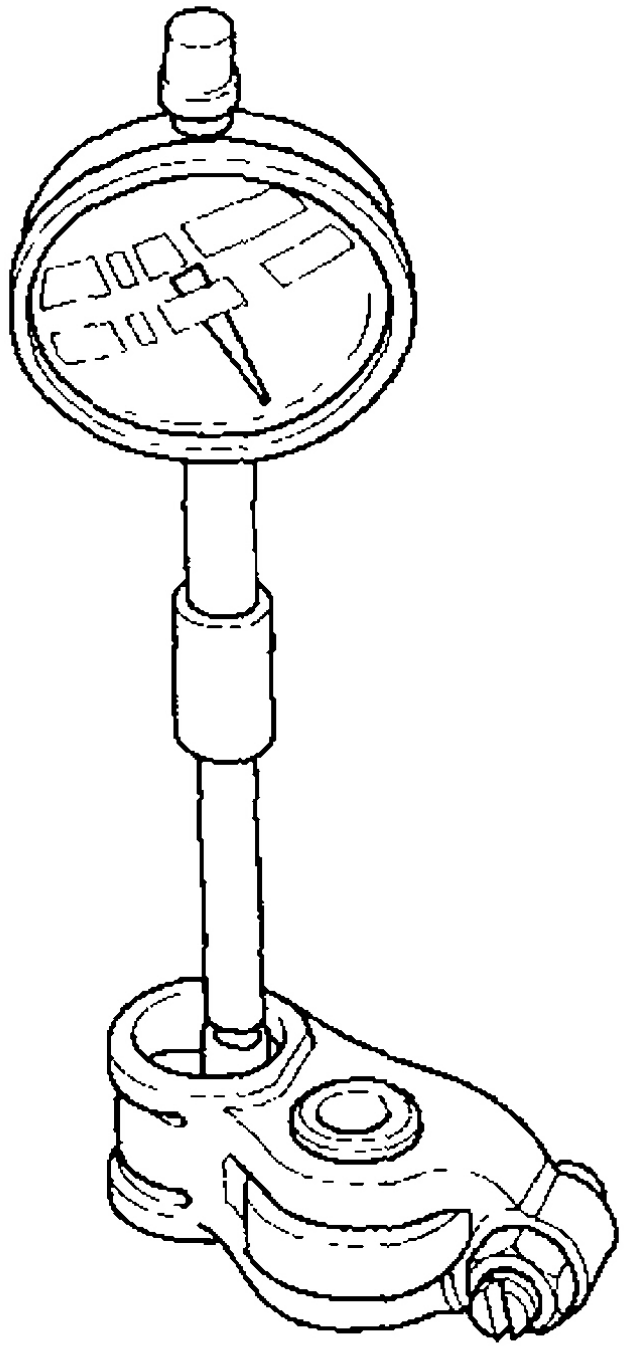
4. Measure the inside diameter of the rocker arm, and check it for an out-of-round condition.

Rocker Arm-to-Shaft Clearance Standard (New):

Intake: 0.025---0.052 mm (0.0010-0.0020 in.)

Exhaust: 0.018---0.056 mm (0.0007---0.0022 in.)

Service Limit: 0.08 mm (0.003 in.)



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Fig. 91: Measuring Inside Diameter Of Rocker Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Repeat for all rocker arms and both shafts. If the clearance is over the limit, replace the rocker shaft and all overtolerance rocker arms. If any VTEC rocker arm needs replacement, replace the rocker arms (primary and secondary) as a set.
6. Inspect the rocker arm pistons (A). Push each piston manually. If it does not move smoothly, replace the rocker arm set.

NOTE: Apply oil to the pistons when reassembling.

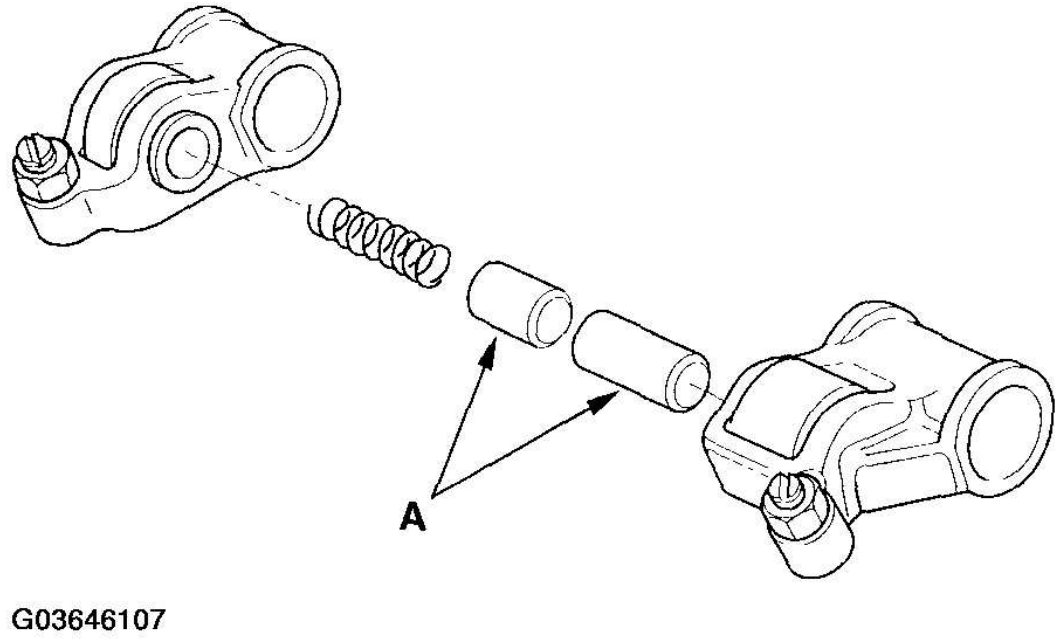


Fig. 92: Identifying Rocker Arm Piston
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the rocker arm assembly (see **ROCKER ARM ASSEMBLY INSTALLATION**).

CAMSHAFT INSPECTION

NOTE: Do not rotate the camshaft during inspection.

1. Remove the rocker arm assembly (see **ROCKER ARM ASSEMBLY REMOVAL**).
2. Put the rocker shaft holders, camshaft and camshaft holders on the cylinder head, then tighten the bolts to the specified torque.

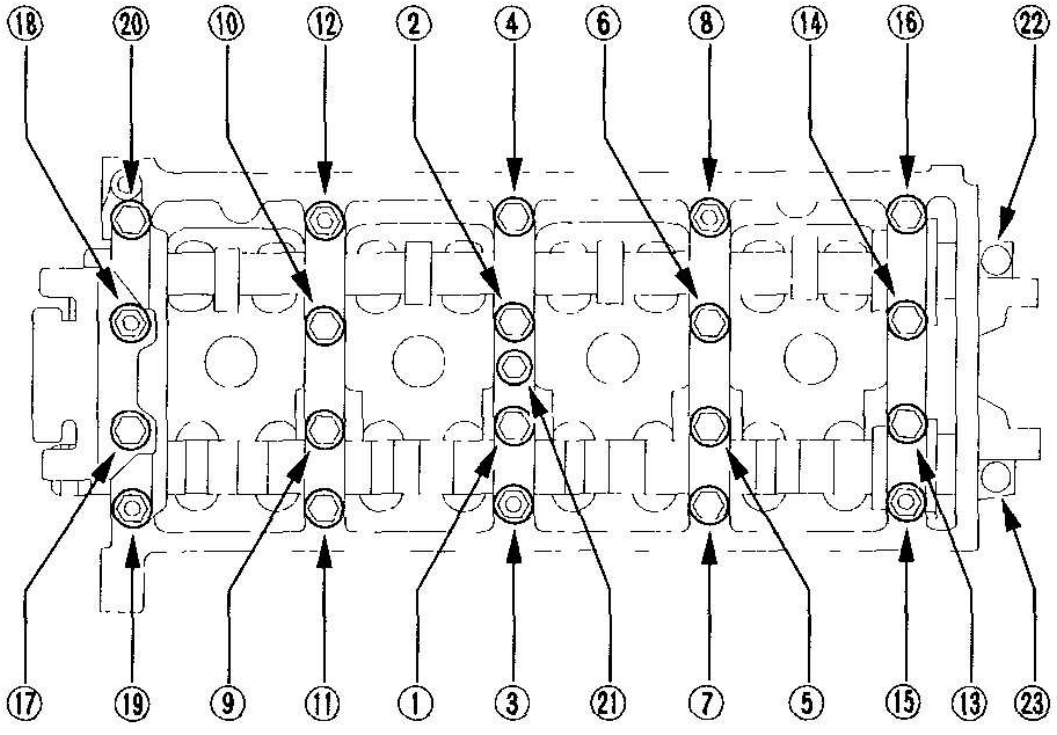
NOTE: If the engine does not have bolt (21), skip it and continue the torque sequence.

Specified torque

8 mm bolts: 22 N.m (2.2 kgf.m, 16 lbf.ft)

6 mm bolts: 12 N.m (1.2 kgf.m, 8.7 lbf.ft)

6 mm bolts: (21), (22), (23)



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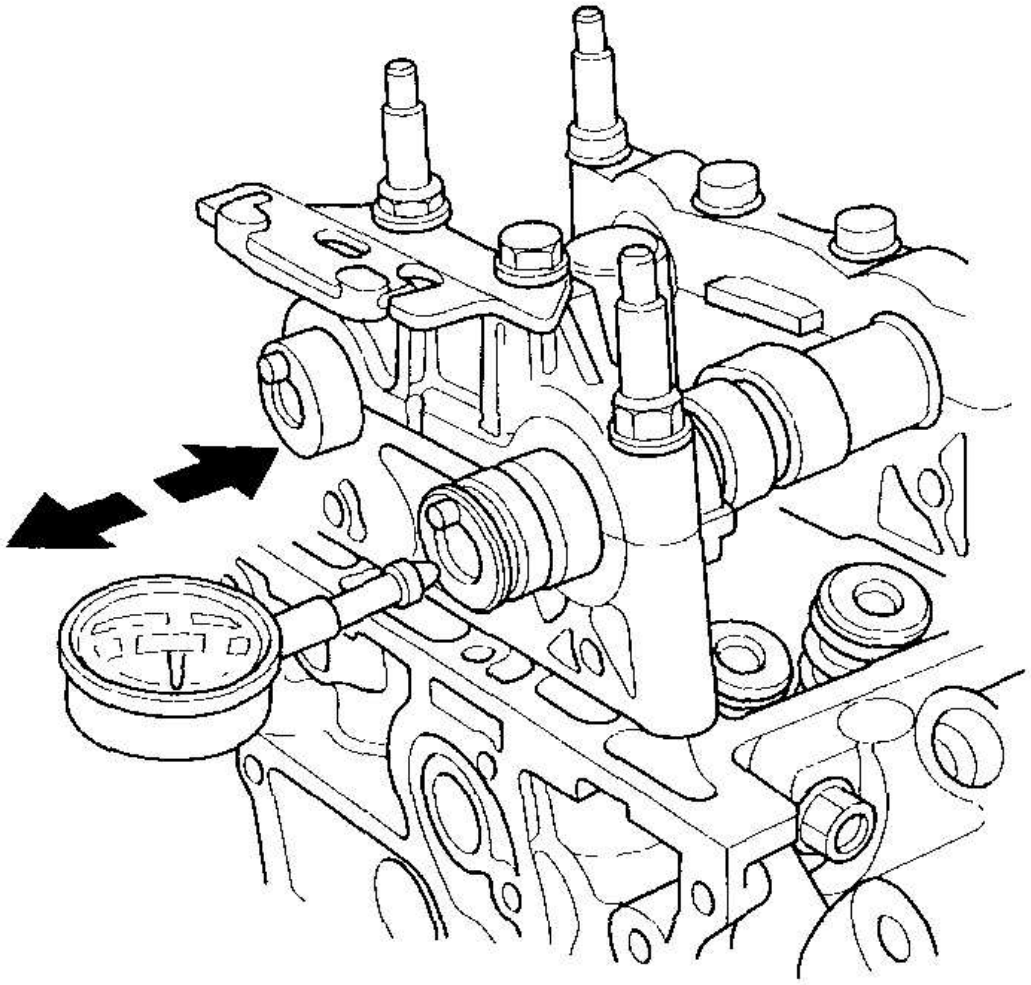
Fig. 93: Tightening Bolts To Specified Torque
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Seat the camshaft by pushing it away from the camshaft pulley end of the cylinder head.
4. Zero the dial indicator against the end of the camshaft, then push the camshaft back and forth and read the end play. If the end play is beyond the service limit, replace the cylinder head and recheck. If it is still beyond the service limit, replace the camshaft.

Camshaft End Play

Standard (New): 0.05---0.20 mm (0.002---0.008 in.)

Service Limit: 0.4 mm (0.02 in.)



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Fig. 94: Zero Dial Indicator Against End Of Camshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Unscrew the camshaft holder bolts two turns at a time, in a crisscross pattern. Then remove the camshaft holders from the cylinder head.
6. Lift the camshafts out of the cylinder head, wipe them clean, then inspect the lift ramps. Replace the camshaft if any lobes are pitted, scored, or excessively worn.
7. Clean the camshaft journal surfaces in the cylinder head, then set the camshafts

back in place. Place a plastigage strip across each journal.

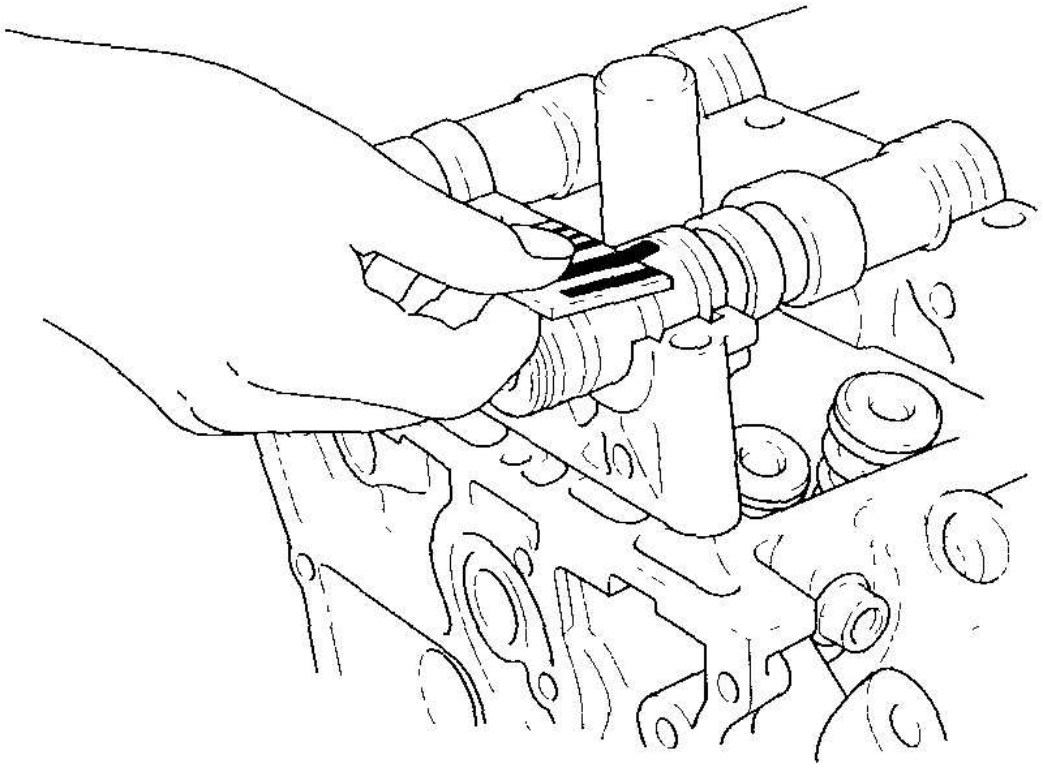
8. Install the camshaft holders, then tighten the bolts to the specified torque as shown in step 2.
9. Remove the camshaft holders. Measure the widest portion of plastigage on each journal.
   - If the camshaft-to-holder clearance is within limits, go to step 11.
   - If the camshaft-to-holder clearance is beyond the service limit and the camshaft has been replaced, replace the cylinder head.
   - If the camshaft-to-holder clearance is beyond the service limit and the camshaft has not been replaced, go to step 10.

Camshaft-to-Holder Oil Clearance Standard (New):

No. 1 Journal: 0.030---0.069 mm (0.001---0.003 in.)

No. 2,3,4,5 Journals: 0.060---0.099 mm (0.002---0.004 in.)

Service Limit: 0.15 mm (0.006 in.)



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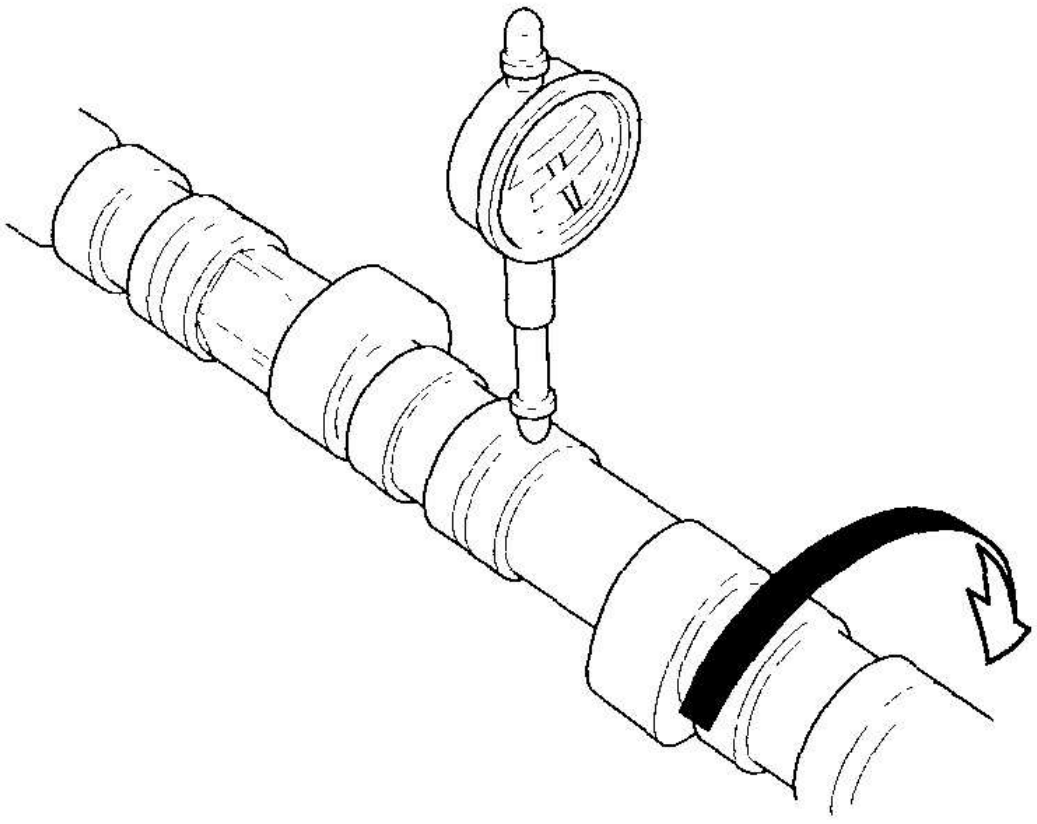
Fig. 95: Removing Camshaft Holders
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Check the total runout with the camshaft supported on V-blocks.
    - If the total runout of the camshaft is within the service limit, replace the cylinder head.
    - If the total runout is beyond the service limit, replace the camshaft and recheck the camshaft-to-holder oil clearance. If the oil clearance is still beyond the service limit, replace the cylinder head.

Camshaft Total Runout

Standard (New): 0.03 mm (0.001 in.) max.

Service Limit: 0.04 mm (0.002 in.)



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Fig. 96: Checking Total Runout With Camshaft Supported On V-Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Measure cam lobe height.

Cam Lobe Height Standard (New):

CAM LOBE HEIGHT STANDARD

INTAKE		EXHAUST
	33.925 mm (1.3356 in.) (1)	

Primary	34.263 mm (1.3489 in.) (2)	34.092 mm (1.3422 in.)
Secondary	29.638 mm (1.1668 in.)	
(1) '03-05 models (2) '06-07 models		

C/C: Cam Chain

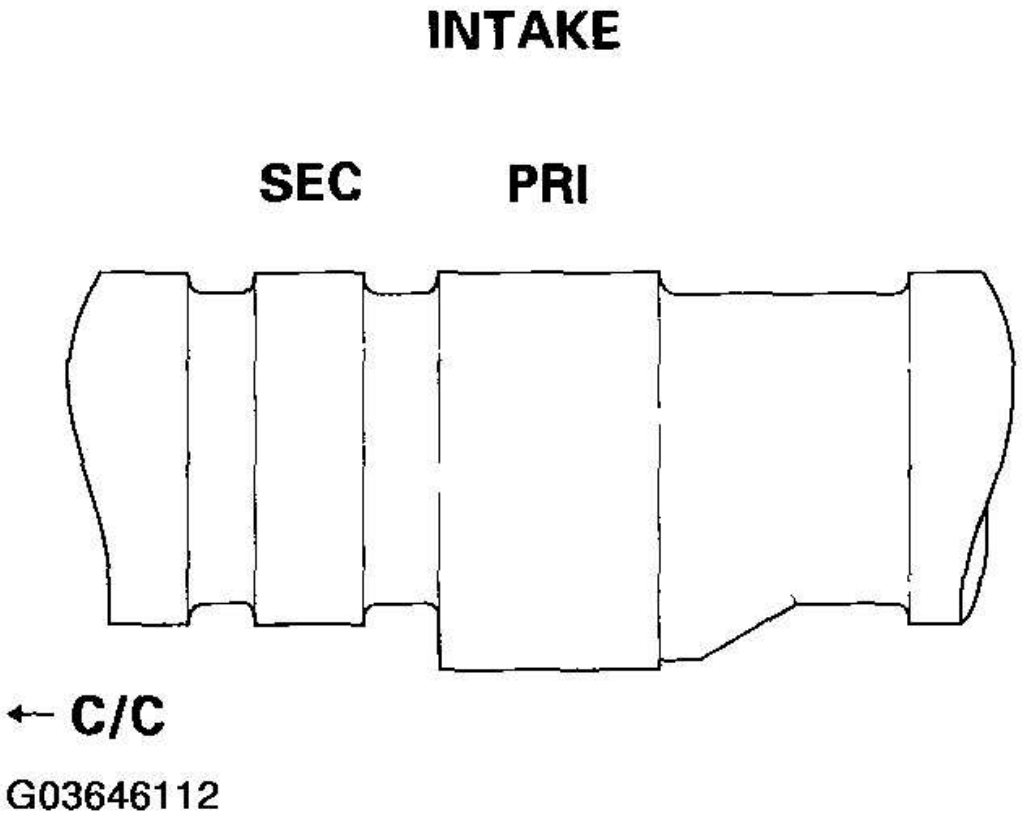


Fig. 97: Measuring CAM Lobe Height
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VALVE, SPRING, AND VALVE SEAL REMOVAL

Special Tools Required

Valve spring compressor attachment 07757-PJ1010A

Identify the valves and valve springs as they are removed so that each item can be reinstalled in its original position.

1. Remove the cylinder head (see **CYLINDER HEAD REMOVAL**).
2. Using an appropriate-sized socket (A) and plastic mallet (B), lightly tap the valve retainer to loosen the valve cotters.

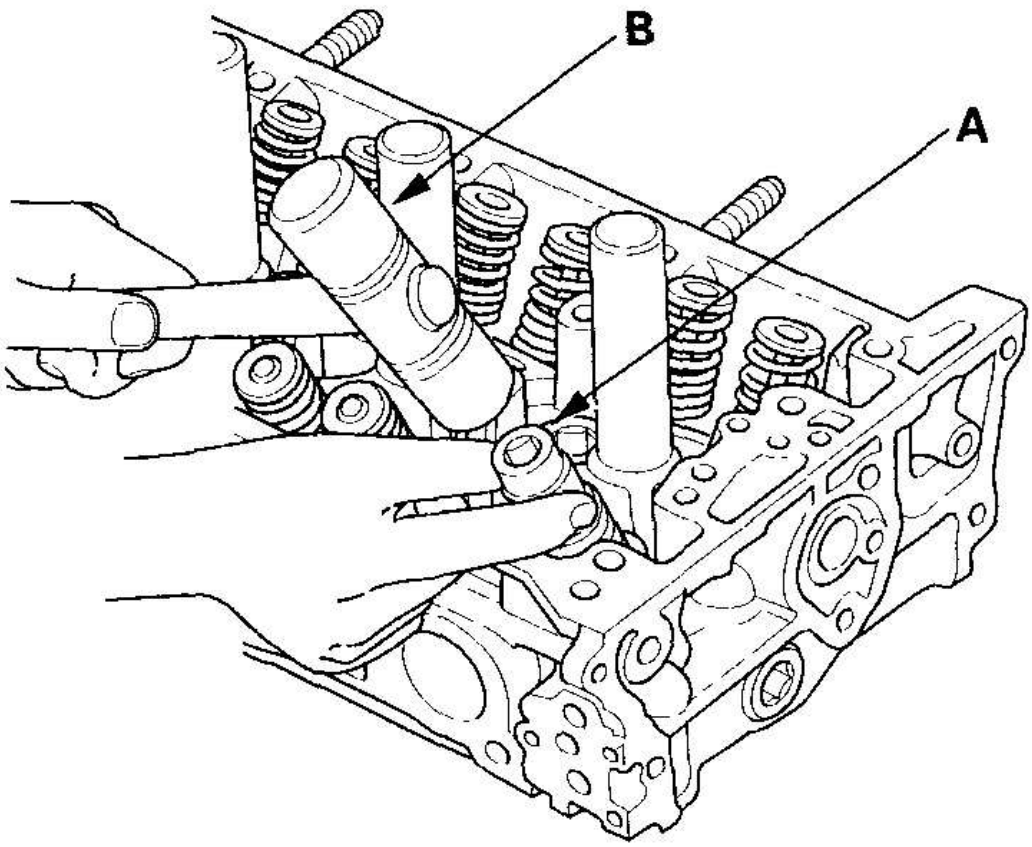


Fig. 98: Tapping Valve Retainer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the spring compressor. Compress the spring, and remove the valve cotters.

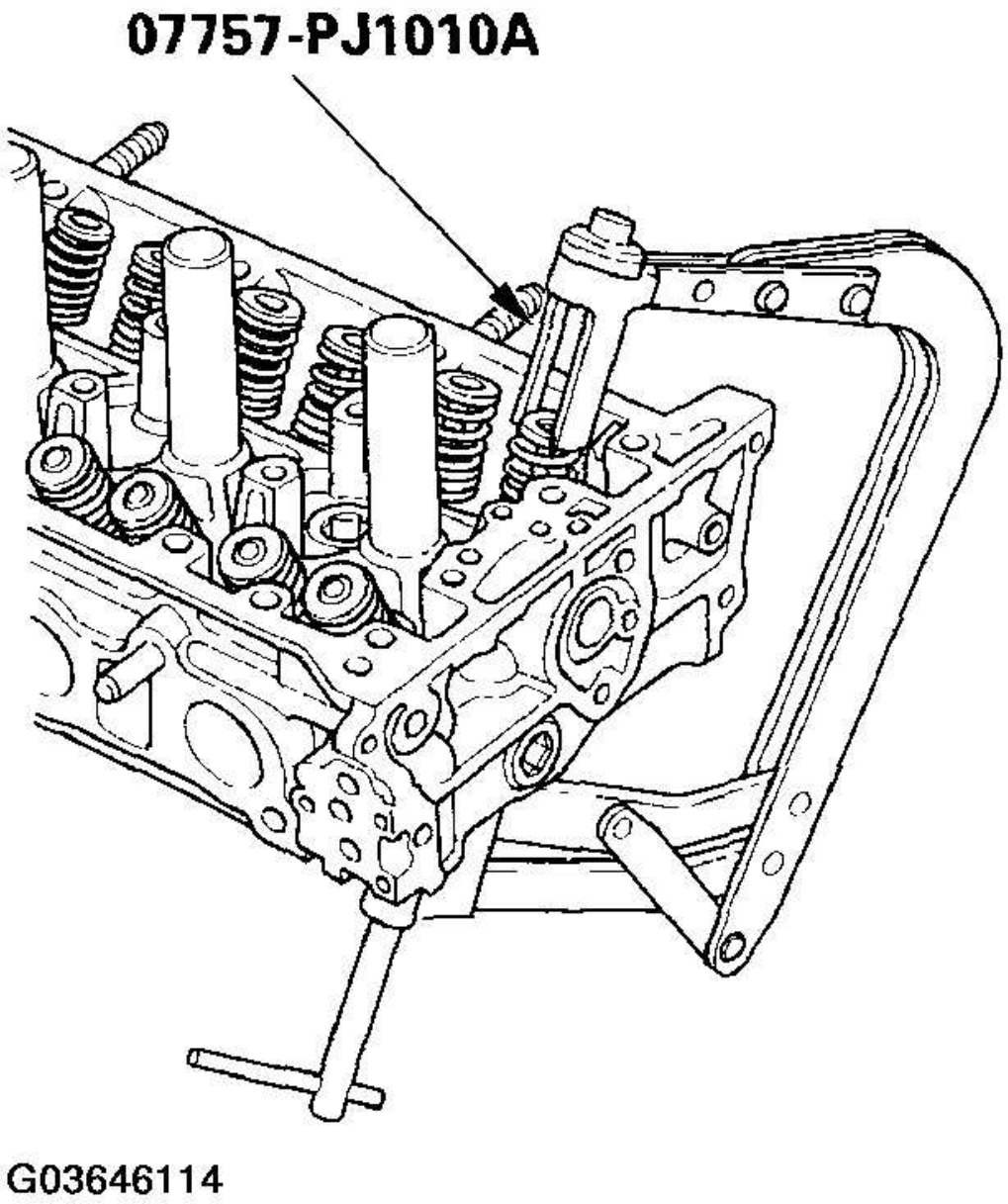
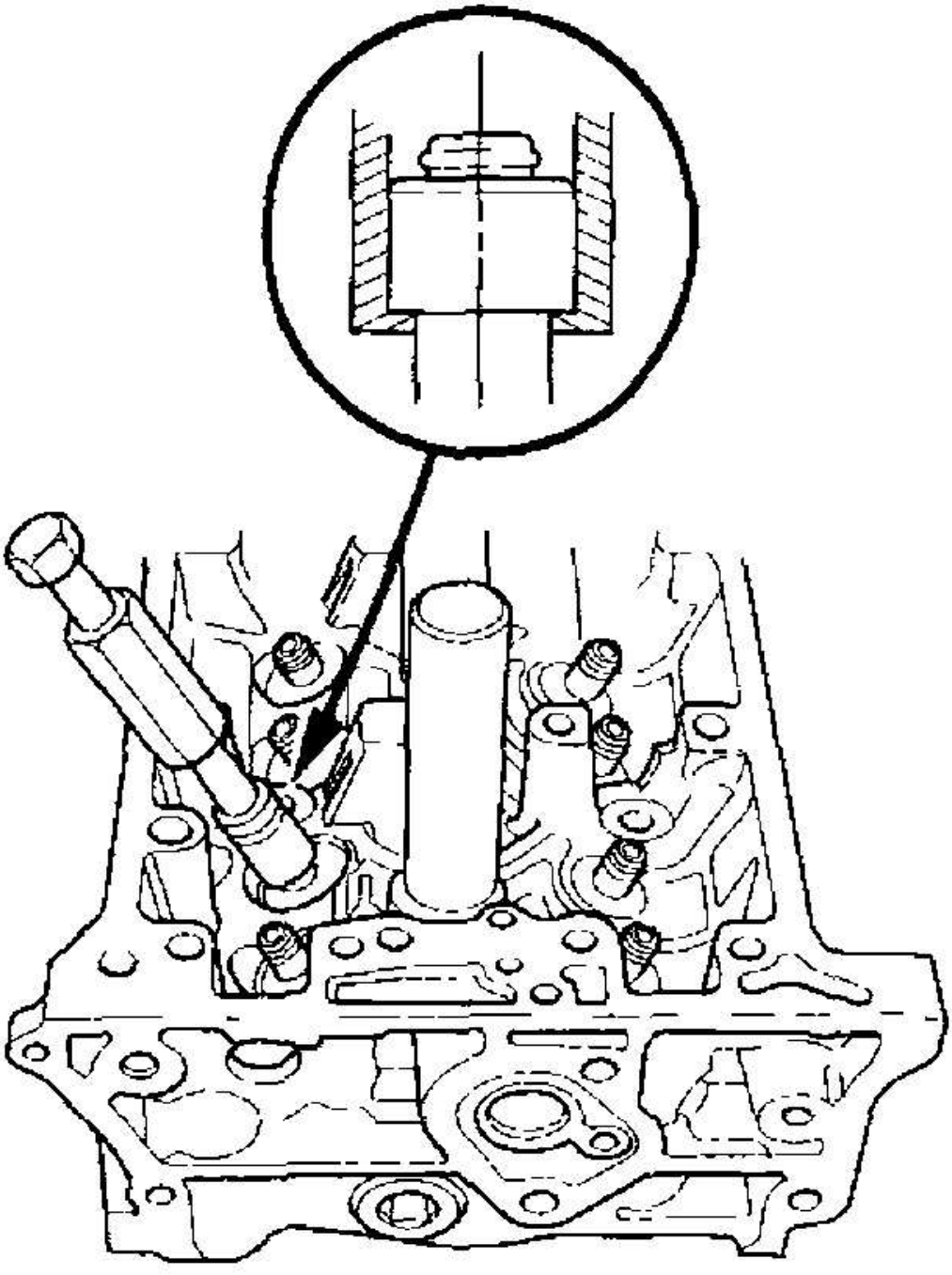


Fig. 99: Installing Spring Compressor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the special tool, then remove the valve retainer and valve spring.
5. Install the valve guide seal remover.



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Fig. 100: Installing Valve Guide Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the valve seal.

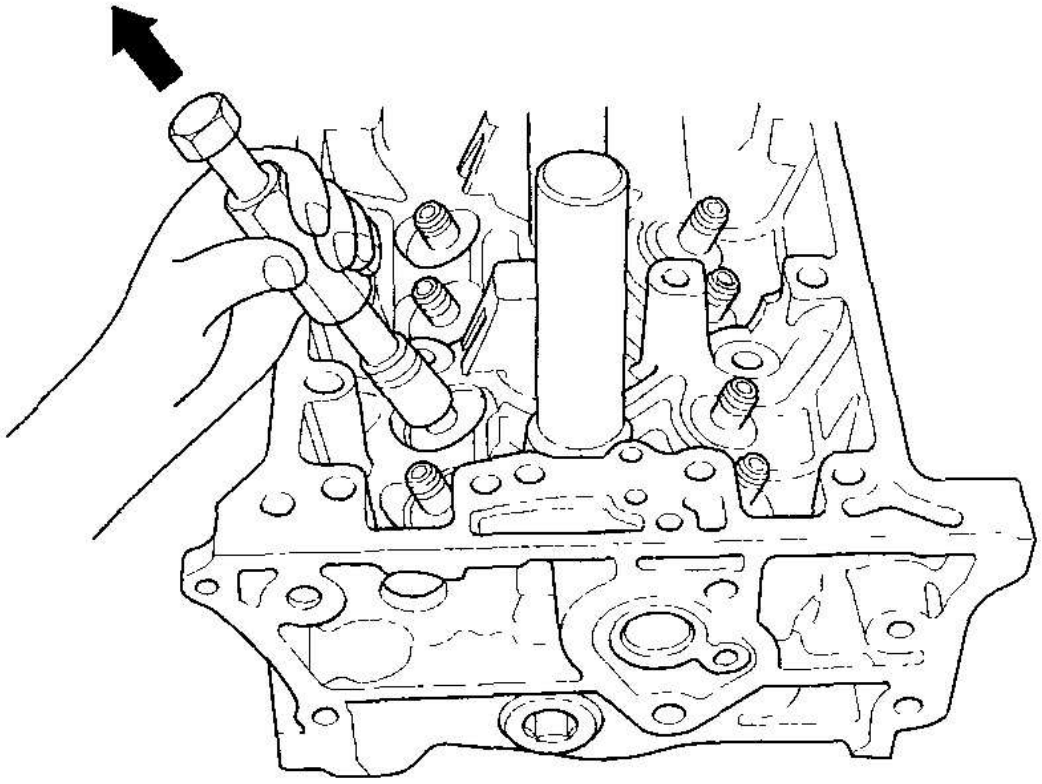


Fig. 101: Removing Valve Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VALVE INSPECTION

1. Remove the valves (see **VALVE, SPRING, AND VALVE SEAL REMOVAL**).
2. Measure the valve in these areas.

Intake Valve Dimensions

A Standard (New): 34.85---35.15 mm (1.372---1.384 in.)

B Standard (New): 108.7---109.5 mm (4.280---4.311 in.)

C Standard (New): 5.475---5.485 mm (0.2156---0.2159 in.)

C Service Limit: 5.445 mm (0.214 in.)

Exhaust Valve Dimensions

A Standard (New): 29.85---30.15 mm (1.175---1.187 in.)

B Standard (New): 108.3---109.1 mm (4.264---4.295 in.)

C Standard (New): 5.450---5.460 mm (0.2146---0.2150 in.)

C Service Limit: 5.42 mm (0.213 in.)

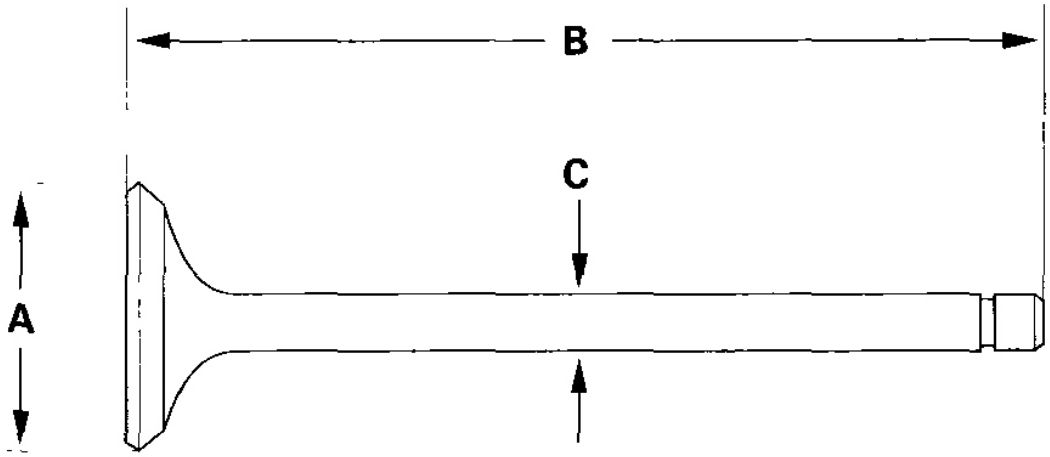


Fig. 102: Measuring Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VALVE STEM-TO-GUIDE CLEARANCE INSPECTION

1. Remove the valves (see **VALVE, SPRING, AND VALVE SEAL REMOVAL**).
2. Slide the valve out of its guide about 10 mm (0.39 in.), then measure the guide-to-stem clearance with a dial indicator while rocking the stem in the direction of normal thrust (wobble method).
   - If the measurement exceeds the service limit, recheck it using a new valve.
   - If the measurement is now within the service limit, reassemble using a new valve.
   - If the measurement with a new valve still exceeds the service limit, go to step 3.

Intake Valve Stem-to-Guide Clearance

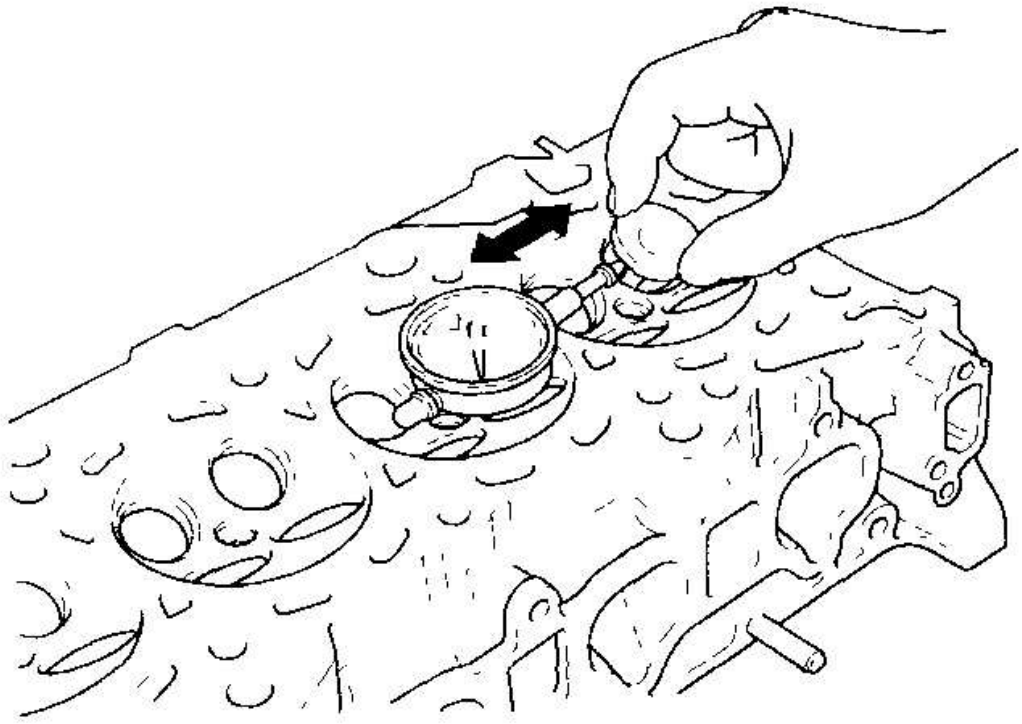
Standard (New): 0.06---0.11 mm (0.002---0.004 in.)

Service Limit: 0.16 mm (0.006 in.)

Exhaust Valve Stem-to-Guide Clearance

Standard (New): 0.11---0.16 mm (0.004---0.006 in.)

Service Limit: 0.22 mm (0.009 in.)



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Fig. 103: Sliding Valve Out
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Subtract the O.D. of the valve stem, measured with a micrometer, from the I.D. of the valve guide, measured with an inside micrometer or ball gauge. Take the measurements in three places along the valve stem and three places inside the valve guide. The difference between the largest guide measurement and the smallest stem measurement should not exceed the service limit.

   Intake Valve Stem-to-Guide Clearance

   Standard (New): 0.030---0.055 mm (0.0012---0.0022 in.)

   Service Limit: 0.08 mm (0.003 in.)

Exhaust Valve Stem-to-Guide Clearance

Standard (New): 0.055---0.080 mm (0.0022---0.0031 in.)

Service Limit: 0.11 mm (0.004 in.)

VALVE GUIDE REPLACEMENT

Special Tools Required

- Valve guide driver, 5.5 mm 07742-0010100
- Valve guide reamer, 5.5 mm 07HAH-PJ7010B

1. Inspect valve stem-to-guide clearance (see **VALVE INSPECTION**).
2. As illustrated, use a commercially available air-impact valve guide driver (A) modified to fit the diameter of the valve guides. In most cases, the same procedure can be done using the special tool and a conventional hammer.

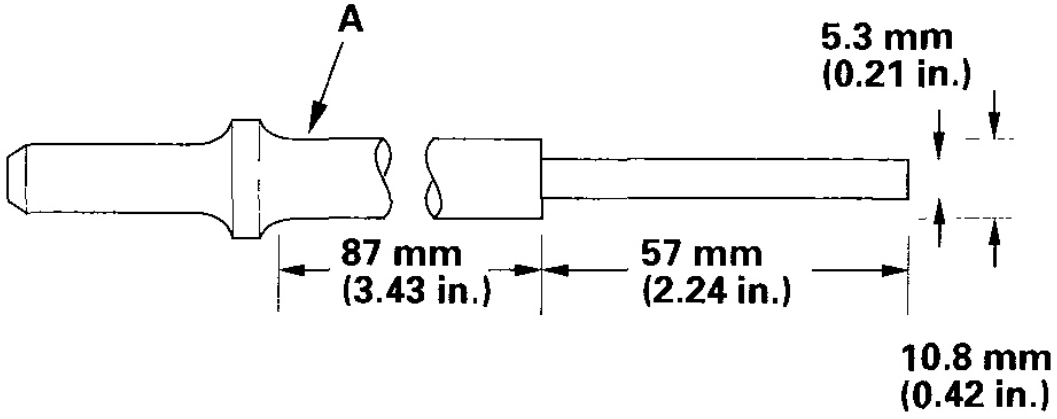


Fig. 104: Identifying Valve Guide Driver
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Select the proper replacement guides, and chill them in the freezer section of a refrigerator for about an hour.

4. Use a hot plate or oven to evenly heat the cylinder head to 300 °F (150 °C). Monitor the temperature with a cooking thermometer. Do not get the head hotter than 300 °F (150 °C); excessive heat may loosen the valve seats.

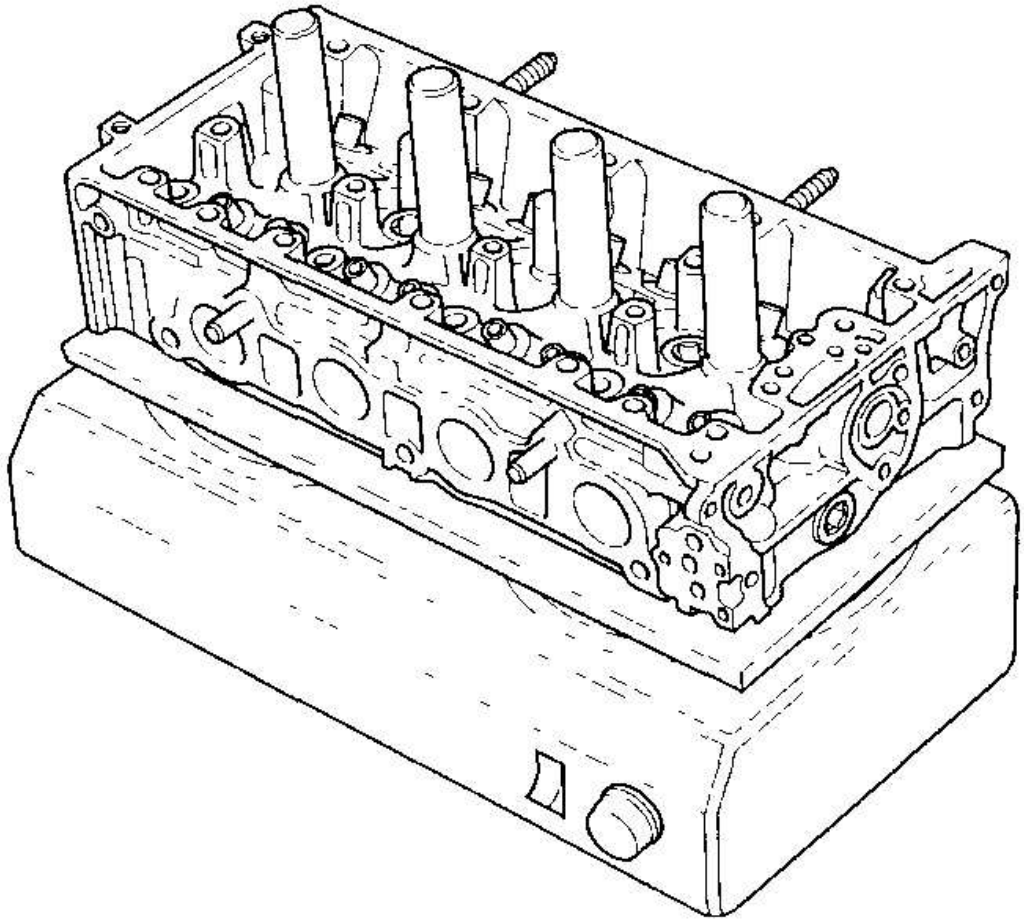


Fig. 105: Using A Hot Plate Or Oven To Evenly Heat Cylinder Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Working from the camshaft side, use the driver and an air hammer to drive the guide about 2 mm (0.1 in.) towards the combustion chamber. This will knock off some of the carbon and make removal easier. Hold the air hammer directly

in line with the valve guide to prevent damaging the driver. Wear safety goggles or a face shield.

6. Turn the head over, and drive the guide out toward the camshaft side of the head.

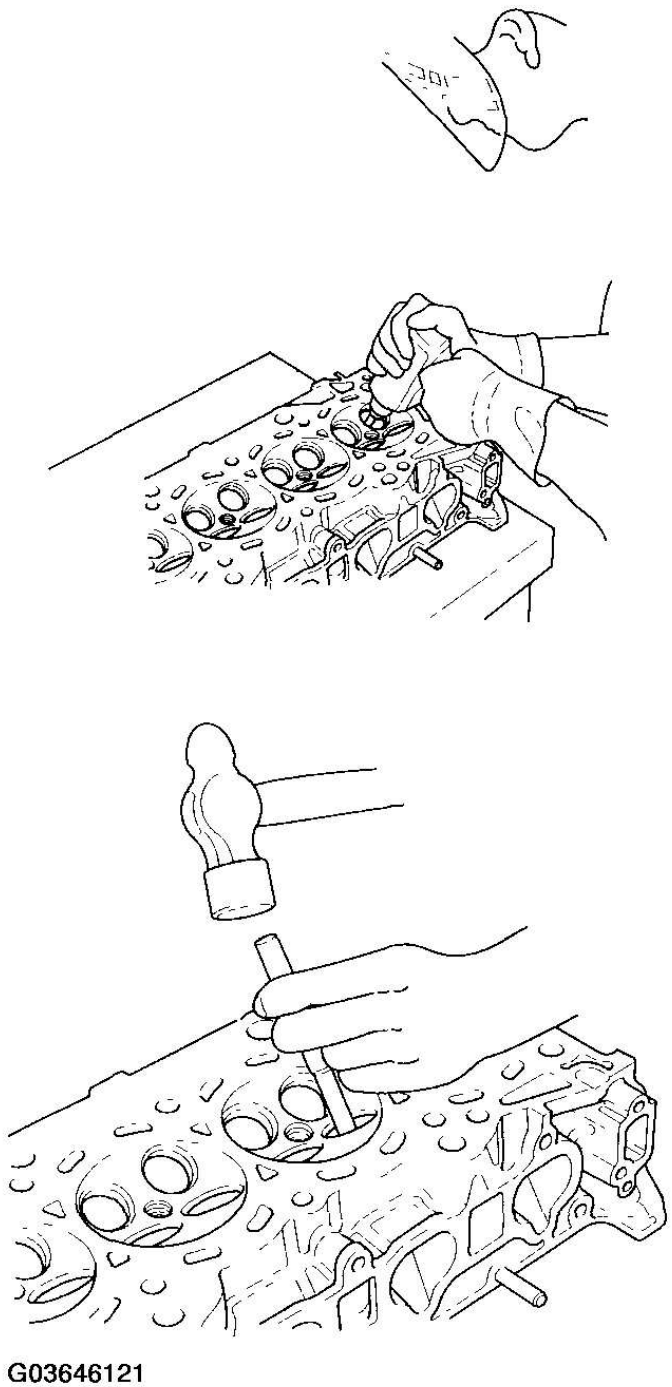


Fig. 106: Turning Head Over, And Drive Guide Out Toward Camshaft Side Of Head

Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. If a valve guide won't move, drill it out with a 8 mm (5/16 in.) bit, then try again. Drill guides only in extreme cases; you could damage the cylinder head if the guide breaks.
8. Take out the new guide(s) from the freezer, one at a time, as you need them.
9. Apply a thin coat of clean engine oil to the outside of the new valve guide. Install the guide from the camshaft side of the head; use the special tool to drive the guide in to the specified installed height (A) of the guide (B). If you have all 16 guides to do, you may have to reheat the head.

   Valve Guide Installed Height

   Intake: 15.2---16.2 mm (0.598---0.638 in.)

   Exhaust: 15.5---16.5 mm (0.610---0.650 in.)

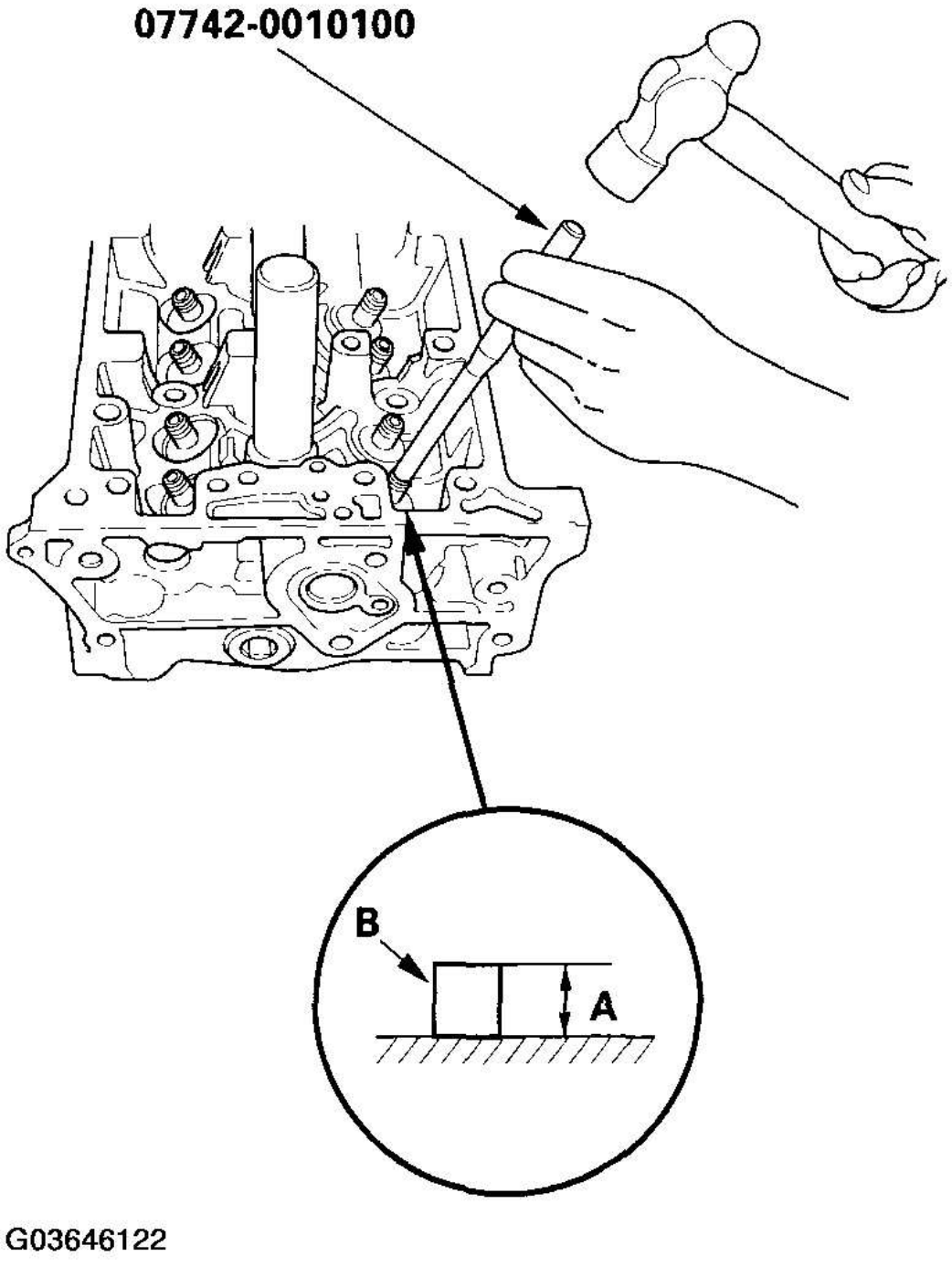


Fig. 107: Installing Guide From Camshaft Side Of Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Coat both reamer and valve guide with cutting oil.
11. Rotate the reamer clockwise the full length of the valve guide bore.

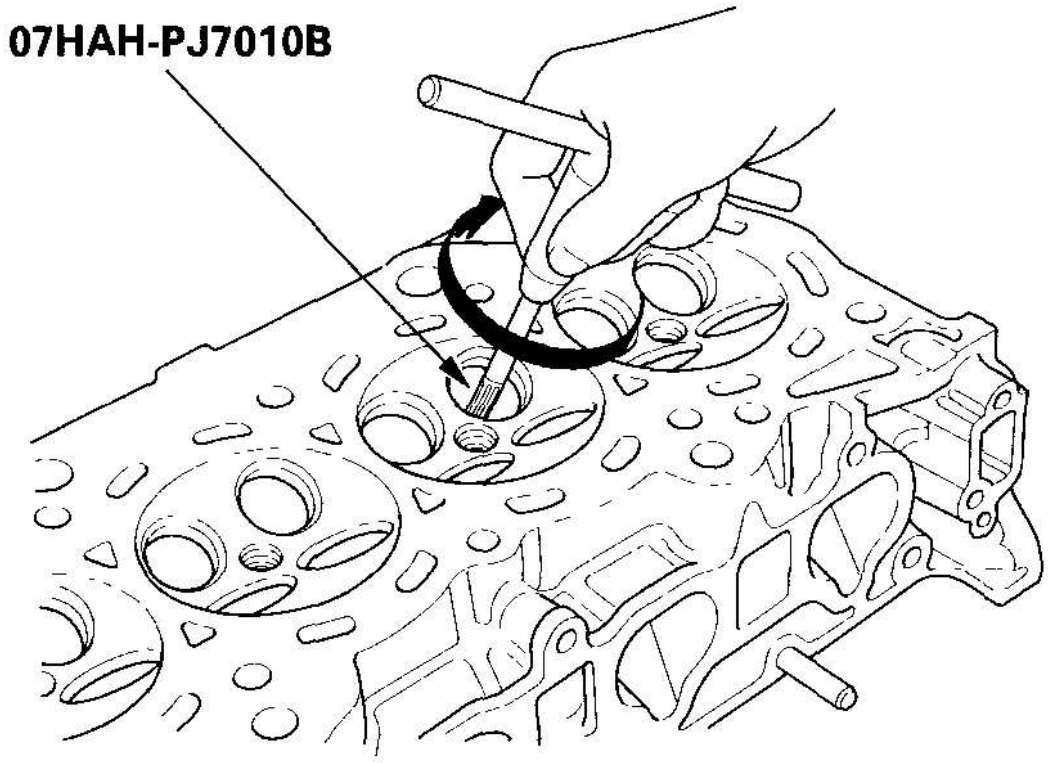


Fig. 108: Rotating Reamer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Continue to rotate the reamer clockwise while removing it from the bore.
13. Thoroughly wash the guide in detergent and water to remove any cutting residue.
14. Check the clearances with a valve (see **VALVE INSPECTION**). Verify that a valve slides in the intake and exhaust valve guides without exerting pressure.
15. Inspect the valve seating, if necessary renew the valve seat using a valve seat cutter (see **VALVE SEAT RECONDITIONING**).

VALVE SEAT RECONDITIONING

1. Inspect valve stem-to-guide clearance (see **VALVE INSPECTION**). If the valve guides are worn, replace them (see **VALVE GUIDE REPLACEMENT**) before cutting the valve seats.
2. Renew the valve seats in the cylinder head using a valve seat cutter.

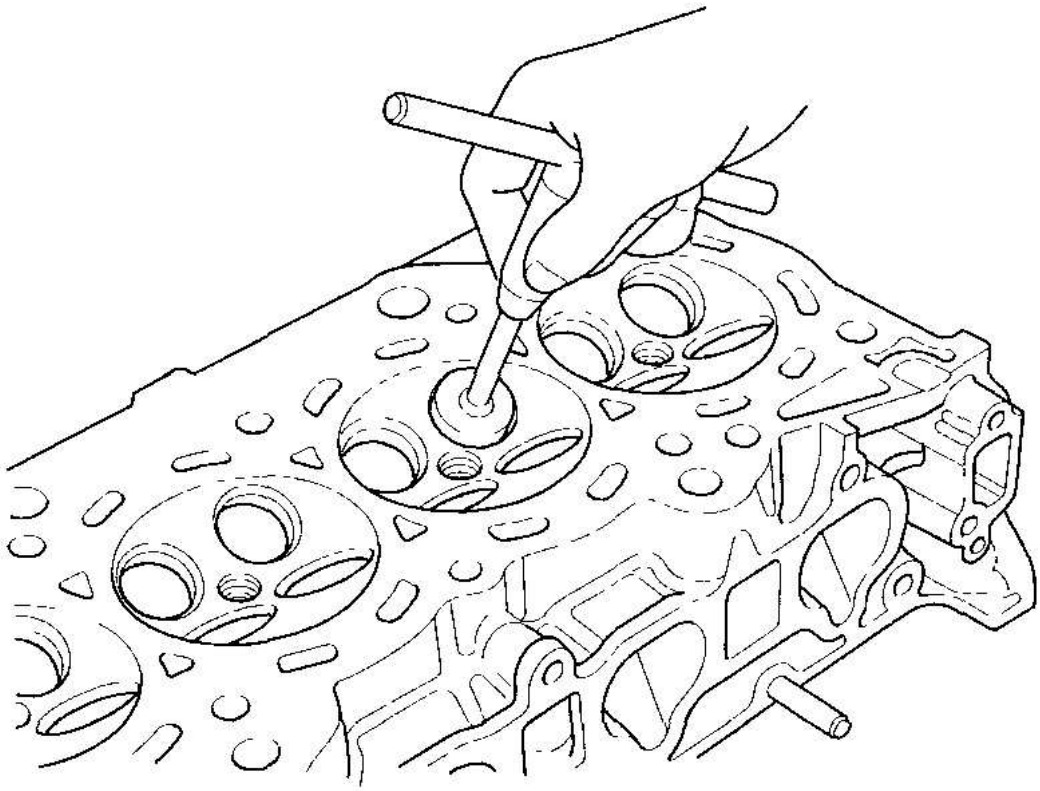


Fig. 109: Renewing Valve Seats In Cylinder Head Using A Valve Seat Cutter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Carefully cut a 45° seat, removing only enough material to ensure a smooth and concentric seat.
4. Bevel the upper and lower edges at the angles shown in **Fig. 110** . Check the

width of the seat and adjust accordingly.

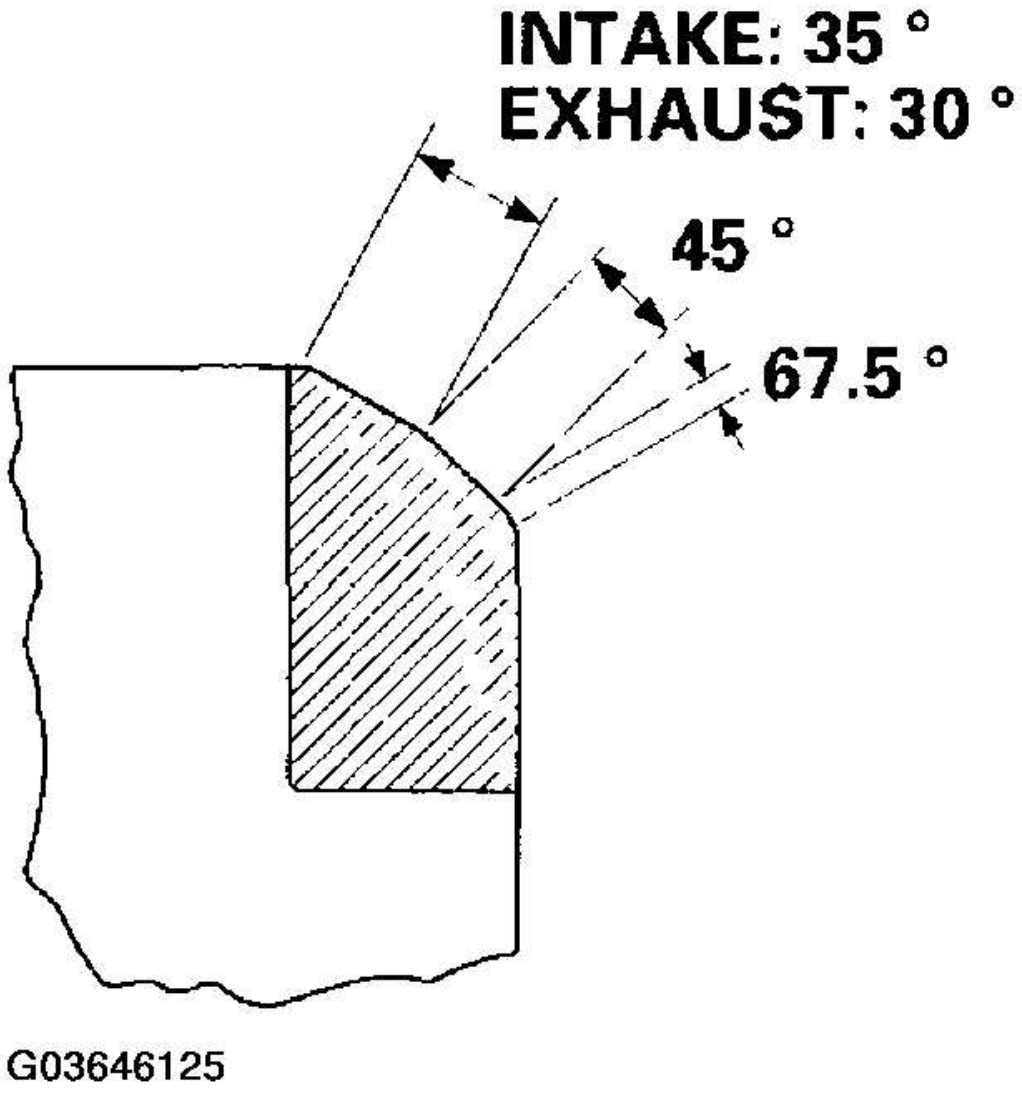


Fig. 110: Checking Width Of Seat
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Make one more very light pass with the 45° cutter to remove any possible burrs caused by the other cutters.

Valve Seat Width

Standard (New): 1.25---1.55 mm (0.049---0.061 in.)

Service Limit: 2.00 mm (0.079 in.)

6. After resurfacing the seat, inspect for even valve seating. Apply Prussian Blue compound (A) to the valve face. Insert the valve in its original location in the head, then lift it and snap it closed against the seat several times.

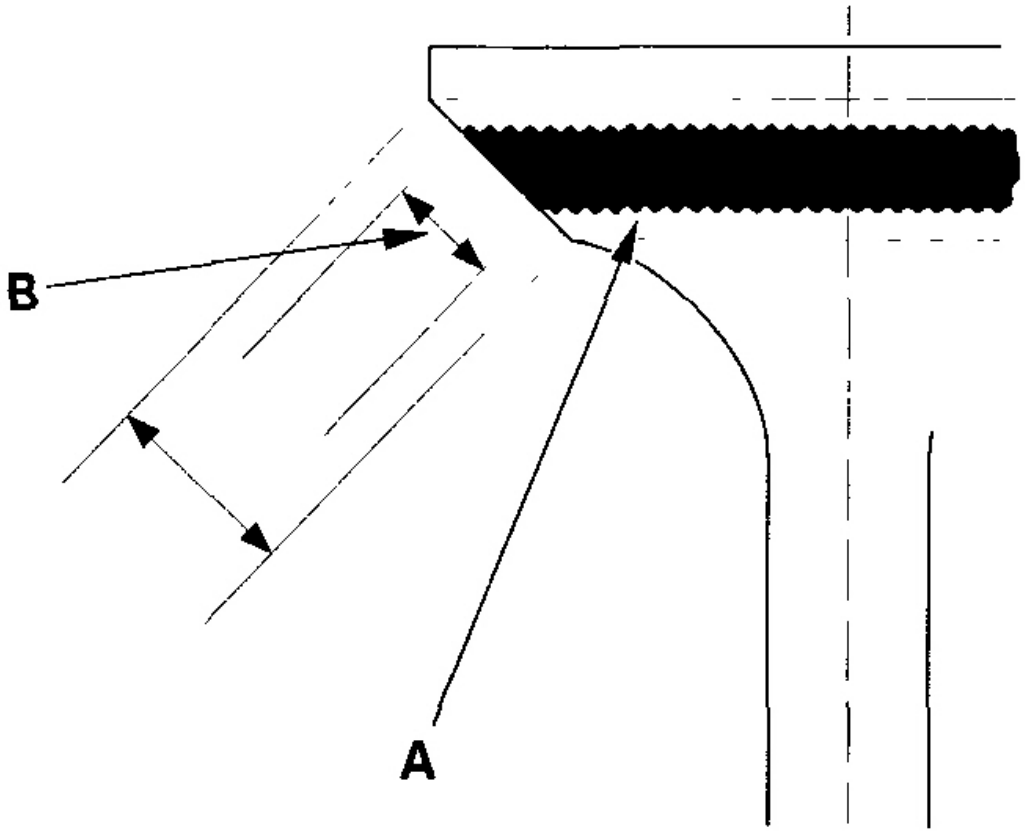


Fig. 111: Applying Prussian Blue Compound To Valve Face
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. The actual valve seating surface (B), as shown in **Fig. 111**by the blue compound, should be centered on the seat.
   - If it is too high (closer to the valve stem), you must make a second cut with the 67.5° cutter to move it down, then one more cut with the 45° cutter to restore seat width.
   - If it is too low (close to the valve edge), you must make a second cut with the 35 ° cutter (intake side) or the 30 ° cutter (exhaust side) to move it up, then make one more cut with the 45° cutter to restore seat width.

NOTE: The final cut should always be made with the 45° cutter.

8. Insert the intake and exhaust valves in the head, and measure valve stem installed height (A).

   Intake Valve Stem Installed Height

   Standard (New): 44.0---44.5 mm (1.73---1.75 in.)

   Service Limit: 44.7 mm (1.76 in.)

   Exhaust Valve Stem Installed Height

   Standard (New): 44.1---44.6 mm (1.74---1.76 in.)

   Service Limit: 44.8 mm (1.76 in.)

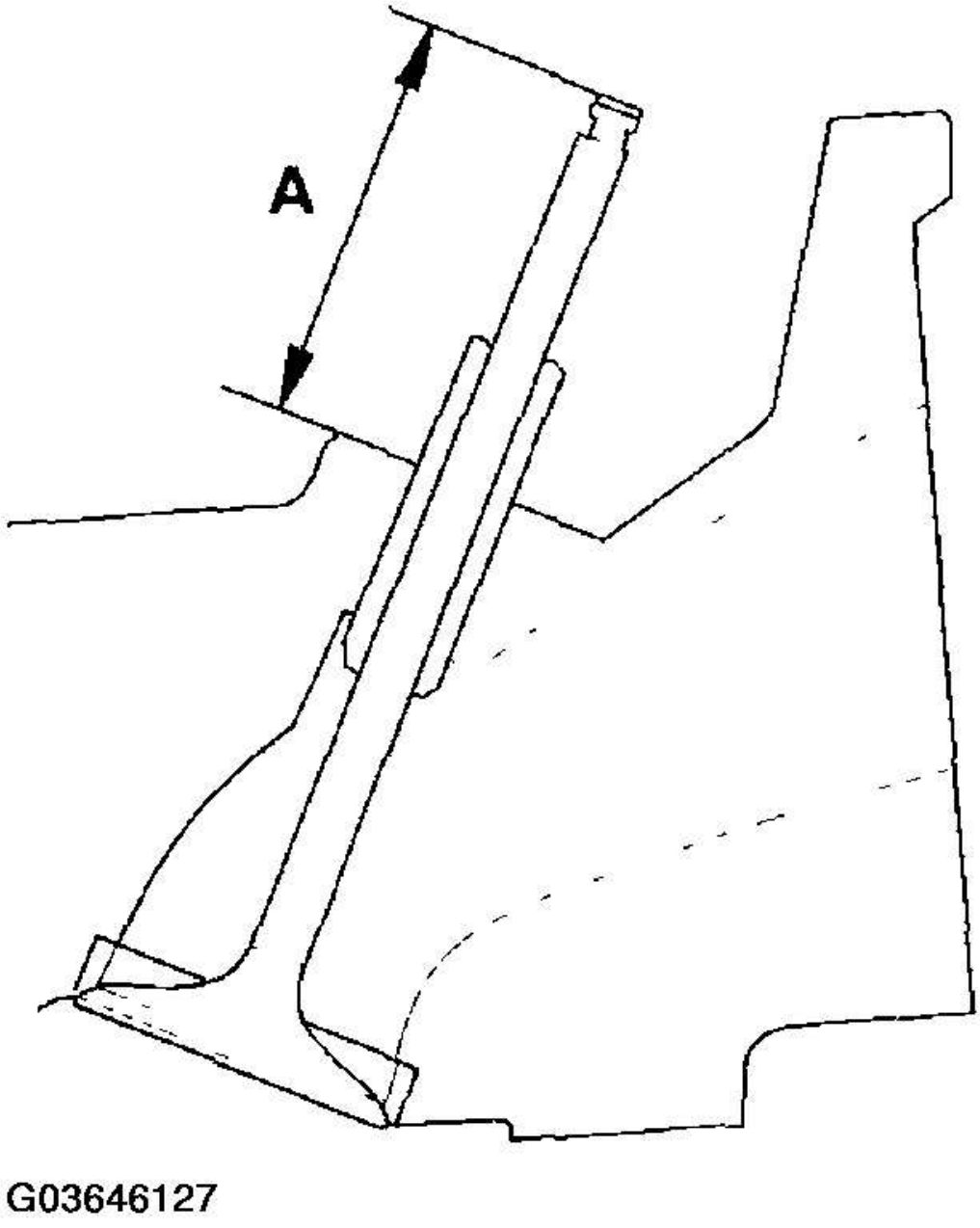


Fig. 112: Inserting Intake And Exhaust Valves In Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. If valve stem installed height is over the service limit, replace the valve and

recheck. If it is still over the service limit, replace the cylinder head; the valve seat in the head is too deep.

VALVE, SPRING, AND VALVE SEAL INSTALLATION

Special Tools Required

- Stem seal driver 07PAD-0010000
- Valve spring compressor attachment 07757-PJ1010A

1. Coat the valve stems with new engine oil. Install the valves in the valve guides.
2. Check that the valves move up and down smoothly.
3. Install the spring seats on the cylinder head.
4. Install the new valve seals (A) using the stem seal driver (B).

NOTE: The exhaust valve seal (C) has a black spring (D), and the intake valve seal (E) has a white spring (F). They are not interchangeable.

NOTE: The exhaust valve seal (C) has a black spring (D), and the intake valve seal (E) has a white spring (F). They are not interchangeable.

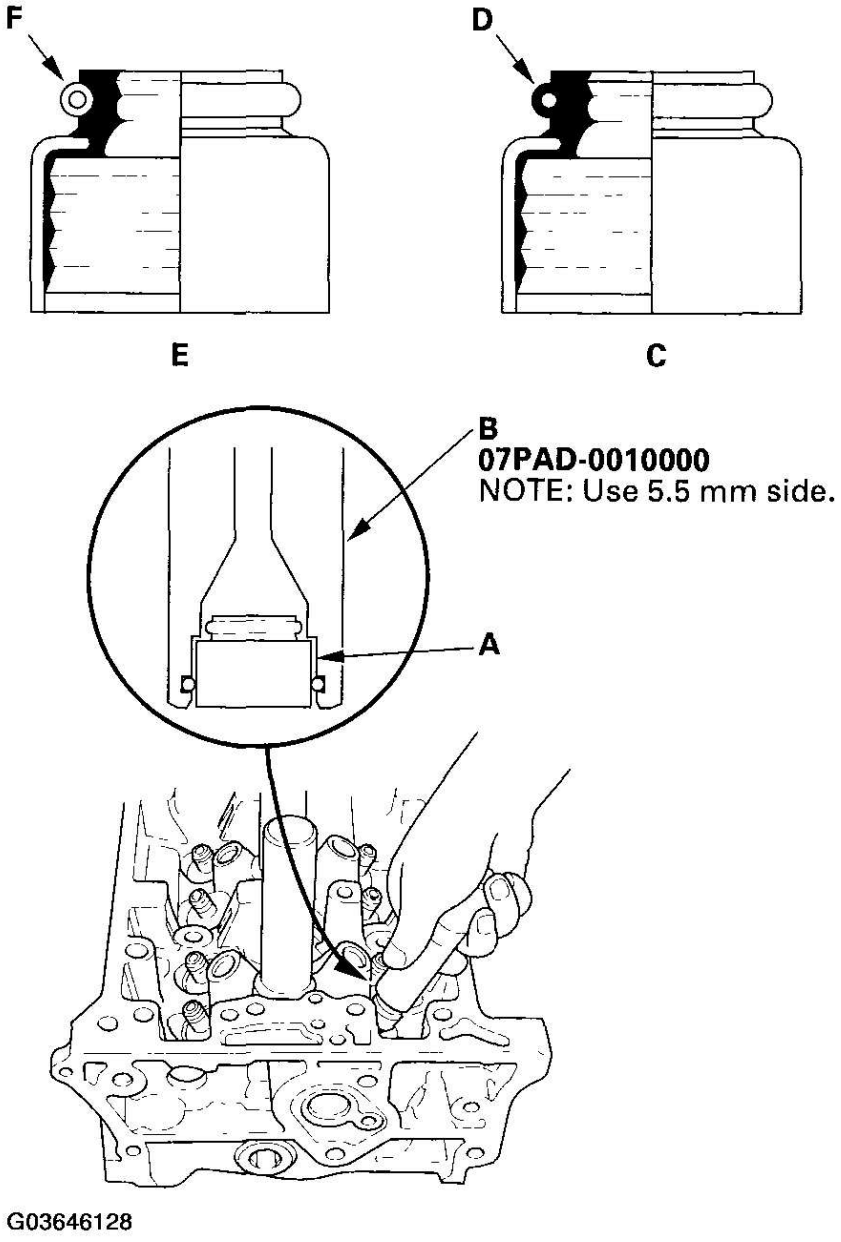
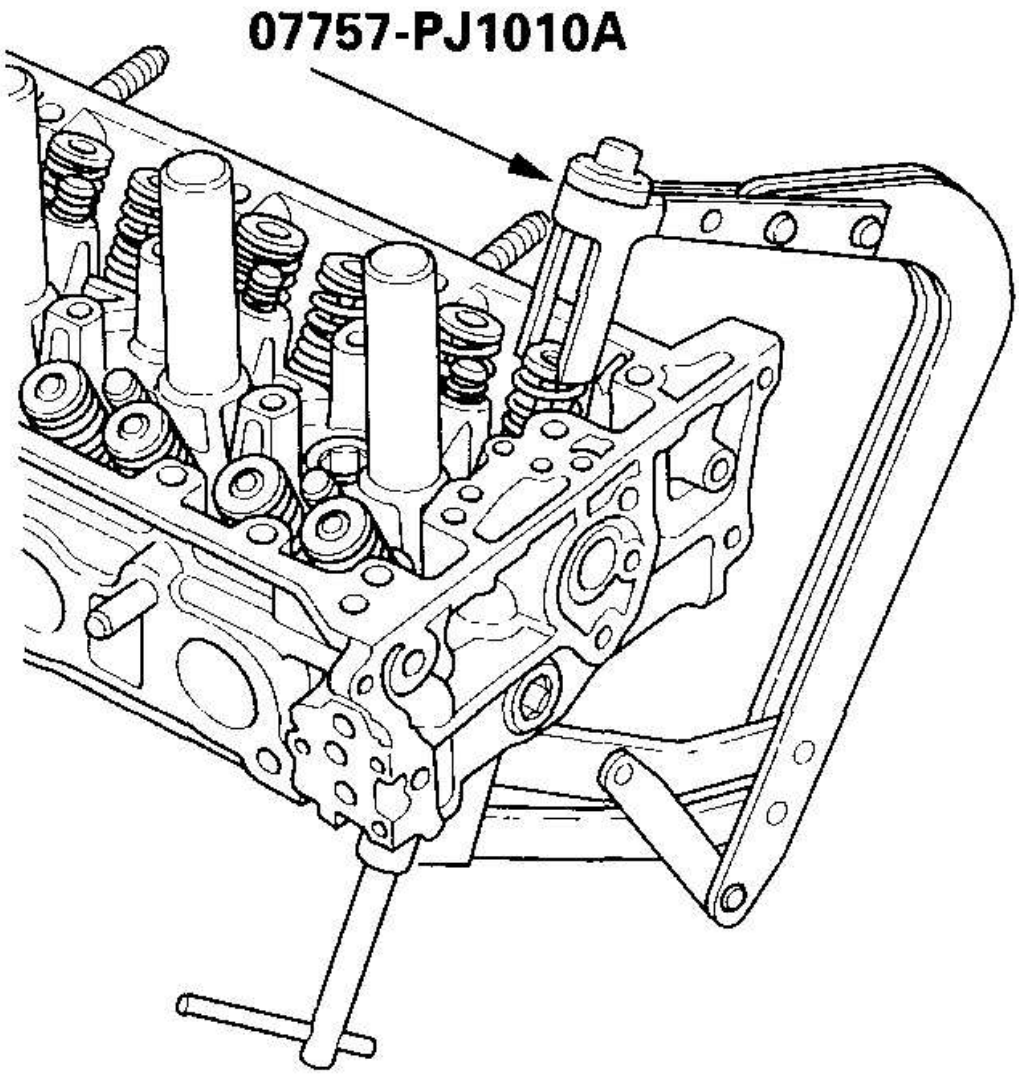


Fig. 113: Installing Valve Seals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the valve spring. Place the end of the valve spring with closely wound coils toward the cylinder head.
6. Install the valve retainer.
7. Install the valve spring compressor. Compress the spring, and install the valve cotters.



G03646129

Fig. 114: Installing Valve Spring Compressor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Lightly tap the end of each valve stem two or three times with a plastic mallet (A) to ensure proper seating of the valve and valve cotters. Tap the valve stem only along its axis so you do not bend the stem.

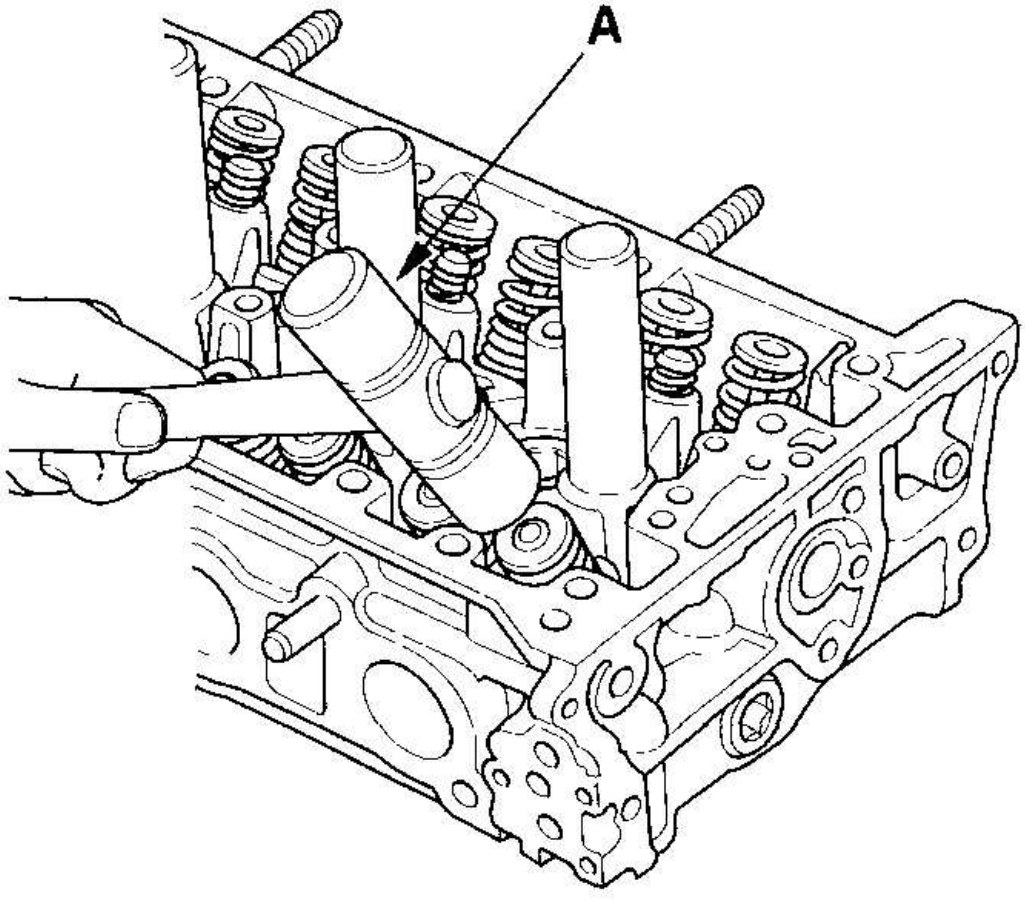


Fig. 115: Lightly Tapping End Of Each Valve Stem
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ROCKER ARM ASSEMBLY INSTALLATION

1. Reassemble the rocker arm assembly (see **ROCKER ARM AND SHAFT DISASSEMBLY/REASSEMBLY**).
2. Clean and dry the No. 5 rocker shaft holder mating surface.
3. Apply liquid gasket, P/N 08717-0004, 08718-0001, 08718-0002, 08718-0003, or 08718-0009, evenly to the cylinder head mating surface of the No. 5 rocker shaft holder.

NOTE: Do not install components if too much time has passed after applying the liquid gasket (for P/N 08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply the liquid gasket.

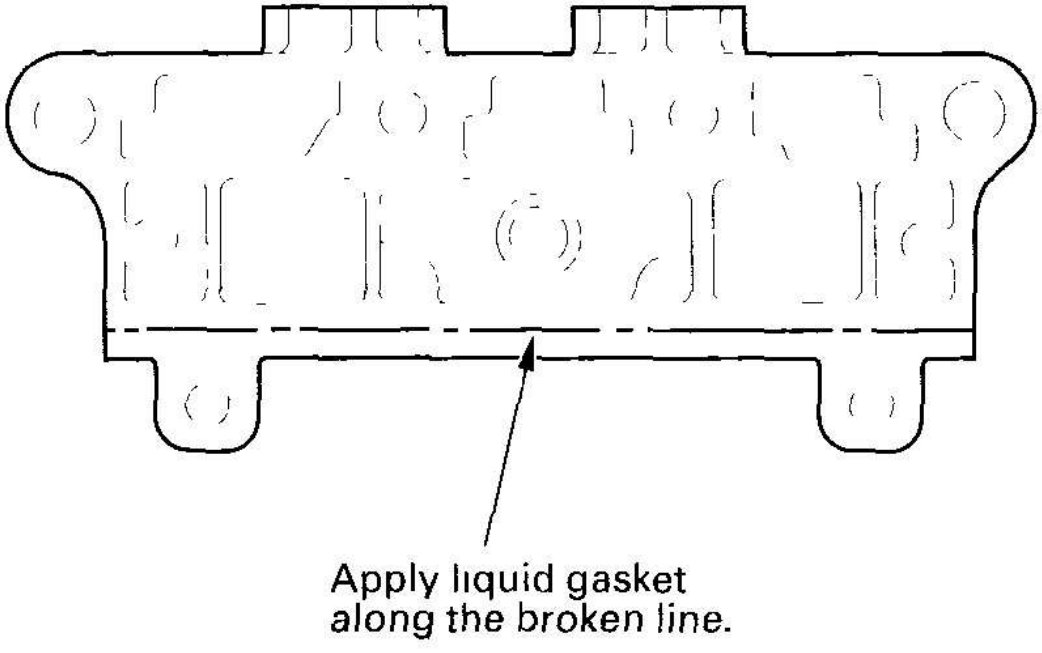


Fig. 116: Applying Liquid Gasket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Insert the bolts (A) into the rocker shaft holder, then install the rocker arm assembly (B) on the cylinder head.

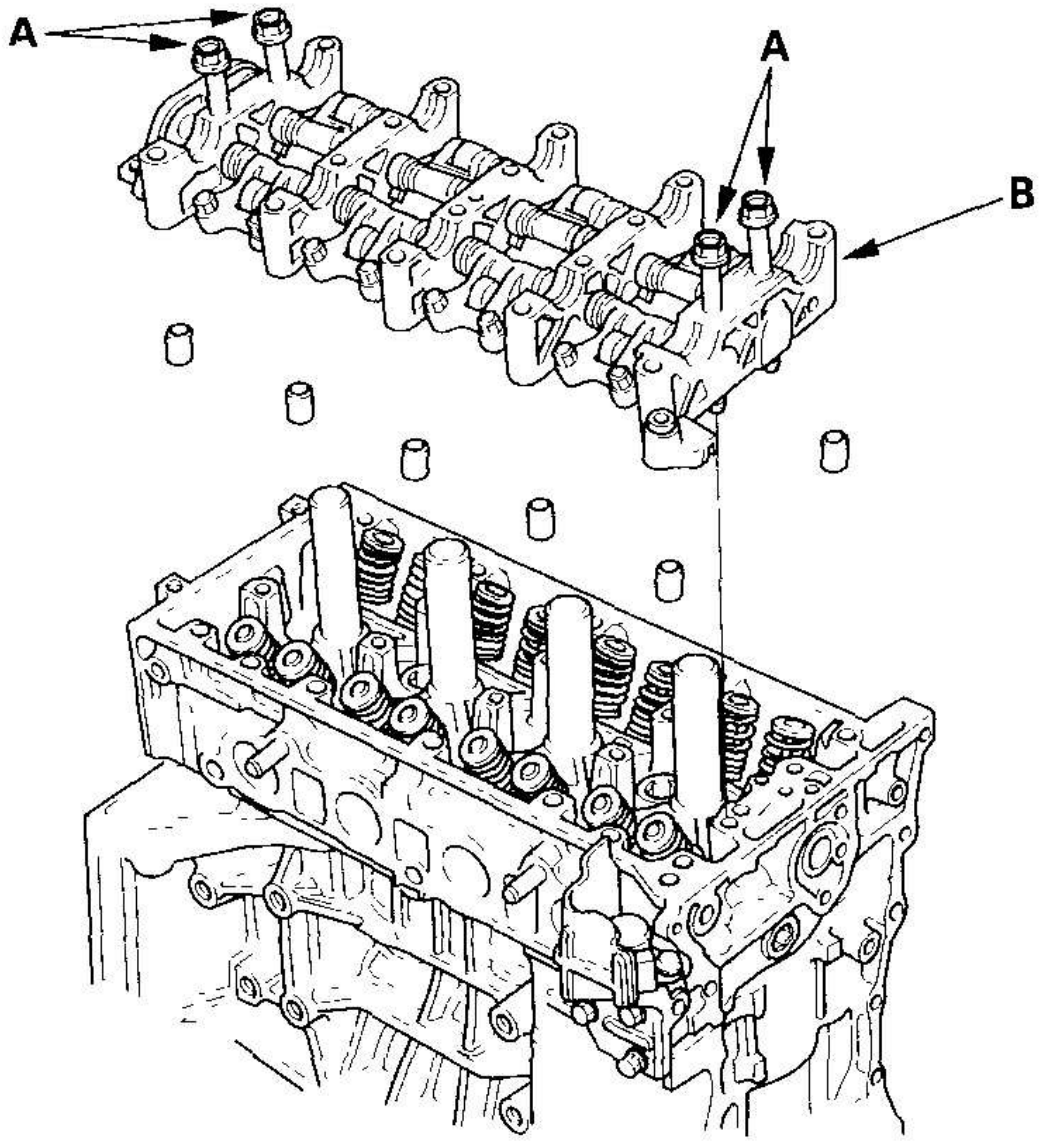


Fig. 117: Inserting Bolts Into Rocker Shaft Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the bolts from the rocker shaft holder.
6. Make sure the punch marks on the variable valve timing control (VTC) actuator and exhaust camshaft sprocket are facing up, then set the camshafts (A) in the holder.

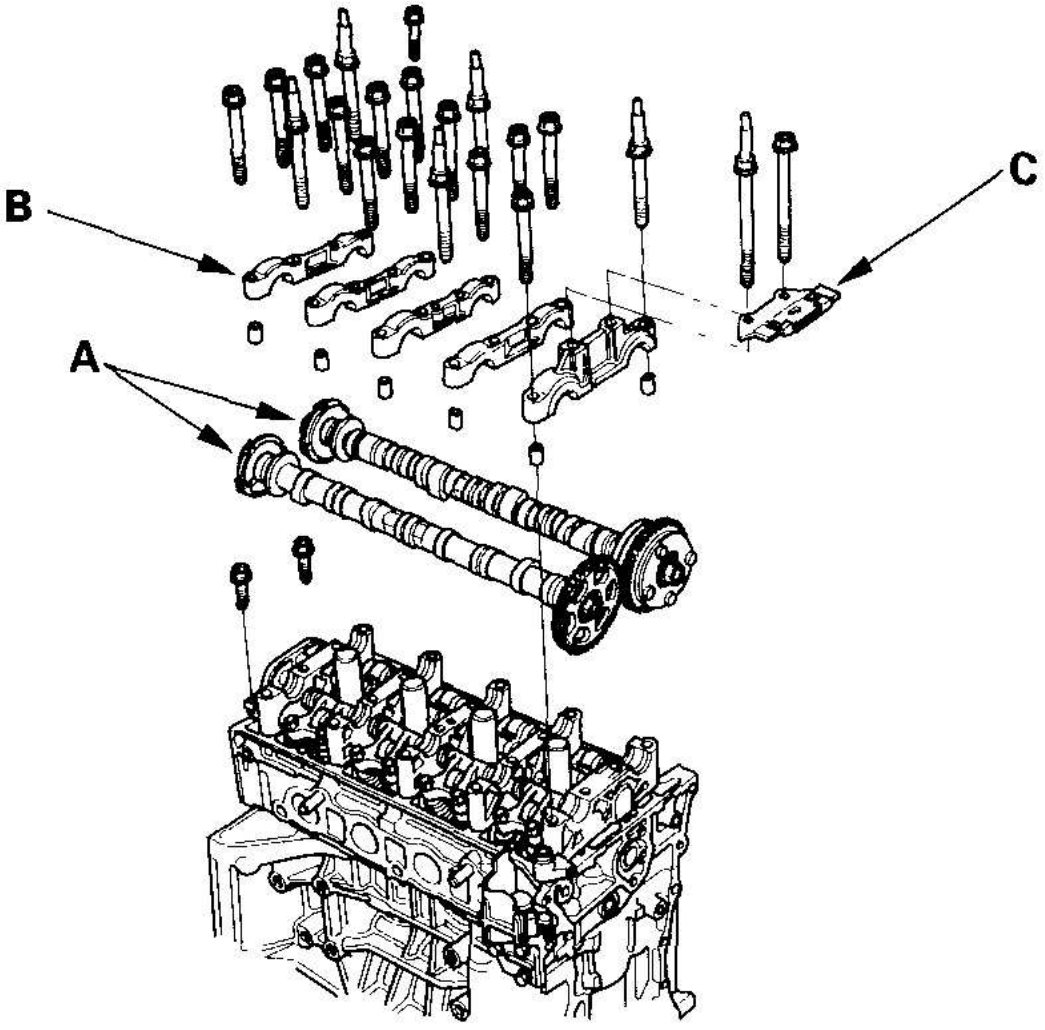


Fig. 118: Setting Camshafts In Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Set the camshaft holders (B) and cam chain guide B (C) in place.
8. Tighten the bolts in sequence to the specified torque.

NOTE: If the engine does not have bolt(21), skip it and continue the torque sequence.

Specified torque
8 mm bolts: 22 N·m (2.2 kgf·m, 16 lbf·ft)
6 mm bolts: 12 N·m (1.2 kgf·m, 8.7 lbf·ft)
6 mm bolts: ㉑, ㉒, ㉓

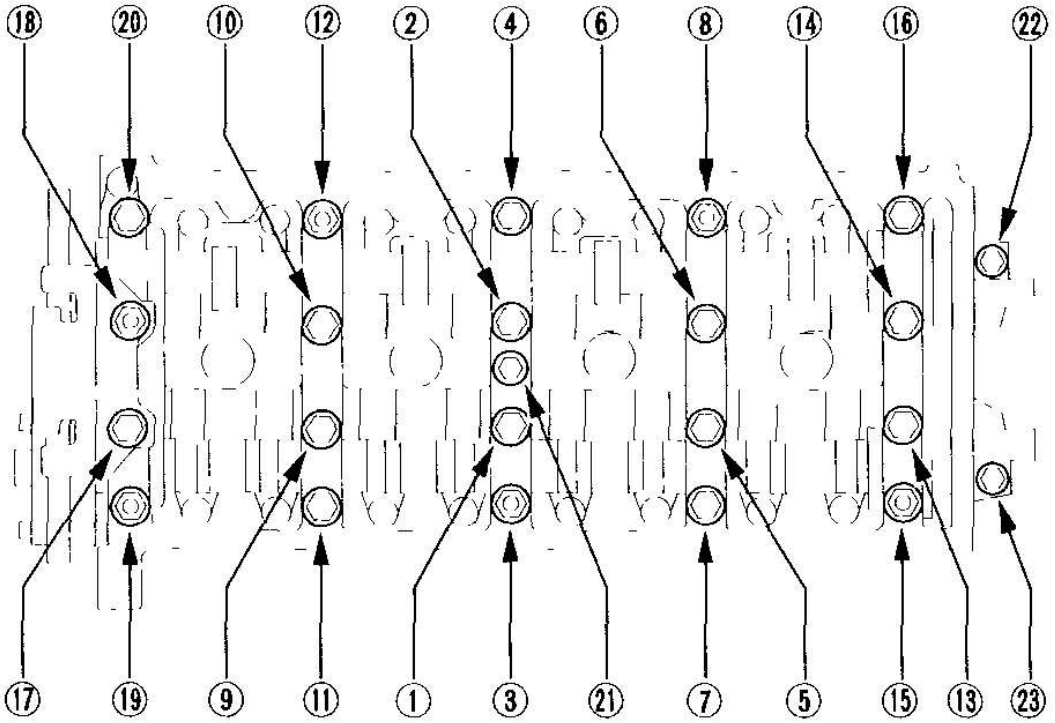


Fig. 119: Tightening Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the cam chain (see **CAM CHAIN INSTALLATION**), and adjust the

valve clearance (see **VALVE CLEARANCE ADJUSTMENT**).

CYLINDER HEAD INSTALLATION

Install the cylinder head in the reverse order of removal.

1. Install the new coolant separator in the engine block, when replacing the engine block.

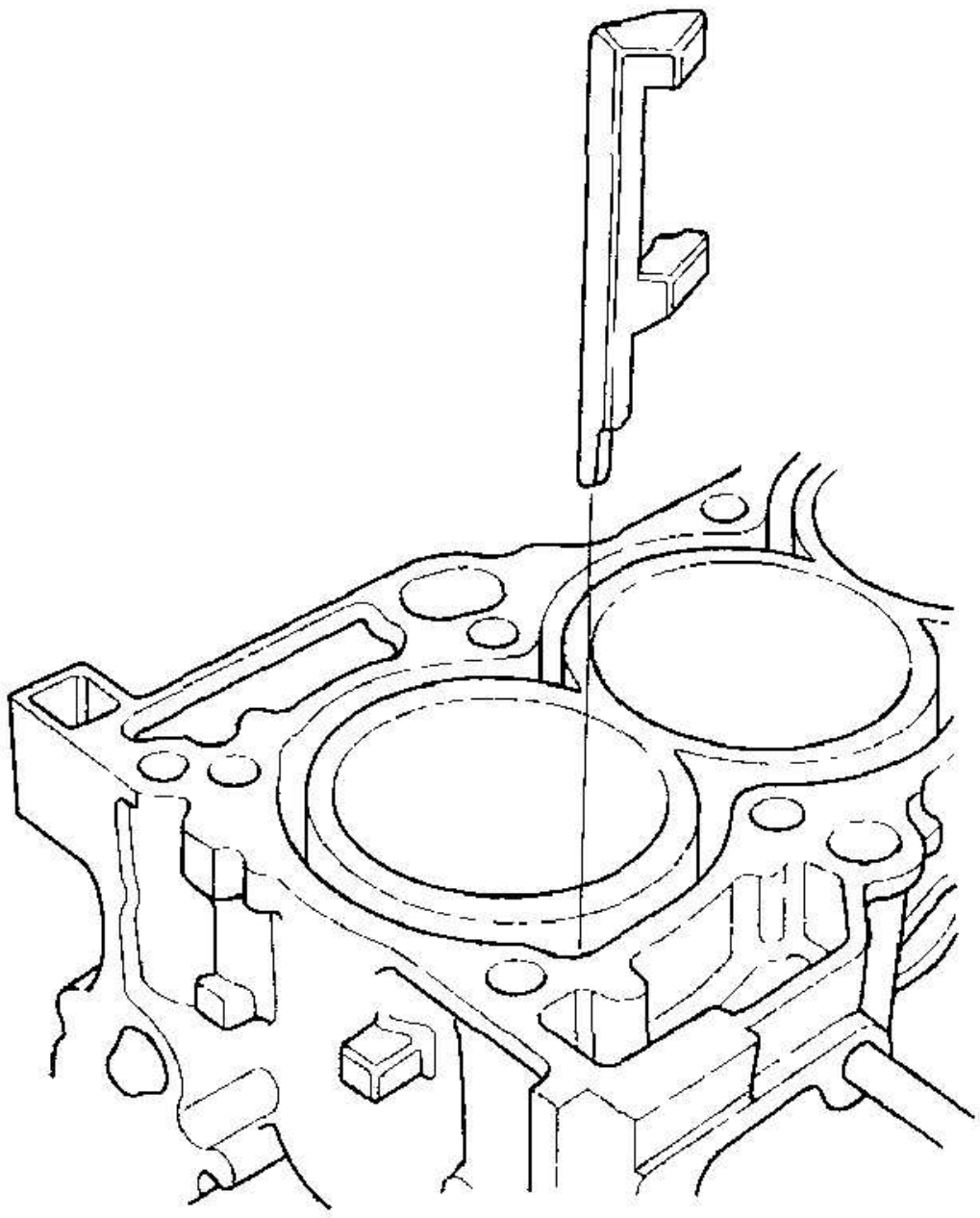


Fig. 120: Installing Coolant Separator In Engine Block
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Clean the cylinder head and engine block surface.
3. Install the new cylinder head gasket (A) and dowel pins (B) on the engine block. Always use a new cylinder head gasket.

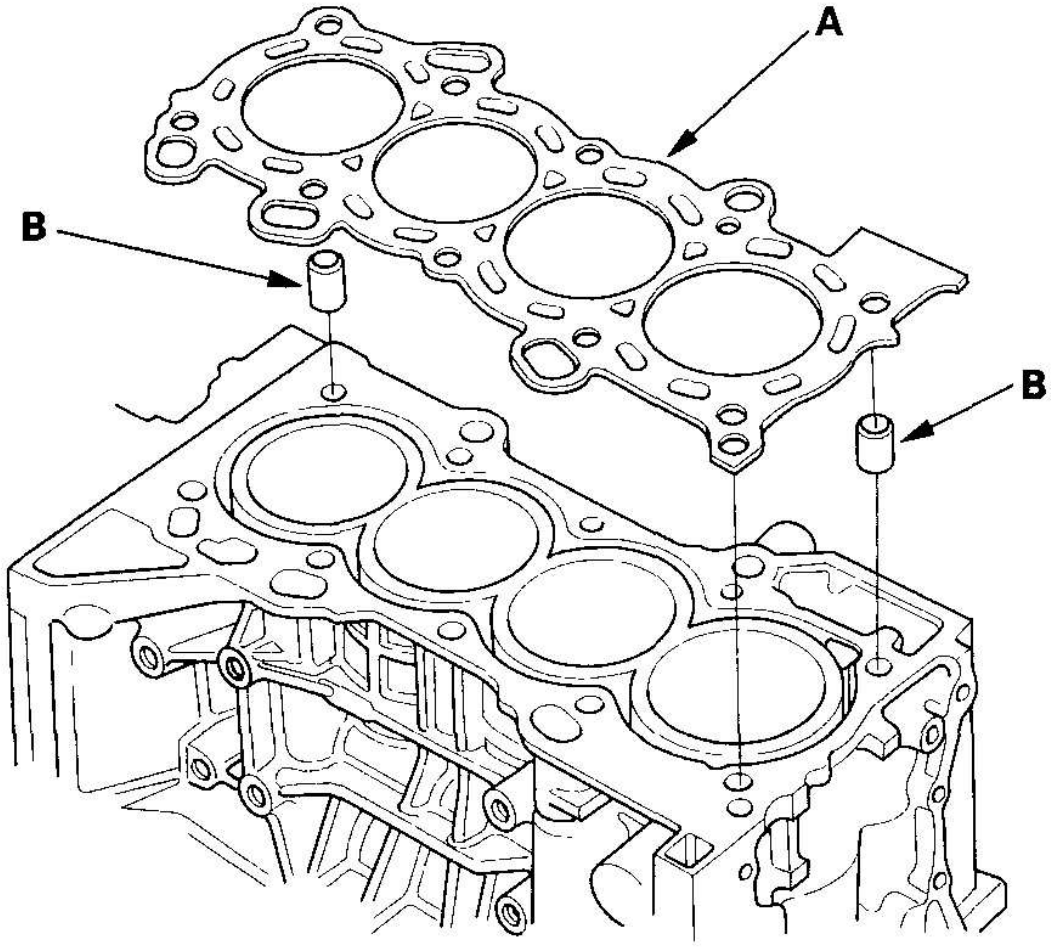


Fig. 121: Installing Cylinder Head Gasket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Set the crankshaft to top dead center (TDC). Align the TDC mark (A) on the crankshaft sprocket with the pointer (B) on the engine block.

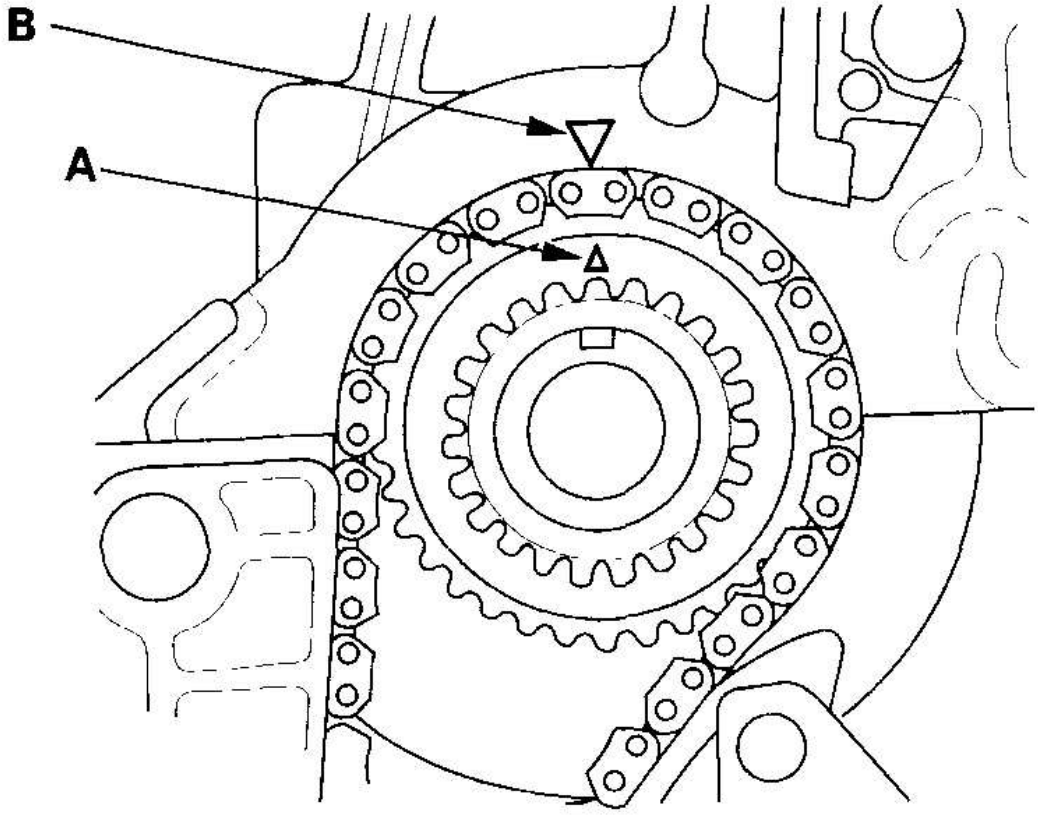


Fig. 122: Aligning TDC Mark On Crankshaft Sprocket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the cylinder head on the engine block.
6. Measure the diameter of each cylinder head bolt at point A and point B.

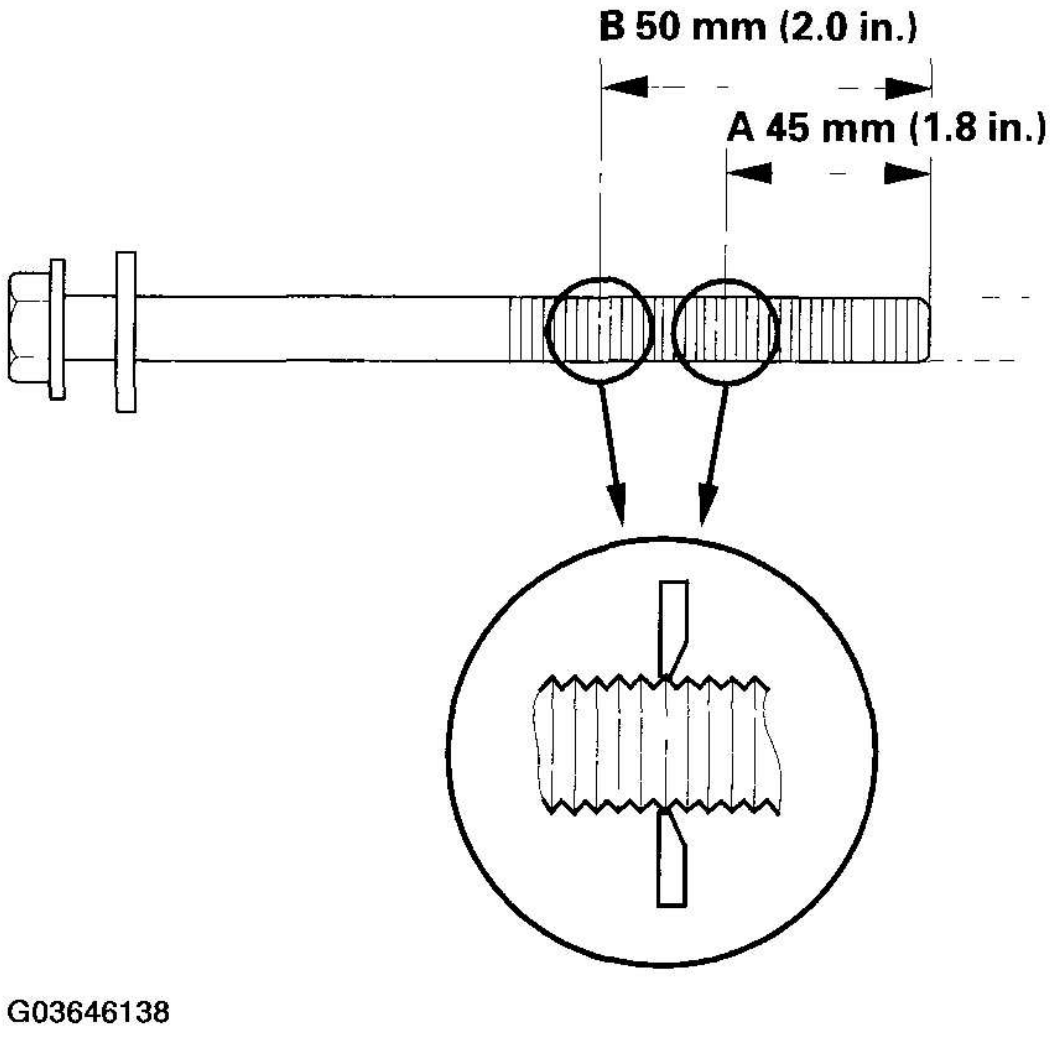


Fig. 123: Measuring Diameter Of Each Cylinder Head Bolt At Point And Point
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. If either diameter is less than 10.6 mm (0.42 in.), replace the cylinder head bolt.
8. Apply new engine oil to the threads and flange of all cylinder head bolts.
9. Tighten the cylinder head bolts in sequence to 39 N.m (4.0 kgf.m, 29 lbf.ft). Use a beam-type torque wrench. When using a preset-type torque wrench, be sure to tighten slowly and do not overtighten. If a bolt makes any noise while

you are torquing it, loosen the bolt and retighten it from the first step.

Specified Toque: 39 N.m (4.0 kgf.m, 29 lbf.ft)

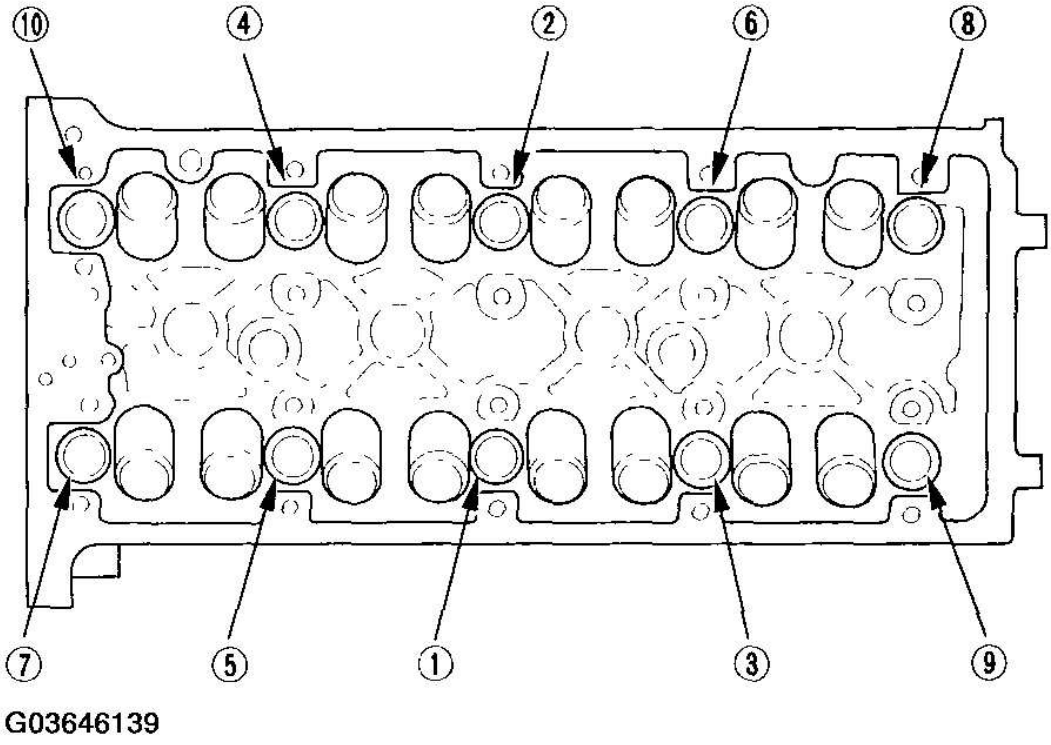


Fig. 124: Tightening Cylinder Head Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. After torquing, tighten all cylinder head bolts in two steps (90° per step). If you are using a new cylinder head bolt, tighten the bolt an extra 90°.

NOTE: Remove the cylinder head bolt if you tightened it beyond the specified angel, and go back to step 6 of the procedure. Do not loosen it back to the specified angel.

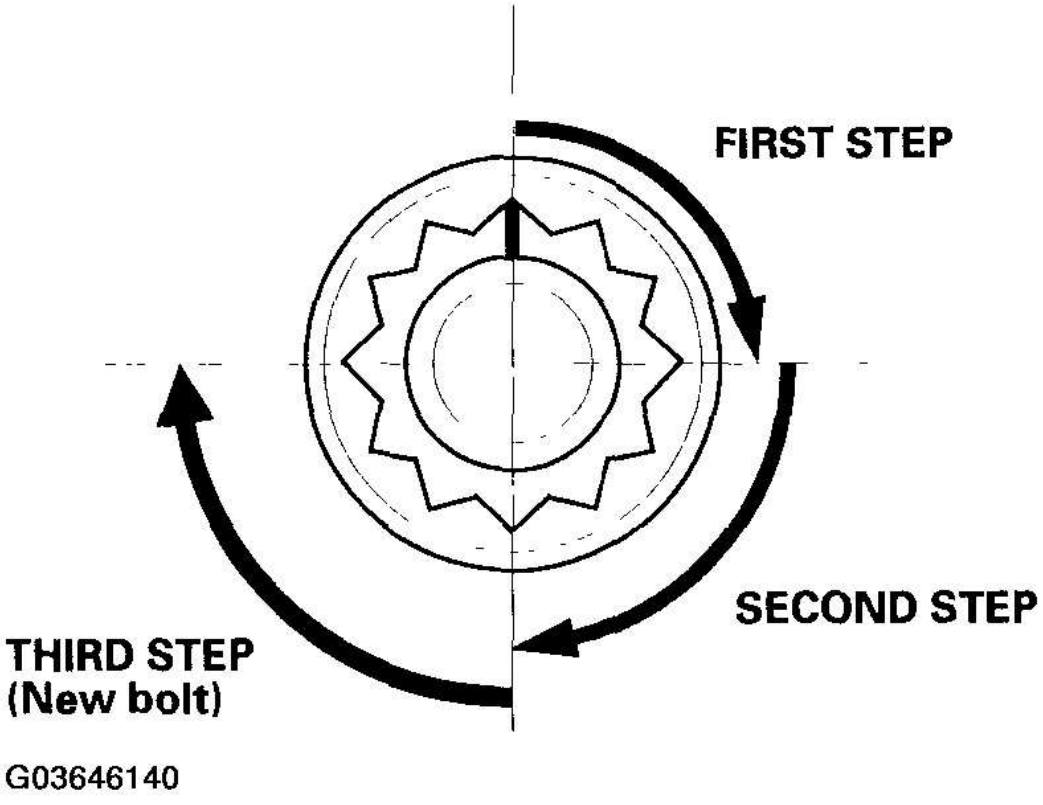


Fig. 125: Identifying Tightening Steps Of Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the rocker arm assembly (see **ROCKER ARM ASSEMBLY INSTALLATION**).
12. Install the cam chain (see **CAM CHAIN INSTALLATION**).
13. Tighten the two bolts (A) securing the evaporative emission (EVAP) canister purge valve bracket and tighten the bolt (B) securing the harness brackets.

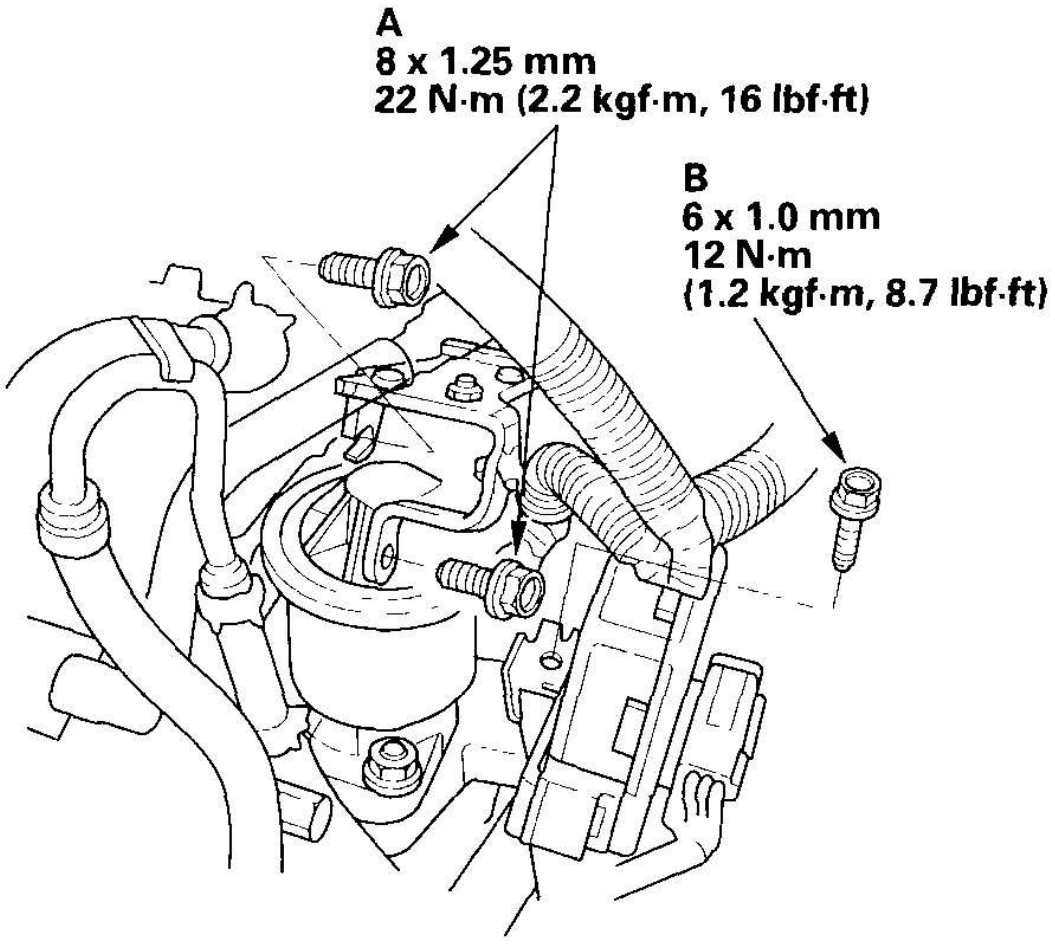


Fig. 126: Tightening Bolts Securing Evaporative Emission (EVAP) Canister Purge Valve Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Install the upper radiator hose (A) and heater hoses (B).

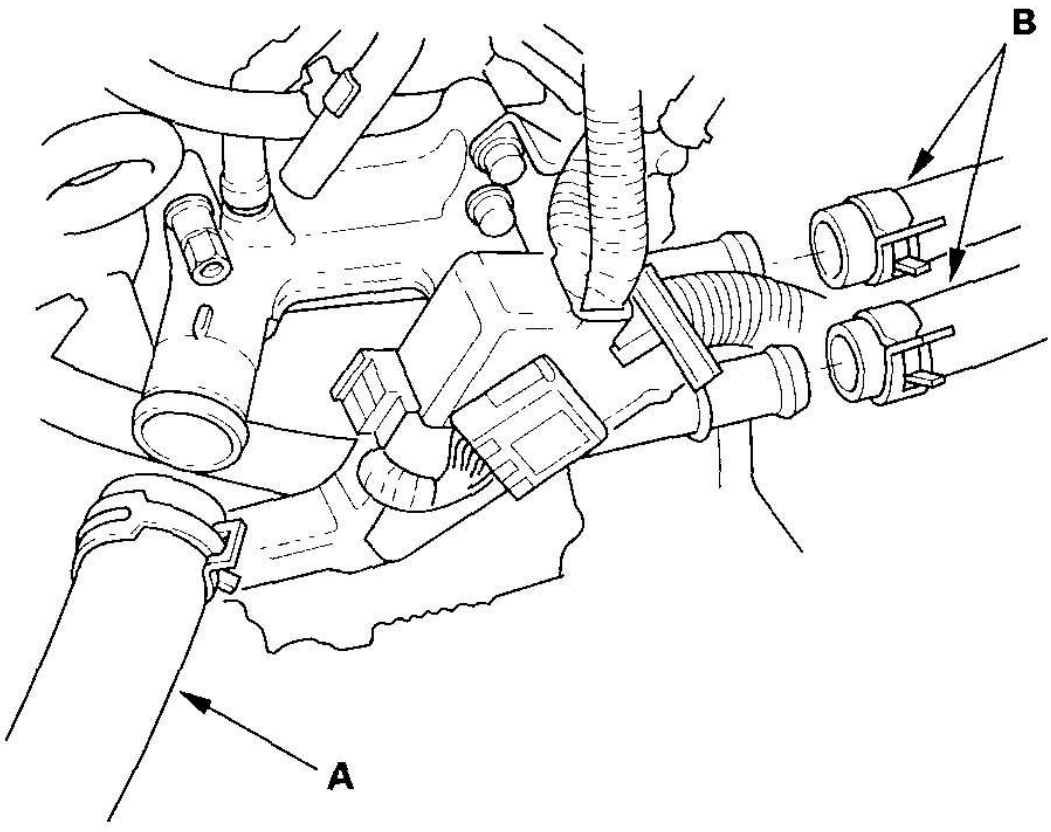


Fig. 127: Installing Upper Radiator Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Install the positive crankcase ventilation (PCV) hose (A) and ground cable (B).

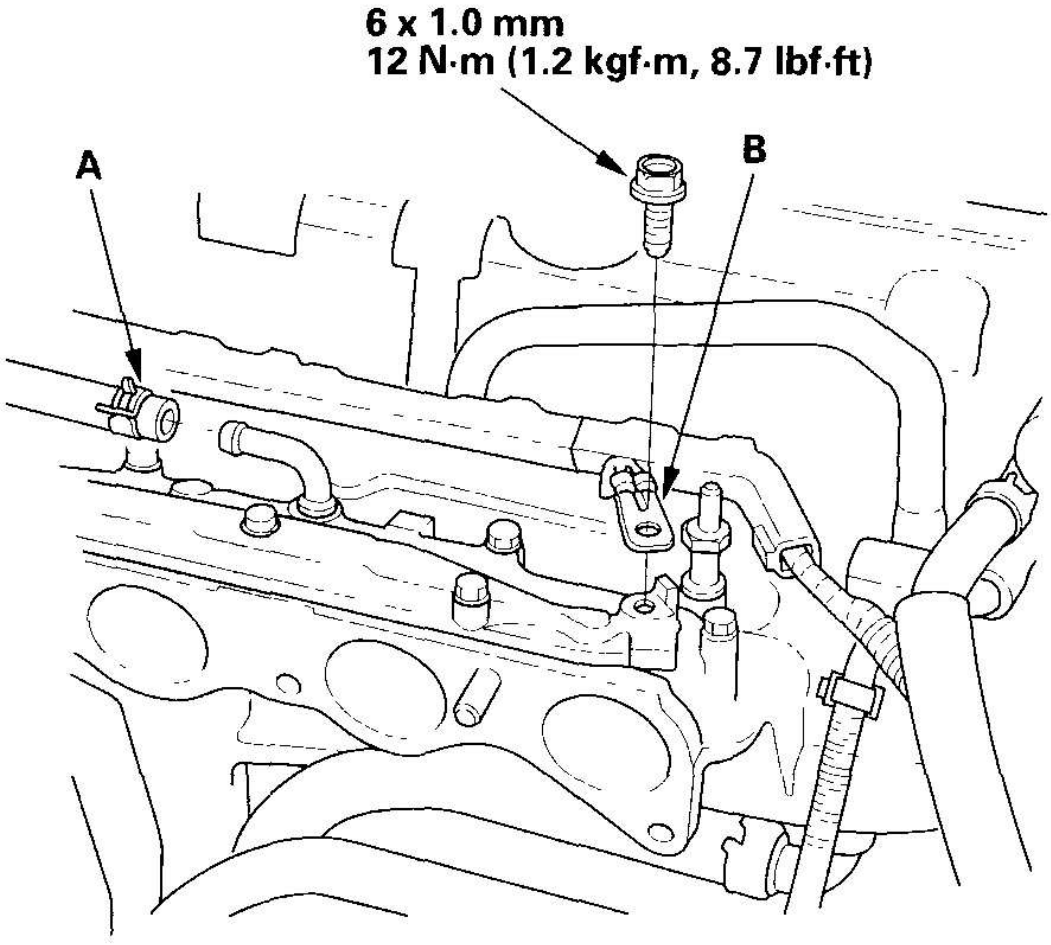


Fig. 128: Installing Positive Crankcase Ventilation (PCV) Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Install the water bypass hose (A).

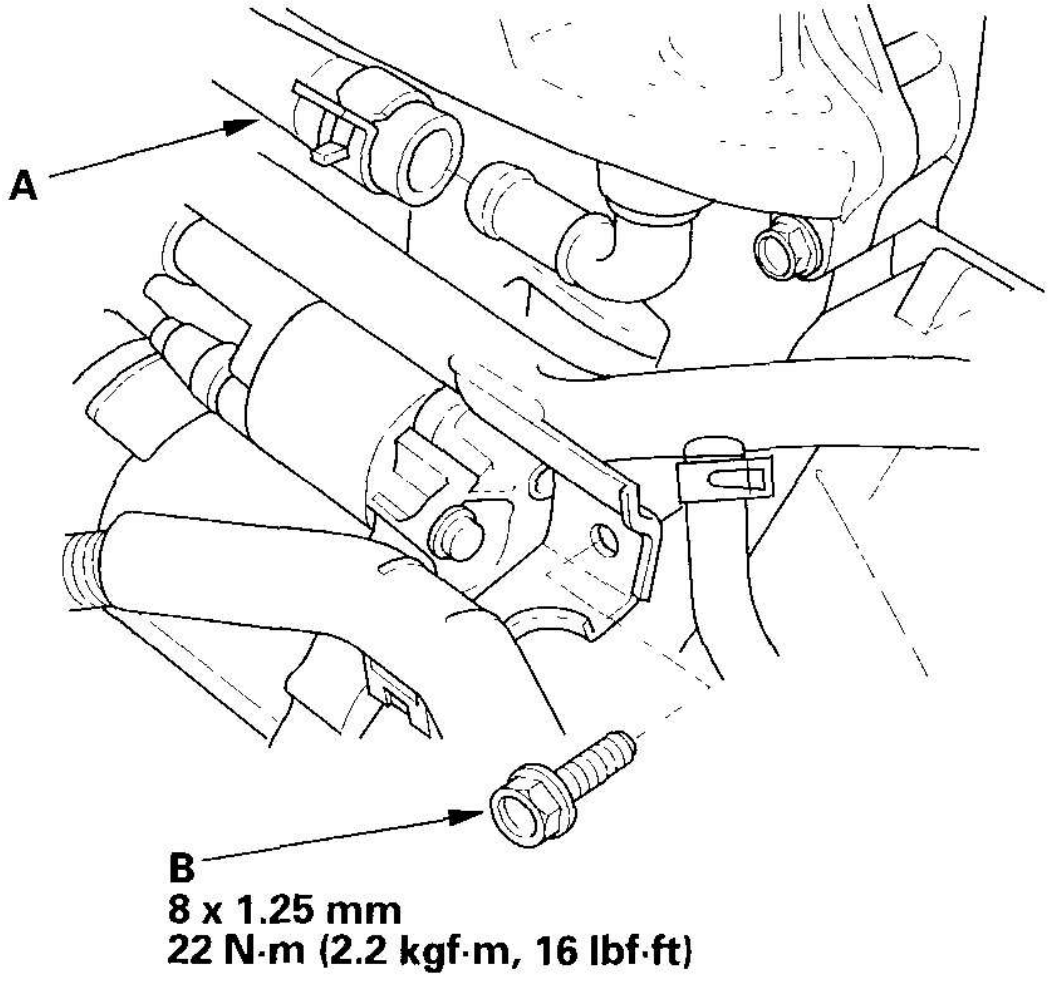


Fig. 129: Installing Water Bypass Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Tighten the bolt (B) securing the connecting pipe.
18. Install the exhaust manifold (see **EXHAUST MANIFOLD REMOVAL AND INSTALLATION**).
19. Install the intake manifold (see **INSTALLATION (2006 MODEL)**).
20. Install the evaporative emission (EVAP) canister hose (A) and brake booster vacuum hose (B).

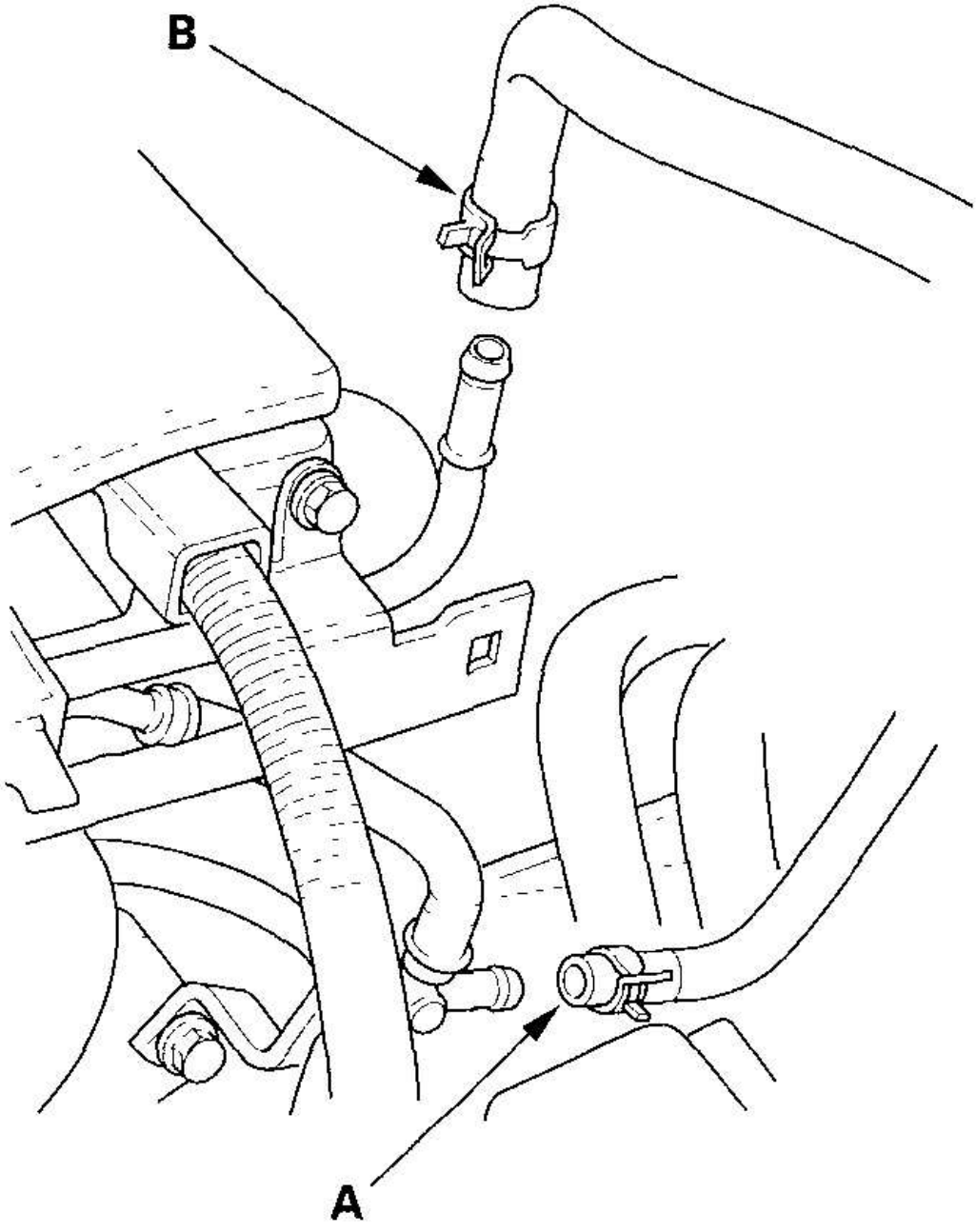


Fig. 130: Installing Evaporative Emission (EVAP) Canister Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Connect the fuel feed hose (see **FUEL LINE/QUICK-CONNECT FITTING INSTALLATION**), then install the quick-connect fitting cover (A). Make sure the connector engages fully.

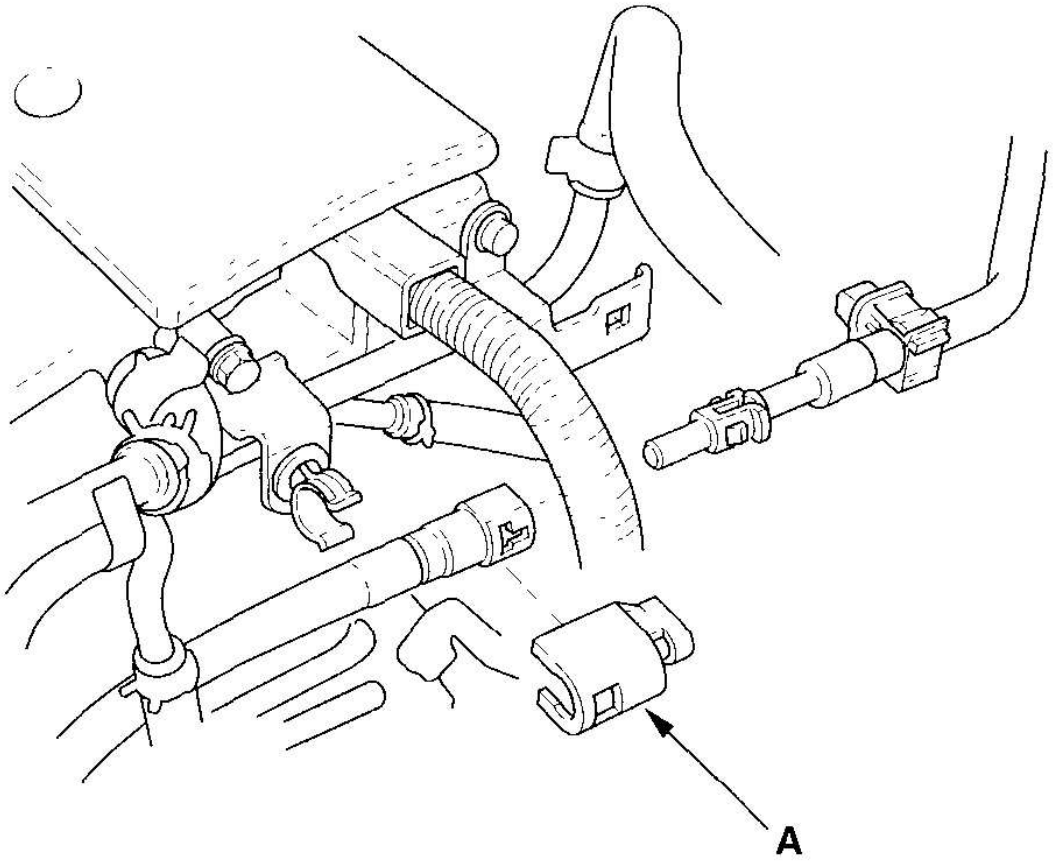


Fig. 131: Connecting Fuel Feed Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Install the intake air duct (A), then connect the intake air temperature (IAT) sensor connector (B), and install the vacuum hose (C) and breather pipe (D).

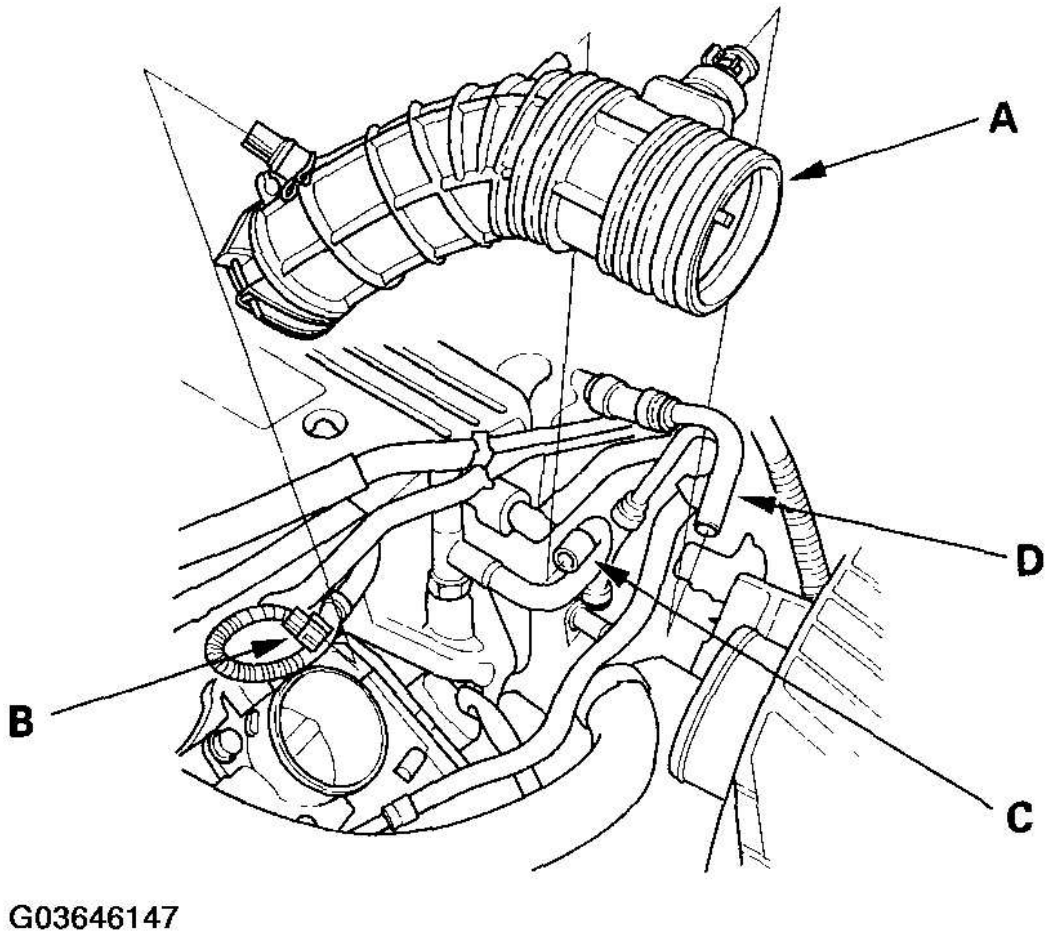


Fig. 132: Installing Intake Air Duct
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. After installation, check that all tubes, hoses, and connectors are installed correctly.
24. Inspect for fuel leaks. Turn the ignition switch ON (II) (do not operate the starter) so that the fuel pump runs for about 2 seconds and pressurizes the fuel line. Repeat this operation two or three times, then check for fuel leakage at any point in the fuel line.
25. Refill the radiator with engine coolant, and bleed air from the cooling system with the heater valve open (see **COOLANT CHECK**).

26. Do the power window control unit reset procedure (see **RESETTING THE POWER WINDOW CONTROL UNIT**).
27. Inspect the idle speed (see **IDLE SPEED INSPECTION**).
28. Inspect the ignition timing (see **IGNITION TIMING INSPECTION**).
29. Set the clock.

2003-07 ACCESSORIES & EQUIPMENT

Dashboard - Accord

INSTRUMENT PANEL REMOVAL/INSTALLATION

Special Tools Required

KTC trim tool set SOJATP2014

NOTE:

- **Take care not to scratch the dashboard and related parts.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Tilt the steering column down.
2. Remove the instrument panel (A).
   -1 Remove the screws (B).
   -2 Gently pull out along the bottom to release the clips (C) and hooks (D).
   -3 Gently pull out the upper portion of the panel.
   -4 With auto A/C: Disconnect the in-car temperature sensor connector (E) and the air hose (F).

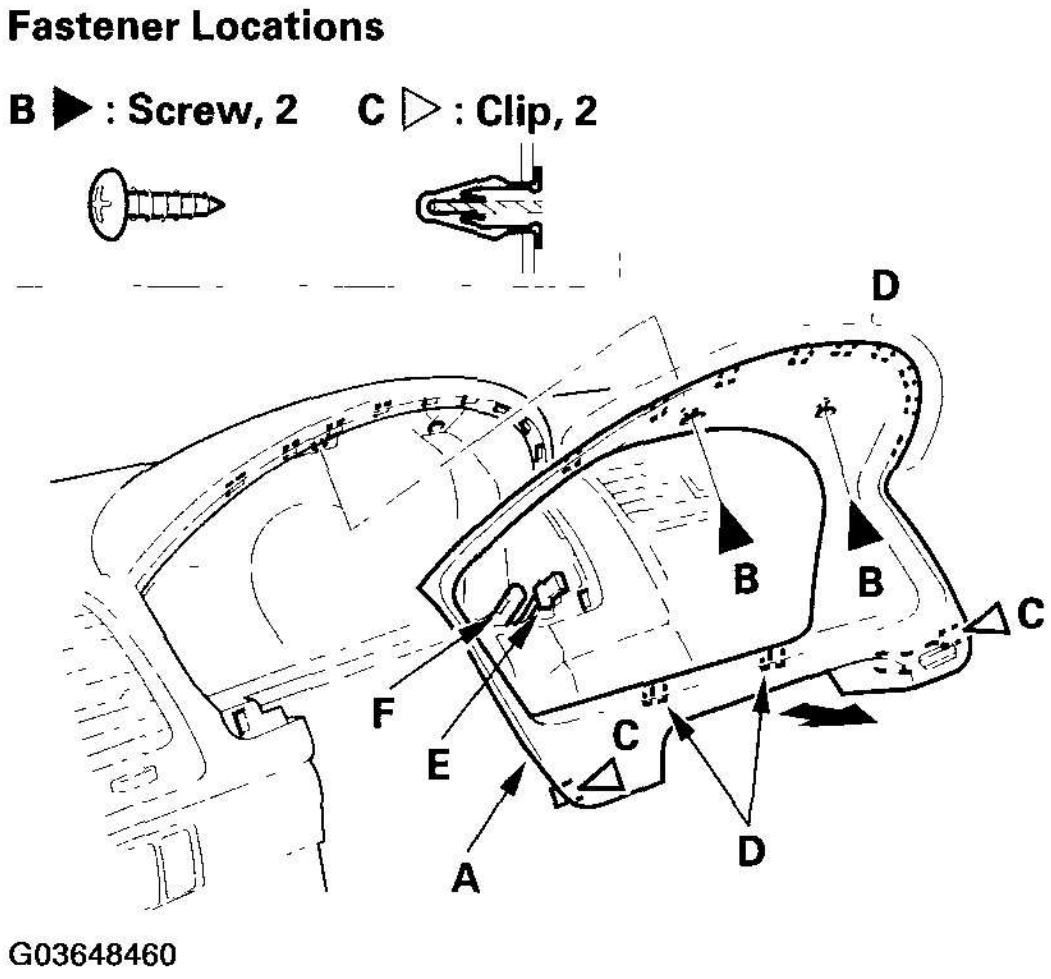


Fig. 1: Removing Instrument Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the panel in the reverse order of removal. If equipped, make sure the in-car temperature sensor connector is plugged in properly, and the air hose is connected securely.

INSTRUMENT UPPER VISOR REMOVAL/INSTALLATION

NOTE: Take care not to scratch the dashboard and related parts.

1. Remove these items:

- Instrument panel (see **INSTRUMENT PANEL REMOVAL/INSTALLATION**)
- Gauge control module

2. Remove the screws, then remove the instrument upper visor (A).

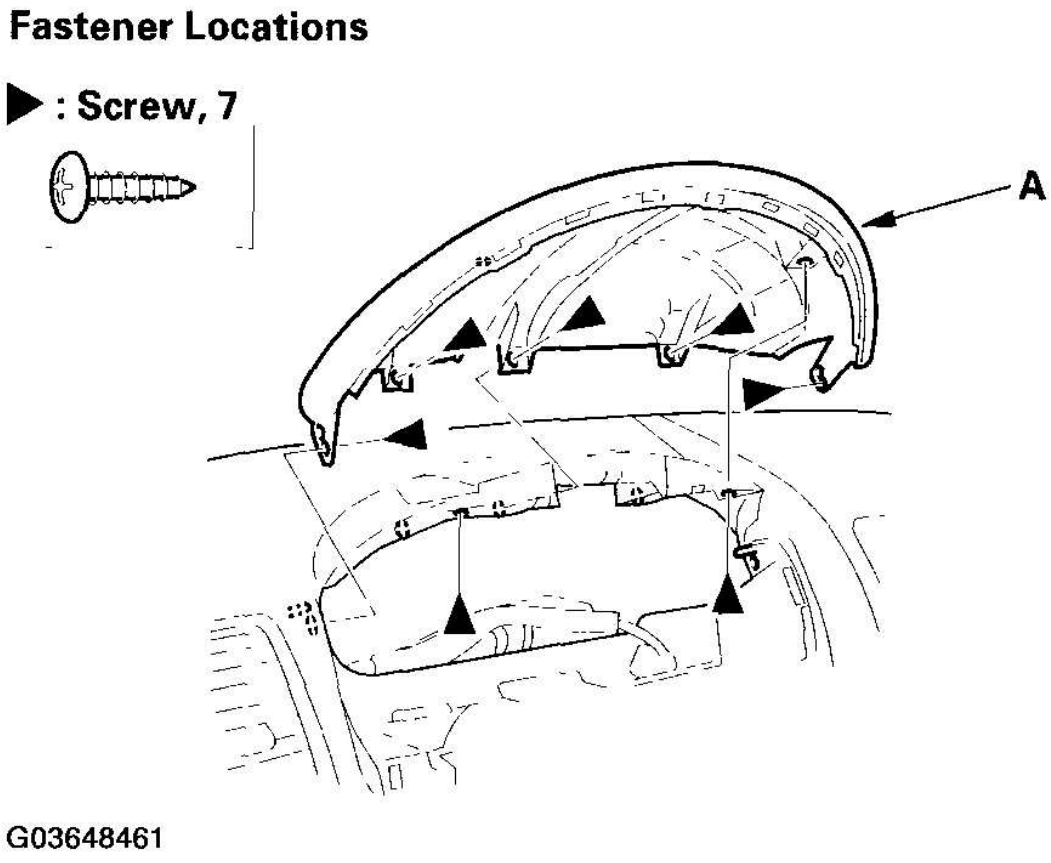


Fig. 2: Removing Instrument Upper Visor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the visor in the reverse order of removal.

DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION

NOTE:

- **Take care not to scratch the dashboard and related parts.**

- **When prying with a flat-tip screwdriver, wrap it with protective tape to prevent damage.**

1. Adjust the steering column upward.
2. Remove the screw (A).

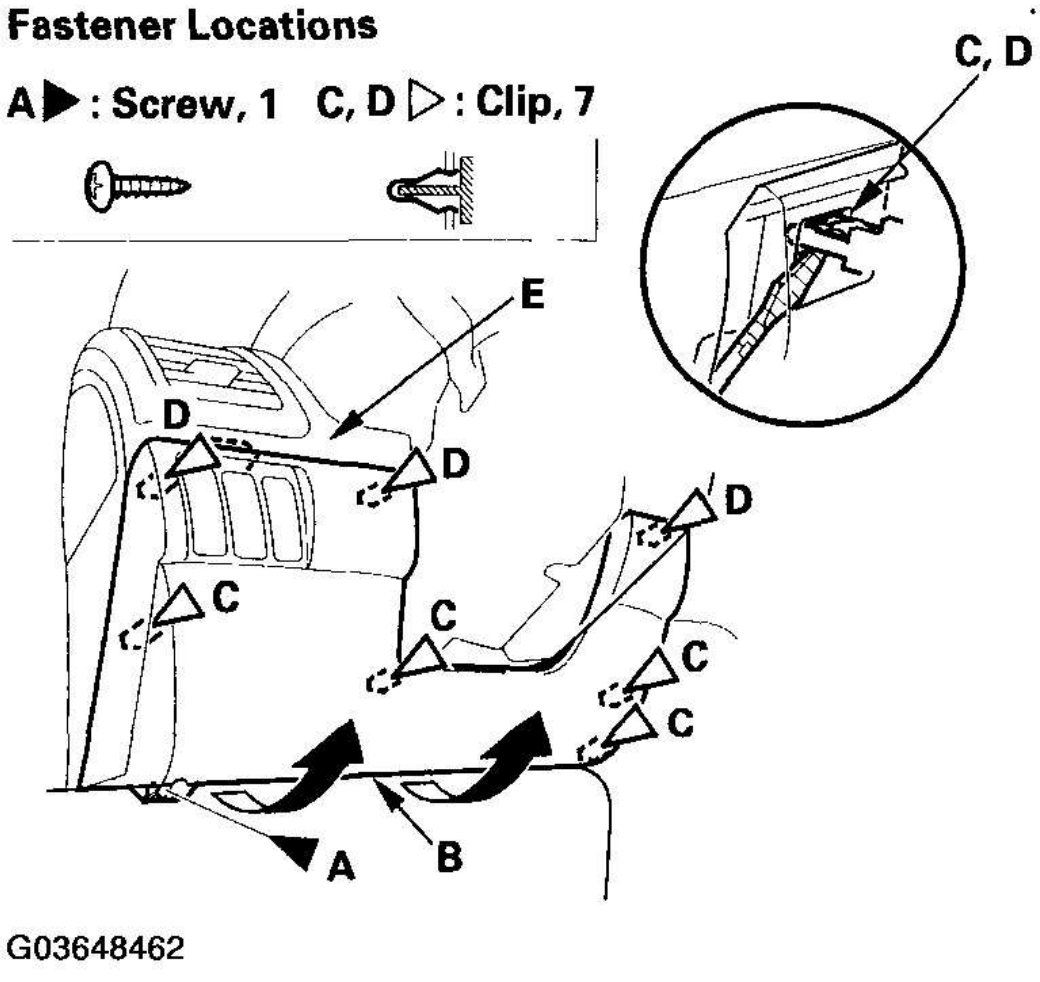


Fig. 3: Removing Driver's Dashboard Lower Cover Screw
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Pull out the bottom of the driver's dashboard lower cover (B) to detach the lower clips (C).

4. Detach the upper clips (D) and a hook (E) by pulling the driver's dashboard lower cover back.
5. If any of the clips (C, D) securing the driver's dashboard lower cover is hard to detach, pry it with a flat-tip screwdriver.
6. Remove the driver's dashboard lower cover (A). If equipped, disconnect the moonroof switch connector (B).

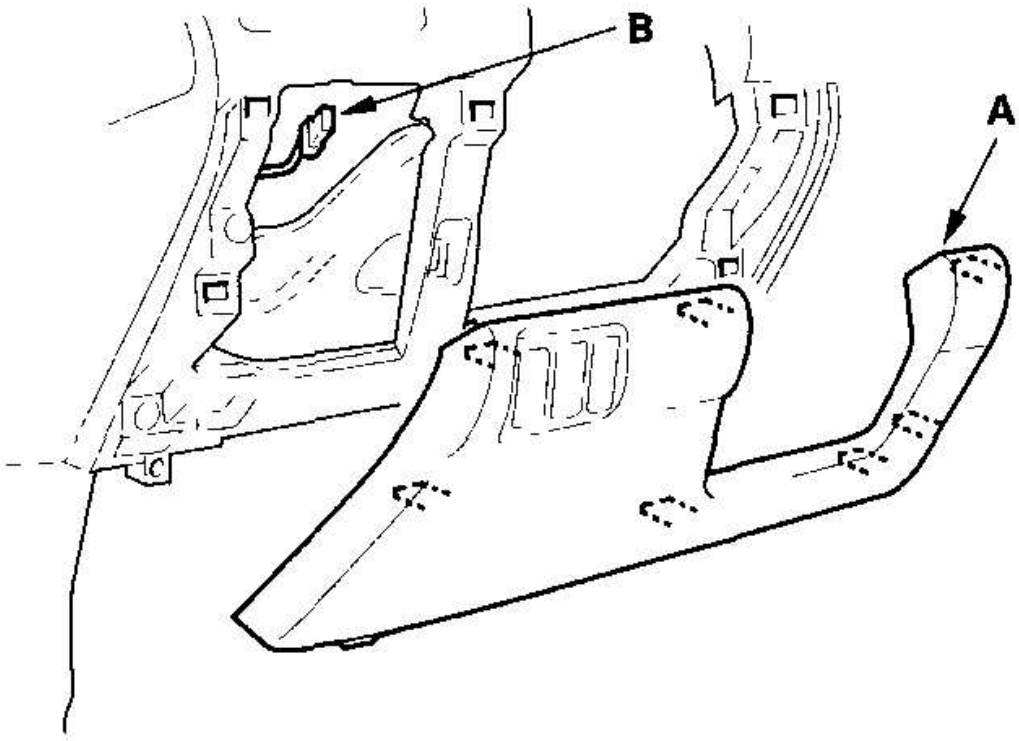


Fig. 4: Removing Driver's Dashboard Lower Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the cover in the reverse order of removal, and make sure each connector is plugged in properly.

DRIVER'S DASHBOARD UNDER COVER REMOVAL/INSTALLATION

'04-07 MODELS

NOTE: Take care not to scratch the dashboard and related parts.

1. Remove the driver's dashboard lower cover (see **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**).
2. Remove the driver's dashboard under cover (A).
   -1 Gently pull down the rear edge to detach the clips.
   -2 Pull the cover away to release the pins (B) from the holders (C).

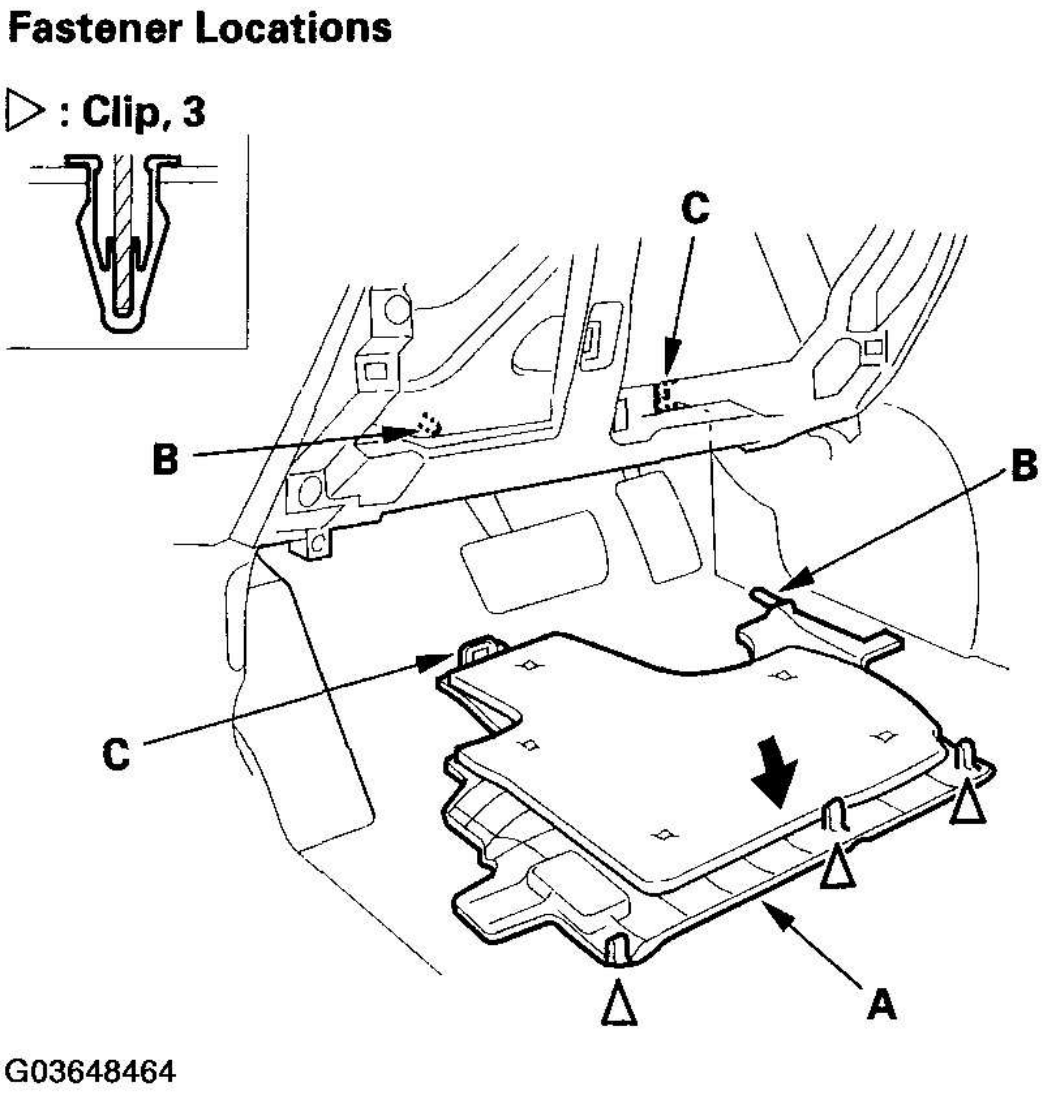


Fig. 5: Removing Driver's Dashboard Under Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the cover in the reverse order of removal.

UPPER PANEL REMOVAL/INSTALLATION

Special Tools Required

Upper panel/vent removal tool 07AAC-SDAA100

NOTE: Take care not to scratch the dashboard and related parts.

1. Push the hazard warning switch button (A). Carefully insert a flat-tip screwdriver into the slot (B) below the button, and push down on the center clip.

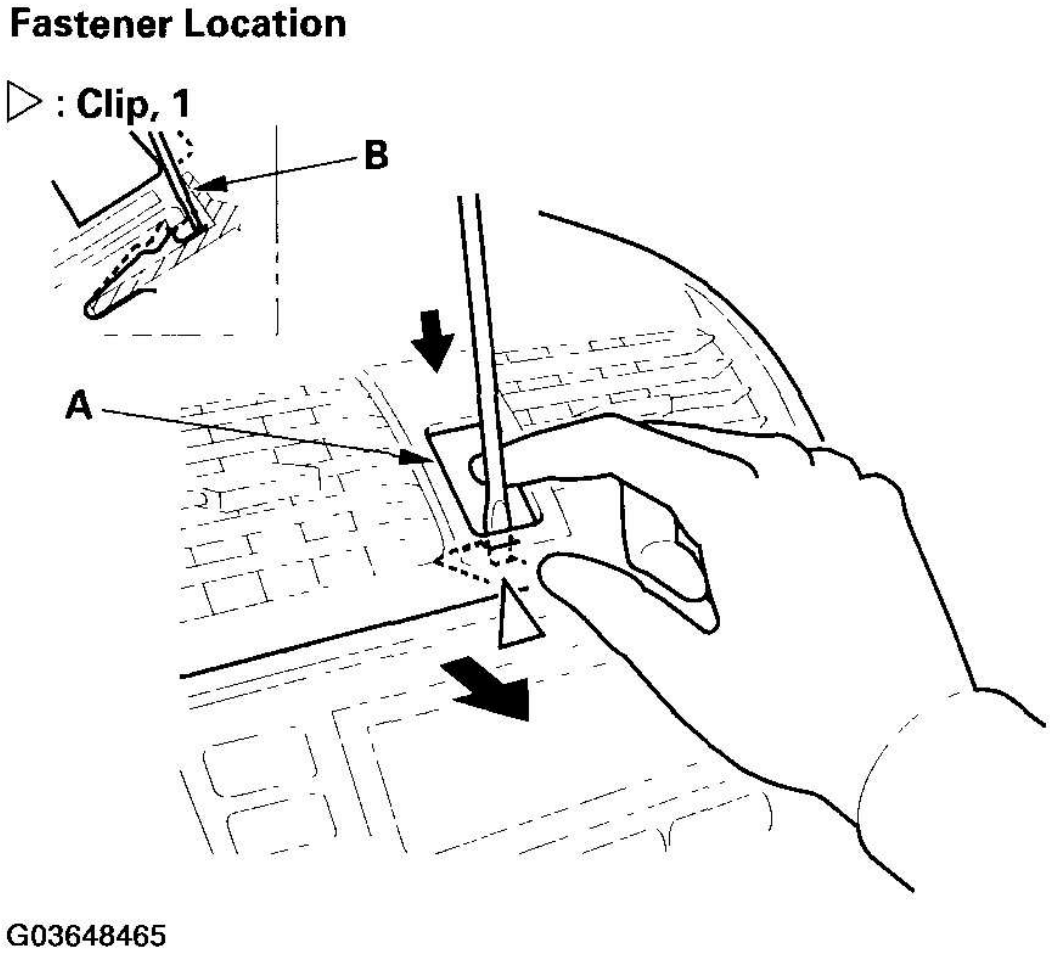


Fig. 6: Pushing Hazard Warning Switch Button
Courtesy of AMERICAN HONDA MOTOR CO., INC.

With the special tool and a flat-tip screwdriver

2. Set both ends of the special tool in the center vent openings (A) as shown below. While pressing the center clip (B) down, pull the upper panel (C) back with the tool to detach the clips (D).

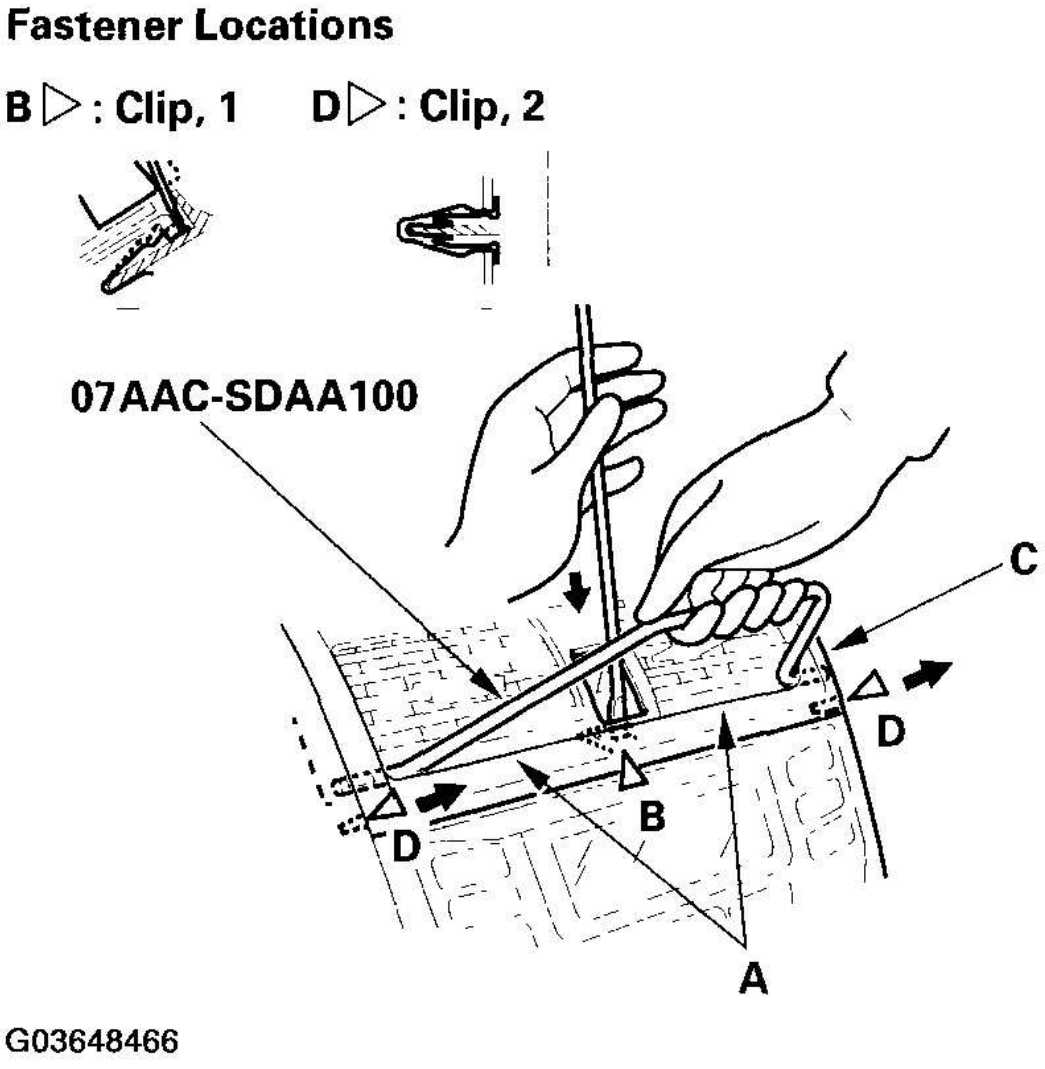


Fig. 7: Setting Both Ends Of Special Tool In Center Vent Openings
Courtesy of AMERICAN HONDA MOTOR CO., INC.

With two flat-tip screwdrivers

3. Carefully insert a flat-tip screwdriver wrapped with tape into the slot (A) on

one side of the upper panel (B). While pressing down on the center clip (C), carefully pull out on the side of the panel to detach the clips (D). Repeat this operation on the other side of the panel.

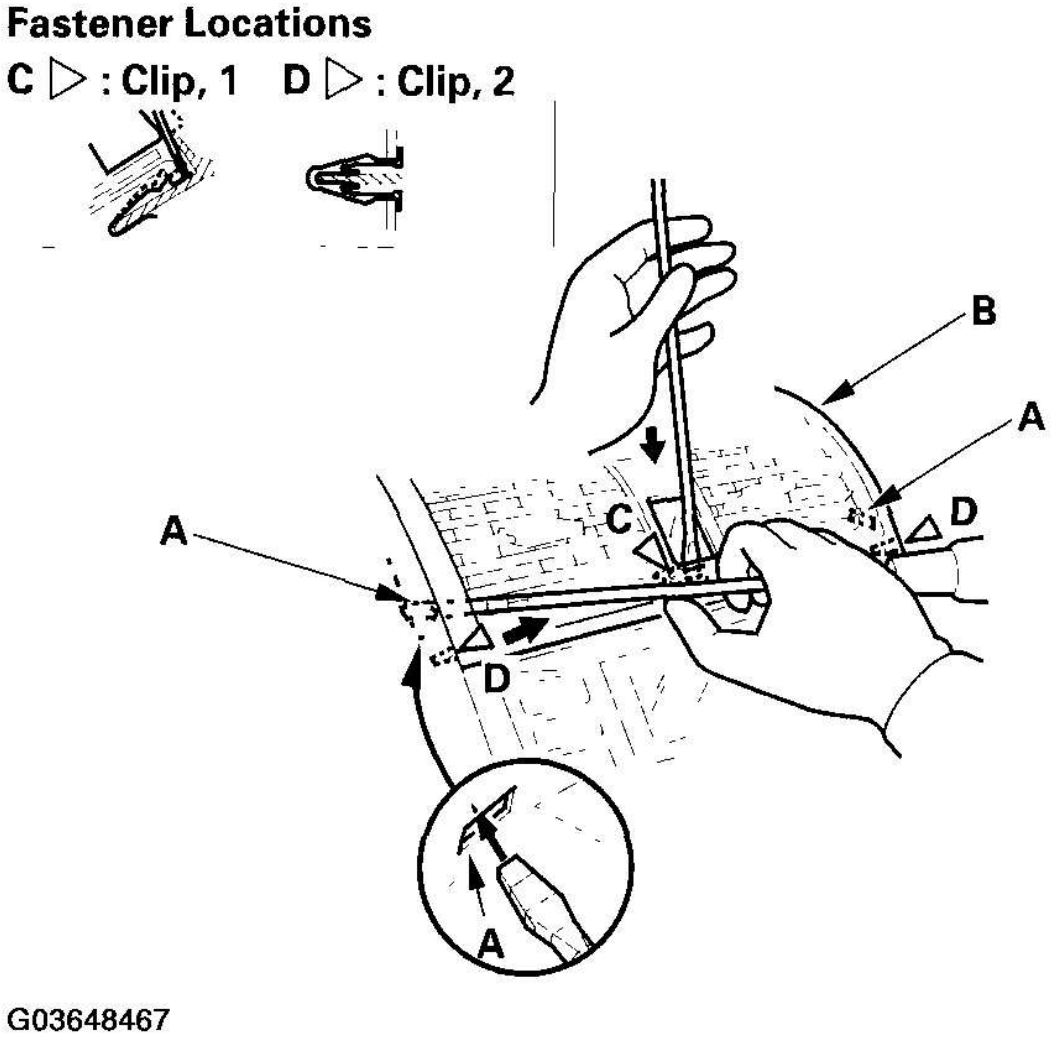


Fig. 8: Inserting Flat-Tip Screwdriver Wrapped With Tape Into Slot On Side Of Upper Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Pull the upper panel (A) in the direction shown in **Fig. 9** to release the remaining clips, disconnect the hazard warning switch connector (B), and if

equipped, sunlight sensor connector (C) and navigation subdisplay connector (D). Detach the harness clips (E), then remove the upper panel.

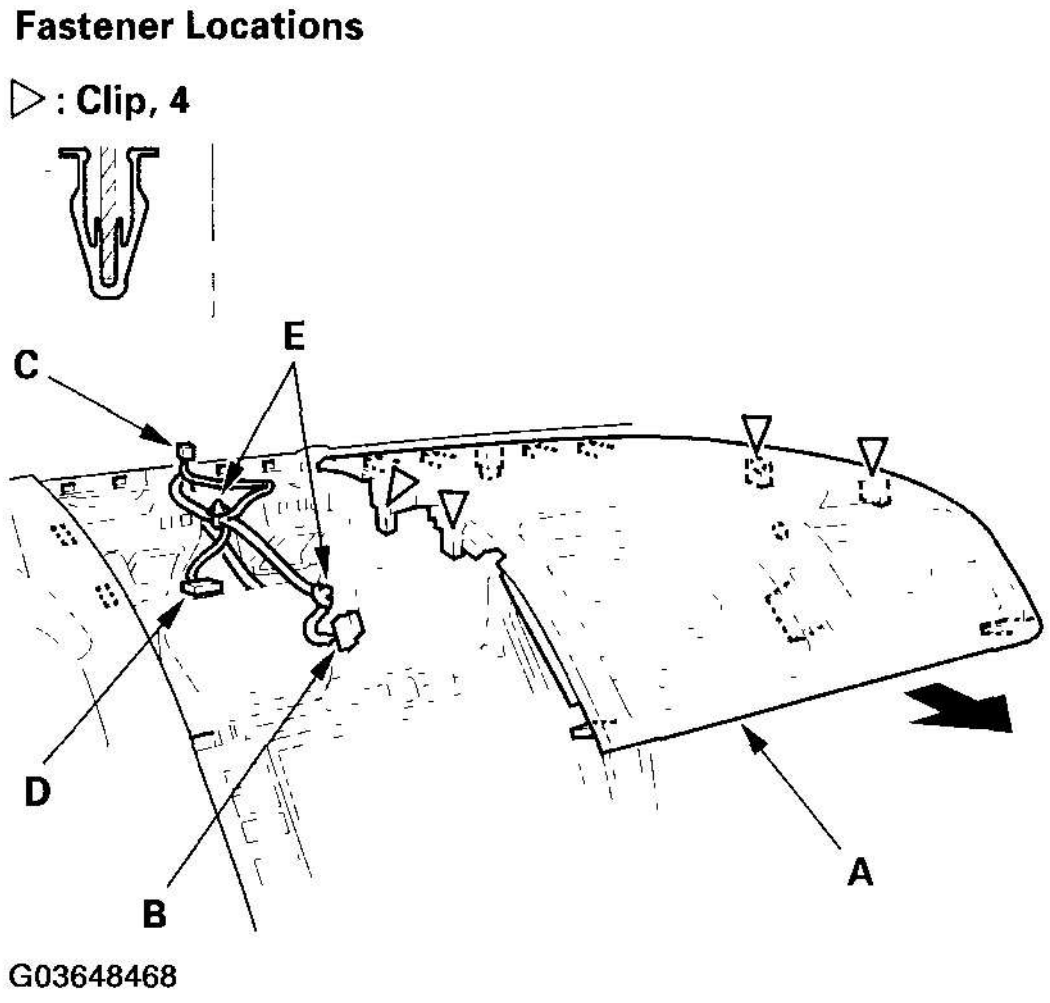


Fig. 9: Pulling Upper Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the panel in the reverse order of removal, and make sure each connector is plugged in properly.

CENTER POCKET REMOVAL/INSTALLATION

SRS components are located in this area. Review the SRS component locations (see

COMPONENT LOCATION INDEX) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to scratch the dashboard and related parts.**

1. Remove the center holder (see **CENTER CONSOLE REMOVAL/INSTALLATION**).
2. Remove the center pocket (A).
   -1 Remove the screws (B).
   -2 Open the lid, then pull the pocket back by hand to detach the clips (C).
   -3 Close the lid, then remove the pocket.

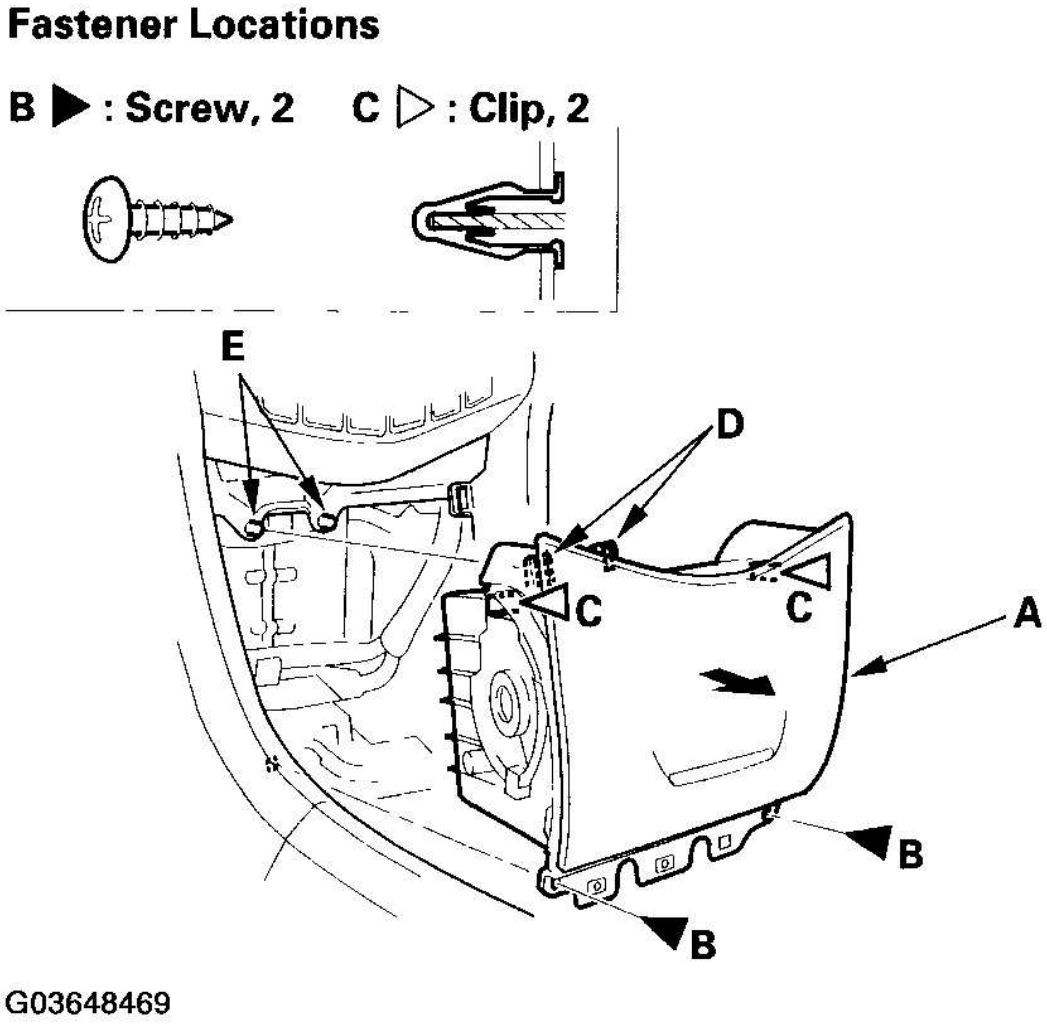


Fig. 10: Removing Center Pocket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the pocket in the reverse order of removal, and note these items:
   - Make sure the holders (D) are installed onto the pins (E) properly.
   - Push the clipped portions into place securely.
   - Make sure the center pocket lid opens smoothly.

GLOVE BOX REMOVAL/INSTALLATION

Special Tools Required

KTC trim tool set SOJATP2014

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:

- **Take care not to scratch the dashboard and related parts.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Detach the hook (A) of the glove box damper (B), and remove the screws.

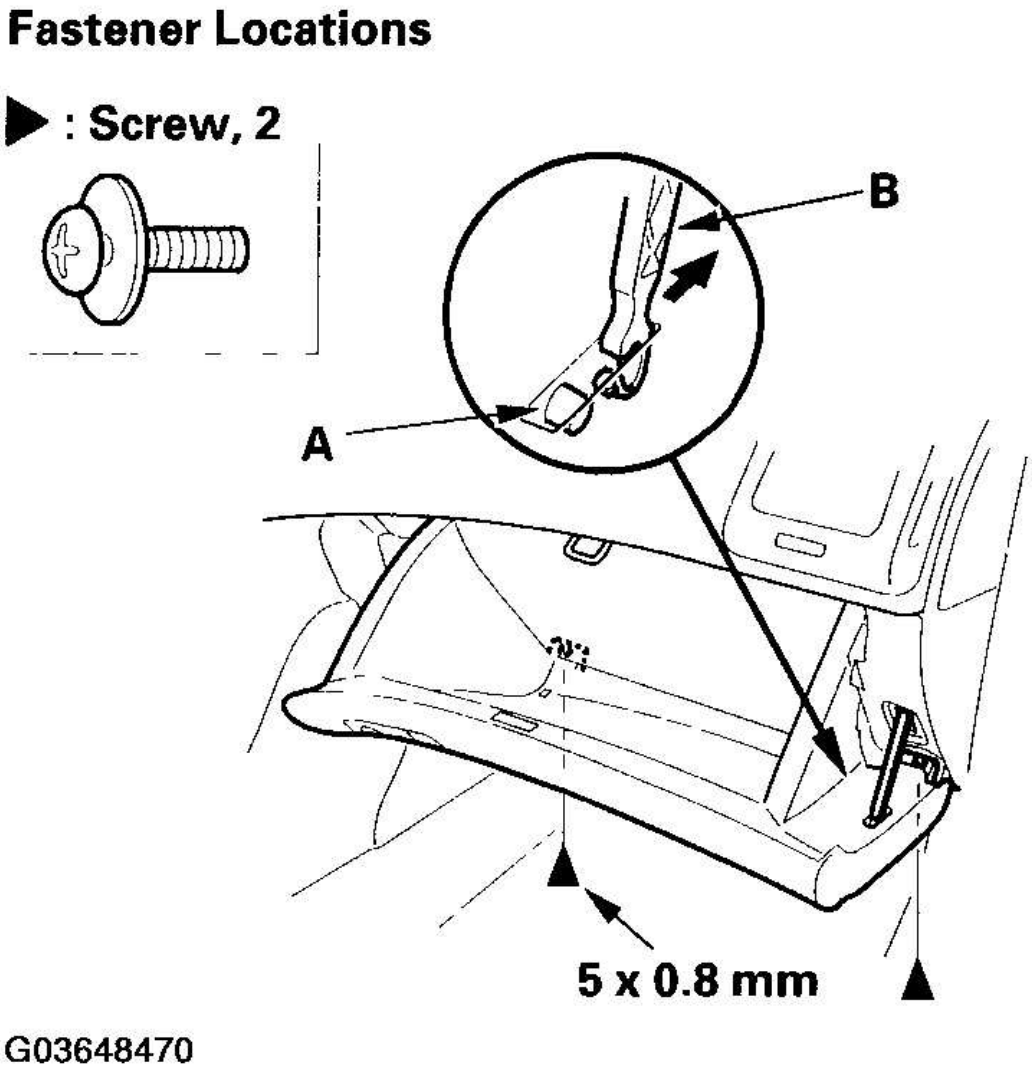


Fig. 11: Detaching Hook Of Glove Box Damper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. While holding the glove box (A), release the glove box stop (B) on each side from the dashboard by pushing them in, then remove the glove box.

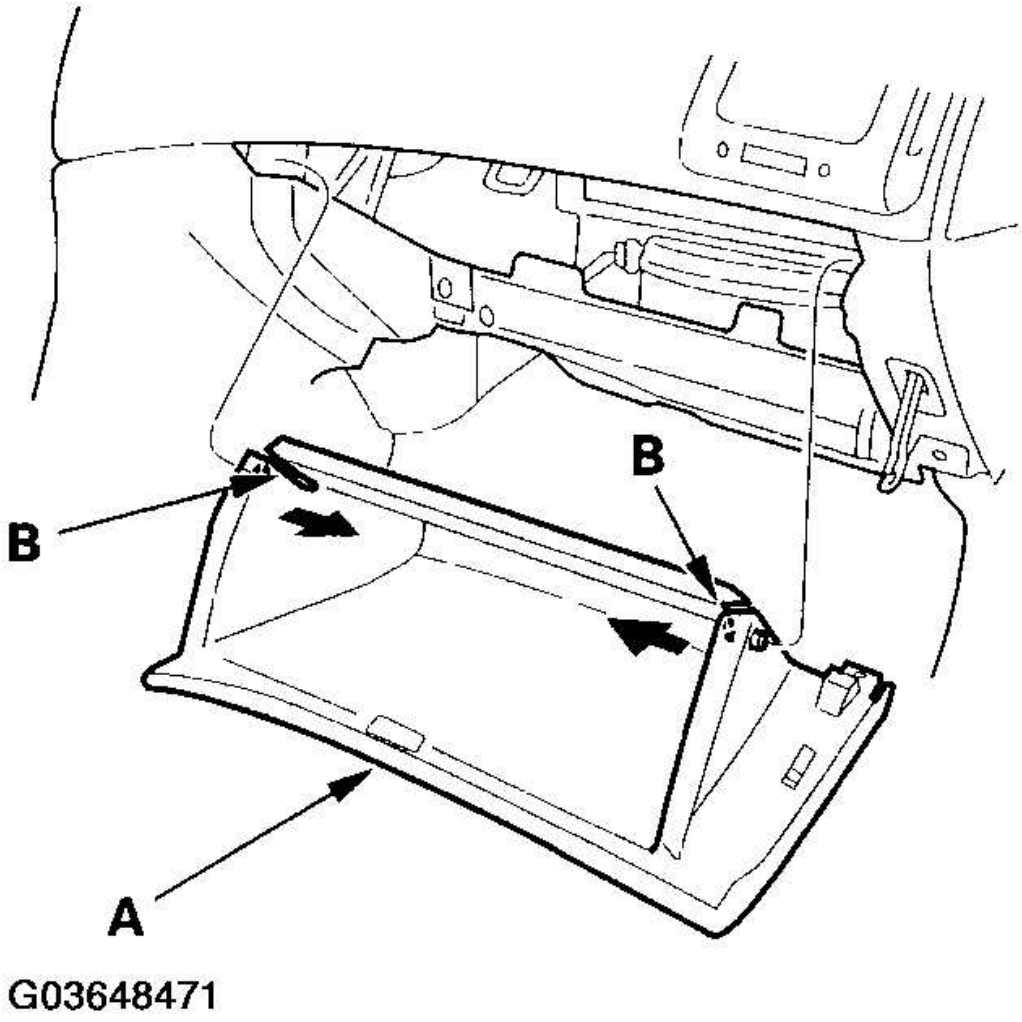


Fig. 12: Releasing Glove Box Stop On Each Side From Dashboard Pushing In
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Open the passenger's door, and gently pull out on the front of the dashboard side cover (A) to release the hooks (B), and remove the cover.

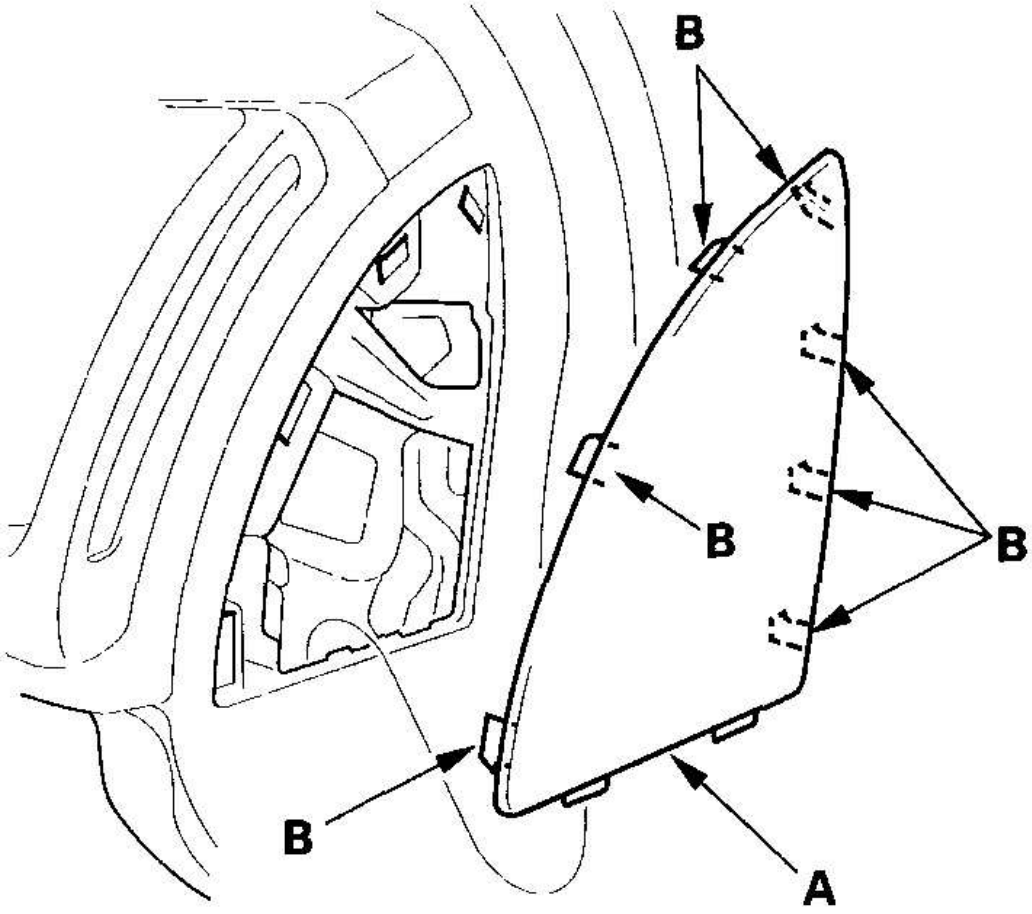


Fig. 13: Pulling Out Front Of Dashboard Side cover To Release Hooks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the screw, then remove the glove box damper (A).

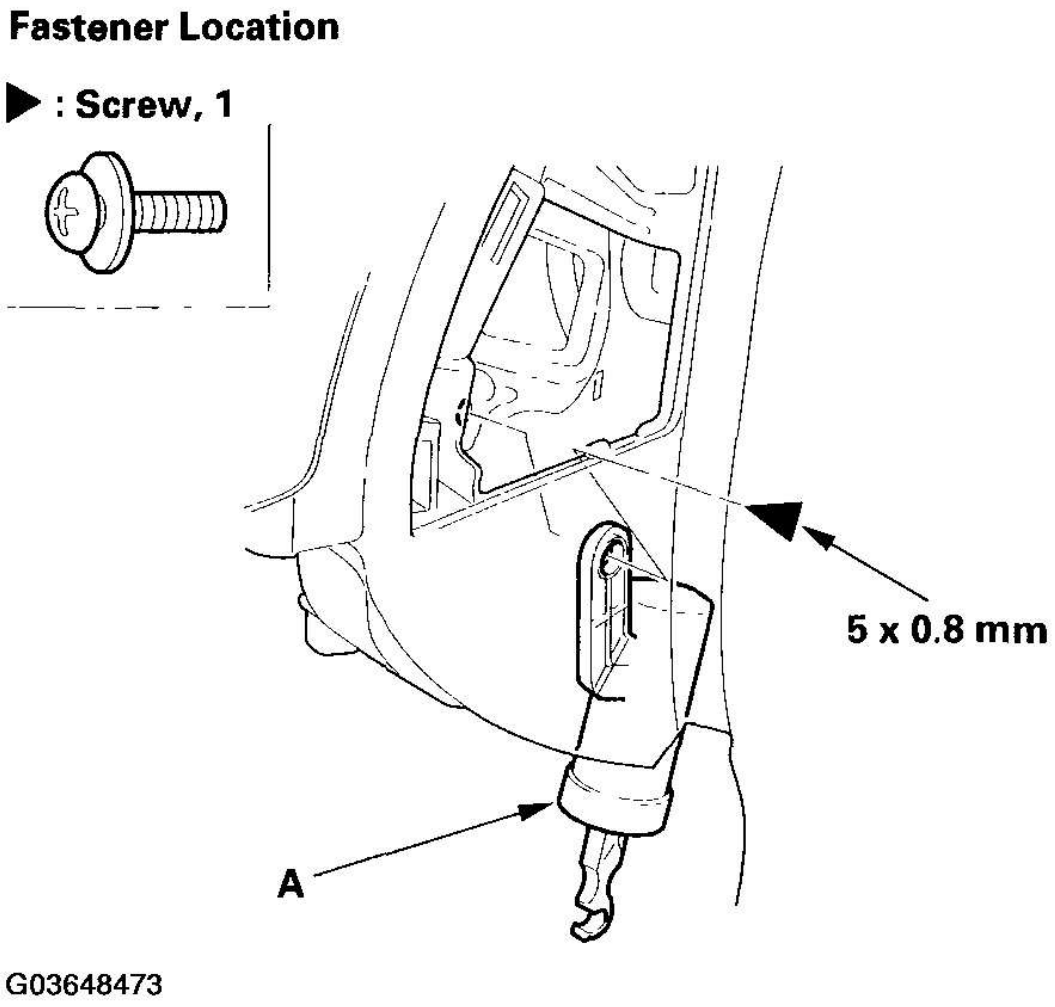


Fig. 14: Removing Glove Box Damper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the glove box in the reverse order of removal.

GLOVE BOX LOCK CYLINDER REPLACEMENT

NOTE: Take care not to scratch the glove box.

1. Remove the glove box (see **GLOVE BOX REMOVAL/INSTALLATION**).
2. Pull out the glove box knob (A) and use a hooked-shaped tool to pull the top

end of the retainer (B) out of its slot (C).

NOTE: Do not remove the retainer entirely. Leave the other side of it in the original position when removing and installing the lock cylinder.

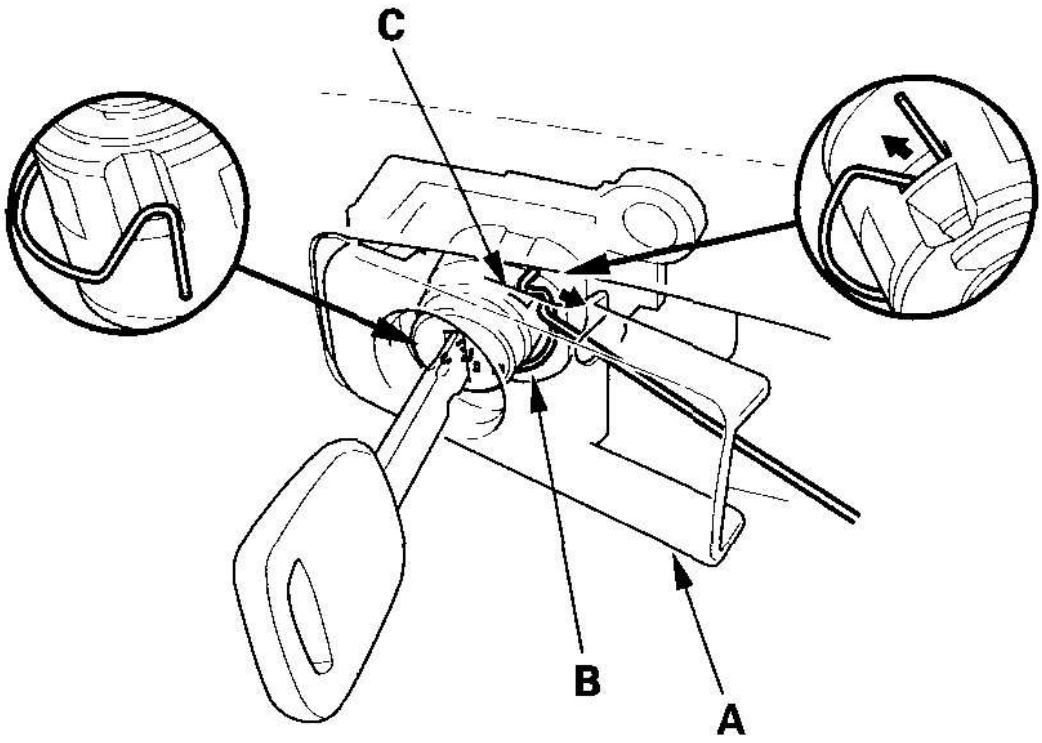


Fig. 15: Removing Glove Box Knob
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the glove box lock cylinder (A).

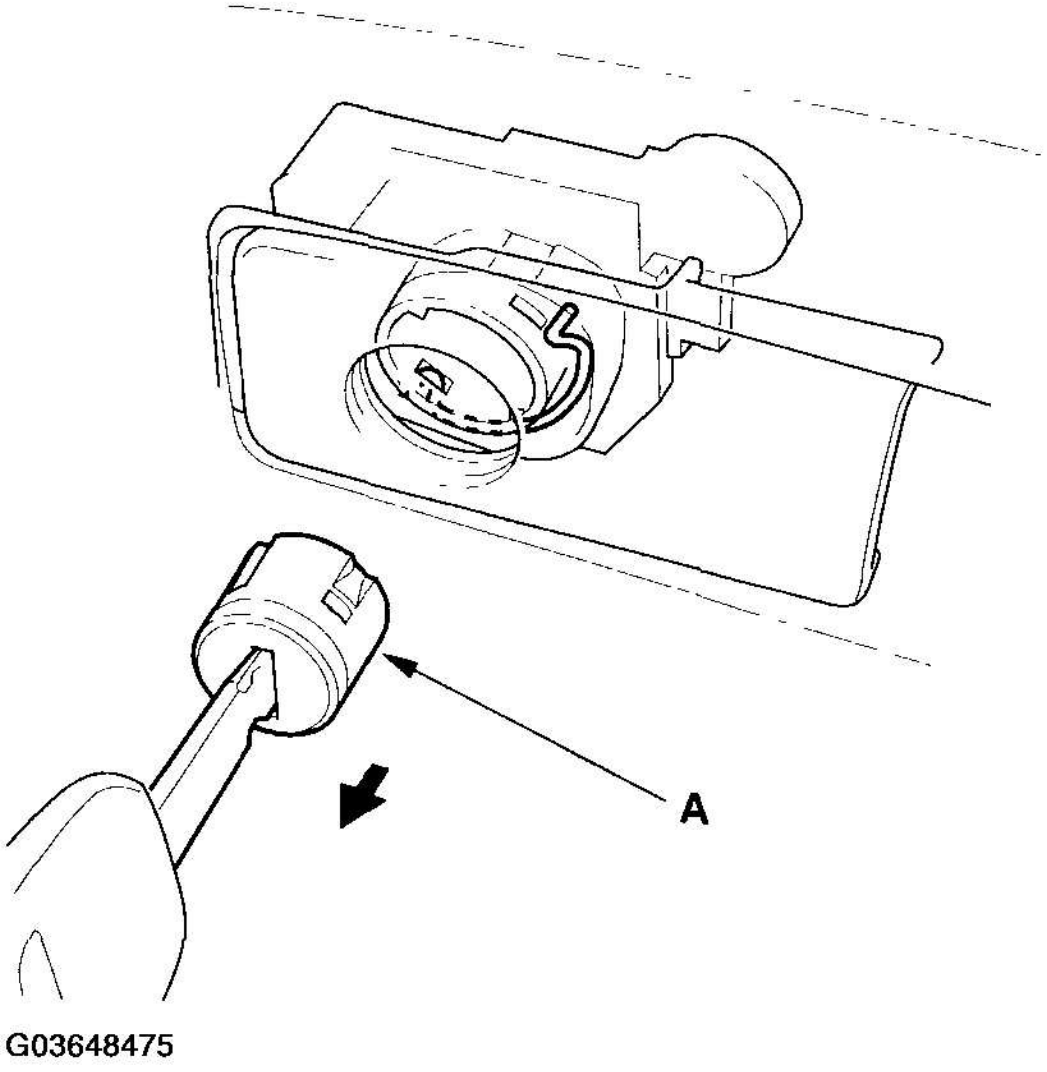


Fig. 16: Removing Glove Box Lock Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Reinstall the top of the retainer (A) in its original position, then reinstall the lock cylinder (B). Push the cylinder into place securely until the retainer snaps into place.

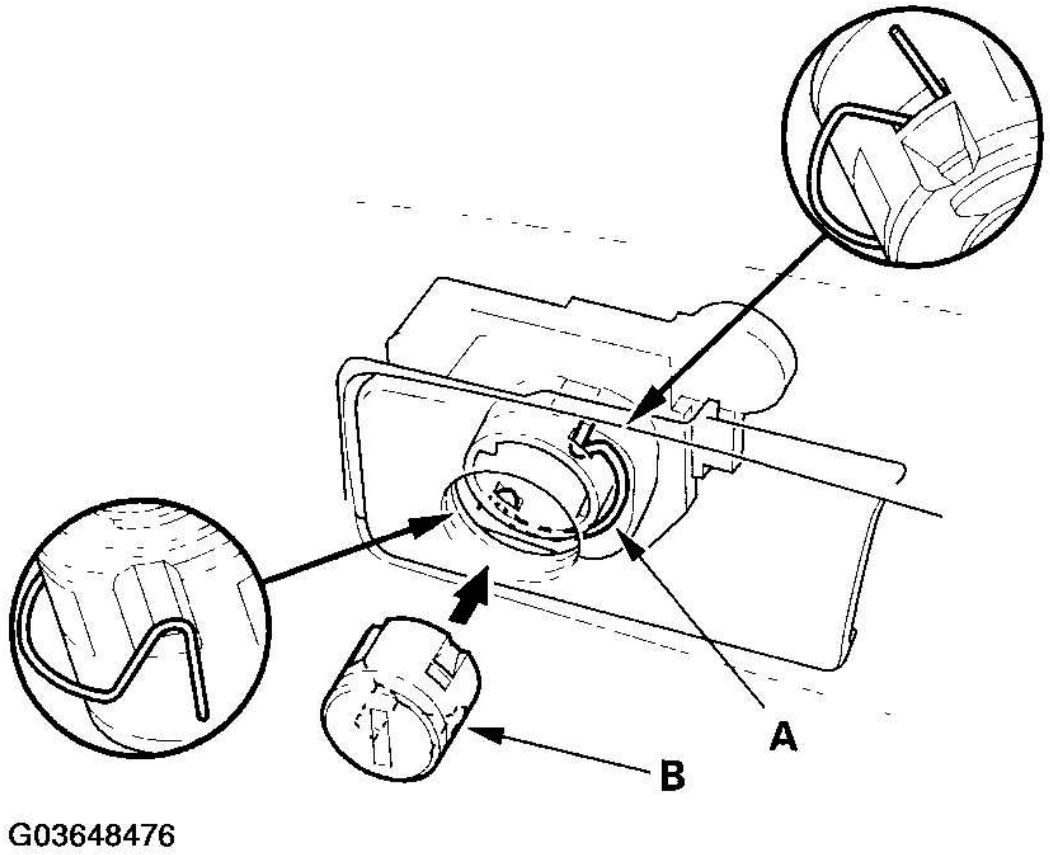


Fig. 17: Reinstalling Top Of Retainer In Original Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PASSENGER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION

NOTE: Take care not to scratch the dashboard and related parts.

1. Remove the passenger's dashboard lower cover (A).
   -1 Gently pull down the edge nearest the glove box to detach the clips.
   -2 Pull the cover away to release the pins (B) from the holders (C).

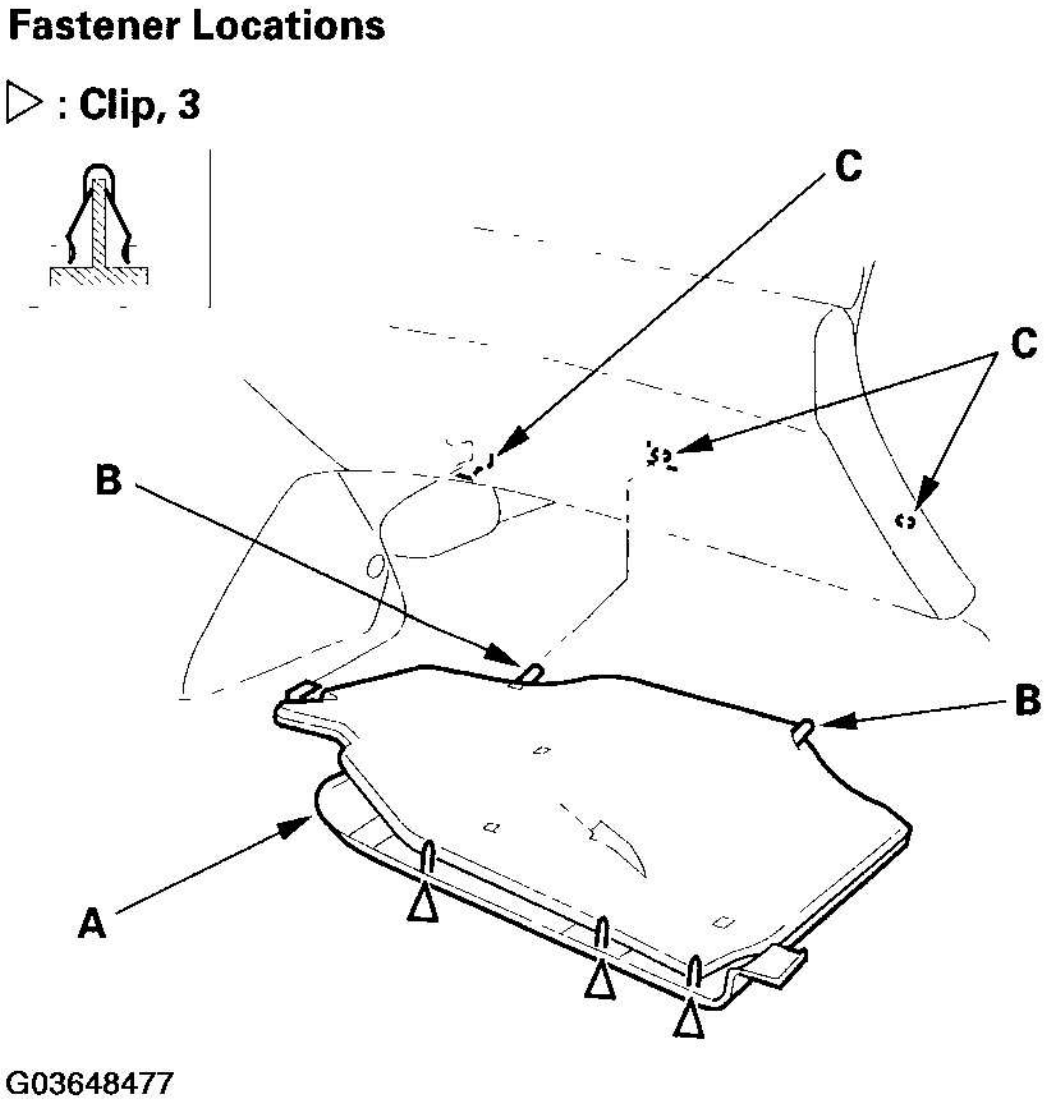


Fig. 18: Removing Passenger's Dashboard Lower Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the cover in the reverse order of removal.

DASHBOARD SIDE VENT REMOVAL/INSTALLATION

Special Tools Required

KTC trim tool set SOJATP2014

DRIVER'S

NOTE:

- **Take care not to scratch the dashboard and related parts.**
- **Put on gloves to protect your hands.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove the driver's dashboard lower cover (see **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**).
2. Push up the lower clips by hand, then push out the driver's side vent (A) by releasing the upper and side tabs (B).

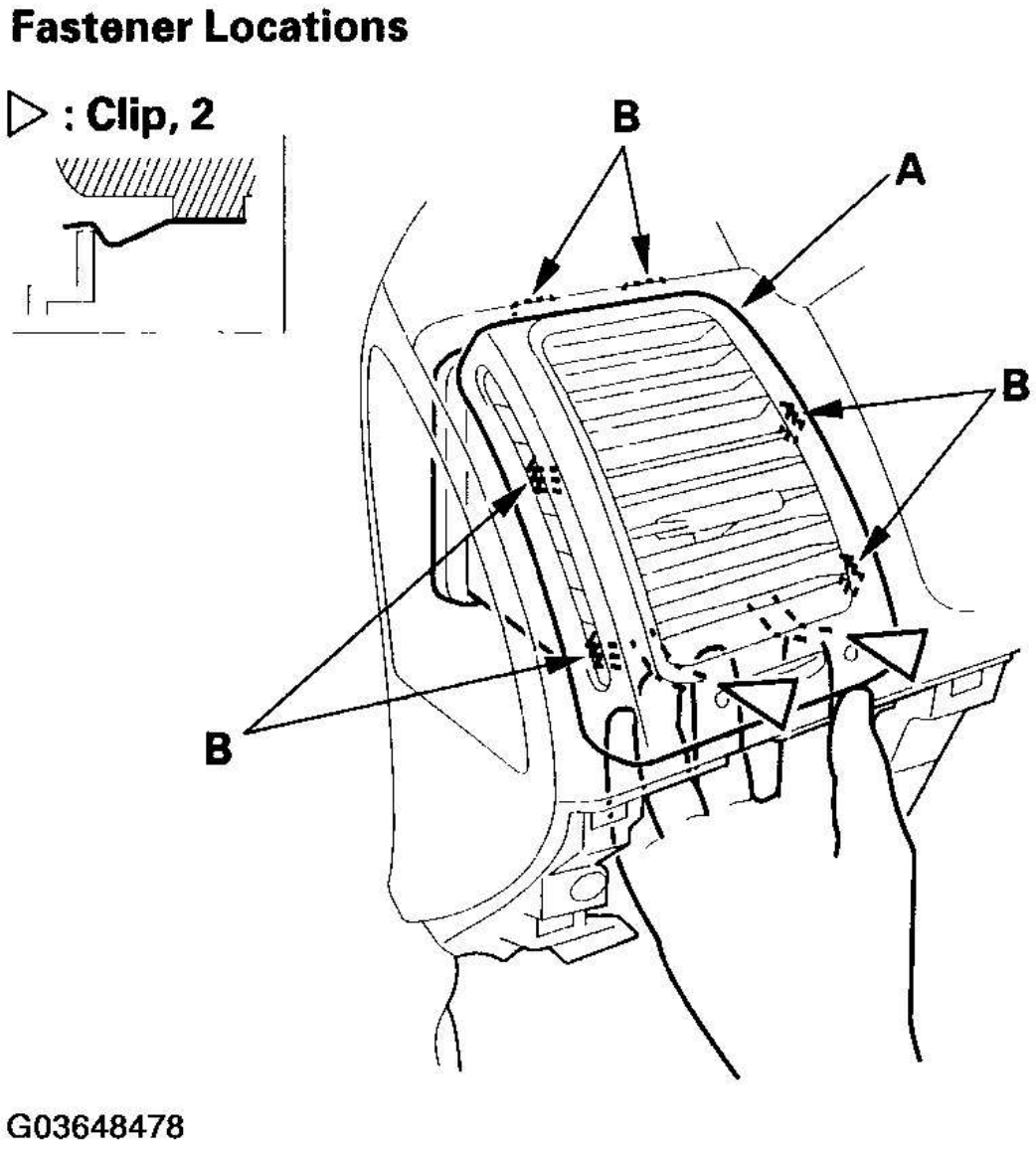


Fig. 19: Pushing Out Driver's Side Vent Releasing Upper And Tabs
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Reinstall the tab portions of the vent first, then push the clip portions into place securely.

PASSENGER'S

NOTE:

- **Take care not to scratch the dashboard and related parts.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Detach the hook of the glove box damper, then lower the glove box (see **GLOVE BOX REMOVAL/INSTALLATION**).
2. Carefully insert a flat-tip screwdriver under the clip, and push it up.
3. Pull out along the edge of the passenger's side vent (A) by hand to release the lower clips and the upper and side tabs (B). Then remove the vent.

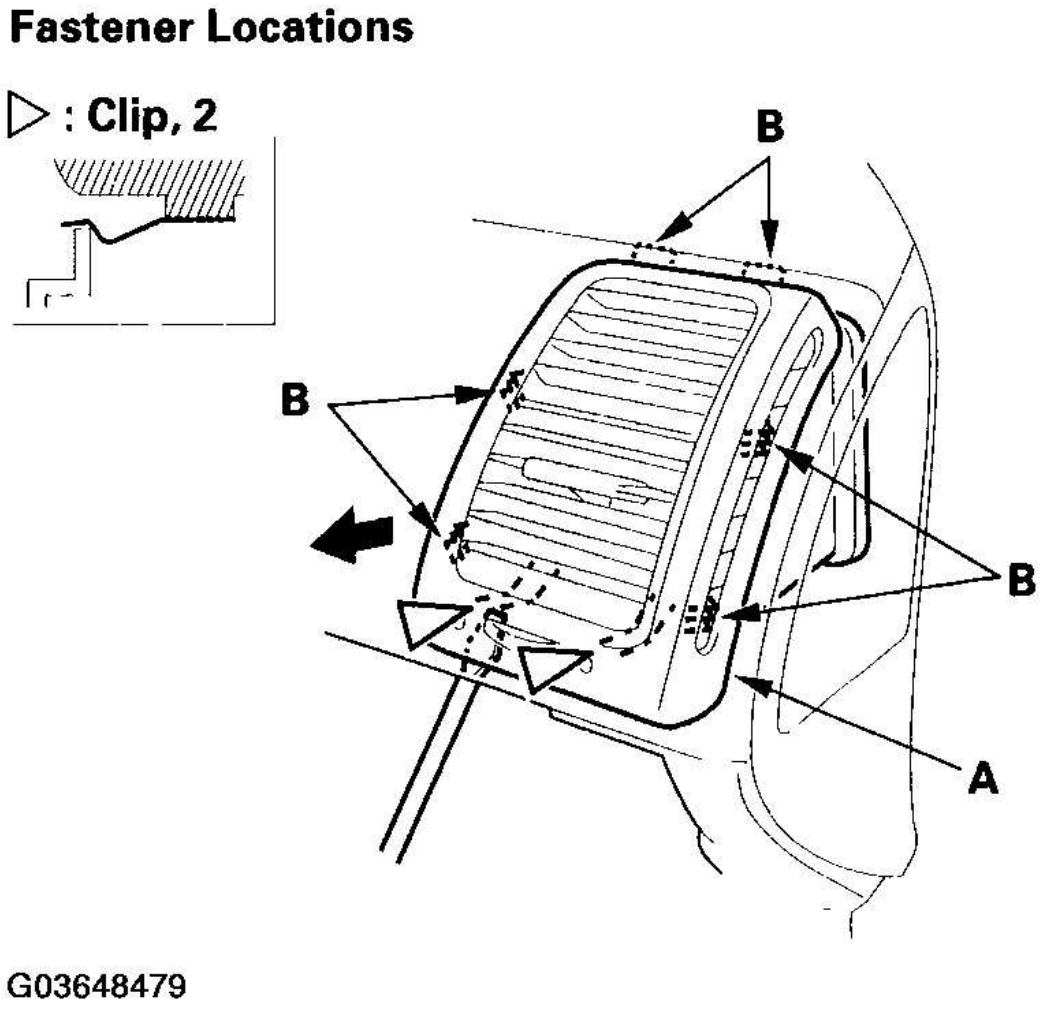


Fig. 20: Pulling Out Edge Of Passenger's Side Vent To Release Lower Clips And Upper & Side Tabs
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Reinstall the tab portions of the vent first, then push the clip portions into place securely.

DASHBOARD/STEERING HANGER BEAM REMOVAL/INSTALLATION

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see

PRECAUTIONS AND PROCEDURES) before performing repairs or service.

NOTE:

- **When prying with a flat-tip screwdriver, wrap it with protective tape, and apply protective tape around the related parts to prevent damage.**
- **Have an assistant help you when removing and installing the dashboard/steering hanger beam.**
- **Take care not to scratch the dashboard, body and other related parts.**
- **Put on gloves to protect your hands.**

1. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the frequencies for the preset buttons.
2. Disconnect the negative cable from the battery, and wait at least 3 minutes before beginning work.
3. Remove these items:
   - Center console (see **CENTER CONSOLE REMOVAL/INSTALLATION**)
   - Driver's dashboard lower cover (see **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**)
   - Passenger's dashboard lower cover**PASSENGER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**
   - Center pocket (see **CENTER POCKET REMOVAL/INSTALLATION**)
   - Glove box (see **GLOVE BOX REMOVAL/INSTALLATION**).
   - Driver's dashboard under cover (see **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**
   - Kick panels, both sides, 2-door (see **2-DOOR - DOOR SILL AREA**), 4-door (see **4-DOOR - FRONT DOOR SILL AREA**)
   - A-pillar trim, both sides, 2-door without side curtain airbags (see **A-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**), 2-door with side curtain airbags (see **A-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-06 MODELS)** , 4-door without side

curtain airbags (see **A-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)).** ,), 4-door with side curtain airbags (see **A-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-06 MODELS)**).

- Steering column (see **STEERING COLUMN REMOVAL AND INSTALLATION**).

4. Remove the screw (A) and release the clip (B), then remove the driver's center lower cover (C) by releasing the hooks (D).

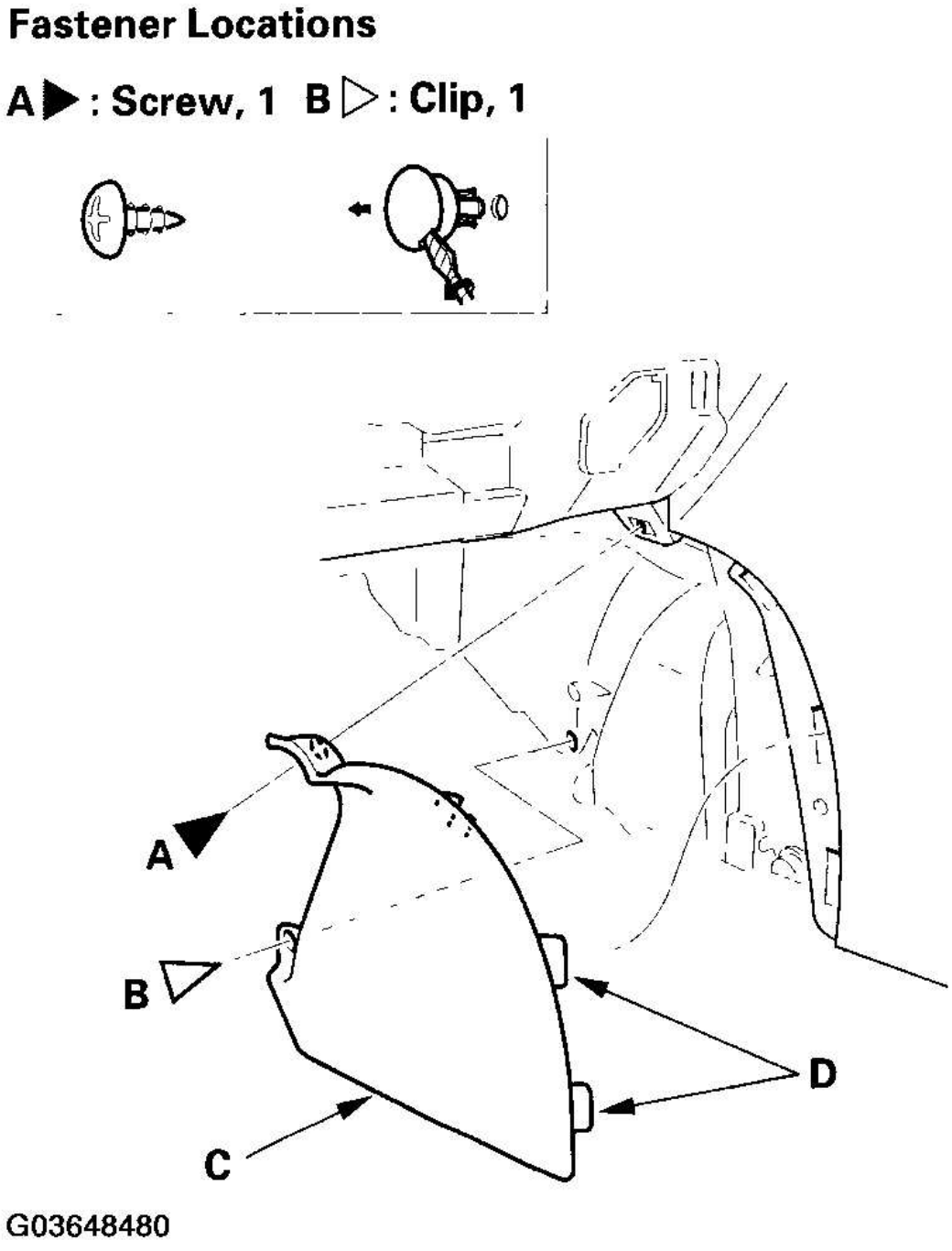


Fig. 21: Removing Driver's Center Lower Cover Releasing Hooks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Release the clip, then remove the passenger's center lower cover (A) and the rear vent duct (B) by releasing the hooks (D) and the hook (E) ('04-07 models).

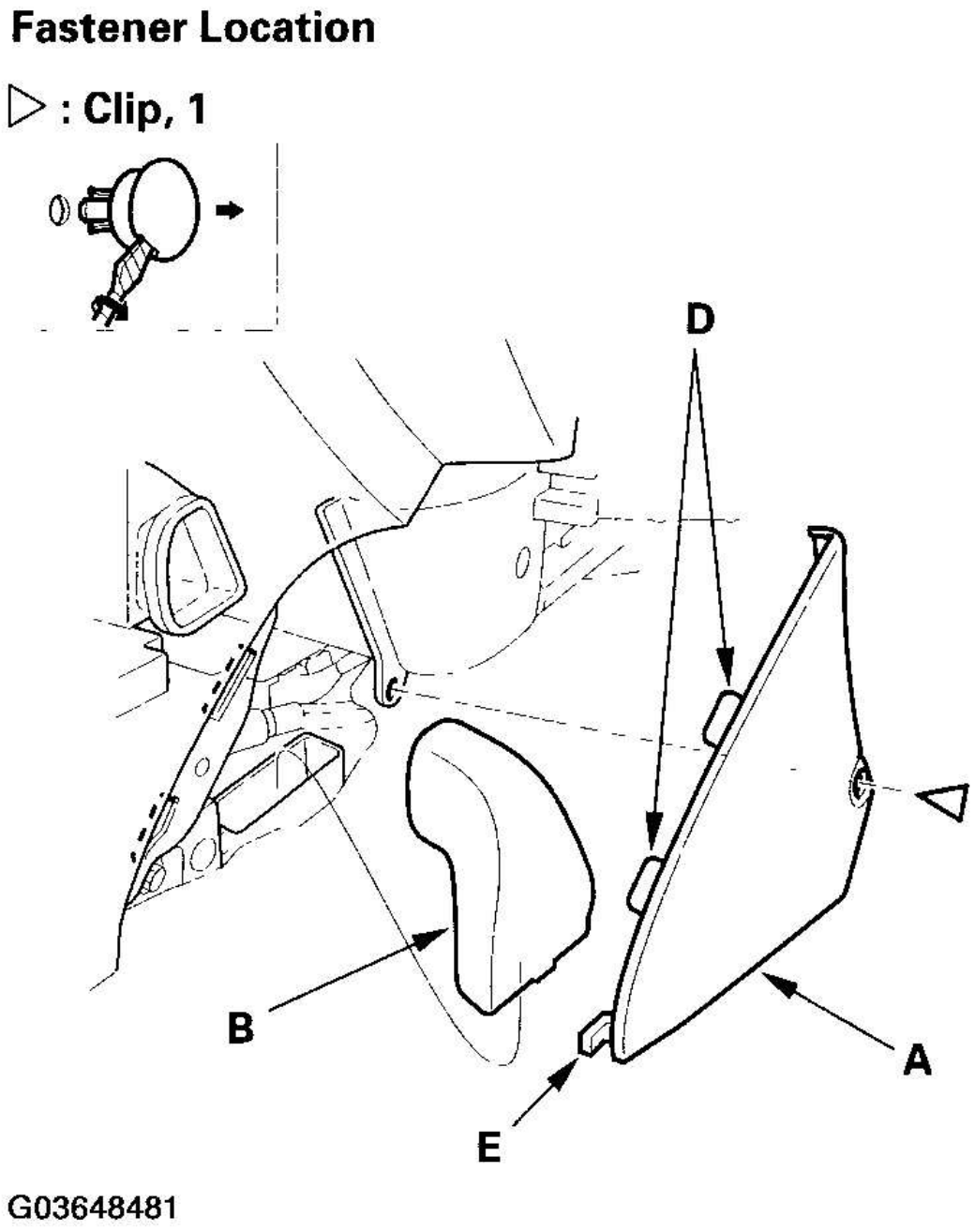


Fig. 22: Removing Passenger's Center Lower Cover And Rear Vent Duct

Releasing Hooks ('04-06 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the SRS control unit (see **SRS UNIT REPLACEMENT**).

Driver's side

7. From under the dash, disconnect the roof wire harness connector (A) (with moonroof), clutch switch connectors (B) (on M/T model), and brake switch connector (C), floor wire harness connectors (D), engine compartment wire harness connectors (E), and disconnect the dashboard wire harness connectors (F) from the under-dash fuse/relay box (G), then release the wire harness clip (H). On auto A/C model, disconnect the air hose (I).

NOTE: Lift the white wire harness connector locks (J) before trying to remove the connectors from the fuse box.

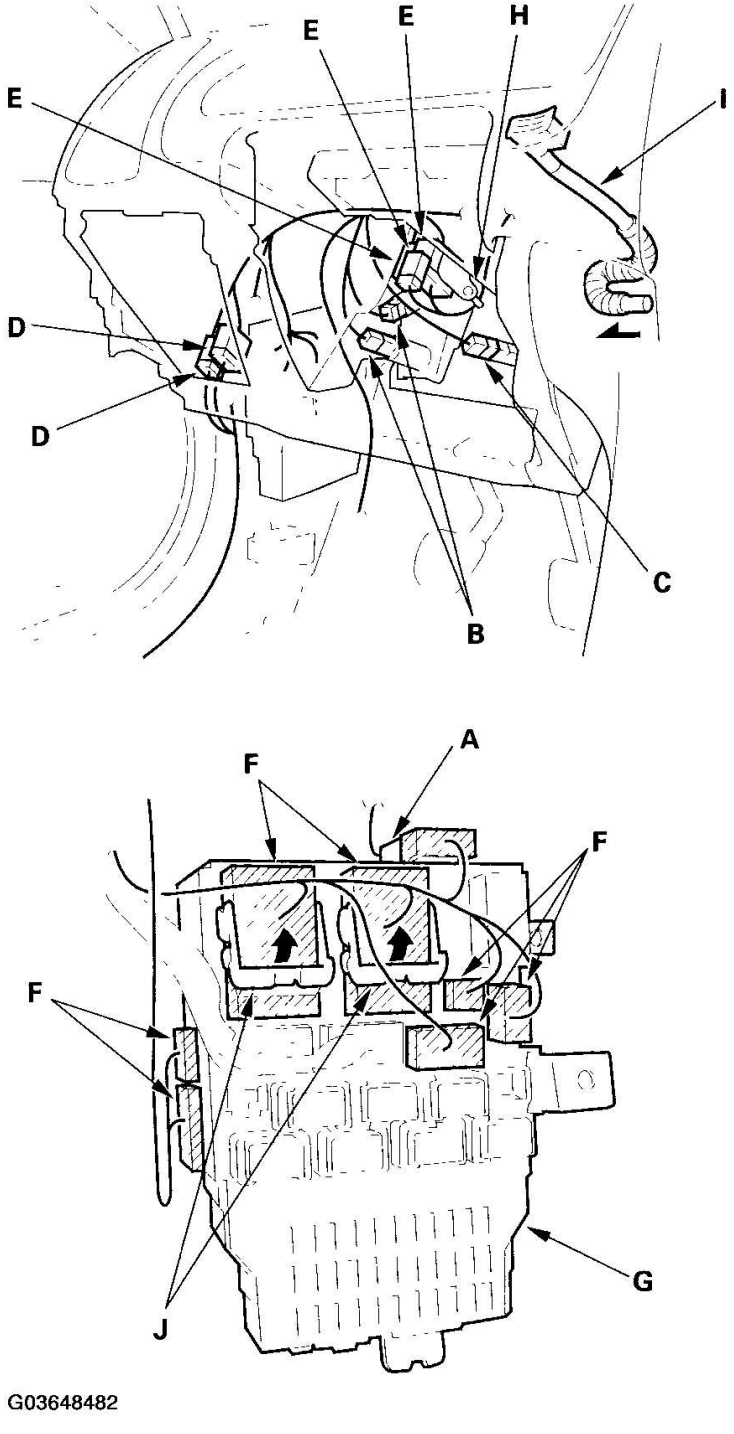


Fig. 23: Disconnecting Interior Wire Harness Connector (With Moonroof)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Middle portion (shift lever portion)

8. Disconnect the parking brake switch connector (A), radio antenna connector (B), antenna lead (C), and A/C subharness connector (D), then release the wire harness clips (E).

   Using a T30 Torx bit, remove the ground bolt (F). On A/T model, disconnect the parking pin switch connector (G) and shift lock solenoid connector (H).

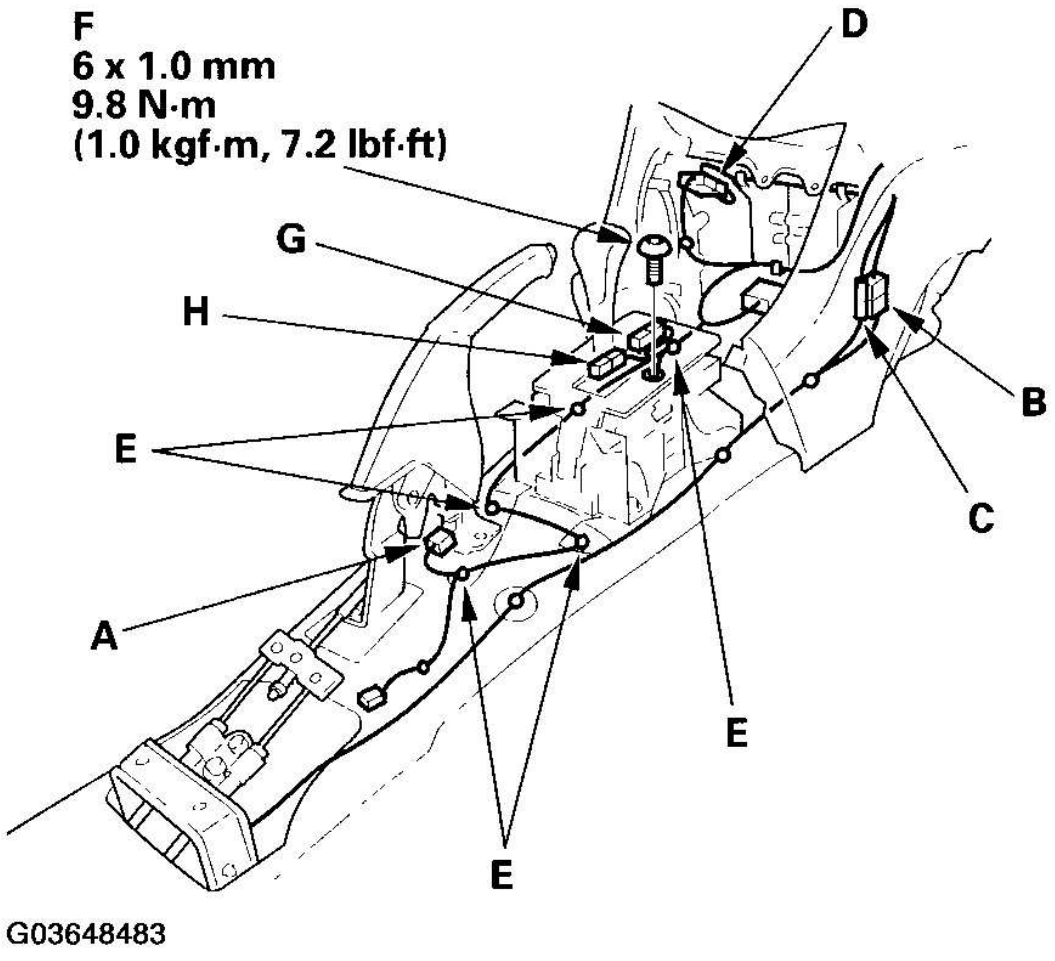


Fig. 24: Removing Parking Brake Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Middle portion (passenger's side)

9. From under the dash, disconnect the ECM/PCM connector (A), power transistor connector (B), and engine wire harness connector (C), then release the wire harness clips (D).

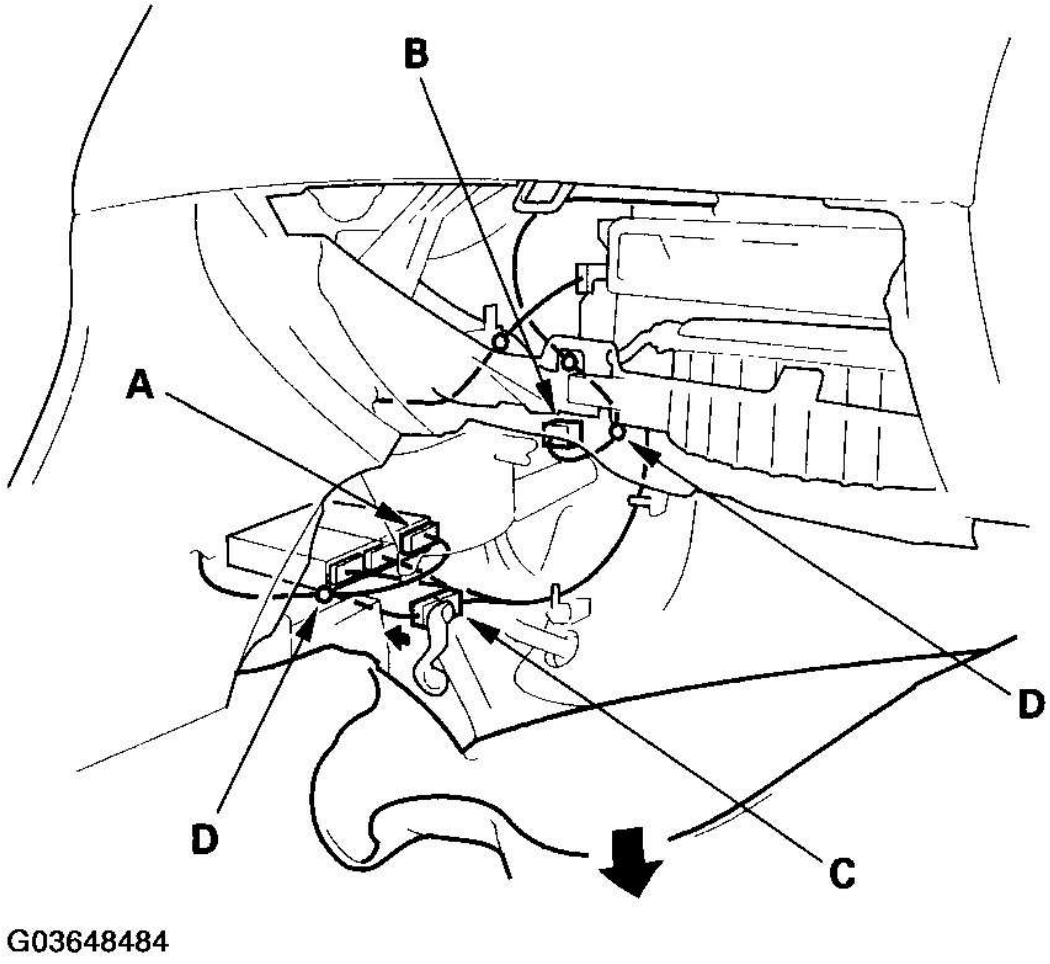


Fig. 25: Disconnecting ECM/PCM Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Passenger's side

10. From under the dash, disconnect the passenger's door wire harness connectors (A), floor wire harness connector (B), and blower motor connector (C). On vehicles with navigation system, disconnect connectors (D).

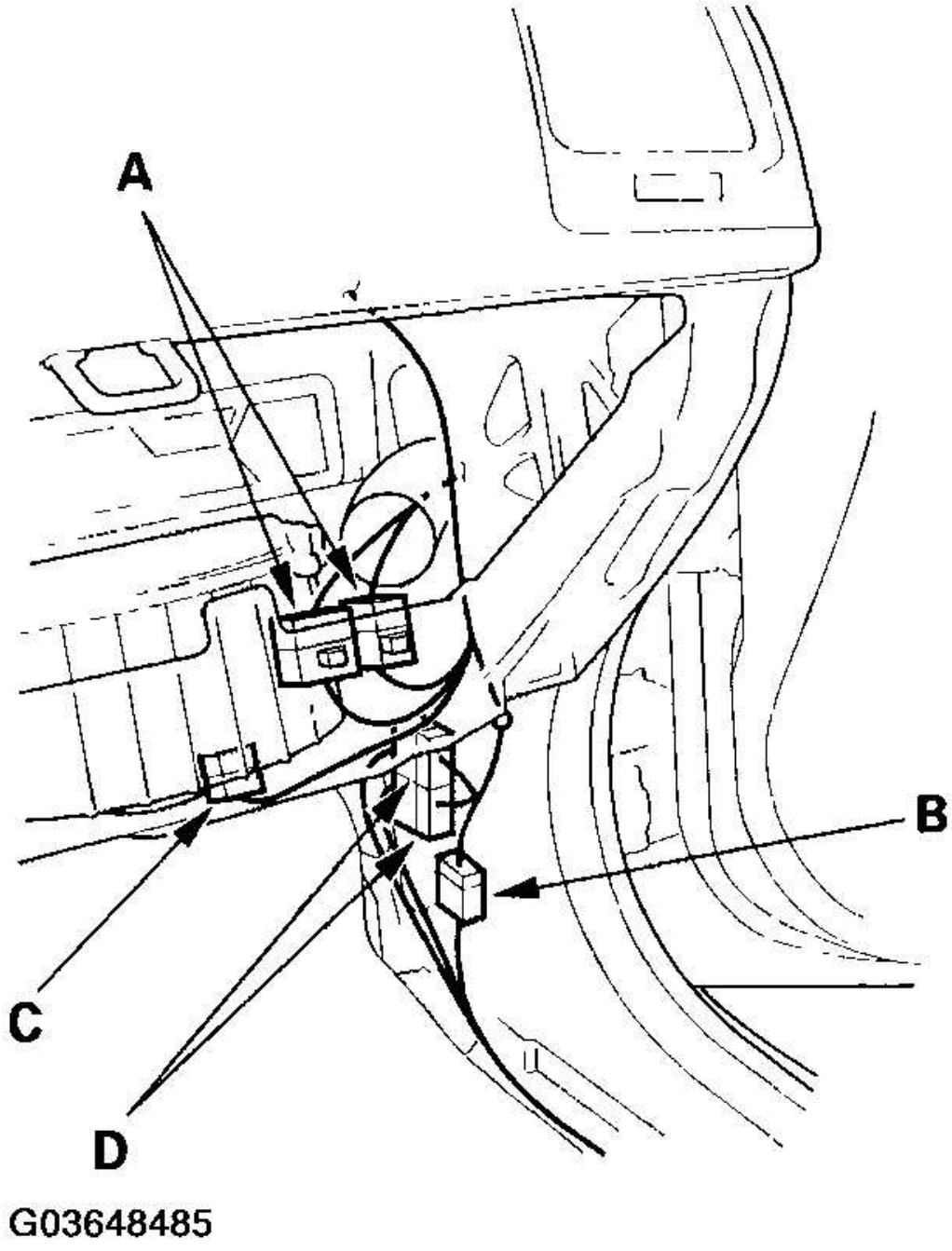


Fig. 26: Disconnecting Passenger's Door Wire Harness Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Detach all of the harness and connector clips.
12. Remove bolts, then remove the brake pedal support member (A).

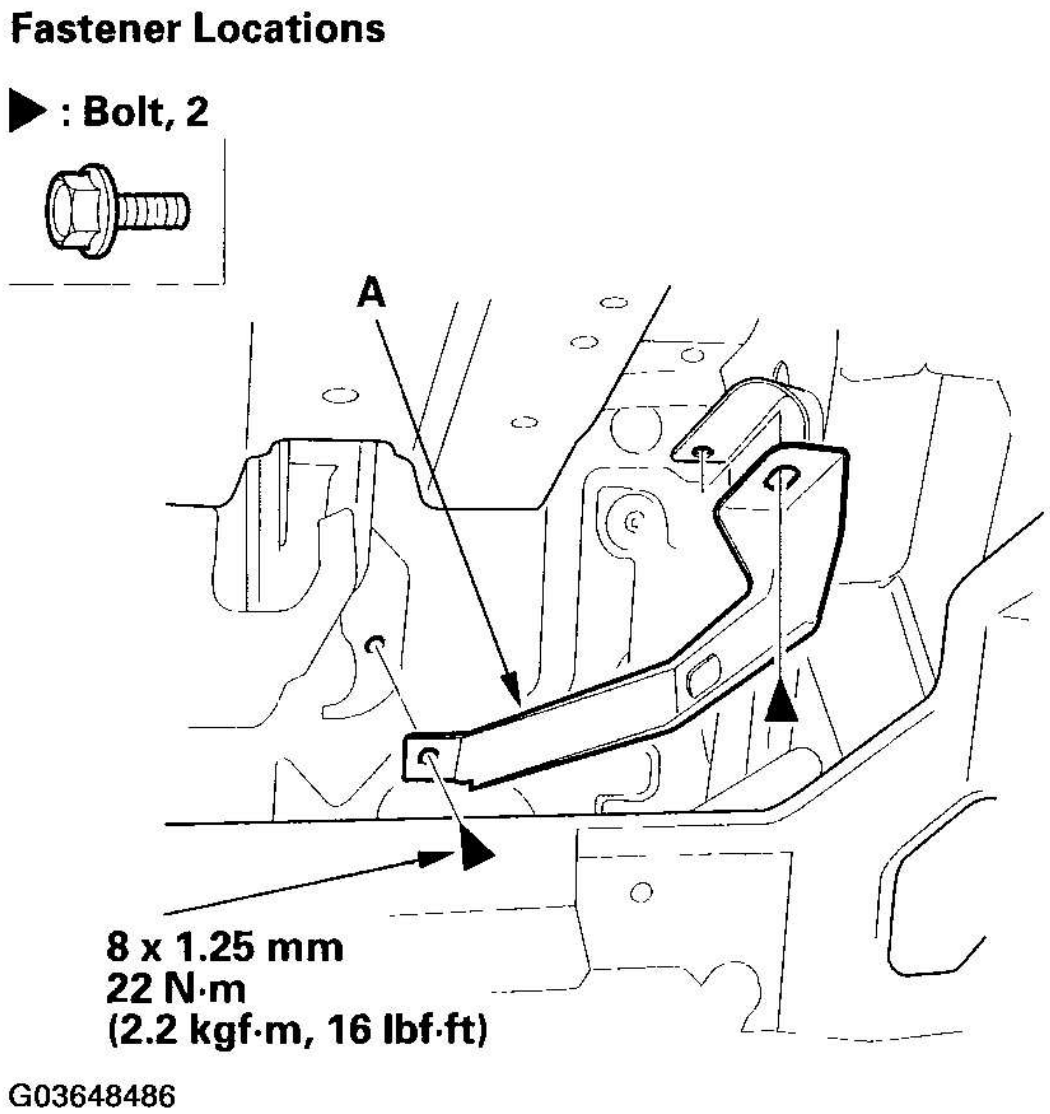


Fig. 27: Removing Brake Pedal Support Member
Courtesy of AMERICAN HONDA MOTOR CO., INC.

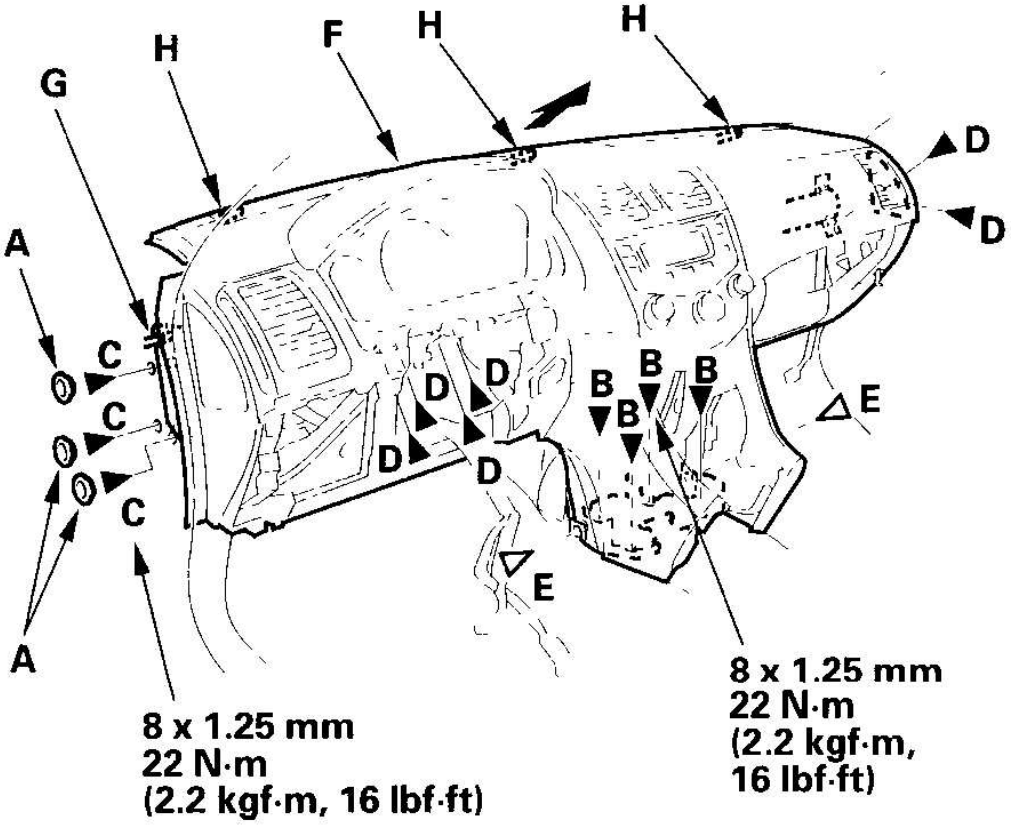
13. Cover the parking brake handle to protect it.
14. Open the driver's door, and remove the caps (A), then remove the bolts (B, C,

D), and clips (E) and lift up on the dashboard (F)/steering hanger beam to release it from the guide pins (G, H).

NOTE: Before removing the dashboard/steering hanger beam, make sure all the harnesses have been disconnected.

Fastener Locations

B ▶ : Bolt, 4 C ▶ : Bolt, 3 D ▶ : Bolt, 6 E ▷ : Clip, 2



G03648487

Fig. 28: Removing Caps, Bolts And Clips & Lifting Up On Dashboard
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Carefully remove the dashboard/steering hanger beam through the front door opening.

NOTE: Lay the dashboard/steering hanger beam on its front or back. Do not stand it on the lower console opening or you may damage it.

16. Remove the bolts (A), then remove the center bracket (B).

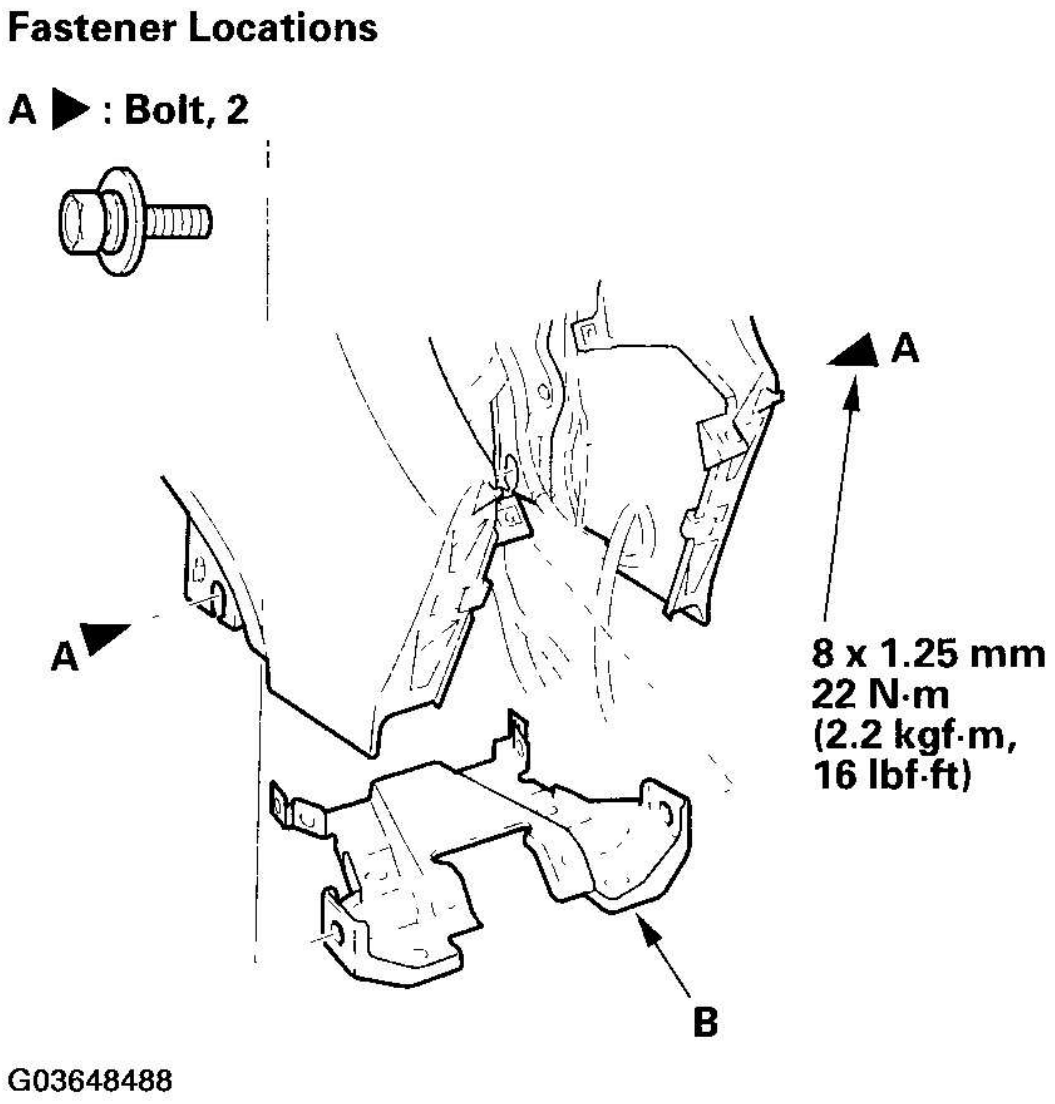


Fig. 29: Removing Center Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Install the dashboard/steering hanger beam in the reverse order of removal, and note these items:
    - Apply medium strength liquid thread lock to the bolts securing the center bracket and the dashboard center frame before reinstallation.
    - Reinstall the center bracket on the center frame, and slightly tighten the

mounting bolts. Reinstall the dashboard/steering hanger beam on the body. After tightening both dashboard/steering hanger beam mounting bolts, tighten the center bracket mounting bolts and center frame mounting bolts.

- Make sure the dashboard/steering hanger beam fits onto the guide pins correctly.
- Before tightening the bolts, make sure none of the wire harnesses are pinched.
- Make sure the connectors are plugged in properly, and the antenna lead and air hose are connected properly.
- Reconnect the negative cable to the battery.
- Enter the anti-theft codes for the radio and the navigation system, then enter the radio station presets.
- Reset the clock.

DASHBOARD REPLACEMENT

NOTE: Put on gloves to protect your hands.

1. Remove the dashboard (see **DASHBOARD/STEERING HANGER BEAM REMOVAL/INSTALLATION**).
2. Remove these items from the dashboard:
   - Upper panel (see **UPPER PANEL REMOVAL/INSTALLATION**)
   - Instrument panel (see **INSTRUMENT PANEL REMOVAL/INSTALLATION**)
   - Gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**)
   - Audio-HVAC-Display module (see **AUDIO-HVAC DISPLAY MODULE REMOVAL/INSTALLATION**)
   - Passenger's airbag (see **FRONT PASSENGER'S AIRBAG REPLACEMENT**)
   - Glove box damper (see step 4 in **GLOVE BOX REMOVAL/INSTALLATION**)
3. Detach the hooks by pulling both blind covers (A) back, release the hooks (B),

then remove the covers.

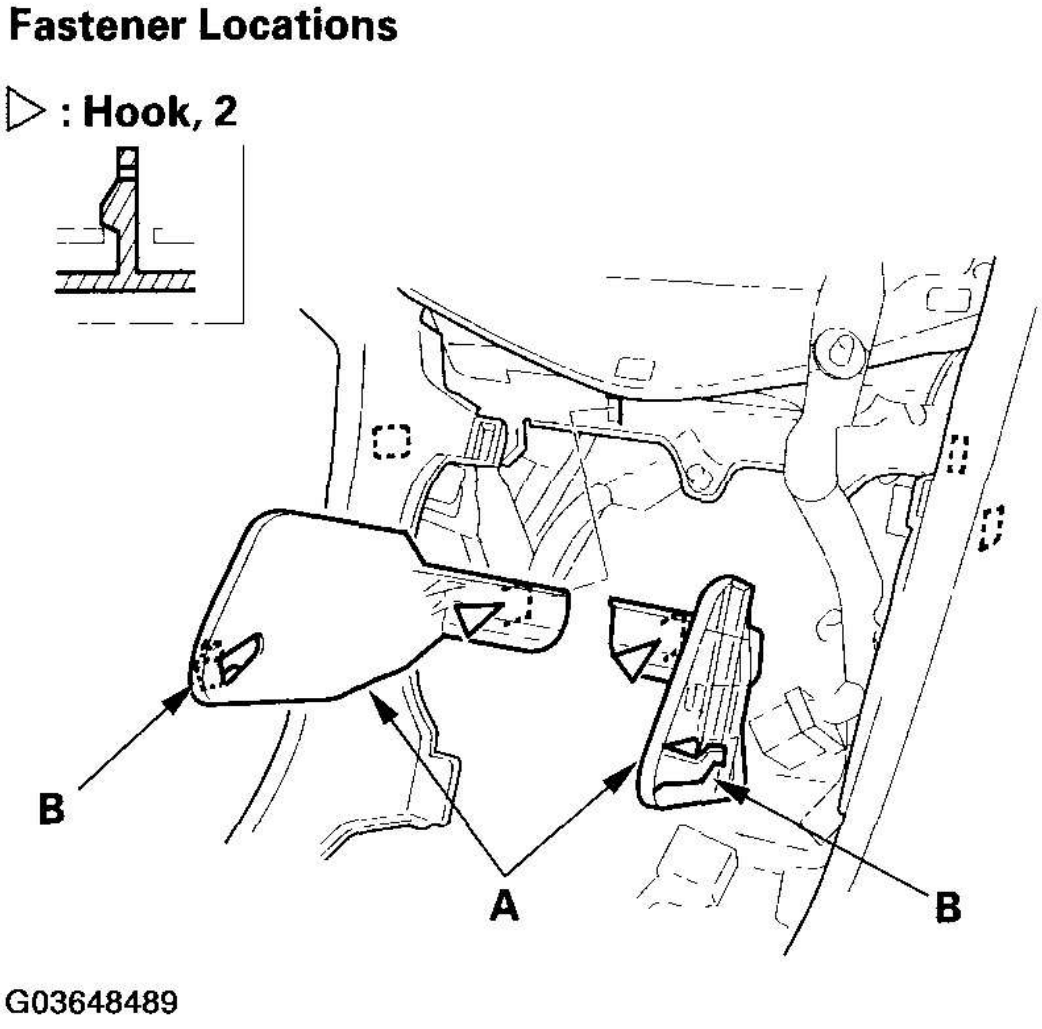


Fig. 30: Detaching Hooks By Pulling Blind Covers Back
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. On both sides, detach the clips and release the hooks (A), then remove the tweeters (B) or tweeter grille. Disconnect the tweeter connectors (C).

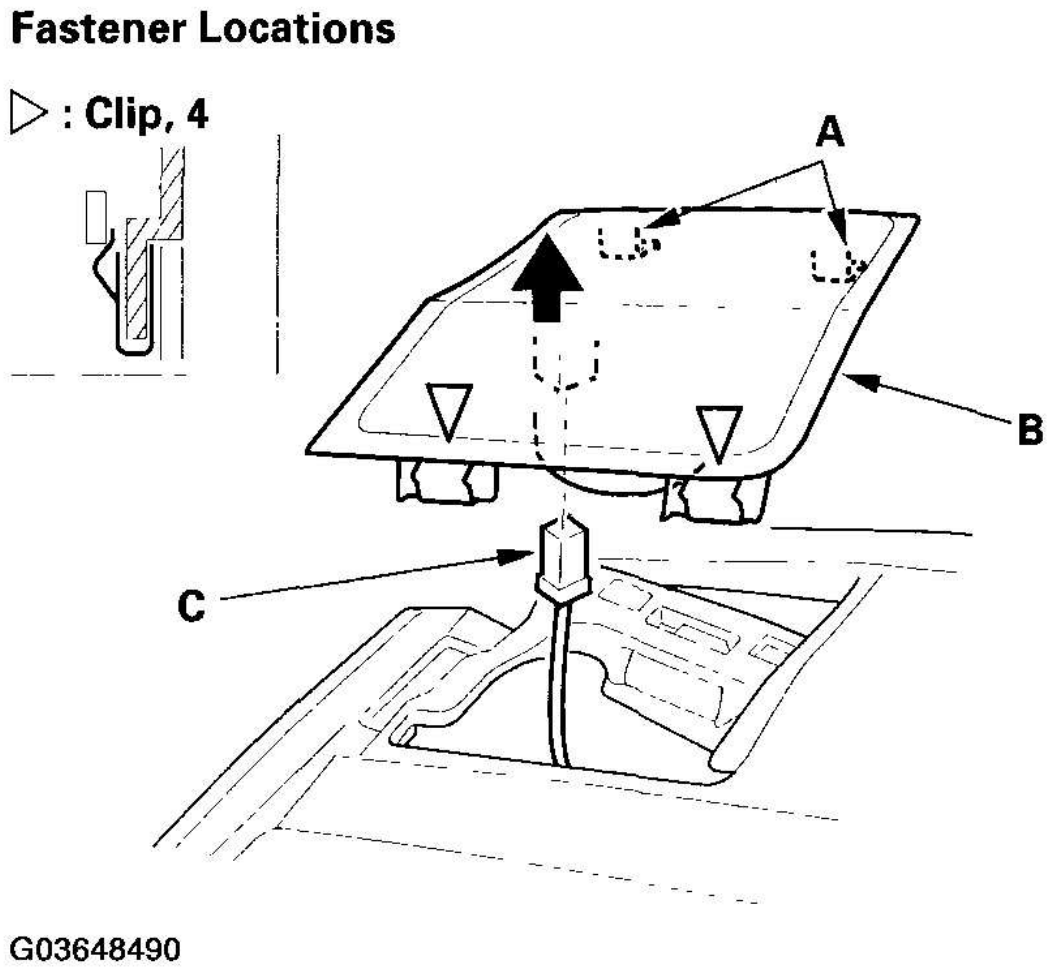


Fig. 31: Detaching Clips And Releasing Hooks On Both Sides
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. From the front of the dashboard, detach the harness clips (A, B).

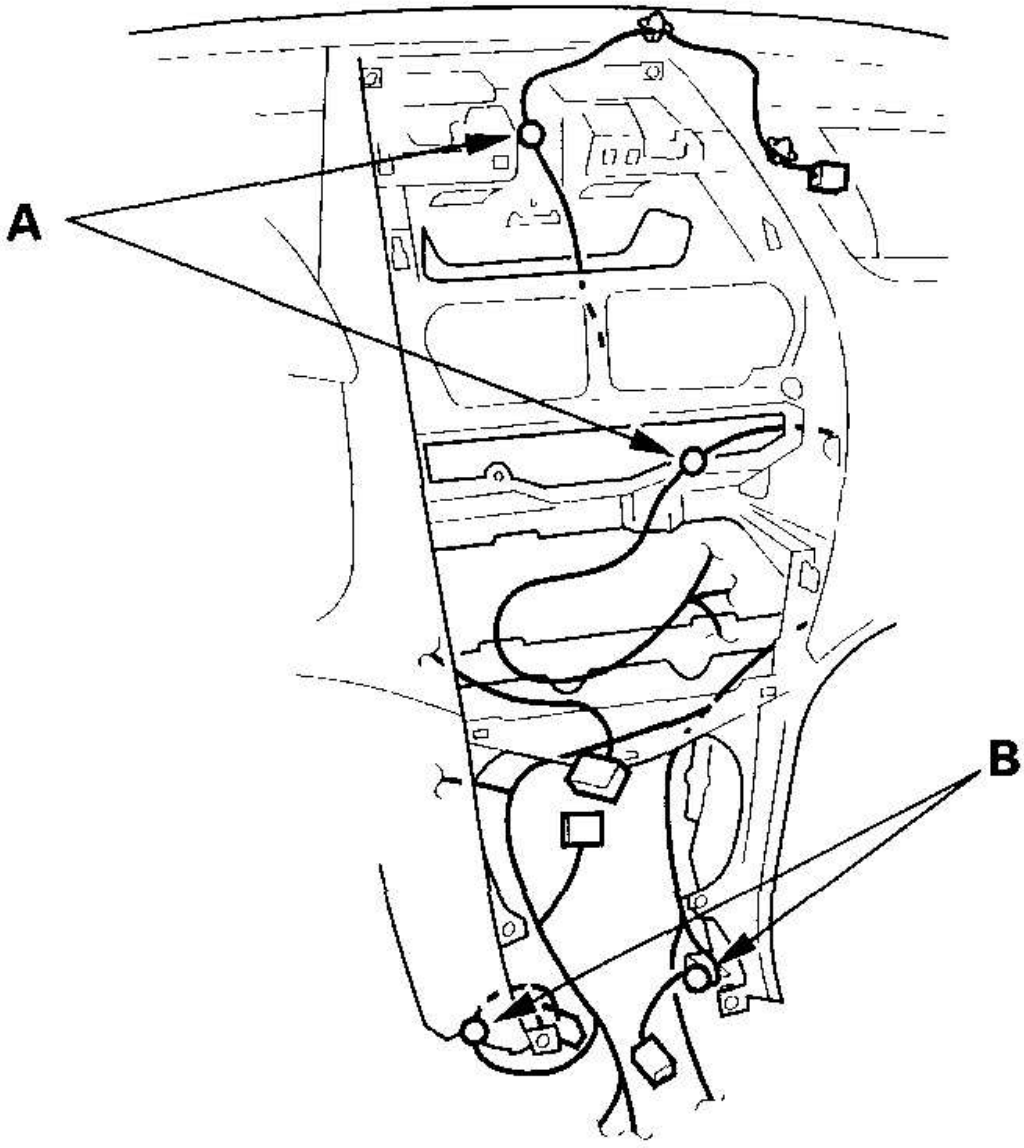


Fig. 32: Detaching Harness Clips
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. From the back of the dashboard, Detach the harness clips (A) from both sides.

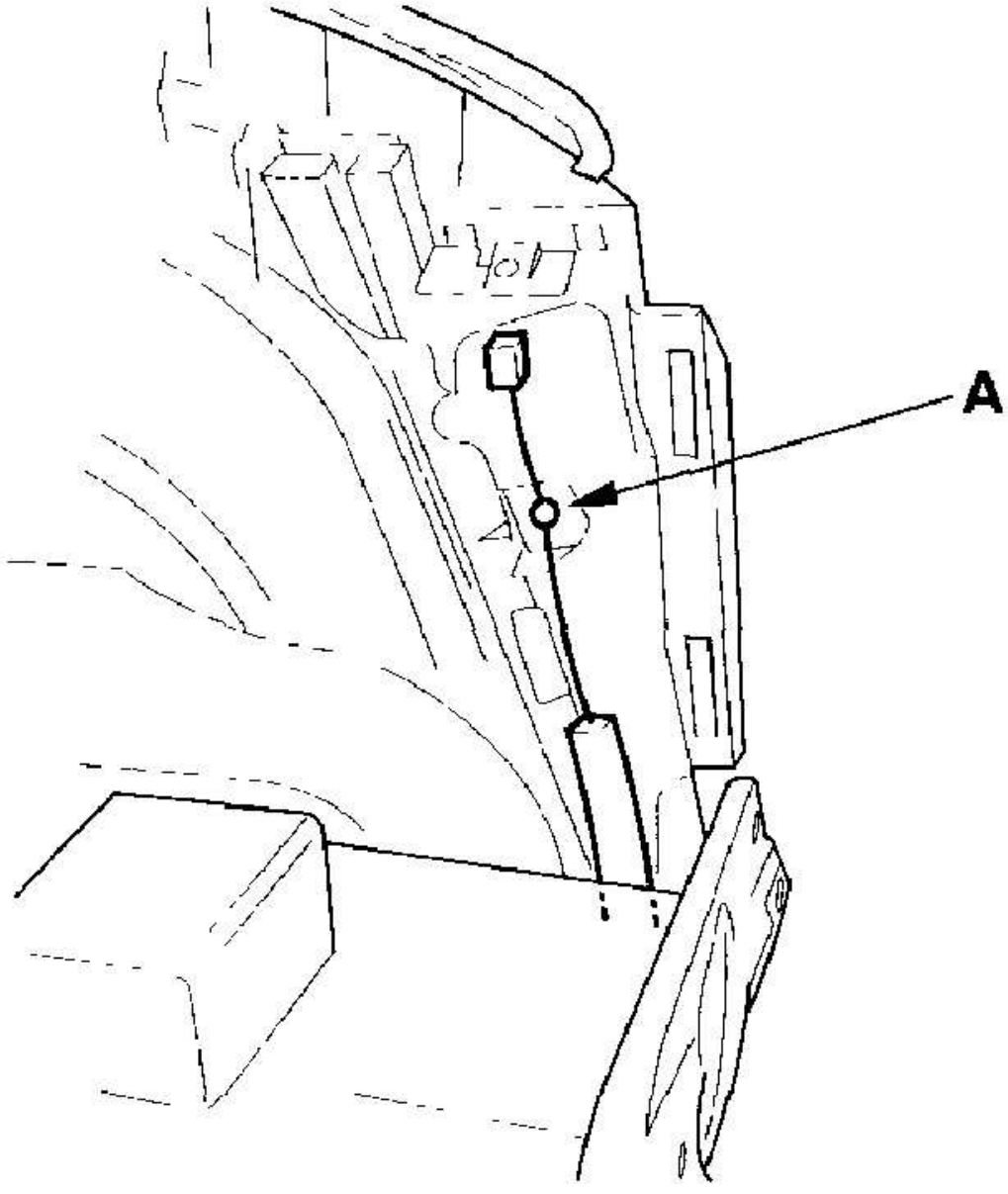


Fig. 33: Detaching Harness Clips From Both Sides (Driver's Side)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

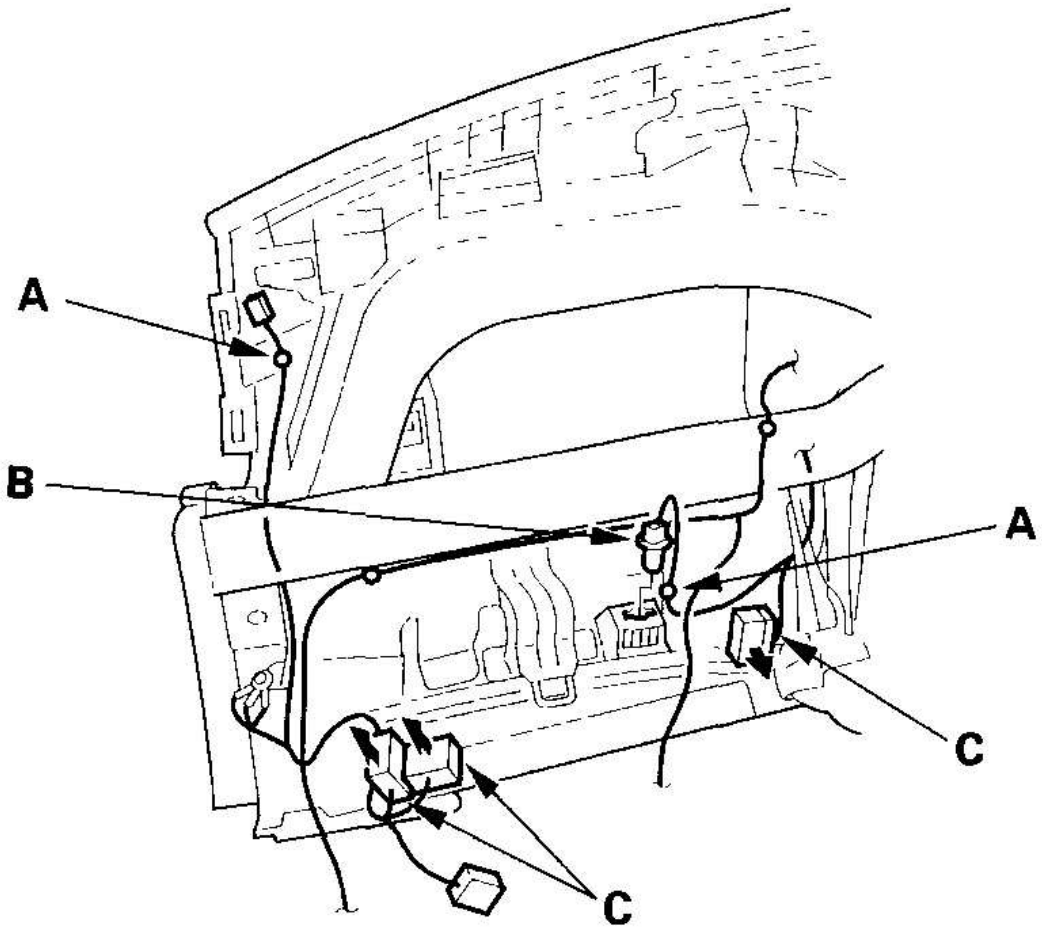


Fig. 34: Detaching Harness Clips From Both Sides (Passenger's Side)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. On passenger's side disconnect the glove box light bulb socket (B), and detach the connectors (C).
8. Remove the screws (A, B) securing the dashboard (C) and steering hanger beam (D), and detach the clips (E), then separate the dashboard and steering hanger beam.

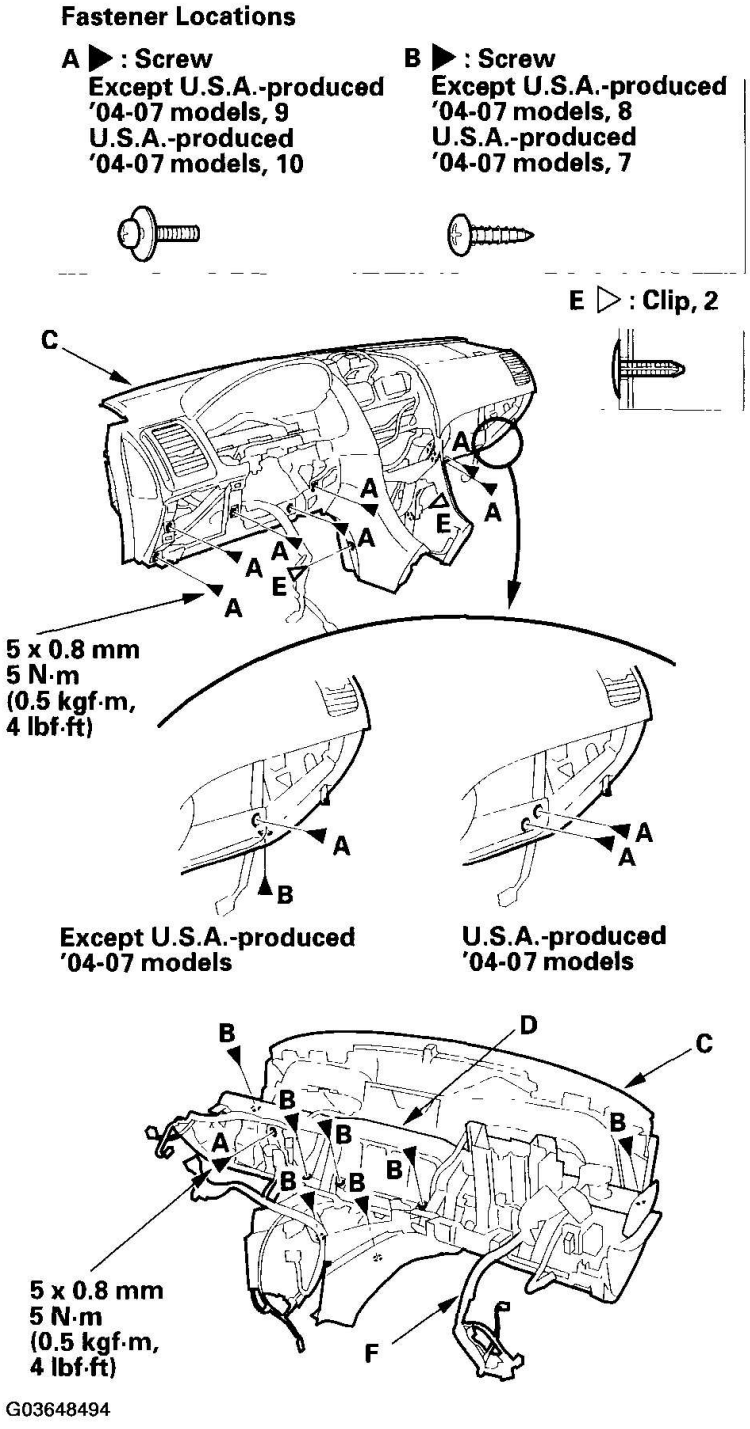


Fig. 35: Removing Screws Securing Dashboard And Steering Hanger Beam

Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the dashboard in the reverse order of removal, and note these items:
   - Make sure the dashboard wire harness (F) is not pinched.
   - Make sure the connectors are plugged in properly, and the glove box light bulb socket is connected securely.

2003-07 ACCESSORIES & EQUIPMENT

Doors - Accord

COMPONENT LOCATIONS INDEX

Ref. No.	Tool Number	Description	Qty
①	07AAC-SDAA100	Upper Panel/Vent Removal Tool	1
②	08M10-SM4-100 or 07AAE-SDAA100	Torsion Bar Assembly Tool	1

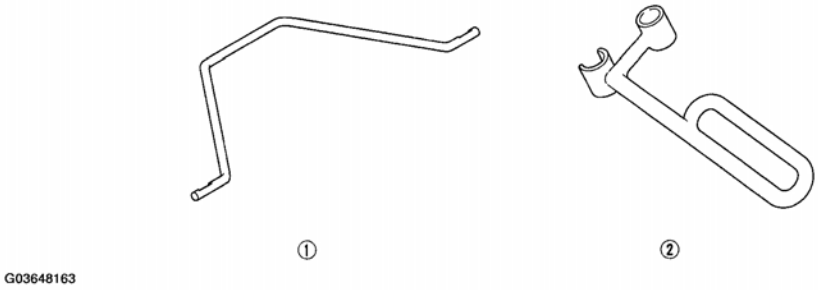


Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2 DOOR

2-door

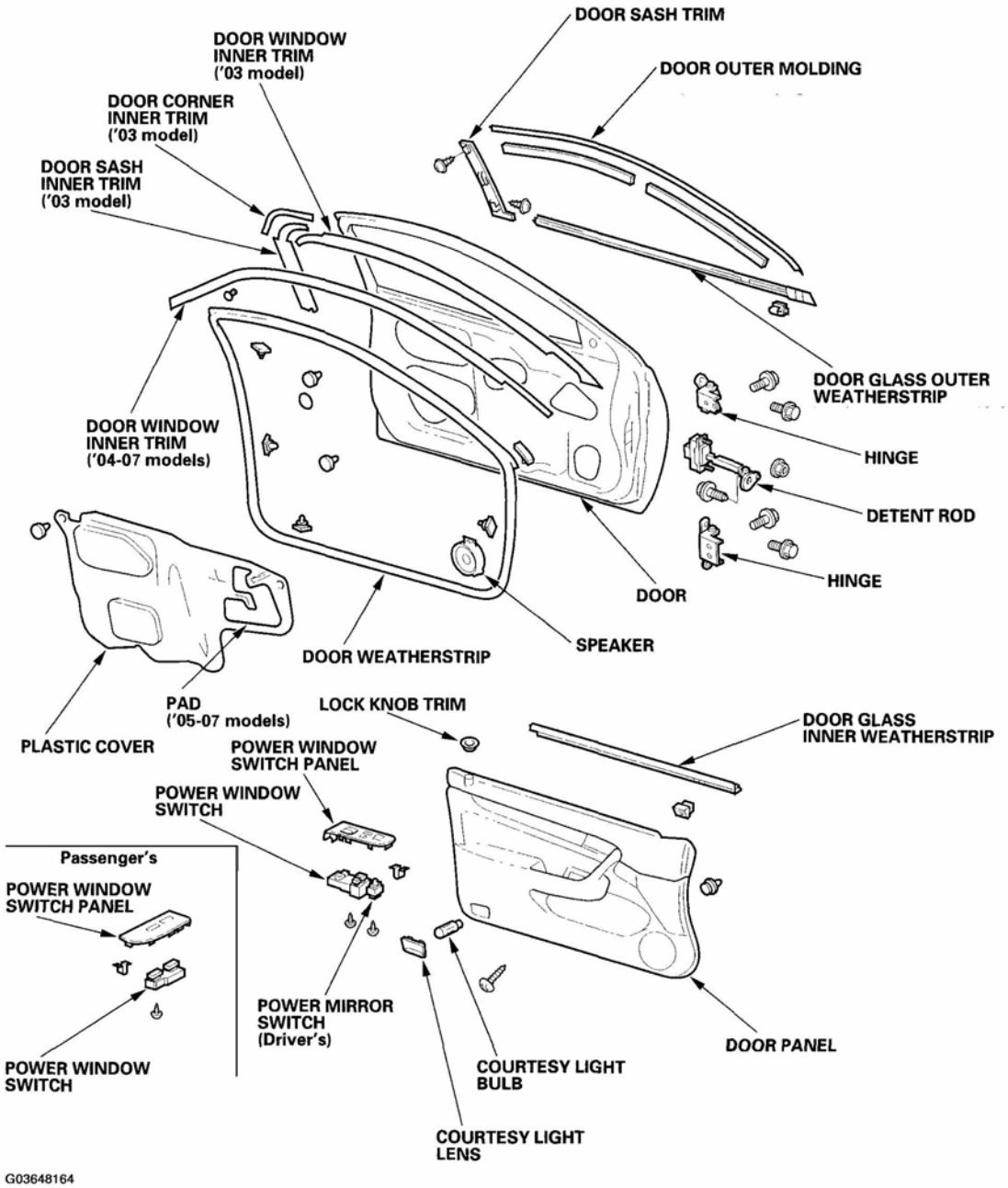


Fig. 2: Locating Door Components (2-Door - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

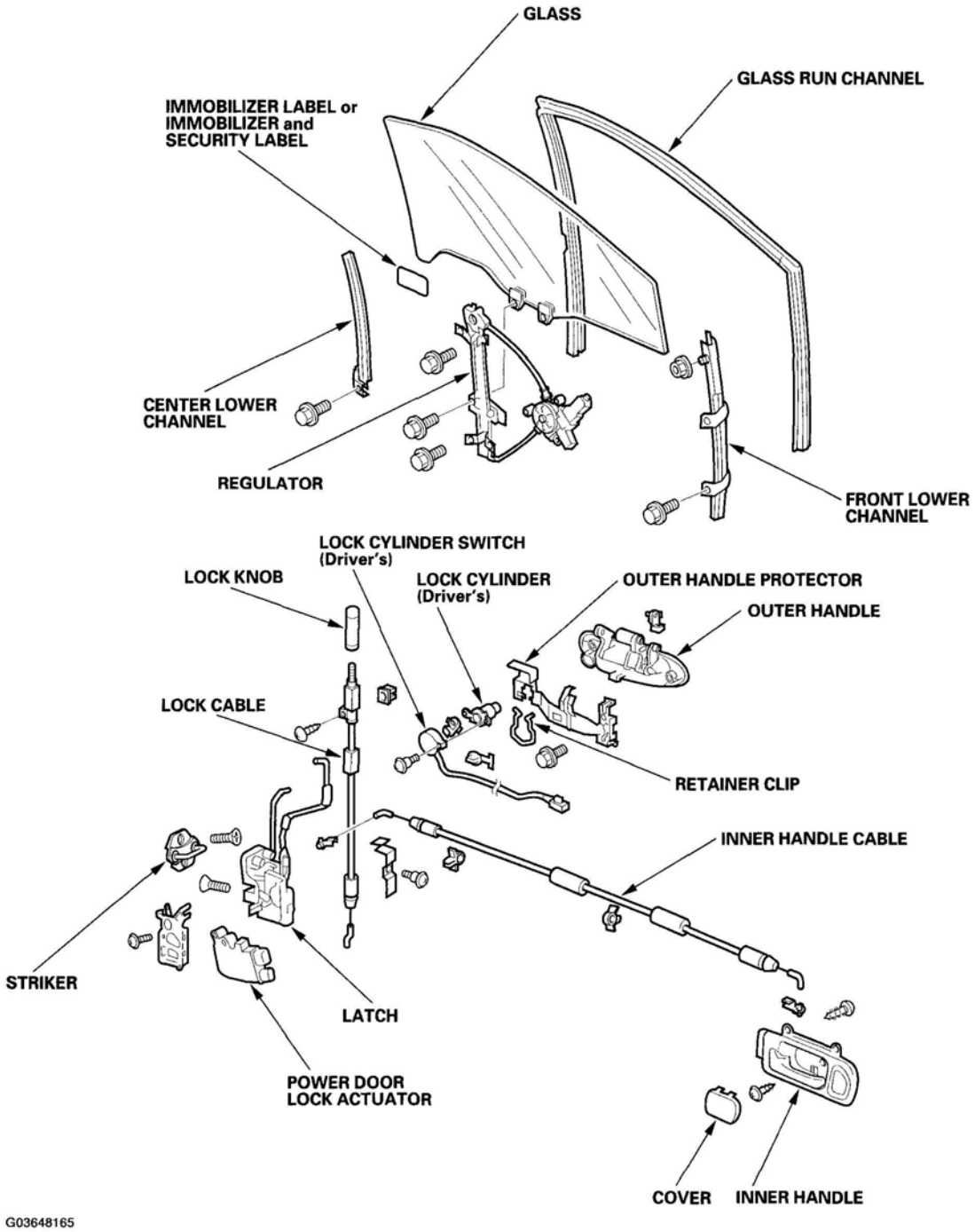


Fig. 3: Locating Door Components (2-Door - 2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR

Front Door

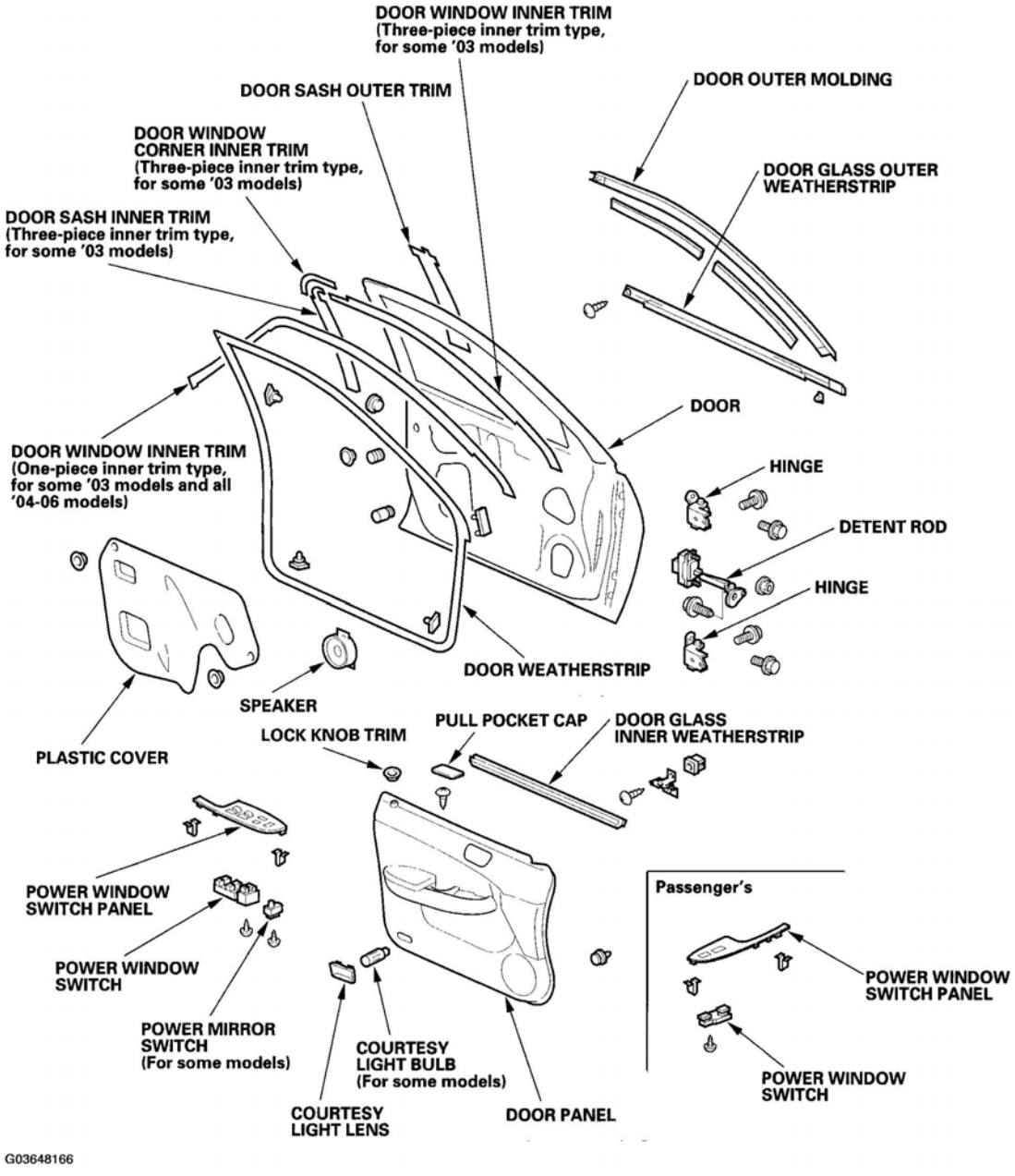


Fig. 4: Locating Front Door Components (4-Door - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

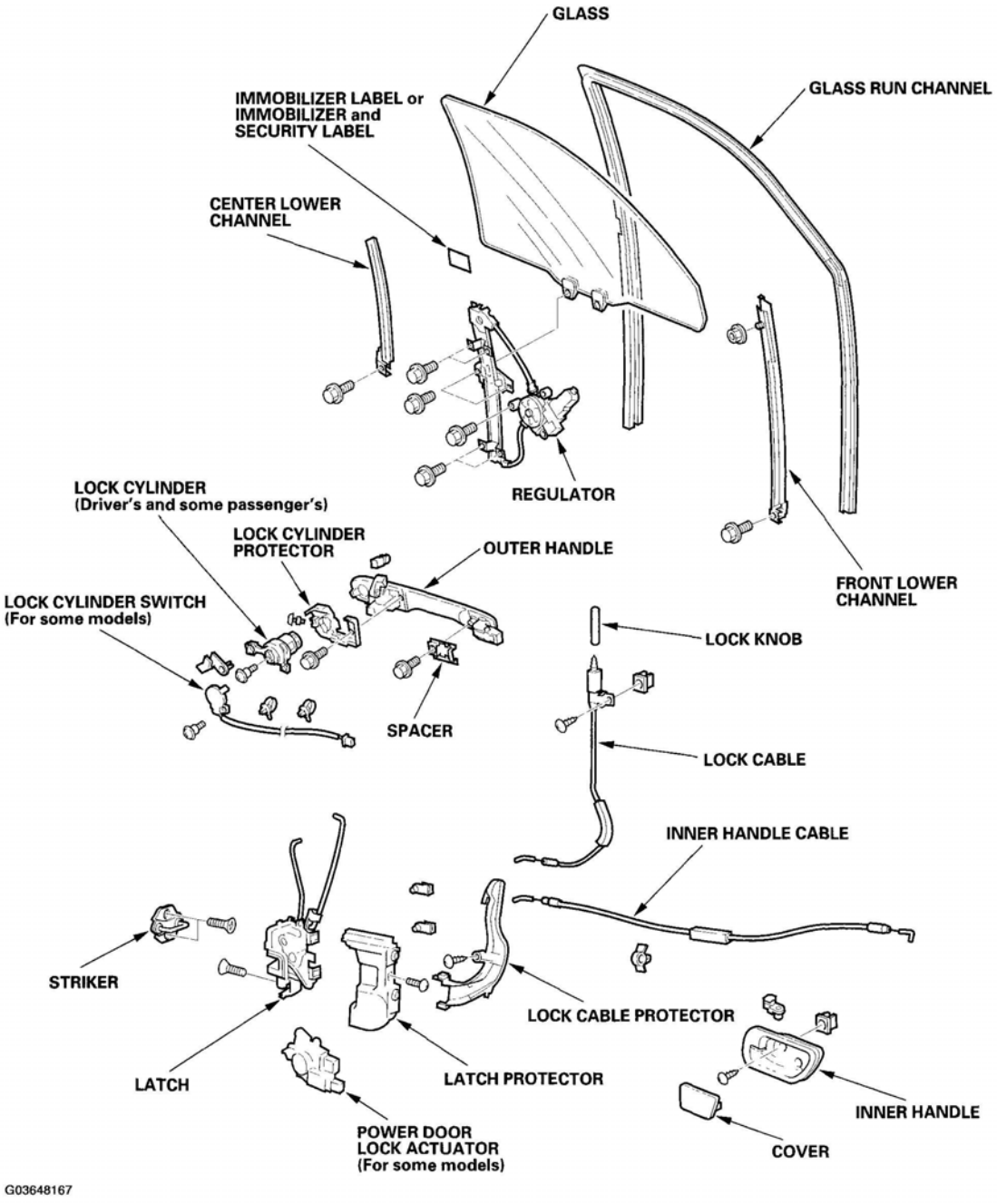


Fig. 5: Locating Front Door Components (4-Door - 2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Rear Door

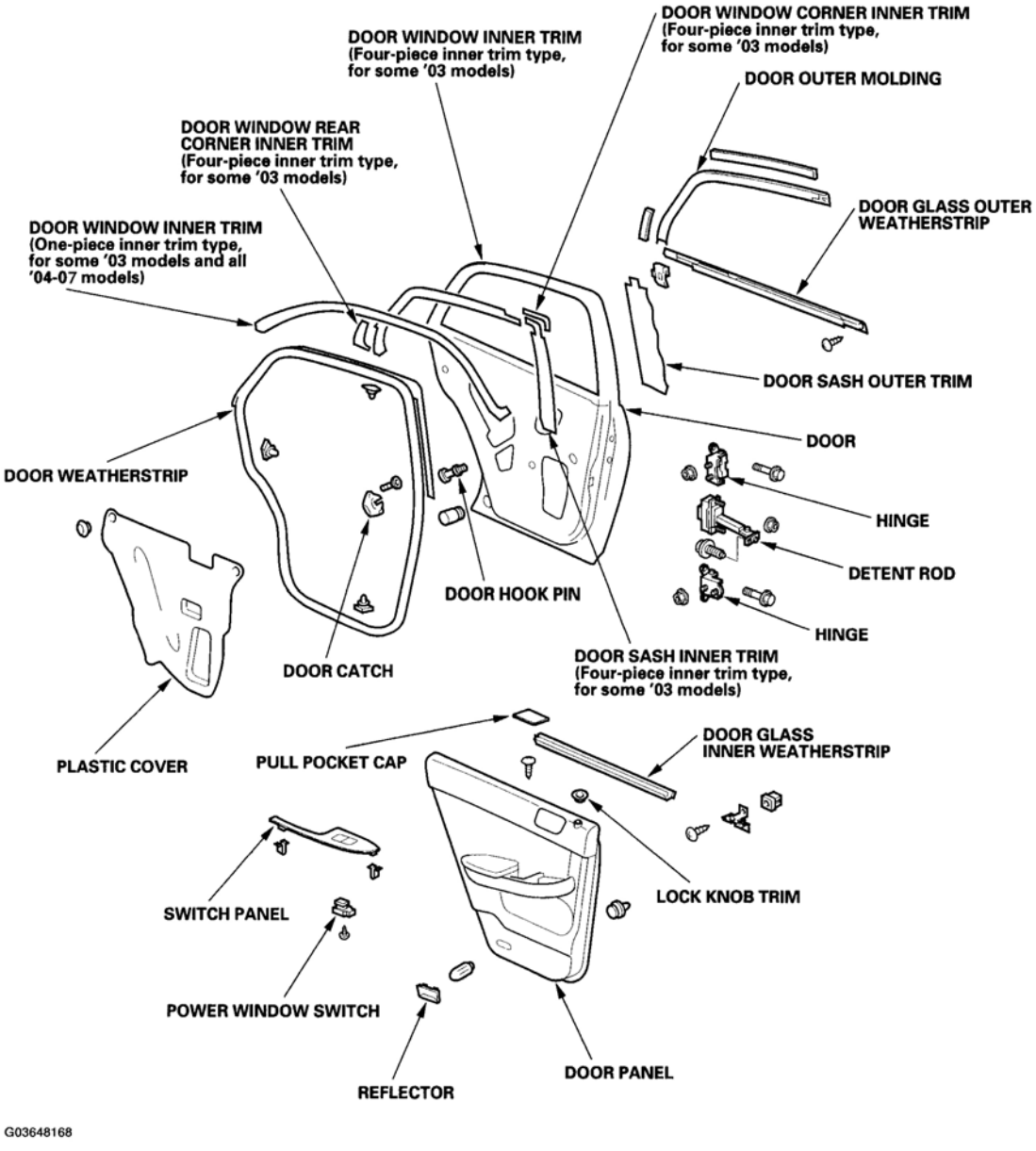


Fig. 6: Locating Rear Door Components (4-Door - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

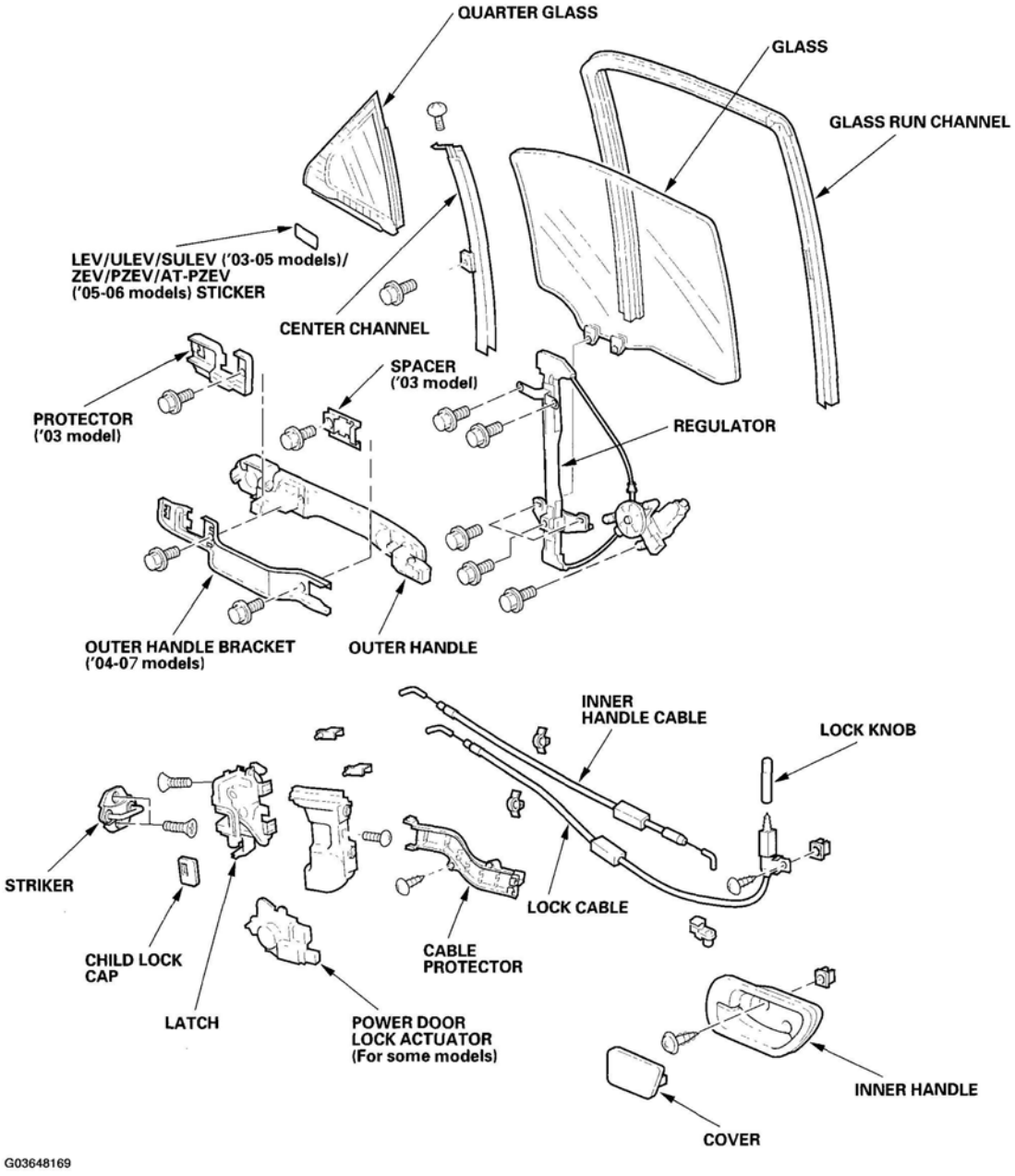


Fig. 7: Locating Rear Door Components (4-Door - 2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DOOR PANEL REMOVAL/INSTALLATION

Special Tools Required

- KTC trim tool set SOJATP2014

- Trim pad remover, Snap-on A 177A or equivalent, commercially available

2-DOOR

NOTE: Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.

1. Lower the glass fully.
2. Using a trim tool, pry out on the lower portion of the cover (A) to release the hooks (B, C), then remove the cover and the screws.

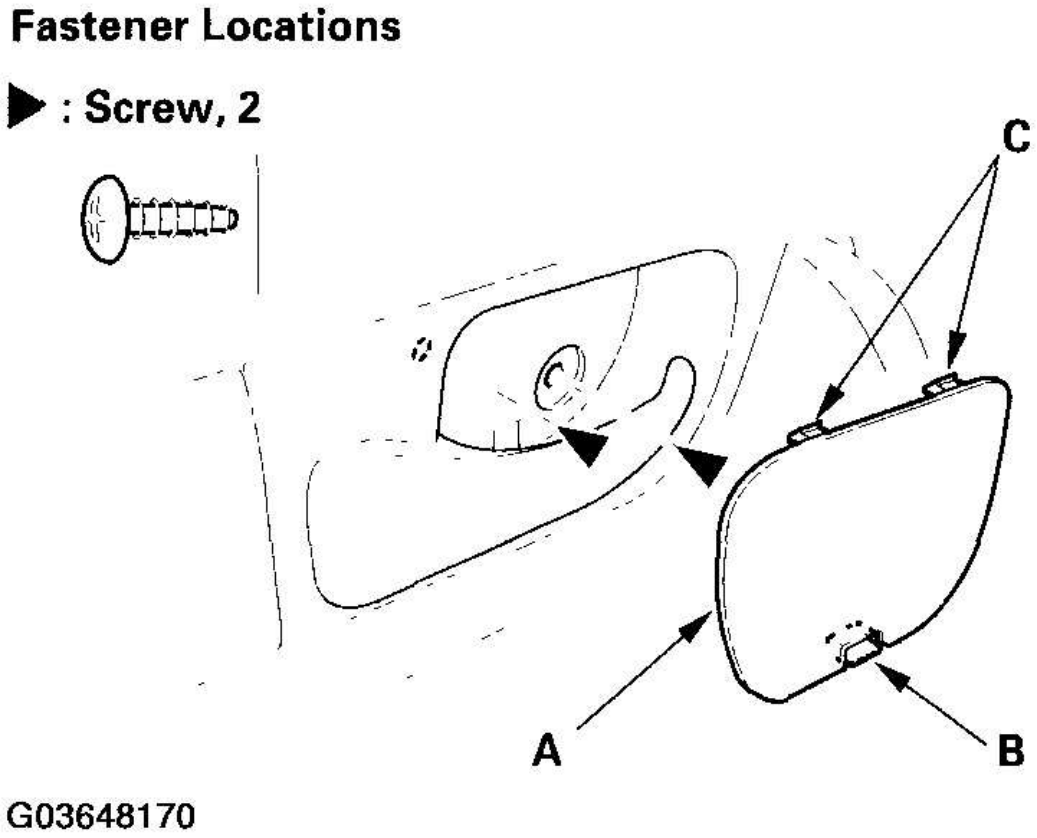


Fig. 8: Prying Out Lower Portion Of Cover To Release Hooks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the power window switch panel (A).

   -1 Insert a flat-tip screwdriver wrapped with protective tape through the hole under the armrest, and push up the bottom of the power window switch (B) to release the panel.

   -2 Pull out along the edge of the panel to release the hook (C) and clips (D).

   -3 Disconnect the power mirror switch connector (E) (driver's) and the power window switch connector (F).

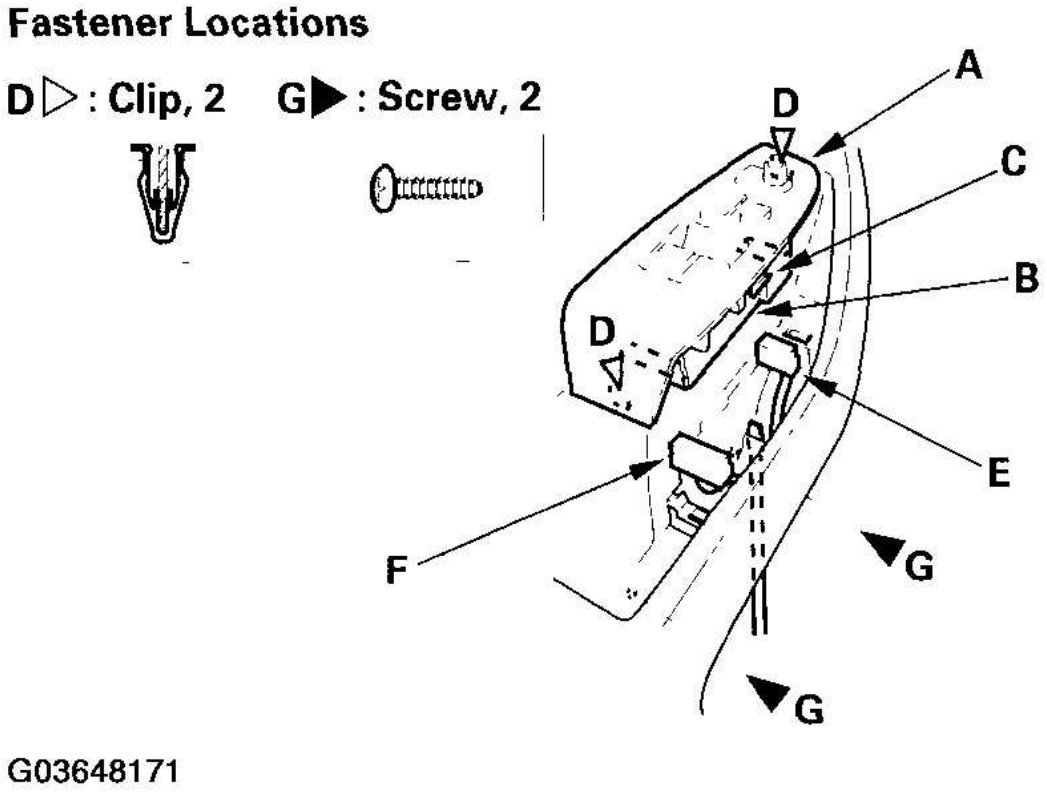


Fig. 9: Removing Power Window Switch Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the screws (G) from under the armrest.
5. Remove the mirror mount cover (see step 2 on **POWER**

MIRROR/MANUAL MIRROR REPLACEMENT).

6. Remove the door panel (A) with as little bending as possible to avoid creasing or breaking it.

   -1 Start at the bottom edge of the door panel, release the clips that are just above the marks (B) on the edge of the panel with a commercially available trim pad remover.

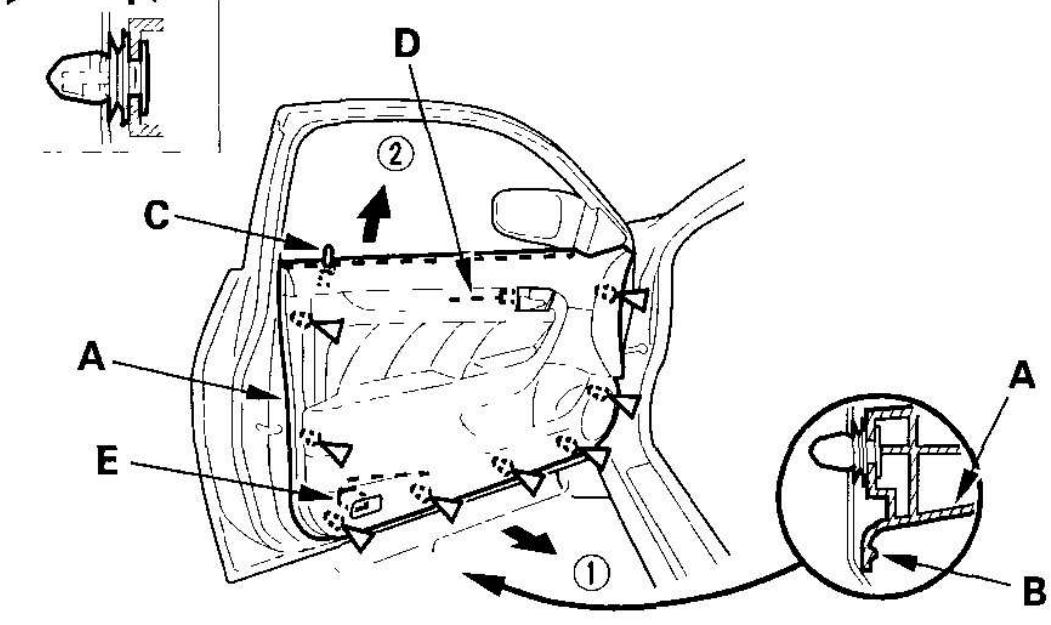
   -2 Detach the upper clips.

   -3 Starting at the rear, pull the door panel upward and over the lock knob (C).

NOTE: The inner handle cable (D) and the courtesy light bulb socket (E) are connected to the door panel. Do not pull the door panel up too far, or the inner handle cable will be damaged.

Fastener Locations

▷ : Clip, 8



G03648172

Fig. 10: Removing Door Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. While holding the door panel (A) away from the door, disconnect the inner handle cable (B) and courtesy light bulb socket (C), and detach the harness clip (D) from the panel, then remove the panel.

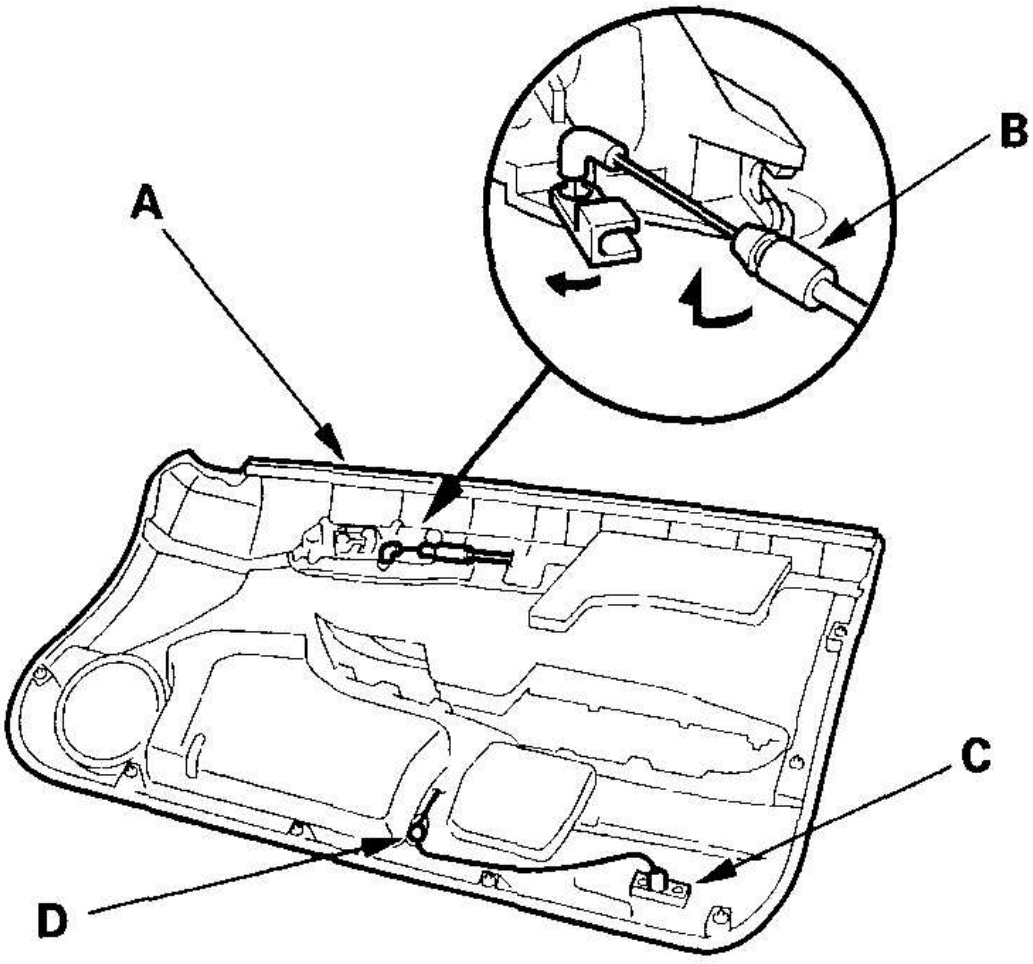


Fig. 11: Disconnecting Inner Handle Cable And Courtesy Light Bulb Socket (Back View)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. If necessary, remove the door glass inner weatherstrip (A) from the door panel (B) by pulling it down.

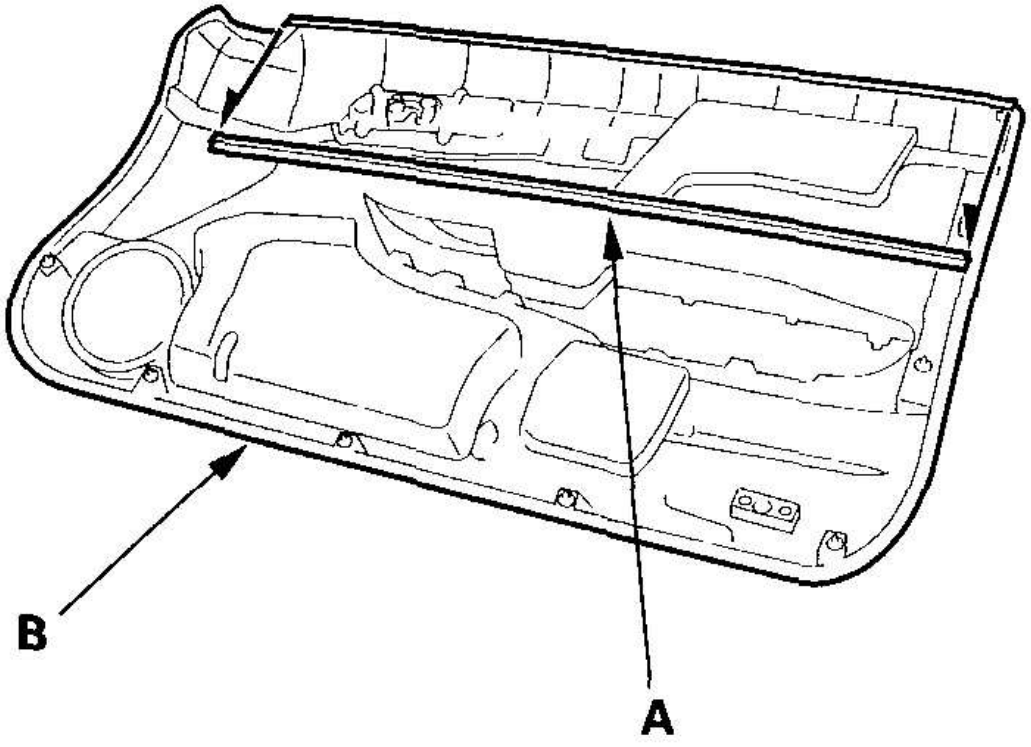


Fig. 12: Removing Door Glass Inner Weatherstrip From Door Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the panel in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Make sure the connectors are plugged in properly, and the cable and the bulb socket are connected properly.
   - Make sure the window and power door lock operate properly.
   - Do the power window control unit reset procedure (see **RESETTING**

THE POWER WINDOW CONTROL UNIT).

- When reinstalling the door panel, make sure the plastic cover is installed properly and sealed around its around its outside perimeter to seal out water.
- Check for water leaks.

FRONT DOOR PANEL REMOVAL/INSTALLATION

Special Tools Required

- KTC trim tool set SOJATP2014
- Trim pad remover, Snap-on A 177A or equivalent, commercially available

4-DOOR

NOTE: Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.

1. Lower the glass fully.
2. Using a trim tool, pry out on the rear portion of the cover (A) to release the hooks (B, C), then remove the cover and the screws securing the inner handle (D).

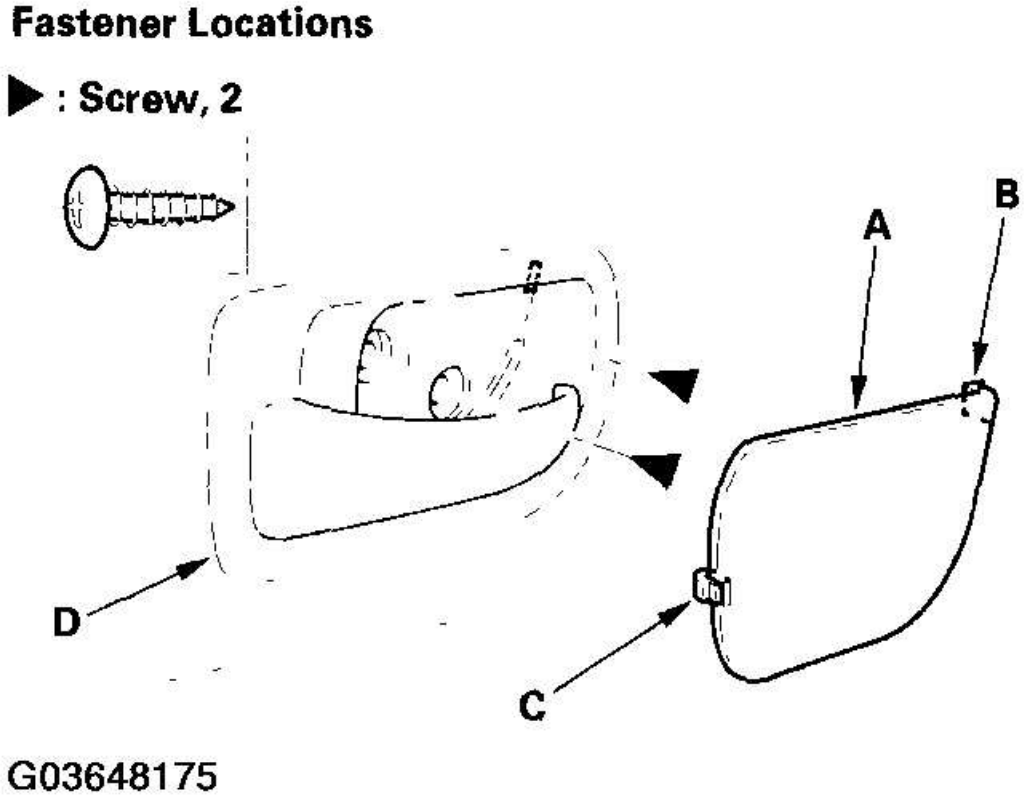


Fig. 13: Removing Cover And Screws Securing Inner Handle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the power window switch panel (A).

   -1 Pry up on the rear edge of the switch panel with a trim tool to release the rear clip.

   -2 Pull out along the edge of the panel to release the hooks (B) and front clip.

   -3 Disconnect the power mirror switch connector (C) (driver's) and the power window switch connector (D).

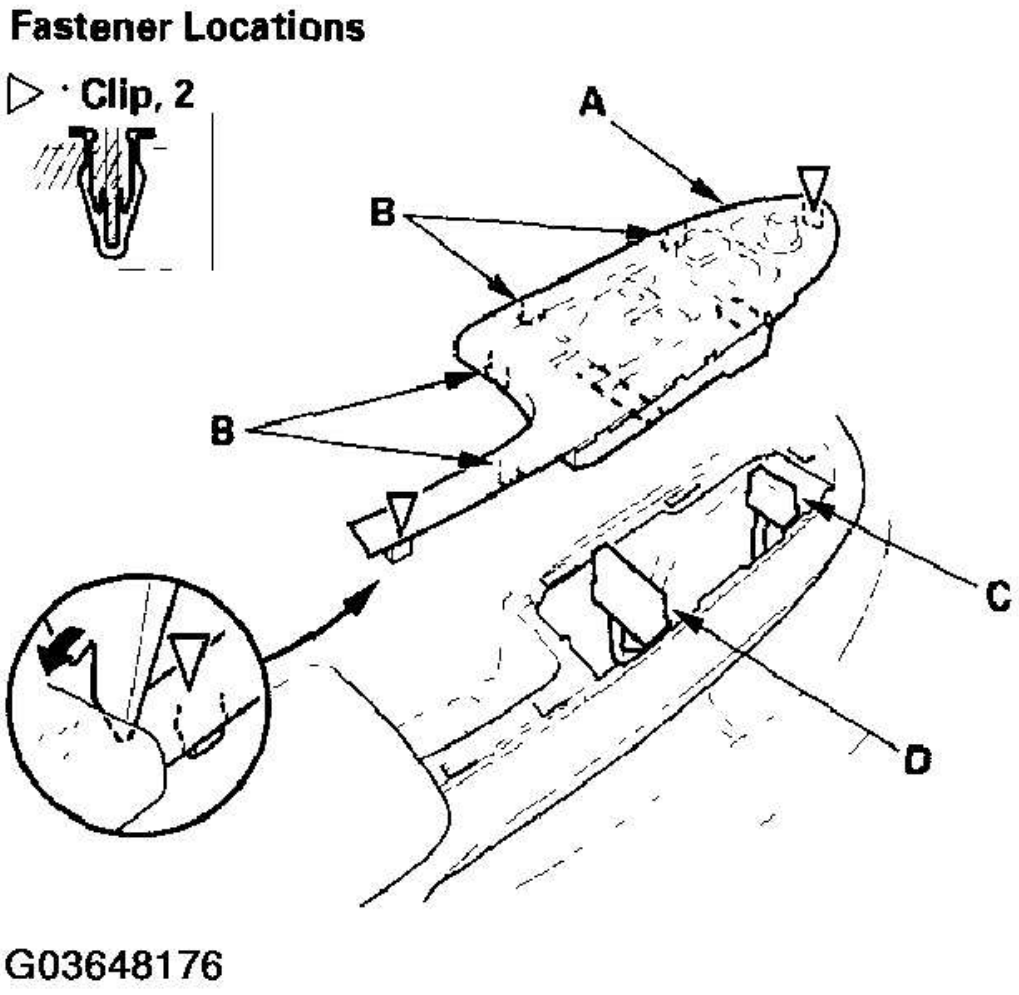


Fig. 14: Removing Power Window Switch Panel (Driver's)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

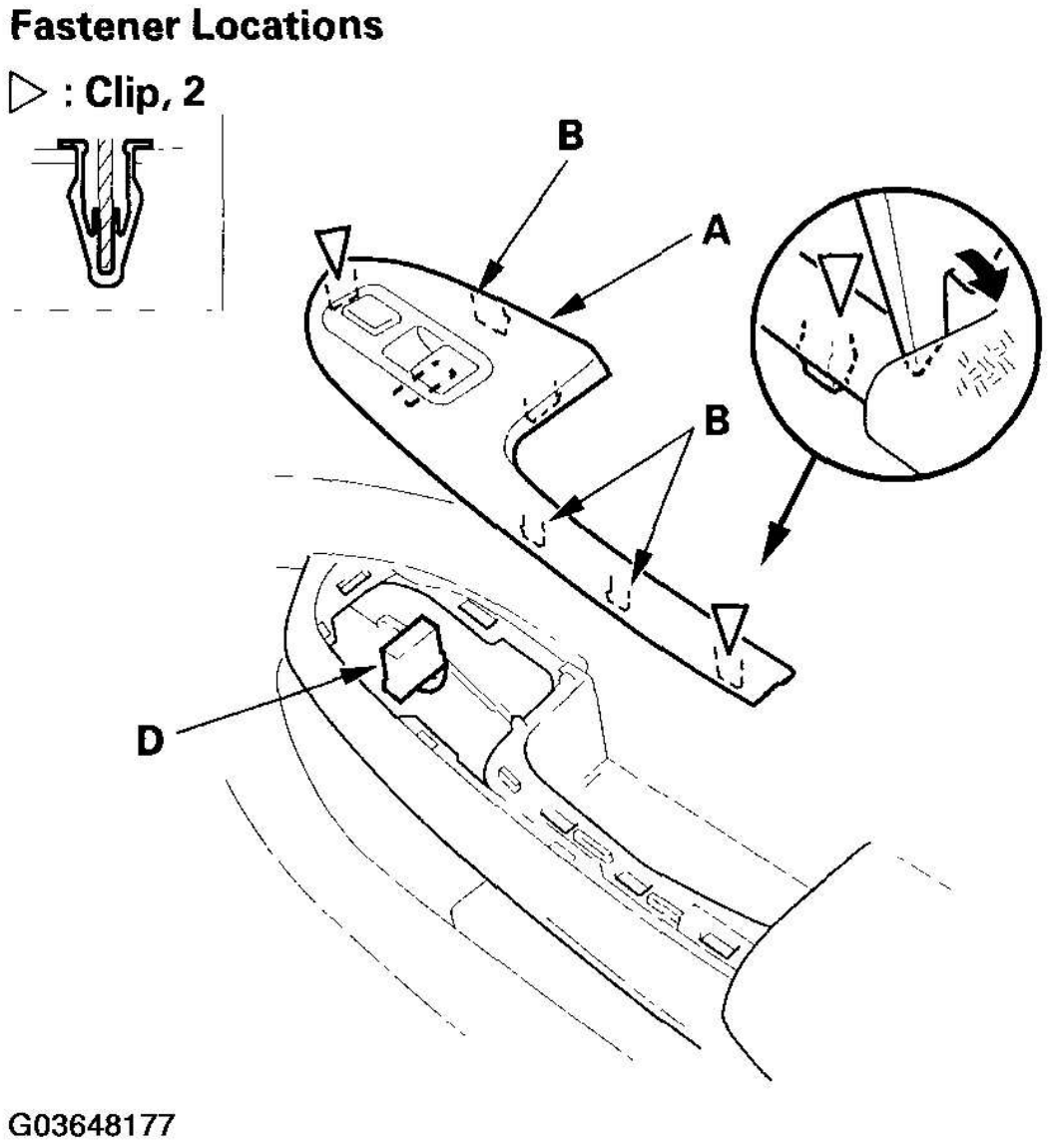


Fig. 15: Removing Power Window Switch Panel (Passenger's)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the screw from under the pull pocket cap (A).

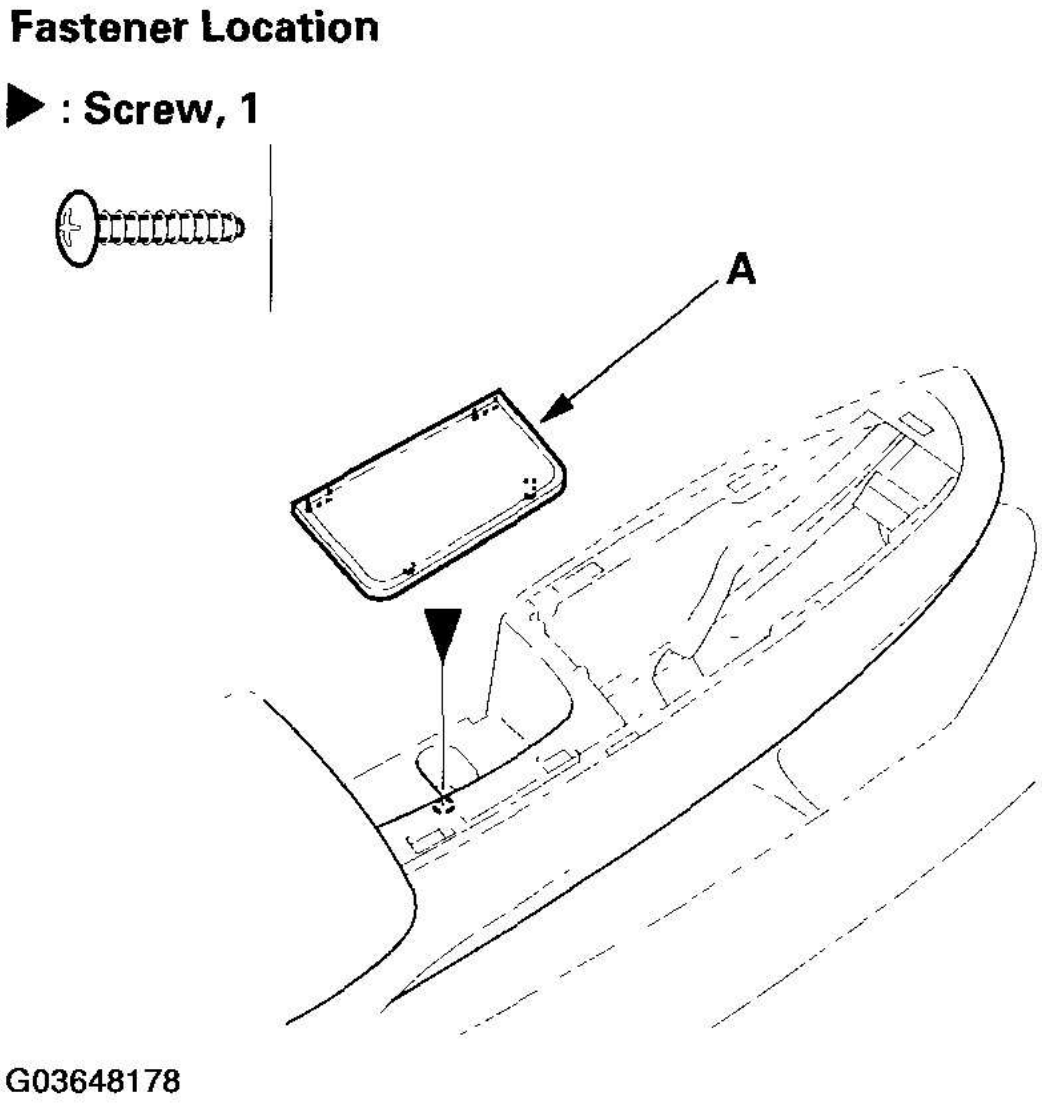


Fig. 16: Removing Screw From Under Pull Pocket Cap
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the mirror mount cover (see step 2 on **POWER MIRROR/MANUAL MIRROR REPLACEMENT**).
6. Remove the door panel (A) with as little bending as possible to avoid creasing or breaking it.
   -1 Start at the bottom edge of the door panel, release the clips that are just

above the marks (B) on the edge of the panel with a commercially available trim pad remover.

-2 Detach the upper clips.

-3 Starting at the rear, pull the door panel upward and over the lock knob (C).

NOTE: The inner handle cable (D) and the courtesy light bulb socket (E) are connected to the door panel. Do not pull the door panel up too far, or the inner handle cable will be damaged.

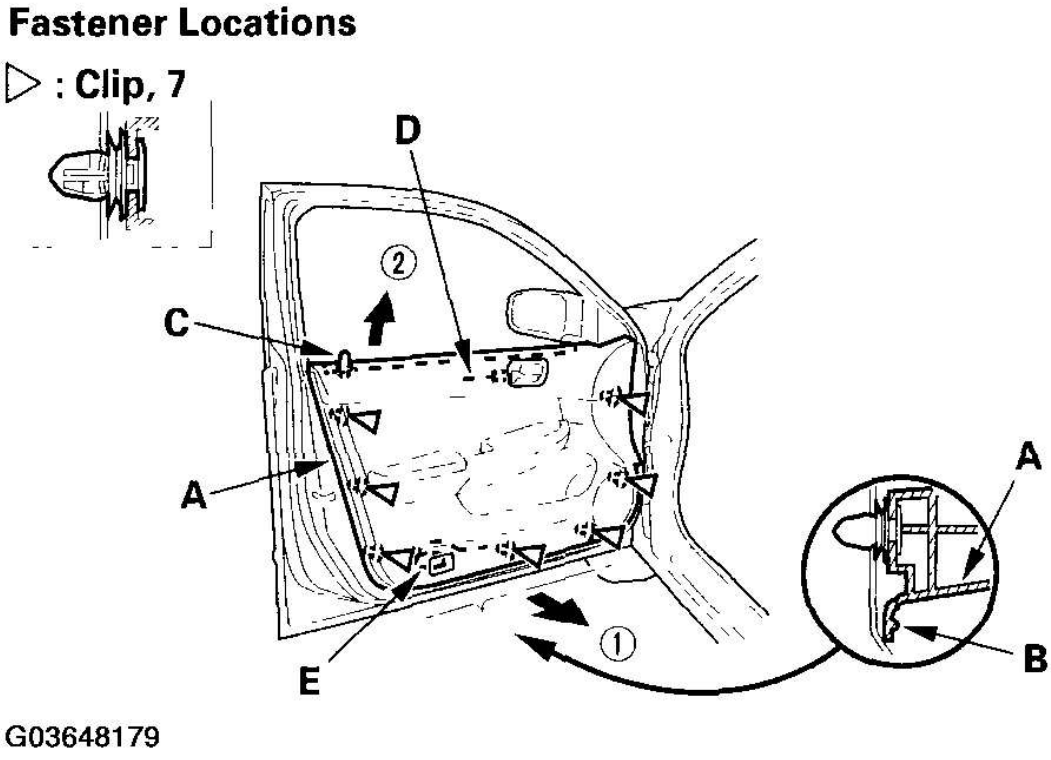


Fig. 17: Removing Door Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. While holding the door panel (A) away from the door, disconnect the inner handle cable (B), and if equipped, courtesy light bulb socket (C), and detach

the harness clip (D), then remove the panel. If necessary, remove the inner handle (E) by releasing the hooks (F, G).

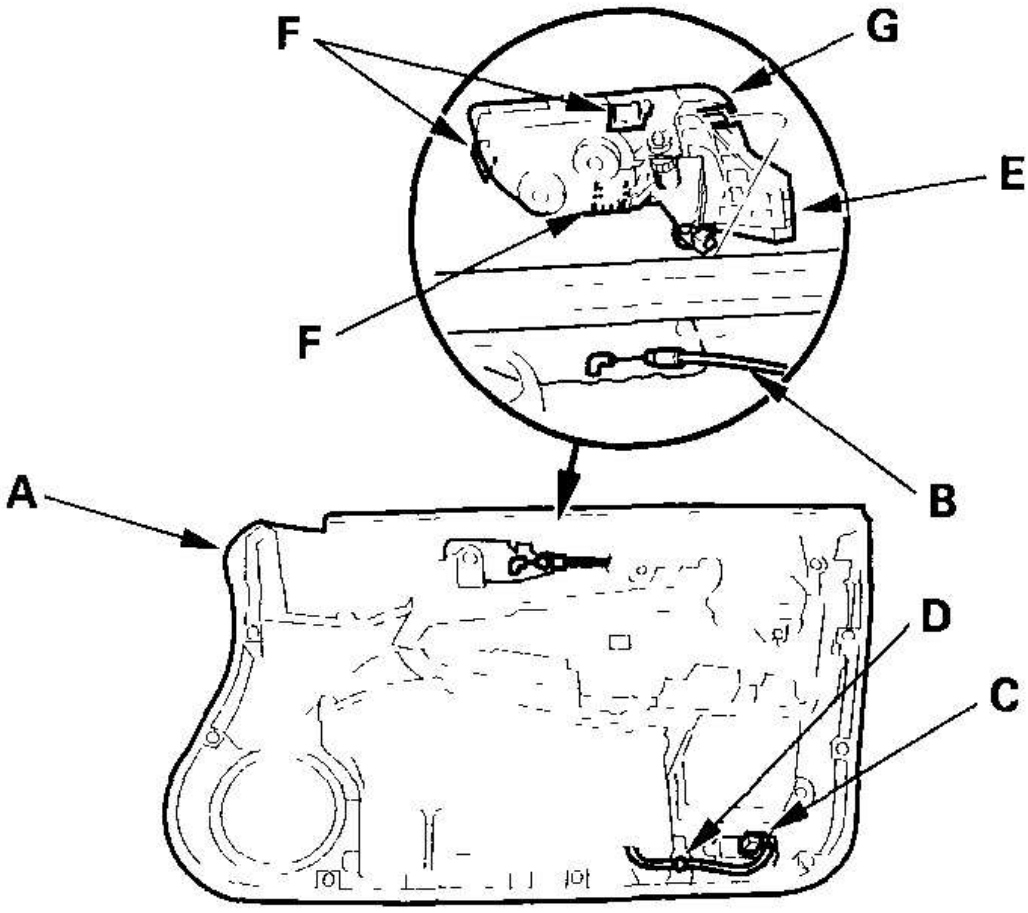


Fig. 18: Disconnecting Inner Handle Cable And Harness Clip (Back View)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. If necessary, remove the door glass inner weatherstrip (A) from the door panel (B) by pulling it down.

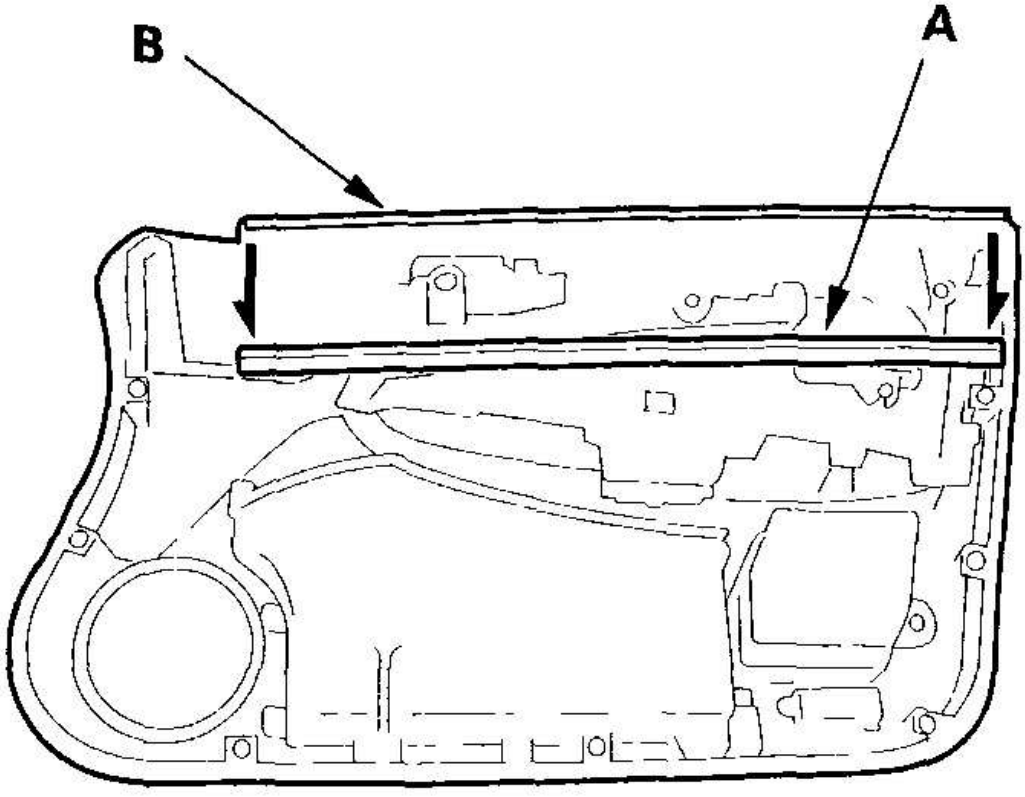


Fig. 19: Removing Door Glass Inner Weatherstrip From Door Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the door panel in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Make sure the connectors are plugged in properly, and the cable and the bulb socket are connected properly.
   - If equipped, make sure the window and power door lock operate properly.
   - Do the power window control unit reset procedure (see **RESETTING THE POWER WINDOW CONTROL UNIT**).
   - When reinstalling the door panel, make sure the plastic cover is installed

properly and sealed around its outside perimeter to seal out water.

- Check for water leaks.

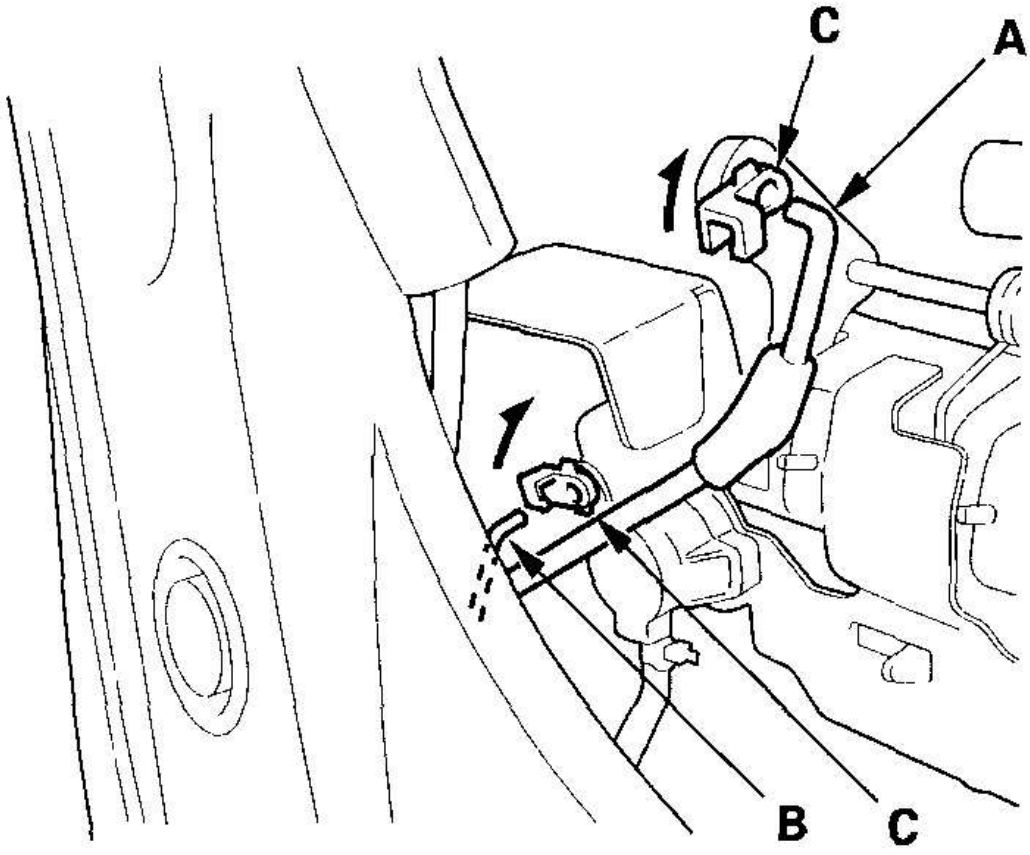
DOOR OUTER HANDLE REPLACEMENT

2-DOOR

NOTE: Put on gloves to protect your hands.

1. Remove these items:
   - Door panel (see **DOOR PANEL REMOVAL/INSTALLATION**)
   - Plastic cover, as necessary (see **2-Door**)
2. Raise the glass fully.
3. Disconnect the outer handle rod (A) and cylinder rod (B) from the joint bushings (C).

NOTE: Check the joint bushing for damage and replace if necessary.



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Fig. 20: Disconnecting Outer Handle Rod And Cylinder Rod From Joint Bushings
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Release the retainer clip (A), then remove the lock cylinder (B).

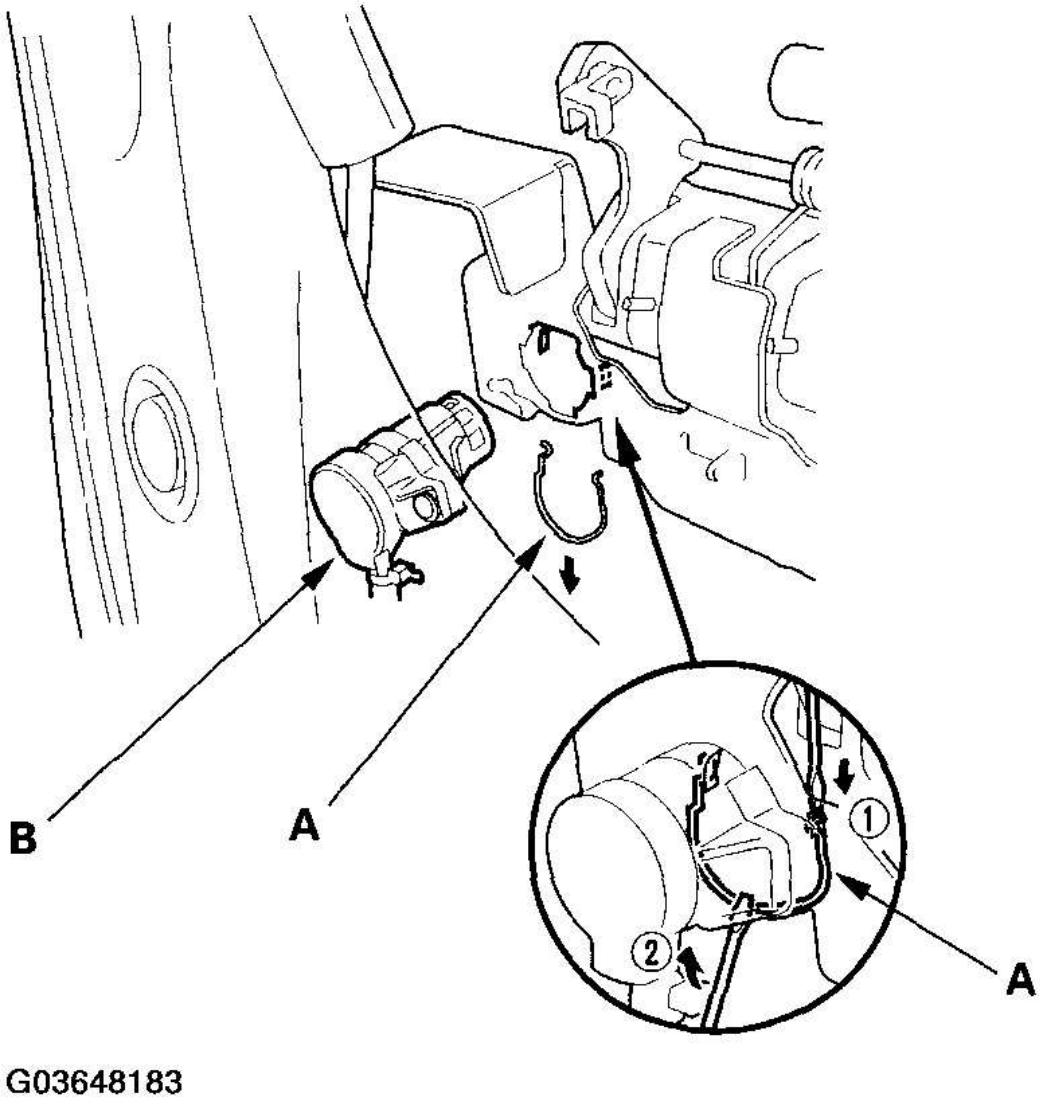


Fig. 21: Releasing Retainer Clip And Lock Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the screw, then separate the lock cylinder (A) and lock cylinder switch (B).

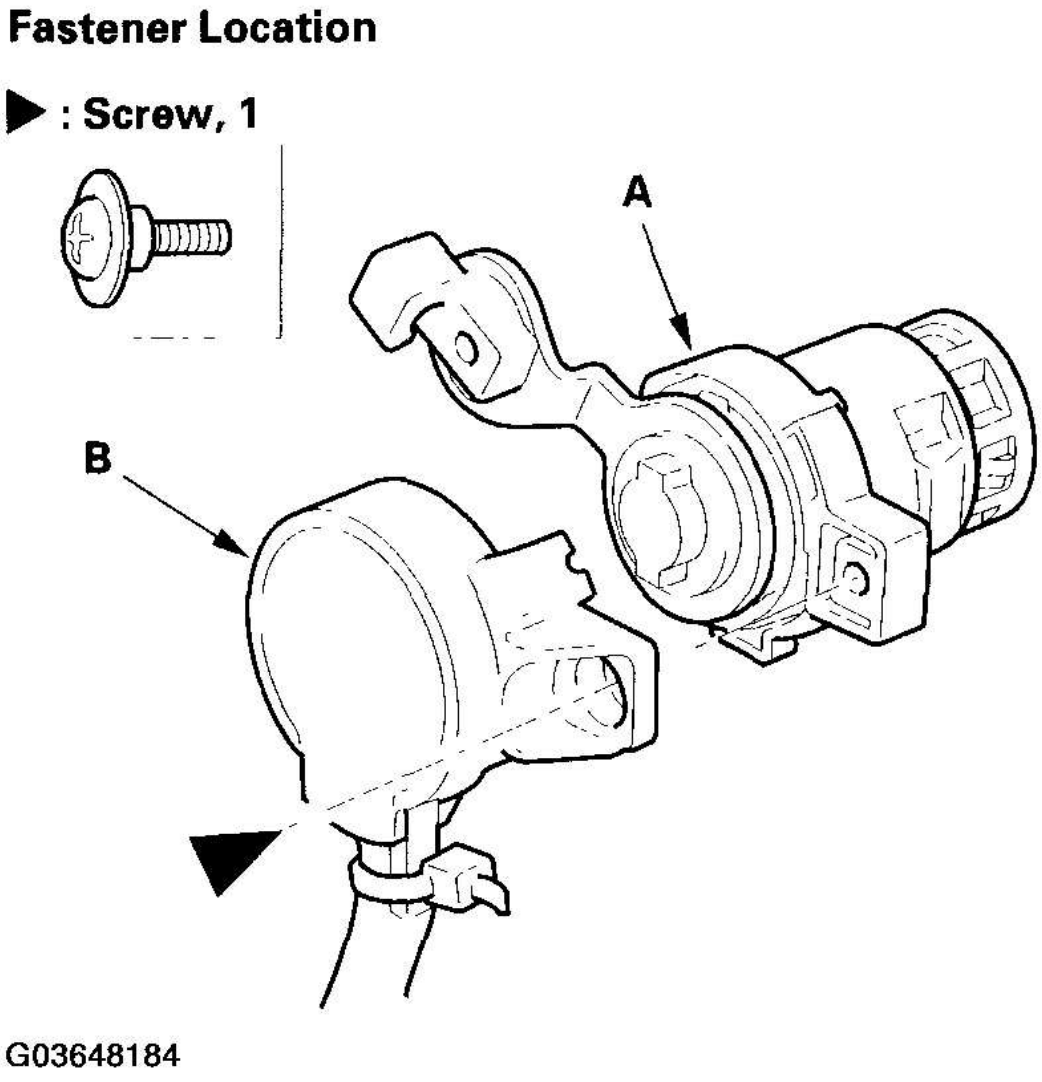
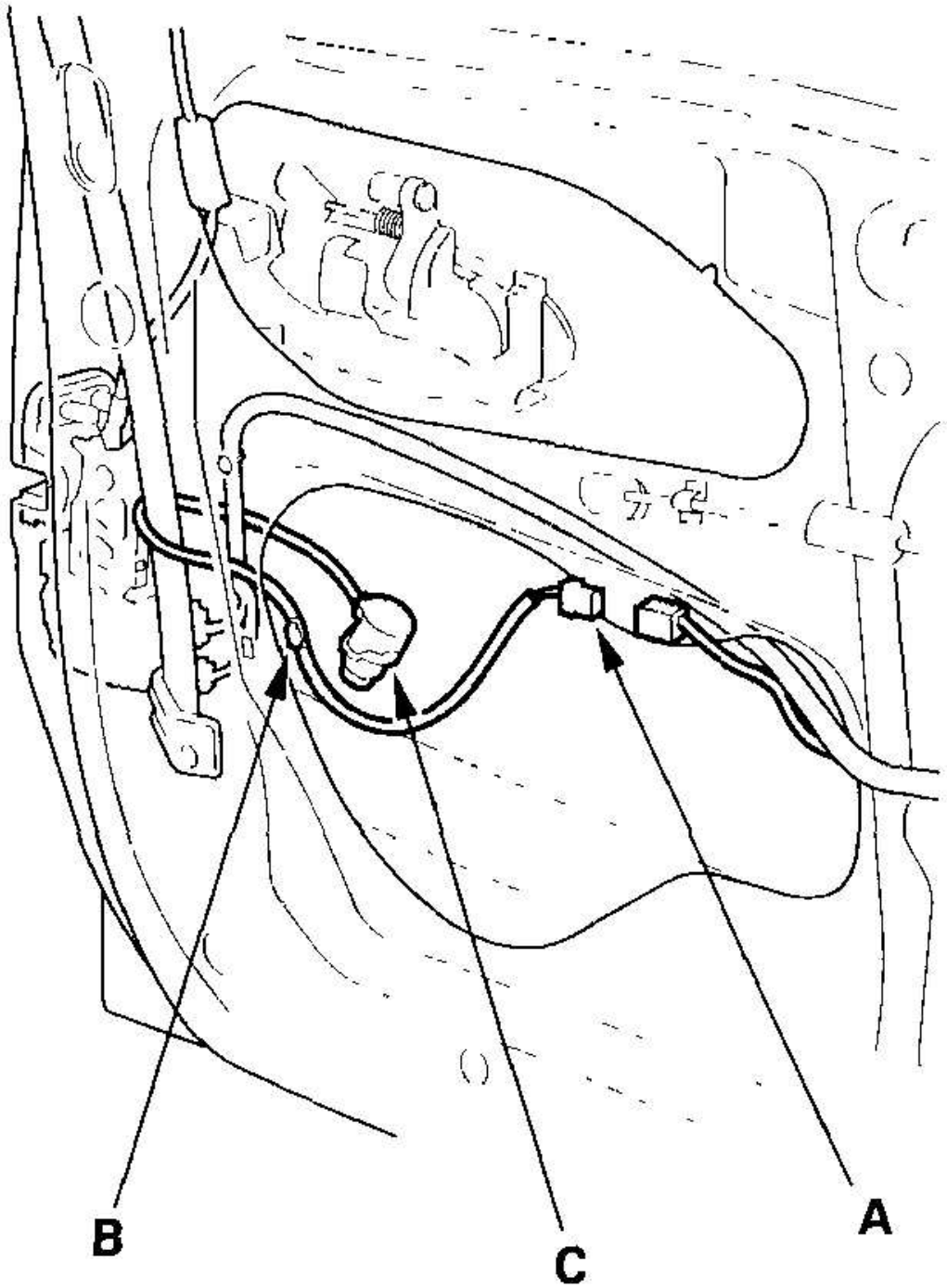


Fig. 22: Separating Lock Cylinder And Lock Cylinder Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Disconnect the lock cylinder switch connector (A), and detach the harness clip (B), then remove the lock cylinder switch (C).



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Fig. 23: Disconnecting Lock Cylinder Switch Connector And Harness Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the maintenance cap (A). While holding the outer handle (B) from the outside of the door, remove the bolts, then remove the outer handle protector (C) by sliding it forward to release the hook (D).

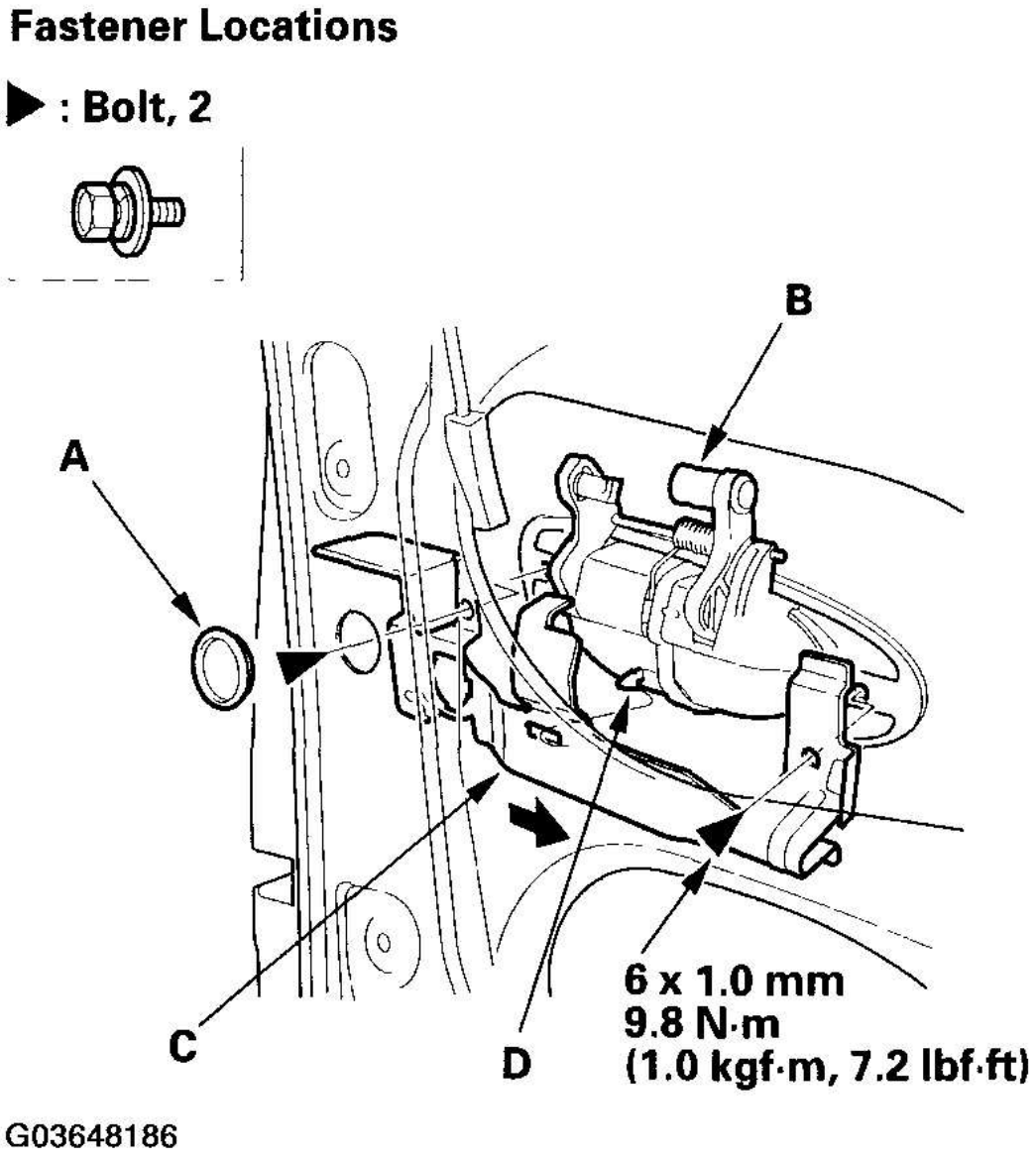


Fig. 24: Removing Maintenance Cap
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Pull out the outer handle (A) in the numbered sequence, and remove it.

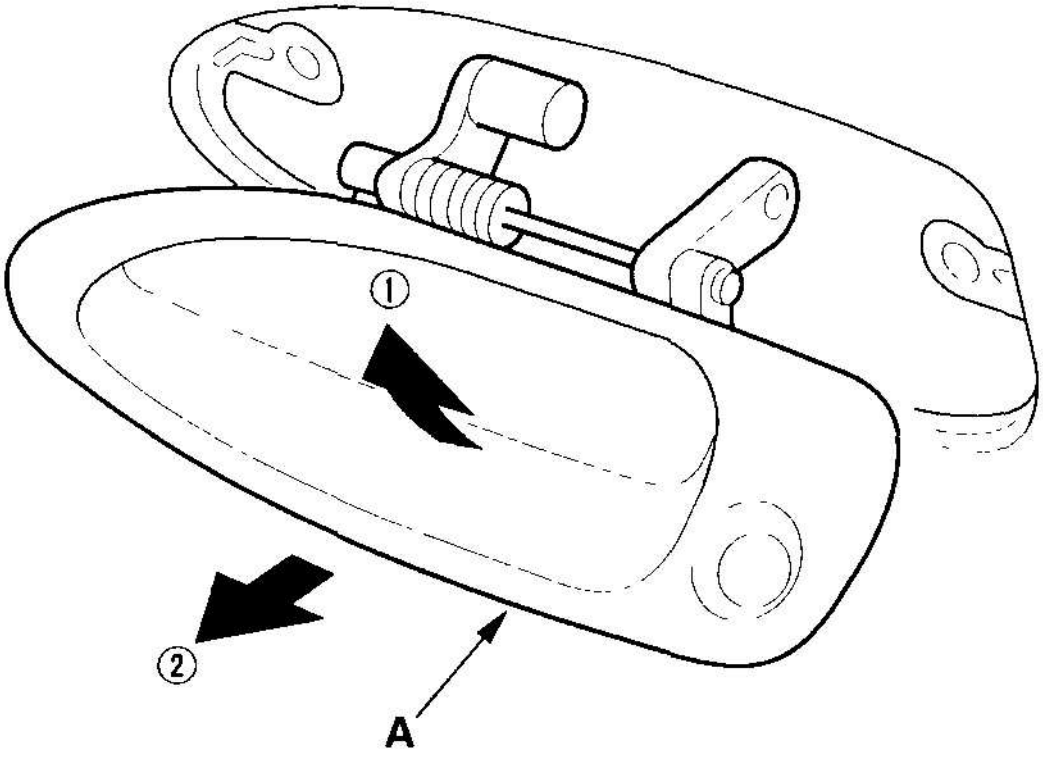


Fig. 25: Pulling Out Outer Handle In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the handle in the reverse order of removal, and note these items:
   - Make sure the lock cylinder switch harness is routed properly.
   - Make sure the lock cylinder switch connector is plugged in properly, and each rod is connected securely.
   - Be sure that the end of the lock cylinder is engaged with the lock cylinder switch correctly.

- Make sure the door locks and opens properly.
- When installing the lock cylinder, leave the outer door handle bolts loose so the inner protector does not interfere with the lock cylinder, then tighten the handle bolts.
- Install the lock cylinder retaining clip on the handle, then install the lock cylinder. Be sure the clip is fully seated in the slot on the lock cylinder.
- When reinstalling the door panel, make sure the plastic cover is installed properly and sealed around its outside perimeter to seal out water.
- Check for water leaks.

FRONT DOOR OUTER HANDLE REPLACEMENT

4-DOOR

NOTE: Put on gloves to protect your hands.

1. Remove these items:
   - Door panel (see **FRONT DOOR PANEL REMOVAL/INSTALLATION**)
   - Plastic cover, as necessary (see **4-DOOR**)
2. Raise the glass fully.
3. Pull the glass run channel (A) away as necessary, and remove the bolt, then remove the center lower channel (B) by pulling it downward.

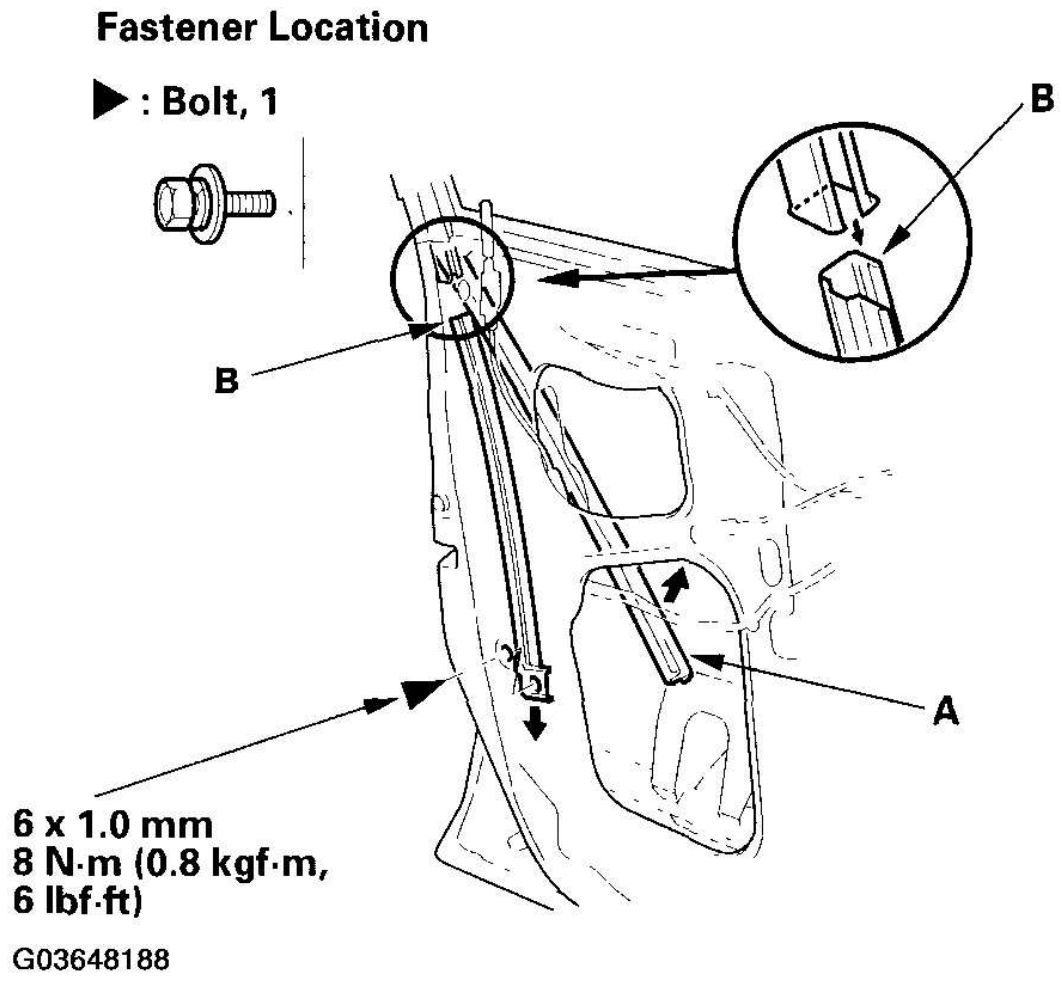


Fig. 26: Pulling Glass Run Channel Away
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the maintenance cap (A), then disconnect the outer handle rod (B), and cylinder rod (C) from the joint bushings (D).

NOTE: Check the joint bushing for damage and replace if necessary.

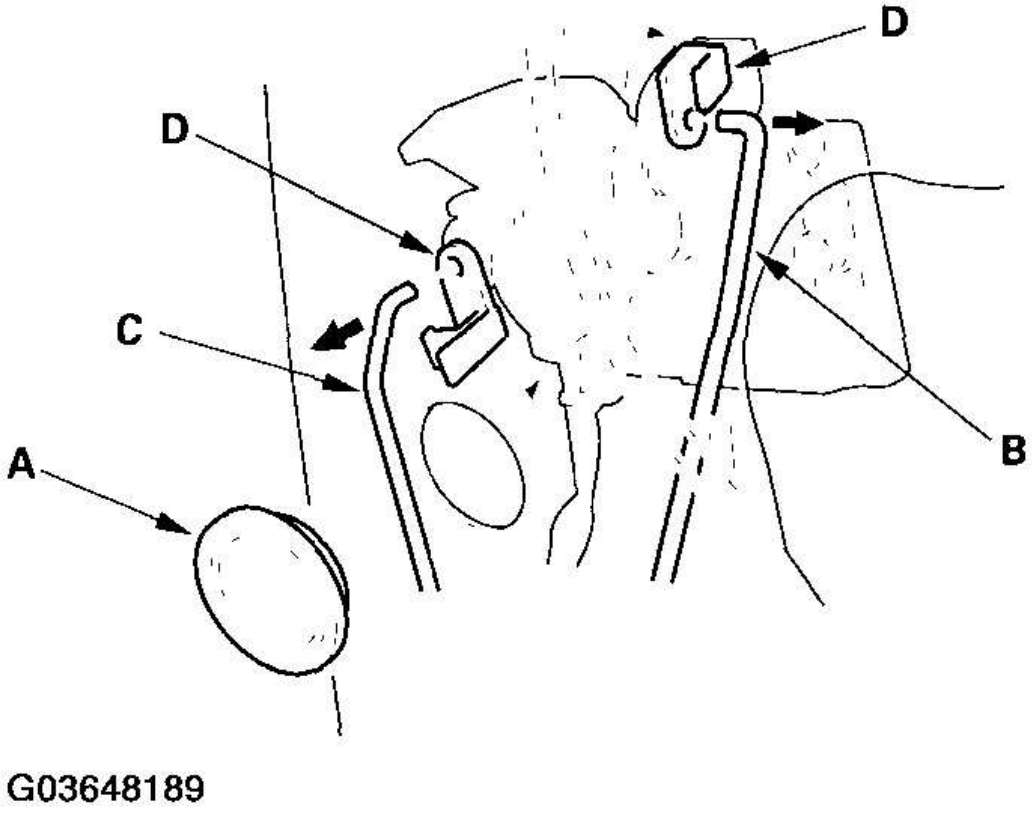


Fig. 27: Removing Maintenance Cap And Disconnecting Outer Handle Rod
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Driver's and some passenger's: Remove the maintenance cap (A) from the rear of the door, then loosen the screw securing the lock cylinder protector (B) and the outer handle (C).

NOTE: Because of the tape (D) on the middle of threads, the screw will stay on the protector after it is loosened.

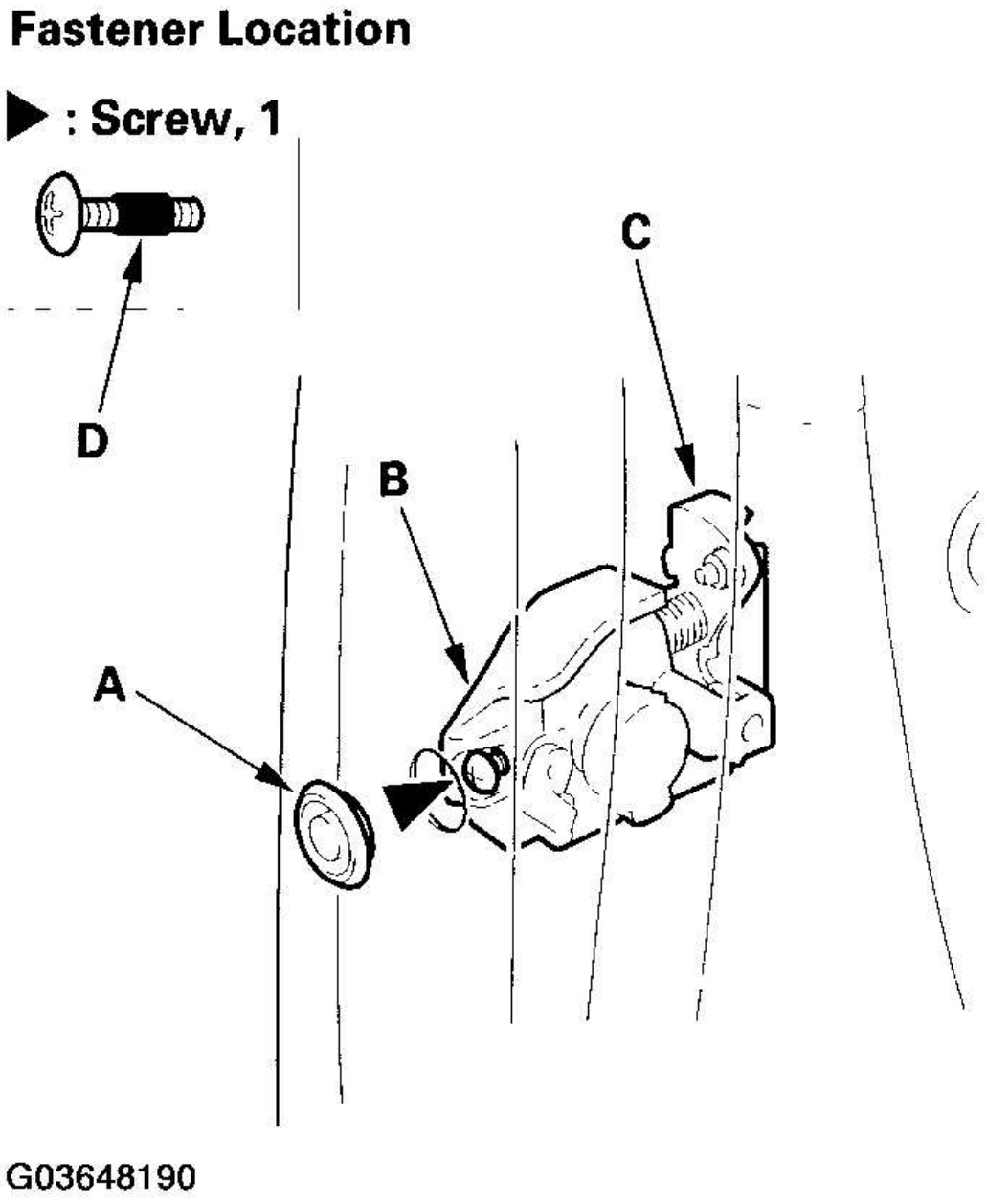


Fig. 28: Removing Maintenance Cap From Rear Of Door
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the bolt, slide the lock cylinder protector (A) rearward, then remove the lock cylinder switch (for some models), lock cylinder, and lock cylinder

protector as an assembly.

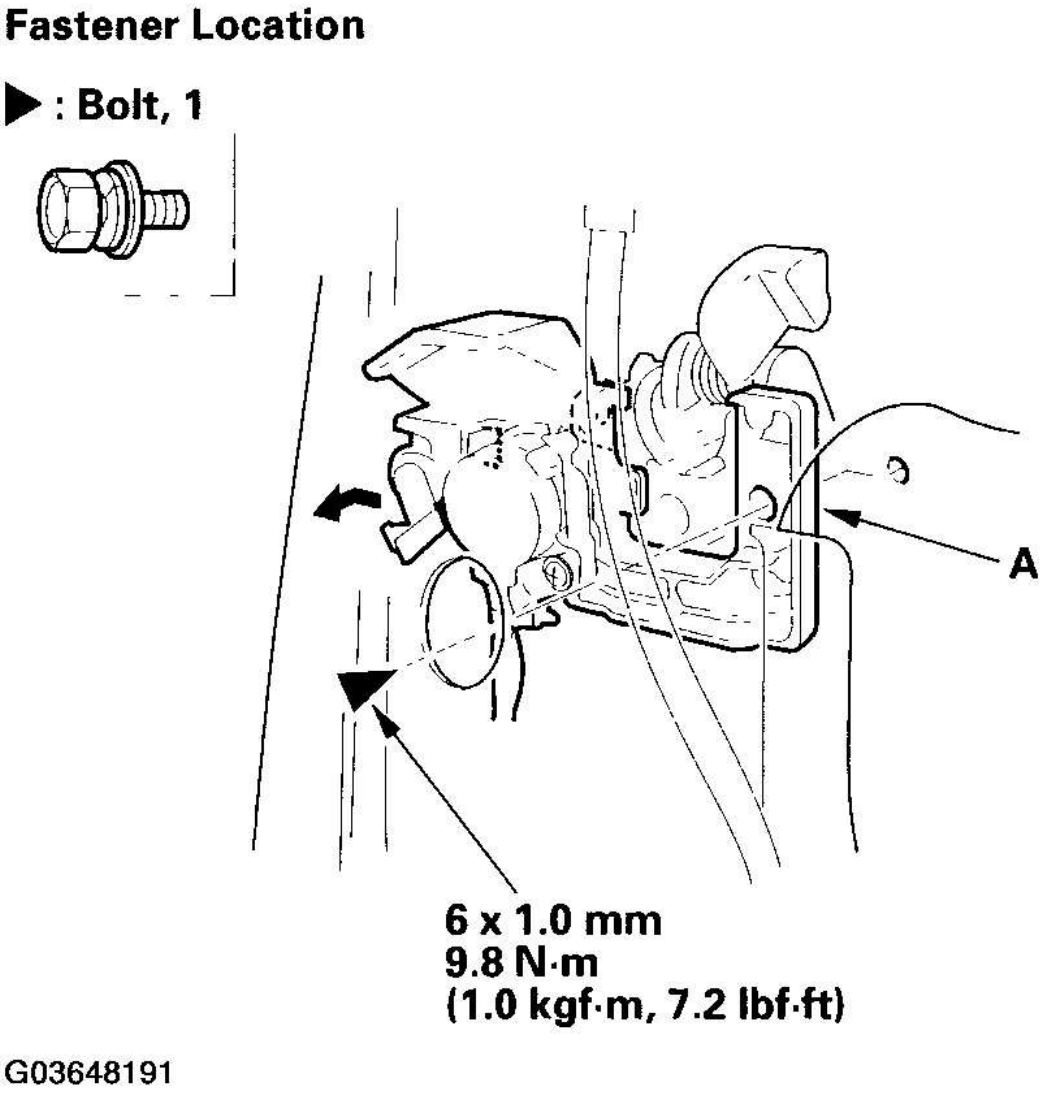


Fig. 29: Sliding Lock Cylinder Protector Rearward
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. With lock cylinder switch: Disconnect the lock cylinder switch connector (A), and detach the harness clips (B), then remove the lock cylinder switch (C).

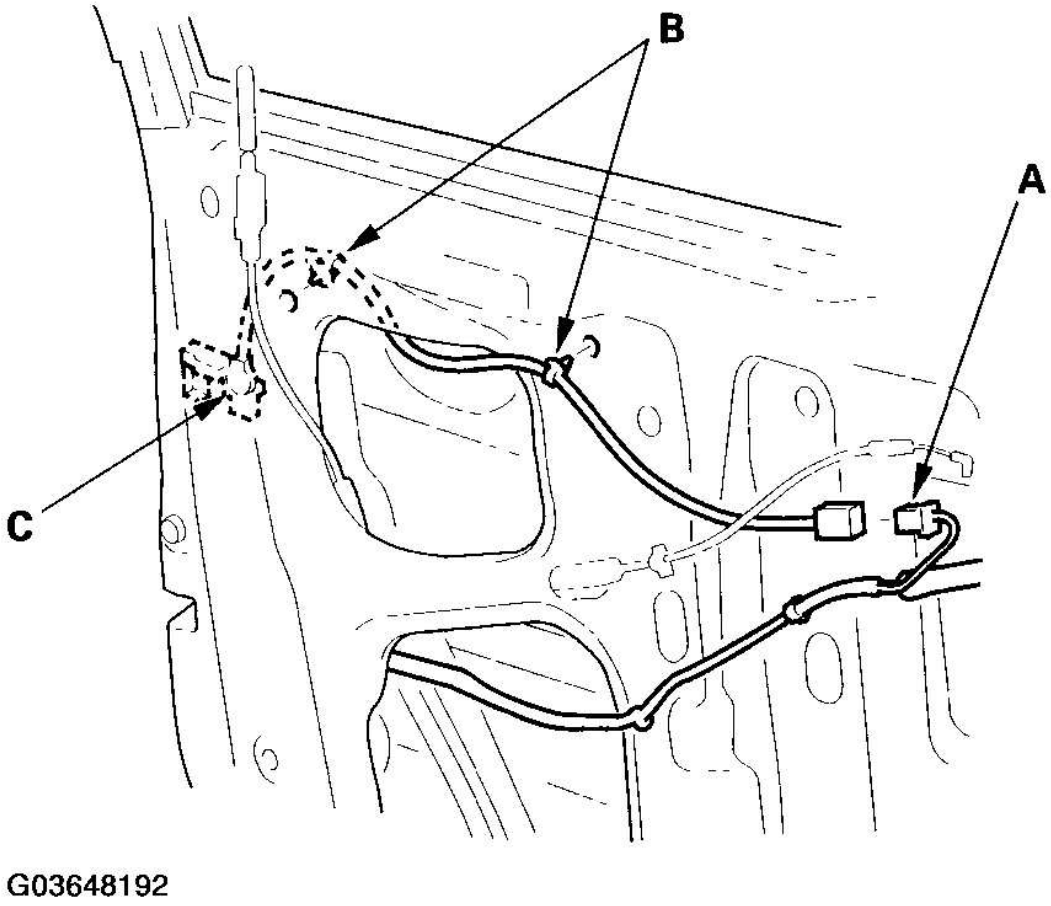


Fig. 30: Disconnecting Lock Cylinder Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the screws, then separate the lock cylinder (A), lock cylinder switch (B) (for some models), and lock cylinder protector (C).

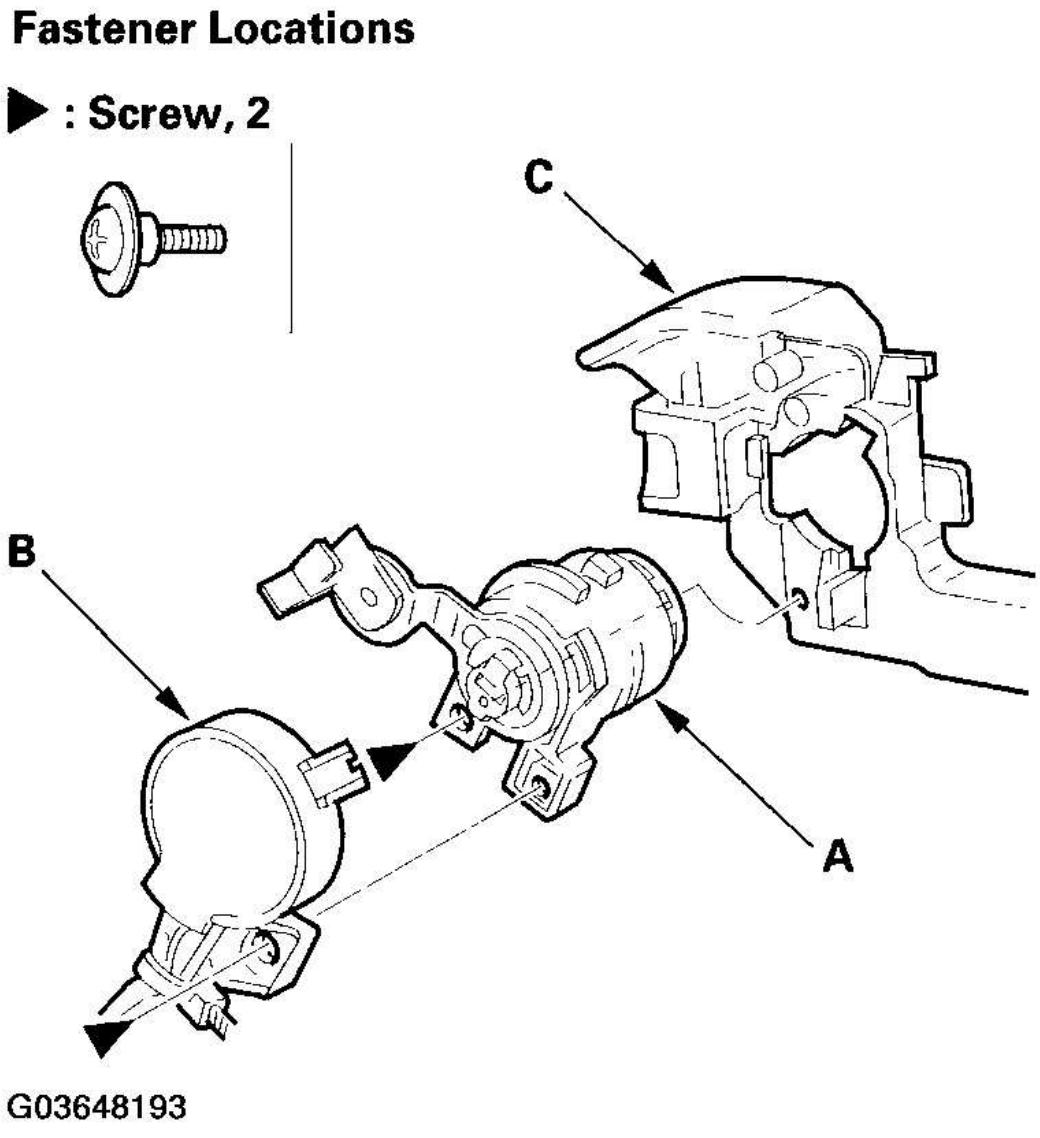


Fig. 31: Separating Lock Cylinder, Lock Cylinder Switch And Lock Cylinder Protector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the bolt, then remove the spacer (A).

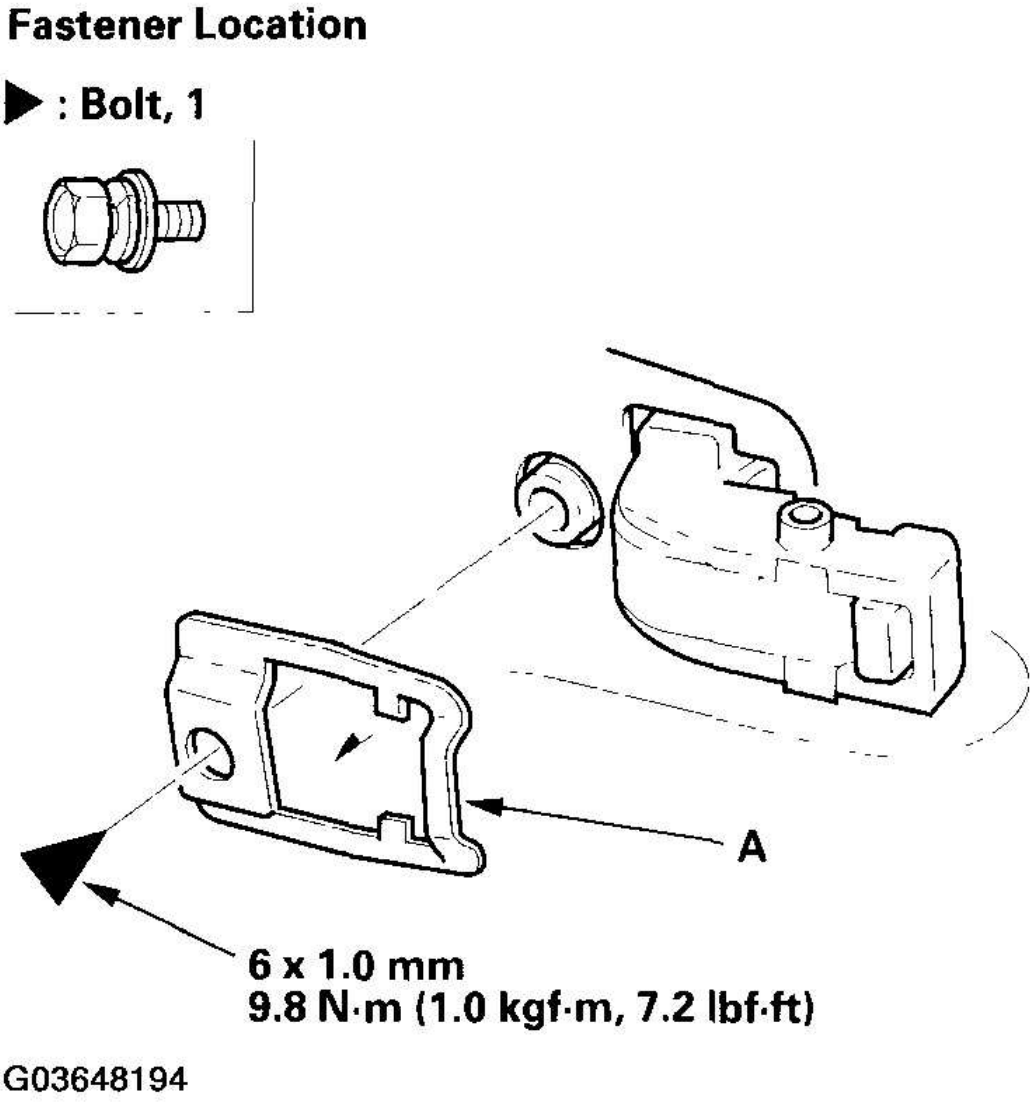


Fig. 32: Removing Spacer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. While pulling the outer handle (A), remove the handle from the holes in the door panel. Take care not to scratch the door.

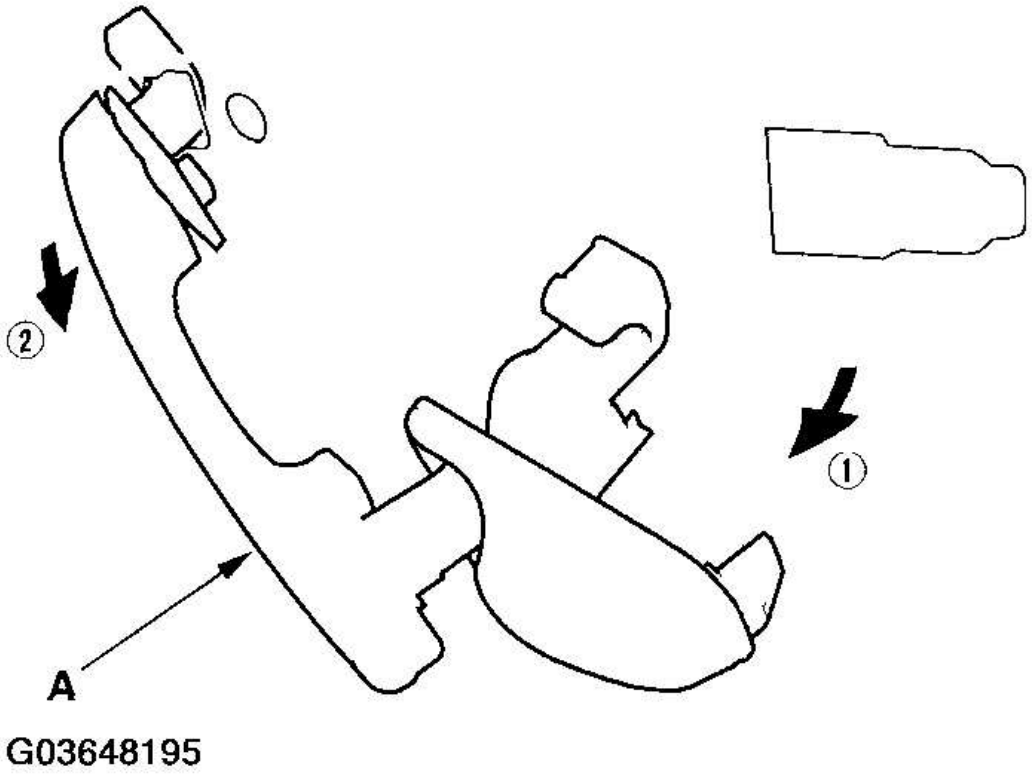


Fig. 33: Removing Handle From Holes In Door Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the handle in the reverse order of removal, and note these items:
    - Make sure the lock cylinder switch harness is routed properly (for some models).
    - Make sure the lock cylinder switch connector is plugged in properly (for some models), and each rod is connected securely.
    - Be sure that the end of the lock cylinder is engaged with the lock cylinder switch correctly.
    - Make sure the door lock cylinder/door locks operate properly.
    - Make sure the door handle works properly.
    - Do the power window control unit reset procedure (see **RESETTING THE POWER WINDOW CONTROL UNIT**).

- When reinstalling the door panel, make sure the plastic cover is installed properly and sealed around its outside perimeter to seal out water.
- Check for water leaks.

DOOR LATCH REPLACEMENT

2-DOOR

NOTE: Put on gloves to protect your hands.

1. Raise the glass fully.
2. Remove these items:
   - Door panel (see **DOOR PANEL REMOVAL/INSTALLATION**)
   - Plastic cover, as necessary (see **2 Door**)
3. Disconnect the cylinder rod from the lock cylinder, then disconnect the outer handle rod from the outer handle (see step 3 in **Door Outer Handle Replacement**).
4. Pull the glass run channel (A) away as necessary, and remove the bolt, then remove the center lower channel (B) by pulling it downward.

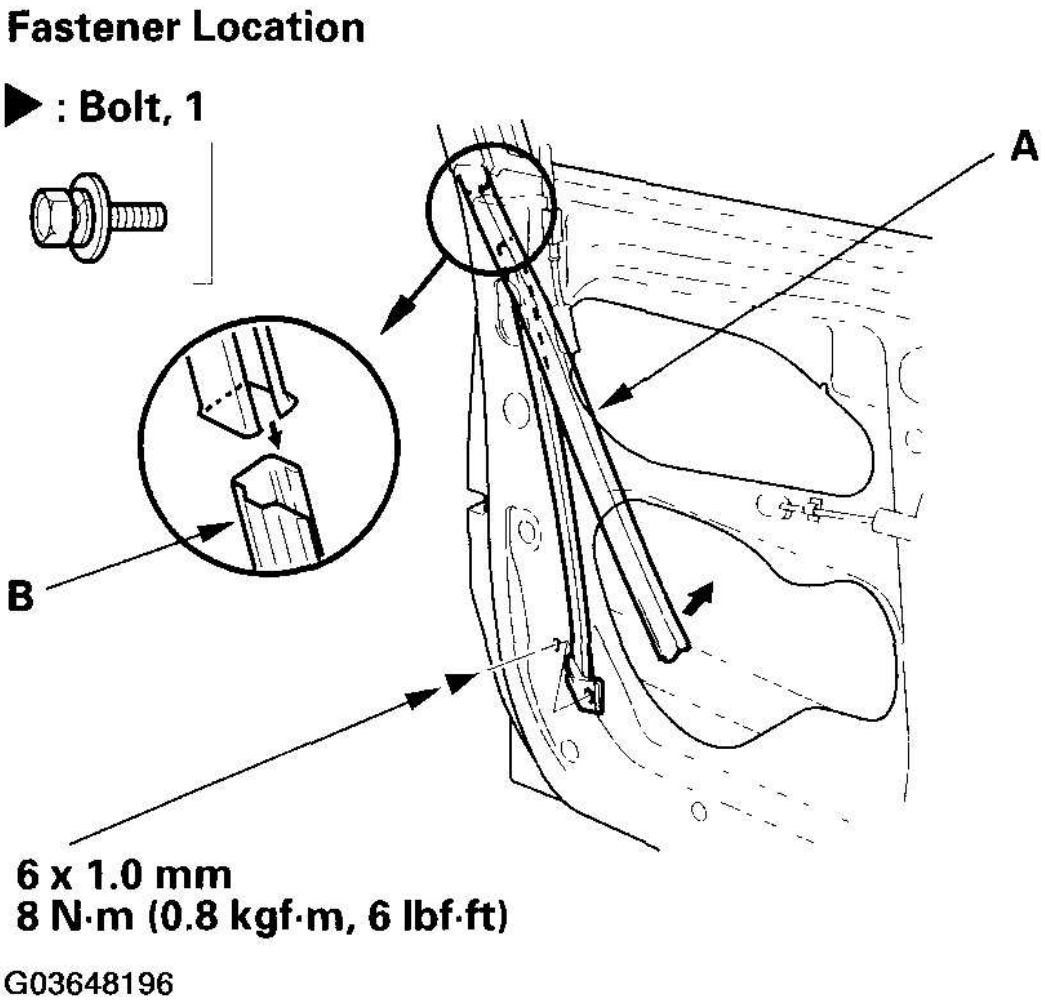


Fig. 34: Removing Center Lower Channel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the screw securing the lock knob (A).

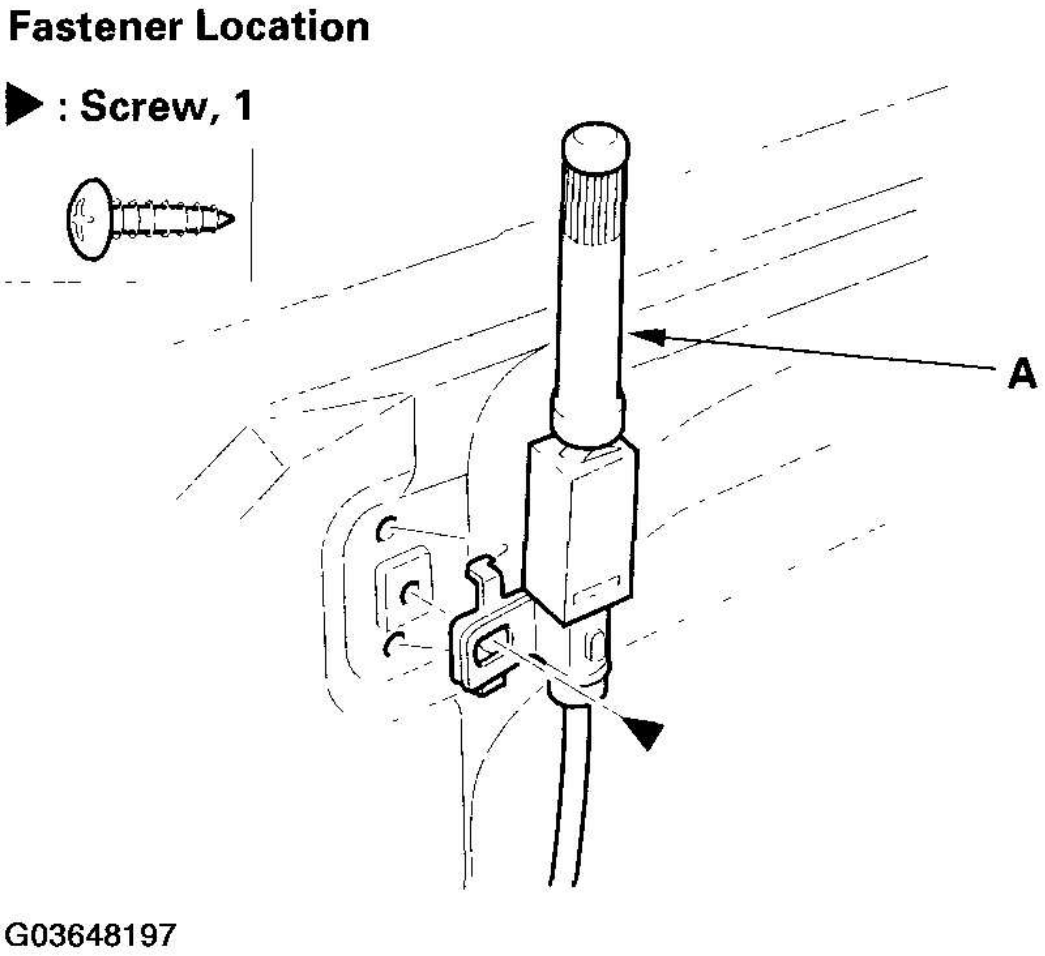


Fig. 35: Removing Screw Securing Lock Knob
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Detach the inner handle cable clip (A), and disconnect the actuator connectors (B). Remove the screws, then remove the latch (C) through the hole in the door. Take care not to bend the outer handle rod (D), cylinder rod (E), inner handle cable (F), and lock cable (G).

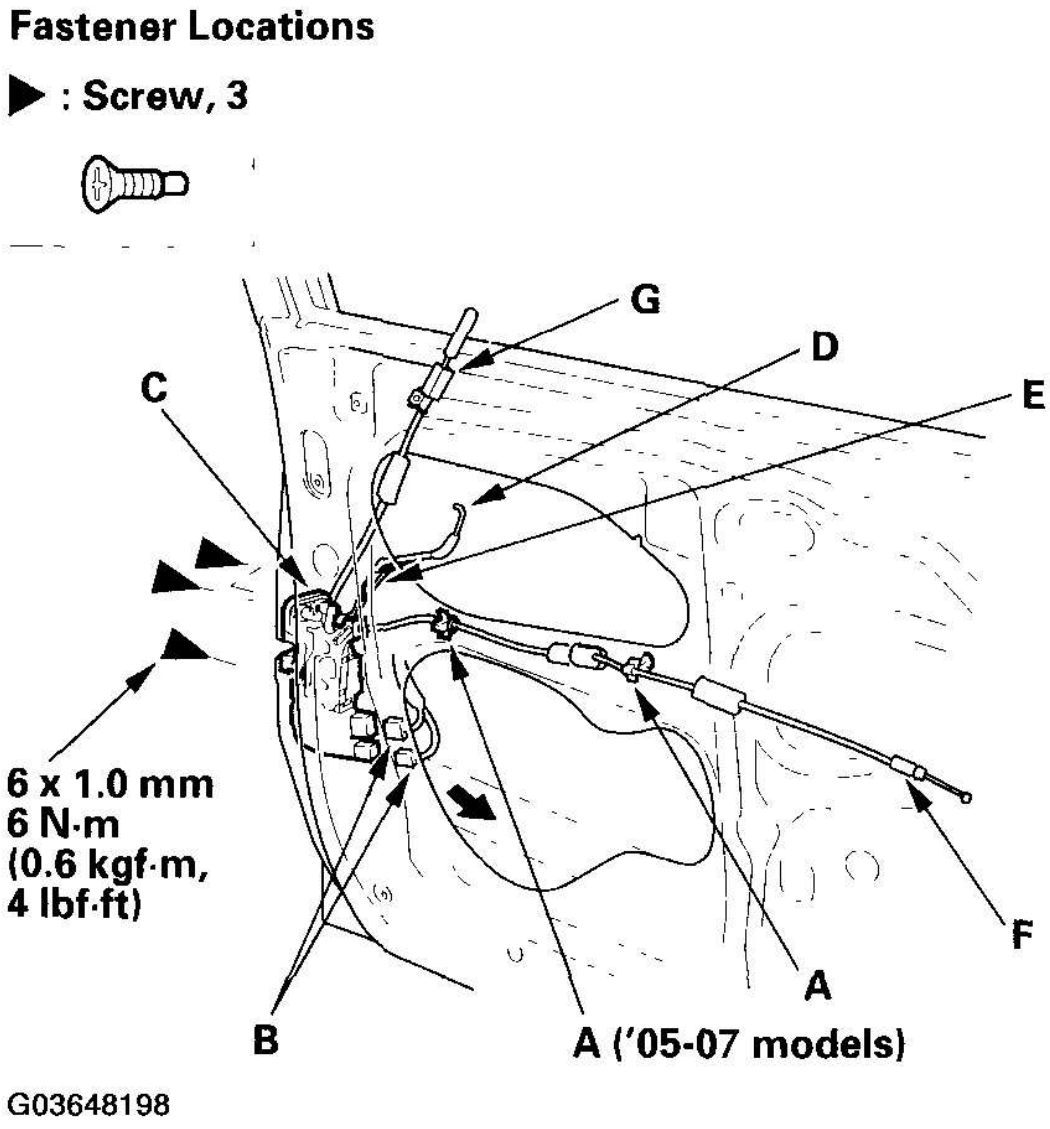


Fig. 36: Detaching Inner Handle Cable Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the latch in the reverse order of removal, and note these items:
   - Make sure the actuator connectors are plugged in property, and each rod is connected securely.
   - Make sure the door locks and opens properly.
   - Do the power window control unit reset procedure (see **RESETTING**

THE POWER WINDOW CONTROL UNIT).

- When reinstalling the door panel, make sure the plastic cover is installed properly and sealed around its outside perimeter to seal out water.
- Driver's: Perform the power window control unit reset procedure (see **RESETTING THE POWER WINDOW CONTROL UNIT**).

FRONT DOOR LATCH REPLACEMENT

4-DOOR

NOTE: Put on gloves to protect your hands.

1. Raise the glass fully.
2. Remove these items:
   - Door panel (see **FRONT DOOR PANEL REMOVAL/INSTALLATION**)
   - Plastic cover, as necessary (see **Front Door**)
   - Center lower channel (see 3)
3. Disconnect the cylinder rod from the lock cylinder, and disconnect the outer handle rod from the outer handle (see 4).
4. Remove the screw securing the lock knob (A).

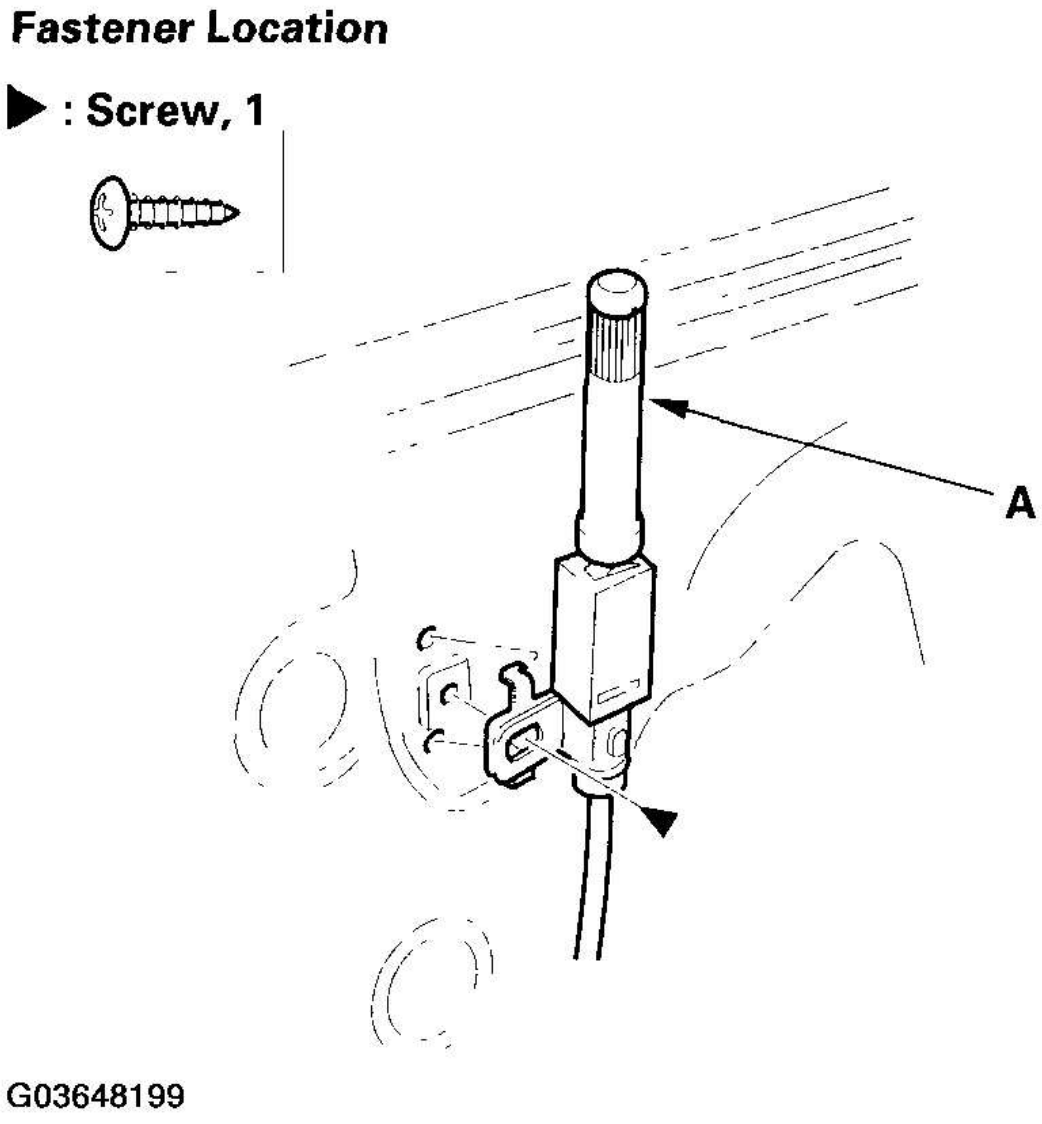


Fig. 37: Removing Screw Securing Lock Knob
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the actuator connectors (A) (for some models), and detach the inner handle cable clip (B). Remove the screws (C, D) securing the latch (E) and the lock cable protector.

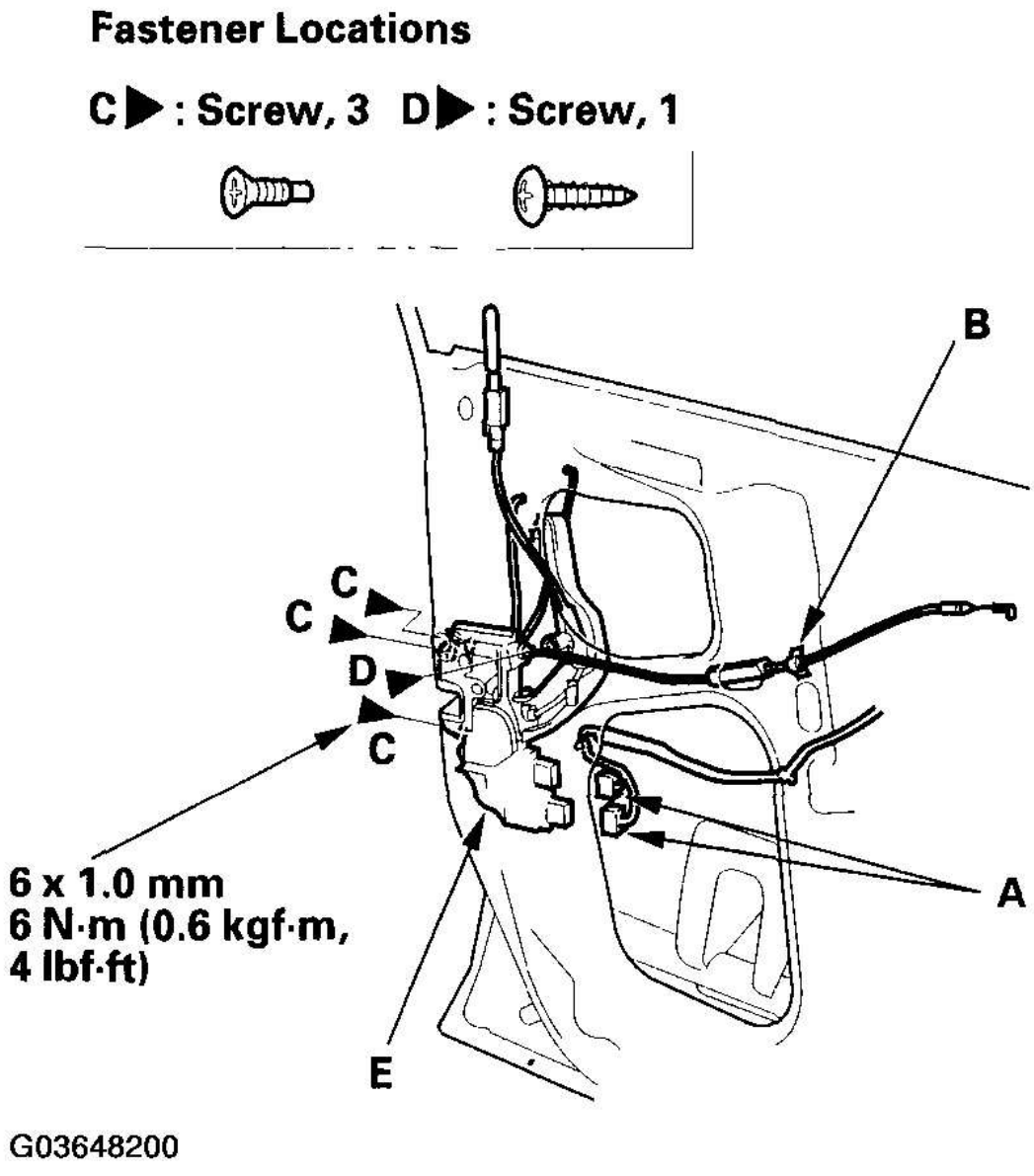


Fig. 38: Disconnecting Actuator Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Release the hooks (A) of the lock cable protector (B) from the door, then remove the latch (C) with the protector through the hole in the door. Take care not to bend the outer handle rod (D), cylinder rod (E), lock cable (F), and inner handle cable (G).

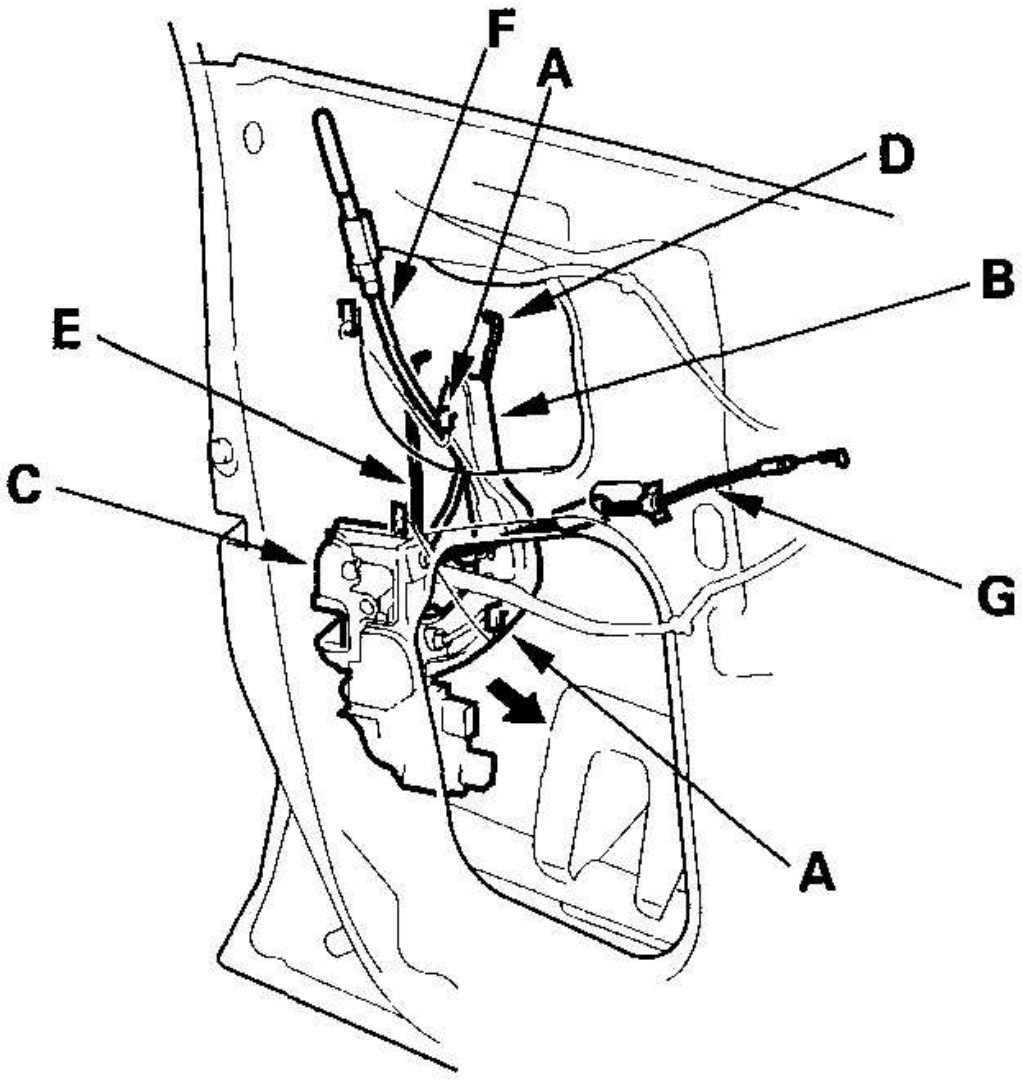


Fig. 39: Releasing Hooks Of Lock Cable Protector From Door
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the lock cable protector (A) from the latch protector (B) by releasing the hook (C).

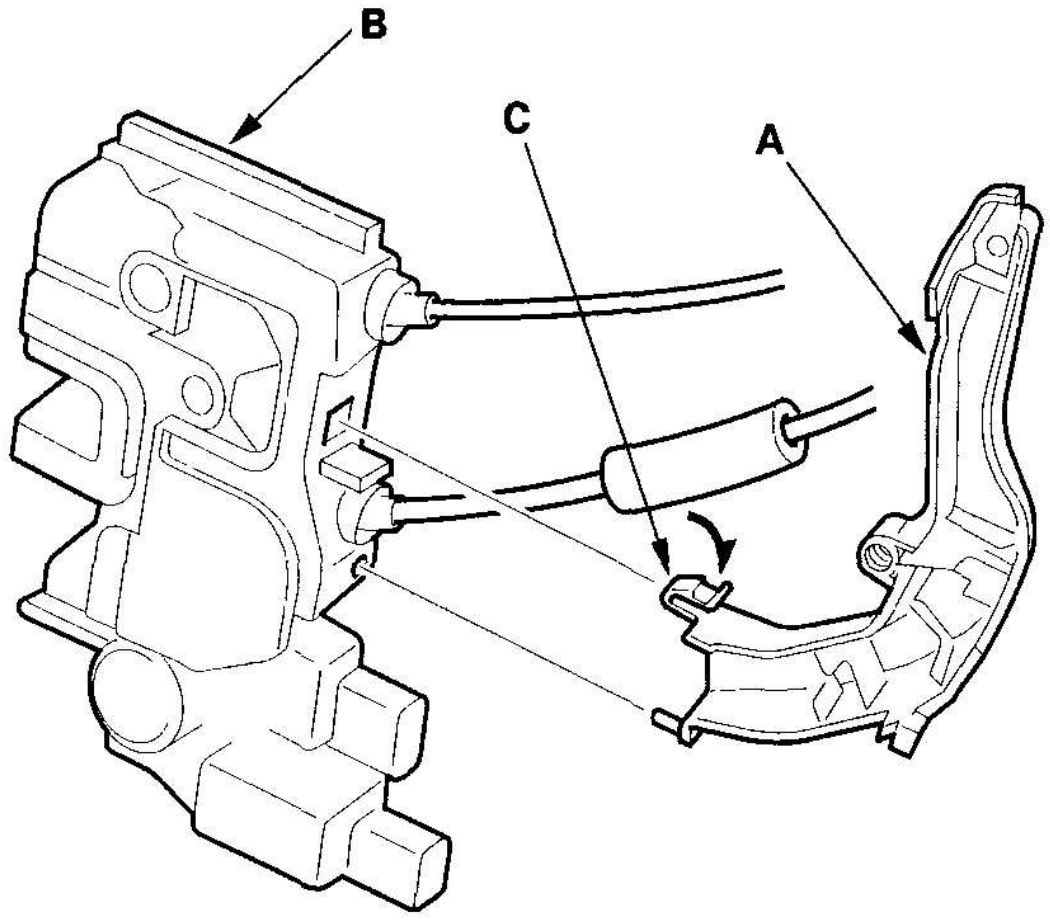


Fig. 40: Removing Lock Cable Protector From Latch Protector By Releasing Hook
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the latch in the reverse order of removal, and note these items:
   - If equipped, make sure the actuator connectors are plugged in properly and each rod is connected securely.
   - Make sure the door locks and opens properly.
   - Do the power window control unit rest procedure (see **RESETTING THE POWER WINDOW CONTROL UNIT**).

- When reinstalling the door panel, make sure the plastic cover is installed properly and sealed around its outside perimeter to seal out water.
- Check for water leaks.

FRONT DOOR GLASS AND REGULATOR REPLACEMENT

NOTE: Put on gloves to protect your hands.

1. Remove the door panel, 2-door (see **2-DOOR**), 4-door (see **4-DOOR**).
2. 4-door: Remove the screws, then remove the panel bracket (A).

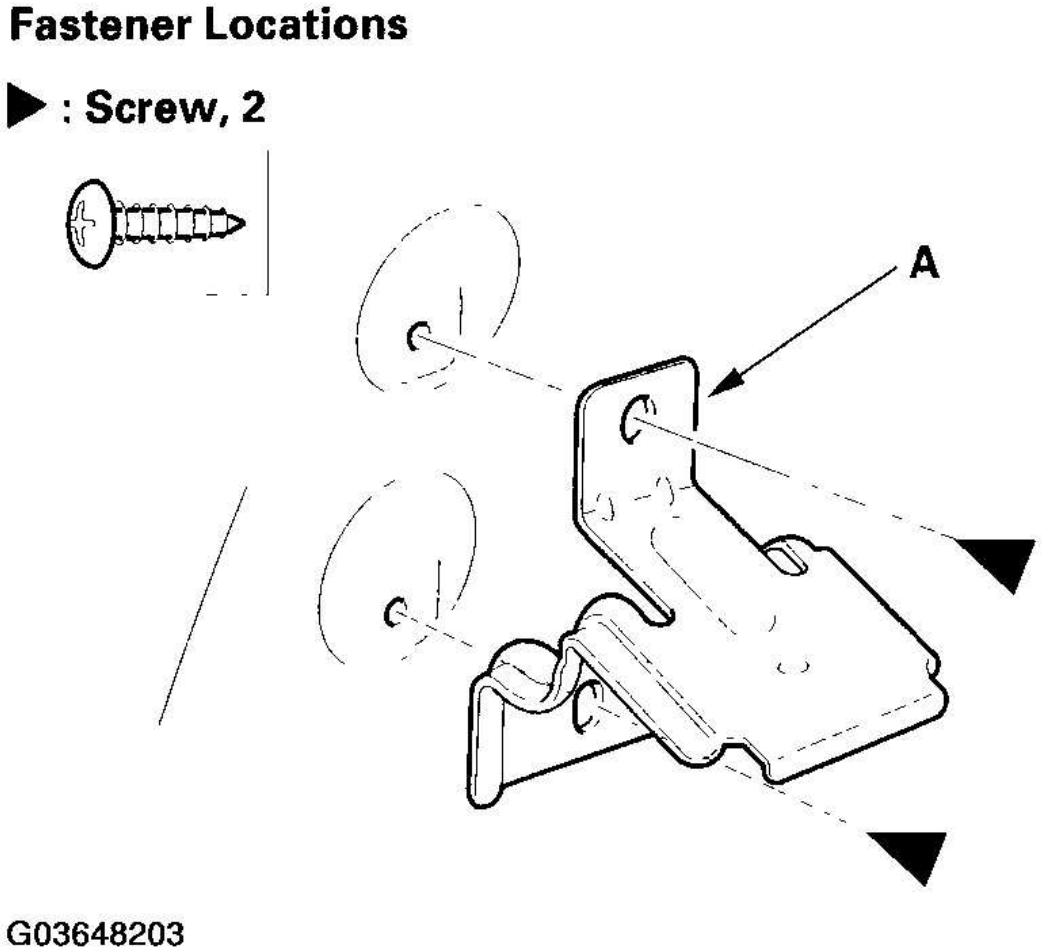


Fig. 41: Removing Panel Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the plastic cover, 2-door (see **2-Door**), 4-door (see **4-DOOR**).
4. Carefully raise the glass (A) until you can see the bolts, then remove them. Carefully pull the glass out through the window slot. Take care not to drop the glass inside the door.

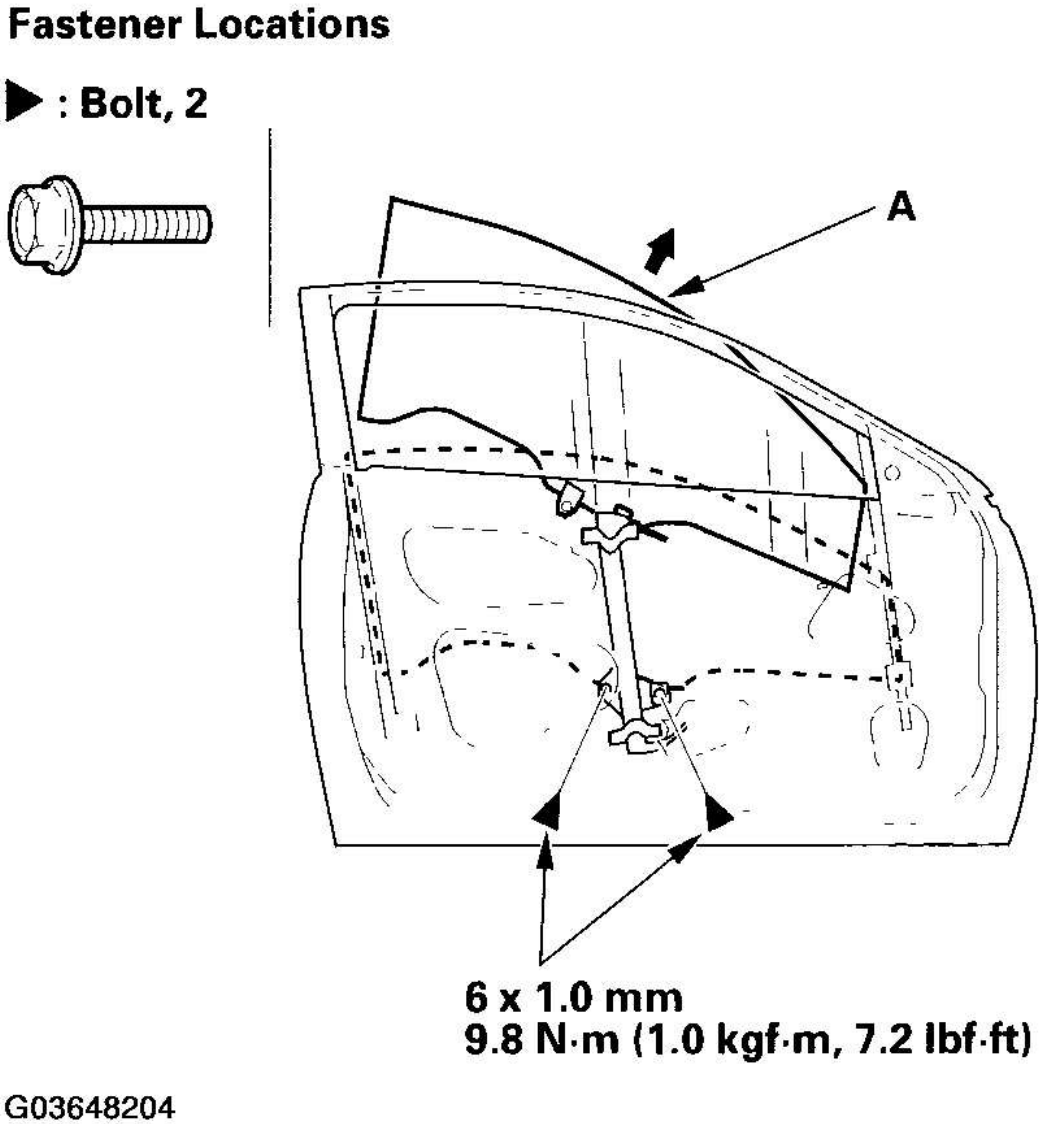


Fig. 42: Raising Glass And Removing (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

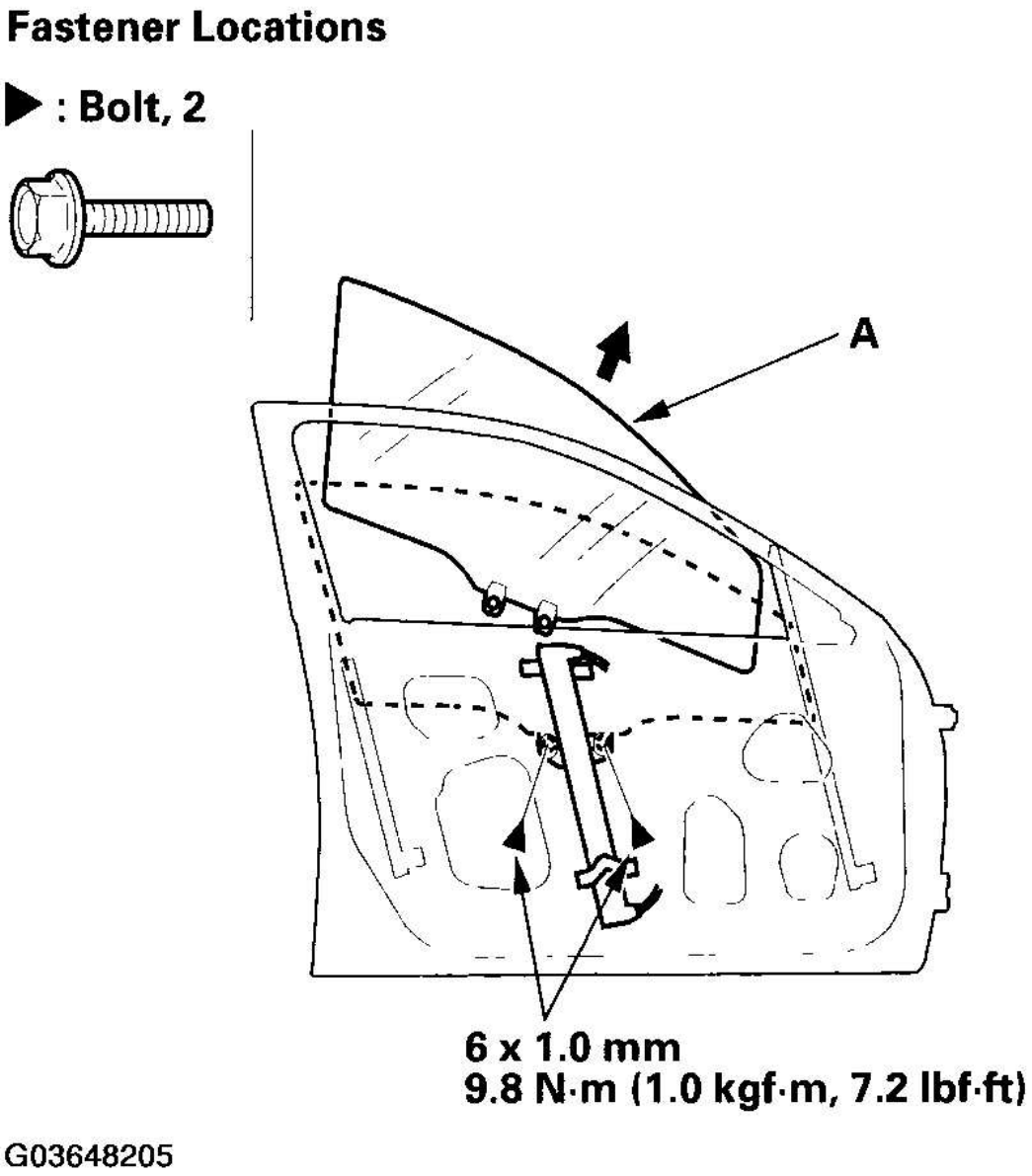


Fig. 43: Raising Glass And Removing (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the connector (A) from the regulator (B).

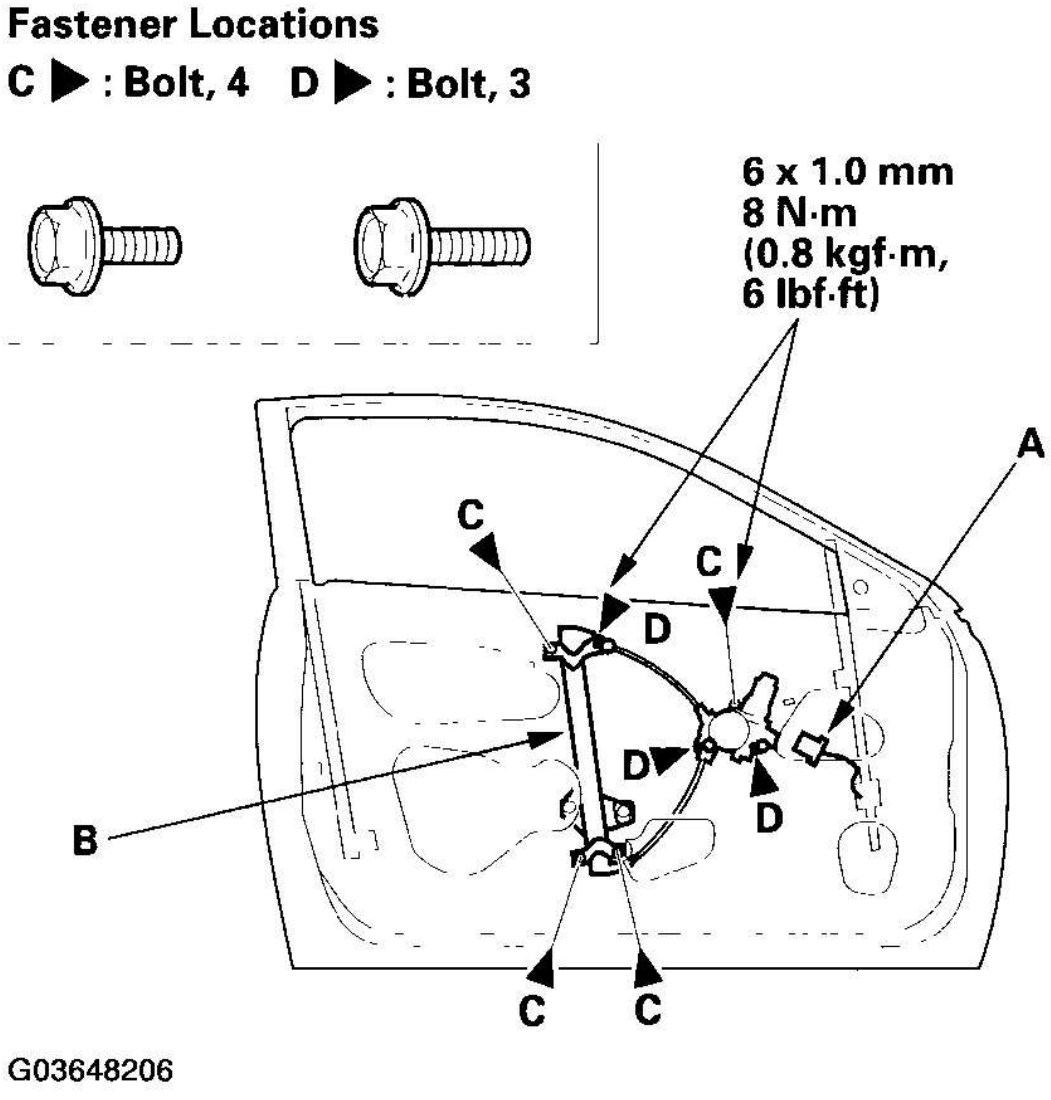


Fig. 44: Disconnecting Connector From Regulator (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

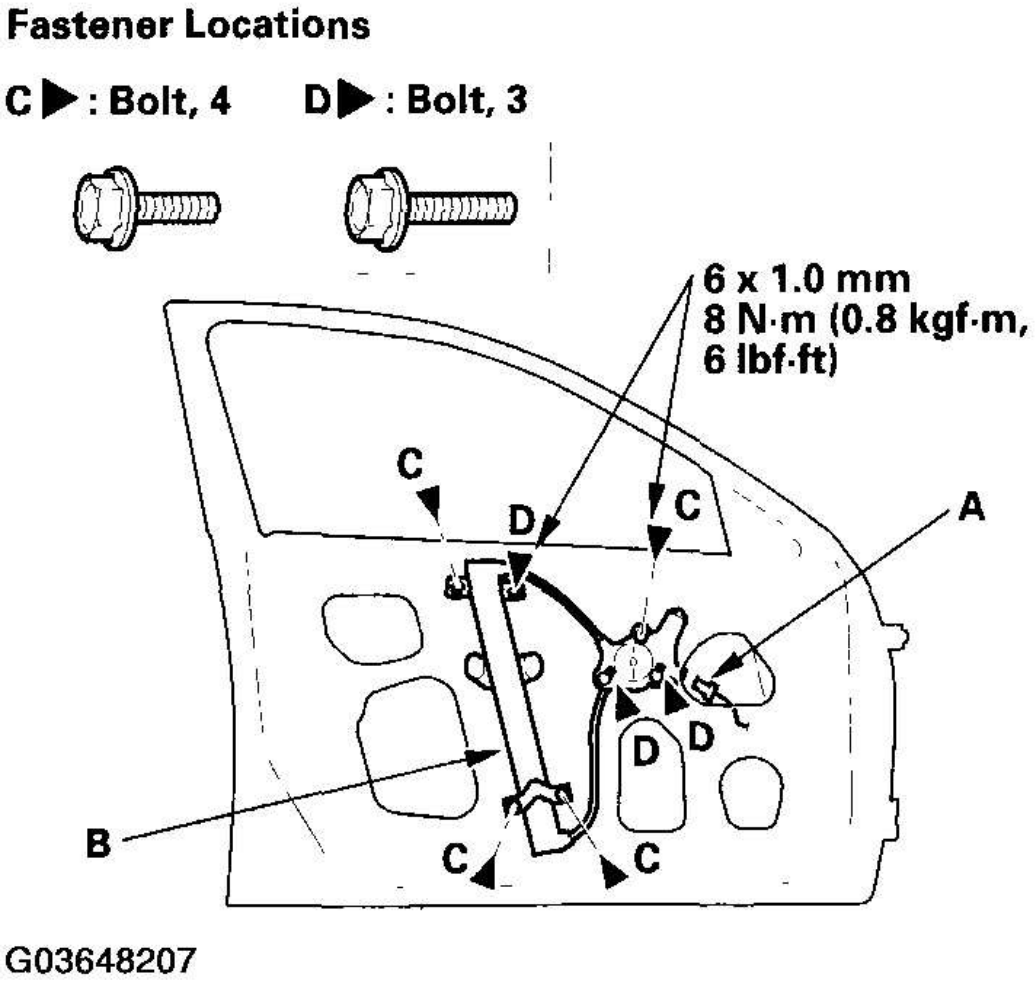


Fig. 45: Disconnecting Connector From Regulator (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the bolts (C), and loosen the bolts (D), then remove the regulator through the hole in the door.
7. Apply multipurpose grease to all the sliding surfaces of the regulator (A) where shown below.

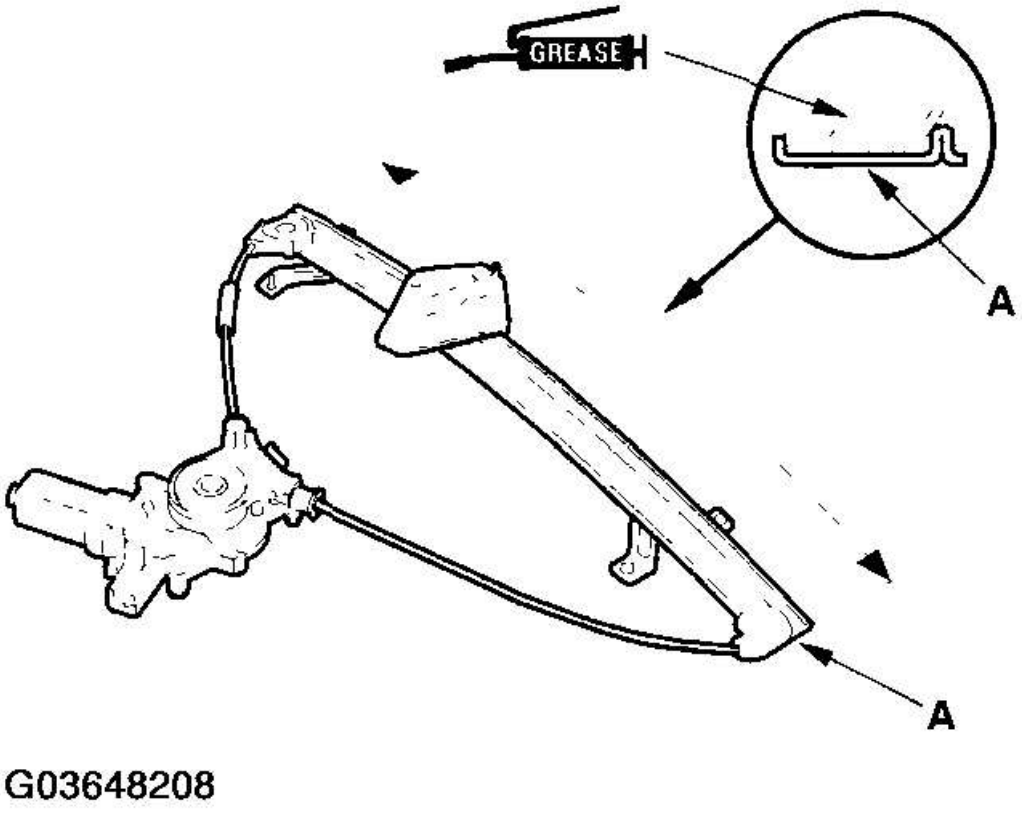


Fig. 46: Applying Multipurpose Grease To Sliding Surfaces
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the glass and regulator in the reverse order of removal, and note these items:
   - Roll the glass up and down to see if it moves freely without binding.
   - Make sure that there is no clearance between the glass and glass run channel when the glass is closed.
   - Adjust the position of the glass as necessary (see **Front and Rear Door Glass Adjustment**).
   - Do the power window control unit reset procedure (see **RESETTING THE POWER WINDOW CONTROL UNIT**).
   - Test-drive and check for wind noise and rattles.

- When reinstalling the door panel, make sure the plastic cover is installed properly and sealed around its outside perimeter to seal out water.
- Check for water leaks.
- Make sure the power door locks, windows, and power mirror operate properly.

DOOR SASH TRIM REPLACEMENT

2-DOOR

NOTE: Take care not to scratch the door.

1. Lower the glass fully.
2. Remove the mirror (see **POWER MIRROR/MANUAL MIRROR REPLACEMENT**).
3. Slide the door glass outer weatherstrip (A) forward to release the hook (B) on bottom of the door sash trim (C) from under the rear end of the weatherstrip.

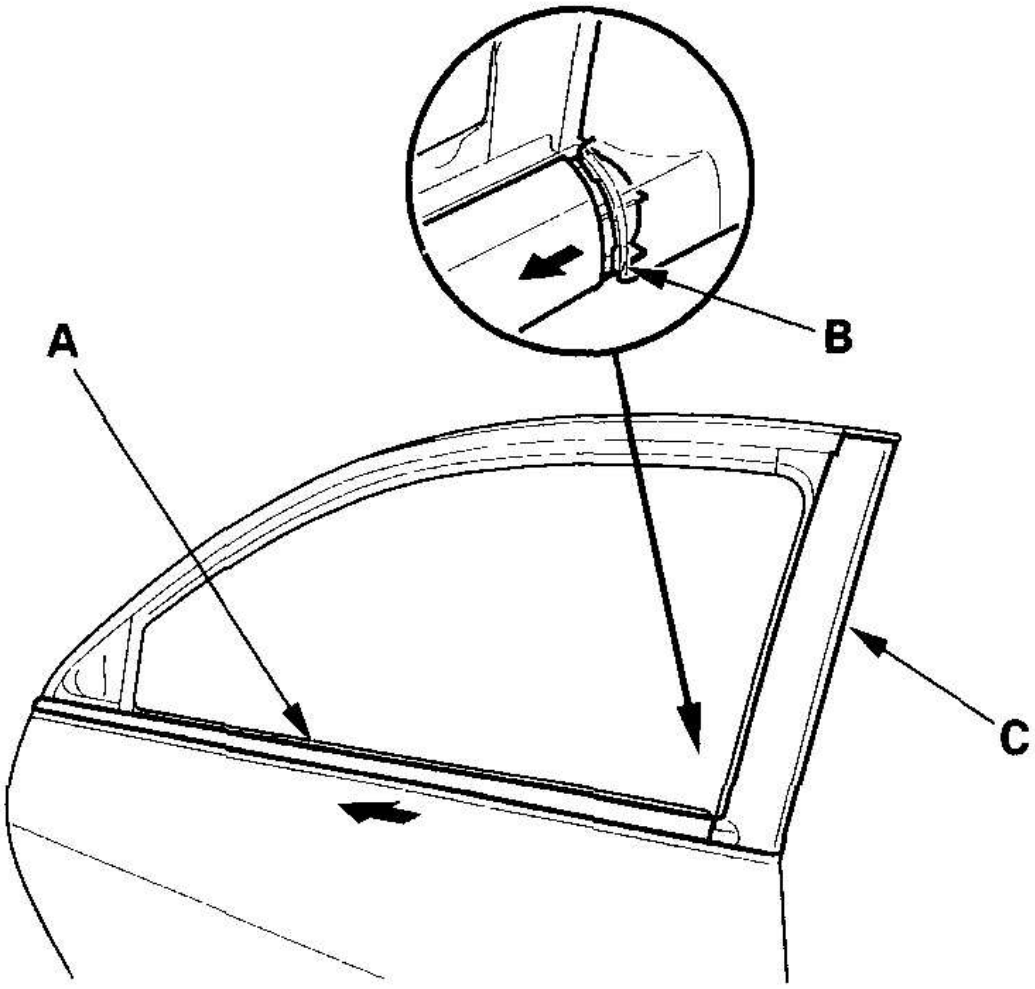


Fig. 47: Sliding Door Glass Outer Weatherstrip Forward To Release Hook
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Pull back the door weatherstrip (A) at the rear upper corner, and pull the glass run channel (B) away as needed, then remove the screws.

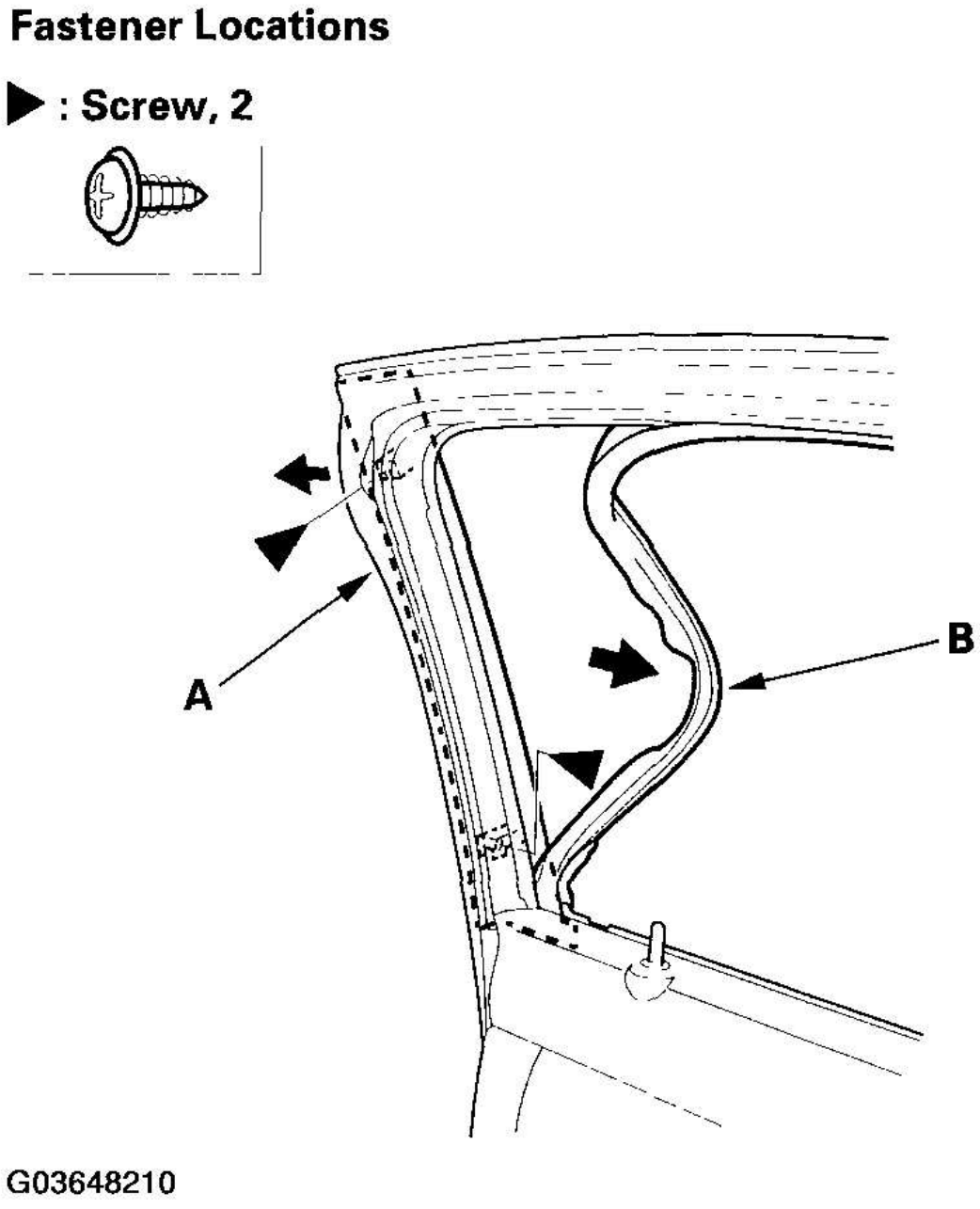
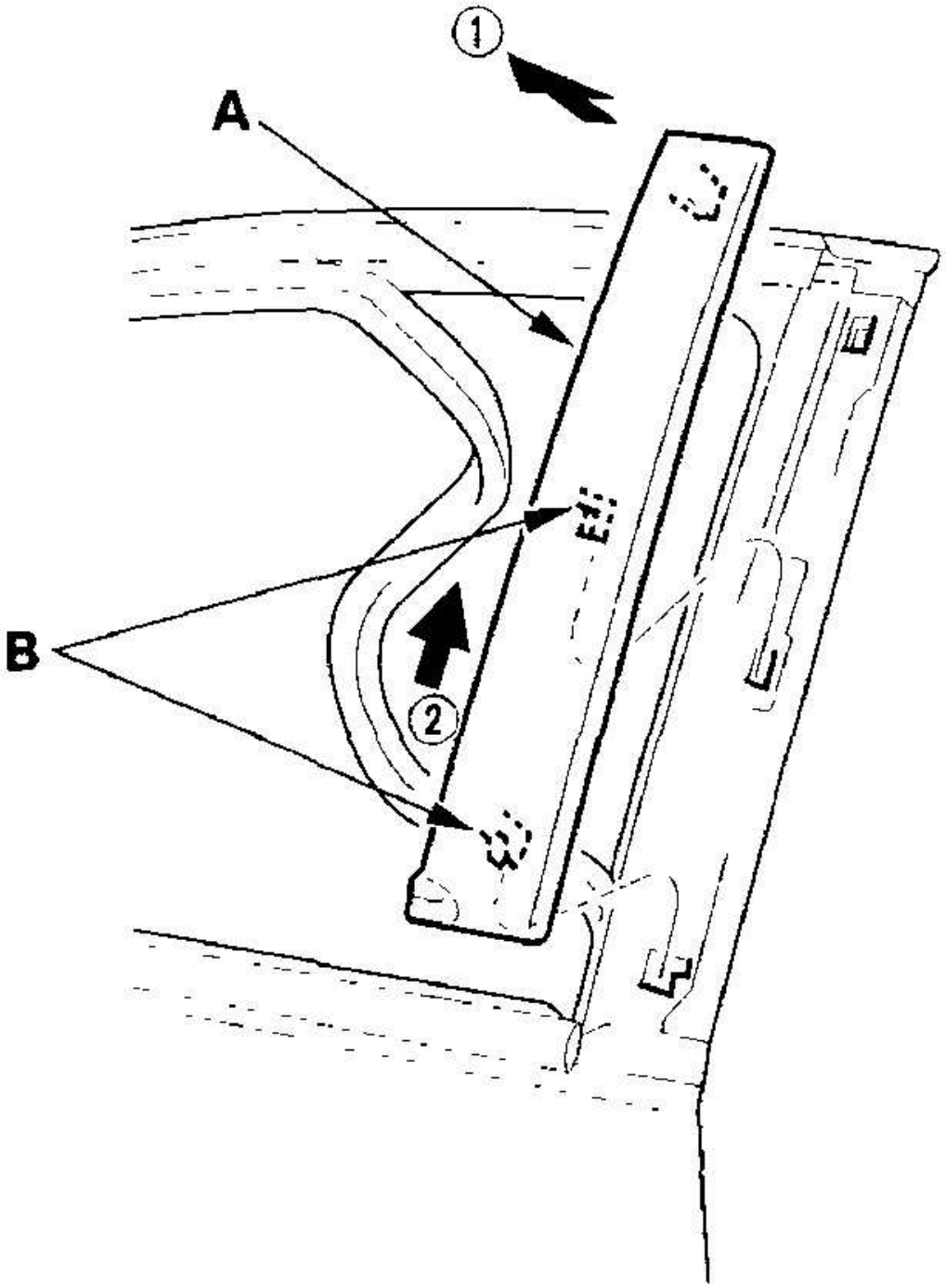


Fig. 48: Pulling Back Door Weatherstrip At Rear Upper Corner
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Pull up the door sash trim (A) to release the hooks (B) from the holes in the sash, then remove the trim.



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Fig. 49: Pulling Up Door Sash Trim To Release Hooks From Holes In Sash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the trim in the reverse order of removal.

FRONT DOOR GLASS OUTER WEATHERSTRIP REPLACEMENT

Special Tools Required

KTC trim tool set SOJATP2014

NOTE:

- **If you remove the door glass outer weatherstrip, replace it with a new one because it will bend.**
- **Put on gloves to protect your hands.**
- **Take care not to scratch the door.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove these items:
   - Door panel, 2-door (see **2-DOOR**), 4-door (see **4-DOOR**)
   - Mirror (see **POWER MIRROR/MANUAL MIRROR REPLACEMENT**)
   - Door sash trim, 2-door (see **2-DOOR**)
2. 4-door: Remove the screw from the rear edge of the door.

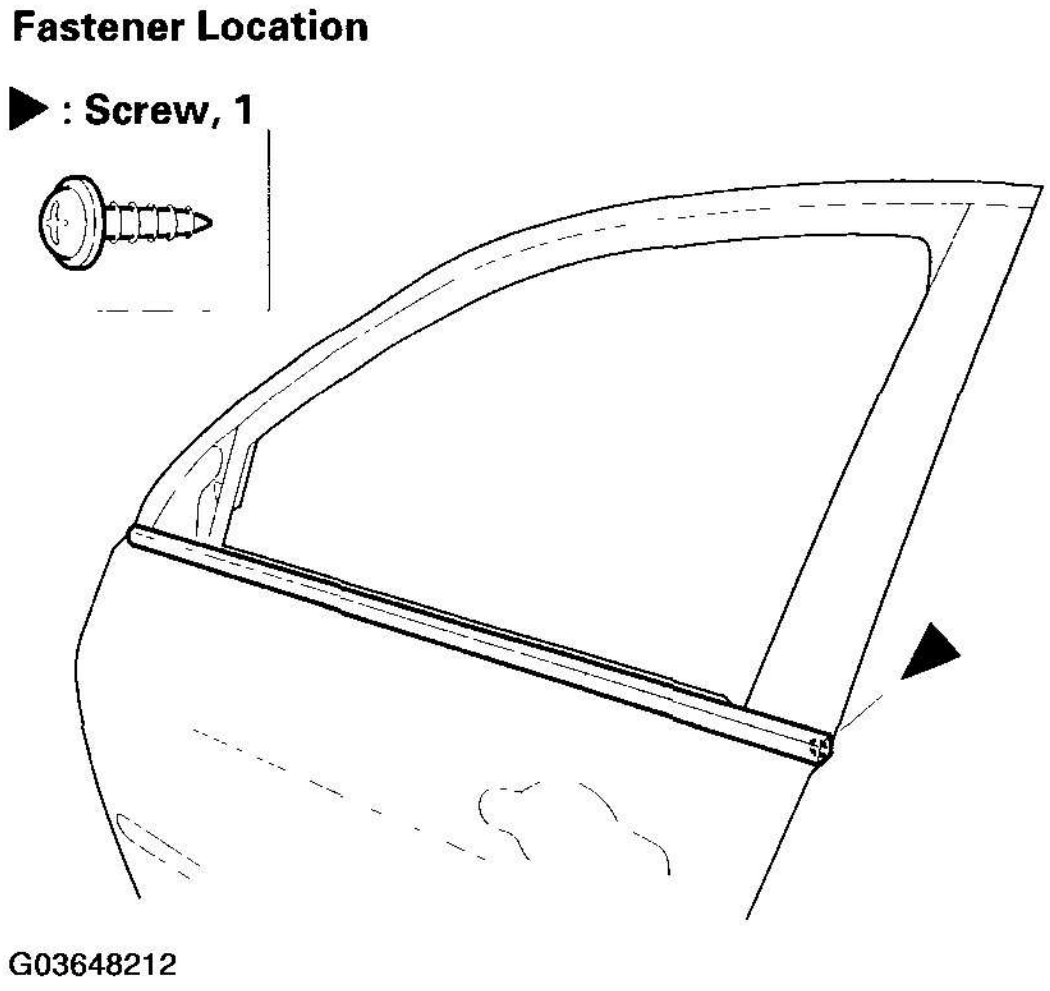


Fig. 50: Removing Screw From Rear Edge Of Door (4-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Starting at the rear, pull the door glass outer weatherstrip (A) up at each portion where the inner molding (B) catches the inside edge of the window slot.

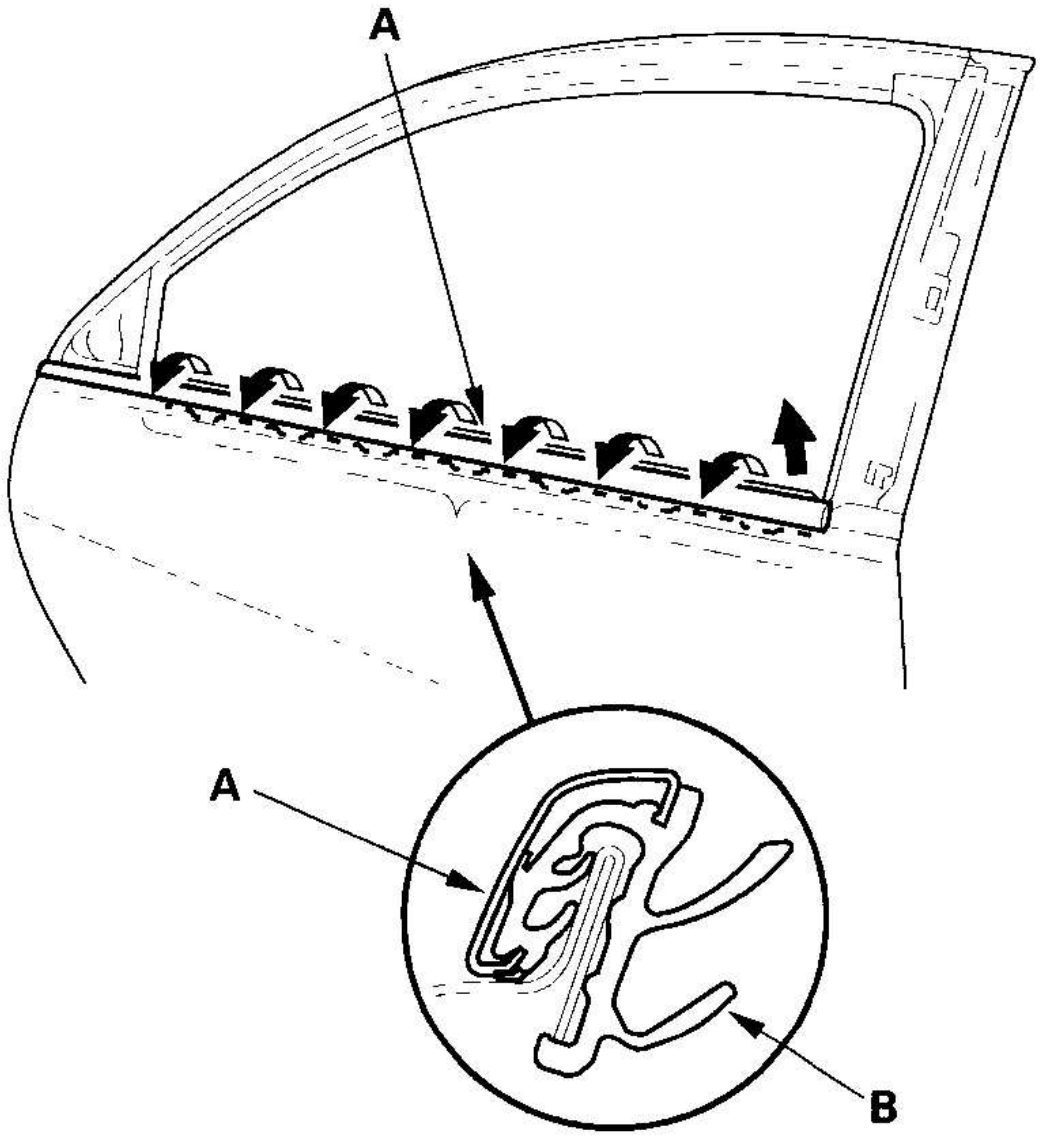


Fig. 51: Pulling Door Glass Outer Weatherstrip (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

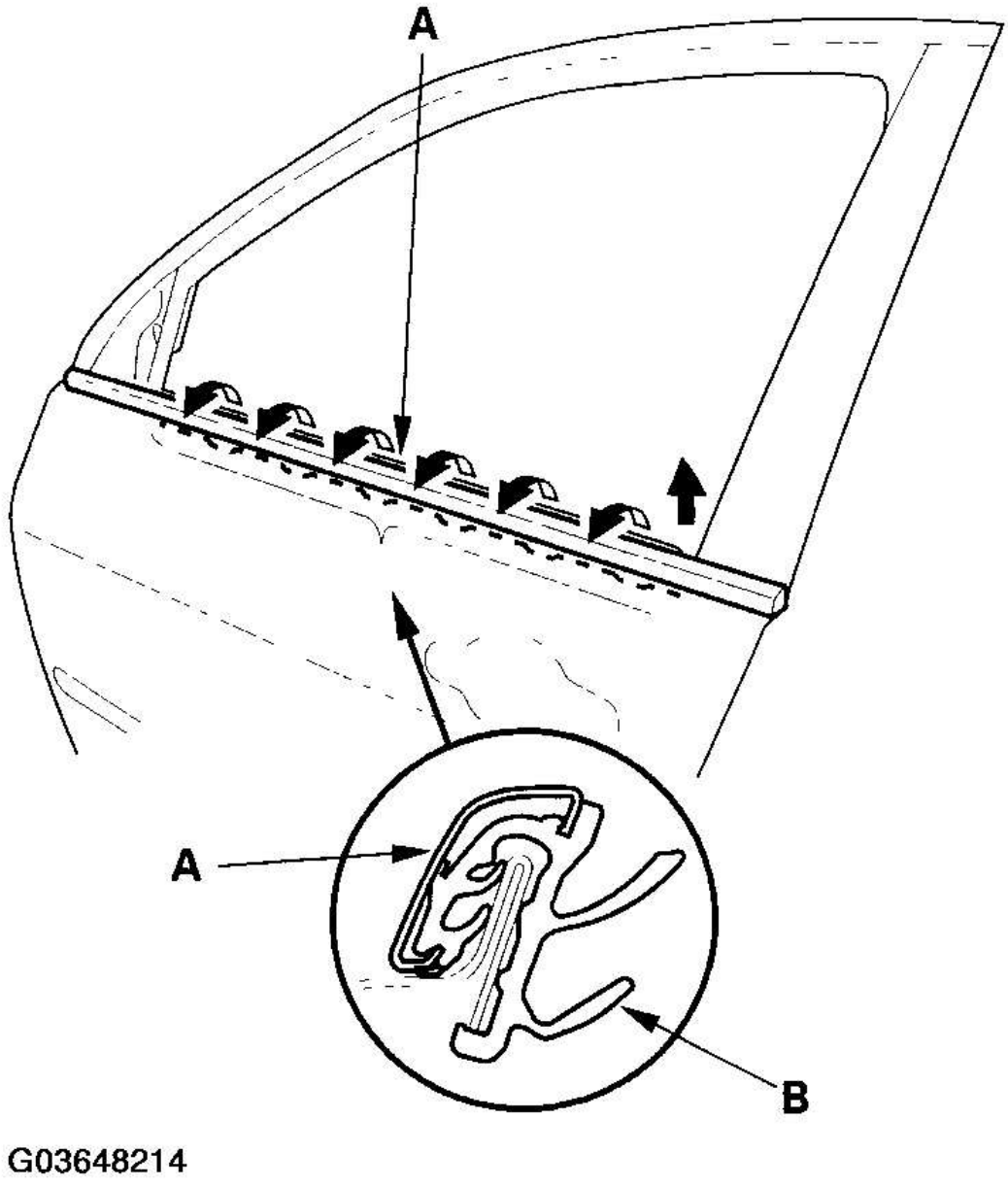


Fig. 52: Pulling Door Glass Outer Weatherstrip (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Pull the rear of the glass outer weatherstrip (A) away from the door, then release the front clip (B) from the mounting hole in the door. If necessary, pry the clip, then remove the weatherstrip.

Fastener Location

B ▷ : Clip, 1

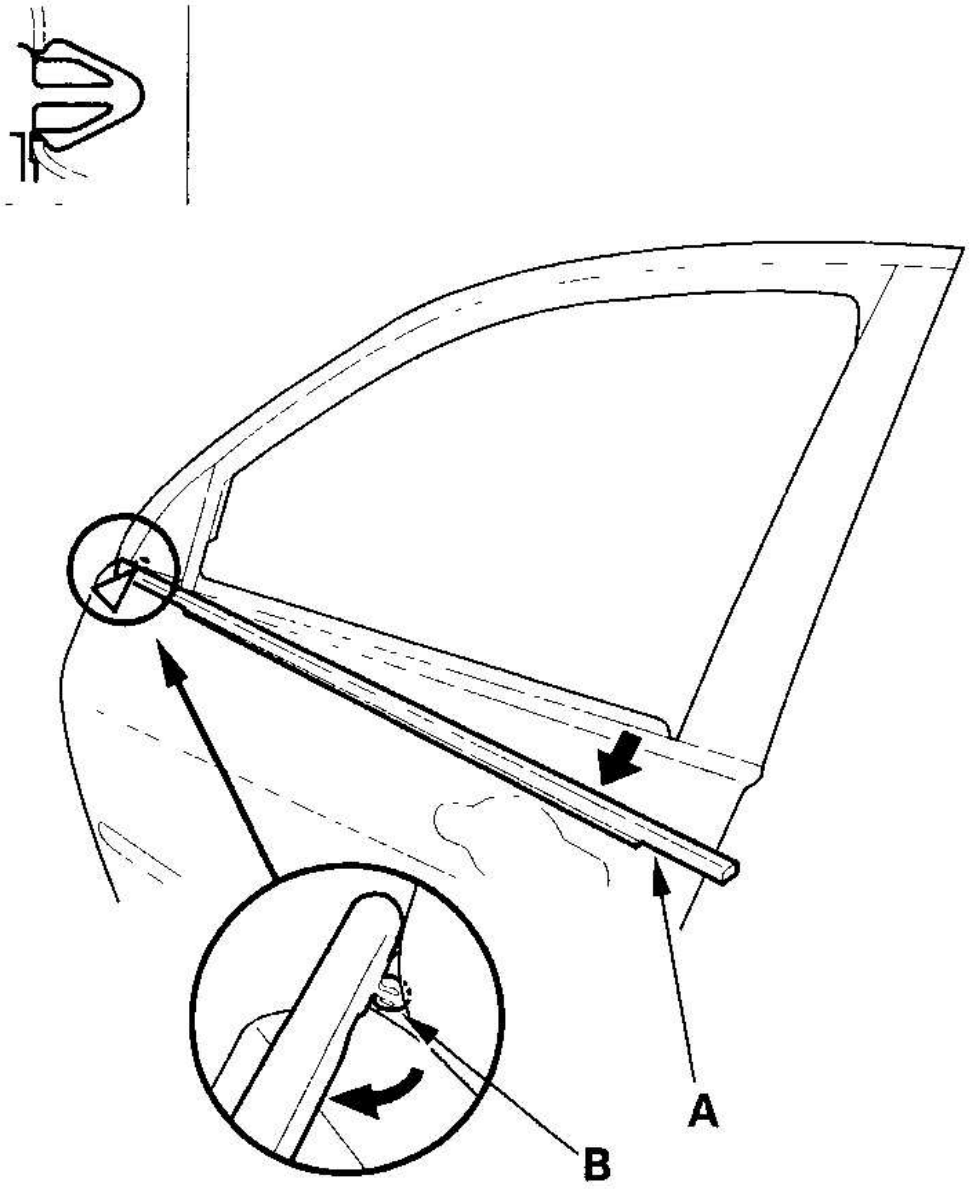


Fig. 53: Pulling Rear Of Glass Outer Weatherstrip And Release Front Clip

Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install new weatherstrip in the reverse order of removal, and perform the power window control unit reset procedure (driver's) (see **RESETTING THE POWER WINDOW CONTROL UNIT**).

FRONT DOOR OUTER MOLDING REPLACEMENT

Special Tools Required

KTC trim tool set SOJATP2014

NOTE:

- **If you remove the door outer molding, replace it with a new one because it will bend during removal.**
- **Put on gloves to protect your hands.**
- **Take care not to scratch the door.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove these items:
   - Mirror (see **POWER MIRROR/MANUAL MIRROR REPLACEMENT**)
   - Door sash trim, 2-door (see **2-DOOR**)
2. Remove the door outer molding (A).

   -4-door: Pry the rear clip with a trim tool.

   -While removing the upper edge of the door outer molding from the edge of the sash, cut the double-sided adhesive tapes (B) with a utility knife, then remove the molding.

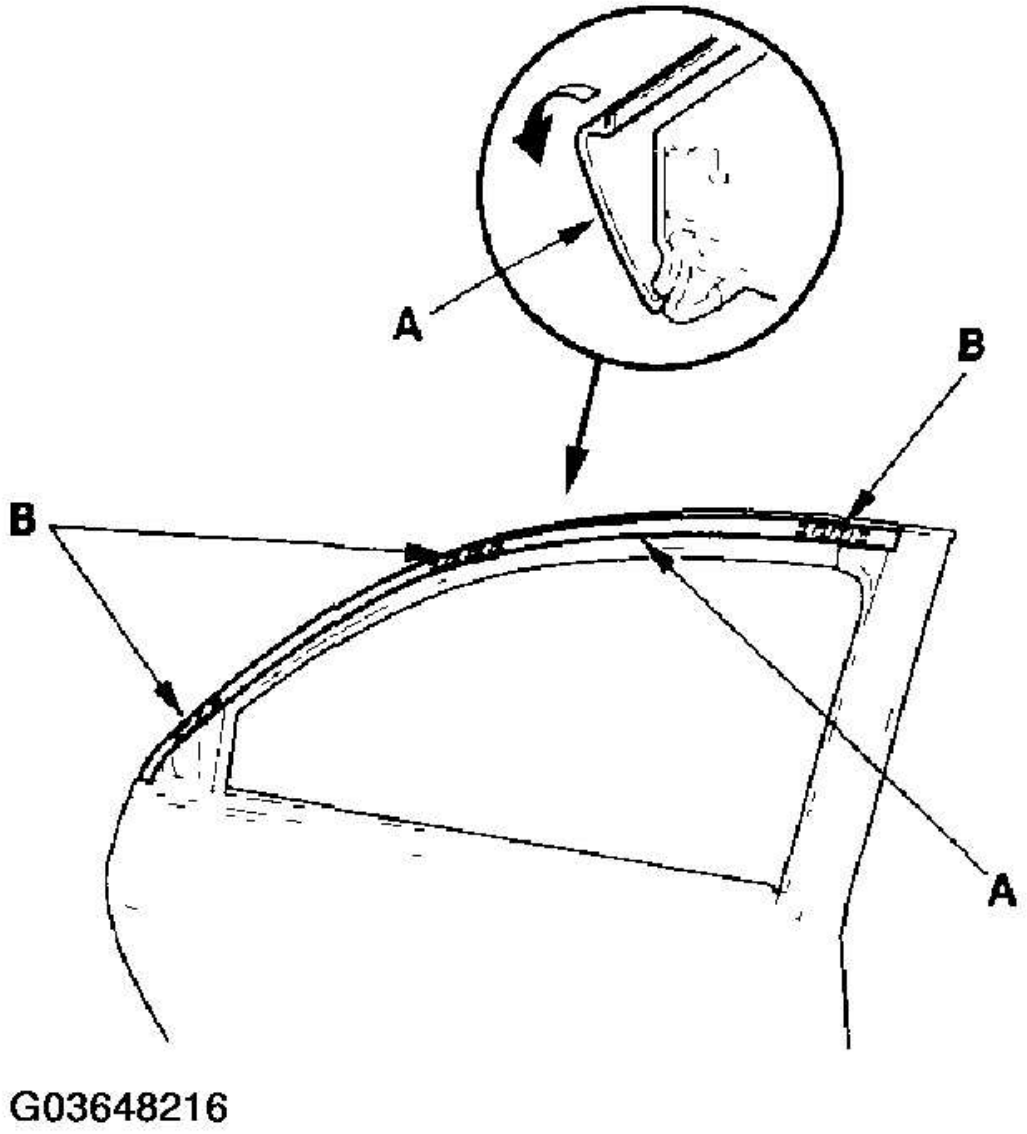


Fig. 54: Removing Door Outer Molding ('03 Model 2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

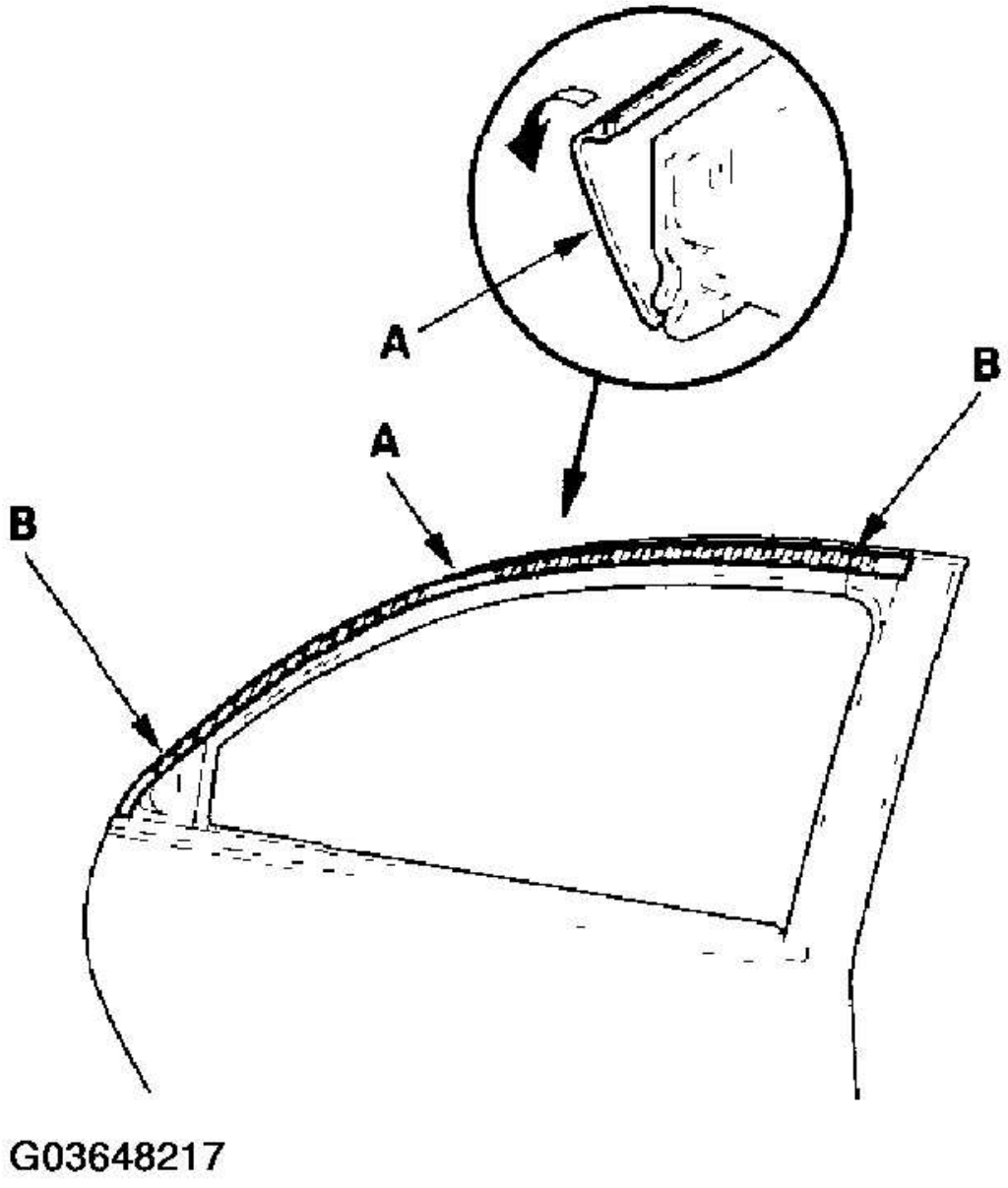


Fig. 55: Removing Door Outer Molding ('04-07 Models 2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

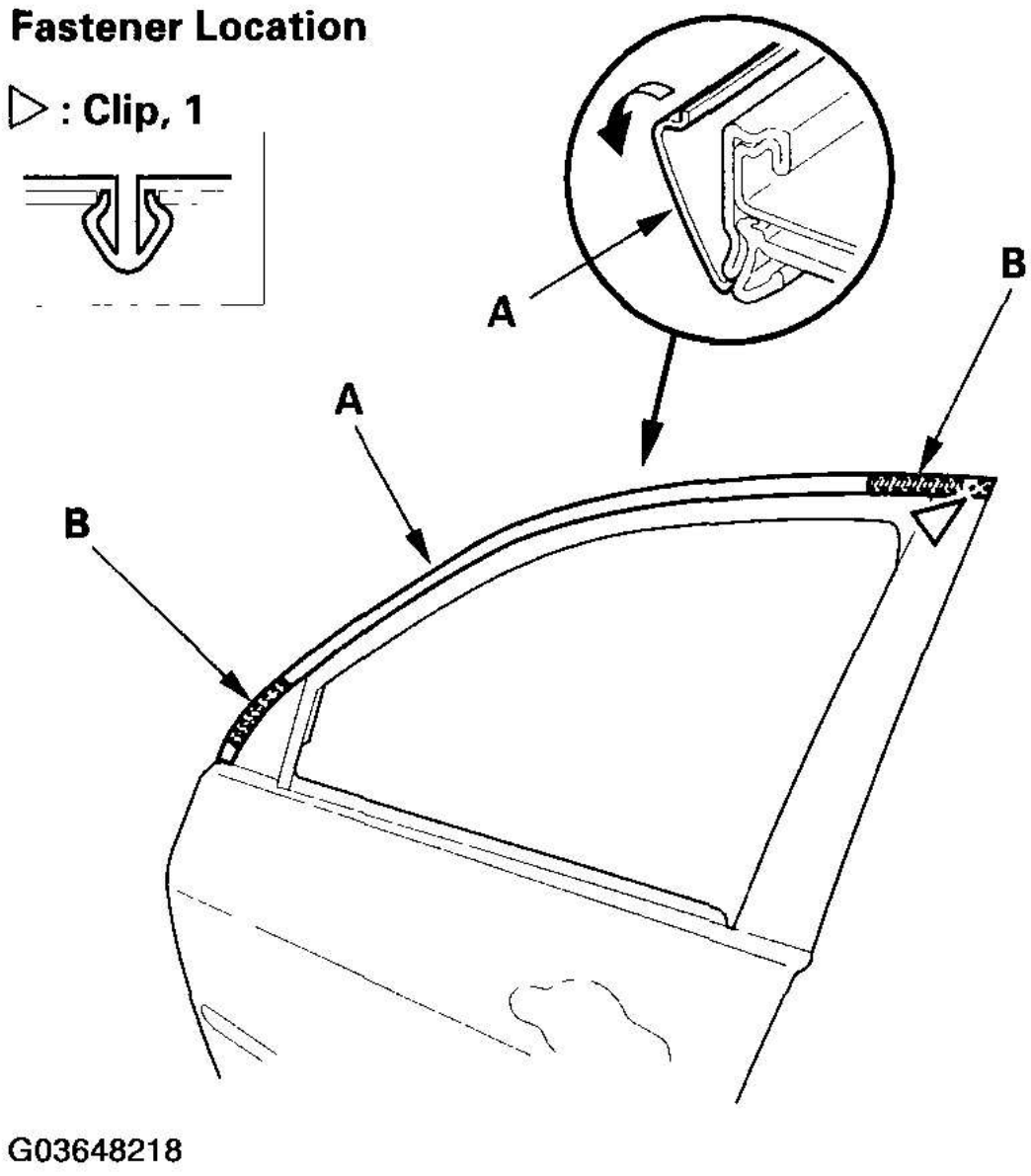


Fig. 56: Removing Door Outer Molding ('03 Model 4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

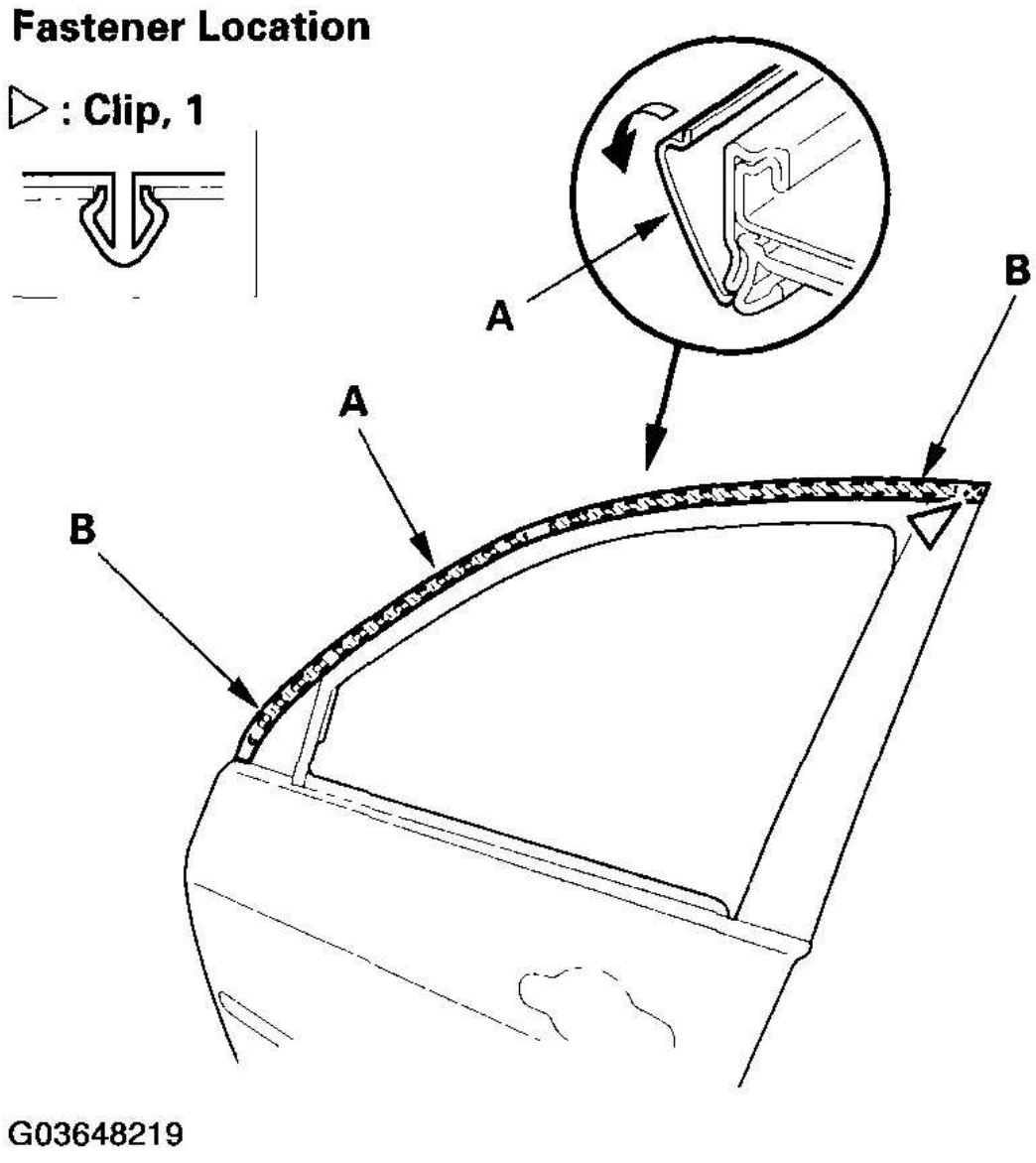


Fig. 57: Removing Door Outer Molding ('04-07 Models 4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Scrape off the remaining double-sided adhesive tape from the sash, then clean the sash surface with a sponge dampened in alcohol.
4. Install new door outer molding in the reverse order of removal, and note these items:

- Push the clip and the adhesive portions into place securely.
- Make sure the upper and lower sides of the molding are catching the edges of the sash properly.

FRONT DOOR WEATHERSTRIP REPLACEMENT

NOTE:

- **Take care not to scratch the door.**
- **Use a clip remover to remove the clips.**

1. At the A-pillar, remove the detent rod mounting bolt (A).

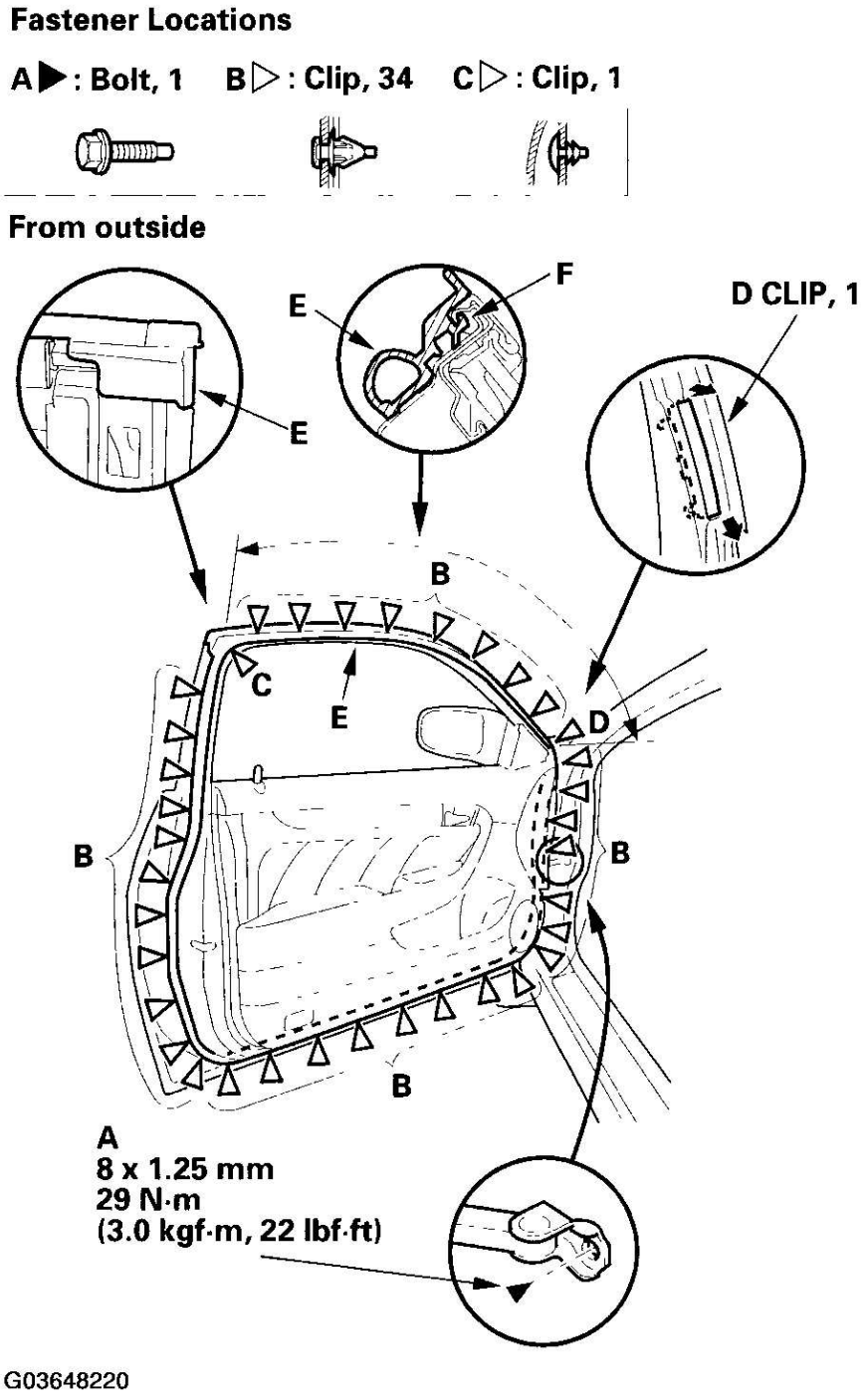


Fig. 58: Removing Detent Rod Mounting Bolt (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

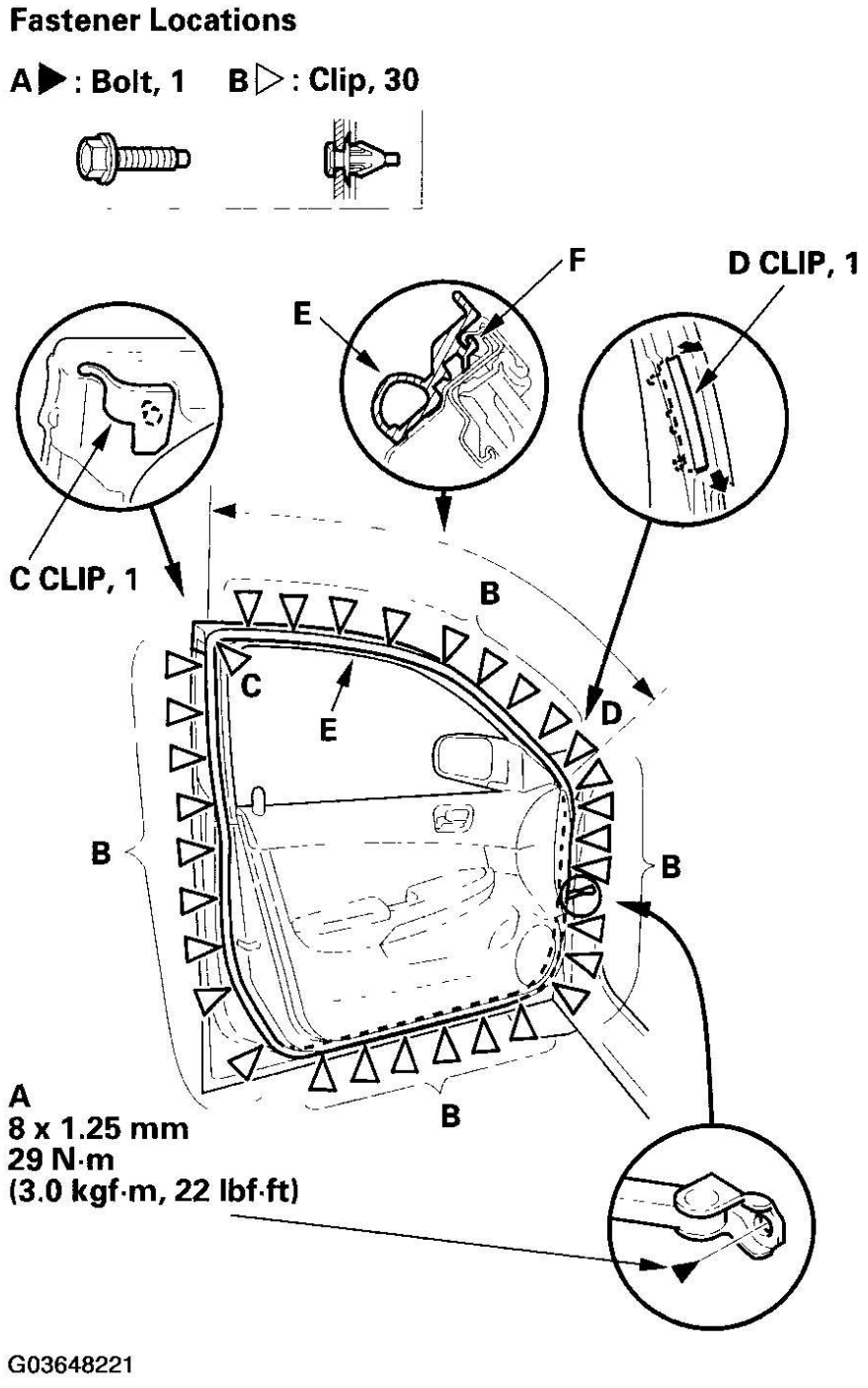


Fig. 59: Removing Detent Rod Mounting Bolt (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Detach the clips (B, C, D), then remove the door weatherstrip (E).
3. Install the weatherstrip in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Make sure the weatherstrip is installed in the holder (F) securely.
   - Apply medium strength liquid thread lock to detent rod mounting bolt before installation.
   - Test-drive and check for wind noise.

REAR DOOR PANEL REMOVAL/INSTALLATION

Special Tools Required

- KTC trim tool set SOJATP2014
- Trim pad remover, Snap-on A 177A or equivalent, commercially available

4-DOOR

NOTE: Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.

1. Lower the glass fully.
2. Using a trim tool, pry out on the rear portion of the cover (A) to release the hooks (B, C), then remove the cover and the screws securing the inner handle (D).

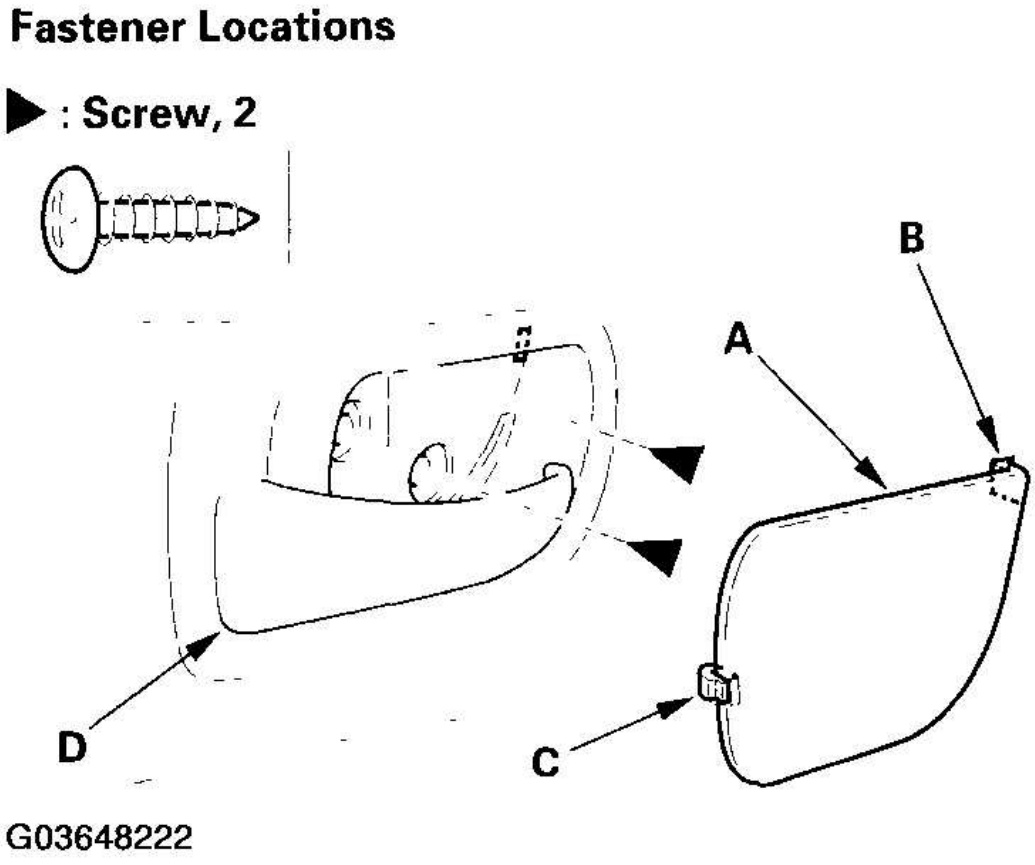


Fig. 60: Removing Cover And Screws Securing Inner Handle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the switch panel (A).
   -1 Pry up on the rear edge of the switch panel with a trim tool to release the rear clip.
   -2 Pull out along the edge of the panel to release the hooks (B) and clip.
   -3 Disconnect the power window switch connector (C).

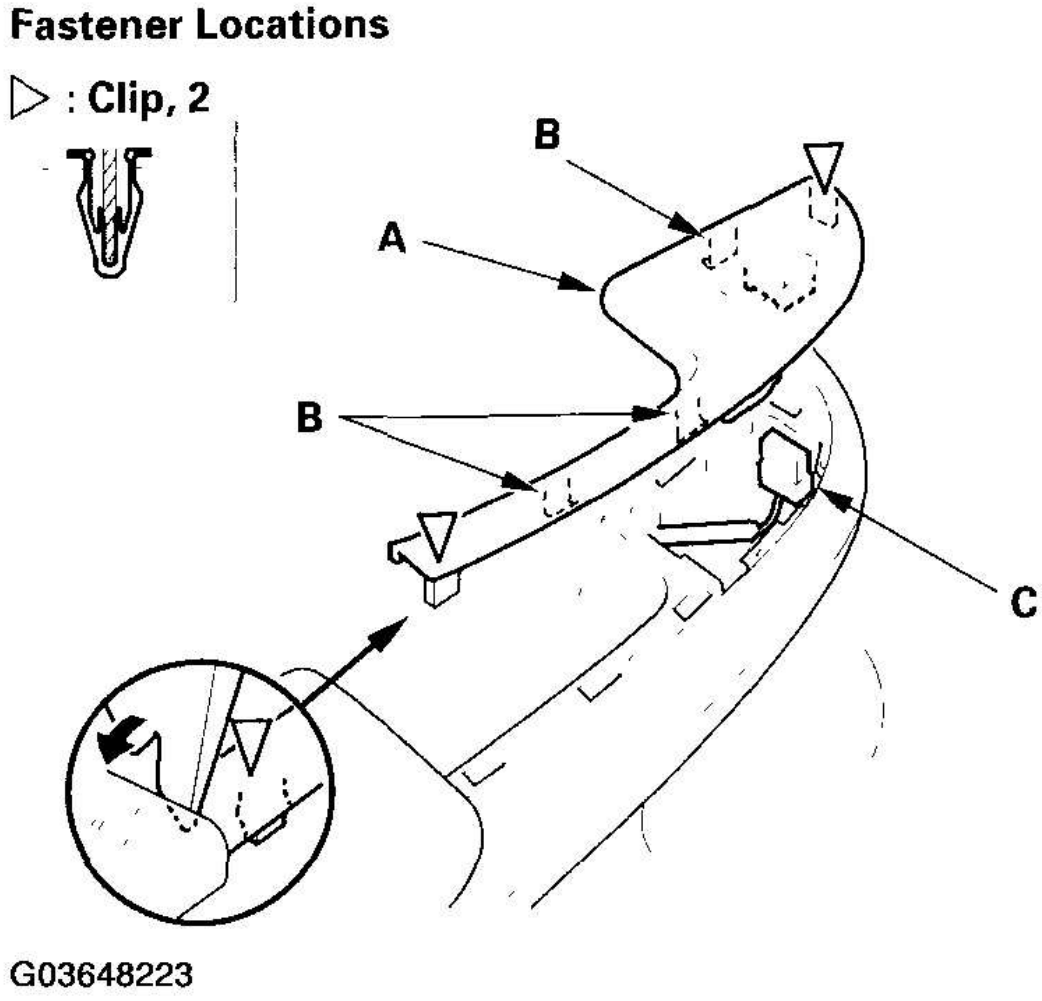


Fig. 61: Removing Switch Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the screw from under the pull pocket cap (A).

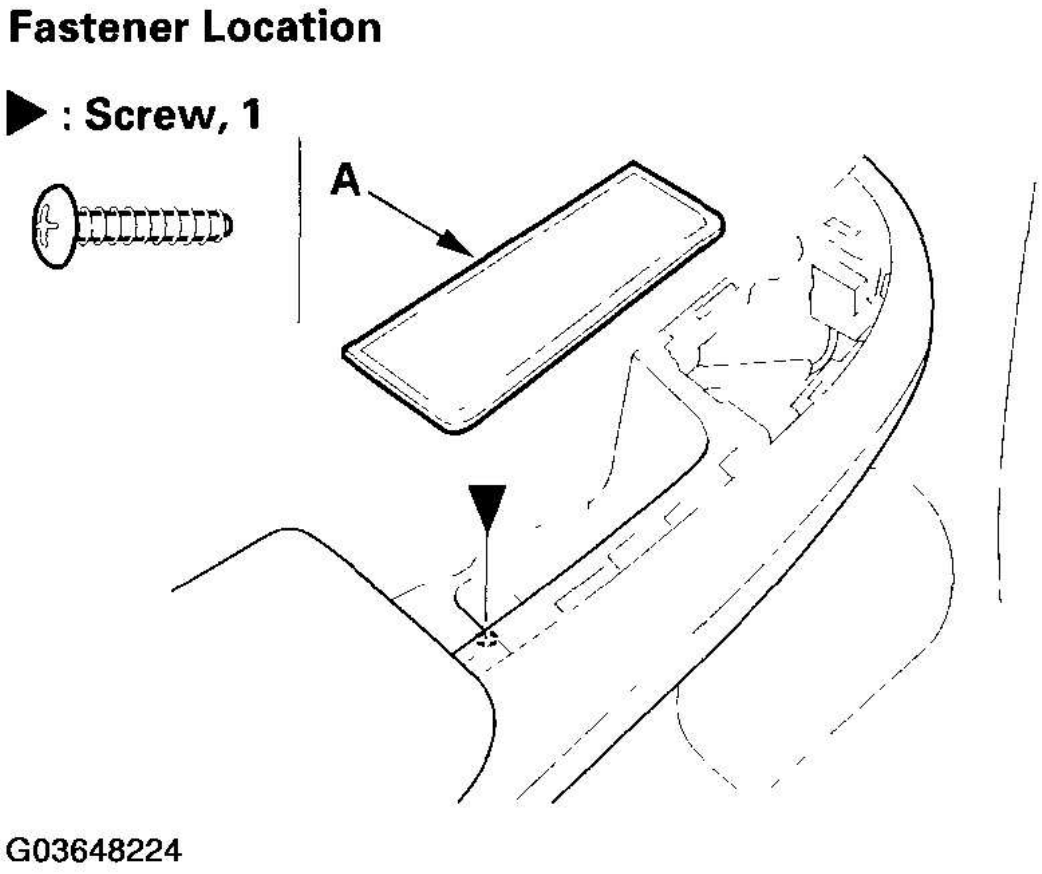


Fig. 62: Removing Screw From Under Pull Pocket Cap
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the door panel (A) with as little bending as possible to avoid creasing or breaking it.

   -1 Start at the bottom edge of the door panel, release the clips that are just above the marks (B) on the edge of the panel with a commercially available trim pad remover.

   -2 Detach the upper clips.

   -3 Starting at the front, pull the door panel upward and over the lock knob (C).

   NOTE: The inner handle cable (D) is connected to the door

panel. Do not pull the door panel up too far, or the inner handle cable will be damaged.

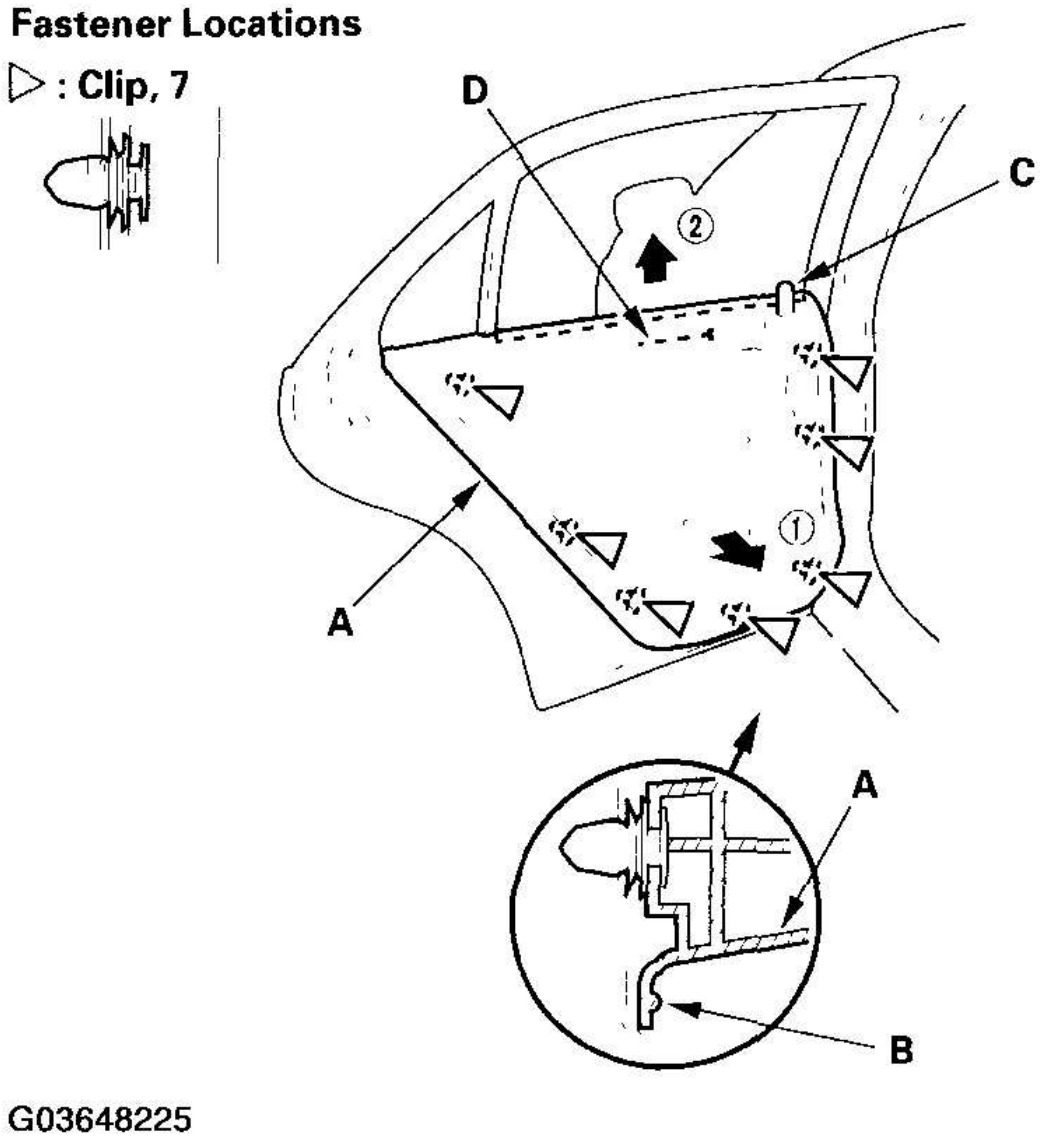
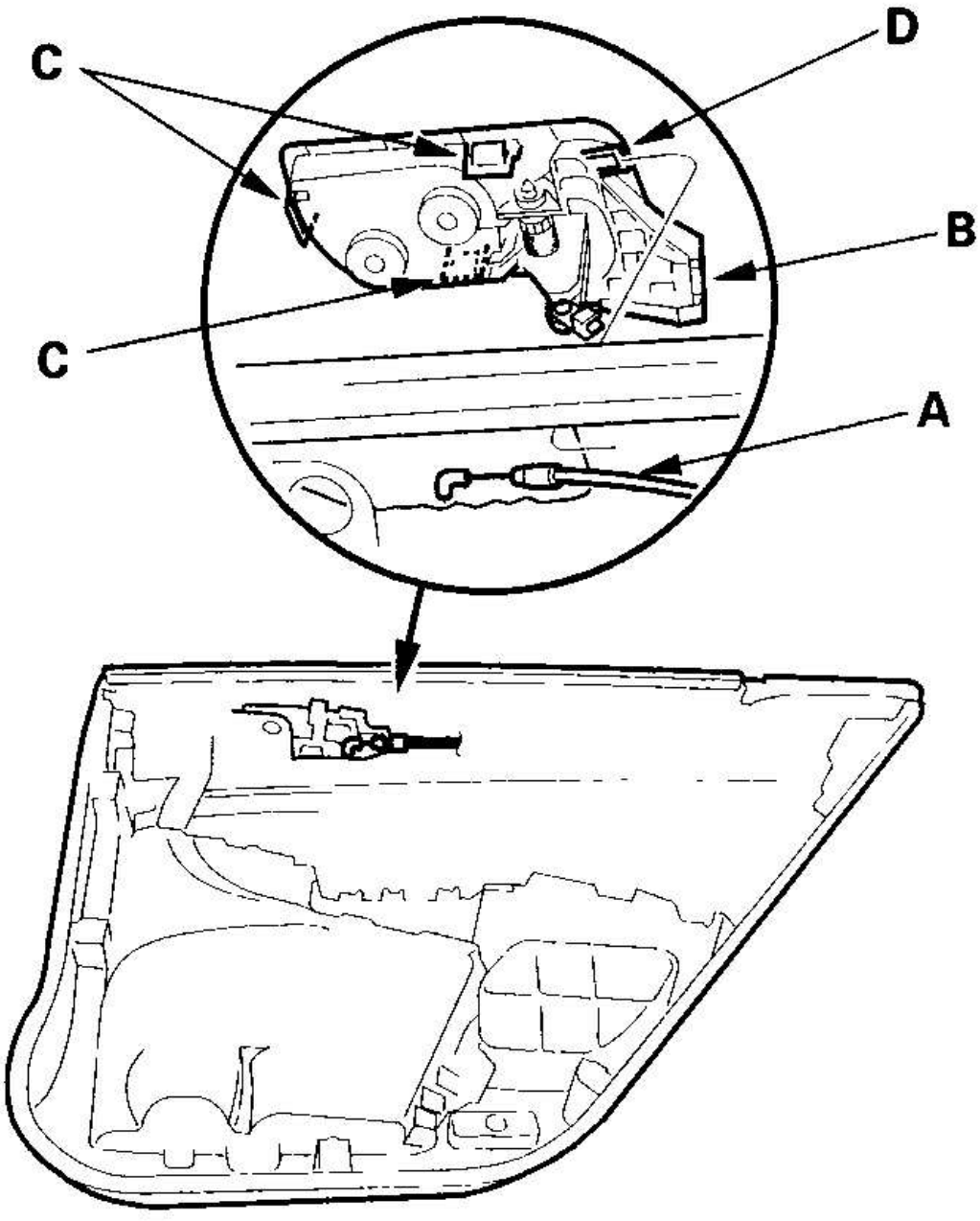


Fig. 63: Removing Door Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. While holding the door panel away from the door, disconnect the inner handle

cable (A), then remove the door panel. If necessary, remove the inner handle (B) by releasing the hooks (C, D).



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Fig. 64: Removing Inner Handle By Releasing Hooks (Back View)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. If necessary, remove the door glass inner weatherstrip (A) from the door panel (B).

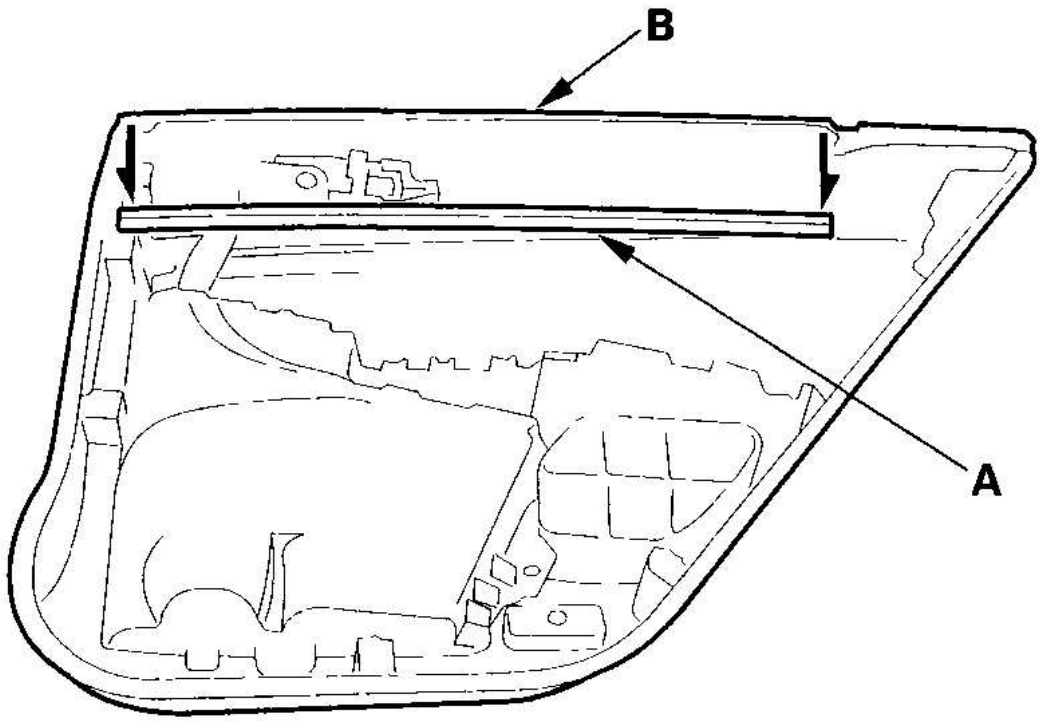


Fig. 65: Removing Door Glass Inner Weatherstrip From Door Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the panel in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Make sure the connector is plugged in properly and the cable is connected securely.
   - If equipped, make sure the window and power door lock operate properly.

- When reinstalling the door panel, make sure plastic cover is installed properly and sealed around its outside perimeter to seal out water.
- Check for water leaks.

REAR DOOR OUTER HANDLE REPLACEMENT

4-DOOR

NOTE: Put on gloves to protect your hands.

1. Remove these items:
   - Door panel (see **REAR DOOR PANEL REMOVAL/INSTALLATION**)
   - Plastic cover, as necessary (see **Rear Door**)
2. Raise the glass fully.
3. Remove the screws (A, B) securing the latch (C) and the cable protector (D).

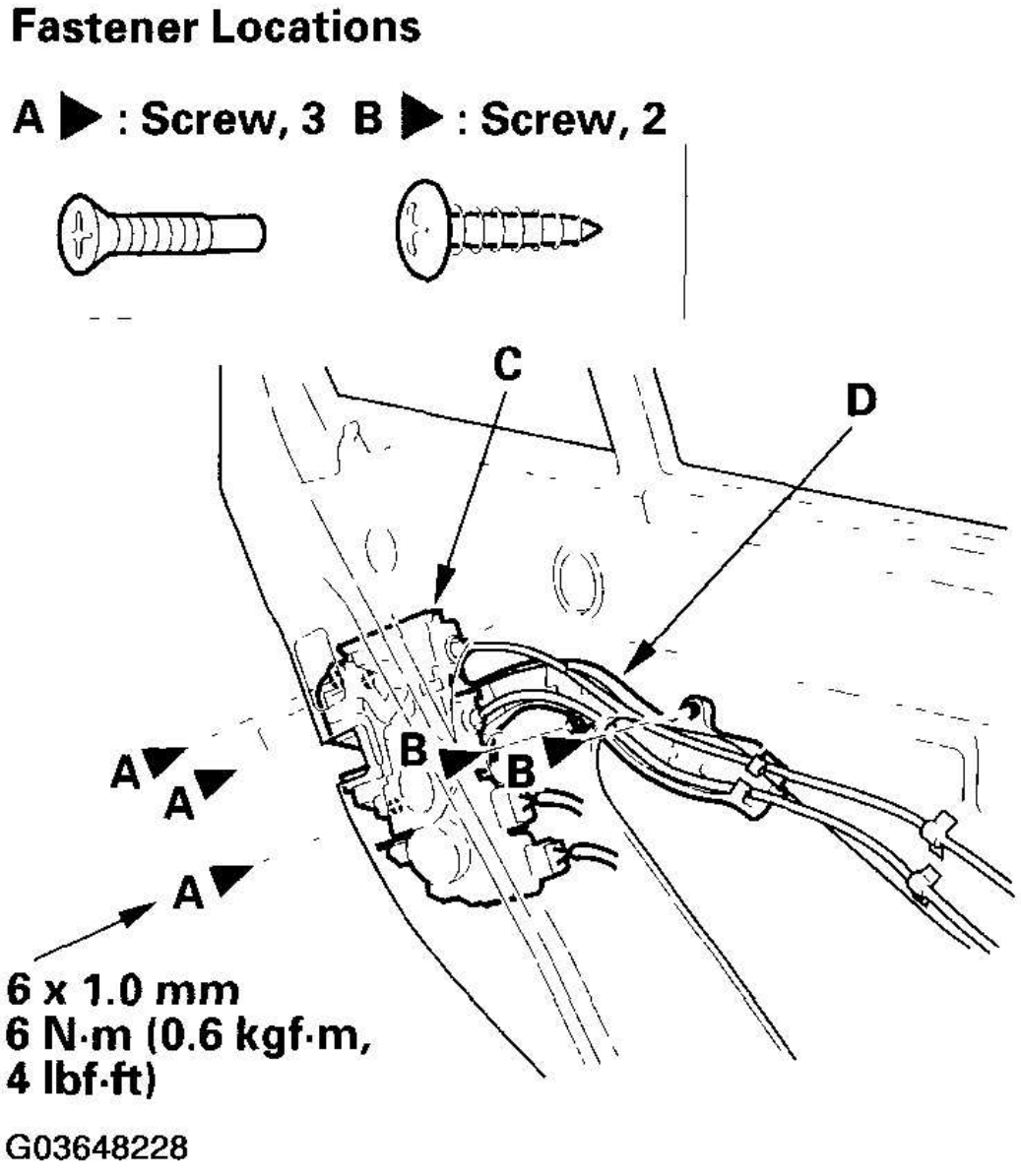


Fig. 66: Removing Screws Securing Latch And Cable Protector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Detach the cable clips (A) and the hook (B) of the cable protector (C), then pull the latch (D) and the cable protector forward. Take care not to bend any of the cables.

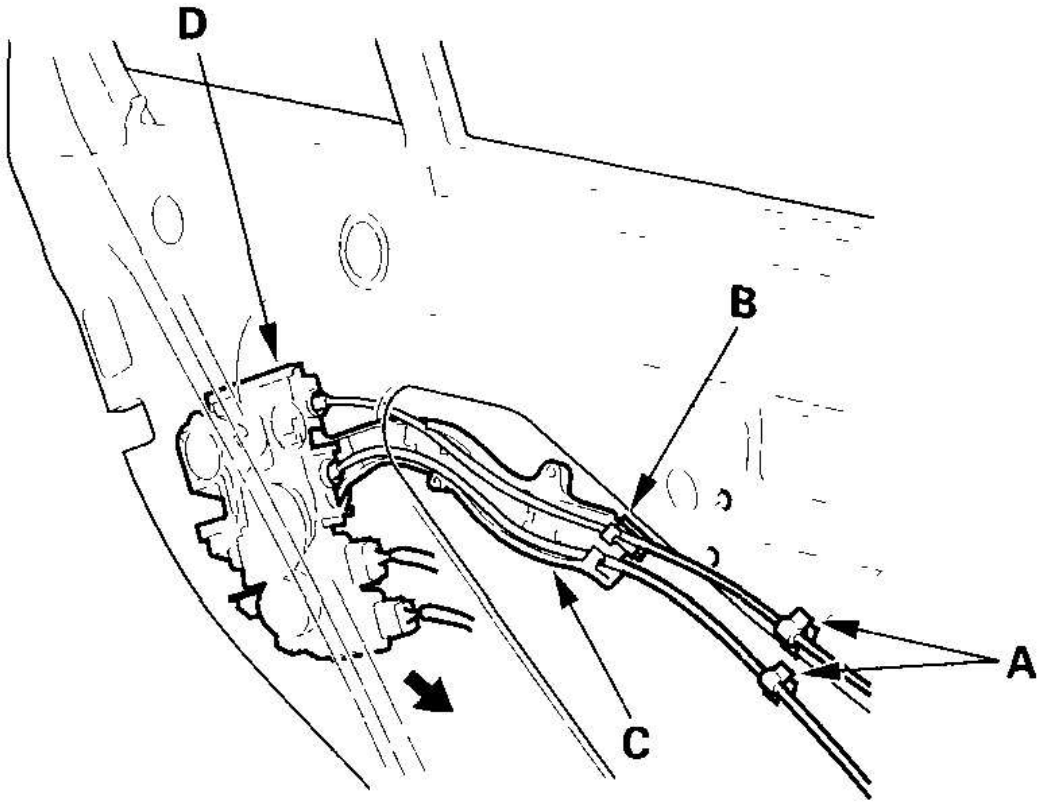


Fig. 67: Detaching Cable Clips And Hook Of Cable Protector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the maintenance hole seal (A) and bolts, slide the protector (B) ('03 model) or the outer handle bracket (C) ('04-06 models) rearward, then remove it.

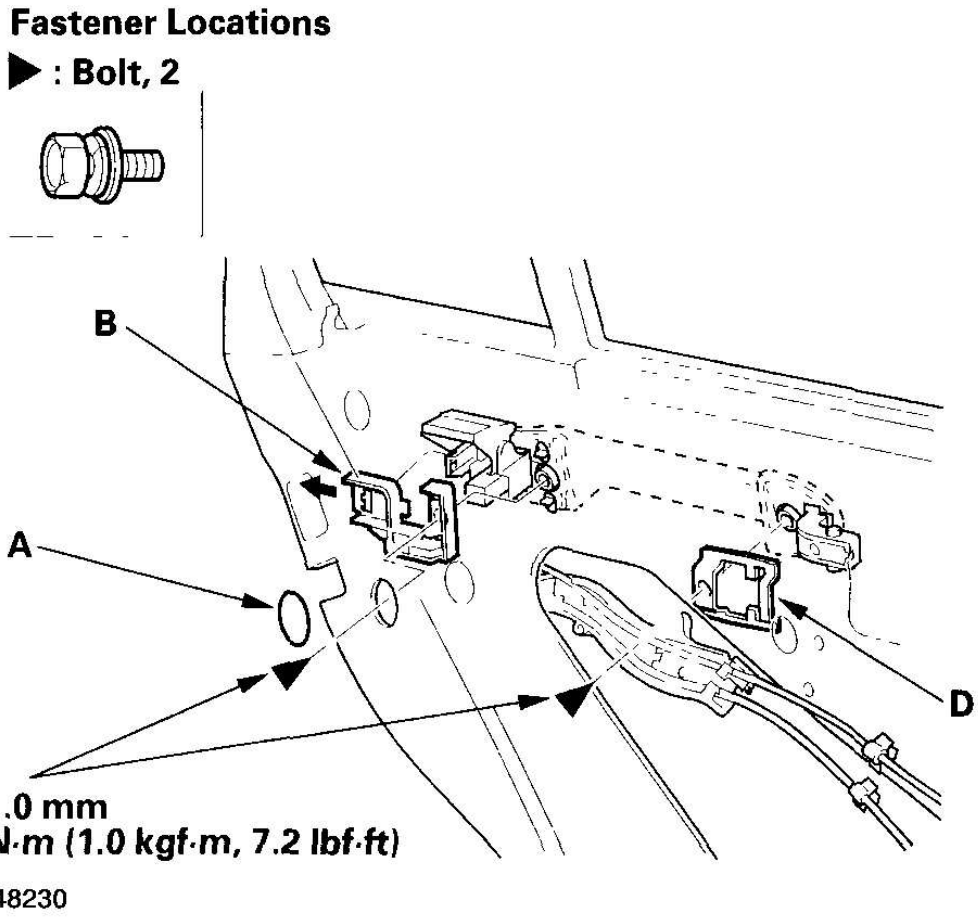


Fig. 68: Removing Maintenance Hole Seal And Bolts ('03 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

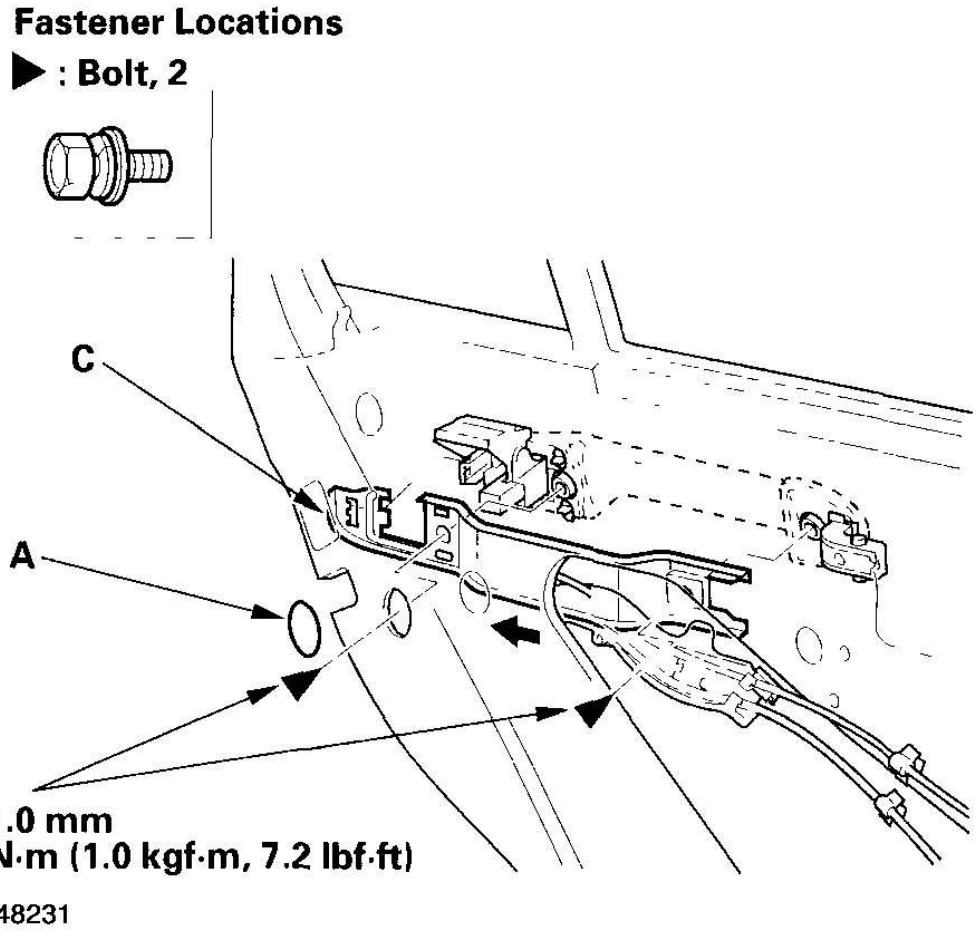


Fig. 69: Removing Maintenance Hole Seal And Bolts ('04-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. '03 model: Remove the spacer (D).
7. While pulling the outer handle (A), remove the handle from the holes in the door panel. Take care not to scratch the door.

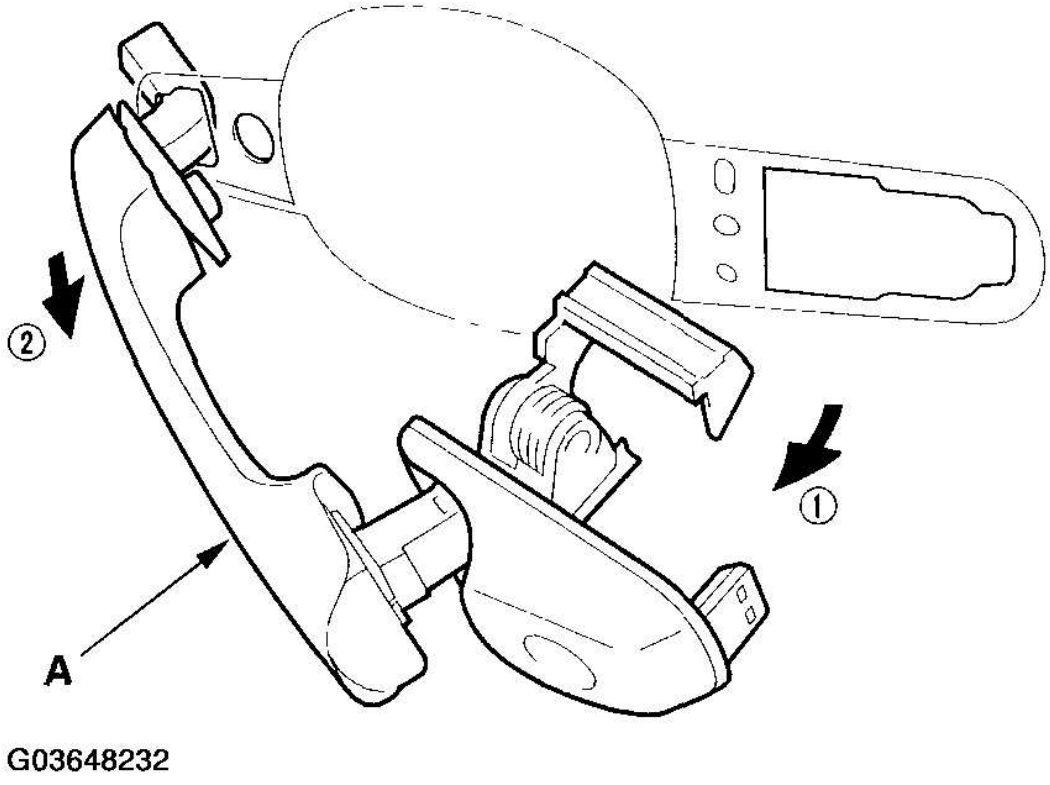


Fig. 70: Removing Handle From Holes In Door Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the handle in the reverse order of removal, and note these items:
   - Make sure the door locks and opens properly.
   - When reinstalling the door panel, make sure the plastic cover is installed properly and sealed around its outside perimeter to seal out water.
   - Check for water leaks.

REAR DOOR LATCH REPLACEMENT

4-DOOR

NOTE: Put on gloves to protect your hands.

1. Remove the door panel (see **REAR DOOR PANEL**

REMOVAL/INSTALLATION).

2. Raise the glass fully.
3. Remove the screw securing the lock knob (A).

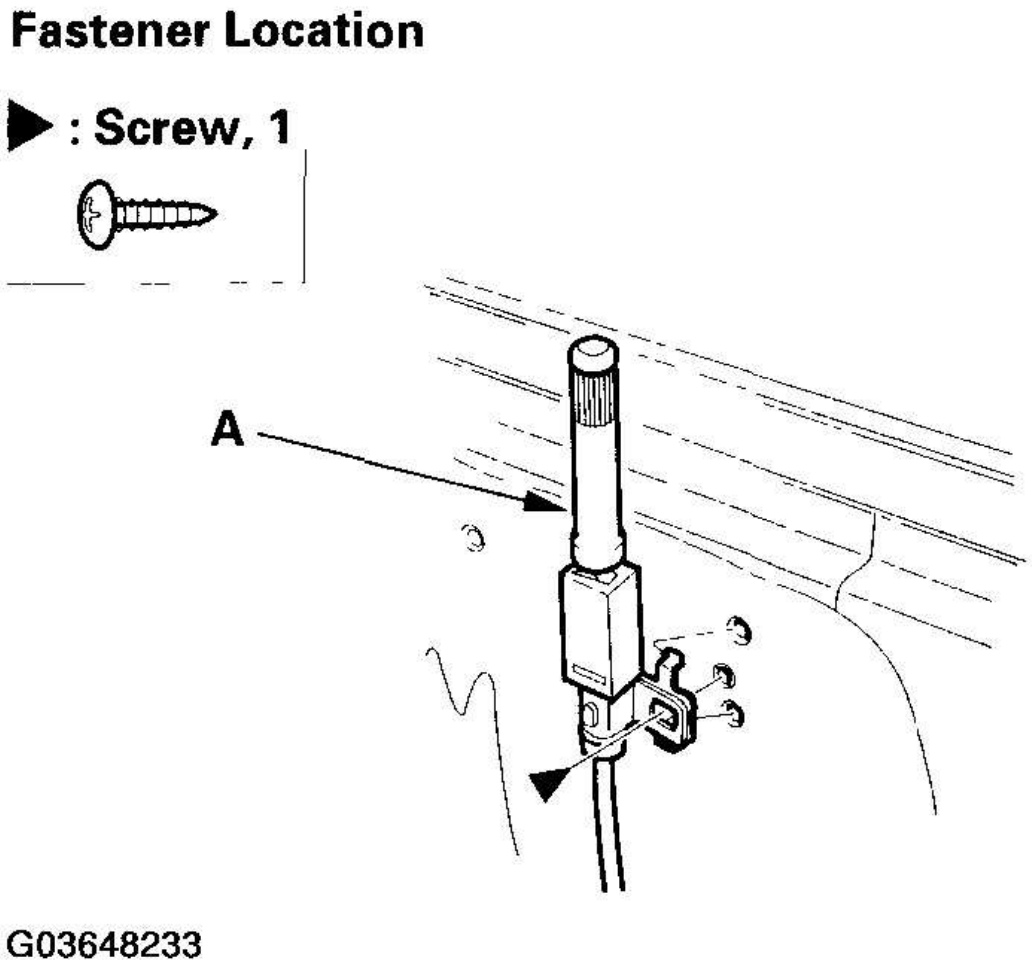


Fig. 71: Removing Screw Securing Lock Knob
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the plastic cover, as needed (see **Rear Door**).
5. Disconnect the actuator connector(s) (A) (for some models). Remove the screws (B, C) securing the latch (D) and the cable protector (E).

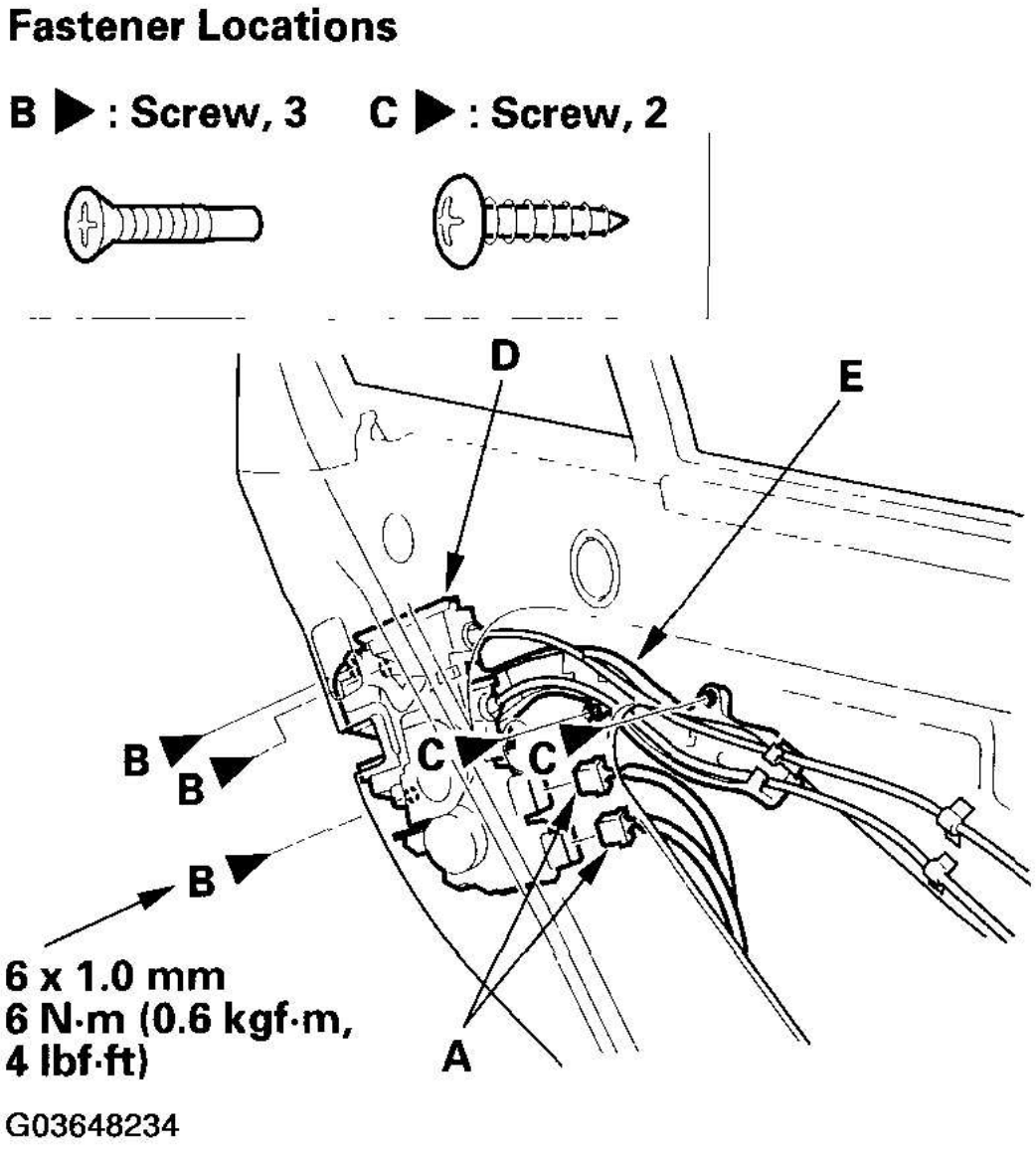


Fig. 72: Removing Screws Securing Latch And Cable Protector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Detach the cable clips (A) and the hook (B) of the cable protector (C), then remove the latch (D) with the cable protector through the hole in the door. Take care not to bend any of the cables.

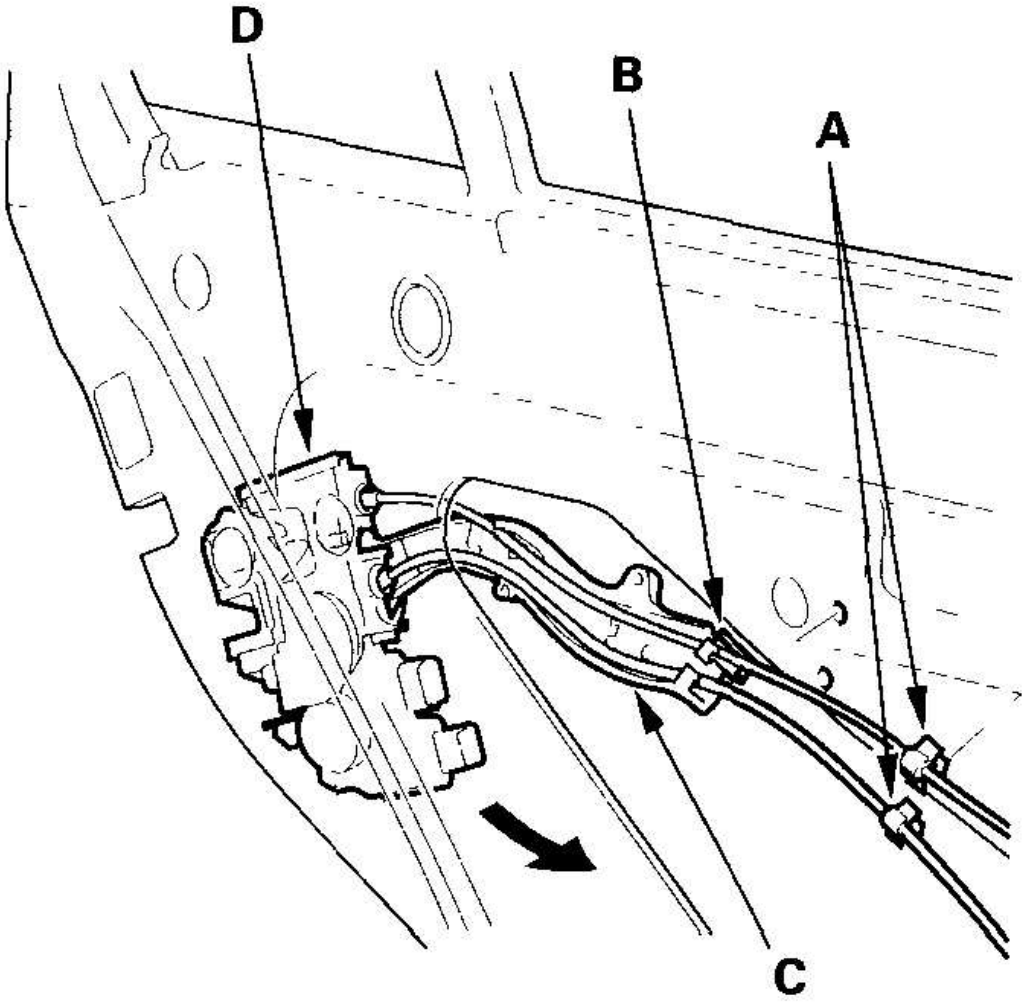


Fig. 73: Detaching Cable Clips And Hook Of Cable Protector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the cable protector (A) from the latch protector (B) by releasing the hook (C).

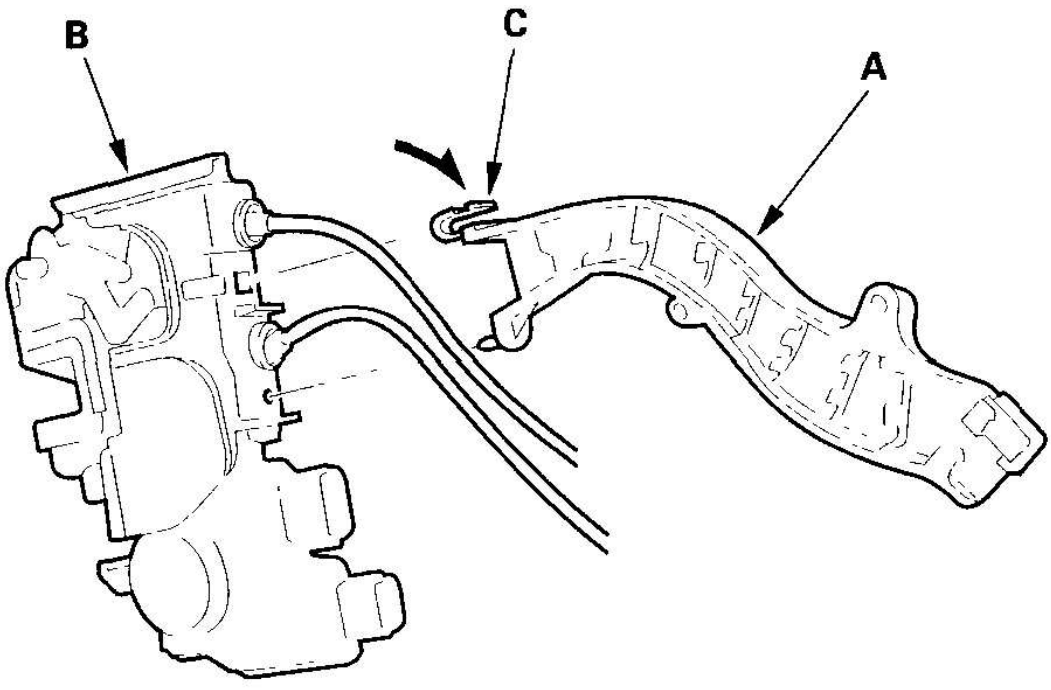


Fig. 74: Removing Cable Protector From Latch Protector By Releasing Hook
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the latch in the reverse order of removal, and note these items:
   - If equipped, make sure the actuator connector(s) are plugged in properly.
   - Make sure the door locks and the window operates properly.
   - When reinstalling the door panel, make sure the plastic cover is installed properly and sealed around its outside perimeter to seal out water.
   - Check for water leaks.

REAR DOOR GLASS AND REGULATOR REPLACEMENT

4-DOOR

NOTE: Put on gloves to protect your hands.

1. Remove these items:
   - Door panel (see **REAR DOOR PANEL REMOVAL/INSTALLATION**)
   - Panel bracket (see step 2 in **Front Door Glass and Regulator Replacement**)
   - Plastic cover, as necessary (see **Rear Door**)
2. Carefully move the glass (A) until you can see the bolts, then remove them. Remove the glass from the regulator (B), and carefully lower the glass. Take care not to drop the glass inside the door.

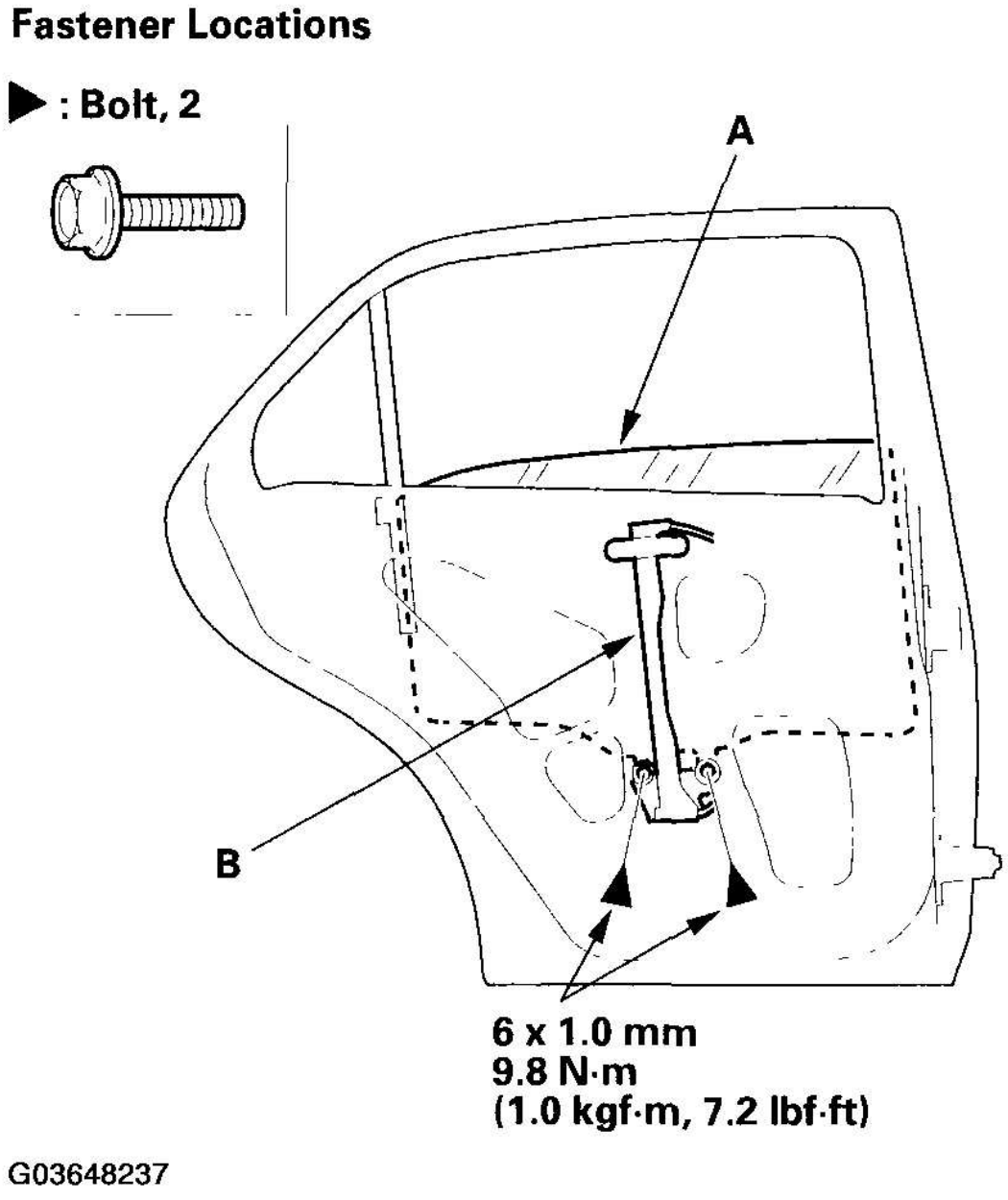
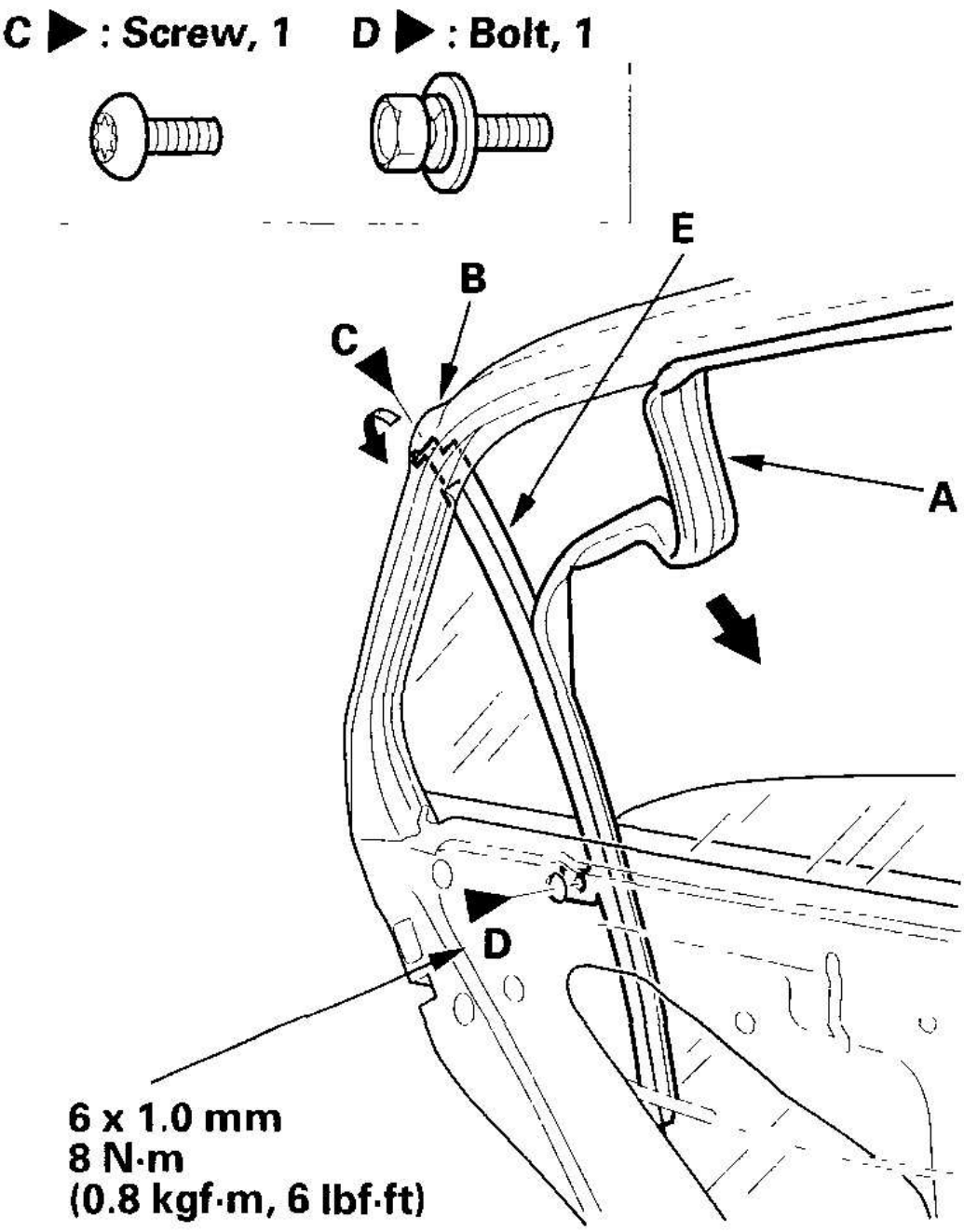


Fig. 75: Removing Glass From Regulator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Pull the glass run channel (A) away as needed. Pull the door weatherstrip (B) away as needed, then remove the screw (C). Remove the bolt (D) securing the center channel (E).

Fastener Locations



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Fig. 76: Pulling Glass Run Channel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Pull the upper portion of the center channel (A) forward to remove it from the door quarter glass seal (B), then pull up and remove the center channel out through the window slot. Take care not to damage the outer weatherstrip (C).

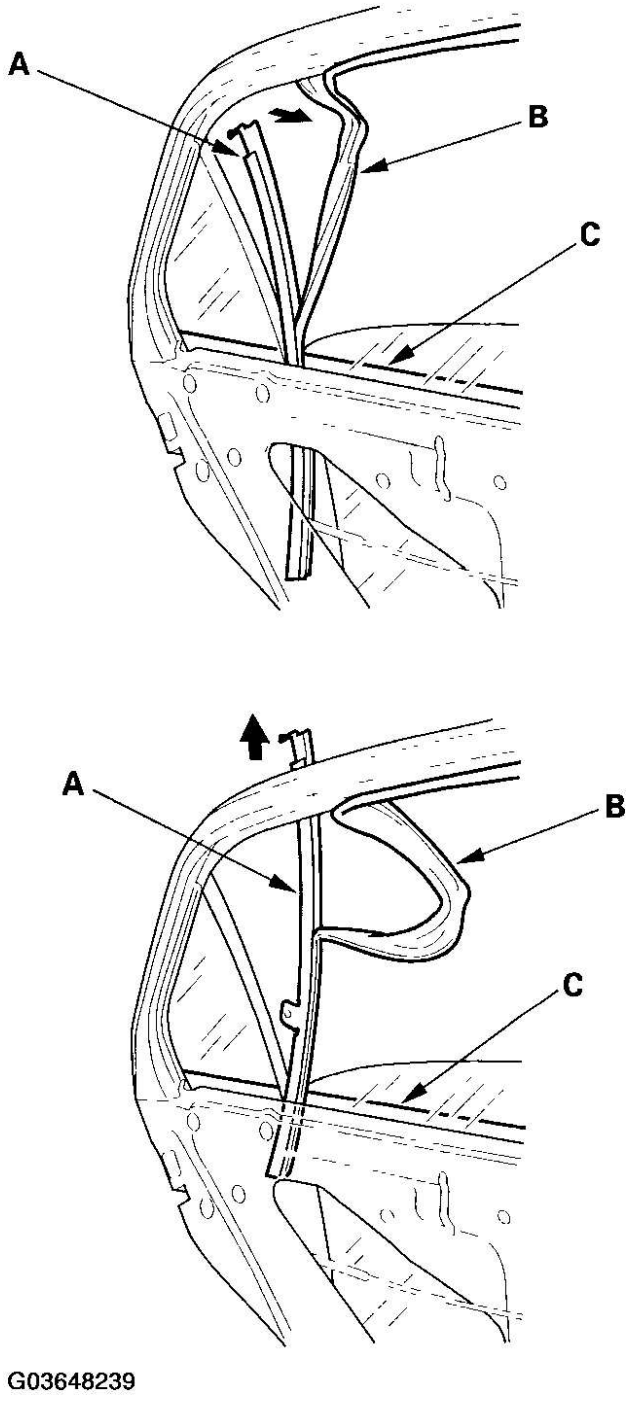


Fig. 77: Pulling Upper Portion Of Center Channel Forward To Remove From Door Quarter Glass Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the quarter glass (A). Take care not to damage the outer weatherstrip (B).

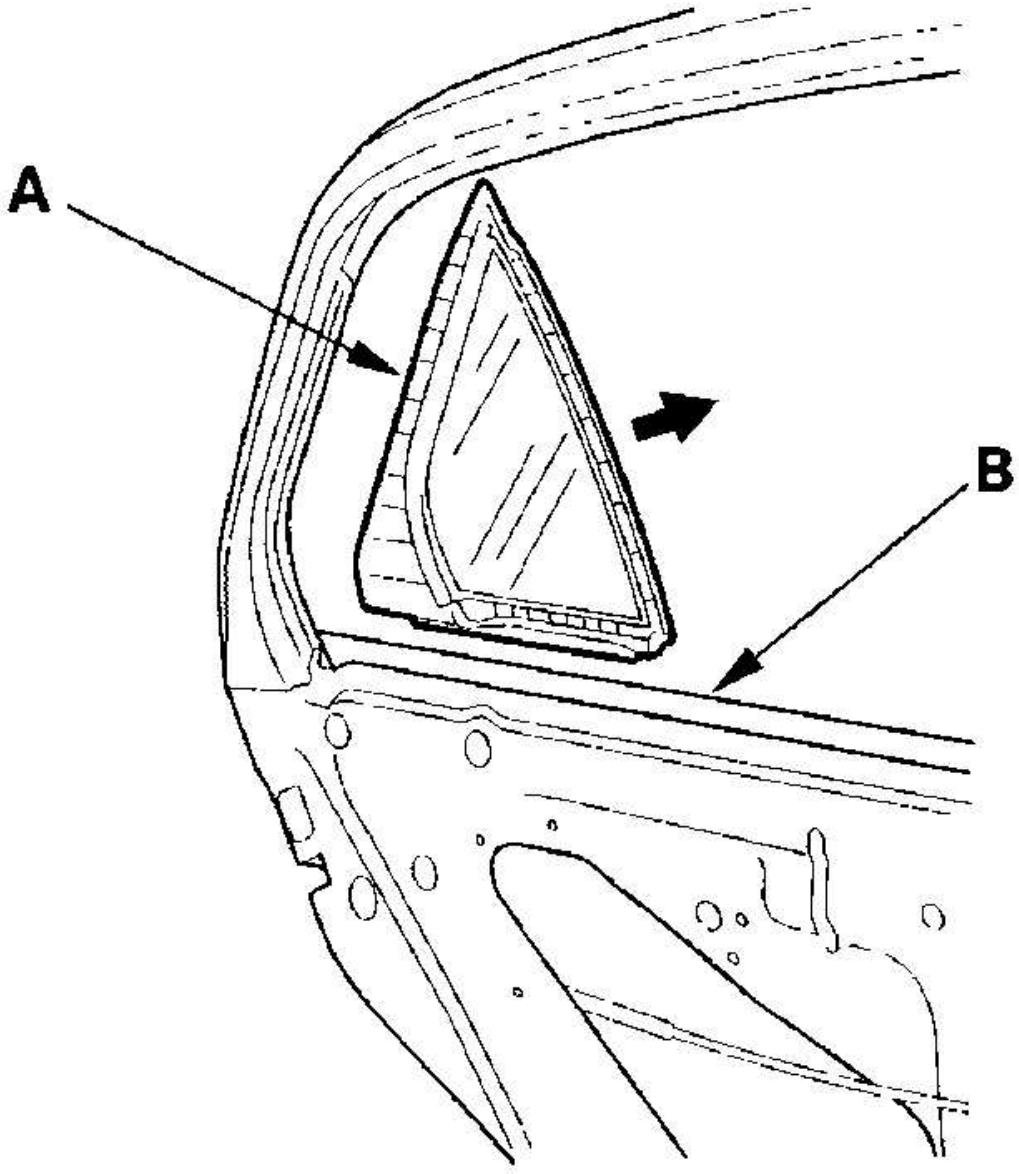


Fig. 78: Removing Quarter Glass

Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Carefully remove the glass (A) out through the window slot. Take care not to drop the glass inside the door.

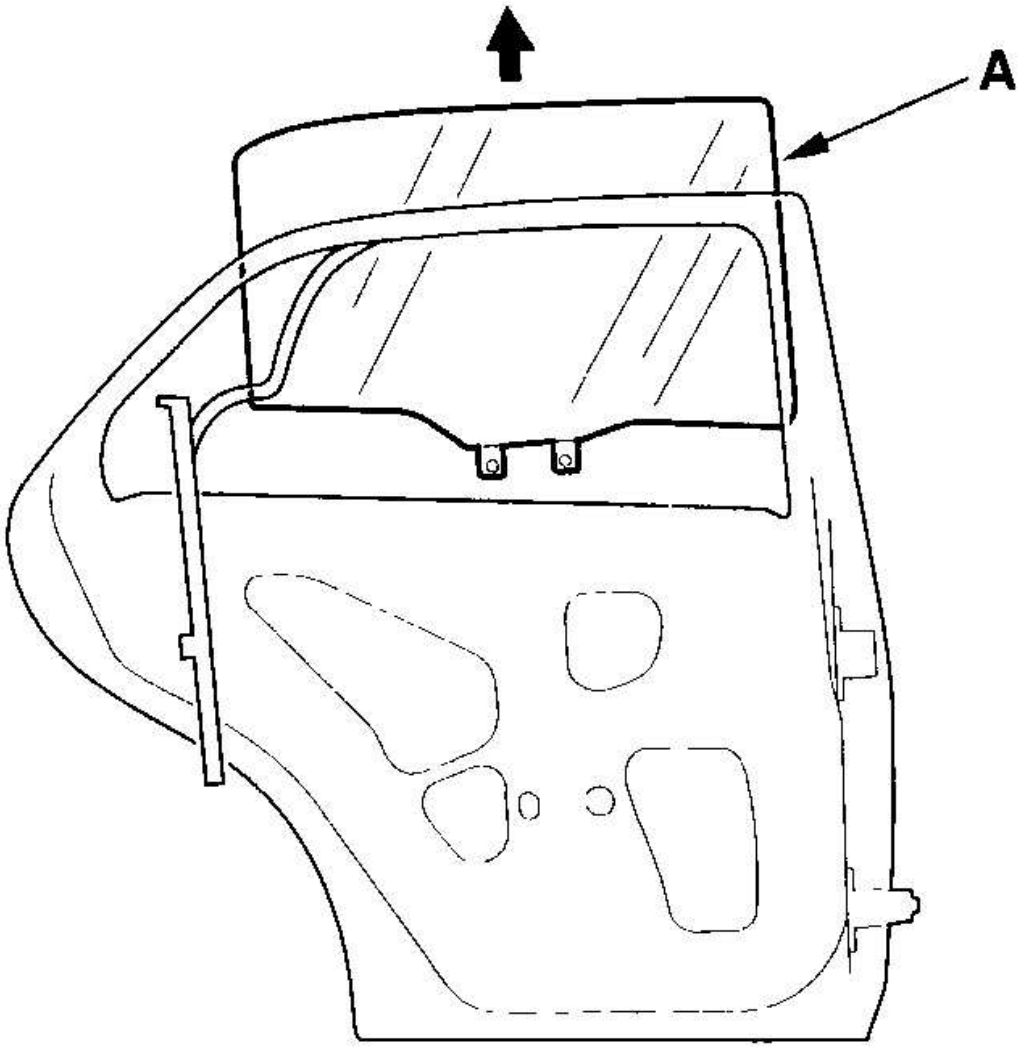


Fig. 79: Removing Glass Through Window Slot
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Disconnect the connector (A) from the regulator (B).

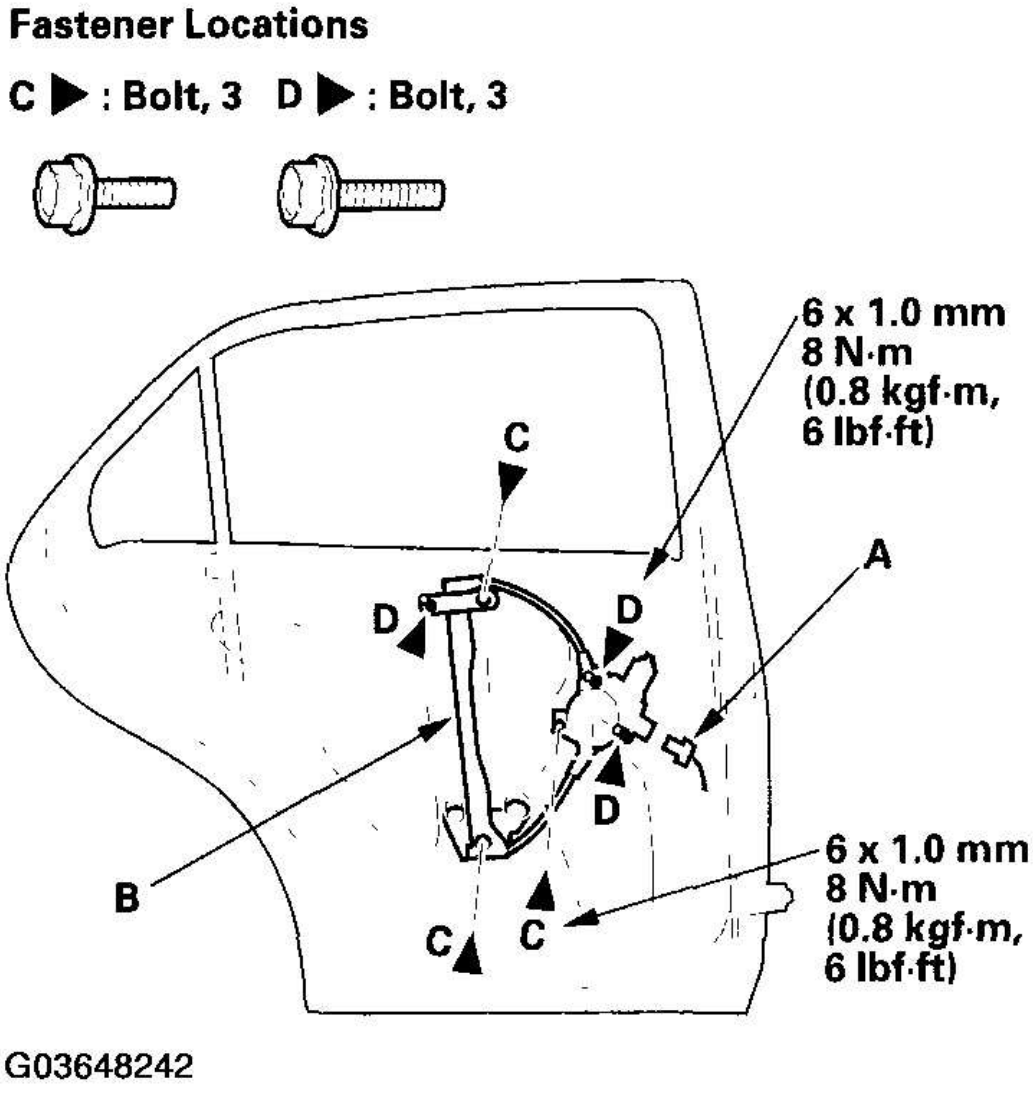


Fig. 80: Disconnecting Connector From Regulator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the bolts (C), and loosen the bolts (D), then remove the regulator through the hole in the door.
9. Apply multipurpose grease to all the sliding surfaces of the regulator (A) where

shown below.

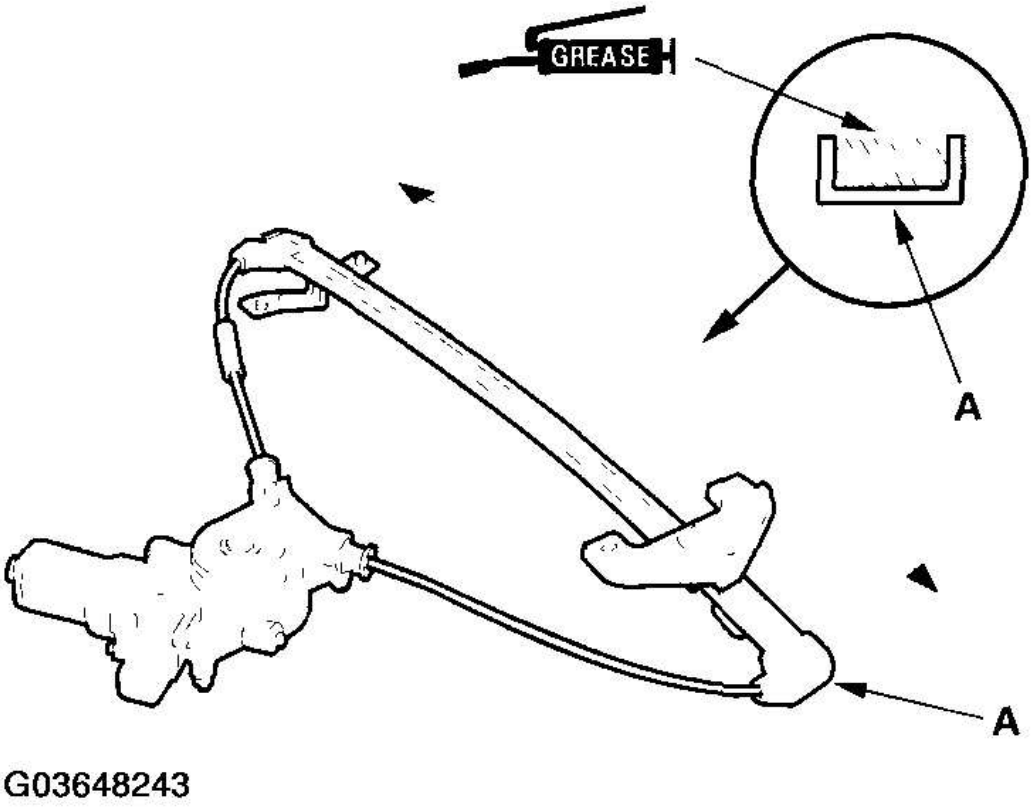


Fig. 81: Applying Multipurpose Grease To Sliding Surfaces Of Regulator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Install the glass and regulator in the reverse order of removal, and note these items:
    - Roll the glass up and down to see if it moves freely without binding.
    - Make sure that there is no clearance between the glass and glass run channel when the glass is closed.
    - Adjust the position of the glass as necessary (see **Front and Rear Door Glass Adjustment**).
    - Test-drive and check for wind noise and rattles.
    - When reinstalling the door panel, make sure the plastic cover is installed

properly and sealed around its perimeter to seal out the water.

- Check for water leaks.

REAR DOOR GLASS OUTER WEATHERSTRIP REPLACEMENT

Special Tools Required

KTC trim tool set SOJATP2014

4-DOOR

NOTE:

- **Once you remove the door glass outer weatherstrip, replace it with a new one because it will bend.**
- **Put on gloves to protect your hands.**
- **Take care not to scratch the door.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove the door panel (see **REAR DOOR PANEL REMOVAL/INSTALLATION**).
2. Remove the screw from the front edge of the door.

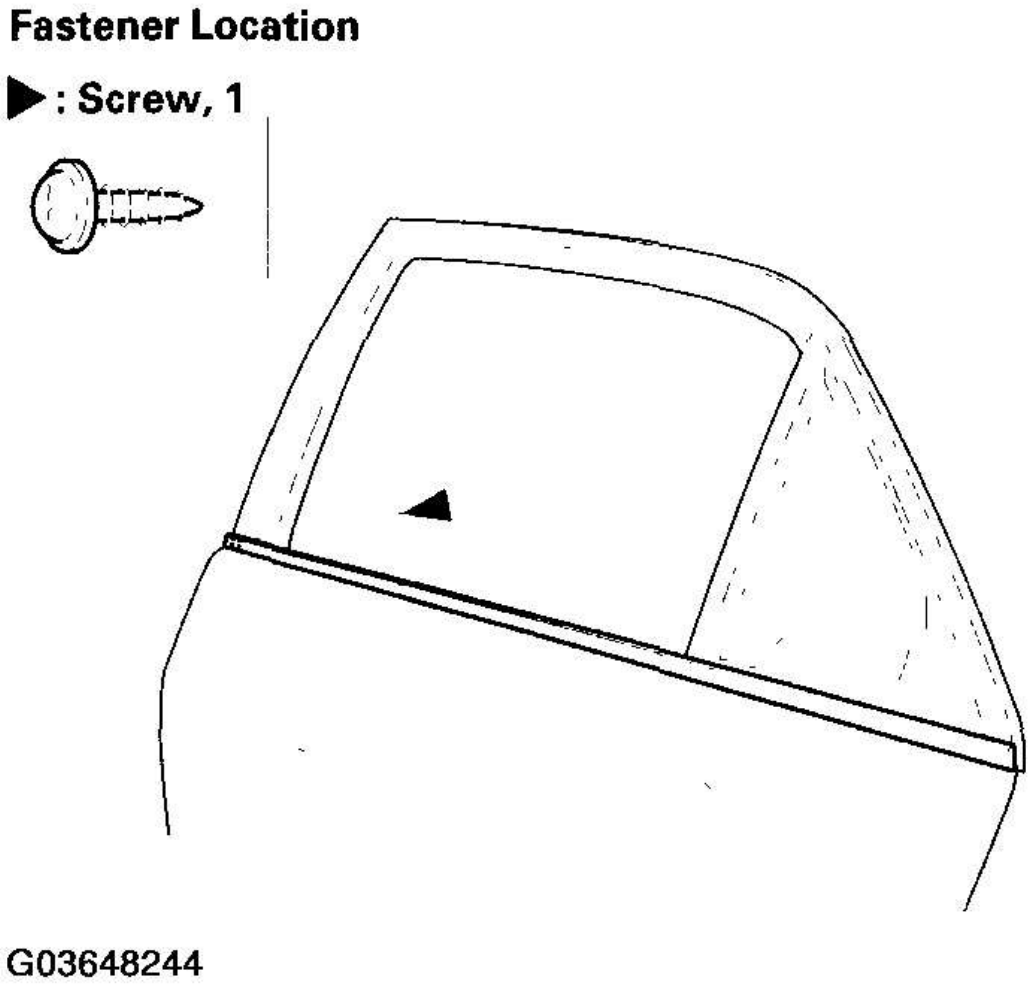


Fig. 82: Removing Screw From Front Edge Of Door
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Starting at the front, pull the door glass outer weatherstrip (A) up at each portion where the inner molding (B) catches the inside edge of the window slot.

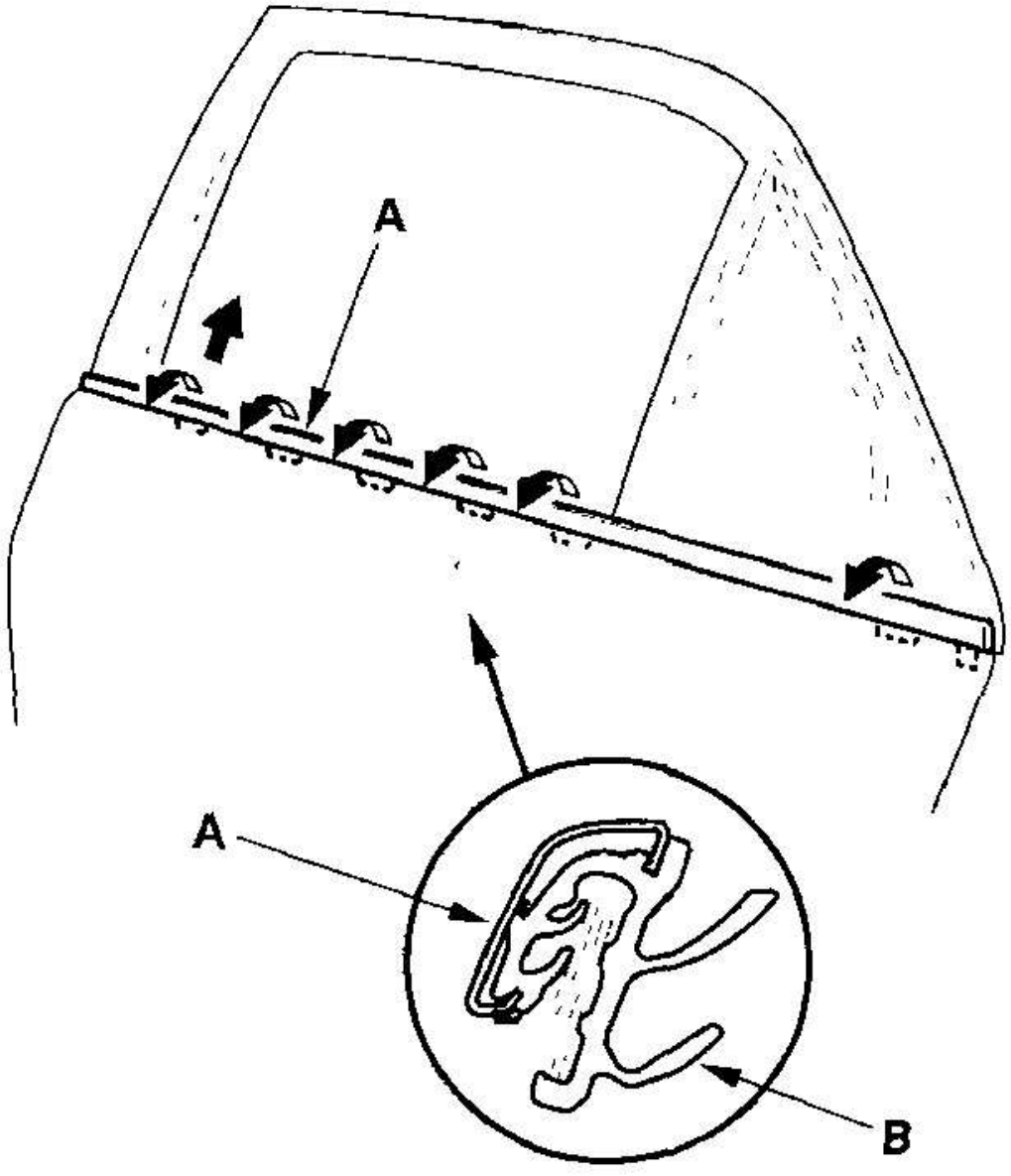


Fig. 83: Pulling Door Glass Outer Weatherstrip At Inner Molding Catches Inside Edge Of Window Slot
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Detach the rear clip (A), then remove the door glass outer weatherstrip (B).

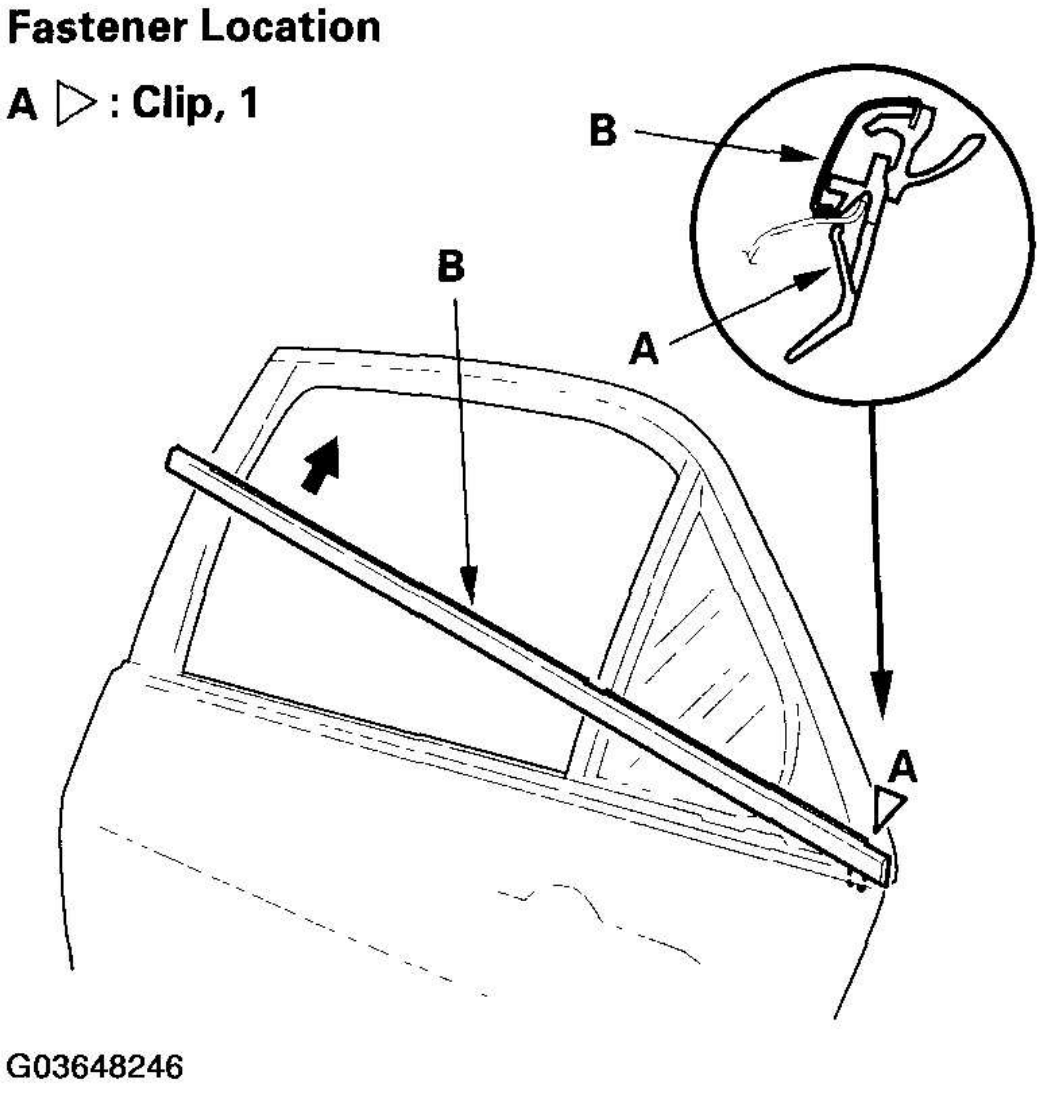


Fig. 84: Removing Door Glass Outer Weatherstrip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install a new weatherstrip in the reverse order of removal.

REAR DOOR OUTER MOLDING REPLACEMENT

Special Tools Required

KTC trim tool set SOJATP2014

4-DOOR

NOTE:

- **If you remove the door outer molding, replace it with a new one because it will bend during removal.**
- **Put on gloves to protect your hands.**
- **Take care not to scratch the door.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Pry the front clip (A) with a trim tool.

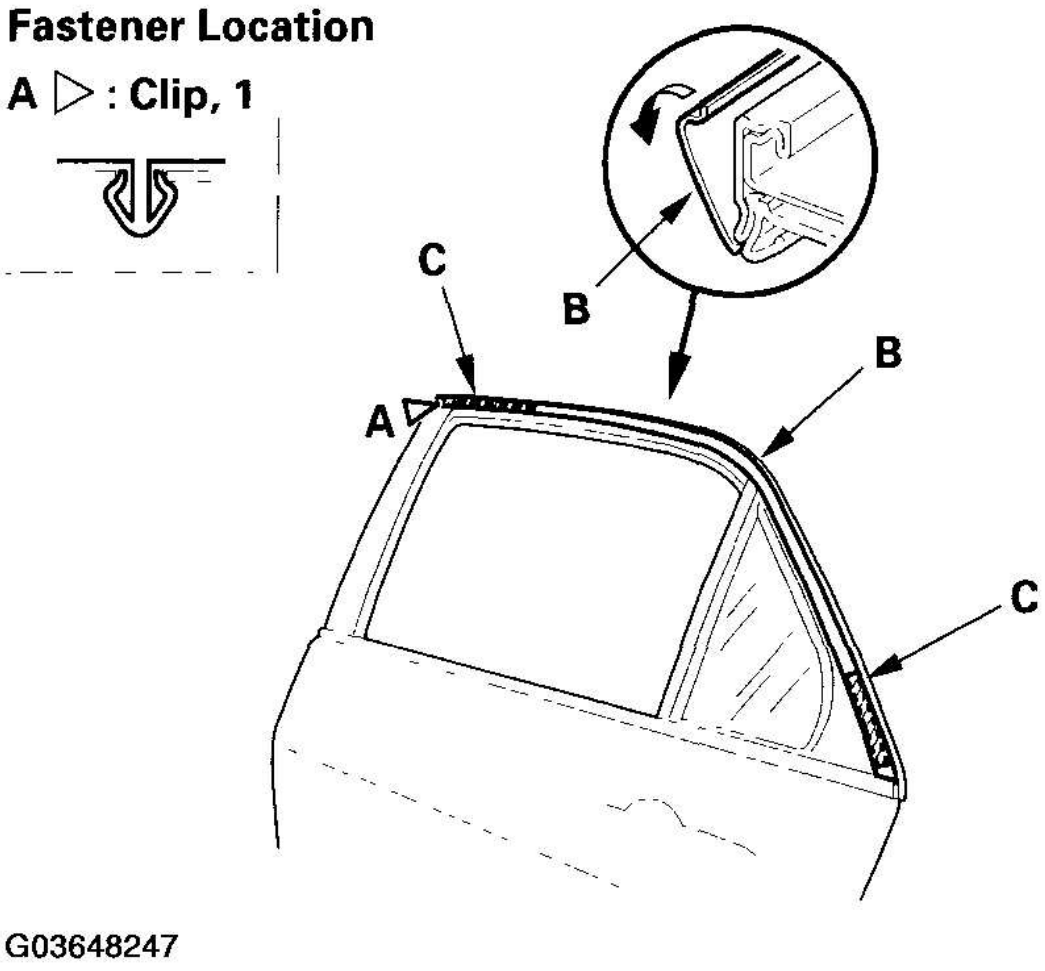


Fig. 85: Prying Front Clip With Trim Tool ('03 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

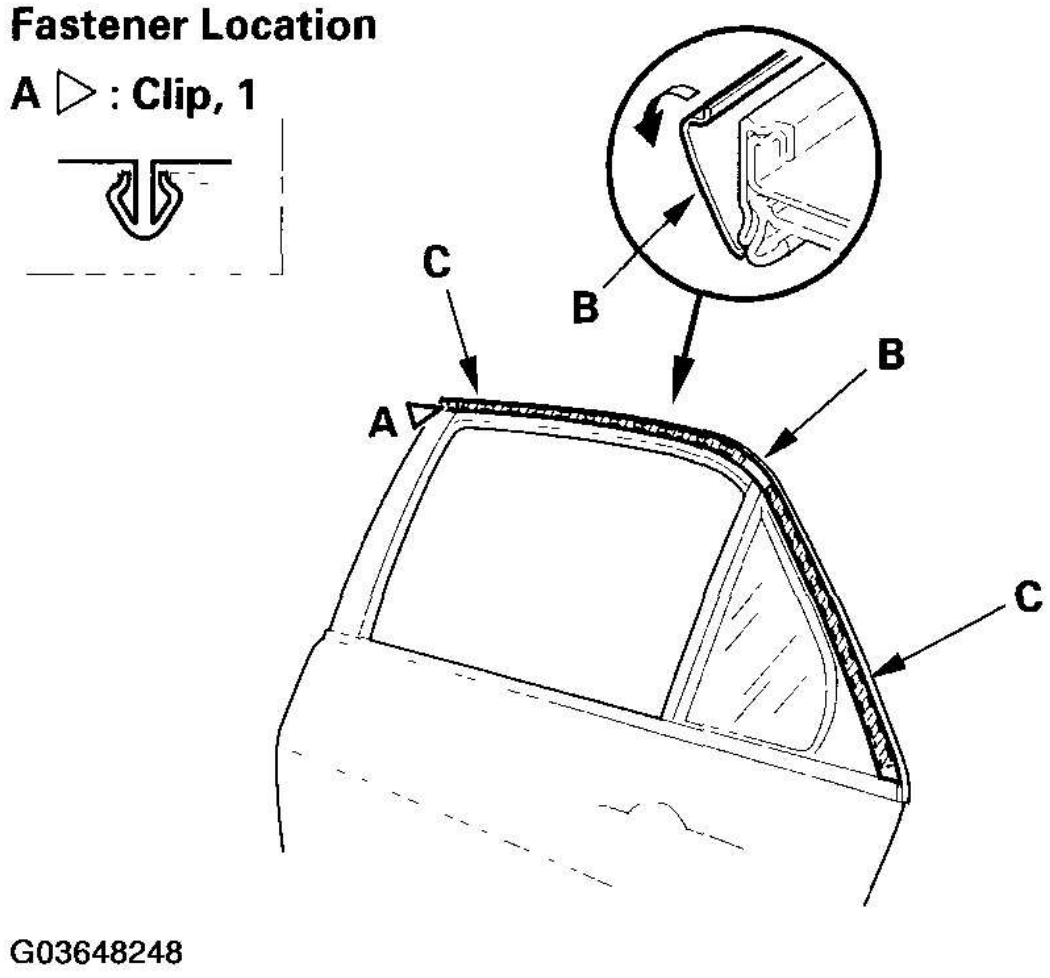


Fig. 86: Prying Front Clip With Trim Tool ('04-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. While removing the upper edge of the door outer molding (B) from the edge of the sash, cut the double-sided adhesive tapes (C) with a utility knife, then remove the molding.
3. Scrape off the remaining double-sided adhesive tape from the sash, then clean the sash surface with a sponge dampened in alcohol.
4. Install new door outer molding in the reverse order of removal, and note these items.
    - Push the clip and the adhesive portions into place securely.

- Make sure the upper and lower sides of the molding are catching the edges of the sash properly.

REAR DOOR WEATHERSTRIP REPLACEMENT

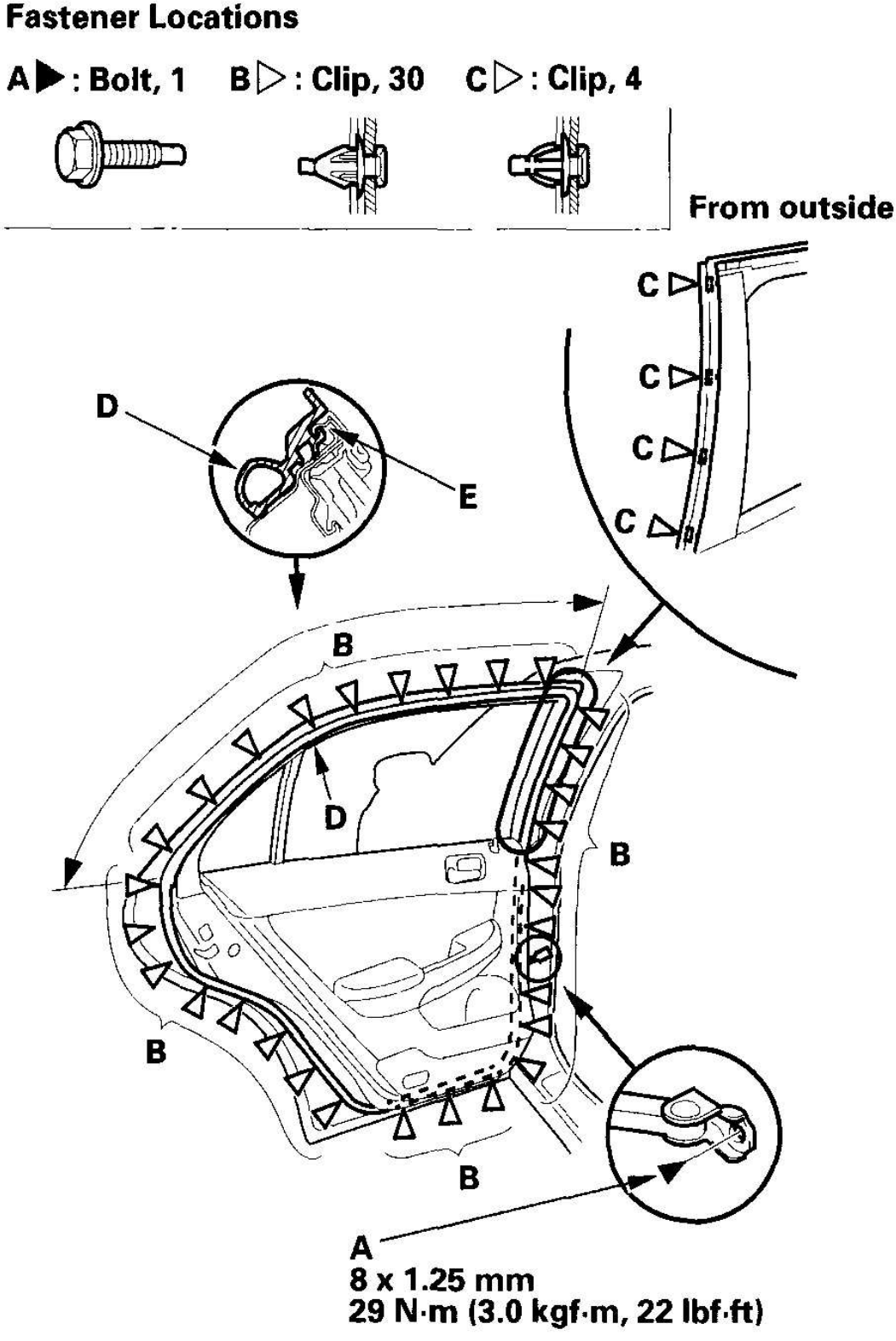
4-DOOR

NOTE:

- **Take care not to scratch the door.**
- **Use a clip remover to remove the clips.**

1. At the B-pillar, remove the detent rod mounting bolt (A).

Fastener Locations



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Fig. 87: Removing Detent Rod Mounting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Detach the clips (B, C), then remove the door weatherstrip (D).
3. Install the weatherstrip in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Make sure the weatherstrip is installed in the holder (E) securely.
   - Apply medium strength liquid thread lock to the detent rod mounting bolt before installation.
   - Test-drive and check for wind noise.
   - Check for water leaks.

REAR DOOR HOOK PIN AND CATCH REPLACEMENT

4-DOOR

1. With a T40 Torx bit, remove the door hook pin (A) from the door.

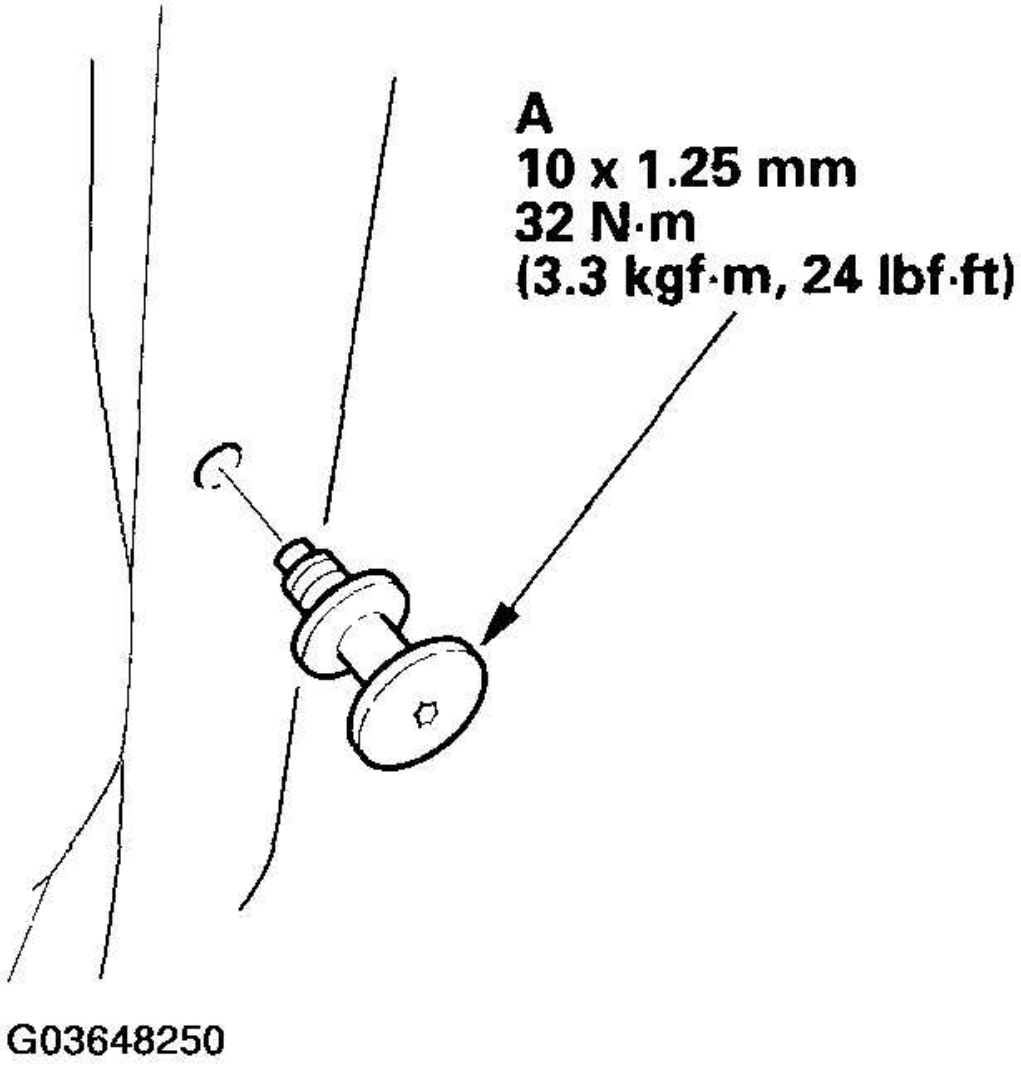


Fig. 88: Removing Door Hook Pin From Door
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. With a T40 Torx bit, remove the bolts, then remove the door catch (A) from the body.

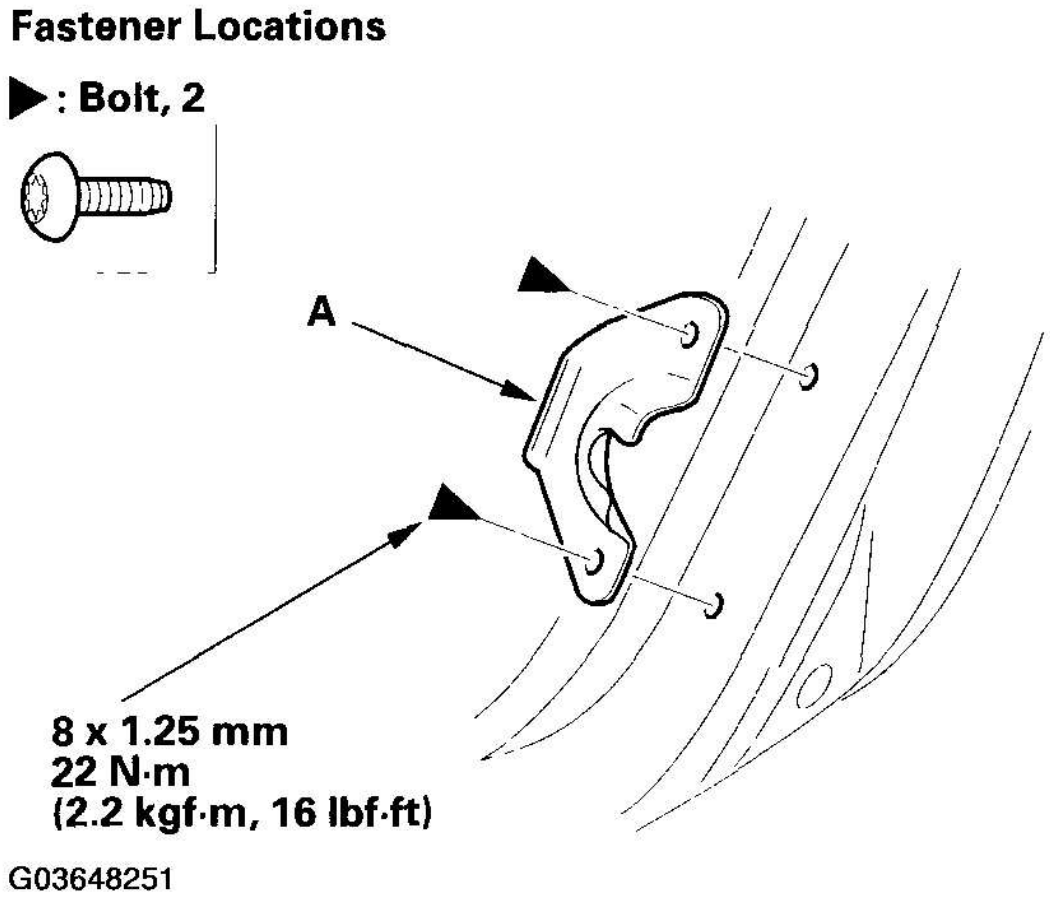


Fig. 89: Removing Door Catch From Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the hook pin and catch in the reverse order of removal, and apply medium strength liquid thread lock to the threads of the door hook pin.

FRONT AND REAR DOOR GLASS ADJUSTMENT

NOTE:

- **Check the weatherstrips and glass run channel for damage or deterioration, and replace them if necessary.**
- **Wipe the run channel clean with a shop towel.**
- **Lubricate the run channel with Shin-Etsu silicone**

grease P/N 08798-9013.

1. Place the vehicle on a firm, level surface.
2. Remove these items:
   - Door panel, 2-door (see **2-DOOR**), 4-door front door (see **4-DOOR**), 4-door rear door (see **4-DOOR**)
   - Plastic cover, 2-door (see **2-DOOR**), 4-door front door (see **4-DOOR**), 4-door rear door (see **REAR DOOR**)
3. Carefully move the glass (A) until you can see the glass mounting bolts (B), then loosen them.

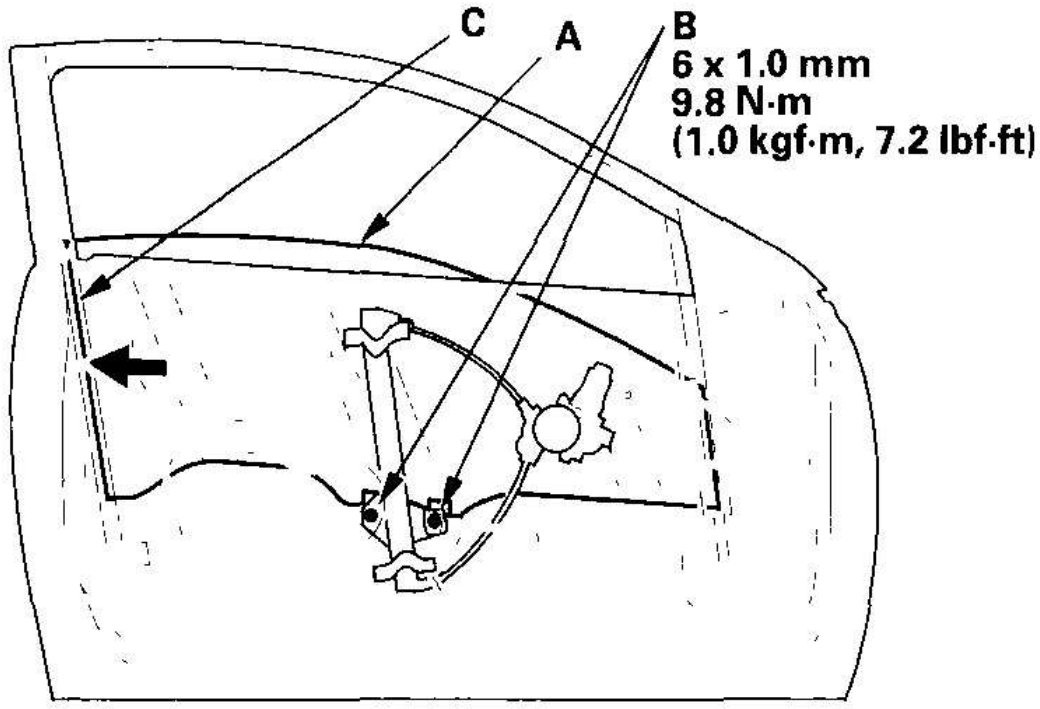


Fig. 90: Loosening Glass Mounting Bolts (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

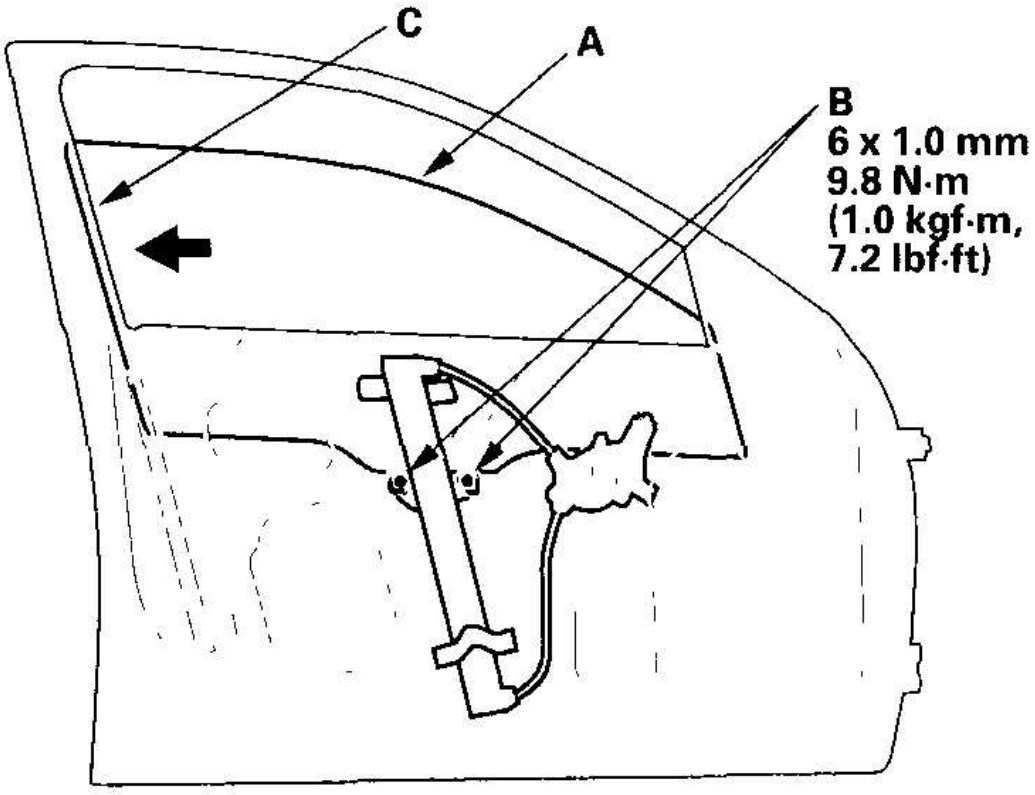


Fig. 91: Loosening Glass Mounting Bolts (4-Door Front Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

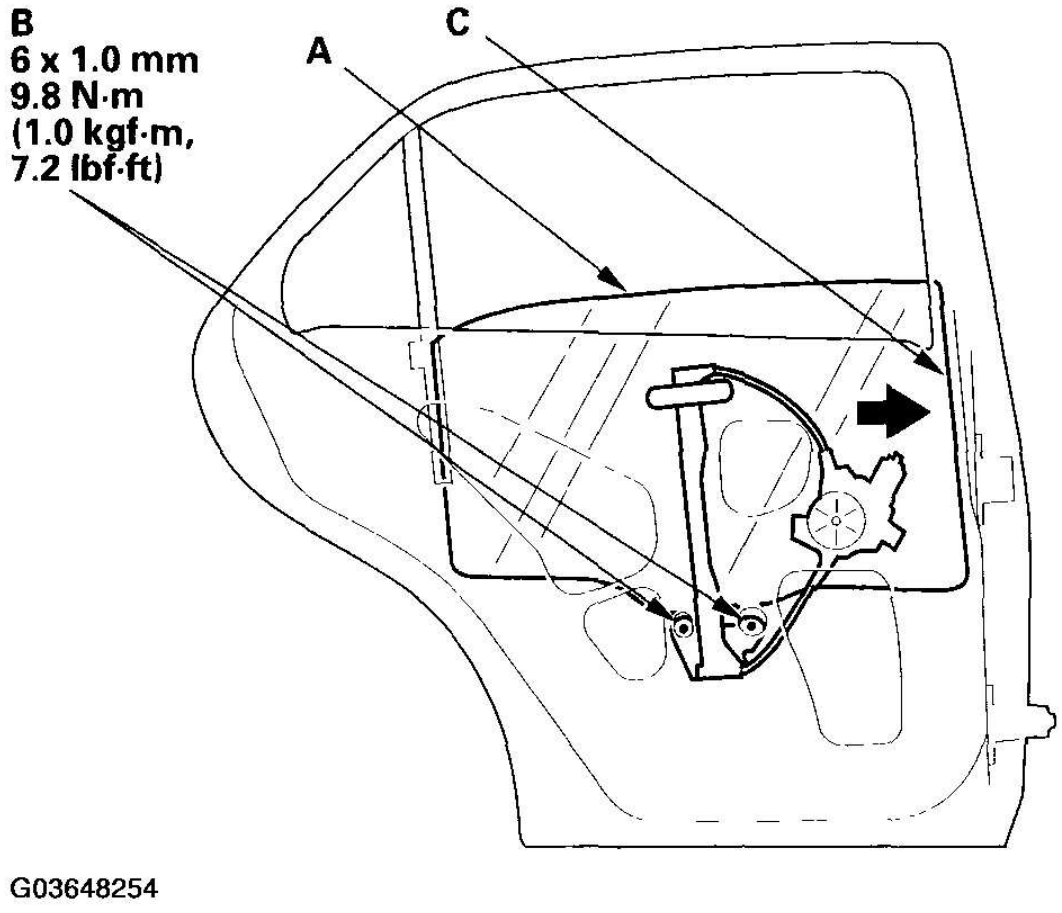


Fig. 92: Loosening Glass Mounting Bolts (4-Door Rear Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Push the glass against the channel (C), then tighten the glass mounting bolts.
5. Check that the glass moves smoothly.
6. Raise the glass fully, and check for gaps. Also check that the glass (A) contacts the glass run channel (B) evenly.

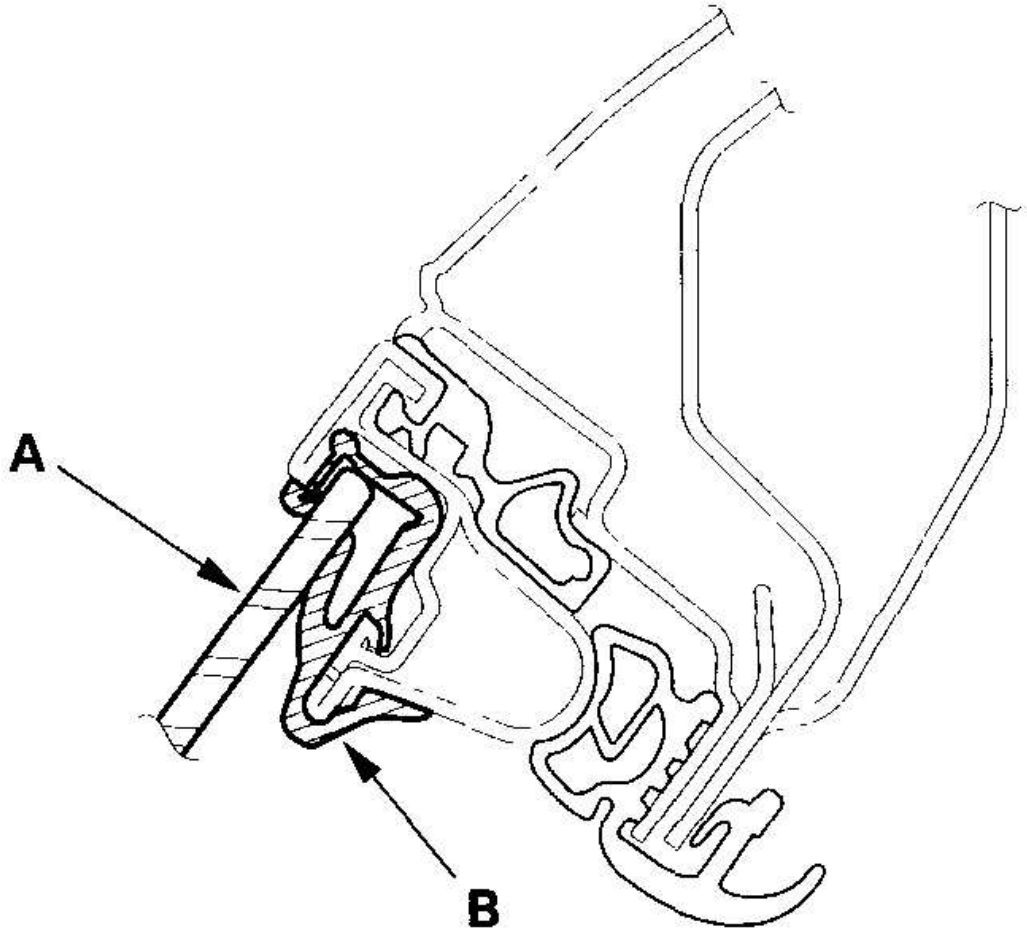


Fig. 93: Checking Glass Contacts Glass Run Channel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Check for water leaks. Run water over the roof and on the sealing area as shown in **Fig. 94**, and note these items:
   - Use a 12 mm (1/2 in.) diameter hose (A).
   - Adjust the rate of water flow as shown in (B), see **Fig. 94**.
   - Do not use a nozzle.
   - Hold the hose about 300 mm (12 in.) away from the door (C).

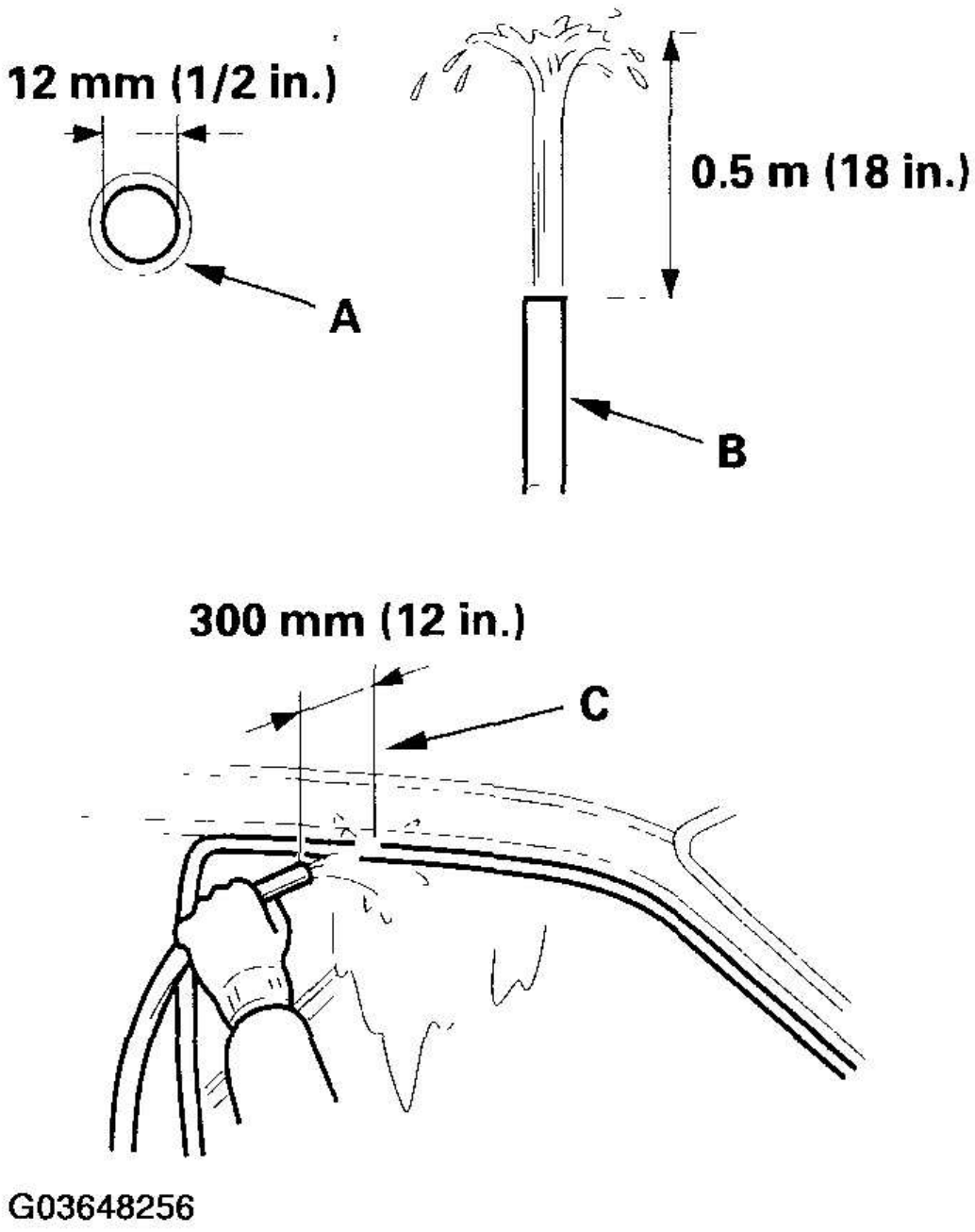


Fig. 94: Checking For Water Leaks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Attach the plastic cover making sure it is sealed around its outside perimeter to

seal out water, then install the door panel, 2-door (see **2-DOOR**), 4-door front door (see **4-DOOR**), 4-door rear door (see **4-DOOR**).

9. Do the power window control unit reset procedure (see **RESETTING THE POWER WINDOW CONTROL UNIT**).
10. Test-drive and check for wind noise.

FRONT AND REAR DOOR POSITION ADJUSTMENT

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE: Check for a flush fit with the body, then check for equal gaps between the front, rear, and bottom door edges and the body. Check that the door and body edges are parallel.

1. Place the vehicle on a firm, level surface when adjusting the doors.
2. Adjust at the hinges (A):
   - On the front door: Remove the front inner fender (see **FRONT INNER FENDER REPLACEMENT**) and front fender fairing (see **FRONT FENDER FAIRING REPLACEMENT**). Loosen the hinge mounting bolts (B) slightly, and move the door backward or forward, up or down as necessary to equalize the gaps. Pad a floor jack (C) with shop towels (D), then use the jack to support the door while adjusting it.
   - On the rear door: Remove the B-pillar lower trim, without side curtain airbags (see **4-DOOR-B-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**), with side curtain airbags (see **4-DOOR-B-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)**) and remove the front seat belt and retractor (see **FRONT SEAT BELT REPLACEMENT**), and the plug seal from the body. Loosen the hinge mounting nuts (E) slightly, and move the door backward or forward, up or down as necessary to equalize the gaps. Pad a floor jack (C) with shop towels (D) then use the jack to support the door to prevent damage to the door while adjusting it.

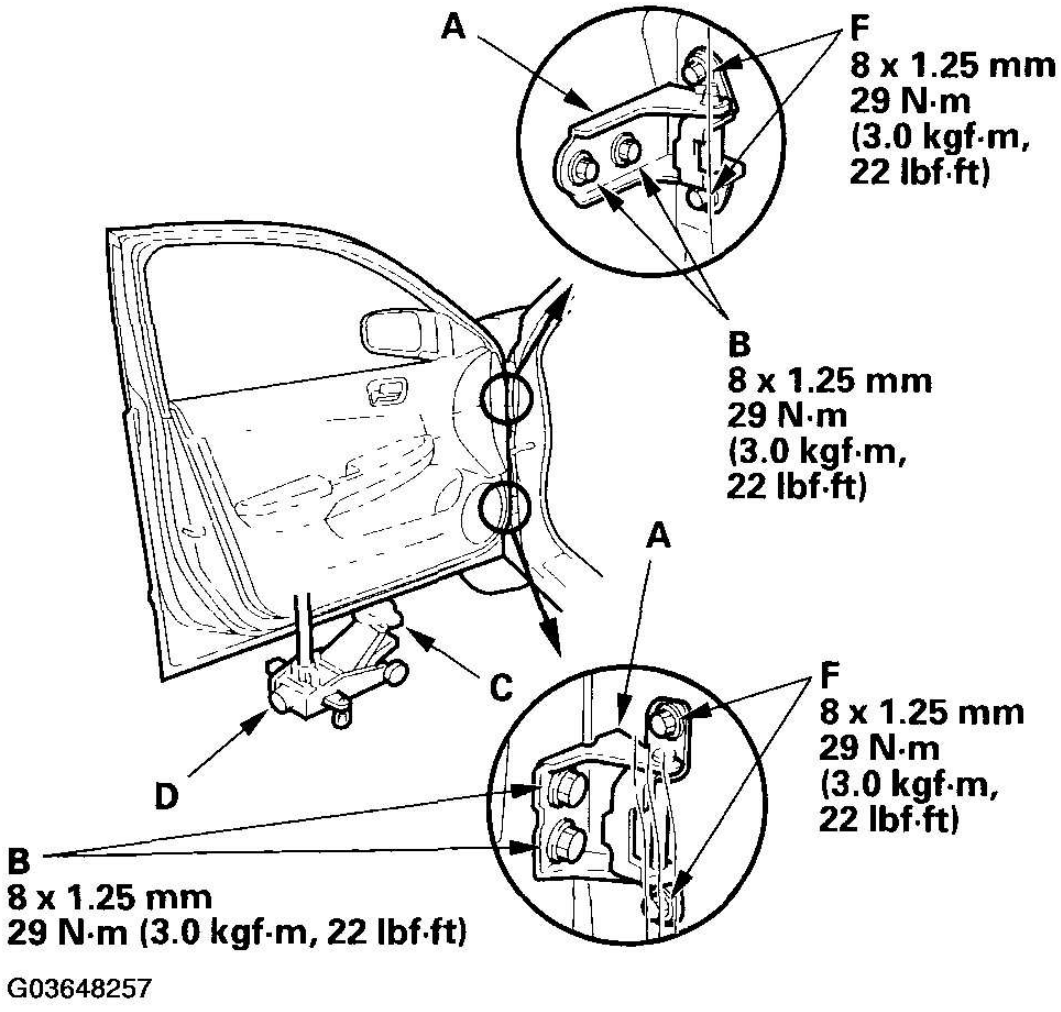


Fig. 95: Adjusting Door At Hinges (2-Door And 4-Door Front Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

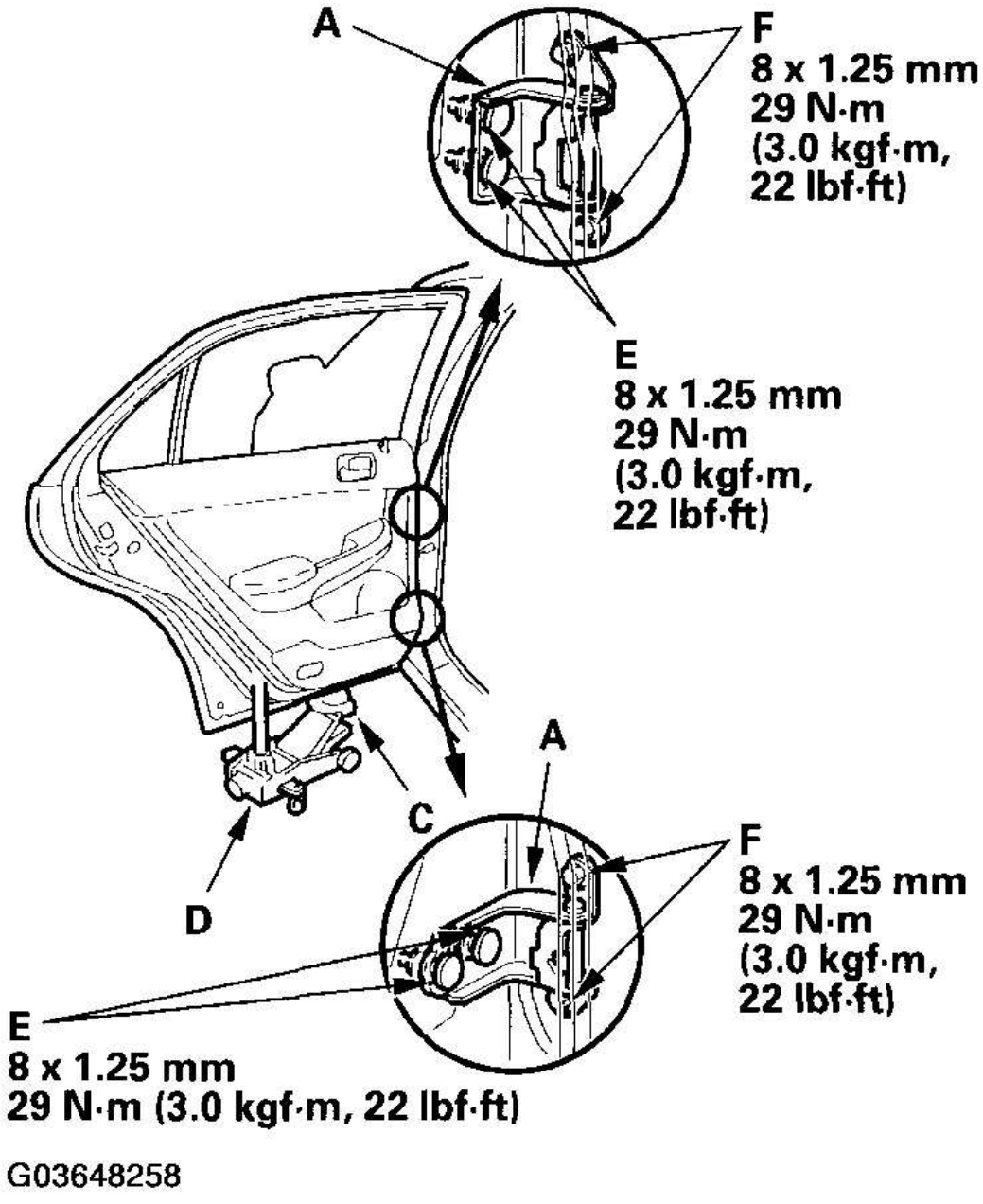


Fig. 96: Adjusting Door At Hinges (4-Door Rear Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If necessary, replace the door mounting bolts (F) with the adjusting bolts (P/N 90 102-SFA-305) made specifically for door adjustment, then adjust at the

door: Loosen the adjusting bolts slightly, move the door in or out until it's flush with the body, and up or down as necessary to equalize the gaps.

4. Check that the door and body edges are parallel. If necessary, adjust the door cushions (A) to make the rear of the doors flush with the body.

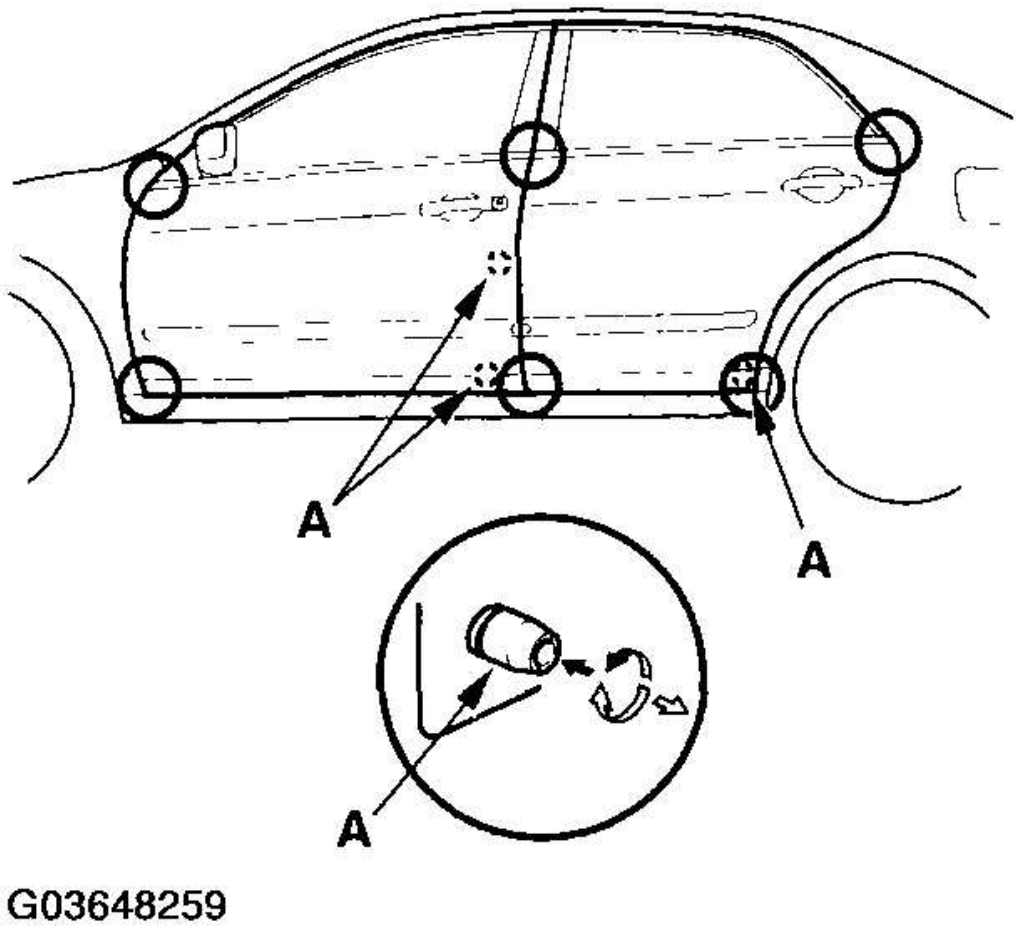


Fig. 97: Adjusting Door Cushions
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Apply touch-up paint to the hinge mounting bolts, and around the hinges.
6. Check for water leaks (see step 7 in **Front and Rear Door Glass Adjustment**).

7. Test-drive and check for wind noise.
8. Reinstall all remaining removed parts.

FRONT AND REAR DOOR STRIKER ADJUSTMENT

Make sure the door latches securely without slamming it. If necessary, adjust the striker (A): The striker can be adjusted slightly up or down, and in or out.

1. Loosen the screws (B).

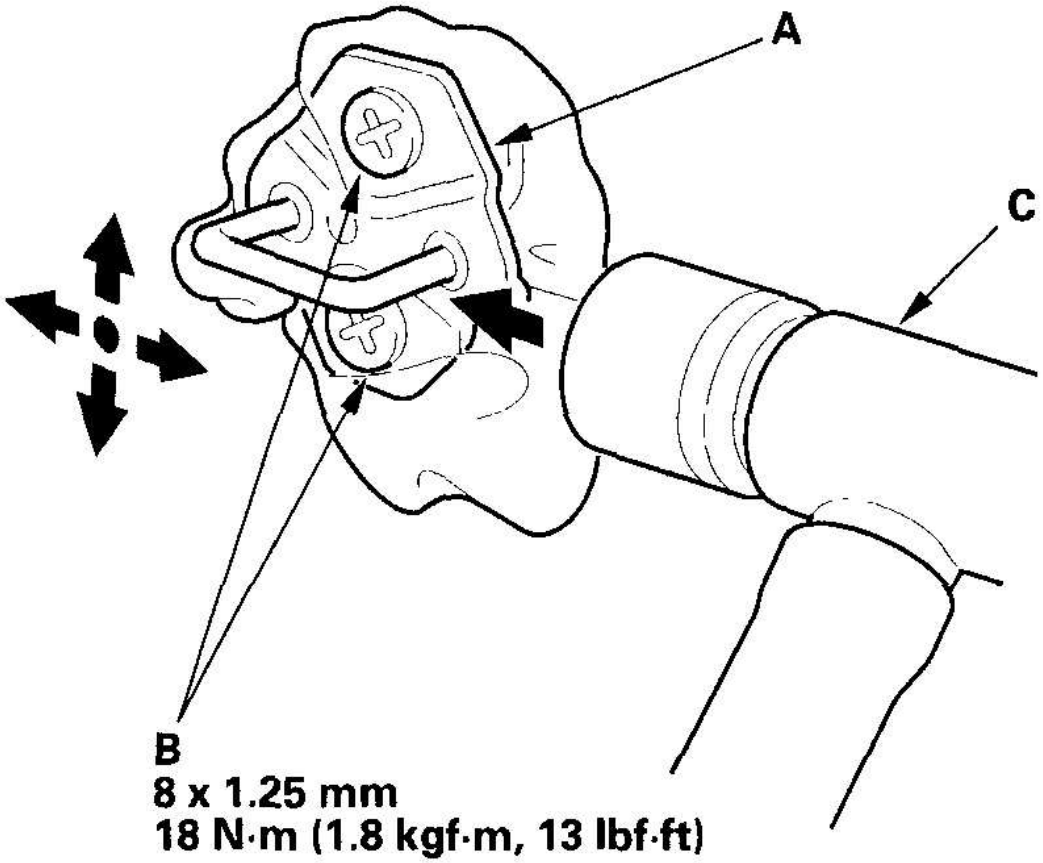


Fig. 98: Adjusting Front And Rear Door Striker
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Wrap the striker with a shop towel, then adjust the striker by tapping it with a plastic hammer (C). Do not tap the striker too hard.
3. Lightly tighten the screws.
4. Hold the outer handle out, and push the door against the body to be sure the striker allows a flush fit. If the door latches properly, tighten the screws and recheck.

2003-07 DRIVELINE/AXLE

Driveline/Axles - Accord (V6)

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07AAF-SDAA100	Ball Joint Thread Protector, 12 mm	1
②	07GAD-PH70201	Oil Seal Driver	1
③	07KAF-PS30200	Bearing Separator	1
④	07MAC-SL0A202	Ball Joint Remover, 28 mm	1
⑤	07NAF-SR30101	Half Shaft Base	1
⑥	07XAC-001020A	Threaded Adapter, 24 x 1.5 mm	1
⑦	07746-0010400	Attachment, 52 x 55 mm	1
⑧	07746-0030400	Attachment, 35 mm I.D.	1
⑨	07749-0010000	Driver	1
⑩	07947-SB00100	Oil Seal Driver	1

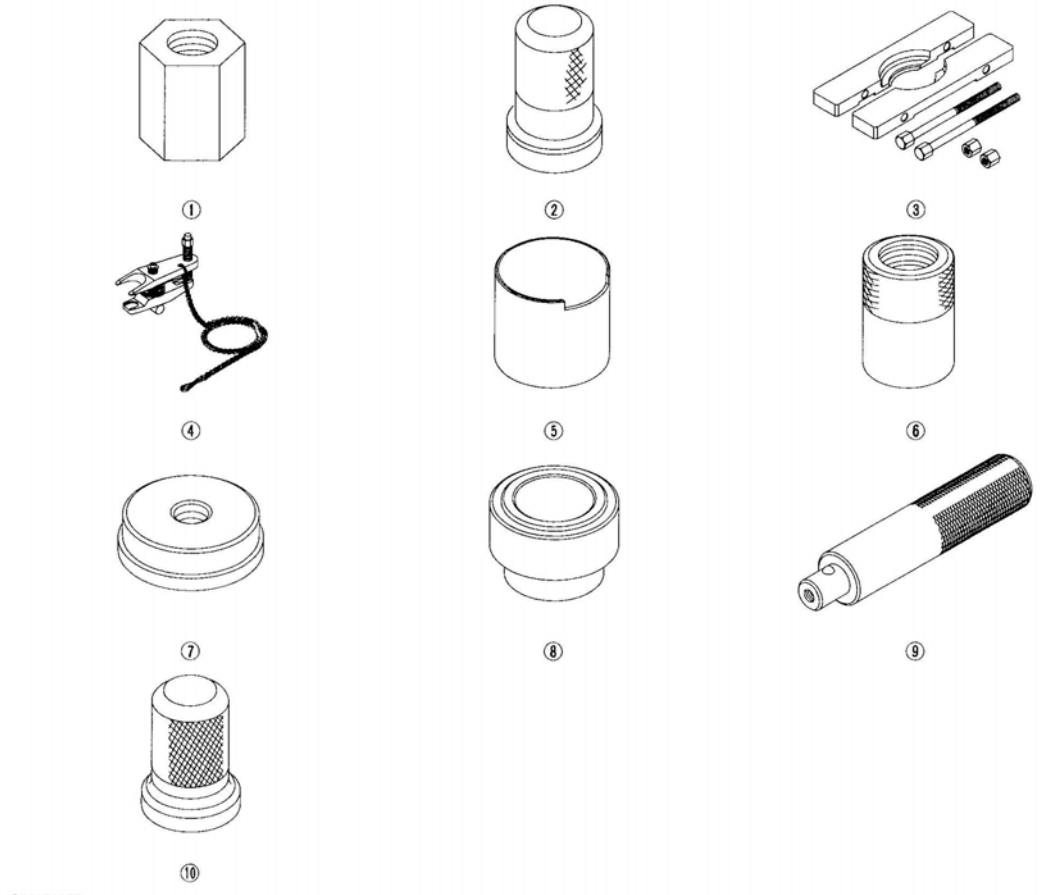


Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

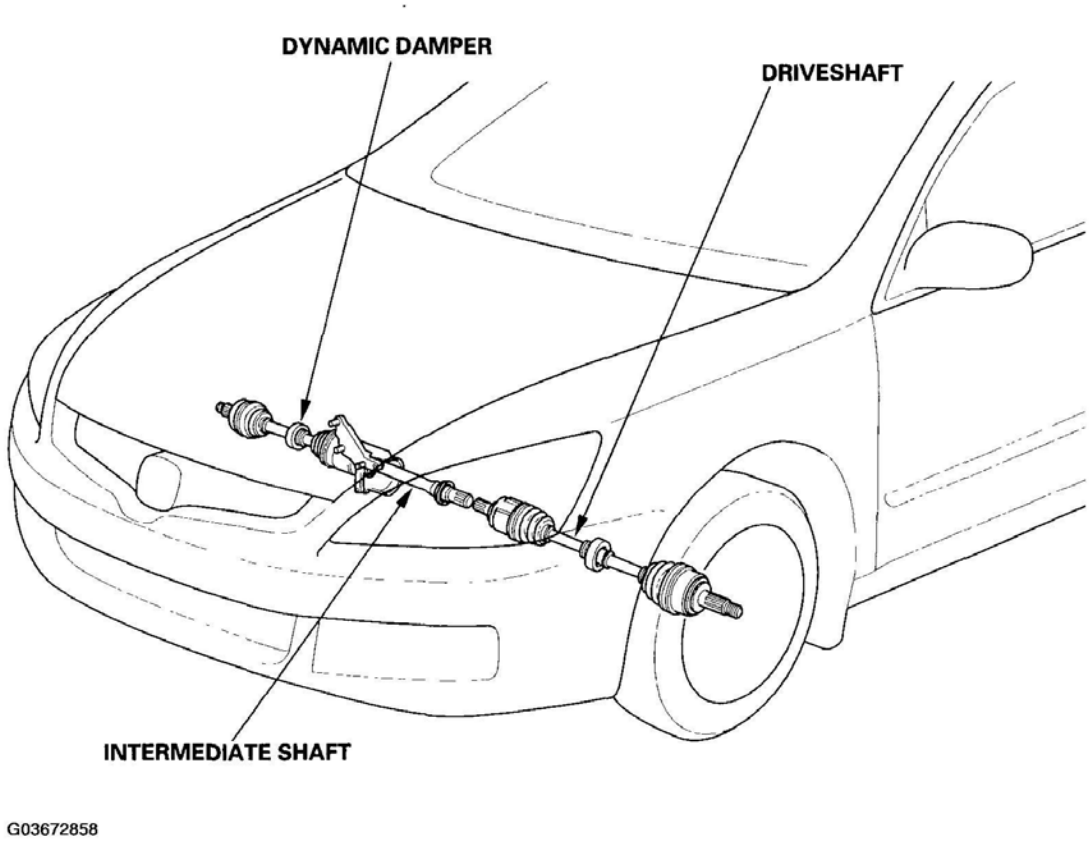


Fig. 2: Locating Components Of Driveline/Axles
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DRIVESHAFT REMOVAL

Special Tools Required

- Ball joint remover, 28 mm 07MAC-SL0A202
- Ball joint thread protector, 12 mm 07AAF-SDAA100

1. Loosen the wheel nuts slightly.
2. Raise the front of the vehicle, and support it with safety stands in the proper locations, refer to **LIFT AND SUPPORT POINTS** .
3. Remove the wheel nuts and front wheels.

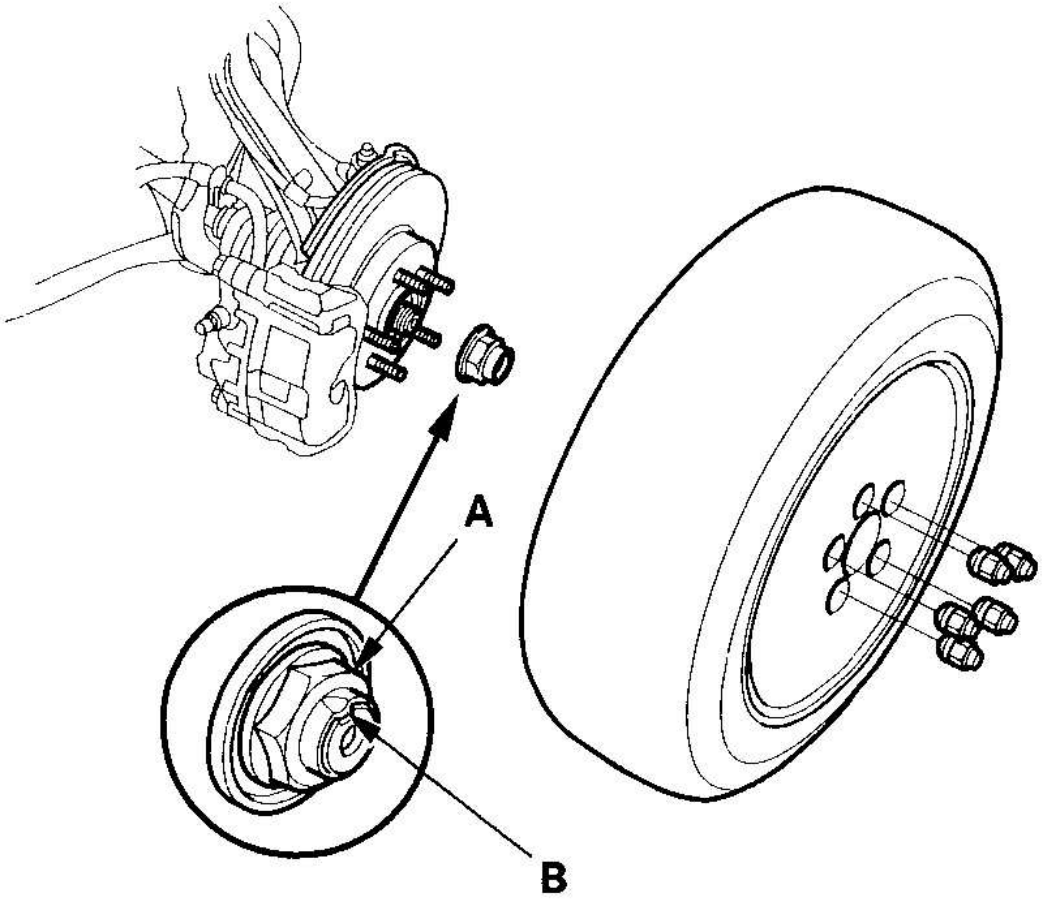


Fig. 3: identifying Wheel Nuts And Front Wheels
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Lift up the locking tab (A) on the spindle nut (B), then remove the nut.
5. Drain the transmission fluid. Reinstall the drain plug using a new washer:
   - Manual transmission (see **MANUAL TRANSMISSION**)
   - Automatic transmission (see **ATF REPLACEMENT**)
6. Remove the self-locking nut (A), 12 mm flange bolt (B), and 10 mm flange bolt (C), then remove the damper fork (D).

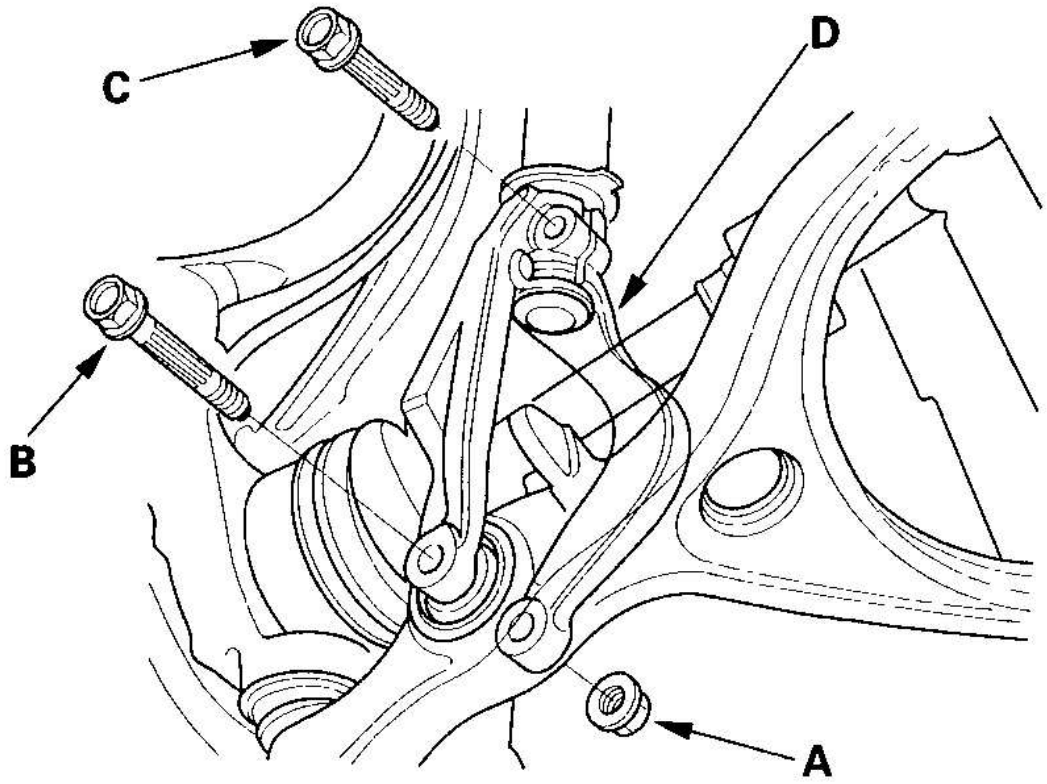


Fig. 4: identifying Self-Locking Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the cotter pin (A) from the lower arm ball joint castle nut (B), and remove the nut.

NOTE:

- **To avoid damaging the ball joint, install the ball joint thread protector onto the threads of the ball joint.**
- **Be careful not to damage the ball joint boot when installing the remover.**

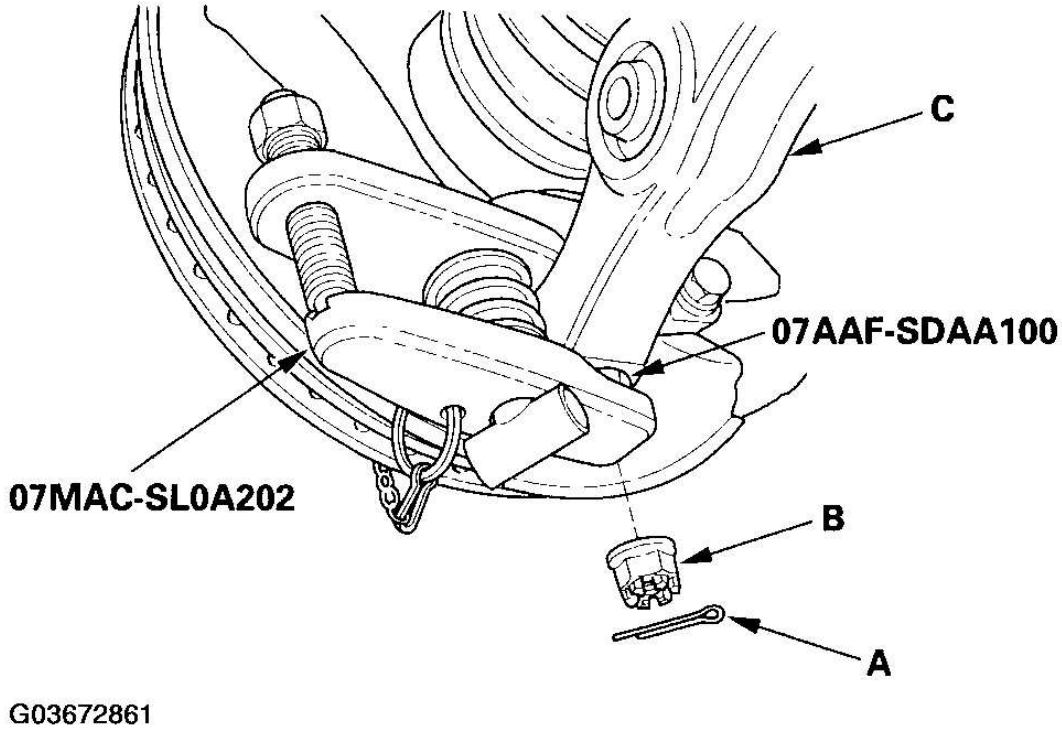
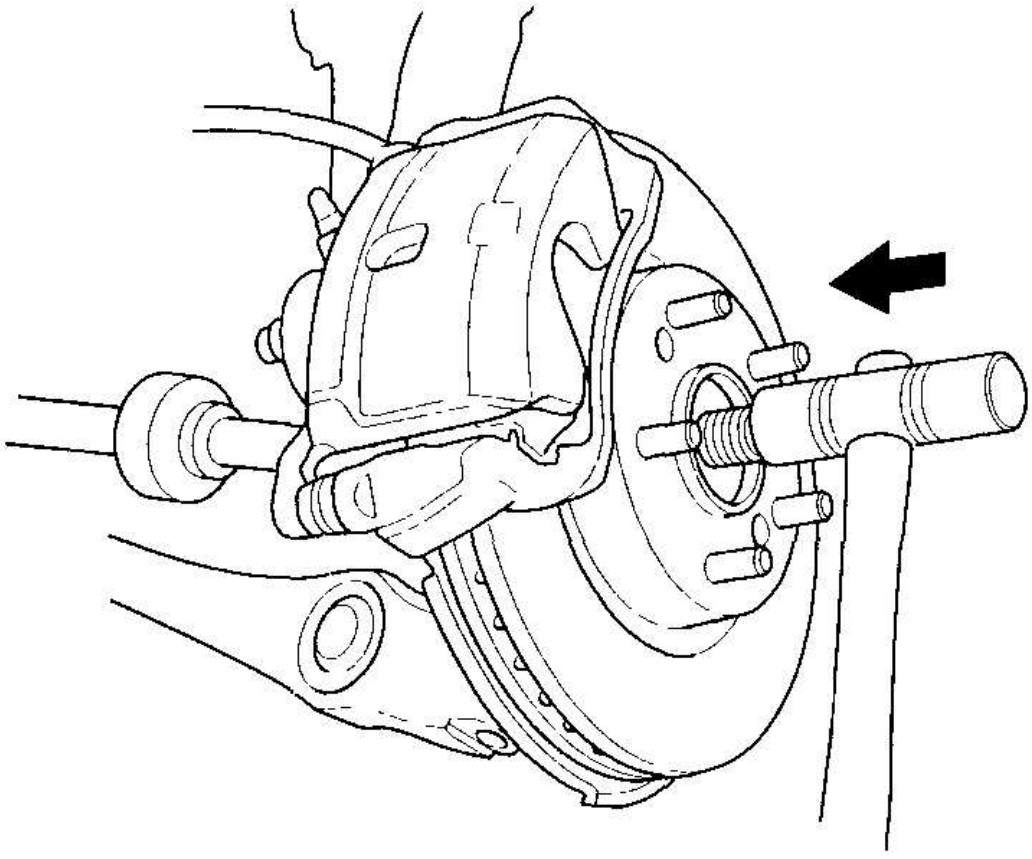


Fig. 5: identifying Cotter Pin From Lower Arm Ball Joint Castle Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Separate the ball joint from the lower arm (C) with the special tool, refer to **BALL JOINT REMOVAL** .
9. Pull the knuckle outward, and remove the outboard joint from the front wheel hub using a plastic hammer.



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Fig. 6: identifying Outboard Joint From Front Wheel Hub Using Plastic Hammer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Left driveshaft: Pry the inboard joint (A) from the differential case with a prybar. Right driveshaft: Drive the inboard joint off of the intermediate shaft with a drift and hammer. Remove the driveshaft as an assembly. Do not pull on the driveshaft (B), because the inboard joint may come apart. Pull the driveshaft straight out to avoid damaging the oil seal.

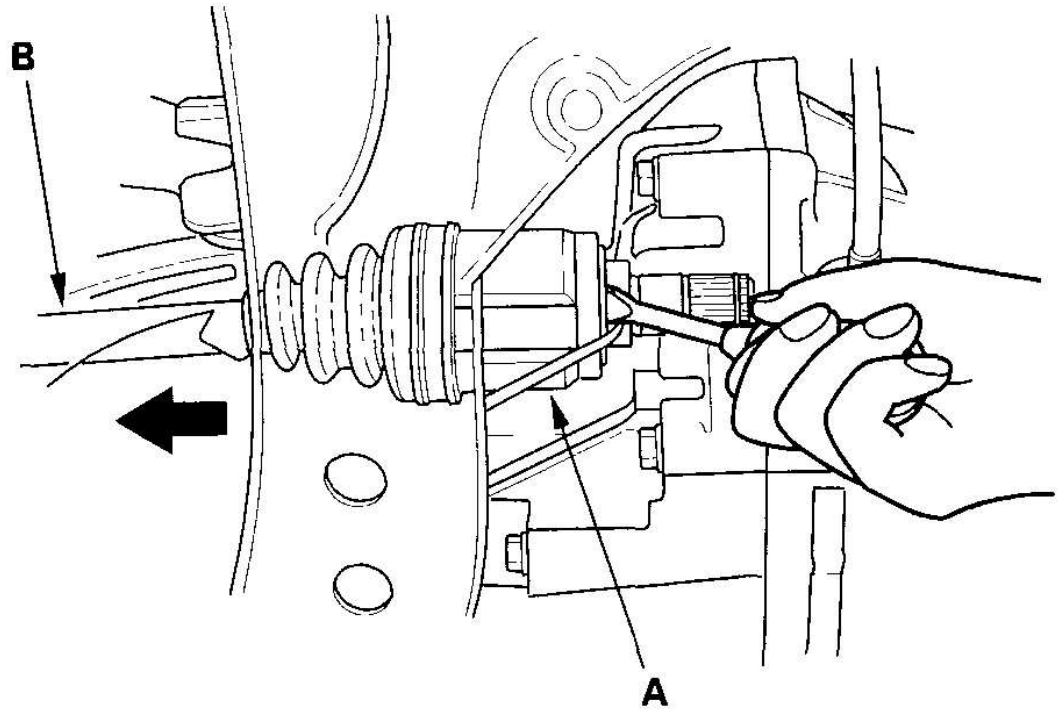


Fig. 7: Prying Inboard Joint From Differential Case With Prybar (Left Driveshaft)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

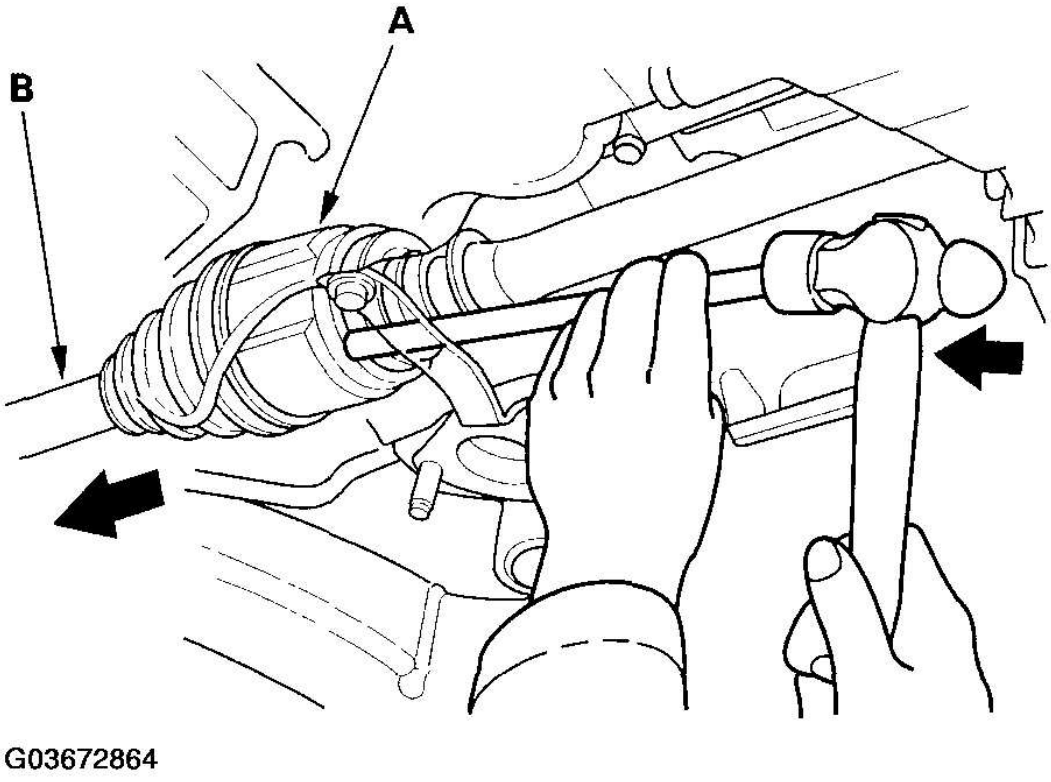


Fig. 8: Prying Inboard Joint From Differential Case With Prybar (Right Driveshaft)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DRIVESHAFT DISASSEMBLY

Special Tools Required

- Threaded adapter, 24 x 1.5 mm 07XAC-001020A
- Boot band pincers, commercially available
- Slide hammer, 5/8"-18 UNF, commercially available

INBOARD JOINT SIDE

1. Remove the set ring from the inboard joint.

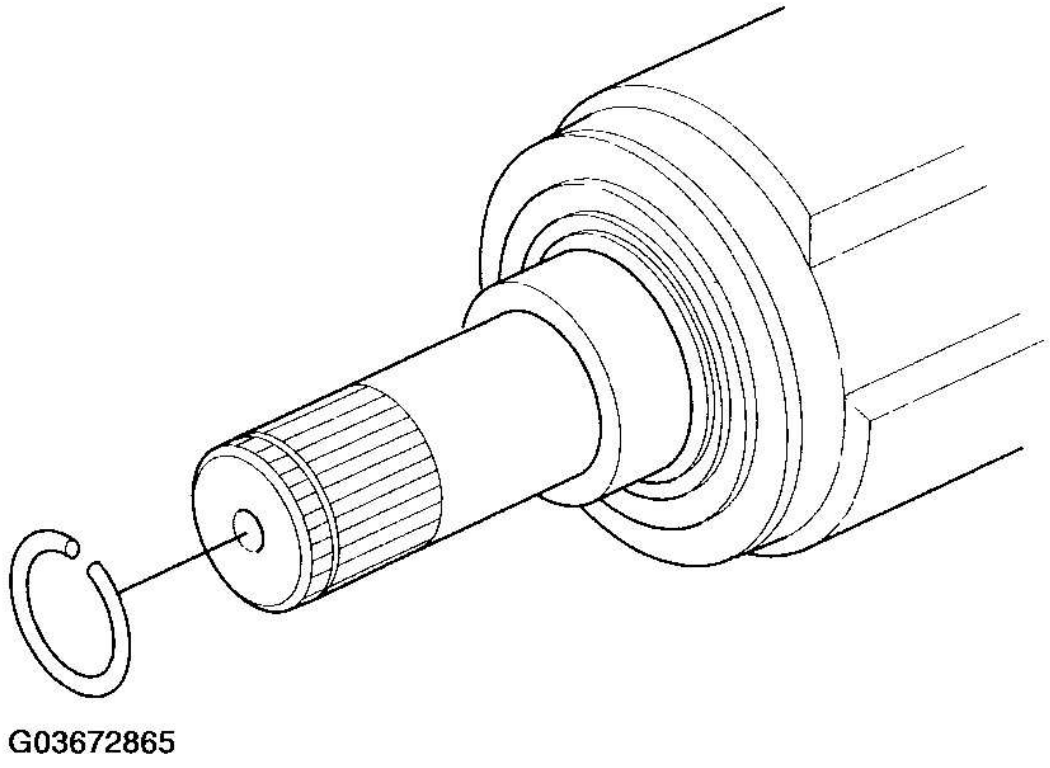
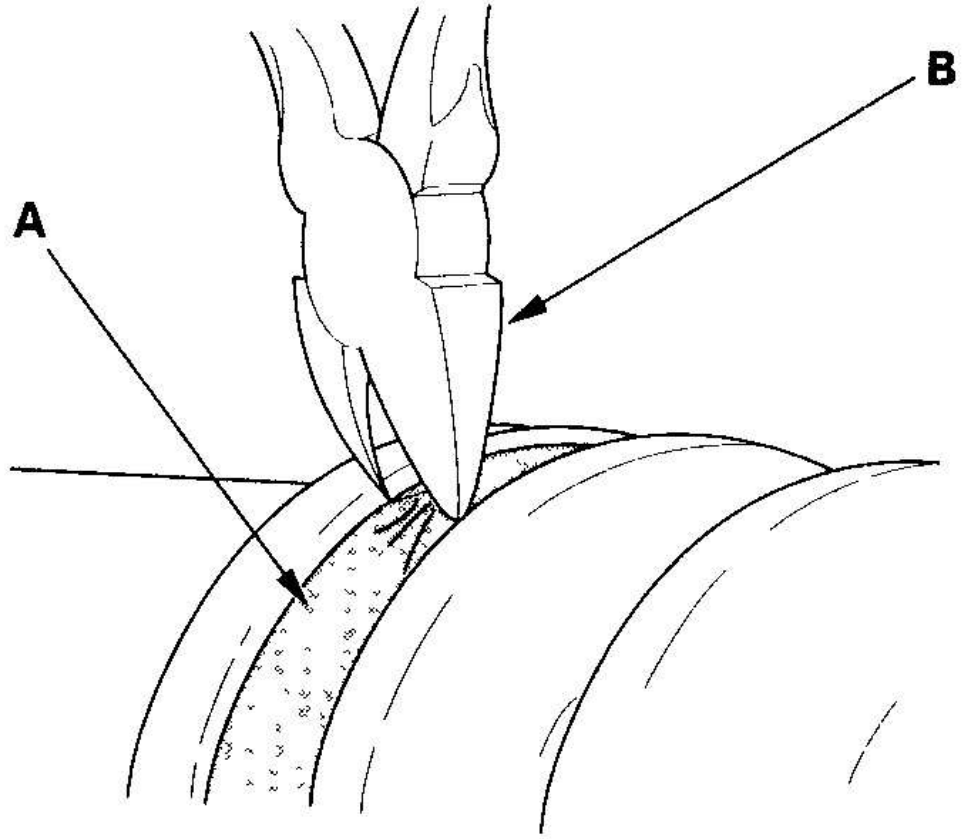


Fig. 9: identifying Set Ring From Inboard Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the boot bands. Be careful not to damage the boot.
   - If the boot band is a welded type (A), cut the boot band (B).
   - If the boot band is a double loop type (C), lift up the band end (D), and push it into the clip (E).
   - If the boot band is a low profile type (F), pinch the boot band using a commercially available boot band pincers (G).

Welded Type



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Fig. 10: identifying Boot Bands (Welded Type)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

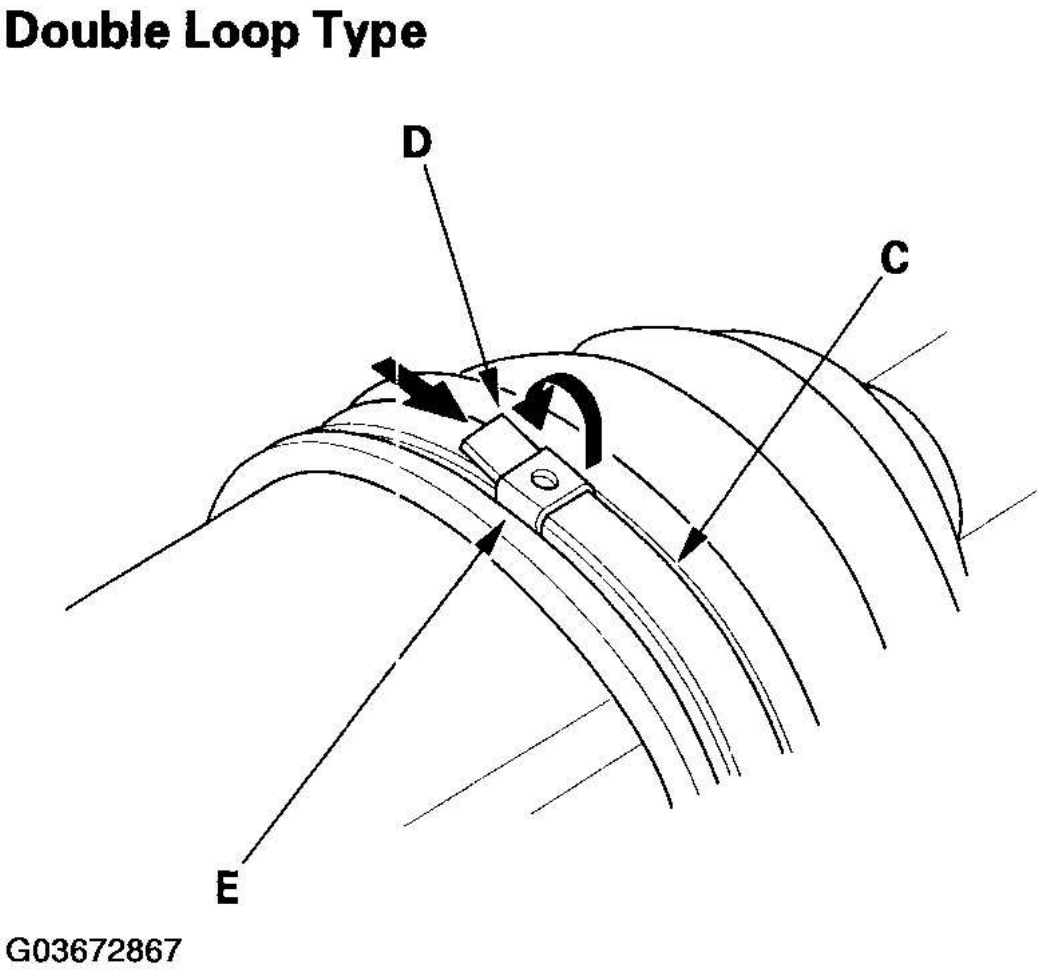


Fig. 11: identifying Boot Bands (Double Loop Type)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

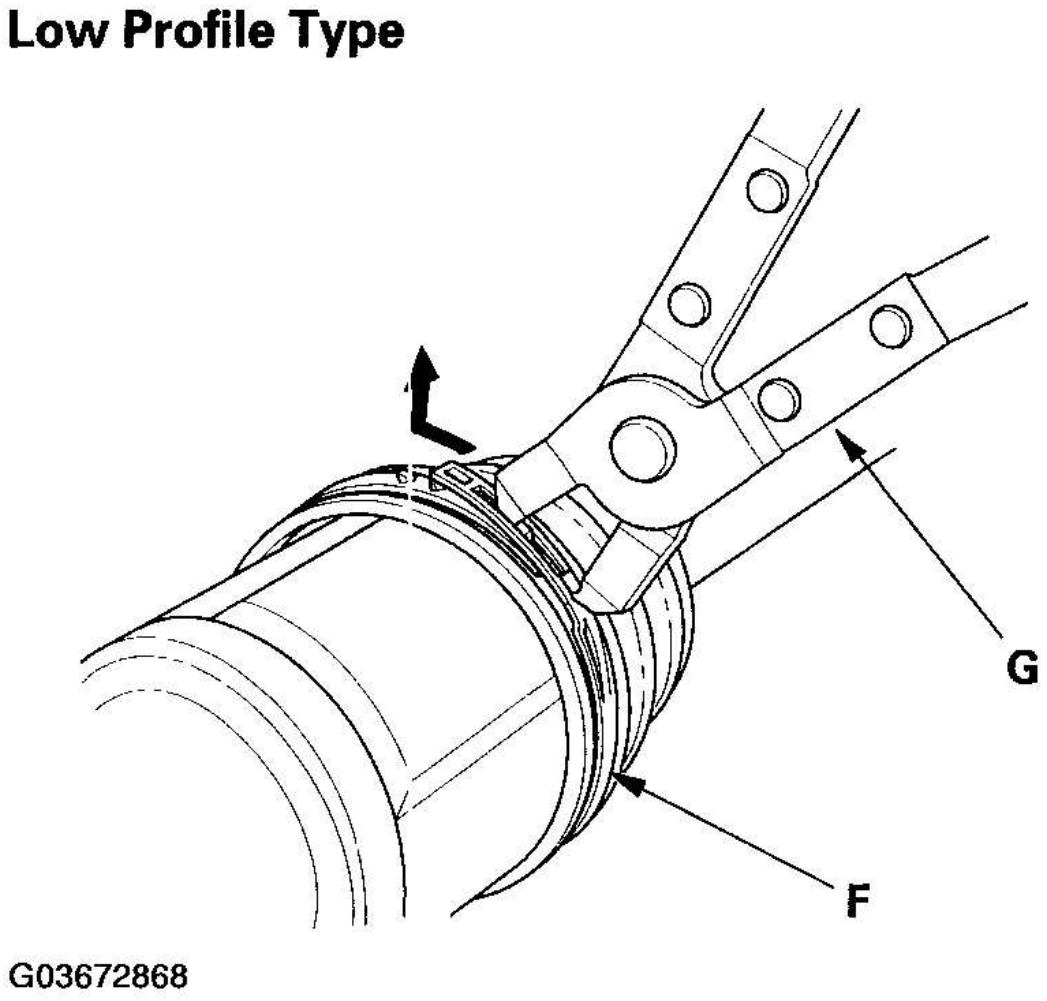


Fig. 12: identifying Boot Bands (Low Profile Type)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Make a mark (A) on each roller (B) and inboard joint (C) to identify the locations of rollers and grooves in the inboard joint. Then remove the inboard joint on the shop towel (D). Be careful not to drop the rollers when separating them from the inboard joint.

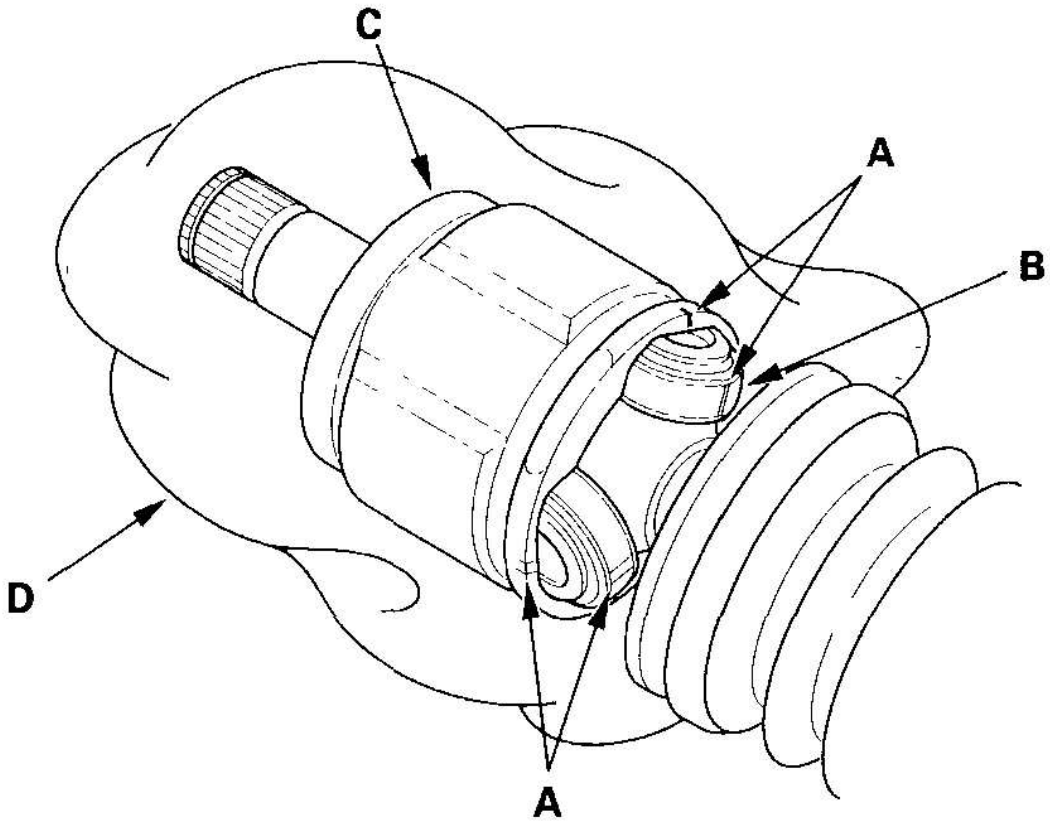


Fig. 13: Making Mark On Each Roller And Inboard Joint To Identifying Locations In Inboard Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Make a mark (A) on the rollers (B) and spider (C) to identify the locations of the rollers on the spider, then remove the rollers.

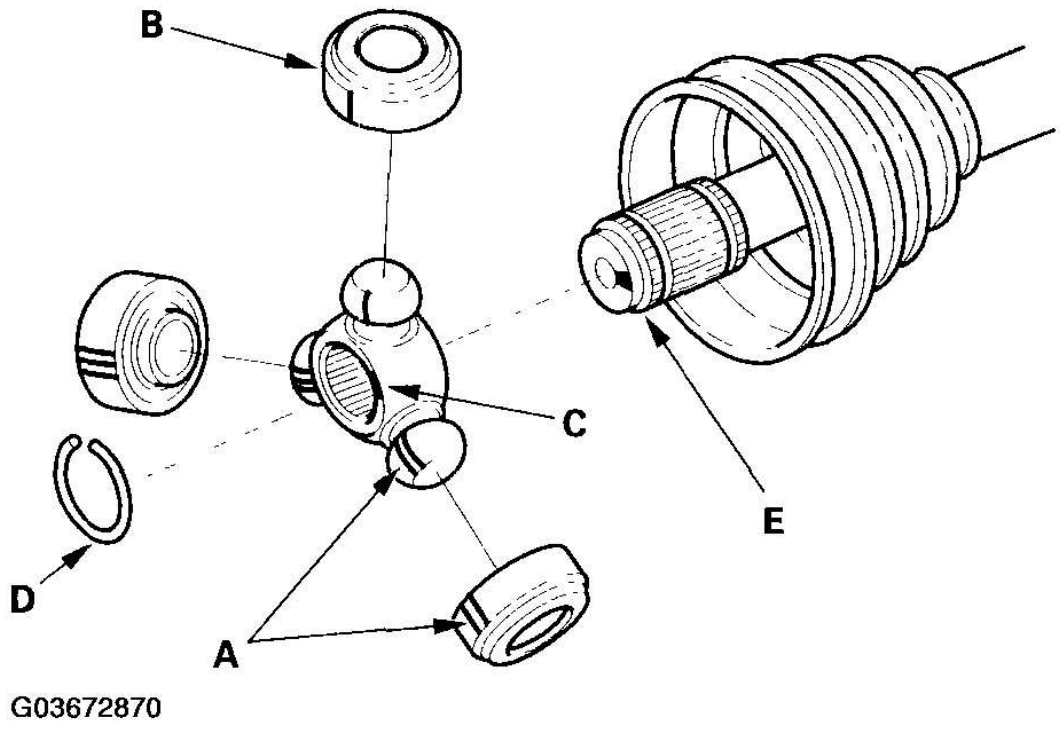


Fig. 14: Making Mark On Rollers And Spider To Identify Locations On Spider
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the circlip (D).
6. Mark the spider and driveshaft (E) to identify the position of the spider on the shaft.
7. Remove the spider.
8. Wrap the splines on the driveshaft with vinyl tape (A) to prevent damage to the boot.

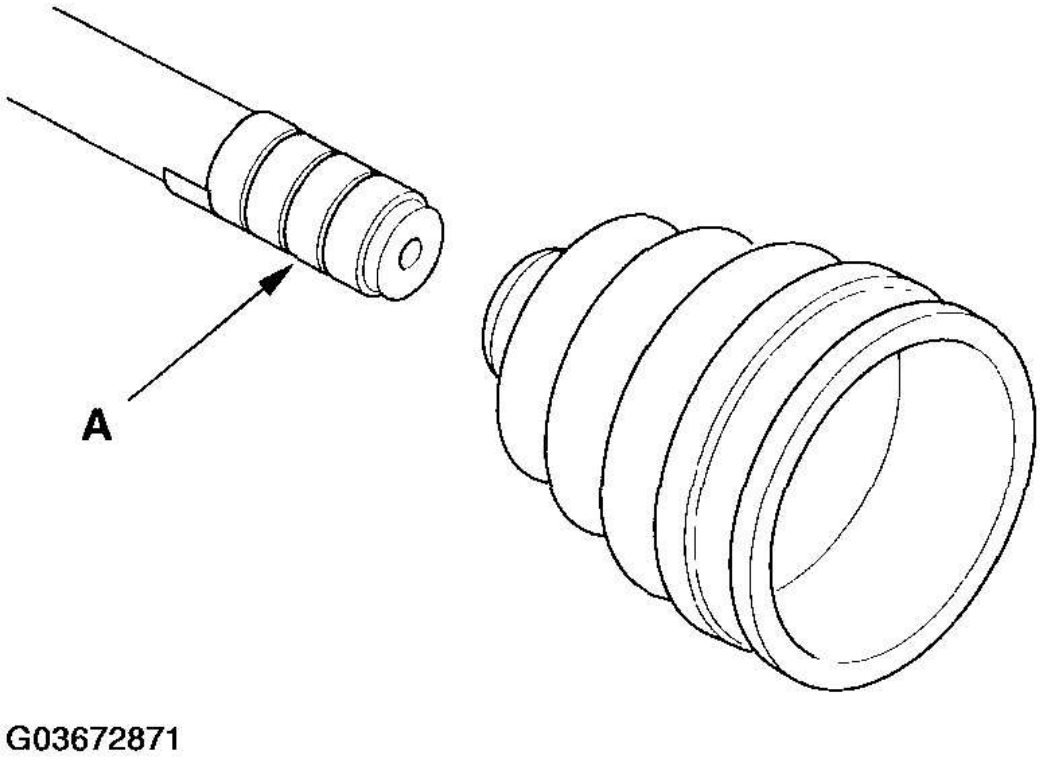


Fig. 15: Wrapping Splines On Driveshaft With Vinyl Tape
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the inboard boot. Be careful not to damage the boot.
10. Remove the vinyl tape.

OUTBOARD JOINT SIDE

1. Remove the boot bands (A). Lift up the three tabs (B) with a screwdriver. Be careful not to damage the boot and dynamic damper.

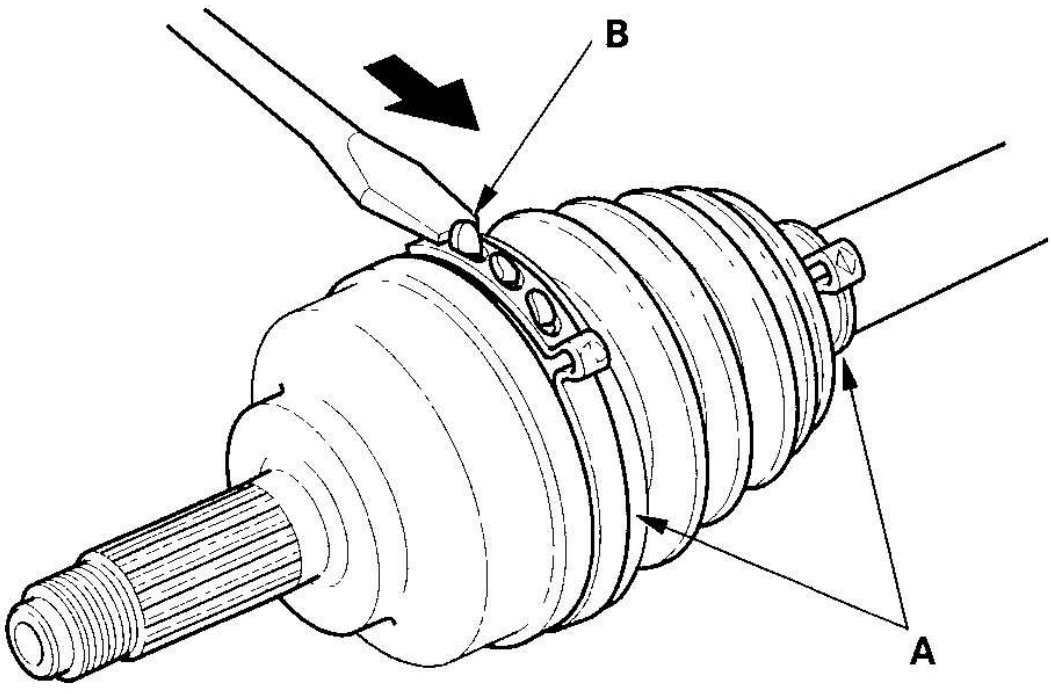


Fig. 16: identifying Boot Bands Lifting Tabs With Screwdriver
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Slide the outboard boot (A) partially to the inboard joint side. Be careful not to damage the boot.

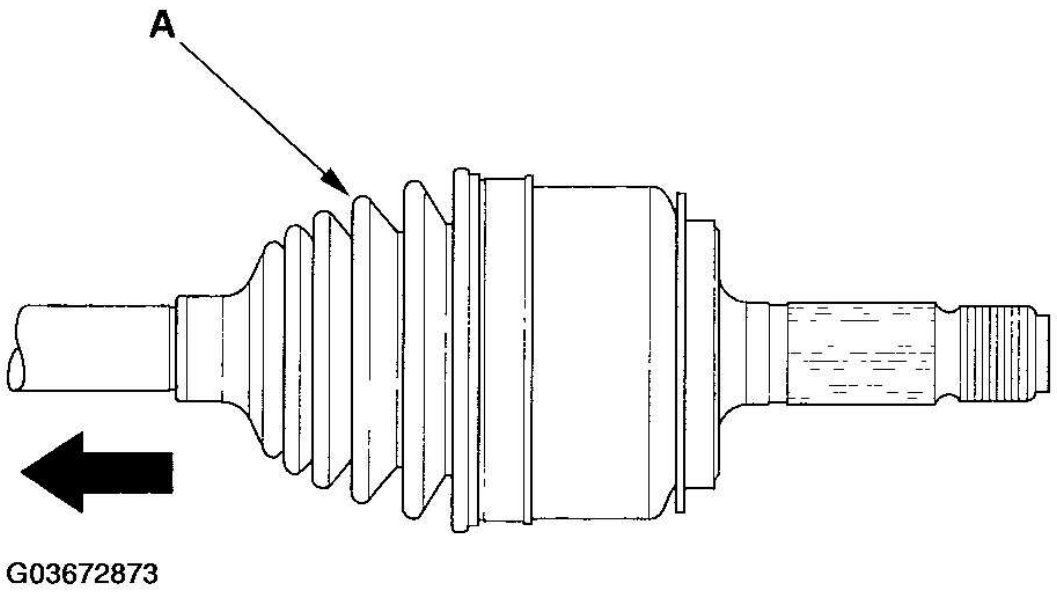


Fig. 17: Sliding Outboard Boot Partially To Inboard Joint Side
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Wipe off the grease to expose the driveshaft and the outboard joint inner race.
4. Make a mark (A) on the driveshaft (B) at the same position as the outboard joint end (C).

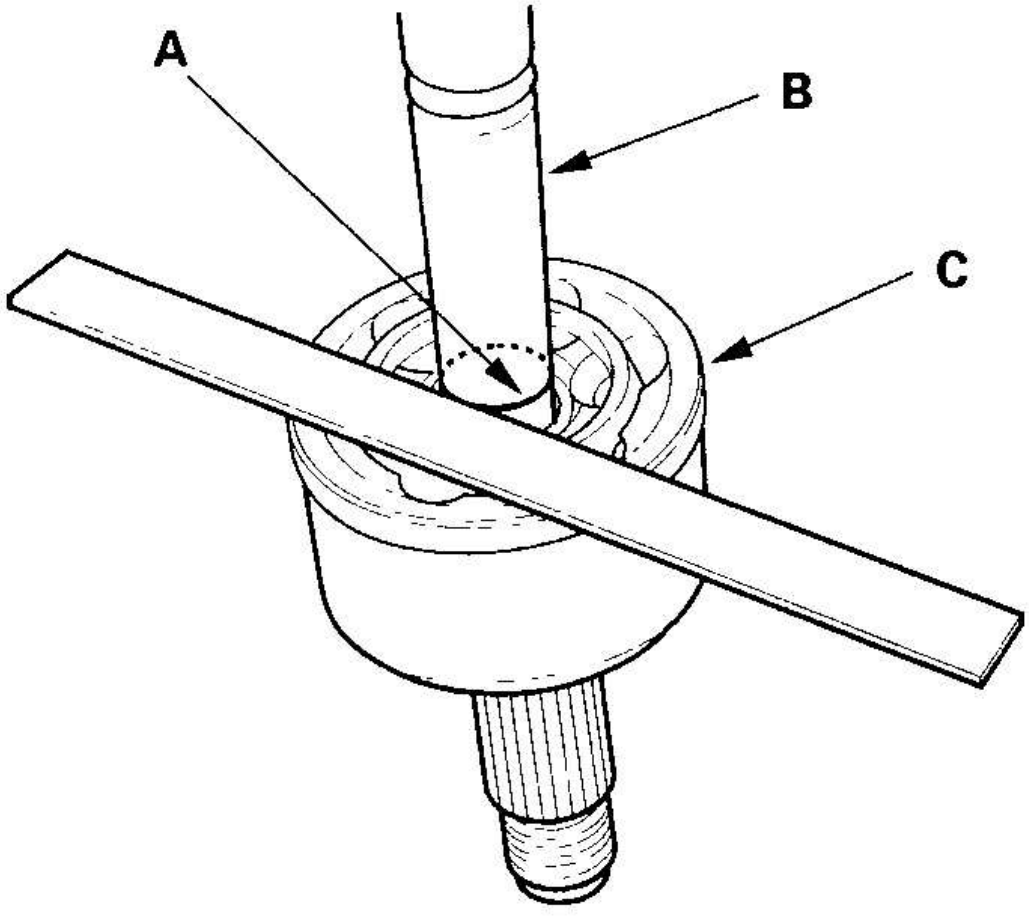


Fig. 18: Making Mark On Driveshaft At Same Position As Outboard Joint End
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Carefully clamp the driveshaft in a vise.

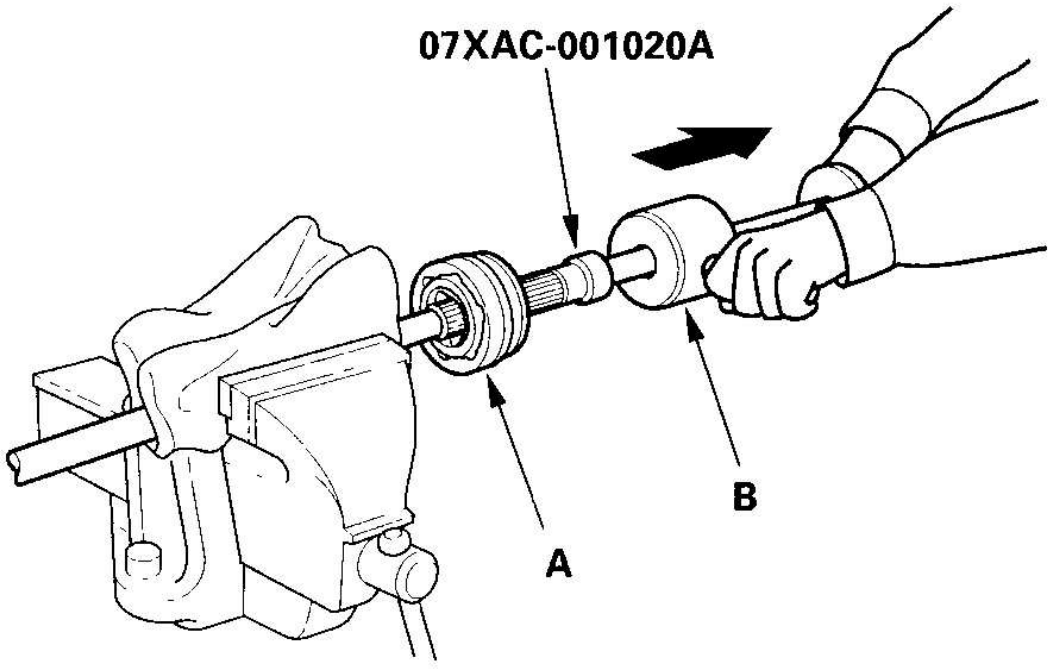


Fig. 19: Clamping Driveshaft In Vise
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the outboard joint (A) using the special tool and a commercially available 5/8"-18 UNF slide hammer (B).
7. Remove the driveshaft from the vise.
8. Remove the stop ring from the driveshaft.

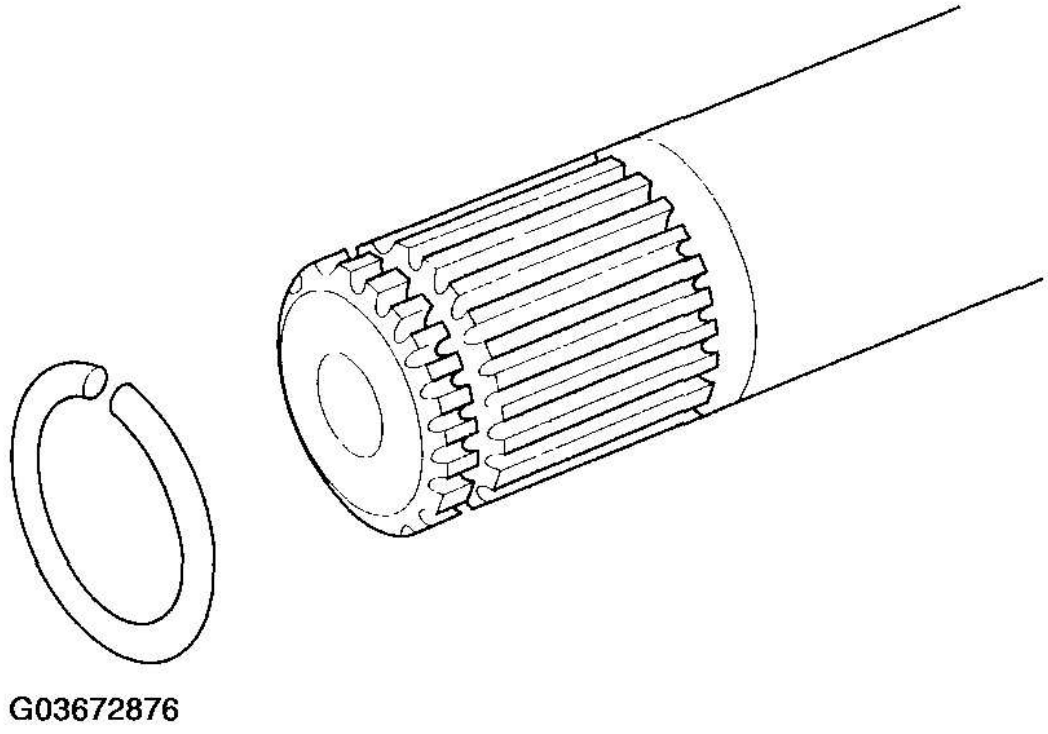


Fig. 20: identifying Stop Ring From Driveshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Wrap the splines on the driveshaft with vinyl tape (A) to prevent damage to the boot.

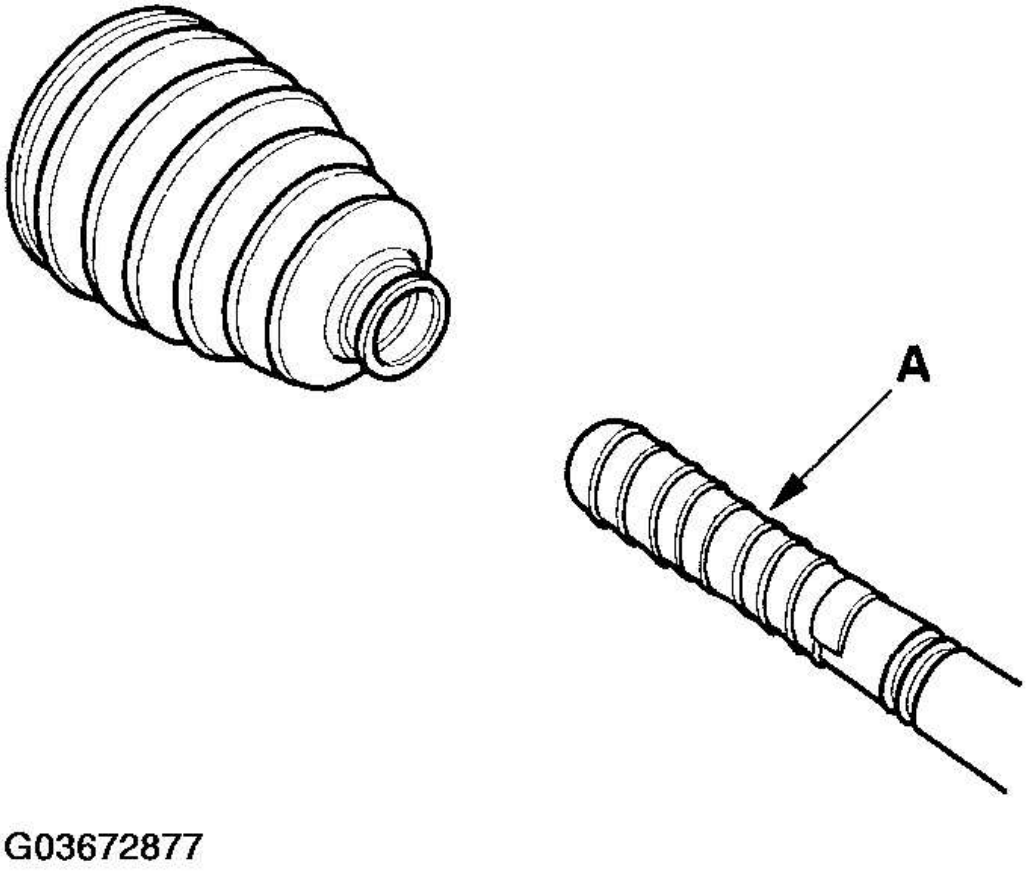


Fig. 21: Wrapping Splines On Driveshaft With Vinyl Tape
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the outboard boot. Be careful not to damage the boot.
11. Remove the vinyl tape.

DYNAMIC DAMPER REPLACEMENT

Special Tools Required

Bearing separator 07KAF-PS30200

BAND TYPE

1. Remove the inboard joint (see **DRIVESHAFT DISASSEMBLY**).
2. Remove the dynamic damper bands. Be careful not to damage the dynamic damper (see **DRIVESHAFT DISASSEMBLY**).
   - If the band is a welded type, cut the band.
   - If the band is a double loop type, lift up the band end, and push it into the clip.
   - If the band is a low profile type, pinch the band using a commercially available boot band pincers.
3. Wrap the splines on the driveshaft with vinyl tape (A) to prevent damage to the dynamic damper.

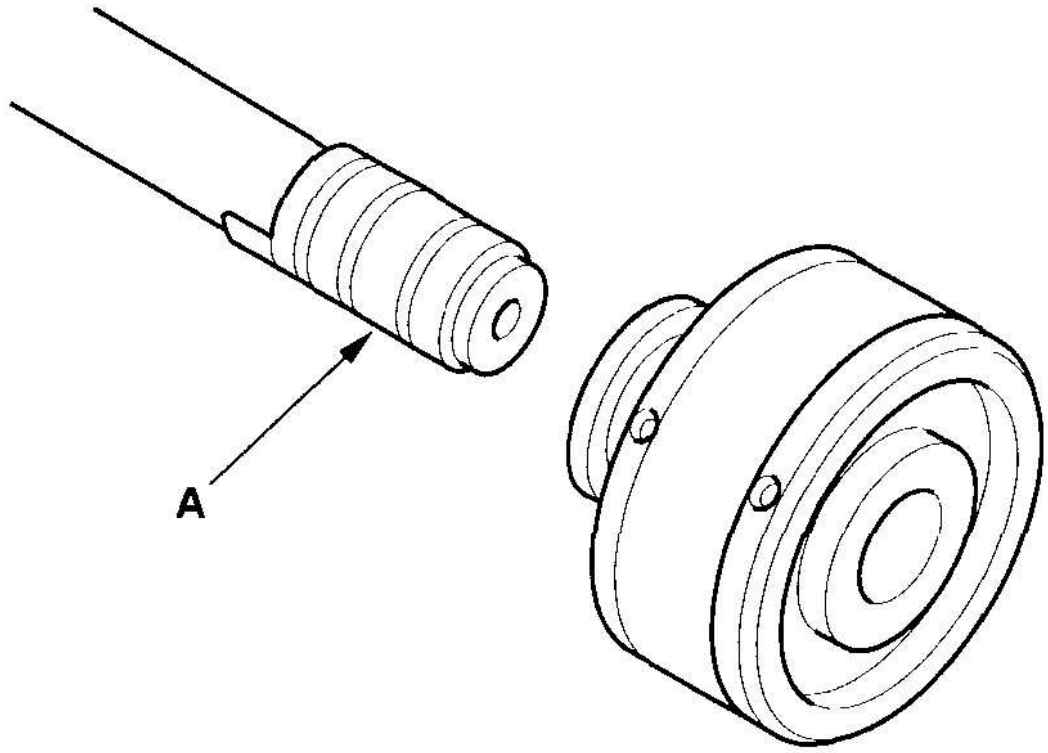


Fig. 22: Wrapping Splines On Driveshaft With Vinyl Tape
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the dynamic damper. Be careful not to damage the dynamic damper.
5. Adjust the position of the new dynamic damper to **Fig. 23** .

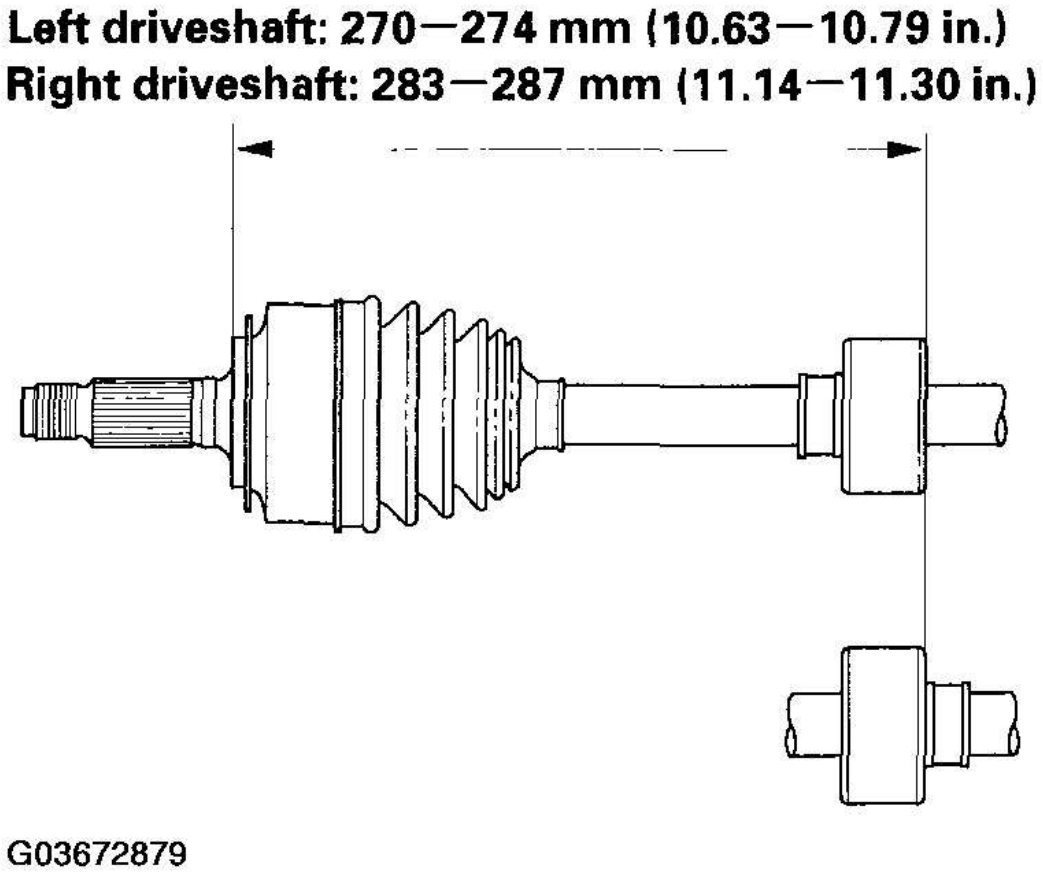


Fig. 23: Adjusting Position Of Dynamic Damper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the dynamic damper band (see step 9 in **Inboard Joint Side**).
7. Install the inboard joint (see step 1 in **Inboard Joint Side**).

BANDLESS TYPE

1. Remove the inboard joint and outboard joint.
2. Remove the dynamic damper (A) using the special tool and a press as shown in

Fig. 24.

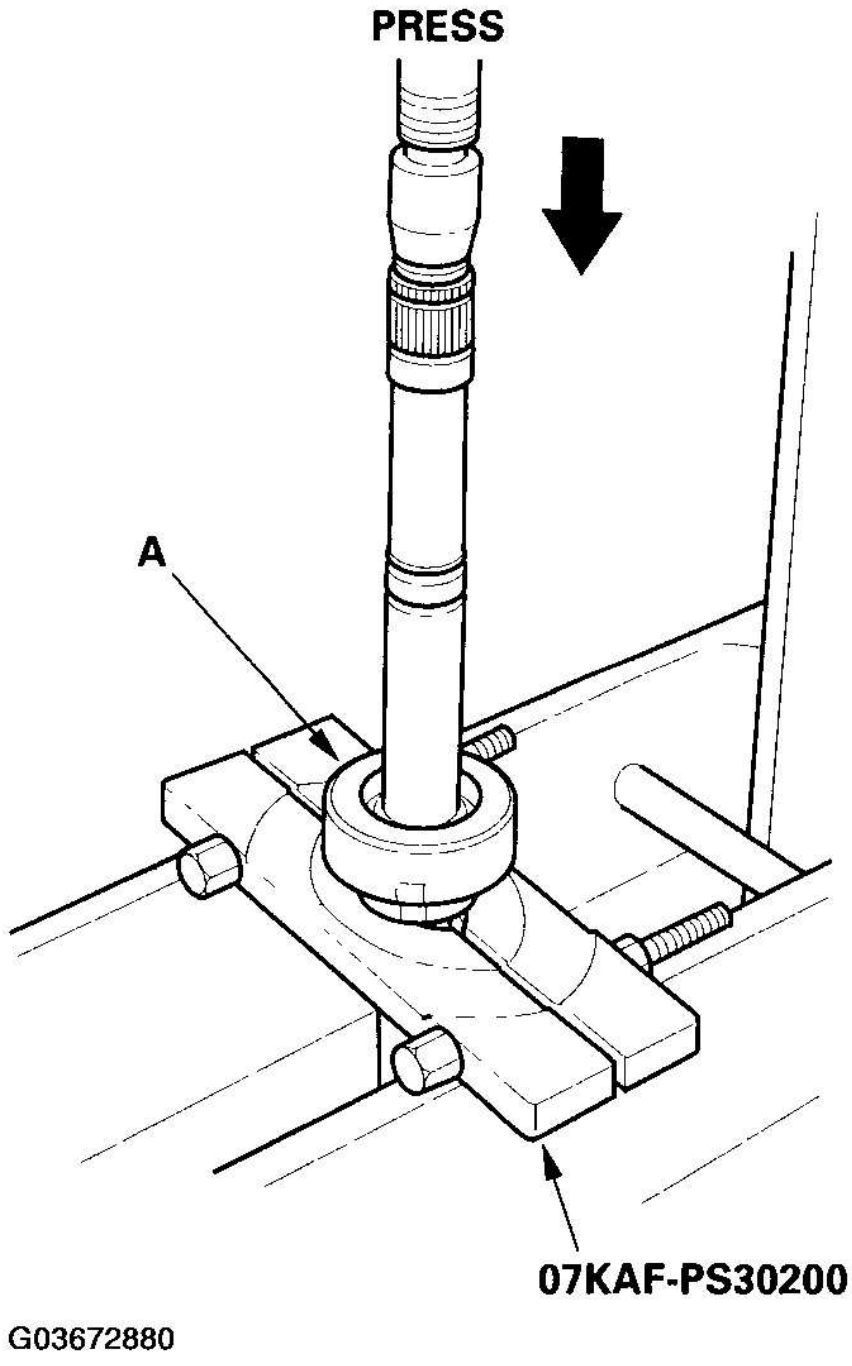


Fig. 24: identifying Dynamic Damper Using Special Tool

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Mark the following position on the driveshaft (A).

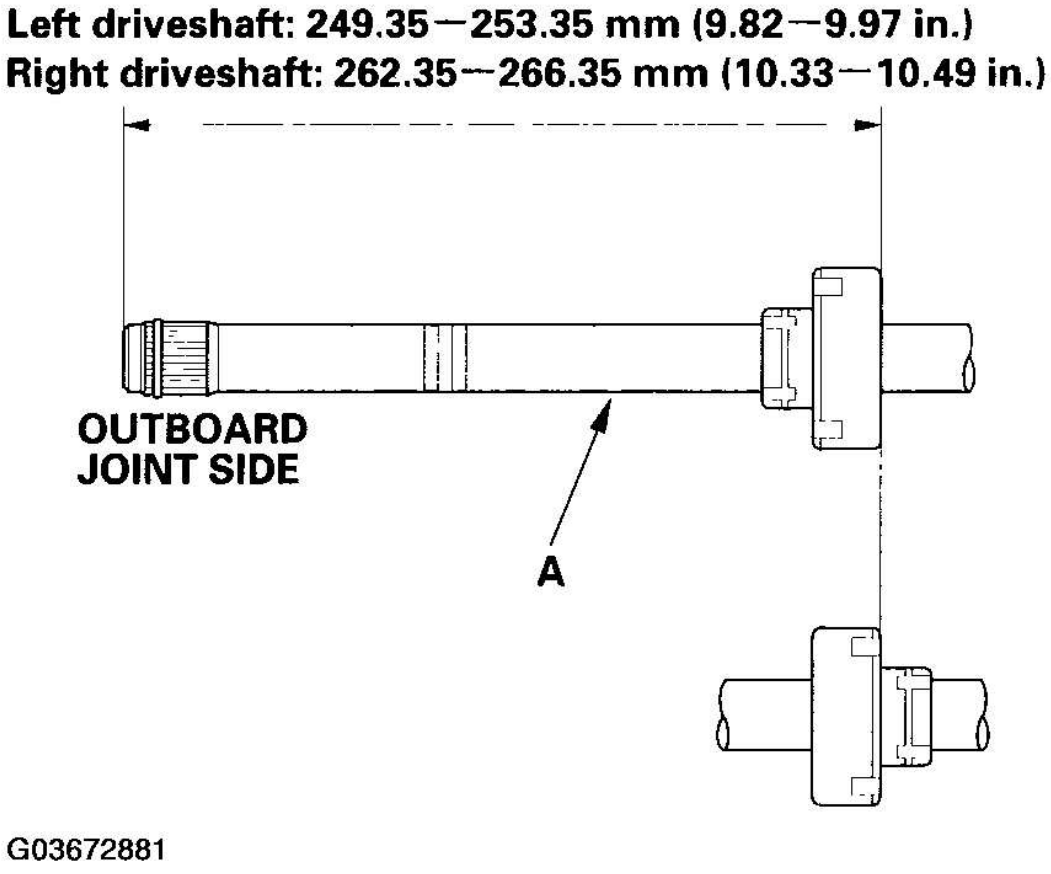


Fig. 25: Marking Position On Driveshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the dynamic damper (A) to the marked position using the special tool and a press as shown in **Fig. 26**.

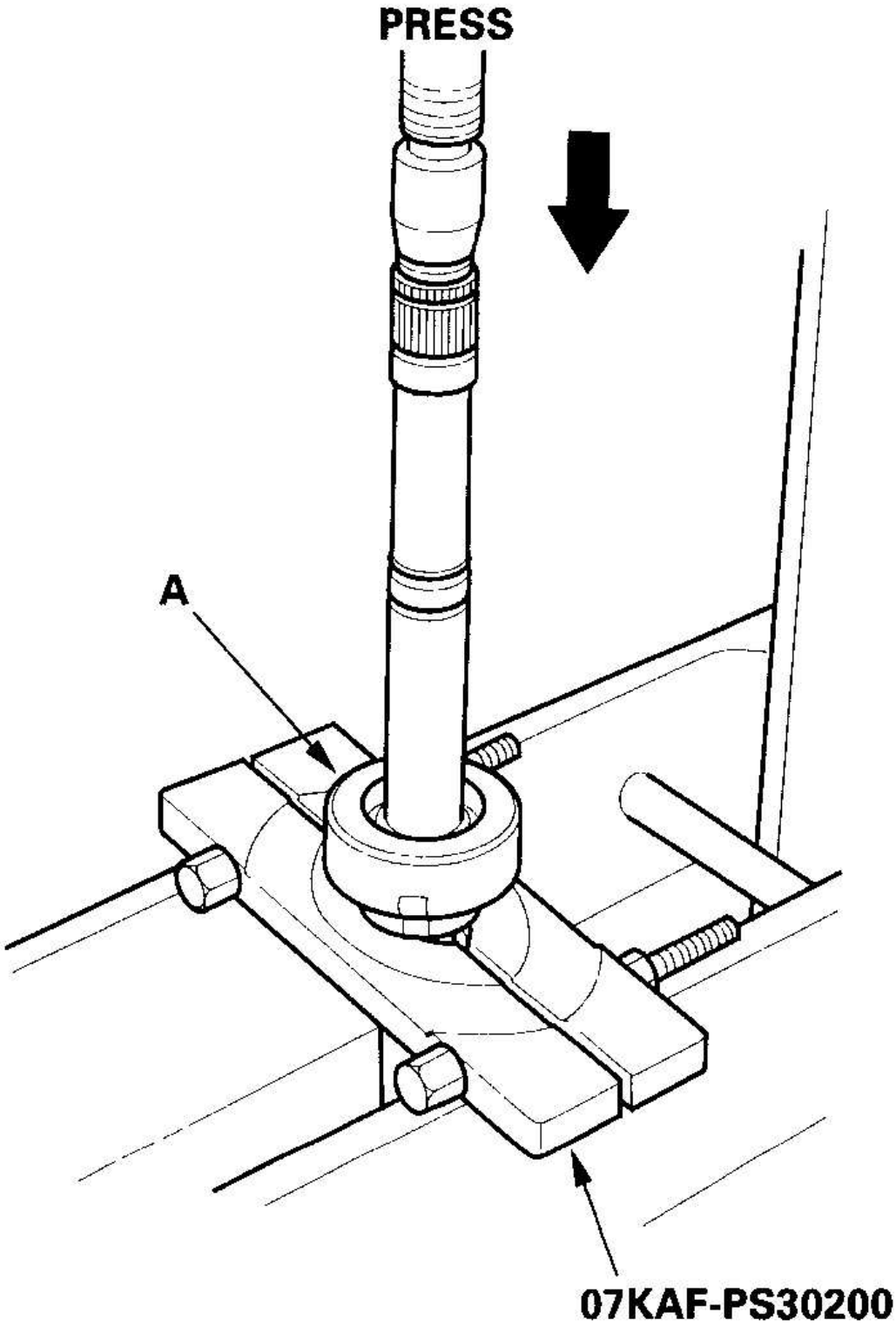

PRESS
A
07KAF-PS30200
G03672882

Fig. 26: Installing Dynamic Damper To Marked Position Using Special Tool And Press
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the inboard joint and outboard joint (see **INBOARD JOINT SIDE**).

DRIVESHAFT REASSEMBLY

EXPLODED VIEW

M/T model:

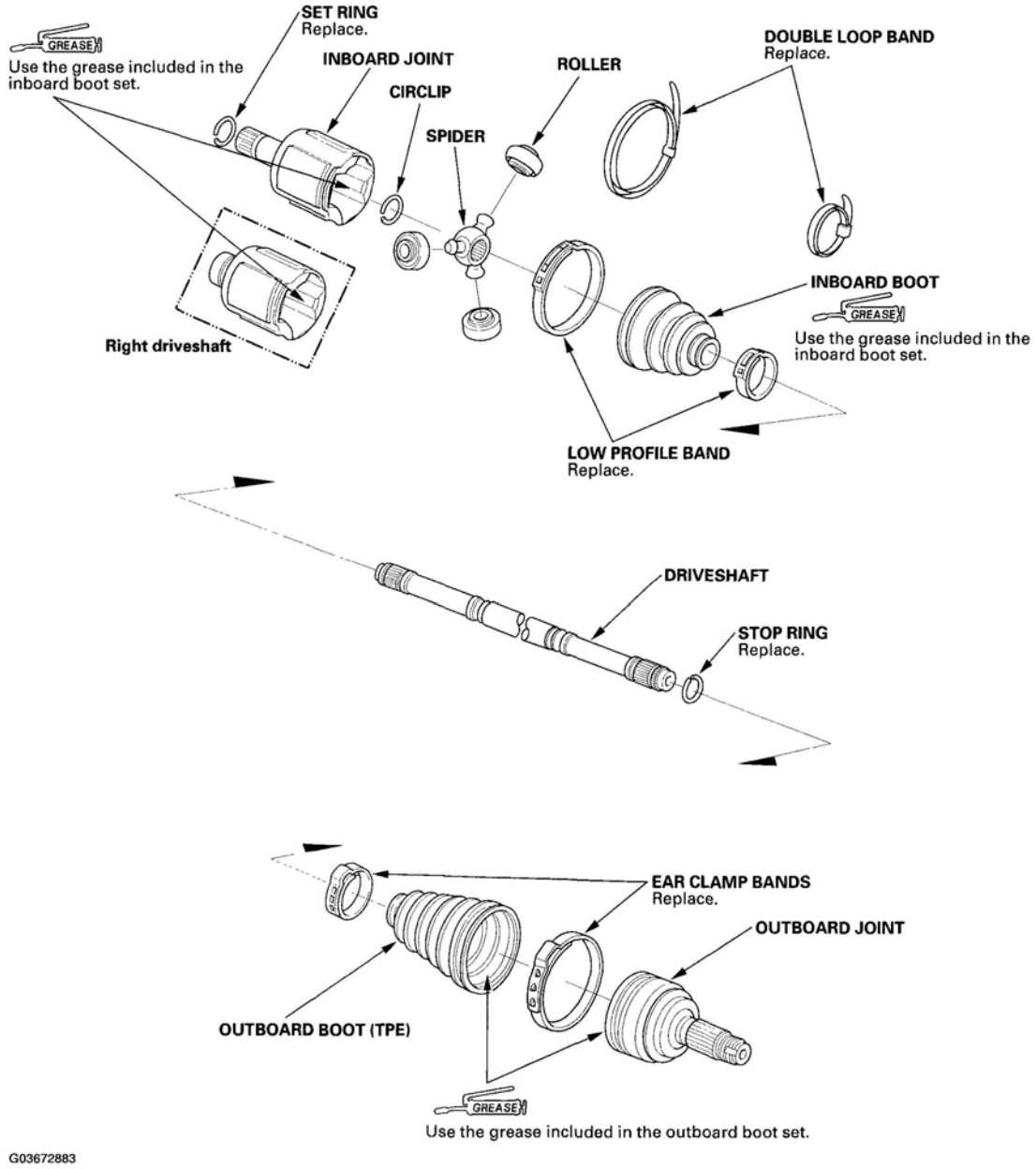


Fig. 27: Exploded View Of Driveshaft (M/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/T model:

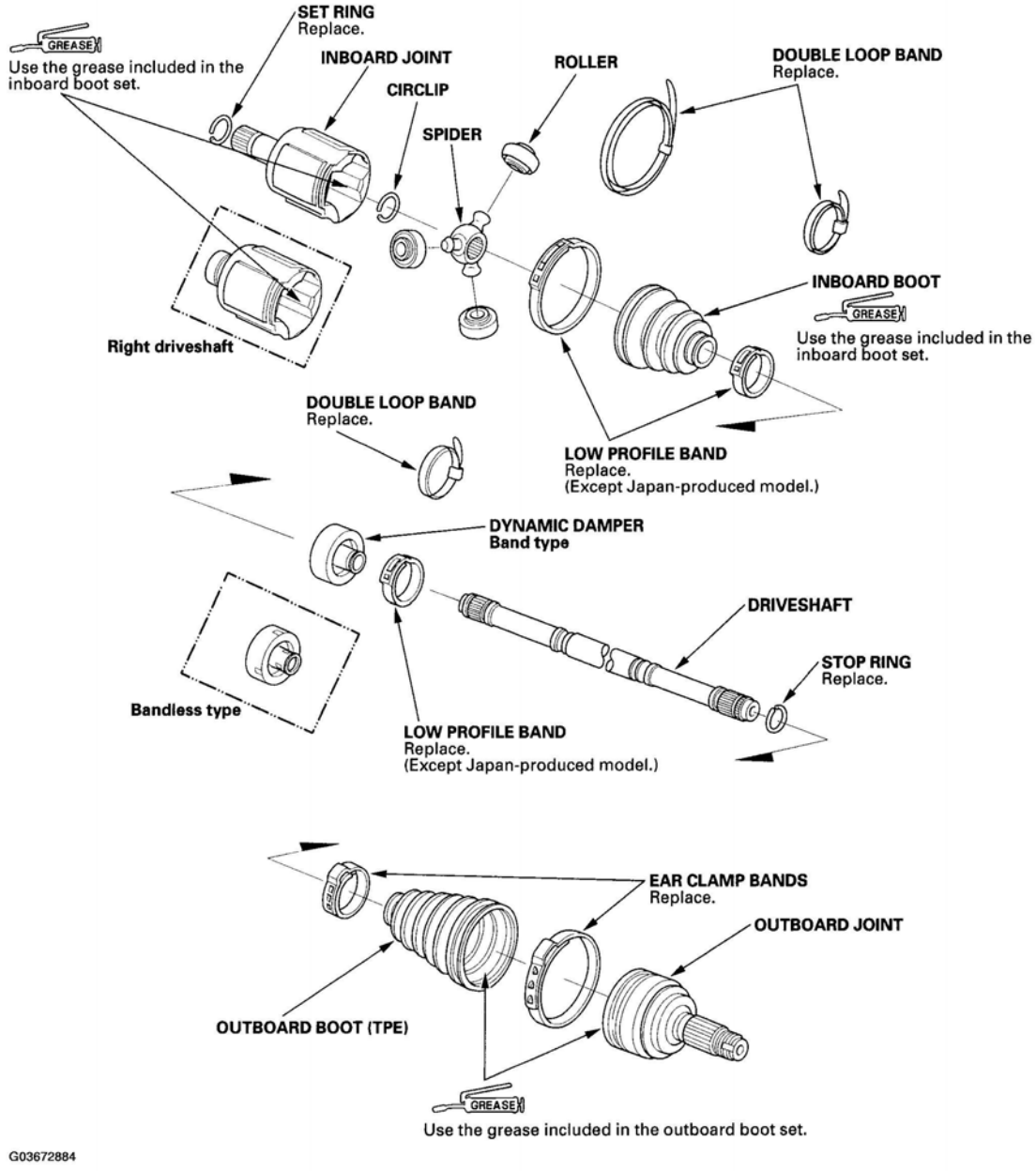


Fig. 28: Exploded View Of Driveshaft (A/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

- Boot band tool, KD-3191 or equivalent, commercially available
- Boot band pincers, Kent-Moore J-35910 or equivalent, commercially available
- Boot band pincers, commercially available

NOTE: Refer to the Fig. 28 as needed during this procedure.

INBOARD JOINT SIDE

1. Wrap the splines with vinyl tape (A) to prevent damage to the inboard boot.

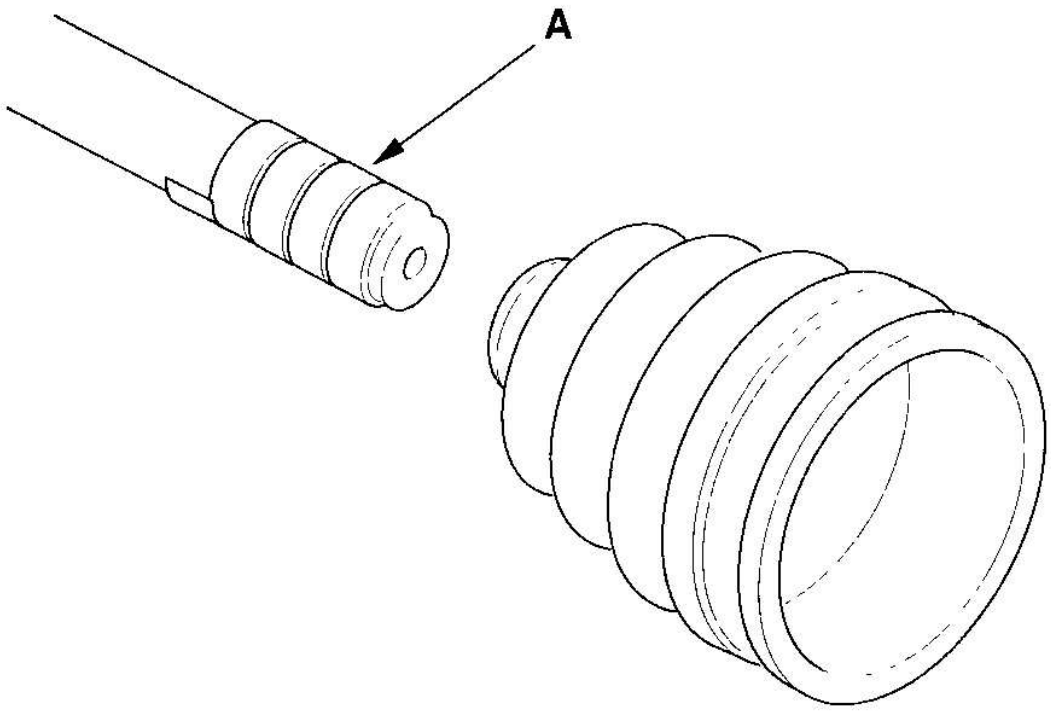


Fig. 29: Wrapping Splines With Vinyl Tape
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the inboard boot onto the driveshaft, then remove the vinyl tape. Be careful not to damage the inboard boot.
3. Install the spider (A) onto the driveshaft by aligning the marks (B) on the spider and the end of the driveshaft.

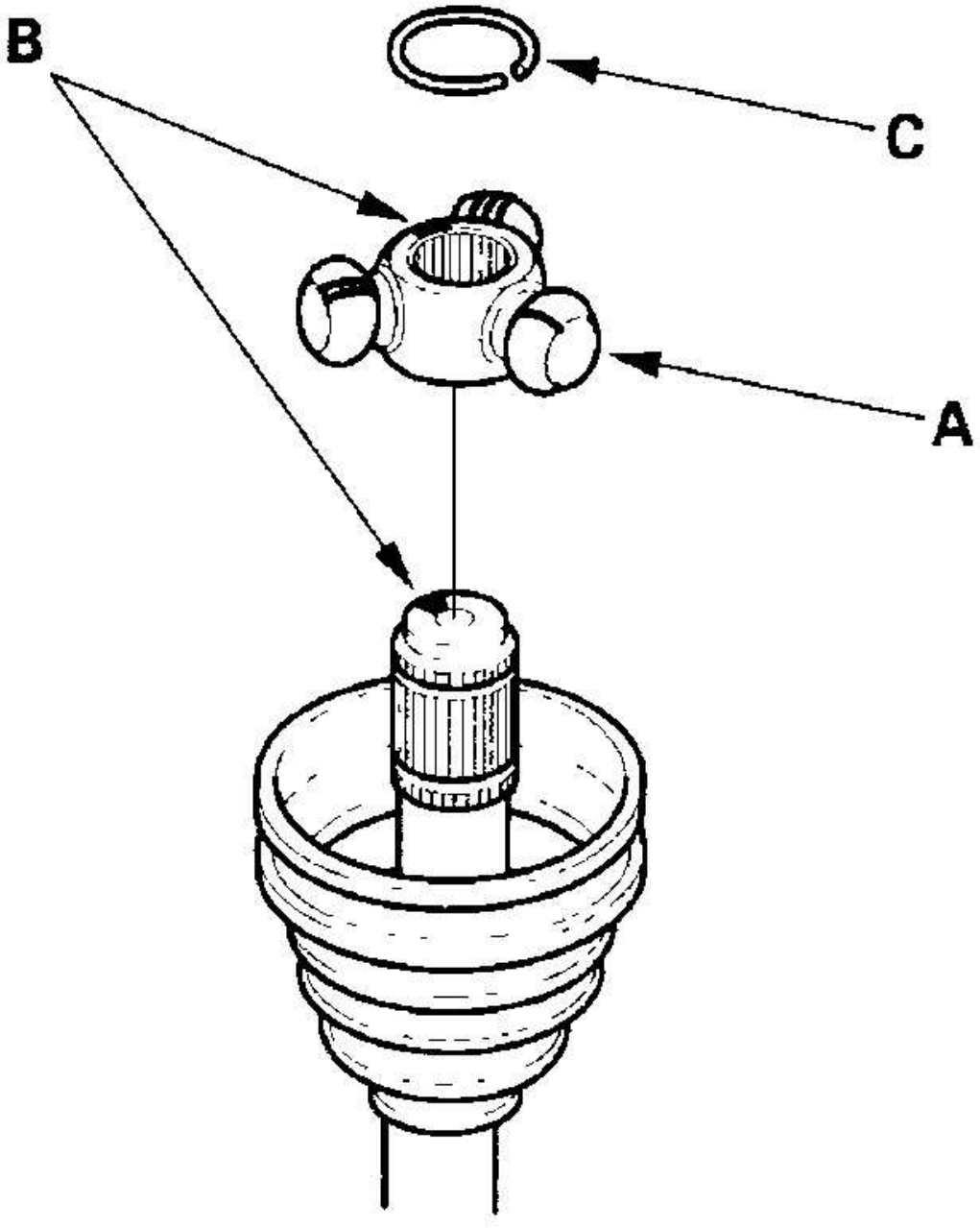


Fig. 30: Installing Spider Onto Driveshaft By Aligning Marks On Spider And End Of Driveshaft

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Fit the circlip (C) into the driveshaft groove. Rotate the circlip in its groove to make sure it is fully seated.
5. Fit the rollers (A) onto the spider (B) with their high shoulders facing outward, and note these items:
   - Reinstall the rollers in their original positions on the spider by aligning the marks (C).
   - Hold the driveshaft pointed up to prevent the rollers from falling off.

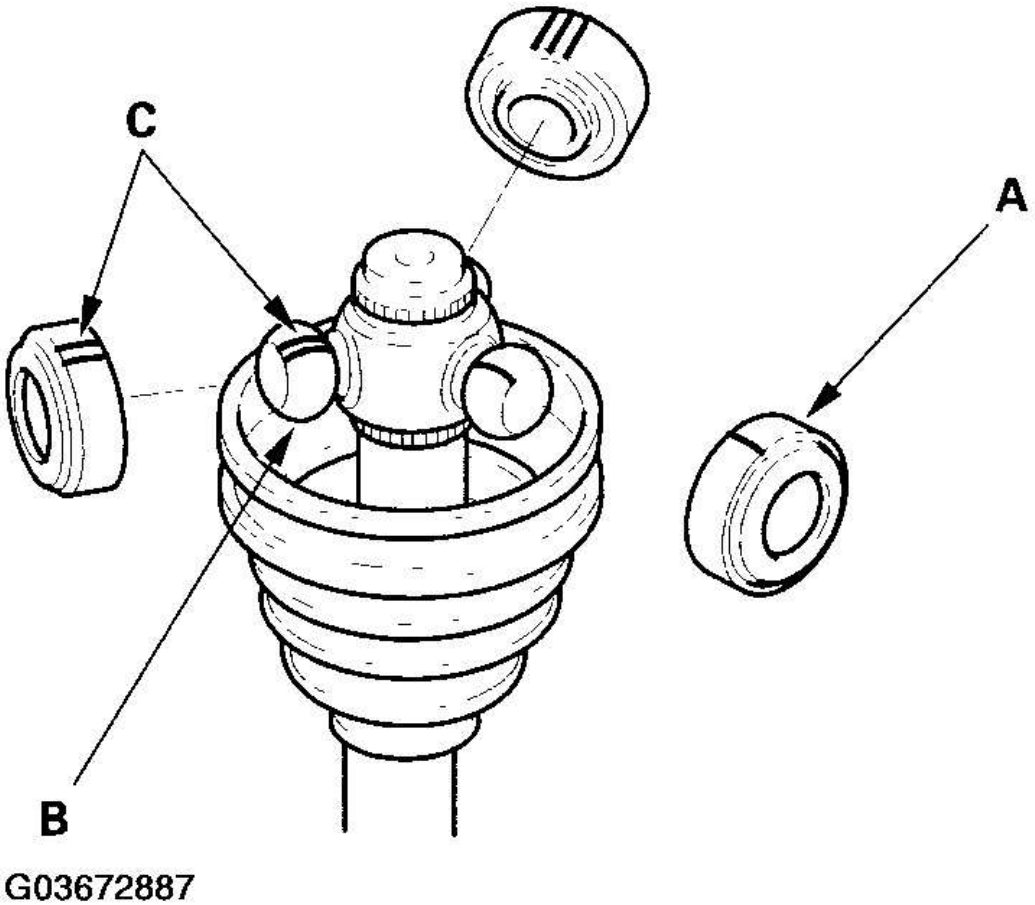


Fig. 31: Fitting Rollers Onto Spider with High Shoulders Facing Outward
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Pack the inboard joint with the joint grease included in the new driveshaft set.

   Grease quantity

   Inboard joint: 150-160 g (5.3-5.6 oz)



Fig. 32: Packing Inboard Joint With Joint Grease
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Fit the inboard joint onto the driveshaft, and note these items:
   - Reinstall the inboard joint onto the driveshaft by aligning the marks (A) on the inboard joint and the rollers.
   - Hold the driveshaft so the inboard joint is pointing up to prevent it from falling off.

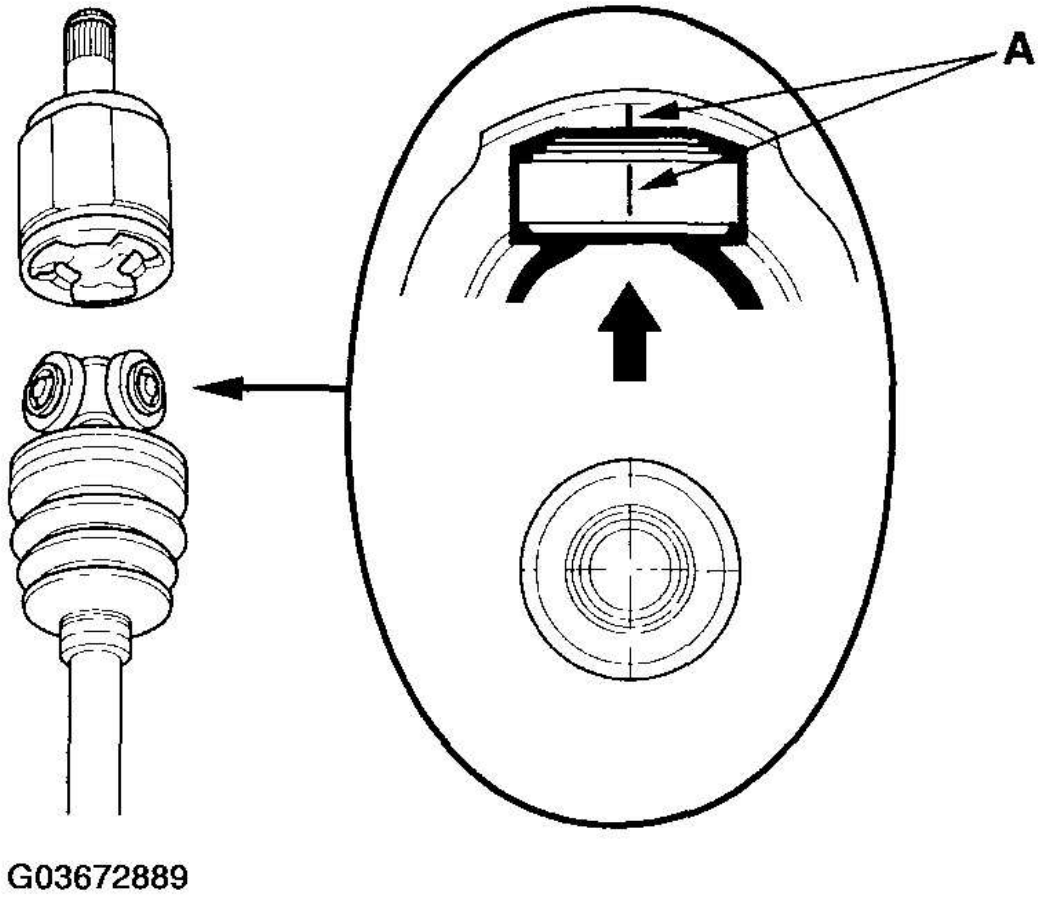


Fig. 33: Fitting Inboard Joint Onto Driveshaft By Aligning Marks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the boot bands.
   - For the double loop type, go to step 13. (Boot band replacement only)
   - For the low profile type, go to step 9.
9. Install the new low profile band (A) onto the boot (B), then hook the tab (C) of the band.

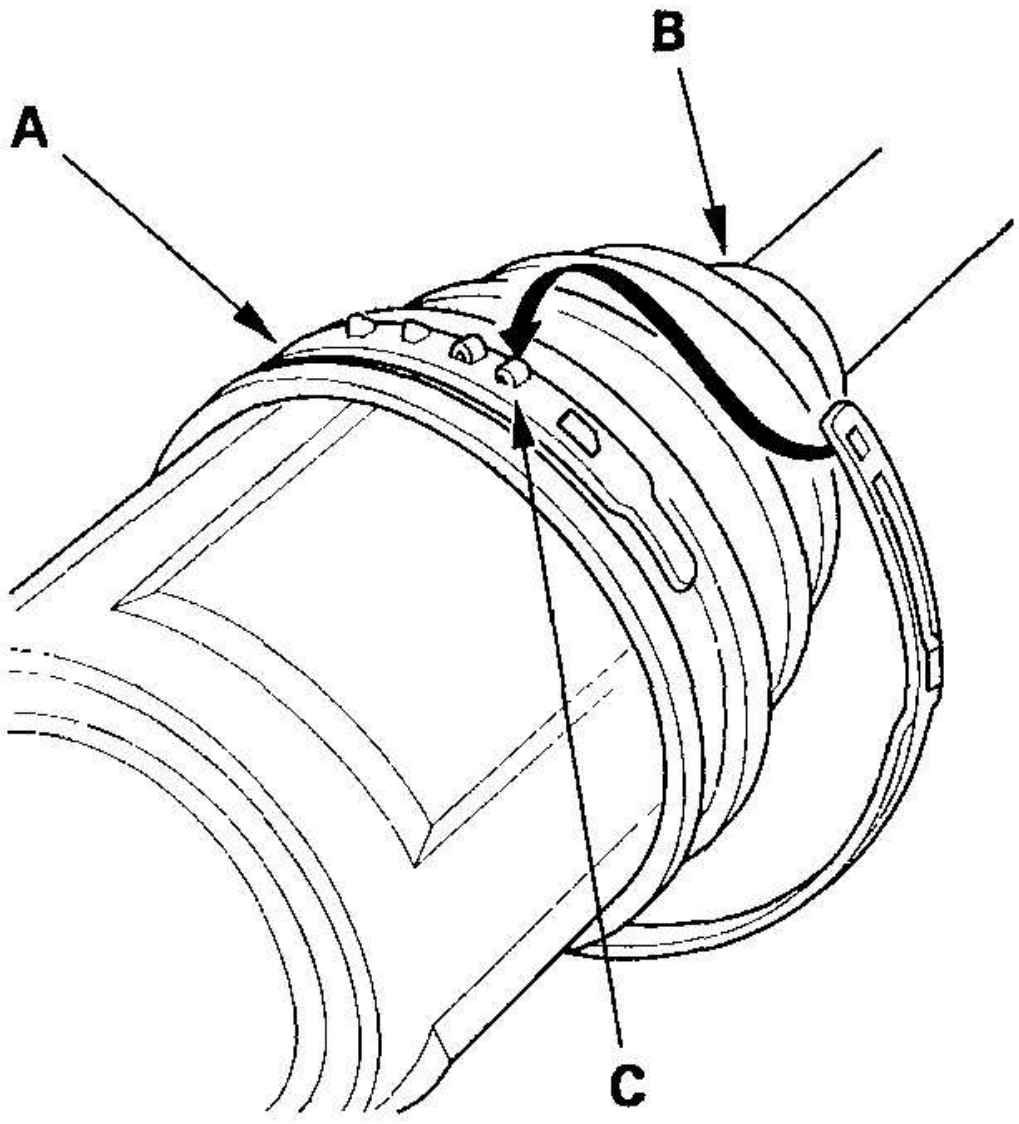


Fig. 34: Installing Low Profile Band Onto Boot
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Close the hook portion of the band with commercially available boot band pincers (A), then hook the tabs (B) of the band.

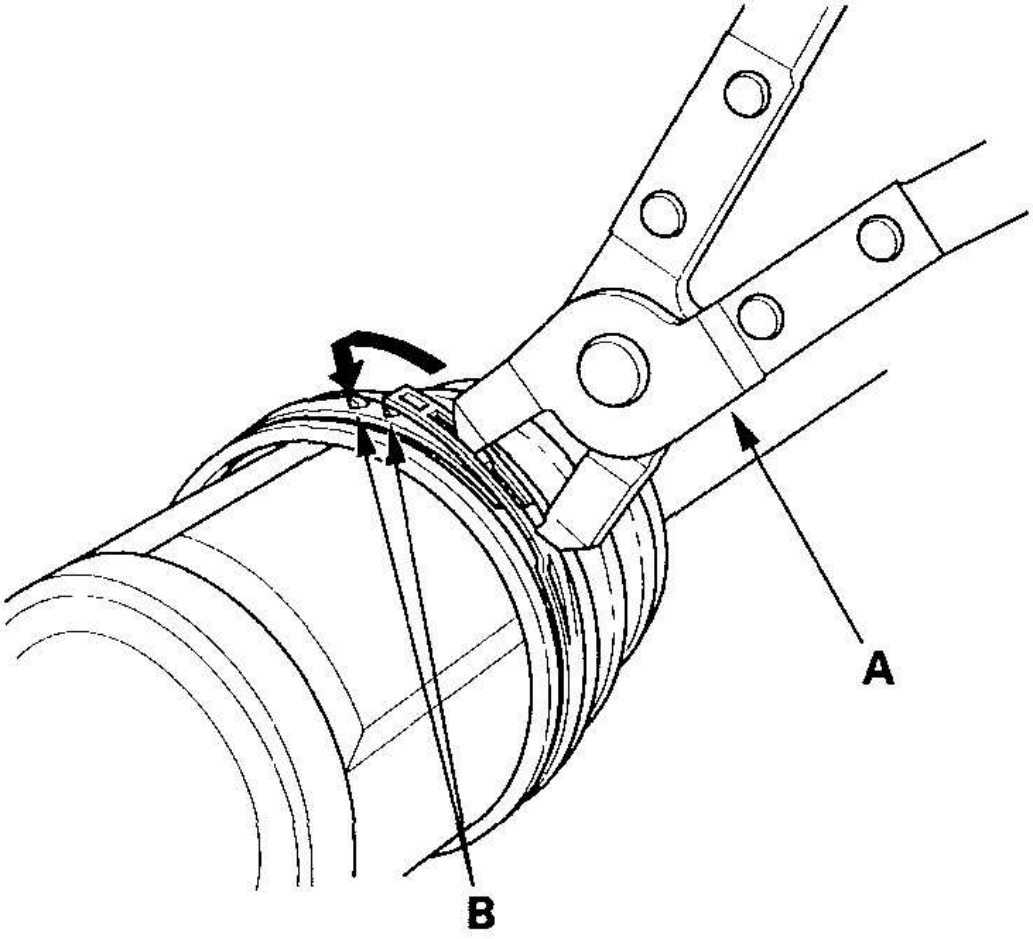


Fig. 35: Closing Hook Portion Of Band
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the boot band on the other end of the boot, and repeat steps 9 through 10.
12. Adjust the inboard joint until the rollers are in the middle of the joint.
13. Fit the boot ends onto the driveshaft and the inboard joint, then install the new double loop band (A) onto the boot.

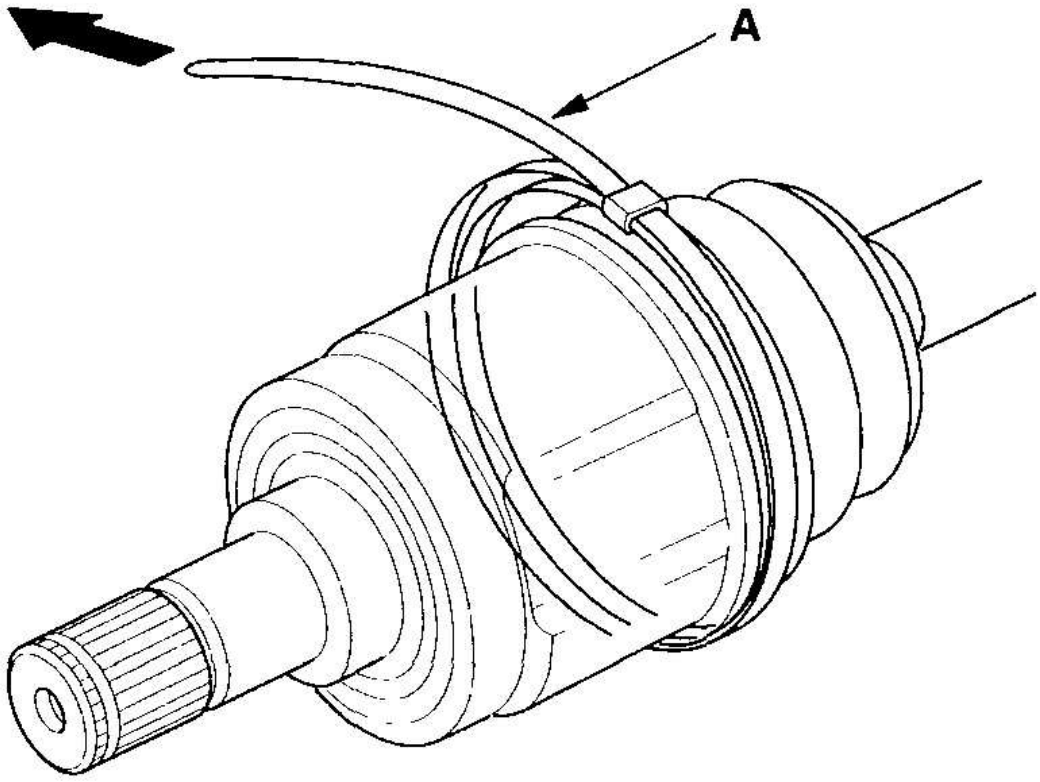


Fig. 36: Installing Double Loop Band Onto Boot
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Pull up the slack in the band by hand.
15. Mark a position (A) on the band 10-14 mm (0.4-0.6 in.) from the clip (B).

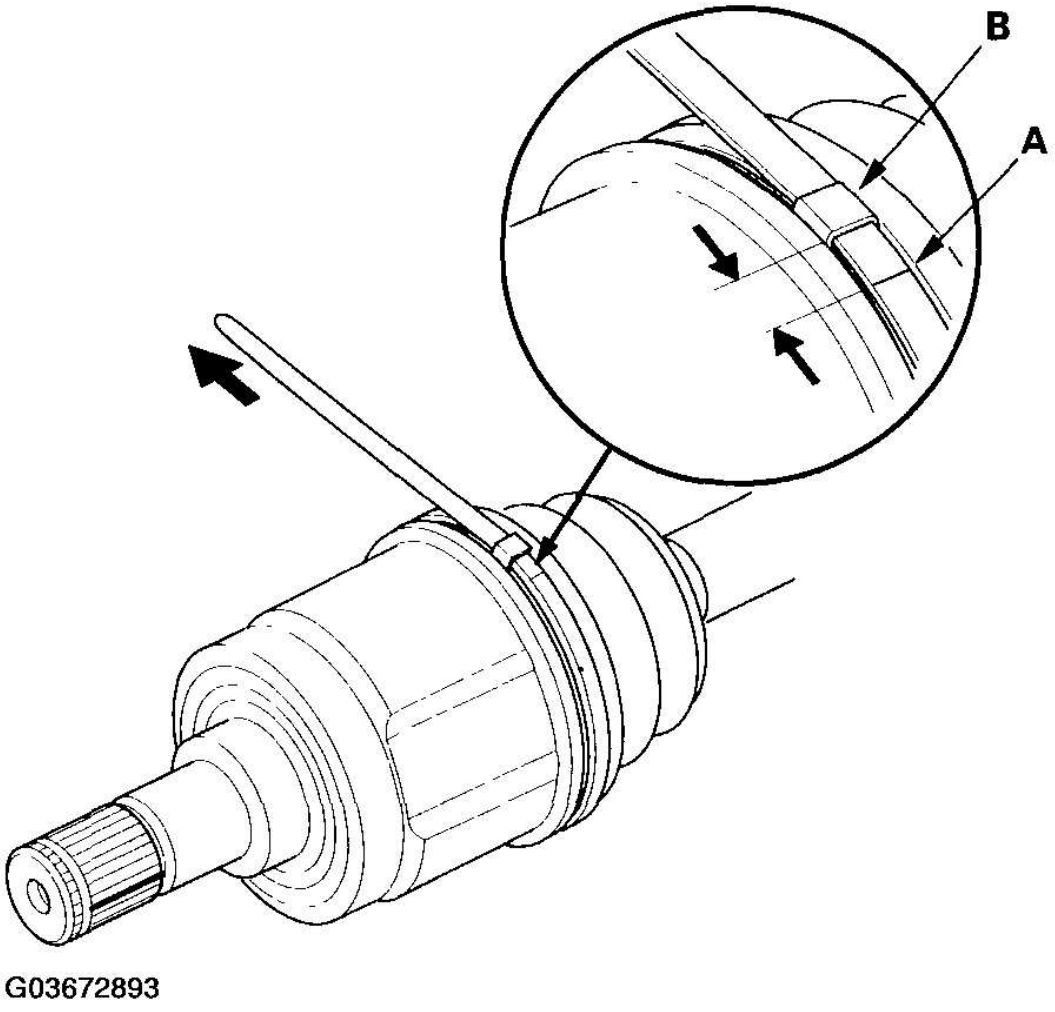


Fig. 37: Marking Position On Band
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Thread the free end of the band through the nose section of the commercially available boot band tool KD-3191 or equivalent (A), and into the slot on the winding mandrel (B).

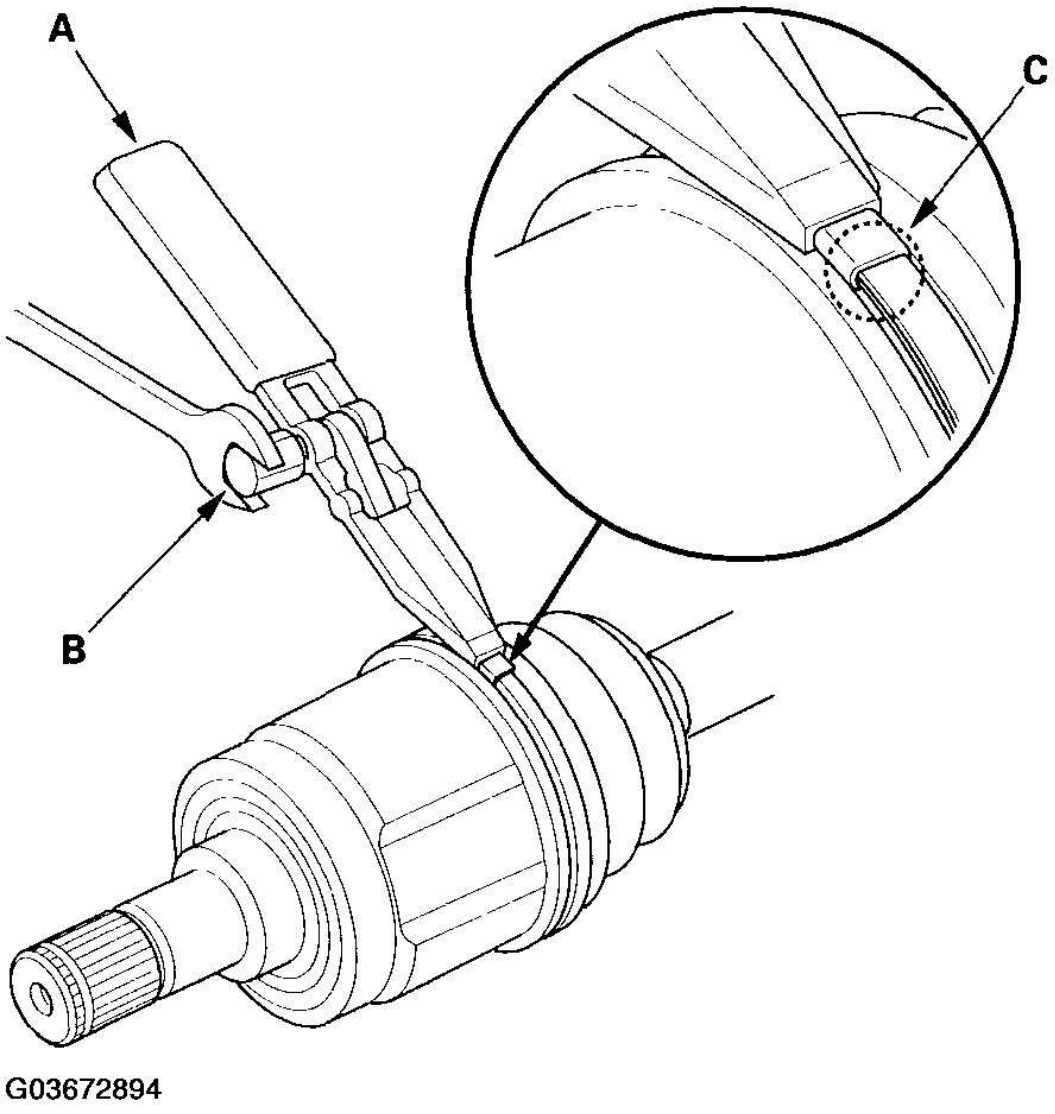


Fig. 38: Threading Free End Of Band Through nose Section Of Boot Band
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Place a wrench on the winding mandrel of the boot band tool, and tighten the band until the marked spot (C) on the band meets the edge of the clip.
18. Lift up the boot band tool to bend the free end of the band 90 degrees to the clip. Center-punch the clip, then fold over the remaining tail onto the clip.

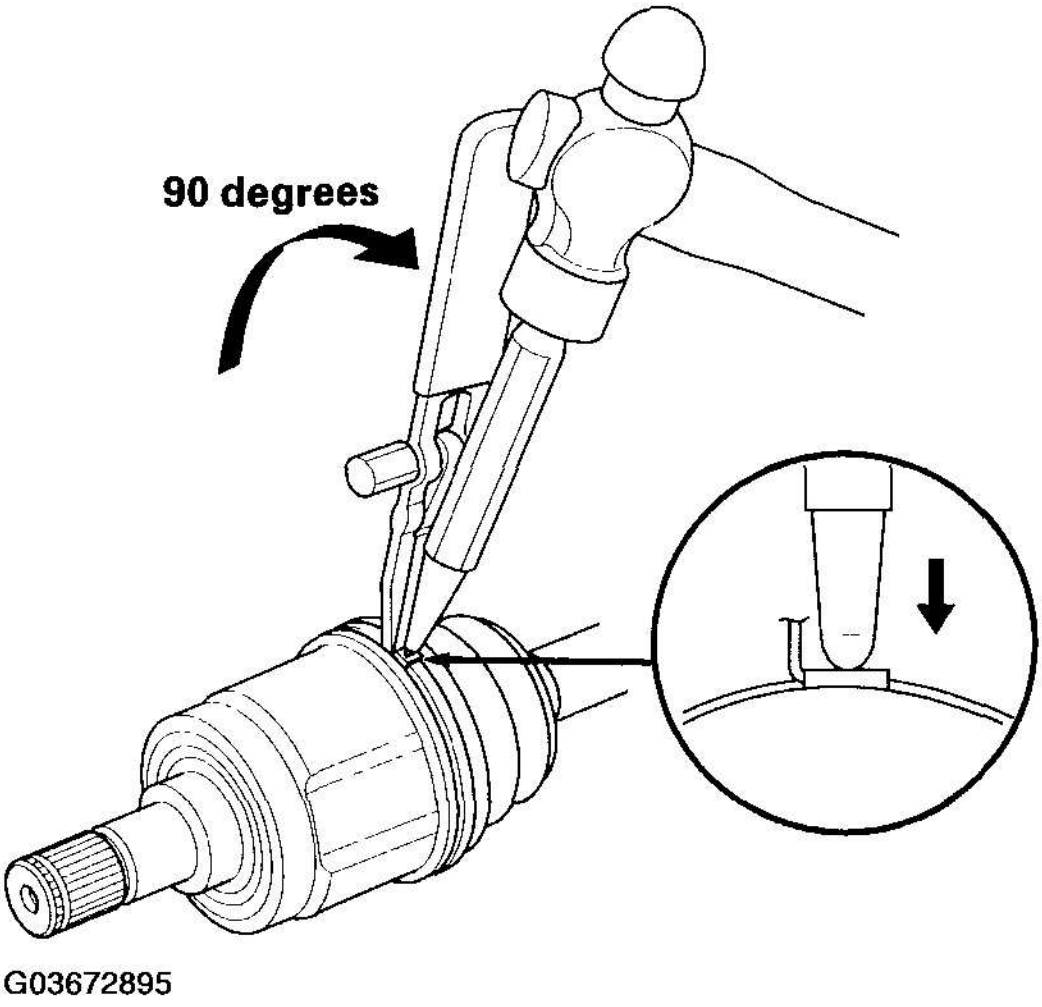


Fig. 39: Lifting Up Boot Band Tool To Ben Free End Of Band 90 Degrees To Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Unwind the boot band tool, and cut off the excess free end of the band to leave a 5-10 mm (0.2-0.4 in.) tail protruding from the clip.

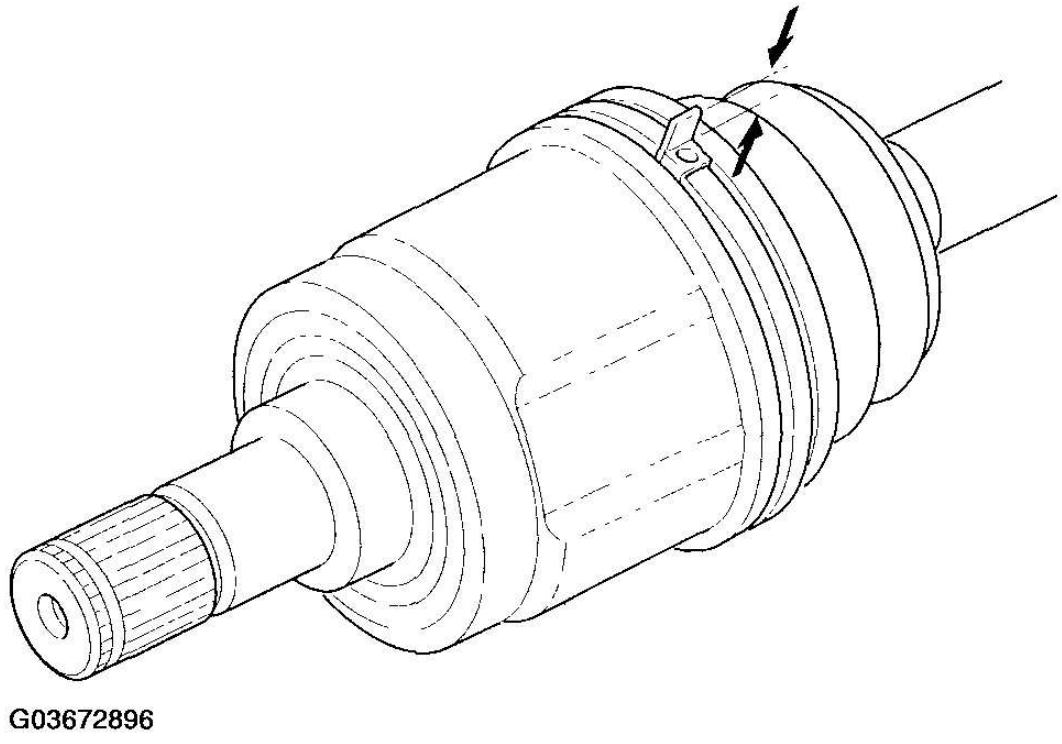


Fig. 40: Unwinding Boot Band Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Bend the band end (A) by tapping it down with a hammer.

NOTE:

- **Make sure the band and clip do not interfere with anything on the vehicle and the band does not move.**
- **Remove any grease remaining on the surrounding surfaces.**

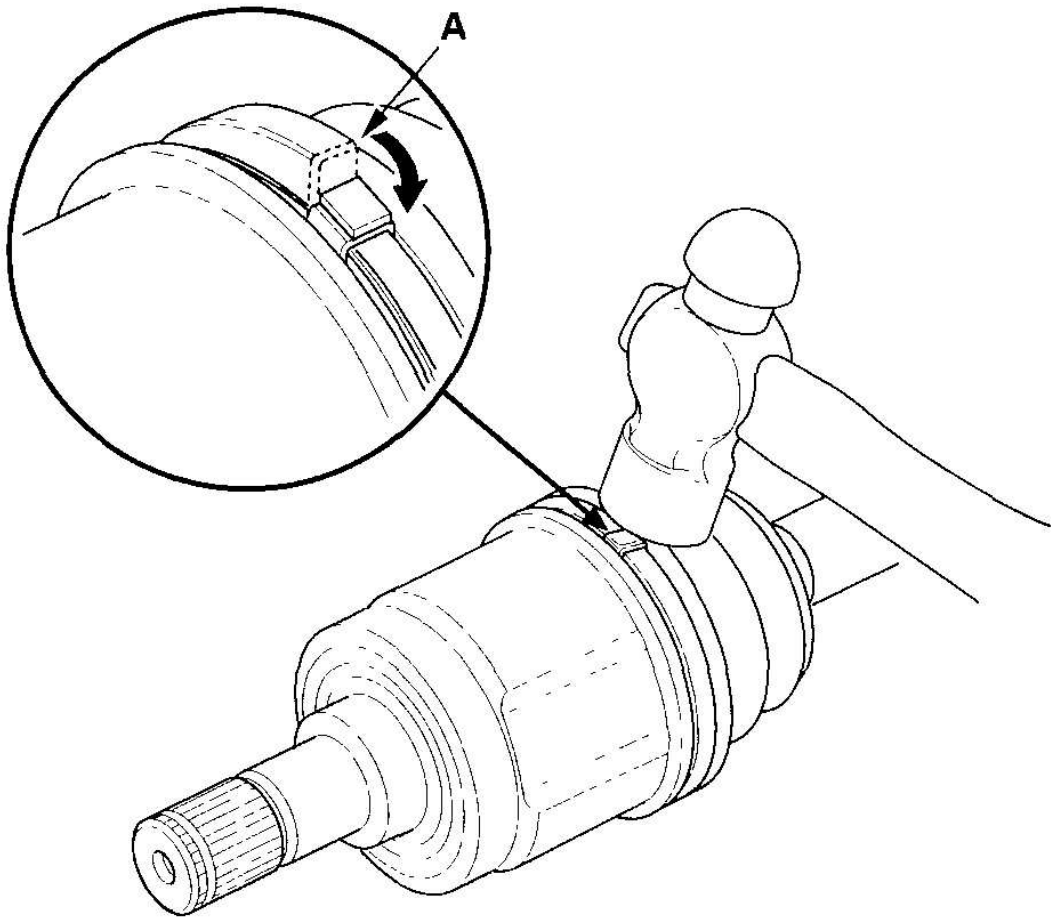


Fig. 41: Bending Band End By Tapping With Hammer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Repeat steps 13 through 20 for the band on the other end of the boot.
22. Install the new set ring.

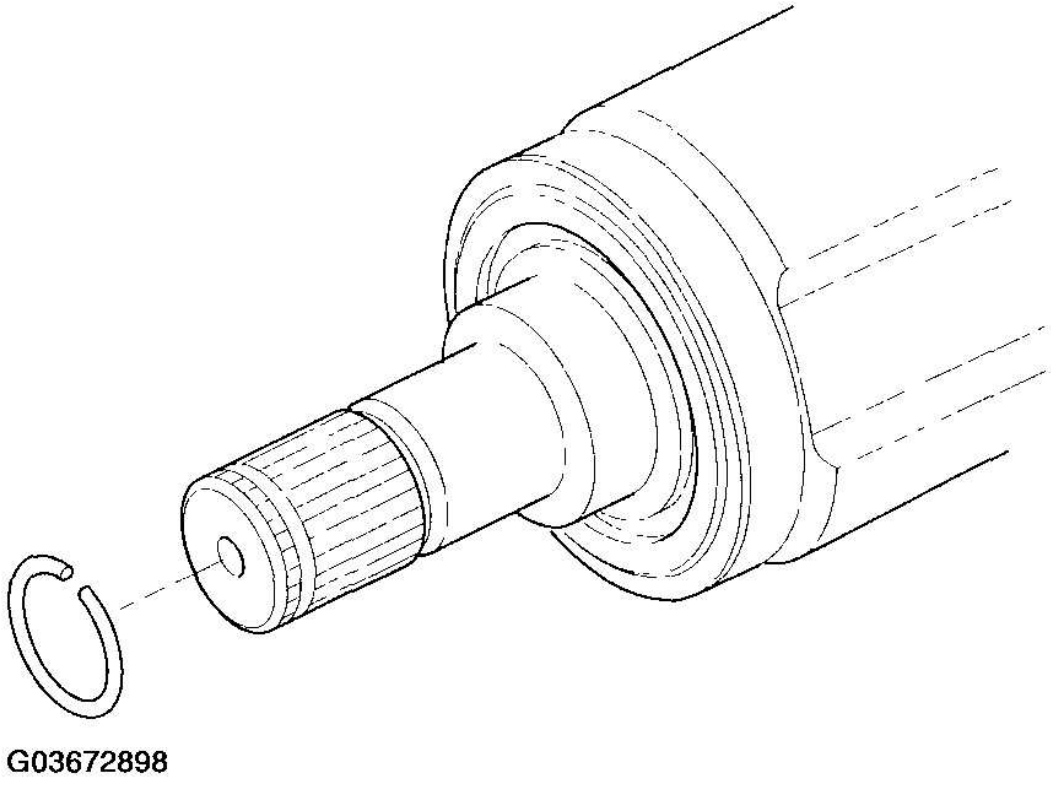


Fig. 42: Installing Set Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

OUTBOARD JOINT SIDE

1. Wrap the splines with vinyl tape (A) to prevent damage to the outboard boot.

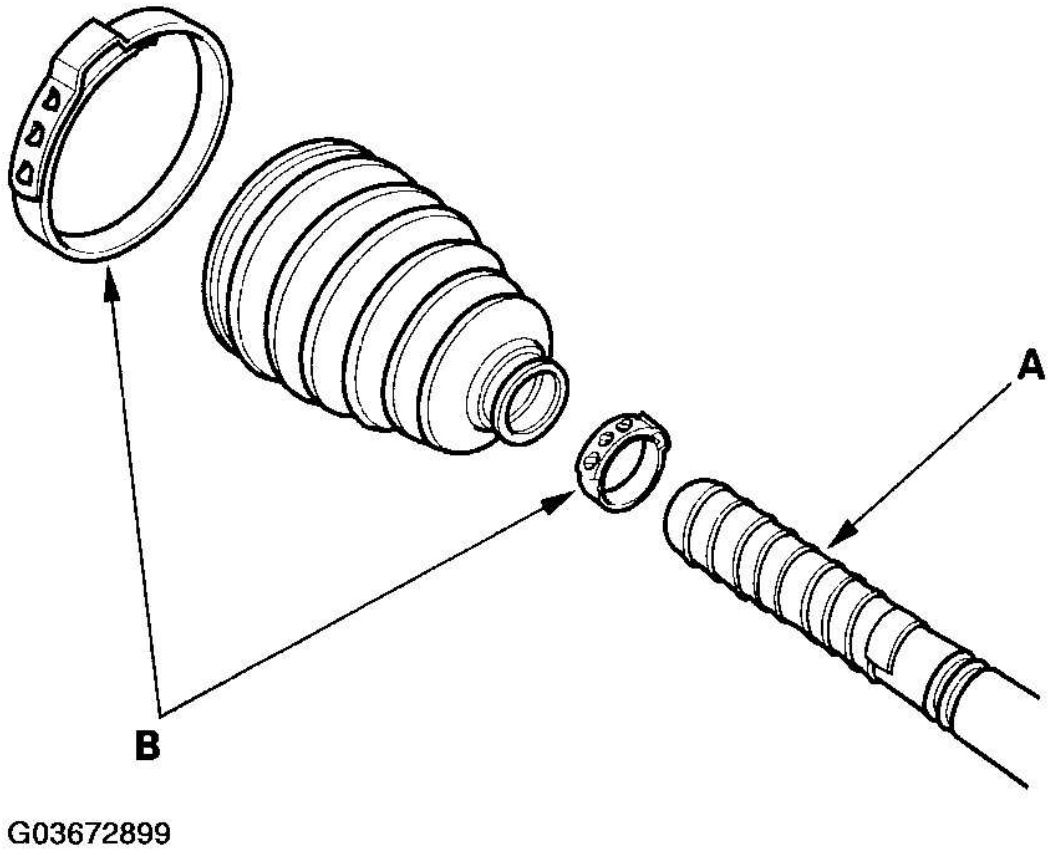


Fig. 43: Wrapping Splines With Vinyl Tape
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the new ear clamp bands (B) and outboard boot, then remove the vinyl tape. Be careful not to damage the outboard boot.
3. Install the new stop ring in the driveshaft groove (A).

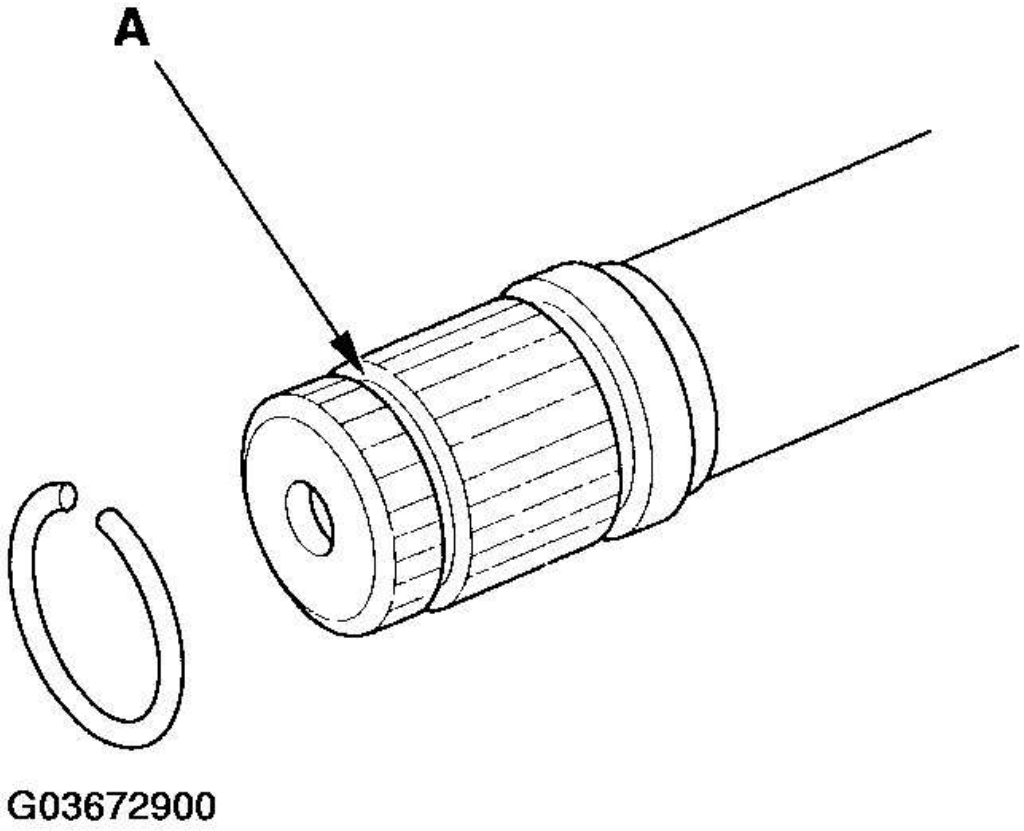


Fig. 44: Installing Stop Ring In Driveshaft Groove
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Insert the driveshaft (A) into the outboard joint (B) until the stop ring (C) is close to the joint.

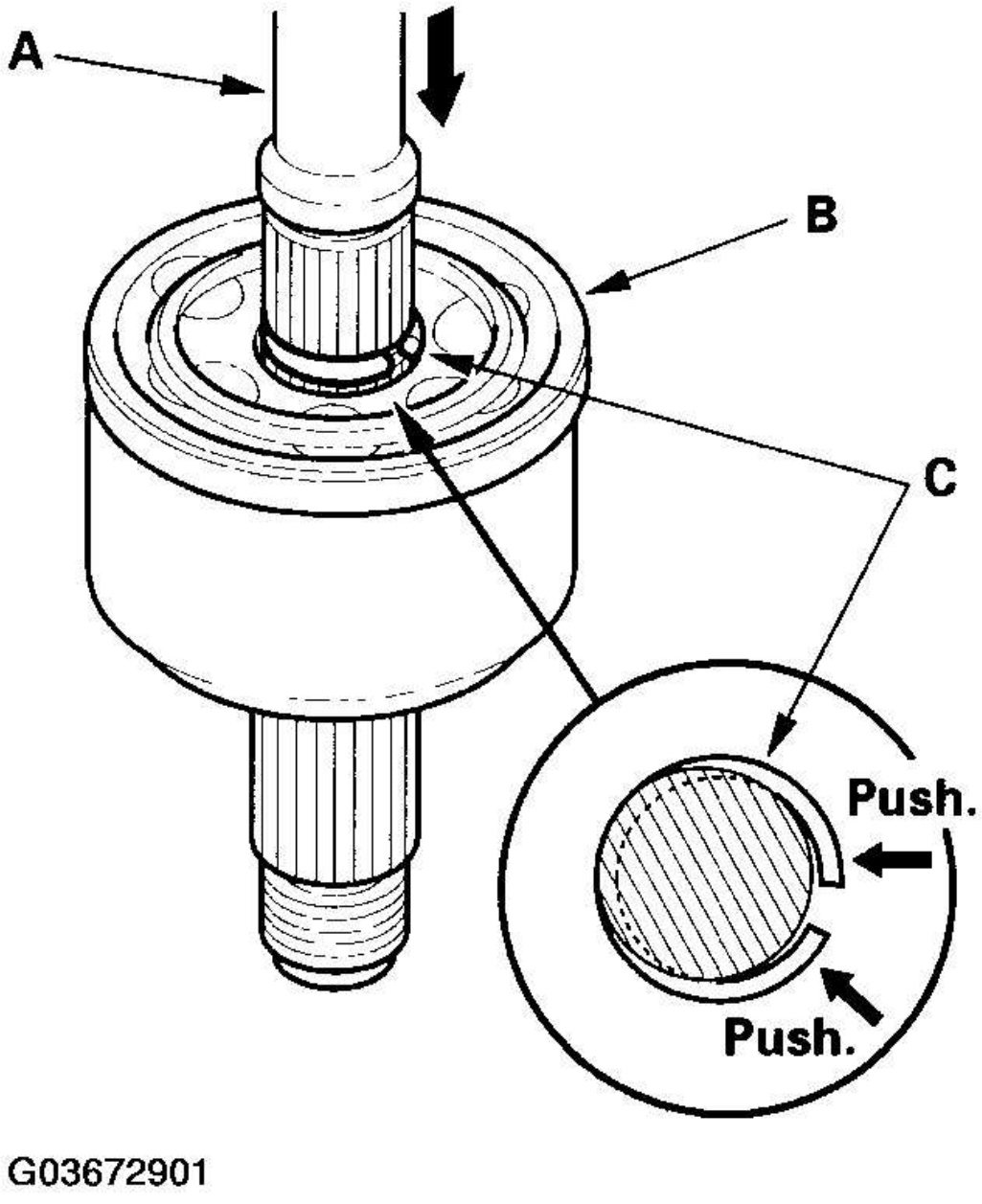


Fig. 45: Installing Driveshaft Into Outboard Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. To completely seat the outboard joint, pick up the driveshaft and joint, and

drop them from about 10 cm (4 in.) onto a hard surface. Do not use a hammer as excessive force may damage the driveshaft. Be careful not to damage the threaded section (A) of the outboard joint.

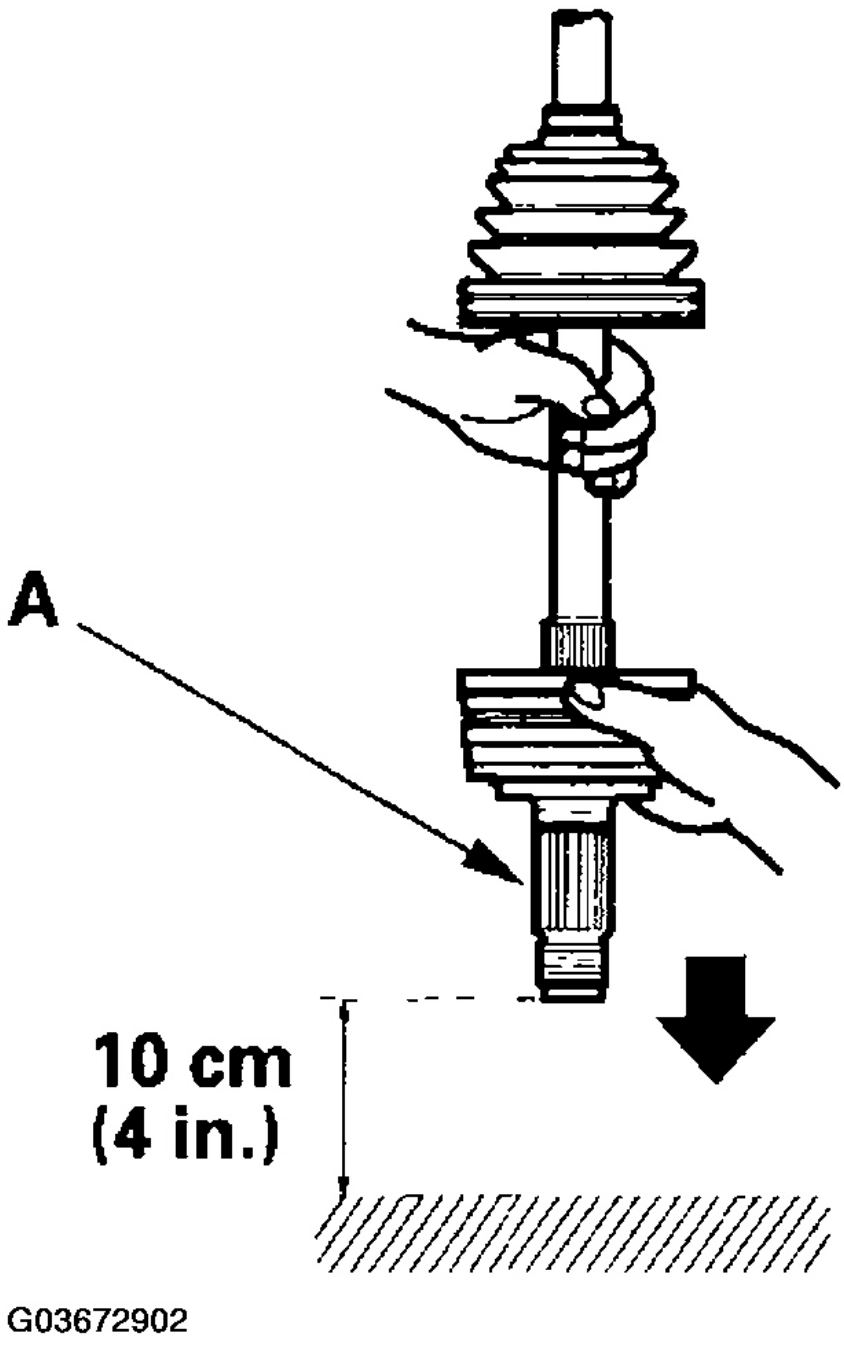


Fig. 46: Identifying Threaded Section Of Outboard Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Check the alignment of the paint mark (A) with the outboard joint end (B).

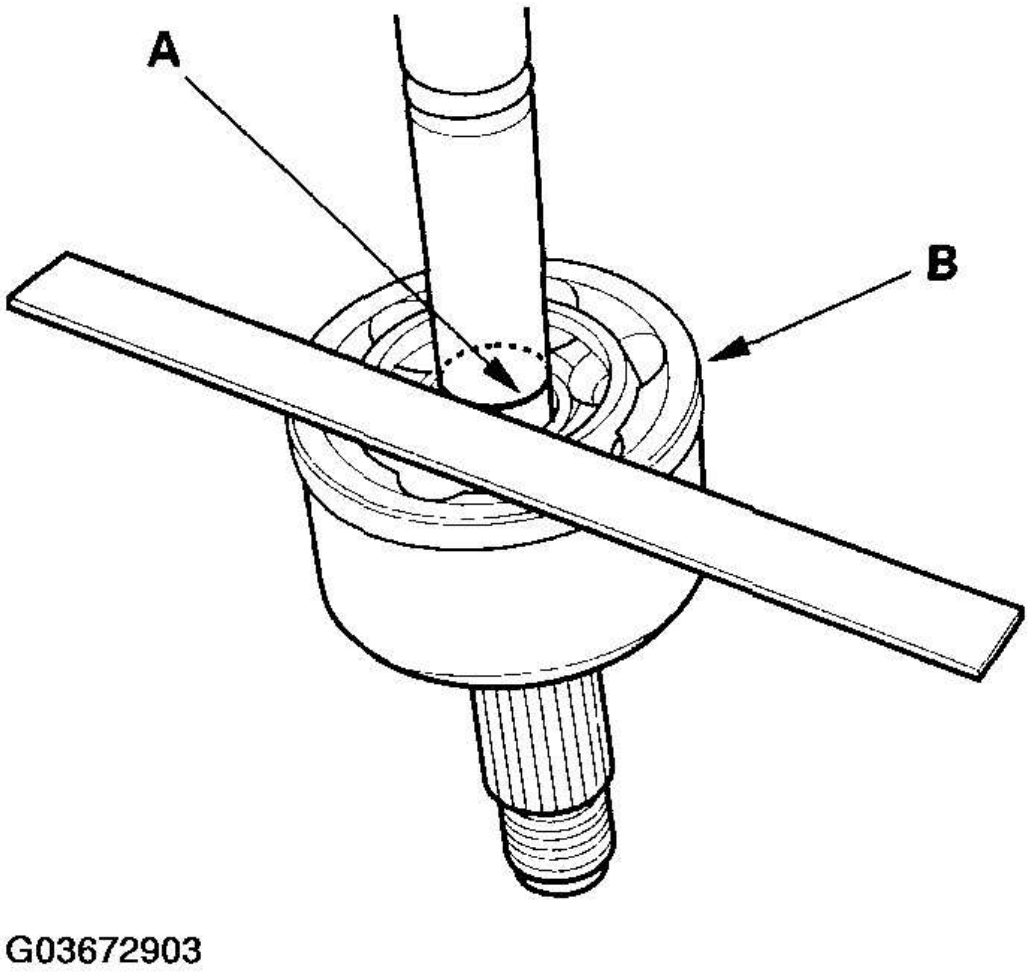


Fig. 47: Checking Alignment Of Paint Mark With Outboard Joint End
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Pack the outboard joint (A) with the joint grease included in the new joint boot set.

Grease quantity

Outboard joint: 140-150 g (4.9-5.3 oz)

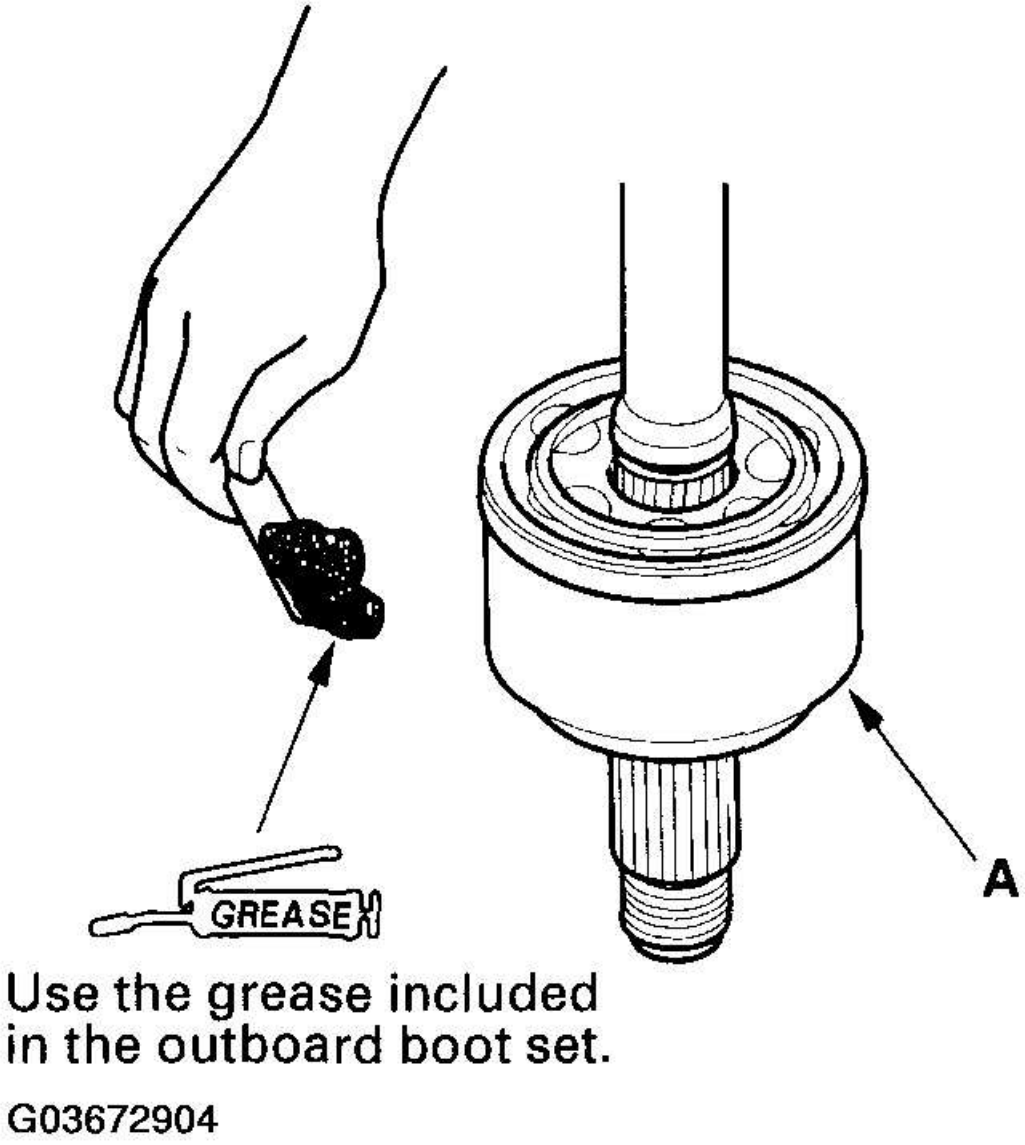
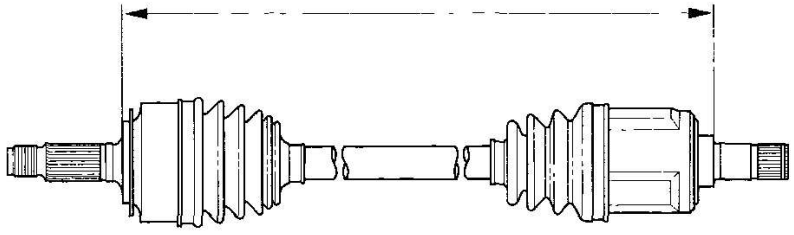


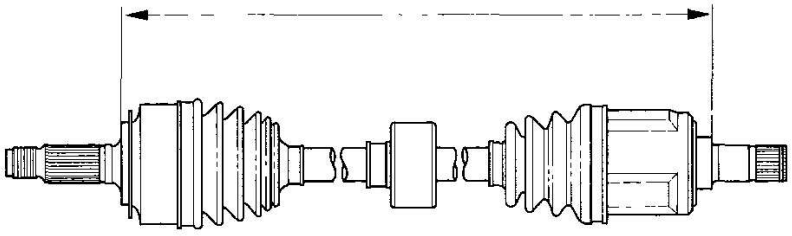
Fig. 48: Packing Outboard Joint With Joint Grease
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Adjust the length of the driveshafts as shown in **Fig. 49** , then adjust the boots to halfway between full compression and full extension. Make sure the ends of the boots seat in the groove of the driveshaft and joint.

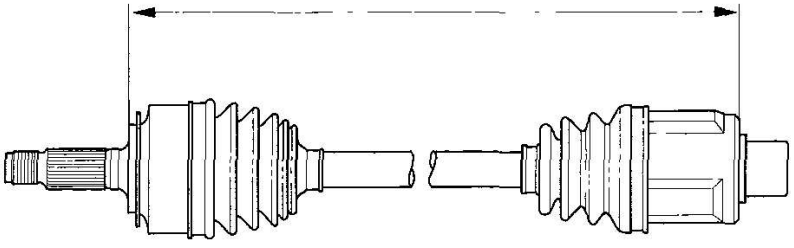
M/T model Left driveshaft: 554—559 mm (21.81—22.01 in.)



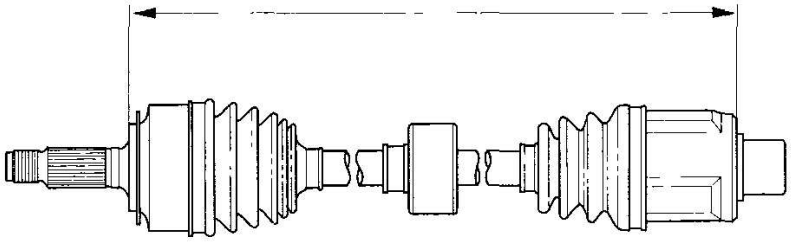
A/T model Left driveshaft: 554—559 mm (21.81—22.01 in.)



M/T model Right driveshaft: 512—517 mm (20.16—20.35 in.)



A/T model Right driveshaft: 512—517 mm (20.16—20.35 in.)



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Fig. 49: Adjusting Length Of Driveshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Fit the boot (A) ends onto the driveshaft (B) and outboard joint (C).

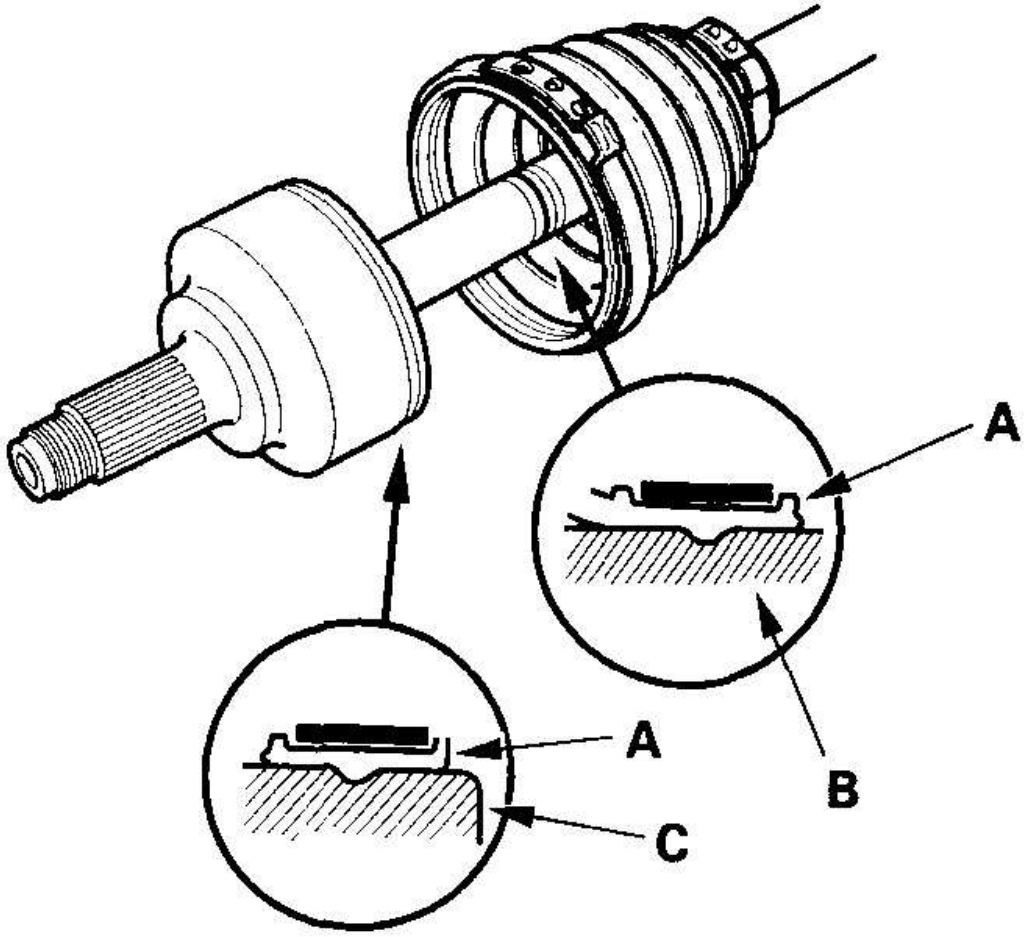


Fig. 50: Fitting Boot Ends Onto Driveshaft And Outboard Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Close the ear portion (A) of the band with commercially available boot band pincers Kent-Moore J-35910 or equivalent (B).

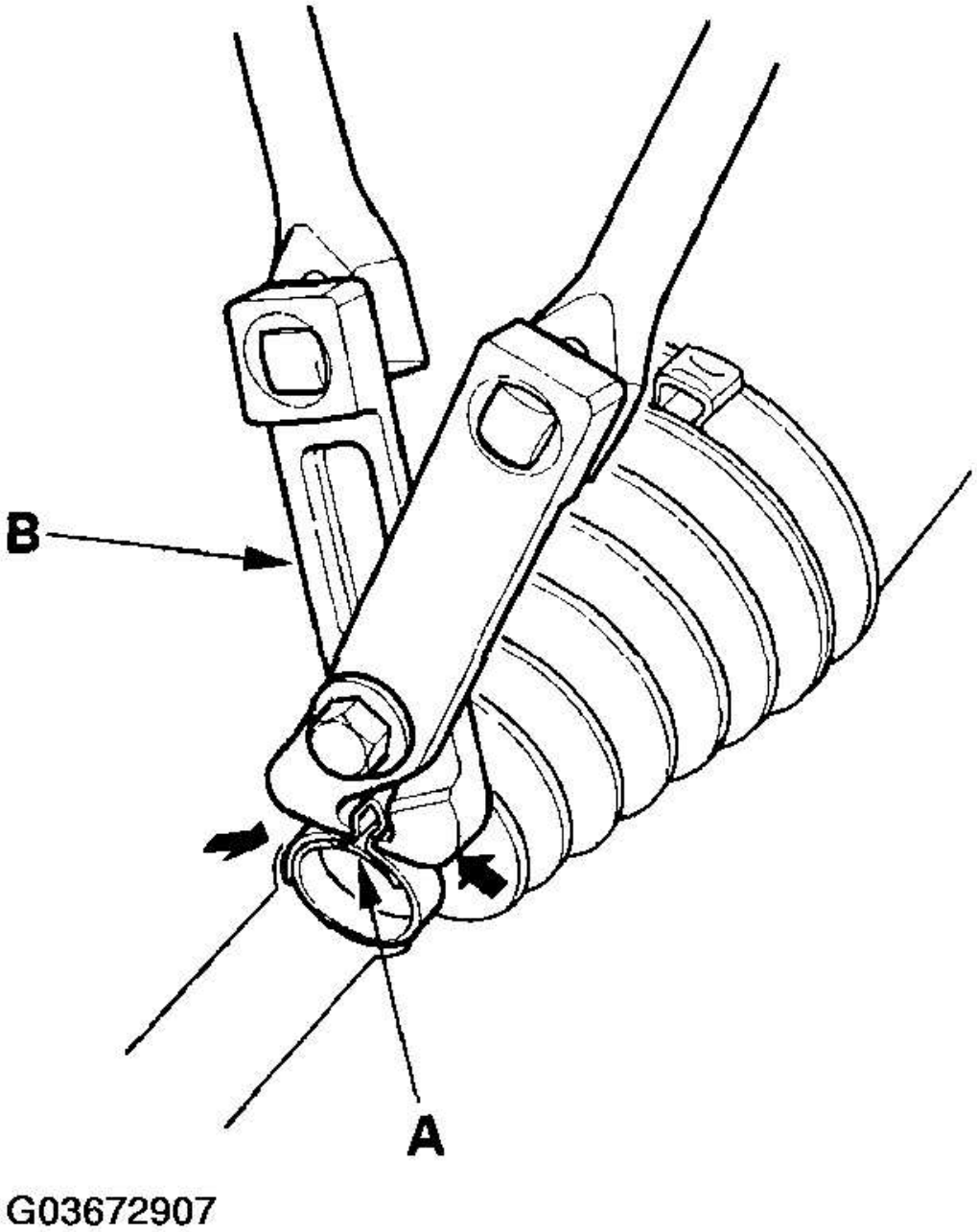


Fig. 51: Closing Ear Portion Of Band
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Check the clearance between the closed ear portion of the band. If the clearance is not within the standard, close the ear portion of the band farther.

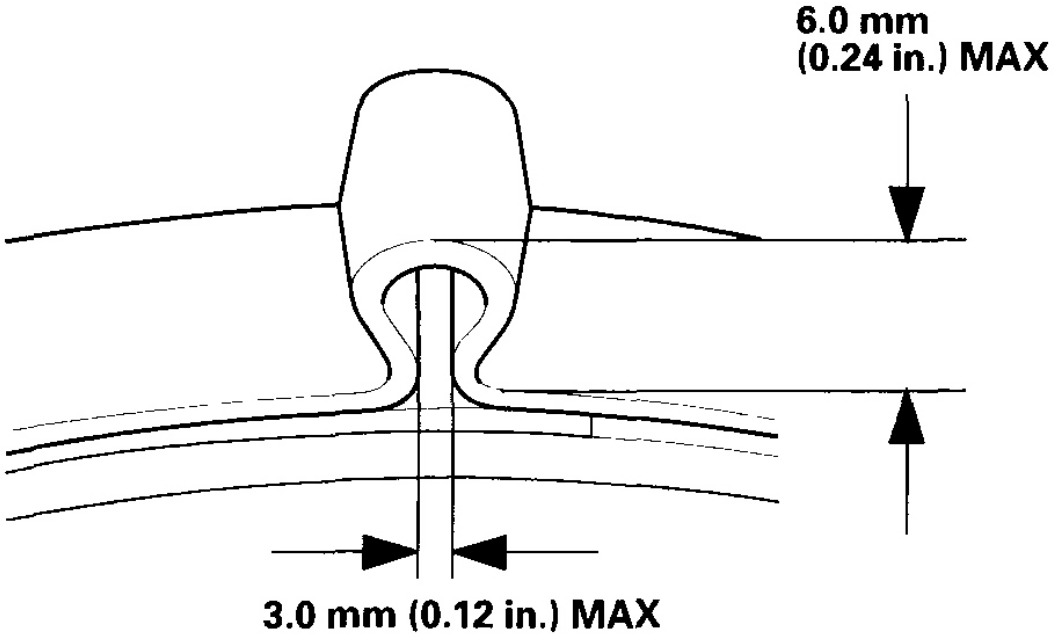


Fig. 52: Checking Clearance Between Closed Ear Portion Of Band
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Repeat steps 10 and 11 for the band on the other end of the boot.

DRIVESHAFT INSTALLATION

1. Install a new set ring in the set ring groove of the driveshaft (left driveshaft).

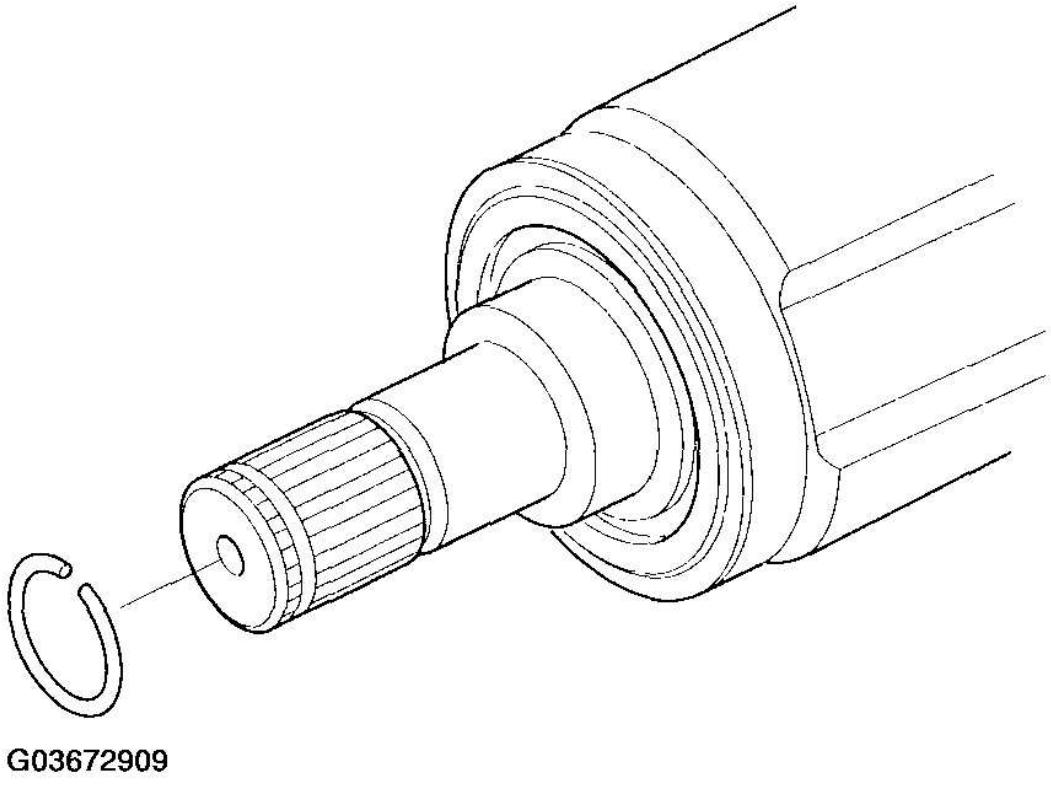


Fig. 53: Installing Set Ring In Set Ring Groove Of Driveshaft (Left Driveshaft)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Apply 0.5-1.0 g (0.02-0.04 oz) of specified grease to the whole splined surface (A) of the right driveshaft. After applying grease, remove the grease from the splined grooves at intervals of 2-3 splines and from the set ring groove (B) so that air can bleed from the intermediate shaft.

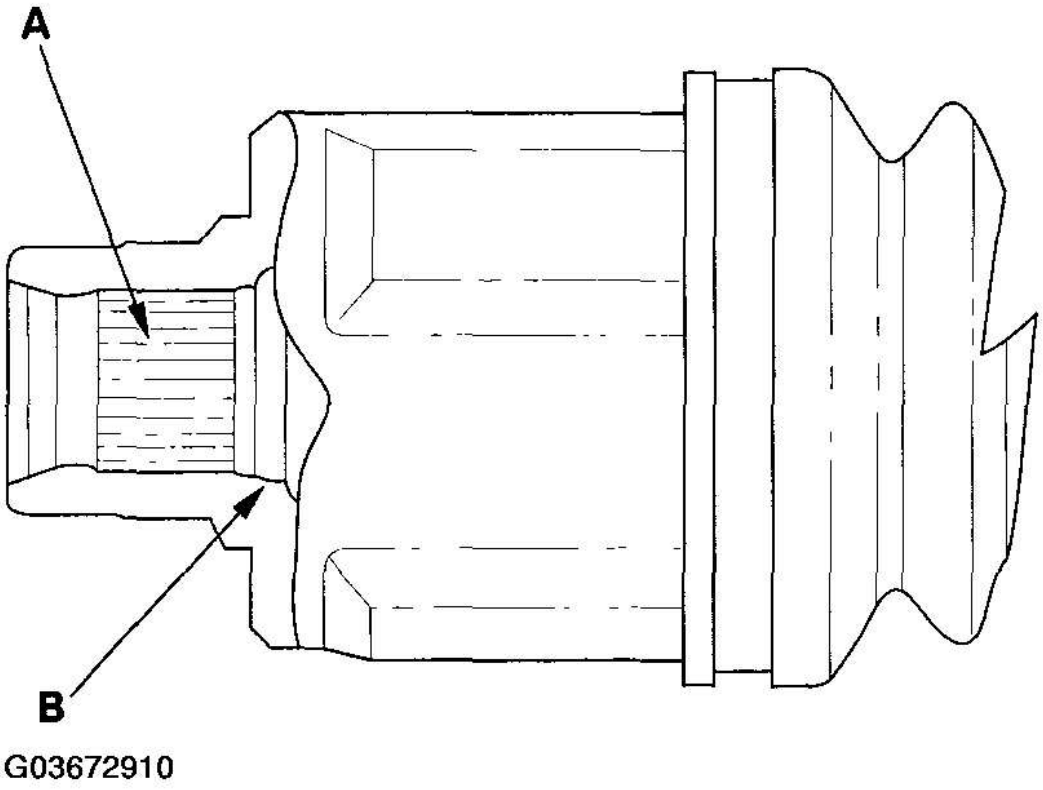


Fig. 54: Applying Grease To Splined Surface Of Right Driveshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Clean the areas where the driveshaft contacts the differential thoroughly with solvent or brake cleaner, and dry with compressed air. Insert the inboard end (A) of the driveshaft into the differential (B) or intermediate shaft (C) until the new set ring (D) locks in the groove (E).

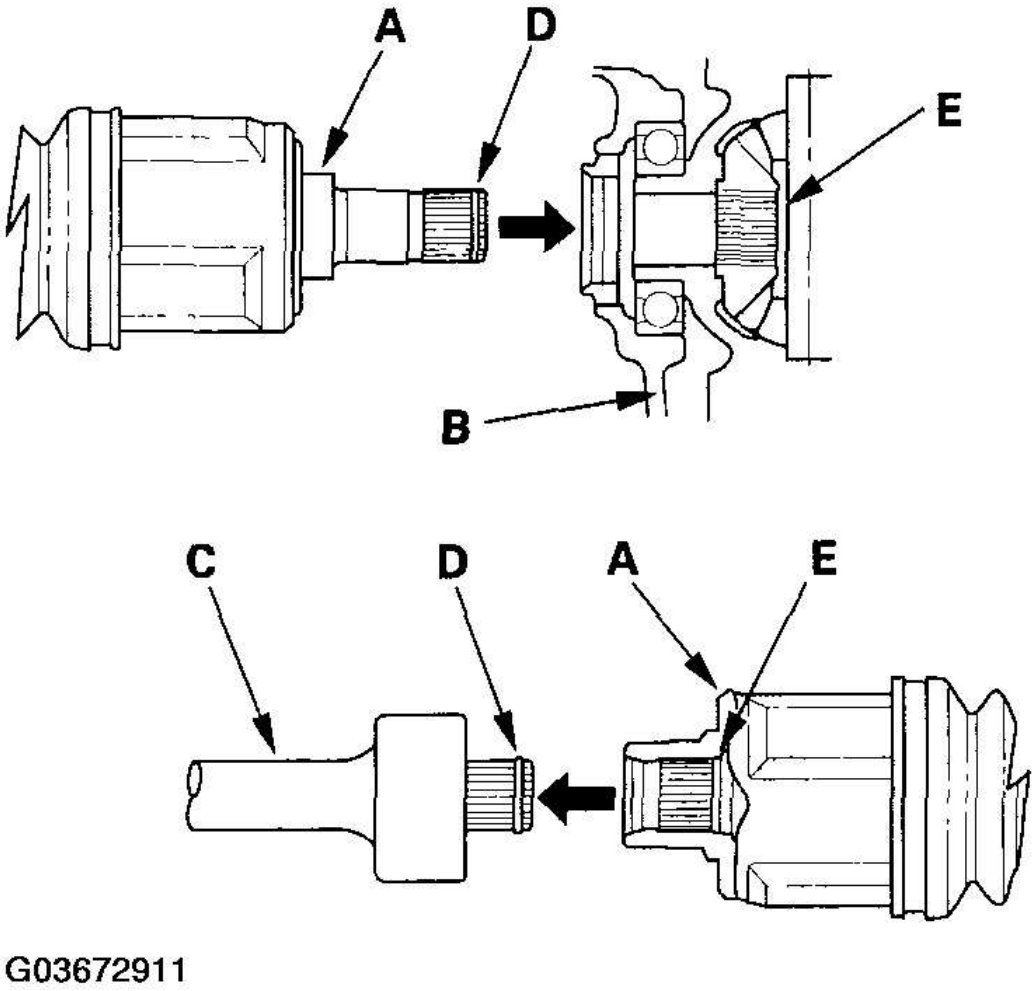


Fig. 55: Inserting Inboard End Of Driveshaft Into Differential Or Intermediate Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the outboard joint (A) into the front hub (B).

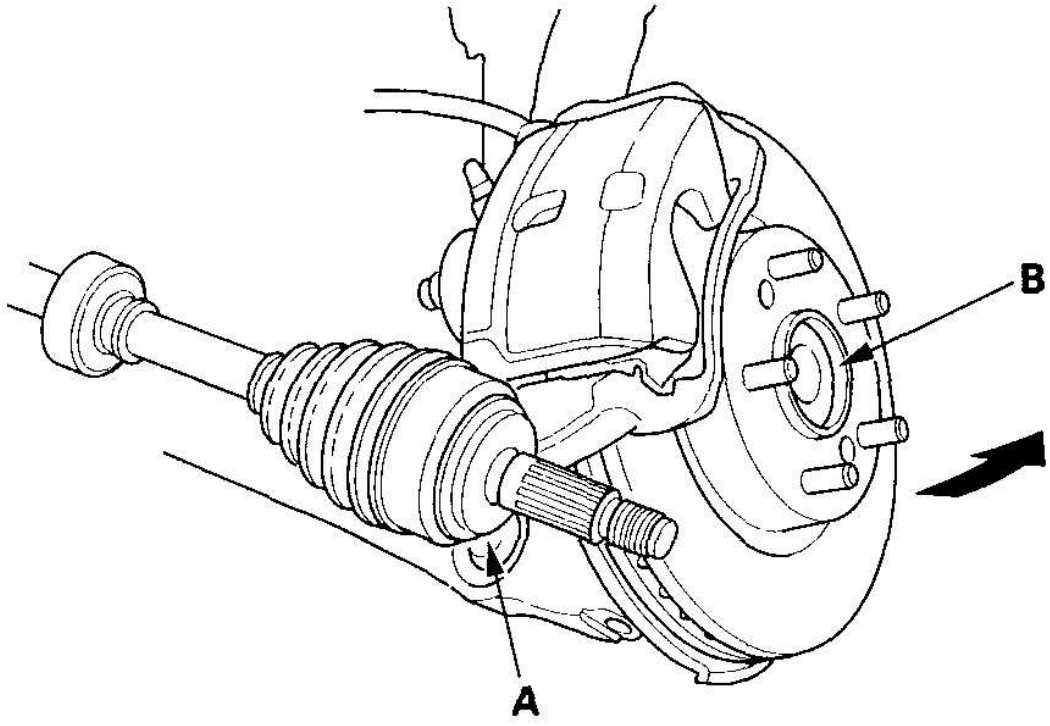


Fig. 56: Installing Outboard Joint Into Front Hub
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the knuckle (A) onto the lower arm (B). Wipe off the grease before tightening the nut at the ball joint. Torque the new castle nut (C) to the lower torque specification, then tighten it only far enough to align the slot with the pin hole. Do not align the nut by loosening it.

NOTE: Make sure the ball joint boot is not damaged or cracked.

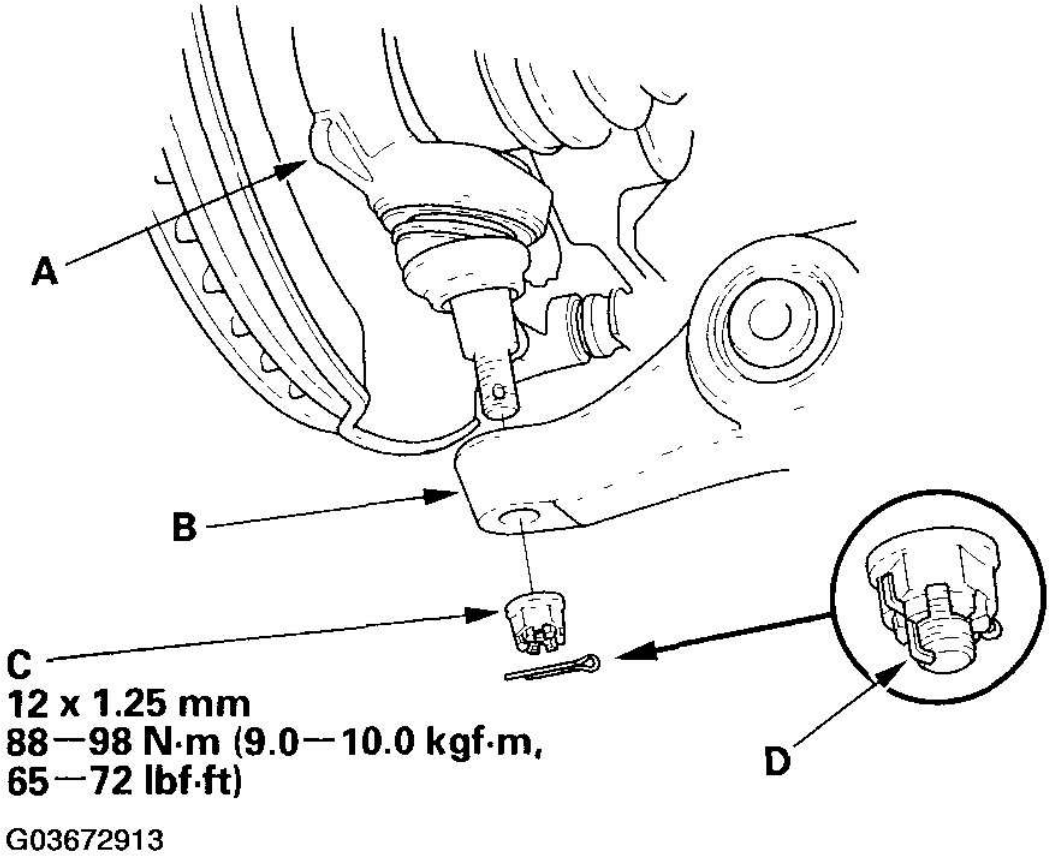


Fig. 57: Installing Knuckle Onto Lower Arm With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the new cotter pin (D) into the pin hole, and bend the cotter pin as shown.
7. Install the damper fork (A) over the driveshaft and onto the lower arm. Install the damper in the damper fork so the aligning tab (B) is aligned with the slot in the damper fork. Loosely install the flange bolt (C).

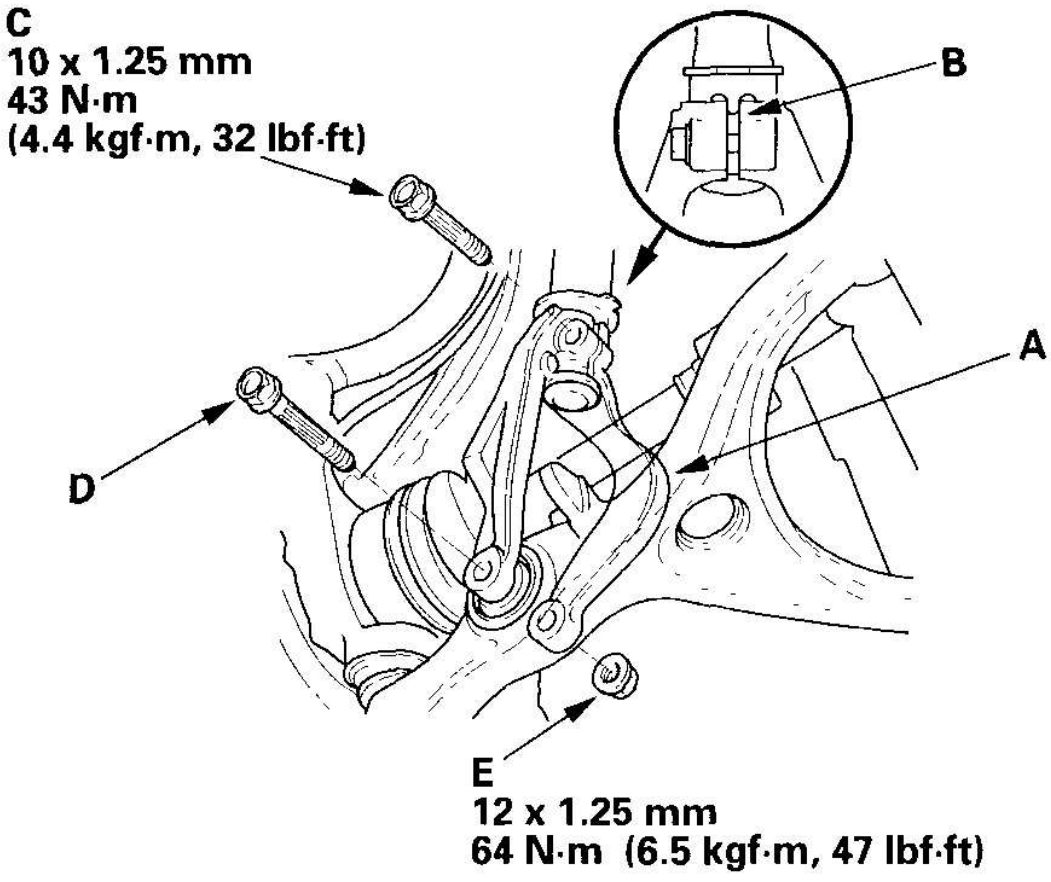


Fig. 58: Installing Damper Fork Over Driveshaft And Lower Arm With Torque Specificaitons
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Loosely install the flange bolt (D) and a new self-locking nut (E).
9. Install a new spindle nut (A), then tighten the nut. After tightening, use a drift to stake the spindle nut shoulder (B) against the driveshaft.

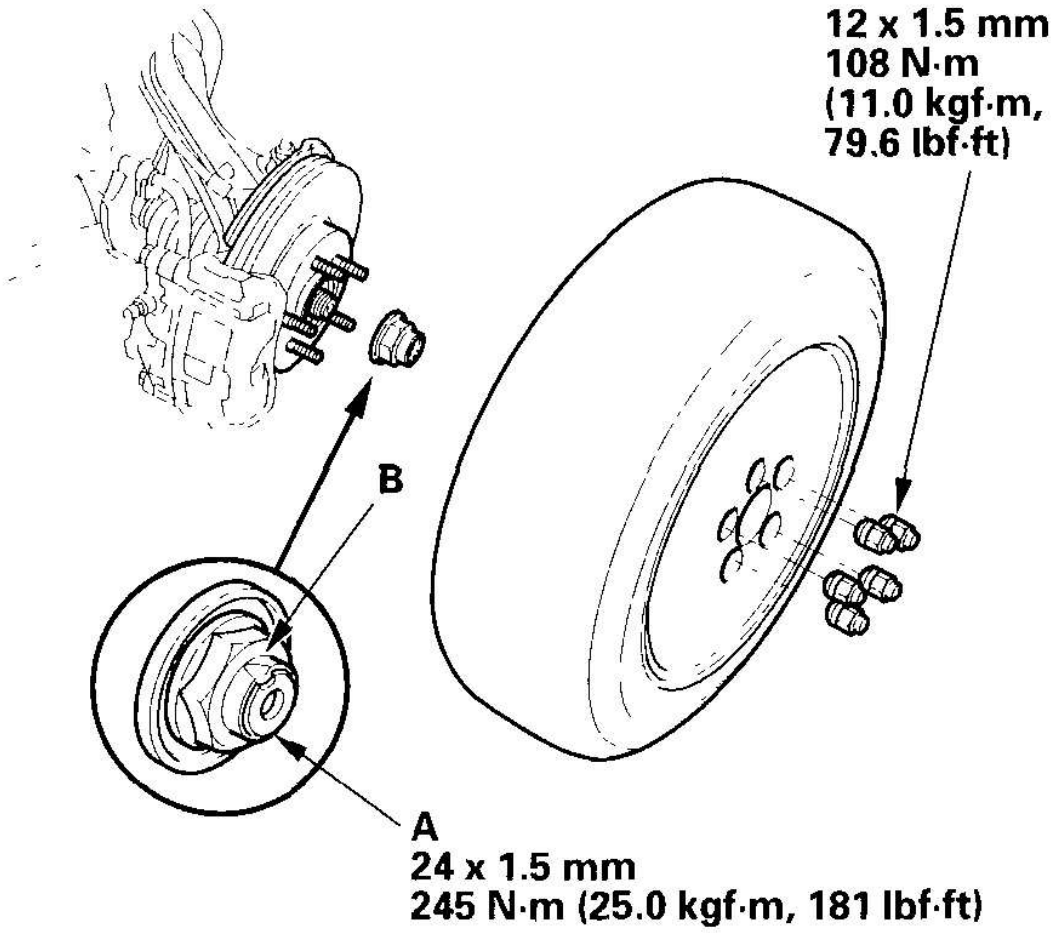


Fig. 59: Installing Spindle Nut With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Clean the mating surfaces of the brake disc and the front wheel, then install the front wheel with the wheel nuts.
11. Turn the front wheel by hand, and make sure there is no interference between the driveshaft and surrounding parts.
12. Tighten the flange bolts and the self-locking nut with the vehicle's weight on the damper.
13. Refill the transmission with recommended transmission fluid:

- Manual transmission (see **MANUAL TRANSMISSION**)
- Automatic transmission (see **ATF REPLACEMENT**)

14. Check the front wheel alignment, and adjust it if necessary, refer to **WHEEL ALIGNMENT** .

INTERMEDIATE SHAFT REMOVAL

1. Drain the transmission fluid. Reinstall the drain plug, use a new washer:
   - Manual transmission (see **MANUAL TRANSMISSION**)
   - Automatic transmission (see **ATF REPLACEMENT**)
2. Remove the right driveshaft (see **DRIVESHAFT REMOVAL**).
3. Remove the exhaust pipe A (see step 40 in **ENGINE REMOVAL**).
4. Remove the rear warm up three way catalytic converter (rear WU-TWC) bracket (A) and heat shield (B).

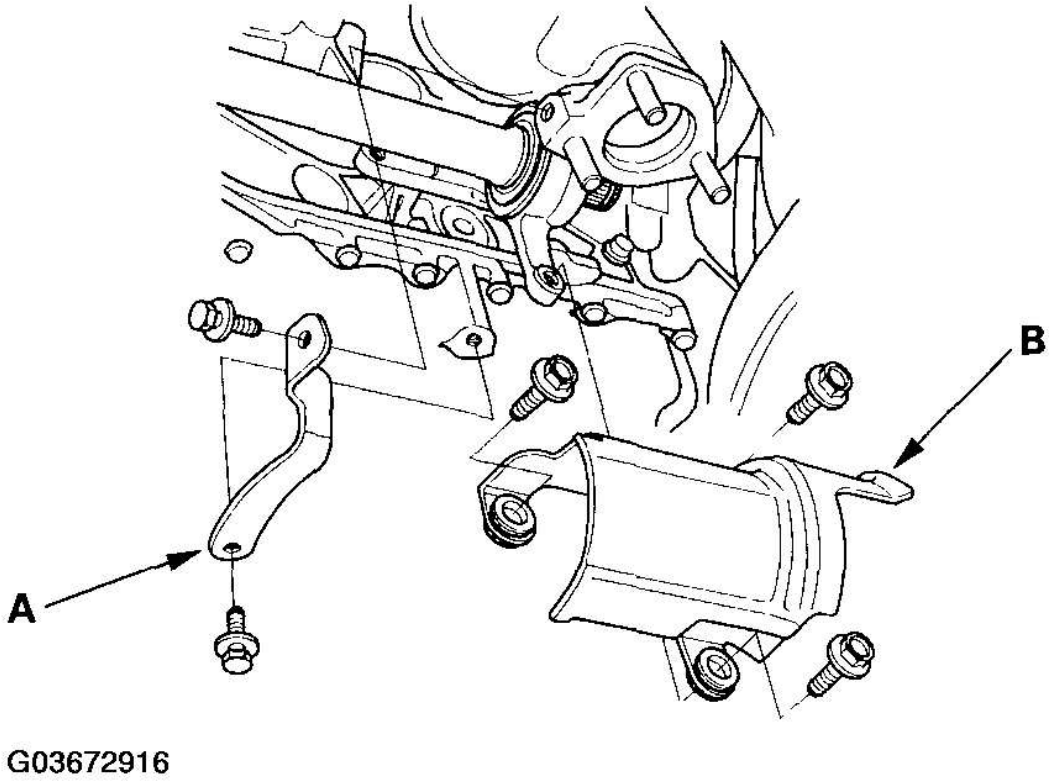


Fig. 60: Identifying Rear WU-TWC Bracket And Heat Shield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the flange bolt (A) and two dowel bolts (B).

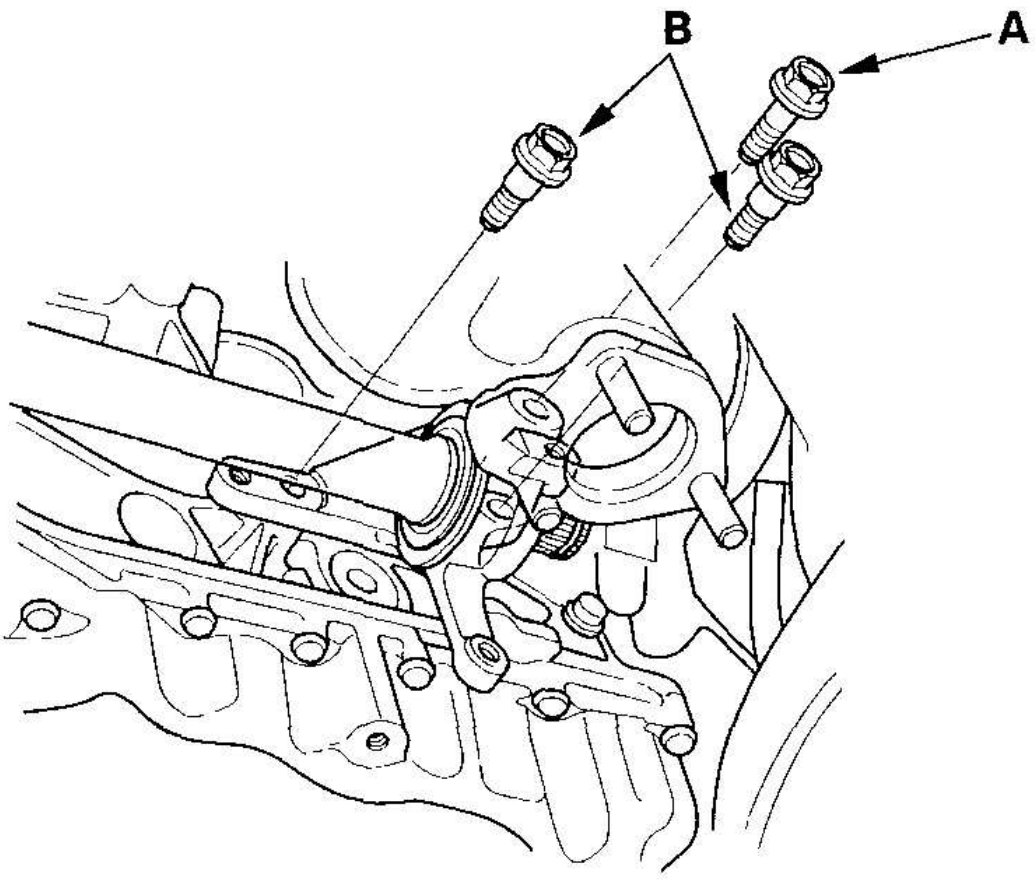


Fig. 61: Identifying Flange Bolt And Dowel Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the intermediate shaft (A) from the differential. Hold the intermediate shaft horizontally until it is clear of the differential to prevent damage to the differential oil seal (B).

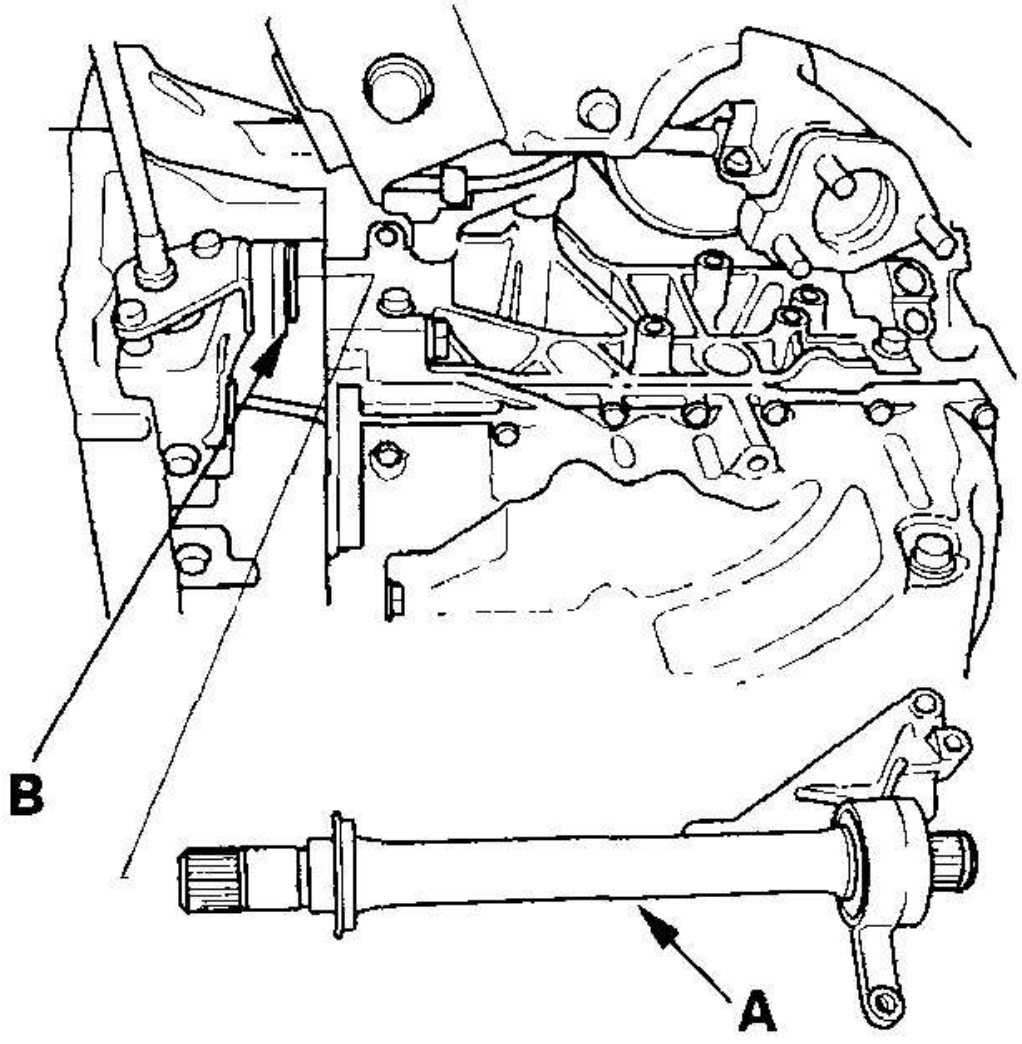


Fig. 62: Identifying Intermediate Shaft From Differential
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INTERMEDIATE SHAFT DISASSEMBLY

Special Tools Required

- Oil seal driver 07947-SB00100

- Half shaft base 07NAF-SR30101

1. Remove the set ring (A), outer seal (B), and external snap ring (C).

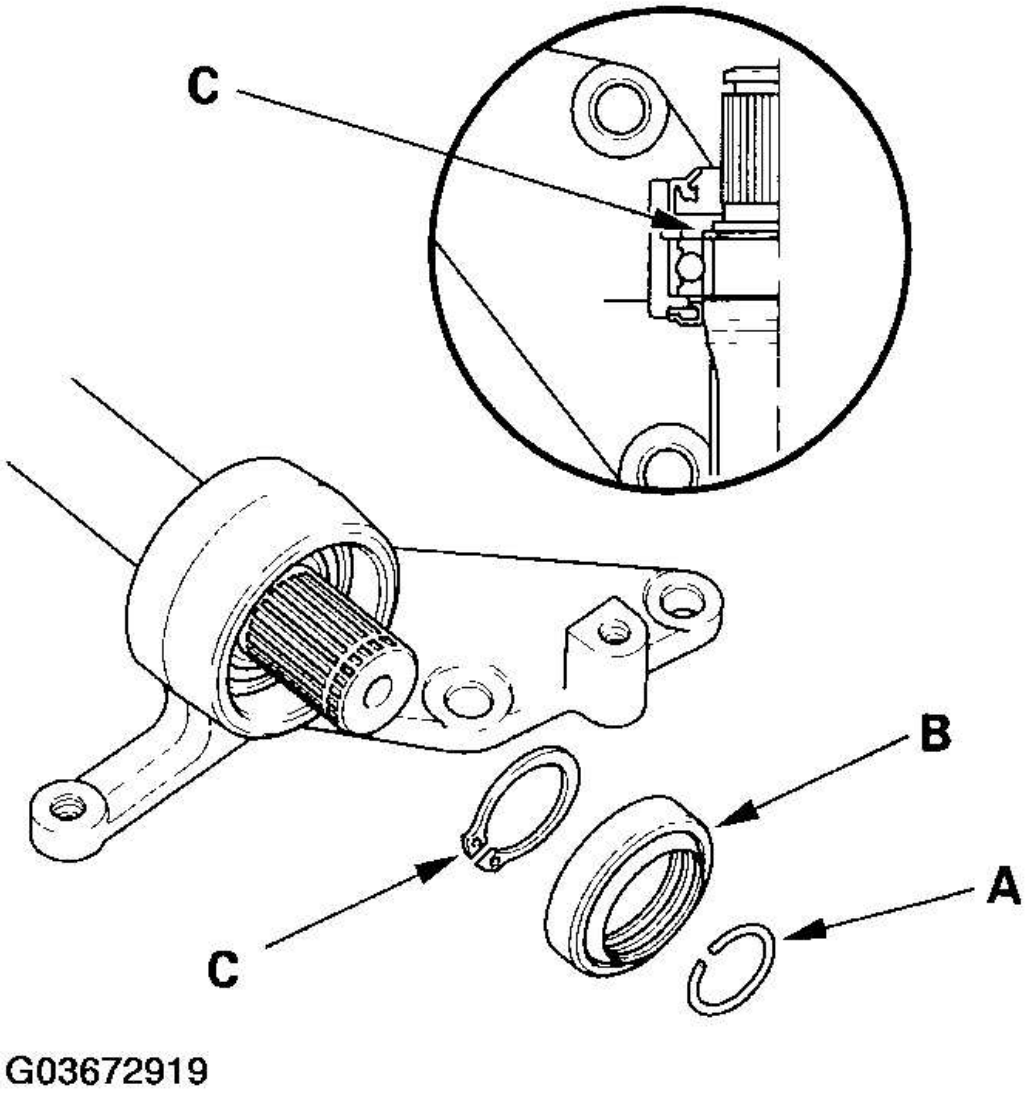


Fig. 63: Identifying Set Ring, Outer Seal, And External Snap Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Press the intermediate shaft (A) out of the intermediate shaft bearing (B) using

a press. Be careful not to damage the metal rings (C) on the intermediate shaft during disassembly.

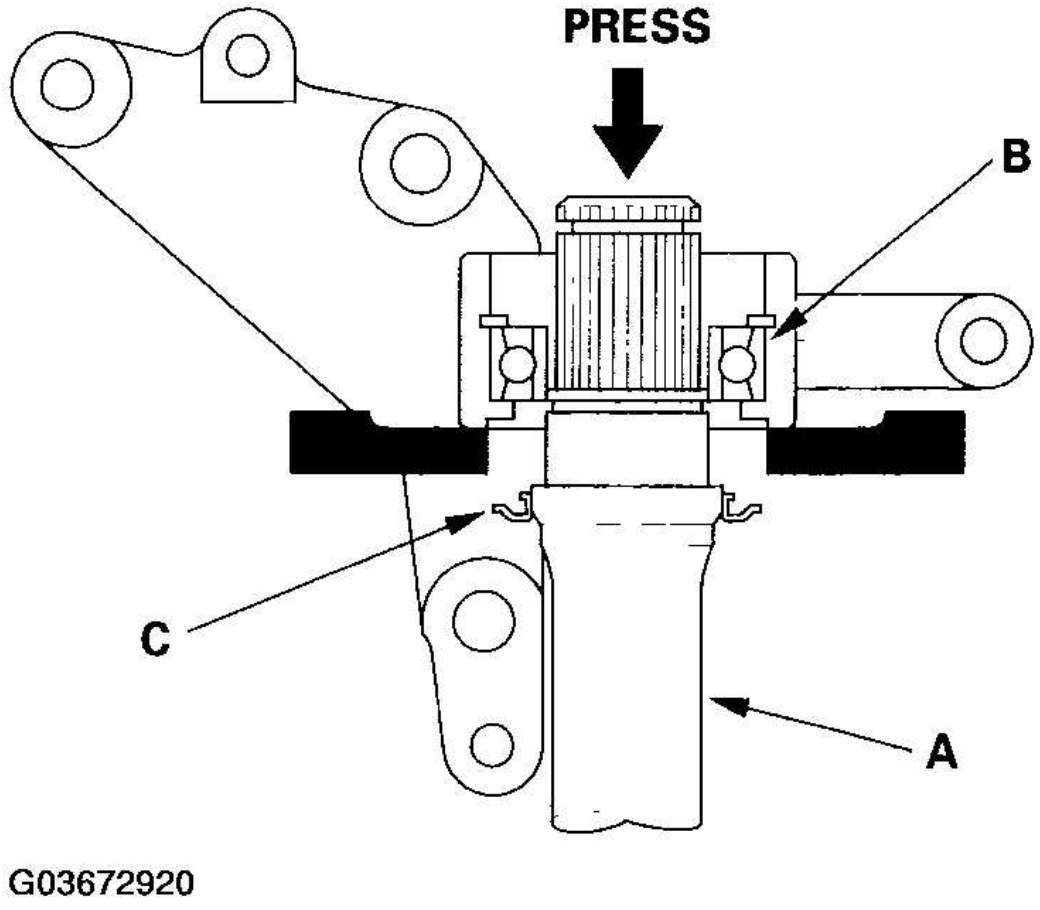
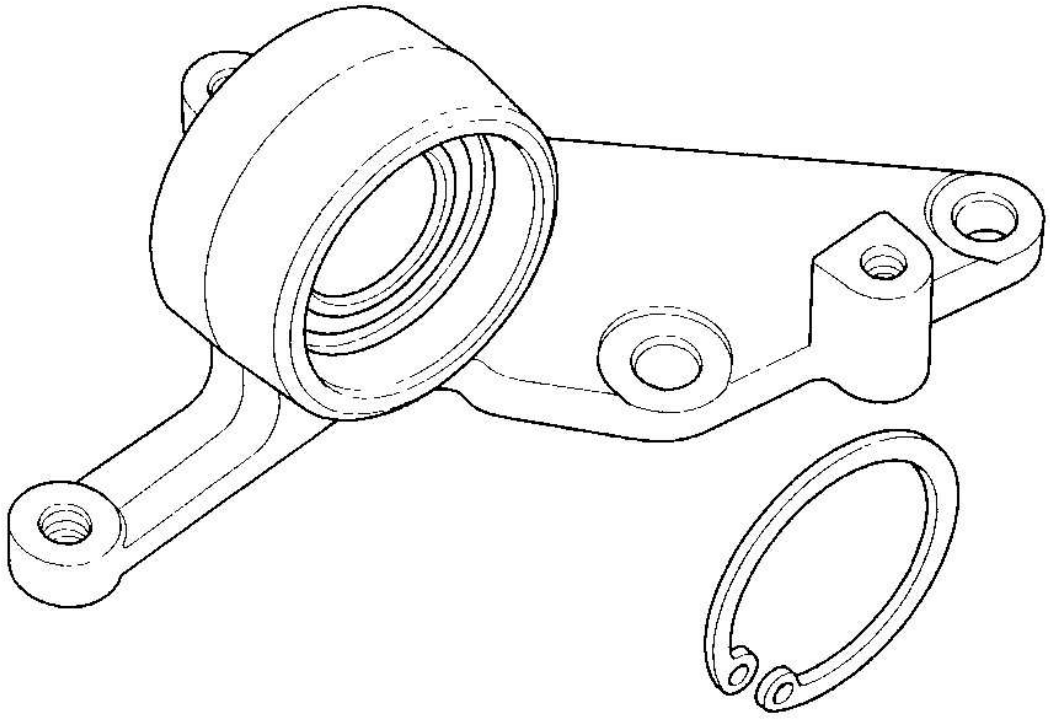


Fig. 64: Pressing Intermediate Shaft Out Of Intermediate Shaft Bearing Using Press
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the internal snap ring.



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Fig. 65: Identifying Internal Snap Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Press the intermediate shaft bearing (A) out of the bearing support (B) using the special tools and a press.

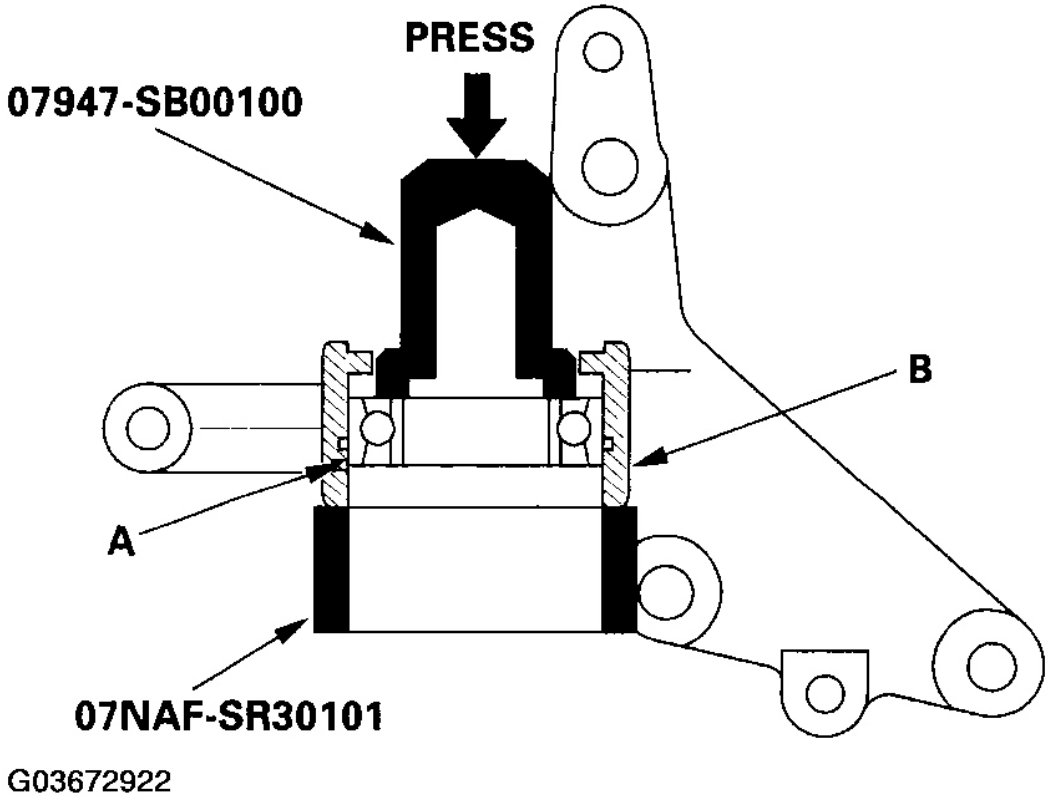


Fig. 66: Pressing Intermediate Shaft Bearing Out Of Bearing Support Using Special Tools And Press
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INTERMEDIATE SHAFT REASSEMBLY

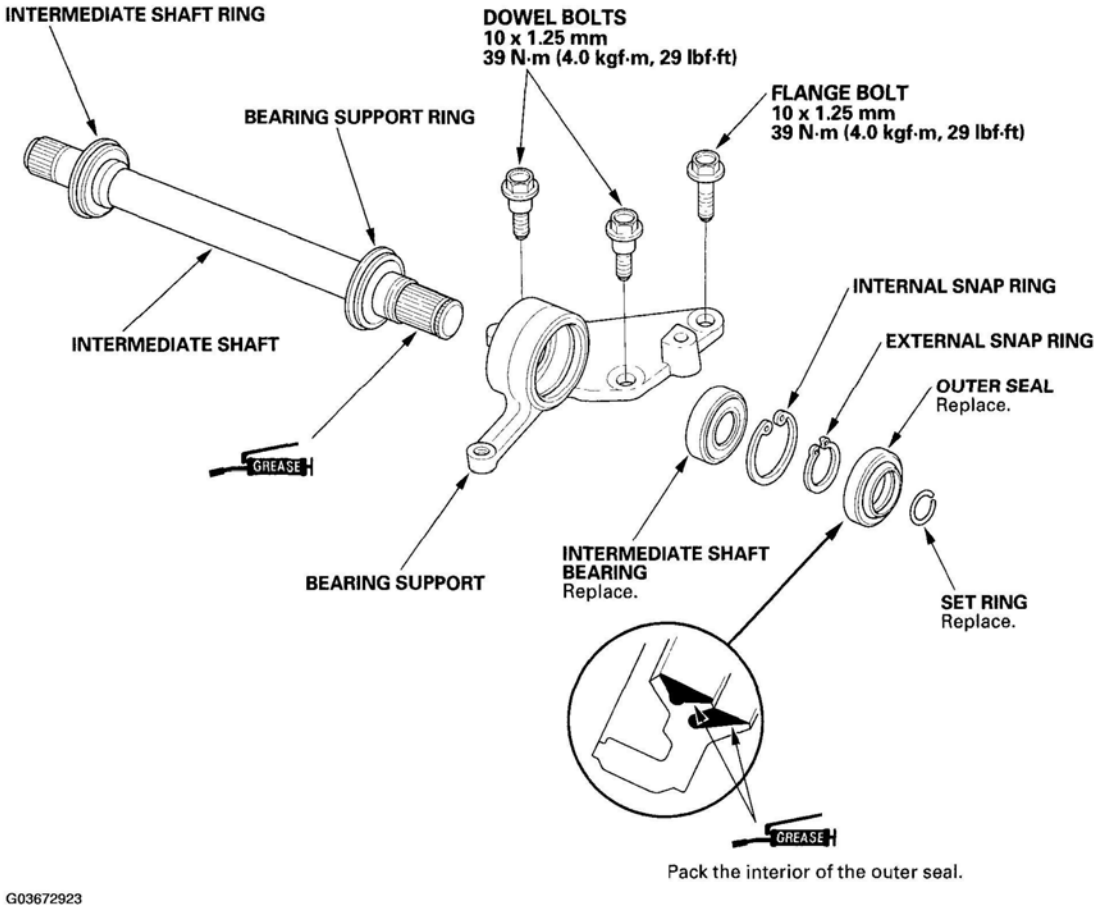


Fig. 67: Exploded View Of Intermediate Shaft With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

- Driver 07749-0010000
- Attachment, 52 x 55 mm 07746-0010400
- Attachment, 35 mm I.D. 07746-0030400
- Oil seal driver 07GAD-PH70201

NOTE: Refer to Fig. 67 as needed during this procedure.

1. Clean the disassembled parts with solvent, and dry them with compressed air. Do not wash the rubber parts with solvent.

2. Press the intermediate shaft bearing (A) into the bearing support (B) using the special tools and a press.

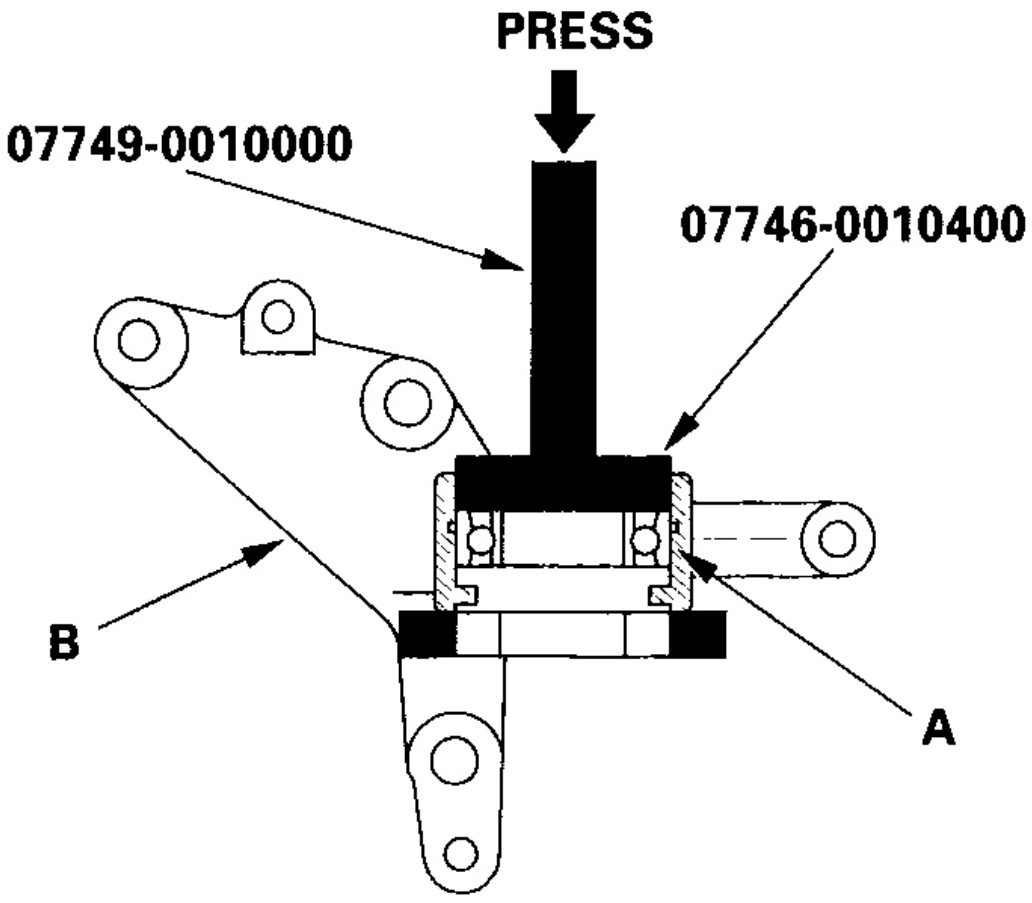


Fig. 68: Pressing Intermediate Shaft Bearing Into Bearing Support
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install, then seat the internal snap ring in the groove of the bearing support.

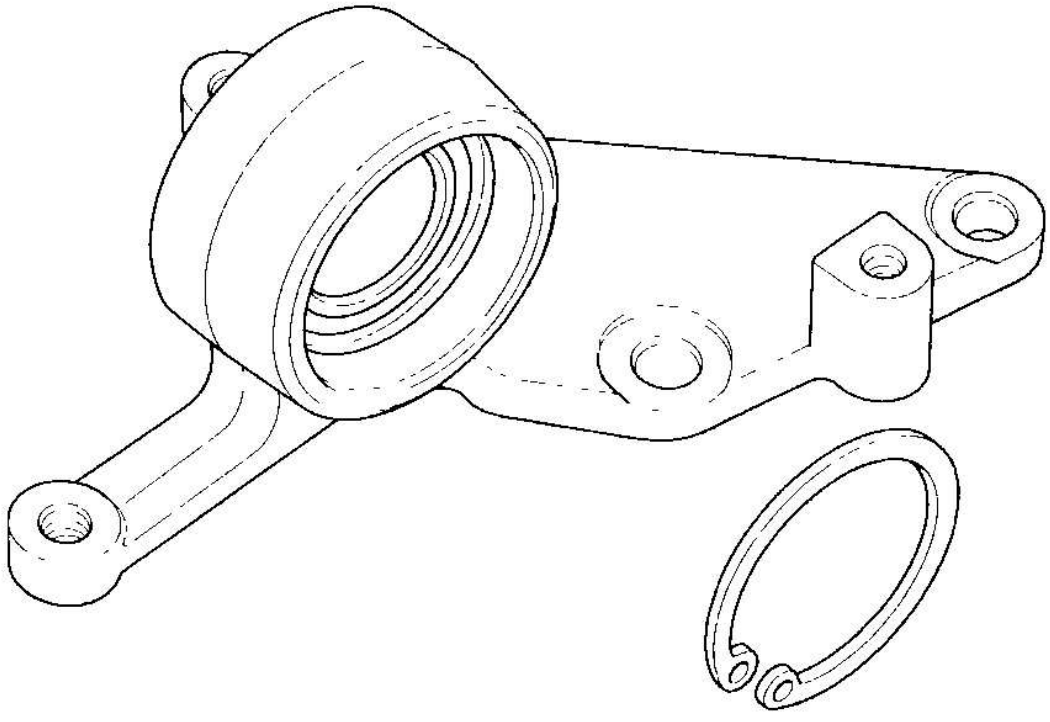


Fig. 69: Seating Internal Snap Ring In Groove Of Bearing Support
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Press the intermediate shaft (A) into the shaft bearing (B) using the special tool and a press.

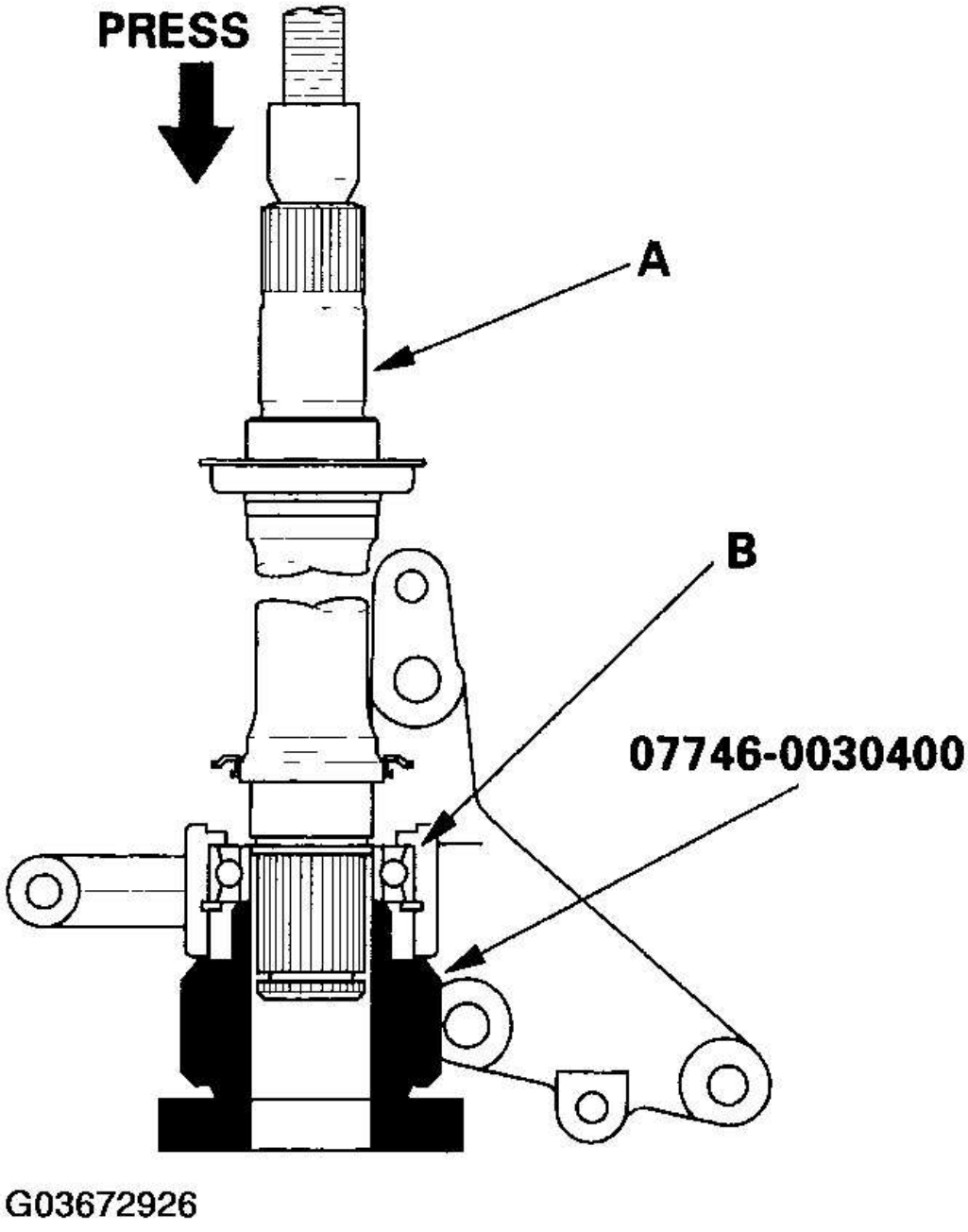


Fig. 70: Pressing Intermediate Shaft Into Shaft Bearing Using Special Tool And Press
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install, then seat the external snap ring (A) in the groove of the intermediate shaft (B).

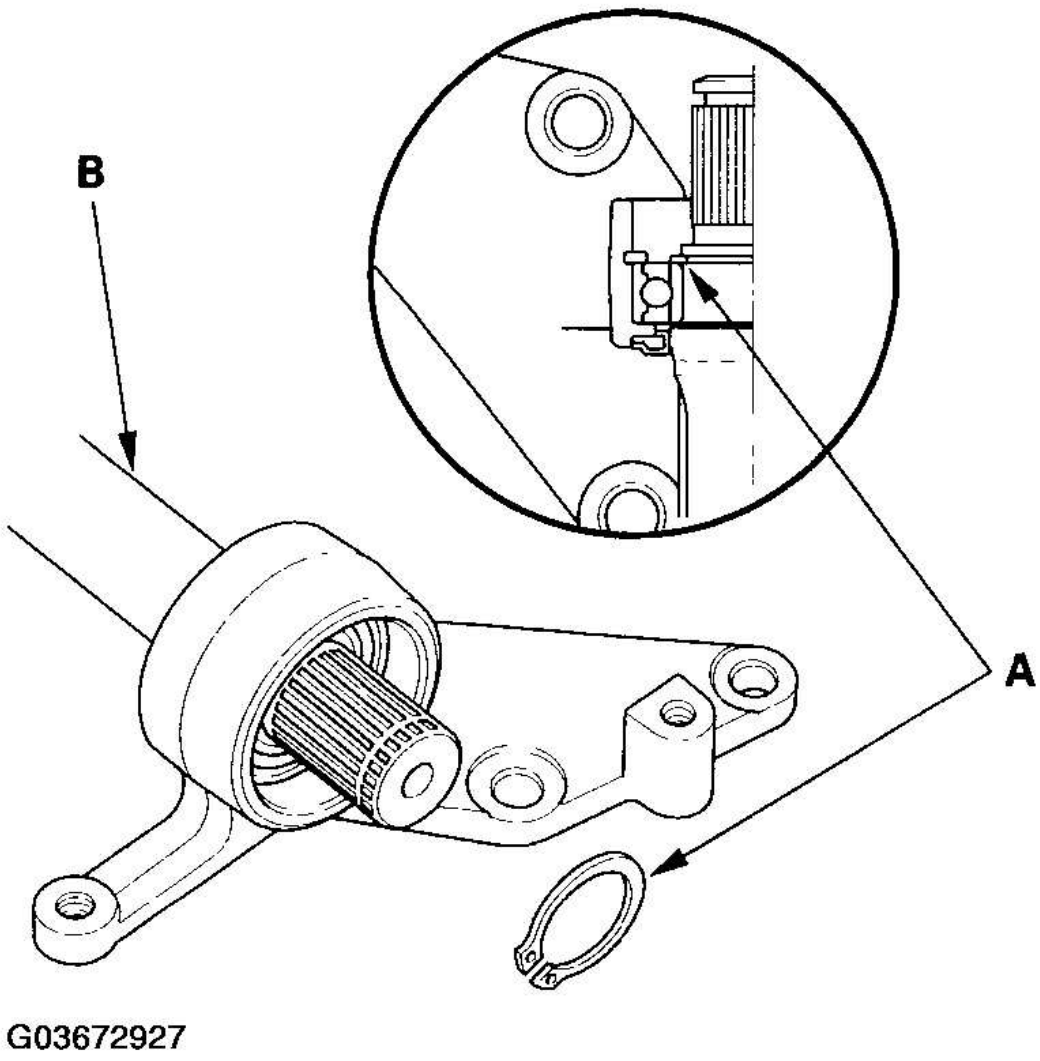


Fig. 71: Seating External Snap Ring In Groove Of Intermediate Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the outer seal (A) into the bearing support (B) using the special tool and a press.

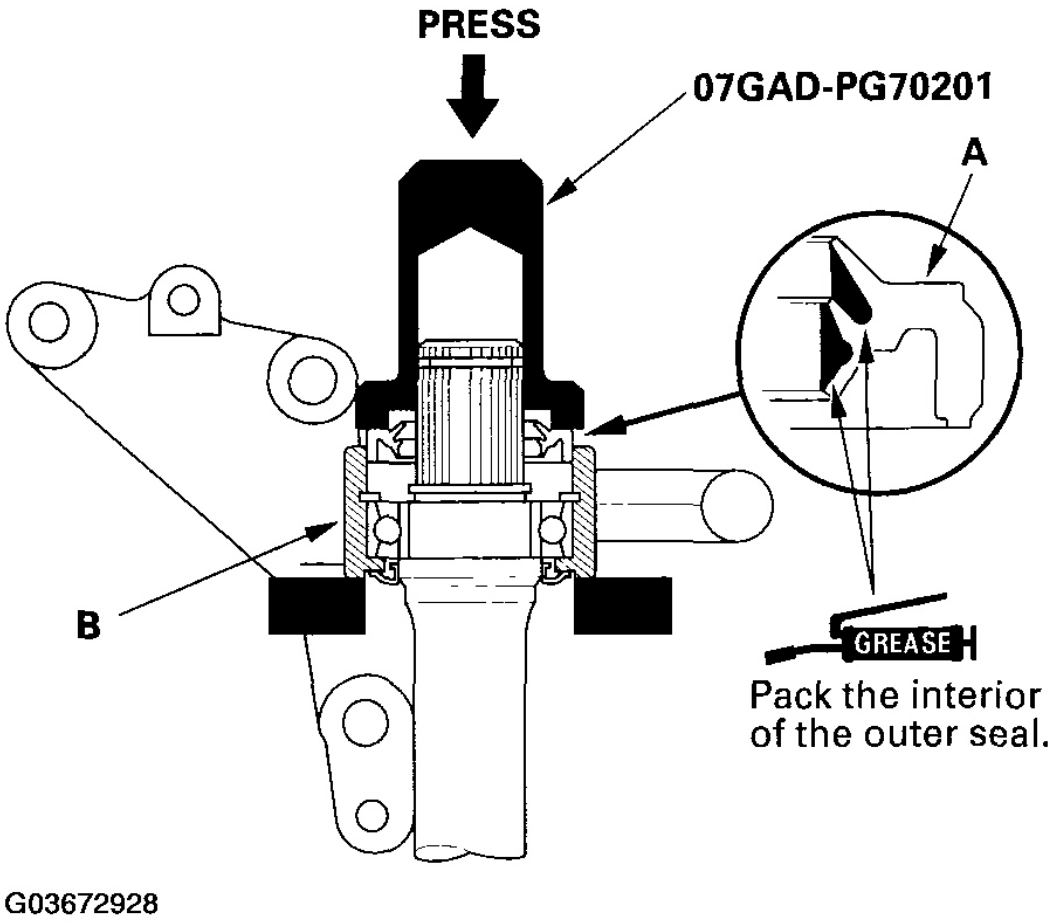


Fig. 72: Identifying Outer Seal Into Bearing Support Using Special Tool And Press
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the set ring.

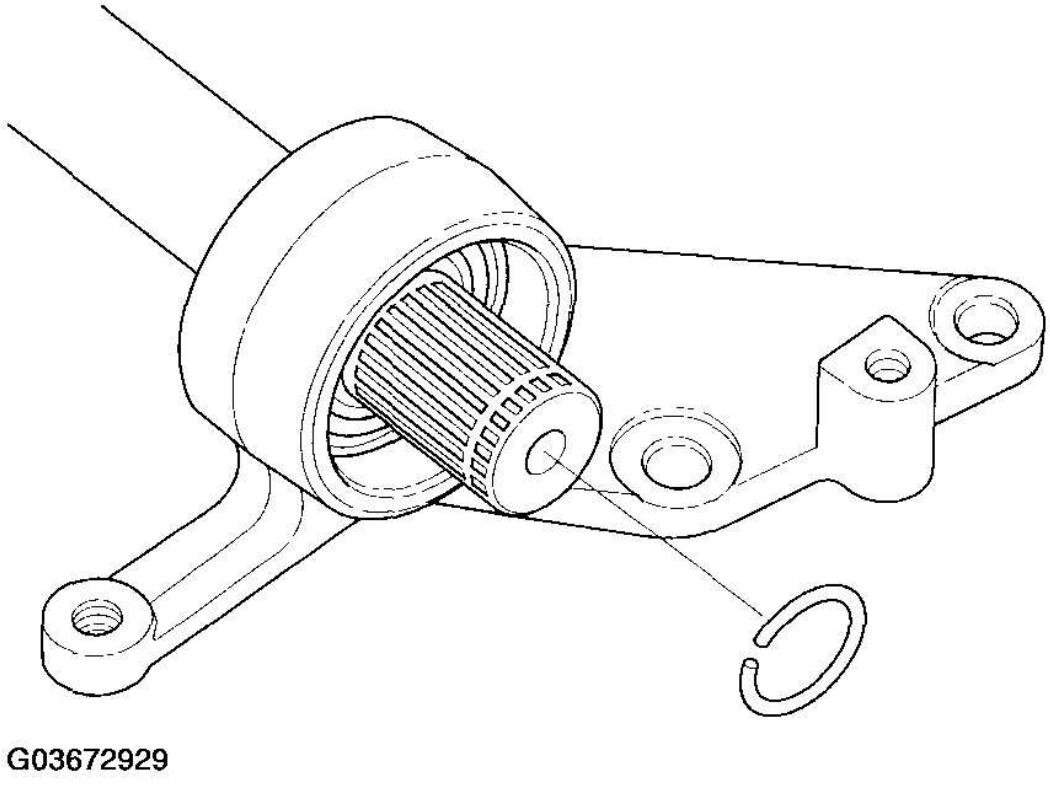


Fig. 73: Identifying Set Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INTERMEDIATE SHAFT INSTALLATION

1. Use solvent or brake cleaner to thoroughly clean the areas where the intermediate shaft (A) contacts the transmission (differential), and dry them with compressed air. Insert the intermediate shaft assembly into the differential. Hold the intermediate shaft horizontally to prevent damage to the differential oil seal (B).

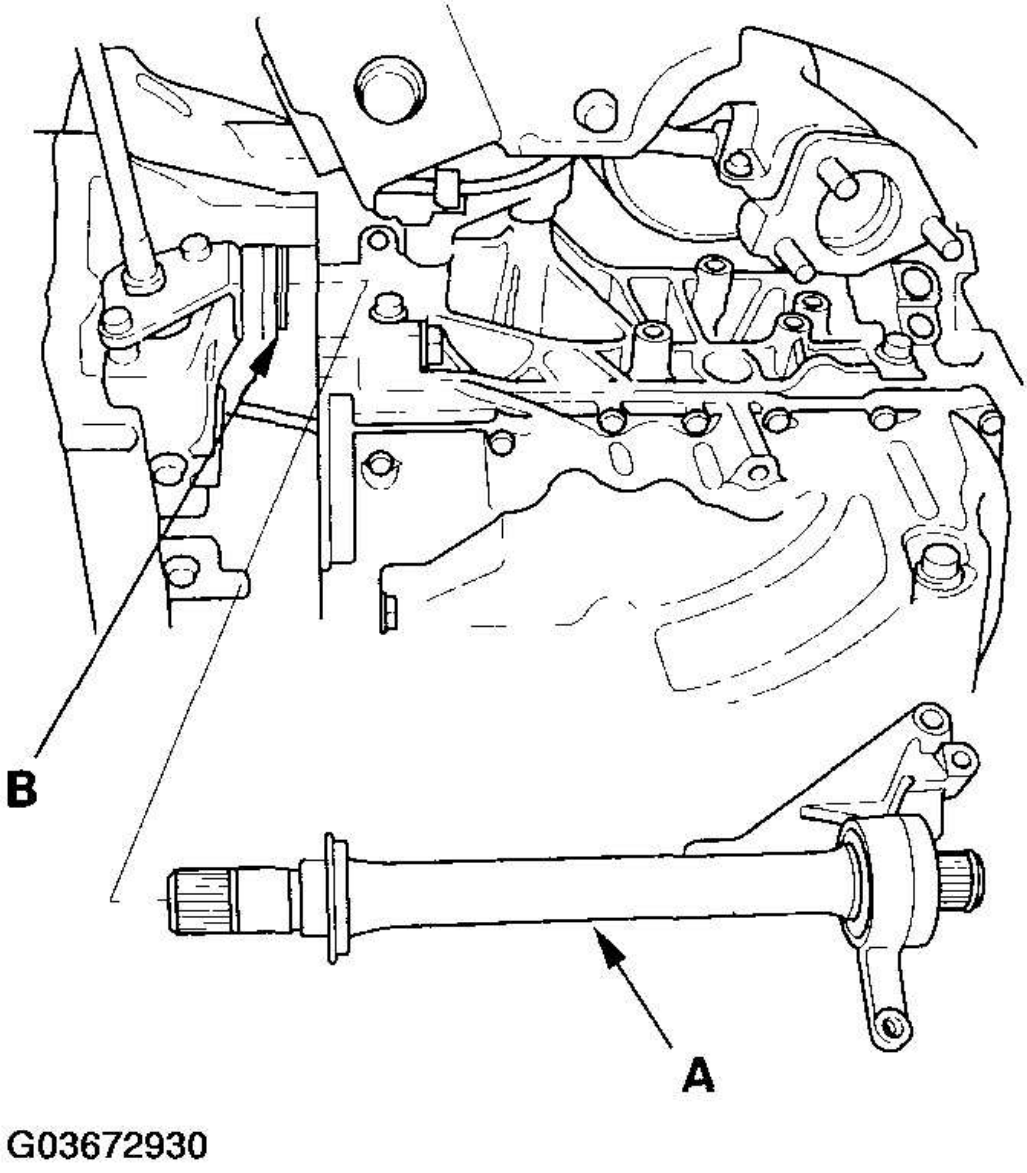


Fig. 74: Using Solvent Or Brake Cleaner To Clean Intermediate Shaft Contacts Transmission (Differential)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the flange bolt (A) and two dowel bolts (B).

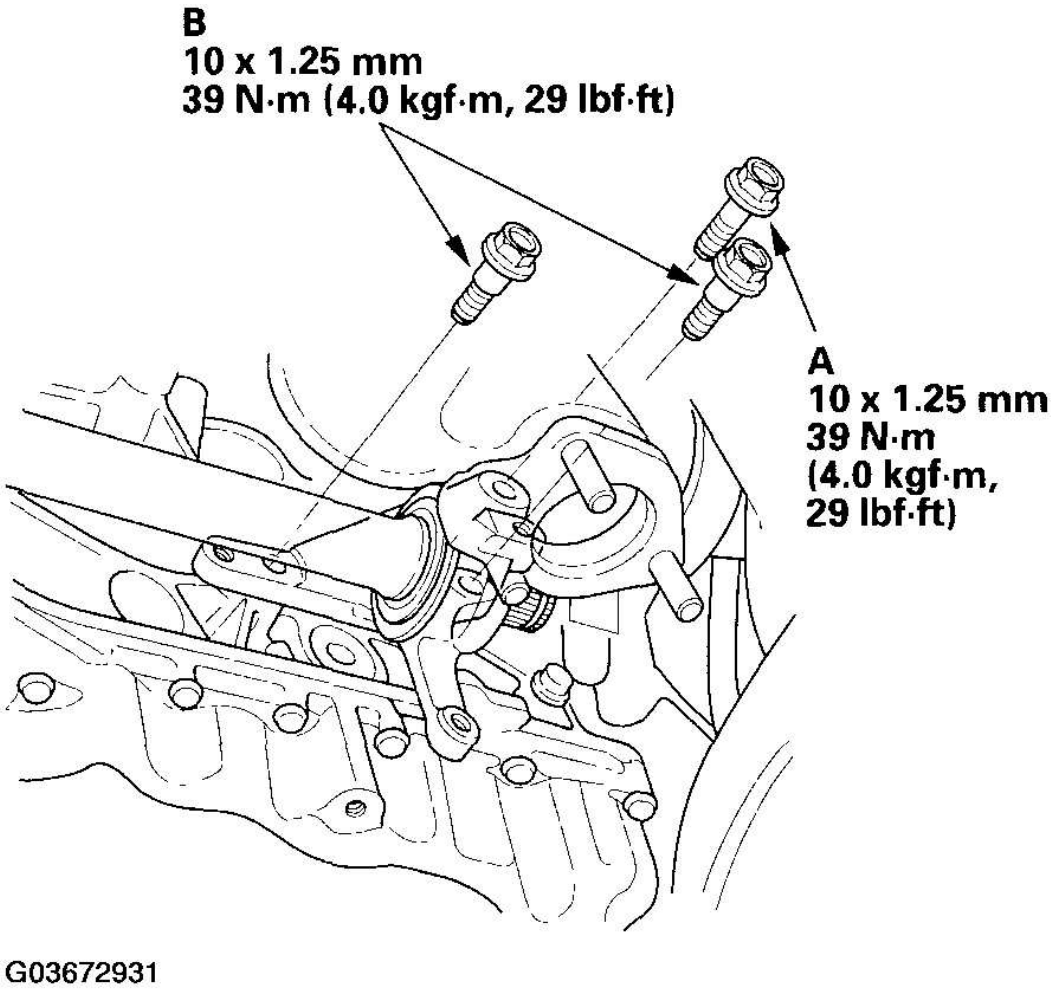


Fig. 75: Identifying Flange Bolt And Dowel Bolts With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the heat shield (A) and rear warm up three way catalytic converter (rear WU-TWC) bracket (B).

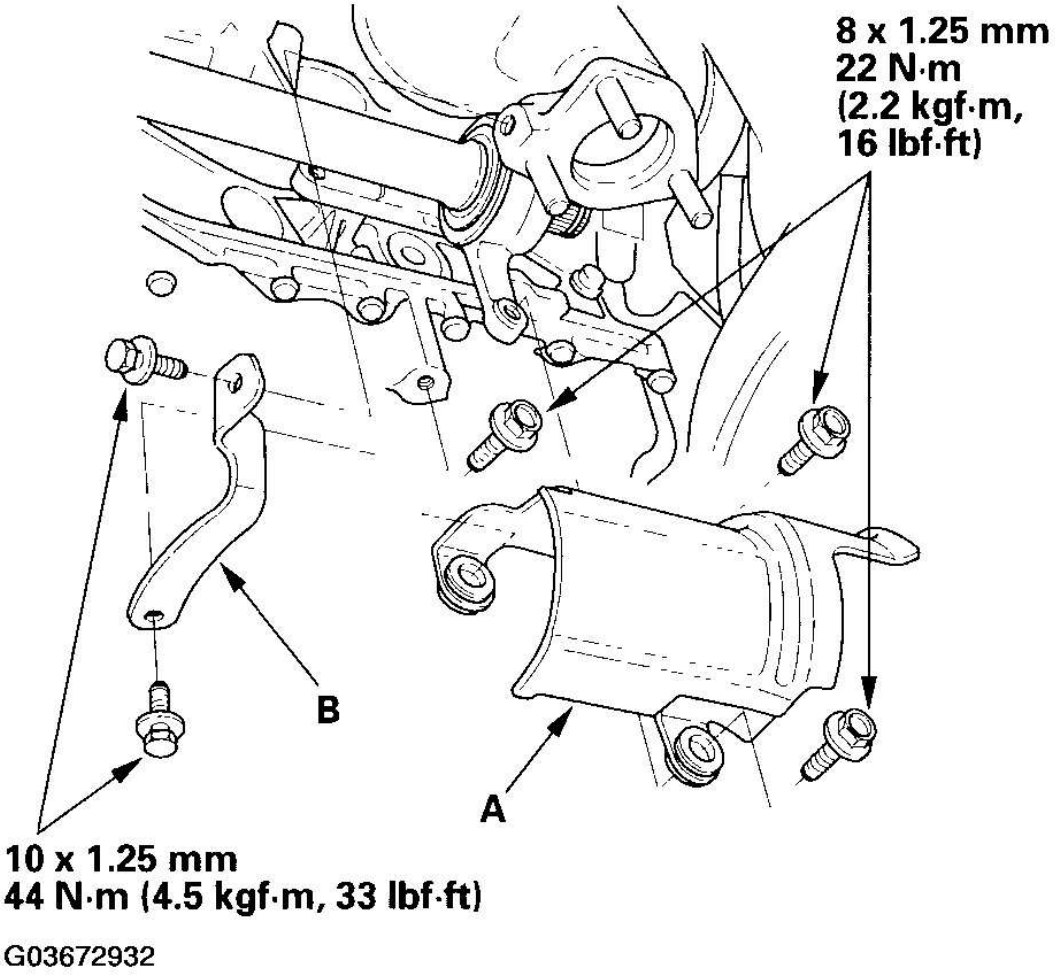


Fig. 76: Identifying Heat Shield And Rear WU-TWC Bracket With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the exhaust pipe A (see step 28 in **ENGINE INSTALLATION**).
5. Install the right driveshaft (see **DRIVESHAFT INSTALLATION**).
6. Refill the transmission fluid.
    - Manual transmission (see **MANUAL TRANSMISSION**)
    - Automatic transmission (see **ATF REPLACEMENT**)

2003-07 DRIVELINE/AXLE

Driveline/Axle - Accord

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07GAD-PH70201	Oil Seal Driver	1
②	07NAF-SR30101 or 07NAF-SR34101	Half Shaft Base	1
③	07XAC-001010A	Threaded Adapter, 22 x 1.5 mm	1
④	07XAC-001020A	Threaded Adapter, 24 x 1.5 mm	1
⑤	07746-0010400	Attachment, 52 x 55 mm	1
⑥	07746-0030400	Attachment, 35 mm I.D.	1
⑦	07749-0010000	Driver	1
⑧	07947-SB00100	Oil Seal Driver	1

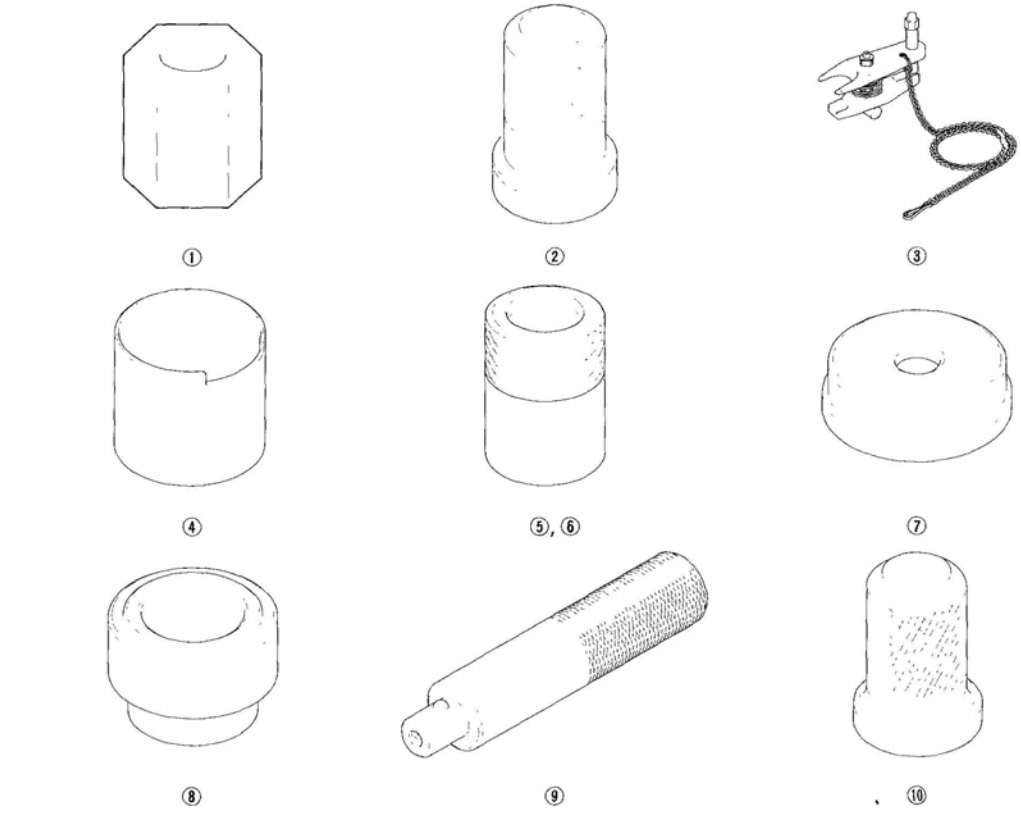


Fig. 1: View Of Special Service Tools And Description Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

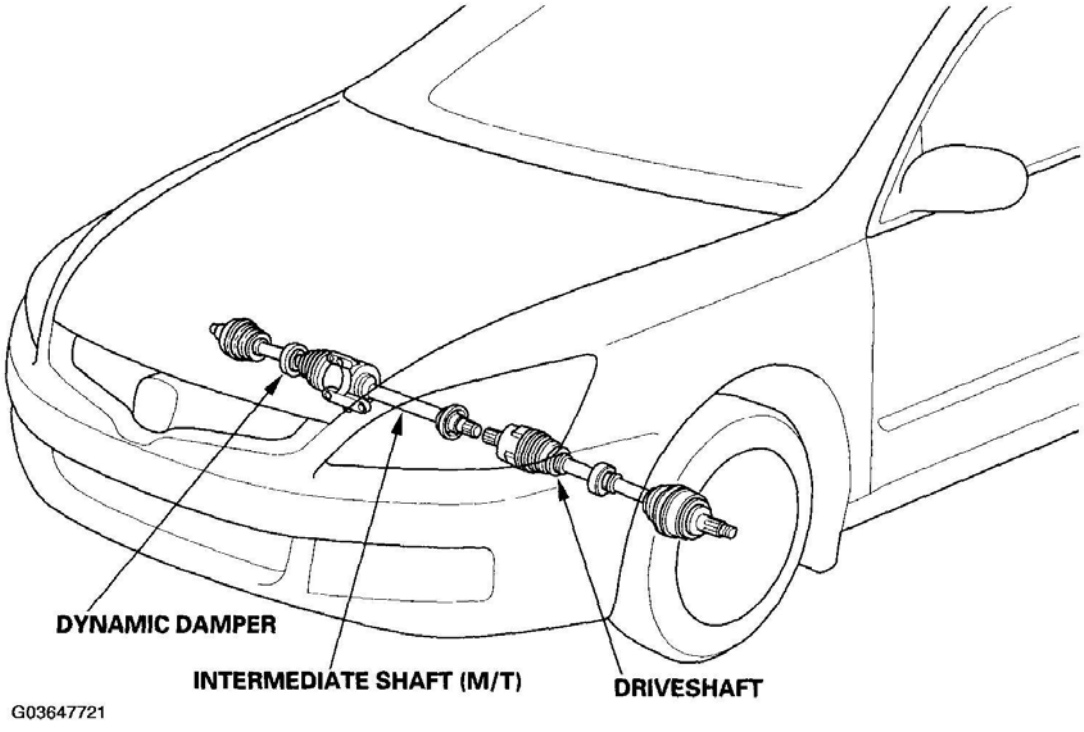


Fig. 2: Identifying Driveline/Axle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DRIVESHAFT INSPECTION

1. Check the inboard boot (A) and the outboard boot (B) on the driveshaft (C) for cracks, damage, leaking grease, and loose boot bands (D). If any damage is found, replace the boot and boot bands.

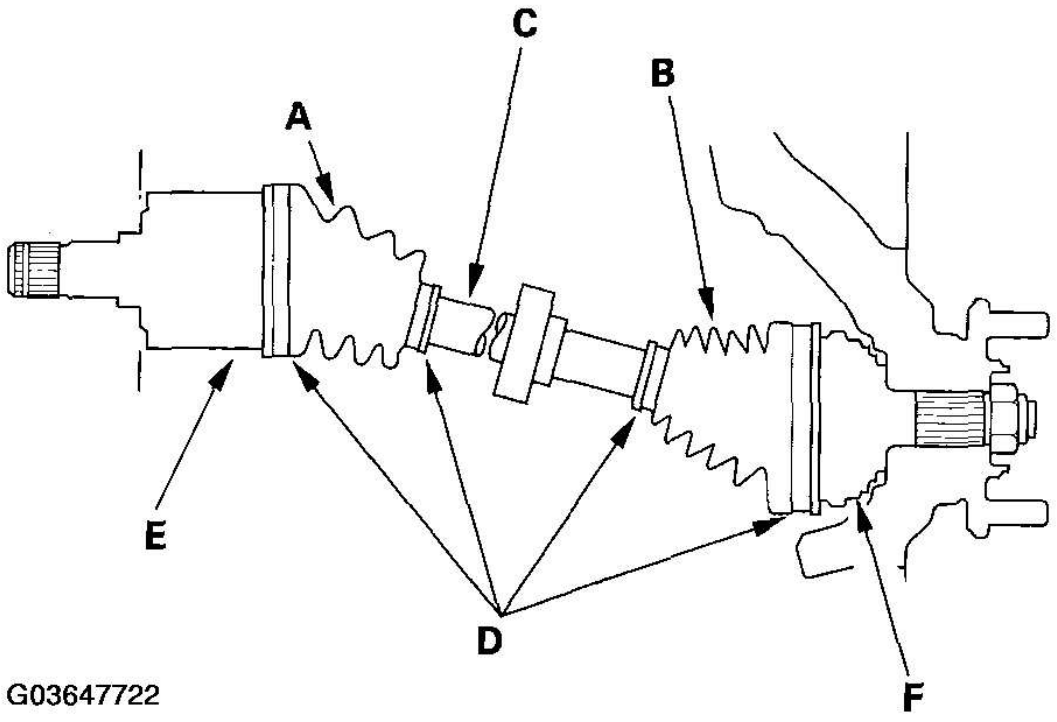


Fig. 3: Inspecting Inboard Boot And Outboard Boot On Driveshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check the driveshaft for cracks and damage. If any damage is found, replace the driveshaft.
3. Check the inboard joint (E) and the out board joint (F) for cracks and damage. If any damage is found, replace the inboard joint or the outboard joint as an assembly.
4. Hold the inboard joint and turn the front wheel by hand, then make sure the joint is not excessively loose. If necessary, replace the inboard joint or the outboard joint as an assembly.

DRIVESHAFT REMOVAL

1. Raise the vehicle on a lift.
2. Remove the front wheels.
3. Lift up the locking tab (A) on the spindle nut (B), then remove the nut.

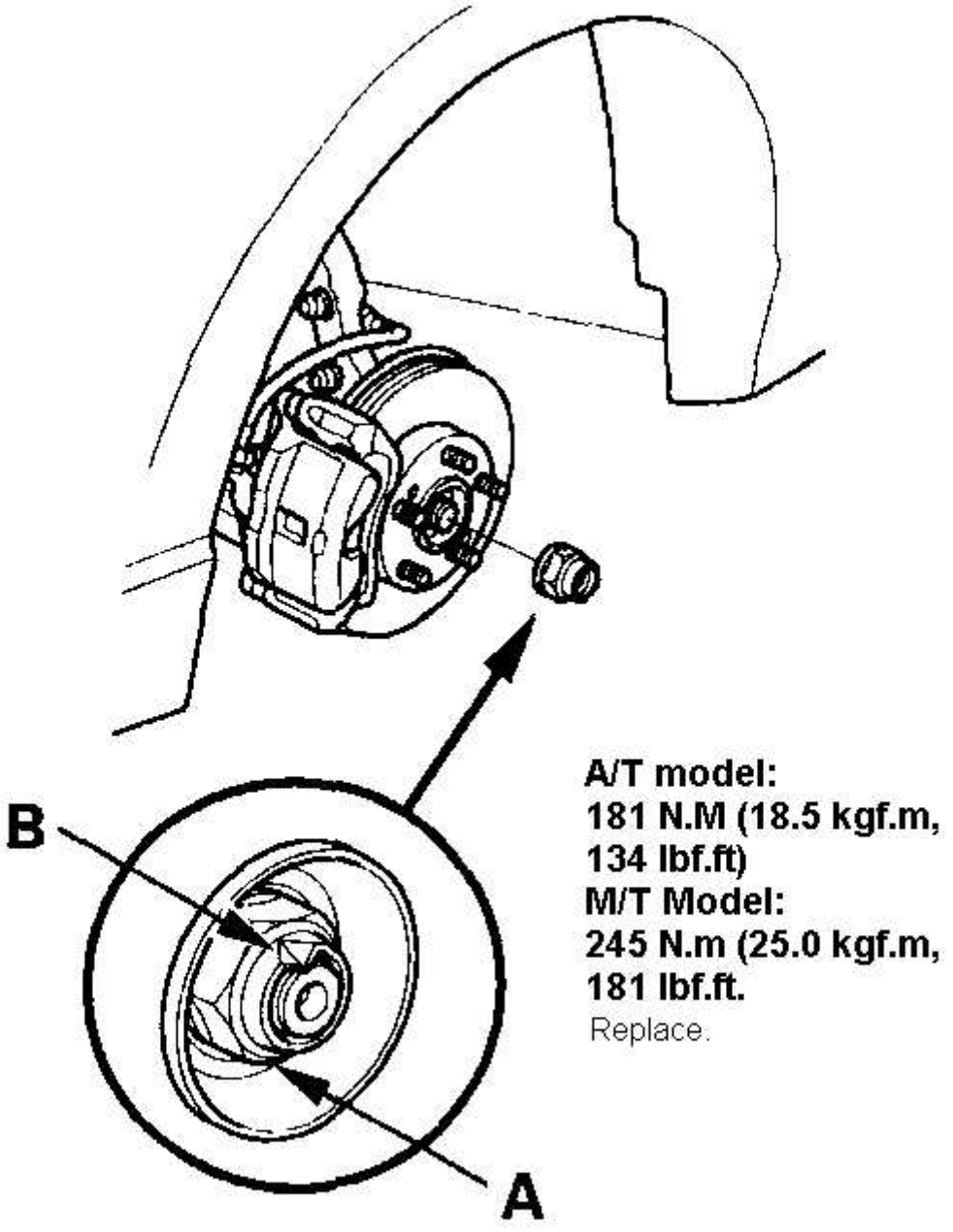


Fig. 4: Removing Wheel Nuts And Front Wheels With Torque Specifications

4. Drain the transmission fluid. Reinstall the drain plug using a new washer:
   - Manual transmission (see **TRANSMISSION FLUID INSPECTION AND REPLACEMENT**)
   - Automatic transmission (see **ATF REPLACEMENT**)
5. Separate the front stabilizer link from the lower arm (see **STABILIZER LINK REPLACEMENT**).
6. Remove the self-locking nut (A), 12 mm flange bolt (B), and 10 mm flange bolt (C), then remove the damper fork (D).

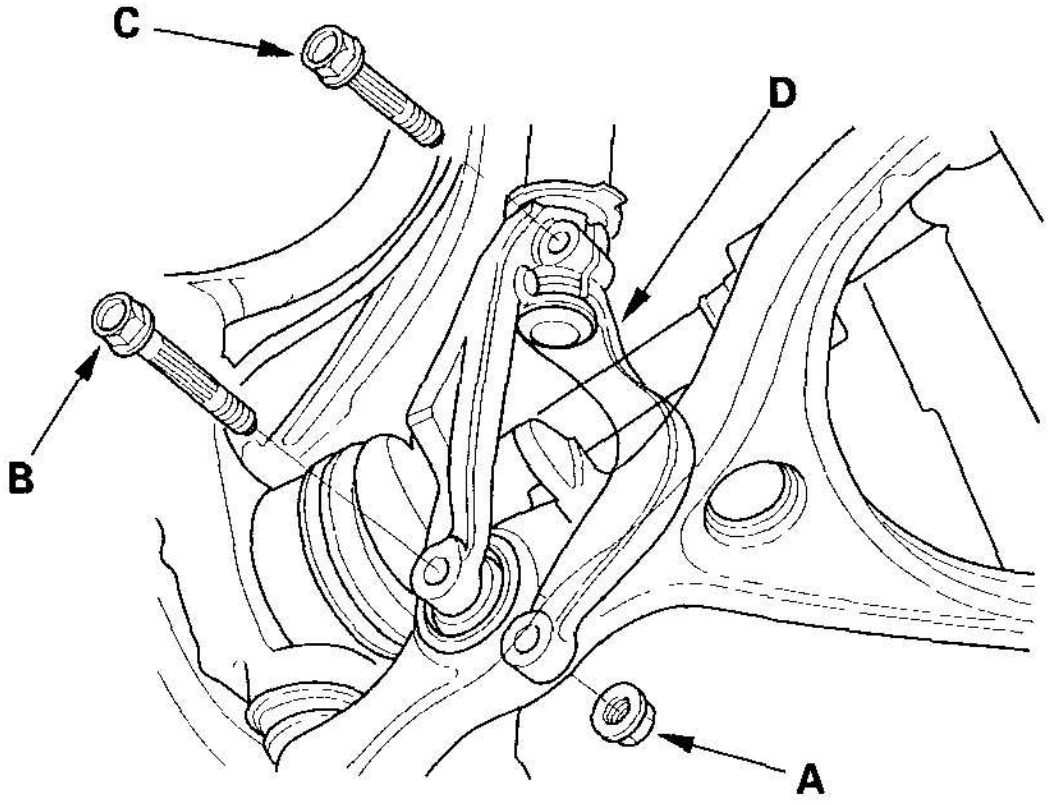


Fig. 5: Removing Damper Fork
Courtesy of AMERICAN HONDA MOTOR CO., INC.

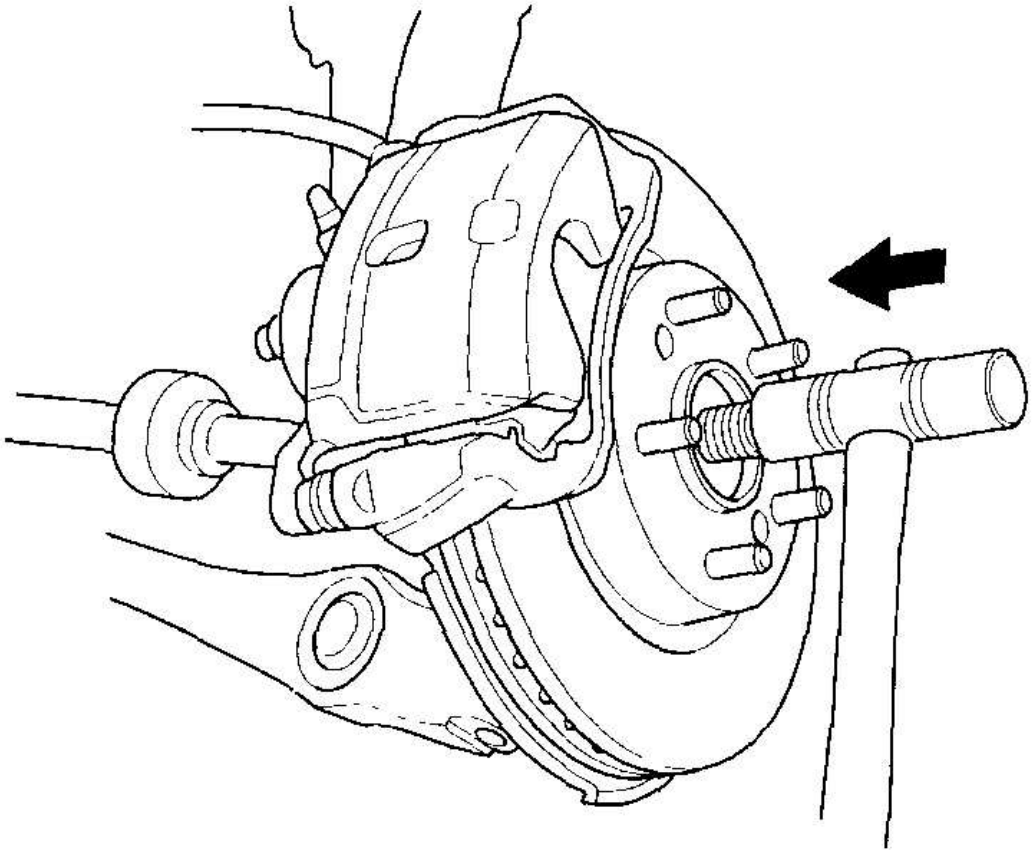
7. Remove the cotter pin form the lower arm ball joint castle nut, and remove the

nut, then separate the ball joint from the lower arm using the ball joint thread protector and remover (see **KNUCKLE/HUB REPLACEMENT**).

NOTE:

- **To avoid damaging the ball joint, install the ball joint thread protector onto the threads of the ball joint.**
- **Be careful not to damage the ball joint boot when installing the remover.**

8. Pull the knuckle outward, and remove the outboard joint from the front wheel hub using a plastic hammer.



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Fig. 6: Removing Outboard Joint From Front Wheel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. A/T model: Remove the heat shield.).

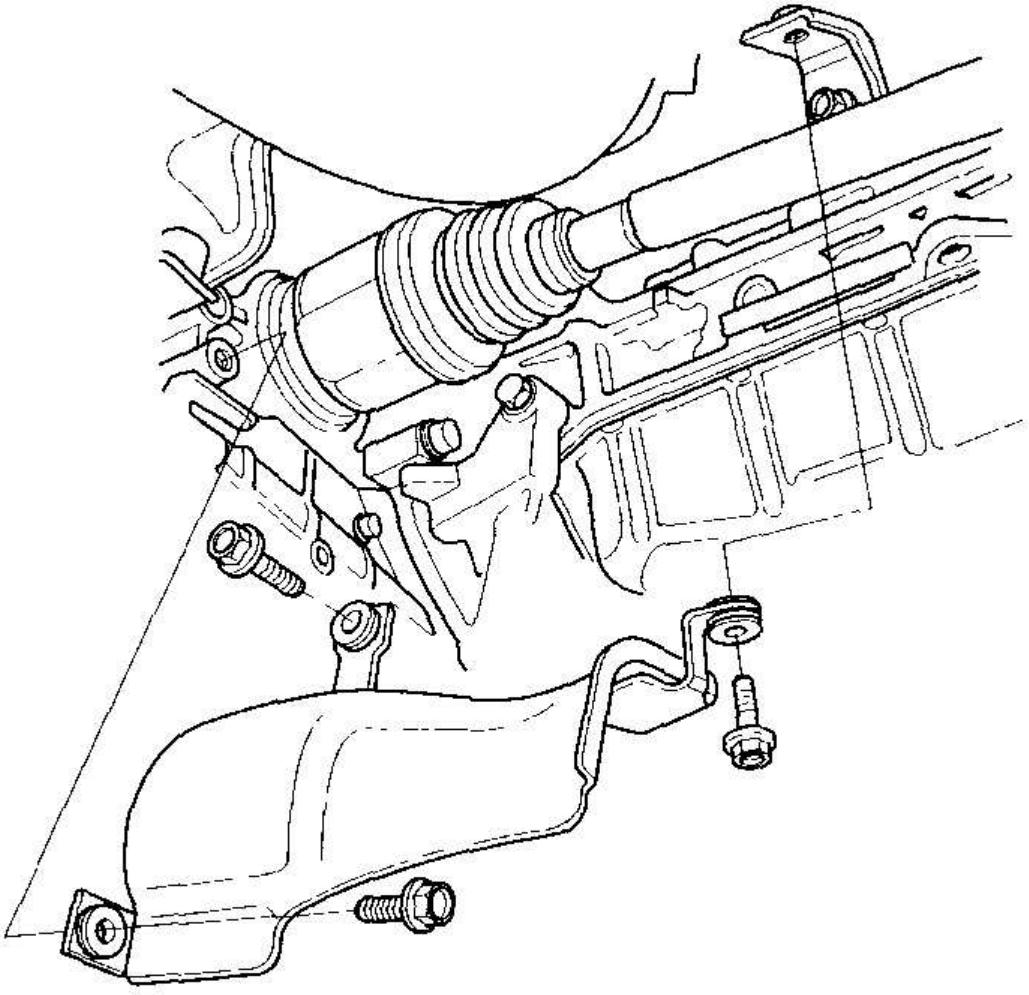
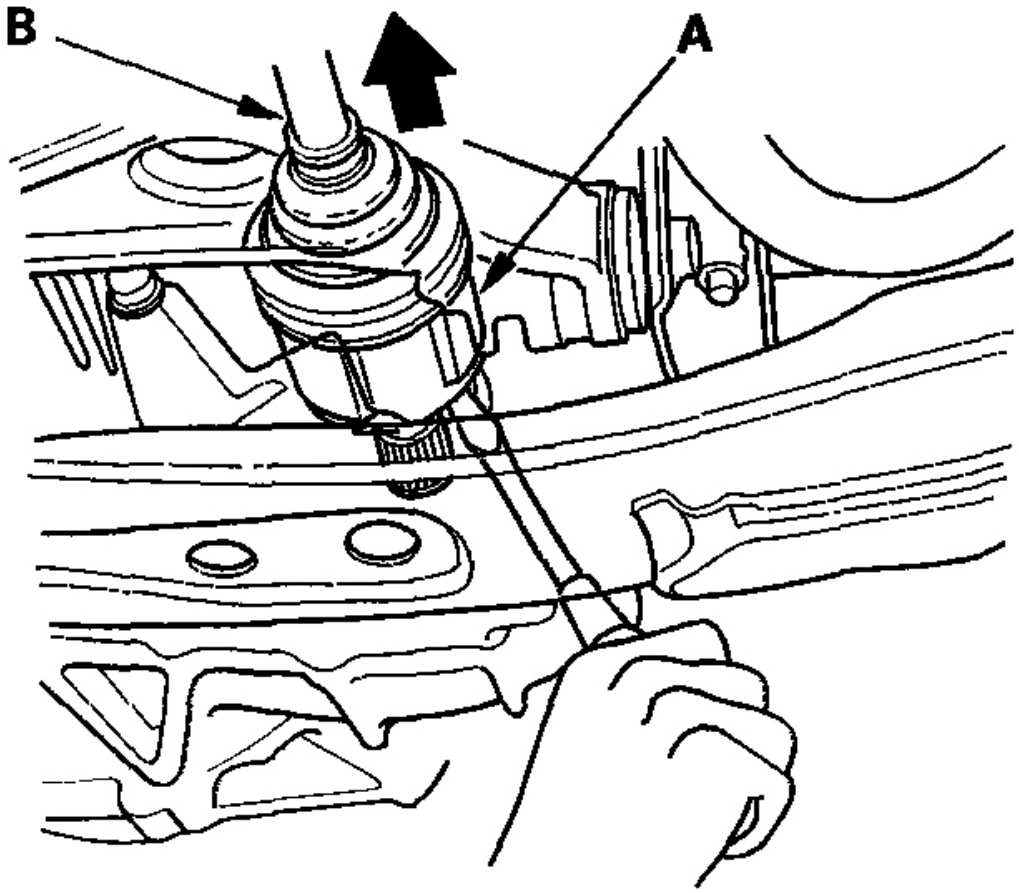


Fig. 7: Removing Heat Shield (A/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Left driveshaft: Pry the inboard joint (A) from the transmission housing with a

prybar. Remove the driveshaft as an assembly.

NOTE: Do not pull on the driveshaft (B), or the inboard joint may come apart. Pull the driveshaft straight out to avoid damaging the oil seal.



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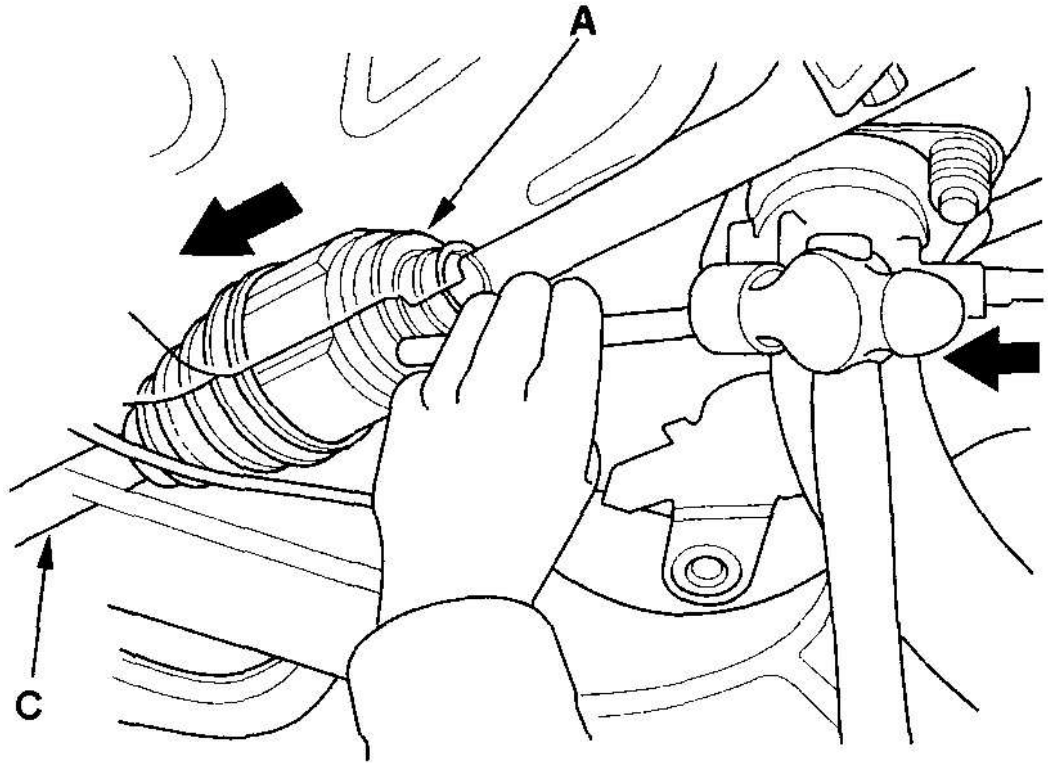
Fig. 8: Prying Inboard Joint From Differential Case (Left Driveshaft)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Right driveshaft: Drive the inboard joint (A) off of the intermediate shaft using

a drift and hammer (M/T model). Pry the inboard joint (B) from the transmission housing with a prybar (A/T model). Remove the driveshaft as an assembly.

NOTE: Do not pull on the driveshaft (C), or the inboard joint may come apart. Pull the driveshaft straight out to avoid damaging the oil seal.

M/T model:



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Fig. 9: Removing Intermediate Shaft Inboard Joint (Right Driveshaft M/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/T model:

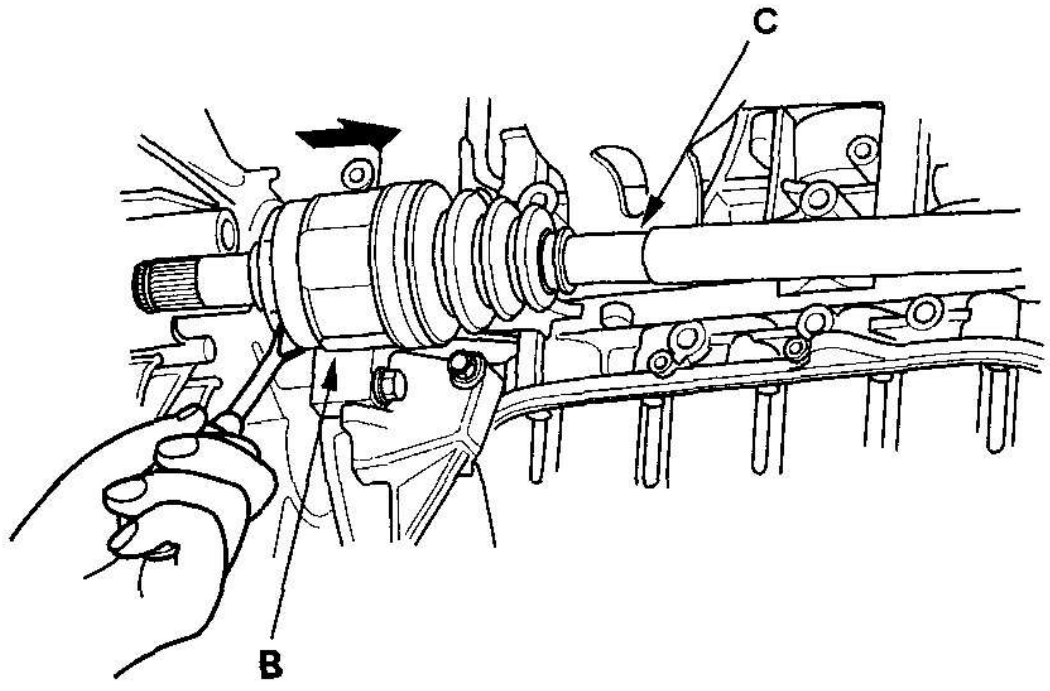


Fig. 10: Prying Inboard Joint From Differential Case (Right Driveshaft A/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DRIVESHAFT DISASSEMBLY

Special Tools Required

- Threaded adapter, 22 x 1.5 mm 07XAC-001010A
- Threaded adapter, 24 x 1.5 mm 07XAC-001020A
- Slide hammer, 5/8"-18 UNF, commercially available
- Boot band pliers, Kent-Moore J-35910 or equivalent, commercially available
- Puller, commercially available.

INBOARD JOINT SIDE

1. Remove the set ring from the inboard joint.

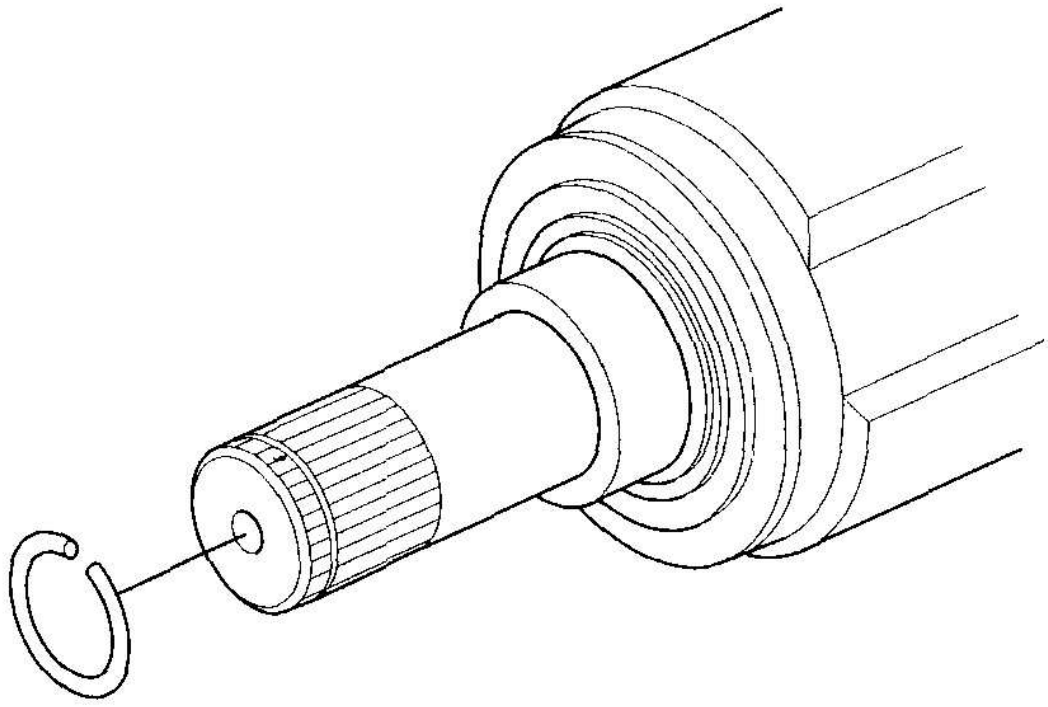


Fig. 11: Removing Set Ring From Inboard Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the boot bands. Be careful not to damage the boot and dynamic damper.
   - If the boot band is a welded type (A), cut the boot band.
   - If the boot band is a double loop type (B), lift up the band end (C), and push it into the clip (D).
   - If the boot band is a low profile type (E), pinch the boot band using commercially available boot pliers (F).

Welded Type

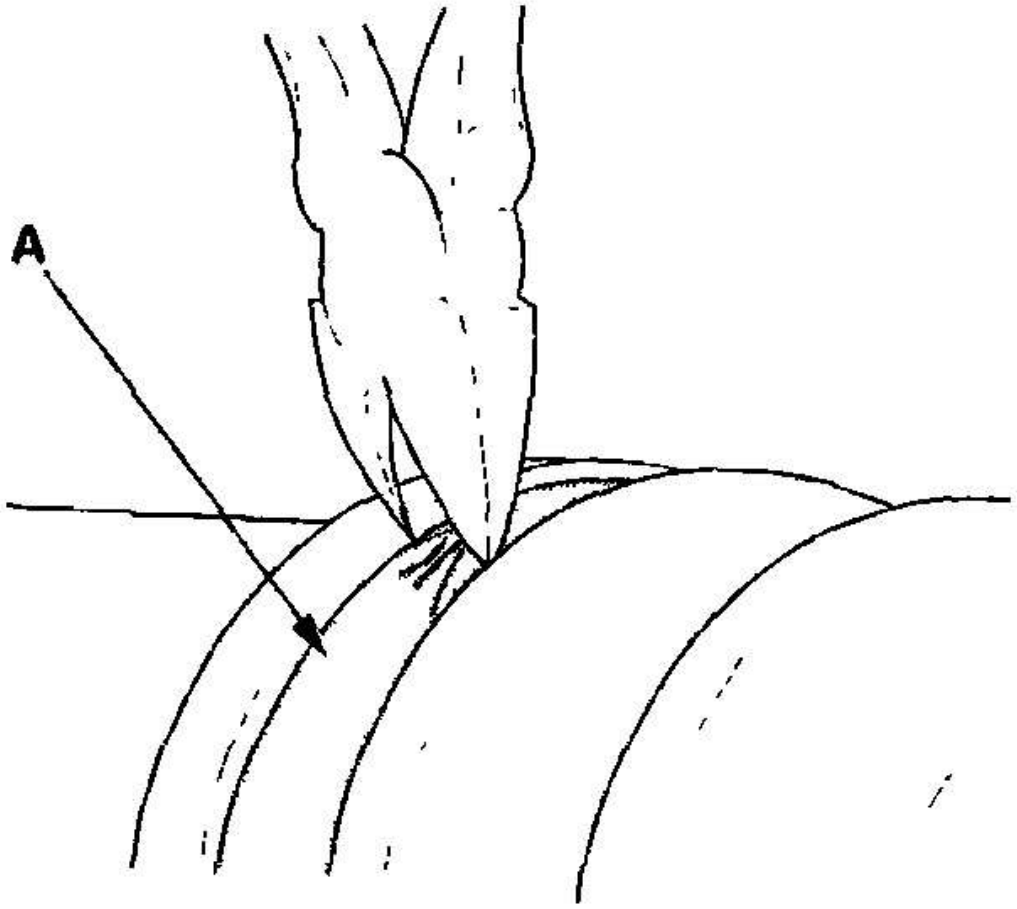


Fig. 12: Removing Boot Bands (Welded Type)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Double Loop Type

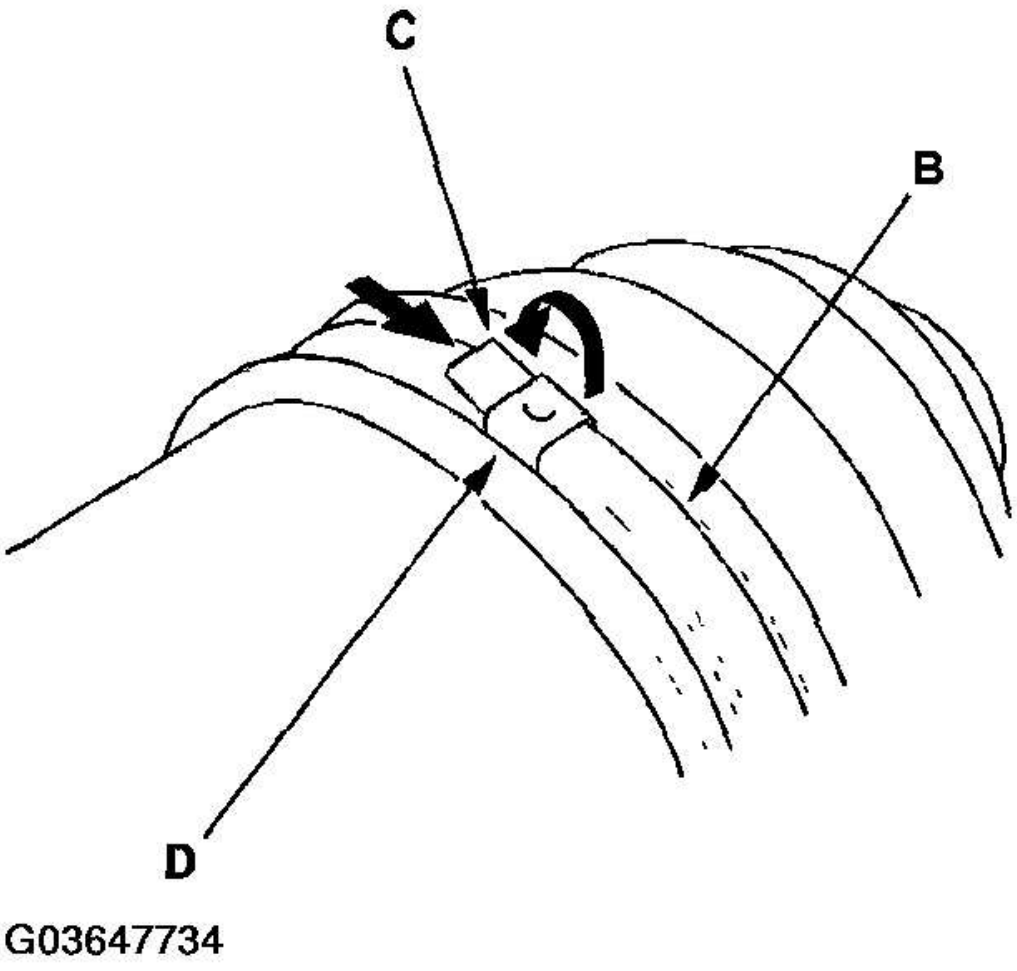


Fig. 13: Removing Boot Bands (Double Loop Type)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Low Profile Type

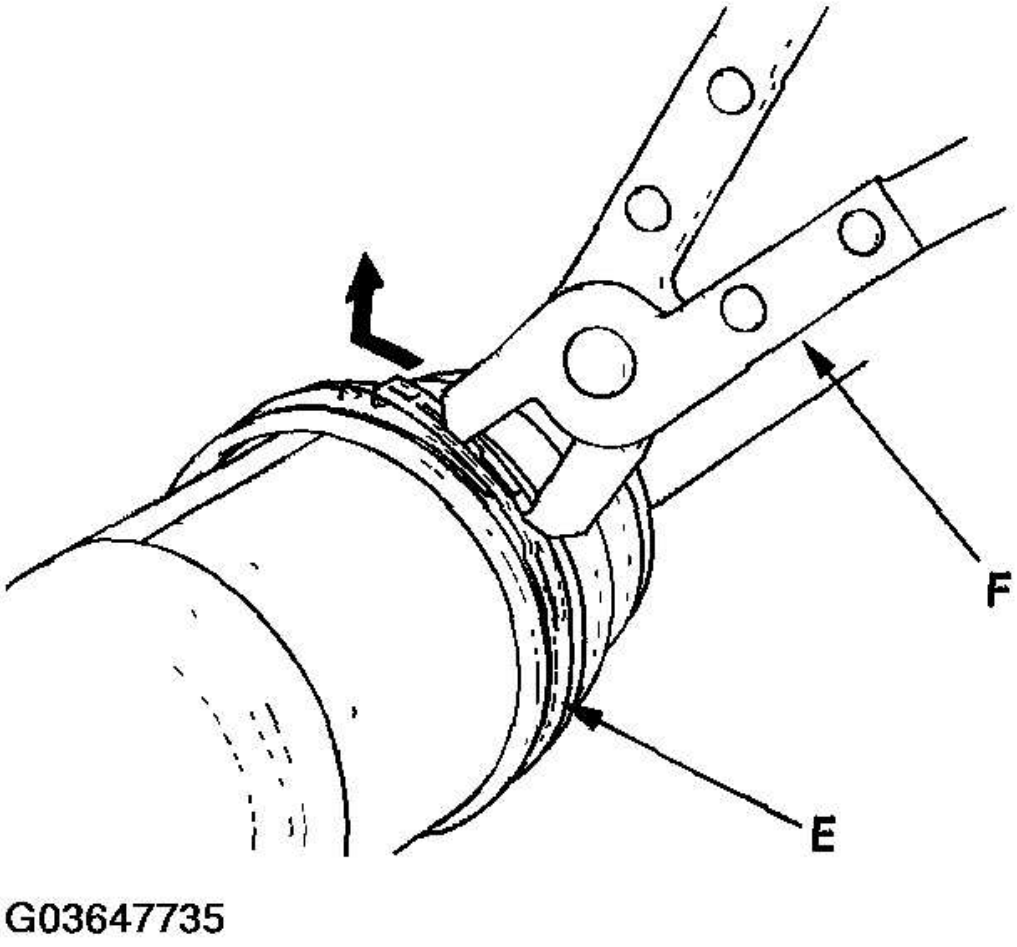


Fig. 14: Removing Boot Bands (Low Profile Type)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Make a mark (A) on each roller (B) and inboard joint (C) to identify the locations of rollers and grooves in the inboard joint. Then remove the inboard joint on the shop towel (D). Be careful not to drop the rollers when separating them from the inboard joint.

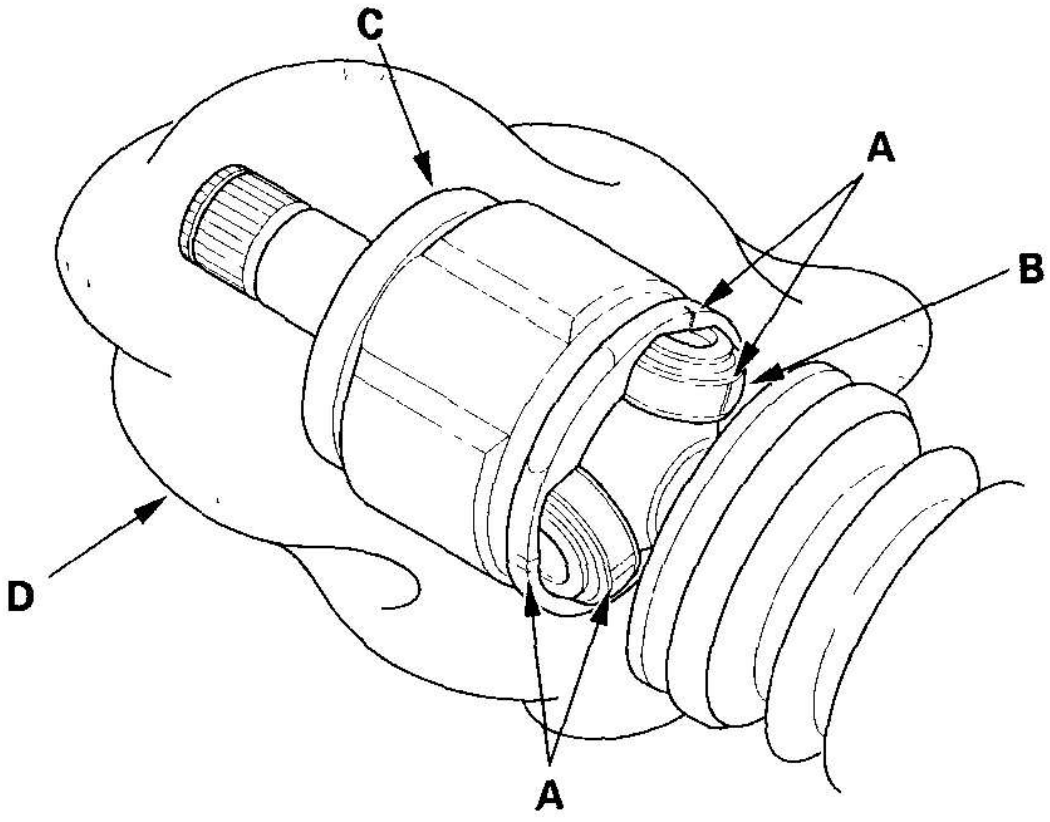


Fig. 15: Placing Mark On Roller And Inboard Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Make a mark (A) on the rollers (B) and spider (C) to identify the locations of the rollers on the spider, then remove the rollers.

NOTE:

- **Do not engrave or scribe mark on the rolling surface.**
- **If necessary, use a commercially available puller.**

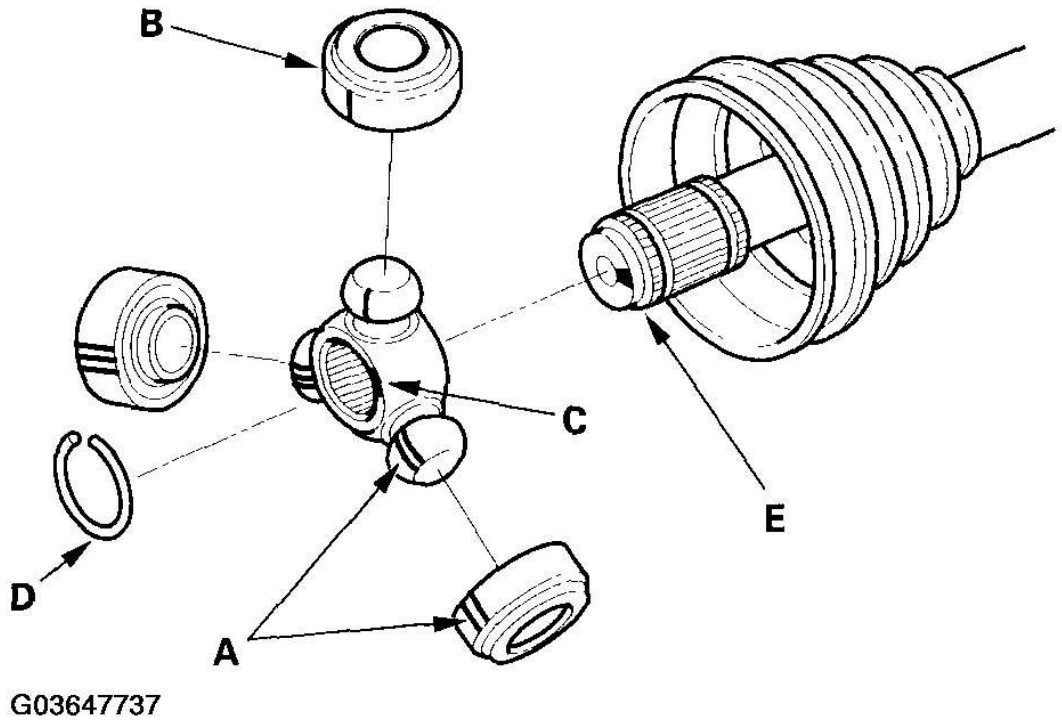


Fig. 16: Placing Marks On Rollers And Spider
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the circlip (D).
6. Mark the spider and driveshaft (E) to identify the position of the spider on the shaft.
7. Remove the spider.
8. Wrap the splines on the driveshaft with vinyl tape (A) to prevent damage to the boot.

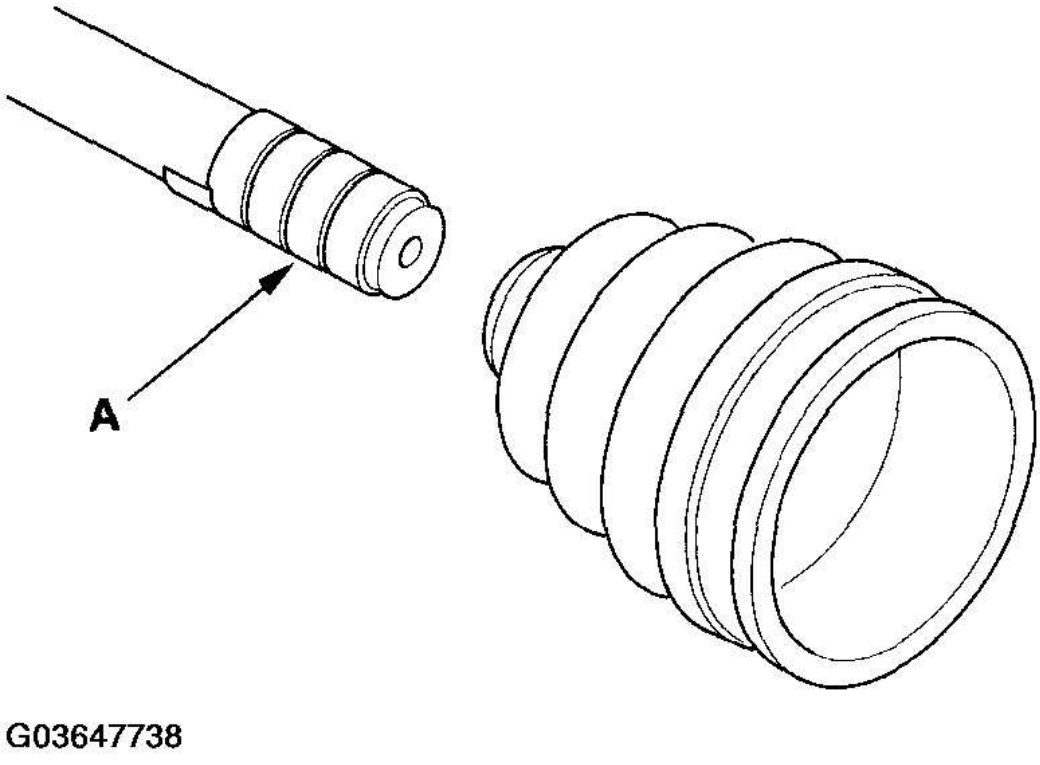


Fig. 17: Wrapping Splines On Driveshaft With Vinyl Tape
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the inboard boot. Be careful not to damage the boot.
10. Remove the vinyl tape.

OUTBOARD JOINT SIDE

1. Remove the boot bands (A). Lift up the three tabs (B) with a screwdriver. Be careful not to damage the boot and dynamic damper.

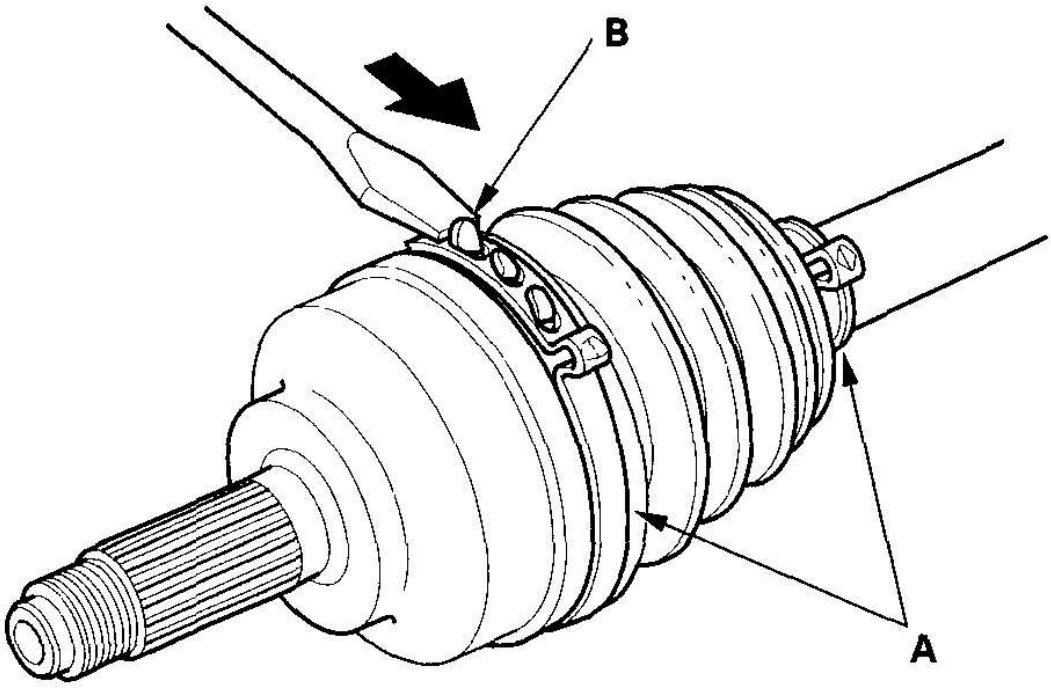


Fig. 18: Lifting Boot Bands Tabs
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Slide the outboard boot (A) partially to the inboard joint side. Be careful not to damage the boot.

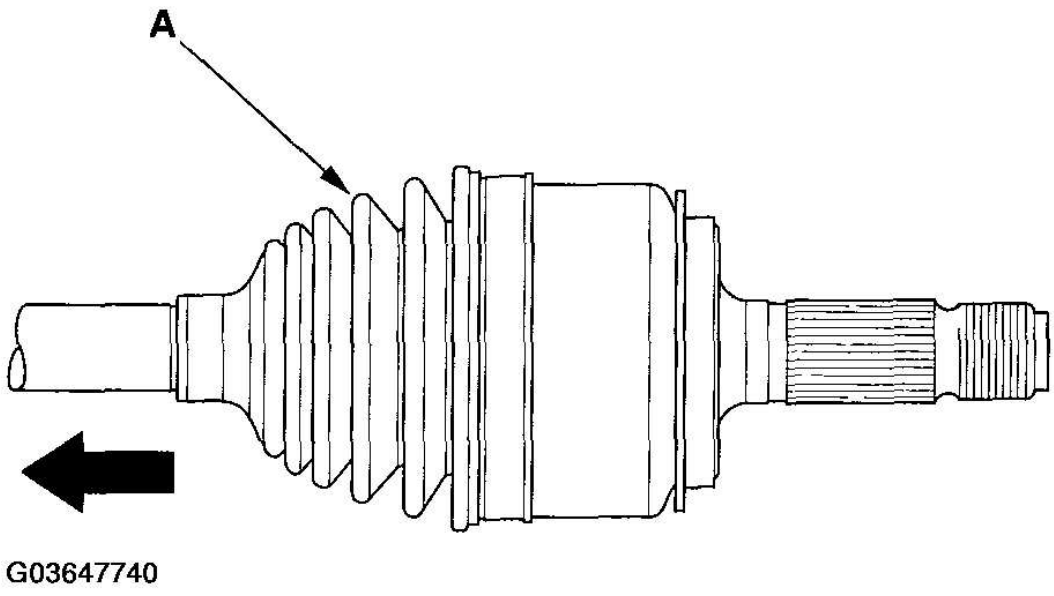


Fig. 19: Sliding Outboard Boot
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Wipe off the grease to expose the driveshaft and the outboard joint inner race.
4. Make a mark (A) on the driveshaft (B) at the same level as the outboard joint rim (C).

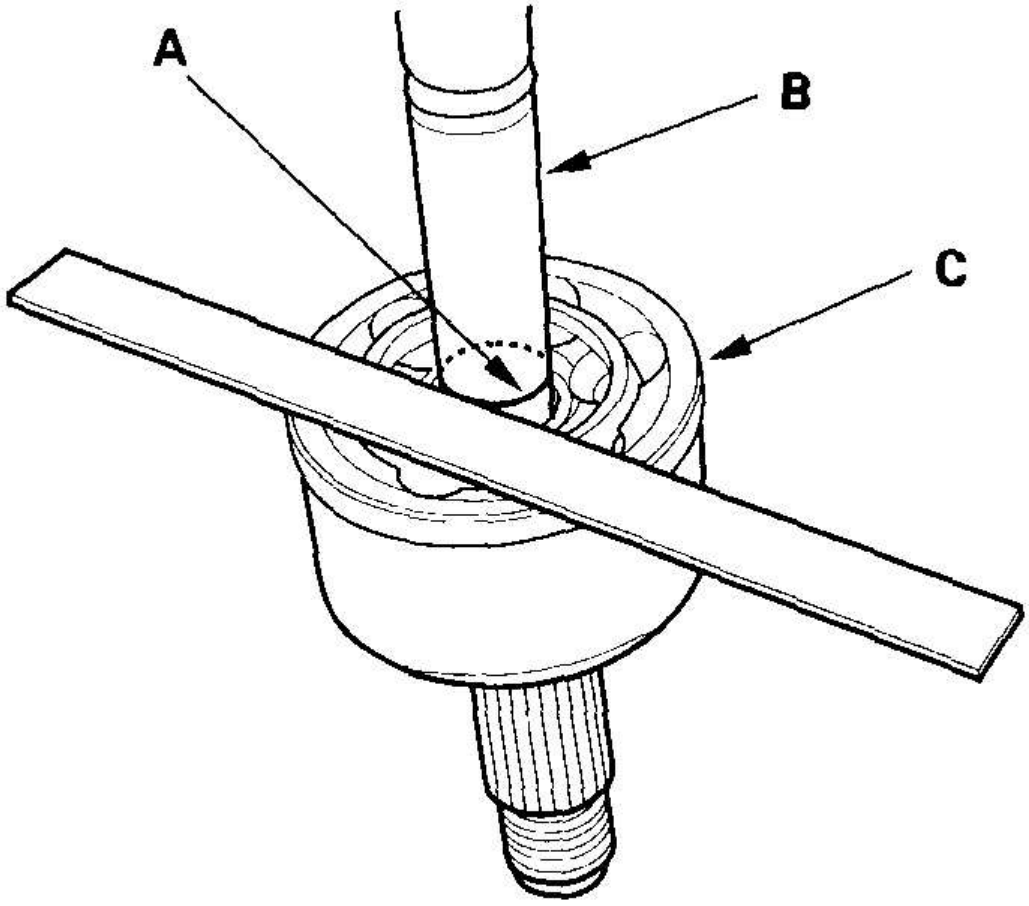


Fig. 20: Placing Mark On Driveshaft And Outboard Joint End
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Securely clamp the driveshaft in a bench vise with a shop towel.

   A/T model: 07XAC-001010A

   M/T model: 07XAC-001020A

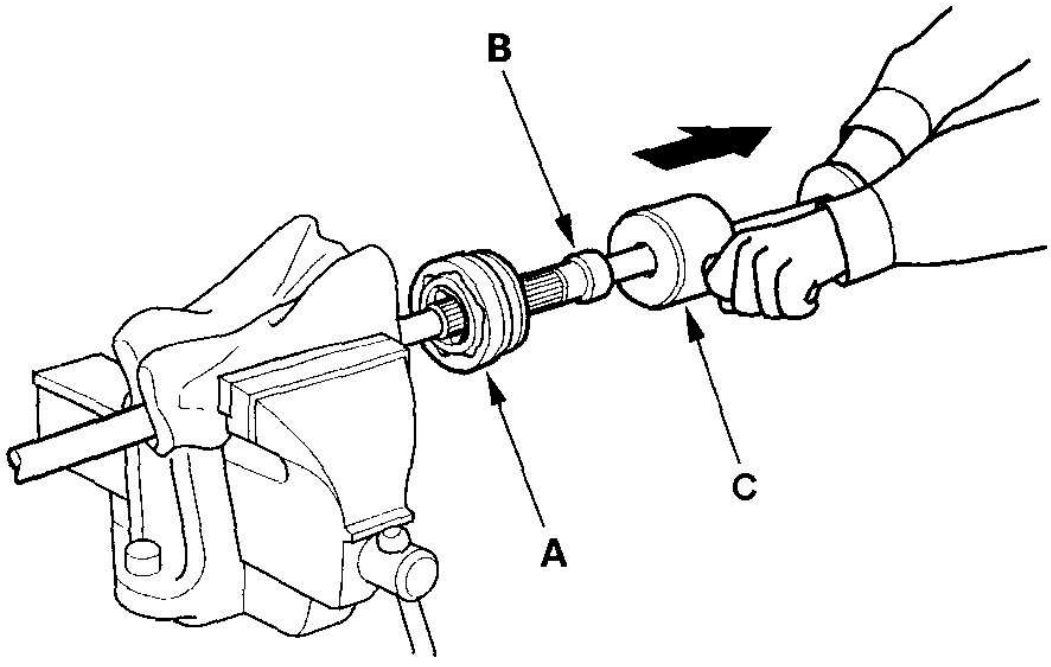


Fig. 21: Clamping Driveshaft In Vise
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the outboard joint (A) using the threaded adapter (B) and a commercially available 5/8"-18 UNF slide hammer (C).
7. Remove the driveshaft from the bench vise.
8. Remove the stop ring from the driveshaft.

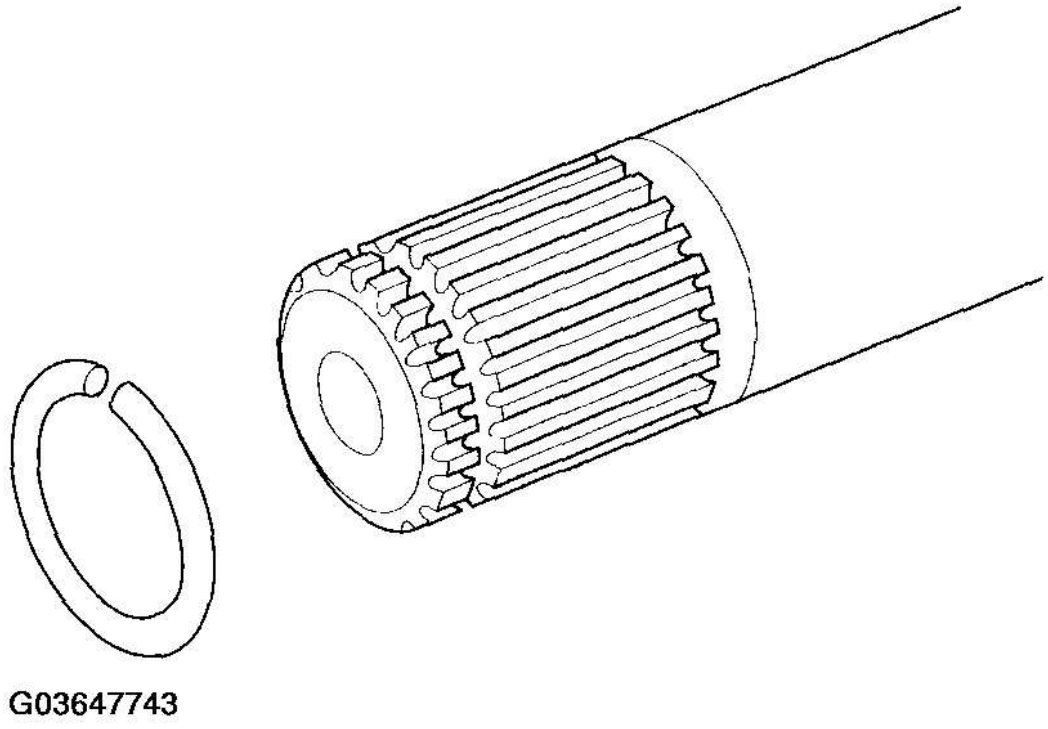


Fig. 22: Removing Stop Ring From Driveshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Wrap the splines on the driveshaft with vinyl tape (A) to prevent damage to the boot.

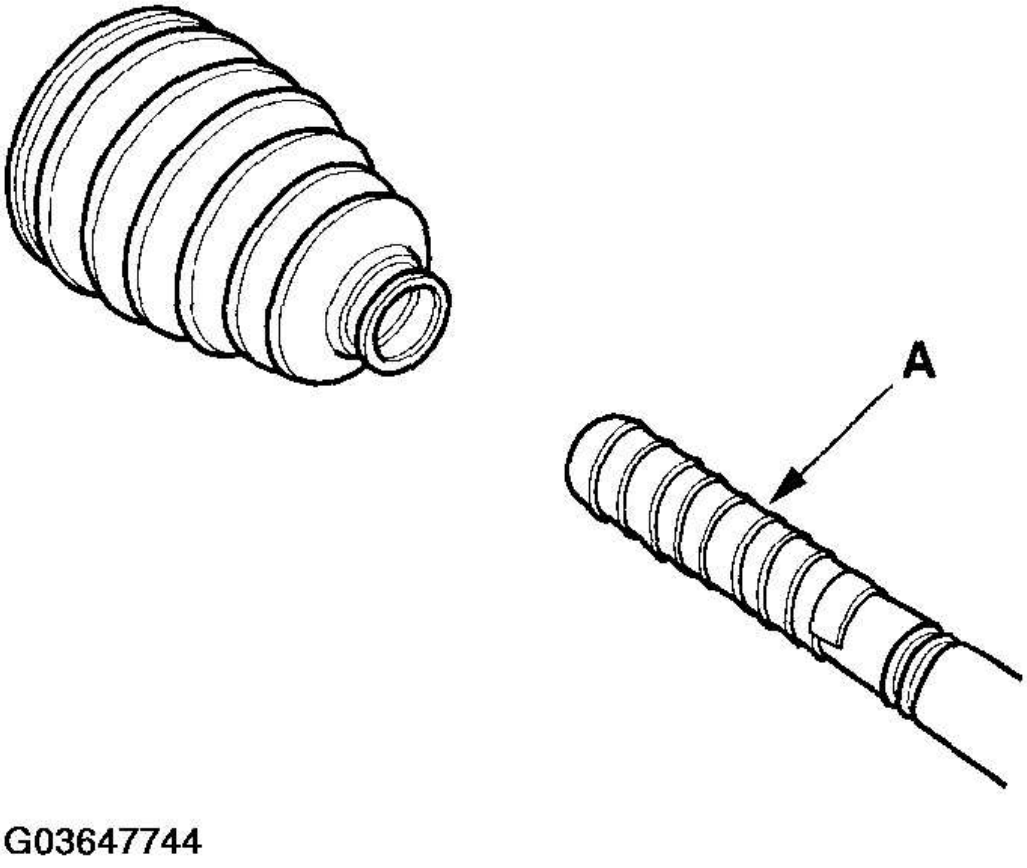


Fig. 23: Wrapping Splines On Driveshaft With Vinyl Tape
Courtesy of AMERICAN HONDA MOTOR CO., INC.

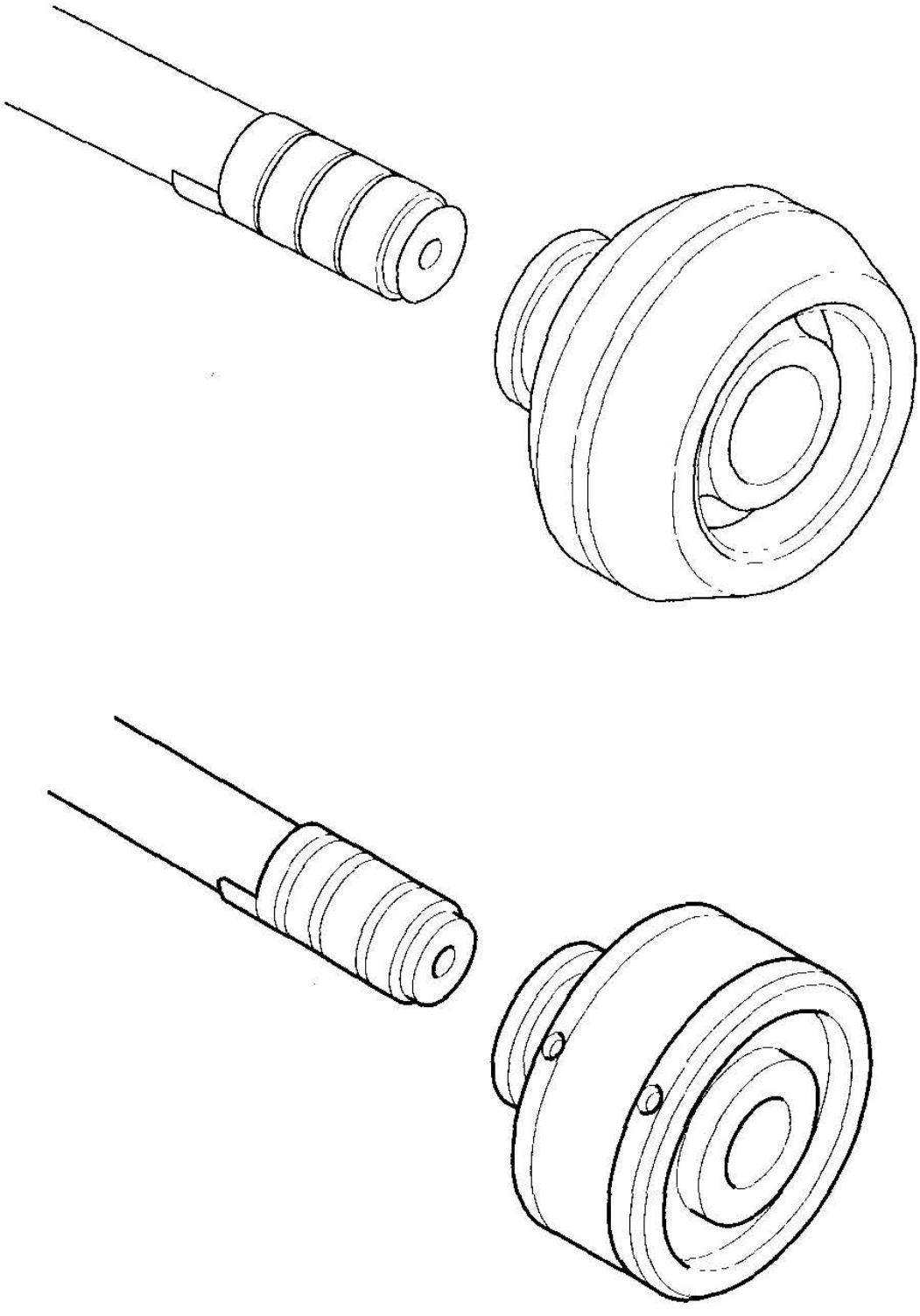
10. Remove the outboard boot. Be careful not to damage the boot.
11. Remove the vinyl tape.

DYNAMIC DAMPER REPLACEMENT

1. Remove the inboard joint (see **Inboard Joint Side**).
2. Remove the dynamic damper bands (see step 2).
   - If the band is a welded type, cut the band.
   - If the band is a double loop type, lift up the band end, and push it into the clip.

- If the band is a low profile type, pinch the band using commercially available boot band pliers.

3. Remove the dynamic damper.



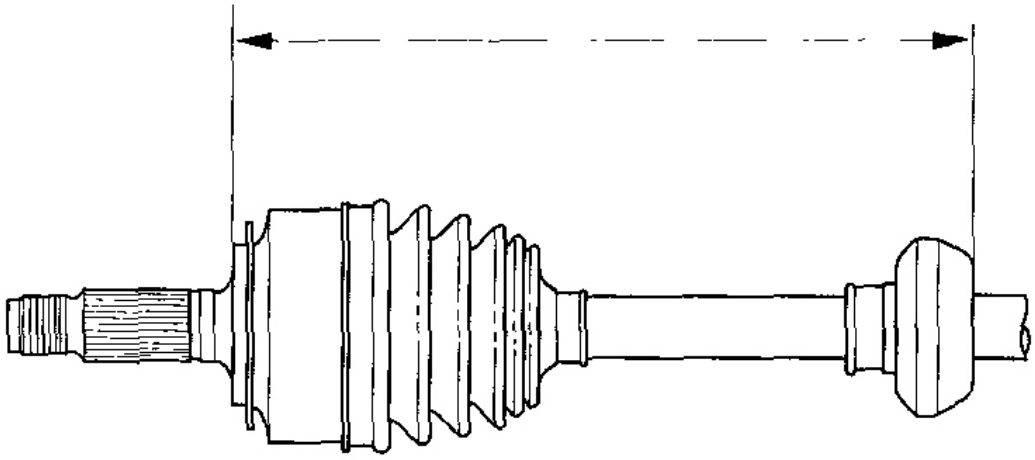
G03647745

Fig. 24: Wrapping Splines On Driveshaft With Vinyl Tape
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Adjust the position of the new dynamic damper to these measurements.

NOTE: Be careful not to swap the dynamic dampers. The right and left dynamic dampers are different.

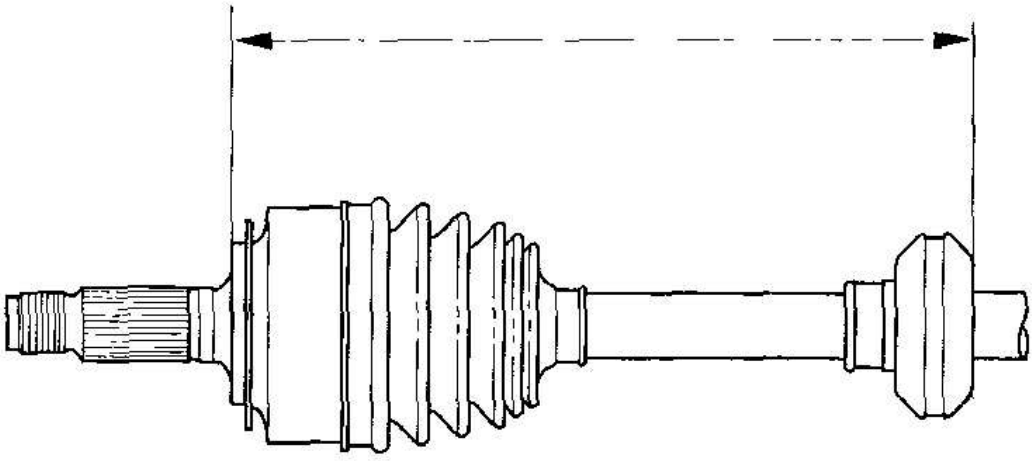
M/T model right driveshaft: 275-281 mm (10.83-11.06 in.)



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Fig. 25: Identifying Dynamic Damper Adjusting Dimension (M/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/T model right driveshaft: 274-278 mm (10.79-10.94 in.)

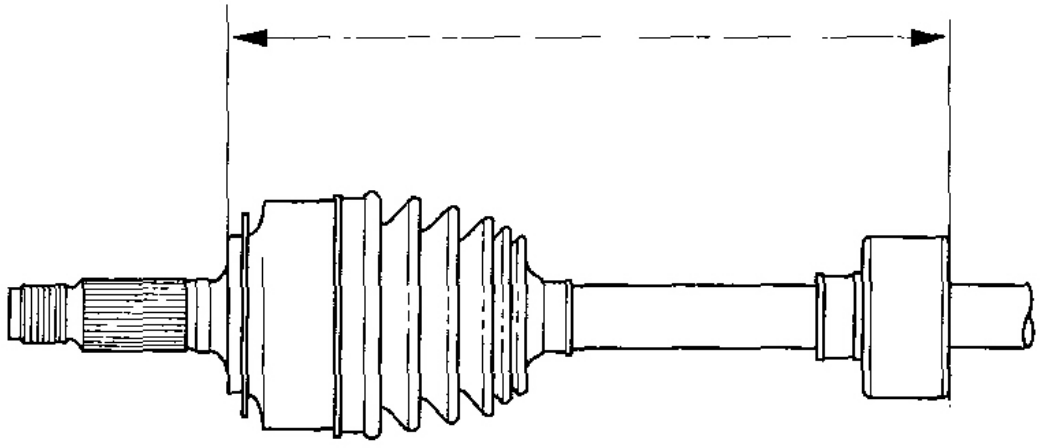


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Fig. 26: Identifying Dynamic Damper Adjusting Dimension (A/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

M/T model left driveshaft: 275-281 mm (10.83-11.06 in.)

A/T model left driveshaft: 283-287 mm (11.14-11.30 in.)



G03647748

Fig. 27: Identifying Dynamic Damper Adjusting Dimension (A/T And M/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the dynamic damper band (see step 10).
6. Install the inboard joint (see step 1).

DRIVESHAFT REASSEMBLY

EXPLODED VIEW

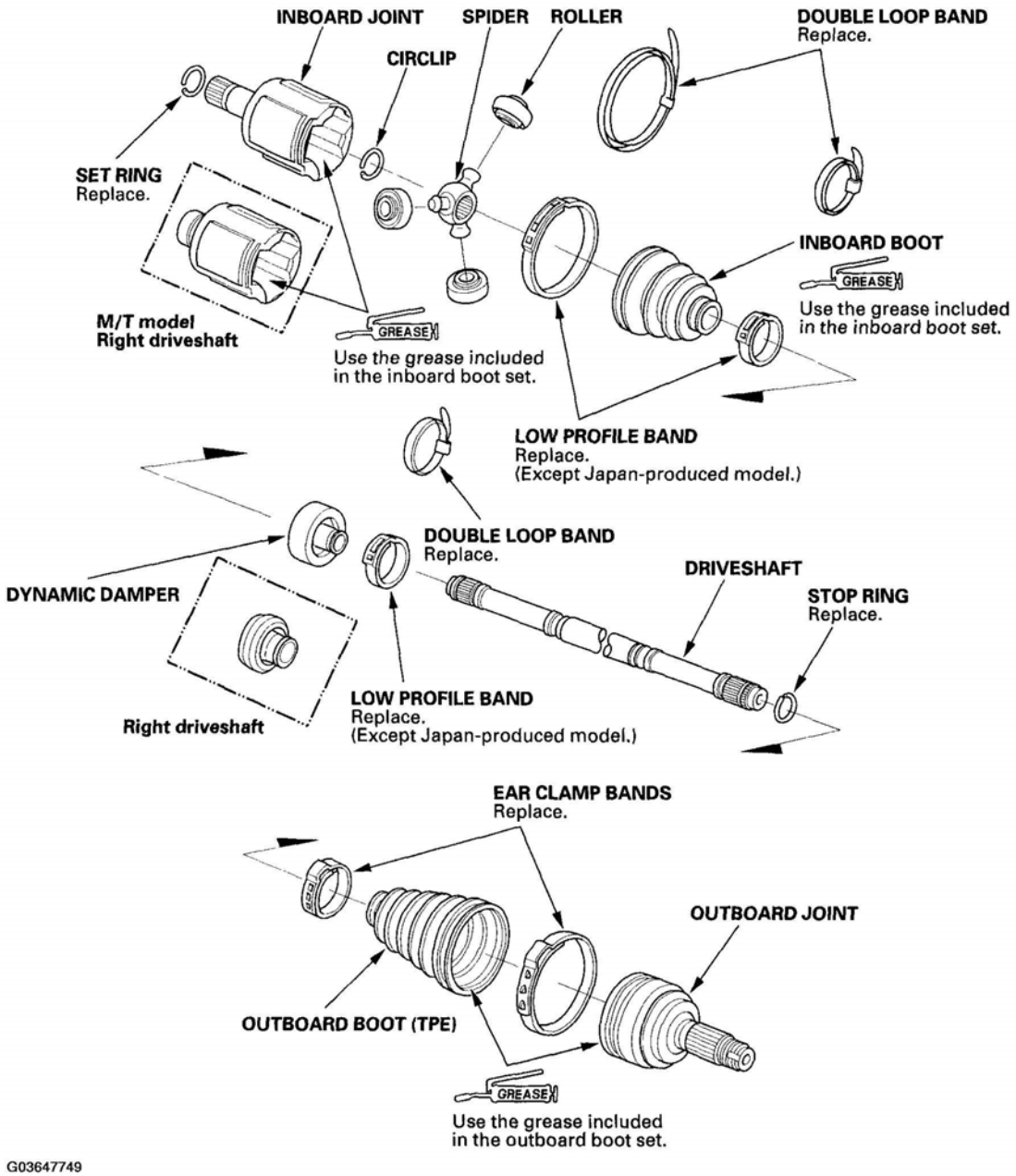


Fig. 28: Exploded View Of Driveshaft Assembly Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

- Boot band tool, KD-3191 or equivalent, commercially available
- Boot band pliers, Kent-Moore J-35910 or equivalent, commercially available

NOTE: Refer to the EXPLODED VIEW as needed during this procedure.

INBOARD JOINT SIDE

1. Wrap the splines with vinyl tape (A) to prevent damage to the inboard boot.

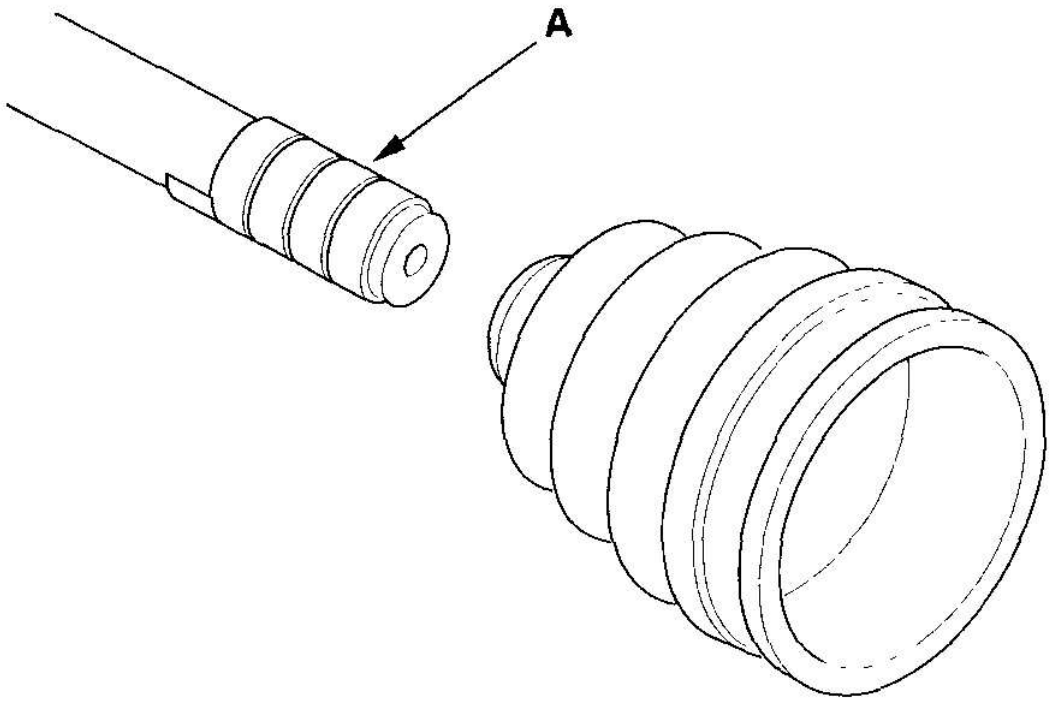


Fig. 29: Wrapping Inboard Joint Splines With Vinyl Tape
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the inboard boot onto the driveshaft, then remove the vinyl tape. Be careful not to damage the inboard boot.
3. Install the spider (A) onto the driveshaft by aligning the marks (B) you made on the spider and the end of the driveshaft.

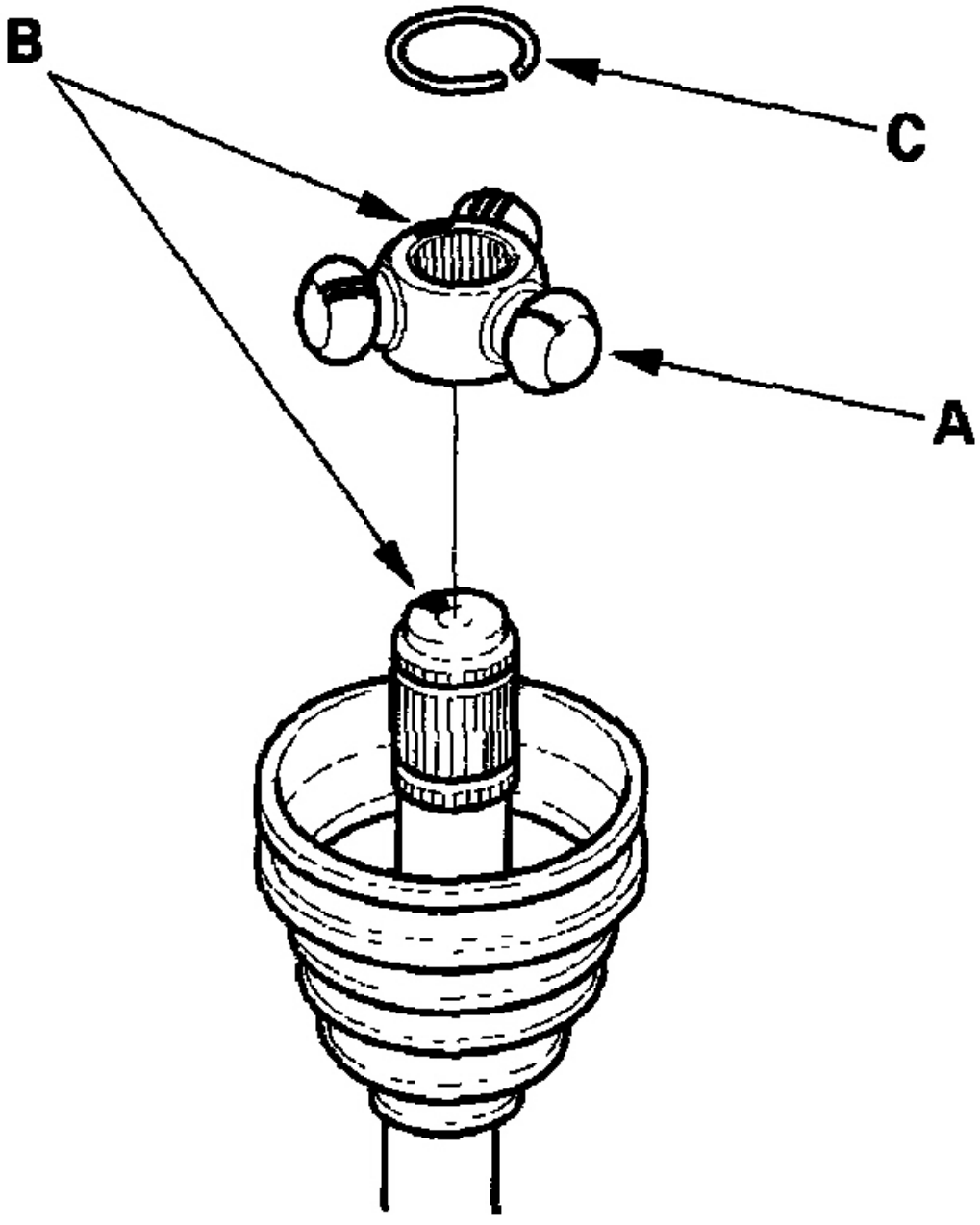


Fig. 30: Installing Spider Onto Driveshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install a new circlip (C) into the driveshaft groove. Always rotate the circlip in its groove to make sure it is fully seated.
5. Fit the rollers (A) onto the spider (B) with their high shoulders facing outward, and note these items:
   - Reinstall the rollers in their original positions on the spider by aligning the marks (C) you made.
   - Hold the driveshaft pointed up to prevent the rollers from falling off.

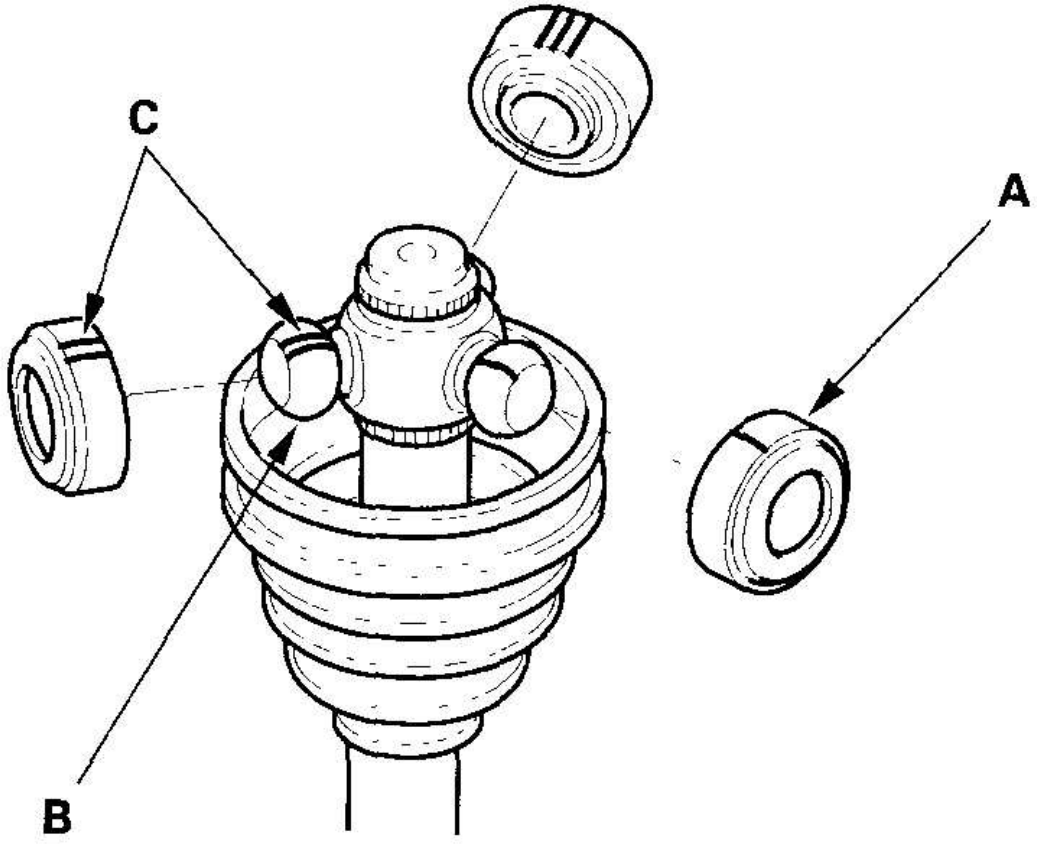


Fig. 31: Fitting Rollers Onto Spider
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Pack the inboard joint with the joint grease included in the new boot set.

Grease quantity

Inboard joint:

A/T model: 130-140 g (4.6-4.9 oz)

M/T model: 150-160 g (5.3-5.6 oz)

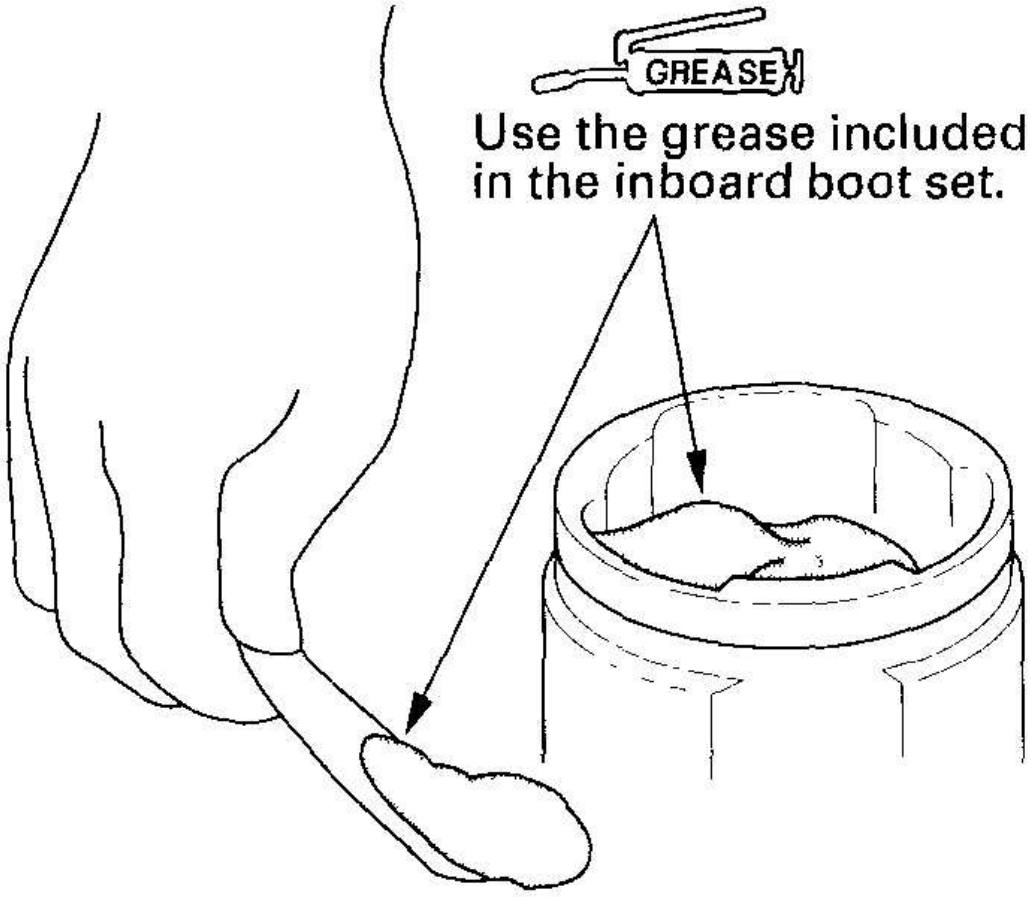


Fig. 32: Packing Inboard Joint With Joint Grease
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Fit the inboard joint onto the driveshaft, and note these items:

- Reinstall the inboard joint onto the driveshaft by aligning the marks (A) you made on the inboard joint and the rollers.
- Hold the driveshaft so the inboard joint is pointing up to prevent it from falling off.

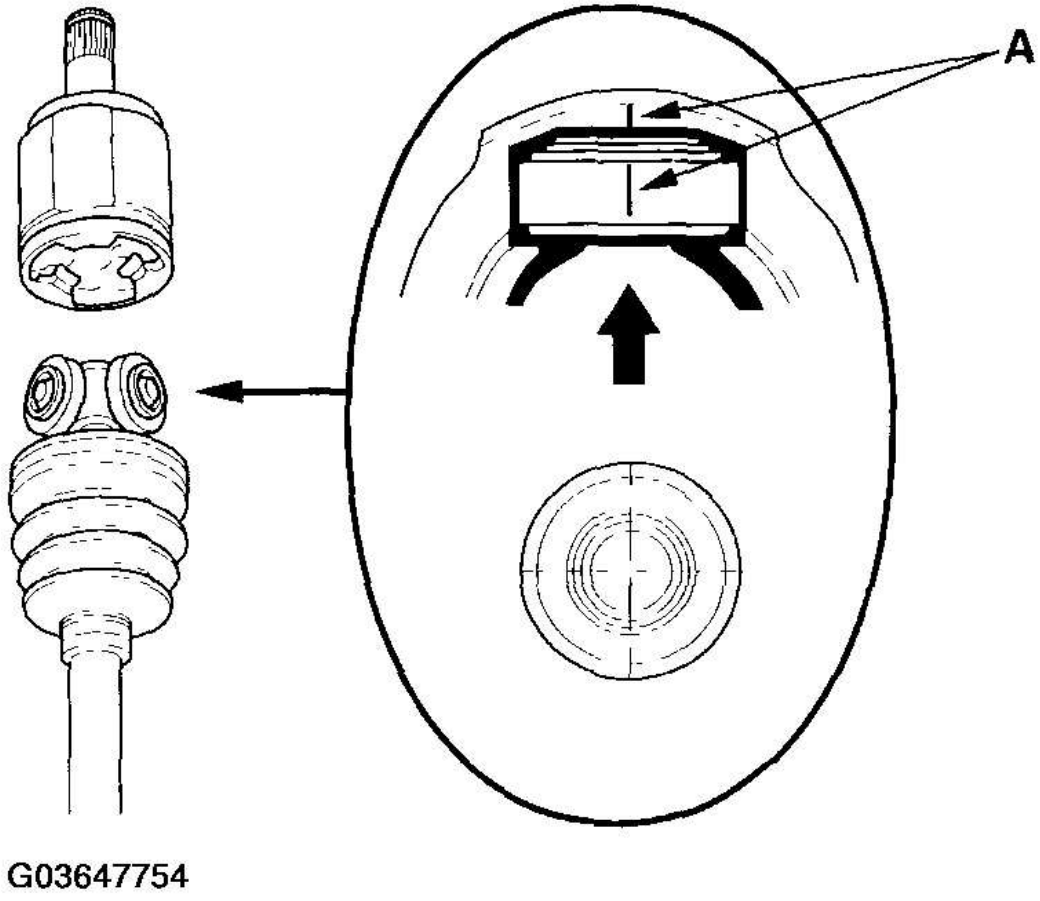


Fig. 33: Fitting Inboard Joint Onto Driveshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Fit the boot (A) ends onto the driveshaft (B) and the inboard joint (C).

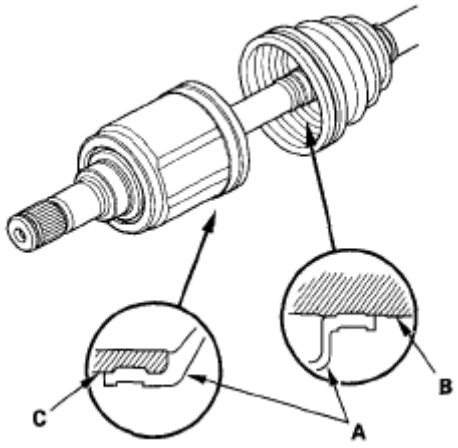


Fig. 34: Locating Driveshaft And Inboard Joint

9. Adjust the length of the driveshafts to the figure as shown, then adjust the boots to halfway between full compression and full extension.

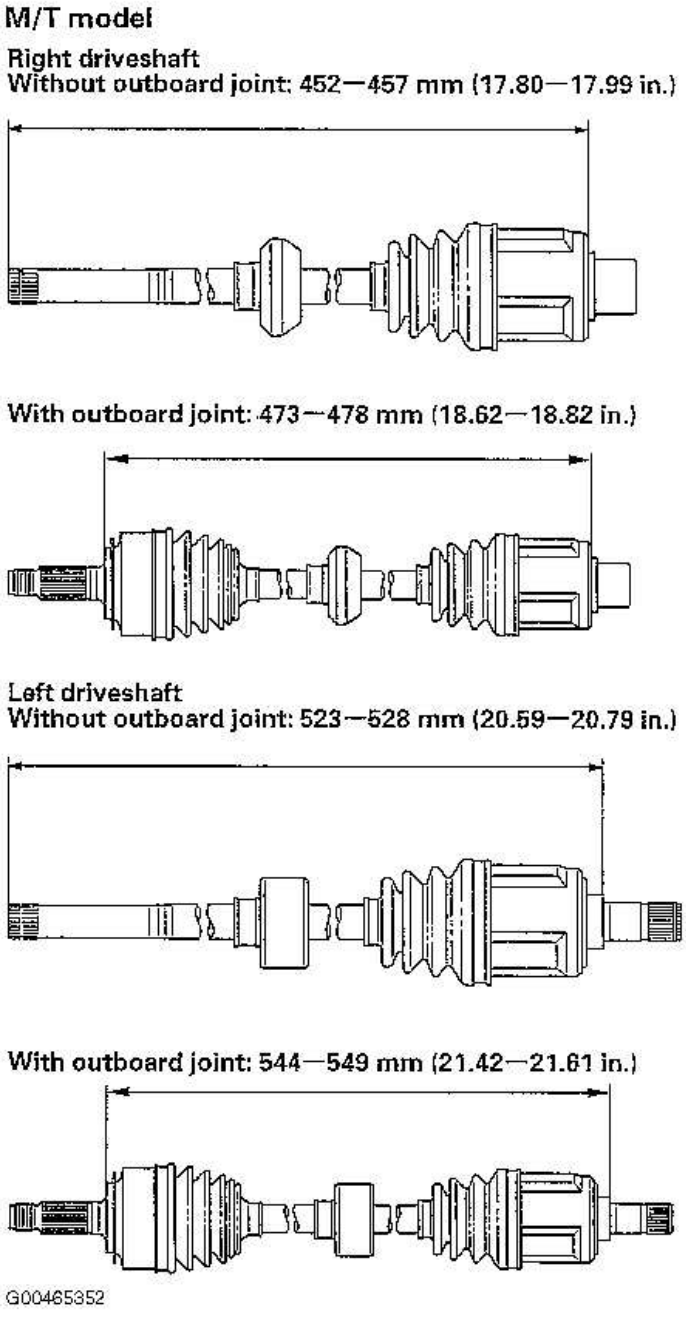


Fig. 35: Identifying M/T Model
Courtesy of AMERICAN HONDA MOTOR CO., INC.

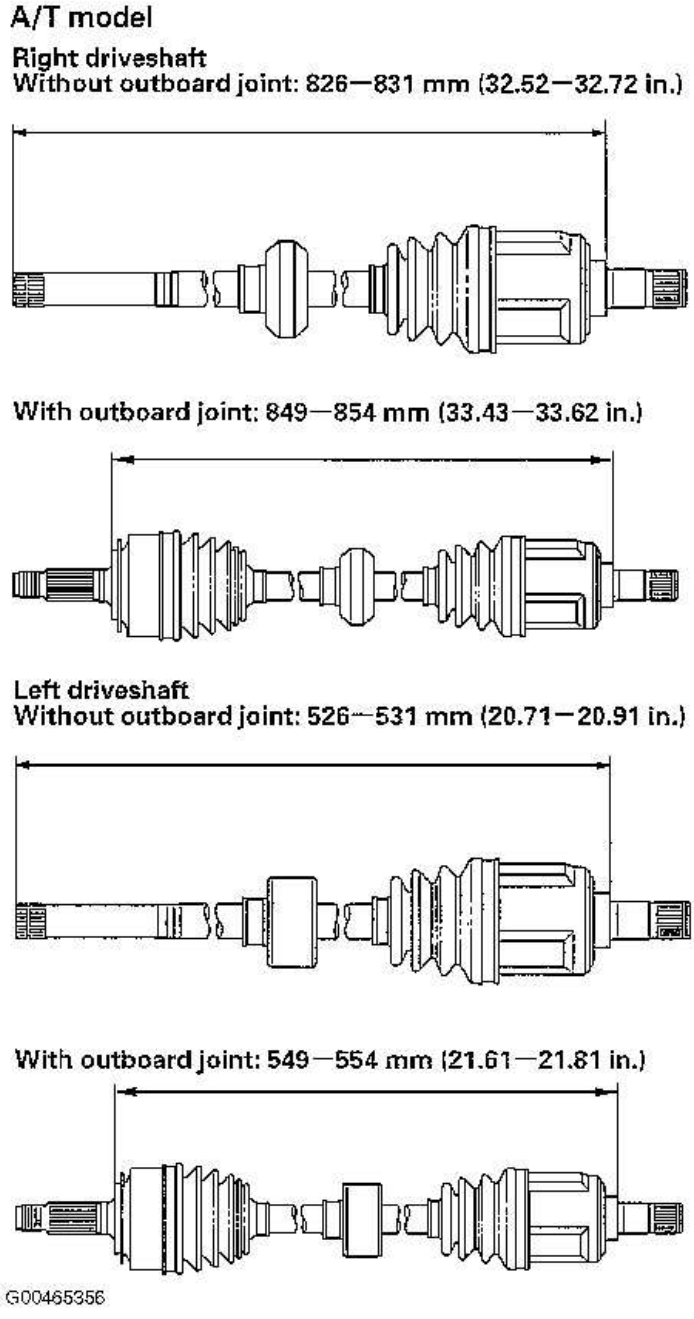


Fig. 36: Identifying A/T Model
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Install the boot bands.
    - For the low profile type, got to step11.
    - For the double loop type, go to step 14 (Boot band replacement only.)
11. Install the new low profile band (A) onto the boot (B), then hook the tab (C) of the band.

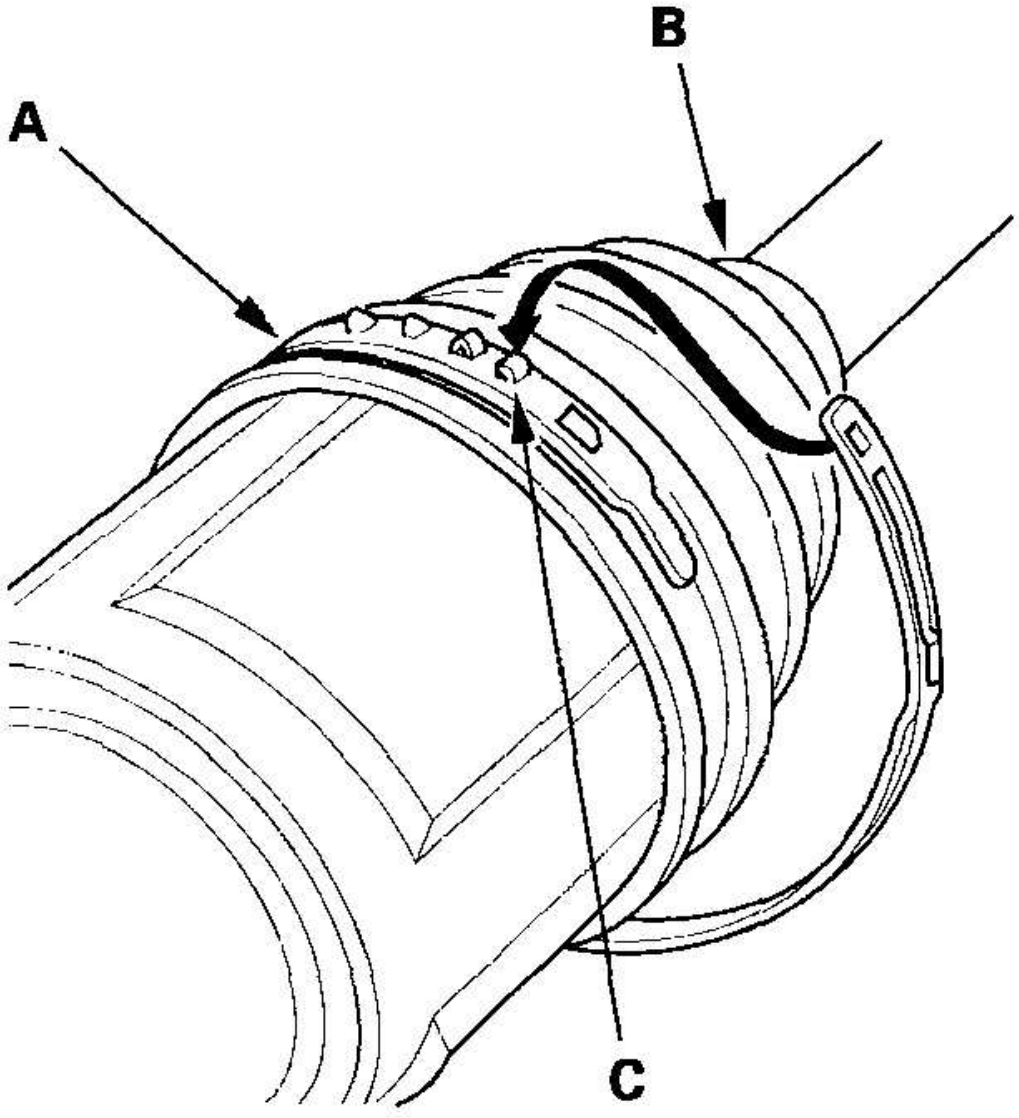


Fig. 37: Installing Low Profile Band Onto Boot

12. Close the hook portion of the band with commercially available boot band pliers (A), then hook the tabs (B) of the band.

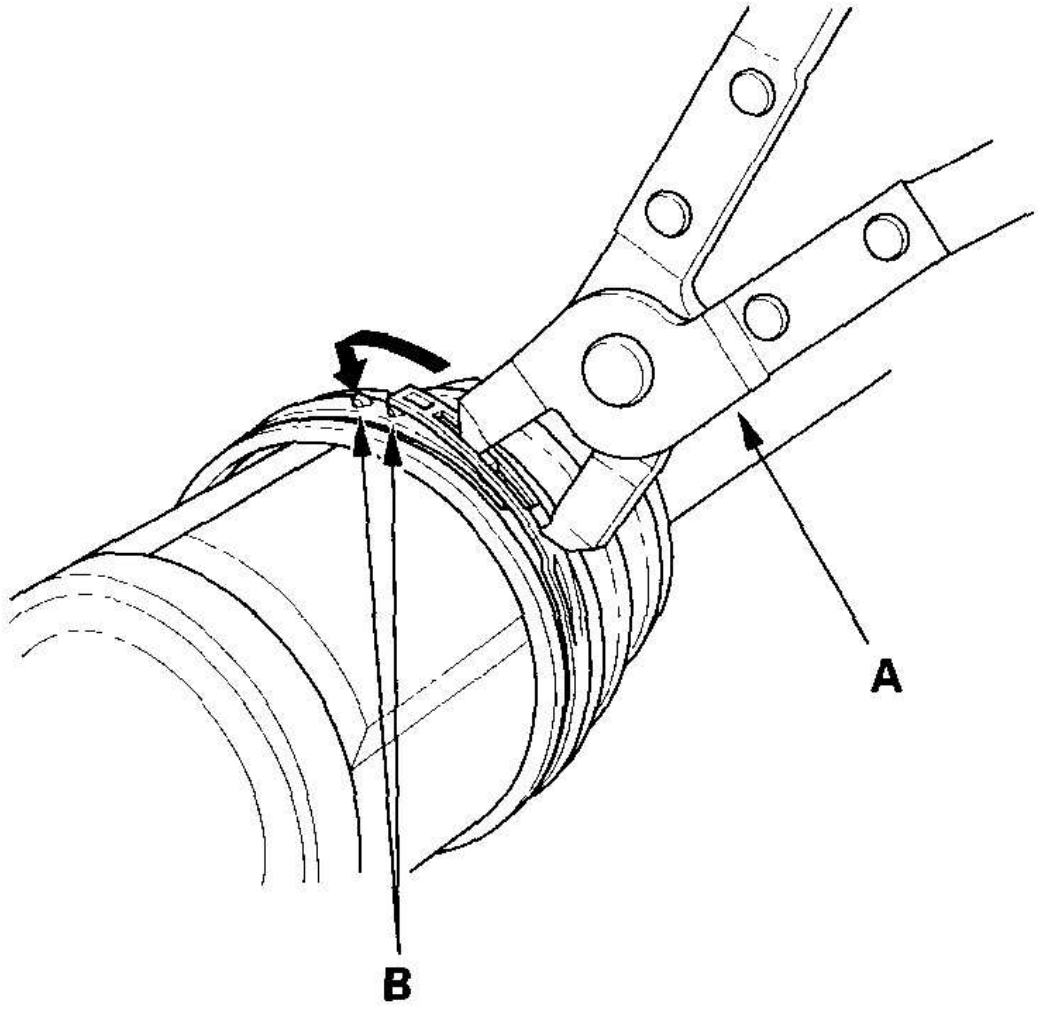


Fig. 38: Closing Hook Portion Of Band
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install the boot band on the other end of the boot, and repeat steps 11 through

12.

14. Fit the boot ends onto the driveshaft and the inboard joint, then install the new double loop band (A) onto the boot (B).

NOTE: Pass the end of the new double loop band through the clip (C) twice in the direction of the forward rotation of the driveshaft.

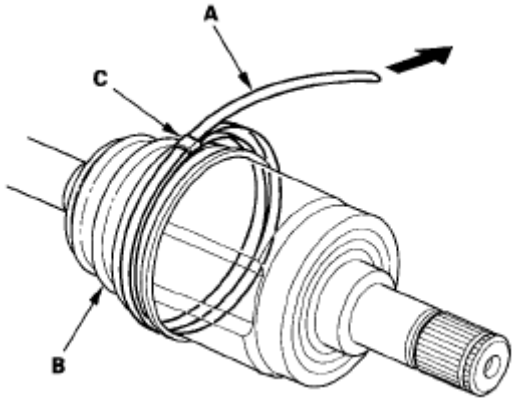


Fig. 39: Twicing In Direction Of Forward Rotation Of Driveshaft

15. Pull up the slack in the band by hand.
16. Mark position (A) on the band 10-14 mm (0.4-0.6 in.) from the clip (B).

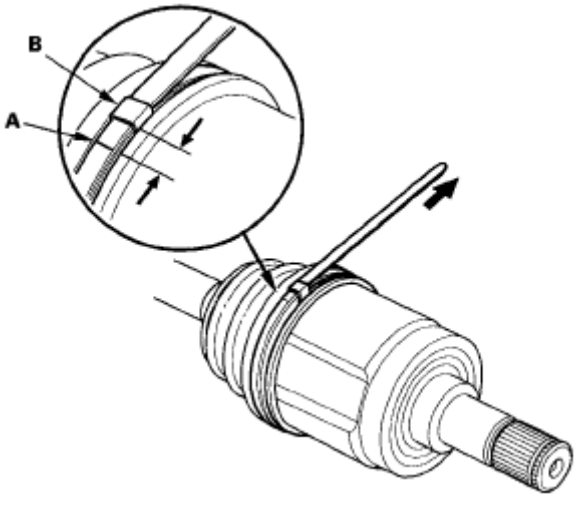


Fig. 40: Identifying Mark Position On Band From Clip

17. Thread the free end of the band through the nose section of the commercially available boot band tool (A), and into the slot on the winding mandrel (B).

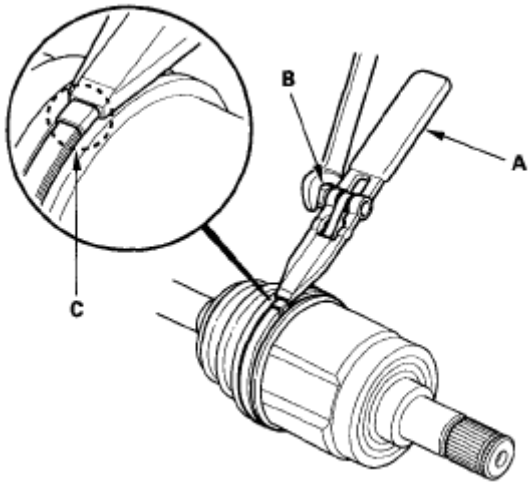


Fig. 41: Tightening Band Until Marked Spot

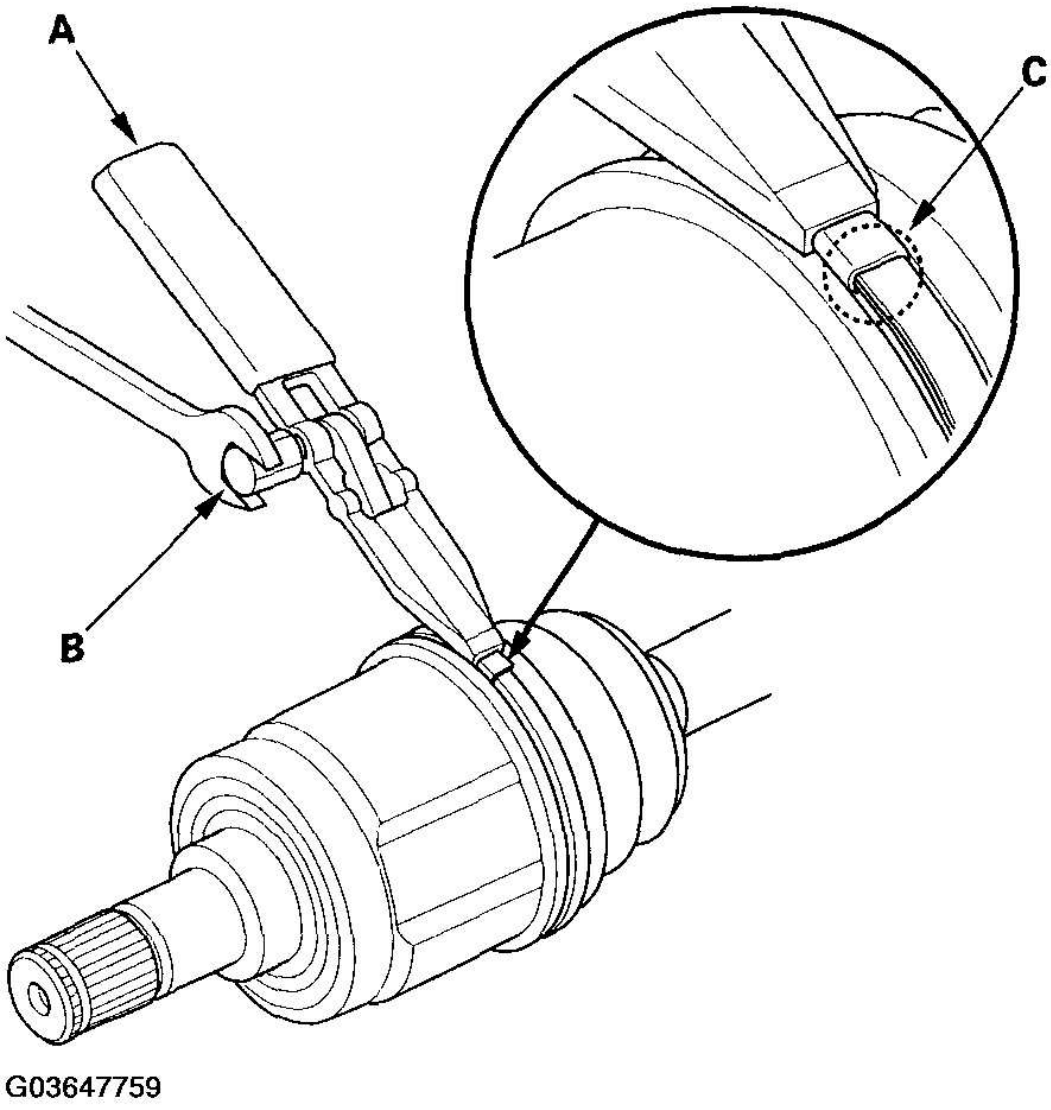


Fig. 42: Threading Free End Of Band And Into Slot On Winding Mandrel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Using a wrench of the winding mandrel of the boot band tool, tighten the band until the marked spot (C) on the band meets the edge of the clip.
19. Lift up the boot band tool to bend the free end of the band 90 degrees to the clip. Center-punch the clip, then fold over the remaining tail onto the clip.

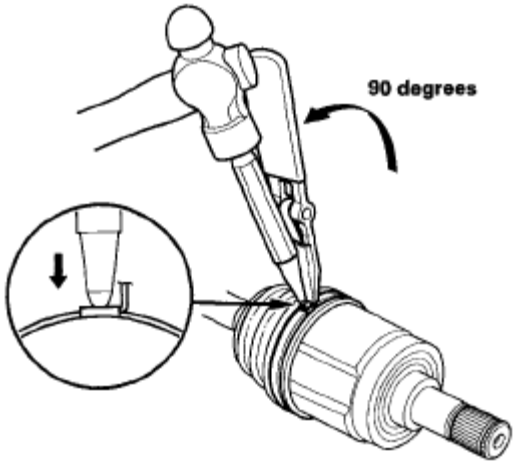


Fig. 43: Lifting Up Boot Band Tool To Bend

20. Unwind the boot band tool, and cut off the excess free end of the band to leave a 5-10 mm (0.2-0.4 in.) tail protruding from the clip.

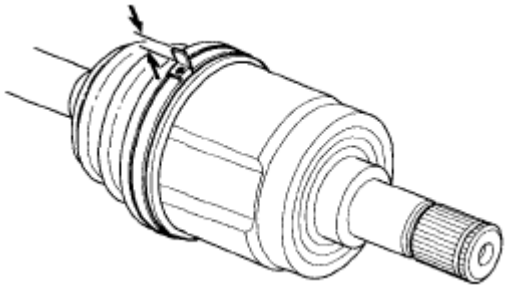


Fig. 44: Identifying Pand Tail Protruding

21. Bend the band end (A) by tapping it down with a hammer.

NOTE:

- **Make sure the band and clip do not interfere with anything on the vehicle and the band does not move.**
- **Remove any grease remaining on the surrounding surfaces.**

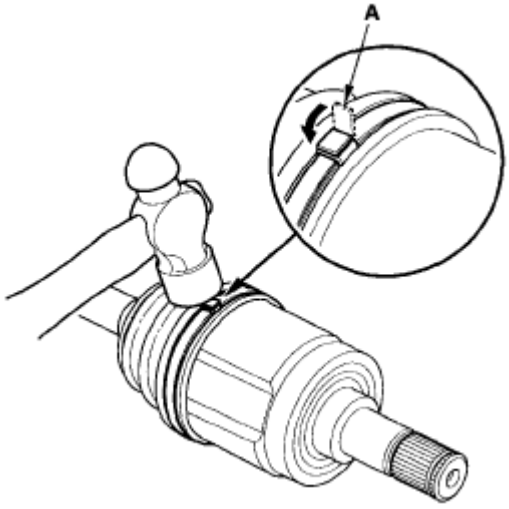


Fig. 45: Tapping Band

22. Repeat steps 13 through 20 for the band on the other end of the boot.

OUTBOARD JOINT SIDE

1. Wrap the splines with vinyl tape (A) to prevent damage to the outboard boot.

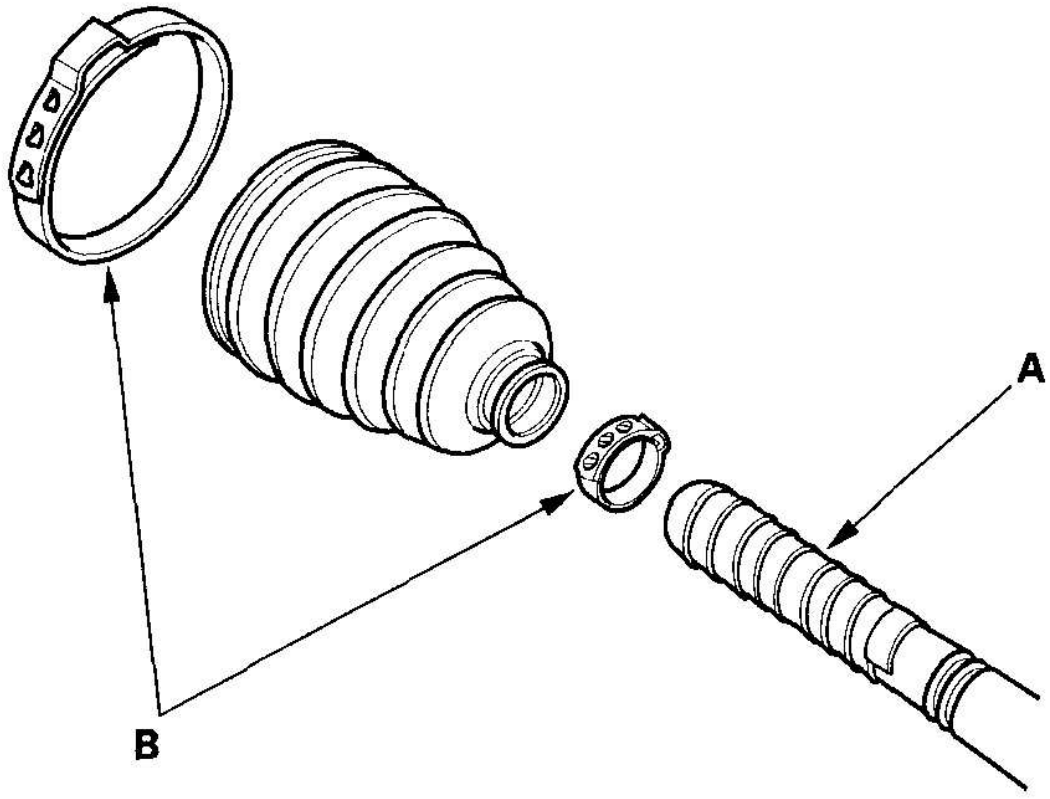


Fig. 46: Wrapping Outboard Joint Splines With Vinyl Tape
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the new ear clamp bands (B) and outboard boot, then remove the vinyl tape. Be careful not to damage the outboard boot.
3. Install the new stop ring in the driveshaft groove (A).

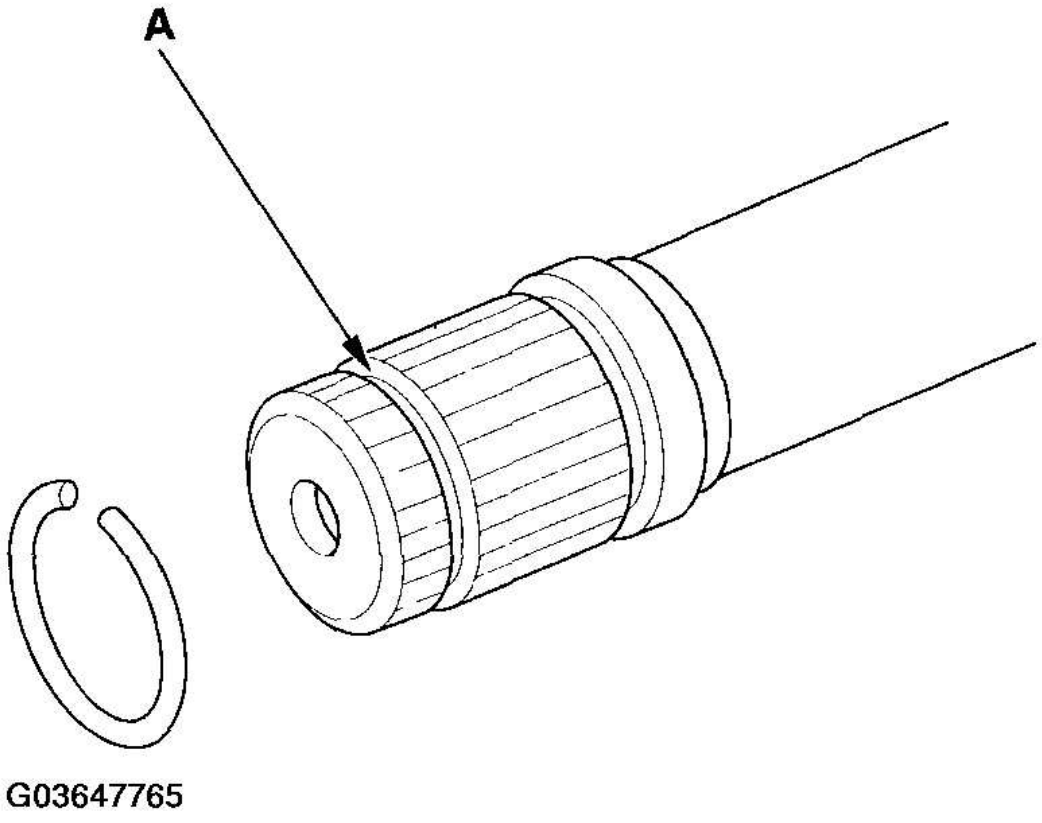


Fig. 47: Installing Stop Ring In Driveshaft Groove
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Pack about half of the grease included in the new outboard boot set into the driveshaft hole in the outboard joint.

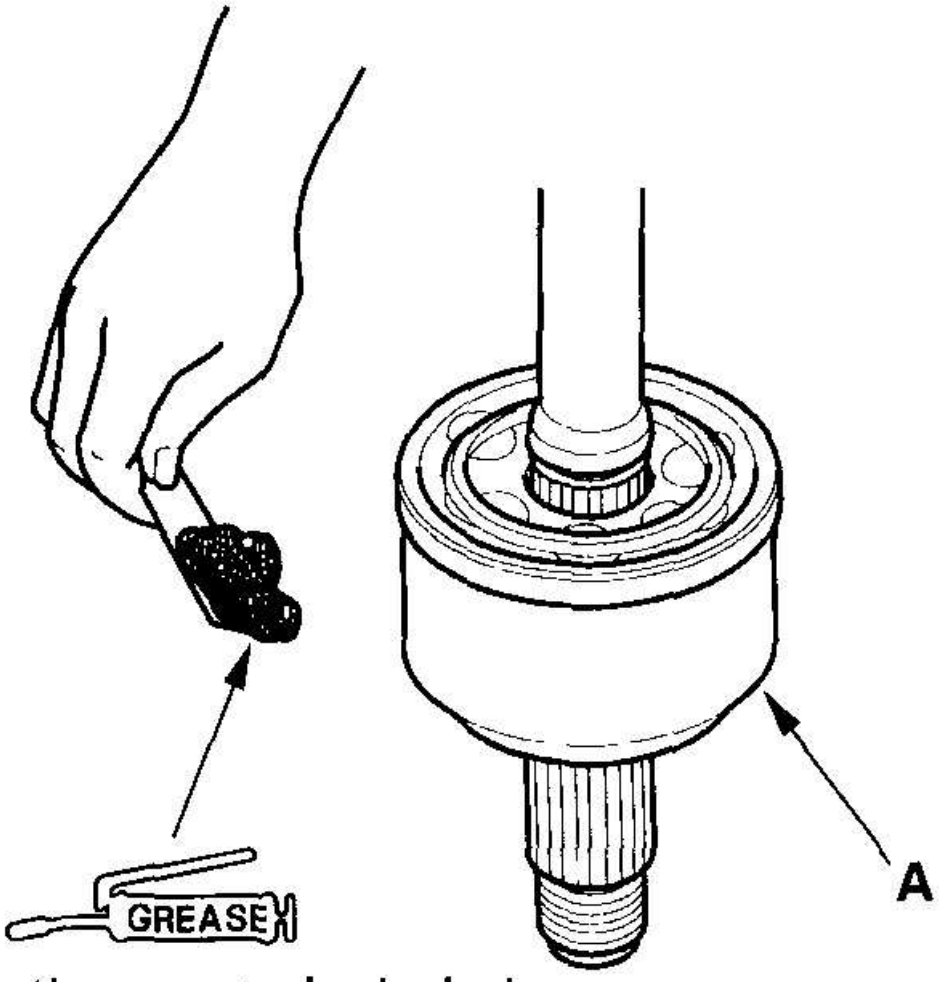


Fig. 48: Packing Outboard Joint With Joint Grease
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Insert the driveshaft (A) into the outboard joint (B) until the stop ring (C) is close to the joint.

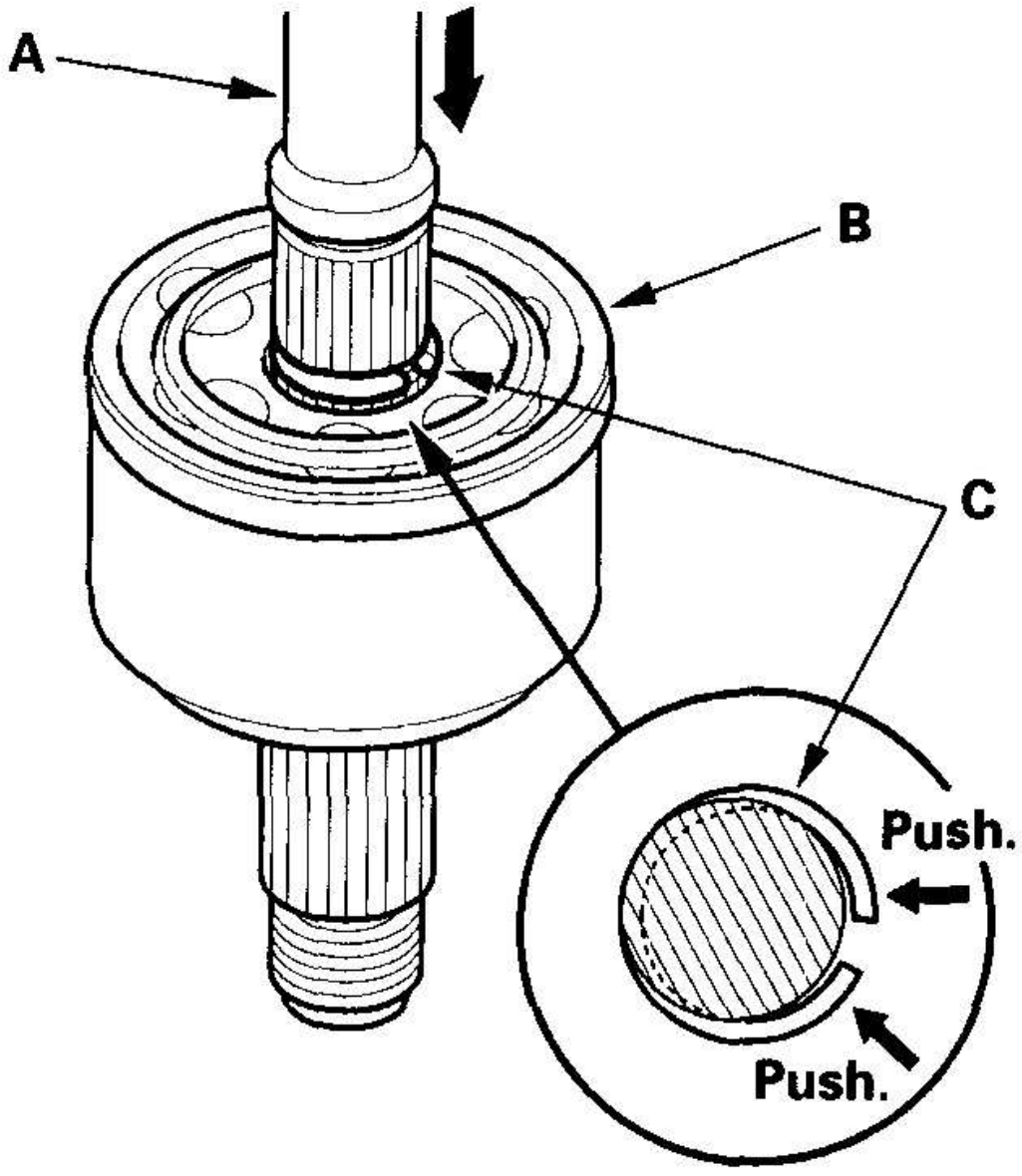


Fig. 49: Inserting Driveshaft Into Outboard Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. To completely seat the outboard joint, pick up the driveshaft and joint, and tap

or hit them from a height of about 10 cm (4 in.) onto a hard surface.

NOTE: Do not use a hammer as excessive force may damage the driveshaft. Be careful not to damage the threaded section (A) of the outboard joint

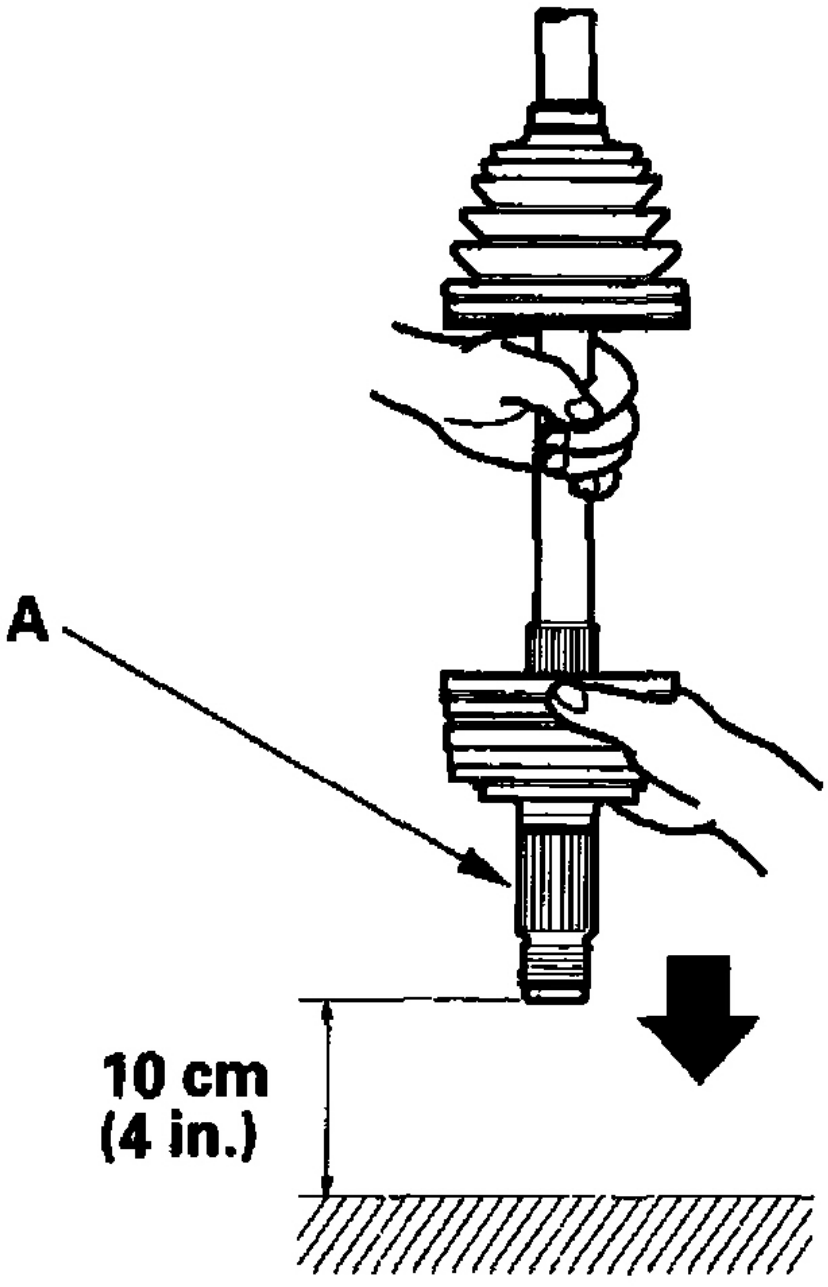


Fig. 50: Seating Outboard Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Check the alignment of the paint mark (A) with the outboard joint end (B).

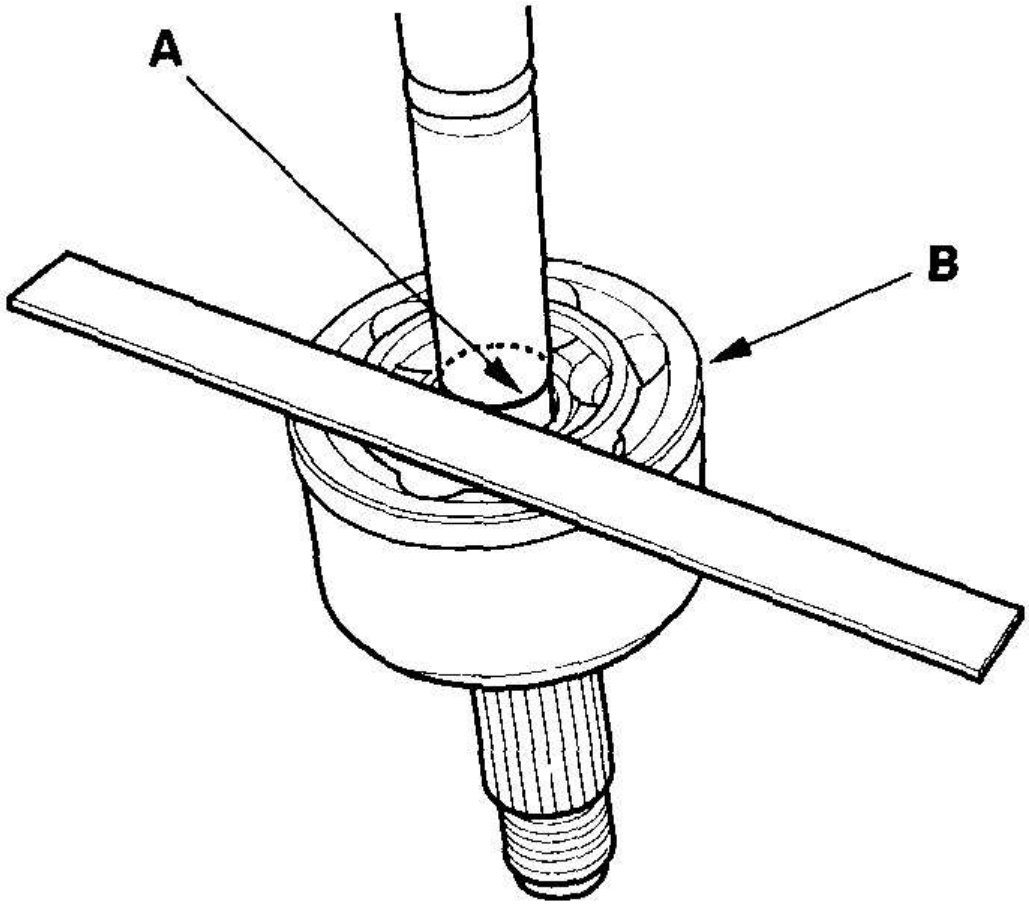


Fig. 51: Checking Alignment Of Paint Mark With Outboard Joint End
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Pack the outboard joint (A) with the remaining joint grease included in the new out board boot set.

Grease quantity

Outboard joint:

A/T model: 105-115 g (3.7-4.1 oz)

M/T model: 140-150 g (4.9-5.3 oz)

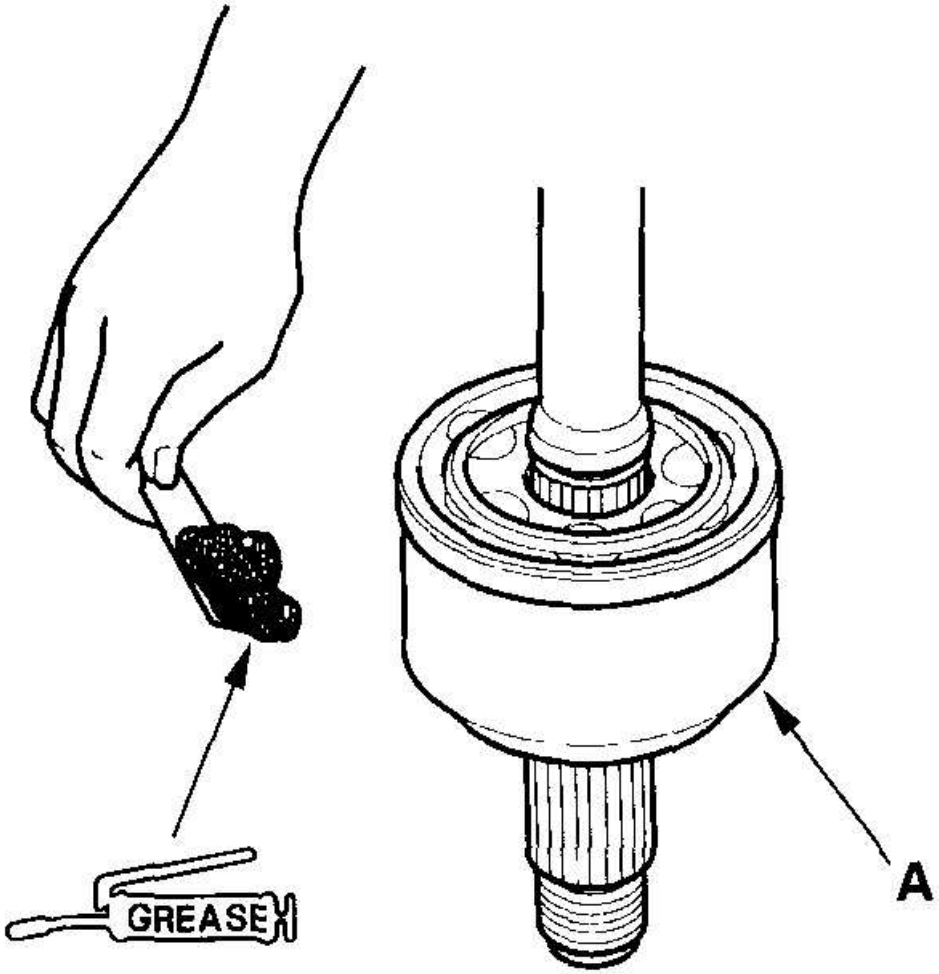


Fig. 52: Packing Outboard Joint With Joint Grease
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Fit the boot (A) ends onto the driveshaft (B) and outboard joint (C).

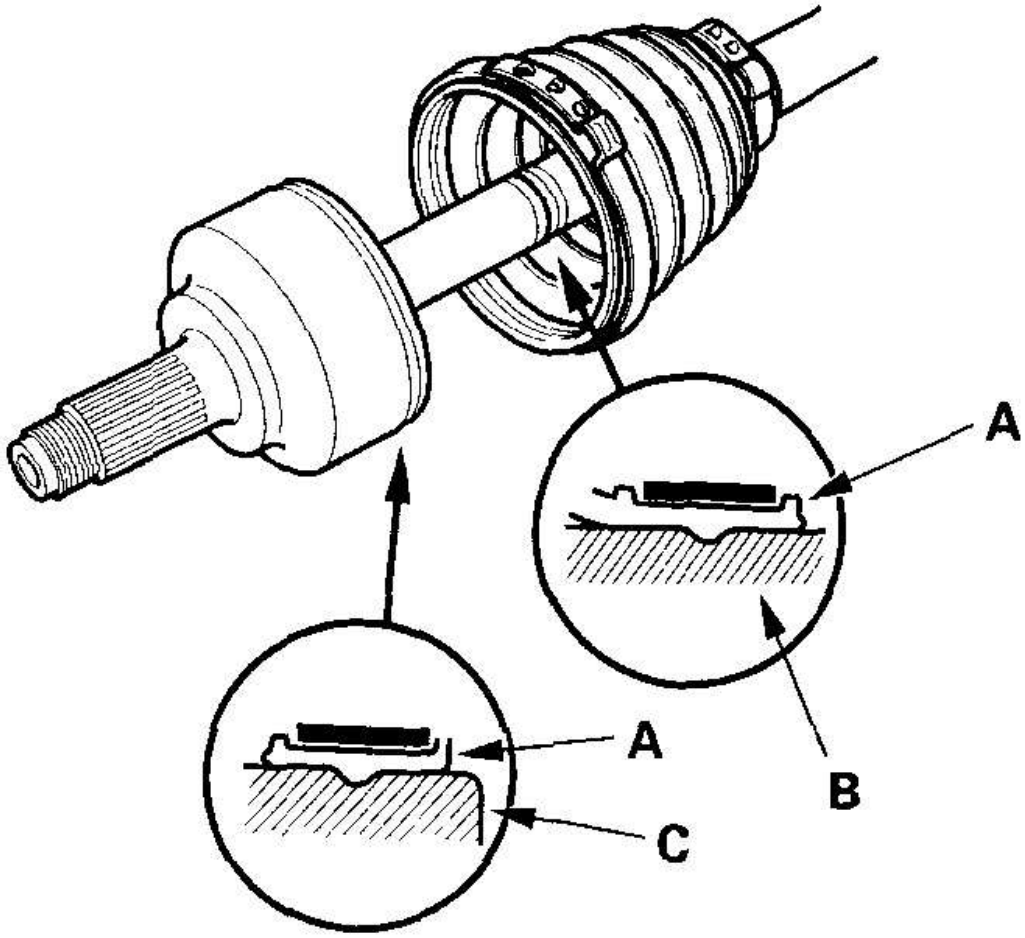


Fig. 53: Fitting Boot Ends Onto Driveshaft And Outboard Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Close the ear portion (A) of the band with commercially available boot band pliers (B).

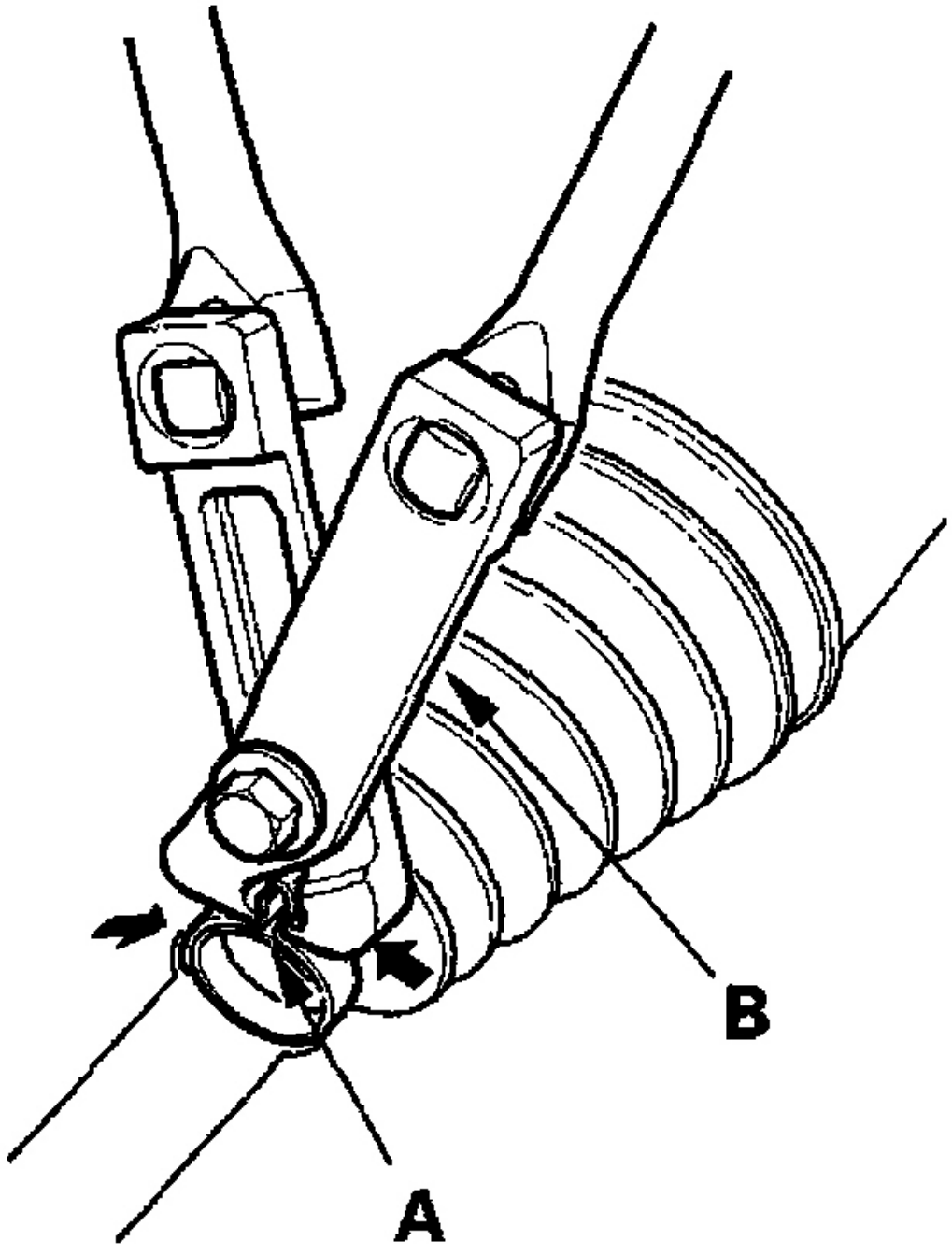


Fig. 54: Closing Band Ear Portion

Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Check the clearance between the closed ear portion of the band. If the clearance is not within the standard, close the ear portion of the band tighter.

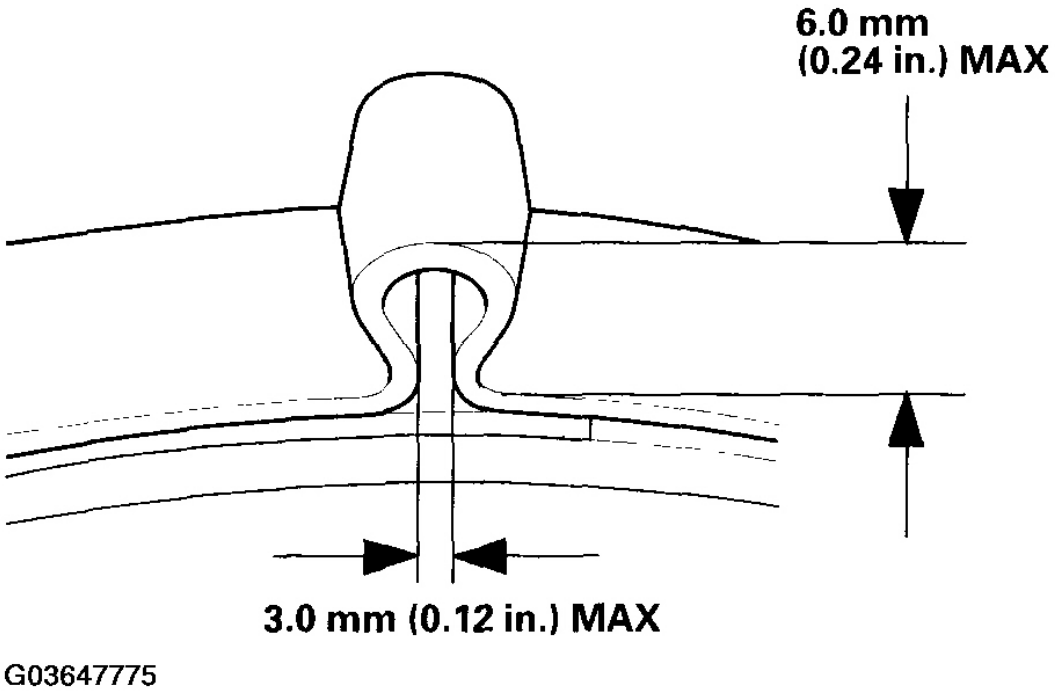


Fig. 55: Identifying Clearance Between Band Closed Ear Portion
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Repeat steps 10 and 11 for the band on the other end of the boot.

DRIVESHAFT INSTALLATION

NOTE: Before starting installation, make sure the mating surfaces of the joint and the splined section are not dusty or dirty.

1. Apply about 5g (0.18 oz) moly 60 paste (P/N08734-0001) to the contact area of the out board joint and the front wheel bearing.

NOTE: The paste helps to prevent noise and vibration.

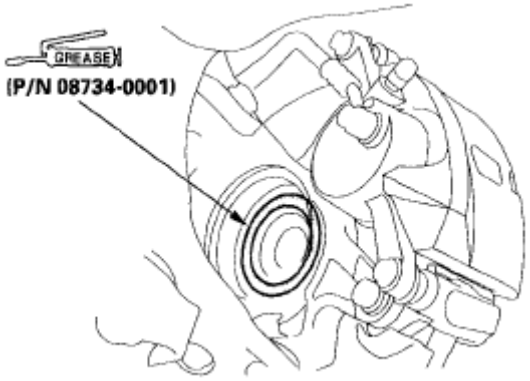


Fig. 56: Identifying Area Applying Grease

2. Install a new set ring in the set ring groove of the driveshaft.

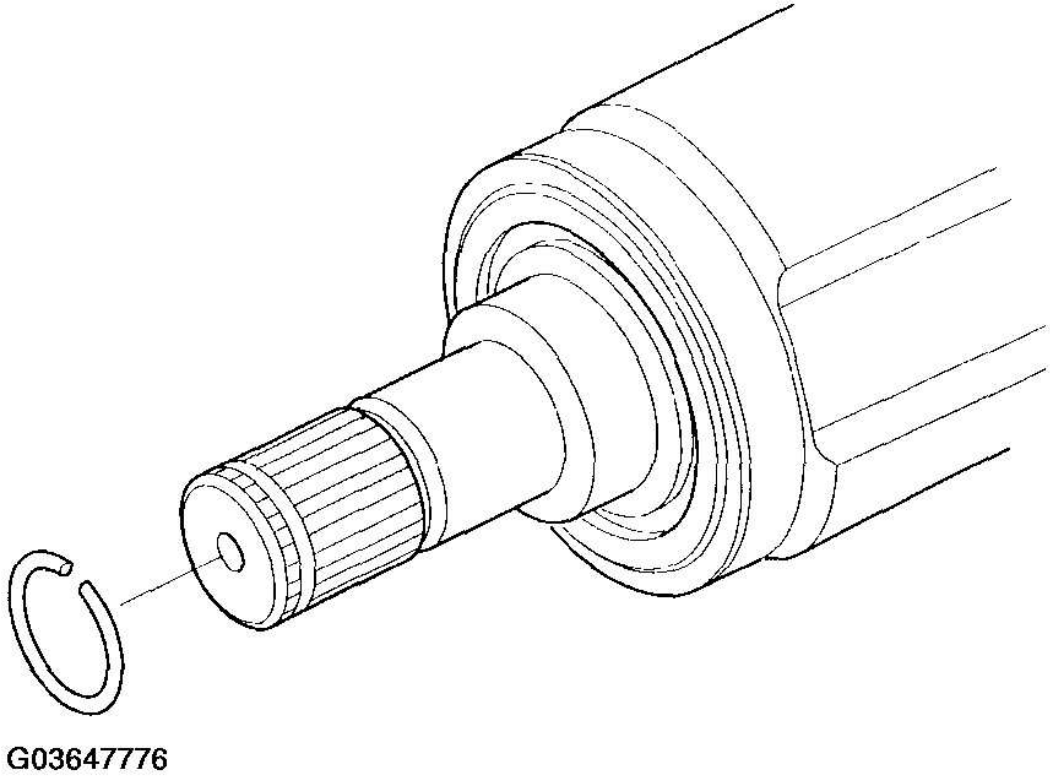


Fig. 57: Installing Set Ring In Driveshaft Set Ring Groove (Left

Driveshaft)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Apply 0.5-1.0 g (0.02-0.04 oz) of grease to the whole splined surface (A) of the right driveshaft. After applying grease, remove the grease from the splined grooves at intervals of 2-3 splines and from the set ring groove (B) so that air can bleed from the intermediate shaft.

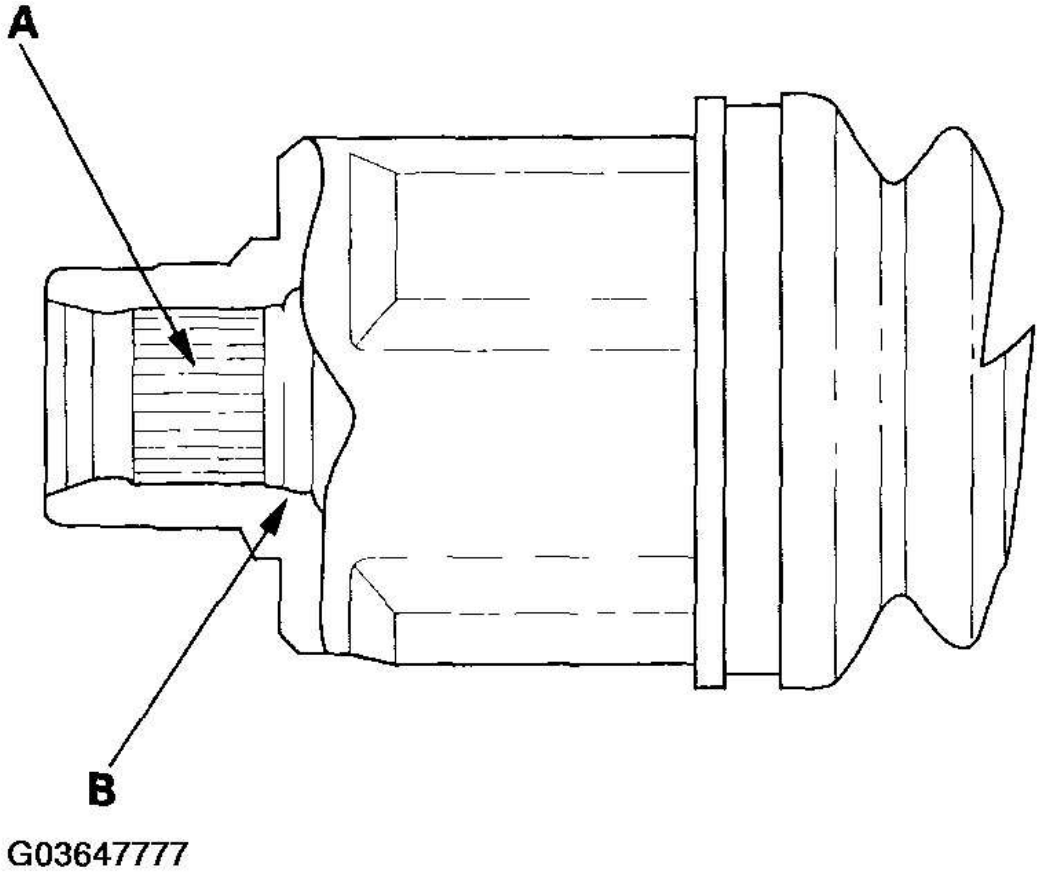


Fig. 58: Locating Grease Applying Point
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Clean the areas where the driveshaft contacts the differential thoroughly with solvent or brake cleaner, and dry with compressed air.

NOTE: Do not wash the rubber parts with solvent.

5. Insert the inboard end (A) of the driveshaft into the differential (B) or intermediate shaft (C) until the new set ring (D) locks in the groove (E).

NOTE: Insert the driveshaft horizontally to prevent damaging the differential oil seal.

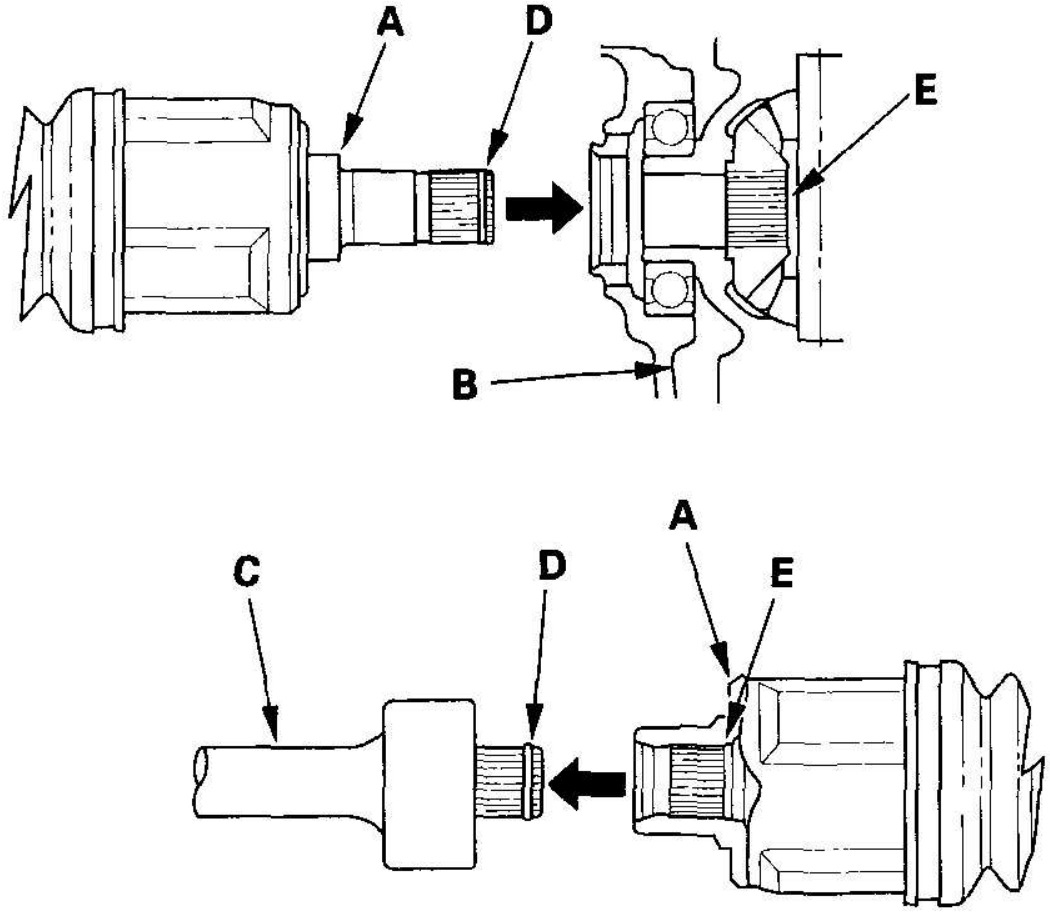


Fig. 59: Inserting Inboard End Of Driveshaft Into Differential
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the outboard joint (A) into the front hub (B).

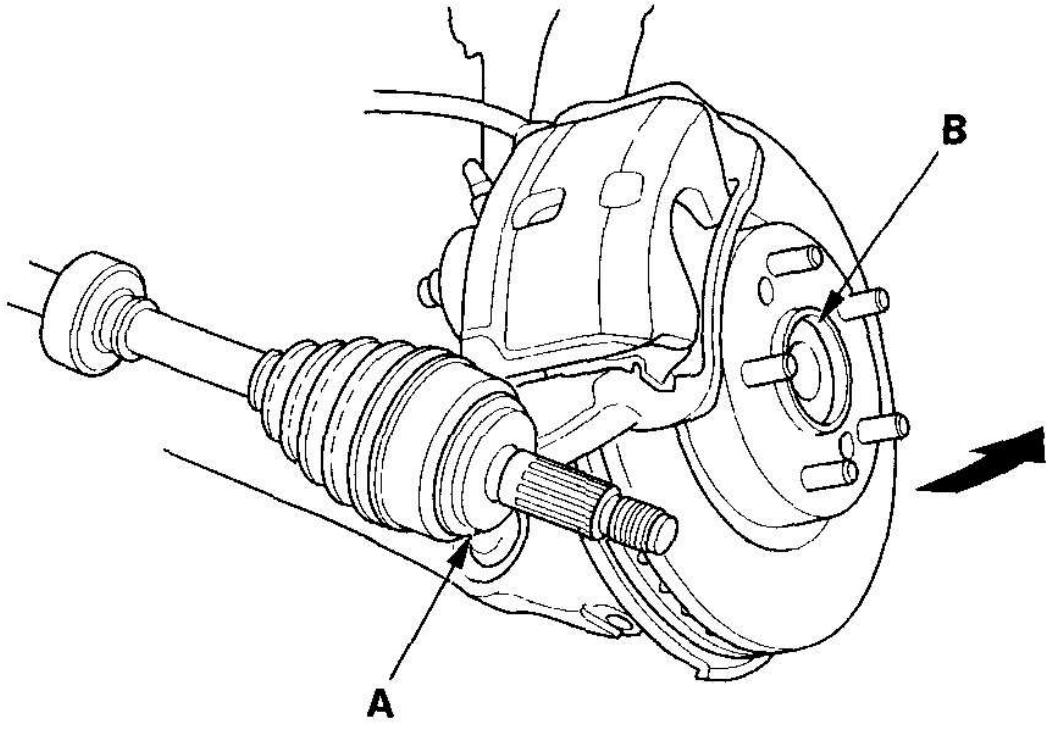


Fig. 60: Installing Outboard Joint Into Front Hub
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. A/T model: Install the heat shield .

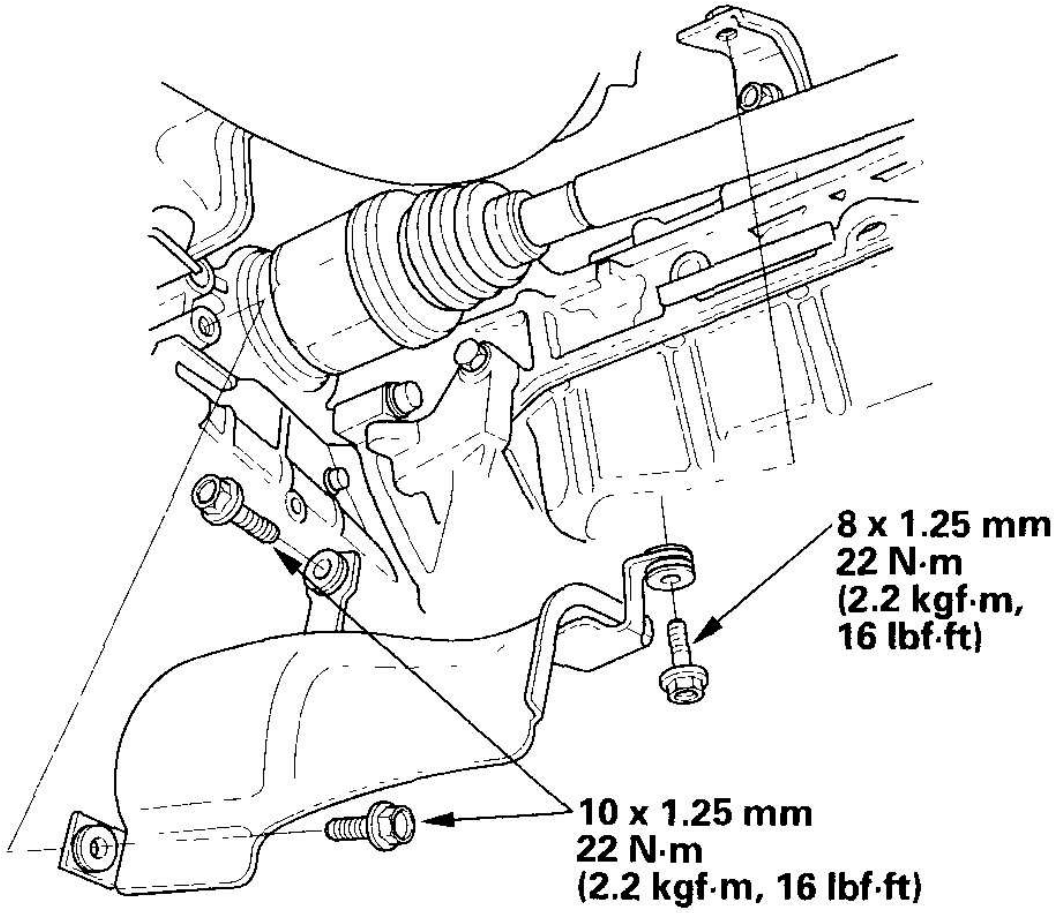


Fig. 61: Installing Heat Shield (A/T Model) With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Clean off any grease contamination from the ball joint tapered section and threads, then install the knuckle (A) onto the lower arm (B). Be careful not to damage the ball joint boot (C). Wipe off the grease before tightening the nut (D) to the lower torque specification, then tighten it only far enough to align the slot with the ball joint pin hole.

NOTE:

- **Make sure the ball joint boot is not damaged or cracked.**

- **Do not align the nut by loosening it.**

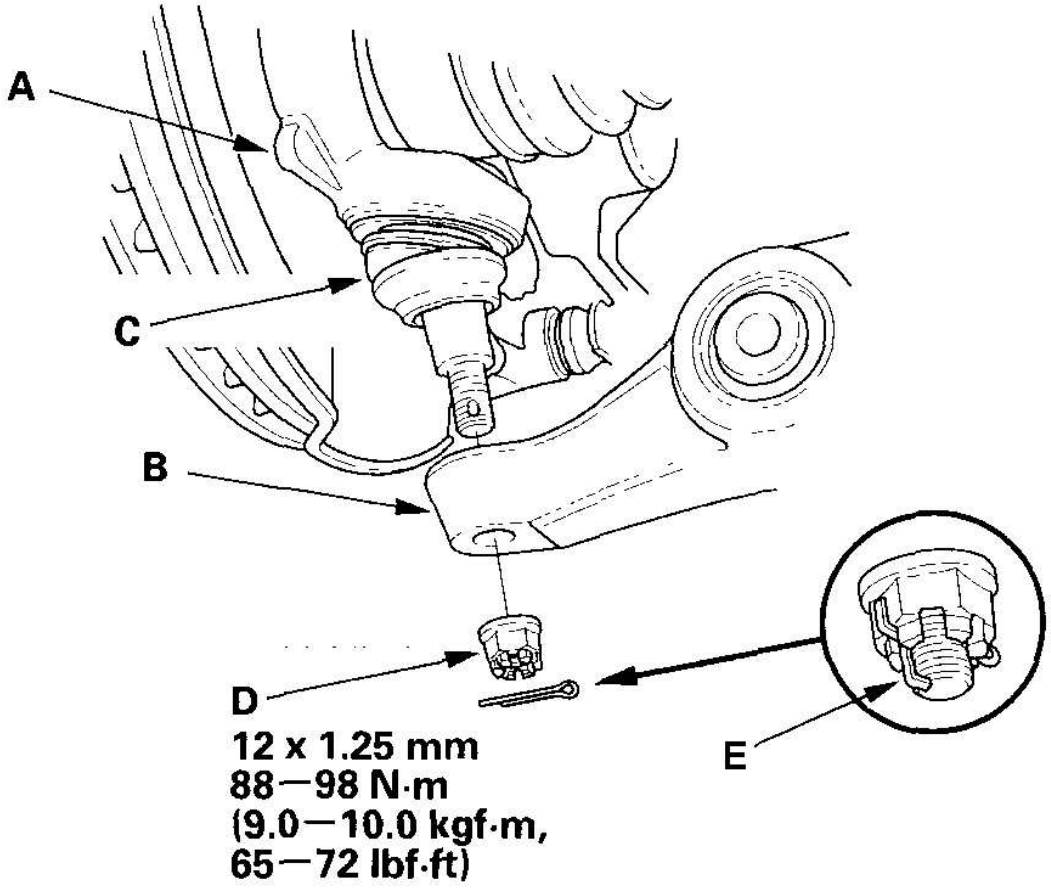


Fig. 62: Installing Knuckle Onto Lower Arm With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the new cotter pin (E) into the ball joint pin hole, and bend the cotter pin as shown in **Fig. 63**.
10. Install the damper fork (A) over the driveshaft and onto the lower arm. Install the damper in the damper fork so the aligning tab (B) is aligned with the slot in the damper fork. Loosely install the flange bolt (C).

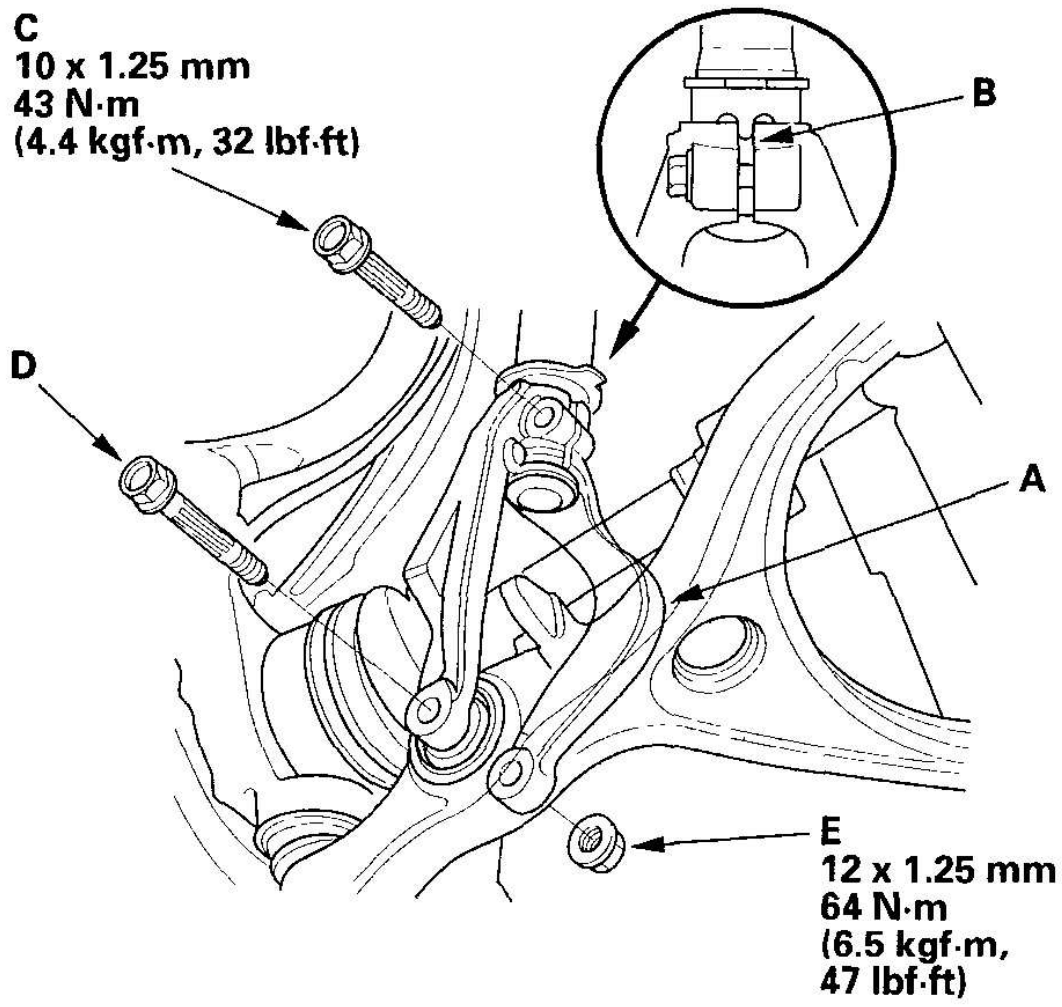


Fig. 63: Installing Damper Fork Over Driveshaft And Onto Lower Arm With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

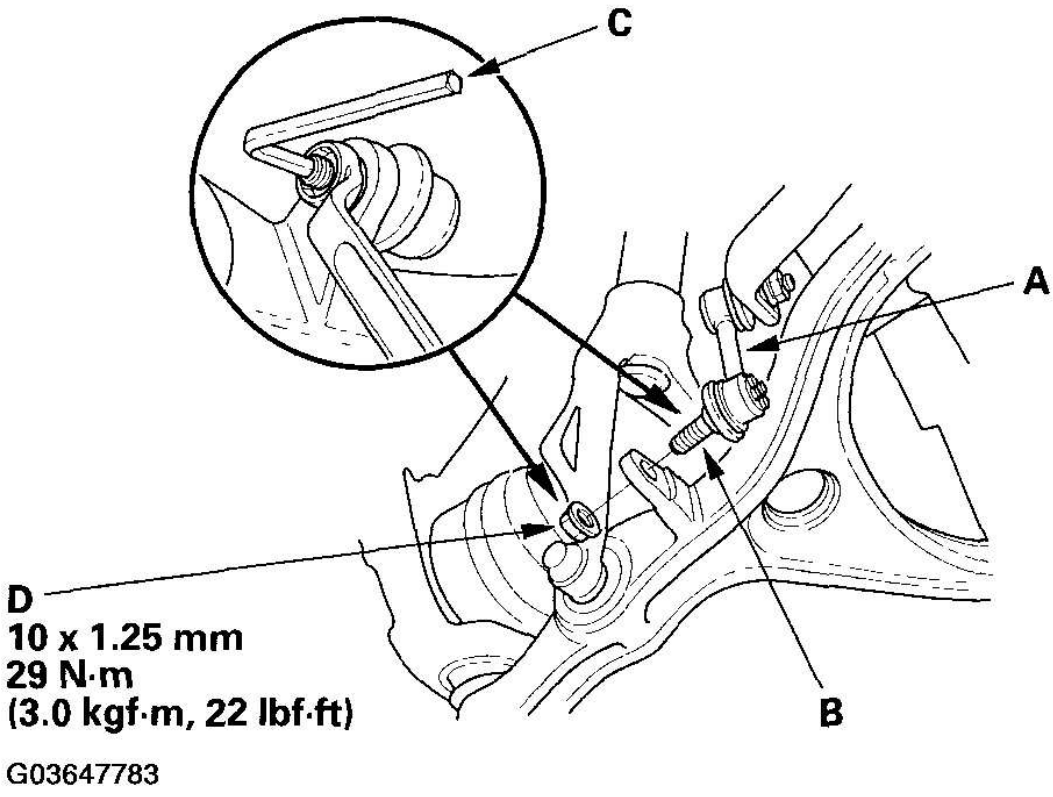


Fig. 64: Connecting Front Stabilizer Link With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Loosely install the flange bolt (D) and a new self-locking nut (E).
12. Connect the front stabilizer link (A) to the lower arm (see step 4 in **STABILIZER LINK REPLACEMENT**).
13. Apply small amount of engine oil to the seating surface of the new spindle nut (A).

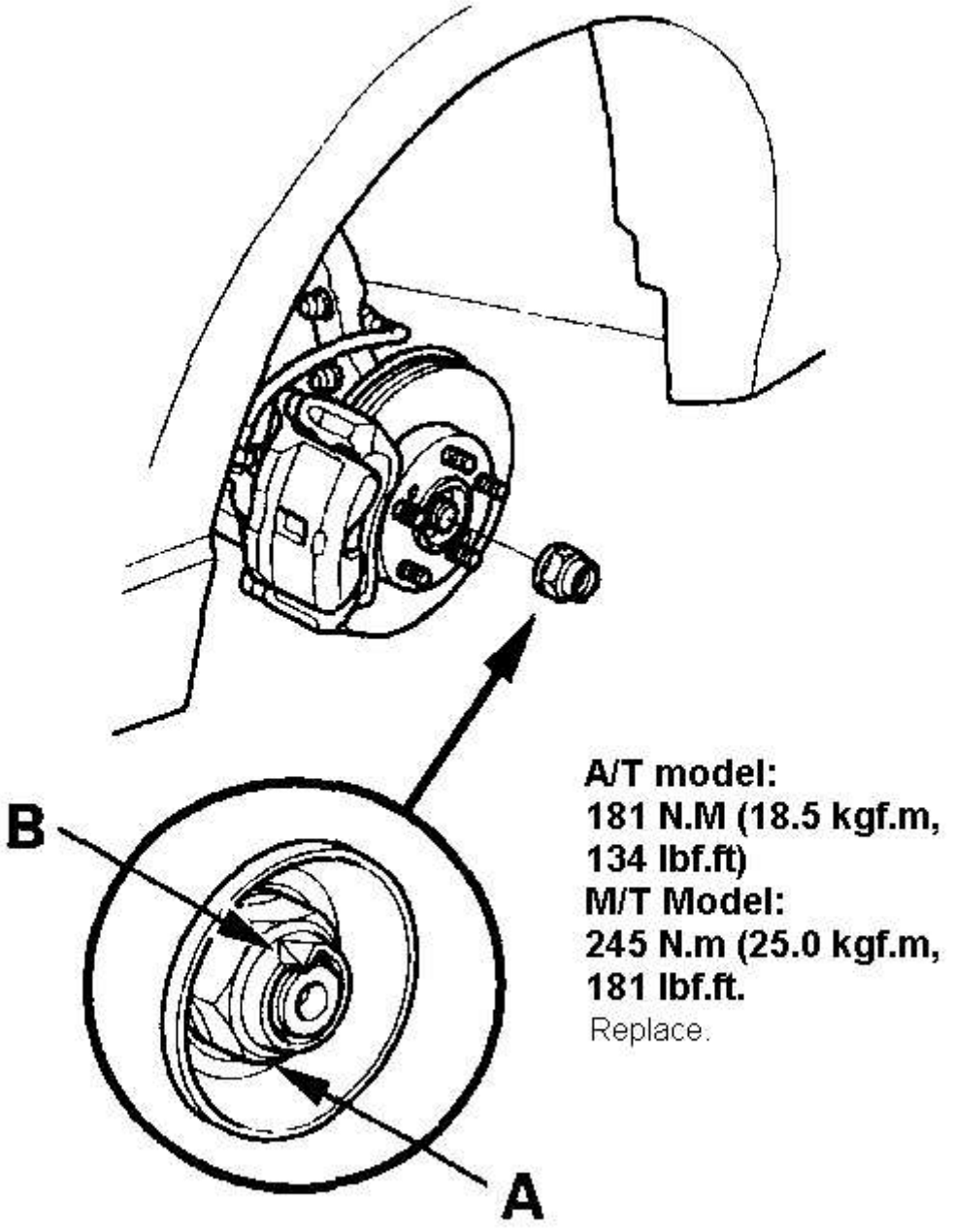


Fig. 65: Removing Wheel Nuts And Front Wheels With Torque Specifications

14. Install a new spindle nut, then tighten the nut. After tightening, use a drift to stake the spindle nut shoulder (B) against the driveshaft.
15. Clean the mating surfaces of the brake disc and the front wheel, then install the front wheel.
16. Turn the front wheel by hand, and make sure there is no interference between the driveshaft and surrounding parts.
17. Tighten the flange bolt and the self-locking nut with the vehicle's weight on the damper.
18. Refill the transmission with recommended transmission fluid:
    - Manual transmission (see **TRANSMISSION FLUID INSPECTION AND REPLACEMENT**)
    - Automatic transmission (see **ATF REPLACEMENT**)
19. Lower the vehicle on a lift.
20. Check the front wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).
21. Test drive the vehicle.

INTERMEDIATE SHAFT REMOVAL

M/T MODEL

1. Drain the transmission fluid. Reinstall the drain plug using a new washer (see **TRANSMISSION FLUID INSPECTION AND REPLACEMENT**).
2. Remove the right driveshaft (see **Driveshaft Removal**).
3. Remove the flange bolt (A) and two dowel bolts (B).

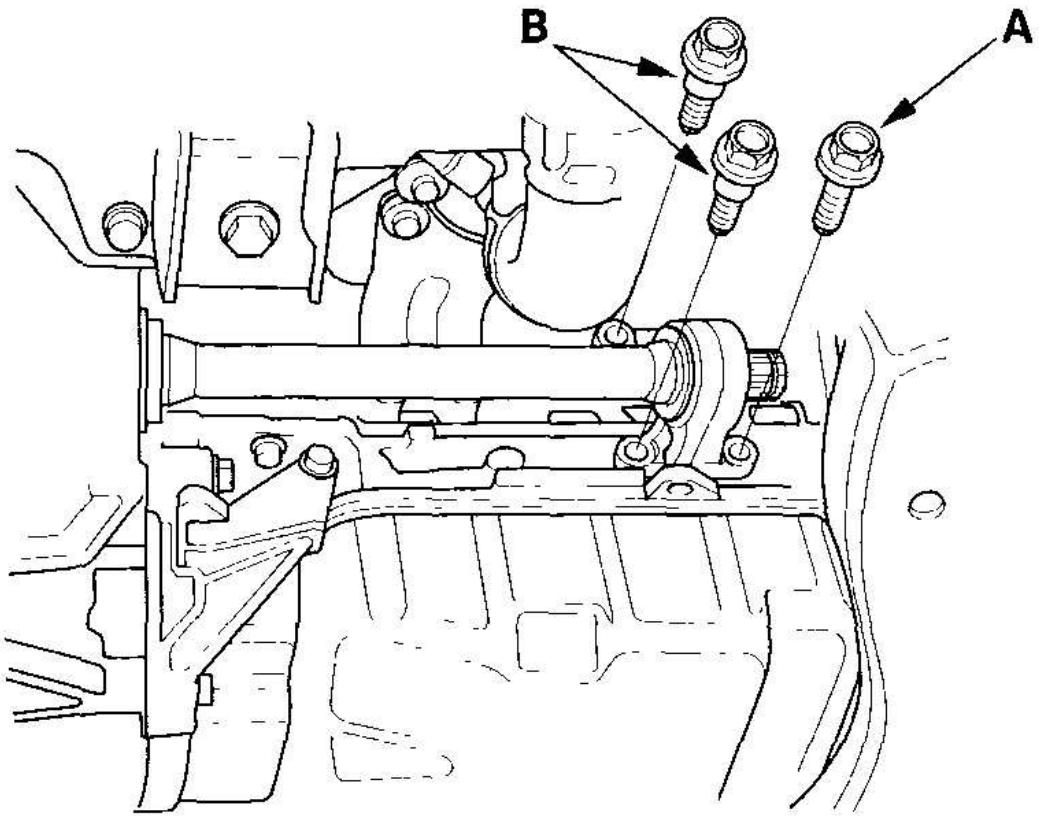


Fig. 66: Removing Flange Bolt And Dowel Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the intermediate shaft (A) from the differential. Hold the intermediate shaft horizontal until it is clear of the differential to prevent damage to the differential oil seal (B).

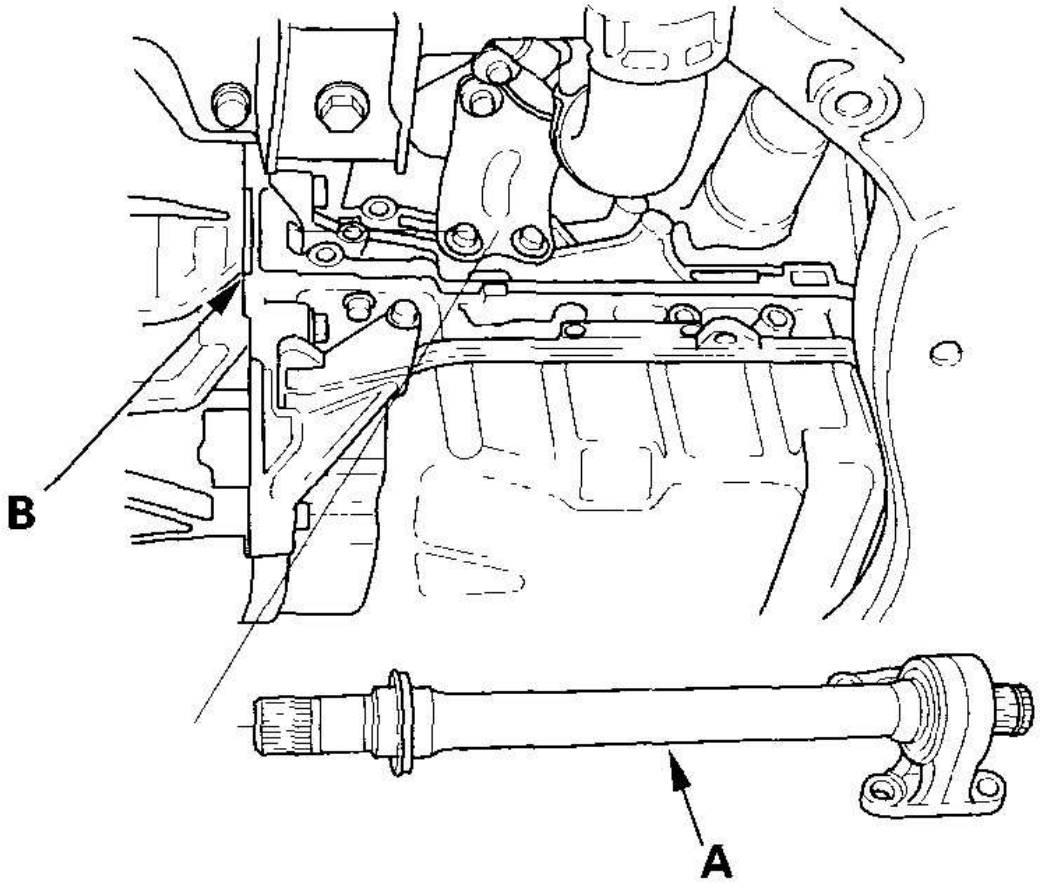


Fig. 67: Removing Intermediate Shaft From Differential
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INTERMEDIATE SHAFT DISASSEMBLY

Special Tools Required

- Half shaft base 07NAF-SR30101 or 07NAF-SR34101
- Oil seal driver 07947-SB00100

M/T MODEL

1. Remove the set ring (A), outer seal (B), and external snap ring (C).

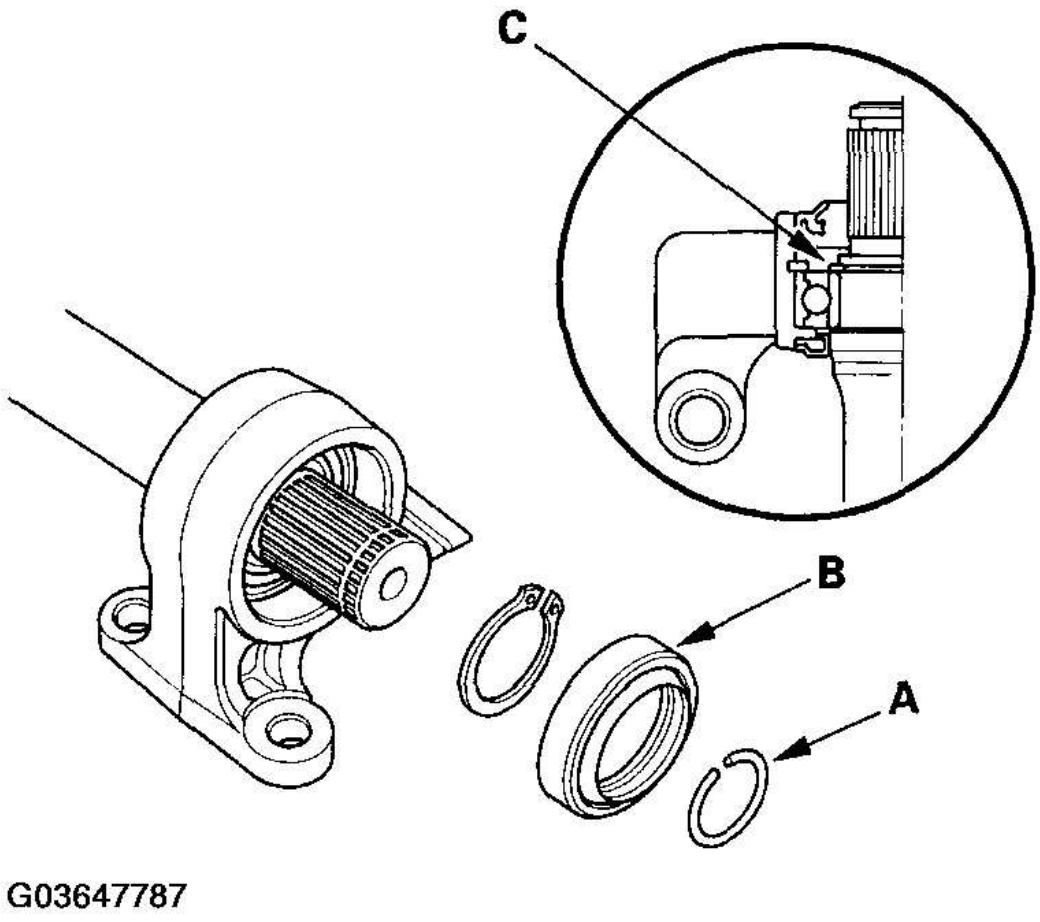


Fig. 68: Removing Set Ring, Outer Seal And External Snap Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Press the intermediate shaft (A) out of the intermediate shaft bearing (B) using a press. Be careful not to damage the metal rings (C) on the intermediate shaft during disassembly.

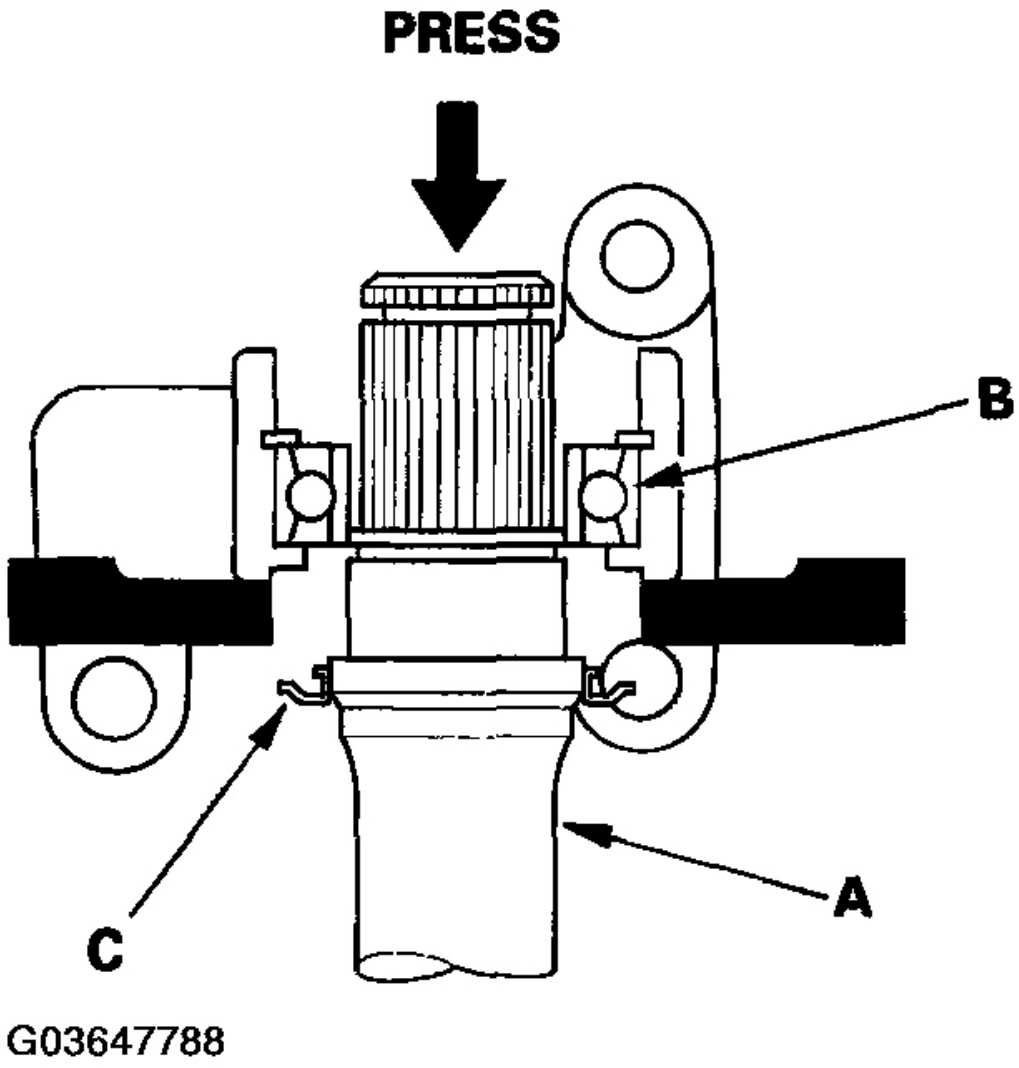
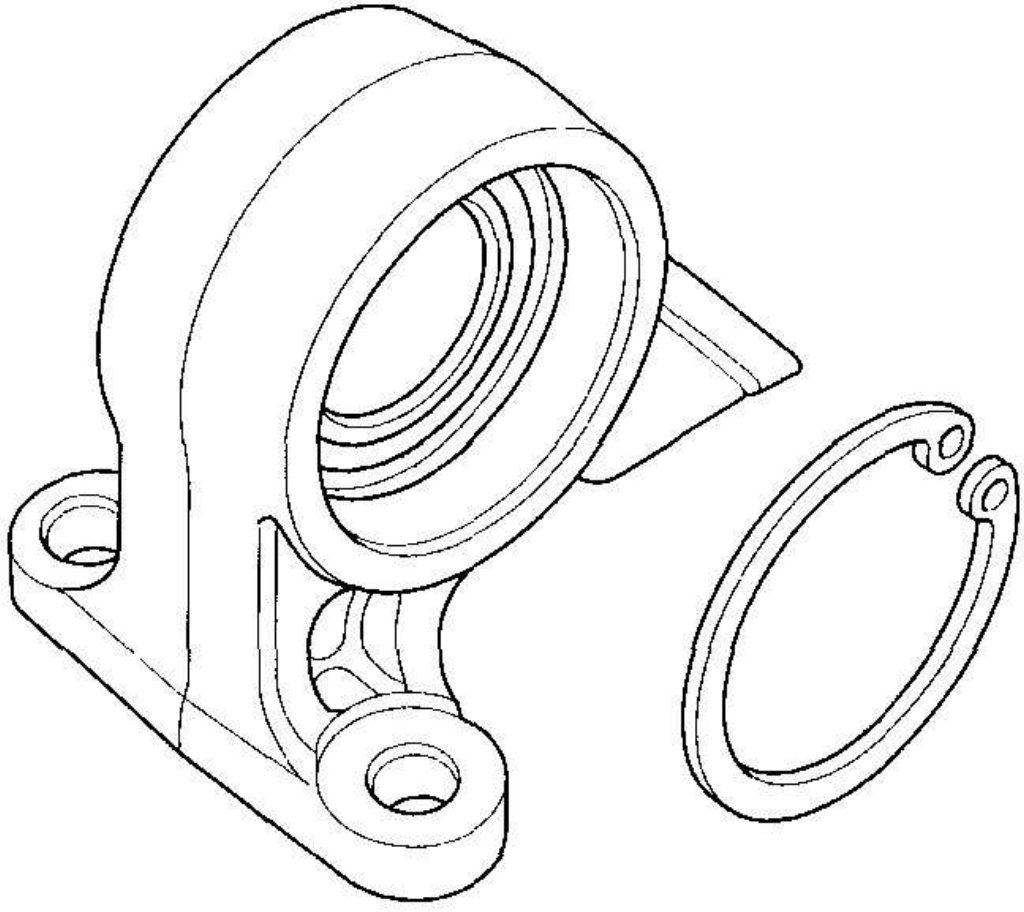


Fig. 69: Removing Intermediate Shaft From Intermediate Shaft Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the internal snap ring.



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Fig. 70: Removing Internal Snap Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Press the intermediate shaft bearing (A) out of the bearing support (B) using the oil seal driver (C), half shaft base (D) and a press.

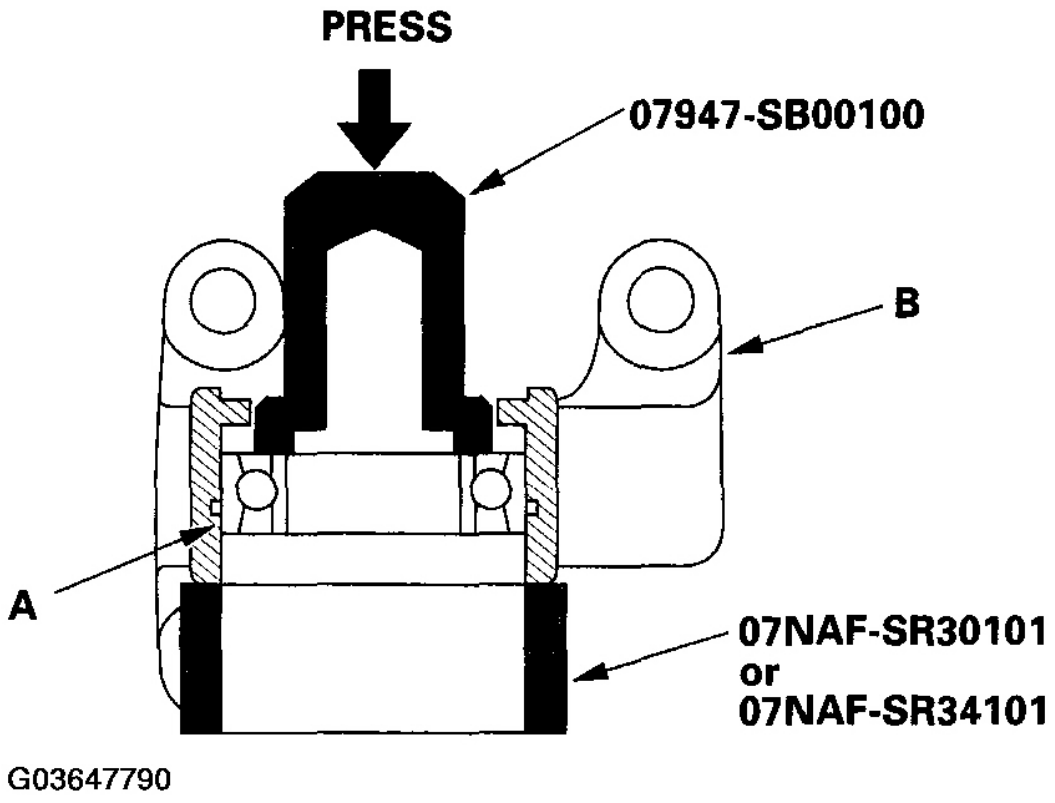


Fig. 71: Removing Intermediate Shaft Bearing From Bearing Support
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INTERMEDIATE SHAFT REASSEMBLY

EXPLODED VIEW

M/T model:

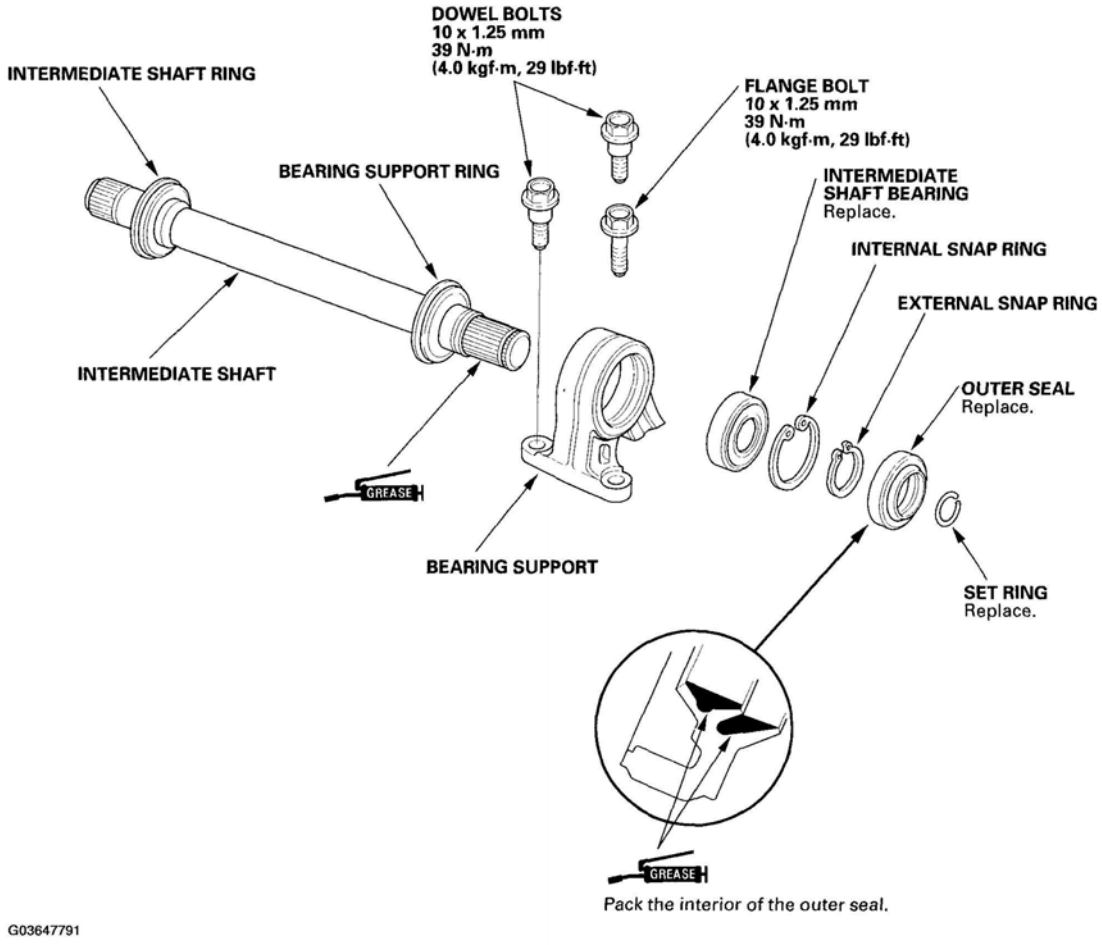


Fig. 72: Exploded View Of Intermediate Shaft Assembly Components (M/T Model) With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

- Oil seal driver 07GAD-PH70201
- Attachment, 52 x 55 mm 07746-0010400
- Attachment, 35 mm I.D. 07746-0030400
- Driver 07749-0010000

M/T MODEL

NOTE: Refer to the EXPLODED VIEW as needed during this

procedure.

1. Clean the disassembled parts with solvent, and dry them with compressed air.

   NOTE: Do not wash the rubber parts with solvent.

2. Press the intermediate shaft bearing (A) into the bearing support (B) using the 52 x 55 mm attachment (C), driver (D) and a press.

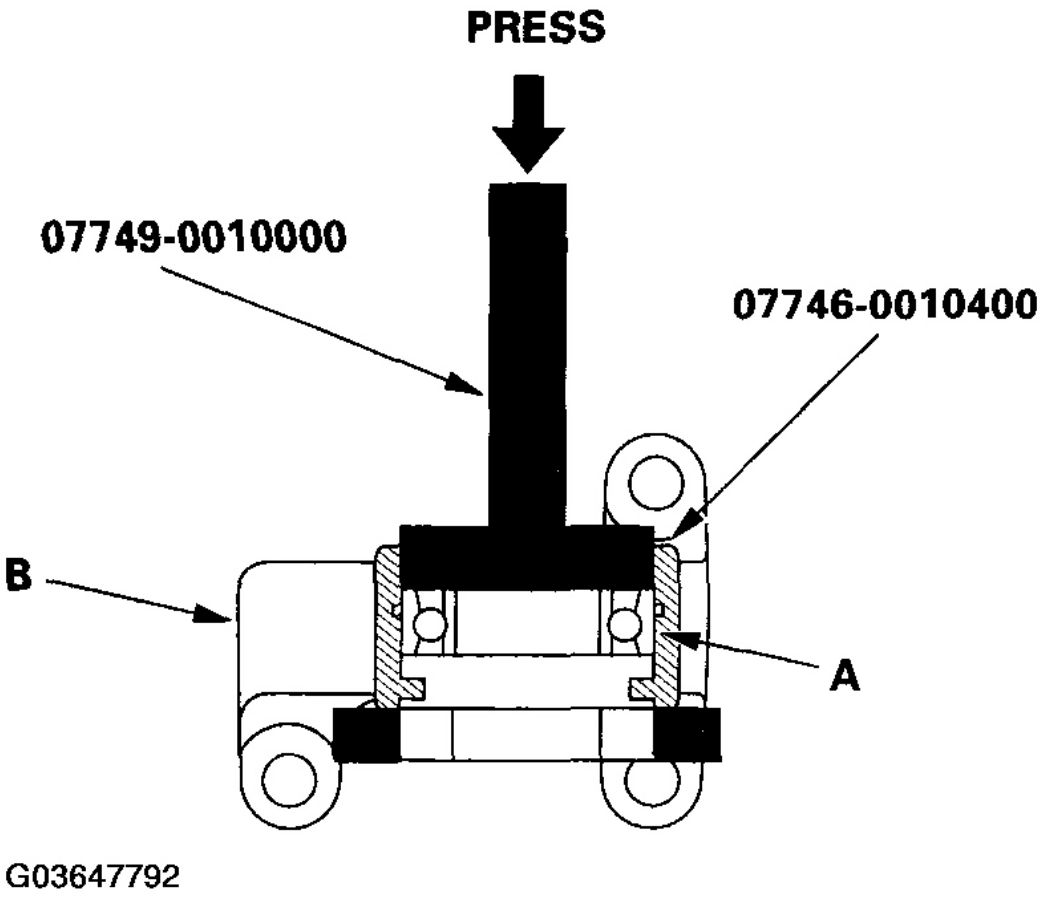
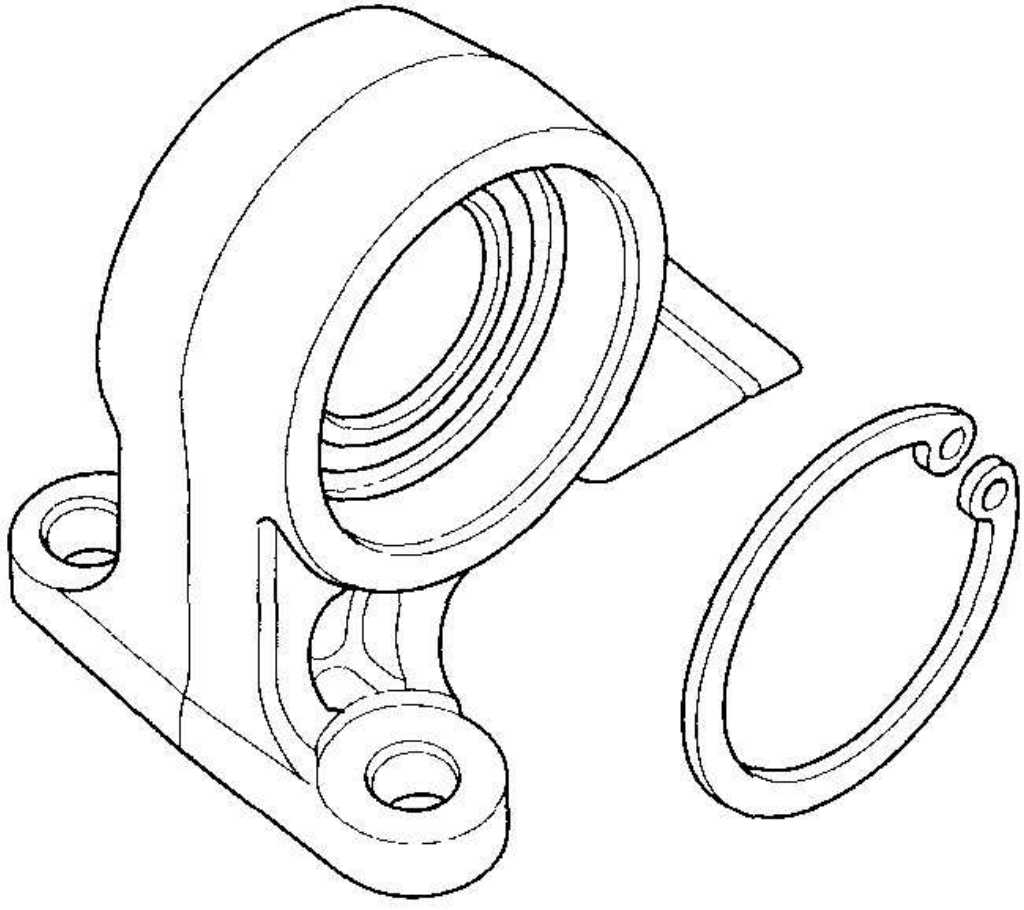


Fig. 73: Inserting Intermediate Shaft Bearing Into Bearing Support
Courtesy of AMERICAN HONDA MOTOR CO., INC.

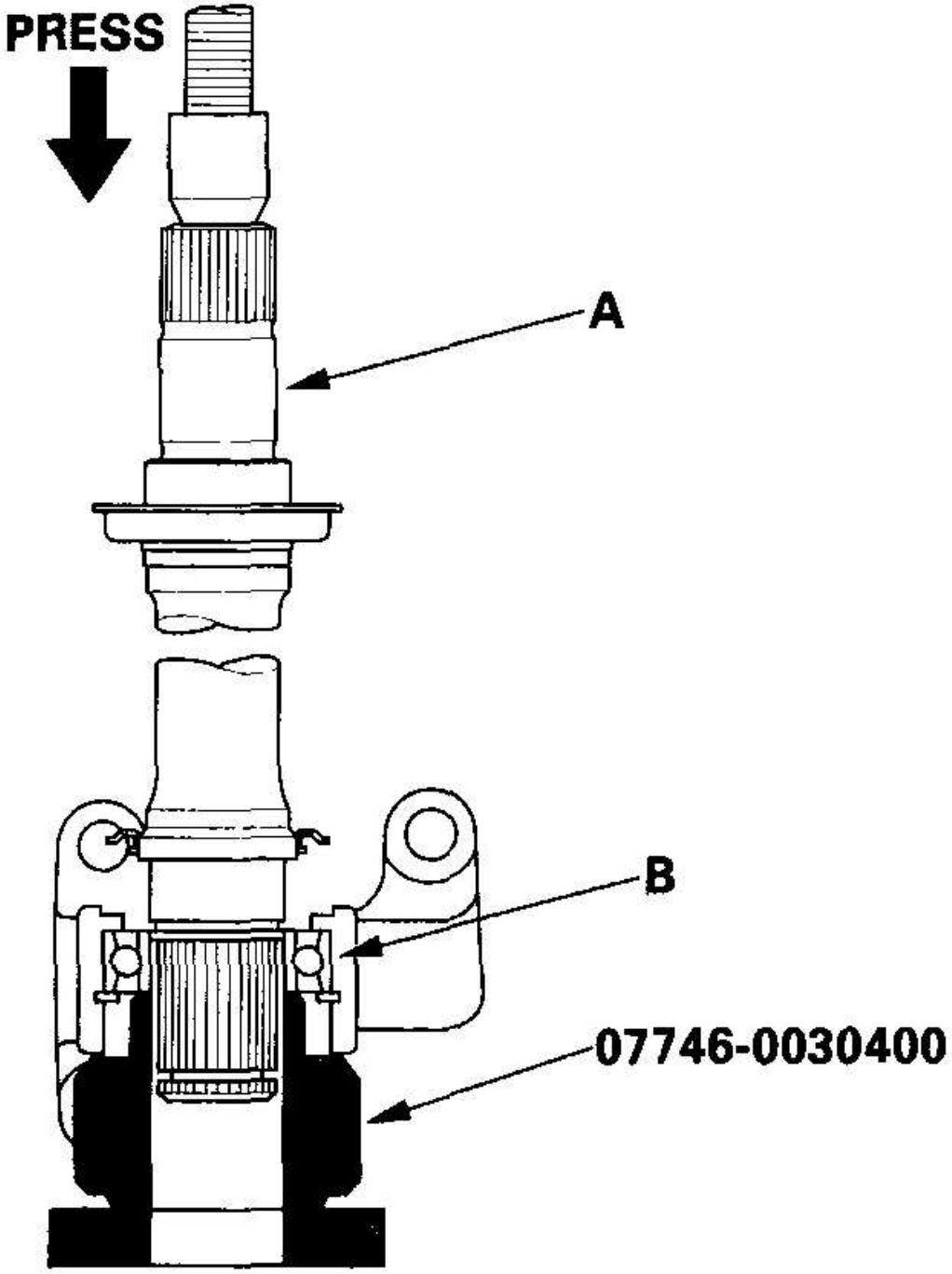
3. Seat the internal snap ring in the groove of the bearing support.



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Fig. 74: Installing Internal Snap Ring In Groove Of Bearing Support
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Press the intermediate shaft bearing (A) into the shaft bearing (B) using the 35 mm I.D. attachment (C) and a press.



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Fig. 75: Inserting Intermediate Shaft Bearing Into Shaft Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Seat the external snap ring (A) in the groove of the intermediate shaft (B).

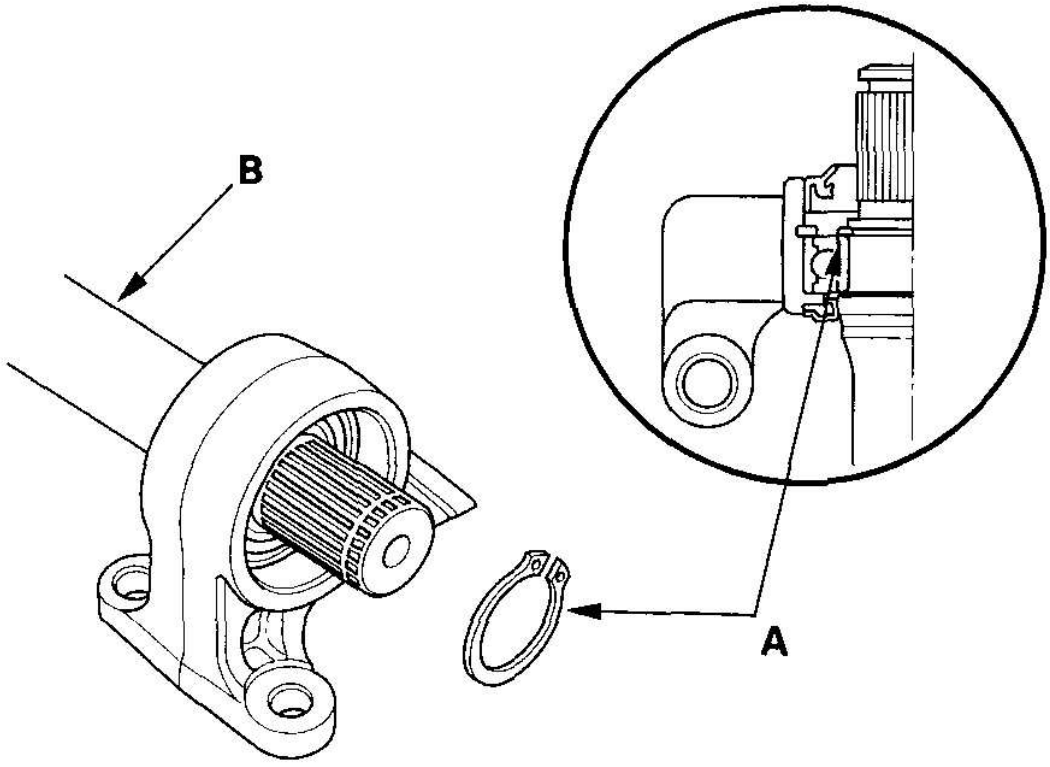


Fig. 76: Seating External Snap Ring In Intermediate Shaft Groove
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the new outer seal (A) into the bearing support (B) using the oil seal driver (C) and a press.

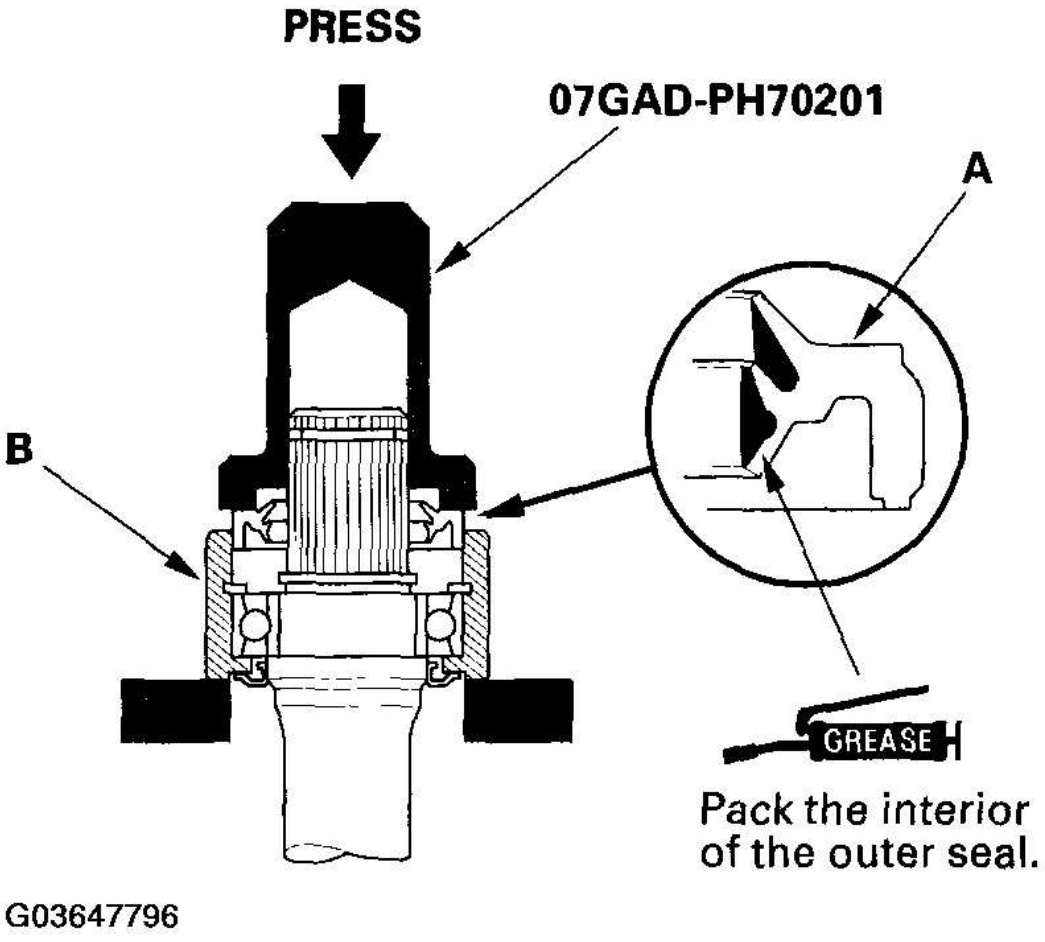


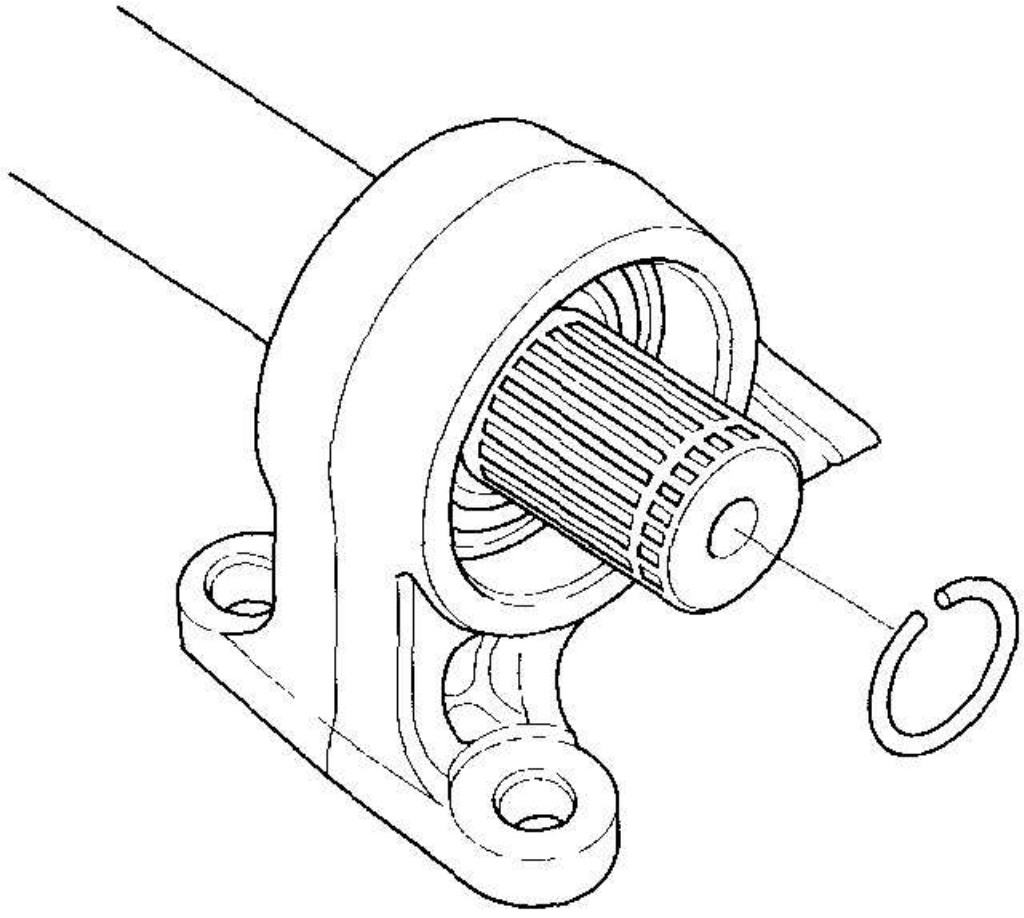
Fig. 77: Installing Outer Seal Into Bearing Support
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7.

INTERMEDIATE SHAFT INSTALLATION

M/T MODEL

1. Install the set ring.



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Fig. 78: Installing Set Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Clean the areas where the intermediate shaft contacts the differential thoroughly with solvent or brake cleaner, and dry with compressed air.

NOTE: Do not wash the rubber parts with solvent.

3. Insert the intermediate shaft assembly (A) into the differential until the set ring locks in the groove.

NOTE: Insert the intermediate shaft horizontally to prevent damage to the differential oil seal (B).

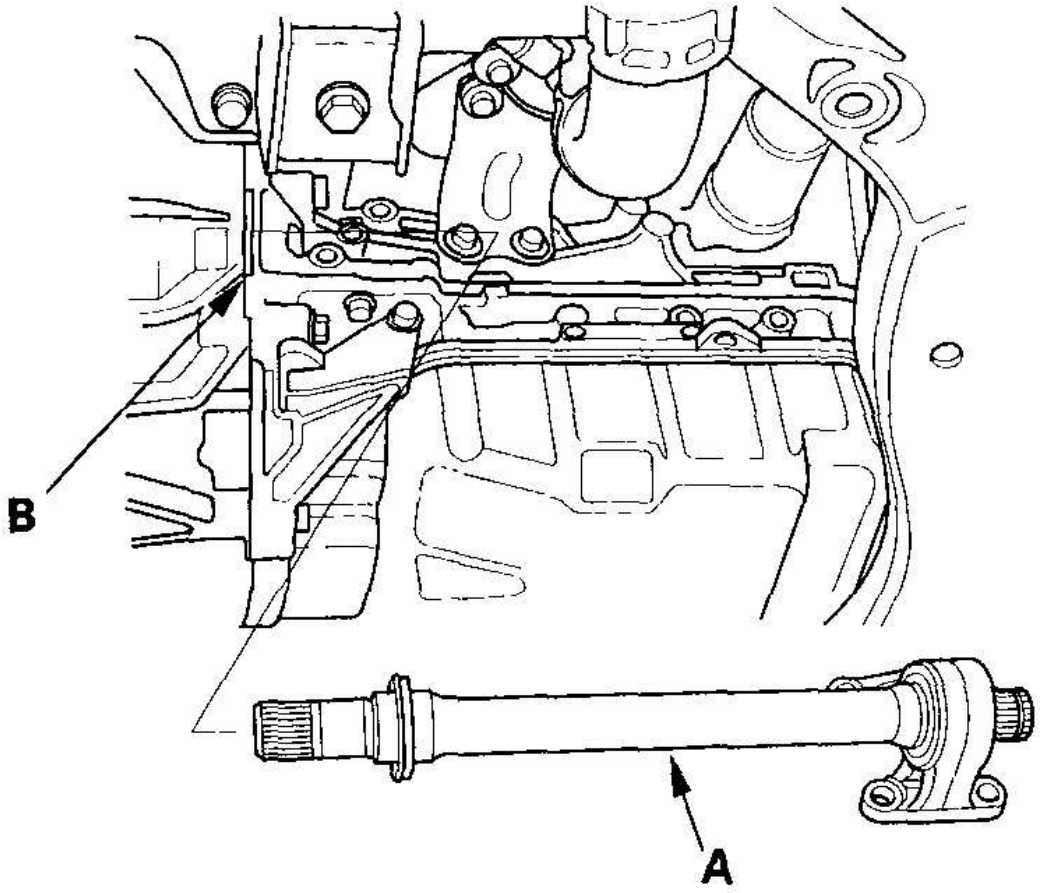


Fig. 79: Inserting Intermediate Shaft Assembly Into Differential (M/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the flange bolt (A) and two dowel bolts (B).

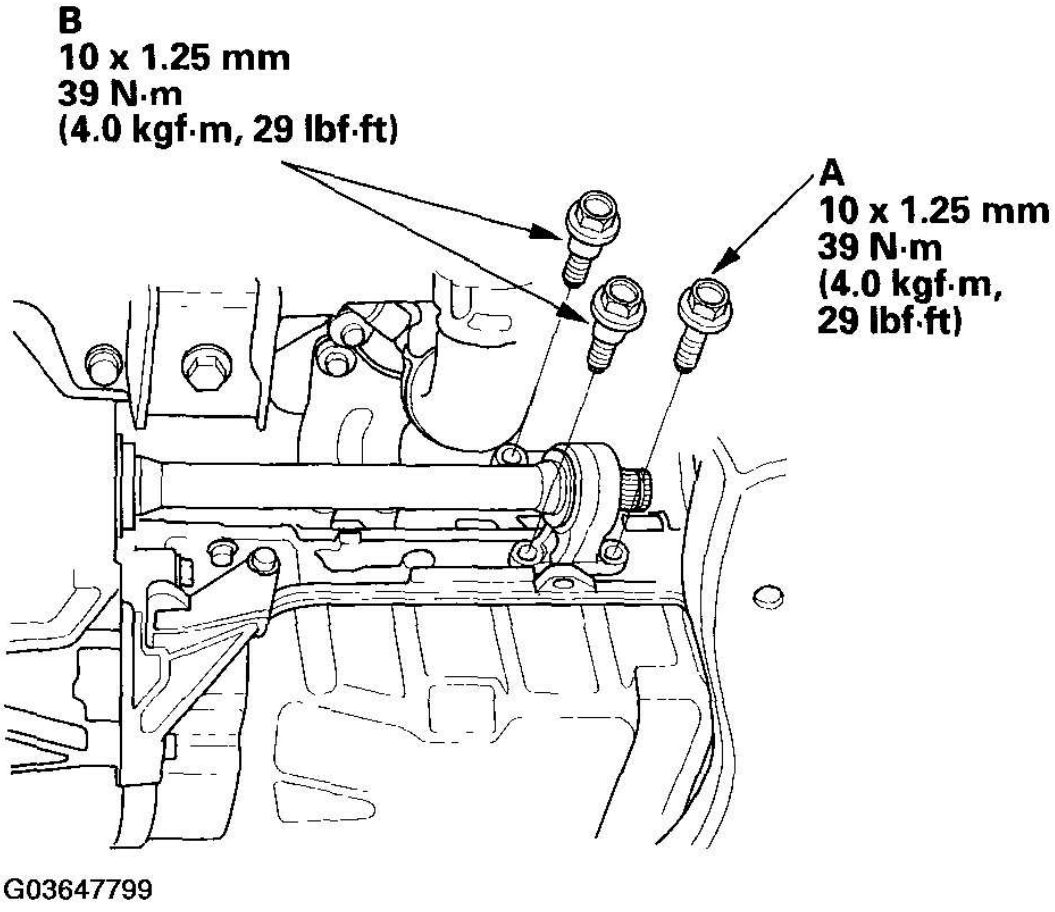


Fig. 80: Installing Flange Bolt And Dowel Bolts With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the right driveshaft (see **Driveshaft Installation**).
6. Refill the transmission fluid (see **TRANSMISSION FLUID INSPECTION AND REPLACEMENT**
7. Test-drive the vehicle.

2003-07 ENGINE PERFORMANCE

EGR-System - Accord (V6)

COMPONENT LOCATION INDEX

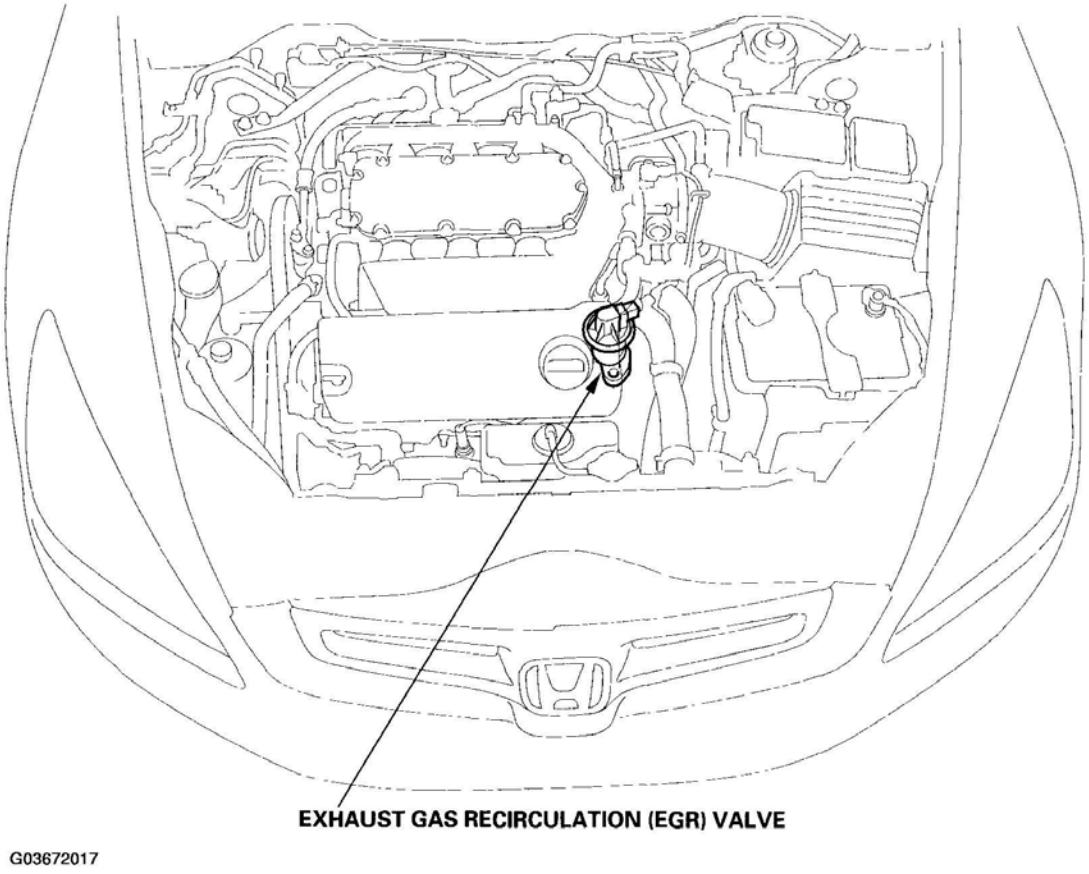


Fig. 1: Identifying EGR-System Component
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC CODES

DTC CHART

DTC	Description
DTC P0401	EGR Insufficient Flow
DTC P0404	EGR Control Circuit Range/ Performance Problem

DTC P0406	EGR Valve Position Sensor Circuit High Voltage
DTC P2413	EGR System Malfunction

DTC TROUBLESHOOTING

DTC P0401: EGR INSUFFICIENT FLOW

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Do the EGR TEST in the INSPECTION MENU with the HDS.

   Is the result OK?

   YES - Go to step 5.

   NO - Go to step 7.
5. Test-drive under these conditions:
   - Engine coolant temperature above 158°F(70°C)
   - Transmission in 4th gear (A/T in D position)
   - Vehicle speed at 25 mph (40 km/h) or more, and engine speed between 1,100 rpm and 3,000 rpm
   - During the drive, decelerate (with the throttle fully closed) for 5 seconds
6. Monitor the OBD STATUS for DTC P0401 in the DTCs MENU with the HDS.

   Does the screen indicate FAILED?

   YES - Remove the intake manifold cover (see **INTAKE MANIFOLD**

REMOVAL AND INSTALLATION), and clean the intake manifold, and EGR ports with throttle plate and induction cleaner, then go to step 9.

NO - If the screen indicates PASSED, intermittent failure, system is OK at this time. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 5 and recheck.

7. Turn the ignition switch OFF.
8. Replace the EGR valve (see **EGR VALVE REPLACEMENT**).
9. Turn the ignition switch ON (II).
10. Reset the ECM/PCM with the HDS.
11. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
12. Test-drive under these conditions:
    - Engine coolant temperature above 158°F (70°C)
    - Transmission in 4th gear (A/T in D position)
    - Vehicle speed at 25 mph (40 km/h) or more, and engine speed between 1,100 rpm and 3,000 rpm
    - During the drive, decelerate (with the throttle fully closed) for 5 seconds
13. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated OK?

YES - If DTC P0401 is indicated, check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the connections are OK, go to step 15. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

NO - Go to step 14.

14. Monitor the OBD STATUS for DTC P0401 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - Troubleshooting is complete.

NO - If the screen indicates FAILED, go to step 1 and recheck. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 12 and recheck.

15. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**).
16. Test-drive under these conditions:
    - Engine coolant temperature above 158°F (70°C)
    - Transmission in 4th gear (A/T in D position)
    - Vehicle speed at 25 mph (40 km/h) or more, and engine speed between 1,100 rpm and 3,000 rpm
    - During the drive, decelerate (with the throttle fully closed) for 5 seconds
17. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0401 is indicated, check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTCs troubleshooting.

NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

DTC P0404: EGR CONTROL CIRCUIT RANGE/ PERFORMANCE PROBLEM

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or

neutral) until the radiator fan comes on, then let it idle.

4. Do the EGR TEST in the INSPECTION MENU with the HDS.

   Is the result OK?

   YES - Intermittent failure, system is OK at this time. Clean any carbon build-up on the EGR valve with throttle plate and induction cleaner.

   NO - Go to step 5.

5. Turn the ignition switch OFF.
6. Disconnect the EGR valve 6P connector.
7. At the sensor side, measure resistance between EGR valve 6P connector terminals No. 1 and No. 2.

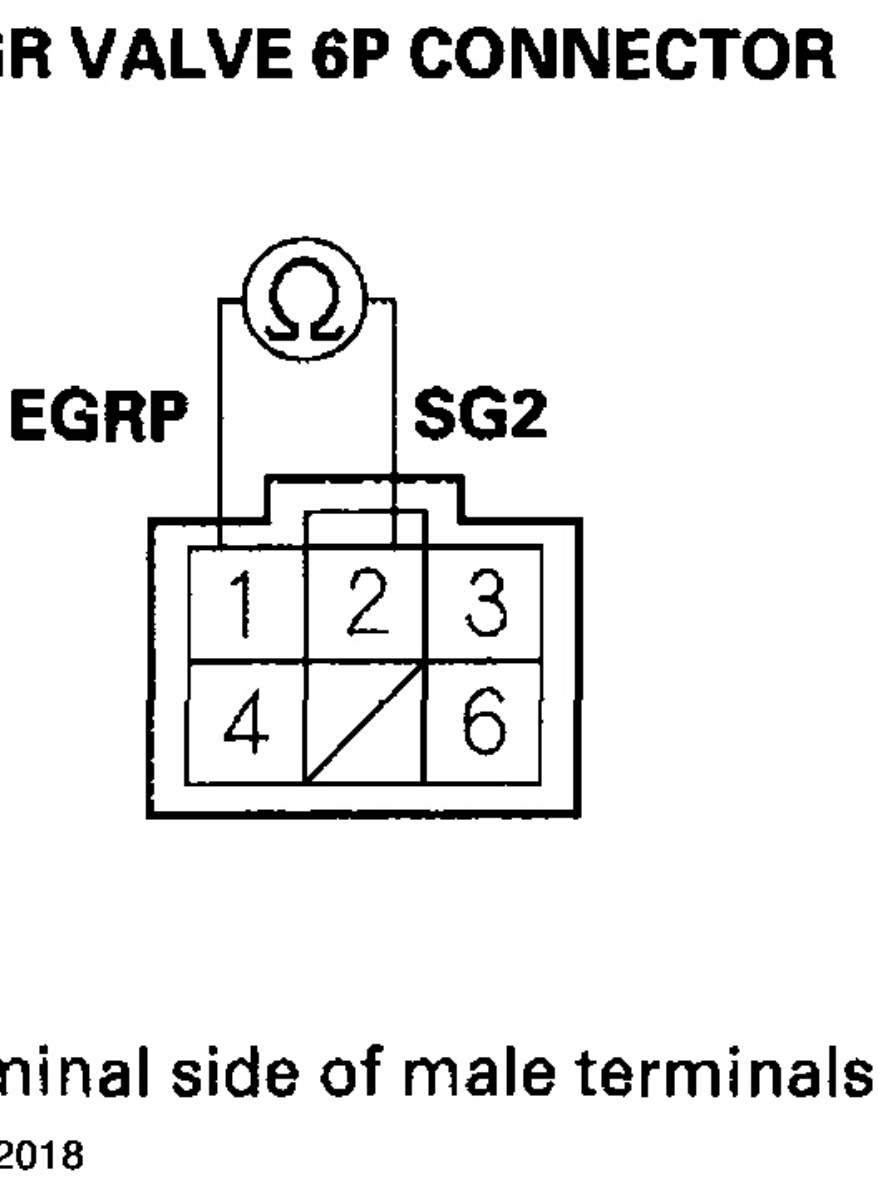


Fig. 2: Measuring Resistance EGR Valve 6P Connector Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 100 k ohms or more?

YES - Go to step 26.

NO - Go to step 8.

8. Measure resistance between EGR valve 6P connector terminals No. 1 and No. 3.

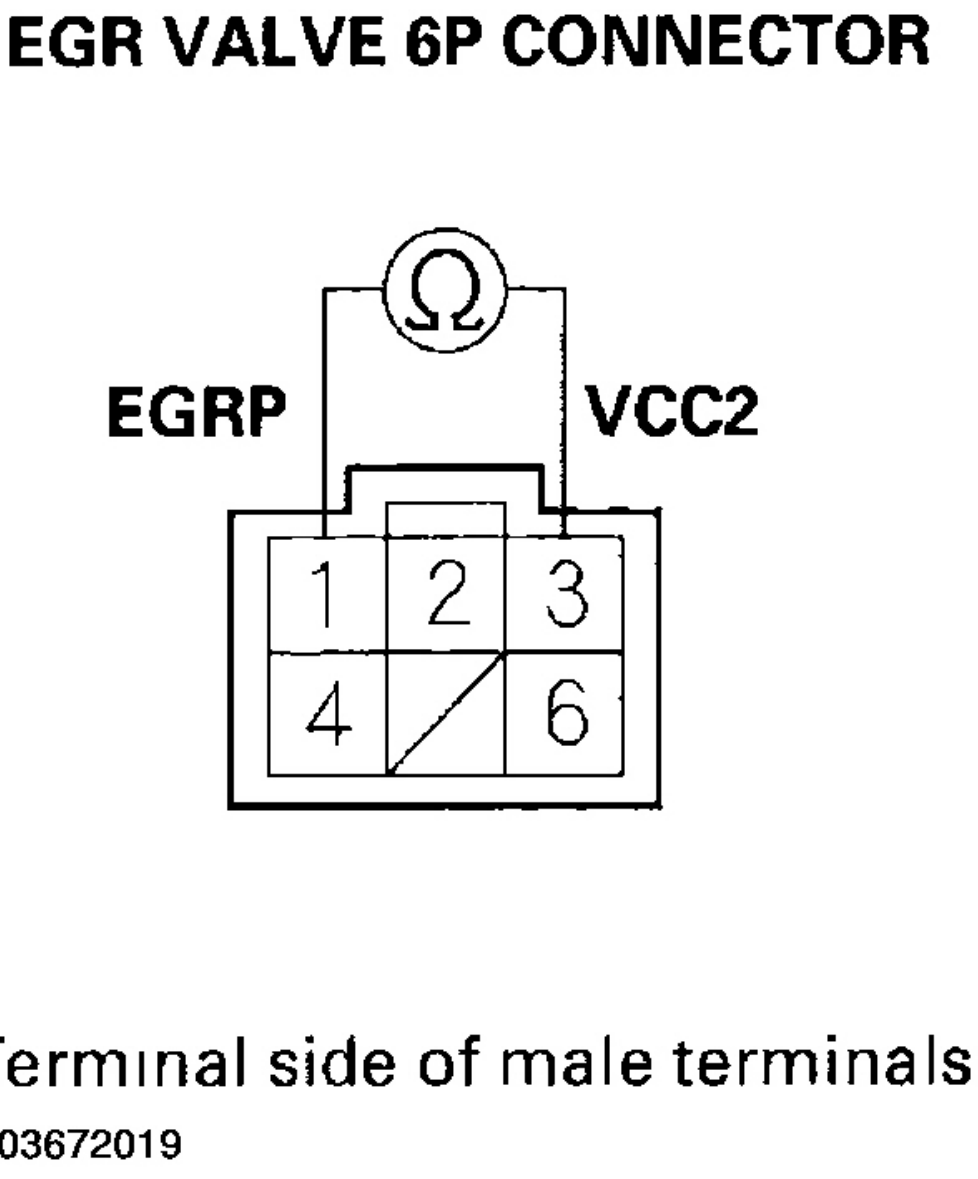


Fig. 3: Measuring Resistance Between EGR Valve 6P Connector

Terminals No. 1 And No. 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 100 k ohms or more?

YES - Go to step 26.

NO - Go to step 9.

9. Check for continuity between EGR valve 6P connector terminal No. 6 and body ground.

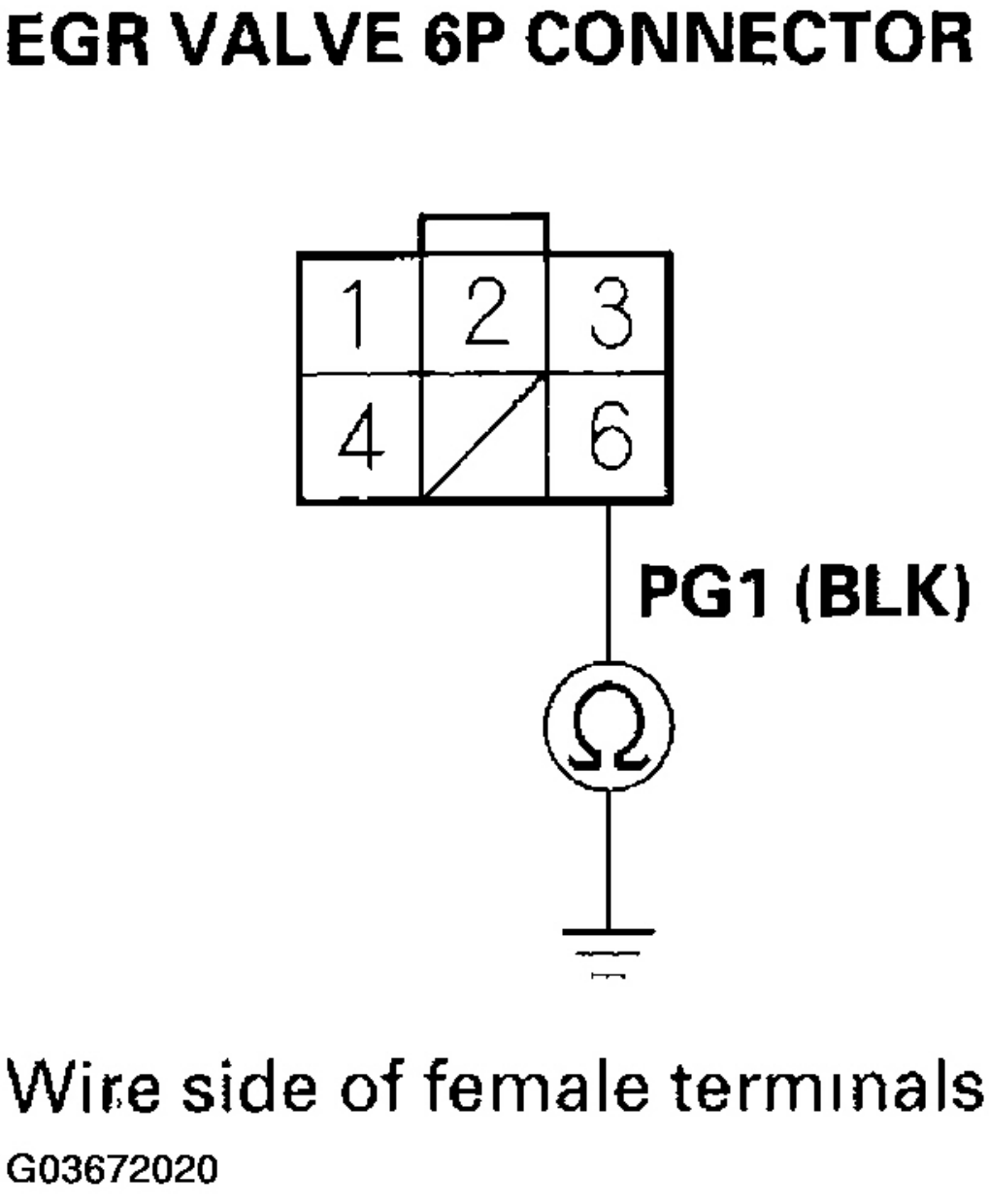


Fig. 4: Checking Continuity Between EGR Valve 6P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10.

NO - Repair open in the wire between the EGR valve and G101, then go to step 27.

10. Jump the SCS line with the HDS.
11. Disconnect ECM/PCM connector B (24P).
12. Check for continuity between ECM/PCM connector terminal B5 and body ground.

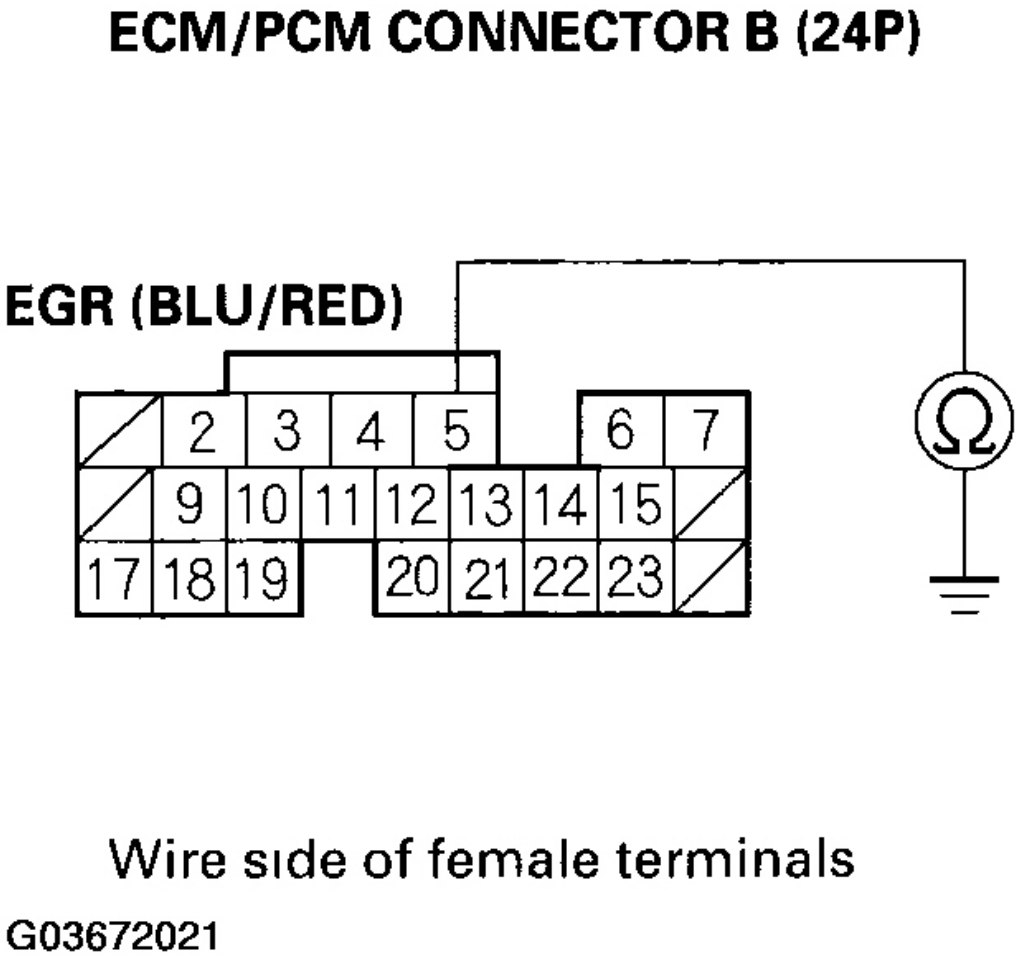


Fig. 5: Checking Continuity Between ECM/PCM Connector Terminal B5

And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/PCM (B5) and the EGR valve, then go to step 27.

NO - Go to step 13.

13. Connect EGR valve 6P connector terminal No. 4 to body ground with a jumper wire.

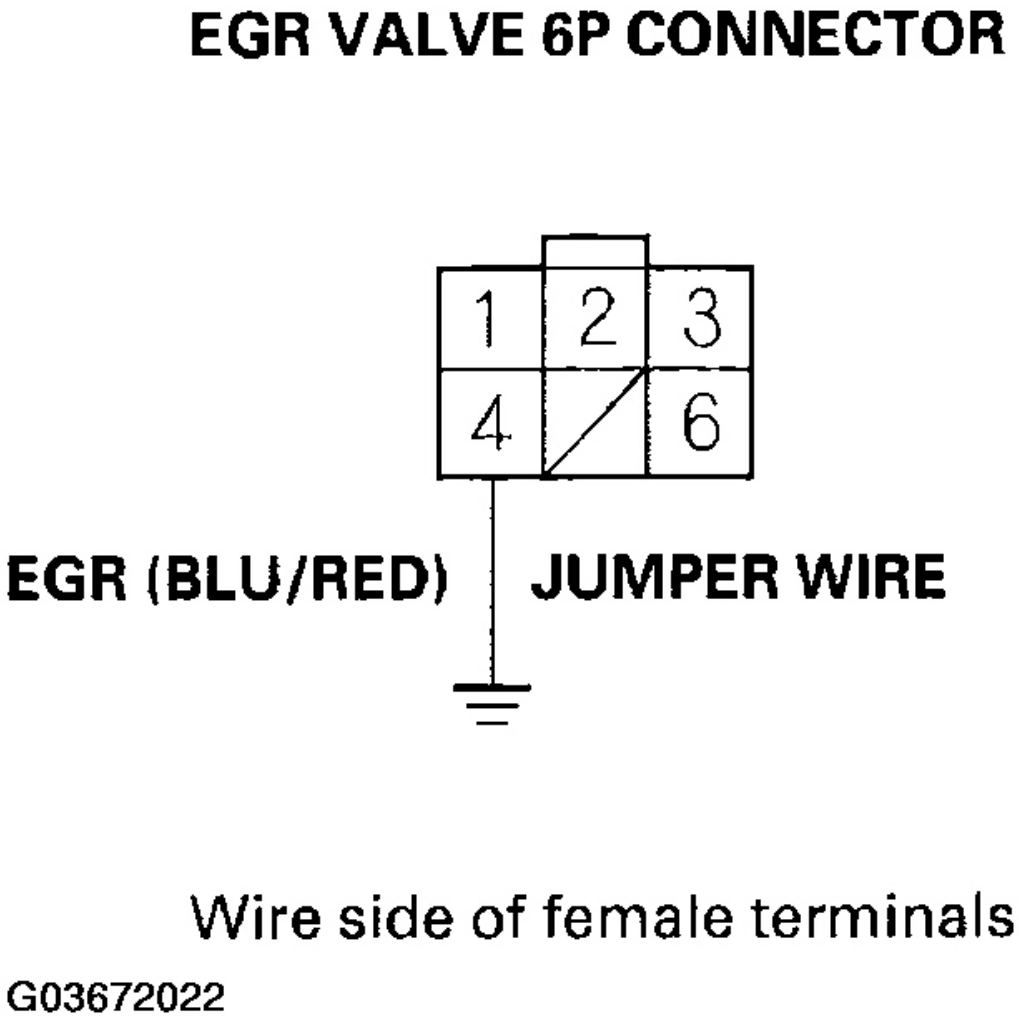


Fig. 6: Connecting EGR Valve 6P Connector Terminal To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Check for continuity between ECM/PCM connector terminal B5 and body ground.

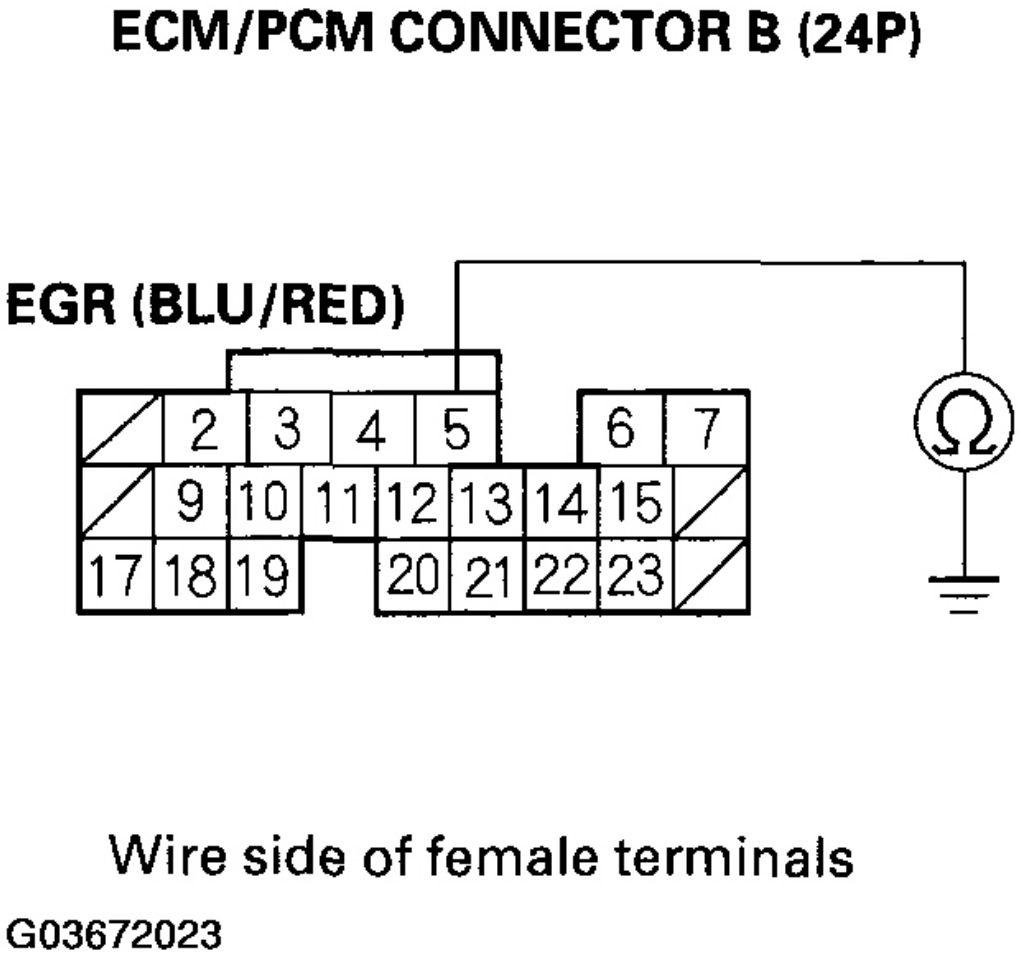


Fig. 7: Checking Continuity Between ECM/PCM Connector Terminal B5 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 15.

NO - Repair open in the wire between the ECM/ PCM (B5) and the EGR valve, then go to step 27.

15. Remove the EGR valve (see **EGR VALVE REPLACEMENT**).

16. Clean the intake manifold EGR port with throttle plate and induction cleaner. Also, clean the passage inside the EGR valve with throttle plate and induction cleaner.
17. Install the EGR valve (see **EGR VALVE REPLACEMENT**).
18. Reconnect the EGR valve 6P connector.
19. Reconnect ECM/PCM connector B (24P).
20. Turn the ignition switch ON (II).
21. Reset the ECM/PCM with the HDS.
22. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
23. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
24. Do the EGR TEST in the INSPECTION MENU with the HDS.

    Is the result OK?

    YES - Go to step 33.

    NO - Go to step 25.
25. Turn the ignition switch OFF.
26. Replace the EGR valve (see **EGR VALVE REPLACEMENT**).
27. Reconnect all connectors.
28. Turn the ignition switch ON (II).
29. Reset the ECM/PCM with the HDS.
30. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
31. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
32. Do the EGR TEST in the INSPECTION MENU with the HDS.
33. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0404 is indicated, check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the connections and terminals are OK, go to step 35. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

NO - Go to step 34.

34. Monitor the OBD STATUS for DTC P0404 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete.

    NO - If the screen indicates FAILED, go to step 1. and recheck. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 31 and recheck.

35. Update the ECM/PCM if it does not have the latest software, or substitute a know-good ECM/PCM (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**).
36. Do the EGR TEST in the INSPECTION MENU with the HDS.
37. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

    YES - If DTC P0404 is indicated, check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

    NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

DTC P0406: EGR VALVE POSITION SENSOR CIRCUIT HIGH VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING

INFORMATION).

1. Turn the ignition switch ON (II).
2. Check the EGR VLS in the DATA LIST with the HDS.

Is 4.88 V or higher indicated?

YES - Go to step 3.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the EGR valve and the ECM/PCM.

3. Turn the ignition switch OFF.
4. Disconnect the EGR valve 6P connector.
5. Turn the ignition switch ON (II).
6. Measure voltage between EGR valve 6P connector terminals No. 2 and No. 3.

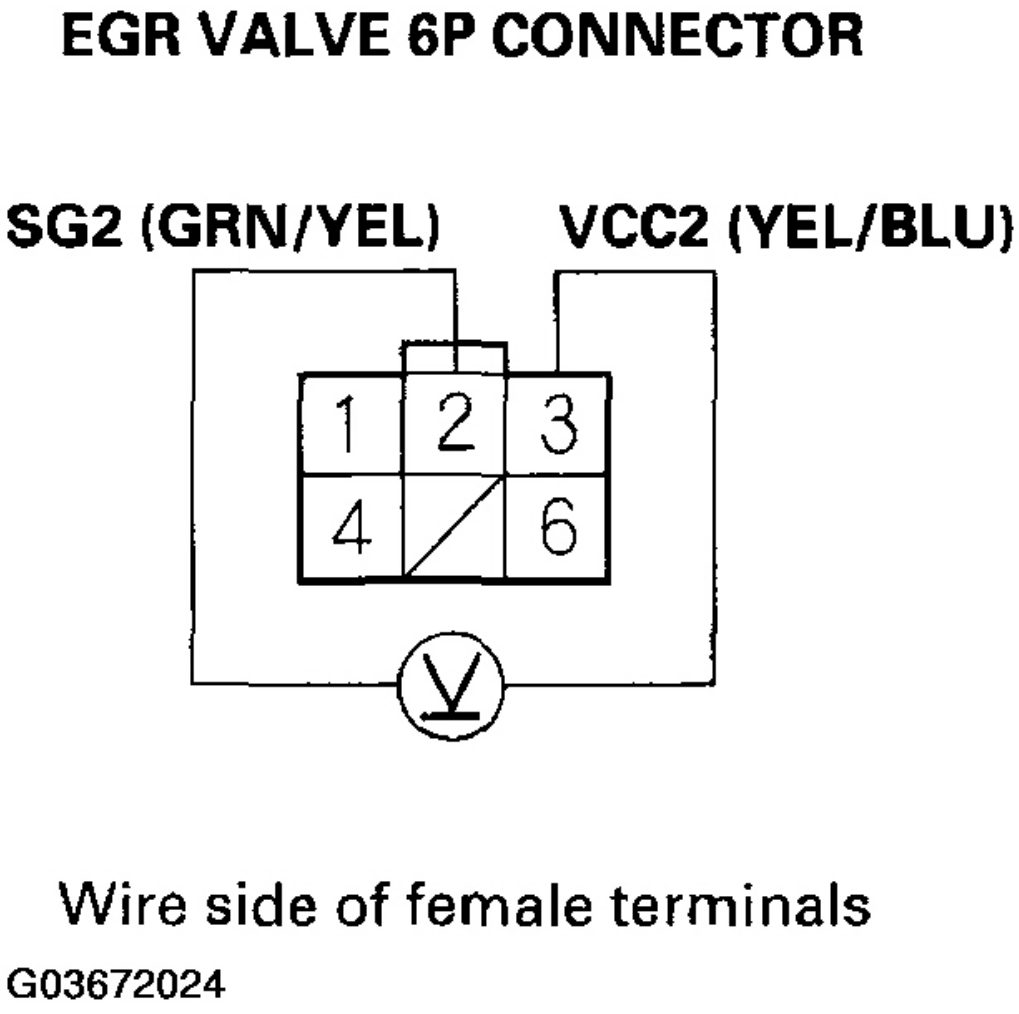


Fig. 8: Measuring Voltage Between EGR Valve 6P Connector Terminals No. 2 And No. 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 8.
NO - Go to step 7.

7. Measure voltage between ECM/PCM connector terminals D12 and D10.

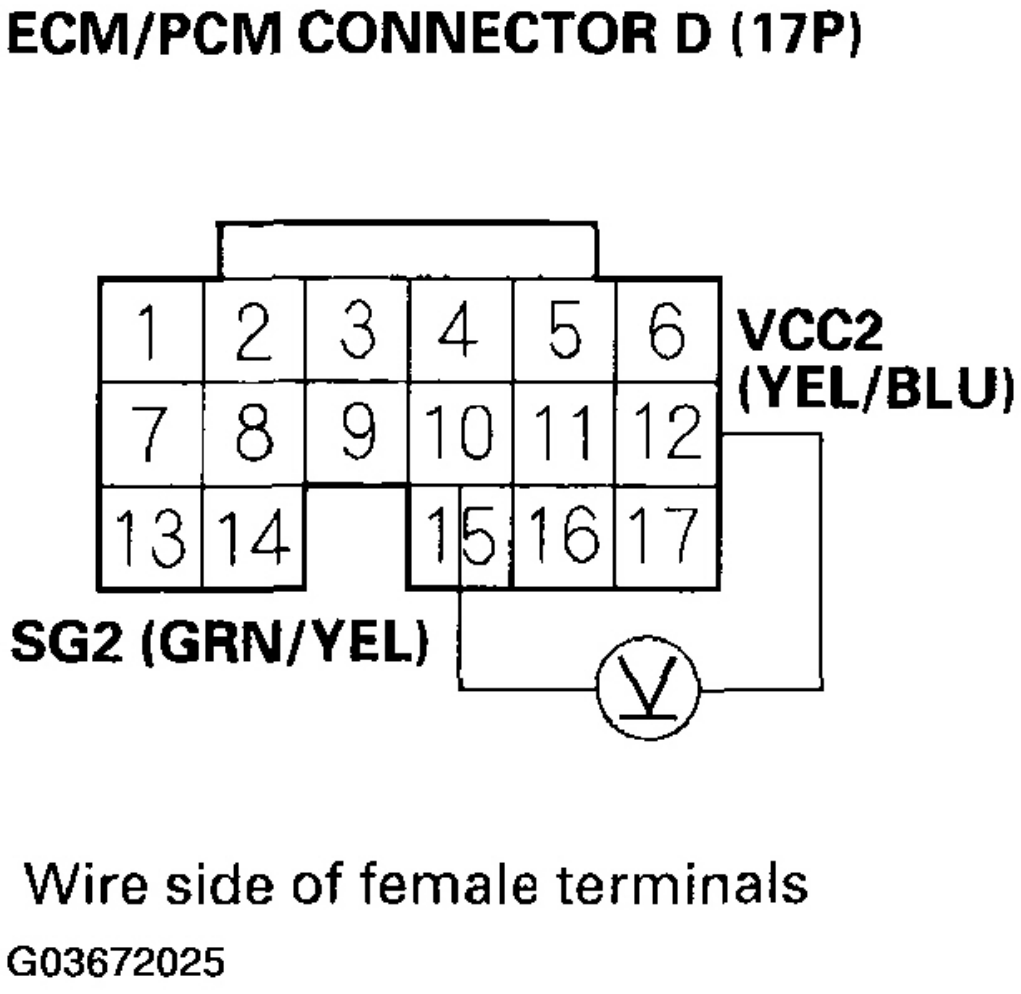


Fig. 9: Measuring Voltage Between ECM/PCM Connector Terminals D12 And D10
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between the EGR valve and the ECM/PCM (D10), then go to step 10.

NO - Go to step 14.

8. Turn the ignition switch OFF.

9. Replace the EGR valve (see **EGR VALVE REPLACEMENT**).
10. Turn the ignition switch ON (II).
11. Reset the ECM/PCM with the HDS.
12. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
13. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

    YES - If DTC P0406 is indicated, check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

    NO - Troubleshooting is complete.
14. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**).
15. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

    YES - If DTC P0406 is indicated, check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

    NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

DTC P2413: EGR SYSTEM MALFUNCTION

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Do the EGR TEST in the INSPECTION MENU with the HDS.

   Is the result OK?

   YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the EGR valve and the ECM/PCM.

   NO - Go to step 5.
5. Turn the ignition switch OFF.
6. Turn the ignition switch ON (II).
7. Check the EGR VLS in the DATA LIST with the HDS.

   Is about 0 V indicated?

   YES - Go to step 8.

   NO - Go to step 19.
8. Turn the ignition switch OFF.
9. Disconnect the EGR valve 6P connector.
10. Turn the ignition switch ON (II).
11. Measure voltage between EGR valve 6P connector terminal No. 3 and body ground.

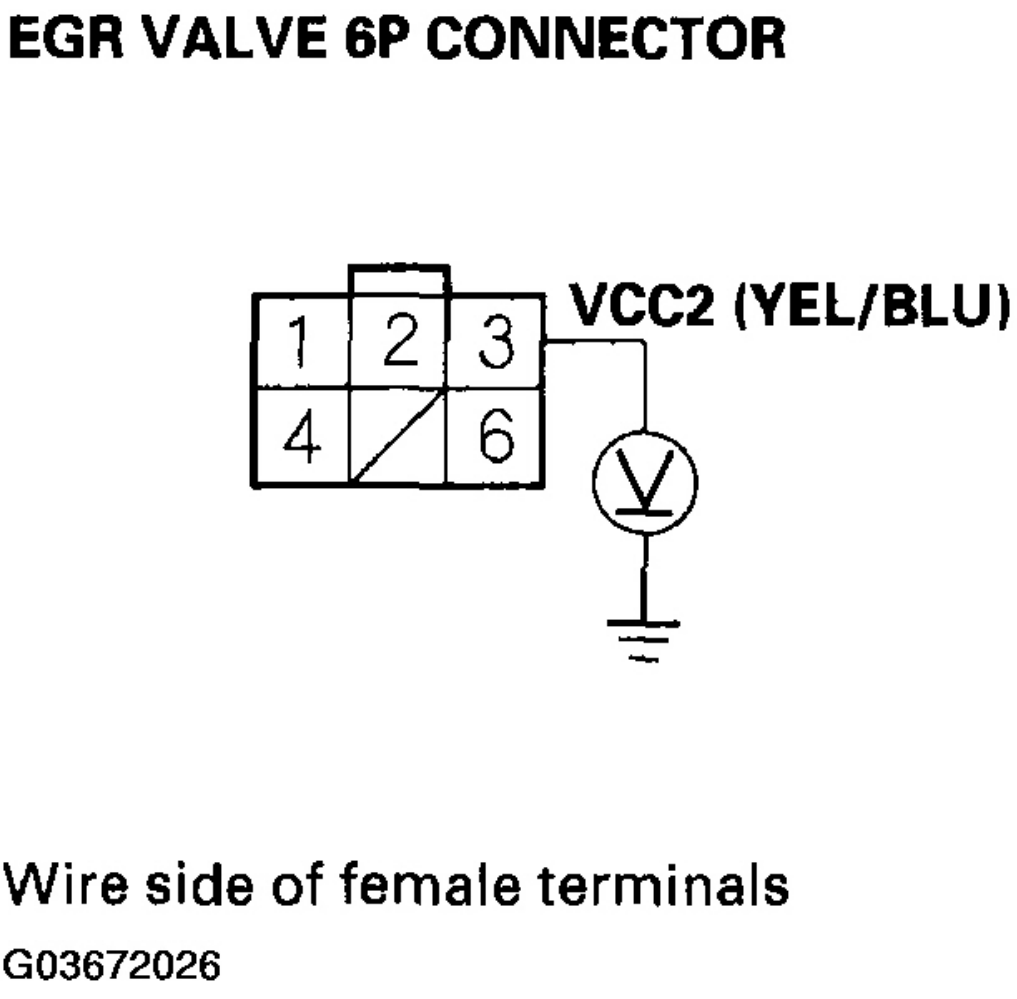


Fig. 10: Measuring Voltage Between EGR Valve 6P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 13.
NO - Go to step 12.

12. Measure voltage between ECM/PCM connector terminal D12 and body ground.

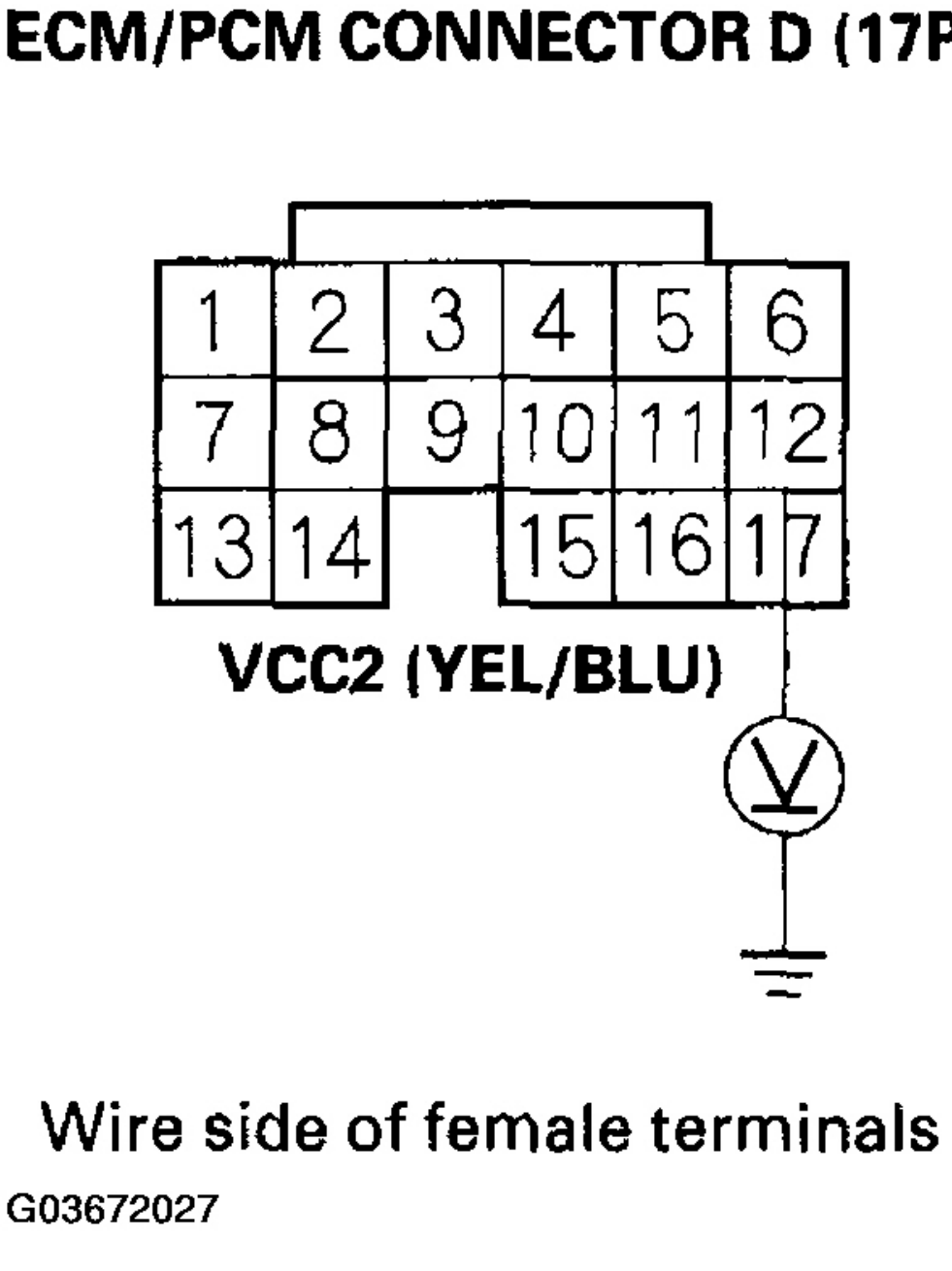


Fig. 11: Measuring Voltage Between ECM/PCM Connector Terminal D12 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between the EGR valve and the ECM/PCM (D12), then go to step 44.

NO - Go to step 51.

13. Turn the ignition switch OFF.
14. Jump the SCS line with the HDS.
15. Disconnect ECM/PCM connector D (17P).
16. Check for continuity between ECM/PCM connector terminal D11 and body ground.

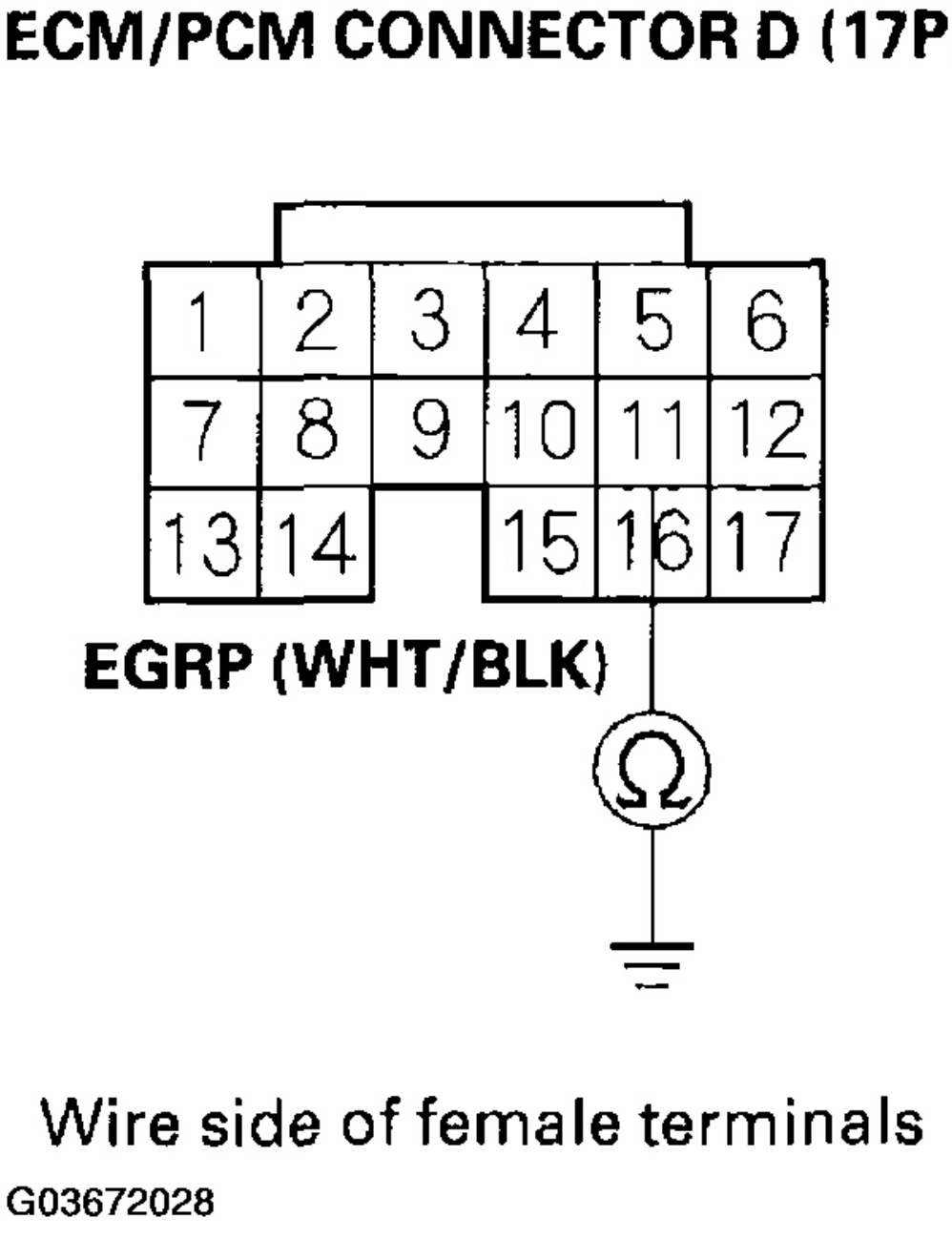


Fig. 12: Checking Continuity Between ECM/PCM Connector Terminal D11 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/ PCM (D11) and the EGR valve, then go to step 44.

NO - Go to step 17.

17. Connect EGR valve 6P connector terminal No. 1 to body ground with a jumper wire.

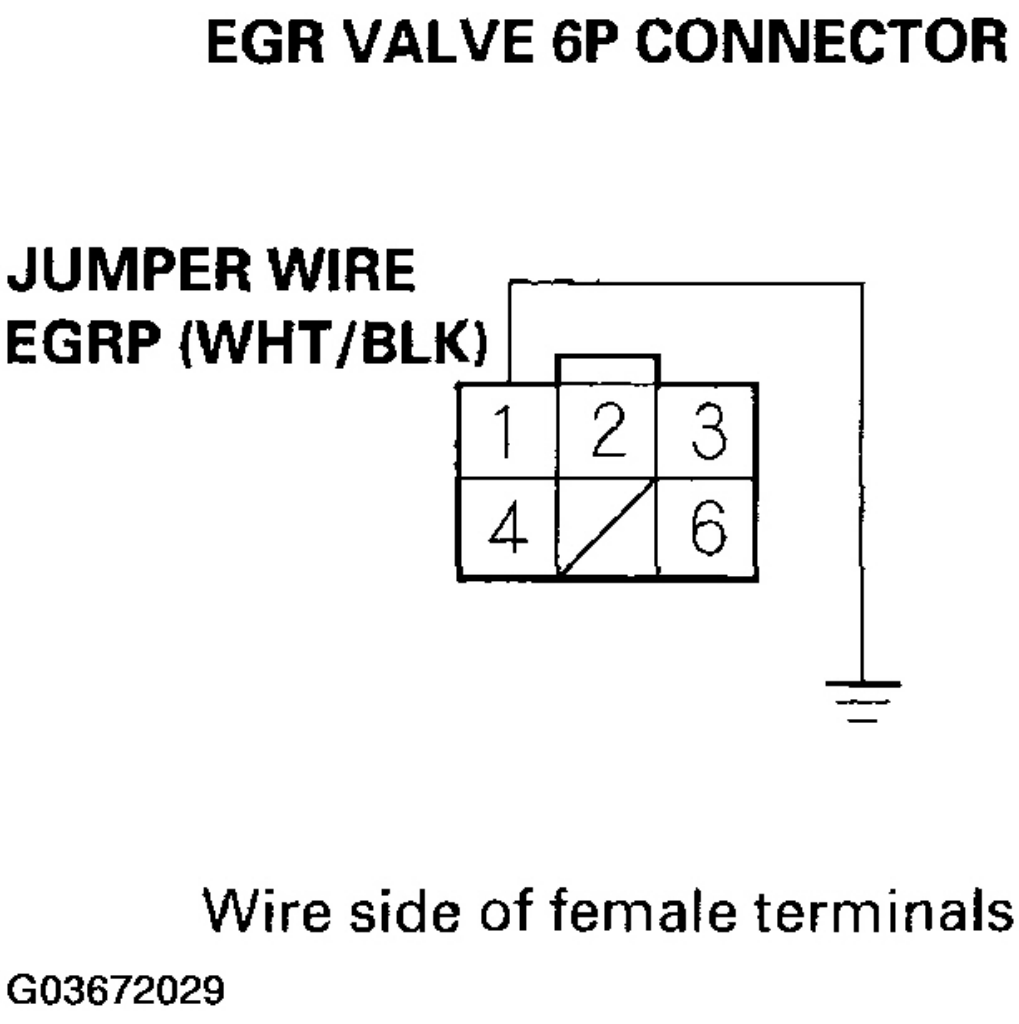


Fig. 13: Connecting EGR Valve 6P Connector Terminal To Body Ground

With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Check for continuity between ECM/PCM connector terminal D11 and body ground.

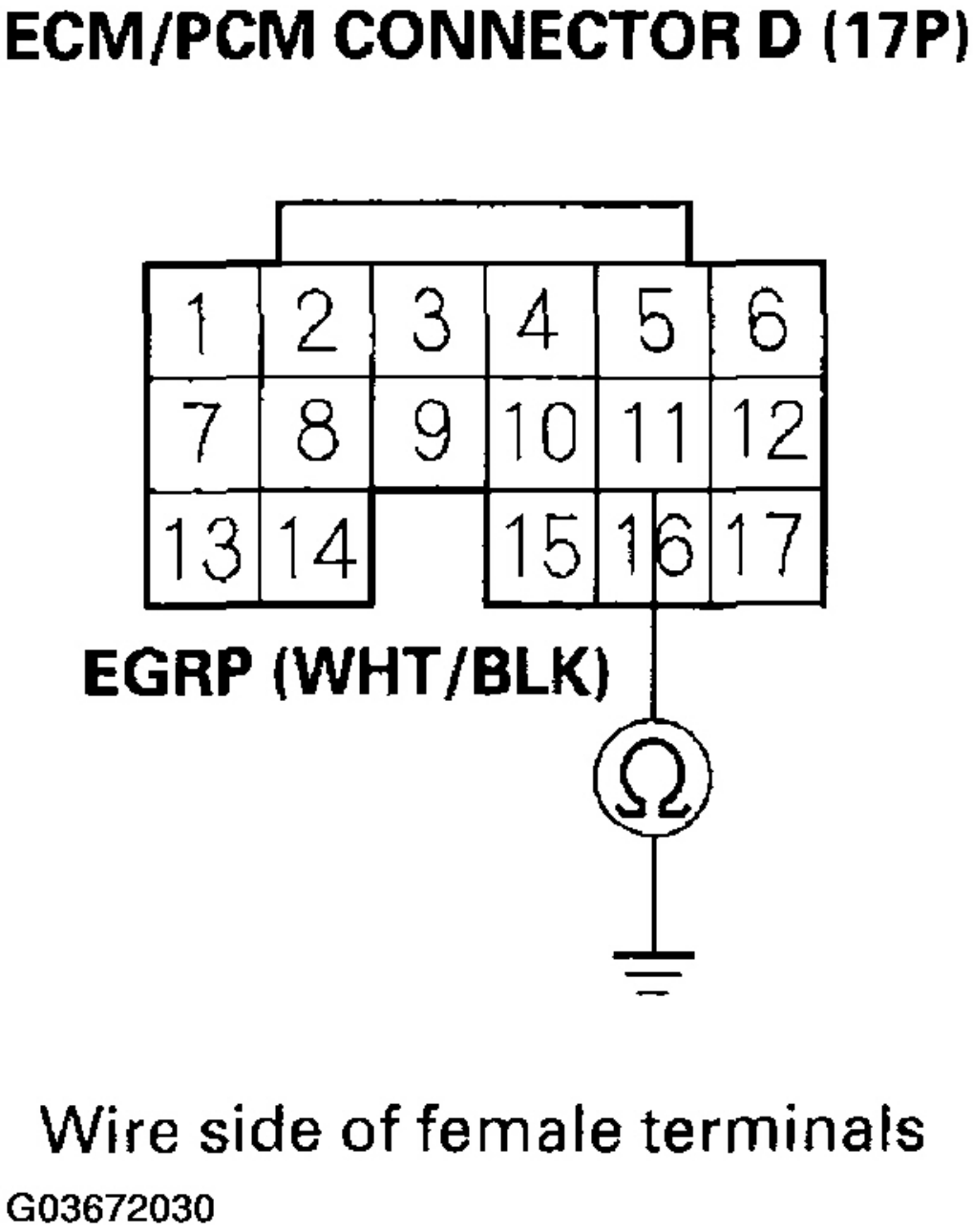


Fig. 14: Check For Continuity Between ECM/PCM Connector Terminal D11 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 19.

NO - Repair open in the wire between the ECM/ PCM (D11) and the EGR valve, then go to step 44.

19. Turn the ignition switch OFF.
20. If not already done, disconnect the EGR valve 6P connector.
21. At the sensor side, measure resistance between EGR valve 6P connector terminals No. 1 and No. 2.

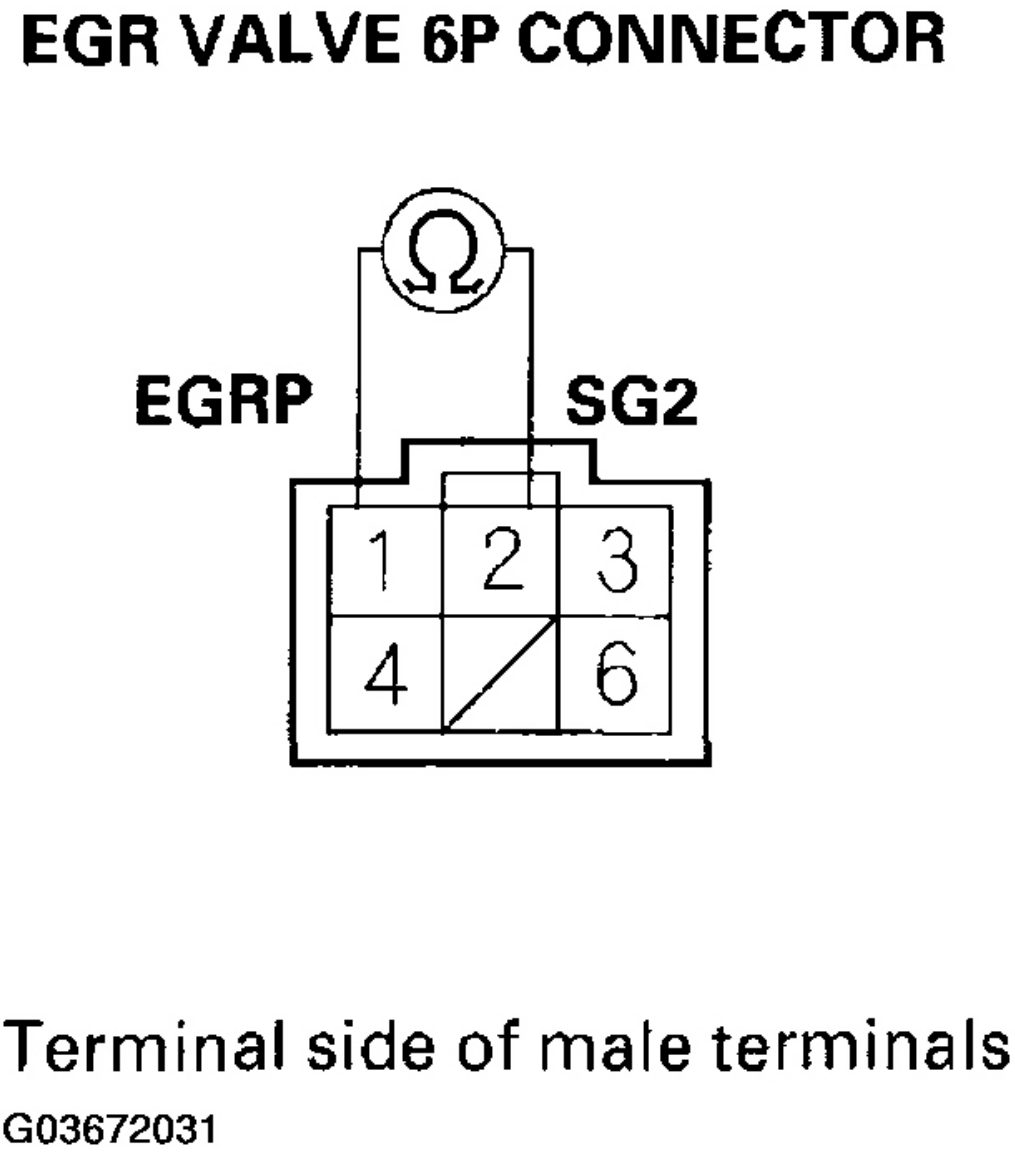


Fig. 15: Measuring Resistance Between EGR Valve 6P Connector Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity or resistance of 100 k ohms or more?

YES - Go to step 43.

NO - Go to step 22.

22. Measure resistance between EGR valve 6P connector terminals No. 1 and No. 3.

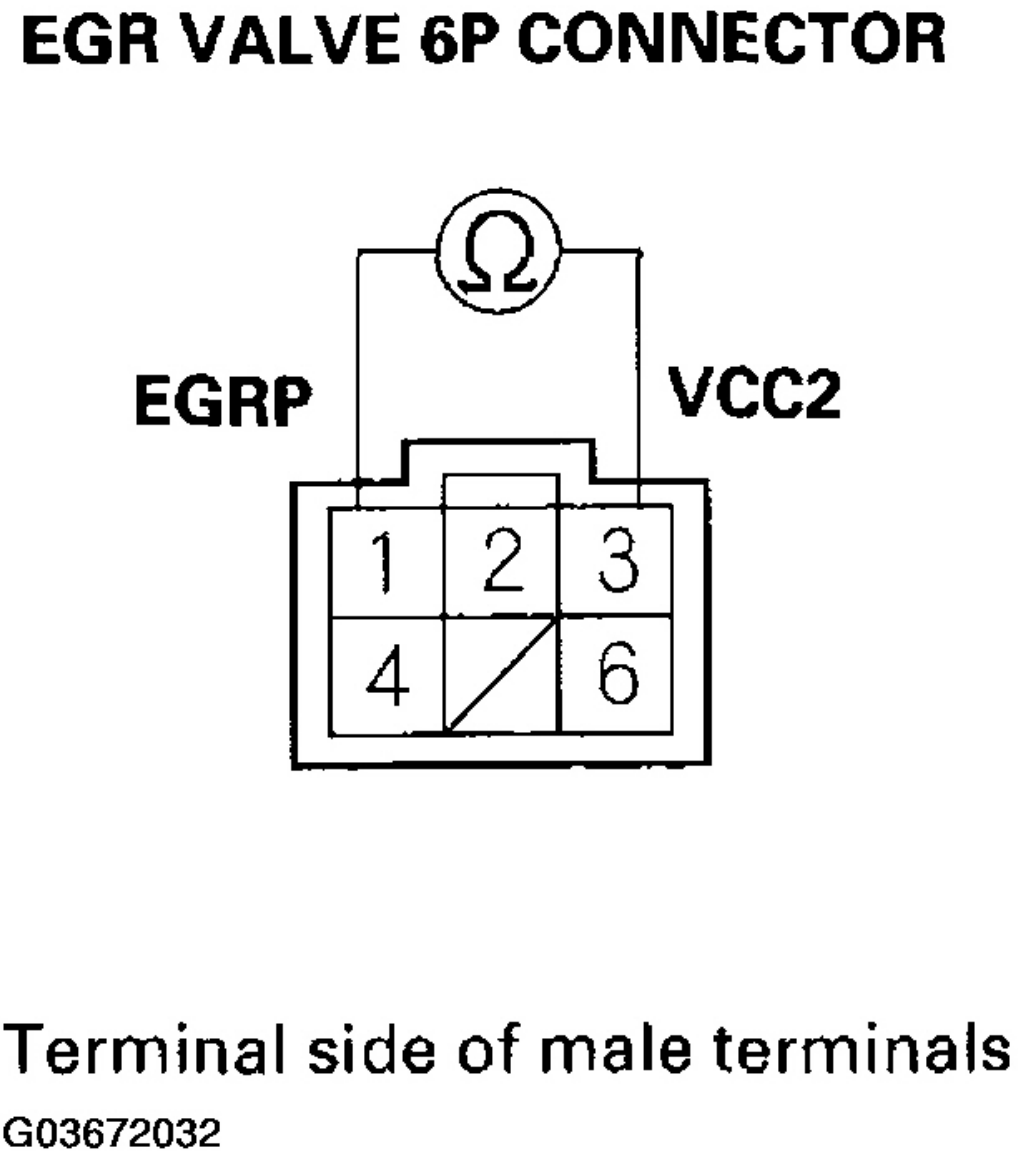


Fig. 16: Measuring Resistance Between EGR Valve 6P Connector Terminals

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 100 k ohms or more?

YES - Go to step 43.

NO - Go to step 23.

23. if not already done, jump the SCS line with the HDS.
24. If not already done, disconnect ECM/PCM connector B (24P).
25. Check for continuity between ECM/PCM connector terminal B5 and body ground.

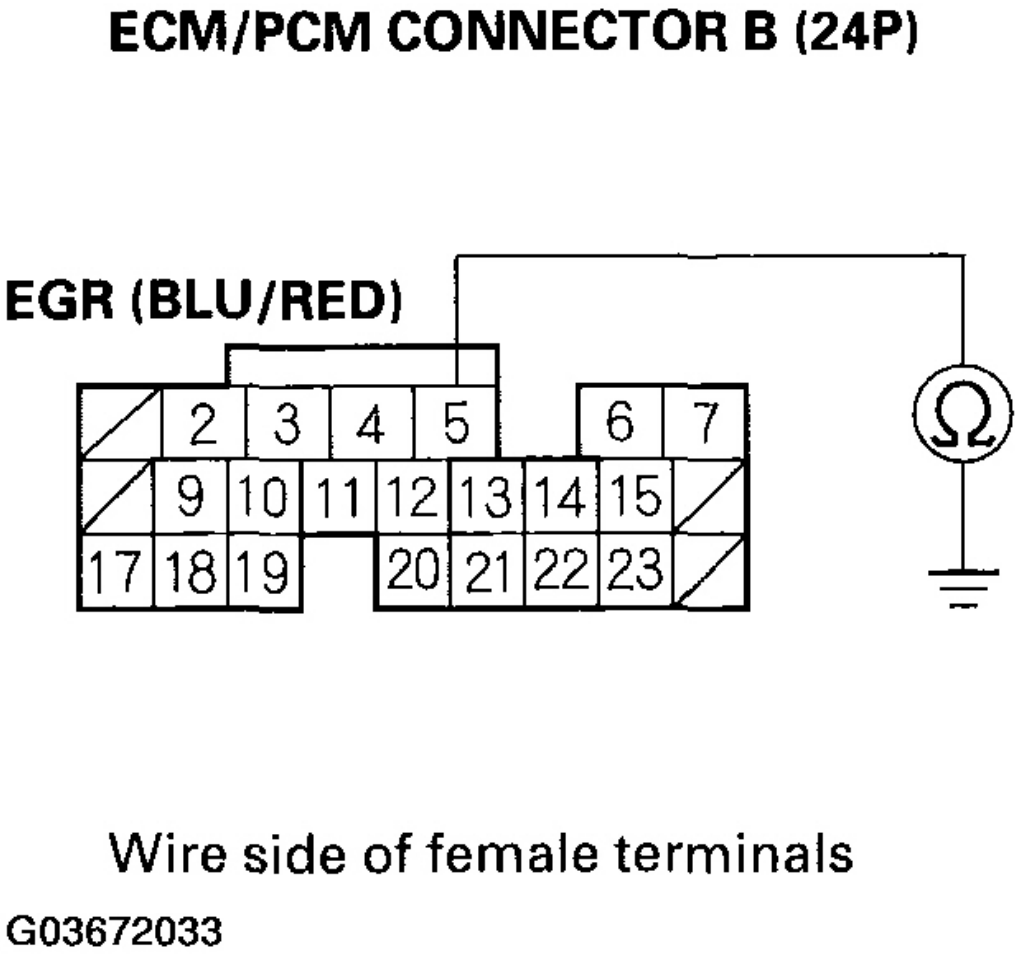


Fig. 17: Checking Continuity Between ECM/PCM Connector Terminal B5 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/ PCM (B5) and the EGR valve, then go to step 44.

NO - Go to step 26.

26. Connect EGR valve 6P connector terminal No. 4 to body ground with a jumper

wire.

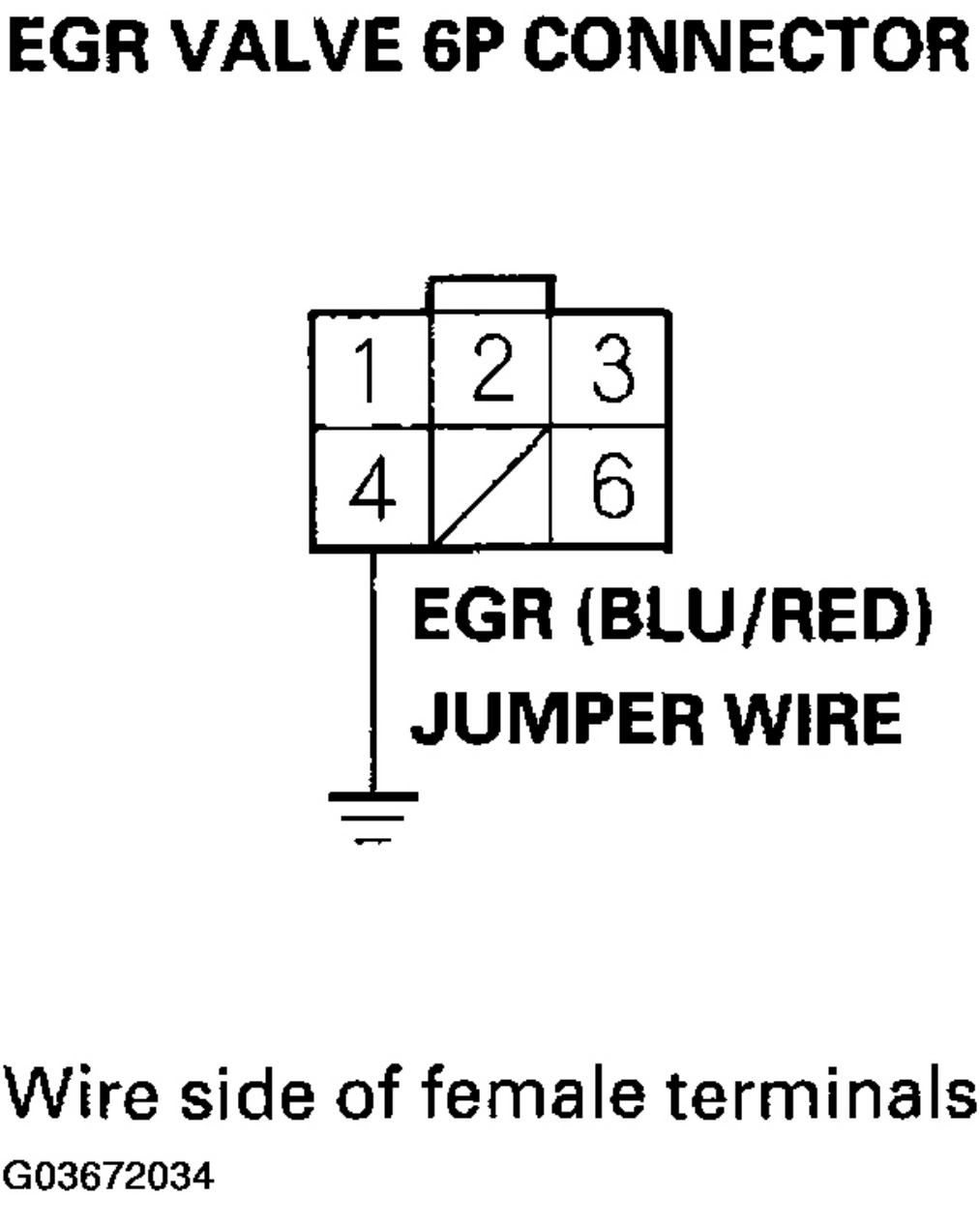


Fig. 18: Connecting EGR Valve 6P Connector Terminal To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

27. Check for continuity between ECM/PCM connector terminal B5 and body ground.

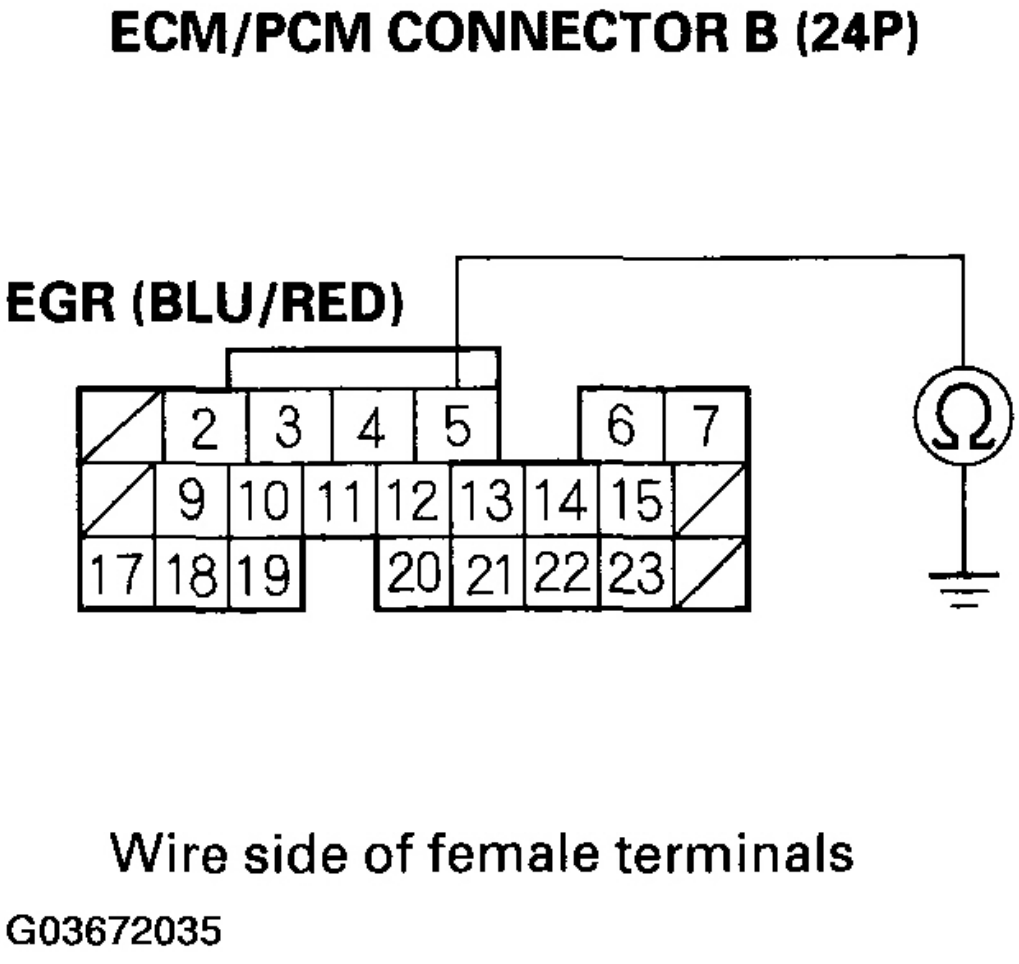


Fig. 19: Checking Continuity Between ECM/PCM Connector Terminal B5 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 28.

NO - Repair open in the wire between the ECM/ PCM (B5) and the EGR

valve, then go to step 44.

28. Remove the jumper wire from the EGR valve 6P connector.
29. Check for continuity between EGR valve 6P connector terminal No. 6 and body ground.

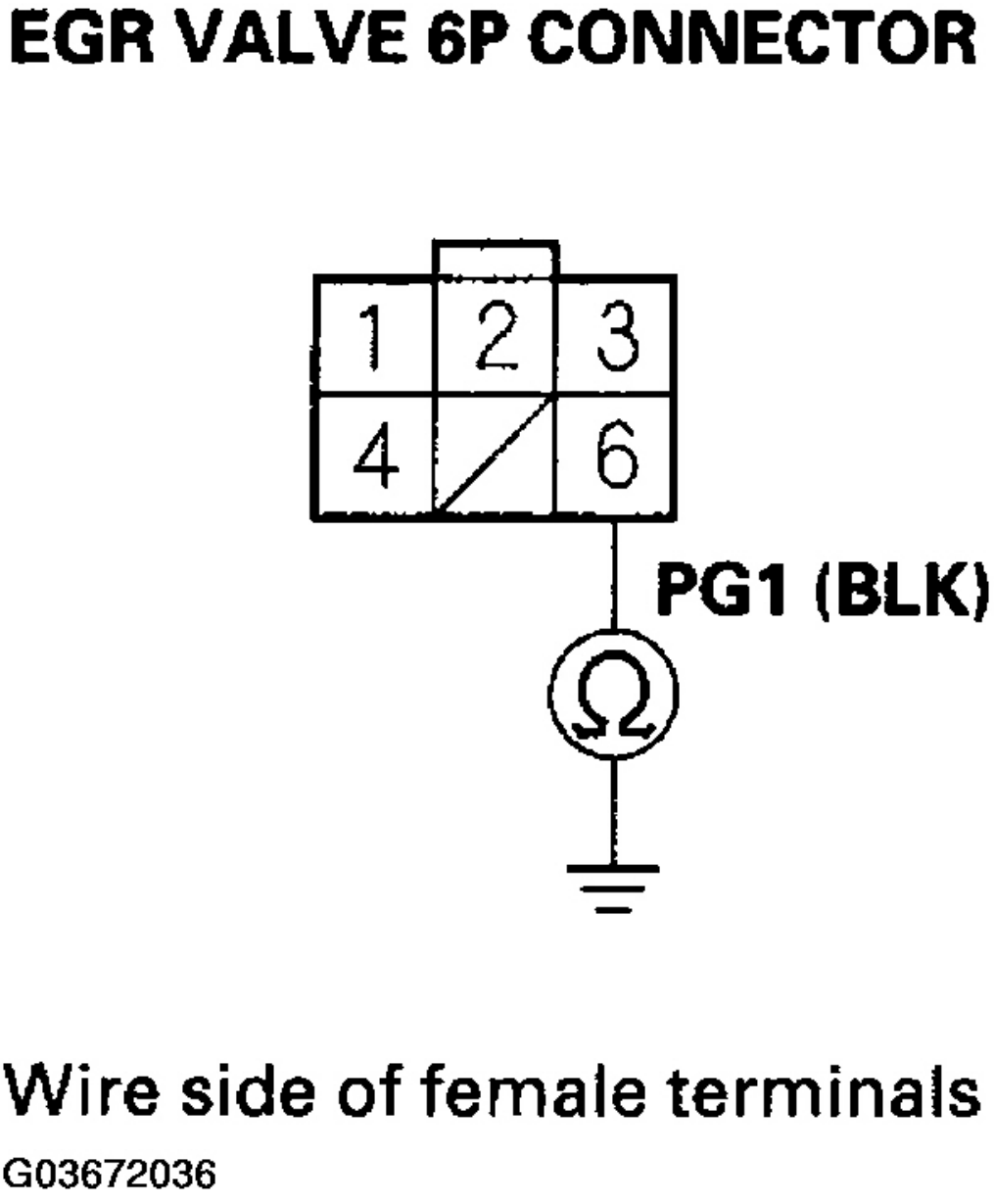


Fig. 20: Checking Continuity Between EGR Valve 6P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 30.

NO - Repair open in the wire between the EGR valve and G101, then go to step 44.

30. Reconnect ECM/PCM connector B (24P).
31. Connect the battery positive terminal to EGR valve 6P connector terminal No. 4 with a jumper wire.

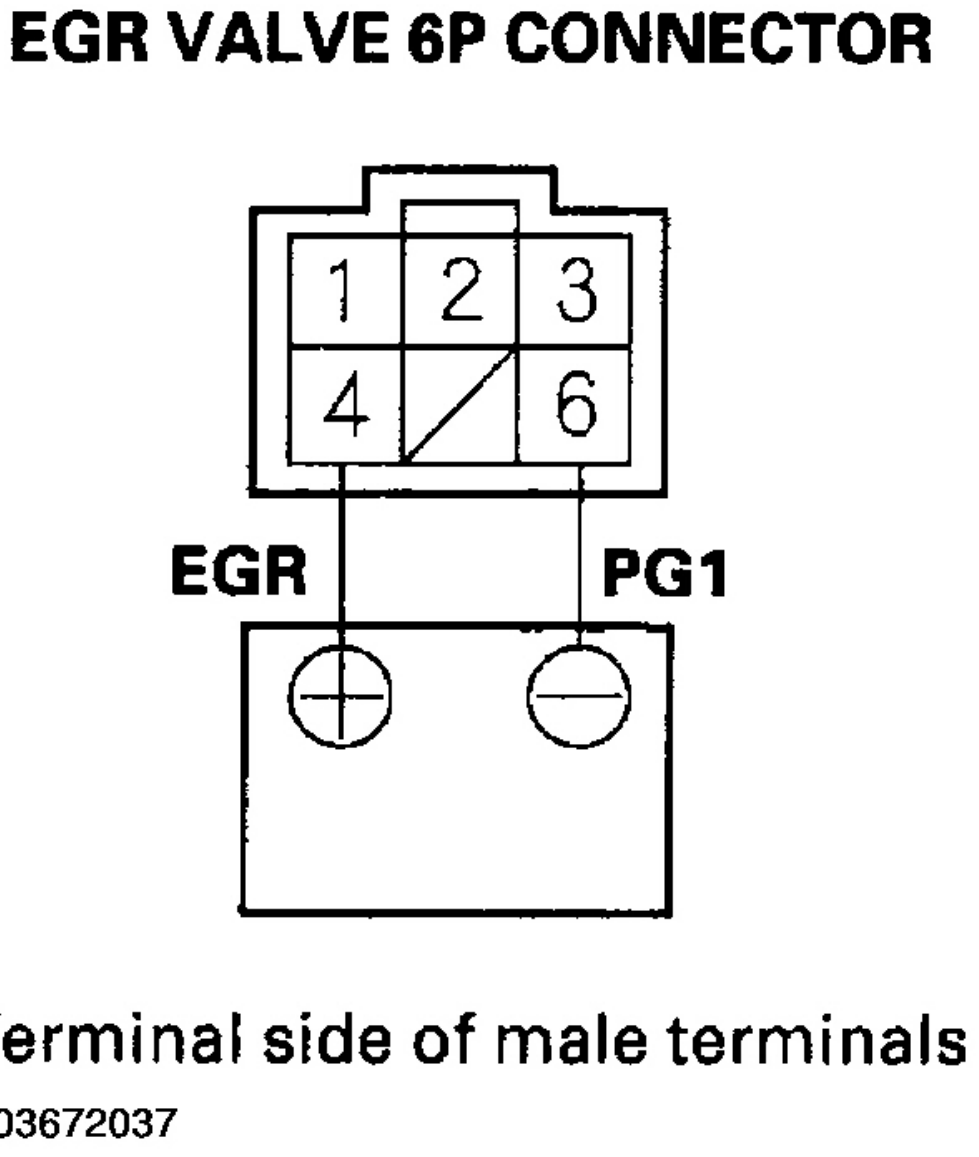


Fig. 21: Connecting Battery Positive Terminal To EGR Valve 6P Connector Terminal With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

32. Start the engine and let it idle, then connect the battery negative terminal to EGR valve 6P connector terminal No. 6 with a jumper wire.

Does the engine stall or run rough?

YES - Go to step 51.

NO - Go to step 33.

33. Turn the ignition switch OFF.
34. Remove the EGR valve (see **EGR VALVE REPLACEMENT**).
35. Clean the intake manifold EGR port with throttle plate and induction cleaner. Also, clean the passage inside the EGR valve with throttle plate and induction cleaner.
36. Install the EGR valve (see **EGR VALVE REPLACEMENT**).
37. Reconnect the EGR valve 6P connector.
38. Turn the ignition switch ON (II).
39. Reset the ECM/PCM with the HDS.
40. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
41. Do the EGR TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Go to step 49.

NO - Go to step 42.

42. Turn the ignition switch OFF.
43. Replace the EGR valve (see **EGR VALVE REPLACEMENT**).
44. Reconnect all connectors.
45. Turn the ignition switch ON (II).
46. Reset the ECM/PCM with the HDS.
47. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
48. Do the EGR TEST in the INSPECTION MENU with the HDS.
49. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P2413 is indicated, check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

NO - Go to step 50.

50. Monitor the OBD STATUS for DTC P2413 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete.

    NO - If the screen indicates FAILED, go to step 1 and recheck. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 48 and recheck.

51. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**).
52. Do the EGR TEST in the INSPECTION MENU with the HDS.
53. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM.
54. Do the EGR TEST in the INSPECTION MENU with the HDS.
55. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

    YES - lf DTC P2413 is indicated, check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTCs troubleshooting.

    NO - Go to step 56.

56. Monitor the OBD STSTUS for DTC P2413 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

YES - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the origional ECM/PCM. If any other Temporary DTCs or DTCs were indicated in step 55, go to the indicated DTCs troubleshooting.

NO - If the screen indicated FAILED, check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 54.

EGR VALVE REPLACEMENT

1. Remove the ignition coil cover (see step 1 **IGNITION COIL REMOVAL/INSTALLATION**).
2. Disconnect the EGR valve 6P connector (A).

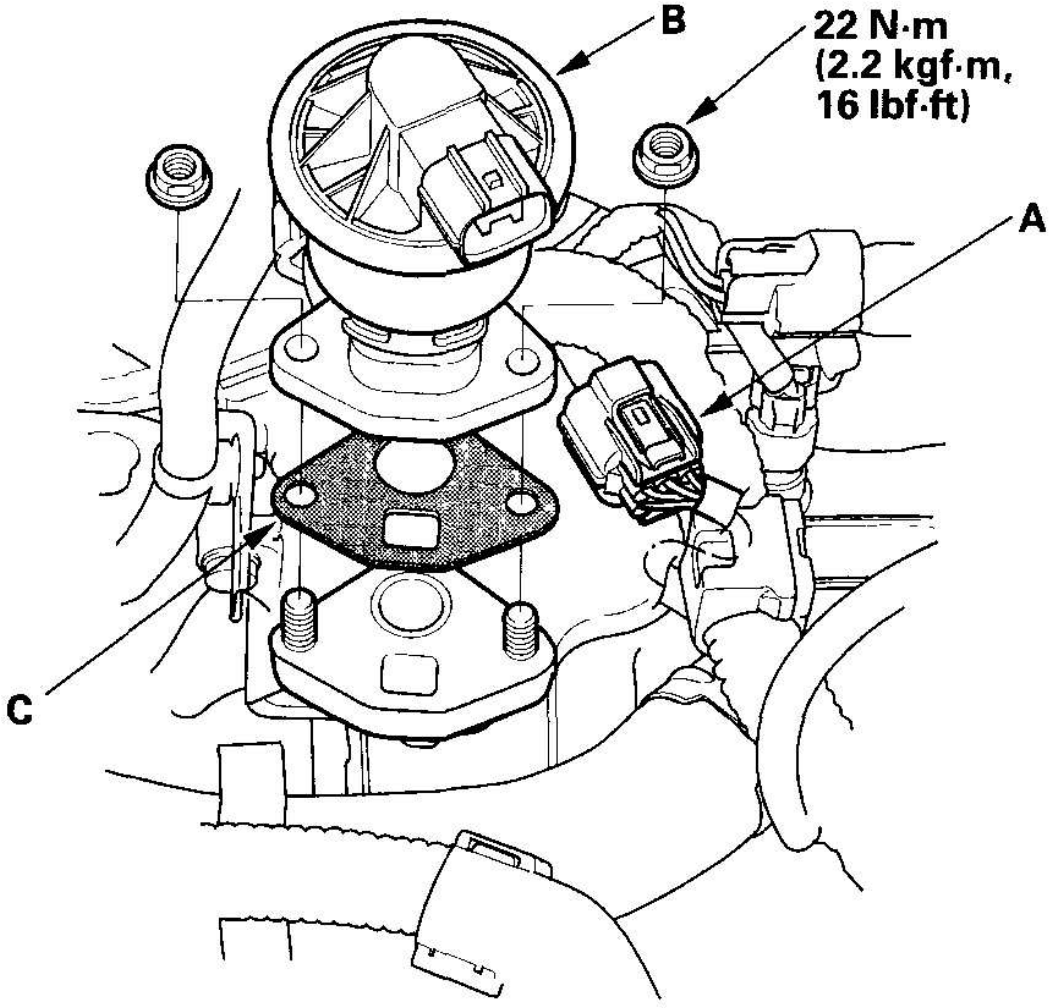


Fig. 22: Disconnecting EGR Valve 6P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the EGR valve (B).
4. Install the valve in the reverse order of removal with a new gasket (C).
5. Install the ignition coil cover.

2003-07 ENGINE PERFORMANCE

EGR System - Accord

COMPONENT LOCATION INDEX

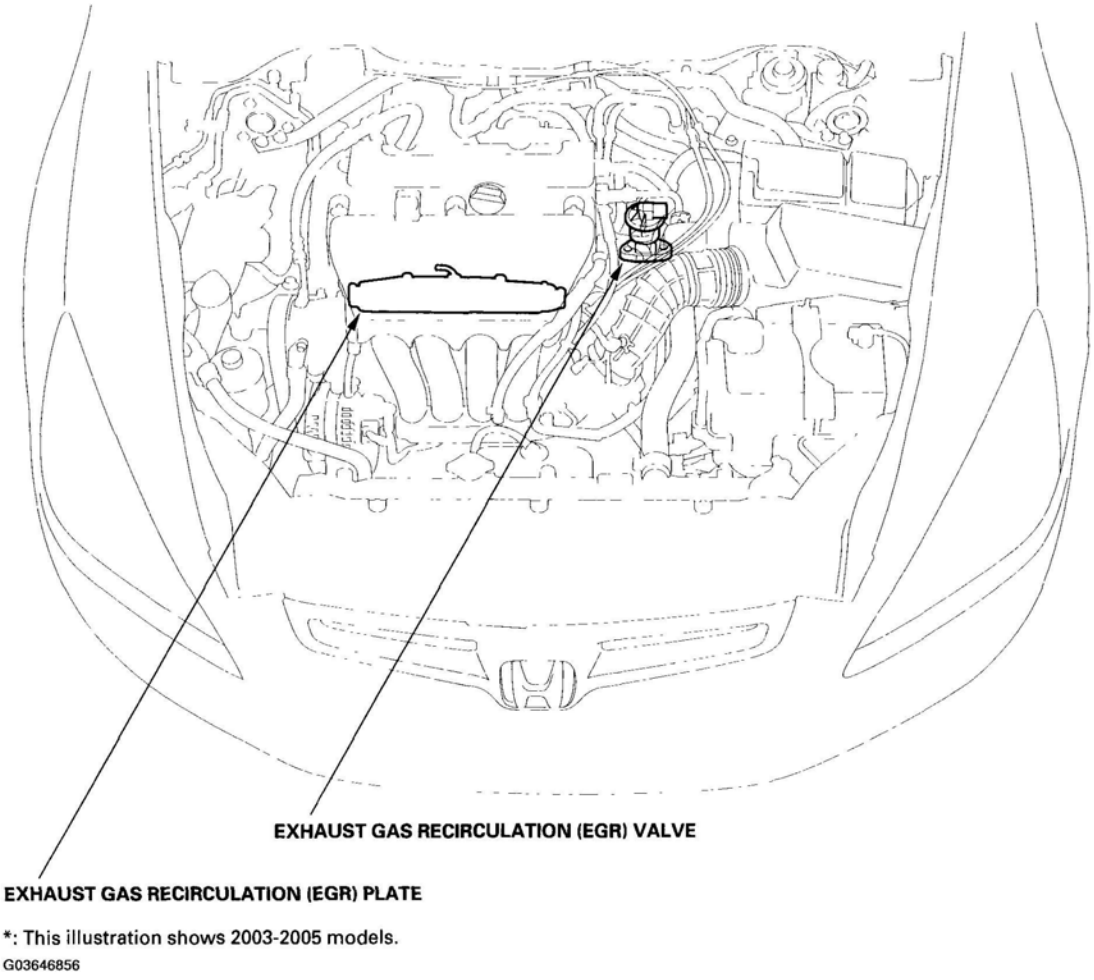


Fig. 1: Identifying EGR System Component Location Index
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC P0401: EGR INSUFFICIENT FLOW

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting

information (seeGENERAL INFORMATION (EXCEPT HYBRID & V6)).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Do the EGR TEST in the INSPECTION MENU with the HDS.

   Is the result OK?

   YES - Go to step 5.

   NO - Go to step 7.
5. Test-drive under these conditions:
   - Engine coolant temperature above 158°F (70°C)
   - A/T in D position (M/T in 4th gear)
   - Vehicle speed at 25 mph (40 km/h) or more, and engine speed between 1,100 and 3,000 rpm
   - During the drive, decelerate (with the throttle fully closed) for 5 seconds
6. Monitor the OBD STATUS for DTC P0401 in the DTCs MENU with the HDS.

   Does the screen indicate FAILED?

   YES - Remove the EGR plate; '03-05 models (see **REMOVAL ('03-05 MODELS)**), '06-07 models**REMOVAL ('06--07 MODELS)** and clean the intake manifold port with throttle plate and induction cleaner, then go to step 9.

   NO - If the screen indicates PASSED, intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 5 and recheck.
7. Turn the ignition switch OFF.

8. Replace the EGR valve (see **EGR VALVE REPLACEMENT**).
9. Turn the ignition switch ON (II).
10. Reset the ECM/PCM with the HDS.
11. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
12. Test-drive under these conditions:
    - Engine coolant temperature above 158°F (70°C)
    - A/T in D position (M/T in 4th gear)
    - Vehicle speed at 25 mph (40 km/h) or more, and engine speed between 1,100 and 3,000 rpm
    - During the drive, decelerate (with the throttle fully closed) for 5 seconds
13. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0401 indicated?

    YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the connections are OK, go to step 15.

    NO - Go to step 14.
14. Monitor the OBD STATUS for DTC P0401 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 13, got to the indicated DTC's troubleshooting.

    NO - If the screen indicates FAILED, check for poor connections or loose terminals at the EGR the valve and the ECM/PCM, go to step 1. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 12 and recheck.
15. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **UPDATING THE ECM/PCM** ,**SUBSTITUTE THE ECM/PCM**).

16. Test-drive under these conditions:
    - Engine coolant temperature above 158°F (70°C)
    - A/T in D position (M/T in 4th gear)
    - Vehicle speed at 25 mph (40 km/h) or more, and engine speed between 1,100 and 3,000 rpm
    - During the drive, decelerate (with the throttle fully closed) for 5 seconds
17. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0401 indicated?

    YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **GENERAL INFORMATION (EXCEPT HYBRID & V6)**) then go to step 16 above. If the ECM/PCM was substituted go to step 1.

    NO - Go to step 18.).
18. Monitor the OBD STATUS for DTC P0401 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES- If the ECM/PCM was substituted, replace the original ECM/PCM; '03-05 models (see **ECM/PCM REPLACEMENT**), '06-07 models (see**ECM/PCM REPLACEMENT**). If any other Temporary DTCs or DTCs were indicated in step 17, got the indicated DTC's troubleshooting.

    NO- If the screen indicates FAILED, check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **GENERAL INFORMATION (EXCEPT HYBRID & V6)**), then go to step 16. If the ECM/PCM was substituted, go to step 1. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 16.

DTC P0404: EGR VALVE CIRCUIT RANGE/PERFORMANCE PROBLEM

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Do the EGR TEST in the INSPECTION MENU with the HDS.

   Is the result OK?

   YES - Intermittent failure, system is OK at this time. Clean any carbon build-up on the EGR valve with throttle plate and induction cleaner.

   NO - Go to step 5.
5. Turn the ignition switch OFF.
6. Disconnect the EGR valve 6P connector.
7. At the sensor side, measure resistance between EGR valve 6P connector terminals No. 1 and No. 2.

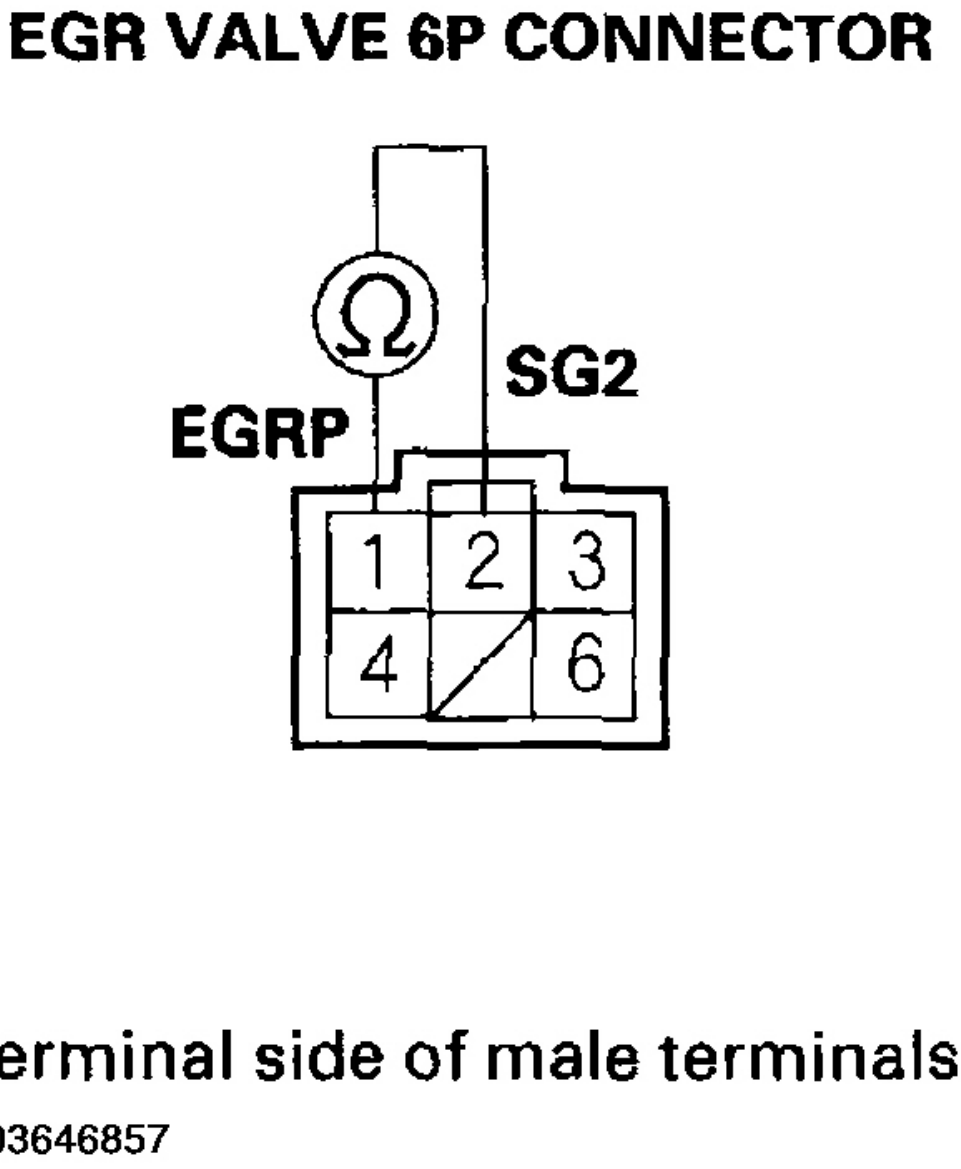


Fig. 2: Measuring Resistance Between EGR Valve 6P Connector Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 100 kohms or more?

YES - Go to step 26.

NO - Go to step 8.

8. Measure resistance between EGR valve 6P connector terminals No. 1 and No. 3.

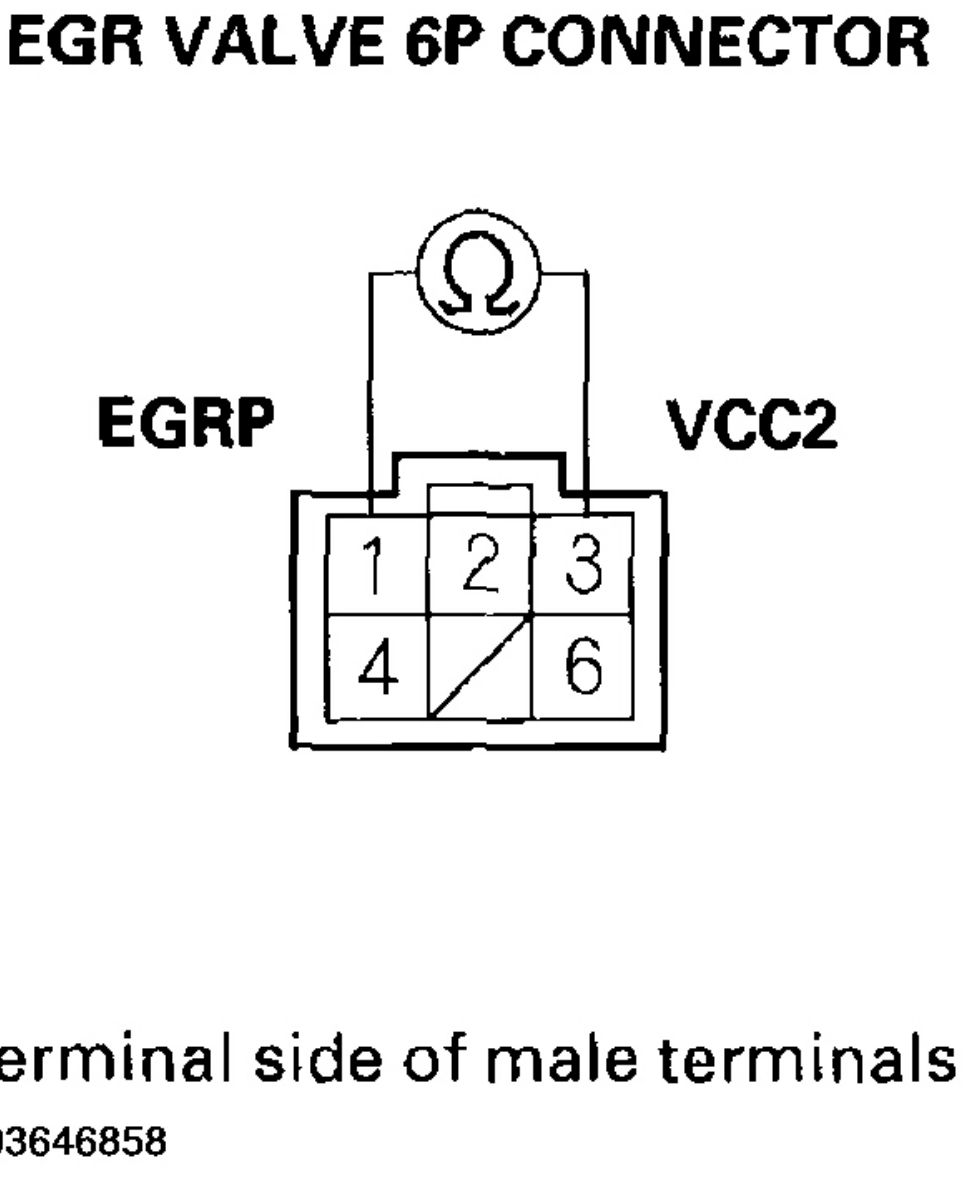


Fig. 3: Measuring Resistance Between EGR Valve 6P Connector

Terminals No. 1 And No. 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 100 kohms or more?

YES - Go to step 26.

NO - Go to step 9.

9. Check for continuity between EGR valve 6P connector terminal No. 6 and body ground.

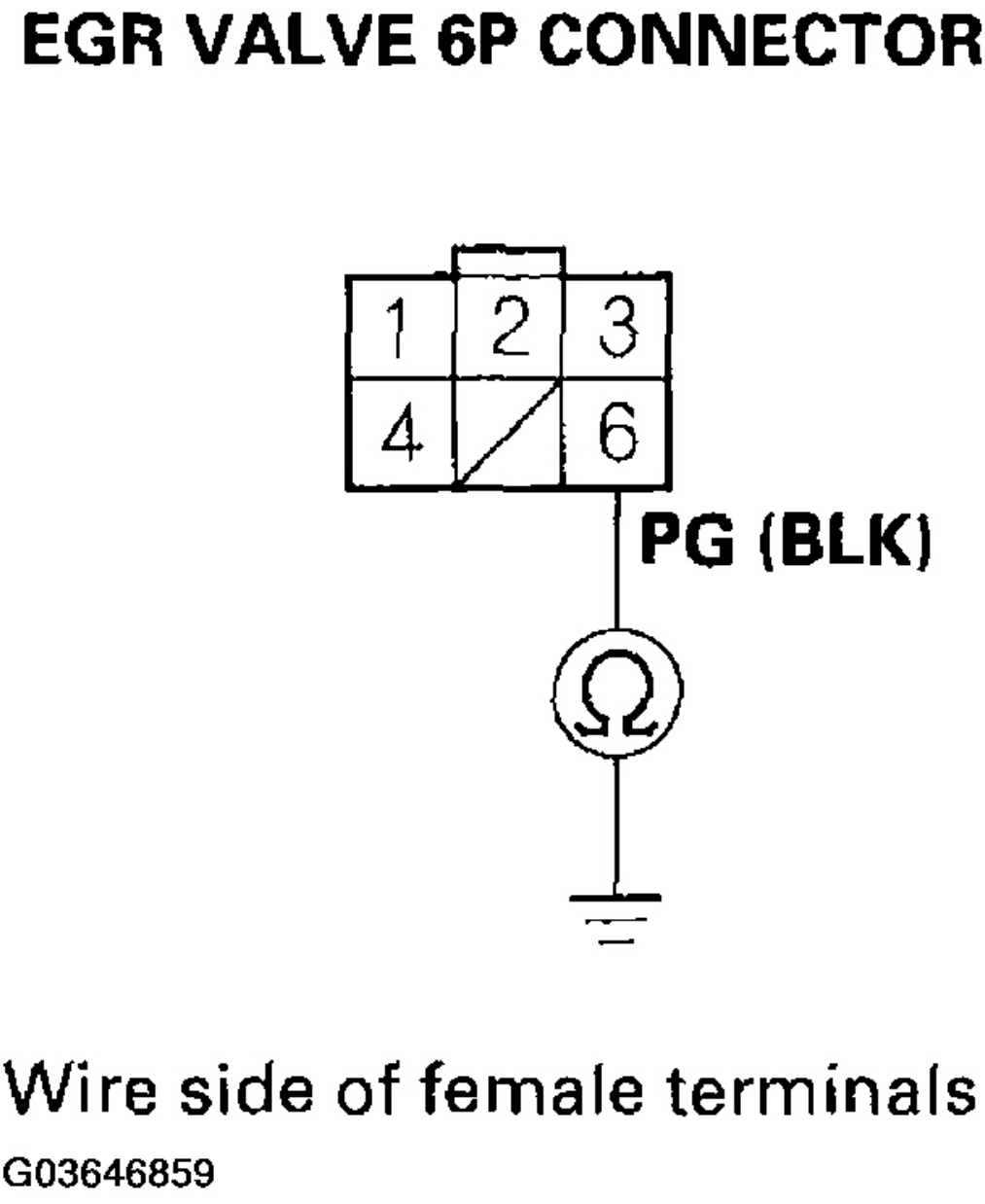


Fig. 4: Checking Continuity Between EGR Valve 6P Connector Terminal No. 6 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10.

NO - Repair open in the wire between the EGR valve and G101, then go to step 27.

10. Jump the SCS line with the HDS.
11. Disconnect ECM/PCM connector B (24P).
12. Check for continuity between ECM/PCM connector terminal B16 and body ground.

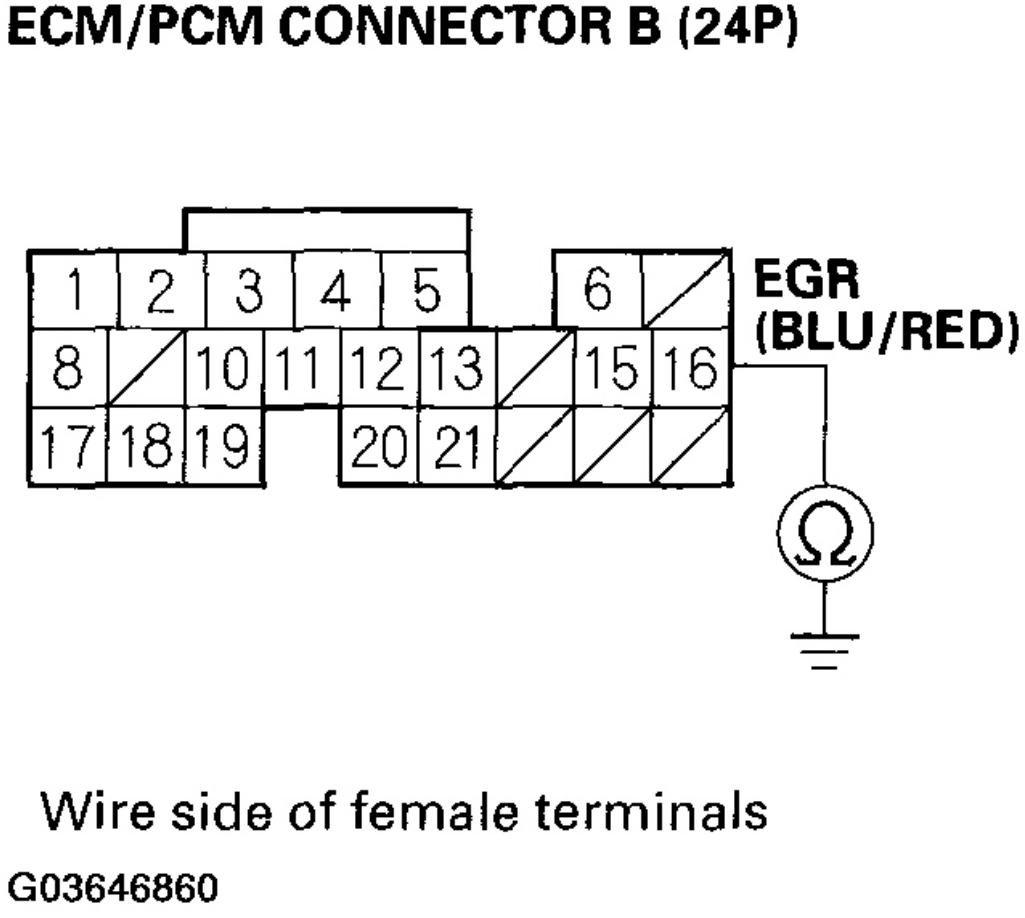


Fig. 5: Checking Continuity Between ECM/PCM Connector Terminal B16 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/PCM (B16) and the EGR valve, then go to step 27.

NO - Go to step 13.

13. Connect EGR valve 6P connector terminal No. 4 to body ground with a jumper wire.

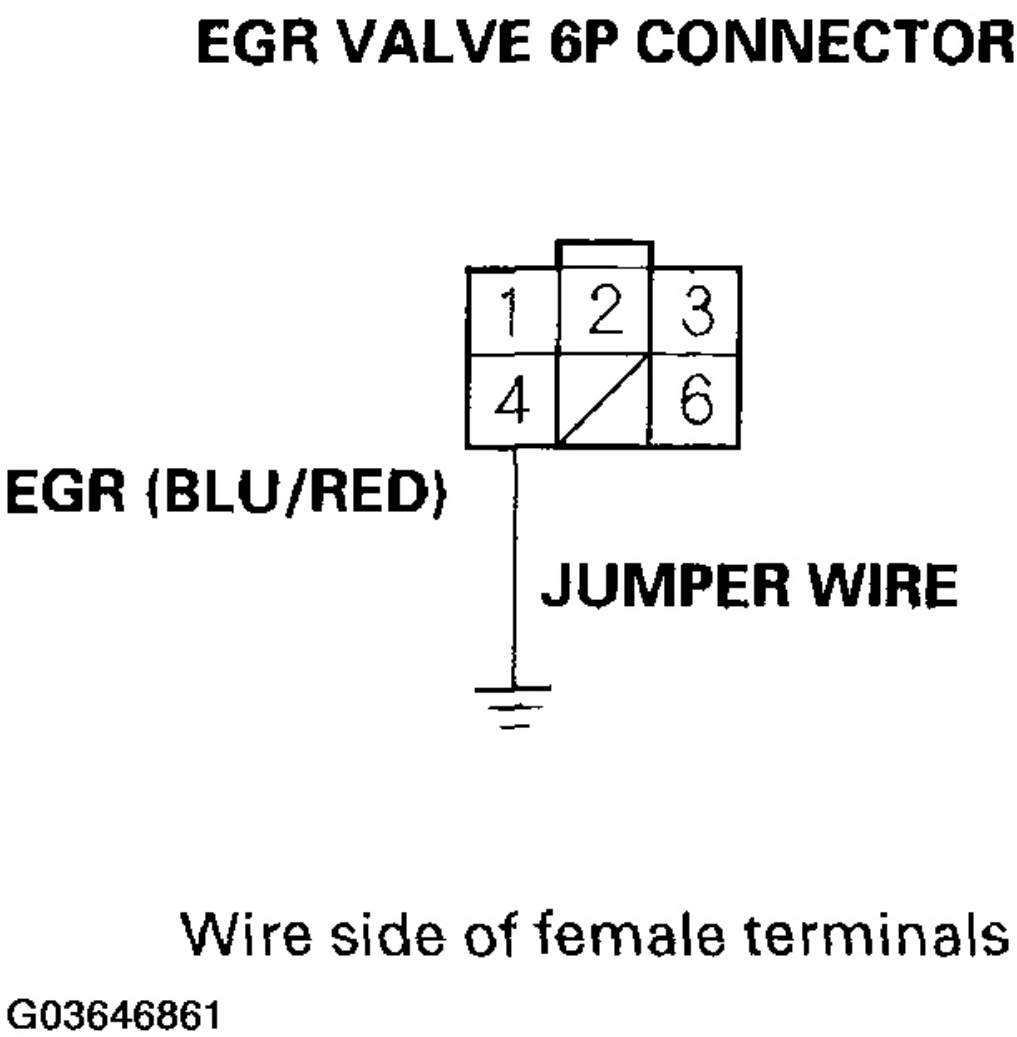


Fig. 6: Connecting EGR Valve 6P Connector Terminal No. 4 To Body

Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Check for continuity between ECM/PCM connector terminal B16 and body ground.

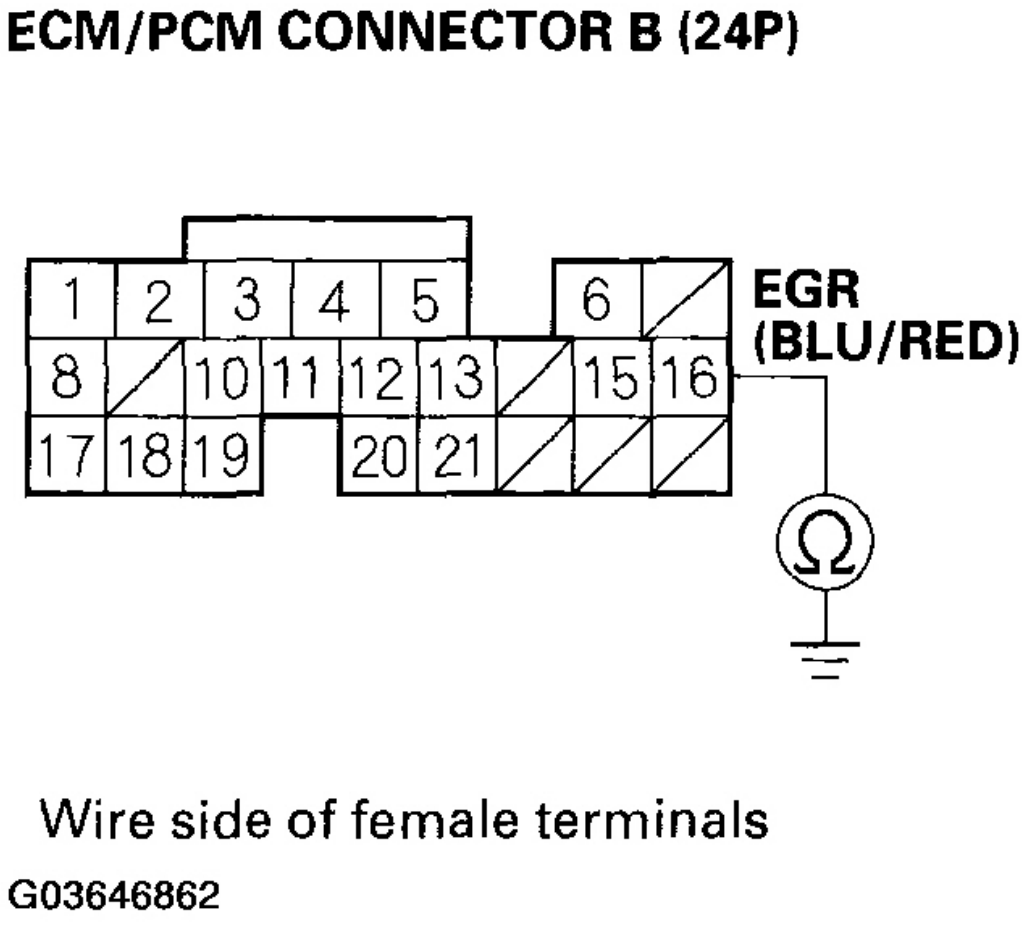


Fig. 7: Checking Continuity Between ECM/PCM Connector Terminal B16 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 15.

NO - Repair open in the wire between the ECM/PCM (B16) and the EGR valve, then go to step 27.

15. Remove the EGR valve (see **EGR VALVE REPLACEMENT**).
16. Clean the intake manifold EGR port with throttle plate and induction cleaner.
17. Install the EGR valve (see **EGR VALVE REPLACEMENT**).
18. Reconnect the EGR valve 6P connector.
19. Reconnect ECM/PCM connector B (24P).
20. Turn the ignition switch ON (II).
21. Reset the ECM/PCM with the HDS.
22. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
23. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
24. Do the EGR TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Go to step 31.

NO - Go to step 25.

25. Turn the ignition switch OFF.
26. Replace the EGR valve (see **EGR VALVE REPLACEMENT**).
27. Reconnect all connectors.
28. Turn the ignition switch ON (II).
29. Reset the ECM/PCM with the HDS.
30. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
31. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
32. Do the EGR TEST in the INSPECTION MENU with the HDS.
33. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0404 indicated?

YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the connections are OK, go to step 35.

NO - Go to step 34.

34. Monitor the OBD STATUS for DTC P0404 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 33, got to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 32.

35. Update the ECM/PCM if it does not have the latest software, or substitute a know-good ECM/PCM (see **UPDATING THE ECM/PCM** ,**SUBSTITUTE THE ECM/PCM**).
36. Do the EGR TEST in the INSPECTION MENU with the HDS.
37. Check for Temporary DTCs or DTCs with the HDS.

Is the DTC P0404 indicated?

YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see), then go to step 36. If the ECM/PCM was substituted, go to step1.

NO - Go to step 38.

38. Monitor the OBD STATUS for DTC P0404 in the DTC's MENU with the HDS.

Does the screen indicate PASSED?

YES- If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM; '03-05 models (see**ECM/PCM REPLACEMENT**), '06-07 models (see **ECM/PCM REPLACEMENT**). If any other Temporary DTCs or DTCs were indicated in step 37, got to the indicated DTC's troubleshooting.

NO - If the screen indicate FAILED, check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**), then go to step 3636. If the ECM/PCM was substituted, go to step 1. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 36.

DTC P0406: EGR VALVE POSITION SENSOR CIRCUIT HIGH VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Check the EGR VLS in the DATA LIST with the HDS.

   Is 4.88 V or higher indicated?

   YES - Go to step 3.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the EGR valve and the ECM/PCM.
3. Turn the ignition switch OFF.
4. Disconnect the EGR valve 6P connector.
5. Turn the ignition switch ON (II).
6. Measure voltage between EGR valve 6P connector terminals No. 2 and No. 3.

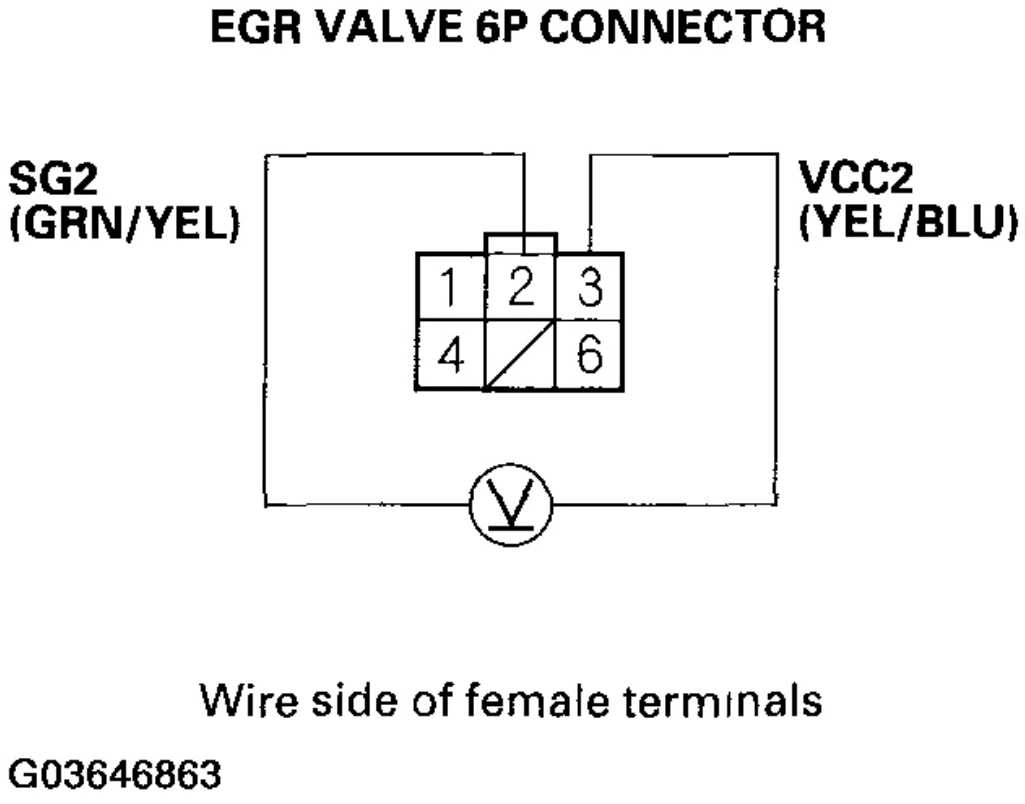


Fig. 8: Measuring Voltage Between EGR Valve 6P Connector Terminals No. 2 And No. 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 8.
NO - Go to step 7.

7. Measure voltage between ECM/PCM connector terminals A20 and A23.

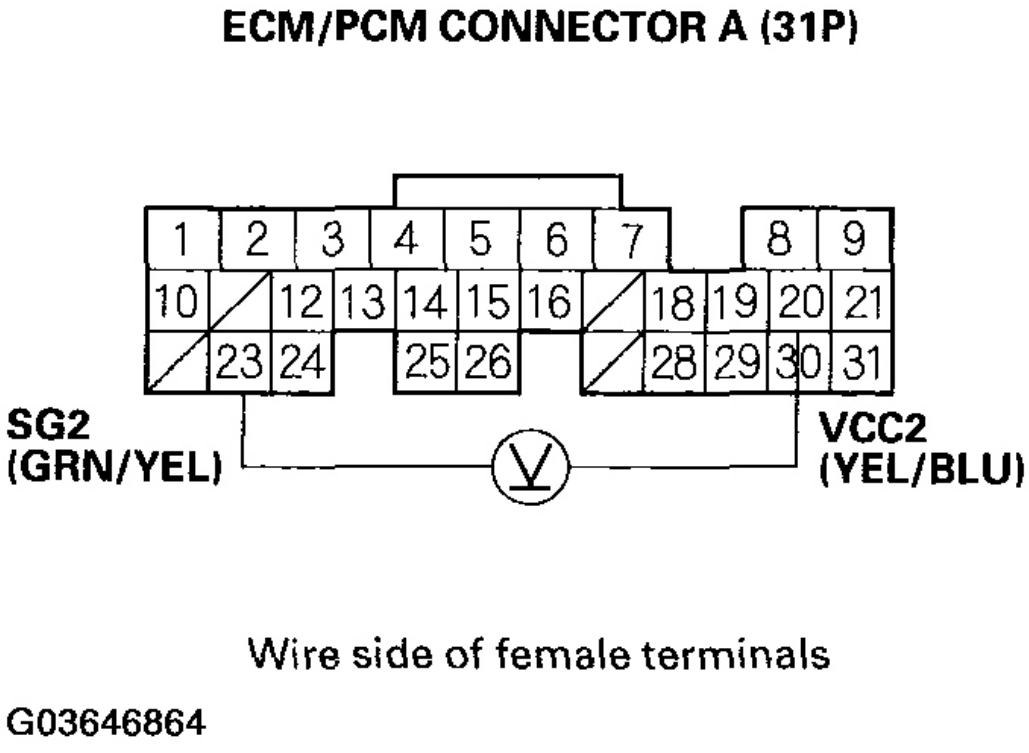


Fig. 9: Measuring Voltage Between ECM/PCM Connector Terminals A20 And A23
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between the EGR valve and the ECM/PCM (A23), then go to step 10.

NO - Go to step 14.

8. Turn the ignition switch OFF.
9. Replace the EGR valve (see **EGR VALVE REPLACEMENT**).
10. Turn the ignition switch ON (II).
11. Reset the ECM/PCM with the HDS.
12. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN**

PROCEDURE).

13. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0406 indicated?

    YES - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1.

    NO - Troubleshooting is complete. If any other Temporary DTC's or DTC's are indicated, go to the indicated DTC's troubleshooting.
14. Turn the ignition switch OFF.
15. Reconnect all connectors.
16. Update the ECM/PCM if it does not have the latest software (see **UPDATING THE ECM/PCM**), or substitute a know-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**)
17. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0406 indicated?

    Yes - Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**), then recheck. If the ECM/PCM was substituted, go to step 1

    No- If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM; '03-05 models (see**ECM/PCM REPLACEMENT**), '06-07 models (see **ECM/PCM REPLACEMENT**). If any other Temporary DTCs or DTCs are indicated, got to the indicated DTC's troubleshooting.

DTC P2413: EGR SYSTEM MALFUNCTION

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Do the EGR TEST in the INSPECTION MENU with the HDS.

   Is the result OK?

   YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the EGR valve and the ECM/PCM.

   NO - Go to step 5.
5. Turn the ignition switch OFF.
6. Turn the ignition switch ON (II).
7. Check the EGR VLS in the DATA LIST with the HDS.

   Is about 0 V indicated?

   YES - Go to step 8.

   NO - Go to step 19.
8. Turn the ignition switch OFF.
9. Disconnect the EGR valve 6P connector.
10. Turn the ignition switch ON (II).
11. Measure voltage between EGR valve 6P connector terminal No. 3 and body ground.

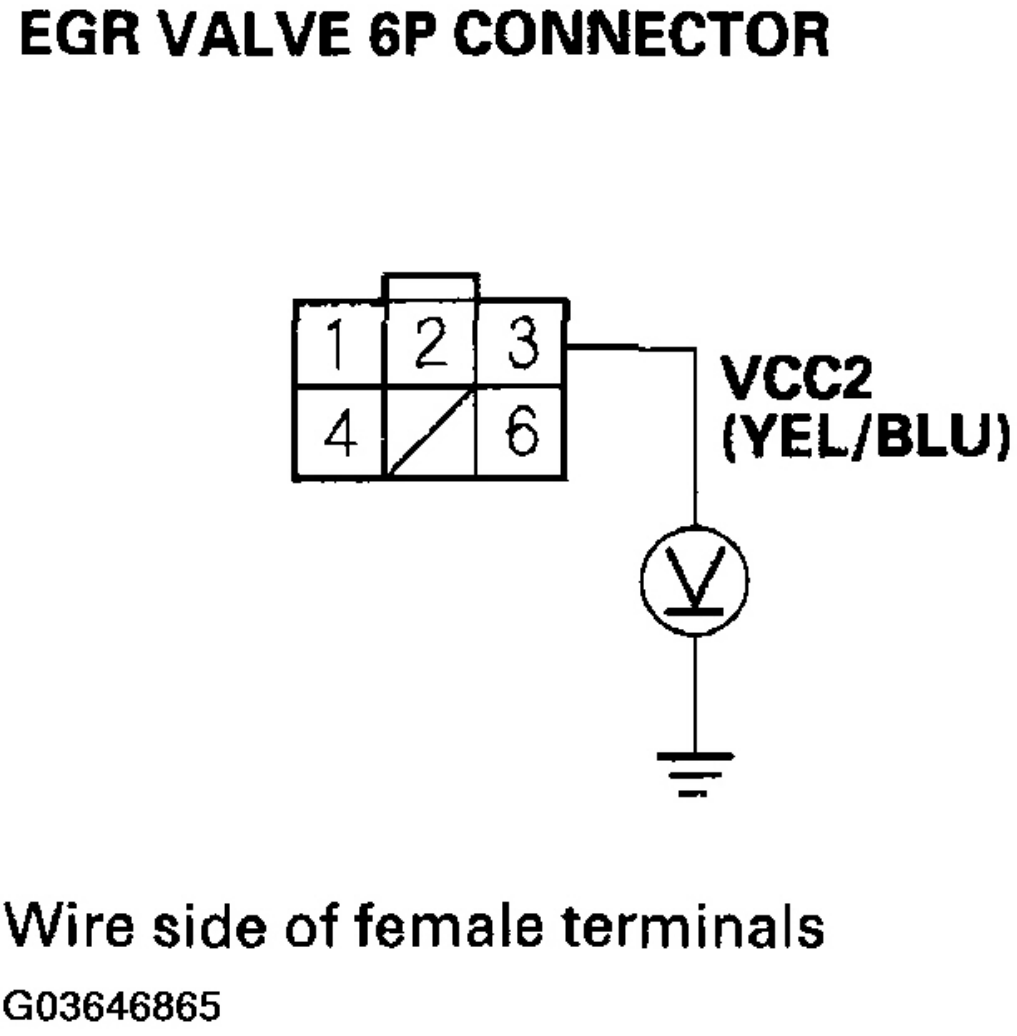


Fig. 10: Measuring Voltage Between EGR Valve 6P Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 13.
NO - Go to step 12.

12. Measure voltage between ECM/PCM connector terminal A20 and body

ground.

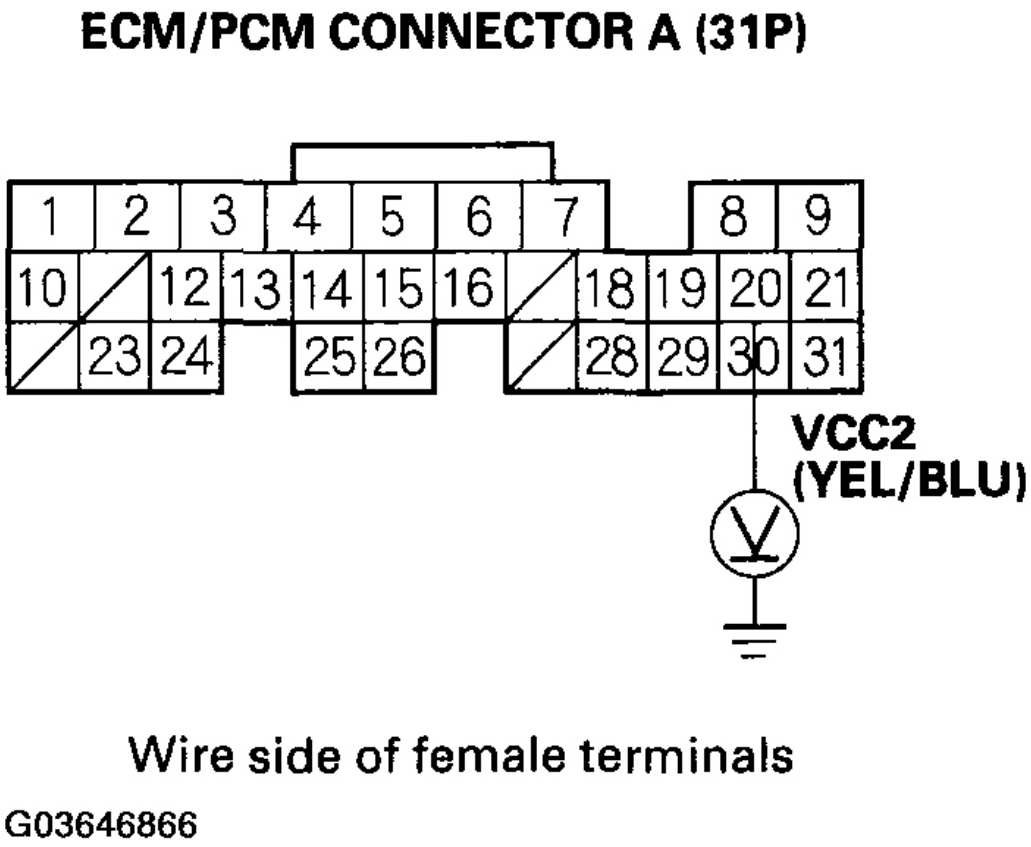


Fig. 11: Measuring Voltage Between ECM/PCM Connector Terminal A20 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between the EGR valve and the ECM/PCM (A20), then go to step 44.

NO - Go to step 51.

13. Turn the ignition switch OFF.
14. Jump the SCS line with the HDS.

15. Disconnect ECM/PCM connector B (24P).
16. Check for continuity between ECM/PCM connector terminal B12 and body ground.

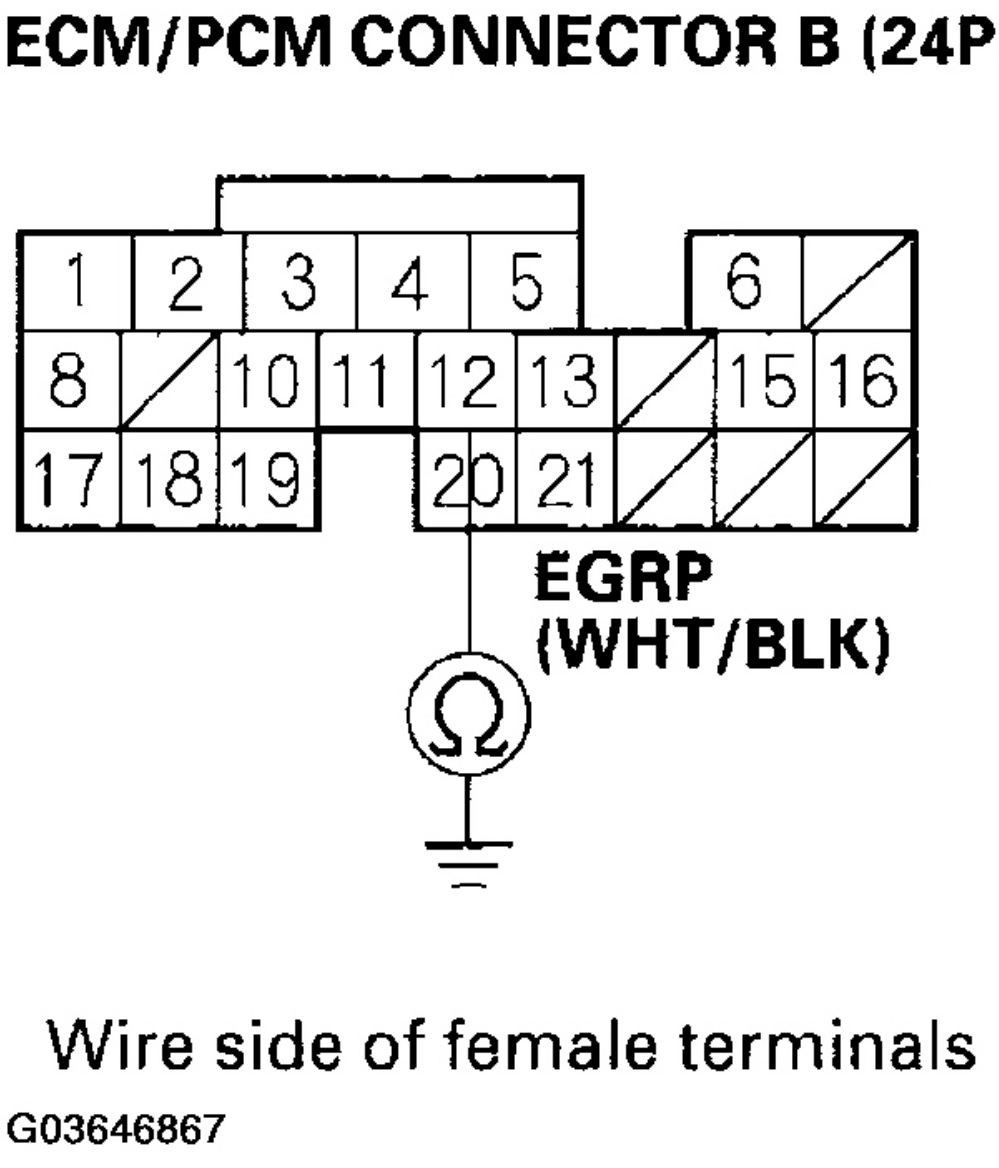


Fig. 12: Checking Continuity Between ECM/PCM Connector Terminal B12 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/PCM (B12) and the EGR valve, then go to step 44.

NO - Go to step 17.

17. Connect EGR valve 6P connector terminal No. 1 to body ground with a jumper wire.

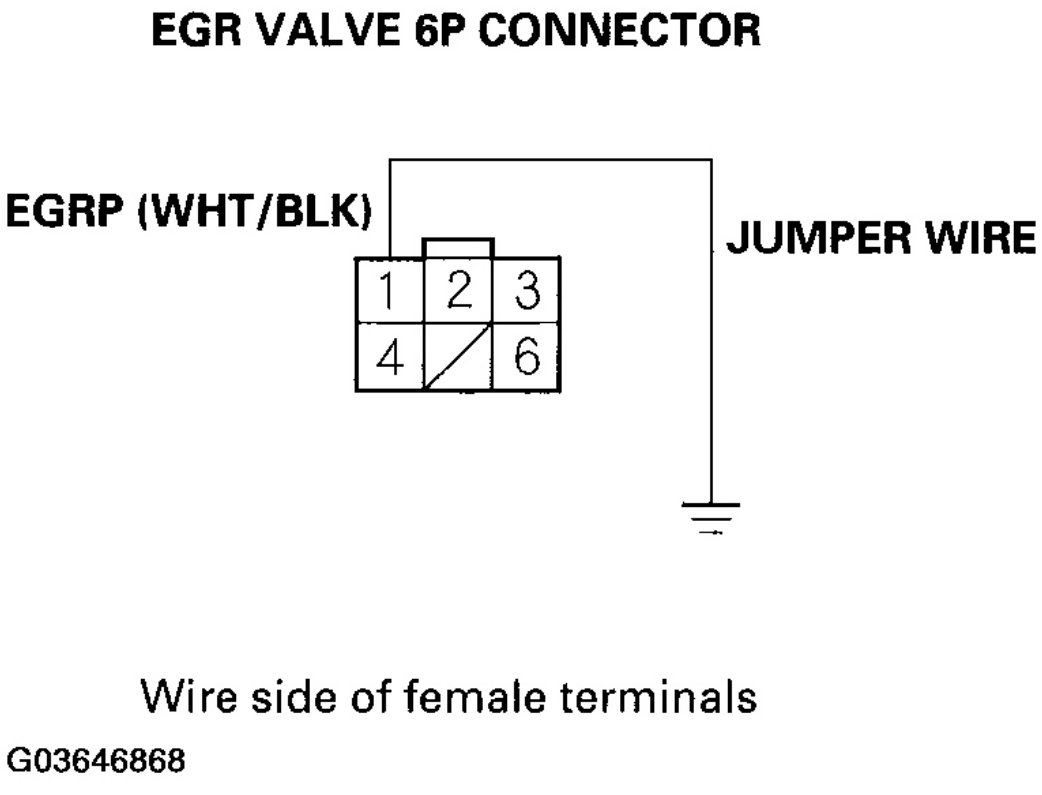


Fig. 13: Connecting EGR Valve 6P Connector Terminal No. 1 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Check for continuity between ECM/PCM connector terminal B12 and body

ground.

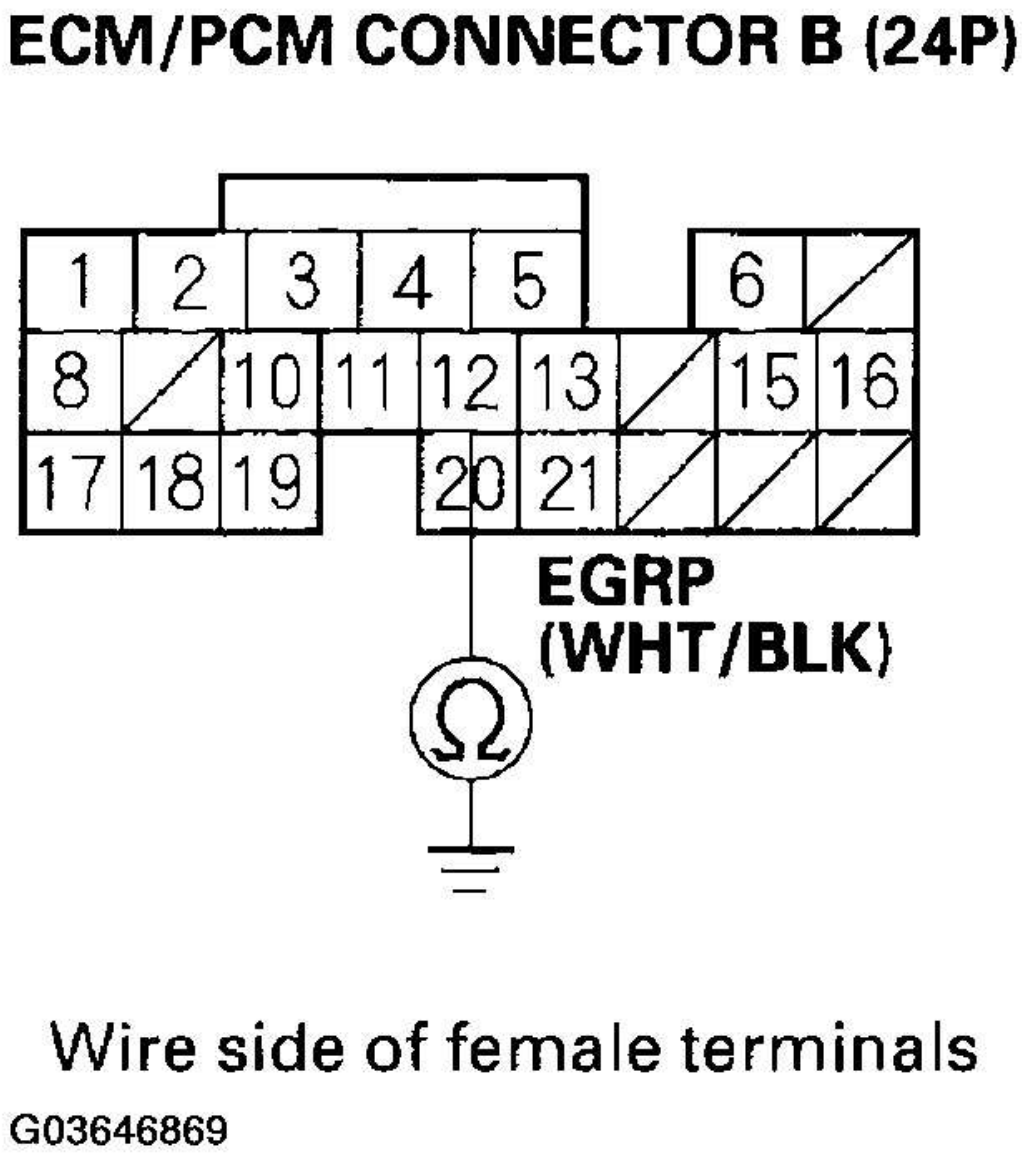


Fig. 14: Checking Continuity Between ECM/PCM Connector Terminal B12 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 19.

NO - Repair open in the wire between the ECM/PCM (B12) and the EGR valve, then go to step 44.

19. Turn the ignition switch OFF.
20. If not already done, disconnect the EGR valve 6P connector.
21. At the sensor side, measure resistance between EGR valve 6P connector terminals No. 1 and No. 2.

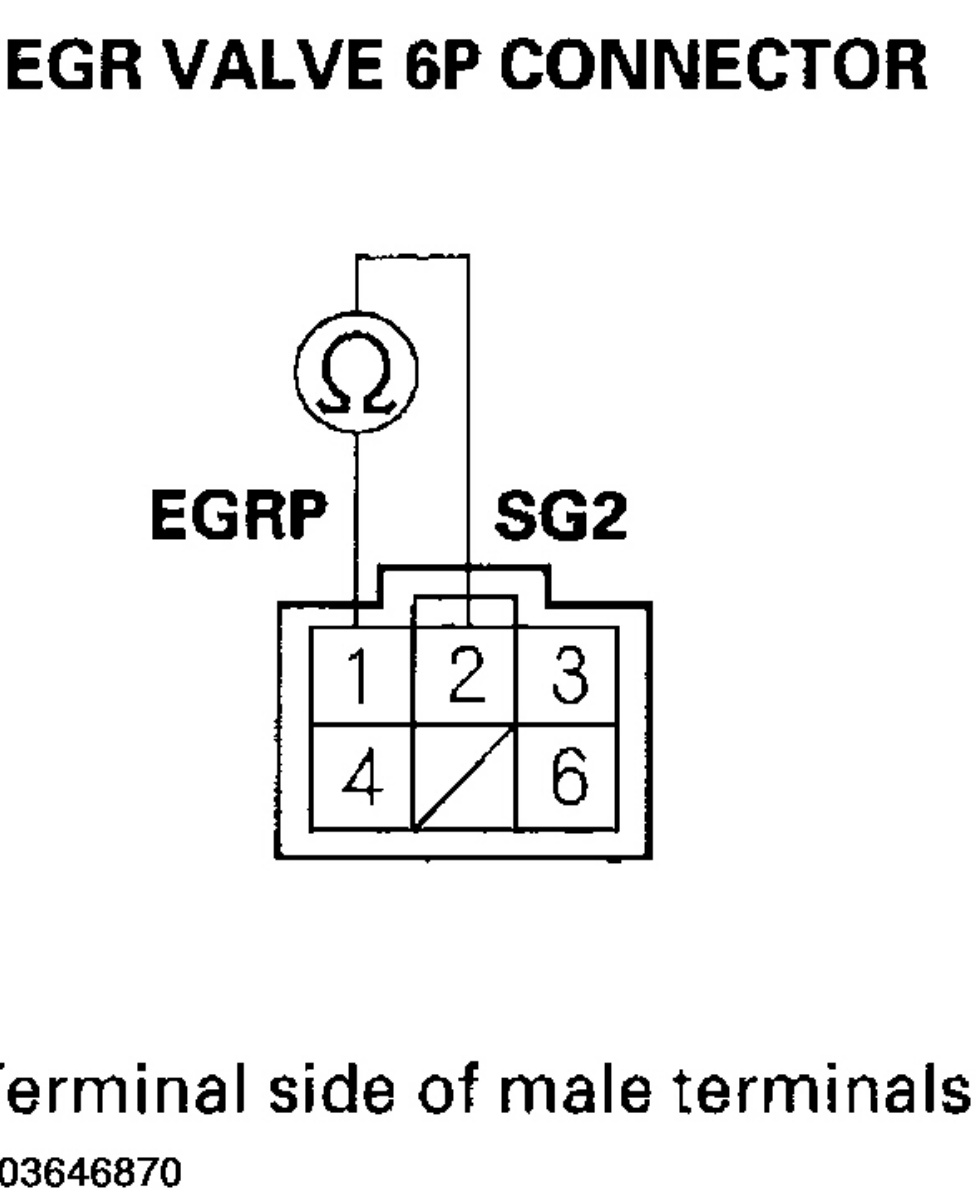


Fig. 15: Measuring Resistance Between EGR Valve 6P Connector Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity or resistance of 100 kohms or more?

YES - Go to step 43.

NO - Go to step 22.

22. At the sensor side, measure resistance between EGR valve 6P connector terminals No. 1 and No. 3.

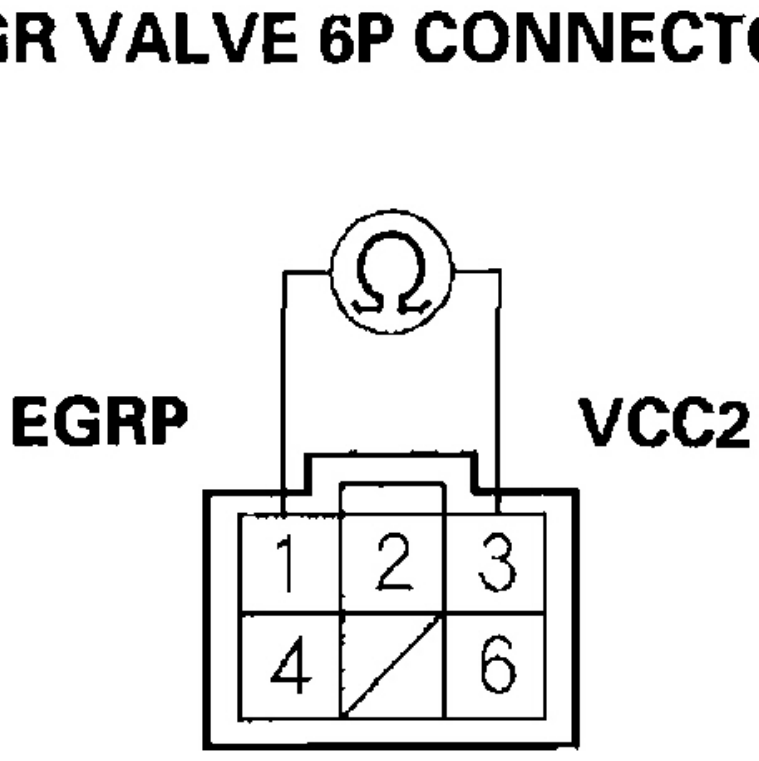


Fig. 16: Measuring Resistance Between EGR Valve 6P Connector Terminals No. 1 And No. 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 100 kohms or more?

YES - Go to step 43.

NO - Go to step 23.

23. If not already done, jump the SCS line with the HDS.
24. If not already done, disconnect ECM/PCM connector B (24P).
25. Check for continuity between ECM/PCM connector terminal B16 and body ground.

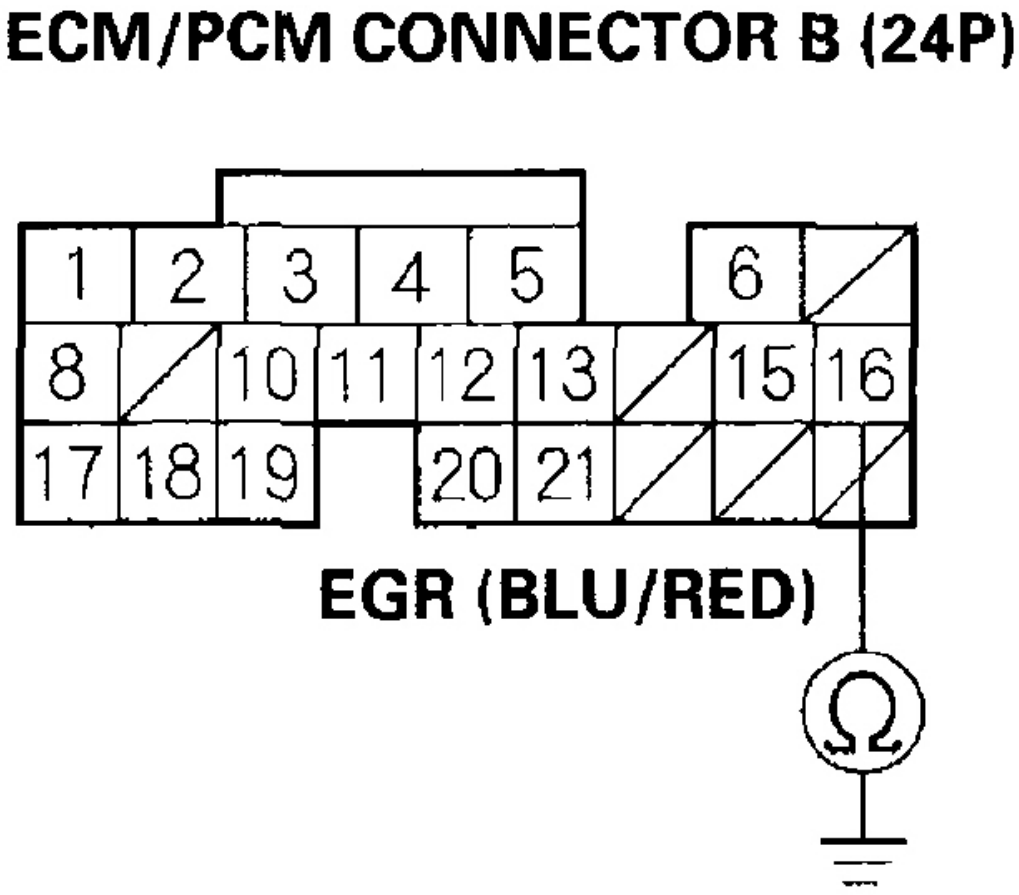


Fig. 17: Checking Continuity Between ECM/PCM Connector Terminal B16 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/PCM (B16) and the

EGR valve, then go to step 44.

NO - Go to step 26.

26. Connect EGR valve 6P connector terminal No. 4 to body ground with a jumper wire.

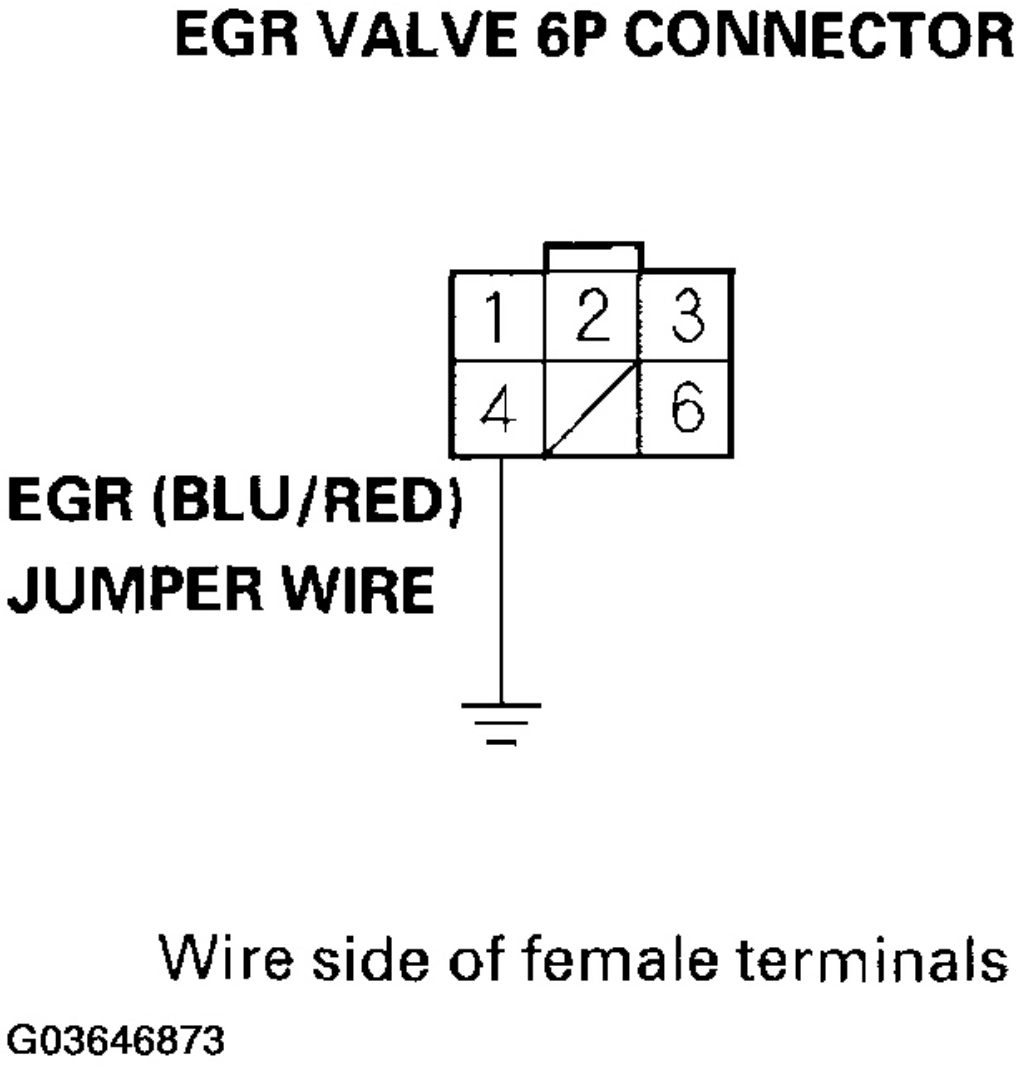


Fig. 18: Connecting EGR Valve 6P Connector Terminal No. 4 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

27. Check for continuity between ECM/PCM connector terminal B16 and body ground.

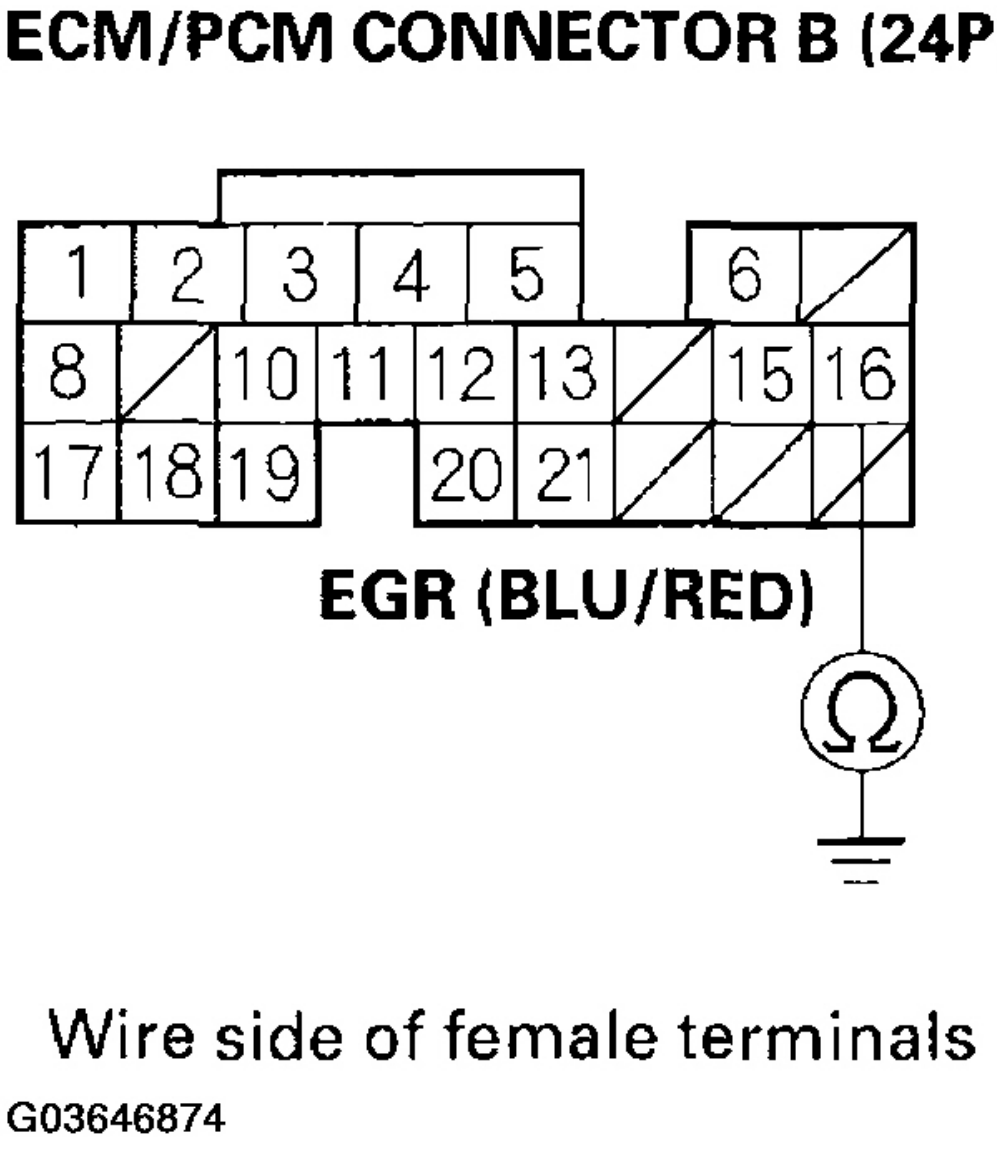


Fig. 19: Checking For Continuity Between ECM/PCM Connector Terminal B16 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 28.

NO - Repair open in the wire between the ECM/PCM (B16) and the EGR valve, then go to step 44.

28. Remove the jumper wire from the EGR valve 6P connector.
29. Check for continuity between EGR valve 6P connector terminal No. 6 and body ground.

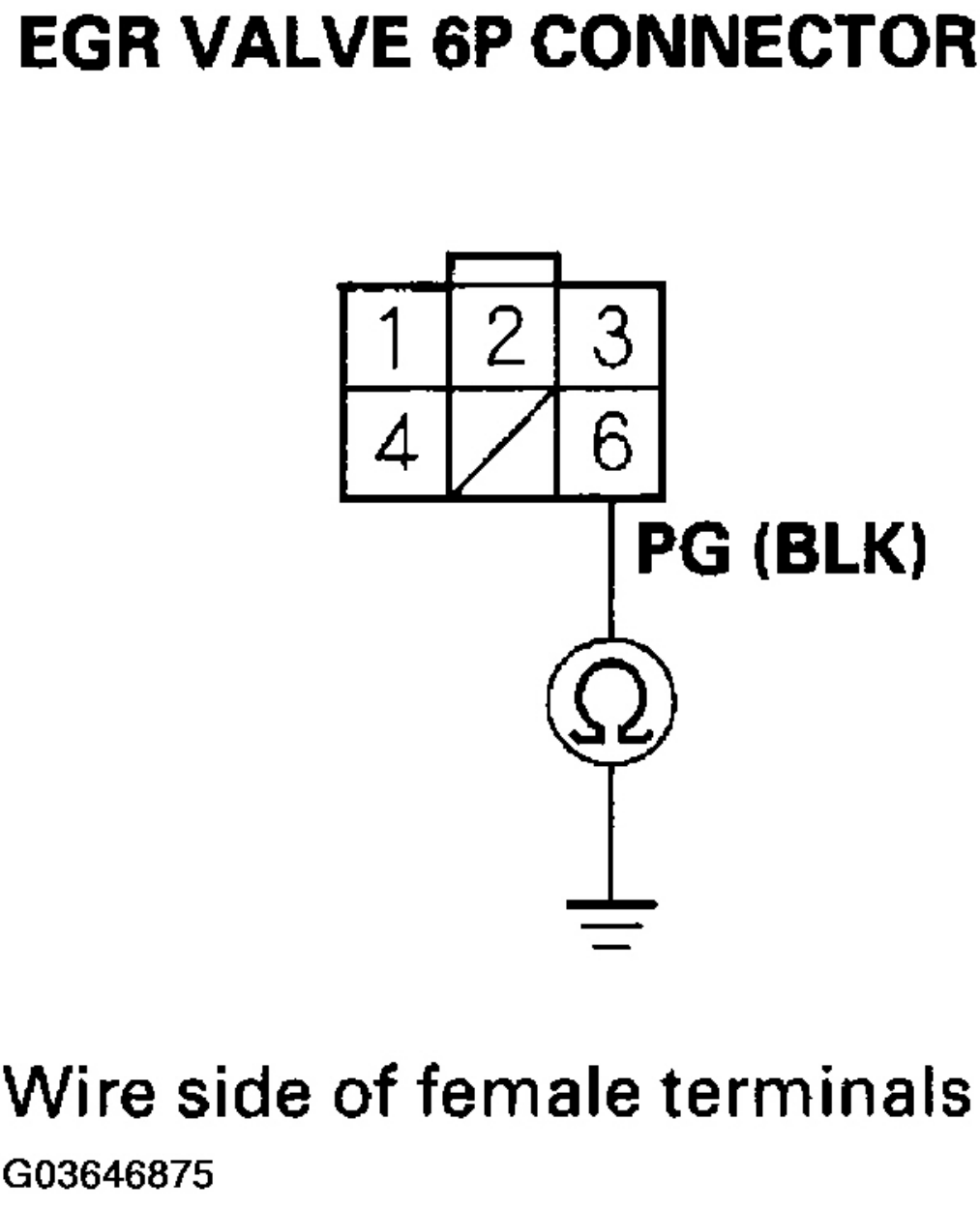


Fig. 20: Checking Continuity Between EGR Valve 6P Connector Terminal No. 6 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 30.

NO - Repair open in the wire between the EGR valve and G101, then go to step 44.

30. Reconnect ECM/PCM connector B (24P).
31. Connect the battery positive terminal to EGR valve 6P connector terminal No. 4 with a jumper wire.

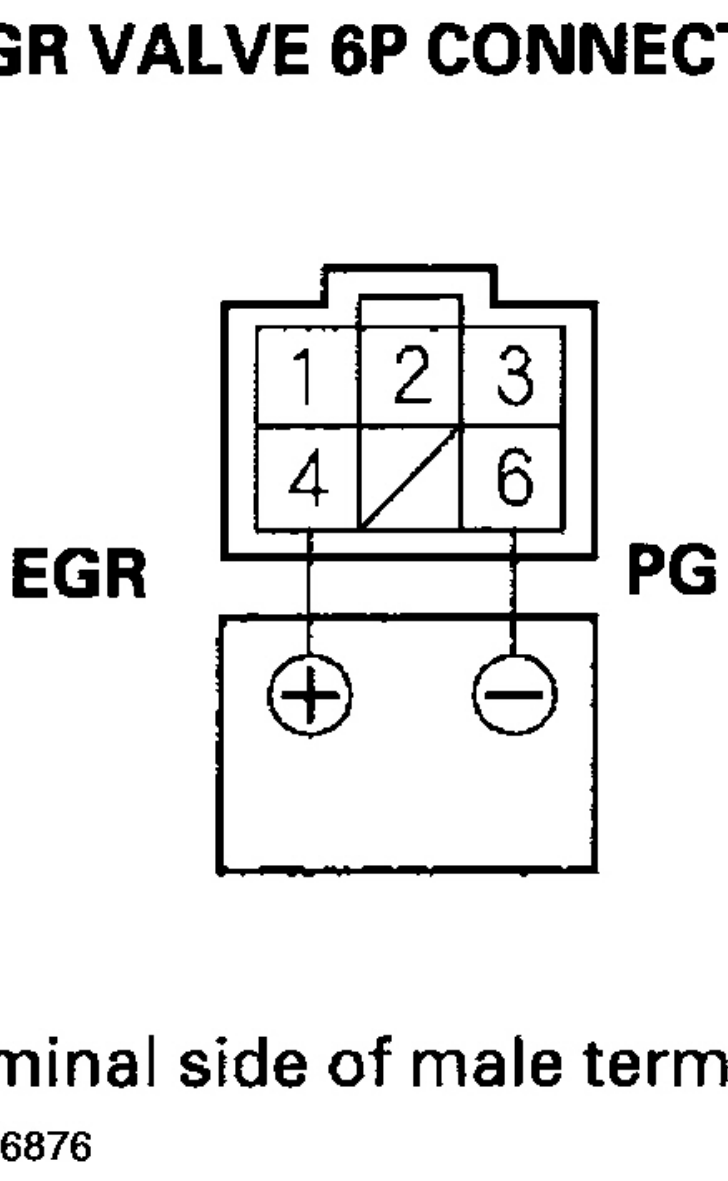


Fig. 21: Connecting Battery Positive Terminal To EGR Valve 6P Connector Terminal No. 4 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

32. Start the engine and let it idle, then connect the battery negative terminal to EGR valve 6P connector terminal No. 6 with a jumper wire.

Does the engine stall or run rough?

YES - Go to step 51.

NO - Go to step 33.

33. Turn the ignition switch OFF.
34. Remove the EGR valve (see **EGR VALVE REPLACEMENT**).
35. Clean the intake manifold EGR port and the passage inside the EGR valve with throttle plate and induction cleaner.
36. Install the EGR valve (see **EGR VALVE REPLACEMENT**).
37. Reconnect the EGR valve 6P connector.
38. Turn the ignition switch ON (II).
39. Reset the ECM/PCM with the HDS.
40. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
41. Do the EGR TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Go to step 49.

NO - Go to step 42.

42. Turn the ignition switch OFF.
43. Replace the EGR valve (see **EGR VALVE REPLACEMENT**).
44. Reconnect all connectors.
45. Turn the ignition switch ON (II).
46. Reset the ECM/PCM with the HDS.
47. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
48. Do the EGR TEST in the INSPECTION MENU with the HDS.
49. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P2413 is indicated, check for poor connections or loose

terminals at the EGR valve and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

NO - Go to step 50.

50. Monitor the OBD STATUS for DTC P2413 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 49, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the EGR valve and the ECM/PCM, then go to step 1 and recheck. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 48.

51. Turn the ignition switch OFF.
52. Reconnect all connectors.
53. Update the ECM/PCM if it does not have the latest software (see **UPDATING THE ECM/PCM**), or substitute a known- good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**).
54. Do the EGR TEST in the INSPECTION MENU with the HDS.
55. Check for temporary DTCs or DTCs with the HDS.

Is DTC P2413 indicated?

YES- Check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-food ECM/PCM (see), then go to step 54. If the ECM/PCM was substituted, go to step 1.

NO- Go to step 56.

56. Monitor the OBD STATUS for DTC P2413 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES- If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM; '03-05 models (see **ECM/PCM REPLACEMENT**), '06-07 models (see **ECM/PCM REPLACEMENT**). If any other Temporary DTCs or DTCs were indicated in step 55, go to the indicated DTC's troubleshooting.

NO- If the screen indicates FAILED, check for poor connections or loose terminals at the EGR valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see**HOW TO SUBSTITUTE THE ECM/PCM**), then go to step 54. If the ECM/PCM was substituted, go to step 1. If the screen indicates EXECUTING, keep driving until a result comes on. If the screen indicates OUT OF CONDITION, go to step 54.

EGR VALVE REPLACEMENT

1. Remove the air cleaner (see **AIR CLEANER REMOVAL/INSTALLATION**).
2. Remove the EGR valve 6P connector (A).

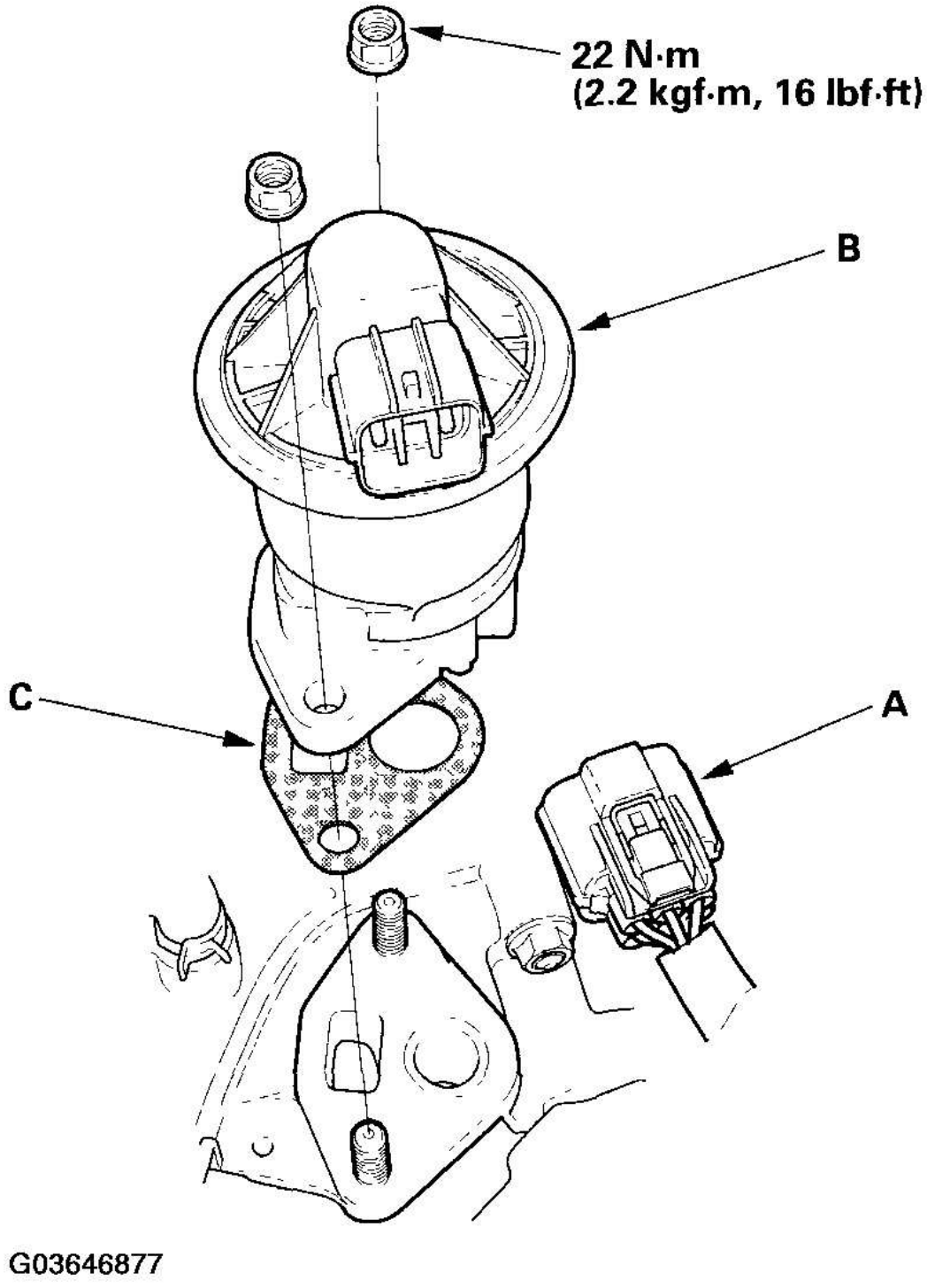


Fig. 22: Removing EGR Valve 6P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the EGR valve (B).
4. Install the parts in the reverse order of removal with a new gasket (C).

2003 HONDA

Accord

BUZZERS, RELAYS & TIMERS

BUZZERS, RELAYS & TIMERS LOCATION

Component	Component Location
Accessory Power Socket Relay	In driver's underdash fuse/relay box.
A/C Compressor Clutch Relay	In underhood fuse/relay box.
A/F Sensor Relay	In driver's underdash fuse/relay box.
Blower Motor Relay	In underhood fuse/relay box.
Condenser Fan Relay	In underhood fuse/relay box.
DRL Relay	In underhood multi-relay box. See **Fig. 7** .
Fan Control Relay	In underhood multi-relay box.
Ignition Coil Relay	In driver's underdash fuse/relay box.
Moon Roof Close Relay	At rear of roof.
Moon Roof Open Relay	At rear of roof.
PGM-FI Main Relay 2	In driver's underdash fuse/relay box.
Power Window Relay	In driver's underdash fuse/relay box.
Radiator Fan Relay	In underhood fuse/relay box.
Rear Window Defogger Relay	In underhood fuse/relay box.
Seat Heater Relay	Behind glove box. See **Fig. 10** .
Starter Cut Relay	In driver's underdash fuse/relay box.
Turn Signal/Hazard Relay	In driver's underdash fuse/relay box.

CIRCUIT PROTECTION DEVICES

CIRCUIT PROTECTION DEVICES LOCATION

Component	Component Location
Fuse/Relay Box (2.4L)	On left rear corner of engine compartment, attached to underhood fuse/relay box. See **Fig. 7** .
Multi-Relay Box (3.0L)	On left rear corner of engine compartment, attached to underhood fuse/relay box. See **Fig. 7** .

Underdash Fuse/Relay Box	Behind left kick panel. See **Fig. 9** .
Underhood Fuse/Relay Box	On left rear corner of engine compartment, forward of strut tower. See **Fig. 7** .

CONTROL UNITS

CONTROL UNITS LOCATION

Component	Component Location
ABS Modulator Unit	At left front of engine compartment.
ABS-TCS Control Unit	Behind right side of engine compartment.
Audio-HVAC Display Module	Behind center of dash. See **Fig. 10** .
Cruise Control Unit	Behind left side of dash. See **Fig. 9** .
ECM/PCM	Under middle of dash. See **Fig. 10** .
Gauge Control Module	Behind instrument cluster. See **Fig. 8** .
Immobilizer Control Unit Receiver	In steering column cover. See **Fig. 8** .
Moon Roof Control Unit	At rear of roof.
Navigation Unit	In trunk, at middle of rear shelf. See **Fig. 14** .
OPDS Unit	In front passenger's seat back.
PCM	Behind center of dash, forward of floor console.
SRS Unit	Under middle of dash.
Throttle Actuator Control Module	Under right side of dash. See **Fig. 11** .

MOTORS

MOTORS LOCATION

Component	Component Location
ABS Modulator Unit	At left front of engine compartment.
Air Mix Control Motor (Except EX & LX)	Under left side of dash. See **Fig. 12** .
Blower Motor	Under right side of dash. See **Fig. 10** .

Driver's Air Mix Control Motor (Except EX & LX)	Under left side of dash. See **Fig. 12** .
Front Passenger's Air Mix Control Motor	Under right side of dash. See **Fig. 12** .
Mode Control Motor	Behind glove box. See **Fig. 12** .
Moon Roof Motor	Under headliner, above center of rear window.
Recirculation Control Motor	Behind glove box, on blower unit. See **Fig. 12** .
Windshield Washer Motor	On bottom of windshield washer fluid reservoir.
Windshield Wiper Motor	On left side of air scoop.

SENDING UNITS & SENSORS

SENDING UNITS & SENSORS LOCATION

Component	Component Location
A/F Sensor	On exhaust manifold. See **Fig. 1** .
APP Sensor	At right side of engine compartment. See **Fig. 11** .
ATF Temperature Sensor	On transmission. See **Fig. 6** .
CMP Sensor A (2.4L)	At right rear of engine. See **Fig. 1** .
CMP Sensor B (2.4L)	At right rear of engine. See **Fig. 1** .
CMP Sensor (3.0L)	At left front of engine. See **Fig. 5** .
CKP Sensor (2.4L)	At left front of engine. See **Fig. 2** .
Countershaft Speed Sensor (2.4L)	On top left of transaxle. See **Fig. 2** .
Countershaft Speed Sensor (3.0L)	On top right of transaxle. See **Fig. 5** .
Driver's Side Impact Sensor	At left "B" pillar.
ECT Sensor (2.4L)	On right rear of cylinder head. See **Fig. 2** .
ECT Sensor (3.0L)	On left rear of engine. See **Fig. 4** .
EGR Valve & EGR Valve Position Sensor (2.4L)	On rear of intake manifold.

EGR Valve & EGR Valve Position Sensor (3.0L)	On left rear of engine.
Evaporator Temperature Sensor	Behind glove box, in evaporator unit. See **Fig. 12** .
Front A/F Sensor (Bank No. 2, Sensor No. 1)	In right exhaust bank, before catalytic converter. See **Fig. 5** .
Front Passenger's Side Impact Sensor	Under front passenger's seat. See **Fig. 14** .
Front Secondary HO2S (Bank No. 2, Sensor No. 2)	In right exhaust bank, before catalytic converter. See **Fig. 4** .
Fuel Tank Pressure Sensor	Under left rear of vehicle, in fuel tank. See **Fig. 13** .
IAT Sensor (2.4L)	On left rear intake manifold. See **Fig. 1** .
IAT Sensor (3.0L)	On top left rear of intake manifold. See **Fig. 4** .
In-Car Temperature Sensor	Under middle of dash. See **Fig. 8** .
Knock Sensor	On lower left side of engine, below exhaust manifold.
Left Impact Sensor	At left front of engine compartment, behind left headlight.
MAF Sensor (2.4L)	At left side of engine compartment. See **Fig. 1** .
Mainshaft Speed Sensor (2.4L)	On rear of transaxle. See **Fig. 1** .
Mainshaft Speed Sensor (3.0L)	On left rear of transaxle. See **Fig. 4** .
MAP Sensor (2.4L)	At left side of engine. See **Fig. 1** .
MAP Sensor (3.0L)	At left side of engine compartment. See **Fig. 5** .
Moon Roof Limit Sensor	At rear of roof.
Outside Air Temperature Sensor	Below center of front bumper. See **Fig. 7** .
Rear A/F Sensor (Bank No. 1, Sensor No. 1)	At rear of engine compartment. See **Fig. 4** .
Rear Secondary HO2S (Bank No. 1,	At rear of engine compartment. See **Fig.**

Sensor No. 2)	**5** .
Right Front Impact Sensor	At right front of engine compartment.
Secondary HO2S	On TWC converter.
Sunlight Sensor	On center front of dash. See **Fig. 10** .
TP Sensor (2.4L)	On throttle body. See **Fig. 2** .
TP Sensor/Throttle Actuator (3.0L)	On throttle body. See **Fig. 4** .
Wheel Speed Sensor (Left Front)	On left front suspension knuckle.
Wheel Speed Sensor (Left Rear)	On left rear suspension knuckle.
Wheel Speed Sensor (Right Front)	On right front suspension knuckle.
Wheel Speed Sensor (Right Rear)	On right rear suspension knuckle. See **Fig. 14** .

SOLENOIDS & SOLENOID VALVES

SOLENOIDS & SOLENOID VALVES LOCATION

Component	Component Location
A/T Clutch Pressure Control Solenoid Valve A (2.4L)	On left side of transaxle.
A/T Clutch Pressure Control Solenoid Valve A (3.0L)	On top rear of transaxle. See **Fig. 5** .
A/T Clutch Pressure Control Solenoid Valve B (2.4L)	On left side of transaxle. See **Fig. 2** .
A/T Clutch Pressure Control Solenoid Valve B (3.0L)	On top rear of transaxle. See **Fig. 4** .
A/T Clutch Pressure Control Solenoid Valve C (2.4L)	On left side of transaxle. See **Fig. 1** .
A/T Clutch Pressure Control Solenoid Valve C (3.0L)	On left side of transaxle. See **Fig. 4** .
Cruise Control Actuator	At right side of firewall.
EGR Valve & EGR Valve Position Sensor (2.4L)	At rear of engine. See **Fig. 2** .
EGR Valve & EGR Valve Position Sensor (3.0L)	At right front top corner of engine.

Engine Mount Control Solenoid Valve (2.4L)	On left front of engine. See **Fig. 1** .
Engine Mount Control Solenoid Valve (3.0L)	On left rear of engine compartment. See **Fig. 5** .
EVAP Canister Purge Valve (2.4L)	On right side of intake manifold. See **Fig. 1** .
EVAP Canister Purge Valve (3.0L)	On right side of engine. See **Fig. 4** .
EVAP Canister Vent Shut Valve	On underside of vehicle, on EVAP control canister.
IAC Valve (2.4L)	On left side of intake manifold. See **Fig. 2** .
IMRC Valve (3.0L)	At front of engine. See **Fig. 4** .
Shift Control Solenoid Valve A (3.0L)	On top front of transaxle. See **Fig. 4** .
Shift Control Solenoid Valve B (3.0L)	On left side of transaxle. See **Fig. 4** .
Shift Control Solenoid Valve C (3.0L)	On top front of transaxle. See **Fig. 4** .
Shift Lock Solenoid	Under floor console, on bottom right of gear selector lever. See **Fig. 10** .
Torque Converter Clutch Solenoid Valve (3.0L)	On top front of transaxle. See **Fig. 4** .
VTC Oil Control Solenoid Valve (2.4L)	At front of engine. See **Fig. 1** .
VTEC Oil Control Solenoid Valve (2.4L)	At front of engine.
VTEC Solenoid Valve (2.4L)	On right front of engine. See **Fig. 1** .
VTEC Solenoid Valve (3.0L)	On right front of engine. See **Fig. 5** .

SWITCHES

SWITCHES LOCATION

Component	Component Location
	At right front of engine compartment, near front

A/C Pressure Switch	bumper.
Back-Up Light Switch (2.4L)	On top left of transaxle. See **Fig. 1** .
Back-Up Light Switch (3.0L)	On top left of transaxle. See **Fig. 5** .
Brake Fluid Level Switch	In brake fluid reservoir cap.
Brake Pedal Position Switch	On brake pedal support. See **Fig. 8** .
Clutch Interlock Switch	On clutch pedal support.
Moon Roof Switch	At left side of dash.
Oil Pressure Switch (2.4L)	At front of engine. See **Fig. 2** .
Oil Pressure Switch (3.0L)	At front of engine. See **Fig. 4** .
Parking Brake Switch	Mounted under parking brake lever. See **Fig. 10** .
Park Pin Switch	Below console, on shift lever. See **Fig. 10** .
PSP Switch (2.4L)	At right side of engine compartment.
PSP Switch (3.0L)	At right rear of engine compartment, on power steering line.
Radiator Fan Switch (2.4L)	On left side of radiator.
Radiator Fan Switch (3.0L)	On left side of radiator. See **Fig. 7** .
Security Hood Switch	At front of engine compartment, on hood lock/latch assembly. See **Fig. 7** .
Transmission Range Switch (2.4L)	On rear of transaxle.
Trunk Key Cylinder Switch	At right rear of trunk. See **Fig. 16** .
Trunk Latch Switch	At trunk latch/lock assembly. See **Fig. 15** .
VTEC Oil Pressure Switch (2.4L)	On front of cylinder head. See **Fig. 2** .
VTEC Oil Pressure Switch (3.0L)	On front of right cylinder head. See **Fig. 5** .
Washer Fluid Level	Behind right side of front bumper, on washer fluid

Switch	reservoir.
2nd Clutch Pressure Switch (2.4L)	On left front of transaxle. See **Fig. 2** .
3rd Clutch Pressure Switch (2.4L)	On side of transaxle. See **Fig. 1** .
3rd Clutch Pressure Switch (3.0L)	On left rear of transaxle. See **Fig. 6** .
4th Clutch Pressure Switch	On left rear of transaxle. See **Fig. 5** .

MISCELLANEOUS

MISCELLANEOUS LOCATION

Component	Component Location
A/C Diode	Under left side of dash.
Blower Power Transistor	On bottom of blower unit. See **Fig. 10** .
DLC	On lower left of dash, above the kick panel. See **Fig. 9** .
High Horn	At front of engine compartment, behind front grille. See **Fig. 7** .
Junction Connector C101	At middle of right cylinder head.
Junction Connector C102	At left side of engine compartment.
Junction Connector C103	At left side of engine compartment.
Junction Connector C404	Below left side of dash.
Junction Connector C405	Below left side of dash.
Junction Connector C406	Below left side of dash.
Junction Connector C503	Behind glove box.
Junction Connector C552	Behind right kick panel.
Junction Connector C553	Behind right kick panel.
Junction Connector C554	Under right side of dash.
Junction Connector C555	Under right side of dash.
Junction Connector C556	Behind glove box.
Junction Connector C557	Behind glove box.

Junction Connector C702	At left "C" pillar.
Junction Connector C703	At left "C" pillar.
Junction Connector C752	At left "C" pillar.
Low Horn	At front of engine compartment, behind front grille. See **Fig. 7** .
Seat Belt Tensioner (Driver's)	At base of left "B" pillar.
Seat Belt Tensioner (Front Passenger's)	At base of right "B" pillar.
Trailer Lighting Connector	On left rear of trunk. See **Fig. 15** .
Window Antenna Coil	At left "C" pillar.

CONNECTORS

CONNECTORS LOCATION

Component	Location
C101 (Gray, 6 Pin)	At center front of engine compartment. See **Fig. 2** .
C108 (2.4L) (Gray, 8 Pin)	At left front side of engine compartment. See **Fig. 2** .
C110 (3.0L) (Black, 6 Pin)	At right rear of engine compartment. See **Fig. 4** .
C151 (Gray, 1 Pin)	At left side of engine compartment, near battery. See **Fig. 5** .
C152 (2.4L) (Gray, 10 Pin)	At left front of engine compartment, near battery. See **Fig. 1** .
C152 (3.0L) (Gray, 10 Pin)	At left rear of engine compartment. See **Fig. 4** .
C153 (Black, 6 Pin)	On top of transmission housing. See **Fig. 5** .
C154 (Black, 1 Pin)	On left front of engine. See **Fig. 4** .
C201 (2.4L) (Black, 33 Pin)	At left rear of engine compartment. See **Fig. 2** .
C201 (3.0L) (Black, 33 Pin)	At left rear of engine compartment. See **Fig. 4** .
C202 (2.4L) (Gray, 33	At left rear of engine compartment.

Pin)	
C202 (3.0L) (Gray, 33 Pin)	At left rear of engine compartment. See **Fig. 5** .
C203 (2.4L) (Black, 1 Pin)	At left rear of engine compartment. See **Fig. 2** .
C203 (3.0L) (Black, 23 Pin)	At left side of engine compartment. See **Fig. 5** .
C251 (White, 13 Pin)	Under center right of dash. See **Fig. 10** .
C281 (White, 13 Pin)	Under middle side of dash. See **Fig. 11** .
C301 (Gray, 2 Pin)	Behind left side of front bumper. See **Fig. 7** .
C310 (Brown, 3 Pin)	At left rear of engine compartment, forward of strut tower.
C311 (Gray/Black, 1 Pin)	At right side of engine compartment.
C401 (Brown, 20 Pin)	Under left side of dash. See **Fig. 8** .
C402 (Brown, 5 Pin)	Under left side of dash. See **Fig. 9** .
C403 (Yellow, 4 Pin)	Under left side of dash. See **Fig. 8** .
C415 (Gray, 3 Pin)	Under left side of dash.
C416 (Gray, 2 Pin)	Under left side of dash.
C501 (White, 24 Pin)	Under left side of dash. See **Fig. 9** .
C502 (Gray, 4 Pin)	Under left side of dash. See **Fig. 9** .
C551 (Gray, 4 Pin)	Behind right kick panel. See **Fig. 10** .
C552 (13 Pin)	Behind right kick panel. See **Fig. 10** .
C553 (6 Pin)	Behind right kick panel. See **Fig. 10** .
C601 (Gray, 8 Pin)	Under left side of dash. See **Fig. 9** .
C631 (White, 20 Pin)	In driver's door.
C632 (Blue/White, 17 Pin)	In driver's door.
C651 (6 Pin)	Behind right kick panel. See **Fig. 14** .
C701 (Coupe) (Gray, 8 Pin)	At left "C" pillar.
C701 (Sedan) (Gray, 8	At left "C" pillar. See **Fig. 16** .

Pin)	
C711 (Gray, 2 Pin)	Under left rear of vehicle. See **Fig. 13** .
C731 (White, 13 Pin)	Behind glove box. See **Fig. 10** .
C732 (Gray, 12 Pin)	Behind glove box. See **Fig. 10** .
C751 (Gray, 10 Pin)	At left "B" pillar. See **Fig. 13** .
C781 (Blue, 10 Pin)	At right "B" pillar. See **Fig. 14** .
C801 (Gray, 4 Pin)	Under front passenger's seat. See **Fig. 14** .
C851 (Blue/White, 21 Pin)	Under middle of dash. See **Fig. 10** .
C901 (Gray, 10 Pin)	Under driver's seat. See **Fig. 13** .
C902 (Gray, 10 Pin)	Under front passenger's seat. See **Fig. 14** .

GROUNDS

GROUNDS LOCATION

Component	Location
G1	At left front of engine compartment. See **Fig. 3** .
G2	At right side of engine compartment. See **Fig. 3** .
G3	At left side of engine compartment. See **Fig. 3** .
G101 (2.4L)	At top middle of engine. See **Fig. 1** .
G101 (3.0L)	Left side of engine compartment. See **Fig. 4** .
G102	At right front side of engine. See **Fig. 4** .
G151	On transmission housing. See **Fig. 6** .
G201 (2.4L)	At right side of engine compartment.
G201 (3.0L)	At right front side of engine compartment.
G202 (2.4L)	At right side of engine compartment, near right front headlight.
G202 (3.0L)	At right rear side of engine compartment.

G203	At right side of engine compartment.
G301	At left side of front bumper. See **Fig. 7** .
G302	Behind left side of front bumper.
G501	Behind left side of dash. See **Fig. 8** .
G502	Behind left side of dash. See **Fig. 8** .
G503	Behind glove box. See **Fig. 10** .
G504	Under middle of dash. See **Fig. 8** .
G505	Under center of dash. See **Fig. 10** .
G506	Under center of dash. See **Fig. 10** .
G601	At left side of floor. See **Fig. 13** .
G602	At right side of floor. See **Fig. 14** .
G603	Behind center of rear seats. See **Fig. 13** .
G701 (Coupe)	At left side of trunk. See **Fig. 15** .
G701 (Sedan)	At left side of trunk. See **Fig. 16** .
G702	At left side of trunk. See **Fig. 15** .

COMPONENT LOCATION GRAPHICS

NOTE: Figures may show multiple component locations. Refer to appropriate table for proper figure references.

2003 Honda Accord DX
2003 HONDA Accord

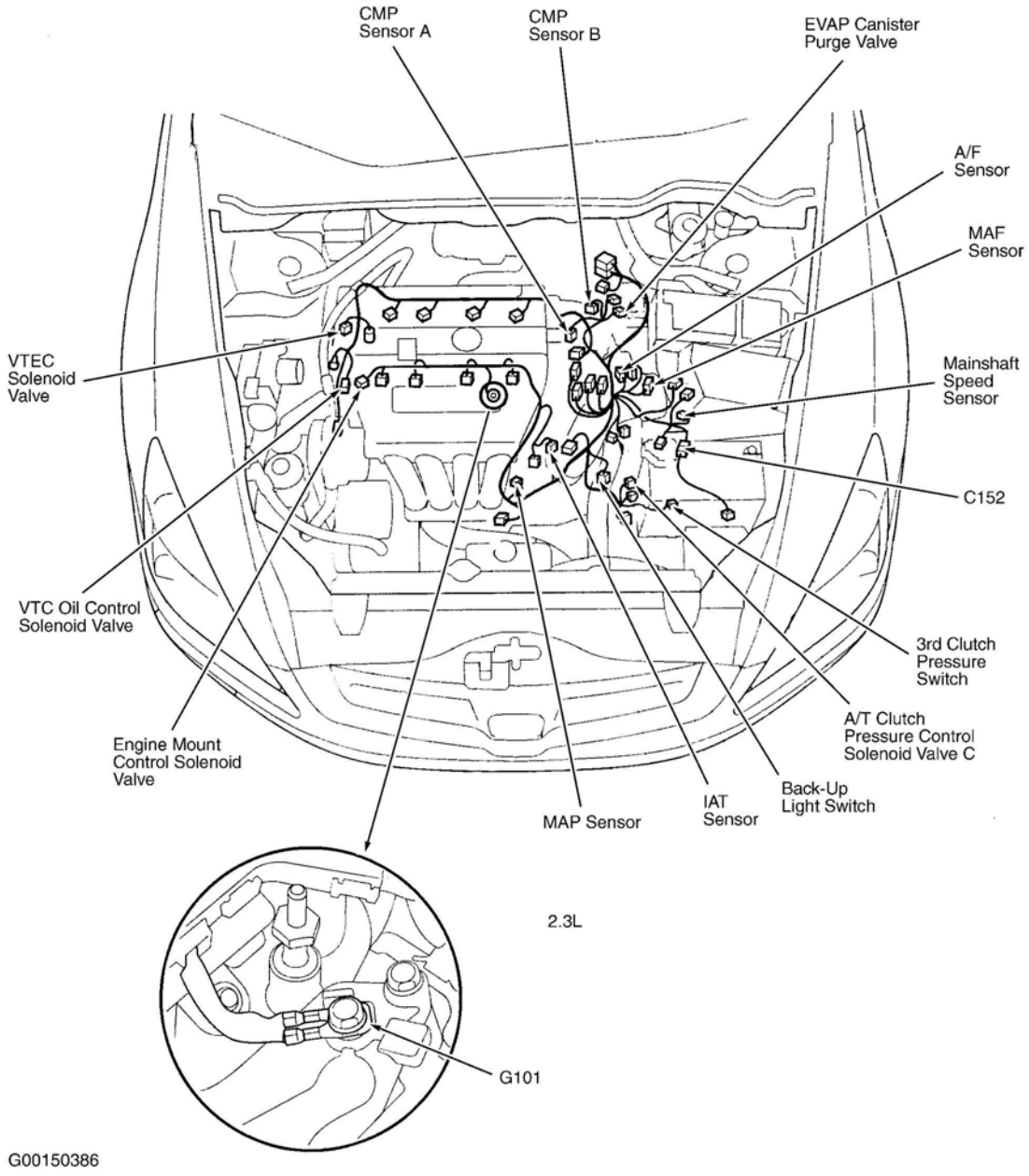


Fig. 1: Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

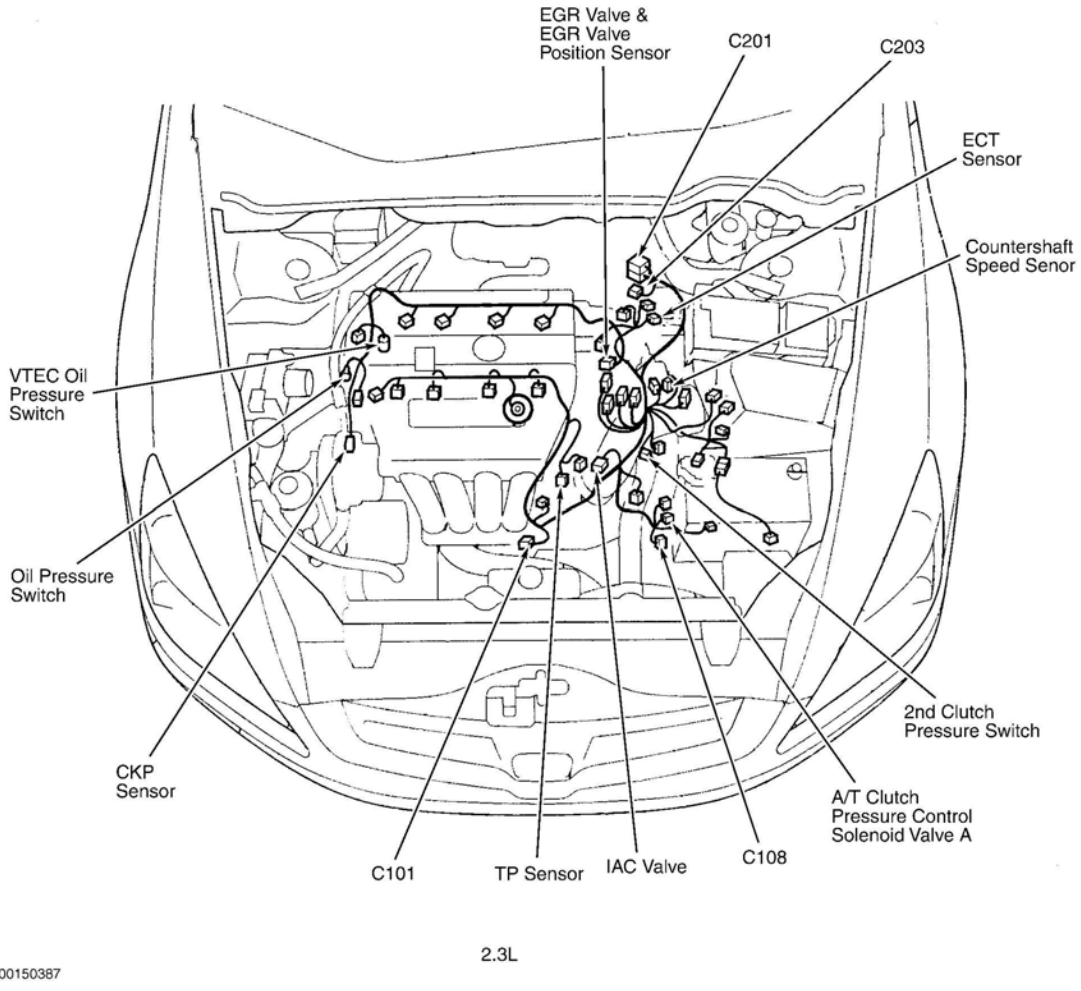


Fig. 2: Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

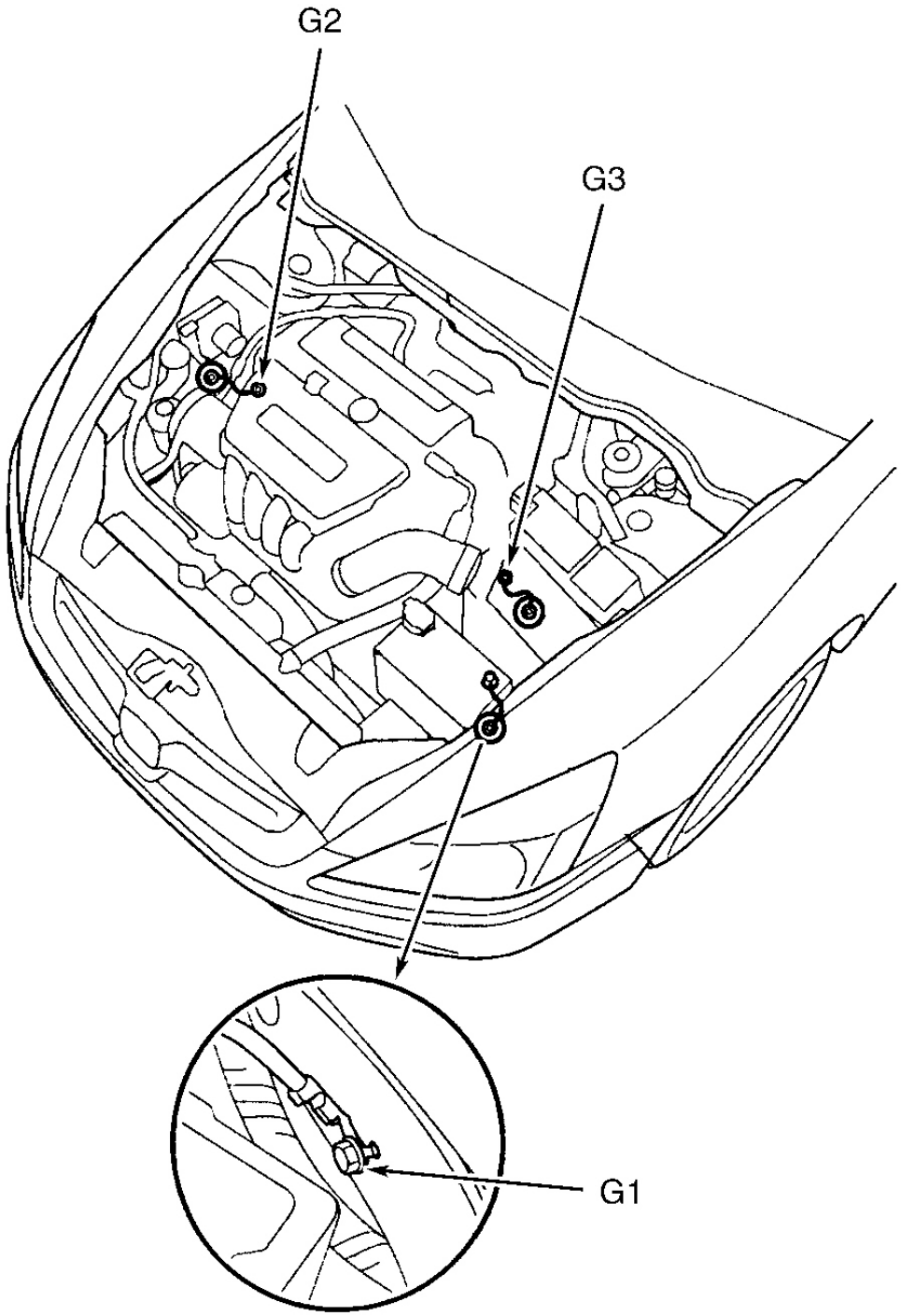


Fig. 3: Engine Compartment
Courtesy of AMERICAN HONDA MOTOR CO., INC.

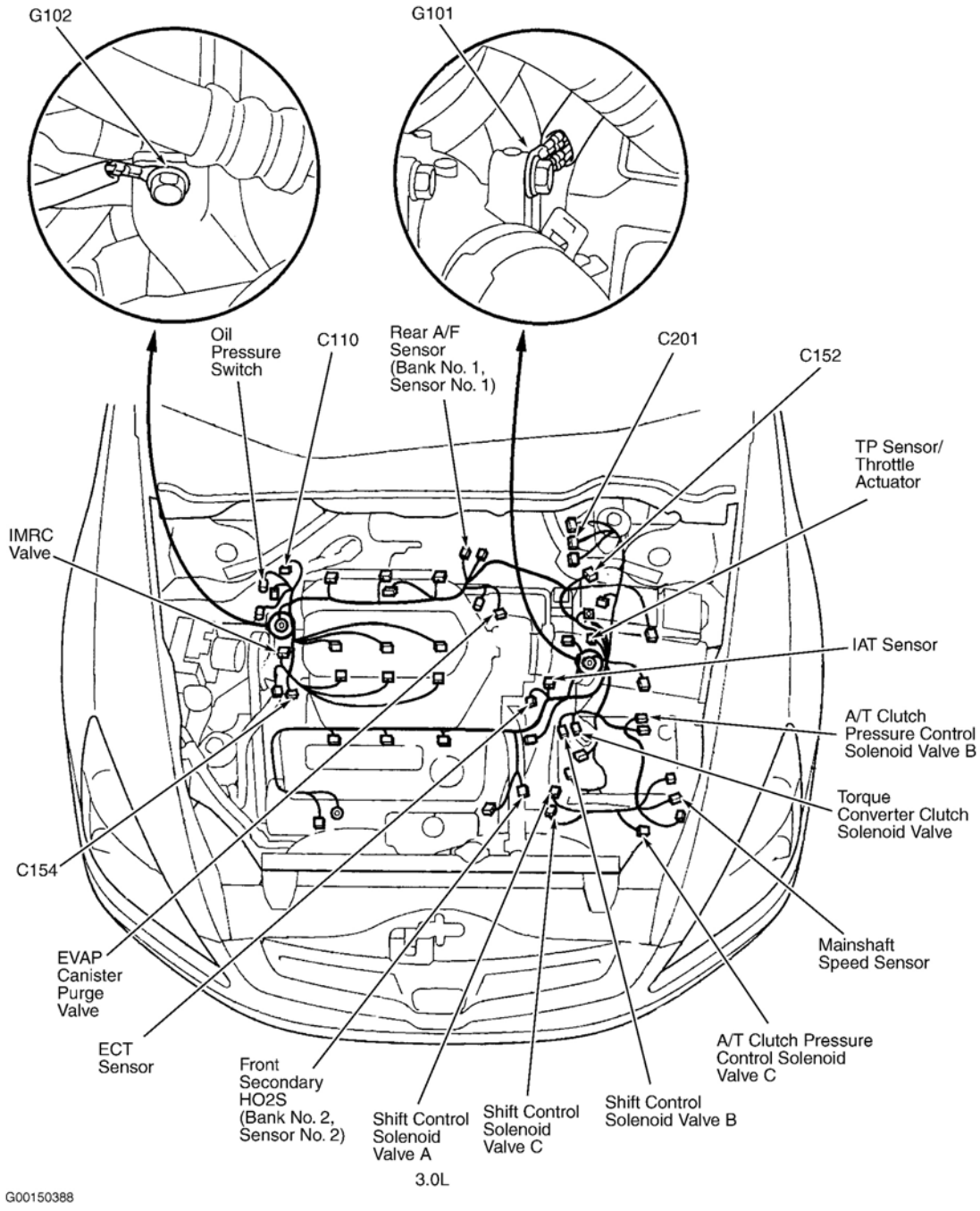


Fig. 4: Engine Compartment (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

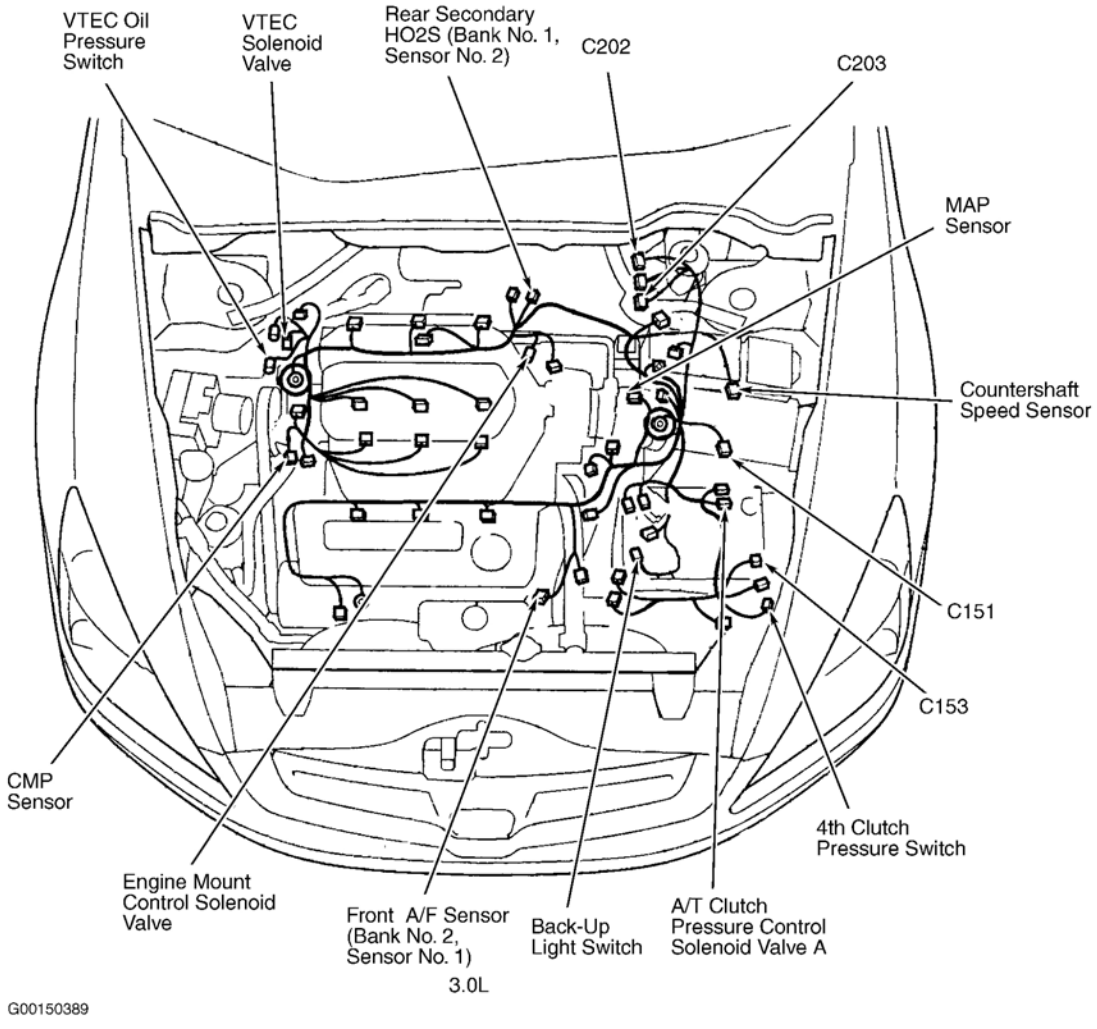
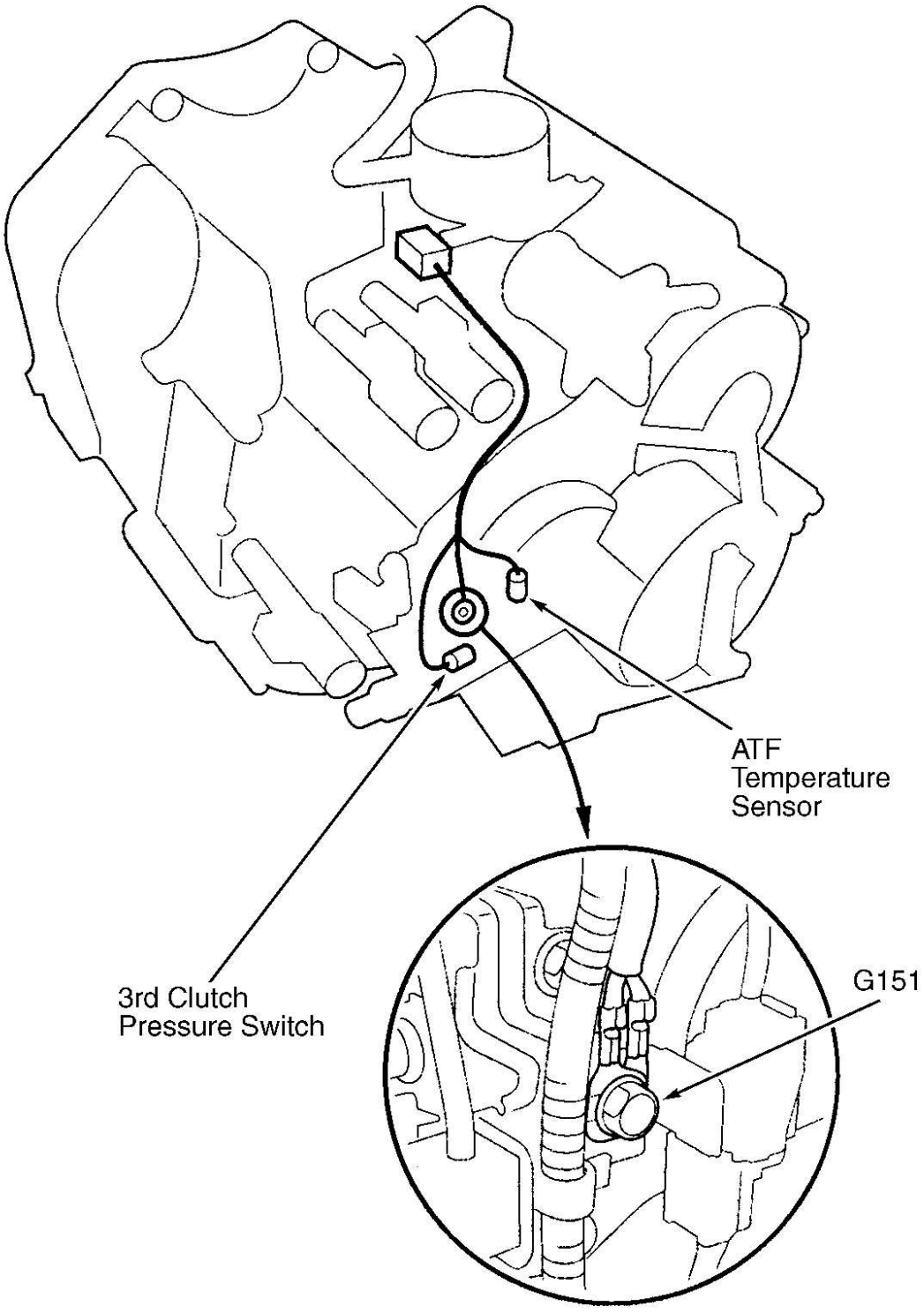


Fig. 5: Engine Compartment (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 6: View Of Automatic Transmission (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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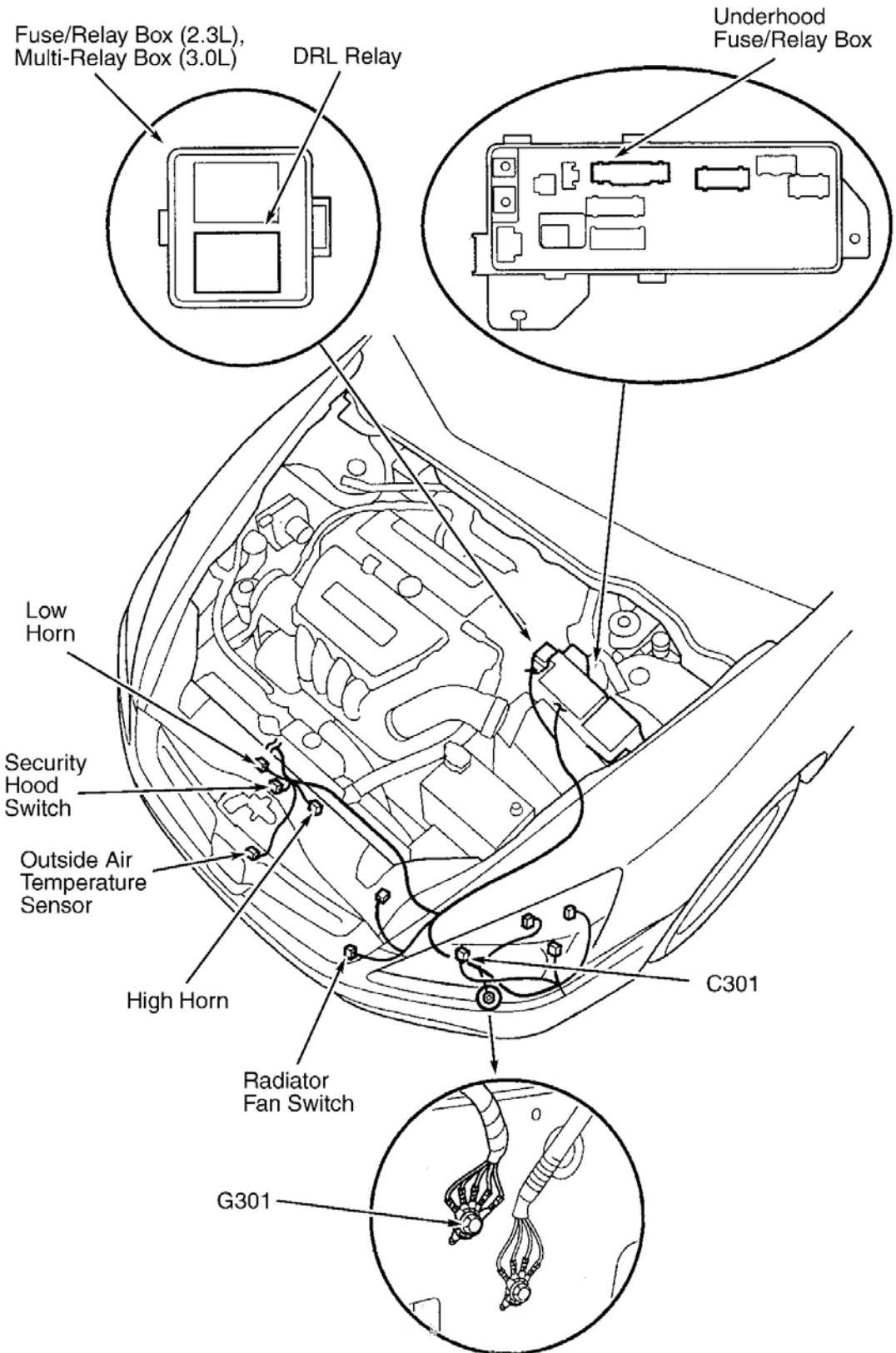


Fig. 7: Front Of Vehicle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

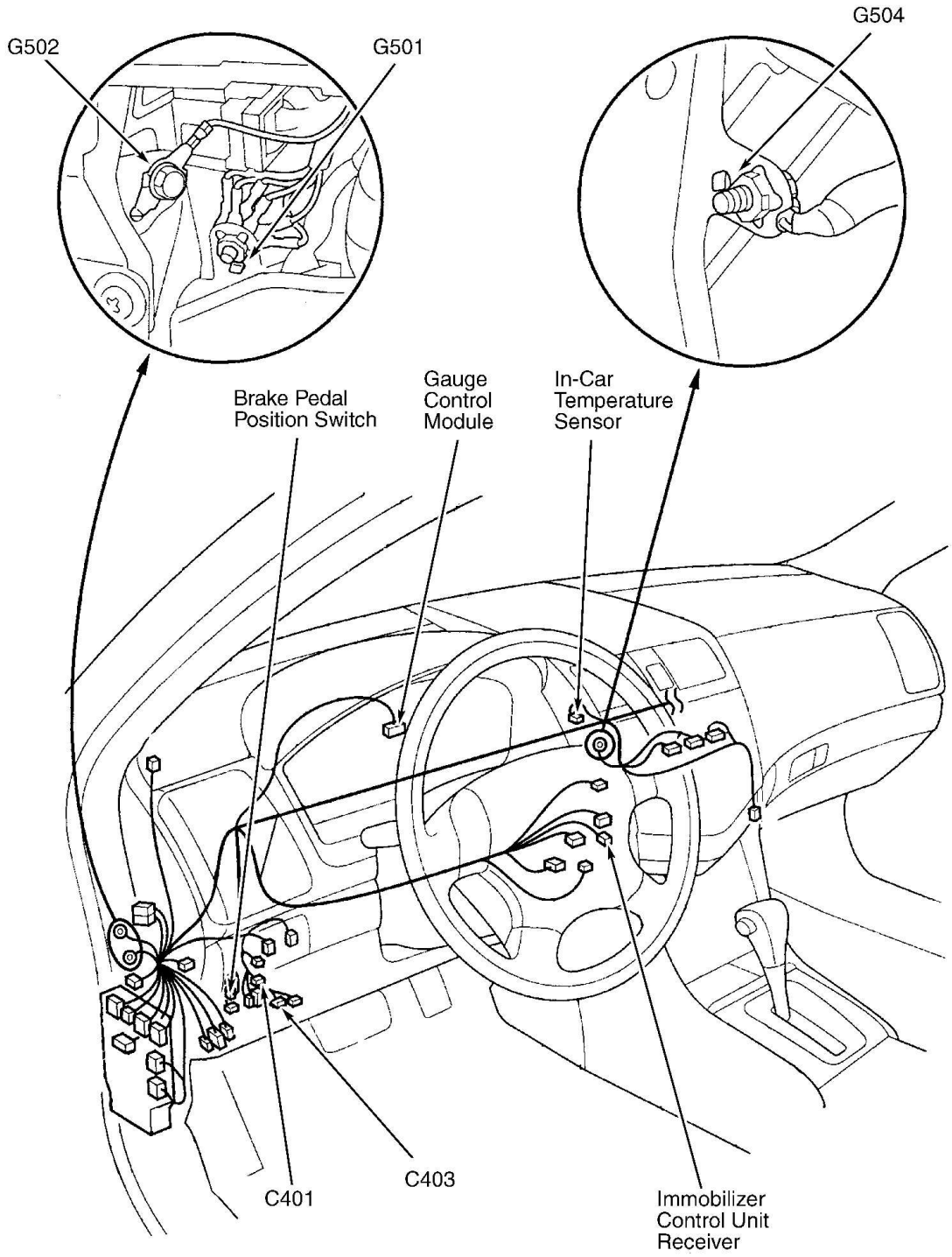


Fig. 8: Left Side Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

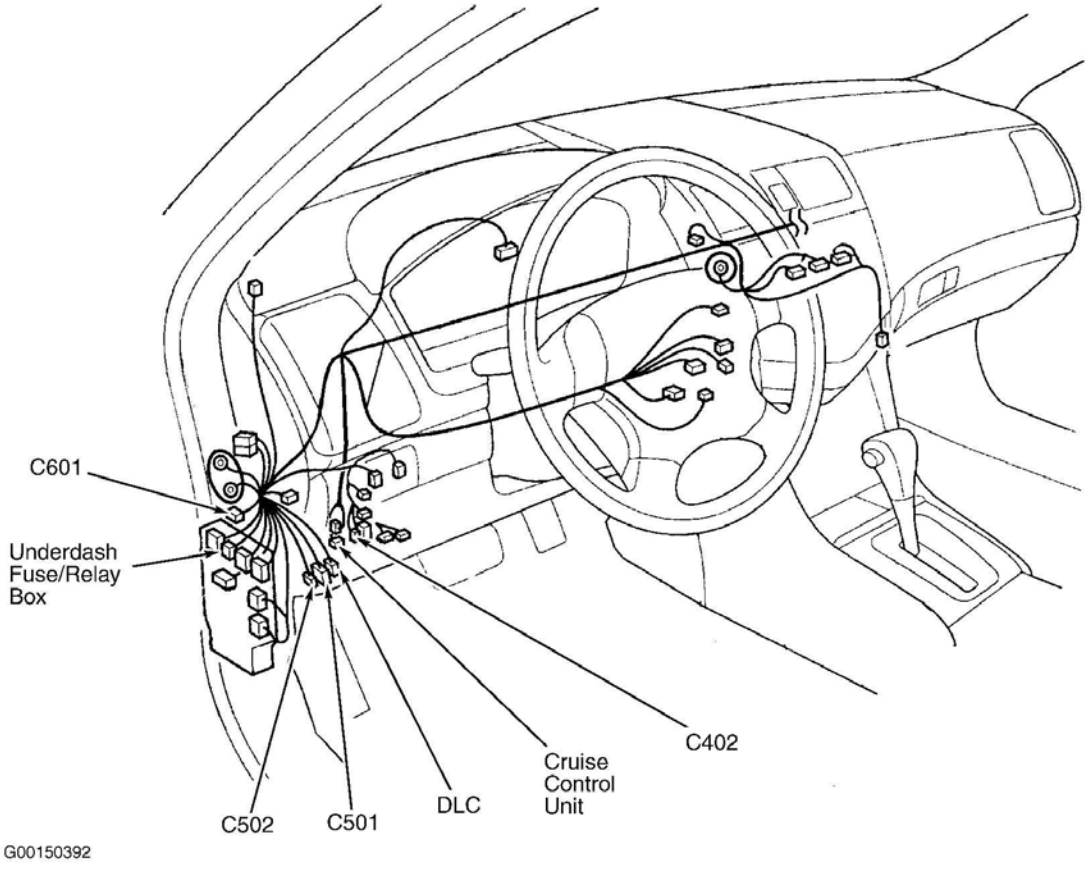


Fig. 9: Left Side Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

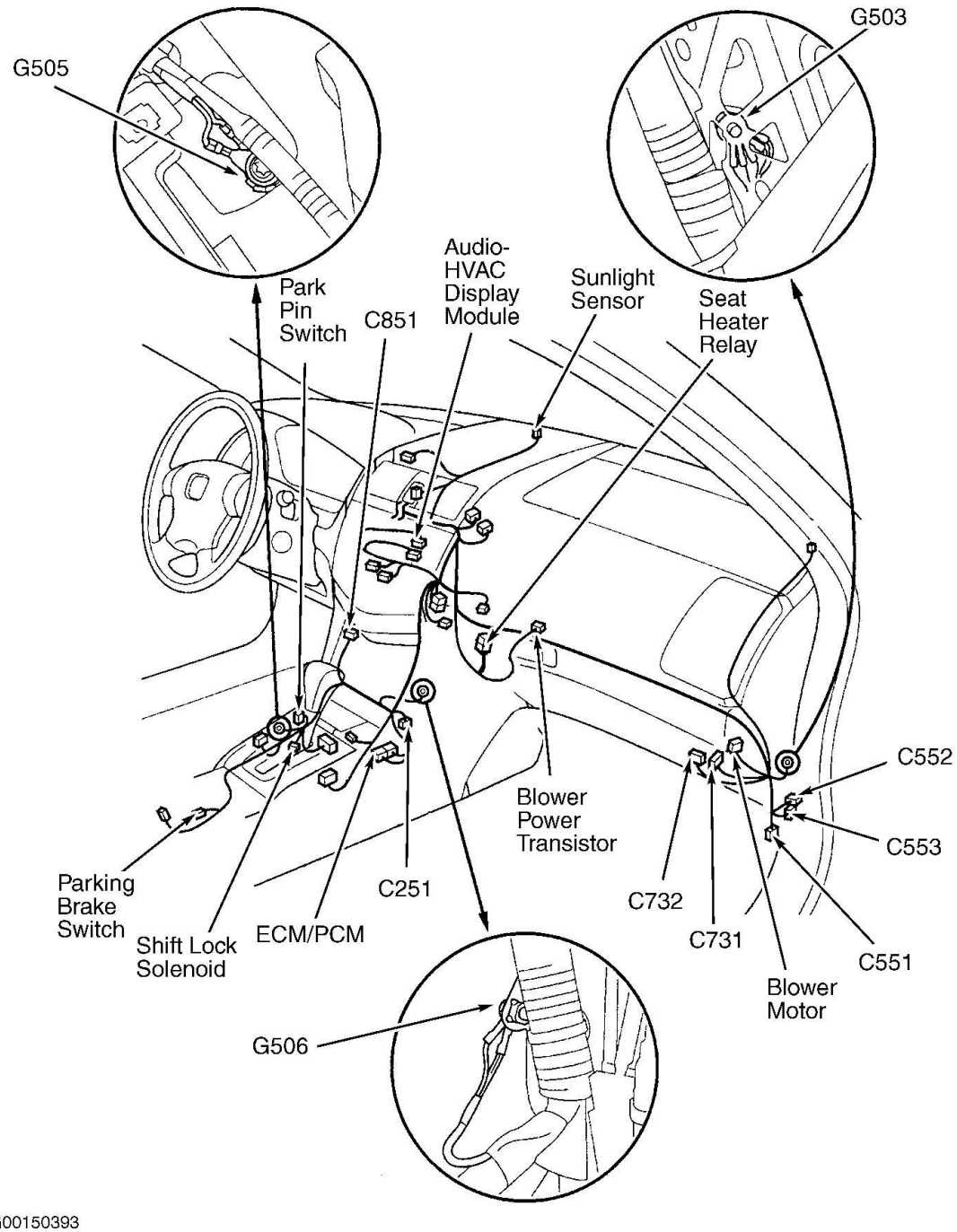


Fig. 10: Right Side Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

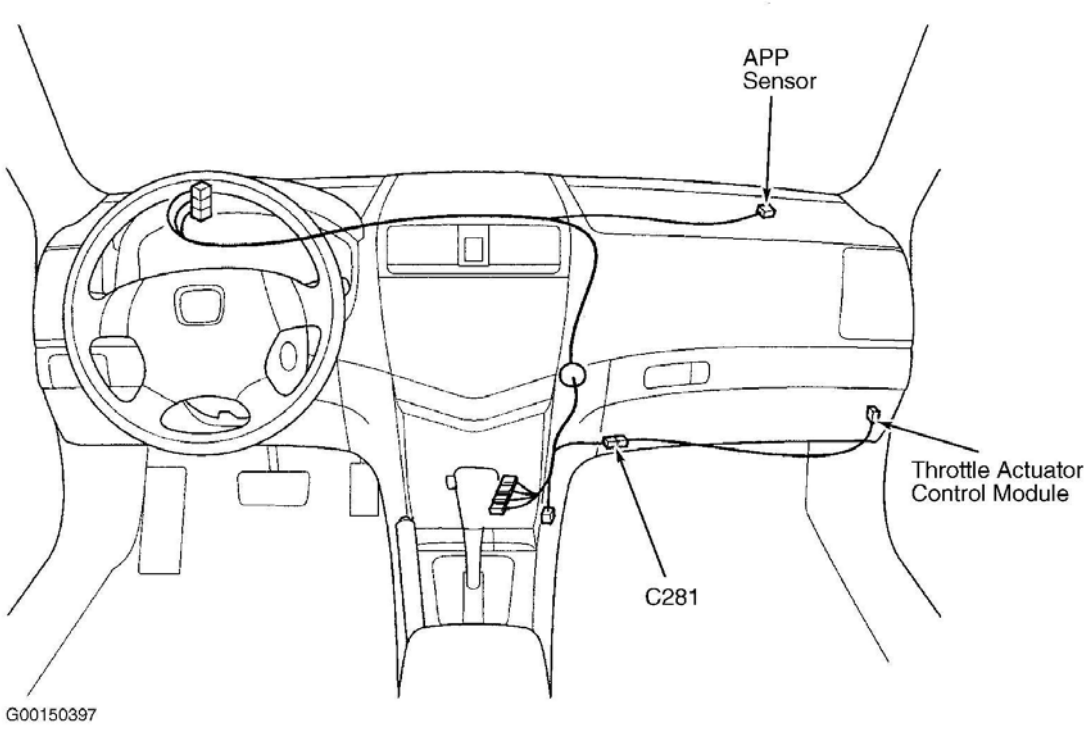


Fig. 11: Front View Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

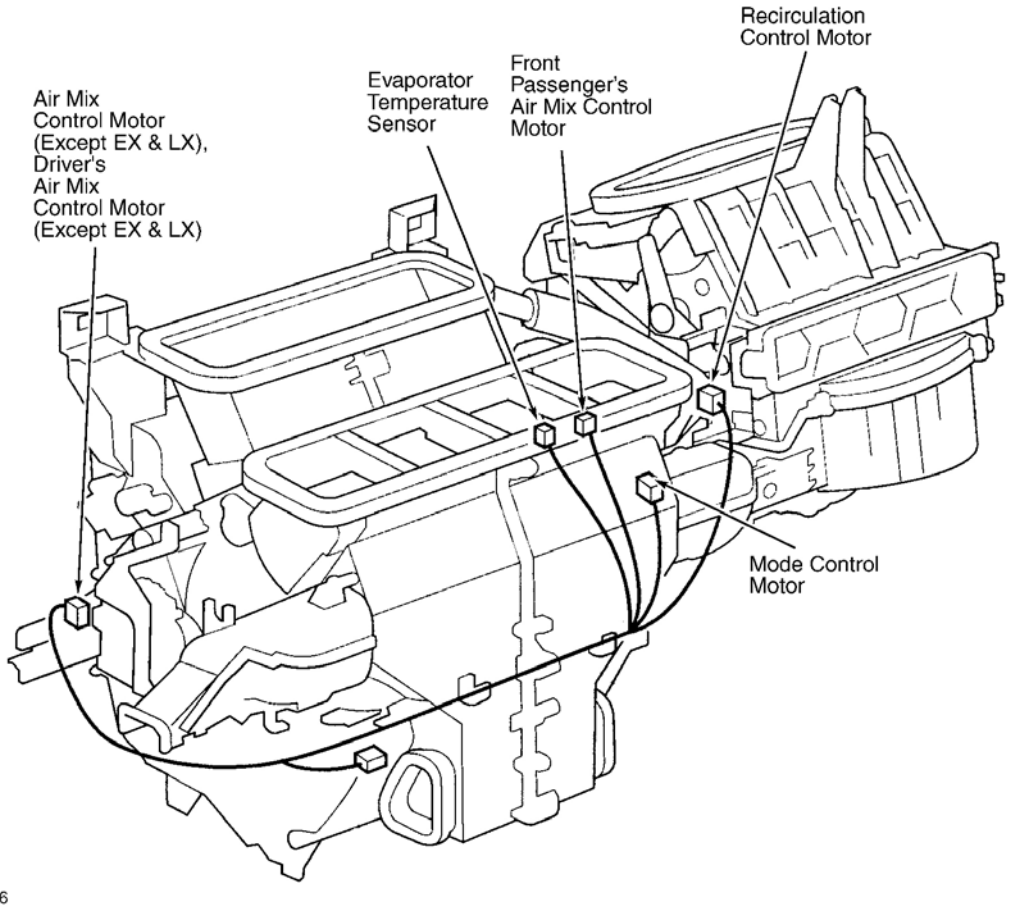


Fig. 12: View Of HVAC Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

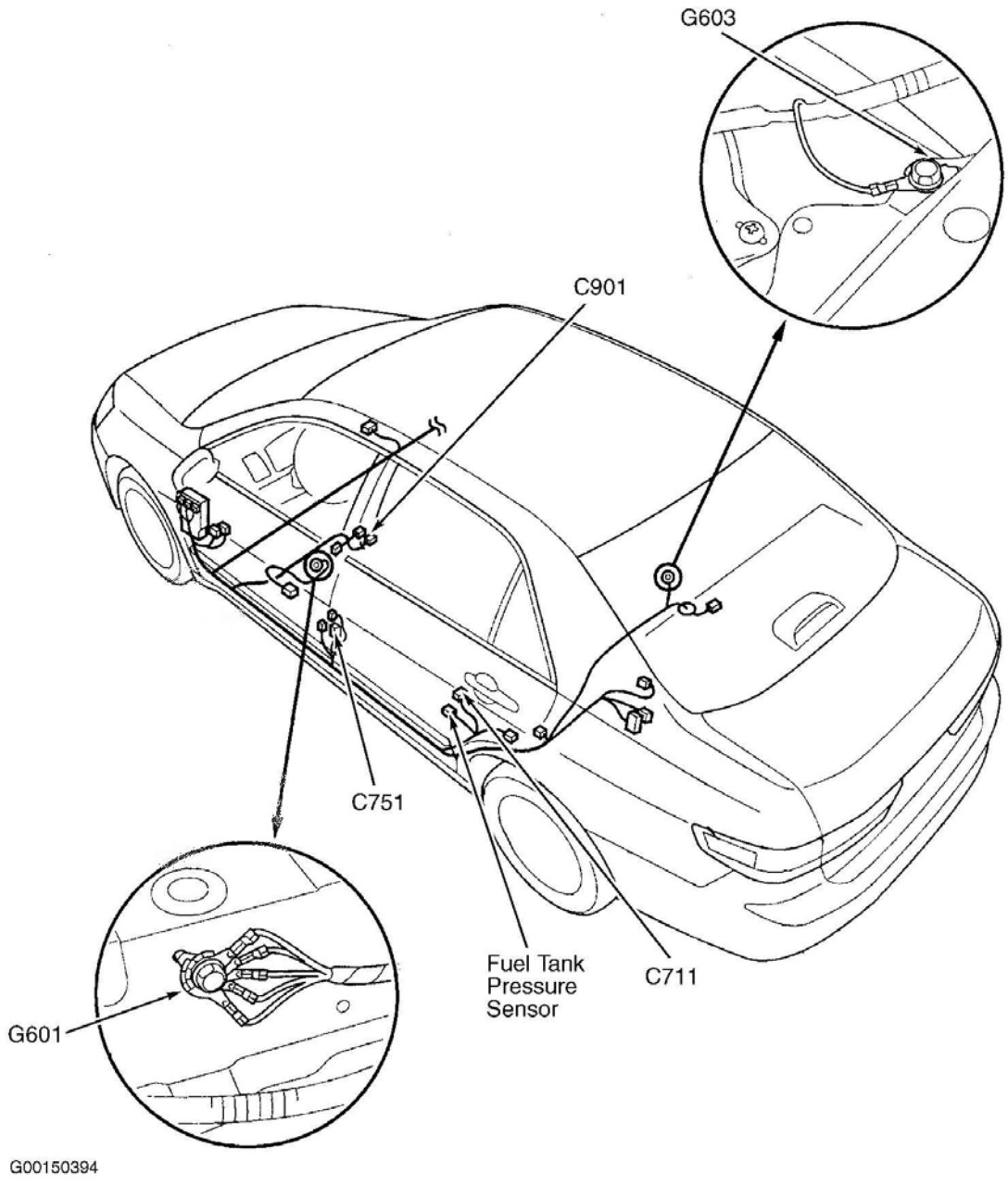


Fig. 13: Left Side Of Vehicle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

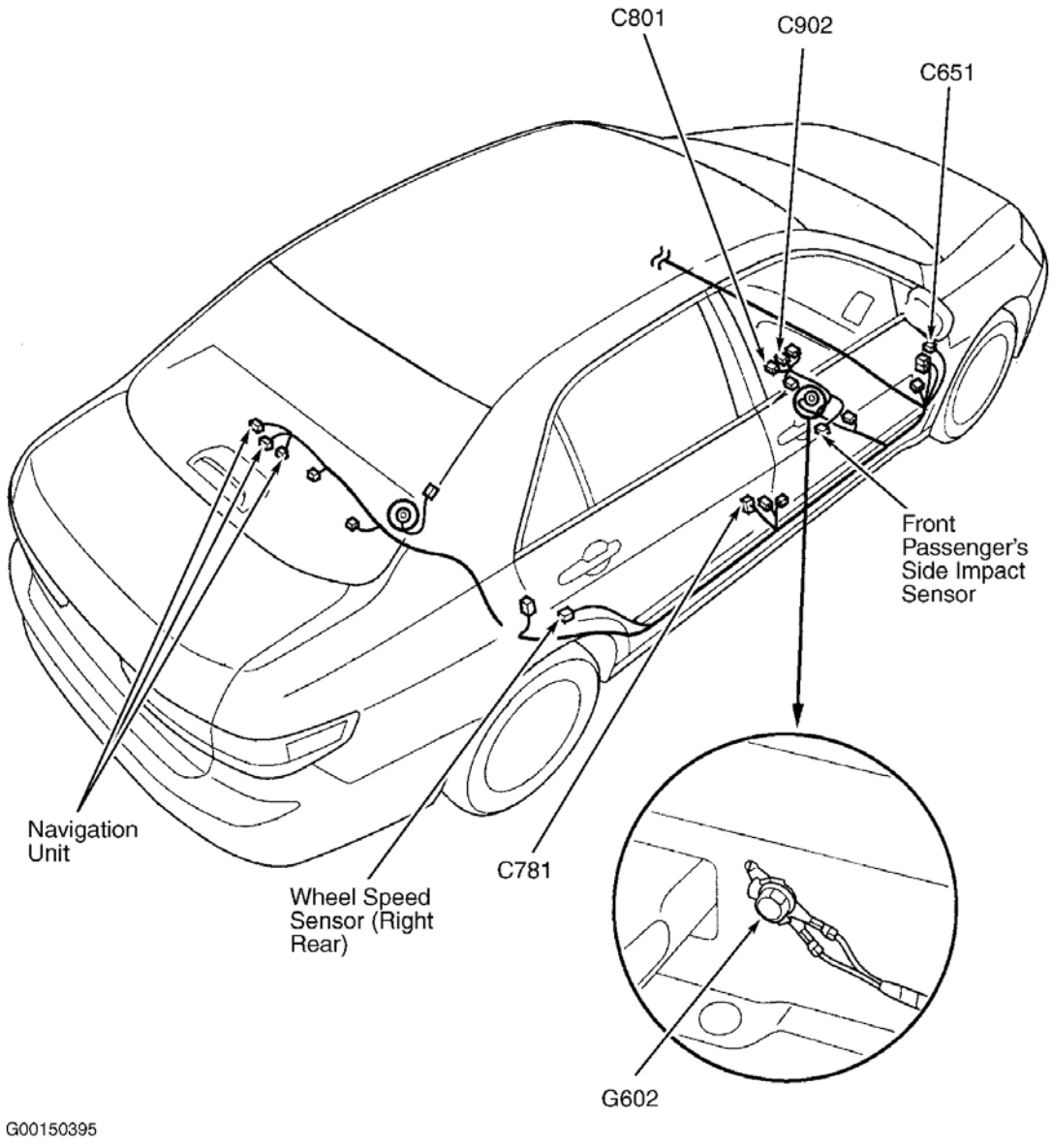
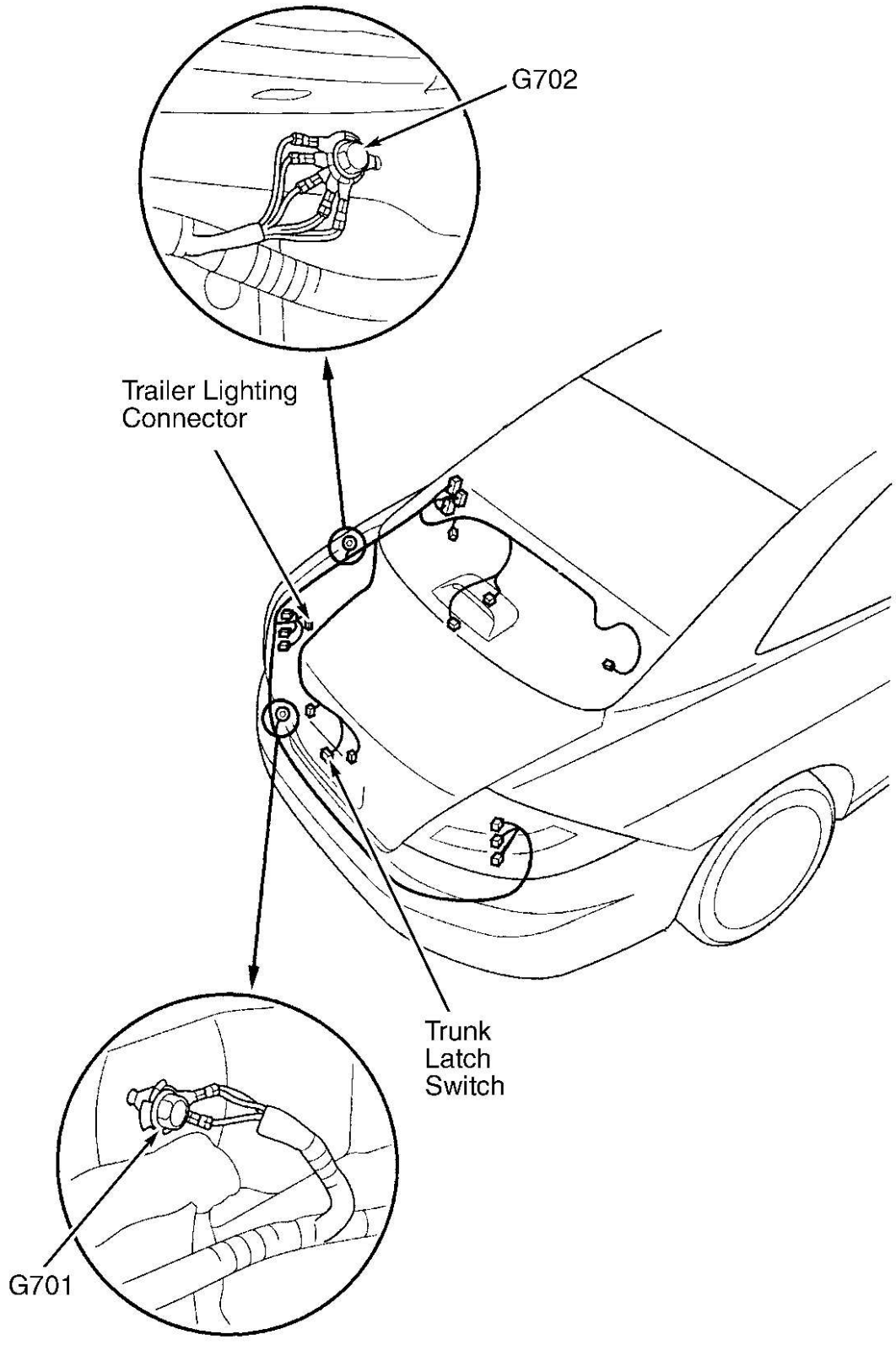


Fig. 14: Right Side Of Vehicle
Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 15: Rear Of Vehicle (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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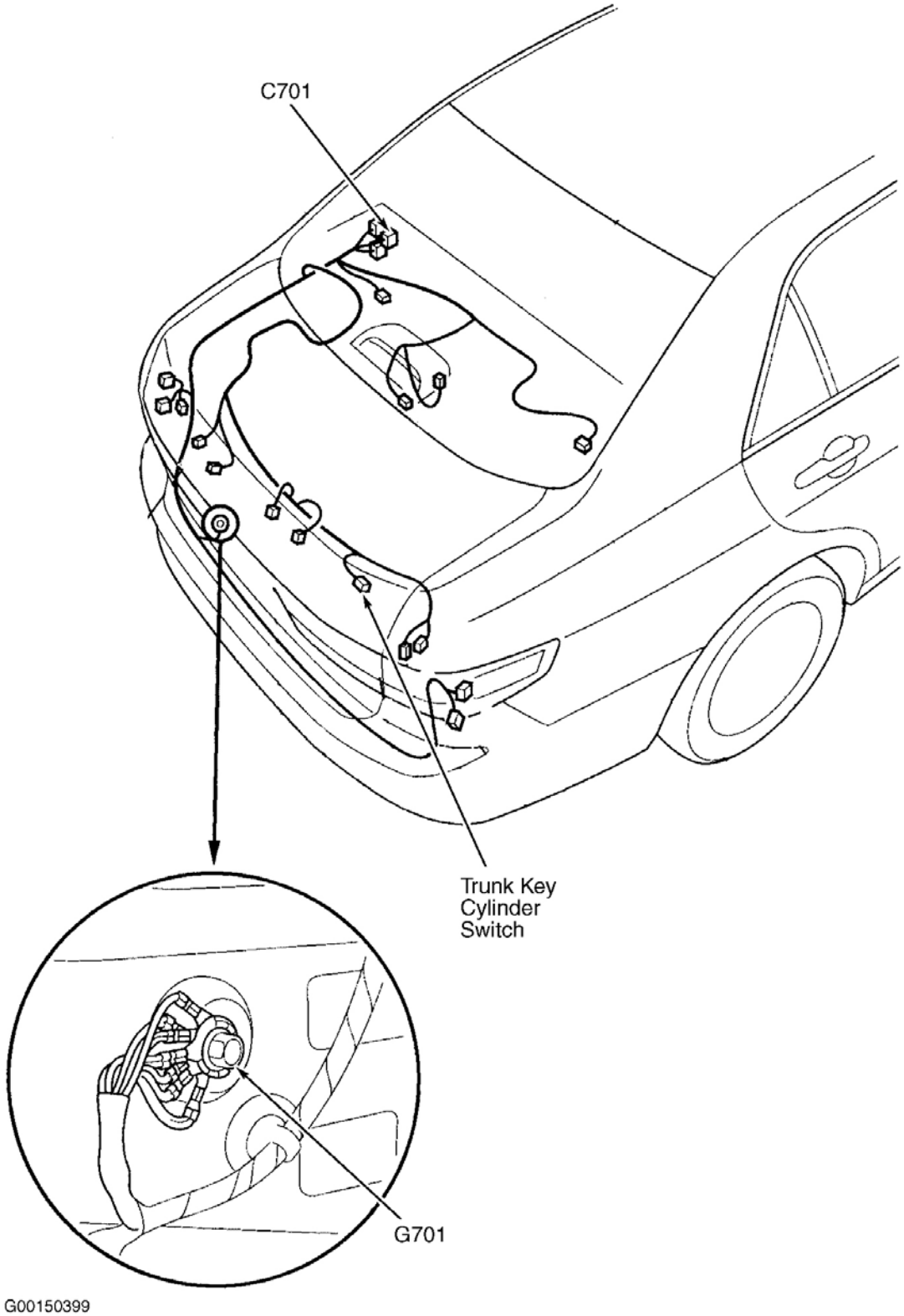


Fig. 16: Rear Of Vehicle (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2007 HONDA

Accord

BUZZERS, RELAYS & TIMERS

BUZZERS, RELAYS & TIMERS LOCATION

Component	Location
Accessory Power Socket Relay	In under-dash fuse/relay box. See **Fig. 144**.
A/C Compressor Clutch Relay	In under-hood fuse/relay box. See **Fig. 145**.
A/C Condenser Fan Relay	In under-hood fuse/relay box. See **Fig. 145**.
A/F Sensor Relay	In under-dash fuse/relay box. See **Fig. 144**.
Blower Motor Relay	In under-hood fuse/relay box. See **Fig. 145**.
DRL Relay (Canada)	In underhood multi-relay box. See **Fig. 83**.
Fan Control Relay	In underhood multi-relay box. See **Fig. 83**.
Fan Control Relay (USA)	In under-hood multi-relay box. See **Fig. 146**.
Fog Light Relay 1 (Honda Accessory)	At left side of engine compartment. See **Fig. 115**.
Fog Light Relay 2 (Honda Accessory)	At left side of engine compartment. See **Fig. 115**.
Ignition Coil Relay	In under-dash fuse/relay box. See **Fig. 144**.
Moonroof Close Relay	At rear of roof. See **Fig. 59**.
Moonroof Open Relay	At rear of roof. See **Fig. 59**.
PGM-FI Main Relay 1	In under-dash fuse/relay box. See **Fig. 144**.
	In under-dash fuse/relay box. See **Fig.**

PGM-FI Main Relay 2	**144**.
Power Window Relay	In under-dash fuse/relay box. See **Fig. 144**.
Radiator Fan Relay	In under-hood fuse/relay box. See **Fig. 145**.
Rear Window Defogger Relay	In under-hood fuse/relay box. See **Fig. 145**.
Seat Heater Relay (2.4L)	Behind glove box. See **Fig. 41**.
Seat Heater Relay (3.0L)	Behind left side of glove box. See **Fig. 108**.
Starter Cut Relay	In under-dash fuse/relay box. See **Fig. 144**.
Throttle Actuator Control Module Relay (3.0L)	Behind left side of glove box. See **Fig. 108**.
Turn Signal/Hazard Relay	In under-dash fuse/relay box. See **Fig. 144**.

CIRCUIT PROTECTION DEVICES

CIRCUIT PROTECTION DEVICES LOCATION

Component	Location
Under-Dash Fuse/Relay Box	Behind left kick panel. See **Fig. 29**.
Under-Hood Fuse/Relay Box	On left rear corner of engine compartment, forward of strut tower. See **Fig. 23**.
Under-Hood Multi-Relay Box	Attached to under-hood fuse/relay box. See **Fig. 155**.

CONTROL UNITS

CONTROL UNITS LOCATION

Component	Location
ABS Modulator-Control Unit	At right side of engine compartment. See **Fig. 3**.

ABS/TCS Modulator-Control Unit (3.0L)	At right side of engine compartment. See **Fig. 79**.
DRL Control Unit	Under left side of dash. See **Fig. 172**.
ECM/PCM (2.4L)	Under middle of dash. See **Fig. 43**.
ECM/PCM (3.0L)	Under middle of dash. See **Fig. 107**.
Frequency Modulator Unit	Under middle of dash. See **Fig. 201**.
Immobilizer Control Unit-Receiver	In steering column cover. See **Fig. 27**.
Moon Roof Control Unit (Coupe)	At rear of roof. See **Fig. 139**.
Navigation Unit	In trunk, under middle of rear shelf. See **Fig. 132**.
ODS Unit	In front passenger's seat back. See **Fig. 194**.
Security Control Unit (Honda Accessory)	Under left side of dash. See **Fig. 118**.
SRS Unit	Under middle of dash. See **Fig. 176**.
Throttle Actuator Control Module	Under right side of dash. See **Fig. 109**.
VSA Modulator-Control Unit	Right front of engine compartment. See **Fig. 159**.

MOTORS

MOTORS LOCATION

Component	**Location**
A/C Condenser Fan Motor Connector (2.4L)	At right side of engine compartment. See **Fig. 6**.
A/C Condenser Fan Motor Connector (3.0L)	At left front of engine. See **Fig. 86**.
Air Mix Control Motor	Under left side of dash. See **Fig. 33**.
Blower Motor	Under right side of dash. See **Fig. 46**.
Driver's Air Mix Control Motor	Under left side of dash. See **Fig. 32**.
Driver's Power Seat Front Up-Down Motor	Under driver's seat. See **Fig. 49**.
Driver's Power Seat Rear Up-Down	Under driver's seat. See **Fig. 49**.

Motor	
Driver's Power Seat Recline Motor Connector	Under driver's seat. See **Fig. 48**.
Driver's Power Seat Slide Motor	Under driver's seat. See **Fig. 49**.
Driver's Power Window Motor	In middle of driver's door. See **Fig. 55**.
Front Passenger's Air Mix Control Motor	Under right side of dash. See **Fig. 45**.
Front Passenger's Power Seat Recline Motor Connector	Under front passenger's seat. See **Fig. 113**.
Front Passenger's Power Window Motor	In middle of front passenger's door. See **Fig. 55**.
Front Passenger's Seat Power Slide Motor	Under front passenger's seat. See **Fig. 112**.
Left Rear Power Window Motor	In middle of left rear door. See **Fig. 56**.
Mode Control Motor	Behind glove box. See **Fig. 40**.
Moonroof Motor	At rear center of roof. See **Fig. 58**.
Power Mirror Connector (Left/Right)	In respective front doors. See **Fig. 180**.
Radiator Fan Motor Connector (2.4L)	At left front of engine compartment. See **Fig. 19**.
Radiator Fan Motor Connector (3.0L)	At left front of engine compartment. See **Fig. 84**.
Recirculation Control Motor	Behind glove box, on blower unit. See **Fig. 40**.
Starter (2.4L)	At lower left rear of engine. See **Fig. 15**.
Starter (3.0L)	At left rear of engine. See **Fig. 98**.
Windshield Washer Motor	On bottom of windshield washer fluid reservoir. See **Fig. 69**.
Windshield Wiper Motor	Under left side of cowl cover. See **Fig. 25**.

SENDING UNITS & SENSORS

SENDING UNITS & SENSORS LOCATION

Component	Location
A/F Sensor Connector	On exhaust manifold. See **Fig. 167**.
APP Sensor	At right side of engine compartment. See **Fig. 158**.
ATF Temperature Sensor Connector (3.0L) (A/T)	On transmission. See **Fig. 105**.
CKP Sensors 1 & 2 (3.0L)	At right front of engine. See **Fig. 166**.
CKP Sensor (2.4L)	At right front of engine. See **Fig. 70**.
CMP Sensor A (2.4L)	At rear of engine. See **Fig. 161**.
CMP Sensor B (2.4L)	At rear of engine. See **Fig. 161**.
CMP Sensor (3.0L)	At right front of engine. See **Fig. 85**.
Driver's Seat Position Sensor	Under driver's seat. See **Fig. 191**.
ECT Sensor 1 (2.4L)	On right rear of cylinder head. See **Fig. 162**.
ECT Sensor 1 (3.0L)	On left rear of engine. See **Fig. 165**.
ECT Sensor 2 (2.4L)	Bottom of radiator. See **Fig. 151**.
ECT Sensor 2 (3.0L)	Left side of engine. See **Fig. 96**.
EGR Valve & EGR Valve Position Sensor (2.4L)	On rear of intake manifold. See **Fig. 161**.
EGR Valve & EGR Valve Position Sensor (3.0L)	At left rear of engine. See **Fig. 99**.
Evaporator Temperature Sensor Connector (Auto A/C)	Behind glove box, in evaporator unit. See **Fig. 40**.
Evaporator Temperature Sensor Connector (Manual A/C)	Under right side of dash. See **Fig. 120**.
Front A/F Sensor Connector (3.0L)	In right exhaust bank. See **Fig. 92**.
Front Passenger's Weight Sensor Connector (Inner Side)	Under front passenger's seat. See **Fig. 195**.
Front Passenger's Weight Sensor Connector (Outer Side)	Under front passenger's seat. See **Fig. 195**.
Front Secondary HO2S Connector (3.0L)	In right exhaust bank. See **Fig. 92**.
FTP Sensor	Under left rear of vehicle. See **Fig. 77**.

Fuel Tank Unit	In top of fuel tank, at left front of trunk. See **Fig. 64**.
IAT Sensor (3.0L)	On top left rear of intake manifold. See **Fig. 99**.
In-Car Temperature Sensor	Right of steering column. See **Fig. 175**.
Input Shaft (Mainshaft) Speed Sensor (2.4L) (A/T)	At left side of engine compartment. See **Fig. 153**.
Input Shaft (Mainshaft) Speed Sensor (3.0L) (M/T) (Coupe)	On transmission housing. See **Fig. 135**.
Knock Sensor (2.4L)	At left side of engine. See **Fig. 15**.
Knock Sensor (3.0L)	At left side of engine. See **Fig. 90**.
Left Front Impact Sensor	Behind left side of bumper. See **Fig. 141**.
Left Front Wheel Speed Sensor Connector	On left front suspension knuckle. See **Fig. 21**.
Left Side Impact Sensor (1st)	Under driver's seat. See **Fig. 189**.
Left Side Impact Sensor (2nd) (Coupe)	At left "B" pillar. See **Fig. 123**.
Left Side Impact Sensor (2nd) (Sedan)	At left "C" pillar. See **Fig. 186**.
MAF/IAT Sensor	At left side of engine compartment. See **Fig. 152**.
MAP Sensor (2.4L)	At left rear of engine. See **Fig. 163**.
MAP Sensor (3.0L)	At left rear of engine. See **Fig. 99**.
Output Shaft (Countershaft) Speed Sensor (2.4L) (A/T)	On top left of transmission. See **Fig. 167**.
Output Shaft (Countershaft) Speed Sensor (2.4L) (M/T)	On transmission housing. See **Fig. 168**.
Output Shaft (Countershaft) Speed Sensor (3.0L) (A/T)	On top right of transmission. See **Fig. 103**.
Output Shaft (Countershaft) Speed Sensor (3.0L) (M/T) (Coupe)	On transmission housing. See **Fig. 135**.
Outside Air Temperature Sensor	Behind center of front bumper. See **Fig. 67**.
Rear A/F Sensor (B1, S1) Connector	

(3.0L)	At middle of engine. See **Fig. 114**.
Rear Secondary HO2S (B1, S2) Connector (3.0L)	At middle of engine. See **Fig. 114**.
Right Front Impact Sensor	Behind right side of front bumper. See **Fig. 142**.
Right Front Wheel Speed Sensor Connector (3.0L)	At right front side of engine compartment. See **Fig. 158**.
Right Front Wheel Speed Sensor (2.4L)	On right front suspension knuckle. See **Fig. 13**.
Right Rear Wheel Speed Sensor	On right rear suspension knuckle. See **Fig. 76**.
Right Side Impact Sensor (1st)	Under front passenger's seat. See **Fig. 189**.
Right Side Impact Sensor (2nd) (Coupe)	At right "B" pillar. See **Fig. 123**.
Right Side Impact Sensor (2nd) (Sedan)	At right "C" pillar. See **Fig. 186**.
Steering Angle Sensor	In steering column cover. See **Fig. 202**.
Sunlight Sensor	Top middle of dash. See **Fig. 174**.
TP Sensor/Throttle Actuator (2.4L)	At left rear of engine. See **Fig. 163**.
TP Sensor/Throttle Actuator (3.0L)	On throttle body. See **Fig. 97**.
Yaw Rate-Lateral Acceleration Sensor	Under middle of dash. See **Fig. 177**.

SOLENOIDS & SOLENOID VALVES

SOLENOIDS & SOLENOID VALVES LOCATION

Component	Location
A/C Compressor Connector (2.4L)	At front of engine. See **Fig. 72**.
A/T Clutch Pressure Control Solenoid Valve A (2.4L)	On left side of transmission. See **Fig. 16**.
A/T Clutch Pressure Control Solenoid Valve A (3.0L)	On top rear of transmission. See **Fig. 100**.
A/T Clutch Pressure Control Solenoid	On left side of transmission. See **Fig.**

Valve B (2.4L)	**74**.
A/T Clutch Pressure Control Solenoid Valve B (3.0L)	On top rear of transmission. See **Fig. 100**.
A/T Clutch Pressure Control Solenoid Valve C (2.4L)	On left side of transmission. See **Fig. 74**.
A/T Clutch Pressure Control Solenoid Valve C (3.0L)	On left side of transmission. See **Fig. 102**.
Cruise Control Actuator	At right side of firewall. See **Fig. 1**.
Driver's Door Lock Actuator	At rear of driver's door. See **Fig. 181**.
Engine Mount Control Solenoid Valve (2.4L)	On left front of engine. See **Fig. 9**.
Engine Mount Control Solenoid Valve (3.0L)	On right cylinder bank. See **Fig. 93**.
EVAP Canister Purge Valve (2.4L)	At right rear of engine. See **Fig. 18**.
EVAP Canister Purge Valve (3.0L)	On right rear of engine. See **Fig. 164**.
EVAP Canister Vent Shut Valve (Except SULEV)	On underside of vehicle, on EVAP control canister. See **Fig. 77**.
EVAP Canister Vent Shut Valve (SULEV)	Under left rear of vehicle. See **Fig. 131**.
Front Passenger's Door Lock Actuator	At rear of front passenger's door. See **Fig. 181**.
IAC Valve (2.4L)	On left side of intake manifold. See **Fig. 14**.
IMRC Valve (3.0L) (M/T)	At front of engine. See **Fig. 134**.
Injector No. 1 (2.4L)	At top of engine. See **Fig. 10**.
Injector No. 1 (3.0L)	On top of right cylinder bank. See **Fig. 91**.
Injector No. 2 (2.4L)	At top of engine. See **Fig. 10**.
Injector No. 2 (3.0L)	On top of right cylinder bank. See **Fig. 91**.
Injector No. 3 (2.4L)	At top of engine. See **Fig. 10**.
Injector No. 3 (3.0L)	On top of right cylinder bank. See **Fig. 91**.

Injector No. 4 (2.4L)	At top of engine. See **Fig. 10**.
Injector No. 4 (3.0L)	On top of left cylinder bank. See **Fig. 89**.
Injector No. 5 (3.0L)	On top of left cylinder bank. See **Fig. 89**.
Injector No. 6 (3.0L)	On top of left cylinder bank. See **Fig. 89**.
Left Rear Door Lock Actuator	At rear of left rear door. See **Fig. 57**.
Reverse Lockout Solenoid (3.0L) (M/T) (Coupe)	On transmission housing. See **Fig. 137**.
Right Rear Door Lock Actuator	At rear of right rear door. See **Fig. 57**.
Shift Control Solenoid Valve A (3.0L) (A/T)	On top front of transmission. See **Fig. 104**.
Shift Control Solenoid Valve B (3.0L)	On left side of transmission. See **Fig. 101**.
Shift Control Solenoid Valve C (3.0L) (A/T)	On top front of transmission. See **Fig. 104**.
Shift Lock Solenoid Connector	Under floor console, on bottom right of gear selector lever. See **Fig. 35**.
Starter Solenoid (2.4L)	At lower left rear of engine. See **Fig. 15**.
Starter Solenoid (3.0L)	At left rear of engine. See **Fig. 98**.
Torque Converter Clutch Solenoid Valve (3.0L)	On top front of transmission. See **Fig. 101**.
VTC Oil Control Solenoid Valve (2.4L)	At front of engine. See **Fig. 7**.
VTEC Solenoid Valve Connector (3.0L)	On right front of engine. See **Fig. 87**.
VTEC Solenoid Valve (2.4L)	On right front of engine. See **Fig. 2**.

SWITCHES

SWITCHES LOCATION

Component	Location

A/C Pressure Switch	At right front of engine compartment, near front bumper. See **Fig. 68**.
Back-Up Light Switch (2.4L) (M/T)	On top left of transmission. See **Fig. 116**.
Back-Up Light Switch (3.0L) (M/T) (Coupe)	On top left of transmission. See **Fig. 136**.
Brake Fluid Level Switch	On brake fluid reservoir. See **Fig. 24**.
Brake Pedal Position Switch	On brake pedal support. See **Fig. 31**.
Clutch Interlock Switch	On clutch pedal support. See **Fig. 173**.
Clutch Pedal Position Switch	Under left side of dash. See **Fig. 173**.
Driver's Door Switch (Coupe)	At left "B" pillar. See **Fig. 123**.
Driver's Door Switch (Sedan)	At left "B" pillar. See **Fig. 182**.
Driver's Seat Belt Switch Connector	Under driver's seat. See **Fig. 48**.
Front Passenger's Door Switch (Coupe)	At right "B" pillar. See **Fig. 123**.
Front Passenger's Door Switch (Sedan)	At right "B" pillar. See **Fig. 182**.
Front Passenger's Seat Belt Switch Connector	Under front passenger's seat. See **Fig. 113**.
Left Rear Door Switch	At left "C" pillar. See **Fig. 183**.
Moonroof Limit Switch Connector	At center rear of roof. See **Fig. 58**.
Oil Pressure Switch (2.4L)	At right front of engine. See **Fig. 71**.
Oil Pressure Switch (3.0L)	At right front of engine. See **Fig. 166**.
Parking Brake Switch	Mounted under parking brake lever. See **Fig. 36**.
Park Pin Switch	Below console, on shift lever. See **Fig. 35**.
PSP Switch (2.4L)	At right side of engine compartment. See **Fig. 13**.
PSP Switch (3.0L)	At right side of engine. See **Fig. 87**.
Right Rear Door Switch	At right "C" pillar. See **Fig. 183**.
Rocker Arm Oil Pressure Switch (VTEC Oil Pressure Switch) (3.0L)	On front of right cylinder head. See **Fig. 166**.

Security Hood Switch Connector	At front of engine compartment, on hood lock/latch assembly. See **Fig. 66**.
Transmission Range Switch (2.4L) (A/T)	On rear of transmission. See **Fig. 154**.
Transmission Range Switch (3.0L) (A/T)	On transmission. See **Fig. 157**.
Trunk Key Cylinder Switch (Sedan)	At right side of trunk lid. See **Fig. 65**.
Trunk Lid Opener Solenoid/Latch Switch	At middle rear of trunk lid. See **Fig. 197**.
VTEC Oil Pressure Switch (2.4L)	On front of cylinder head. See **Fig. 2**.
2nd Clutch Transmission Fluid Pressure Switch (2.4L)	On left front of transmission. See **Fig. 16**.
3rd Clutch Transmission Fluid Pressure Switch (2.4L)	On side of transmission. See **Fig. 75**.
3rd Clutch Transmission Fluid Pressure Switch (3.0L) (A/T)	On left rear of transmission. See **Fig. 105**.
4th Clutch Transmission Fluid Pressure Switch (3.0L)	On left rear of transmission. See **Fig. 102**.

MISCELLANEOUS

MISCELLANEOUS LOCATION

Component	Location
A/C Diode (3.0L)	Under left side of dash. See **Fig. 106**.
Alternator (2.4L)	At left front of engine. See **Fig. 8**.
Alternator (3.0L)	At left front of engine. See **Fig. 86**.
Automatic Dimming Inside Mirror In-Line Fuse (Honda Accessory)	Under left side of dash. See **Fig. 117**.
Blower Power Transistor	On bottom of blower unit. See **Fig. 45**.
Coil Assembly (Rear Window Defogger) (Coupe)	At right "C" pillar. See **Fig. 127**.
Coil Assembly (Rear Window Defogger) (Sedan)	At right "C" pillar. See **Fig. 60**.

DIN Terminal (Honda Accessory)	Under middle of dash. See **Fig. 119**.
DLC	On lower left of dash, above the kick panel. See **Fig. 169**.
Driver's Airbag First & Second Inflators Connector	Under steering wheel horn pad. See **Fig. 26**.
Driver's Seat Belt Tensioner Connector (Coupe)	At left "B" pillar. See **Fig. 123**.
Driver's Seat Belt Tensioner Connector (Sedan)	At left "B" pillar. See **Fig. 143**.
Driver's Seat Heater Connector (EX-L)	Under driver's seat. See **Fig. 48**.
Driver's Side Airbag Inflator Connector (EX-L & 3.0L LX) (Sedan)	Under driver's seat. See **Fig. 50**.
Frequency Modulator (Honda Accessory)	Under center of dash. See **Fig. 119**.
Front Passenger's Airbag First & Second Inflators Connector	Behind left side of glove box. See **Fig. 38**.
Front Passenger's Seat Belt Tensioner Connector (Coupe)	At right "B" pillar. See **Fig. 123**.
Front Passenger's Seat Belt Tensioner Connector (Sedan)	At right "B" pillar. See **Fig. 143**.
Front Passenger's Seat Heater Connector (3.0L EX-L) (Sedan)	Under front passenger's seat. See **Fig. 112**.
Front Passenger's Side Airbag Inflator Connector (3.0L EX-L) (Sedan)	Under front passenger's seat. See **Fig. 111**.
High Horn	At front of engine compartment, behind front grille. See **Fig. 66**.
Ignition Coil No. 1 (2.4L)	At top of engine. See **Fig. 12**.
Ignition Coil No. 1 (3.0L)	On top of right cylinder bank. See **Fig. 94**.
Ignition Coil No. 2 (2.4L)	At top of engine. See **Fig. 12**.
Ignition Coil No. 2 (3.0L)	On top of right cylinder bank. See **Fig. 94**.
Ignition Coil No. 3 (2.4L)	At top of engine. See **Fig. 12**.

Ignition Coil No. 3 (3.0L)	On top of right cylinder bank. See **Fig. 94**.
Ignition Coil No. 4 (2.4L)	At top of engine. See **Fig. 12**.
Ignition Coil No. 4 (3.0L)	On top of left cylinder bank. See **Fig. 95**.
Ignition Coil No. 5 (3.0L)	On top of left cylinder bank. See **Fig. 95**.
Ignition Coil No. 6 (3.0L)	On top of left cylinder bank. See **Fig. 95**.
Junction Connector C101 (3.0L)	At middle of right cylinder bank. See **Fig. 93**.
Junction Connector C102 (2.4L)	At left side of engine compartment. See **Fig. 17**.
Junction Connector C103 (2.4L)	At left side of engine compartment. See **Fig. 17**.
Junction Connector C103 (3.0L)	At left rear of engine. See **Fig. 96**.
Junction Connector C404	Below left side of dash. See **Fig. 147**.
Junction Connector C405	Below left side of dash. See **Fig. 28**.
Junction Connector C406	Below left side of dash. See **Fig. 28**.
Junction Connector C554	Under right side of dash. See **Fig. 37**.
Junction Connector C555	Under right side of dash. See **Fig. 37**.
Junction Connector C556	Behind glove box. See **Fig. 39**.
Junction Connector C557	Behind glove box. See **Fig. 39**.
Junction Connector C702 (Coupe)	At left "C" pillar. See **Fig. 125**.
Junction Connector C702 (Sedan)	At left "C" pillar. See **Fig. 53**.
Junction Connector C703 (Coupe)	At left "C" pillar. See **Fig. 125**.
Junction Connector C703 (Sedan)	At left "C" pillar. See **Fig. 53**.
Junction Connector C752 (Coupe)	At left "C" pillar. See **Fig. 124**.
Junction Connector C752 (Sedan)	At left "C" pillar. See **Fig. 52**.
Left Side Curtain Airbag Inflator (Coupe)	At left "C" pillar. See **Fig. 184**.
Left Side Curtain Airbag Inflator	At left "C" pillar. See **Fig. 185**.

(Sedan)	
Low Horn	At front of engine compartment, behind front grille. See **Fig. 66**.
MES Connector	Behind left kick panel. See **Fig. 29**.
Microphone Jack (Honda Accessory)	Under left side of dash. See **Fig. 118**.
Navigation Service Check Connector	In trunk, under right side of rear shelf. See **Fig. 133**.
Passenger's Seat Belt Tensioner Connector (Coupe)	At right "B" pillar. See **Fig. 123**.
Right Side Curtain Airbag Inflator (Coupe)	At right "C" pillar. See **Fig. 184**.
Right Side Curtain Airbag Inflator (Sedan)	At right "C" pillar. See **Fig. 185**.
Thermal Joint (T10)	Rear of engine. See **Fig. 149**.
Thermal Joint (T11)	Rear of engine. See **Fig. 149**.
Thermal Joint (T12)	Rear of engine. See **Fig. 149**.
Thermal Joint (T13)	Rear of engine. See **Fig. 149**.
Trailer Lighting Connector (C704)	Left side of trunk. See **Fig. 203**.
Window Antenna Coil (Coupe)	At left "C" pillar. See **Fig. 128**.
Window Antenna Coil (Sedan)	At left "C" pillar. See **Fig. 61**.
XM Antenna Connector (Coupe)	At right "C" pillar. See **Fig. 187**.
XM Antenna Connector (Sedan)	At right "C" pillar. See **Fig. 188**.
XM Receiver	At right side of trunk. See **Fig. 140**.

CONNECTORS

CONNECTORS LOCATION

Component	Location
C101 (Black, 6 Pin)	At left side of engine. See **Fig. 160**.
C108 (2.4L) (A/T) (Gray, 8 Pin)	At left side of transmission housing. See **Fig. 73**.
C151 (3.0L) (A/T) (Black, 6 Pin)	At left side of engine compartment. See **Fig. 102**.

C152 (2.4L) (Black, 10 Pin)	At left side of engine compartment. See **Fig. 153**.
C152 (3.0L) (Black, 10 Pin)	At top of transmission housing. See **Fig. 156**.
C153 (2.4L) (Gray, 1 Pin)	On top of transmission housing. See **Fig. 20**.
C153 (3.0L) (Gray, 1 Pin)	At rear of transmission housing. See **Fig. 103**.
C154 (3.0L) (Black, 1 Pin)	On left front of engine. See **Fig. 90**.
C155 (3.0L) (Black, 6 Pin)	At right side of engine. See **Fig. 87**.
C201 (2.4L) (Black, 33 Pin)	At left side of engine compartment. See **Fig. 150**.
C201 (3.0L) (Black, 33 Pin)	At left rear of engine compartment. See **Fig. 81**.
C202 (2.4L) (A/T) (Gray, 33 Pin)	At left side of engine compartment. See **Fig. 150**.
C202 (2.4L) (M/T) (Black, 23 Pin)	At left side of engine compartment. See **Fig. 150**.
C202 (3.0L) (Gray, 33 Pin)	At left rear of engine compartment. See **Fig. 81**.
C203 (2.4L) (Black, 1 Pin)	At left side of engine compartment. See **Fig. 150**.
C203 (3.0L) (Black, 23 Pin)	At left side of engine compartment. See **Fig. 81**.
C251 (White, 13 Pin)	Under center right of dash. See **Fig. 44**.
C281 (White, 13 Pin)	Under right side of dash. See **Fig. 110**.
C301 (Gray, 4 Pin)	At left side of engine compartment. See **Fig. 148**.
C310 (Optional) (Brown, 3 Pin)	At left rear of engine compartment, forward of strut tower. See **Fig. 21**.
C311 (3.0L) (Gray, 1 Pin)	At right side of engine compartment. See **Fig. 88**.

C401 (Brown, 20 Pin)	Under left side of dash. See **Fig. 171**.
C402 (White, 12 Pin)	Under left side of dash. See **Fig. 171**.
C403 (Yellow, 4 Pin)	Under left side of dash. See **Fig. 171**.
C407 (EX-L) (White, 14 Pin)	Under middle of dash. See **Fig. 138**.
C408 (EX-L) (White, 14 Pin)	Under middle of dash. See **Fig. 138**.
C411 (Brown, 1 Pin)	Under middle of dash. See **Fig. 177**.
C415 (Optional) (Gray, 3 Pin)	Under left side of dash. See **Fig. 30**.
C416 (Optional) (Gray, 2 Pin)	Under left side of dash. See **Fig. 30**.
C501 (Honda Accessory) (White, 24 Pin)	Under left side of dash. See **Fig. 117**.
C501 (White, 24 Pin)	Under left side of dash. See **Fig. 169**.
C502 (EX-L) (Light Blue, 6 Pin)	Under left side of dash. See **Fig. 169**.
C531 (SULEV) (Gray, 2 Pin)	Under left rear of vehicle. See **Fig. 130**.
C551 (DX-G, LX, SE, EX & VP) (Gray, 4 Pin)	Behind right kick panel. See **Fig. 47**.
C551 (EX-L) (White, 17 Pin)	Behind right kick panel. See **Fig. 179**.
C552 (White, 13 Pin)	Behind right kick panel. See **Fig. 179**.
C553 (Light Blue, 6 Pin)	Behind right kick panel. See **Fig. 179**.
C601 (EX-L, 2.4L EX & 3.0L LX, SE) (Gray, 10 Pin)	Under left side of dash. See **Fig. 170**.
C602 (Optional) (Gray, 3 Pin)	Left front of roof. See **Fig. 196**.
C630 (Honda Accessory) (Gray, 3 Pin)	At front of roof. See **Fig. 126**.
C631 (White, 20 Pin)	In driver's door. See **Fig. 54**.
C632 (Blue/White, 17 Pin)	In driver's door. See **Fig. 54**.
C651 (White, 6 Pin)	Behind right kick panel. See **Fig. 179**.
C701 (Coupe) (Gray, 8 Pin)	At left "C" pillar. See **Fig. 124**.
C701 (Sedan) (Gray, 8 Pin)	At left "C" pillar. See **Fig. 52**.
C704 (Trailer Lighting Connector) (Gray, 2 Pin)	Left side of trunk. See **Fig. 203**.
C731 (White, 13 Pin)	Behind glove box. See **Fig. 42**.
C732 (Gray, 12 Pin)	Behind glove box. See **Fig. 42**.

C751 (Sedan) (Gray, 10 Pin)	At left "B" pillar. See **Fig. 51**.
C781 (Sedan) (Blue, 10 Pin)	At right "B" pillar. See **Fig. 51**.
C801 (Except 3.0L EX-L Sedan) (Gray, 4 Pin)	Under front passenger's seat. See **Fig. 193**.
C801 (3.0L EX-L) (Sedan) (Gray, 4 Pin)	Under front passenger's seat. See **Fig. 111**.
C851 (Coupe) (White, 21 Pin)	Under middle of dash. See **Fig. 178**.
C851 (Sedan) (Blue, 21 Pin)	Under center of dash. See **Fig. 178**.
C901 (Except EX-L & 3.0L LX) (Gray, 5 Pin)	Under driver's seat. See **Fig. 192**.
C901 (EX-L & 3.0L SE, LX) (Gray, 10 Pin)	Under driver's seat. See **Fig. 50**.
C902 (3.0L EX-L) (Sedan) (Gray, 10 Pin)	Under front passenger's seat. See **Fig. 111**.
C903 (EX-L & 3.0L SE, LX) (Gray, 2 Pin)	Under driver's seat. See **Fig. 191**.
C910 (EX-L) (Gray, 2 Pin)	Under driver's seat. See **Fig. 48**.

GROUNDS

GROUNDS LOCATION

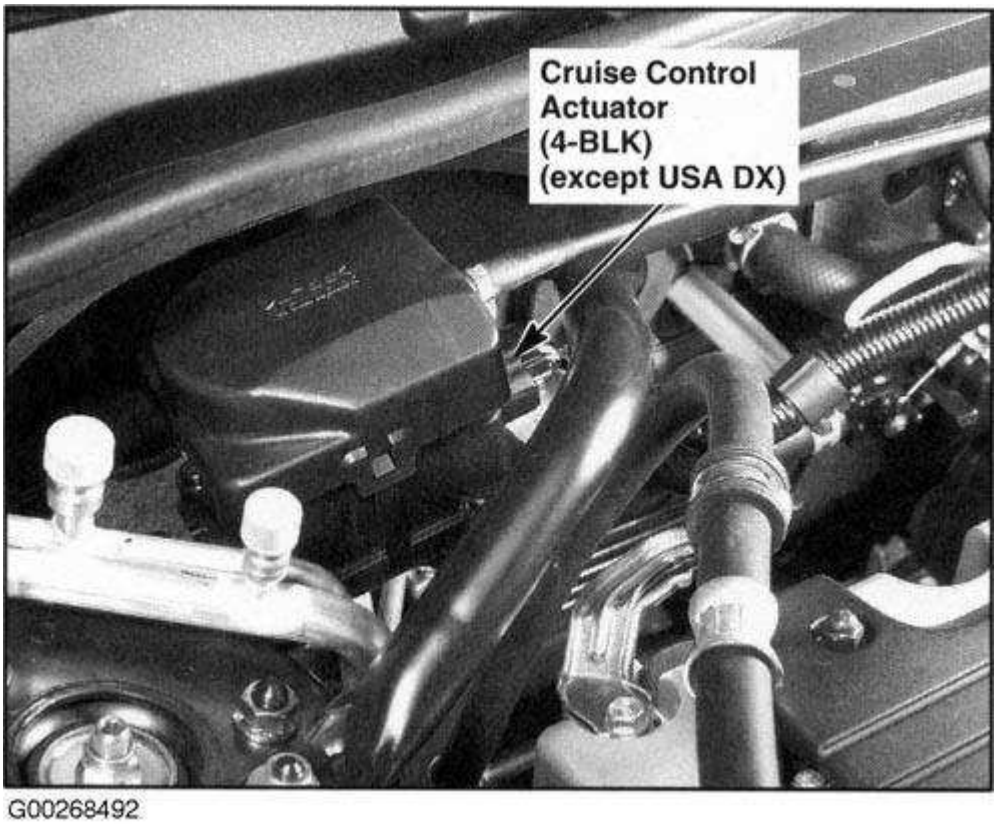
Component	Location
Case Ground (Below Alternator)	Left front of engine (3.0L). See **Fig. 86**.
G1 (2.4L)	At left front of engine compartment. See **Fig. 22**.
G1 (3.0L)	At left side of engine compartment. See **Fig. 82**.
G2 (2.4L)	At right side of engine compartment. See **Fig. 4**.
G2 (3.0L)	At right side of engine compartment. See **Fig. 80**.
G3 (2.4L)	At rear of transmission housing. See **Fig. 20**.

G3 (3.0L)	At left side of engine compartment. See **Fig. 103**.
G20 (Honda Accessory)	Behind middle of front bumper. See **Fig. 129**.
G51 (Honda Accessory)	Behind left kick panel. See **Fig. 200**.
G101 (2.4L)	At top middle of engine. See **Fig. 11**.
G101 (3.0L)	Rear of engine. See **Fig. 165**.
G102 (3.0L)	At right front side of engine. See **Fig. 78**.
G151 (3.0L) (A/T)	On transmission housing. See **Fig. 105**.
G201	Behind right side of front bumper. See **Fig. 142**.
G202	Behind right side of front bumper. See **Fig. 142**.
G203	At right side of engine compartment. See **Fig. 5**.
G301	At left side of front bumper. See **Fig. 141**.
G302	Behind left side of front bumper. See **Fig. 141**.
G501	Behind left side of dash. See **Fig. 147**.
G502	Behind left side of dash. See **Fig. 147**.
G503	Behind glove box. See **Fig. 42**.
G504	Under middle of dash. See **Fig. 34**.
G505	Under center of dash. See **Fig. 35**.
G506	Under middle of dash. See **Fig. 177**.
G601 (Coupe)	On left side of floor. See **Fig. 121**.
G601 (Sedan)	Under driver's seat. See **Fig. 190**.
G602	On right side of floor. See **Fig. 122**.
G603	Behind center of rear seats. See **Fig. 63**.
G604 (Coupe)	At right "C" pillar. See **Fig. 127**.

G604 (Sedan)	At right "C" pillar. See **Fig. 60**.
G701 (Coupe)	Left side of trunk. See **Fig. 199**.
G701 (Sedan)	At left side of trunk. See **Fig. 62**.
G702 (Coupe)	At left side of trunk. See **Fig. 198**.

COMPONENT LOCATION GRAPHICS

NOTE: Figures may show multiple component locations. Refer to appropriate table for proper figure references.



G00268492

Fig. 1: Right Side Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

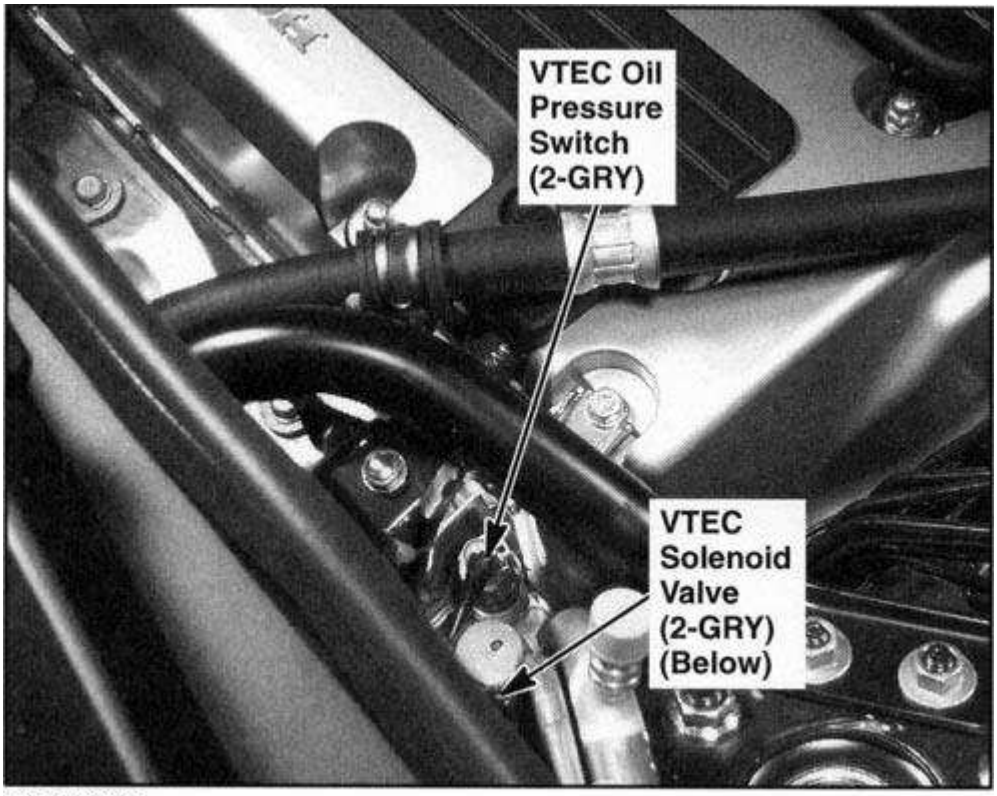


Fig. 2: Right Side Of Engine (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

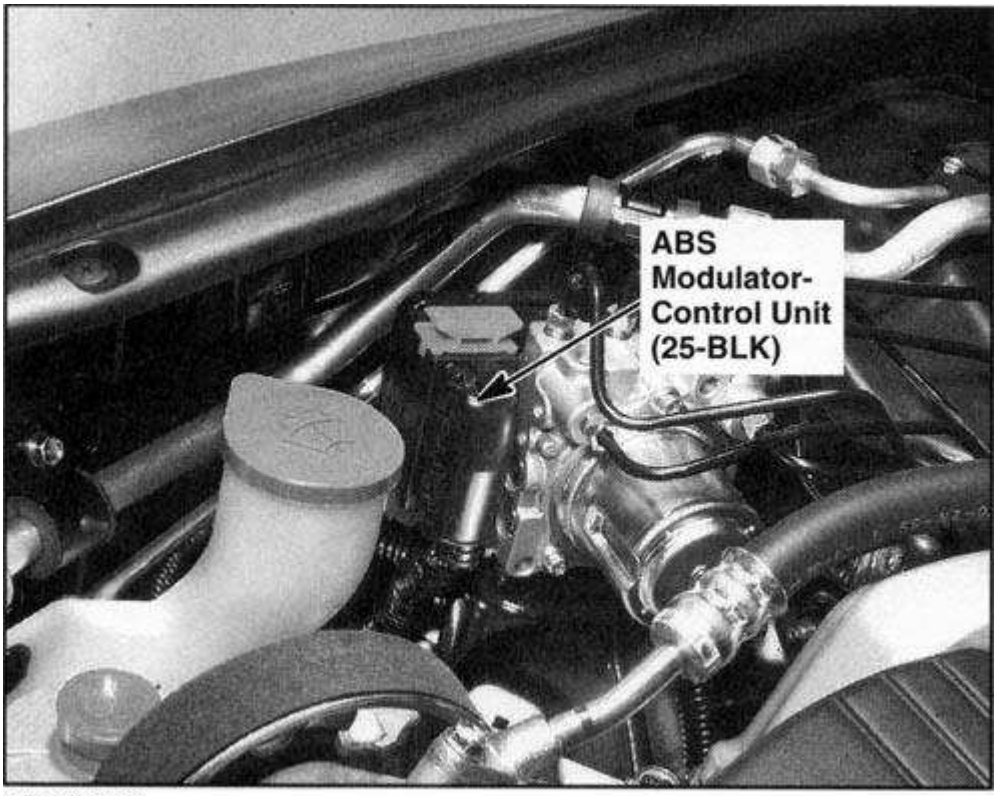
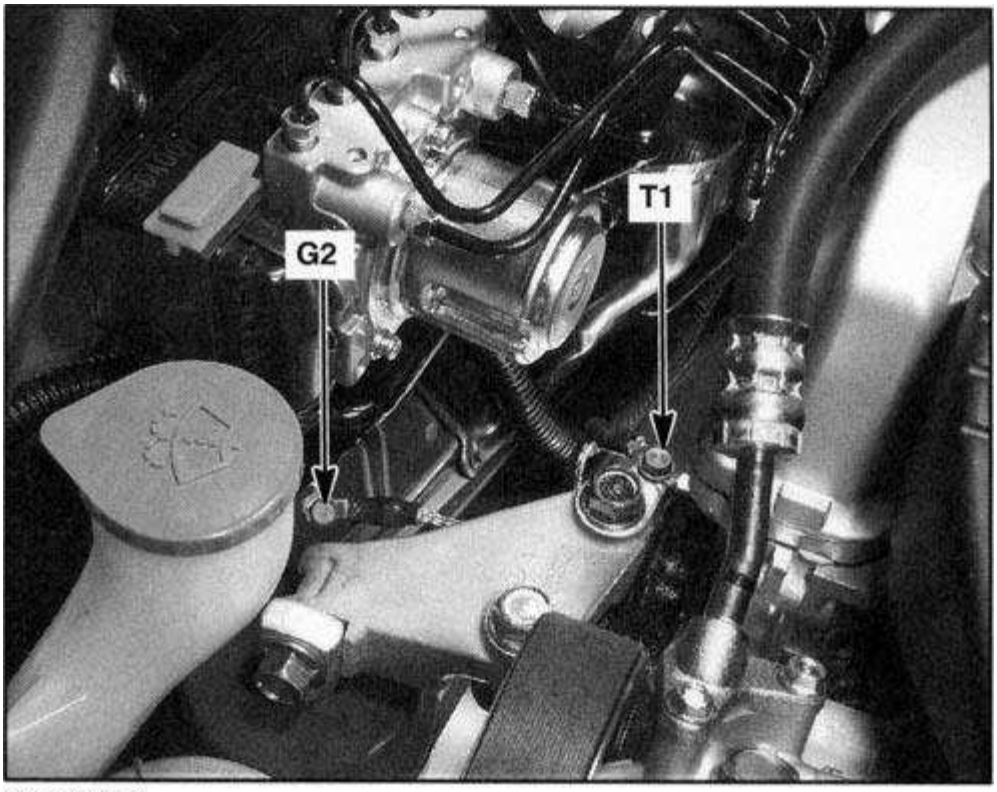
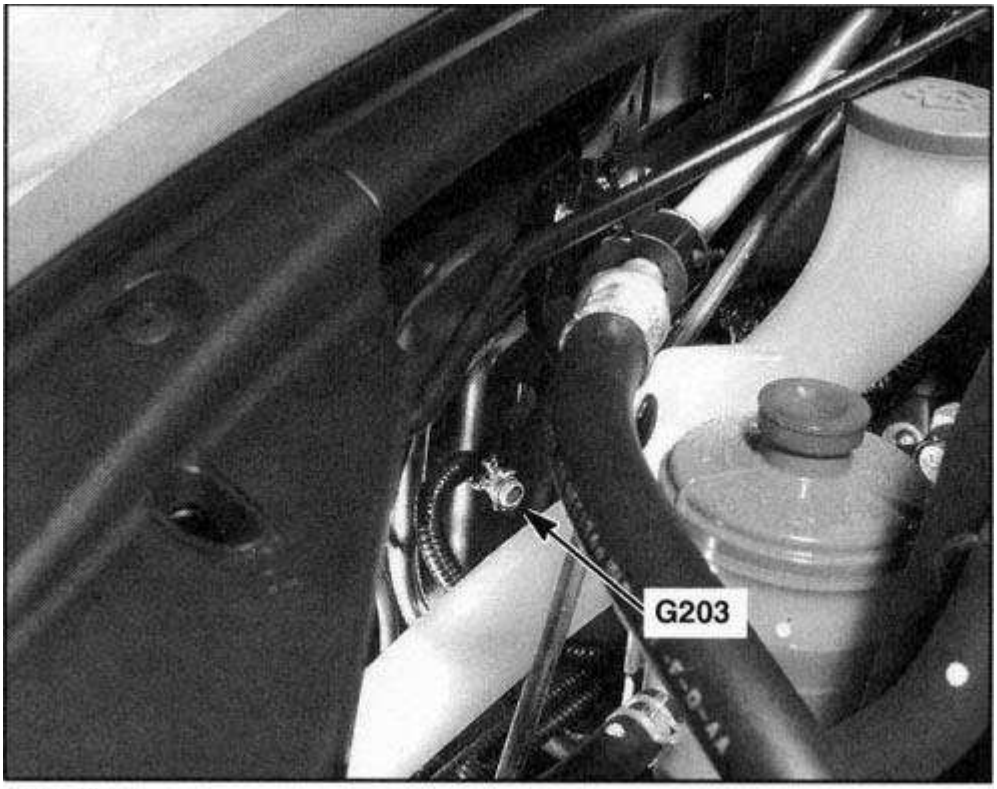


Fig. 3: Right Side Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



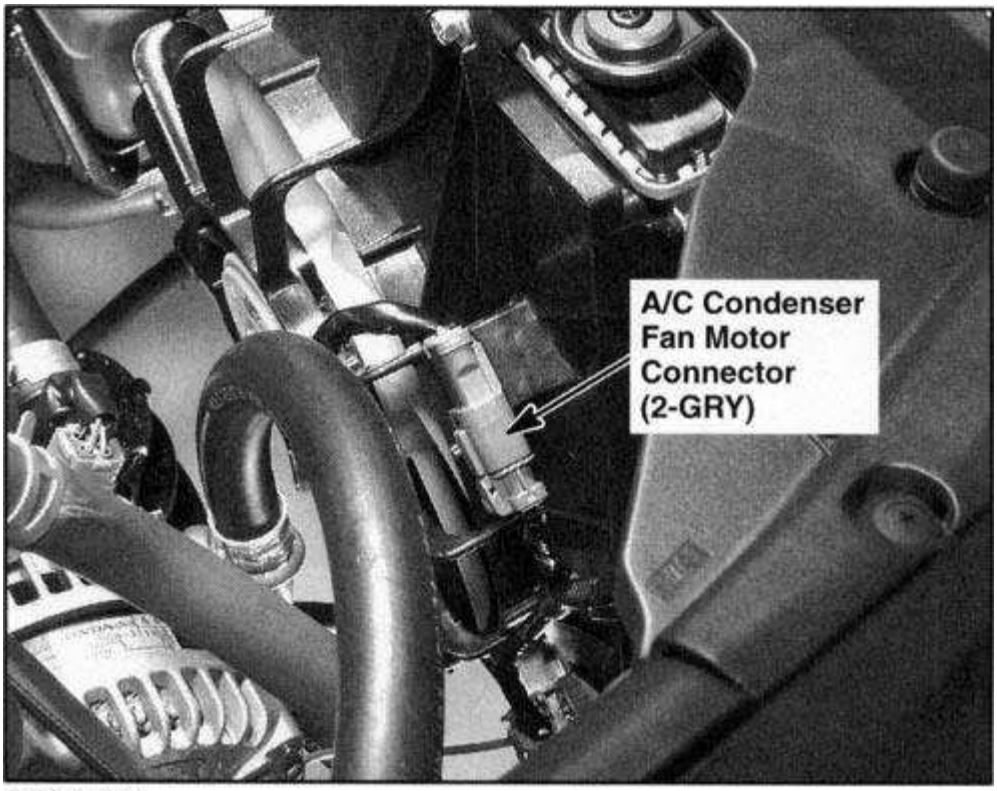
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Fig. 4: Right Side Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



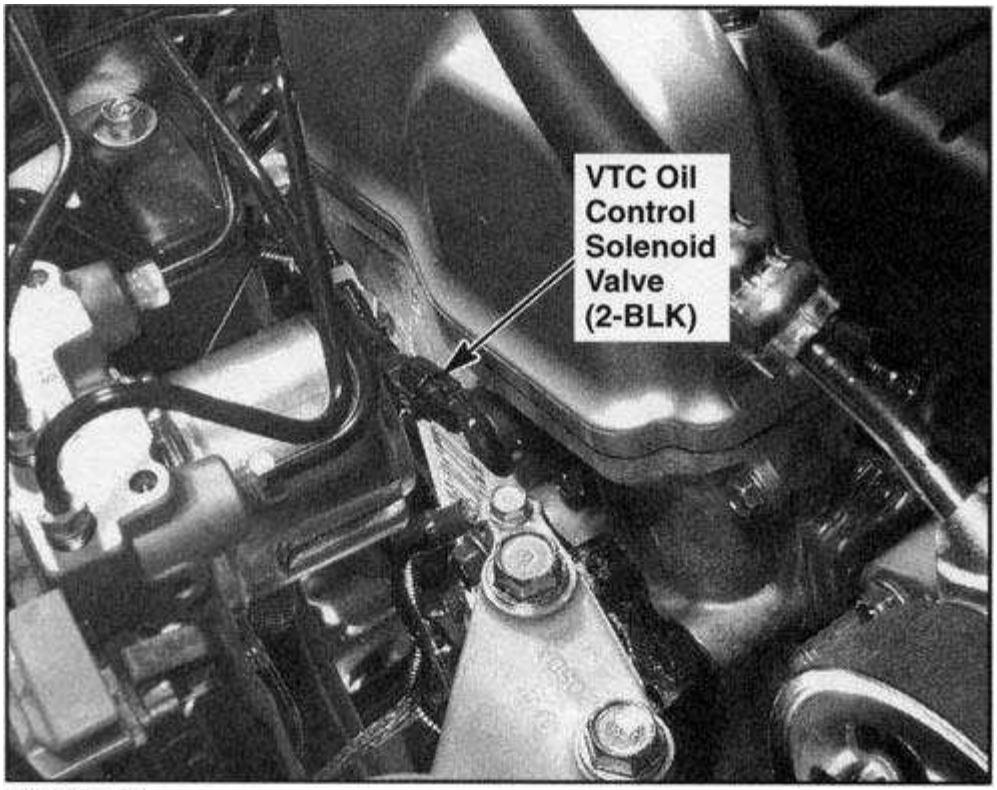
G00268496

Fig. 5: Right Side Of Engine Compartment
Courtesy of AMERICAN HONDA MOTOR CO., INC.



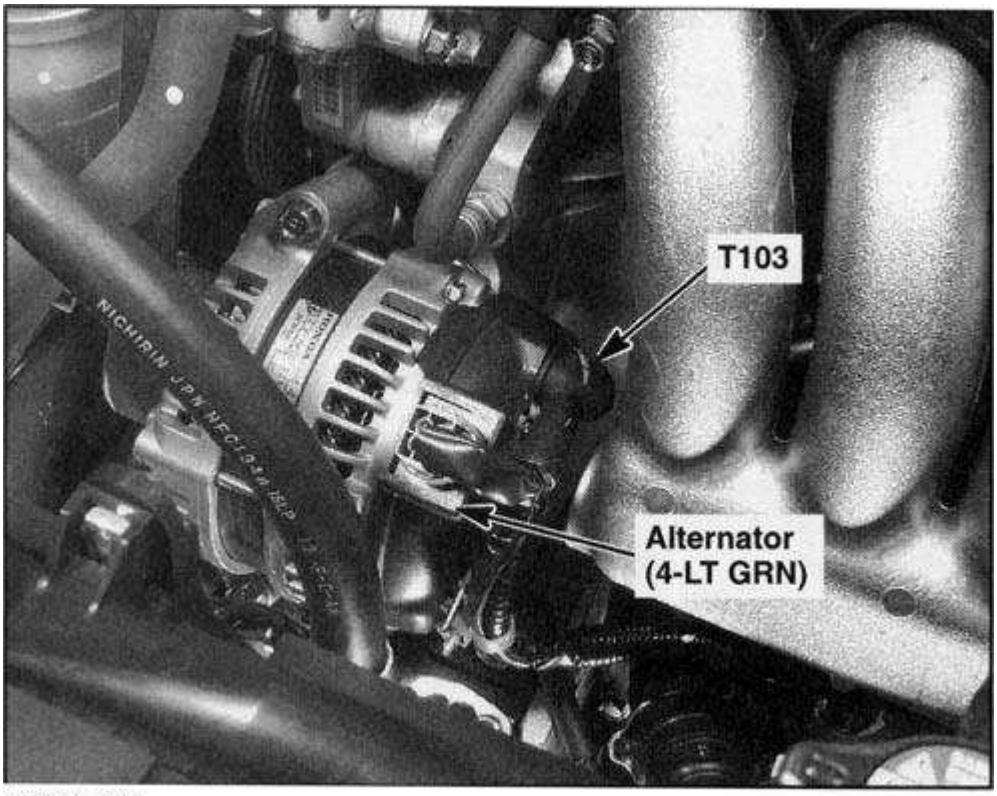
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Fig. 6: Right Side Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



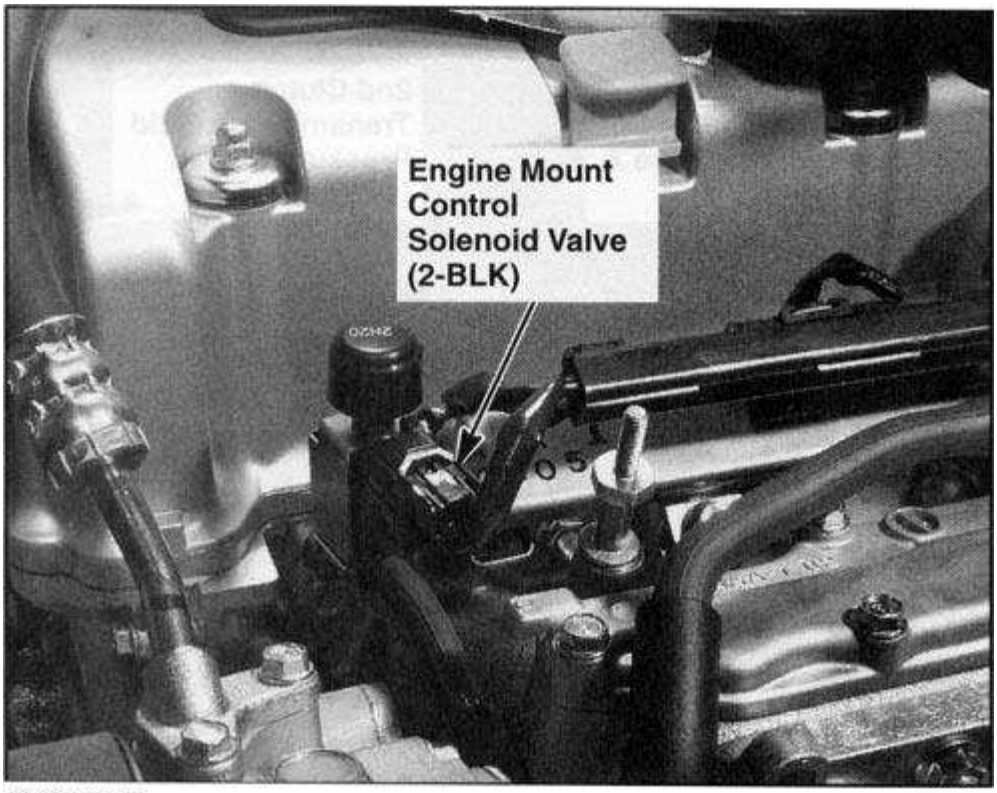
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Fig. 7: Right Side Of Engine (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



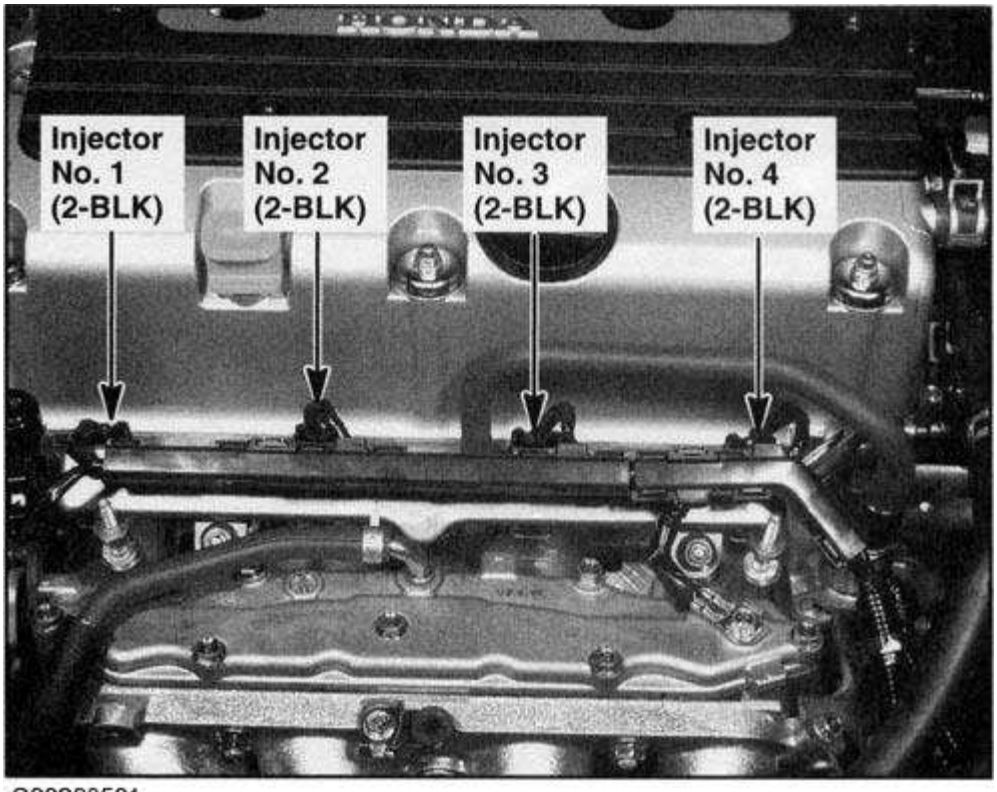
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Fig. 8: Right Side Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



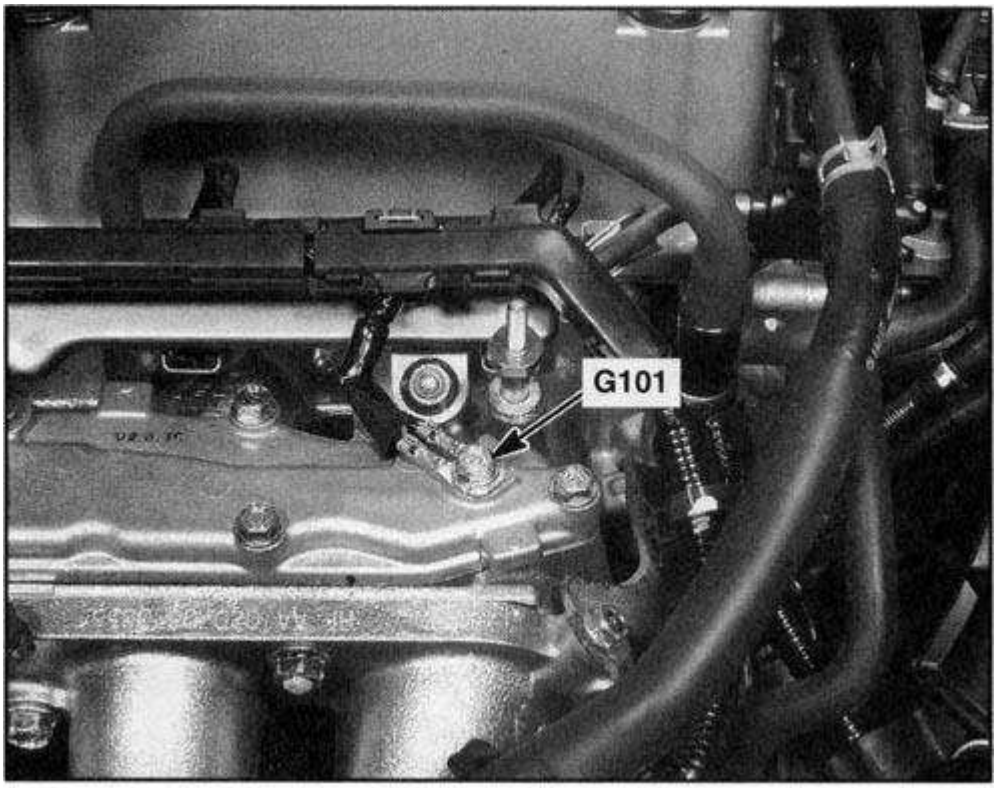
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Fig. 9: Middle Of Engine (2.4L) (A/T)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



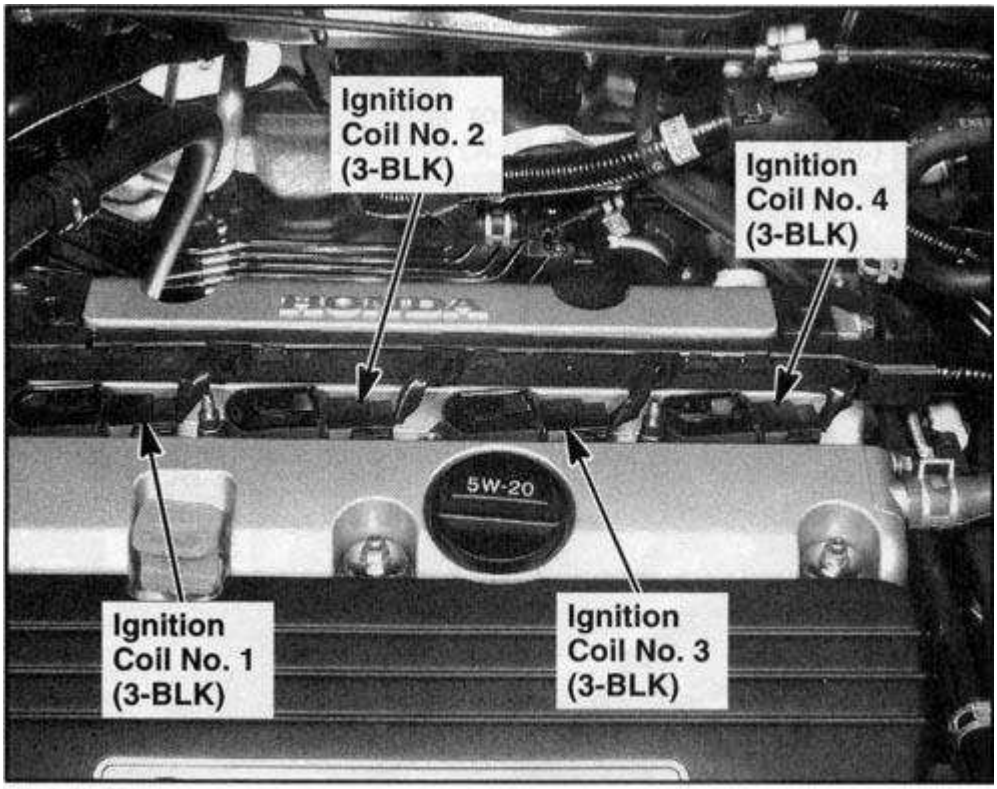
G00268501

Fig. 10: Middle Of Engine (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268502

Fig. 11: Middle Of Engine (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268503

Fig. 12: Middle Of Engine (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

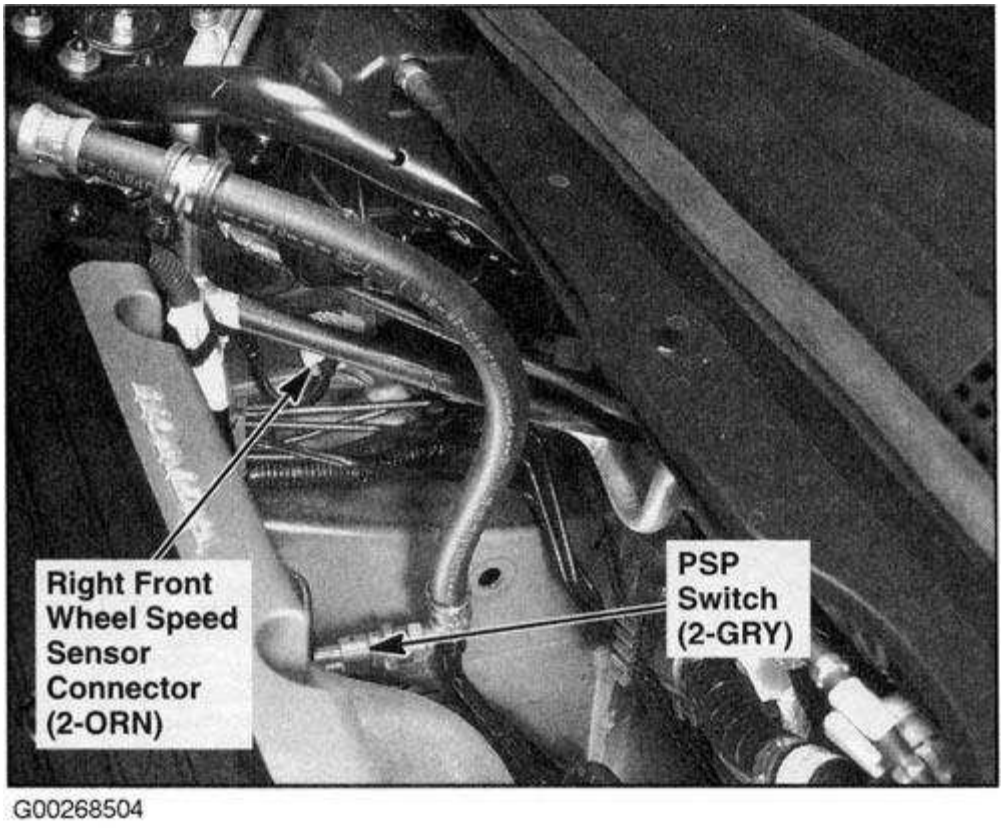


Fig. 13: Right Side Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

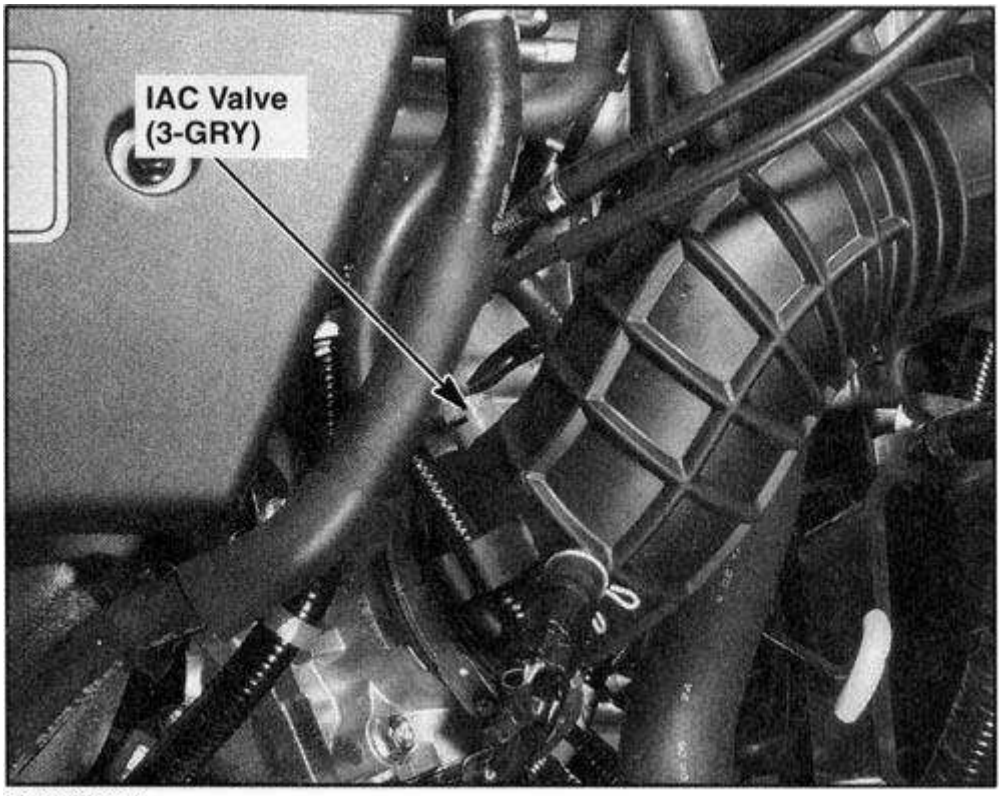
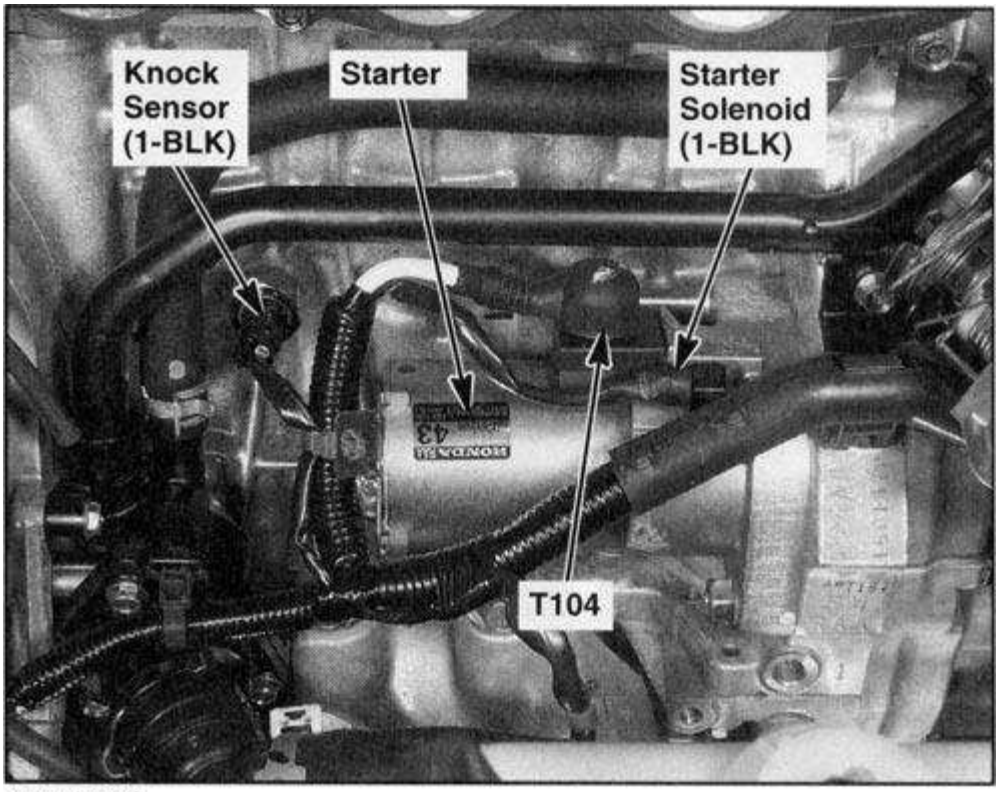


Fig. 14: Left Side Of Engine (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268508

Fig. 15: Left Side Of Engine (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

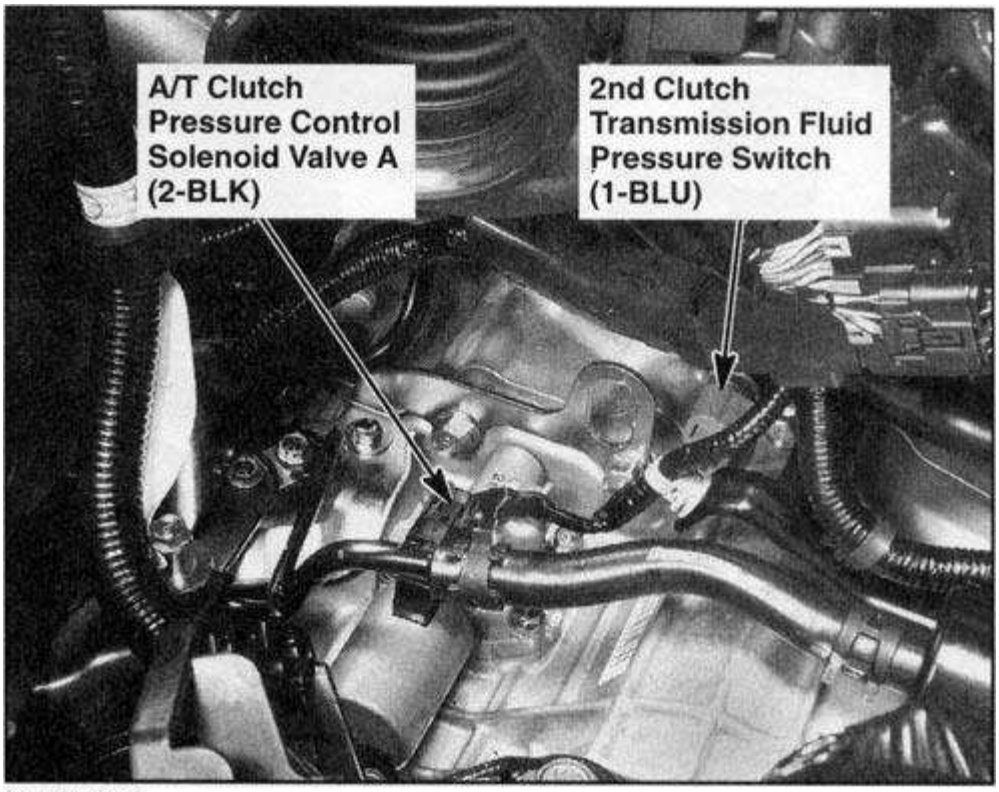
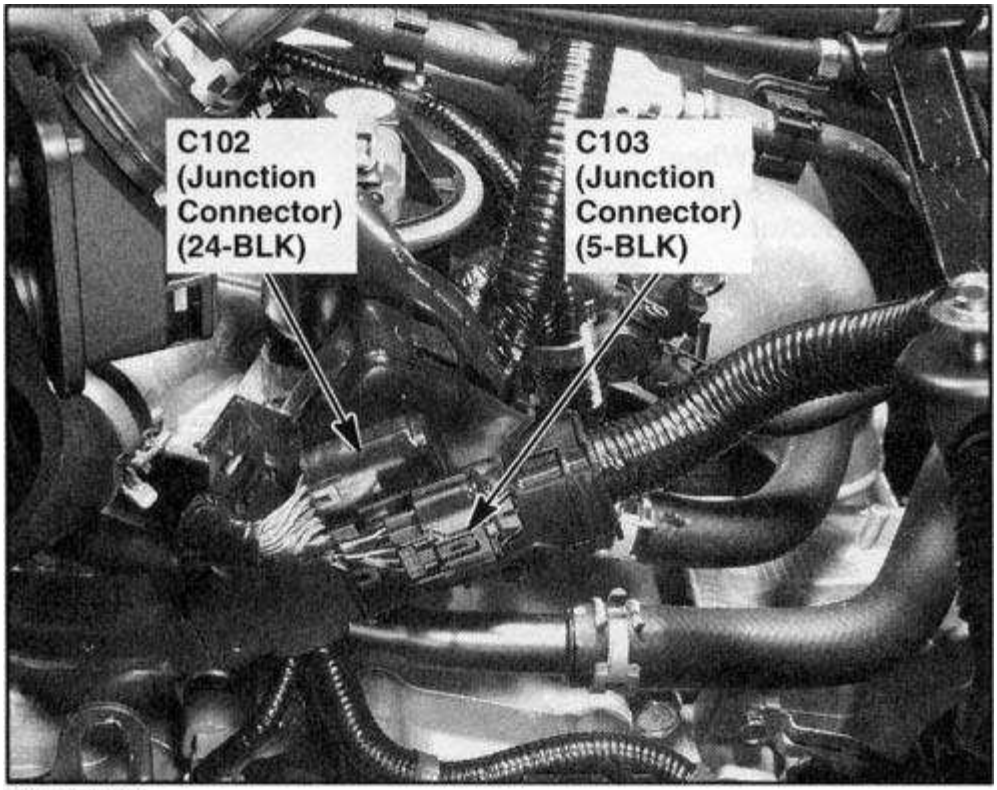
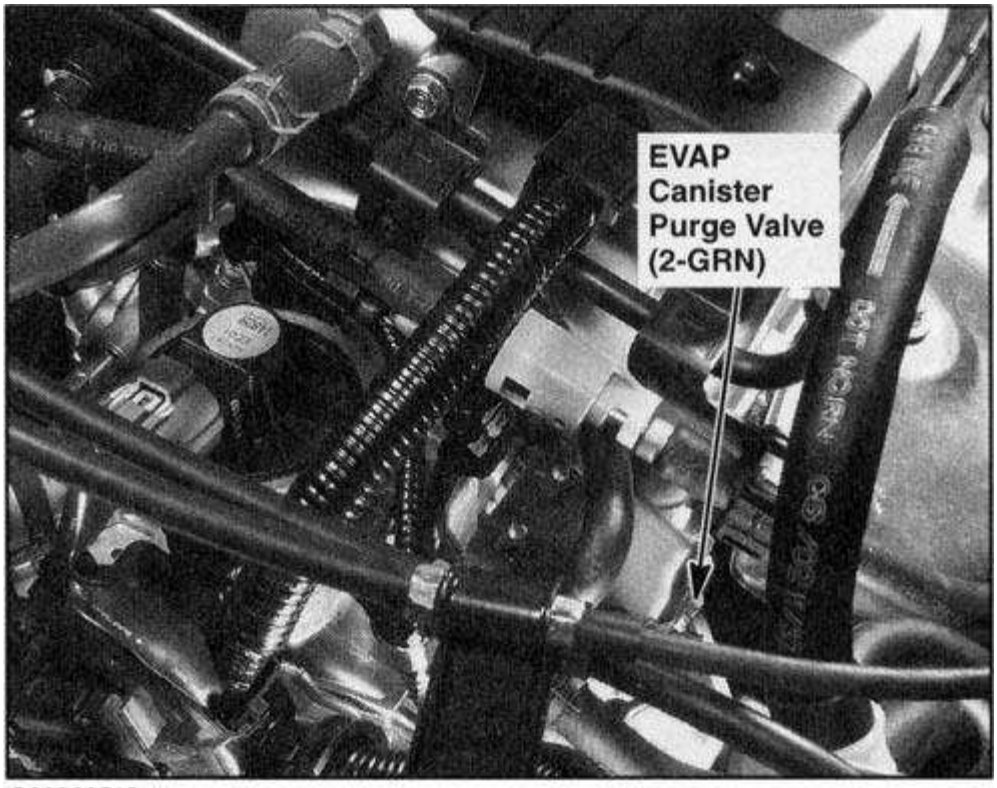


Fig. 16: Automatic Transmission Housing (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



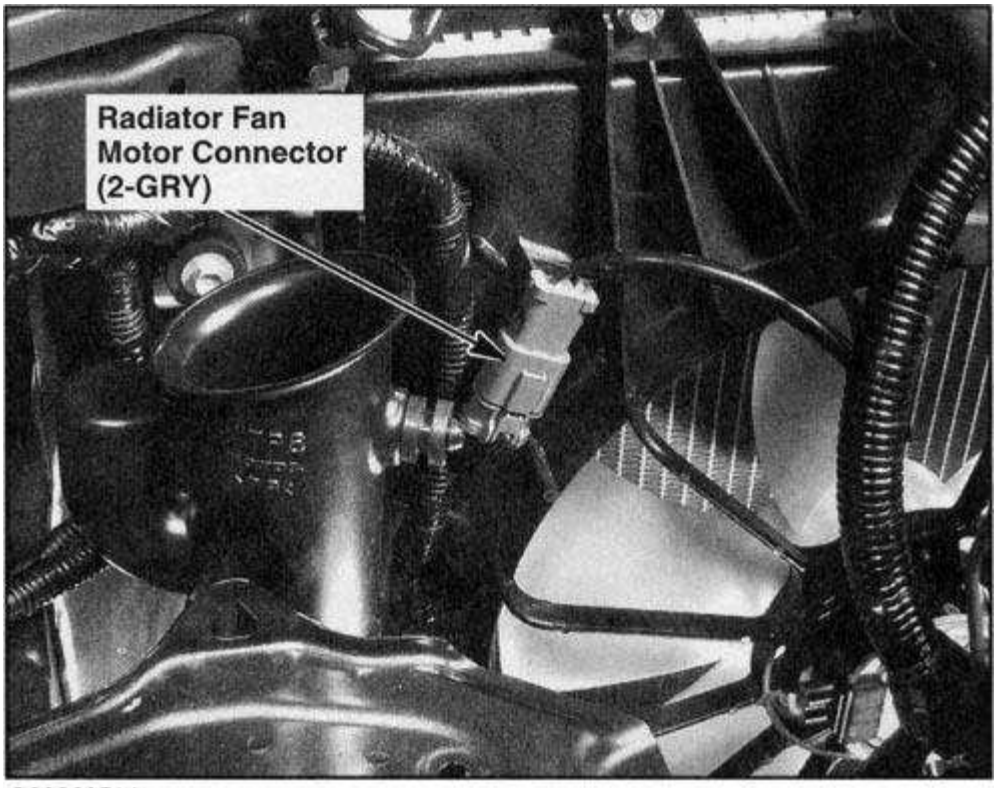
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Fig. 17: Left Side Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



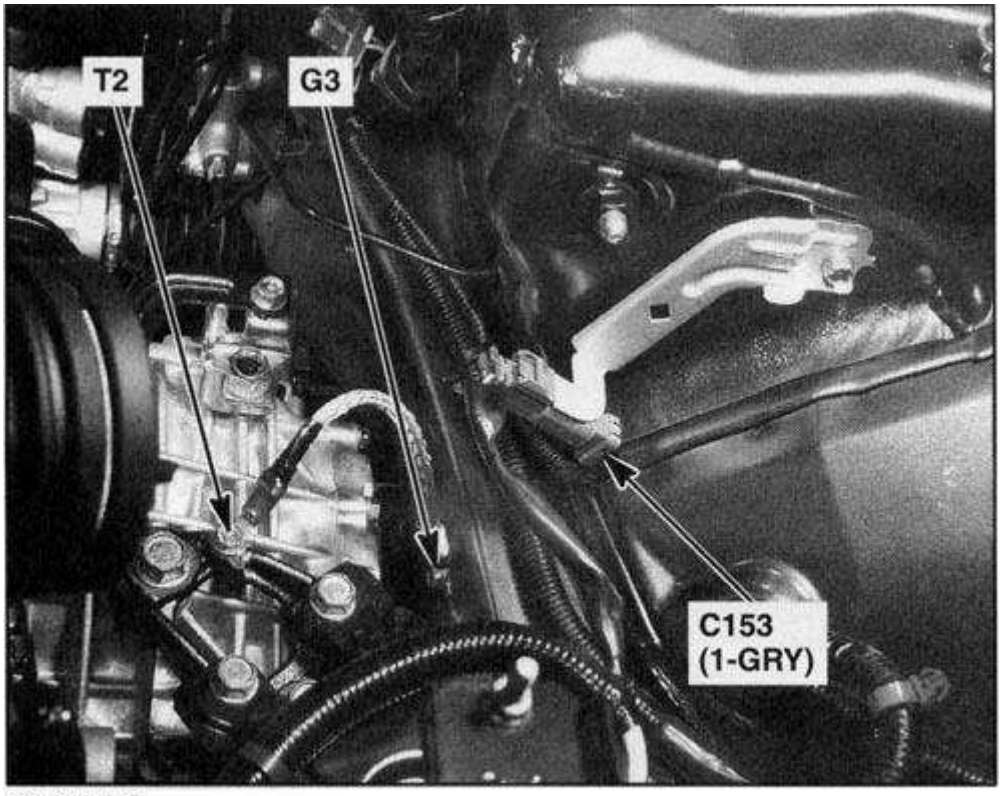
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Fig. 18: Right Rear Of Engine (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



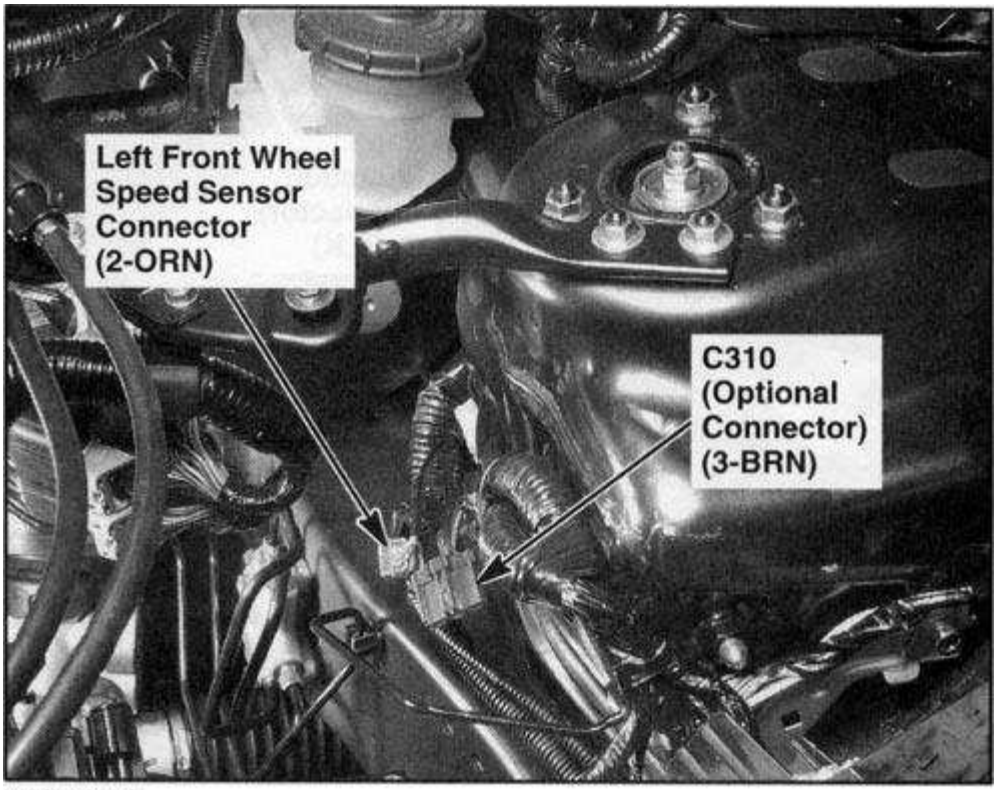
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Fig. 19: Left Front Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



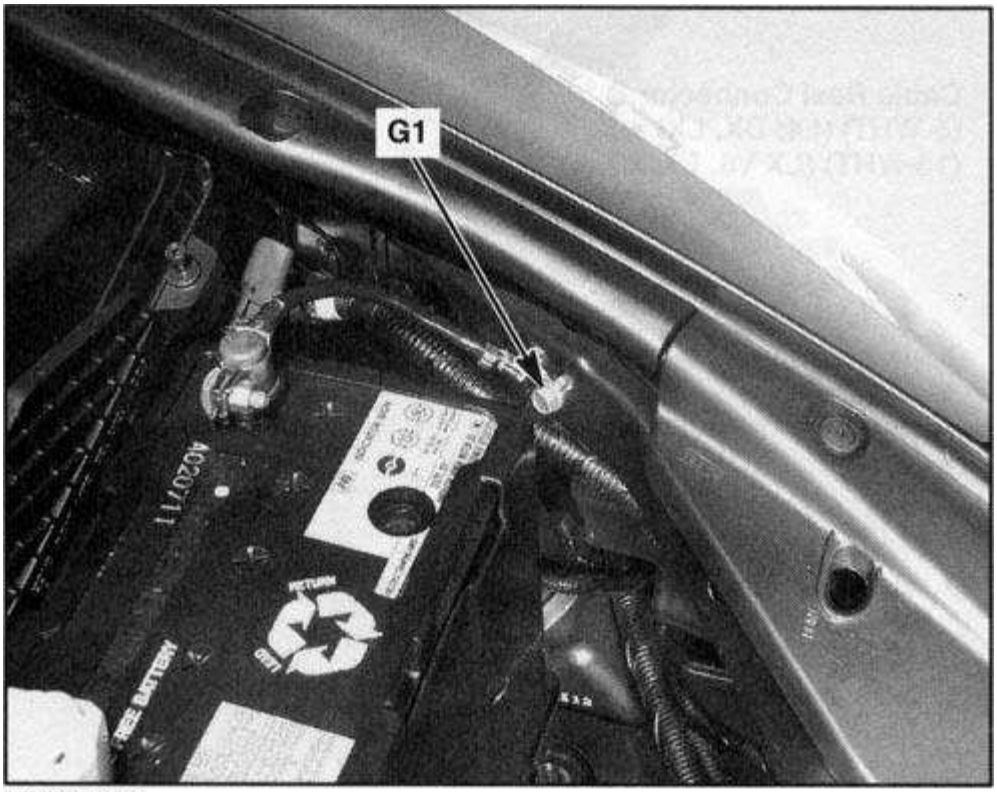
G00268515

Fig. 20: Left Side Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



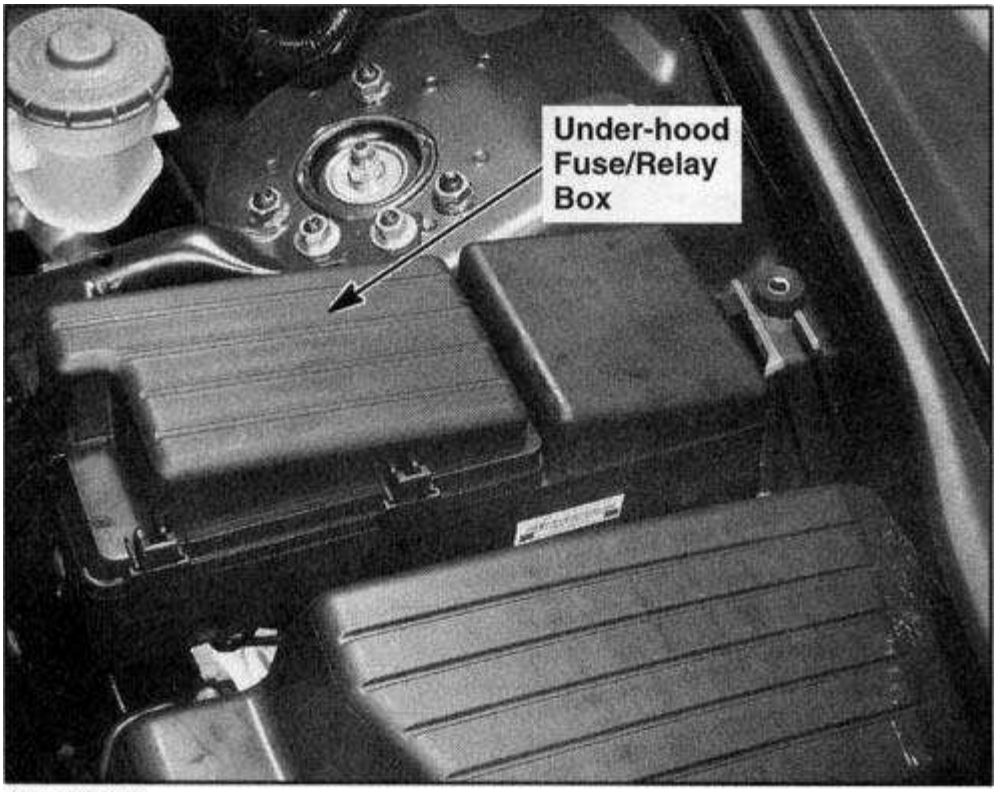
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Fig. 21: Left Side Of Engine Compartment
Courtesy of AMERICAN HONDA MOTOR CO., INC.



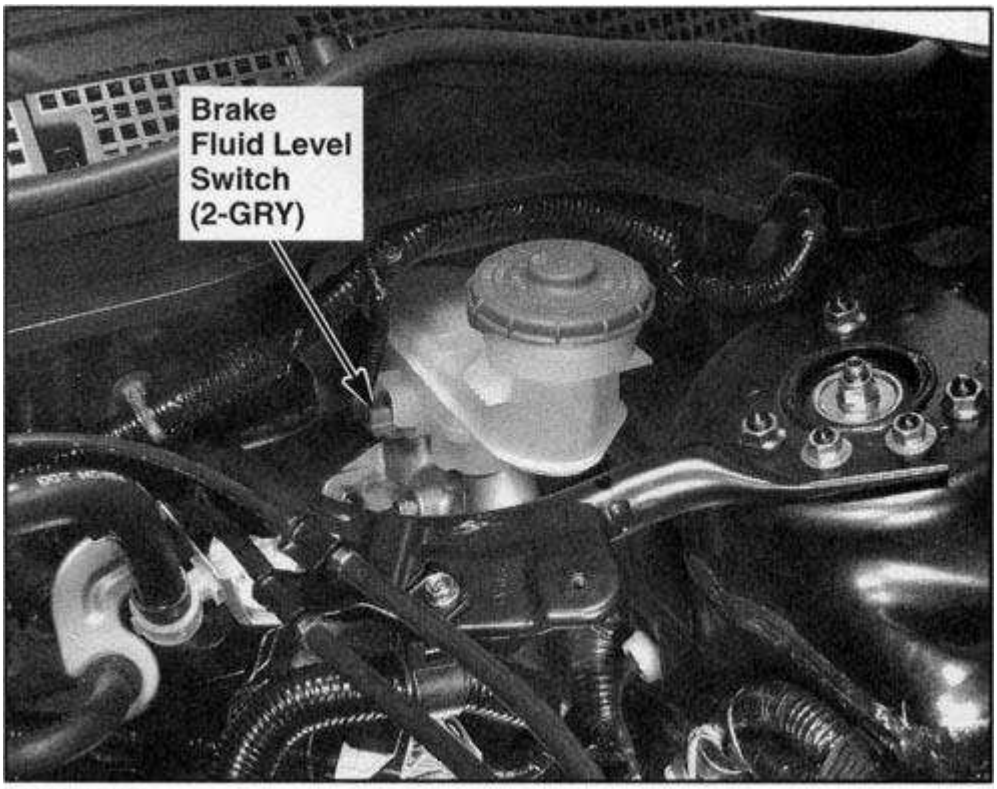
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Fig. 22: Left Side Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



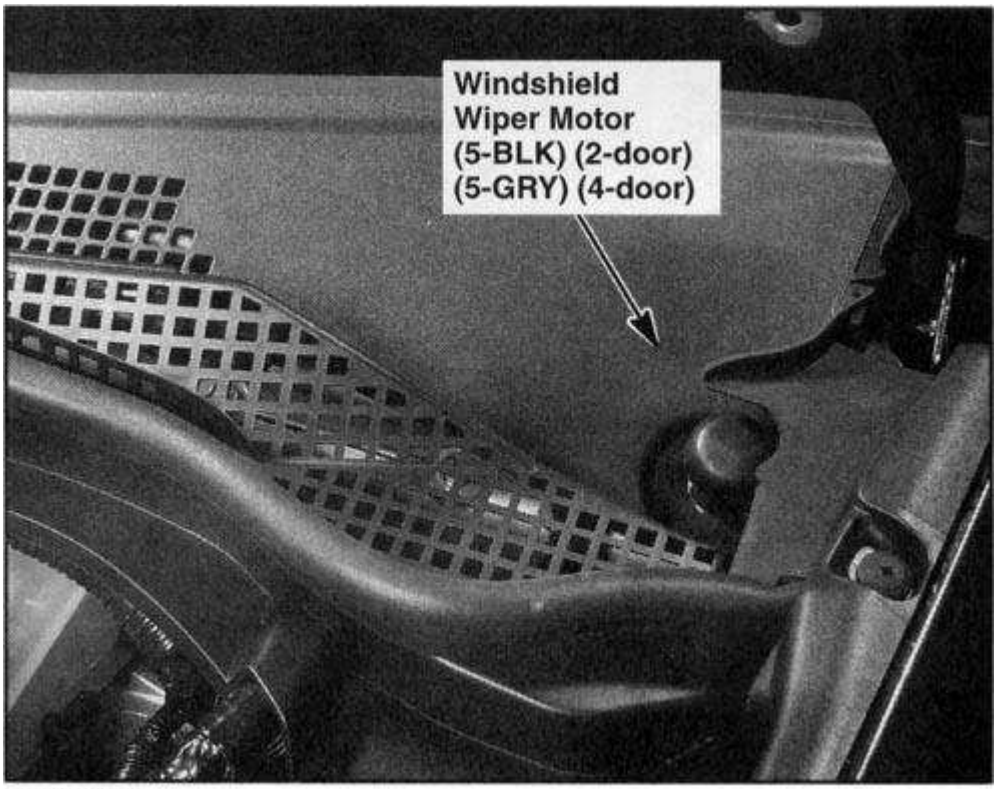
G00268521

Fig. 23: Left Rear Of Engine Compartment
Courtesy of AMERICAN HONDA MOTOR CO., INC.



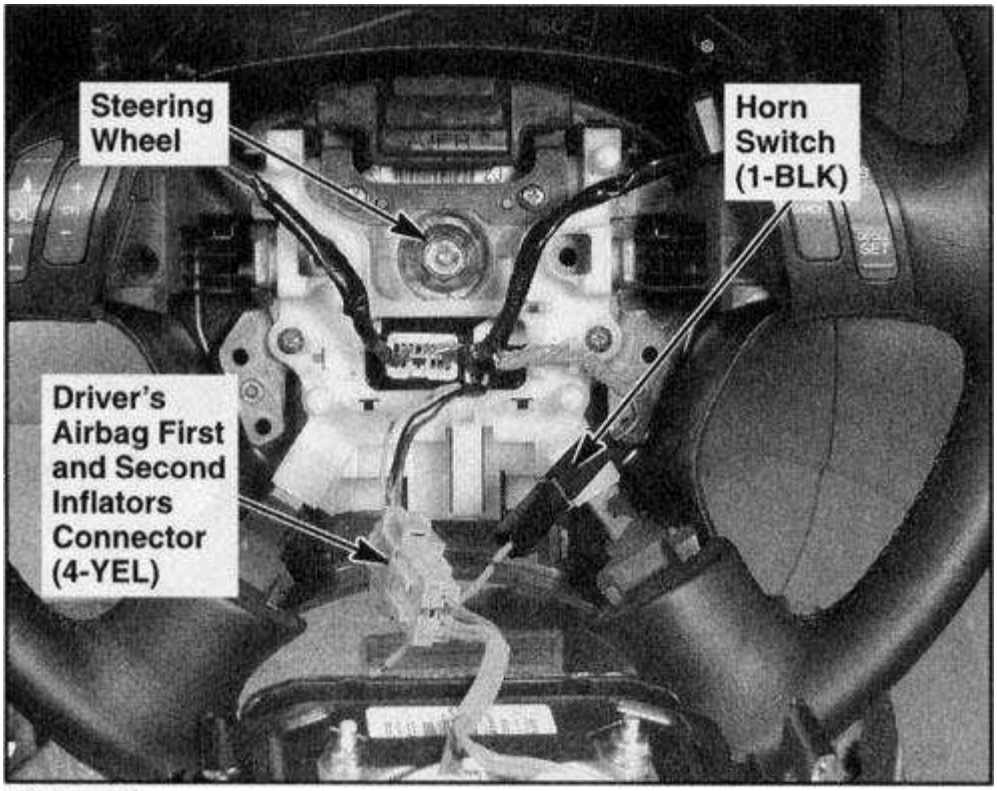
G00268522

Fig. 24: Left Rear Of Engine Compartment
Courtesy of AMERICAN HONDA MOTOR CO., INC.



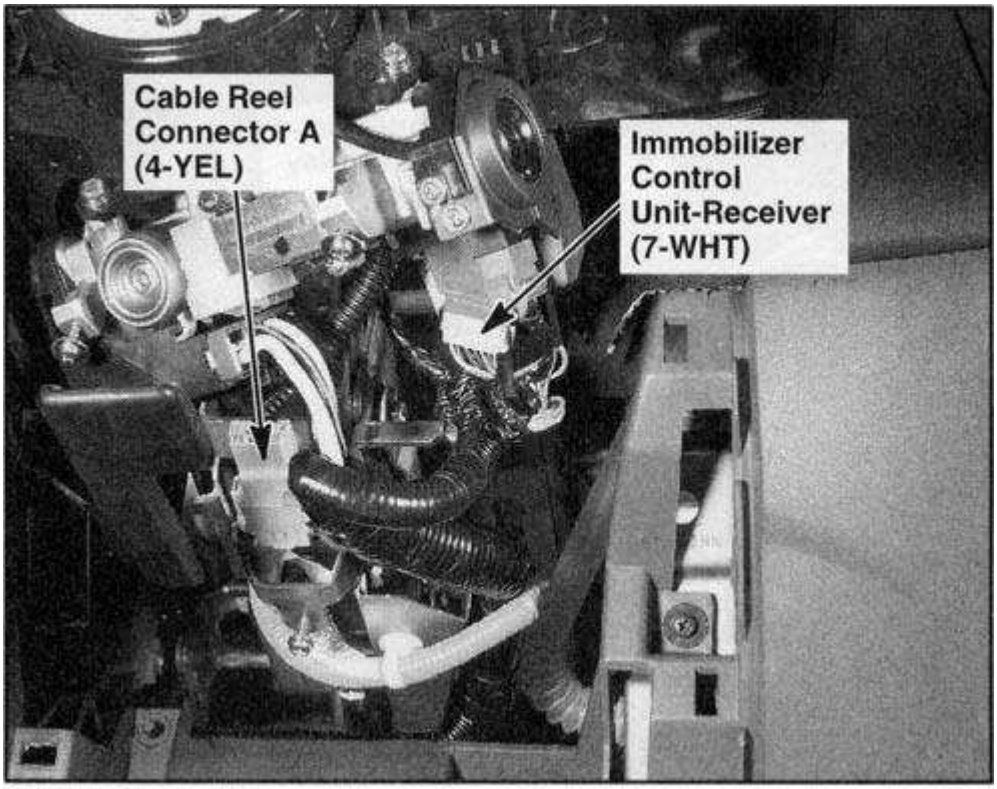
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Fig. 25: Under Left Side Of Cowl Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.



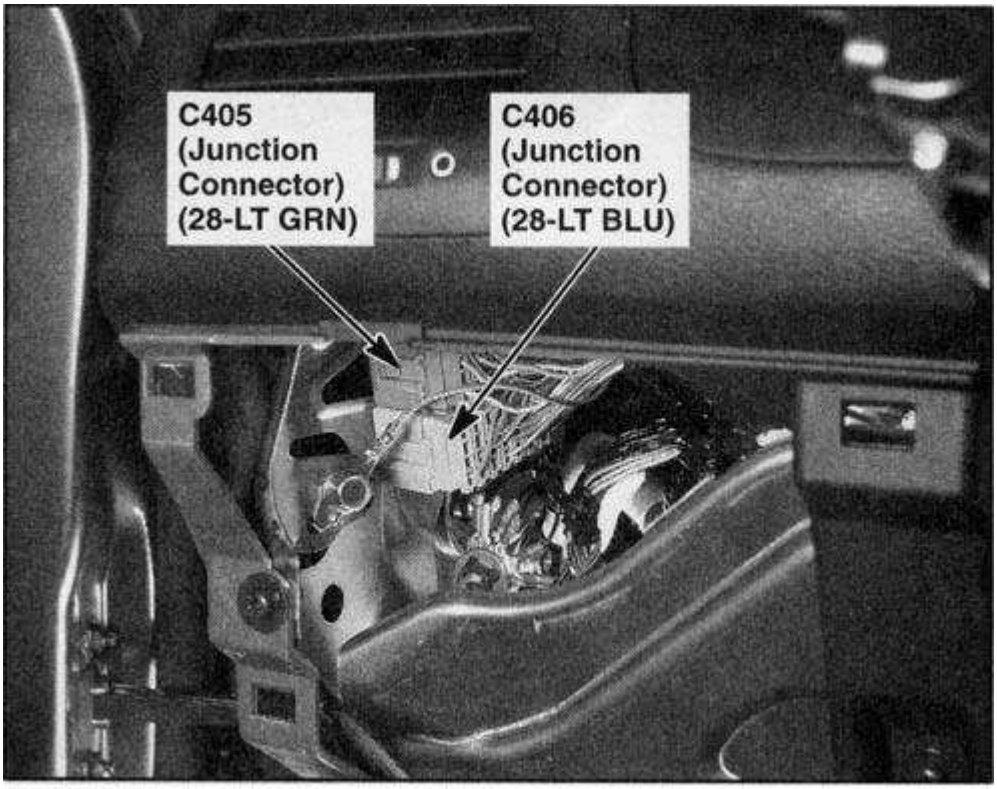
G00268524

Fig. 26: Steering Wheel
Courtesy of AMERICAN HONDA MOTOR CO., INC.



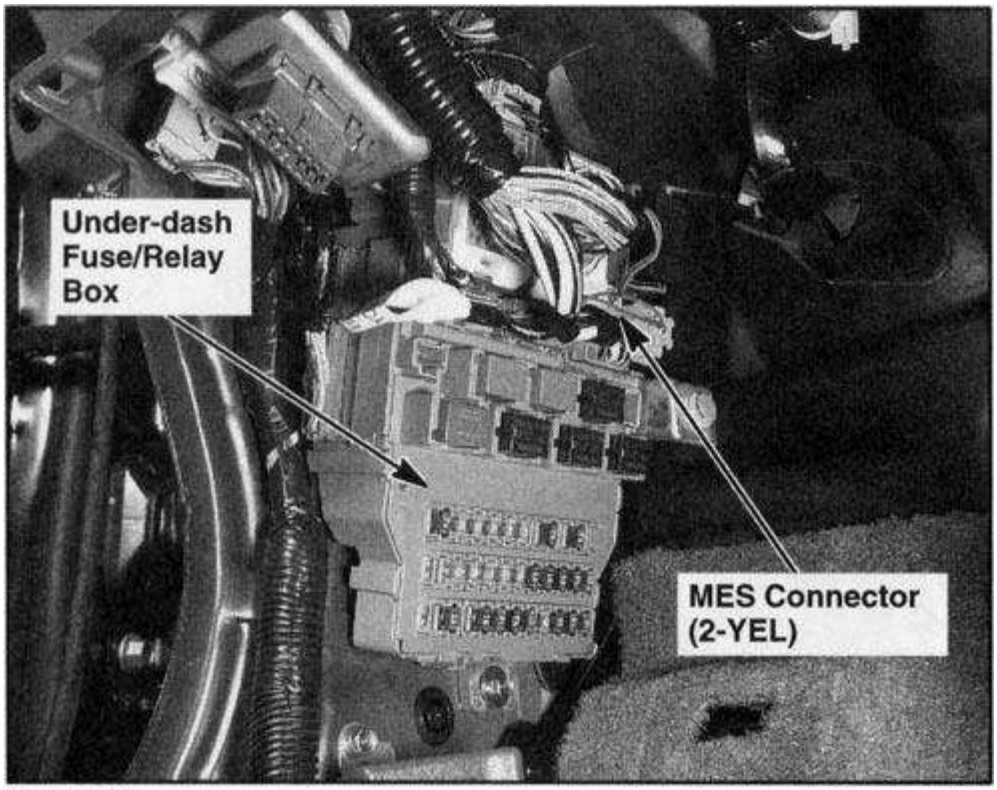
G00268525

Fig. 27: Steering Column
Courtesy of AMERICAN HONDA MOTOR CO., INC.



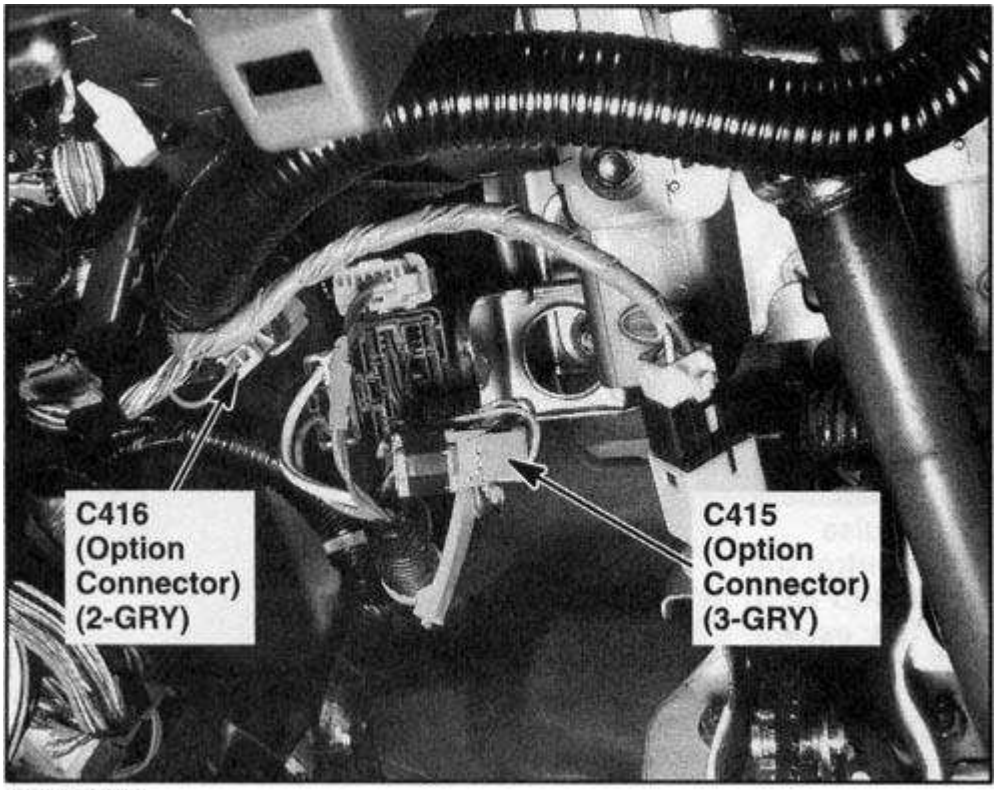
G00268526

Fig. 28: Under Left Side Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.



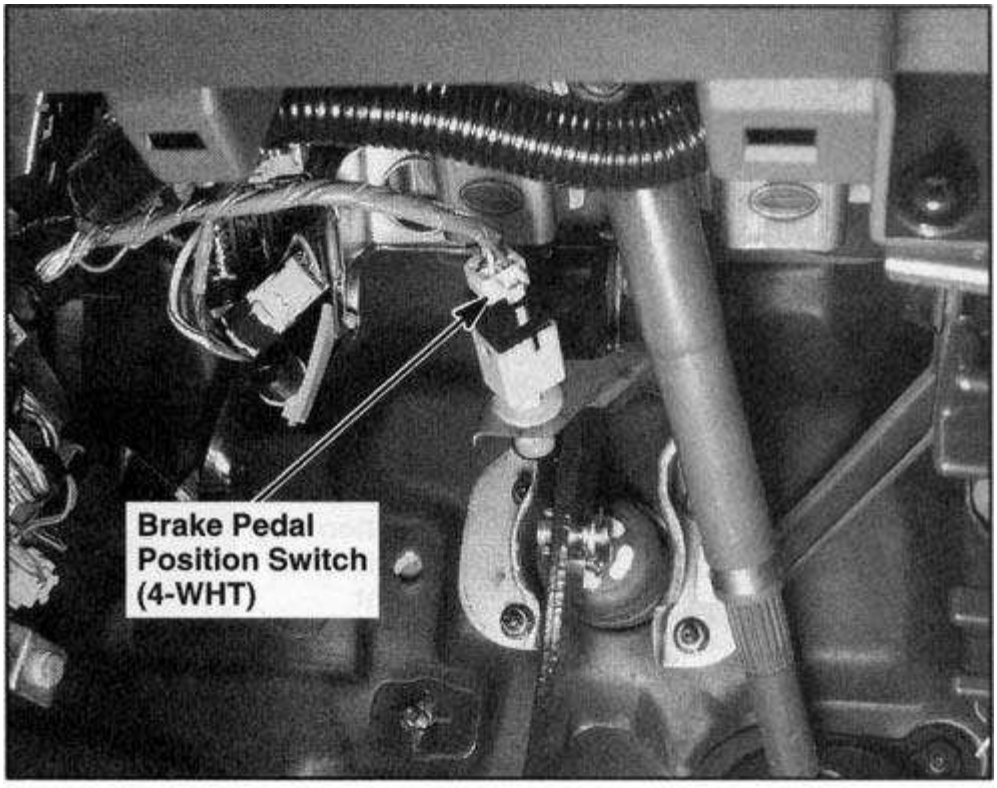
G00268529

Fig. 29: Behind Left Kick Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268531

Fig. 30: Under Left Side Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.



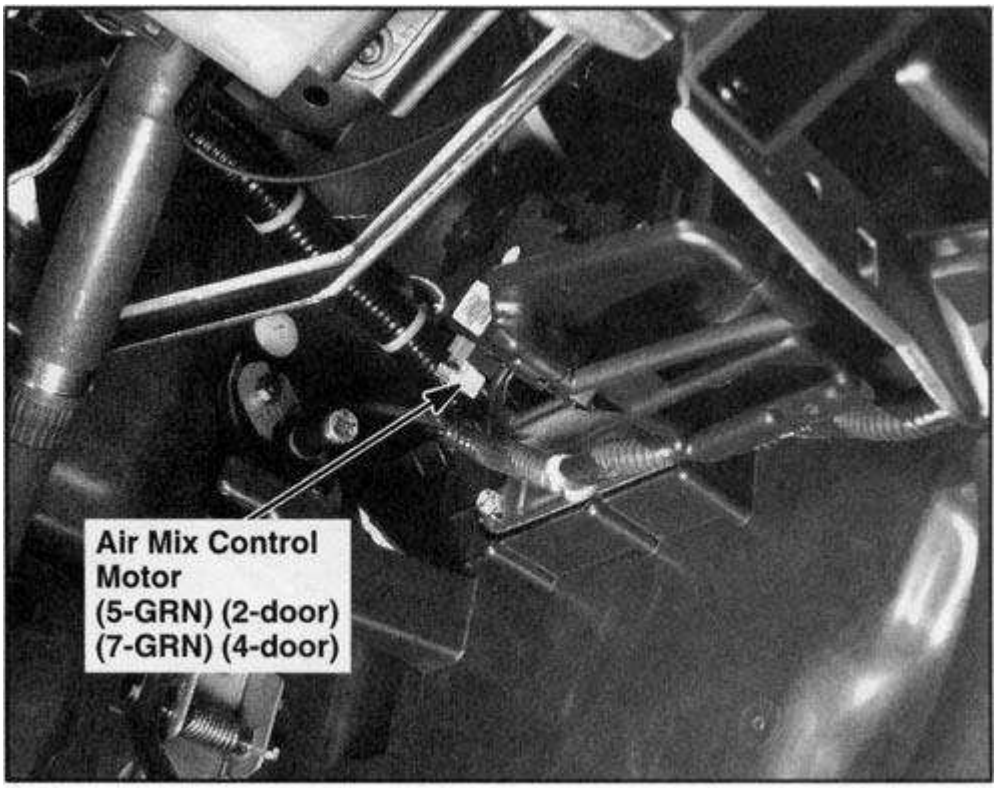
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Fig. 31: Under Left Side Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.



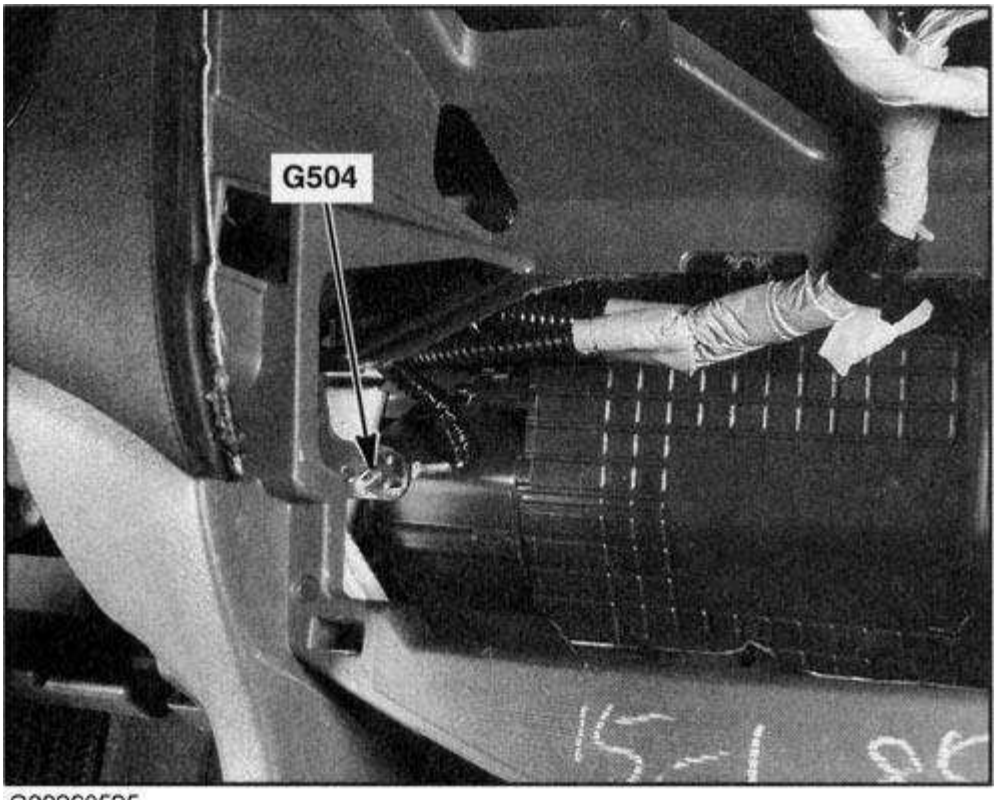
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Fig. 32: Under Left Side Of Dash (EX-L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



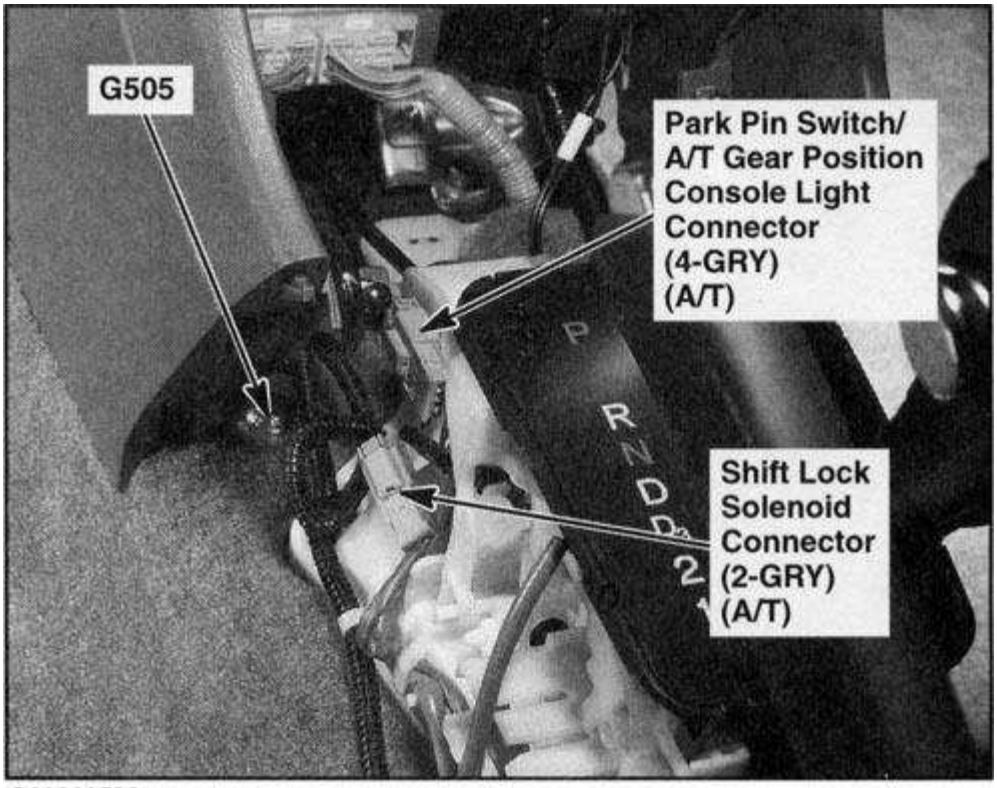
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Fig. 33: Under Left Side Of Dash (DX-G, LX, SE, VP & 2.4L EX)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



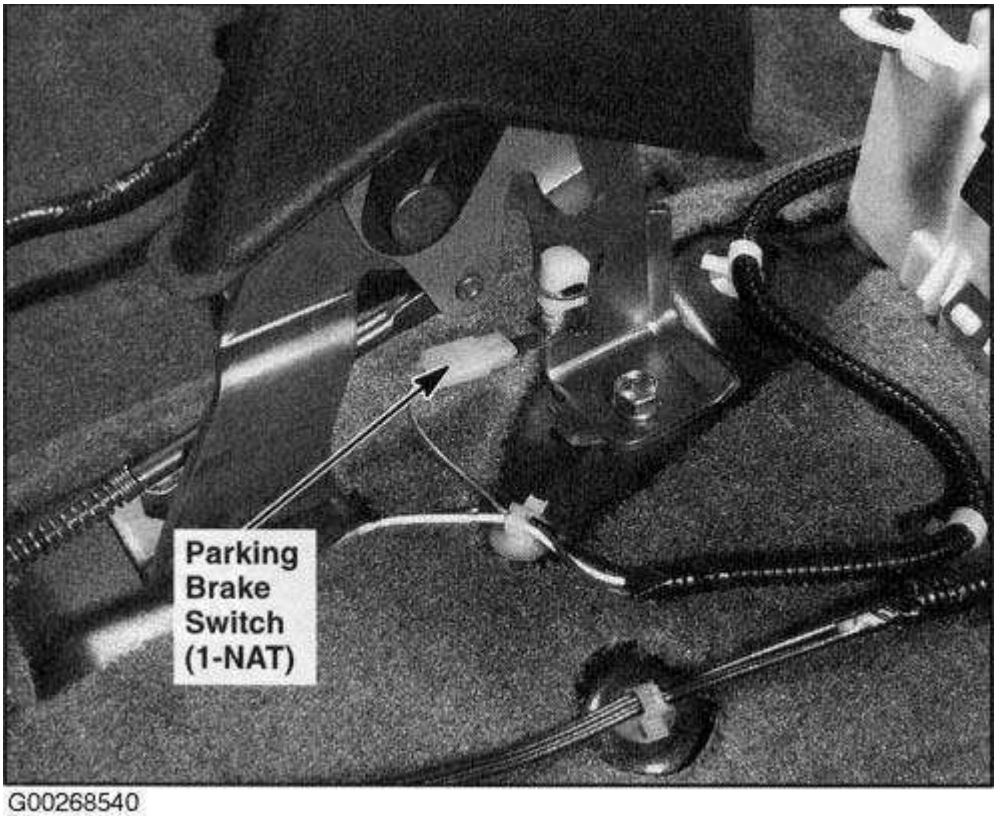
G00268535

Fig. 34: Under Middle Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268539

Fig. 35: Under Center Console
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268540

Fig. 36: Under Center Console
Courtesy of AMERICAN HONDA MOTOR CO., INC.

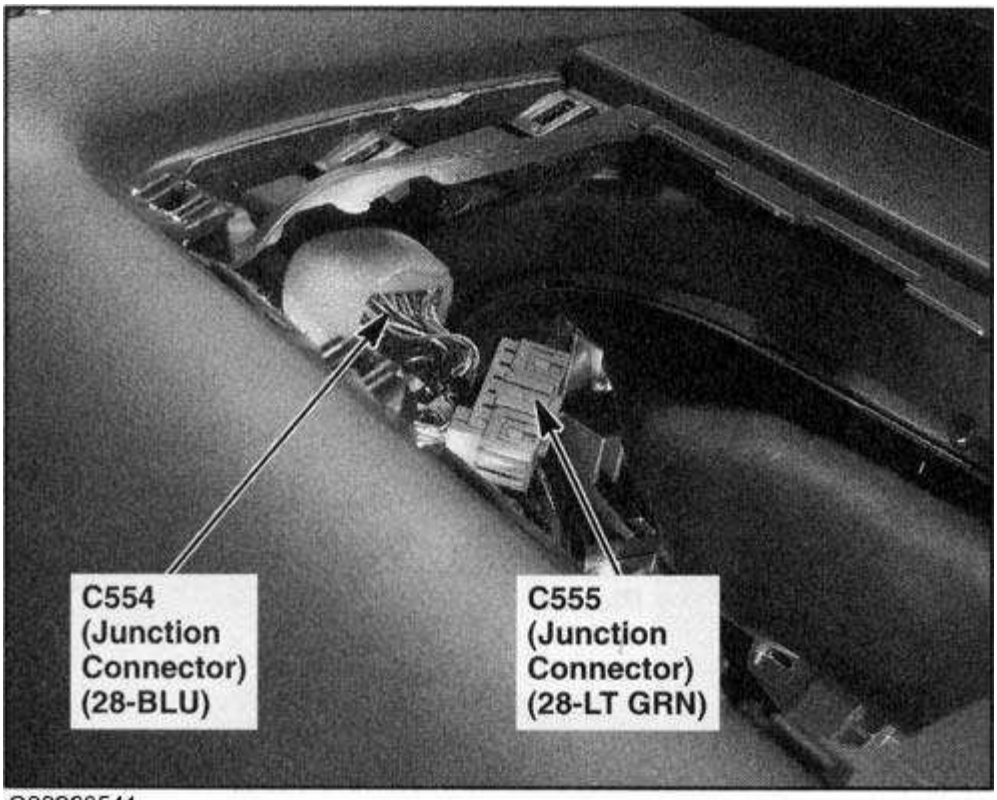


Fig. 37: Under Right Side Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

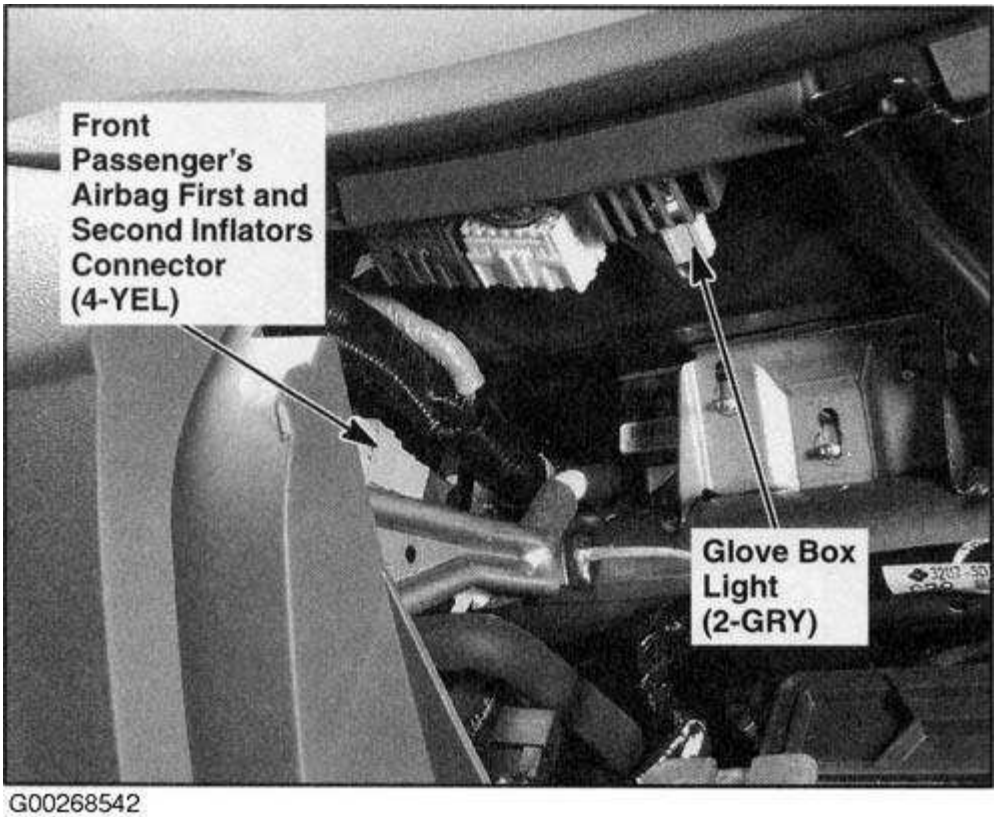
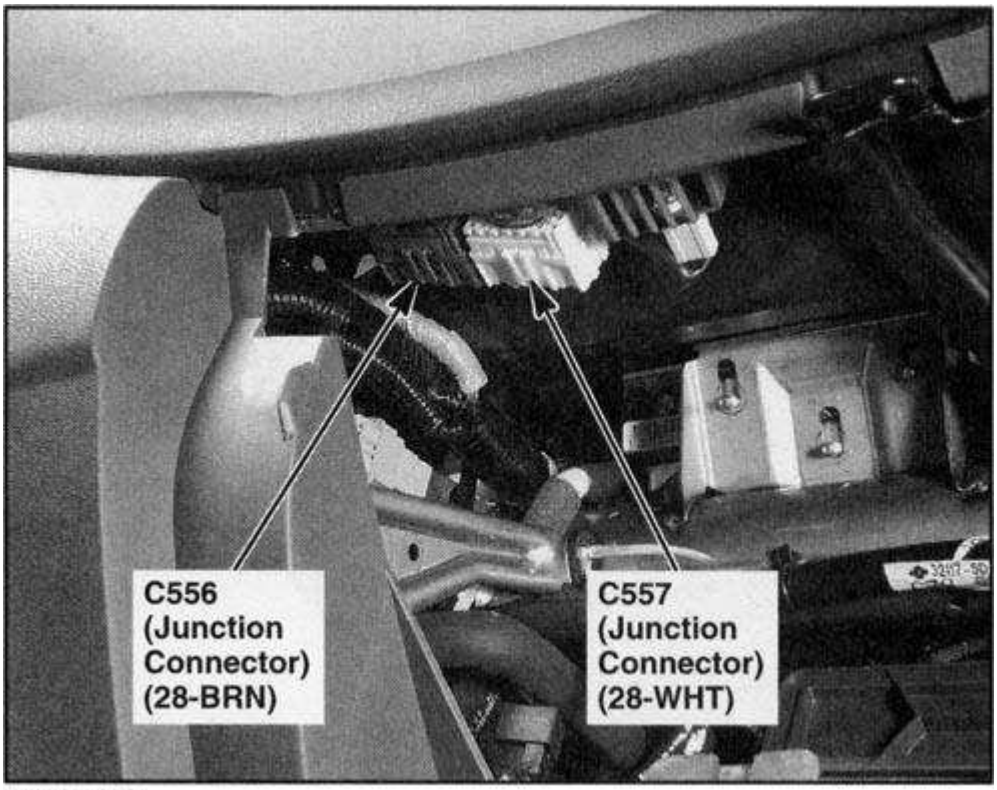
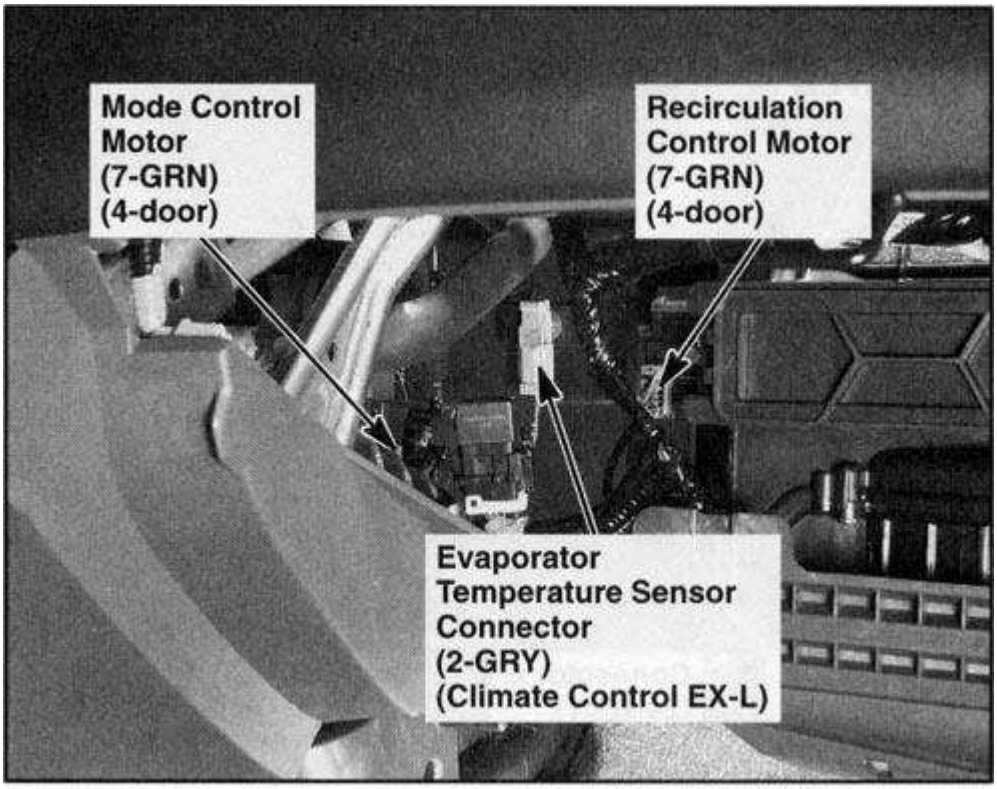


Fig. 38: Behind Glove Box
Courtesy of AMERICAN HONDA MOTOR CO., INC.



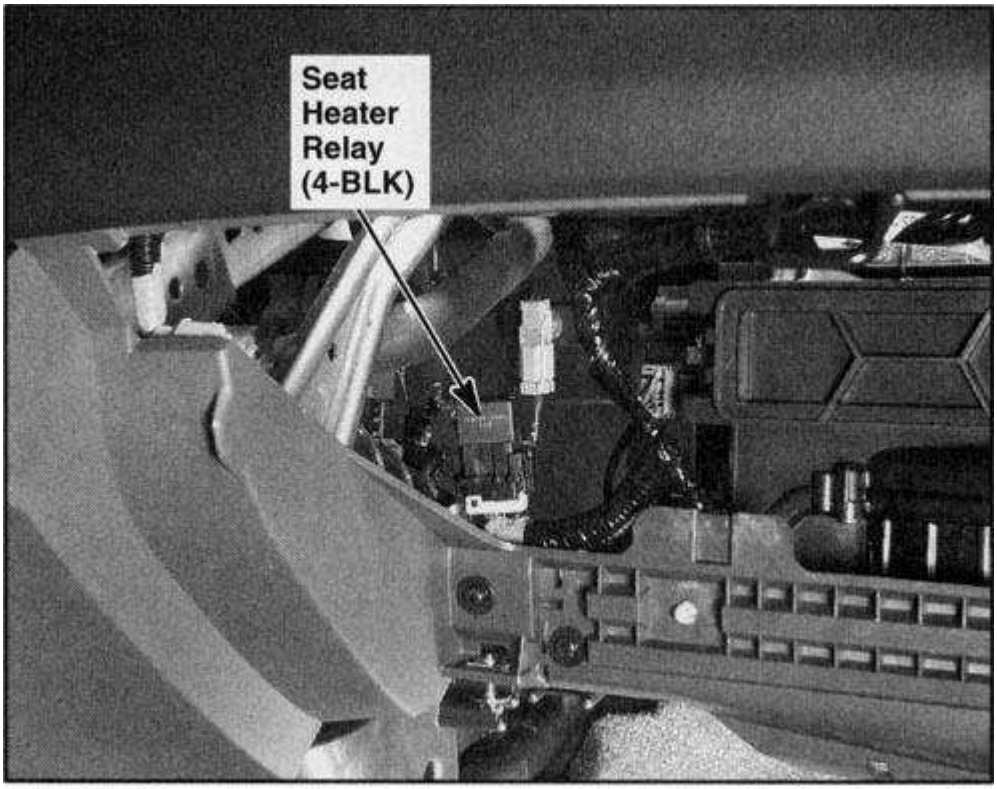
G00268543

Fig. 39: Behind Glove Box
Courtesy of AMERICAN HONDA MOTOR CO., INC.



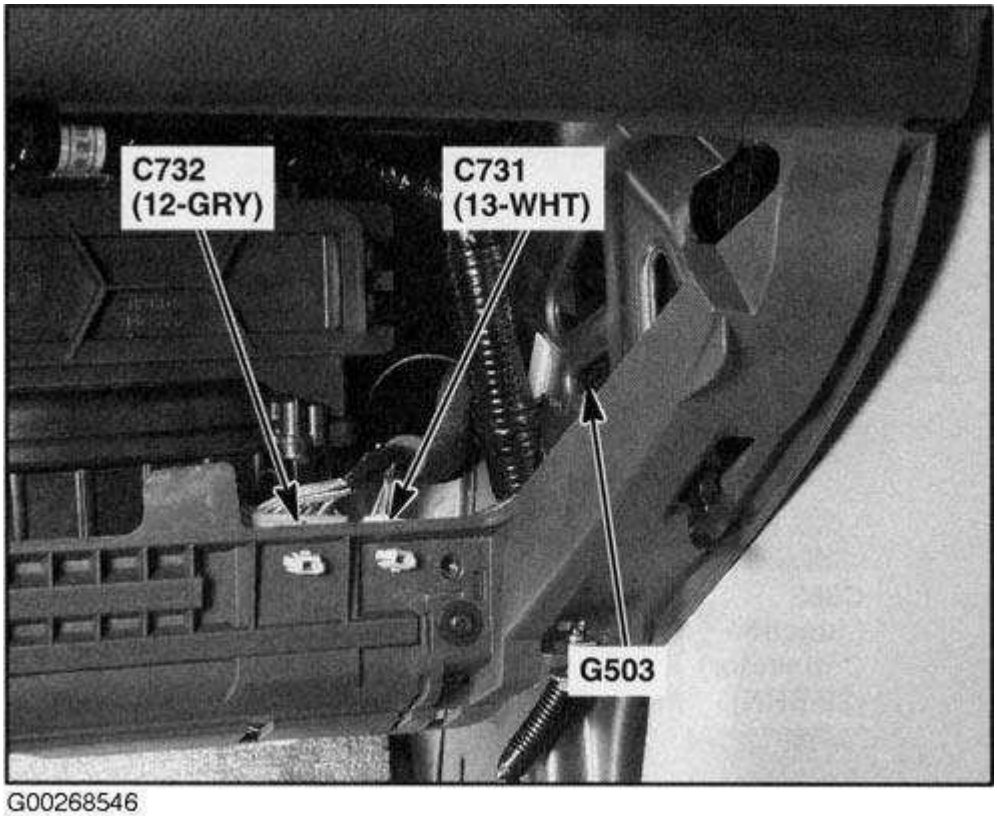
G00268544

Fig. 40: Behind Glove Box
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268545

Fig. 41: Behind Glove Box (2.4L EX-L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268546

Fig. 42: Behind Glove Box
Courtesy of AMERICAN HONDA MOTOR CO., INC.

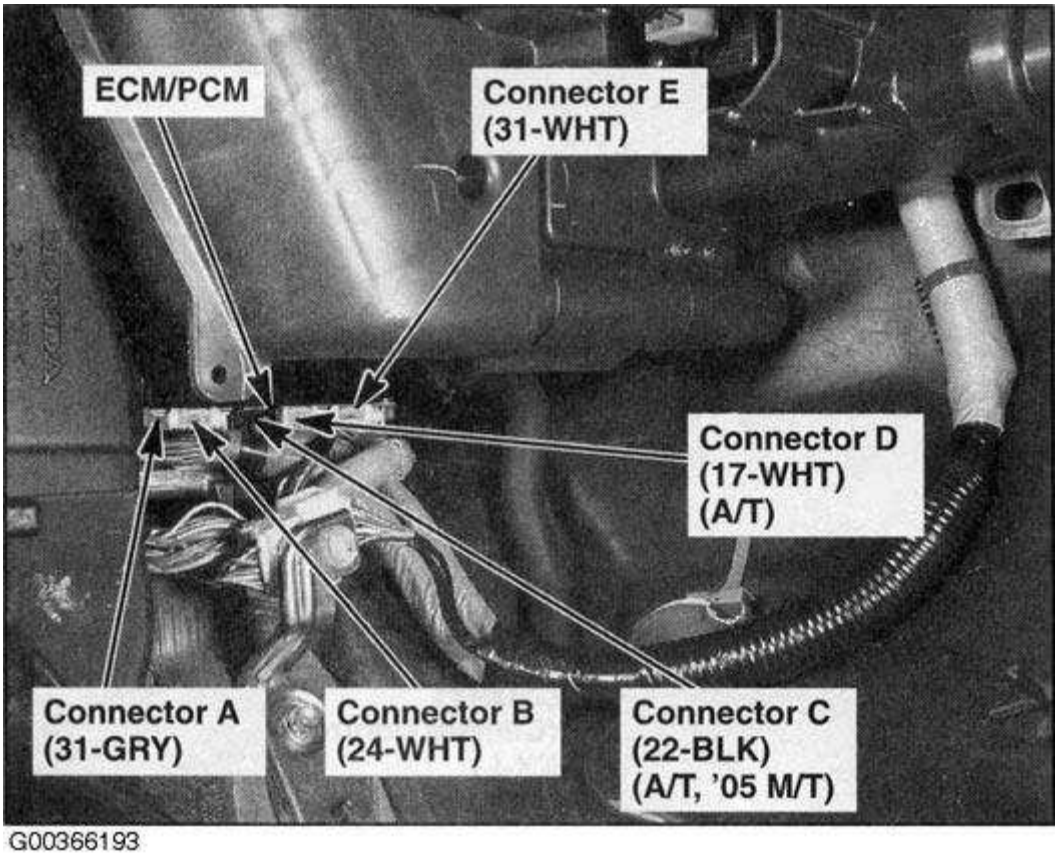
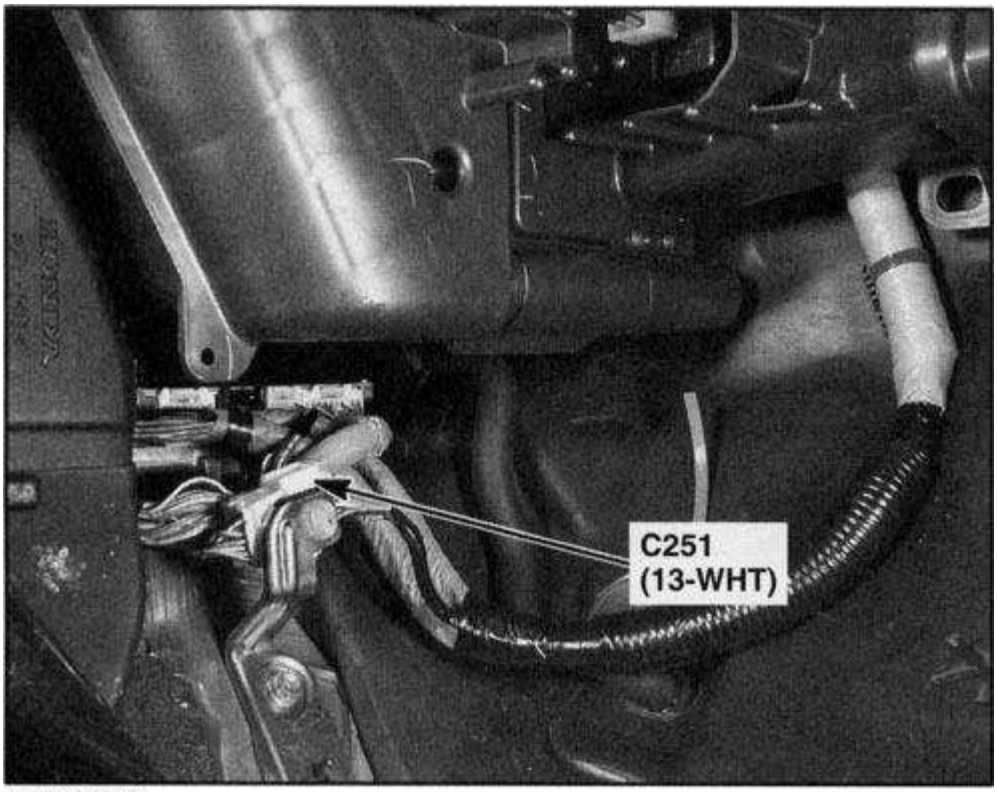
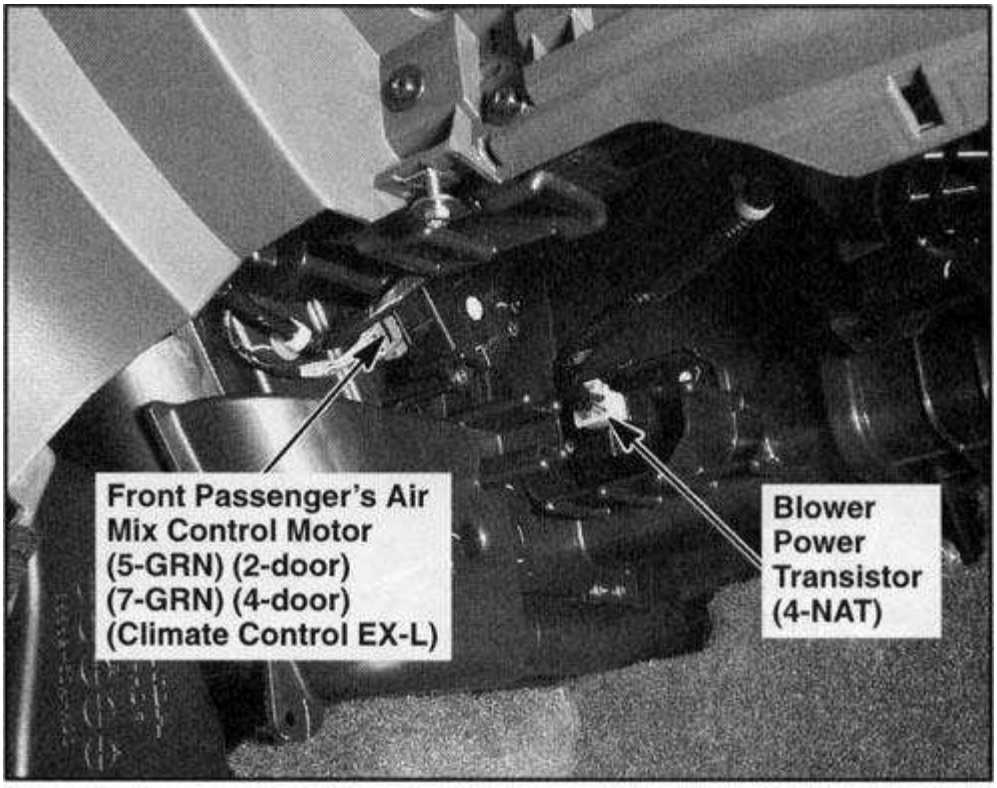


Fig. 43: Under Middle Of Dash (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



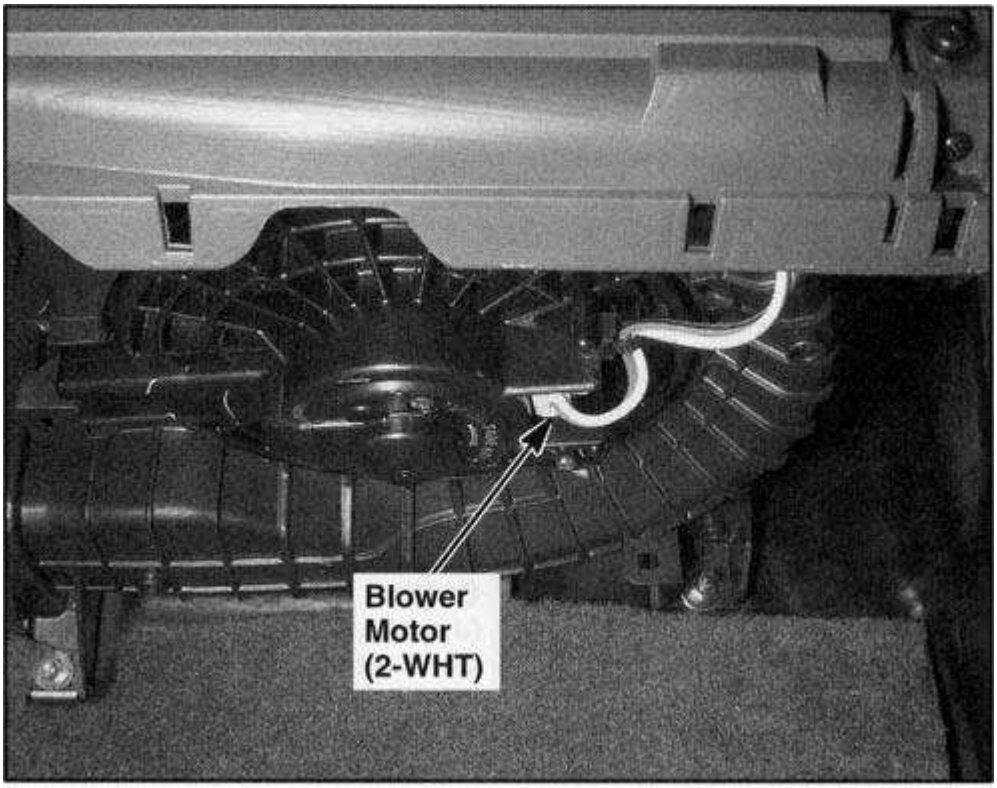
G00268548

Fig. 44: Under Middle Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.



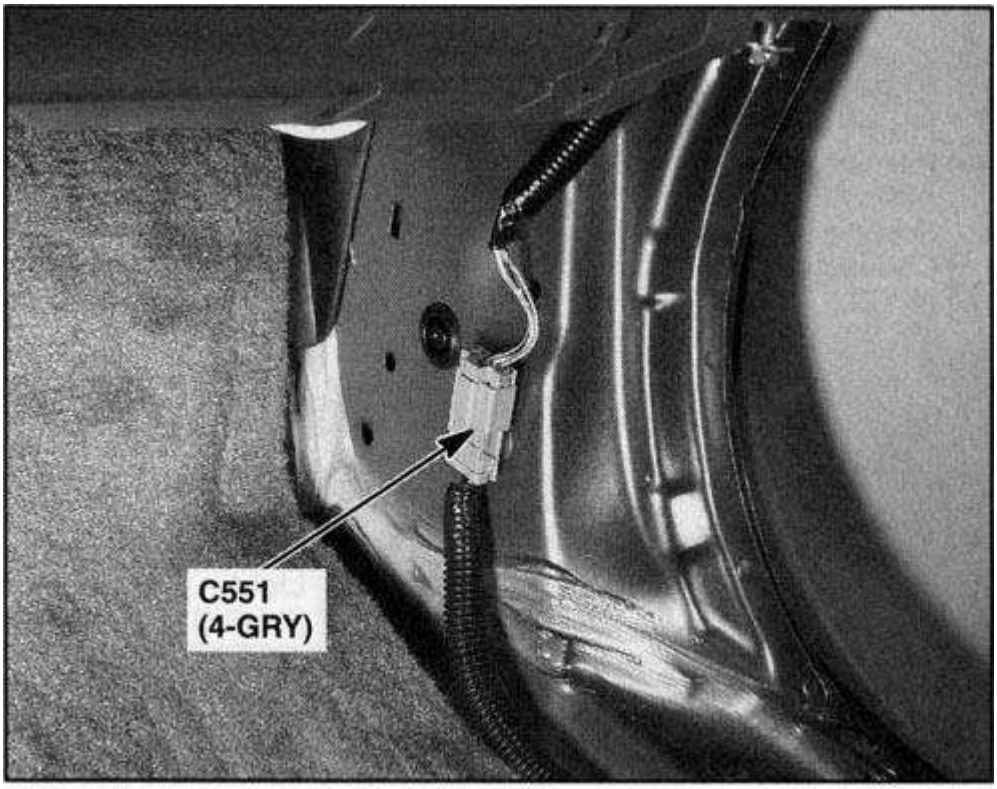
G00268549

Fig. 45: Under Right Side Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.



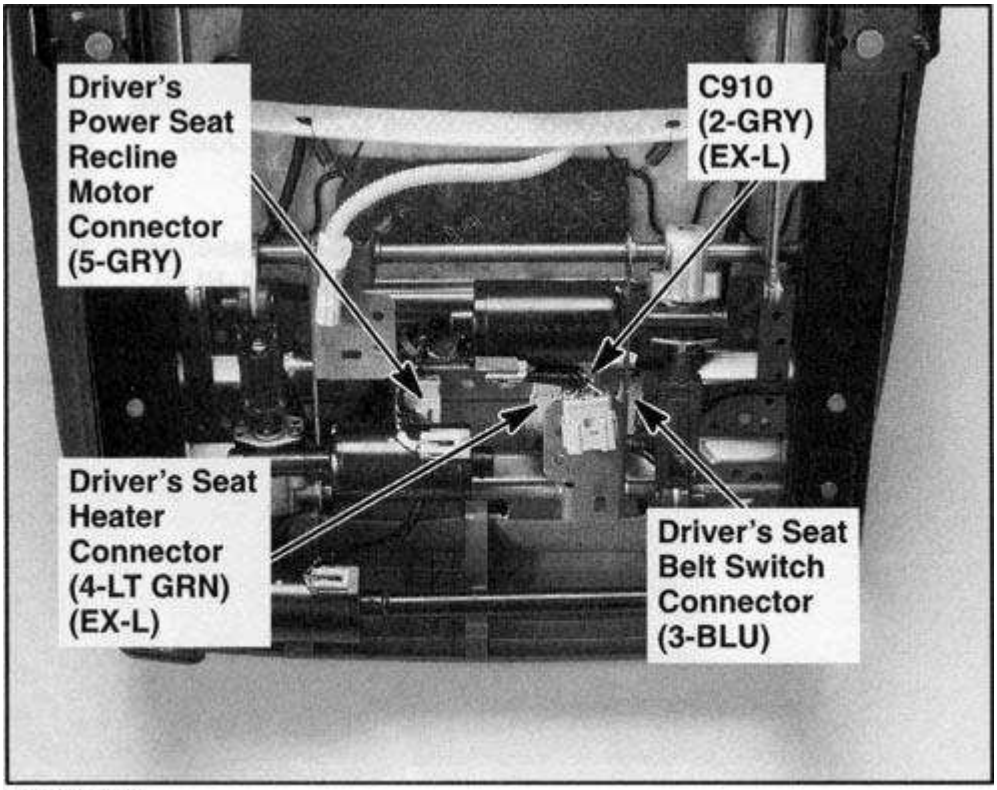
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Fig. 46: Under Right Side Of Dash (EX-L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



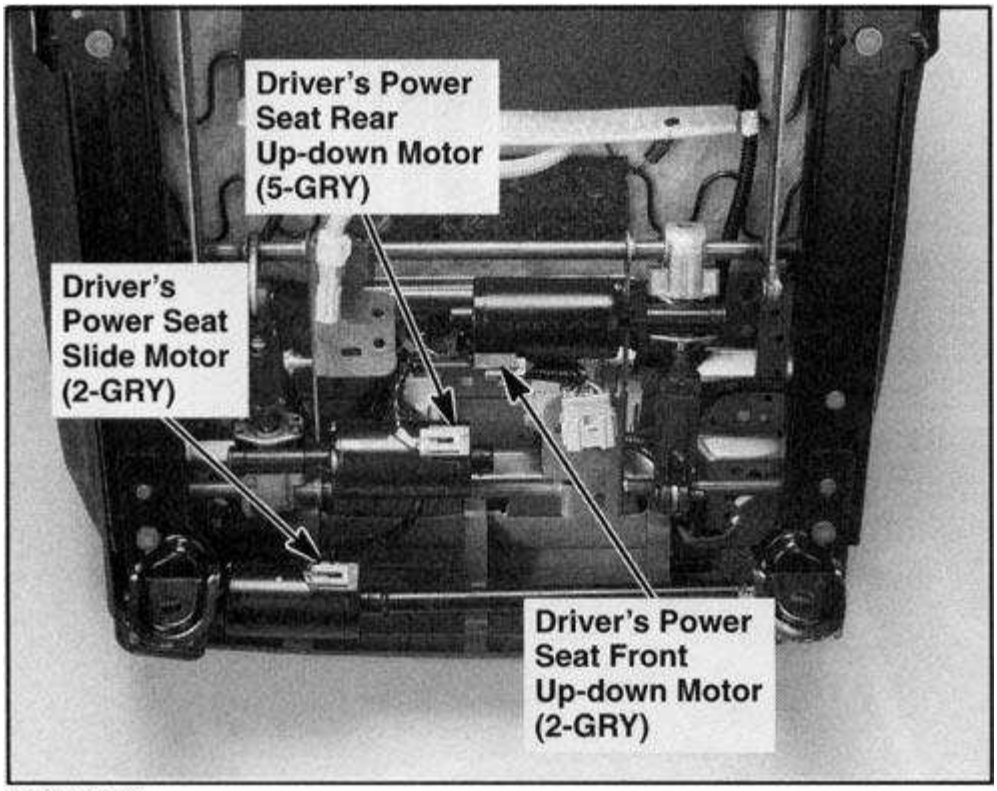
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Fig. 47: Behind Right Kick Panel (DX-G, LX, SE, EX & VP)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



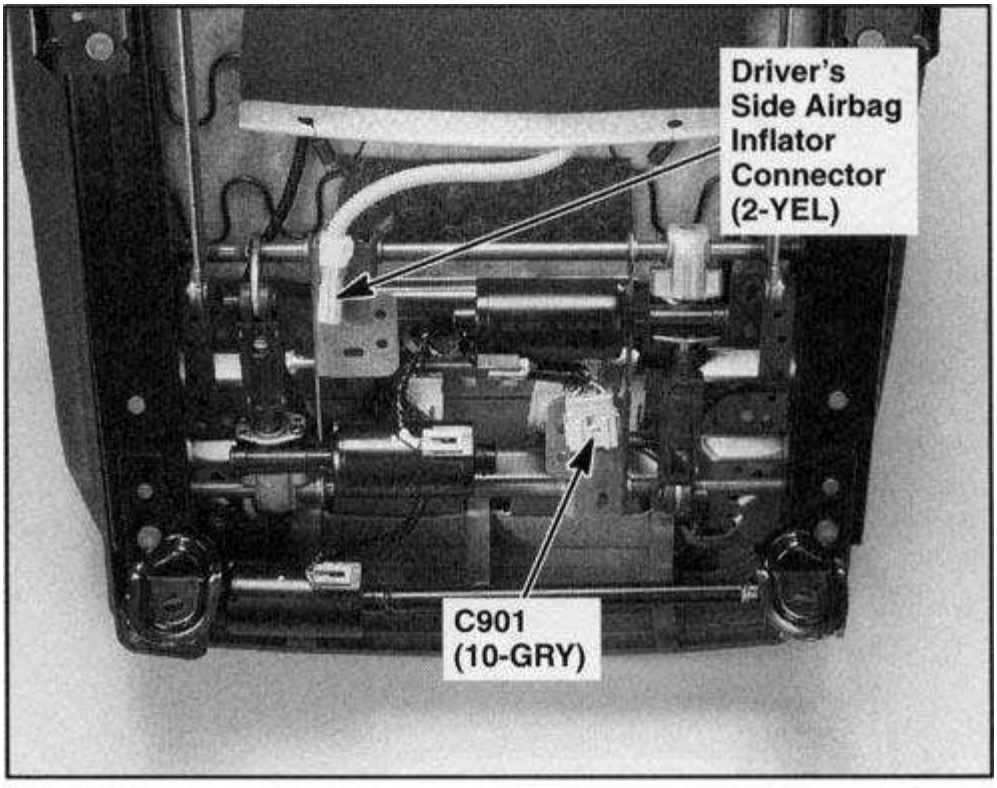
G00268552

Fig. 48: Under Driver's Seat (EX-L & 3.0L SE, LX)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



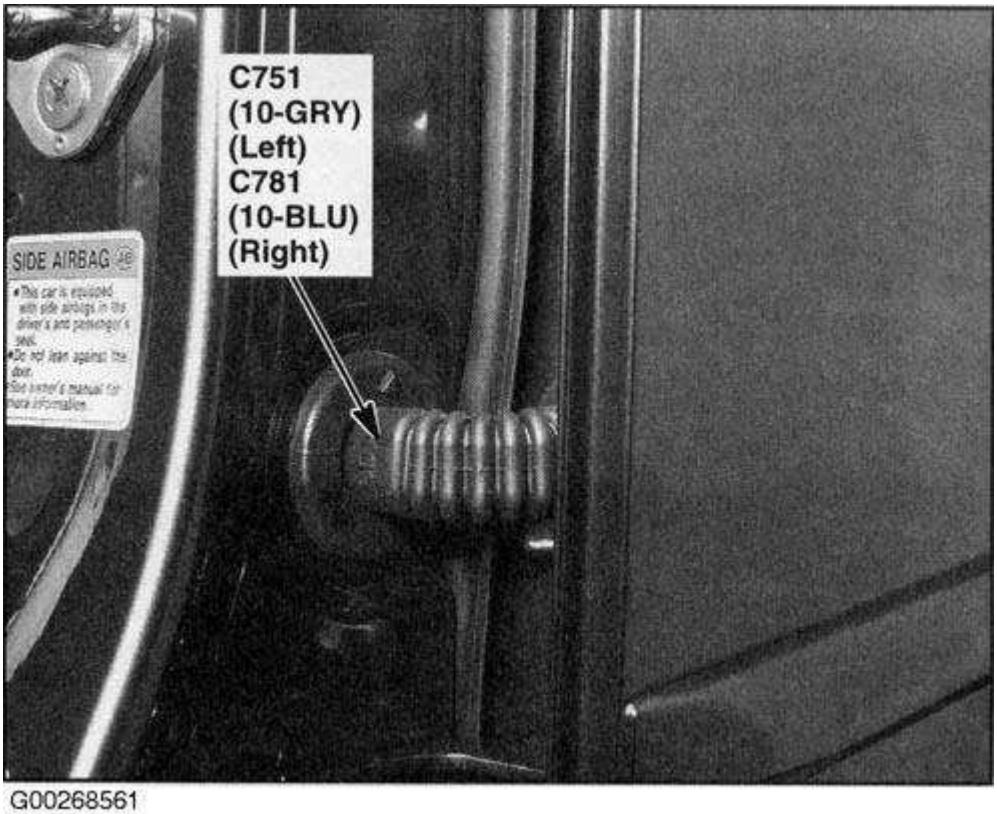
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Fig. 49: Under Driver's Seat (EX-L & 3.0L SE, LX)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



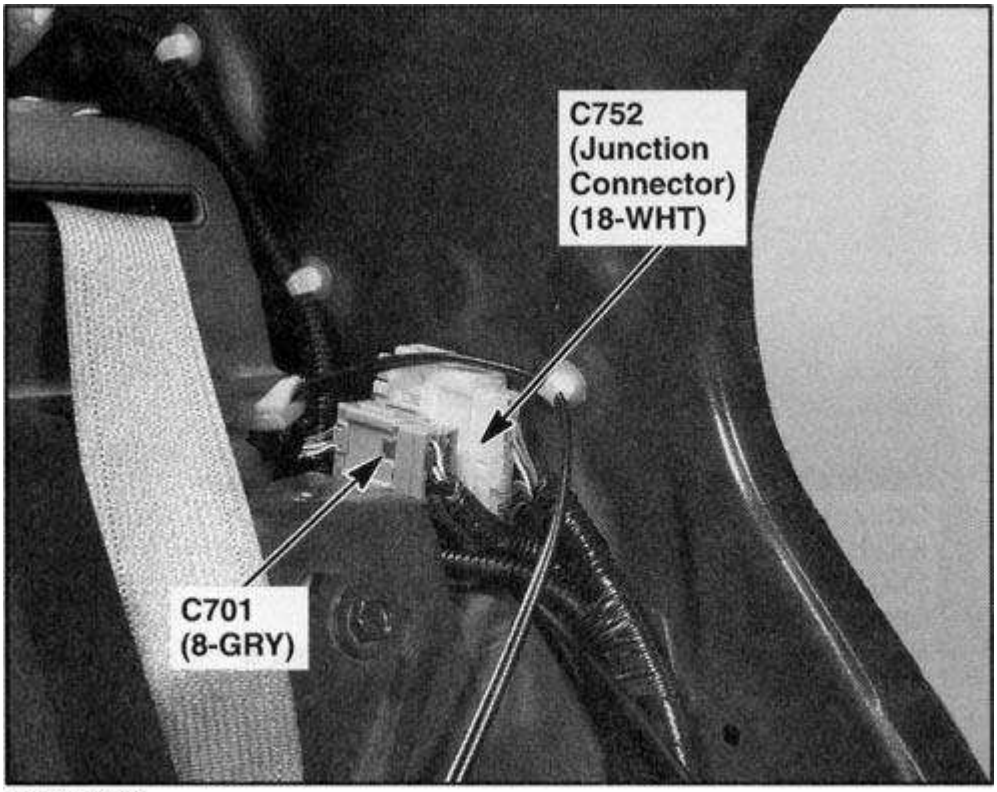
G00268554

Fig. 50: Under Driver's Seat (EX-L & 3.0L SE, LX)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268561

Fig. 51: Left & Right "B" Pillar
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268562

Fig. 52: Left "C" Pillar (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

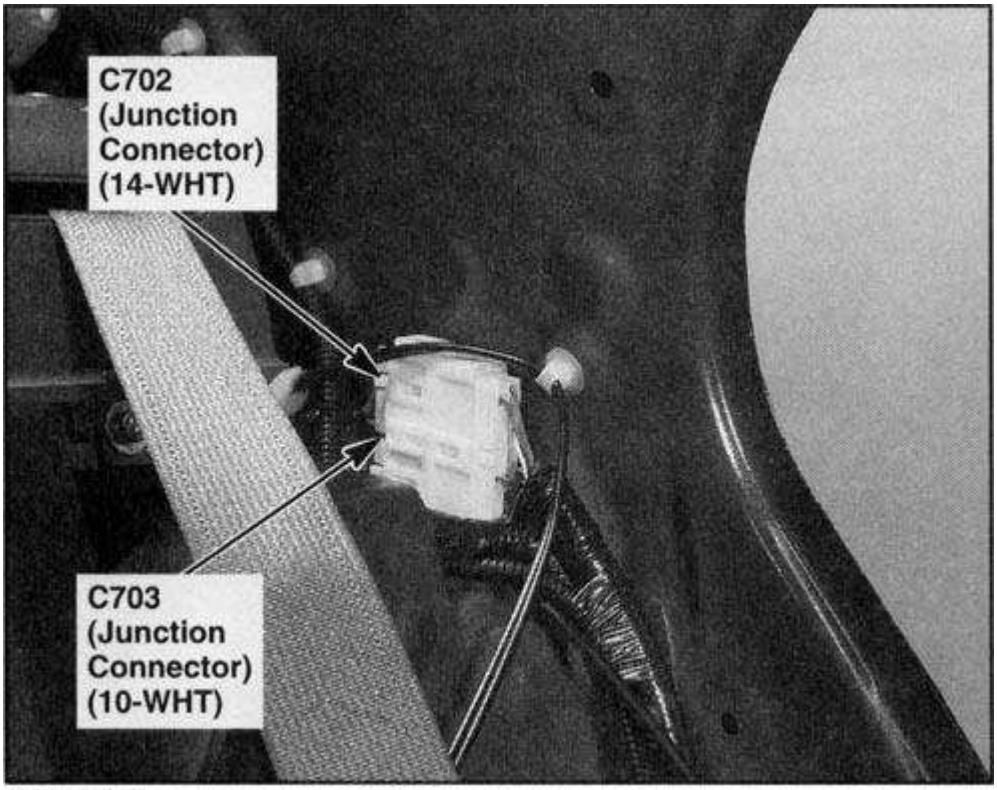


Fig. 53: Left "C" Pillar (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

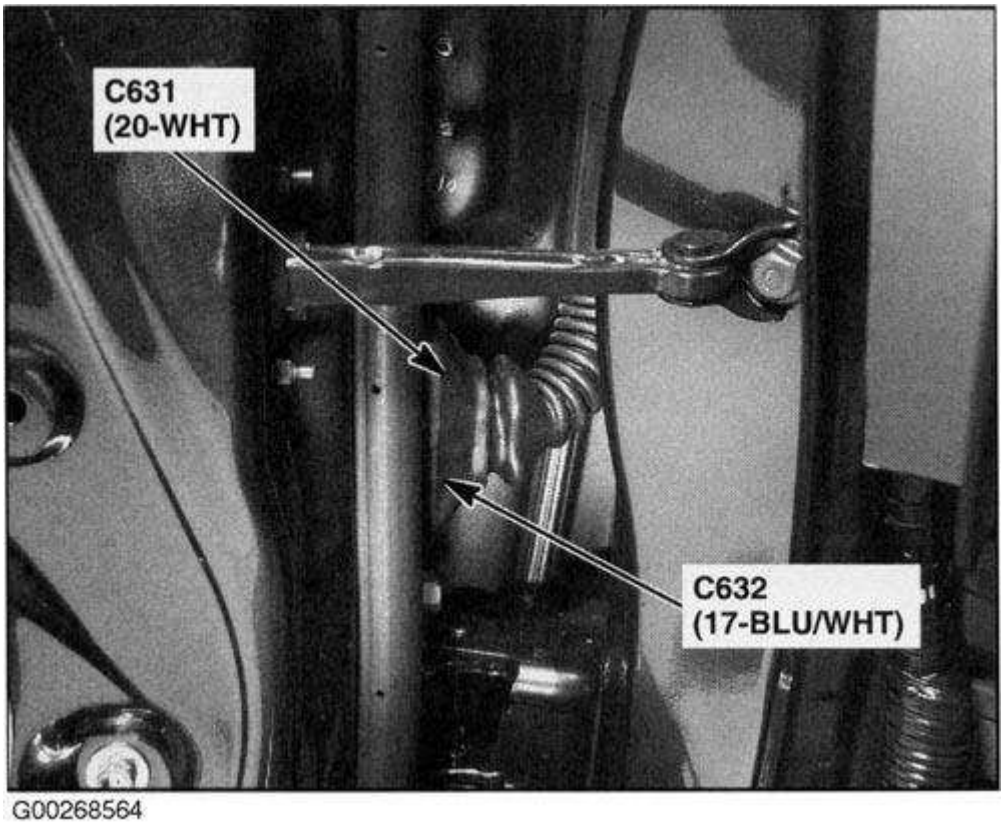
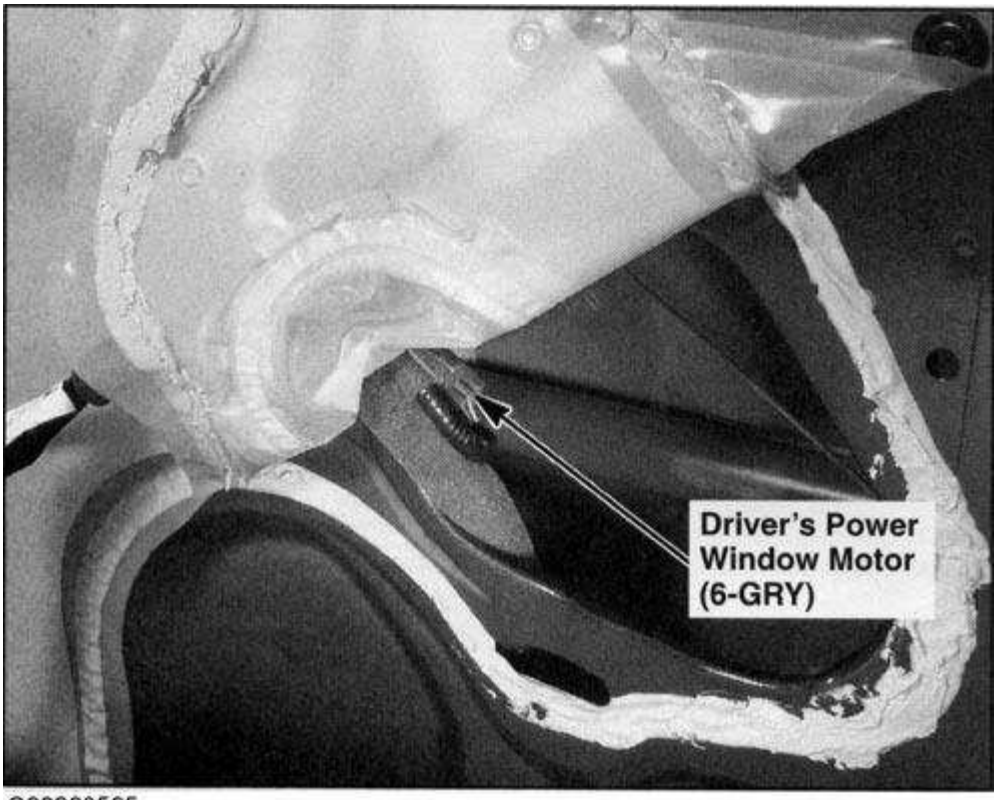
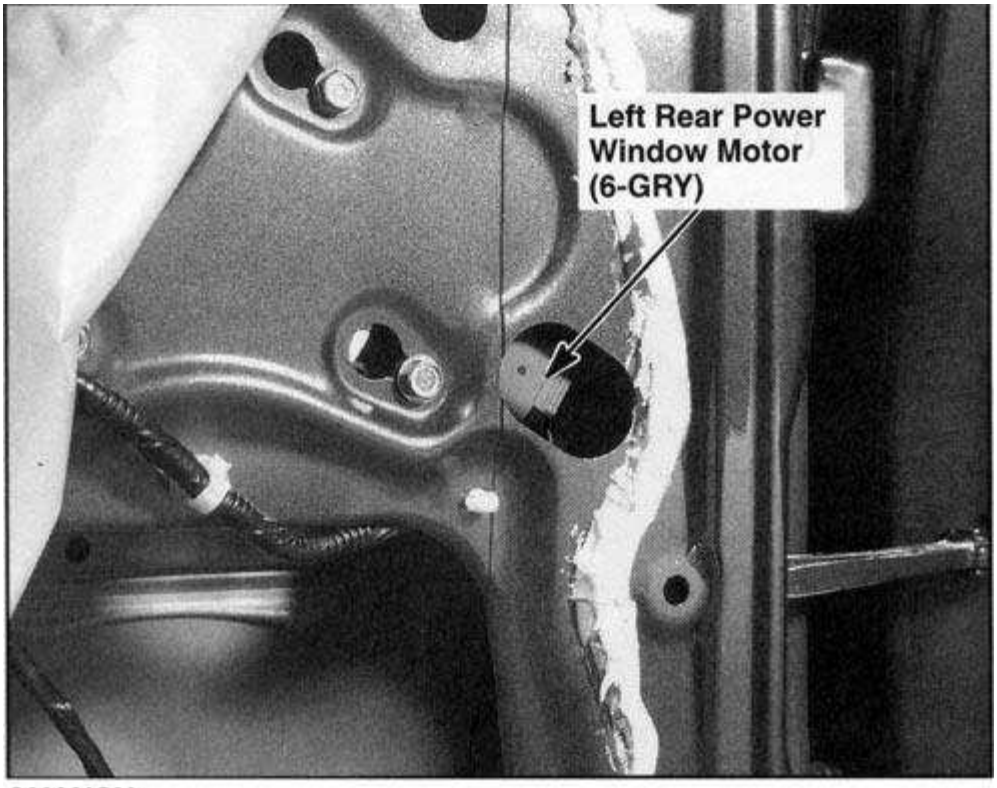


Fig. 54: Front Of Driver's Door
Courtesy of AMERICAN HONDA MOTOR CO., INC.



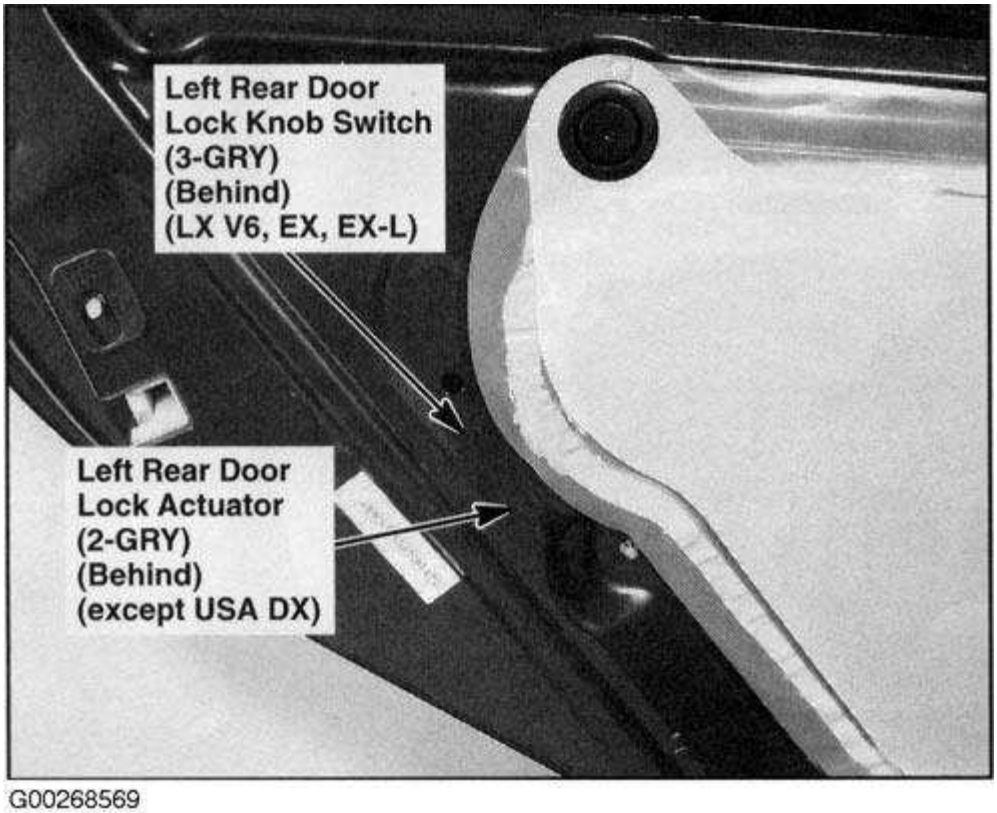
G00268565

Fig. 55: Driver's & Front Passenger's Door
Courtesy of AMERICAN HONDA MOTOR CO., INC.



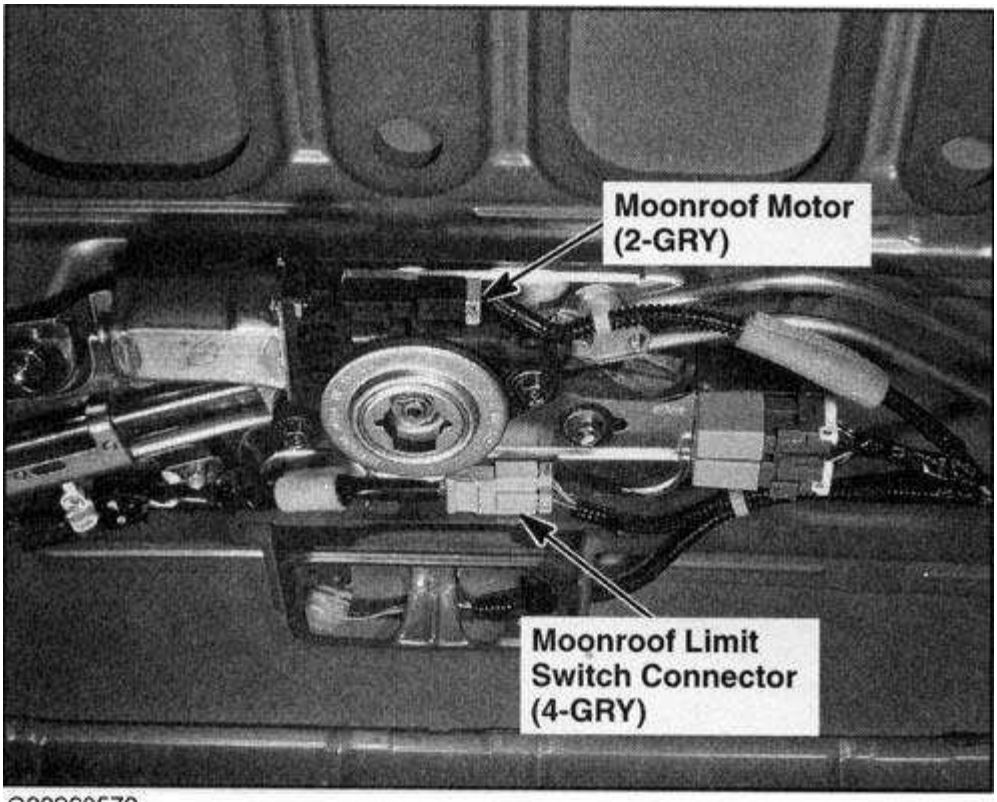
G00268568

Fig. 56: Left & Right Rear Door
Courtesy of AMERICAN HONDA MOTOR CO., INC.



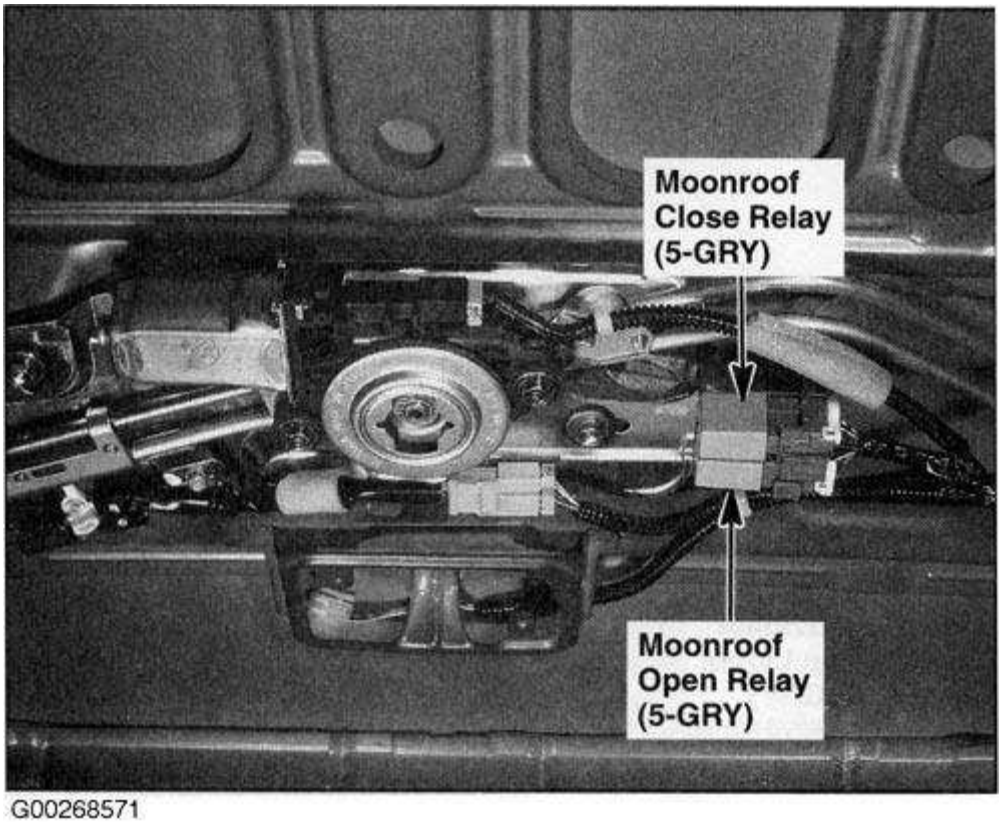
G00268569

Fig. 57: Left & Right Rear Doors
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268570

Fig. 58: Rear Of Roof (EX & EX-L) (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268571

Fig. 59: Rear Of Roof (EX & EX-L) (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

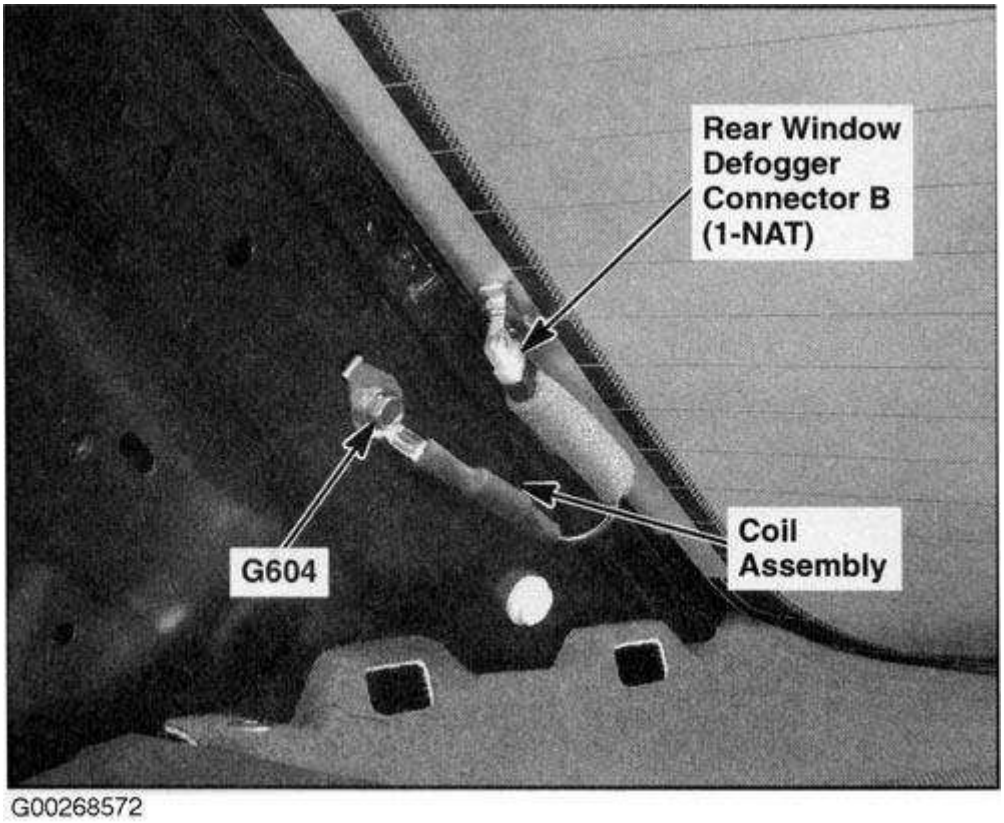


Fig. 60: Right "C" Pillar (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

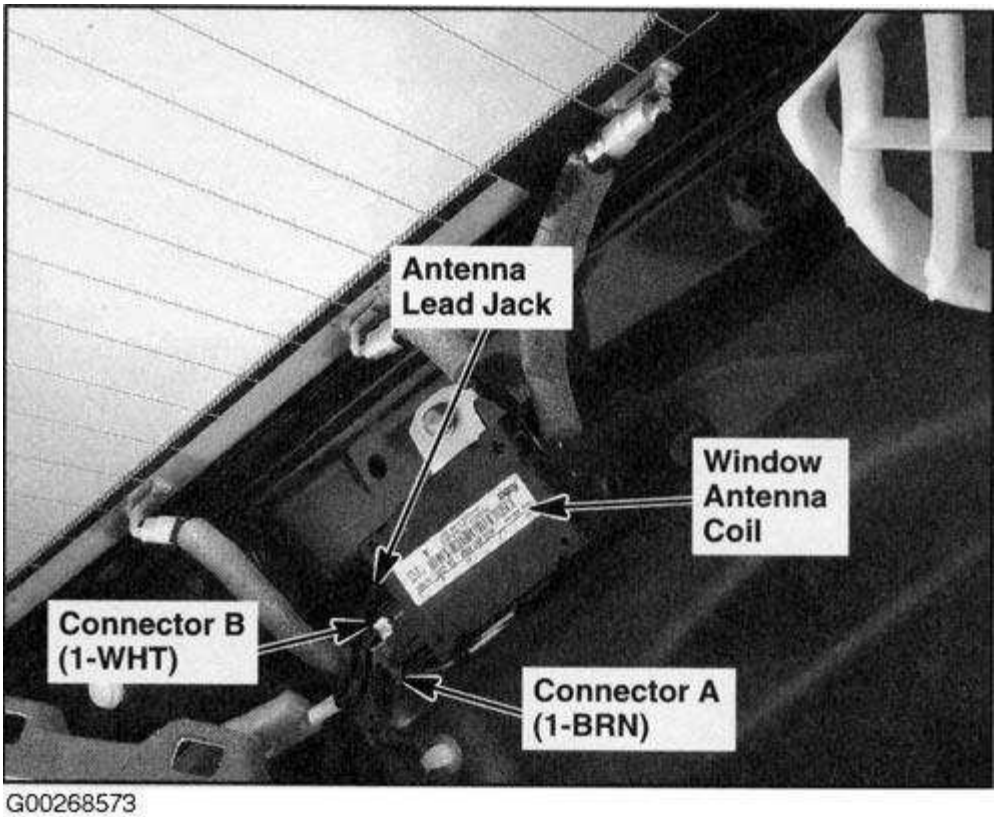
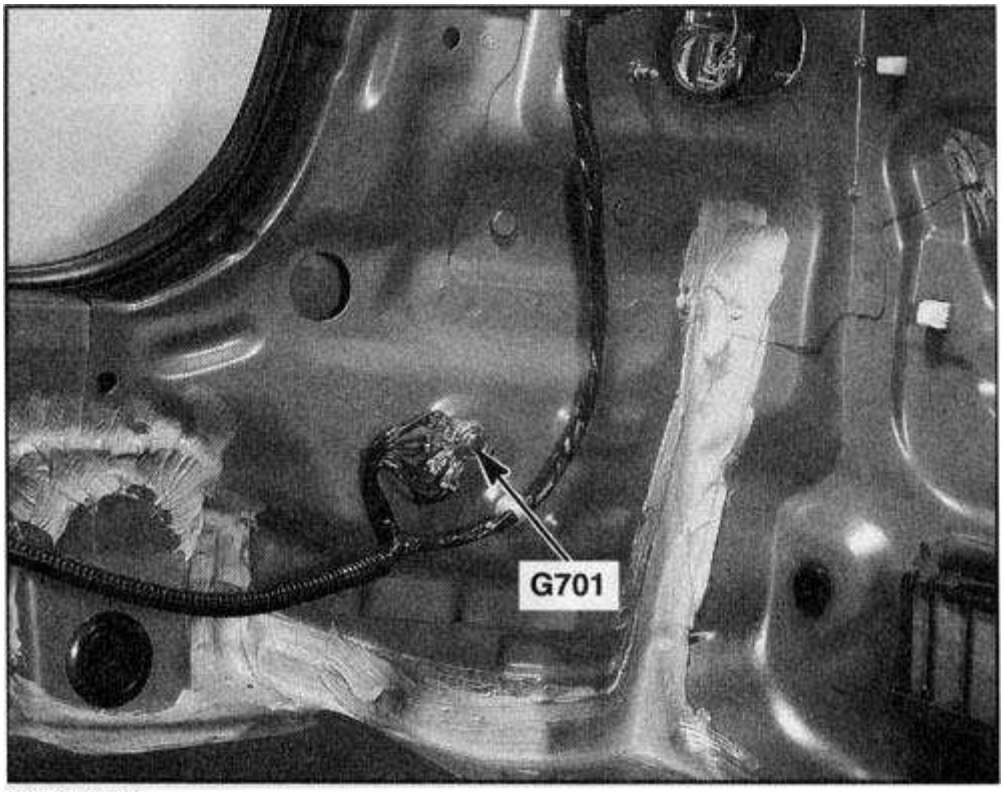
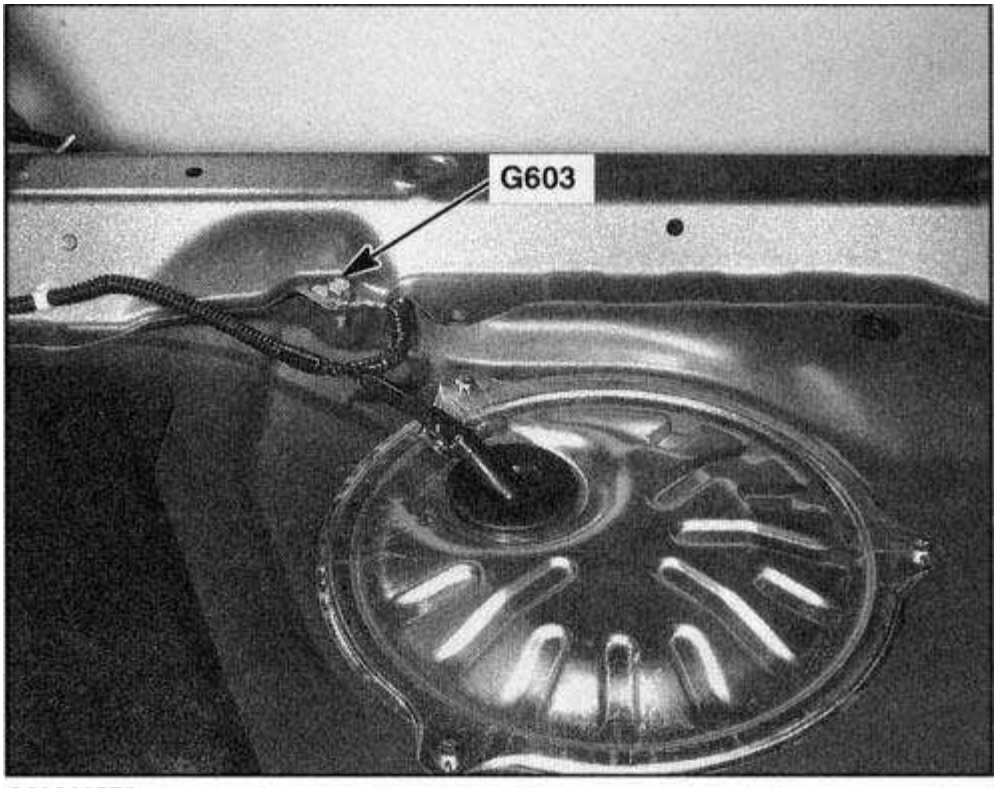


Fig. 61: Left "C" Pillar (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



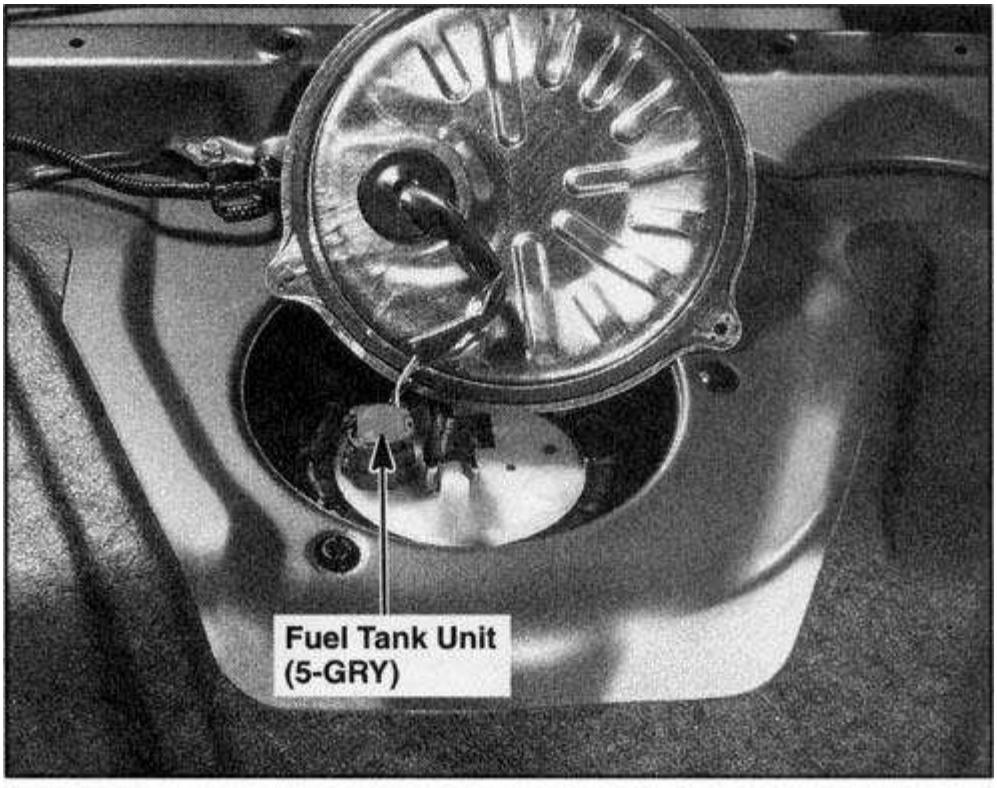
G00268574

Fig. 62: Left Side Of Trunk (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



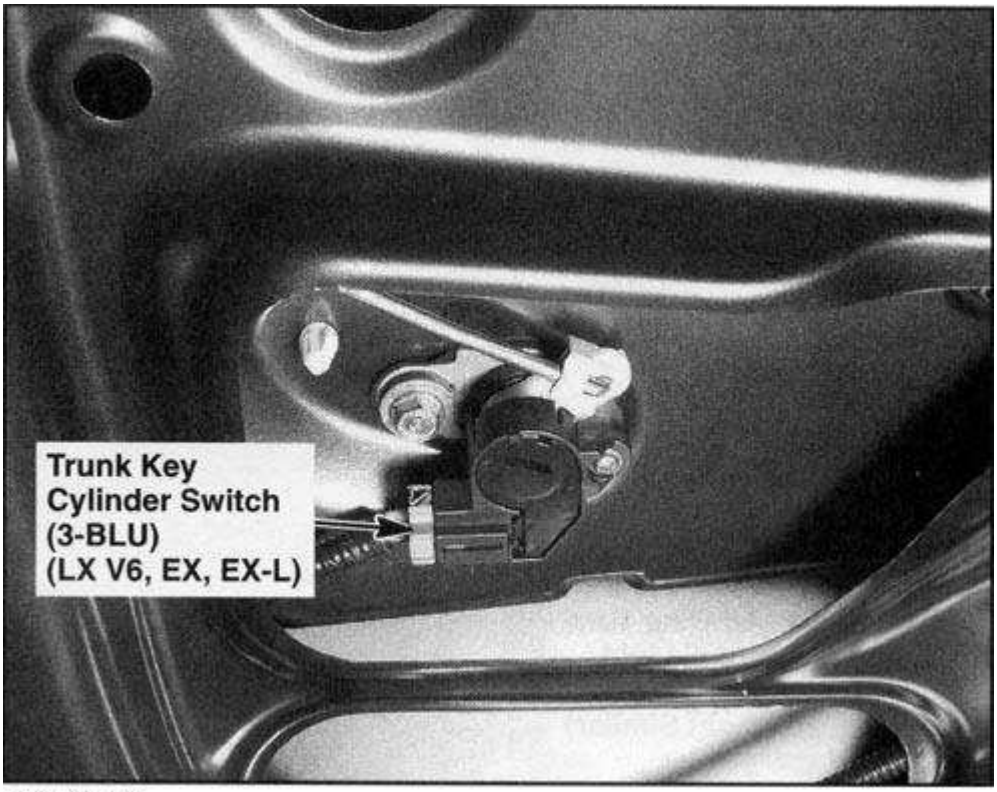
G00268576

Fig. 63: Left Front Of Trunk
Courtesy of AMERICAN HONDA MOTOR CO., INC.



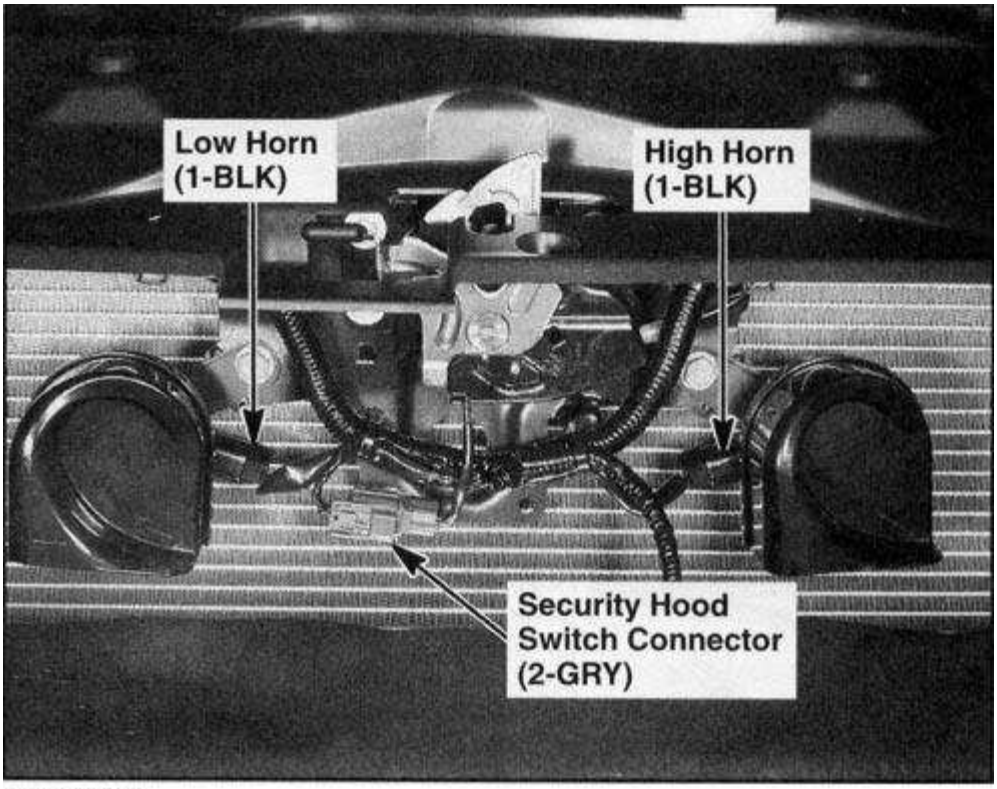
G00268577

Fig. 64: Left Front Of Trunk
Courtesy of AMERICAN HONDA MOTOR CO., INC.



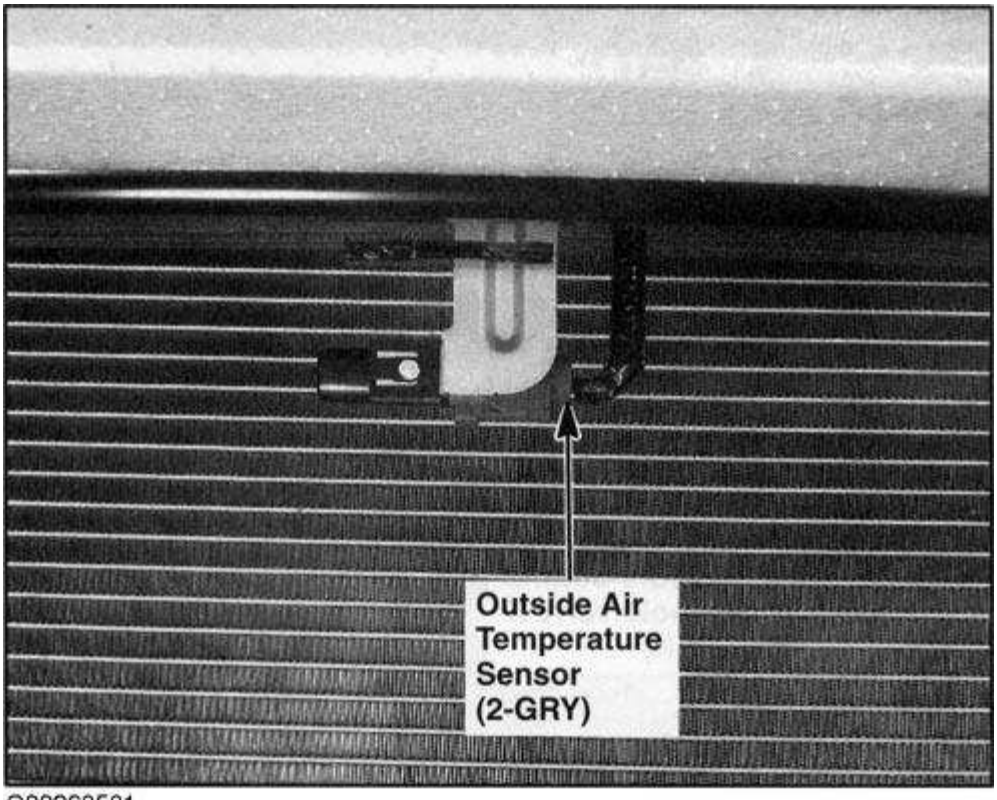
G00268579

Fig. 65: Right Side Of Trunk Lid (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



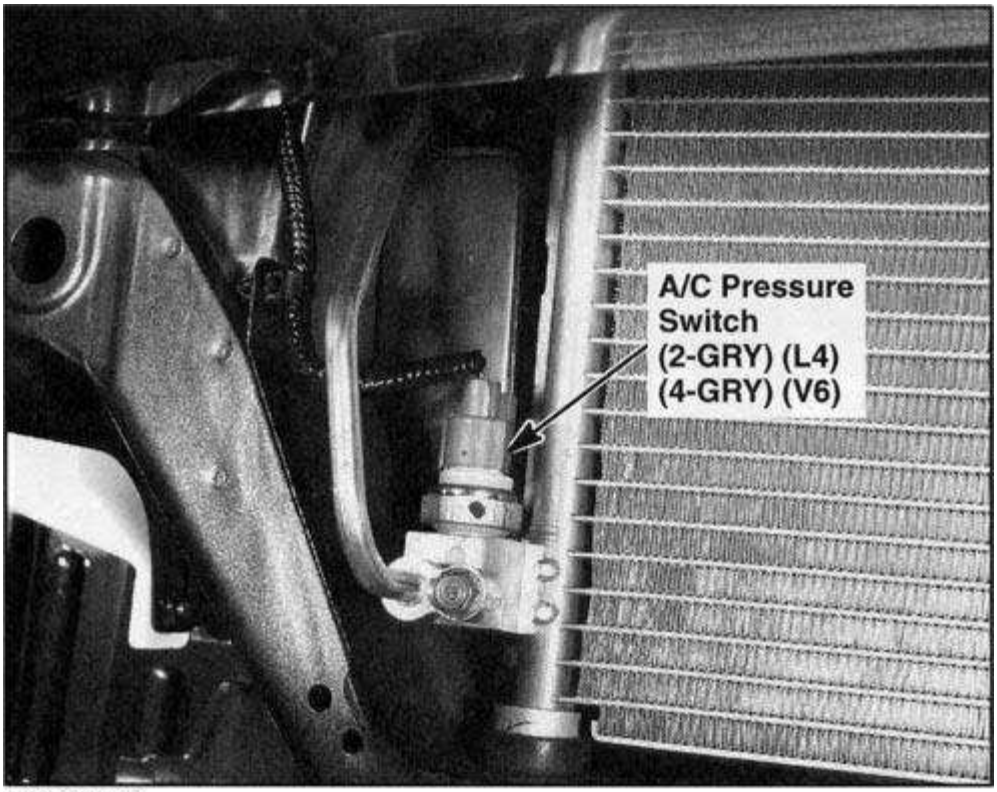
G00268580

Fig. 66: Behind Middle Of Front Bumper
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268581

Fig. 67: Behind Middle Of Front Bumper
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268582

Fig. 68: Behind Right Side Of Front Bumper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

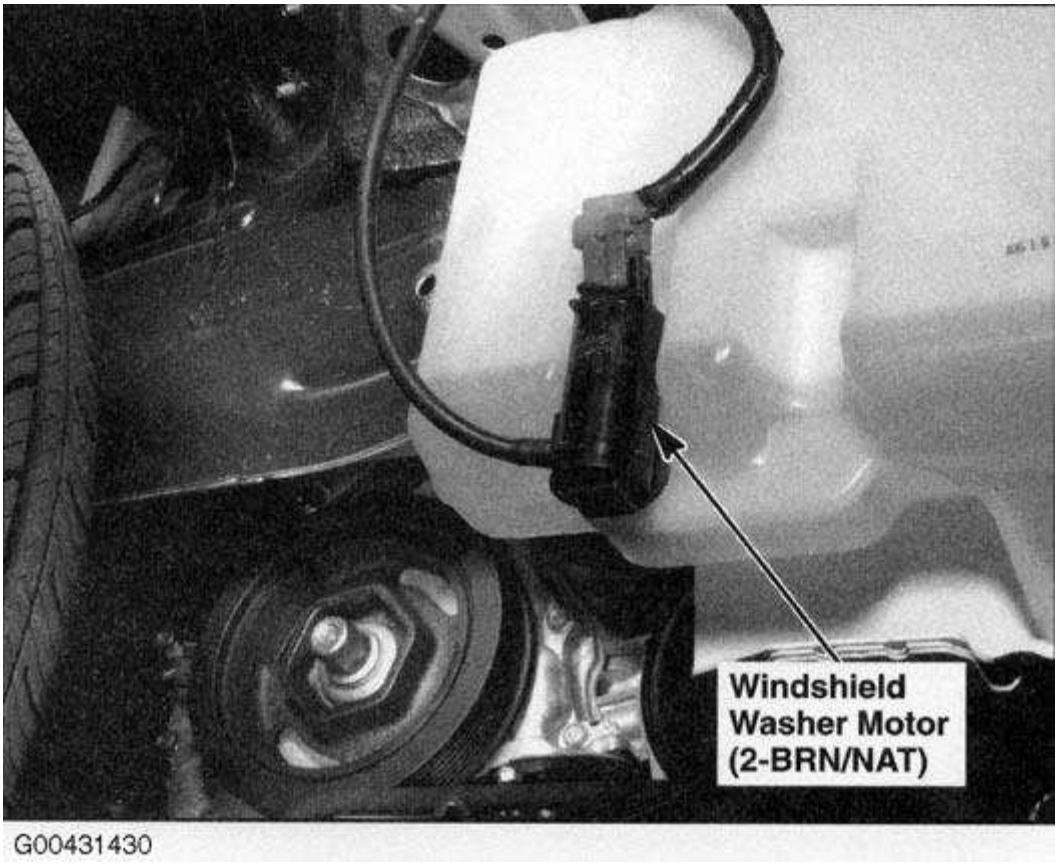
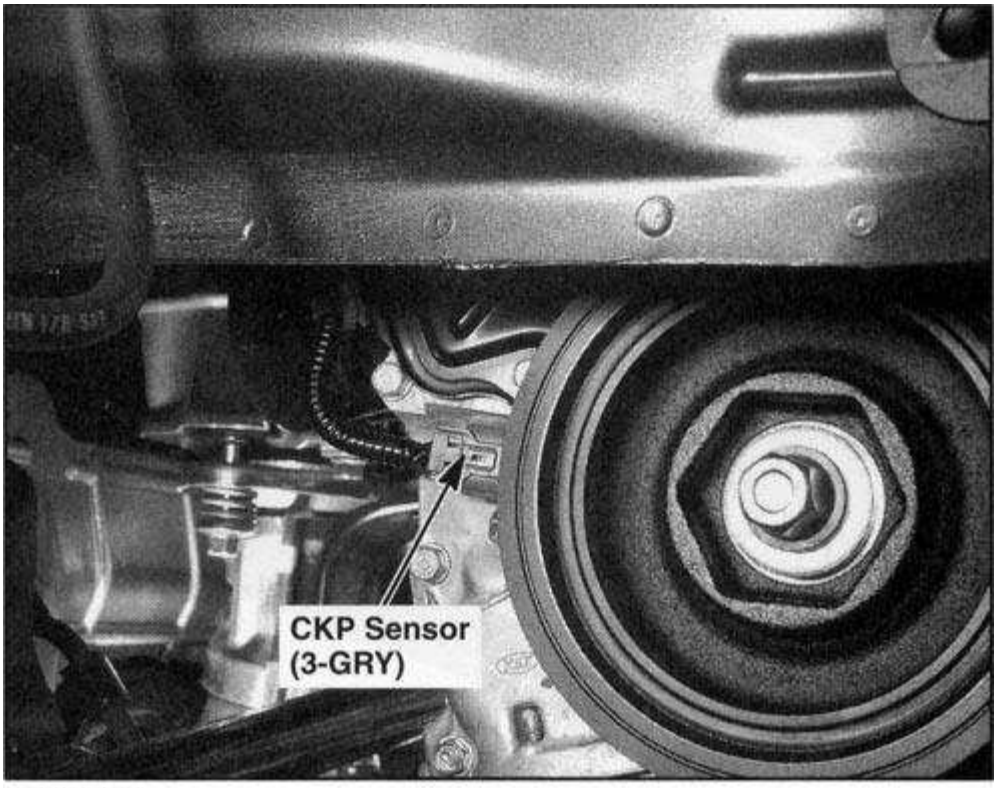
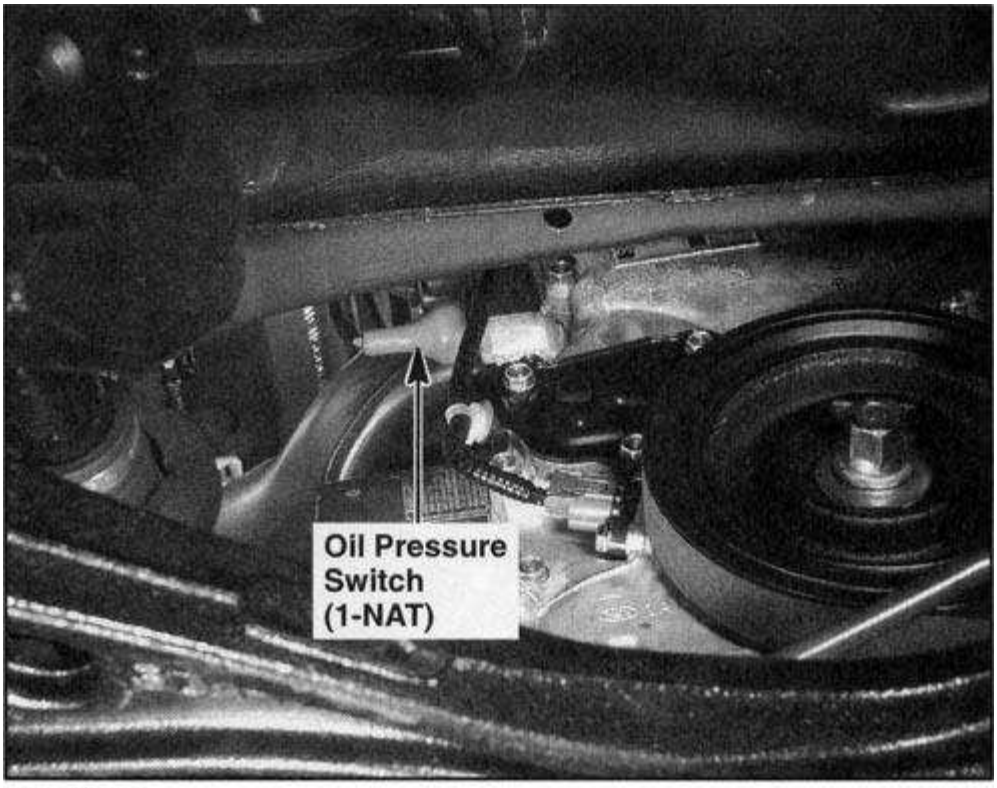


Fig. 69: Behind Right Side Of Front Bumper
Courtesy of AMERICAN HONDA MOTOR CO., INC.



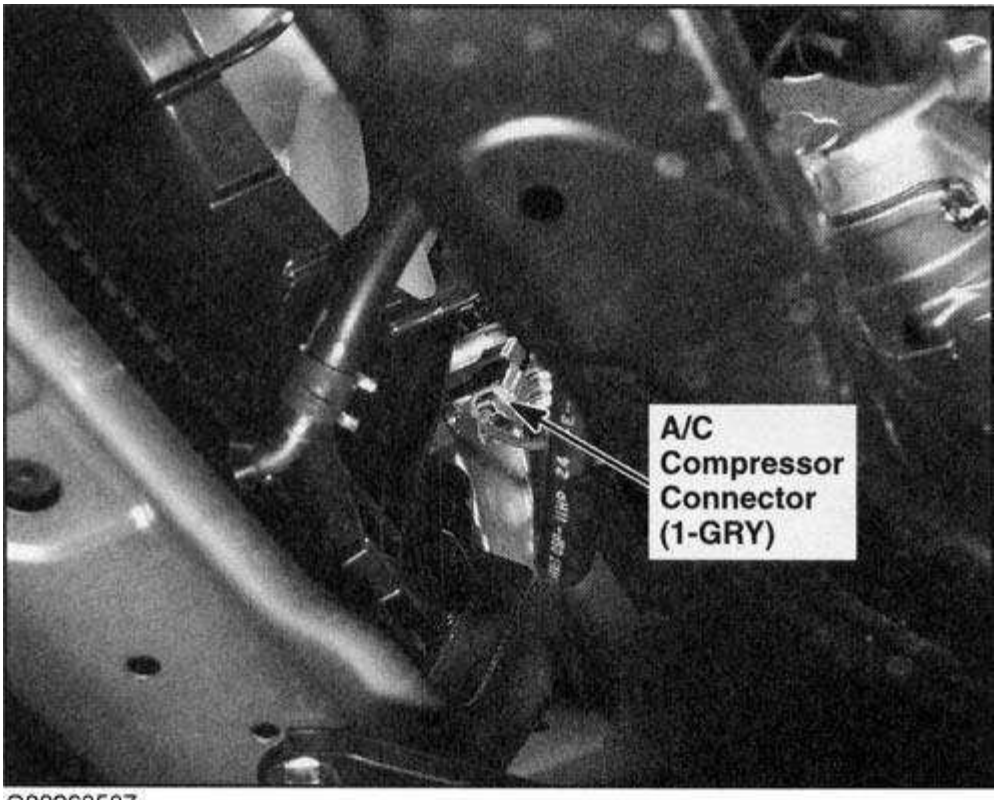
G00268585

Fig. 70: Right Front Side Of Engine (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268586

Fig. 71: Right Front Side Of Engine (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268587

Fig. 72: Right Side Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

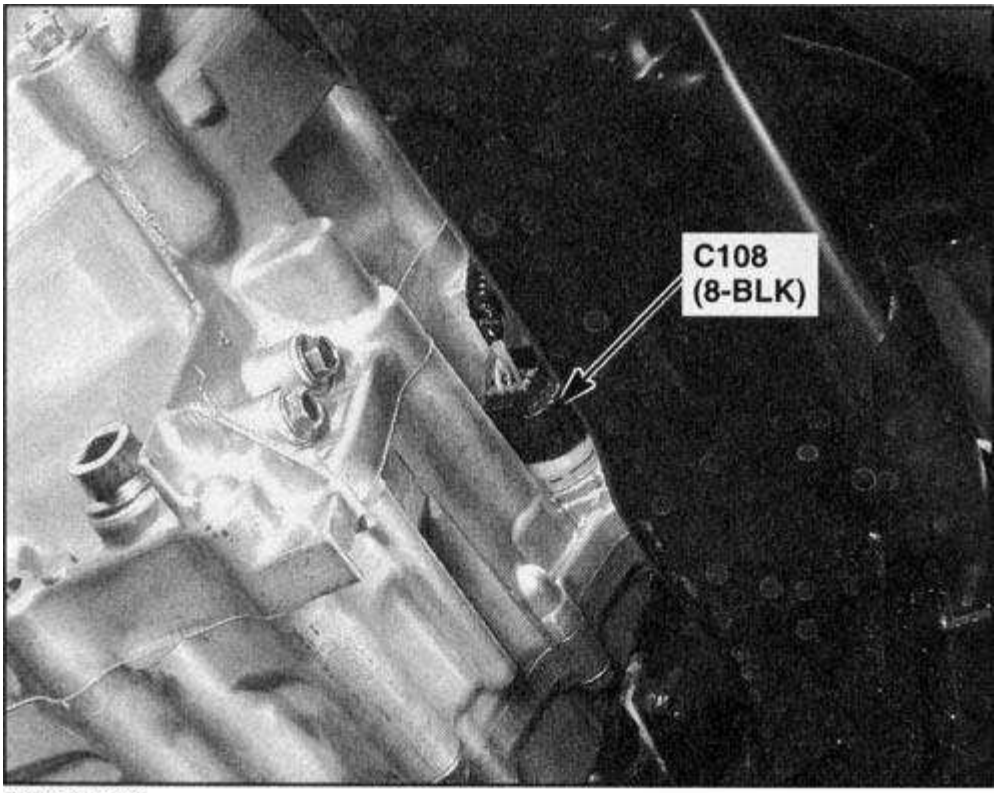
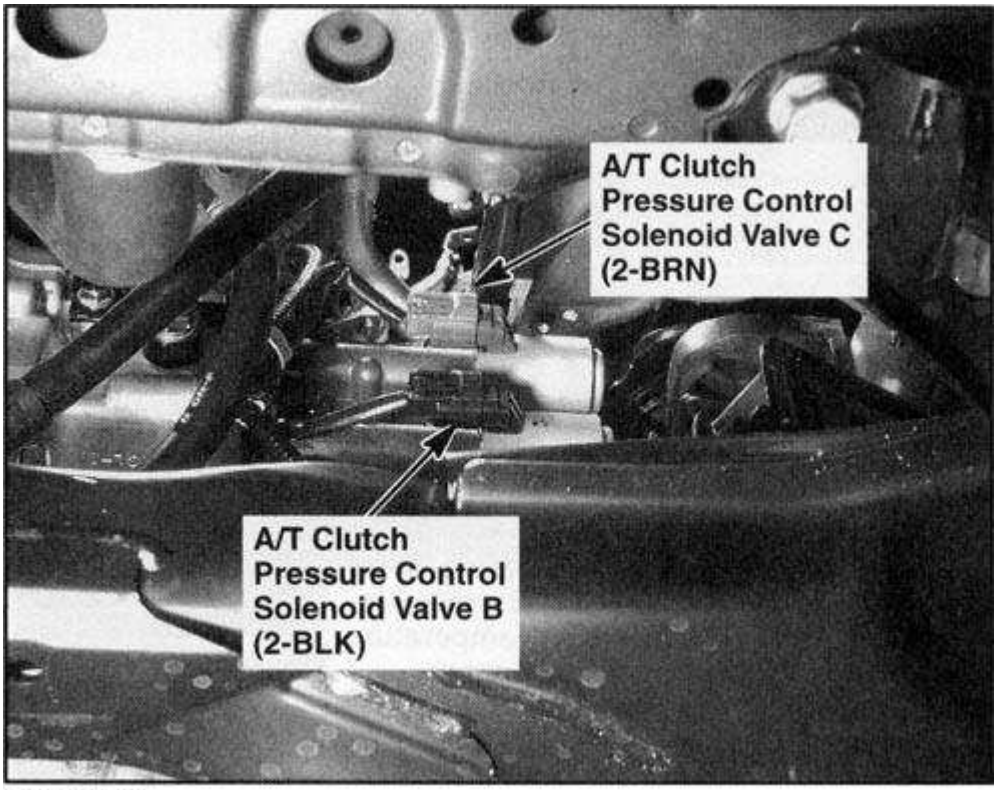
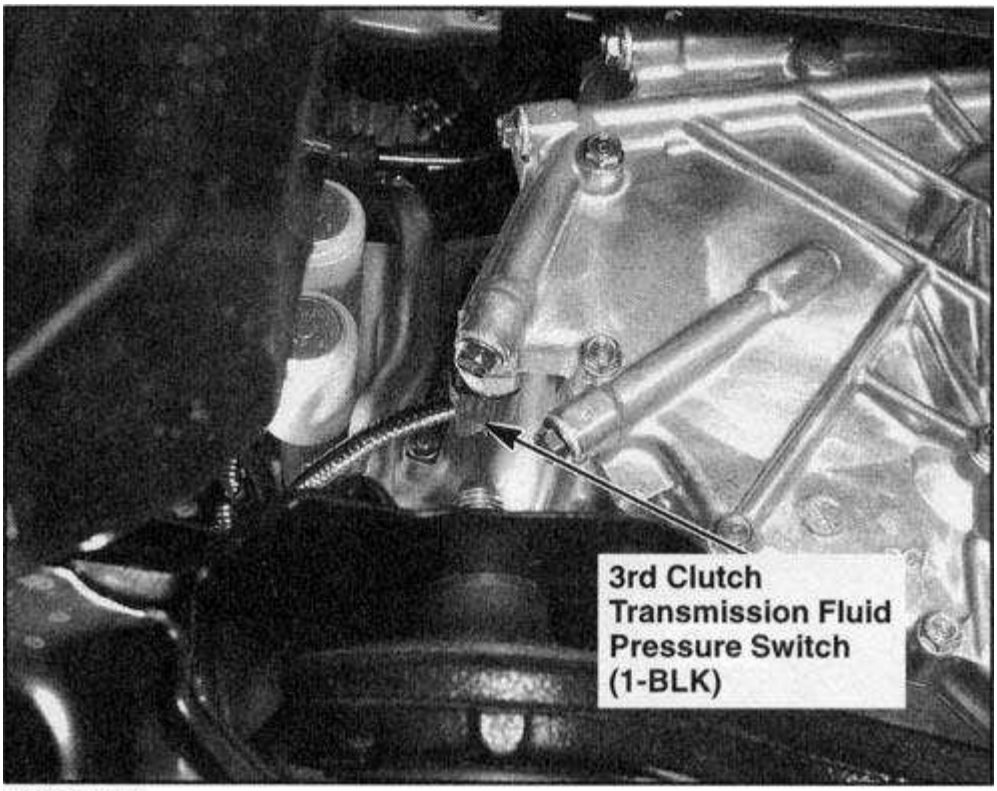


Fig. 73: Automatic Transmission Housing (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268590

Fig. 74: Automatic Transmission Housing (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268592

Fig. 75: Automatic Transmission Housing (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

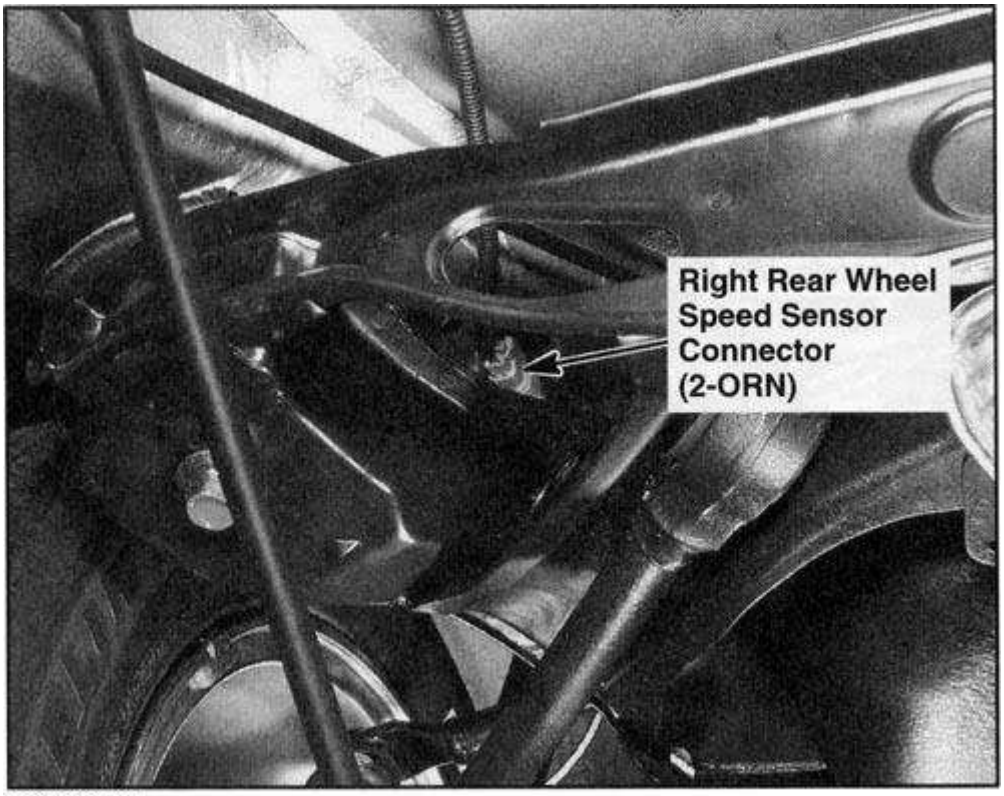


Fig. 76: Under Right Rear Of Vehicle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

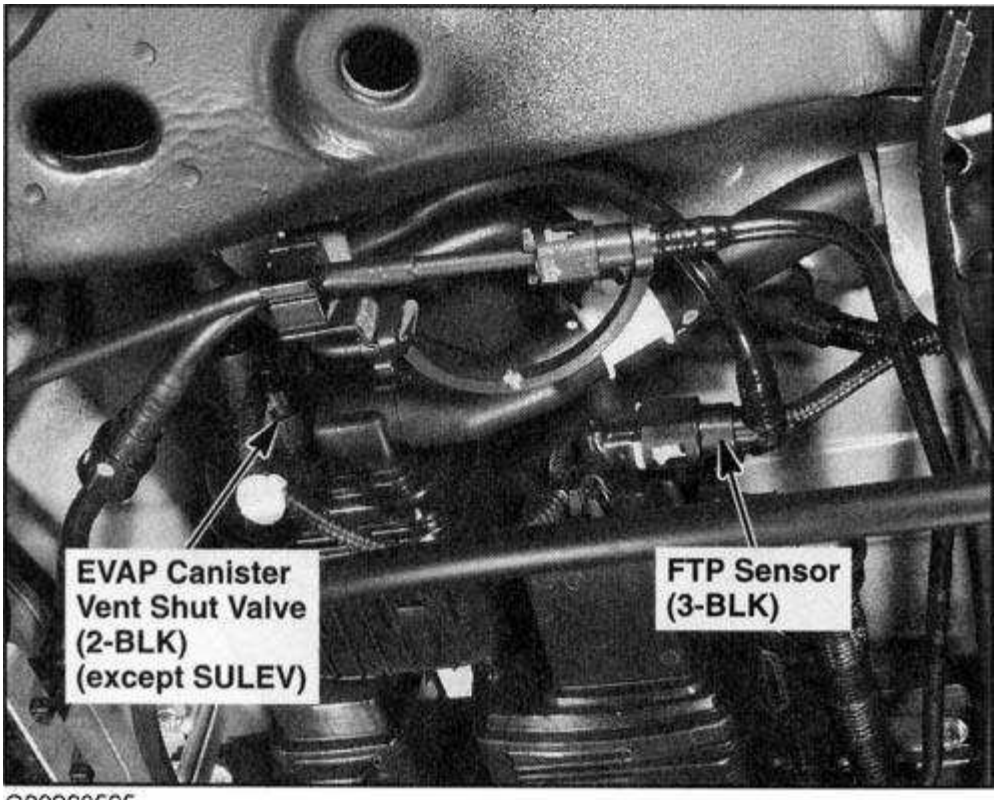
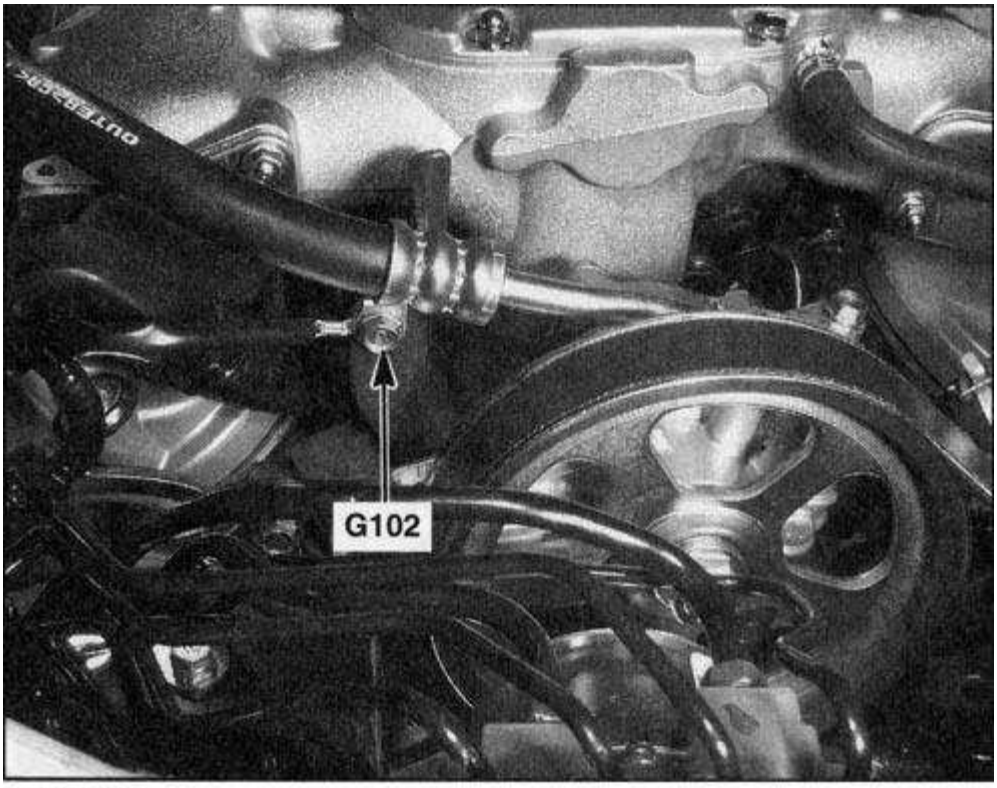
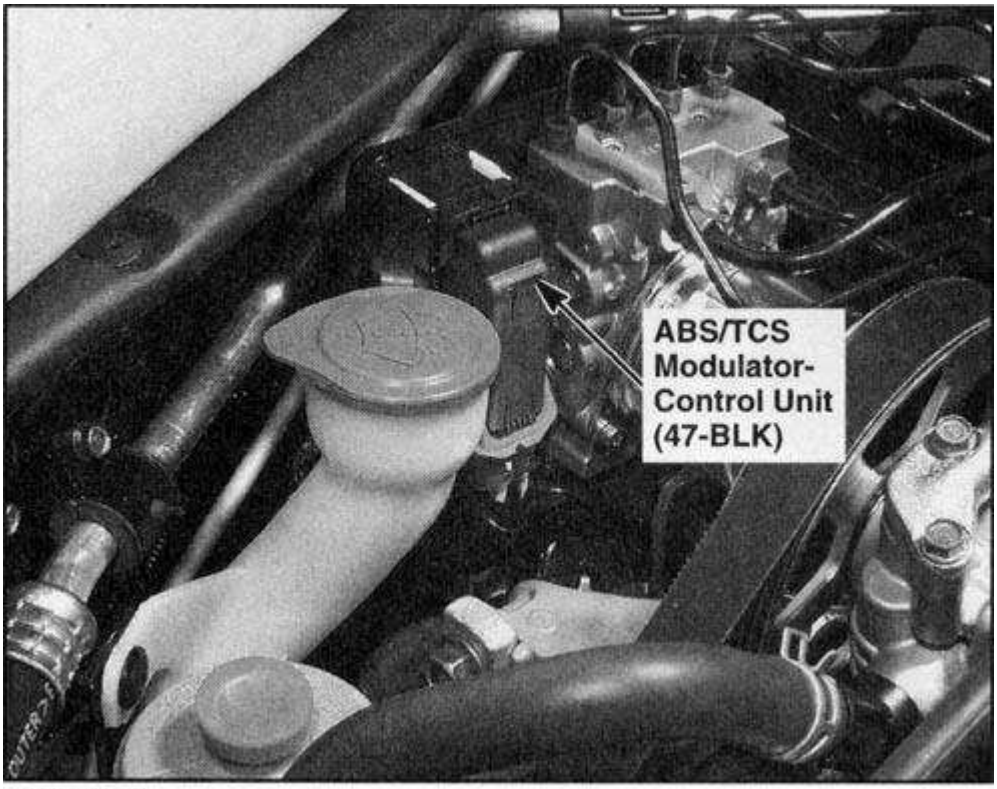


Fig. 77: Under Left Rear Of Vehicle
Courtesy of AMERICAN HONDA MOTOR CO., INC.



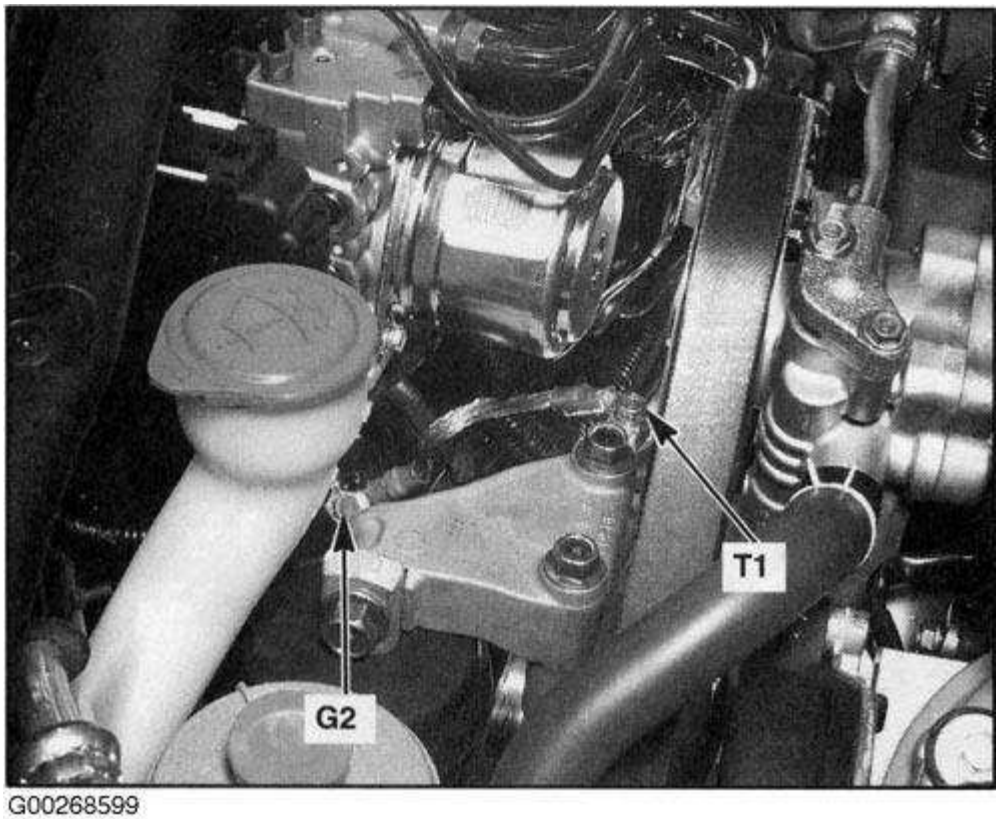
G00268597

Fig. 78: Right Side Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268598

Fig. 79: Right Side Of Engine Compartment (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268599

Fig. 80: Right Side Of Engine Compartment (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

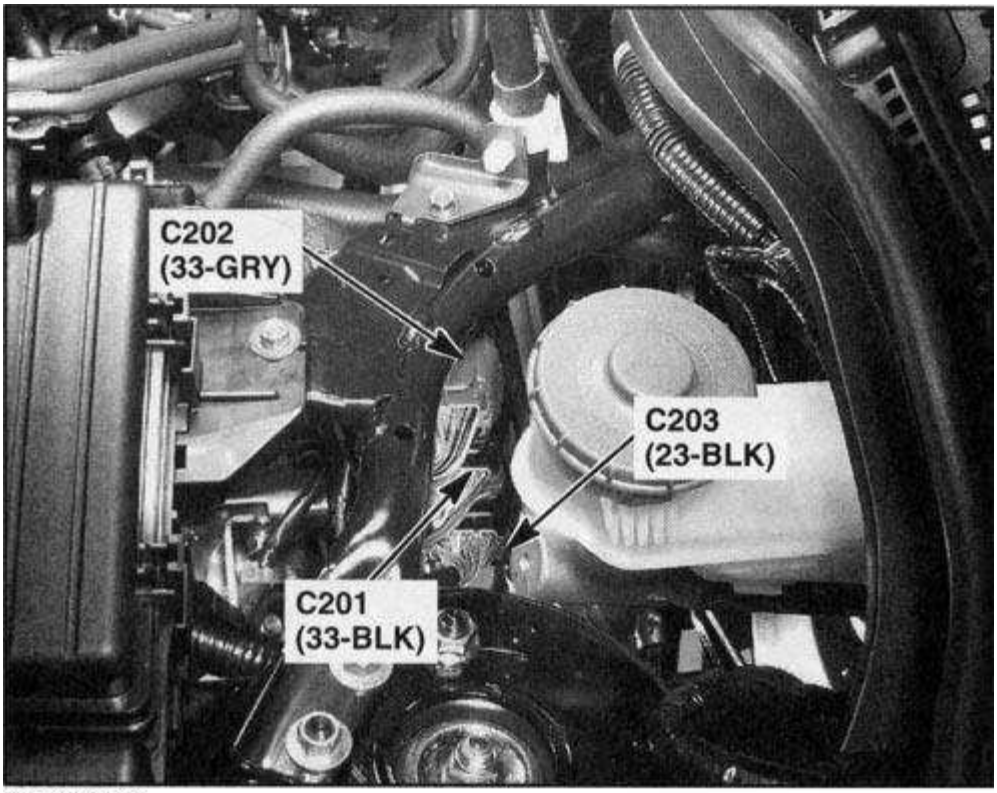
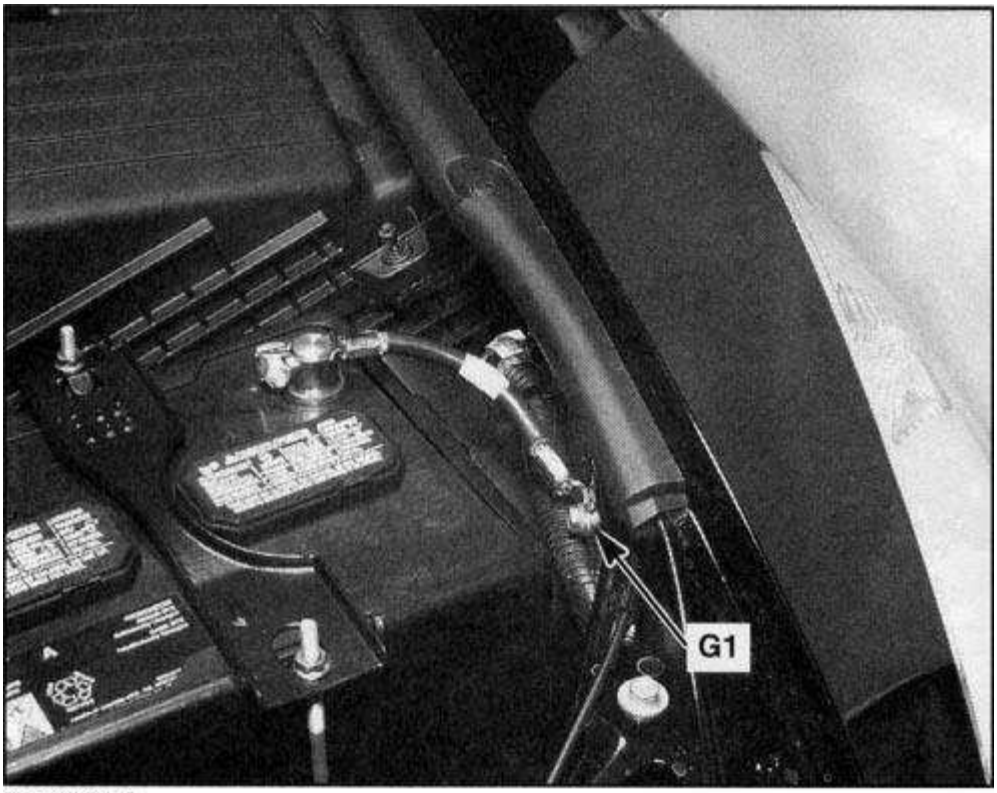
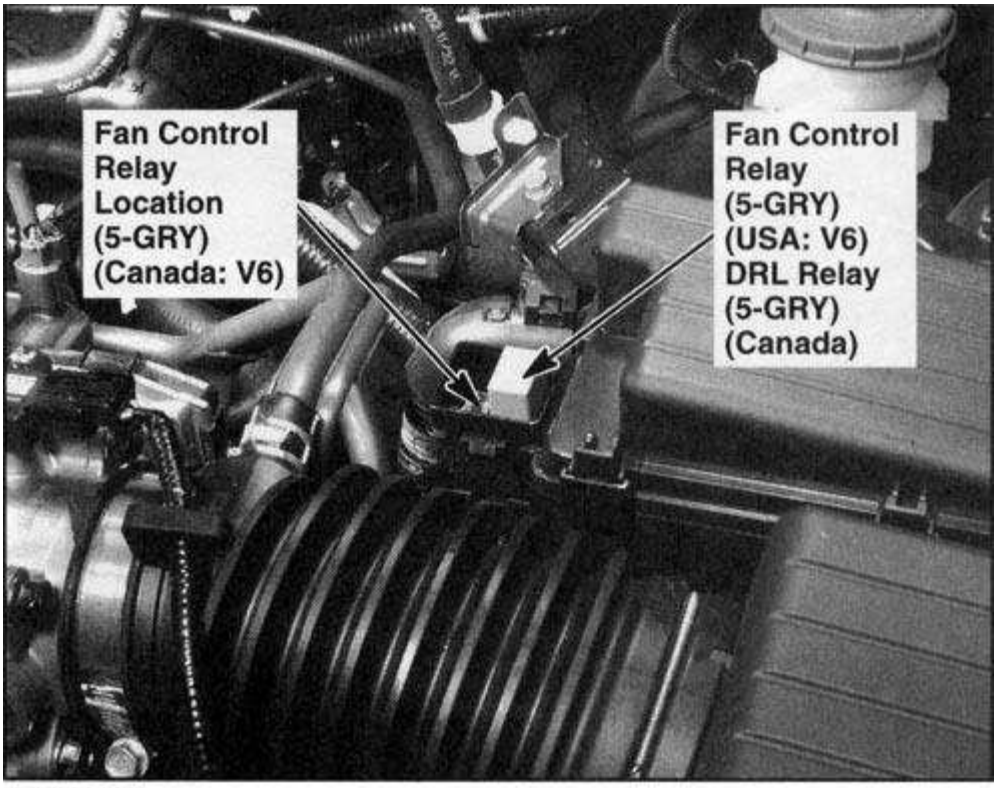


Fig. 81: Left Side Of Engine Compartment (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268601

Fig. 82: Left Side Of Engine Compartment (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268603

Fig. 83: Left Side Of Engine Compartment (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

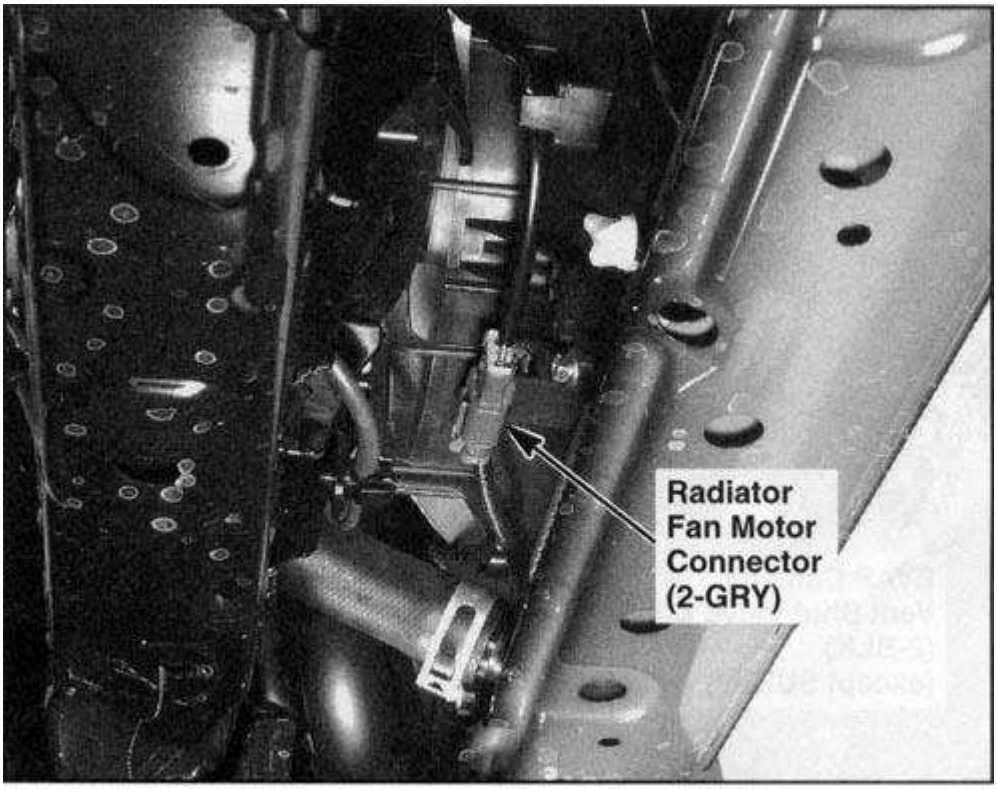
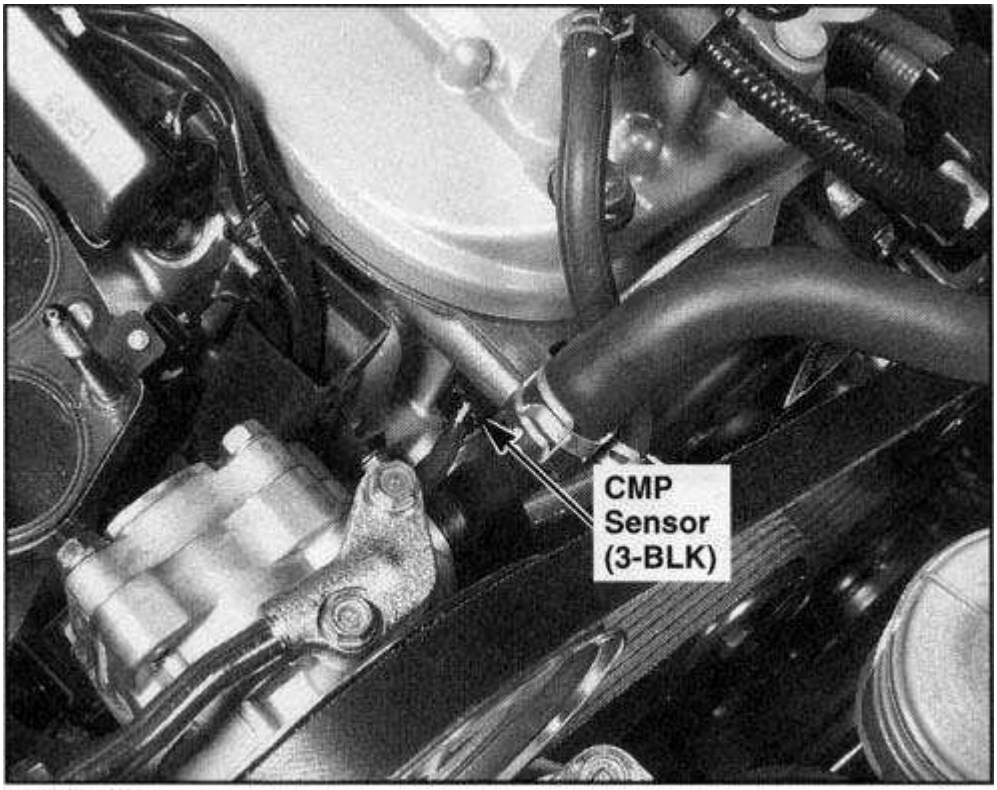
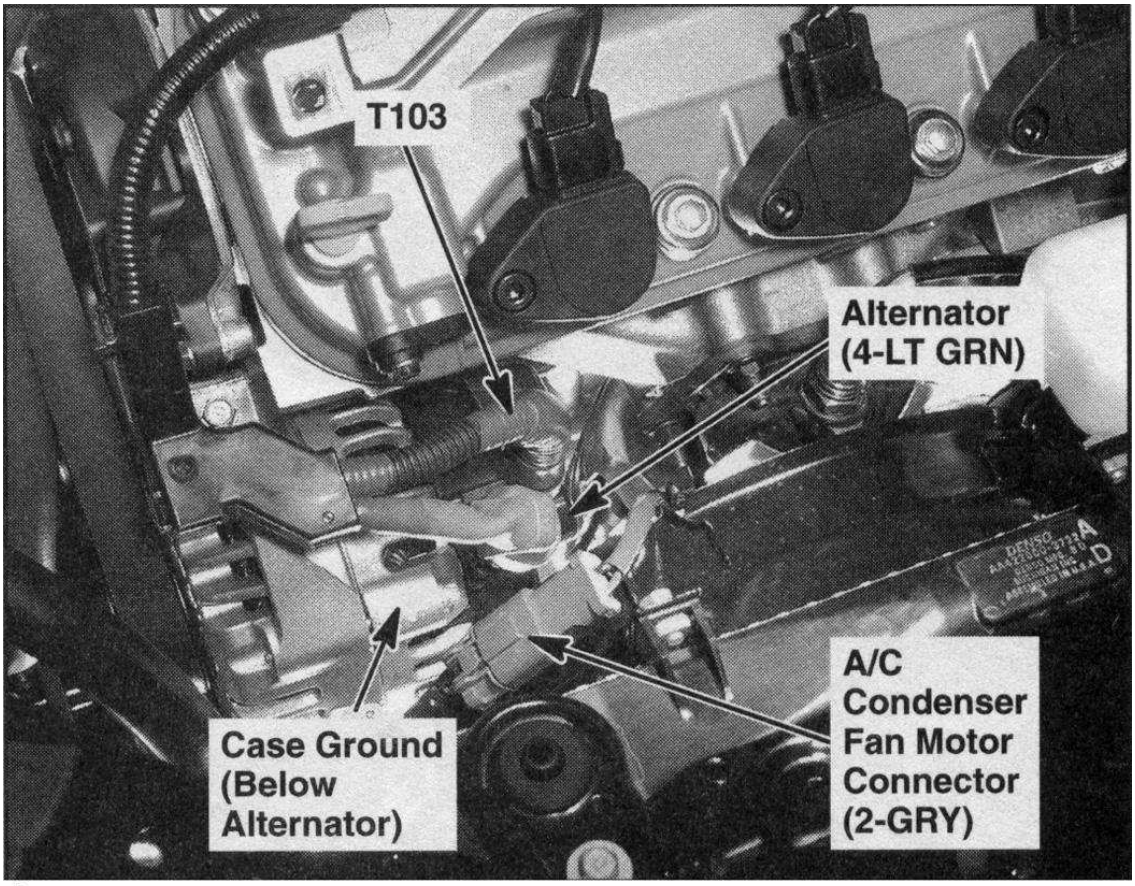


Fig. 84: Left Side Of Engine Compartment (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



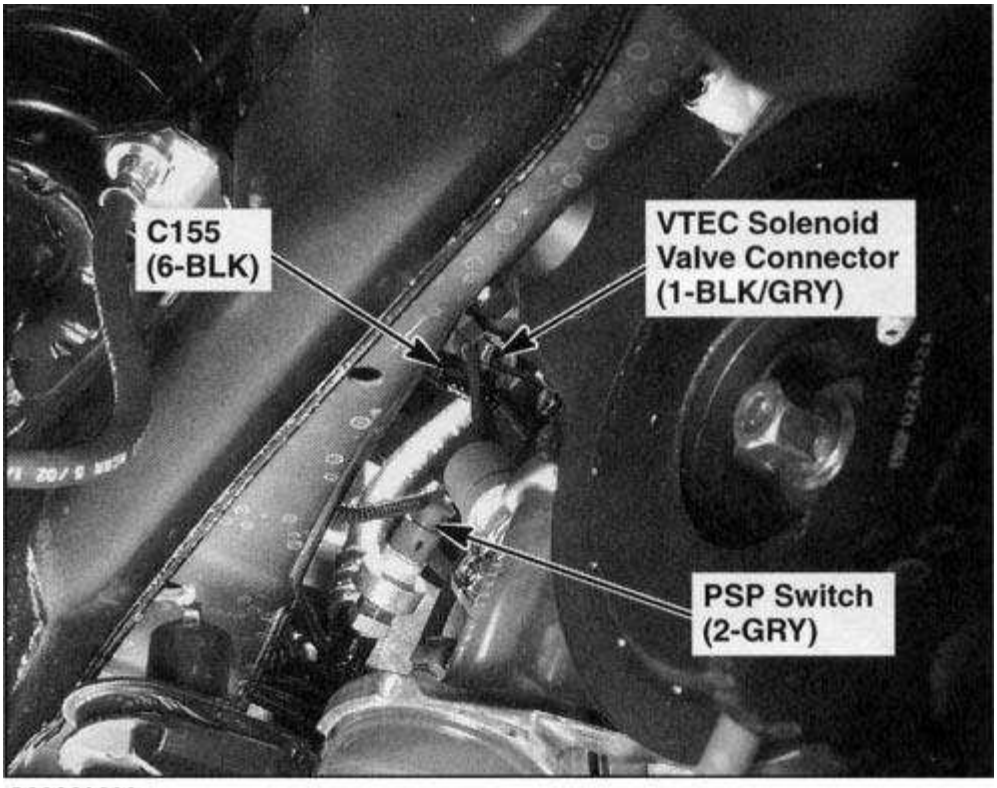
G00268605

Fig. 85: Right Side Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



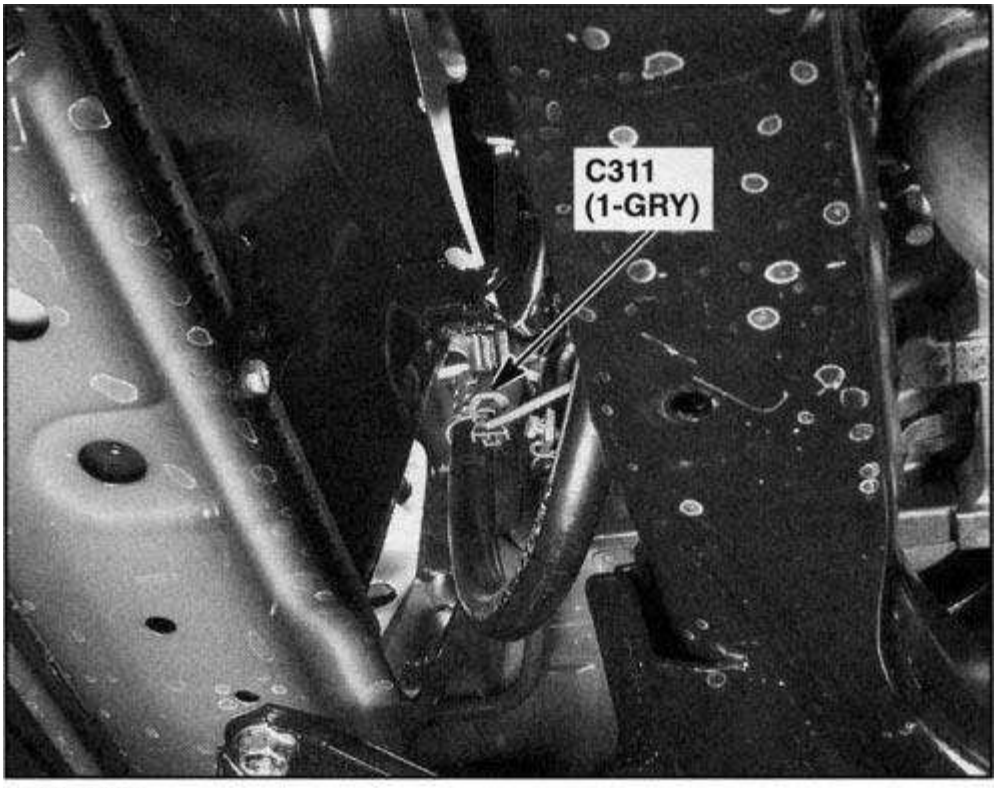
G00445670

Fig. 86: Left Front Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



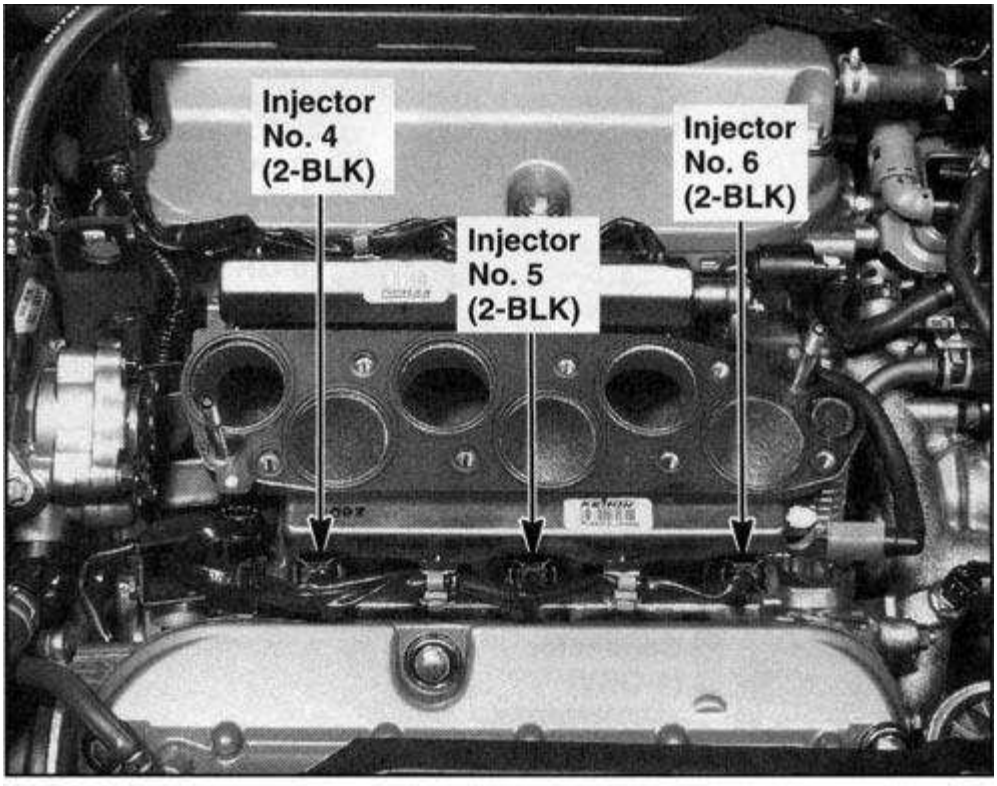
G00268608

Fig. 87: Right Side Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



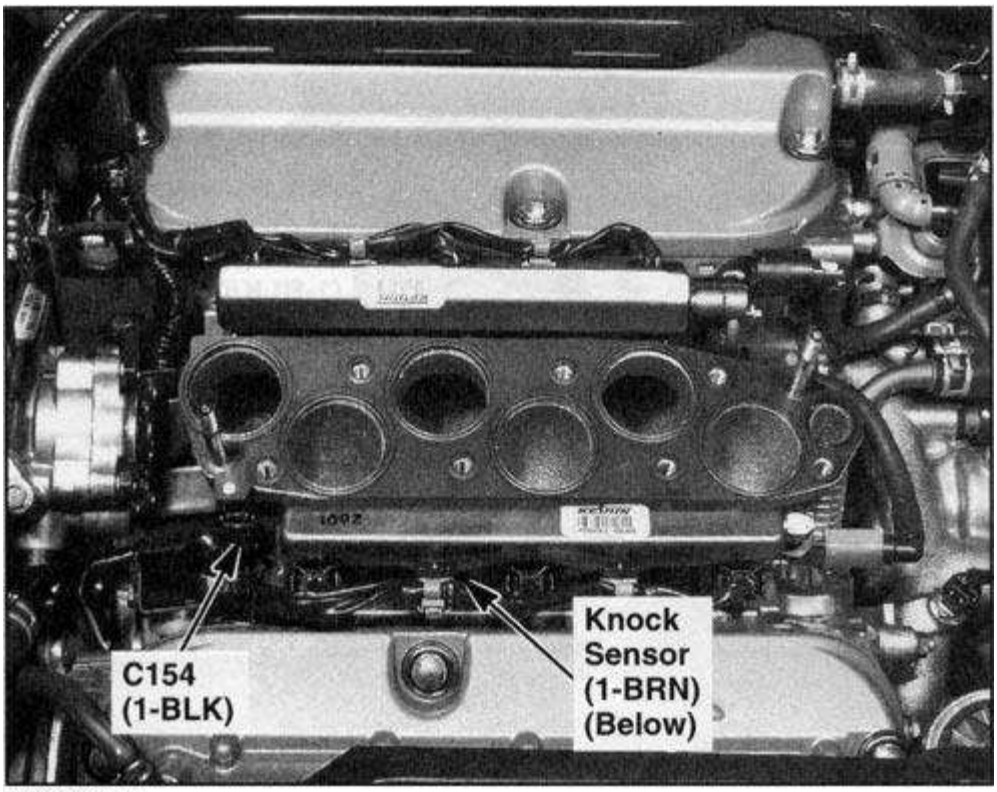
G00268609

Fig. 88: Right Side Of Engine Compartment (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



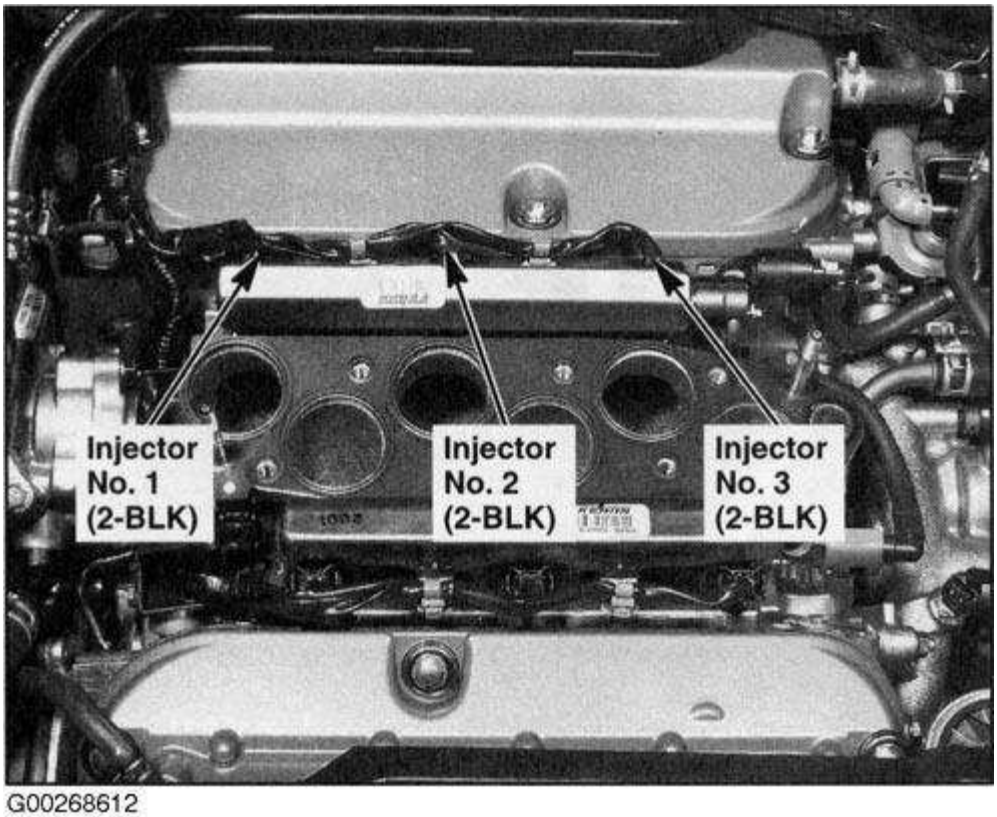
G00268610

Fig. 89: Middle Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268611

Fig. 90: Middle Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268612

Fig. 91: Middle Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

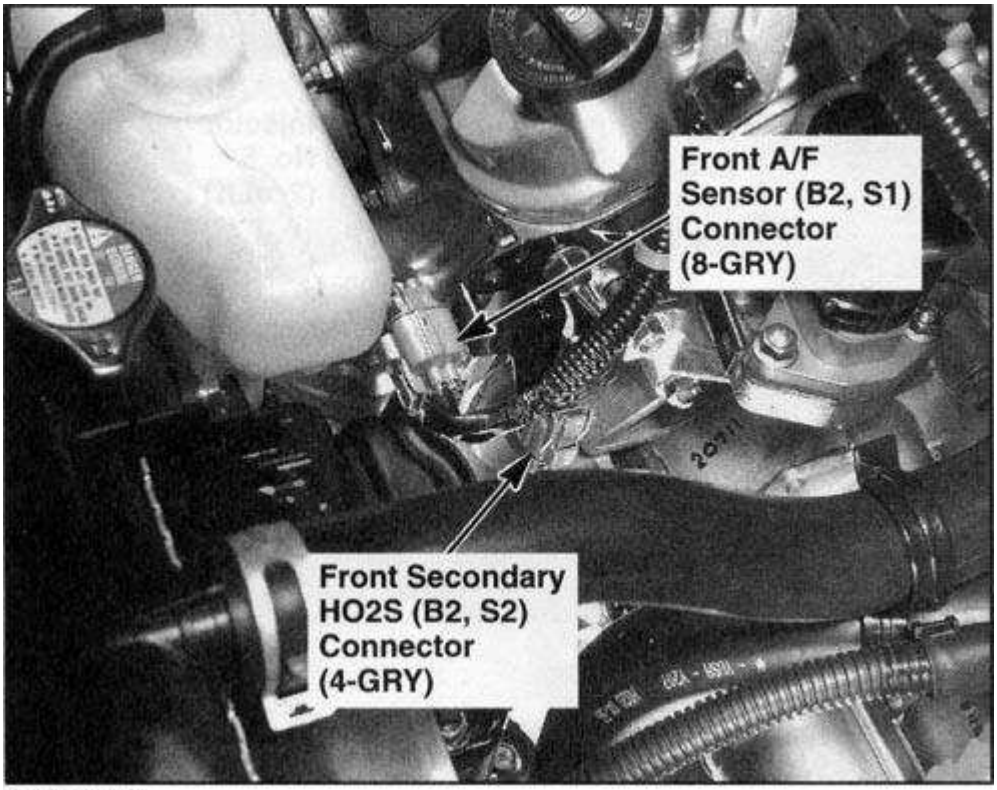
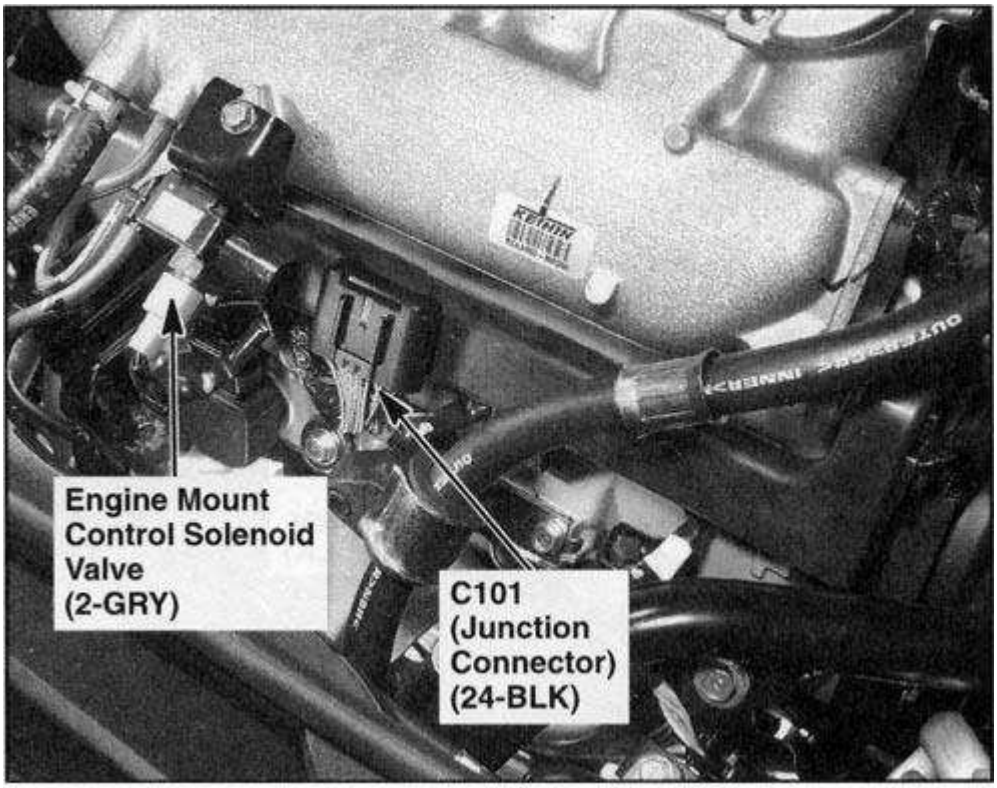
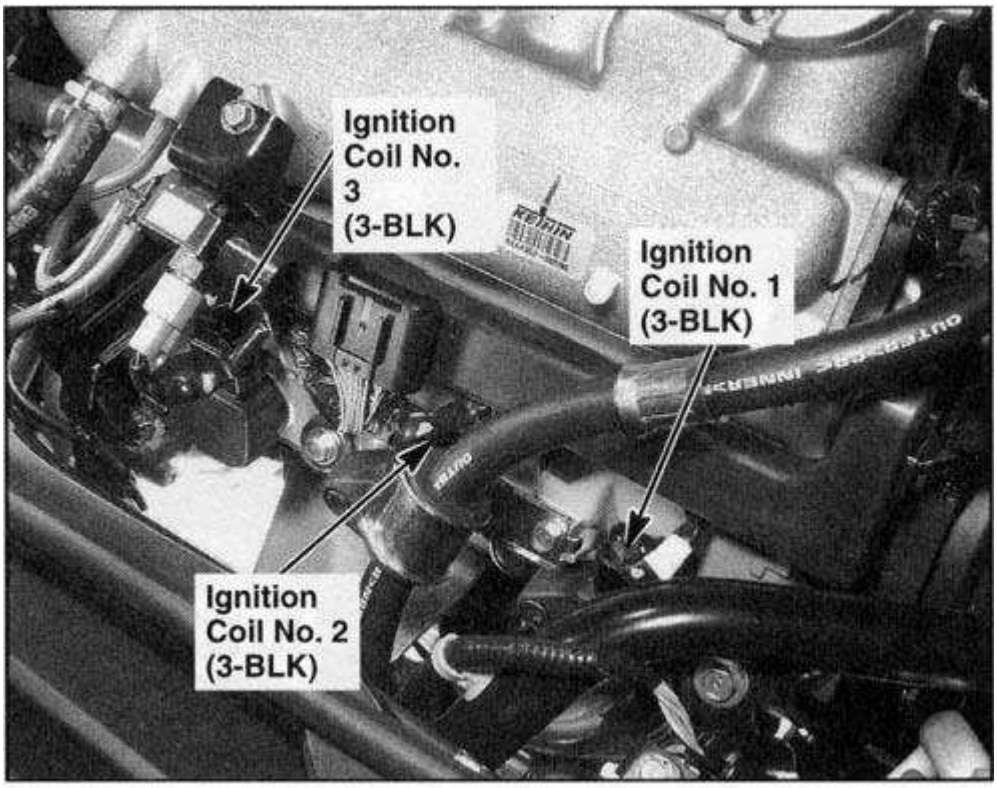


Fig. 92: Middle Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



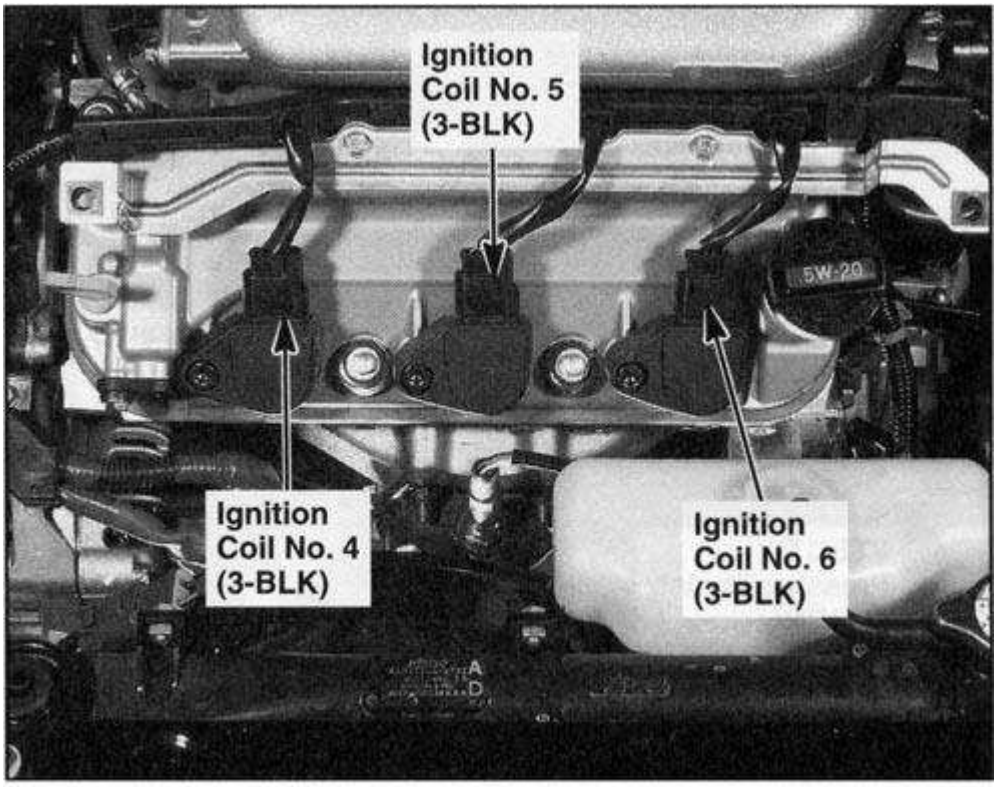
G00268614

Fig. 93: Middle Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268615

Fig. 94: Middle Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268616

Fig. 95: Middle Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

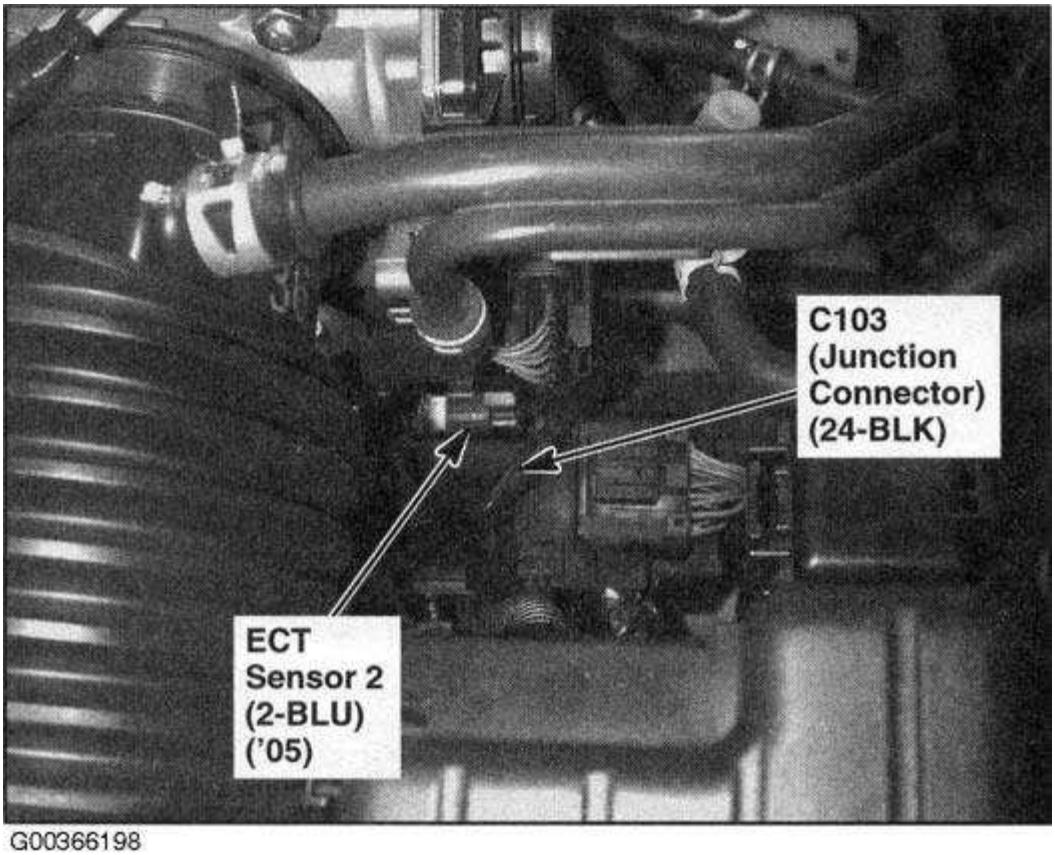
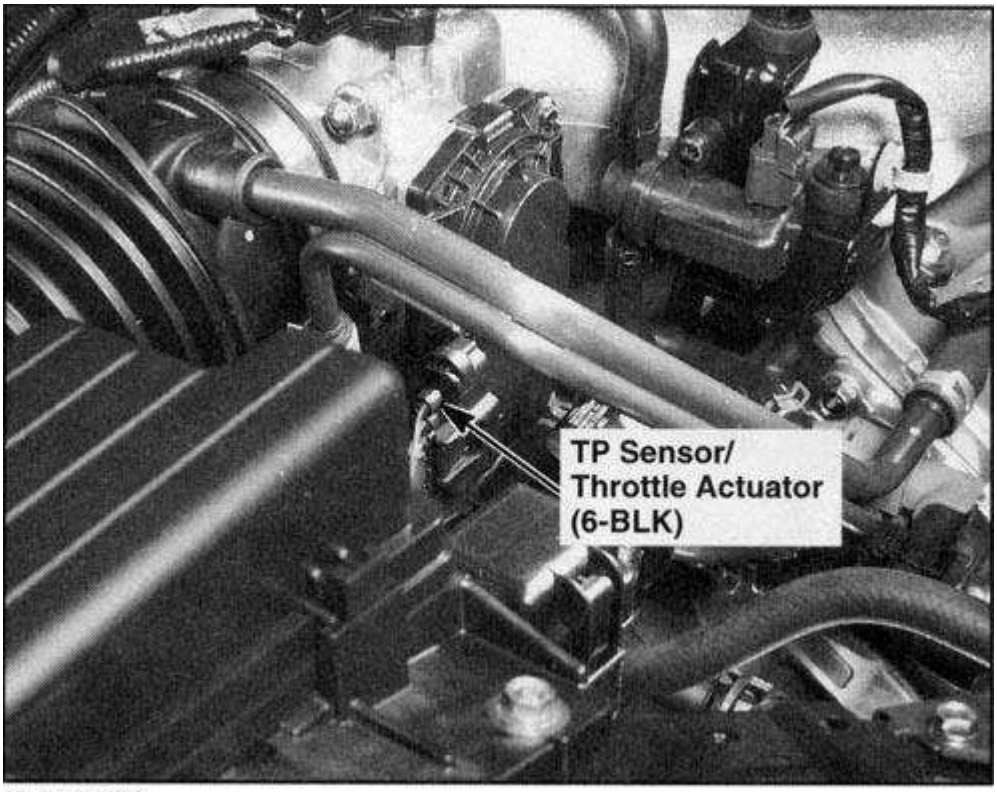
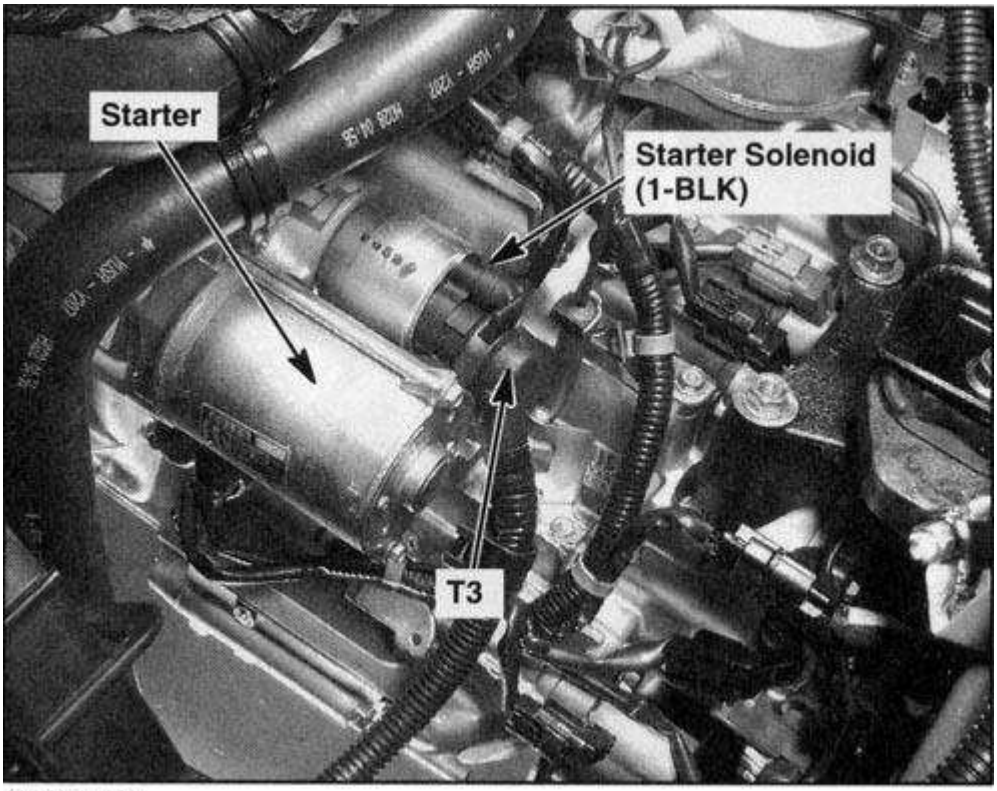


Fig. 96: Left Rear Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



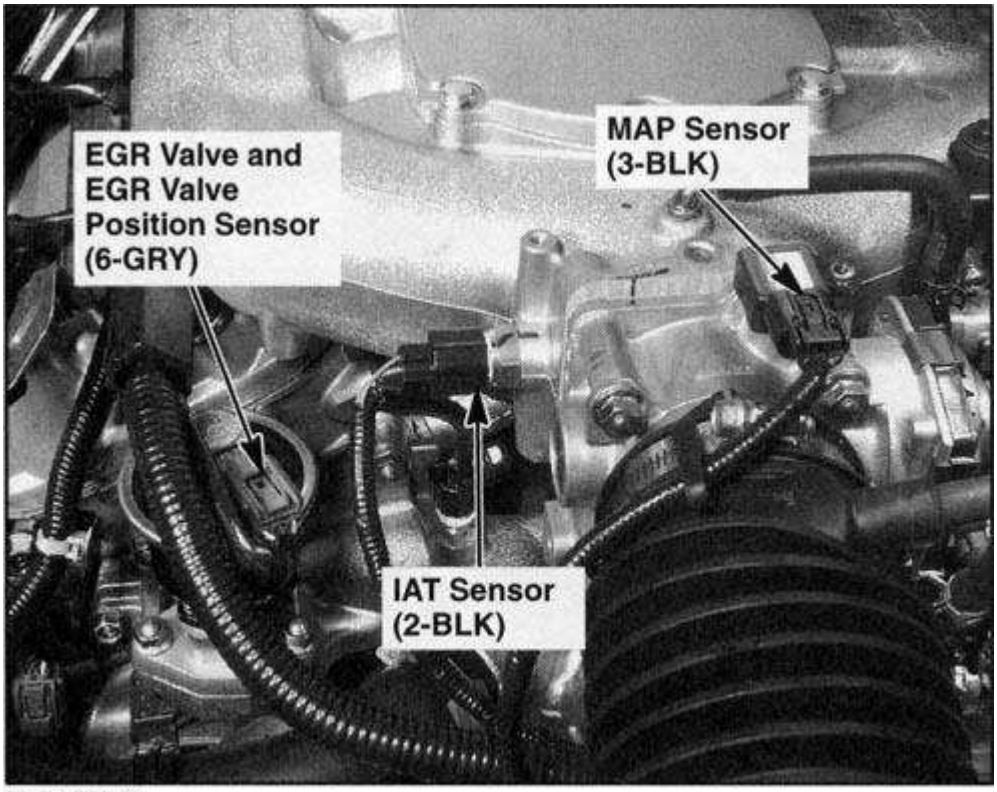
G00268620

Fig. 97: Left Rear Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



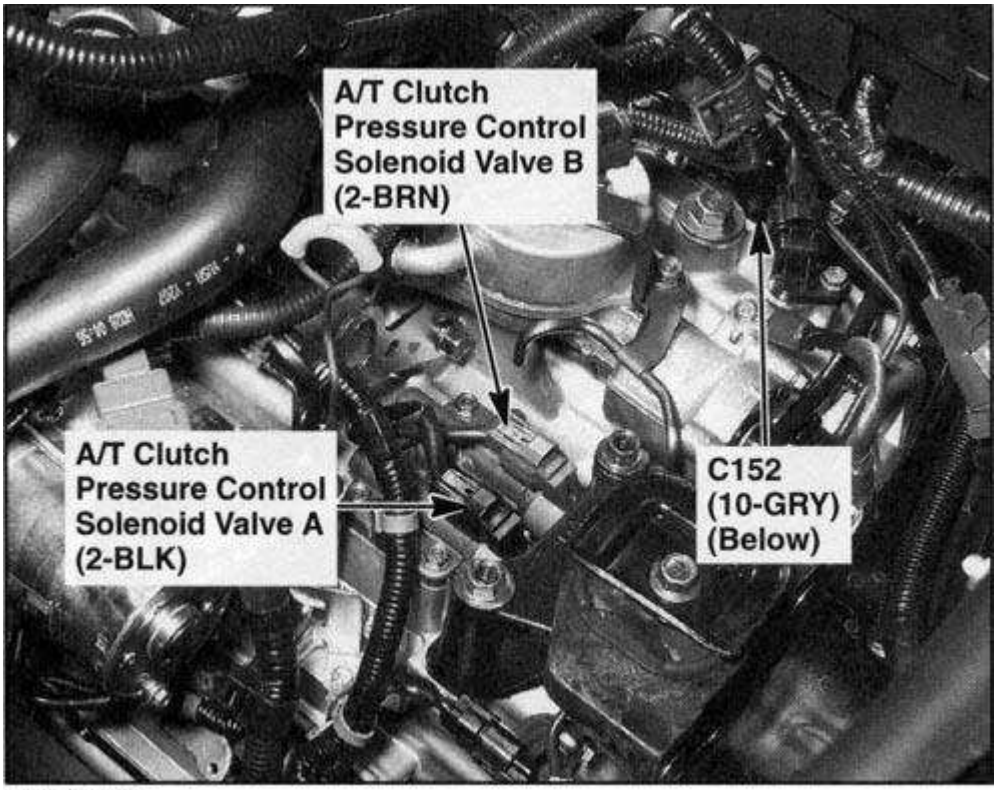
G00268621

Fig. 98: Left Rear Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



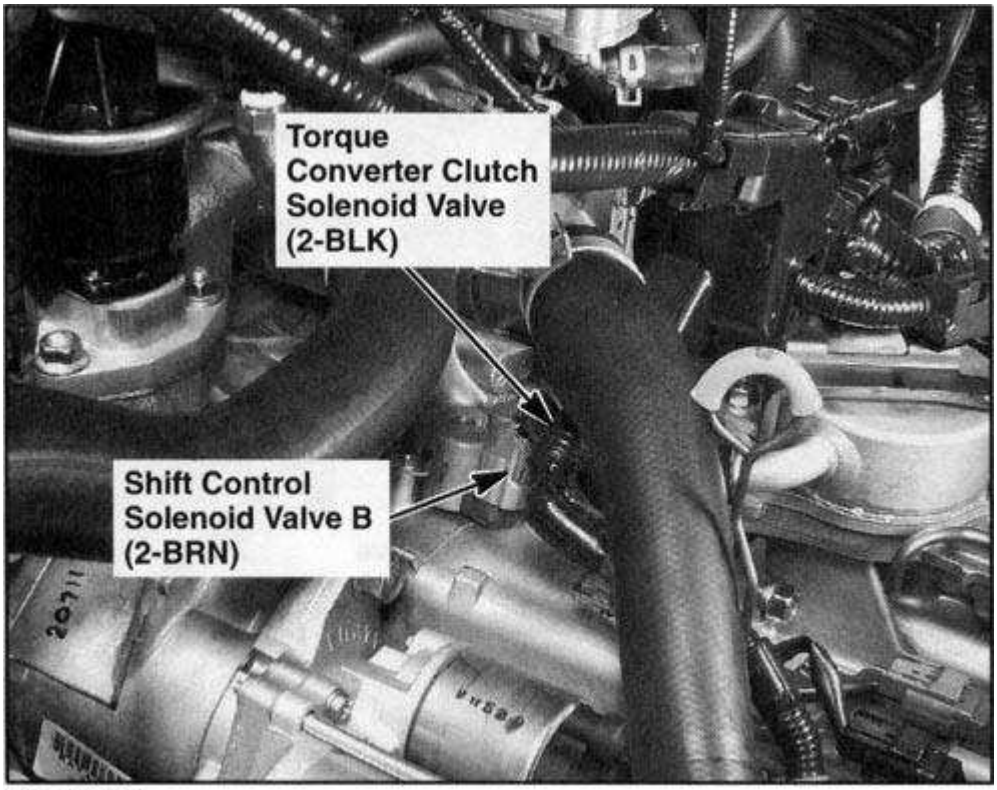
G00268623

Fig. 99: Left Rear Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



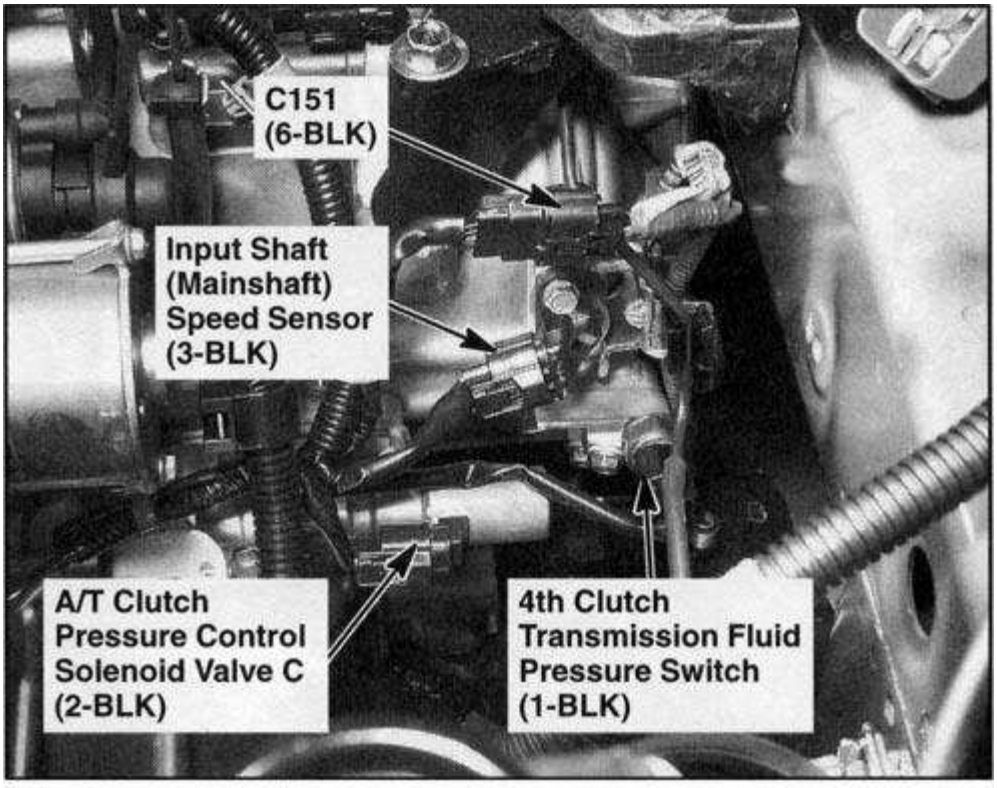
G00268624

Fig. 100: Automatic Transmission Housing (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



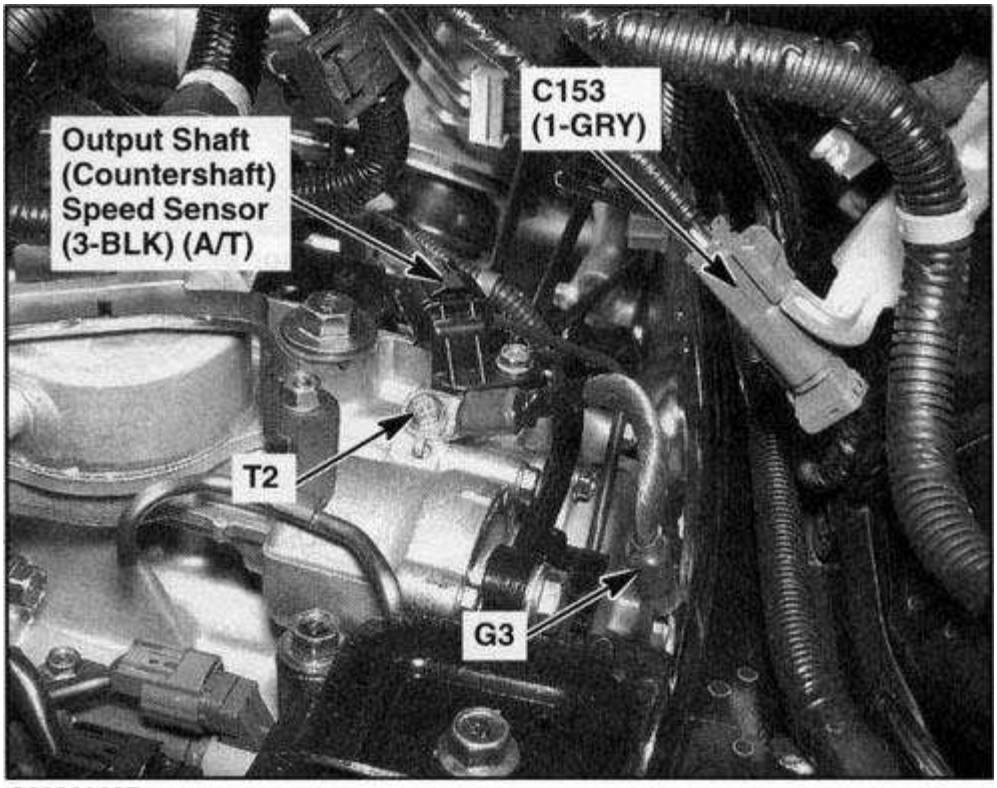
G00268625

Fig. 101: Automatic Transmission Housing (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



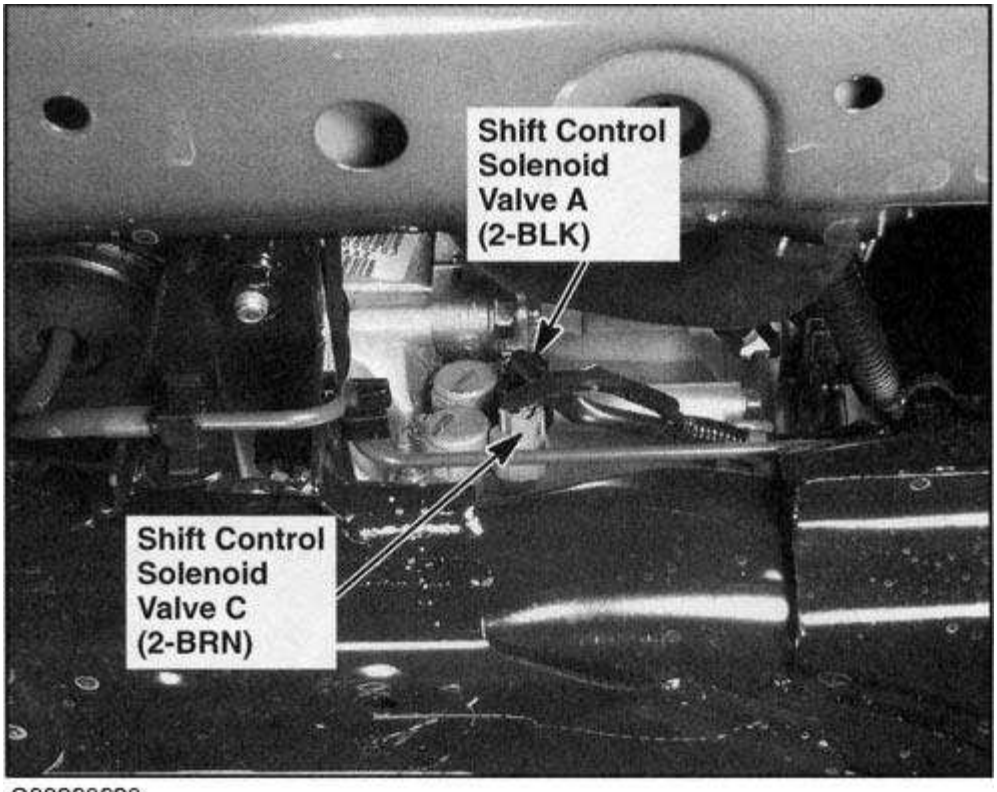
G00268626

Fig. 102: Automatic Transmission Housing (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



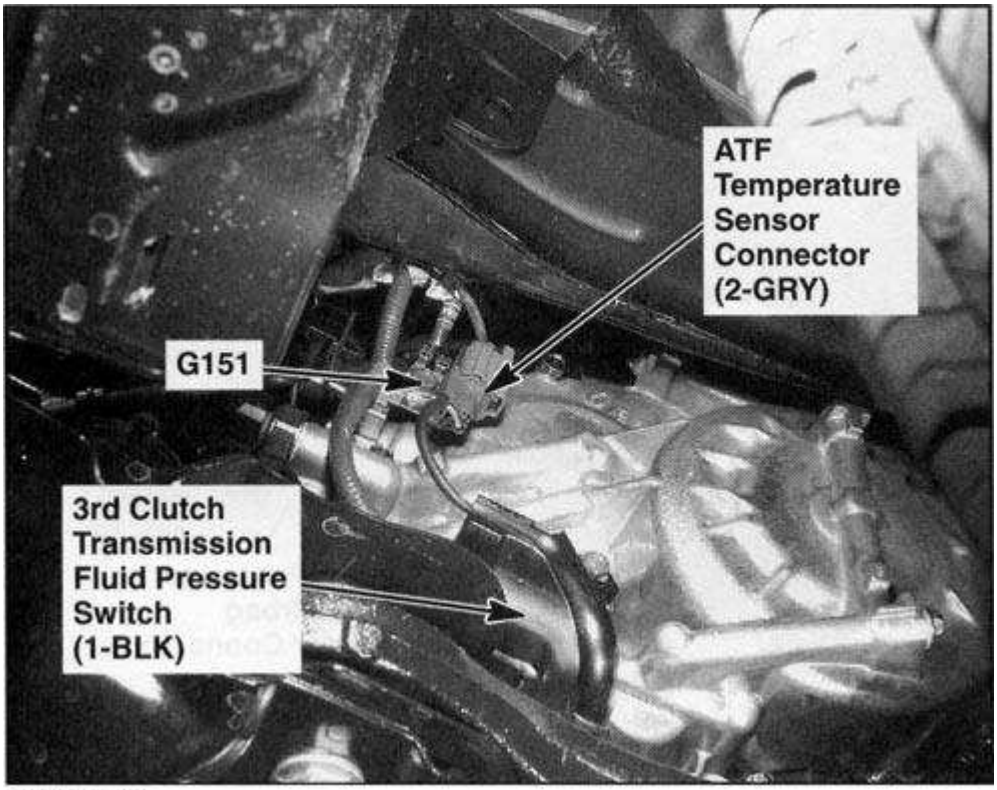
G00268627

Fig. 103: Automatic Transmission Housing (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



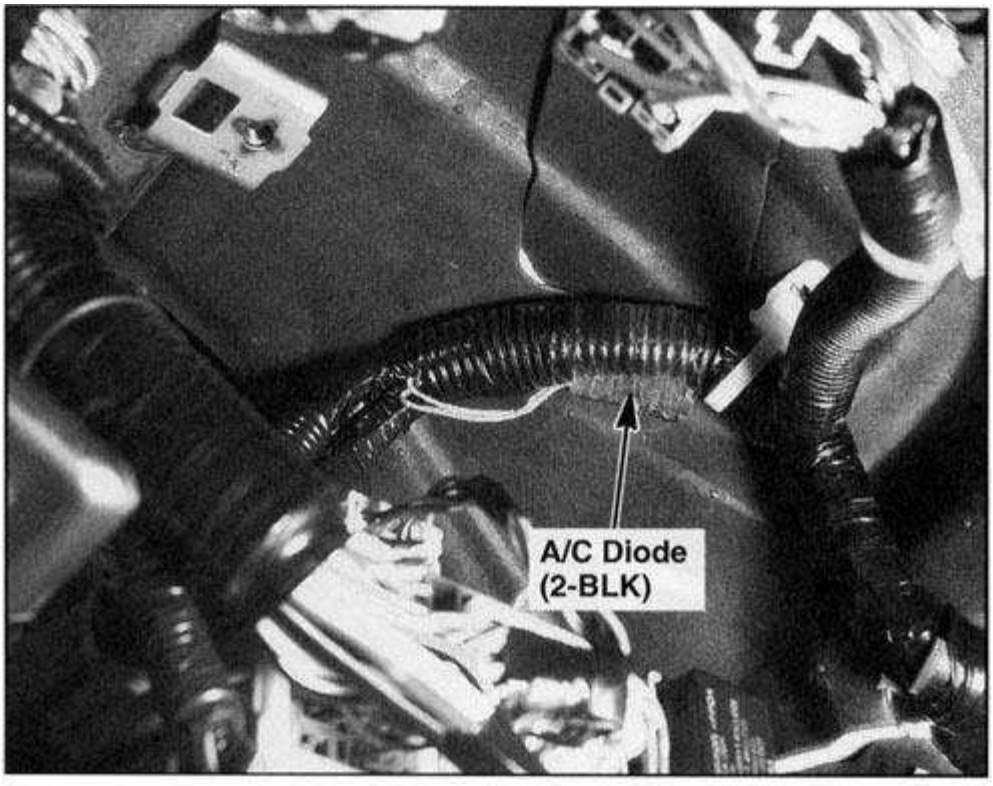
G00268628

Fig. 104: Automatic Transmission Housing (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268629

Fig. 105: Automatic Transmission Housing (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268631

Fig. 106: Under Left Side Of Dash (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

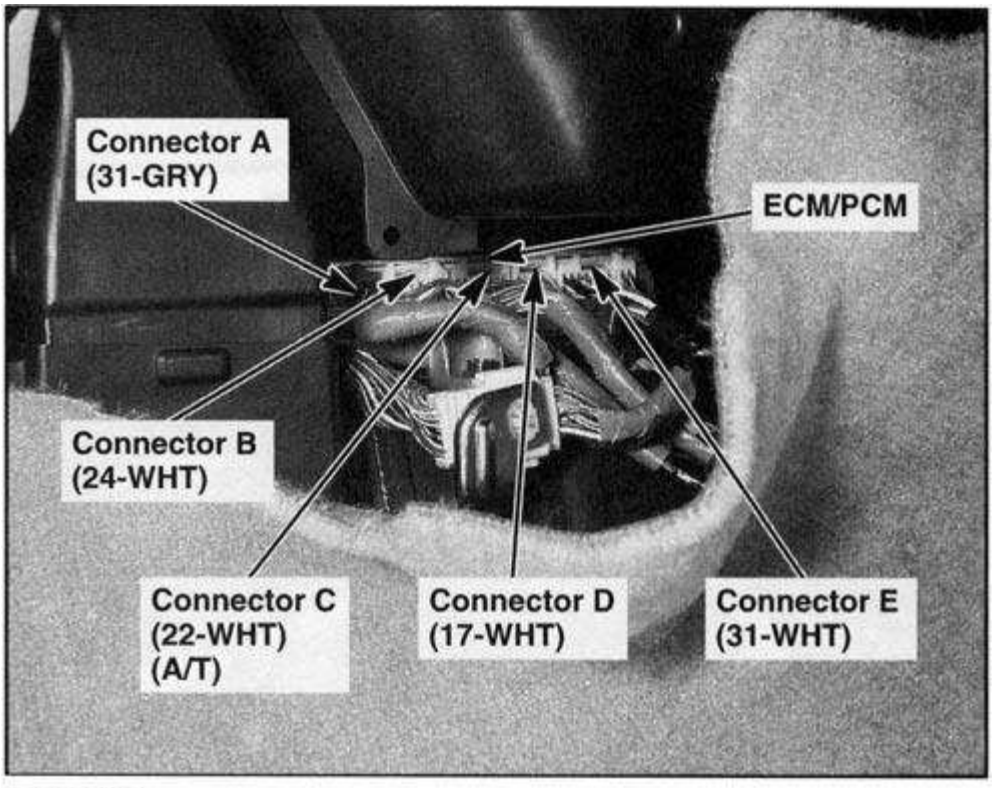
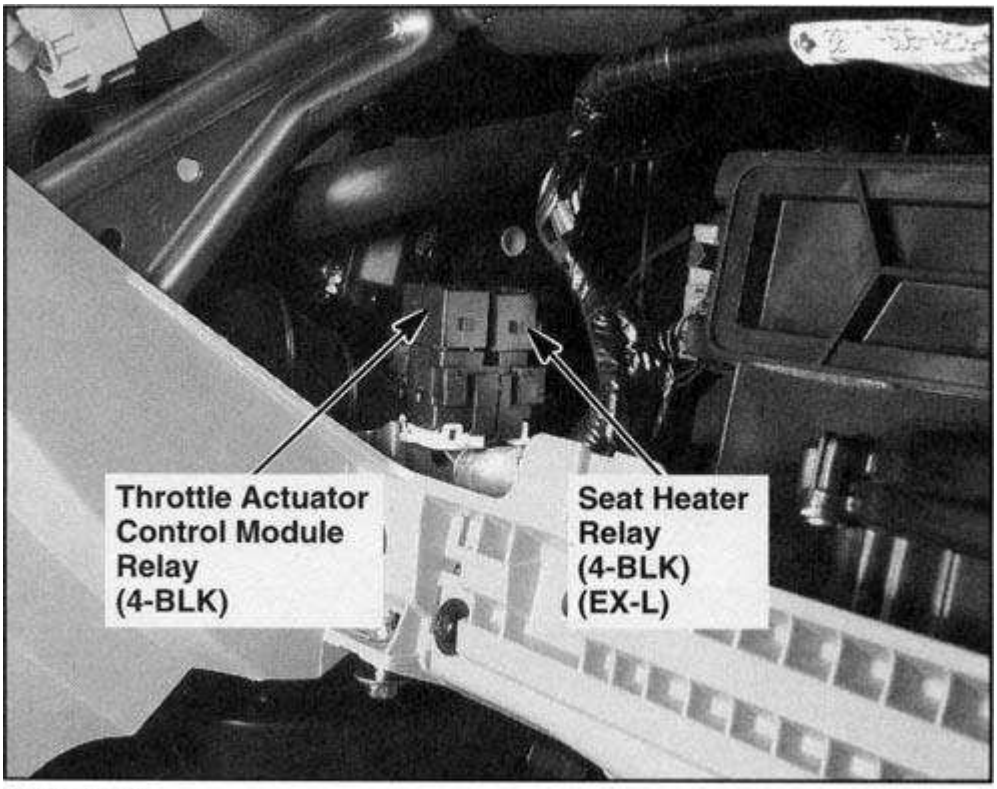
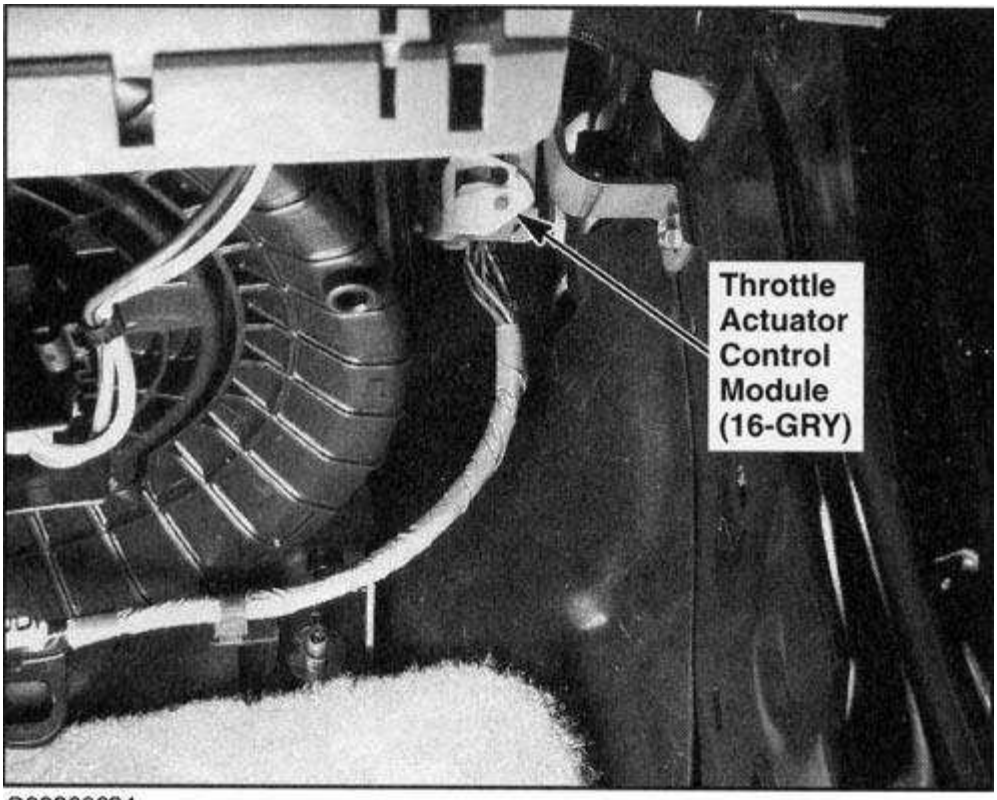


Fig. 107: Under Middle Of Dash (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268633

Fig. 108: Behind Glove Box
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268634

Fig. 109: Under Right Side Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

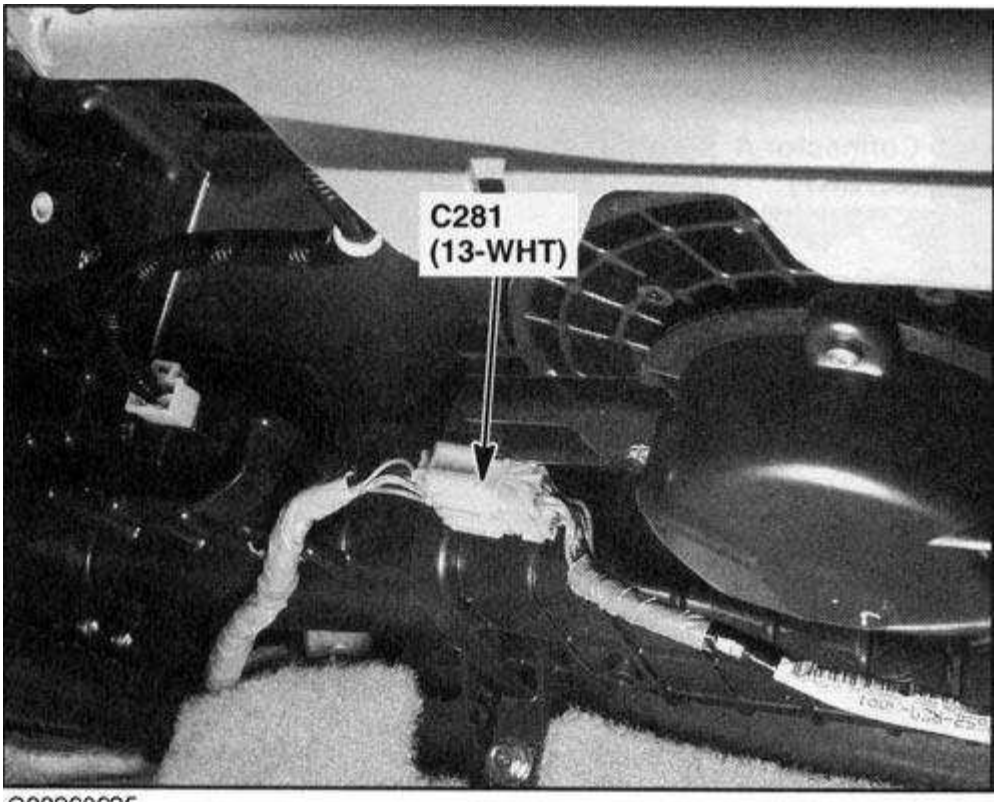


Fig. 110: Under Right Side Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

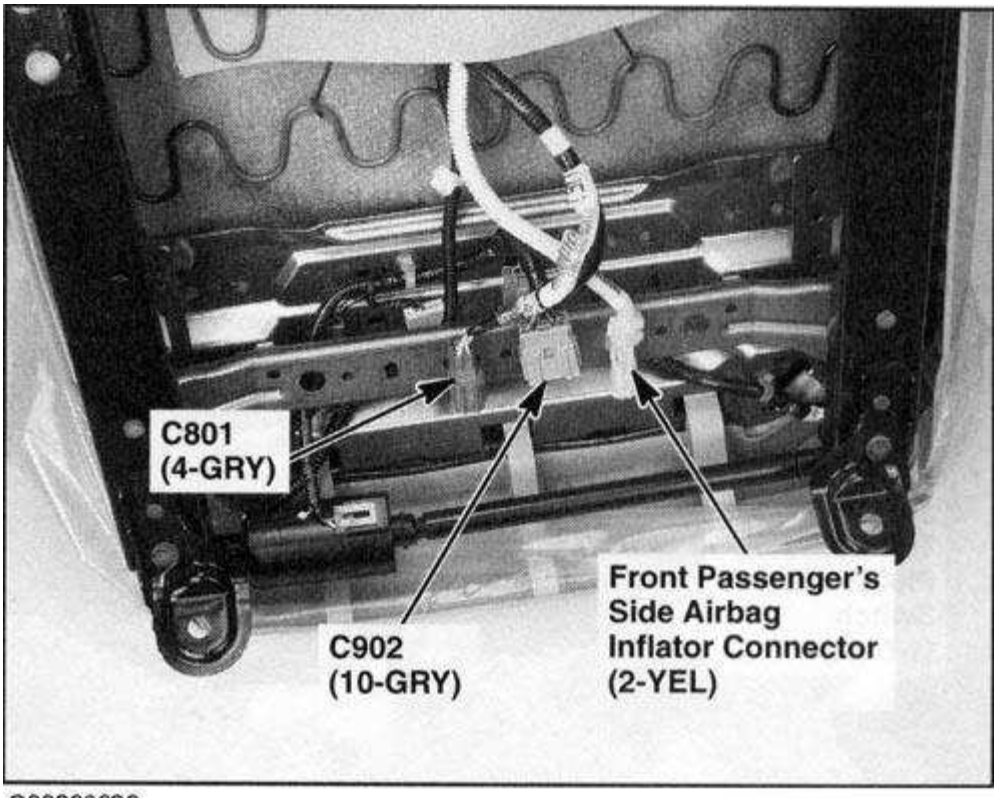
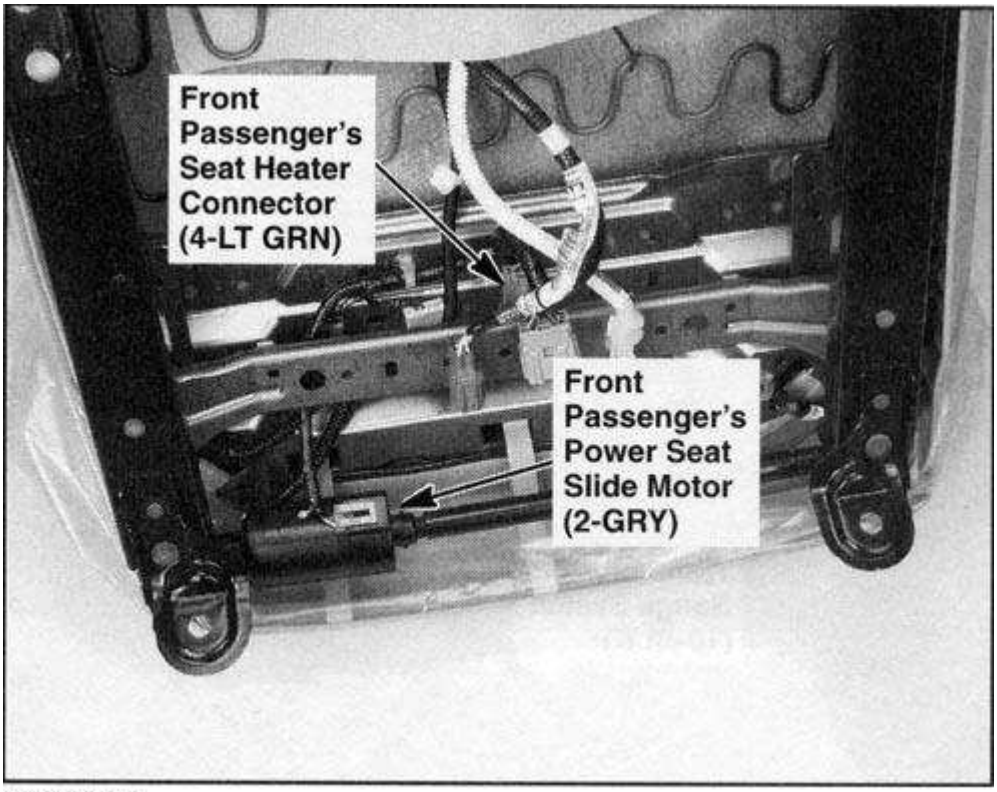
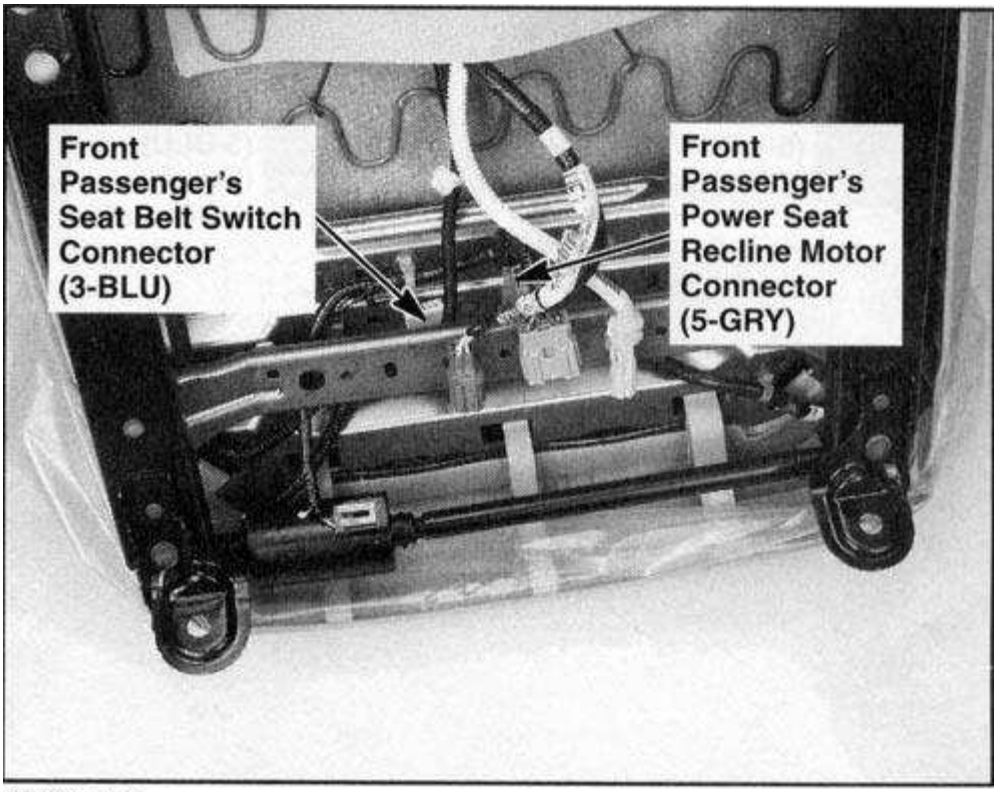


Fig. 111: Under Front Passenger's Seat (3.0L EX-L) (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



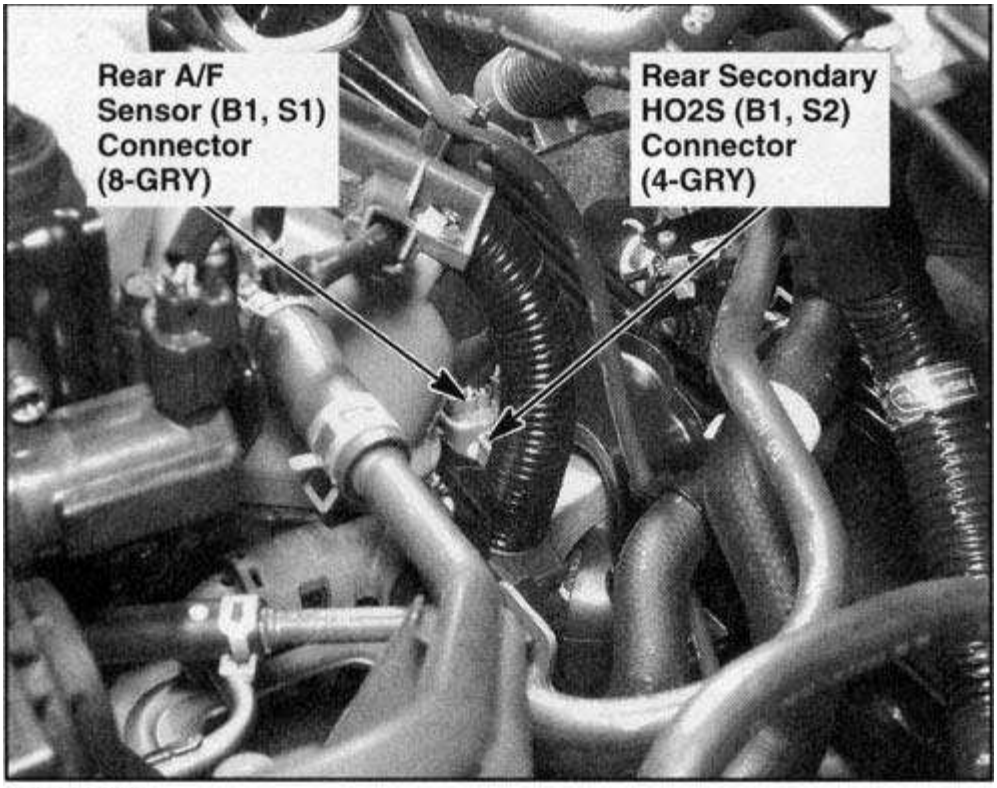
G00268637

Fig. 112: Under Front Passenger's Seat (3.0L EX-L) (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



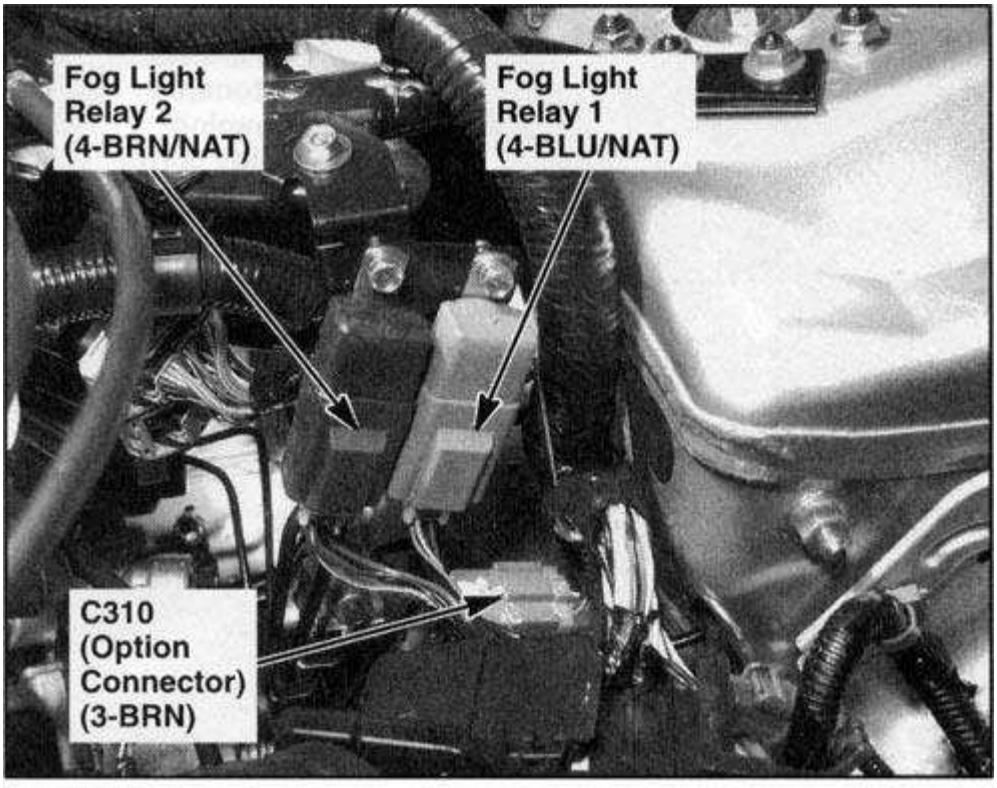
G00268638

Fig. 113: Under Front Passenger's Seat (3.0L EX-L) (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268641

Fig. 114: Middle Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00268643

Fig. 115: Left Side Of Engine Compartment (Honda Accessory)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

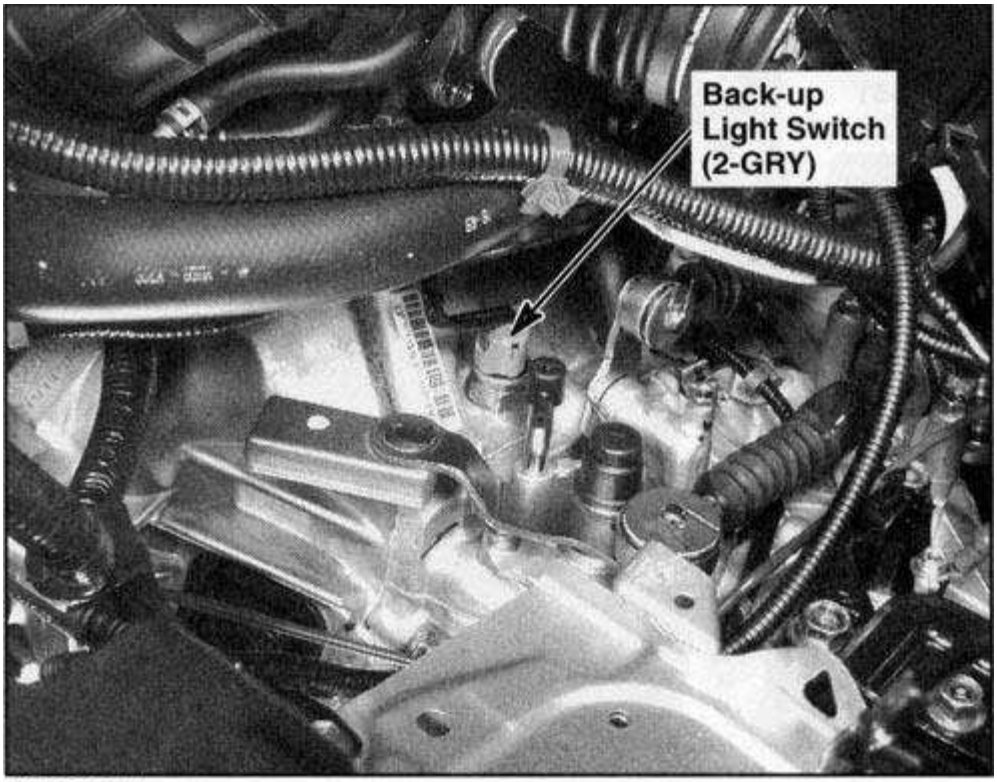


Fig. 116: Manual Transmission Housing (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

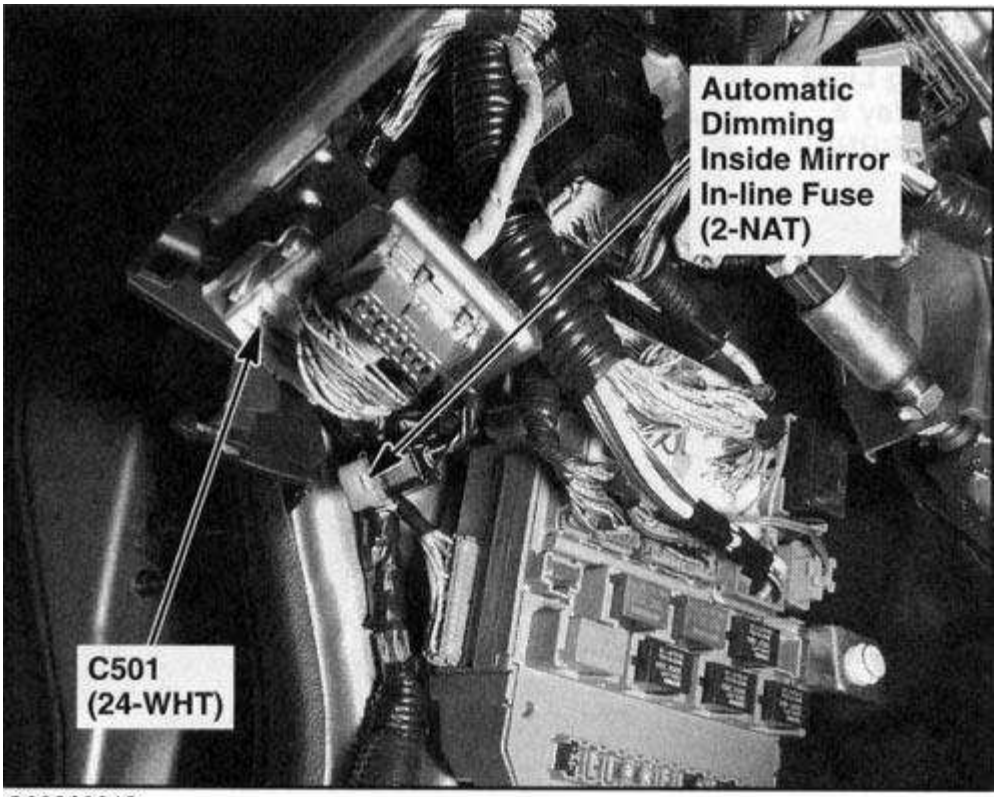
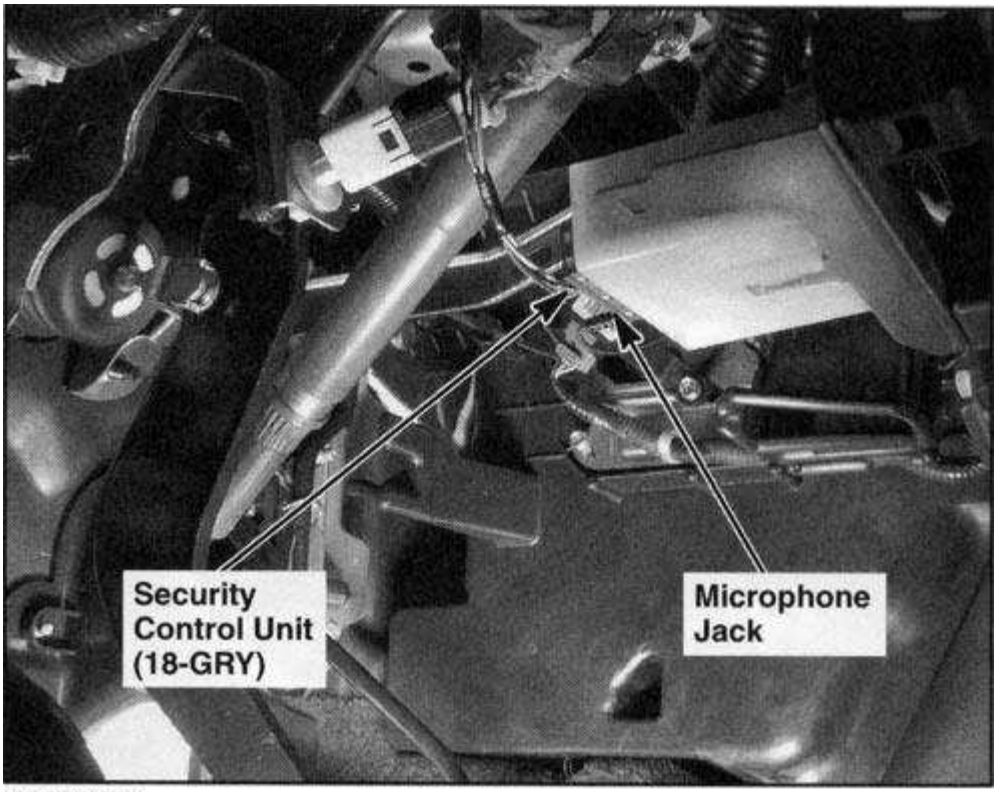
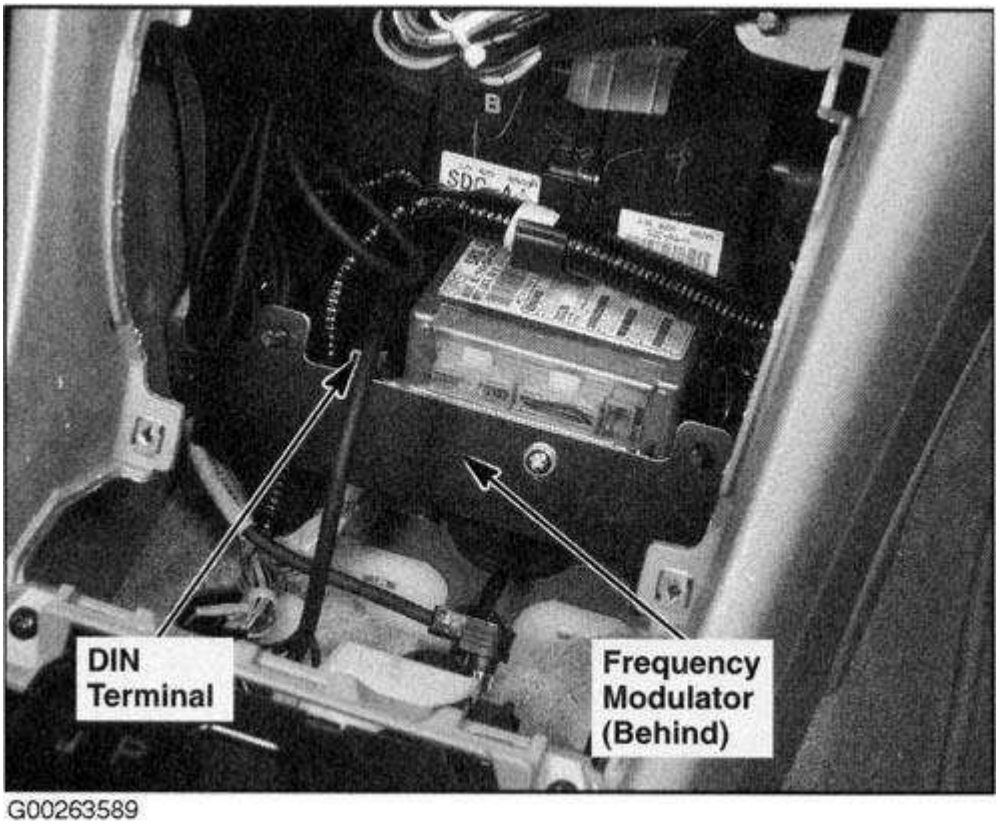


Fig. 117: Under Left Side Of Dash (Honda Accessory)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



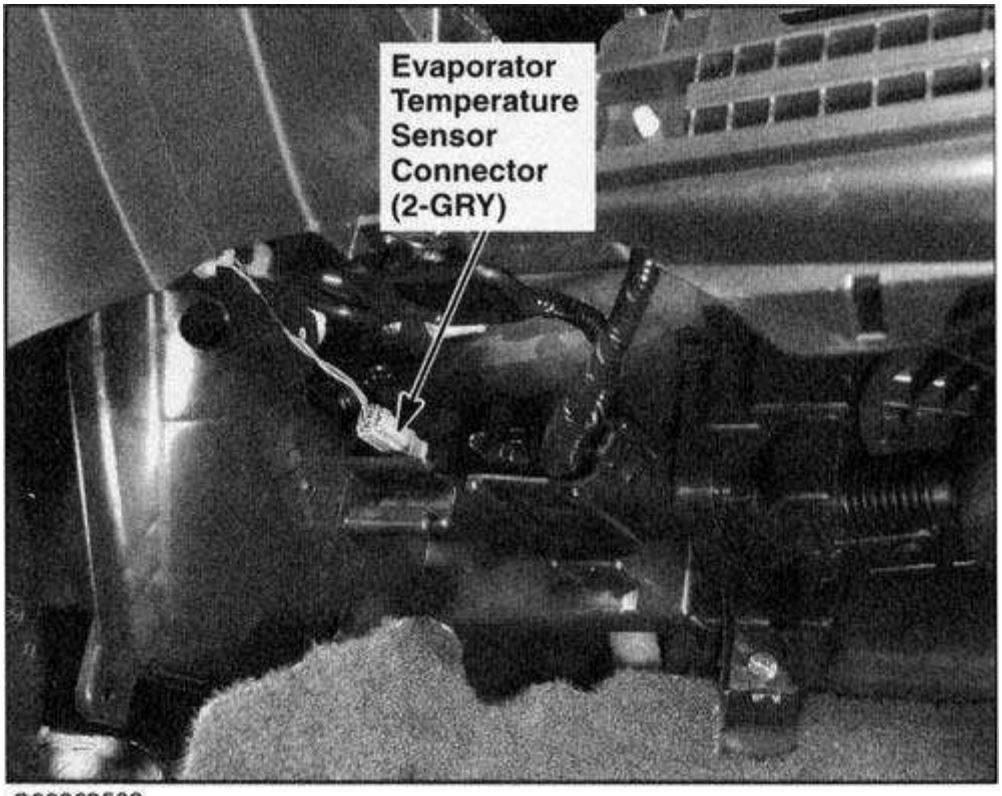
G00263588

Fig. 118: Under Left Side Of Dash (DX-G, VP & SE, LX) (Honda Accessory)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00263589

Fig. 119: Under Middle Of Dash (Honda Accessory)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00263592

Fig. 120: Under Right Side Of Dash (DX-G, LX, SE, VP & 2.4L EX)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

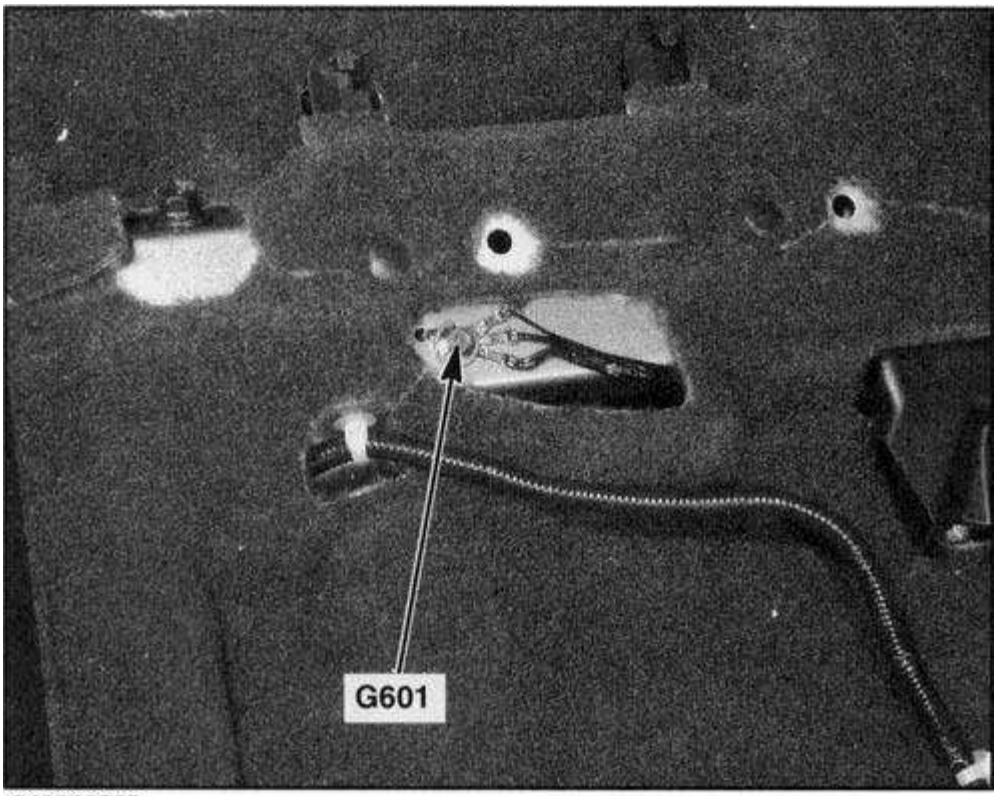


Fig. 121: Left Side Of Floor (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00263596

Fig. 122: Right Side Of Floor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

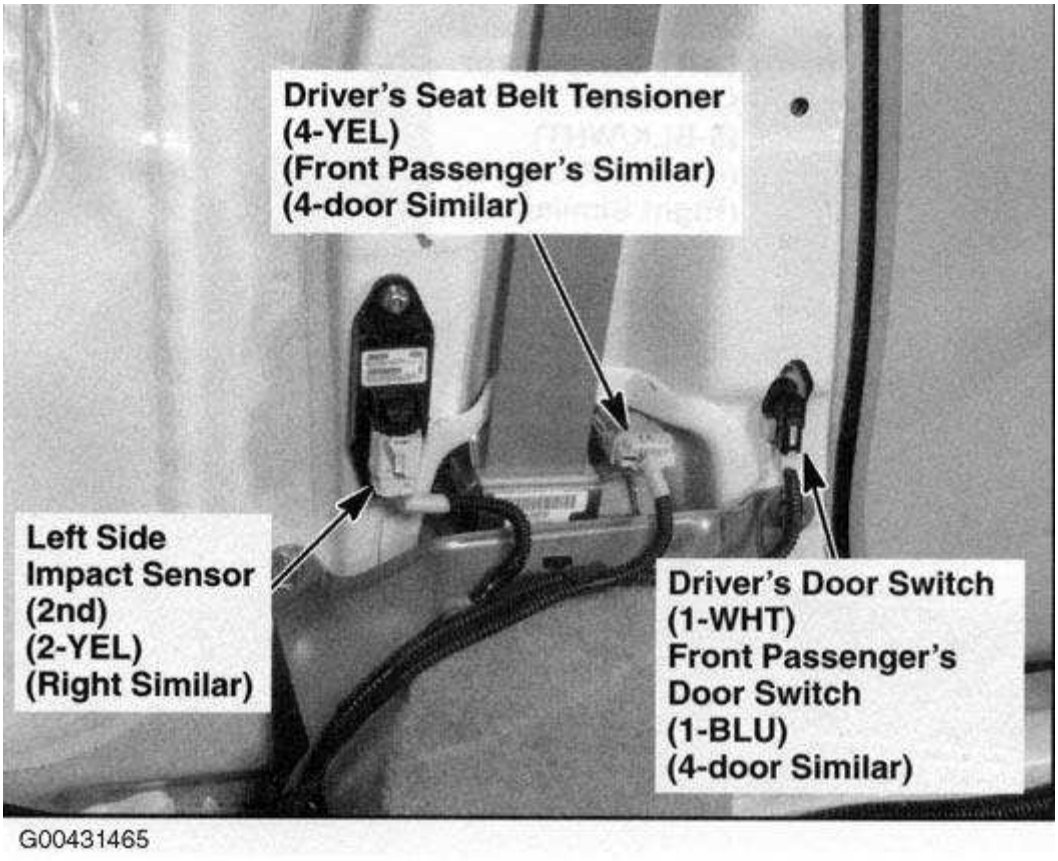
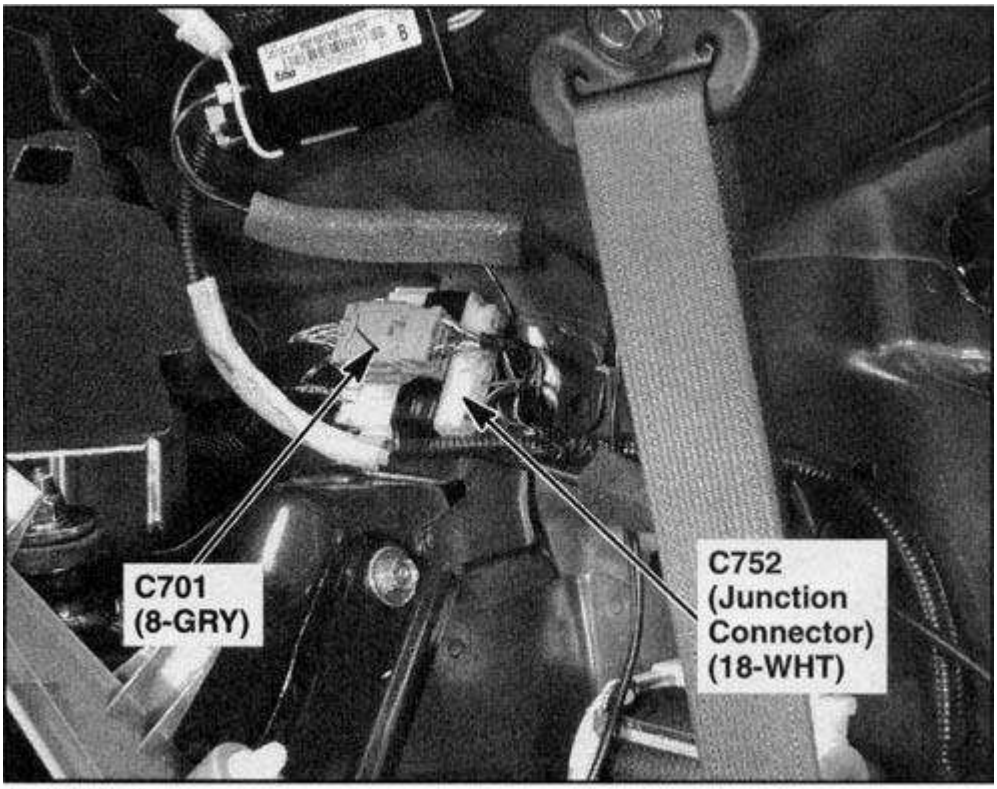


Fig. 123: Left & Right "B" Pillar (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00263598

Fig. 124: Left "C" Pillar (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

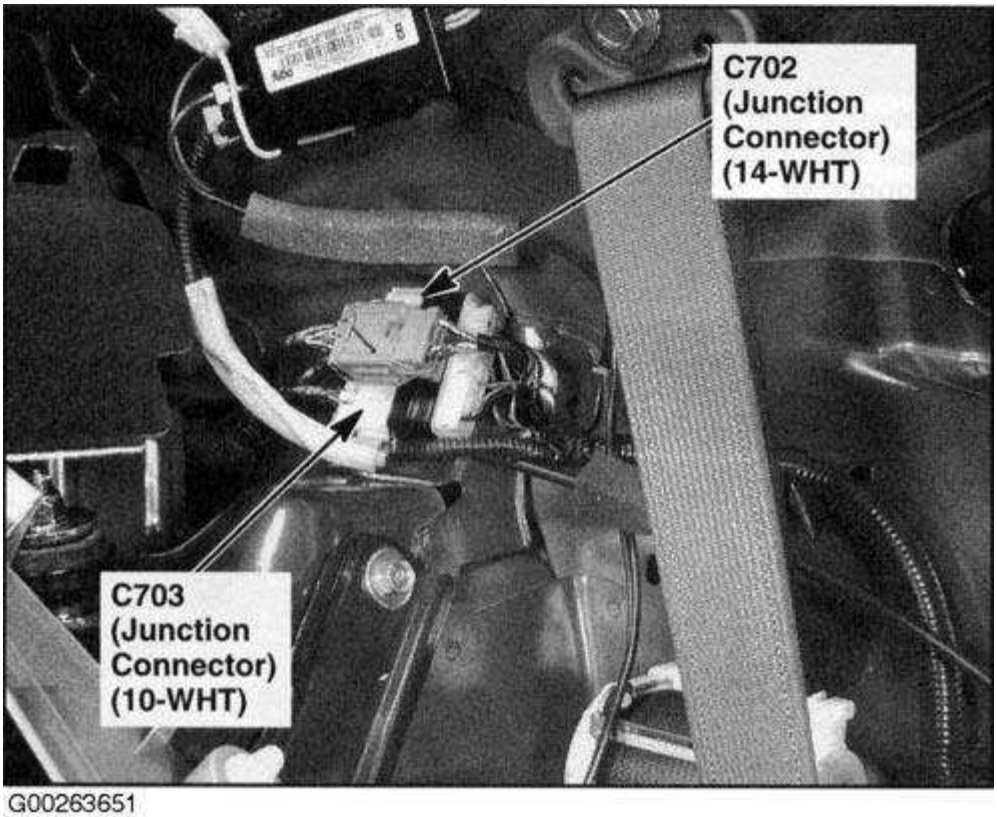


Fig. 125: Left "C" Pillar (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

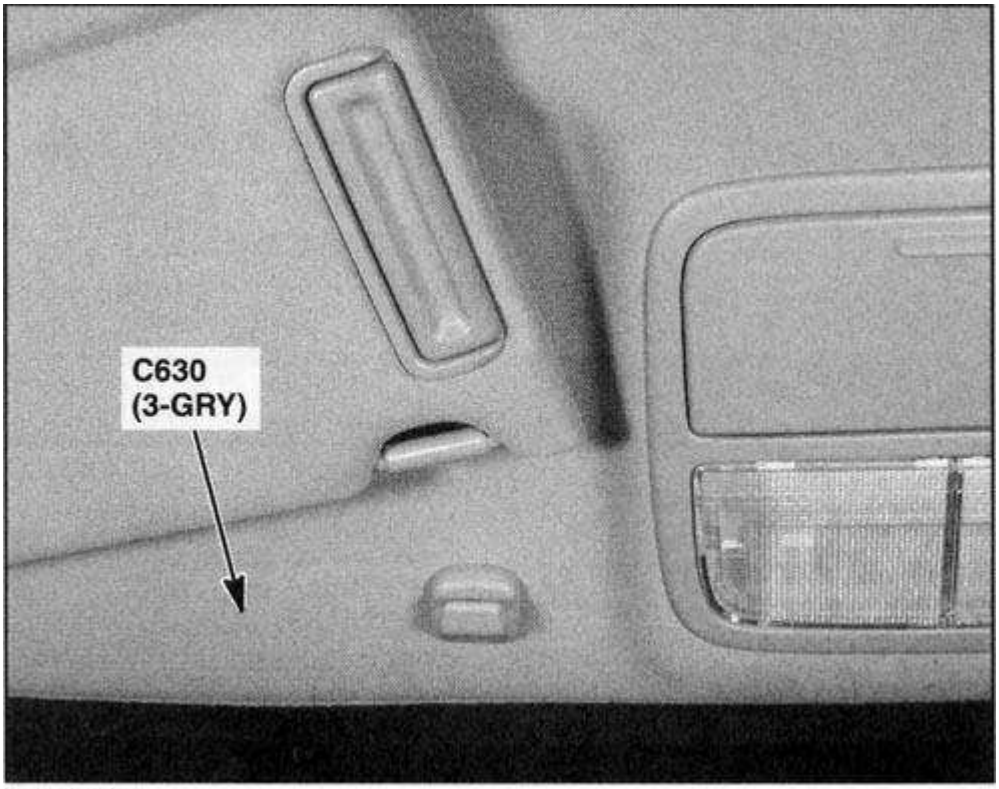
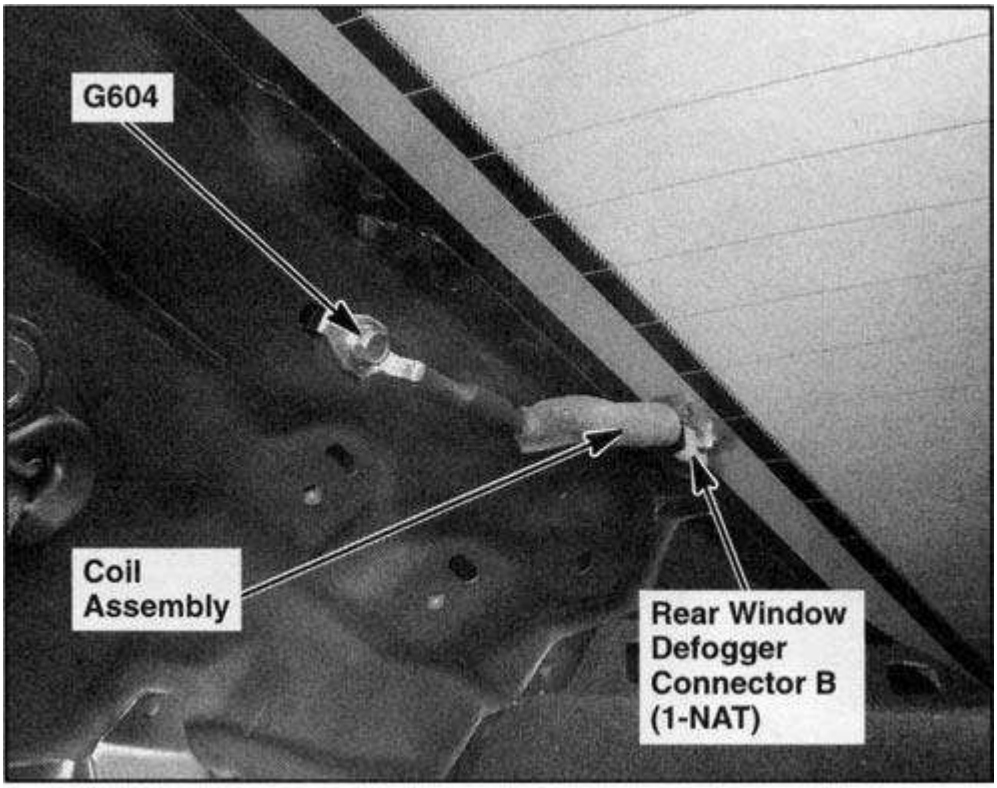
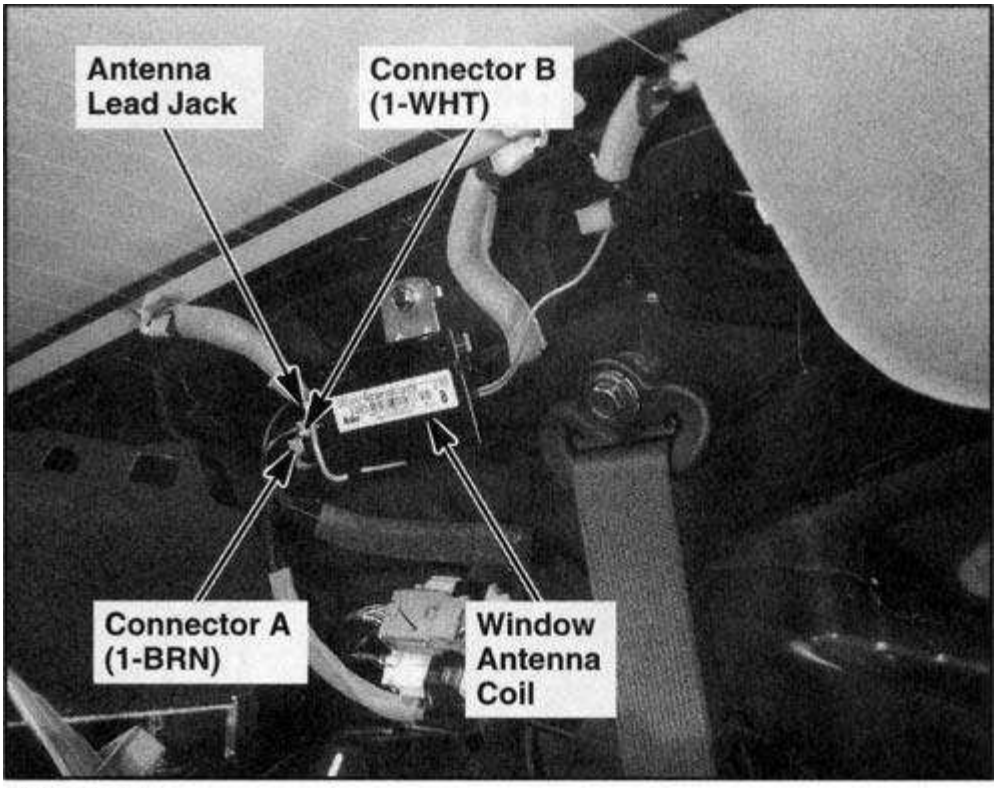


Fig. 126: Front Of Roof (Honda Accessory)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



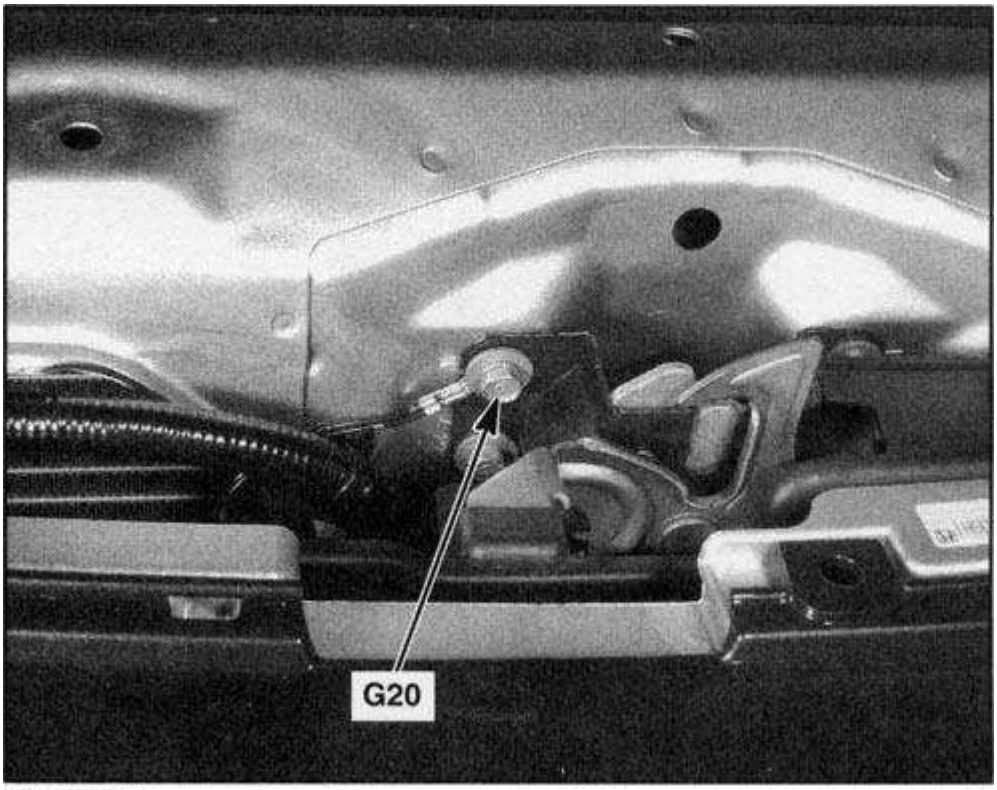
G00263654

Fig. 127: Right "C" Pillar (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00263655

Fig. 128: Left "C" Pillar (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00263659

Fig. 129: Behind Middle Of Front Bumper (Honda Accessory)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

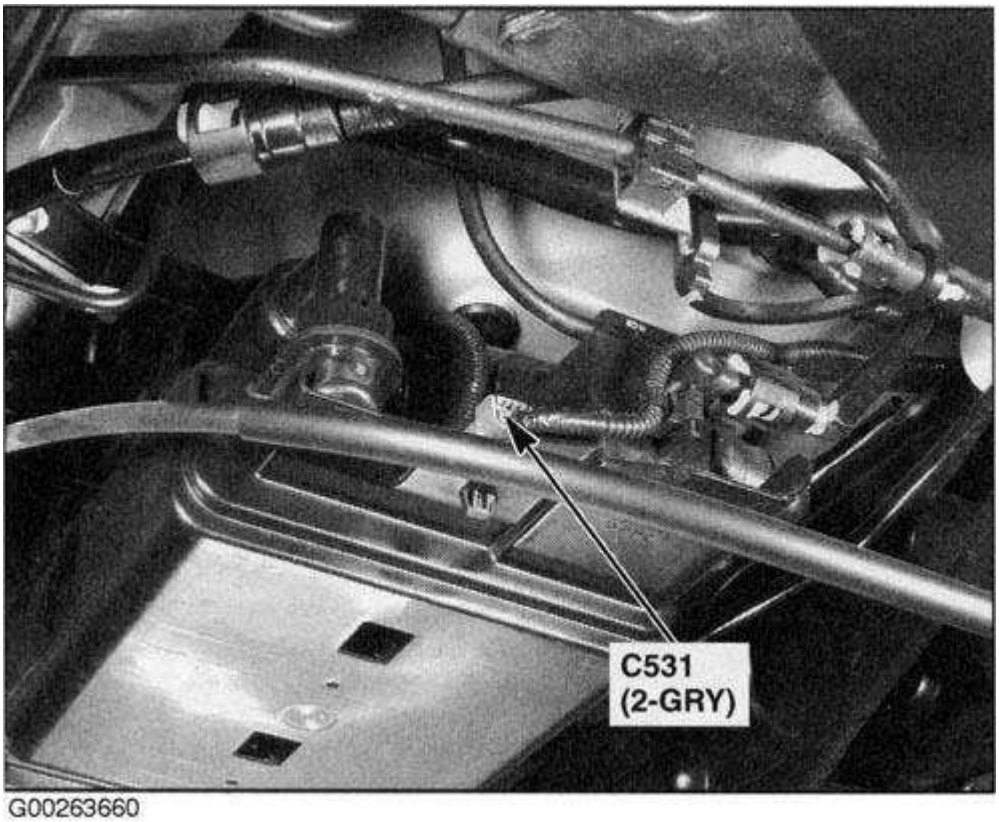


Fig. 130: Under Left Rear Of Vehicle (SULEV)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

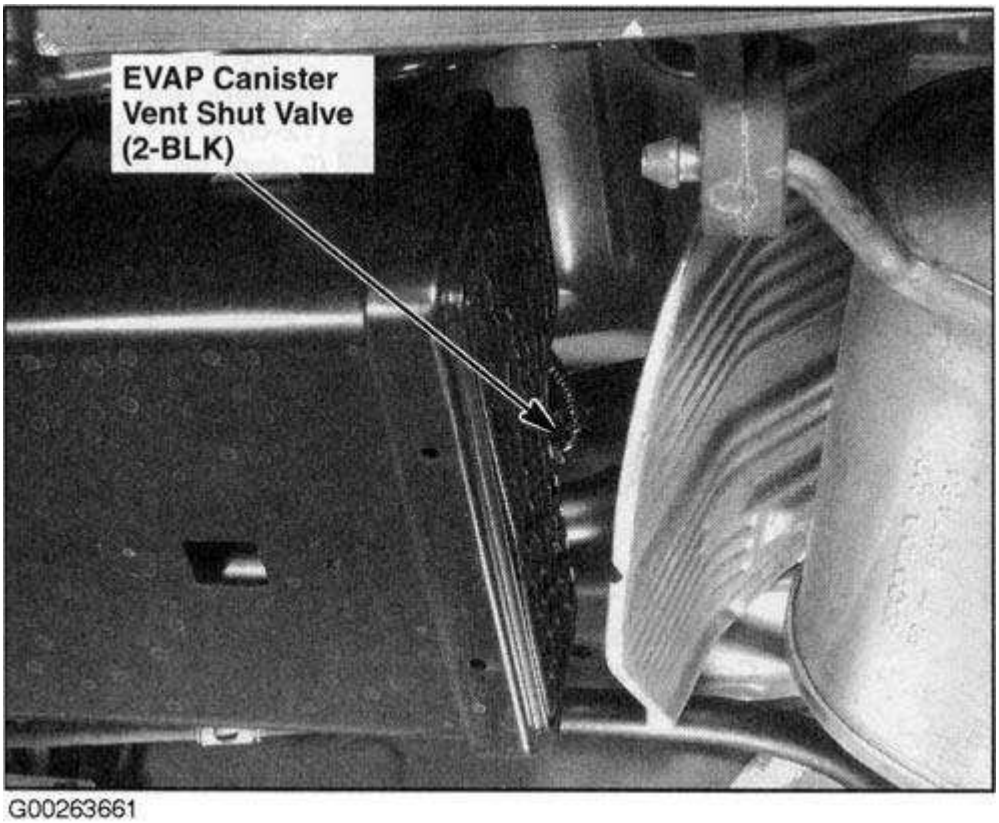
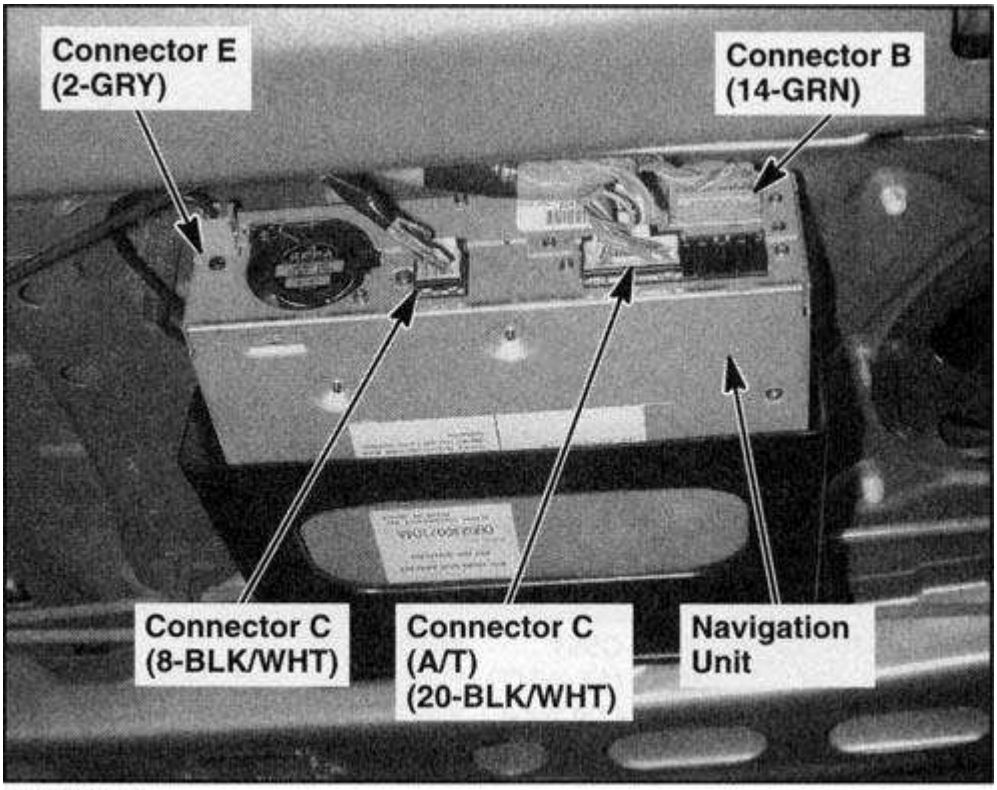
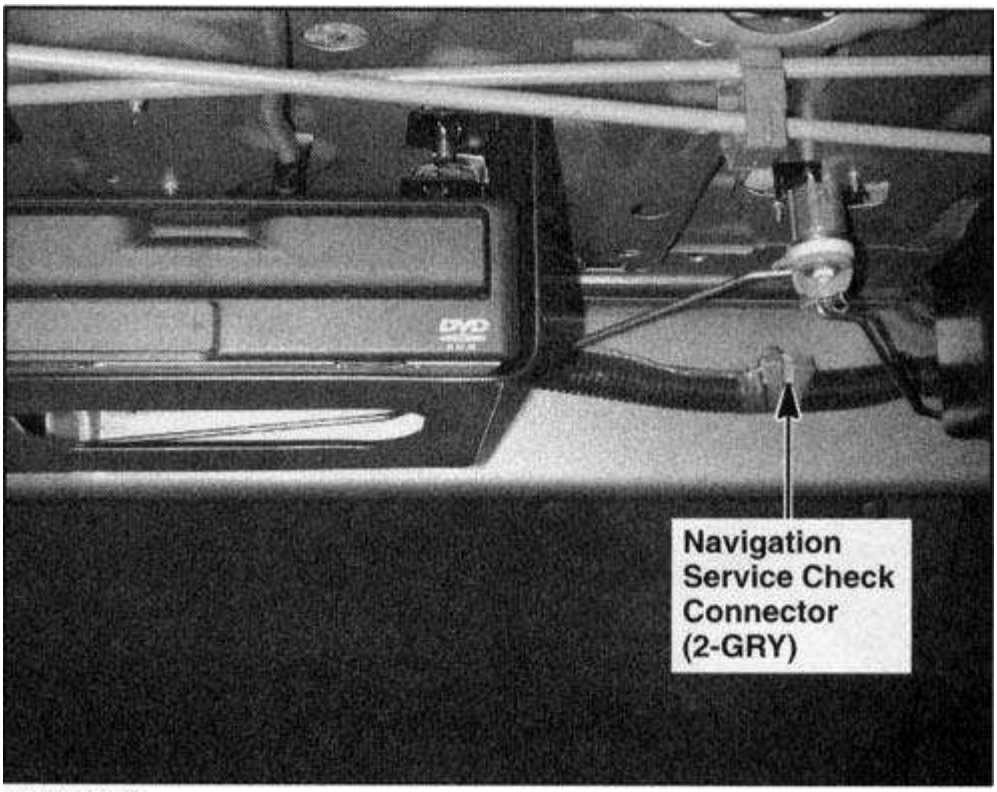


Fig. 131: Under Left Rear Of Vehicle (SULEV)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



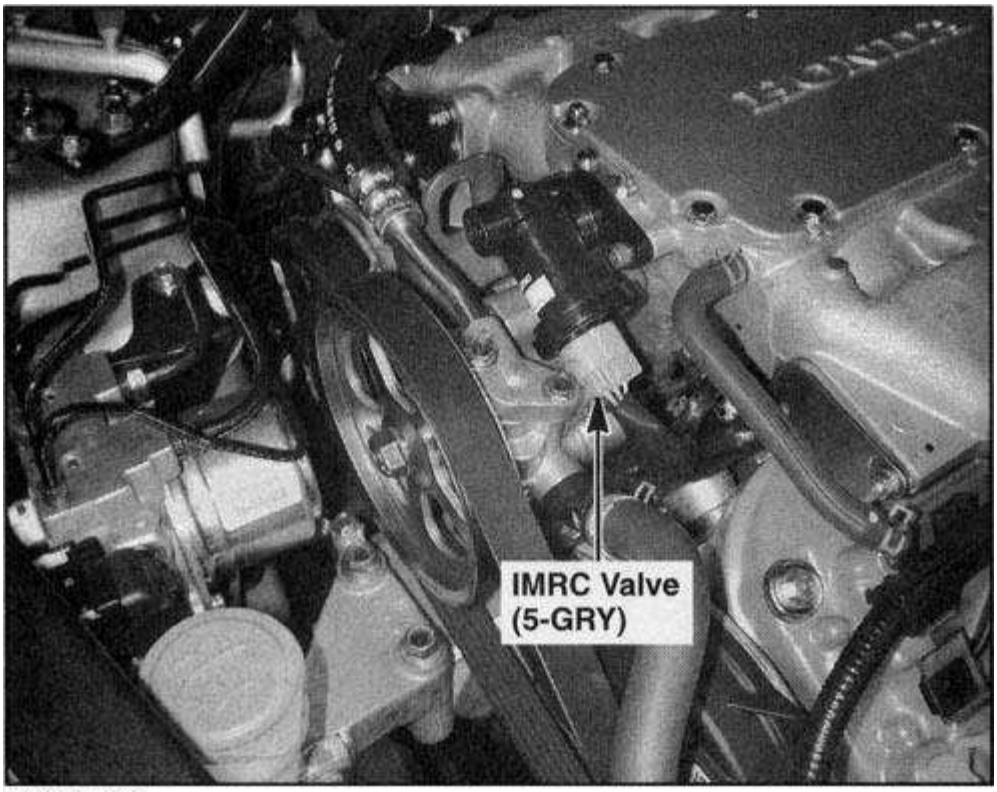
G00263662

Fig. 132: Under Middle Of Rear Shelf (EX-L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



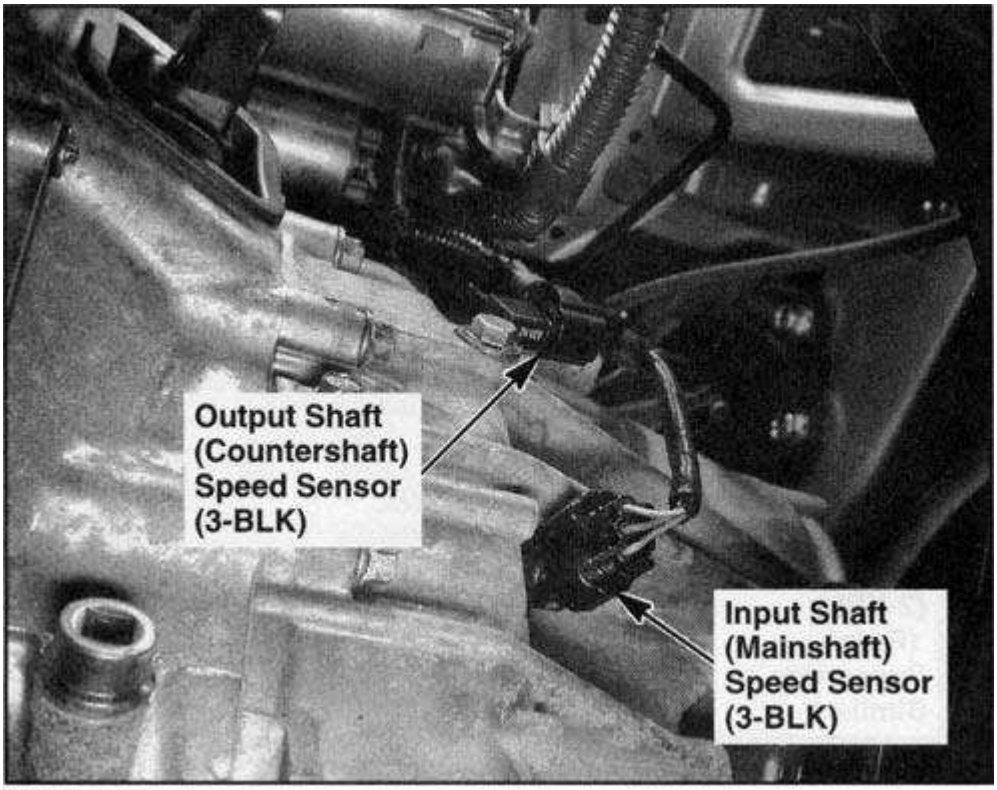
G00263663

Fig. 133: Under Right Side Of Rear Shelf (EX-L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



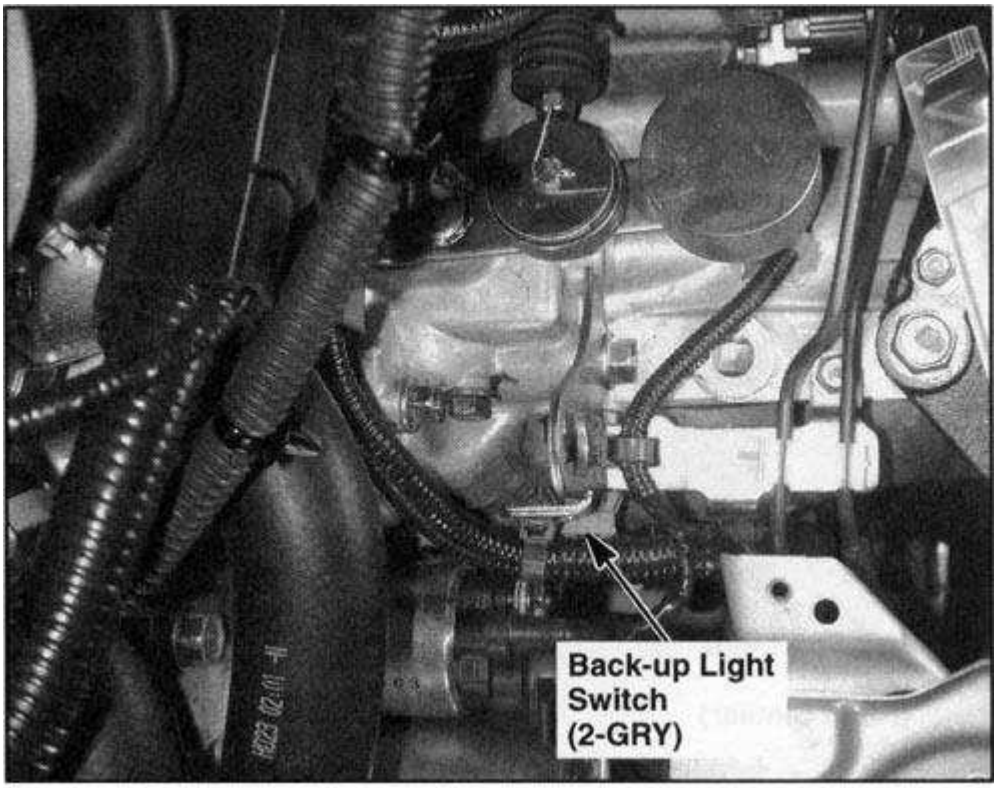
G00263666

Fig. 134: Front Of Engine (3.0L) (M/T)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



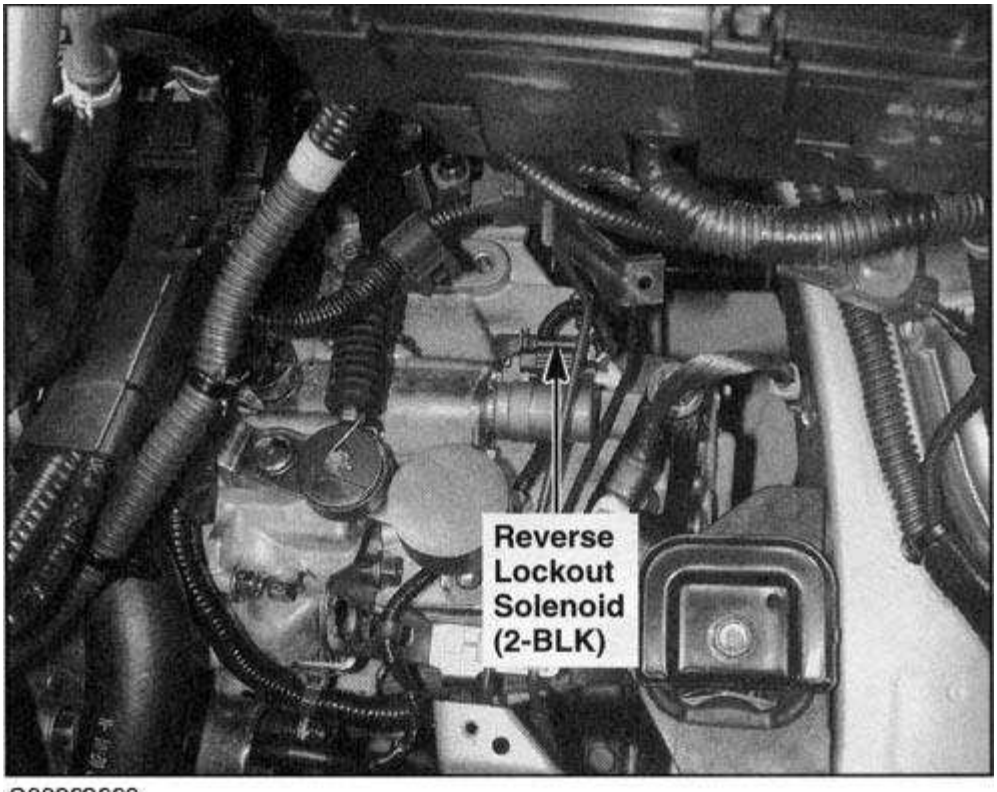
G00263667

Fig. 135: Manual Transmission Housing (3.0L) (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



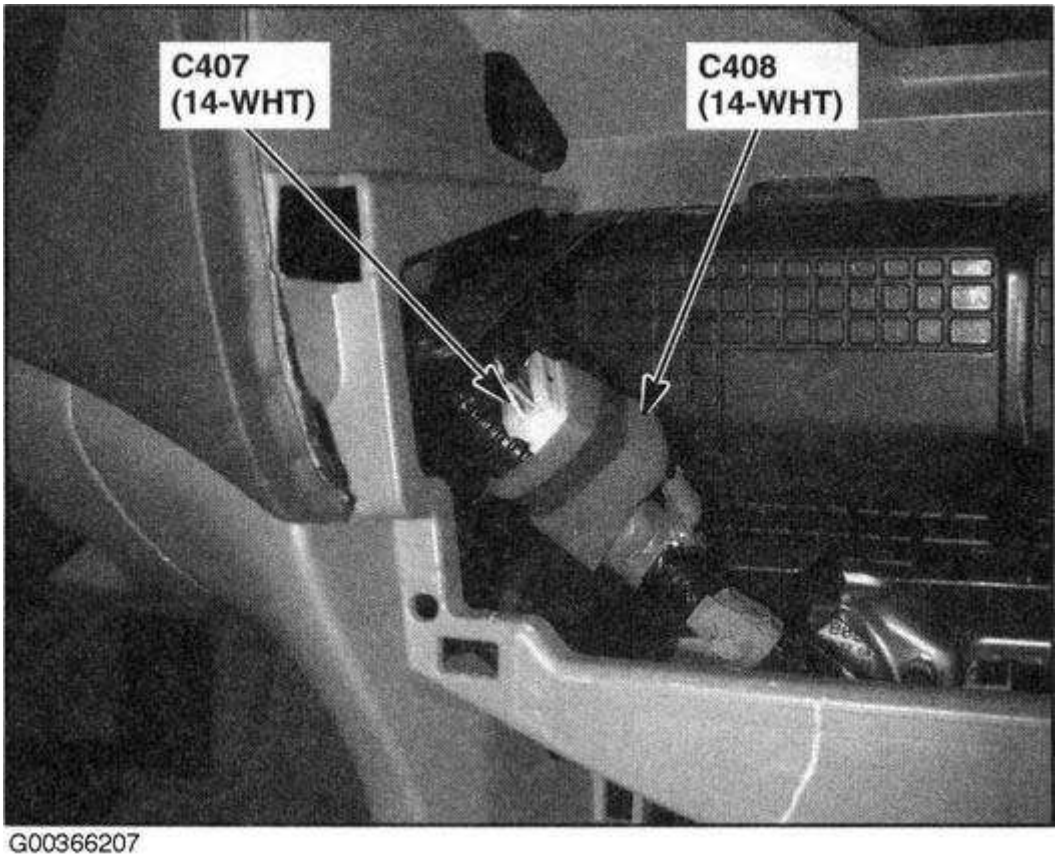
G00263668

Fig. 136: Manual Transmission Housing (3.0L) (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



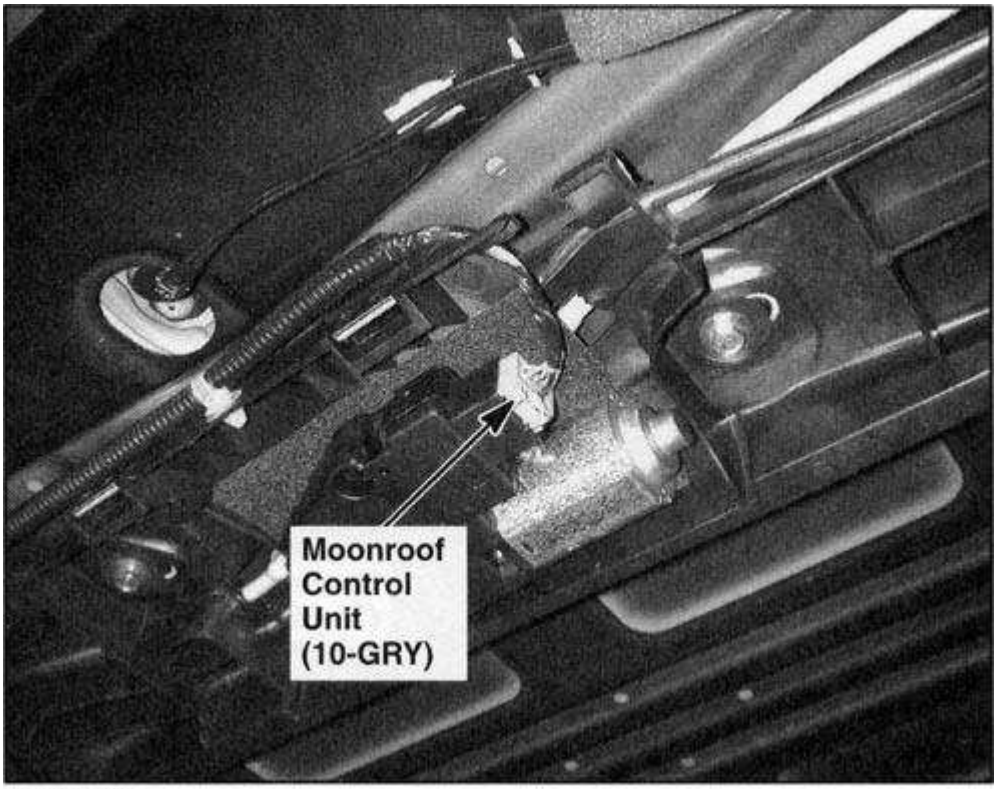
G00263669

Fig. 137: Manual Transmission Housing (3.0L) (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00366207

Fig. 138: Under Middle Of Dash (EX-L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00263675

Fig. 139: Rear Of Roof (EX & EX-L) (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

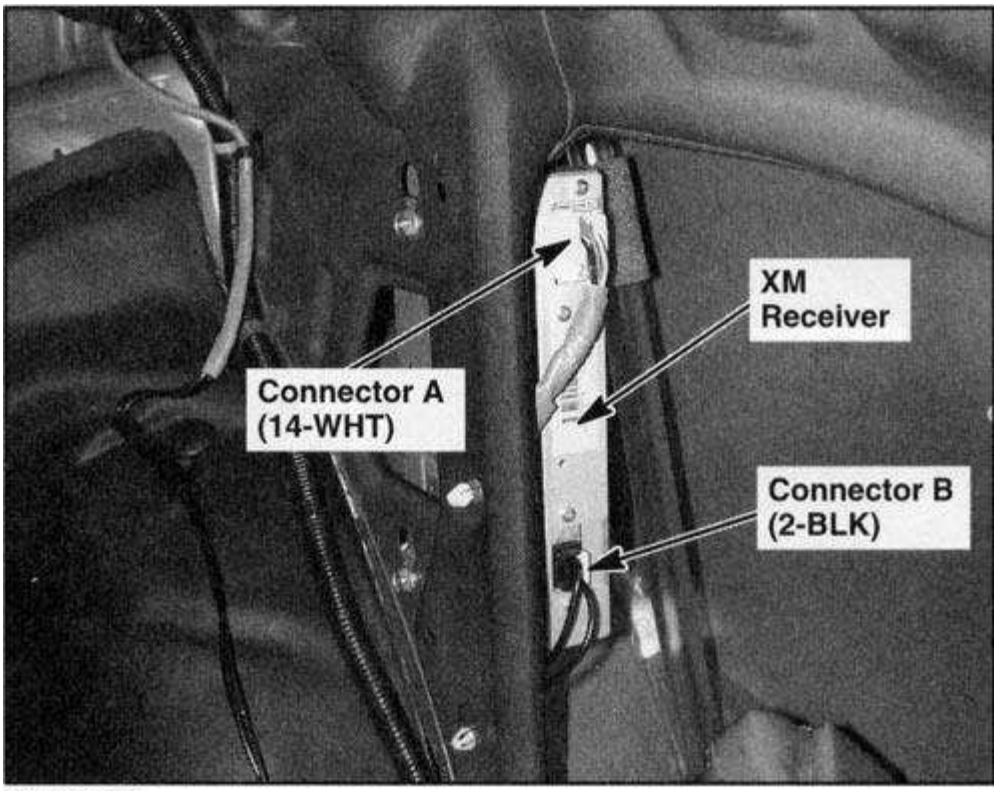


Fig. 140: Right Side Of Trunk
Courtesy of AMERICAN HONDA MOTOR CO., INC.

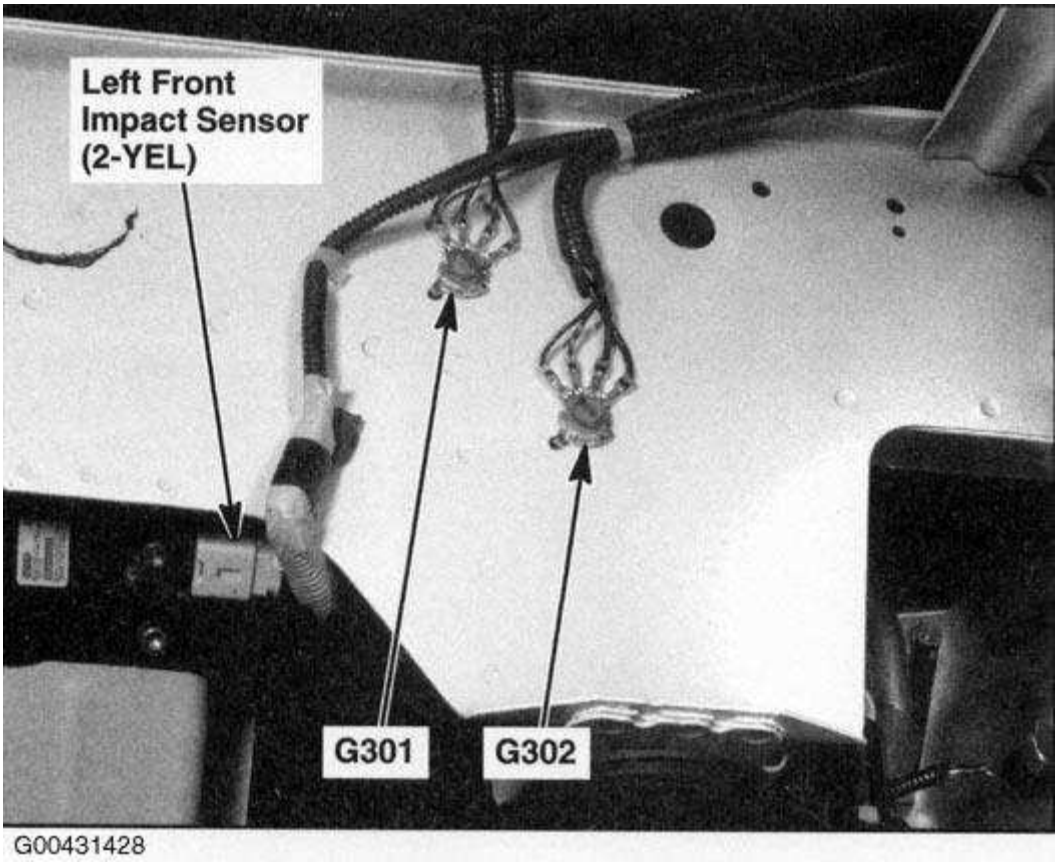


Fig. 141: Behind Left Side Of Front Bumper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

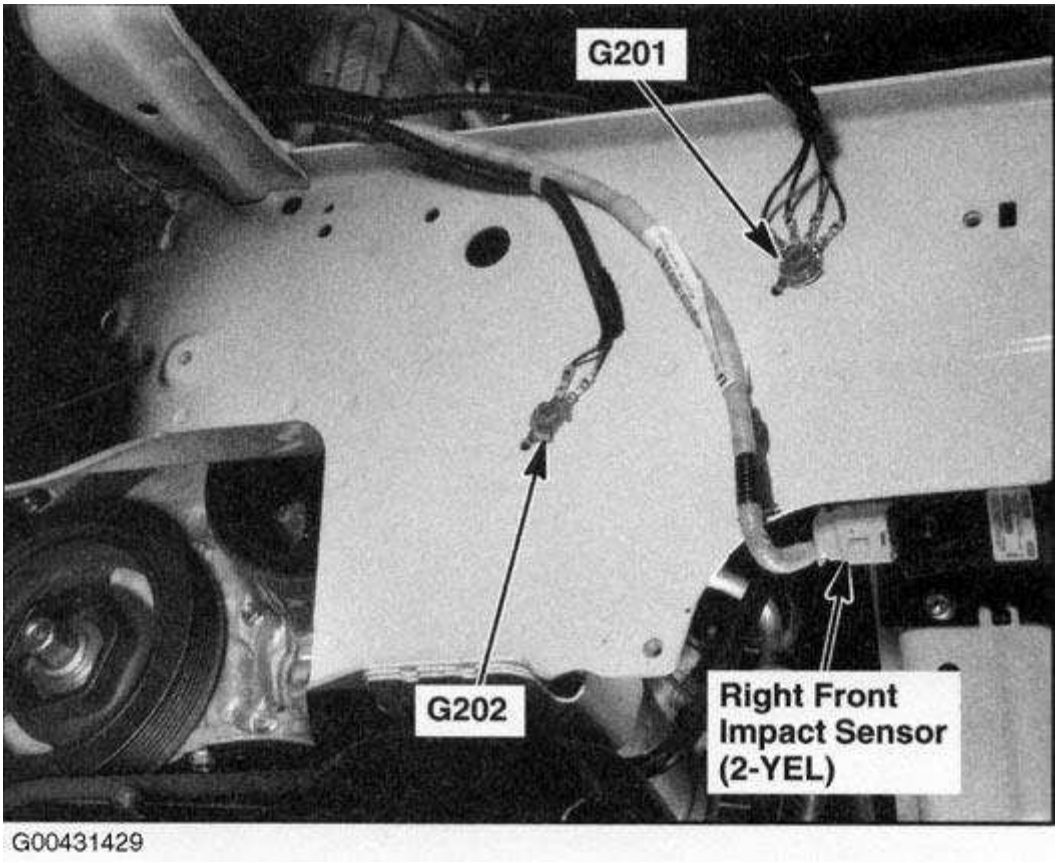
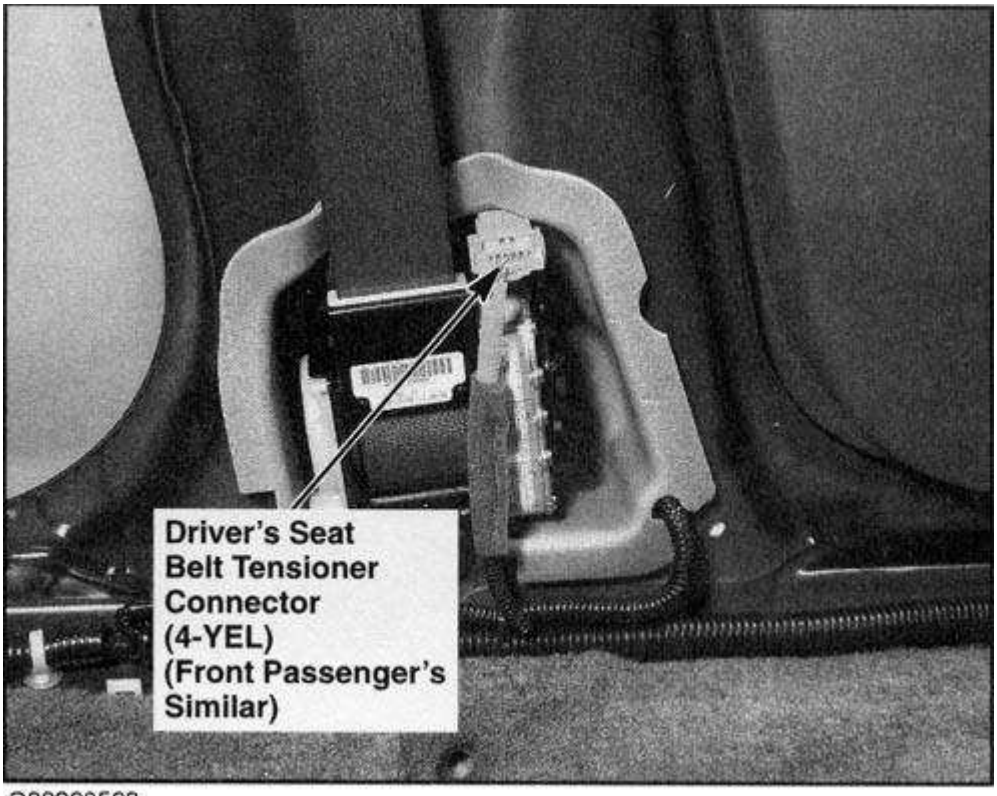


Fig. 142: Behind Right Side Of Front Bumper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

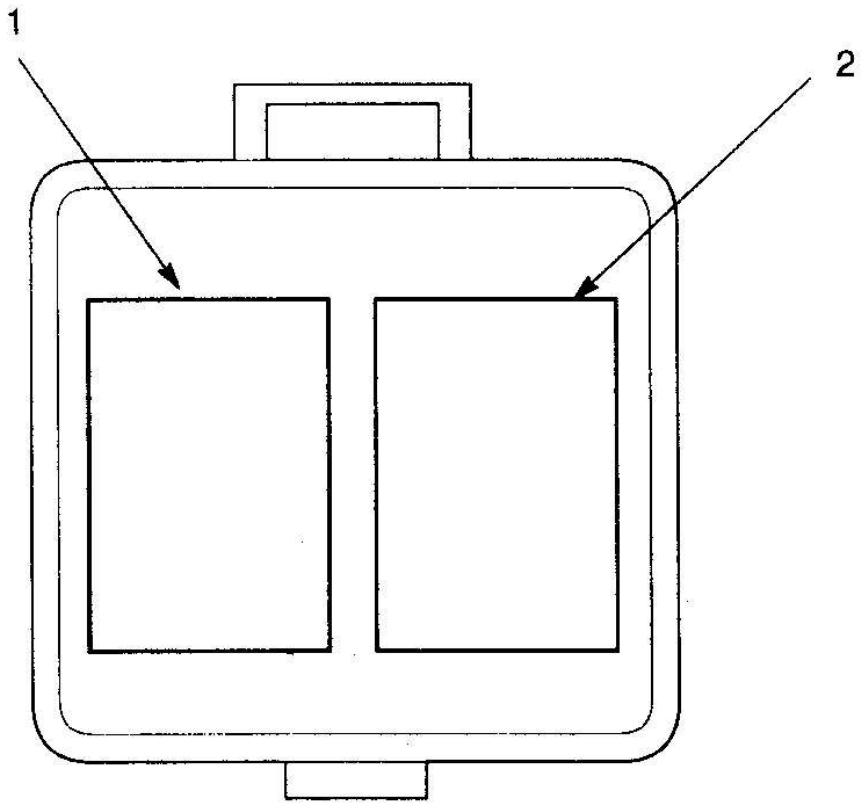


G00268560

Fig. 143: Left & Right "B" Pillar (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Fig. 144: Under-Dash Fuse/Relay Box
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Fig. 145: Under-Hood Fuse/Relay Box
Courtesy of AMERICAN HONDA MOTOR CO., INC.



Ref	Socket
1	Fan control relay (Canada)
2	Fan control relay (USA)
2	DRL relay (Canada)

G00292070

Fig. 146: Under-Hood Multi-Relay Box
Courtesy of AMERICAN HONDA MOTOR CO., INC.

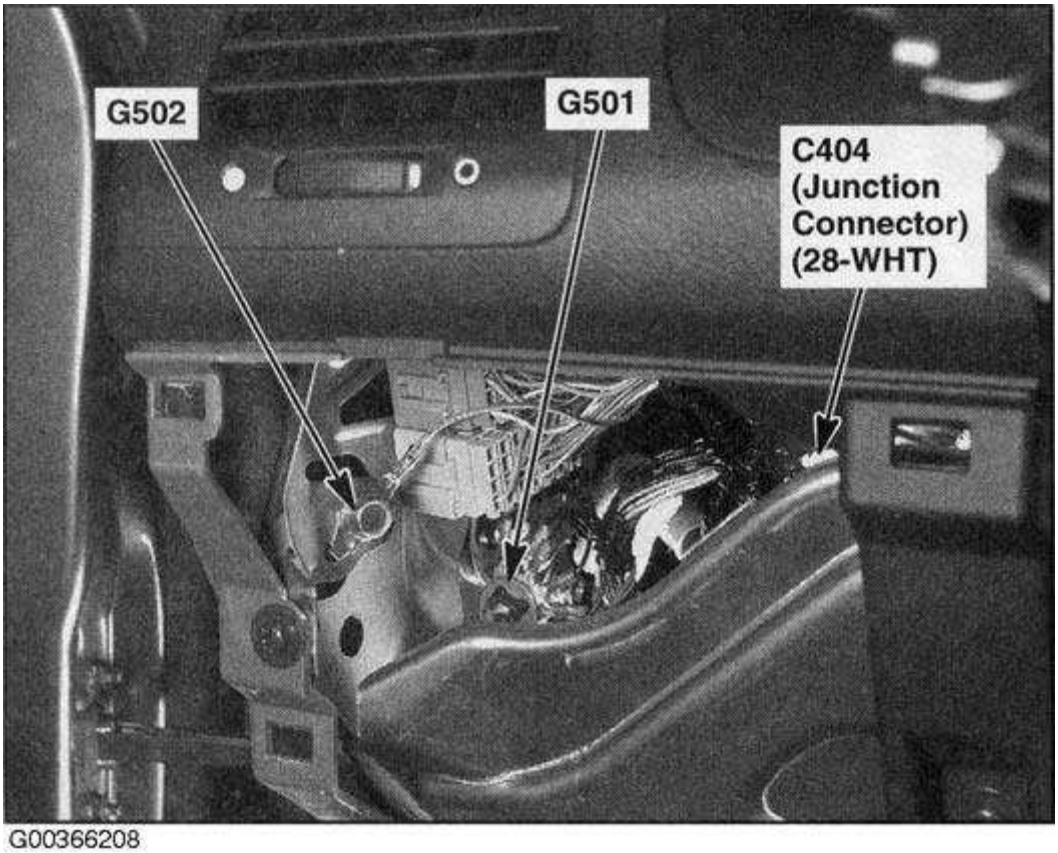


Fig. 147: Under Left Side Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

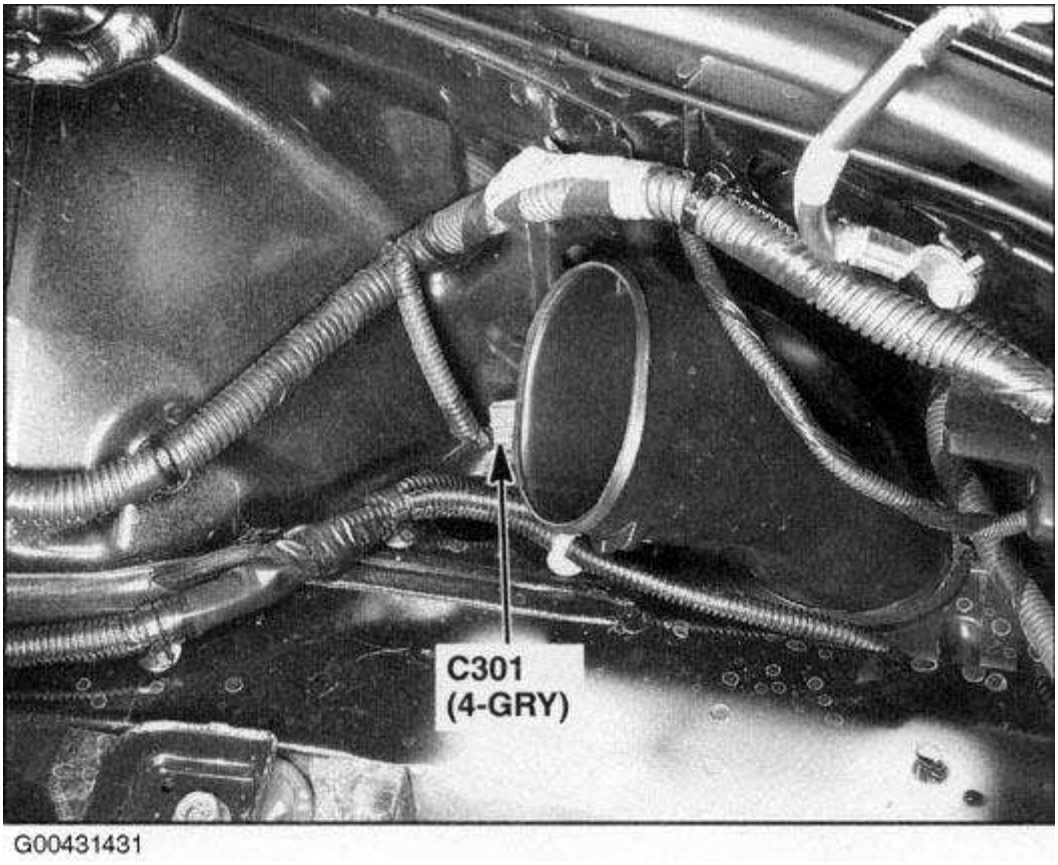


Fig. 148: Left Side Of Engine Compartment
Courtesy of AMERICAN HONDA MOTOR CO., INC.

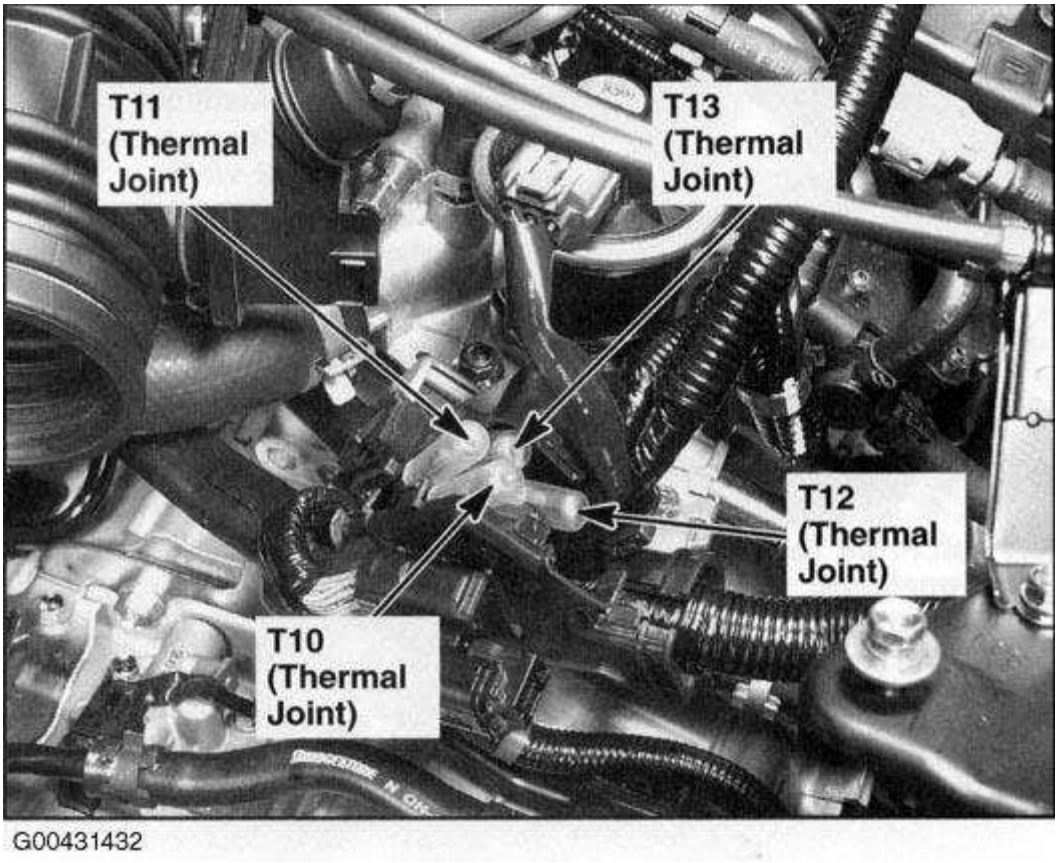


Fig. 149: Left Side Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

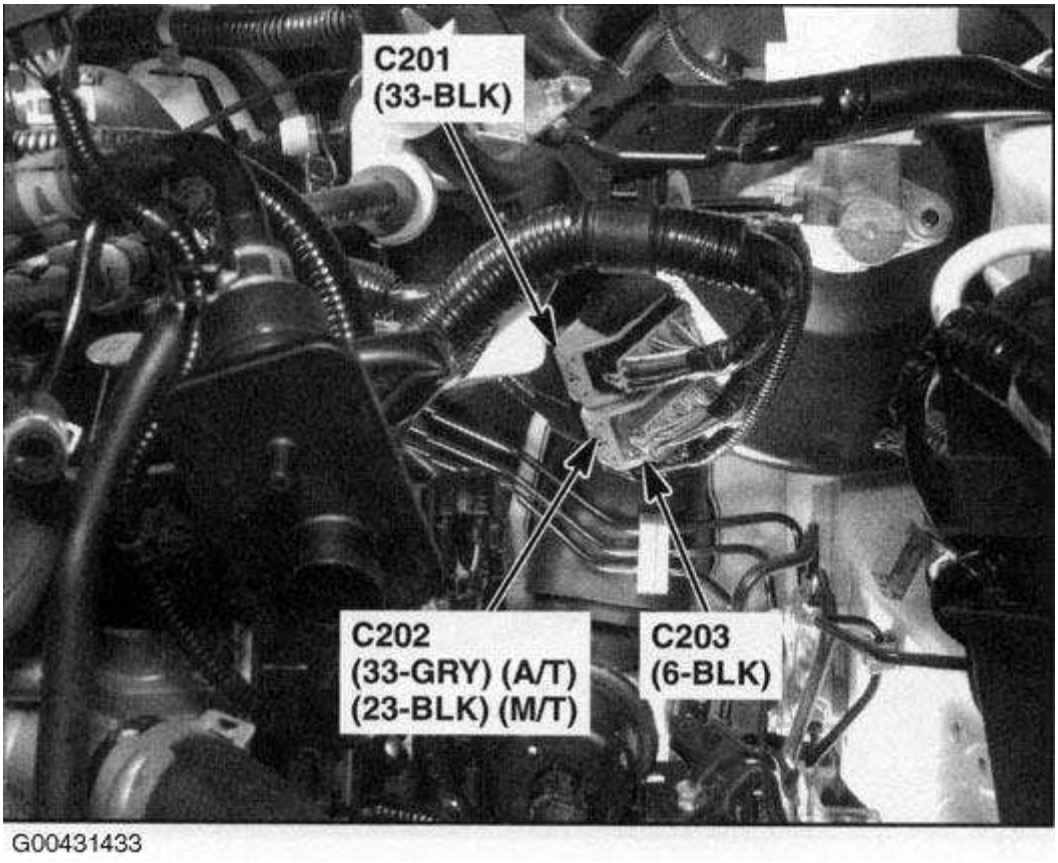


Fig. 150: Left Side Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

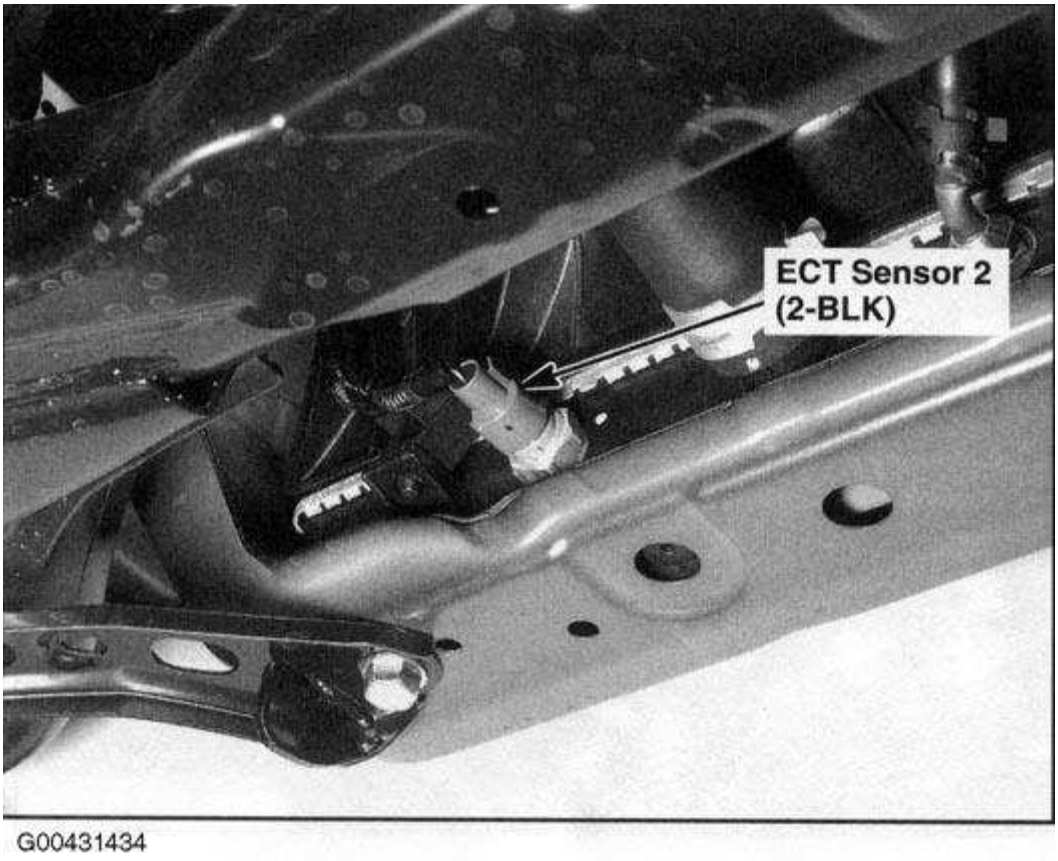


Fig. 151: Left Side Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

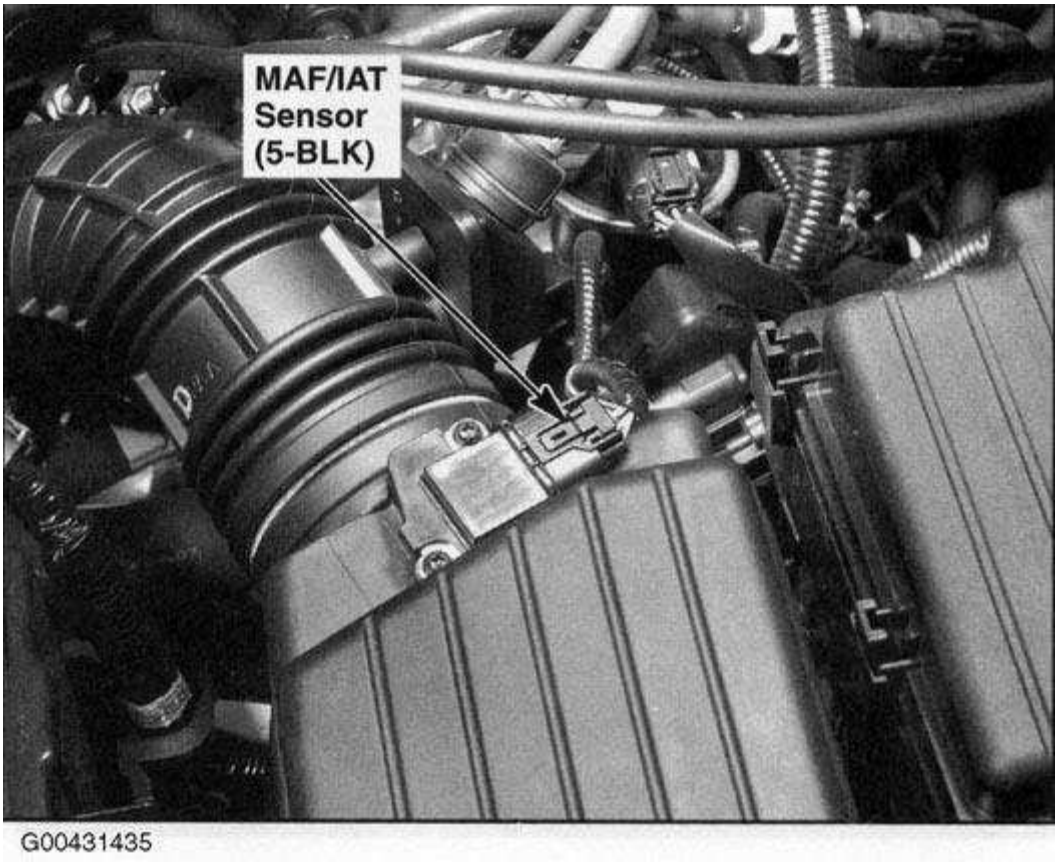


Fig. 152: Left Side Of Engine Compartment (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

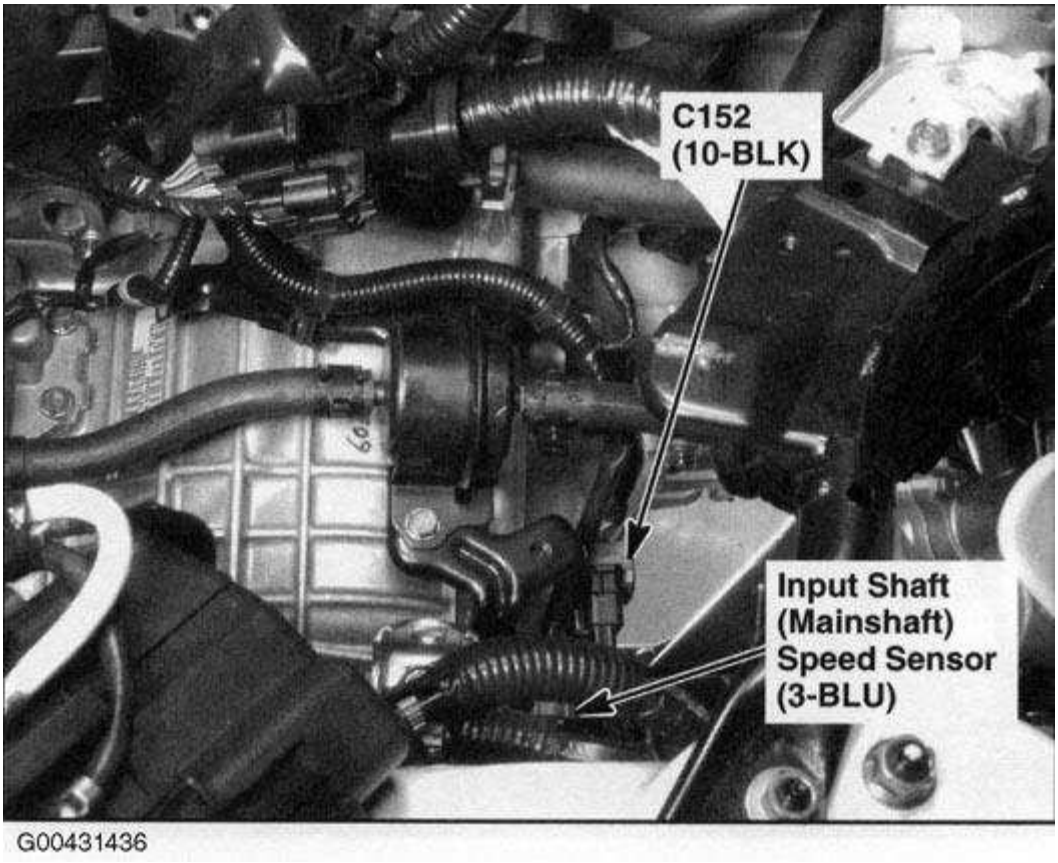


Fig. 153: Left Side Of Engine Compartment (2.4L) (A/T)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

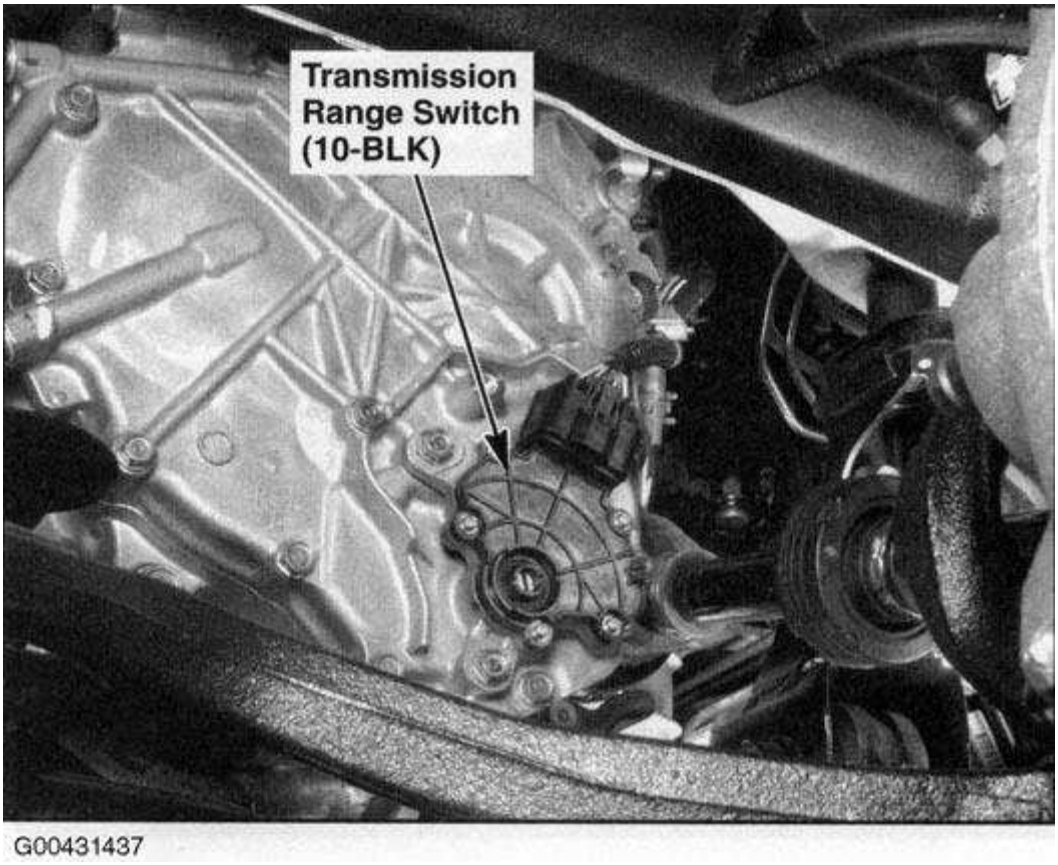


Fig. 154: Left Side Of Engine Compartment (2.4L) (A/T)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

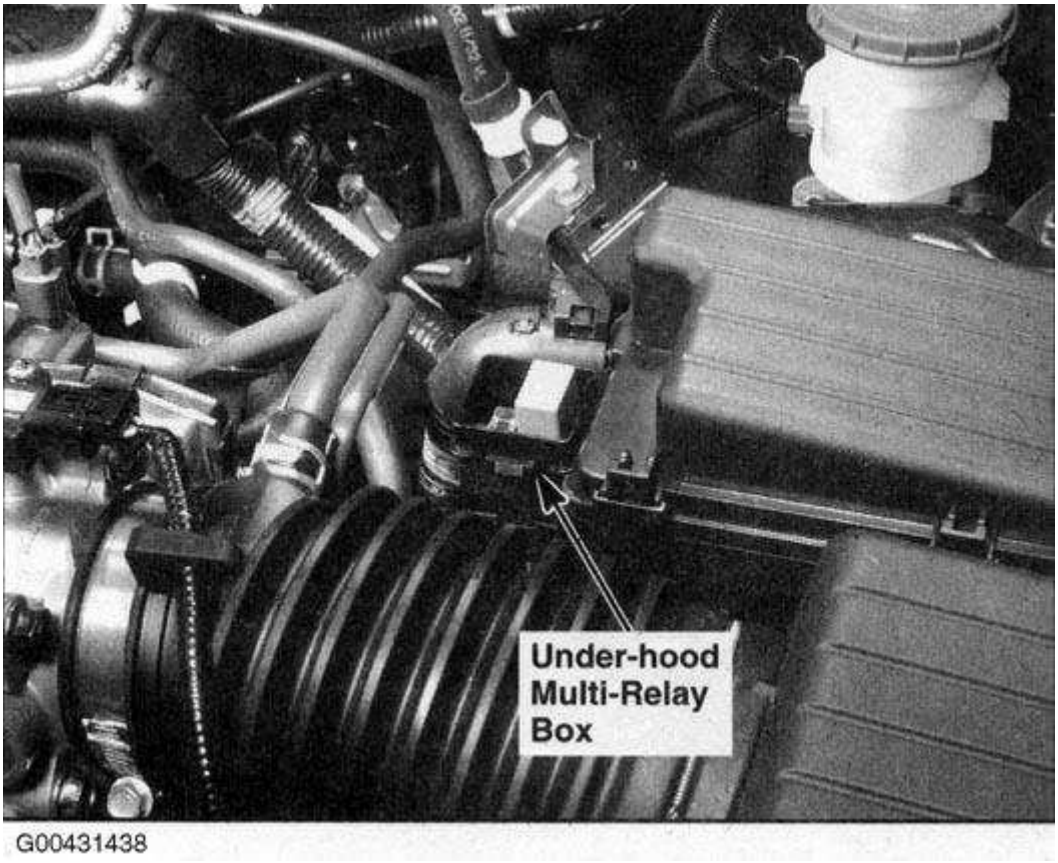


Fig. 155: Left Side Of Engine Compartment
Courtesy of AMERICAN HONDA MOTOR CO., INC.

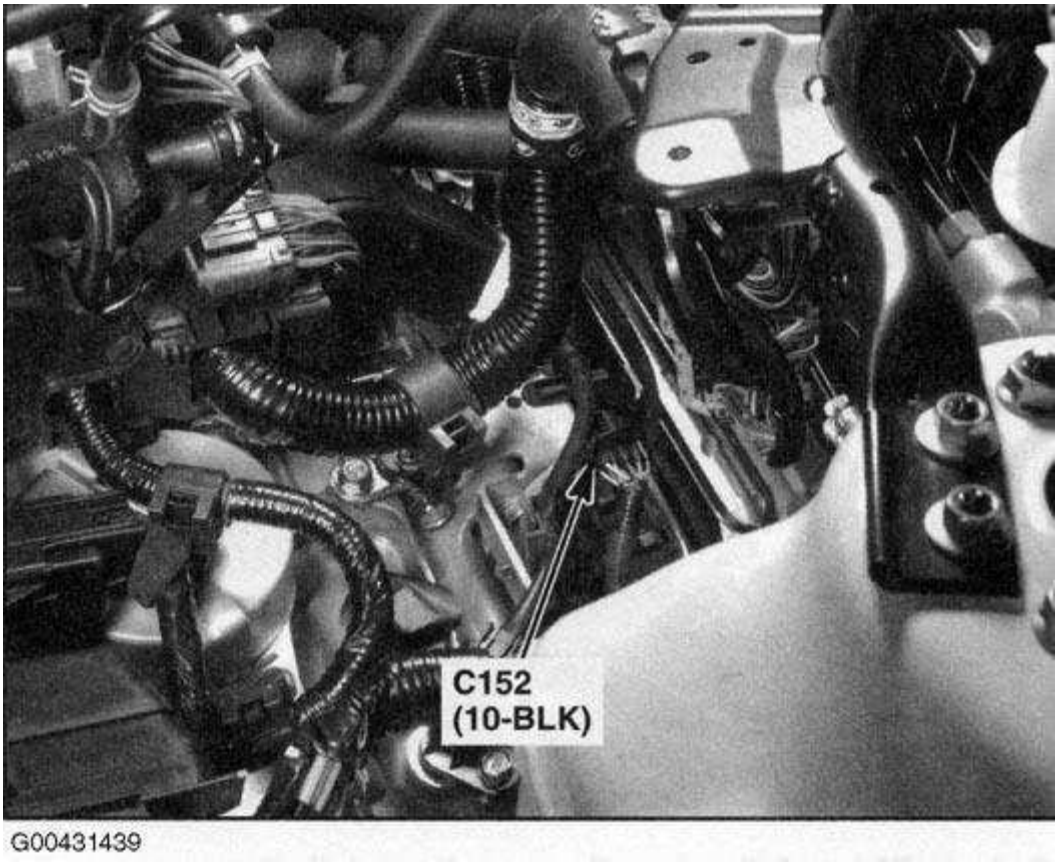


Fig. 156: Left Side Of Engine Compartment (3.0L) (A/T)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

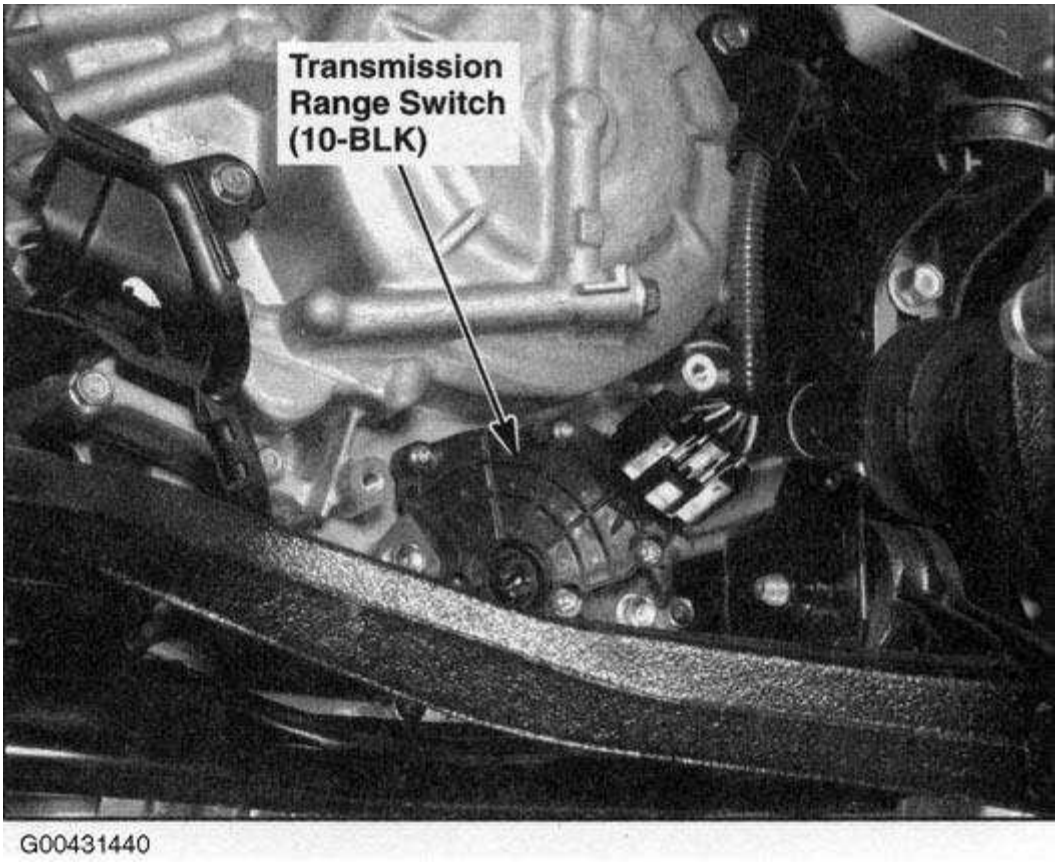


Fig. 157: Left Side Of Engine Compartment (3.0L) (A/T)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

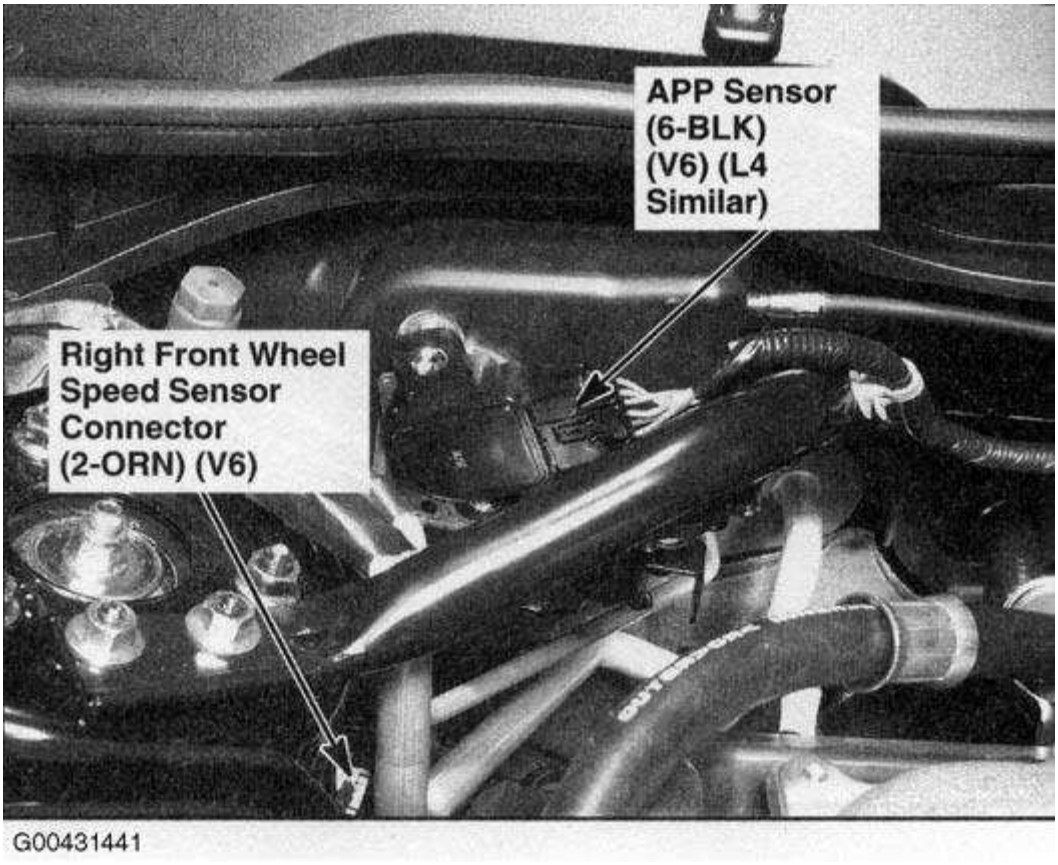


Fig. 158: Right Side Of Engine Compartment
Courtesy of AMERICAN HONDA MOTOR CO., INC.

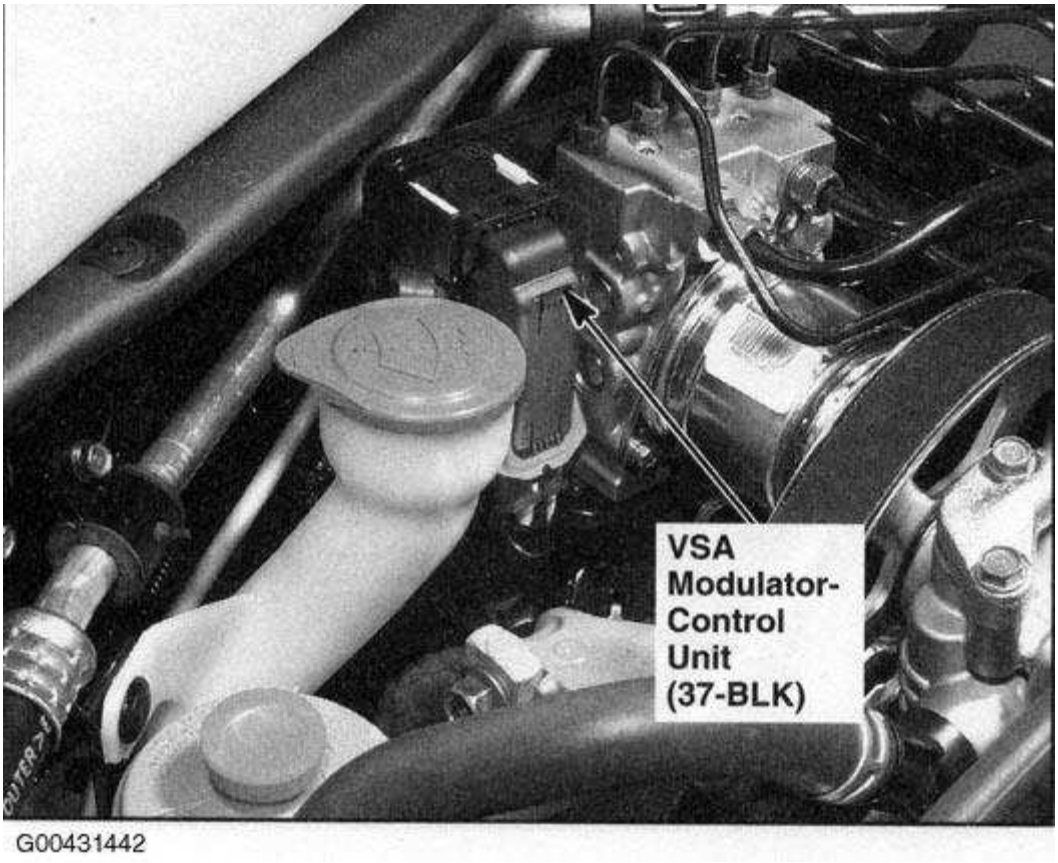


Fig. 159: Right Side Of Engine Compartment (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

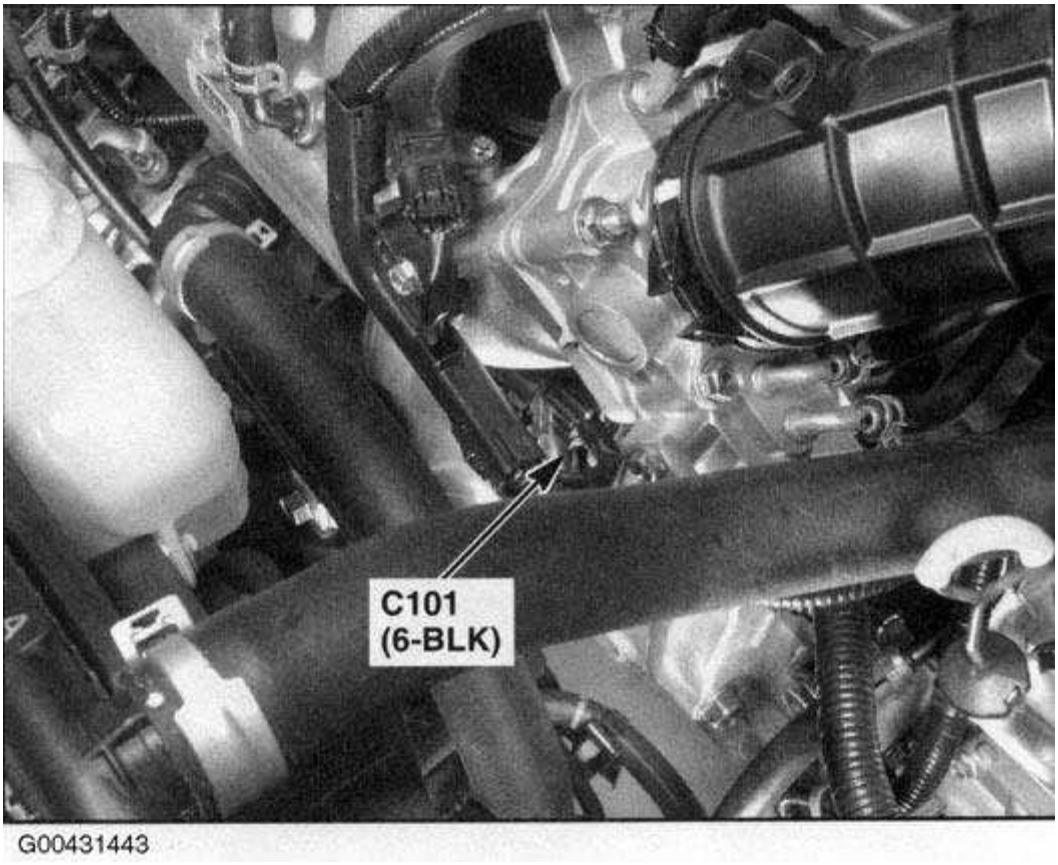


Fig. 160: Left Side Of Engine (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

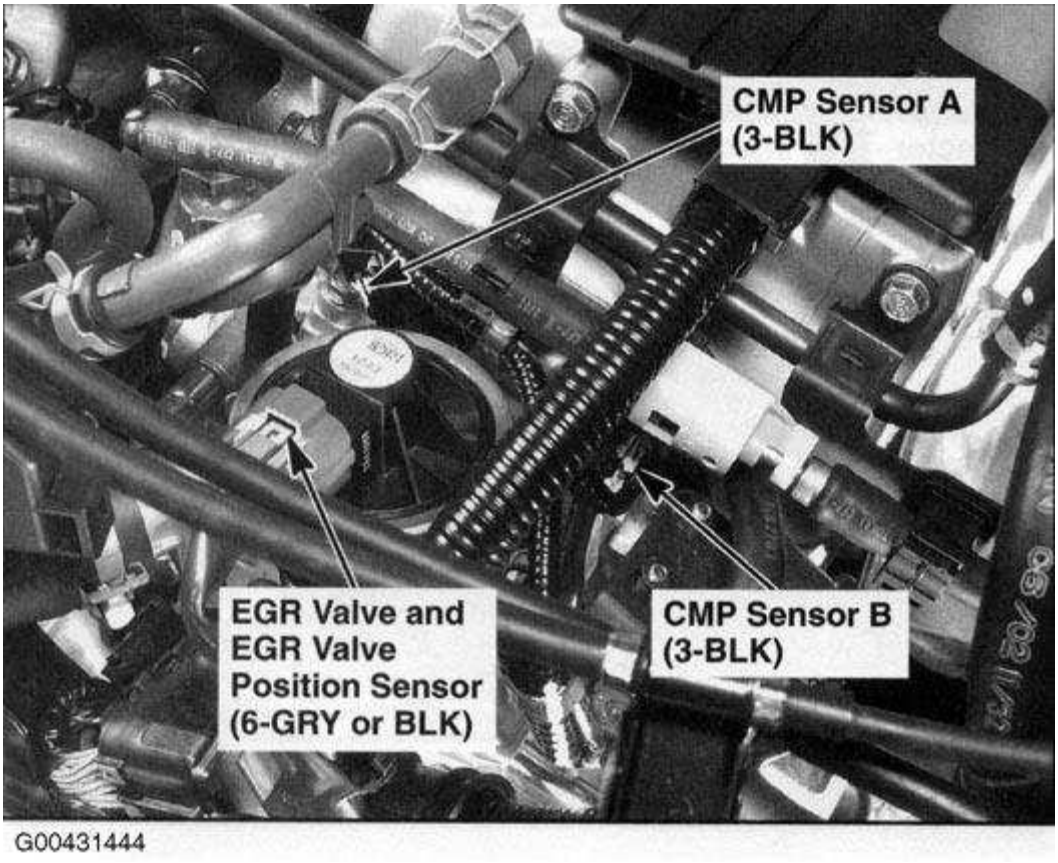


Fig. 161: Rear Of Engine (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

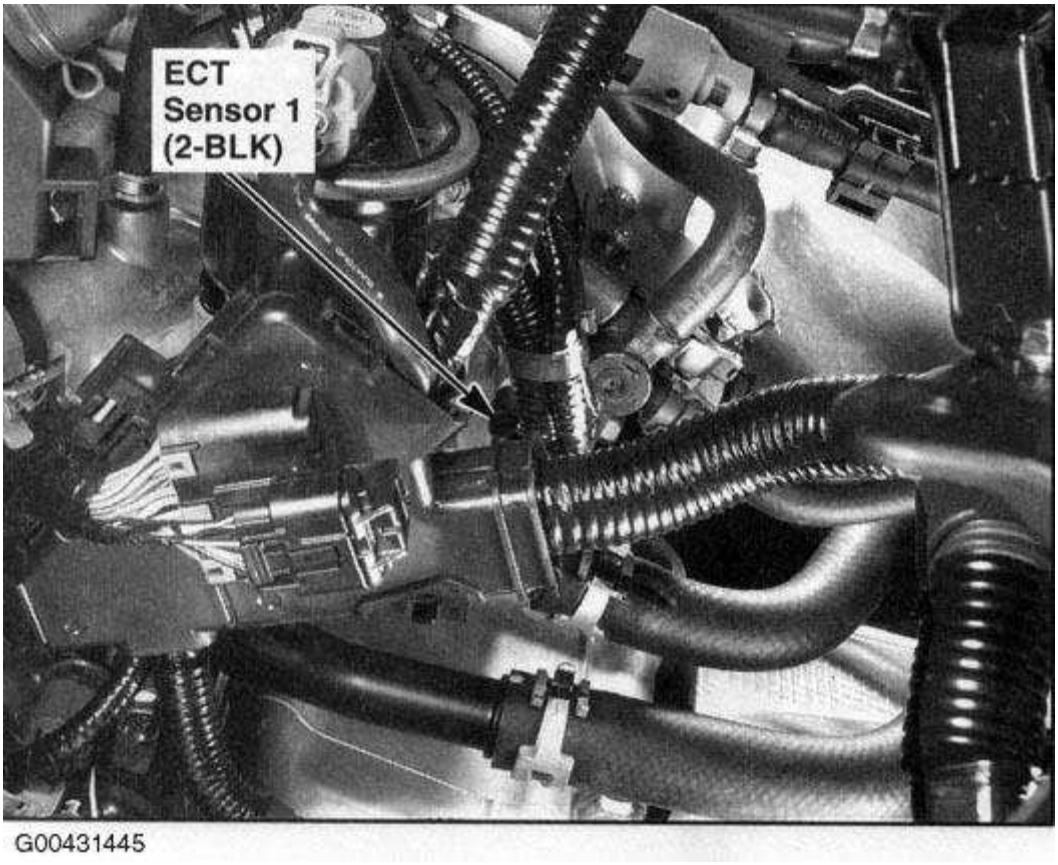


Fig. 162: Rear Of Engine (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

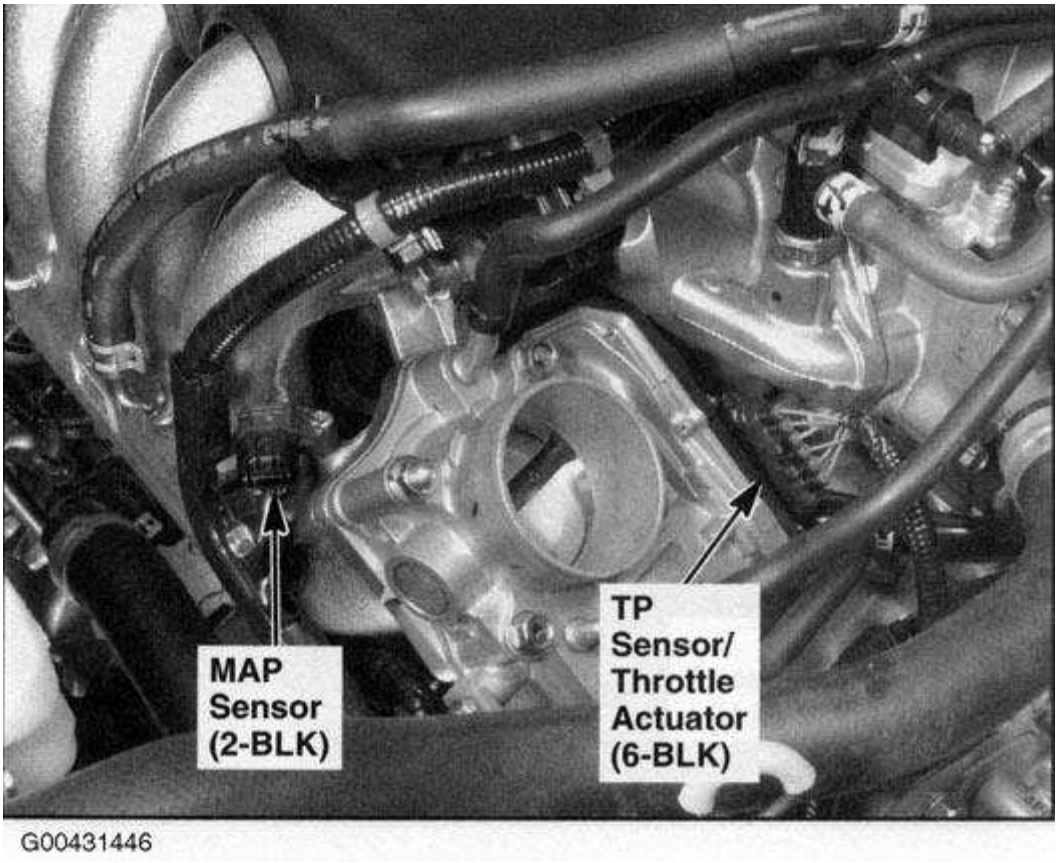


Fig. 163: Rear Of Engine (2.4L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

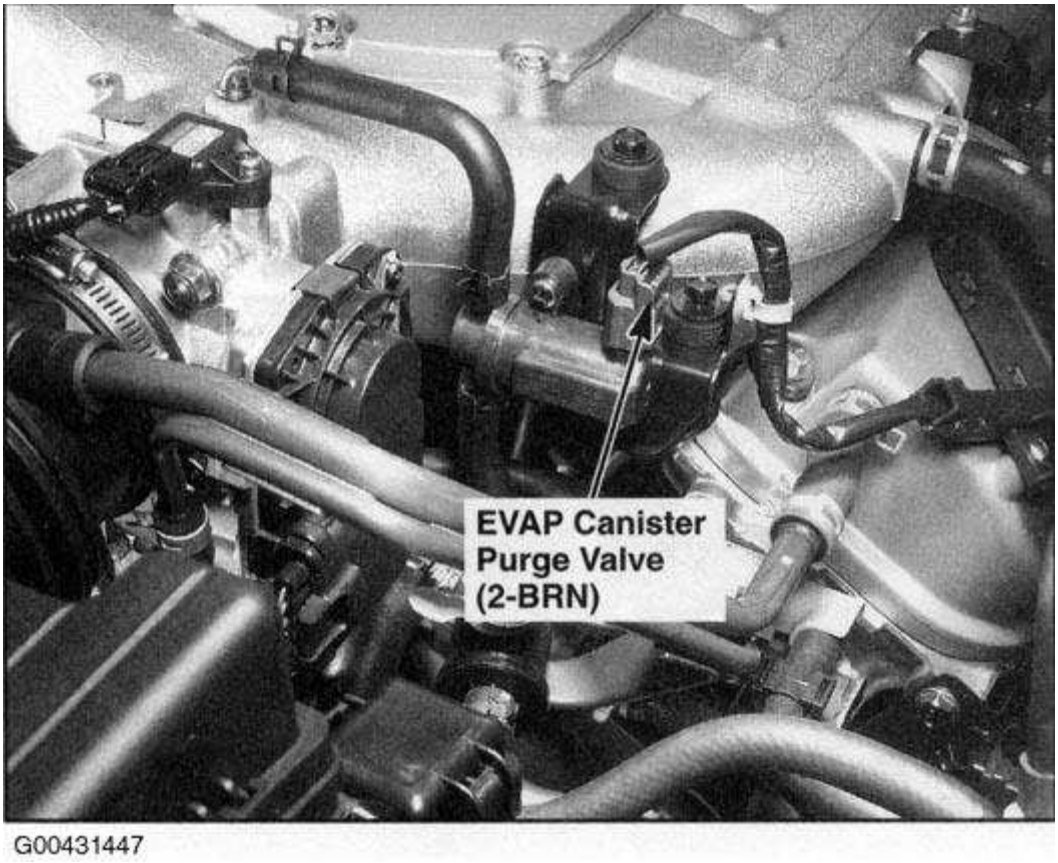


Fig. 164: Rear Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

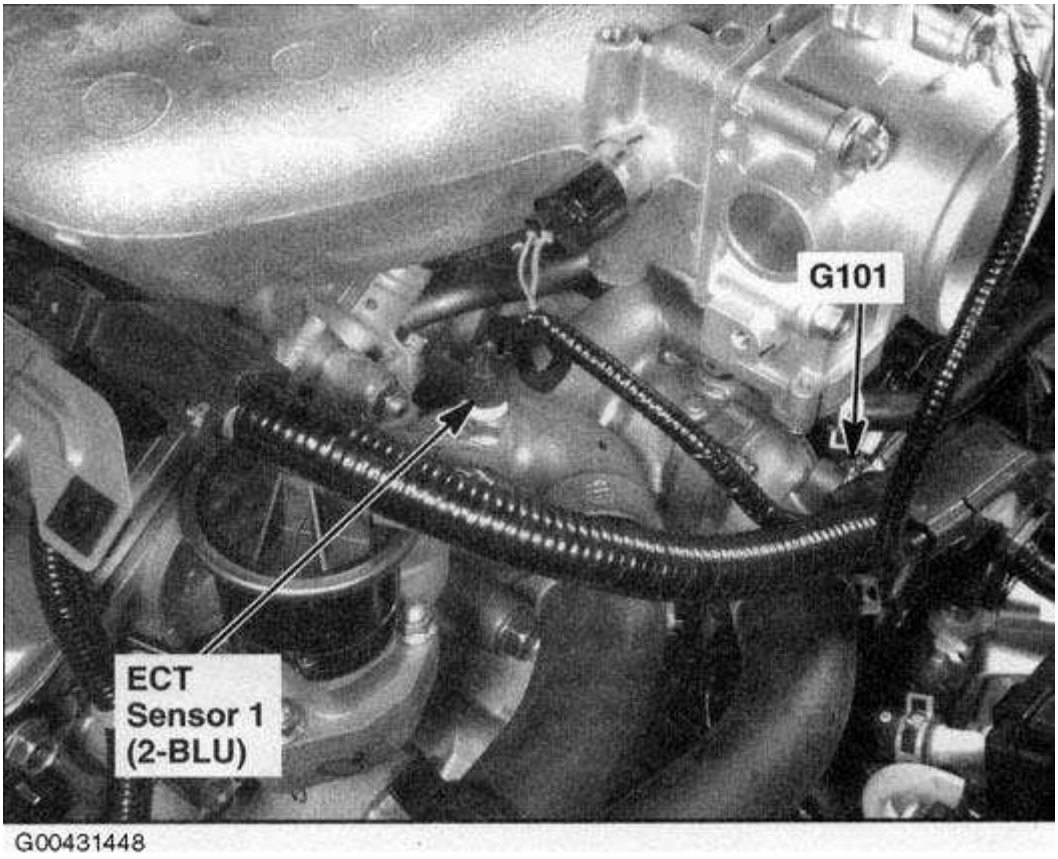


Fig. 165: Rear Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

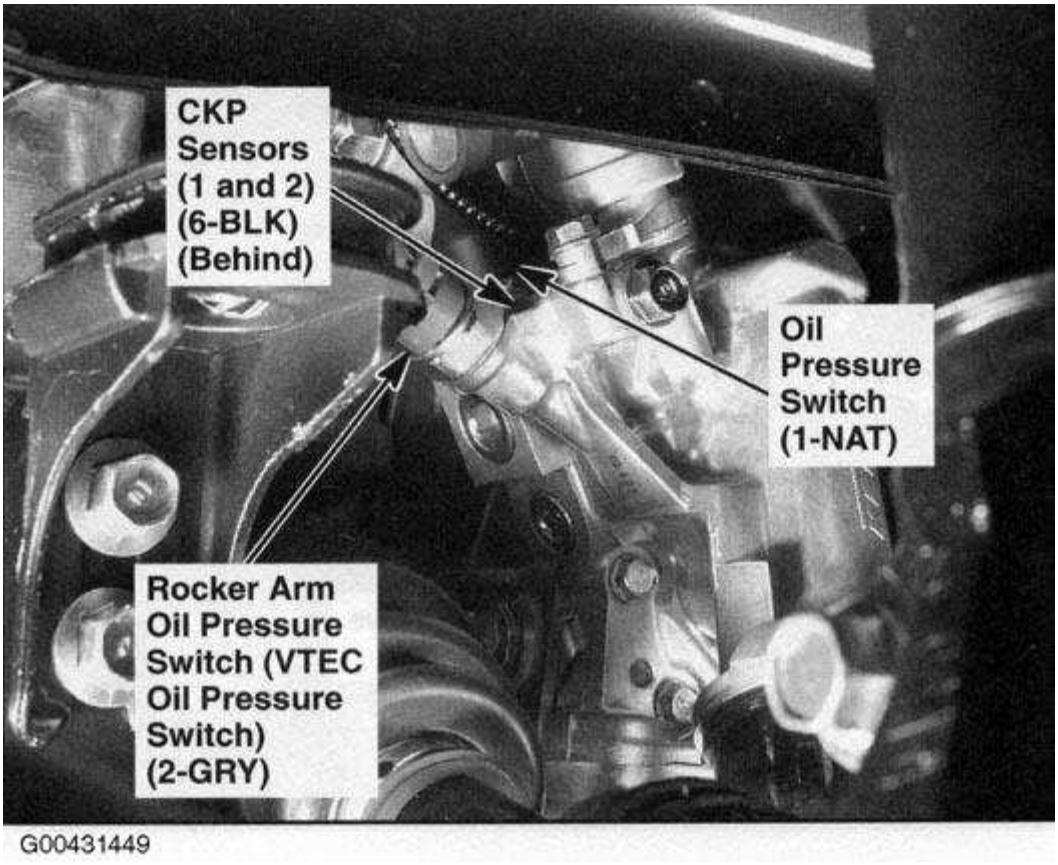


Fig. 166: Front Of Engine (3.0L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

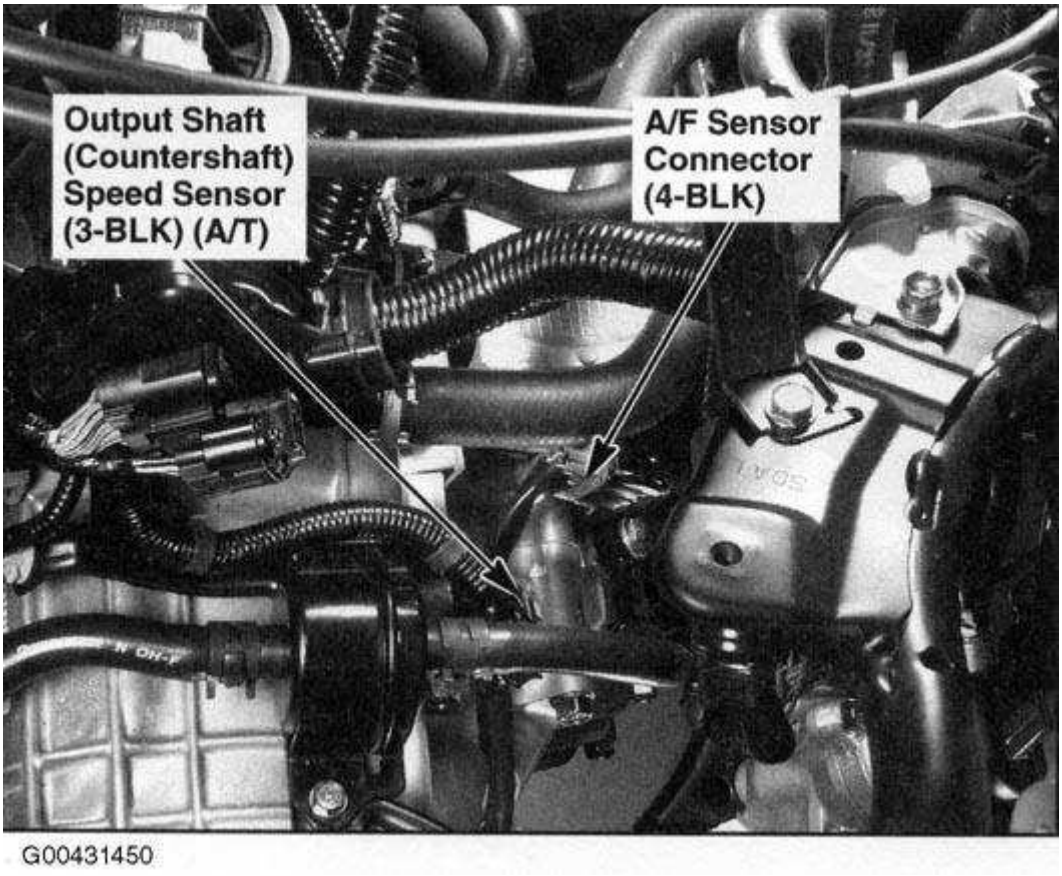


Fig. 167: Transmission Housing (2.4L) (A/T)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

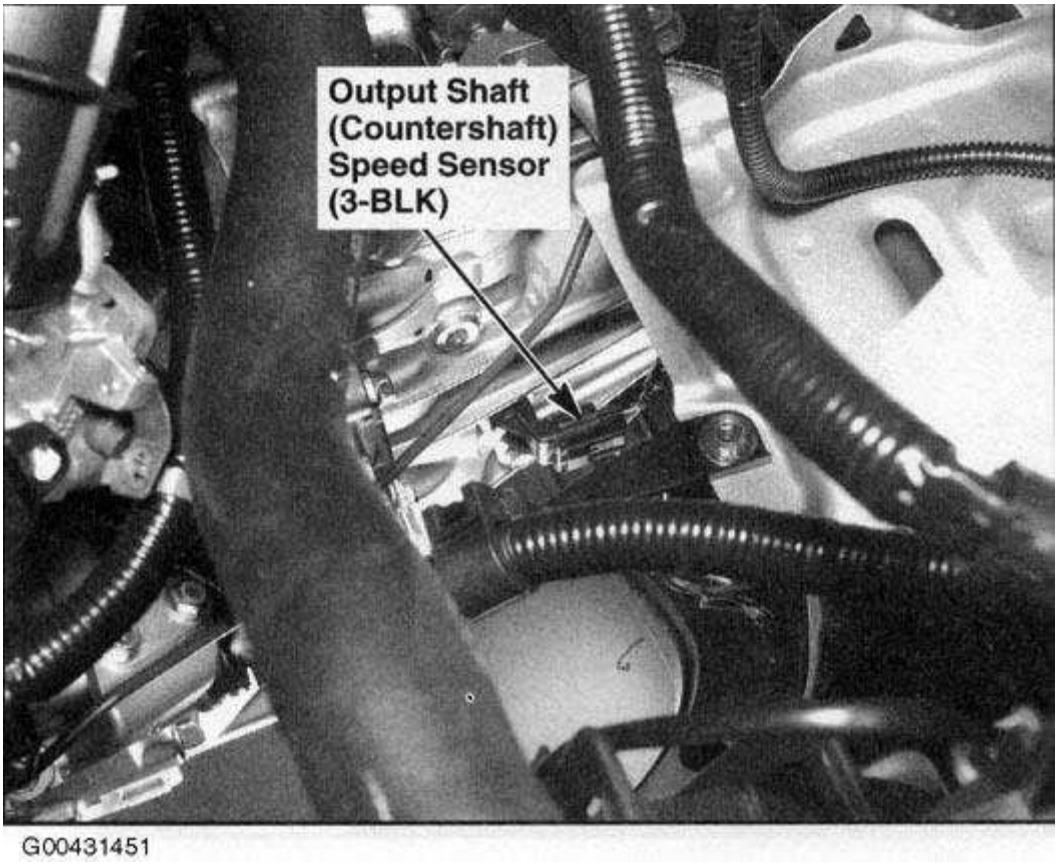


Fig. 168: Transmission Housing (2.4L) (M/T)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

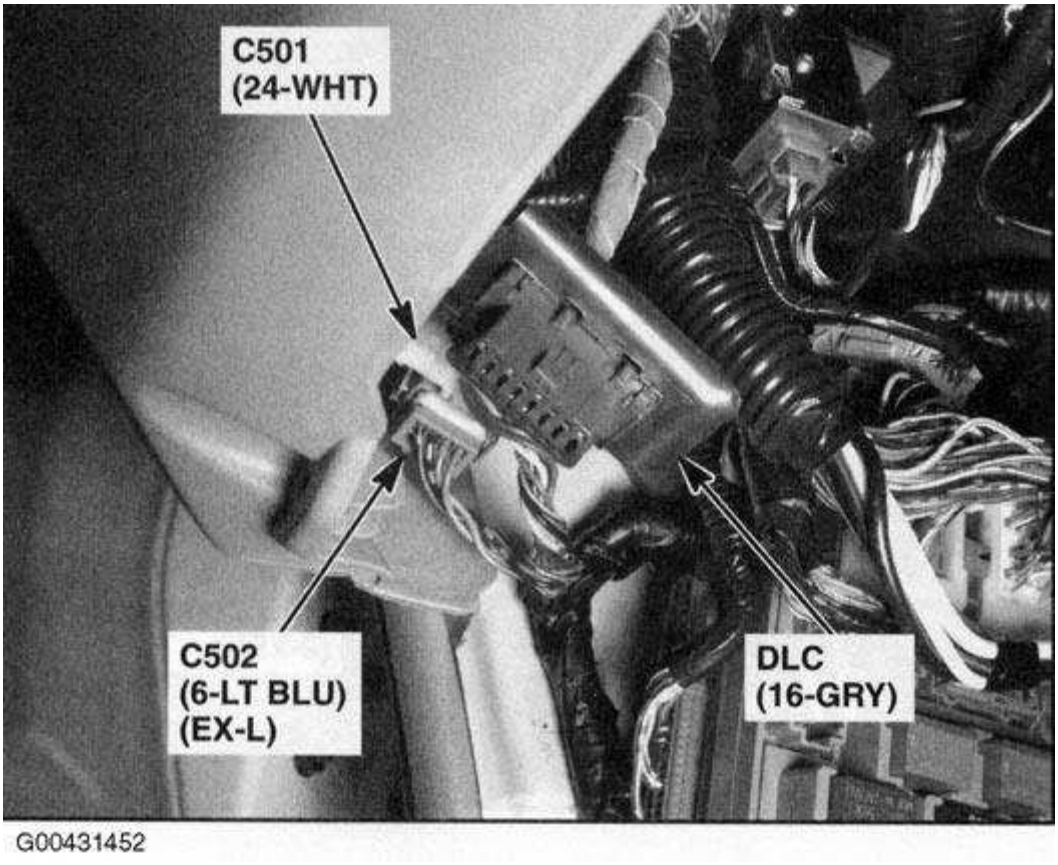


Fig. 169: Under Left Side Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

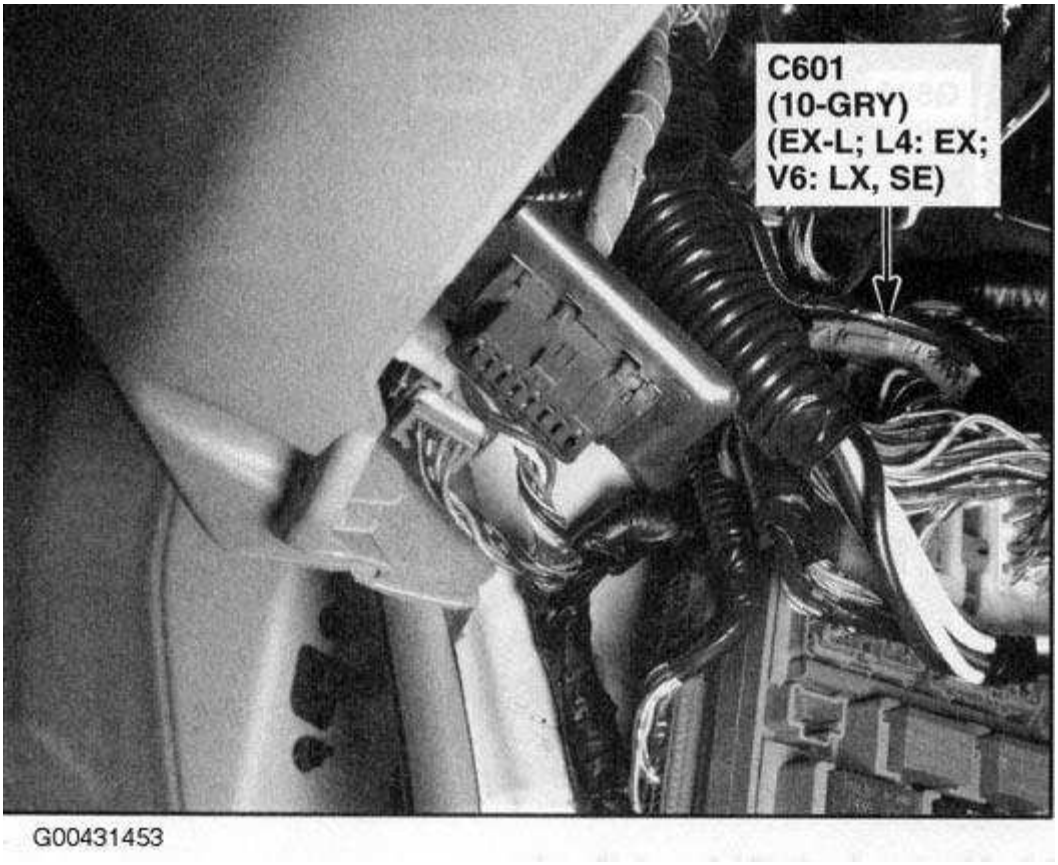


Fig. 170: Under Left Side Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

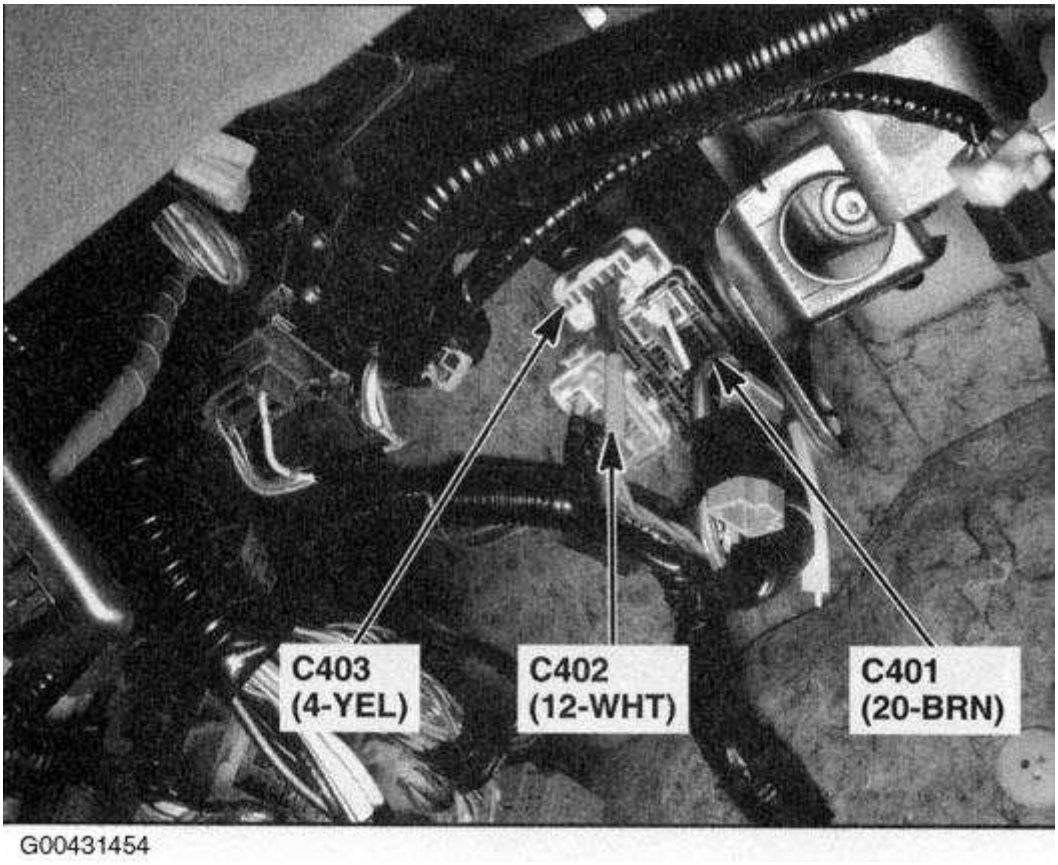


Fig. 171: Under Left Side Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

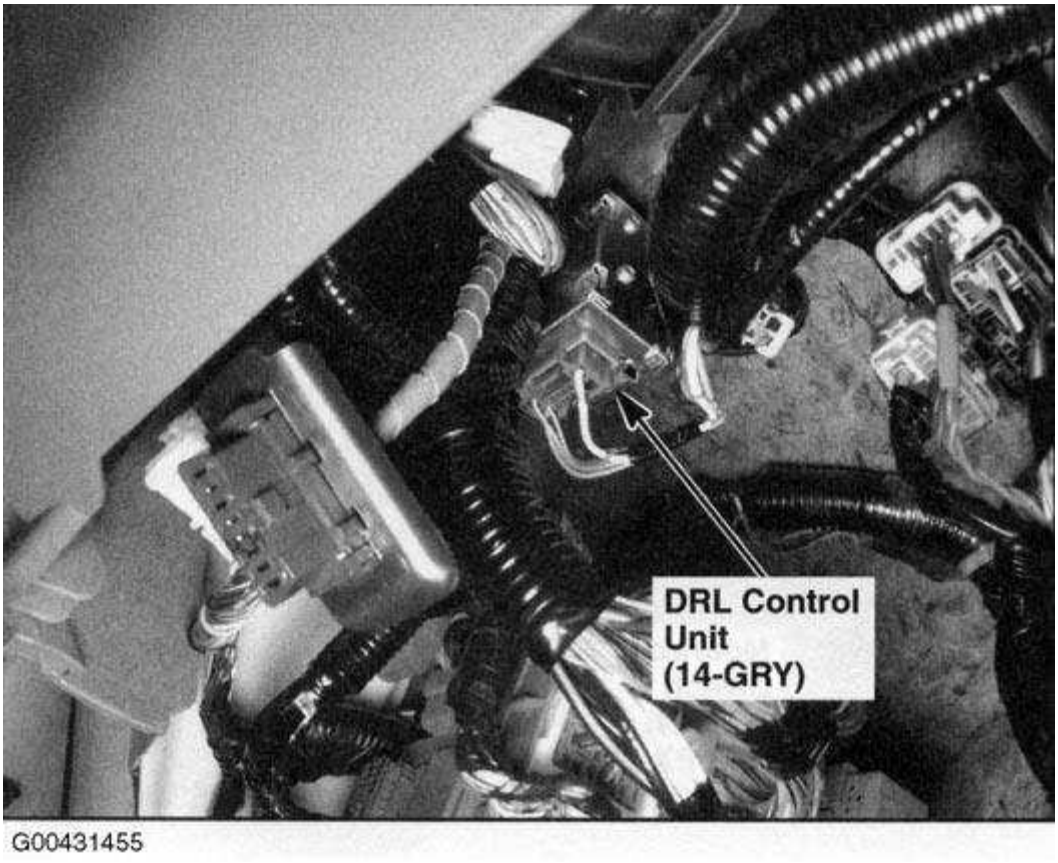


Fig. 172: Under Left Side Of Dash (USA)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

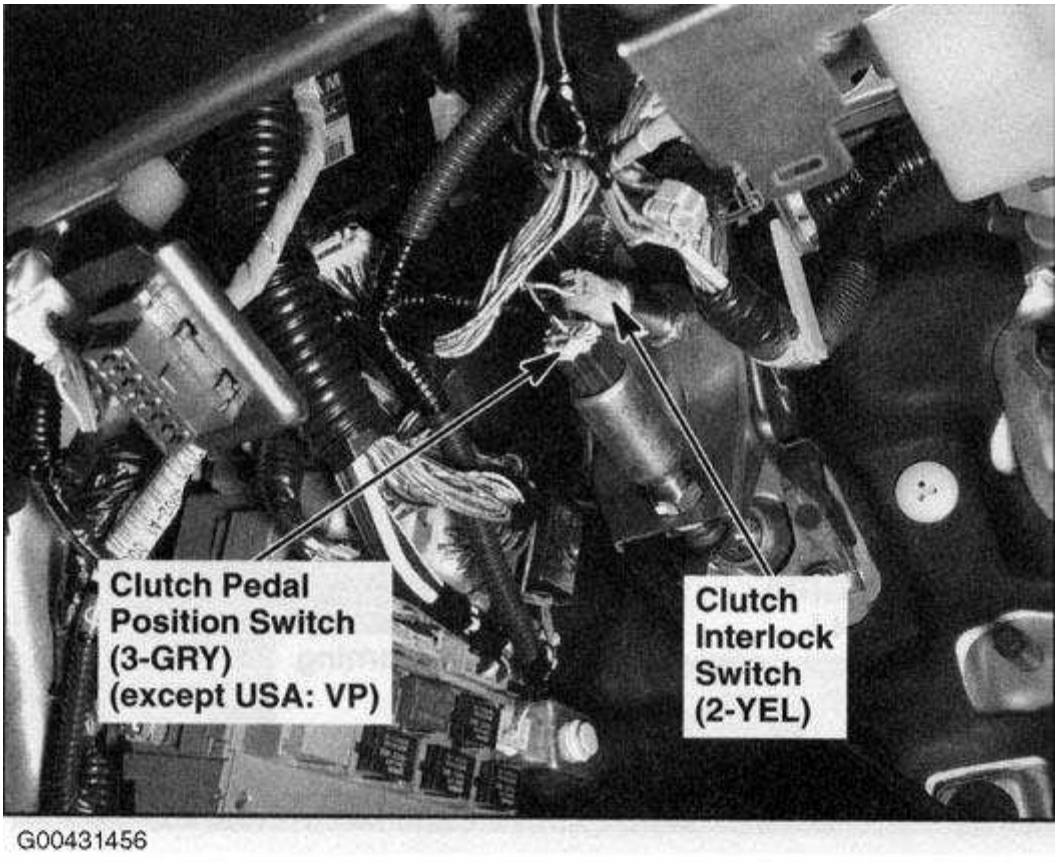


Fig. 173: Under Left Side Of Dash (M/T)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

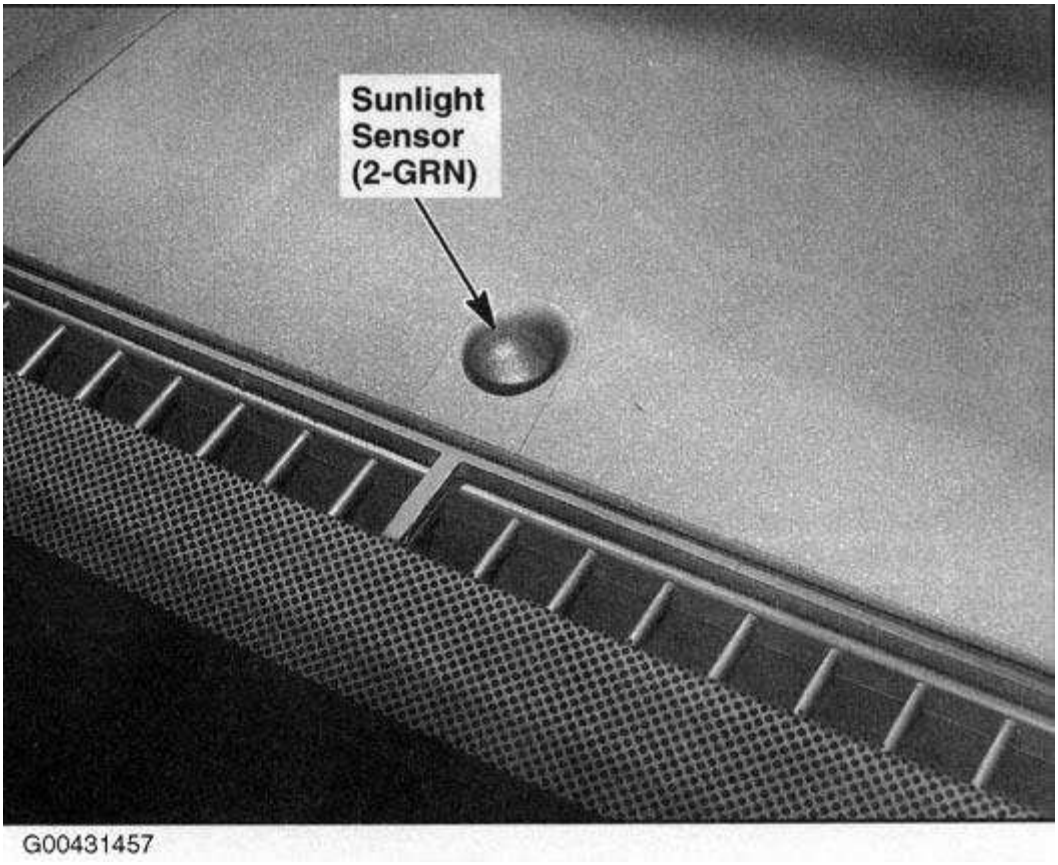


Fig. 174: Top Middle Of Dash (EX-L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

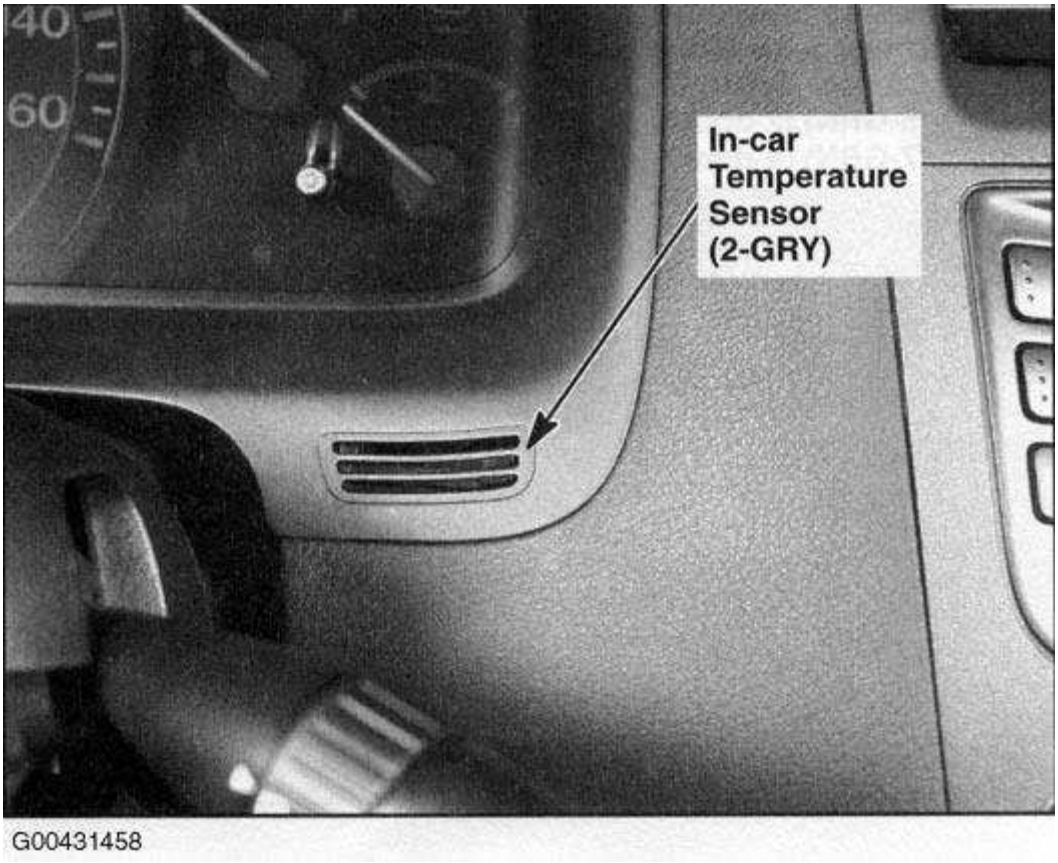


Fig. 175: Lower Middle Of Dash (EX-L)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

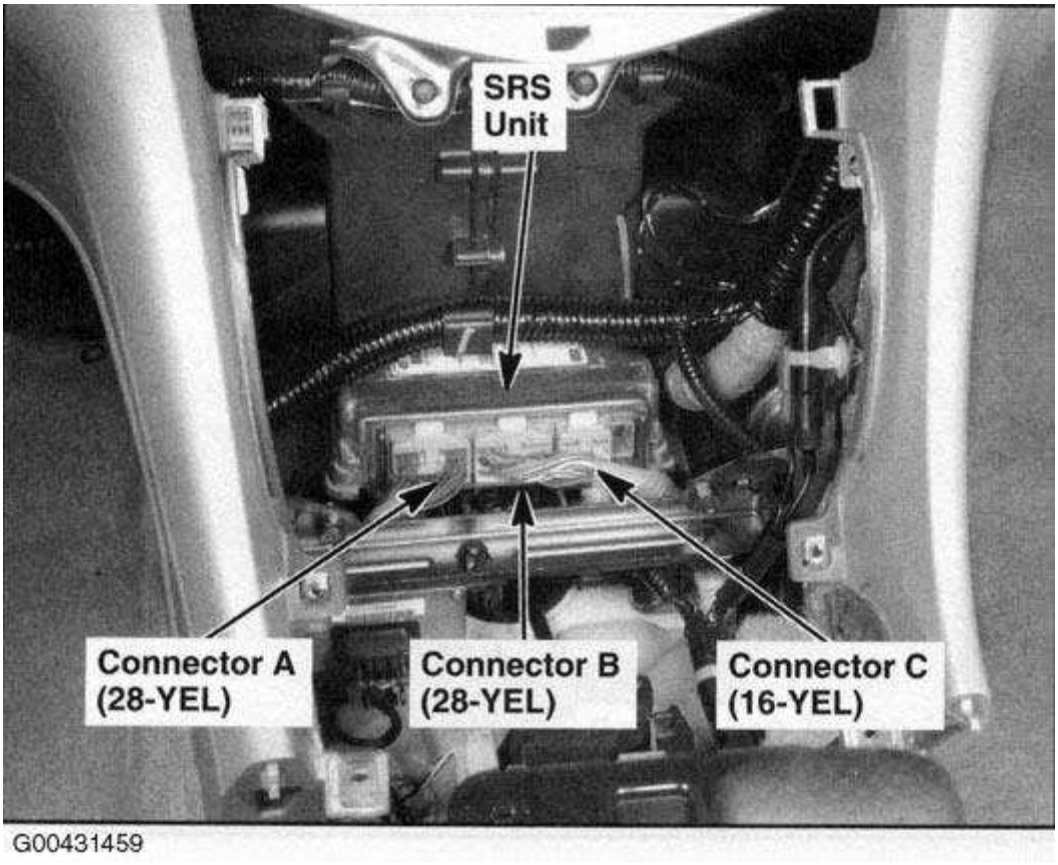


Fig. 176: Under Middle Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

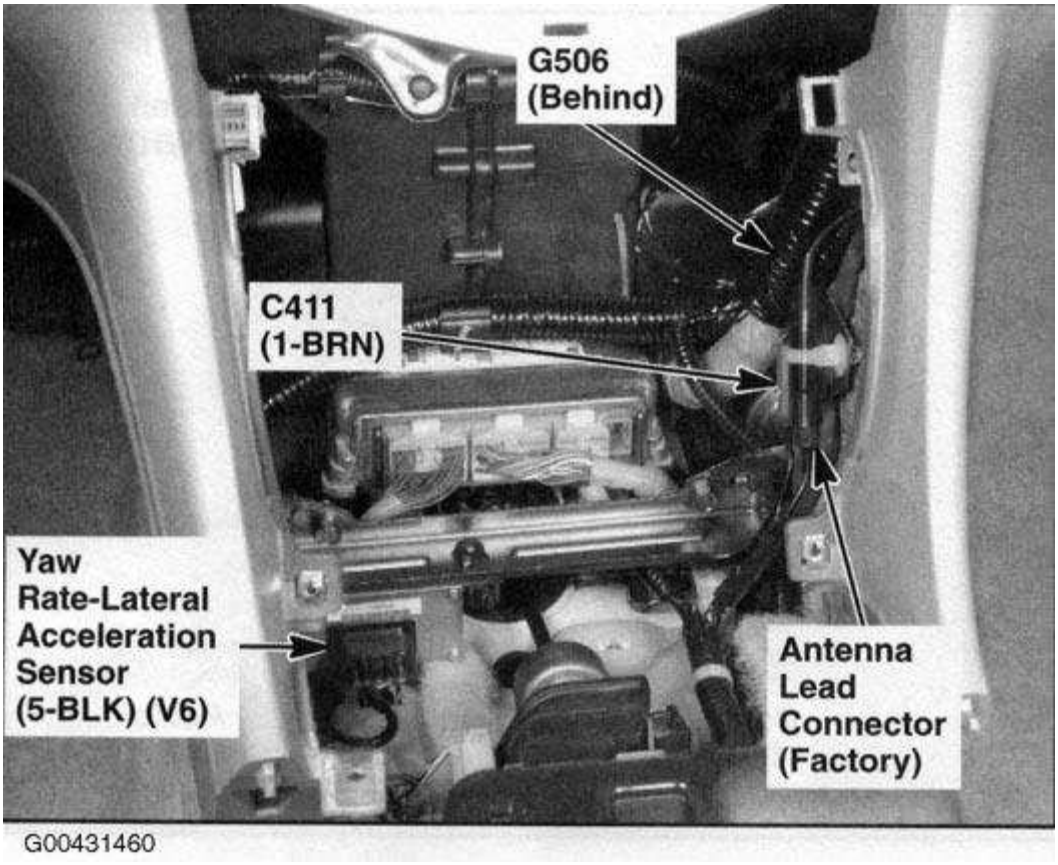


Fig. 177: Under Middle Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

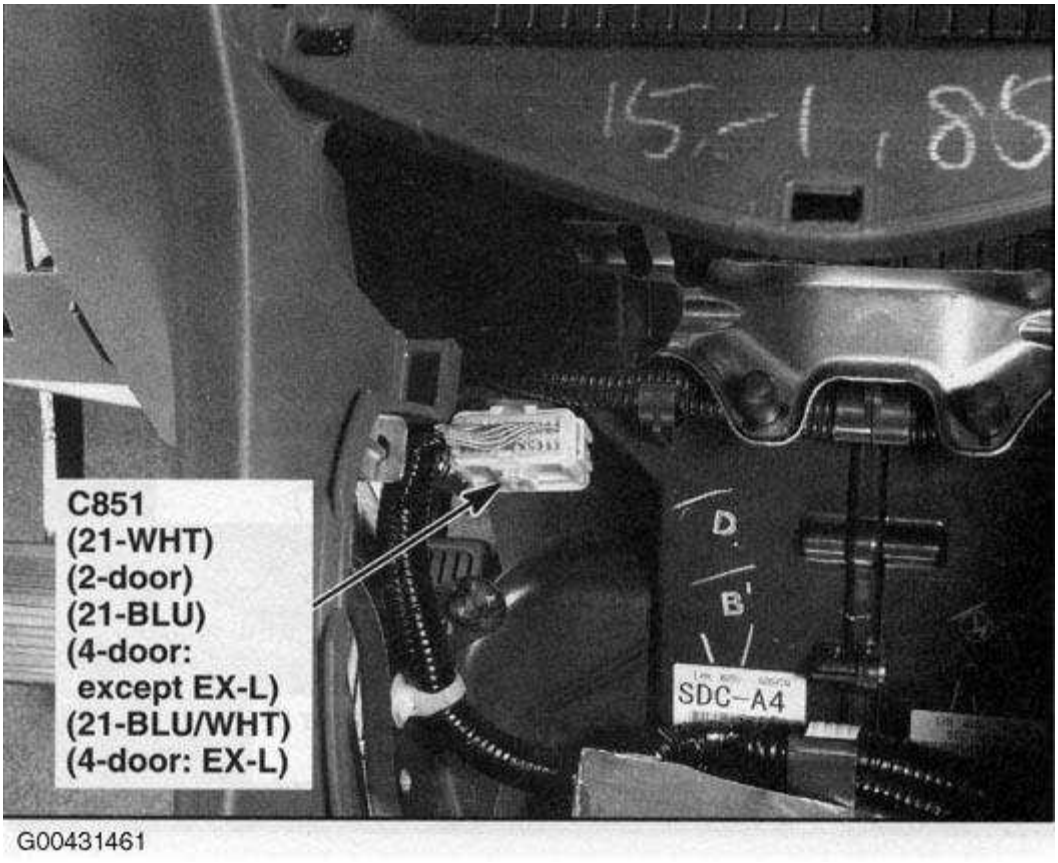


Fig. 178: Under Middle Of Dash
Courtesy of AMERICAN HONDA MOTOR CO., INC.

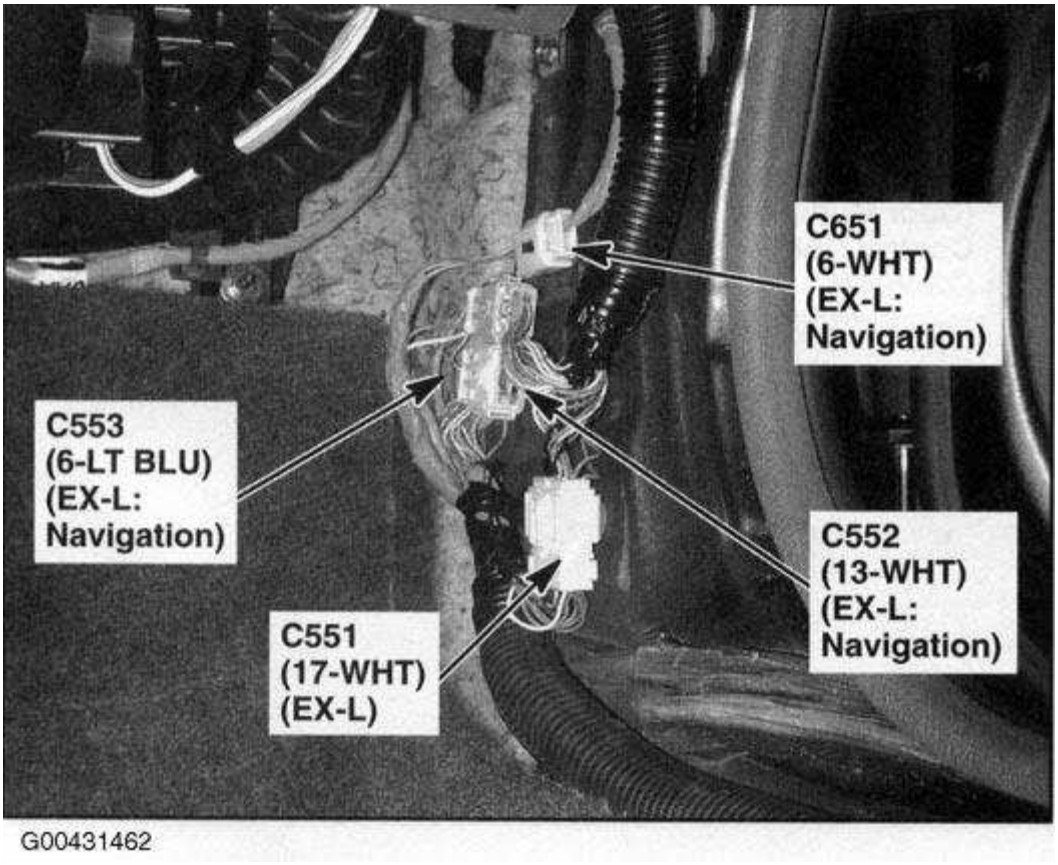


Fig. 179: Behind Right Kick Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

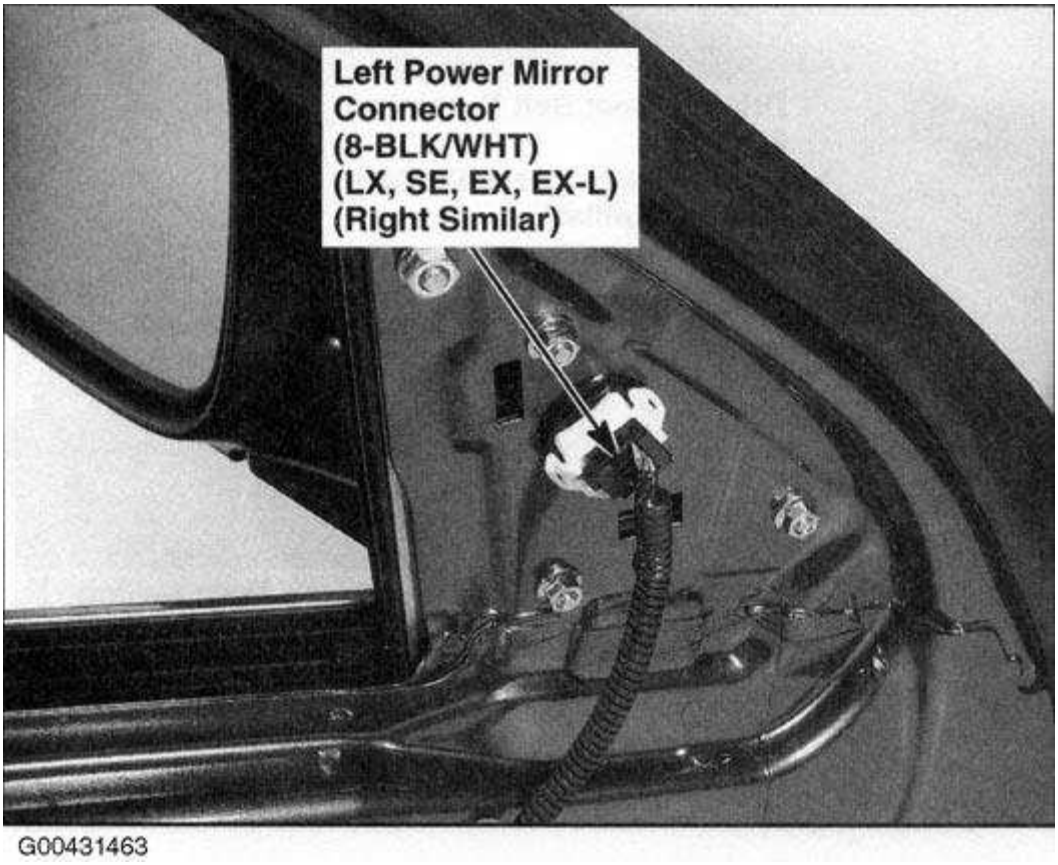


Fig. 180: Left & Right Front Door
Courtesy of AMERICAN HONDA MOTOR CO., INC.

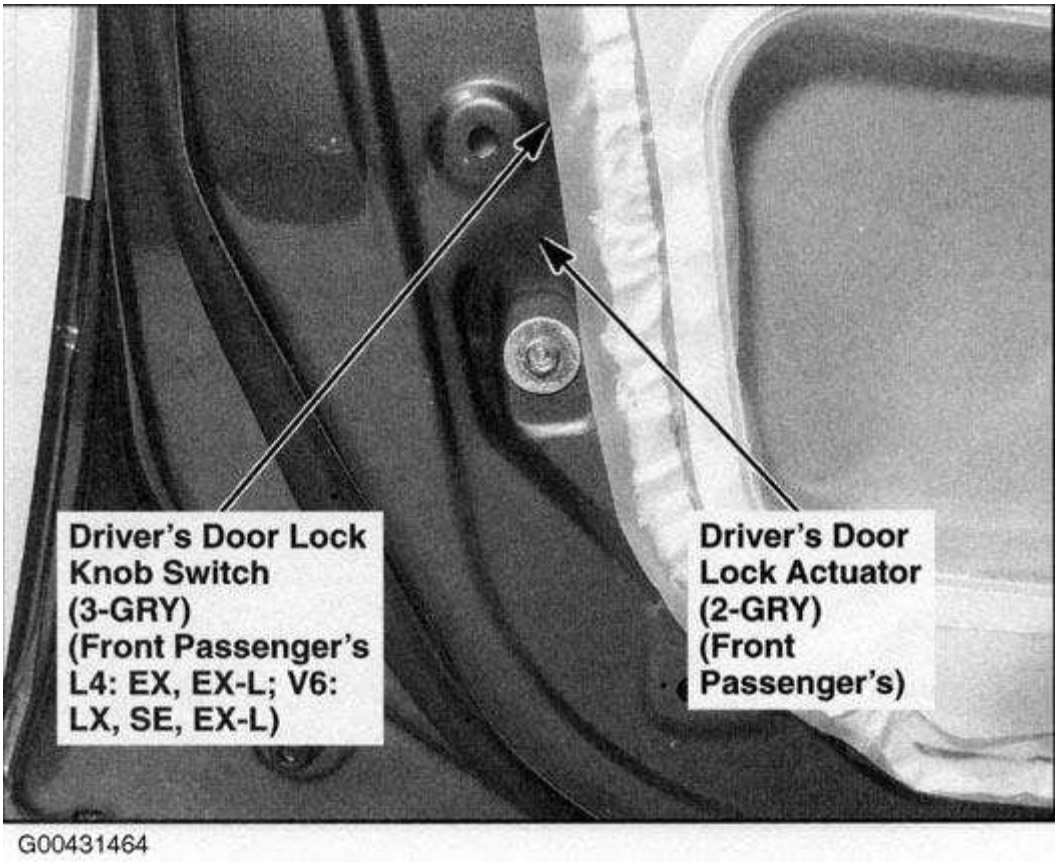


Fig. 181: Left & Right Front Door
Courtesy of AMERICAN HONDA MOTOR CO., INC.



Fig. 182: Left & Right "B" Pillar (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

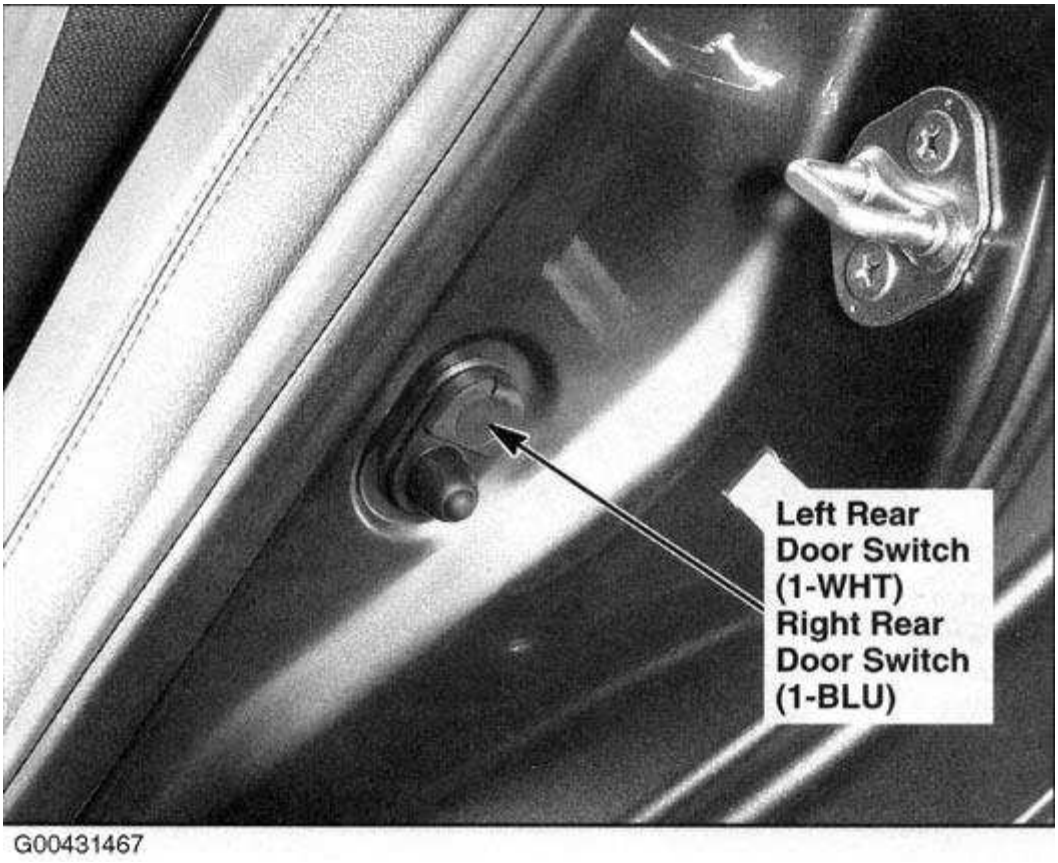


Fig. 183: Left & Right "C" Pillar (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

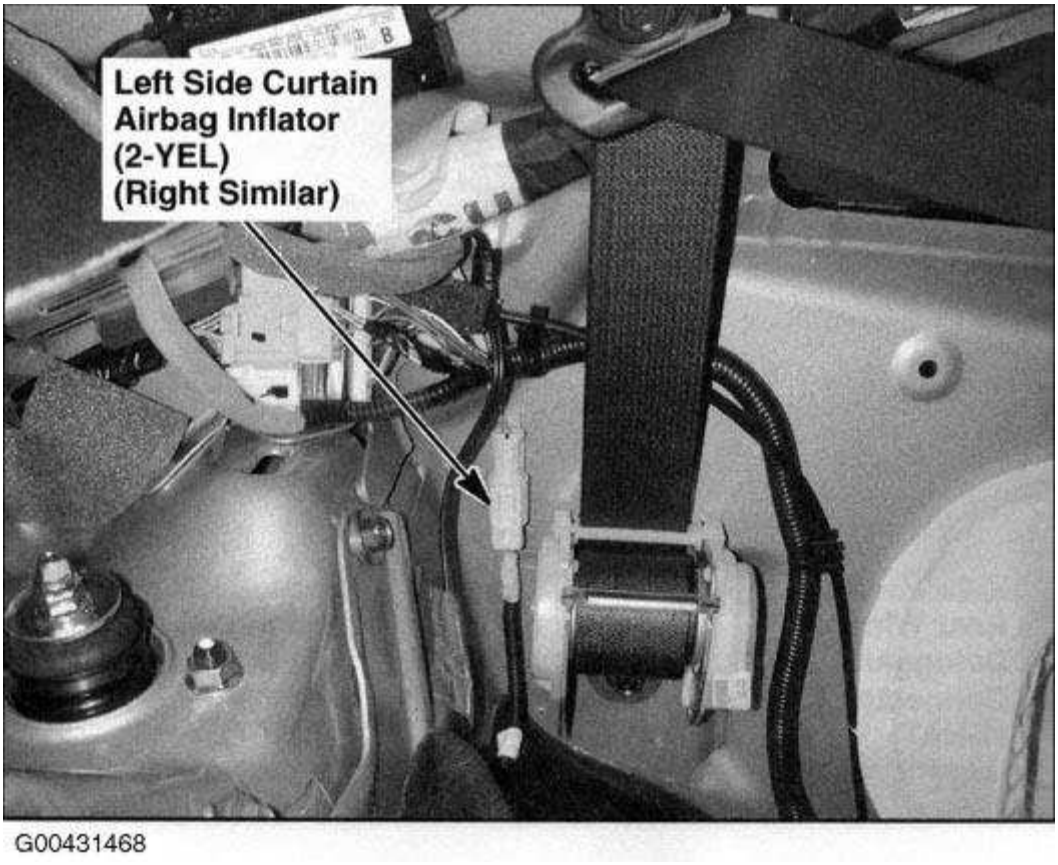


Fig. 184: Left & Right "C" Pillar (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

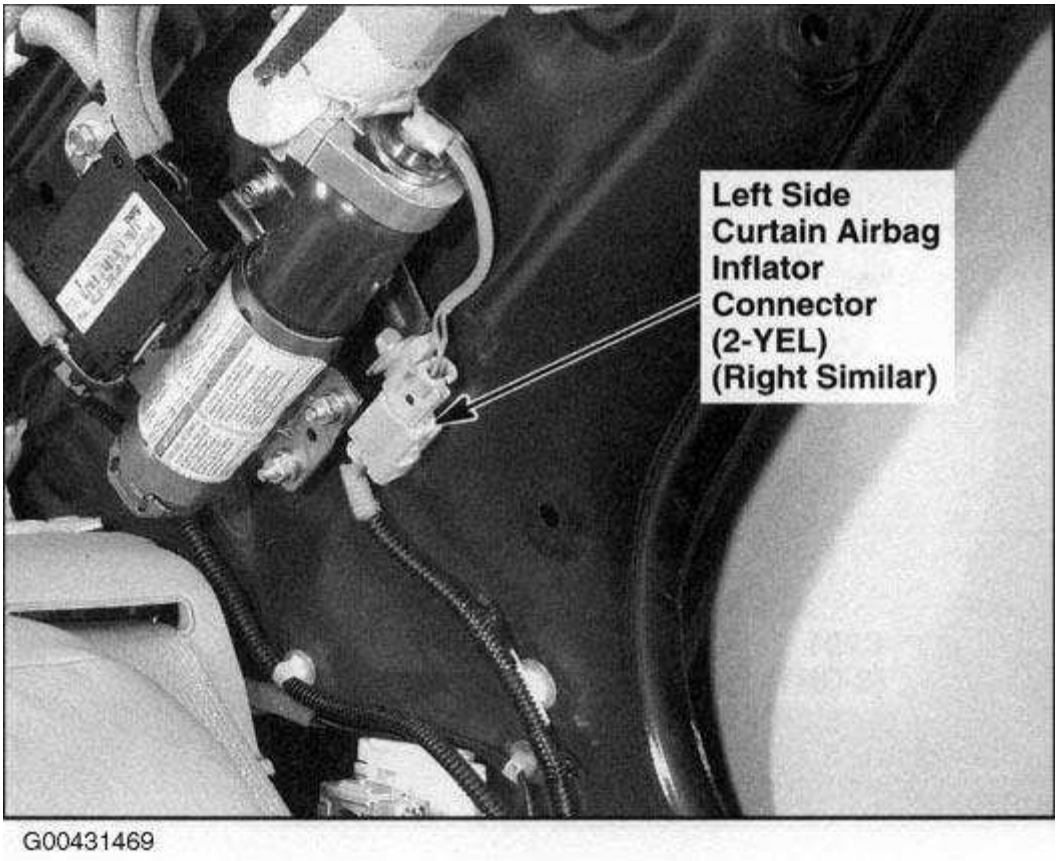


Fig. 185: Left & Right "C" Pillar (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

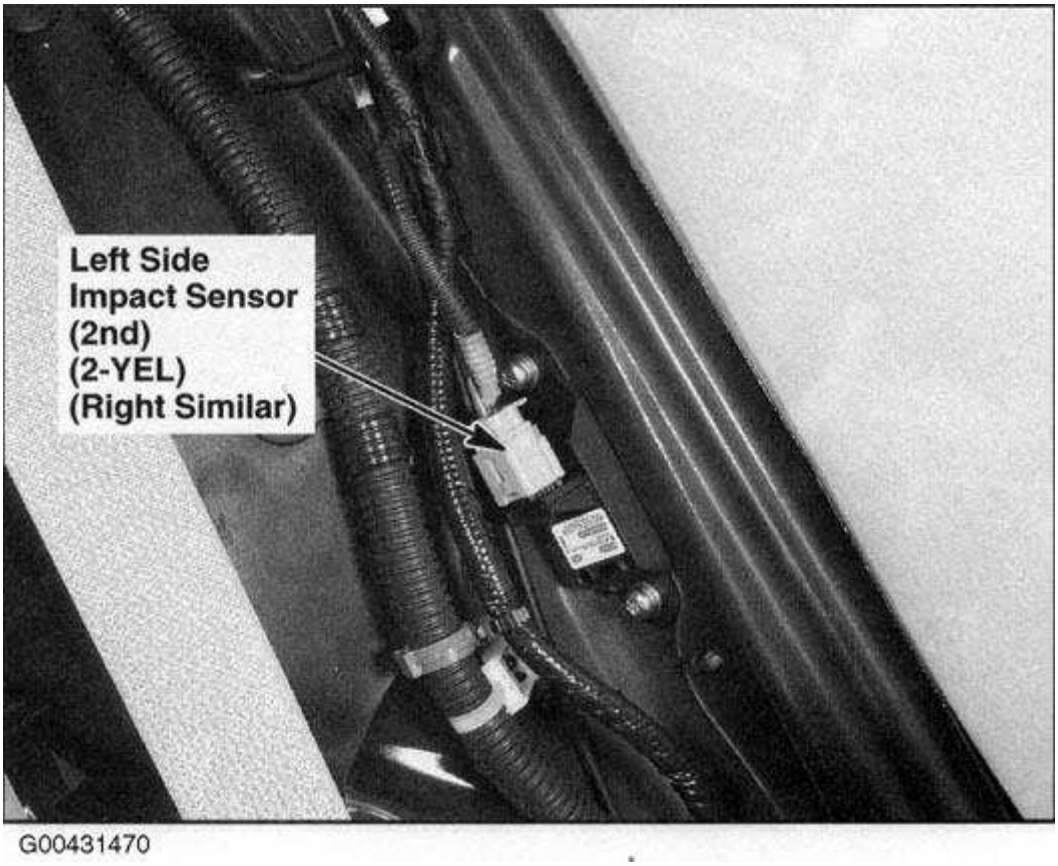


Fig. 186: Left & Right "C" Pillar (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



Fig. 187: Right "C" Pillar (EX-L) (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

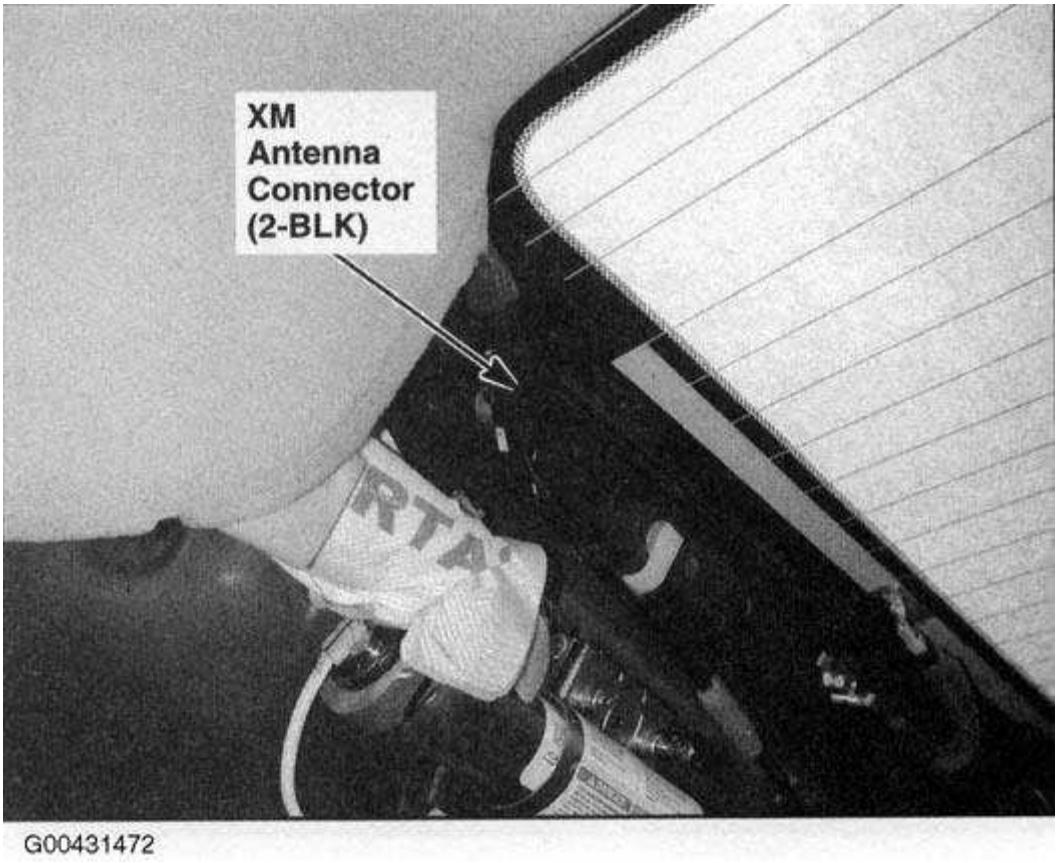


Fig. 188: Right "C" Pillar (EX-L) (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

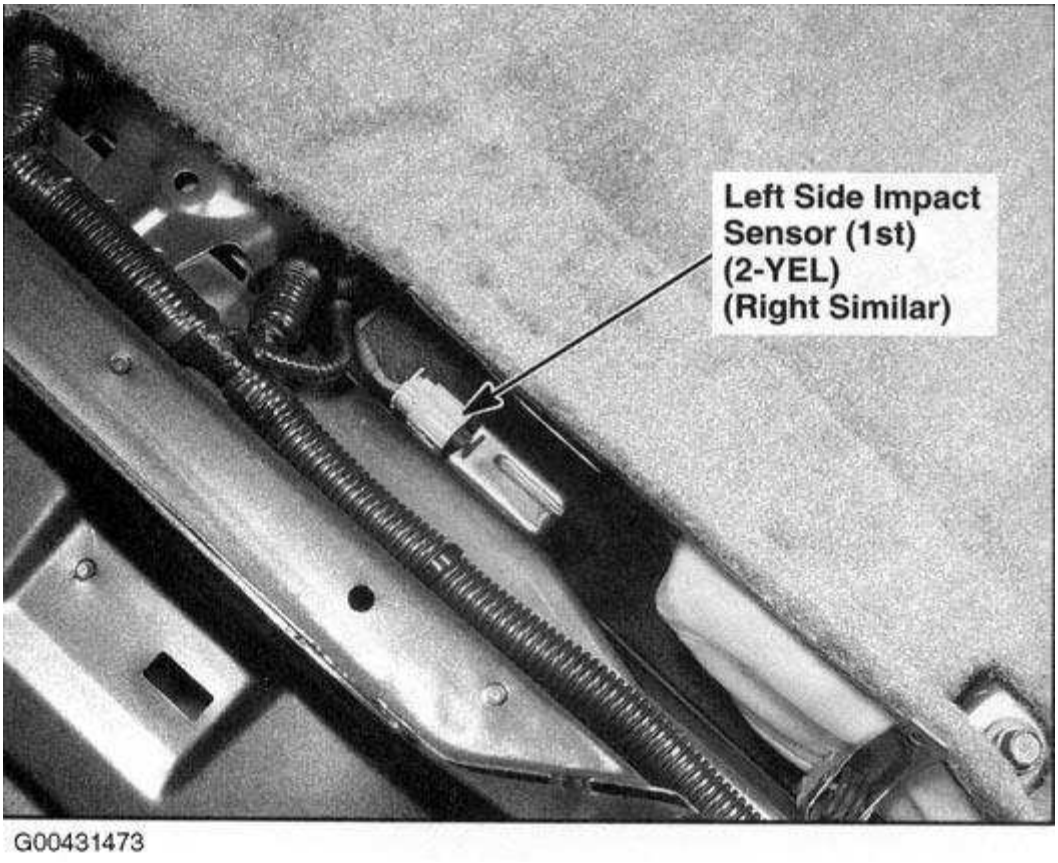


Fig. 189: Left & Right Front Floor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

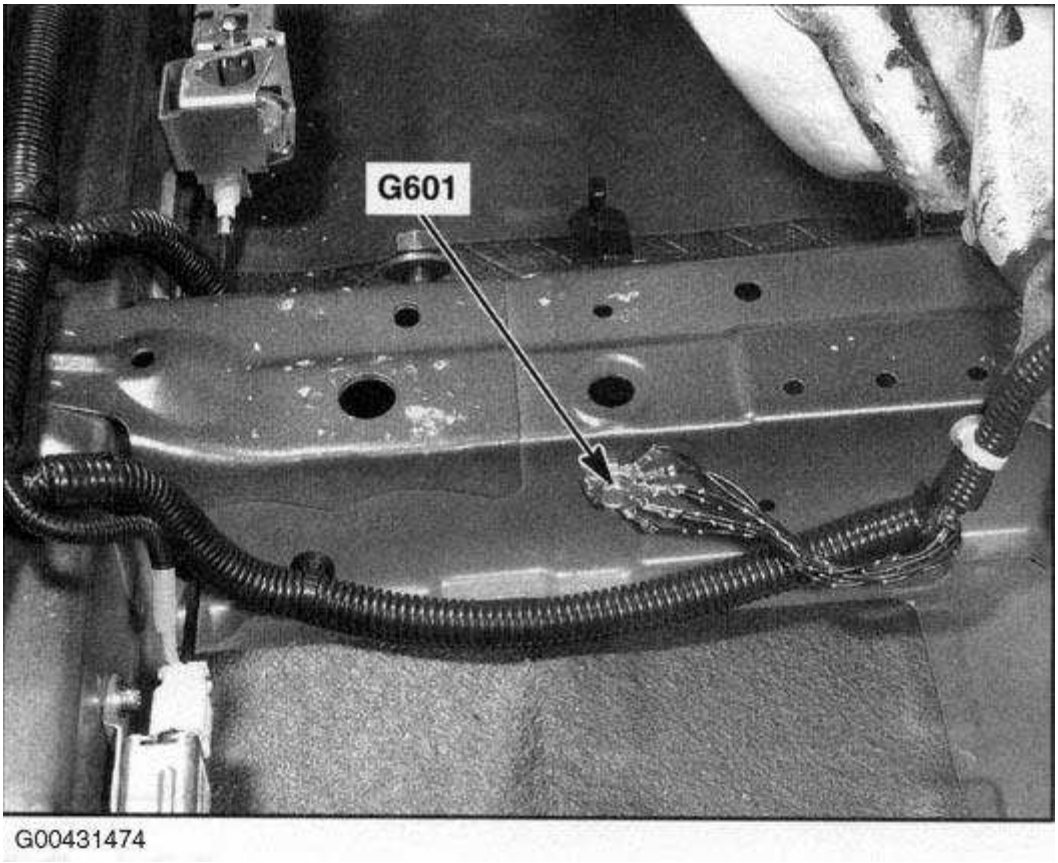


Fig. 190: Under Driver's Seat (Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

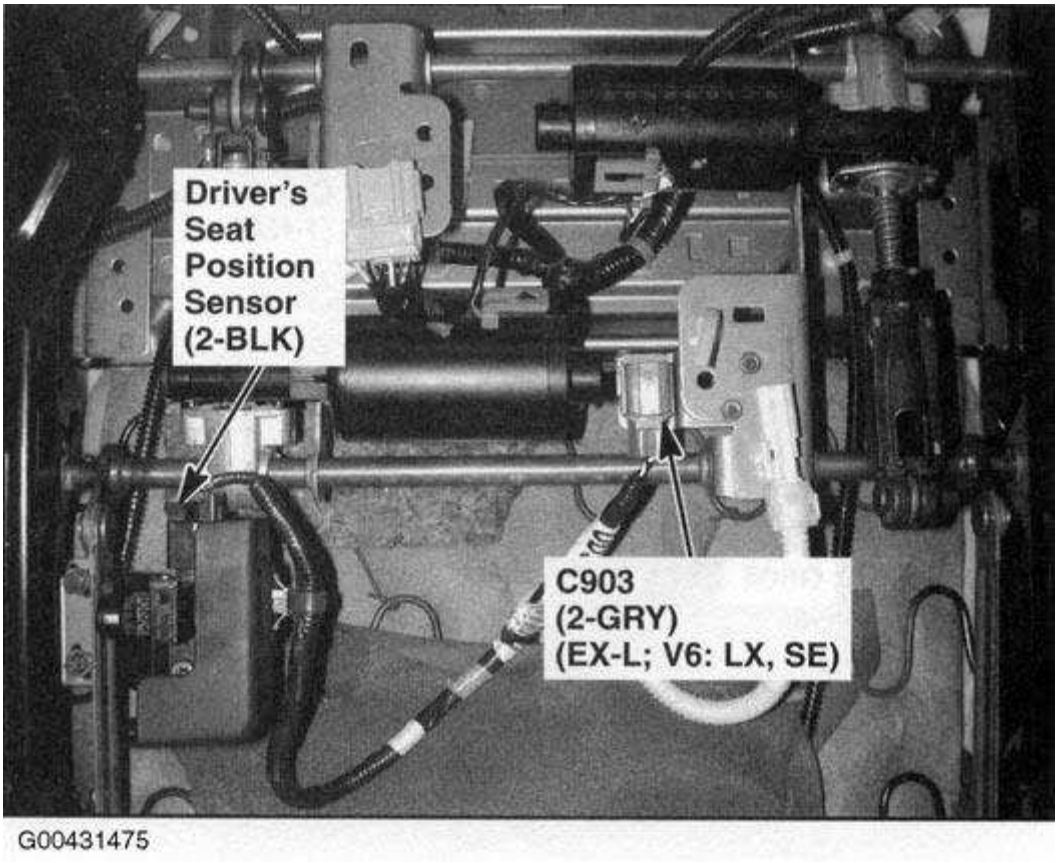


Fig. 191: Under Driver's Seat
Courtesy of AMERICAN HONDA MOTOR CO., INC.

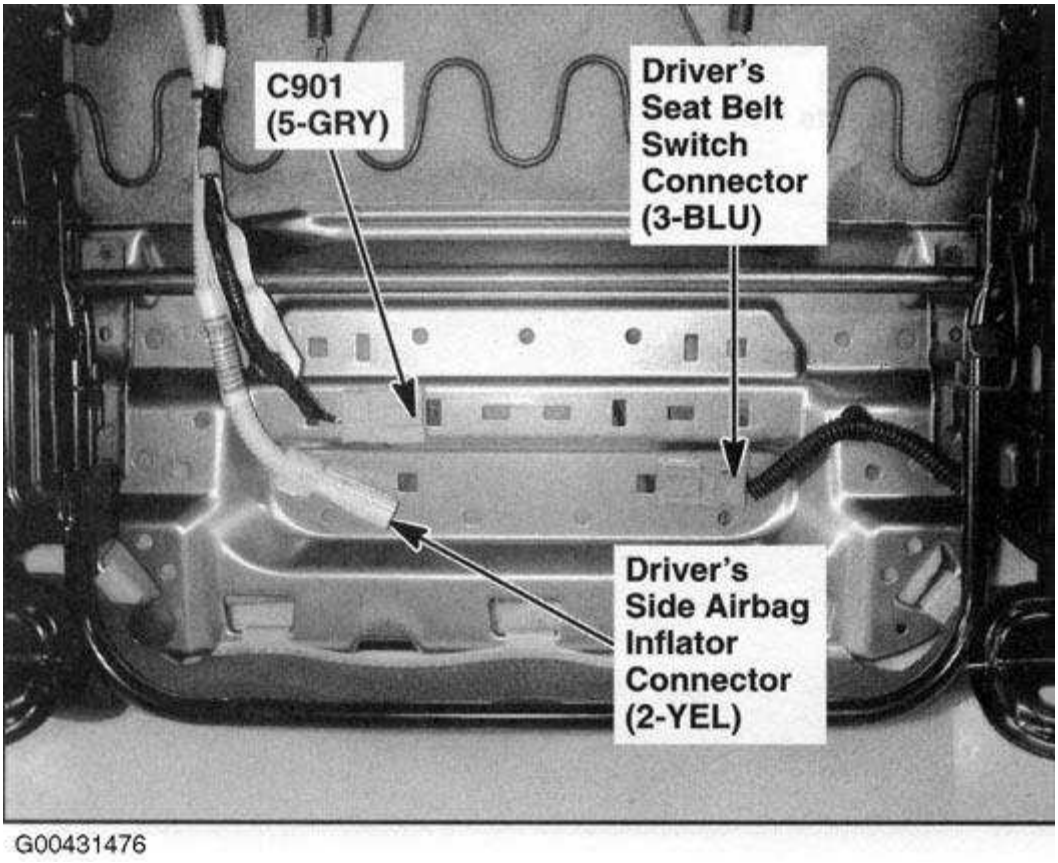


Fig. 192: Under Driver's Seat (Except EX-L & 3.0L LX)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

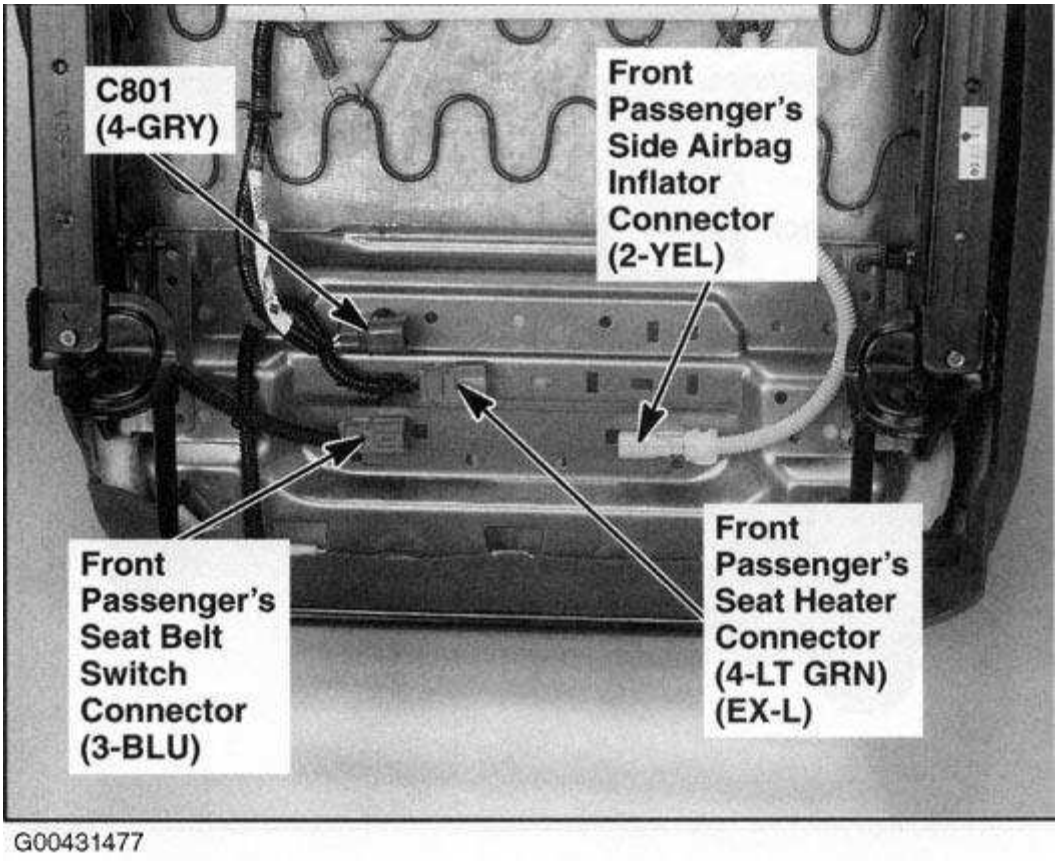


Fig. 193: Under Front Passenger's Seat (Except 3.0L EX-L Sedan)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

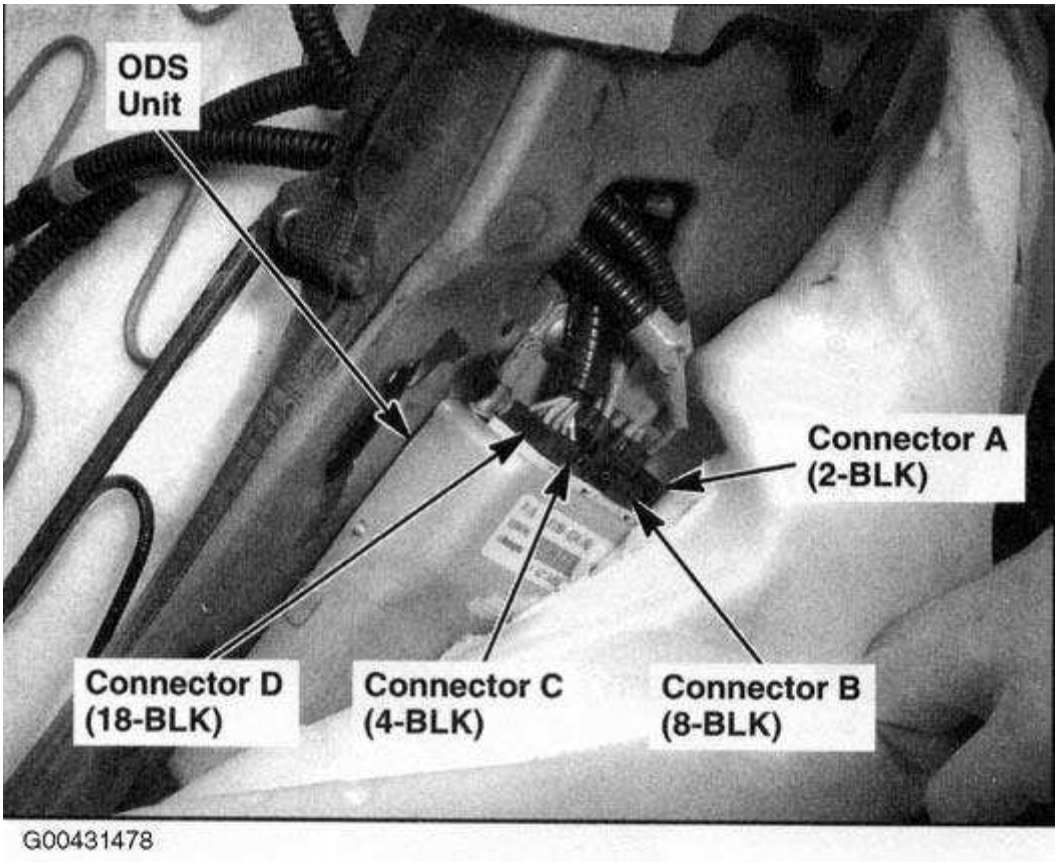


Fig. 194: Front Passenger's Seat
Courtesy of AMERICAN HONDA MOTOR CO., INC.

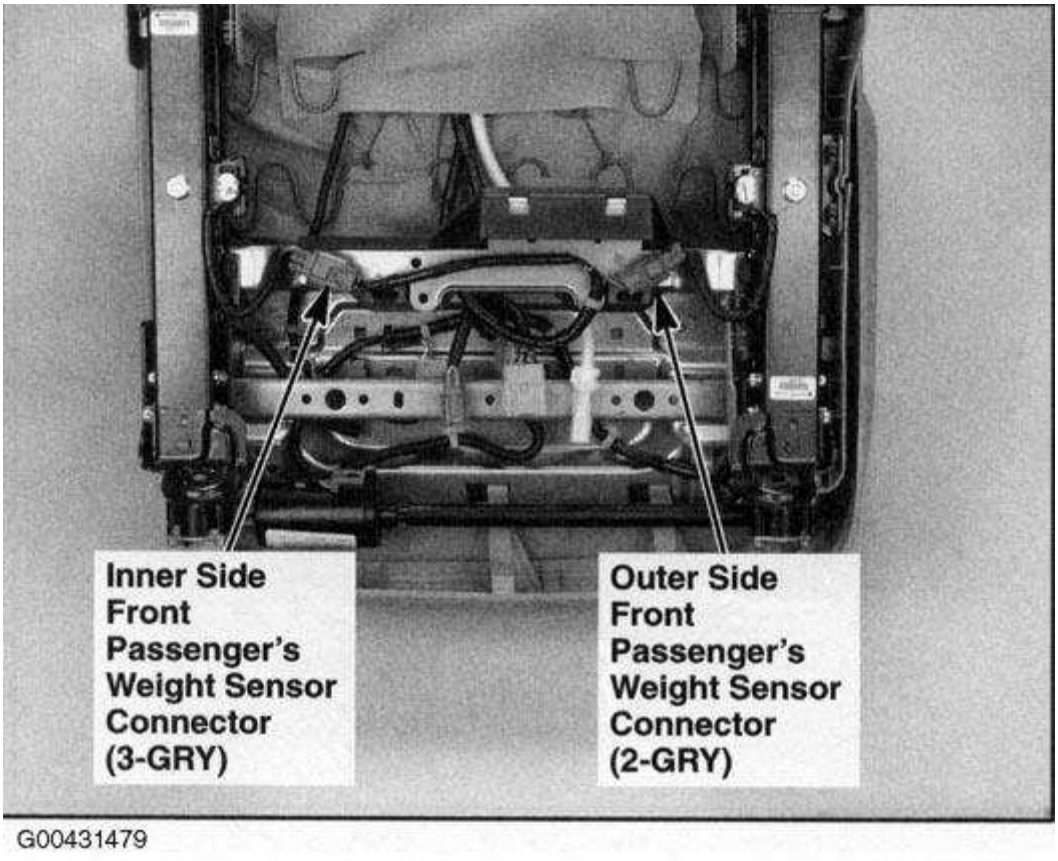


Fig. 195: Under Front Passenger's Seat
Courtesy of AMERICAN HONDA MOTOR CO., INC.

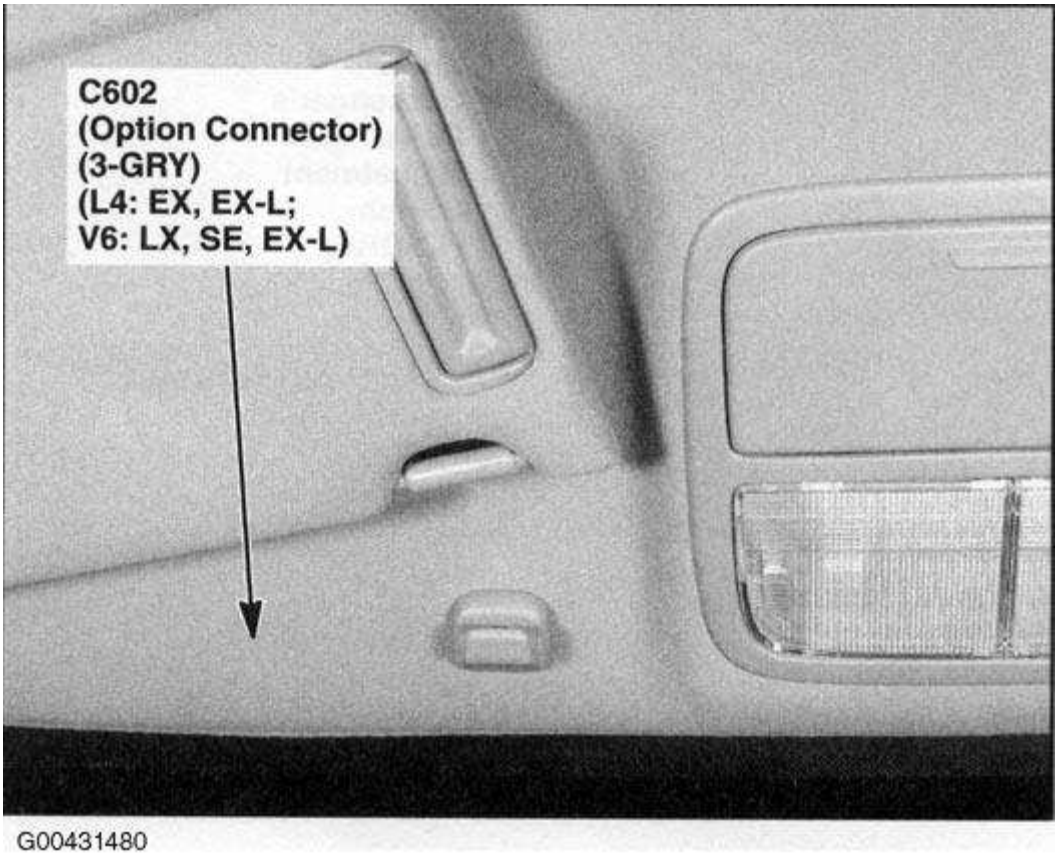


Fig. 196: Front Of Roof
Courtesy of AMERICAN HONDA MOTOR CO., INC.

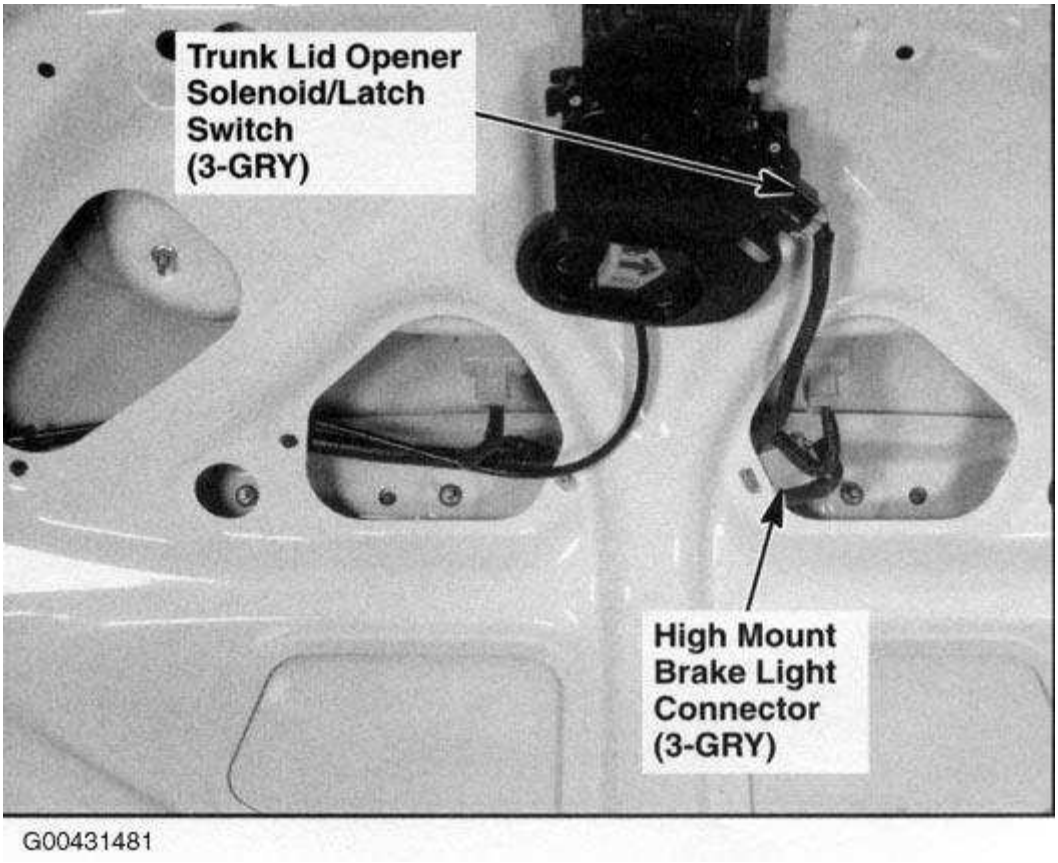


Fig. 197: Middle Of Trunk Lid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

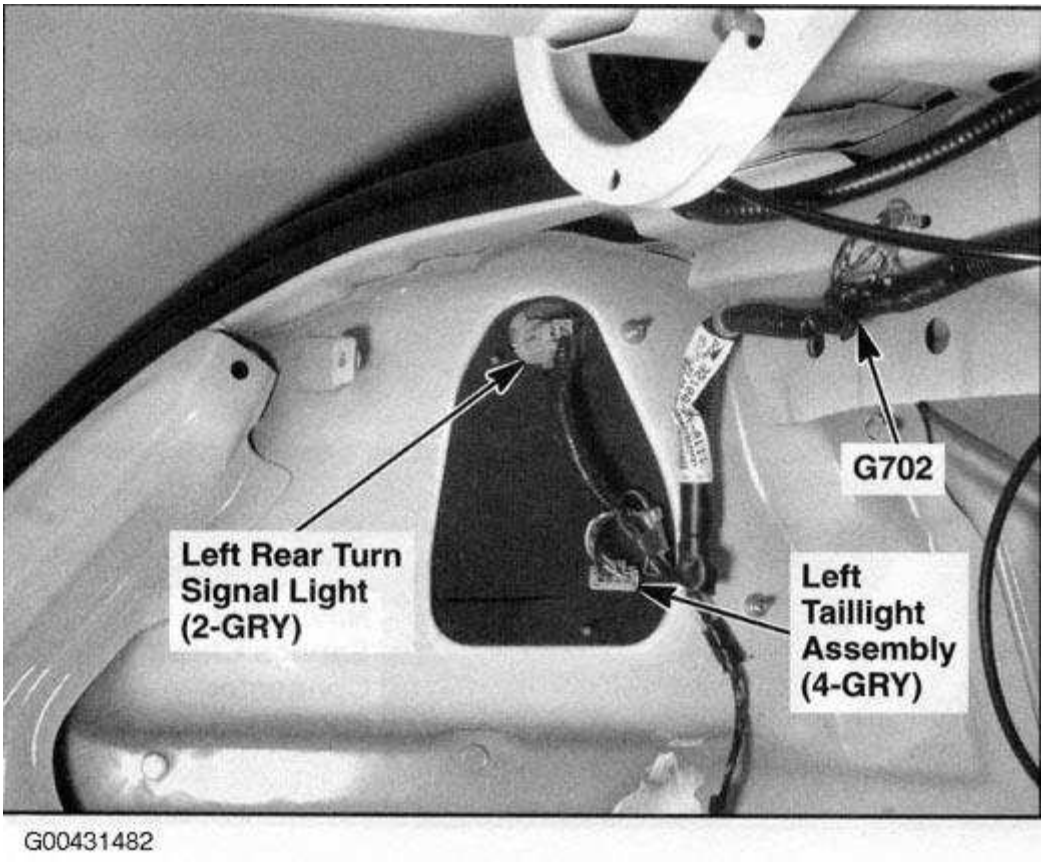


Fig. 198: Left Side Of Trunk (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

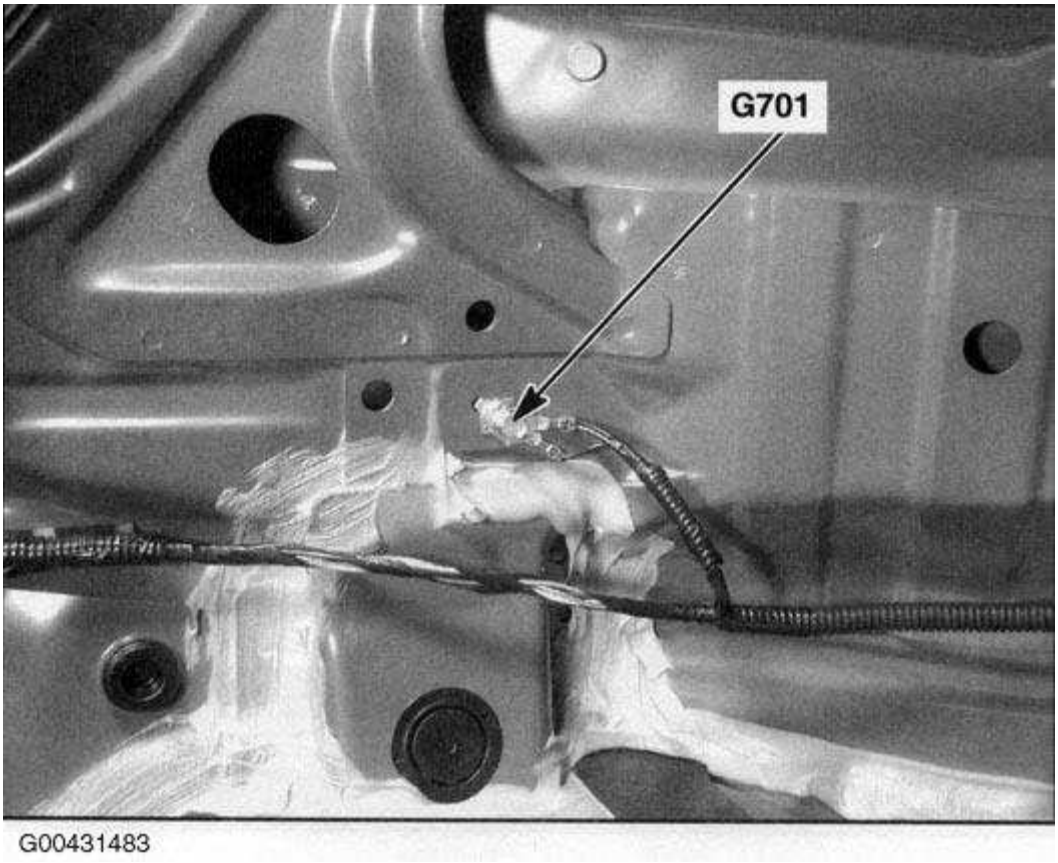


Fig. 199: Left Side Of Trunk (Coupe)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

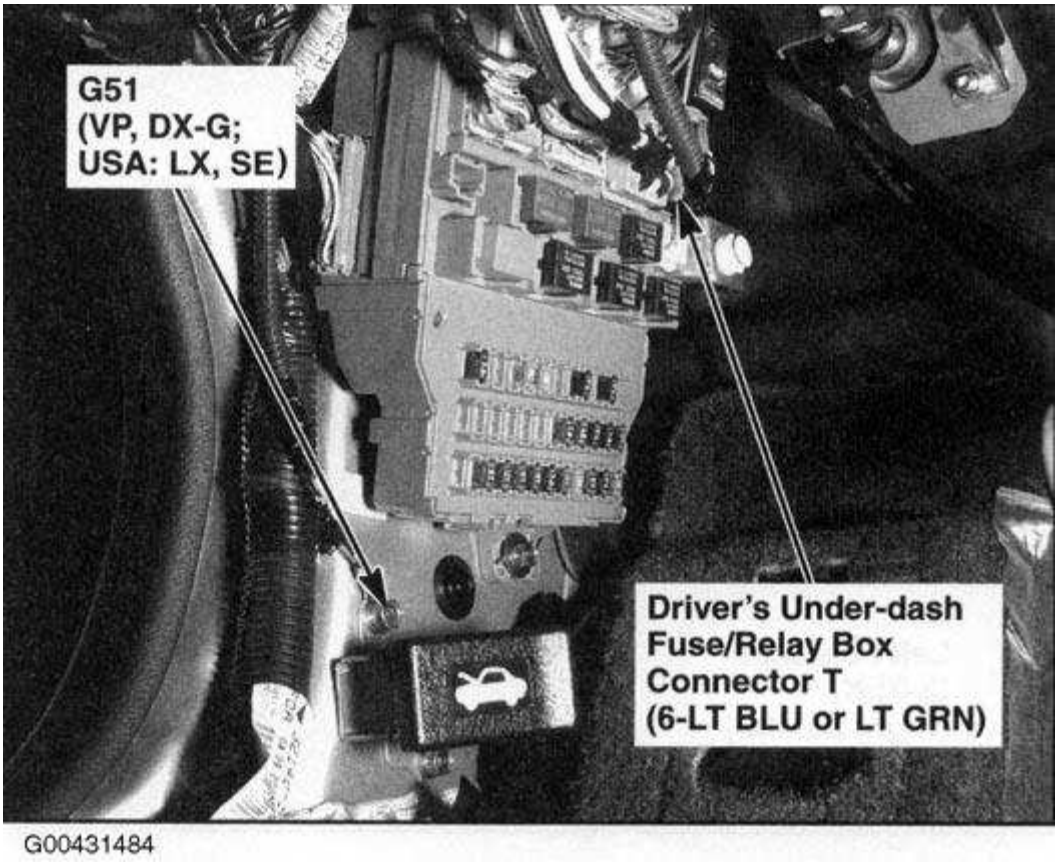


Fig. 200: Behind Left Kick Panel (Honda Accessory)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

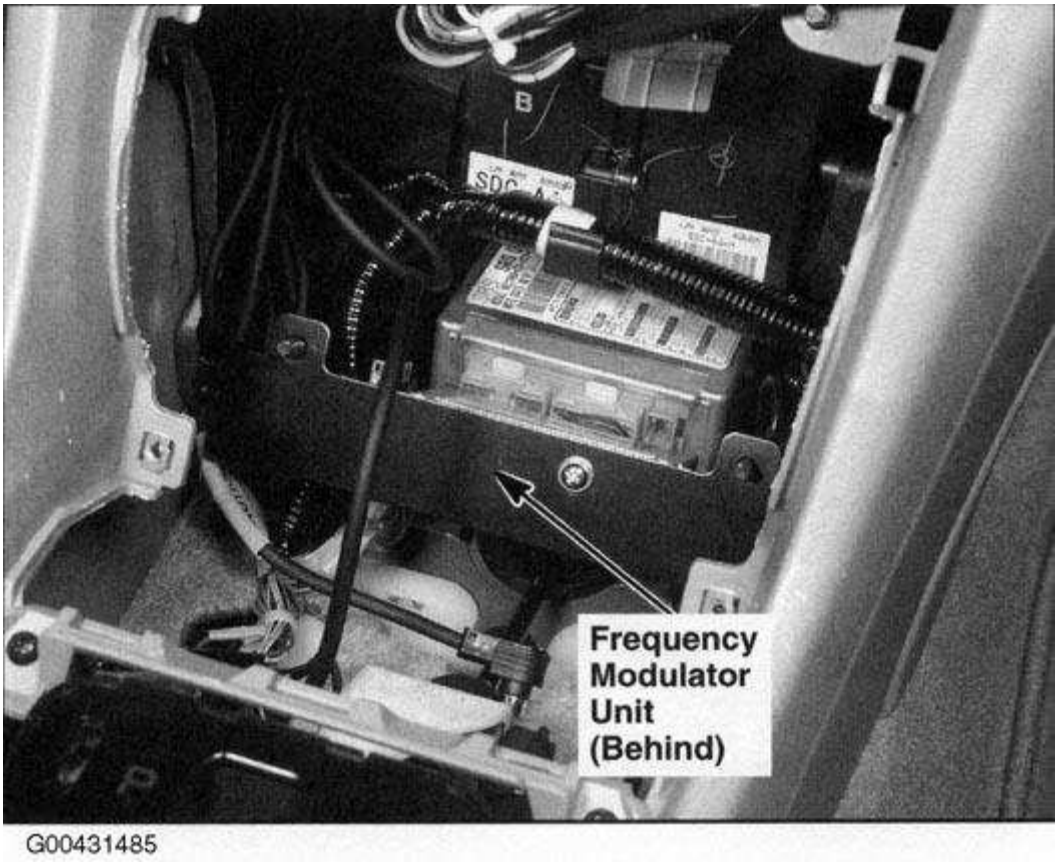
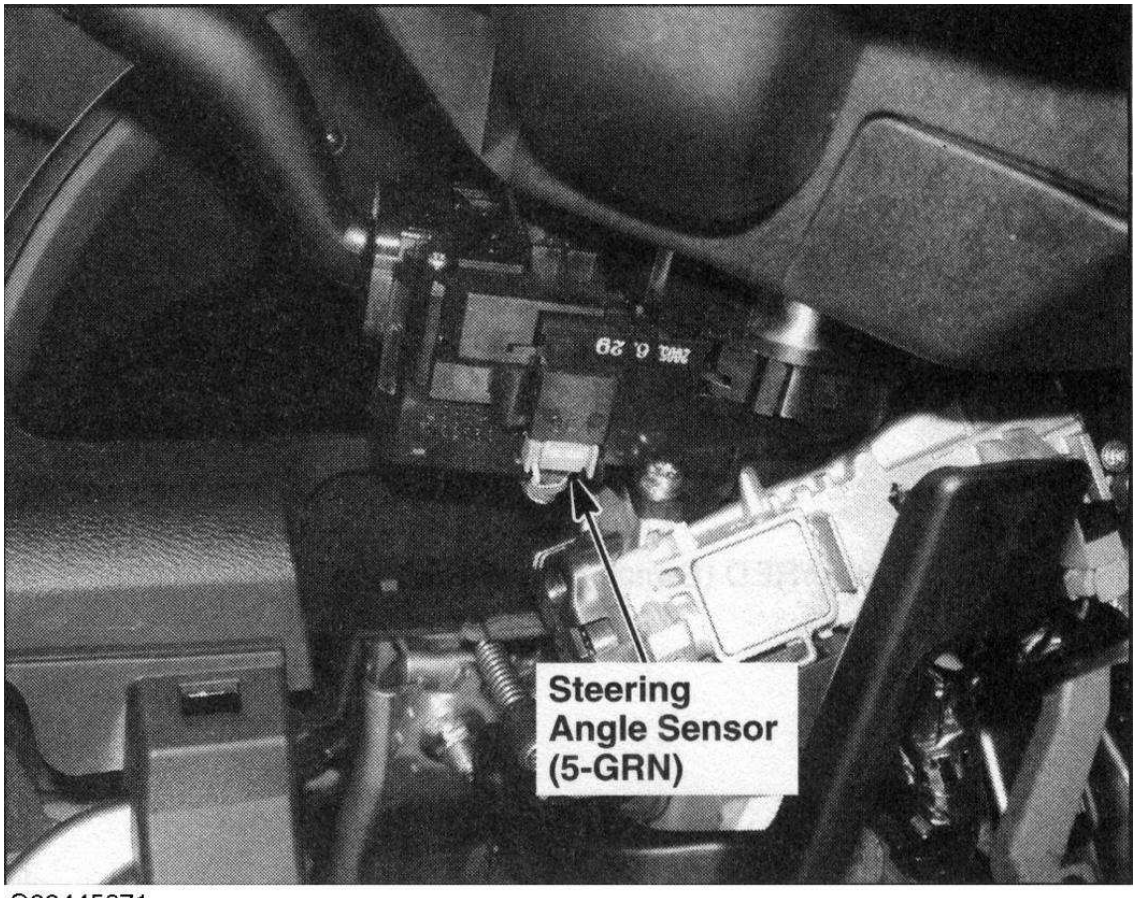
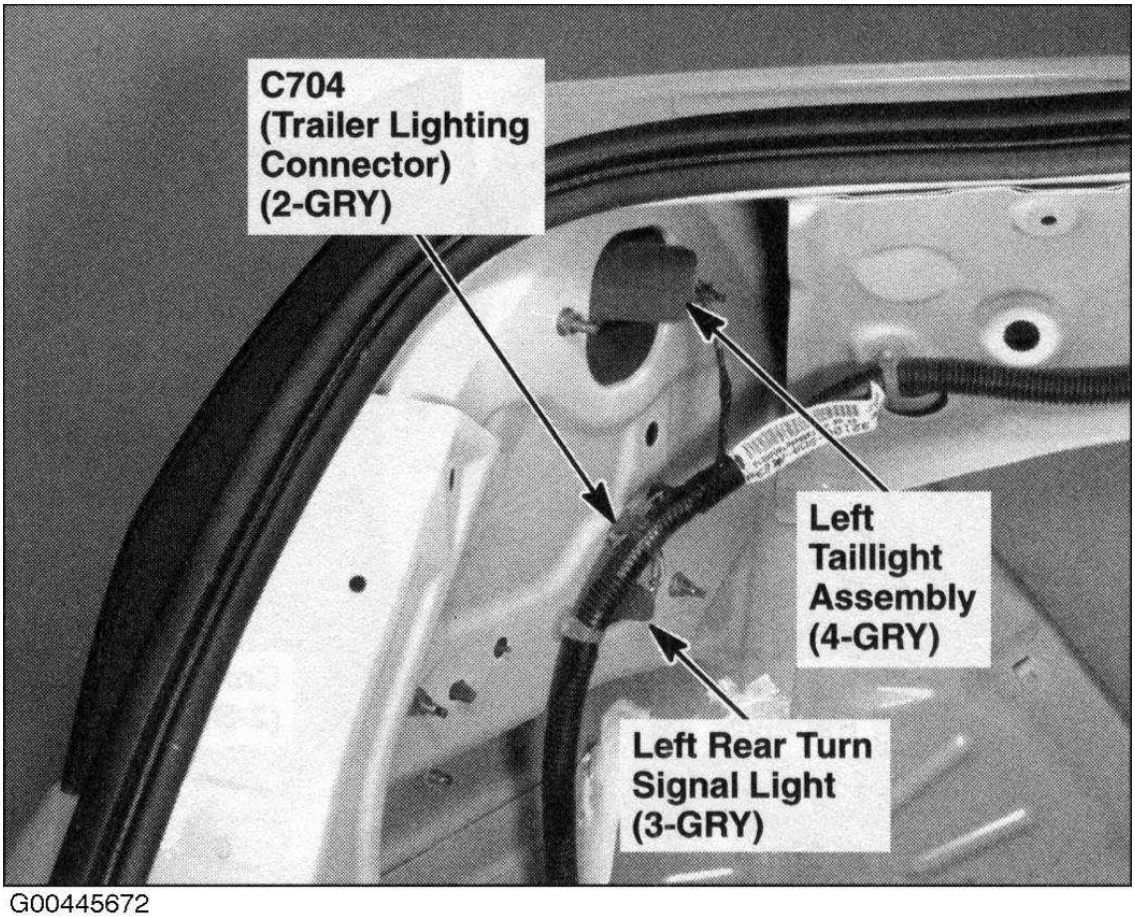


Fig. 201: Under Middle Of Dash (Honda Accessory)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00445671

Fig. 202: In Steering Column Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G00445672

Fig. 203: Left Side Of Trunk
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ENGINE

Engine Assembly - Accord (V6)

ENGINE REMOVAL

Special Tools Required

- Front subframe adapter VSB02C000016
- Engine support hanger, A and Reds AAR-T-12566
- Engine hanger balance bar VSB02000019

NOTE:

- **Use fender covers to avoid damaging painted surfaces.**
- **To avoid damage, unplug the wiring connectors carefully while holding the connector portion.**
- **Mark all wiring and hoses to avoid misconnection. Also, be sure that they do not contact other wiring, hoses, or interfere with other parts.**

1. Make sure you have the anti-theft codes for the radio and navigation system, then write down the customer's audio presets. Make sure the ignition switch is OFF.
2. Remove the windshield wiper arms, then remove the cowl cover, refer to **COWL COVER REPLACEMENT** .
3. Remove the bulkhead cover:
   - 2-door, refer to **FRONT GRILLE REPLACEMENT**
   - 4-door, refer to **FRONT GRILLE REPLACEMENT**
4. Remove the support struts from the engine hood. Move the engine hood to a vertical position, then reinstall the right side support strut as shown in **Fig. 1**.

NOTE: Do not attempt to close the hood with the support strut in the vertical position, as it will damage the support strut and hood.

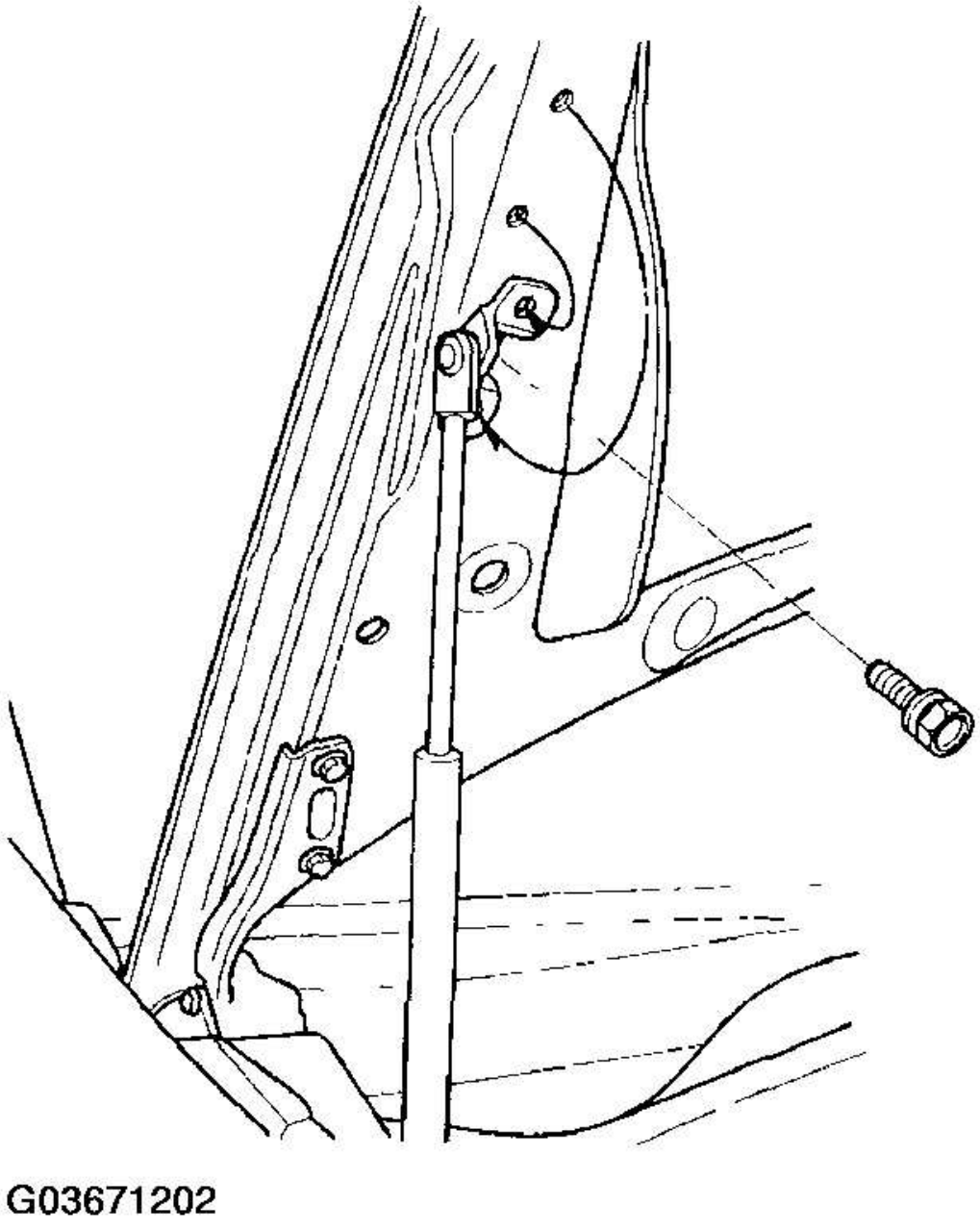
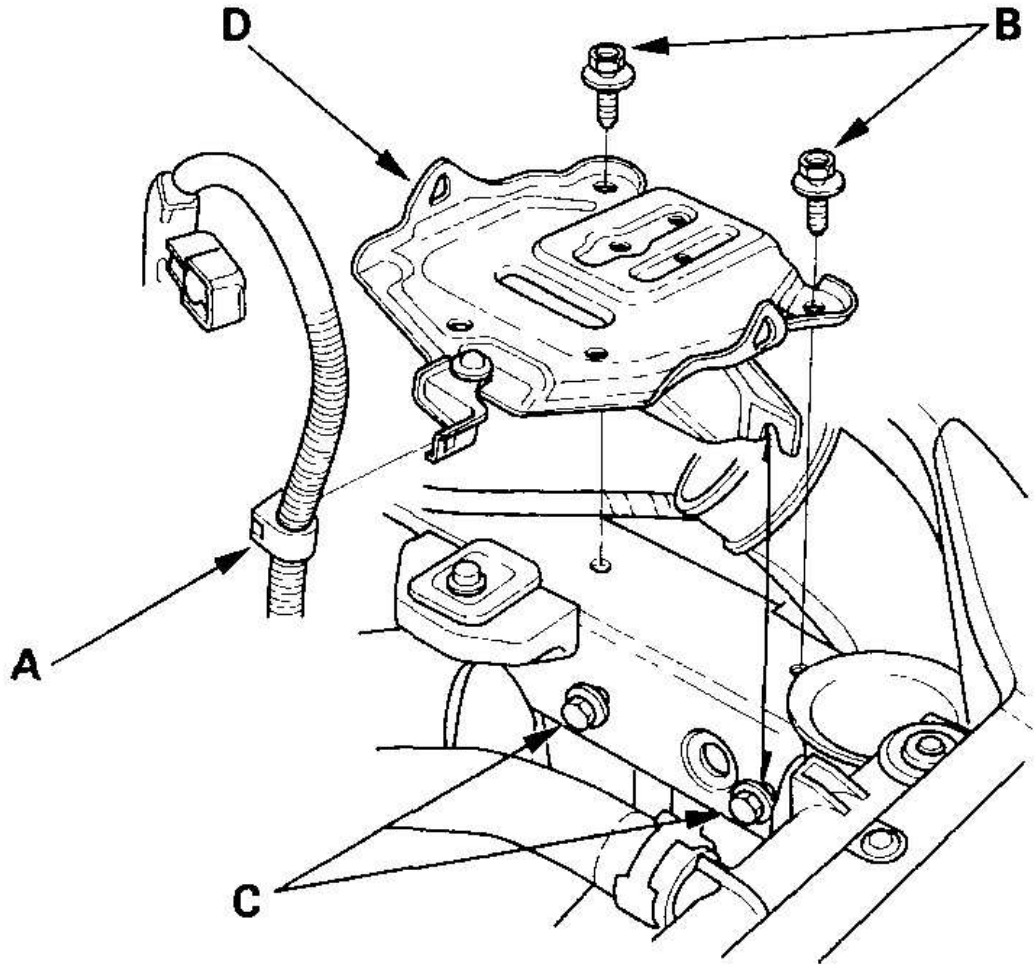


Fig. 1: Identifying Support Strut From Engine Hood
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).

6. Drain the power steering system fluid, then plug the fluid reservoir and return hose (see **FLUID REPLACEMENT**).
7. Disconnect the negative cable from the battery first, then disconnect the positive cable.
8. Remove the battery.
9. Remove the air cleaner housing (see **AIR CLEANER REMOVAL/INSTALLATION**).
10. Remove the harness clamp (A).



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Fig. 2: Identifying Harness Clamps
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the two bolts (B), and loosen the two bolts (C) securing the battery base, then remove the battery base (D).
12. Remove the battery cables (A) from the under-hood fuse/relay box, then disconnect the harness connector (B).

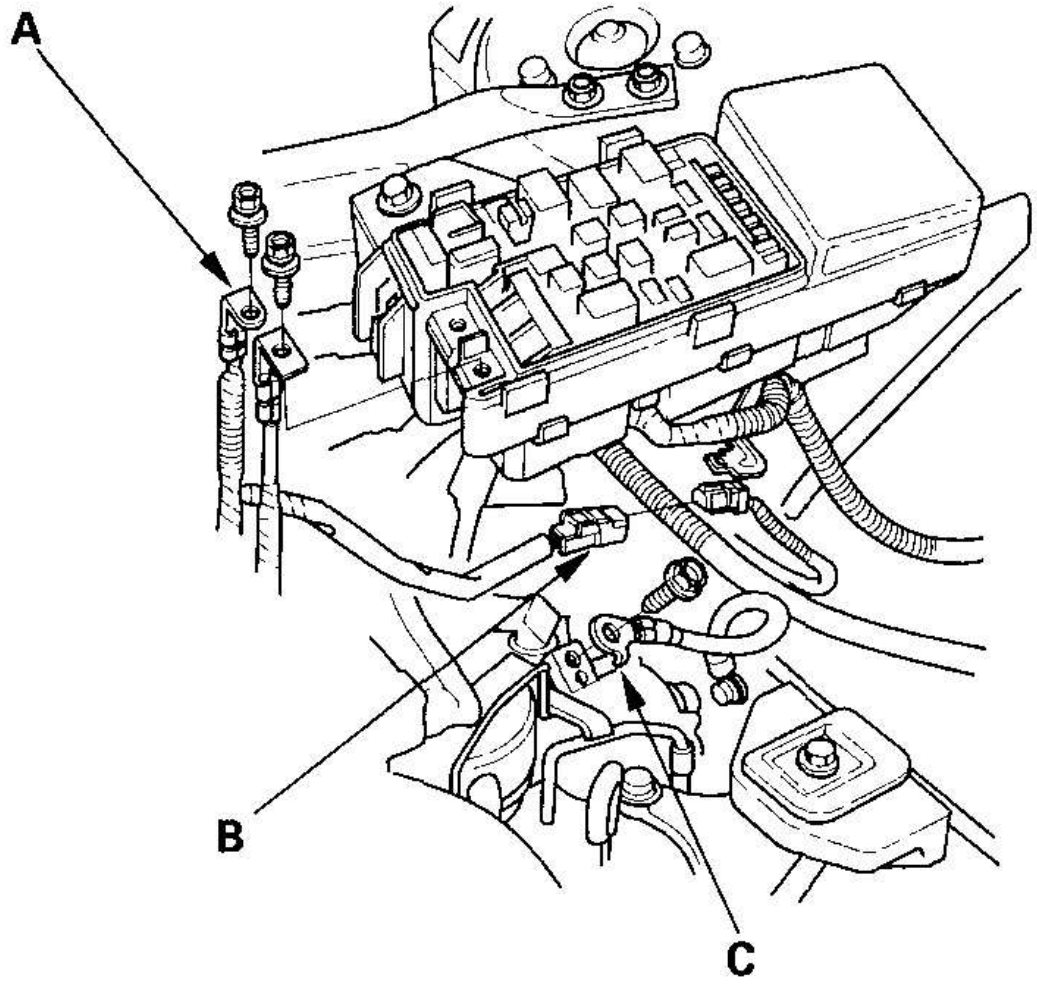


Fig. 3: Identifying Battery Cables From Under-Hood Fuse/Relay Box

Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Remove the ground cable (C).
14. Remove the brake booster vacuum hose (A), evaporative emission (EVAP) canister hose (B) and vacuum hose (C).

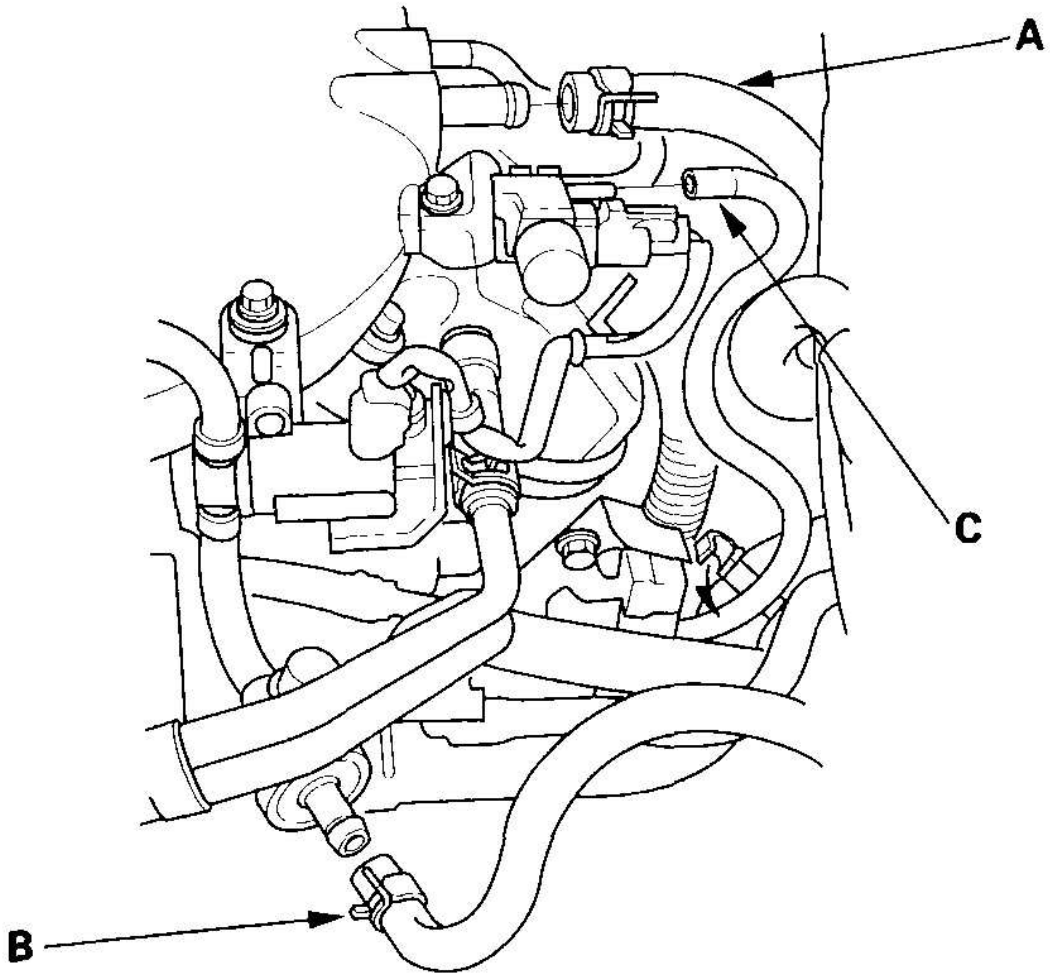


Fig. 4: Identifying Brake Booster Vacuum Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the harness clamp (A), and disconnect the engine wire harness

connectors (B) on the left side of the engine compartment.

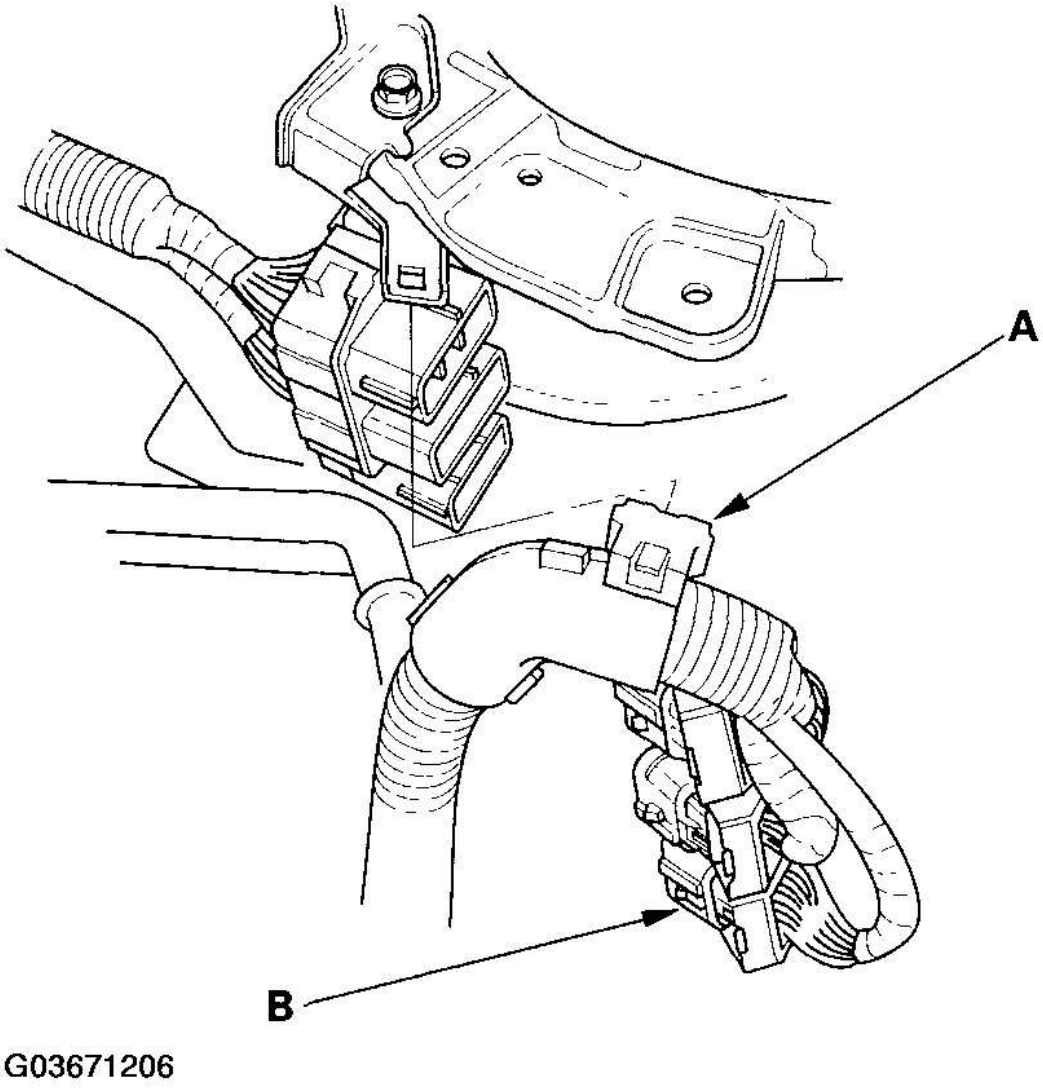


Fig. 5: Identifying Harness Clamp
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Remove the drive belt (see **DRIVE BELT REPLACEMENT**).
17. Remove the Fuel Line.
18. Remove the power steering (P/S) pump outlet line (A) from the P/S pump, then plug the outlet line and the P/S pump.

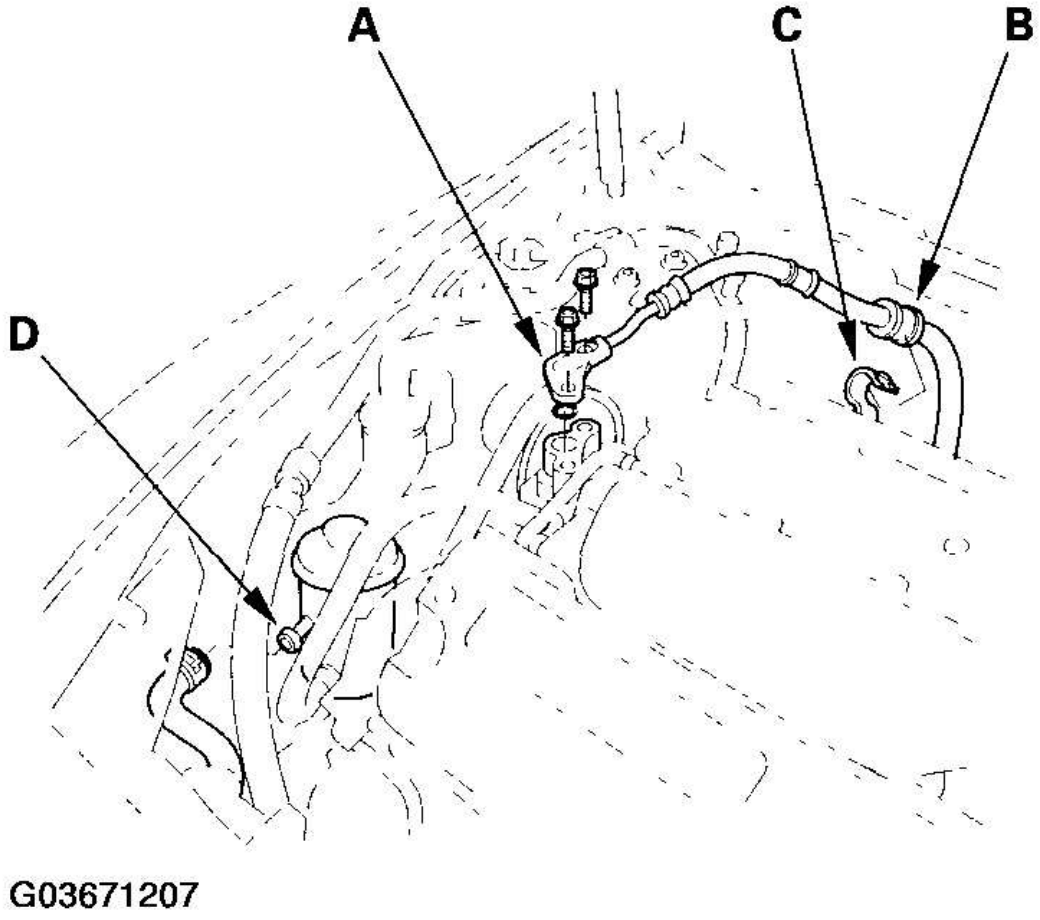


Fig. 6: Identifying P/S Pump Outlet Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Remove the P/S hose (B) from the clamp (C).
20. Remove the power steering system fluid reservoir (D) from the clamp.
21. Remove the steering joint cover (A).

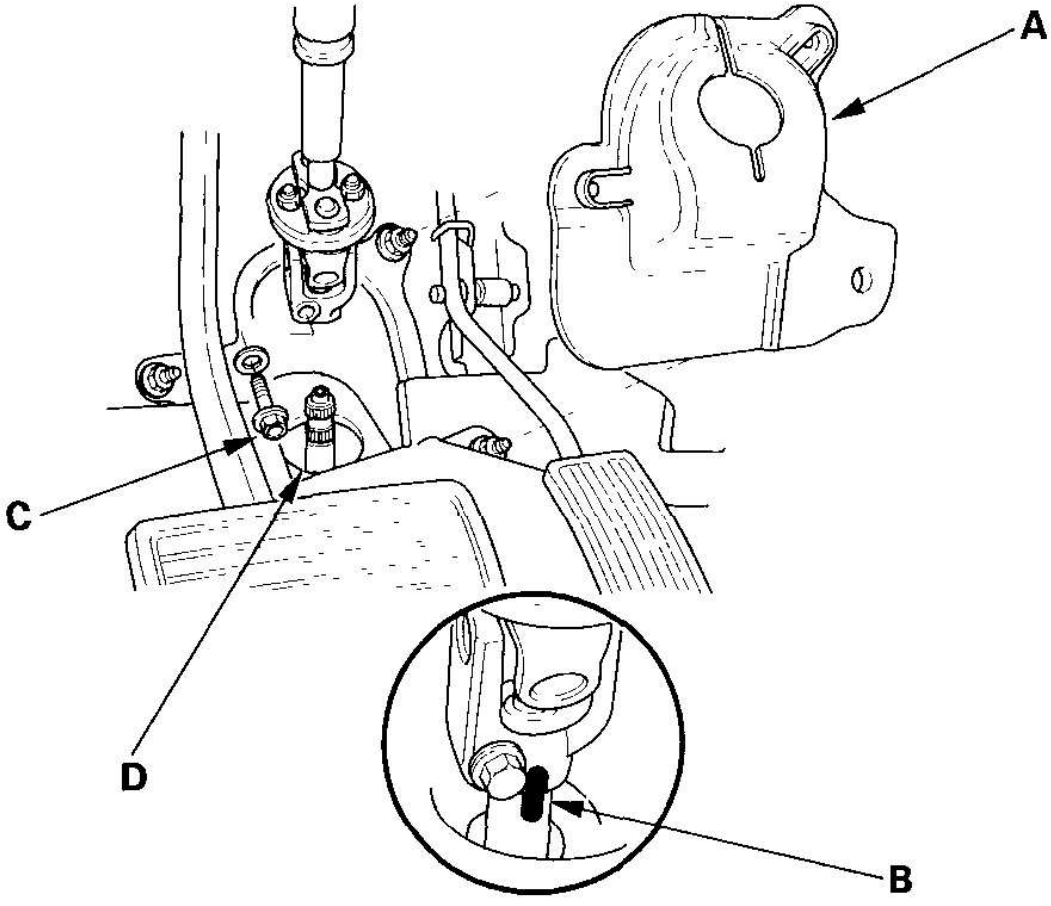


Fig. 7: Identifying Steering Joint Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Looking the steering wheel. Make a reference mark (B) across the steering joint and steering gearbox pinion shaft. Remove the steering joint bolt (C), and disconnect the steering joint from the steering gearbox pinion shaft (D). To prevent damage to the cable reel, do not turn the steering wheel once the steering joint has been removed.
23. Disconnect the fan motor connector (A) and compressor clutch connector (B), then remove the reserve tank (C).

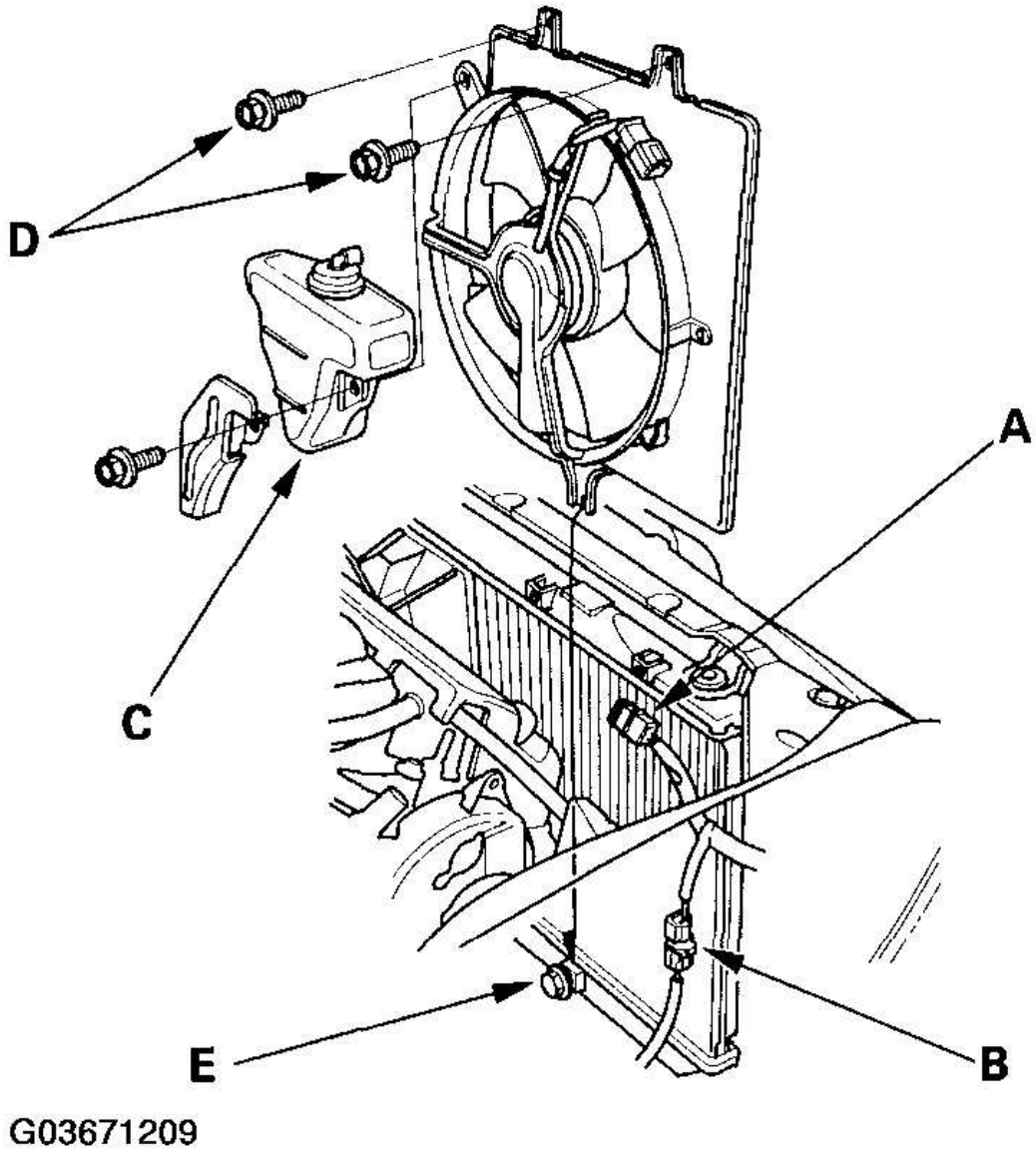
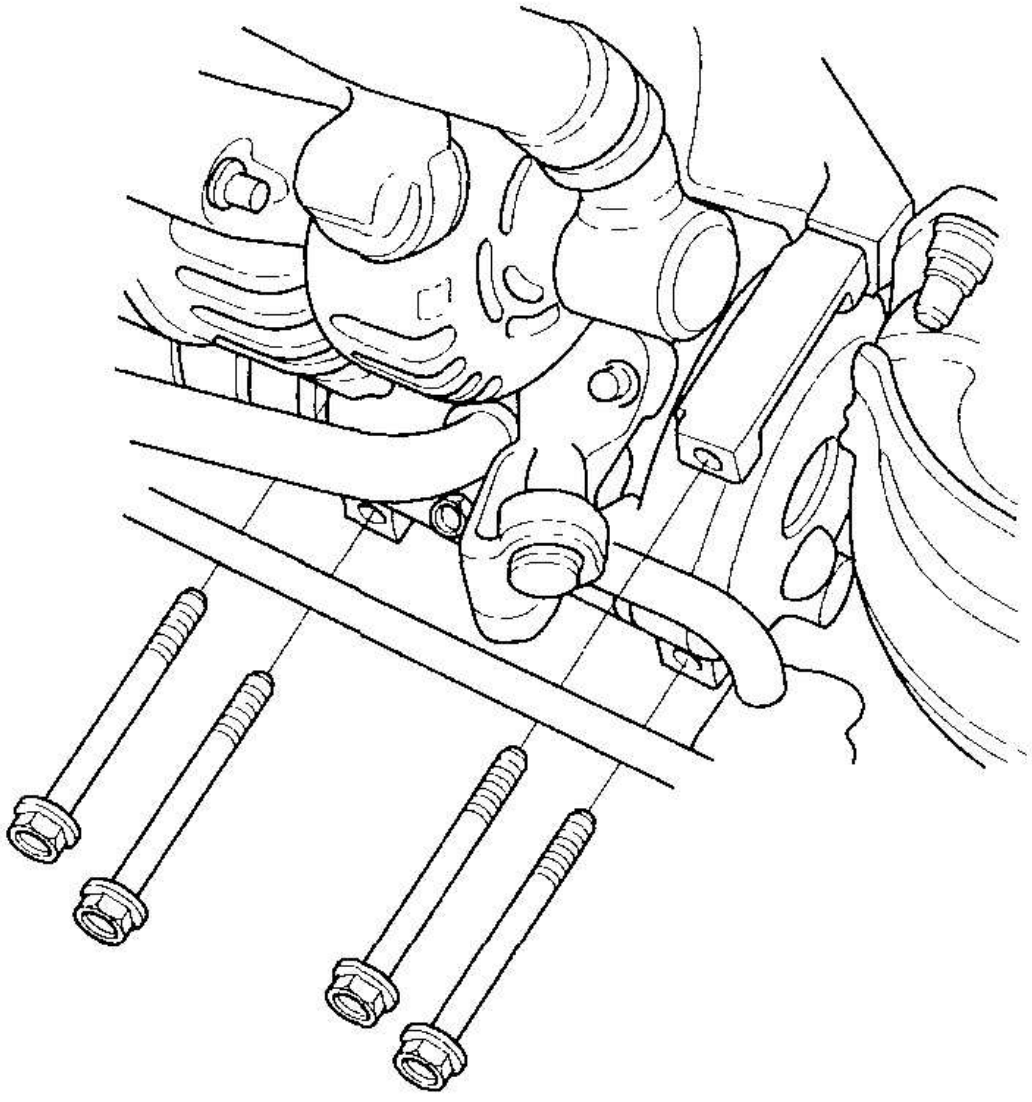


Fig. 8: Disconnecting Fan Motor Connector And Compressor Clutch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Remove the two bolts (D), and loosen the bolt (E), then remove the condenser fan shroud.
25. Remove the four bolts securing the A/C compressor.



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Fig. 9: Identifying A/C Compressor Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. M/T model: Remove the ground cable (A) from the shift cable holder, then remove the three bolts securing the shift cable holder (B).

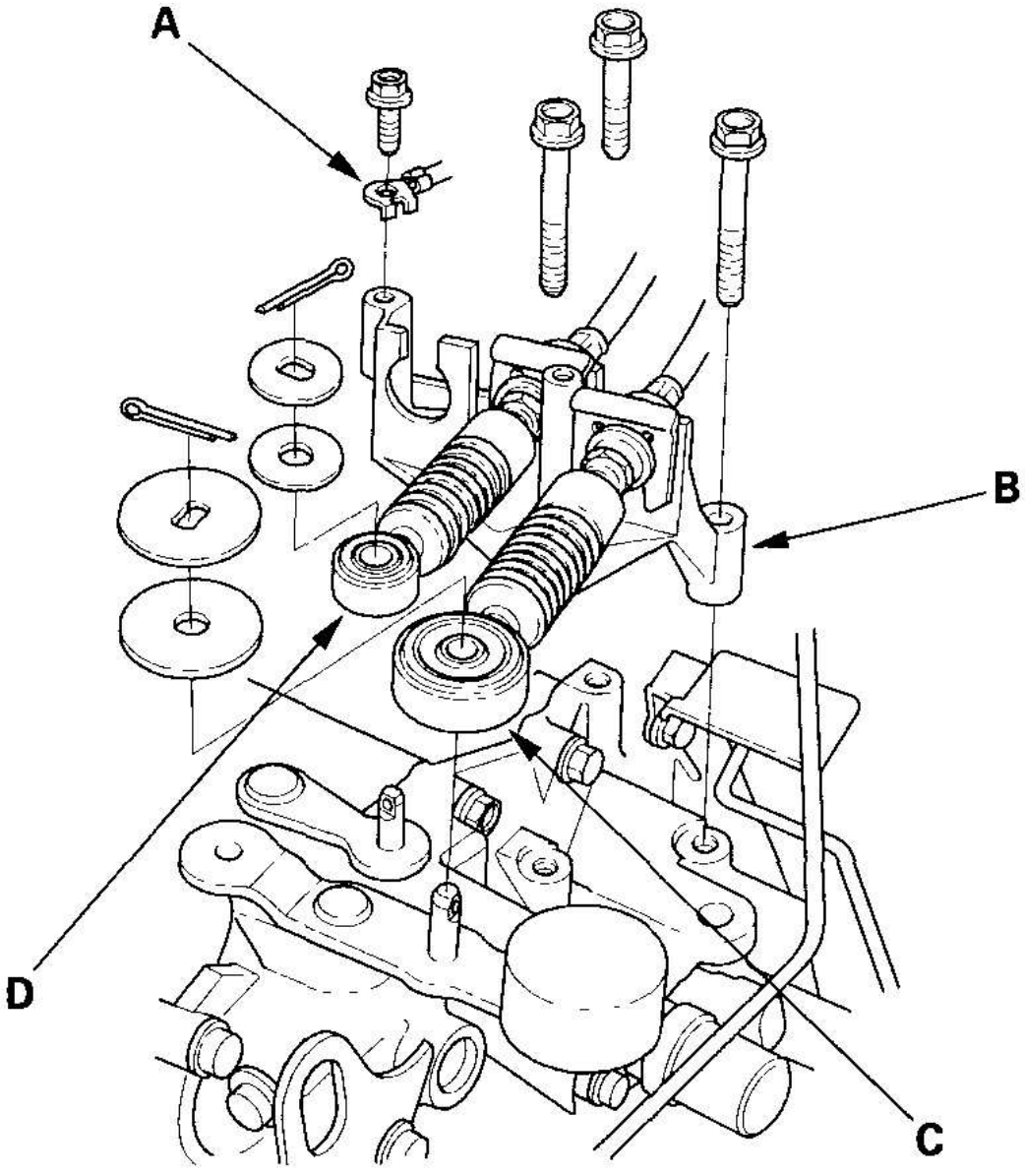


Fig. 10: Identifying Ground Cable From Shift Cable Holder (M/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

27. M/T model: Remove the shift cable (C) and select cable (D). Do not bend the cables excessively.

28. M/T model: Remove the clutch slave cylinder (A), and clutch line bracket mounting bolt (B). Do not operate the clutch pedal once the slave cylinder has been removed.

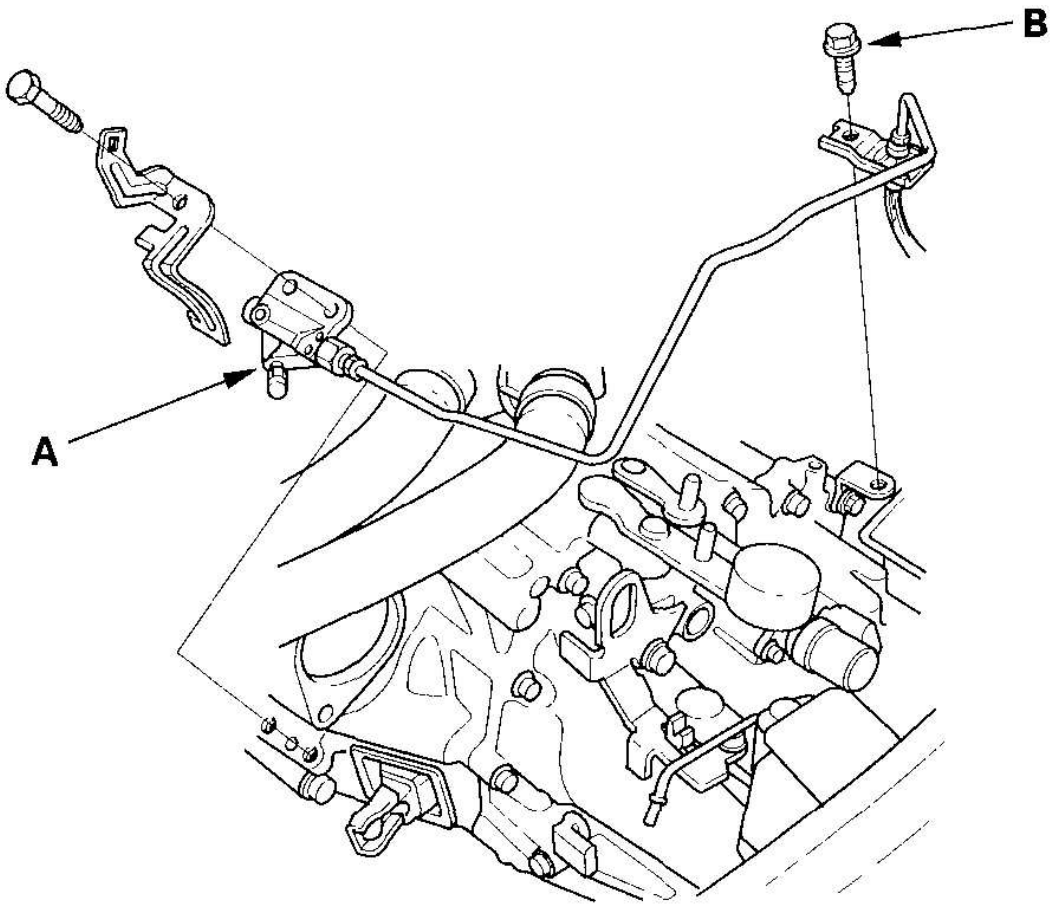


Fig. 11: Identifying Clutch Slave Cylinder And Clutch Line Bracket Mounting Bolt (M/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

29. Remove the radiator cap.
30. Raise the vehicle on the hoist to full height.
31. Remove the front wheels.

32. Remove the splash shield.

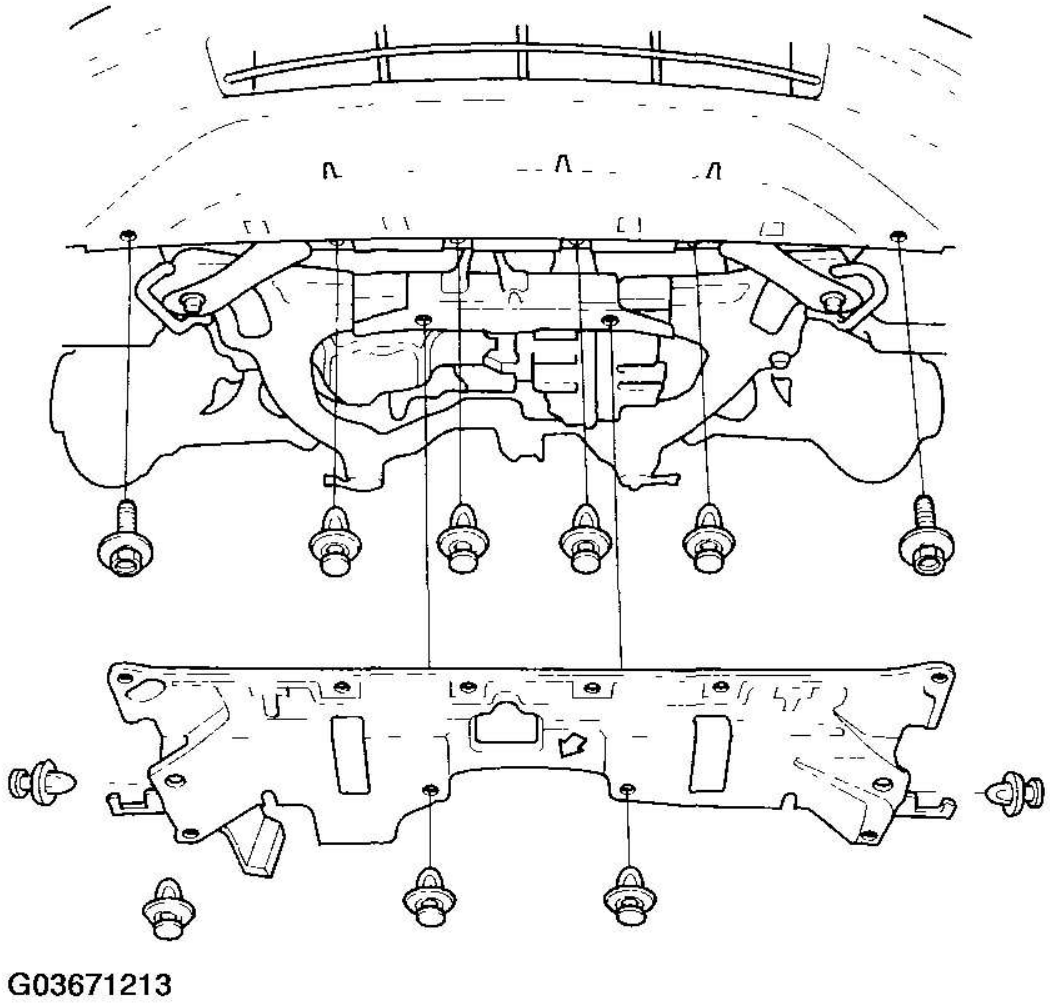


Fig. 12: Identifying Splash Shield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

33. Loosen the drain plug in the radiator, and drain the engine coolant (see **COOLANT CHECK**).
34. Drain the transmission fluid:
    - Manual transmission (see **TRANSMISSION REMOVAL**)
    - Automatic transmission (see **TRANSMISSION REMOVAL**)

35. Drain the engine oil (see **ENGINE OIL REPLACEMENT**).
36. Disconnect the stabilizer links, refer to **STABILIZER LINK REPLACEMENT** .
37. Remove the damper fork, refer to **DAMPER/SPRING REPLACEMENT** .
38. Separate the tie-rod end ball joints from the knuckles (see step 9 in **STEERING GEARBOX REMOVAL**).
39. Separate the knuckles from the lower arms, refer to **LOWER ARM REMOVAL/INSTALLATION** .
40. Remove the driveshafts (see step 10 **DRIVESHAFT REMOVAL**). Coat all precision-finished surfaces with clean engine oil. Tie plastic bags over the driveshaft ends.
41. Remove exhaust pipe A.

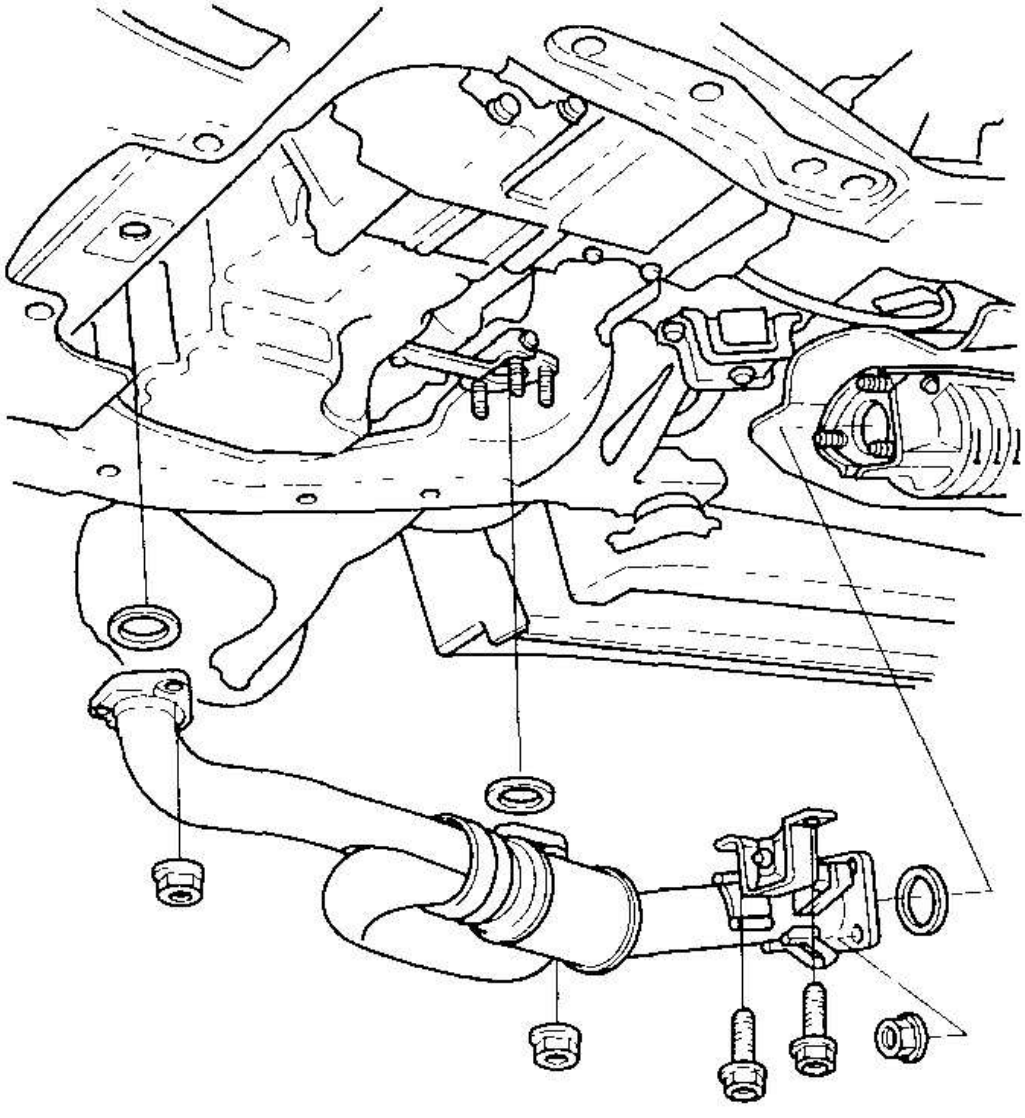


Fig. 13: Identifying Exhaust Pipe A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

42. A/T model: Remove the bolts (A) securing the shift cable holder (B), then remove the shift cable cover (C). To prevent damage to the control lever joint, be sure to remove the bolts securing the shift cable holder before Identifying

the bolts securing the shift cable cover.

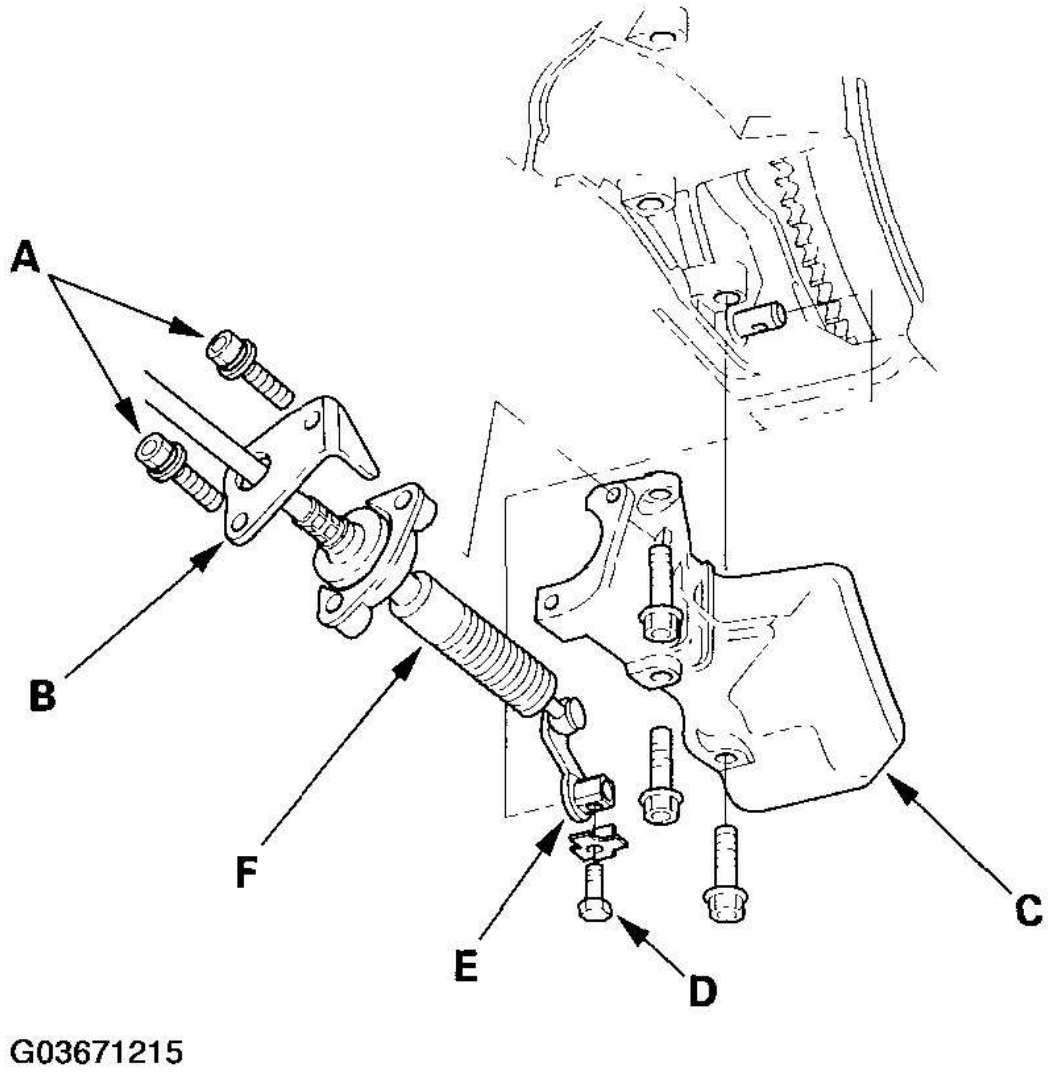


Fig. 14: Identifying Shift Cable Holder Bolt (A/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

43. A/T model: Remove the lock bolt (D) securing the control lever (E), then remove the shift cable (F) with the control lever. Do not bend the shift cable excessively.
44. A/T model: Remove the lock bolt (D) securing the control lever (E), then

remove the shift cable (F) with the control lever (E), then remove the shift cable (F) with the control lever. Do not bend the shift cable excessively.

45. Remove the P/S hose, then plug the line and the hose.

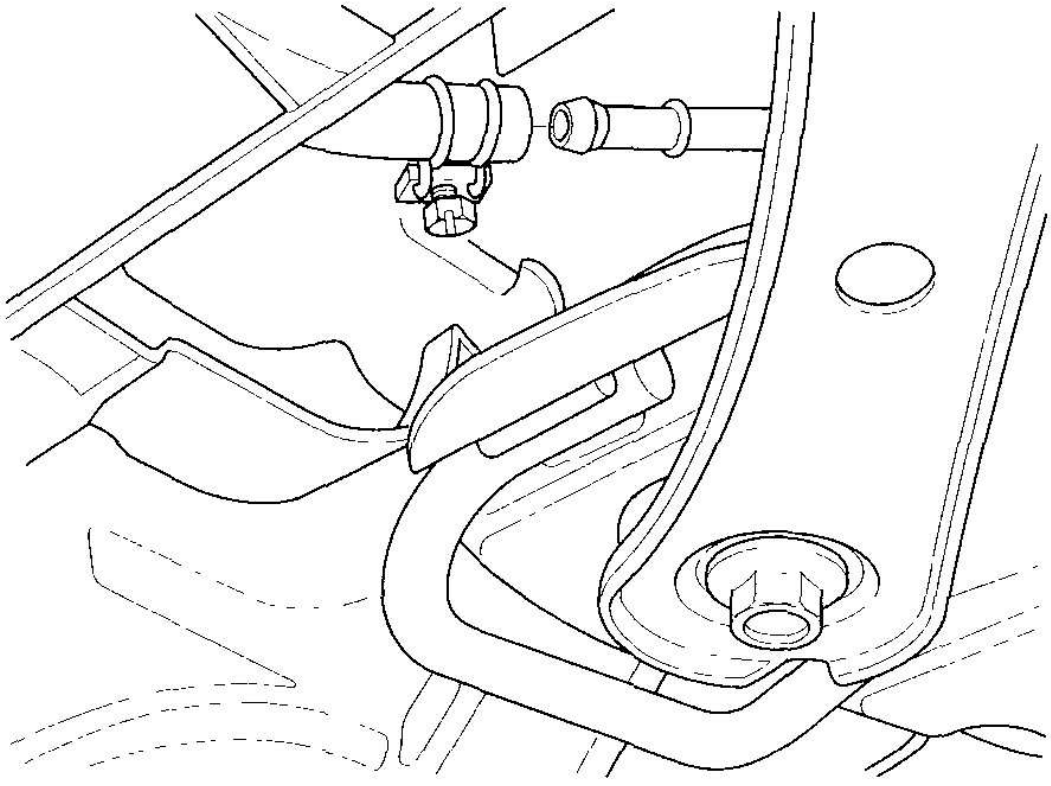
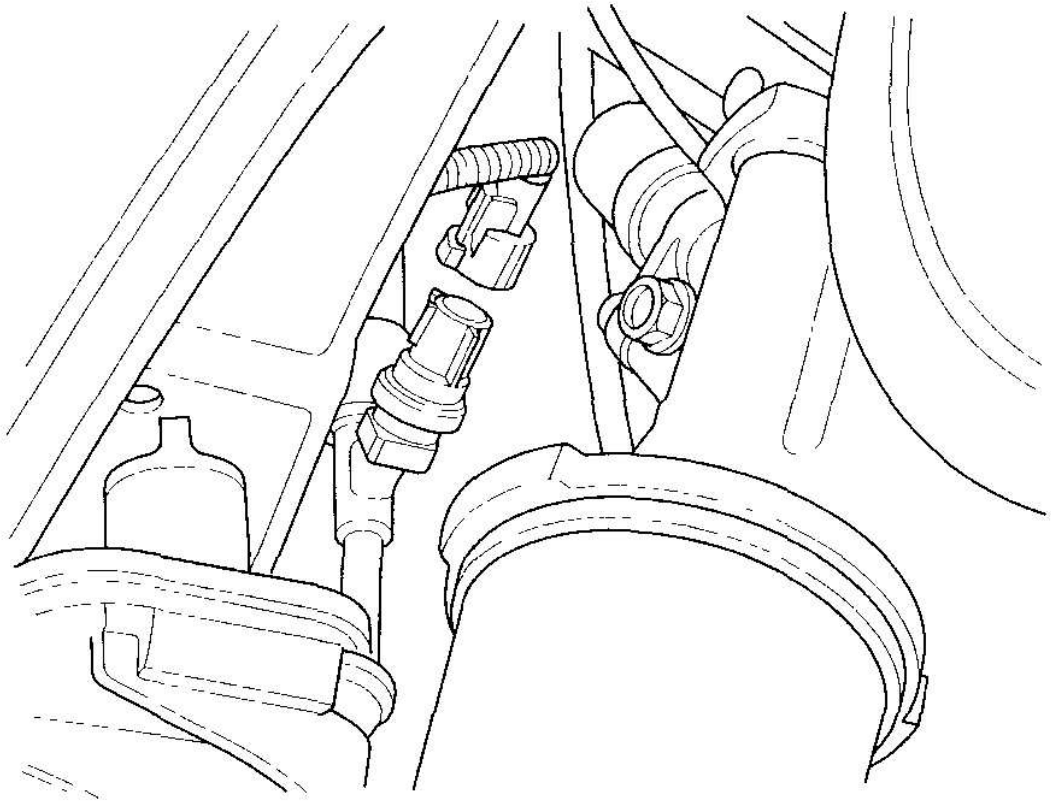


Fig. 15: Identifying P/S Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

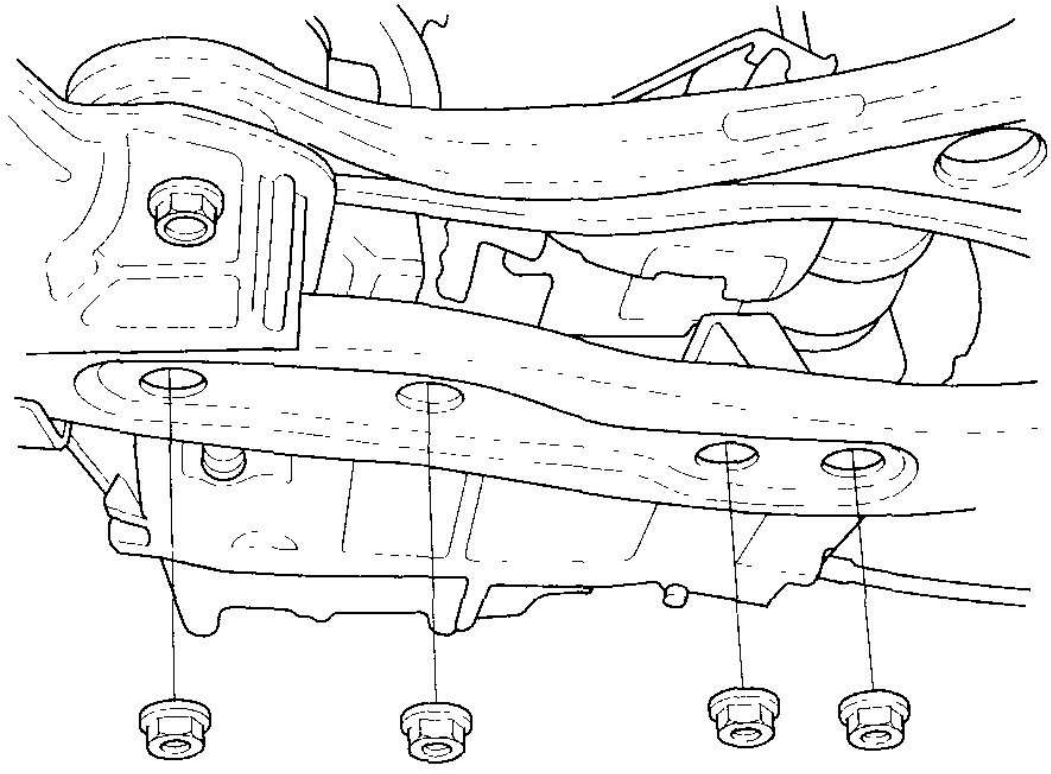
46. Disconnect the power steering pressure switch connector.



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Fig. 16: Disconnecting Power Steering Pressure Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

47. Remove the nuts securing the transmission lower front mount and transmission lower rear mount.



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Fig. 17: Identifying Transmission Lower Front Mount And Transmission Lower Rear Mount Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

48. Lower the vehicle on the hoist.
49. Remove the upper radiator hose (A) and lower radiator hose (B).

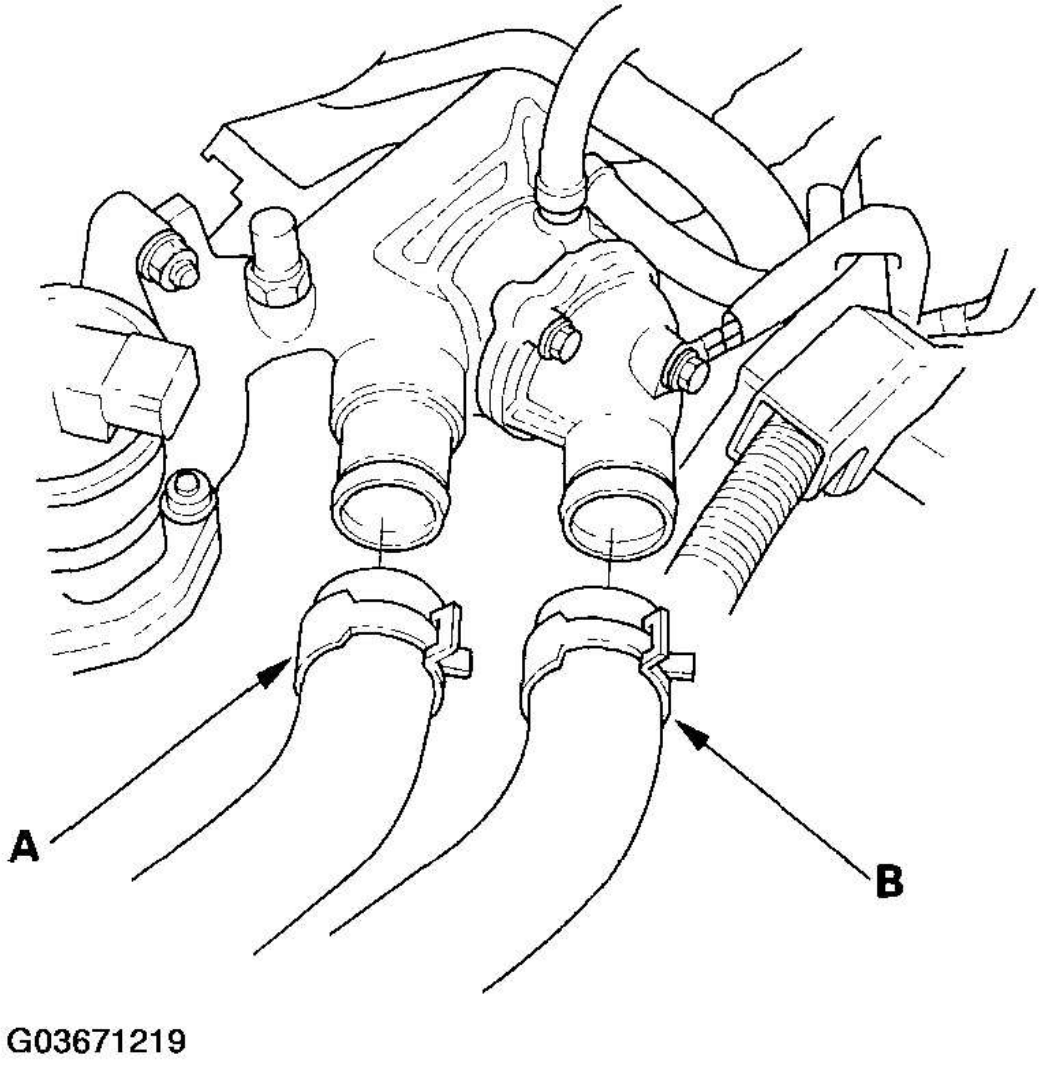
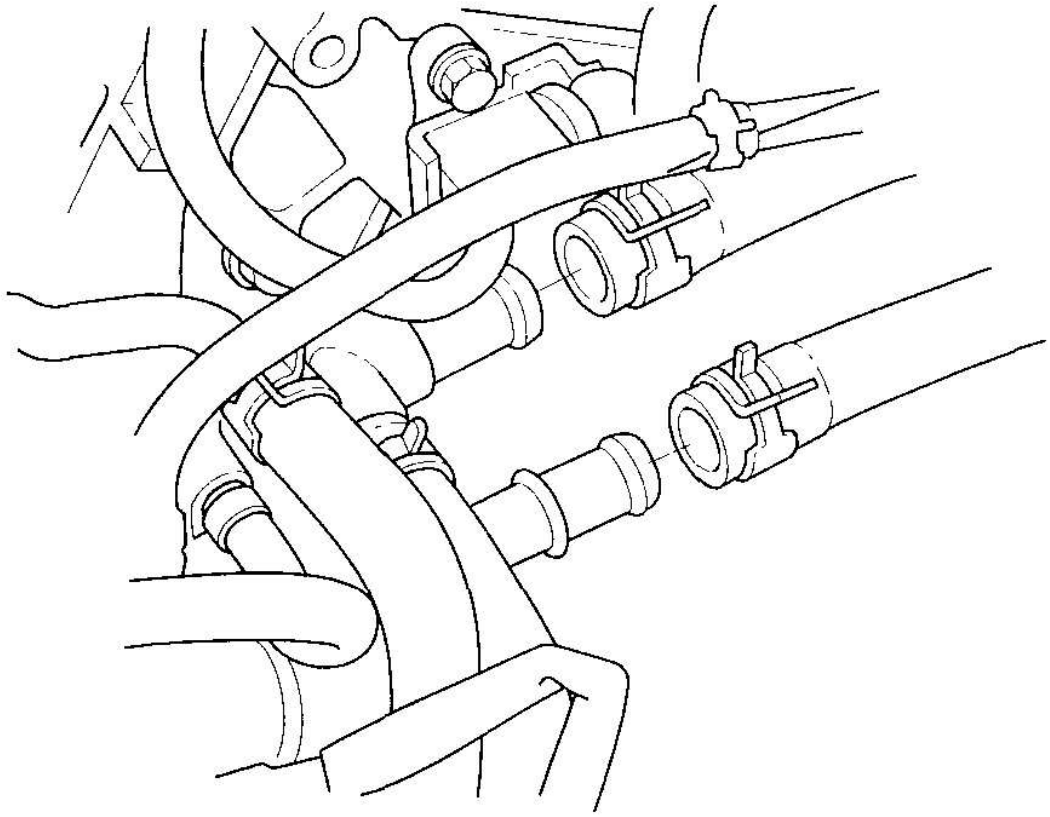


Fig. 18: Identifying Upper Radiator And Lower Radiator Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

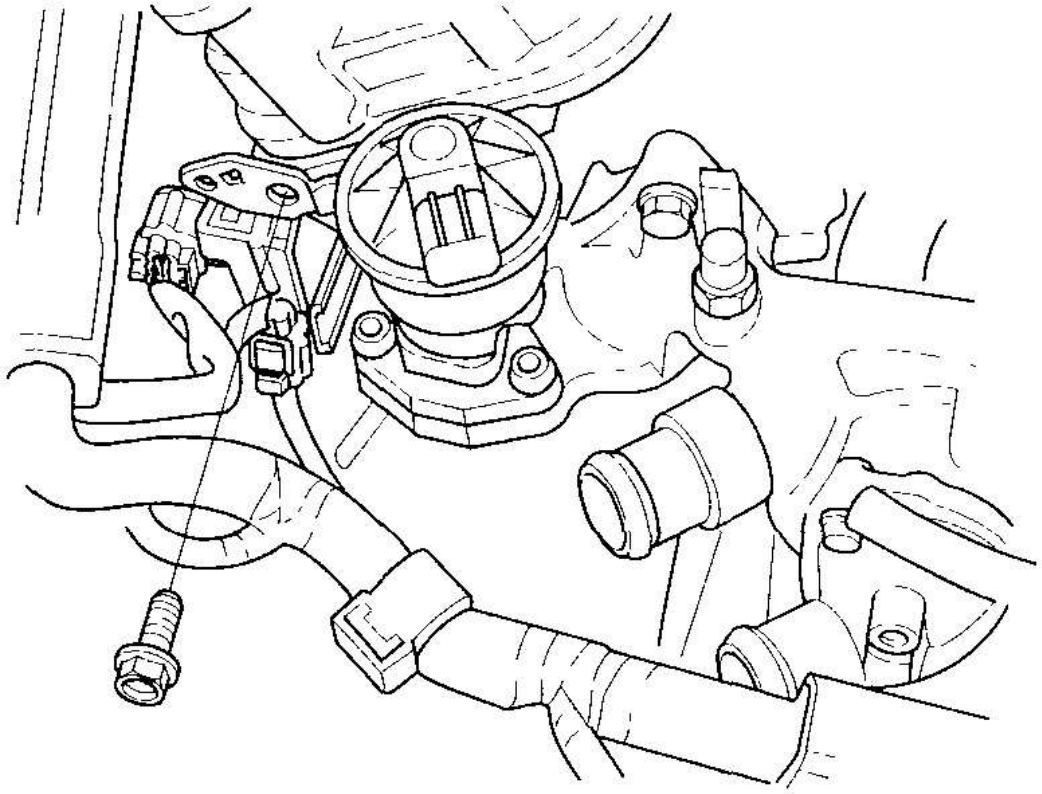
50. Remove the heater hoses.



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Fig. 19: Identifying Heater Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

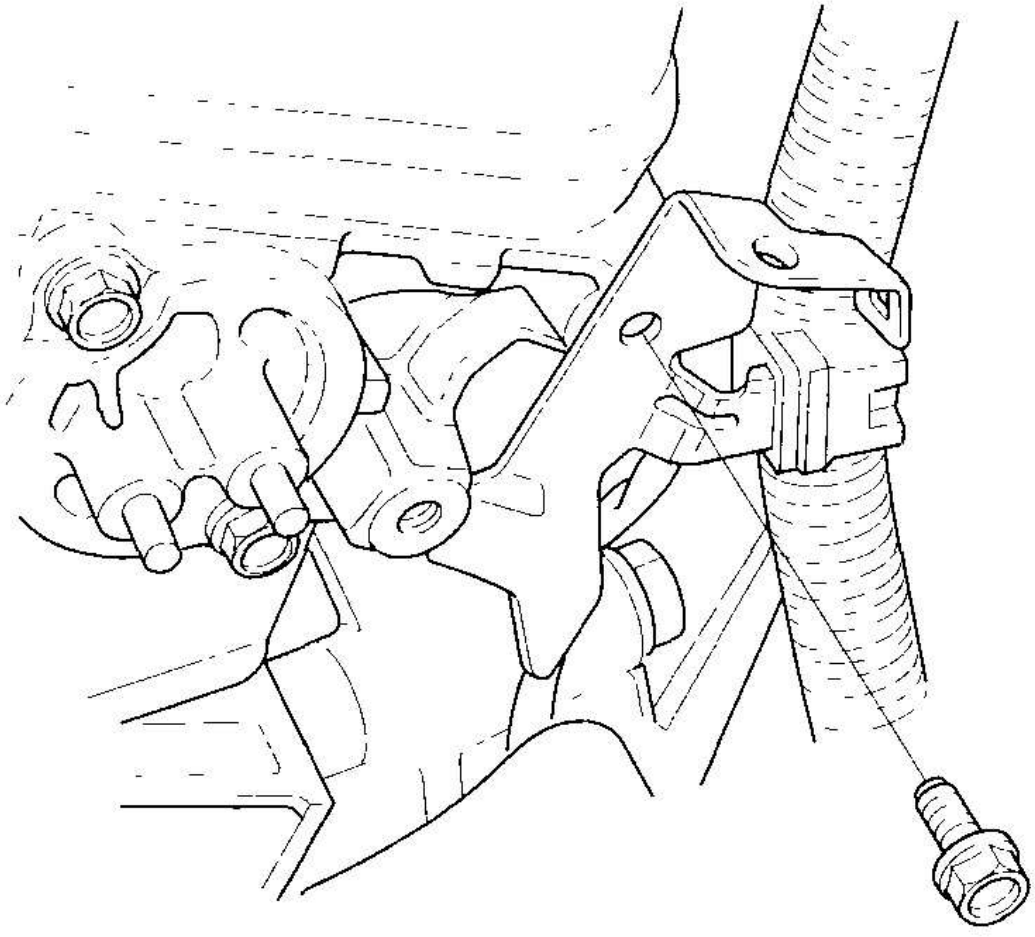
51. Remove the connector bracket from the front cylinder head; use the bracket bolt to attach engine balancer bar front arm.



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Fig. 20: Identifying Connector Bracket From Front Cylinder Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

52. Remove the harness clamp bracket from the rear cylinder head; use the bracket bolt to attach engine balancer bar rear arm.



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Fig. 21: Identifying Harness Clamp Bracket From Rear Cylinder Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

53. Lift and support the engine with engine hanger (A) and engine balancer bar (B).

    Attach the front arm (C) to the front cylinder head with a spacer (D) and the connector bracket bolt (10 x 1.25 mm) (E). Attach the rear arm (F) to the rear cylinder head with the harness clamp bracket bolt (8 x 1.25 mm) (G).

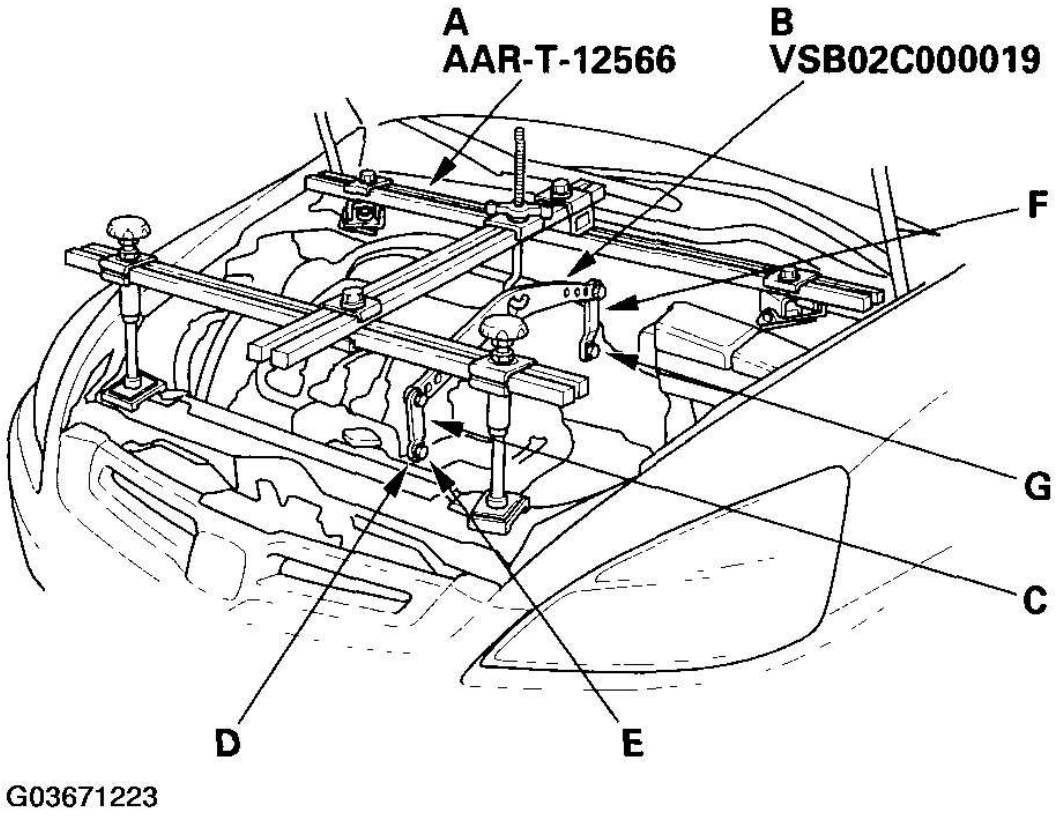


Fig. 22: Lifting Engine With Engine Hanger And Engine Balancer Bar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

54. M/T model: Remove the ground cable (A).

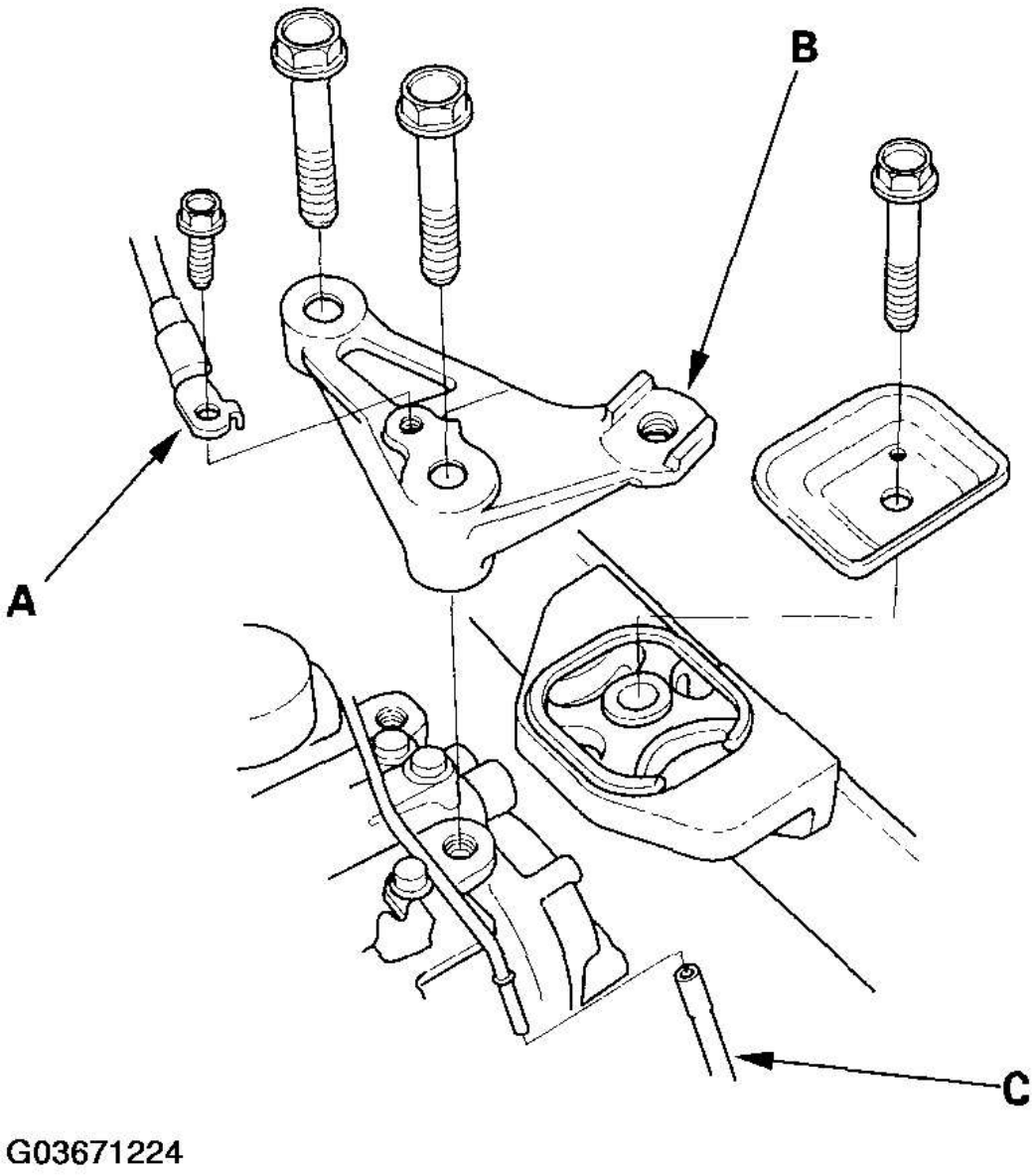


Fig. 23: Identifying Ground Cable (M/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

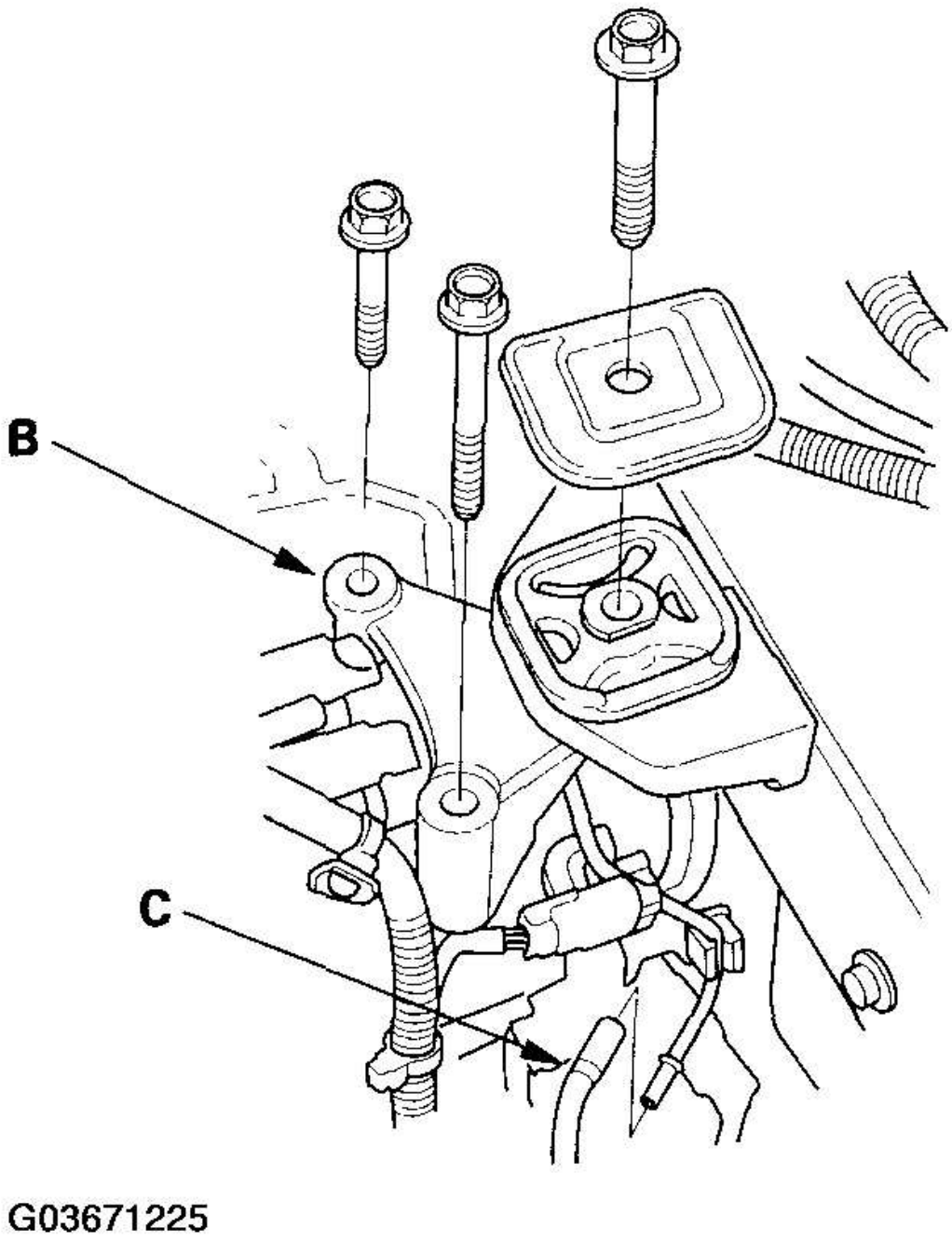


Fig. 24: Identifying Ground Cable (A/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

55. Remove the transmission upper mount bracket (B), and remove the vacuum hose (C).
56. Remove the front mount stop (A), then remove the front mount bolt (B).

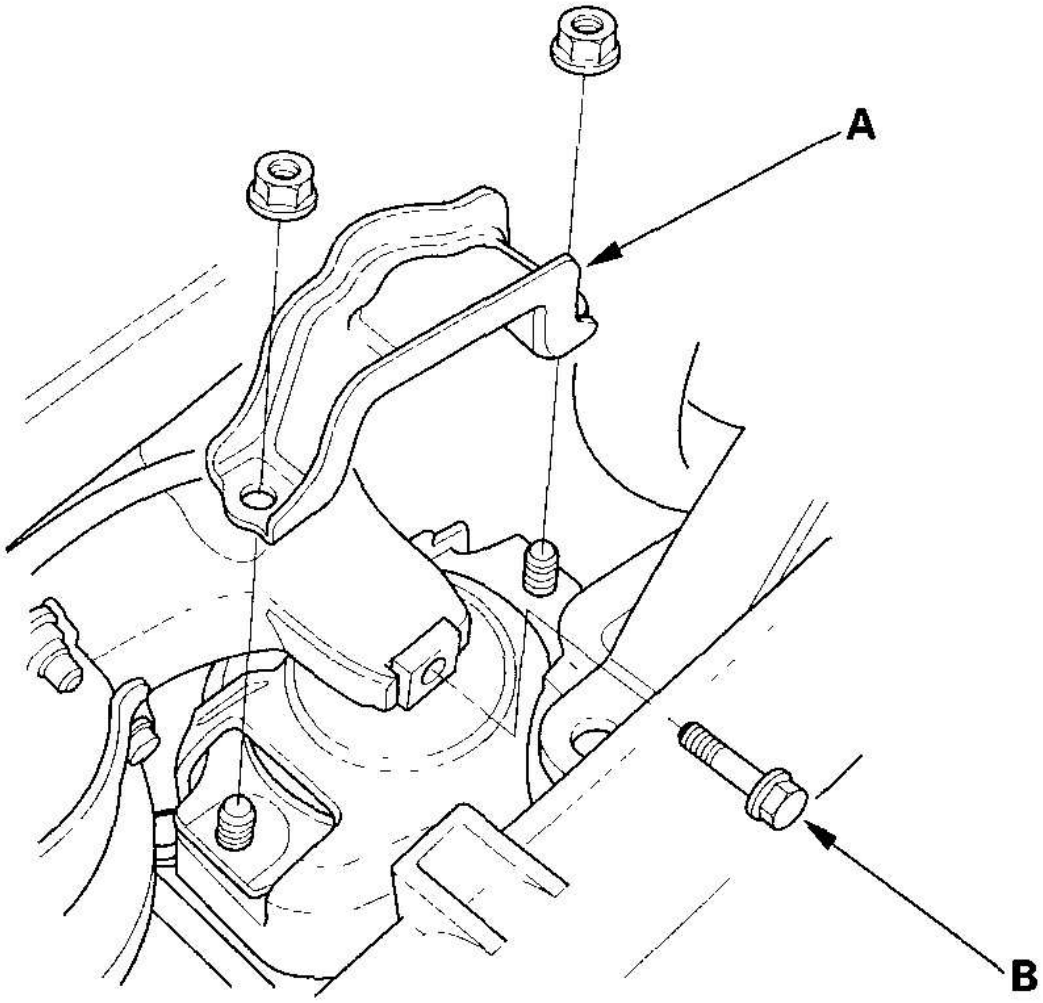


Fig. 25: Identifying Front Mount Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

57. Remove the rear mount stop (A), then remove the rear mount bolt (B).

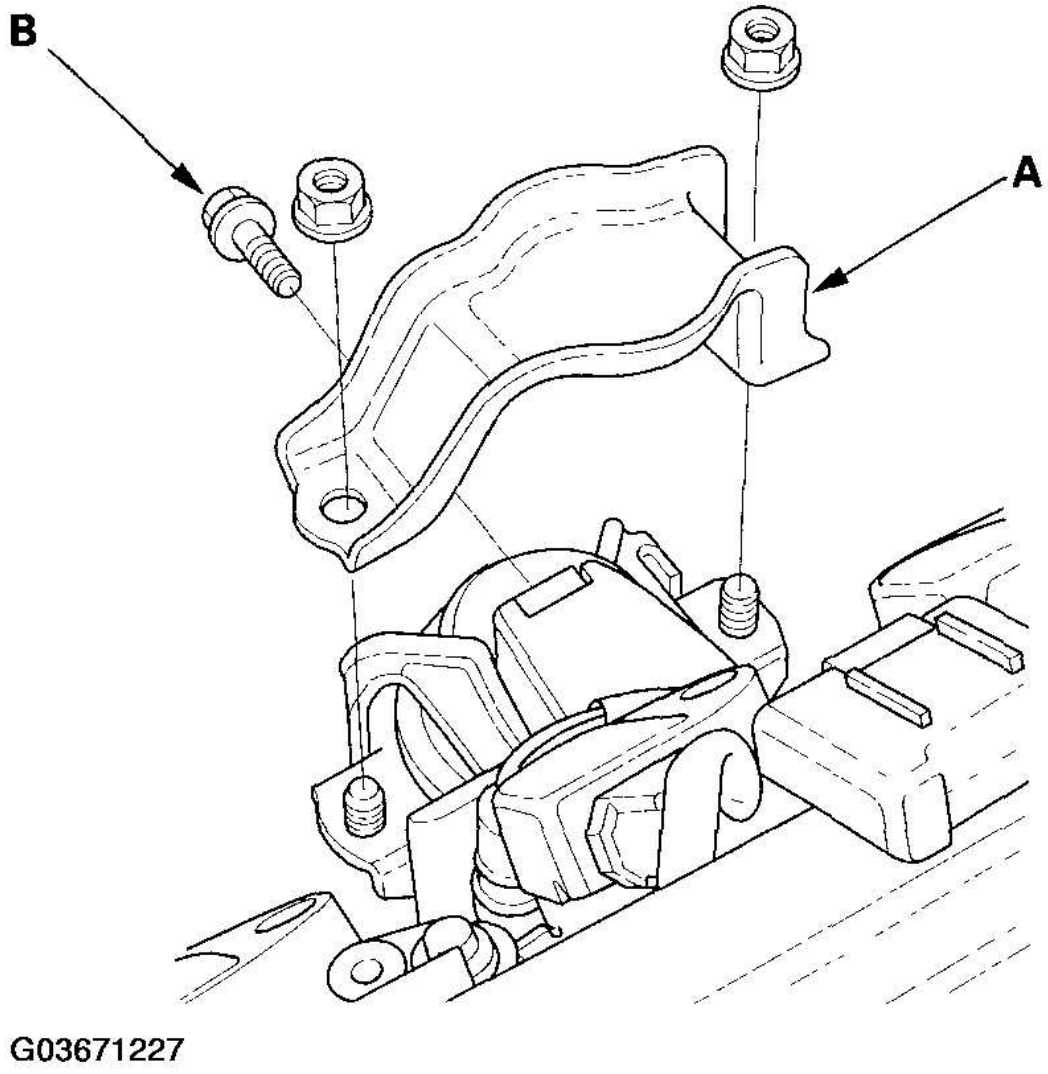
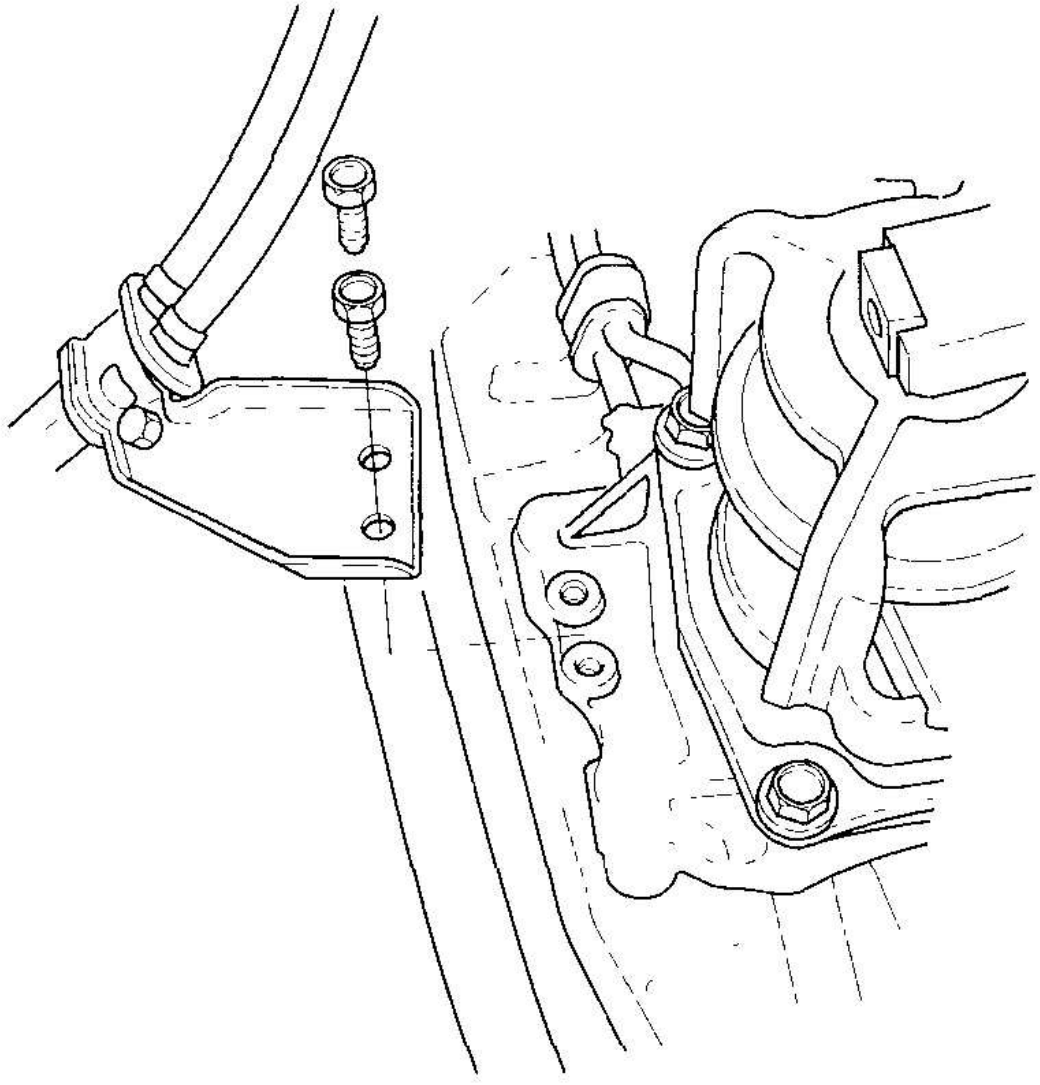


Fig. 26: Identifying Rear Mount Stop And Rear Mount Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

58. M/T model: Remove the two bolts securing the shift cable bracket.



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Fig. 27: Identifying Shift Cable Bracket Bolt (M/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

59. Raise the vehicle on the hoist to full height.
60. Make the appropriate lines (A) at the subframe that line up with the edge of the subframe stiffer (B).

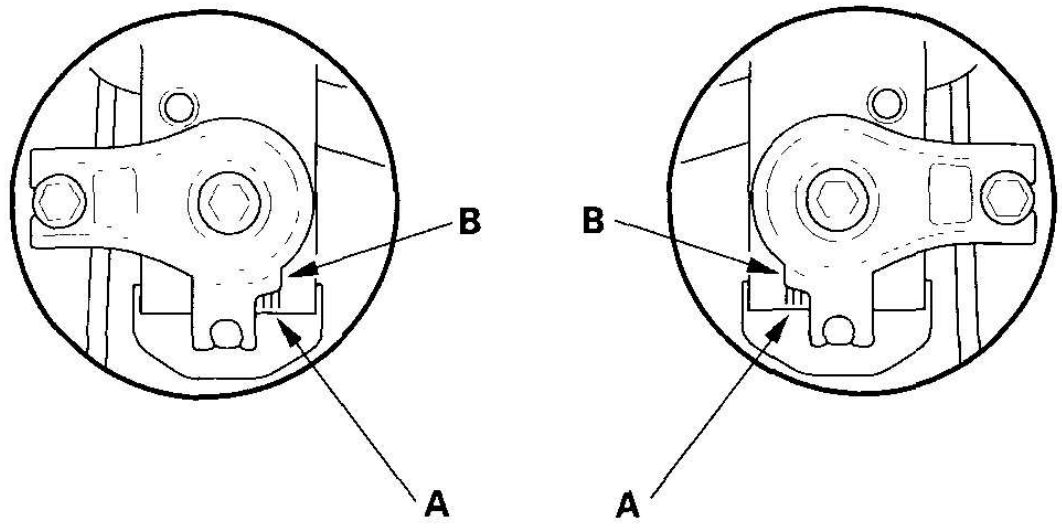


Fig. 28: Identifying Subframe Stiffer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

61. Attach the special tool to the subframe by hanging the belt (A) over the front of the subframe (B), then secure the belt with its stop (C).

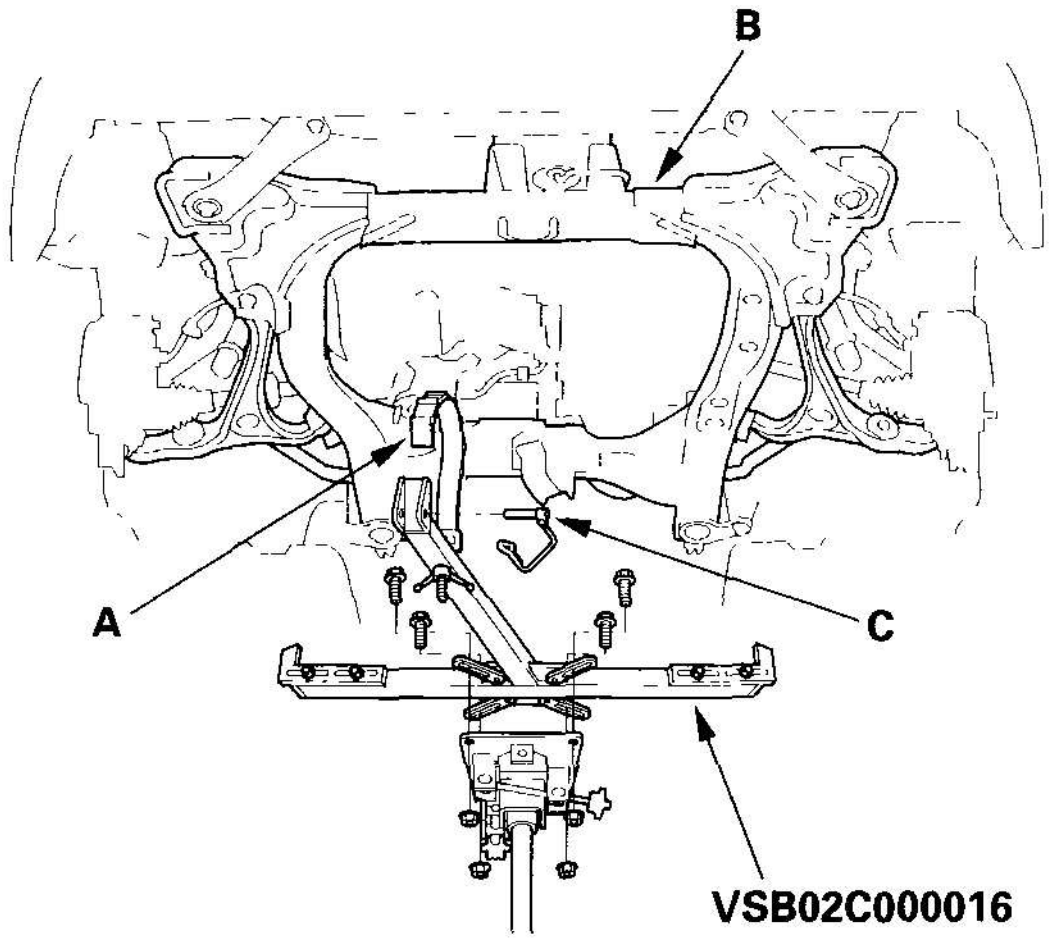


Fig. 29: Hanging Belt Over Front Of Subframe Using Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

62. Raise the jack, then line up the slots in the special tool arms with the bolt holes on the corner of the jack base, then securely attach them with four bolts.
63. Remove the subframe mid mounts (A), then remove the subframe (B).

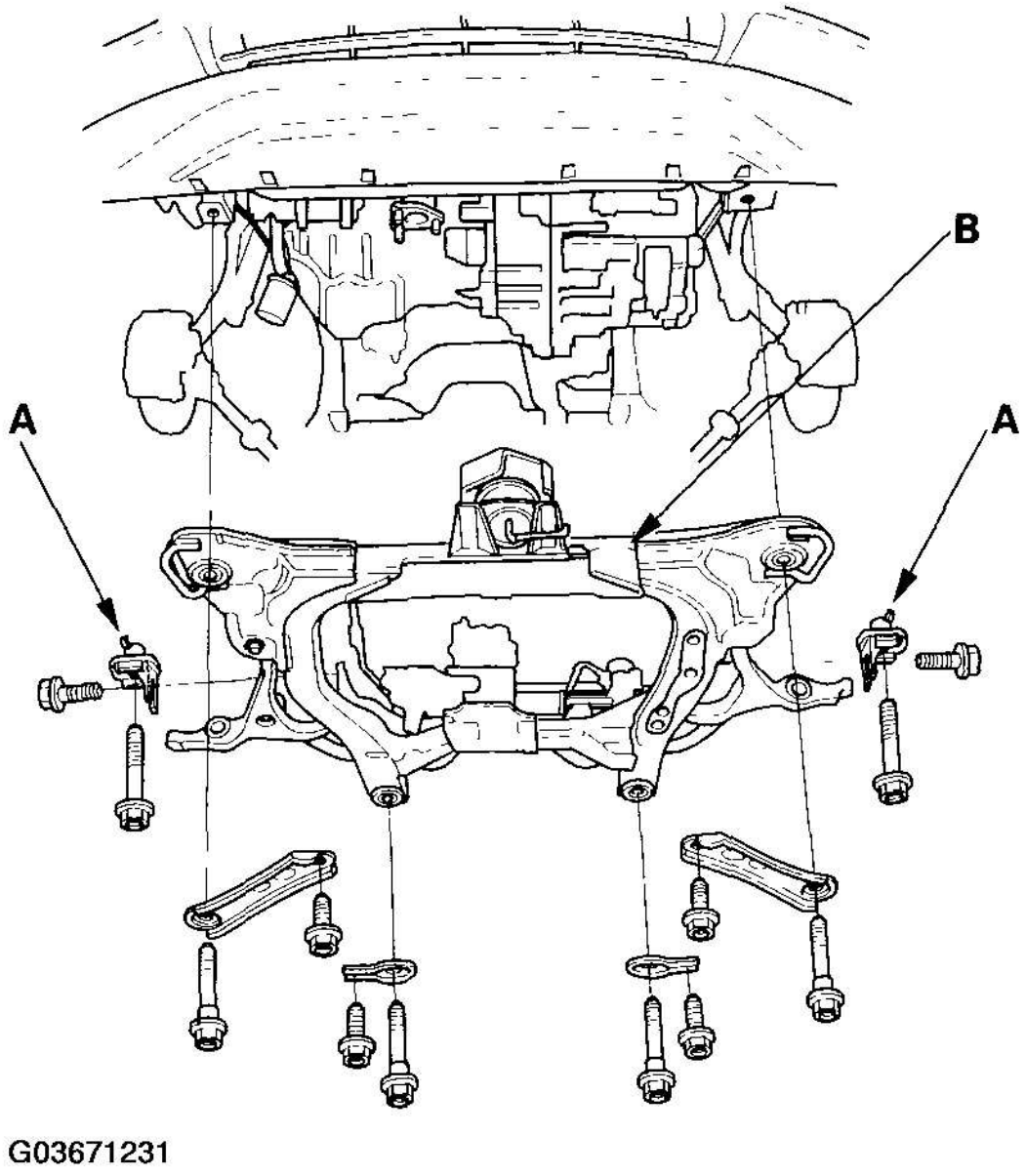
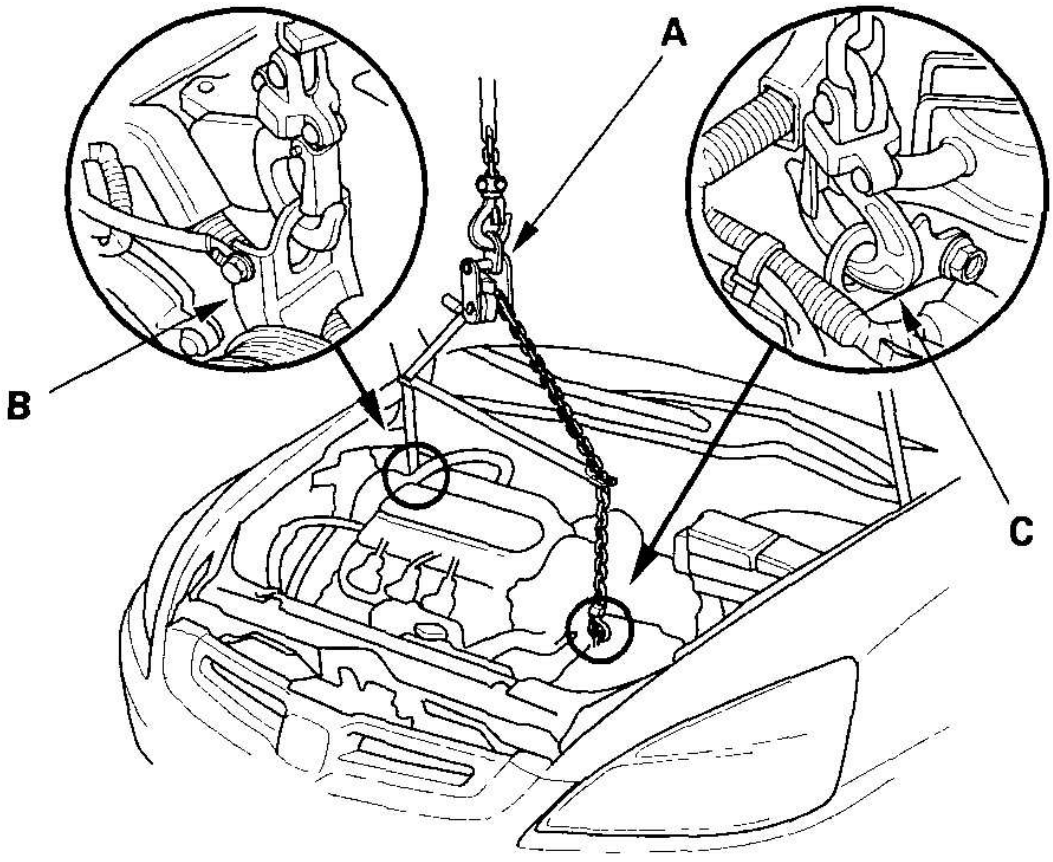


Fig. 30: Identifying Subframe Mid Mounts And Subframe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

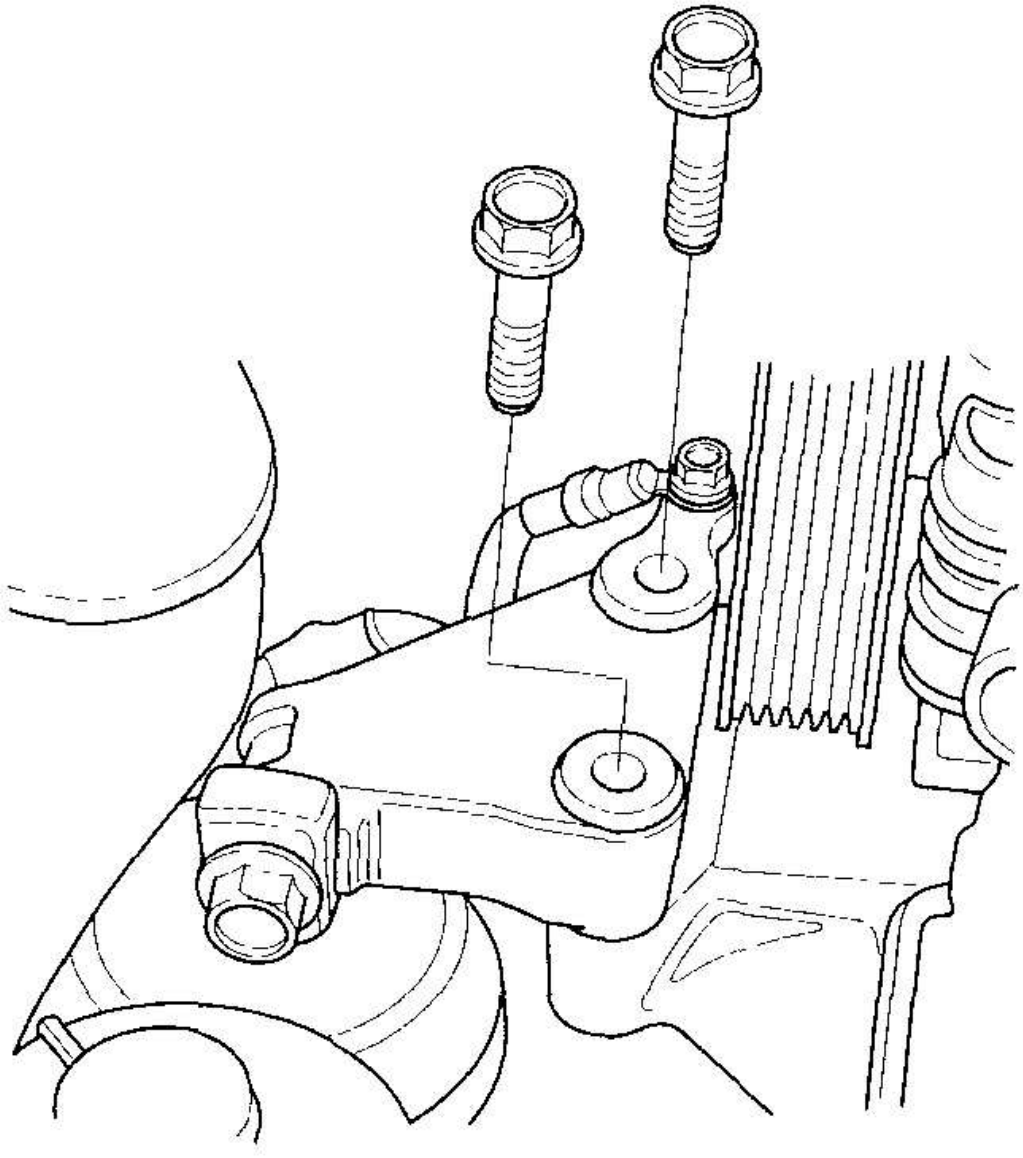
64. Lower the vehicle and attach a chain hoist (A) to the engine hook (B) and transmission hook (C). Lift up on the engine/transmission assembly until it's securely supported by the chain hoist, and remove the engine support hanger from the engine and vehicle.



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Fig. 31: Attaching Chain Hoist To Engine Hook And Transmission Hook
Courtesy of AMERICAN HONDA MOTOR CO., INC.

65. Remove the two bolts securing the side engine mount bracket.



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Fig. 32: Identifying Side Engine Mount Bracket Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

66. Check that the engine/transmission is completely free of vacuum hoses, fuel and coolant hoses, and electrical wiring.

67. Slowly lower the engine/transmission assembly about 150 mm (6 in.). Check once again that all hoses and electrical wiring are disconnected and free from the engine/transmission, then lower it all the way.
68. Disconnect the chain hoist from the engine/ transmission assembly.
69. Raise the vehicle all the way, and remove the engine/transmission assembly from under the vehicle.

ENGINE INSTALLATION

Special Tools Required

- Front subframe adapter VSB02C000016
- Engine support hanger, A and Reds AAR-T-12566
- Engine hanger balance bar VSB02000019

1. Install the accessory brackets and tighten their bolts and nuts to the specified torques.

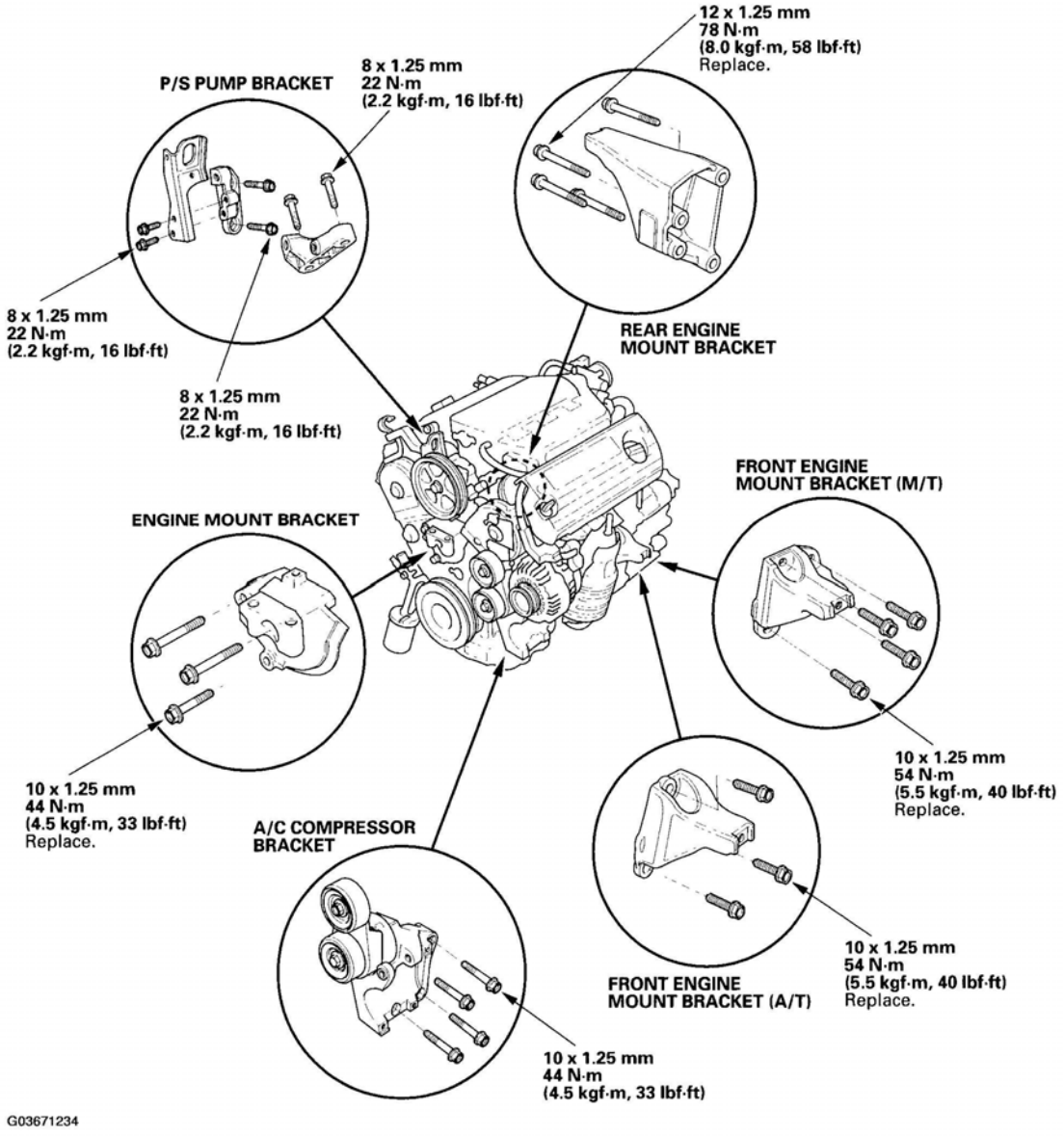


Fig. 33: Identifying Engine Accessory Brackets, Bolts And Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Position the engine/transmission assembly under the vehicle. Be sure that they are properly aligned. Carefully lower the vehicle until the engine and transmission are properly positioned in the engine compartment. Make sure the vehicle is not resting on any part of the engine or transmission. Lift and support the engine with a chain hoist (A) and carefully raise the engine/transmission assembly into place.

NOTE: Reinstall the mounting bolts/support nuts in the sequence given in following steps. Failure to follow this sequence may cause excessive noise and vibration, and reduce engine mount life.

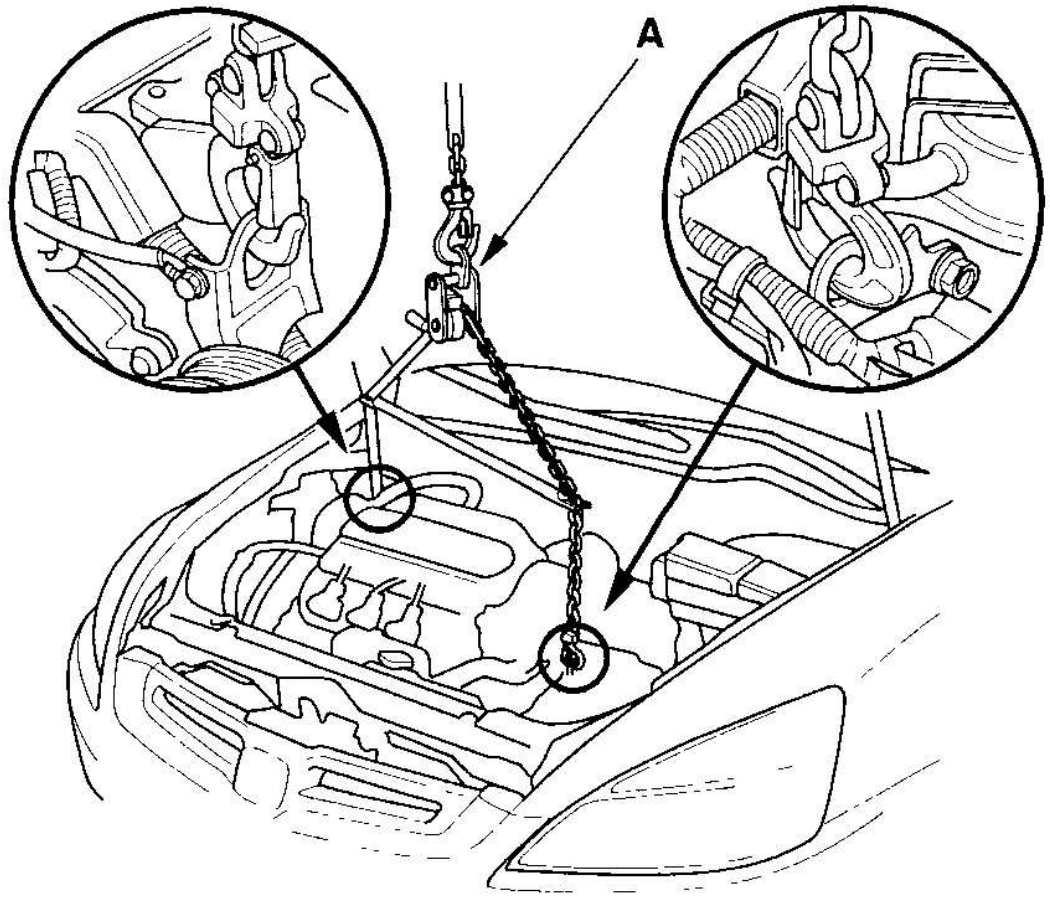


Fig. 34: Lifting And Supporting Engine With Chain Hoist
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the engine balancer bar (VSB02C000019); attach the front arm (A) to the front cylinder head with a spacer (B) and 10 x 1.25 mm bolt (C), attach the rear arm (D) to the rear cylinder head with 8 x 1.25 mm bolt (E).

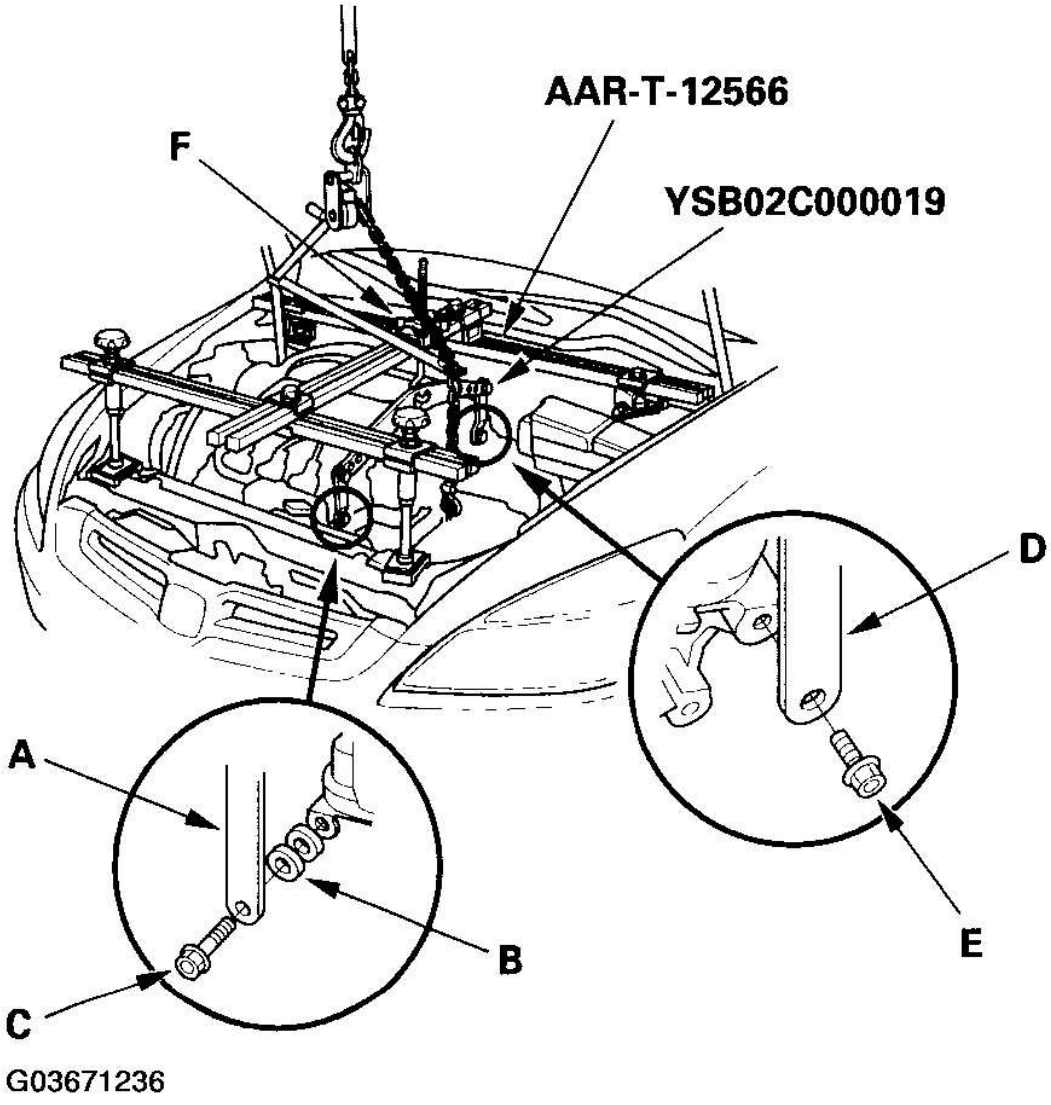


Fig. 35: Attaching Front Arm To Front Cylinder Head With Spacer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the engine support hanger (AAR-T-12566) to the vehicle, and attach the hook to the slotted hole in the engine balancer bar. Tighten the wing nut (F) by hand to lift and support the engine/transmission assembly.
5. Install and tighten the two bolts securing the upper bracket.

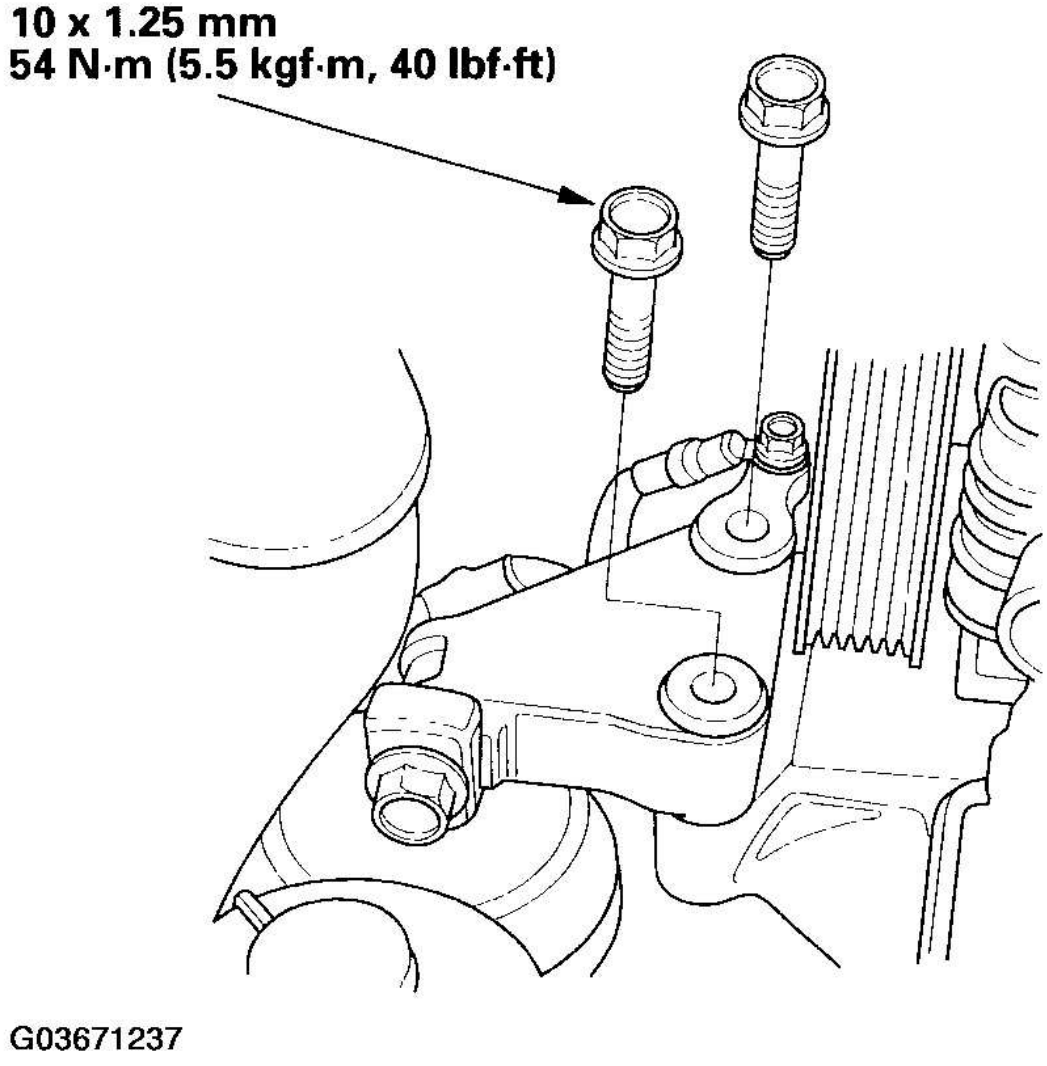


Fig. 36: Identifying Upper Bracket Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the chain hoist, then raise the vehicle on the hoist to full height.
7. Raise the vehicle on the hoist to full height.
8. Attach the front subframe adapter to the subframe by hanging the belt (A) over the front of the subframe (B), then secure the belt with its stop (C). Raise the subframe up to the body with a jack.

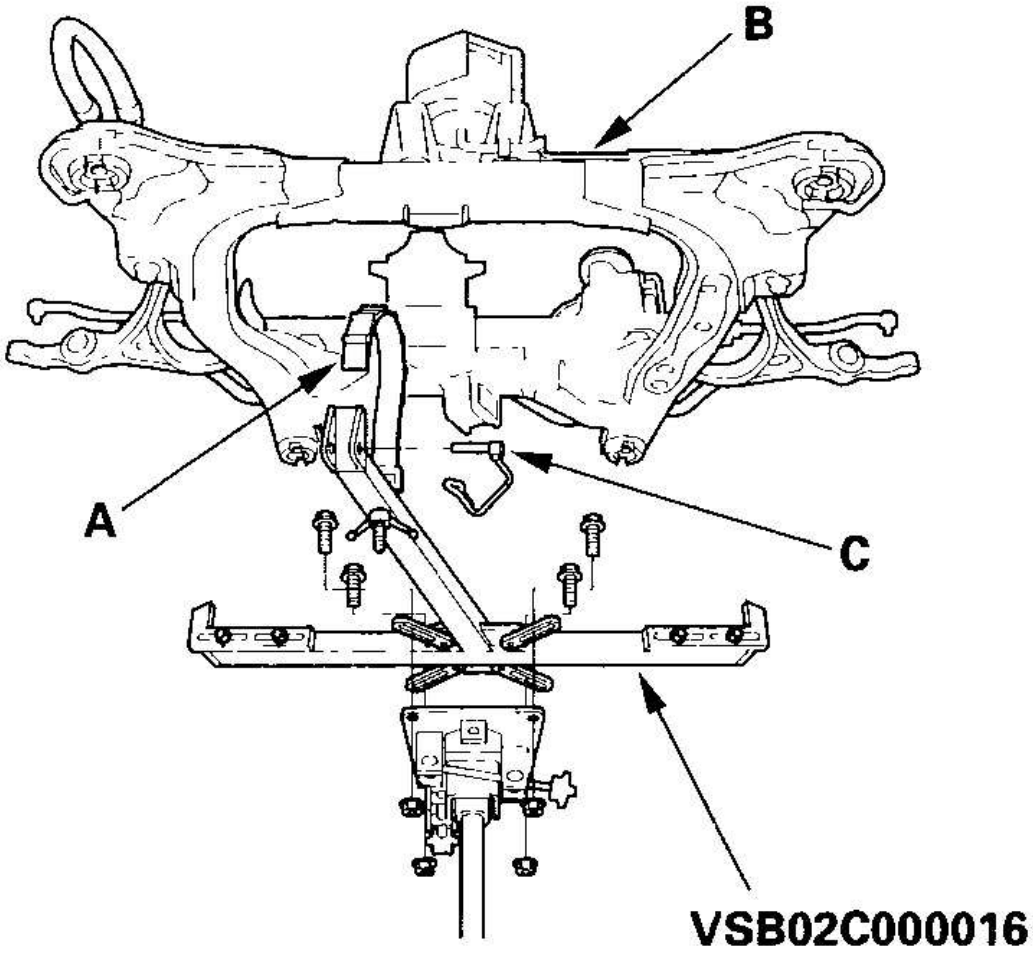


Fig. 37: Attaching Front Subframe Adapter To Subframe By Hanging Belt Over Front Subframe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Loosely install the four front subframe mounting bolts (A) and the four 12 x 1.25 mm bolts (B), (C) with the stiffeners.

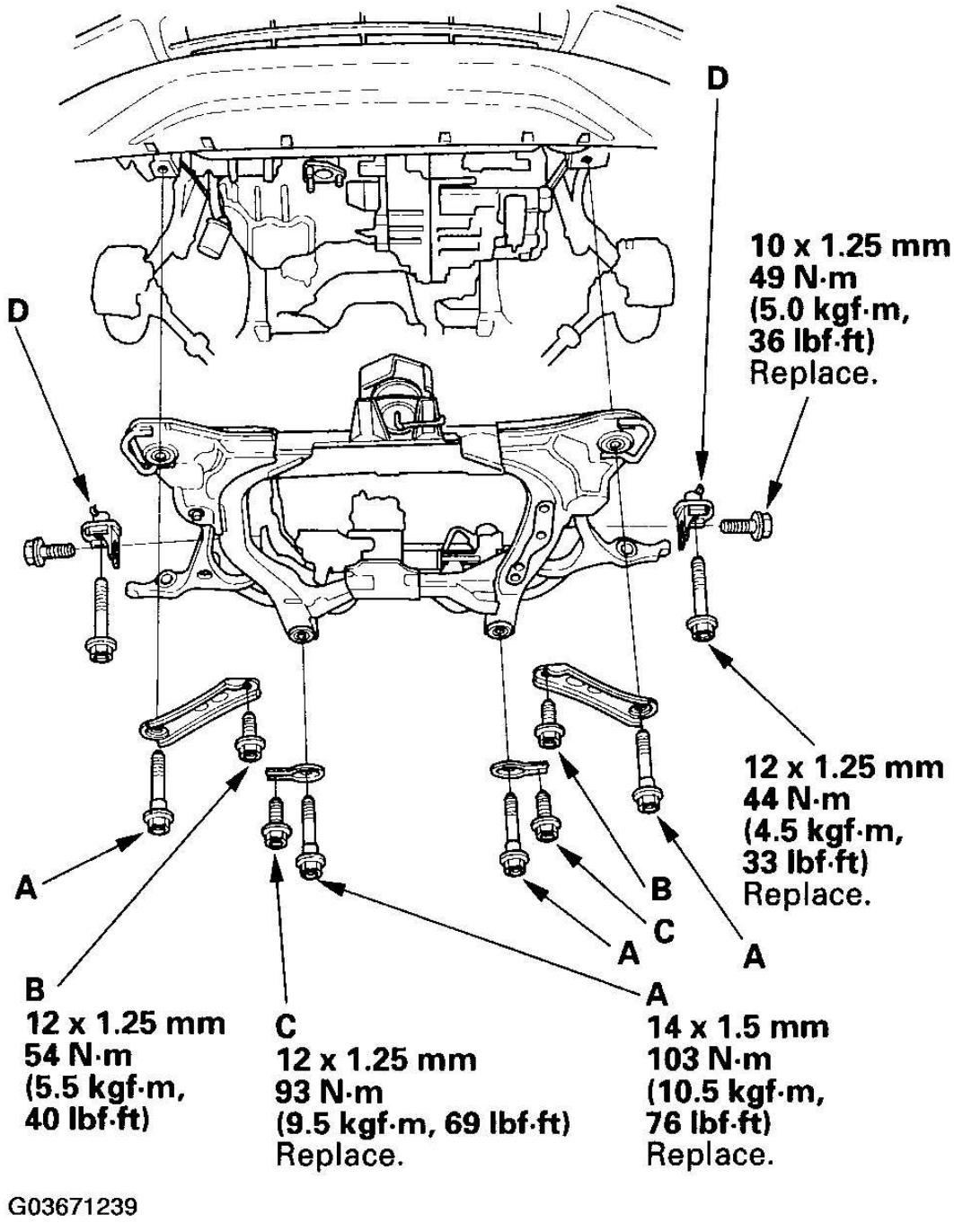


Fig. 38: Identifying Front Subframe Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Loosely install the subframe mid mounts (D).

11. Align the reference marks (A) with the edge of the subframe stiffener (B), then tighten the subframe mounting bolts, and 12 x 1.25 mm bolts.

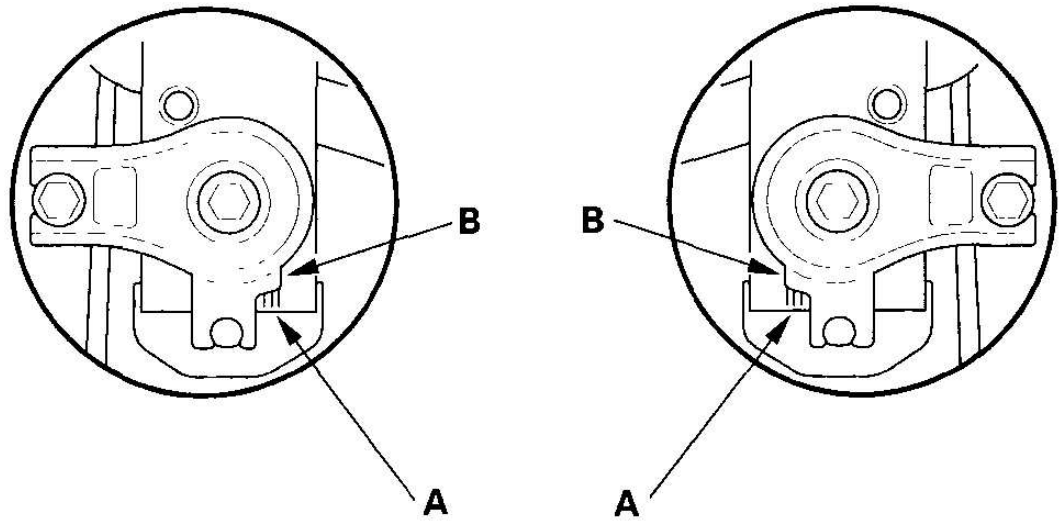


Fig. 39: Aligning Reference Marks With Edge Of Subframe Stiffener
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the jack and front subframe adapter.
13. Tighten the bolts securing the subframe mid mounts.
14. Tighten the nuts securing the transmission lower rear mount.

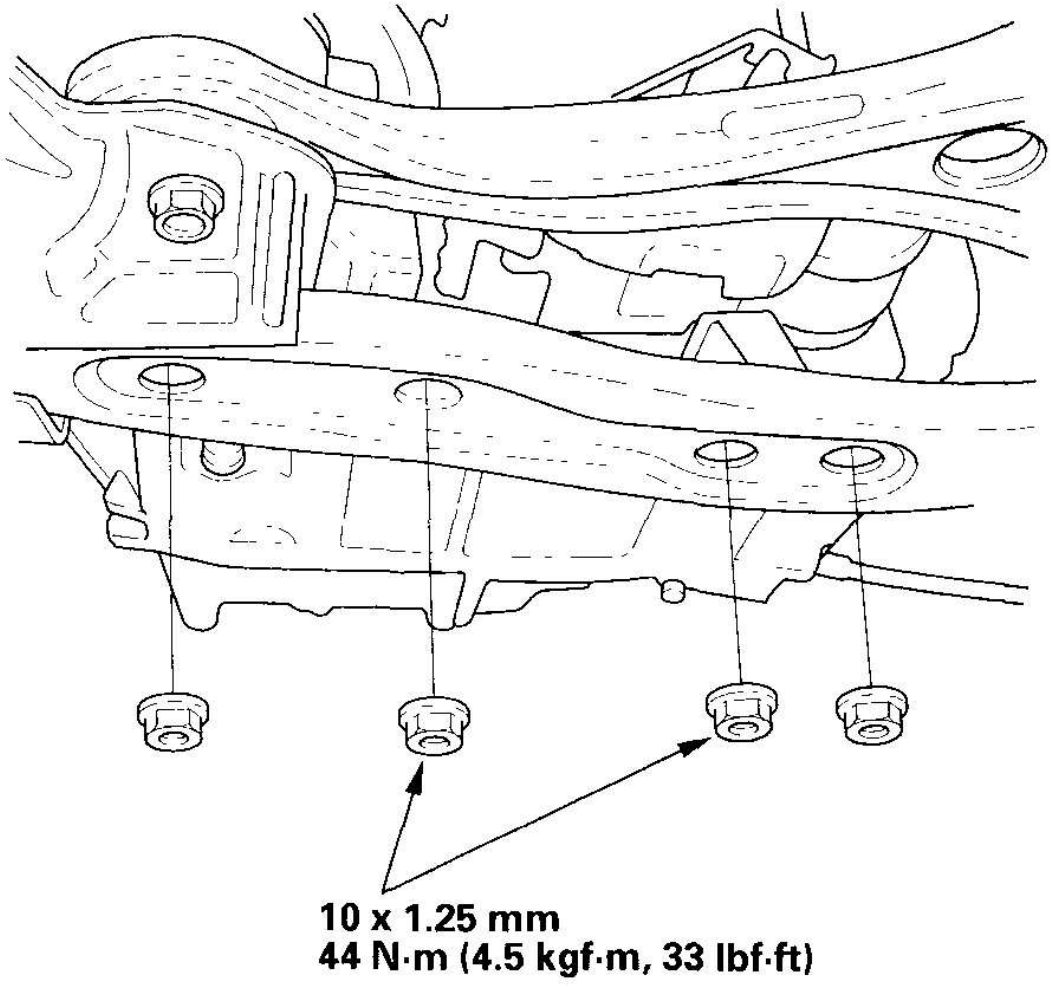


Fig. 40: Tightening Transmission Lower Rear Mount Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Lower the vehicle on the hoist, then remove the engine hanger and balancer bar.
16. M/T model: Tighten the two bolts securing the shift cable bracket.

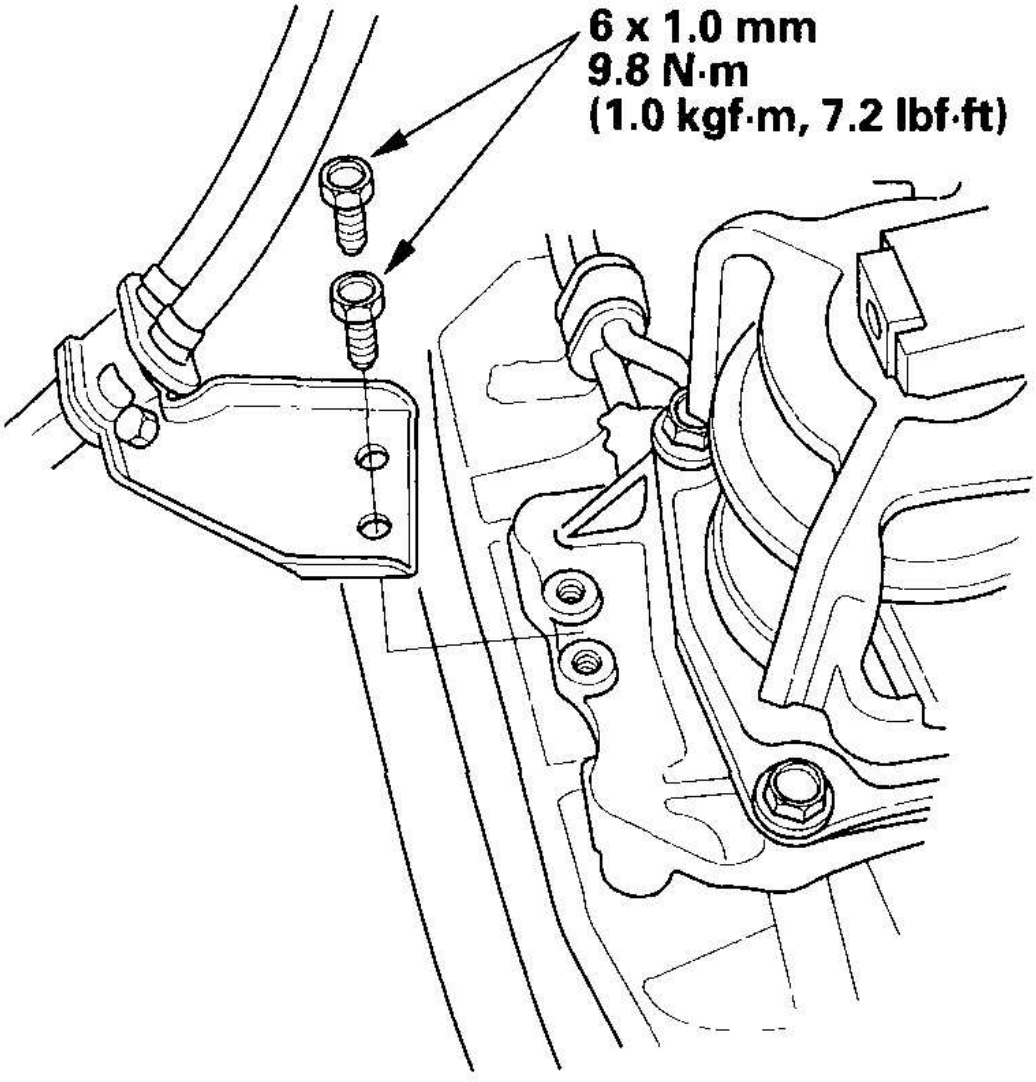


Fig. 41: Tightening Shift Cable Bracket Bolt (M/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Tighten the rear mount bolt (A), then install the rear mount stop (B).

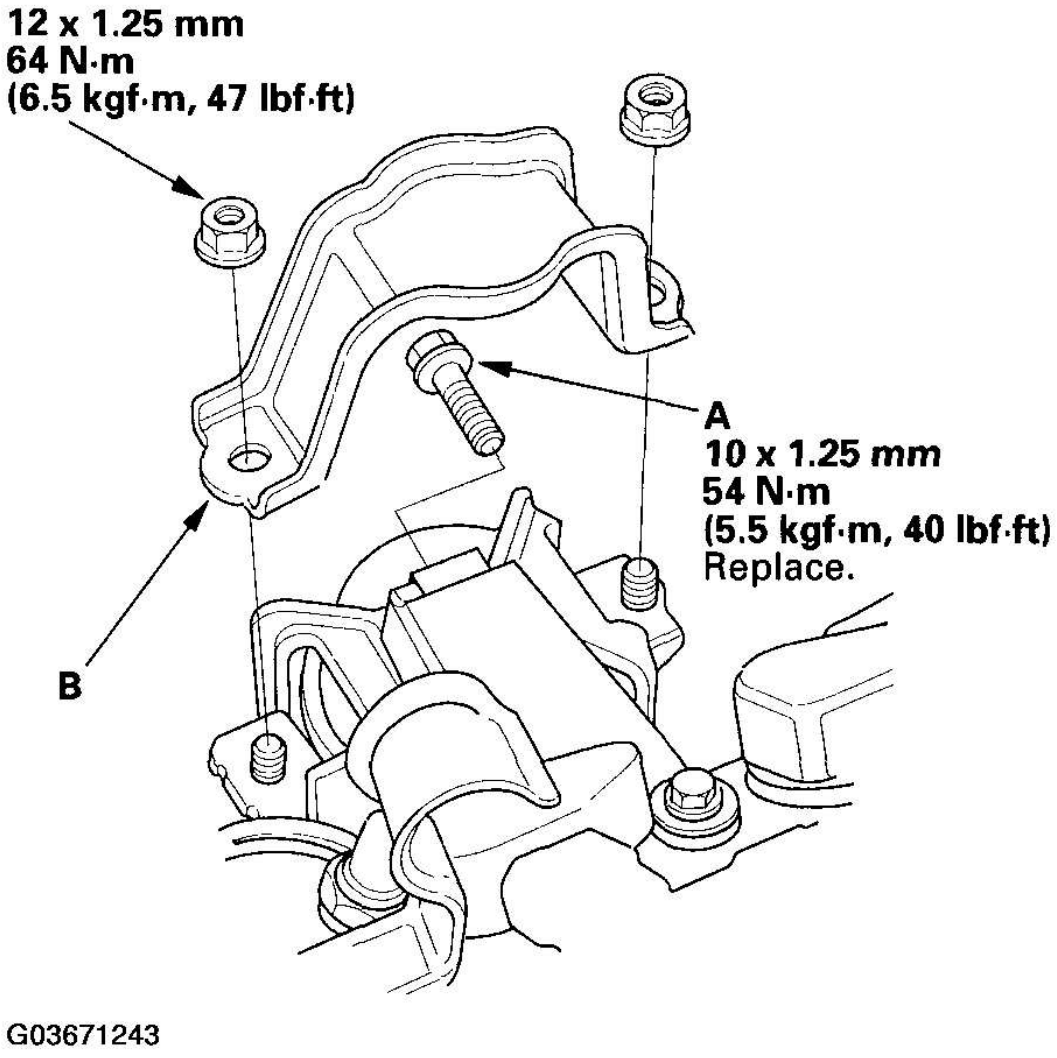


Fig. 42: Tightening Rear Mount Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Tighten the front mount bolt (A), then install the front mount stop (B).

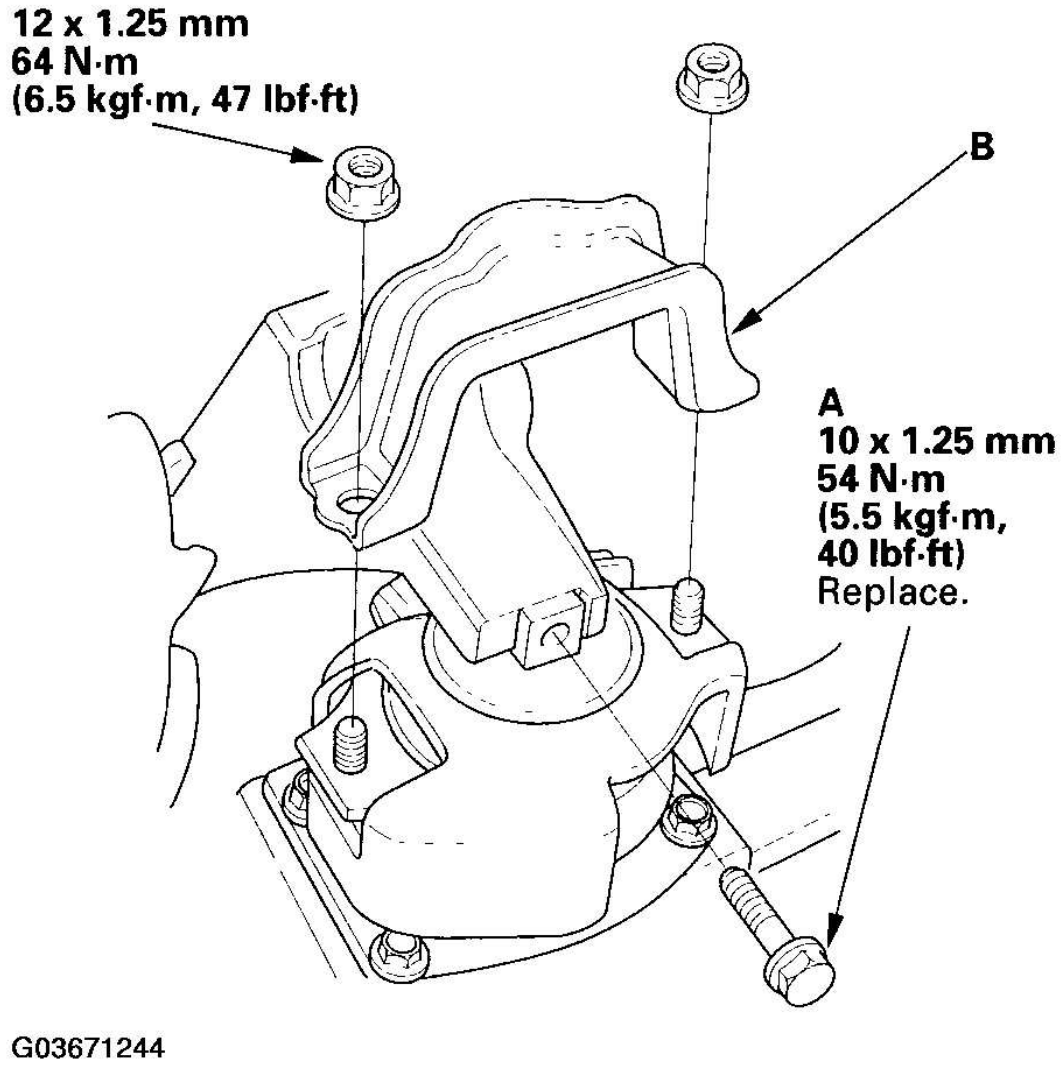


Fig. 43: Tightening Front Mount Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Install the transmission upper mount bracket (A), then tighten the bolts in the numbered sequence shown in **Fig. 44** or **Fig. 45**.

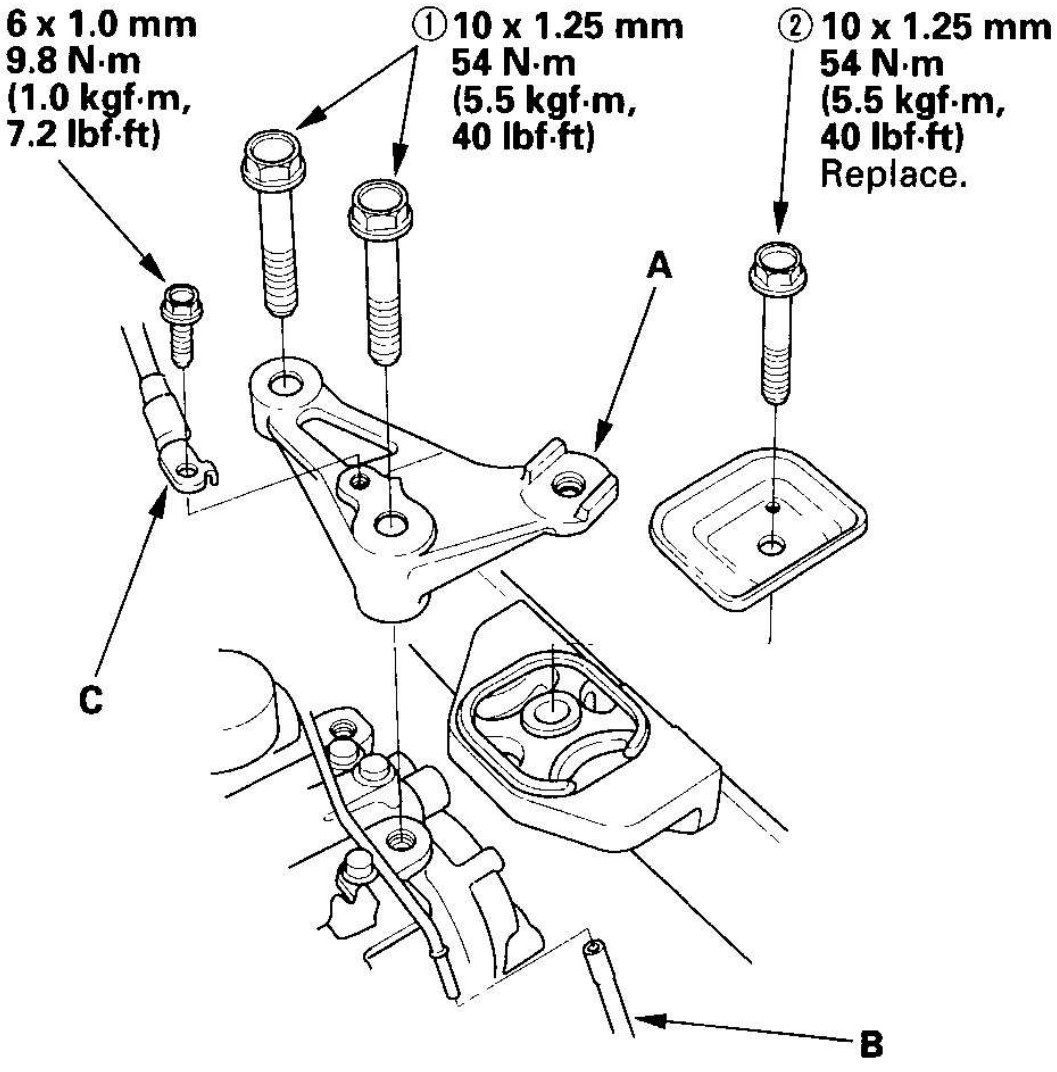


Fig. 44: Identifying Transmission Upper Mount Bracket (M\T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

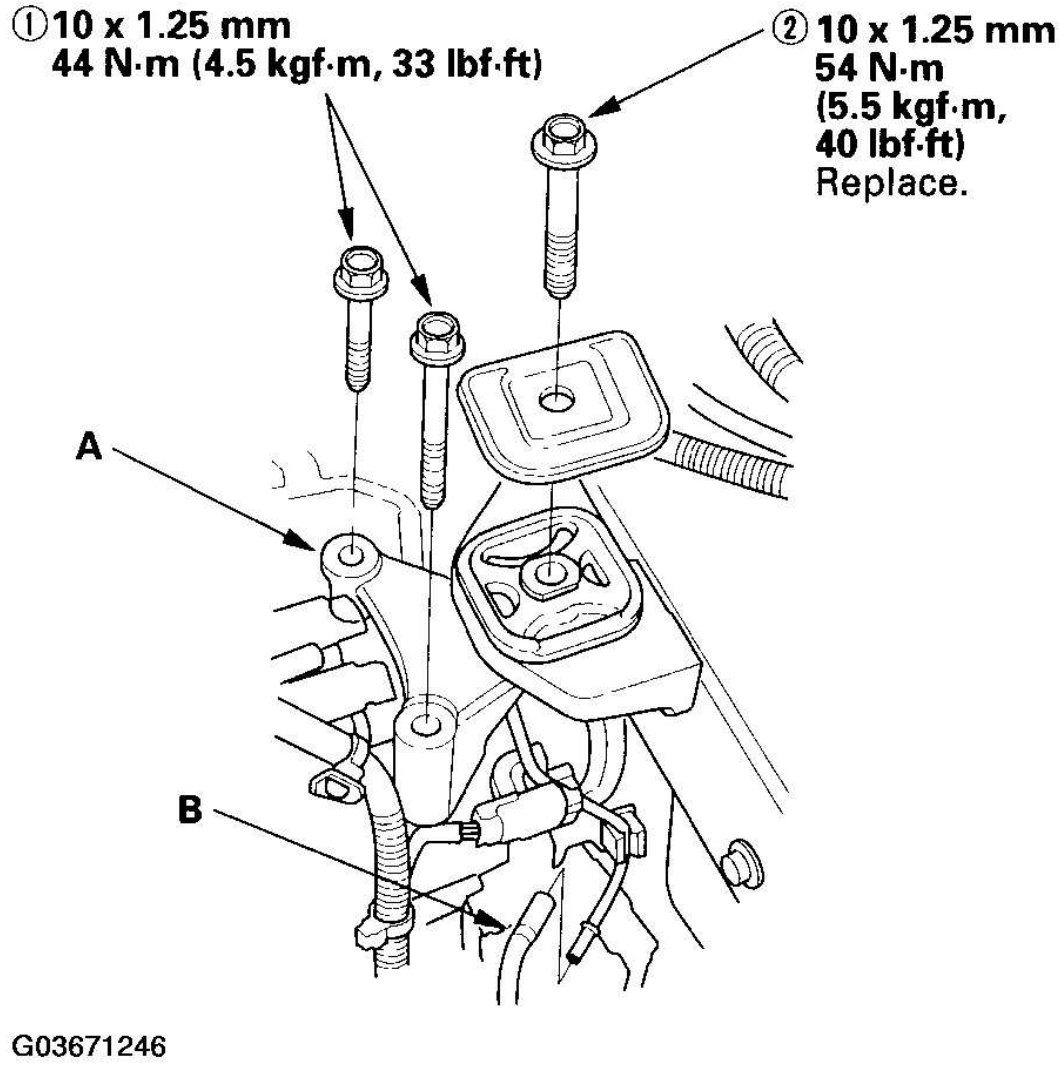
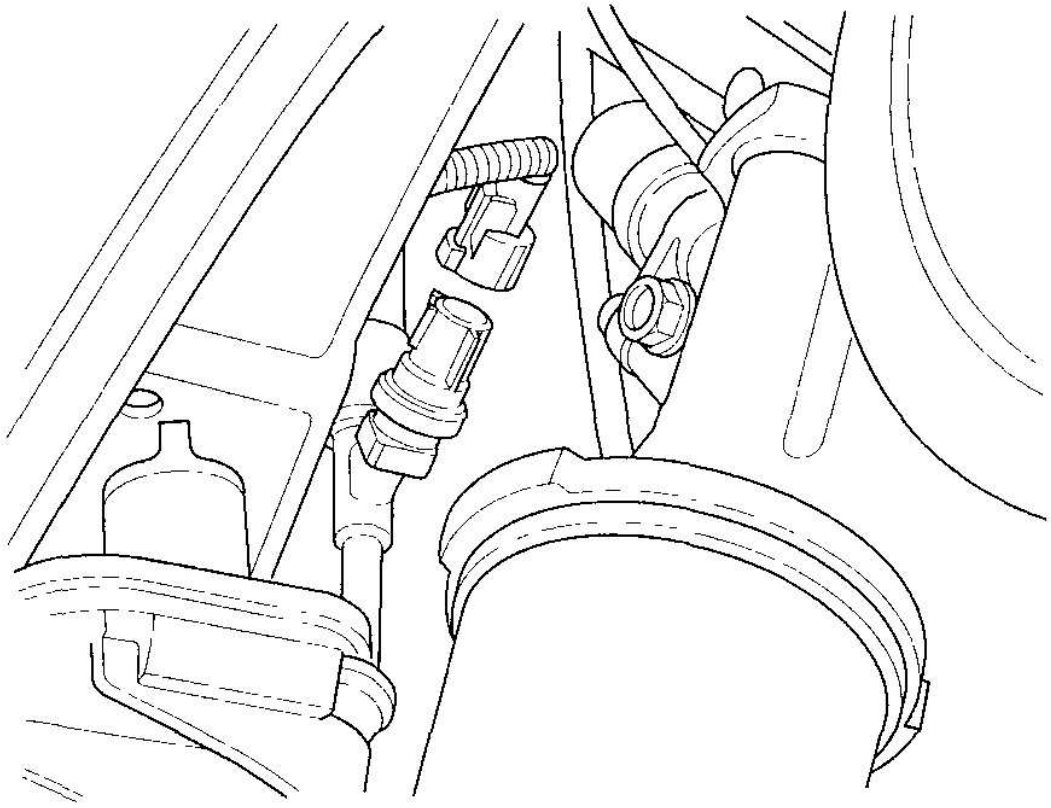


Fig. 45: Identifying Transmission Upper Mount Bracket (A\T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

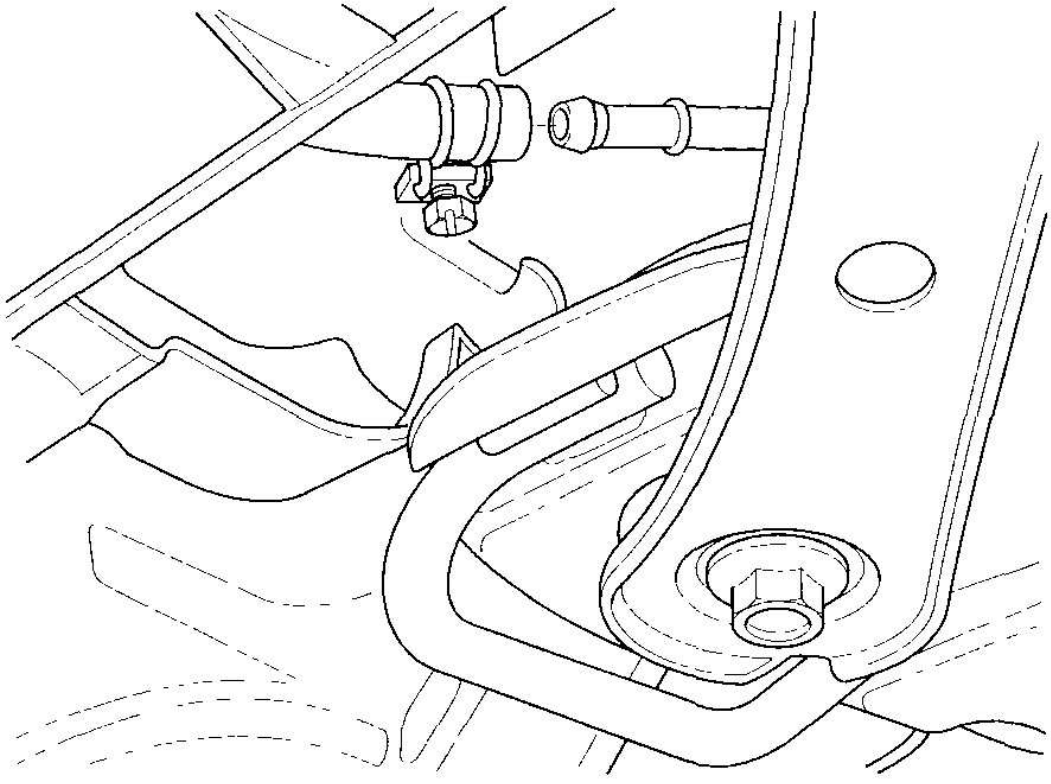
20. Install the vacuum hose (B).
21. M/T model: Install the ground cable (C).
22. Raise the vehicle on the hoist to full height.
23. Connect the power steering pressure switch connector.



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Fig. 46: Connecting Power Steering Pressure Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Install the power steering (P/S) hose.



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Fig. 47: Identifying Power Steering (P/S) Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

25. A/T model: Install the control lever (A) with the shift cable on the control shaft. Do not bend the shift cable excessively.

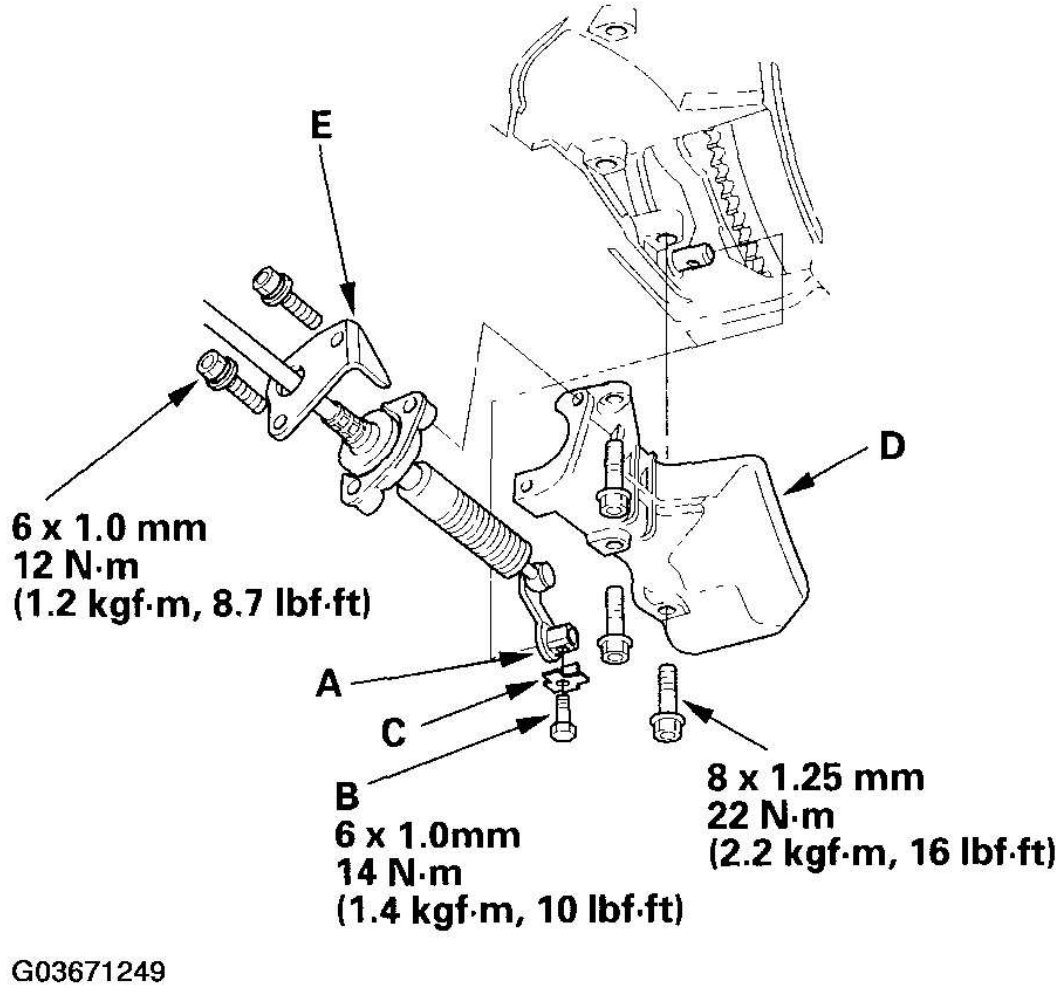


Fig. 48: Identifying Control Lever With Shift Cable On Control Shaft (A/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. A/T model: Install the lock bolt (B) with a new lock washer (C), then bend the lock washer tab against the bolt.
27. A/T model: Install the shift cable cover (D), then install the shift cable holder (E) on the shift cable cover.
28. Install exhaust pipe A using new gaskets (B) and new self-locking nuts (C).

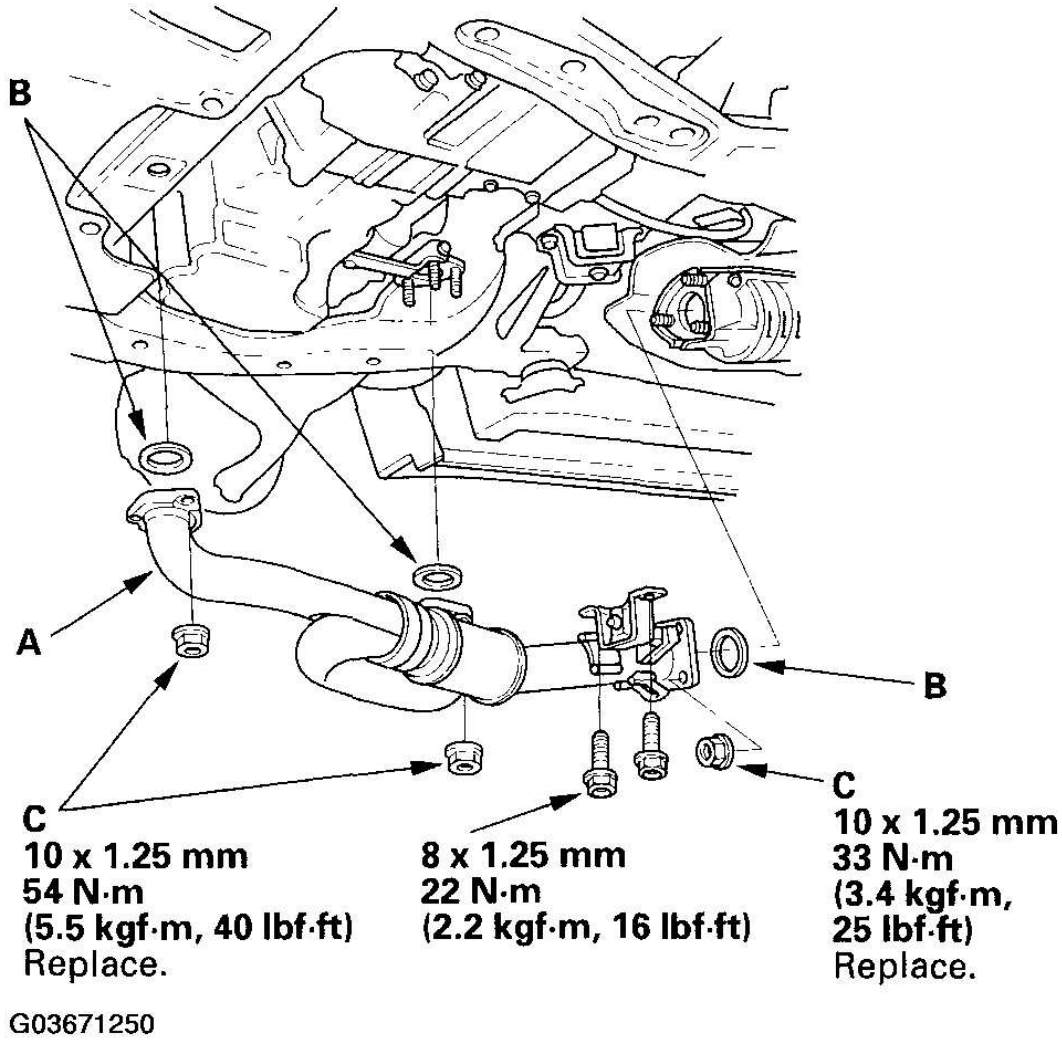


Fig. 49: Identifying Exhaust Pipe A Using Gaskets
Courtesy of AMERICAN HONDA MOTOR CO., INC.

29. Install a new set ring on the end of each driveshaft, then install the driveshafts. Make sure each ring "clicks" into place in the differential and intermediate shaft.
30. Connect the suspension lower arm to the knuckles, refer to step 8 **LOWER ARM REMOVAL/INSTALLATION** .
31. Connect the tie-rod end ball joints to the knuckles (see step 21 in**STEERING GEARBOX INSTALLATION**).

32. Install the damper fork, refer to step 2 in **INSTALLATION**).
33. Connect the stabilizer links, refer to **STABILIZER LINK REPLACEMENT** .
34. Install the splash shield.

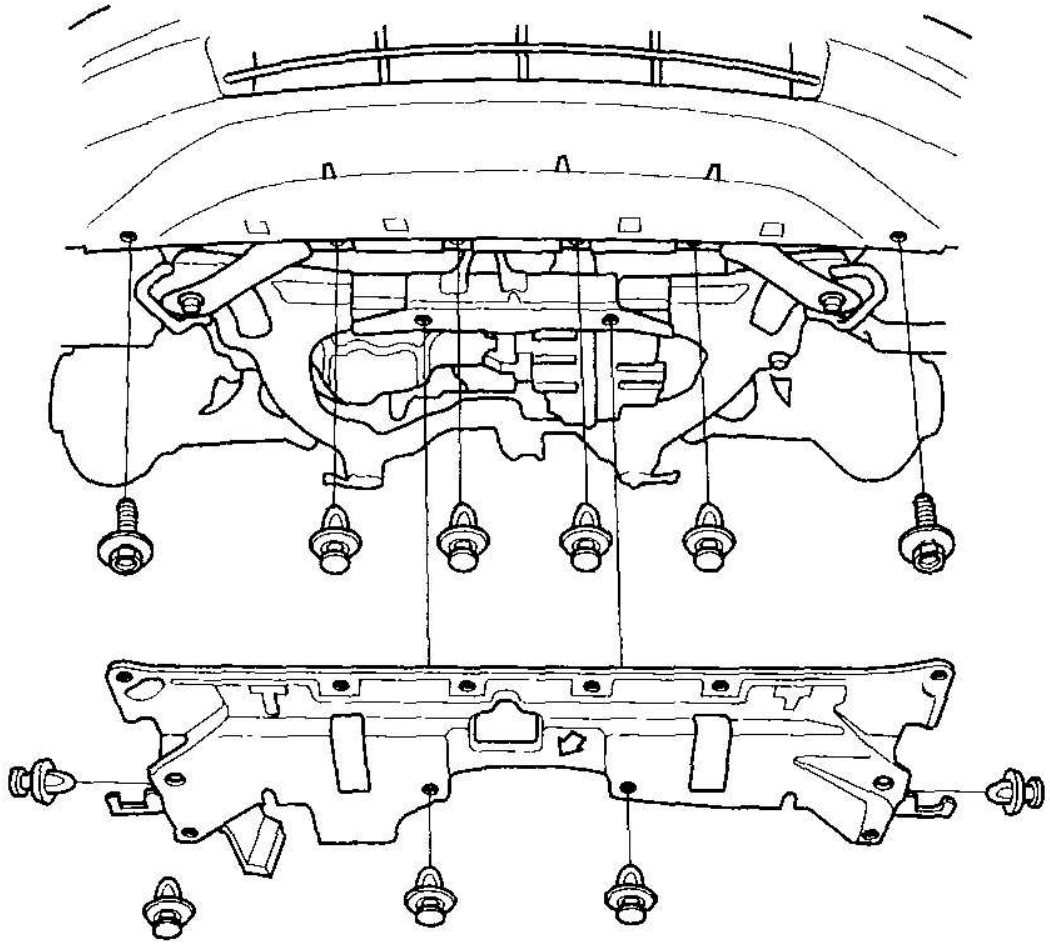
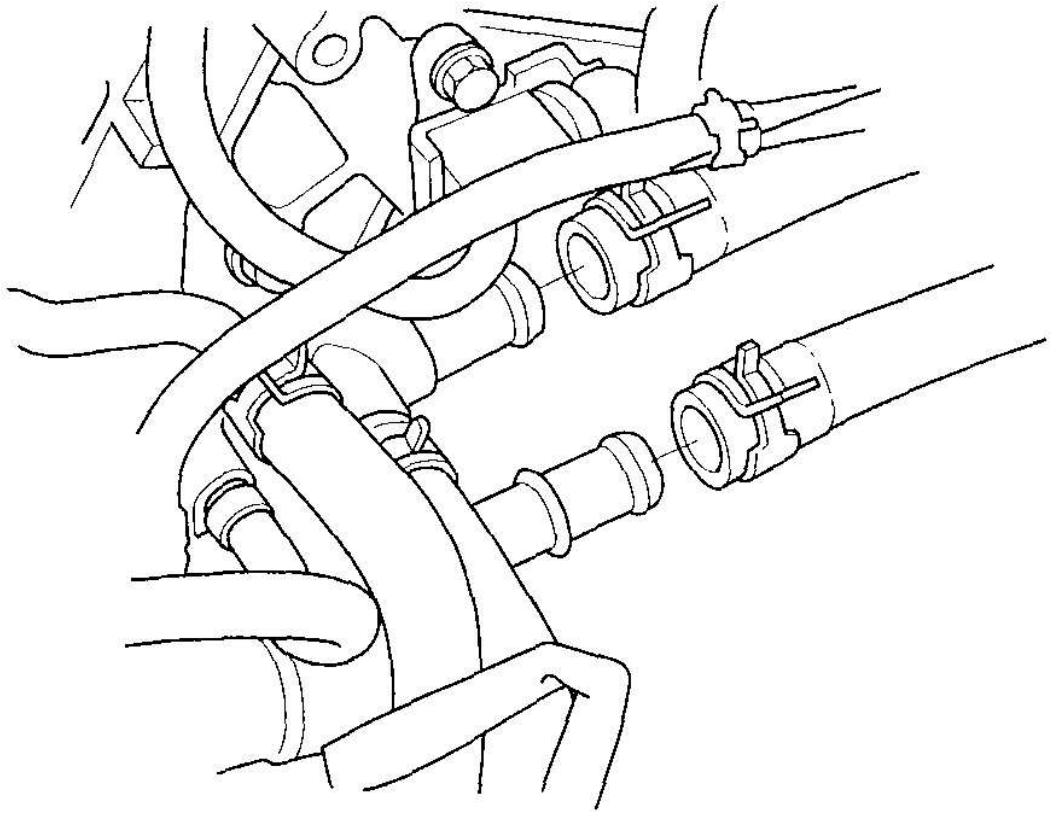


Fig. 50: Identifying Splash Shield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

35. Install the front wheels.
36. Lower the vehicle on the hoist.

37. Install the heater hoses.



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Fig. 51: Identifying Heater Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

38. Install the upper radiator hose (A) and lower radiator hose (B).

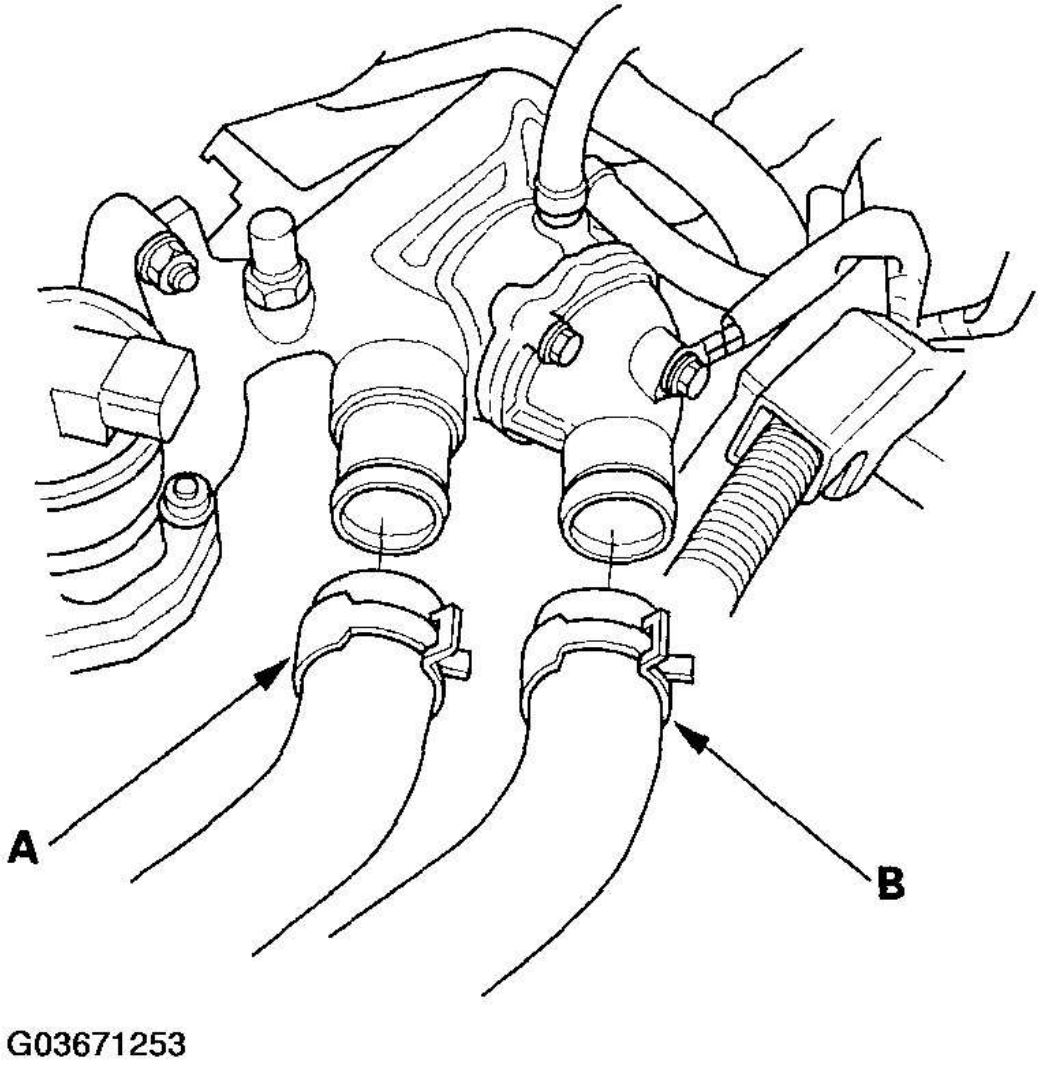


Fig. 52: Identifying Upper Radiator And Lower Radiator Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

39. M/T model: Install the clutch slave cylinder (A) and clutch line bracket mounting bolt (B).

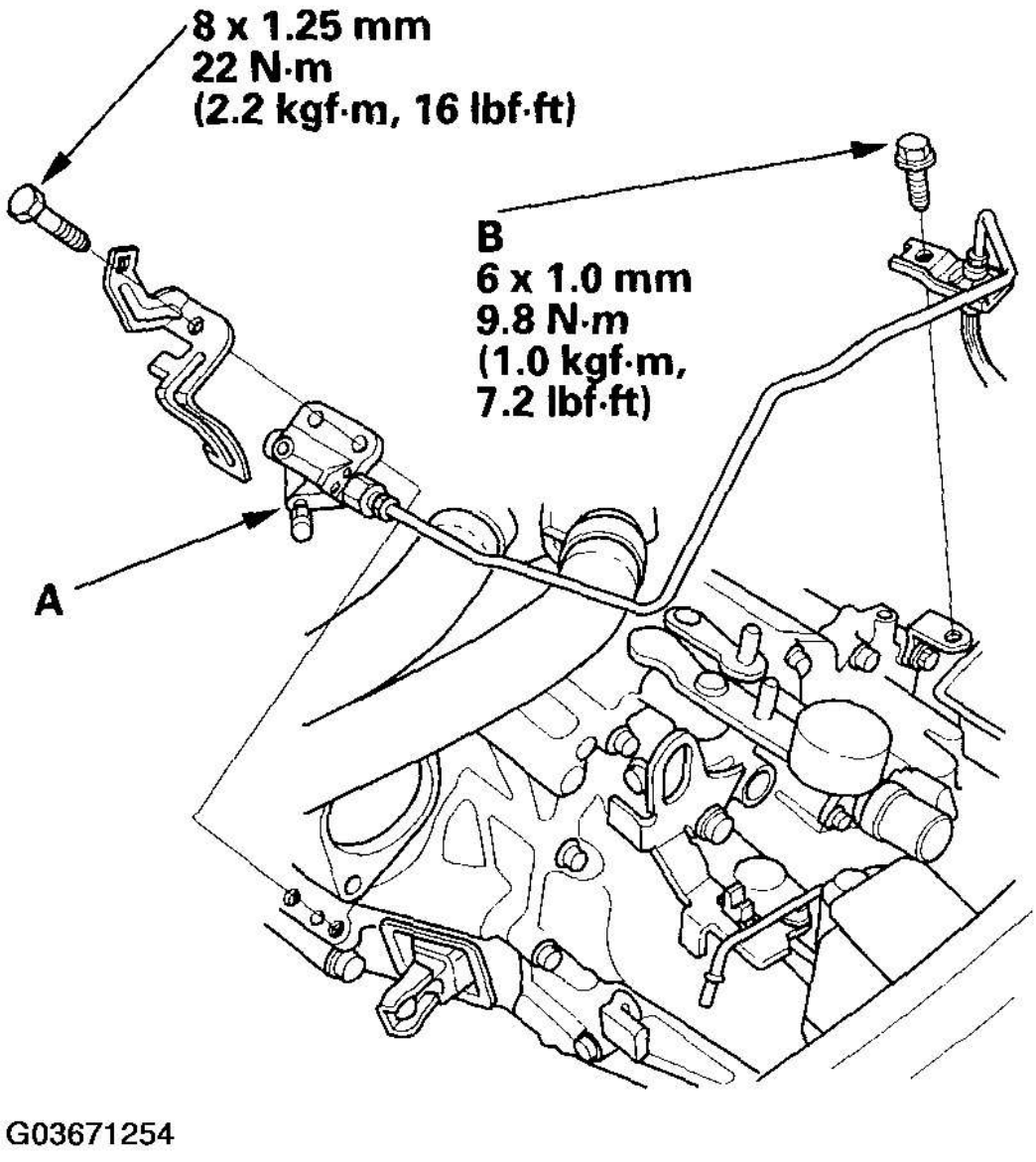


Fig. 53: Identifying Clutch Slave Cylinder And Clutch Line Bracket Mounting Bolt (M/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

40. M/T model: Install the select cable (A) and shift cable (B) with the plastic washers (C), washers (D), and new cotter pins (E).

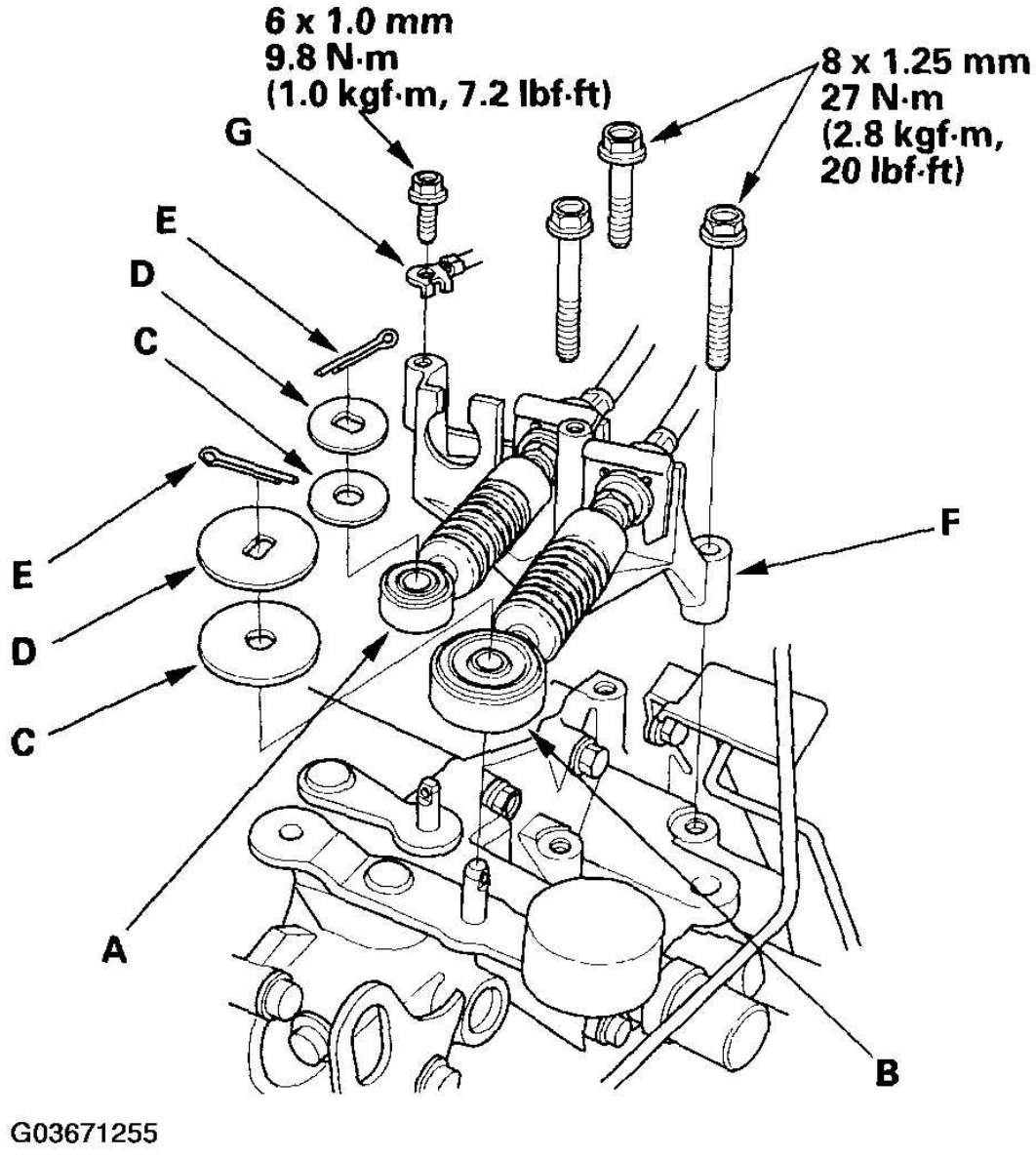


Fig. 54: Identifying Select Cable And Shift Cable With Plastic Washers (M/T Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

41. M/T model: Install the shift cable holder (F) and ground cable (G).
42. Install the A/C compressor.

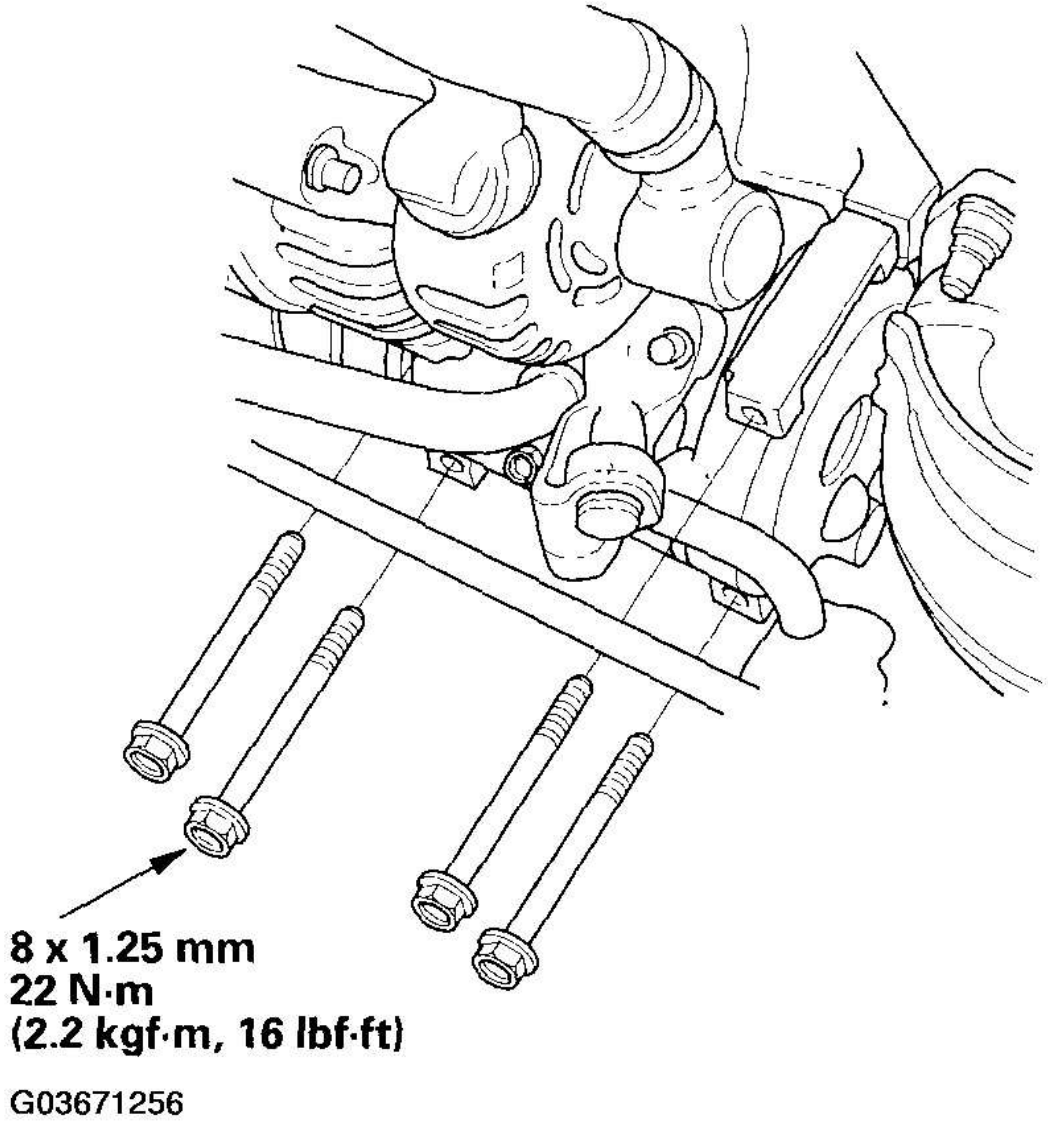


Fig. 55: Identifying A/C Compressor Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

43. Install the condenser fan shroud (A), and reserve tank (B), then connect the fan motor connector (C) and compressor clutch connector (D).

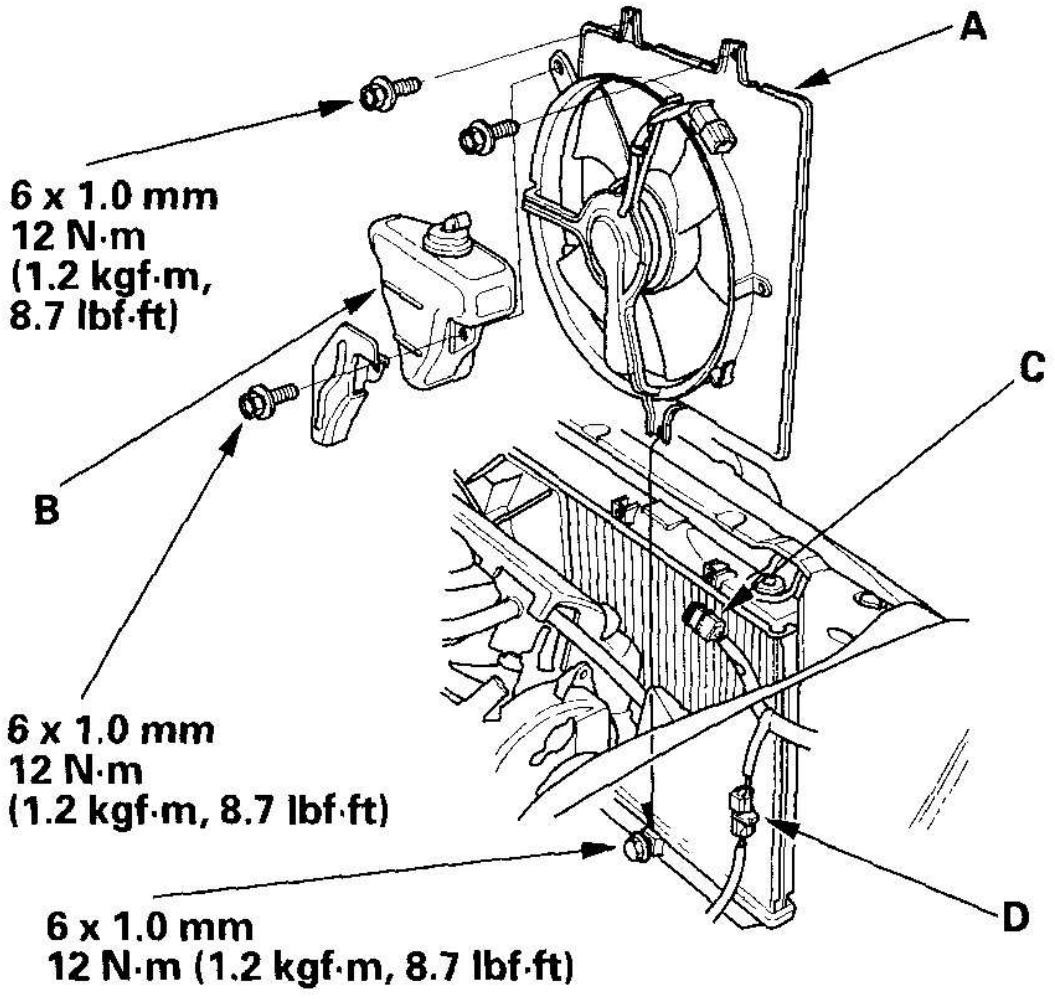


Fig. 56: Identifying Condenser Fan Shroud And Reserve Tank
Courtesy of AMERICAN HONDA MOTOR CO., INC.

44. Align the reference mark (A) on the steering joint and steering gearbox pinion shaft. Connect the steering joint (B) to the steering gearbox pinion shaft (C). Tighten the steering joint bolt.

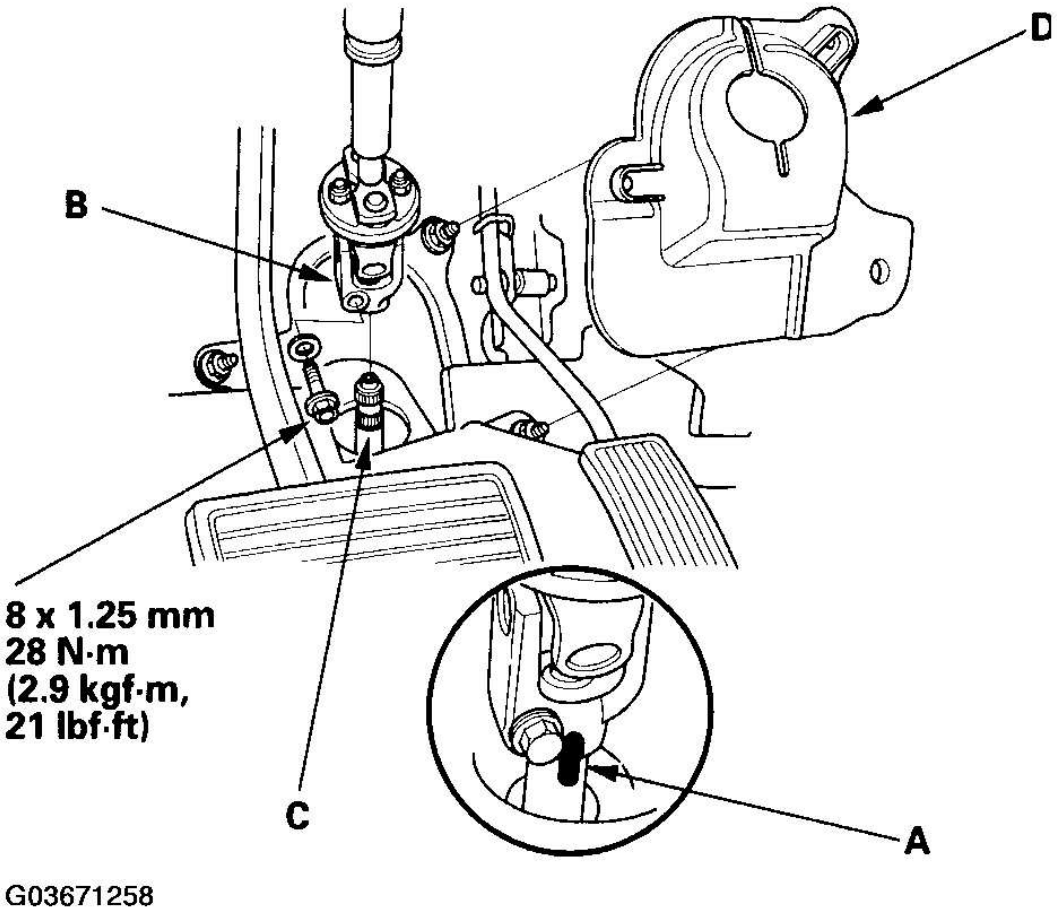


Fig. 57: Aligning Reference Mark On Steering Joint And Steering Gearbox Pinion Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

45. Install the steering joint cover (D).
46. Install the P/S pump outlet line (A) with a new O-ring (B) to the pump (C), and install the P/S hose (D) in its clamp (E).

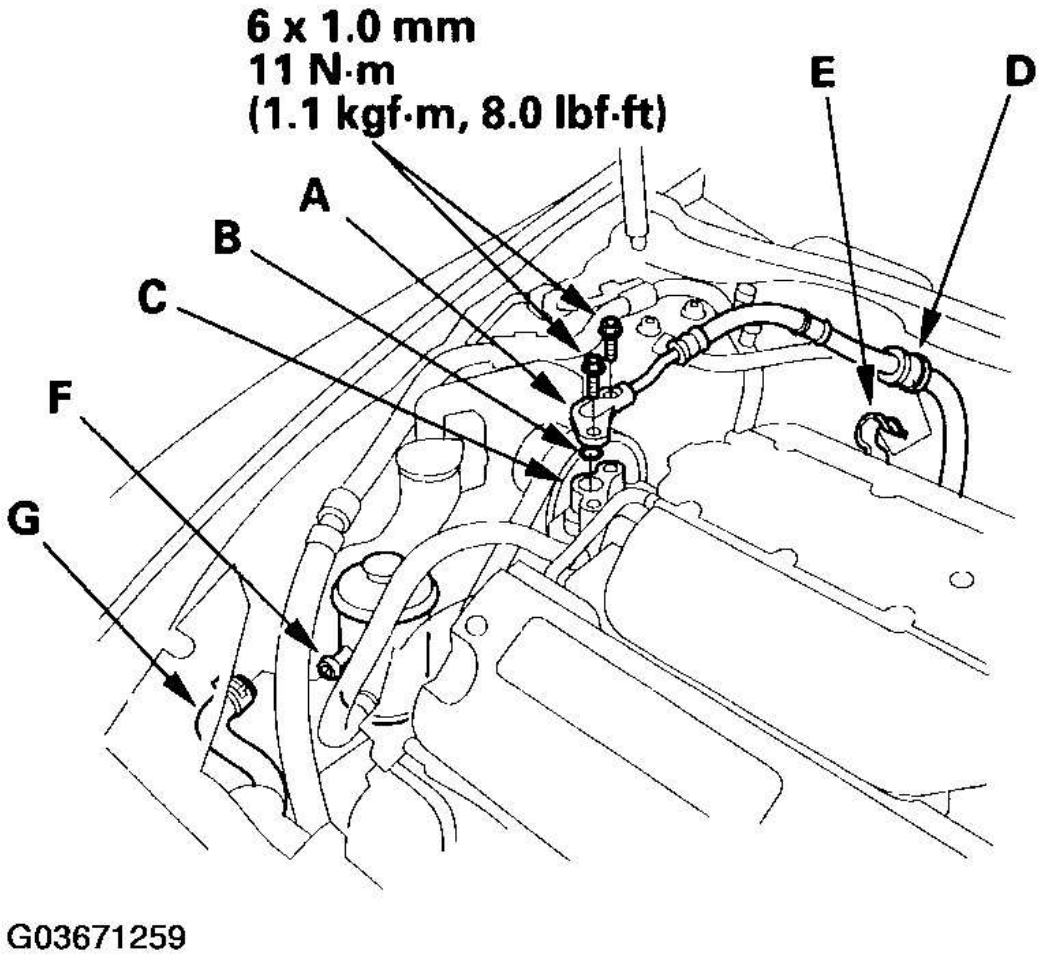


Fig. 58: Identifying P/S Pump Outlet Line With New O-Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

47. Install the power steering system fluid reservoir (F) to the clamp, then install the return hose (G) to the fluid reservoir.
48. Install the harness clamp bracket to the rear cylinder head.

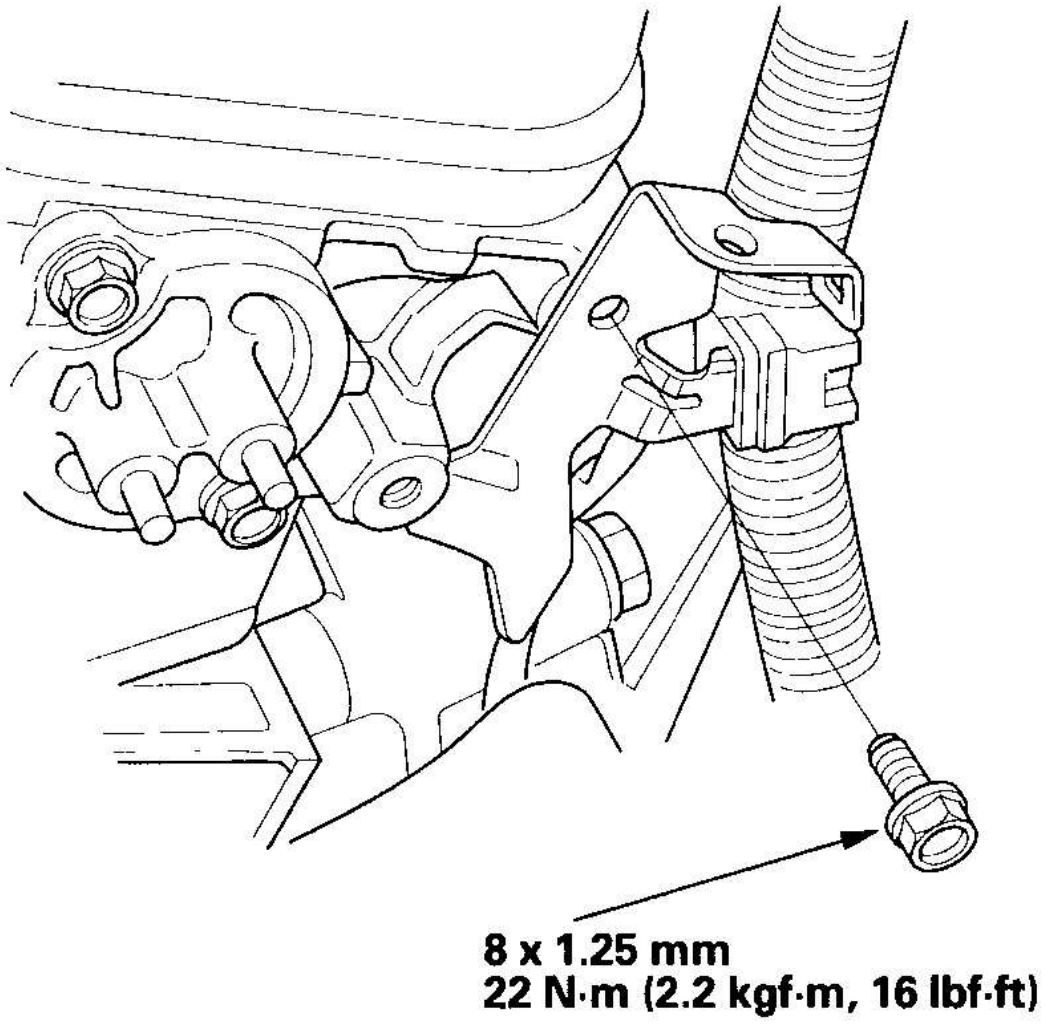


Fig. 59: Identifying Harness Clamp Bracket To Rear Cylinder Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

49. Install the connecting bracket to the front cylinder head.

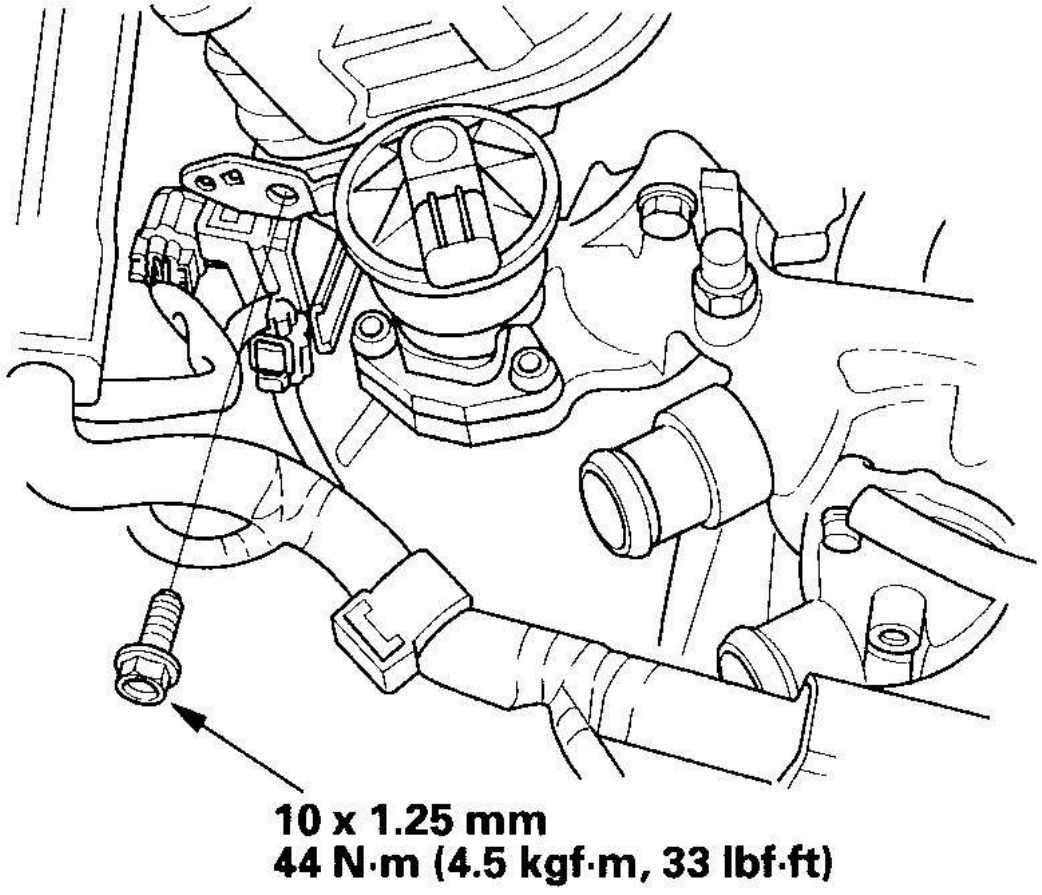


Fig. 60: Identifying Connecting Bracket To Front Cylinder Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

50. Install the drive belt (see **DRIVE BELT INSPECTION**).
51. Install the fuel line (see **FUEL LINE/QUICK-CONNECT FITTING INSTALLATION**).
52. Connect the engine wire harness connectors (A), then install the harness clamp (B).

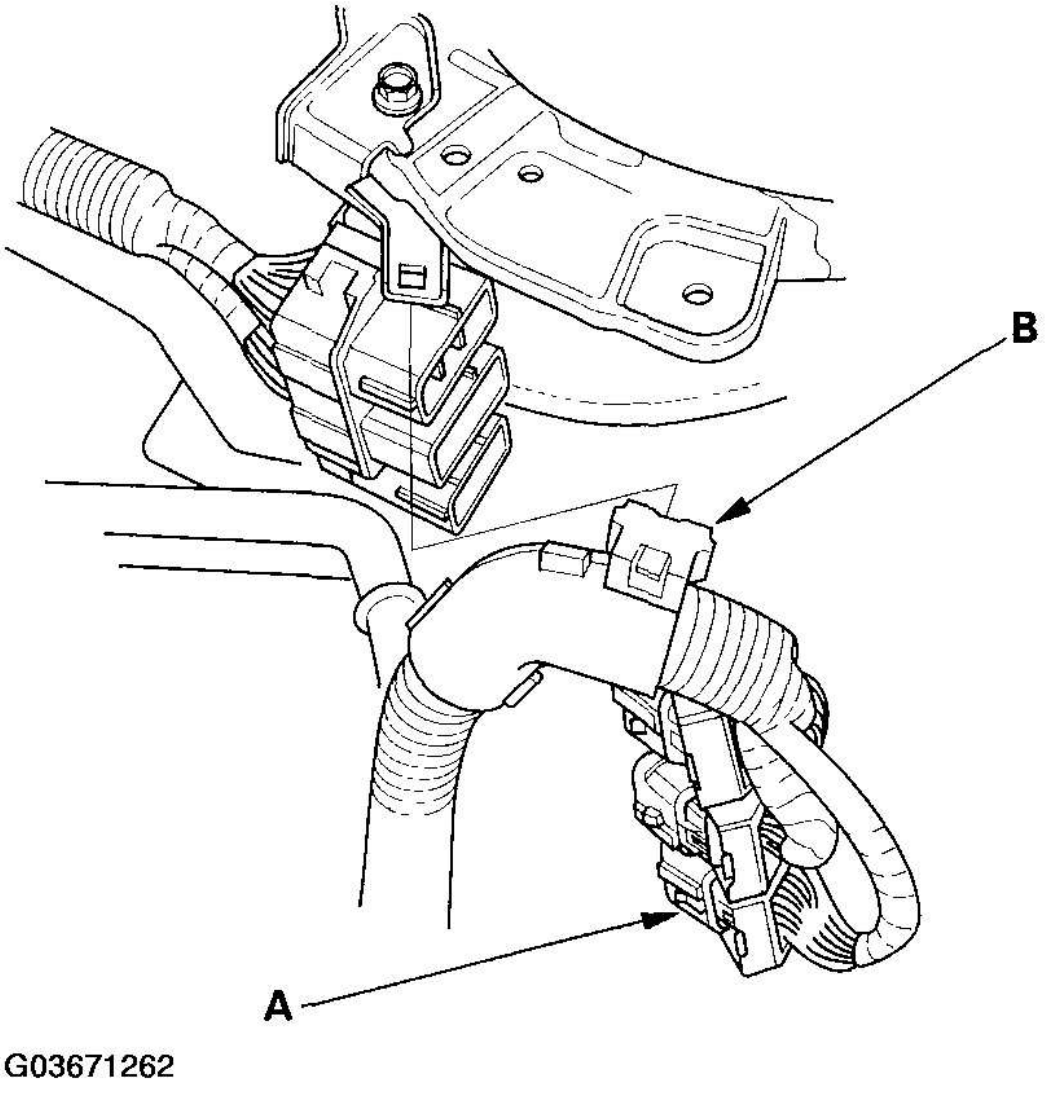


Fig. 61: Connecting Engine Wire Harness Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

53. Install the brake booster vacuum hose (A), evaporative emission (EVAP) canister hose (B), and vacuum hose (C).

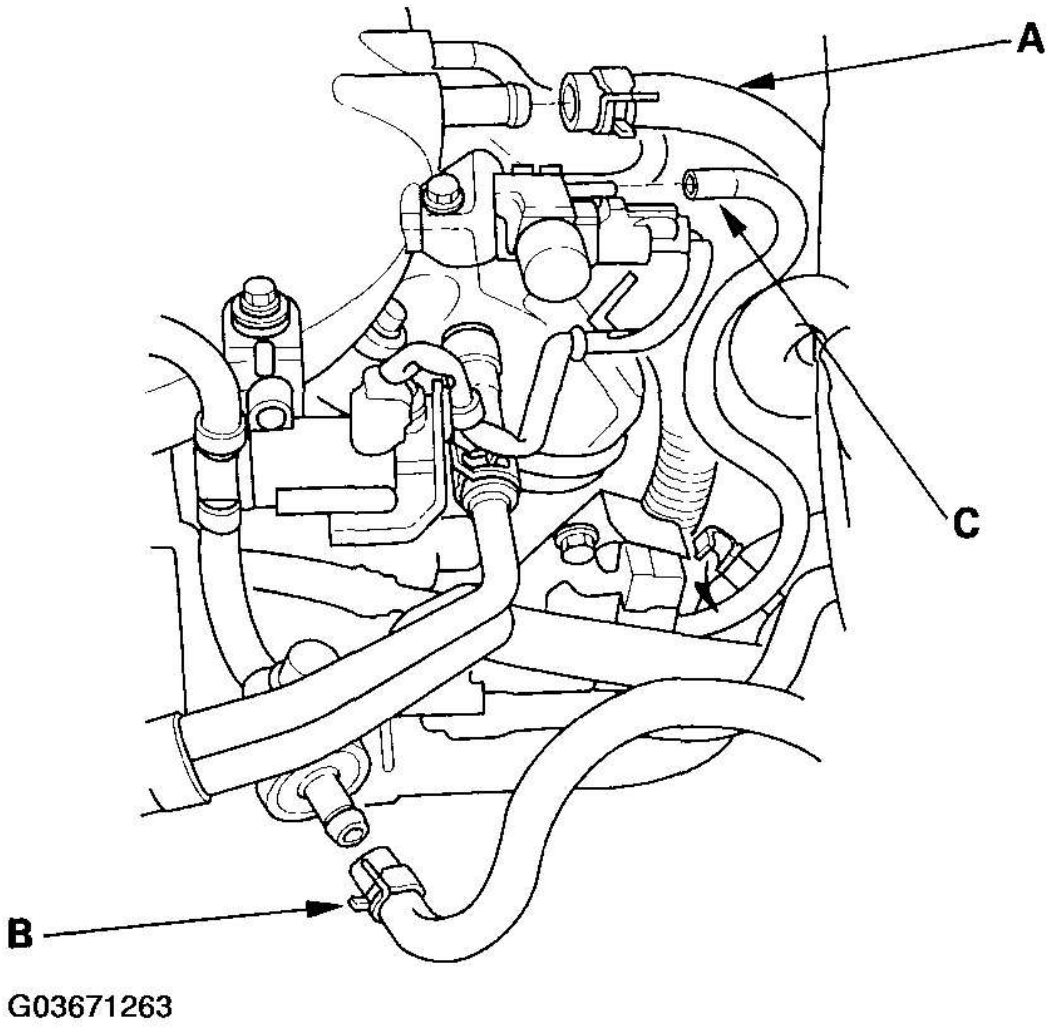


Fig. 62: Identifying Brake Booster Vacuum Hose, Evaporative Emission Canister Hose And Vacuum Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

54. Install the ground cable (A), and connect the harness connector (B).

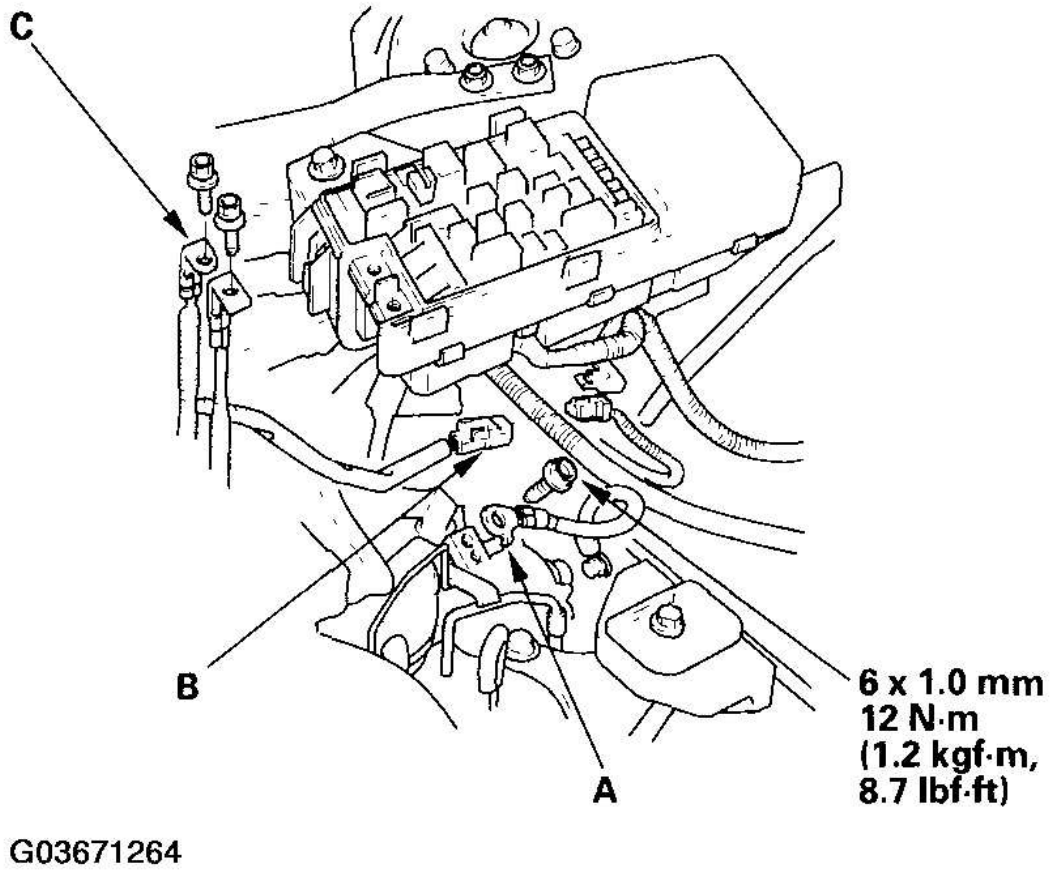


Fig. 63: Identifying Ground Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

55. Install the battery cables (C).
56. Install the battery base (A), then install the harness clamp (B).

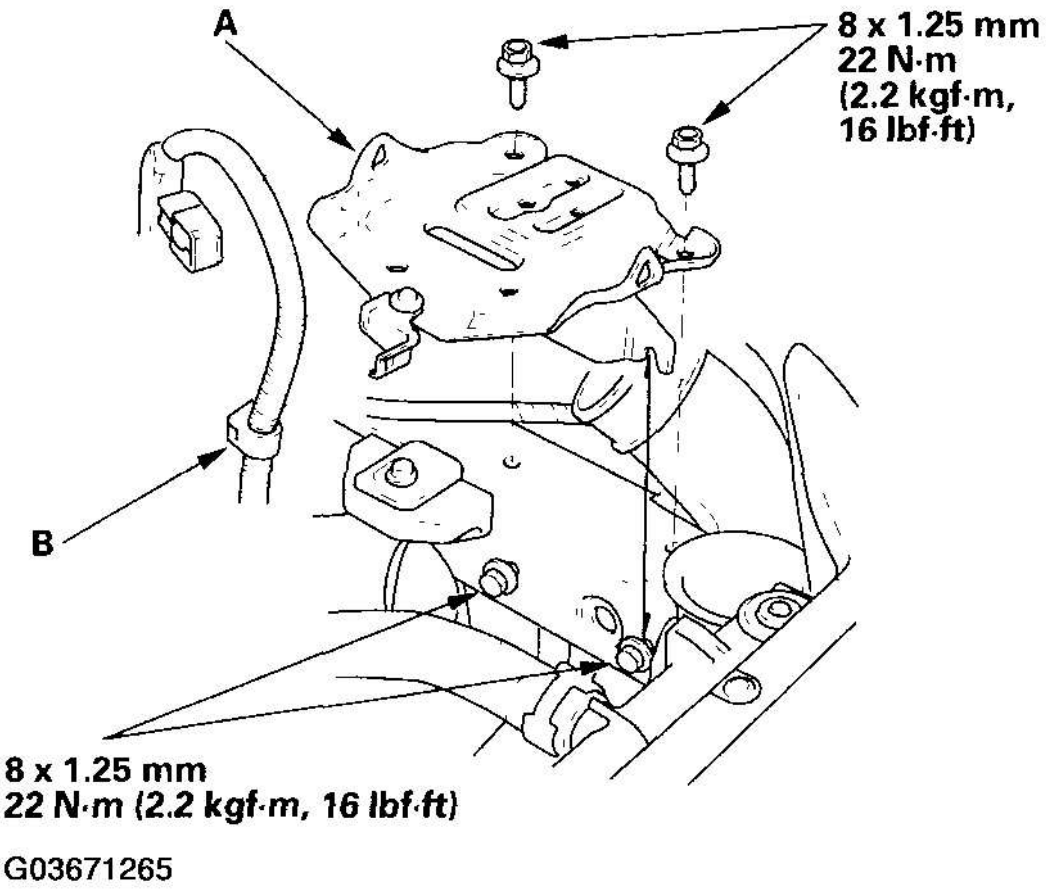


Fig. 64: Identifying Battery Base And Harness Clamp
Courtesy of AMERICAN HONDA MOTOR CO., INC.

57. Install the air cleaner housing, refer to **DTC P0406: EGR VALVE POSITION SENSOR CIRCUIT HIGH VOLTAGE**).
58. Install the battery. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
59. A/T model: Move the shift lever to each gear, and verify that the A/T gear position indicator follows the transmission range switch.
60. Inspect for fuel leaks. Turn the ignition switch ON (II) (do not operate the starter) so the fuel pump runs for about 2 seconds and pressurizes the fuel line. Repeat this operation two or three times, then check for fuel leakage at any point in the fuel line.

61. Refill the engine with engine oil (see step 3 in **ENGINE OIL REPLACEMENT**).
62. Refill the transmission with fluid:
    - Manual transmission (see **TRANSMISSION REMOVAL**)
    - Automatic transmission (see **TRANSMISSION REMOVAL**)
63. Refill the radiator with engine coolant, and bleed air from the cooling system with the heater valve open (see step 8 **COOLANT REPLACEMENT**).
64. Refill the power steering system fluid (see **FLUID REPLACEMENT**).
65. Perform the engine control module (ECM)/ powertrain control module (PCM) reset procedure (see **ECM/PCM RESET**).
66. Do the crankshaft position (CKP) pattern clear/CKP pattern learn procedure (see **CKP PATTERN CLEAR/CKP PATTERN LEARN**).
67. Inspect the idle speed, refer to (see **FUEL PRESSURE RELIEVING**).
68. Inspect the ignition timing (see **IGNITION TIMING INSPECTION**).
69. Install the cowl cover and windshield wiper arms, refer to **COWL COVER REPLACEMENT** .
70. Install the bulkhead cover:
    - 2-door, refer to **FRONT BUMPER REMOVAL/INSTALLATION**
    - 4-door, refer to **FRONT BUMPER REMOVAL/INSTALLATION**
71. Check the wheel alignment, refer to **WHEEL ALIGNMENT** .
72. Enter the anti-theft codes for the radio and the navigation system, then enter the customer's audio presets.
73. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .
74. Set the clock.

ENGINE MOUNT REPLACEMENT

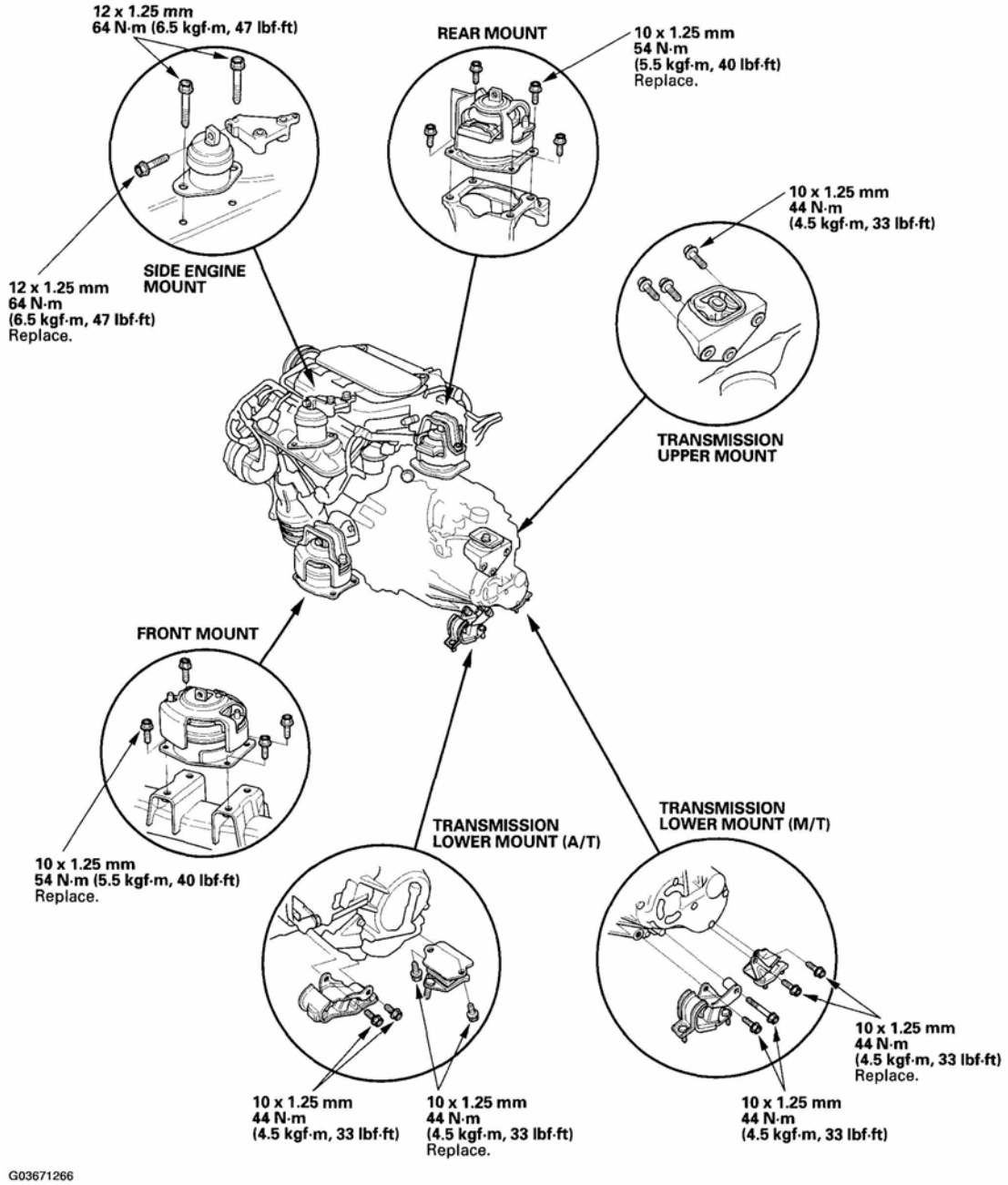


Fig. 65: Replacing Engine Mount
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ENGINE

Engine Assembly - Accord

ENGINE REMOVAL

NOTE:

- **Use fender covers to avoid damaging painted surfaces.**
- **To avoid damaging the wire and terminals, unplug the wiring connectors carefully while holding the connector portion.**
- **Mark all wiring and hoses to avoid misconnection. Also, be sure that they do not contact other wiring or hoses, or interfere with other parts.**

1. Secure the hood in the wide open position (support rod in the lower hole).
2. Make sure you have the anti-theft codes for the audio unit, then write down the audio presets. Make sure the ignition switch is OFF.
3. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
4. Disconnect the negative cable from the battery first, then disconnect the positive cable.
5. Remove the battery.
6. Except '03-04 SULEV, LX-P models and '05-07 models: Disconnect the intake air temperature (IAT) sensor connector (A).

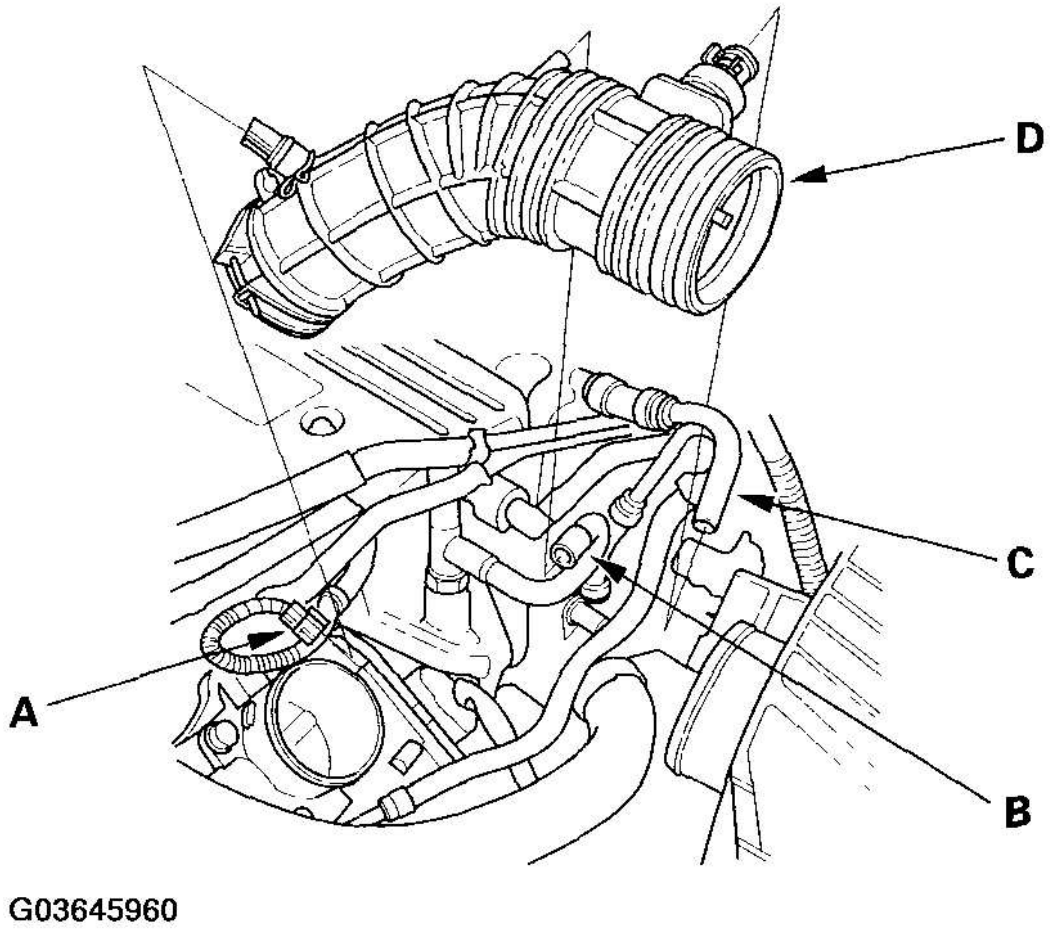


Fig. 1: Disconnecting Intake Air Temperature (IAT) Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the vacuum hose (B) and breather pipe (C), then remove the intake air duct (D).
8. Remove the air cleaner housing (see **AIR CLEANER REMOVAL/INSTALLATION**).
9. Remove the harness clamp (A).

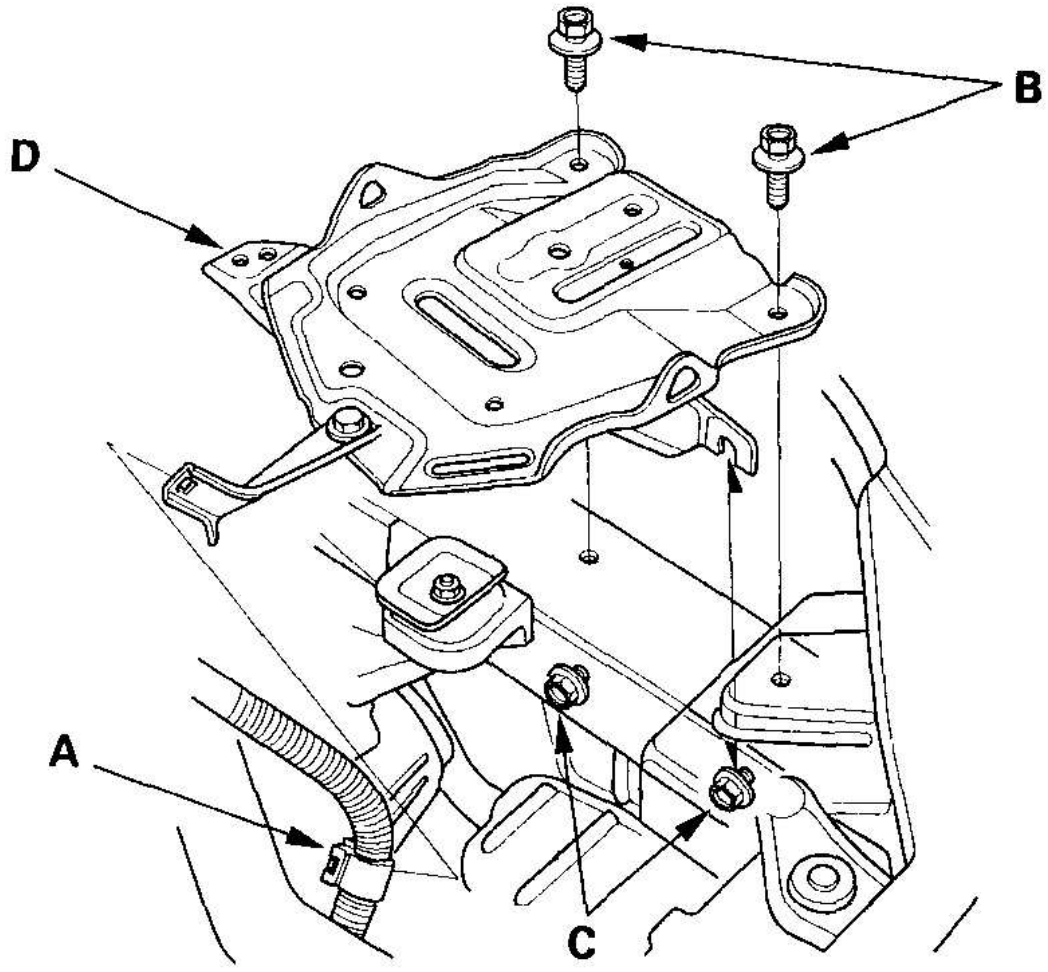


Fig. 2: Removing Harness Clamp
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the two bolts (B), and loosen the two bolts (C) securing the battery base, then remove the battery base (D).
11. Remove the battery cables (A) from the under-hood fuse/relay box, then disconnect the harness connector (B).

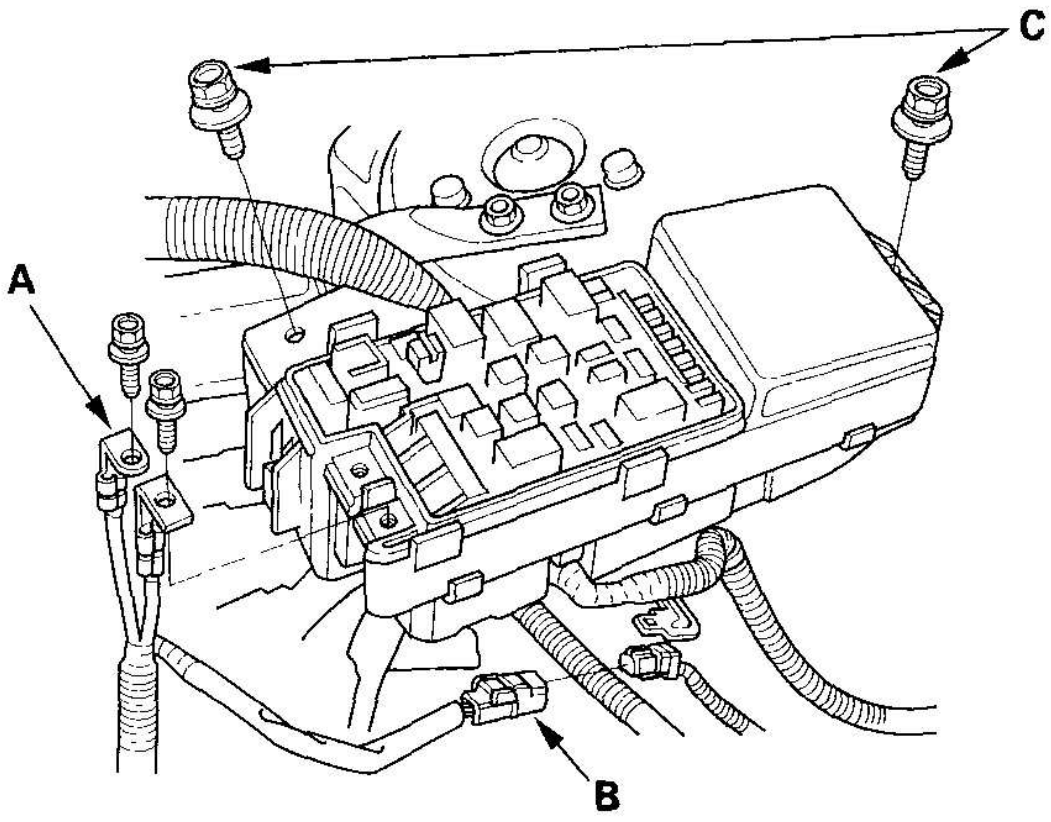


Fig. 3: Removing Battery Cables (A) From Under-Hood Fuse/Relay Box
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the two bolts (C) securing the under-hood fuse/relay box.
13. '03-05 models: Remove the throttle cable (A) and cruise control actuator cable (B) by loosening the locknuts (C), then slipping the cable ends out of the accelerator linkage. Take care not to bend the cables when removing them. Always replace any kinked cable with a new one.

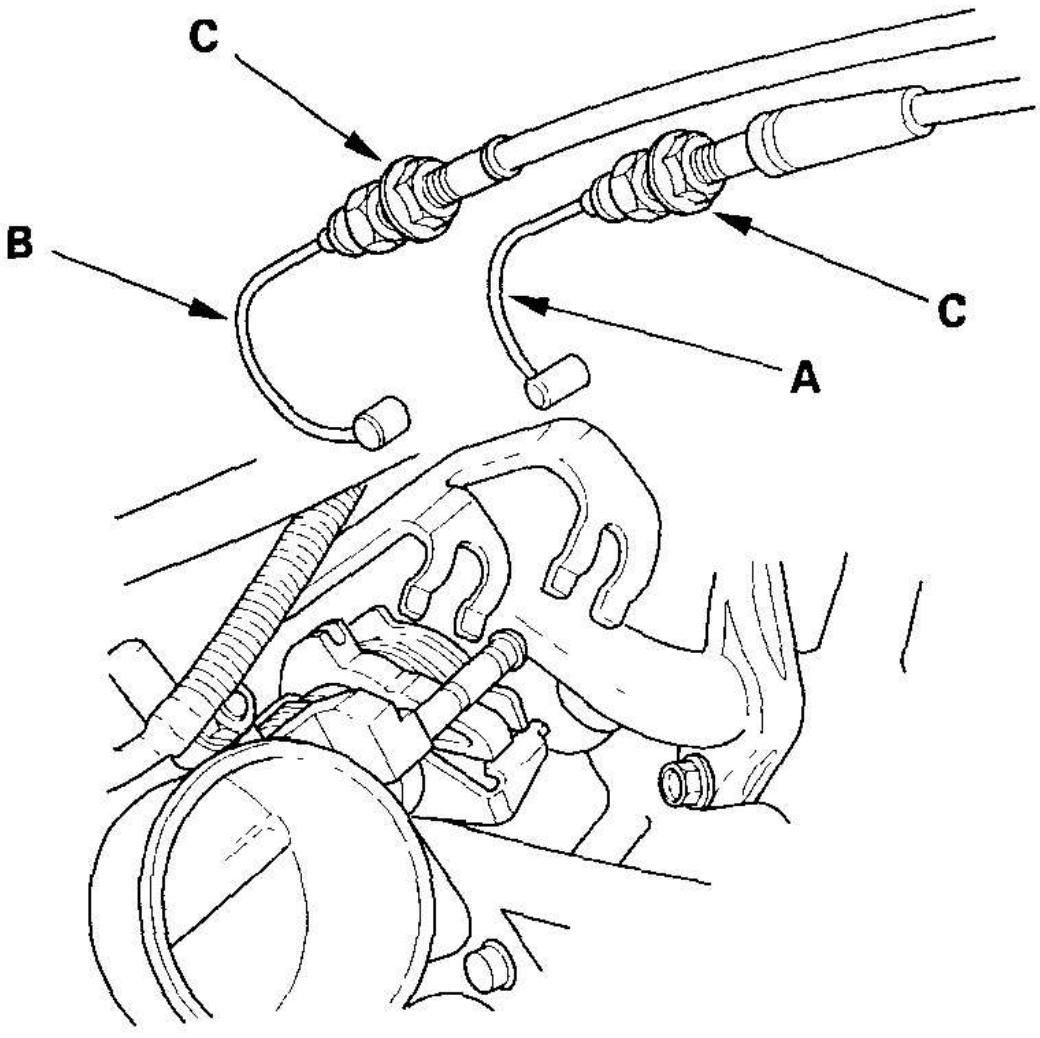
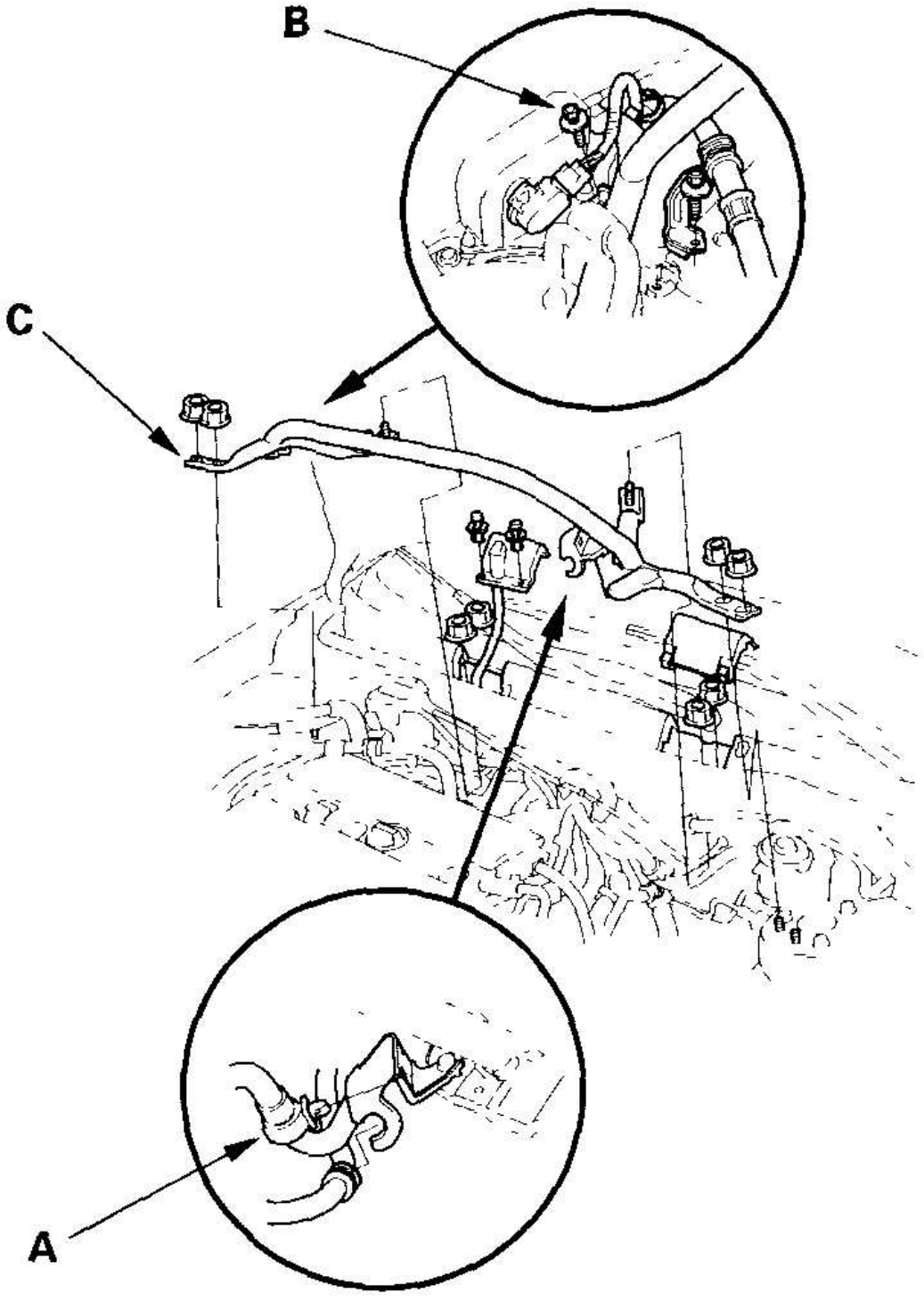


Fig. 4: Removing Throttle Cable And Cruise Control Actuator Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. '06-07 models: Remove the harness clamp (A) and bolt (B), then remove the strut brace (C).



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Fig. 5: Removing Harness Clamp And Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the quick-connect fitting cover (A), then disconnect the fuel feed hose (see **FUEL LINE/QUICK-CONNECT FITTING REMOVAL**).

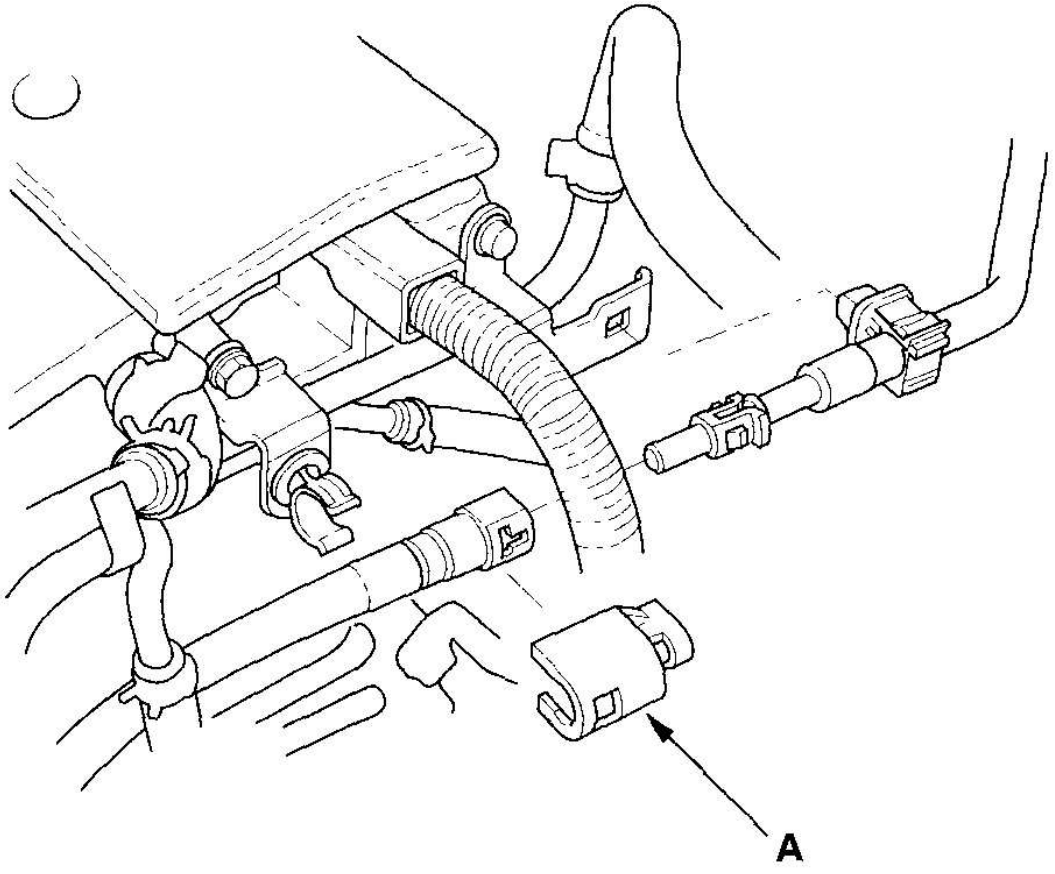


Fig. 6: Removing Quick-Connect Fitting Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Remove the evaporative emission (EVAP) canister hose (A) and brake booster vacuum hose (B).

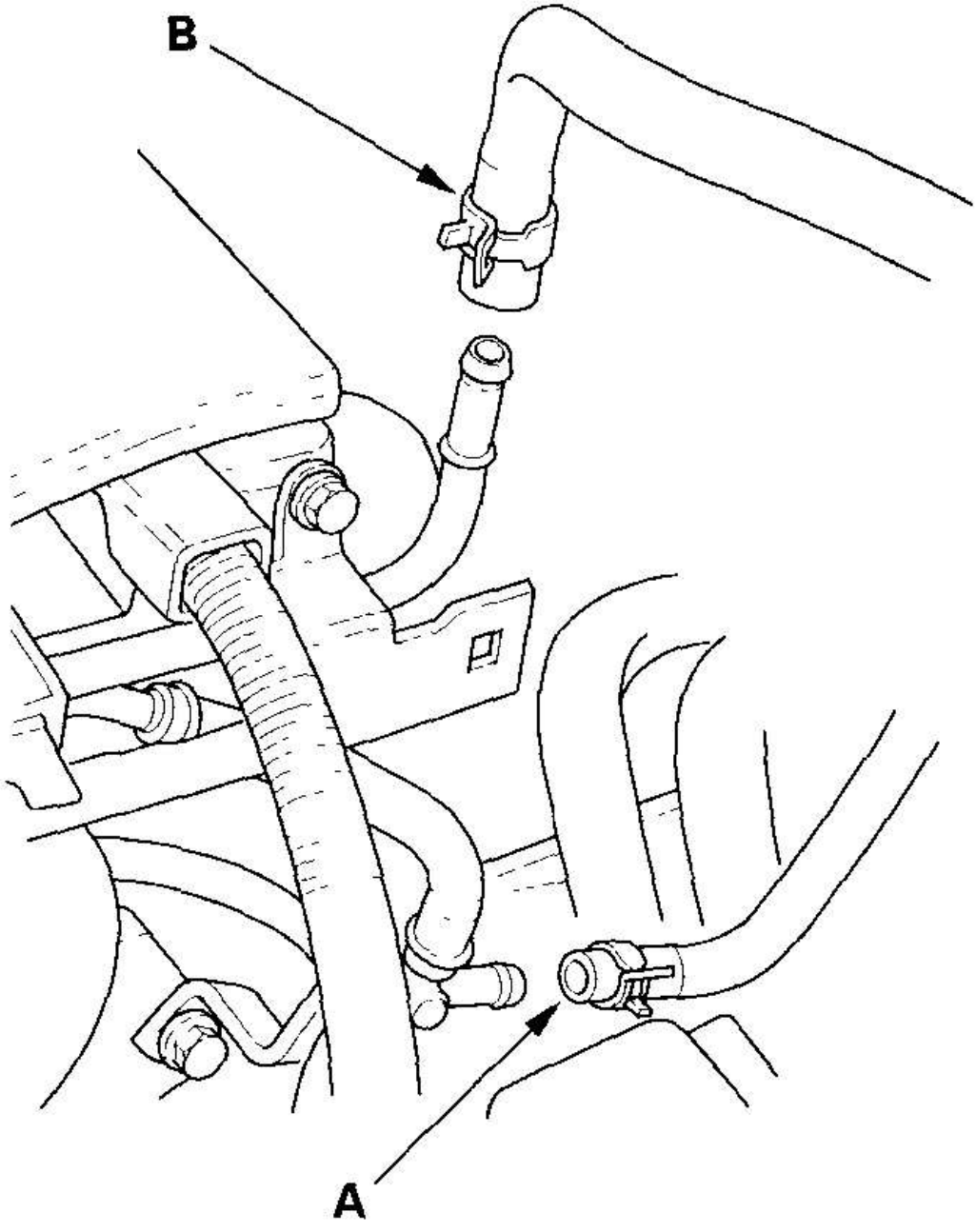


Fig. 7: Removing Evaporative Emission (EVAP) Canister Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. '03-2005 models: Remove the harness clamp (A), then disconnect the engine wire harness connectors (B) on the left side of the engine compartment.

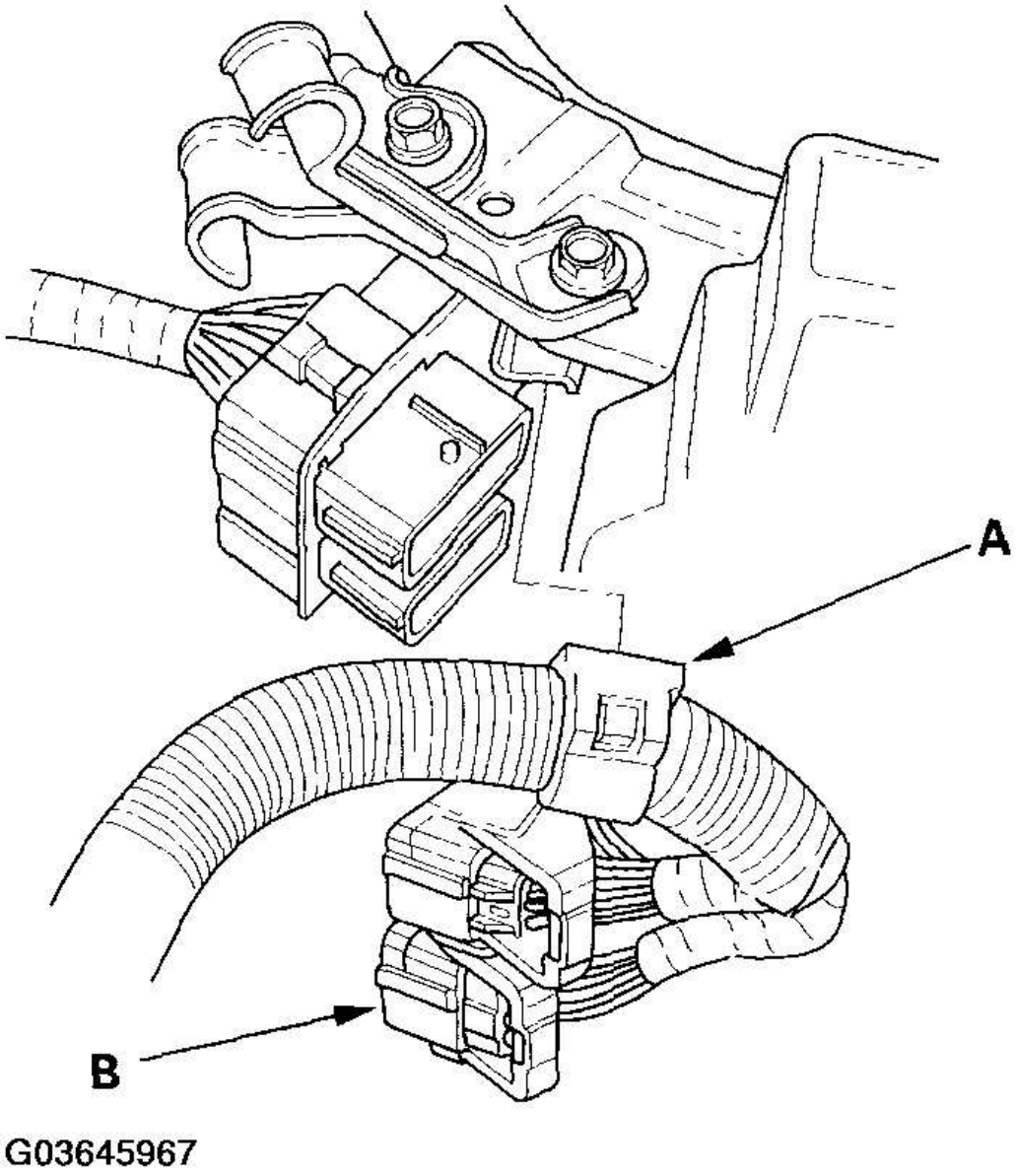


Fig. 8: Removing Harness Clamp
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. '06-07 models: Disconnect the engine control module (ECM)/powertrain control module (PCM) connectors (A) and the main wire harness connectors (B).

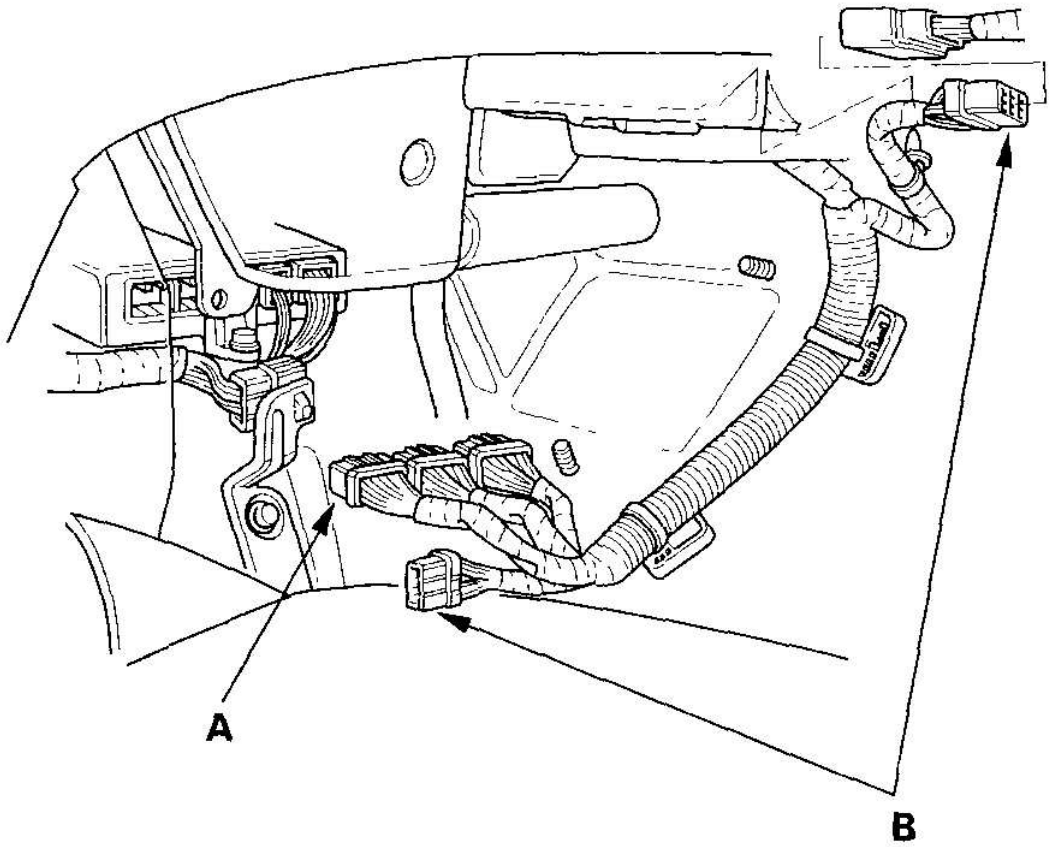


Fig. 9: Disconnecting Engine Control Module (ECM)/Powertrain Control Module (PCM) Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. '06-07 models: Disconnect the accelerator pedal position (APP) sensor connector (A).

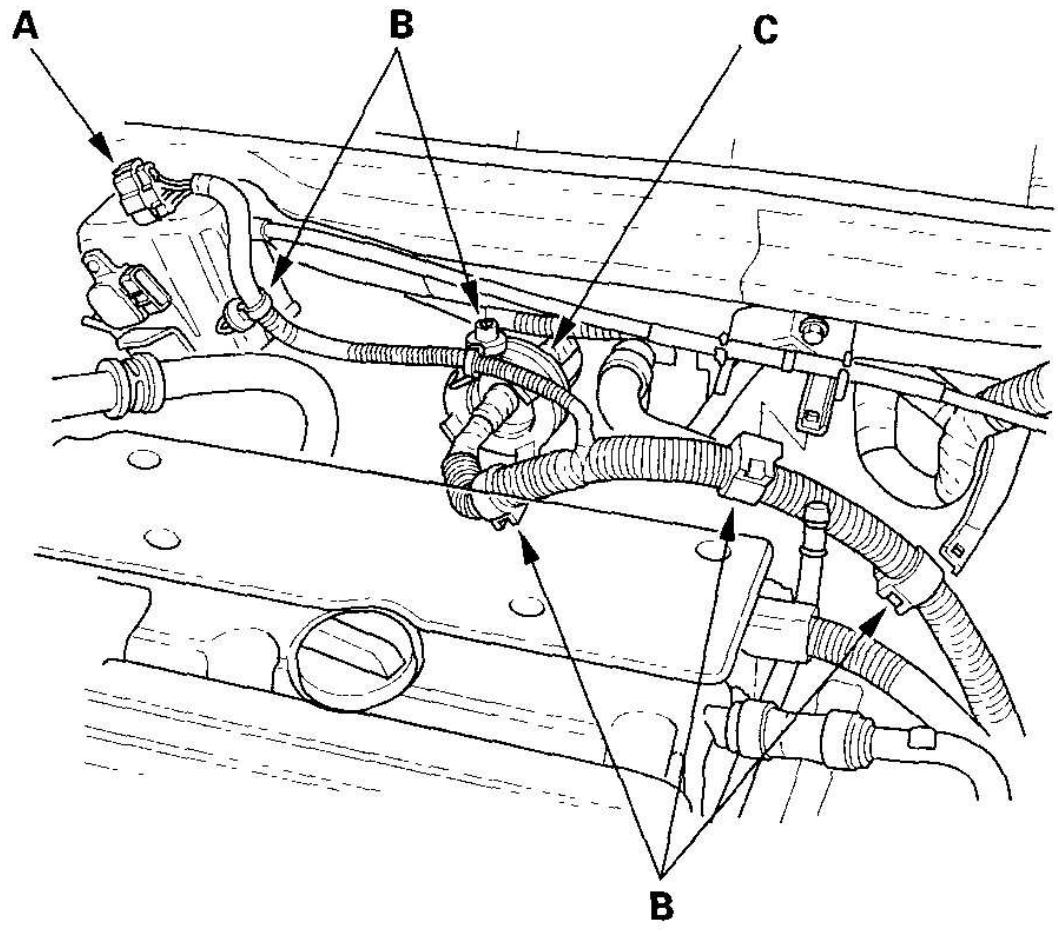


Fig. 10: Disconnecting Accelerator Pedal Position (APP) Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. '06-07 models: Remove the harness clamps (B) and grommet (C), then pull the engine wire harness through the bulkhead.
21. M/T model: Remove the clutch slave cylinder (A), and clutch line bracket mounting bolt (B).

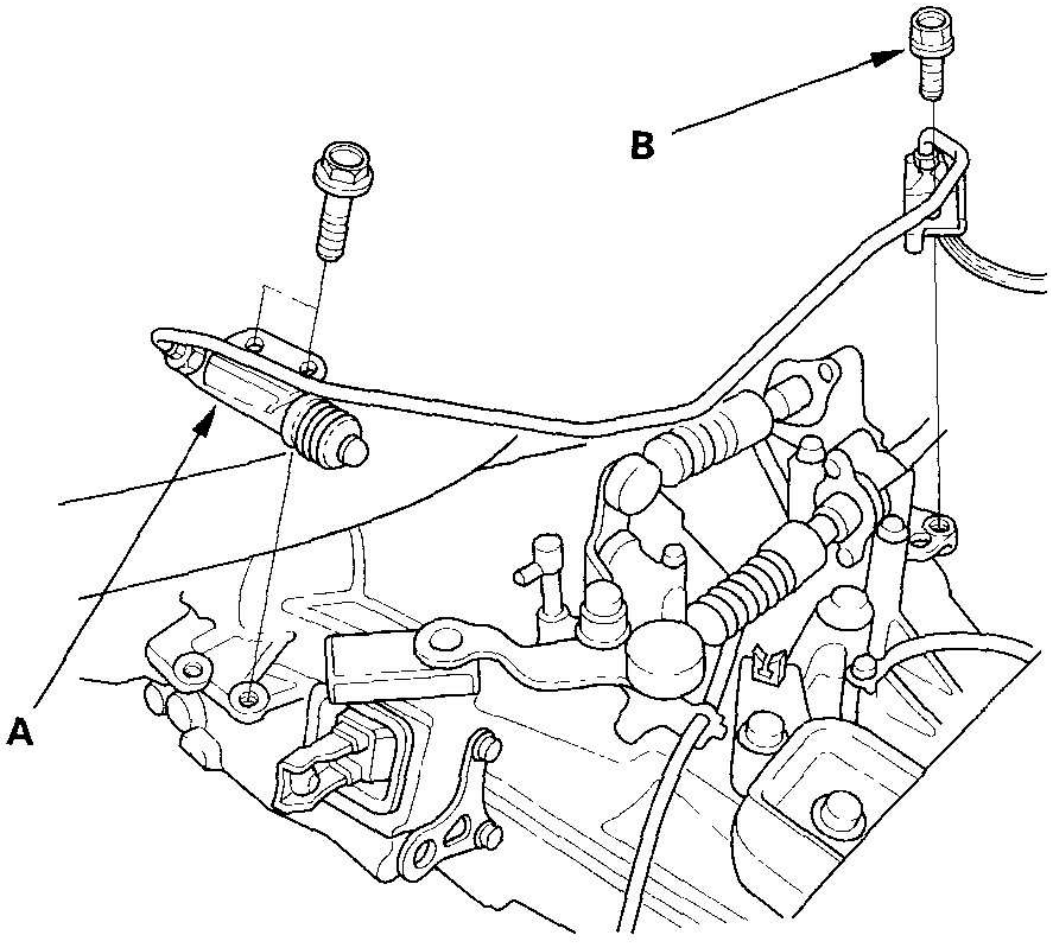
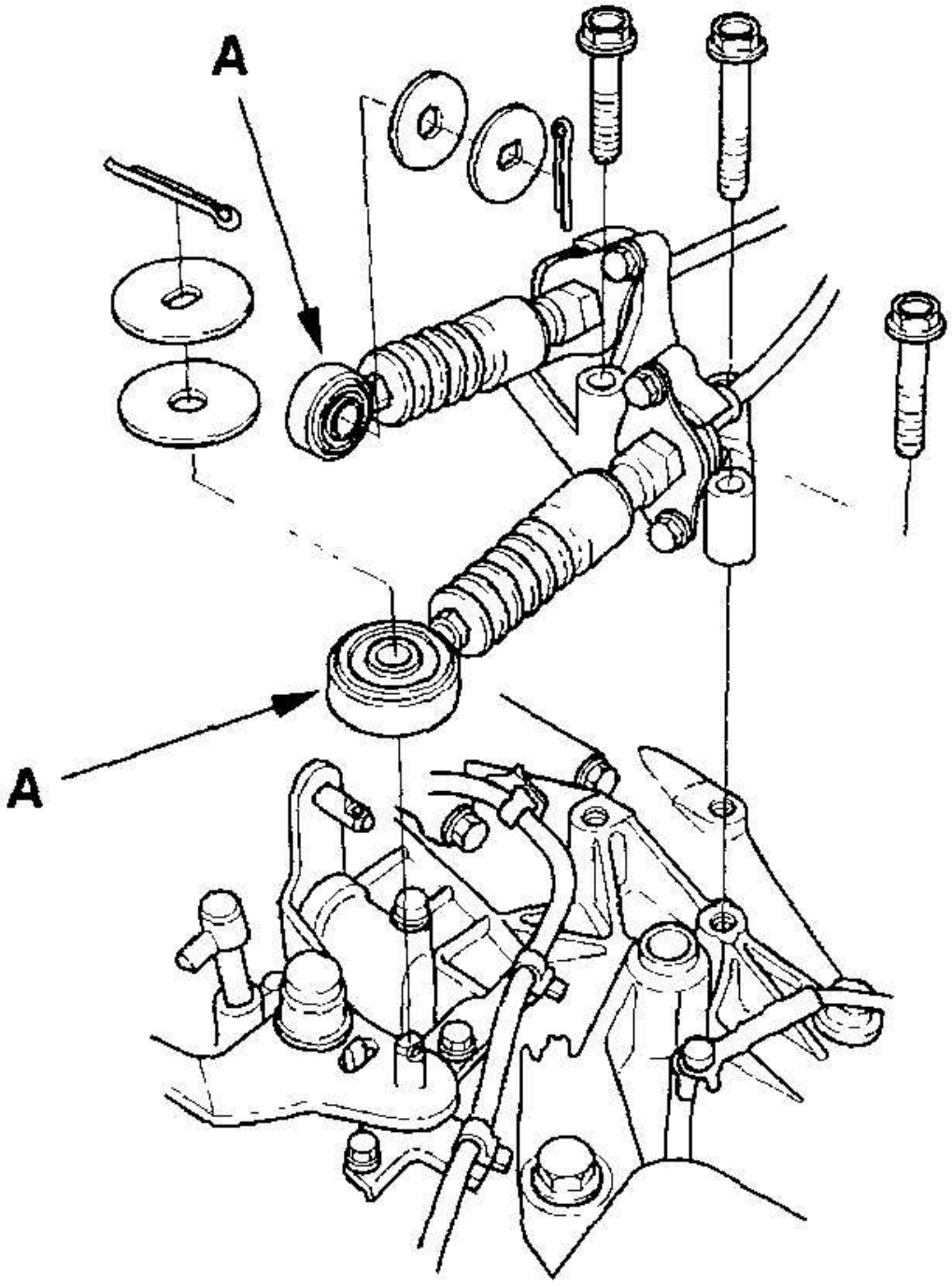


Fig. 11: Removing Clutch Slave Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. M/T model: Remove the shift cable (A) and select cable (B).



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Fig. 12: Removing Shift Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Disconnect the air fuel ratio (A/F) sensor connector.

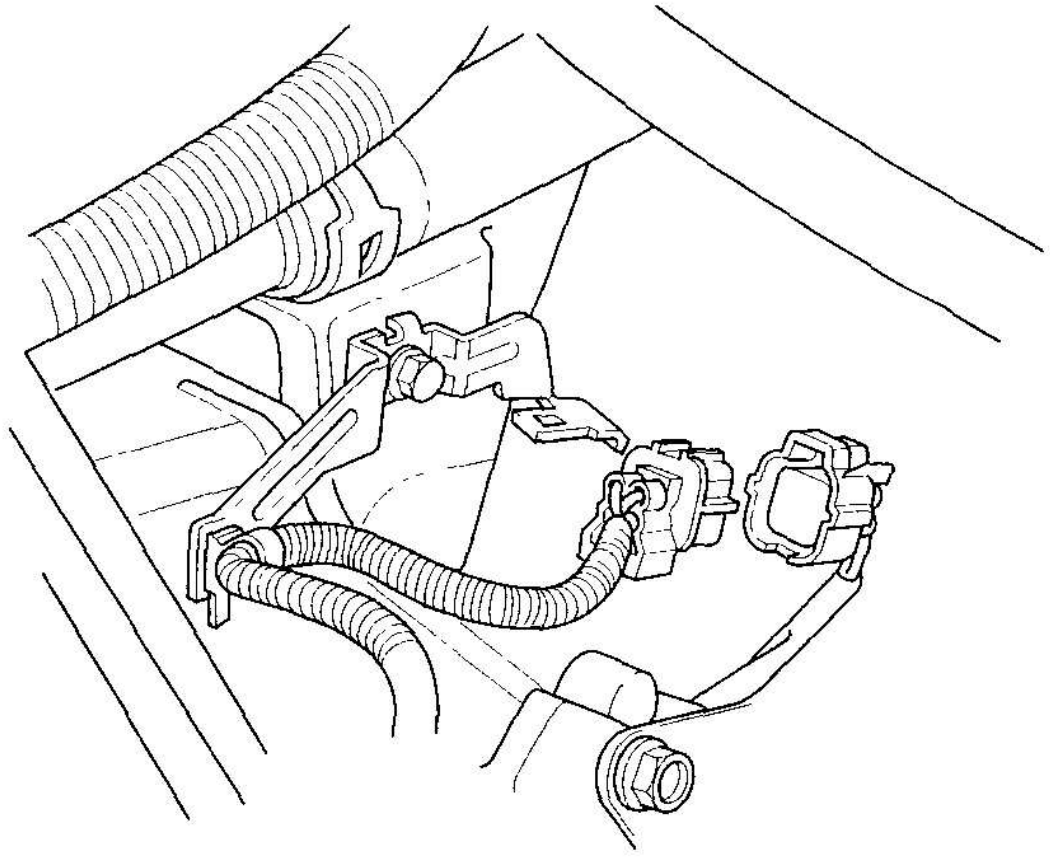


Fig. 13: Disconnecting Air Fuel Ratio (A/F) Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Remove the drive belt (see **DRIVE BELT REPLACEMENT**).
25. Remove the power steering (P/S) pump (A), and the P/S hose clamp (B). Do not disconnect the P/S hoses from the pump.

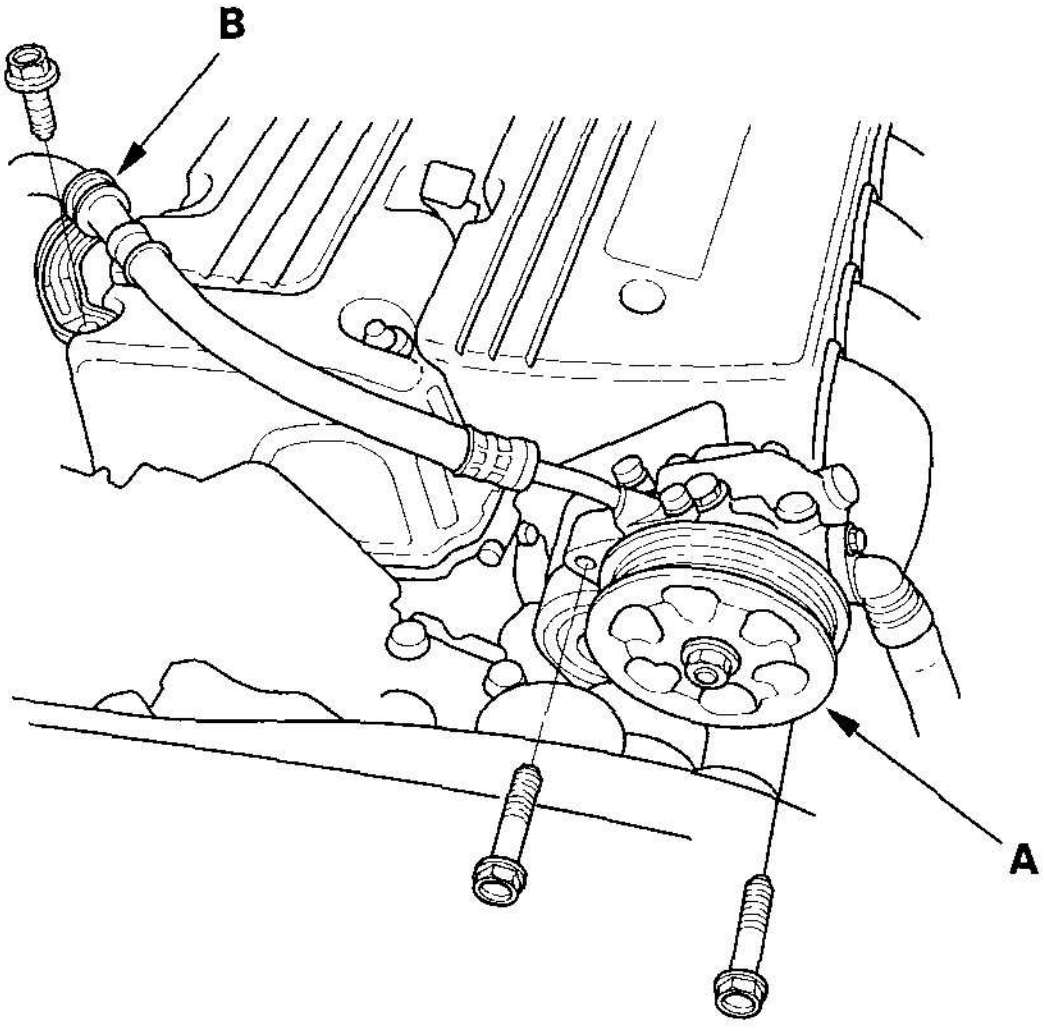
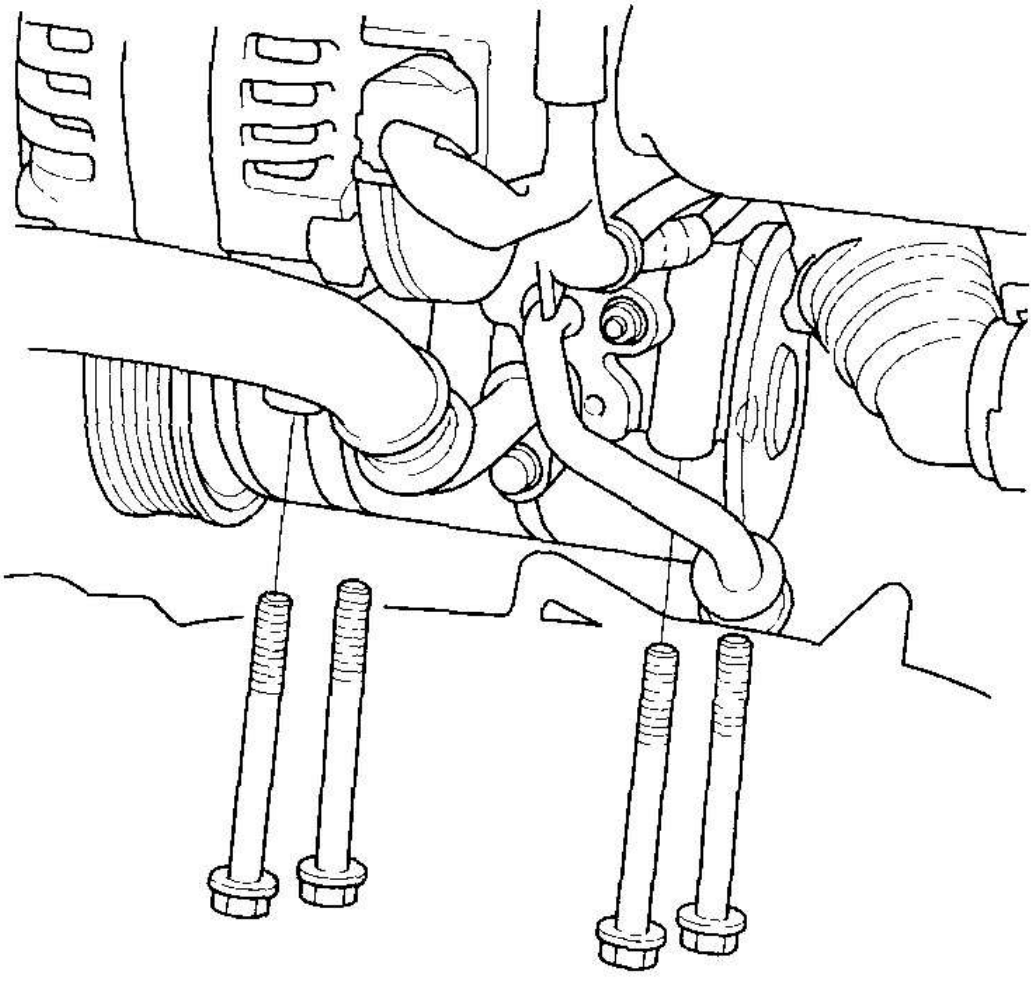


Fig. 14: Removing Power Steering (P/S) Pump (A)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. Remove the A/C compressor without disconnecting the A/C hoses.



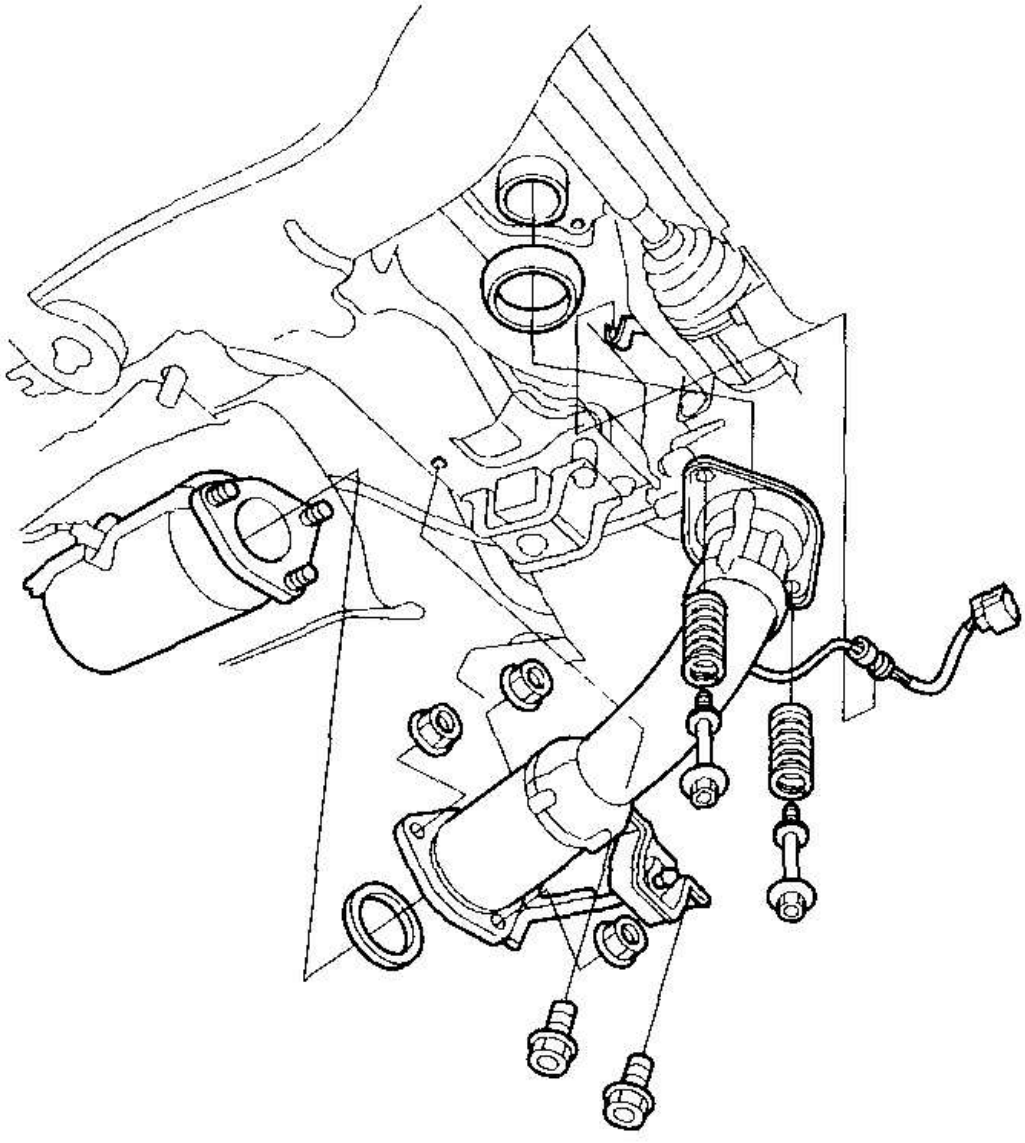
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Fig. 15: Removing A/C Compressor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

27. Remove the radiator cap.
28. Raise the vehicle on the hoist to full height.
29. Remove the front wheels.
30. Loosen the drain plug in the radiator and drain the engine coolant (see **COOLANT REPLACEMENT**).
31. Drain the transmission fluid:

- Manual transmission (see **TRANSMISSION FLUID INSPECTION AND REPLACEMENT**)
- Automatic transmission (see **ATF REPLACEMENT**)

32. Drain the engine oil (see **ENGINE OIL REPLACEMENT**).
33. Disconnect the stabilizer links (see **STABILIZER LINK REPLACEMENT**).
34. Remove the damper fork (see step 3 on **REMOVAL**).
35. Separate the knuckles from the lower arm ball joints (see step 6 on **LOWER ARM REMOVAL/INSTALLATION**).
36. Remove the driveshafts (see step 12 on **DRIVESHAFT DISASSEMBLY**). Coat all precision-finished surfaces with clean engine oil. Tie plastic bags over the driveshaft ends.
37. Remove exhaust pipe A.



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Fig. 16: Removing Exhaust Pipe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

38. A/T model: Remove the three bolts securing the shift cable holder (A), then remove the shift cable cover (B).

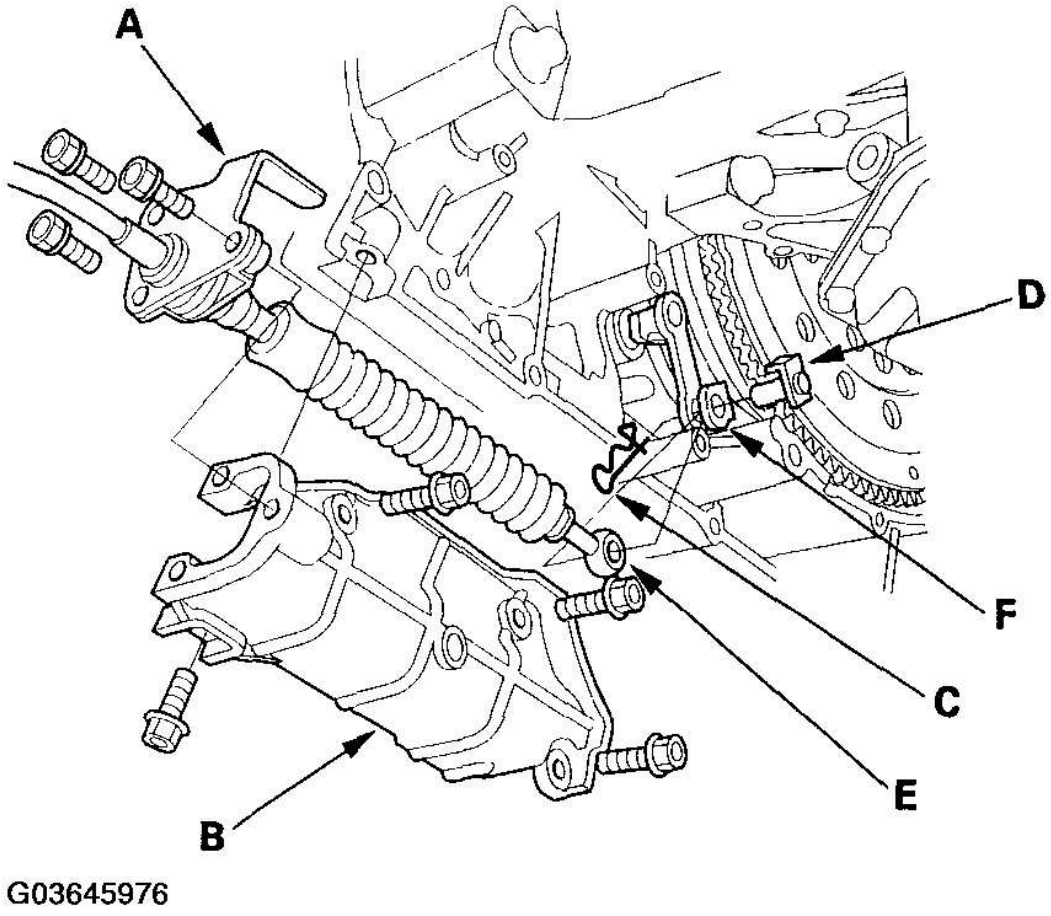


Fig. 17: Removing Shift Cable Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

39. A/T model: Remove the spring clip (C) and control pin (D), then separate the shift cable (E) from the control lever (F). Do not bend the cable excessively.
40. Remove the nuts securing the transmission lower front mount and transmission lower rear mount.

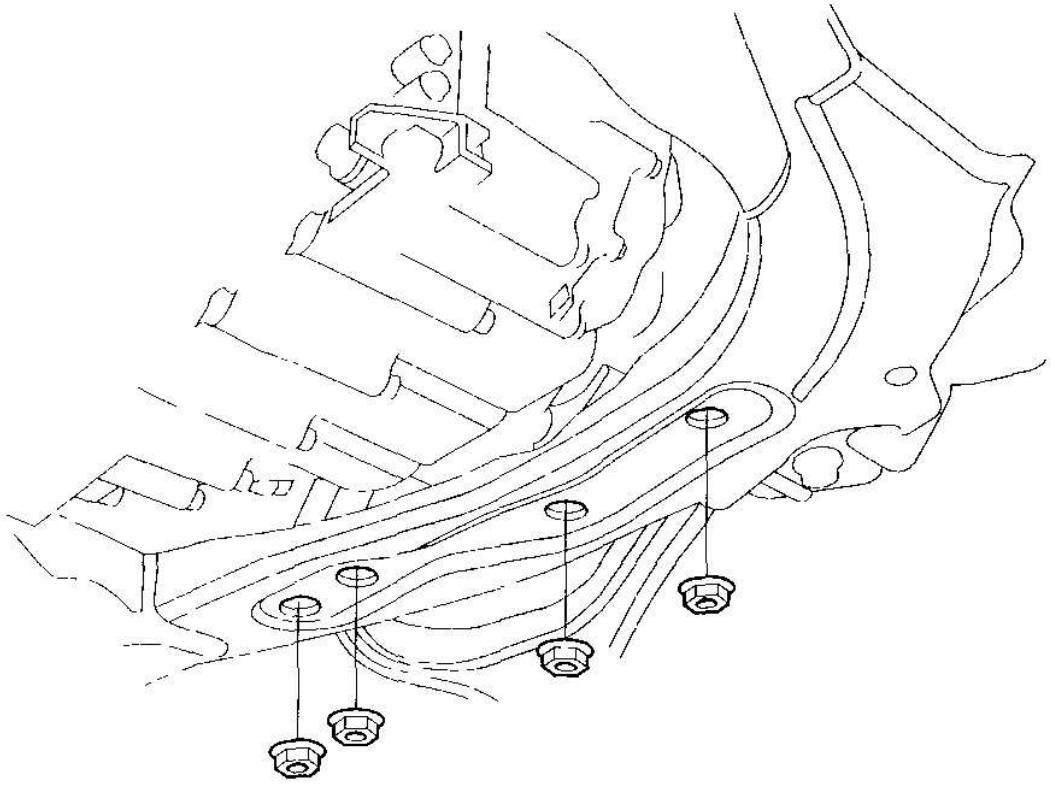
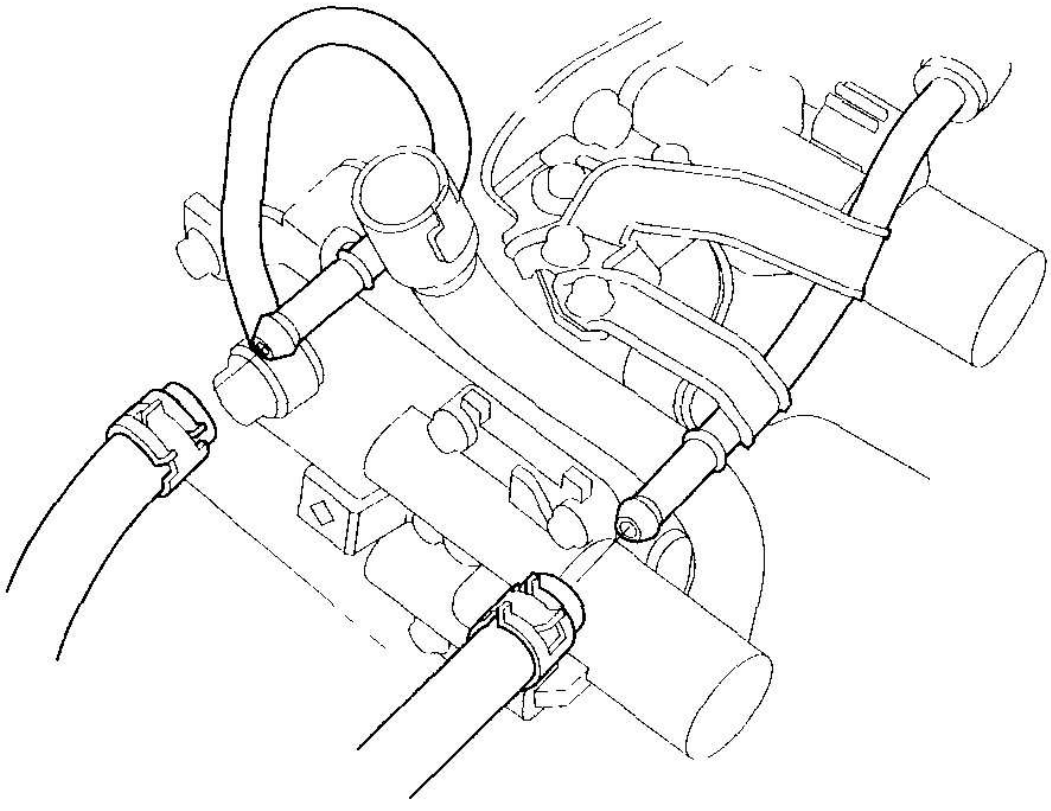


Fig. 18: Removing Spring Clip And Control Pin
Courtesy of AMERICAN HONDA MOTOR CO., INC.

41. Lower the vehicle on the lift.
42. A/T model: Remove the automatic transmission fluid (ATF) cooler hoses, then plug the line and the hoses.



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Fig. 19: Removing Automatic Transmission Fluid (ATF) Cooler Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

43. Remove the upper radiator hose (A) and heater hoses (B).

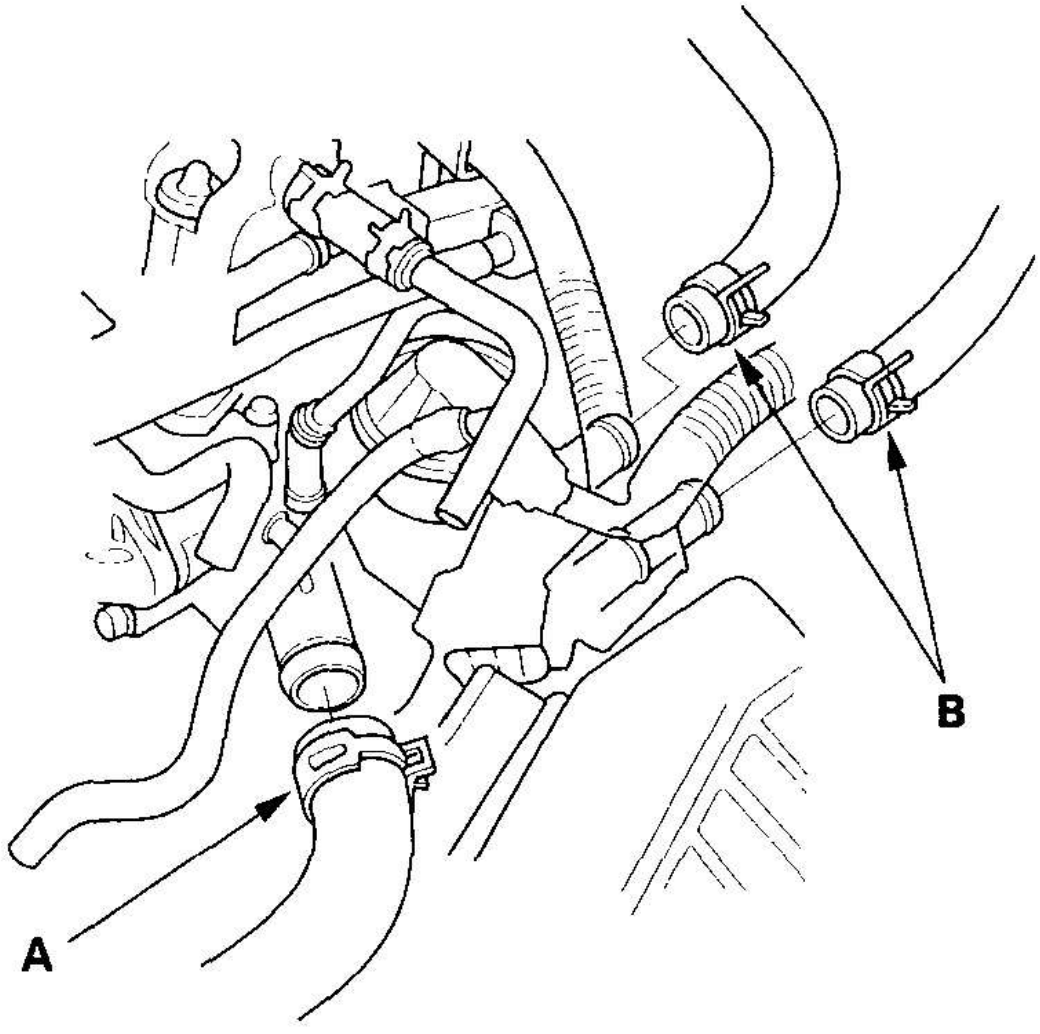


Fig. 20: Removing Upper Radiator Hose (A) And Heater Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

44. Clean any dirt off the quick connector (A), thermostat cover, and lower radiator hose.

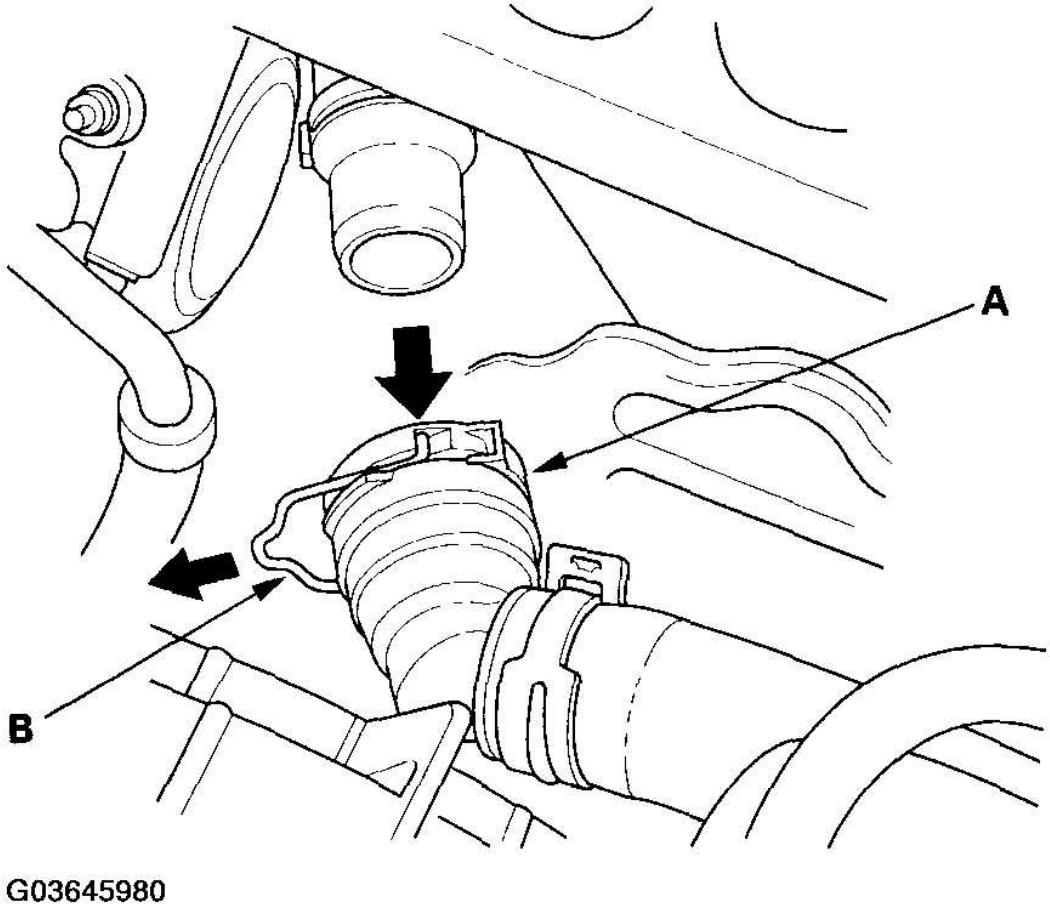


Fig. 21: Cleaning Any Dirt Quick Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

45. Pull out the lock (B) by hand, then wiggle the quick connector loose, and remove it from the thermostat cover. Do not use any tools to remove the quick connector.
46. Remove the ground cable (A), then remove the upper bracket (B).

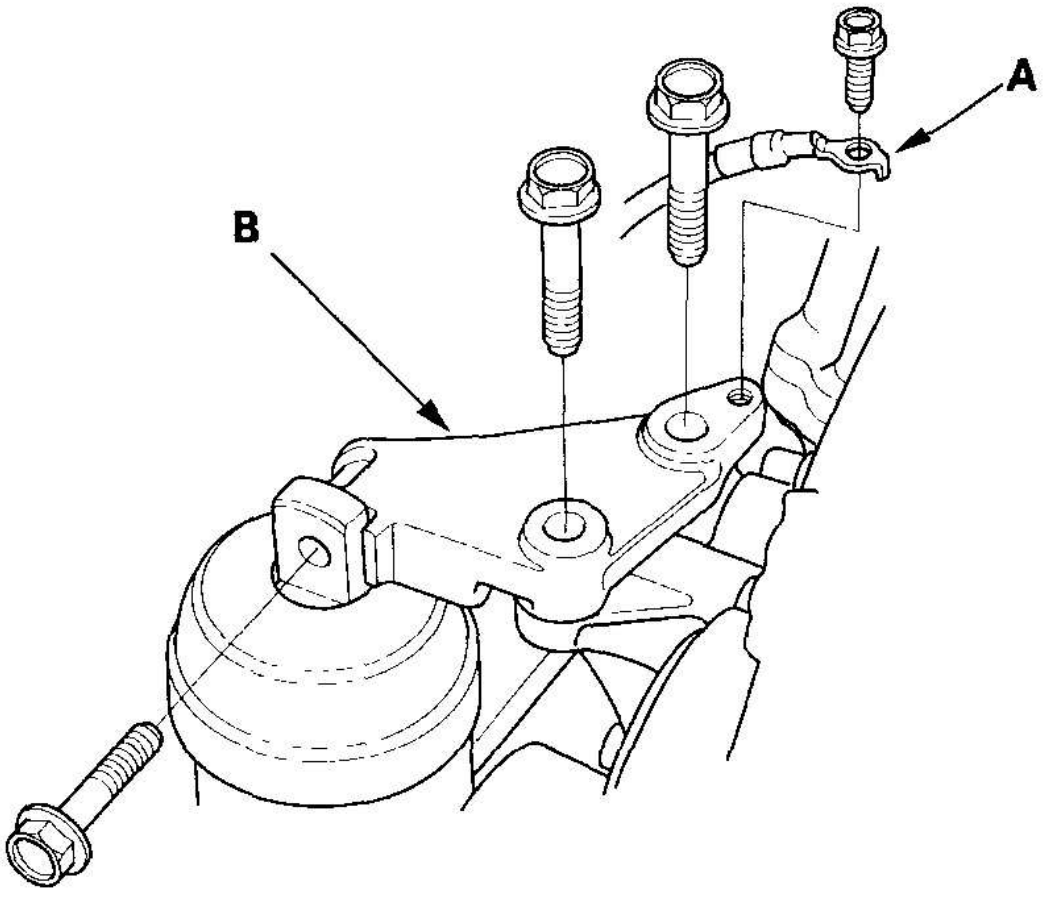


Fig. 22: Removing Ground Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

47. Attach the chain hoist to the engine as shown below.

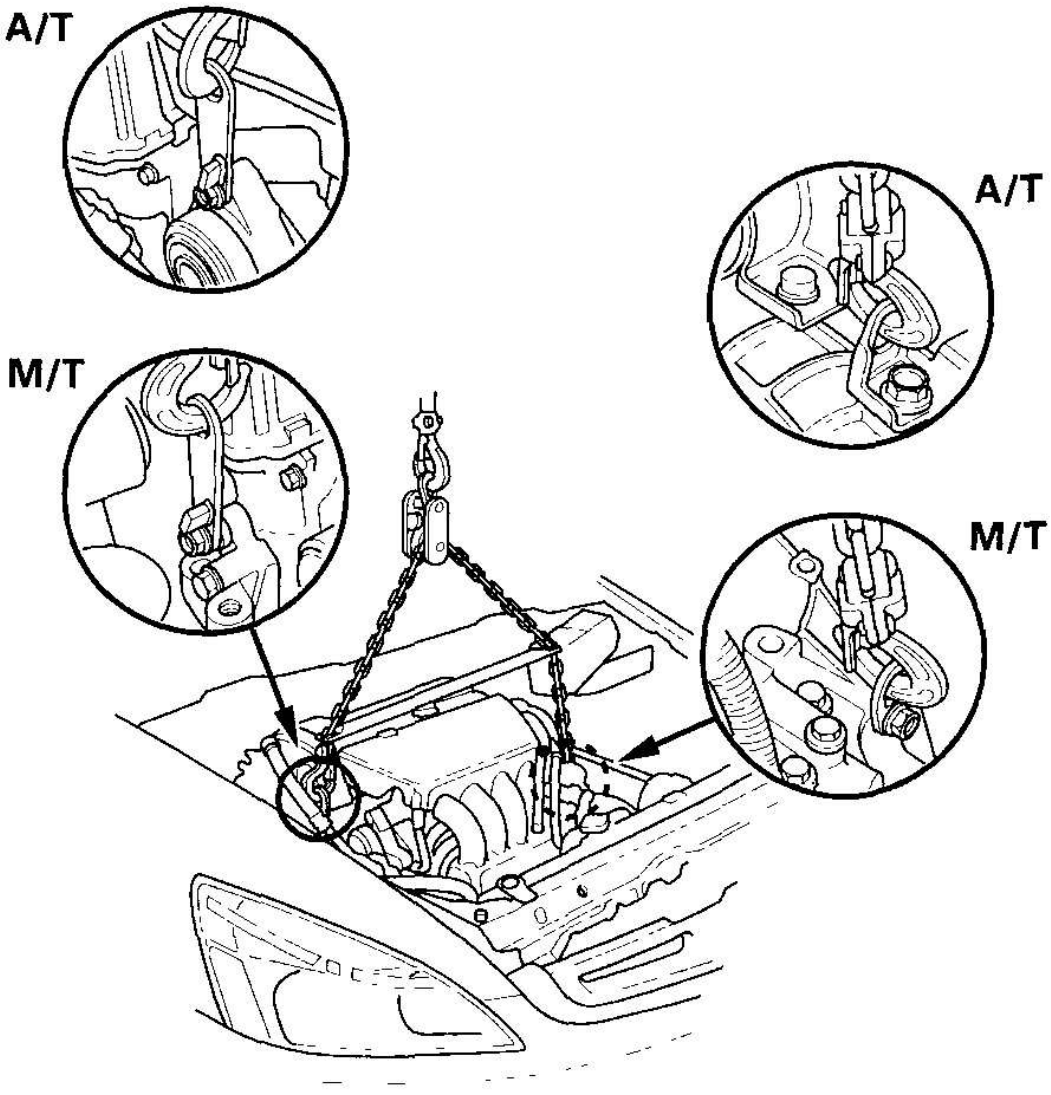


Fig. 23: Attaching Chain Hoist To Engine
Courtesy of AMERICAN HONDA MOTOR CO., INC.

48. M/T model: Remove the ground cable (A), then remove the transmission upper mount/bracket assembly (B) and clutch line clamp bracket (C).

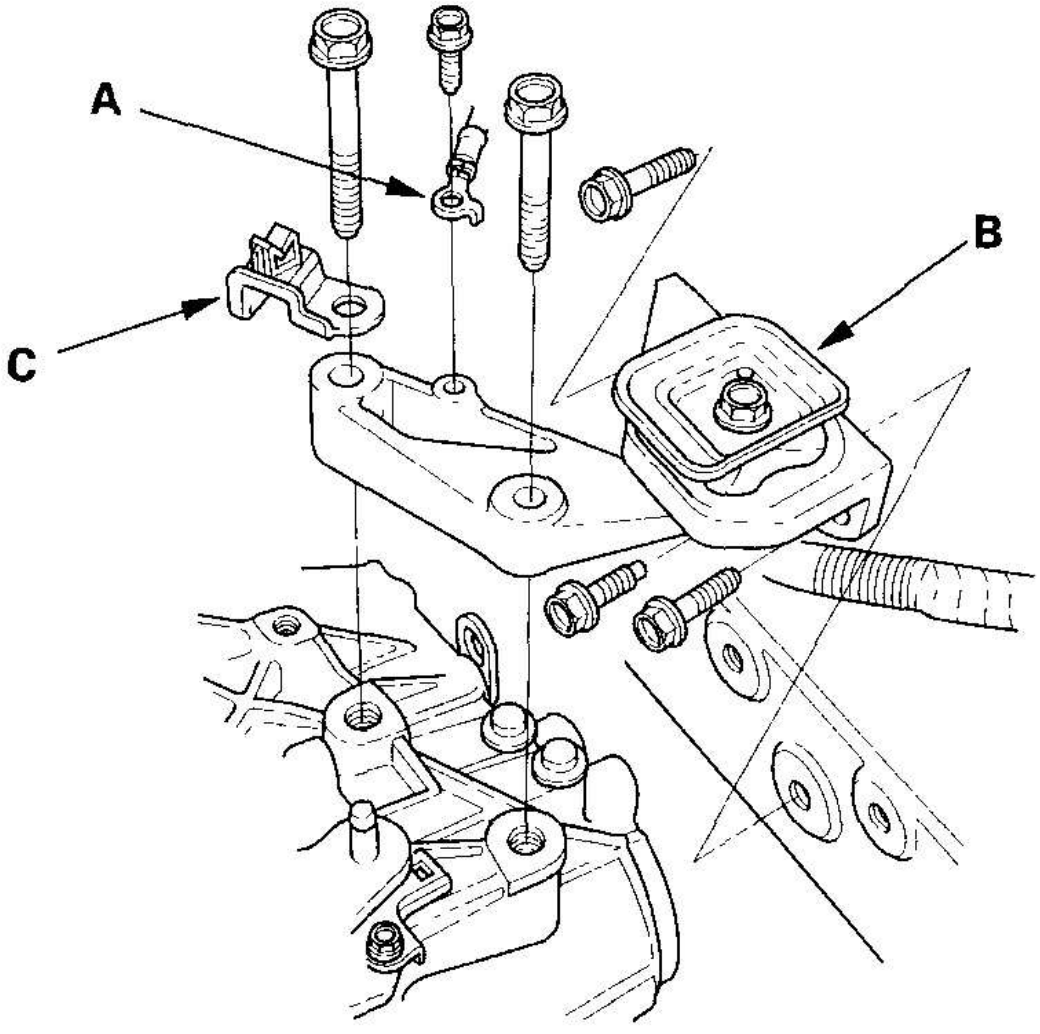


Fig. 24: Removing Ground Cable & Upper Mount/Bracket Assy (MT)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

49. A/T model: Remove the ground cable (A), then remove the transmission upper mount/bracket assembly (B).

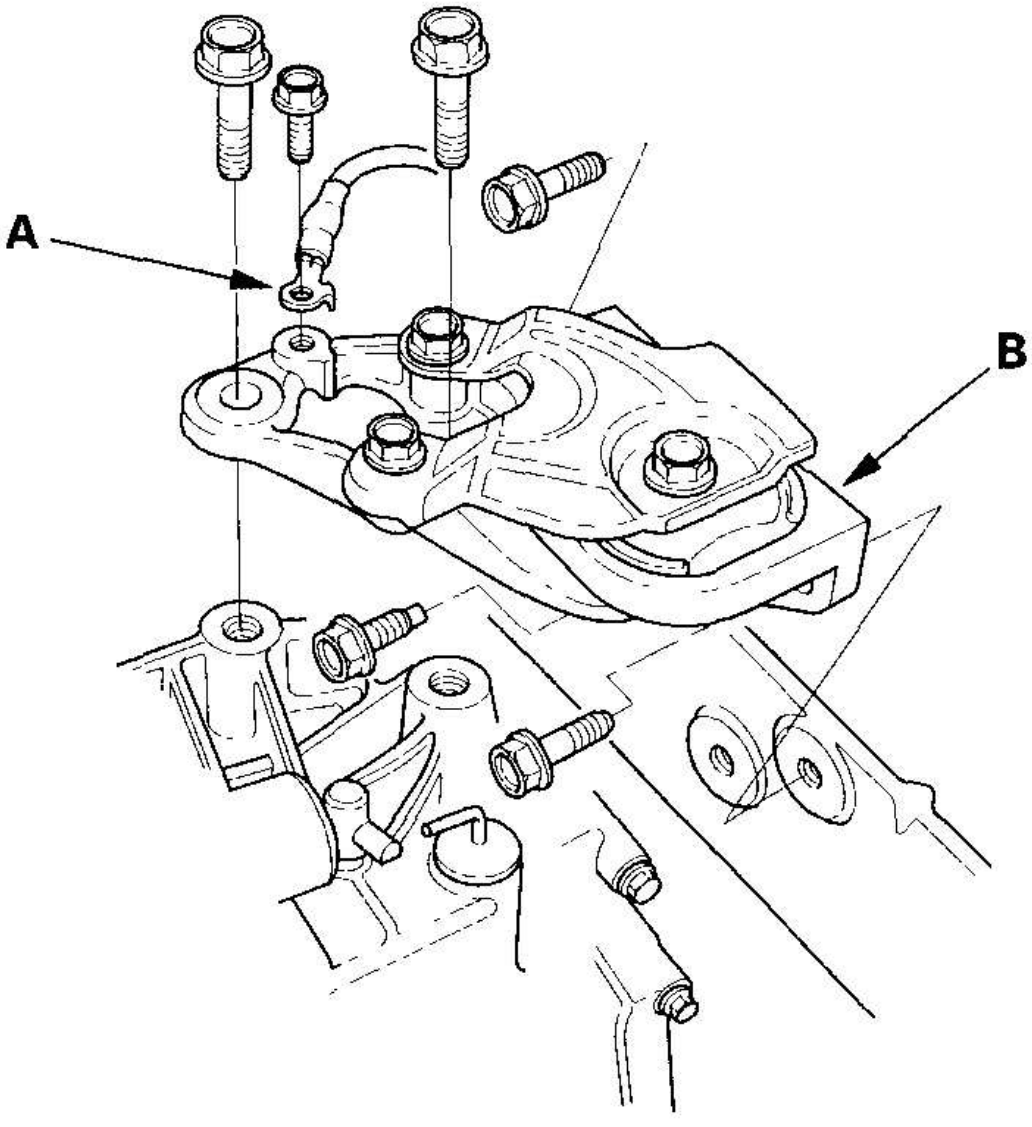


Fig. 25: Removing Ground Cable & Upper Mount/Bracket Assy (AT)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

50. M/T model: Remove the front mount stop (A), then remove the front mount bolt (B).

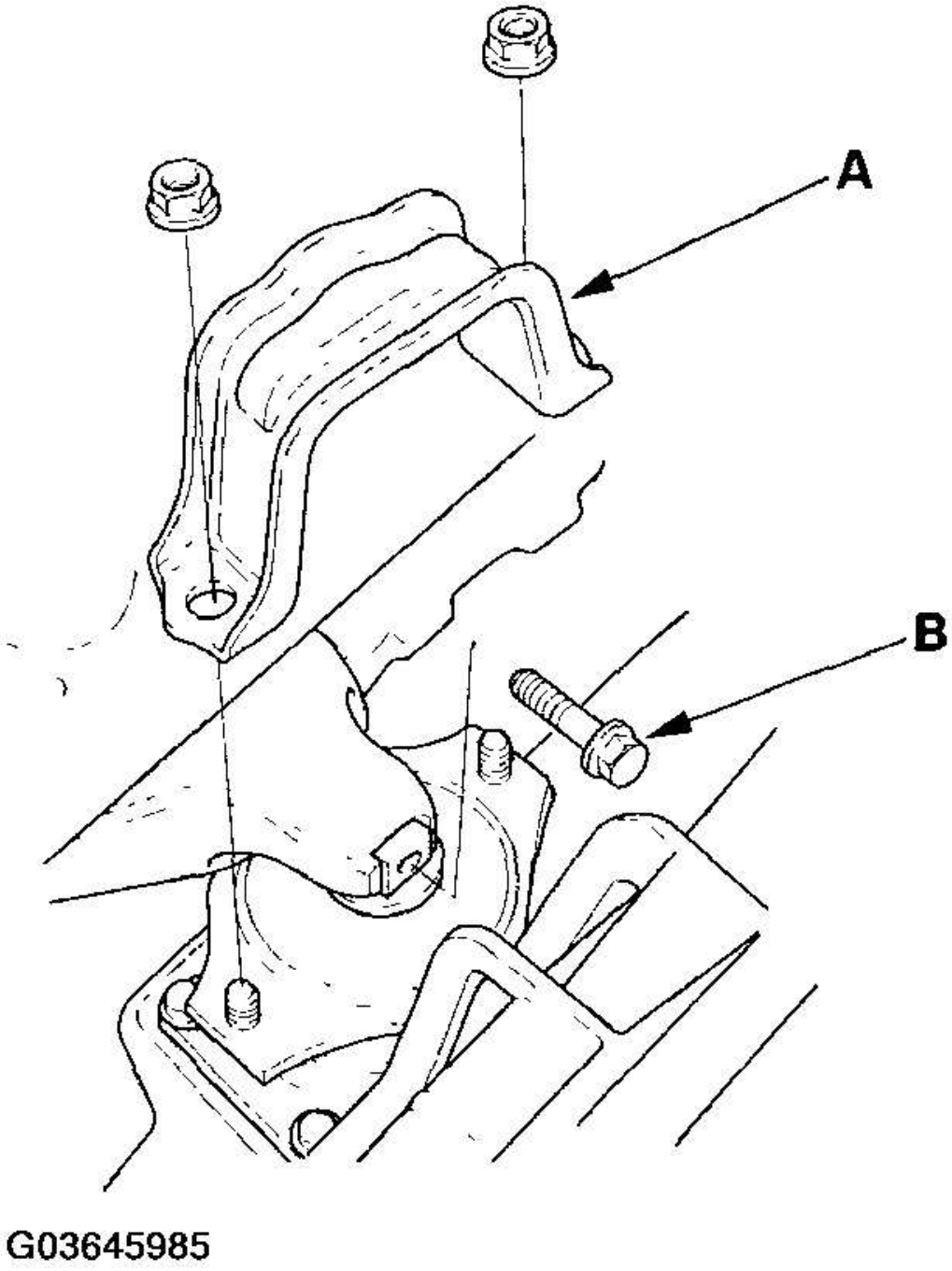


Fig. 26: Removing Front Mount Stop (MT)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

51. A/T model: Remove the vacuum hose (A) from the vacuum line. Remove the front mount stop (B) and vacuum hose clamp bracket (C), then remove the front mount bolt (D).

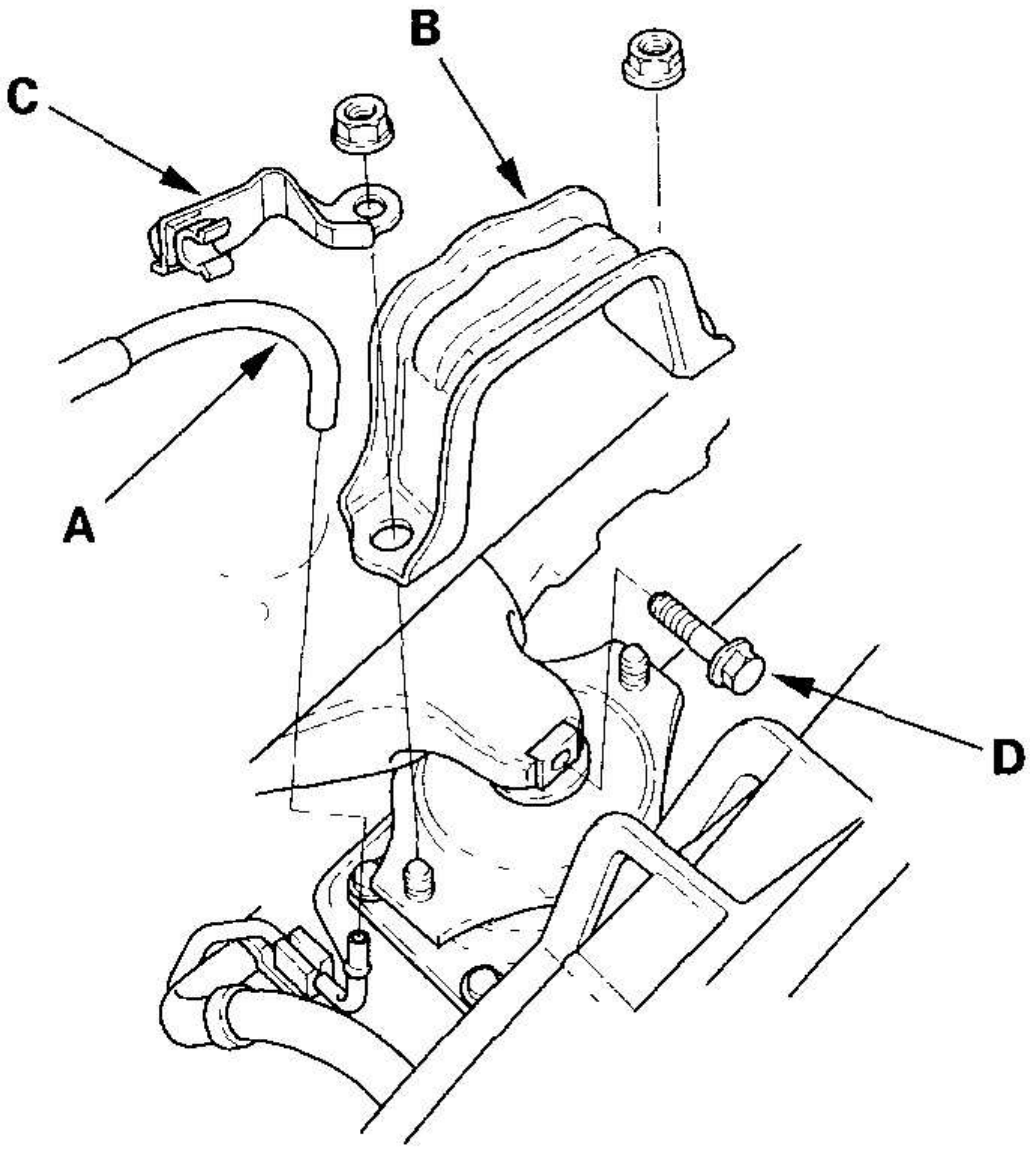


Fig. 27: Removing Vacuum Hose (A) From Vacuum Line (AT)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

52. Remove the rear mount stop (A), then remove the rear mount bolt (B).

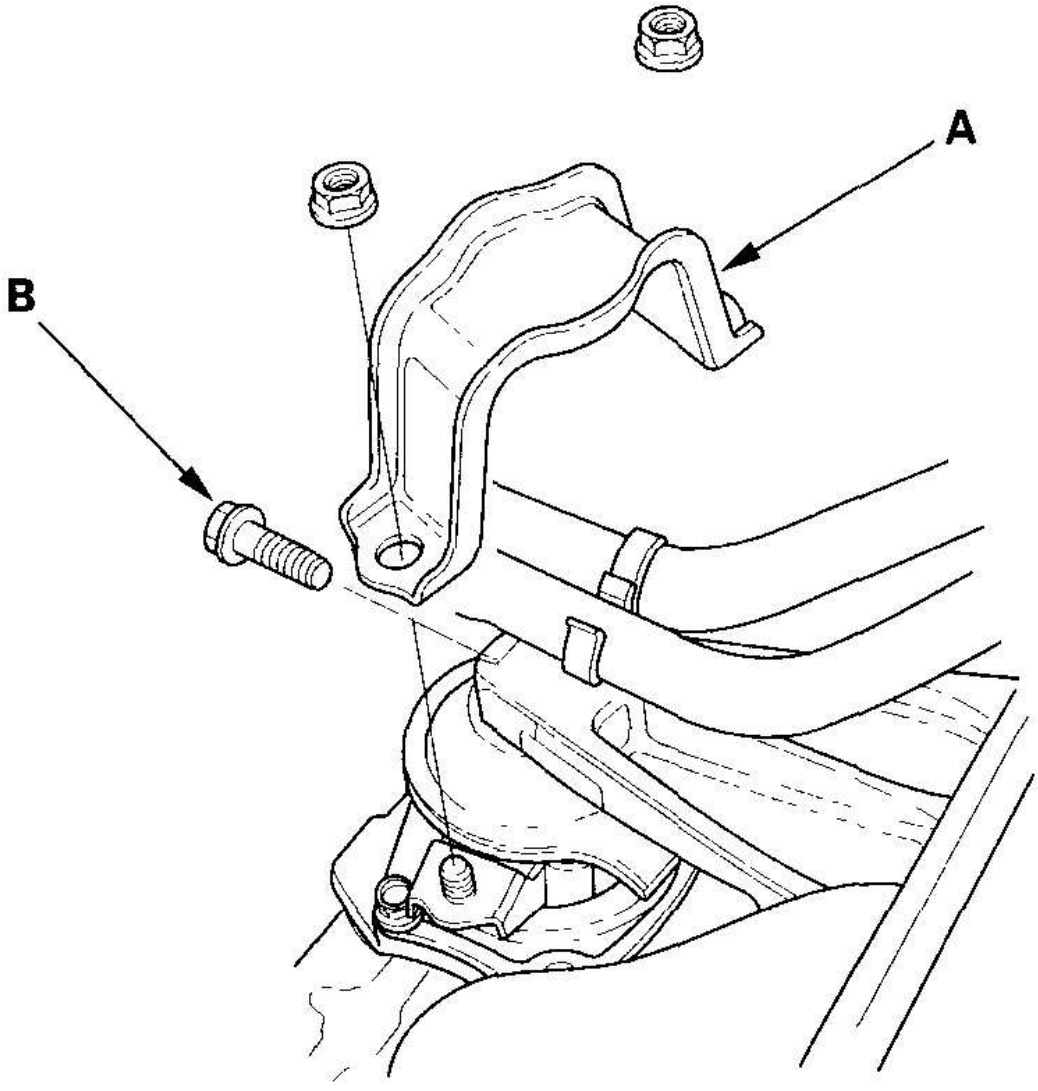


Fig. 28: Removing Rear Mount Stop
Courtesy of AMERICAN HONDA MOTOR CO., INC.

53. Check that the engine/transmission is completely free of vacuum hoses, fuel

and coolant hoses, and electrical wiring.

54. Slowly lower the engine/transmission assembly about 150 mm (6 in.). Check once again that all hoses and wires are disconnected from the engine/transmission.
55. Raise the engine/transmission assembly from under the vehicle.

ENGINE INSTALLATION

1. Install the accessory brackets and tighten their bolts to the specified torques.

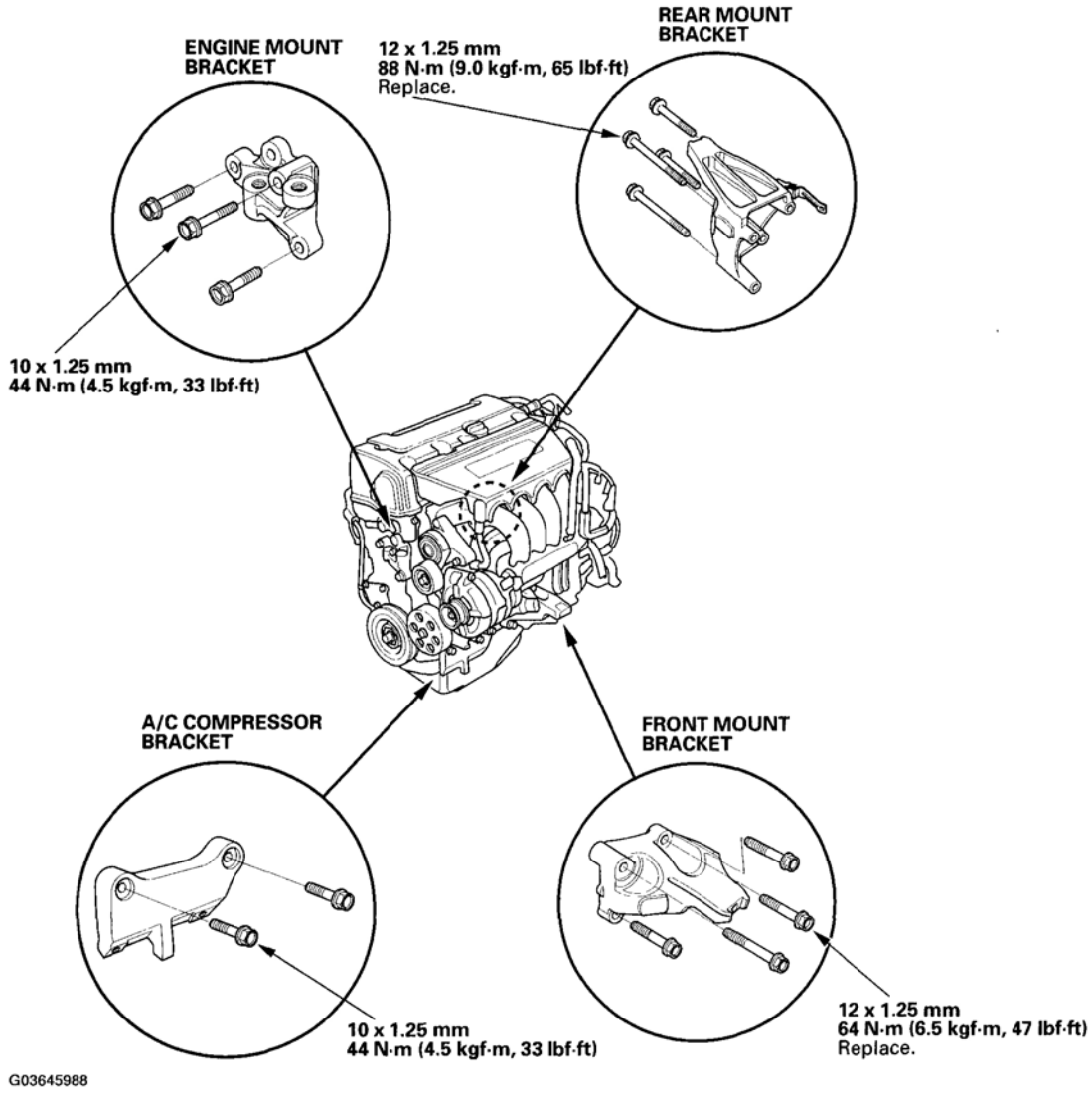


Fig. 29: Installing Accessory Brackets

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the engine/transmission assembly into position in the vehicle, then remove the chain hoist from the engine.

NOTE: Reinstall the mounting bolts/support nuts in the sequence given. Failure to follow this sequence may cause excessive noise and vibration, and reduce bushing life.

3. M/T model: Tighten the front mount bolt (A), then install the front mount stop (B).

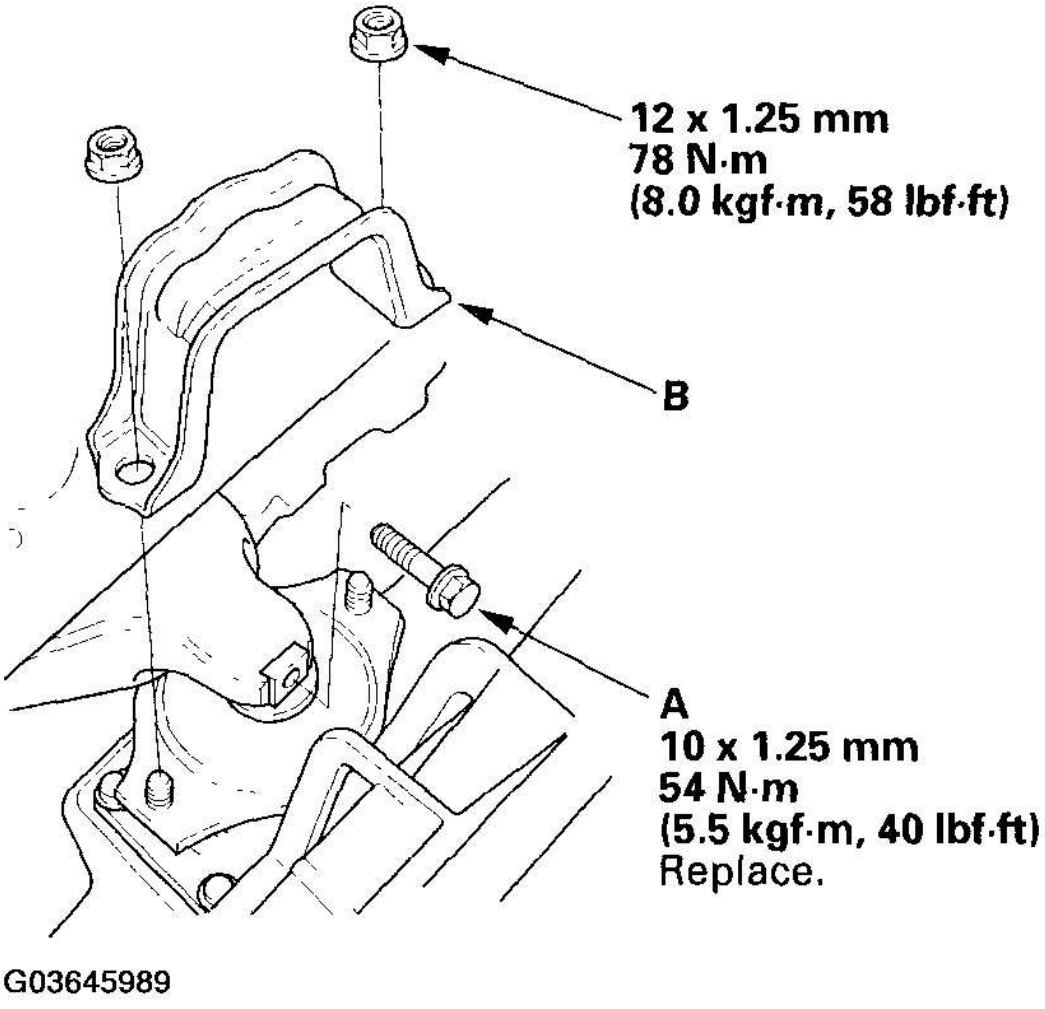


Fig. 30: Tightening Front Mount Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. A/T model: Tighten the front mount bolt (A), then install the front mount stop (B) and vacuum hose clamp bracket (C). Install vacuum hose (D).

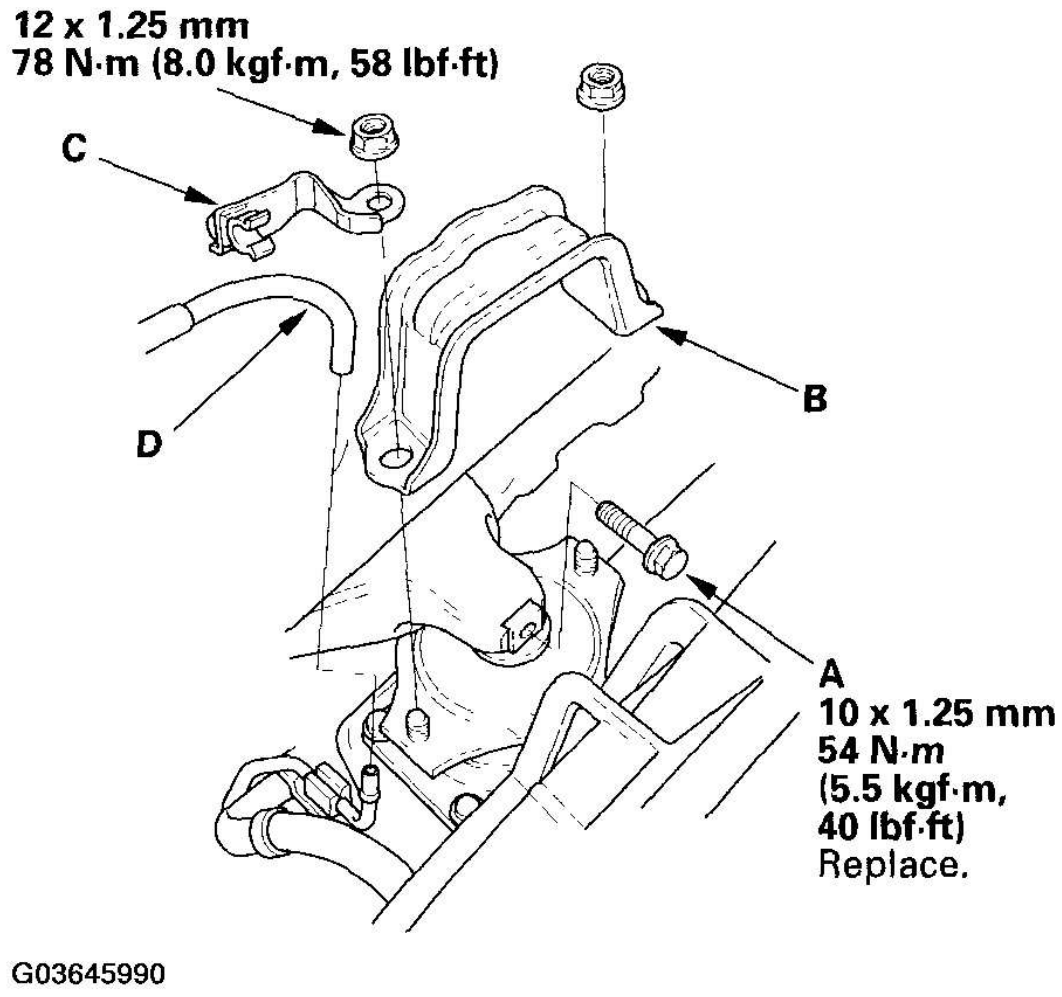


Fig. 31: Tightening Front Mount Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Tighten the rear mount bolt (A), then install the rear mount stop (B).

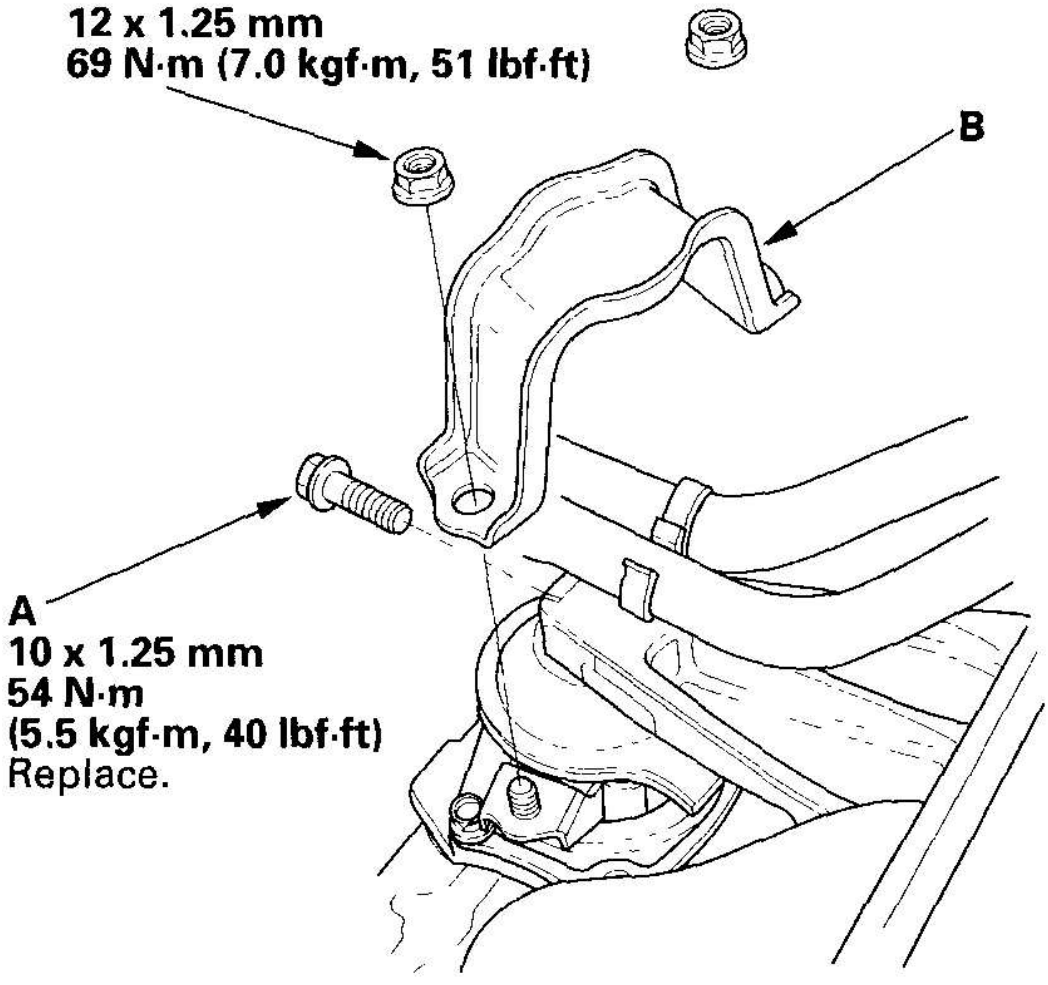


Fig. 32: Tightening Rear Mount Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the upper bracket (A), then tighten the bolts in the numbered sequence shown below.

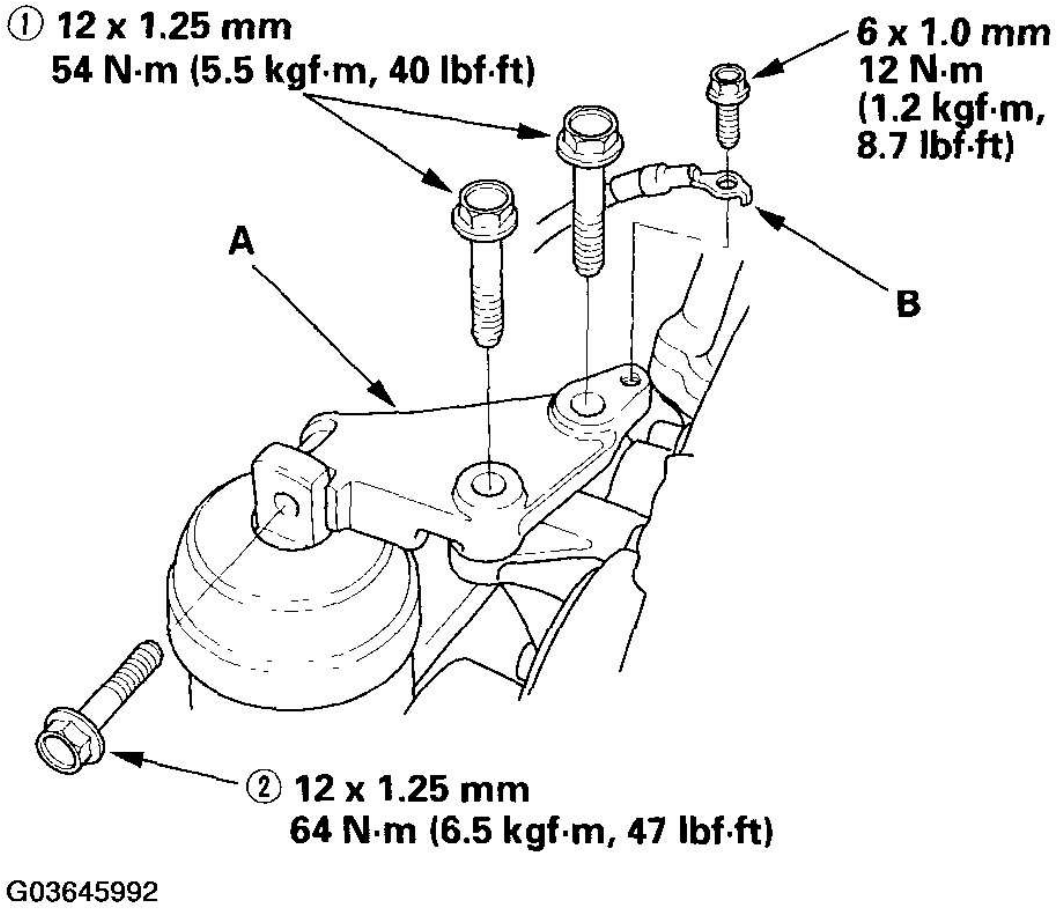


Fig. 33: Installing Upper Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the ground cable (B).
8. M/T model: Loosen the mount bolt (A), then install the transmission upper mount/bracket assembly (B), clutch line clamp bracket (C), and ground cable (D).

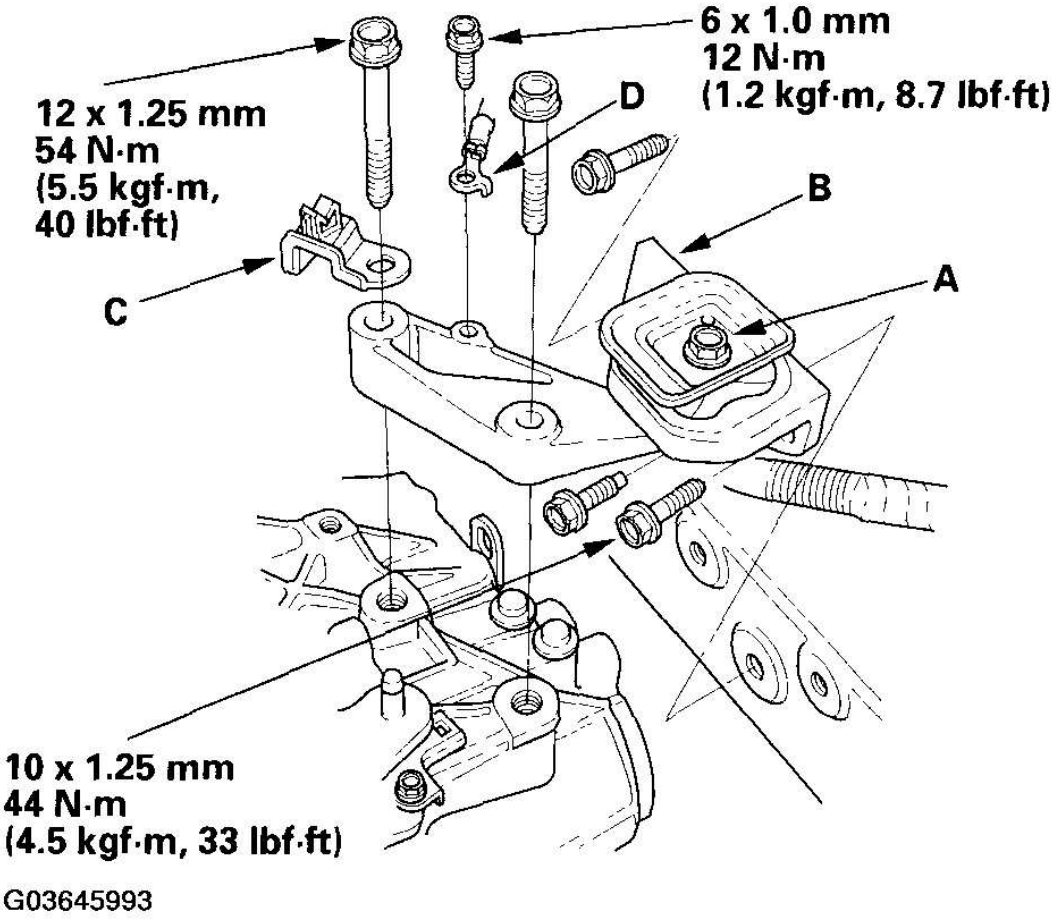


Fig. 34: Loosening Mount Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. A/T model: Loosen the mount bolt (A) and bracket plate mounting bolts (B), then install the transmission upper mount/bracket assembly (C), and ground cable (D).

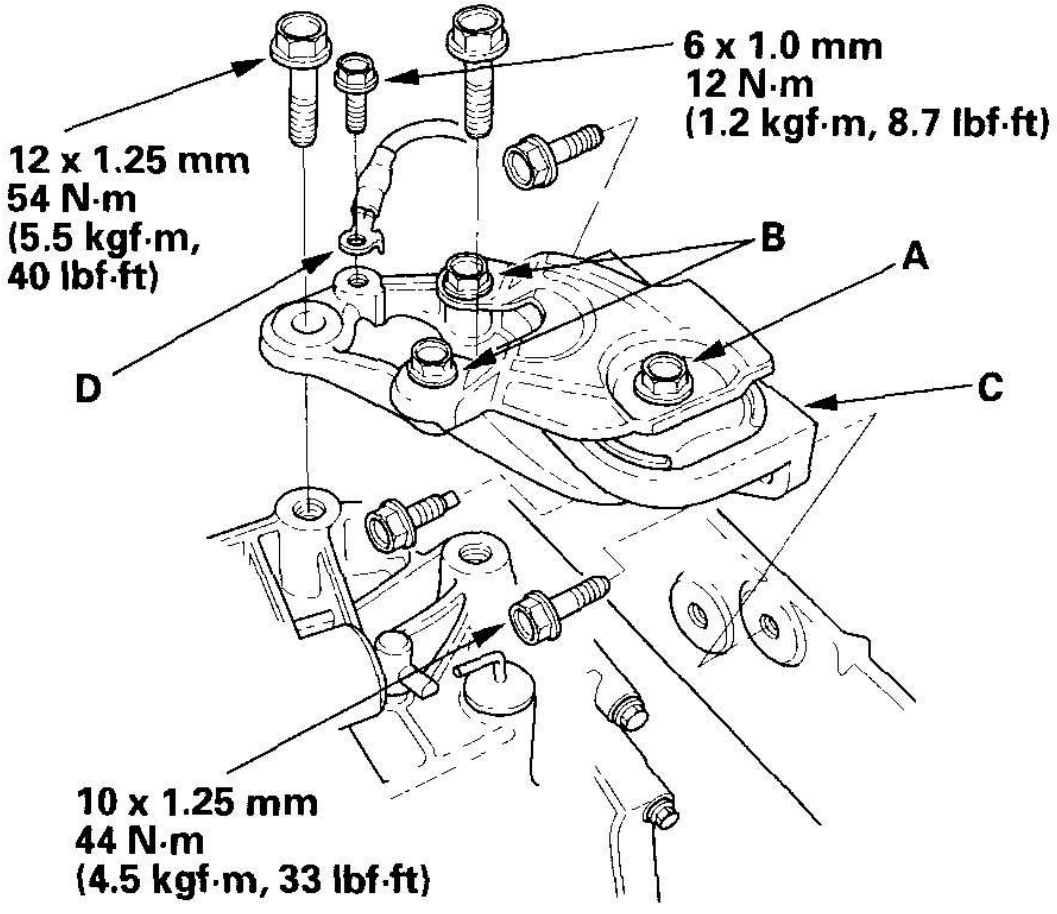


Fig. 35: Loosening Mount Bolt (A) And Bracket Plate Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. M/T model: Tighten the transmission upper mount bolt.

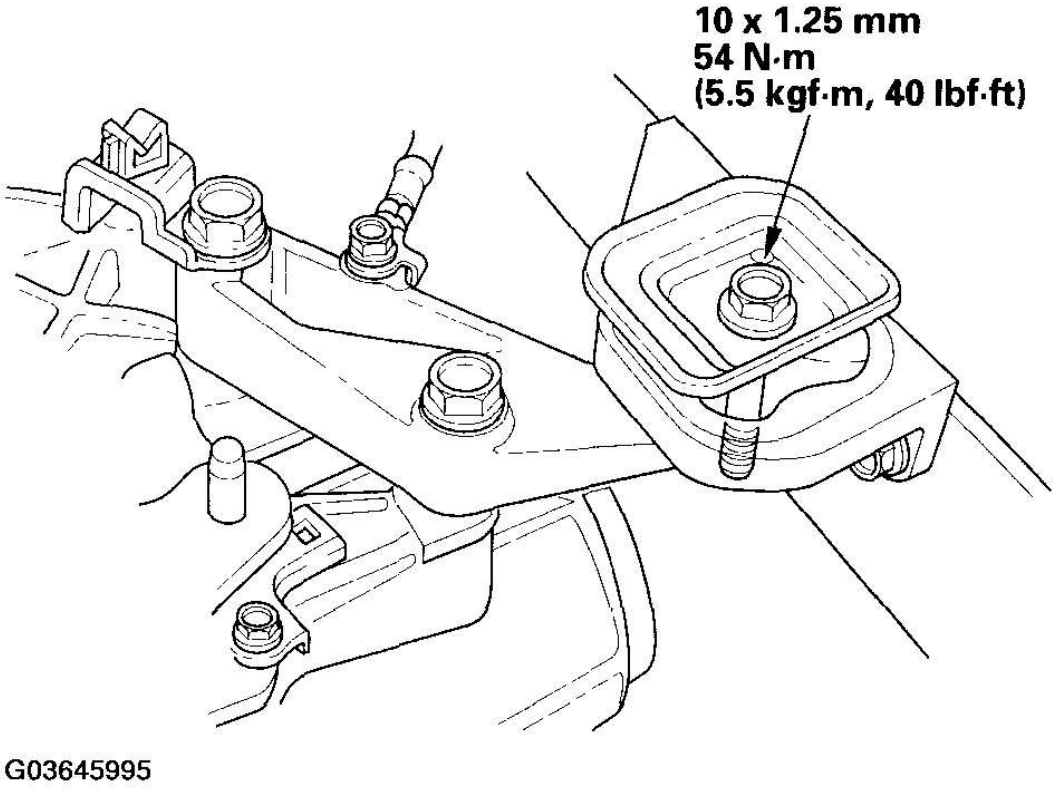


Fig. 36: Tightening Transmission Upper Mount Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. A/T model: Tighten the transmission upper mount bracket plate mounting bolts (A), then tighten the transmission upper mount bolt (B).

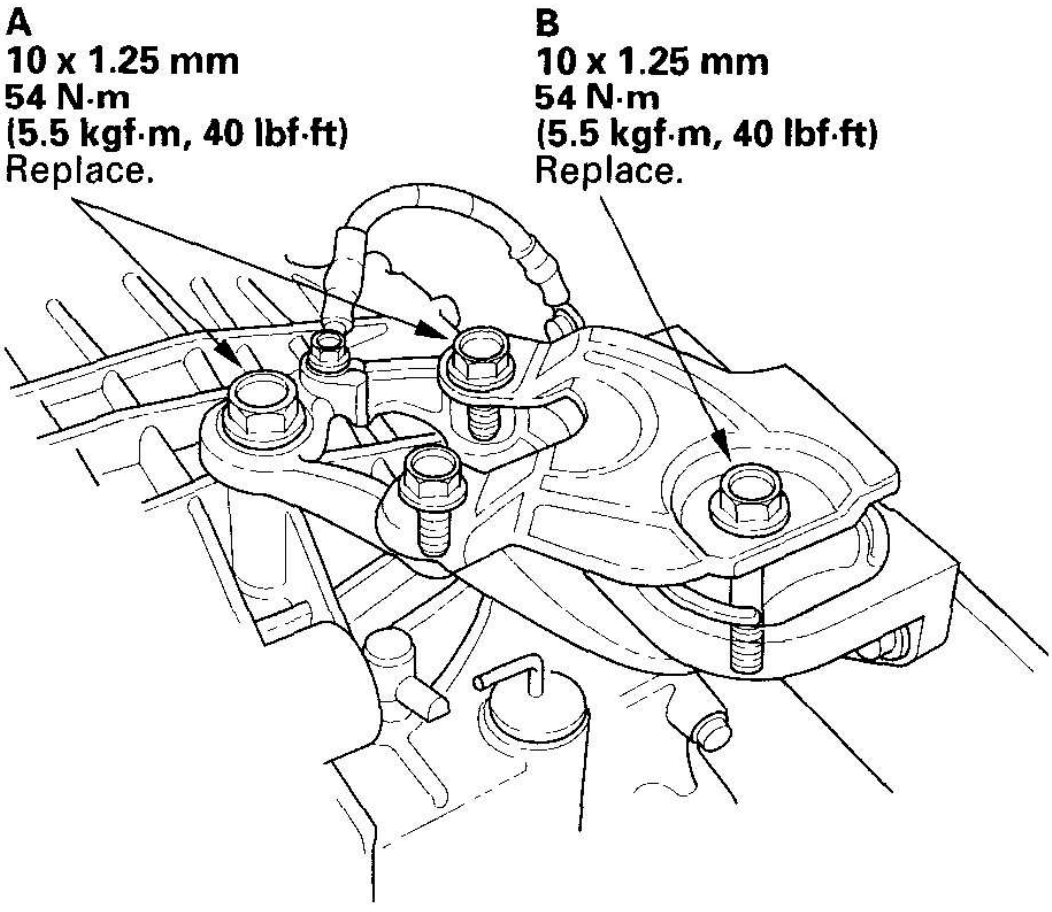


Fig. 37: Tightening Transmission Upper Mount Bracket Plate Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Raise the vehicle on the lift to full height.
13. Tighten the nuts securing the transmission lower front mount and transmission lower rear mount.

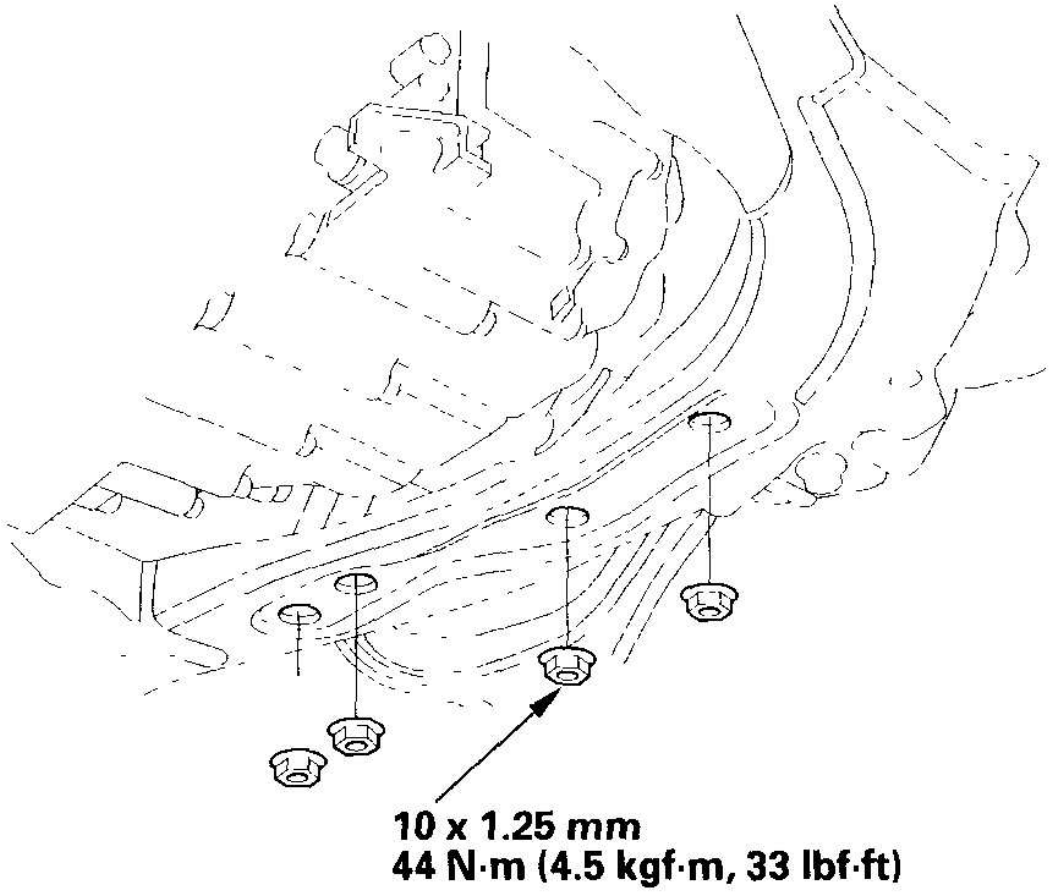


Fig. 38: Tightening Nuts Securing Transmission Lower Front Mount
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. A/T model: Install the shift control cable (A).

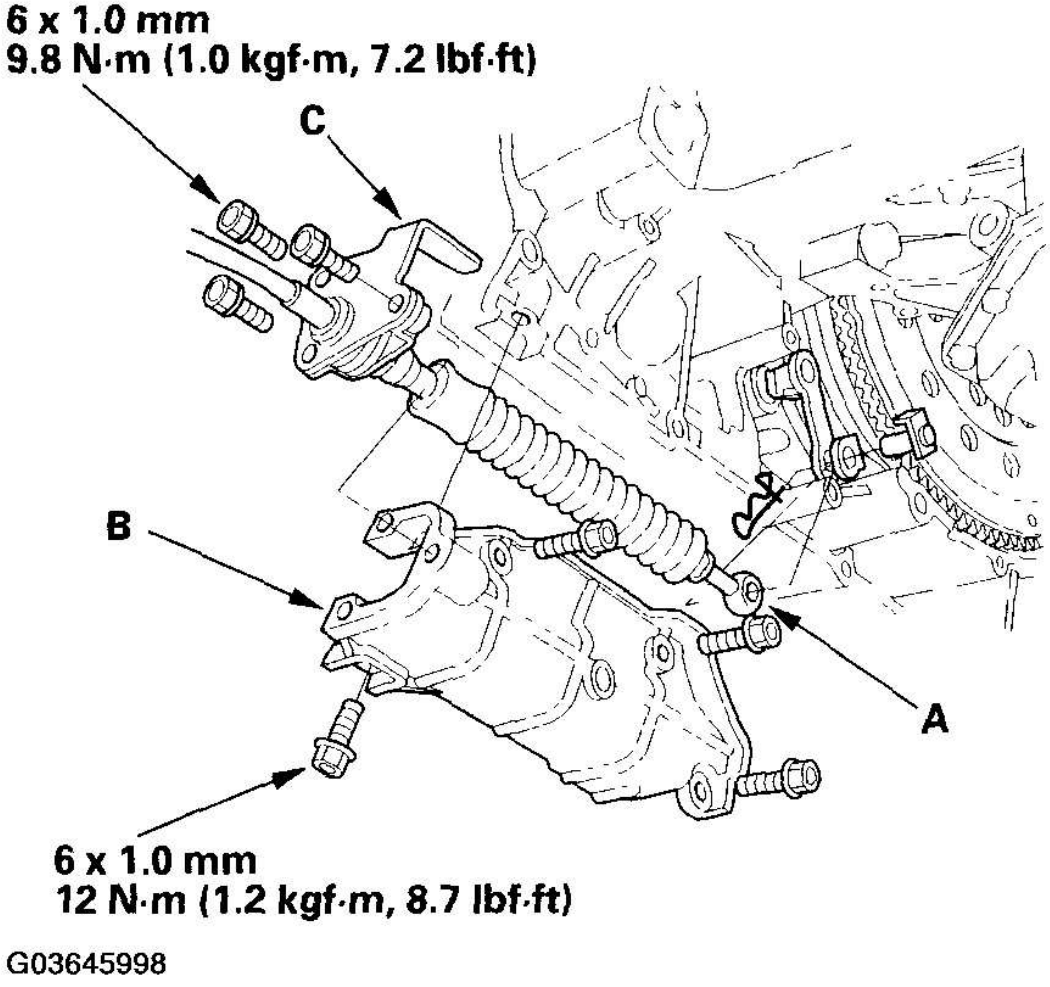


Fig. 39: Installing Shift Control Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. A/T model: Install the shift cable cover (B), then install the shift cable holder (C).
16. Install exhaust pipe A. Use new gaskets (B) and new self locking nuts (C).

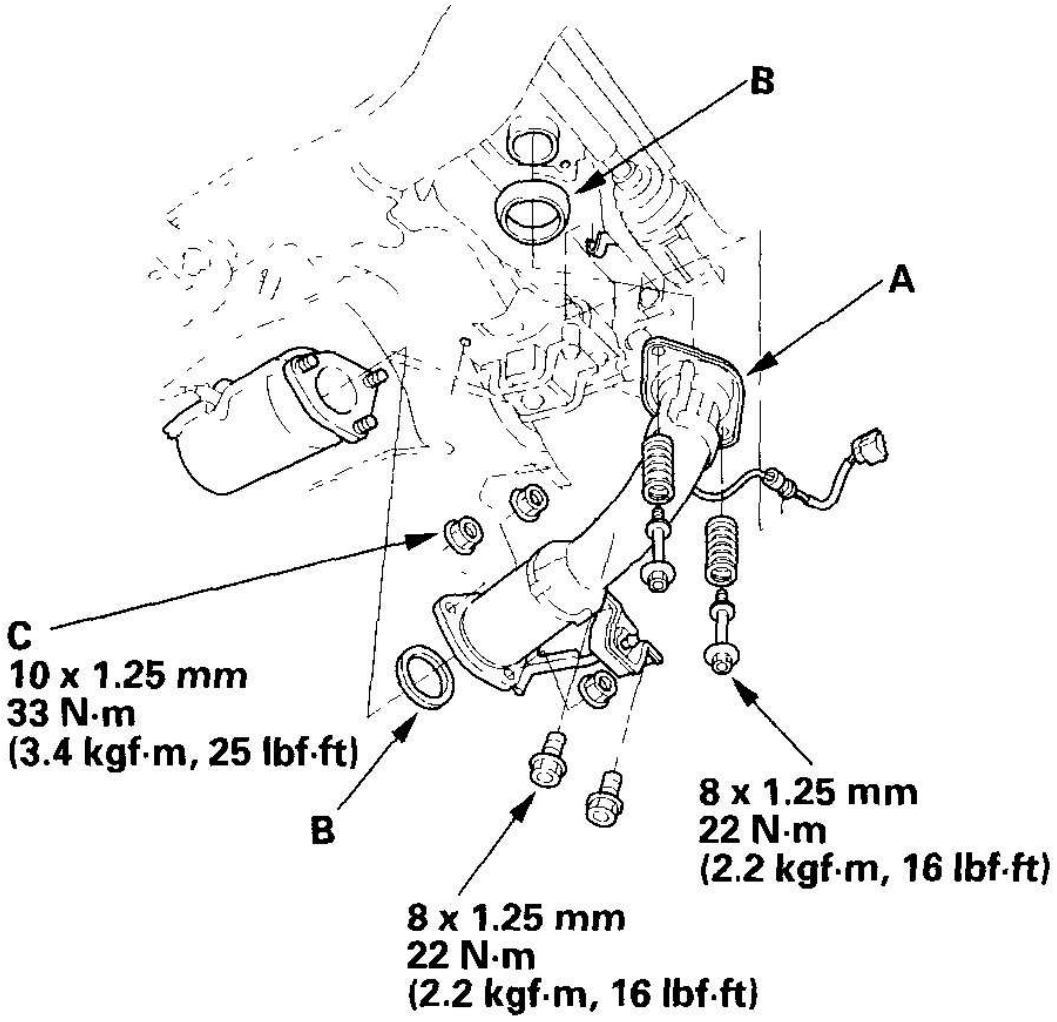


Fig. 40: Installing Exhaust Pipe A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Install a new set ring on the end of each driveshaft, then install the driveshafts. Make sure each ring "clicks" into place in the differential and intermediate shaft.
18. Connect the suspension lower arm ball joints (see step 8 on **LOWER ARM REMOVAL/INSTALLATION**).
19. Install the damper fork (see step 2 on **INSTALLATION**).

20. Connect the stabilizer links (see **STABILIZER LINK REPLACEMENT**).
21. Lower the vehicle on the lift.
22. Check the quick connector (A) and set ring (B) for cracks or damage. If the connector and/or set ring are cracked or damaged, replace the connector.

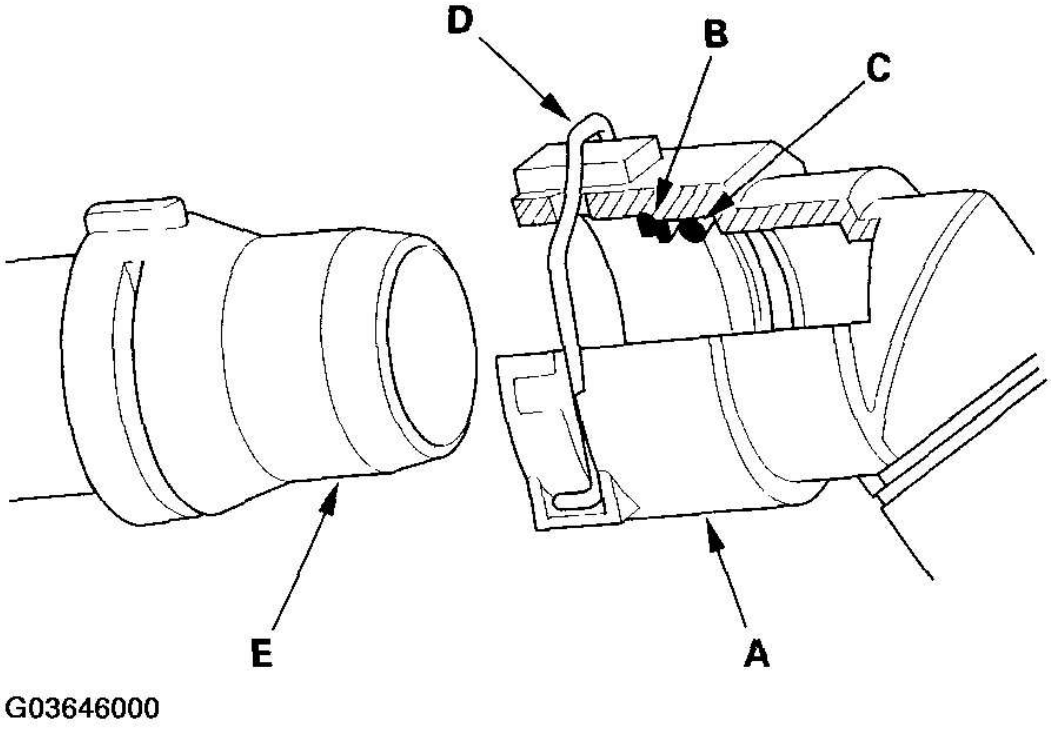


Fig. 41: Checking Quick Connector And Set Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Make sure the set ring is in place inside the quick connector. If the set ring is off the connector, replace the quick connector.
24. Replace the O-ring (C) in the quick connector.
25. Check the lock (D). If the lock is damaged or deformed, replace it. When installing the new lock on the connector, press it straight down along the groove.
26. Clean the connecting surface of the thermostat cover (E), then apply clean engine coolant around the connecting surface.

27. Push down the lock (A), then push the quick connector (B) onto the thermostat cover until you hear it click.

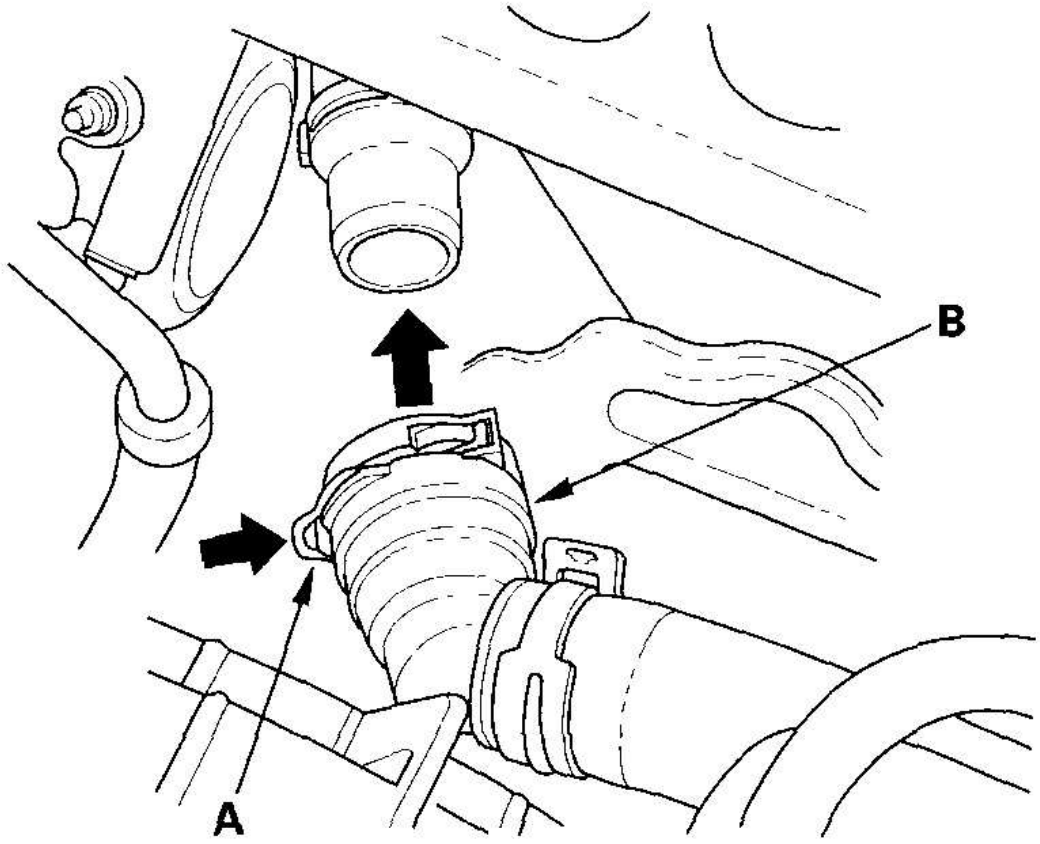


Fig. 42: Pushing Down Lock
Courtesy of AMERICAN HONDA MOTOR CO., INC.

28. Install the upper radiator hose (A) and heater hoses (B).

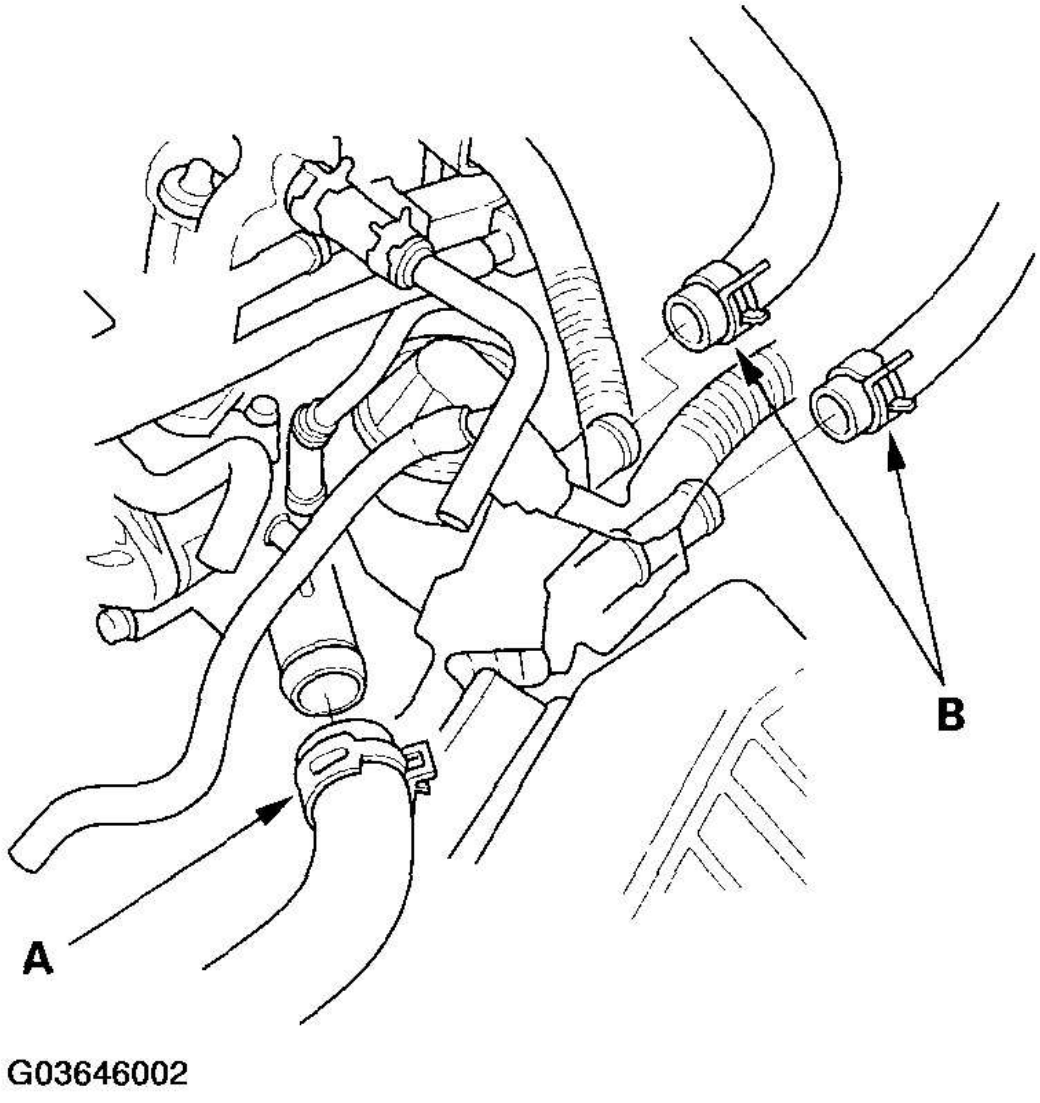
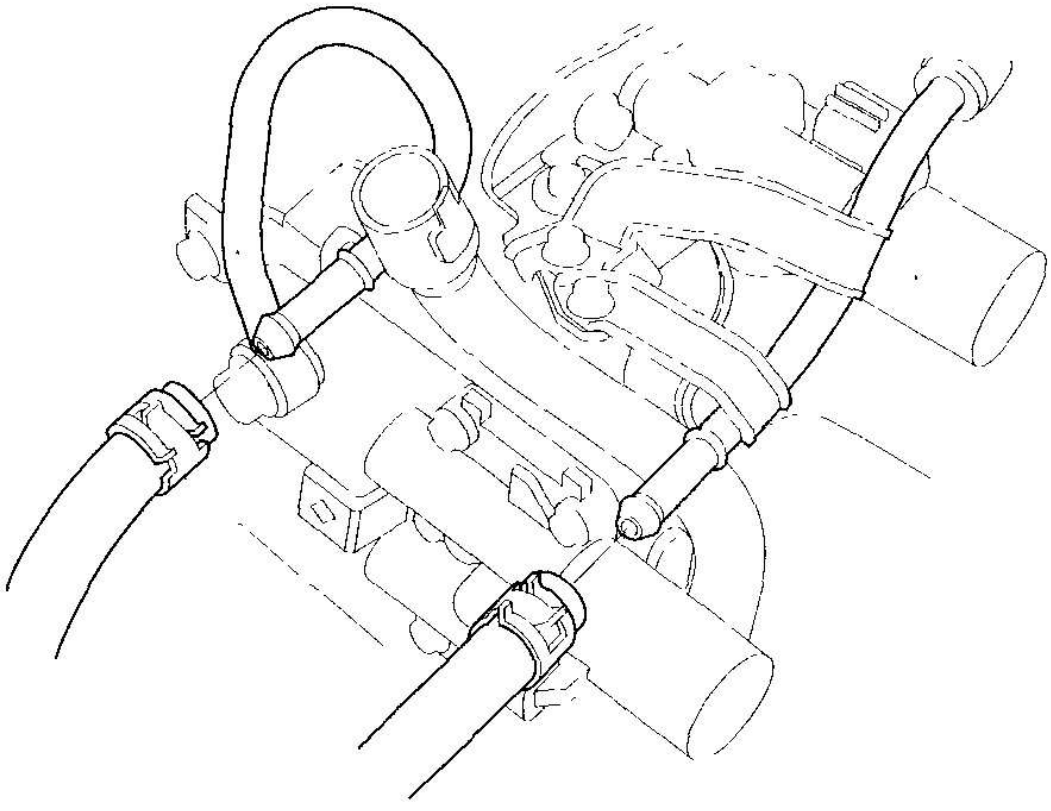


Fig. 43: Installing Upper Radiator Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

29. A/T model: Install the automatic transmission fluid (ATF) cooler hoses.



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Fig. 44: Installing Automatic Transmission Fluid (ATF) Cooler Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

30. Install the A/C compressor.

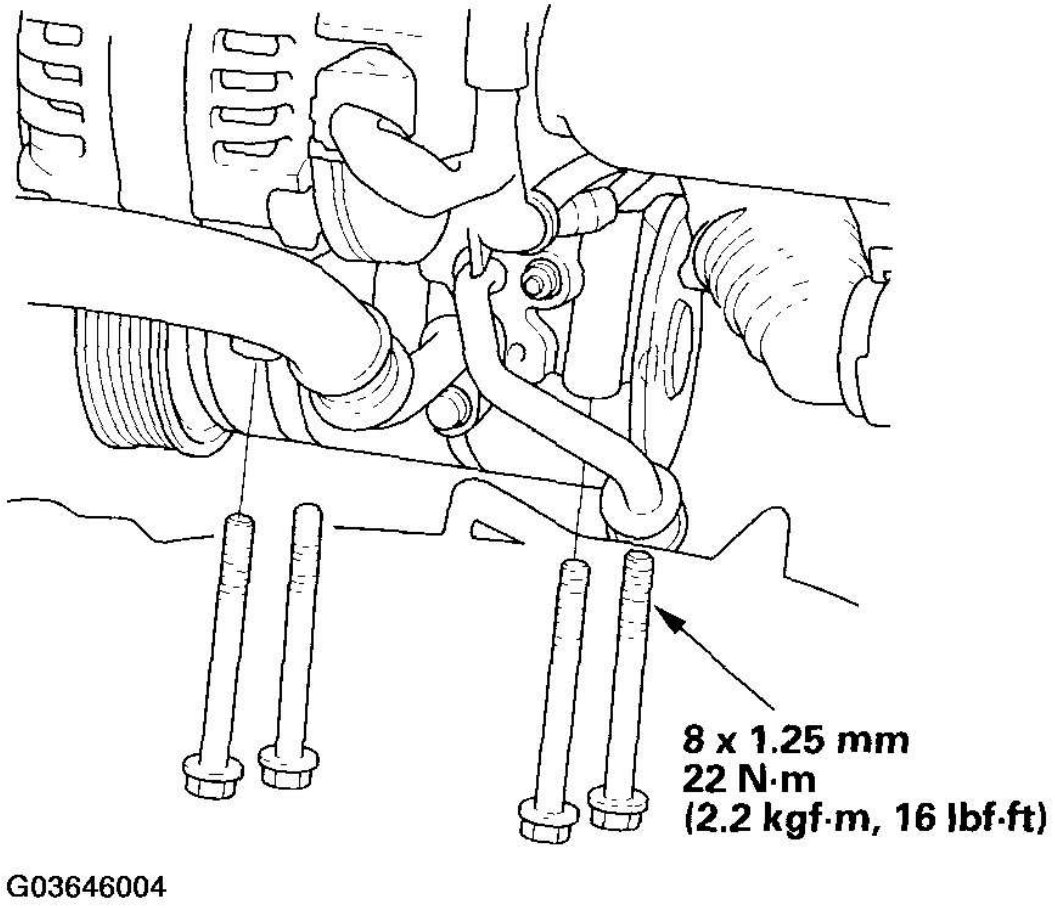


Fig. 45: Installing A/C Compressor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

31. Install the power steering (P/S) pump (A), and the P/S hose clamp (B).

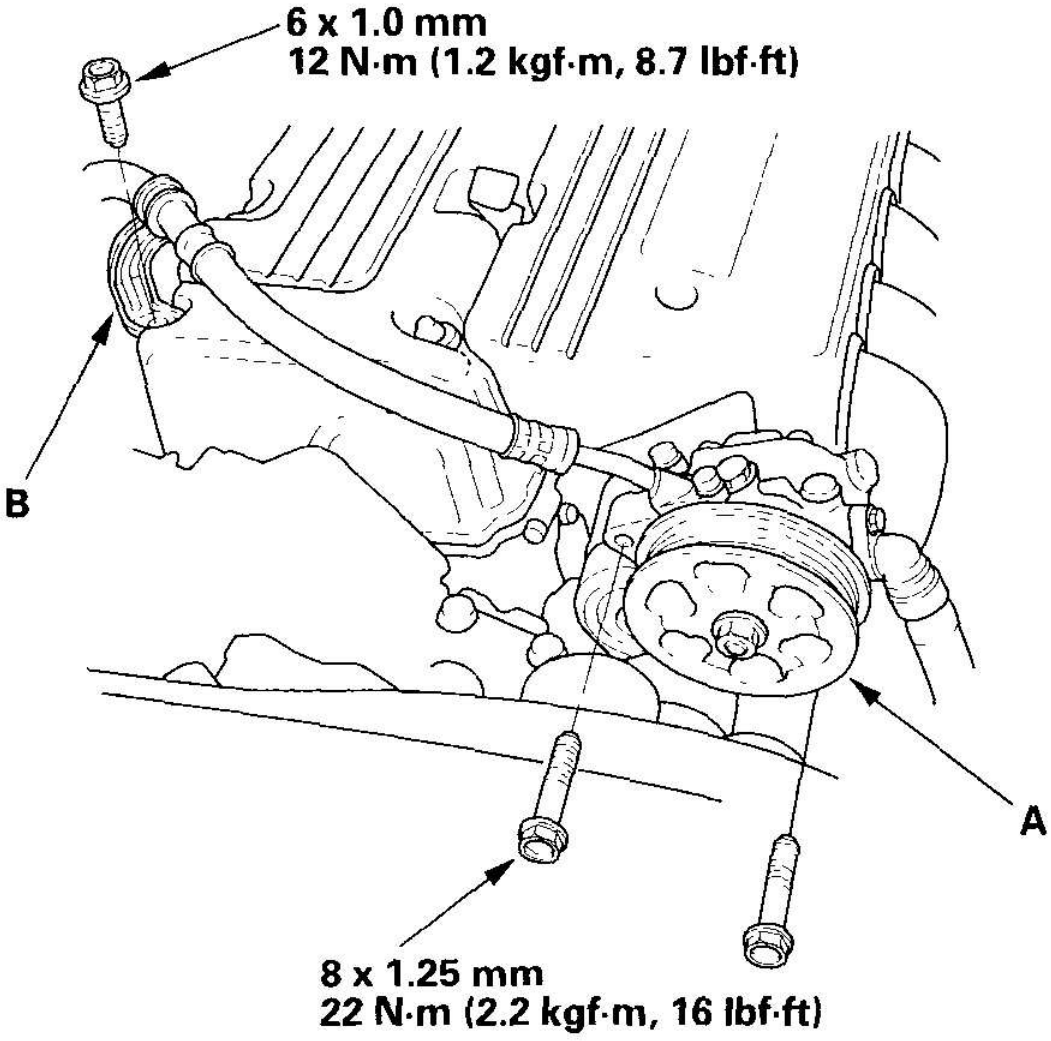
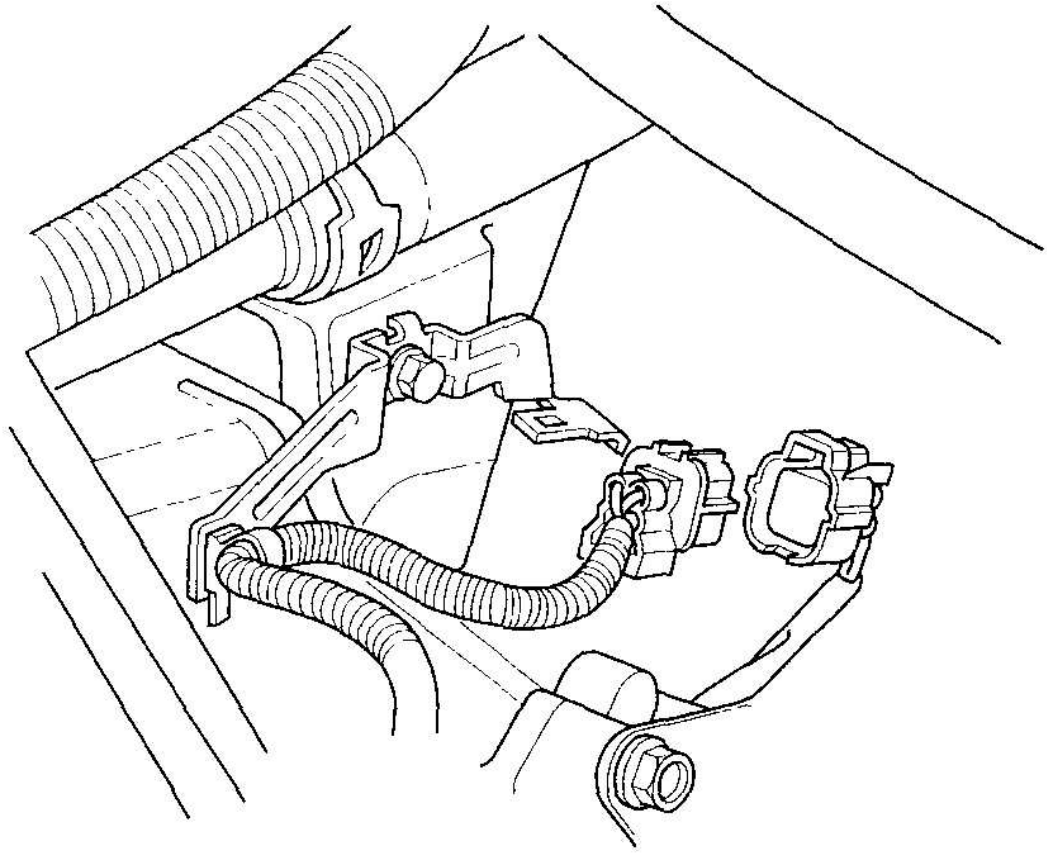


Fig. 46: Installing Power Steering (P/S) Pump (A)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

32. Install the drive belt.
33. Connect the air fuel ratio (A/F) sensor connector.



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Fig. 47: Connecting Air Fuel Ratio (A/F) Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

34. M/T model: Install the select cable (A) with the plastic washers (B) washers (C), and new cotter pins (D).

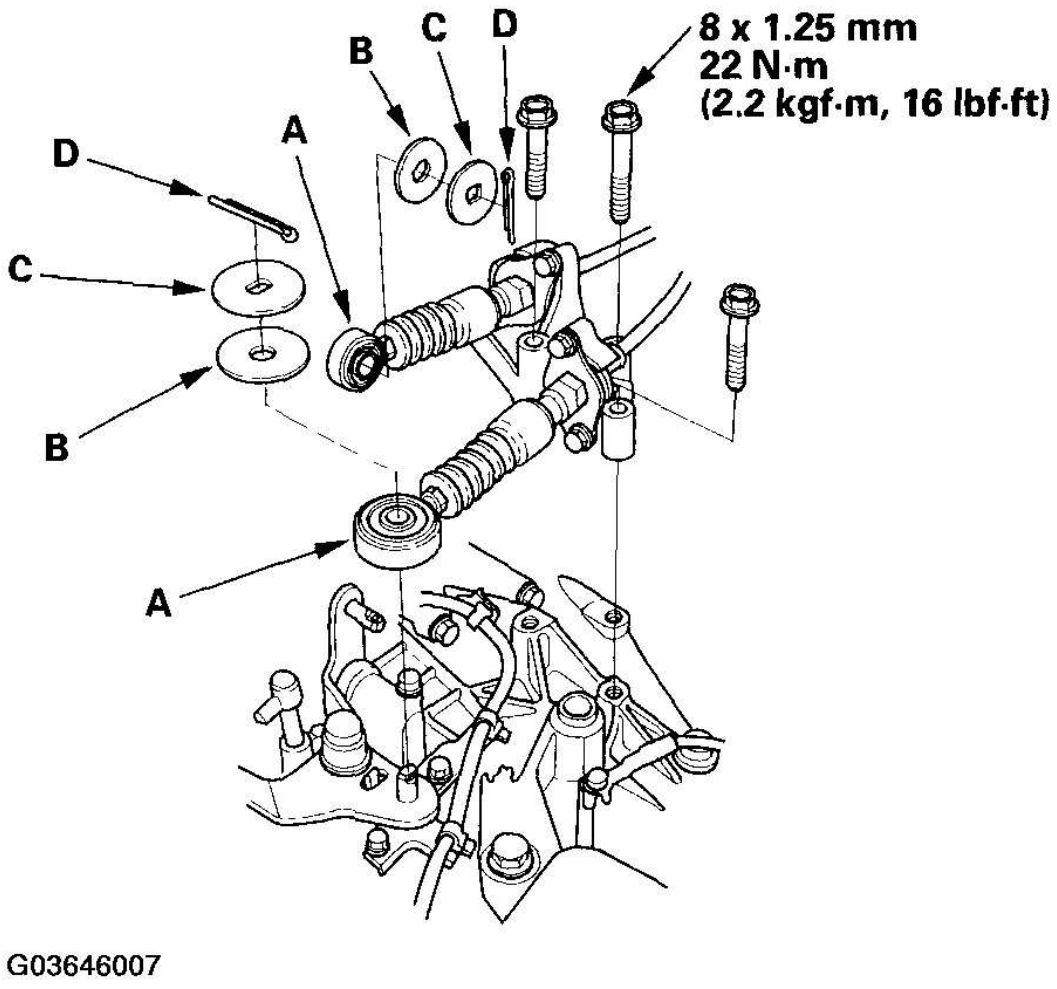


Fig. 48: Installing Select Cable (A) And Shift Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

35. M/T model: Install the clutch slave cylinder (A) and clutch line bracket mounting bolt (B).

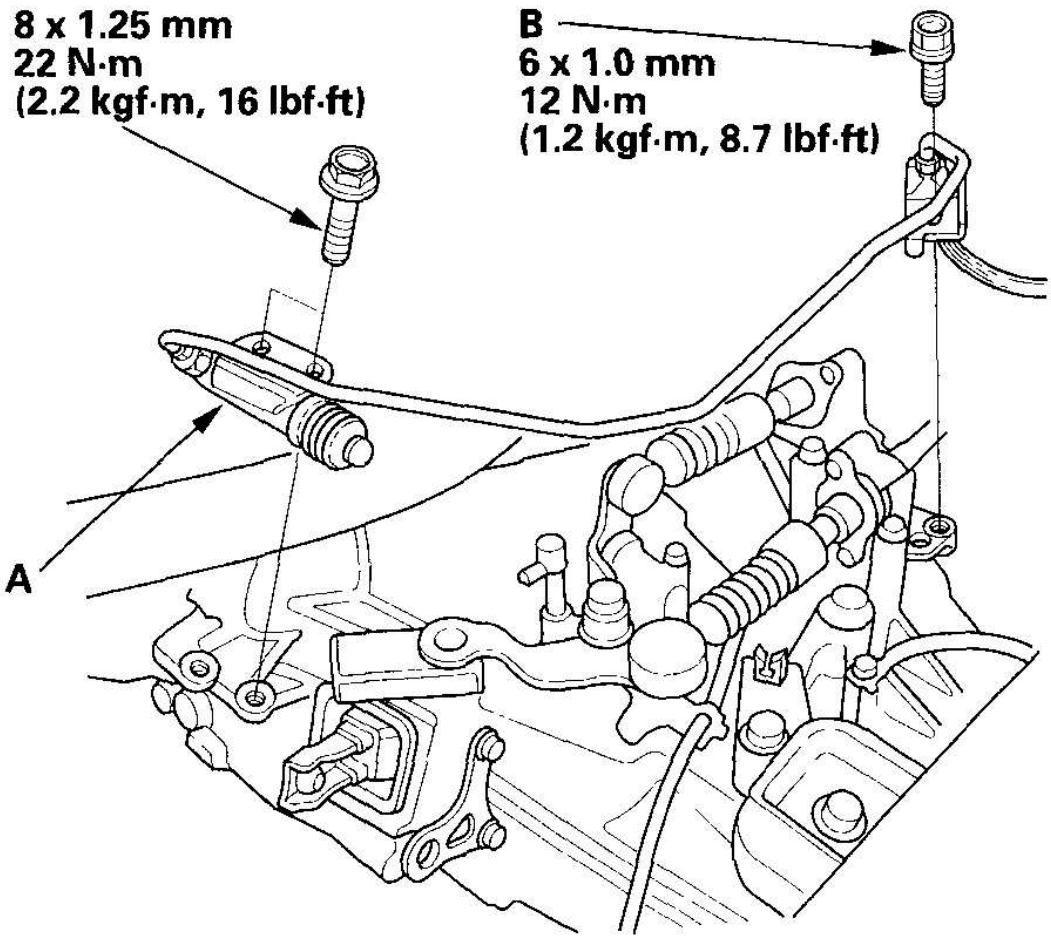


Fig. 49: Installing Clutch Slave Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

36. '06-07 models: Push the engine control module (ECM)/powertrain control module (PCM) connectors through the bulkhead, then install the grommet (A) and harness clamps (B).

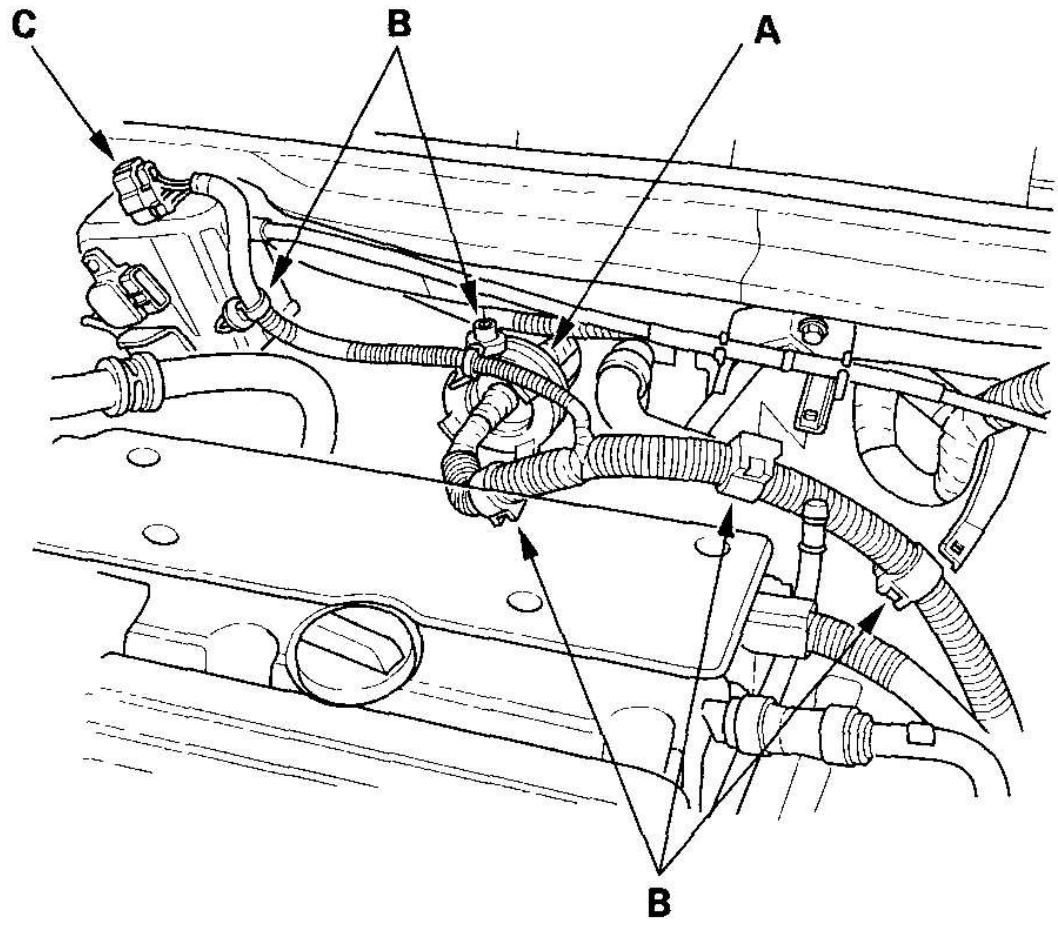


Fig. 50: Installing Grommet And Harness Clamps
Courtesy of AMERICAN HONDA MOTOR CO., INC.

37. Connect the accelerator pedal position (APP) sensor connector (C).
38. '03-05 models: Connect the engine wire harness connectors (A), then install the harness clamp (B).

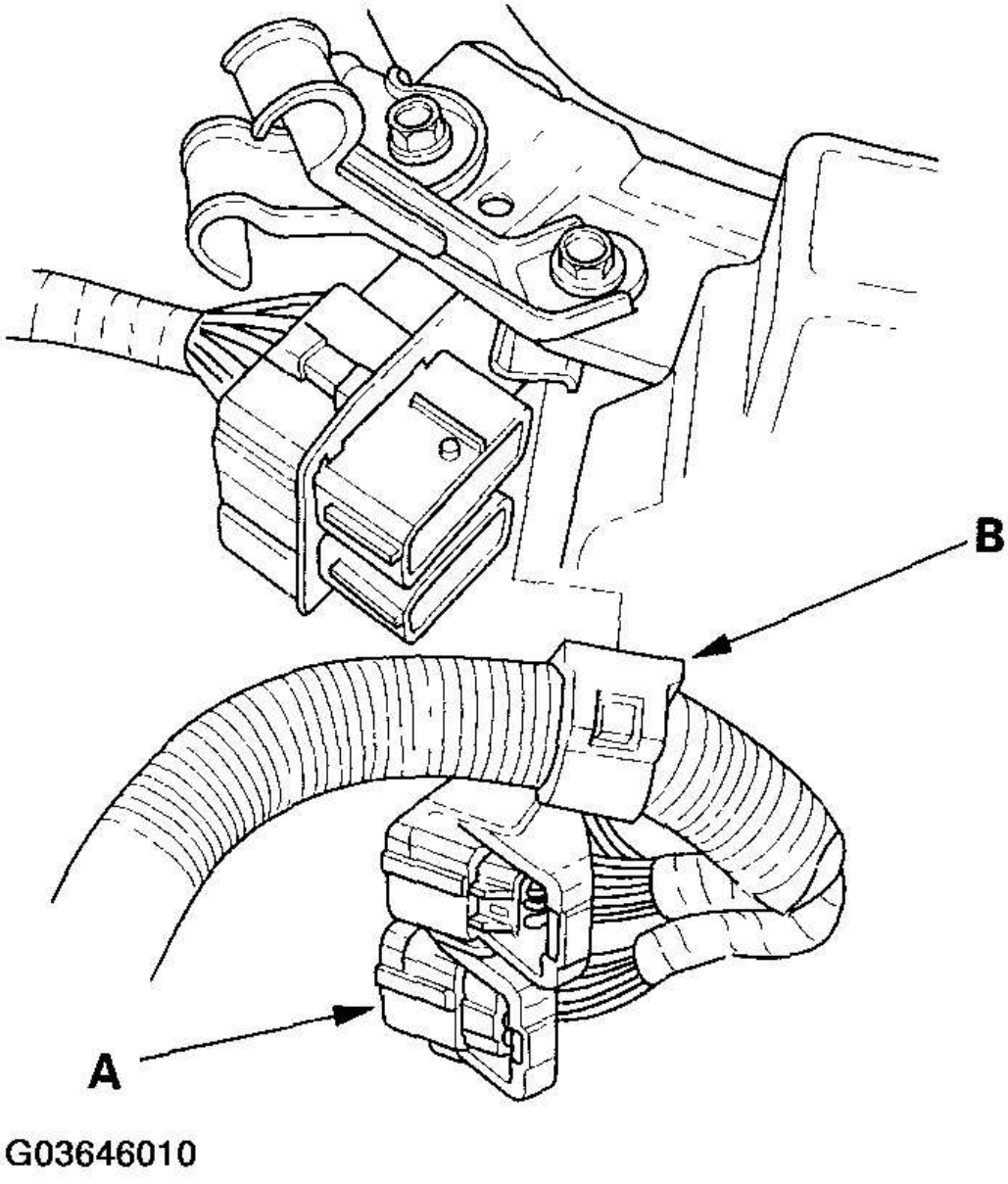


Fig. 51: Connecting Engine Wire Harness Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

39. '06-07 models: Connect the ECM/PCM connectors (A) and main wire harness connectors (B).

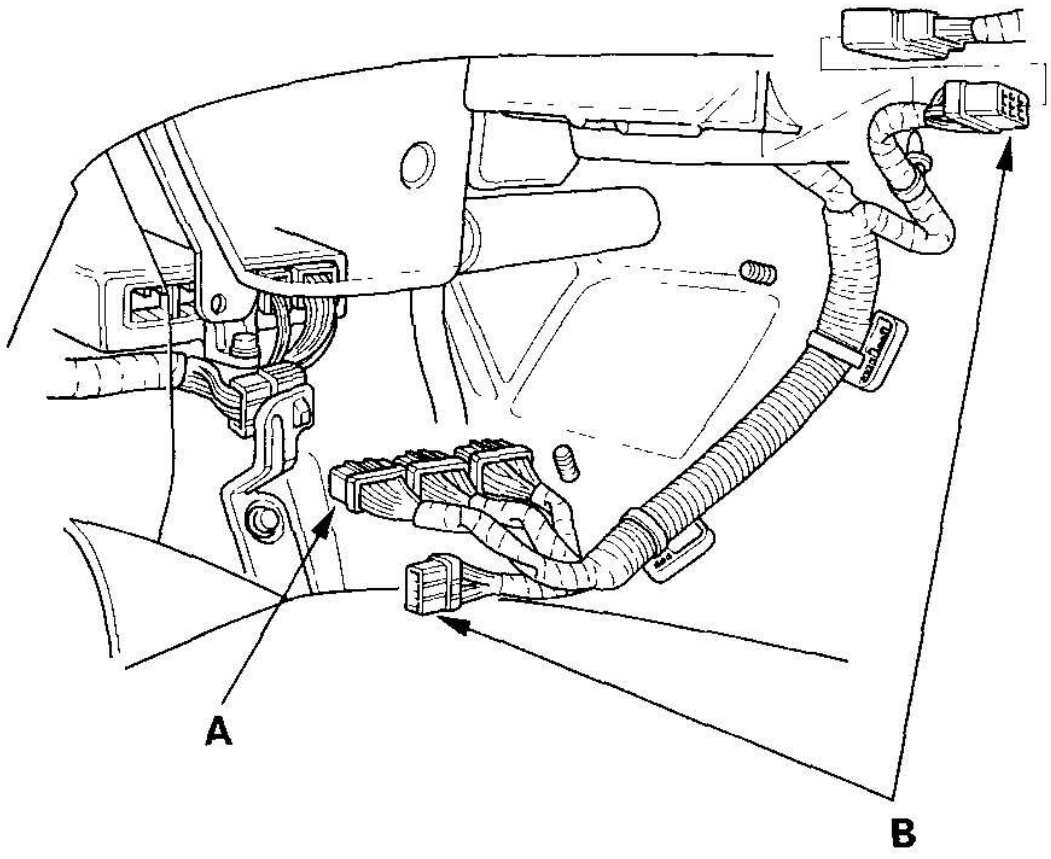


Fig. 52: Connecting ECM/PCM Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

40. Install the evaporative emission (EVAP) canister hose (A) and brake booster vacuum hose (B).

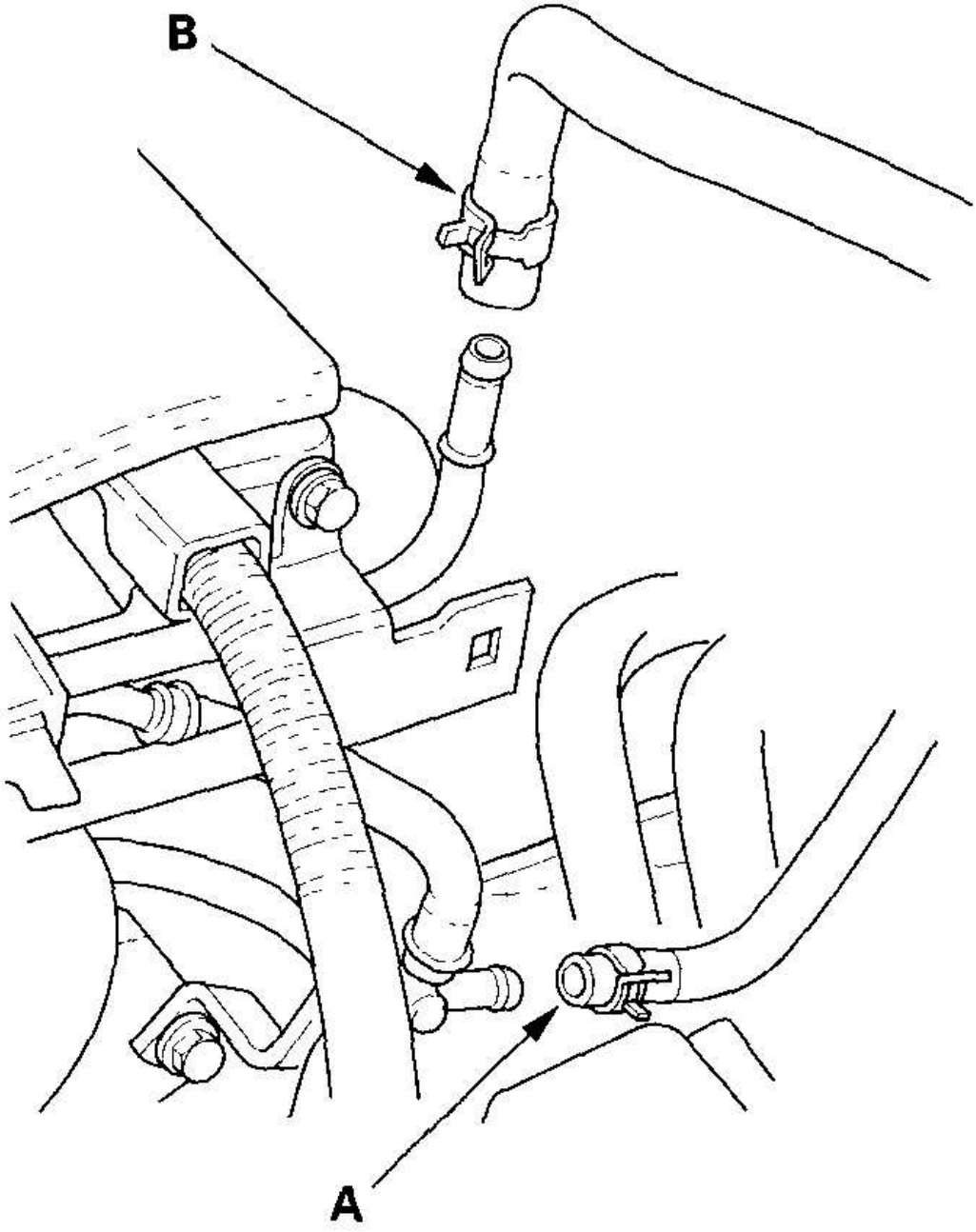


Fig. 53: Installing Evaporative Emission (EVAP) Canister Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

41. Connect the fuel feed hose (see **FUEL LINE/QUICK-CONNECT FITTING INSTALLATION**), then install the quick-connect fitting cover (A). Make sure the connector engages fully.

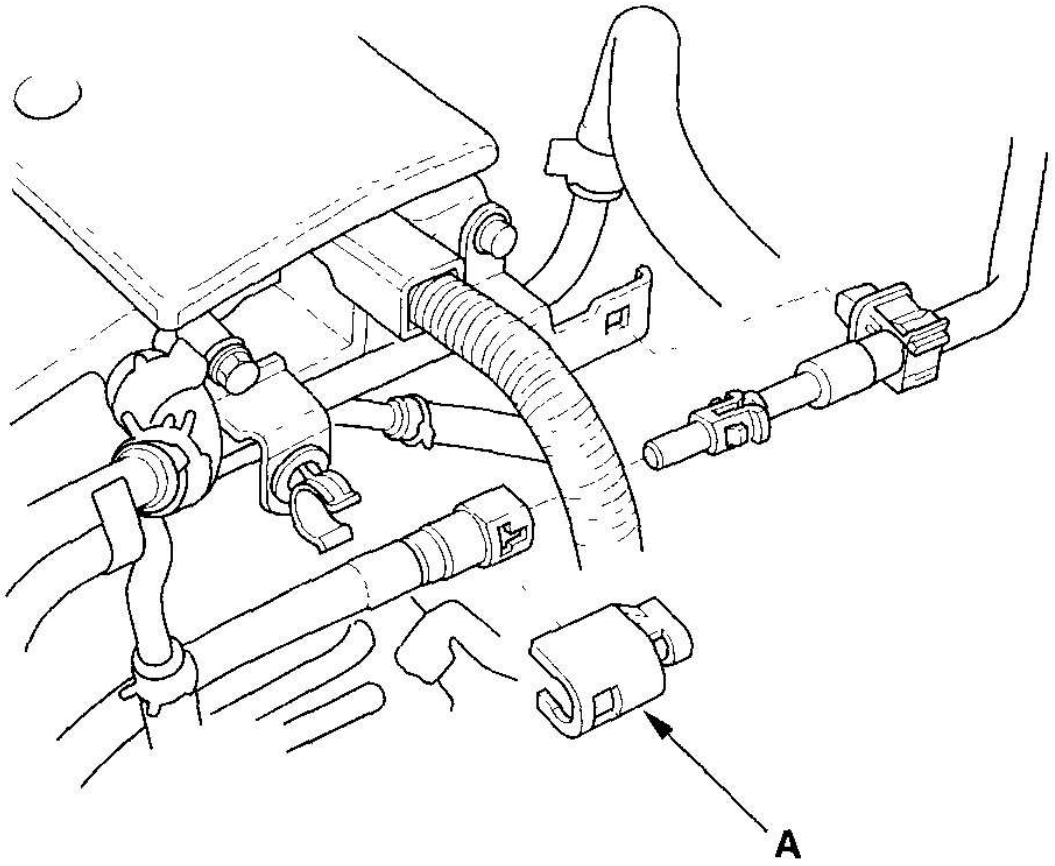


Fig. 54: Installing Quick-Connect Fitting Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

42. '03-05 models: Install the throttle cable (see **THROTTLE BODY REMOVAL/INSTALLATION**), then adjust the cable (see **THROTTLE CABLE ADJUSTMENT**).
43. '03-05 models: Install the cruise control actuator cable (see **CRUISE CONTROL ACTUATOR/CABLE REPLACEMENT**), then adjust it (see **CRUISE CONTROL ACTUATOR CABLE ADJUSTMENT**).

44. '06-07 models: Install the strut brace (A), then install the harness clamp (B) and bolt (C).

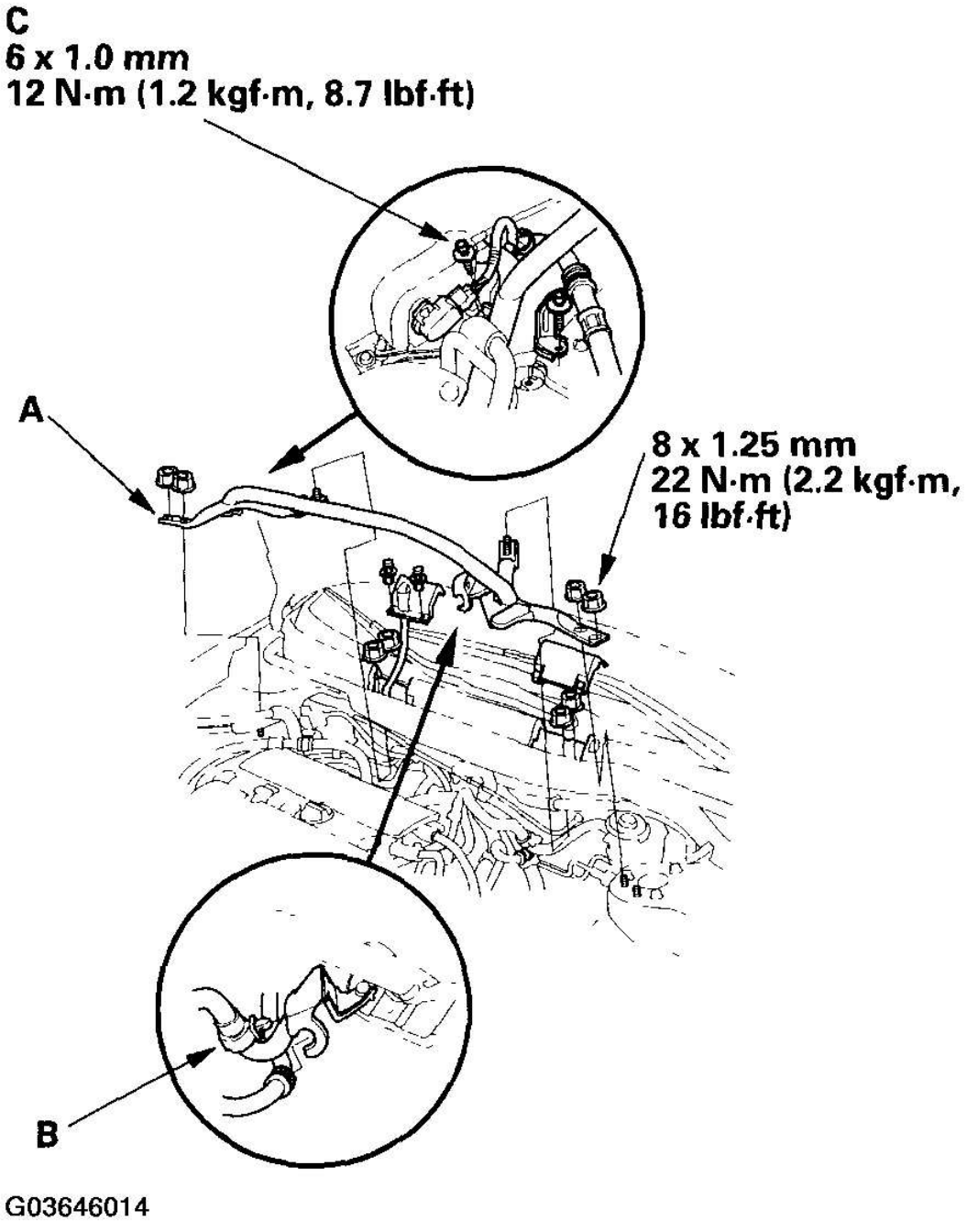


Fig. 55: Installing Strut Brace

Courtesy of AMERICAN HONDA MOTOR CO., INC.

45. Connect the harness connector (A).

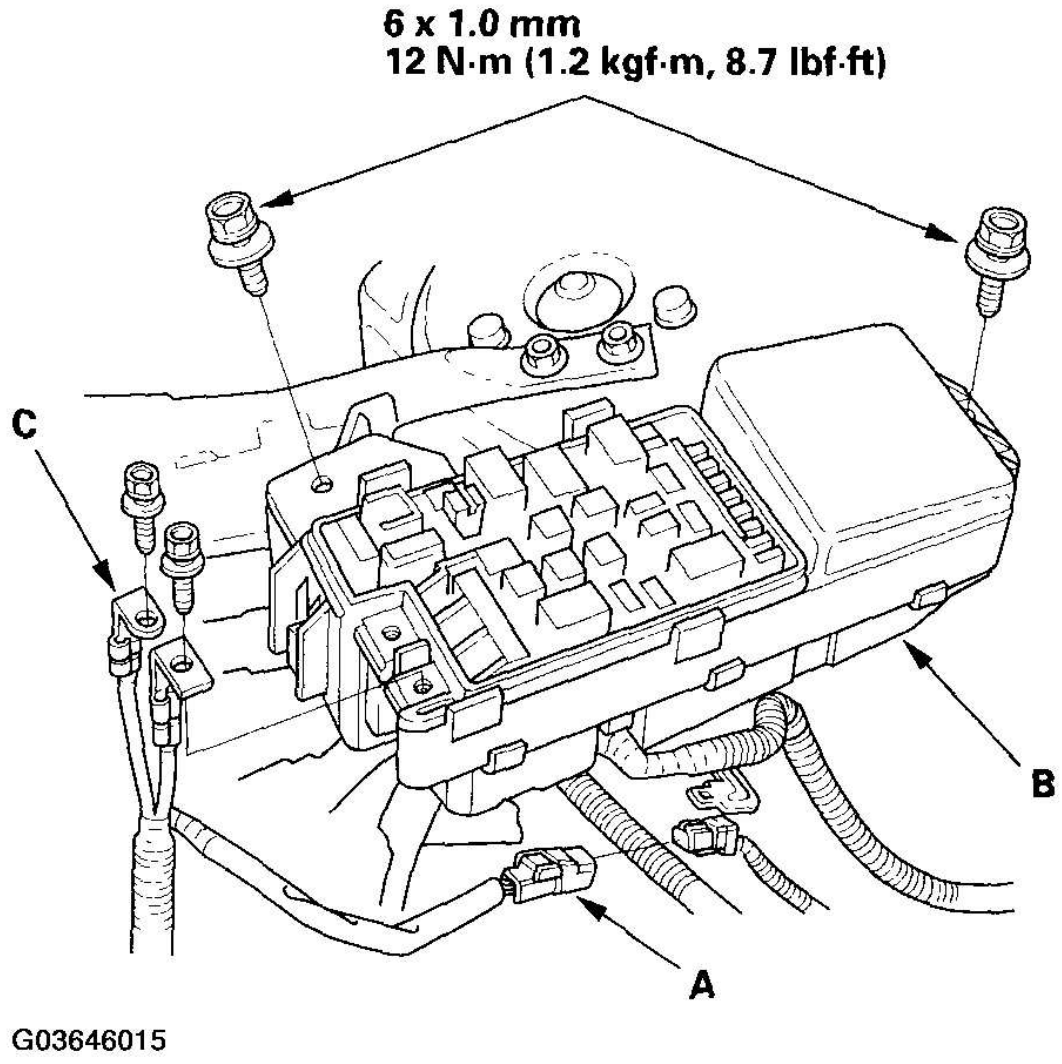


Fig. 56: Connecting Harness Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

46. Install the under-hood fuse/relay box (B), then install the battery cables (C).
47. Install the battery base (A), then install the harness clamp (B).

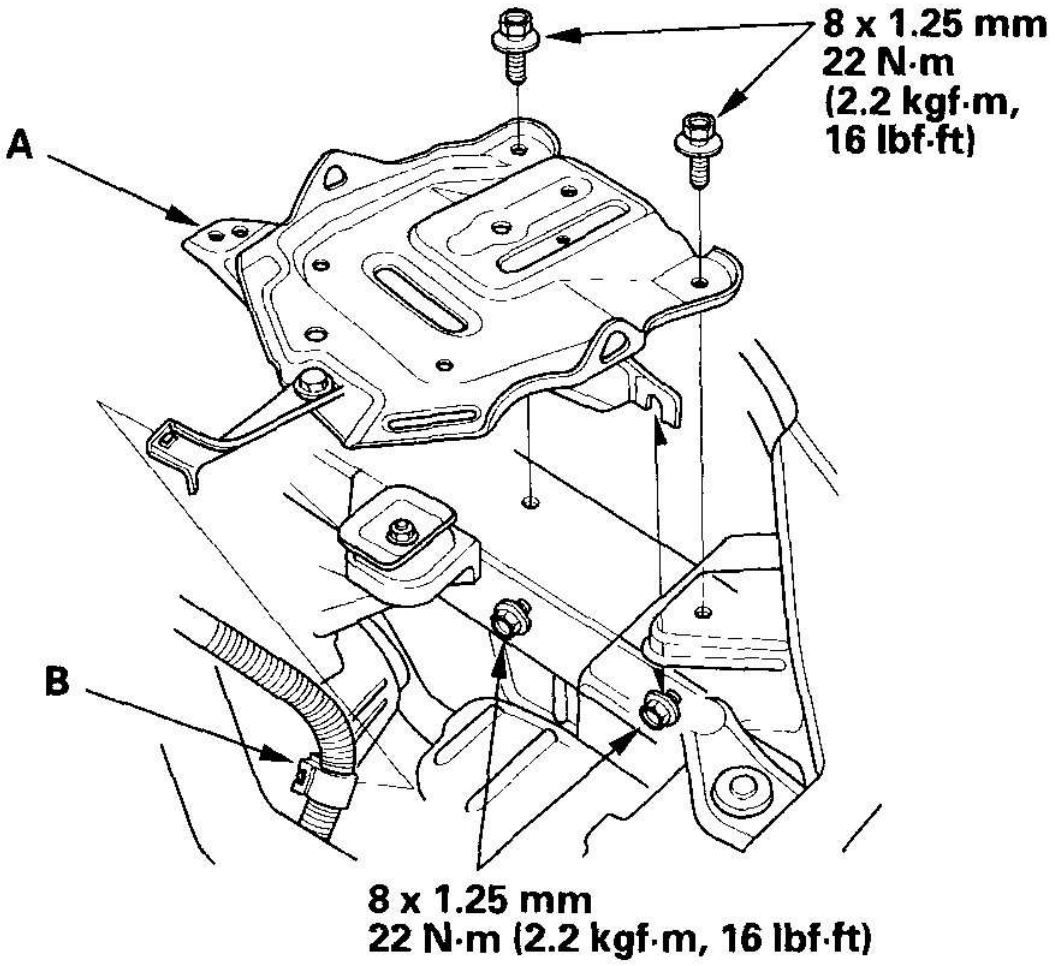


Fig. 57: Installing Battery Base
Courtesy of AMERICAN HONDA MOTOR CO., INC.

48. Install the air cleaner housing (see **AIR CLEANER REMOVAL/INSTALLATION**).
49. Install the intake air duct (A), and install the vacuum hose (B), and breather pipe (C).

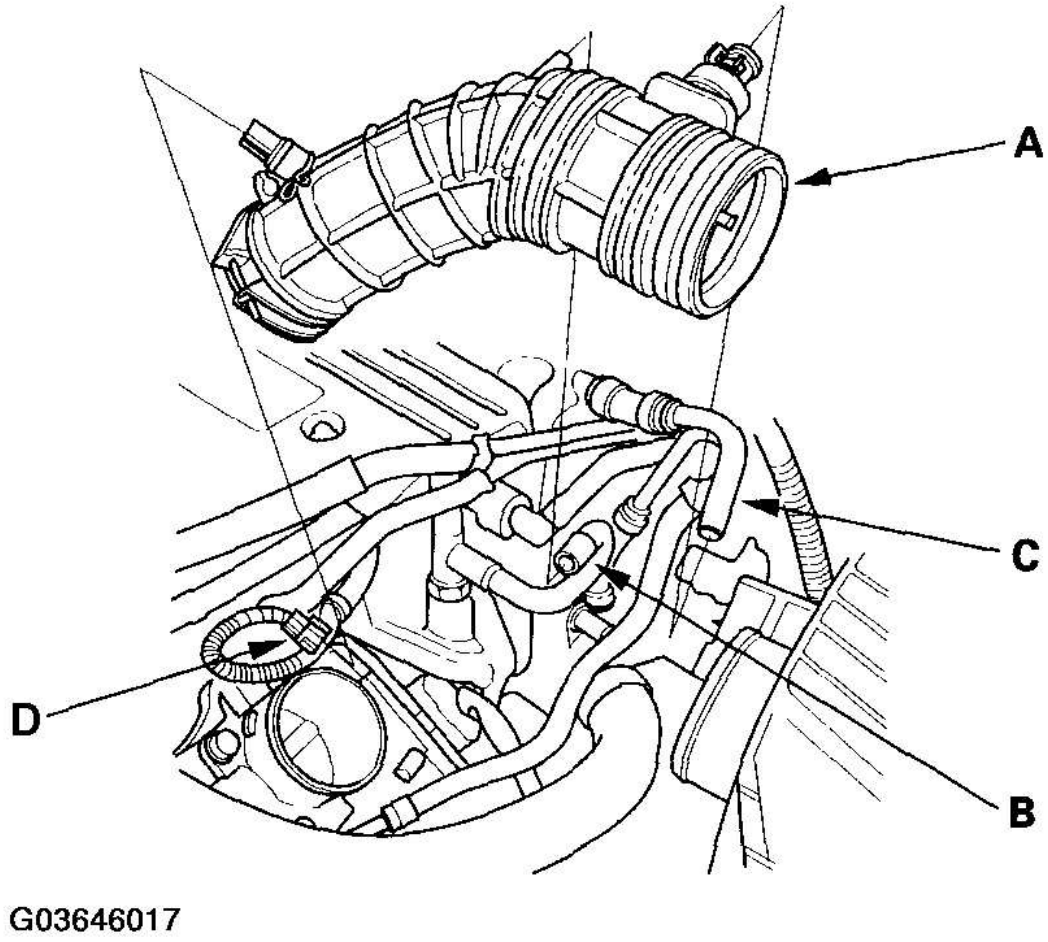


Fig. 58: Installing Intake Air Duct
Courtesy of AMERICAN HONDA MOTOR CO., INC.

50. Except '03-04 SULEV, LX-P models, and '05-07 models: Connect the intake air temperature (IAT) sensor connector (D).
51. Install the battery. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
52. Install the front wheels.
53. A/T model: Move the shift lever to each gear, and verify that the A/T gear position indicator follows the transmission range switch.
54. M/T model: Check that the transmission shift into gear smoothly.

55. Inspect for fuel leaks. Turn the ignition switch to ON (II) (do not operate the starter) so the fuel pump runs for about 2 seconds and pressurizes the fuel line. Repeat this operation two or three times, then check for fuel leakage at any point in the fuel line.).
56. Refill the engine with engine oil (see step 4 on **ENGINE OIL REPLACEMENT** .
57. Refill the transmission with fluid:
    - Manual transmission (see **TRANSMISSION FLUID INSPECTION AND REPLACEMENT**)
    - Automatic transmission (see **ATF REPLACEMENT**).
58. Refill the radiator with engine coolant, and bleed air from the cooling system with the heater valve open (see step 7 on **COOLANT REPLACEMENT**).
59. Do the ECM/PCM reset procedure (see **HDS CLEAR COMMAND**).
60. Do the crankshaft position (CPK) pattern clear/CPK pattern learn procedure (see **CKP PATTERN CLEAR/CKP PATTERN LEARN**).
61. Inspect the idle speed (see **IDLE SPEED INSPECTION**).
62. Inspect the ignition timing (see **IGNITION TIMING INSPECTION**).
63. Check the wheel alignment (see **WHEEL ALIGNMENT**).
64. Enter the anti-theft codes for the audio unit (and the navigation code if equipped), then enter the audio presets.
65. Set the clock.

2003-07 ENGINE

Engine Block - Accord (V6)

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	070AD-RCA0100	Oil Seal Driver, 64 mm	1
②	070AD-RCAA200	Driver Attachment, 106 mm	1
③	07749-0010000	Driver	1

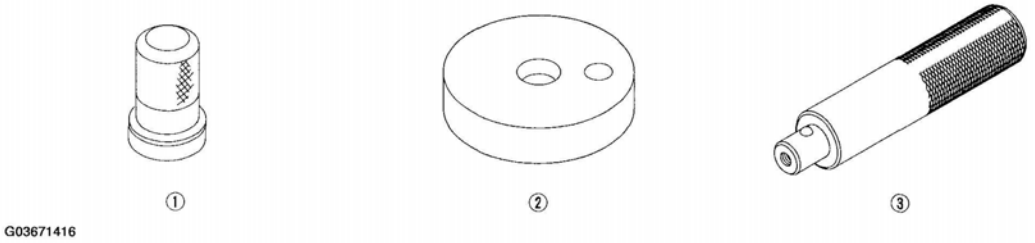


Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

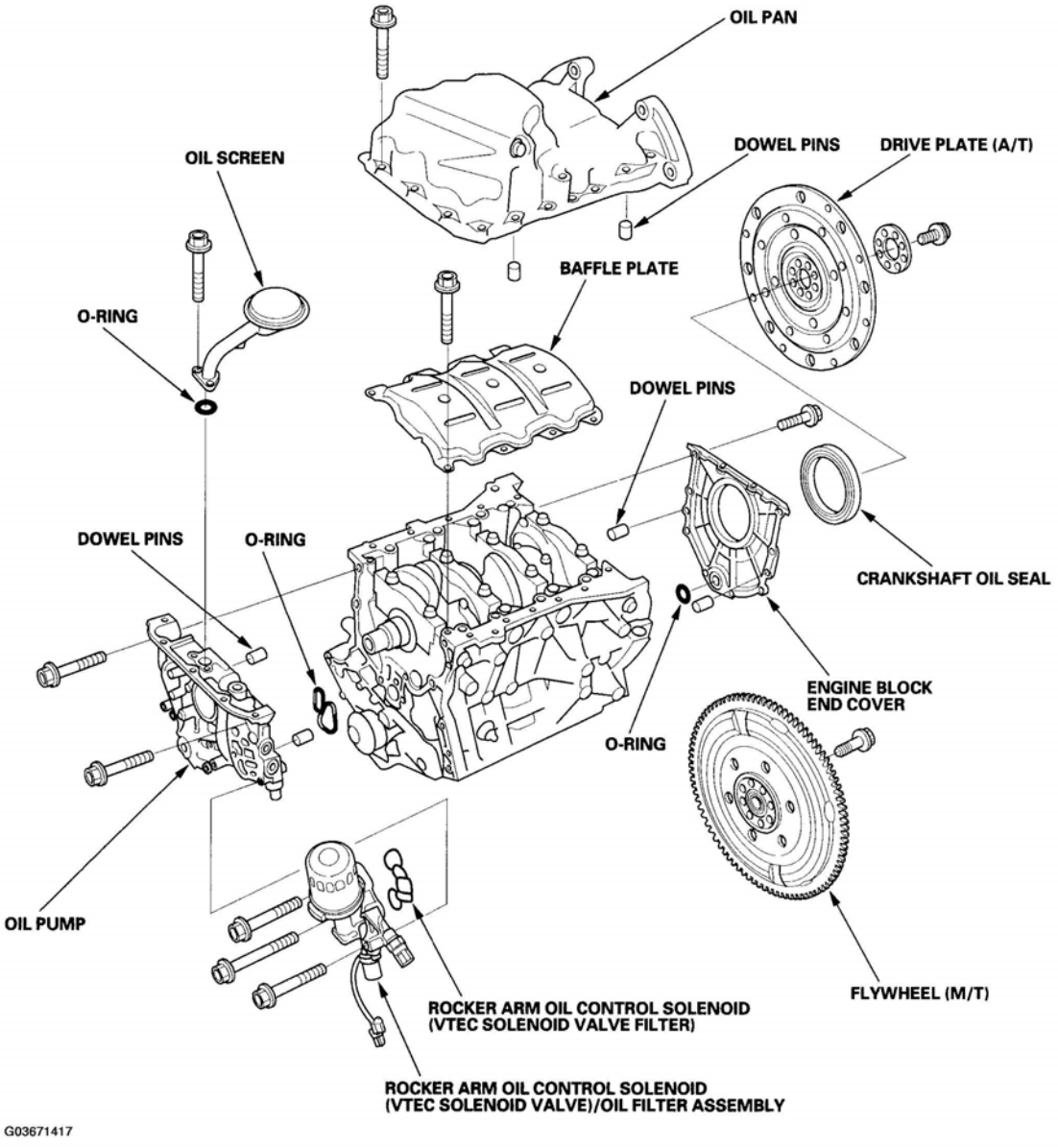


Fig. 2: Locating Engine Block Components (1 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

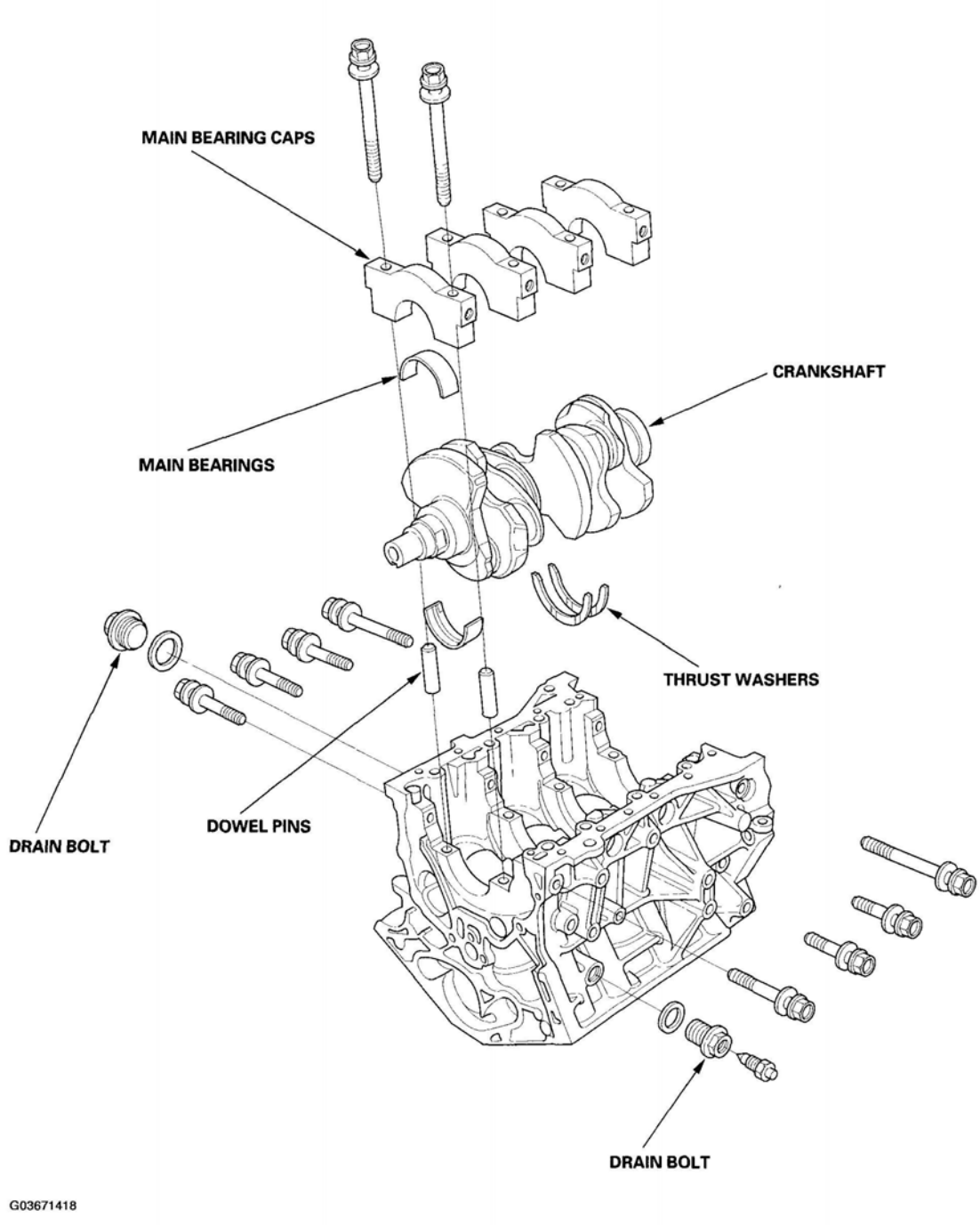


Fig. 3: Locating Engine Block Components (2 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

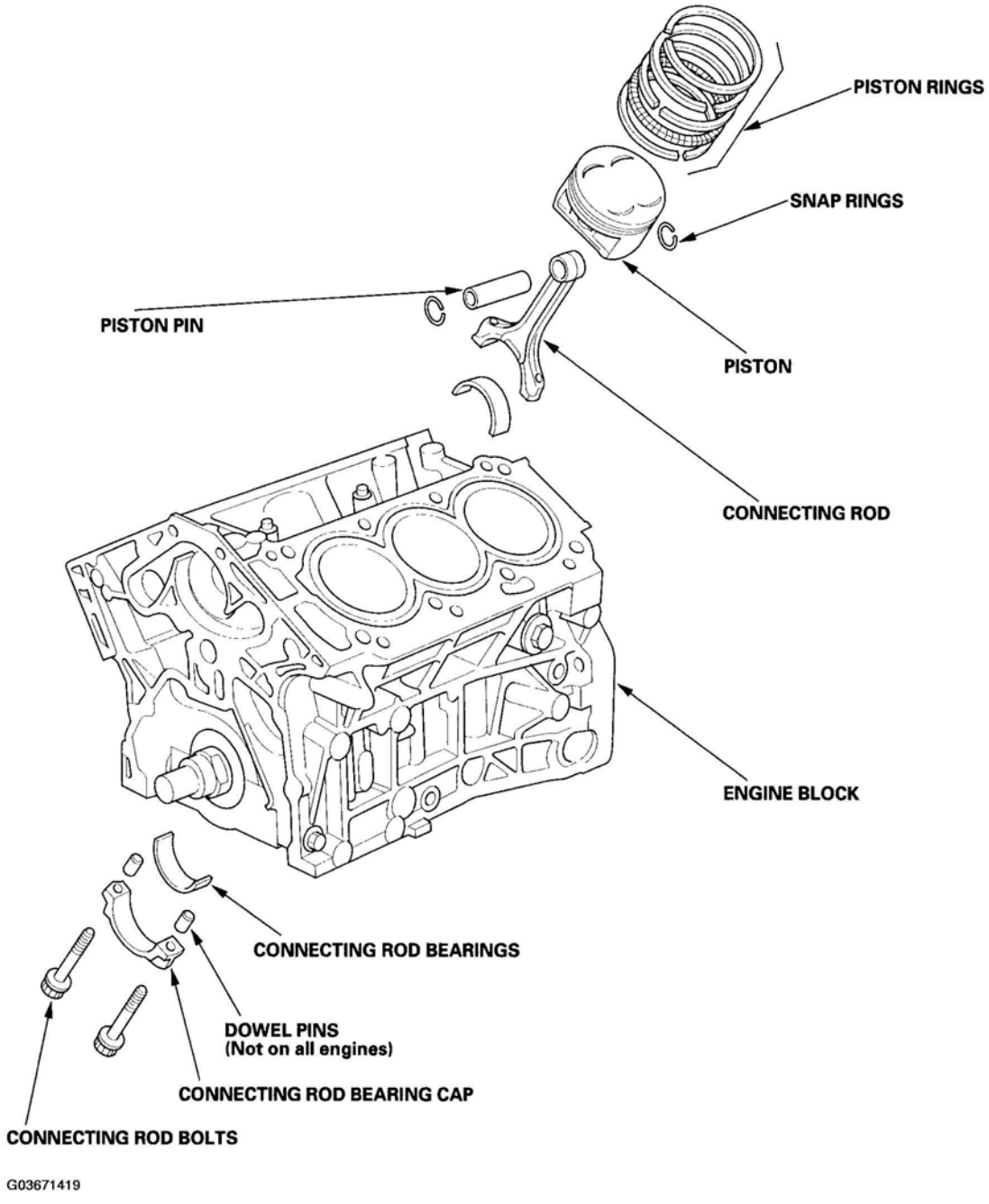


Fig. 4: Locating Engine Block Components (3 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CONNECTING ROD AND CRANKSHAFT END PLAY INSPECTION

1. Remove the oil pump (see **REMOVAL**).

2. Remove the baffle plate (see step 11).
3. Measure the connecting rod end play with a feeler gauge (A) between the connecting rod (B) and crankshaft (C).

   Connecting Rod End Play

   Standard (New): 0.15-0.35 mm (0.006-0.014 in.)

   Service Limit: 0.45 mm (0.018 in.)

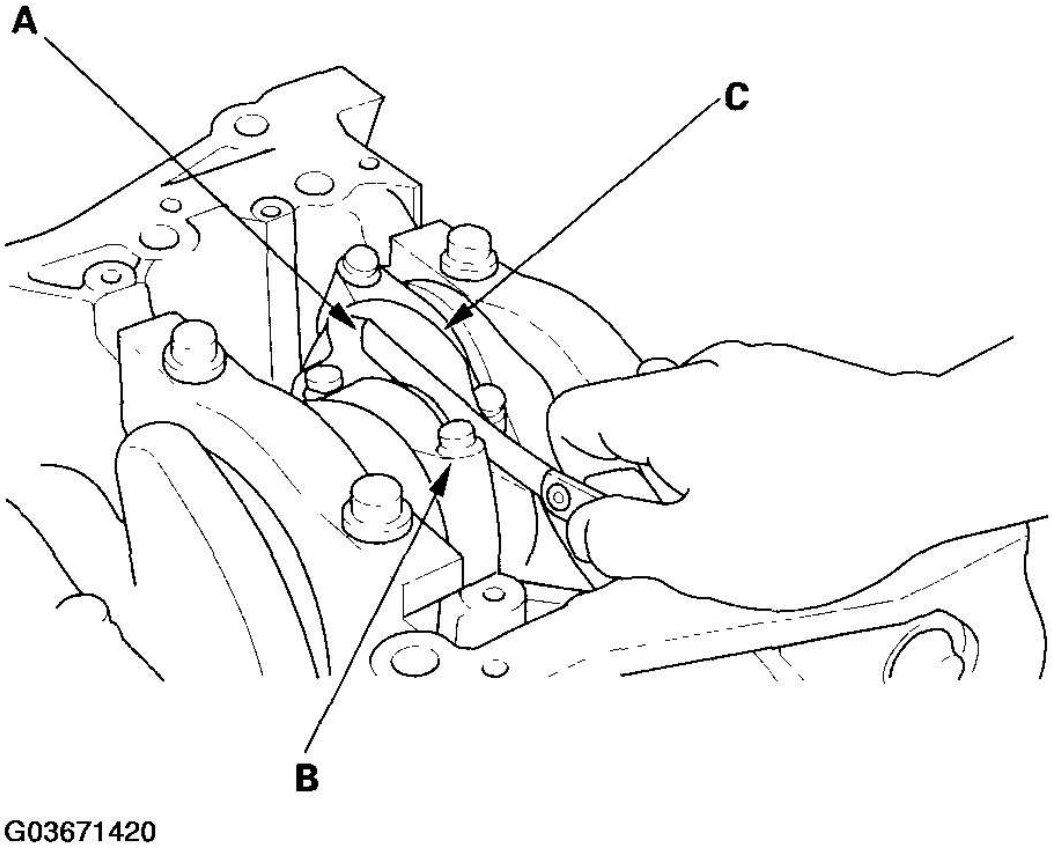


Fig. 5: Measuring Connecting Rod End Play
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the connecting rod end play is out-of-tolerance, install a new connecting rod and recheck. If it is still out-of-tolerance, replace the crankshaft (see step 12).

5. Push the crankshaft firmly away from the dial indicator, and zero the dial against the end of the crankshaft. Then pull the crankshaft firmly back toward the indicator; the dial reading should not exceed the service limit.

   Crankshaft End Play

   Standard (New): 0.10-0.35 mm (0.004-0.014 in.)

   Service Limit: 0.45 mm (0.018 in.)

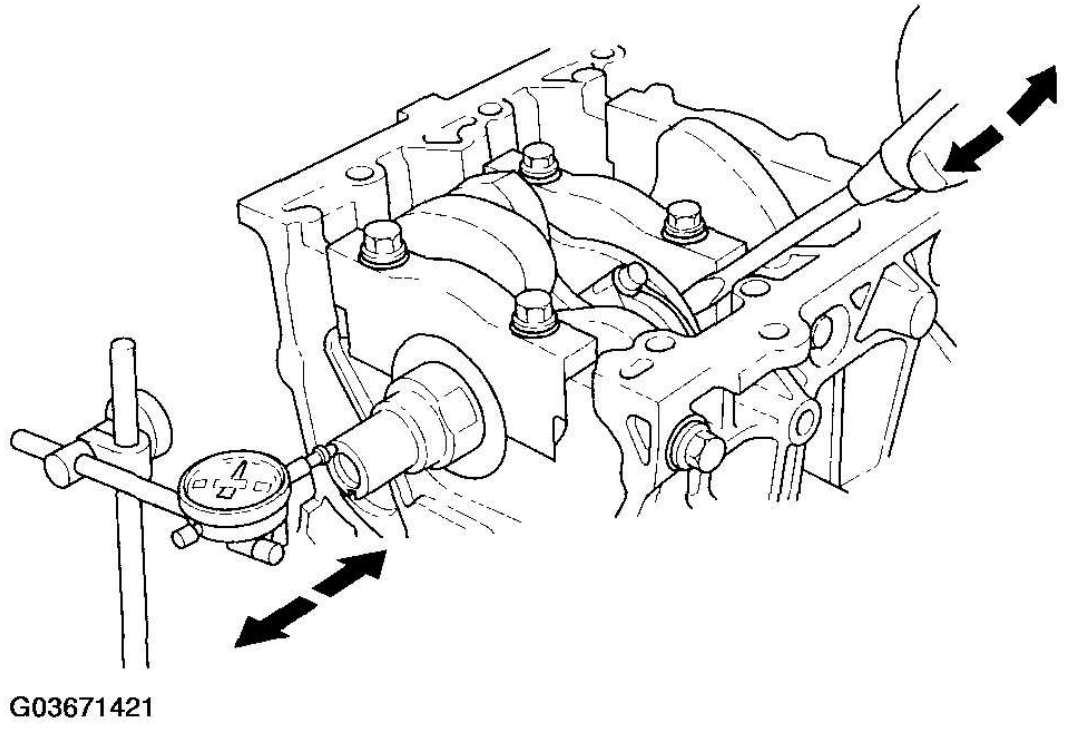


Fig. 6: Measuring Crankshaft End Play
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. If the end play is excessive, replace the thrust washers and recheck. If it is still out-of-tolerance, replace the crankshaft (see step 12).

CRANKSHAFT MAIN BEARING REPLACEMENT

MAIN BEARING CLEARANCE INSPECTION

1. Remove the main caps and bearing halves (see **OIL PAN REMOVAL**).
2. Clean each main journal and bearing half with a clean shop towel.
3. Place one strip of plastigage across each main journal.

NOTE: If the engine is still in the vehicle when you bolt the main cap down to check the clearance, the weight of the crankshaft and drive plate will flatten the plastigage further than just the torque on the cap bolt and give you an incorrect reading. For an accurate reading, support the crank with a jack under the counterweights, and check only one bearing at a time.

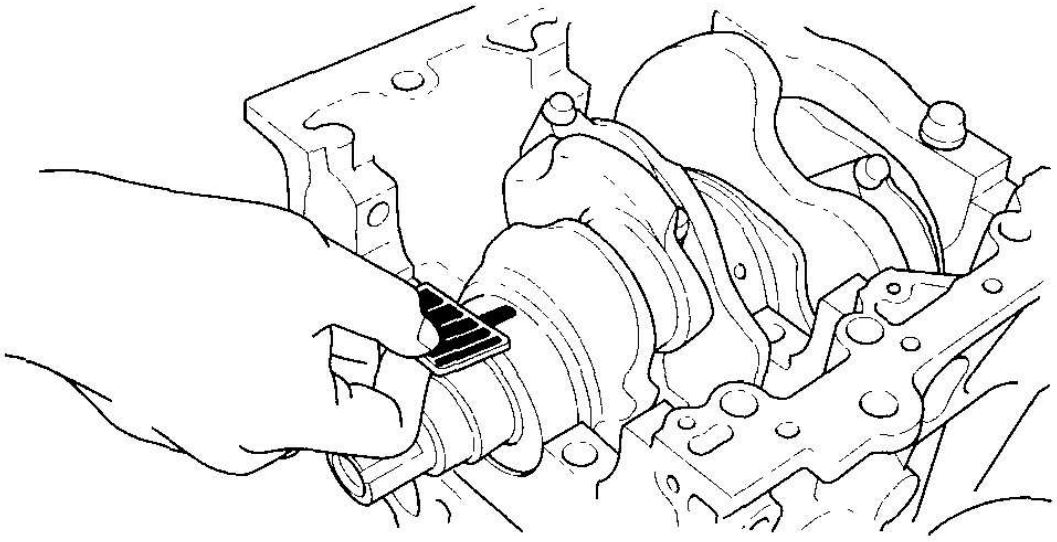
4. Reinstall the bearings and caps, then torque the bearing cap bolts to 74 N.m (7.5 kgf.m, 54 lbf.ft), and the bearing cap side bolts to 49 N.m (5.0 kgf.m, 36 lbf.ft) in the proper sequence (see step 21).

NOTE: Do not rotate the crankshaft during inspection.

5. Remove the cap and bearing half, and measure the widest part of the plastigage.

Main Bearing-to-Journal Oil Clearance

Standard (New): 0.020-0.044 mm (0.0008-0.0017 in.)
Service Limit: 0.050 mm (0.0020 in.)



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Fig. 7: Measuring Main Bearing-To-Journal Oil Clearance
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. If the plastigage measures too wide or too narrow, remove the crankshaft, and remove the upper half of the bearing. Install a new, complete bearing with the same color code, and recheck the clearance. Do not file, shim, or scrape the bearings or the caps to adjust clearance.
7. If the plastigage shows the clearance is still incorrect, try the next larger or smaller bearing (the color listed above or below that one), and check again. If the proper clearance cannot be obtained by using the appropriate larger or smaller bearings, replace the crankshaft and start over.

MAIN BEARING SELECTION

Crankshaft Bore Code Location

Letters or bars have been stamped on the end of the block as a code for the size of each of the four main journal bores.

Use them, and the numbers stamped on the crankshaft (codes for main journal size), to choose the correct bearings. If the codes are indecipherable because of an

accumulation of dirt and dust, do not scrub them with a wire brush or scraper. Clean them only with solvent or detergent.

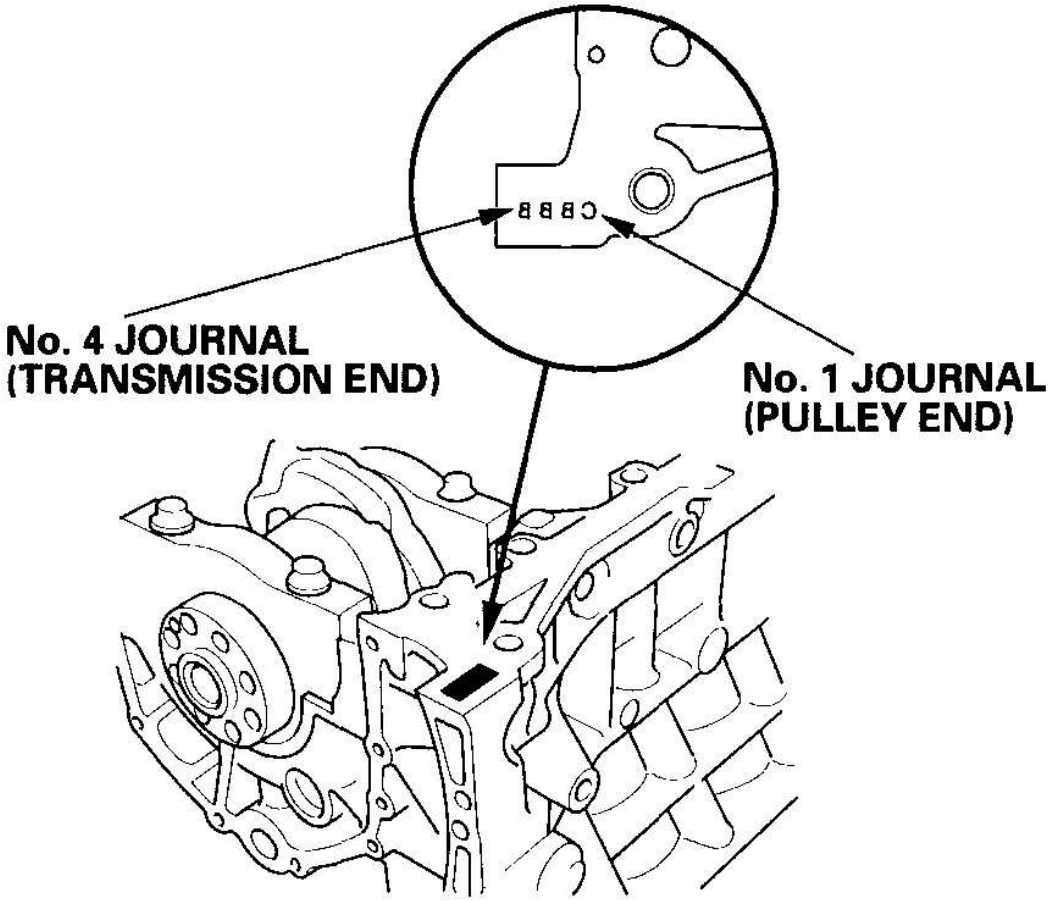


Fig. 8: Locating Crankshaft Bore Code
Courtesy of AMERICAN HONDA MOTOR CO., INC.

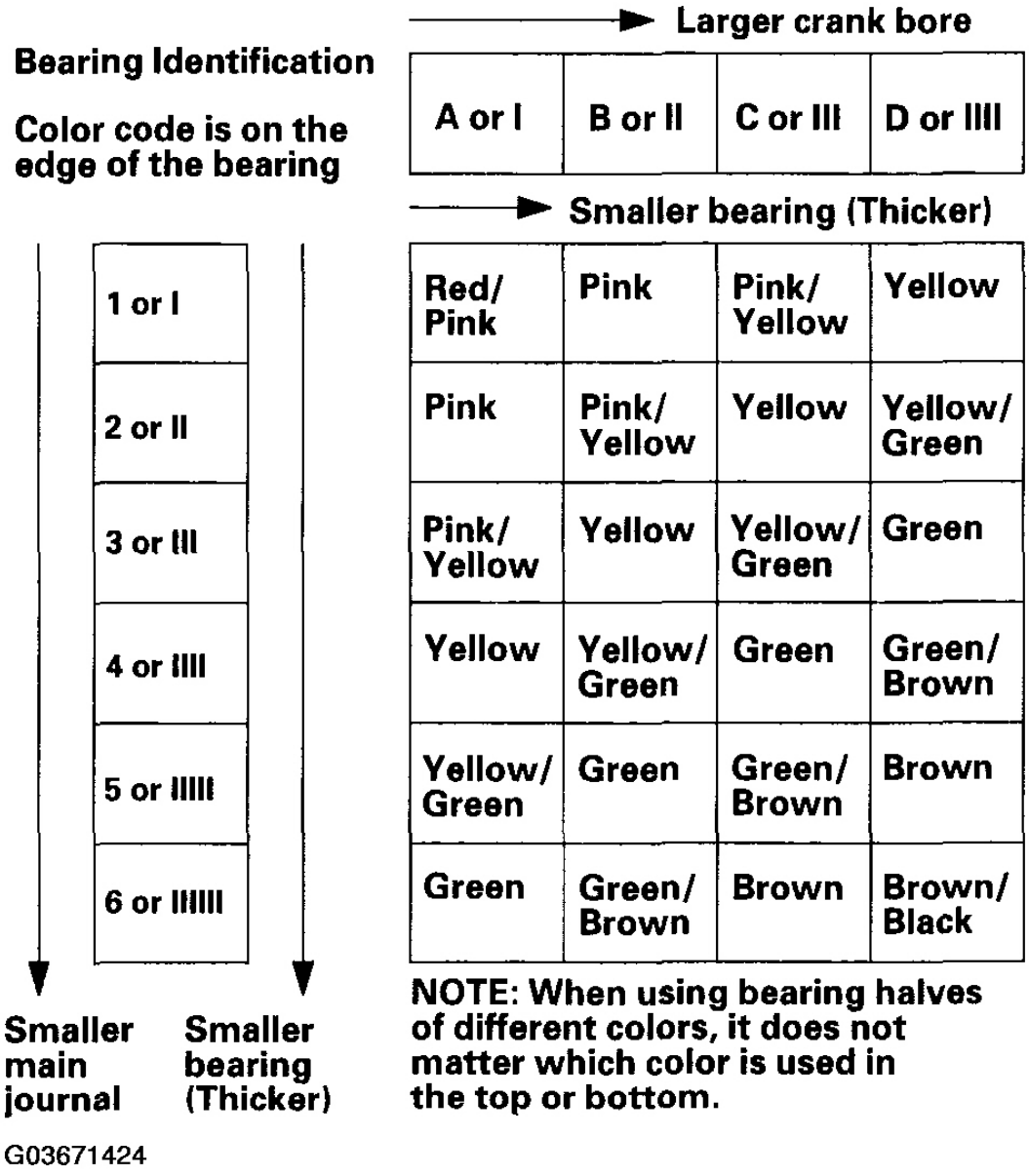


Fig. 9: Bearing Identification Color Code Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Main journal code locations (Numbers or Bars)

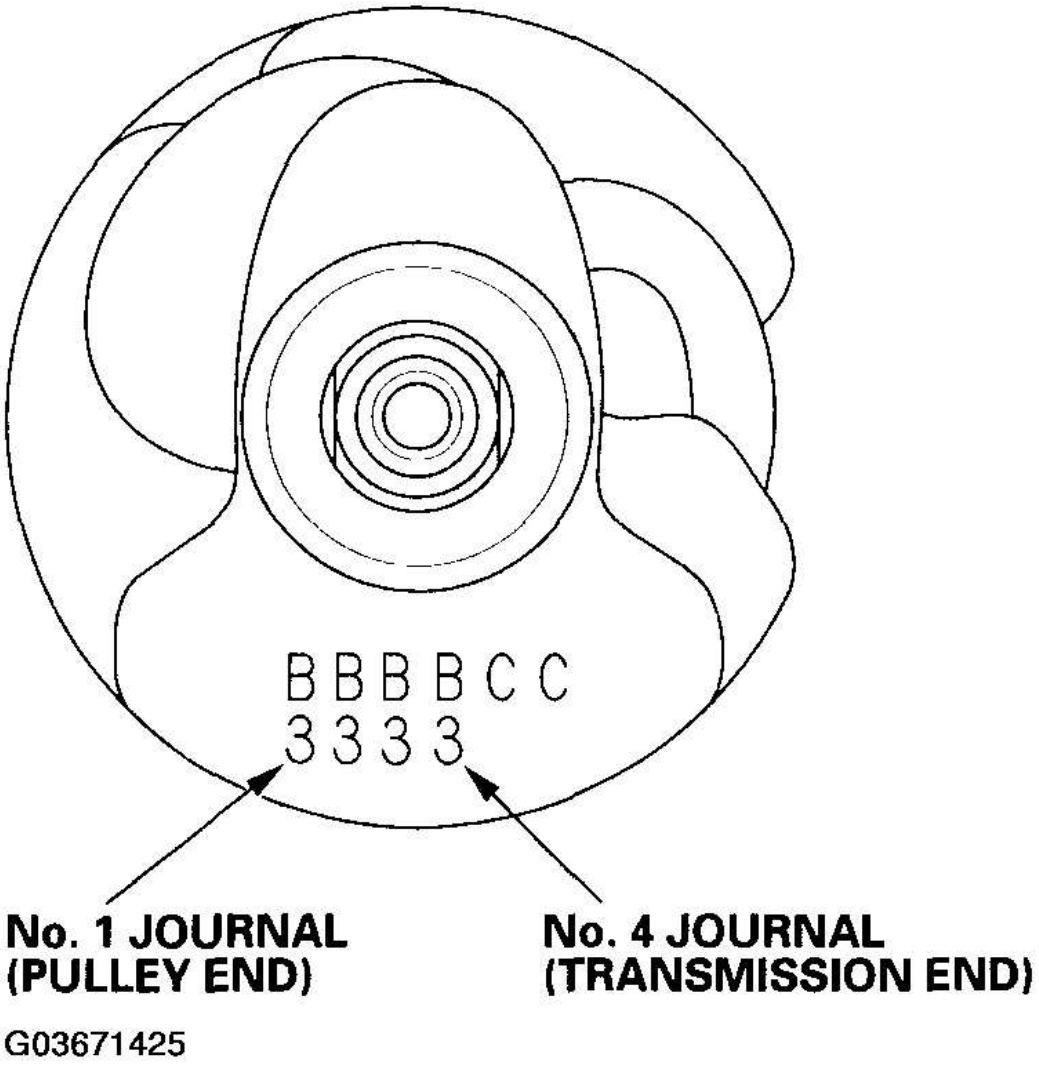


Fig. 10: Identifying Main Journal Code Locations (Numbers Or Bars)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CONNECTING ROD BEARING REPLACEMENT

ROD BEARING CLEARANCE INSPECTION

1. Remove the connecting rod cap and bearing half (see **OIL PAN REMOVAL**).
2. Clean the crankshaft rod journal and bearing half with a clean shop towel.

3. Place a strip of plastigage across the rod journal.
4. Reinstall the bearing half and cap, and torque the bolts.

   Tightening torque: 20 N.m (2.0 kgf.m, 14 lbf.ft) + 90°

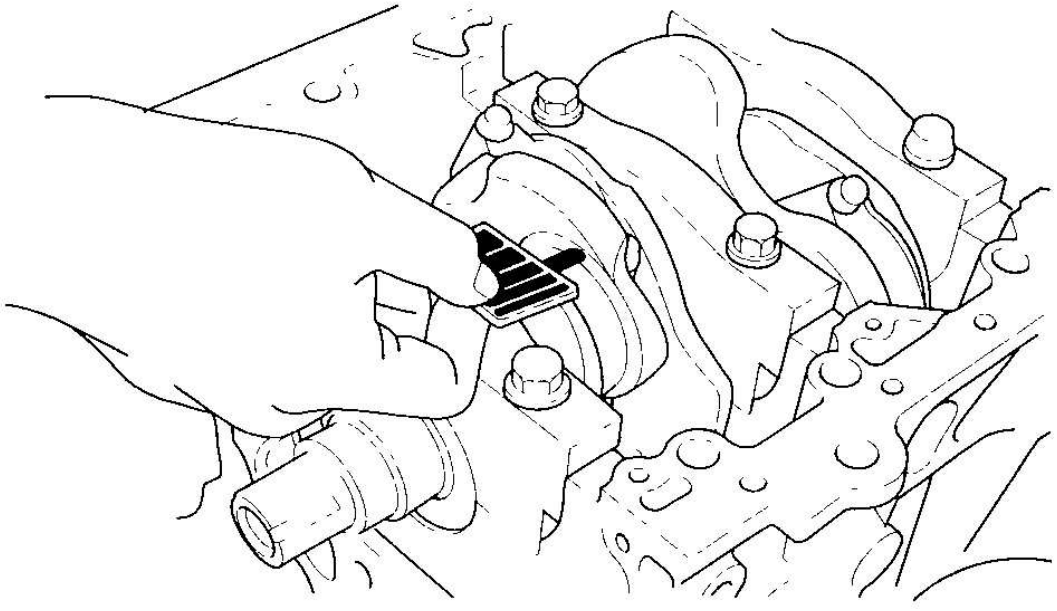
   Apply new engine oil to the bolt threads.

   NOTE: Do not rotate the crankshaft during inspection.

5. Remove the rod cap and bearing half, and measure the widest part of the plastigage.

   Connecting Rod Bearing-to-Journal Oil Clearance

   Standard (New): 0.020-0.044 mm (0.0008-0.0017 in.)
   Service Limit: 0.050 mm (0.0020 in.)



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Fig. 11: Measuring Connecting Rod Bearing-To-Journal Oil Clearance
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. If the plastigage measures too wide or too narrow, remove the upper half of the bearing, then install a new, complete bearing with the same color code, and recheck the clearance. Do not file, shim, or scrape the bearings or the caps to adjust clearance.
7. If the plastigage shows the clearance is still incorrect, try the next larger or smaller bearing (the color listed above or below that one), and check clearance again. If the proper clearance cannot be obtained by using the appropriate larger or smaller bearings, replace the crankshaft and start over.

ROD BEARING SELECTION

Each rod falls into one of four tolerance ranges (from 0 to 0.024 mm (0.0009 in.), in 0.006 mm (0.0002 in.) increments) depending on the size of its big end bore. It's then stamped with a number or bar (1, 2, 3, or 4/I, II, III, or IIII) indicating the range. You may find any combination of 1, 2, 3, or 4/I, II, III, or IIII in any engine.

Normal Bore Size: 56.0 mm (2.20 in.)

Inspect the connecting rod for cracks and heat damage.

Connecting Rod Journal Code Locations

Numbers or bars have been stamped on the side of each connecting rod as a code for the size of the big end. Use them, and the letters or bars stamped on the crank (codes for rod journal size), to choose the correct bearings. If the codes are indecipherable because of an accumulation of dirt and dust, do not scrub them with a wire brush or scraper. Clean them only with solvent or detergent.

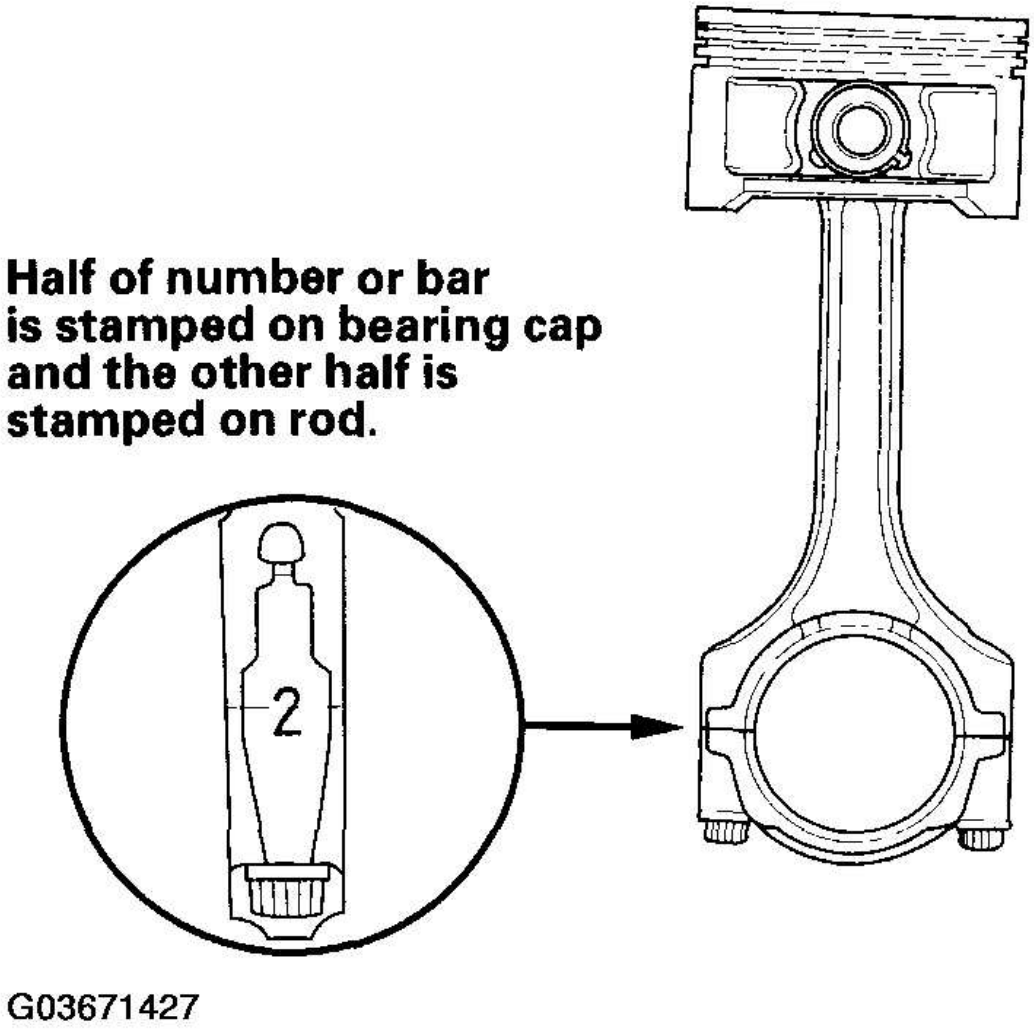


Fig. 12: Identifying Connecting Rod Journal Code Locations
Courtesy of AMERICAN HONDA MOTOR CO., INC.

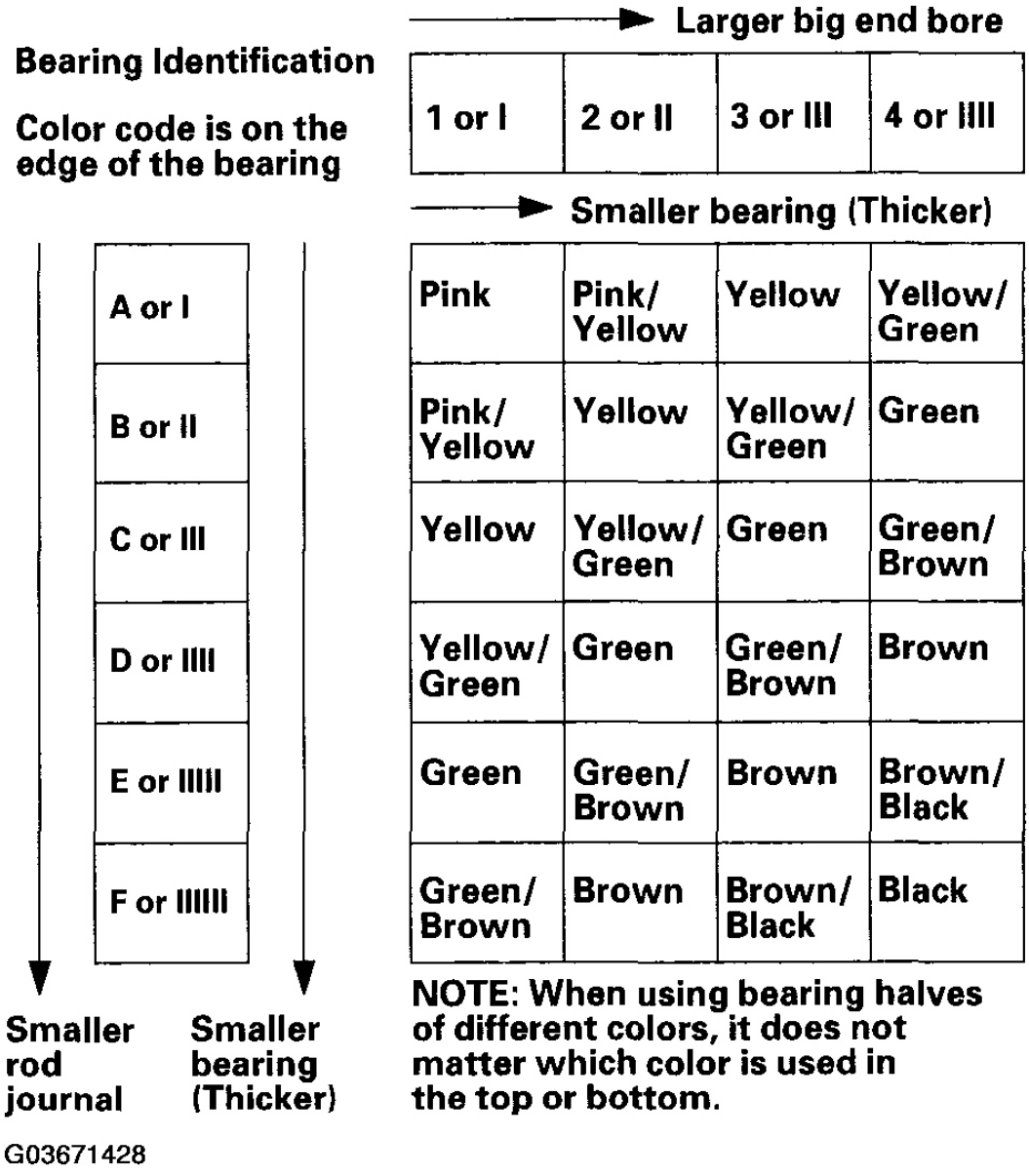


Fig. 13: Bearing Identification And Color Code Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Connecting rod journal code locations Letters or Bars)

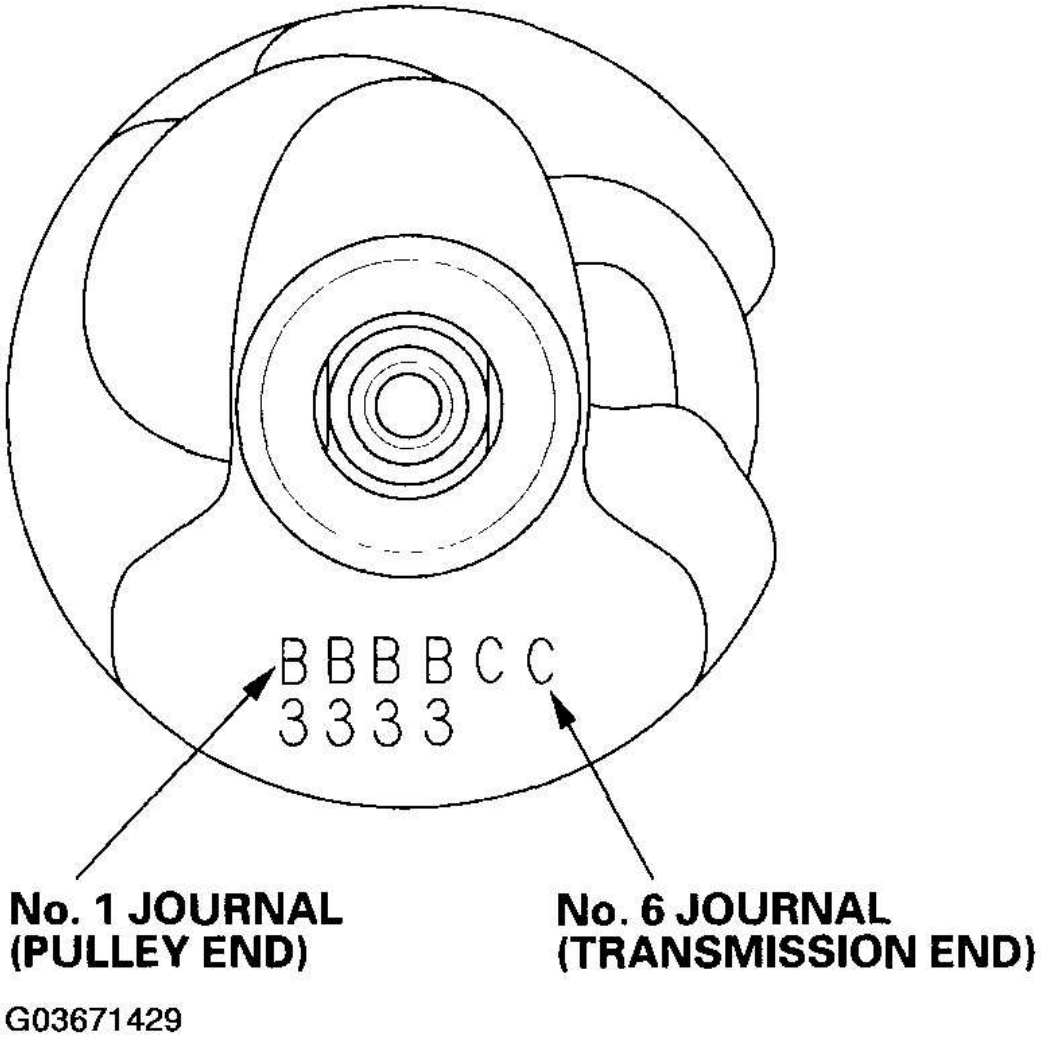


Fig. 14: Identifying Connecting Rod Journal Code Locations (Letters Or Bars)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

OIL PAN REMOVAL

1. If the engine is out of the vehicle, go to step 5.
2. Raise the vehicle on the hoist to full height.
3. Drain the engine oil (see **ENGINE OIL REPLACEMENT**).
4. Remove exhaust pipe A (see step 40 in **ENGINE REMOVAL**).

5. Remove the torque converter cover (A) and the two bolts (B) securing the transmission.

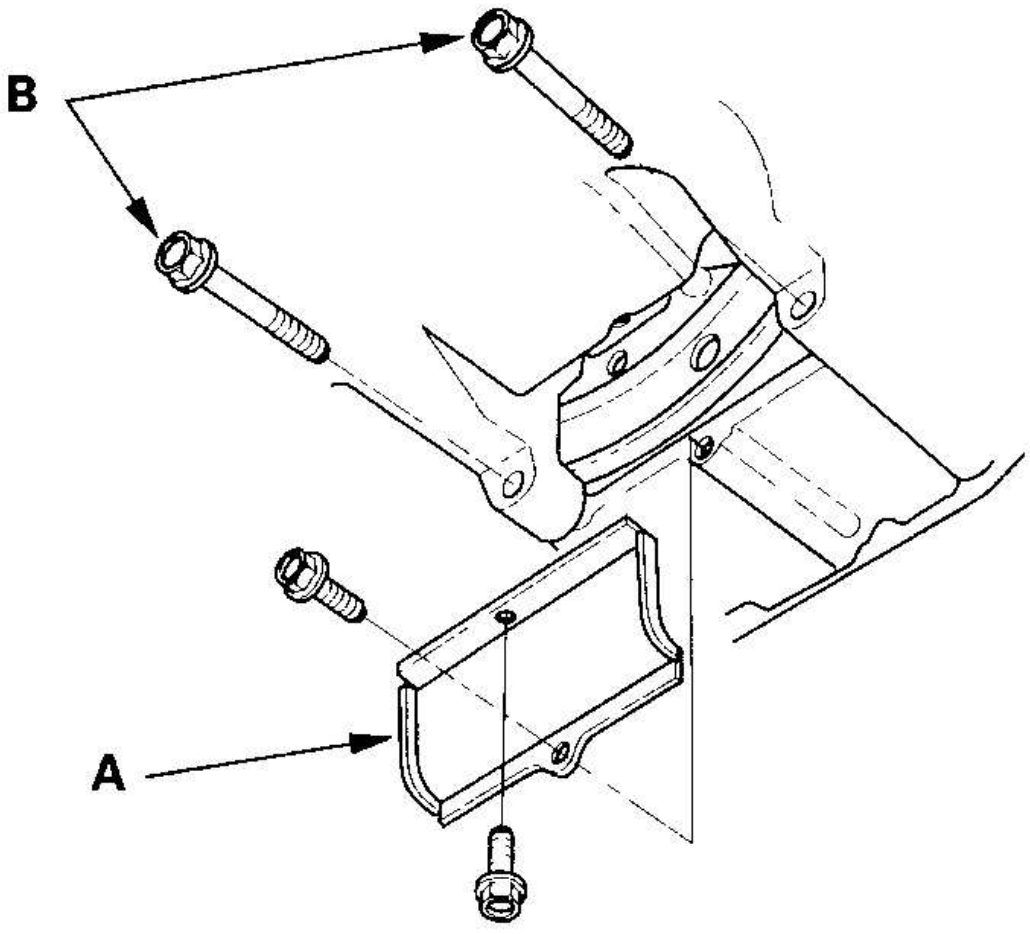


Fig. 15: Removing Torque Converter Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the bolts securing the oil pan.
7. Using a flat blade screwdriver, separate the oil pan from the block in the places shown in **Fig. 16**.

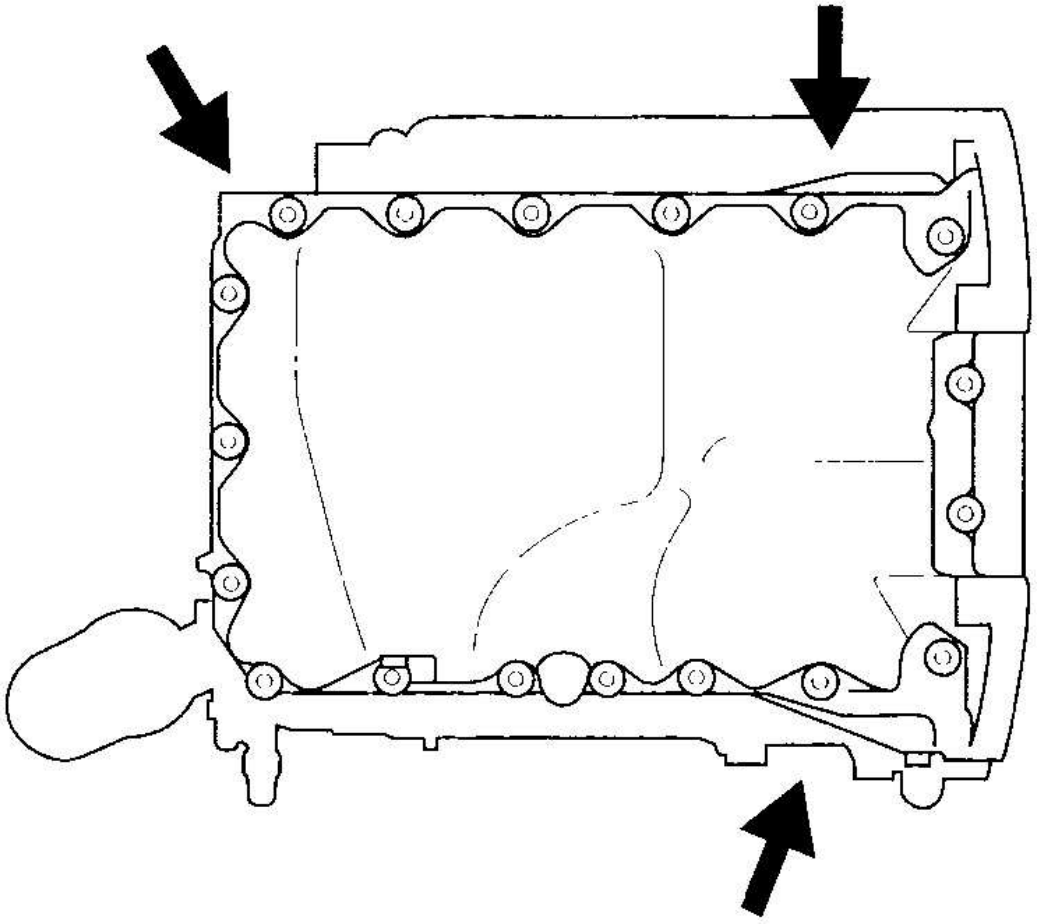


Fig. 16: Separating Oil Pan From Block
Courtesy of AMERICAN HONDA MOTOR CO., INC.

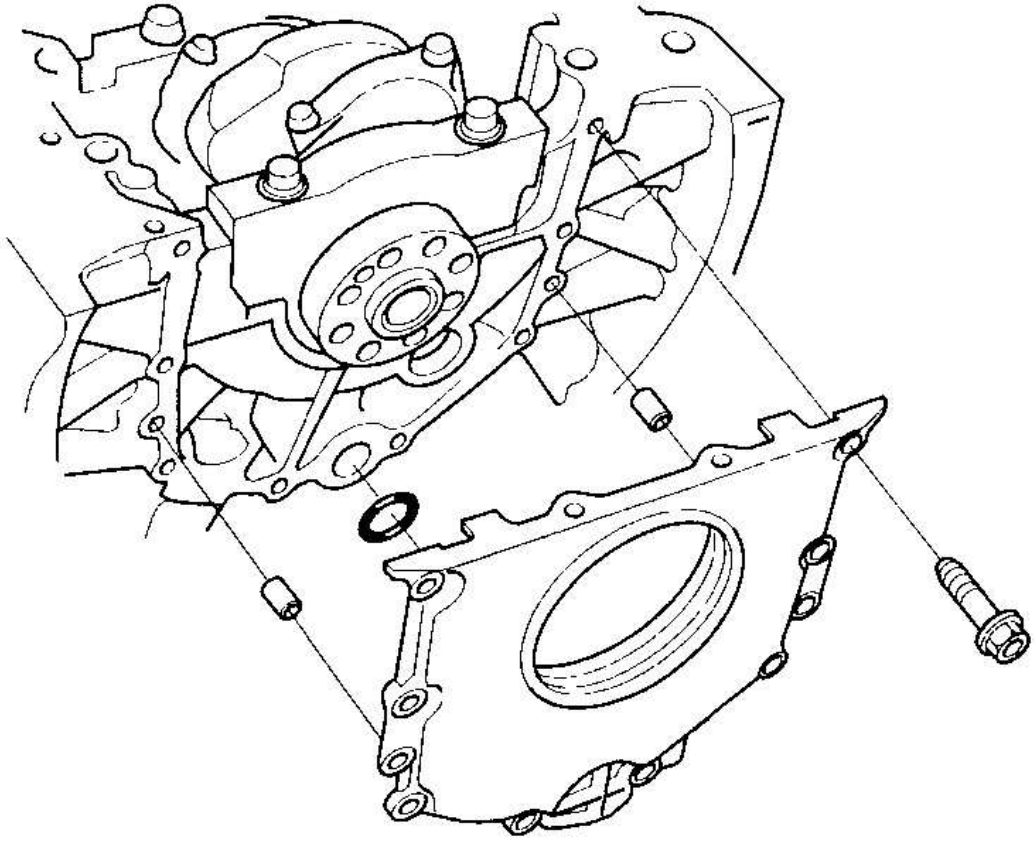
8. Remove the oil pan.

CRANKSHAFT AND PISTON REMOVAL

1. Remove the engine assembly (see **ENGINE REMOVAL**).
2. Remove the transmission:
   - Manual transmission (see **TRANSMISSION REMOVAL**)

- Automatic transmission (see **TRANSMISSION REMOVAL**)

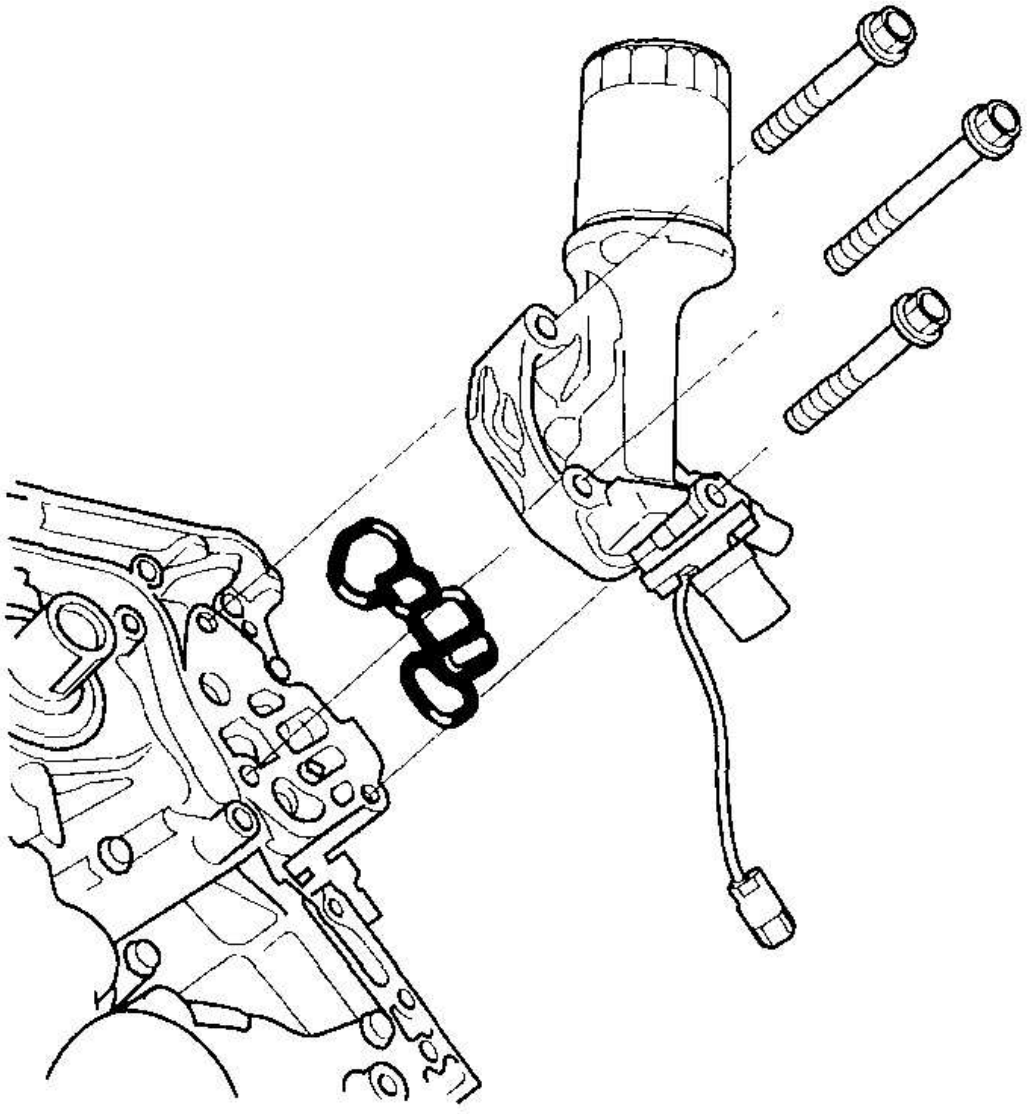
3. M/T model: Remove the pressure plate (see **PRESSURE PLATE AND CLUTCH DISC REMOVAL**), clutch disc (see **PRESSURE PLATE AND CLUTCH DISC REMOVAL**), and flywheel (see **FLYWHEEL AND PILOT BEARING REPLACEMENT**).
4. A/T model: Remove the drive plate (see **DRIVE PLATE REMOVAL AND INSTALLATION**).
5. Remove the cylinder heads (see **CYLINDER HEAD REMOVAL**).
6. Remove the crankshaft position (CKP) sensor (see **CKP SENSOR REPLACEMENT**).
7. Remove the timing belt drive pulley from the crankshaft.
8. Remove the oil pan (see **OIL PAN REMOVAL**).
9. Remove the engine block end cover.



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Fig. 17: Removing Engine Block End Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the rocker arm oil control solenoid (VTEC solenoid valve)/oil filter assembly.



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Fig. 18: Removing Rocker Arm Oil Control Solenoid (VTEC Solenoid Valve)/Oil Filter Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the oil screen (A), baffle plate (B), and oil pump(C).

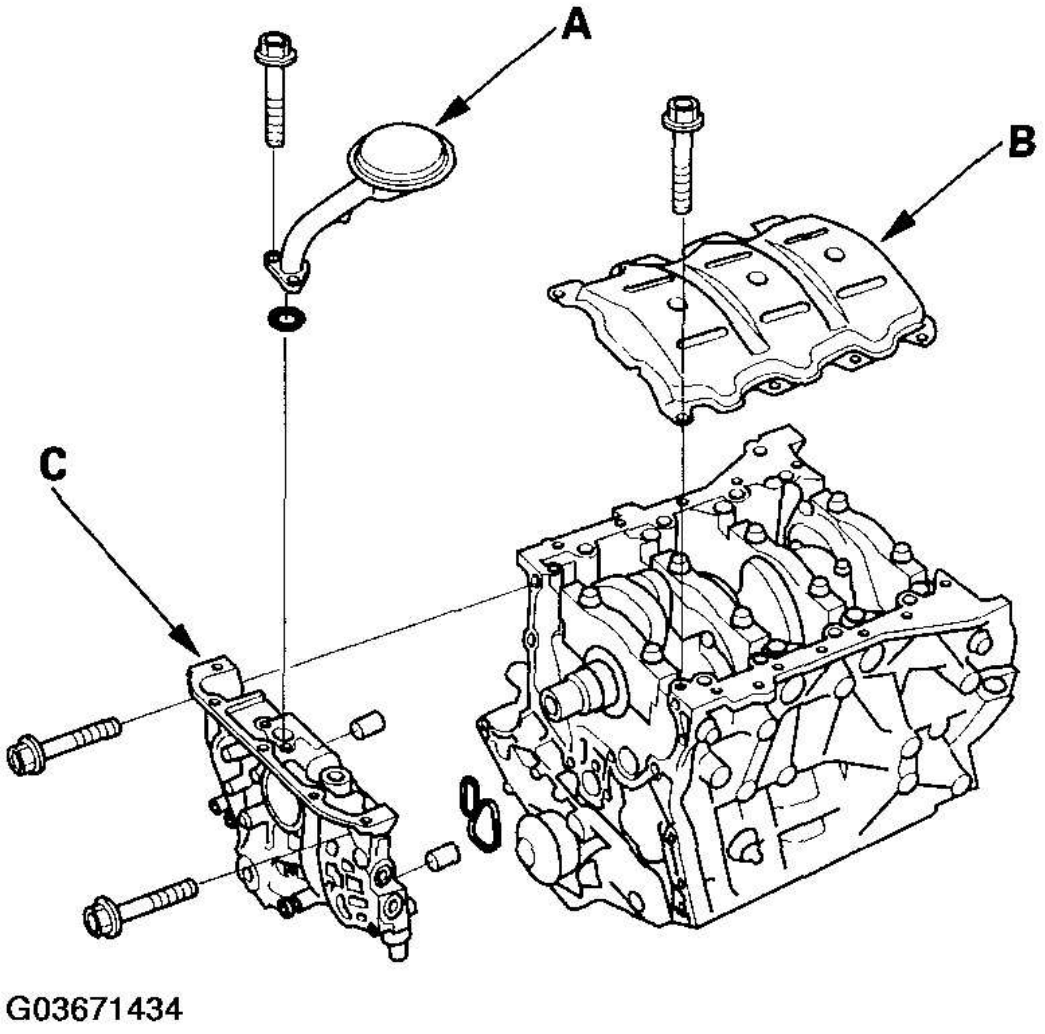
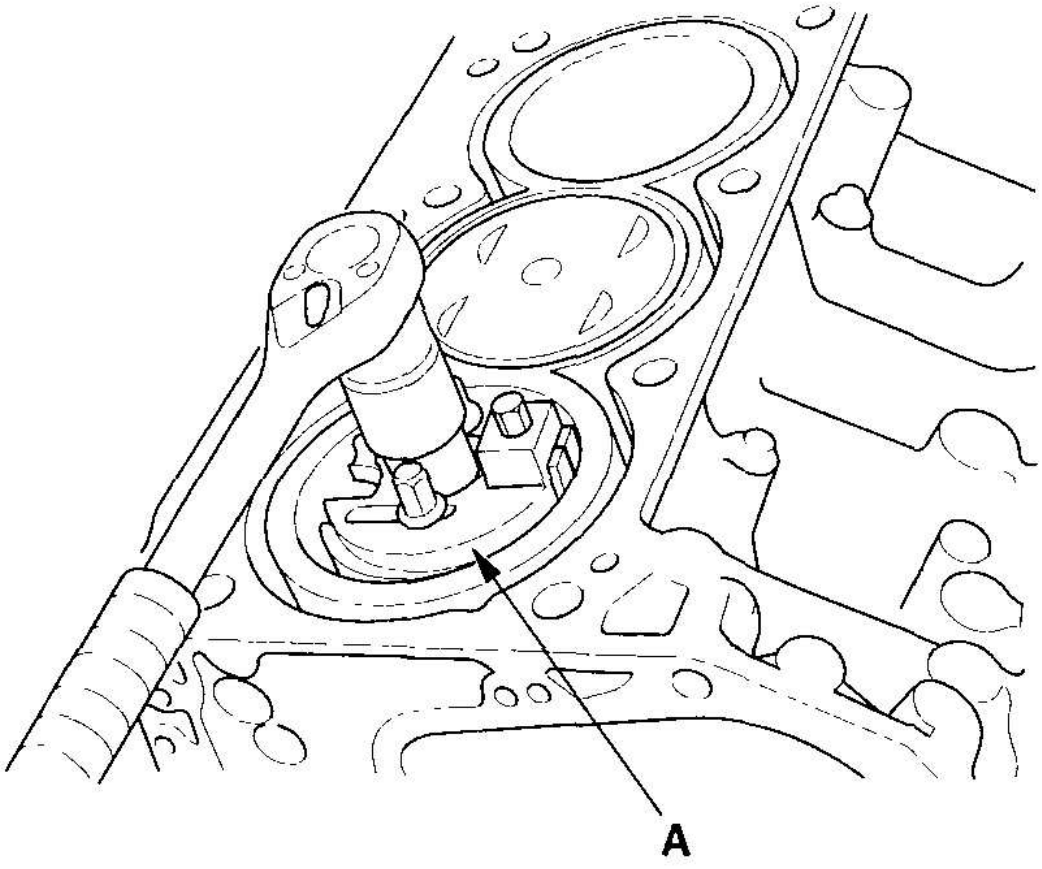


Fig. 19: Removing Oil Screen, Baffle Plate And Oil Pump
Courtesy of AMERICAN HONDA MOTOR CO., INC.

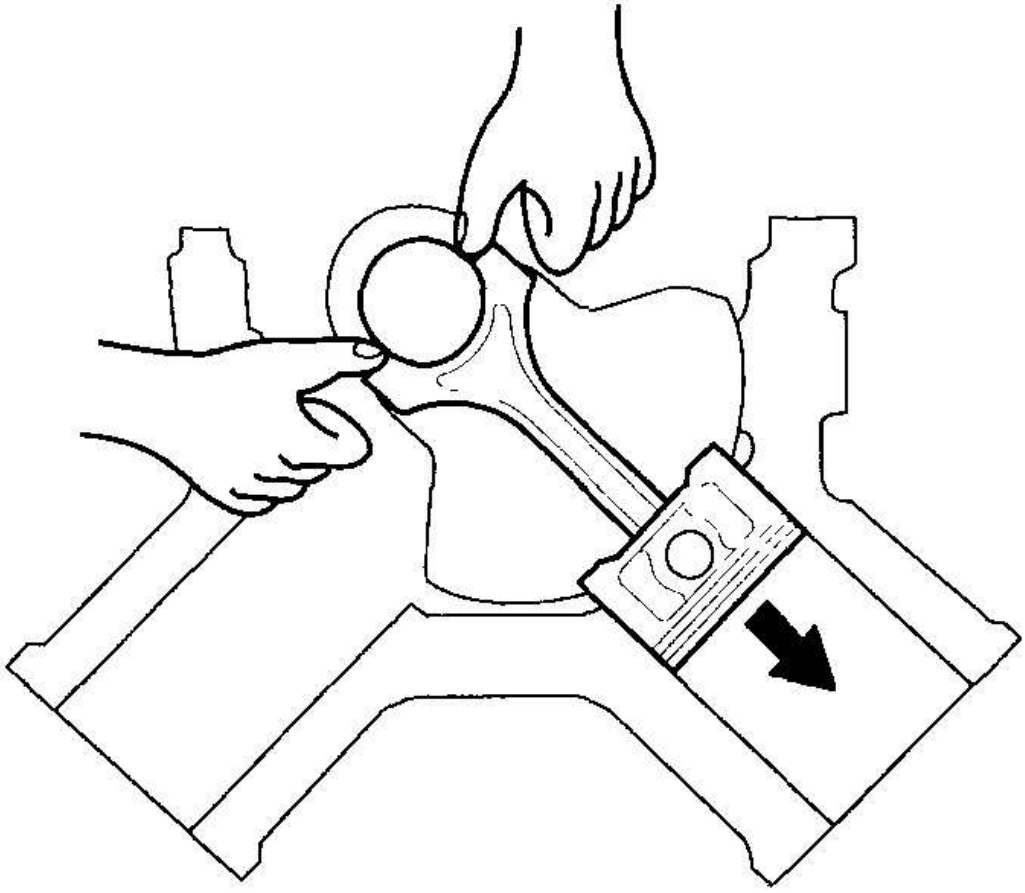
12. If you can feel a ridge of metal or hard carbon around the top of any cylinder, remove it with a ridge reamer (A). Follow the reamer manufacturer's instructions. If the ridge is not removed, it may damage the pistons as they are pushed out.



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Fig. 20: Removing Cylinder With Ridge Reamer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Remove the bearing from the cap. Keep all caps/ bearings in order.
14. Remove the upper bearing halves from the connecting rods, and set them aside with their respective caps.
15. Remove the connecting rod caps after setting the crank pin at bottom dead center (BDC) for each cylinder. Remove the piston assembly by pushing on the connecting rod. Take care not to damage the crank pin or cylinder with the connecting rod.



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Fig. 21: Identifying Correct Way Of Removing Piston Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

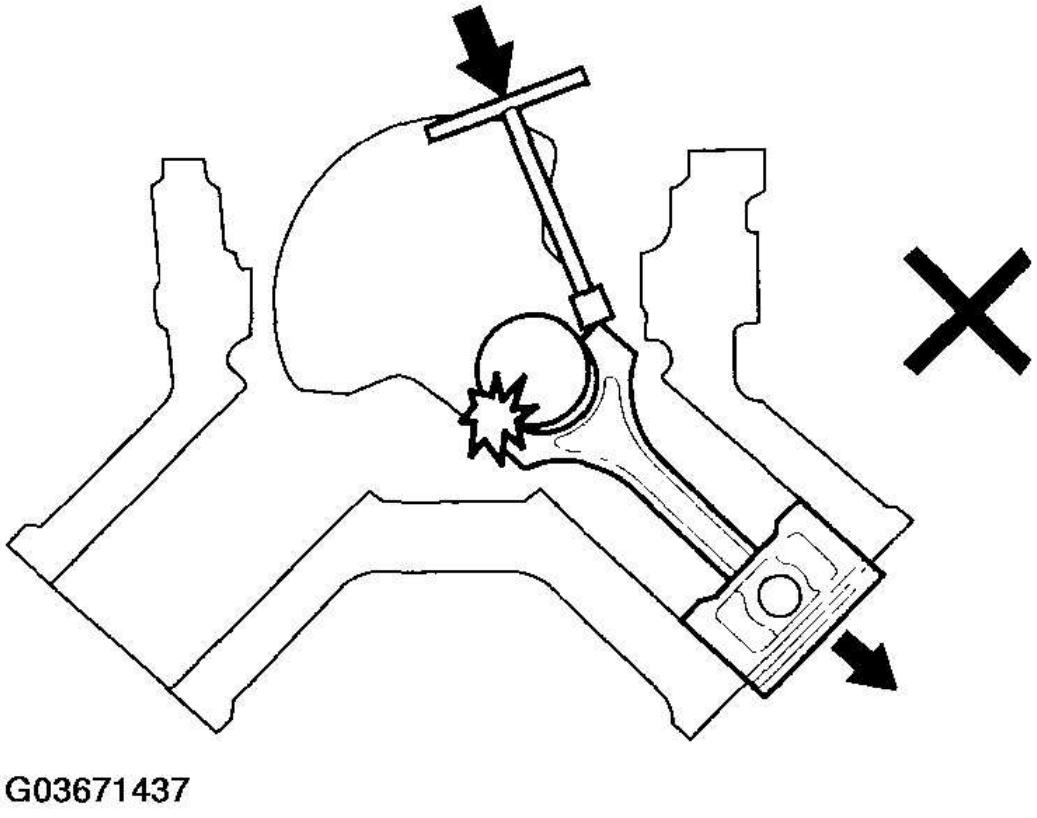
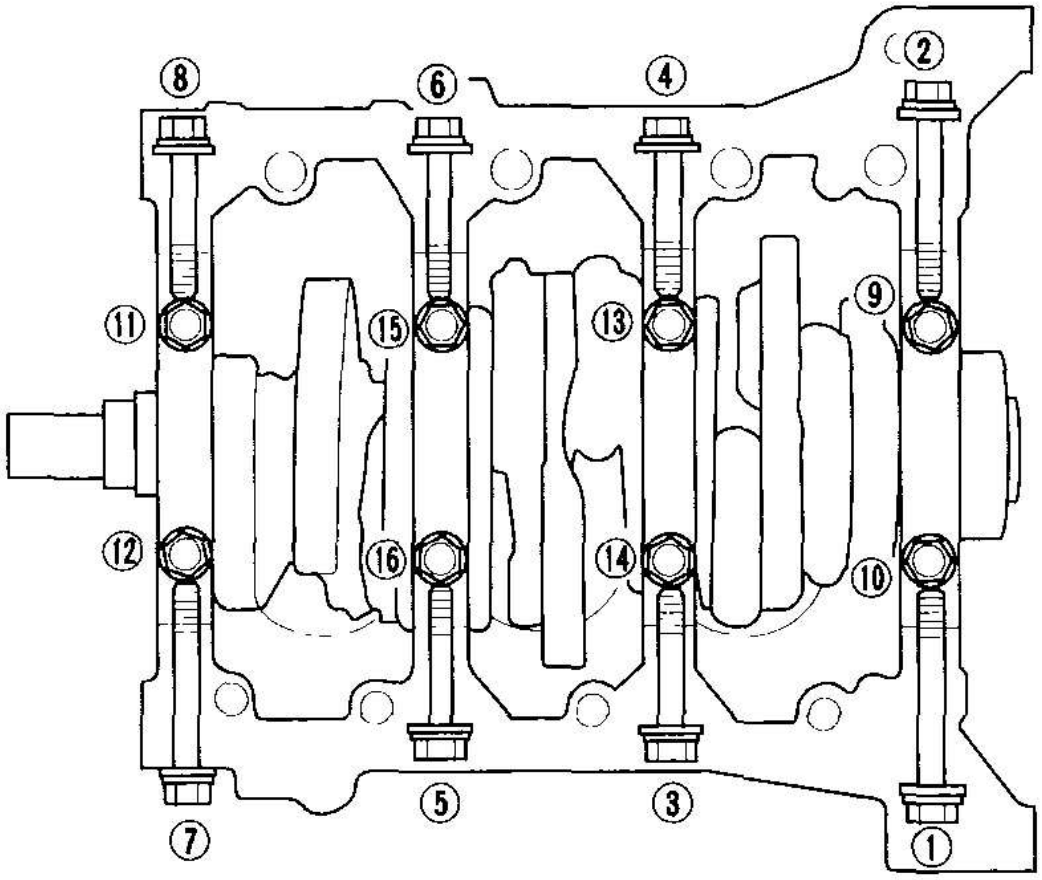


Fig. 22: Identifying Incorrect Way Of Removing Piston Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. After removing a piston/connecting rod assembly, reinstall the cap on the rod.
17. To avoid confusion during reassembly, mark each piston/connecting rod assembly with its cylinder number.
18. Unscrew the bearing cap bolts and bearing cap side bolts in sequence 1/3 turn at a time; repeat the sequence until all bolts are loosened.



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Fig. 23: Removing Bearing Caps Bolts And Bearing Cap Side Bolts In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Remove the bearing cap bolts (A) and bearing cap side bolts (B), then remove the bearing cap (C).

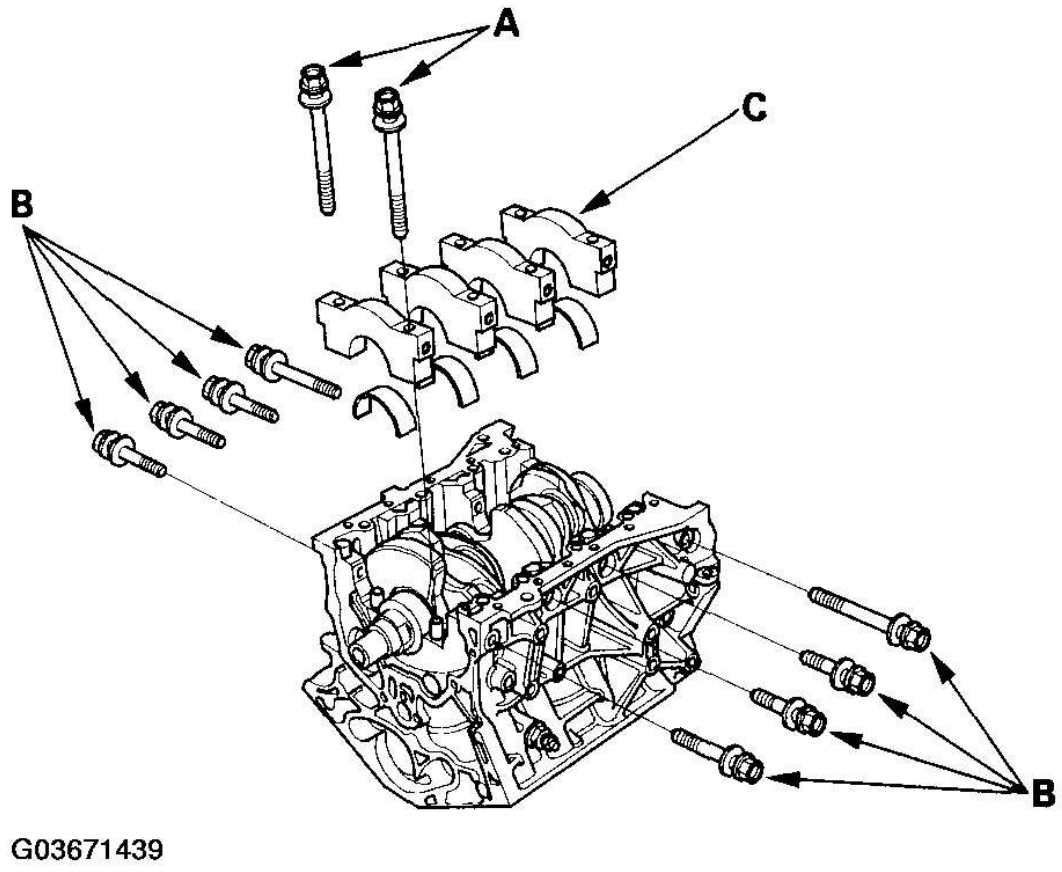


Fig. 24: Removing Bearing Cap Bolts And Bearing Cap Side Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Lift the crankshaft (A) out of the engine block, being careful not to damage the journals.

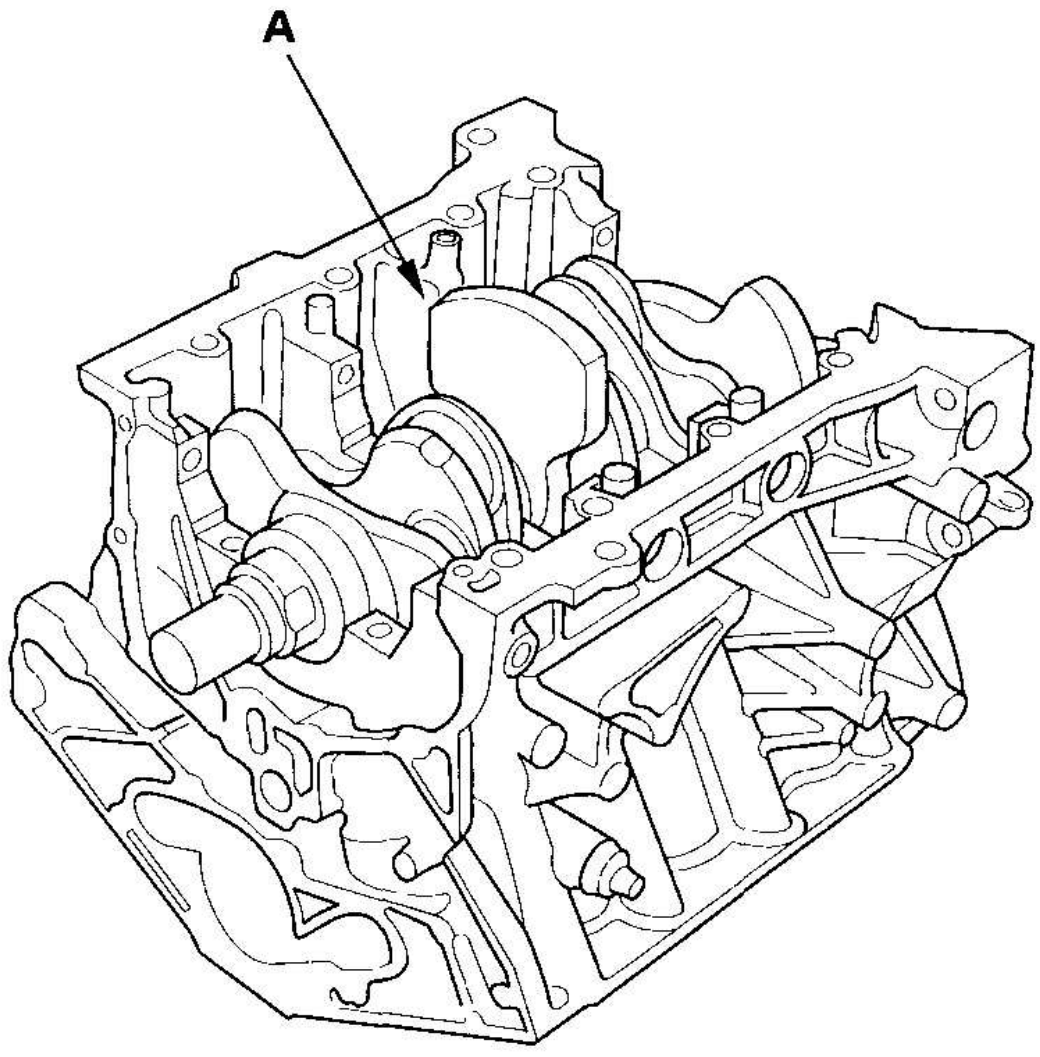


Fig. 25: Lifting Crankshaft Out Of Engine Block
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Reinstall the main caps and bearings on the engine block in the proper order.

CRANKSHAFT INSPECTION

OUT-OF-ROUND AND TAPER

1. Remove the crankshaft from the engine block (see **OIL PAN REMOVAL**).
2. Clean the crankshaft oil passages with pipe cleaners or a suitable brush.
3. Check the keyway and threads.
4. Measure out-of-round at the middle of each rod and main journal in two places. The difference between measurements on each journal must not be more than the service limit.

   Journal Out-of-Round

   Standard (New): 0.005 mm (0.0002 in.) max.

   Service Limit: 0.010 mm (0.0004 in.)

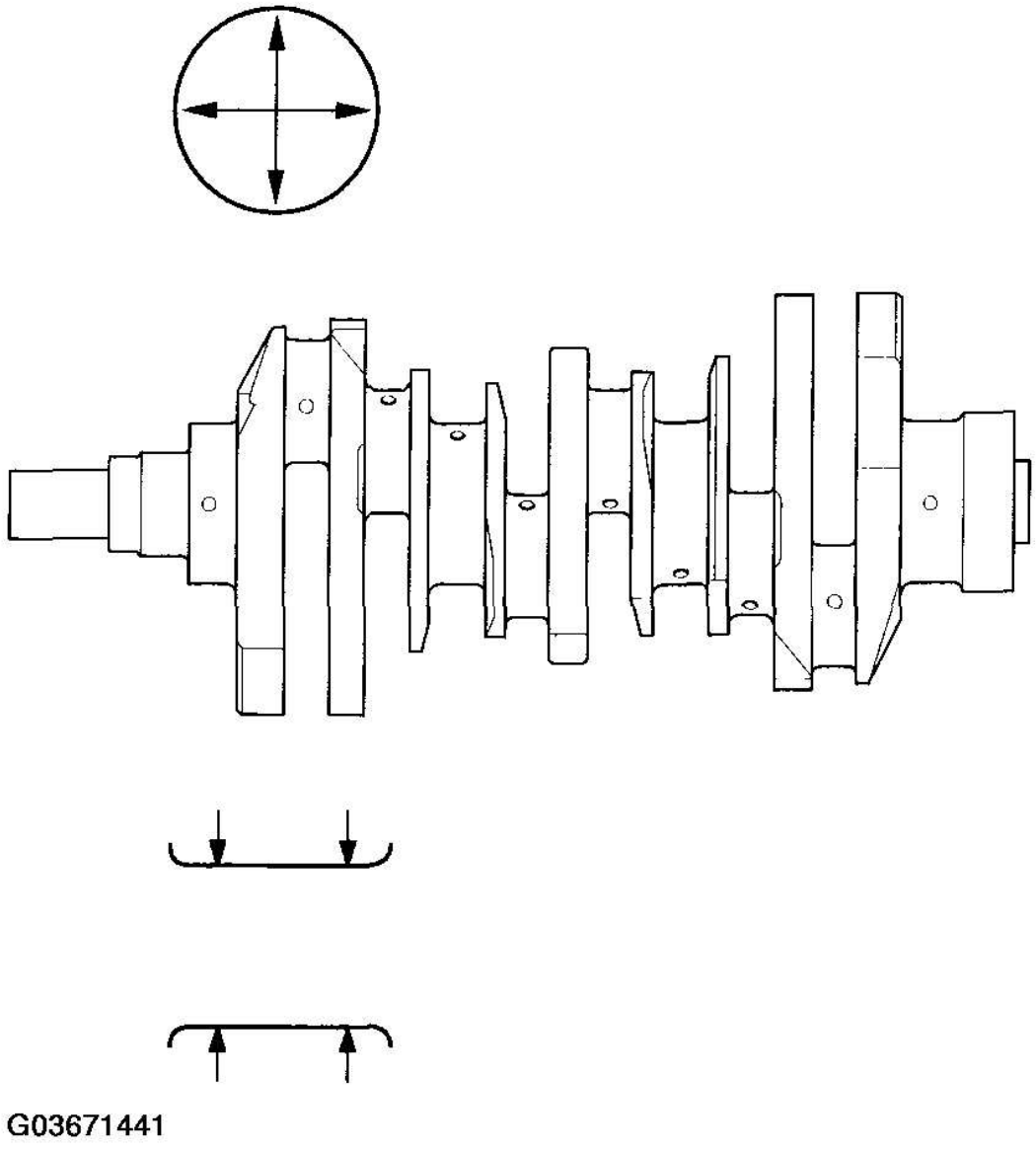


Fig. 26: Measuring Out-Of-Journal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Measure taper at the edges of each rod and main journal. The difference between measurements on each journal must not be more than the service limit.

Journal Taper

Standard (New): 0.005 mm (0.0002 in.) max.

Service Limit: 0.010 mm (0.0004 in.)

Straightness

6. Place the engine block on the surface plate.
7. Clean and install the bearings on the No. 1 and No. 4 journal of the engine block.
8. Lower the crankshaft into the block.
9. Measure the runout on all of the main journals. Rotate the crankshaft two complete revolutions. The difference between measurements on each journal must not be more than the service limit.

Crankshaft Total Runout

Standard (New): 0.020 mm (0.0008 in.) max.

Service Limit: 0.030 mm (0.0012 in.)

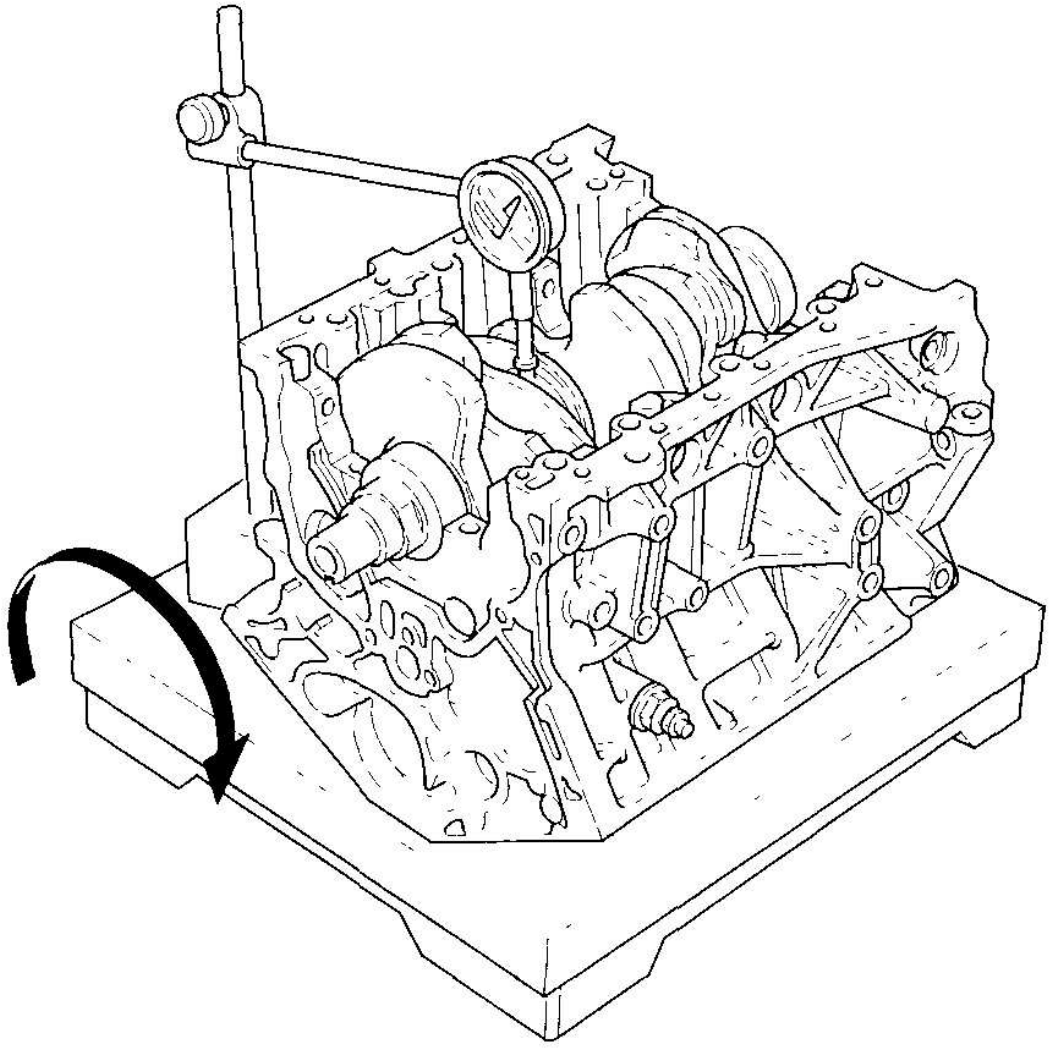


Fig. 27: Measuring Crankshaft Total Runout
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BLOCK AND PISTON INSPECTION

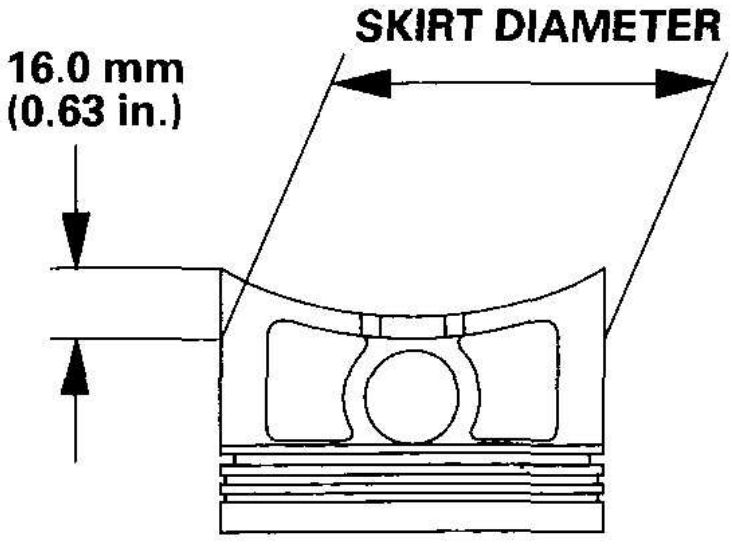
1. Remove the piston from the engine block (see **OIL PAN REMOVAL**).
2. Check the piston for distortion or cracks.
3. Measure the piston diameter at a point 16.0 mm (0.63 in.) from the bottom of the skirt.

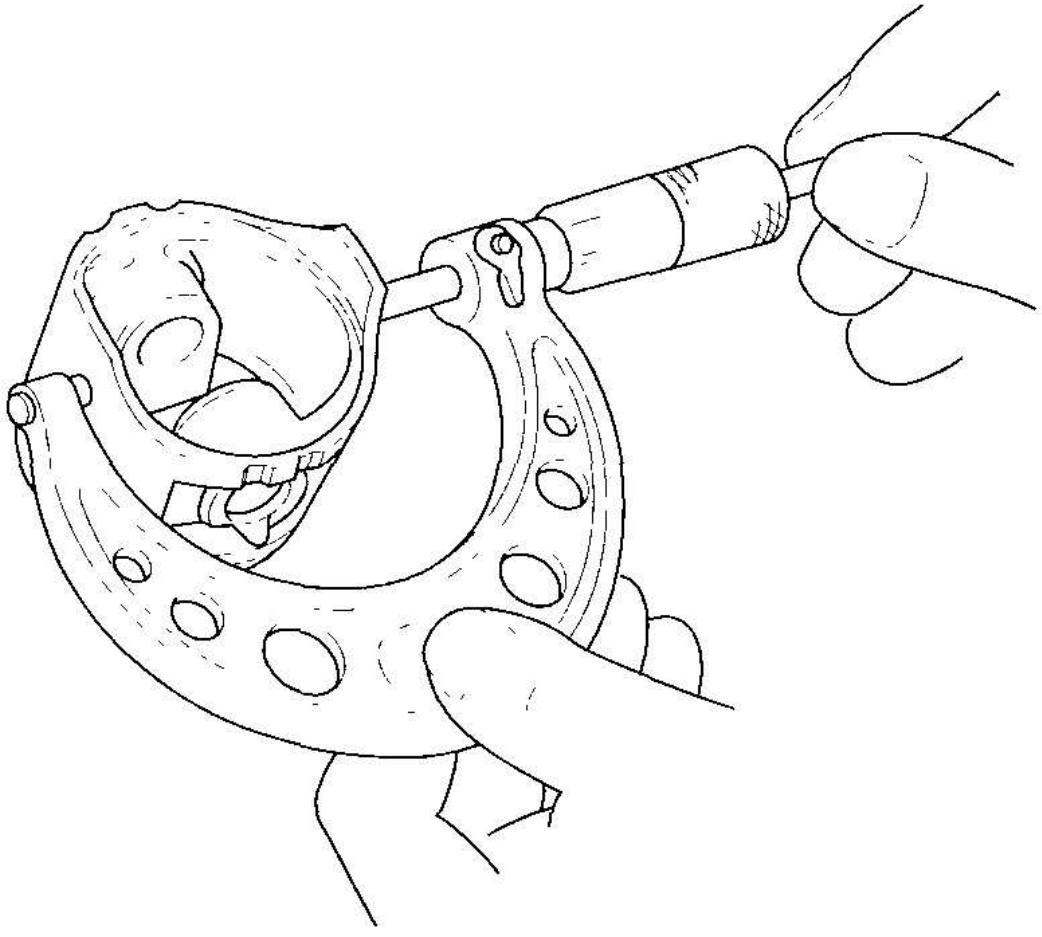
Piston Diameter

Standard (New): 85.975-85.985 mm (3.3848-3.3852 in.)
Service Limit: 85.965 mm (3.3844 in.)

Oversize Piston Diameter

0.25: 86.225-86.235 mm (3.3947-3.3951 in.)
0.50: 86.475-86.485 mm (3.4045-3.4049 in.)





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Fig. 28: Measuring Piston Diameter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure wear and taper in direction X and Y at three levels in each cylinder as shown in **Fig. 29**. If measurements in any cylinder are beyond the oversize bore service limit, replace the block. If the block has to be rebored, refer to step 7 after reboring.

Cylinder Bore Size

Standard (New): 86.000-86.015 mm (3.3858-3.3864 in.)
Service Limit: 86.065 mm (3.3884 in.)

Oversize

0.25: 86.250-86.265 mm (3.3957-3.3963 in.)
0.50: 86.500-86.515 mm (3.4055-3.4061 in.)

Reboring Limit: 0.5 mm (0.02 in.)

Bore Taper

Limit: (Difference between first and third measurement) 0.05 mm (0.002 in.)

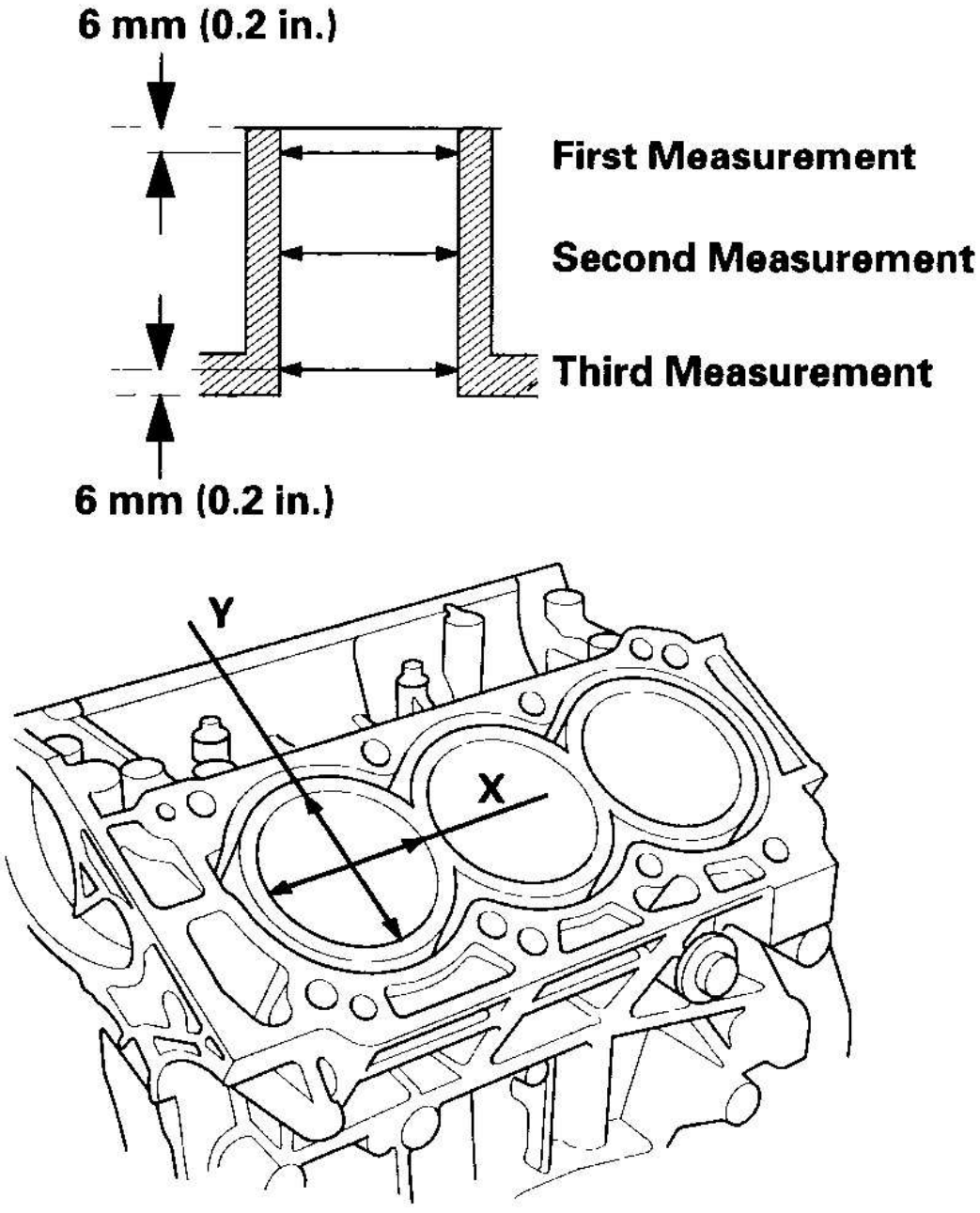


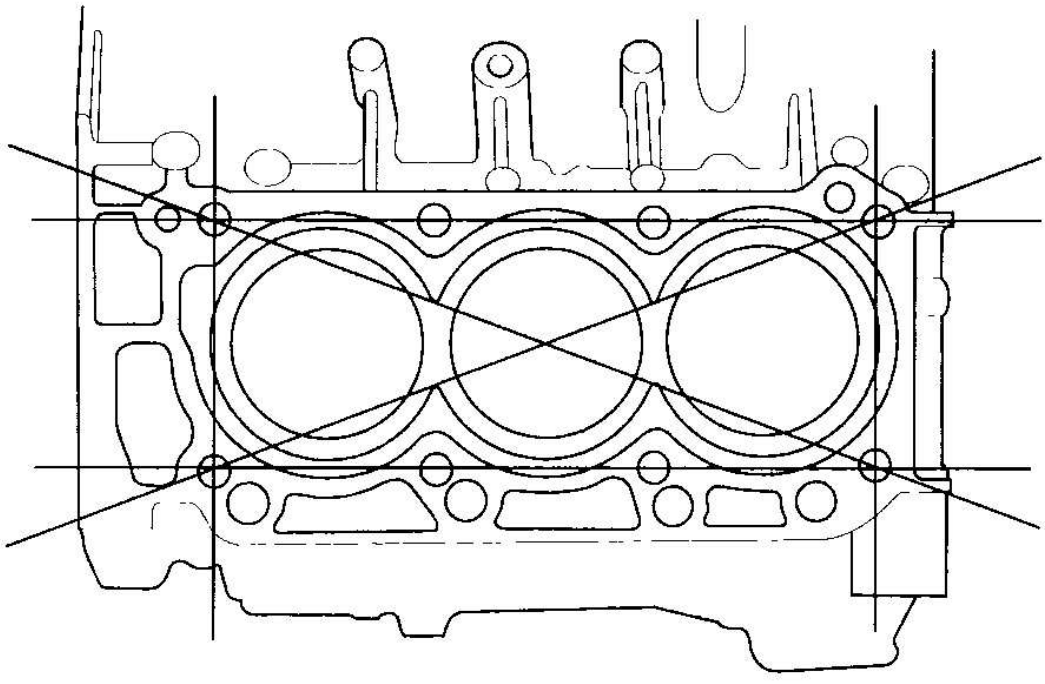
Fig. 29: Identifying Cylinder Bore Sizes
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Scored or scratched cylinder bores must be honed (see **CYLINDER BORE HONING**).
6. Check the top of the engine block for warpage. Measure along the edges and across the center as shown in **Fig. 30**.

   Engine Block Warpage

   Standard (New): 0.07 mm (0.003 in.) max.

   Service Limit: 0.10 mm (0.004 in.)



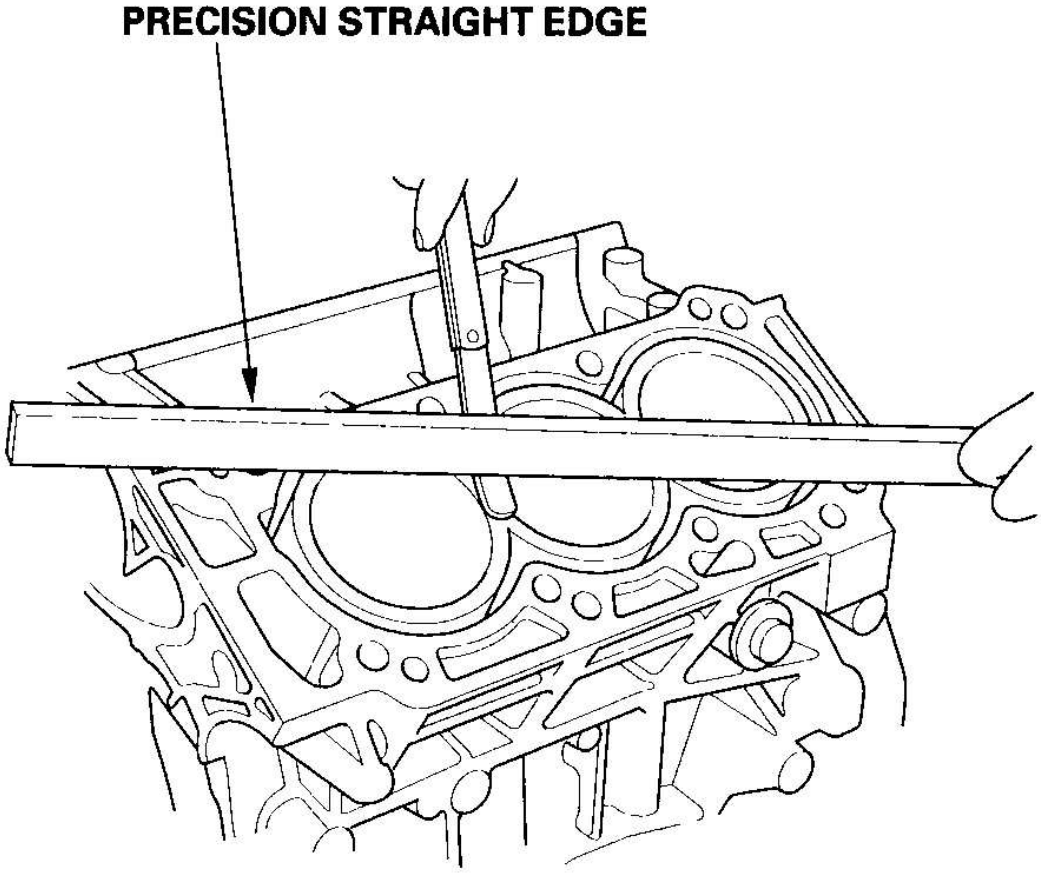

PRECISION STRAIGHT EDGE

Fig. 30: Checking Top Of Engine Block For Warpage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Calculate the difference between cylinder bore diameter and piston diameter. If the clearance is near or exceeds the service limit, inspect the piston and engine block for excessive wear.

   Piston-to-Cylinder Bore Clearance

   Standard (New): 0.015-0.040 mm (0.0006-0.0016 in.)

   Service Limit: 0.08 mm (0.003 in.)

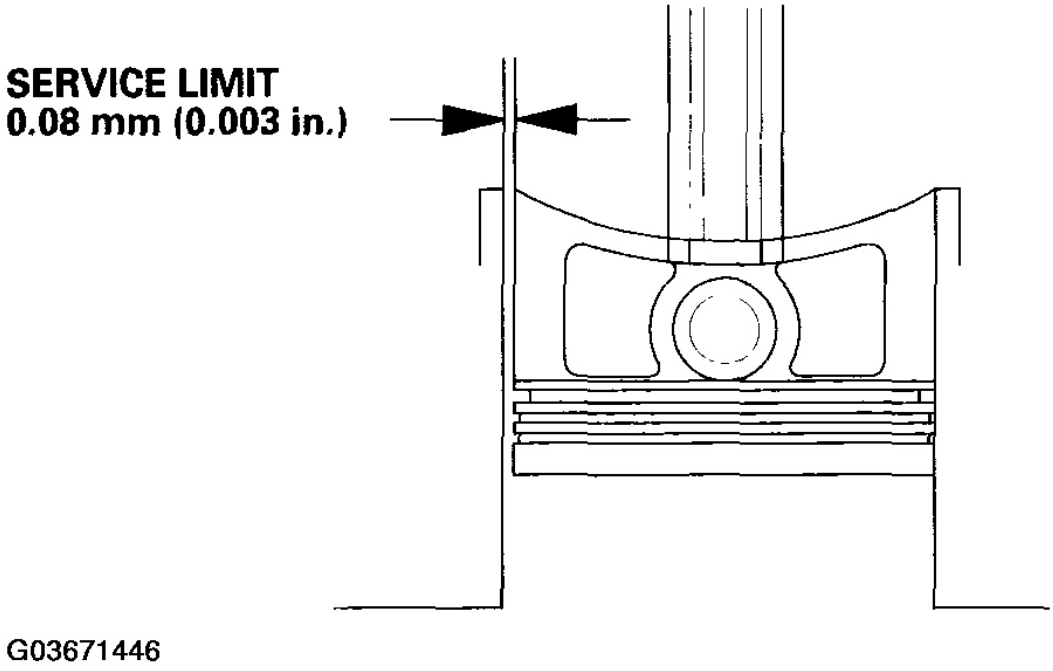


Fig. 31: Identifying Piston-To-Cylinder Bore Clearance
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CYLINDER BORE HONING

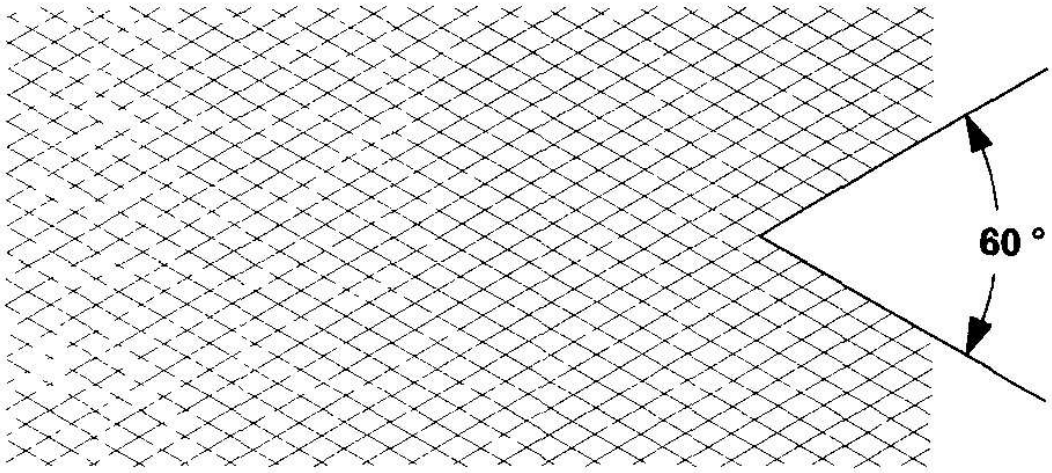
1. Measure the cylinder bores (see step 4). If the engine block is to be reused,

hone the cylinders and remeasure the bores. Only scored or scratched cylinder bores must be honed.

2. Hone the cylinder bores with honing oil and a fine (400 grit) stone in a 60 degree Crosshatch pattern.

NOTE:

- **Use only a rigid hone with 400 grit or finer stone, such as Sunnen, Ammco, or equivalent.**
- **Do not use stones that are worn or broken.**



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Fig. 32: Identifying Cylinder Bore Honing Angle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

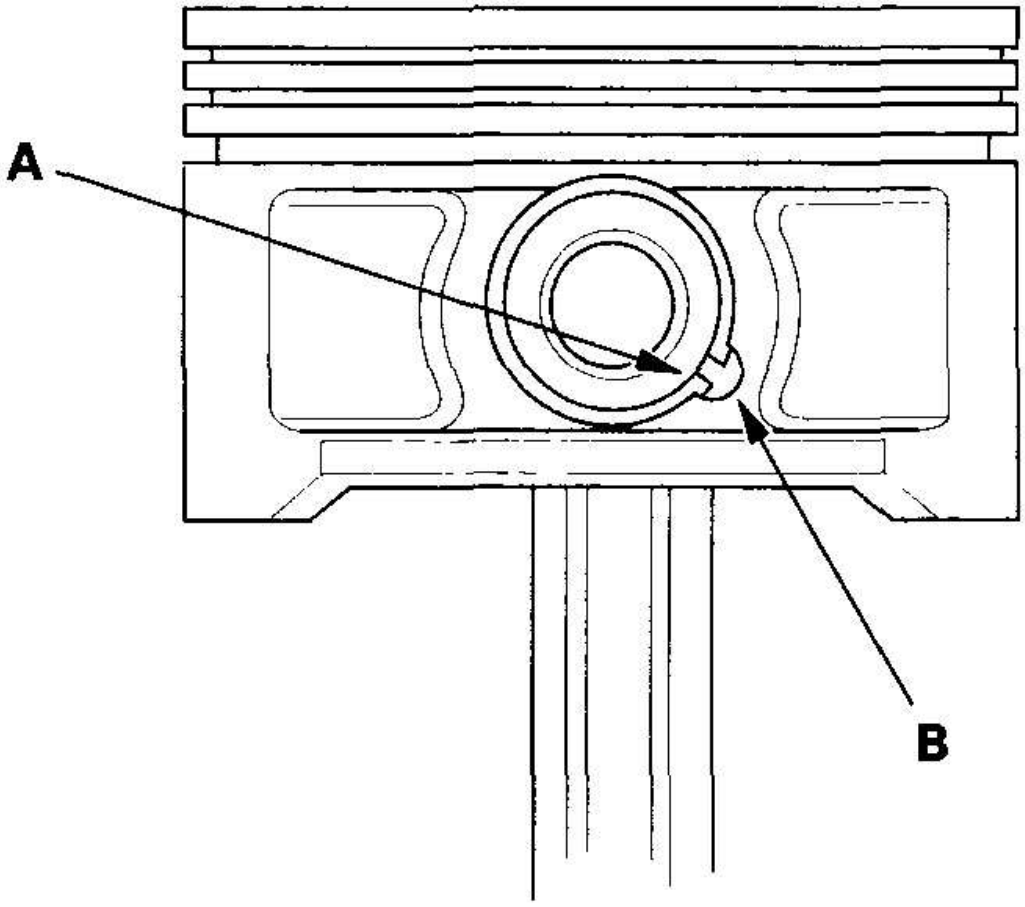
3. When honing is complete, thoroughly clean the engine block of all metal particles. Wash the cylinder bores with hot soapy water, then dry and oil them immediately to prevent rusting. Never use solvent, it will only redistribute the grit on the cylinder walls.
4. If scoring or scratches are still present in the cylinder bores after honing to the service limit, rebore the engine block. Some light vertical scoring and scratching is acceptable if it is not deep enough to catch your fingernail and does not run the full length of the bore.

PISTON, PIN, AND CONNECTING ROD REPLACEMENT

DISASSEMBLY

1. Remove the piston from the engine block (see **OIL PAN REMOVAL**).
2. Apply new engine oil to the piston pin snap rings (A) and turn them in the ring grooves until the end gaps are lined up with the cutouts in the piston pin bores (B).

NOTE: Take care not to damage the ring grooves.



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Fig. 33: Applying Engine Oil To Piston Pin Snap Rings
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove snap rings (A) from both sides of the piston. Start at the cutout in the piston pin bore. Remove the snap rings carefully so they do not go flying or get lost. Wear eye protection.

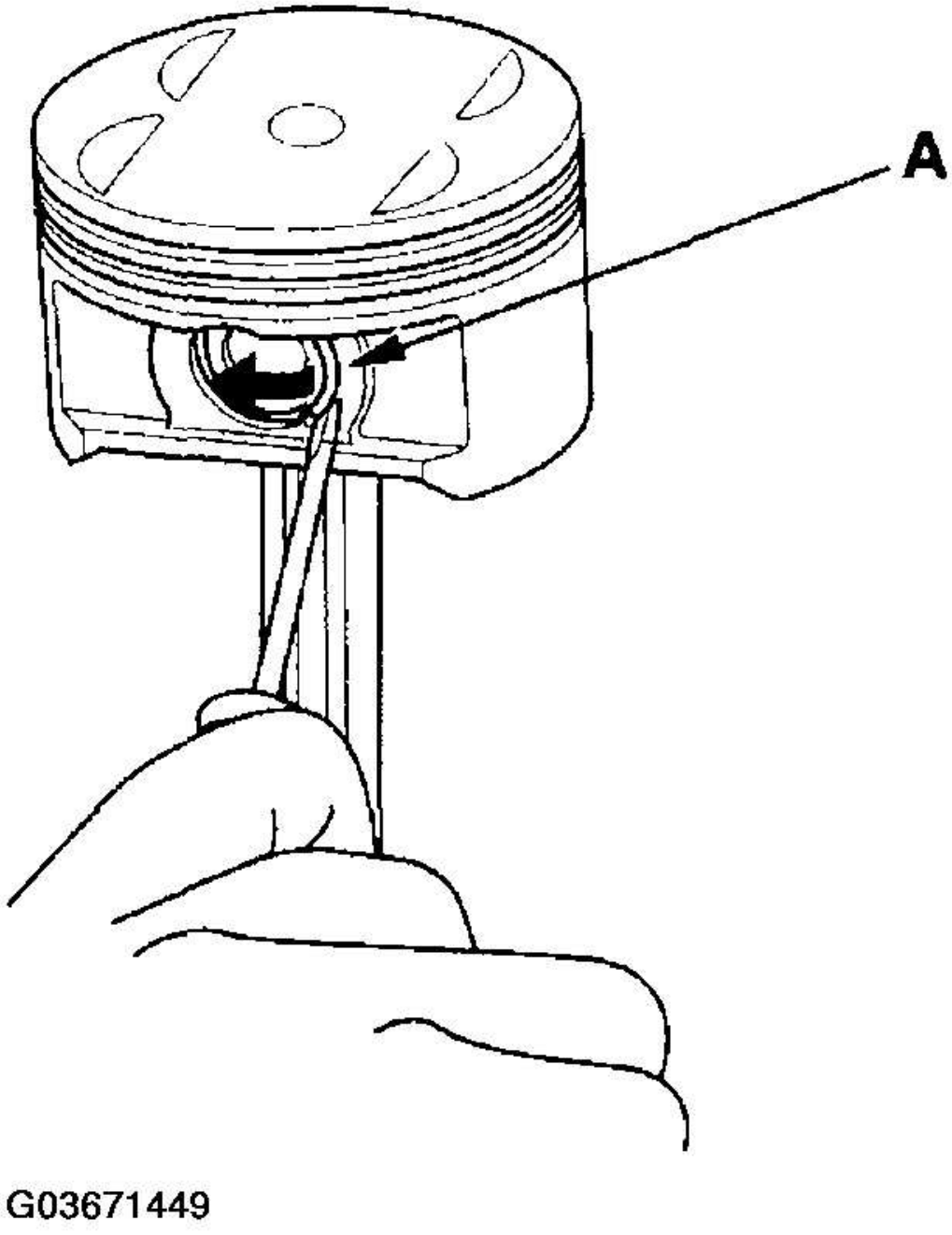


Fig. 34: Removing Snap Rings From Piston
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Heat the piston and connecting rod assembly to about 158°F (70°C), then remove the piston pin.

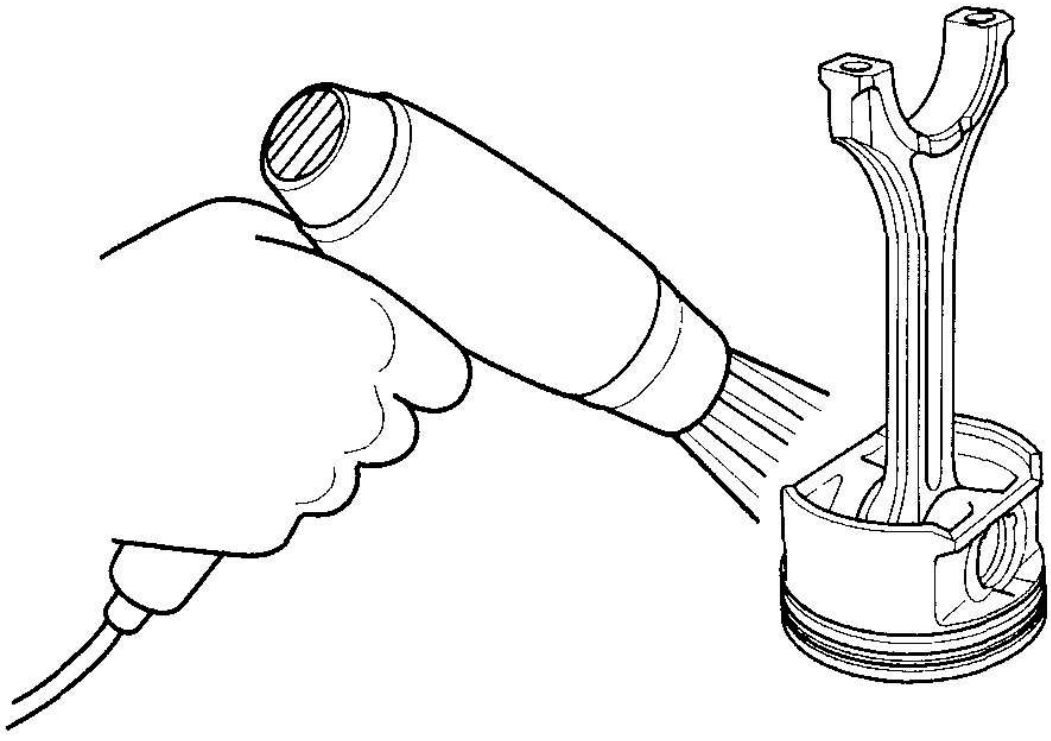


Fig. 35: Heating Piston And Connecting Rod Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INSPECTION

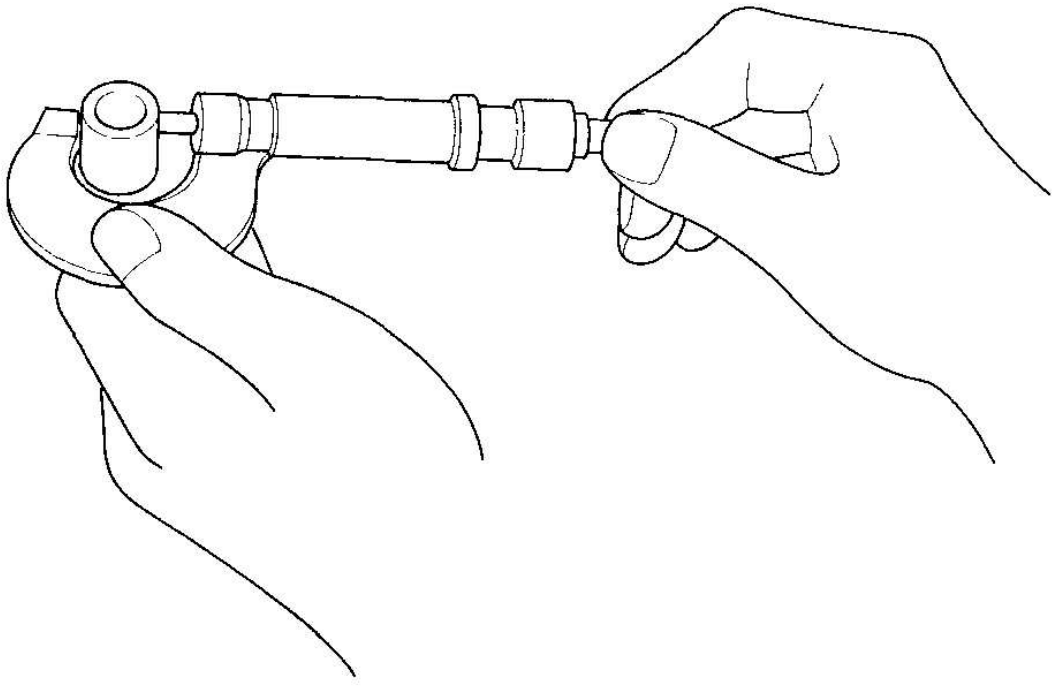
NOTE: Inspect the piston, piston pin, and connecting rod when they are at room temperature.

1. Measure the diameter of the piston pin.

Piston Pin Diameter

Standard (New): 21.962-21.965 mm (0.8646-0.8648 in.)

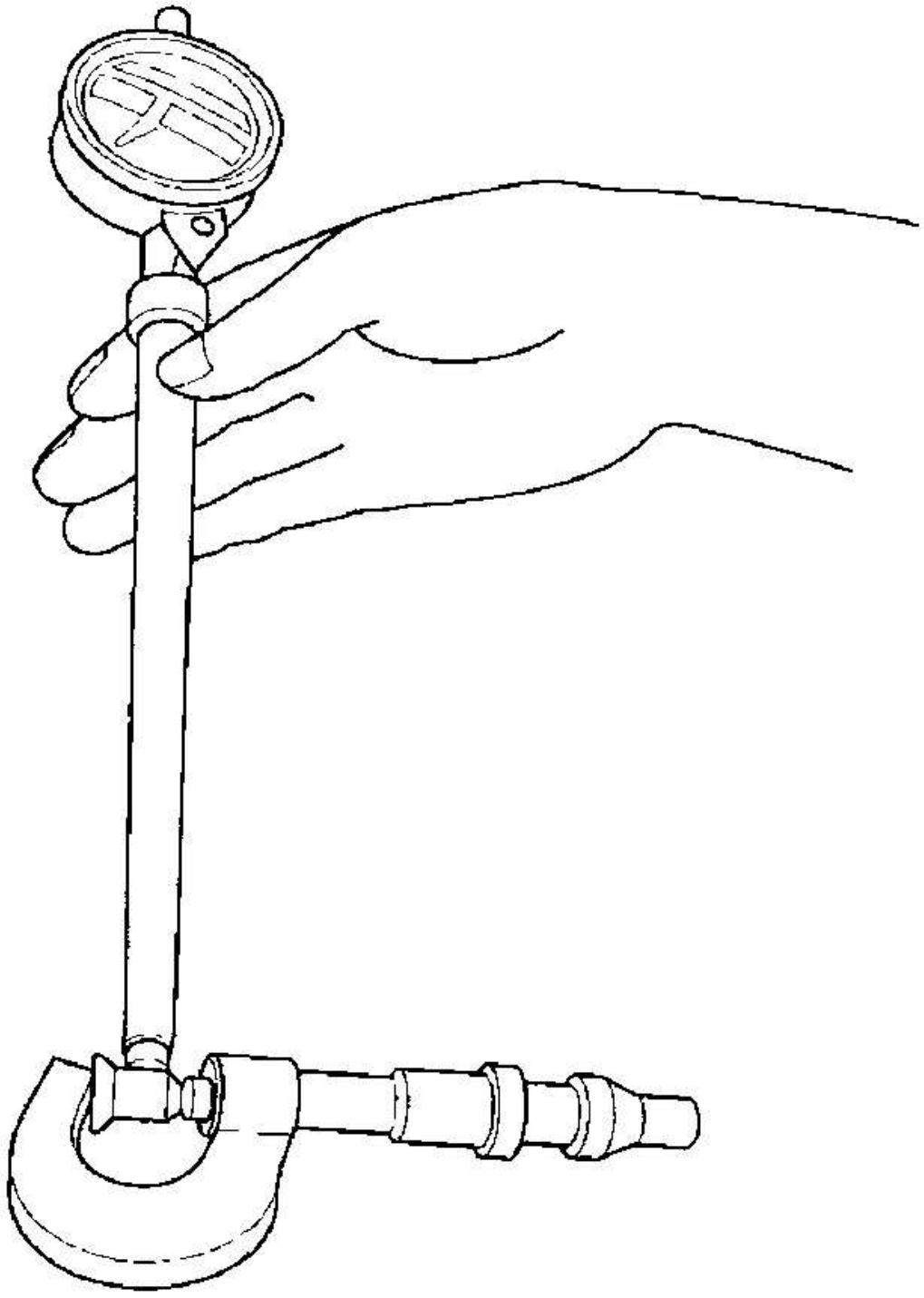
Service Limit: 21.954 mm (0.8643 in.)



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Fig. 36: Measuring Piston Pin Diameter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Zero the dial indicator to the piston pin diameter.



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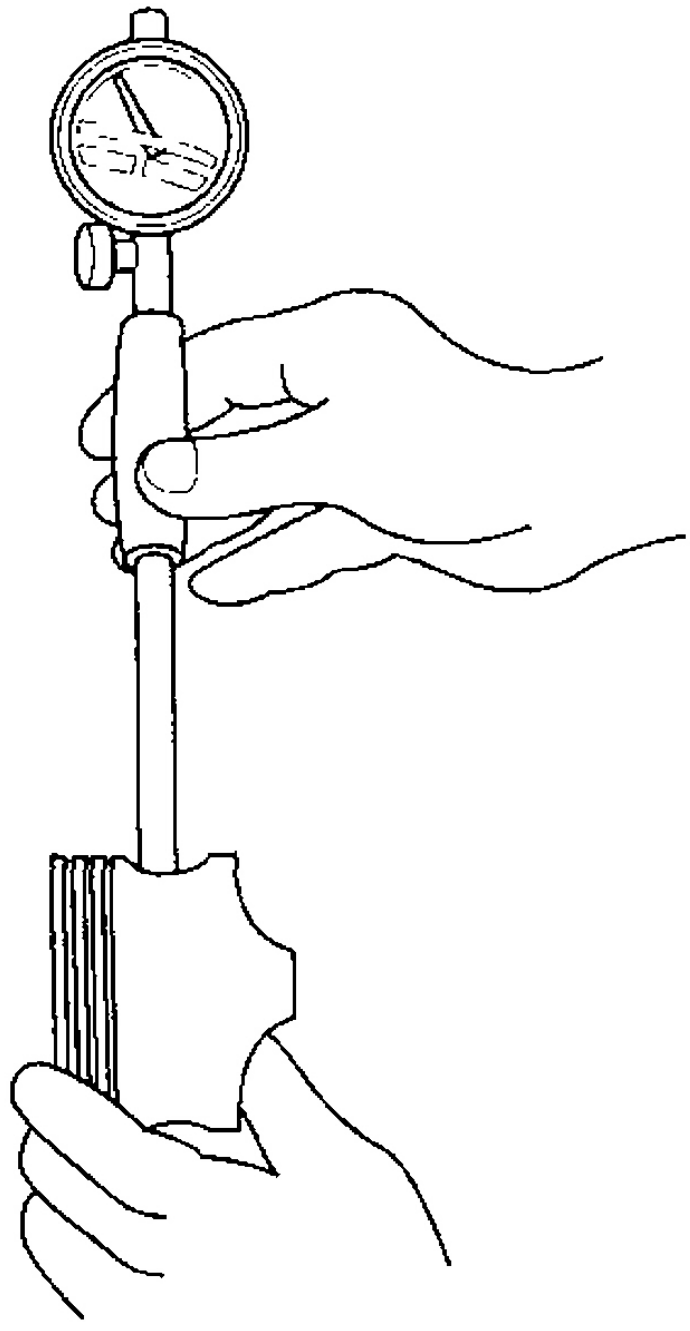
Fig. 37: Zeroing Dial Indicator To Piston Pin Diameter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check the difference between the piston pin diameter and piston pin hole diameter on the piston.

   Piston Pin-to-Piston Clearance

   Standard (New): -0.0050 to +0.0010 mm (-0.00020 to +0.00004 in.)

   Service Limit: 0.004 mm (0.0002 in.)



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Fig. 38: Checking Difference Between Piston Pin & Piston Hole Diameter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the piston pin-to-connecting rod clearance.

   Piston Pin-to-Connecting Rod Clearance

   Standard (New): 0.005-0.014 mm (0.0002-0.0006 in.)

   Service Limit: 0.019 mm (0.0007 in.)

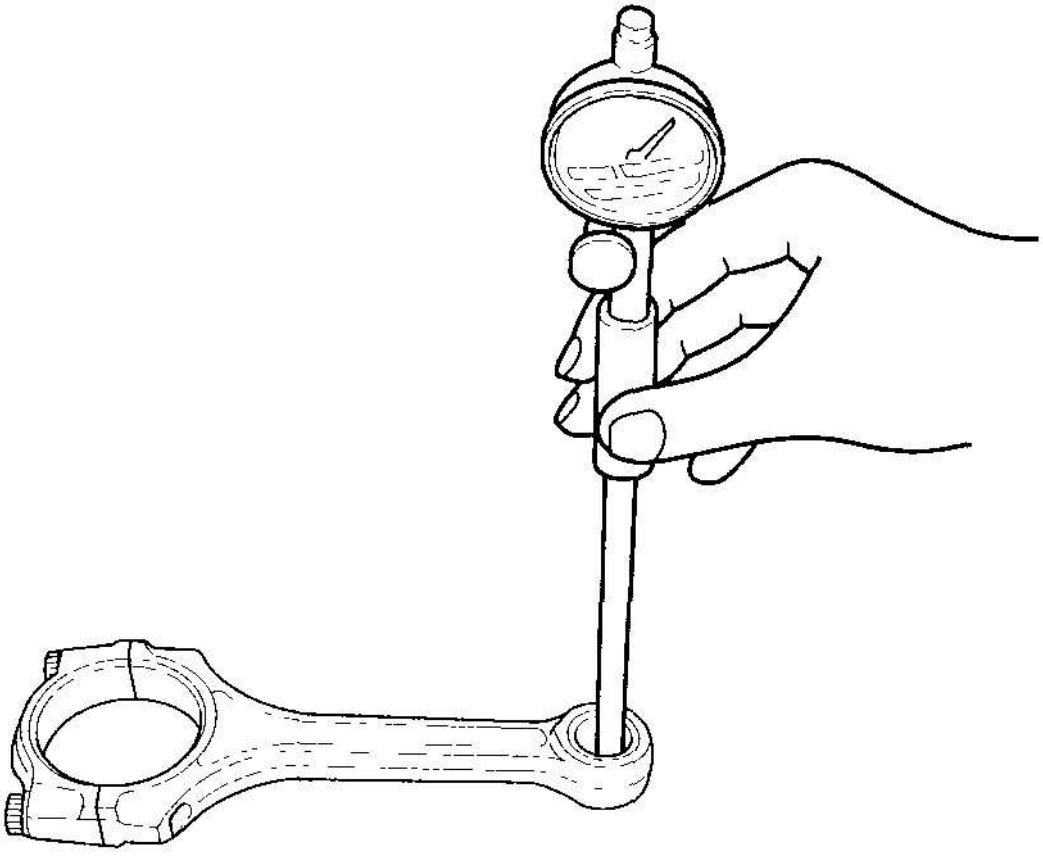


Fig. 39: Checking Piston Pin-To-Connecting Rod Clearance
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REASSEMBLY

1. Install a piston pin snap ring (A).

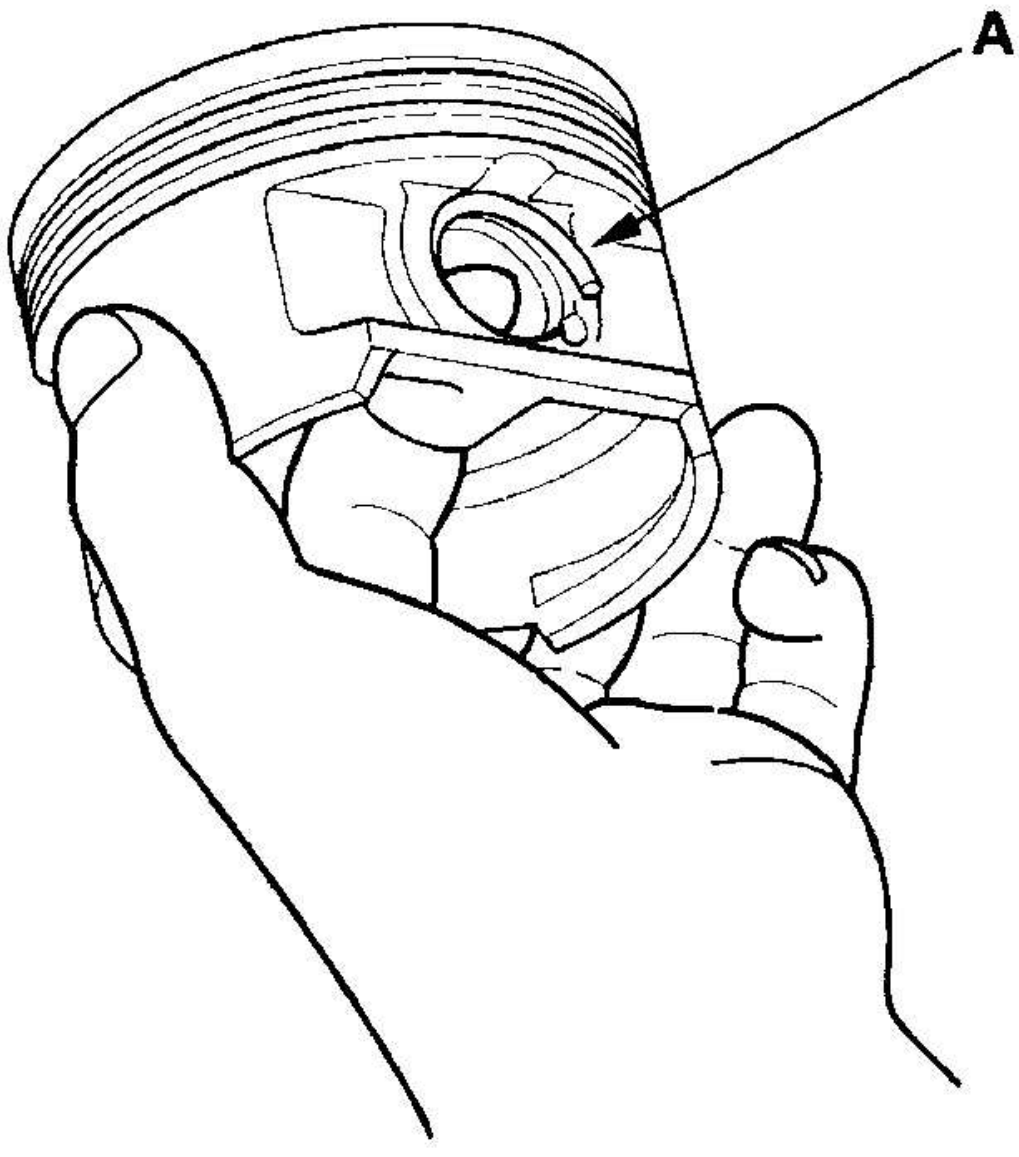


Fig. 40: Installing Piston Pin Snap Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Coat the piston pin bore in the piston, the bore in the connecting rod, and the piston pin with new engine oil.

3. Heat the piston to about 158°F (70°C).

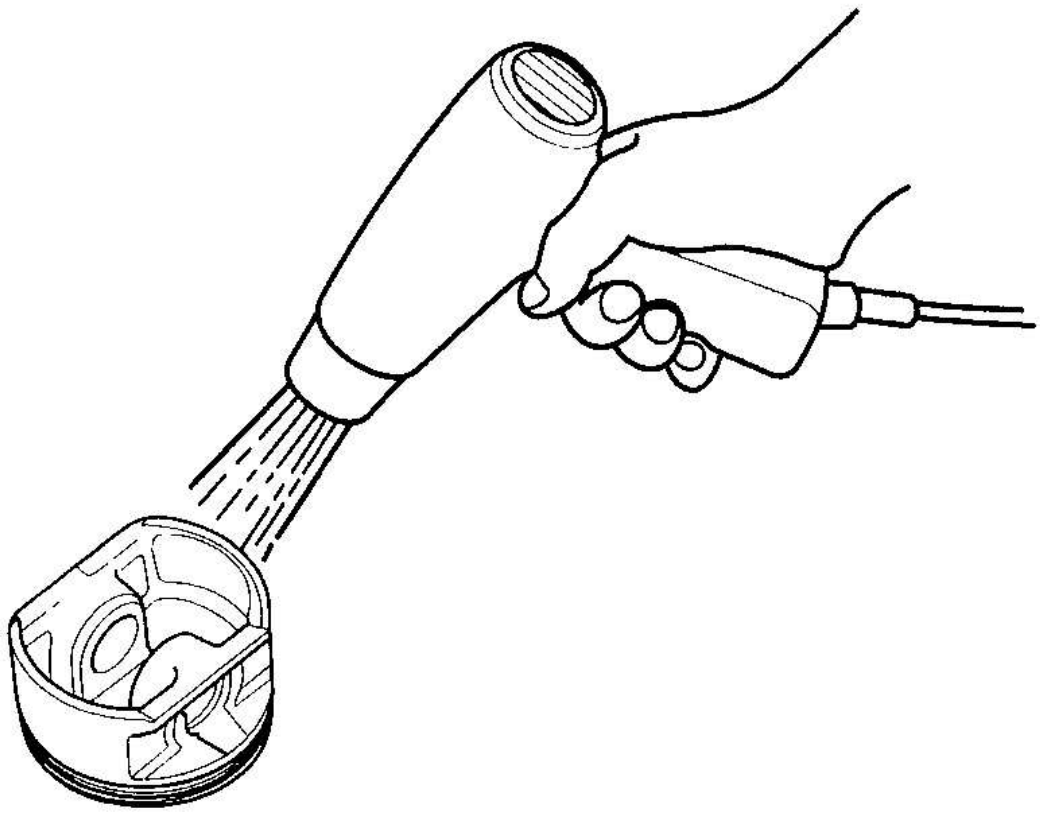


Fig. 41: Heating Piston
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Assemble the piston (A) and connecting rod (B) with the embossed marks (C) on the same side. Install the piston pin (D).

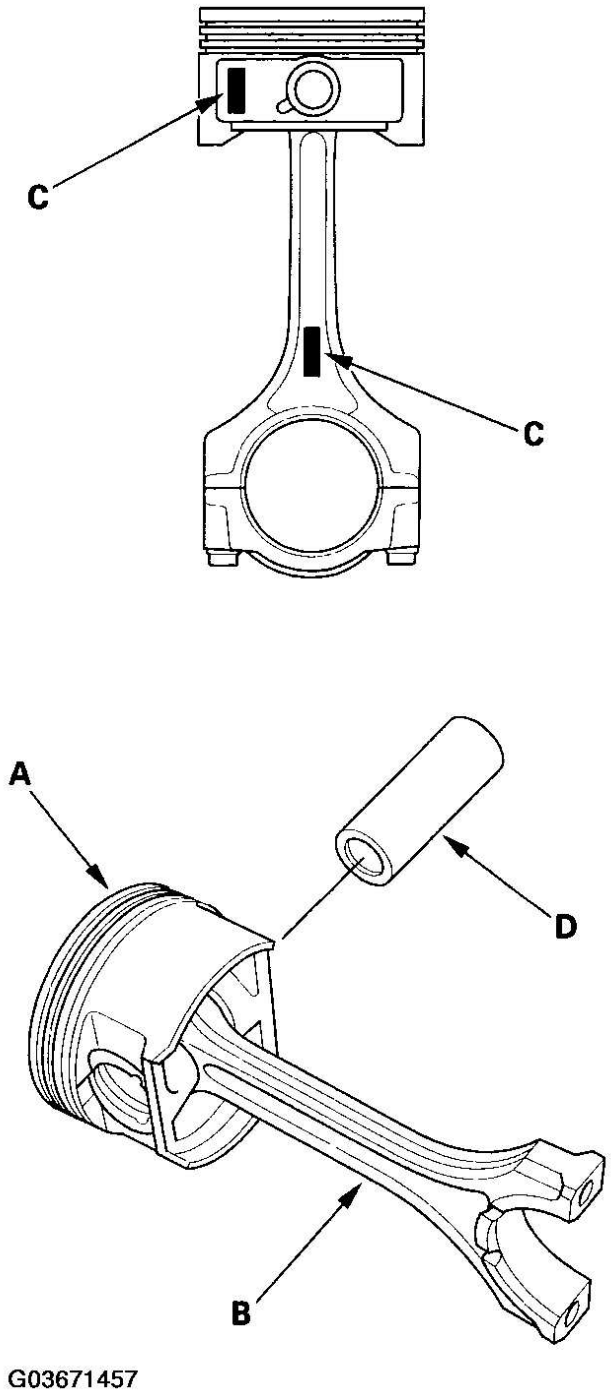


Fig. 42: Assembling Piston And Connecting Rod With Embossed Marks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the remaining snap ring.

PISTON RING REPLACEMENT

1. Remove the piston from the engine block (see **OIL PAN REMOVAL**).
2. Using a ring expander (A), remove the old piston rings (B).

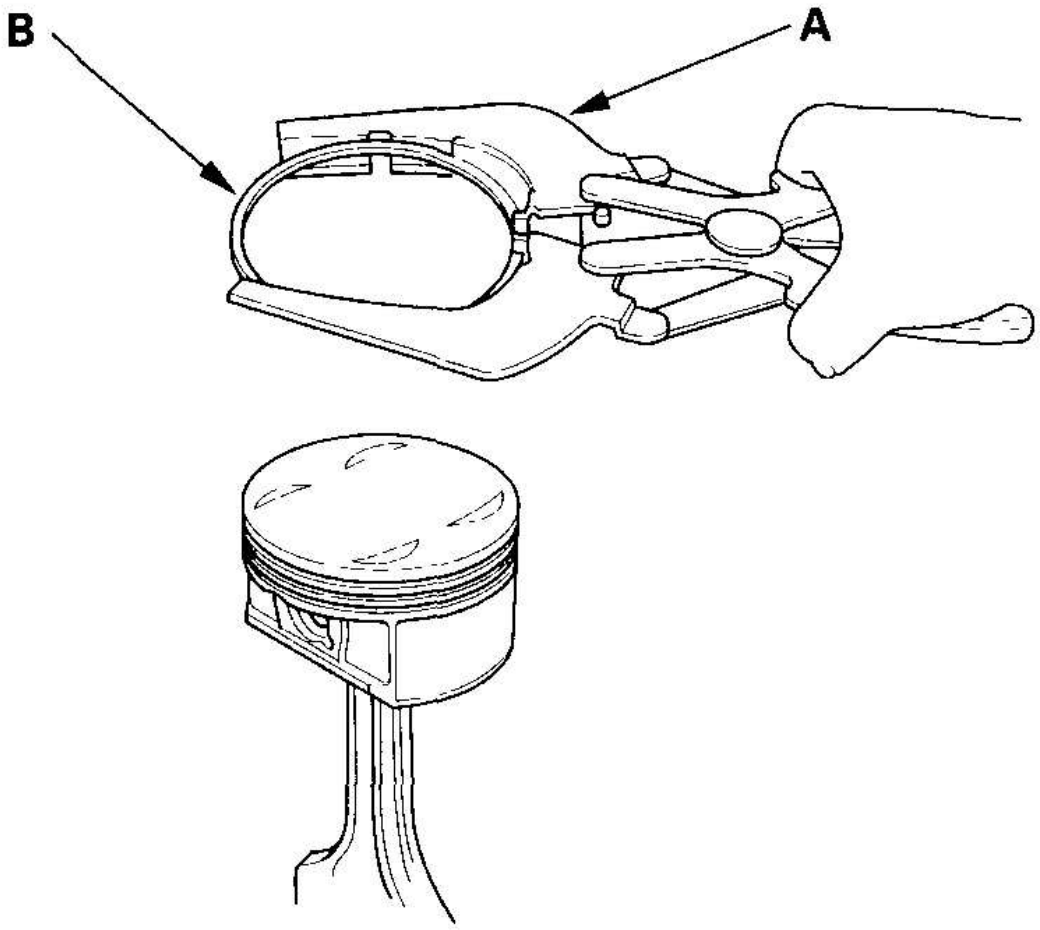


Fig. 43: Removing Old Piston Rings Using Ring Expander
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Clean all the ring grooves thoroughly with a squared-off broken ring, or a ring

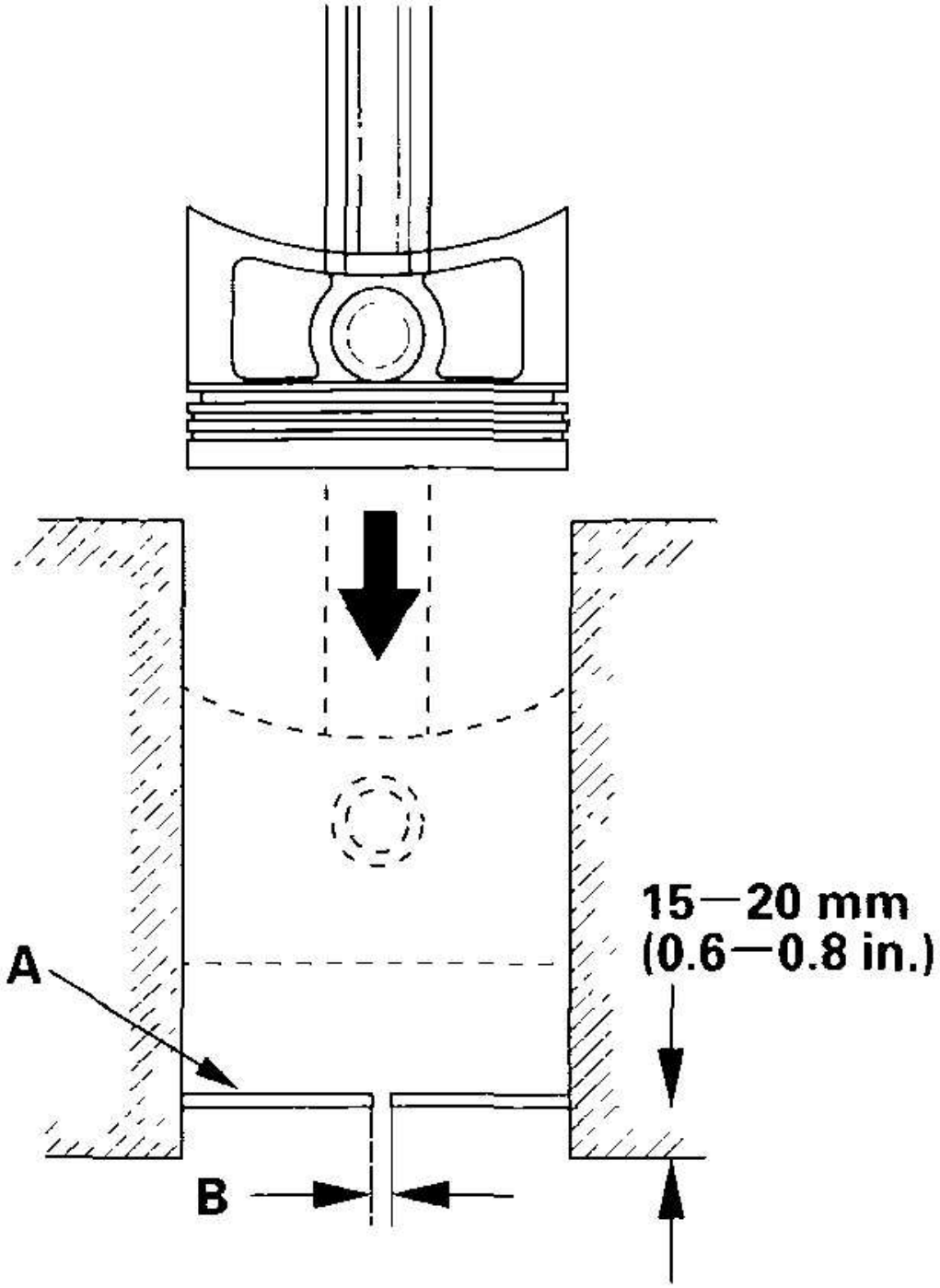
groove cleaner with a blade to fit the piston grooves. File down the blade, if necessary.

The top ring and second ring grooves are 1.2 mm (0.05 in.) wide, and the oil ring groove is 2.8 mm (0.11 in.) wide.

Do not use a wire brush to clean the ring grooves, or cut the ring grooves deeper with the cleaning tool.

NOTE: If the piston is to be separated from the connecting rod, do not install new rings yet.

4. Using a piston, push a new ring (A) into the cylinder bore 15-20 mm (0.6-0.8 in.) from the bottom.



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Fig. 44: Pushing Ring Into Cylinder Bore Using Piston
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Measure the piston ring end-gap (B) with a feeler gauge:
   - If the gap is too small, check to see if you have the proper rings for your engine.
   - If the gap is too large, recheck the cylinder bore diameter against the wear limits (see step 4). If the bore is over the service limit, the engine block must be rebored.

   Piston Ring End-Gap

   Top Ring:

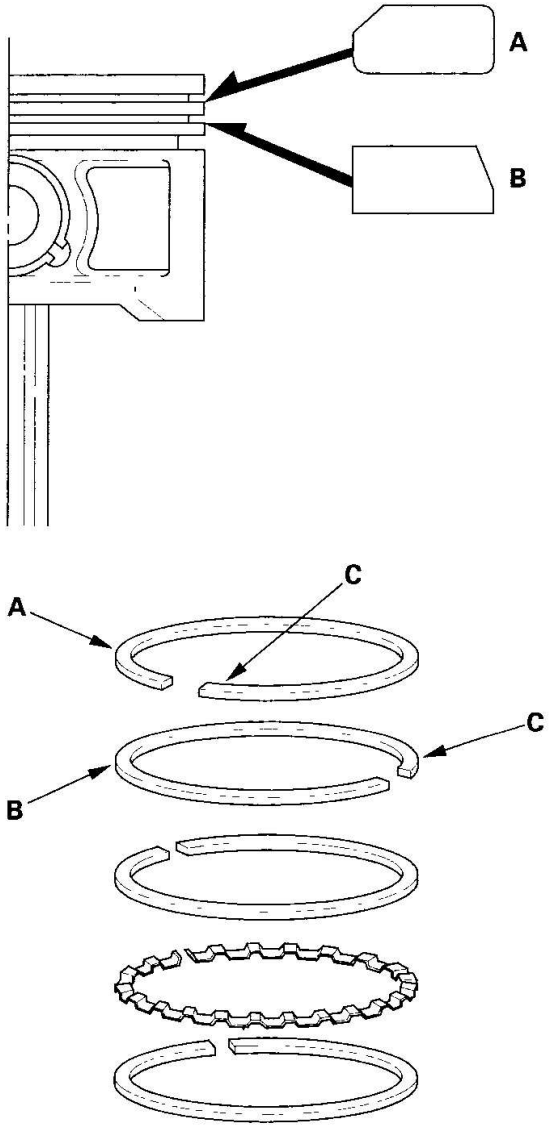
   Standard (New): 0.20-0.35 mm (0.008-0.014 in.)
   Service Limit: 0.60 mm (0.024 in.)

   Second Ring:

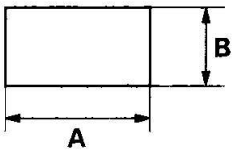
   Standard (New): 0.40-0.55 mm (0.016-0.022 in.)
   Service Limit: 0.70 mm (0.028 in.)

   Oil Ring:

   Standard (New): 0.20-0.70 mm (0.008-0.028 in.)
   Service Limit: 0.80 mm (0.031 in.)
6. Install the rings as shown in **Fig. 45**. The top ring (A) has a 1A mark and the second ring (B) has a 2B mark. The manufacturing marks (C) must be facing upward.



Piston Ring Dimensions:



Top Ring (Standard)
A: 3.1 mm (0.12 in.)
B: 1.2 mm (0.05 in.)

Second Ring (Standard)
A: 3.4 mm (0.13 in.)
B: 1.2 mm (0.05 in.)

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Fig. 45: Installing Piston Rings
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. After installing a new set of rings, measure the ring-to-groove clearance:

Top Ring Clearance

Standard (New): 0.055-0.080 mm (0.0022-0.0031 in.)
Service Limit: 0.15 mm (0.006 in.)

Second Ring Clearance

Standard (New): 0.030-0.055 mm (0.0012-0.0022 in.)
Service Limit: 0.13 mm (0.005 in.)

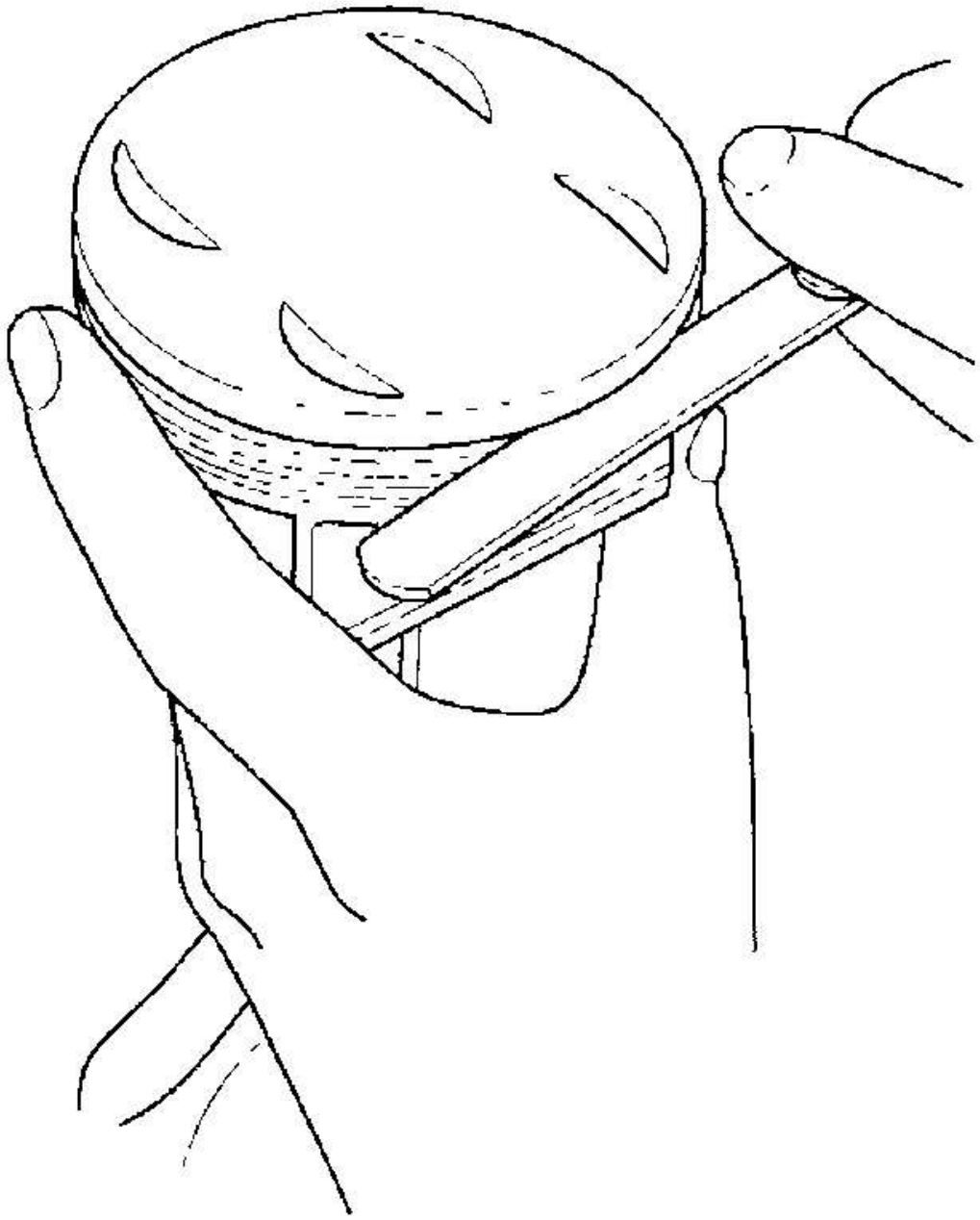


Fig. 46: Measuring Ring-To-Groove Clearance
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Rotate the rings in their grooves to make sure they do not bind.
9. Position the ring end gaps as shown in **Fig. 47**:

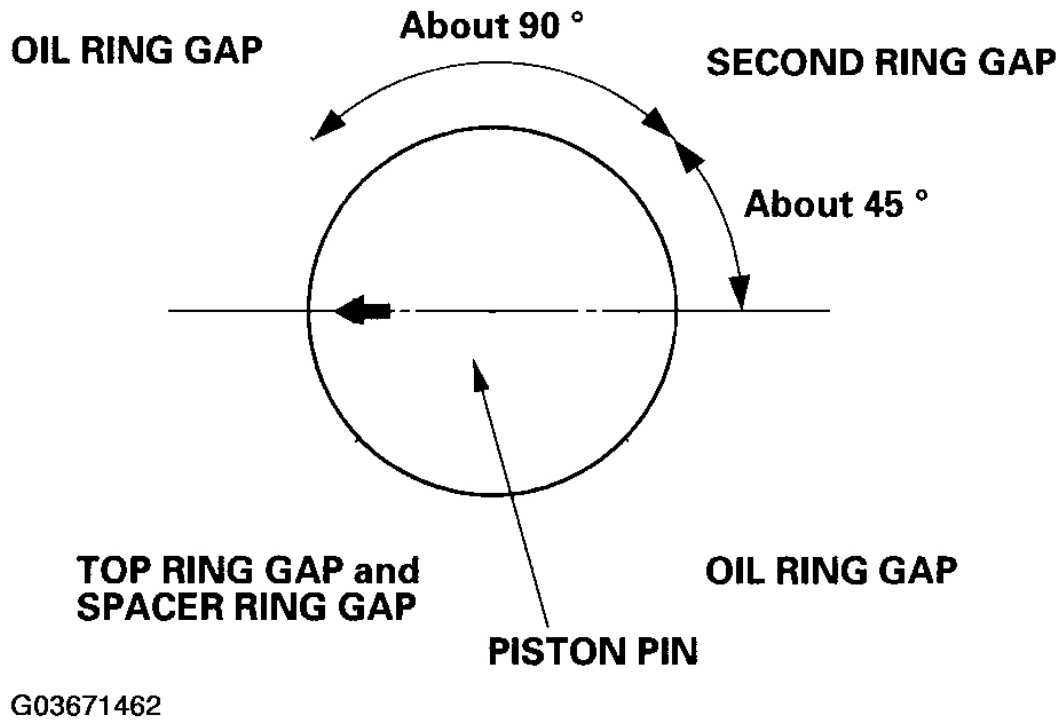


Fig. 47: Positioning Ring End Gaps
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CRANKSHAFT AND PISTON INSTALLATION

Special Tools Required

- Driver 07749-0010000
- Driver attachment, 106 mm 070AD-RCAA200

1. Check the connecting rod bearing clearance with plastigage (see **CONNECTING ROD BEARING REPLACEMENT**).
2. Check the main bearing clearance with plastigage (see **CRANKSHAFT MAIN BEARING REPLACEMENT**).

3. Install the bearing halves in the engine block and connecting rods.
4. Apply new engine oil to inside of the main bearings and rod bearings.
5. Lower the crankshaft (A) into the engine block.

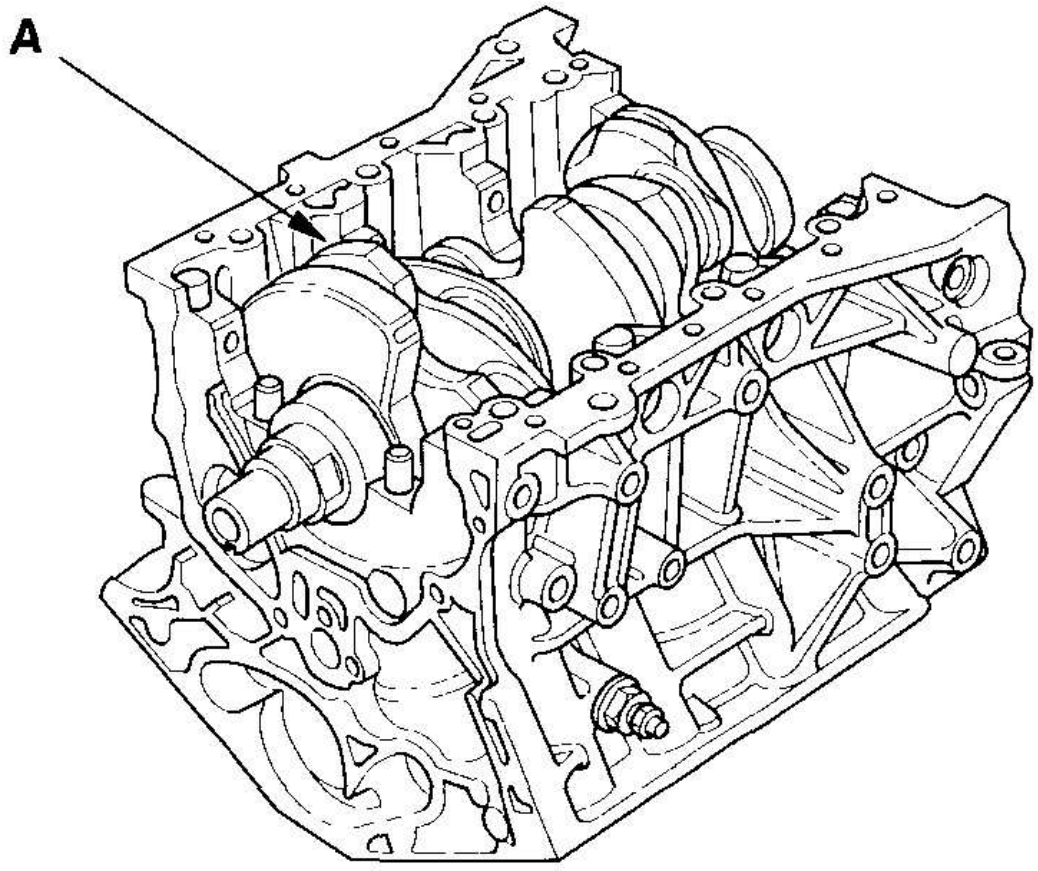


Fig. 48: Lowering Crankshaft Into Block
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Apply new engine oil to the side with the thrust washer groove. Install the thrust washers (A) in the No. 3 journal.

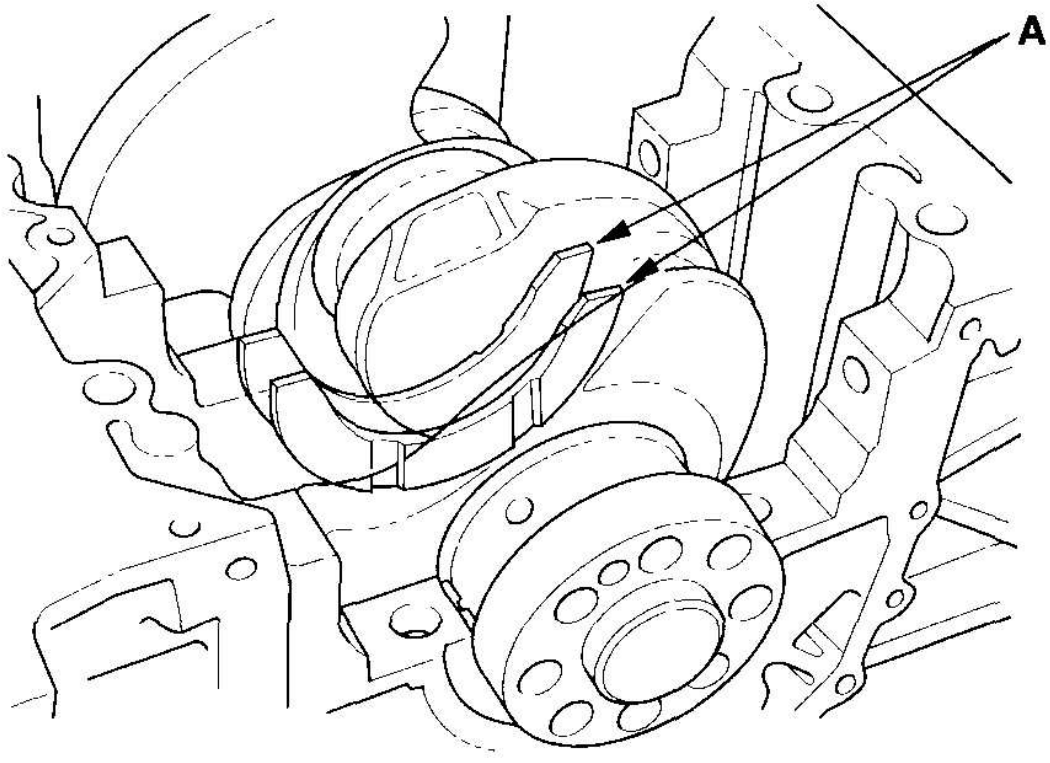


Fig. 49: Installing Thrust Washers In No. 3 Journal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the bearings (A) and bearing caps (B) with the arrow (C) facing the timing belt end of the engine.

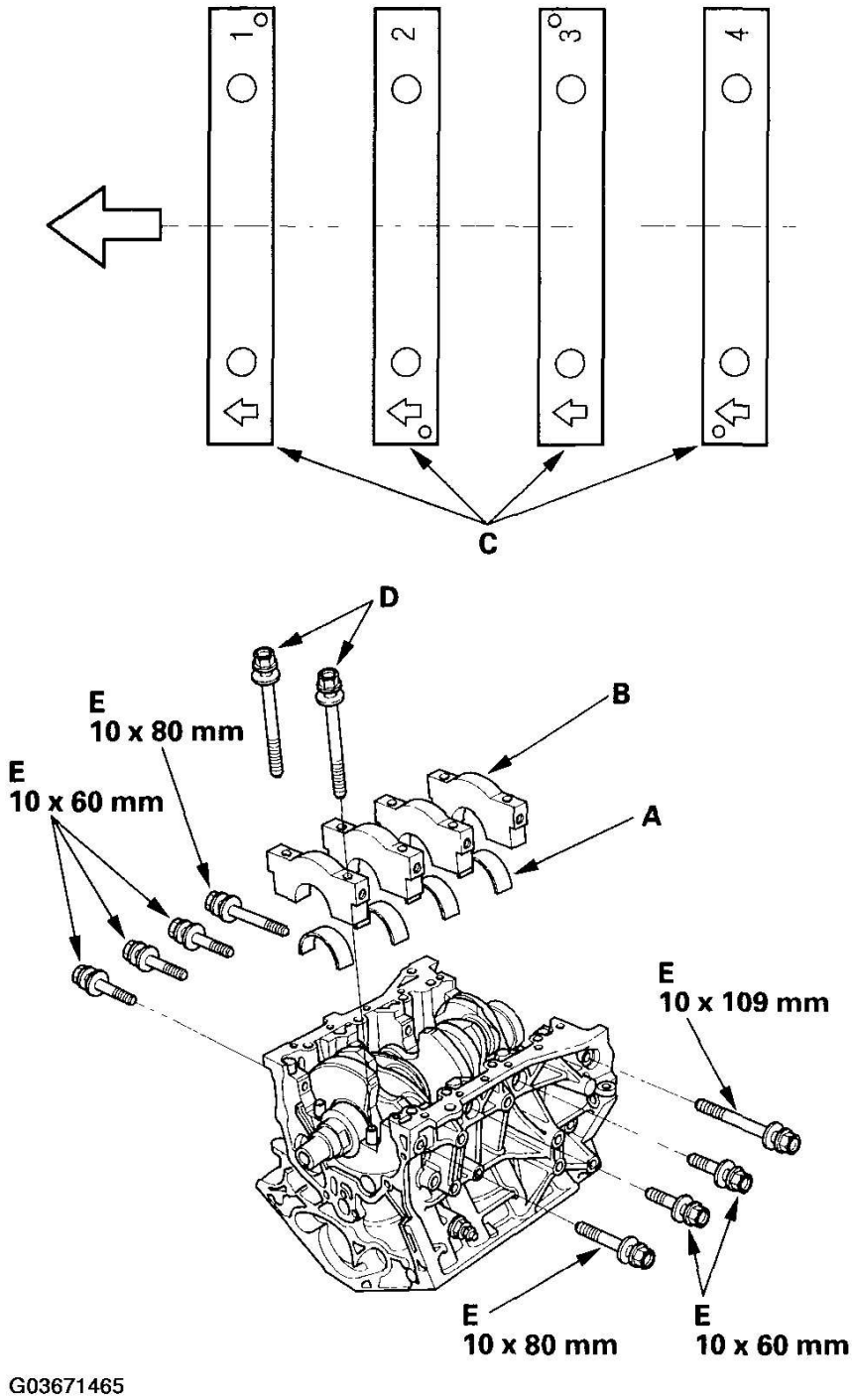


Fig. 50: Installing Bearings And Bearing Caps With Arrow Facing Timing Belt End

Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Apply new engine oil to the bolt threads and flanges, then loosely install the bearing cap bolts (D) and bearing cap side bolts (E).
9. Set the crankshaft to bottom dead center (BDC) for the cylinder you are installing the piston in.
10. Apply new engine oil to the piston, inside of the ring compressor, and the cylinder bore.
11. Attach the ring compressor to the piston/ connecting rod assembly, and check that the bearing is securely in place.
12. Position the piston/connecting rod assembly with the arrow (A) facing the timing belt side of the engine.

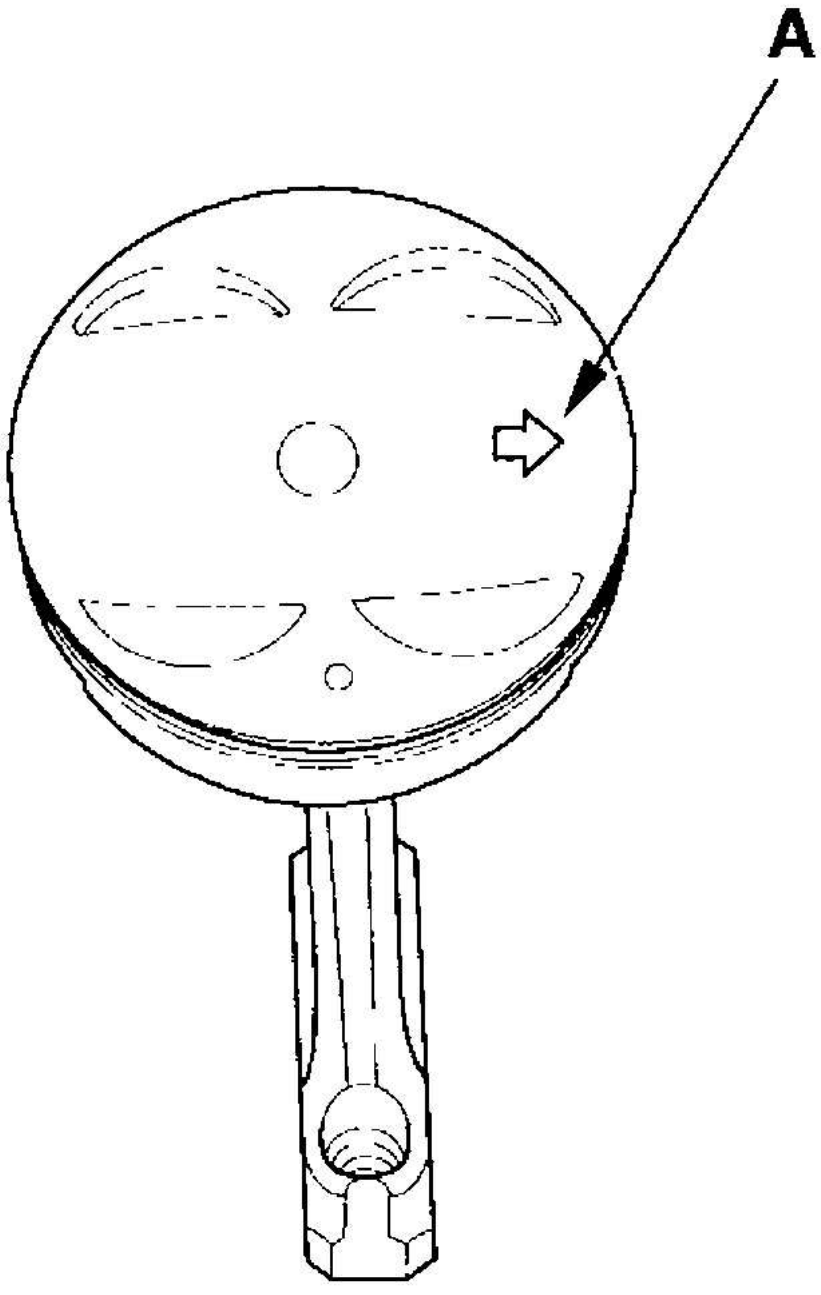


Fig. 51: Positioning Piston/Connecting Rod Assembly With Arrow Facing Timing Belt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Position the piston/connecting rod assembly in the cylinder, and tap it in using the wooden handle of a hammer (A). Maintain downward force on the ring compressor (B) to prevent the rings from expanding before entering the cylinder bore.

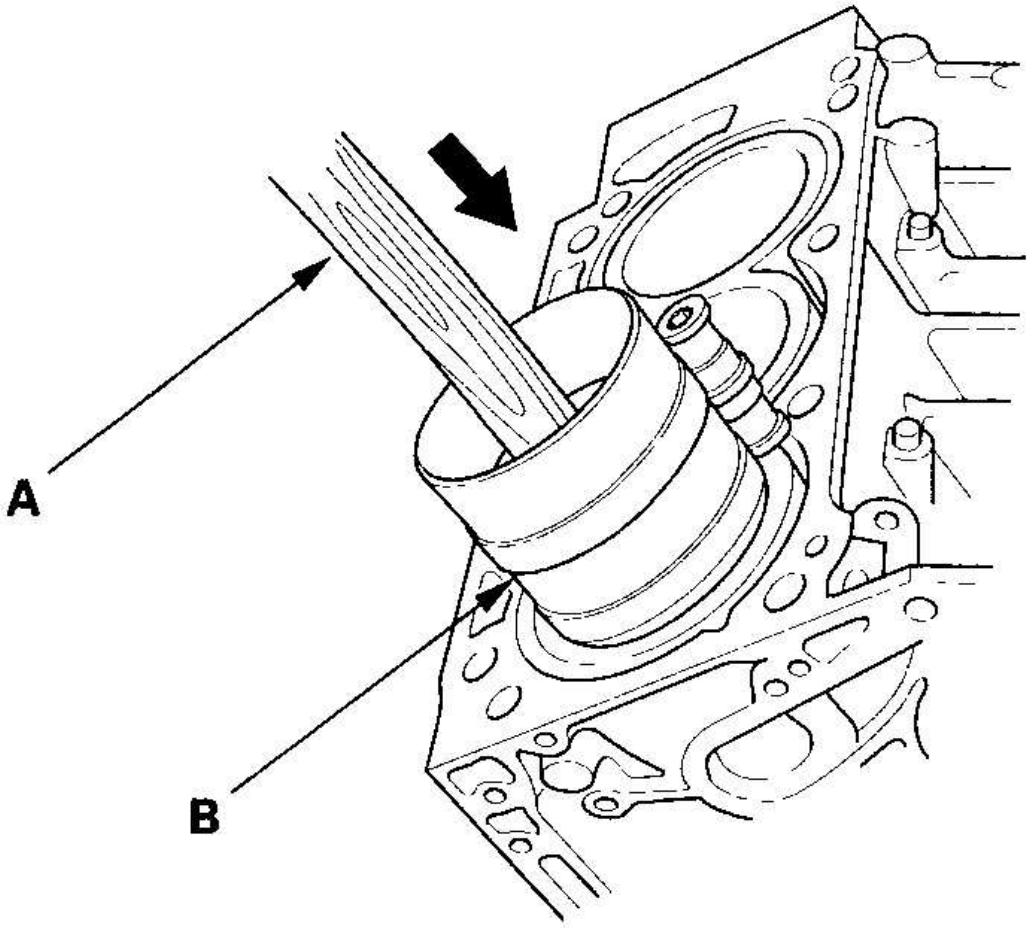


Fig. 52: Tapping Piston/Connecting Rod Assembly Using Wooden Handle Of Hammer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Stop after the ring compressor pops free, and check the connecting rod-to-

crank journal alignment before pushing the piston into place.

15. Measure the diameter of each connecting rod bolt at point A and point B.

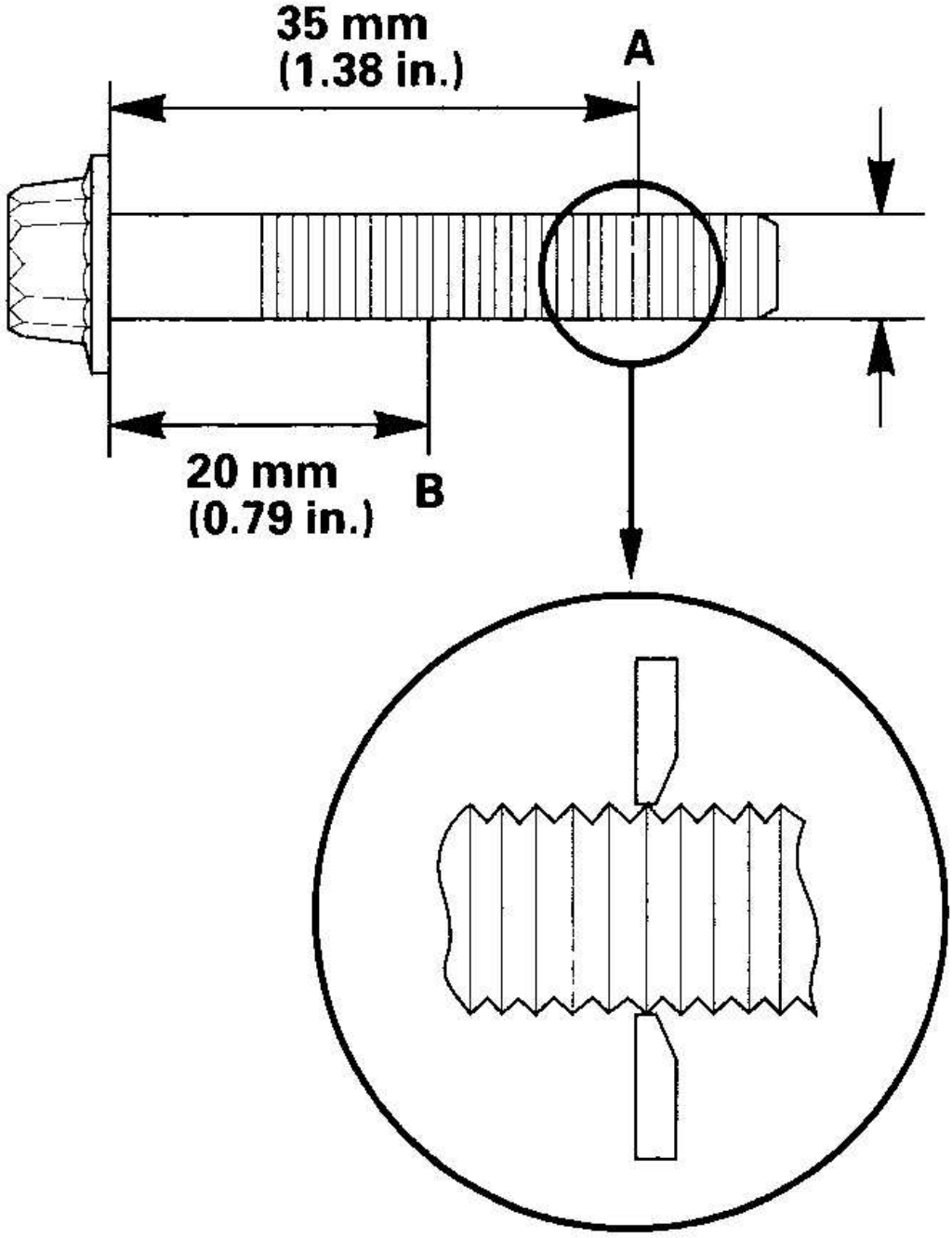


Fig. 53: Measuring Diameter Of Connecting Rod Bolt

Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Calculate the difference in diameter between point A and point B.

    Point A-Point B = Difference in Diameter

    Difference in Diameter

    Specification: 0-0.1 mm (0-0.004 in.)

17. If the difference in diameter is out of tolerance, replace the connecting rod bolt.
18. Line up the mark (A) on the connecting rod and cap, then install the cap.

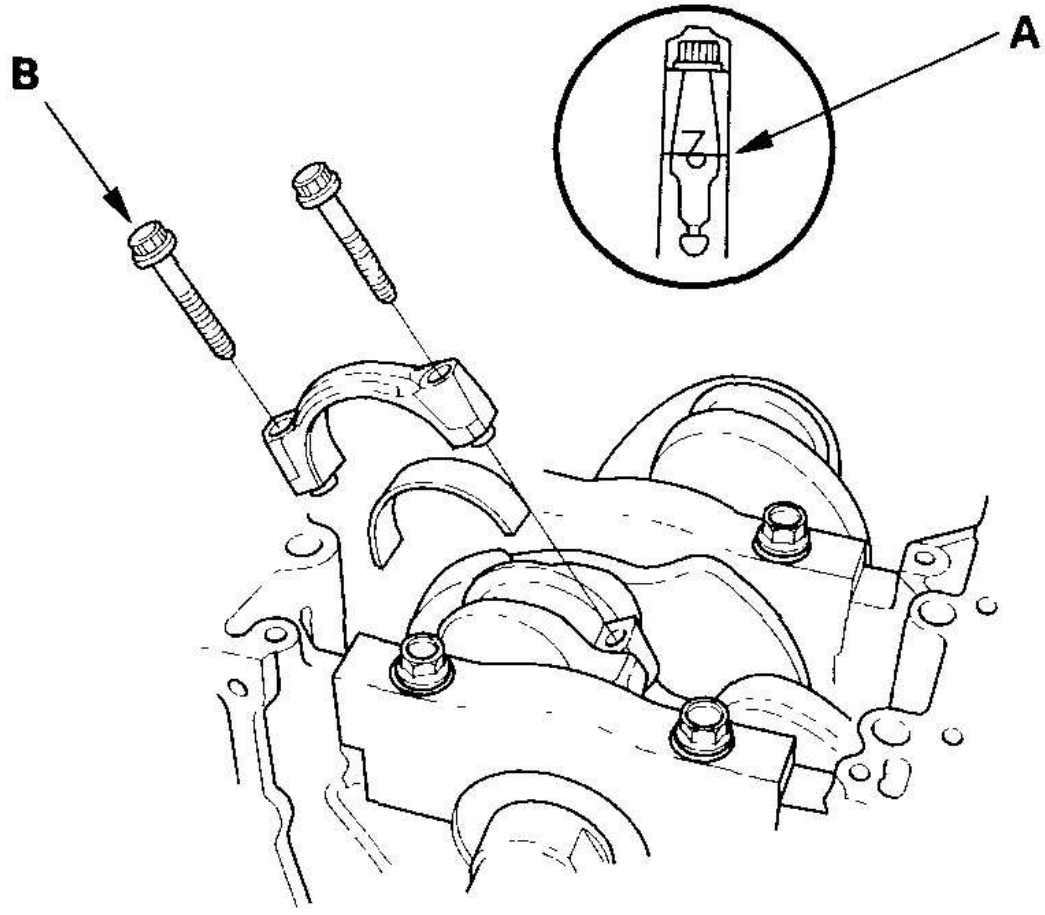


Fig. 54: Lining Mark On Connecting Rod And Cap
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Apply new engine oil to the bolt threads and flanges. Torque the bolts (B) to 20 N.m (2.0 kgf.m, 14 lbf.ft).
20. Mark the connecting rod (A) and bolt head (B) as shown in **Fig. 55**.

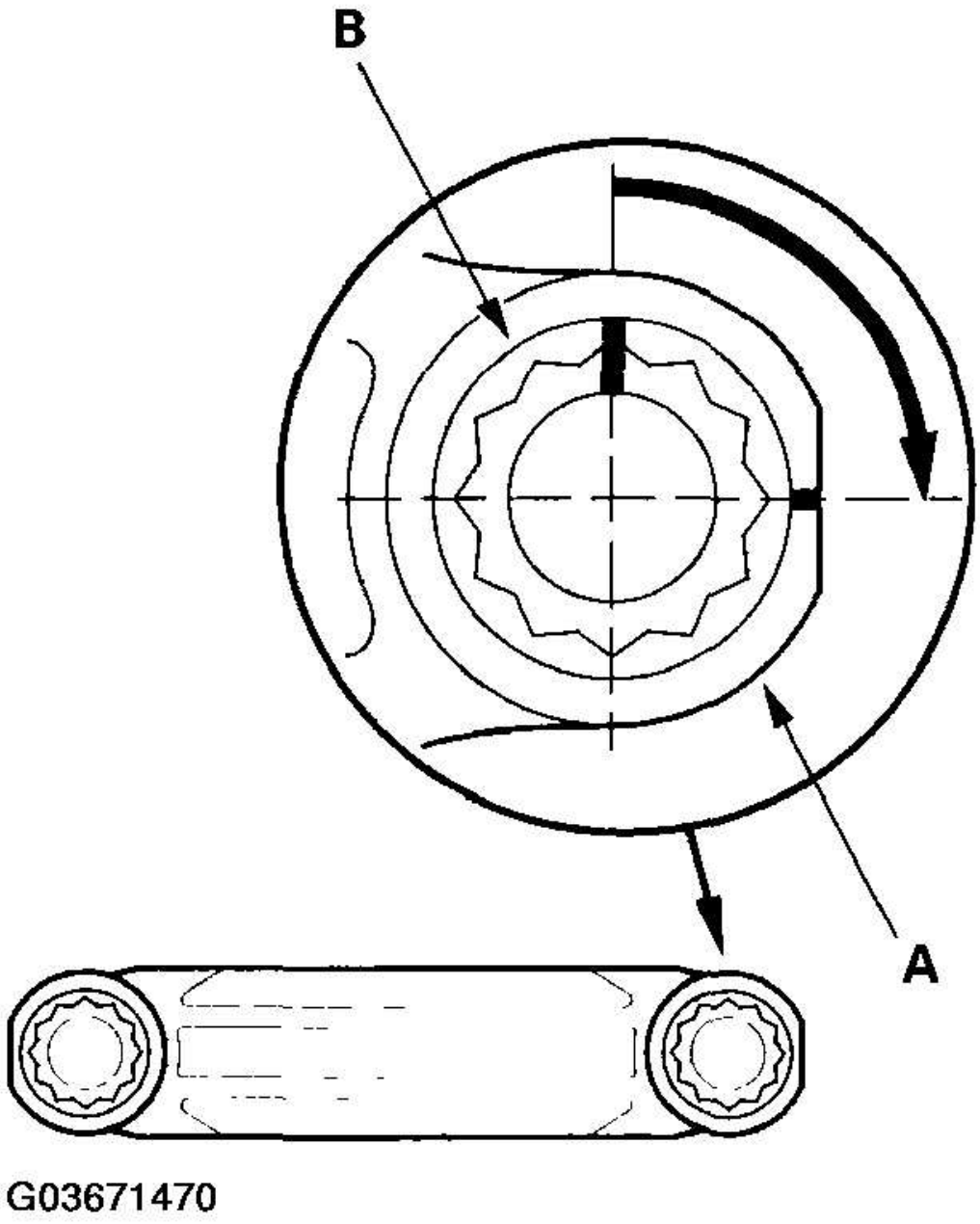


Fig. 55: Marking Connecting Rod And Bolt Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Tighten the bolt until the mark on the bolt head lines up with the mark on the

connecting rod (turn the bolt 90°).

NOTE: Remove the connecting rod bolt if you tightened it beyond the specified angle, and go back to step 15 of the procedure. Do not loosen it back to the specified angle.

22. Tighten the bearing cap bolts, and then the bearing cap side bolts to the specified torque in the sequence as shown in **Fig. 56**. Repeat the torque sequence again to measure the bolts are properly torqued.

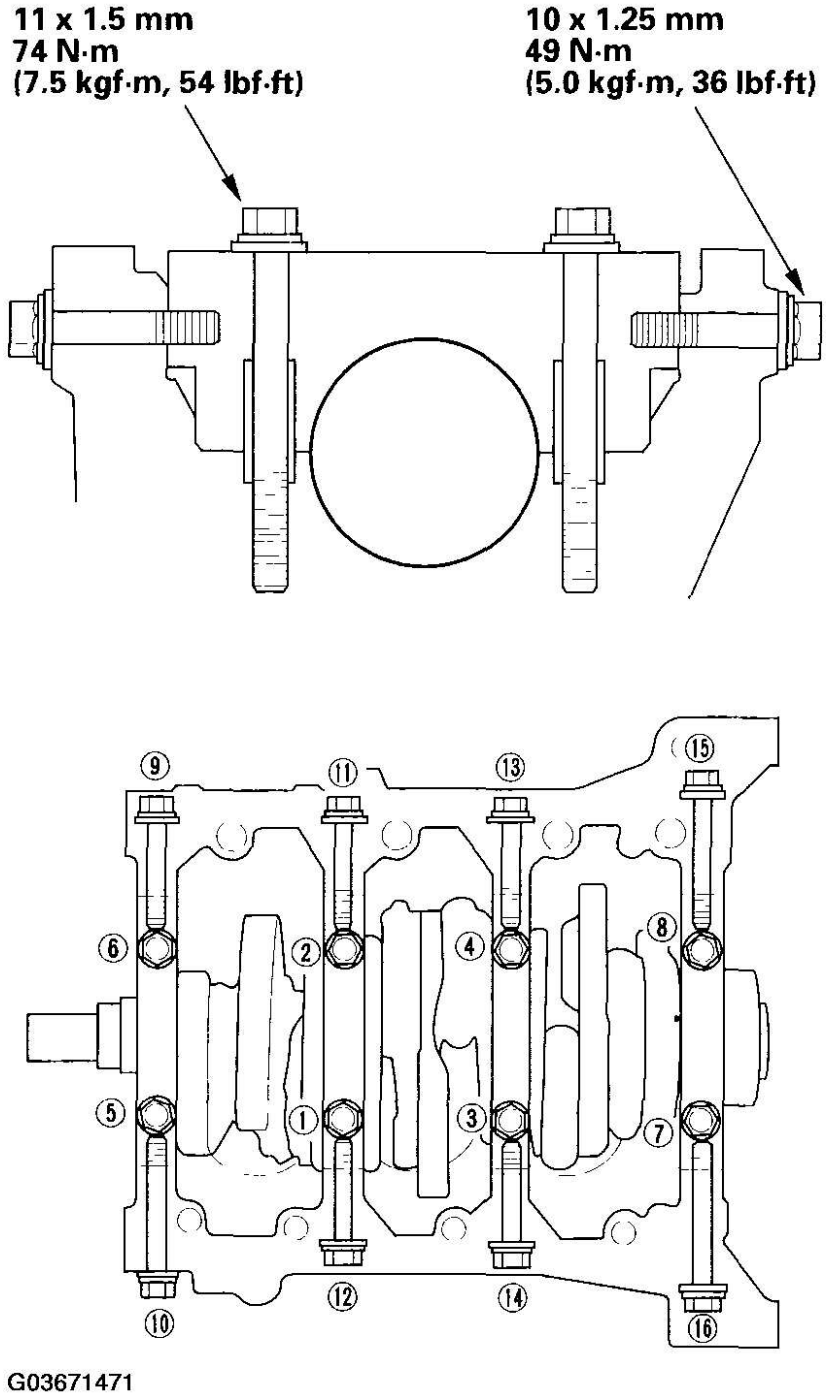


Fig. 56: Tightening Bearing Cap Bolts And Cap Side Bolts In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Apply a light coat of multipurpose grease to the crankshaft and to the lip of the seal.
24. Drive the new crankshaft oil seal until the driver attachment bottoms on the engine block end cover.

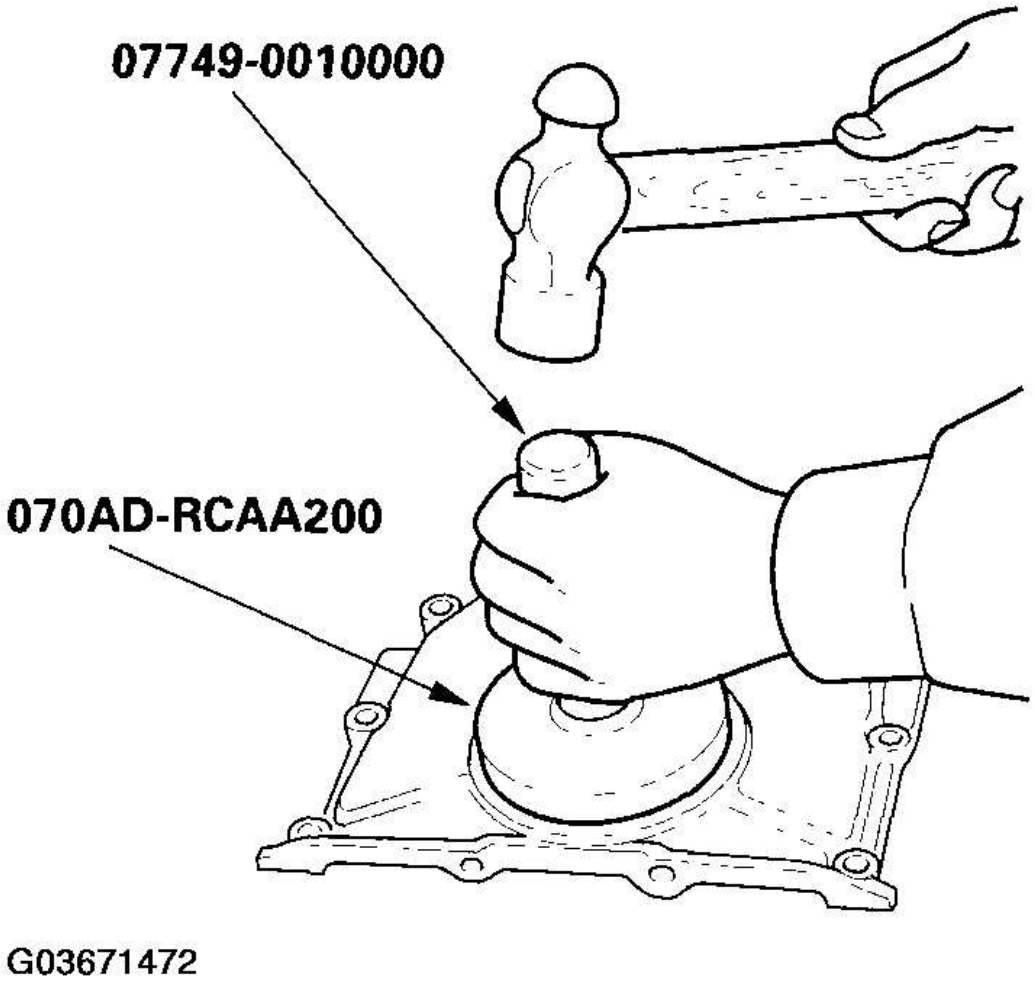


Fig. 57: Driving Crankshaft Oil Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

25. Remove all of the old liquid gasket from the engine block end cover mating surfaces, bolts, and bolt holes.

26. Clean and dry the engine block end cover mating surfaces.
27. Apply liquid gasket, P/N 08717-0004,08718-0001, 08718-0002, 08718-0003, or 08718-0009, evenly to the engine block mating surface of the engine block end cover.

NOTE: Do not install components if too much time has passed after applying the liquid gasket (for P/N 08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply the liquid gasket.

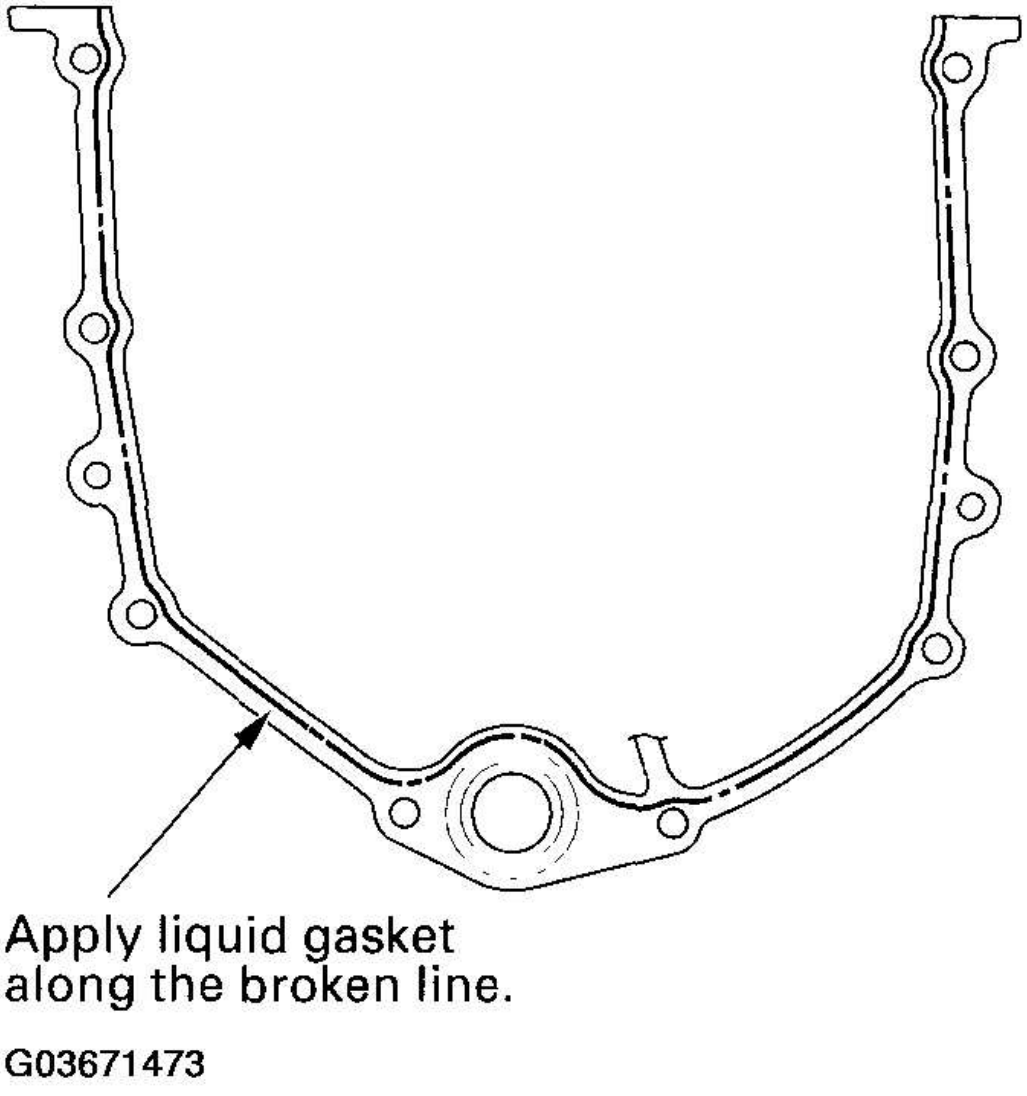


Fig. 58: Applying Liquid Gasket To Engine Block Mating Surface Of Engine Block End Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

28. Install the dowel pins (A), new O-ring (B), and the engine block end cover (C) on the engine block.

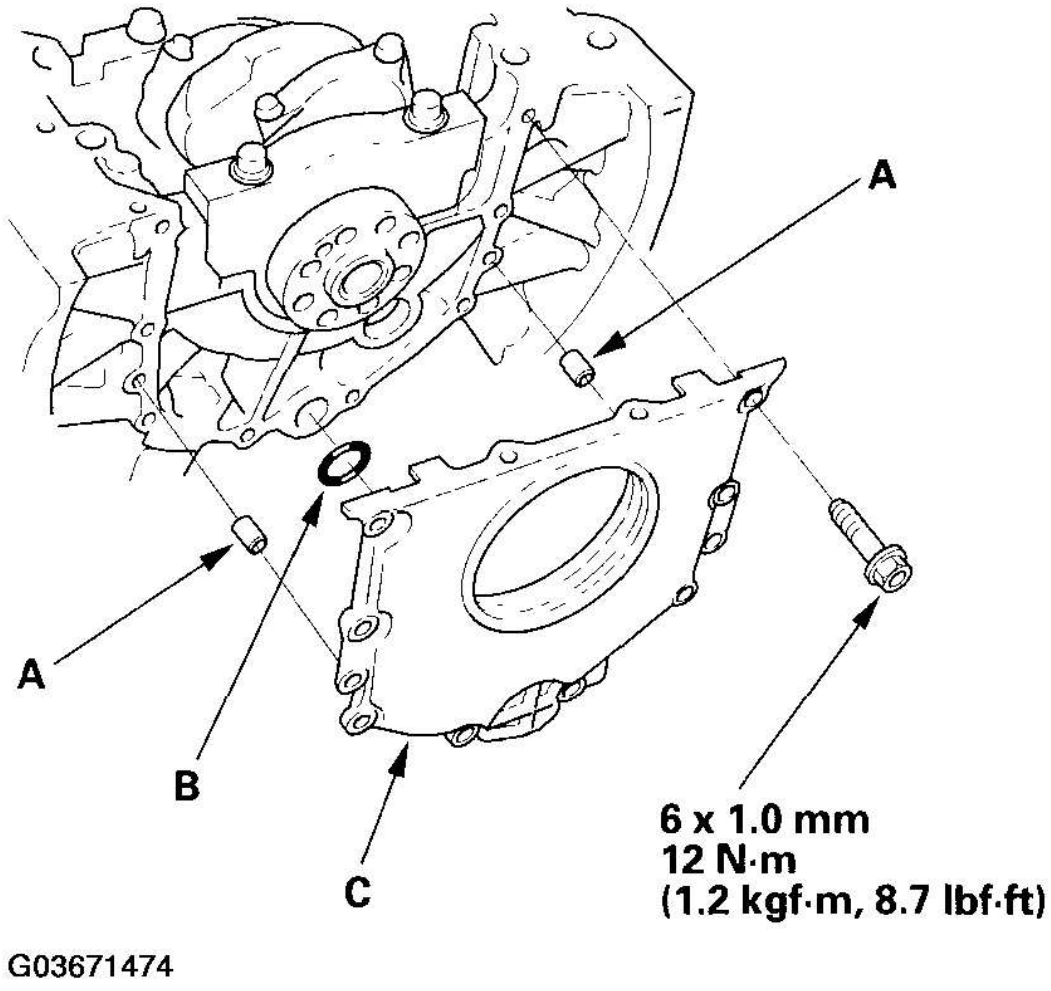


Fig. 59: Installing Dowel Pins, New O-Ring, And Engine Block End Cover On Engine Block
Courtesy of AMERICAN HONDA MOTOR CO., INC.

29. Clean the excess grease off the crankshaft, and check the seal for distortion.
30. Install a new crankshaft oil seal in the oil pump (see step 2 **INSTALLATION**).
31. Remove all of the old liquid gasket from the oil pump mating surfaces, bolts, and bolt holes.
32. Clean and dry the oil pump mating surfaces.

33. Apply liquid gasket, P/N 08717-0004, 08718-0001, 08718-0002,08718- 0003, or 08718-0009, evenly to the engine block mating surface of the oil pump.

NOTE: Do not install components if too much time has passed after applying the liquid gasket (for P/N 08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply the liquid gasket.

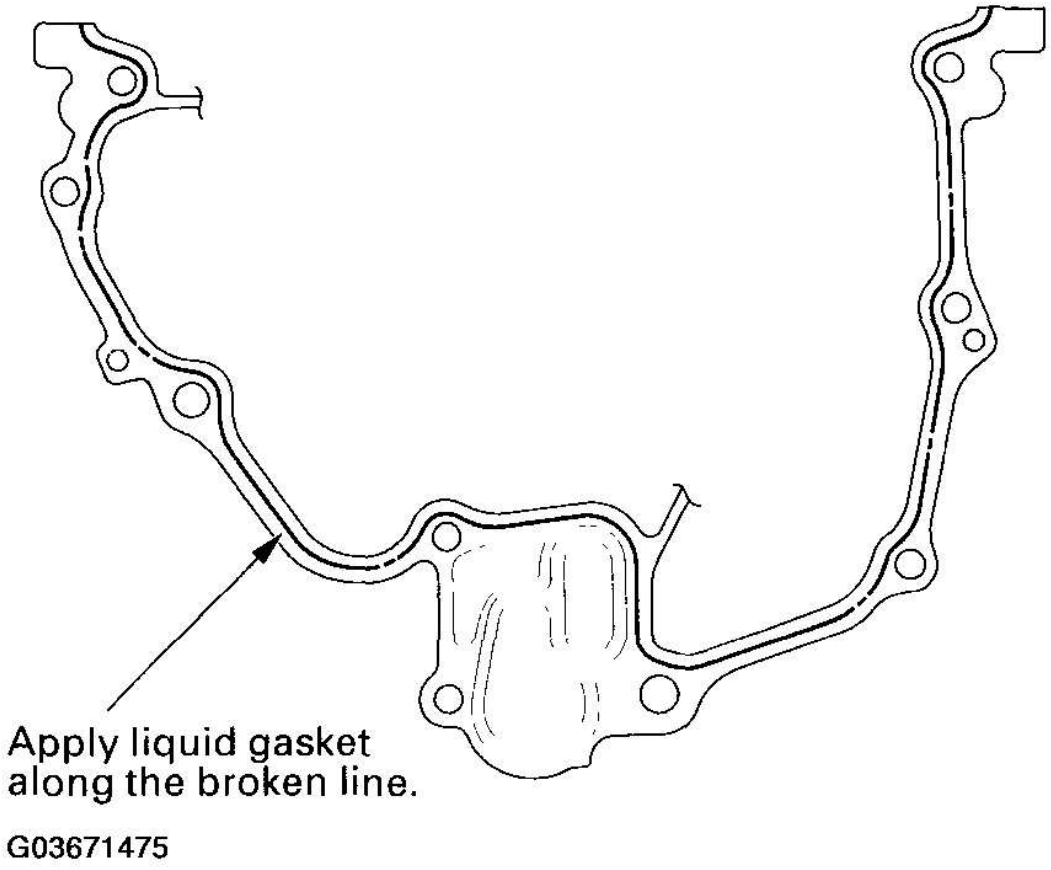


Fig. 60: Applying Liquid Gasket To Engine Block Mating Surface Of Oil Pump
Courtesy of AMERICAN HONDA MOTOR CO., INC.

34. Grease the lip of the oil seal, and apply oil to the new O-ring (A).

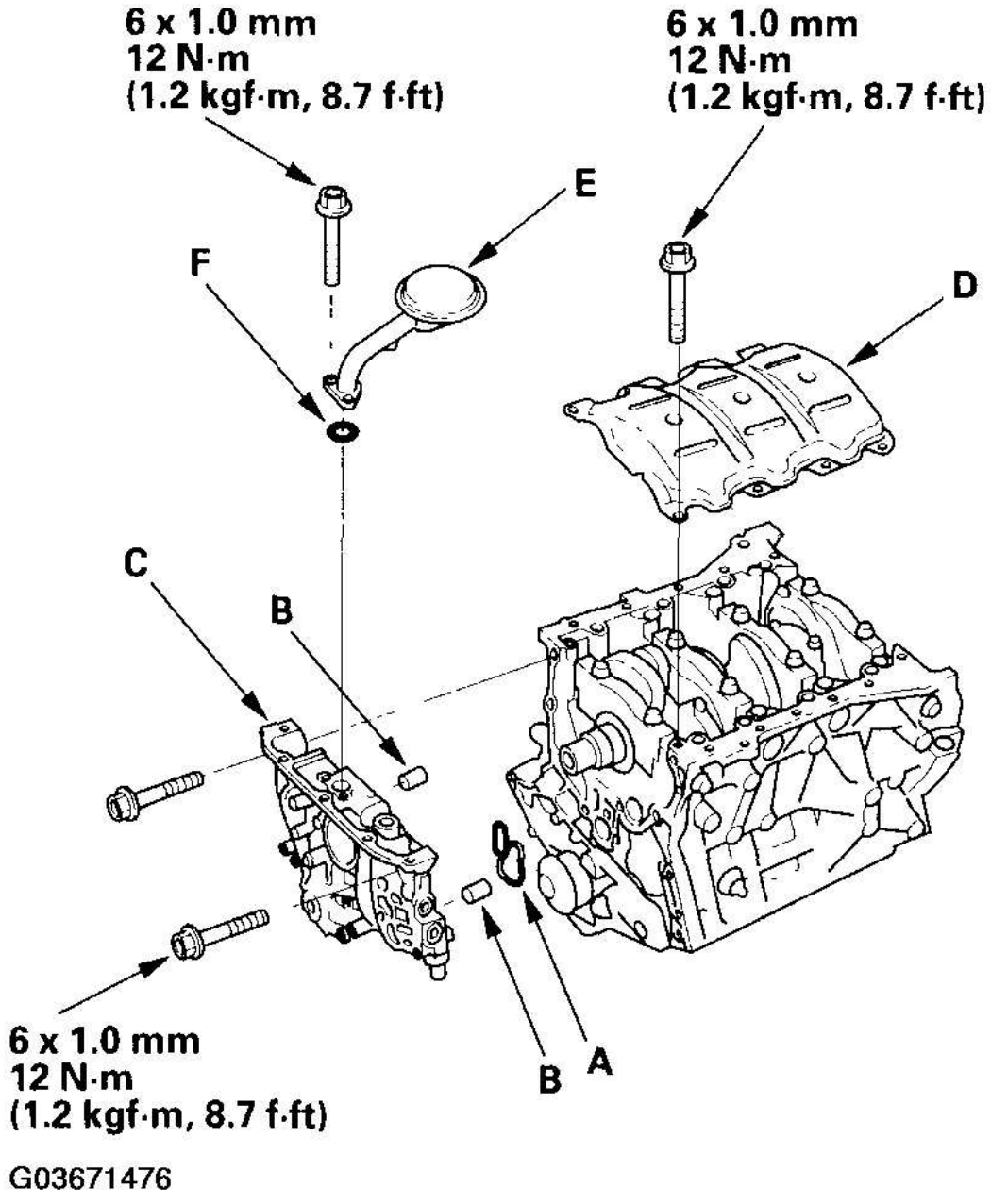


Fig. 61: Greasing Oil Seal Lip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

35. Install the dowel pins (B), then align the inner rotor with the crankshaft, and install the oil pump (C).

36. Clean the excess grease off the crankshaft, and check the seal for distortion.
37. Install the baffle plate (D), then install the oil screen (E) with new O-ring (F).
38. Install the rocker arm oil control solenoid (VTEC solenoid valve)/oil filter assembly (A), with a new rocker arm oil control solenoid (VTEC solenoid valve) filter (B).

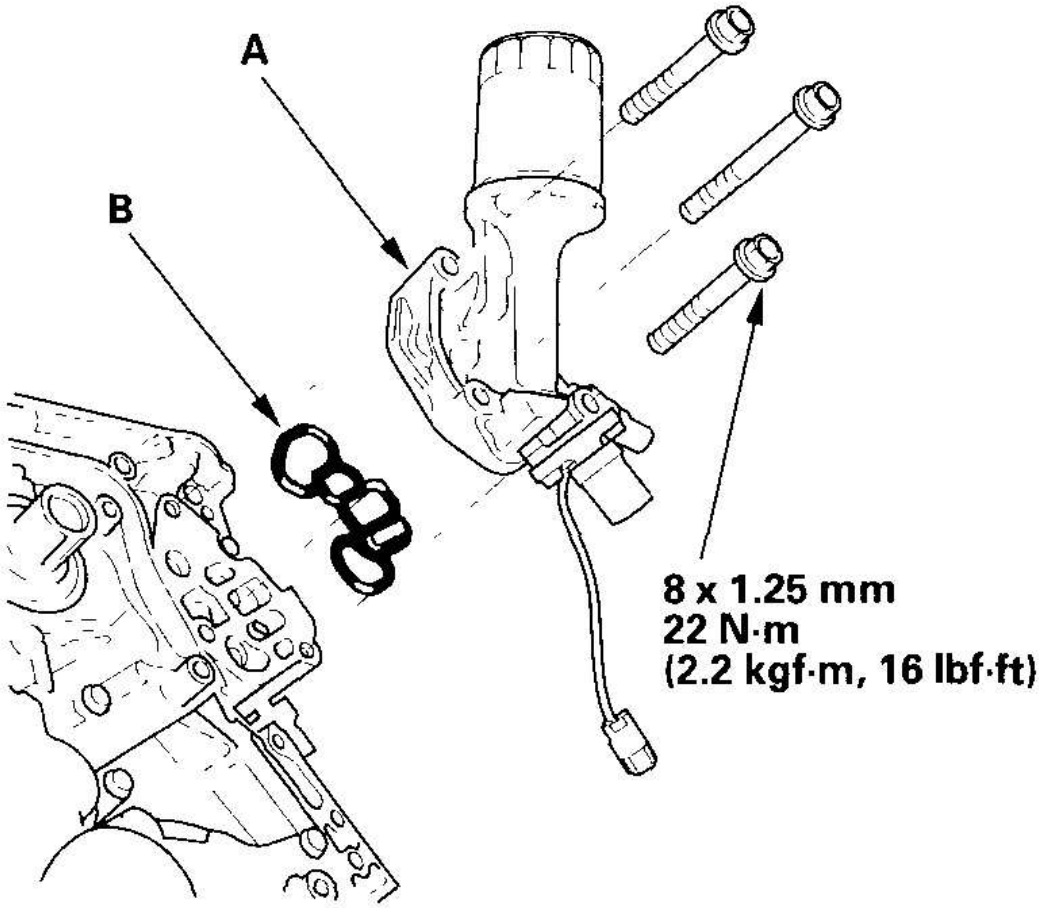


Fig. 62: Installing Rocker Arm Oil Control Solenoid (VTEC Solenoid Valve)/Oil Filter Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

39. Install the oil pan (see **OIL PAN INSTALLATION**).

40. Install the crankshaft position (CKP) sensor (see **CKP SENSOR REPLACEMENT**).
41. Install the cylinder heads (see **CYLINDER HEAD INSTALLATION**).
42. M/T model: Install the flywheel (see **FLYWHEEL AND PILOT BEARING INSPECTION**), clutch disc (see **PRESSURE PLATE AND CLUTCH DISC REMOVAL**), and pressure plate (see **PRESSURE PLATE AND CLUTCH DISC REMOVAL**).
43. A/T model: Install the drive plate (see **DRIVE PLATE REMOVAL AND INSTALLATION**).
44. Install the transmission:
    - Manual transmission (see **TRANSMISSION INSTALLATION**)
    - Automatic transmission (see **TRANSMISSION INSTALLATION**)
45. Install the engine assembly (see **ENGINE INSTALLATION**).

NOTE: When any crankshaft or connecting rod bearing is replaced, after assembly it is necessary to run the engine at idling speed until it reaches normal operating temperature, then continue to run it for about 15 minutes.

OIL PAN INSTALLATION

1. Remove all of the old liquid gasket from the oil pan mating surfaces, bolts, and bolt holes.
2. Clean and dry the oil pan mating surfaces.
3. Apply liquid gasket, P/N 08717-0004, 08718-0001, 08718-0002, 08718-0003, or 08718-0009, evenly to the oil pan mating surface of the engine block.

NOTE: Do not install components if too much time has passed after applying the liquid gasket (for P/N 08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply the liquid gasket.

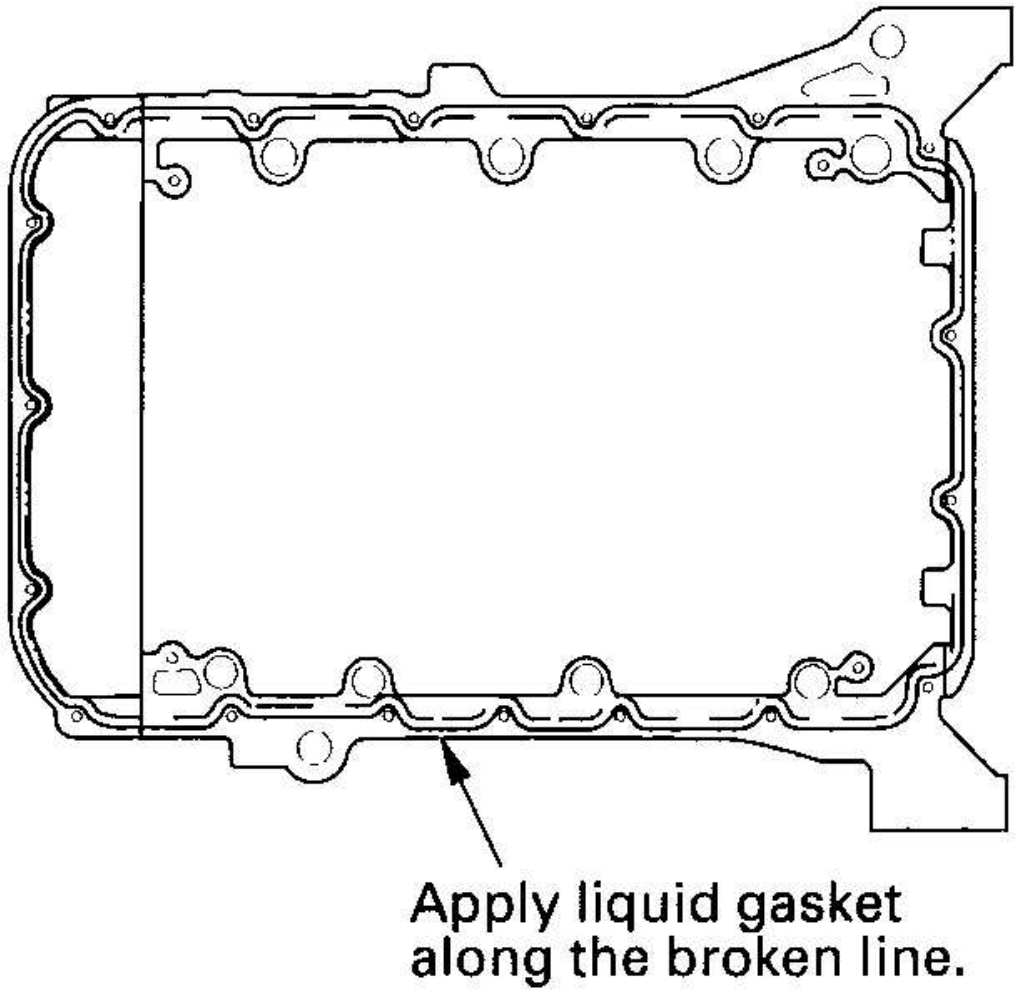


Fig. 63: Applying Liquid Gasket To Oil Pan Mating Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the oil pan on the engine block.
5. Tighten the bolts in two or three steps. In the final step, tighten all bolts, in sequence, to 12 N.m (1.2 kgf.m, 8.7 lbf.ft).

NOTE: After assembly, wait at least 30 minutes before filling

the engine with oil.

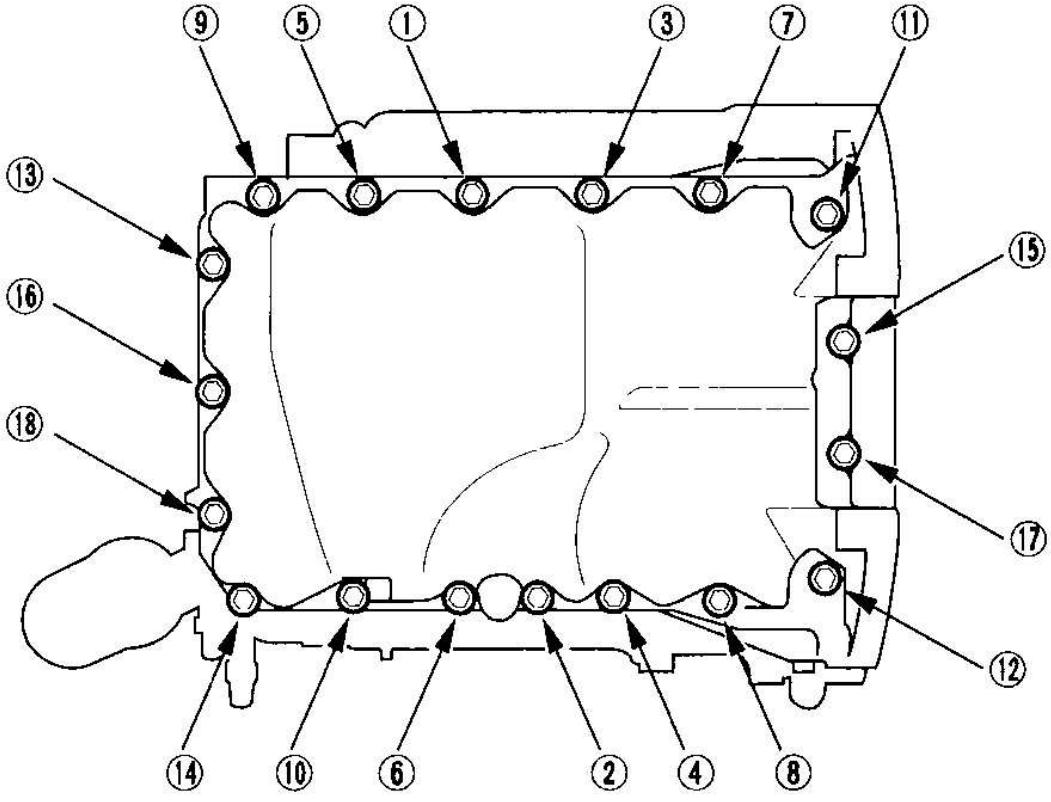


Fig. 64: Tightening Oil Pan Bolts In Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Tighten the two bolts (A) securing the transmission, then install the torque converter cover (B).

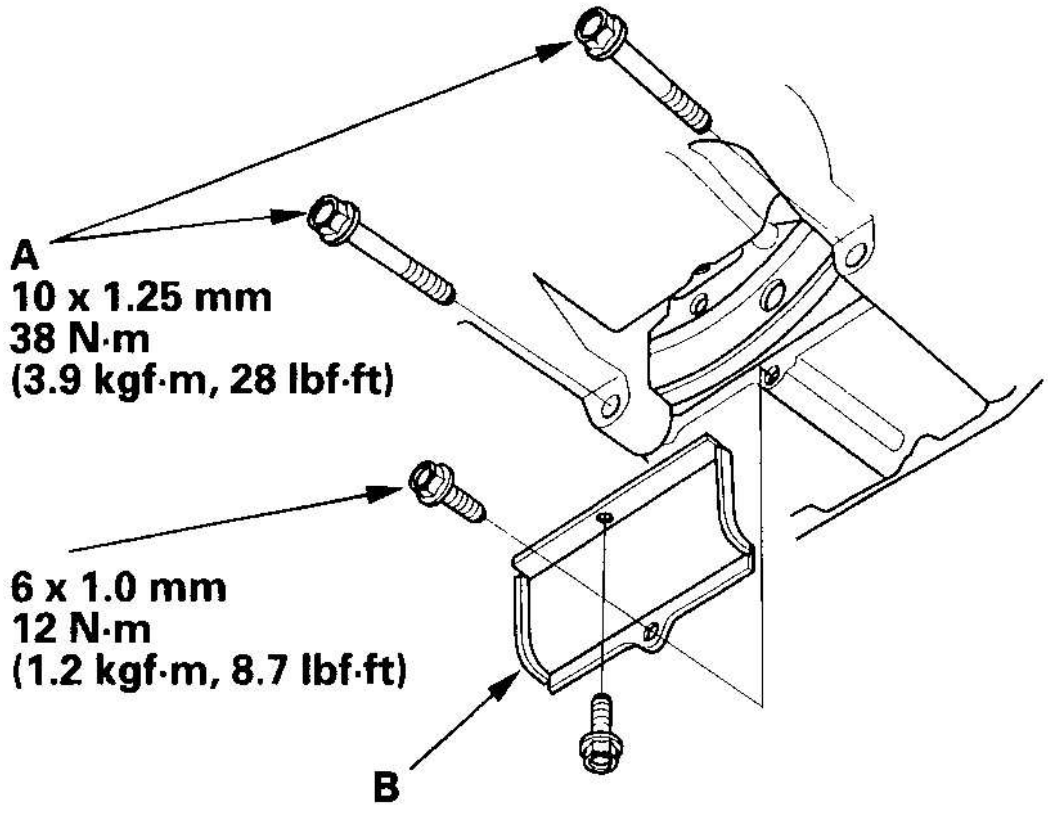


Fig. 65: Tightening Bolts Securing Transmission
Courtesy of AMERICAN HONDA MOTOR CO., INC.

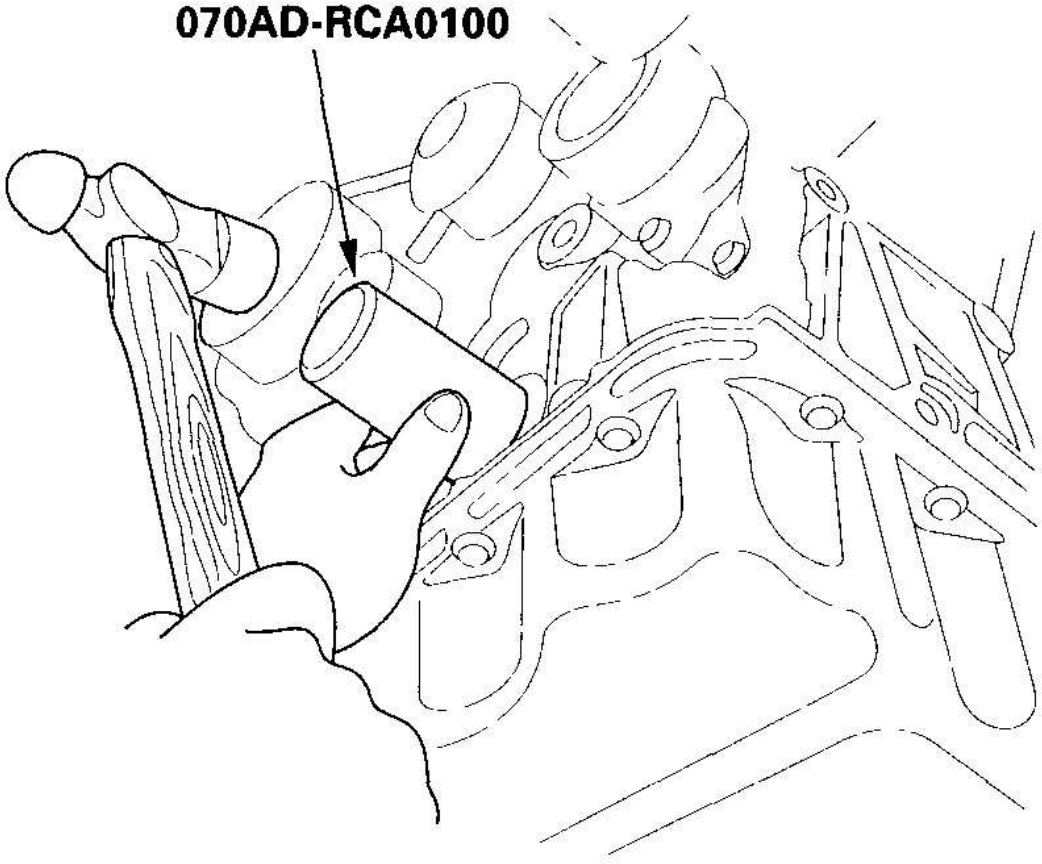
7. If the engine is still in the vehicle, do the following steps.
8. Install exhaust pipe A using new gaskets and new self-locking nuts (see step 28 in **ENGINE INSTALLATION**).
9. Install the splash shield (see step 34 in **ENGINE INSTALLATION**).
10. Refill the engine with oil (see step 4 in **ENGINE OIL REPLACEMENT**).
11. Lower the vehicle on the hoist.

PULLEY END CRANKSHAFT OIL SEAL INSTALLATION - IN CAR

Special Tools Required

Oil seal driver, 64 mm 070AD-RCA0100

1. Remove the crankshaft position (CKP) sensor, timing belt, and timing belt drive pulley (see **TIMING BELT DRIVE PULLEY REPLACEMENT**).
2. Remove the pulley and crankshaft oil seal.
3. Clean and dry the crankshaft oil seal housing.
4. Apply a light coat of multipurpose grease to the crankshaft and to the lip of the seal.
5. Using the seal driver, drive in the crankshaft oil seal until the driver bottoms against the oil pump. When the seal is in place, clean any excess grease off the crankshaft, and check that the oil seal lip is not distorted.



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Fig. 66: Driving In Crankshaft Oil Seal Using Seal Driver
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the timing belt drive pulley, CKP sensor, and timing belt (see **TIMING BELT DRIVE PULLEY REPLACEMENT**).

TRANSMISSION END CRANKSHAFT OIL SEAL INSTALLATION - IN CAR

Special Tools Required

- Driver 07749-0010000
- Driver attachment 106 070AD-RCAA200

1. Remove the transmission:
   - Manual transmission (see **TRANSMISSION REMOVAL**)
   - Automatic transmission (see **TRANSMISSION REMOVAL**)
2. M/T model: Removal the pressure plate (see **PRESSURE PLATE AND CLUTCH DISC REMOVAL**), clutch disc (see **PRESSURE PLATE AND CLUTCH DISC REMOVAL**), and flywheel (see **FLYWHEEL AND PILOT BEARING REPLACEMENT**).
3. A/T model: Removal the drive plate (see **DRIVE PLATE REMOVAL AND INSTALLATION**).
4. Clean and dry the crankshaft oil seal housing.
5. Apply a light coat of multipurpose grease to the crankshaft and to the lip of the seal.
6. Using the special tools, drive in the crankshaft oil seal until the driver attachment bottoms against the engine block end cover. Align the hole in the driver attachment with the pin on the crankshaft.

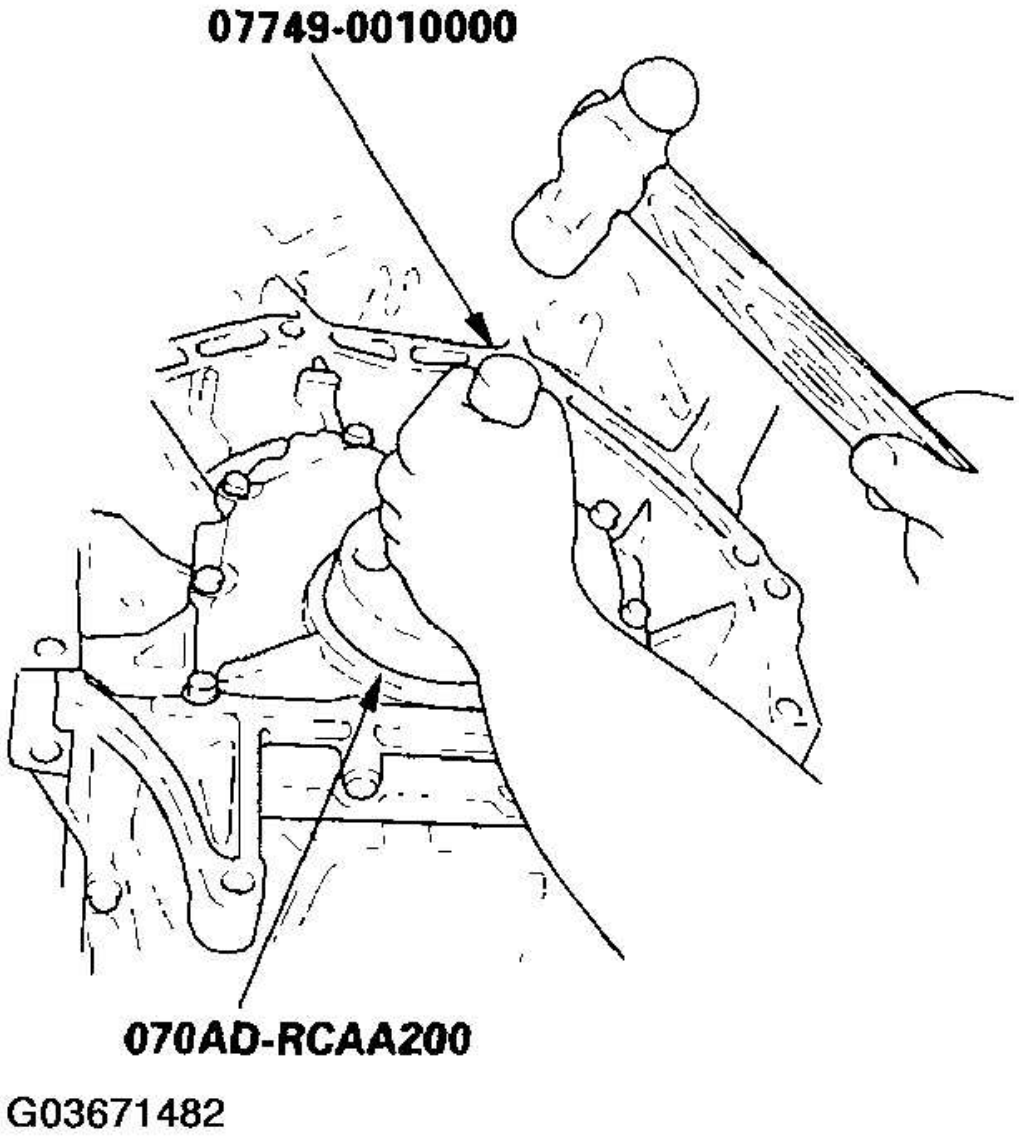


Fig. 67: Driving Crankshaft Oil Seal Using Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Clean any excess grease off the crankshaft, and check that the oil seal lip is not distorted.
8. M/T model: Install the flywheel (see **FLYWHEEL AND PILOT BEARING INSPECTION**), clutch disc (see **PRESSURE PLATE AND CLUTCH**

DISC REMOVAL), and pressure plate (see **PRESSURE PLATE AND CLUTCH DISC REMOVAL**).

9. A/T model: Install the drive plate (see **DRIVE PLATE REMOVAL AND INSTALLATION**).
10. Install the transmission:
    - Manual transmission (see **TRANSMISSION INSTALLATION**)
    - Automatic transmission (see **TRANSMISSION INSTALLATION**)

DRAIN BOLT INSTALLATION

NOTE: When installing the drain bolt, always use new washer.

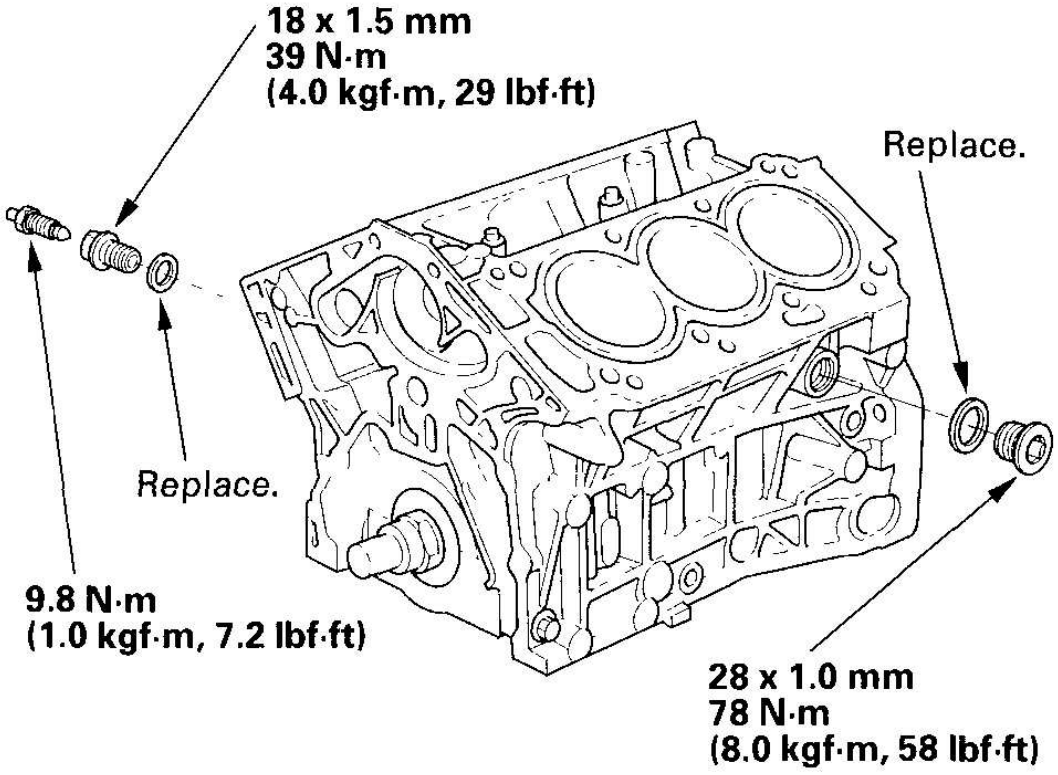


Fig. 68: Installing Drain Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ENGINE

Engine Block - Accord

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07ZAD-PNAA100	Oil Seal Driver Attachment 96	1
②	07746-0010700	Attachment, 24 x 26 mm	1
③	07749-0010000	Driver	1

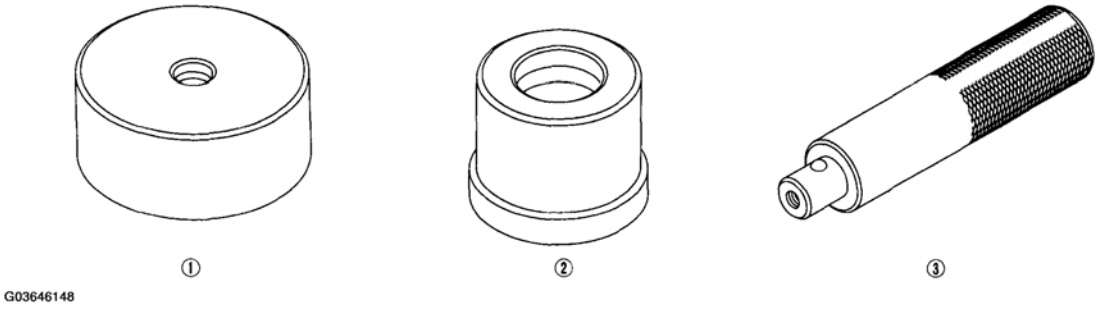


Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

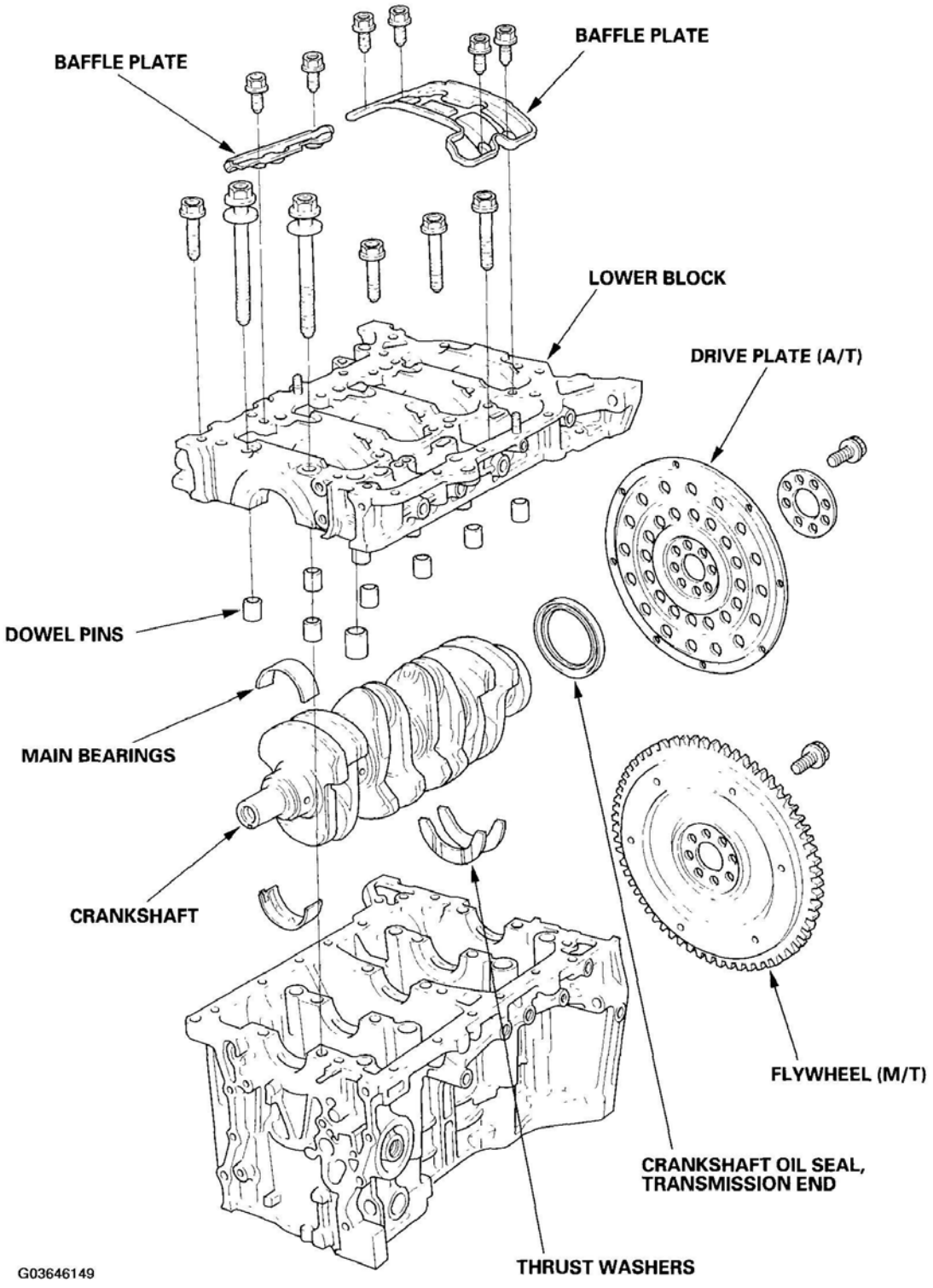


Fig. 2: Identifying Engine Block Component Location (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2006 Honda Accord

2003-07 ENGINE Engine Block - Accord

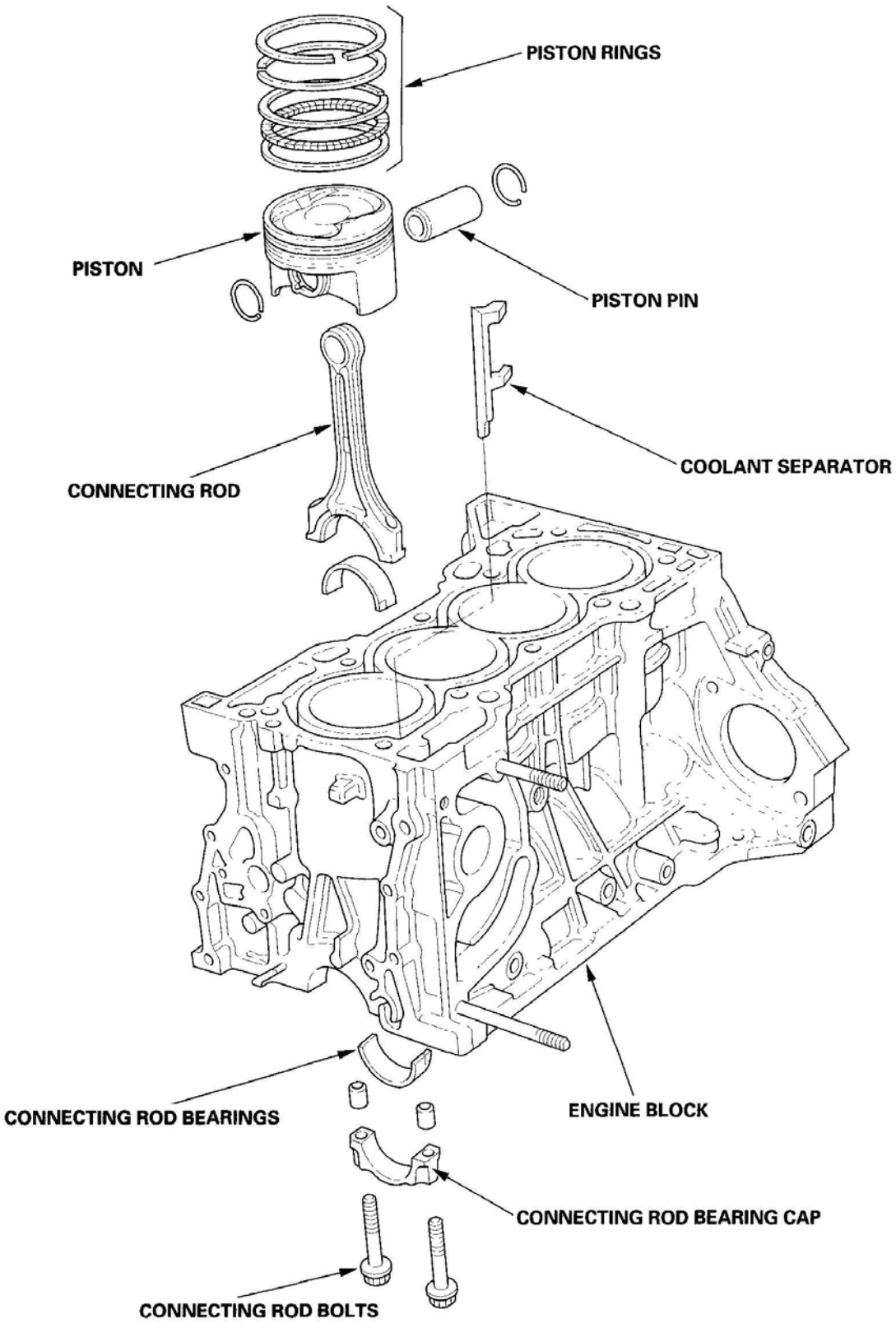


Fig. 3: Identifying Engine Block Component Location (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

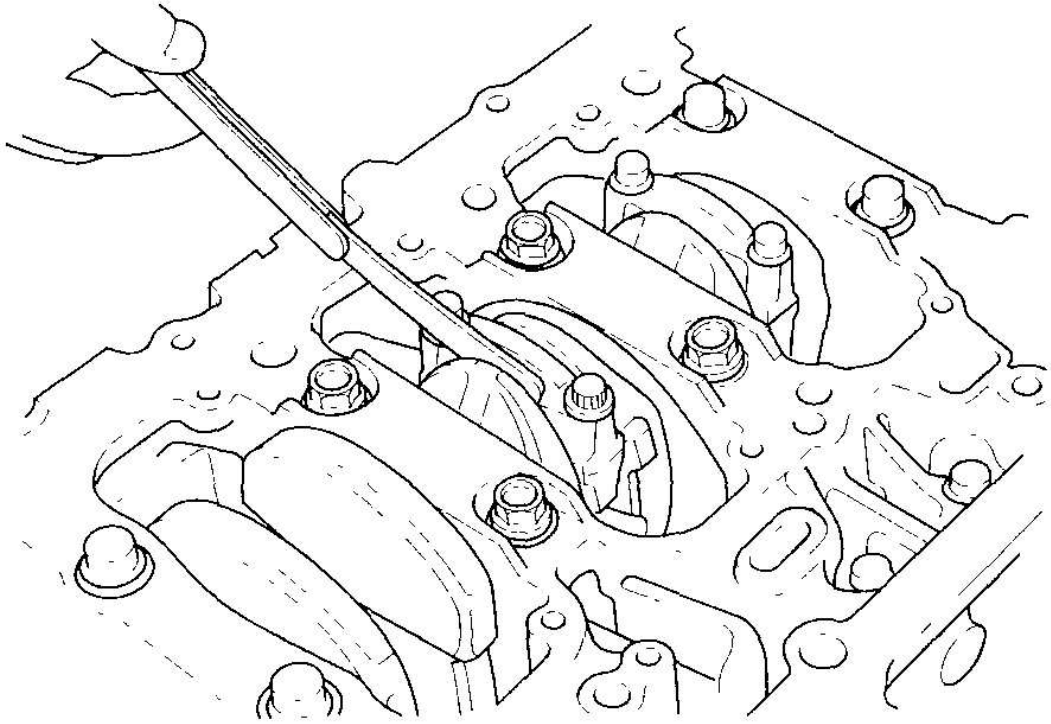
CONNECTING ROD AND CRANKSHAFT END PLAY INSPECTION

1. Remove the oil pump (see **OIL PUMP REMOVAL**).
2. Remove the baffle plates (see step 8).
3. Measure the connecting rod end play with a feeler gauge between the connecting rod and crankshaft.

Connecting Rod End Play

Standard (New): 0.15-0.35 mm (0.006-0.014 in.)

Service Limit: 0.40 mm (0.016 in.)



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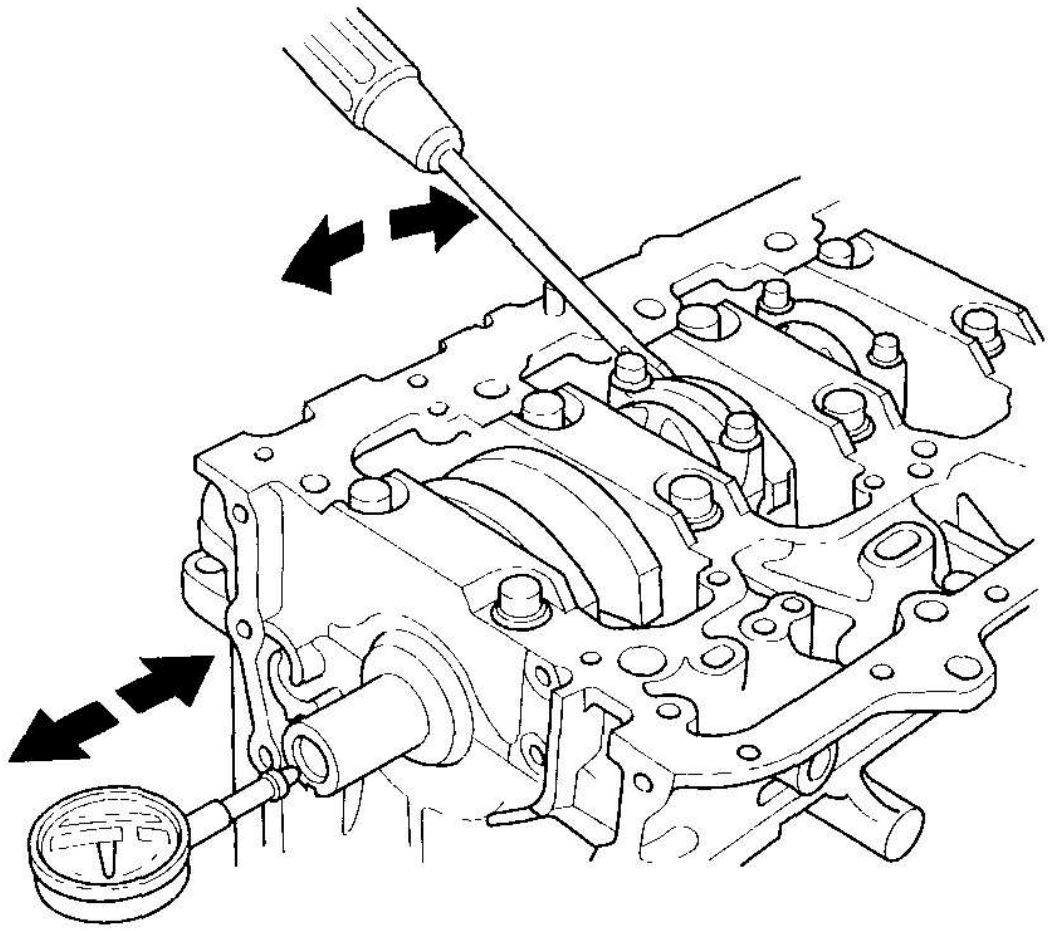
Fig. 4: Measuring Connecting Rod End Play With A Feeler Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the connecting rod end play is out-of-tolerance, install a new connecting rod, and recheck. If it is still out-of-tolerance; replace the crankshaft (see step 9).
5. Push the crankshaft firmly away from the dial indicator, and zero the dial against the end of the crankshaft. Then pull the crankshaft firmly back toward the indicator; the dial reading should not exceed the service limit.

Crankshaft End Play

Standard (New): 0.10-0.35 mm (0.004-0.014 in.)

Service Limit: 0.45 mm (0.018 in.)



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Fig. 5: Pushing Crankshaft Firmly Away From Dial Indicator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. If the end play is out-of-tolerance, replace the thrust washers and recheck, if it is still out-of-tolerance, replace the crankshaft (see step 9).

CRANKSHAFT MAIN BEARING REPLACEMENT

MAIN BEARING CLEARANCE INSPECTION

1. To check main bearing-to-journal oil clearance, remove the lower block and bearing halves (see **CRANKSHAFT AND PISTON REMOVAL**).

2. Clean each main journal and bearing half with a clean shop towel.
3. Place one strip of plastigage across each main journal.
4. Reinstall the bearing half and lower block, then torque the bolts to 29 N.m (3.0 kgf.m, 22 lbf.ft) + 56 ° in the proper sequence (see step 18).

NOTE: Do not rotate the crankshaft during inspection.

5. Remove the lower block and bearing half again, and measure the widest part of the plastigage.

   Main Bearing-to-Journal Oil Clearance No. 1,2,4,5 Journals:

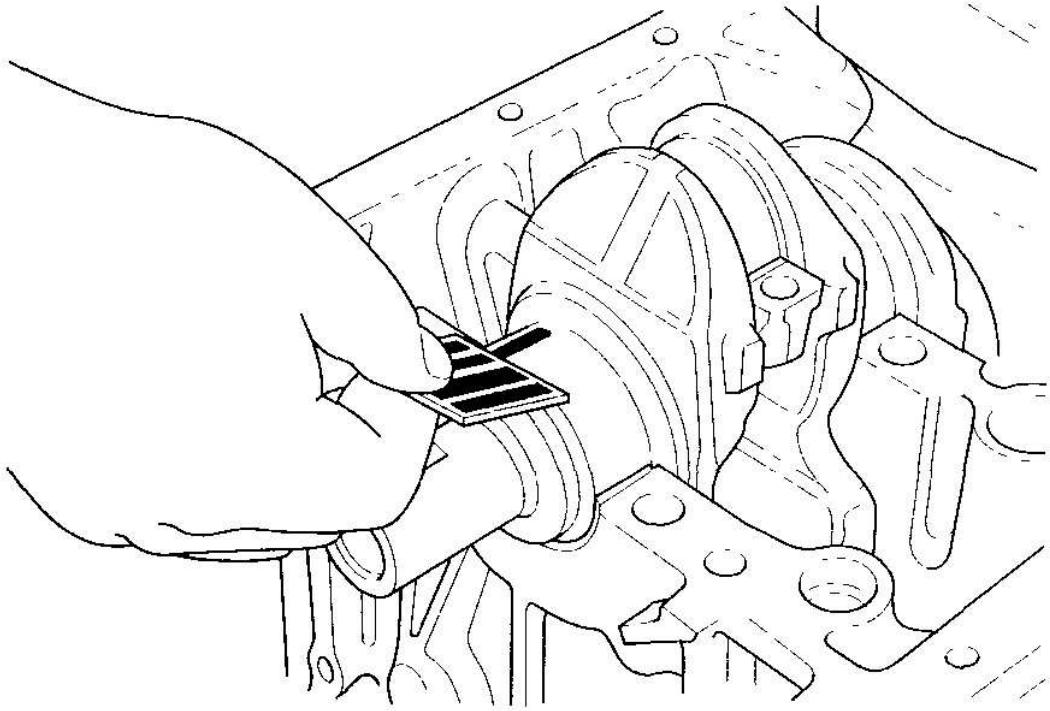
   Standard (New): 0.017 - 0.041 mm (0.0007 - 0.0016 in.)

   Service Limit: 0.050 mm (0.0020 in.)

   No. 3 Journal:

   Standard (New): 0.025 - 0.049 mm (0.0010 - 0.0019 in.)

   Service Limit: 0.055 mm (0.0022 in.)



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Fig. 6: Measuring Widest Part Of Plastigage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. If the plastigage measures too wide or too narrow, remove the crankshaft, and remove the upper half of the bearing. Install a new, complete bearing with the same color code(s), and recheck the clearance. Do not file, shim, or scrape the bearings or the caps to adjust clearance.
7. If the plastigage shows the clearance is still incorrect, try the next larger or smaller bearing (the color listed above or below that one), and check again. If the proper clearance cannot be obtained by using the appropriate larger or smaller bearings, replace the crankshaft and start over.

MAIN BEARING SELECTION

Crankshaft Bore Code Location

1. Numbers or letters or bars have been stamped on the end of the block as a code

for the size of each of the five main journal bores. Write down the crank bore codes.

If you can't read the codes because of accumulated dirt and dust, do not scrub them with a wire brush or scraper. Clean them only with solvent or detergent.

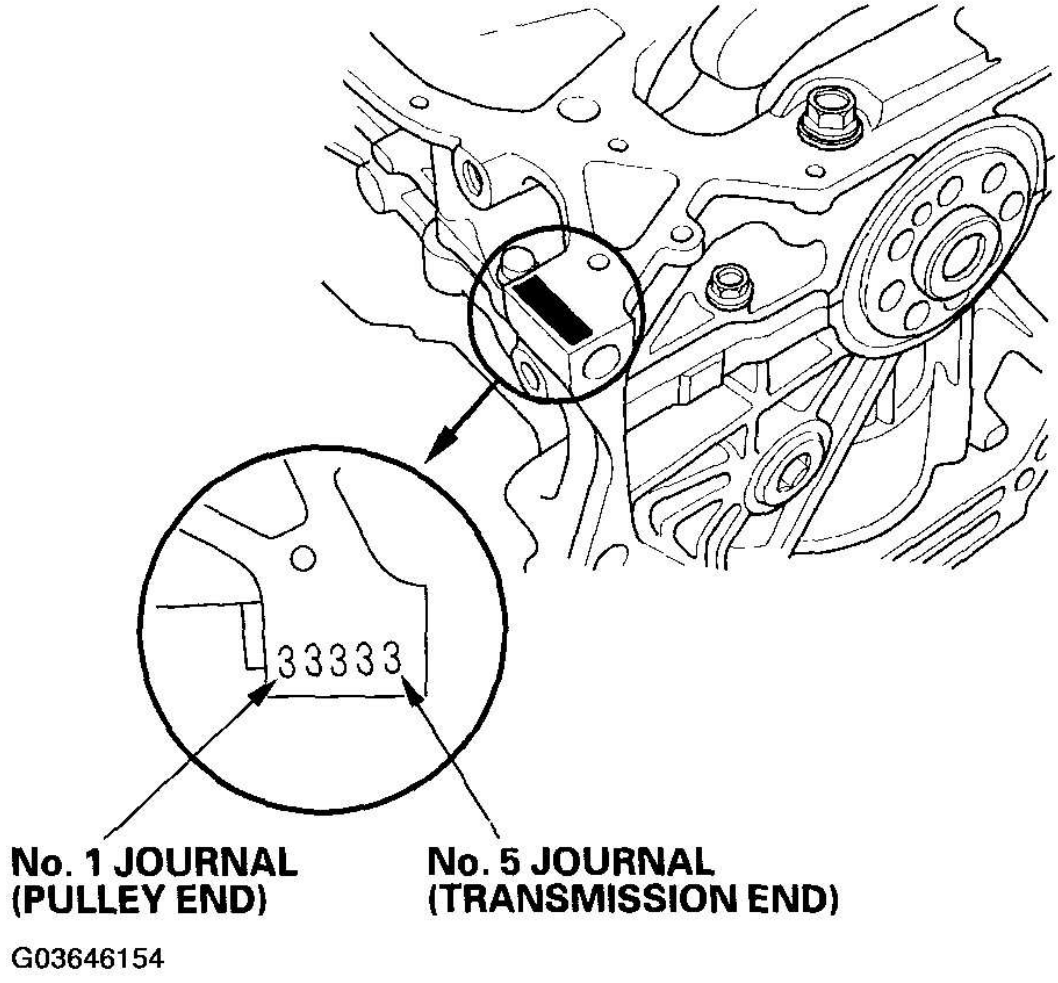
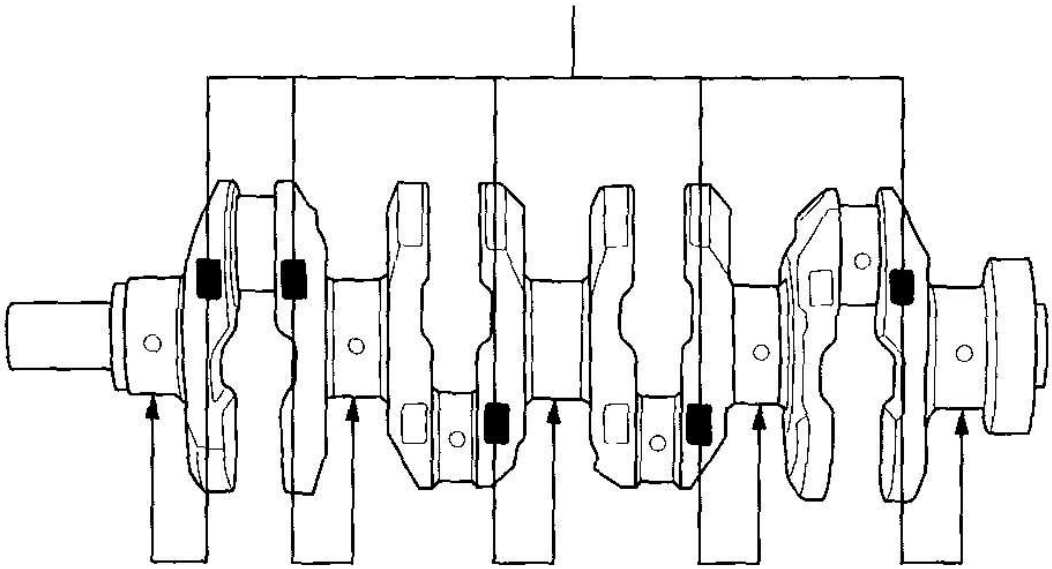
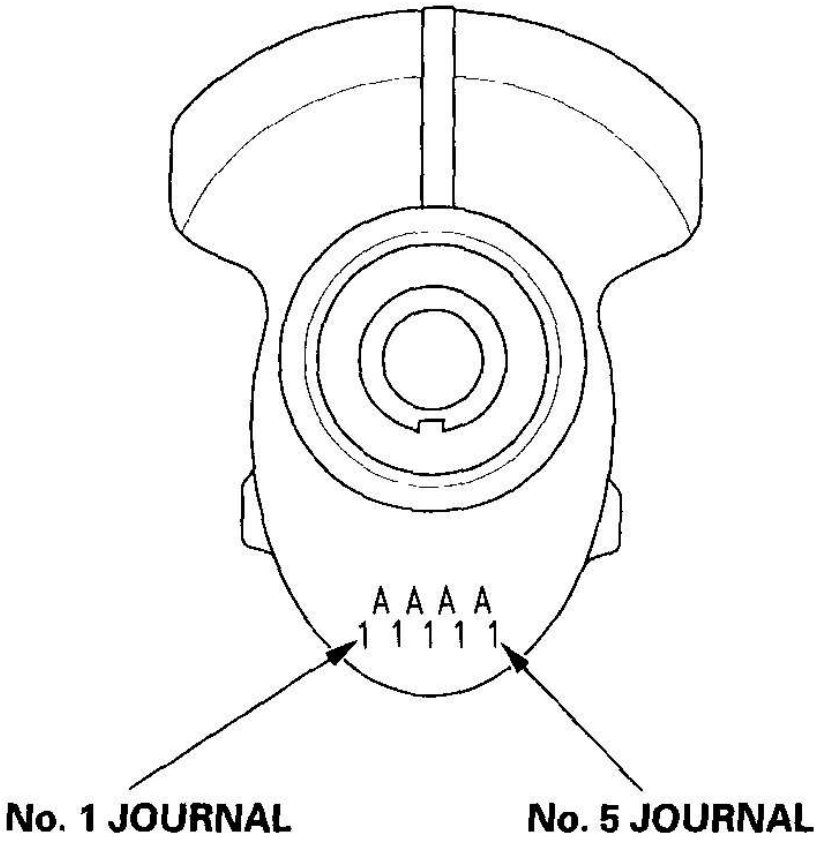


Fig. 7: Identifying Crankshaft Bore Code Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Main Journal Code Location

2. The main journal codes are stamped on the crankshaft.





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Fig. 8: Identifying Main Journal Code Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Use the crank bore codes and crank journal codes to select the appropriate replacement bearings from the following table.

NOTE:

- **Color code is on the edge of the bearing.**
- **When using bearing halves of different colors, it does not matter which color is used in the top or bottom.**

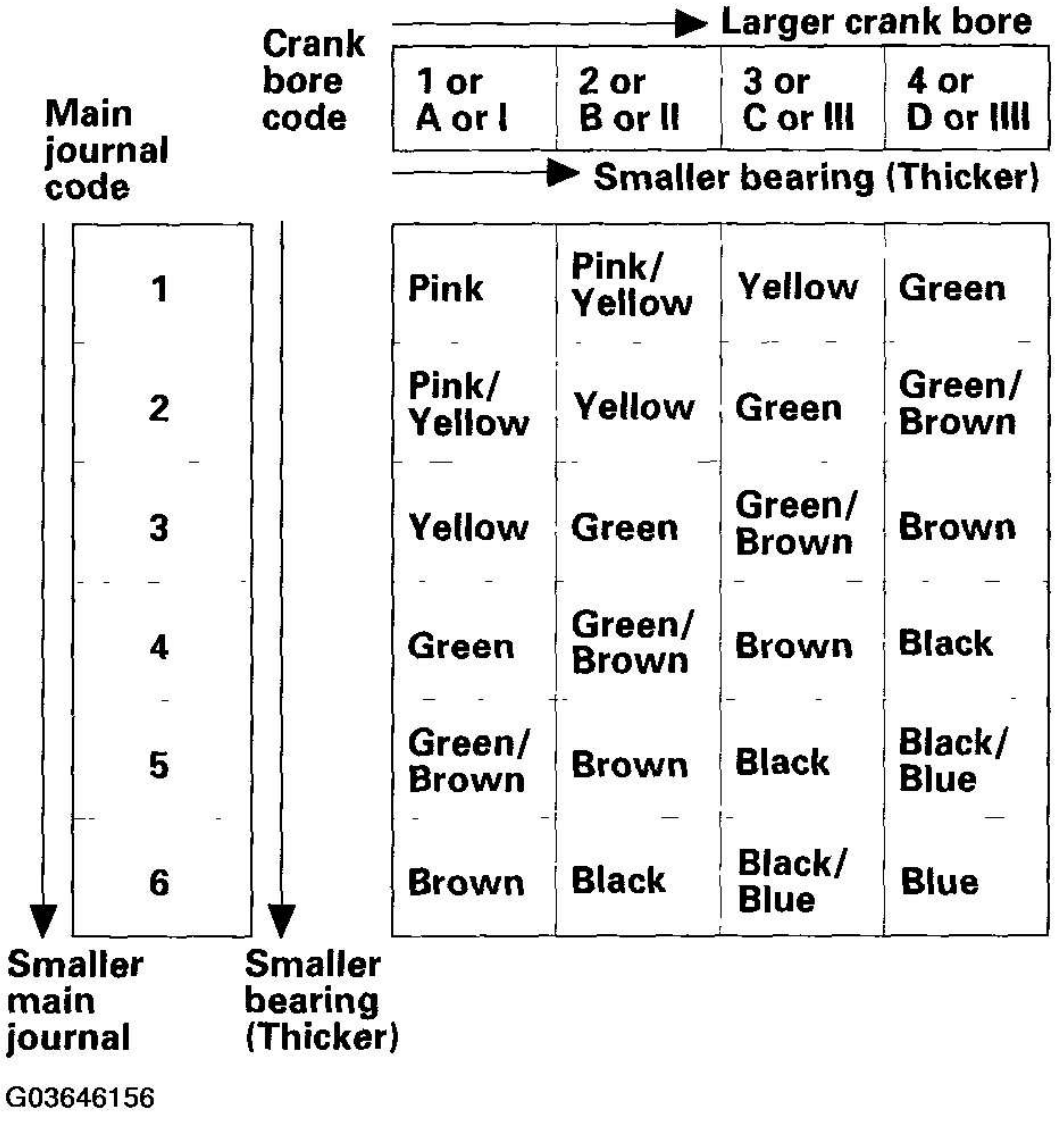


Fig. 9: Identifying Crank Bore Codes And Crank Journal Codes
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CONNECTING ROD BEARING REPLACEMENT

ROD BEARING CLEARANCE INSPECTION

1. Remove the oil pump (see **OIL PUMP REMOVAL**).
2. Remove the baffle plates (see step 8).

3. Remove the connecting rod cap and bearing half.
4. Clean the crankshaft rod journal and bearing half with a clean shop towel.
5. Place plastigage across the rod journal.
6. Reinstall the bearing half and cap, and torque the bolts to 20 N.m (2.0 kgf.m, 14 lbf.ft) + 90°.

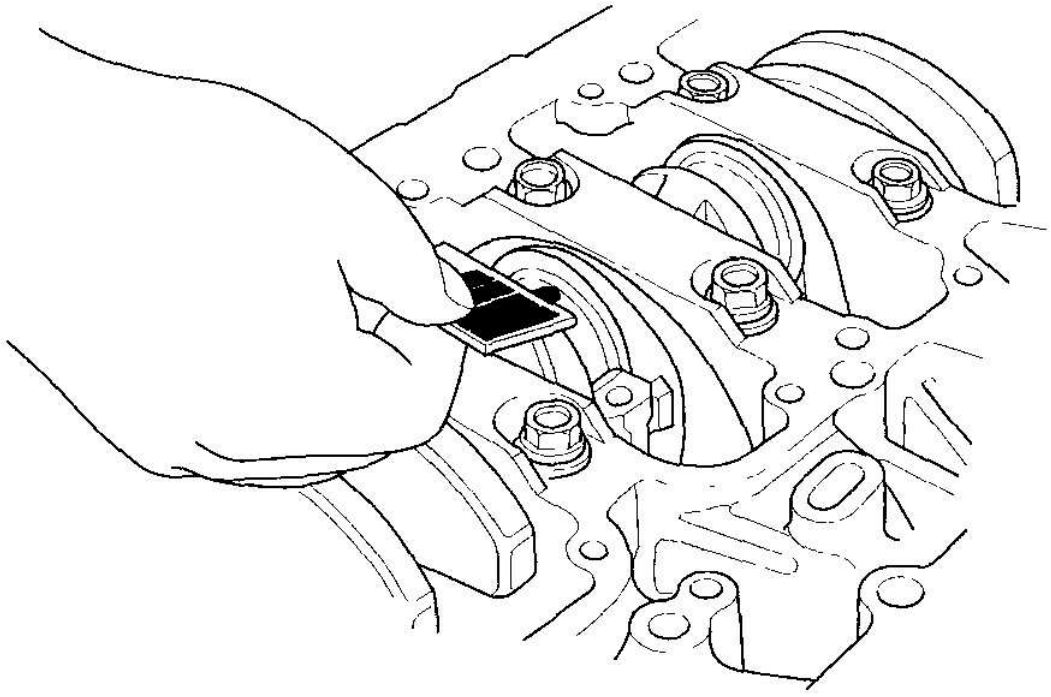
NOTE: Do not rotate the crankshaft during inspection.

7. Remove the rod cap and bearing half, and measure the widest part of the plastigage.

Connecting Rod Bearing-to-Journal Oil Clearance

Standard (New): 0.020-0.050 mm (0.0008-0.0020 in.)

Service Limit: 0.060 mm (0.0024 in.)



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Fig. 10: Measuring Widest Part Of Plastigage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. If the plastigage measures too wide or too narrow, remove the upper half of the bearing, install a new, complete bearing with the same color code(s), and recheck the clearance. Do not file, shim, or scrape the bearings or the caps to adjust clearance.
9. If the plastigage shows the clearance is still incorrect, try the next larger or smaller bearing (the color listed above or below that one), and check clearance again. If the proper clearance cannot be obtained by using the appropriate larger or smaller bearing, replace the crankshaft and start over.

ROD BEARING SELECTION

1. Inspect each connecting rod for cracks and heat damage.

Connecting Rod Big End Bore Code Locations

2. Each rod has a tolerance range from 0 to 0.024 mm (0.0009 in.), in 0.006 mm (0.0002 in.) increments, depending on the size of its big end bore. It's then stamped with a number or bar (1, 2, 3 or 4/I, II, III, or IIII) indicating the range. You may find any combination of numbers and bars in any engine. (Half the number or bar is stamped on the bearing cap, the other half is on the rod.)

   If you can't read the code because of an accumulation of oil and varnish, do not scrub it with a wire brush or scraper. Clean it only with solvent or detergent.

   Normal Bore Size: 51.0 mm (2.01 in.)

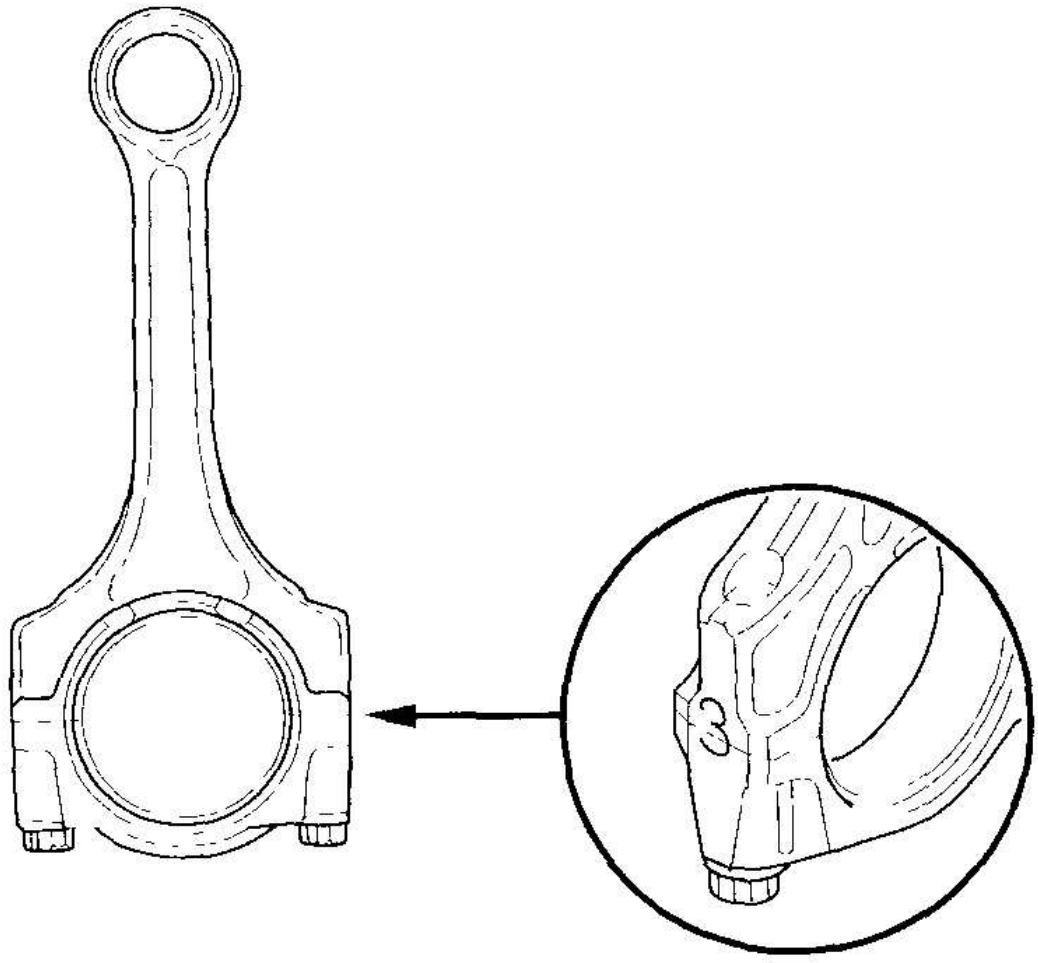
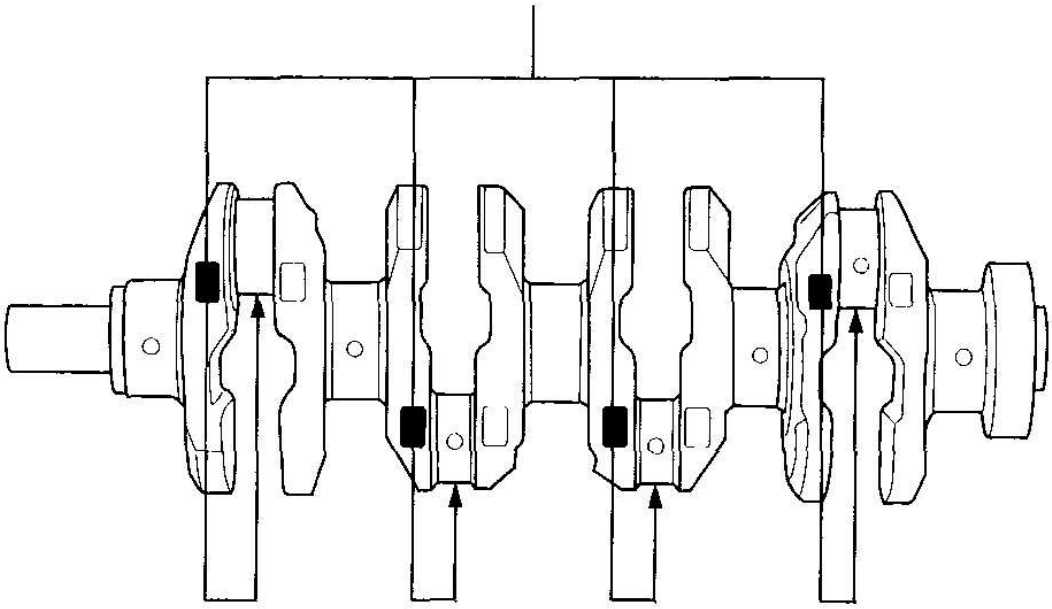


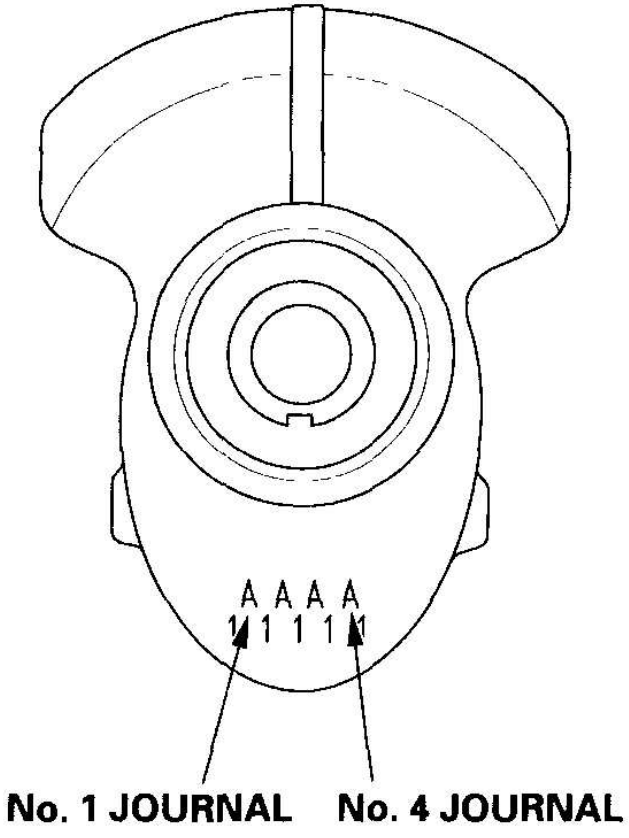
Fig. 11: Identifying Connecting Rod Big End Bore Code Locations
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Connecting Rod Journal Code Location

3. The connecting rod journal codes are stamped on the crankshaft.

Connecting Rod Journal Code Location (Letters or Bars)





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Fig. 12: Identifying Connecting Rod Journal Code Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Use the big end bore codes and rod journal codes to select appropriate replacement bearings from the following table.

NOTE:

- **The color code is on the edge of the bearing.**
- **When using bearing halves of different colors, it does not matter which color is used in the top or bottom.**

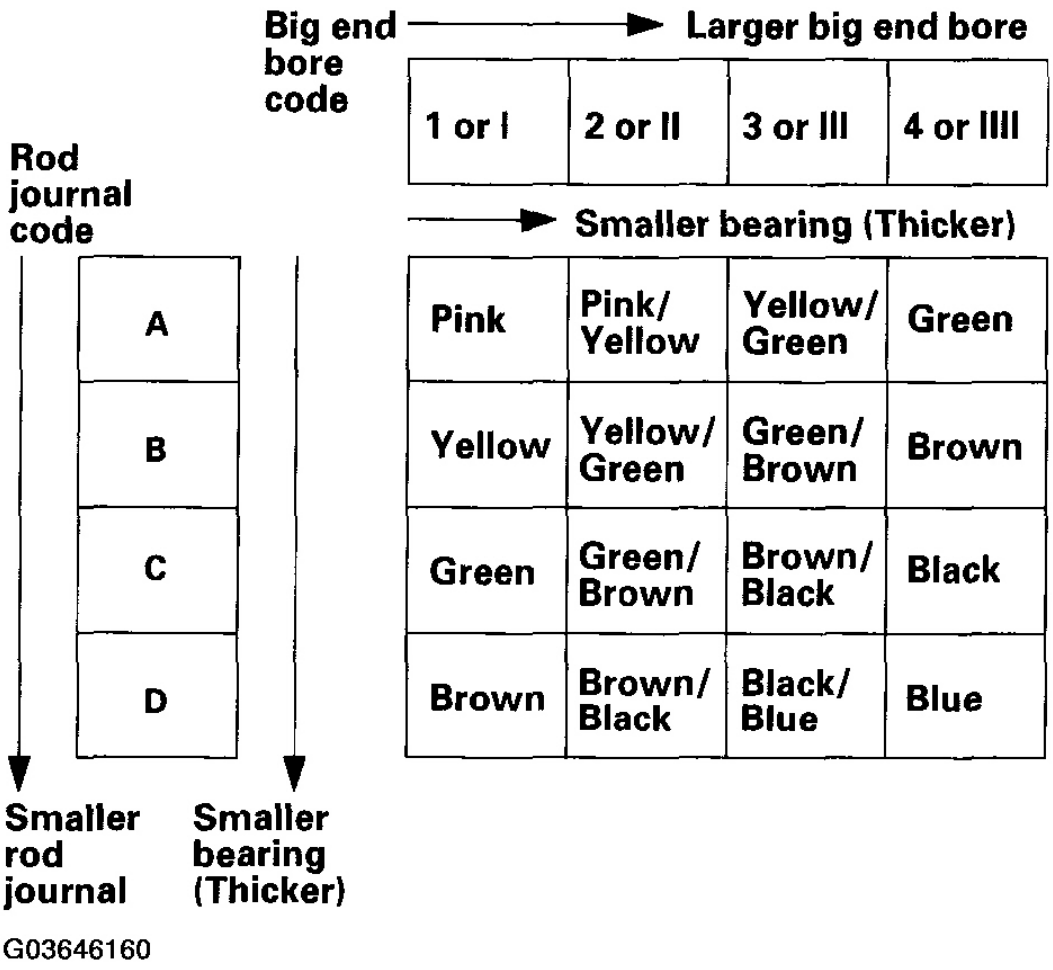


Fig. 13: Identifying Big End Bore Codes And Rod Journal Codes

Courtesy of AMERICAN HONDA MOTOR CO., INC.

OIL PAN REMOVAL

1. If the engine is out of the vehicle, go to step 19.
2. Drain the engine oil (see **ENGINE OIL REPLACEMENT**).
3. Make sure you have the anti-theft codes for the audio unit (and navigation code if equipped), then write down the audio preset.
4. Disconnect the negative cable from the battery first, then disconnect the positive cable. Remove the battery.
5. Remove the air cleaner assembly (see **AIR CLEANER REMOVAL/INSTALLATION**).
6. Remove the harness clamp. Remove the two bolts, and loosen the two bolts securing the battery base, then remove the battery base (see step 9 on **ENGINE REMOVAL**).
7. Remove the clutch slave cylinder, and clutch line bracket mounting bolt (M/T) (see step 21 on **ENGINE REMOVAL**).
8. Remove the ground cable, then remove the transmission upper mount/bracket assembly:
   - Manual transmission (see step 48 on **ENGINE REMOVAL**)
   - Automatic transmission (see step 49 on **ENGINE REMOVAL**)
9. Remove the front mount stop, then remove the front mount bolt (see step 50 on **ENGINE REMOVAL**).
10. Remove the rear mount stop, then remove the rear mount bolt (see step 52 on **ENGINE REMOVAL**).
11. Raise the vehicle on the hoist to full height.
12. Remove the front wheels.
13. Disconnect the stabilizer links (see **STABILIZER LINK REPLACEMENT**).
14. Remove the left side damper fork (see **REMOVAL**).
15. Disconnect the left side suspension lower arm ball joint (see **LOWER ARM REMOVAL/INSTALLATION**).

16. Remove the left side driveshaft (see step 12 on **DRIVESHAFT DISASSEMBLY**). Coat all precision-finished surfaces with clean engine oil. Tie plastic bag over the driveshaft end.
17. Remove the nuts securing the transmission lower front mount and transmission lower rear mount (see step 40 on **ENGINE REMOVAL**).
18. Use a transmission jack to lift the transmission 40-55 mm (1.6-2.2 in.).

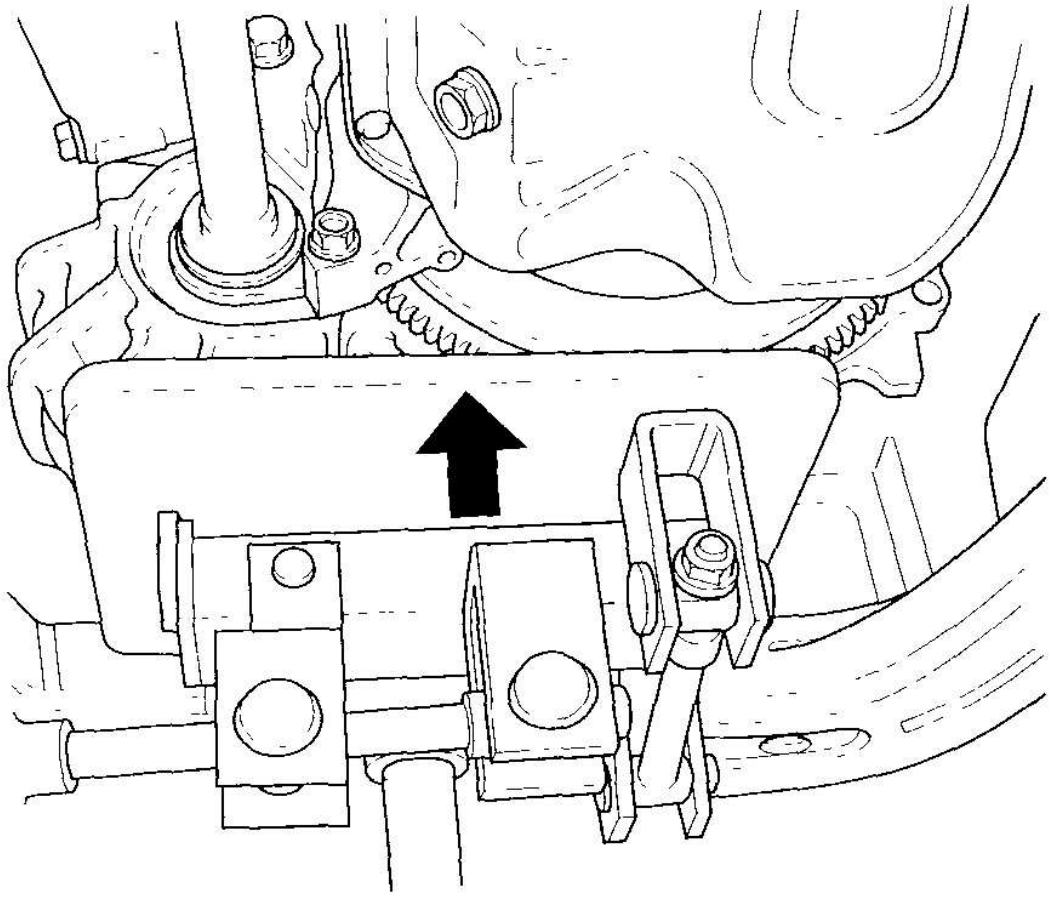
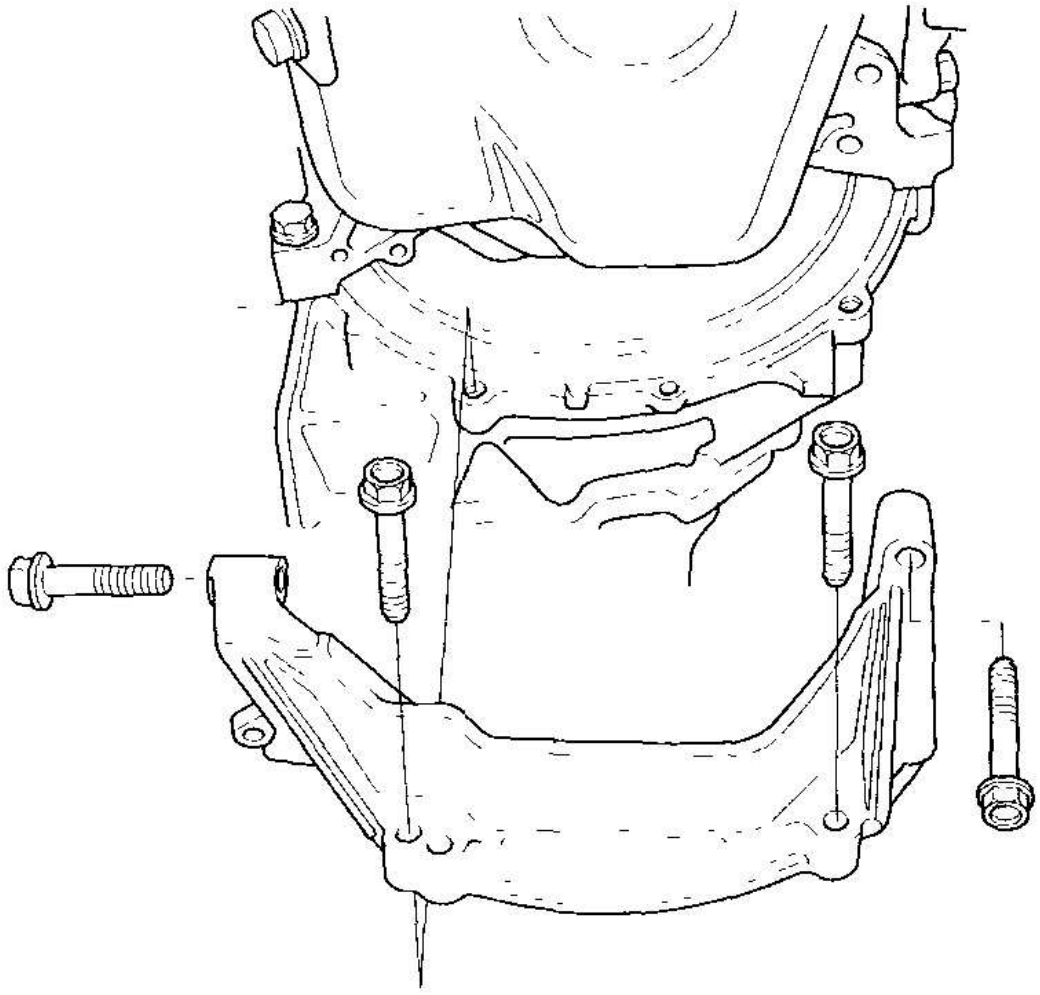


Fig. 14: Using A Transmission Jack To Lift Transmission
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Remove the stiffener.



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Fig. 15: Removing Stiffener
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Remove the bolts/nuts securing the oil pan.
21. Drive an oil pan seal cutter between the oil pan and engine block.

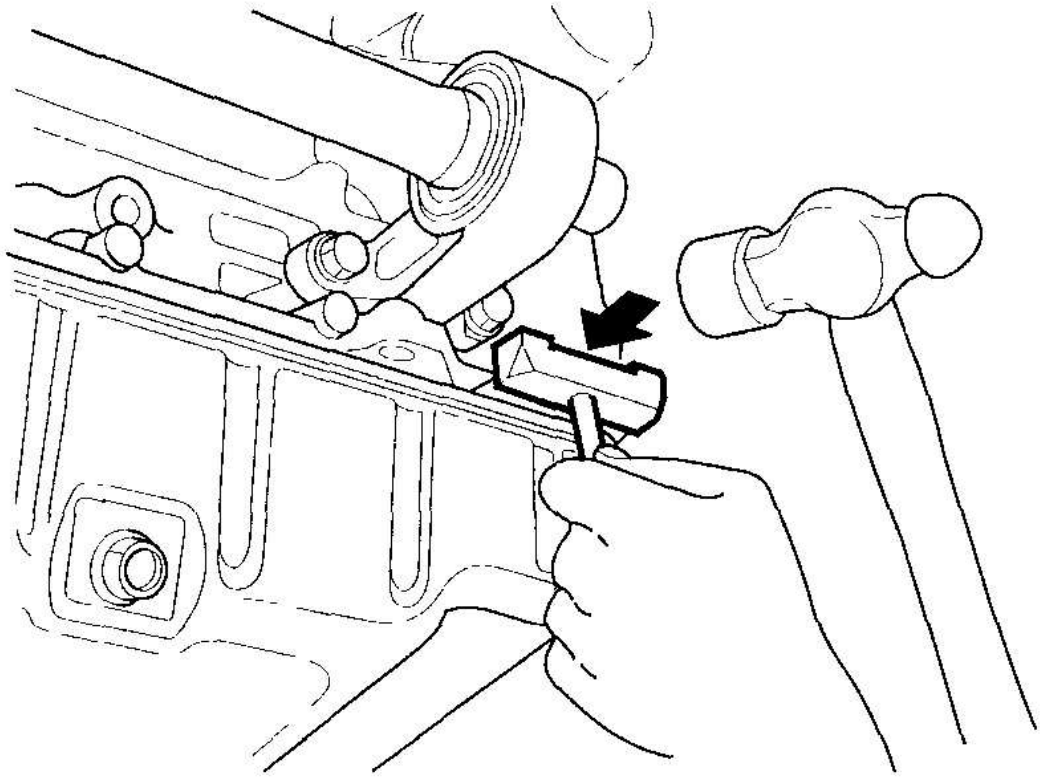
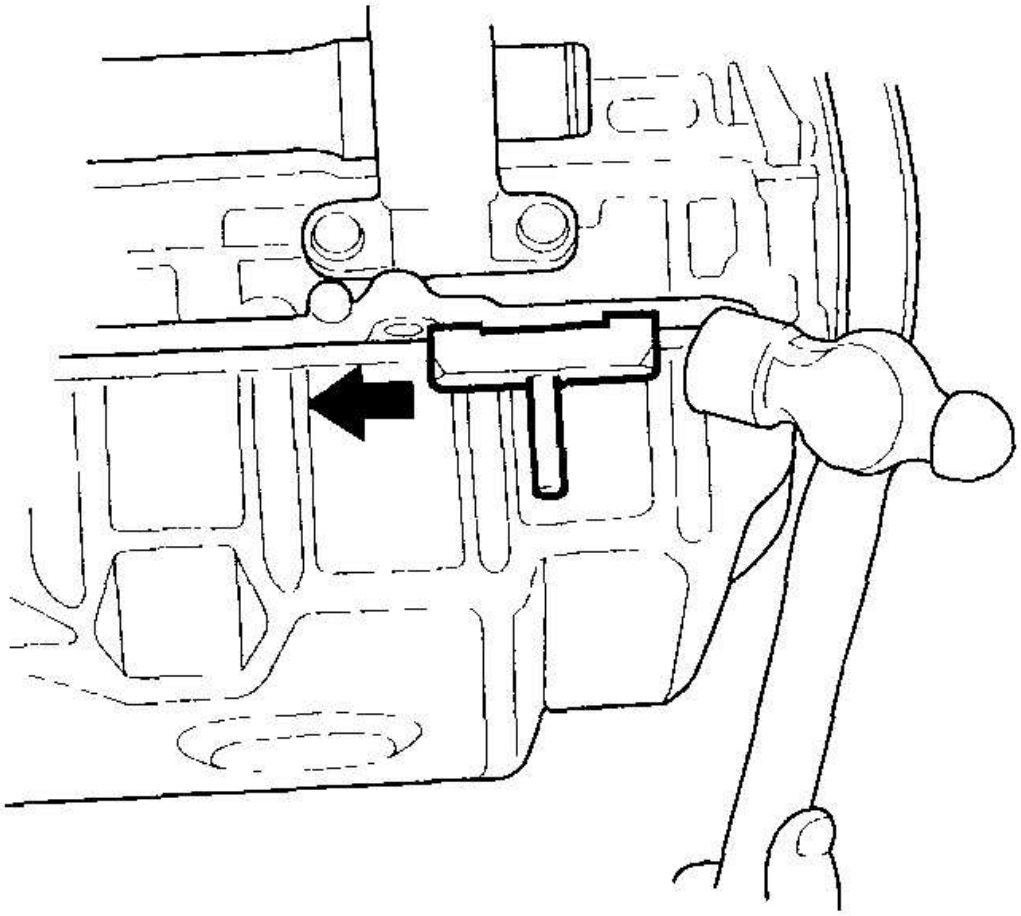


Fig. 16: Driving An Oil Pan Seal Cutter Between Oil Pan And Engine Block
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Cut the oil pan seal by striking the side of the cutter to slide the cutter along the oil pan.



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Fig. 17: Cutting Oil Pan Seal By Striking Side Of Cutter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

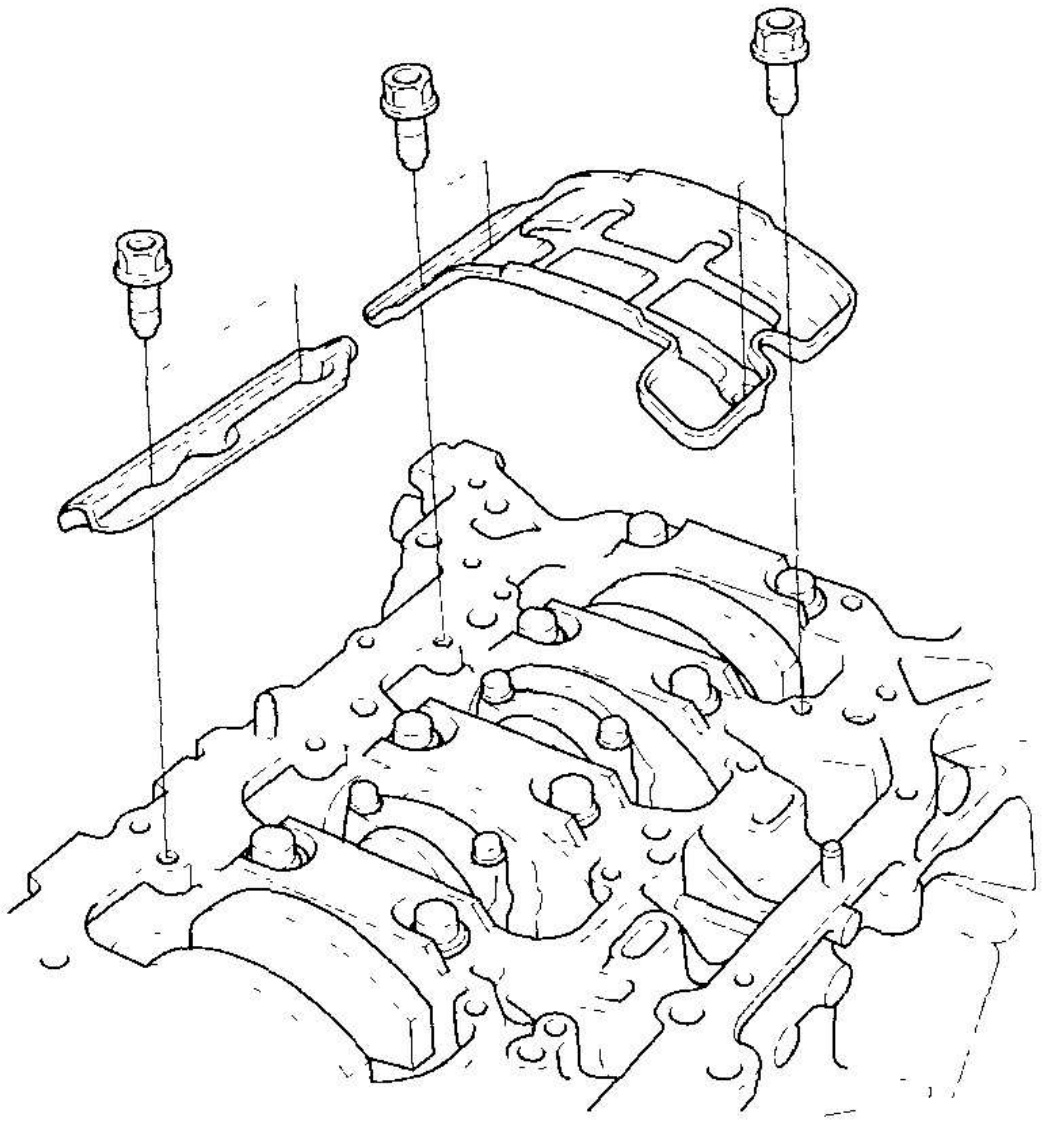
23. Remove the oil pan.

CRANKSHAFT AND PISTON REMOVAL

1. Remove the engine assembly (see **ENGINE REMOVAL**).
2. Remove the transmission:
   - Manual transmission (see **TRANSMISSION REMOVAL**)

- Automatic transmission (see **TRANSMISSION REMOVAL**)

3. M/T model: Remove the pressure plate (see **PRESSURE PLATE AND CLUTCH DISC REMOVAL**), clutch disc (see **CLUTCH REPLACEMENT**), and flywheel (see **FLYWHEEL INSPECTION**).
4. A/T model: Remove the drive plate (see **DRIVE PLATE REMOVAL AND INSTALLATION**).
5. Remove the oil pan (see **OIL PAN REMOVAL**).
6. Remove the oil pump (see **OIL PUMP REMOVAL**).
7. Remove the cylinder head (see **CYLINDER HEAD REMOVAL**).
8. Remove the baffle plates.



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Fig. 18: Removing Baffle Plates
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the 8 mm bolts.

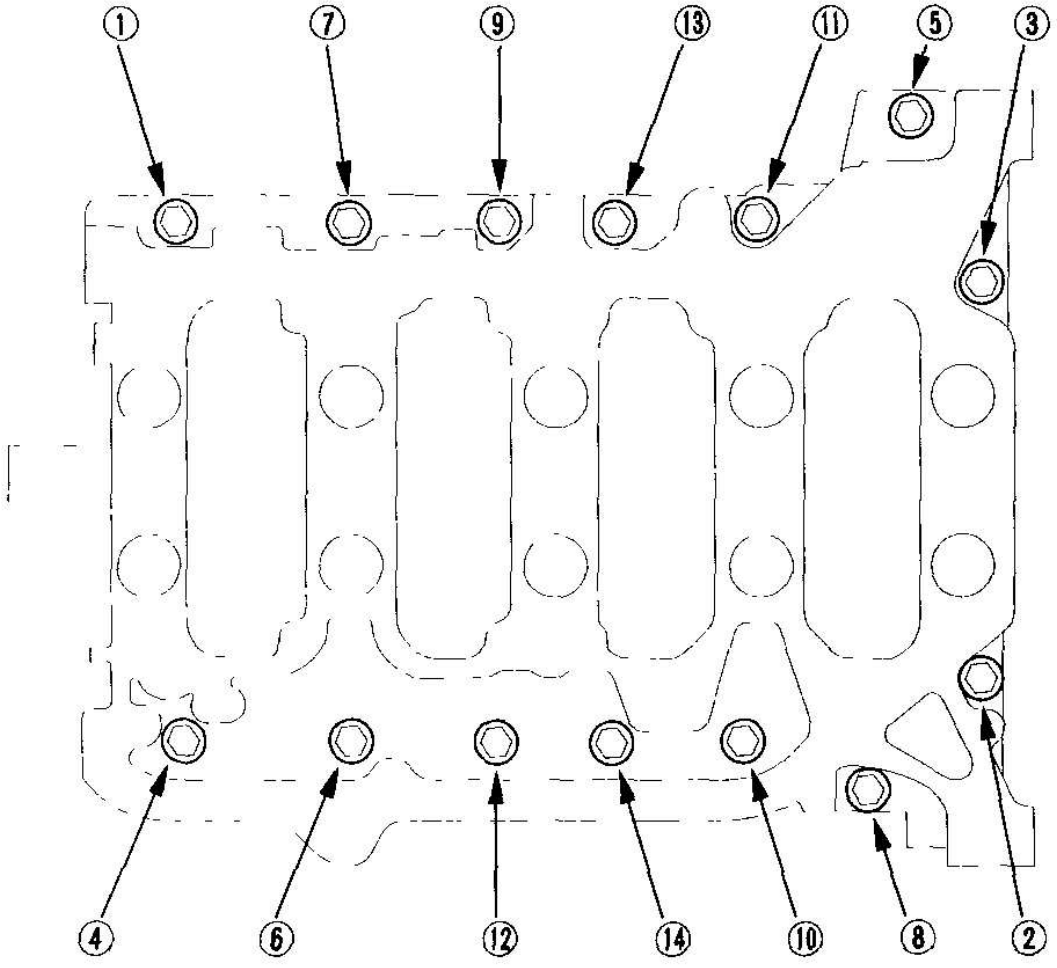


Fig. 19: Removing Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the bearing cap bolts. To prevent warpage, unscrew the bolts in sequence 1/3 turn at a time: repeat the sequence until all bolts are loosened.

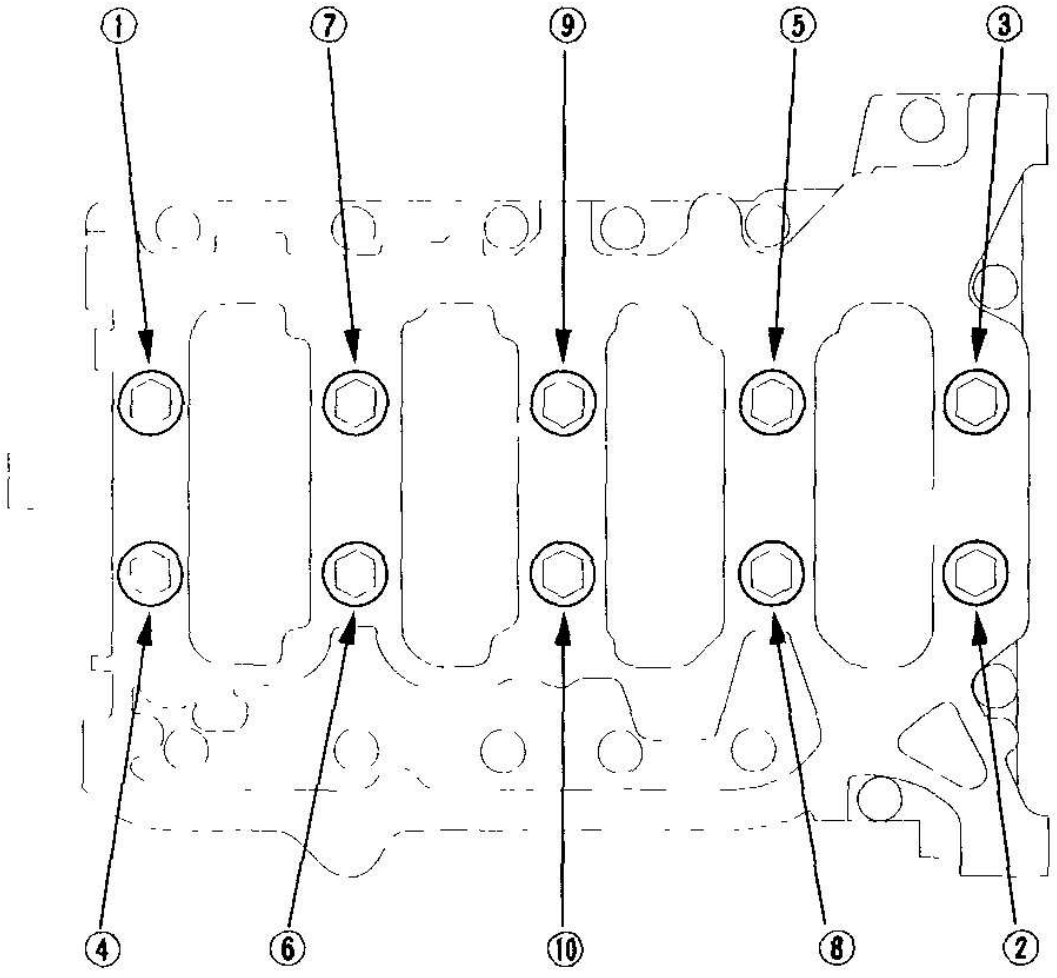
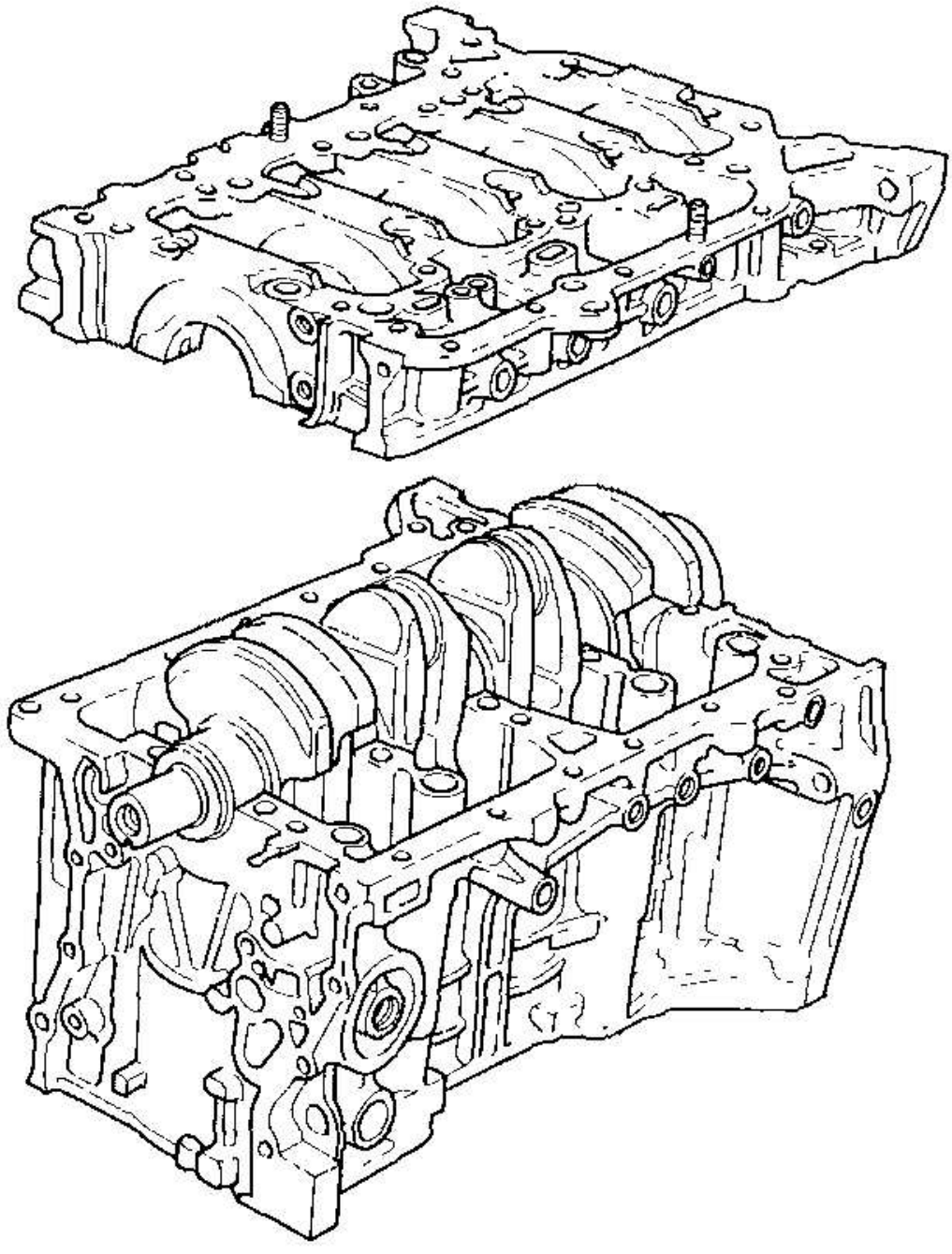


Fig. 20: Removing Bearing Cap Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the lower block and bearings. Keep all bearings in order.

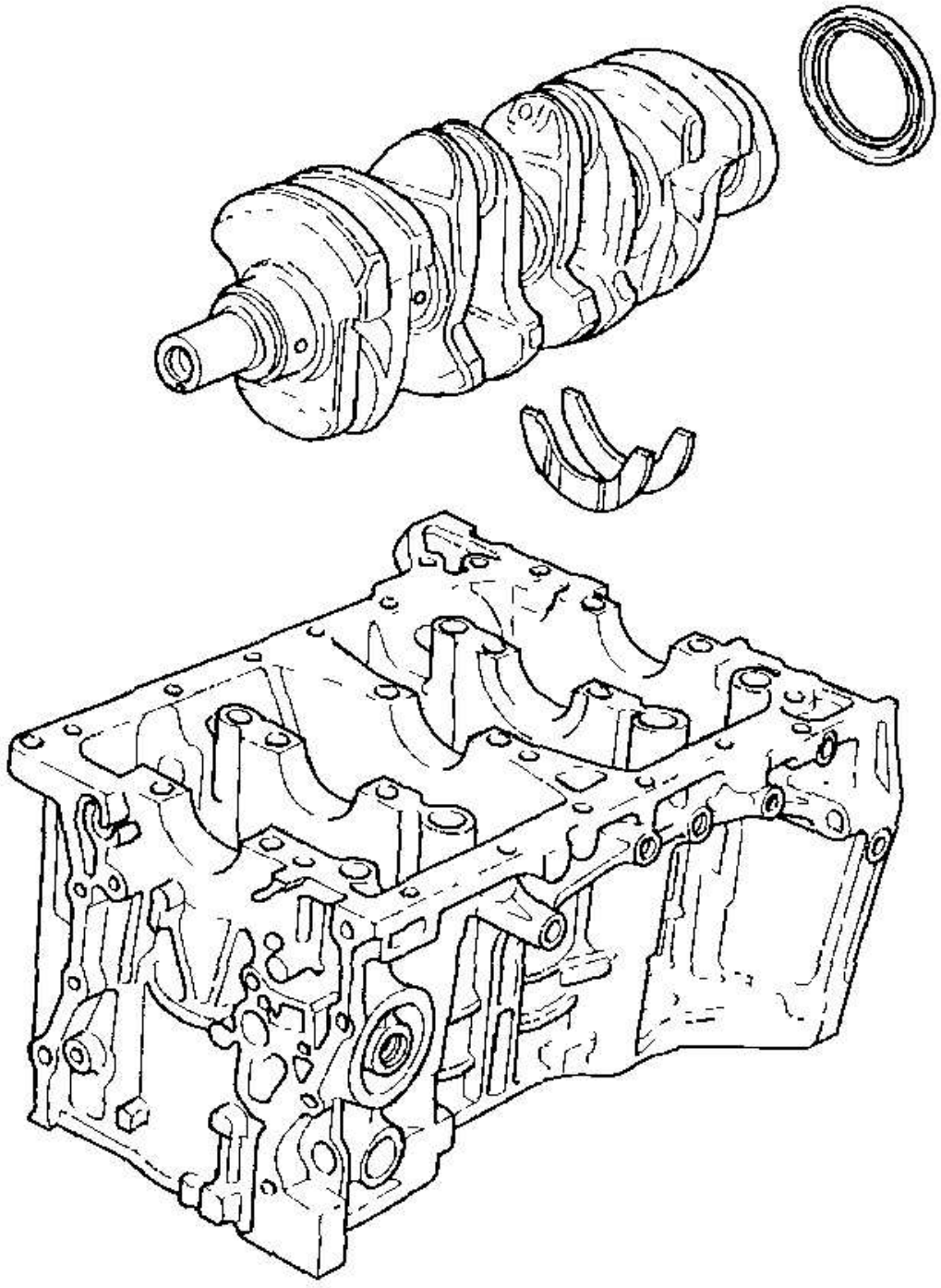


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Fig. 21: Removing Lower Block And Bearings

Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the rod caps/bearings. Keep all caps/ bearings in order.
13. Lift the crankshaft out of the engine, being careful not to damage the journals.



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Fig. 22: Lifting Crankshaft Out Of Engine
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Remove the upper bearing halves from the connecting rods, and set them aside with their respective caps.
15. If you can feel a ridge of metal or hard carbon around the top of each cylinder, remove it with a ridge reamer (A). Follow the reamer manufacturer's instructions. If the ridge is not removed, it may damage the pistons as they are pushed out.

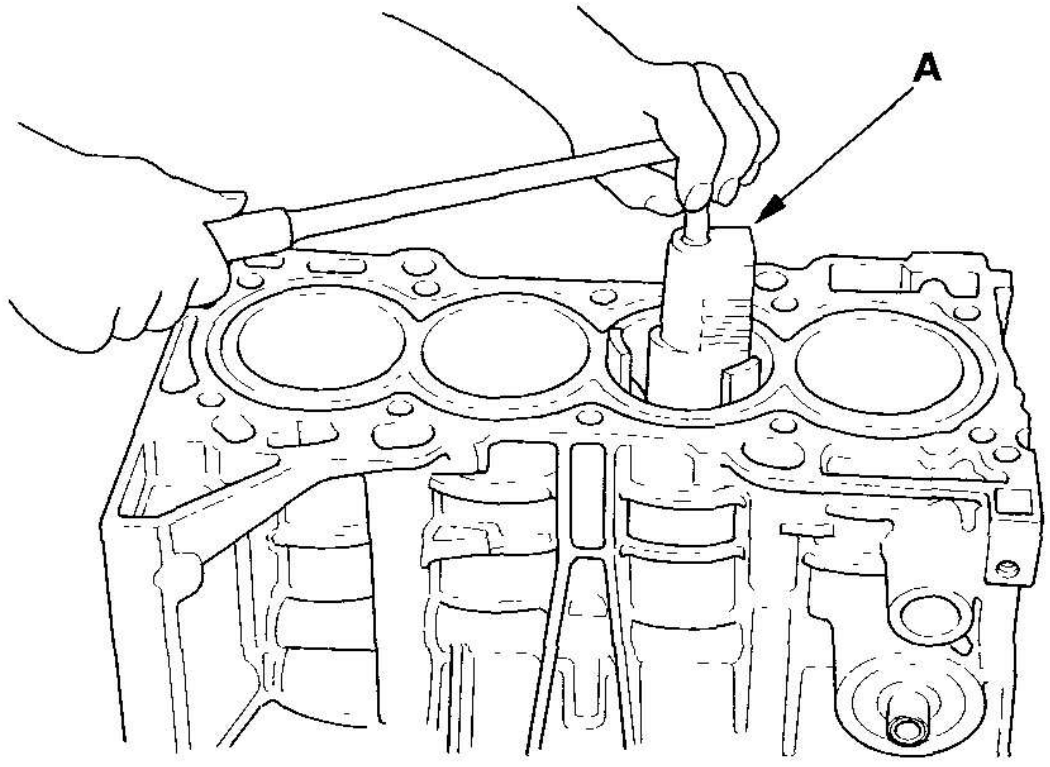


Fig. 23: Removing Upper Bearing Halves From Connecting Rods
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Use the wooden handle of a hammer (A) to drive out the pistons (B).

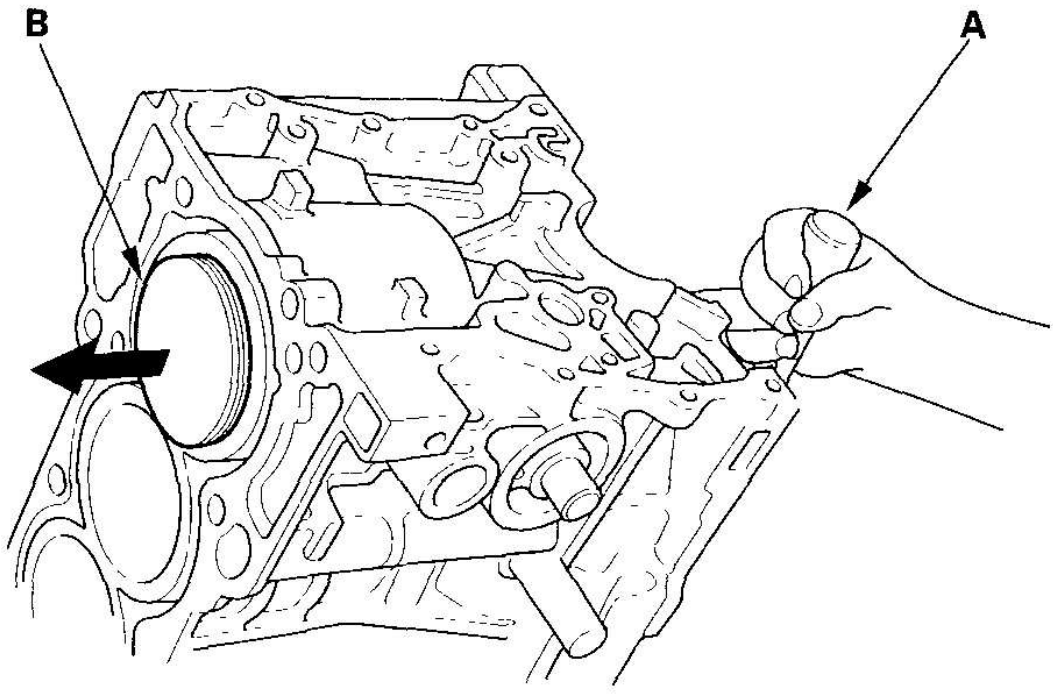


Fig. 24: Driving Out Pistons
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. To avoid mixup on reassembly, mark each piston/connecting rod assembly with its cylinder number.

NOTE: The existing number on the connecting rod does not indicate its position in the engine, it indicates the rod bore size.

18. Reinstall the connecting rod bearings and caps after removing each piston/connecting rod assembly.
19. Reinstall the lower block and bearings on the engine in the proper order.

CRANKSHAFT INSPECTION

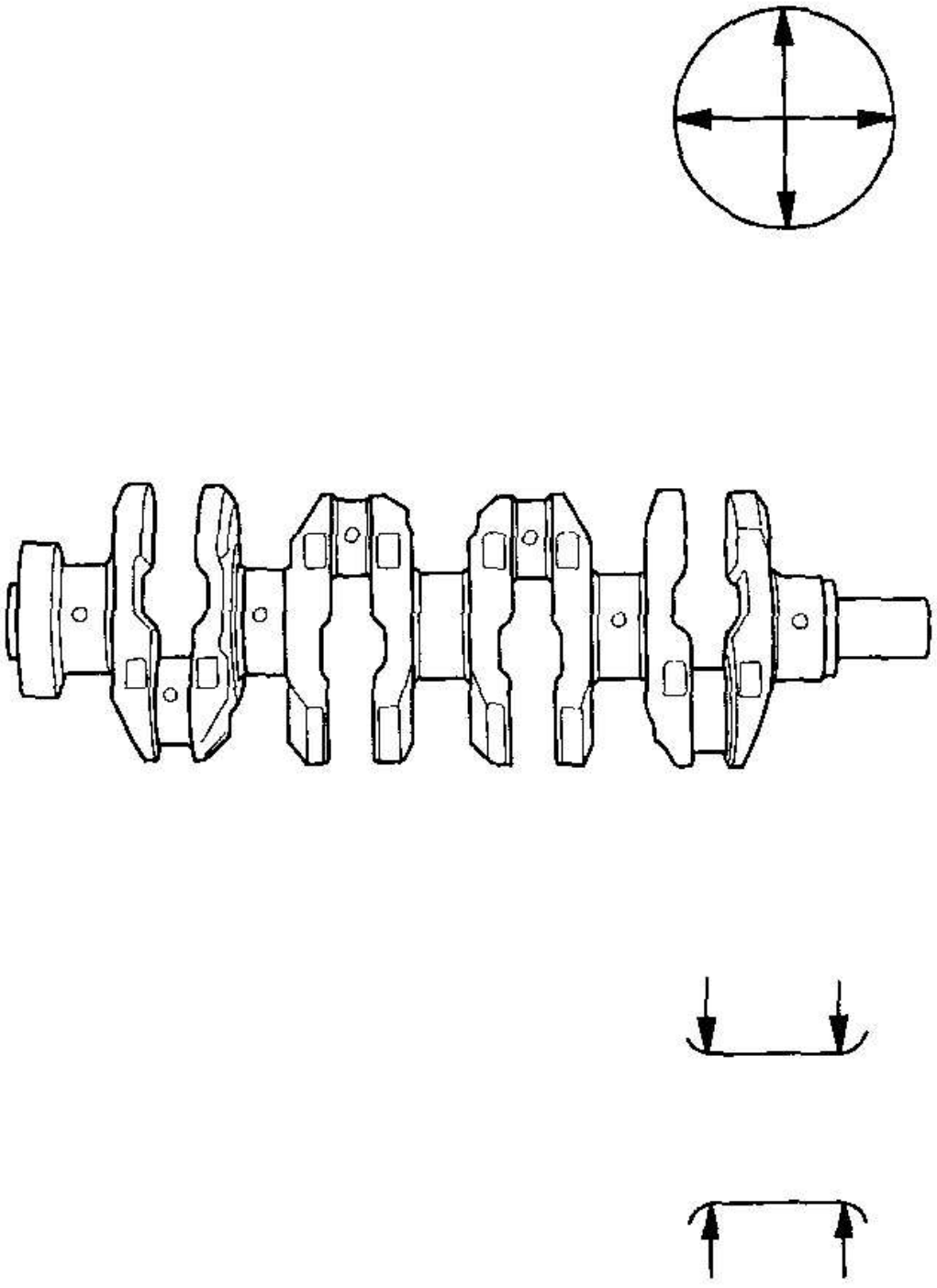
OUT-OF-ROUND AND TAPER

1. Remove the crankshaft from the engine block (see **CRANKSHAFT AND PISTON REMOVAL**).
2. Clean the crankshaft oil passages with pipe cleaners or a suitable brush.
3. Clean the keyway and threads.
4. Measure out-of round at the middle of each rod and main journal in two places. The difference between measurements on each journal must not be more than the service limit.

   Journal Out-of-Round

   Standard (New): 0.005 mm (0.0002 in.) max.

   Service Limit: 0.010 mm (0.0004 in.)



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Fig. 25: Measuring Out-Of Round At Middle Of Each Rod And Main Journal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Measure taper at the edges of each rod and main journal. The difference between measurements on each journal must not be more than the service limit.

   Journal Taper

   Standard (New): 0.005 mm (0.0002 in.) max.

   Service Limit: 0.010 mm (0.0004 in.)

   Straightness

6. Place the engine block on the surface plate.
7. Clean and install the bearings on the No. 1 and No. 5 journals of the engine block.
8. Lower the crankshaft into the block.
9. Measure the runout on all of the main journals. Rotate the crankshaft two complete revolutions. The difference between measurements on each journal must not be more than the service limit.

   Crankshaft Total Runout

   Standard (New): 0.03 mm (0.0012 in.) max.

   Service Limit: 0.04 mm (0.0016 in.)

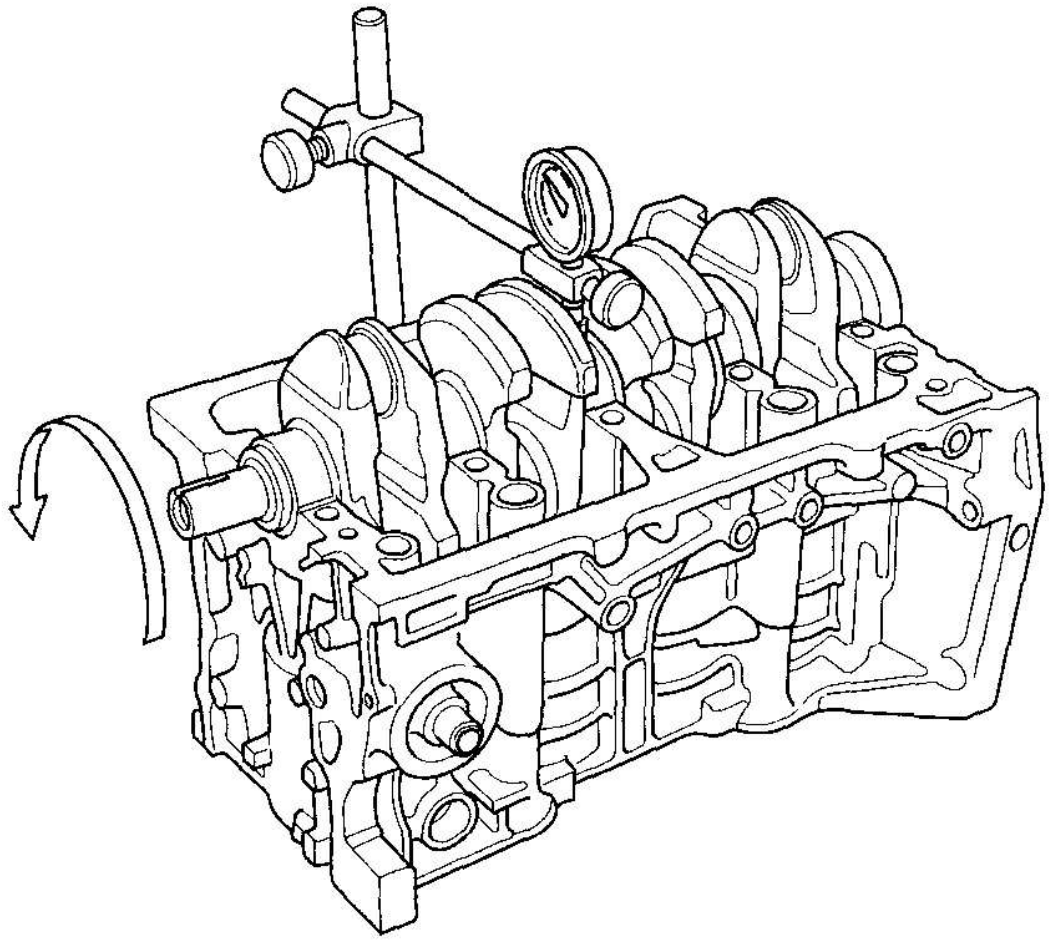


Fig. 26: Measuring Runout On All Of Main Journals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BLOCK AND PISTON INSPECTION

1. Remove the crankshaft and pistons (see **CRANKSHAFT AND PISTON REMOVAL**).
2. Check the piston for distortion or cracks.
3. Measure the piston diameter at a point 13 mm (0.5 in.) from the bottom of the skirt. There are two standard-size pistons (No Letter or A, and B). The letter is stamped on the top of the piston. Letters are also stamped on the block as

cylinder bore sizes.

Piston Diameter

Standard (New):

No Letter (or A): 86.980-86.990 mm (3.4244-3.4248 in.)

B: 86.970-86.980 mm (3.4240-3.4244 in.)

Service Limit:

No Letter (or A): 86.930 mm (3.4224 in.)

B: 86.920 mm (3.4220 in.)

Oversize Piston Diameter

0.25: 87.230-87.240 mm (3.4342-3.4346 in.)

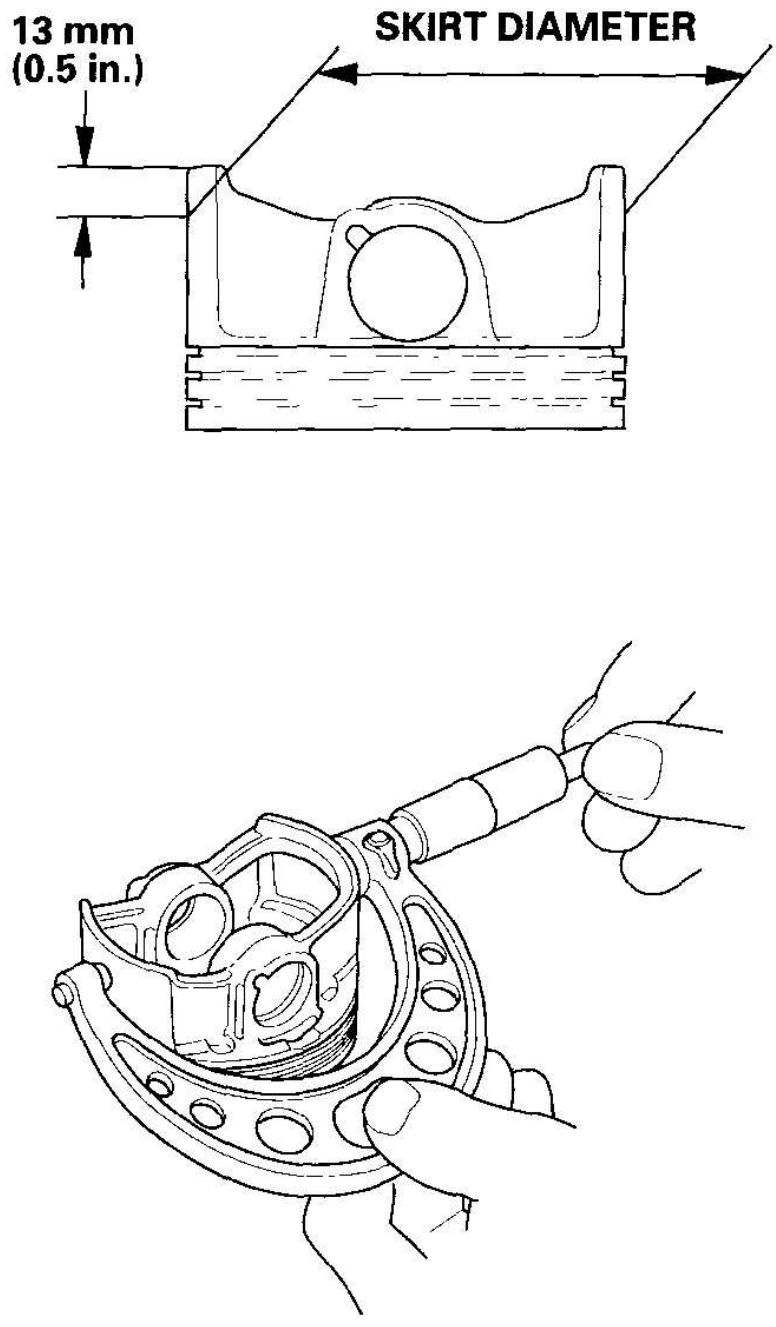


Fig. 27: Measuring Piston Diameter At A Point 13 Mm (0.5 In.) From Bottom Of Skirt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure wear and taper in direction X and Y at three levels in each cylinder as shown in **Fig. 28**. If measurements in any cylinder are beyond the Oversize Bore Service Limit, replace the block. If the block is to be rebored, refer to step 7 after reboring.

   Cylinder Bore Size

   Standard (New):

   A or I: 87.010-87.020 mm (3.4256-3.4260 in.)

   B or II: 87.000-87.010 mm (3.4252-3.4256 in.)

   Service Limit: 87.070 mm (3.4279 in.)

   Oversize

   0.25: 87.250-87.260 mm (3.4350-3.4354 in.)

   Reboring limit: 0.25 mm (0.01 in.) max.

   Bore Taper

   Limit: (Difference between first and third measurement) 0.05 mm (0.002 in.)

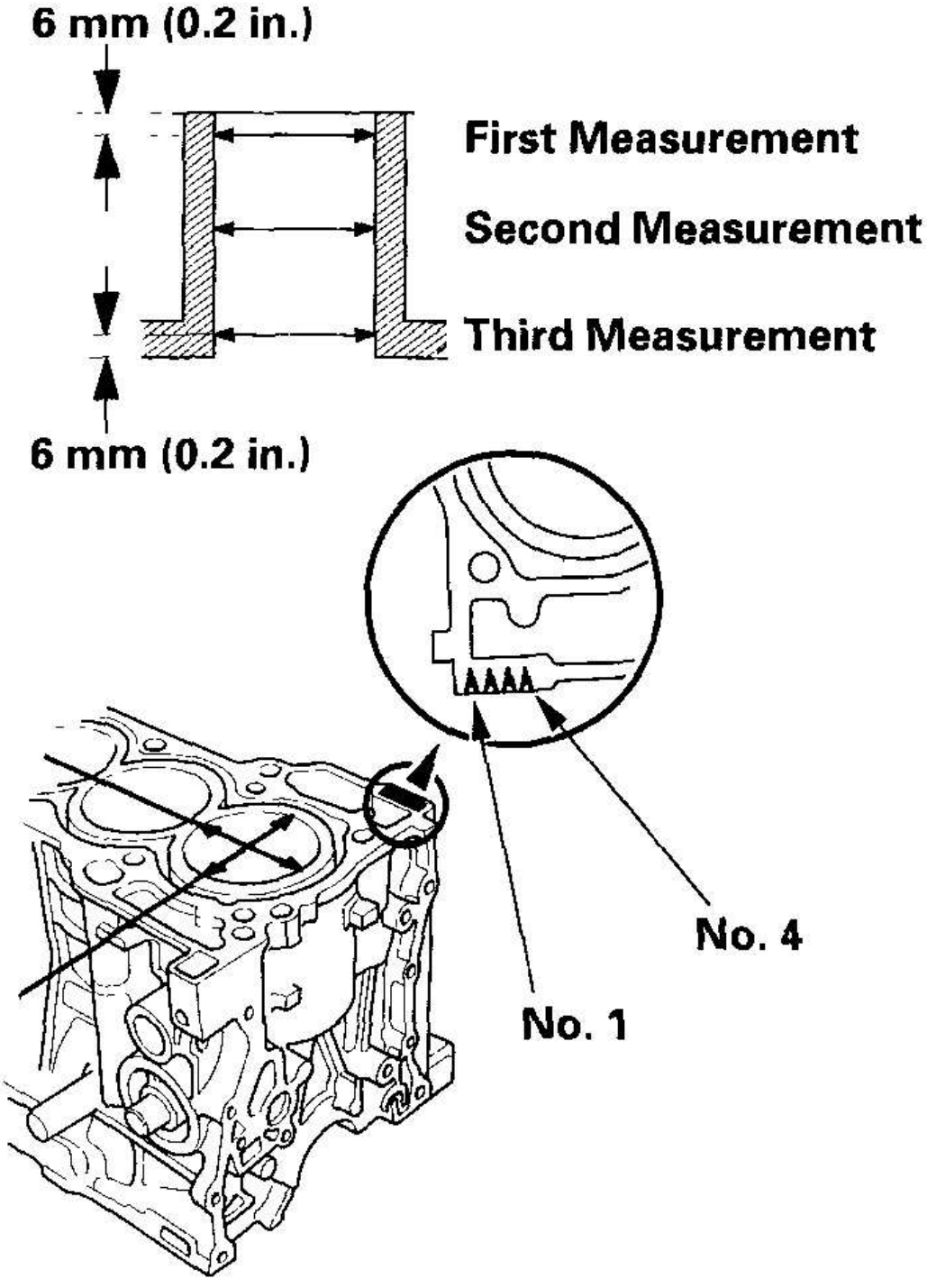

6 mm (0.2 in.)
First Measurement
Second Measurement
Third Measurement
6 mm (0.2 in.)
No. 4
No. 1
G03646175

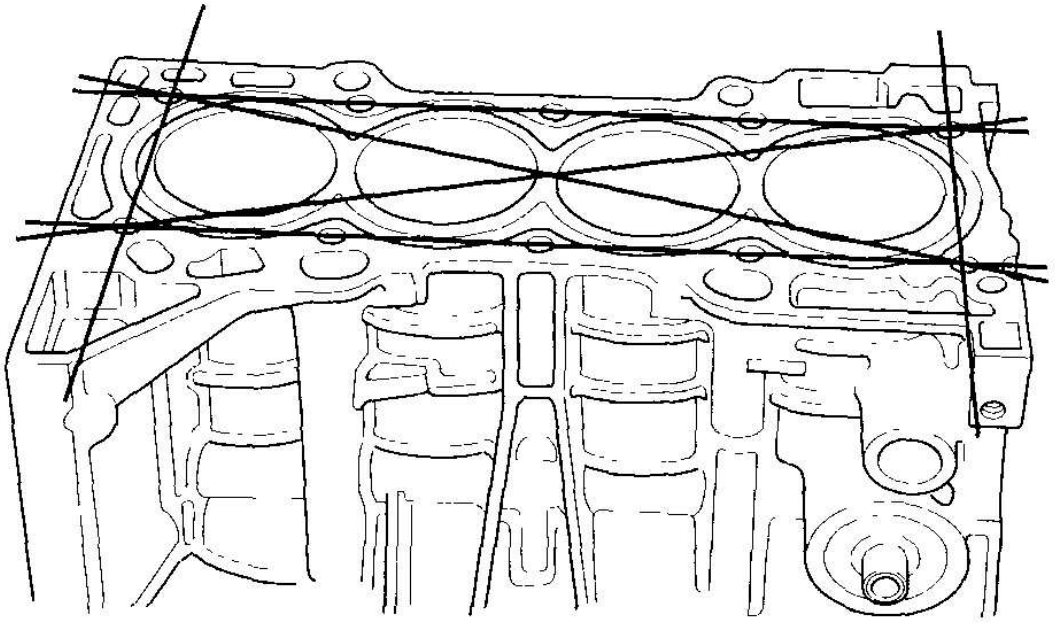
Fig. 28: Measuring Wear And Taper In Direction X And Y
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Scored or scratched cylinder bores must be honed.
6. Check the top of the block for warpage. Measure along the edges and across the center as shown in **Fig. 29**.

Engine Block Warpage

Standard (New): 0.07 mm (0.003 in.) max.

Service Limit: 0.10 mm (0.004 in.)



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Fig. 29: Checking Top Of Block For Warpage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

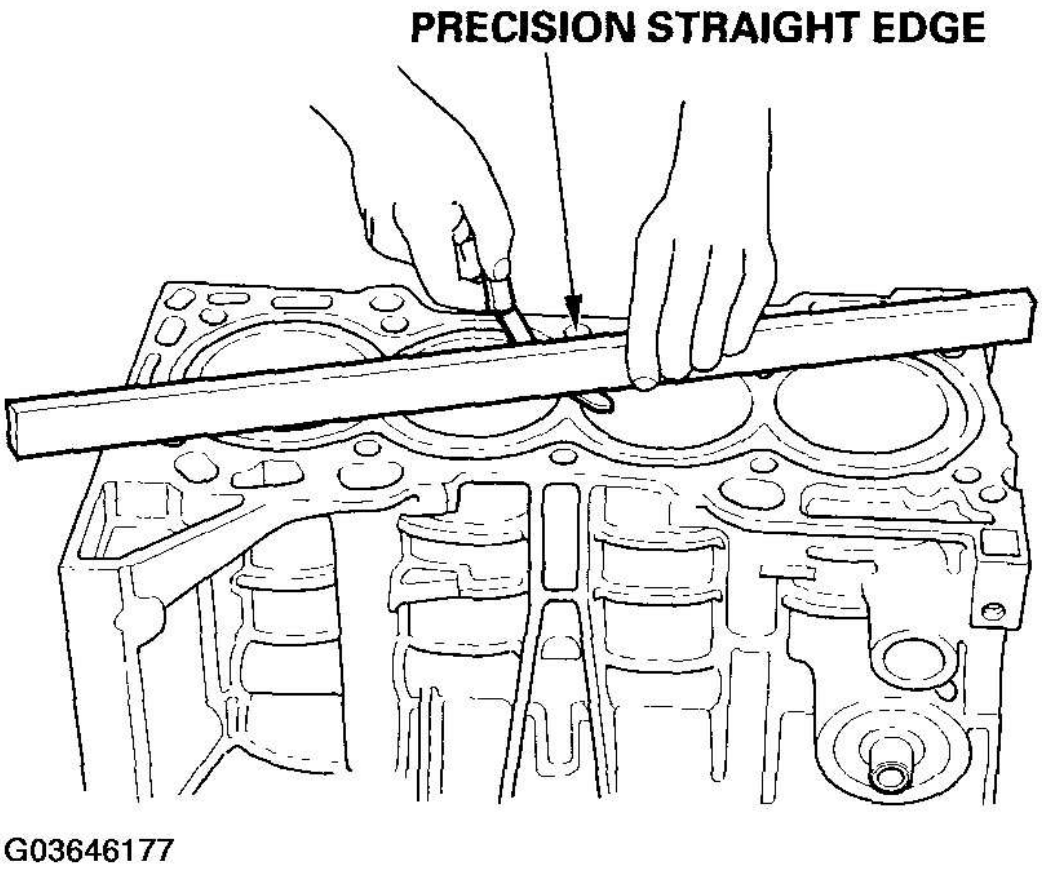


Fig. 30: Identifying Precision Straight Edge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Calculate the difference between the cylinder bore diameter and the piston diameter. If the clearance is near or exceeds the service limit, inspect the piston and engine block for excessive wear.

   Piston-to-Cylinder Bore Clearance

   Standard (New): 0.020-0.040 mm (0.0008-0.0016 in.)

   Service Limit: 0.05 mm (0.002 in.)

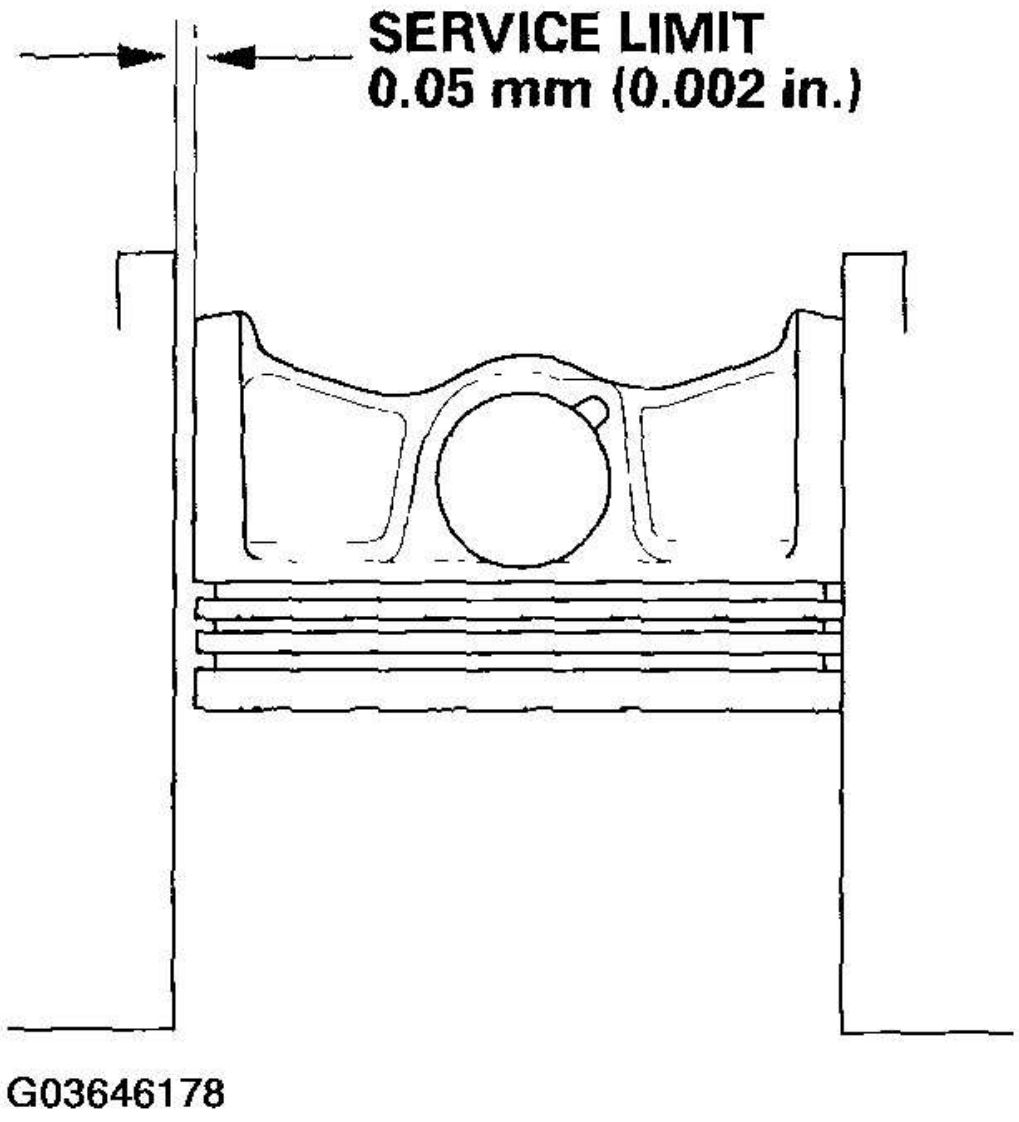


Fig. 31: Calculating Difference Between Cylinder Bore Diameter And Piston Diameter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CYLINDER BORE HONING

Only a scored or scratched cylinder bore must be honed.

1. Measure the cylinder bores (see step 4).

   If the block is to be reused, hone the cylinders and remeasure the bores. Only scored or scratched cylinder bores must be honed.

2. Hone the cylinder bores with honing oil and a fine (400 grit) stone in a 60 degree cross-hatch pattern (A).

NOTE:

- **Use only a rigid hone with 400 grit or finer stone such as Sunnen, Ammco, or equivalent.**
- **Do not use stones that are worn or broken.**

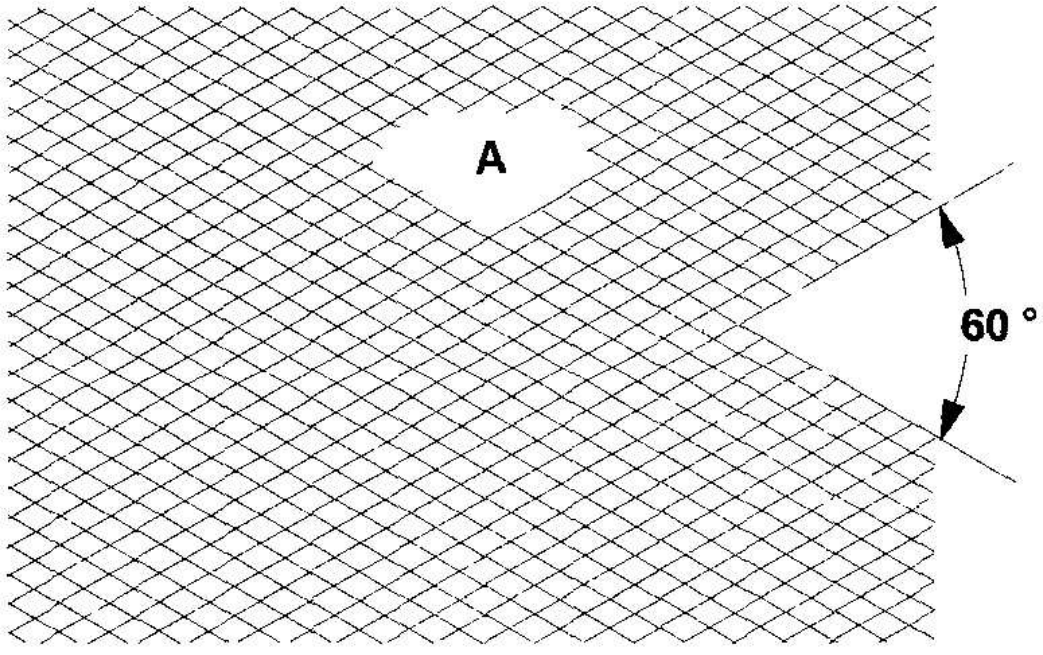


Fig. 32: Honing Cylinder Bores With Honing Oil And A Fine (400 Grit) Stone
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. When honing is complete, thoroughly clean the engine block of all metal

particles. Wash the cylinder bores with hot soapy water, then dry and oil them immediately to prevent rusting. Never use solvent, it will only redistribute the grit on the cylinder walls.

4. If scoring or scratches are still present in the cylinder bores after honing to the service limit, rebore the engine block. Some light vertical scoring and scratching is acceptable if it is not deep enough to catch your fingernail and does not run the full length of the bore.

PISTON, PIN, AND CONNECTING ROD REPLACEMENT

DISASSEMBLY

1. Remove the piston from the engine block (see **CRANKSHAFT AND PISTON REMOVAL**).
2. Apply new engine oil to the piston pin snap rings (A), and turn them in the ring grooves until the end gaps are lined up with the cutouts in the piston pin bores (B).

NOTE: Take care not to damage the ring grooves.

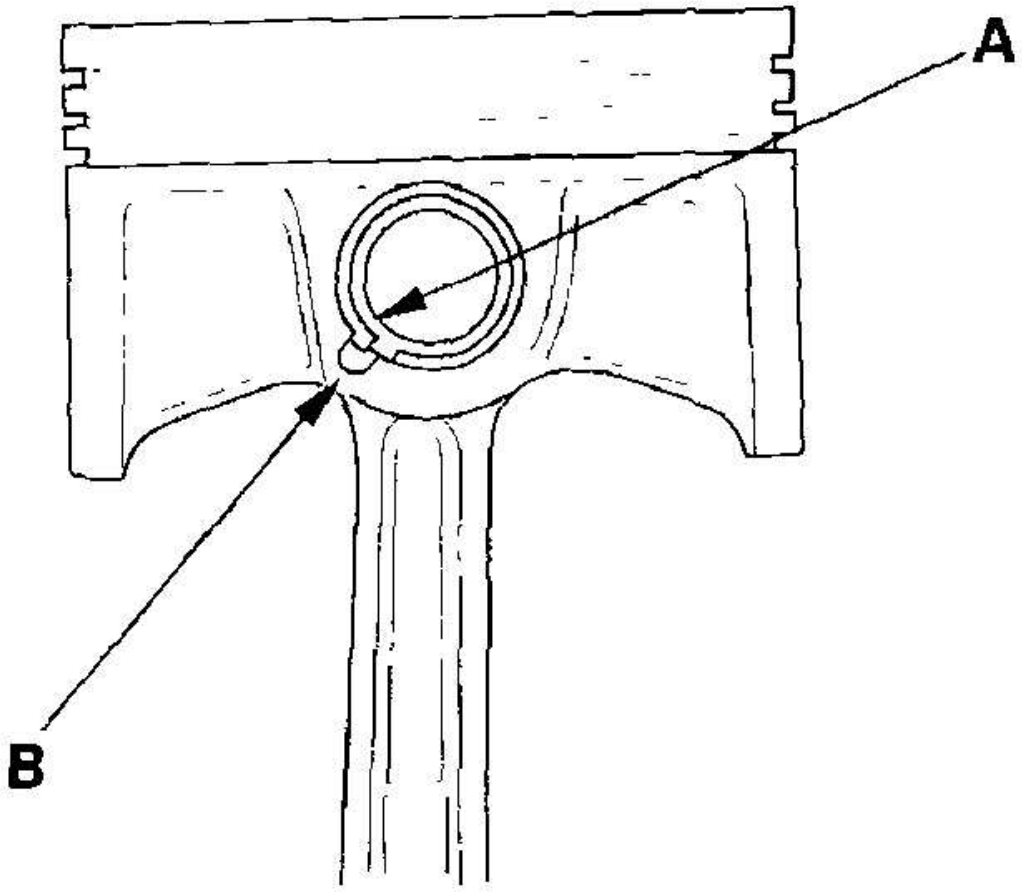


Fig. 33: Applying Engine Oil To Piston Pin Snap Rings
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove both snap rings (A). Start at the cutout in the piston pin bore. Remove the snap rings carefully so they do not go flying or get lost. Wear eye protection.

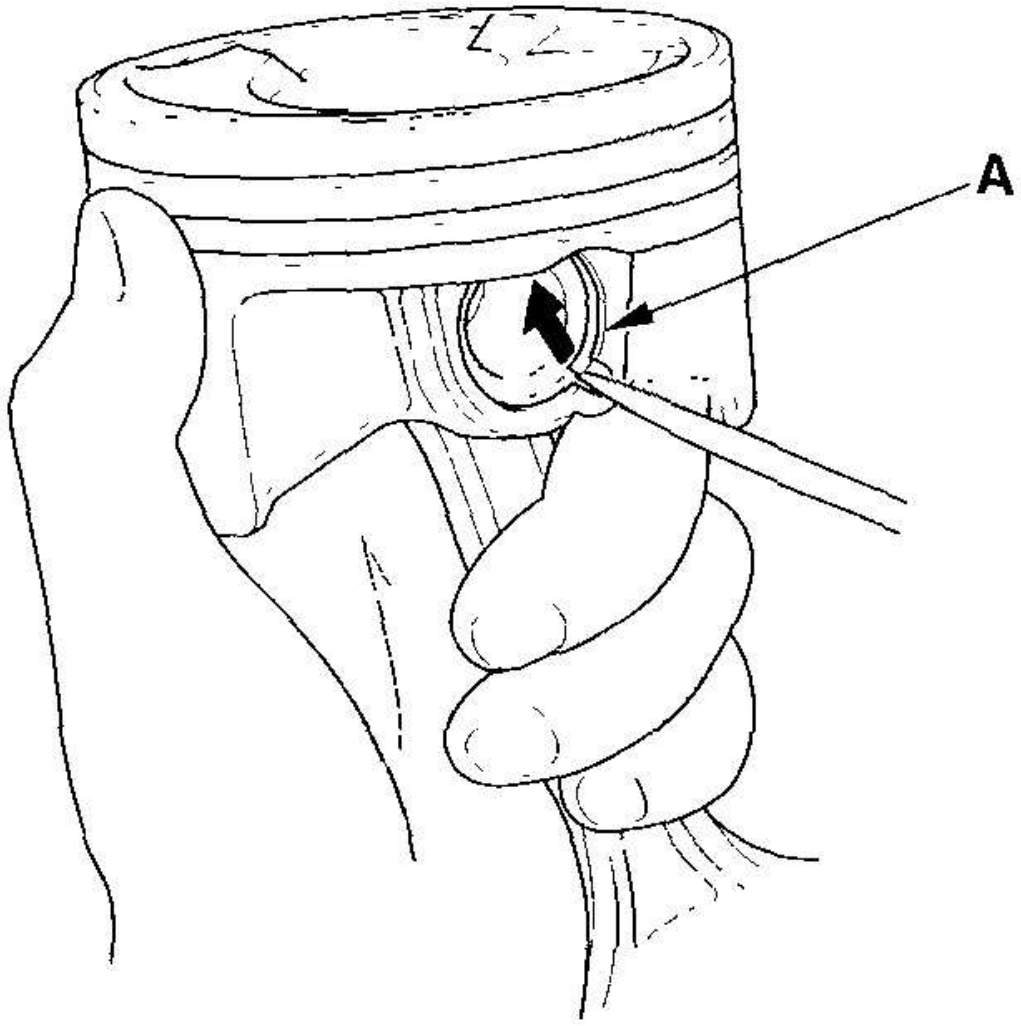
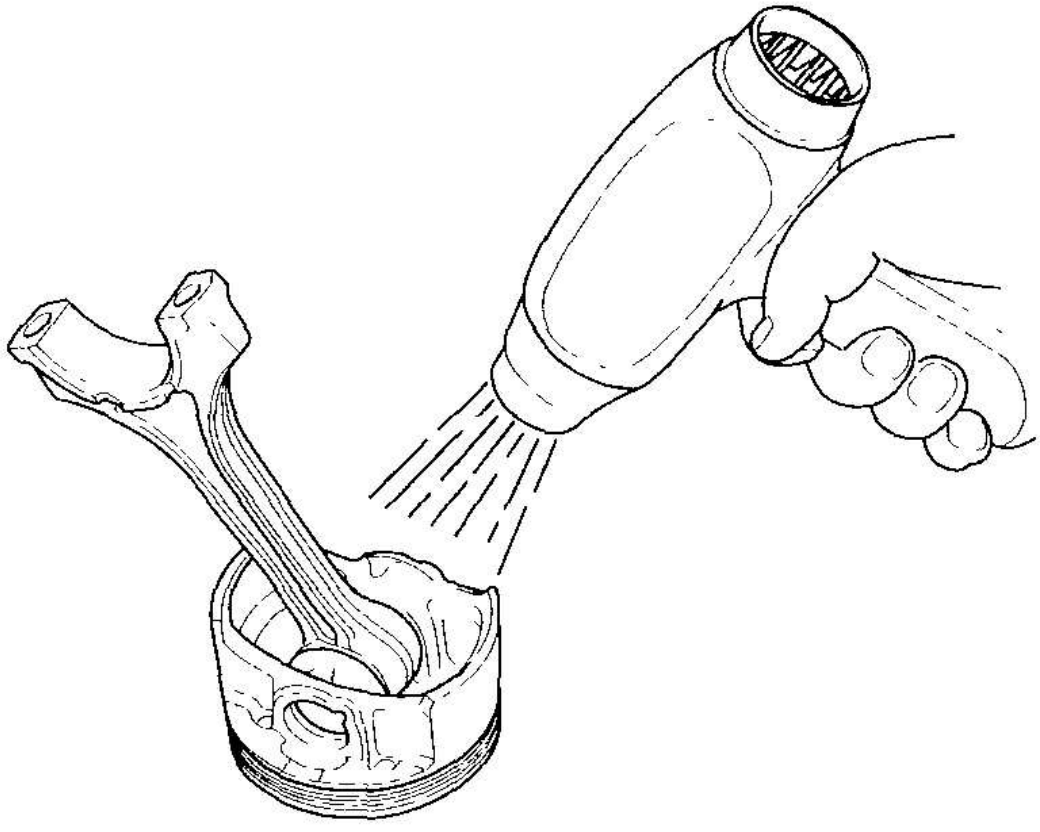


Fig. 34: Removing Both Snap Rings
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Heat the piston and connecting rod assembly to about 158 °F (70 °C), then remove the piston pin.



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Fig. 35: Heating Piston And Connecting Rod Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INSPECTION

NOTE: Inspect the piston, piston pin, and connecting rod when they are at room temperature.

1. Measure the diameter of the piston pin.

   Piston Pin Diameter

   Standard (New): 21.961-21.965 mm (0.8646-0.8648 in.)

Service Limit: 21.953 mm (0.8643 in.)

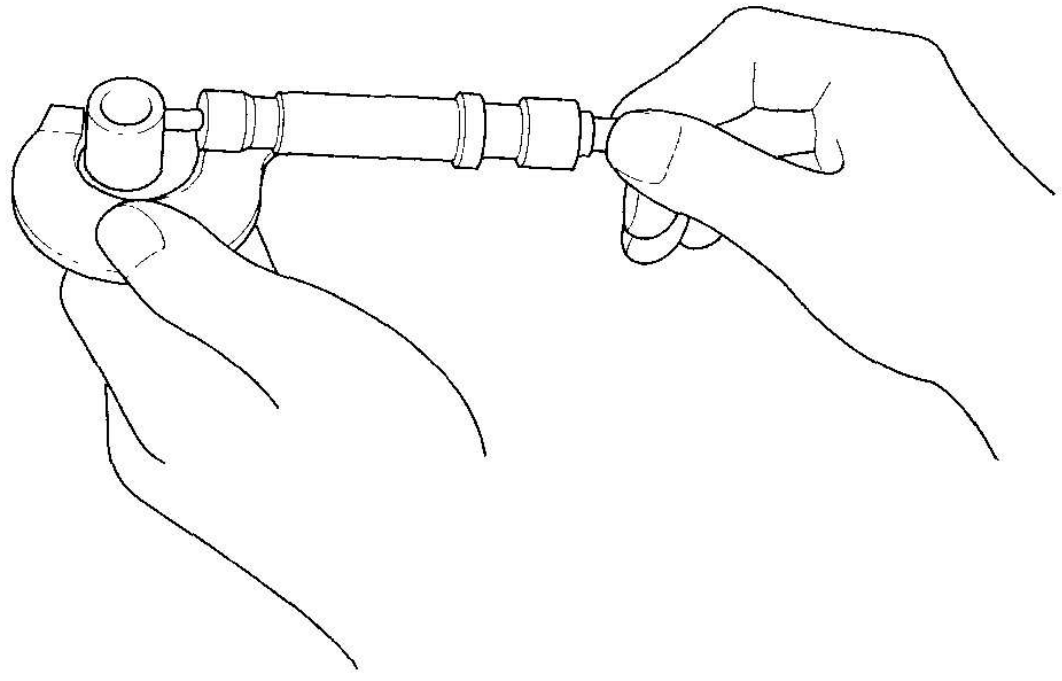
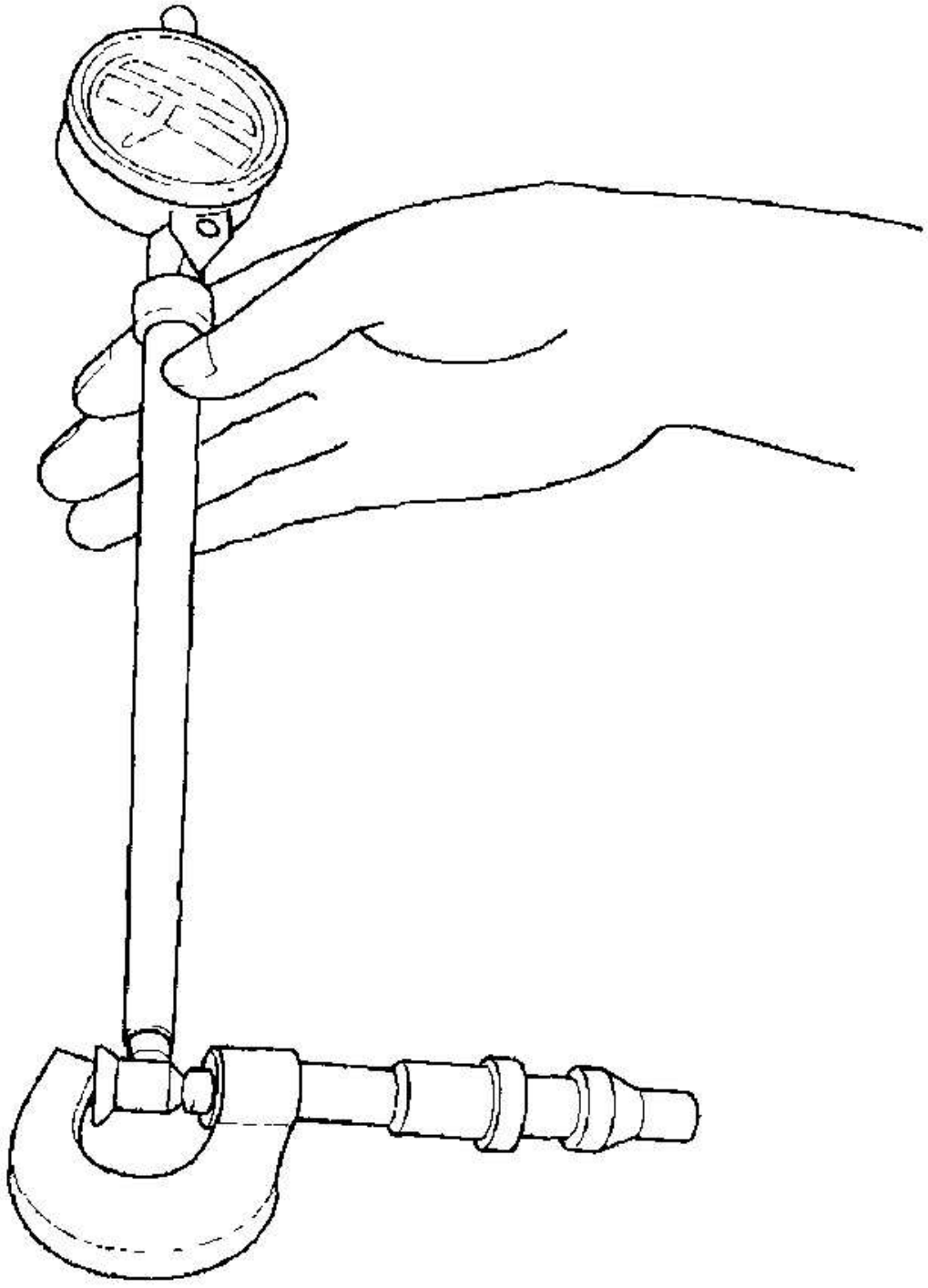


Fig. 36: Measuring Diameter Of Piston Pin
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Zero the dial indicator to the piston pin diameter.



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Fig. 37: Zero Dial Indicator To Piston Pin Diameter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check the difference between the piston pin diameter and piston pin hole diameter in the piston.

   Piston Pin-to-Piston Clearance

   Standard (New): -0.005 to +0.002 mm (-0.00020 to +0.00008 in.)

   Service Limit: 0.005 mm (0.0002 in.)

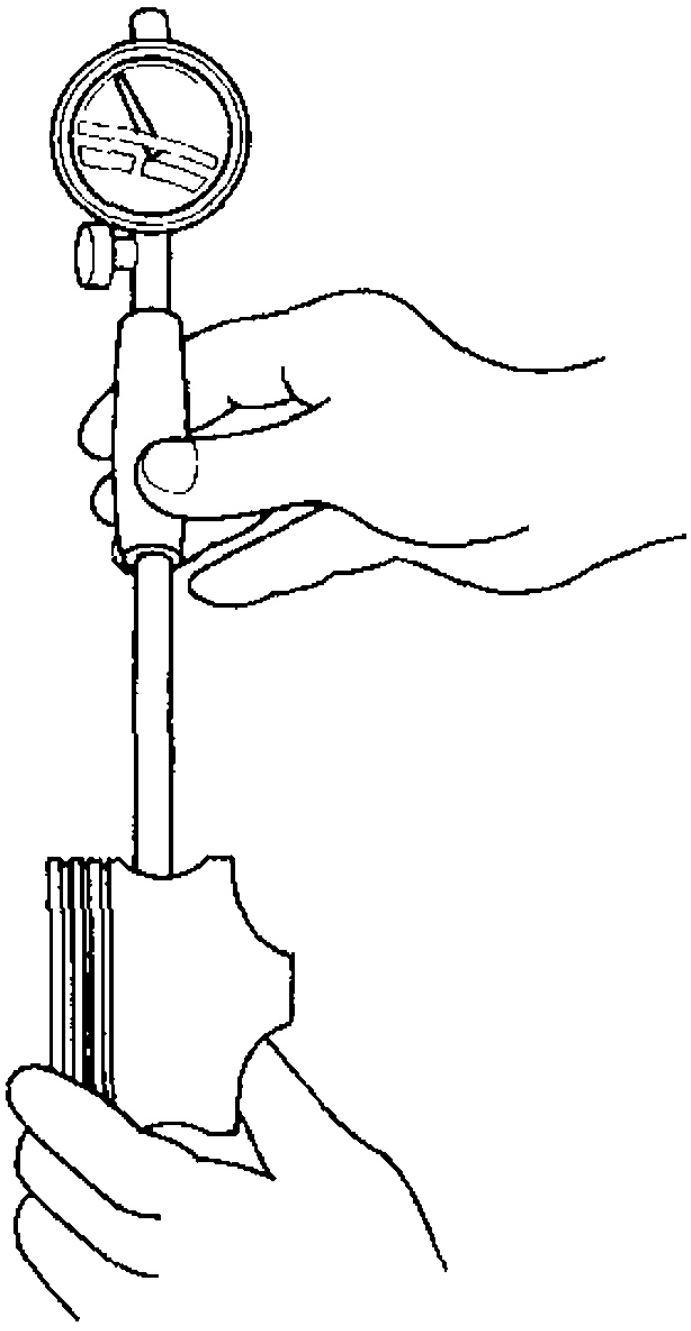


Fig. 38: Checking Difference Between Piston Pin Diameter And Piston Pin Hole Diameter In Piston
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the piston pin-to-connecting rod clearance.

   Piston Pin-to-Connecting Rod Clearance

   Standard (New): 0.005-0.015 mm (0.0002-0.0006 in.)

   Service Limit: 0.02 mm (0.0008 in.)

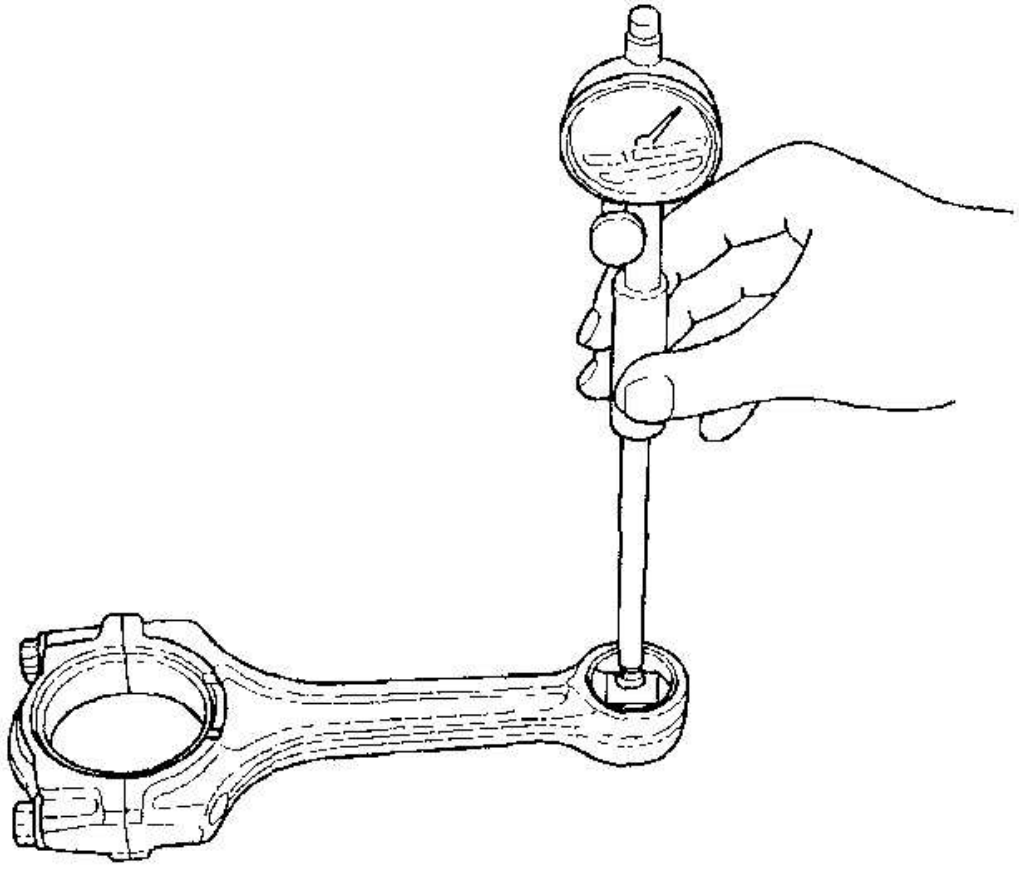


Fig. 39: Measuring Piston Pin-To-Connecting Rod Clearance
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REASSEMBLY

1. Install a piston pin snap ring (A) only on one side.

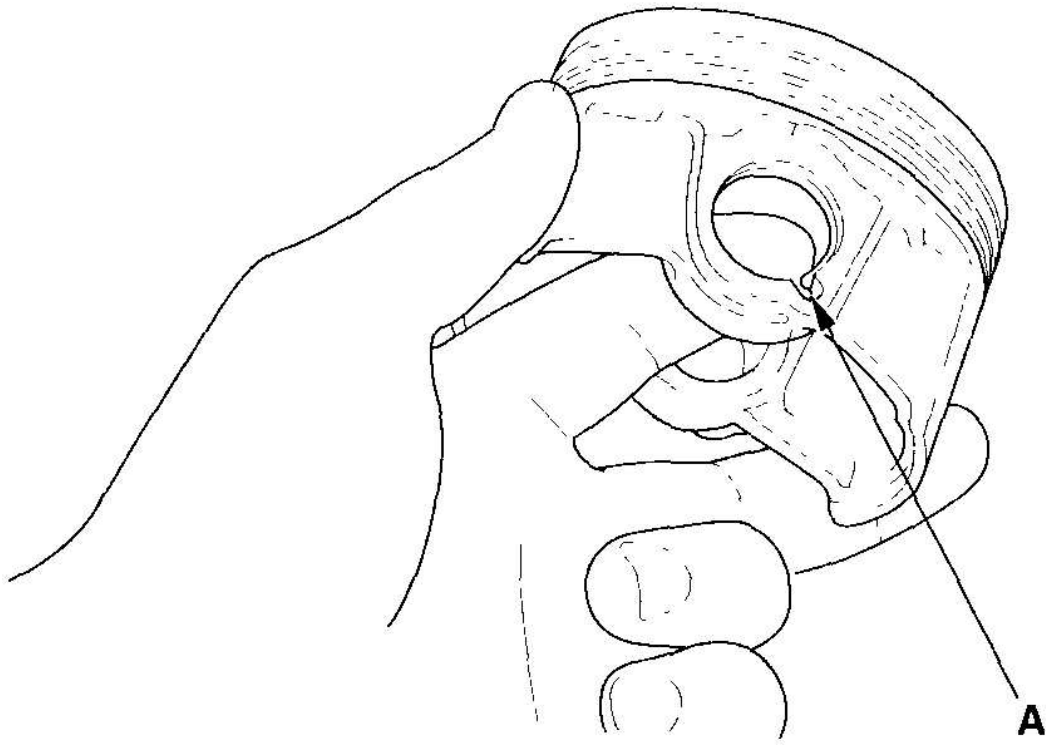


Fig. 40: Installing A Piston Pin Snap Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Coat the piston pin bore in the piston, the bore in the connecting rod, and the piston pin with new engine oil.
3. Heat the piston to about 158 °F (70 °C).

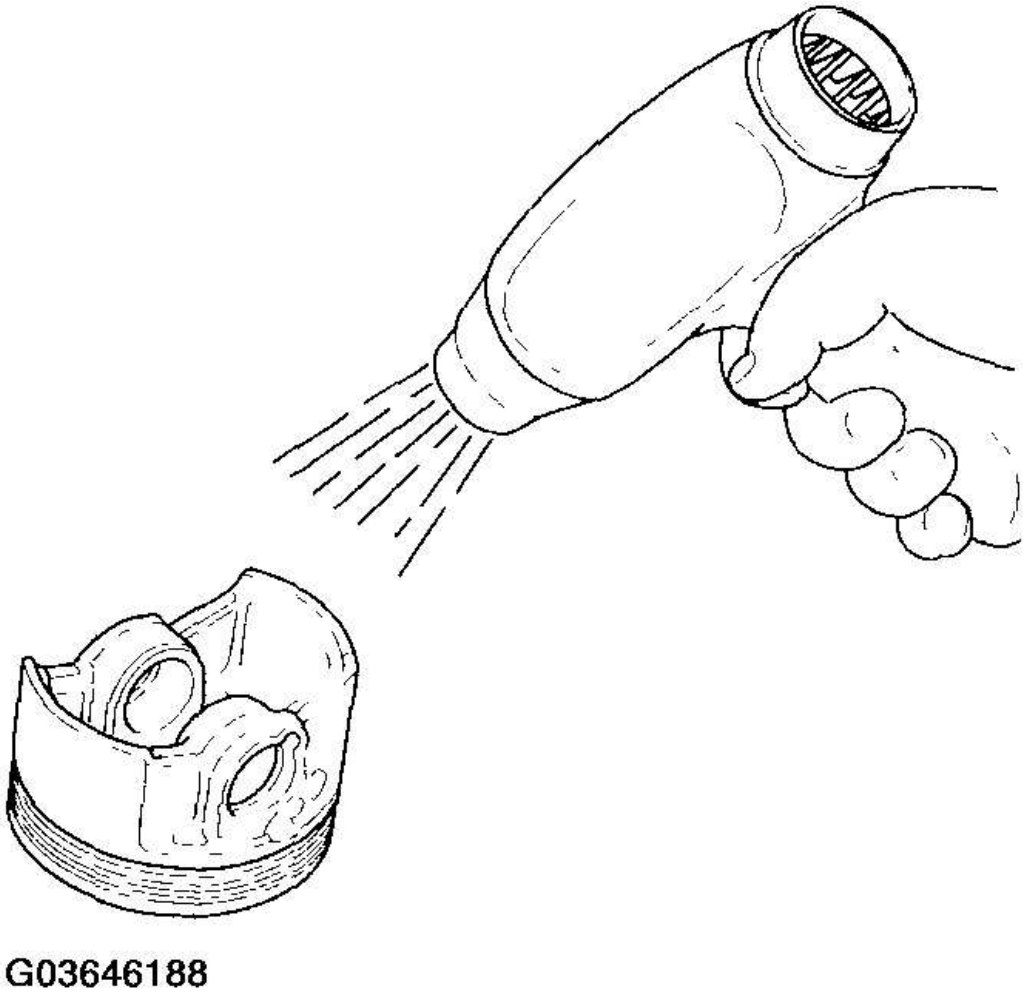


Fig. 41: Heating Piston To About 158°F (70 °C)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the piston pin (A). Assemble the piston (B) and connecting rod (C) with the arrow (D) and the embossed mark (E) on the same side.

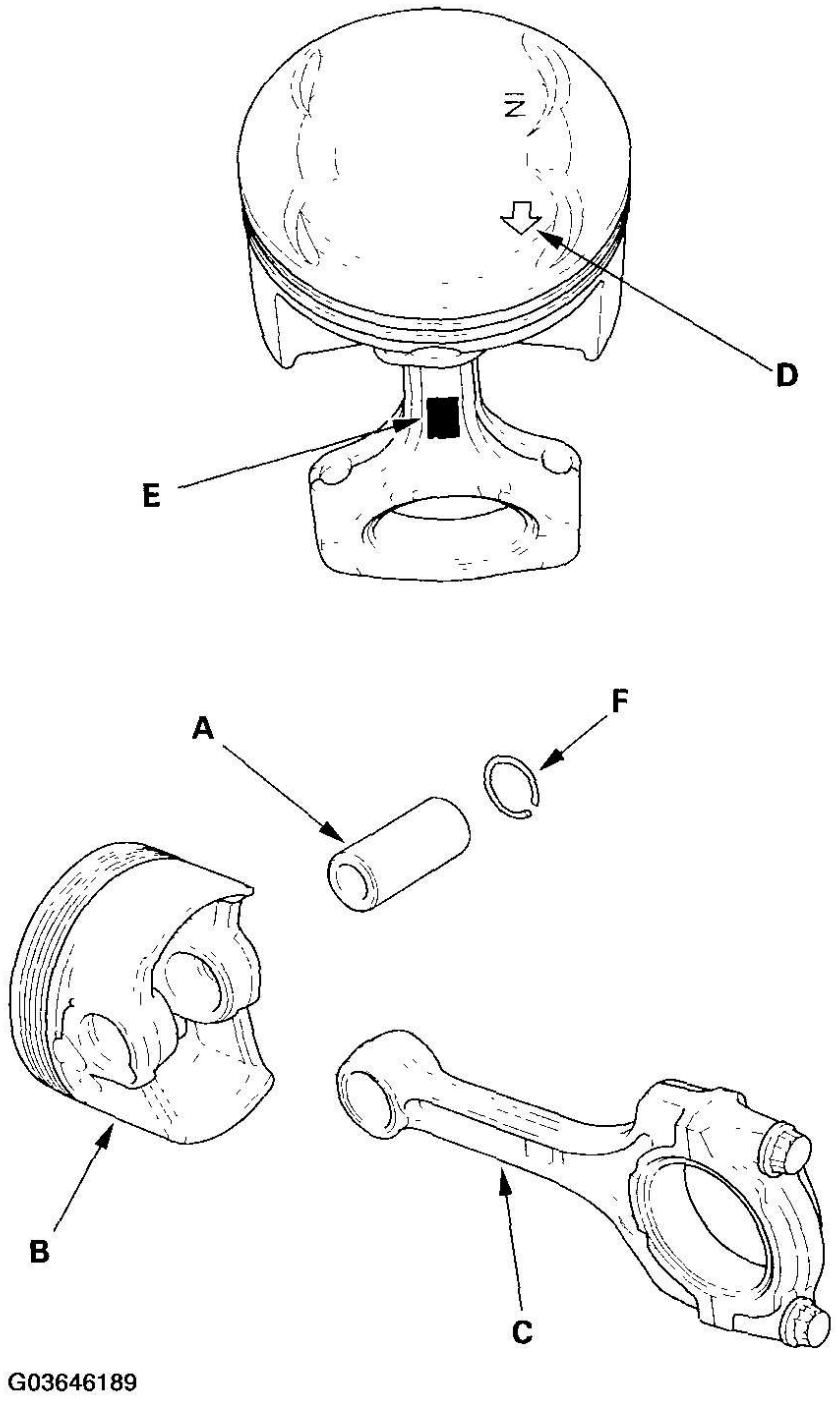
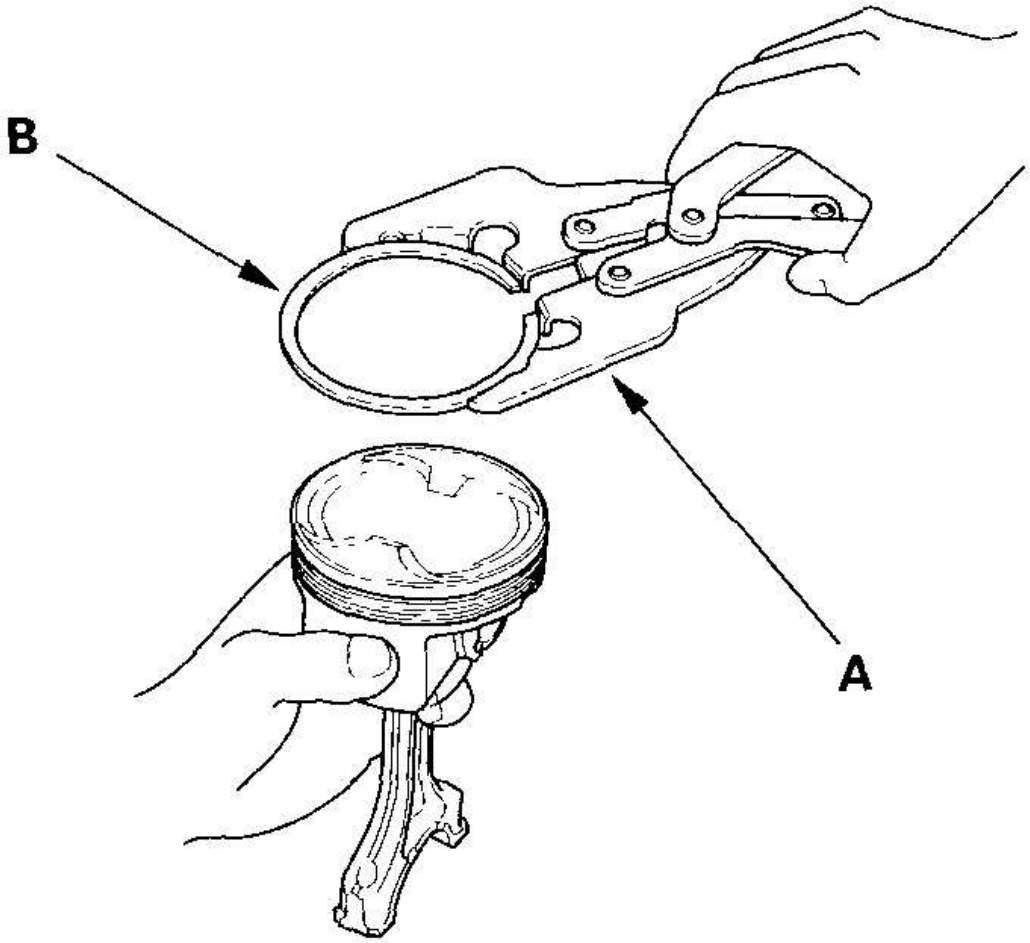


Fig. 42: Installing Piston Pin
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the remaining snap ring (F).
6. Turn the snap rings in the ring grooves until the end gaps are positioned at the bottom of the piston.

PISTON RING REPLACEMENT

1. Remove the piston from the engine block (see **CRANKSHAFT AND PISTON REMOVAL**).
2. Using a ring expander (A), remove the old piston rings (B).



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Fig. 43: Removing Piston Rings
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Clean all ring grooves thoroughly with a squared-off broken ring or ring groove cleaner with a blade to fit the piston grooves.

   The top and 2nd ring grooves are 1.2 mm (0.05 in.) wide. The oil ring groove is 2.0 mm (0.08 in.) wide. File down a blade if necessary.

   Do not use a wire brush to clean the ring grooves, or cut the ring grooves deeper with the cleaning tools.

   NOTE: If the piston is to be separated from the connecting rod, do not install new rings yet.

4. Using a piston, push a new ring (A) into the cylinder bore 15-20 mm (0.6-0.8 in.) from the bottom.

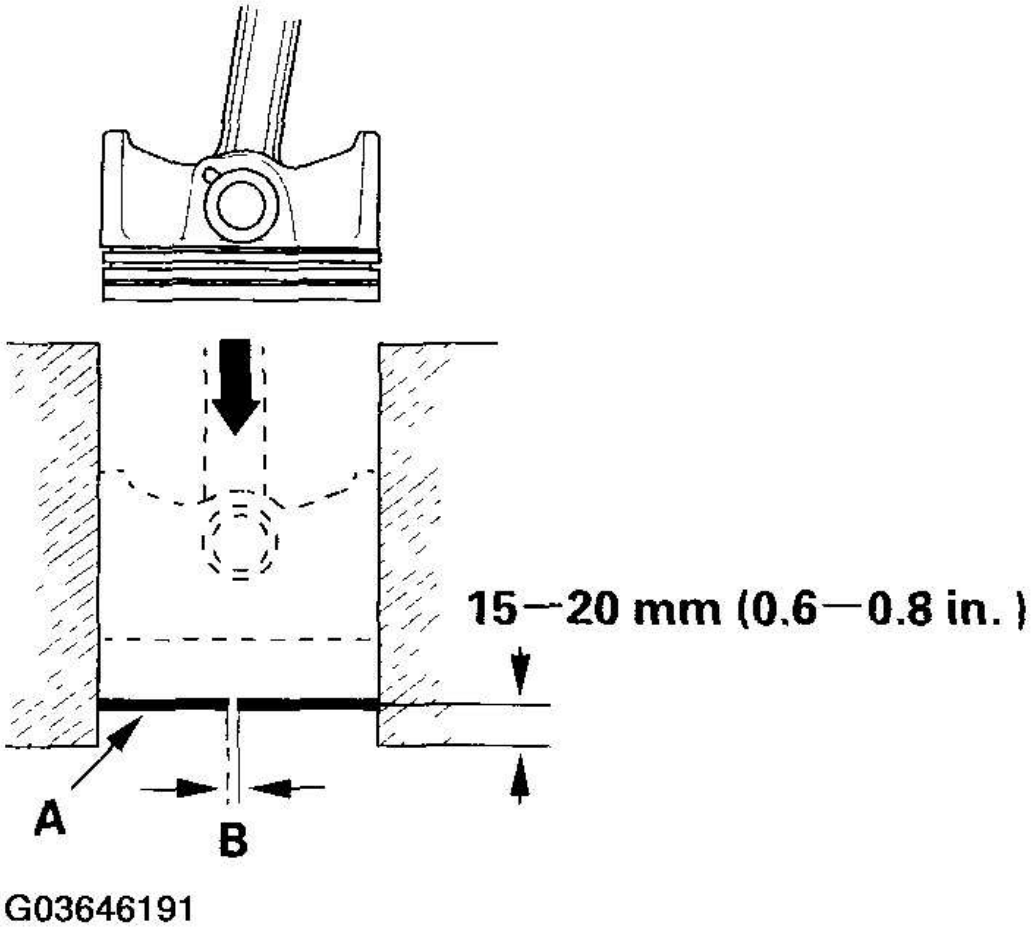


Fig. 44: Pushing Ring Into Cylinder Bore
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Measure the piston ring end-gap (B) with a feeler gauge:
   - If the gap is too small, check to see if you have the proper rings for your engine.
   - If the gap is too large, recheck the cylinder bore diameter against the wear limits (see **BLOCK AND PISTON INSPECTION**). If the bore is over the service limit, the engine block must be rebored.

Piston Ring End-Gap

Top Ring:

Standard (New): 0.20-0.35 mm (0.008-0.014 in.)

Service Limit: 0.60 mm (0.024 in.)

Second Ring:

Standard (New): 0.40-0.55 mm (0.016-0.022 in.)

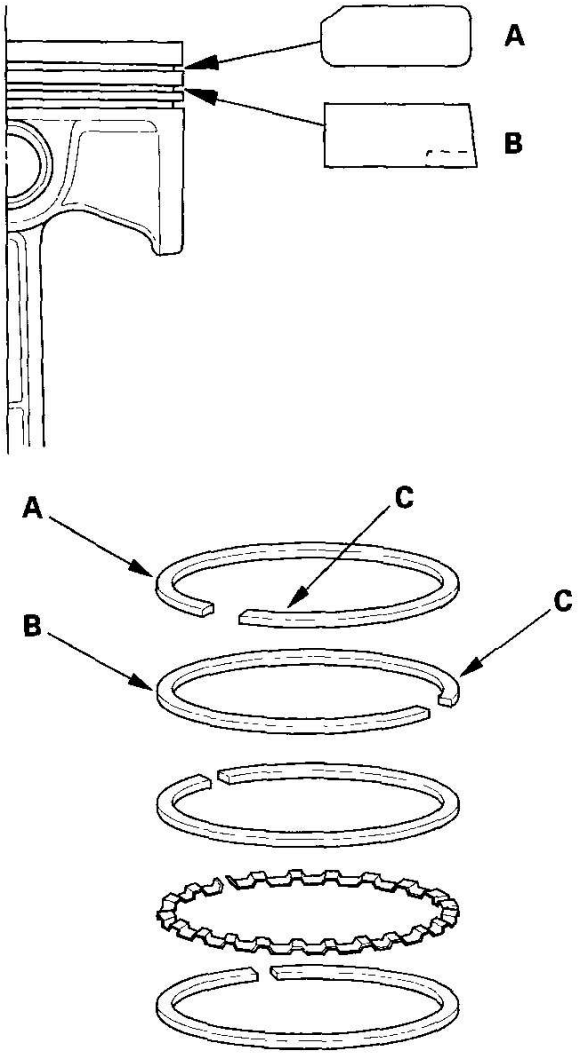
Service Limit: 0.70 mm (0.028 in.)

Oil Ring:

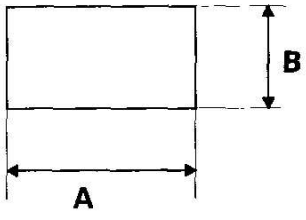
Standard (New): 0.20-0.70 mm (0.008-0.028 in.)

Service Limit: 0.80 mm (0.031 in.)

6. Install the top ring and second ring as shown below. The top ring (A) has a T, 1A, or 1R mark and the second ring (B) has a 2T, 2A, or 2R mark. The manufacturing marks (C) must be facing upward.



Piston Ring Dimensions:



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Top Ring (Standard):
A: 3.1 mm (0.12 in.)
B: 1.2 mm (0.05 in.)

Second Ring (Standard):
A: 3.4 mm (0.13 in.)
B: 1.2 mm (0.05 in.)

Fig. 45: Installing Top Ring And Second Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Rotate the rings in their grooves to make sure they do not bind.
8. Position the ring end gaps as shown below:

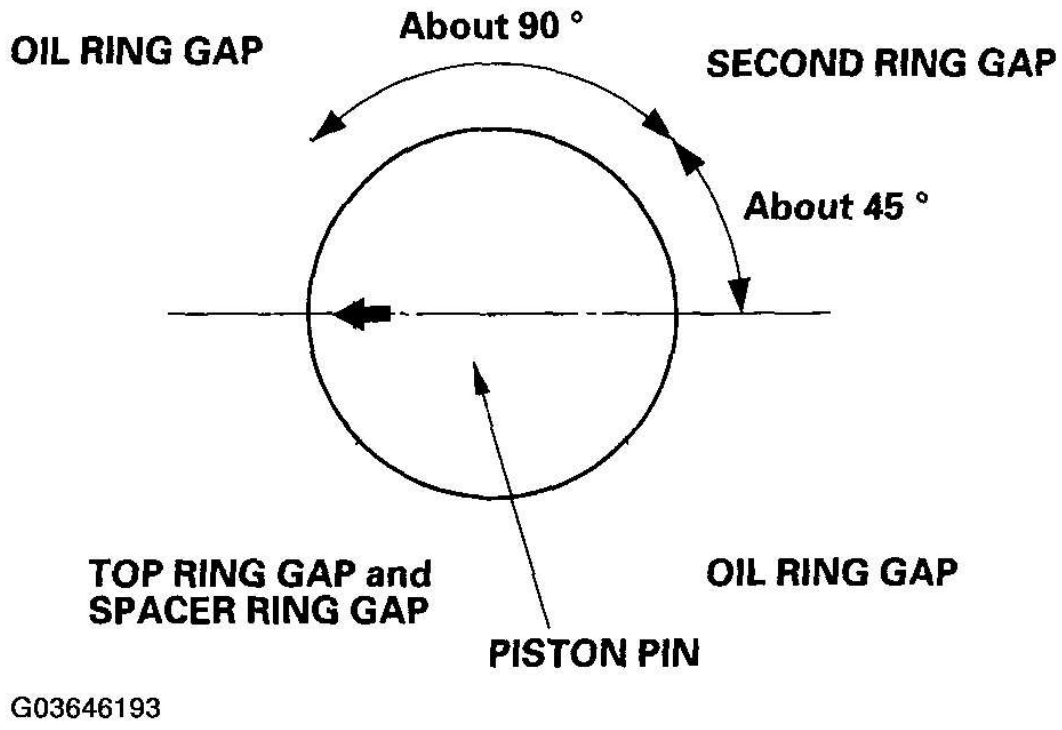


Fig. 46: Positioning Ring End Gaps
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. After installing a new set of rings, measure the ring-to-groove clearances:

Top Ring Clearance

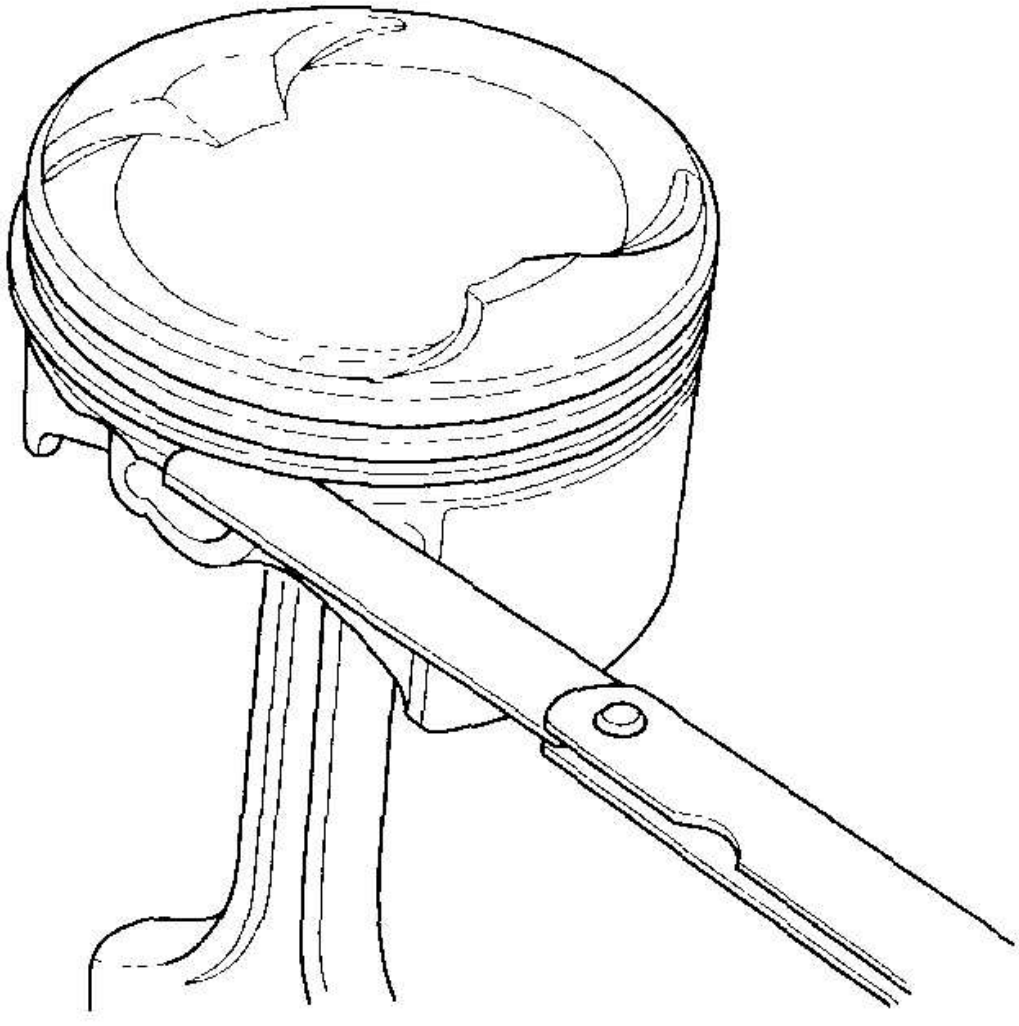
Standard (New): 0.045-0.070 mm (0.0018-0.0028 in.)

Service Limit: 0.13 mm (0.005 in.)

Second Ring Clearance

Standard (New): 0.050-0.075 mm (0.0020-0.0030 in.)

Service Limit: 0.13 mm (0.005 in.)



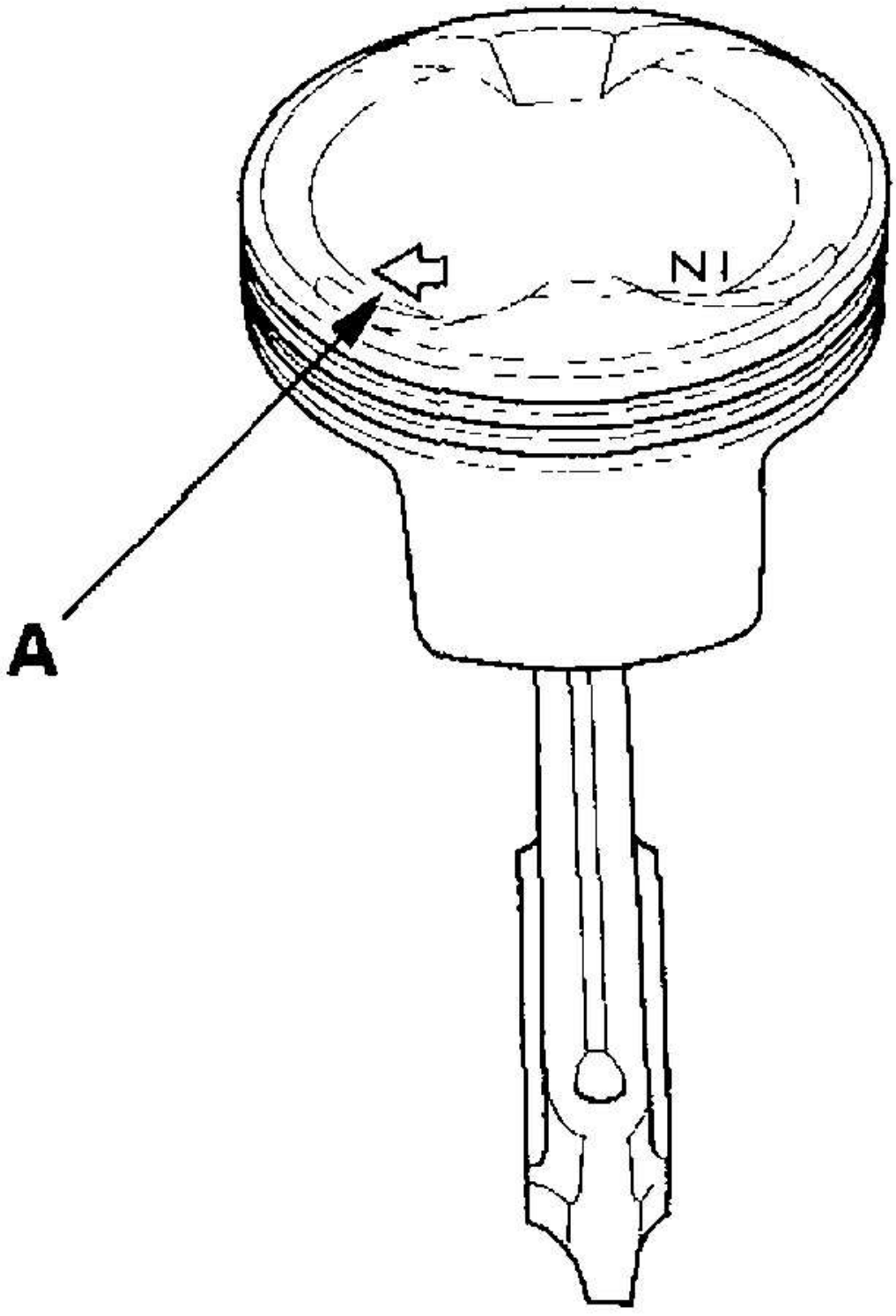
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Fig. 47: Measuring Ring-To-Groove Clearances
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PISTON INSTALLATION

IF THE CRANKSHAFT IS ALREADY INSTALLED

1. Set the crankshaft to bottom dead center (BDC) for each cylinder.
2. Remove the connecting rod caps, then install the ring compressor. Check that the bearing is securely in place.
3. Position the mark (A) to face the cam chain side of the engine.



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Fig. 48: Positioning Mark To Face Cam Chain Side Of Engine
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Position the piston in the cylinder, and tap it in using the wooden handle of a hammer (A).

   Maintain downward force on the ring compressor (B) to prevent the rings from expanding before entering the cylinder bore.

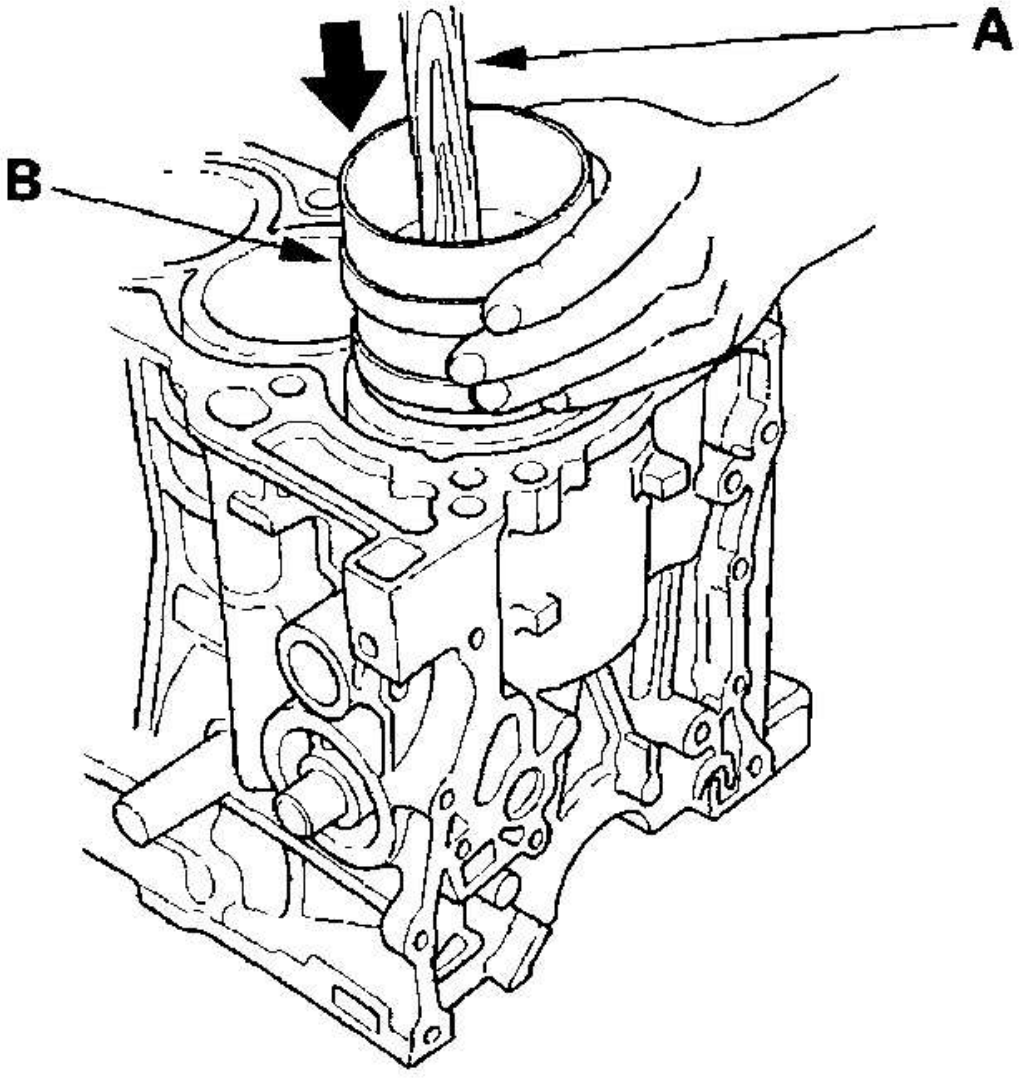


Fig. 49: Positioning Piston In Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Stop after the ring compressor pops free, and check the connecting rod-to-crank journal alignment before pushing the piston into place.
6. Check the connecting rod bearing clearance with plastigage (see

CONNECTING ROD BEARING REPLACEMENT).

7. Inspect the connecting rod bolts (see **Connecting Rod Bolt Inspection**).
8. Apply new engine oil to the bolt threads, then install the rod caps with bearings. Torque the bolts to 20 N.m (2.0 kgf.m, 14 lbf.ft).
9. Tighten the connecting rod bolts an additional 90°.

NOTE: Remove the connecting rod bolt if you tightened it beyond the specified angle, and go back to step 7 of the procedure. Do not loosen it back to the specified angle.

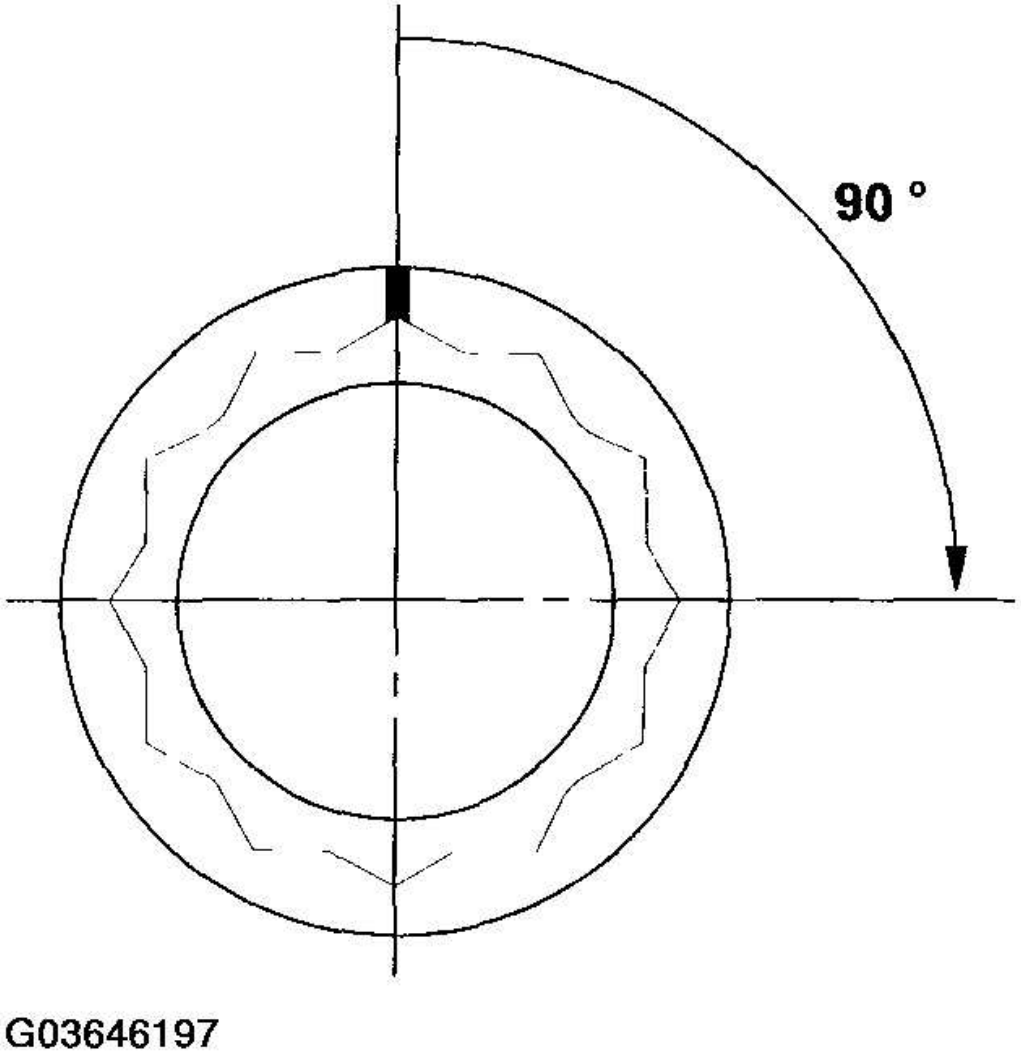
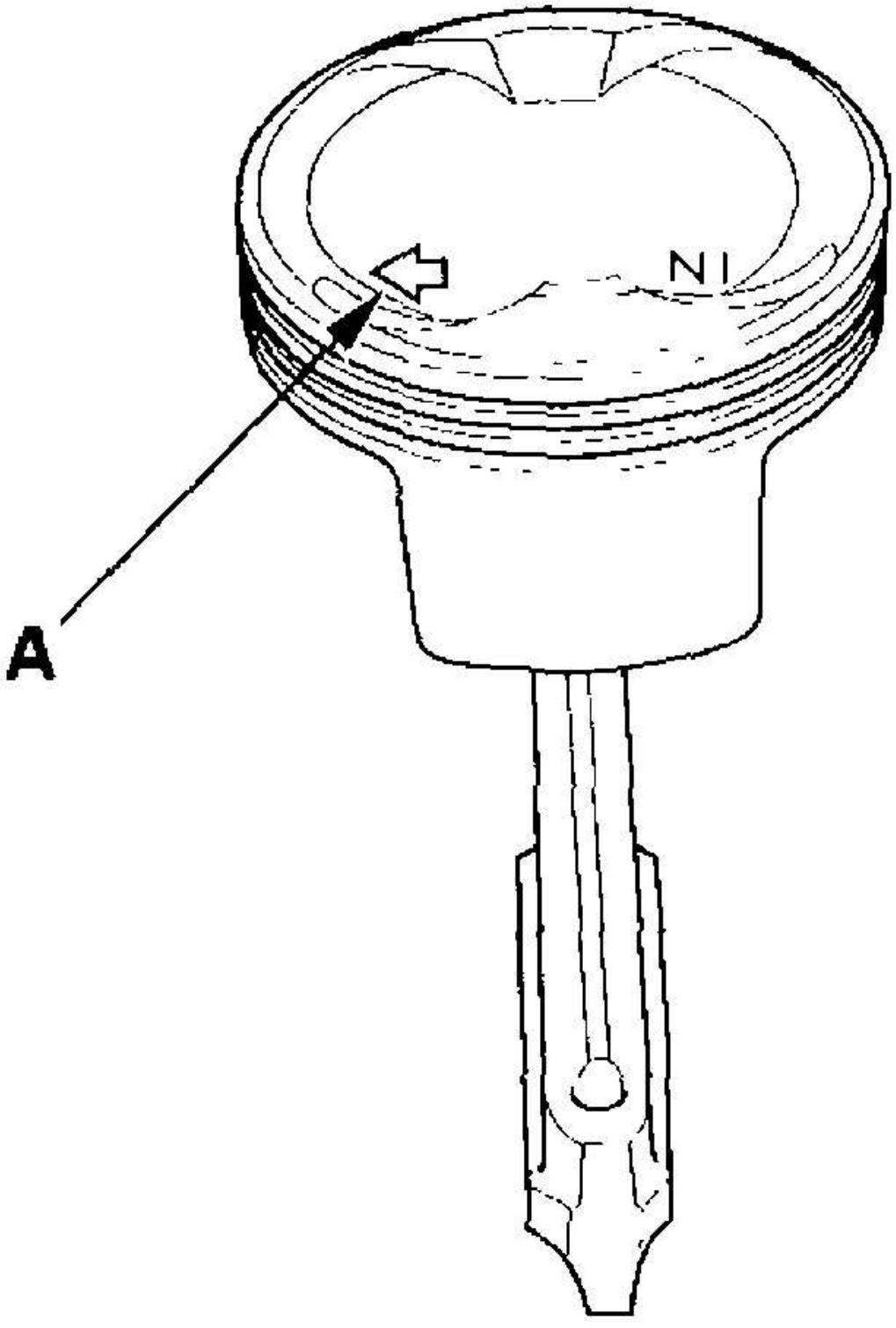


Fig. 50: Tightening Connecting Rod Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

IF THE CRANKSHAFT IS NOT INSTALLED

1. Remove the connecting rod caps, then install the ring compressor, and check that the bearing is securely in place.
2. Position the mark (A) to face the cam chain side of the engine.



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Fig. 51: Positioning Mark
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Position the piston in the cylinder, and tap it in using the wooden handle of a hammer (A).

   Maintain downward force on the ring compressor (B) to prevent the rings from expanding before entering the cylinder bore.

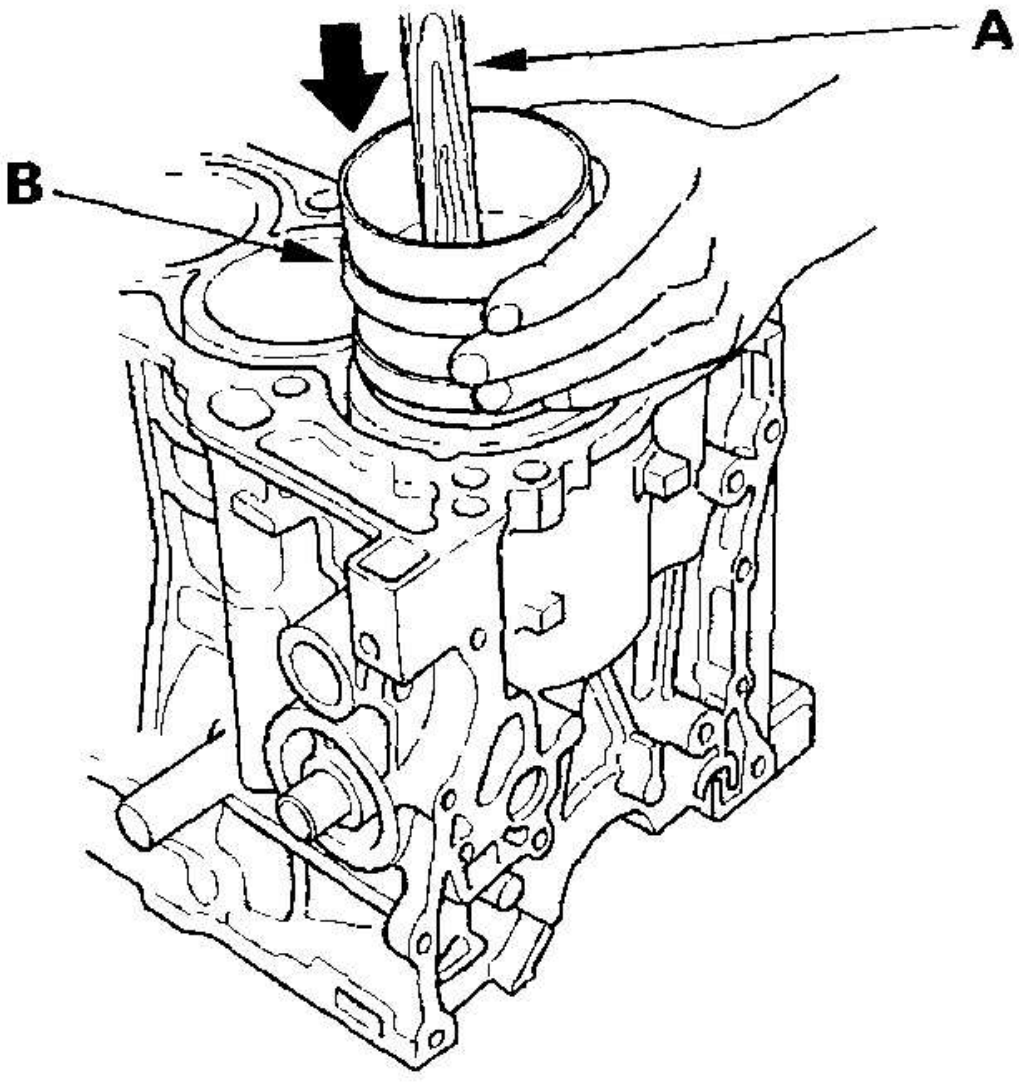
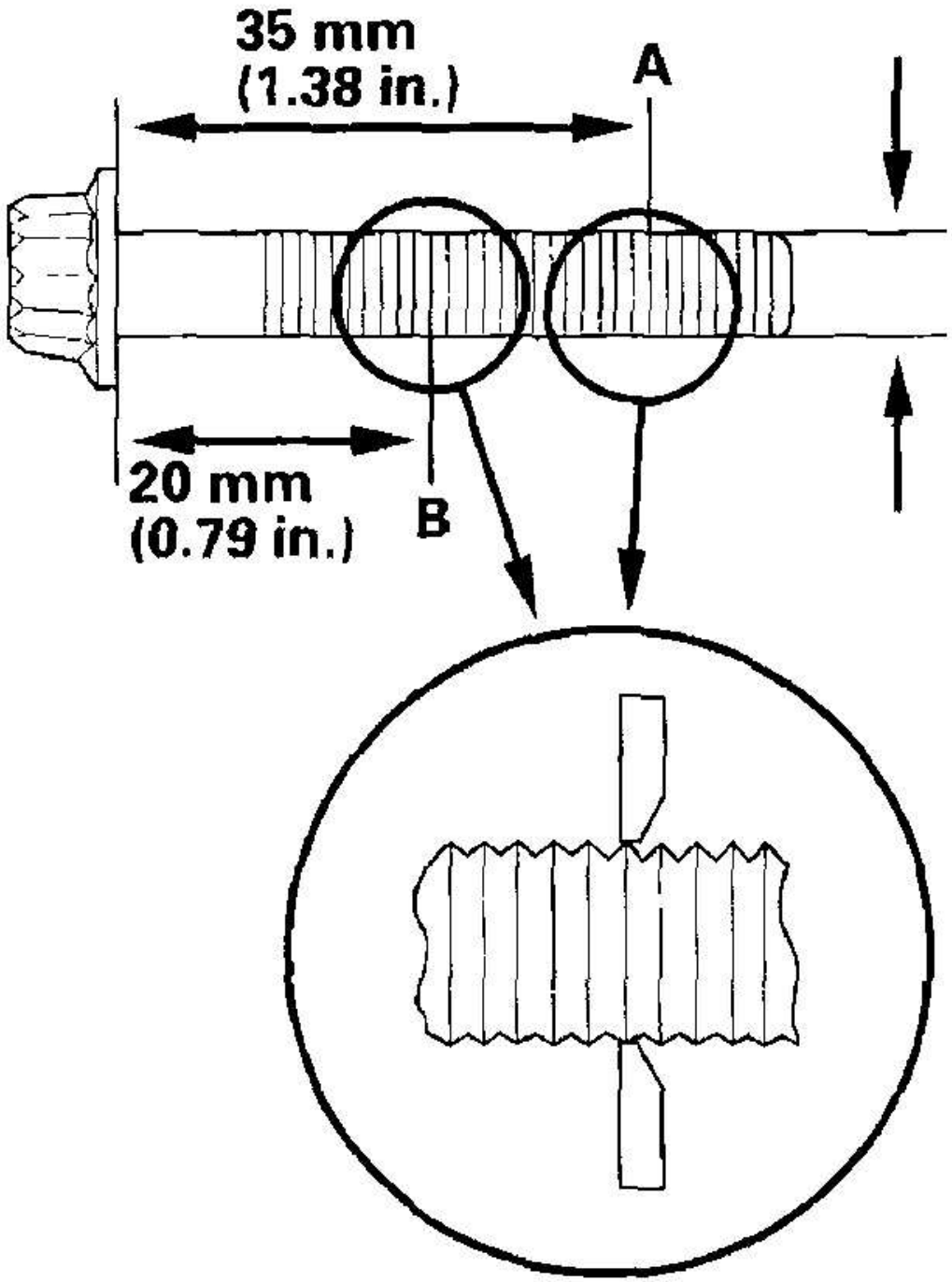


Fig. 52: Positioning Piston In Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Position all pistons at top dead center (TDC).

CONNECTING ROD BOLT INSPECTION

1. Measure the diameter of each connecting rod bolt at point A and point B.



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Fig. 53: Measuring Diameter Of Each Connecting Rod Bolt At Point And Point
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Calculate the difference in diameter between point A and point B.

   Point A-Point B = Difference in Diameter

   Difference in Diameter:

   Specification: 0-0.1 mm (0-0.004 in.)

3. If the difference in diameter is out of tolerance, replace the connecting rod bolt.

CRANKSHAFT INSTALLATION

Special Tools Required

- Driver 07749-0010000
- Attachment, 24 x 26 mm 07746-0010700
- Oil seal driver attachment 96 07ZAD-PNAA100

1. With a manual transmission, install the crankshaft end bushing when replacing the crankshaft.

   Using the special tools, drive in the crankshaft end bushing until the special tools bottom against the crankshaft.

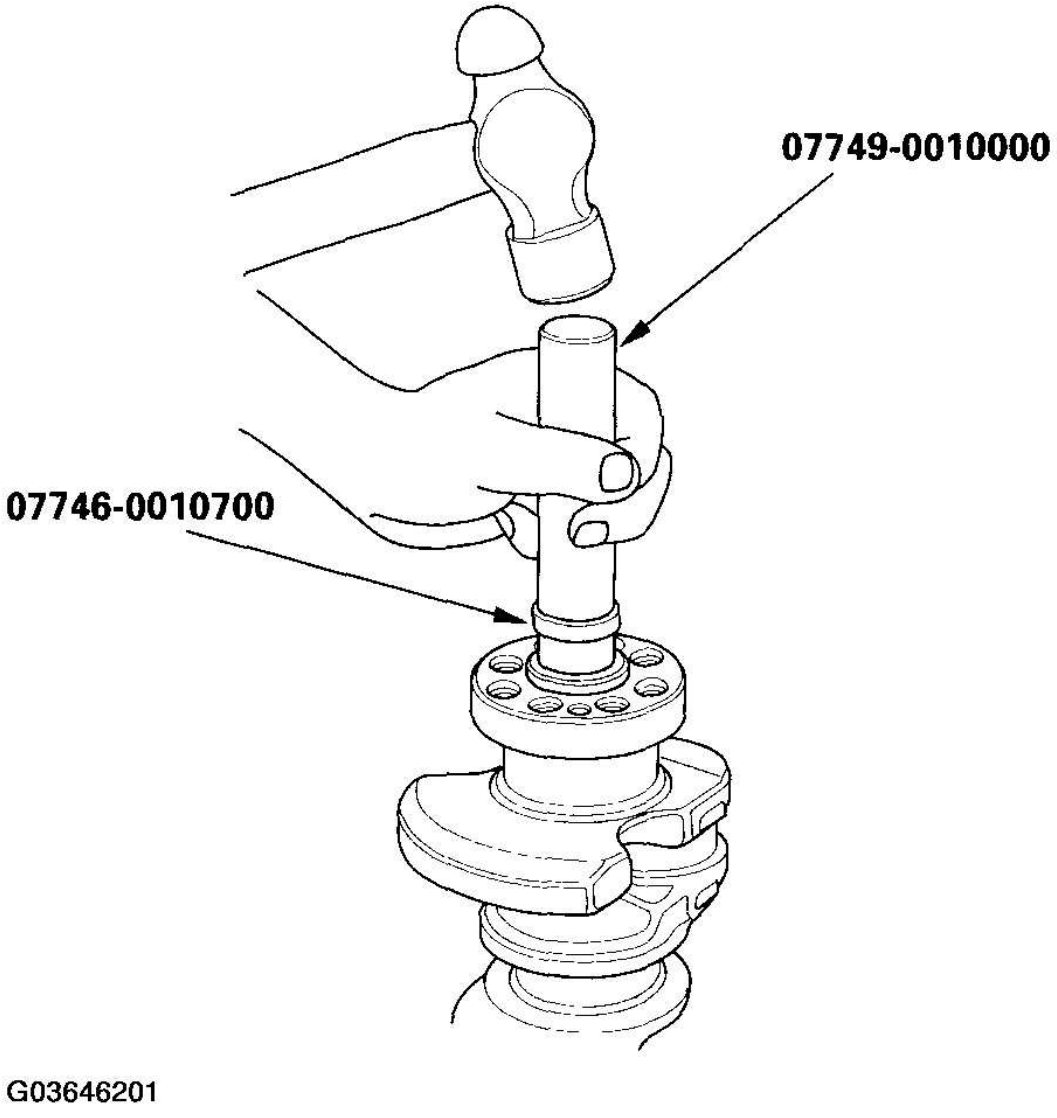


Fig. 54: Driving In Crankshaft End Bushing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check the connecting rod bearing clearance with plastigage (see **CONNECTING ROD BEARING REPLACEMENT**).
3. Check the main bearing clearance with plastigage (see **CRANKSHAFT MAIN BEARING REPLACEMENT**).
4. Install the bearing halves in the engine block and connecting rods.

5. Apply a coat of new engine oil to the main bearings and rod bearings.
6. Hold the crankshaft so rod journal No. 2 and rod journal No. 3 are straight up, and lower the crankshaft into the block.
7. Apply new engine oil to the thrust washer surfaces. Install the thrust washers (A) in the No. 4 journal of the engine block.

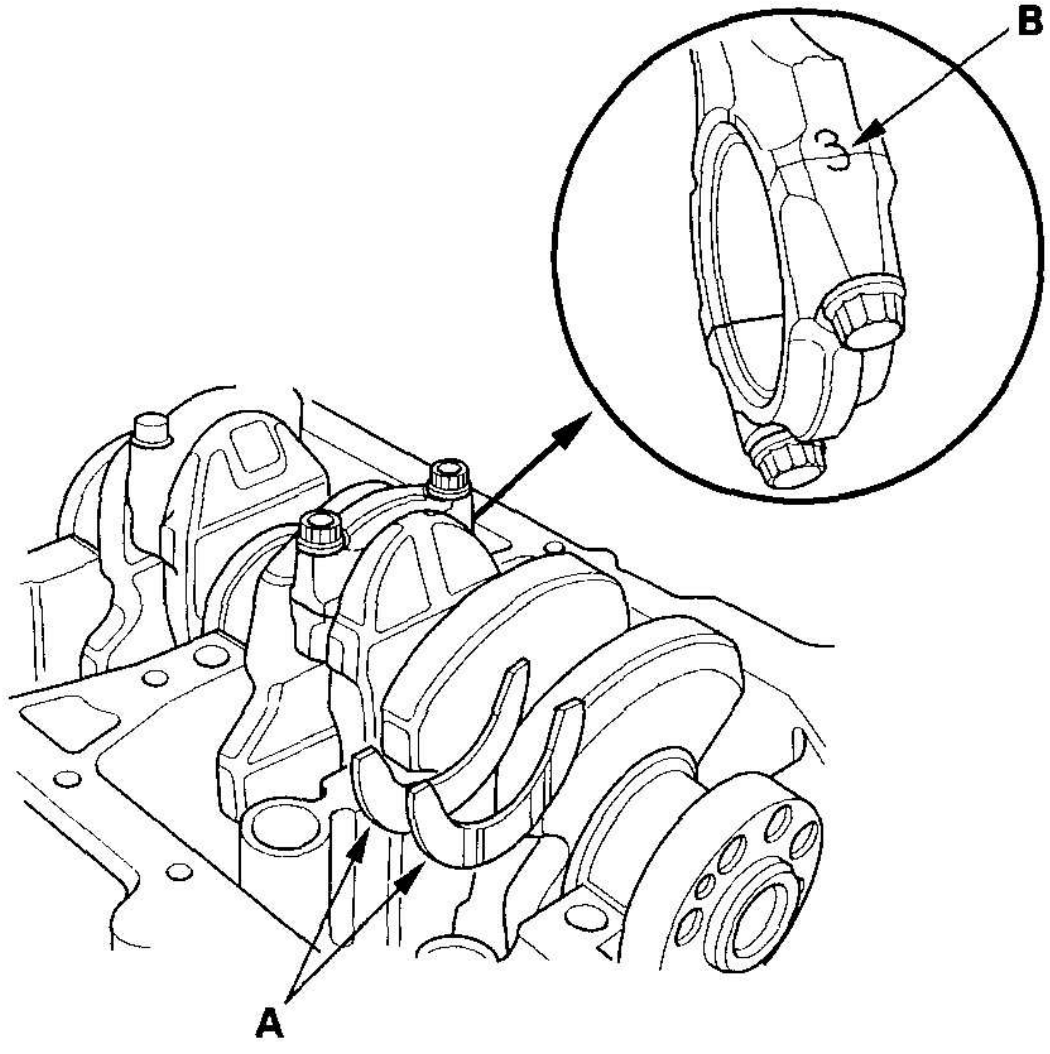


Fig. 55: Applying Engine Oil To Thrust Washer Surfaces
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Inspect the connecting rod bolts (see **Connecting Rod Bolt Inspection**).
9. Apply new engine oil to the threads of the connecting rod bolts.
10. Seat the rod journals into connecting rod No. 1 and connecting rod No. 4. Line up the mark (B) on the connecting rod and cap, then install the caps and bolts finger-tight.
11. Rotate the crankshaft clockwise, and seat the journals into connecting rod No. 2 and connecting rod No. 3. Line up the mark on the connecting rod and cap, then install the caps and bolts finger-tight.
12. Tighten the connecting rod bolts to 20 N.m (2.0 kgf.m, 14 lbf.ft).
13. Tighten the connecting rod bolts an additional 90°.

NOTE: Remove the connecting rod bolt if you tightened it beyond the specified angle, and go back to step 8 of the procedure. Do not loosen it back to the specified angle.

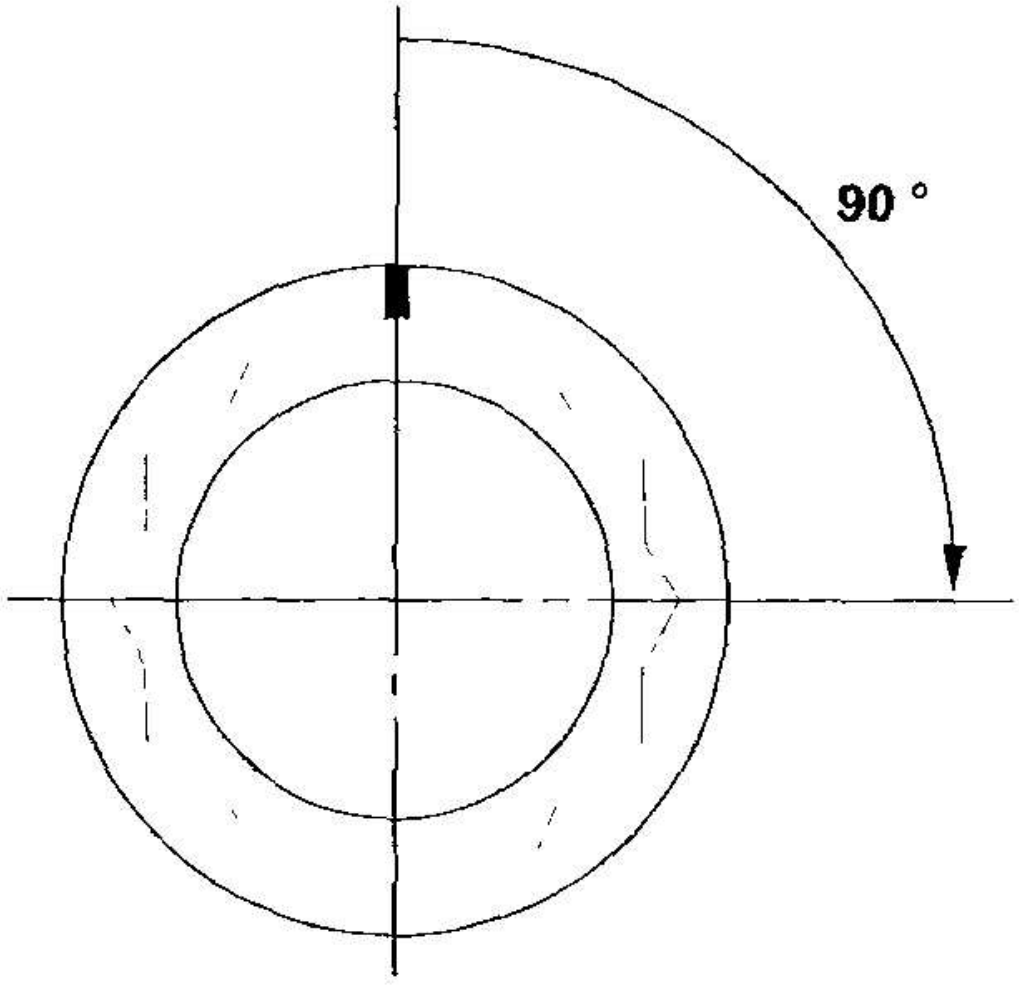


Fig. 56: Tightening Connecting Rod Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Remove all of the old liquid gasket from the lower block mating surfaces, bolts, and bolt holes.
15. Clean and dry the lower block mating surfaces.
16. Apply liquid gasket, P/N 08717-0004, 08718-0001, 08718-0002, 08718-0003, or 08718-0009, evenly to the engine block mating surface of the lower block

and to the inner threads of the bolt holes.

NOTE: Do not install components if too much time has passed after applying the liquid gasket (for P/N 08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply the liquid gasket.

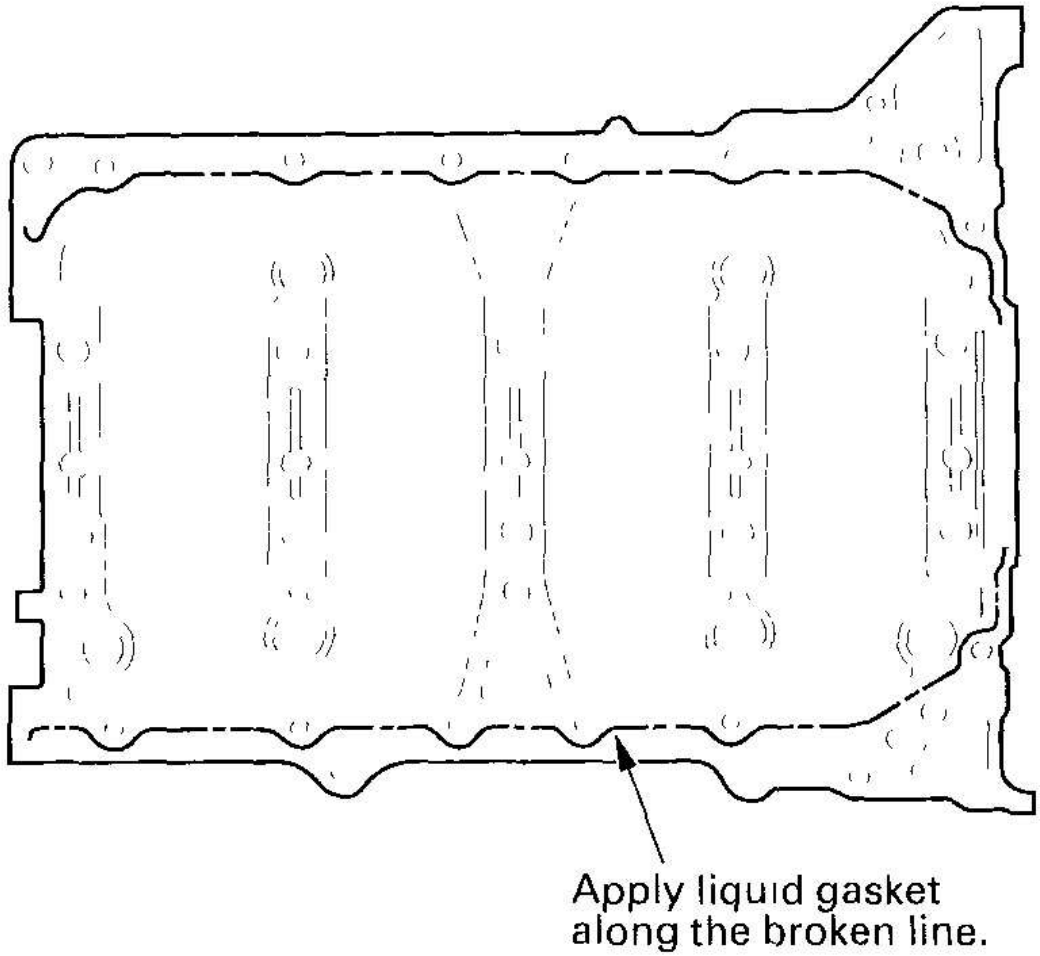


Fig. 57: Applying Liquid Gasket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Put the lower block on the engine block.
18. Tighten the bearing cap bolts in sequence to 29 N.m (3.0 kgf.m, 22 lbf.ft).

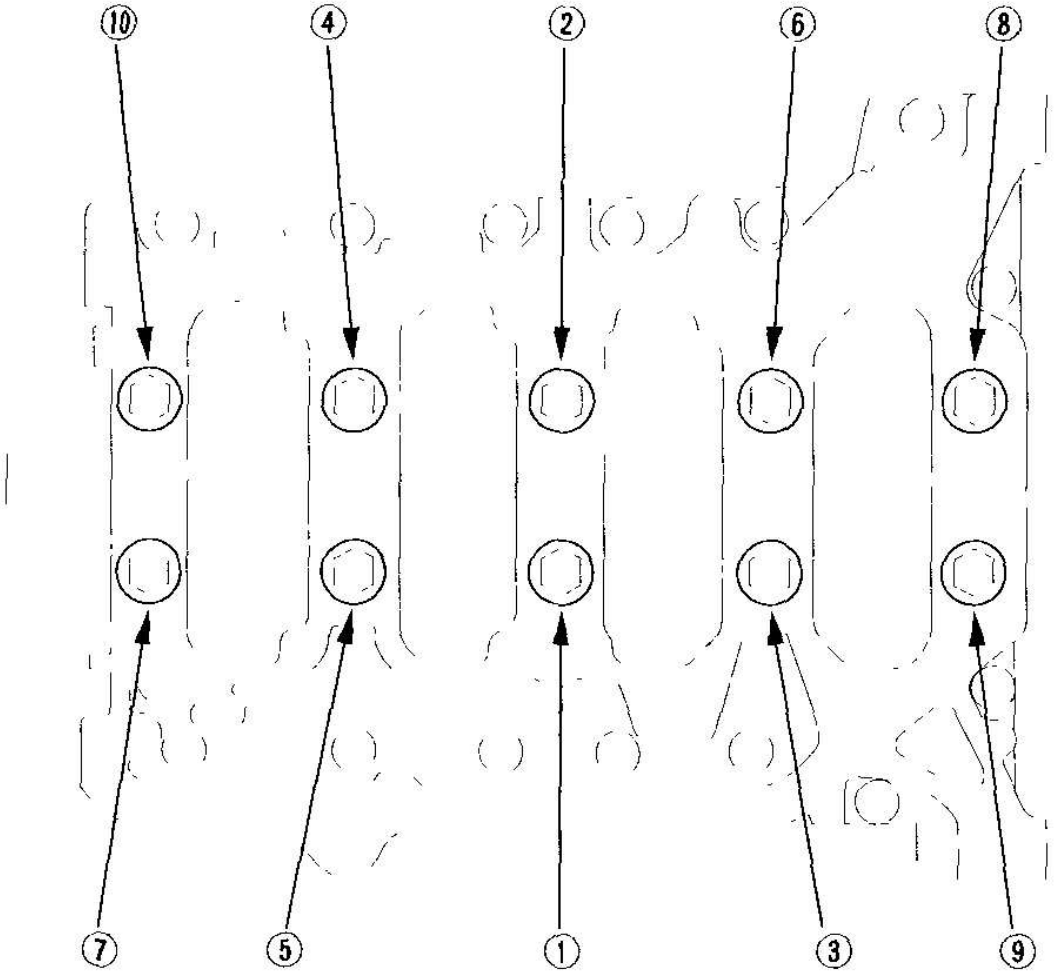


Fig. 58: Tightening Bearing Cap Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Tighten the bearing cap bolts an additional 56°.

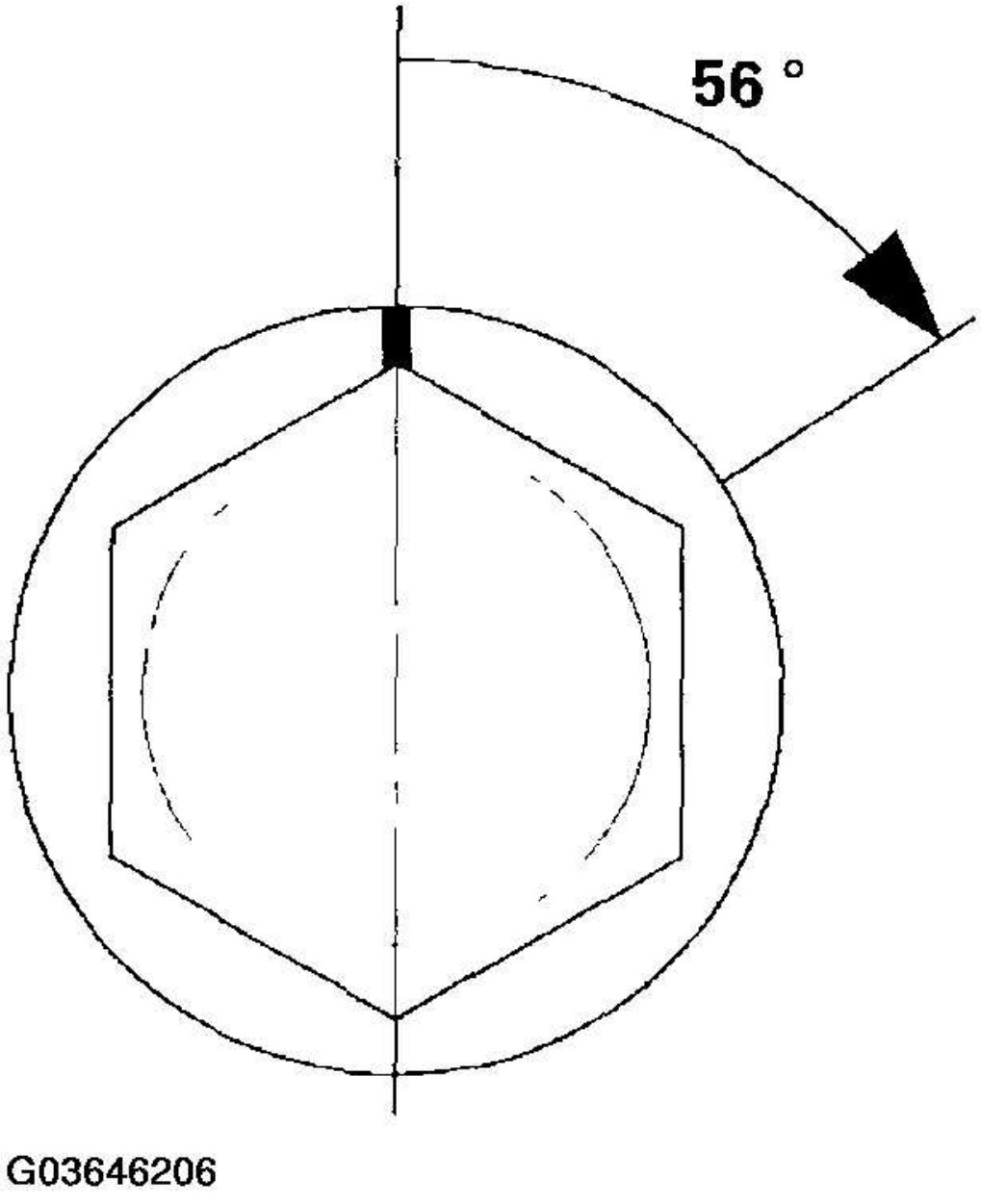


Fig. 59: Tightening Bearing Cap Bolts An Additional 56°
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Tighten the 8 mm bolts in sequence to 22 N.m (2.2 kgf.m, 16 lbf.ft).

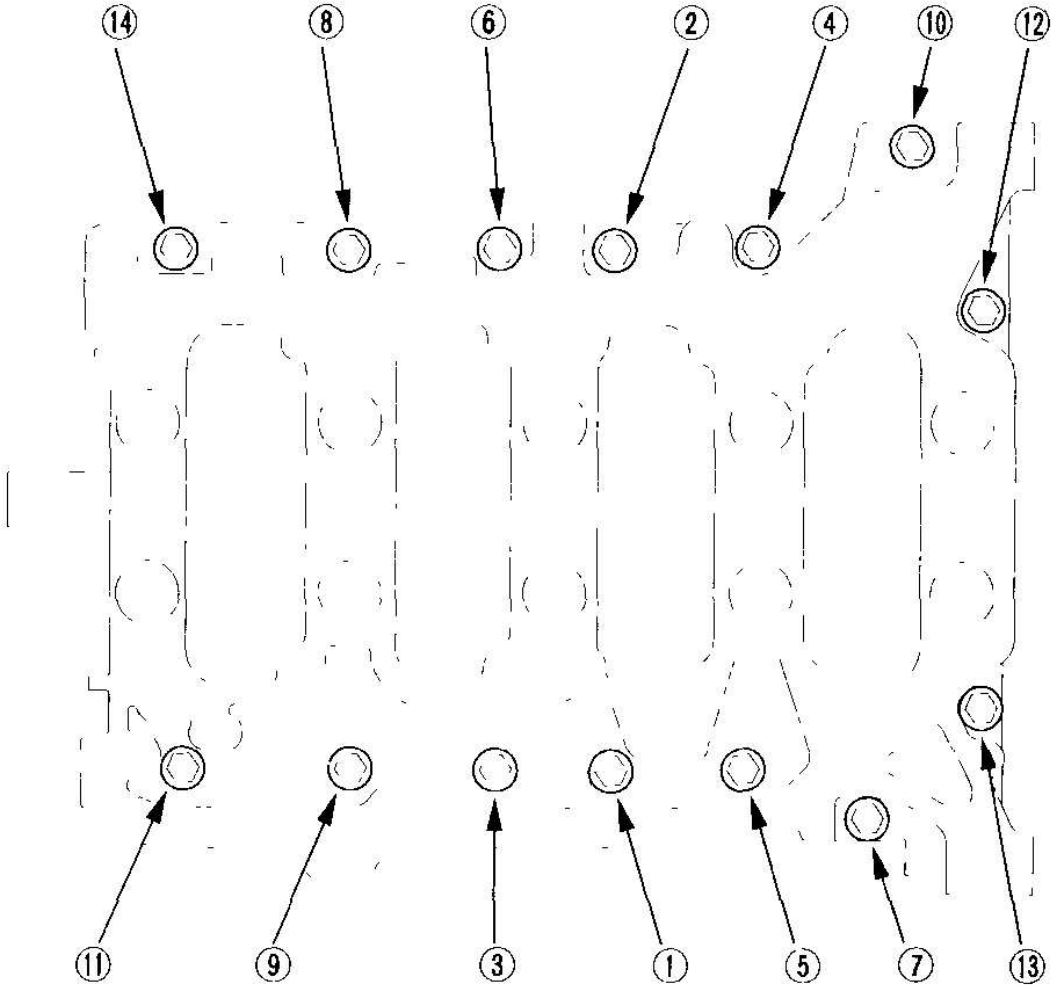


Fig. 60: Tightening Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Use the special tools to drive a new oil seal squarely into the block to the specified installed height.

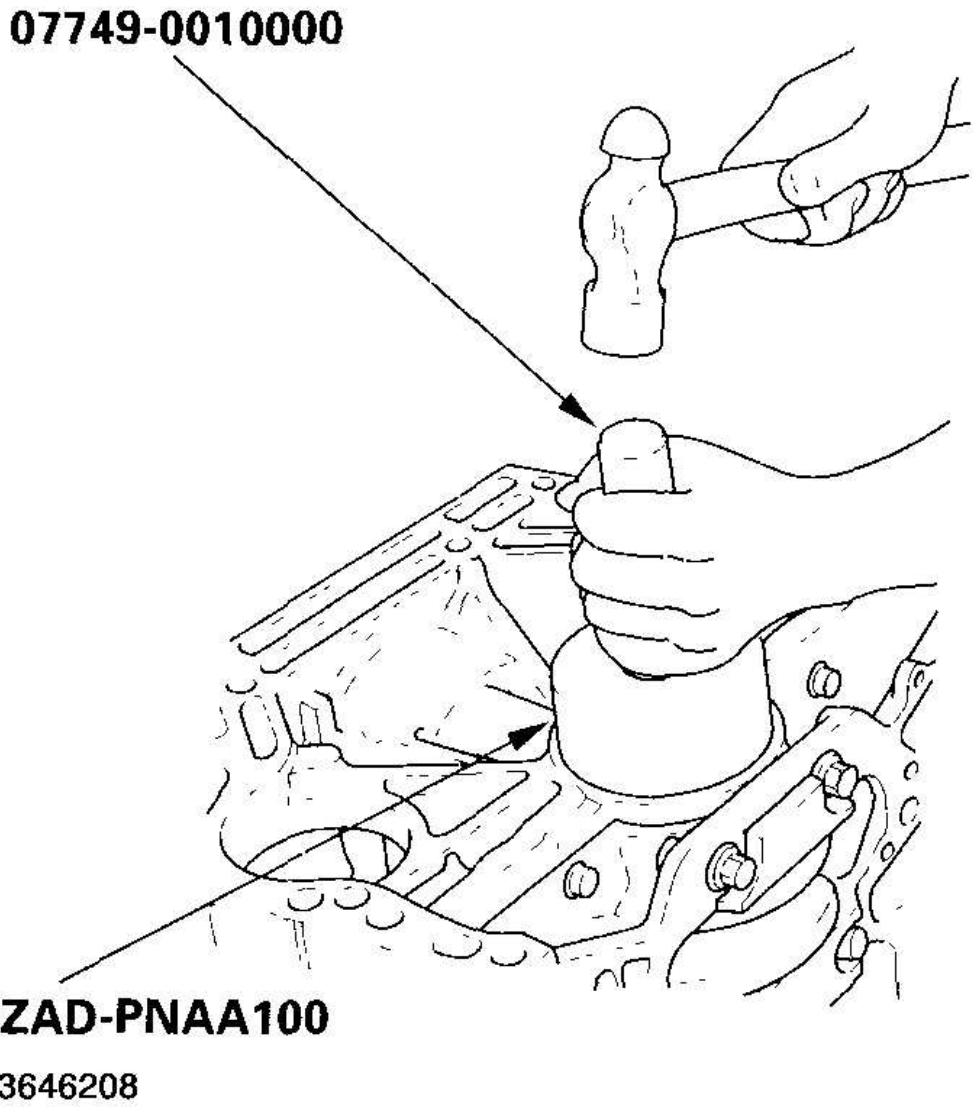


Fig. 61: Driving Oil Seal Squarely Into Block
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Measure the distance between the engine block (A) and oil seal (B).

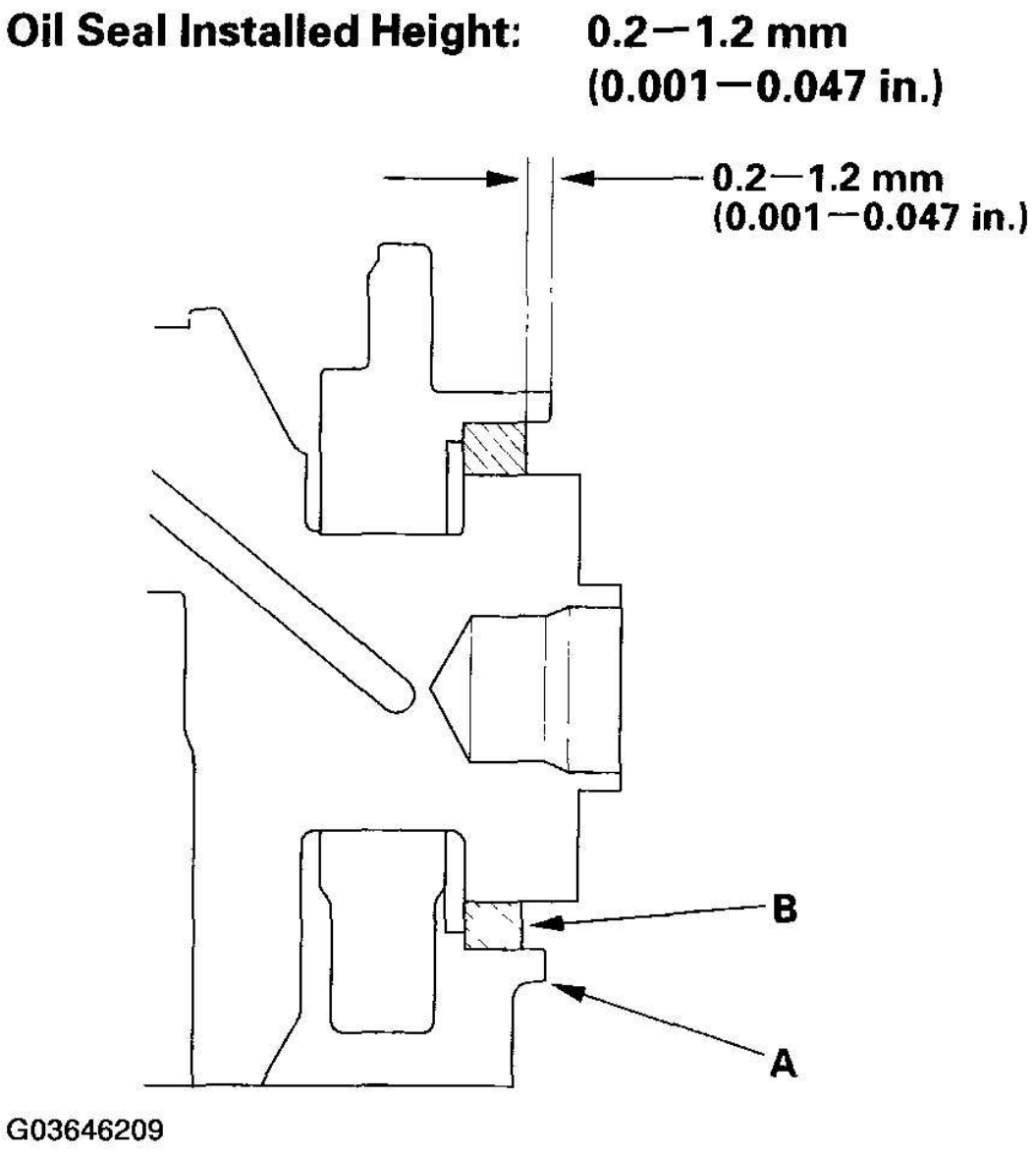


Fig. 62: Measuring Distance Between Engine Block And Oil Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Install the baffle plates.

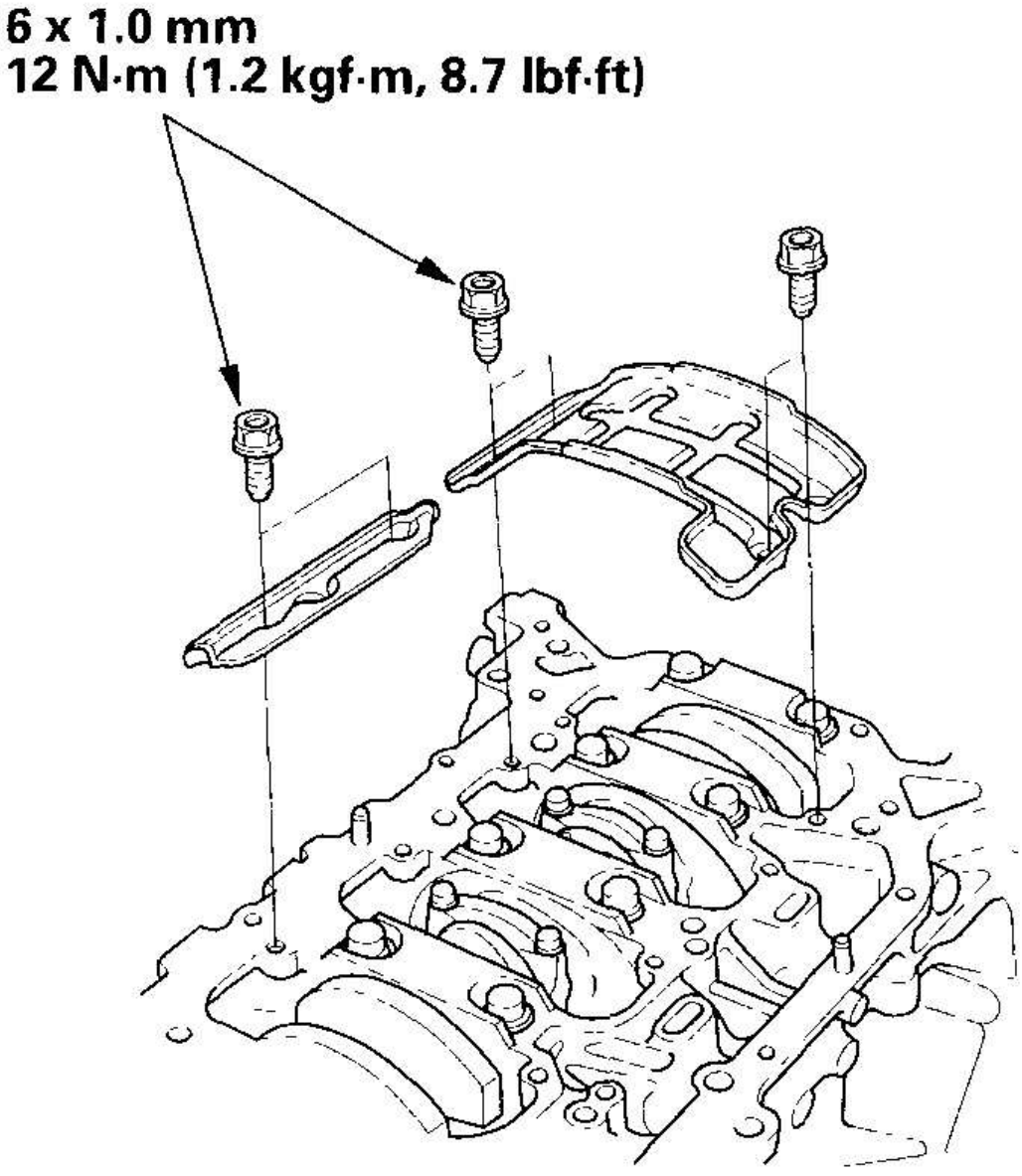


Fig. 63: Installing Baffle Plates
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Install the oil pump (see **OIL PUMP INSTALLATION**).
25. Install the oil pan (see **OIL PAN INSTALLATION**).

26. Install the cylinder head (see **CYLINDER HEAD INSTALLATION**).
27. M/T model: Install the flywheel (see **FLYWHEEL REPLACEMENT**), clutch disc (see **CLUTCH DISC AND PRESSURE PLATE INSTALLATION**), and pressure plate (see **CLUTCH DISC AND PRESSURE PLATE INSTALLATION**),
28. A/T model: Install the drive plate (see **DRIVE PLATE REMOVAL AND INSTALLATION**).
29. Install the transmission:
    - Manual transmission (see **TRANSMISSION INSTALLATION**)
    - Automatic transmission (see **TRANSMISSION INSTALLATION**)
30. Install the engine assembly (see **ENGINE INSTALLATION**).

NOTE: Whenever any crankshaft or connecting rod bearing is replaced, it is necessary after reassembly to run the engine at idling speed until it reaches normal operating temperature, then continue to run it for about 15 minutes.

OIL PAN INSTALLATION

1. Remove all of the old liquid gasket from the oil pan mating surfaces, bolts, and bolt holes.
2. Clean and dry the oil pan mating surfaces.
3. Apply liquid gasket, P/N 08717-004, 08718-0001, 08718-0002, 8718-0003, or 08718-0009, evenly to the engine block mating surface of the oil pan and to the inner threads of the bolt holes.

NOTE: Do not install components if too much time has passed after applying the liquid gasket (for P/N 08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply the liquid gasket.

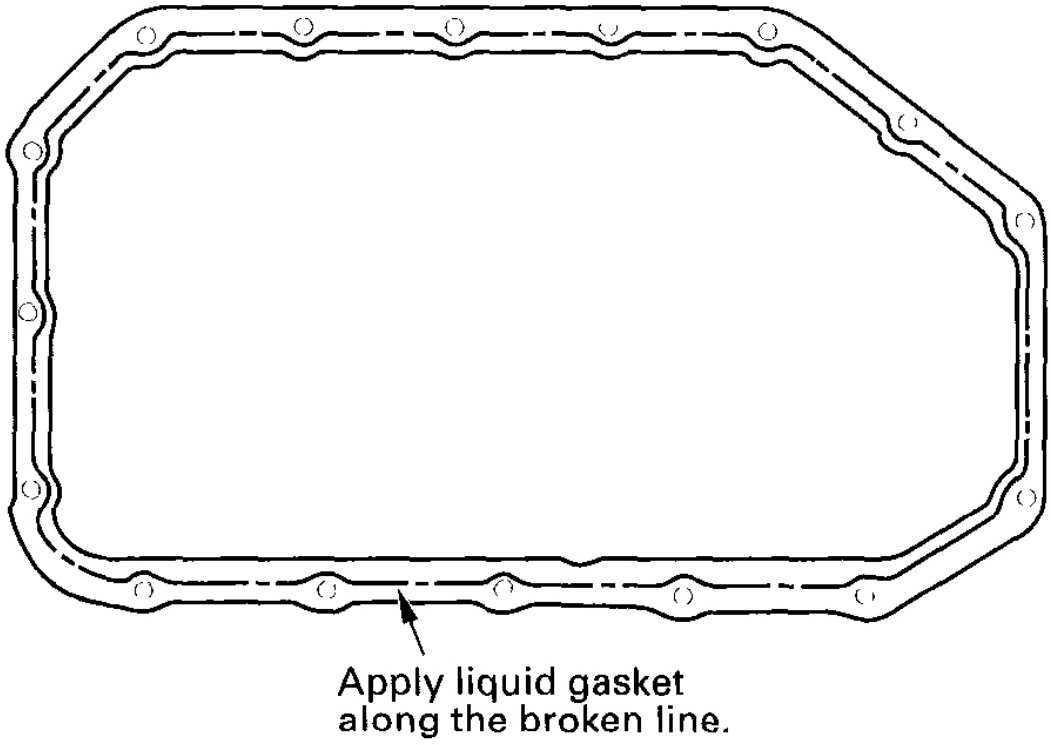


Fig. 64: Applying Liquid Gasket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the oil pan.
5. Tighten the bolts in two or three steps. In the final step, tighten all bolts, in sequence, to 12 N.m (1.2 kgf.m, 8.7 lbf.ft). Wipe off the excess liquid gasket on the each side of crankshaft pulley and flywheel/drive plate.

NOTE:

- **Wait at least 30 minutes before filling the engine with oil.**
- **Do not run the engine for at least 3 hours after installing the oil pan.**

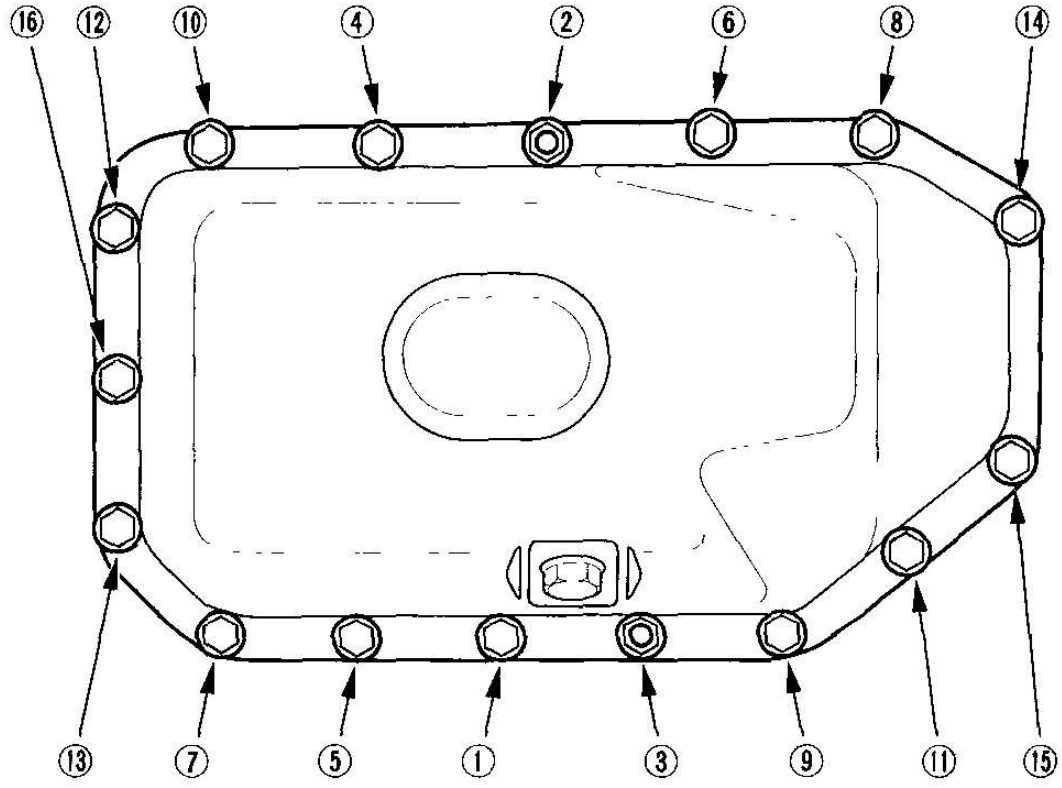


Fig. 65: Tightening Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the stiffener.

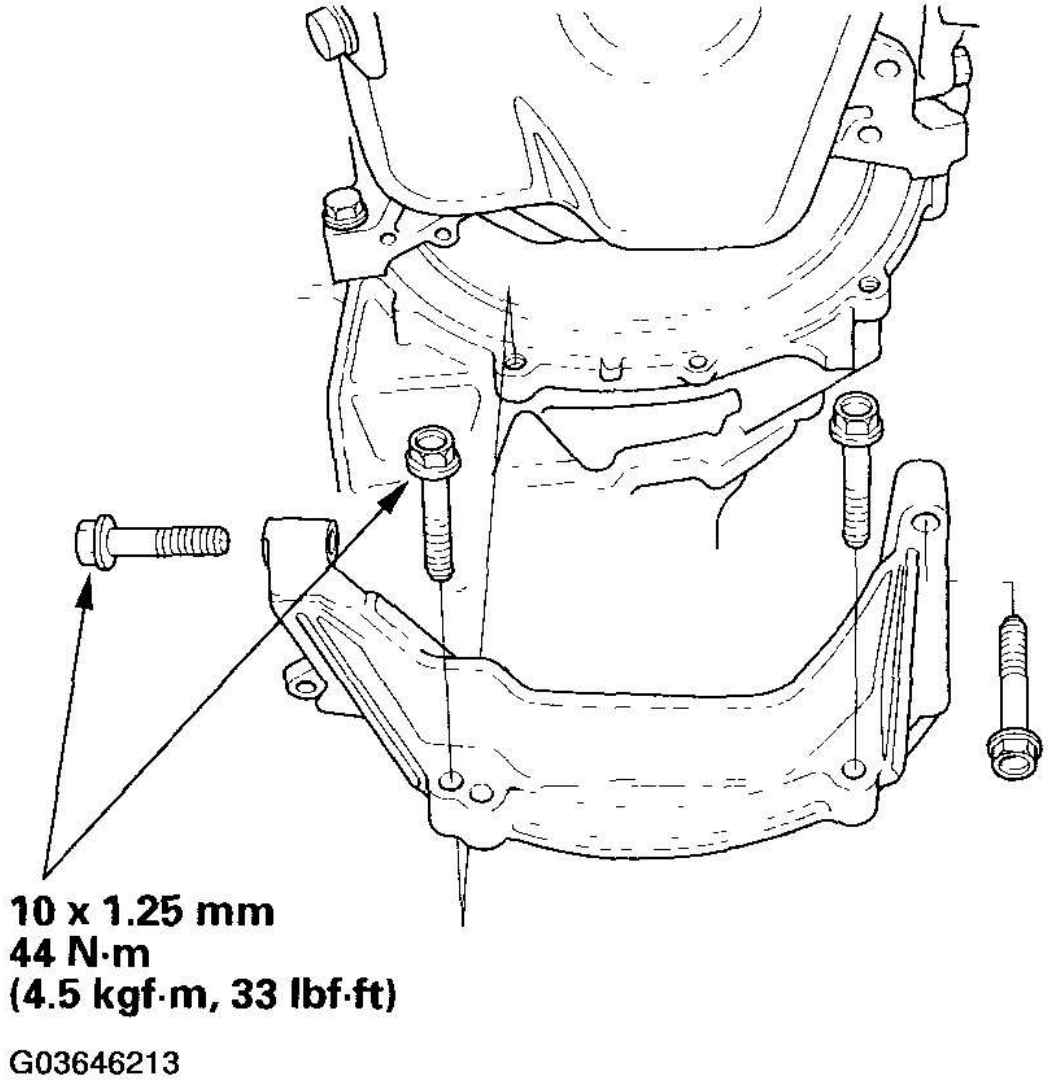


Fig. 66: Installing Stiffener
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. If the engine is still in the vehicle, do the following steps.
8. Tighten the nuts securing the transmission lower front mount and transmission lower rear mount (see step 13 on **ENGINE INSTALLATION**).
9. Install a new set ring on the end of the left side driveshaft, then install the driveshaft. Make sure each ring "clicks" into place in the differential.

10. Connect the left side suspension lower arm ball joint (see step 8 on **LOWER ARM REMOVAL/INSTALLATION**).
11. Install the left side damper fork (see step 2 on **INSTALLATION**).
12. Connect the stabilizer links (see **STABILIZER LINK REPLACEMENT**).
13. Lower the vehicle on the lift.
14. Tighten the front mount bolt, then install the front mount stop (see step 3 on **ENGINE INSTALLATION**).
15. Tighten the rear mount bolt, then install the rear mount stop (see step 5 on **ENGINE INSTALLATION**).
16. Loosen the mount bolt, then install the transmission upper mount/bracket assembly, clutch line clamp bracket and ground cable (M/T) (see step 8 on **ENGINE INSTALLATION**).
17. Loosen the mount bolt and bracket plate mounting bolts, then install the transmission upper mount/bracket assembly, and ground cable (A/T) (see step 9 on **ENGINE INSTALLATION**).
18. Tighten the transmission upper mount bolt (M/T) (see step 10 on **ENGINE INSTALLATION**).
19. Tighten the transmission upper mount bracket plate mounting bolts, then tighten the transmission upper mount bolt (A/T) (see step 11 on **ENGINE INSTALLATION**).
20. Install the clutch slave cylinder and clutch line bracket mounting bolt (M/T) (see step 35 on **ENGINE INSTALLATION**).
21. Install the battery base, then install the harness clamp (see step 47 on **ENGINE INSTALLATION**).
22. Install the air cleaner assembly (see **AIR CLEANER REMOVAL/INSTALLATION**).
23. Install the battery. Clean the battery posts and cable terminals with sandpaper, then assemble them and apply grease to prevent corrosion.
24. Enter the anti-theft codes for the radio and the navigation system, then enter the customer's radio station presets.
25. Set the clock.

TRANSMISSION END CRANKSHAFT OIL SEAL INSTALLATION - IN CAR

Special Tools Required

- Driver 07749-0010000
- Oil seal driver attachment 96 07ZAD-PNAA100

1. Remove the transmission:
   - Manual transmission (see **TRANSMISSION REMOVAL**)
   - Automatic transmission (see **TRANSMISSION REMOVAL**)
2. M/T model: Remove the pressure plate (see **PRESSURE PLATE AND CLUTCH DISC REMOVAL**), clutch disc (see **CLUTCH REPLACEMENT**), and flywheel (see **FLYWHEEL REPLACEMENT**).
3. A/T model: Remove the drive plate (see **DRIVE PLATE REMOVAL AND INSTALLATION**).
4. Clean and dry the crankshaft oil seal housing.
5. Use the special tools to drive a new oil seal squarely into the block to the specified installed height.

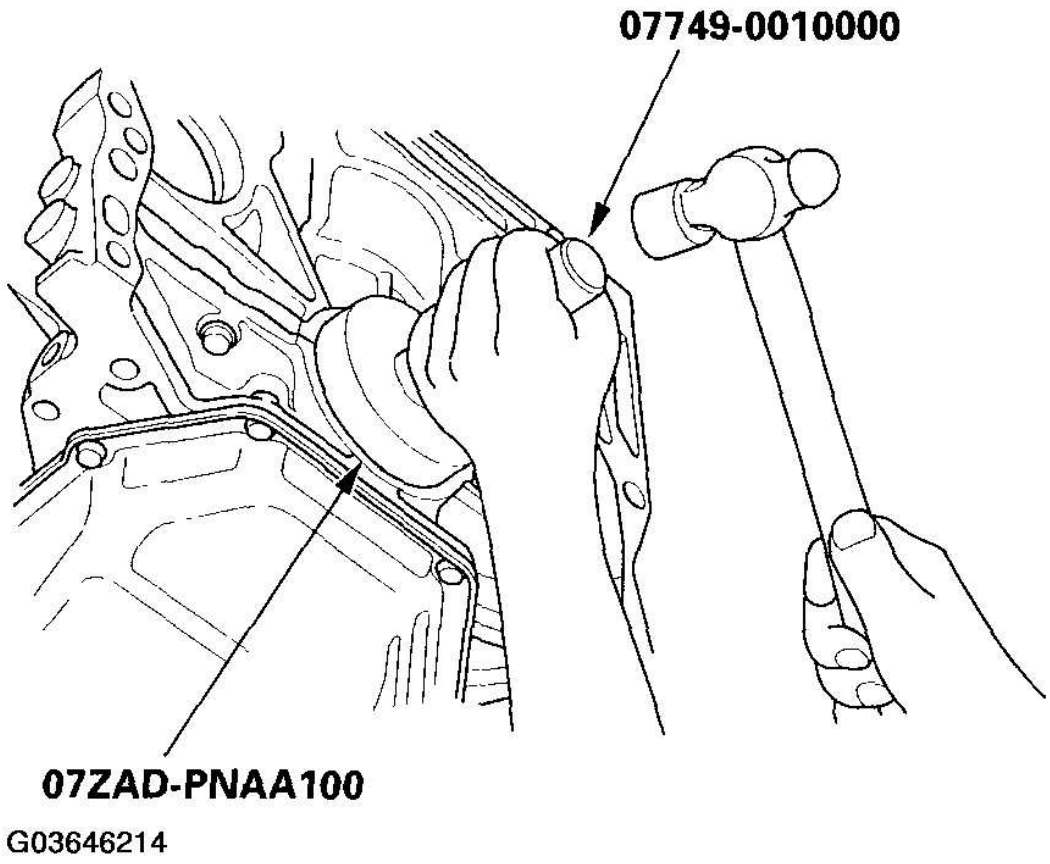


Fig. 67: Driving Oil Seal Squarely Into Block
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Measure the distance between the engine block (A) and oil seal (B).

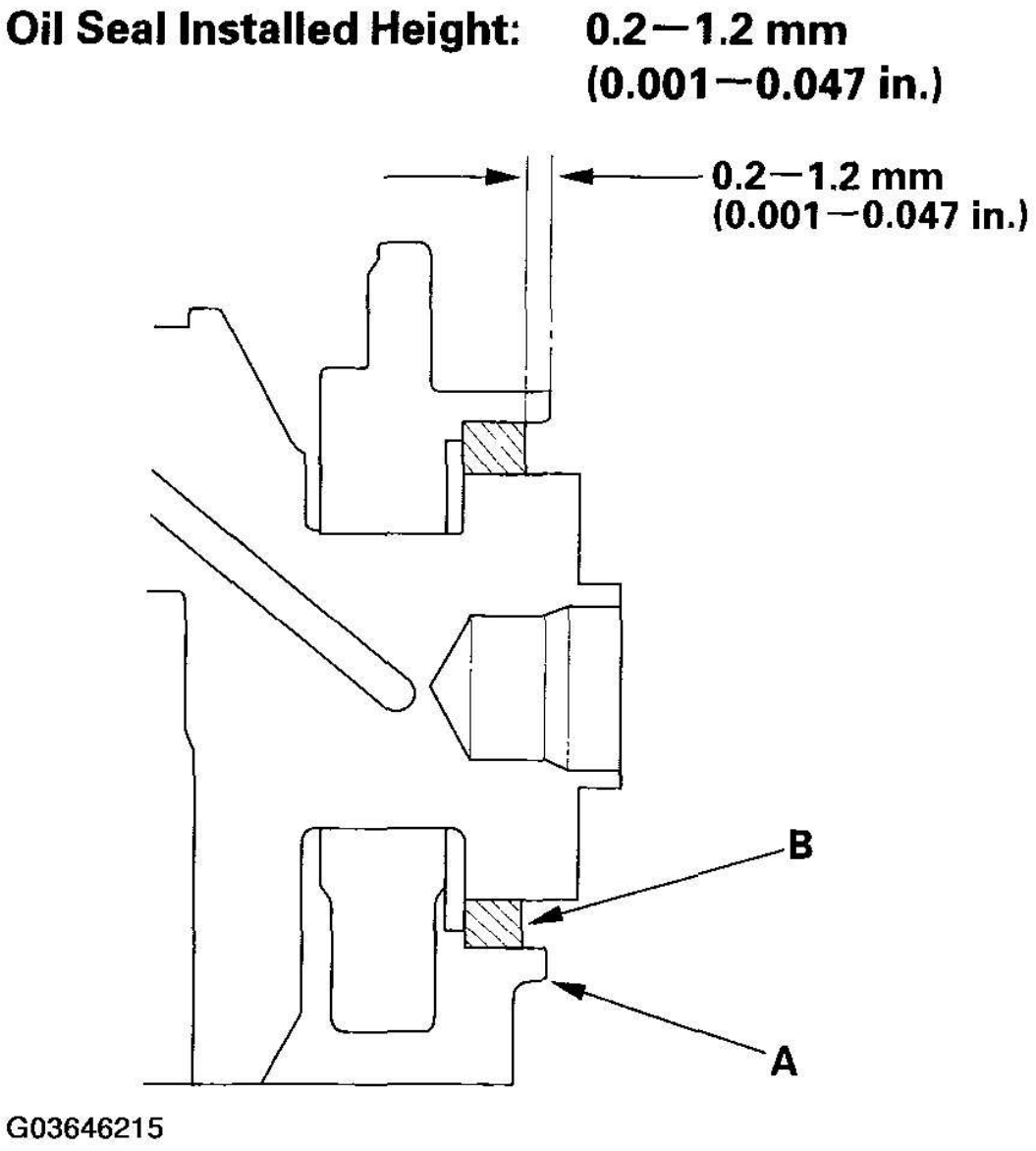


Fig. 68: Measuring Distance Between Engine Block And Oil Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. M/T model: Install the flywheel (see **FLYWHEEL REPLACEMENT**), clutch disc (see **CLUTCH DISC AND PRESSURE PLATE INSTALLATION**), and pressure plate (see **CLUTCH DISC AND PRESSURE PLATE INSTALLATION**).

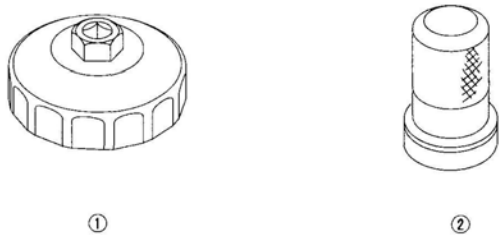
8. A/T model: Install the drive plate (see **DRIVE PLATE REMOVAL AND INSTALLATION**).
9. Install the transmission:
    - Manual transmission (see **TRANSMISSION INSTALLATION**)
    - Automatic transmission (see **TRANSMISSION INSTALLATION**)

2003-07 ENGINE

Engine Lubrication - Accord (V6)

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07HAA-PJ70100	Oil Filter Wrench	1
②	070AD-RCAA100	Oil Seal Driver, 64 mm	1



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Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

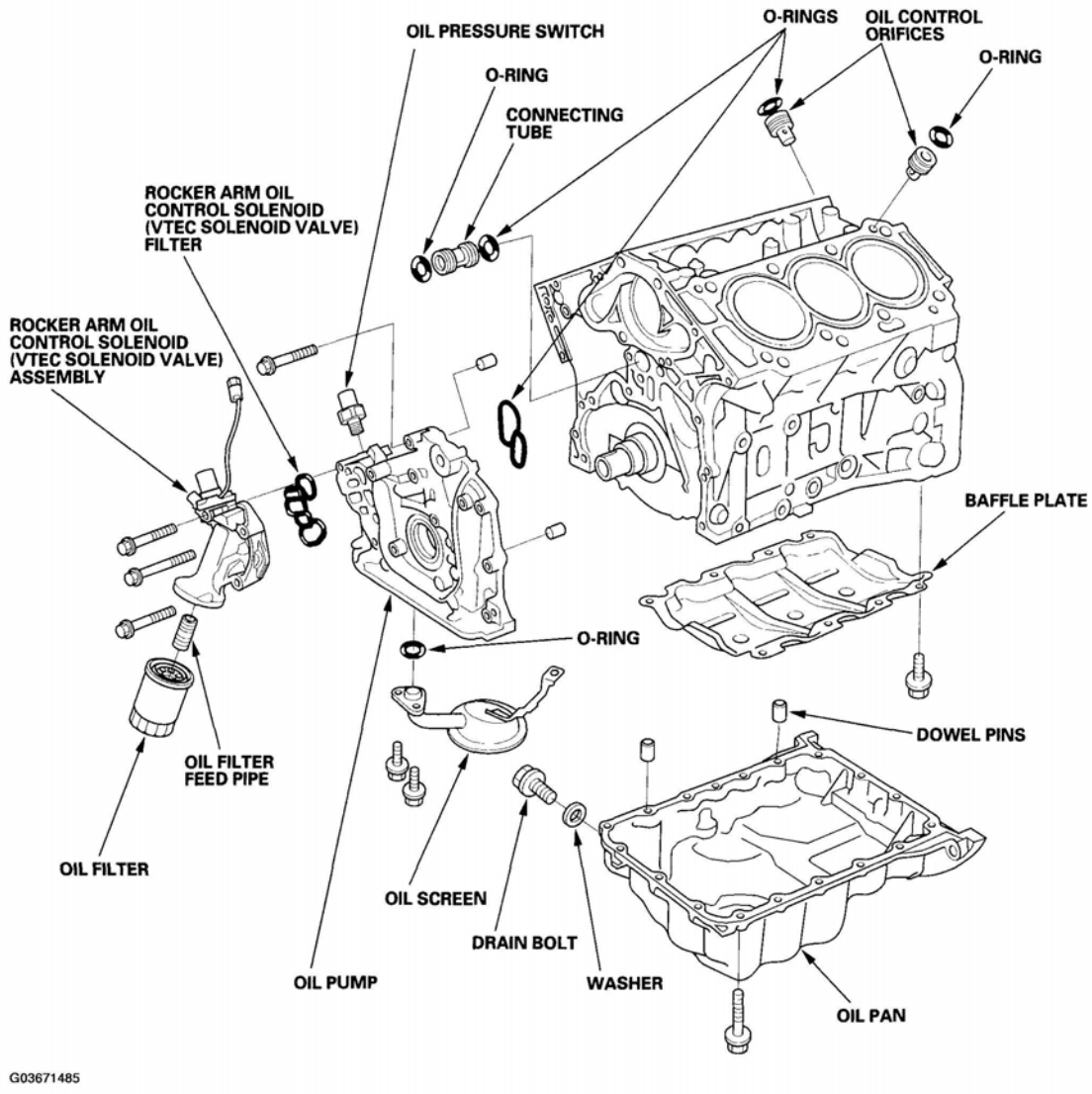


Fig. 2: Locating Engine Lubrication Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

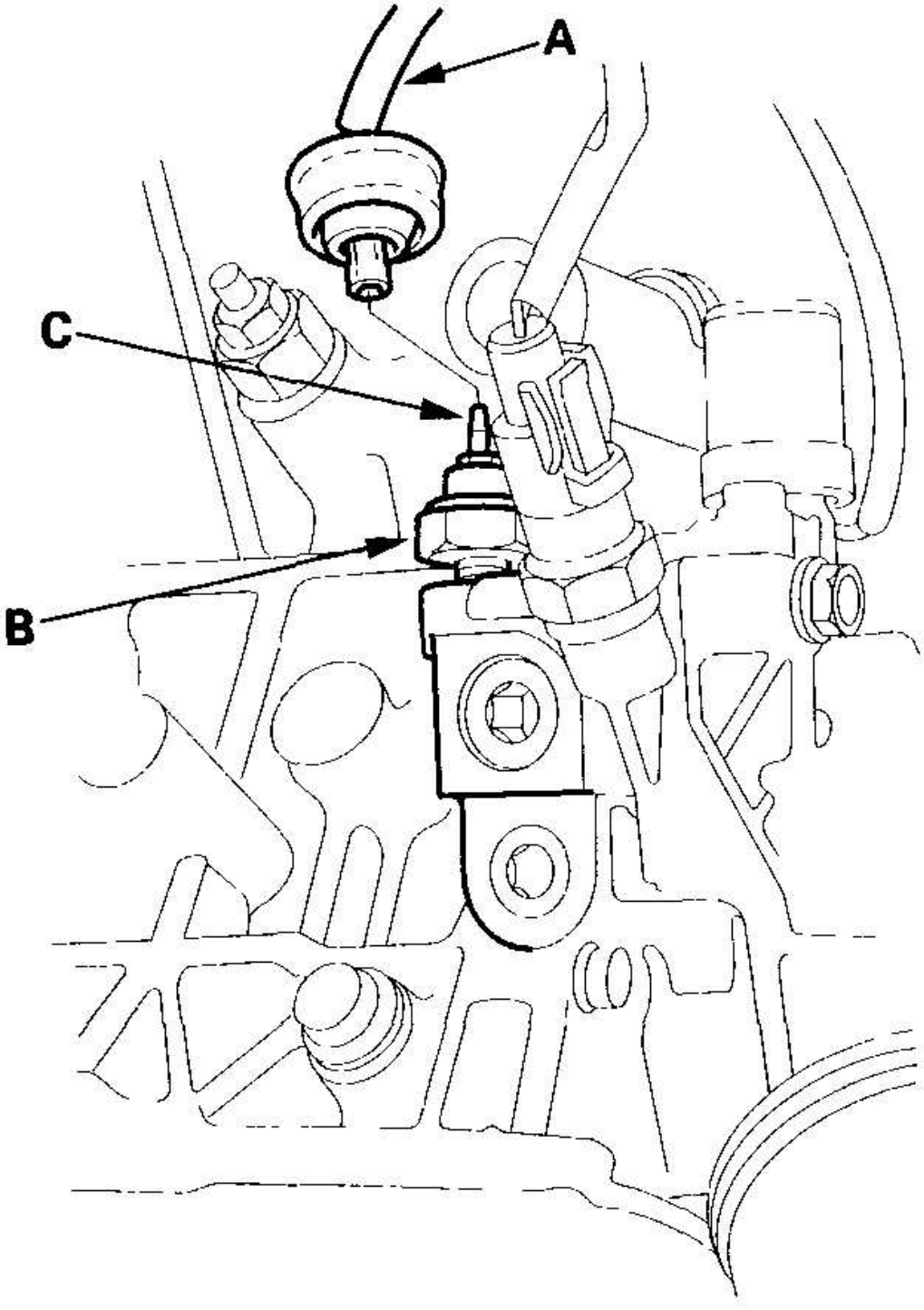
SYMPTOM TROUBLESHOOTING

Symptom	Diagnostic procedure	Also check for
	1. Check the loose of the engine oil fill cap, oil drain bolt, and oil filter. 2. Check for oil leaks.	

Excessive engine oil consumption	3. Check for worn valve guide(s) (see **VALVE INSPECTION**) or worn valve stem seal(s) (see **VALVE, SPRING, AND VALVE SEAL REMOVAL**). 4. Check for damaged or worn piston ring(s) (see **PISTON RING REPLACEMENT**). 5. Check for damaged or worn engine internal parts (cylinder wall, pistons, etc.) (see **BLOCK AND PISTON INSPECTION**).	
Low oil pressure indicator does not come on with the ignition switch ON (II)	1. Do the gauge control module self-diagnostic function (see **SELF-DIAGNOSTIC FUNCTION**). 2. Oil pressure switch test (see **OIL PRESSURE SWITCH TEST**).	An open in the wire between the gauge control module and the oil pressure switch
Low oil pressure indicator stays on	1. Check the engine oil level. 2. Do the gauge control module self-diagnostic function (see **SELF-DIAGNOSTIC FUNCTION**). 3. Test the oil pressure switch (see **OIL PRESSURE SWITCH TEST**). 4. Check the engine oil pressure (see **OIL PRESSURE TEST**). 5. Check the oil filter for clogging. 6. Check the oil screen for clogging. 7. Check the relief valve. 8. Test the oil pump (see **INSPECTION**).	A wire shorted to ground between the gauge control module and the oil pressure switch

OIL PRESSURE SWITCH TEST

1. Remove the YEL/RED wire (A) from the engine oil pressure switch (B).



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Fig. 3: Removing YEL/RED Wire From Engine Oil Pressure Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check for continuity between the positive terminal (C) and the engine (ground). There should be continuity with the engine stopped. There should be no continuity with the engine running.

OIL PRESSURE SWITCH REPLACEMENT

1. Disconnect the oil pressure switch connector, then remove the oil pressure switch.

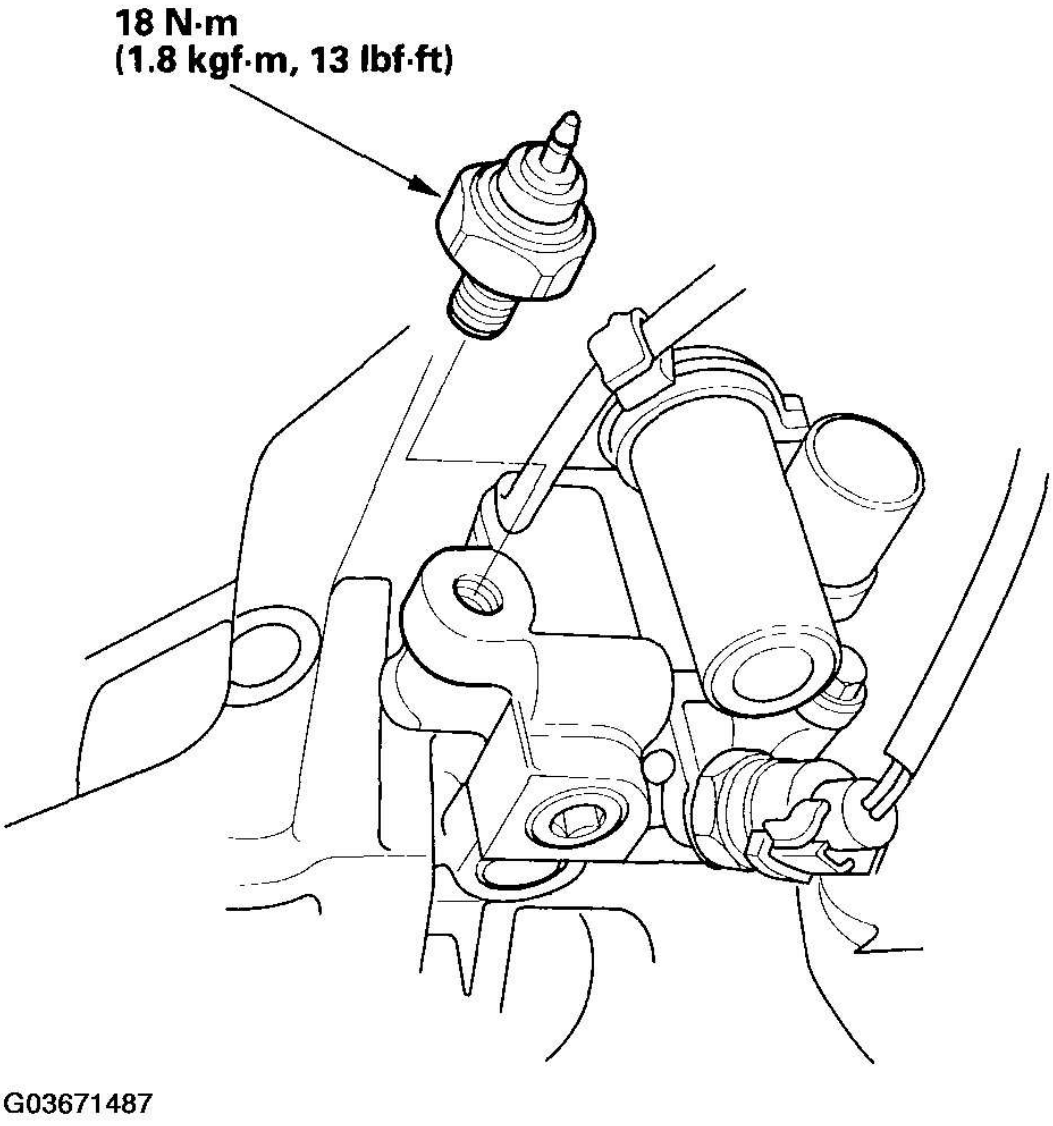


Fig. 4: Removing Oil Pressure Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove all of the old liquid gasket from the switch and switch mounting hole.
3. Apply a very small amount of liquid gasket to the oil pressure switch threads, then install the oil pressure switch.

NOTE: Using too much liquid gasket may cause liquid gasket

to enter the oil passage or the end of the new oil pressure switch.

OIL PRESSURE TEST

If the low oil pressure indicator stays on with the engine running, check the engine oil level. If the oil level is correct:

1. Remove the engine oil pressure switch, then install an oil pressure gauge (A).

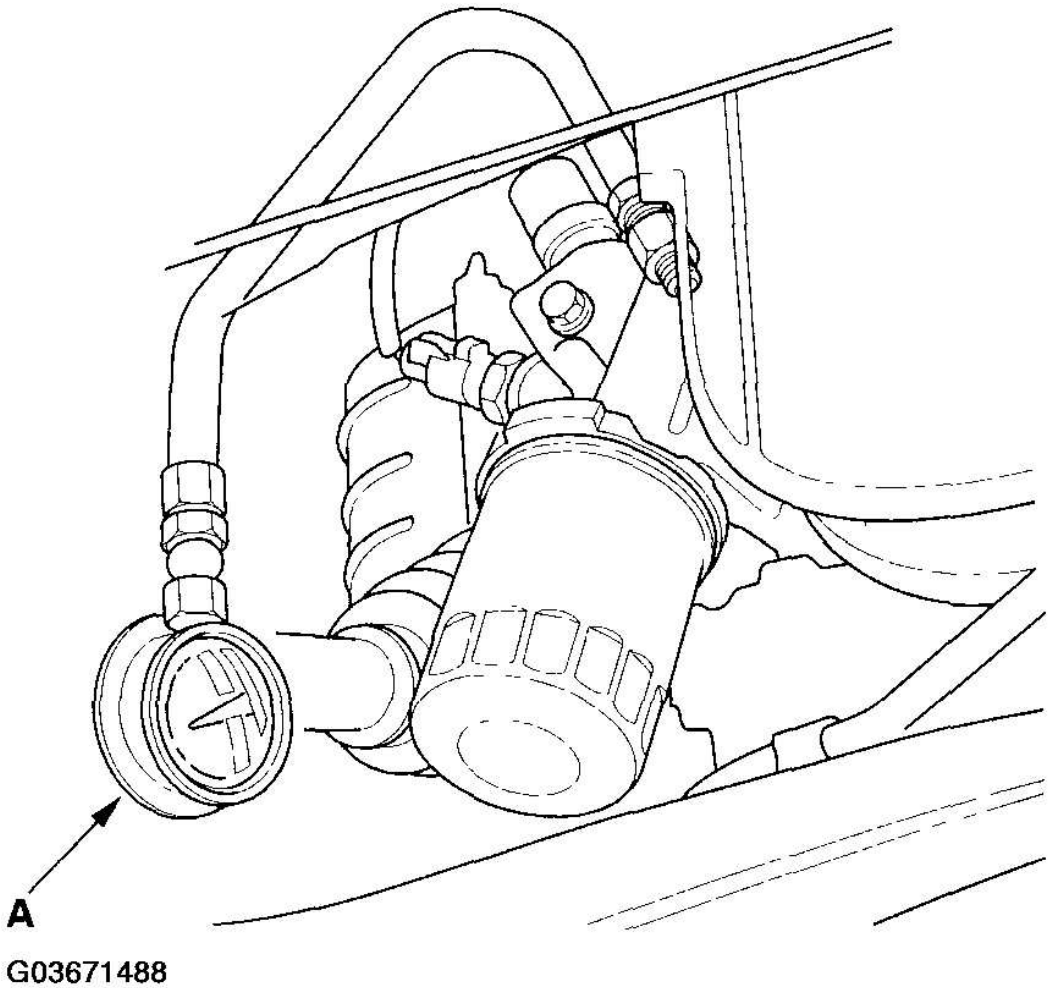


Fig. 5: Installing Oil Pressure Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Start the engine. Shut it off immediately if the gauge registers no oil pressure. Repair the problem before continuing.
3. Allow the engine to reach operating temperature (fan comes on at least twice). The pressure should be:

   Engine Oil Temperature: 176°F (80°C)

   Engine Oil Pressure:

   At Idle: 70 kPa (0.7 kgf/cm2,10 psi) min.
   At 3,000 rpm: 490 kPa (5.0 kgf/cm2,71 psi) min.
4. If oil pressure is NOT within specifications, inspect these items:
   - Check the oil screen for clogging.
   - Inspect the oil pump (see **INSPECTION**).

ENGINE OIL REPLACEMENT

1. Warm up the engine.
2. Remove the drain bolt (A), and drain the engine oil.

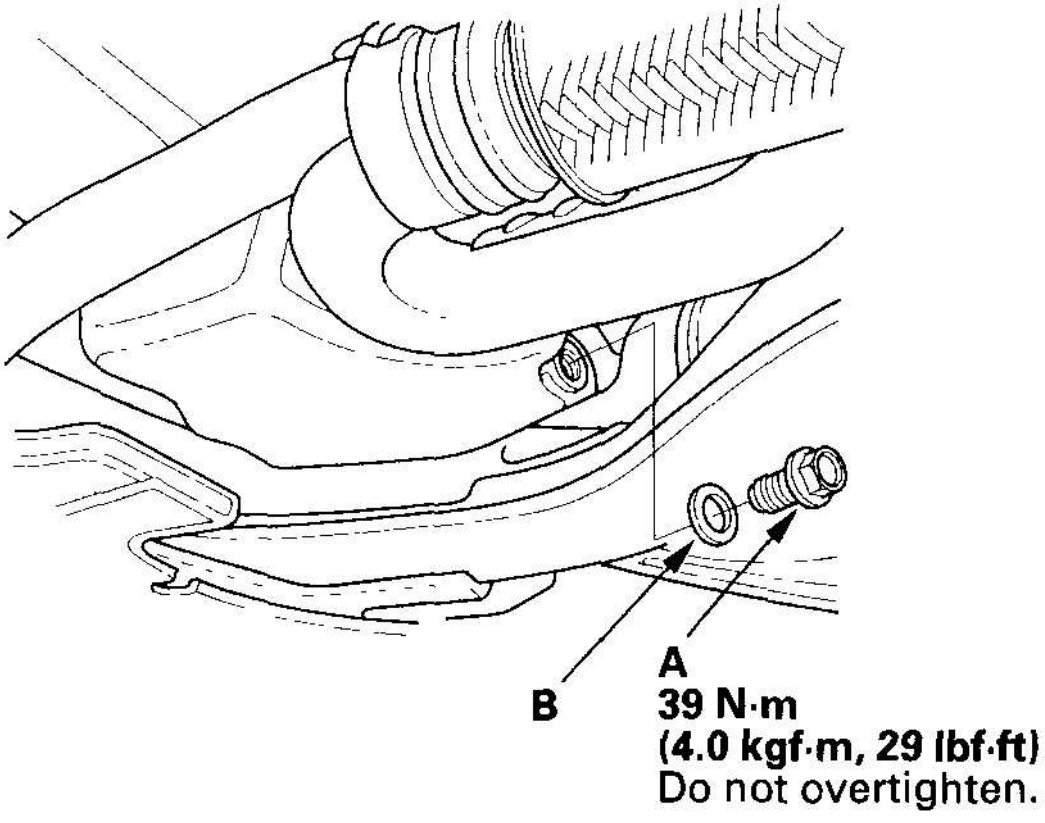


Fig. 6: Draining Engine Oil
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Reinstall the drain bolt with a new washer (B).
4. Refill with the recommended oil (see **LUBRICANTS AND FLUIDS** .

Capacity

At oil change:

4.0 L (4.2 US qt)

At oil change including filter:

4.3 L (4.5 US qt)

After engine overhaul:

5.0 L (5.3 US qt)

5. Run the engine for more than 3 minutes, then check for oil leakage.
6. 2006-07 model: Reset the engine oil life indicator **ENGINE OIL LIFE INDICATOR** .

ENGINE OIL FILTER REPLACEMENT

Special Tools Required

Oil filter wrench 07HAA-PJ70100

1. Remove the oil filter with the special tool.
2. Inspect the filter to make sure the rubber seal is not stuck to the oil filter seating surface of the engine.
3. Inspect the threads (A) and rubber seal (B) on the new filter. Clean the seat on the engine block, then apply a light coat of new engine oil to the filter rubber seal. Use only filters with a built-in bypass system.

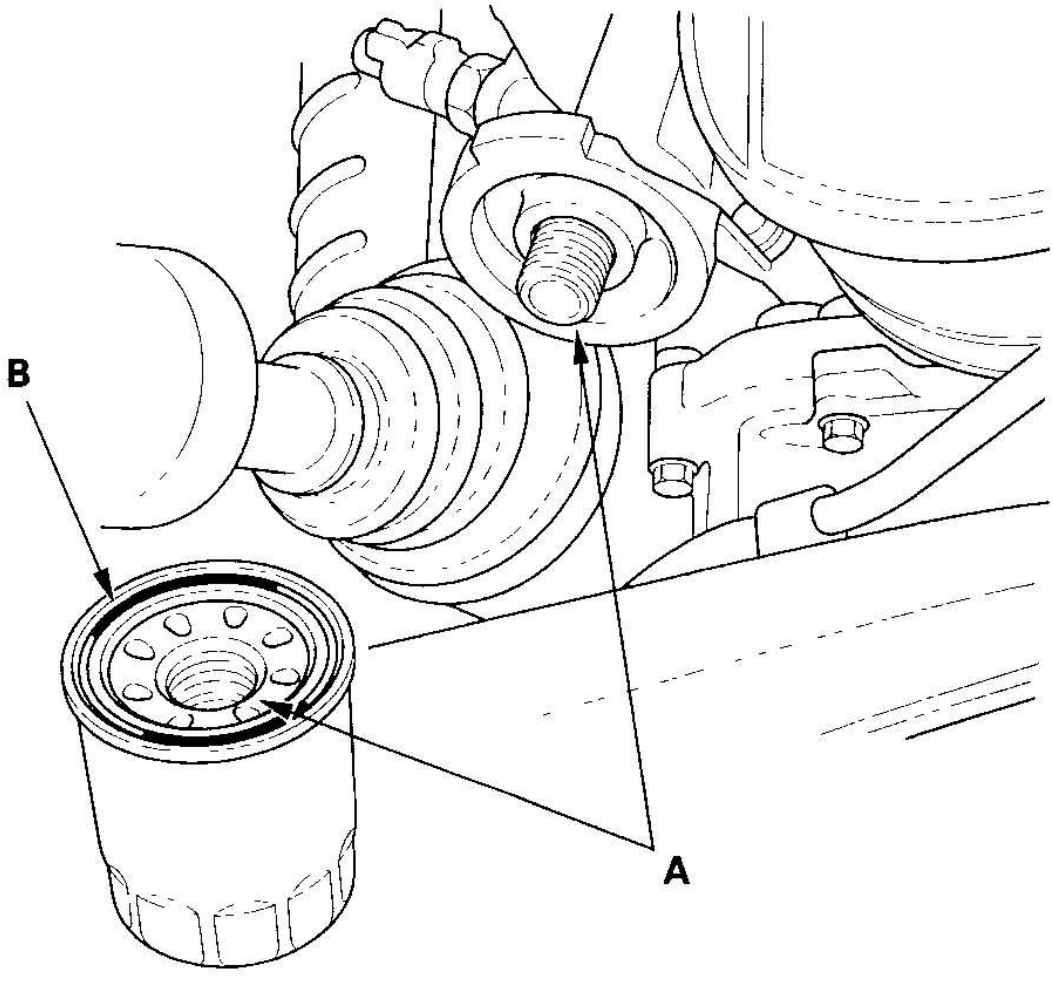
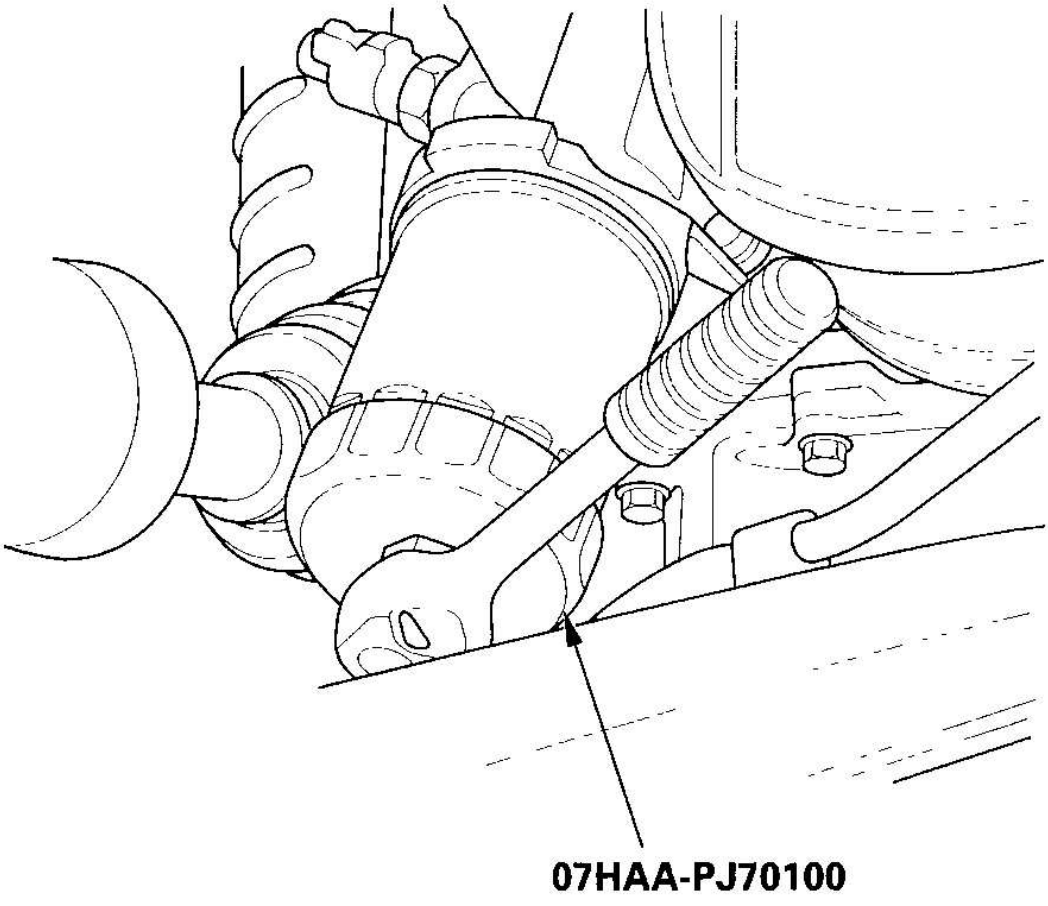


Fig. 7: Inspecting Threads And Rubber Seal On Filter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the oil filter by hand.
5. After the rubber seal seats, tighten the oil filter clockwise with the special tool.

Tighten: 3/4 turn clockwise

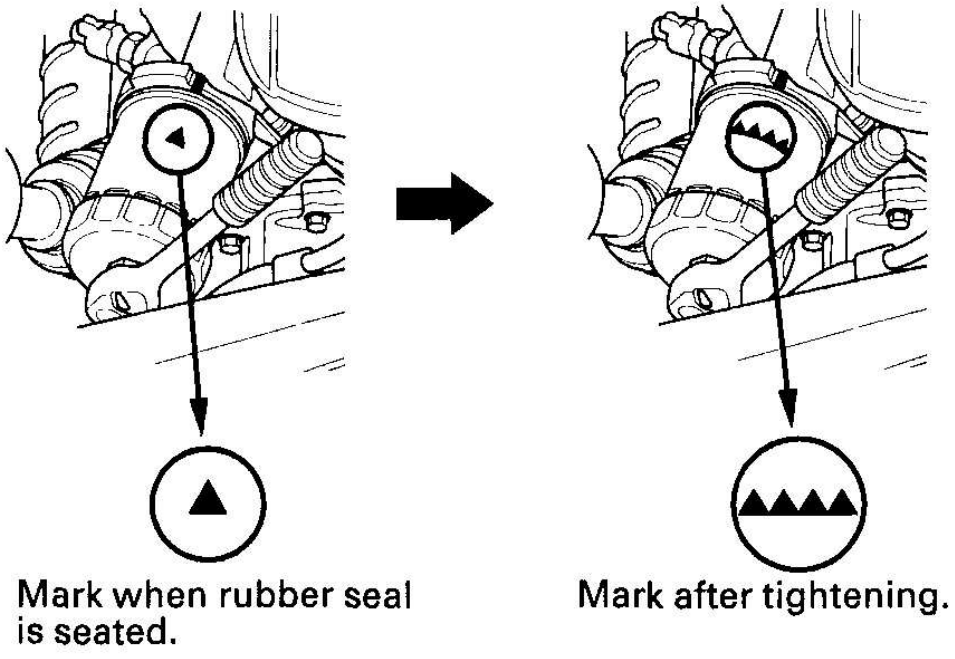
Tightening torque: 12 N.m (1.2 kgf.m, 8.7 lbf.ft)



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Fig. 8: Tightening Oil Filter Clockwise With Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. If four numbers or triangle marks) are printed around the outside of the filter, you can use the following procedure to tighten the filter.
   - Spin the filter on until its seal lightly seats against the block, and note which number or mark is at the bottom.
   - Tighten the filter by turning it clockwise three numbers or marks from the one you noted. For example, if triangle mark is at the bottom when the seal is lightly seated, tighten the filter until the triangle mark comes around to the bottom.



Number or Mark when rubber seal is seated	1 or ▼	2 or ▼▼	3 or ▼▼▼	4 or ▼▼▼▼
Number or Mark after tightening	4 or ▼▼▼▼	1 or ▼	2 or ▼▼	3 or ▼▼▼

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Fig. 9: Tightening Filter Mark Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. After installation, fill the engine with oil up to the specified level, run the engine for more than 3 minutes, then check for oil leakage.
8. 2006-07 model: Reset the engine oil life indicator **ENGINE OIL LIFE**

INDICATOR .

OIL FILTER FEED PIPE REPLACEMENT

1. Remove the filter (see **ENGINE OIL FILTER REPLACEMENT**).
2. Remove the oil filter feed pipe.

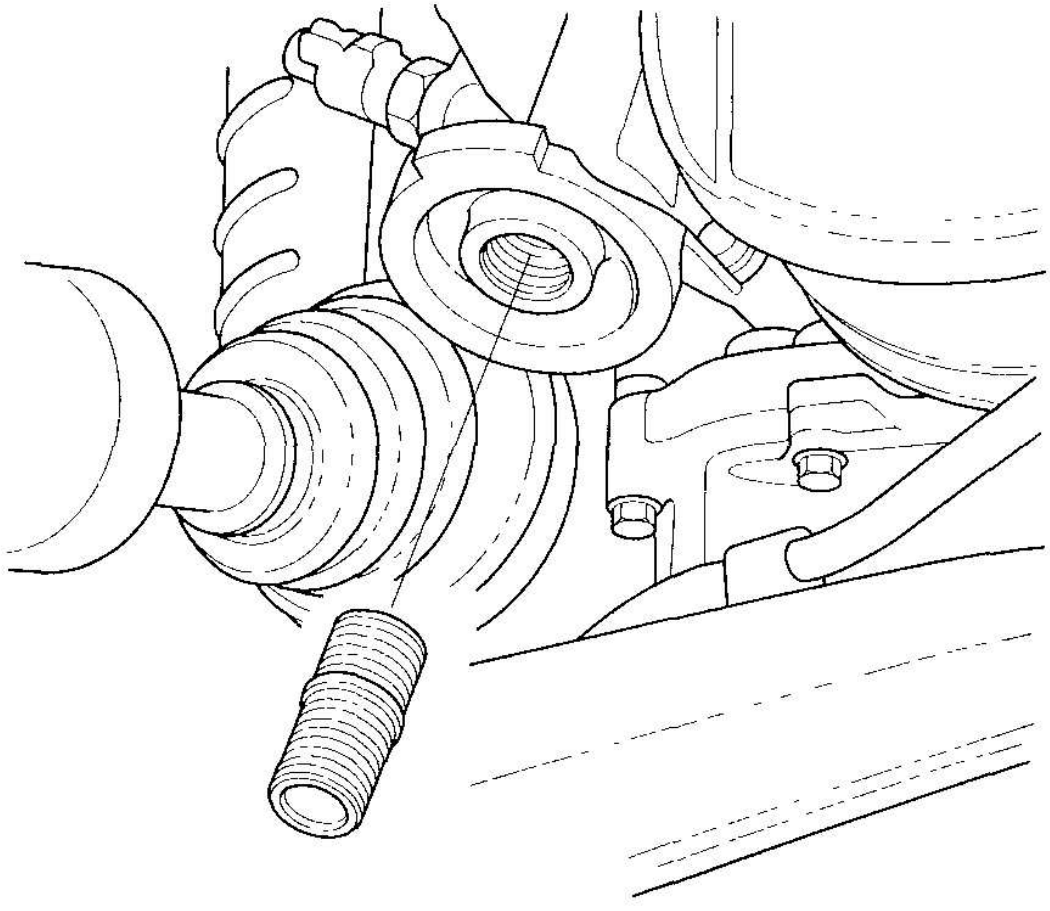


Fig. 10: Identifying Oil Filter Feed Pipe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install two 20 x 1.5 mm nuts (A) onto the new oil filter feed pipe, and hold one nut with a wrench, then tighten the other nut.

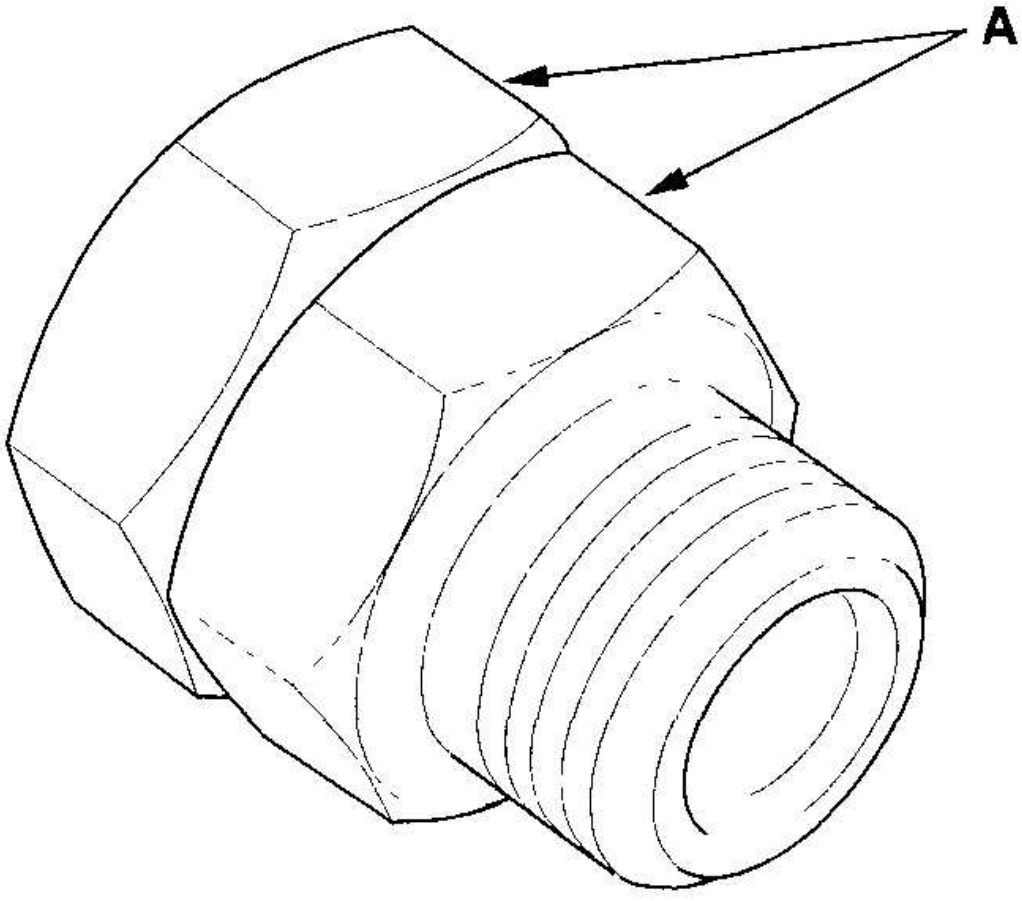


Fig. 11: Identifying Nuts And Oil Filter Feed Pipe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Tighten the oil filter feed pipe to 49 N.m (5.0 kgf.m, 36 lbf.ft), then remove the nuts from the oil filter feed pipe.

OIL PUMP OVERHAUL

EXPLODED VIEW

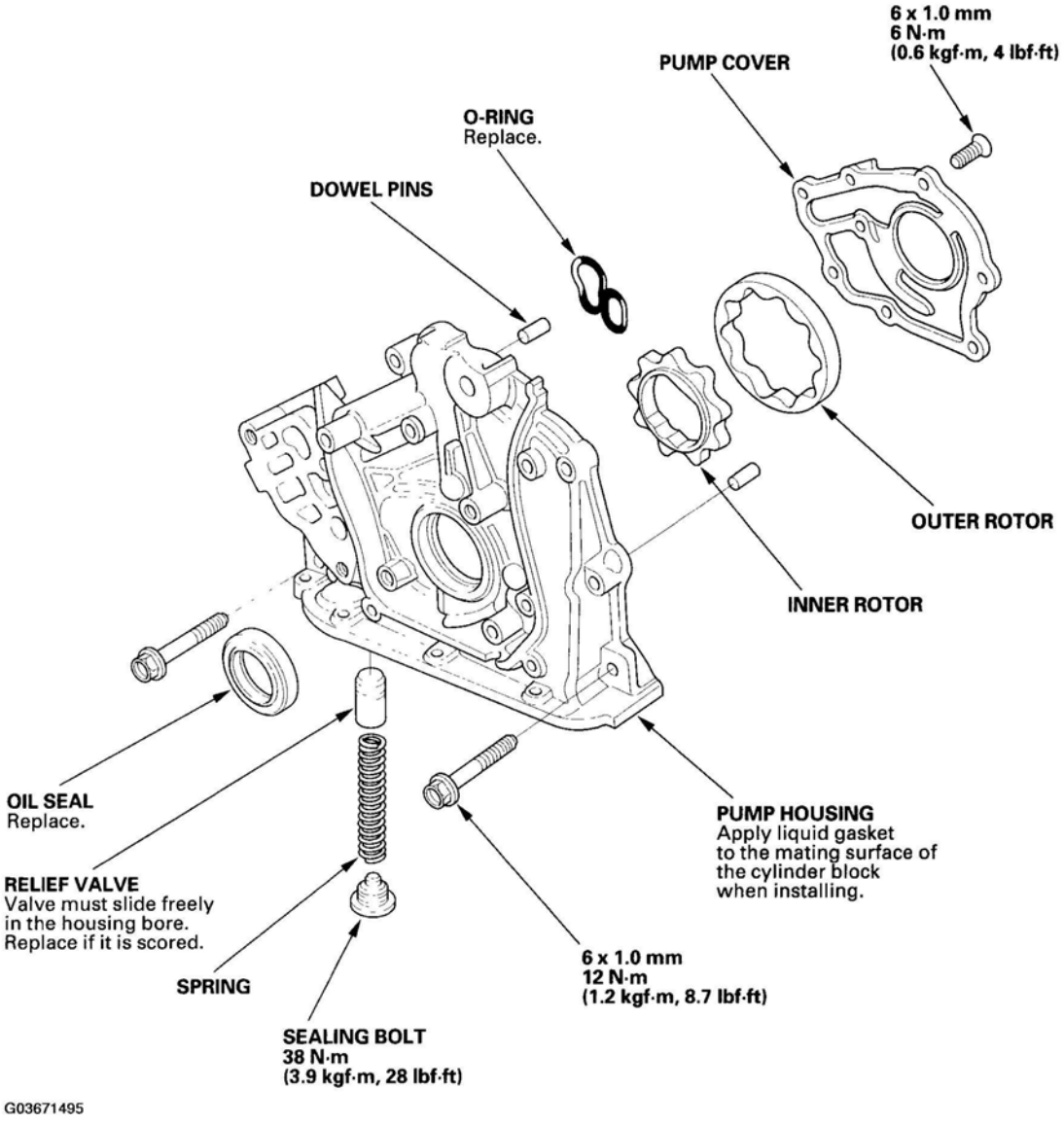


Fig. 12: Exploded View Of Oil Pump
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

- Oil seal driver, 64 mm 070AD-RCA0100
- Engine support hanger, A and Reds AAR-T-12566
- Engine hanger balance bar VSB02C000019

REMOVAL

1. Drain the engine oil (see **OIL PRESSURE TEST**).
2. Remove the bulkhead cover:
   - 2-door, refer to **2-DOOR**
   - 4-door, refer to **4-DOOR**
3. Remove the windshield wiper arms, then remove the cowl cover, refer to **COWL COVER REPLACEMENT**).
4. Remove the connector bracket from the front cylinder head; use the bracket bolt hole to attach engine balancer bar front arm (see step 49 **ENGINE REMOVAL**).
5. Remove the harness clamp bracket from the rear cylinder head; use the bracket bolt hole to attach engine balancer bar rear arm (see step 50 **ENGINE REMOVAL**).
6. Lift and support the engine with engine hanger and engine balancer bar. Attach the front arm to the front cylinder head with a spacer and the connector bracket bolt (10 x 1.25 mm). Attach the rear arm to the rear cylinder head with the harness clamp bracket bolt (8 x 1.25 mm). (see step 51 **ENGINE REMOVAL**).
7. Remove the timing belt (see **TIMING BELT INSTALLATION**).
8. Remove the crankshaft position (CKP) sensor (see **CKP SENSOR REPLACEMENT**).
9. Remove the rocker arm oil control solenoid (VTEC solenoid valve) and oil filter assembly (see **ROCKER ARM OIL CONTROL SOLENOID (VTEC SOLENOID VALVE) REPLACEMENT**).
10. Remove the oil pan (see **OIL PAN INSTALLATION**).
11. Remove the oil screen (A), then remove the oil pump (B).

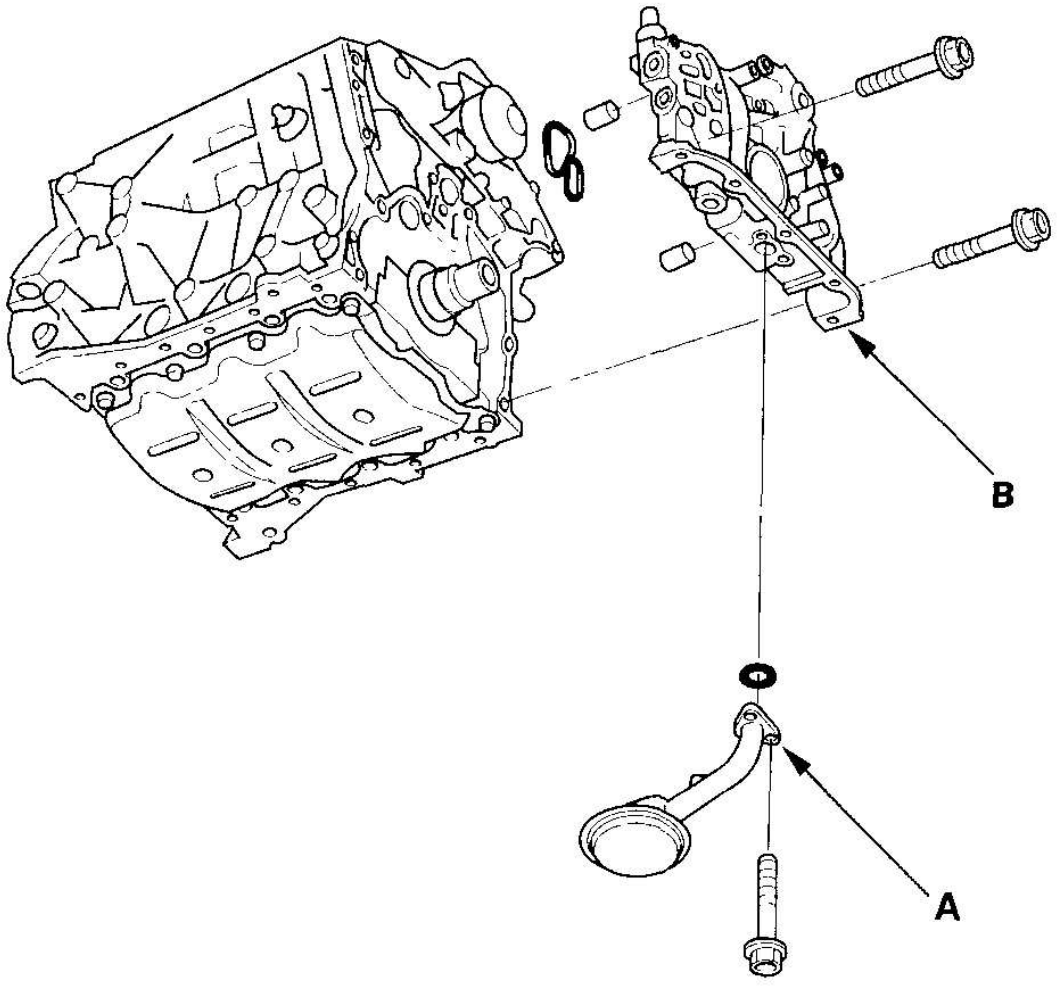


Fig. 13: Identifying Oil Screen And Oil Pump
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INSPECTION

1. Remove the screws from the pump housing, then separate the housing and cover.
2. Check the inner-to-outer rotor radial clearance between the inner rotor (A) and outer rotor (B). If the inner-to-outer rotor clearance exceeds the service limit, replace the oil pump assembly.

Inner Rotor-to-Outer Rotor Radial Clearance

Standard (New): 0.04-0.16 mm (0.002-0.006 in.)
Service Limit: 0.20 mm (0.008 in.)

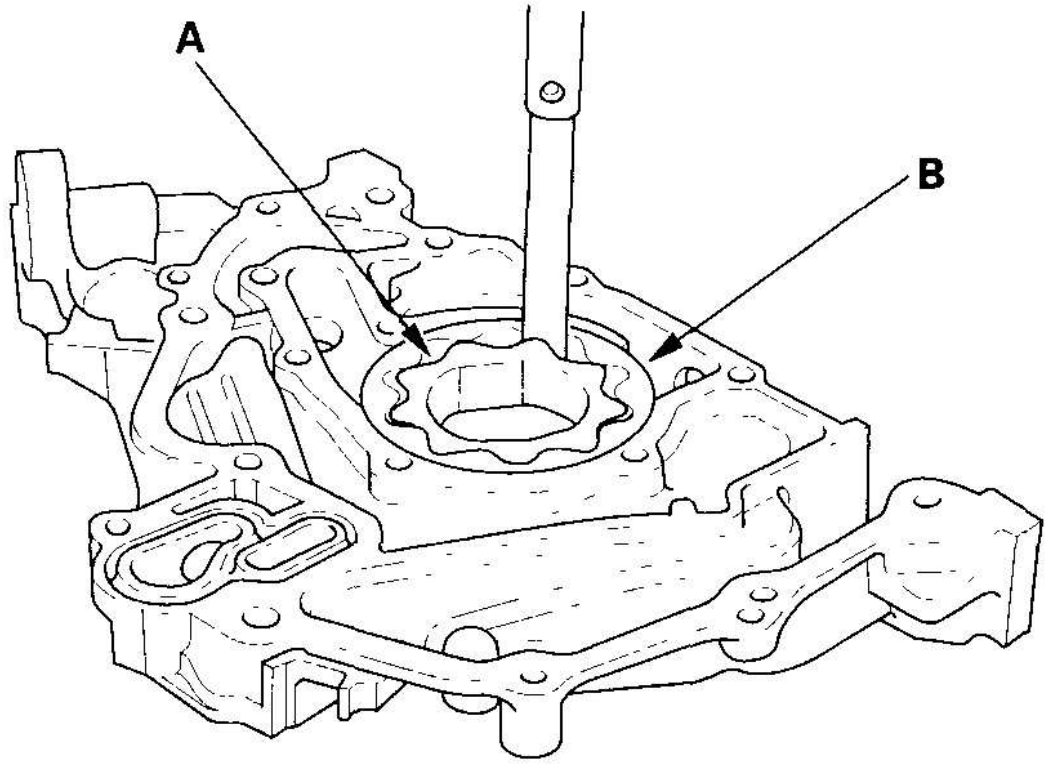


Fig. 14: Checking Inner-To-Outer Rotor Radial Clearance Between Inner Rotor And Outer Rotor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check the housing-to-rotor axial clearance between the rotors (A) and pump housing (B). If the housing-to-rotor axial clearance exceeds the service limit, replace the oil pump assembly.

Housing-to-Rotor Axial Clearance

Standard (New): 0.02-0.07 mm (0.001-0.003 in.)
Service Limit: 0.12 mm (0.005 in.)

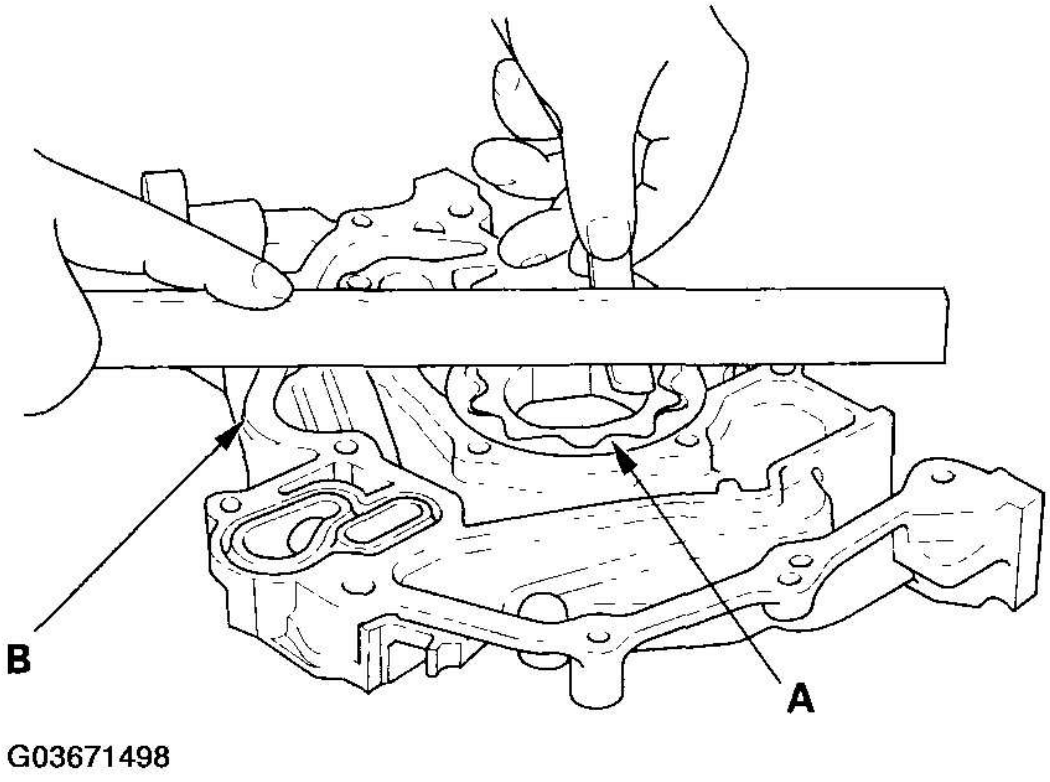


Fig. 15: Checking Housing-To-Rotor Axial Clearance Between Rotors And Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check the housing-to-outer rotor radial clearance between the outer rotor (A) and pump housing (B). If the housing-to-outer rotor radial clearance exceeds the service limit, replace the oil pump assembly.

Housing-to-Outer Rotor Radial Clearance

Standard (New): 0.14-0.19 mm (0.006-0.007 in.)
Service Limit: 0.20 mm (0.008 in.)

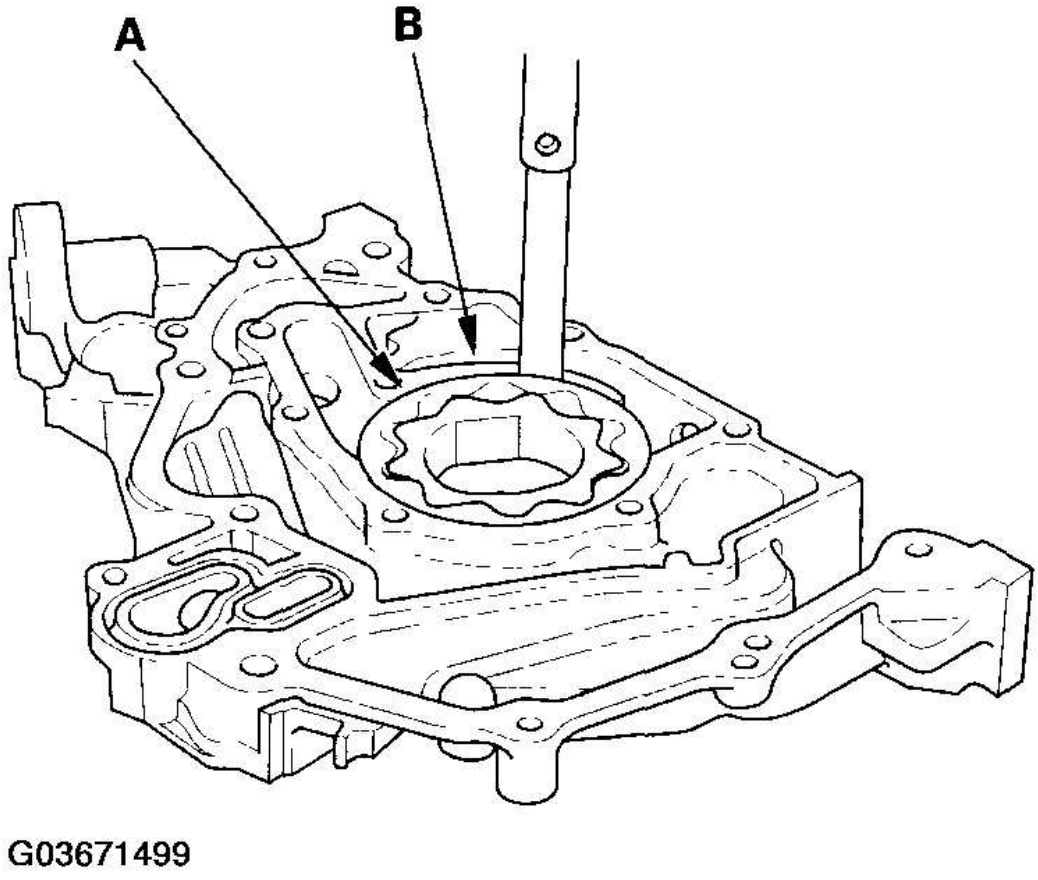


Fig. 16: Checking Housing-To-Outer Rotor Radial Clearance Between Outer Rotor And Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Inspect both rotors and pump housing for scoring or other damage. Replace the parts, if necessary.
6. Apply liquid thread lock to the pump housing screws, then install the oil pump cover.
7. Check that the oil pump turns freely.

INSTALLATION

1. Remove the old oil seal from the oil pump.

2. Gently tap in the new oil seal until the special tool bottoms on the pump.

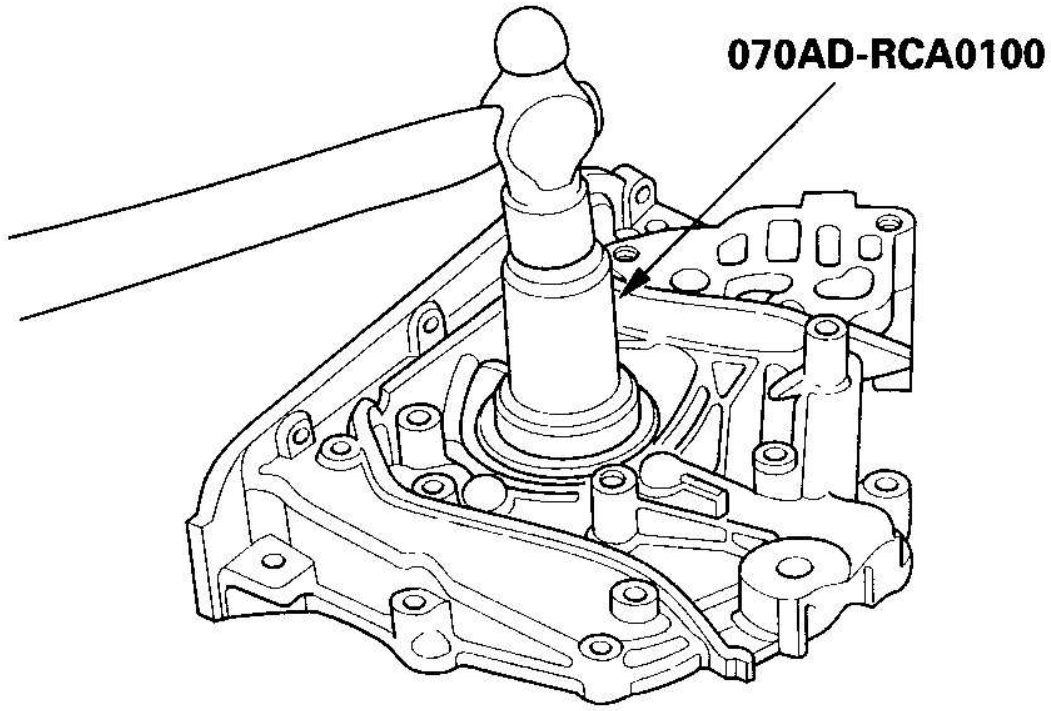


Fig. 17: Tapping In Oil Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove all of the old liquid gasket from the oil pump mating surfaces, bolts, and bolt holes.
4. Clean and dry the oil pump mating surfaces.
5. Install the oil pump (A).

   -1 Apply liquid gasket, P/N 08717-0004, 08718-0001, 08718-0002, 08718-0003, or 08718-0009, evenly to the block mating surface of the oil pump.

   NOTE: Do not install components if too much time has passed after applying the liquid gasket (for P/N

08718-0002, no more than 4 minutes, for all others, no more than 5 minutes). Instead, remove the old residue and reapply the liquid gasket.

-2 Grease the lip of the oil seal, and apply oil to the new O-rings (B).

-3 Install the dowel pins (C), then align the inner rotor with the crankshaft and install the oil pump.

-4 Clean the excess grease off the crankshaft, and check the seal for distortion.

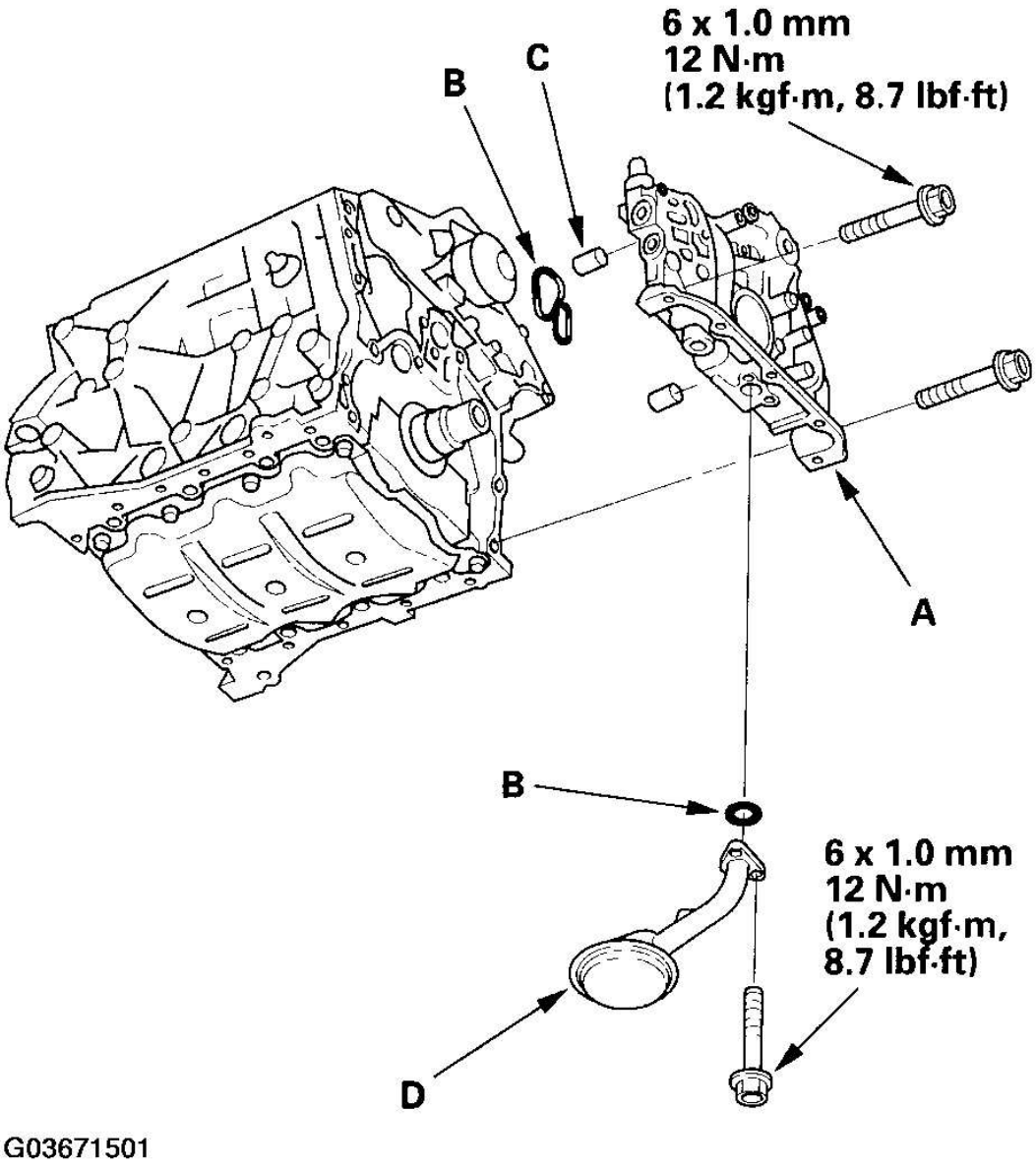


Fig. 18: Identifying Oil Pump
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the oil screen (D)
7. Install the oil pan (see **OIL PAN INSTALLATION**).
8. Install the rocker arm oil control solenoid (VTEC solenoid valve) and oil filter assembly (see **ROCKER ARM OIL CONTROL SOLENOID (VTEC**

SOLENOID VALVE) REPLACEMENT).

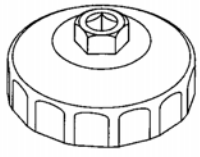
9. Install the CKP sensor (see **CKP SENSOR REPLACEMENT**).
10. Install the idler pulley.
11. Install the timing belt (see **TIMING BELT INSTALLATION**).
12. Remove the engine balance bar and hanger.
13. Install the connector bracket to the front cylinder head (see step 48 **ENGINE INSTALLATION**).
14. Install the harness clamp bracket to the rear cylinder head (see step 47 **ENGINE INSTALLATION**).
15. Install the cowl cover and windshield wiper arms, refer to **COWL COVER REPLACEMENT** .
16. Install the front bulkhead cover:
    - 2-door, refer to **2-DOOR**
    - 4-door, refer to **4-DOOR**
17. Refill the engine with engine oil (see **OIL PRESSURE TEST**).

2003-07 ENGINE

Engine Lubrication - Accord

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07HAA-PJ70100	Oil Filter Wrench	1



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Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

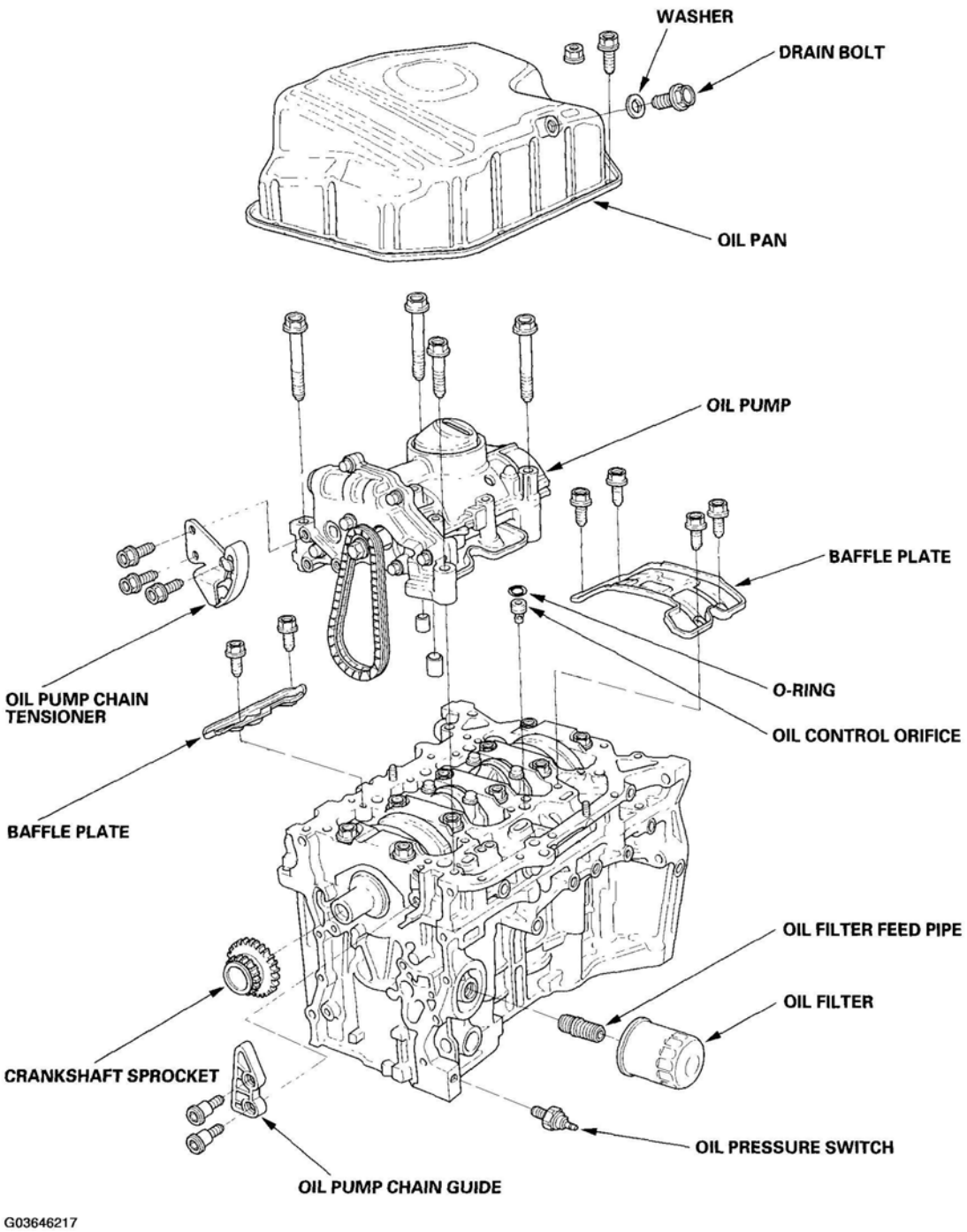


Fig. 2: Identifying Engine Lubrication Component Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for
Excessive engine oil consumption	1. Check the loose of the engine oil fill cap, oil drain bolt, and oil filter. 2. Check for oil leaks. 3. Check for worn valve guide(s) (see **VALVE INSPECTION**) or worn valve stem seal(s) (see **VALVE INSPECTION**). 4. Check for damaged or worn piston ring(s) (see **PISTON RING REPLACEMENT**). 5. Check for damaged or worn engine internal parts (cylinder wall, pistons, etc.) (see **BLOCK AND PISTON INSPECTION**).	
Low oil pressure indicator does not come on with the ignition switch ON (II)	1. Do the gauge control module self-diagnostic function (see **SELF-DIAGNOSTIC FUNCTION**). 2. Test the oil pressure switch (see **OIL PRESSURE SWITCH TEST**).	An open in the wire between the gauge control module and the oil pressure switch
	1. Check the engine oil level.	

Low oil pressure indicator stays on	2. Do the gauge control module self-diagnostic function (see **SELF-DIAGNOSTIC FUNCTION**). 3. Test the oil pressure switch (see **OIL PRESSURE SWITCH TEST**). 4. Check the engine oil pressure (see **OIL PRESSURE TEST**). 5. Check the oil filter for clogging. 6. Check the oil screen for clogging. 7. Check the relief valve. 8. Test the oil pump (see **OIL PUMP INSPECTION**).	A wire shorted to ground between the gauge control module and the oil pressure switch

OIL PRESSURE SWITCH TEST

1. Remove the YEL/RED wire (A) from the engine oil pressure switch (B).

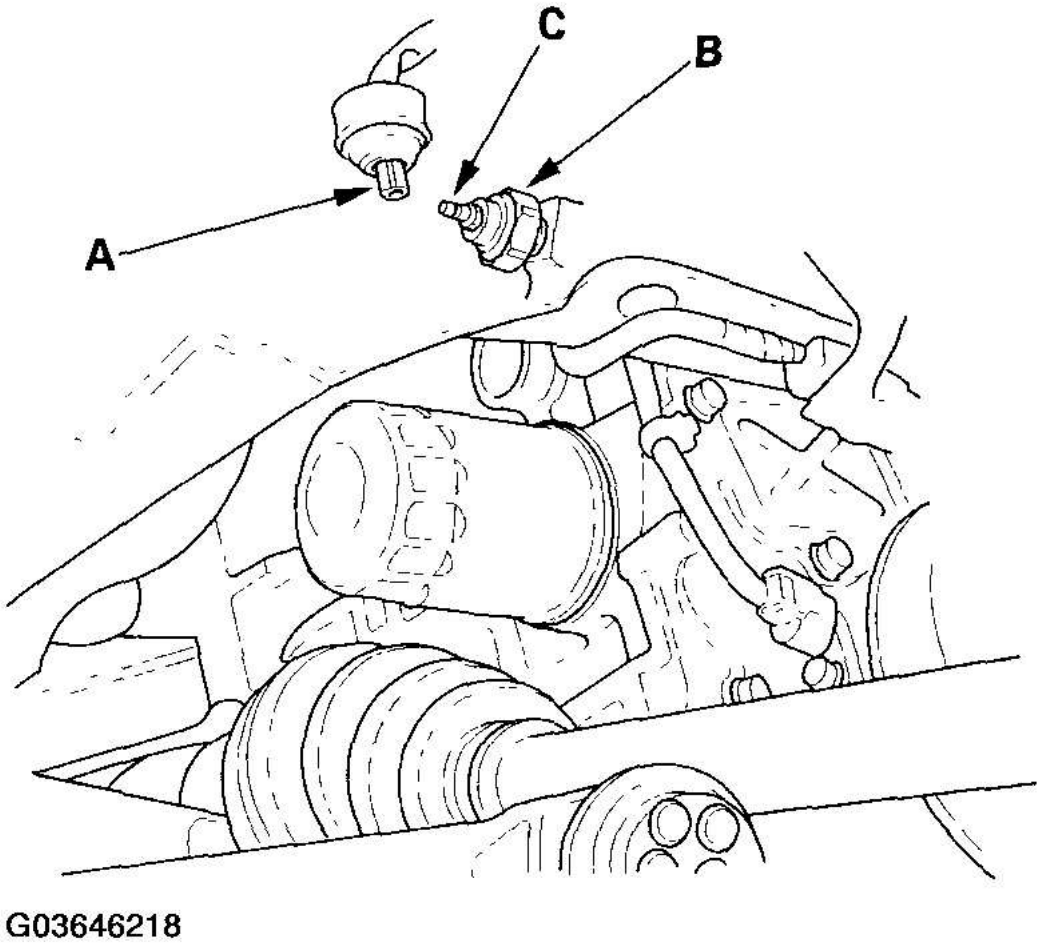


Fig. 3: Removing Yel/Red Wire From Engine Oil Pressure Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check for continuity between the positive terminal (C) and the engine (ground). There should be continuity with the engine stopped. There should be no continuity with the engine running.
3. If the switch fails to operate, check the engine oil level. If the engine oil level is OK, check the engine oil pressure. If the oil pressure is OK, replace the oil pressure switch (see **OIL PRESSURE SWITCH TEST**).

OIL PRESSURE SWITCH REPLACEMENT

1. Disconnect the oil pressure switch connector, then remove the oil pressure switch.

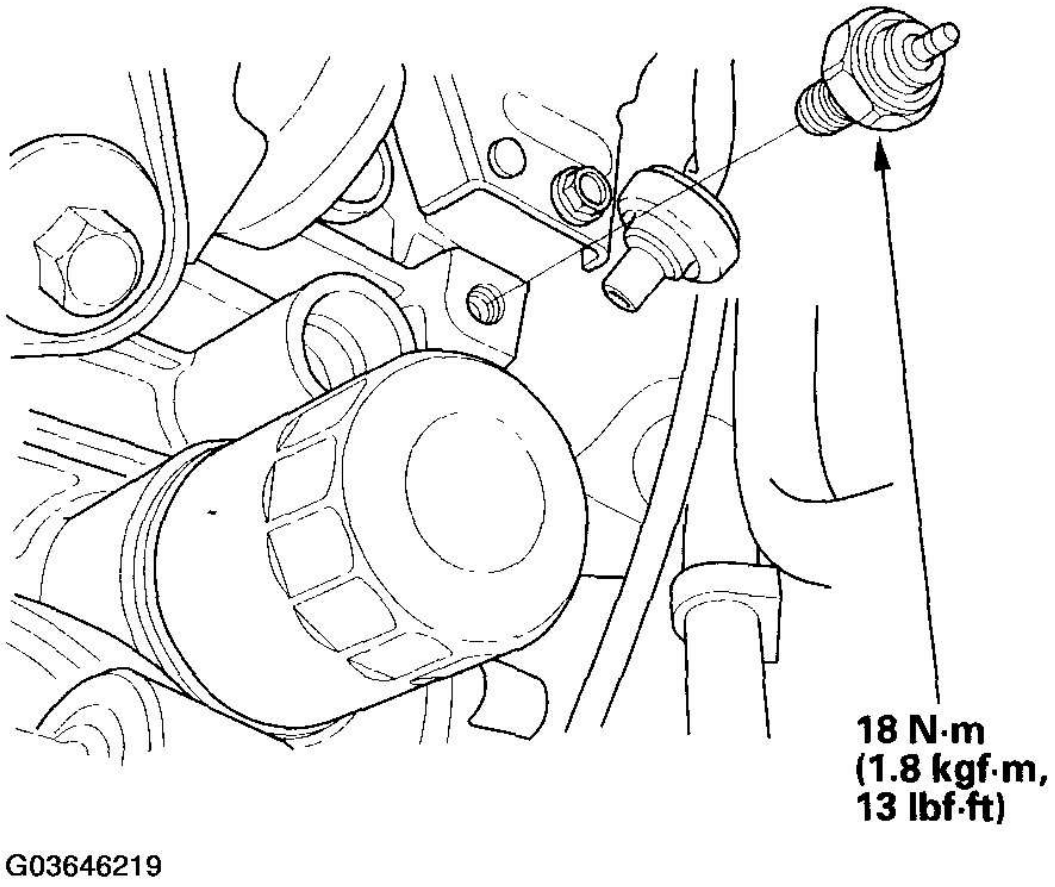


Fig. 4: Disconnecting Oil Pressure Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove all of the old liquid gasket from the switch and switch mounting hole.
3. Apply liquid gasket to the new oil pressure switch threads, then install the oil pressure switch.

NOTE: Using too much liquid gasket may cause liquid gasket to enter the oil passage or the end of the new oil pressure switch.

OIL PRESSURE TEST

If the oil pressure warning light stays on with the engine running, check the engine oil level. If the oil level is correct:

1. Remove the engine oil pressure switch, and install an oil pressure gauge (A).

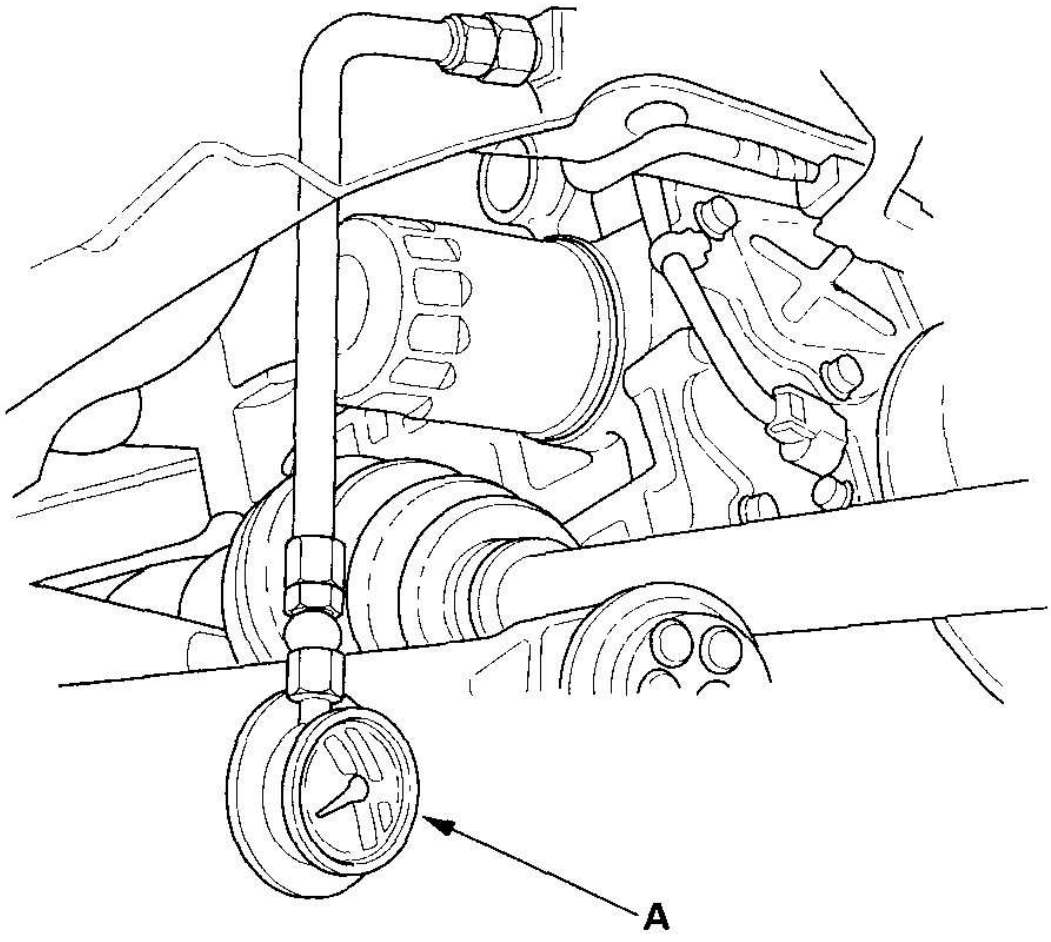


Fig. 5: Installing Oil Pressure Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Start the engine. Shut it off immediately if the gauge registers no oil pressure. Repair the problem before continuing.

3. Allow the engine to reach operating temperature (fan comes on at least twice). The pressure should be:

   Engine Oil Temperature: 176 °F (80 °C)

   Engine Oil Pressure:

   At Idle: 70 kPa (0.7 kgf/cm^2 , 10 psi) min.

   At 3,000 rpm: 300 kPa (3.1 kgf/cm^2 , 44 psi) min.

4. If the oil pressure is NOT within specifications, inspect these items:
   - Check the oil screen for clogging.
   - Inspect the oil pump (see **OIL PUMP INSPECTION**).

ENGINE OIL REPLACEMENT

1. Warm up the engine.
2. Remove the drain bolt (A), and drain the engine oil.

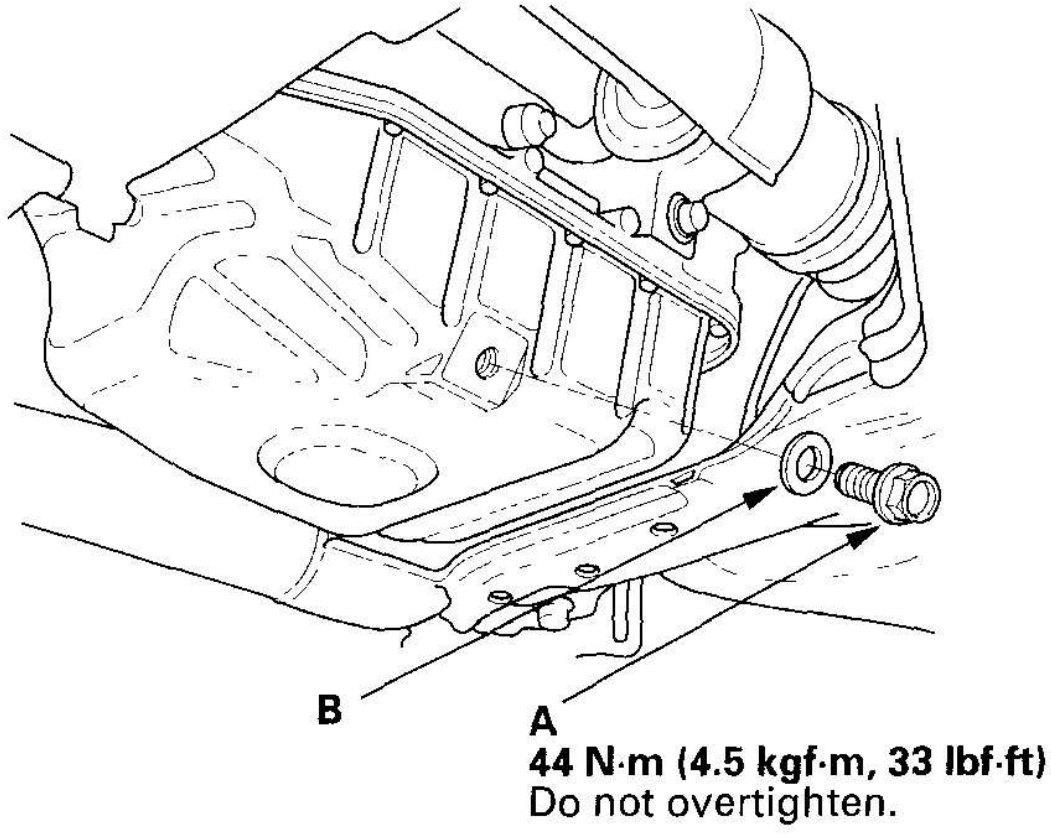


Fig. 6: Removing Drain Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Reinstall the drain bolt with a new washer (B).
4. Refill with the recommended oil (see **SERVICE INFORMATION**).

Capacity

At Oil Change:

4.0 L (4.2 US qt)

At Oil Change Including Filter:

4.2 L (4.4 US qt)

After Engine Overhaul:

5.3 L (5.6 US qt)

5. Run the engine for more than 3 minutes, then check for oil leakage.
6. '06-07 models:Reset the engine oil life indicator (see **RESETTING THE MAINTENANCE INFORMATION DISPLAY**).

ENGINE OIL FILTER REPLACEMENT

Special Tools Required

Oil filter wrench 07HAA-PJ70100

1. Remove the oil filter with the special tool.
2. Inspect the threads (A) and rubber seal (B) on the new filter. Clean the seat on the engine block, then apply a light coat of new engine oil to the filter rubber seal. Use only filters with a built-in bypass system.

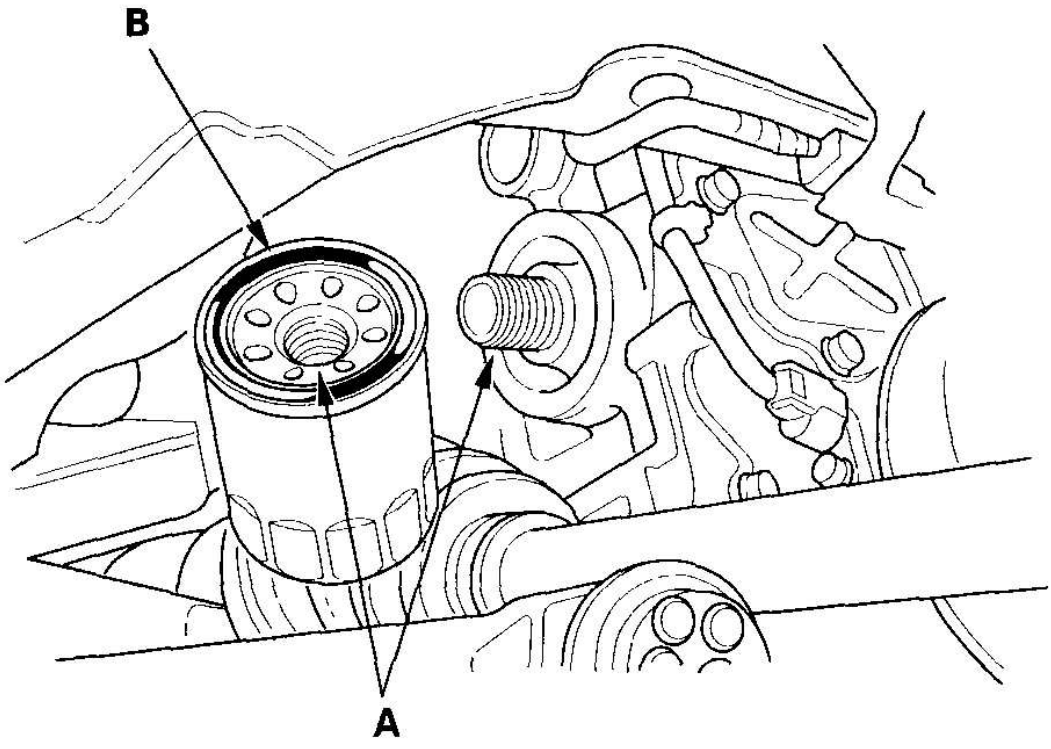


Fig. 7: Inspecting Threads And Rubber Seal On Filter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the oil filter by hand.
4. After the rubber seal seats, tighten the oil filter clockwise with the special tool.

   Tighten: 3/4 Turn Clockwise

   Tightening torque:12 N.m (1.2 kgf.m, 8.7 lbf.ft)

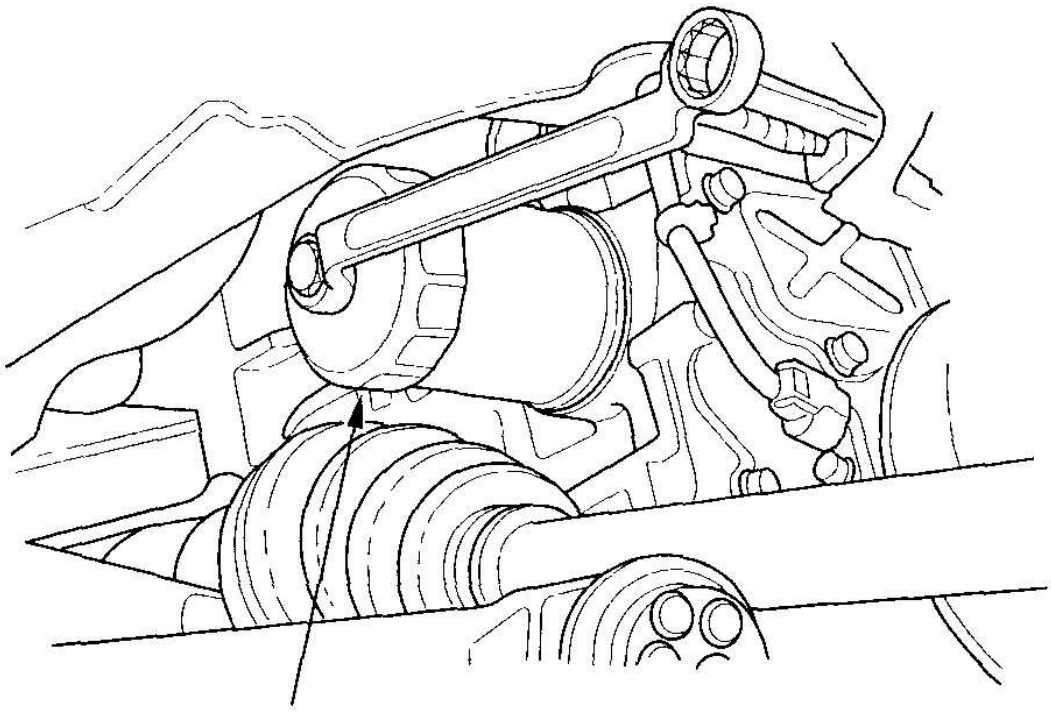
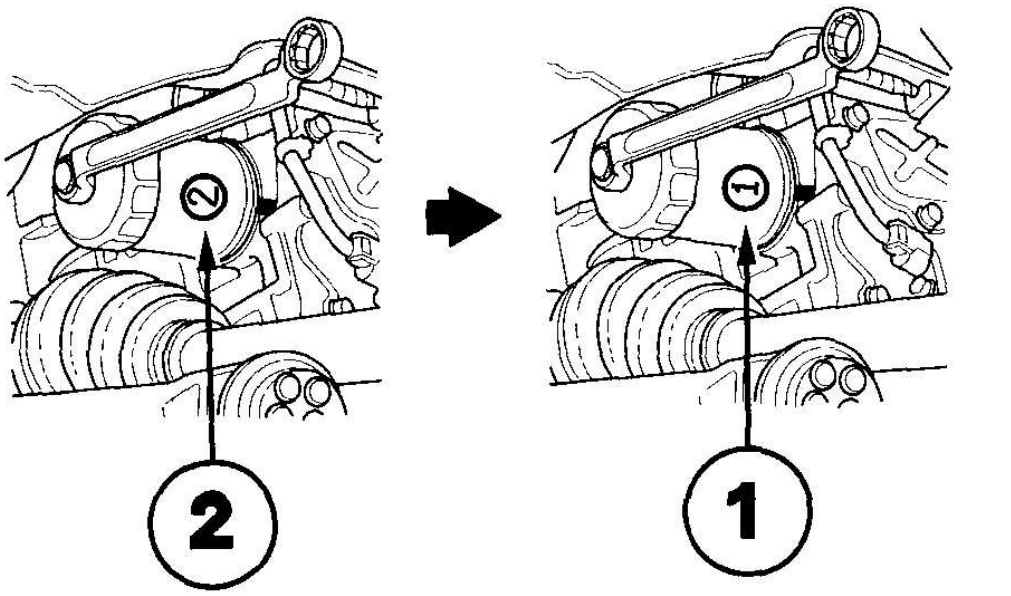


Fig. 8: Tightening Oil Filter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If four numbers or triangle marks (1 to 4 or triangle symbols) are printed around the outside of the filter, use the following procedure to tighten the filter.
   - Spin the filter on until its seal lightly seats against the block, and note which number or mark is at the bottom.
   - Tighten the filter by turning it clockwise three numbers or marks from the one you noted. For example, if number 2 is at the bottom when the seal is seated, tighten the filter until the number 1 comes around the bottom.



Number or Mark when rubber seal is seated	1 or ▼	2 or ▼▼	3 or ▼▼▼	4 or ▼▼▼▼
Number or Mark after tightening	4 or ▼▼▼▼	1 or ▼	2 or ▼▼	3 or ▼▼▼

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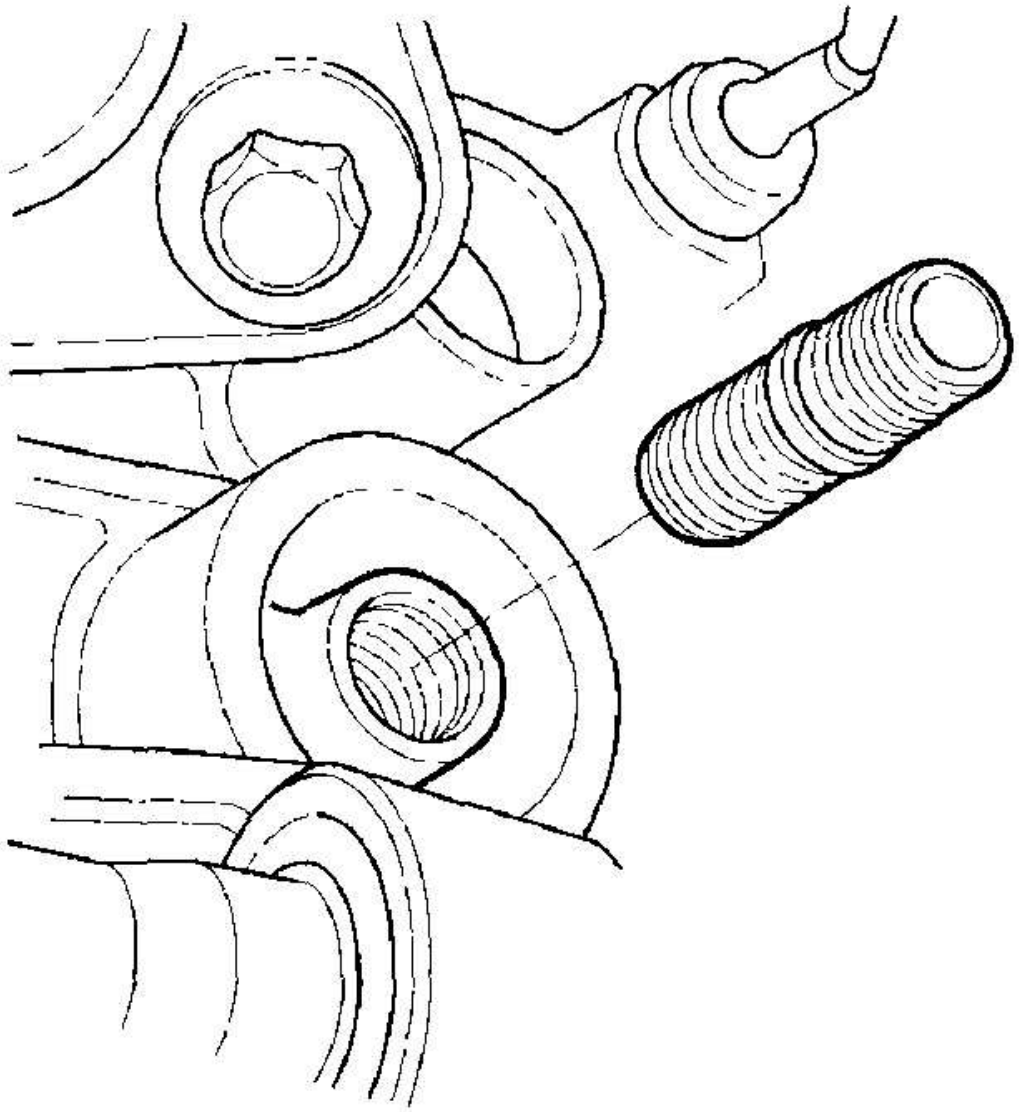
Fig. 9: Tightening Filter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. After installation, fill the engine with oil up to the specified level, run the engine for more than 3 minutes, then check for oil leakage.

7. '06 -07 models: Reset the engine oil life indicator (see **RESETTING THE MAINTENANCE INFORMATION DISPLAY**).

OIL FILTER FEED PIPE REPLACEMENT

1. Remove the oil filter (see **ENGINE OIL FILTER REPLACEMENT**).
2. Remove the oil filter feed pipe.



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Fig. 10: Removing Oil Filter Feed Pipe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the two 20 x 1.5 mm nuts (A) onto the new oil filter feed pipe. Hold one nut with a wrench, then tighten the other nut.

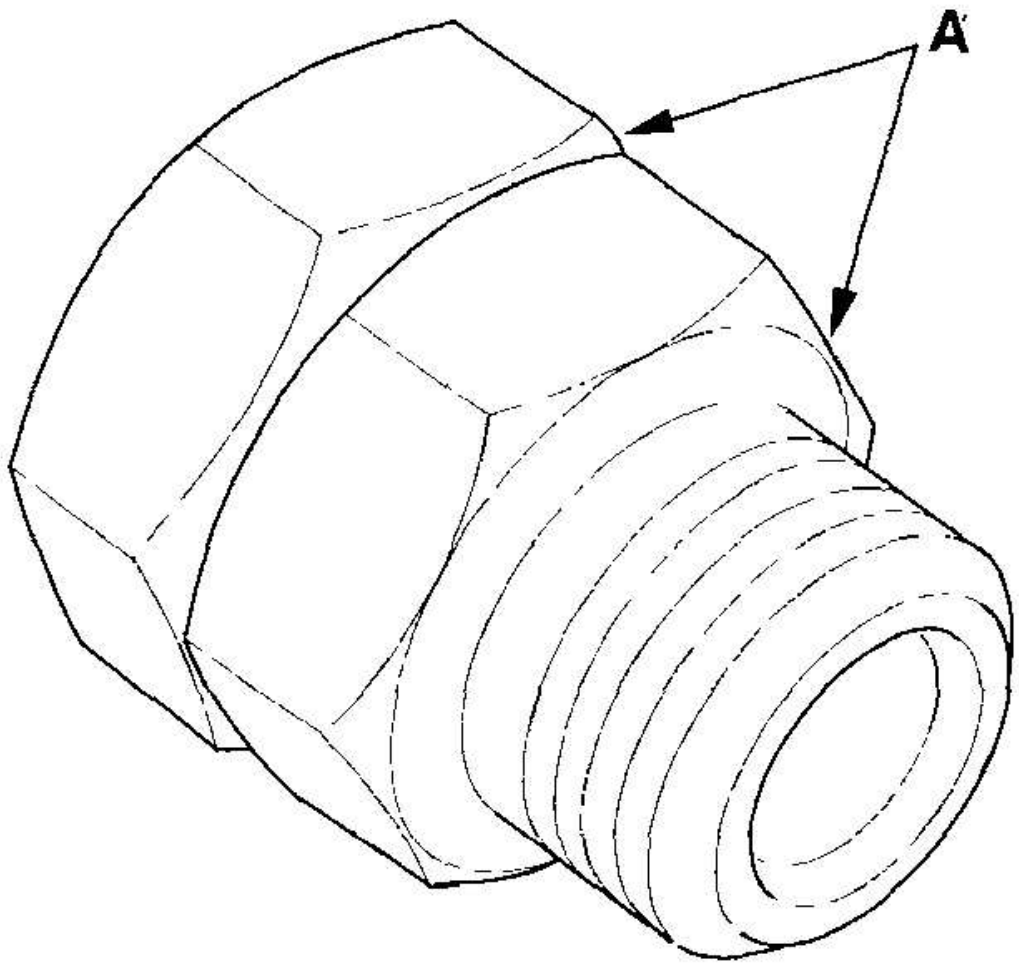


Fig. 11: Installing Nuts Onto Oil Filter Feed Pipe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Tighten the oil filter feed pipe to the block to 49 N.m (5.0 kgf.m, 36 lbf.ft), then remove the nuts from the oil filter feed pipe.

OIL PUMP OVERHAUL

EXPLODED VIEW

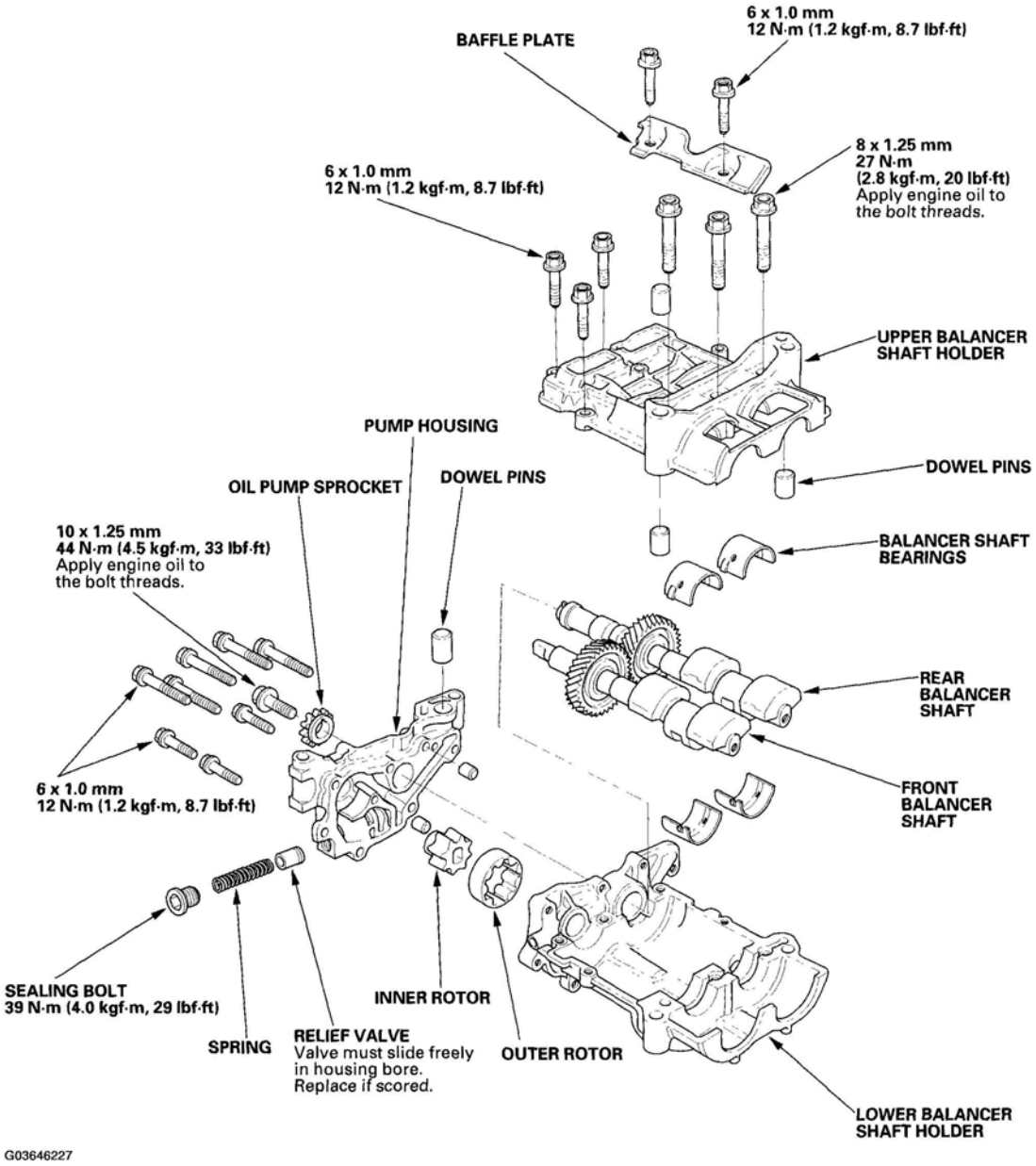
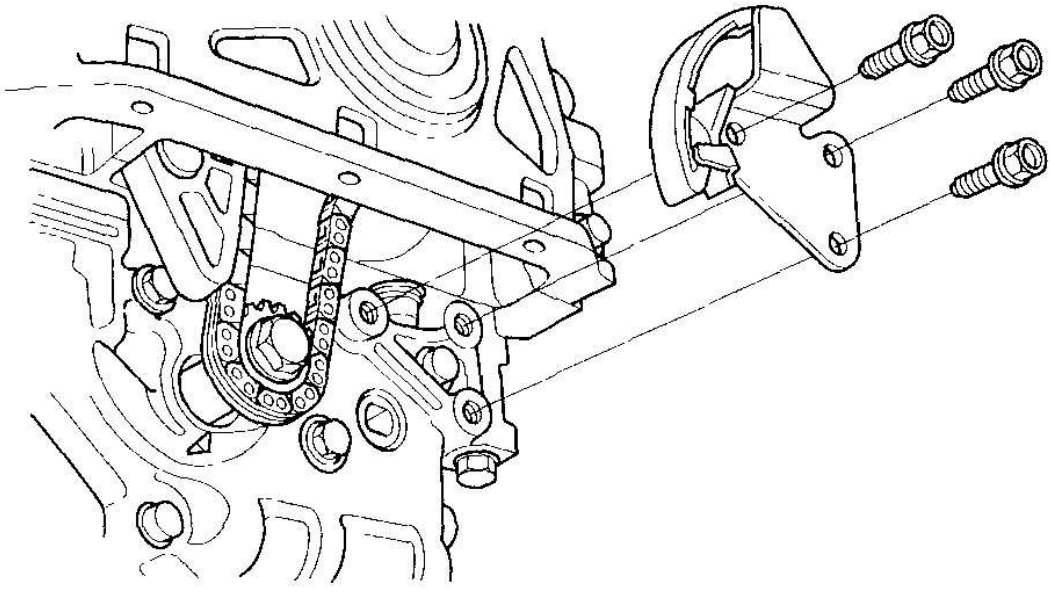


Fig. 12: Exploded View Of Oil Pump
Courtesy of AMERICAN HONDA MOTOR CO., INC.

OIL PUMP REMOVAL

1. Turn the crankshaft pulley so its top dead center (TDC) mark lines up with the pointer (see step 1 on **INSTALLATION**).
2. Remove the oil pan (see **OIL PAN REMOVAL**).

3. Remove and discard the oil pump chain tensioner.



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Fig. 13: Discarding Oil Pump Chain Tensioner
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. To hold the rear balancer shaft, insert a 6 mm pin driver (A) into the maintenance hole in the lower balancer shaft holder and through the rear balancer shaft.

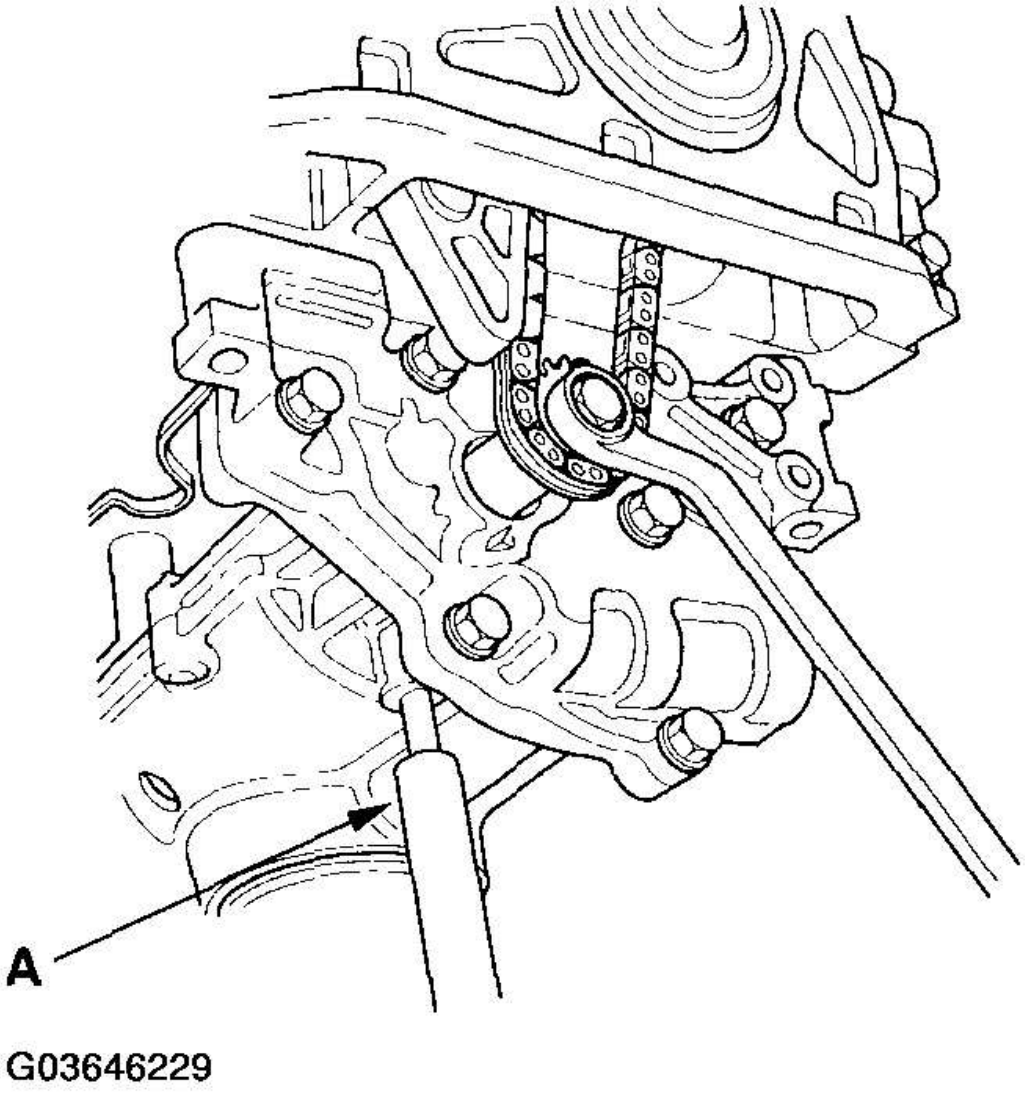


Fig. 14: Inserting Pin Driver Into Maintenance Hole In Lower Balancer Shaft Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Loosen the oil pump sprocket mounting bolt.
6. Remove the oil pump sprocket (A), then remove the oil pump (B).

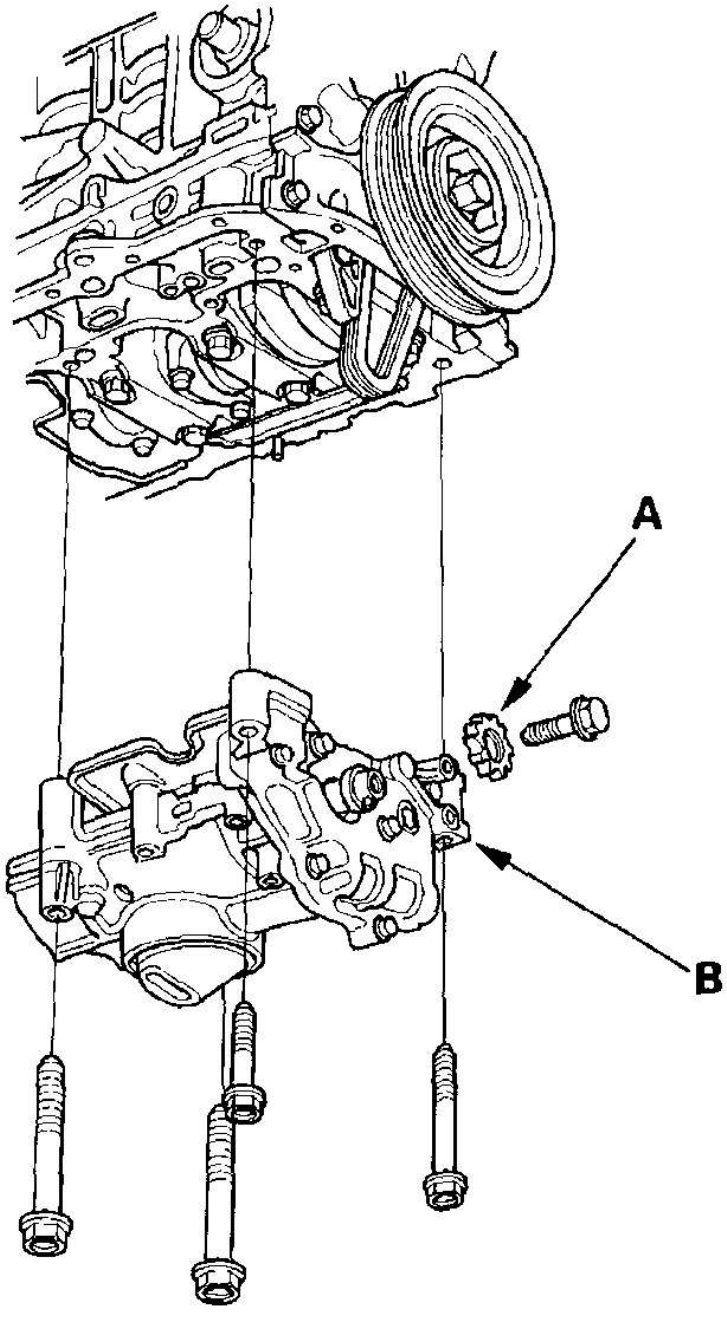
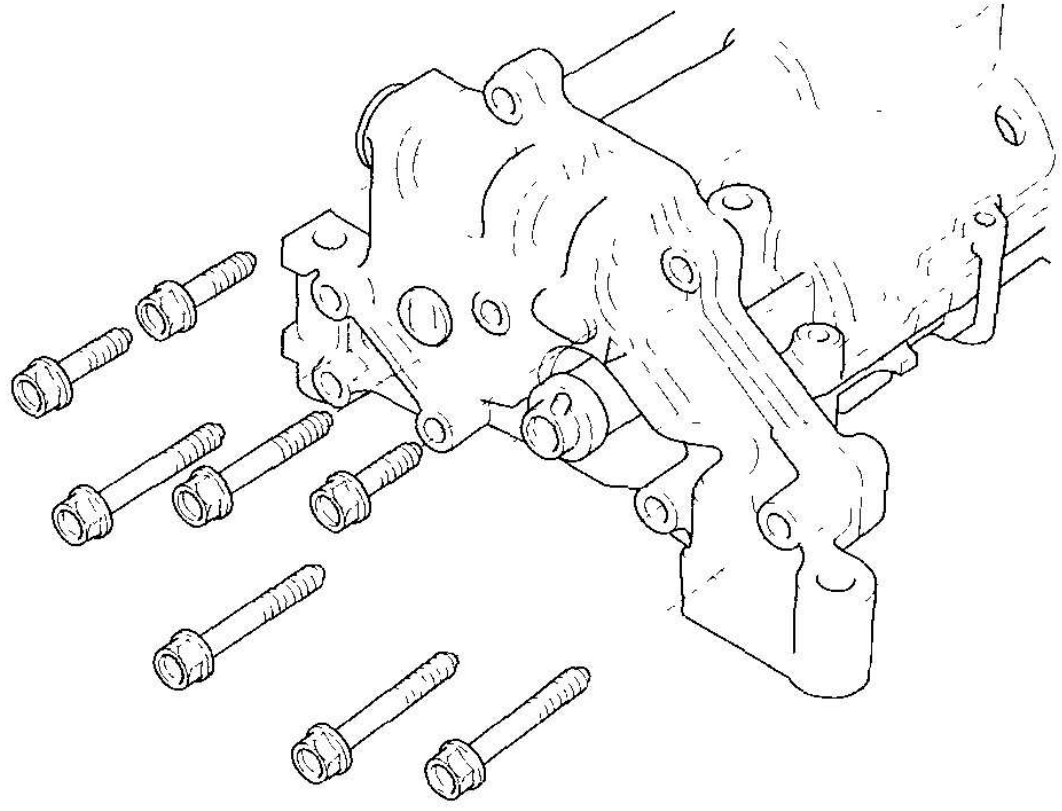


Fig. 15: Removing Oil Pump Sprocket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

OIL PUMP INSPECTION

1. Remove the pump housing.



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Fig. 16: Removing Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check the inner-to-outer rotor radial clearance between the inner rotor (A) and outer rotor (B). If the inner-to-outer rotor radial clearance exceeds the service limit, replace the oil pump.

   Inner Rotor-to-Outer Rotor Radial Clearance

   Standard (New): 0.06-0.16 mm (0.002-0.006 in.)

   Service Limit: 0.20 mm (0.008 in.)

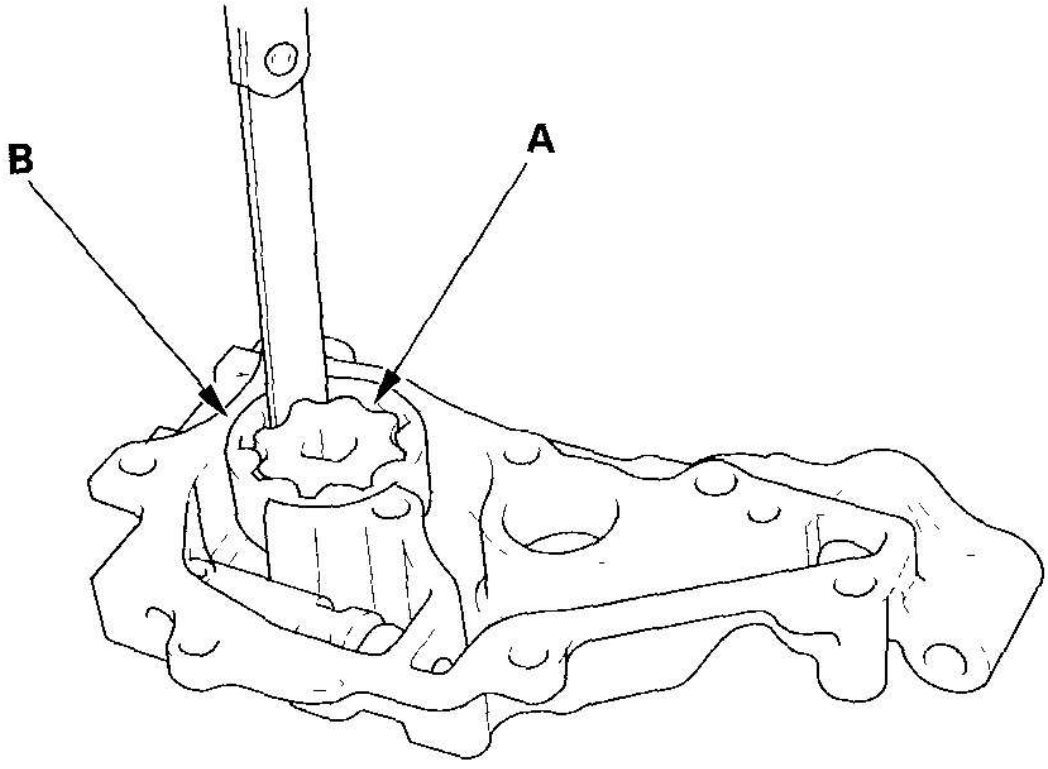


Fig. 17: Checking Inner-To-Outer Rotor Radial Clearance Between Inner Rotor And Outer Rotor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check the housing-to-rotor axial clearance between the rotor (A) and pump housing (B). If the housing-to-rotor axial clearance exceeds the service limit, replace the oil pump.

   Housing-to-Rotor Axial Clearance

   Standard (New): 0.035---0.070 mm

   (0.0014---0.0028 in.)

   Service Limit: 0.12 mm (0.005 in.)

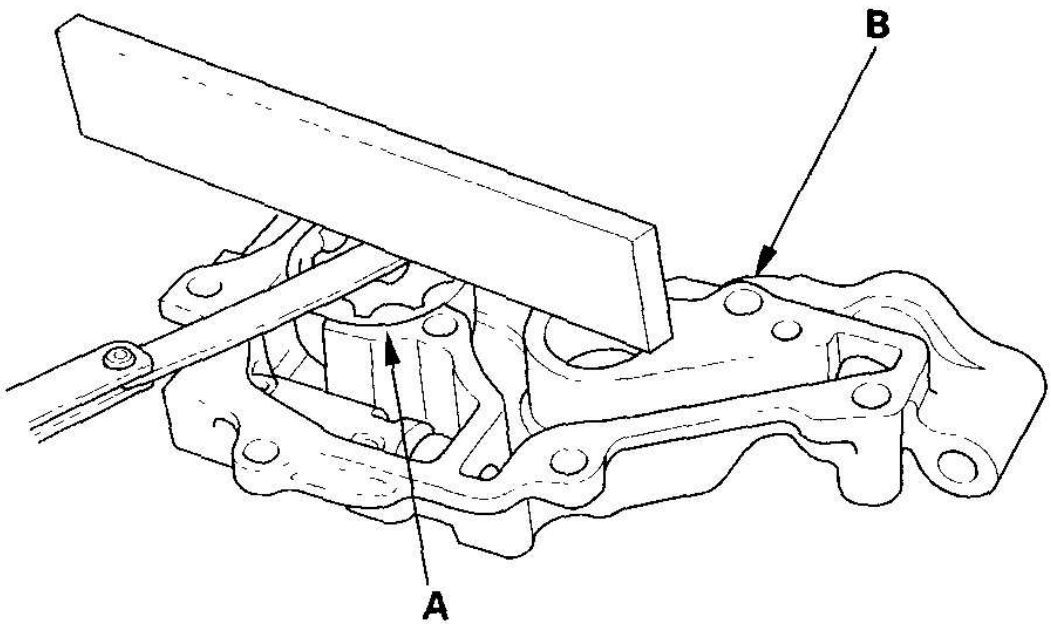


Fig. 18: Checking Housing-To-Rotor Axial Clearance Between Rotor And Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check the housing-to-outer rotor radial clearance between the outer rotor (A) and pump housing (B). If the housing-to-outer rotor radial clearance exceeds the service limit, replace the oil pump.

   Housing-to-Outer Rotor Radial Clearance

   Standard (New): 0.15---0.21 mm (0.006---0.008 in.)

   Service Limit: 0.23 mm (0.009 in.)

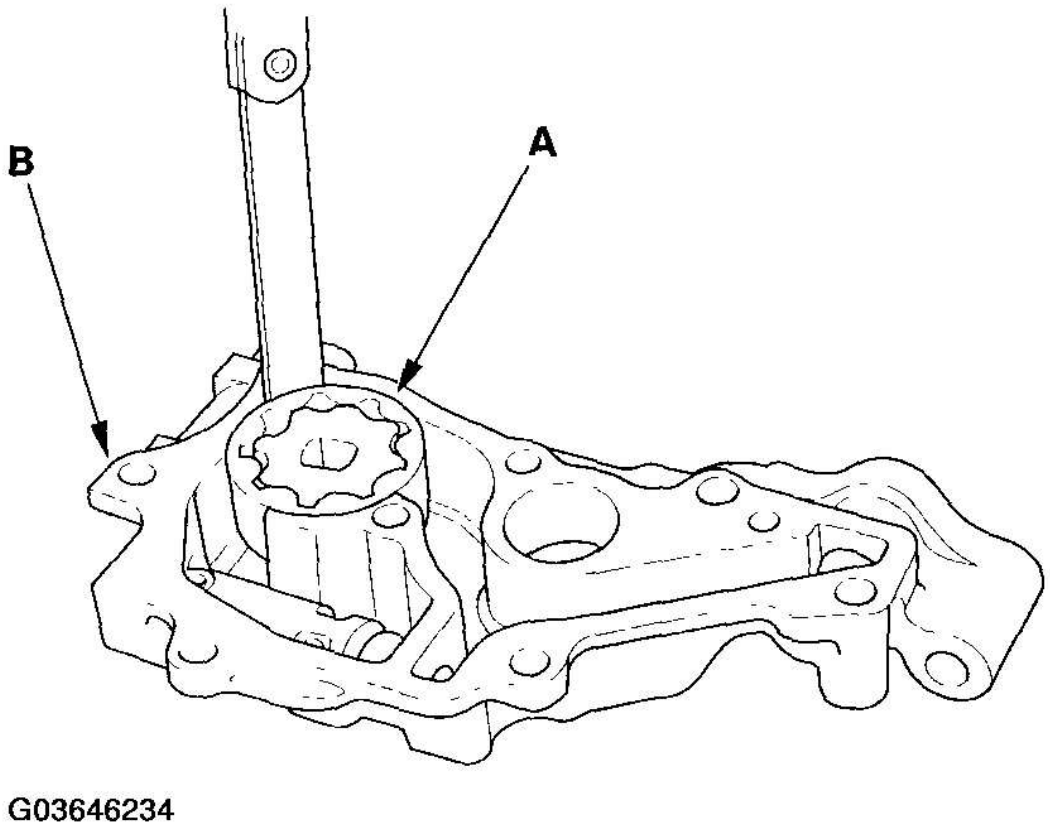


Fig. 19: Checking Housing-To-Outer Rotor Radial Clearance Between Outer Rotor And Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Inspect both rotors and the pump housing for scoring or other damage. Replace parts if necessary.

BALANCER SHAFT INSPECTION

1. Seat the balancer shaft by pushing it away from the oil pump sprocket end of the oil pump.
2. Zero the dial indicator against the end of the balancer shaft, then push the balancer shaft back and forth and read the end play.

Balancer Shaft End Play

Front Balancer Shaft:

Standard (New): 0.063---0.108 mm

(0.0025---0.0043 in.)

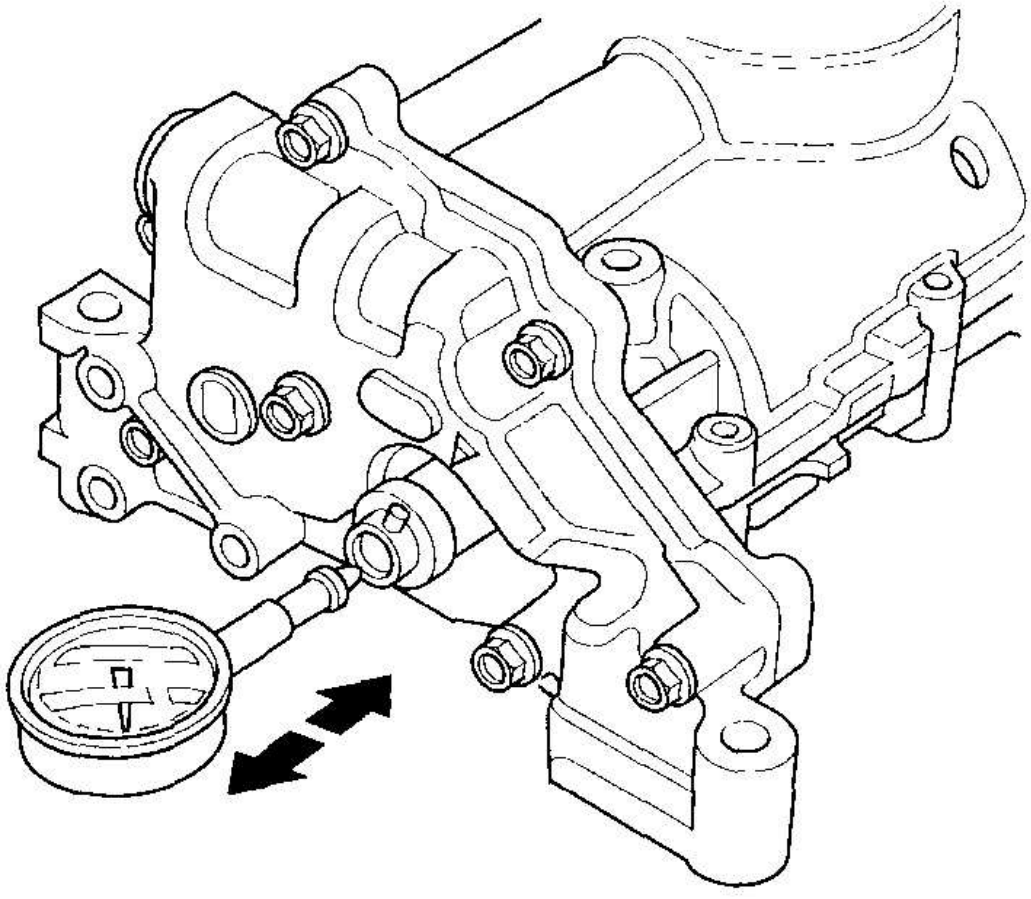
Service Limit: 0.14 mm (0.0055 in.)

Rear Balancer Shaft:

Standard (New): 0.063---0.108 mm

(0.0025---0.0043 in.)

Service Limit: 0.14 mm (0.0055 in.)



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Fig. 20: Pushing Balancer Shaft Back And Forth
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the baffle plate (A) and upper balancer shaft holder (with bearings) (B), then remove the front balancer shaft (C) and rear balancer shaft (D).

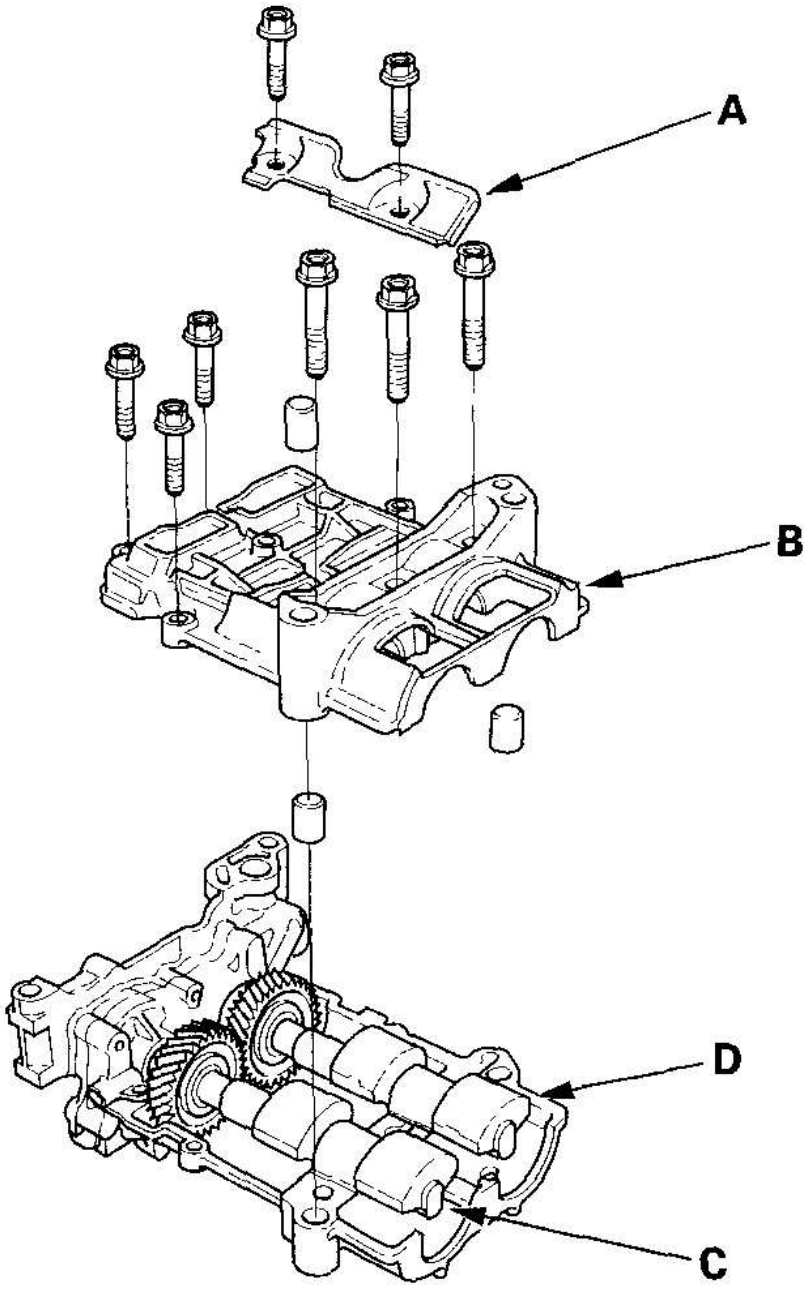


Fig. 21: Removing Baffle Plate (A) And Upper Balancer Shaft Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the inner diameter of the No. 1 bearing for the front balancer shaft hole and the rear balancer shaft hole.

   Bearing Inner Diameter

   Front:

   Standard (New): 20.000---20.020 mm

   (0.7874---0.7882 in.)

   Service Limit: 20.03 mm (0.789 in.)

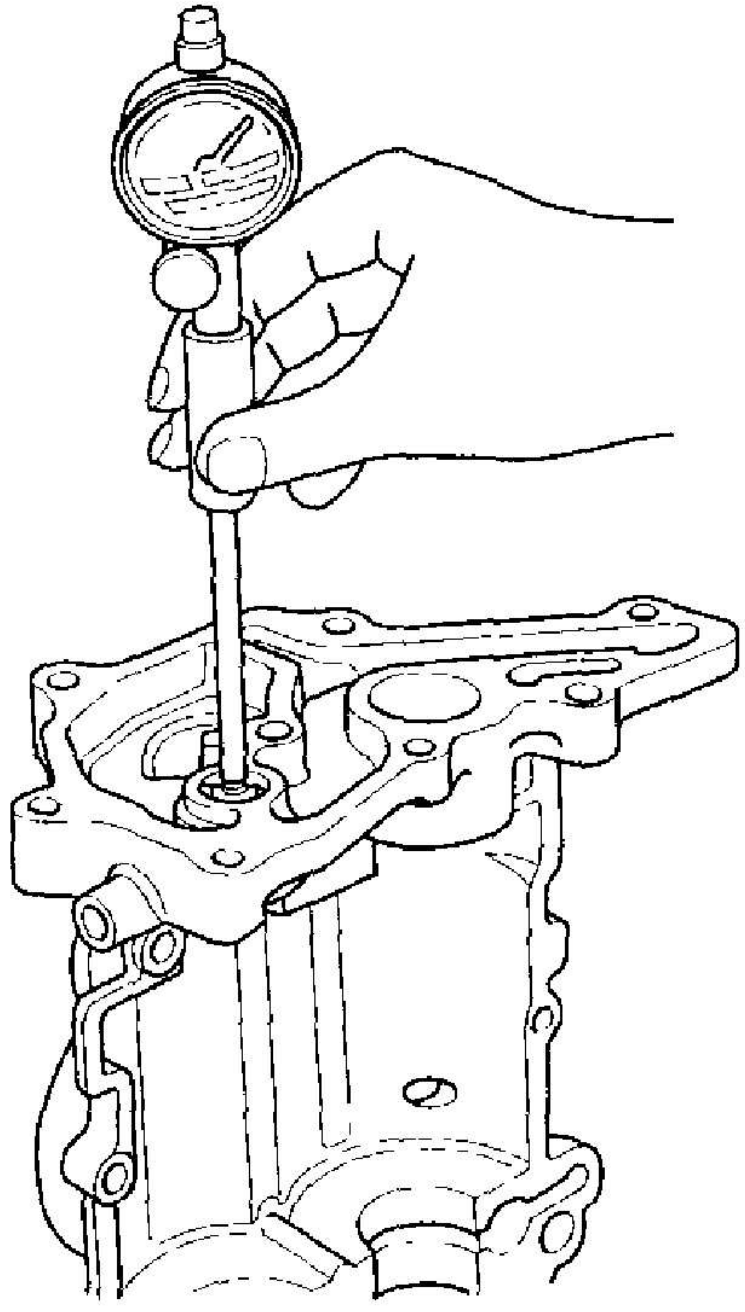
   Rear:

   Standard (New): 24.000---24.020 mm

   (0.9449---0.9457 in.)

   Service Limit: 24.03 mm (0.946 in.)

   Front:



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Fig. 22: Measuring Inner Diameter Of Bearing For Front Balancer Shaft Hole

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Rear:

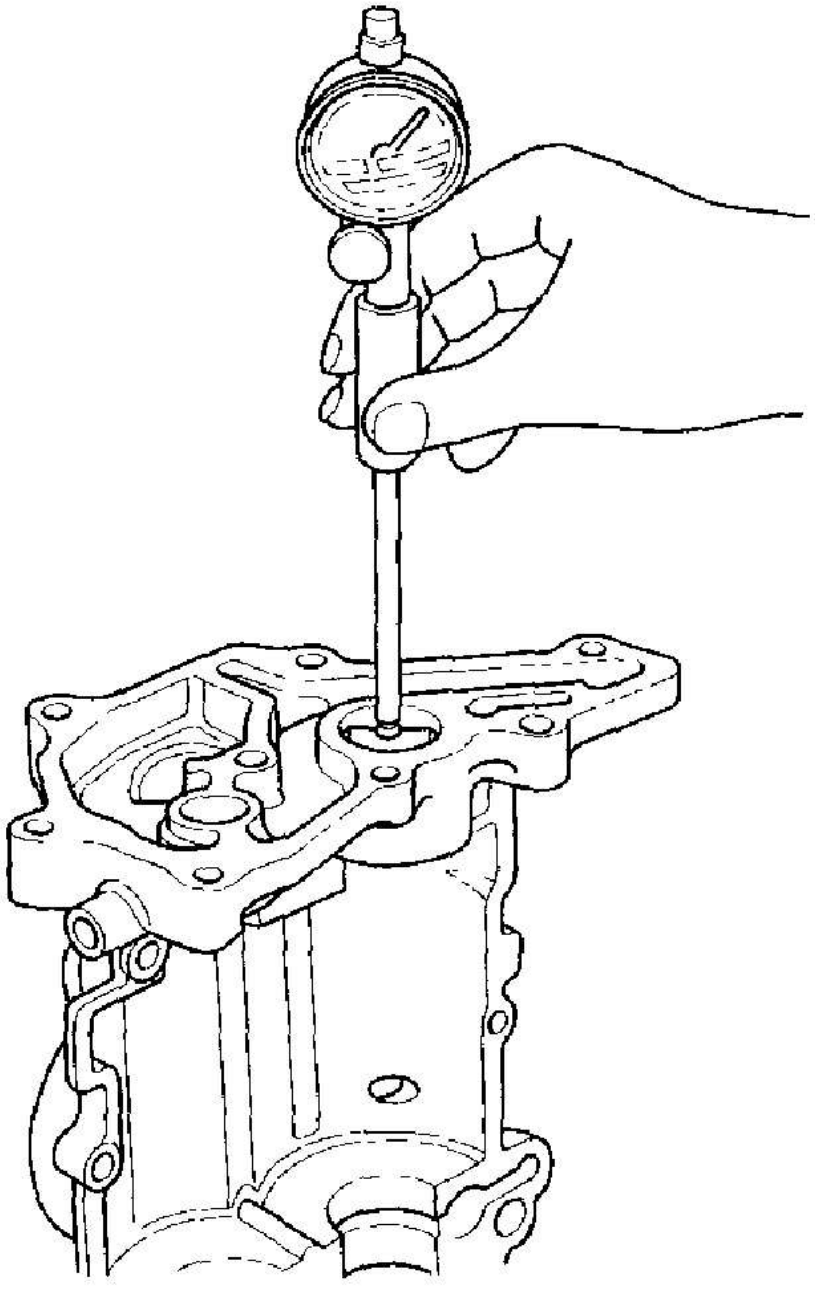


Fig. 23: Measuring Inner Diameter Of Bearing For Rear Balancer Shaft

Hole
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Measure the diameters of the No. 1 journals on the front balancer shaft and rear balancer shaft.

Journal Diameter

Front:

Standard (New): 19.938---19.950 mm

(0.7850---0.7854 in.)

Service Limit: 19.92 mm (0.784 in.)

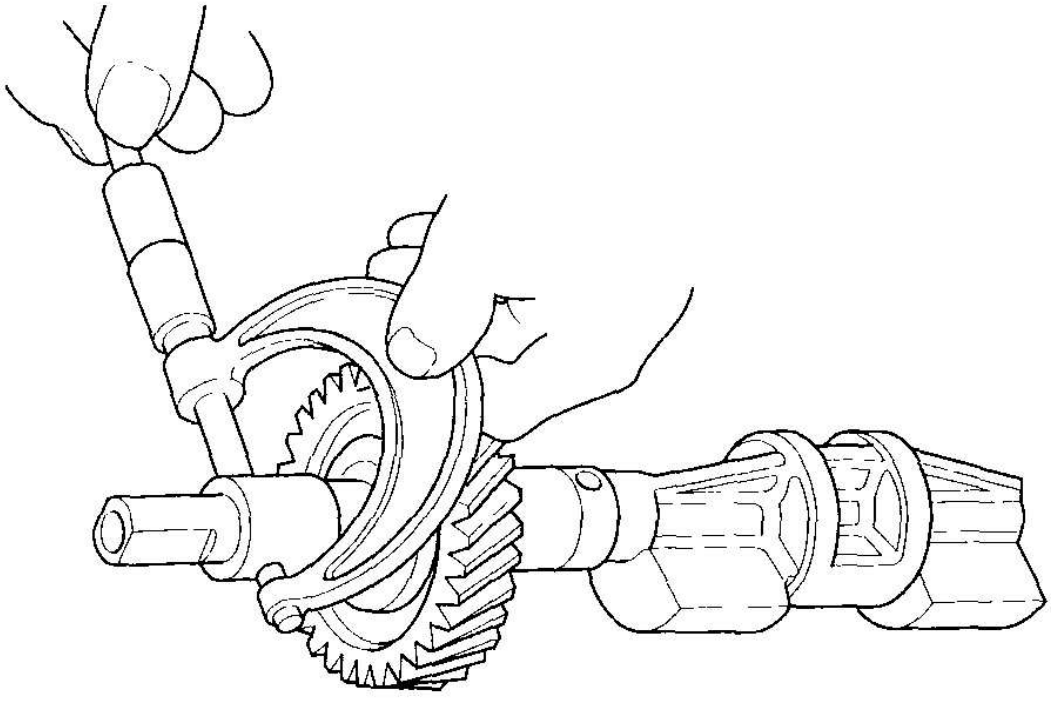
Rear:

Standard (New): 23.938---23.950 mm

(0.9424---0.9429 in.)

Service Limit: 23.92 mm (0.942 in.)

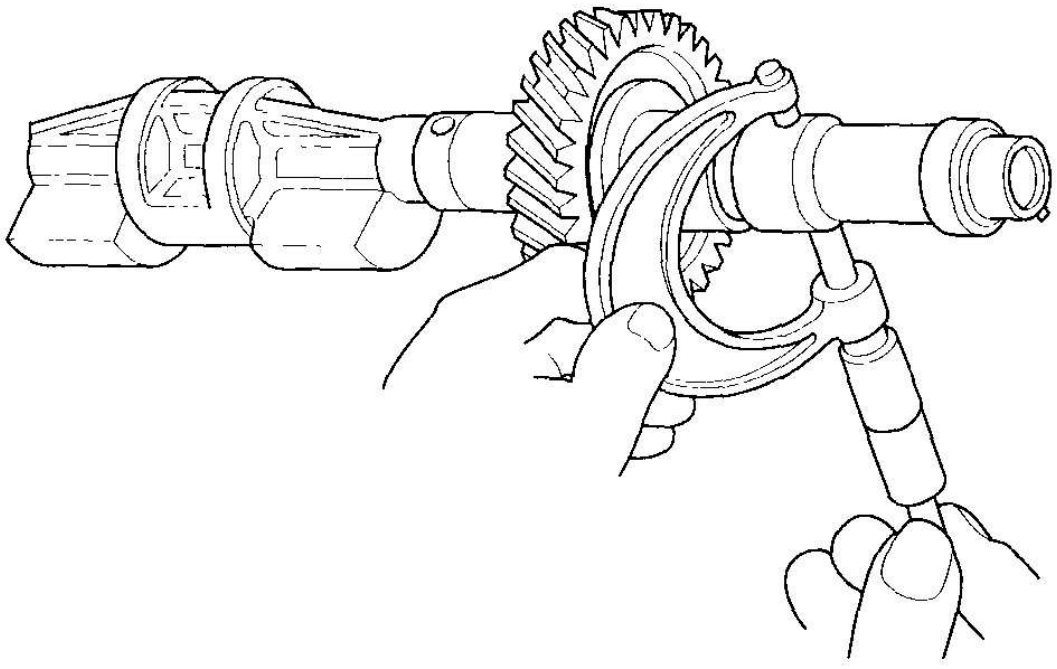
Front:



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Fig. 24: Measuring Diameters Of No. 1 Journals On Front Balancer Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Rear:



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Fig. 25: Measuring Diameters Of No. 1 Journals On Rear Balancer Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Clean both balancer shaft No. 2 journals and bearing halves with a clean shop towel.
7. Place one strip of plastigage across each No. 2 journal.
8. Reinstall the bearings and upper balancer shaft holder, then torque the bolts.

NOTE: Do not rotate the balancer shafts during inspection.

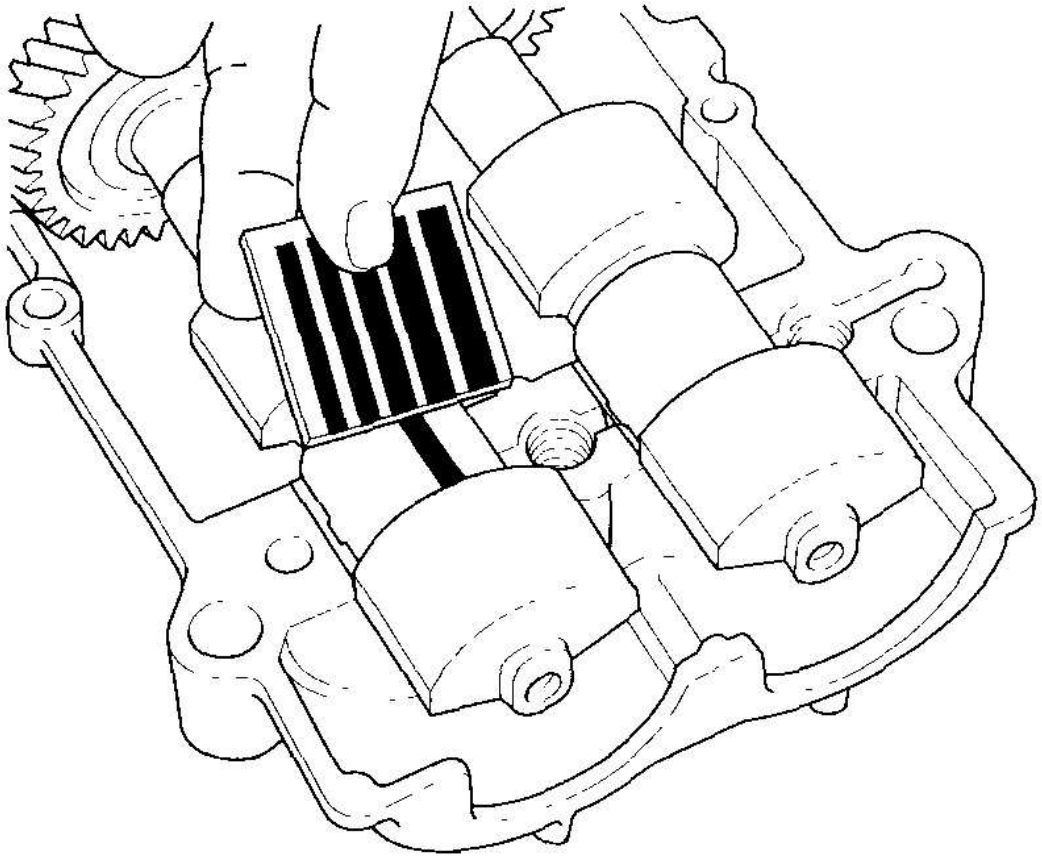
9. Remove the upper balancer shaft holder and bearings again, and measure the widest part with the plastigage. If the balancer shaft No. 2 journal oil clearance is out-of-tolerance, install new bearings, and recheck. If it is still out-of-tolerance, replace the balancer shafts.

No. 2 Journal Oil Clearance

Standard (New): 0.060---0.120 mm

(0.0024---0.0047 in.)

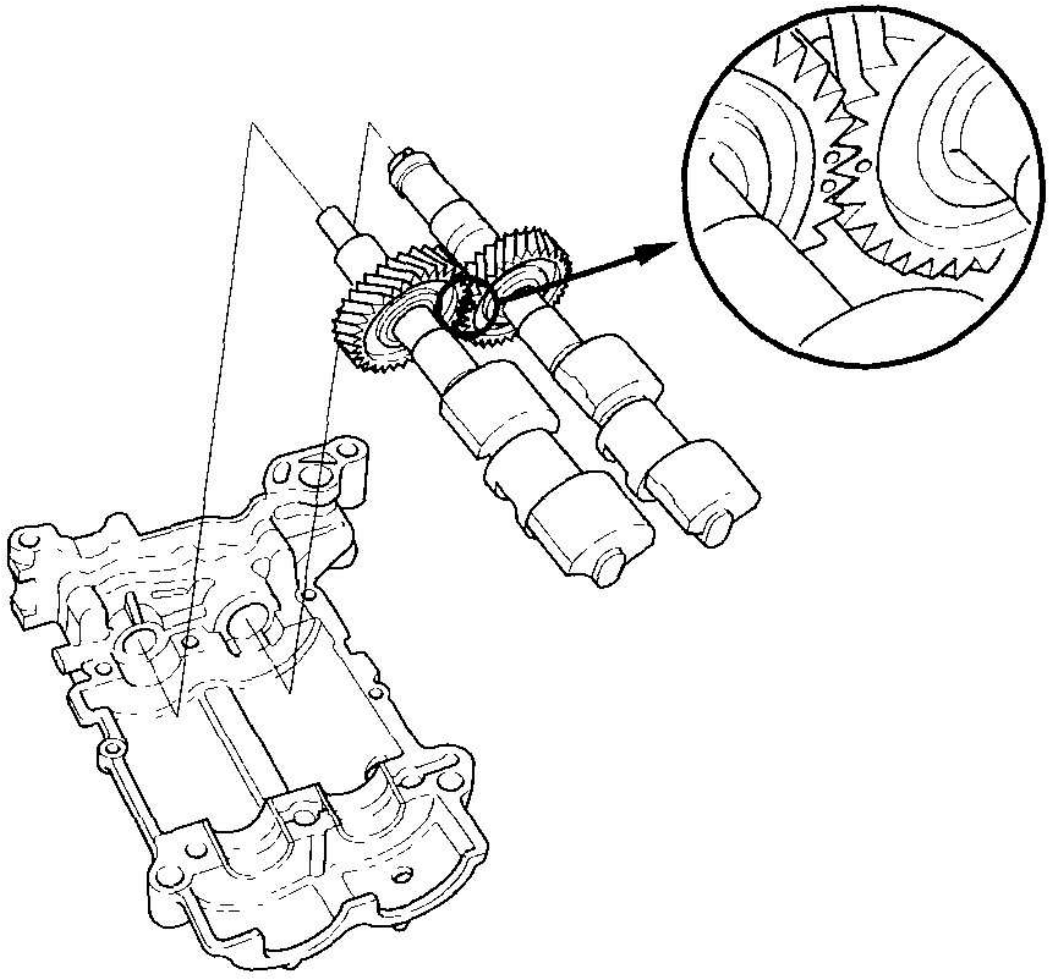
Service Limit: 0.15 mm (0.006 in.)



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Fig. 26: Measuring Widest Part With Plastigage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Align the punch mark on the rear balancer shaft in the center of the two punch marks on the front balancer shaft, then install the balancer shafts on the lower balancer shaft holder.



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Fig. 27: Aligning Punch Mark On Rear Balancer Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Apply new engine oil to the threads of the 8 mm bolts (A).

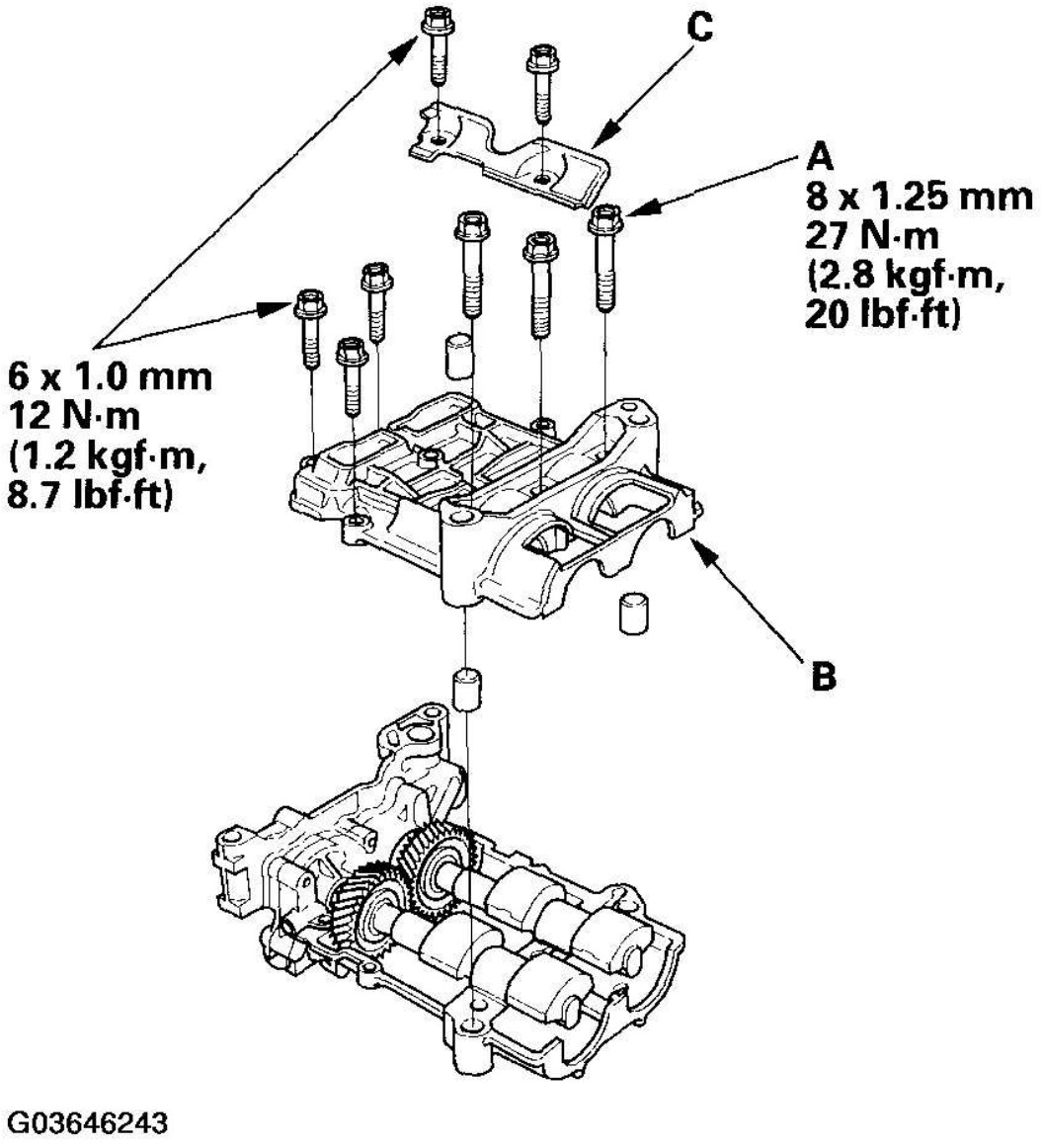


Fig. 28: Applying Engine Oil To Threads Of Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Install the upper balancer shaft holder (B) and baffle plate (C).
13. Install the pump housing.

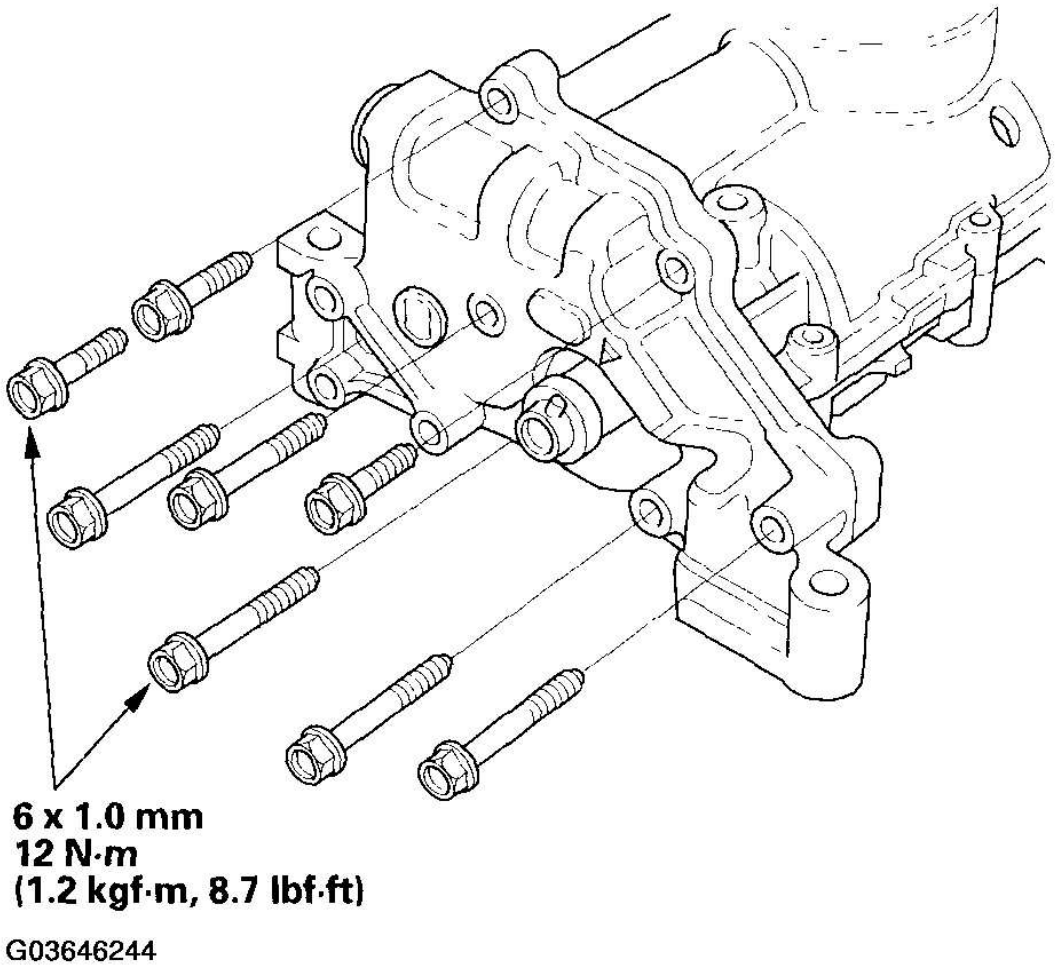


Fig. 29: Installing Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

OIL PUMP INSTALLATION

1. Make sure the No. 1 piston is at TDC (see step 1 on **INSTALLATION**).
2. Align the dowel pin (A) on the rear balancer shaft with the mark (B) on the oil pump.

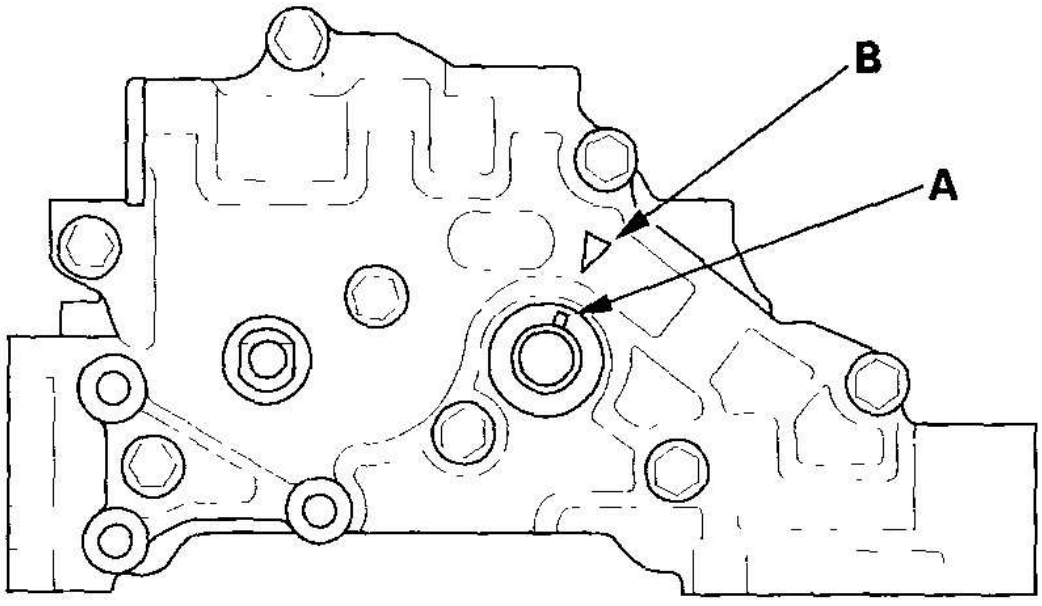


Fig. 30: Aligning Dowel Pin On Rear Balancer Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. To hold the rear balancer shaft, insert a 6 mm pin driver (A) into the maintenance hole in the lower balancer shaft holder and through the rear balancer shaft.

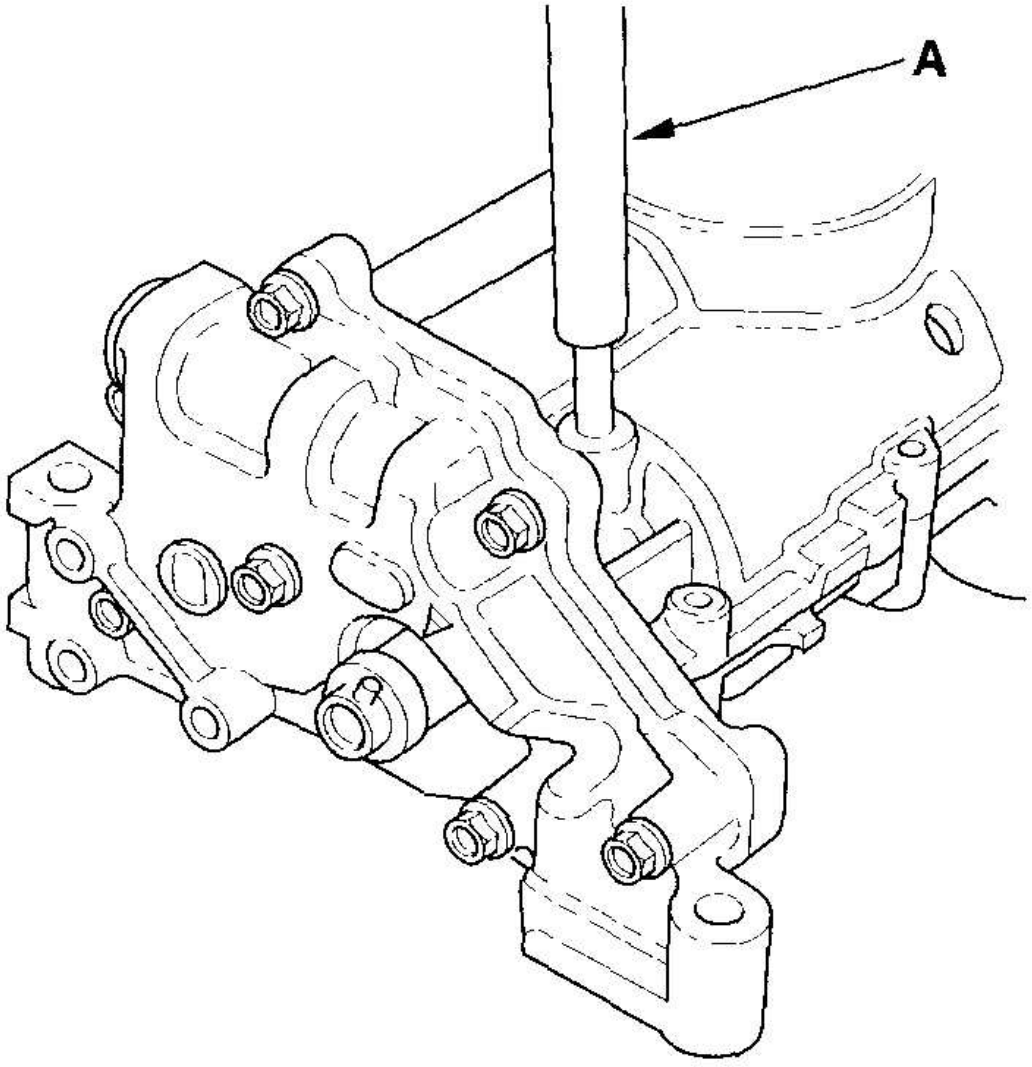


Fig. 31: Inserting Pin Driver Into Maintenance Hole
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Apply new engine oil to the threads of the oil pump sprocket mounting bolt (A).

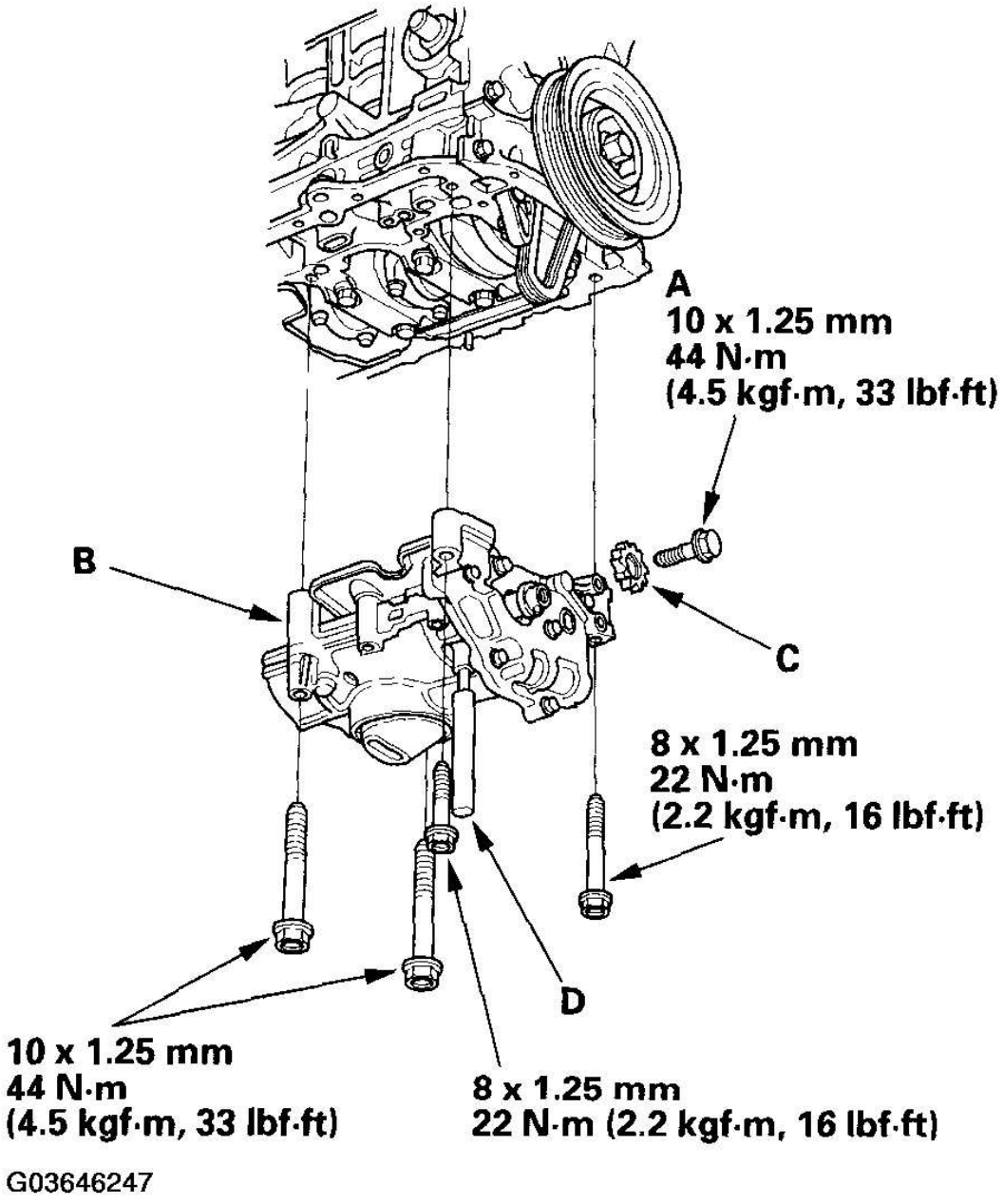


Fig. 32: Applying Engine Oil To Threads Of Oil Pump Sprocket Mounting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Loosely install the oil pump (B), then install the oil pump sprocket (C).

6. Remove the pin driver (D).
7. Tighten the oil pump mounting bolts.
8. Squeeze the new oil pump chain tensioner (A), then install the set clip (B) on it as shown below.

NOTE: The set clip is supplied with the oil pump chain tensioner.

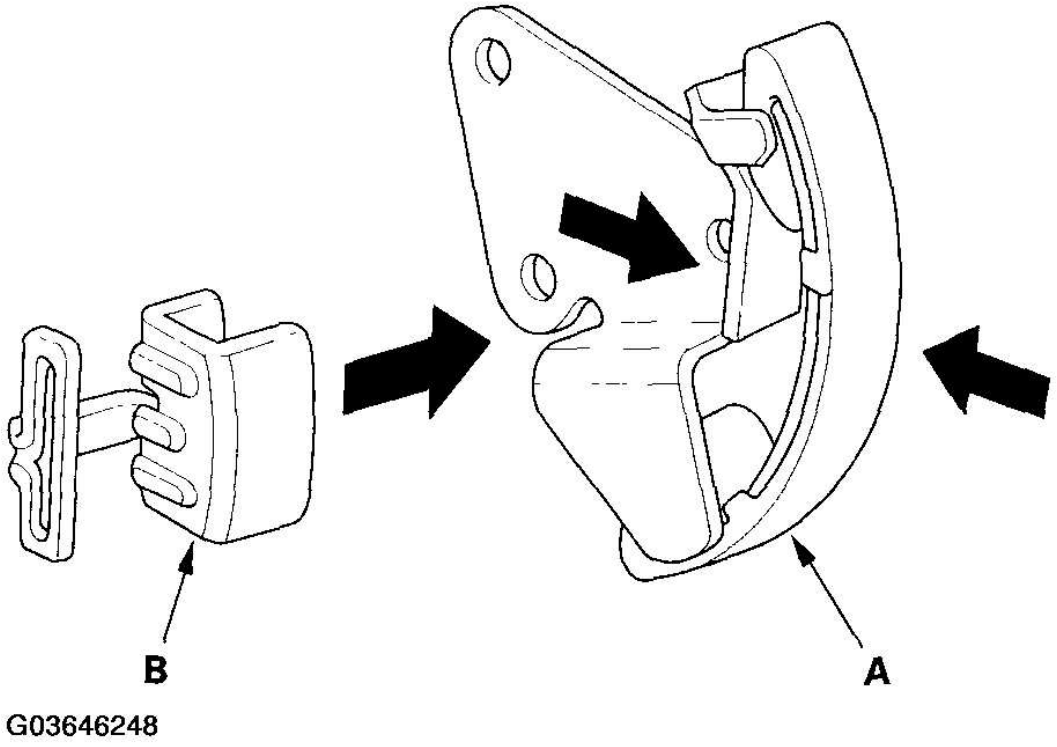


Fig. 33: Installing Set Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the new oil pump chain tensioner.

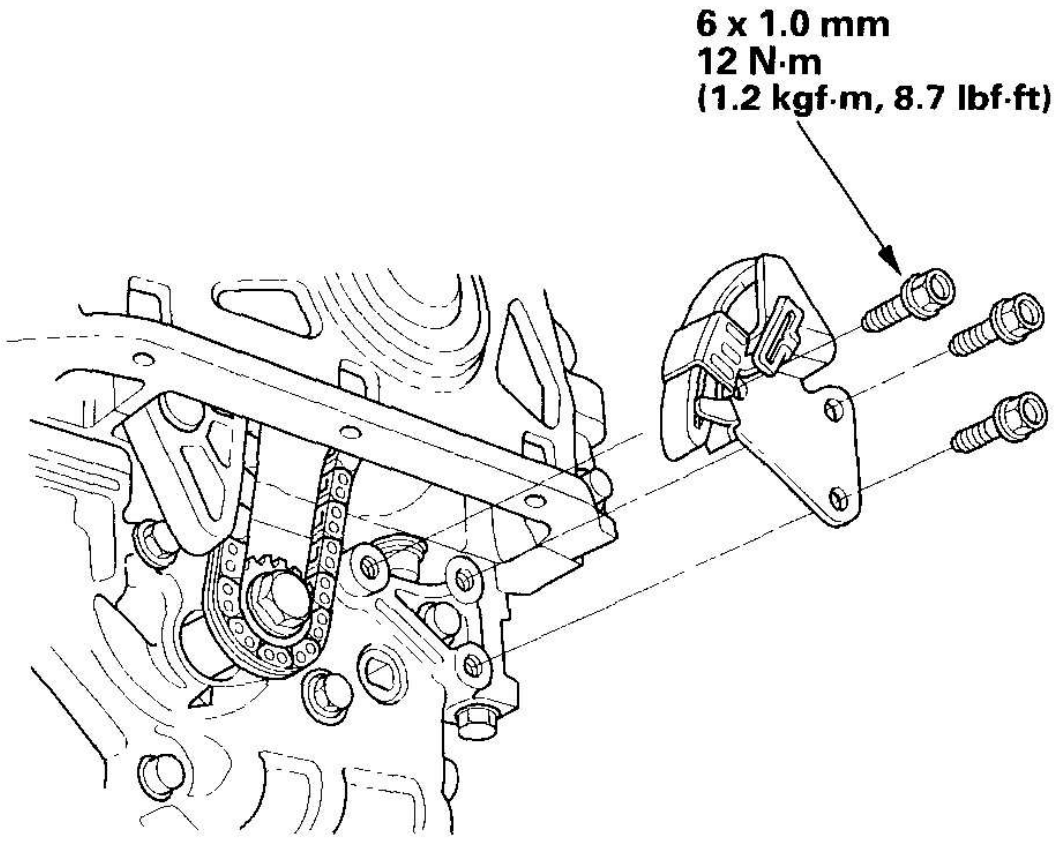


Fig. 34: Installing Oil Pump Chain Tensioner
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the set clip from the oil pump chain tensioner.

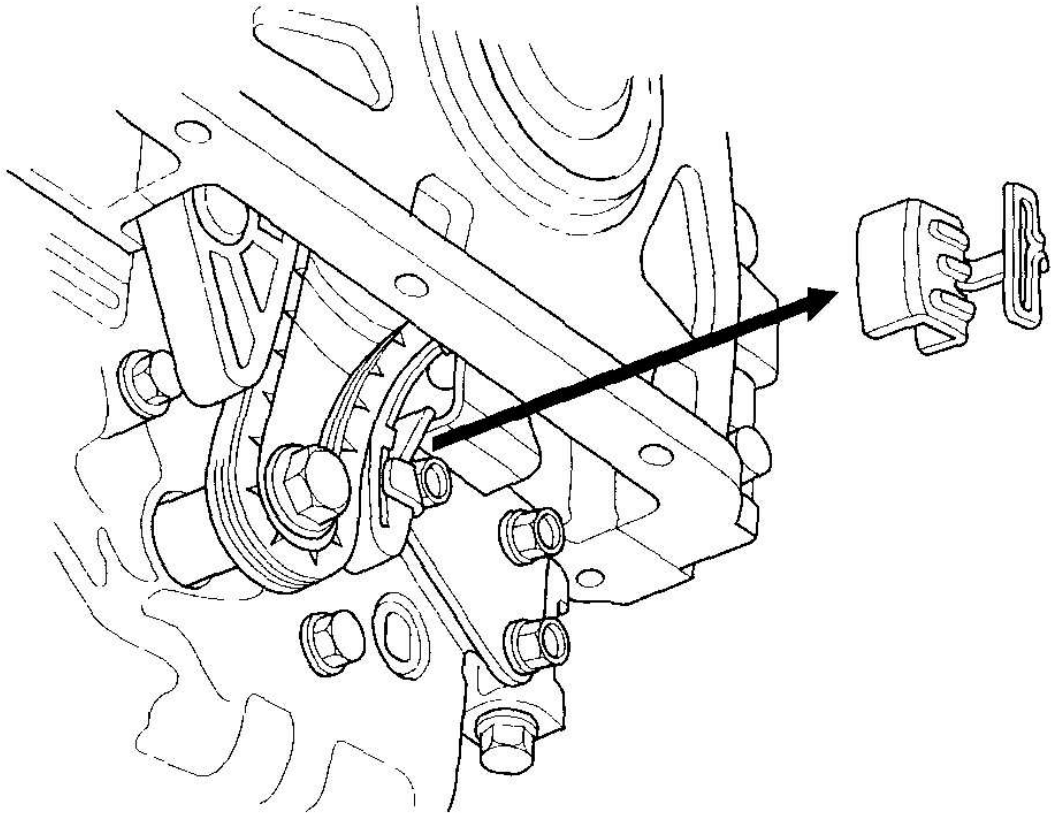


Fig. 35: Removing Set Clip From Oil Pump Chain Tensioner
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the oil pan (see **OIL PAN INSTALLATION**).

2003-07 ENGINE

Engine Mount Control System - Accord

COMPONENT LOCATION INDEX

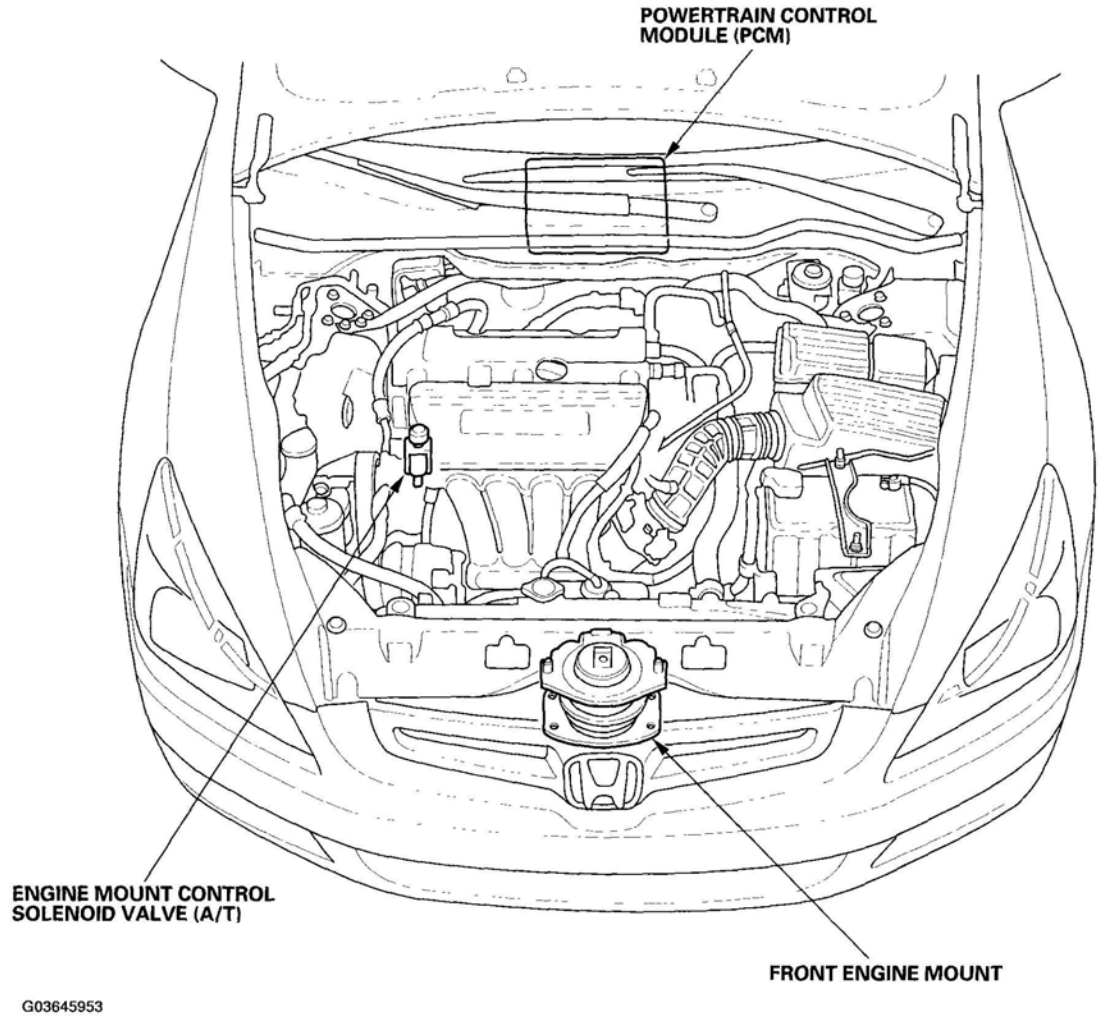
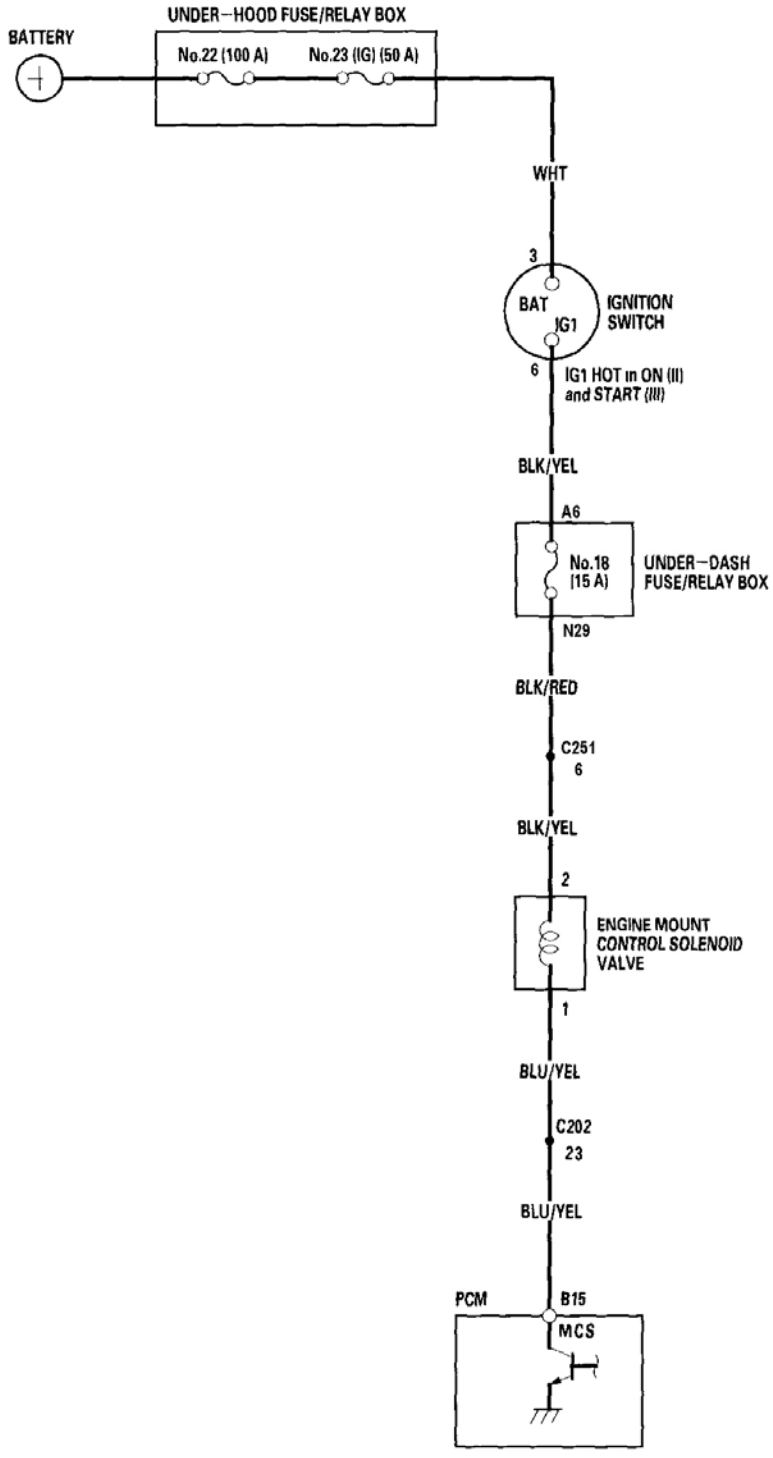


Fig. 1: Identifying Engine Mount Control System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

A/T

A/T



G03645954

Fig. 2: Wiring Diagram - Engine Mount Control System Circuit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TROUBLESHOOTING

Special Tools Required

Vacuum pump/gauge, 0---30 in.Hg

Snap-on YA4000A or equivalent, commercially available

NOTE: Check the vacuum hoses and lines for damage and proper connections before troubleshooting.

Follow this procedure if the engine vibrates excessively when idling.

A/T

1. Start the engine, and let it idle (see **IDLE SPEED INSPECTION**).
2. Raise the engine speed from idling to 2,000 rpm.
3. Check the MOUNT CTRL SOL in the PGM-FI DATA LIST with the Honda Diagnostic System (HDS).

   Is ON indicated at idling and OFF indicated at 2,000 rpm?

   YES - Go to step 4.

   NO - Update the powertrain control module (PCM) if it does not have the latest software (see **UPDATING THE ECM/PCM**), or substitute a known-good PCM (see **SUBSTITUTE THE ECM/PCM**), then recheck. If the engine mount control system works properly, and the PCM was updated, the troubleshooting is complete. If the PCM was substituted, replace the original PCM (see **ECM/PCM REPLACEMENT**).
4. Turn the ignition switch OFF.
5. Disconnect the engine mount control solenoid valve 2P connector from the engine mount control solenoid valve.
6. Turn the ignition switch ON (II).

7. Measure the voltage between engine mount control solenoid valve 2P connector terminal No.2 and body ground.

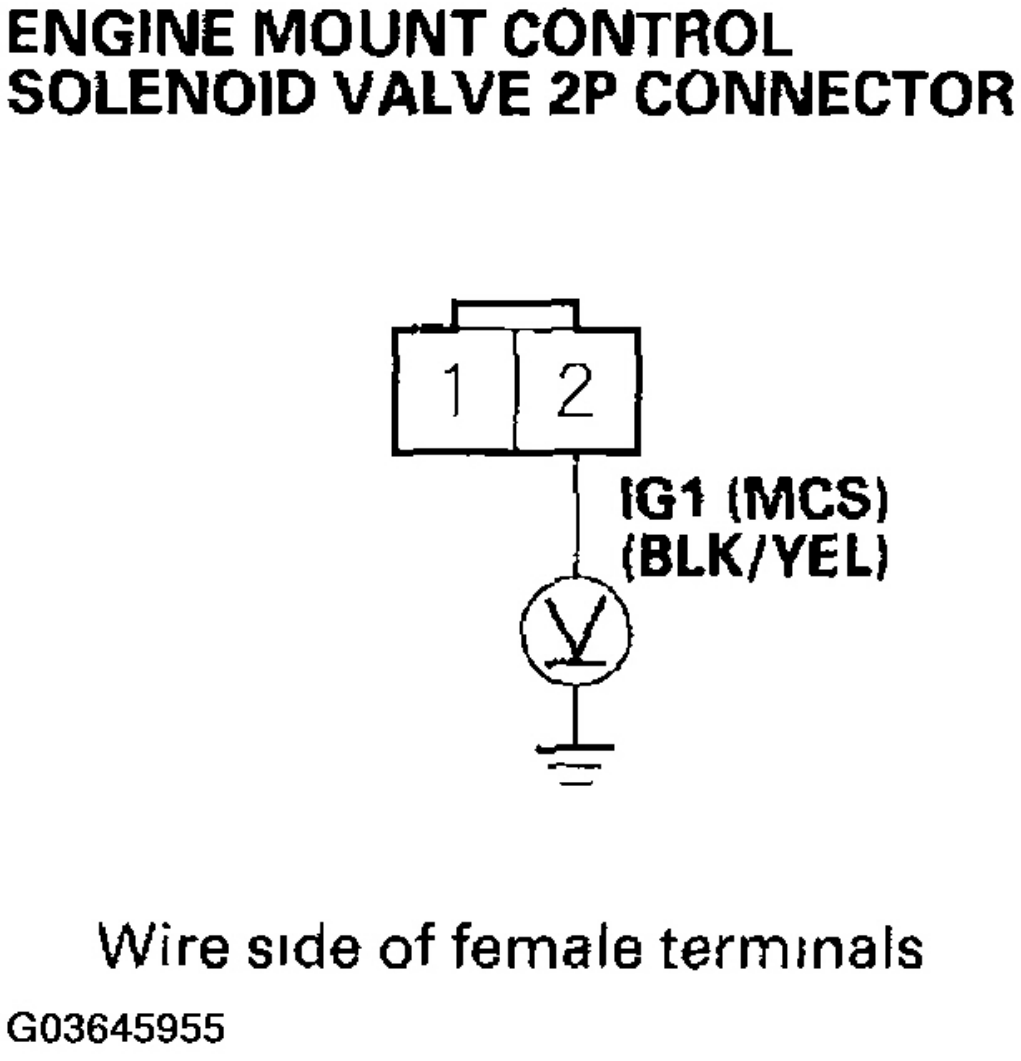


Fig. 3: Measuring Voltage Between Engine Mount Control Solenoid Valve 2P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

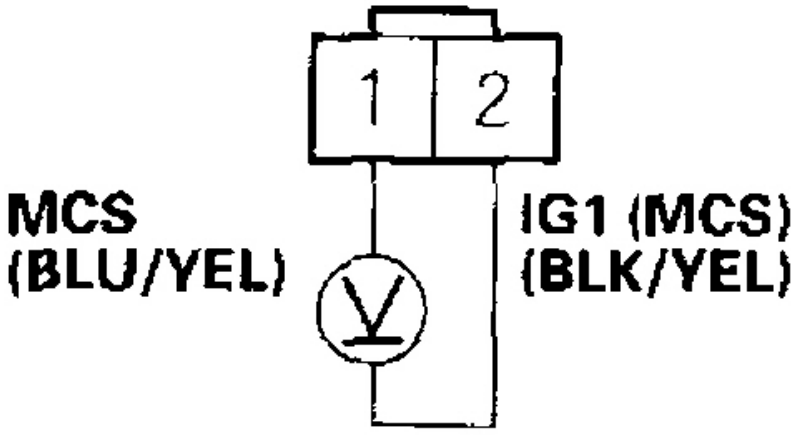
Is there battery voltage?

YES - Go to step 8.

NO - Repair an open in the wire between the engine mount control solenoid valve 2P connector terminal No. 2 and No. 18 (15A) fuse in the under-dash fuse/relay box.

8. Measure voltage between engine mount control solenoid valve 2P connector terminals No. 1 and No. 2.

ENGINE MOUNT CONTROL SOLENOID VALVE 2P CONNECTOR



Wire side of female terminals

G03645956

Fig. 4: Measuring Voltage Between Engine Mount Control Solenoid Valve 2P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 9.

NO - Repair an open in the wire between PCM (B15) and the engine mount control solenoid valve 2P connector. If the wire is OK, update the PCM if it does not have the latest software (see **UPDATING THE ECM/PCM**), or substitute a known-good PCM (see **SUBSTITUTE THE ECM/PCM**), and recheck. If the engine mount control system works properly, and the PCM was updated, the troubleshooting is complete. If the PCM was substituted, replace the original PCM (see **ECM/PCM REPLACEMENT**).

9. Raise the engine speed above 1,000 rpm.
10. Measure the voltage between engine mount control solenoid valve 2P connector terminals No. 1 and No. 2.

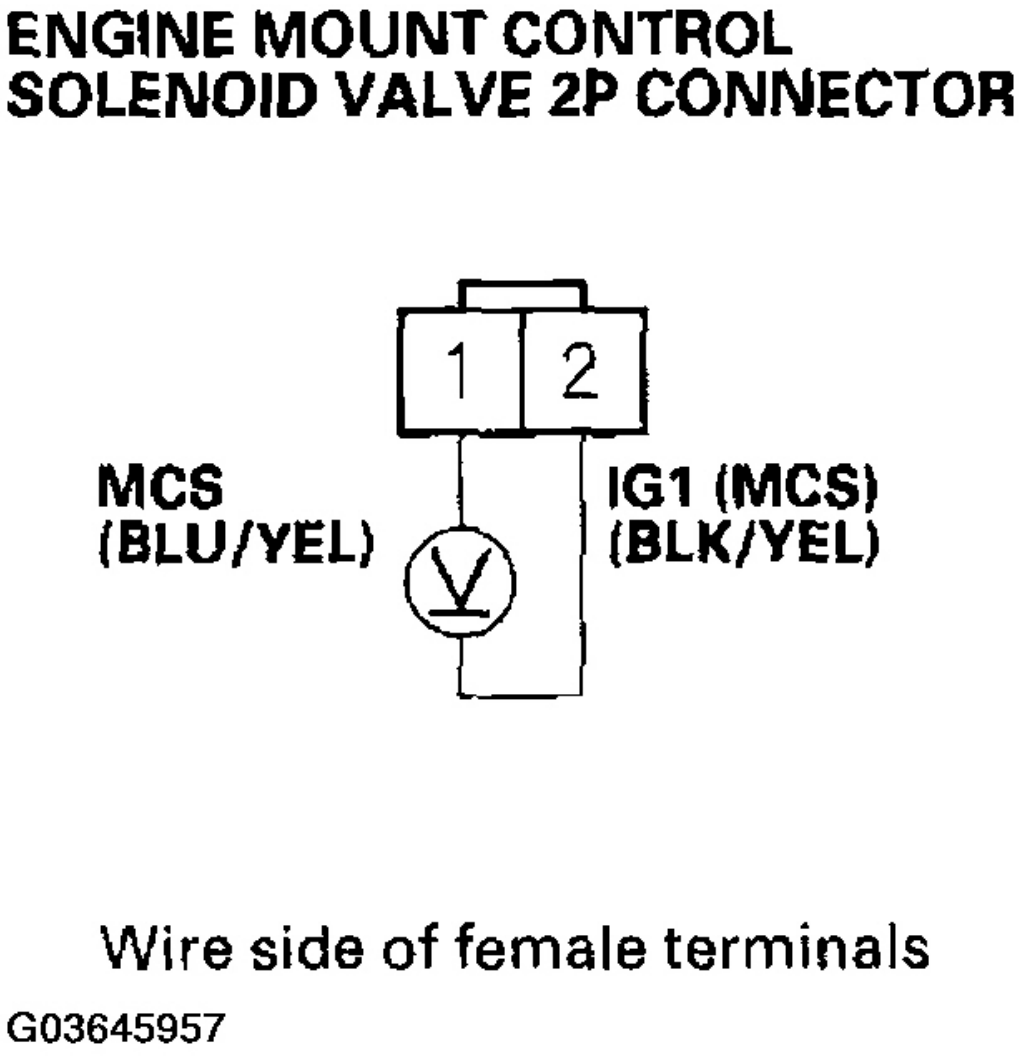


Fig. 5: Measuring Voltage Between Engine Mount Control Solenoid Valve 2P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Repair a short to body ground in the wire between PCM (B15) and the engine mount control solenoid valve. If the wire is OK, update the PCM if it does not have the latest software (see **UPDATING THE**

ECM/PCM), or substitute a known-good PCM (see **SUBSTITUTE THE ECM/PCM**), and recheck. If the engine mount control system works properly, and the PCM was updated, the troubleshooting is complete. If the PCM was substituted, replace the original PCM (see **ECM/PCM REPLACEMENT**).

NO - Go to step 11.

11. Disconnect the upper vacuum hose (A) from the engine mount control solenoid valve (B), and connect a vacuum pump/gauge, 0-30 in. Hg, to the hose. Apply about 20 in.Hg of vacuum, and wait 20 seconds.

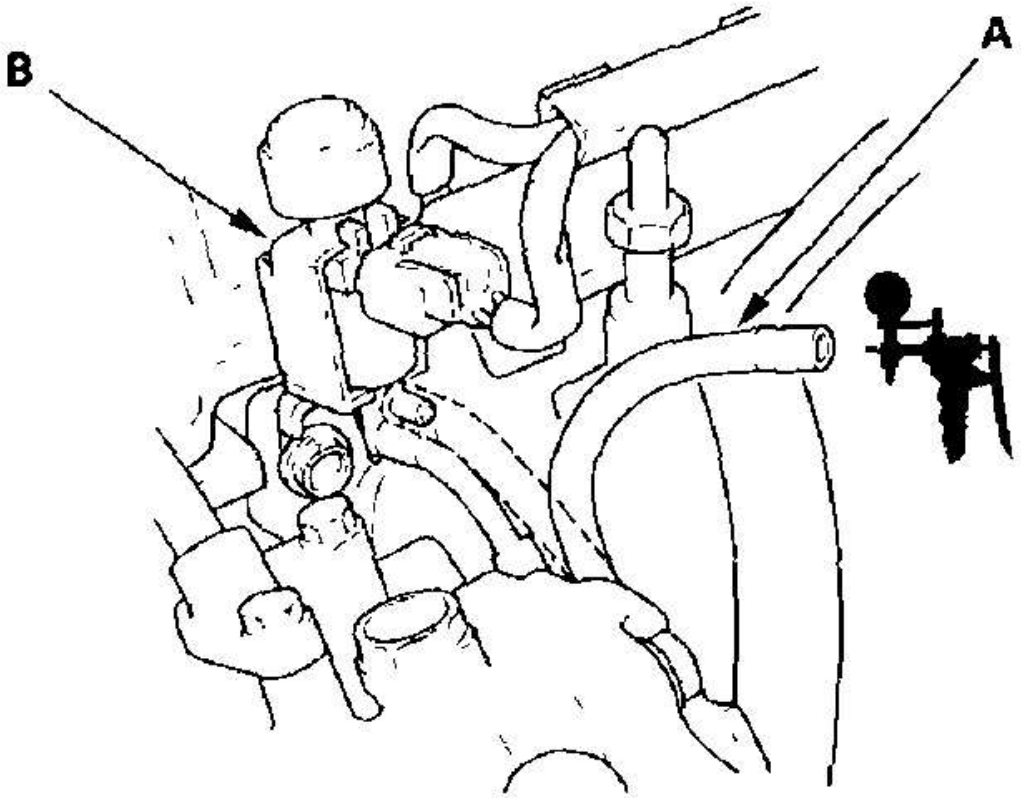


Fig. 6: Disconnecting The Upper Vacuum Hose From The Engine Mount Control Solenoid Valve

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the engine mount hold vacuum?

YES - Go to step 12.

NO - Either the vacuum hose or the engine mount has a vacuum leak. Repair as needed.

12. Release the vacuum, then apply vacuum again.

Is there a noticeable change in idle smoothness with and without vacuum applied?

YES - Go to step 13.

NO - Replace the front engine mount.

13. Connect a vacuum pump/gauge, 0-30 in. Hg, to the engine mount control solenoid valve (A).

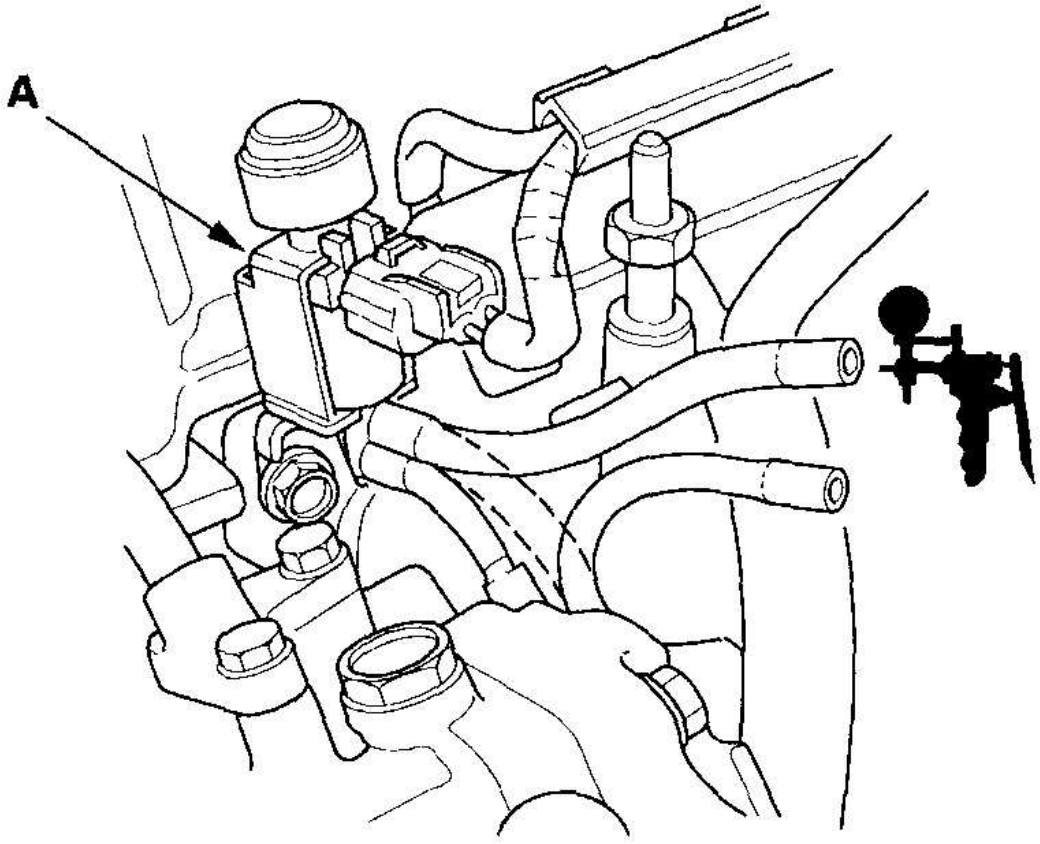


Fig. 7: Connecting Vacuum Pump/Gauge, 0---30 in. Hg, To The Engine Mount Control Solenoid Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there manifold vacuum at idle, and a decrease in manifold vacuum when you raise the engine speed above 1,000 rpm?

YES - The system is OK.

NO - Replace the engine mount control solenoid valve.

2003-07 ENGINE

Engine Mount Control System - Accord (V6)

COMPONENT LOCATION INDEX

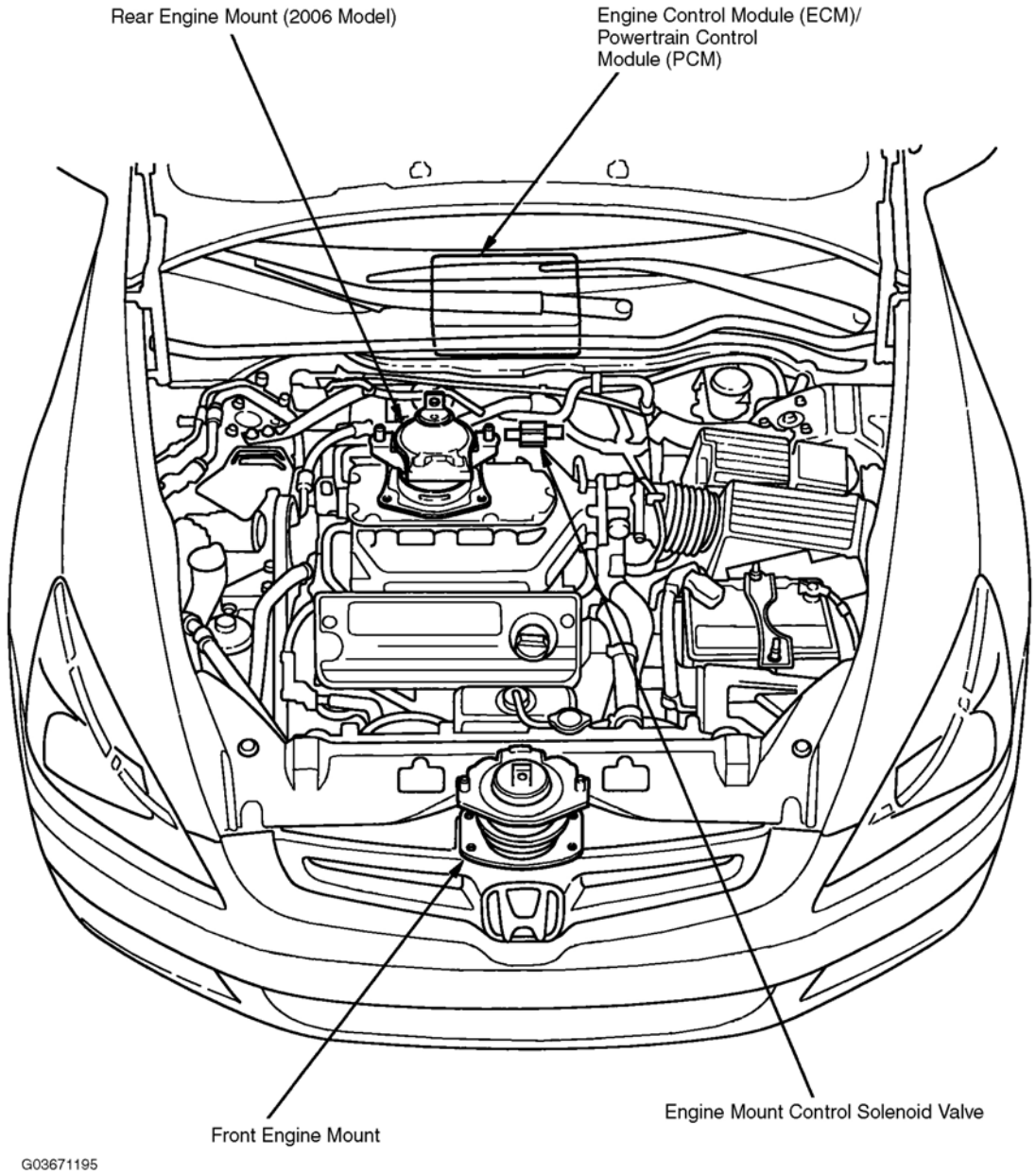


Fig. 1: Locating Engine Mount Control System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

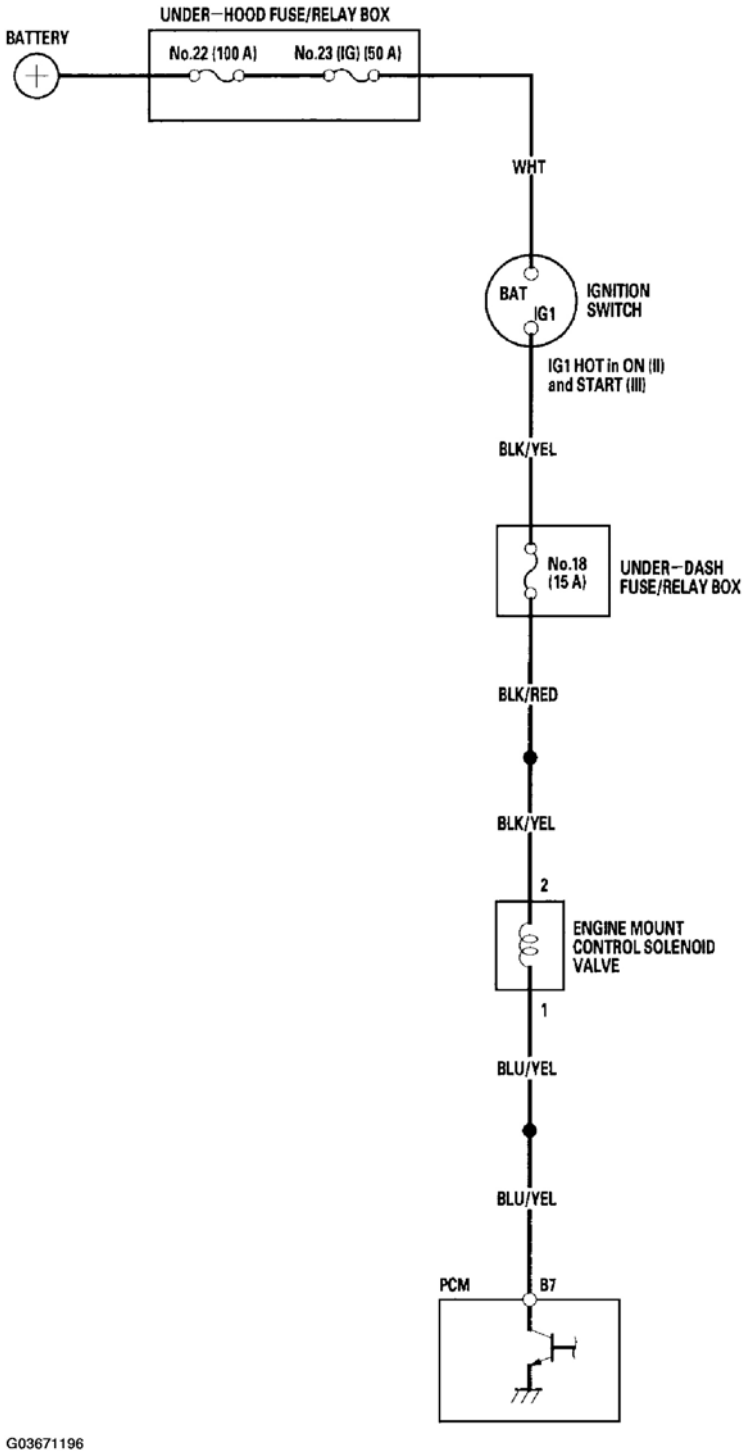


Fig. 2: Engine Mount Control System Circuit Diagram

Courtesy of AMERICAN HONDA MOTOR CO., INC.

TROUBLESHOOTING

Special Tools Required

Vacuum pump/gauge, 0-30 in.Hg
Snap-on YA4000A or equivalent, commercially available

NOTE: Check the vacuum hoses and lines for damage and proper connections before troubleshooting.

Follow this procedure if the engine vibrates excessively when idling.

1. Start the engine, and let it idle (see **IDLE SPEED INSPECTION**).
2. Raise the engine speed from idling to 2,000 rpm.
3. Check the MOUNT CTRL SOL in the PGM-FI DATA LIST with the Honda Diagnostic System (HDS).

   Is ON indicated at idling and OFF indicated at 2,000 rpm?

   YES - Go to step 4.

   NO - Update the engine control module (ECM) / powertrain control module (PCM) if it does not have the latest software (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**), or substitute a known-good ECM/PCM (see **HOW TO SUBSTITUTE THE ECM/PCM**), then recheck. If the engine mount control system works properly, and the ECM/PCM was updated, the troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

4. Turn the ignition switch OFF.
5. Disconnect the engine mount control solenoid valve 2P connector from the engine mount control solenoid valve.
6. Turn the ignition switch ON (II).
7. Measure the voltage between engine mount control solenoid valve 2P

connector terminal No. 2 and body ground.

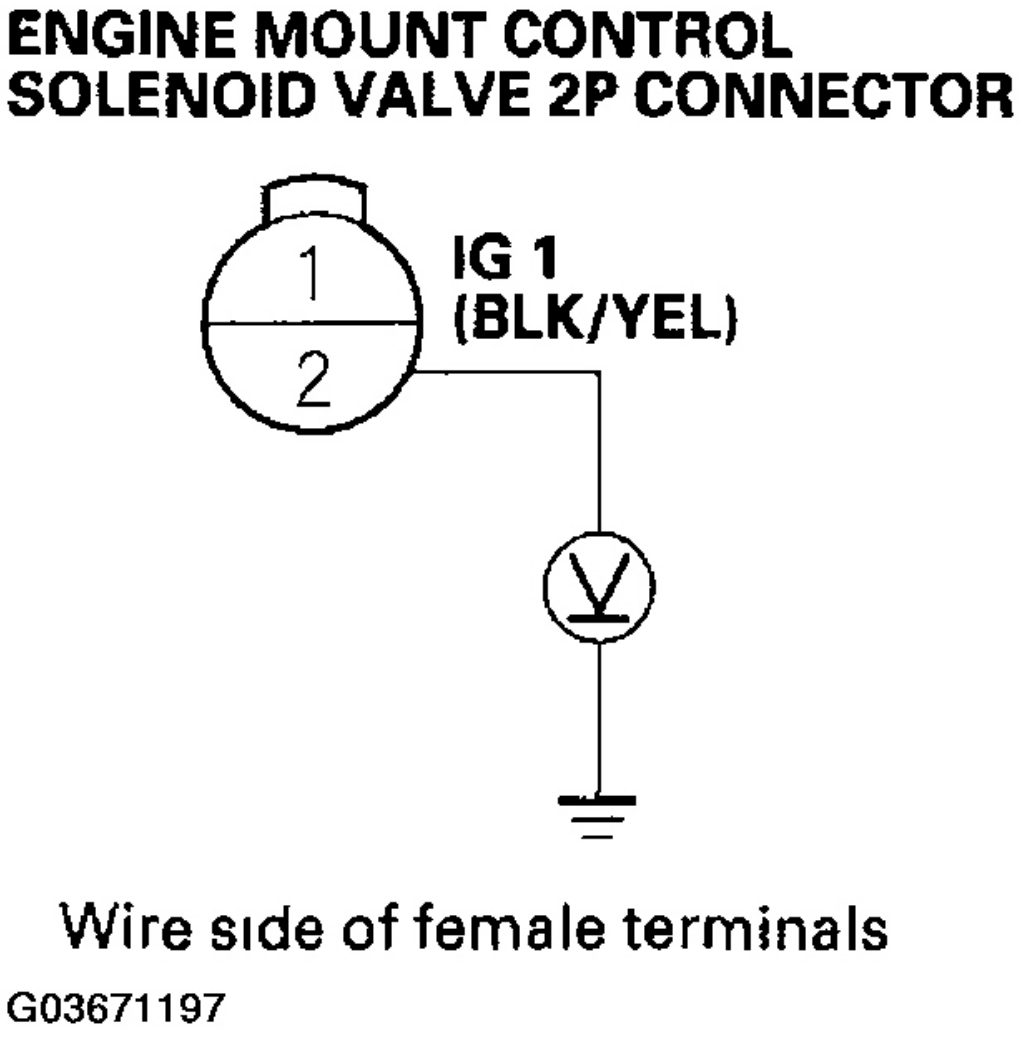


Fig. 3: Measuring Voltage Between Engine Mount Control Solenoid Valve 2P Connector Terminal 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 8.

NO - Repair an open in the wire between the engine mount control solenoid valve 2P connecter terminal No.2 and No. 18 (15 A) fuse in the under-dash fuse/relay box.

8. Measure the voltage between engine mount control solenoid valve 2P connector terminals No. 1 and No. 2, with the engine at idle.

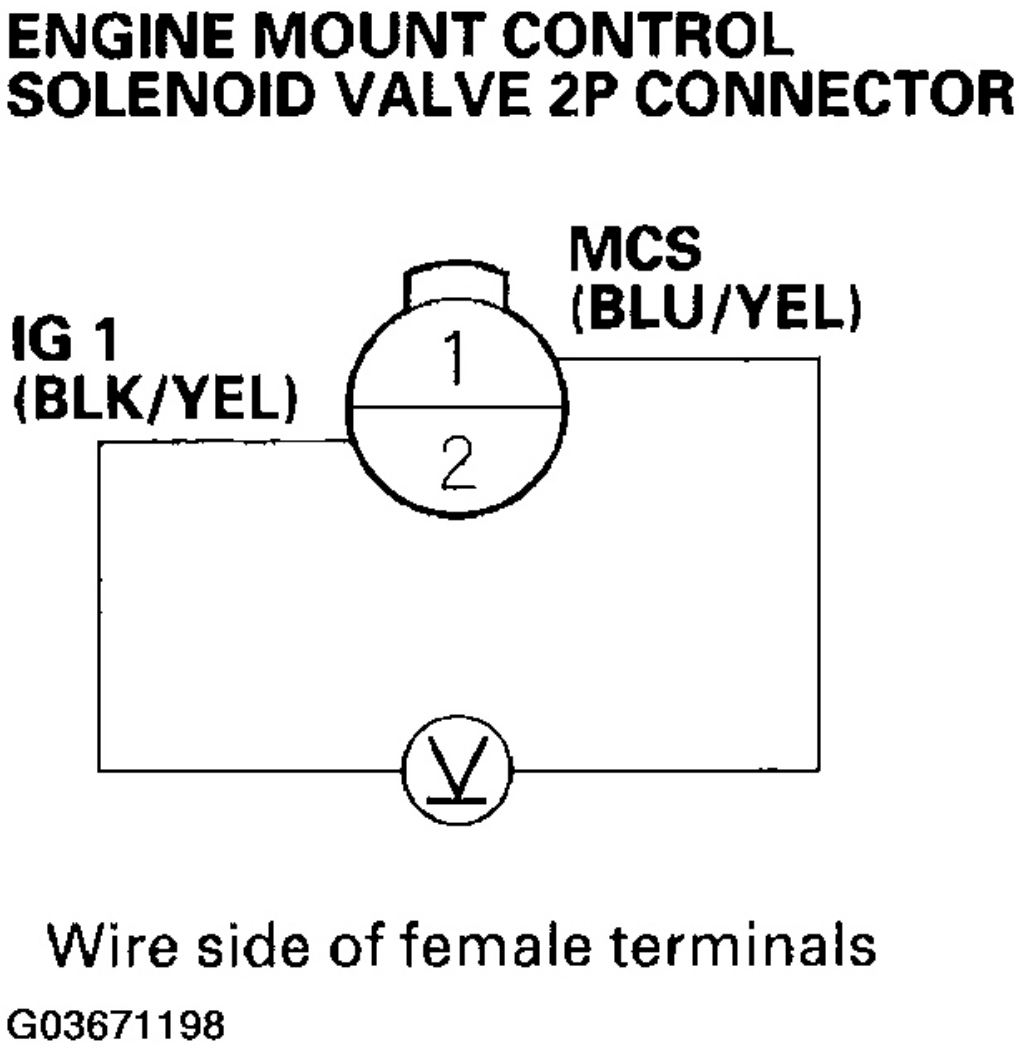


Fig. 4: Measuring Voltage Between Engine Mount Control Solenoid Valve 2P Connector Terminals 1 And 2

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 9.

NO - Repair an open in the wire between ECM/PCM (B7) and the engine mount control solenoid valve 2P connector. If the wire is OK, update the ECM/PCM if it does not have the latest software (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**), or substitute a known-good ECM/PCM (see **HOW TO SUBSTITUTE THE ECM/PCM**), and recheck. If the engine mount control system works properly, and the ECM/PCM was updated, the troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see**ECM/PCM REPLACEMENT**).

9. Raise the engine speed above 1,000 rpm.
10. Measure the voltage between engine mount control solenoid valve 2P connector terminals No. 1 and No. 2.

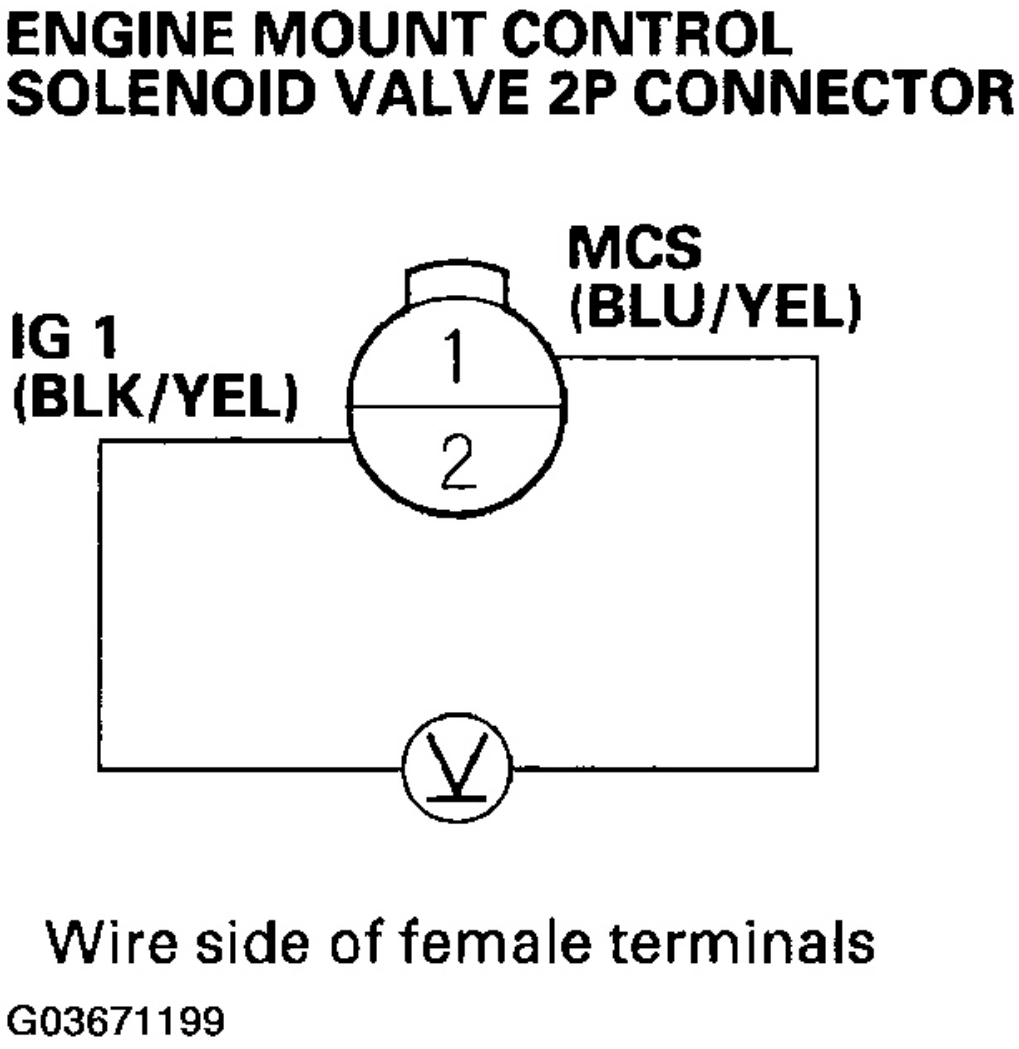


Fig. 5: Measuring Voltage Between Engine Mount Control Solenoid Valve 2P Connector Terminals 1 And 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Repair a short to body ground in the wire between ECM/PCM (B7) and the engine mount control solenoid valve. If the wire is OK, update the ECM/PCM if it does not have the latest software (see **ECM/PCM**

UPDATING AND SUBSTITUTION FOR TESTING), or substitute a known-good ECM/PCM (see **HOW TO SUBSTITUTE THE ECM/PCM**), and recheck. If the engine mount control system works properly, and the ECM/PCM was updated, the troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

NO - Go to step 11.

11. Disconnect the vacuum hose (A) that is closest to the solenoid connector from the engine mount control solenoid valve (B) and connect a commercially available vacuum pump/gauge, 0-30 in.Hg. to the hose. Apply about 20 in.Hg, of vacuum, and wait for 20 seconds.

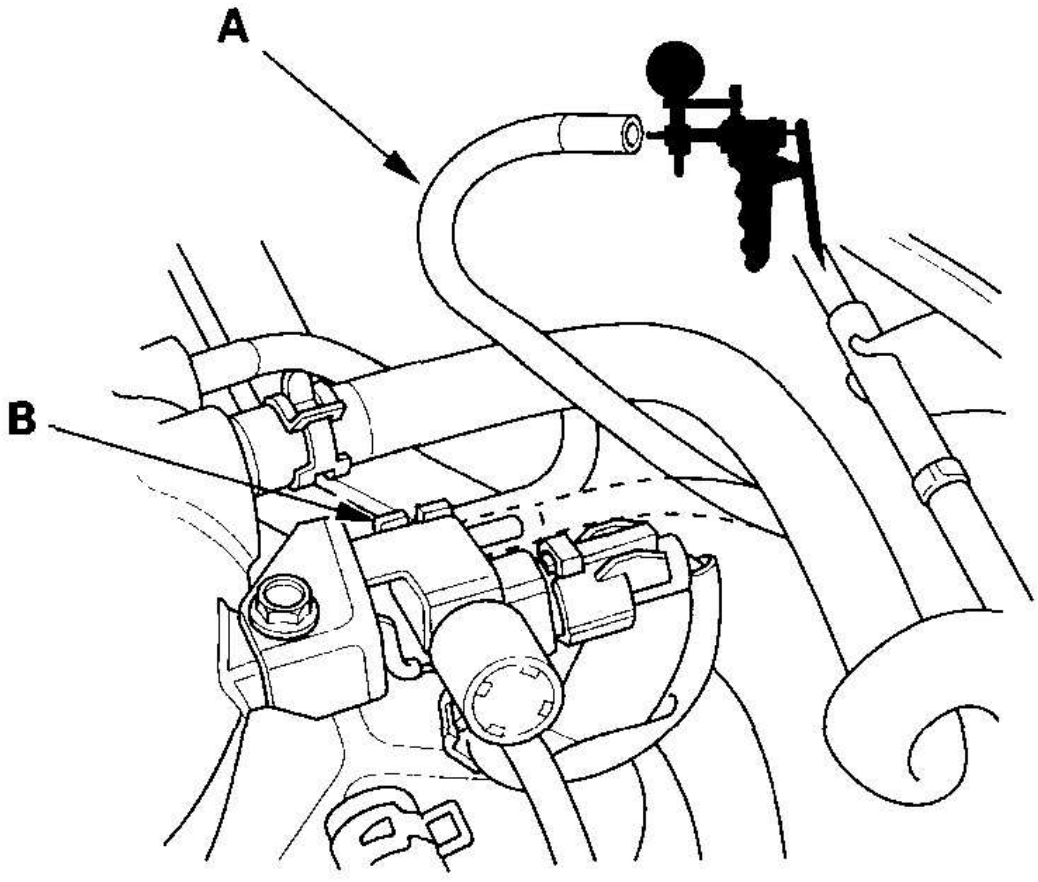


Fig. 6: Identifying Vacuum Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the engine mounts hold vacuum?

YES - Go to step 12.

NO - Either the vacuum hose or one of the engine mounts has a vacuum leak. Repair as needed.

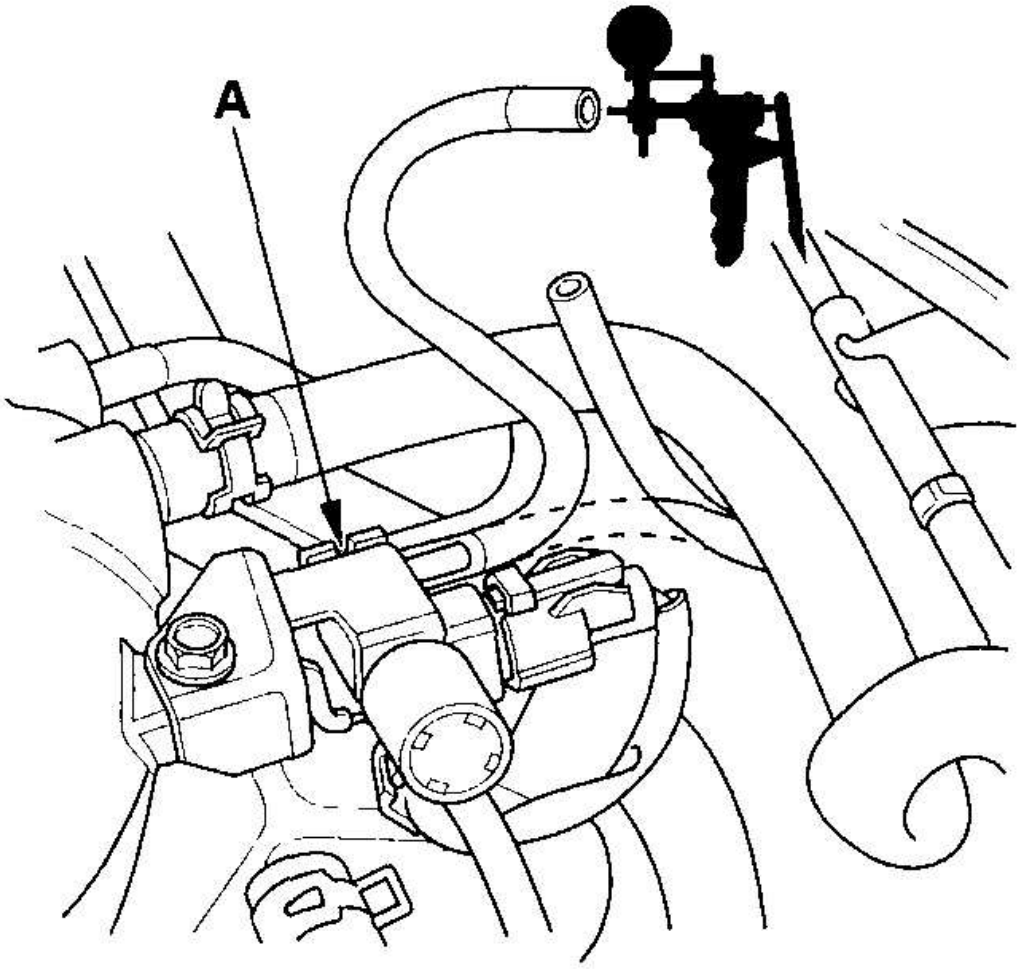
12. Release the vacuum, then apply vacuum again.

Is there a noticeable change in idle smoothness with and without vacuum applied?

YES - Go to step 13.

NO - Replace the front engine mount and/or rear engine mount.

13. Connect a commercially available vacuum pump/gauge,. 0-3 in.Hg, to engine mount control solenoid valve port (A) that is closest to the solenoid connector.



G03671201

Fig. 7: Connecting Vacuum Pump To Engine Mount Control Solenoid Valve Port
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there manifold vacuum at idle, and decrease in manifold vacuum when you raise the engine speed above 1,000 rpm?

YES - The system is OK.

NO - Replace the engine mount control solenoid valve.

2003-07 ENGINE PERFORMANCE

EVAP System - Accord (V6)

COMPONENT LOCATION INDEX

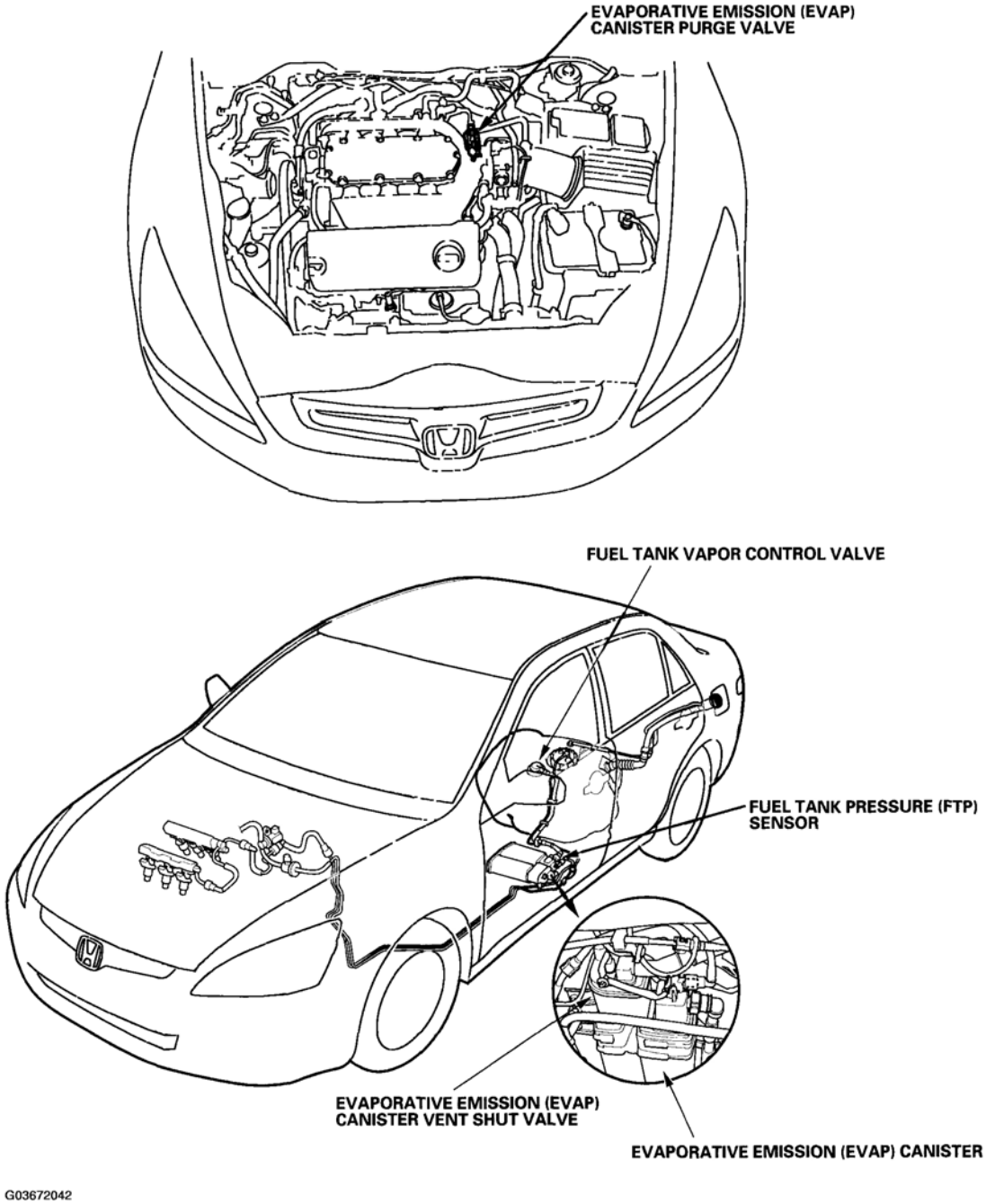


Fig. 1: Identifying EVAP System Components

Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC CODES

DTC CHART

DTC	Description
DTC P0442	EVAP System Small Leak Detected (2003-2004 models)
DTC P0455	EVAP System Large Leak Detected (2005-2007 models)
DTC P0456	EVAP System Very Small Leak Detected
DTC P0443	EVAP Canister Purge Valve Circuit Malfunction
DTC P0451	FTP Sensor Range/Performance Problem
DTC P0452	FTP Sensor Circuit Low Voltage (2003-2004 models)
DTC P0452	FTP Sensor Circuit Low Voltage (2005-2007 models)
DTC P0453	FTP Sensor Circuit High Voltage
DTC P0457	EVAP System Leak Detected Fuel Fill Cap Loose or Missing
DTC P0496	EVAP System High Purge Flow
DTC P0497	EVAP System Low Purge Flow
DTC P0498	EVAP Canister Vent Shut Valve Control Circuit Low Voltage
DTC P0499	EVAP Canister Vent Shut Valve Control Circuit High Voltage
DTC P1454	FTP Sensor Range/Performance Problem
DTC P2422	EVAP Canister Vent Shut Valve Close Malfunction

DTC TROUBLESHOOTING

DTC P0442: EVAP SYSTEM SMALL LEAK DETECTED (2003-2004 MODELS); DTC P0455: EVAP SYSTEM LARGE LEAK DETECTED (2005-2007 MODELS); DTC P0456: EVAP SYSTEM VERY SMALL LEAK DETECTED

NOTE: The fuel system is designed to allow specified maximum vacuum and pressure conditions. Do not deviate from the vacuum and pressure tests as indicated in these procedures. Excessive pressure/ vacuum would damage the EVAP components or cause eventual fuel tank failure.

Special Tools Required

- Vacuum/pressure gauge, 0-4 in.Hg, 07JAZ-001000B
- Vacuum pump/gauge, 0-30 in.Hg, Snap-on YA4000A or equivalent, commercially available

NOTE:

- **Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**
- **Fresh fuel has a higher volatility that will create greater pressure/vacuum. The optimum condition for testing is less than a full tank of fresh fuel, If possible, to assist in leak detection, add 1 gallon of fresh fuel to the tank (as long as it will not fill the tank), just before starting these procedures.**

1. Check the fuel fill cap (the cap must say "Tighten to click"). It should turn 1/4 turn after it's tight, then it clicks.

   Is the correct fuel fill cap installed and properly tightened?

   YES - Go to step 2.

   NO - Replace or tighten the cap, then go to step 22.

2. Check the fuel fill cap seal (A) and the fuel fill pipe mating surface (B). Verify that the fuel fill cap tether cord (C) is not caught under the cap.

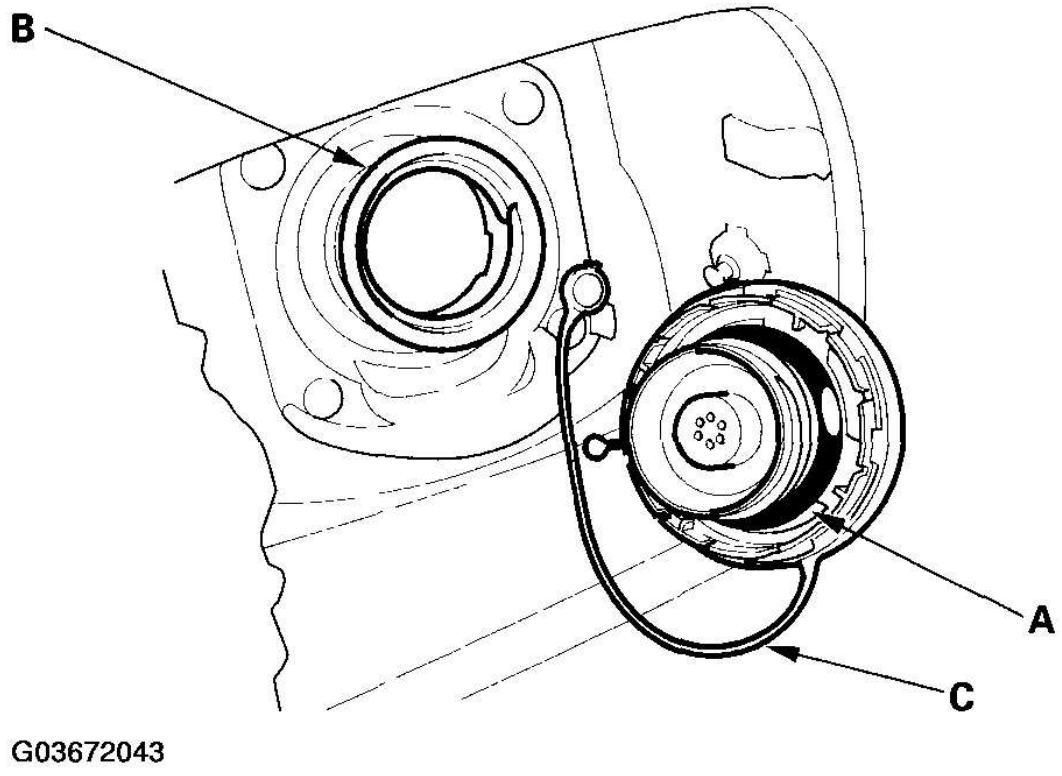


Fig. 2: Checking Fuel Fill Cap Seal And Mating Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the fuel fill cap seal missing or damaged, is the fuel fill pipe damaged, or is the tether cord caught under the cap?

YES - Replace the fuel fill cap or the fuel fill pipe, then go to step 22.

NO - Go to step 3.

3. Turn the ignition switch ON (II).
4. Clear the DTC with the HDS.
5. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor, the EVAP canister purge valve, or the EVAP canister vent shut valve and the ECM/ PCM.

NO - Go to step 6.

6. Turn the ignition switch OFF.
7. Turn the ignition switch ON (II).
8. Check for a poor connection or damage at the fuel tank vapor recirculation tube.

Is the tube OK?

YES - Go to step 9.

NO -

- Replace the fuel tank vapor recirculation tube, then go to step 22.
- If necessary, replace the fuel tank (see **FUEL TANK REPLACEMENT**), then go to step 22.

9. Disconnect the fuel tank vapor recirculation tube (A) from the EVAP canister (B), and plug the EVAP canister port (C).

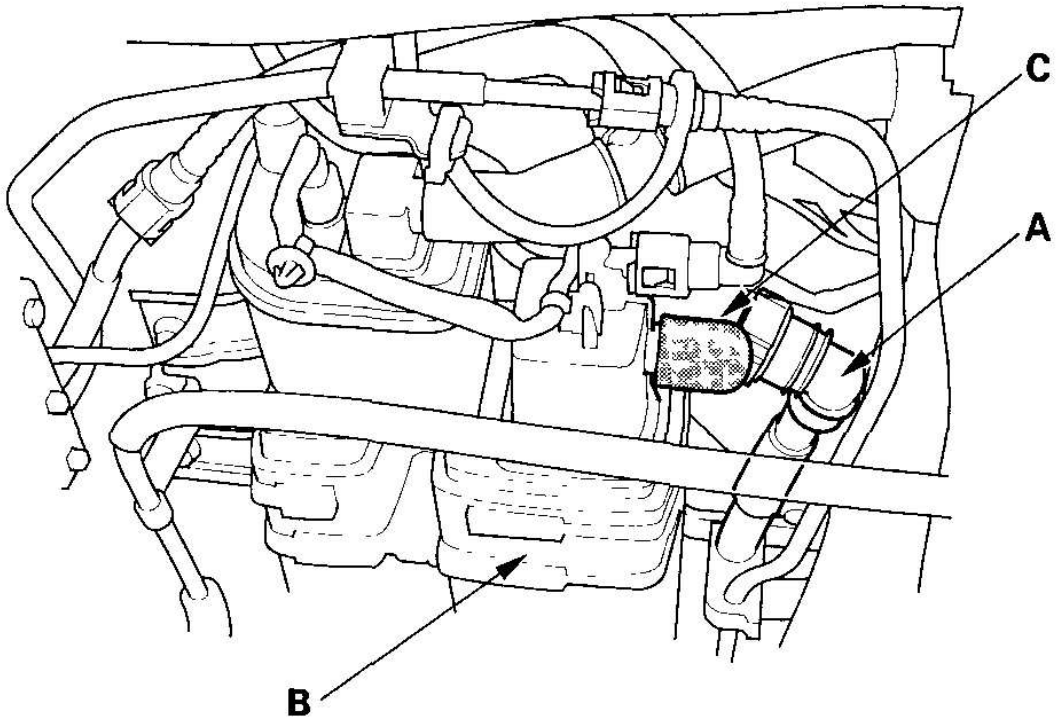


Fig. 3: Disconnecting Fuel Tank Vapor Recirculation Tube
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Disconnect the vacuum hose (A) from the EVAP canister purge valve (B) in the engine compartment, and connect a vacuum pump/gauge, 0-30 in.Hg, to the hose.

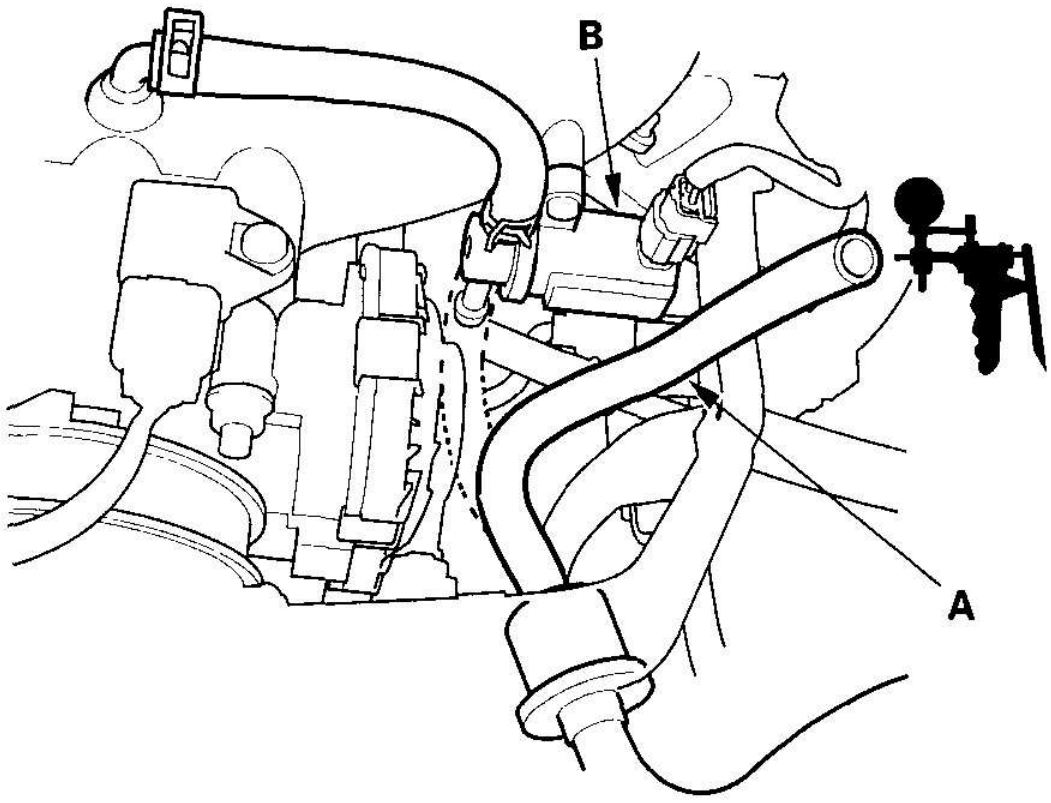


Fig. 4: Disconnecting Vacuum Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Do the EVAP CVS ON in the INSPECTION MENU with the HDS.
12. Apply vacuum to the hose until the FTP reads 1.90 V (0.59 in.Hg, -15.1 mmHg).

NOTE: Be careful not to exceed the pressure. If you exceed the pressure, the FTP sensor can be damaged.

13. Monitor the FTP SENSOR in the DATA LIST for 1 minute with the HDS.

Does the voltage increase more than 0.2 V (0.1 in.Hg, 2.5 mmHg)?

YES - Go to step 14.

NO - Go to step 19.

14. Do the EVAP CVS OFF in the INSPECTION MENU with the HDS.
15. Disconnect the fresh air hoses (A) from the EVAP canister vent shut valve (B), and plug the EVAP canister vent shut valve ports (C).

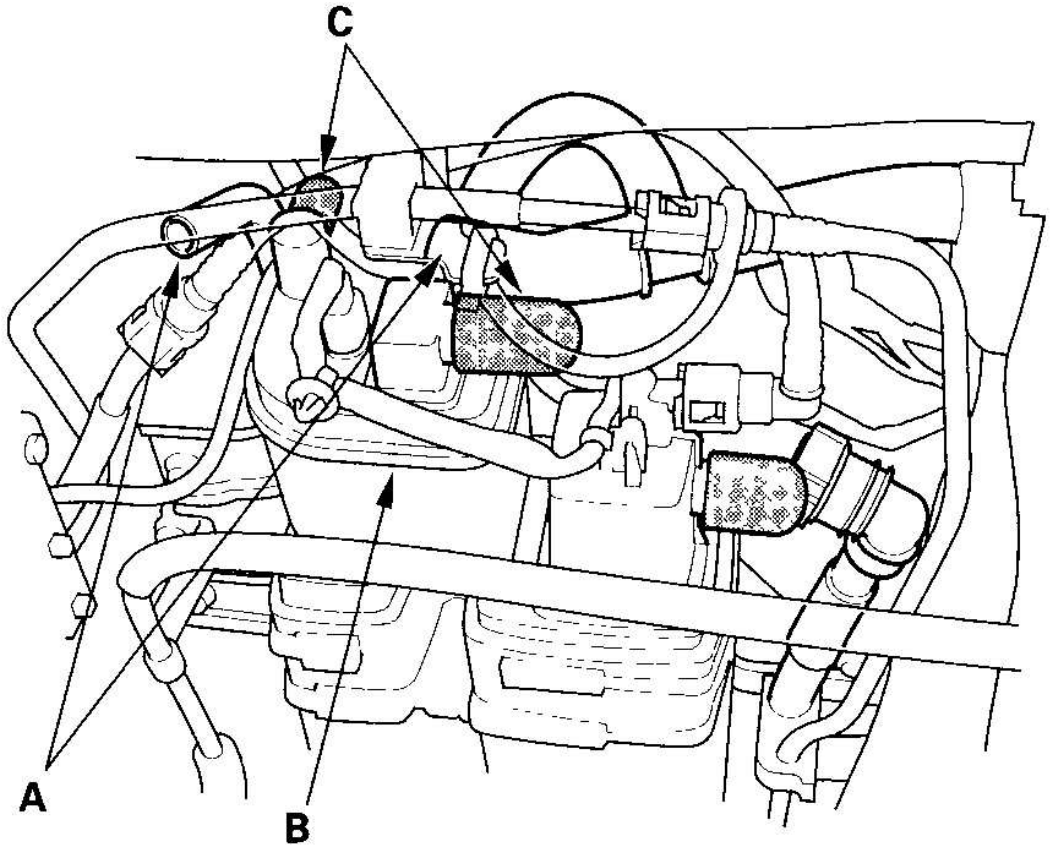


Fig. 5: Disconnecting Fresh Air Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Apply vacuum to the hose (disconnected in step 10) until the FTP reads 1.90 V (-0.59 in.Hg,-15.1 mmHg).

NOTE: Be careful not to exceed the pressure. If you exceed the pressure, the FTP sensor can be damaged.

17. Monitor the FTP SENSOR in the DATA LIST for 1 minute with the HDS.

    Does the voltage increase more than 0.2 V (0.1 in.Hg, 2.5 mmHg)?

    YES - Go to step 18.

    NO - Replace the EVAP canister vent shut valve (see **EVAP CANISTER VENT SHUT VALVE REPLACEMENT**), then go to step 21.

18. Check for a loose or damaged EVAP canister purge line between the EVAP canister and the EVAP canister purge valve.

    Is the line OK?

    YES - Replace the following parts, then go to step 21.

    - FTP sensor O-ring
    - EVAP canister vent shut valve case and O-ring
    - EVAP canister

    NO - Reconnect or repair the EVAP canister purge hose, then go to step 21.

19. Do the EVAP CVS OFF in the INSPECTION MENU with the HDS.
20. Check these parts for looseness or damage.
    - Fuel fill pipe
    - Fuel vapor return pipe

    Are the parts OK?

    YES - Check the fuel tank unit base gasket (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**), and check the fuel tank, then go to step 21.

    NO - Repair or replace the damaged parts, then go to step 21.

21. Reconnect all hoses and connectors.
22. Turn the ignition switch ON (II).

23. Reset the ECM/PCM with the HDS.
24. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
25. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Troubleshooting is complete.

NO - Check for poor connections or loose terminals at the FTP sensor, the EVAP canister purge valve, or the EVAP canister vent shut valve and the ECM/ PCM, then go to step 1.

DTC P0443: EVAP CANISTER PURGE VALVE CIRCUIT MALFUNCTION

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0443 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the EVAP canister purge valve and the ECM/PCM.

5. Turn the ignition switch OFF, and allow the engine to cool below 140°F (60° C).
6. Disconnect the vacuum hose (A) from the EVAP canister purge joint (B) in the engine compartment, and connect a vacuum pump/gauge, 0-30 in.Hg, to the

hose.

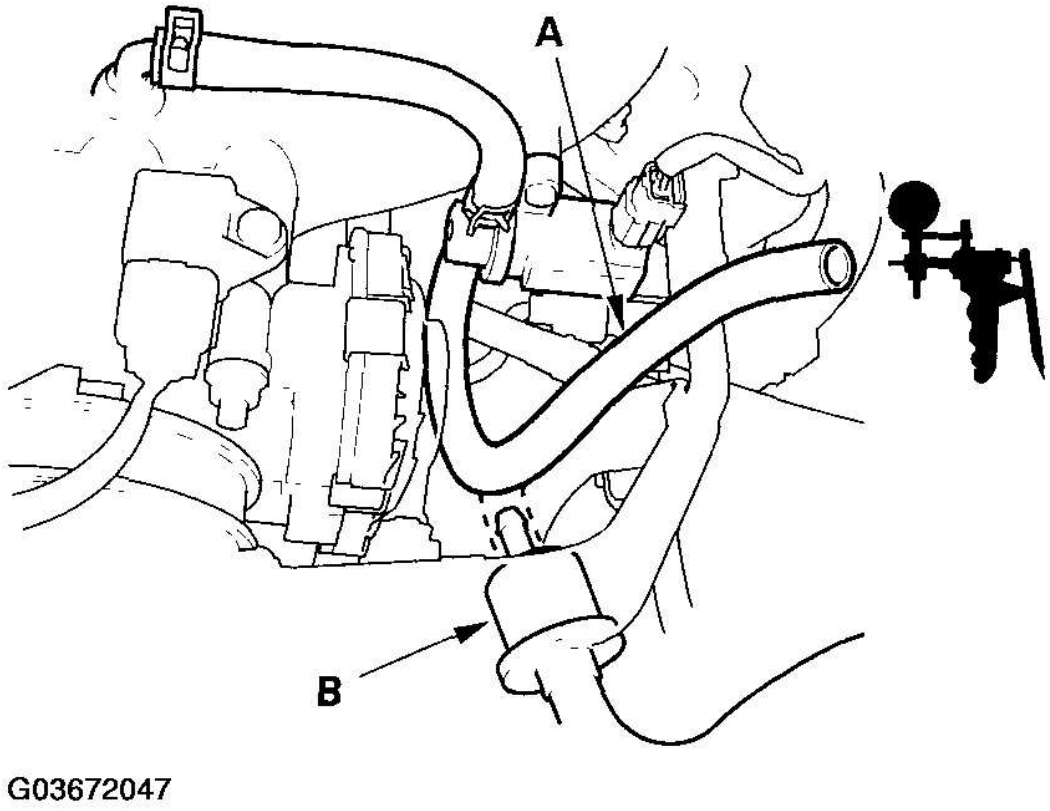


Fig. 6: Disconnecting Vacuum Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Start the engine, and let it idle.

   Is there vacuum?

   YES - Go to step 8.
   NO - Go to step 14.
8. Turn the ignition switch OFF.
9. Disconnect the EVAP canister purge valve 2P connector.
10. Check for continuity between EVAP canister purge valve 2P connector No. 1 and body ground.

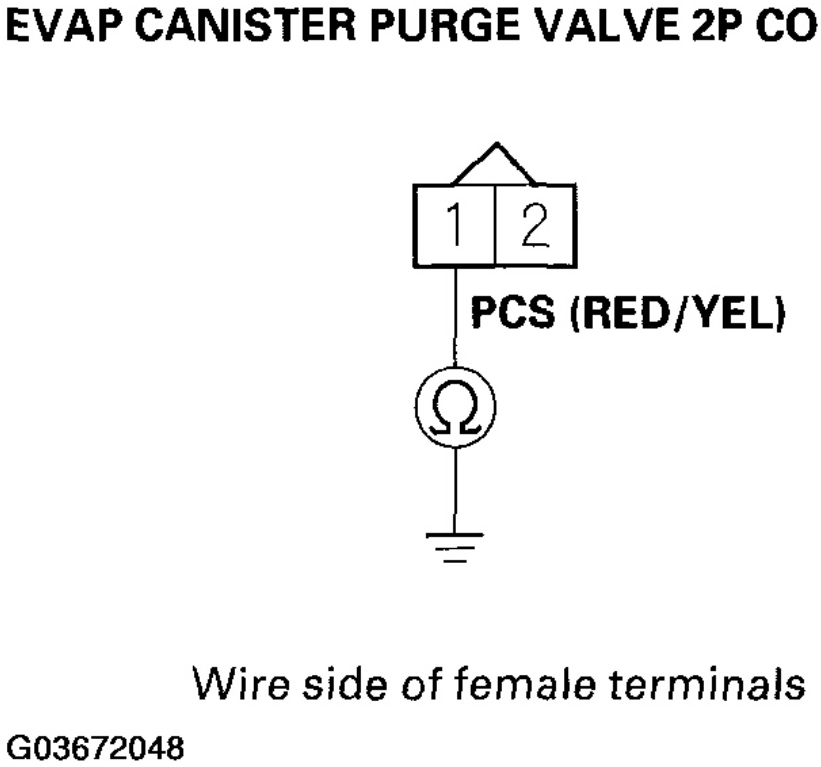


Fig. 7: Checking Continuity Between EVAP Canister Purge Valve 2P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 11.
NO - Go to step 24.

11. Jump the SCS line with the HDS.
12. Disconnect ECM/PCM connector B (24P).
13. Check for continuity between EVAP canister purge valve 2P connector terminal No. 1 and body ground.

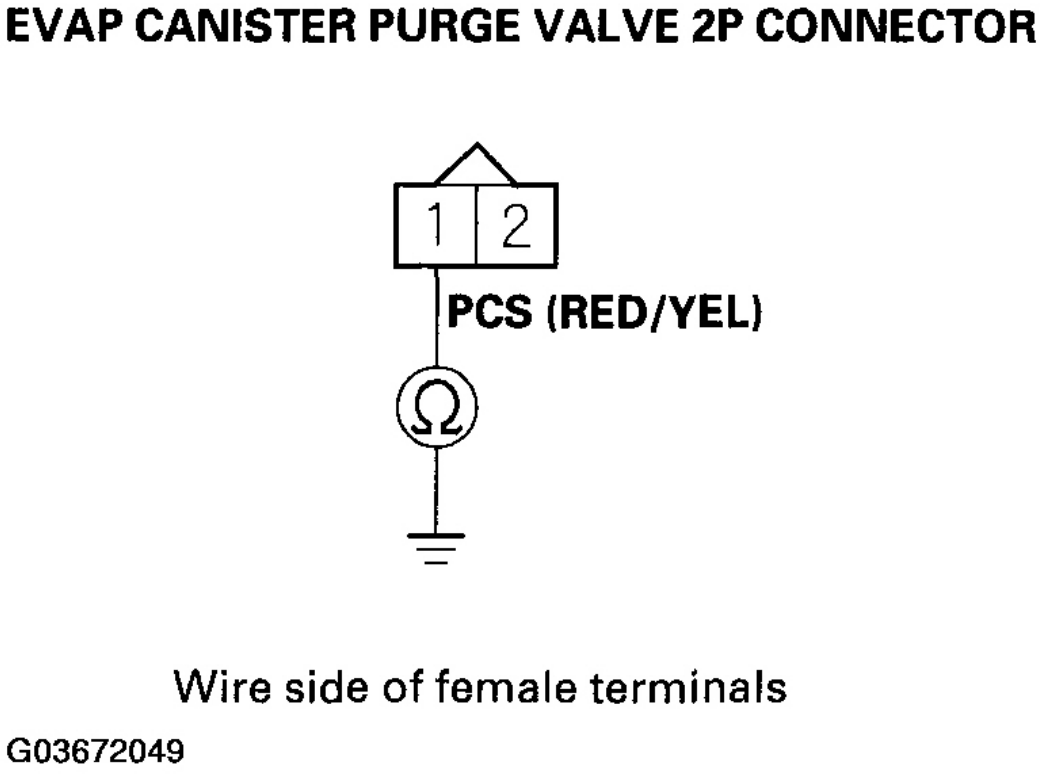


Fig. 8: Checking Continuity Between EVAP Canister Purge Valve 2P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the EVAP canister purge valve and the ECM/PCM (B2), then go to step 25.

NO - Go to step 31.

14. Turn the ignition switch OFF.
15. Disconnect the EVAP canister purge valve 2P connector.
16. Turn the ignition switch ON (II).
17. Measure voltage between EVAP canister purge valve 2P connector terminal No. 2 and body ground.

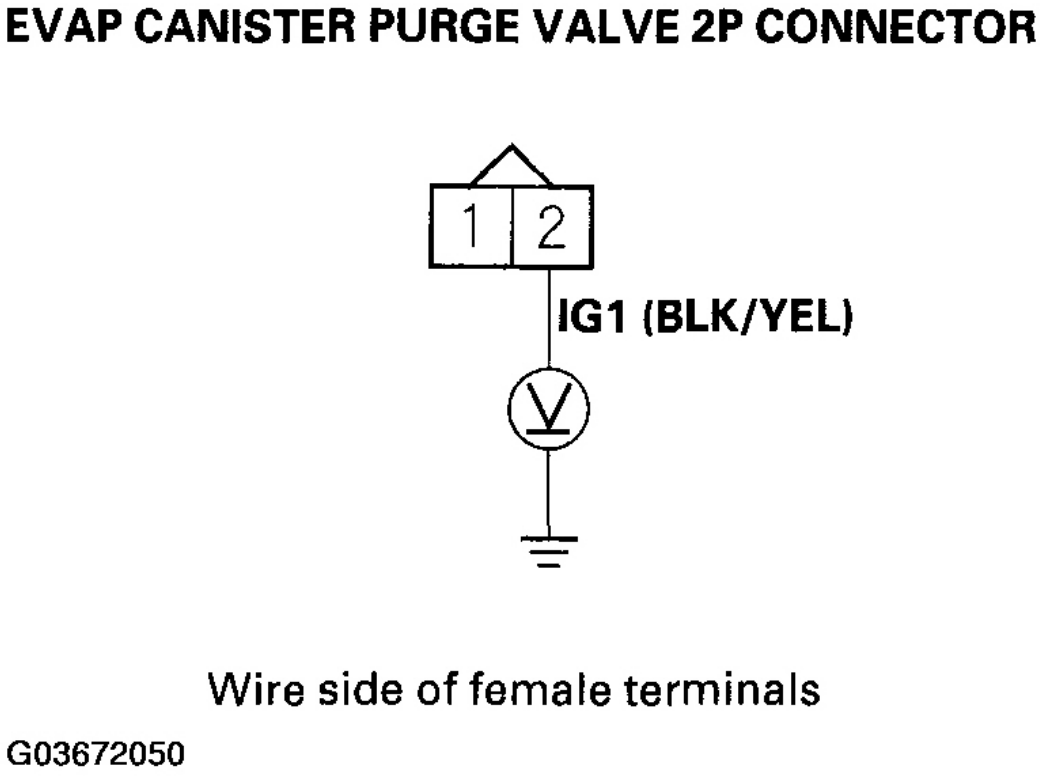


Fig. 9: Measuring Voltage Between EVAP Canister Purge Valve 2P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 18.

NO - Repair open in the wire between the EVAP canister purge valve and the No. 18 ACG (15 A) fuse in the under-dash fuse/relay box, then go to step 25.

18. Turn the ignition switch OFF.
19. Jump the SCS line with the HDS.
20. Disconnect ECM/PCM connector B (24P).
21. Connect EVAP canister purge valve 2P connector terminal No. 1 to body

ground with a jumper wire.

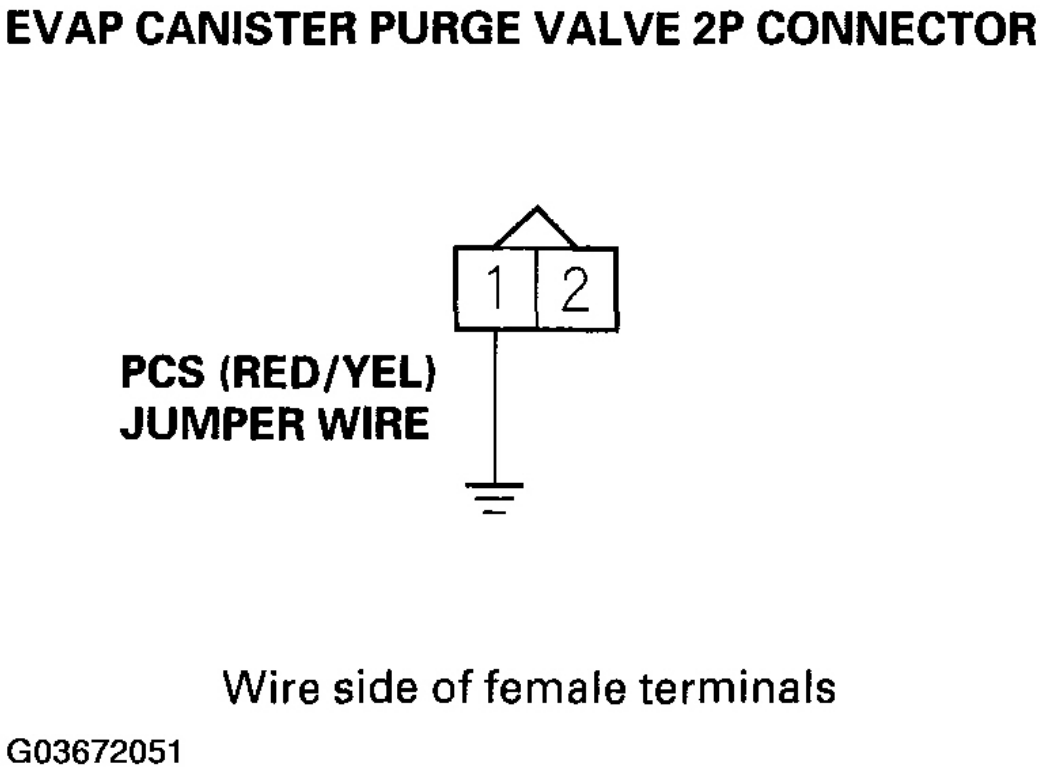


Fig. 10: Connecting EVAP Canister Purge Valve 2P Connector Terminal To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Check for continuity between ECM/PCM connector terminal B2 and body ground.

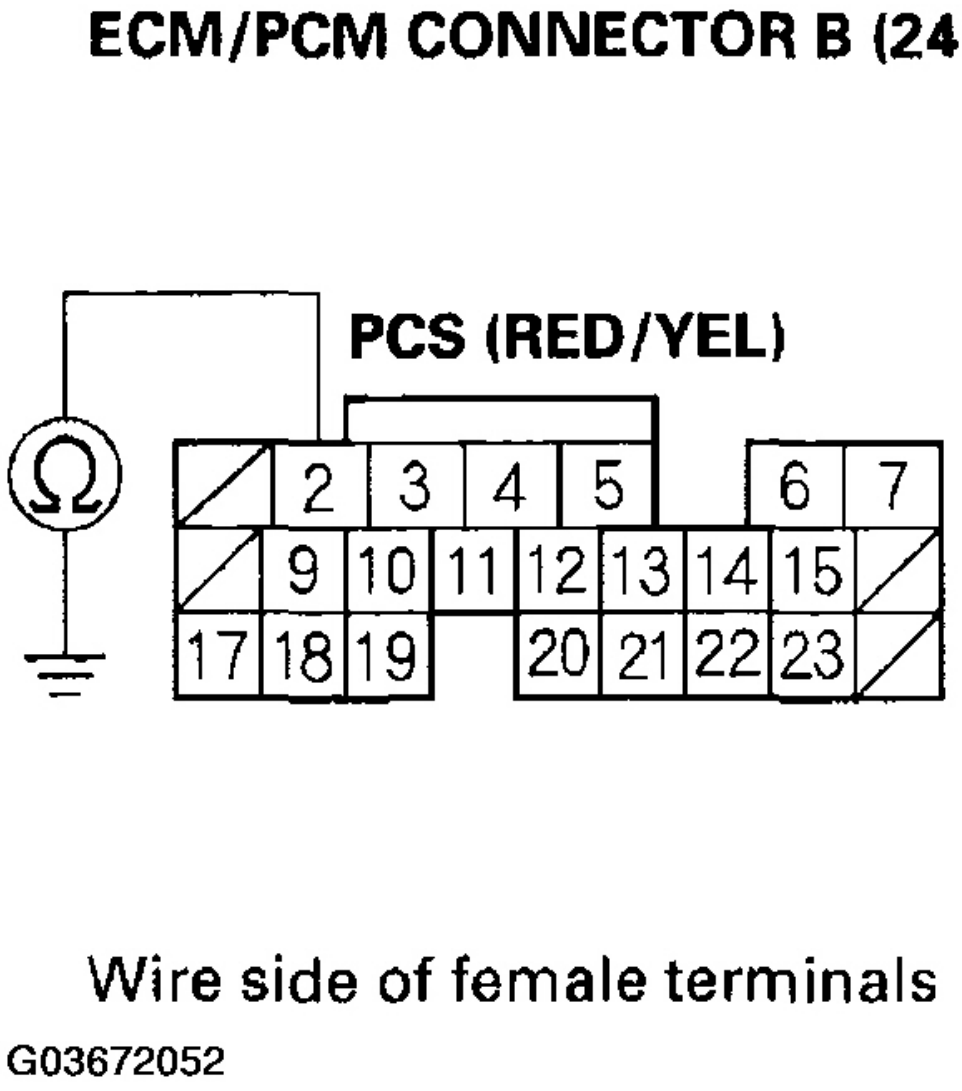


Fig. 11: Checking Continuity Between ECM/PCM Connector Terminal B2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 23.
NO - Repair open in the wire between the EVAP canister purge valve and

the ECM/PCM (B2), then go to step 25.

23. Measure resistance between EVAP canister purge valve 2P connector terminals No. 1 and No. 2.

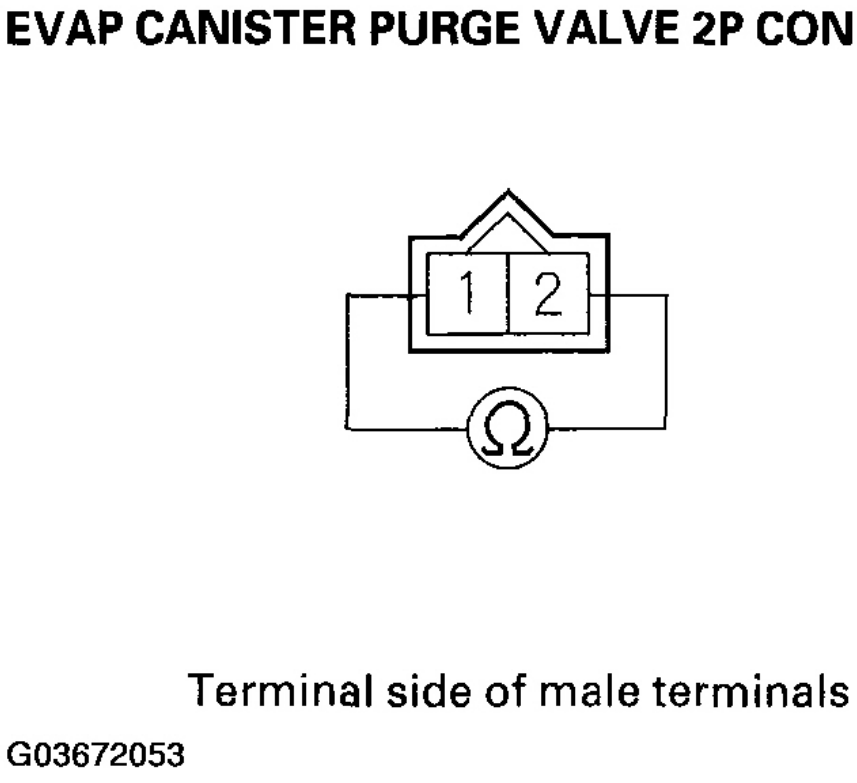


Fig. 12: Measuring Resistance Between EVAP Canister Purge Valve 2P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 33 ohms, at room temperature?

YES - Go to step 31.

NO - Go to step 24.

24. Replace the EVAP canister purge valve (see **EVAP CANISTER PURGE VALVE REPLACEMENT**).
25. Reconnect all connectors.

26. Turn the ignition switch ON (II).
27. Reset the ECM/PCM with the HDS.
28. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
29. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

    YES - If DTC P0443 is indicated, check for poor connections or loose terminals at the EVAP canister purge valve and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

    NO - 2003 model: Troubleshooting is complete. 2004-2007 models: Go to step 30.
30. Monitor the OBD STATUS for DTC P0443 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete.

    NO - If the screen indicates FAILED, check for poor connections or loose terminals at the EVAP canister purge valve and the ECM/PCM, then go to step 1. If the screen indicates EXECUTING, keep idling until a result comes on. If the screen indicates OUT OF CONDITION, go to step 28 and recheck.
31. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**).
32. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

    YES - If DTC P0443 is indicated, check for poor connections or loose terminals at the EVAP canister purge valve and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the

indicated **DTC TROUBLESHOOTING**.

NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

DTC P0451: FTP SENSOR RANGE/PERFORMANCE PROBLEM

NOTE:

- **Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**
- **If DTC P2422 is stored at the same time as DTC P0451, troubleshoot DTC P2422 first, then recheck for DTC P0451.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine, and let it idle for 1 minute.
4. Monitor the OBD STATUS for DTC P0451 in the DTCs MENU with the HDS.

   Does the screen indicate FAILED?

   YES - Go to step 5.

   NO - If the screen indicates PASSED, intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the screen indicates NOT COMPLETED, go to step 3 and recheck.
5. Turn the ignition switch OFF.
6. Replace the FTP sensor (see **FTP SENSOR REPLACEMENT**).
7. Turn the ignition switch ON (II).
8. Reset the ECM/PCM with the HDS.
9. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).

10. Start the engine, and let it idle for 1 minute.
11. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0451 is indicated, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

NO - Go to step 12.

12. Monitor the OBD STATUS for DTC P0451 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - Troubleshooting is complete.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If the screen indicates NOT COMPLETED, go to step 10 and recheck.

DTC P0452: FTP SENSOR CIRCUIT LOW VOLTAGE (2003-2004 MODELS)

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF.
4. Turn the ignition switch ON (II).
5. Check for Temporary DTCs or DTCs with the HDS.

Are DTC P0107, P0112, P0117, P2122, P2127, P2228, P0452, P2627, and P2630 indicated at the same time?

YES - Go to step 23.

NO - Go to step 6.

6. Turn the ignition switch OFF.
7. Remove the fuel fill cap.
8. Turn the ignition switch ON (II).
9. Check the FTP SENSOR in the DATA LIST with the HDS.

Is about -7.3 kPa (-2.16 in.Hg, - 55 mmHg), or 0.3 V or less indicated?

YES - Go to step 13.

NO - Go to step 10.

10. Install the fuel fill cap.
11. Start the engine.
12. Monitor the OBD STATUS for DTC P0452 in the DTCs MENU with the HDS.

Does the screen indicate FAILED?

YES - Go to step 13.

NO - If the screen indicates PASSED, intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the screen indicates NOT COMPLETED, go to step 6 and recheck.

13. Turn the ignition switch OFF.
14. Disconnect the FTP sensor 3P connector.
15. Turn the ignition switch ON (II).
16. Check the FTP SENSOR in the DATA LIST with the HDS.

Is about 7.3 kPa (2.15 in.Hg, 54.7 mmHg), or 4.90 V indicated?

YES - Go to step 32.

NO - Go to step 17.

17. Measure voltage between FTP sensor 3P connector terminal No. 1 and body

ground.

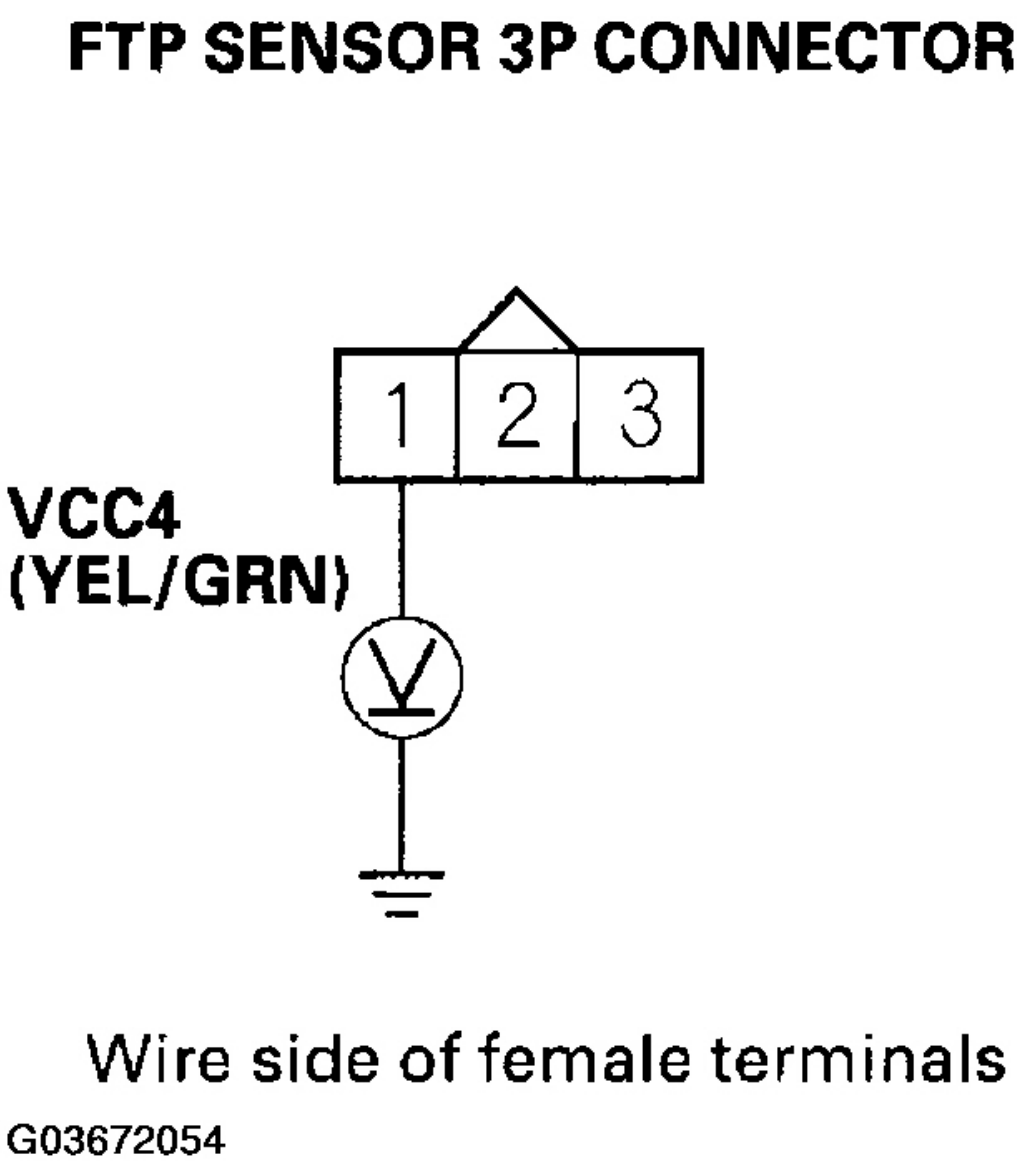


Fig. 13: Measuring Voltage Between FTP Sensor 3P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 19.

NO - Go to step 18.

18. Measure voltage between ECM/PCM connector terminal A31 and body ground.

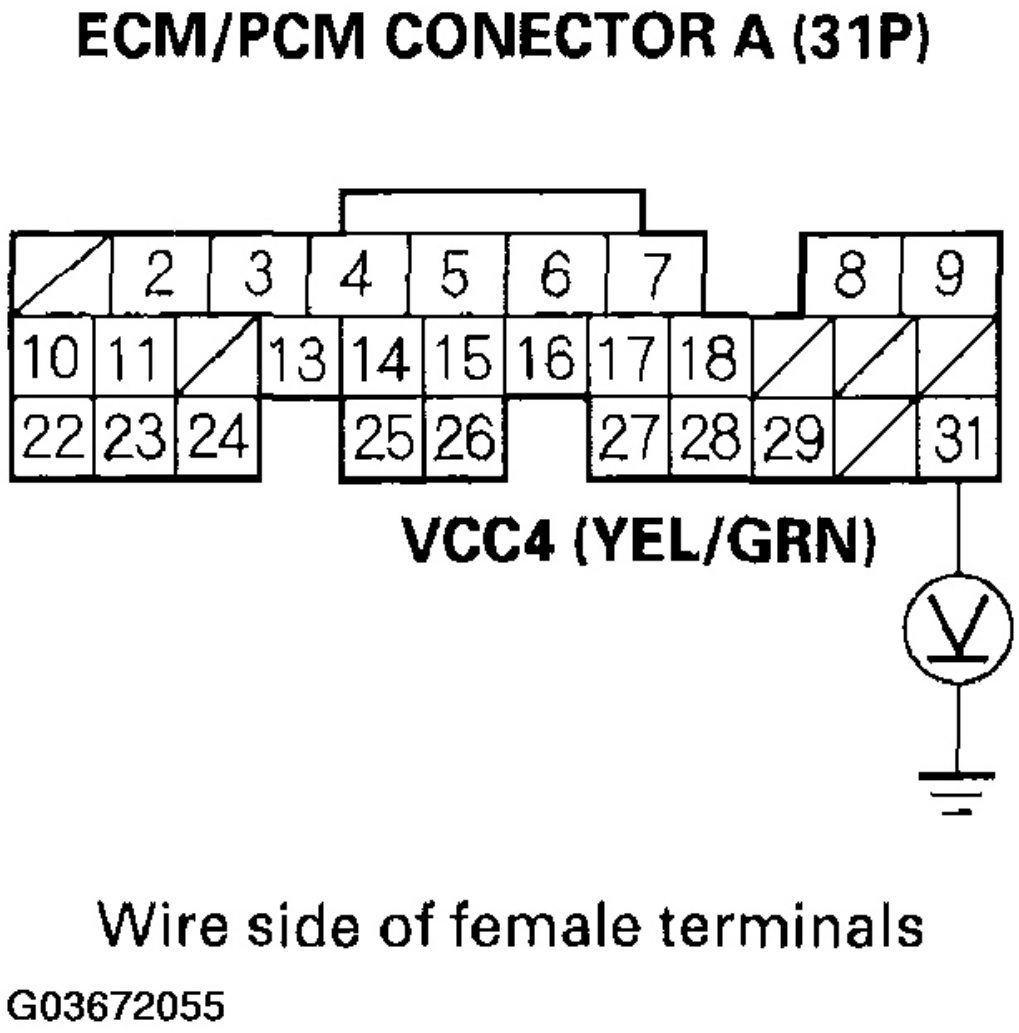


Fig. 14: Measuring Voltage Between ECM/PCM Connector Terminal A31 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ls there about 5V?

YES - Repair open in the wire between the ECM/ PCM (A31) and the FTP sensor, then go to step 34.

NO - Go to step 40.

19. Turn the ignition switch OFF.
20. Jump the SCS line with the HDS.
21. Disconnect ECM/PCM connector A (31P).
22. Check for continuity between FTP sensor 3P connector terminal No. 2 and body ground.

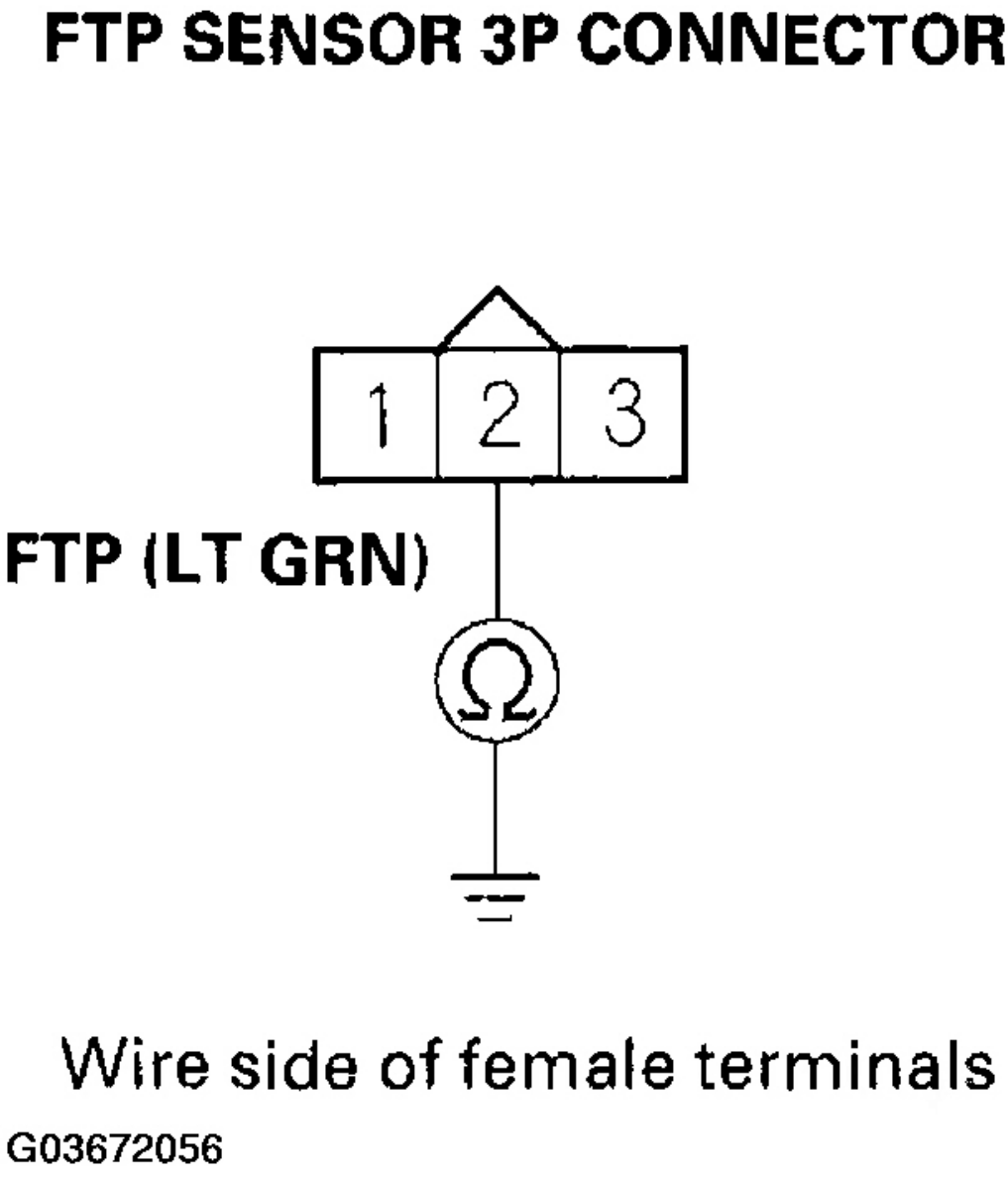


Fig. 15: Checking Continuity Between FTP Sensor 3P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/ PCM (A29) and the FTP sensor, then go to step 34.

NO - Go to step 40.

23. Turn the ignition switch OFF.
24. Jump the SCS line with the HDS.
25. Disconnect ECM/PCM connectors A (31P) and D(17P).
26. Disconnect the connectors from these parts:
    - MAP sensor
    - APP sensor
    - IMT (IMRC) actuator
    - EGR valve
    - FTP sensor
    - Input shaft (mainshaft) speed sensor
    - Output shaft (countershaft) speed sensor
27. Check for continuity between body ground and ECM/PCM connector terminals A31, D2, D6, and D12 individually.

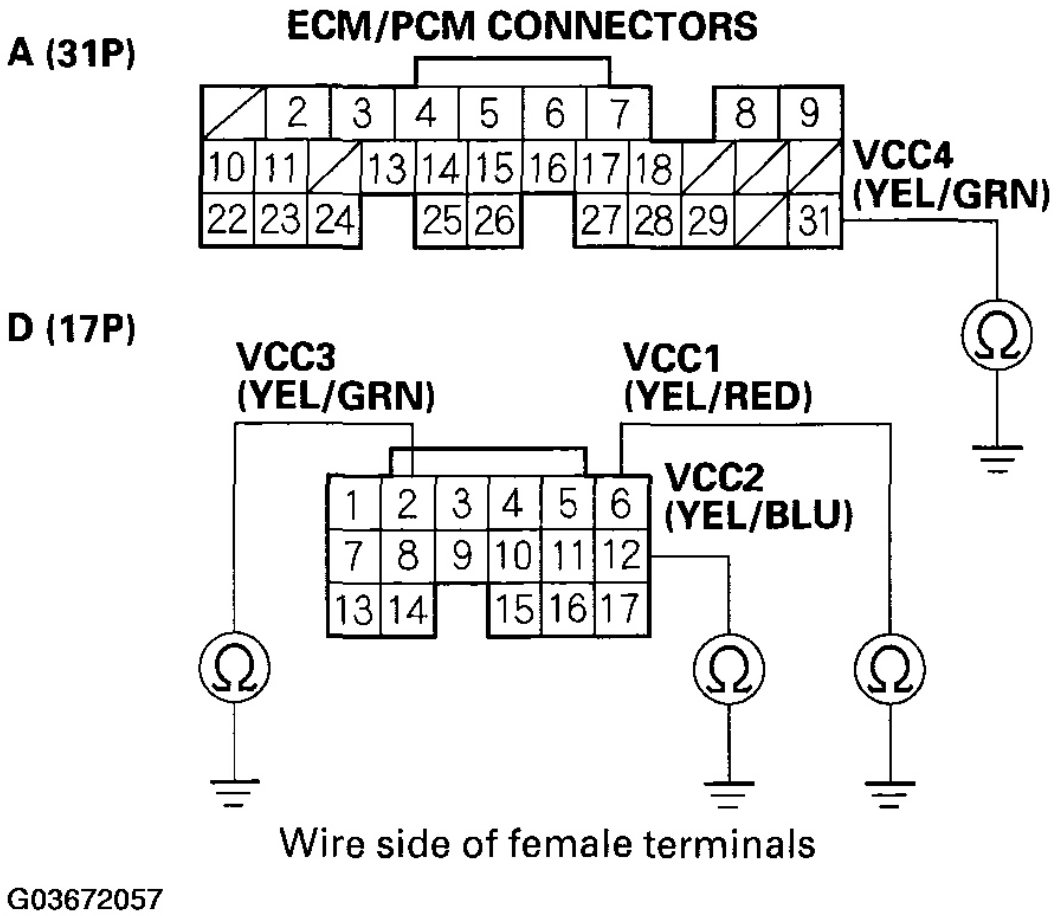


Fig. 16: Checking Continuity Between Body Ground And ECM/PCM Connector Terminals A31, D2, D6, And D12
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/ PCM (A31, D2, D6, or D12) and each part, then go to step 34.

NO - Go to step 28.

28. Reconnect ECM/PCM connectors A (31P) and D(17P).
29. Turn the ignition switch ON (II).
30. Measure voltage between ECM/PCM connector terminal D6 and body ground.

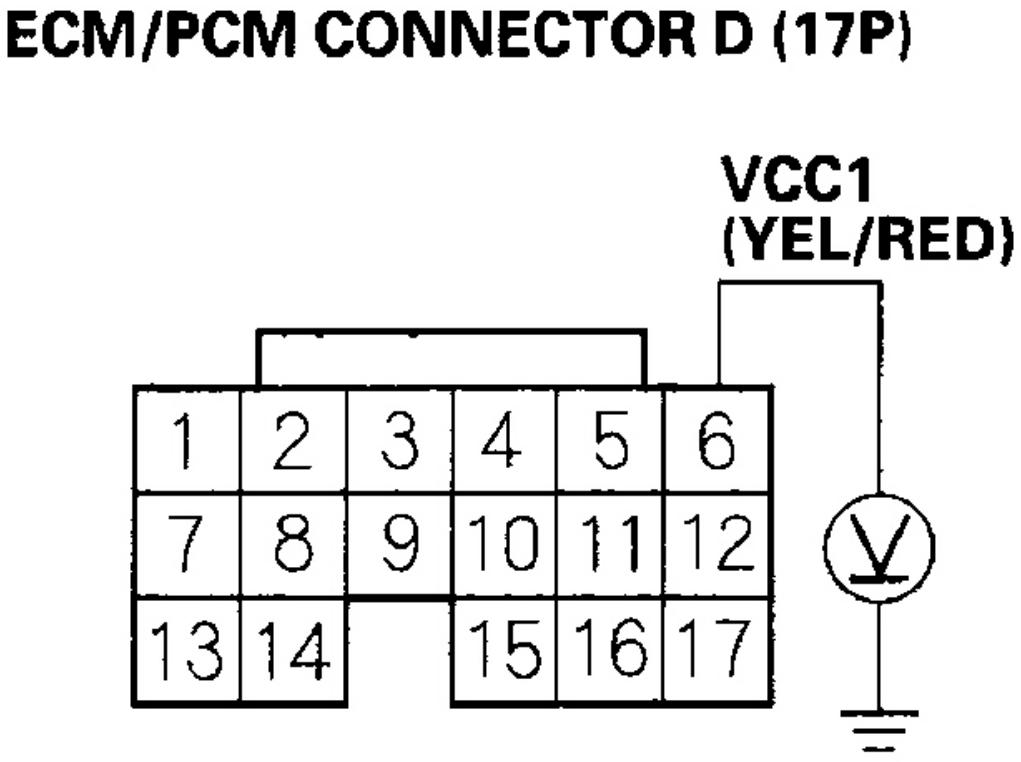


Fig. 17: Measuring Voltage Between ECM/PCM Connector Terminal D6 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 31.

NO - Go to step 40.

31. Continue to monitor voltage at ECM/PCM connector terminal D6 while reconnecting these parts, one at a time:
    - MAP sensor
    - APP sensor
    - IMT (IMRC) actuator
    - EGR valve
    - FTP sensor
    - Input shaft (mainshaft) speed sensor
    - Output shaft (countershaft) speed sensor

    Did the voltage drop to about OV?

    YES - Replace the part that caused the voltage to drop, then go to step 34.

    NO - Go to step 40.
32. Turn the ignition OFF.
33. Replace the FTP sensor (see **FTP SENSOR REPLACEMENT**).
34. Reconnect all connectors.
35. Turn the ignition switch ON (II).
36. Reset the ECM/PCM with the HDS.
37. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
38. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

    YES - If DTC P0452 is indicated, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

    NO - Go to step 39.
39. Monitor the OBD STATUS for DTC P0452 in the DTCs MENU with the

HDS.

Does the screen indicate PASSED?

YES - Troubleshooting is complete.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If the screen indicates NOT COMPLETED, go to step 37 and recheck.

40. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**).
41. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0452 is indicated, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

DTC P0452: FTP SENSOR CIRCUIT LOW VOLTAGE (2005-2007 MODELS)

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF.
4. Remove the fuel fill cap.
5. Turn the ignition switch ON (II).

6. Check the FTP SENSOR in the DATA LIST with the HDS.

   Is about - 7.3 kPa (- 2.16 in.Hg, -55mmHg), or 0.3 V or less indicated?

   YES - Go to step 10.

   NO - Go to step 7.
7. Install the fuel fill cap.
8. Start the engine.
9. Monitor the OBD STATUS for DTC P0452 in the DTCs MENU with the HDS.

   Does the screen indicate FAILED?

   YES - Go to step 10.

   NO - If the screen indicates PASSED, intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the screen indicates NOT COMPLETED, go to step 5 and recheck.
10. Turn the ignition switch OFF.
11. Disconnect the FTP sensor 3P connector.
12. Turn the ignition switch ON (II).
13. Check the FTP SENSOR in the DATA LIST with the HDS.

    Is about 7.3 kPa (2.15 in.Hg, 54.7 mm Hg), or 4.90 V indicated?

    YES - Go to step 20.

    NO - Go to step 14.
14. Measure voltage between FTP sensor 3P connector terminal No. 1 and body ground.

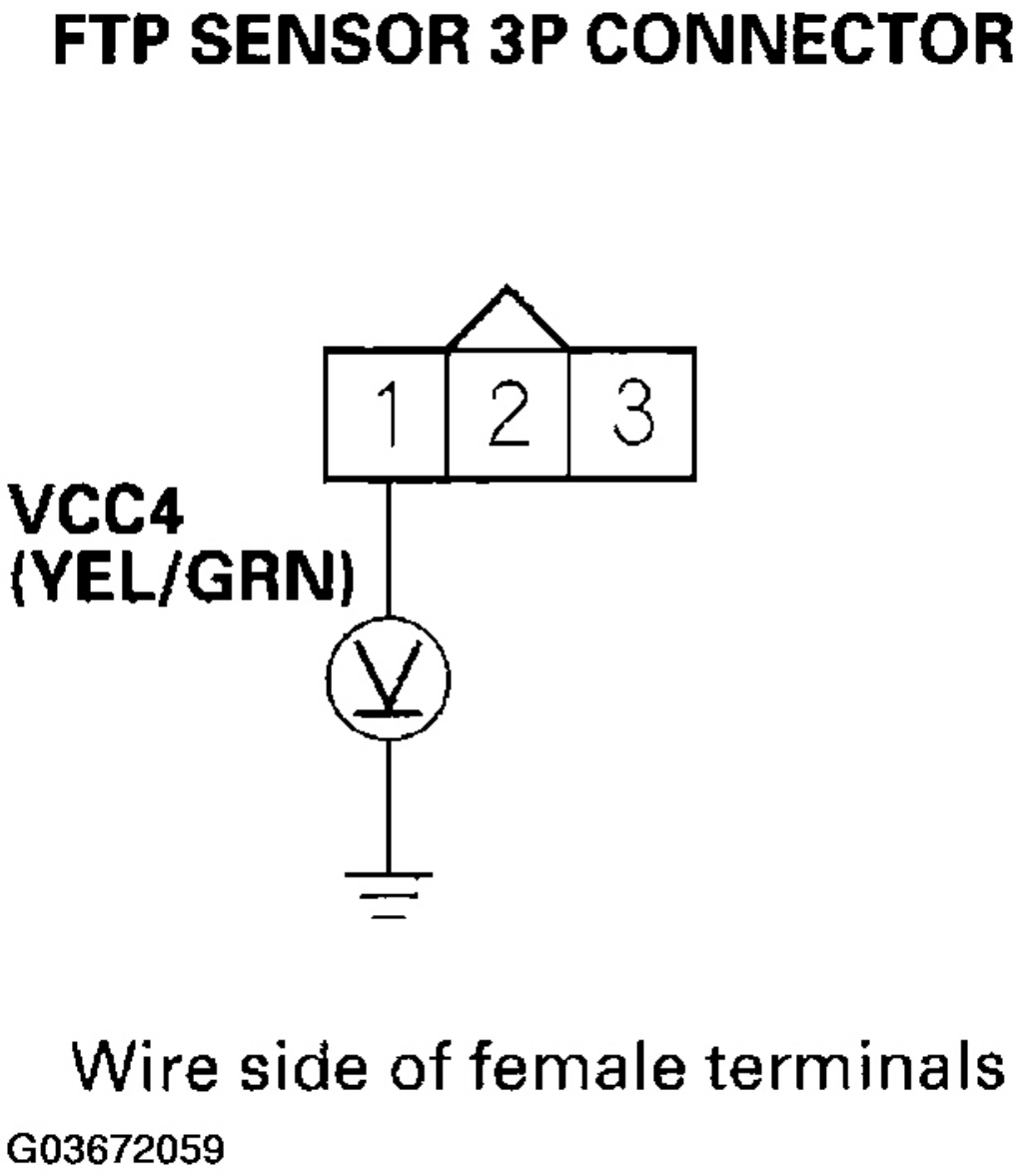


Fig. 18: Measuring Voltage Between FTP Sensor 3P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 16.

NO - Go to step 15.

15. Measure voltage between ECM/PCM connector terminal A31 and body ground.

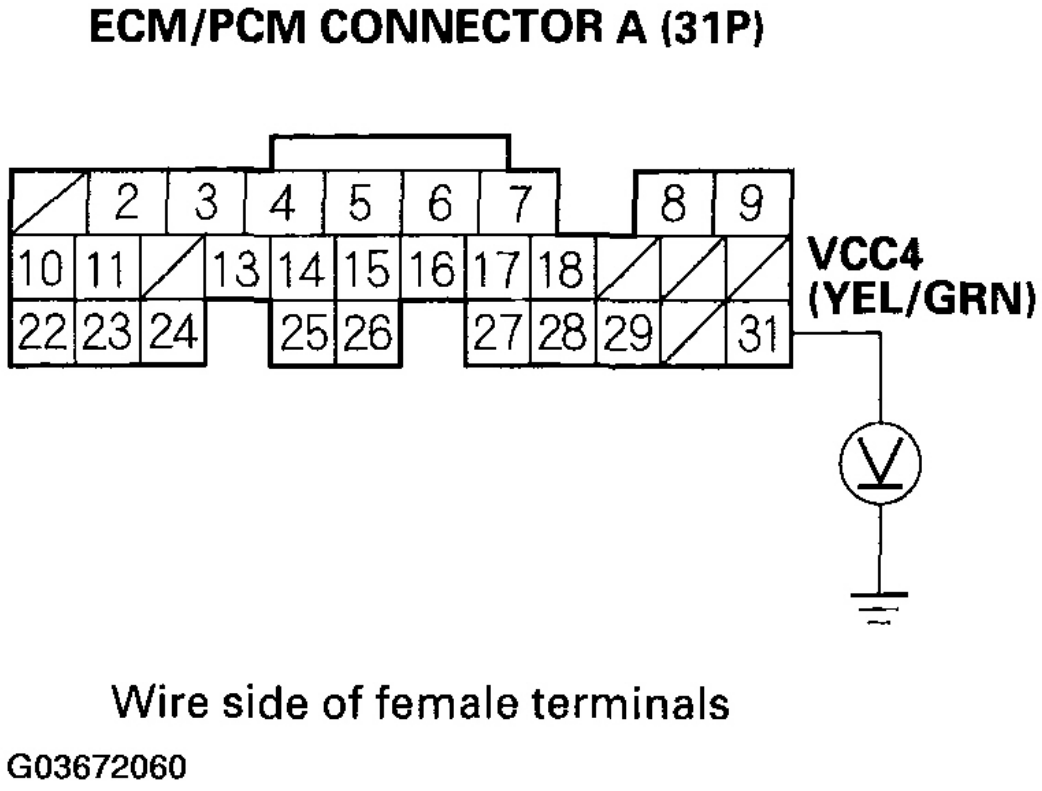


Fig. 19: Measuring Voltage Between ECM/PCM Connector Terminal A31 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Repair open in the wire between the ECM/ PCM (A31) and the FTP sensor, then go to step 22.

NO - Go to step 28.

16. Turn the ignition switch OFF.
17. Jump the SCS line with the HDS.
18. Disconnect ECM/PCM connector A (31P).
19. Check for continuity between FTP sensor 3P connector terminal No. 2 and body ground.

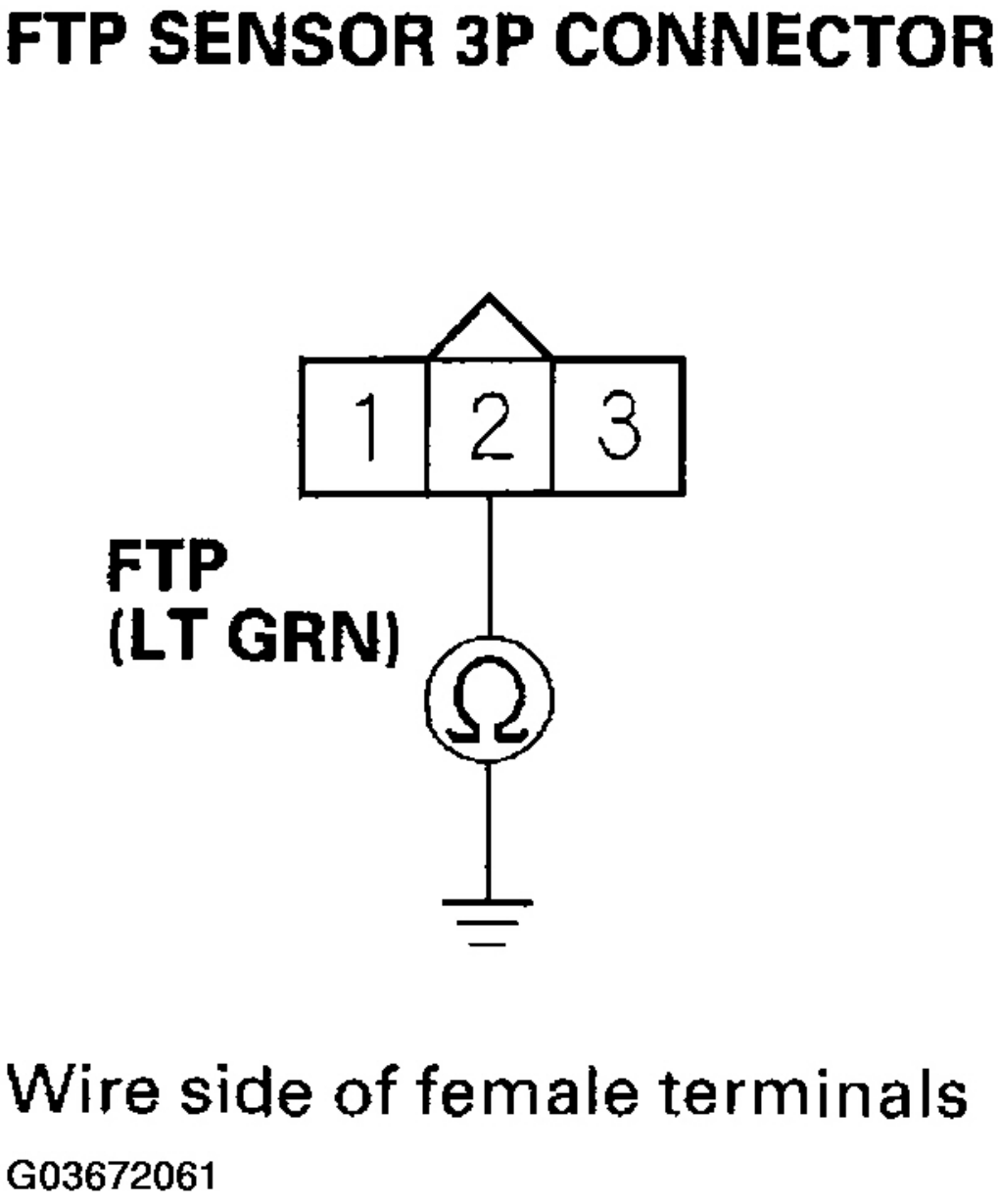


Fig. 20: Checking Continuity Between FTP Sensor 3P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/ PCM (A29) and the FTP sensor, then go to step 22.

NO - Go to step 28.

20. Turn the ignition switch OFF.
21. Replace the FTP sensor (see **FTP SENSOR REPLACEMENT**).
22. Reconnect all connectors.
23. Turn the ignition switch ON (II).
24. Reset the ECM/PCM with the HDS.
25. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
26. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0452 is indicated, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

NO - Go to step 27.

27. Monitor the OBD STATUS for DTC P0452 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - Troubleshooting is complete.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If the screen indicates NOT COMPLETED, go to step 25 and recheck.

28. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**).
29. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0452 is indicated, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

DTC P0453: FTP SENSOR CIRCUIT HIGH VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF.
4. Remove the fuel fill cap.
5. Turn the ignition switch ON (II).
6. Check the FTP SENSOR in the DATA LIST with the HDS.

Is about 7.3 kPa (2.16 in.Hg, 55 mmHg), or 4.7 V or more indicated?

YES - Go to step 10.

NO - Go to step 7.

7. Install the fuel fill cap.
8. Start the engine.
9. Monitor the OBD STATUS for DTC P0453 in the DTCs MENU with the HDS.

Does the screen indicate FAILED?

YES - Go to step 10.

NO - If the screen indicates PASSED, intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the screen indicates NOT COMPLETED, go to step 6 and recheck.

10. Turn the ignition switch OFF.
11. Disconnect the FTP sensor 3P connector.
12. Connect FTP sensor 3P connector terminals No. 2 and No. 3 with a jumper wire.

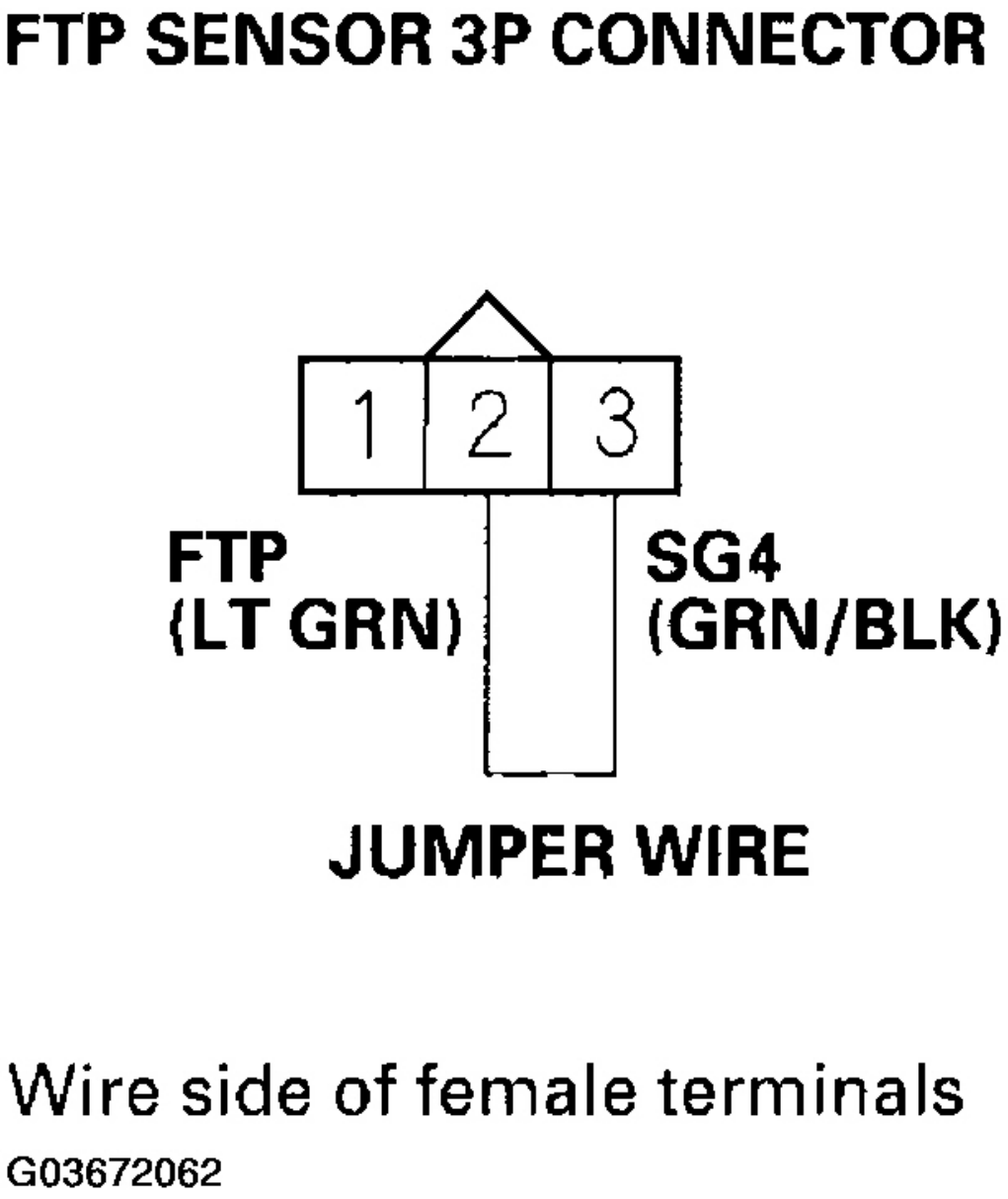


Fig. 21: Connecting FTP Sensor 3P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Turn the ignition switch ON (II).
14. Check the FTP SENSOR in the DATA LIST with the HDS.

Is about 7.3 kPa (2.16 in.Hg, 55 mmHg), or 4.7 V or more indicated?

YES - Go to step 15.

NO - Go to step 25.

15. Measure voltage between FTP sensor 3P connector terminals No. 1 and No. 3.

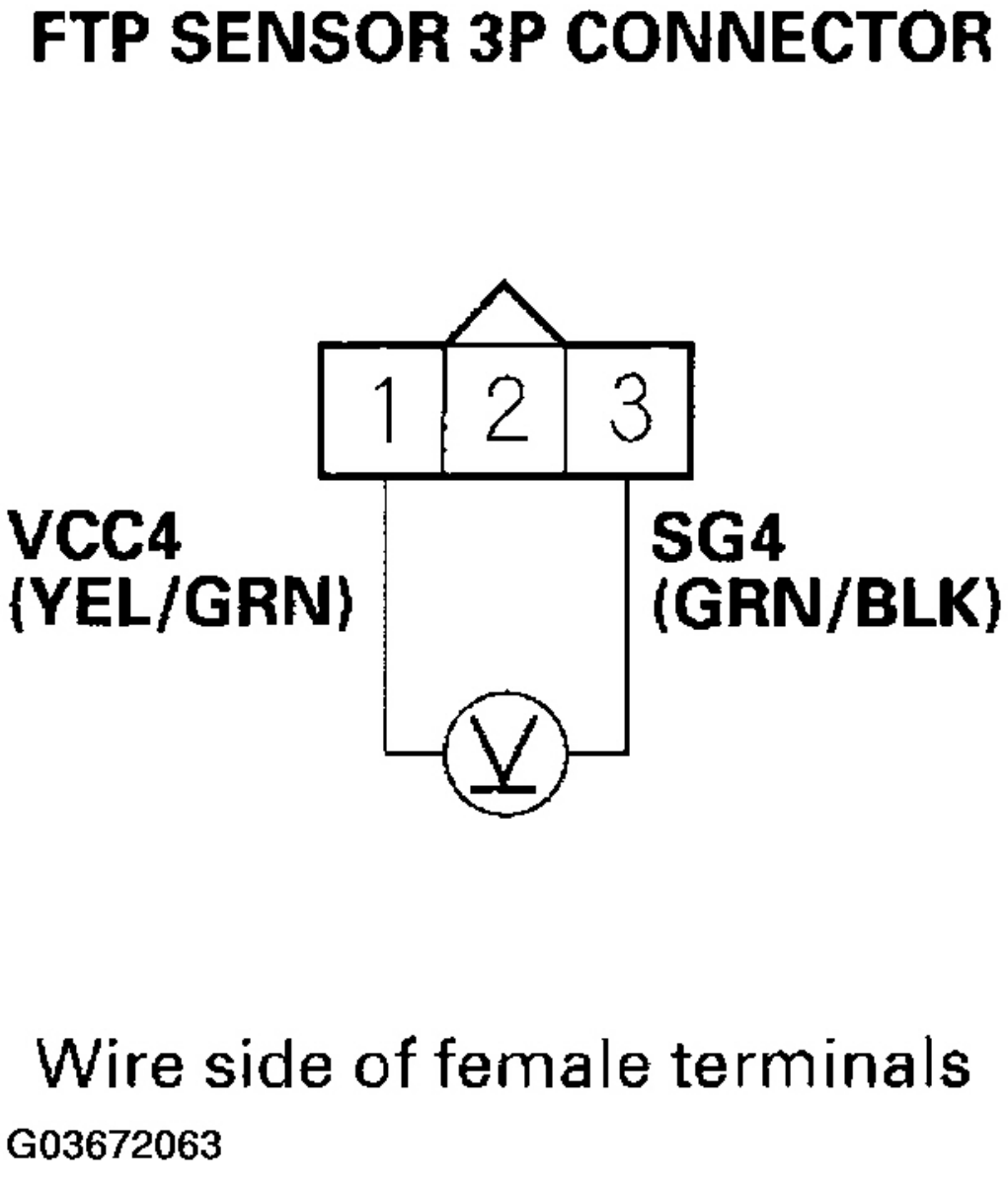


Fig. 22: Measuring Voltage Between FTP Sensor 3P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 21.

NO - Go to step 16.

16. Turn the ignition switch OFF.
17. Jump the SCS line with the HDS.
18. Disconnect ECM/PCM connector A (31P).
19. Connect FTP sensor 3P connector terminal No. 3 to body ground with a jumper wire.

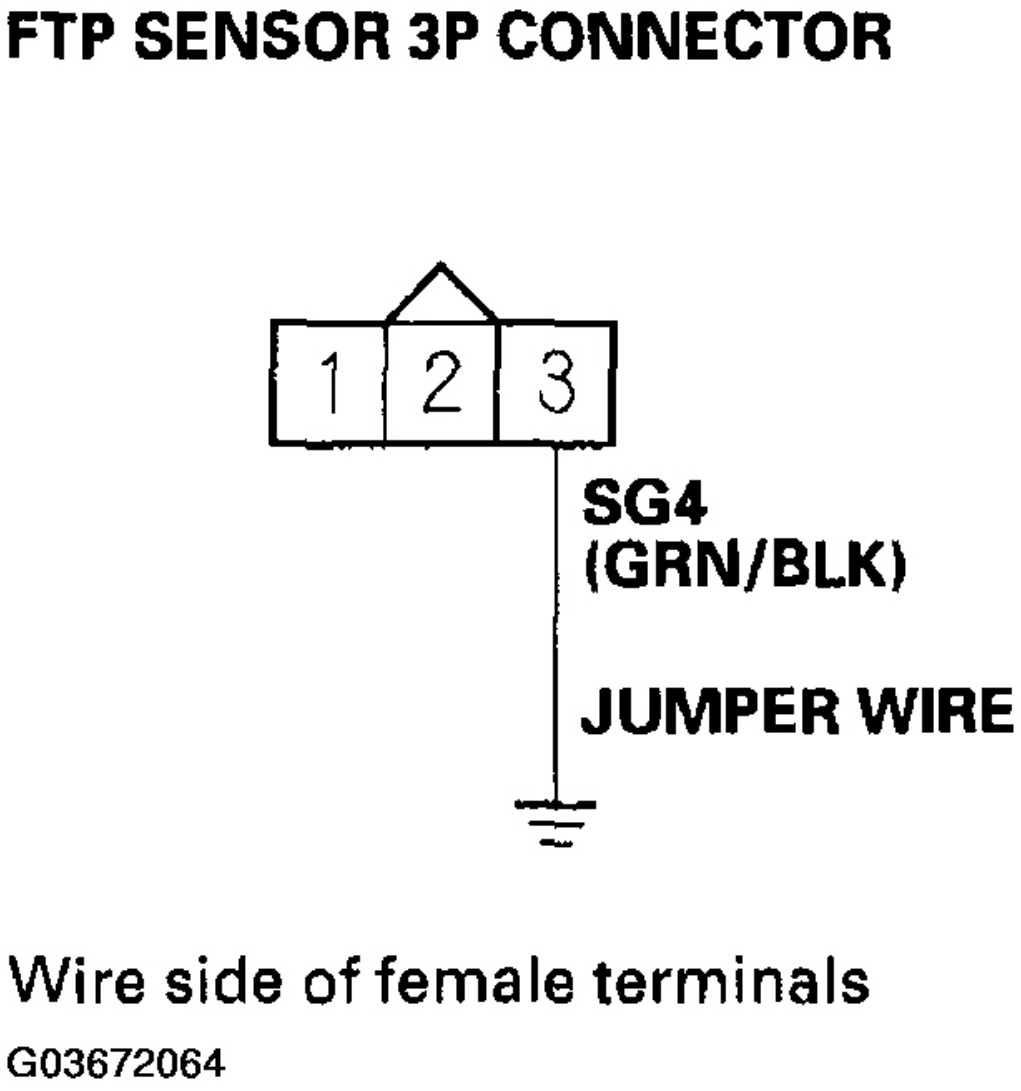


Fig. 23: Connecting FTP Sensor 3P Connector Terminal To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Check for continuity between ECM/PCM connector terminals A28 and body ground.

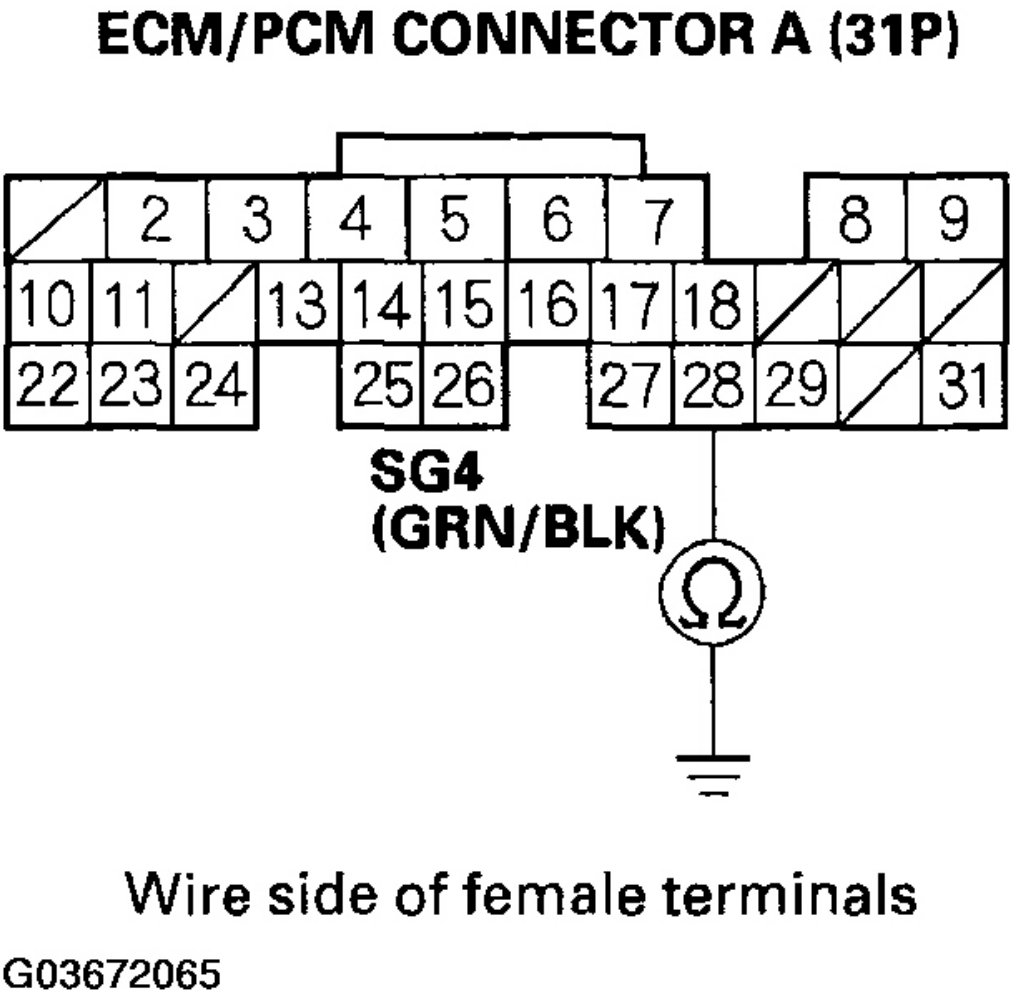


Fig. 24: Checking Continuity Between ECM/PCM Connector Terminals A28 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 33.

NO - Repair open in the wire between the ECM/ PCM (A28) and the FTP sensor, then go to step 27.

21. Turn the ignition switch OFF.
22. Connect ECM/PCM connector terminals A28 and A29 with a jumper wire.

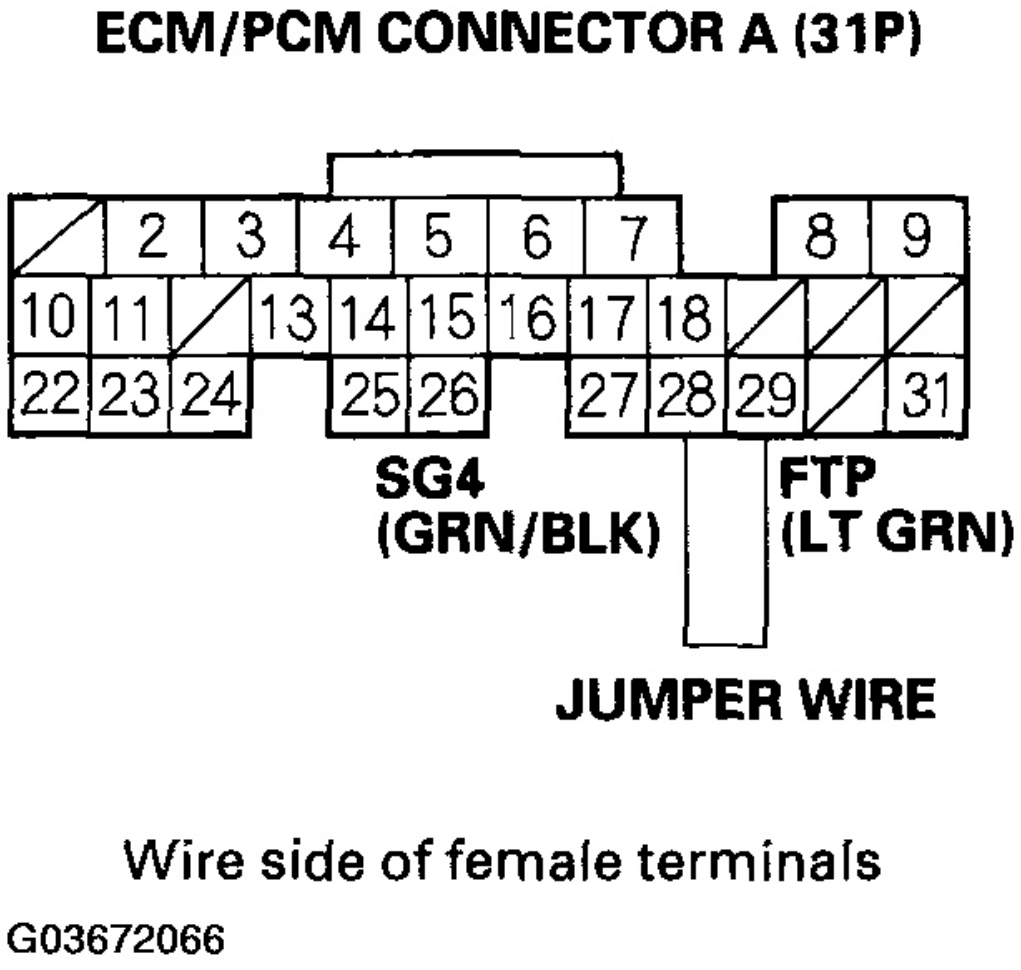


Fig. 25: Connecting ECM/PCM Connector Terminals A28 And A29 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Turn the ignition switch ON (II).
24. Check the FTP SENSOR in the DATA LIST with the HDS.

Is about 7.3 kPa (2.16 in.Hg, 55 mmHg), or 4.7 V or more indicated?

YES - Go to step 33.

NO - Repair open in the wire between the ECM/ PCM (A29) and the FTP sensor, then go to step 27.

25. Turn the ignition switch OFF.
26. Replace the FTP sensor (see **FTP SENSOR REPLACEMENT**).
27. Reconnect all connectors.
28. Turn the ignition switch ON (II).
29. Reset the ECM/PCM with the HDS.
30. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
31. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0453 is indicated, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

NO - Go to step 32.

32. Monitor the OBD STATUS for DTC P0453 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - Troubleshooting is complete.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If the screen indicates NOT COMPLETED, go to step 30 and recheck.

33. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**).
34. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0453 is indicated, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

DTC P0457: EVAP SYSTEM LEAK DETECTED FUEL FILL CAP LOOSE OR MISSING

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Check the fuel fill cap (the cap must say "Tighten to click"). If should turn 1/4 turn after it's tight, then it clicks.

   Is the correct fuel fill cap installed and properly tightened?

   YES - Go to step 2.

   NO - Replace or tighten the cap, then go to step 19.
2. Check the fuel fill cap seal (A) and the fuel fill pipe mating surface (B). Verify that the fuel fill cap tether cord (C) is not caught under the cap.

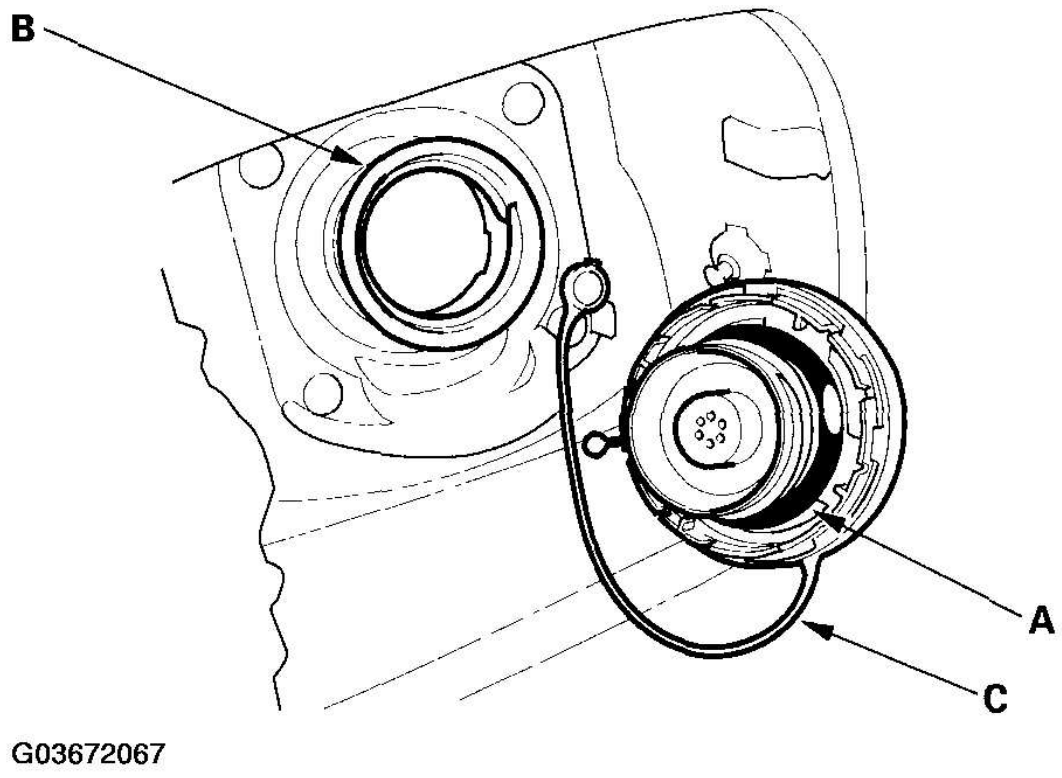


Fig. 26: Checking Fuel Fill Cap Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the fuel fill cap seal missing or damaged, is the fuel fill pipe damaged, or is the tether cord caught under the cap?

YES - Replace the fuel fill cap or the fuel fill pipe, then go to step 19.
NO - Go to step 3.

3. Turn the ignition switch ON (II).
4. Clear the DTC with the HDS.
5. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor, or the EVAP canister

vent shut valve and the ECM/PCM.

NO - Go to step 6.

6. Turn the ignition switch OFF.
7. Remove the EVAP canister vent shut valve from the EVAP canister (see **EVAP CANISTER VENT SHUT VALVE REPLACEMENT**).
8. Connect the 2P connector to the EVAP canister vent shut valve.
9. Turn the ignition switch ON (II).
10. Do the EVAP CVS ON in the INSPECTION MENU with the HDS.
11. Check the EVAP canister vent shut valve (A) operation.

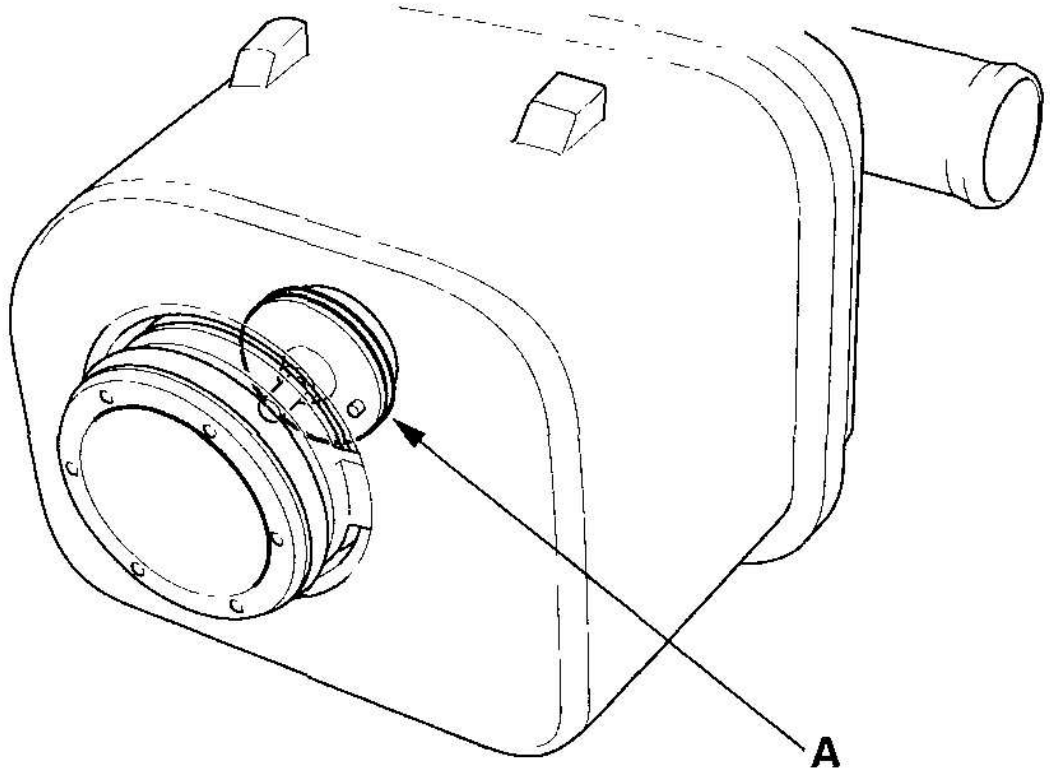


Fig. 27: Checking EVAP Canister Vent Shut Valve Operation
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the valve operate?

YES - Check the routing of the EVAP canister vent tube, then go to step 18.

NO - Go to step 12.

12. Turn the ignition switch OFF.
13. Replace the EVAP canister vent shut valve (see **EVAP CANISTER VENT SHUT VALVE REPLACEMENT**).
14. Turn the ignition switch ON (II).
15. Reset the ECM/PCM with the HDS.
16. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
17. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Troubleshooting is complete.

NO - Check for poor connections or loose terminals at the FTP sensor, or the EVAP canister vent shut valve and the ECM/PCM, then go to step 1.

18. Reinstall the EVAP canister vent shut valve.
19. Turn the ignition switch ON (II).
20. Reset the ECM/PCM with the HDS.
21. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
22. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Troubleshooting is complete.

NO - Check for poor connections or loose terminals at the FTP sensor, or the EVAP canister vent shut valve and the ECM/PCM, then go to step 1.

DTC P0496: EVAP SYSTEM HIGH PURGE FLOW

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (seeGENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor, the EVAP canister purge valve, or the EVAP canister vent shut valve and the ECM/ PCM.

NO - Go to step 4.

4. Turn the ignition switch OFF.
5. Replace the EVAP canister purge valve (see **EVAP CANISTER PURGE VALVE REPLACEMENT**).
6. Turn the ignition switch ON (II).
7. Reset the ECM/PCM with the HDS.
8. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
9. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Troubleshooting is complete.

NO - Check for poor connections or loose terminals at the FTP sensor, the EVAP canister purge valve, or the EVAP canister vent shut valve and the ECM/ PCM, then go to step 1.

DTC P0497: EVAP SYSTEM LOW PURGE FLOW

Special Tools Required

- Vacuum/pressure gauge, 0-4 in.Hg, 07JAZ-001000B
- Vacuum pump/gauge, 0-30 in.Hg, Snap-on YA4000A or equivalent, commercially available

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Check the fuel fill cap installation.

   Is the fuel fill cap installed and properly tightened?

   YES - Go to step 2.

   NO - Properly install the fuel fill cap (the cap must say "Tighten to click"). If should turn 1/4 turn after it's tight, then go to step 23.
2. Turn the ignition switch ON (II).
3. Clear the DTC with the HDS.
4. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

   Is the result OK?

   YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor, the EVAP canister purge valve, or the EVAP canister vent shut valve and the ECM/ PCM.

   NO - Go to step 5.
5. Check for a loose or damaged EVAP canister purge line between the intake manifold and the EVAP canister purge valve.

   Is the line OK?

   YES - Go to step 6.

   NO - Reconnect or repair the EVAP canister purge line, then go to step 23.
6. Disconnect the vacuum hose (A) from the EVAP canister purge valve joint (B)

in the engine compartment, and connect a T-fitting (C) from the vacuum gauge and the vacuum pump/gauge, 0-30 in.Hg, to the vacuum hose (A) as shown in **Fig. 28**.

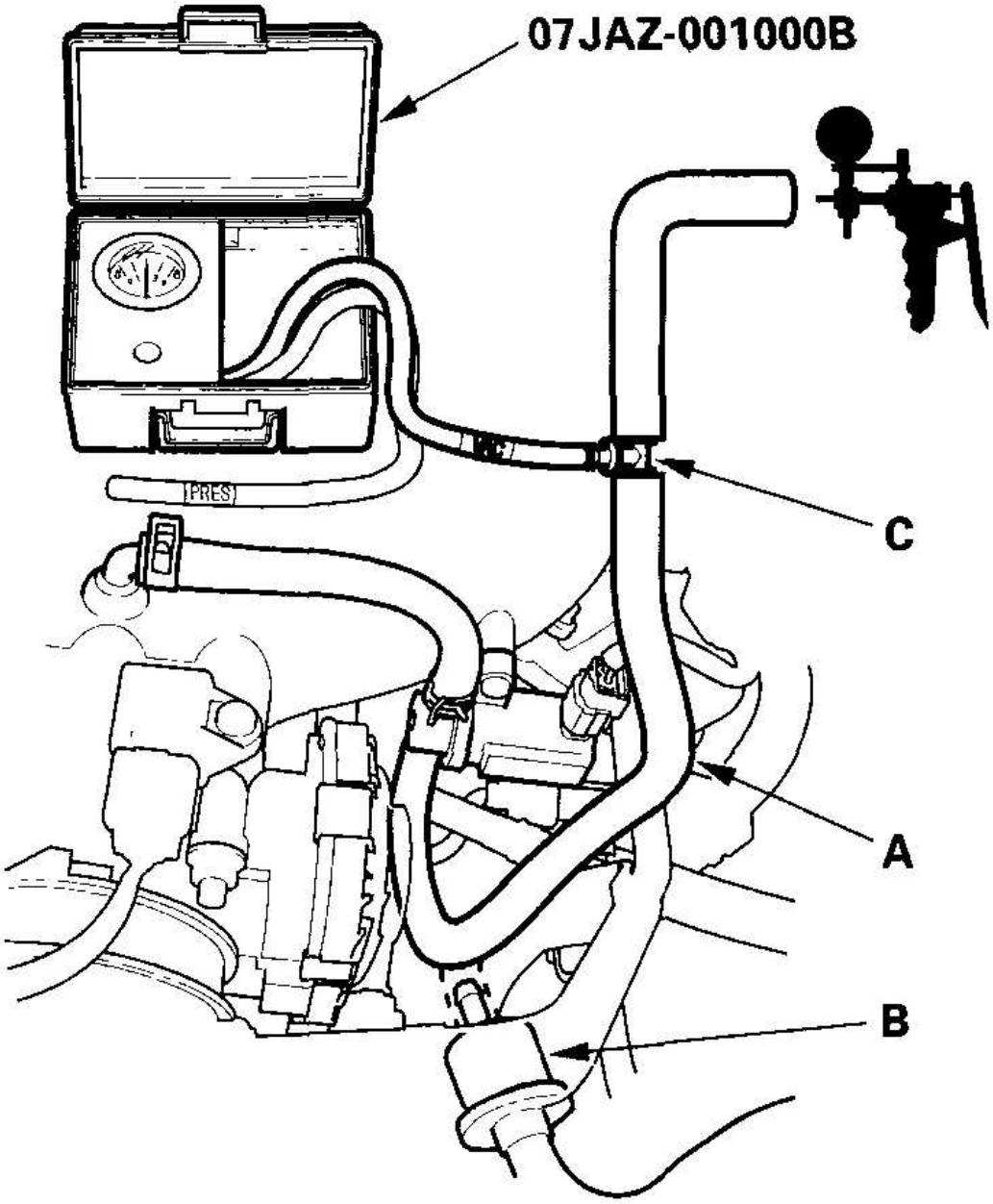


Fig. 28: Disconnecting Vacuum Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Do the EVAP PCS ON in the INSPECTION MENU with the HDS.
8. Slowly apply about 0.6 in.Hg (15 mmHg) of vacuum to the hose.

Does it hold vacuum?

YES - Check for blockage in the PCS line between the intake manifold and the EVAP canister purge valve, and the line between the EVAP canister purge valve and the EVAP canister purge joint. If the vacuum hoses are OK, replace the EVAP canister purge valve, then go to step 22.

NO - Go to step 9.

9. Reconnect the vacuum hose to the EVAP canister purge joint.
10. Disconnect the vacuum hose from the EVAP canister purge line (EVAP canister side), and connect a T-fitting (A) from the vacuum gauge and the vacuum pump/gauge, 0-30 in.Hg, to the hose as shown in **Fig. 29**.

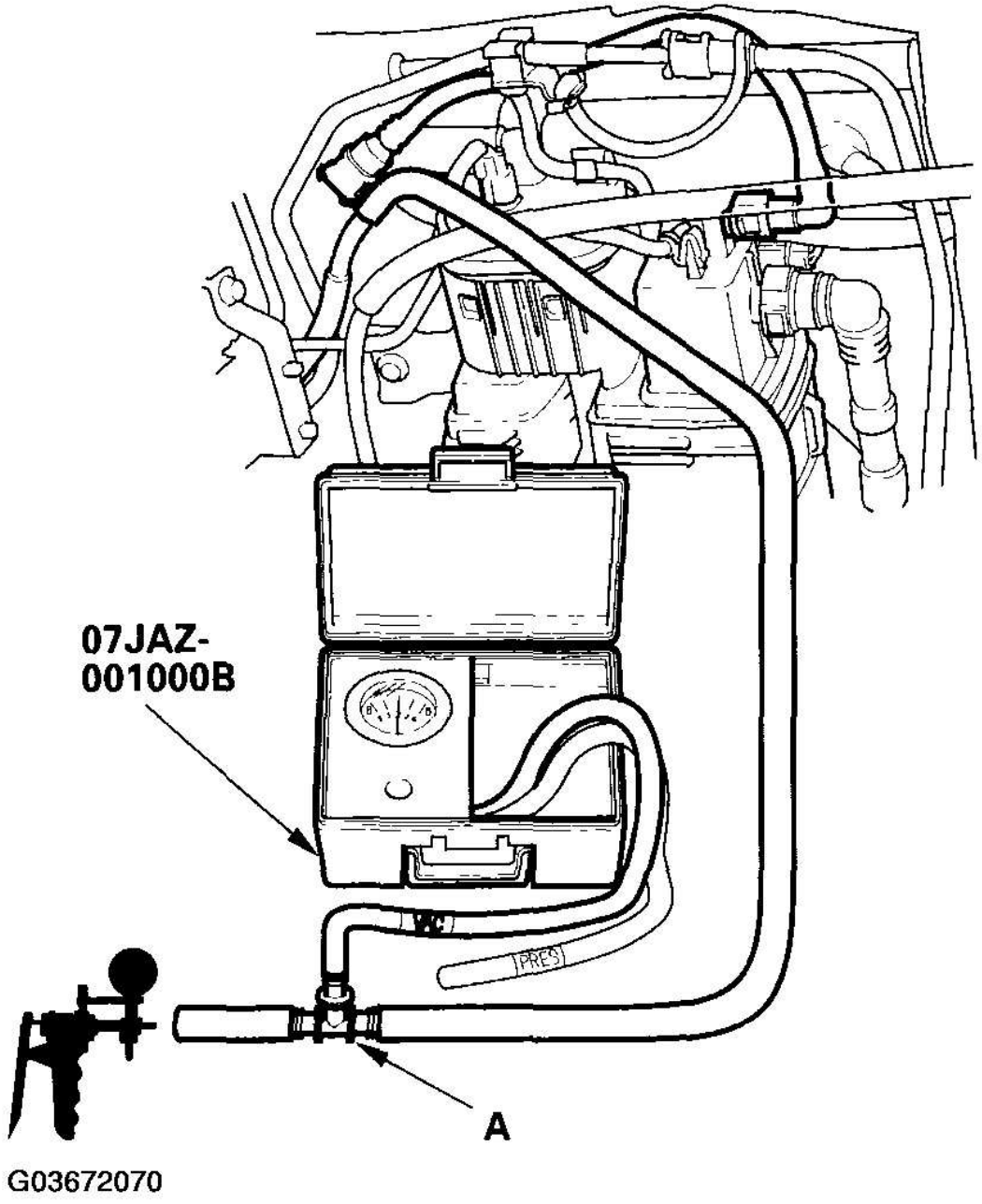


Fig. 29: Connecting T-Fitting From Vacuum Gauge And Vacuum Pump/Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Do the EVAP PCS ON in the INSPECTION MENU with the HDS.

12. Slowly apply about 2 kPa (0.6 in.Hg, 15 mmHg) of vacuum to the hose.

    Does it hold vacuum?

    YES - Check for a restricted EVAP canister purge line between the EVAP canister purge valve and the EVAP canister, then go to step 22.

    NO - Go to step 13.

13. Remove the FTP sensor with its connector connected (see **FTP SENSOR REPLACEMENT**).
14. Connect a T-fitting (A) from the vacuum gauge and a commercially available vacuum pump/gauge, 0-30 in.Hg, to the FTP sensor (B) as shown in **Fig. 30**.

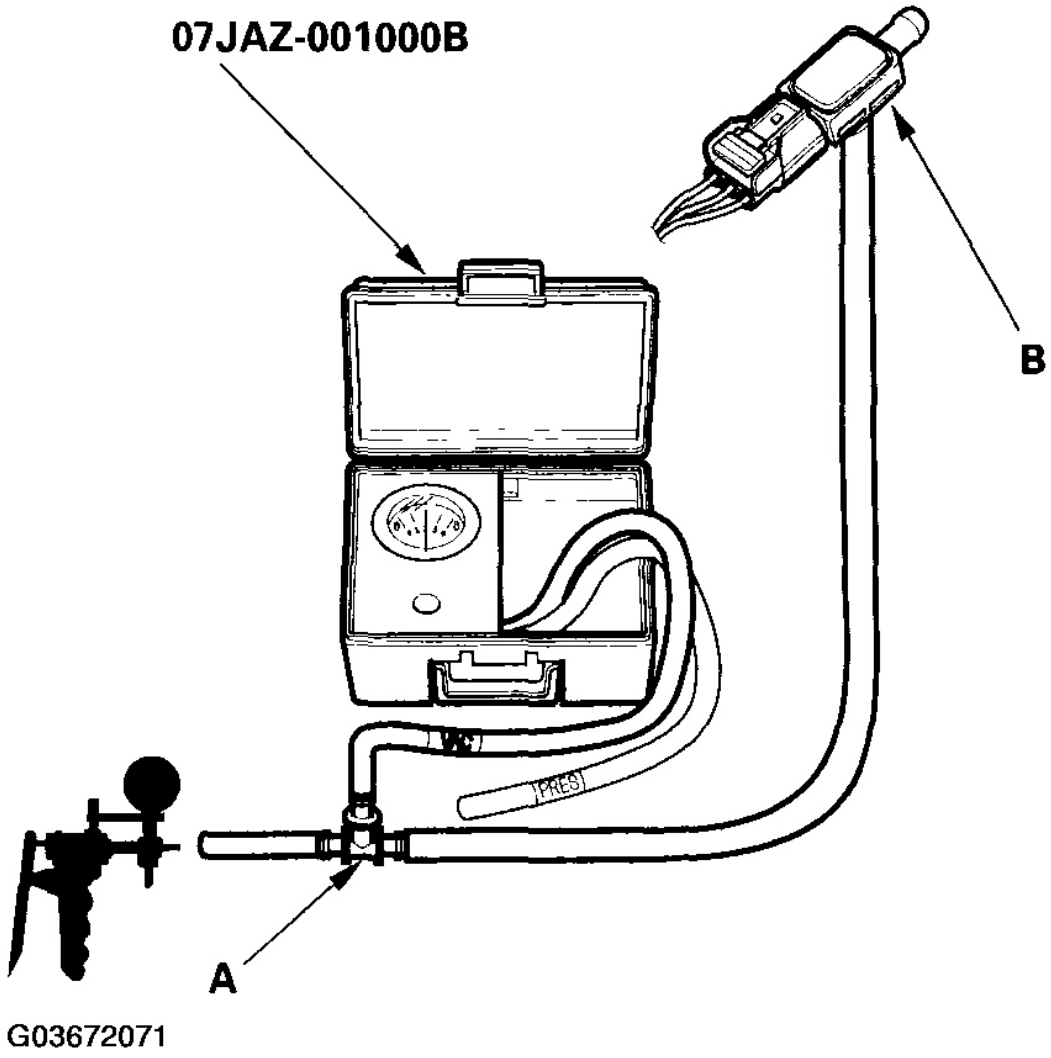


Fig. 30: Connecting T-Fitting
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Check and record the FTP SENSOR reading in the DATA LIST with the HDS.
16. Slowly apply about 1.3 kPa (0.4 in.Hg, 10 mmHg) of vacuum to the hose.
17. Check the FTP SENSOR in the DATA LIST with the HDS.

Is the difference more than 1.1 kPa (0.31 in.Hg, 8 mmHg) before and after applying vacuum?

YES - Go to step 18.

NO - Replace the FTP sensor (see **FTP SENSOR REPLACEMENT**), then go to step 22.

18. Reconnect the vacuum hoses to the EVAP canister purge line (EVAP canister side), and reinstall the FTP sensor.
19. Disconnect the vacuum hose (purge line) (A) from the EVAP canister purge valve (B), and connect a T-fitting (C) from the vacuum gauge and the vacuum pump/gauge, 0-30 in.Hg, to the hose as shown in **Fig. 31**.

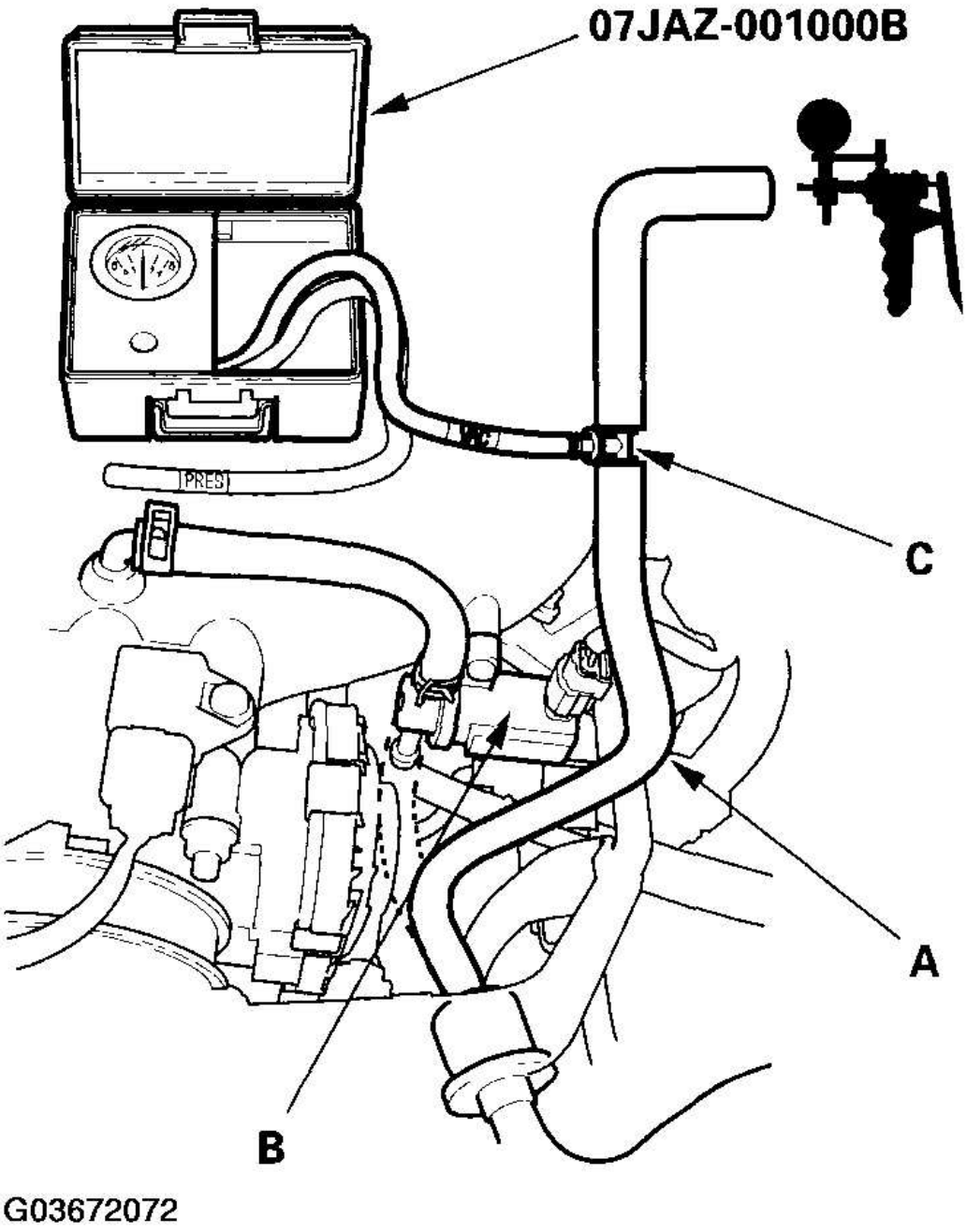


Fig. 31: Disconnecting Vacuum Hose (Purge Line)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Do the EVAP CVS ON in the INSPECTION MENU with the HDS.

21. Slowly apply about 2 kPa (0.6 in.Hg, 15 mmHg) of vacuum to the hose.

Does the hose hold vacuum?

YES - Check for blockage on the EVAP canister purge joint, then go to step 22.

NO - Replace the EVAP canister vent shut valve (see **EVAP CANISTER VENT SHUT VALVE REPLACEMENT**), then go to step 22.

22. Reconnect all hoses.
23. Turn the ignition switch ON (II).
24. Reset the ECM/PCM with the HDS.
25. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
26. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Troubleshooting is complete.

NO - Check for poor connections or loose terminals at the FTP sensor, the EVAP canister purge valve, or the EVAP canister vent shut valve and the ECM/ PCM, then go to step 1.

DTC P0498: EVAP CANISTER VENT SHUT VALVE CONTROL CIRCUIT LOW VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0498 indicated?

YES - Go to step 6.

NO - Go to step 4.

4. Do the EVAP CVS ON in the INSPECTION MENU with the HDS.
5. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0498 indicated?

YES - Go to step 6.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the EVAP canister vent shut valve and the ECM/ PCM.

6. Turn the ignition switch OFF.
7. Disconnect the EVAP canister vent shut valve 2P connector.
8. Turn the ignition switch ON (II).
9. Measure voltage between EVAP canister vent shut valve 2P connector terminal No. 2 and body ground.

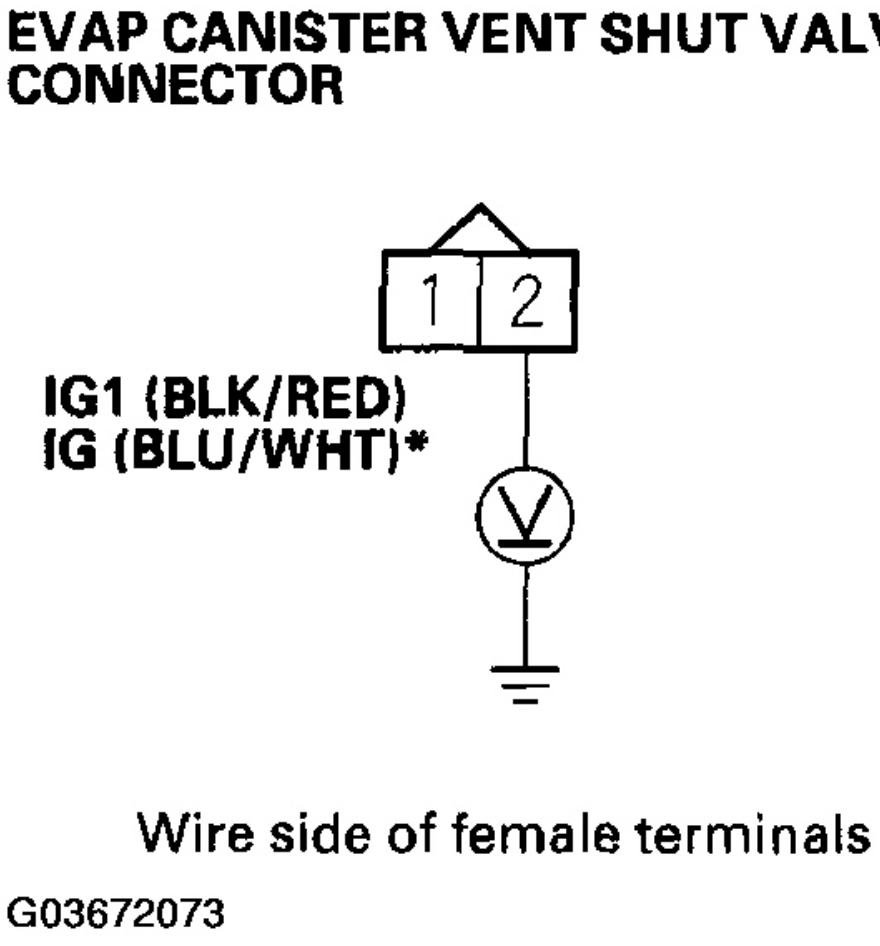


Fig. 32: Measuring Voltage Between EVAP Canister Vent Shut Valve 2P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

*: 2005-2007 models

Is there battery voltage?

YES - Go to step 10.

NO - 2003-2004 models: Repair open in the wire between the EVAP canister vent shut valve and the No. 18 ACG (15 A) fuse in the under-dash

fuse/relay box, then go to step 19.

2005-2007 models: Repair open in the wire between the EVAP canister vent shut valve and the A/F sensor relay, then go to step 19.

10. Turn the ignition switch OFF.
11. Measure resistance between EVAP canister vent shut valve 2P connector terminals No. 1 and No. 2.

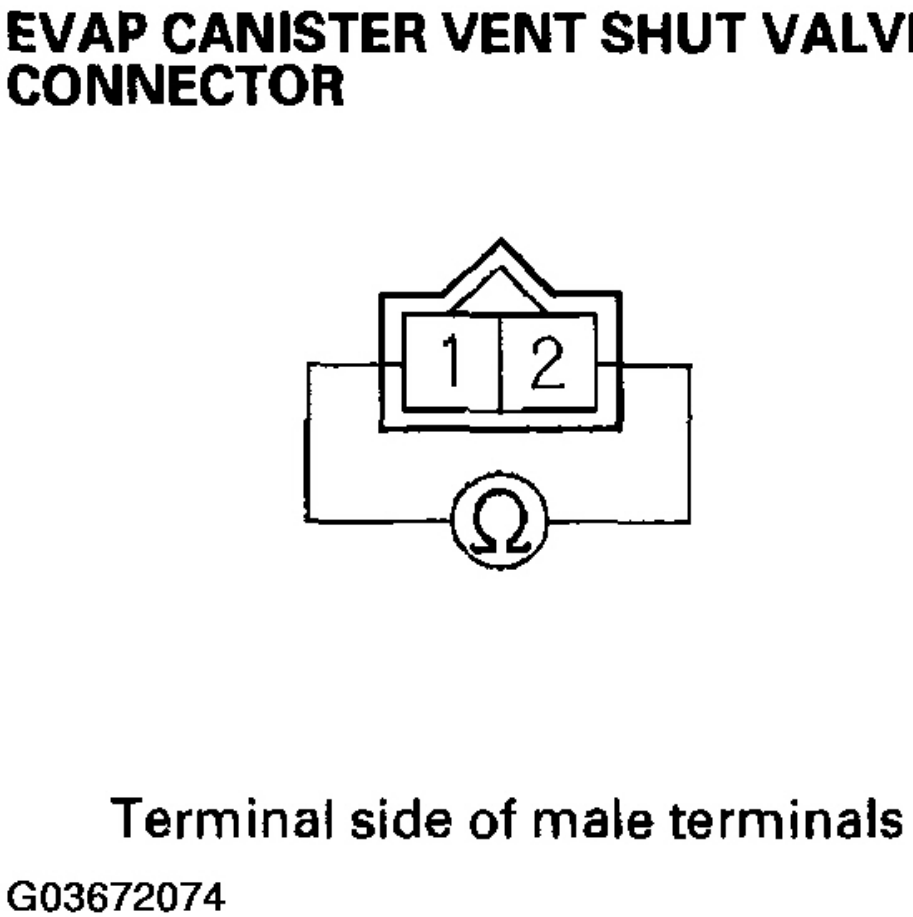


Fig. 33: Measuring Resistance Between EVAP Canister Vent Shut Valve 2P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 25- 30 ohms, at room temperature?

YES - Go to step 12.

NO - Go to step 18.

12. Turn the ignition switch OFF.
13. Jump the SCS line with the HDS.
14. Disconnect ECM/PCM connector A (31P).
15. Check for continuity between ECM/PCM connector terminal A10 and body ground.

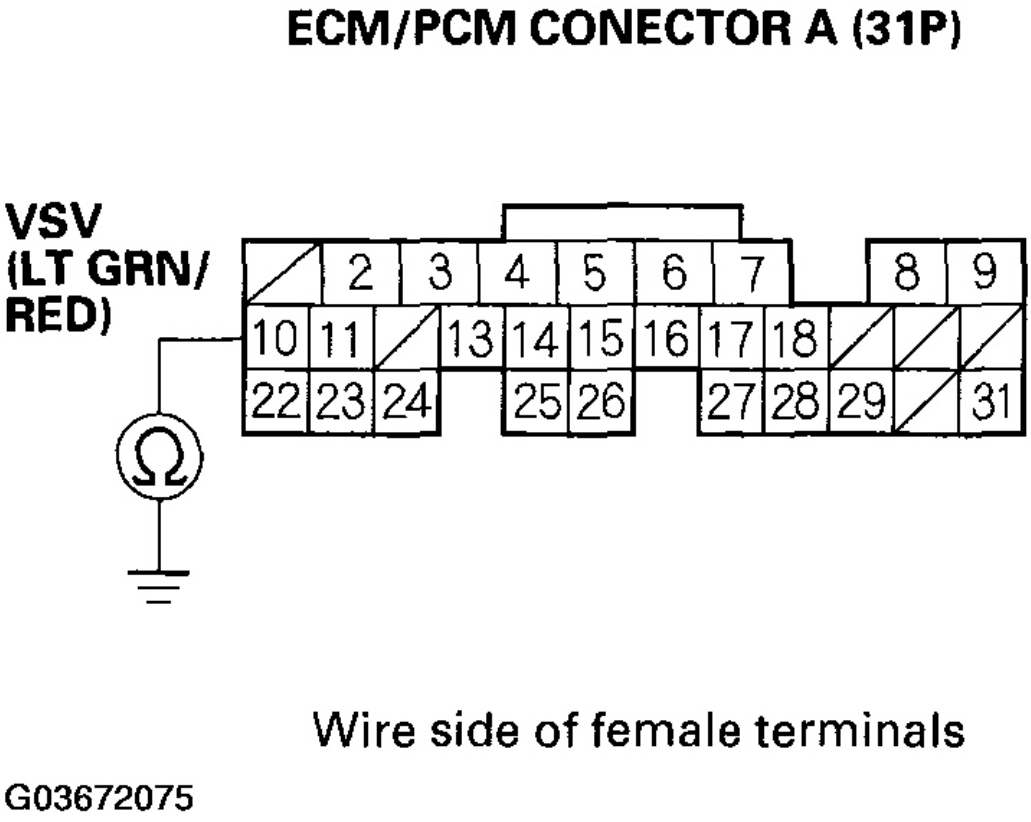


Fig. 34: Checking Continuity Between ECM/PCM Connector Terminal A10 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the EVAP canister vent shut valve and the ECM/PCM (A10), then go to step 19.

NO - Go to step 16.

16. Connect EVAP canister vent shut valve 2P connector terminal No. 1 to body ground with a jumper wire.

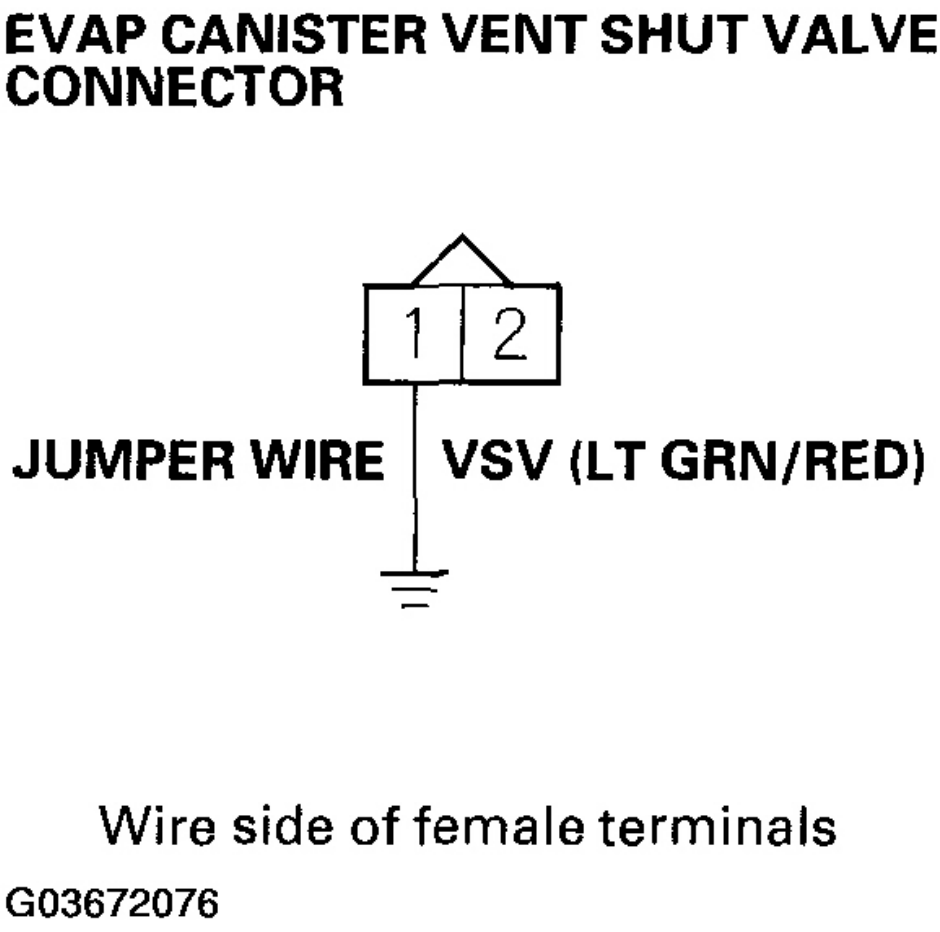


Fig. 35: Connecting EVAP Canister Vent Shut Valve 2P Connector Terminal To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Check for continuity between ECM/PCM connector terminal A10 and body ground.

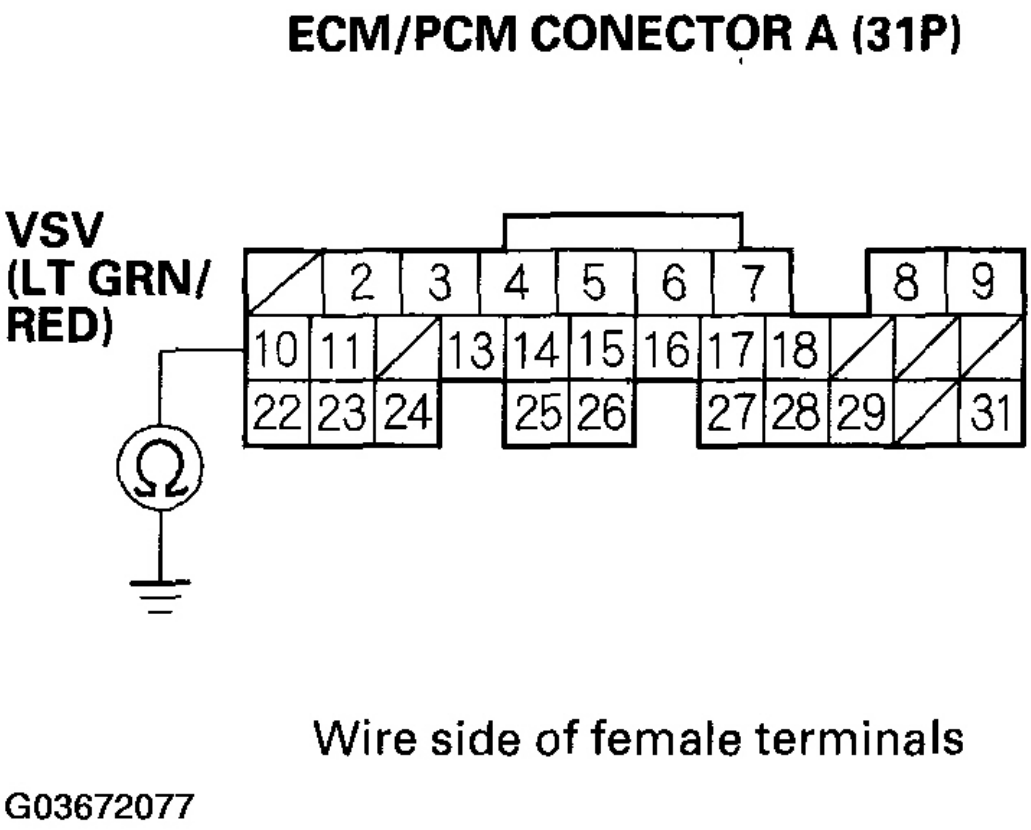


Fig. 36: Checking Continuity Between ECM/PCM Connector Terminal A10 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 25.

NO - Repair open in the wire between the EVAP canister vent shut valve and the ECM/PCM (A10), then go to step 19.

18. Replace the EVAP canister vent shut valve (see **EVAP CANISTER VENT SHUT VALVE REPLACEMENT**).

19. Reconnect all connectors.
20. Turn the ignition switch ON (II).
21. Reset the ECM/PCM with the HDS.
22. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
23. Do the EVAP CVS ON in the INSPECTION MENU with the HDS.
24. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0498 is indicated, check for poor connections or loose terminals at the EVAP canister vent shut valve and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

NO - Troubleshooting is complete.

25. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**).
26. Do the EVAP CVS ON in the INSPECTION MENU with the HDS.
27. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0498 is indicated, check for poor connections or loose terminals at the EVAP canister vent shut valve and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**) .

DTC P0499: EVAP CANISTER VENT SHUT VALVE CONTROL CIRCUIT HIGH VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and any on-

board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Do the EVAP CVS ON in the INSPECTION MENU with the HDS.
4. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0499 indicated?

YES - Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/ PCM (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**), then recheck. If the symptom/ indication goes away with a known-good ECM/PCM, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the EVAP canister vent shut valve and the ECM/ PCM.

DTC P1454: FTP SENSOR RANGE/PERFORMANCE PROBLEM; DTC P2422: EVAP CANISTER VENT SHUT VALVE CLOSE MALFUNCTION

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF.
4. Remove the fuel fill cap, and wait 1 minute.
5. Check the FTP SENSOR in the DATA LIST with the HDS.

Is it between - 0.67 kPa and 0.67 kPa (- 0.2 and 0.2in.Hg, -5 and 5 mmHg),

or 2.4-2.6 V?

YES - Go to step 6.

NO - Go to step 17.

6. Install the fuel fill cap.
7. Clear the DTC with the HDS.
8. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park on neutral) until the radiator fan comes on, then let it idle.
9. Monitor the OBD STATUS for DTC P1454 in the DTCs MENU with the HDS.

Does the screen indicate FAILED?

YES - Go to step 10.

NO - If the screen indicates PASSED, intermittent failure, system is OK at this time, check for a poor connections or loose terminals at the FTP sensor, or the EVAP canister vent shut valve and the ECM/ PCM. If the screen indicates NOT COMPLETED, go to step 8 and recheck.

10. Clear the DTC with the HDS.
11. Turn the ignition switch OFF.
12. Remove the EVAP canister vent shut valve from the EVAP canister (see **EVAP CANISTER VENT SHUT VALVE REPLACEMENT**).
13. Connect the 2P connector to the EVAP canister vent shut valve.
14. Turn the ignition switch ON (II).
15. Do the EVAP CVS ON in the INSPECTION MENU with the HDS.
16. Check the EVAP canister vent shut valve (A) operation.

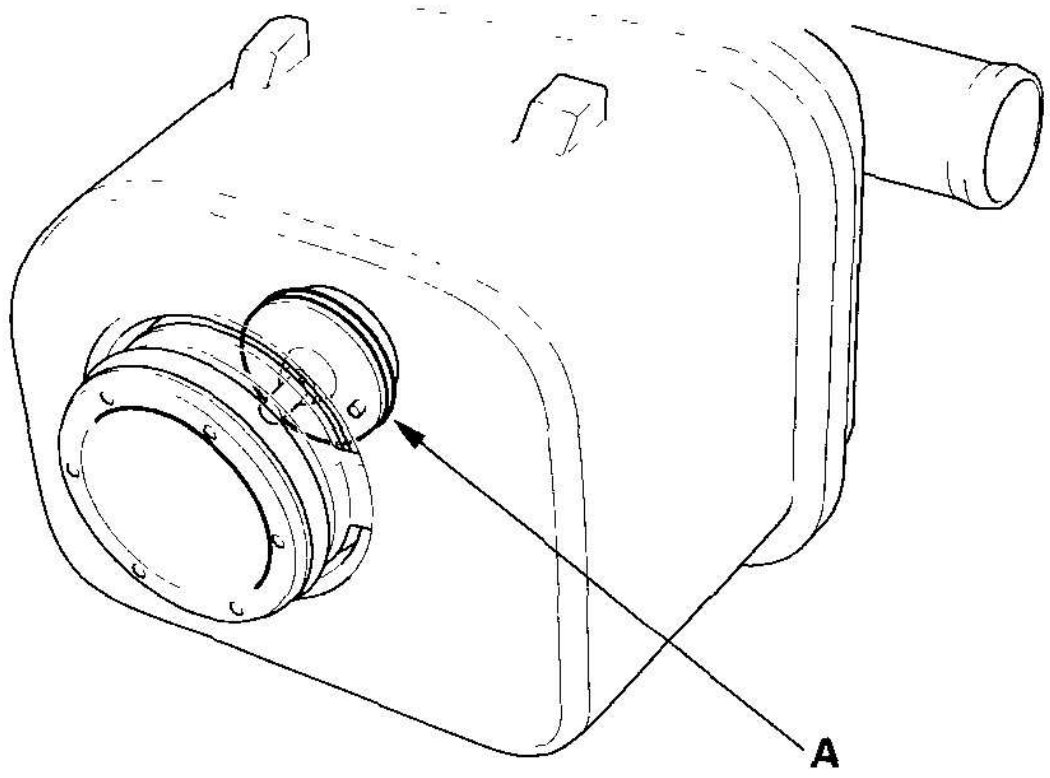


Fig. 37: Checking EVAP Canister Vent Shut Valve Operation
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the valve operate?

YES - Check for a blockage in the EVAP canister, canister filter, vent hoses, and drain joint, then install the EVAP canister vent shut valve, and go to step 23.

NO - Replace the EVAP canister vent shut valve (see **EVAP CANISTER VENT SHUT VALVE REPLACEMENT**), then go to step 23.

17. Disconnect the air tube (A) from the FTP sensor (B).

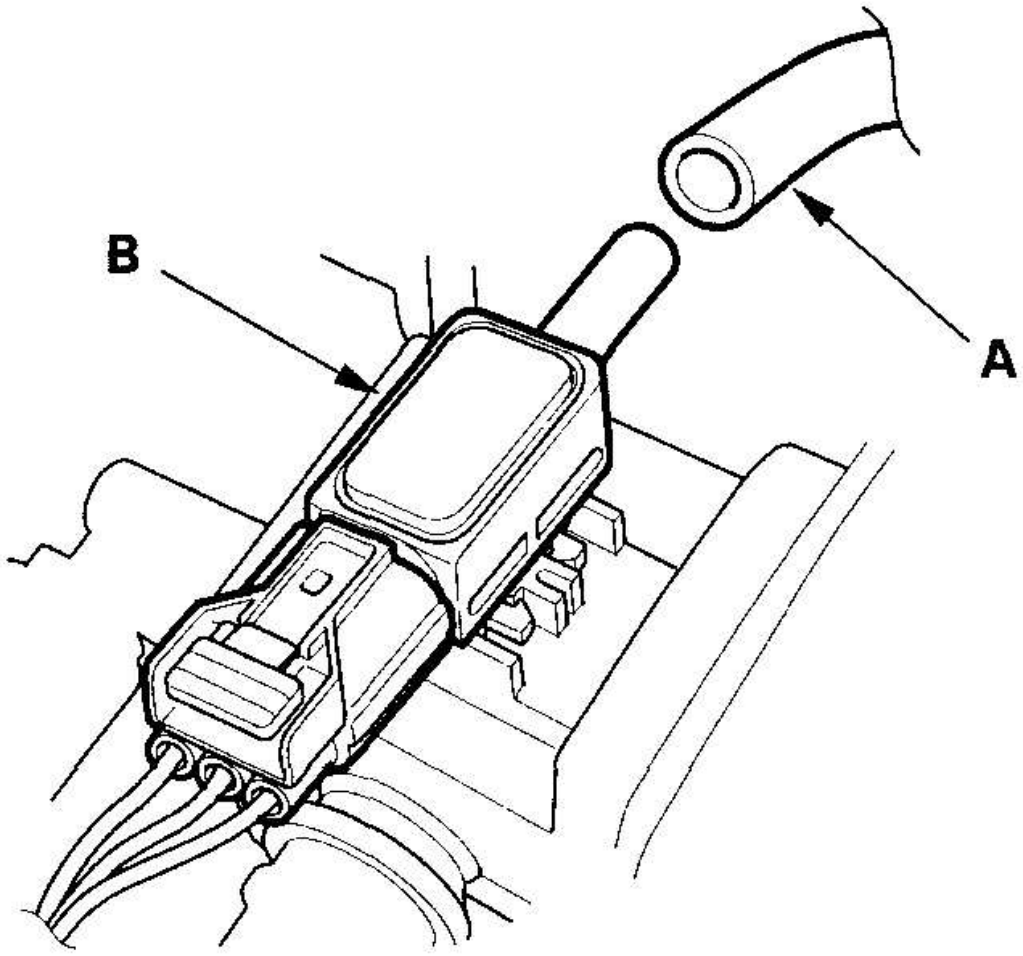


Fig. 38: Disconnecting Air Tube From FTP Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Check the FTP SENSOR in the DATA LIST with the HDS.

Is it between - 0.67 kPa and 0.67 kPa (- 0.2 and 0.2 in.Hg, -5 and 5 mmHg), or 2.4-2.6 V?

YES - Check for a blockage in the FTP sensor air tube, then go to step 23.

NO - Go to step 19.

19. Turn the ignition switch OFF.
20. Remove the FTP sensor (A) from the EVAP canister with its connector connected (see **FTP SENSOR REPLACEMENT**).

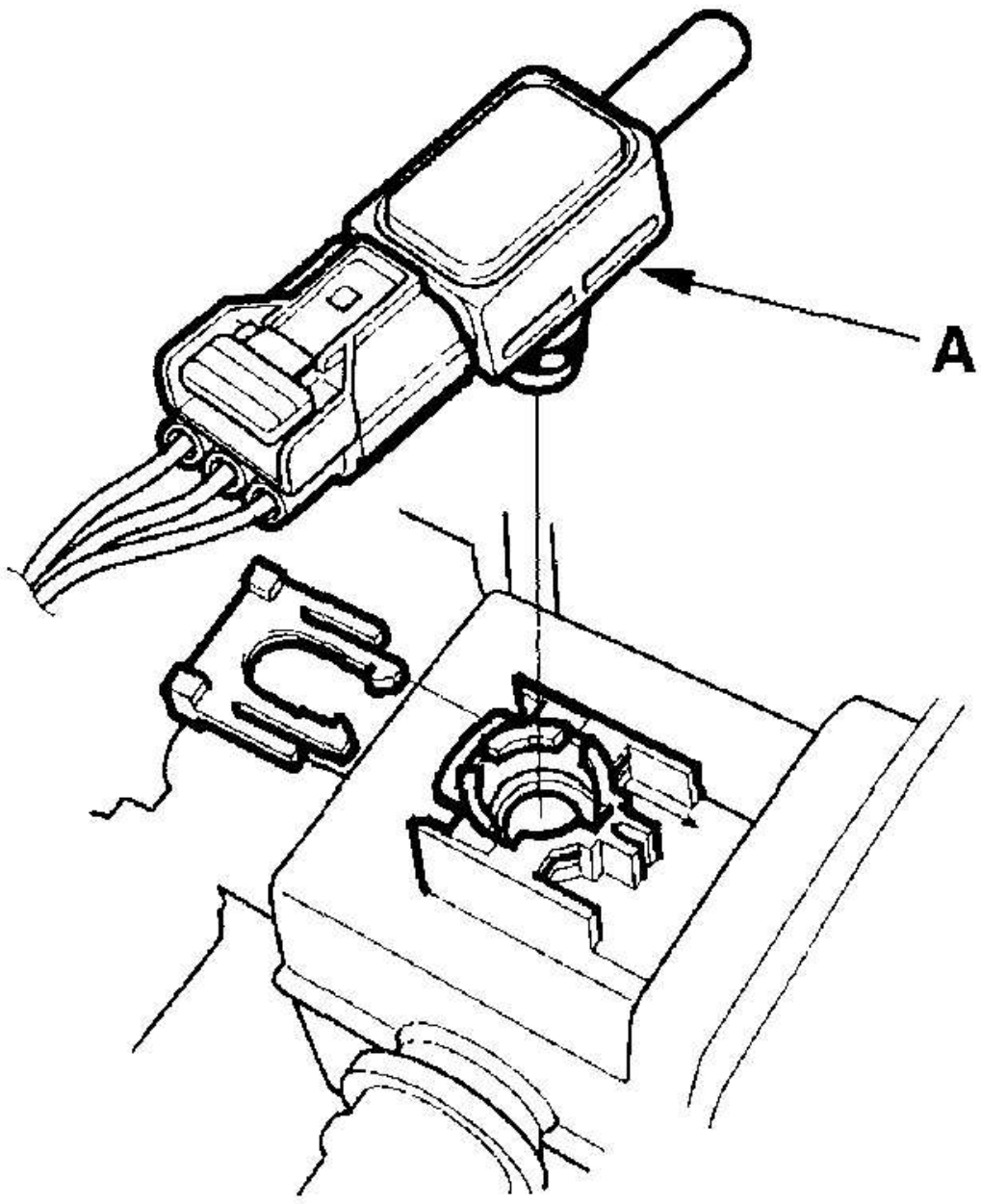


Fig. 39: Removing FTP Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Turn the ignition switch ON (II).
22. Check the FTP SENSOR in the DATA LIST with the HDS.

    Is it between - 0.67 kPa and 0.67 kPa (- 0.2 and 0.2 in.Hg, -5 and 5 mmHg), or 2.4-2.6 V?

    YES - Check for debris or clogging at the EVAP canister and the FTP sensor port, then go to step 23.

    NO - Replace the FTP sensor (see **FTP SENSOR REPLACEMENT**), then go to step 23.
23. Turn the ignition switch ON (II).
24. Reset the ECM/PCM with the HDS.
25. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
26. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
27. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

    YES - If DTC P1454 and/or P2422 is indicated, check for poor connections or loose terminals at the FTP sensor, or the EVAP canister vent shut valve and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

    NO - Go to step 28.
28. Monitor the OBD STATUS for DTC P1454 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete.

    NO - If the screen indicates FAILED, check for poor connections or loose terminals at the FTP sensor, or the EVAP canister vent shut valve and the

ECM/ PCM, then go to step 1. If the screen indicates NOT COMPLETED, go to step 26 and recheck.

EVAP CANISTER REPLACEMENT

1. Remove the EVAP canister cover (A).

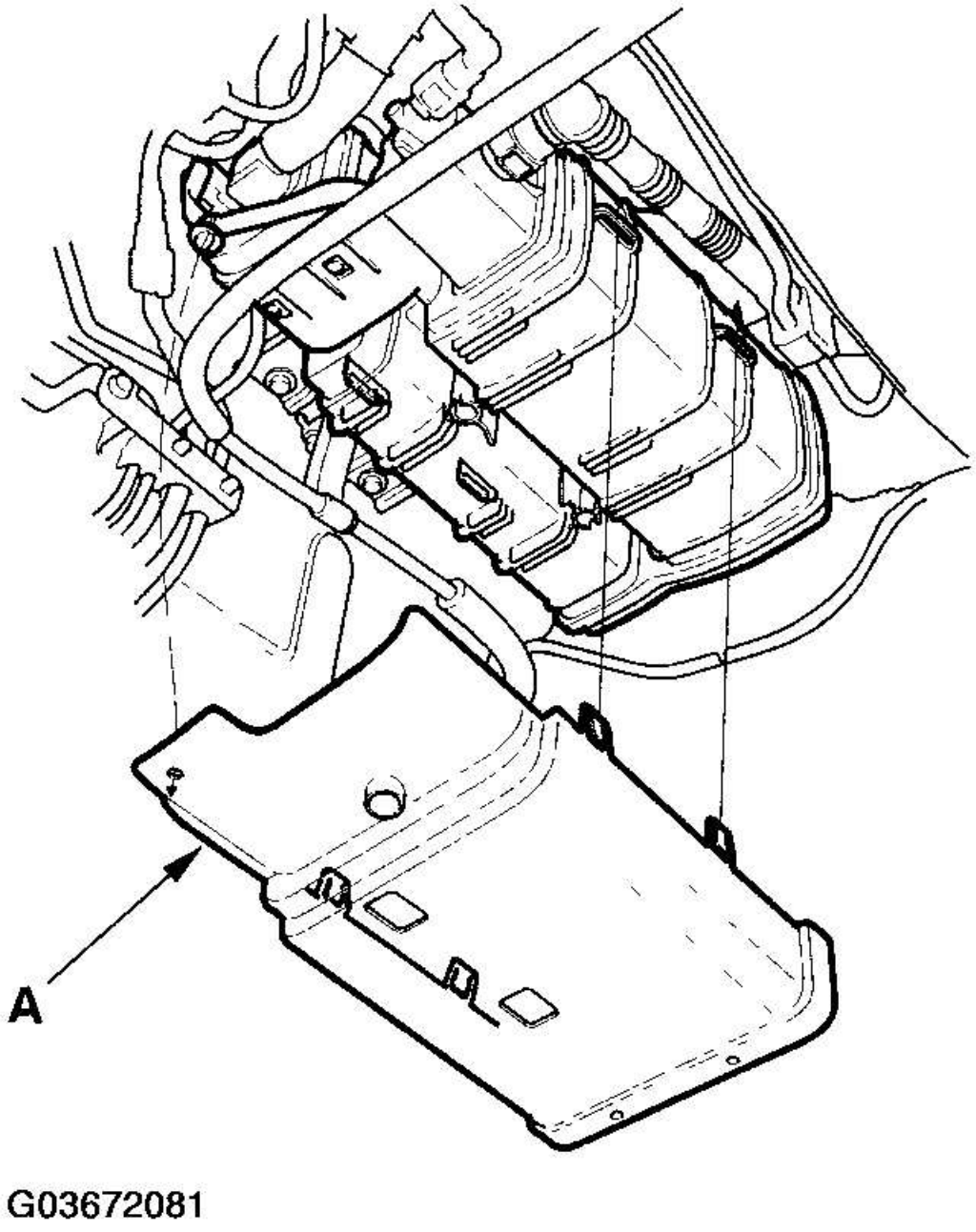


Fig. 40: Removing EVAP Canister Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the hoses (A), the FTP sensor 3P connector (B), and the EVAP

canister vent shut valve 2P connector (C).

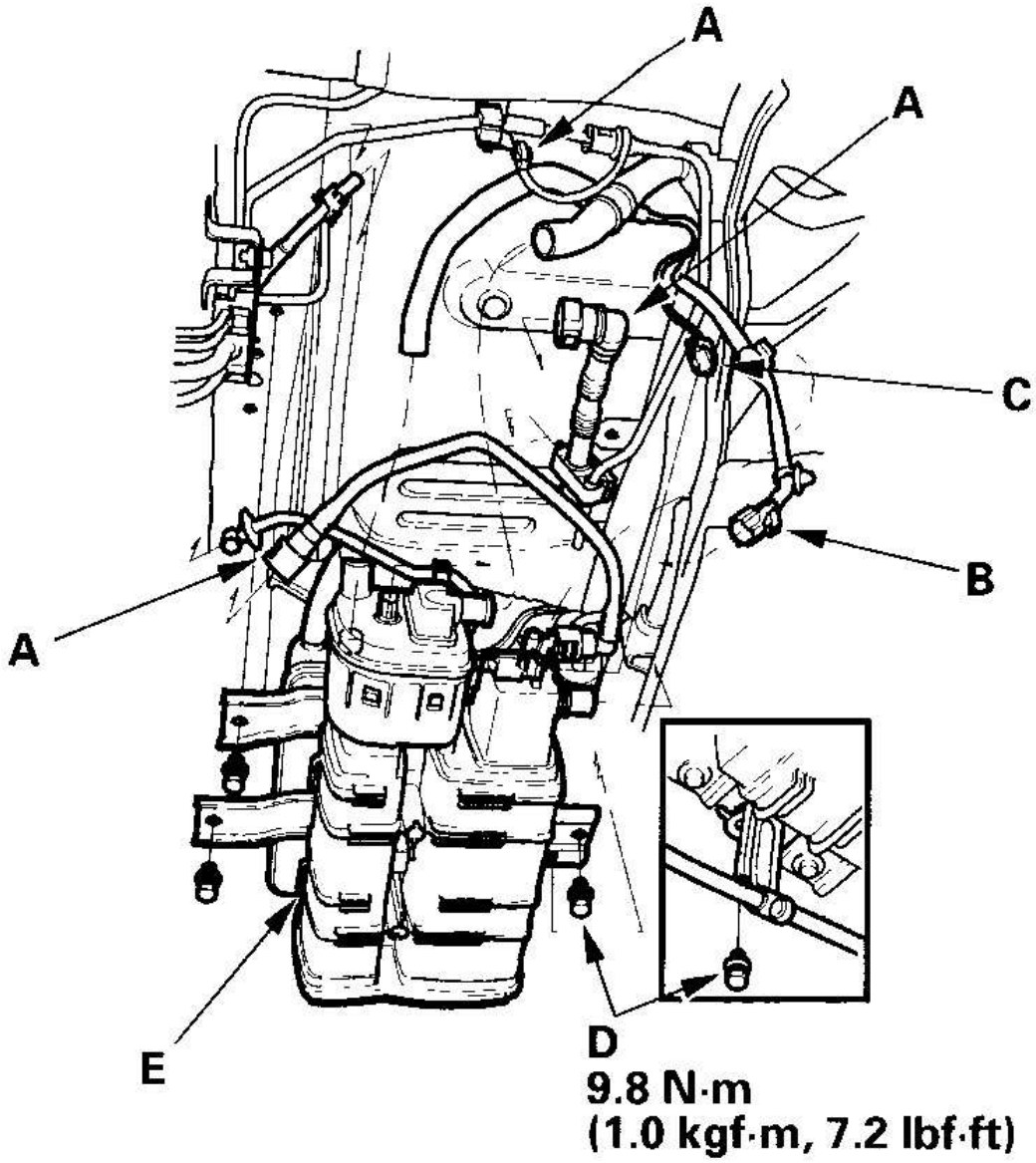


Fig. 41: Removing Hoses, FTP Sensor 3P Connector And EVAP Canister Vent Shut Valve 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the bolts (D).
4. Remove the EVAP canister assembly (E).
5. Remove the EVAP canister bracket (A).

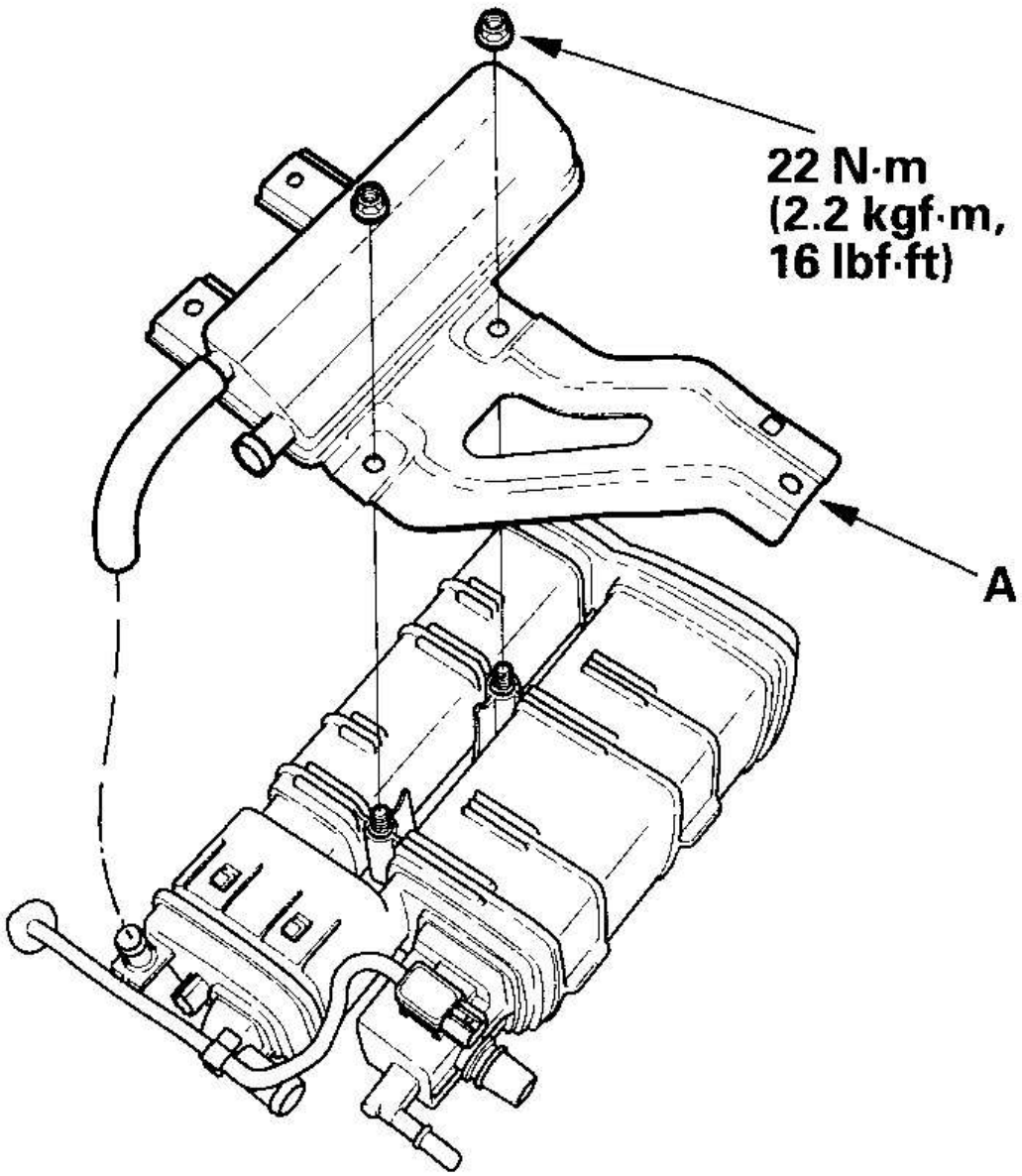


Fig. 42: Removing EVAP Canister Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the canister in the reverse order of removal.

FTP SENSOR REPLACEMENT

1. Remove the EVAP canister (see **EVAP CANISTER REPLACEMENT**).
2. Remove the FTP sensor (A).

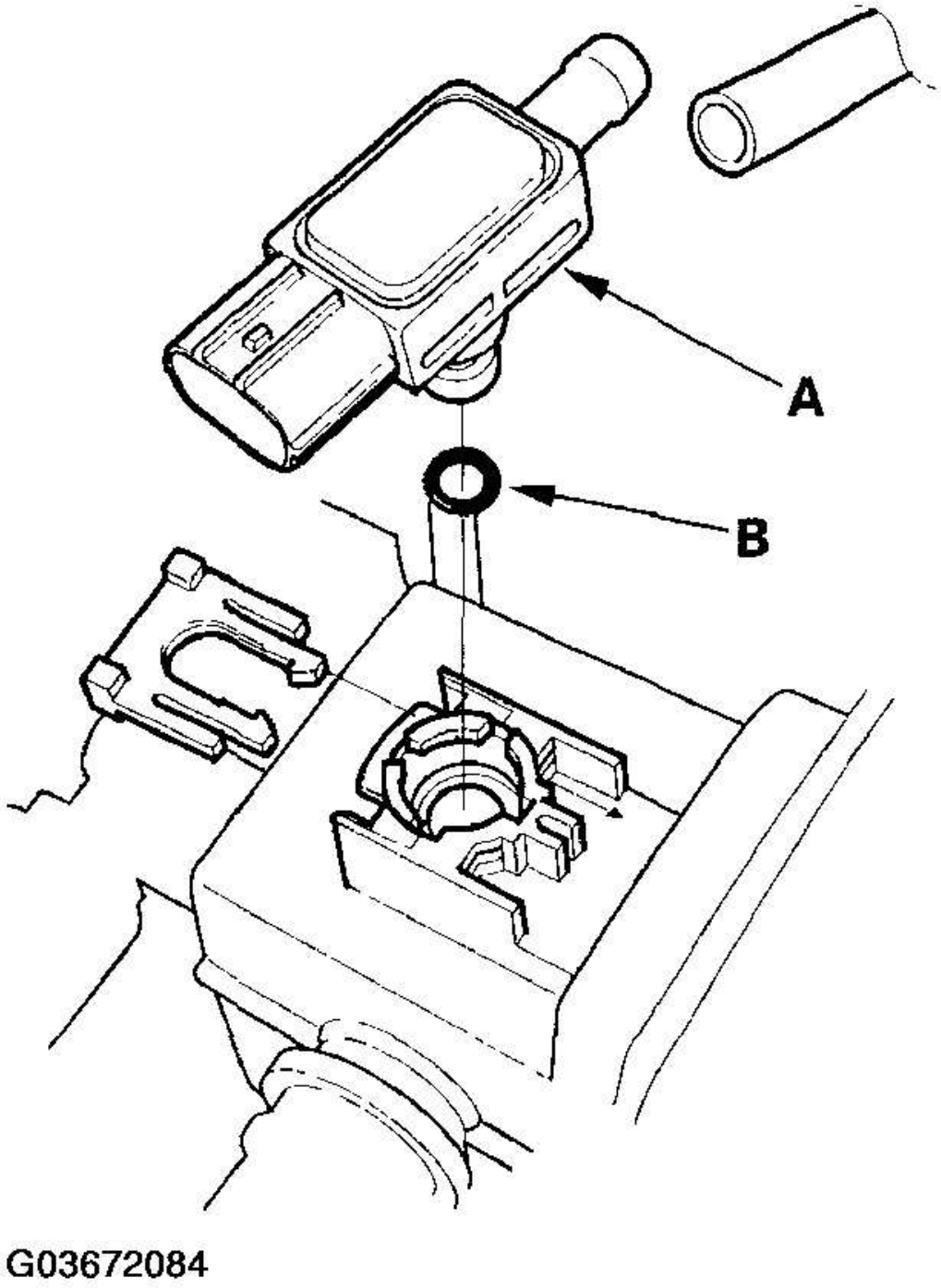


Fig. 43: Removing FTP Sensor

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the sensor in the reverse order of removal with a new O-ring (B).

EVAP CANISTER PURGE VALVE REPLACEMENT

1. Disconnect the hoses (A) and the EVAP canister purge valve 2P connector (B).

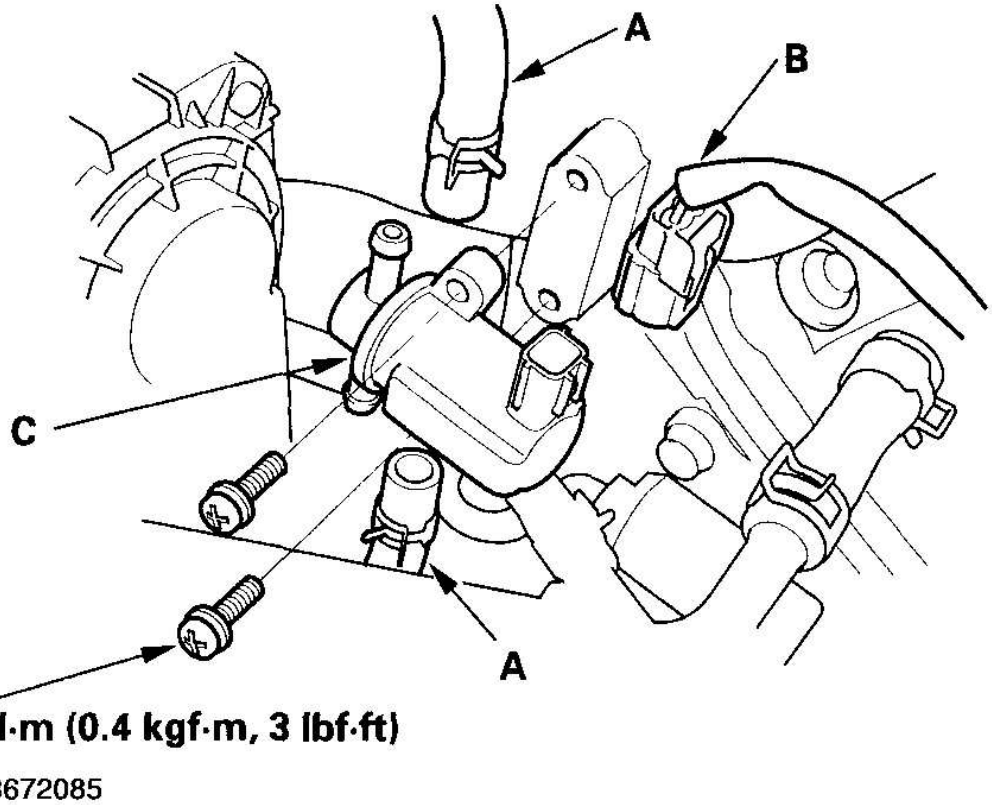


Fig. 44: Disconnecting Hoses And EVAP Canister Purge Valve 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the EVAP canister purge valve (C).
3. Install the valve in the reverse order of removal.

EVAP CANISTER VENT SHUT VALVE REPLACEMENT

1. Remove the EVAP canister (see **EVAP CANISTER REPLACEMENT**).
2. Pry the lock tabs outward (A) then remove the EVAP canister vent shut valve (B).

NOTE: Be careful not to damage the lock tabs.

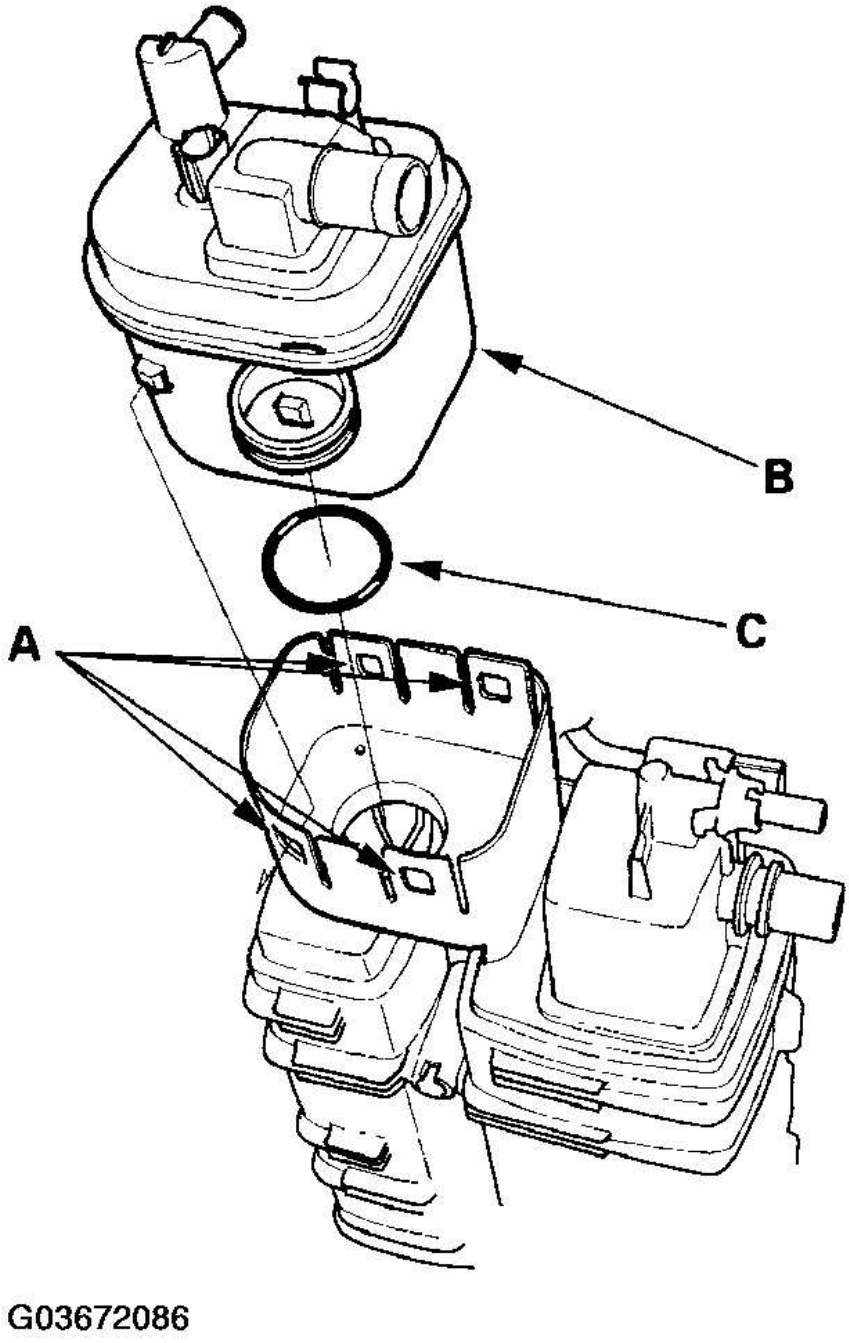


Fig. 45: Prying Lock Tabs Outward And Removing EVAP Canister Vent Shut Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

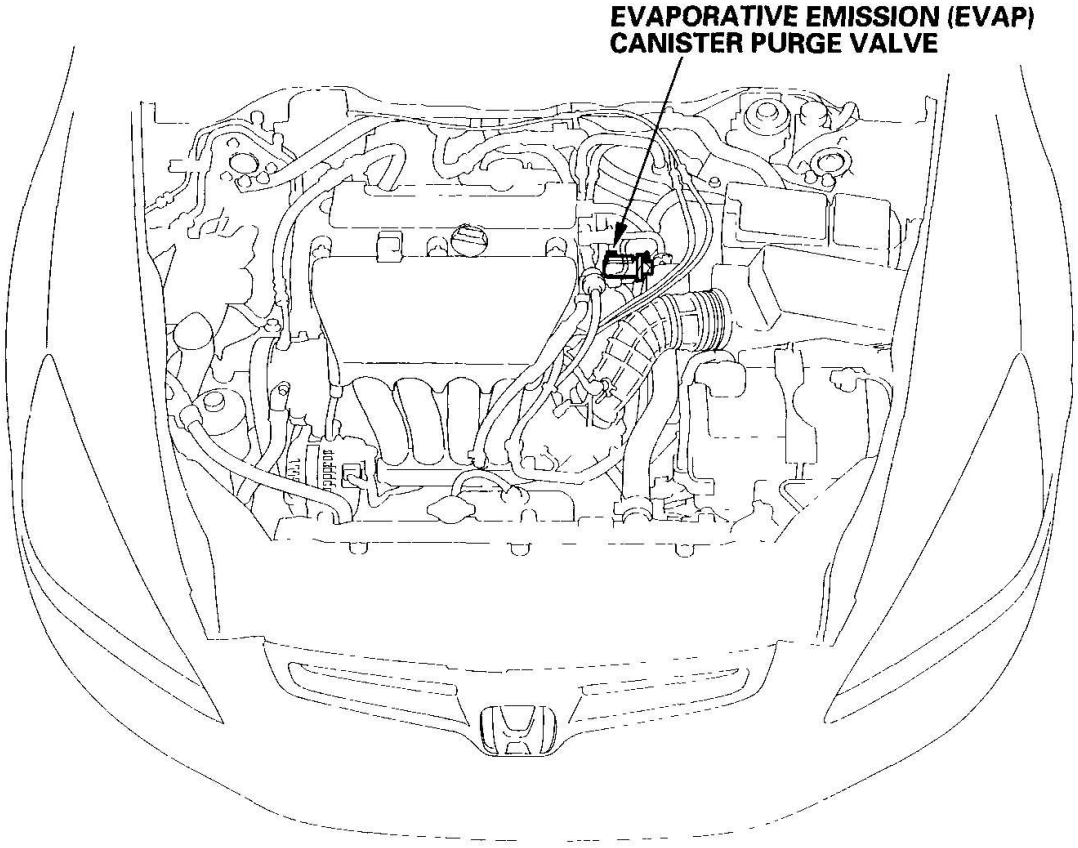
3. Install the valve in the reverse order of removal with a new O-ring (C).

NOTE: Do not coat the O-ring with oil.

2003-07 ENGINE PERFORMANCE

EVAP System - Accord

COMPONENT LOCATION INDEX



*: This illustration shows 2003-2005 models.

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Fig. 1: Identifying EVAP System Component Location Index
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NON-SULEV MODEL

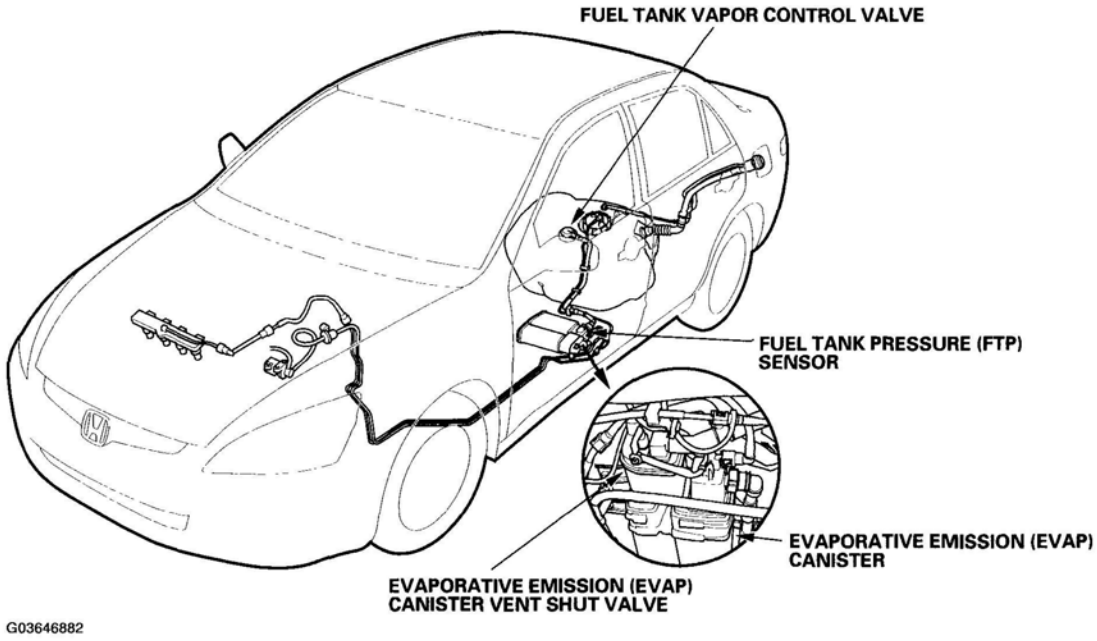


Fig. 2: Identifying EVAP System Component Location Index (Non-SULEV Model)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

SULEV MODEL

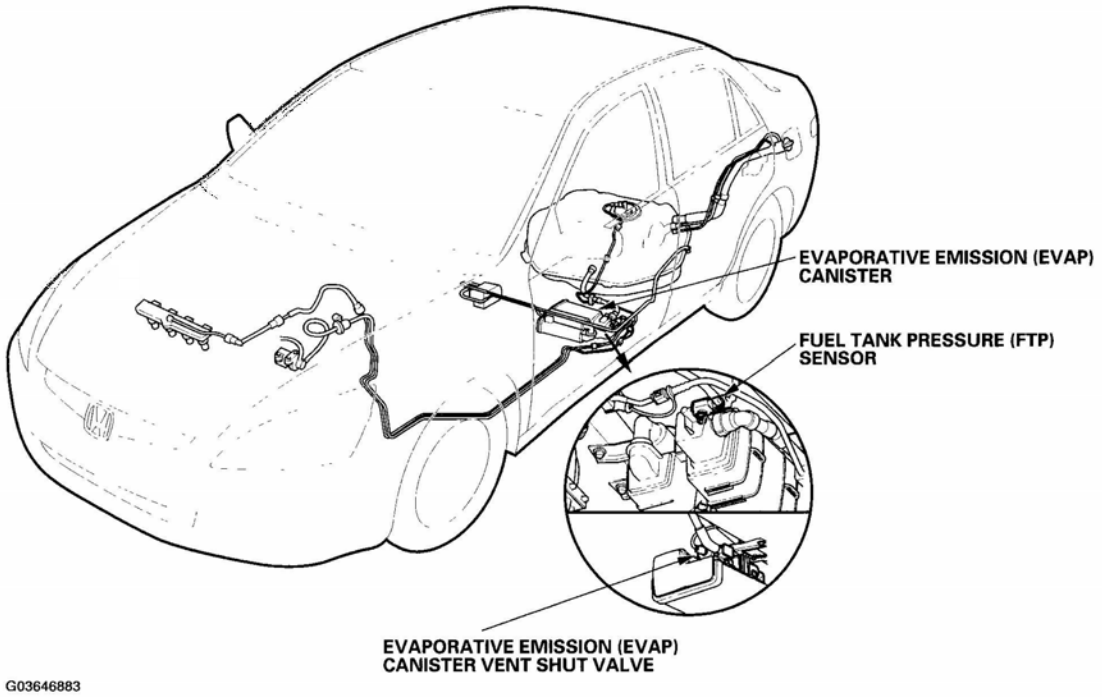


Fig. 3: Identifying EVAP System Component Location Index (SULEV Model) Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC CODES

DTC INDEX

DTC	Description
DTC P0442	EVAP System Small Leak Detected (2003-2004 models)
DTC P0455	EVAP System Large Leak Detected (2005-2006 models)
DTC P0456	EVAP System Very Small Leak Detected
DTC P0443	EVAP Canister Purge Valve Circuit Malfunction
DTC P0451	FTP Sensor Range/Performance Problem
DTC P0452	FTP Sensor Circuit Low Voltage (2003-2004 models)

DTC P0452	FTP Sensor Circuit Low Voltage (2005-2006 models)
DTC P0453	FTP Sensor Circuit High Voltage
DTC P0457	EVAP System Leak Detected/Fuel Cap Loose or Missing
DTC P0496	EVAP System High Purge Flow
DTC P0497	EVAP System Low Purge Flow
DTC P0498	EVAP Canister Vent Shut Valve Circuit Low Voltage
DTC P0499	EVAP Canister Vent Shut Valve Circuit High Voltage
DTC P1454	FTP Sensor Range/Performance Problem
DTC P2422	EVAP Canister Vent Shut Valve; Stuck Close Malfunction

DTC TROUBLESHOOTING

DTC P0442: EVAP SYSTEM SMALL LEAK DETECTED (2003-2004 MODELS); DTC P0455: EVAP SYSTEM LARGE LEAK DETECTED (2005-2007 MODELS); DTC P0456: EVAP SYSTEM VERY SMALL LEAK DETECTED;

NOTE: The fuel system is designed to allow specified maximum vacuum and pressure conditions. Do not deviate from the vacuum and pressure tests as indicated in these procedures. Excessive pressure/vacuum would damage the EVAP components or cause eventual fuel tank failure.

Special Tools Required

- Vacuum/pressure gauge, 0-4 in.Hg 07JAZ-001000B
- Vacuum pump/gauge, 0-30 in.Hg, Snap-on YA4000A or equivalent, commercially available

NOTE:

- **Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general**

troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

- **Fresh fuel has a higher volatility that will create greater pressure/vacuum. The optimum condition for testing is less than a full tank of fresh fuel. If possible, to assist in leak detection, add 1 gallon of fresh fuel to the tank (as long as it will not fill the tank) just before starting these procedures.**

1. Check the fuel fill cap (the cap must say "Tighten to click"). It should turn 1/4 turn after it's tight, then it clicks.

   Is the correct fuel fill cap installed and properly tightened?

   YES - Go to step 2.

   NO - Replace or tighten the cap, then go to step 22.
2. Check the fuel fill cap seal (A) and the fuel fill pipe mating surface (B). Verify that the fuel fill cap tether cord (C) is not caught under the cap.

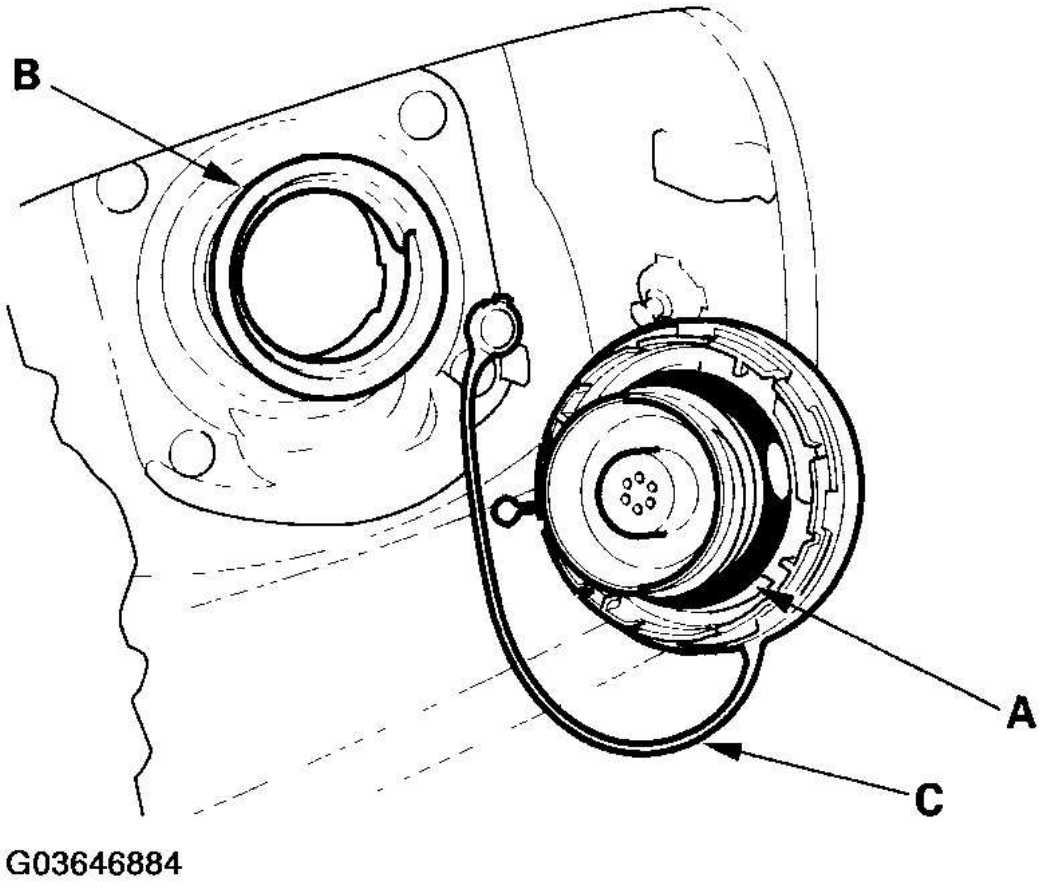


Fig. 4: Checking Fuel Fill Cap Seal And Fuel Fill Pipe Mating Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the fuel fill cap seal missing or damaged, is the fuel fill pipe damaged, or is the tether cord caught under the cap?

YES - Replace the fuel fill cap or the fuel fill pipe, then go to step 22.

NO - Go to step 3.

3. Turn the ignition switch ON (II).
4. Clear the DTC with the HDS.
5. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor, the EVAP canister purge valve, or the EVAP canister vent shut valve and the ECM/PCM.

NO - Go to step 6.

6. Turn the ignition switch OFF.
7. Check for a poor connection or damage at the fuel tank vapor recirculation tube (see **FUEL LINE INSPECTION**).

Is the tube OK?

YES - Go to step 9.

NO -

- Replace the fuel tank vapor recirculation tube (see **FUEL TANK REPLACEMENT**), then go to step 22.
- If necessary, replace the fuel tank (see **FUEL TANK REPLACEMENT**), then go to step 22.

8. Disconnect the fuel tank vapor recirculation tube (A) from the EVAP canister (B), and plug the EVAP canister port (C).

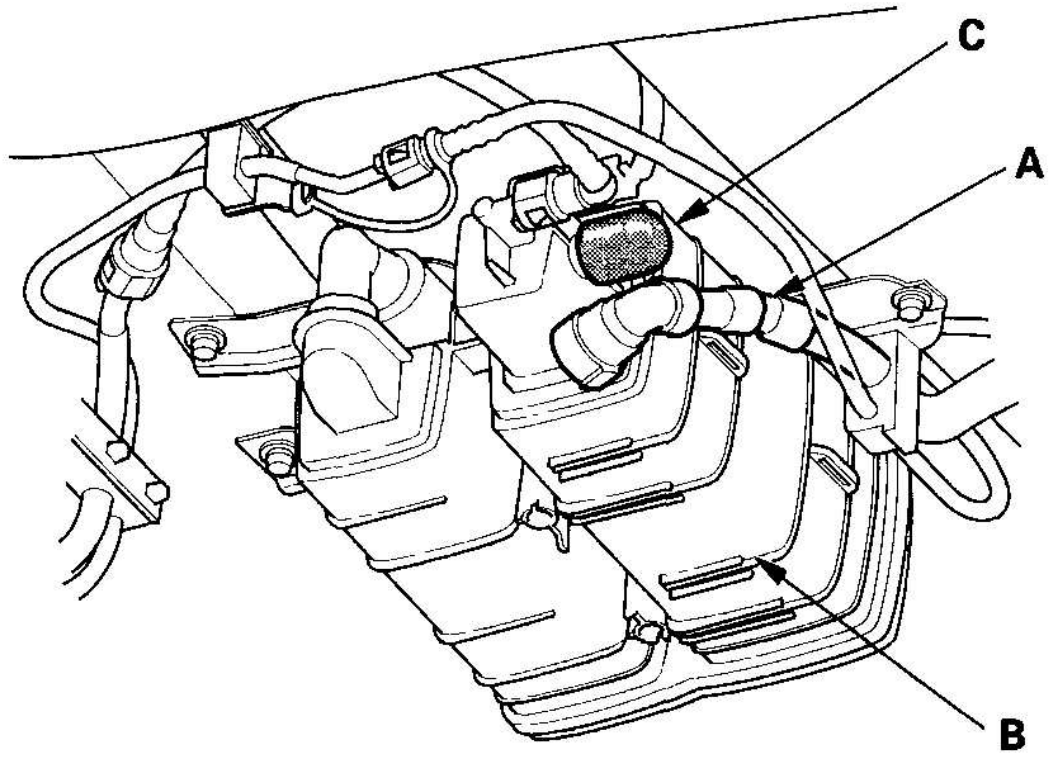


Fig. 5: Disconnecting Fuel Tank Vapor Recirculation Tube From EVAP Canister (SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

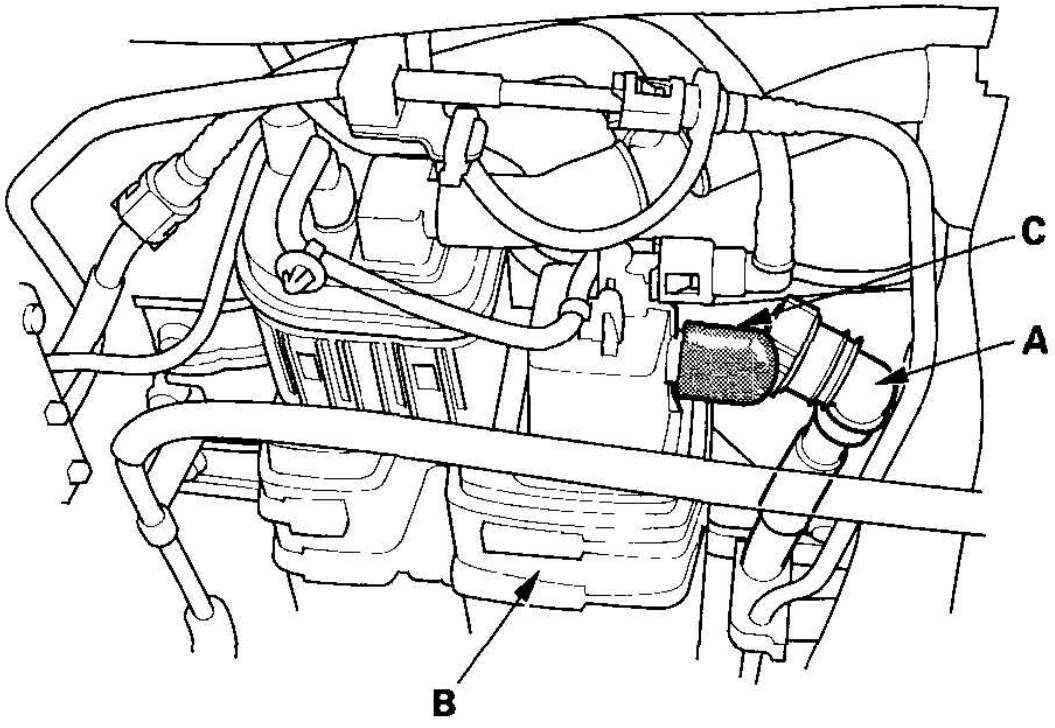


Fig. 6: Disconnecting Fuel Tank Vapor Recirculation Tube From EVAP Canister (Non-SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Disconnect the vacuum hose (purge line) (A) from the EVAP canister purge valve (B) in the engine compartment, and connect a T-fitting (C) from the vacuum gauge and the vacuum pump/gauge, 0-30 in.Hg, to the hose as shown below.

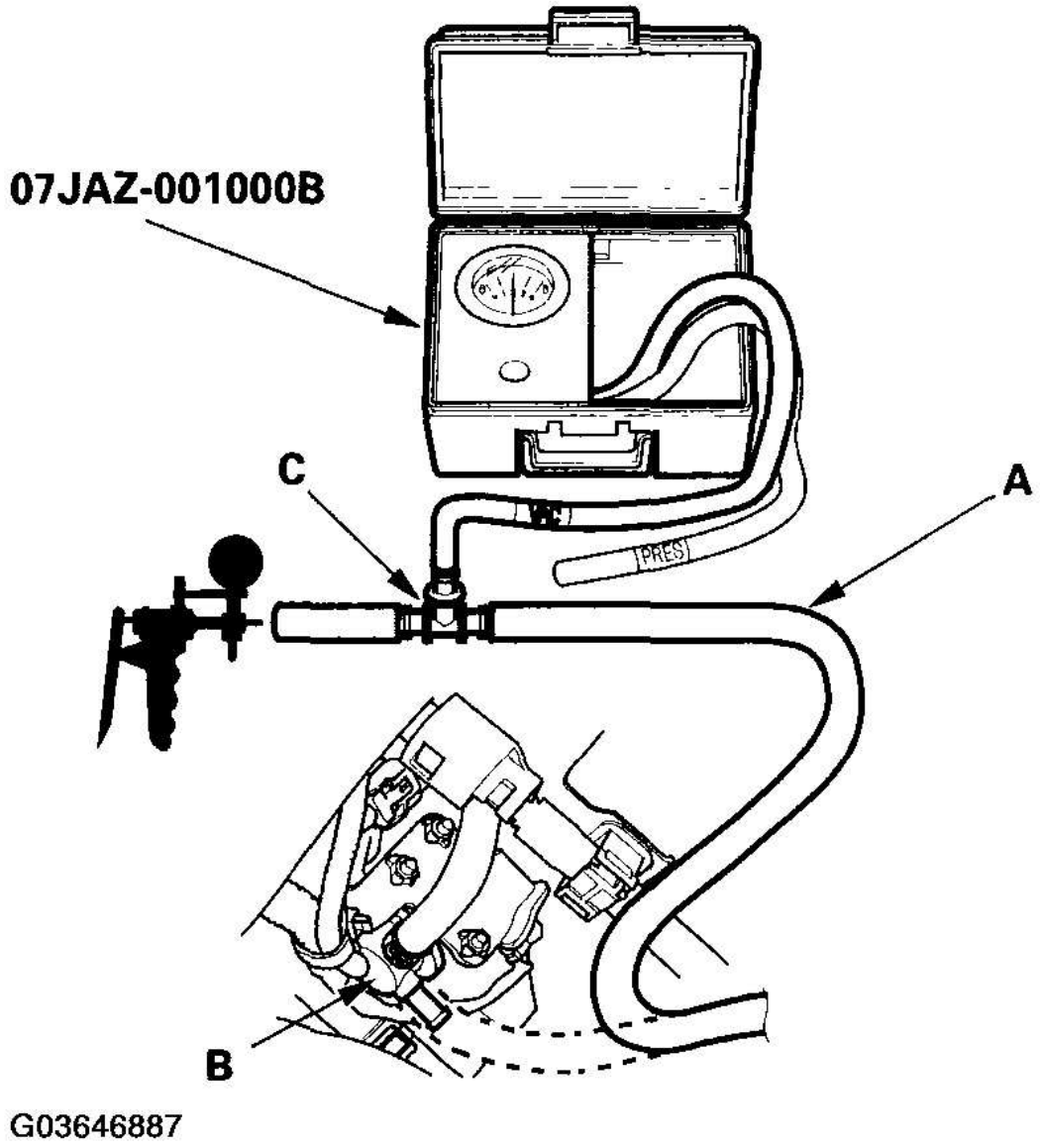


Fig. 7: Disconnecting Vacuum Hose From EVAP Canister Purge Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Turn the ignition switch ON (II).
11. Select EVAP CVS ON in the INSPECTION MENU with the HDS.
12. Apply vacuum to the hose until the FTP reads 1.90 V (-0.59 in.Hg, -15.1 mmHg).

NOTE: Be careful not to exceed the pressure. If you exceed the pressure, the FTP sensor can be damaged.

13. Monitor the FTP SENSOR in the DATA LIST for 1 minute with the HDS.

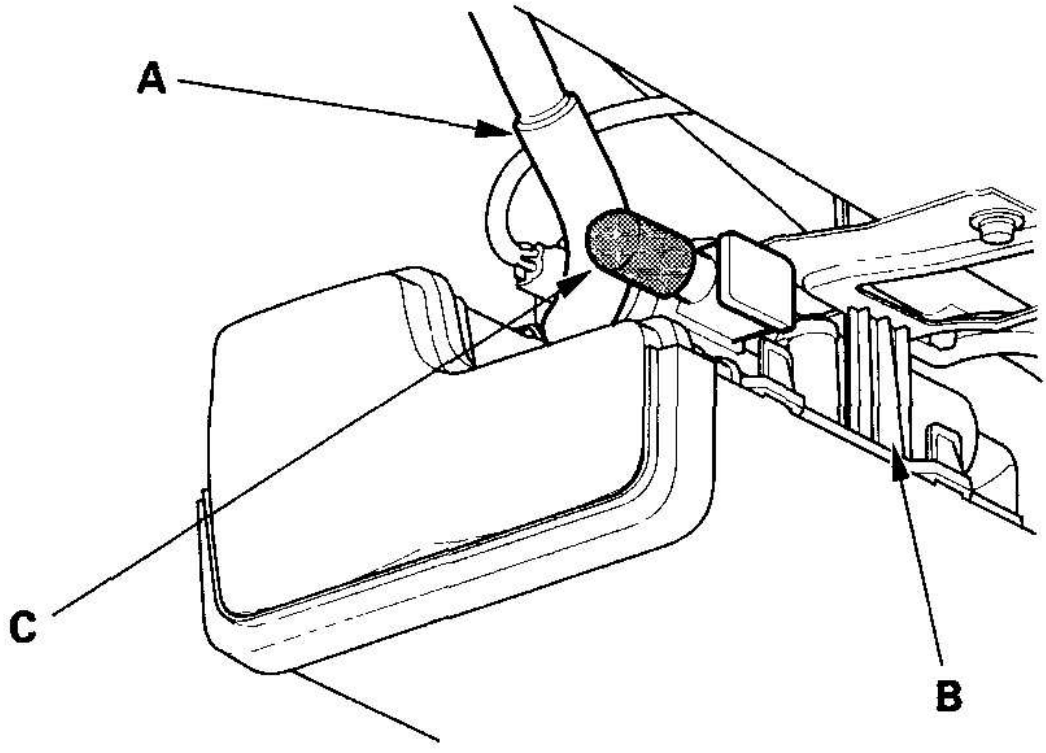
Does the voltage increase more than 0.2 V (0.1 in.Hg, 2.5 mmHg)?

YES - Go to step 14.

NO - Go to step 19.

14. Select EVAP CVS OFF in the INSPECTION MENU with the HDS.
15. Disconnect the fresh air hoses (A) from the EVAP canister vent shut valve (B), and plug the EVAP canister vent shut valve ports (C).

SULEV model



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Fig. 8: Disconnecting Fresh Air Hoses From EVAP Canister Vent Shut Valve (SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Non-SULEV model

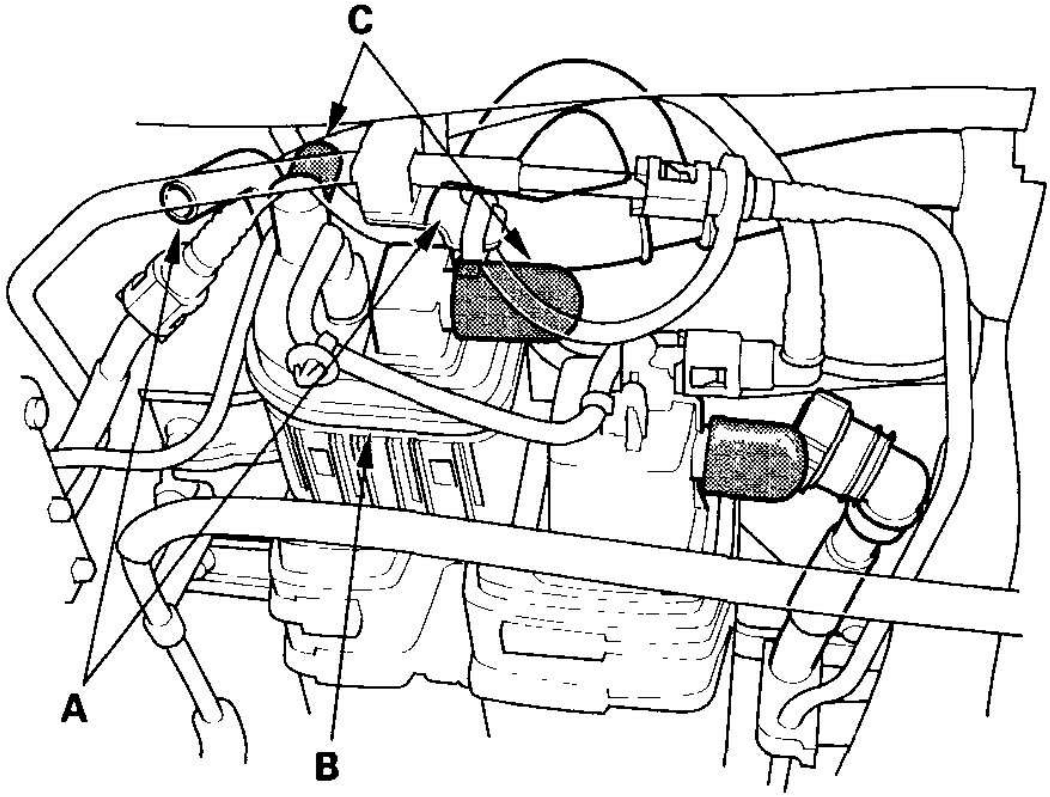


Fig. 9: Disconnecting Fresh Air Hoses From EVAP Canister Vent Shut Valve (Non-SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Apply vacuum to the hose (disconnected in step 10) until the FTP reads 1.90 V (-0.59 in.Hg, -15.1 mmHg).

NOTE: Be careful not to exceed the pressure. If you exceed the

pressure, the FTP sensor can be damaged.

17. Monitor the FTP SENSOR in the DATA LIST for 1 minute with the HDS.

    Does the voltage increase more than 0.2 V (0.1 in.Hg, 2.5 mmHg)?

    YES - Go to step 18.

    NO - Replace the EVAP canister vent shut valve; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**), then go to step 21.

18. Check for a loose or damaged EVAP canister purge line between the EVAP canister and the EVAP canister purge valve.

    Is the line OK?

    YES - Replace the following parts, then go to step 21.

    - FTP sensor O-ring (see **FTP Sensor Replacement**)
    - EVAP canister vent shut valve case and O-ring; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**)
    - EVAP canister (see **EVAP Canister Replacement**)

    NO - Reconnect or repair the EVAP canister purge hose, then go to step 21.

19. Select EVAP CVS OFF in the INSPECTION MENU with the HDS.
20. Check these parts for looseness or damage:
    - Fuel fill pipe
    - Fuel vapor return pipe
    - Fuel tank vapor signal tube (SULEV model)

    Are the parts OK?

    YES - Check the fuel pump base gasket (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**), and check the fuel tank, then go to step 21.

    NO - Repair or replace the damaged parts, then go to step 21.

21. Reconnect all hoses and connectors.
22. Turn the ignition switch ON (II).
23. Reset the ECM/PCM with the HDS.
24. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
25. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Troubleshooting is complete.

NO - Check for poor connections or loose terminals at the FTP sensor, the EVAP canister purge valve, or the EVAP canister vent shut valve and the ECM/PCM, then go to step 1.

DTC P0443: EVAP CANISTER PURGE VALVE CIRCUIT MALFUNCTION

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
4. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0443 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the EVAP canister purge valve and the ECM/PCM.

5. Turn the ignition switch OFF, and allow the engine to cool below 131°F (55° C).

6. Disconnect the vacuum hose (A) from the EVAP canister purge valve (B) in the engine compartment, and connect a vacuum pump/gauge, 0-30 in.Hg, to the hose.

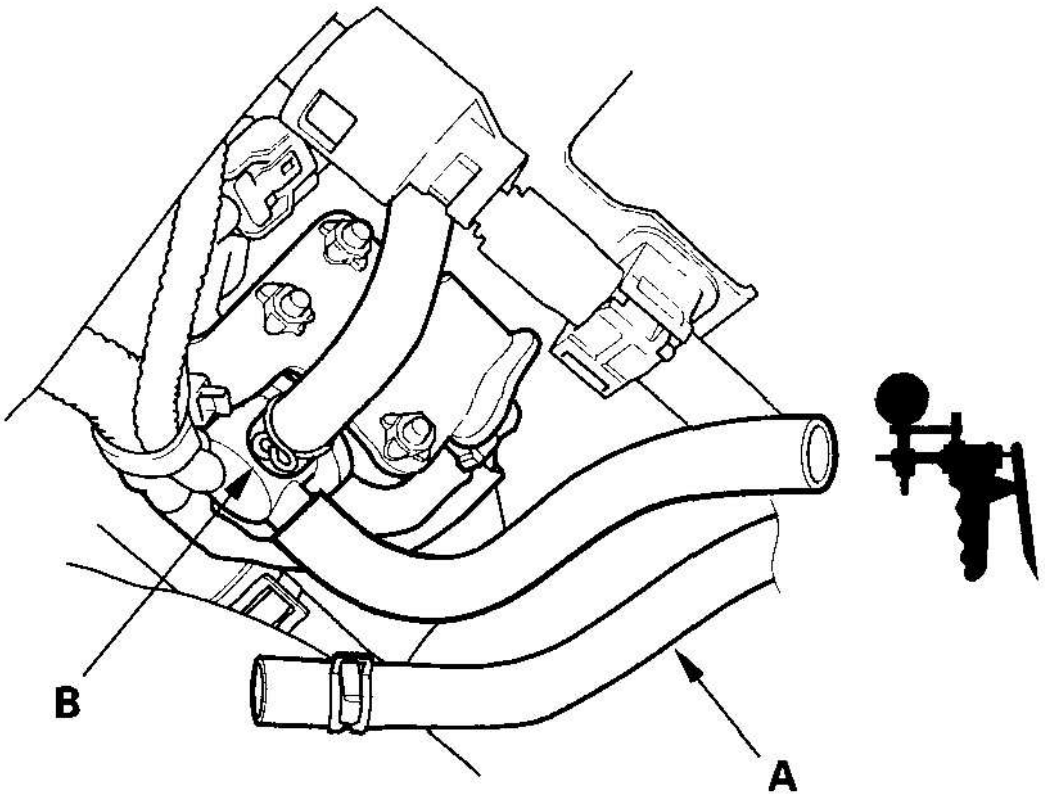


Fig. 10: Disconnecting Vacuum Hose From EVAP Canister Purge Valve In Engine Compartment
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Start the engine, and let it idle.

Is there vacuum?

YES - Go to step 8.
NO - Go to step 14.

8. Turn the ignition switch OFF.
9. Disconnect the EVAP canister purge valve 2P connector.
10. Check for continuity between EVAP canister purge valve 2P connector terminal No. 2 and body ground.

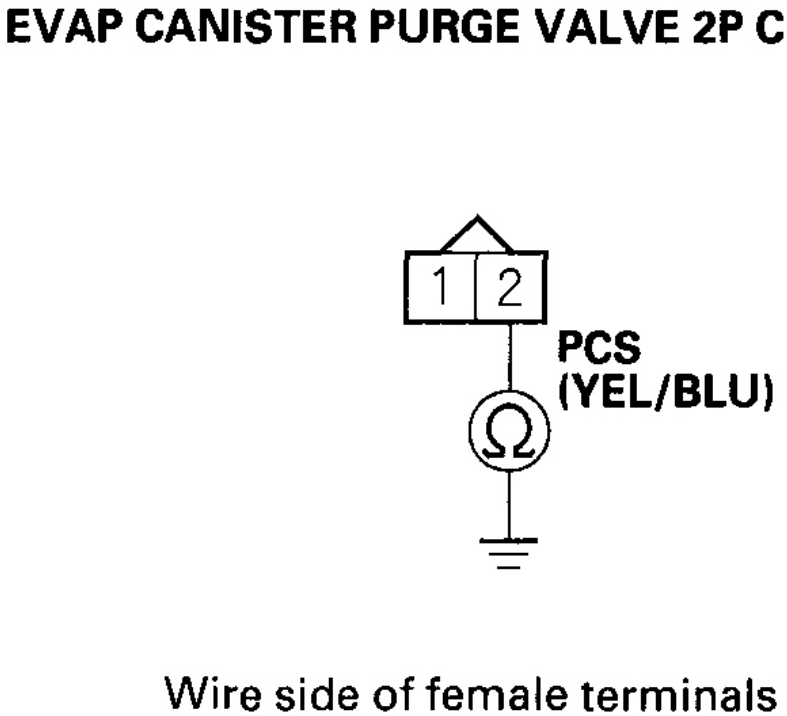


Fig. 11: Checking Continuity Between EVAP Canister Purge Valve 2P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 11.
NO - Go to step 24.

11. Jump the SCS line with the HDS.

12. Disconnect ECM/PCM connector B (24P).
13. Check for continuity between EVAP canister purge valve 2P connector terminal No. 2 and body ground.

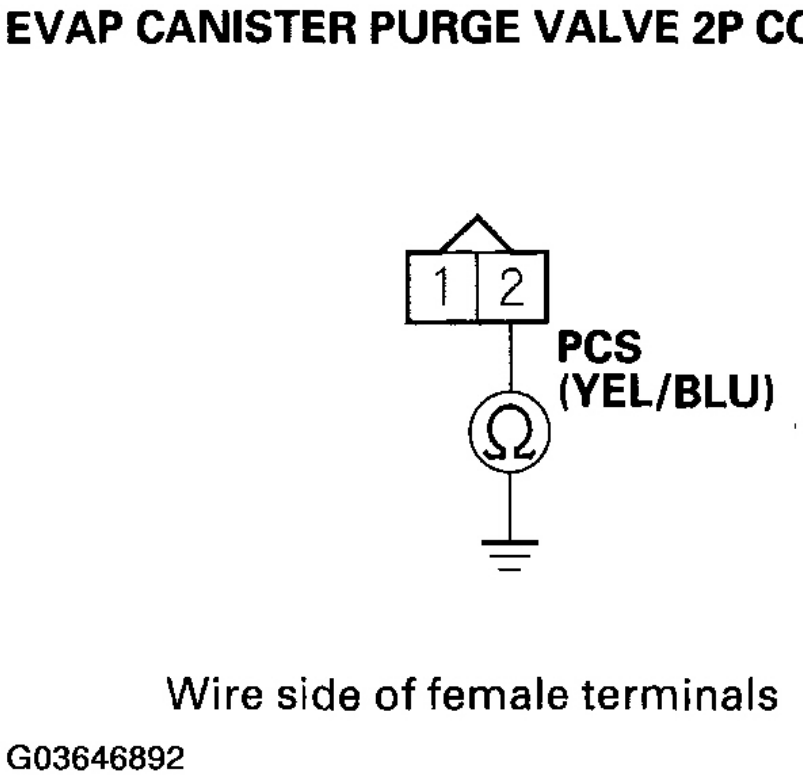


Fig. 12: Checking Continuity Between EVAP Canister Purge Valve 2P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the EVAP canister purge valve and the ECM/PCM (B21), then go to step 25.

NO - Go to step 31.

14. Turn the ignition switch OFF.
15. Disconnect the EVAP canister purge valve 2P connector.

16. Turn the ignition switch ON (II).
17. Measure voltage between EVAP canister purge valve 2P connector terminal No. 1 and body ground.

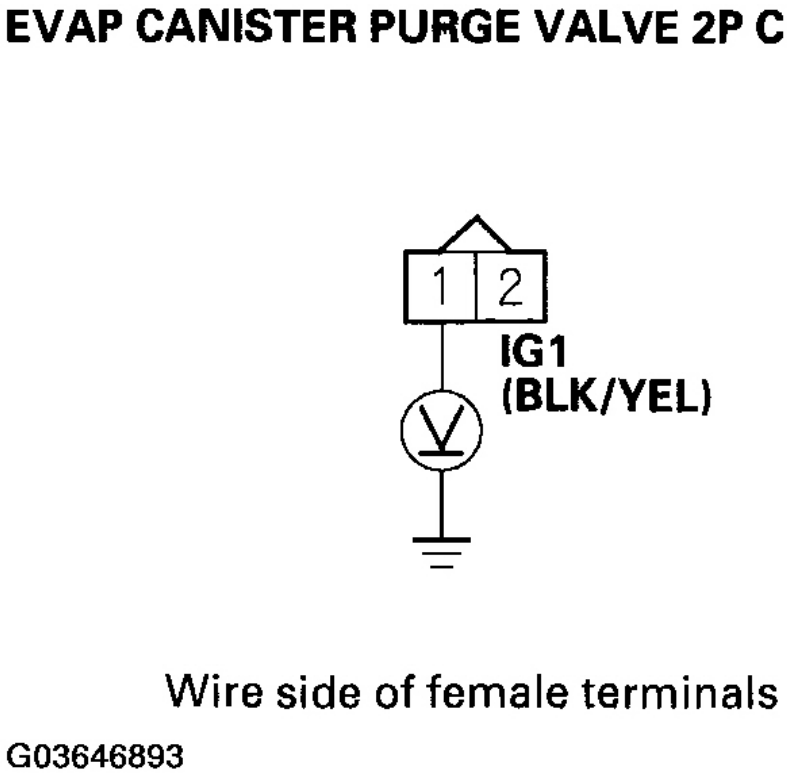


Fig. 13: Measuring Voltage Between EVAP Canister Purge Valve 2P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 18.

NO - Repair open in the wire between the EVAP canister purge valve and the No. 18 ACG (15 A) fuse in the under-dash fuse/relay box, then go to step 25.

18. Turn the ignition switch OFF.

19. Jump the SCS line with the HDS.
20. Disconnect ECM/PCM connector B (24P).
21. Connect EVAP canister purge valve 2P connector terminal No. 2 to body ground with a jumper wire.

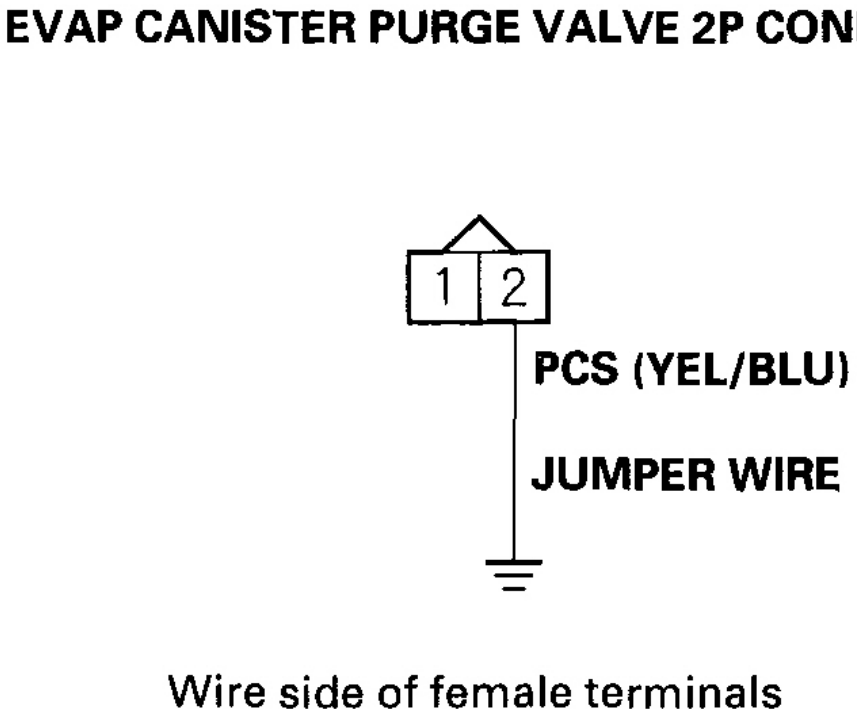


Fig. 14: Connecting EVAP Canister Purge Valve 2P Connector Terminal No. 2 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Check for continuity between ECM/PCM connector terminal B21 and body ground.

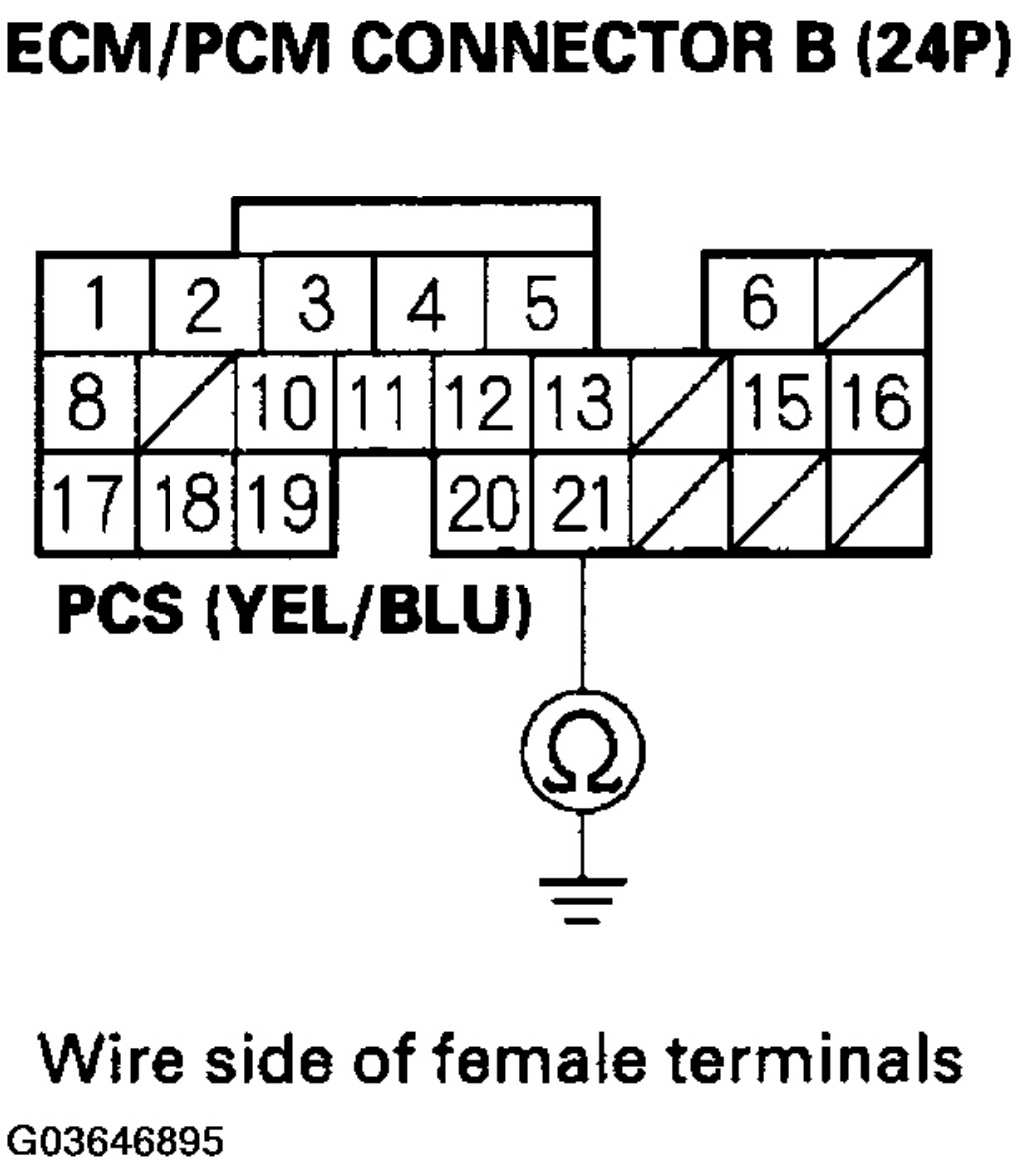


Fig. 15: Checking Continuity Between ECM/PCM Connector Terminal B21 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 23.

NO - Repair open in the wire between the EVAP canister purge valve and the ECM/PCM (B21), then go to step 25.

23. At the valve side, measure resistance between EVAP canister purge valve 2P connector terminals No. 1 and No. 2.

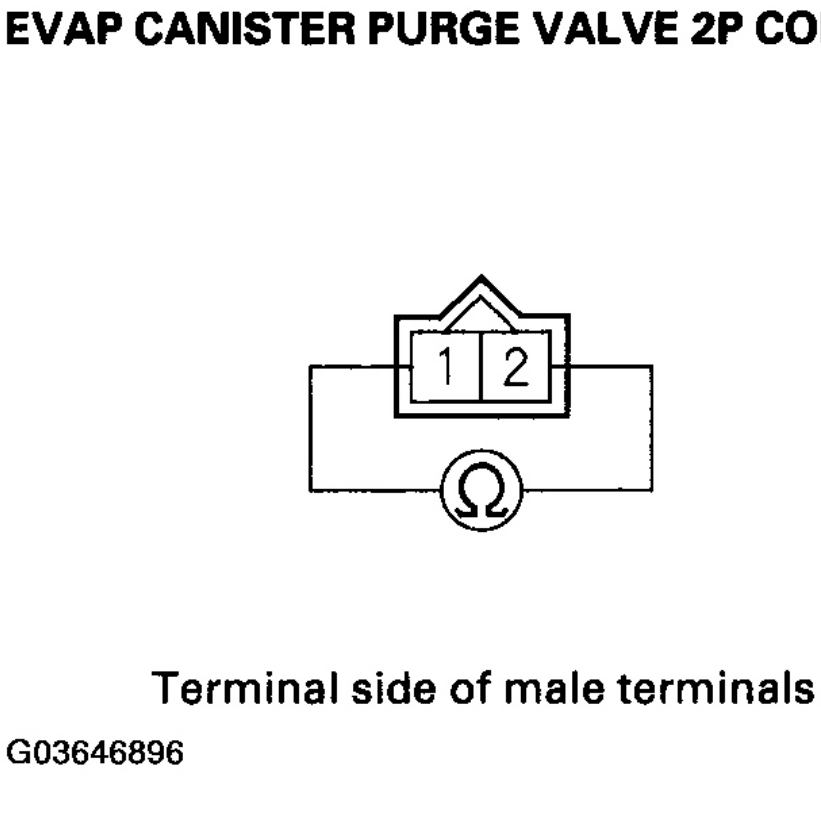


Fig. 16: Measuring Resistance Between EVAP Canister Purge Valve 2P Connector Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 33 ohms at room temperature?

YES - Go to step 31.

NO - Go to step 24.

24. Replace the EVAP canister purge valve (see **EVAP Canister Purge Valve Replacement**).

25. Reconnect all connectors.
26. Turn the ignition switch ON (II).
27. Reset the ECM/PCM with the HDS.
28. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
29. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0443 Indicated?

    YES - Check for poor connections or loose terminals at the EVAP canister purge valve and the ECM/PCM, then go to step 1.

    NO - 2003 model: Troubleshooting is complete. 2004-2007 models: Go to step 30.
30. Monitor the OBD STATUS for DTC P0443 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 29, go to the indicated DTC's troubleshooting.

    NO - If the screen indicate FAILED, check for poor connections or loose terminals at the EVAP canister purge valve and the ECM/PCM, then go to step 1. If the screen indicates EXECUTING, keep idling until a result comes on. If the screen indicates OUT OF CONDITION, go to step 28 and recheck.
31. Reconnect all connectors.
32. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **UPDATING THE ECM/PCM** , **SUBSTITUTE THE ECM/PCM**).
33. Start the engine.
34. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0443 is indicated, check for poor connections or loose terminals at the EVAP canister purge valve and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

35. Monitor the OBD STATUS for DTC P0443 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - If the ECM/PCM was updated, troubleshooting is complete. If the ECM was substituted, replace the original ECM/PCM; '03-05 models, '06-07 models (see **ECM/PCM REPLACEMENT**). If any other Temporary DTC's or DTCs were indicated in step 34, go to the indicated DTC's troubleshooting.

NO - If the screen indicate FAILED, check for poor connections or loose terminals at the EVAP canister purge valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**), then recheck. If the ECM/PCM was substituted, then go to step 1. If the screen indicates EXECUTING or OUT OF CONDITION, keep idling until result comes on.

DTC P0451: FTP SENSOR RANGE/PERFORMANCE PROBLEM

NOTE:

- **Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION .**
- **If DTC P2422 is stored at the same time as DTC P0451, troubleshoot DTC P2422 first, then recheck for DTC P0451, troubleshoot DTC P2422 first, then recheck for DTC P0451.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Start the engine, and let it idle 1 minute.
4. Monitor the OBD STATUS for DTC P0451 in the DTCs MENU with the HDS.

   Does the screen indicate FAILED?

   YES - Go to step 5.

   NO - If the screen indicates PASSED, intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the screen indicates NOT COMPLETED, go to step 3 and recheck.
5. Turn the ignition switch OFF.
6. Replace the FTP sensor (see **FTP Sensor Replacement**).
7. Turn the ignition switch ON (II).
8. Reset the ECM/PCM with the HDS.
9. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
10. Start the engine, and let it idle 1 minute.
11. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0451 indicated?

    YES - Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**), then go to step 10 above. If the ECM/PCM was substituted, go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

    NO - Go to step 12.
12. Monitor the OBD STATUS for DTC P0451 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - Troubleshooting is complete. IF any other Temporary DTC's or DTC's were indicated in step 11, go to the indicated DTC's troubleshooting.

NO - If the screen indicate FAILED, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**), then recheck. If the ECM/PCM was substituted, then go to step 1. If the screen indicates NOT COMPLETED, keep idling until result comes on.

DTC P0452: FTP SENSOR CIRCUIT LOW VOLTAGE (2003-2004 MODELS)

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF.
4. Turn the ignition switch ON (II).
5. Check for Temporary DTCs or DTCs with the HDS.

Are DTC P0107, P0122, and P0452 indicated at the same time?

YES - Go to step 23.

NO - Go to step 6.

6. Turn the ignition switch OFF.
7. Remove the fuel fill cap.
8. Turn the ignition switch ON (II).
9. Check the FTP SENSOR in the DATA LIST with the HDS.

Is about - 7.3 kPa (-2.16 in.Hg, - 55 mmHg), or 0.3 V or less indicated?

YES - Go to step 13.

NO - Go to step 10.

10. Install the fuel fill cap.
11. Start the engine.
12. Monitor the OBD STATUS for DTC P0452 in the DTCs MENU with the HDS.

Does the screen indicate FAILED?

YES - Go to step 13.

NO - If the screen indicates PASSED, intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the screen indicates NOT COMPLETED, go to step 8 and recheck.

13. Turn the ignition switch OFF.
14. Disconnect the FTP sensor 3P connector.
15. Turn the ignition switch ON (II).
16. Check the FTP SENSOR in the DATA LIST with the HDS.

Is about 7.3 kPa (2.15 in.Hg, 54.7 mmHg), or 4.90 V indicated?

YES - Go to step 32.

NO - Go to step 17.

17. Measure voltage between FTP sensor 3P connector terminal No. 1 and body ground.

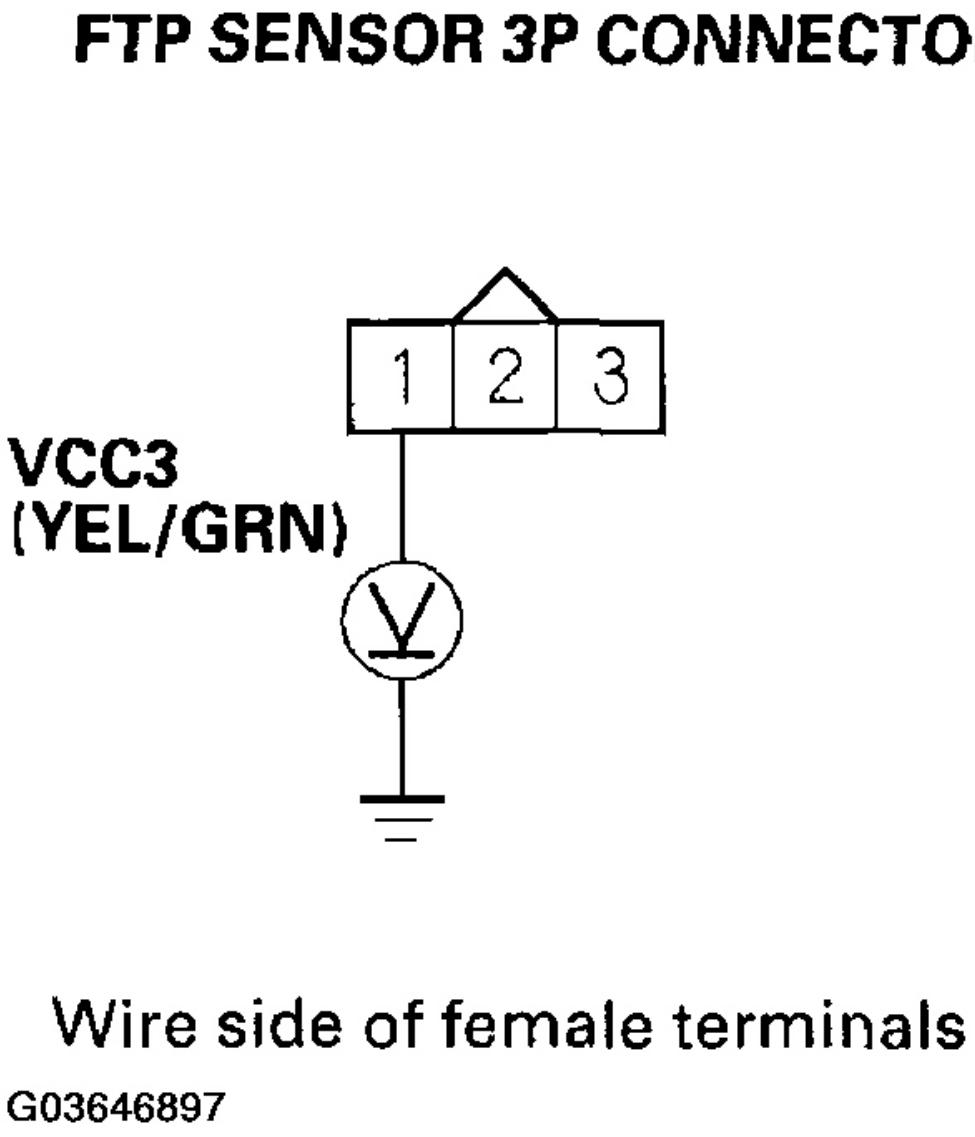


Fig. 17: Measuring Voltage Between FTP Sensor 3P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 19.

NO - Go to step 18.

18. Measure voltage between ECM/PCM connector terminal E5 and body ground.

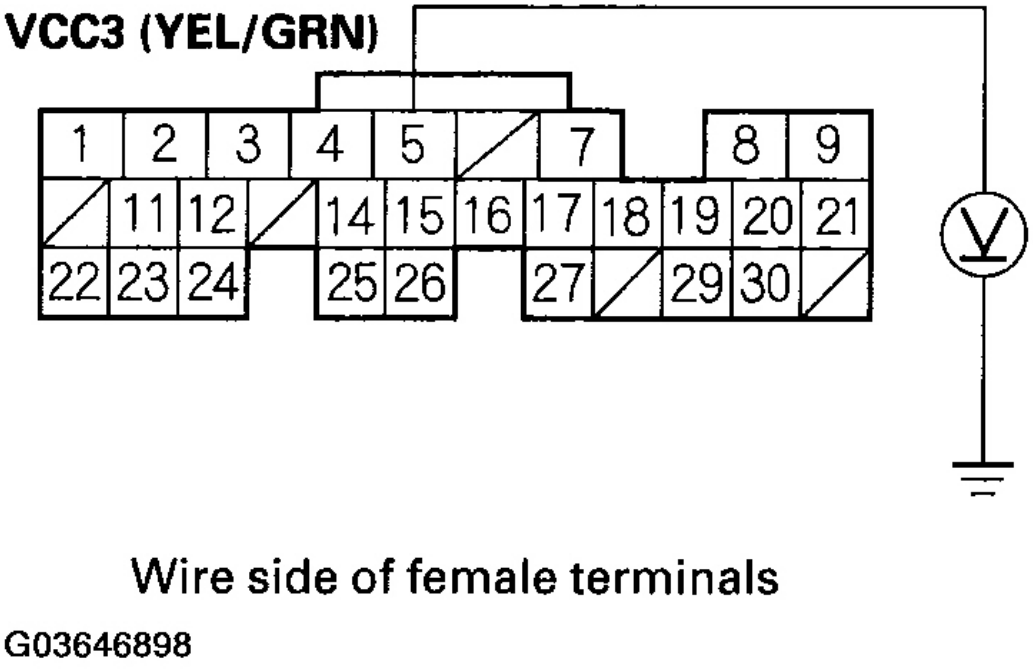


Fig. 18: Measuring Voltage Between ECM/PCM Connector Terminal E5 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 5 V?

YES - Repair open in the wire between the ECM/PCM (E5) and the FTP sensor, then go to step 35.

NO - Go to step 41.

19. Turn the ignition switch OFF.
20. Jump the SCS line with the HDS.

21. Disconnect ECM/PCM connector E (31P).
22. Check for continuity between FTP sensor 3P connector terminal No. 2 and body ground.

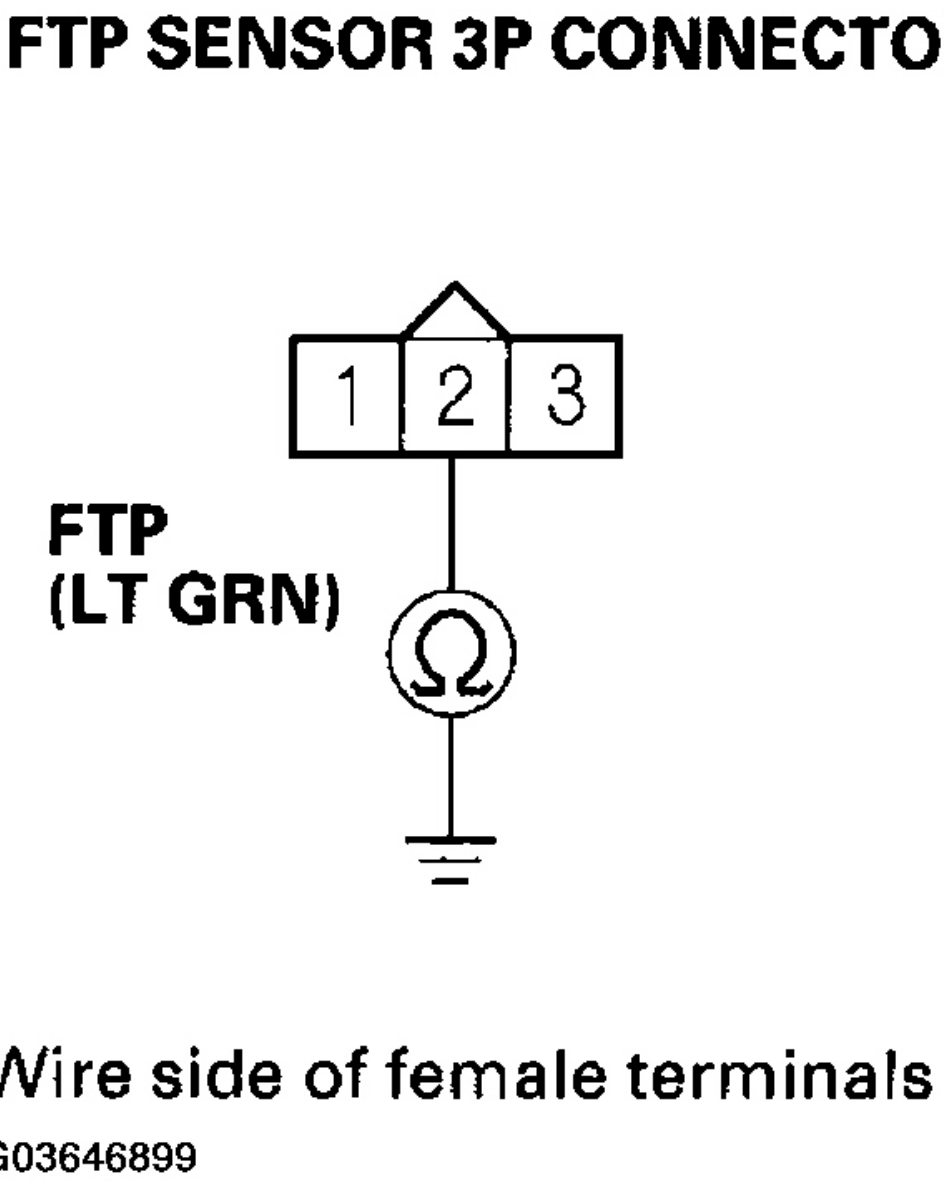


Fig. 19: Checking Continuity Between FTP Sensor 3P Connector Terminal No. 2 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/PCM (E14) and the FTP sensor, then go to step 34.

NO - Go to step 42.

23. Turn the ignition switch OFF.
24. Jump the SCS line with the HDS.
25. Disconnect ECM/PCM connectors A (31P) and E(31P).
26. Disconnect the connectors from these parts:
    - MAP sensor
    - TP sensor
    - FTP sensor
    - EGR valve
    - Input shaft (mainshaft) speed sensor
    - Output shaft (countershaft) speed sensor
27. Check for continuity between body ground and ECM/PCM connector terminals A20, A21, and E5 individually.

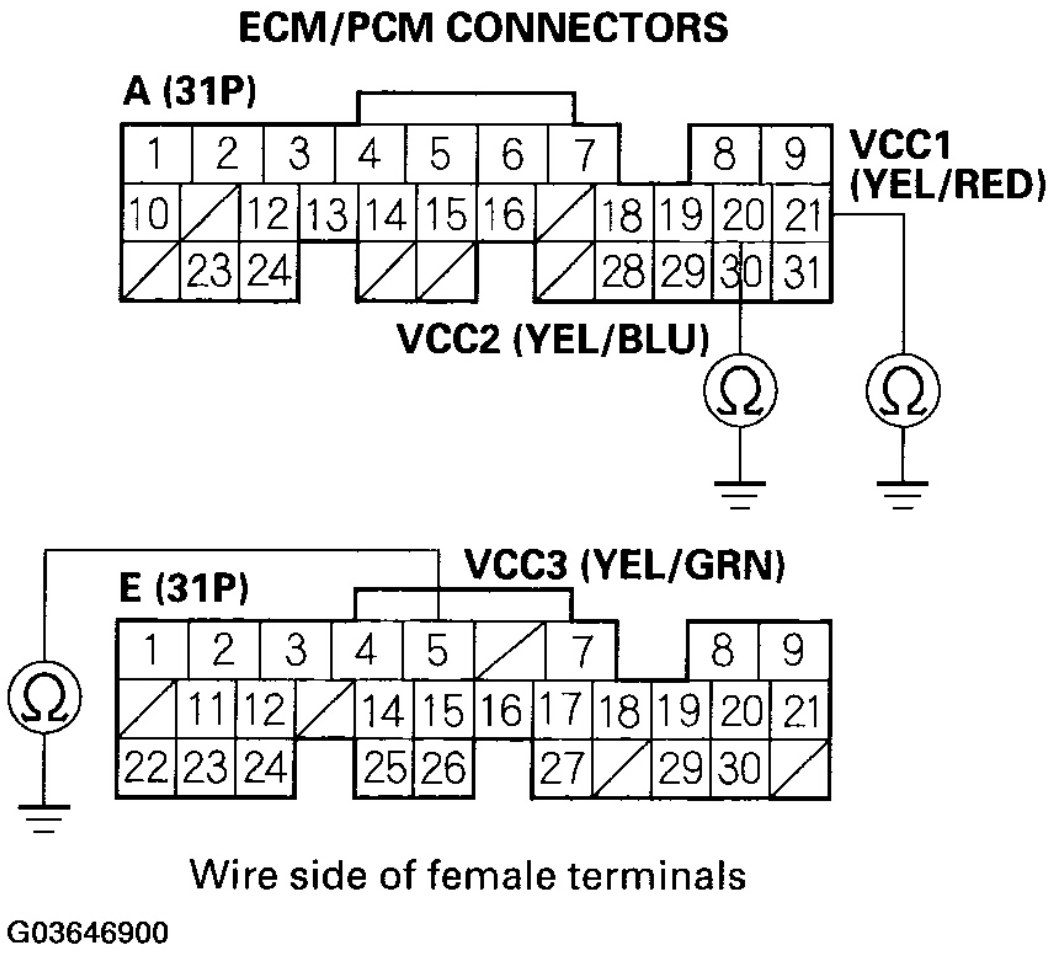


Fig. 20: Checking Continuity Between Body Ground And ECM/PCM Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/PCM (A20, A21, or E5) and each disconnected part, then go to step 34.

NO - Go to step 28.

28. Reconnect ECM/PCM connectors A (31P) and E (31P).
29. Turn the ignition switch ON (II).

30. Measure voltage between ECM/PCM connector terminal A21 and body ground.

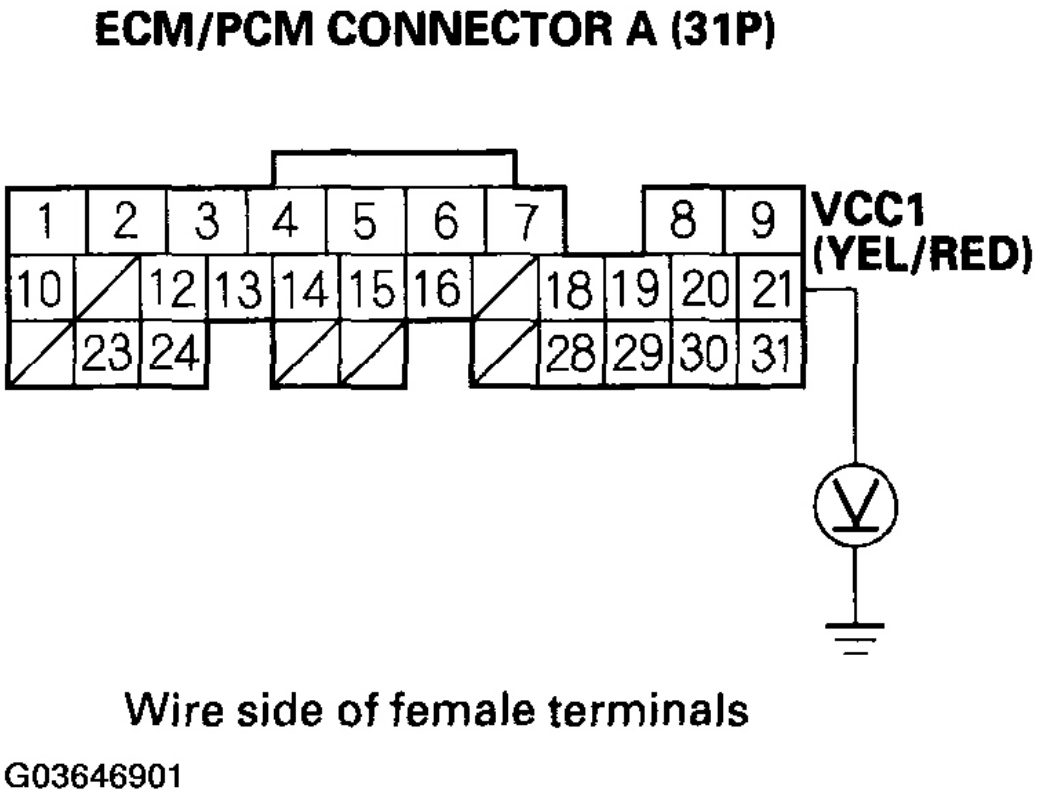


Fig. 21: Measuring Voltage Between ECM/PCM Connector Terminal A21 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 31.

NO - Go to step 41.

31. Continue to monitor voltage at ECM/PCM connector terminal A21 while reconnecting these parts, one at a time:
    - MAP sensor

- TP sensor
- FTP sensor
- EGR valve
- Input shaft (mainshaft) speed sensor
- Output shaft (countershaft) speed sensor

Did the voltage drop to about 0 V?

YES - Replace the part that caused the voltage to drop, then go to step 36.

NO - Go to step 41.

32. Turn the ignition switch OFF.
33. Replace the FTP sensor (see **FTP Sensor Replacement**).
34. Reconnect the ECM/PCM connectors.
35. Reconnect the FTP sensor 3P connector.
36. Turn the ignition switch ON (II).
37. Reset the ECM/PCM with the HDS.
38. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
39. Check for Temporary DTCs or DTCs with the HDS.

Is there P0452 indicated?

YES - Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step1.

NO - Go to step 40.

40. Monitor the OBD STATUS for DTC P0452 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 39, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If the screen indicates NOT COMPLETED, keep idling until a result comes on.

41. Turn ignition switch OFF.
42. Reconnect all connectors.
43. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **UPDATING THE ECM/PCM** , **SUBSTITUTE THE ECM/PCM**).
44. Start the engine, then let it idle for 10 seconds.
45. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0452 indicated?

YES - Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM** then recheck. If the ECM/PCM was substituted, go to step 1.

NO - Go to step 46.).

46. Monitor the OBD STATUS for DTC P0452 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**). If any other Temporary DTC's or DTCs were indicated in step 45, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**), then go to step 44. If the ECM/PCM was substituted, go to step 1. If the screen indicate NOT COMPLETED, keep idling until a result comes on.

DTC P0452: FTP SENSOR CIRCUIT LOW VOLTAGE (2005-2007 MODELS)

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF.
4. Remove the fuel fill cap.
5. Turn the ignition switch ON (II).
6. Check the FTP SENSOR in the DATA LIST with the HDS.

   Is about - 7.3 kPa (-2.16 in.Hg, -55 mmHg), or 0.3 V or less indicated?

   YES - Go to step 10.

   NO - Go to step 7.
7. Install the fuel fill cap.
8. Start the engine.
9. Monitor the OBD STATUS for DTC P0452 in the DTCs MENU with the HDS.

   Does the screen indicate FAILED?

   YES - Go to step 10.

   NO - If the screen indicates PASSED, intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the screen indicates NOT COMPLETED, go to step 5 and recheck.
10. Turn the ignition switch OFF.
11. Disconnect the FTP sensor 3P connector.
12. Turn the ignition switch ON (II).
13. Check the FTP SENSOR in the DATA LIST with the HDS.

    Is about 7.3 kPa (2.15 in.Hg, 54.7 mmHg), or 4.90 V indicated?

YES - Go to step 20.

NO - Go to step 14.

14. Measure voltage between FTP sensor 3P connector terminal No. 1 and body ground.

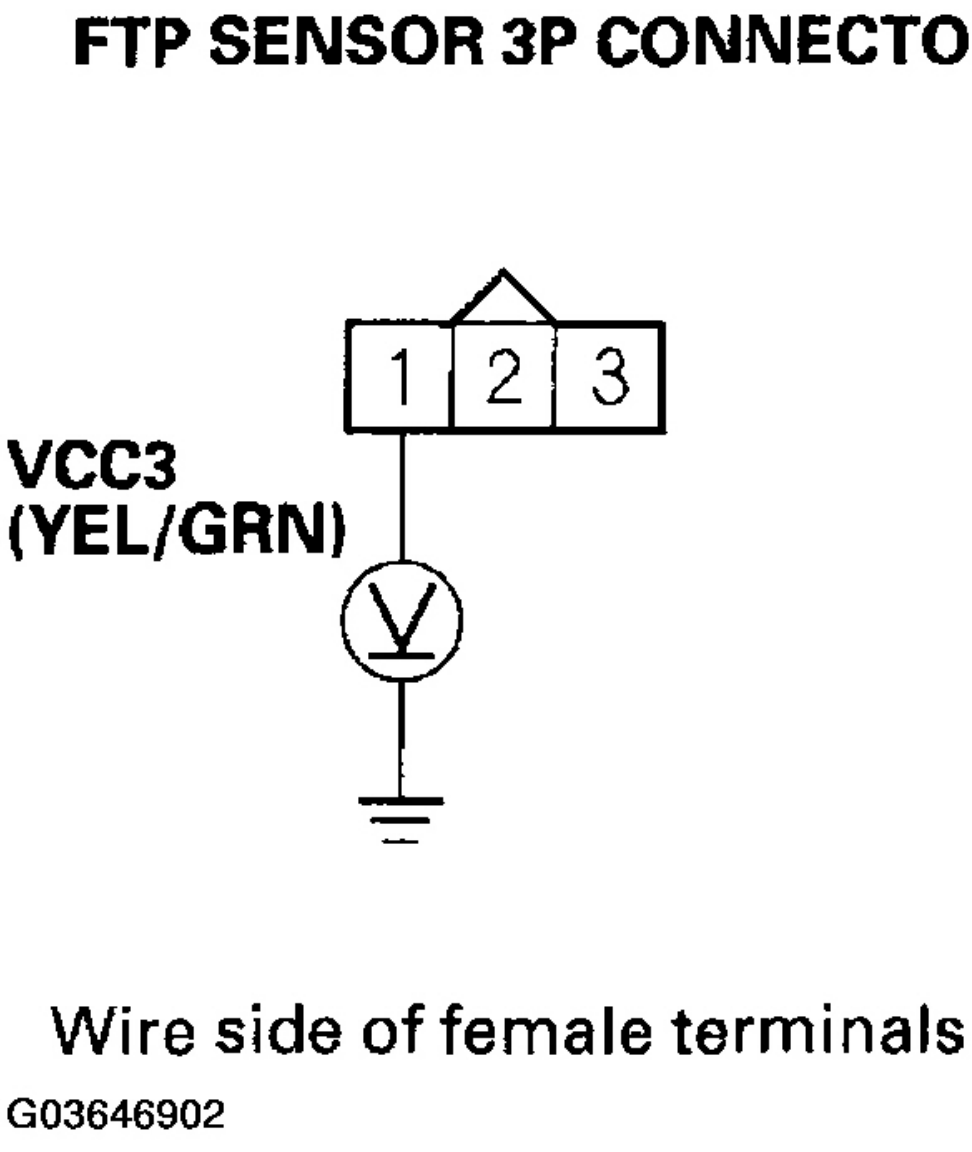


Fig. 22: Measuring Voltage Between FTP Sensor 3P Connector Terminal

No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 16.
NO - Go to step 15.

15. Measure voltage between ECM/PCM connector terminal E5 and body ground.

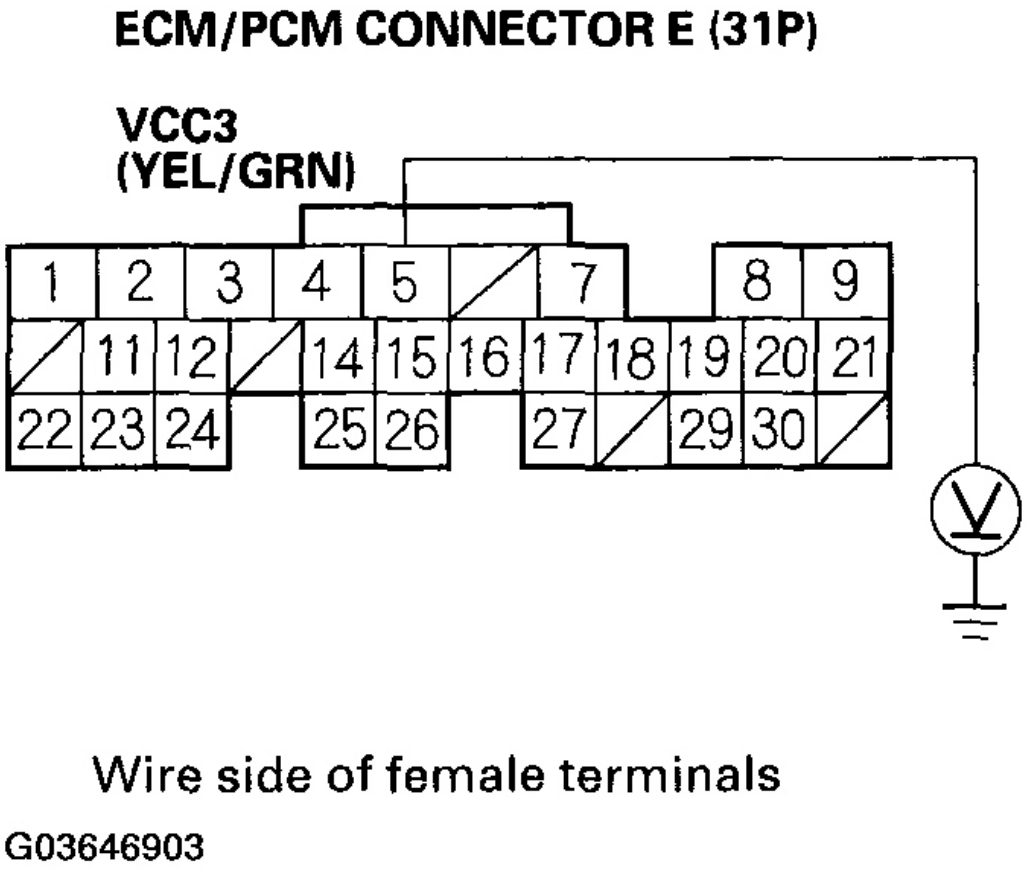


Fig. 23: Measuring Voltage Between ECM/PCM Connector Terminal E5 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 5 V?

YES - Repair open in the wire between the ECM/PCM (E5) and the FTP sensor, then go to step 22.

NO - Go to step 28.

16. Turn the ignition switch OFF.
17. Jump the SCS line with the HDS.
18. Disconnect ECM/PCM connector E (31P).
19. Check for continuity between FTP sensor 3P connector terminal No. 2 and body ground.

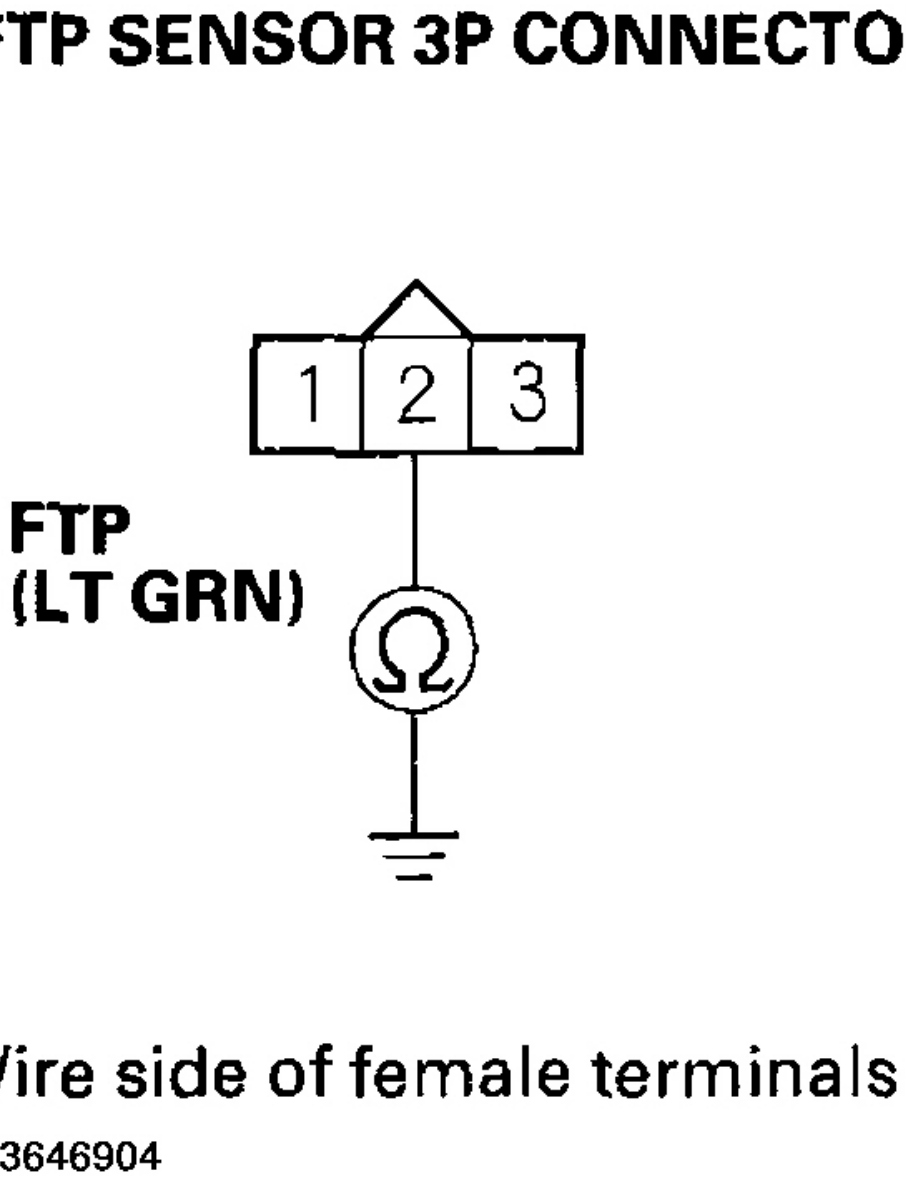


Fig. 24: Checking Continuity Between FTP Sensor 3P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/PCM (E14) and the FTP sensor, then go to step 22.

NO - Go to step 29.

20. Turn the ignition switch OFF.
21. Replace the FTP sensor (see **FTP Sensor Replacement**).
22. Reconnect all connectors.
23. Turn the ignition switch ON (II).
24. Reset the ECM/PCM with the HDS.
25. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
26. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0452 indicated?

YES - Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1.

NO - Go to step 27.

27. Monitor the OBD STATUS for DTC P0452 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 26, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If the screen indicates NOT COMPLETED, keep idling until a result comes on.

28. Turn the ignition switch OFF.
29. Reconnect all connectors.
30. Update the ECM/PCM if it does not have the latest software (see**UPDATING THE ECM/PCM**), or substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**).

31. Start the engine, then let it idle without load (in Park or neutral) until the radiator fan comes on.
32. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0452 indicated?

YES - Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**), then recheck. If the ECM/PCM was substituted, go to step 1.

NO - Go to step 33.

33. Monitor the OBD STATUS for DTC P0452 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM; '05, '06-07 models (see **ECM/PCM REPLACEMENT**). If any other Temporary DTC's or DTC's were indicated in step 32, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the ECM/PCM was updated, substitute a known good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**), then recheck. If the ECM/PCM was substituted, go to step 1. If the screen indicates NOT COMPLETED, keep idling until a result comes on.

DTC P0453: FTP SENSOR CIRCUIT HIGH VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).

2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF.
4. Remove the fuel fill cap.
5. Turn the ignition switch ON (II).
6. Check the FTP SENSOR in the DATA LIST with the HDS.

   Is about 7.3 kPa (2.16 in.Hg, 55 mmHg), or 4.7 V or more indicated?

   YES - Go to step 10.

   NO - Go to step 7.
7. Install the fuel fill cap.
8. Start the engine.
9. Monitor the OBD STATUS for DTC P0453 in the DTCs MENU with the HDS.

   Does the screen indicate FAILED?

   YES - Go to step 10.

   NO - If the screen indicates PASSED, intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the screen indicates NOT COMPLETED, go to step 6 and recheck.
10. Turn the ignition switch OFF.
11. Disconnect the FTP sensor 3P connector.
12. Connect FTP sensor 3P connector terminals No. 2 and No. 3 with a jumper wire.

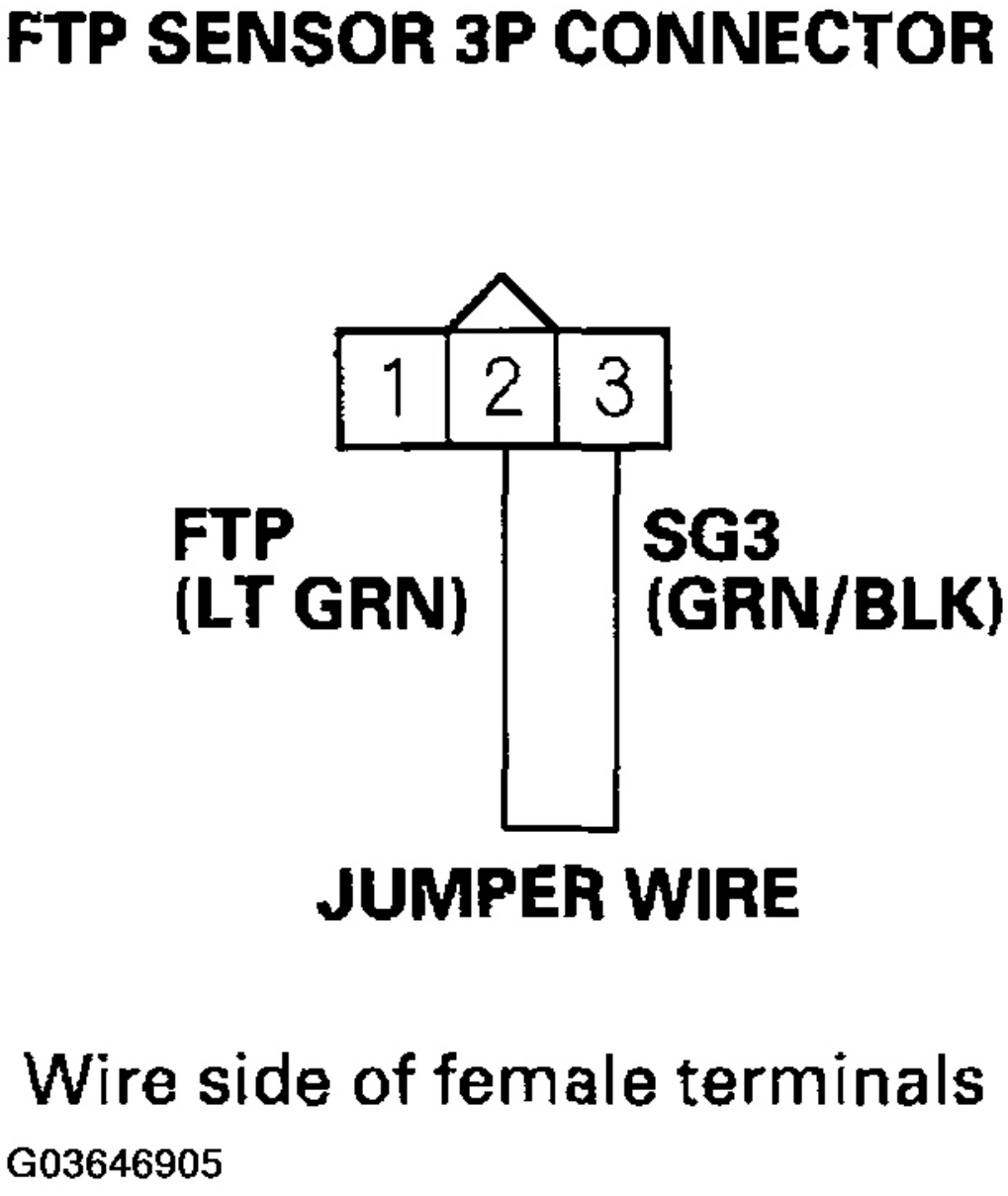


Fig. 25: Connecting FTP Sensor 3P Connector Terminals No. 2 And No. 3 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Turn the ignition switch ON (II).

14. Check the FTP SENSOR in the DATA LIST with the HDS.

    Is about 7.3 kPa (2.16 in.Hg, 55 mmHg), or 4.7 V or more indicated?

    YES - Go to step 15.
    NO - Go to step 25.

15. Measure voltage between FTP sensor 3P connector terminals No. 1 and No. 3.

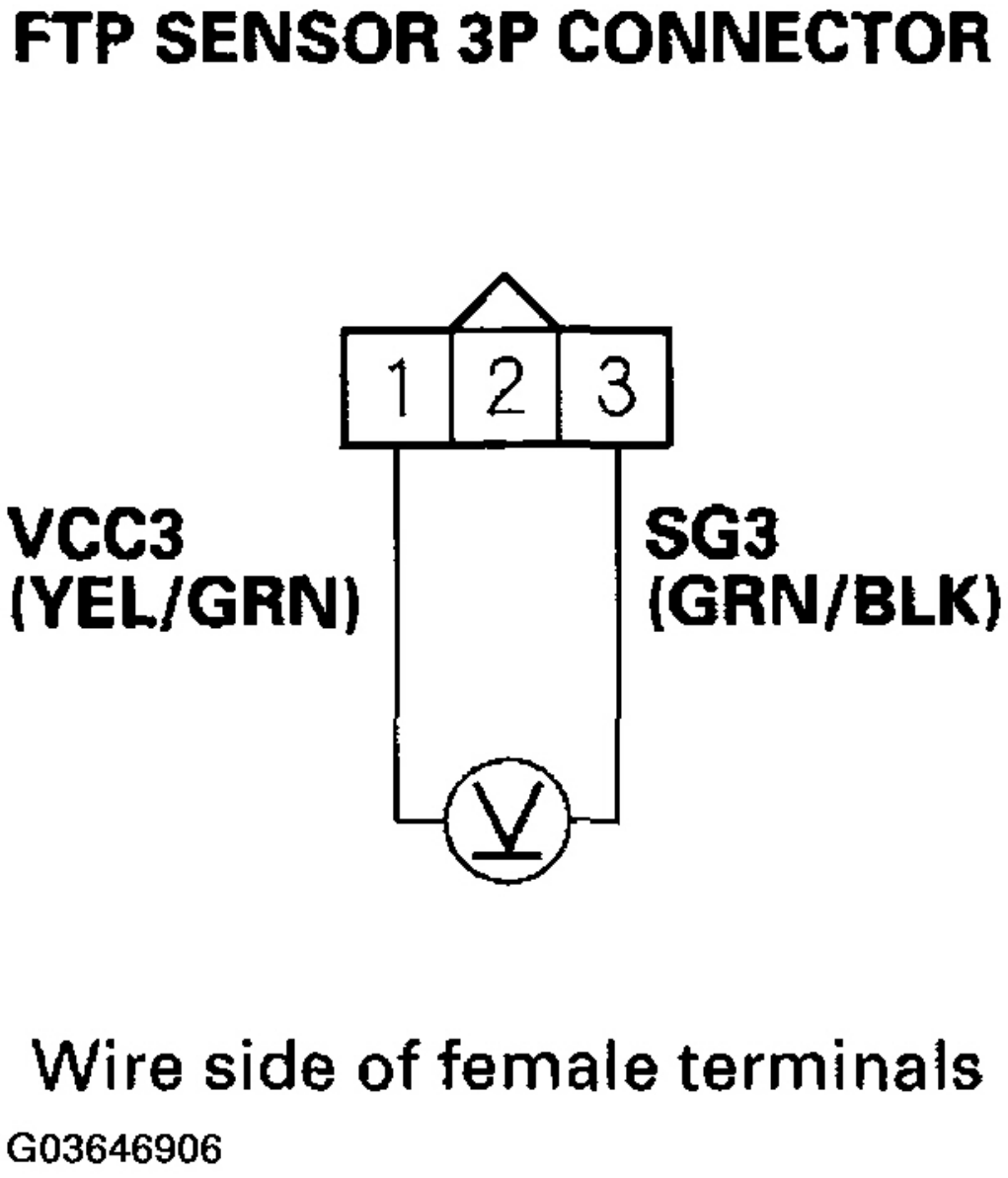


Fig. 26: Measuring Voltage Between FTP Sensor 3P Connector Terminals No. 1 And No. 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 21.

NO - Go to step 16.

16. Turn the ignition switch OFF.
17. Jump the SCS line with the HDS.
18. Disconnect ECM/PCM connector E (31P).
19. Connect FTP sensor 3P connector terminal No. 3 to body ground with a jumper wire.

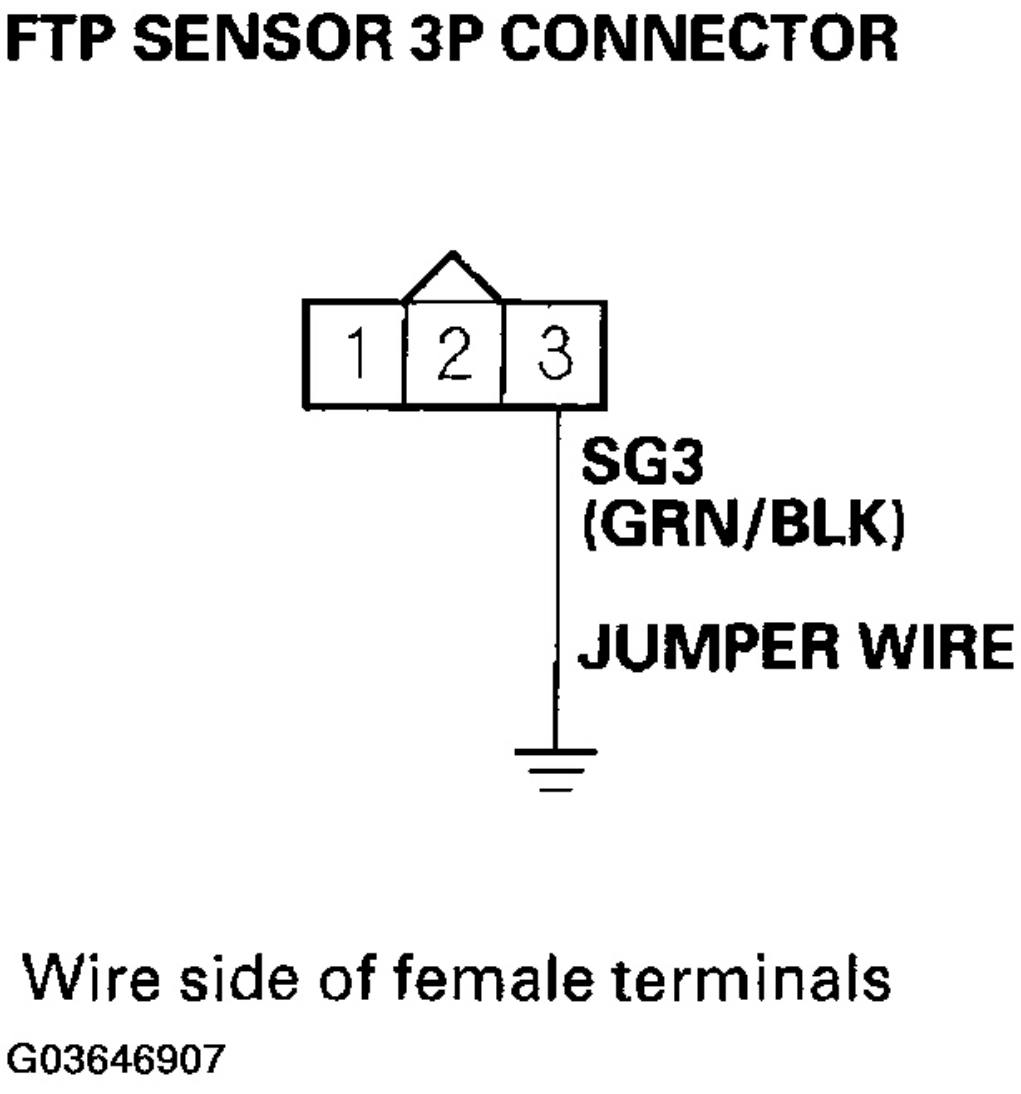


Fig. 27: Connecting FTP Sensor 3P Connector Terminal No. 3 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Check for continuity between ECM/PCM connector terminal E4 and body ground.

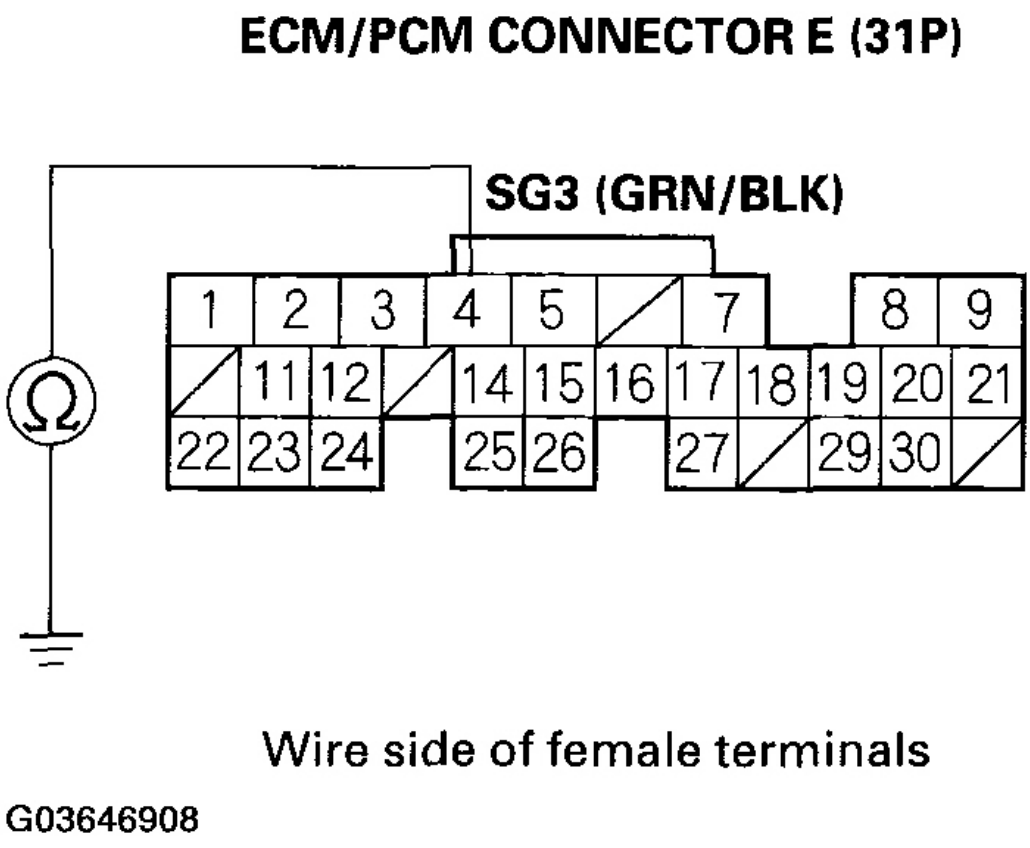


Fig. 28: Checking Continuity Between ECM/PCM Connector Terminal E4 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 34.

NO - Repair open in the wire between the ECM/PCM (E4) and the FTP sensor, then go to step 27.

21. Turn the ignition switch OFF.
22. Connect ECM/PCM connector terminals E4 and E14 with a jumper wire.

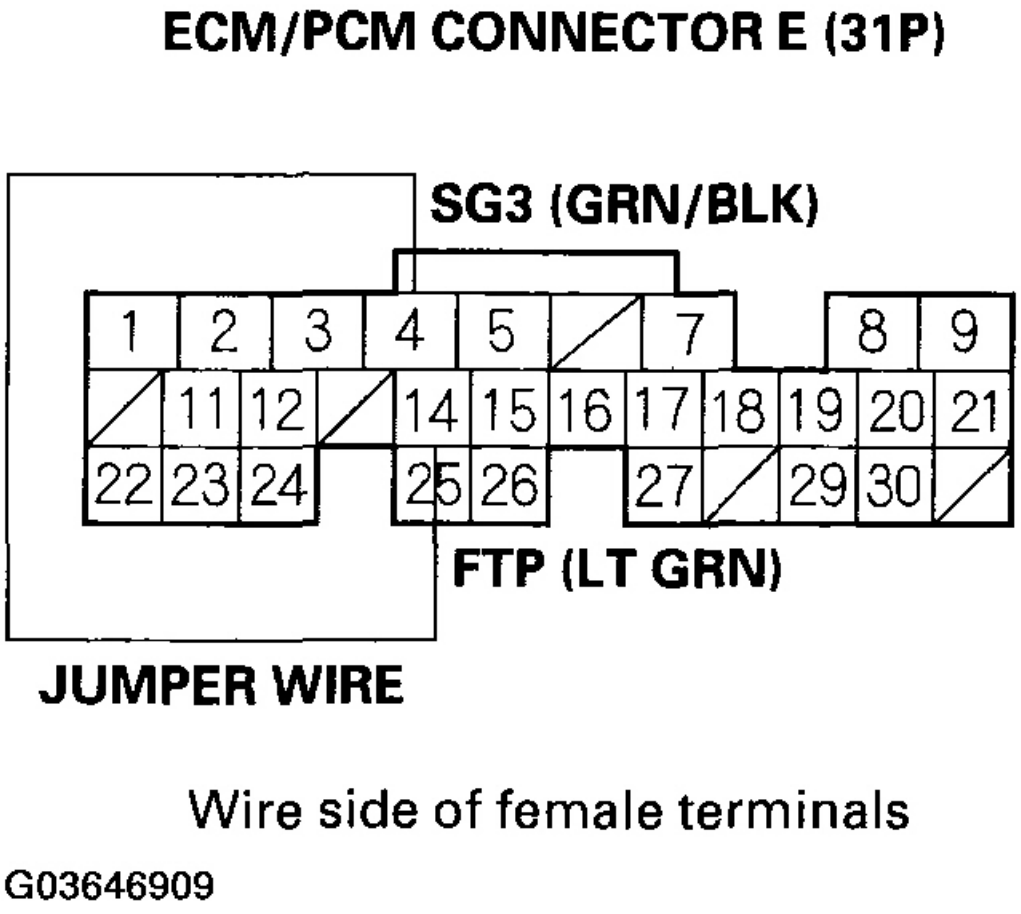


Fig. 29: Connecting ECM/PCM Connector Terminals E4 And E14 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Turn the ignition switch ON (II).
24. Check the FTP SENSOR in the DATA LIST with the HDS.

Is about 7.3 kPa (2.16 in.Hg, 55 mmHg), or 4.7 V or more indicated?

YES - Go to step 33.

NO - Repair open in the wire between the ECM/PCM (E14) and the FTP sensor, then go to step 27.

25. Turn the ignition switch OFF.
26. Replace the FTP sensor (see **FTP Sensor Replacement**).
27. Reconnect all connectors.
28. Turn the ignition switch ON (II).
29. Reset the ECM/PCM with the HDS.
30. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
31. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0453 indicated?

    YES - Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1.

    NO - Go to step 32.
32. Monitor the OBD STATUS for DTC P0453 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 31, go to the indicated DTC's troubleshooting.

    NO - If the screen indicates FAILED, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If the screen indicates NOT COMPLETED, keep idling until a result comes on.
33. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **UPDATING THE ECM/PCM** , **SUBSTITUTE THE ECM/PCM**).
34. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

    YES - If DTC P0453 is indicated, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM, then go to step 1. If any

other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

35. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **UPDATING THE ECM/PCM** , **SUBSTITUTE THE ECM/PCM**).
36. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0453 indicated?

YES - Check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**), then recheck. If the ECM/PCM was substituted, go to step 1.

NO - Go to step 37.

37. Monitor the OBD STATUS for DTC P0453 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM; '03-05, '06-07 (see **ECM/PCM REPLACEMENT**). If any other Temporary DTCs or DTCs were indicated in step 36, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the FTP sensor and the ECM/PCM. If the ECM/PCM was updated, substitute a known good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**), then recheck. If the ECM/PCM was substituted, go to step 1. If the screen indicates NOT COMPLETED, keep idling until a result comes on.

DTC P0457: EVAP SYSTEM LEAK DETECTED/FUEL CAP LOOSE OR MISSING

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Check the fuel fill cap (the cap must say "Tighten to click"). It should turn 1/4 turn after it's tight, then it clicks.

   Is the correct fuel fill cap installed and properly tightened?

   YES - Go to step 2.

   NO - Replace or tighten the cap, then go to step 19.
2. Check the fuel fill cap seal (A) and the fuel fill pipe mating surface (B). Verify that the fuel fill cap tether cord (C) is not caught under the cap.

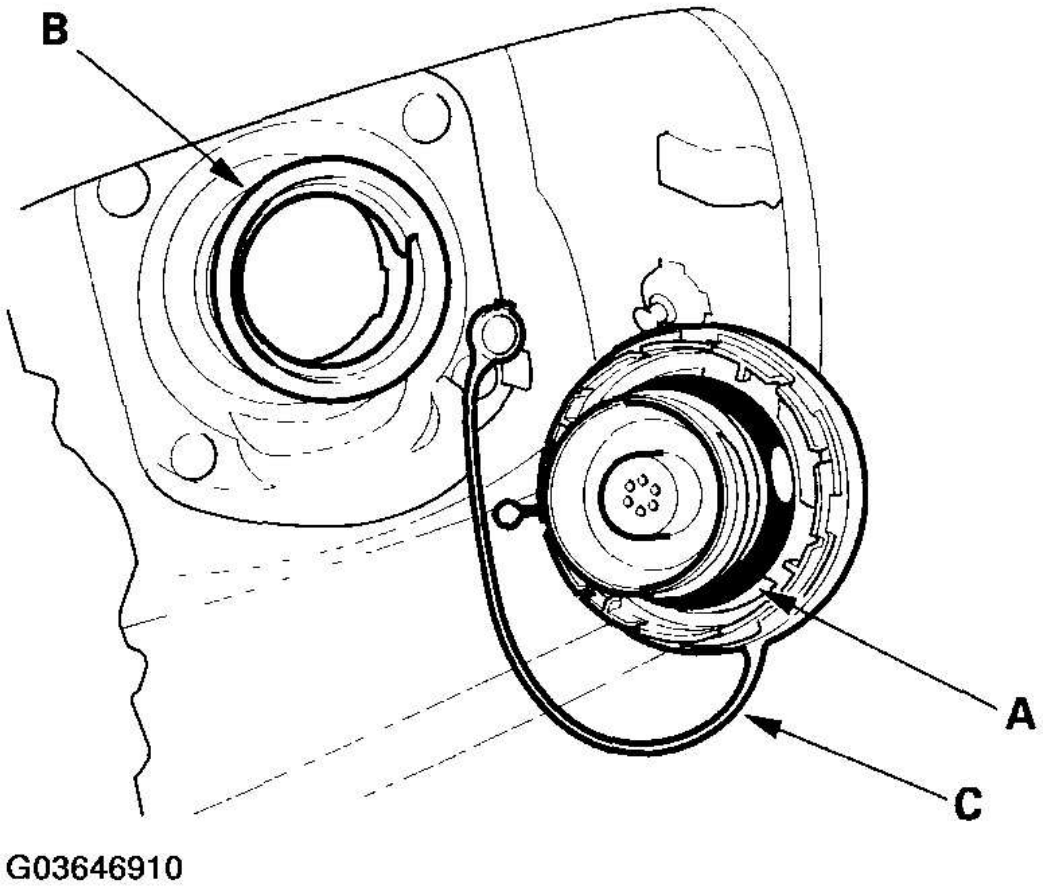


Fig. 30: Checking Fuel Fill Cap Seal And Fuel Fill Pipe Mating Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the fuel fill cap seal missing or damaged, is the fuel fill pipe damaged, or is the tether cord caught under the cap?

YES - Replace the fuel fill cap or the fuel fill pipe, then go to step 19.

NO - Go to step 3.

3. Turn the ignition switch ON (II).
4. Clear the DTC with the HDS.
5. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor or the EVAP canister vent shut valve and the ECM/PCM.

NO - Go to step 6.

6. Turn the ignition switch OFF.
7. Remove the EVAP canister vent shut valve from the EVAP canister; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**).
8. Connect the 2P connector to the EVAP canister vent shut valve.
9. Turn the ignition switch ON (II).
10. Select EVAP CVS ON in the INSPECTION MENU with the HDS.
11. Check the EVAP canister vent shut valve (A) operation.

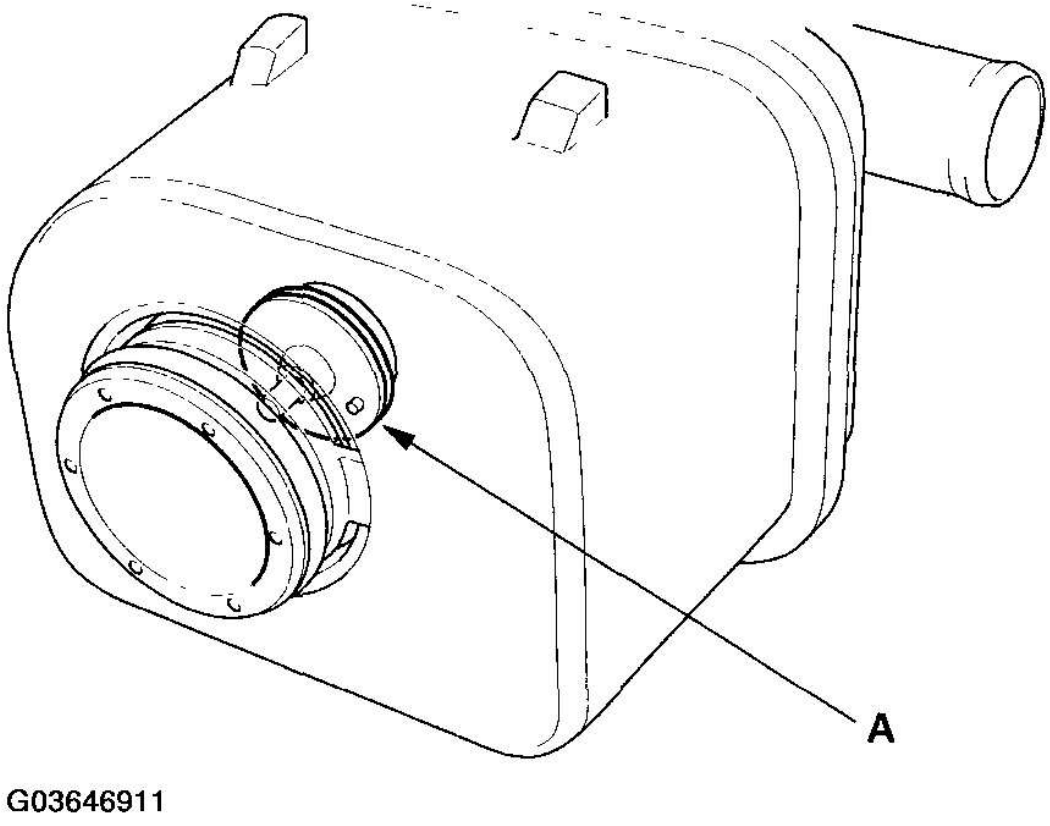


Fig. 31: Checking EVAP Canister Vent Shut Valve Operation
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the valve operate?

YES - Check the routing of the EVAP canister vent tube, then go to step 18.

NO - Go to step 12.

12. Turn the ignition switch OFF.
13. Replace the EVAP canister vent shut valve; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**).
14. Turn the ignition switch ON (II).
15. Reset the ECM/PCM with the HDS.
16. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN**

PROCEDURE).

17. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

    Is the result OK?

    YES - Troubleshooting is complete.

    NO - Check for poor connections or loose terminals at the FTP sensor or the EVAP canister vent shut valve and the ECM/PCM, then go to step 1.
18. Reinstall the EVAP canister vent shut valve; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**).
19. Turn the ignition switch ON (II).
20. Reset the ECM/PCM with the HDS.
21. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
22. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

    Is the result OK?

    YES - Troubleshooting is complete.

    NO - Check for poor connections or loose terminals at the FTP sensor or the EVAP canister vent shut valve and the ECM/PCM, then go to step 1.

DTC P0496: EVAP SYSTEM HIGH PURGE FLOW

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

   Is the result OK?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor, the EVAP canister purge valve, or the EVAP canister vent shut valve and the ECM/PCM.

NO - Go to step 4.

4. Turn the ignition switch OFF.
5. Replace the EVAP canister purge valve; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**).
6. Turn the ignition switch ON (II).
7. Reset the ECM/PCM with the HDS.
8. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
9. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Troubleshooting is complete.

NO - Check for poor connections or loose terminals at the FTP sensor, the EVAP canister purge valve, or the EVAP canister vent shut valve and the ECM/PCM, then go to step 1.

DTC P0497: EVAP SYSTEM LOW PURGE FLOW

Special Tools Required

- Vacuum/pressure gauge, 0-4 in.Hg, 07 JAZ-001000B
- Vacuum pump/gauge, 0-30 in.Hg, Snap-on YA4000A or equivalent, commercially available

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Check the fuel fill cap installation.

Is the fuel fill cap installed and properly tightened?

YES - Go to step 2.

NO - Properly install the fuel fill cap (the cap must say "Tighten to click"). It should turn 1/4 turn after it's tight, then go to step 23.

2. Turn the ignition switch ON (II).
3. Clear the DTC with the HDS.
4. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor, the EVAP canister purge valve, or the EVAP canister vent shut valve and the ECM/PCM.

NO - Go to step 5.

5. Check for a loose or damaged EVAP canister purge line between the intake manifold and the EVAP canister purge valve.

Is the line OK?

YES - Go to step 6.

NO - Reconnect or repair the EVAP canister purge line, then go to step 23.

6. Disconnect the vacuum hose (A) from the EVAP canister purge valve (B) in the engine compartment, and connect a T-fitting (C) from the vacuum gauge and the vacuum pump/gauge, 0-30 in.Hg, to the EVAP canister purge valve as shown below.

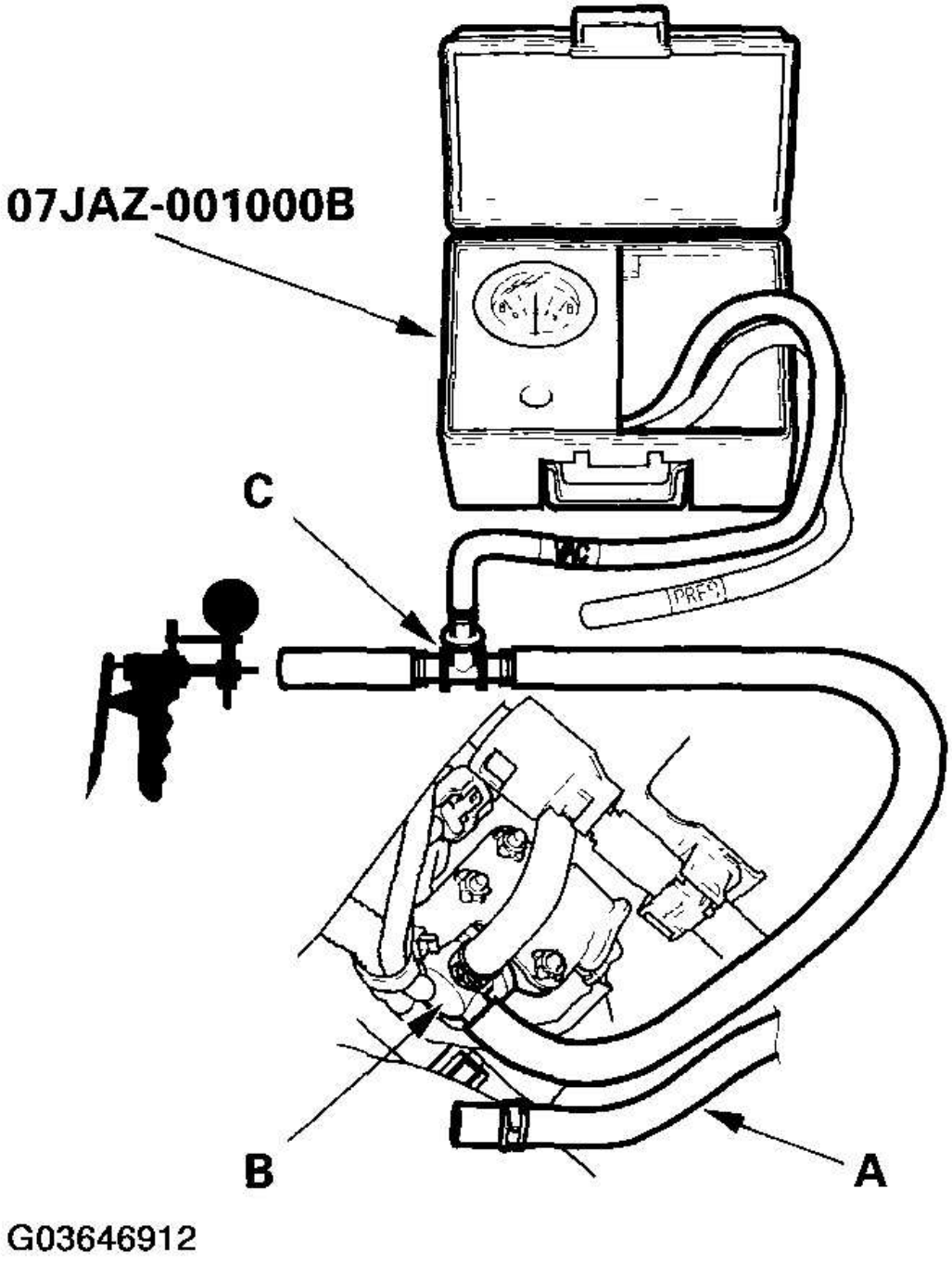


Fig. 32: Disconnecting Vacuum Hose From EVAP Canister Purge Valve In Engine Compartment And Connecting T-Fitting

Courtesy of AMERICAN HONDA MOTOR CO., INC.

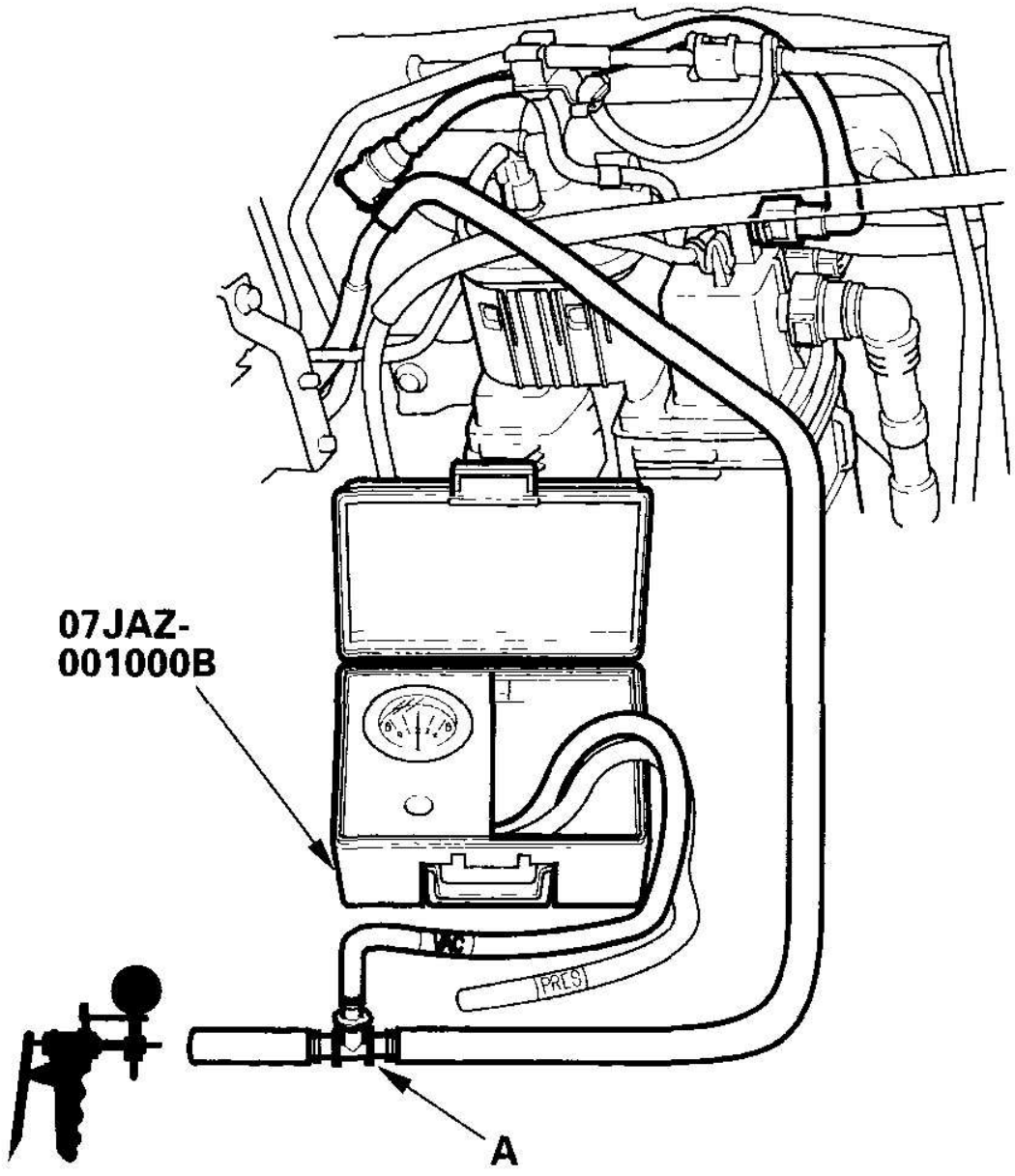
7. Select EVAP PCS ON in the INSPECTION MENU with the HDS.
8. Slowly apply about 2 kPa (0.6 in.Hg, 15 mmHg) of vacuum to the hose.

Does it hold vacuum?

YES - Check for blockage in the EVAP canister purge line between the intake manifold and the EVAP canister purge valve. If the vacuum hose is OK, replace the EVAP canister purge valve, then go to step 22.

NO - Go to step 9.

9. Reconnect the vacuum hose to the EVAP canister purge valve.
10. Disconnect the vacuum hose from the EVAP canister purge line (EVAP canister side), and connect a T-fitting (A) from the vacuum gauge and the vacuum pump/gauge, 0-30 in.Hg, to the hose as shown below.



*: This illustration shows the non-SULEV model.

G03646913

Fig. 33: Connecting T-Fitting From Vacuum Gauge And Vacuum Pump/Gauge To Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Select EVAP PCS ON in the INSPECTION MENU with the HDS.
12. Slowly apply about 2 kPa (0.6 in.Hg, 15 mmHg) of vacuum to the hose.

    Does it hold vacuum?

    YES - Check for a restricted in the EVAP canister purge line between the EVAP canister purge valve and the EVAP canister, then go to step 22.

    NO - Go to step 13.
13. Remove the FTP sensor with its connector connected (see **FTP Sensor Replacement**).
14. Connect a T-fitting (A) from the vacuum gauge and the commercially available vacuum pump/gauge, 0-30 in.Hg, to the FTP sensor (B) as shown below.

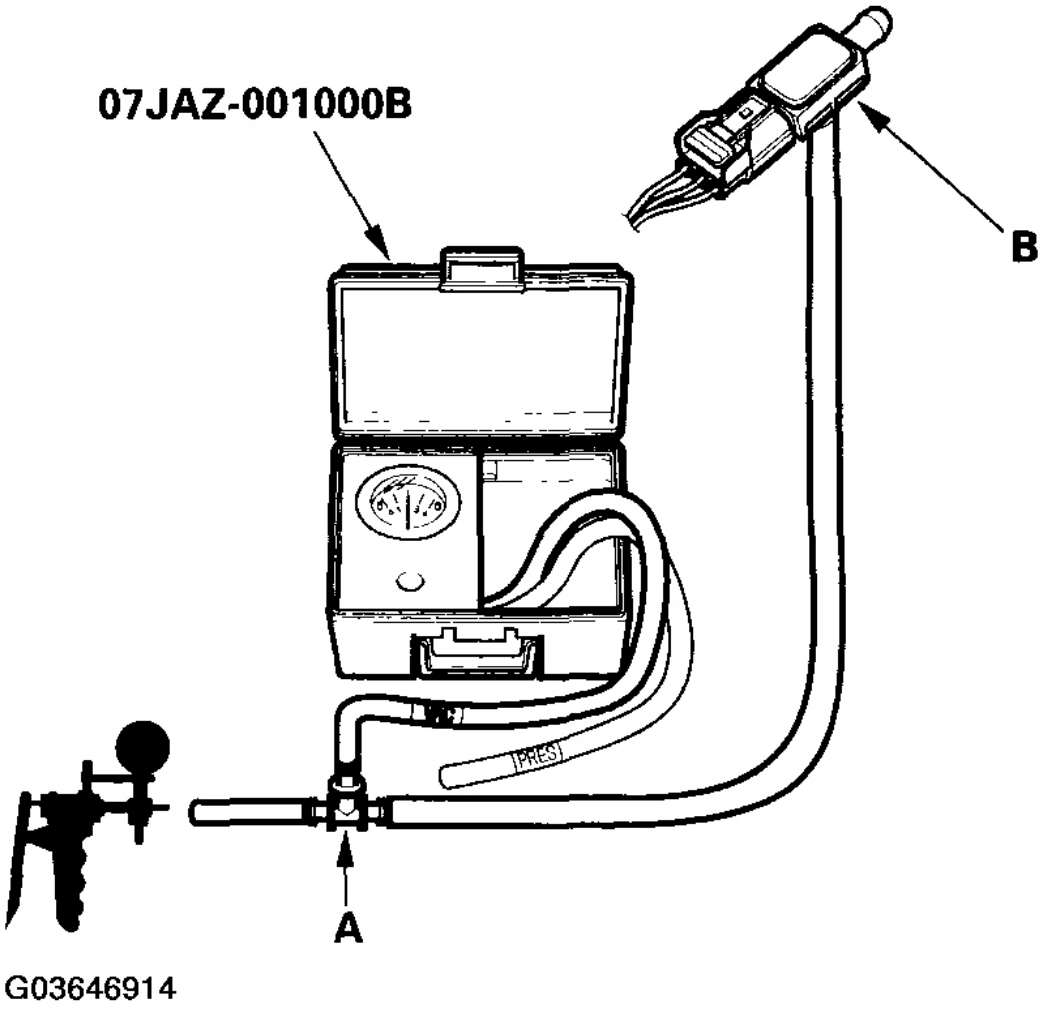


Fig. 34: Connecting T-Fitting From Vacuum Gauge And Commercially Available Vacuum Pump/Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Check and record the FTP SENSOR reading in the DATA LIST with the HDS.
16. Slowly apply about 1.3 kPa (0.4 in.Hg, 10 mmHg) of vacuum to the hose.
17. Check the FTP SENSOR in the DATA LIST with the HDS.

Is the difference more than 1.1 kPa (0.31 in.Hg, 8 mmHg) before and after applying vacuum?

YES - Go to step 18.

NO - Replace the FTP sensor (see **FTP Sensor Replacement**), then go to step 22.

18. Reconnect the vacuum hose to the EVAP canister purge line (EVAP canister side) and reinstall the FTP sensor.
19. Disconnect the vacuum hose (A) from the EVAP canister purge valve (B), and connect a T-fitting (C) from the vacuum gauge and the vacuum pump/gauge, 0-30 in.Hg, to the hose as shown below.

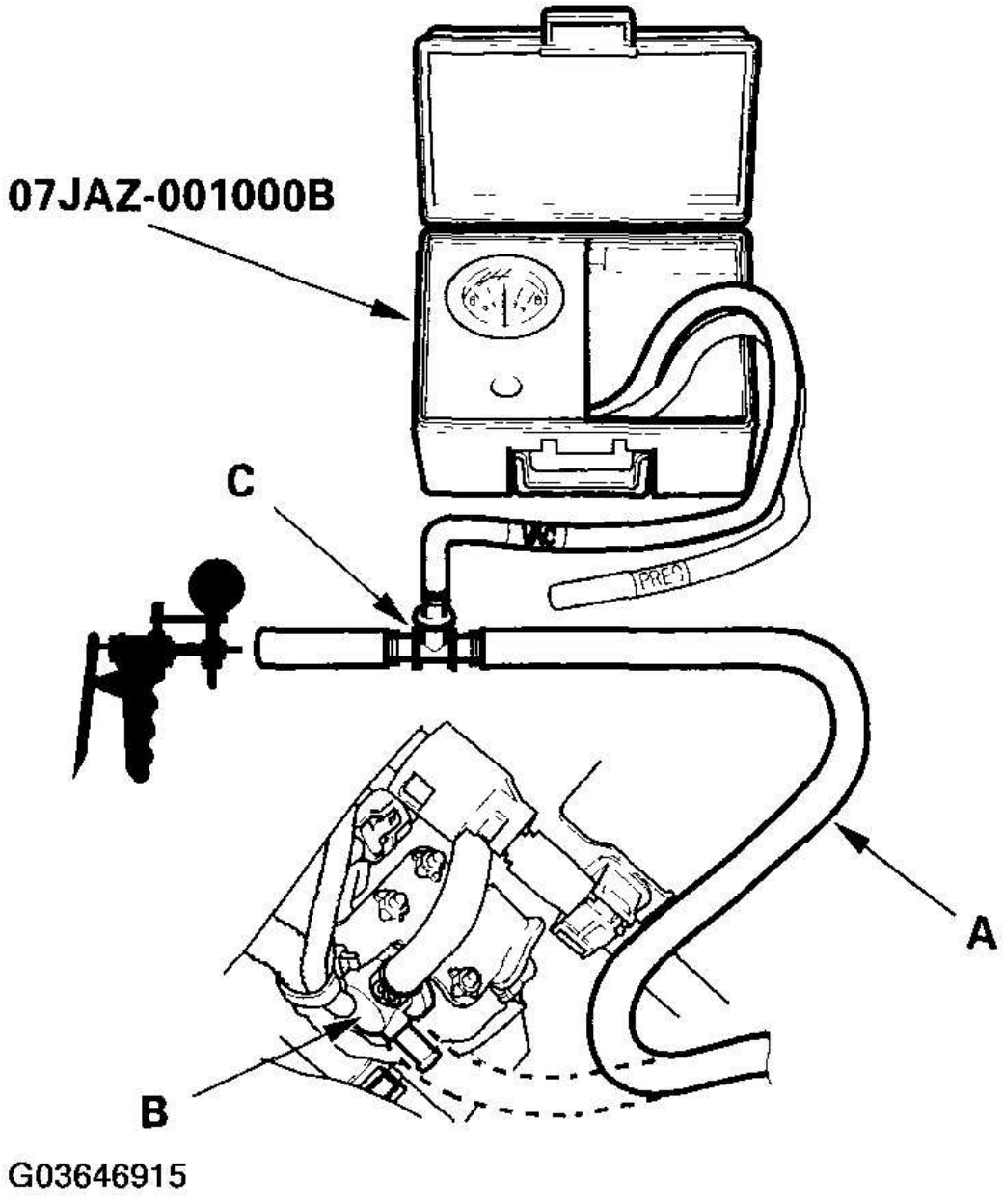


Fig. 35: Disconnecting Vacuum Hose From EVAP Canister Purge Valve And Connect T-Fitting
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Select EVAP CVS ON in the INSPECTION MENU with the HDS.

21. Slowly apply about 2 kPa (0.6 in.Hg, 15 mmHg) of vacuum to the hose.

Does the hose hold vacuum?

YES - Check for blockage at the EVAP canister port, then go to step 22.

NO - Replace the EVAP canister vent shut valve, then go to step 22.

22. Reconnect all hoses.
23. Turn the ignition switch ON (II).
24. Reset the ECM/PCM with the HDS.
25. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
26. Do the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

Is the result OK?

YES - Troubleshooting is complete.

NO - Check for poor connections or loose terminals at the FTP sensor, the EVAP canister purge valve, or the EVAP canister vent shut valve and the ECM/PCM, then go to step 1.

DTC P0498: EVAP CANISTER VENT SHUT VALVE CIRCUIT LOW VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS, then wait 5 seconds.
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0498 indicated?

YES - Go to step 6.

NO - Go to step 4.

4. Select EVAP CVS ON in the INSPECTION MENU with the HDS.
5. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0498 indicated?

YES - Go to step 6.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the EVAP canister vent shut valve and the ECM/PCM.

6. Turn the ignition switch OFF.
7. Disconnect the EVAP canister vent shut valve 2P connector.
8. Measure resistance between EVAP canister vent shut valve 2P connector terminals No. 1 and No. 2.

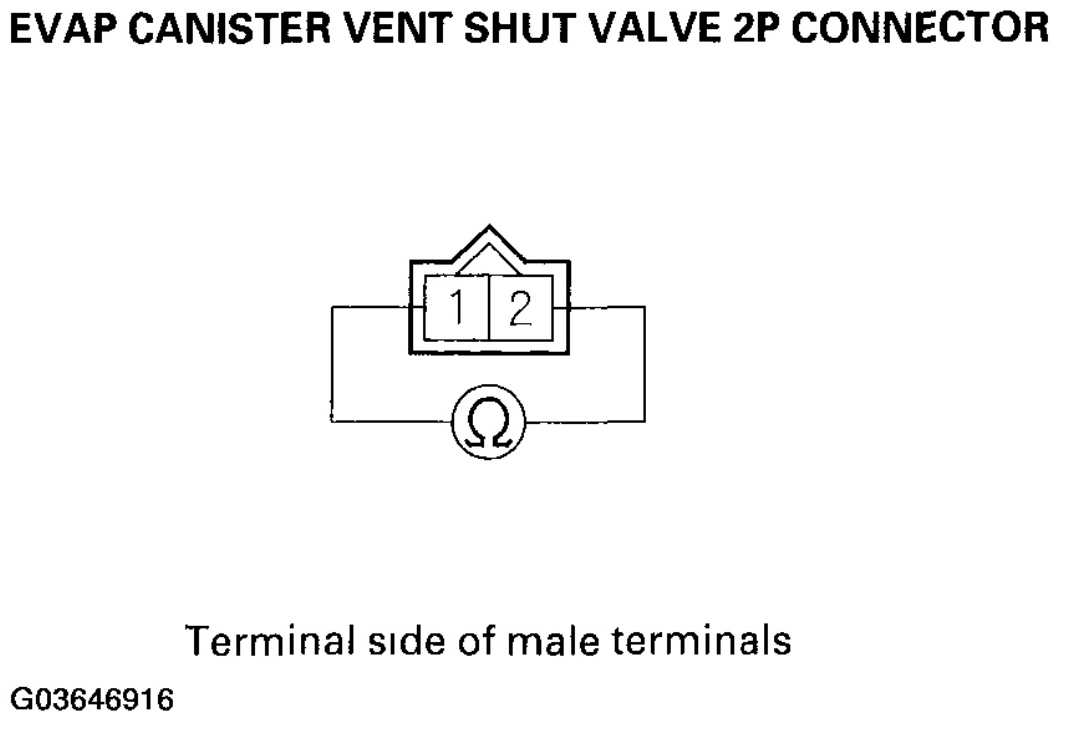


Fig. 36: Measuring Resistance Between EVAP Canister Vent Shut Valve 2P Connector Terminals No. 1 And No. 2

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 25-30 ohms at room temperature?

YES - Go to step 9.

NO - Go to step 12.

9. Jump the SCS line with the HDS.
10. Disconnect ECM/PCM connector E (31P).
11. Check for continuity between ECM/PCM connector terminal E19 and body ground.

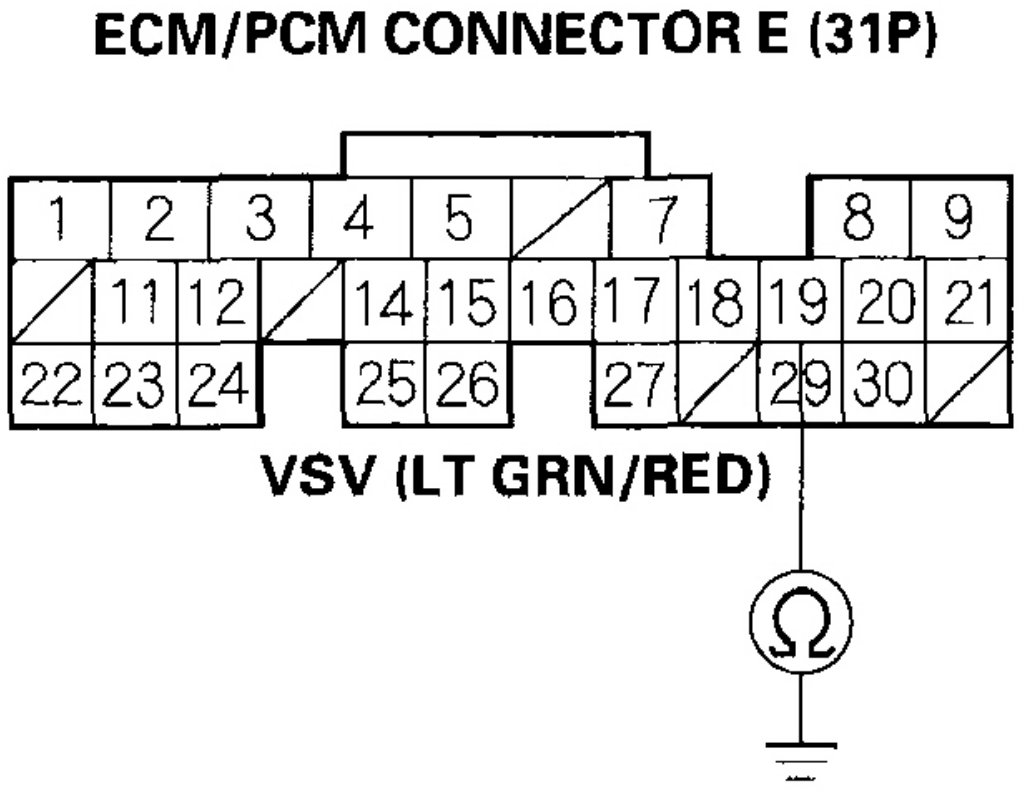


Fig. 37: Checking Continuity Between ECM/PCM Connector Terminal E19 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the EVAP canister vent shut valve and the ECM/PCM (E19), then go to step 13.

NO - Go to step 21.

12. Replace the EVAP canister vent shut valve; Non-SULEV model (see **Non-**

SULEV model) or SULEV model (see **SULEV model**).

13. Reconnect ECM/PCM connector E (31P).
14. Reconnect the EVAP canister vent shut valve 2P connector.
15. Turn the ignition switch ON (II).
16. Reset the ECM/PCM with the HDS.
17. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
18. Select EVAP CVS ON in the INSPECTION MENU with the HDS.
19. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0498 indicated?

    YES - Check for poor connections or loose terminals at the EVAP canister vent shut valve and the ECM/PCM, then go to step 1.

    NO - Go to step 20.
20. Monitor the OBD STATUS for DTC P0498 in the DTC's MENU with the HDS.

    Does the screen indicate PASSED?

    YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 19, go to the indicated DTCs troubleshooting.

    NO - If the screen indicates FAILED, check for poor connections or loose terminals at the EVAP canister vent shut valve and the ECMPCM, then go to step 1. If the screen indicates NOT COMPLETED, go to step 18.
21. Reconnect connectors.
22. Update the ECM/PCM if it does not have the latest software (see **ECM/PCM REPLACEMENT**), or substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**).
23. Select EVAP CVS ON in the INSPECTION MENU with the HDS.
24. Check for Temporary DTCs or DTCs with HDS.

    Is DTC P0498 indicated?

YES - Check for poor connections or loose terminals at the EVAP canister vent shut valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/CPM (see **SUBSTITUTE THE ECM/PCM**), then go to step 23. If the ECM/PCM was substituted, go to step 1.

NO - Go to step 25.

25. Monitor the OBD STATUS for DTC P0498 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM; '03-05 models, '06-07 models (see **ECM/PCM REPLACEMENT**). If any other Temporary DTC's or DTCs were indicated in step 24, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the EVAP canister vent shut valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**), then go to step 23. If the ECM/PCM was substituted, go to step 1. If the screen indicates NOT COMPLETED, go to step 23.

DTC P0499: EVAP CANISTER VENT SHUT VALVE CIRCUIT HIGH VOLTAGE

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS, then wait 5 seconds.
3. Select EVAP CVS ON in the INSPECTION MENU with the HDS.
4. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0499 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the EVAP canister vent shut valve and the ECM/PCM.

5. Turn the ignition switch OFF.
6. Disconnect the EVAP canister vent shut valve 2P connector.
7. Turn the ignition switch ON (II).
8. Measure voltage between EVAP canister vent shut valve 2P connector terminal No. 2 (No. 1)* and body ground.

*: SULEV model

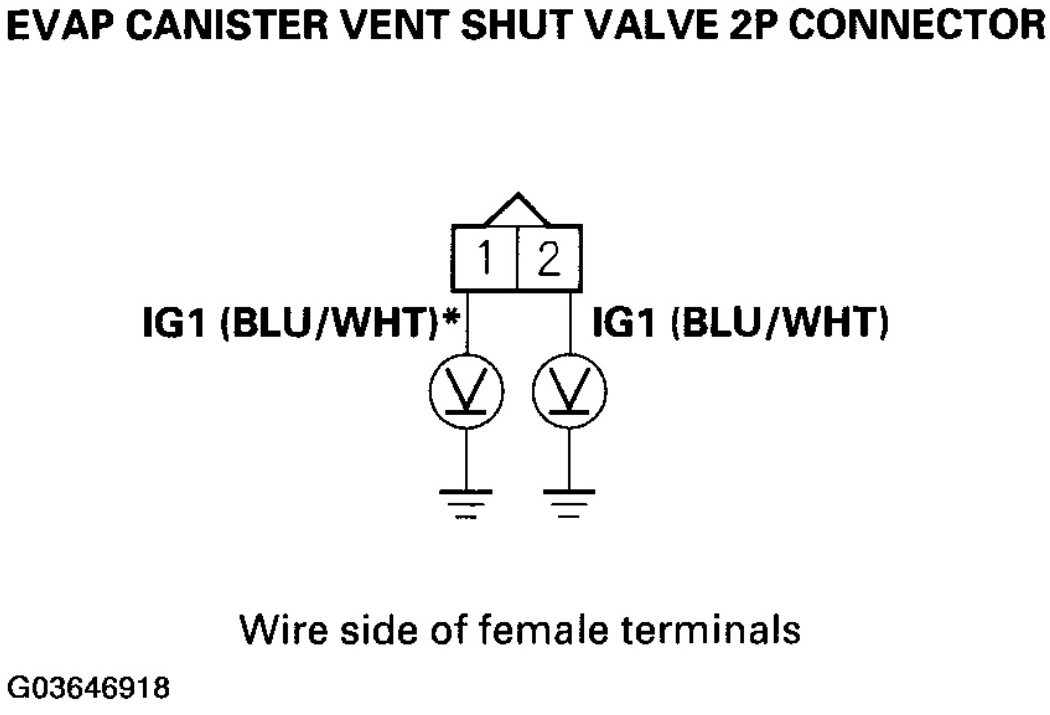


Fig. 38: Measuring Voltage Between EVAP Canister Vent Shut Valve 2P Connector Terminal No. 2 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 9.

NO - 2003-2004 models: Repair open in the wire between the EVAP canister vent shut valve and the No. 18 ACG (15 A) fuse in the under-dash fuse/relay box, then go to step 16.

2005-2007 models: Repair open in the wire between the EVAP canister vent shut valve and the A/F sensor relay, then go to step 16.

9. Turn the ignition switch OFF.
10. At the valve side, Measure resistance between EVAP canister vent shut valve 2P connector terminals No. 1 and No. 2.

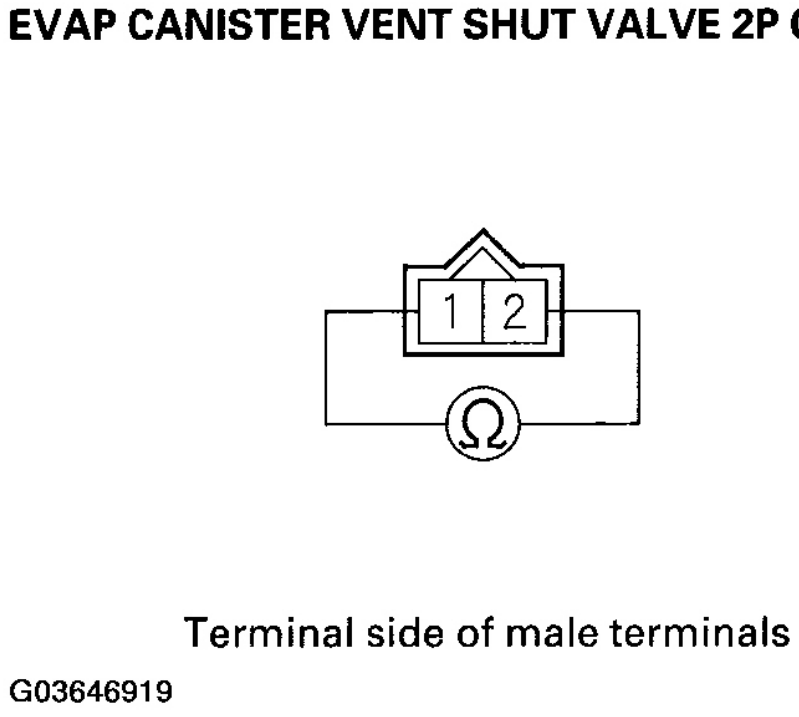


Fig. 39: Measuring Resistance Between EVAP Canister Vent Shut Valve

2P Connector Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 25-30 ohms at room temperature?

YES - Go to step 11.

NO - Go to step 15.

11. Jump the SCS line with the HDS.
12. Disconnect ECM/PCM connector E (31P).
13. Connect EVAP canister vent shut valve 2P connector terminal No. 1 (No. 2)* to body ground with a jumper wire.

*: SULEV model

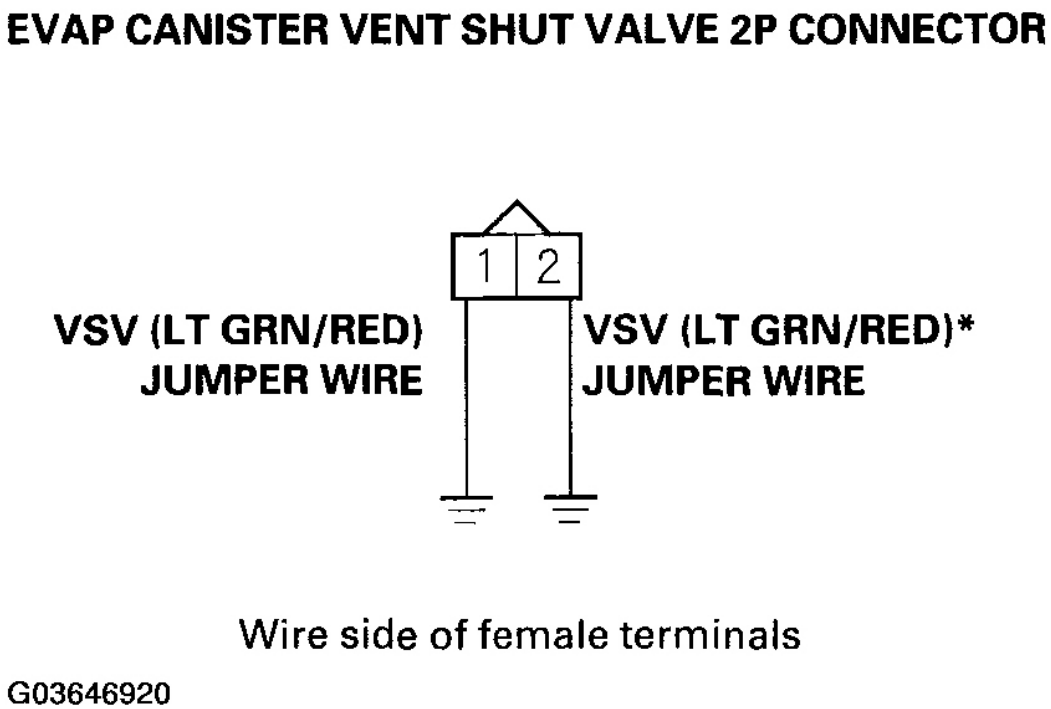


Fig. 40: Connecting EVAP Canister Vent Shut Valve 2P Connector Terminal No. 1 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Check for continuity between ECM/PCM connector terminal E19 and body ground.

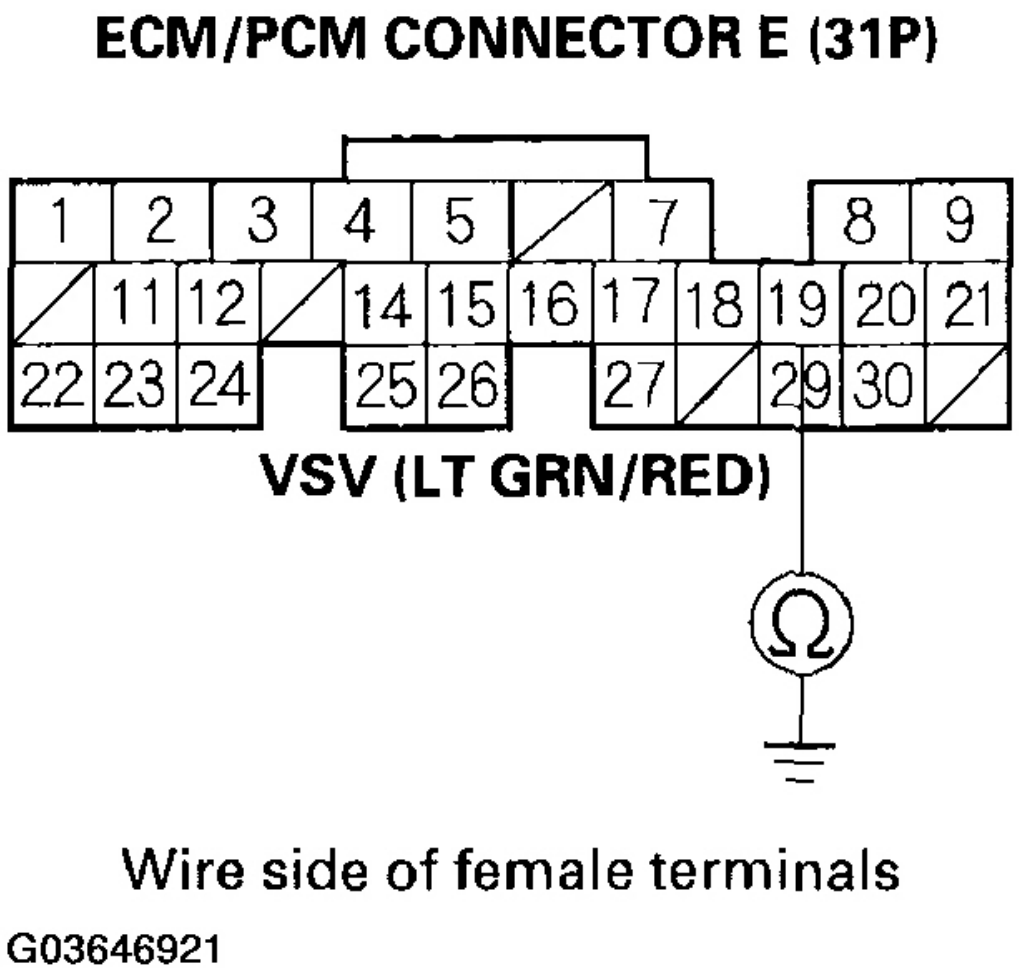


Fig. 41: Checking Continuity Between ECM/PCM Connector Terminal E19 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 23.

NO - Repair open in the wire between the EVAP canister vent shut valve and the ECM/PCM (E19), then go to step 16.

15. Replace the EVAP canister vent shut valve; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**).
16. Reconnect all connectors.
17. Turn the ignition switch ON (II).
18. Reset the ECM/PCM with the HDS.
19. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
20. Select EVAP CVS ON in the INSPECTION MENU with the HDS.
21. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0499 indicated?

YES - Check for poor connections or loose terminals at the EVAP canister vent shut valve and the ECM/PCM, then go to step 1.

NO - Go to step 22.

22. Monitor the OBD STATUS for DTC P0499 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 21, go to the indicated DTC's troubleshooting.

NO - IF the screen indicates FAILED, check for poor connections or loose terminals at the EVAP canister vent shut valve and the ECM/PCM, then go to step 1. If the screen indicate NOT COMPLETED, go to step20.

23. Reconnect all connectors.
24. Update the ECM/PCM if it does not have the latest software (see **UPDATING THE ECM/PCM**), or substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**).
25. Select EVAP CVS ON in the INSPECTION MENU with HDS.

26. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC P0499 indicated?

    YES - Check for poor connections or loose terminals at the EVAP canister vent shut valve and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**), then go to step 25. If the ECM/CPM was substituted, go to step1.

    NO - IF the screen indicates FAILED, check for poor connections or loose terminals at the EVAP canister vent shut valve and the ECM/PCM, then go to step 1. If the screen indicate NOT COMPLETED, go to step20.

27. Monitor the OBD STATUS for DTC P0499 in the DTCs MENU with the HDS.

    Does the screen indicate PASSED?

    YES - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM; '03-05, '06-07 models (see **ECM/PCM REPLACEMENT**). If any other Temporary DTCs or DTCs were indicated in step 26, go to the indicated DTC's troubleshooting.

    NO - If the screen indicates FAILED, check the poor connections or loose terminals at the EVAP canister vent shut valve and ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**), then go to step 25. If the ECM/PCM was substituted, go to step 1. If the screen indicates NOT COMPLETED, go to step 25.

DTC P1454: FTP SENSOR RANGE/PERFORMANCE PROBLEM; DTC P2422: EVAP CANISTER VENT SHUT VALVE; STUCK CLOSE MALFUNCTION

NOTE: Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF.
4. Remove the fuel fill cap, and wait 1 minute.
5. Check the FTP SENSOR in the DATA LIST with the HDS.

   Is it between - 0.67 kPa and 0.67 kPa (- 0.2 and 0.2 in.Hg, -5 and 5 mmHg), or 2.4-2.6 V?

   YES - Go to step 6.

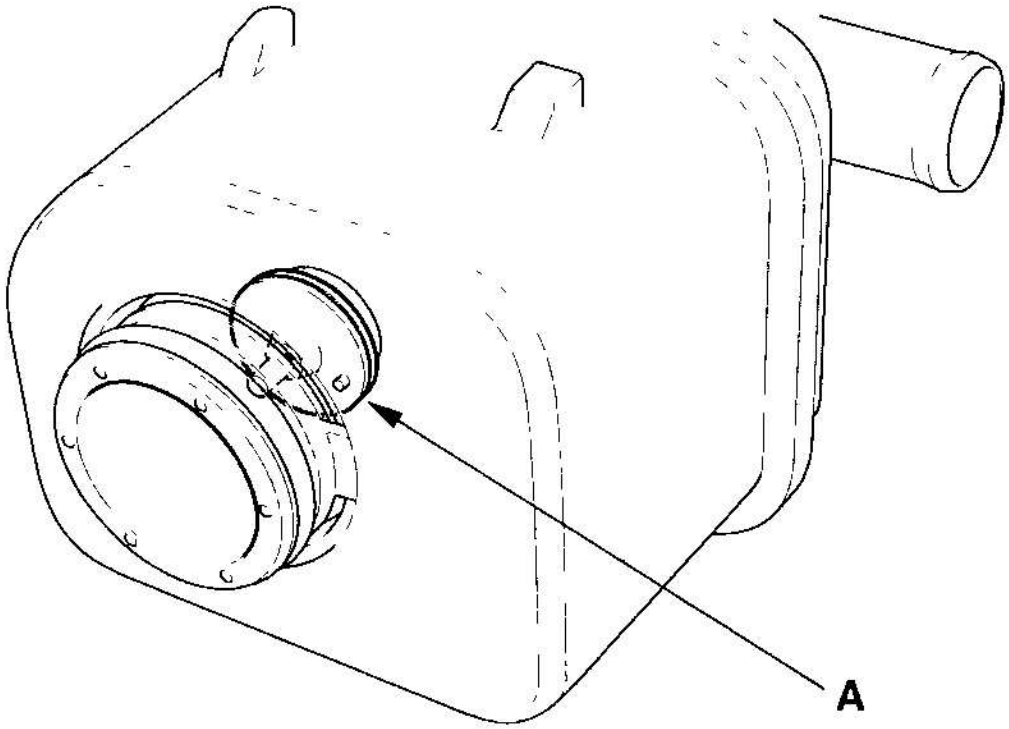
   NO - Go to step 17.
6. Install the fuel fill cap.
7. Clear the DTC with the HDS.
8. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
9. Monitor the OBD STATUS for DTC P1454 in the DTCs MENU with the HDS.

   Does the screen indicate FAILED?

   YES - Go to step 10.

   NO - If the screen indicates PASSED, intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the FTP sensor, or the EVAP canister vent shut valve and the ECM/ PCM. Also check for a blockage in the canister filter, vent hoses, and drain joint. If the screen indicates NOT COMPLETED, go to step 8 and recheck.
10. Clear the DTC with the HDS.
11. Turn the ignition switch OFF.
12. Remove the EVAP canister vent shut valve from the EVAP canister; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**).
13. Connect the 2P connector to the EVAP canister vent shut valve.
14. Turn the ignition switch ON (II).

15. Select EVAP CVS ON in the INSPECTION MENU with the HDS.
16. Check the EVAP canister vent shut valve (A) operation.



*: This illustration shows the non-SULEV model.

G03646922

Fig. 42: Checking EVAP Canister Vent Shut Valve Operation
Courtesy of AMERICAN HONDA MOTOR CO., INC.

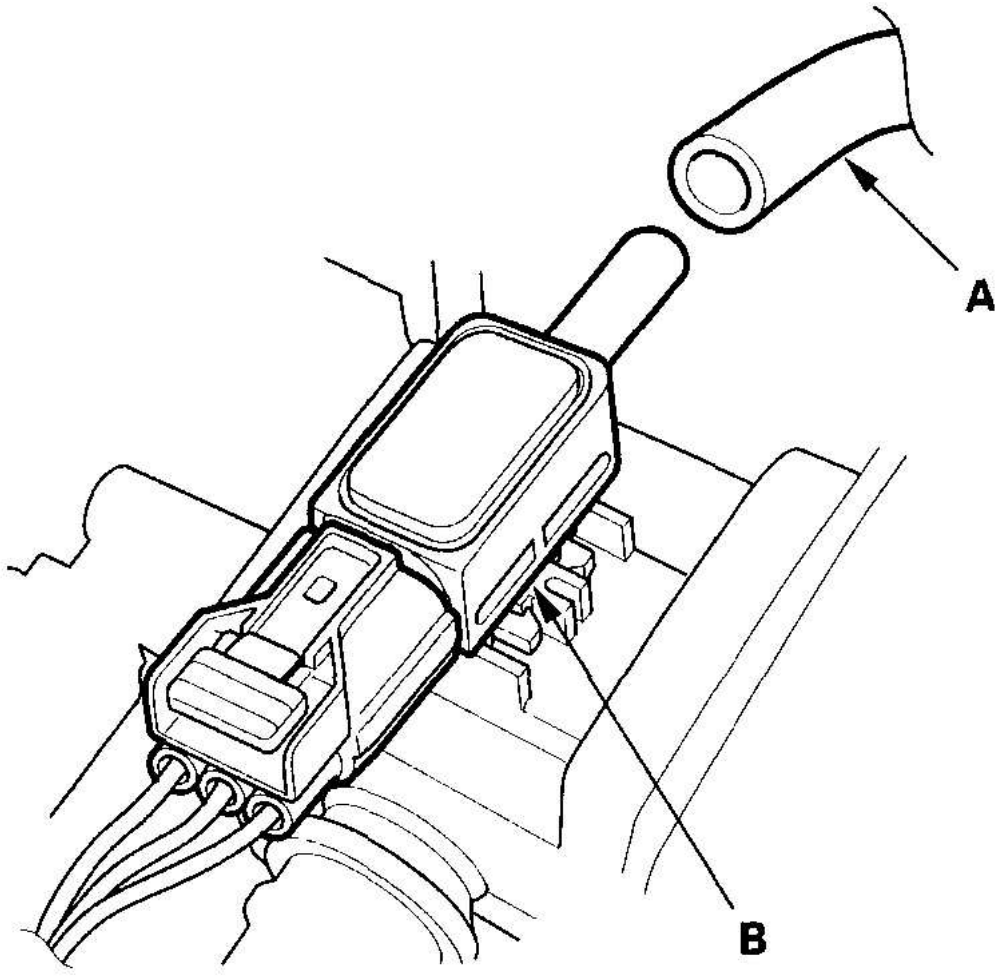
Does the valve operate?

YES - Check for a blockage in the EVAP canister, canister filter, vent hoses, and drain joint, then install the EVAP canister vent shut valve, and go to step 23.

NO - Replace the EVAP canister vent shut valve; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**), then go to

step 23.

17. Disconnect the air tube (A) from the FTP sensor (B).



*: This illustration shows the non-SULEV model.

G03646923

Fig. 43: Disconnecting Air Tube From FTP Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Check the FTP SENSOR in the DATA LIST with the HDS.

Is it between - 0.67 kPa and 0.67 kPa (- 0.2 and 0.2 in.Hg, -5 and 5 mmHg), or 2.4 - 2.6 V?

YES - Check for a blockage in the FTP sensor air tube, then go to step 23.

NO - Go to step 19.

19. Turn the ignition switch OFF.
20. Remove the FTP sensor (A) from the EVAP canister with its connector connected (see **FTP Sensor Replacement**).

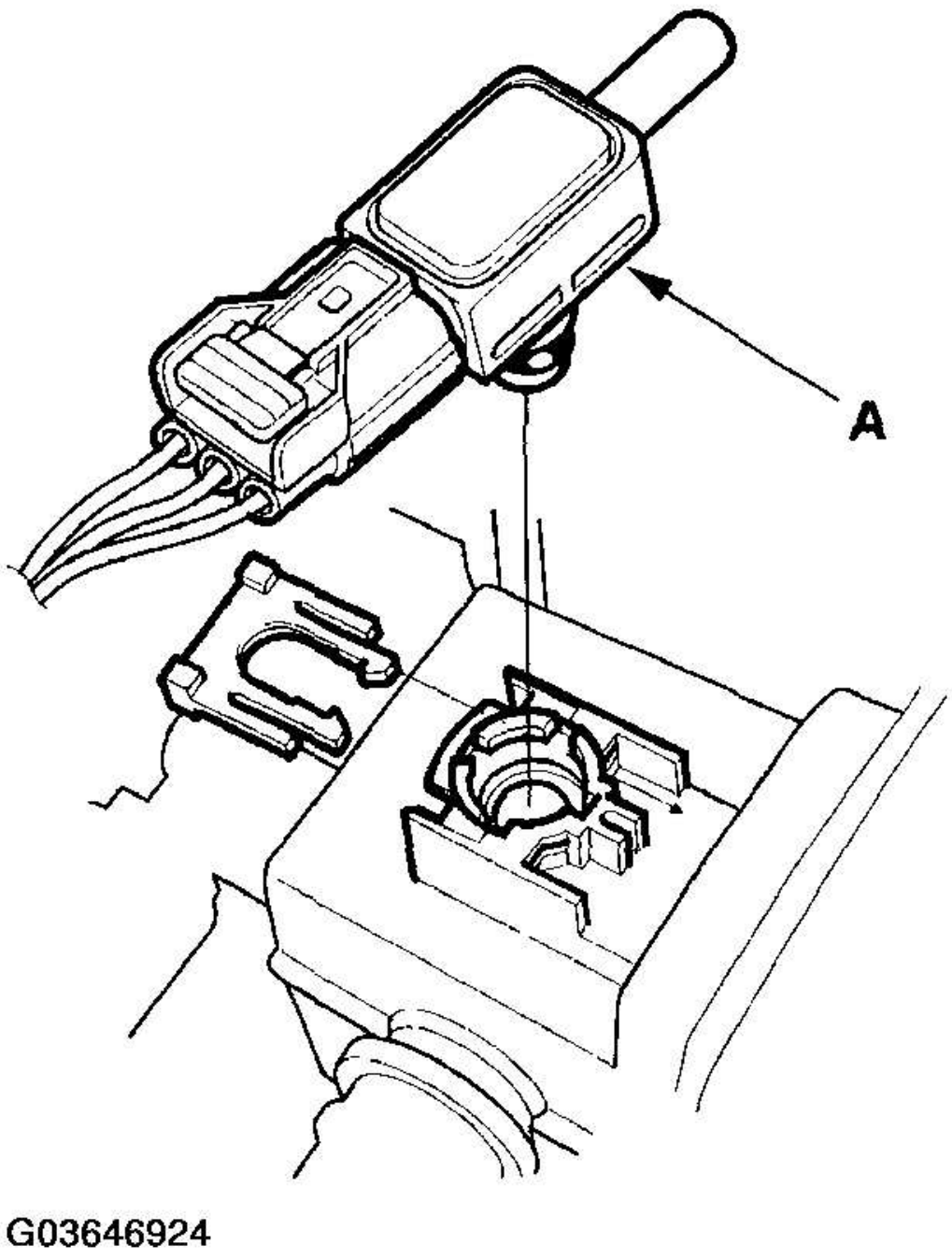


Fig. 44: Removing FTP Sensor From EVAP Canister With Connector Connected

Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Turn the ignition switch ON (II).
22. Check the FTP SENSOR in the DATA LIST with the HDS.

Is it between - 0.67 kPa and 0.67 kPa (- 0.2 and 0.2 in.Hg, -5 and 5 mmHg), or 2.4 - 2.6 V?

YES - Check for debris or clogging at the EVAP canister and the FTP sensor port, then go to step 23.

NO - Replace the FTP sensor (see **FTP Sensor Replacement**), then go to step 23.

23. Turn the ignition switch ON (II).
24. Reset the ECM/PCM with the HDS.
25. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
26. Start the engine. Hold the engine speed at 3,000 rpm without load (in Park or neutral) until the radiator fan comes on, then let it idle.
27. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P01454 and/or P2422 Indicated?

YES - Check for poor connections or loose terminals at the FTP sensor, or the EVAP canister vent shut valve and the ECM/PCM, then go to step 1.

NO - Go to step 28.

28. Monitor the OBD STATUS for DTC P1454 in the DTCs MENU with the HDS.

Does the screen indicate PASSED?

YES - Troubleshooting is complete. If any other Temporary DTCs or DTCs were indicated in step 27, go to the indicated DTC's troubleshooting.

NO - If the screen indicates FAILED, check for poor connections or loose terminals at the FTP sensor, or the EVAP canister vent shut valve and the

ECM/PCM, then go to step 1. If the screen indicates NOT COMPLETED, keep idling until the result comes on.

EVAP CANISTER REPLACEMENT

1. Remove the EVAP canister cover (A).

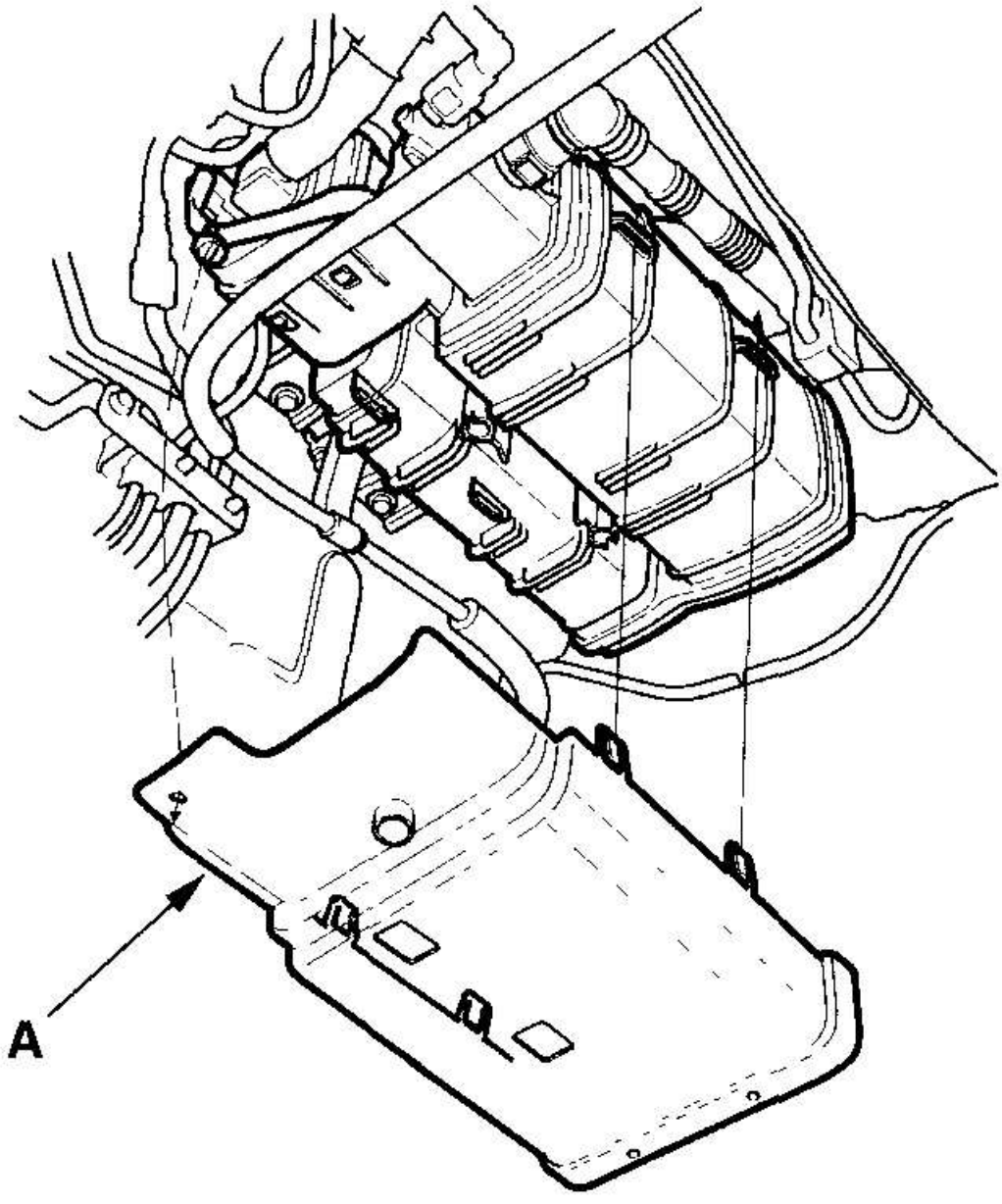
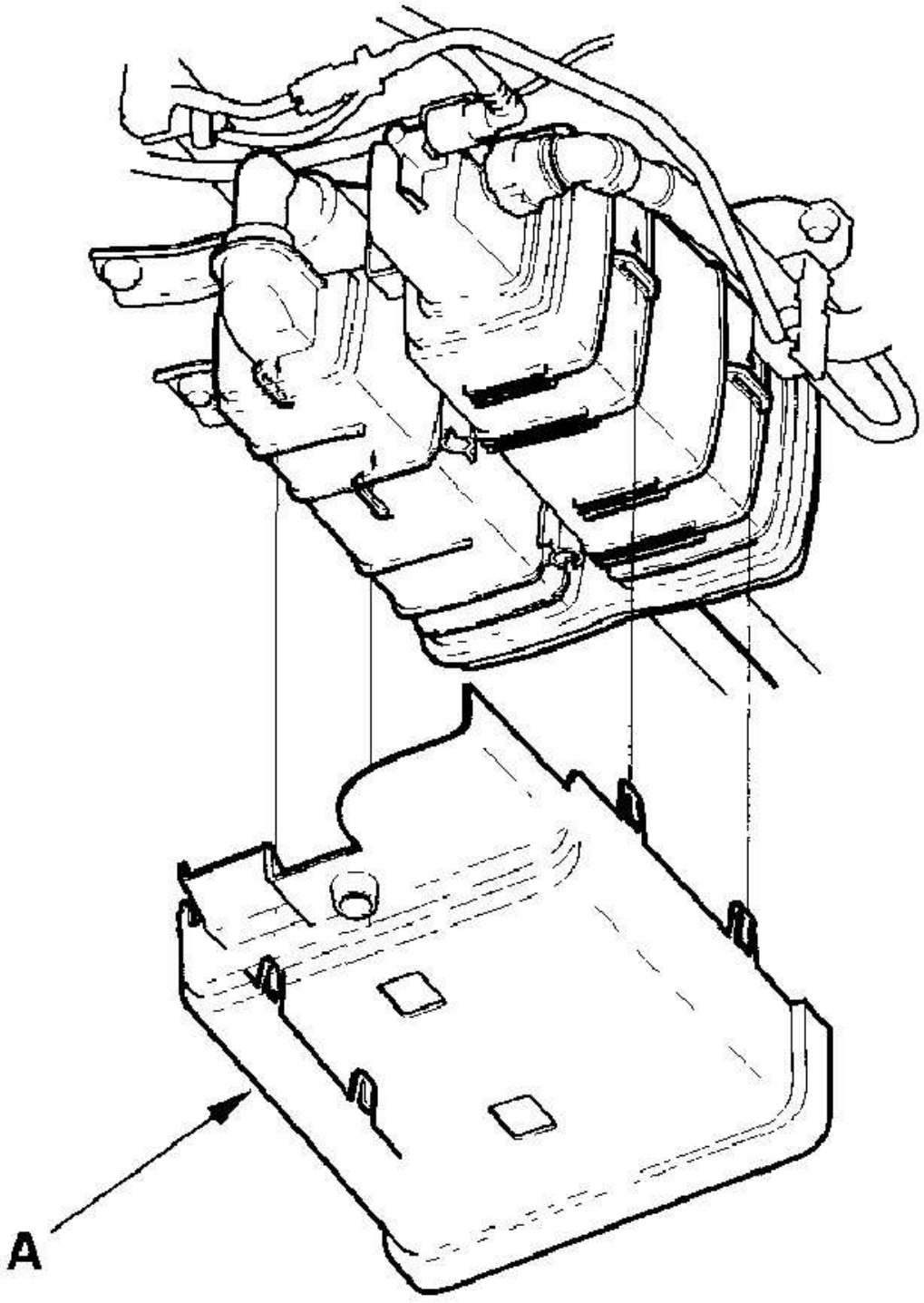


Fig. 45: Removing EVAP Canister Cover (Non-SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G03646926

Fig. 46: Removing EVAP Canister Cover (SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the hoses (A), the FTP sensor 3P connector (B), and the EVAP canister vent shut valve 2P connector (C).

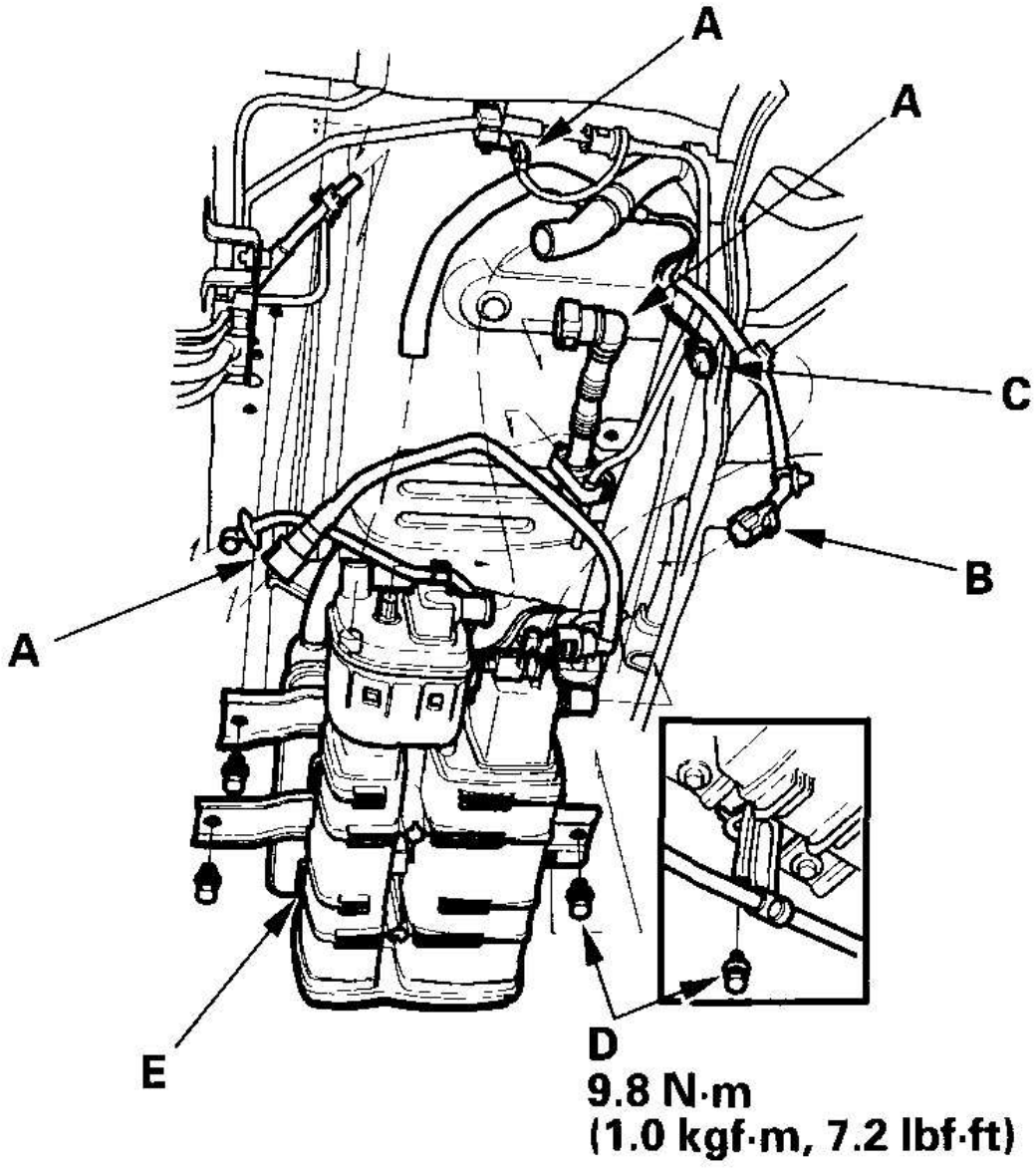


Fig. 47: Removing Hoses, FTP Sensor 3P Connector And EVAP Canister Vent Shut Valve 2P Connector (Non-SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

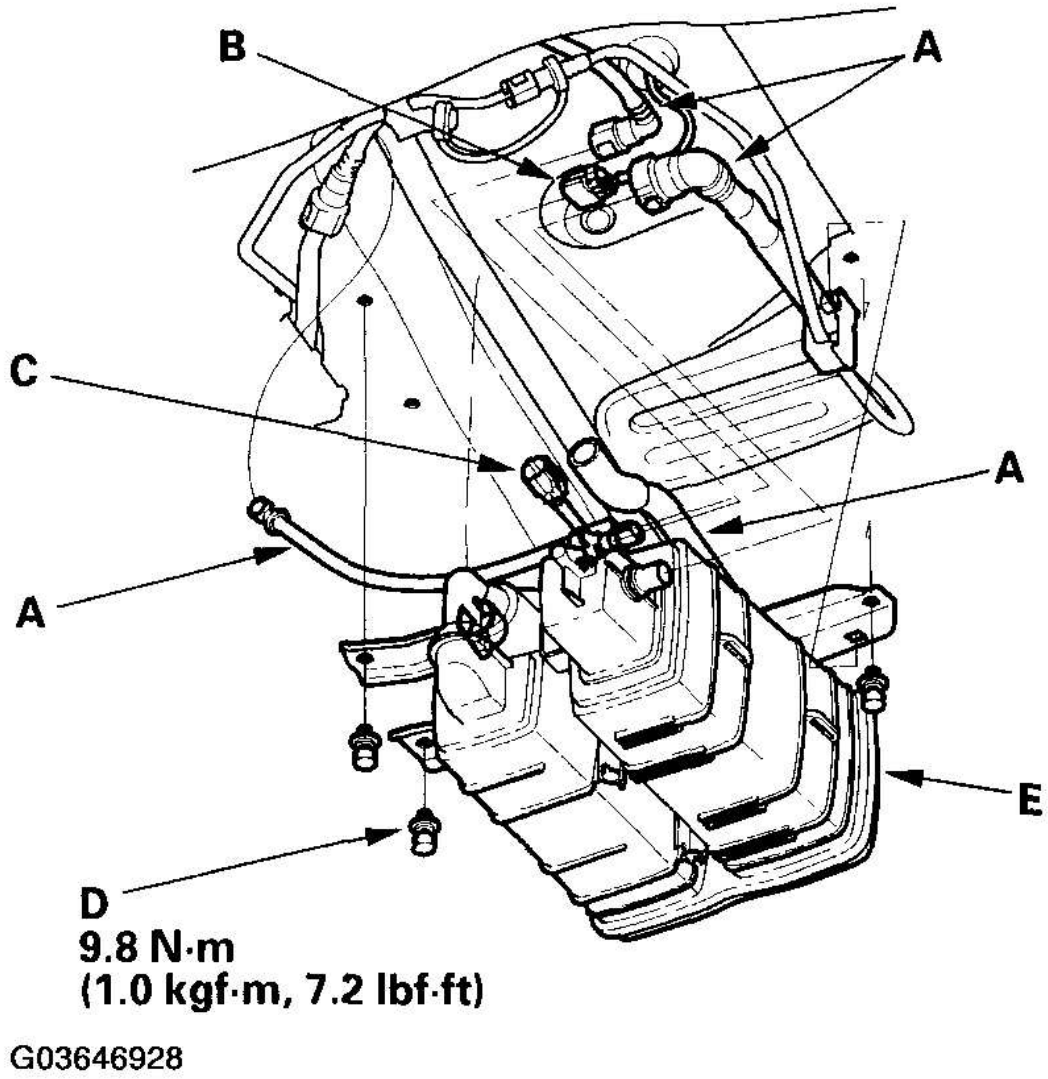


Fig. 48: Removing Hoses, FTP Sensor 3P Connector And EVAP Canister Vent Shut Valve 2P Connector (SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the bolts (D).

4. Remove the EVAP canister assembly (E).
5. Remove the EVAP canister bracket (A).

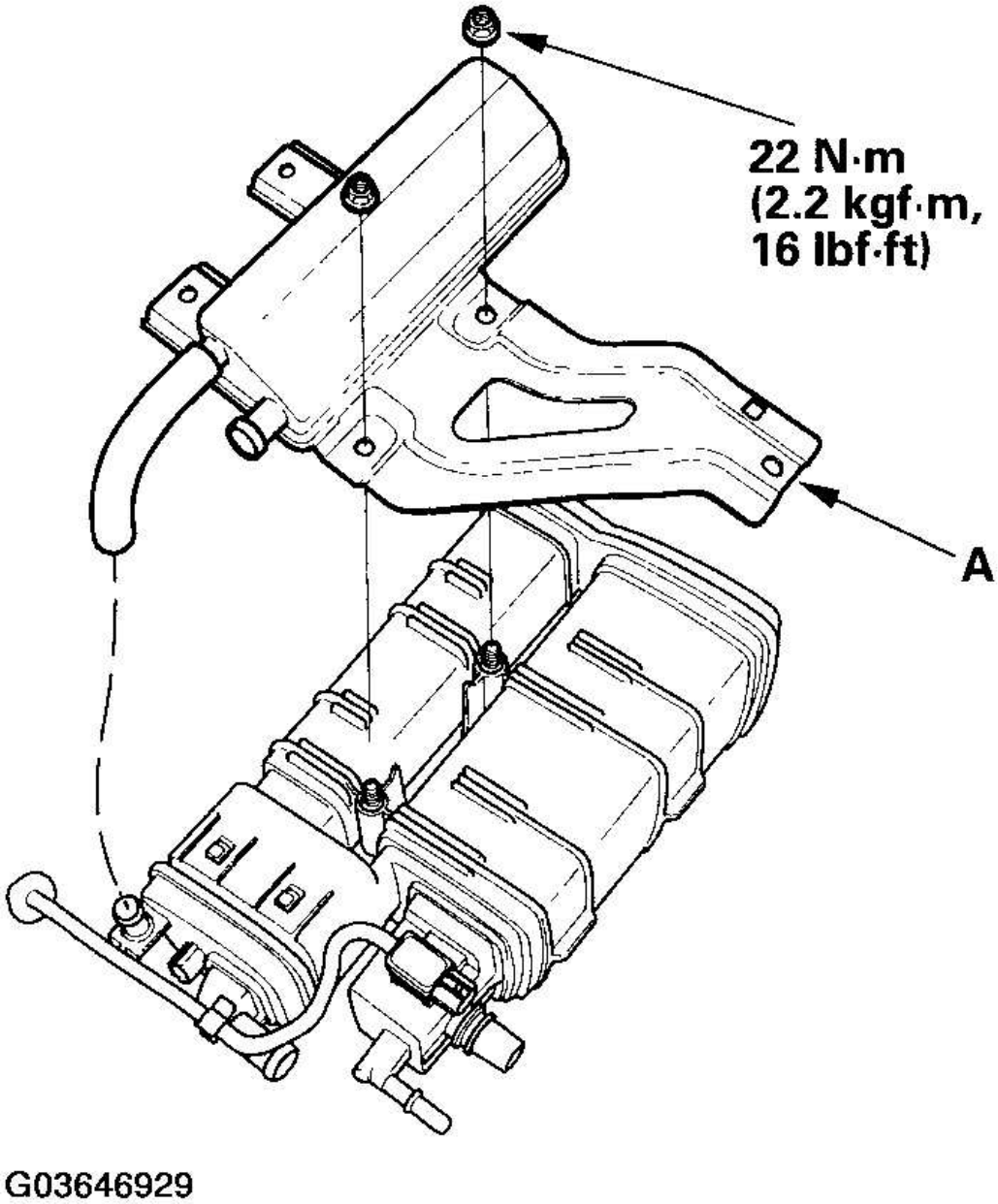


Fig. 49: Removing EVAP Canister Bracket (Non-SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

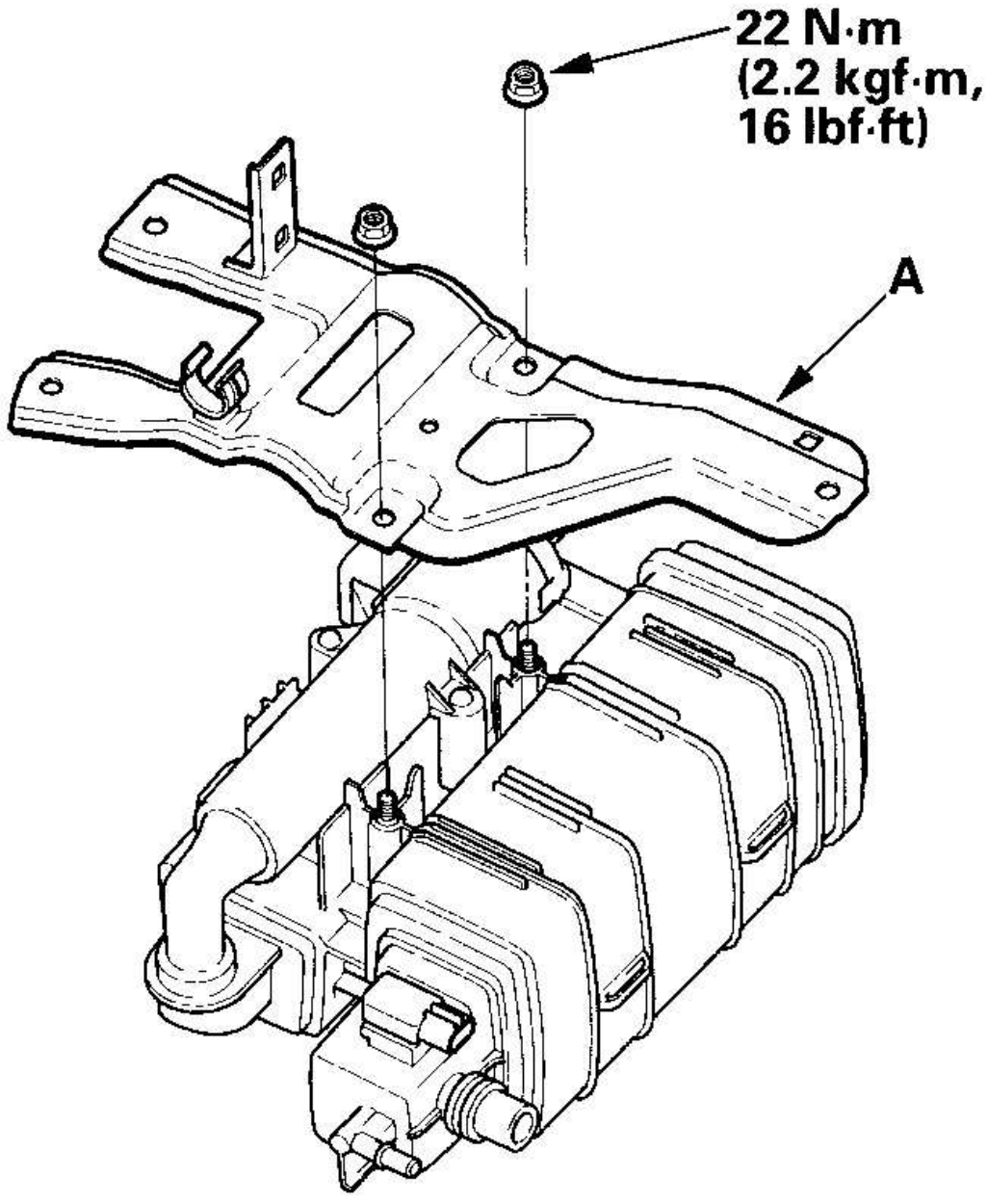


Fig. 50: Removing EVAP Canister Bracket (SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the canister in the reverse order of removal.

FTP SENSOR REPLACEMENT

1. Remove the EVAP canister (see **EVAP Canister Replacement**).
2. Remove the FTP sensor (A).

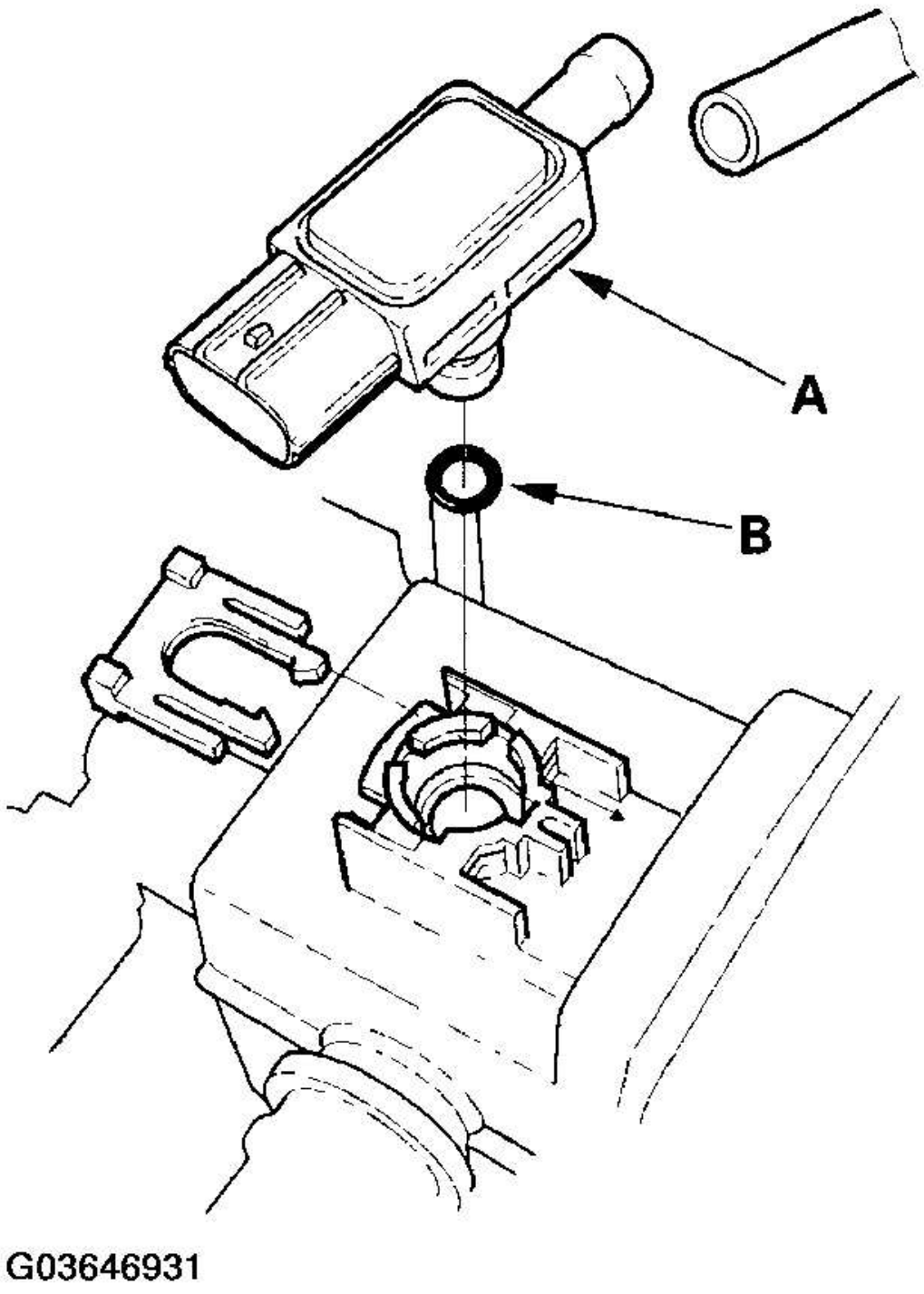


Fig. 51: Removing FTP Sensor

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the sensor in the reverse order of removal with a new O-ring (B).

EVAP CANISTER PURGE VALVE REPLACEMENT

1. Disconnect the EVAP canister purge valve 2P connector (A).

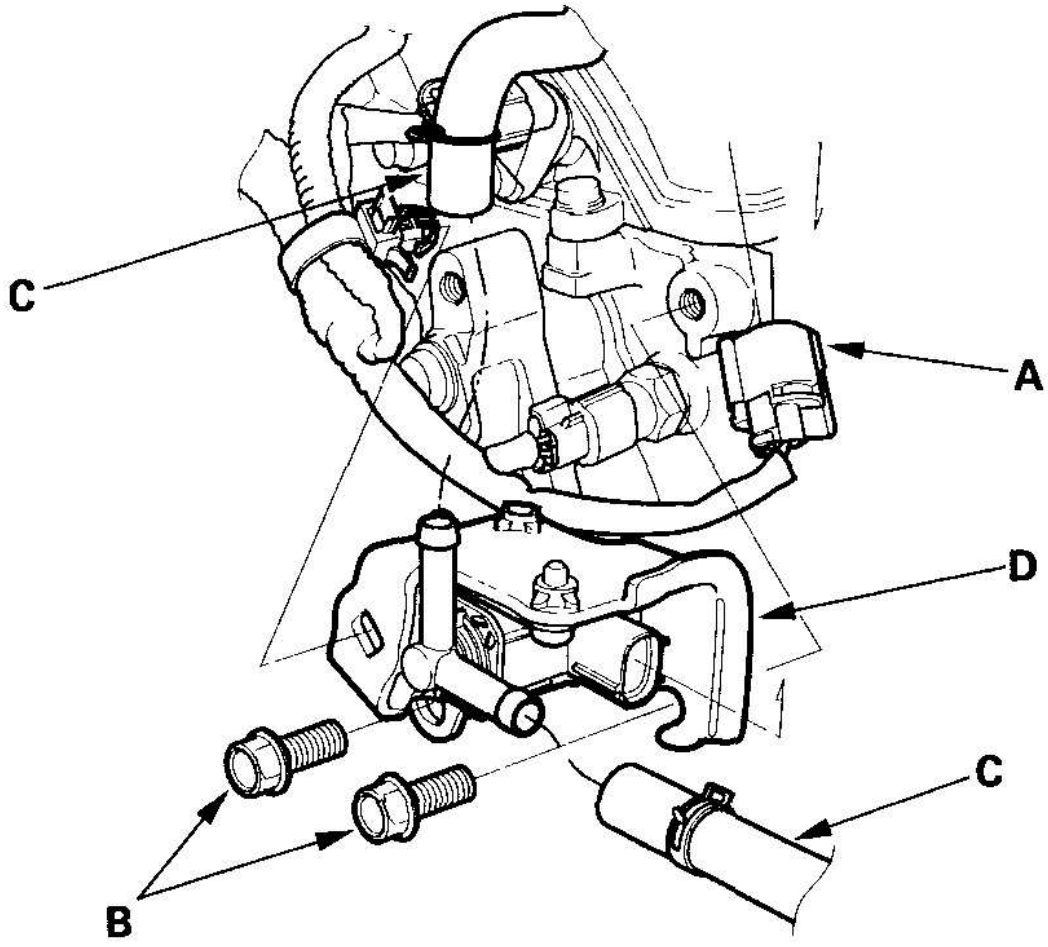


Fig. 52: Disconnecting EVAP Canister Purge Valve 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the bolts (B) and the hoses (C), then remove the EVAP canister purge valve assembly (D).
3. Remove the screws (A).

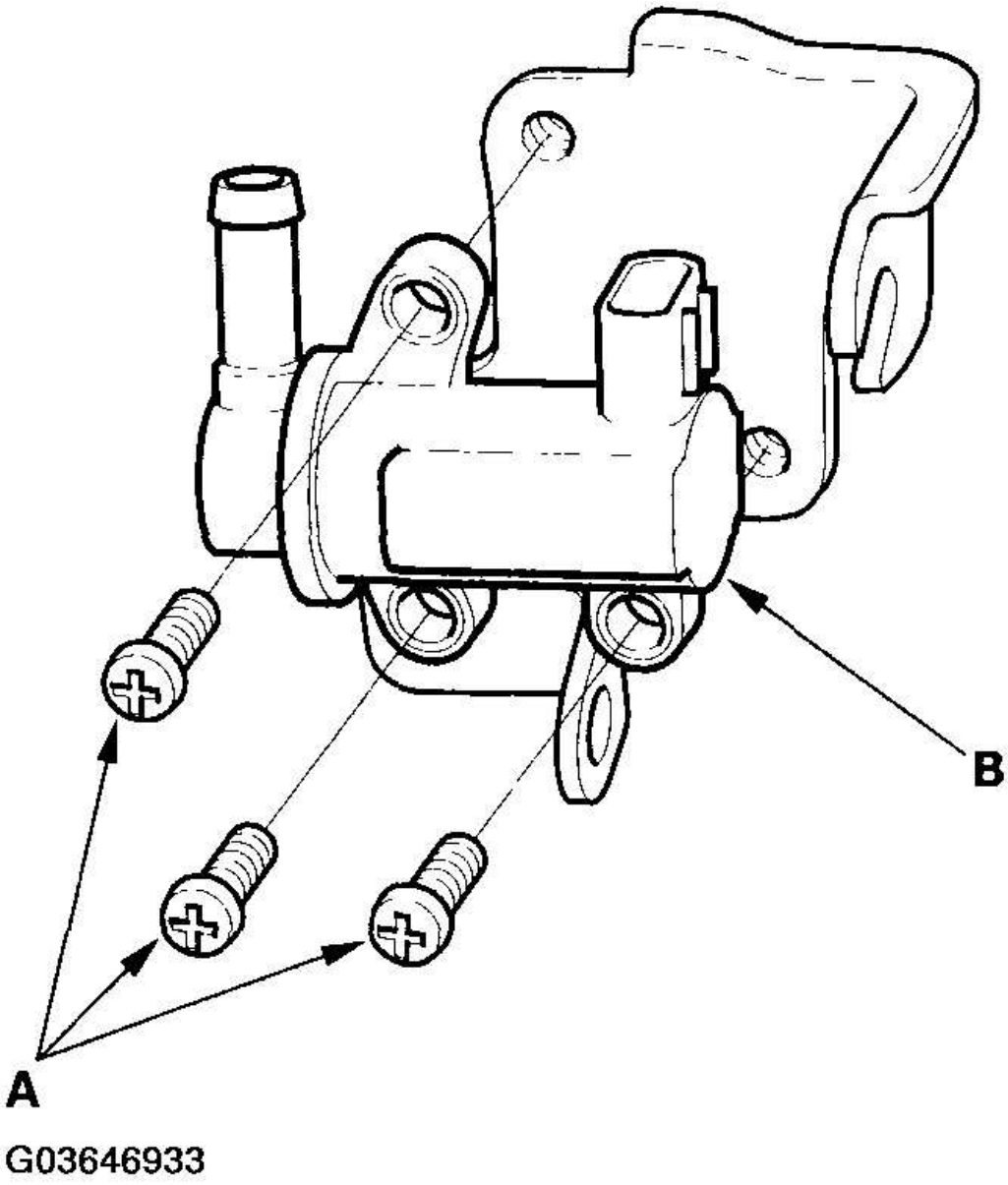


Fig. 53: Removing EVAP Canister Purge Valve Screws

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the EVAP canister purge valve (B) from the bracket.
5. Install the valve in the reverse order of removal.

EVAP CANISTER VENT SHUT VALVE REPLACEMENT

NON-SULEV MODEL

1. Remove the EVAP canister (see **EVAP Canister Replacement**).
2. Pry the lock tabs outward (A) then remove the EVAP canister vent shut valve (B).

NOTE: Be careful not to damage the lock tabs.

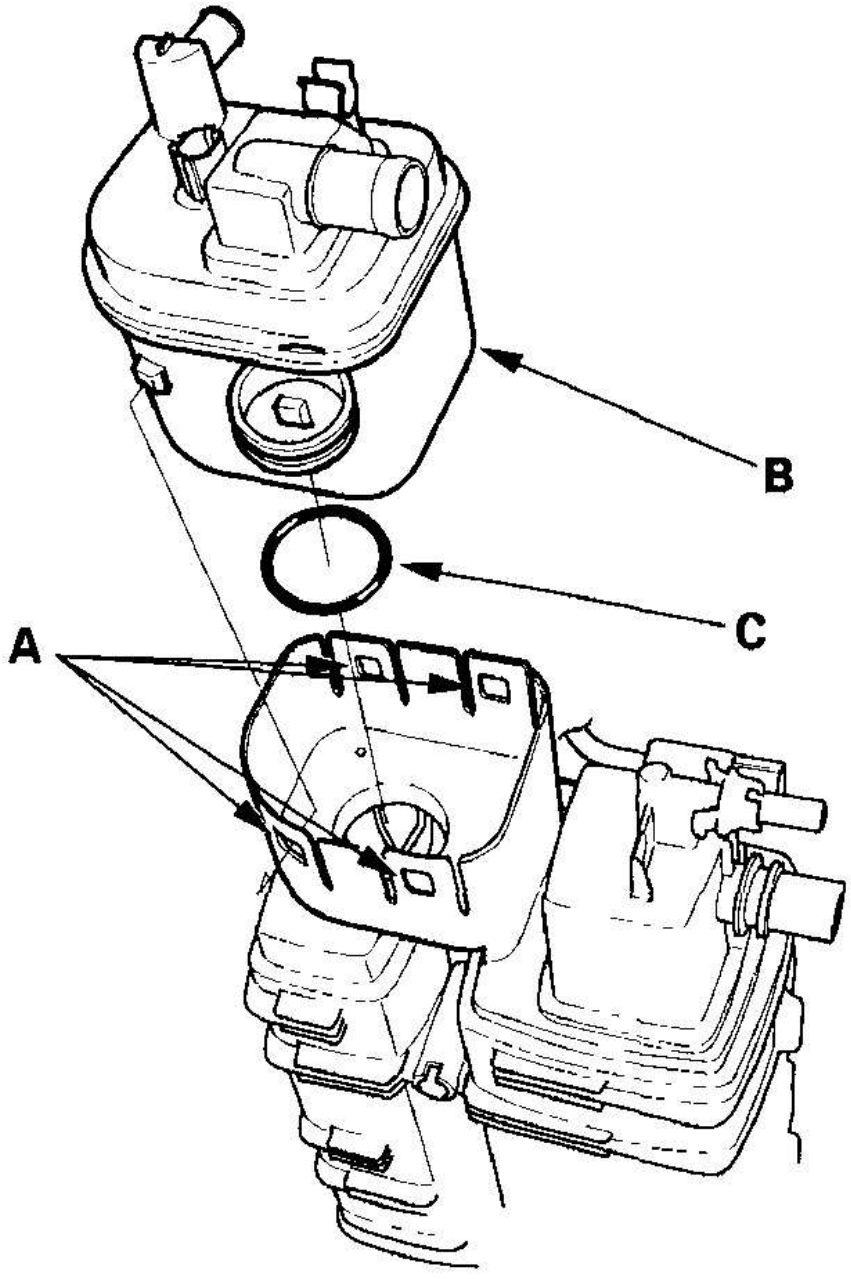


Fig. 54: Removing EVAP Canister Vent Shut Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the valve in the reverse order of removal with a new O-ring (C).

NOTE: Do not coat the O-ring with oil.

SULEV MODEL

1. Remove the EVAP canister (see **EVAP Canister Replacement**).
2. Remove the cap (A).

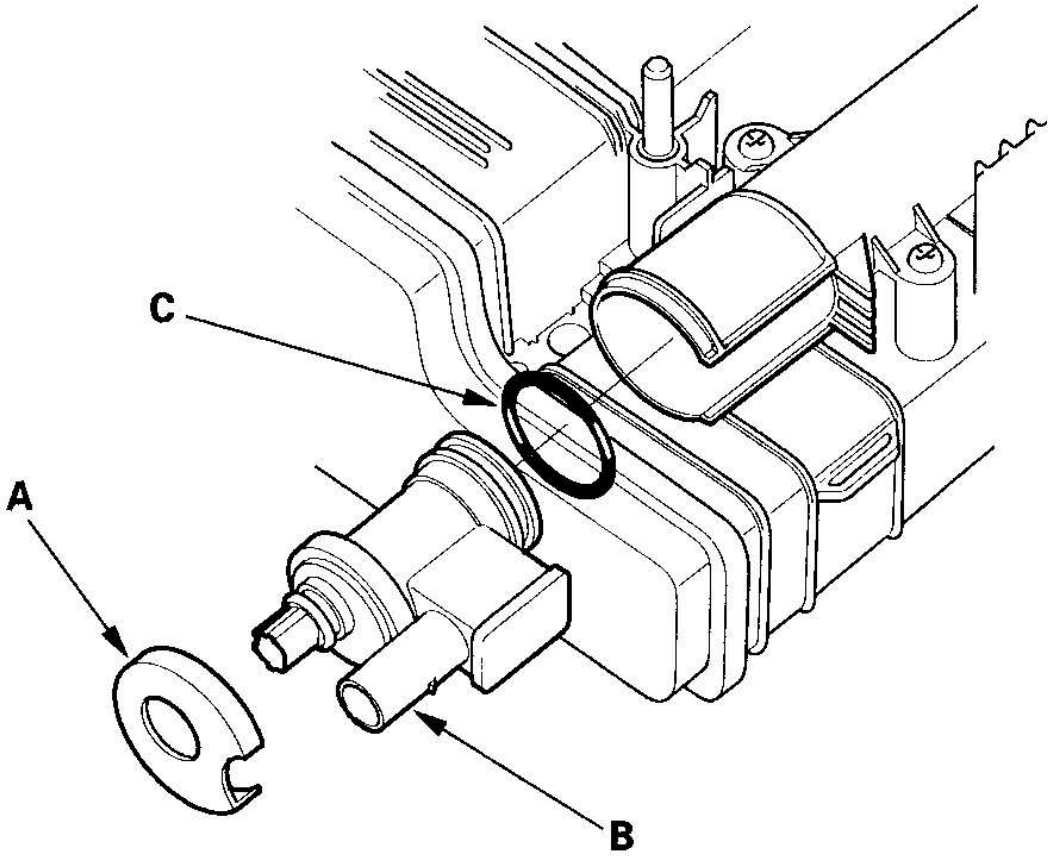


Fig. 55: Removing Cap
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the EVAP canister vent shut valve (B).

4. Install the valve in the reverse order of removal with a new O-ring (B).

NOTE: Do not coat the O-ring with engine oil.

2003-07 ACCESSORIES & EQUIPMENT

Exterior Light - Accord (V6)

CIRCUIT DIAGRAM - BRAKE LIGHTS

2-DOOR ('06-07 MODEL)

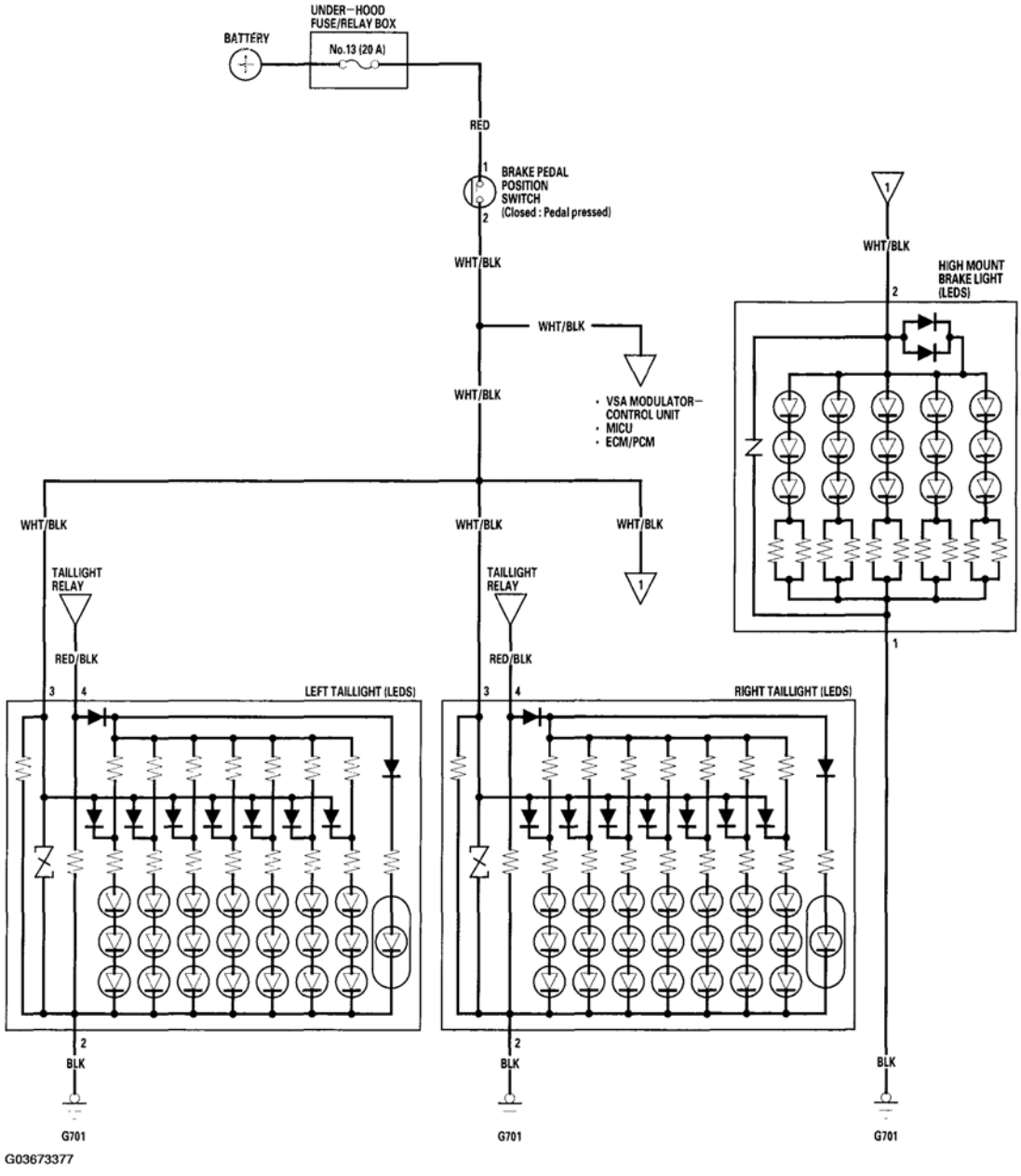


Fig. 1: 2-Door Brake Lights Circuit Diagram (2006-07 Model)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR ('06-07 MODEL)

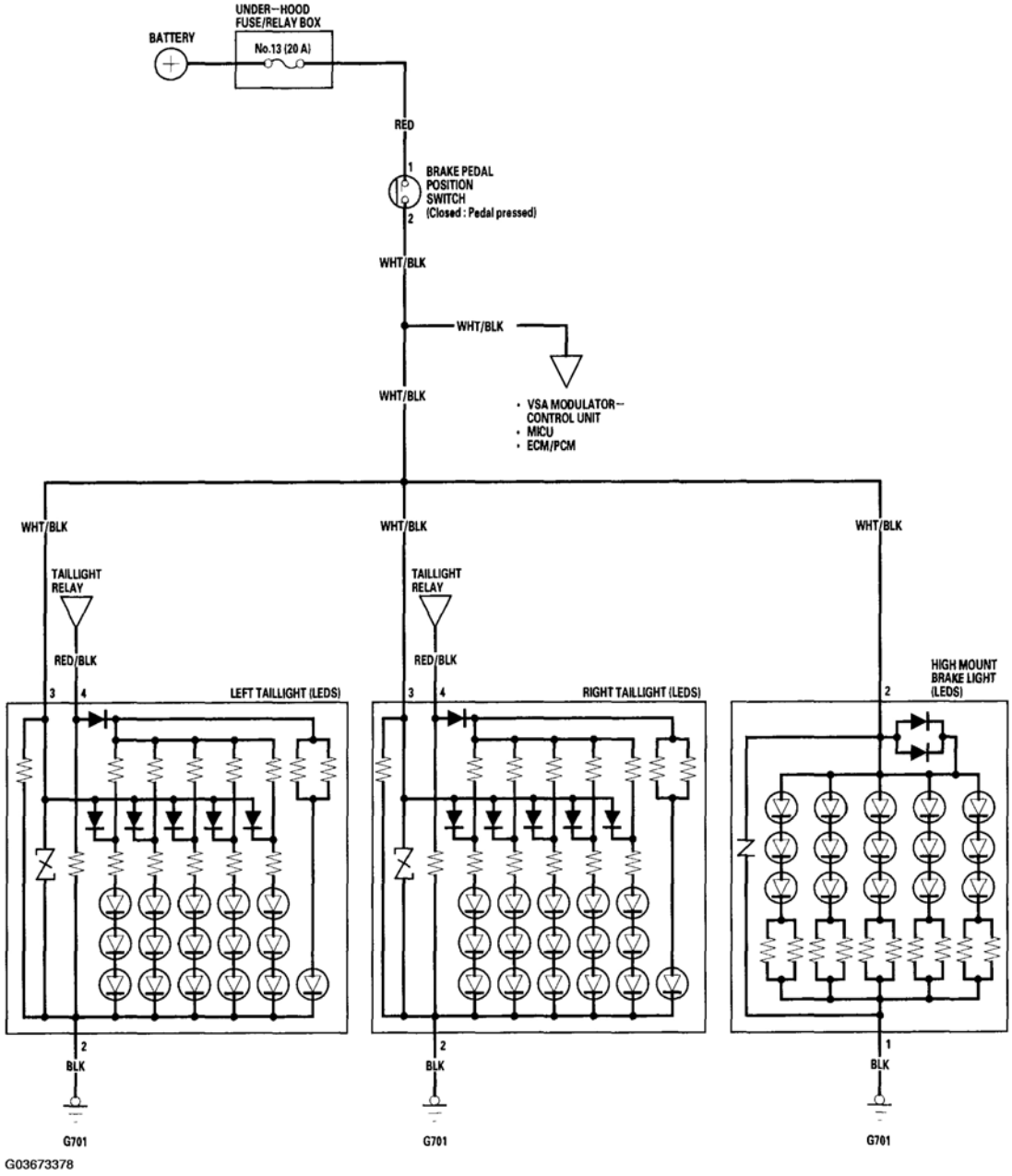


Fig. 2: 4-Door Brake Lights Circuit Diagram (2006-07 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ACCESSORIES & EQUIPMENT

Exterior Lights - Accord

COMPONENT LOCATION INDEX

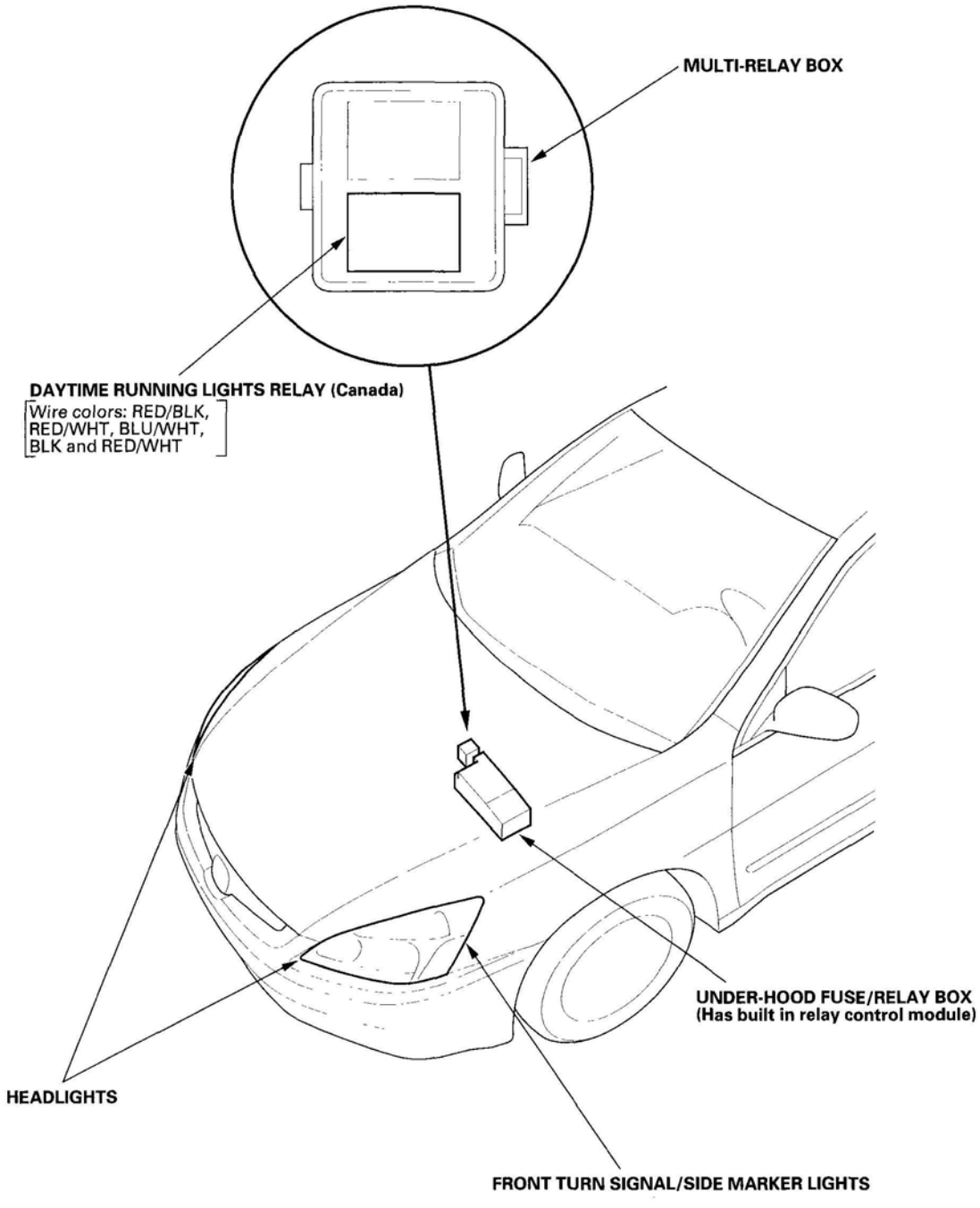


Fig. 1: Locating Exterior Lights Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

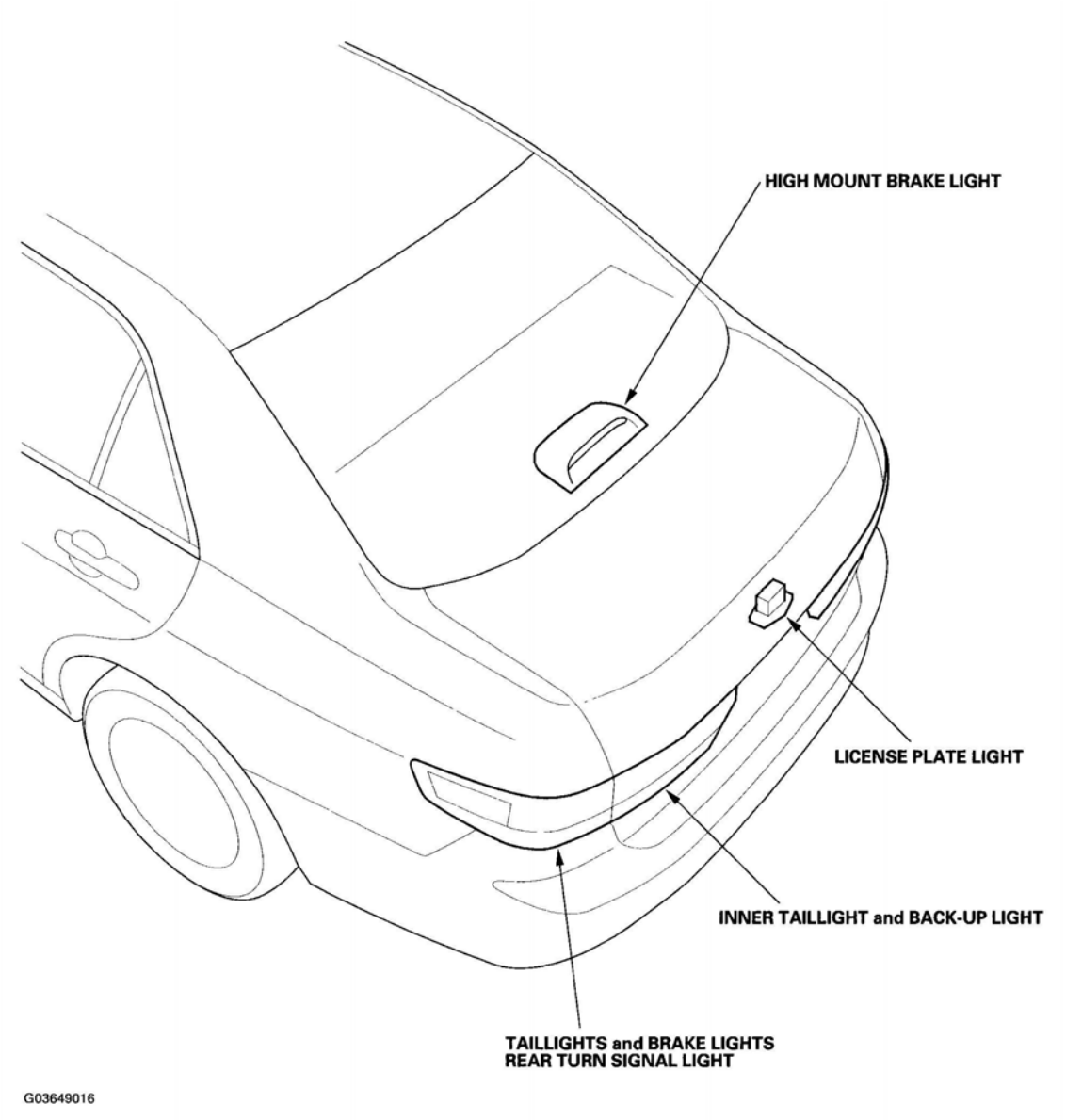


Fig. 2: Locating Exterior Lights Components (4-Door - '03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

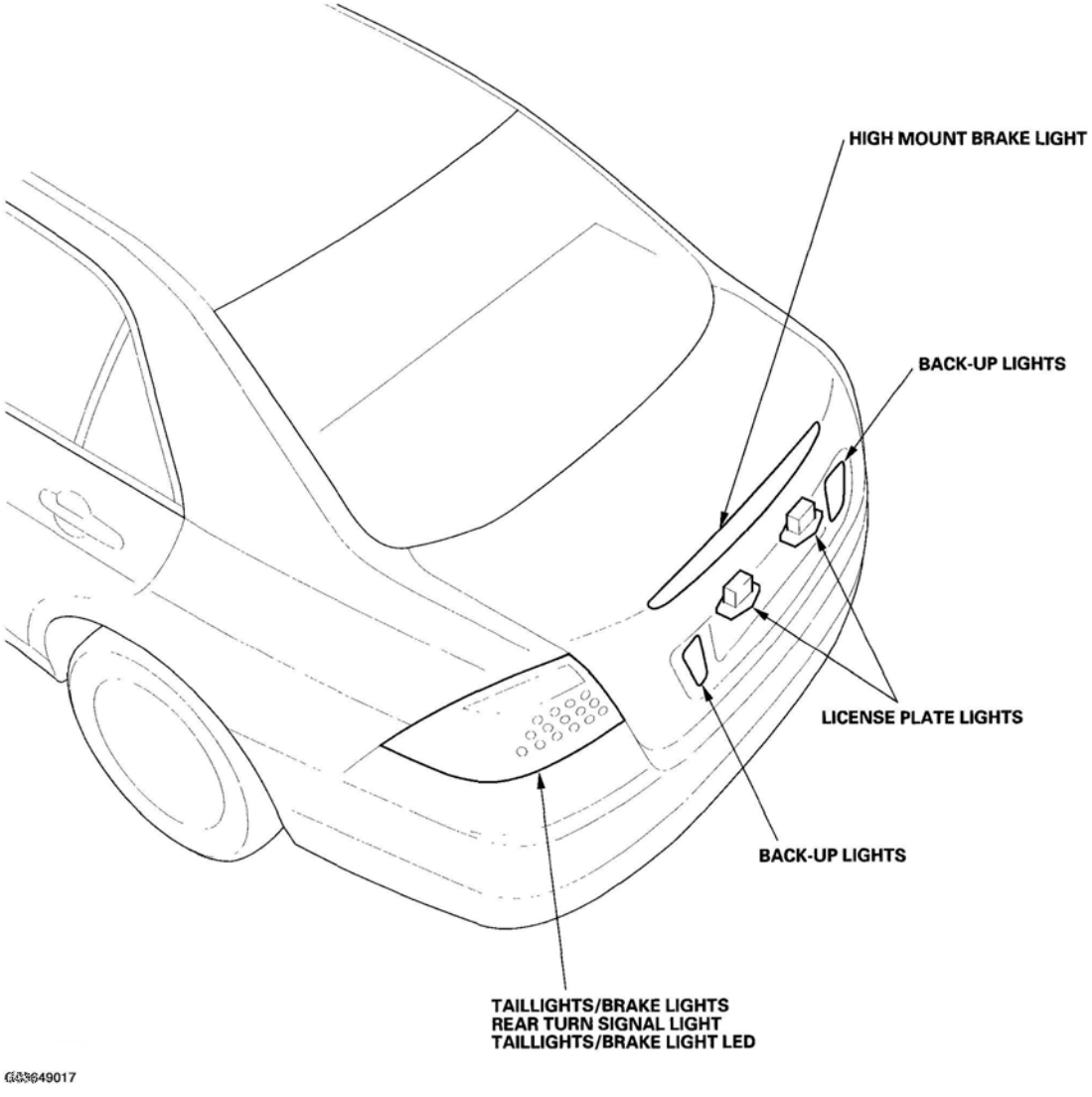


Fig. 3: Locating Exterior Lights Components (4-Door - '06-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

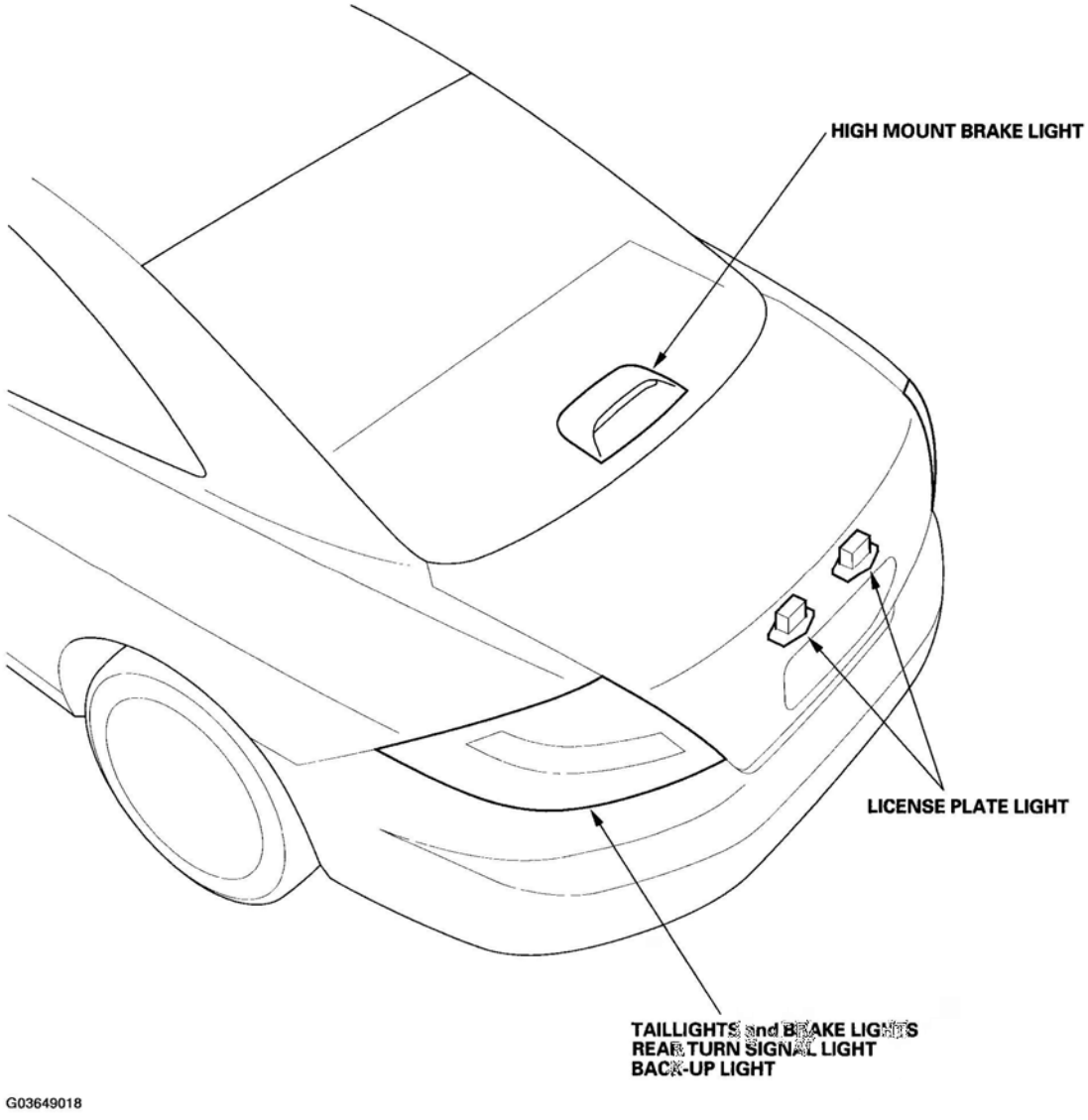


Fig. 4: Locating Exterior Lights Components (2-Door - '03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

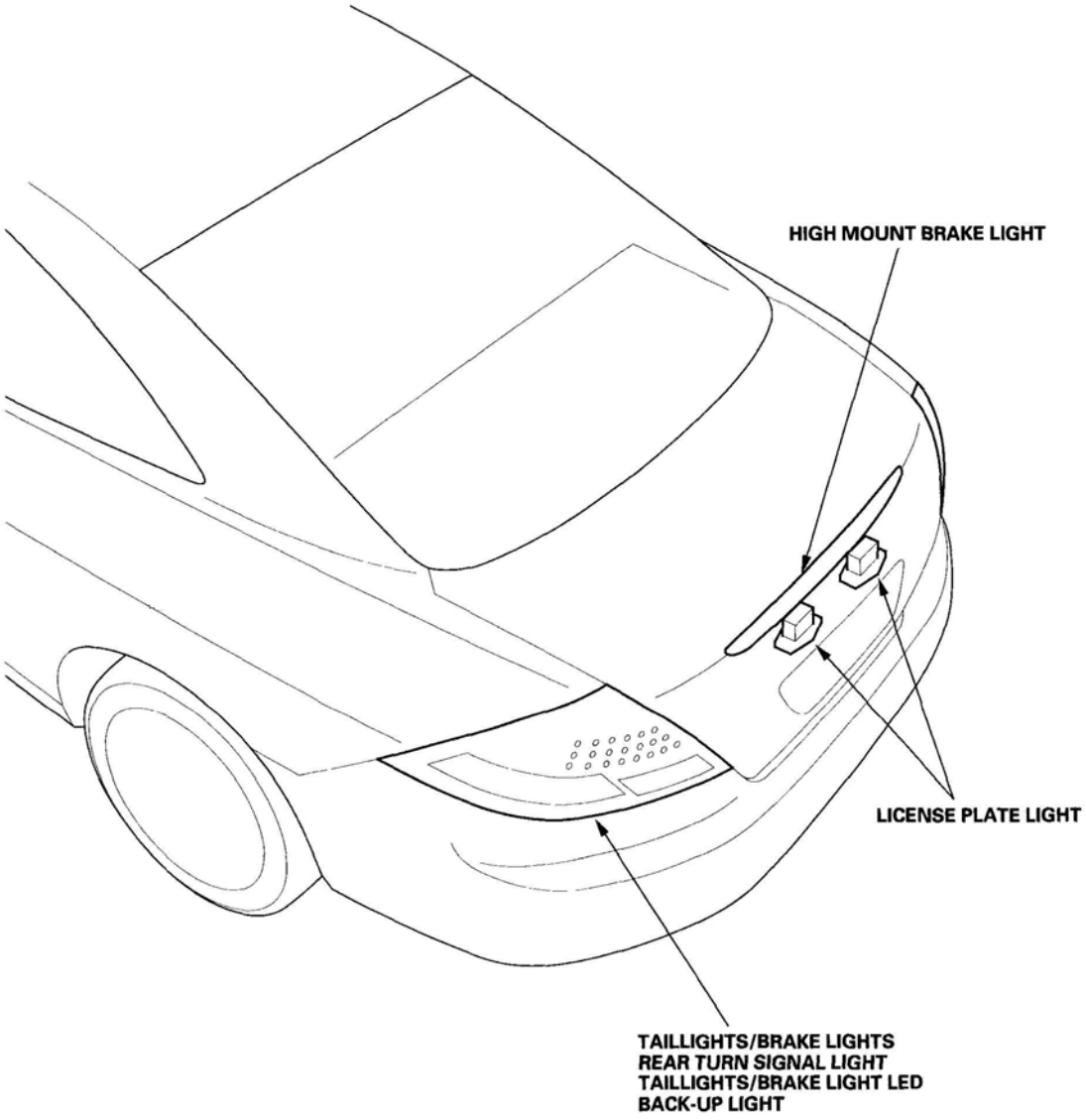


Fig. 5: Locating Exterior Lights Components (2-Door - '06-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

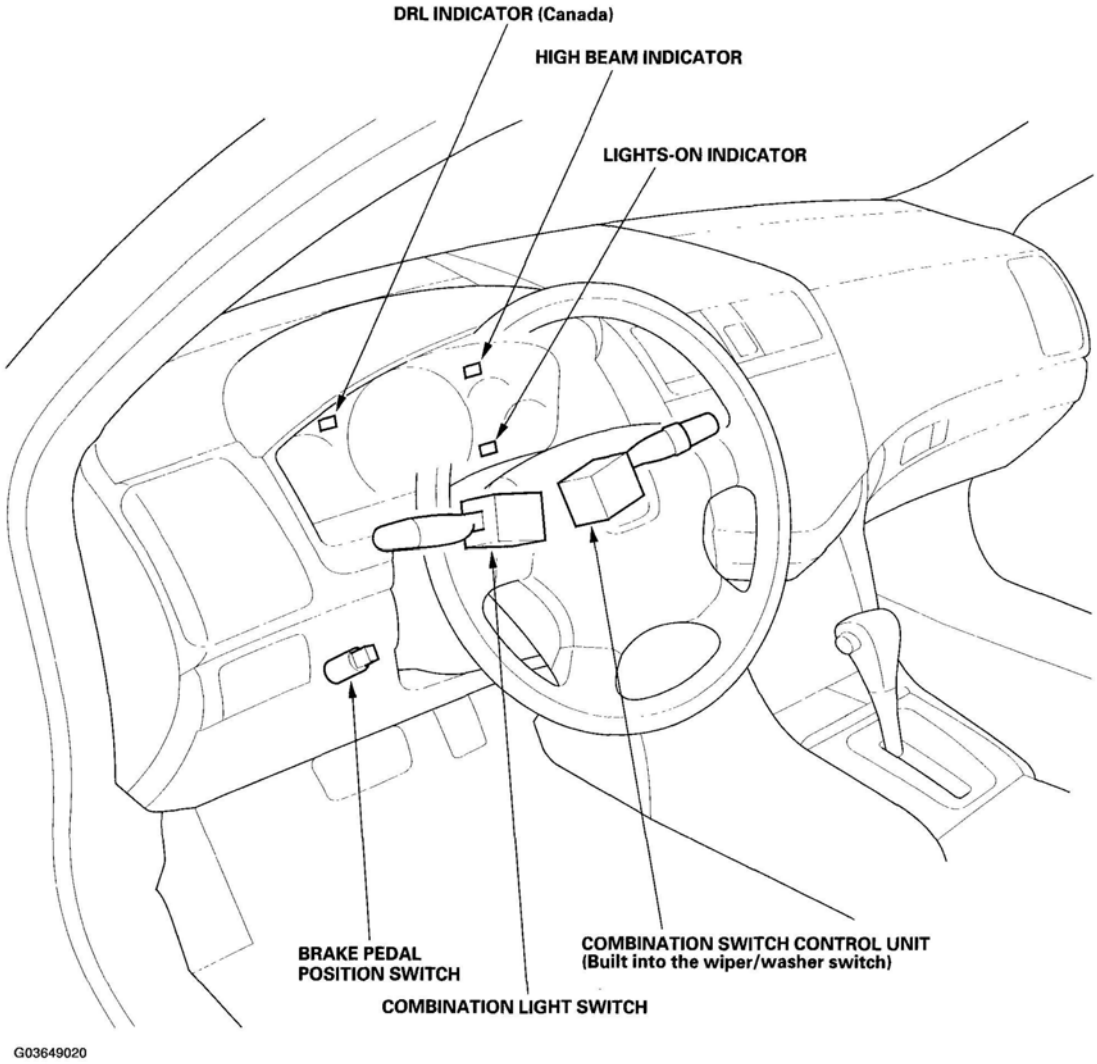


Fig. 6: Locating Exterior Lights Components ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

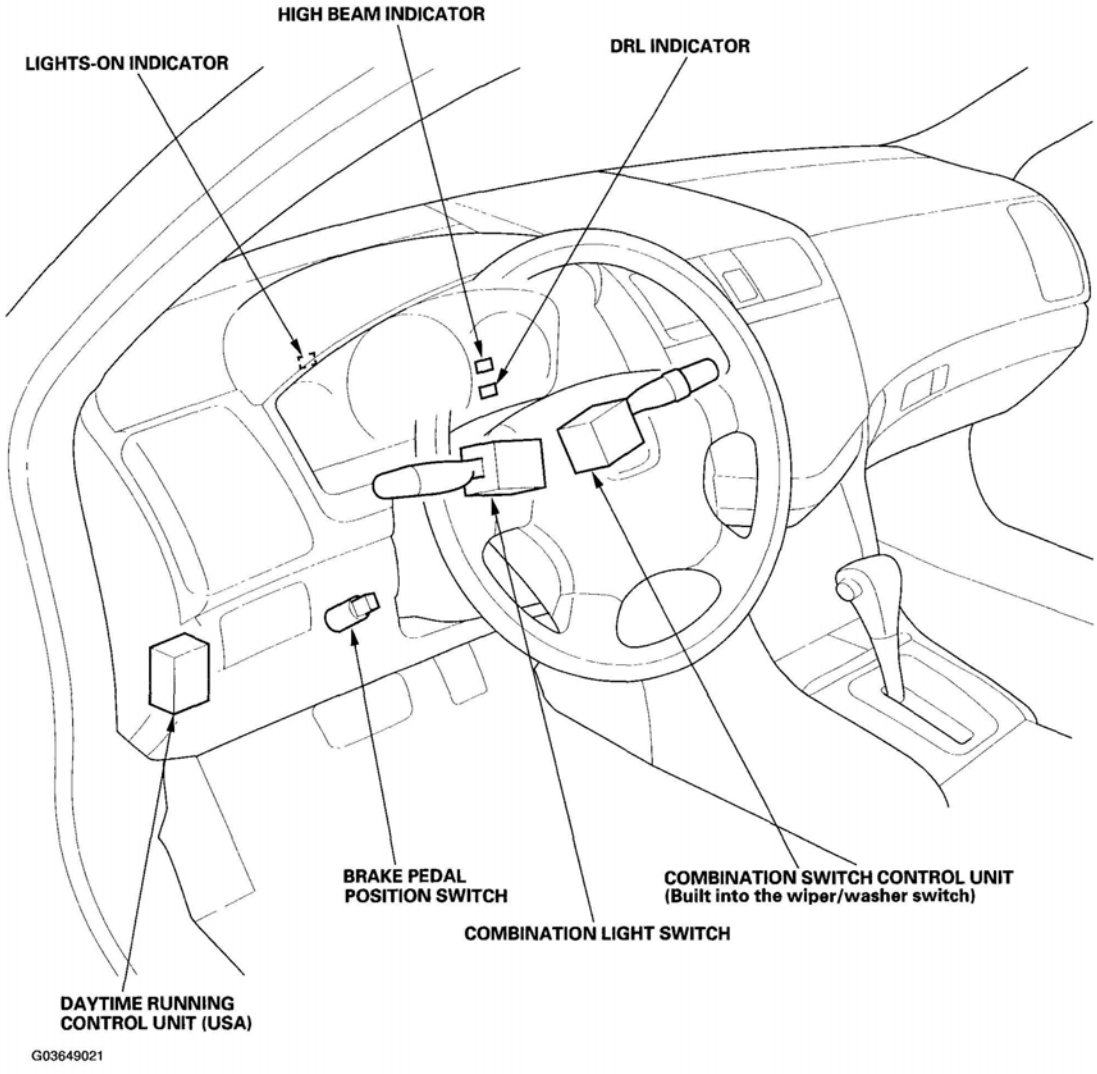


Fig. 7: Locating Exterior Lights Components ('06 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

USA ('03-05 MODELS):

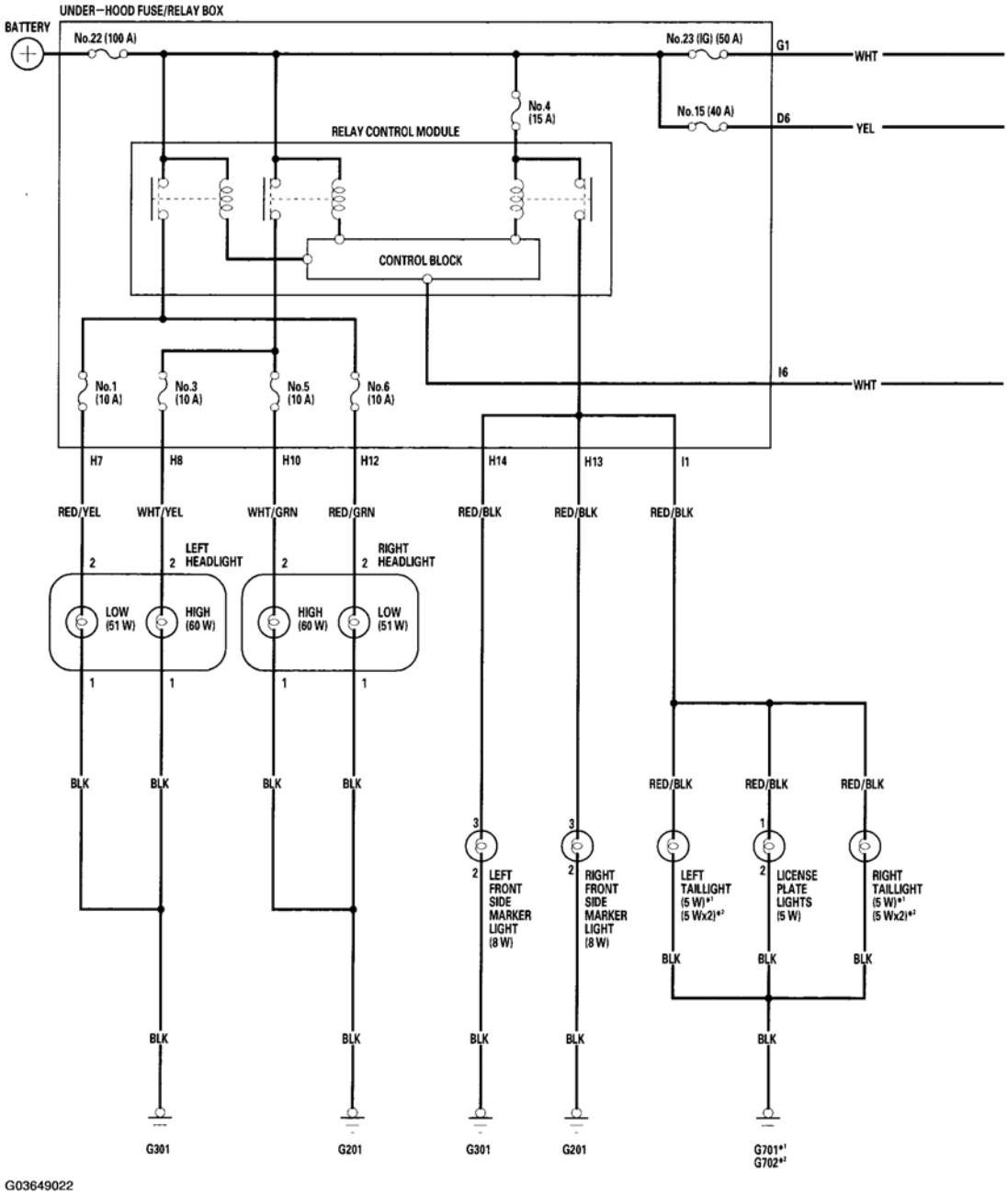


Fig. 8: Exterior Lights Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

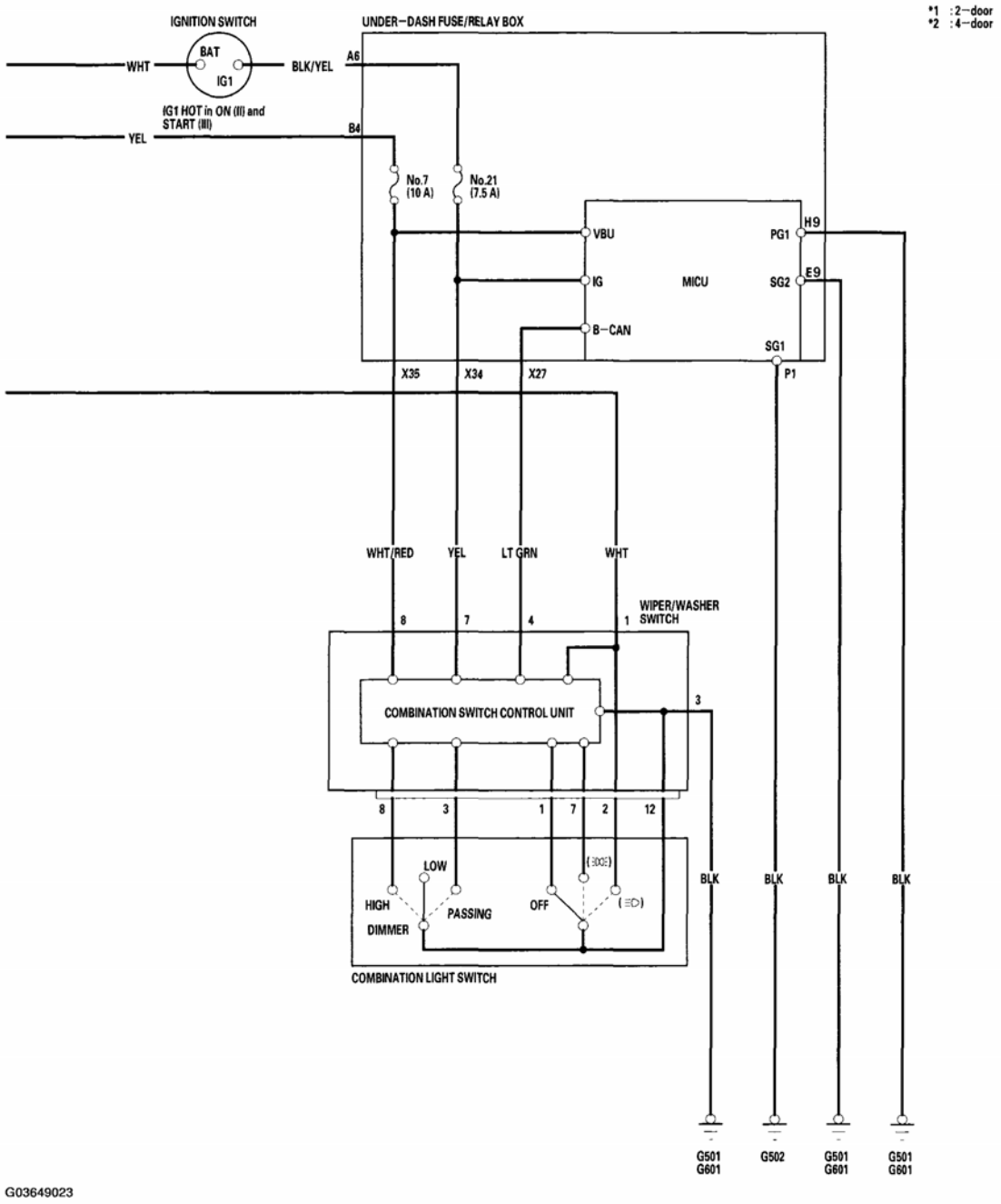


Fig. 9: Exterior Lights Circuit Diagram (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CANADA ('03-05 MODELS):

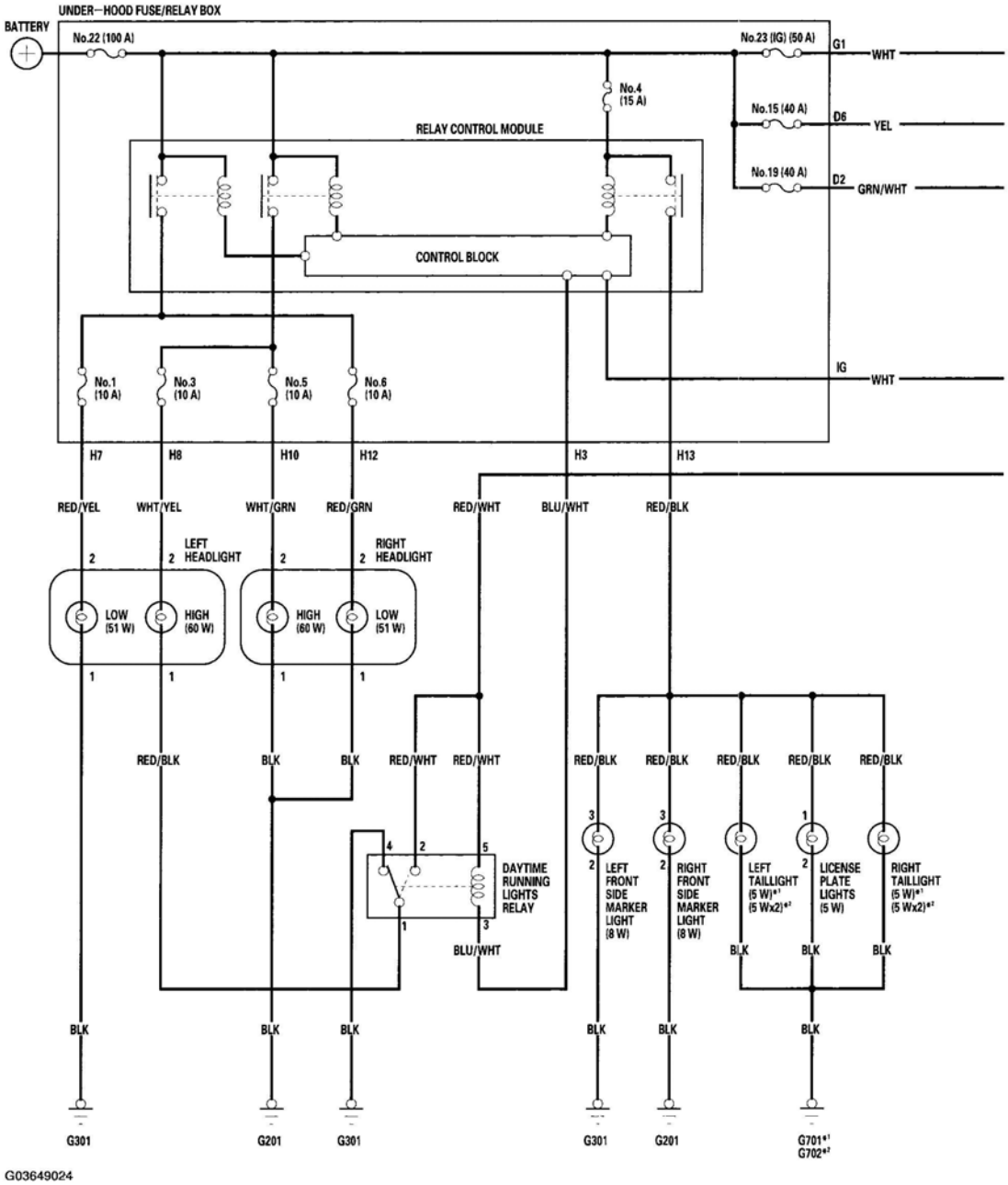


Fig. 10: Exterior Lights Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

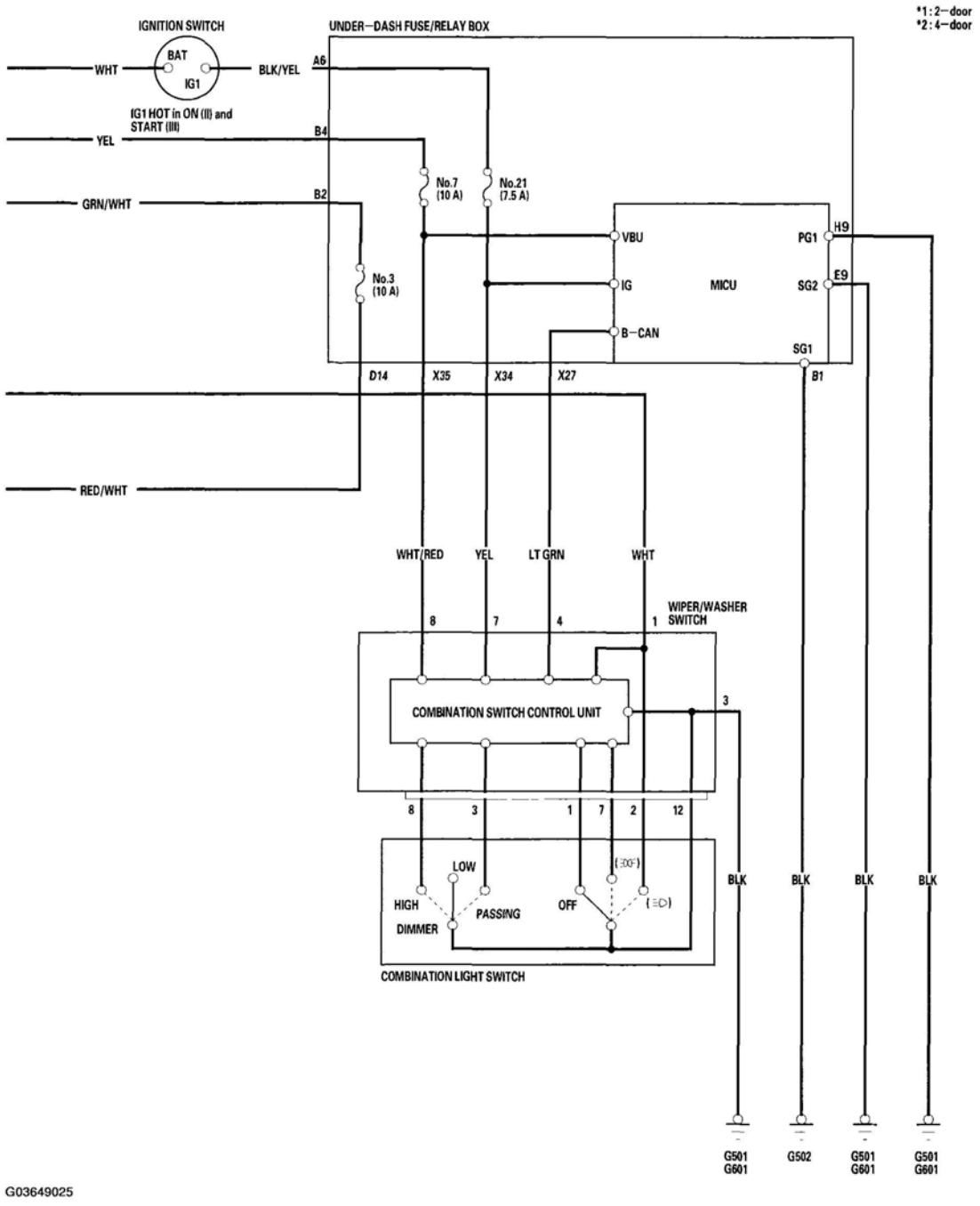


Fig. 11: Exterior Lights Circuit Diagram (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM - LIGHTING SYSTEM

USA ('06-07 MODELS):

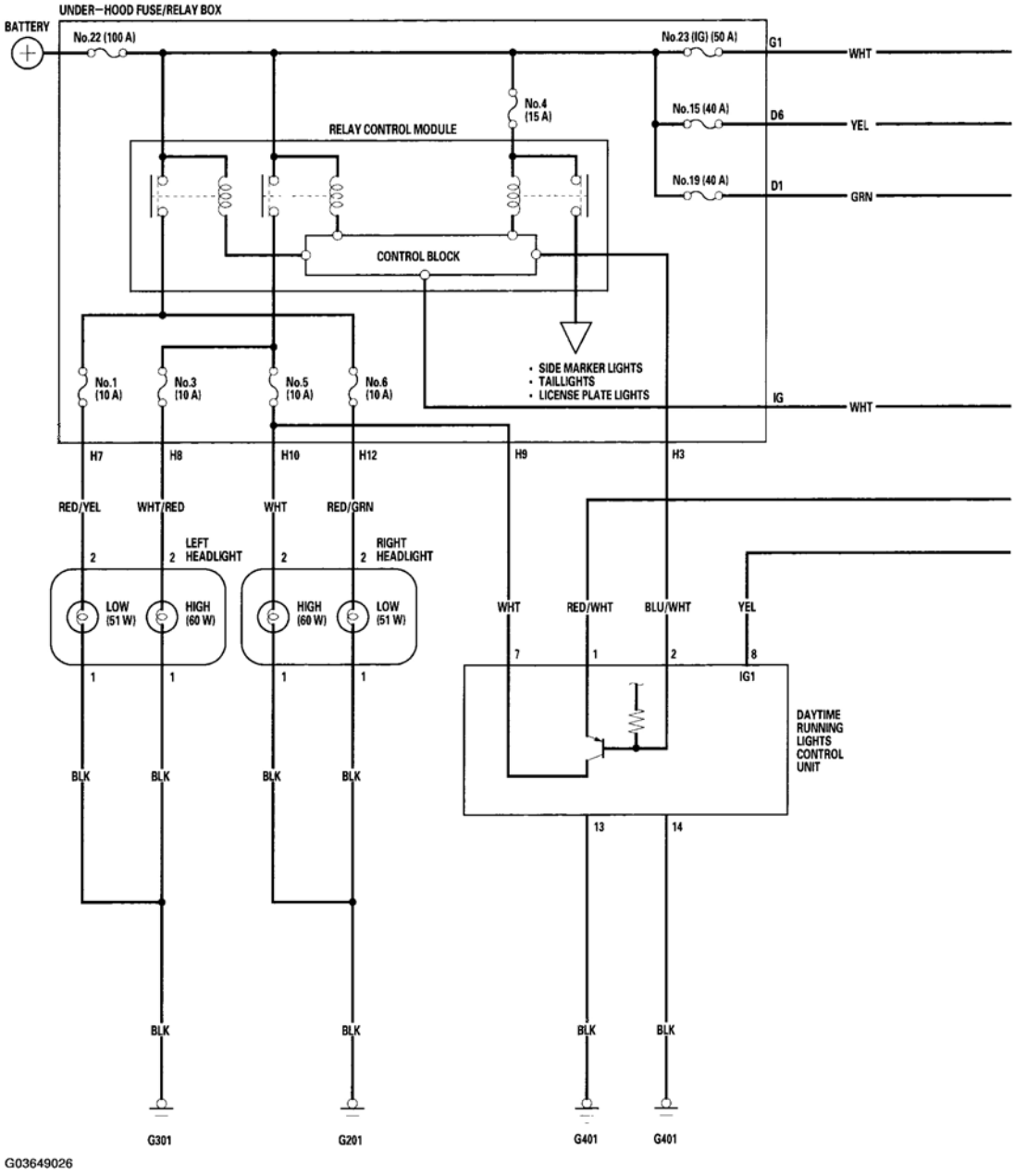


Fig. 12: Lighting System Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

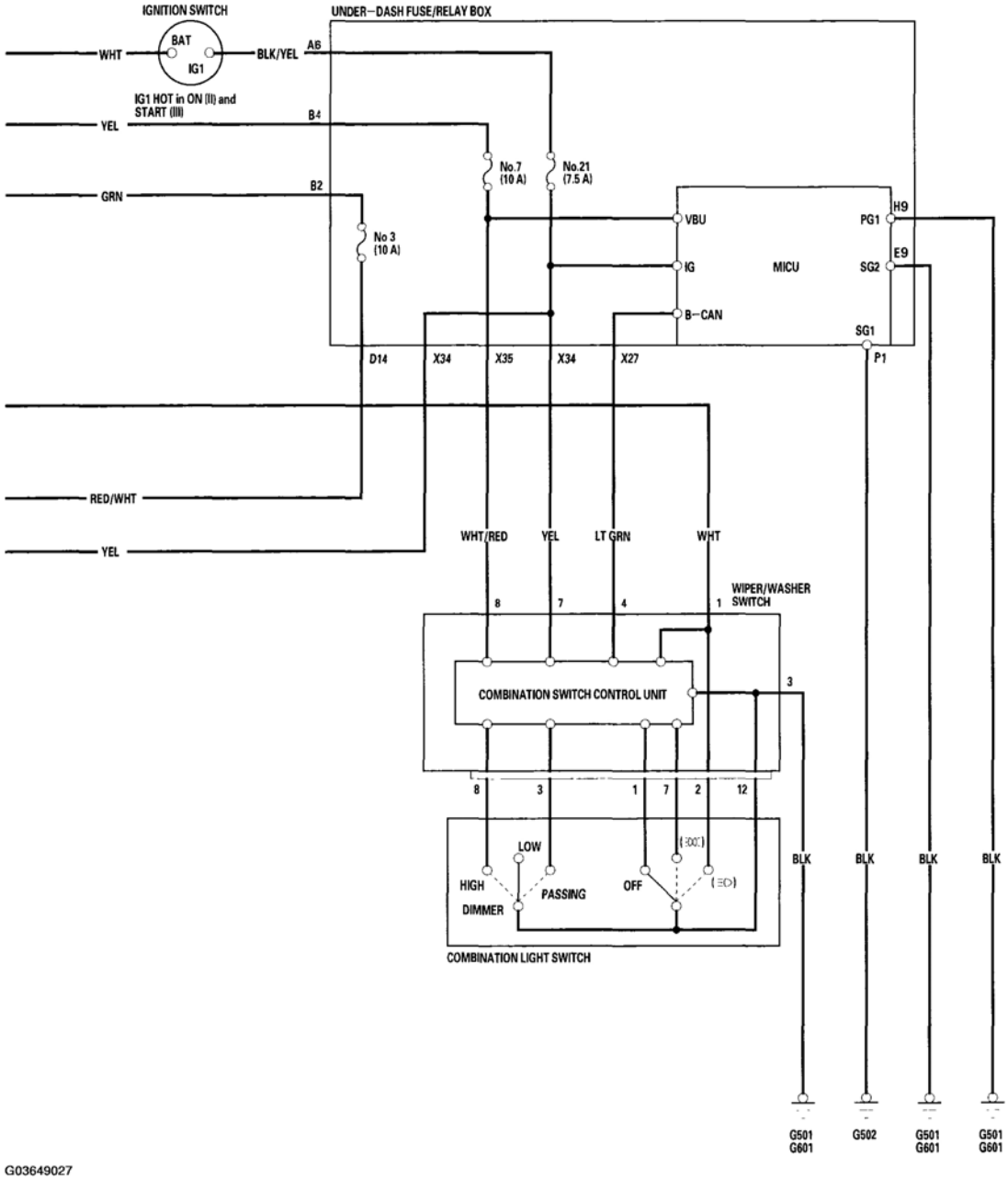


Fig. 13: Lighting System Circuit Diagram (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CANADA ('06-07 MODELS):

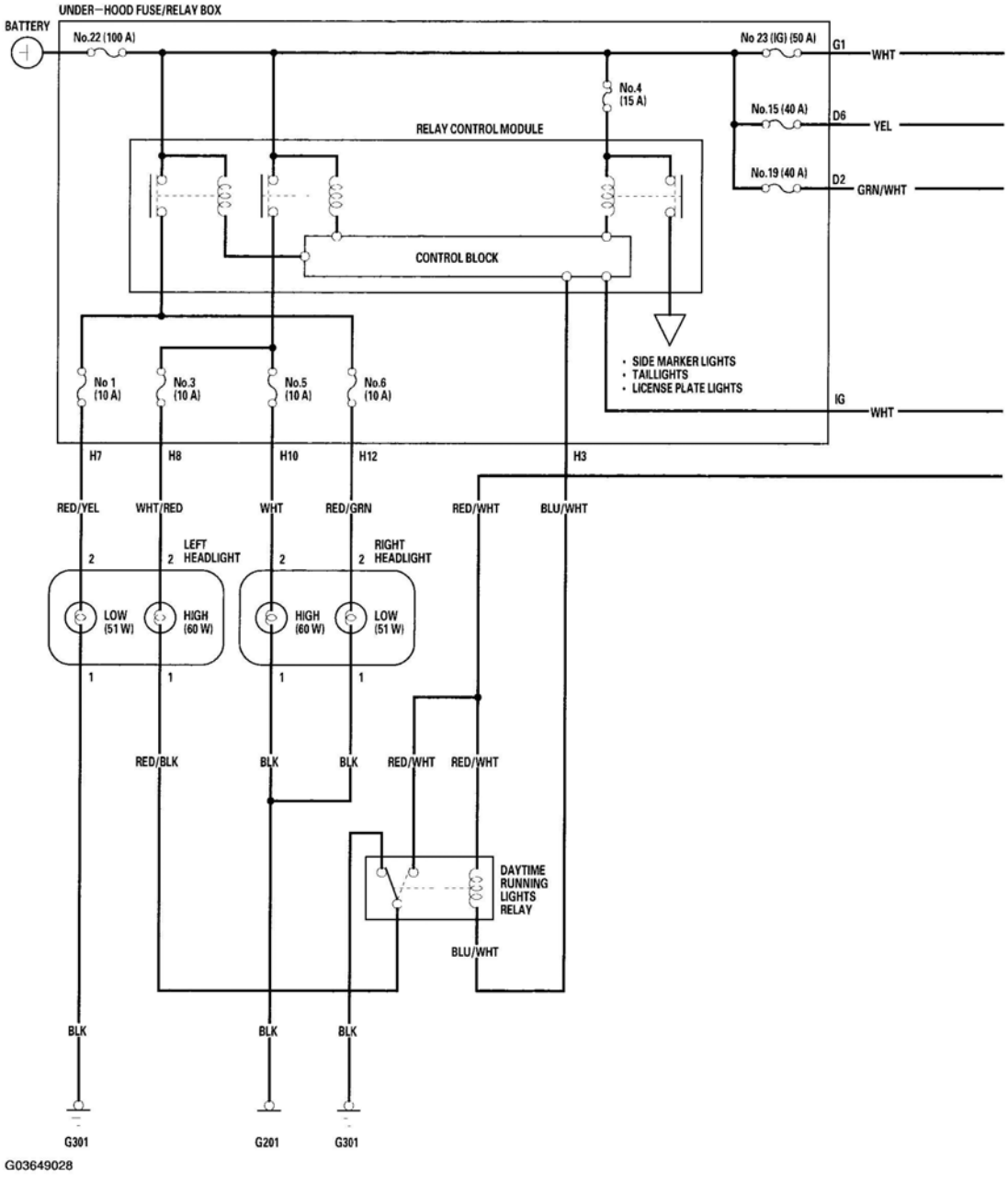


Fig. 14: Lighting System Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

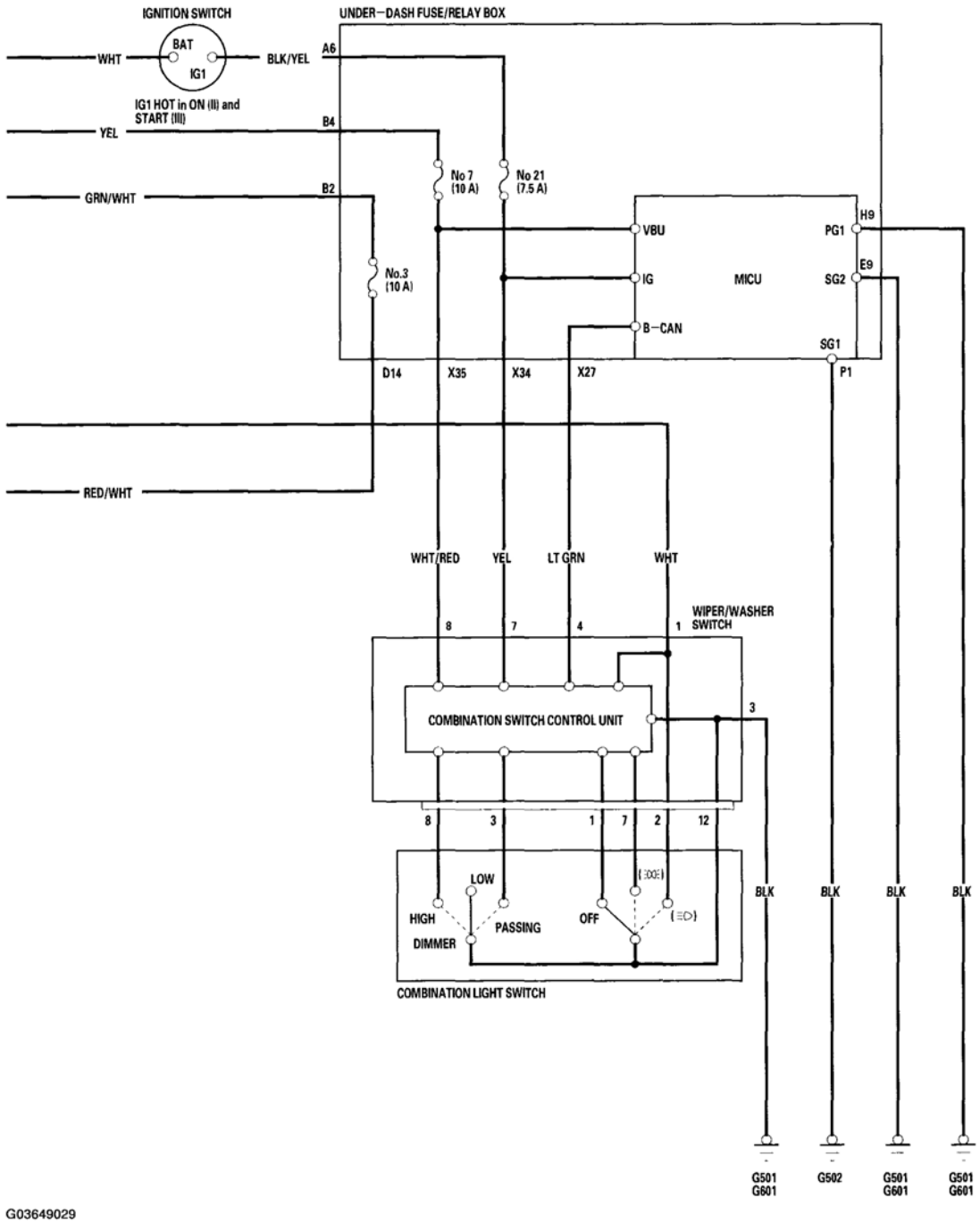


Fig. 15: Lighting System Circuit Diagram (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM - SIDE MARKER/LICENSE PLATE LIGHTS

4-DOOR ('06-07 MODELS):

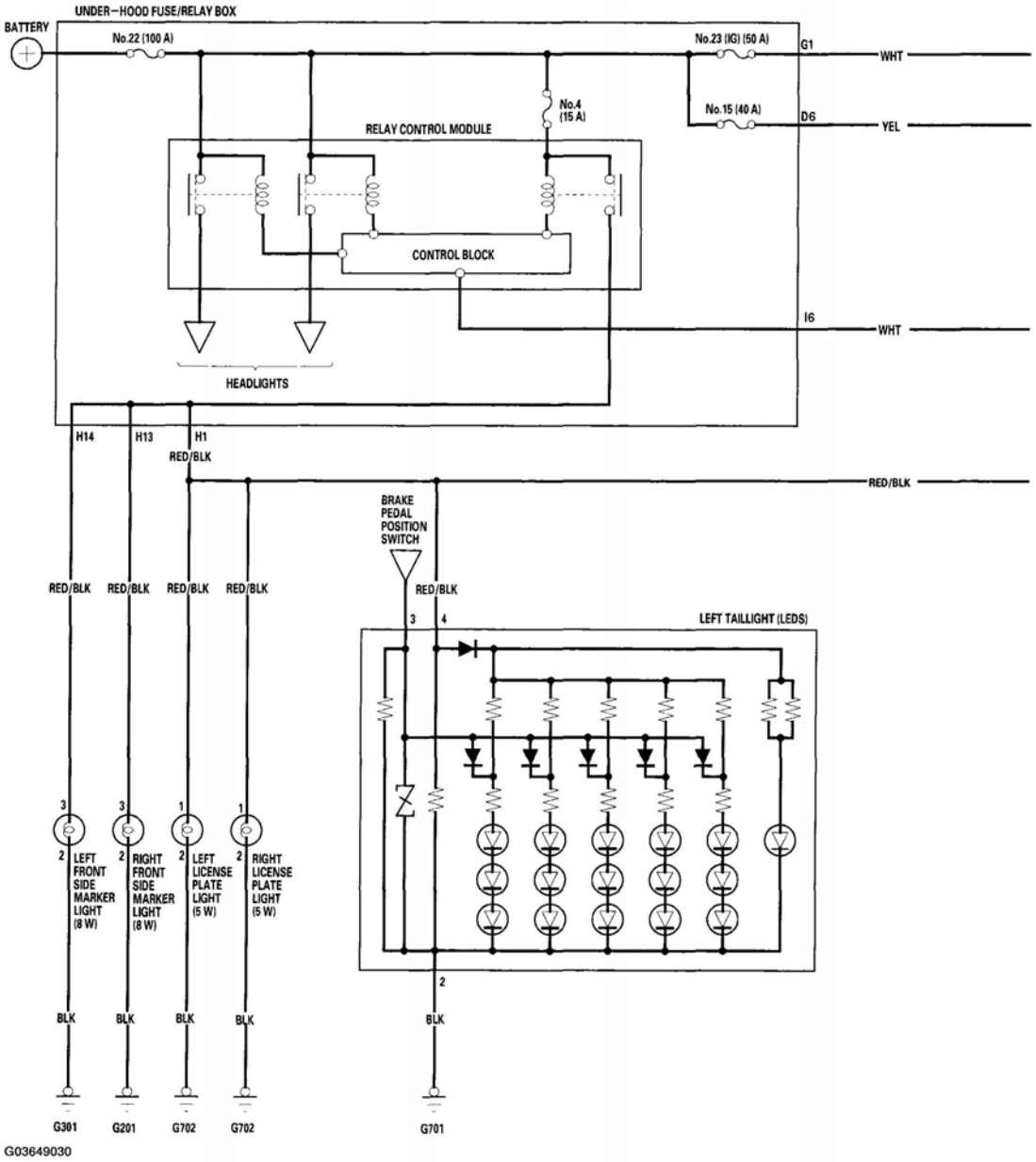


Fig. 16: Side Marker/License Plate Lights Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

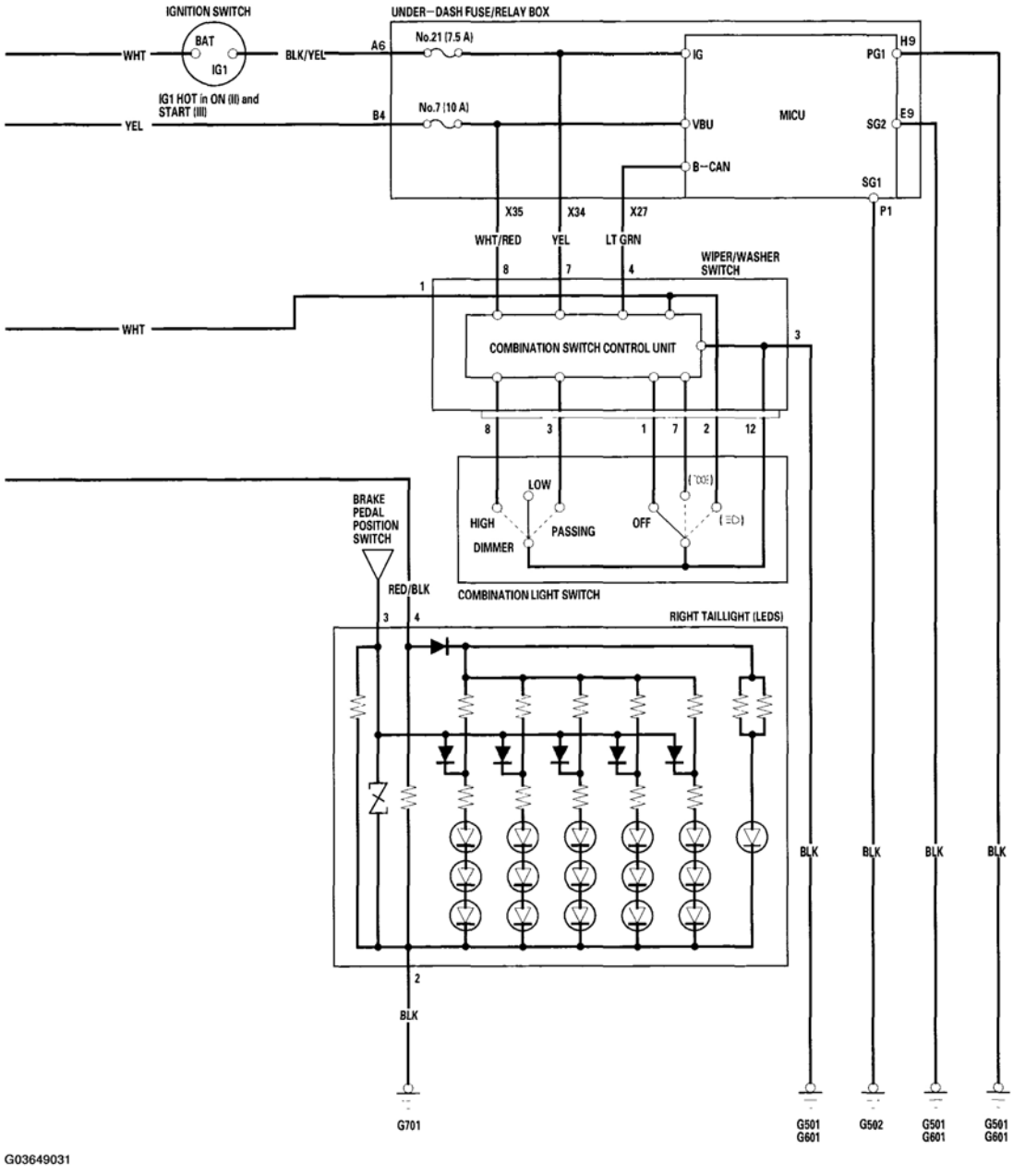


Fig. 17: Side Marker/License Plate Lights Circuit Diagram (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2-DOOR ('06-07 MODELS):

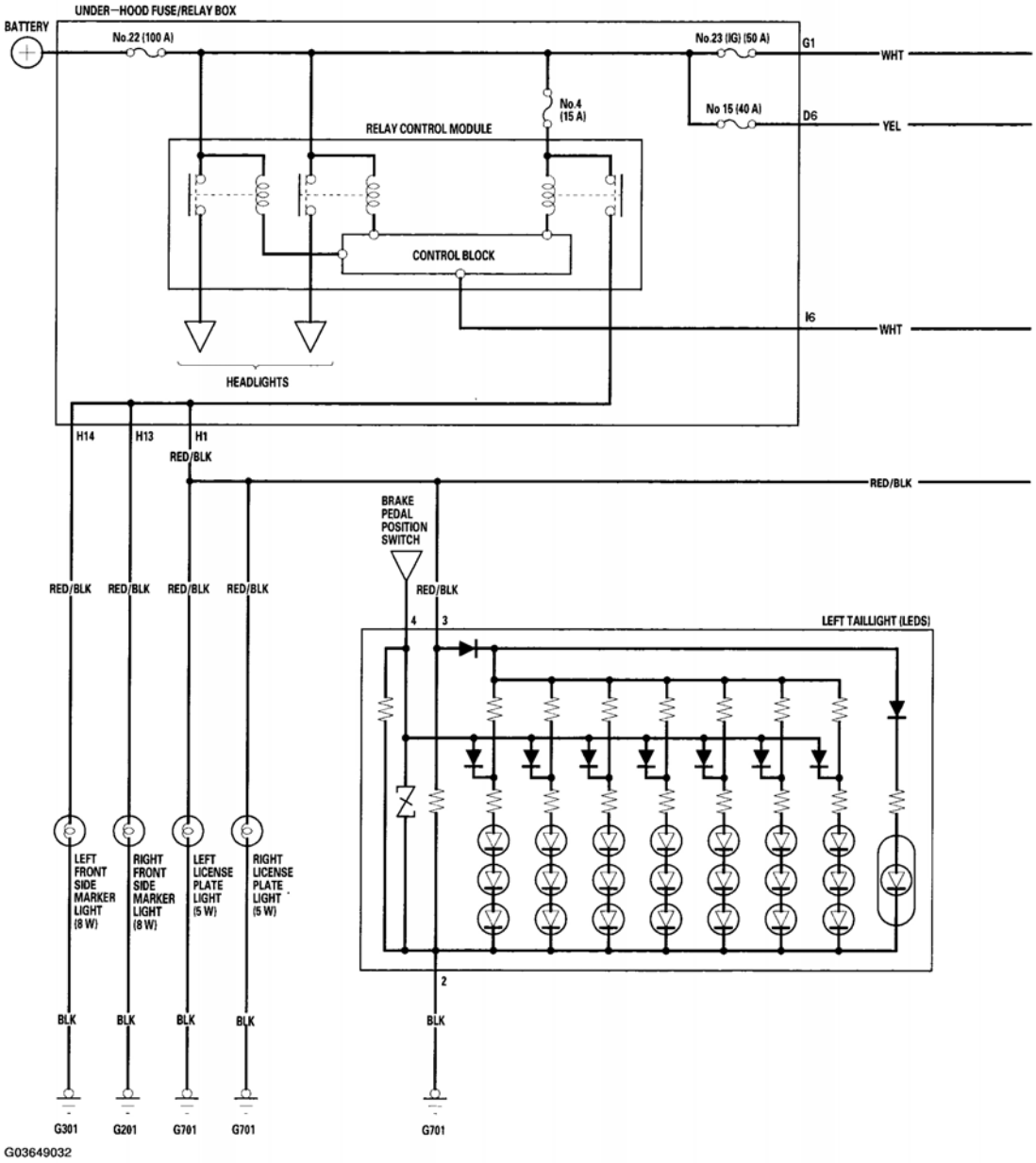


Fig. 18: Side Marker/License Plate Lights Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

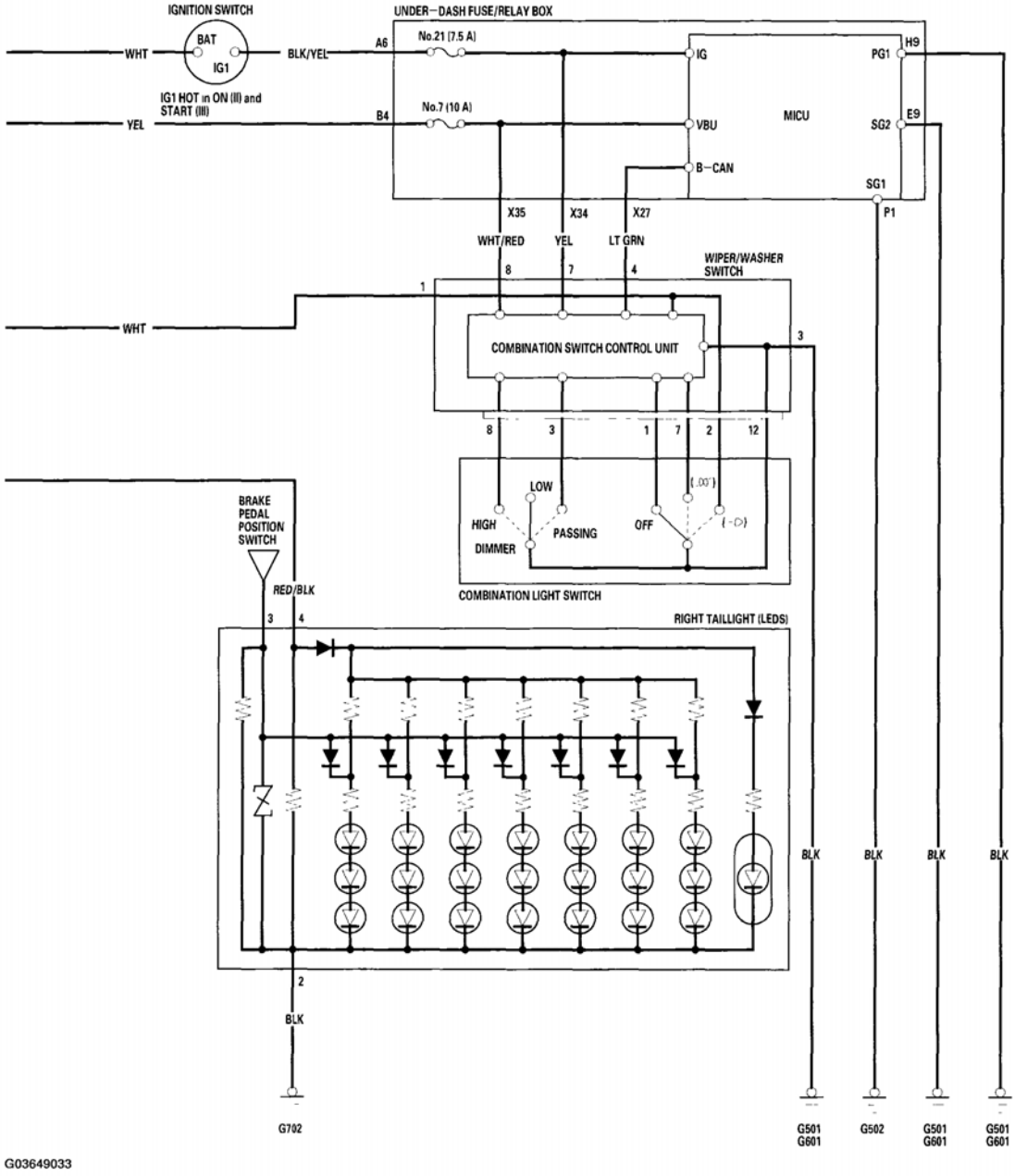
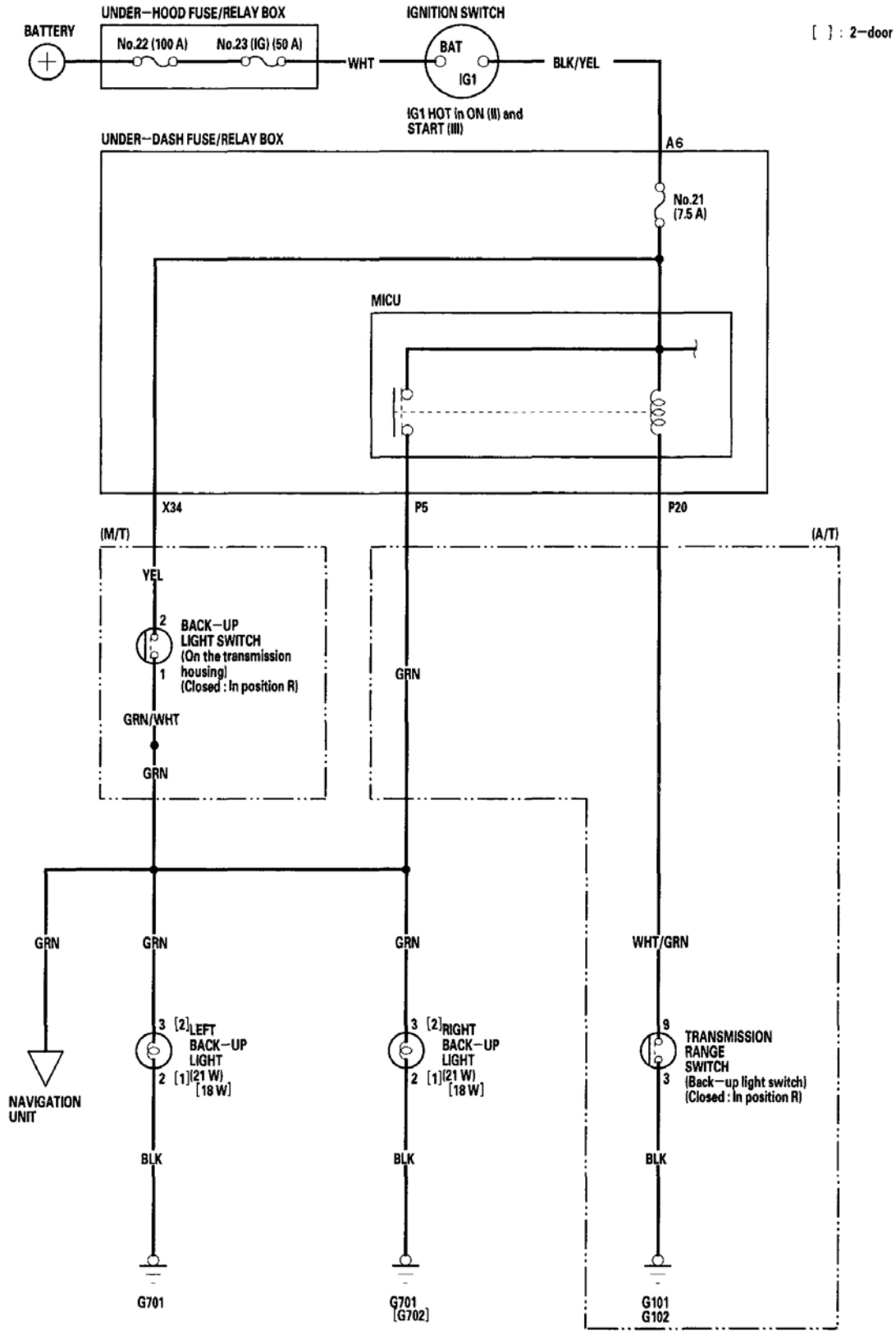


Fig. 19: Side Marker/License Plate Lights Circuit Diagram (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM - BACK-UP LIGHTS

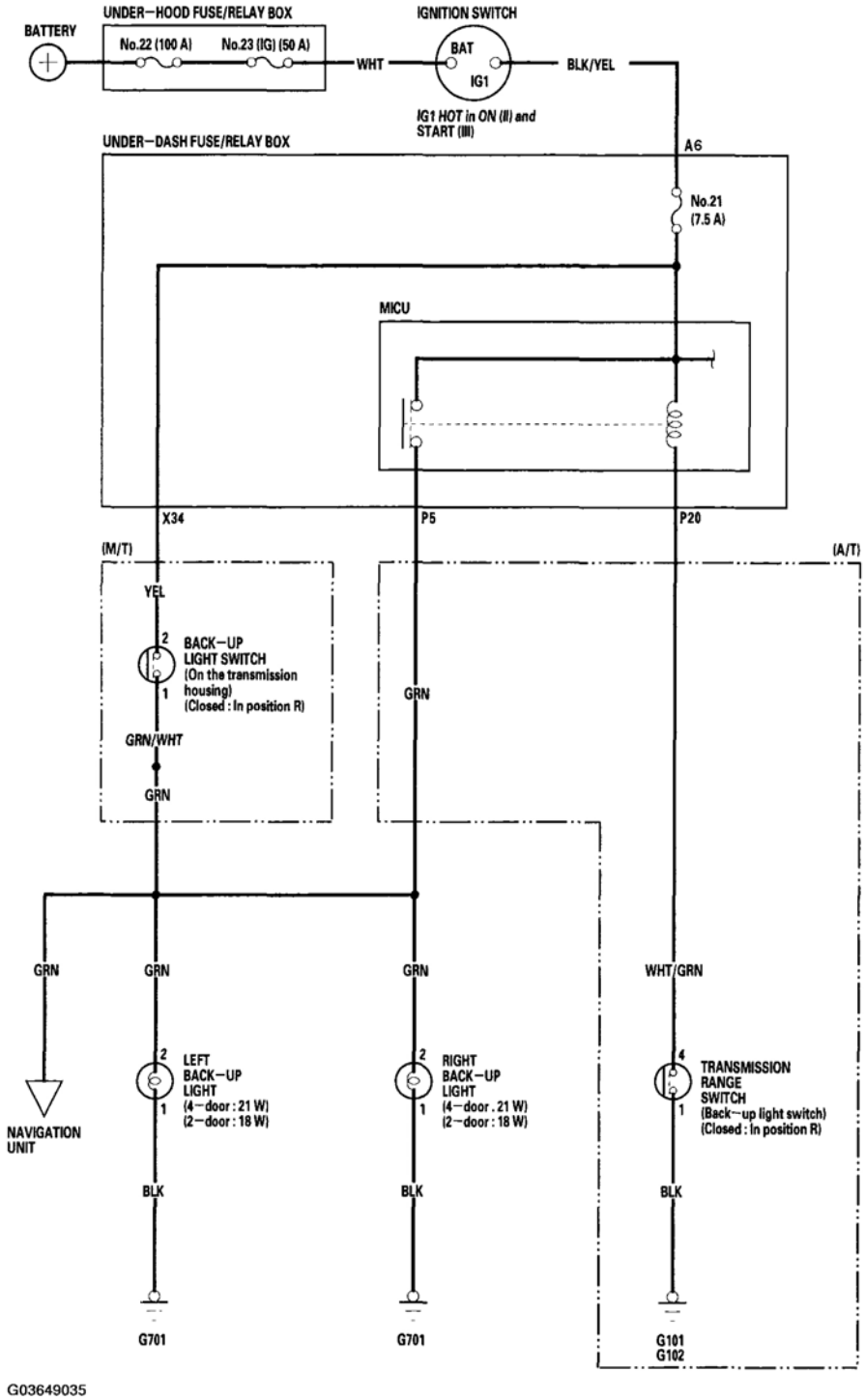
2007 Honda Accord SE

2003-07 ACCESSORIES & EQUIPMENT Exterior Lights - Accord



G03649034

Fig. 20: Back-Up Lights Circuit Diagram ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G03649035

Fig. 21: Back-Up Lights ('06-07 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM - BRAKE LIGHTS

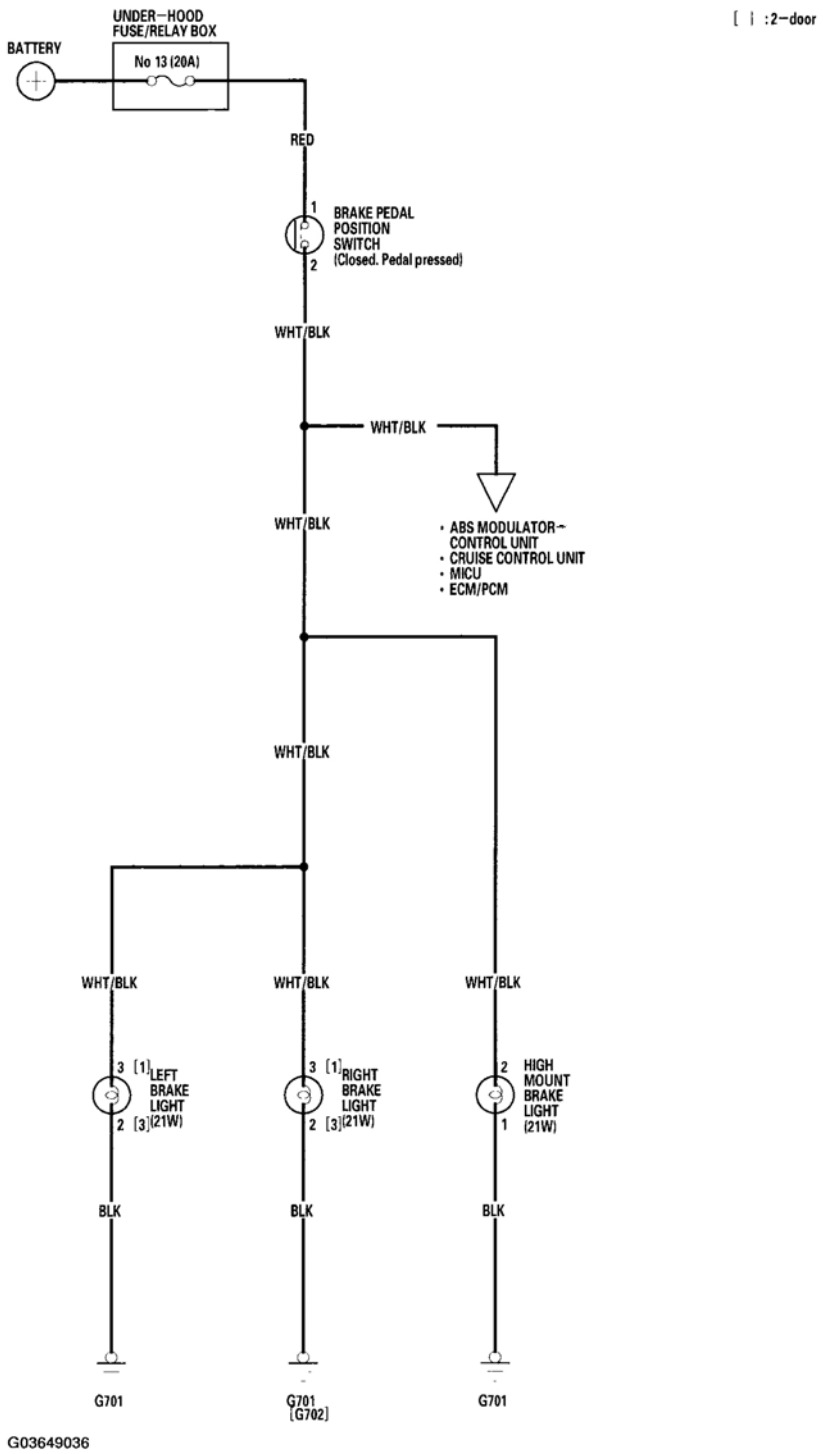


Fig. 22: Brake Lights Circuit Diagram ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

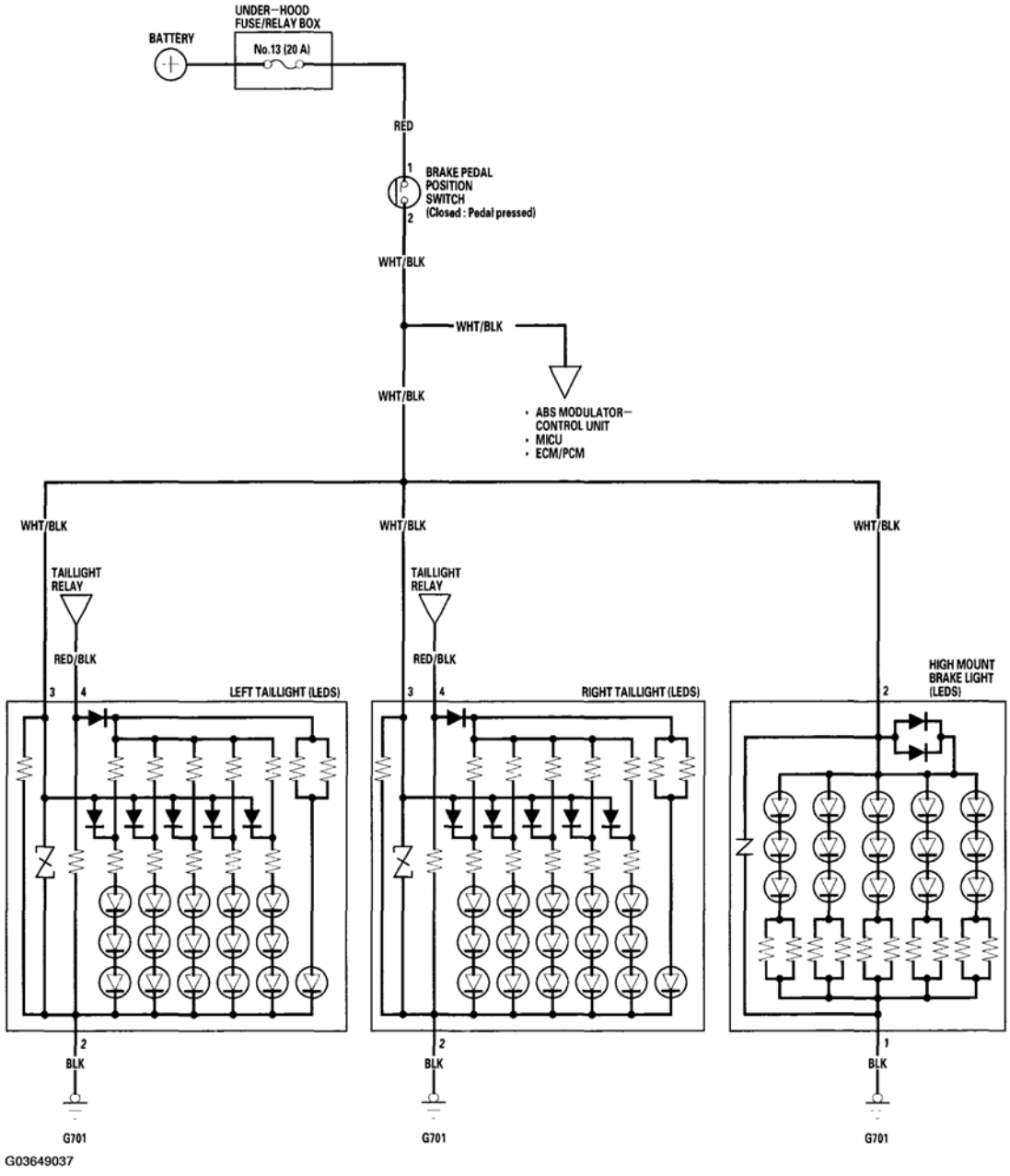


Fig. 23: 4-Door ('06 Model) Circuit Diagram - Brake Lights Circuit Diagram (4-door - '06 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

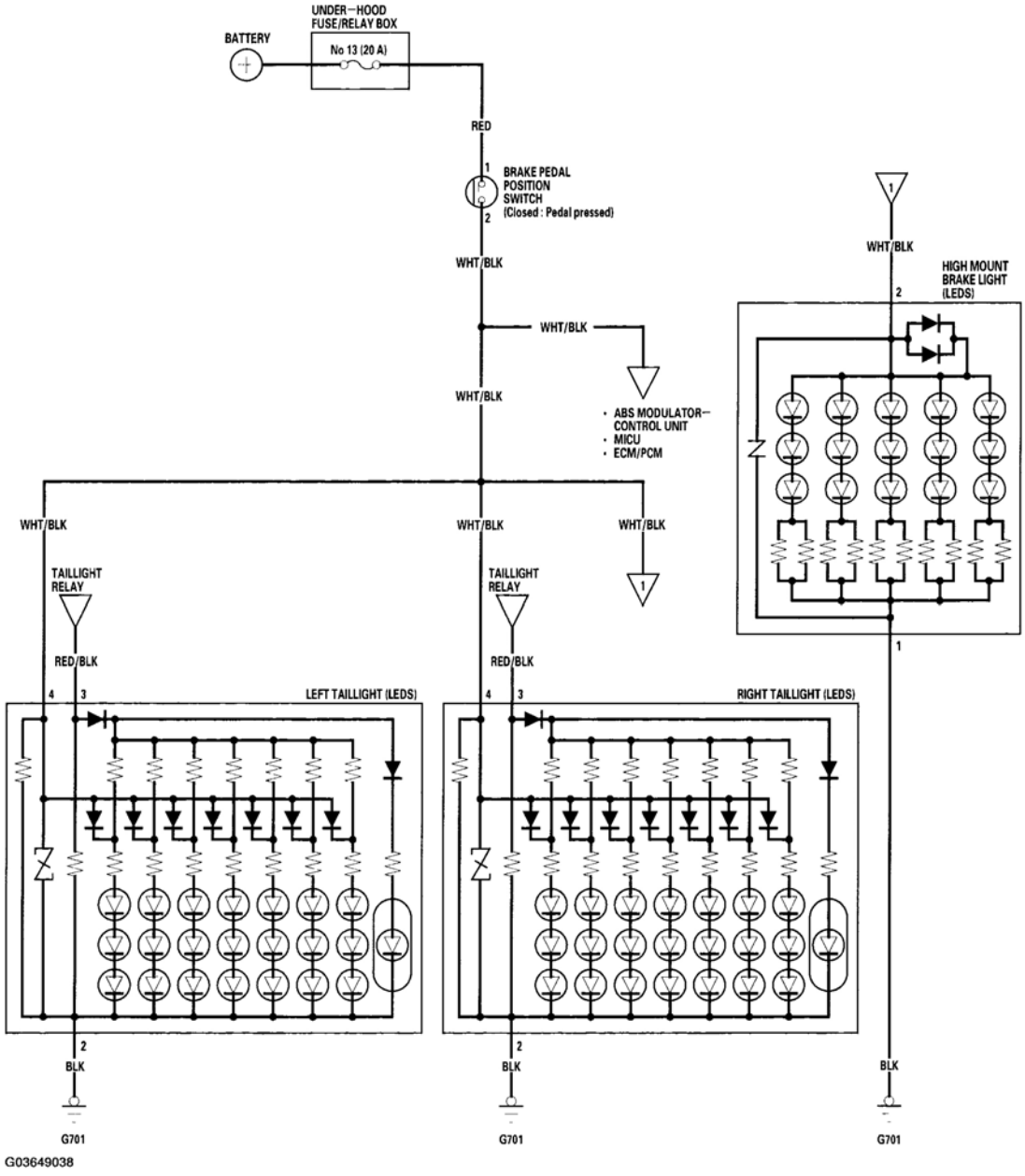


Fig. 24: 2-Door ('06 Model) Circuit Diagram - Brake Lights Circuit Diagram (2-door - '06 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC B1075: HEADLIGHT SIGNAL ERROR

1. Clear the DTCs using the HDS.
2. Turn the headlights switch from the OFF position to the ON position.
3. Check for DTCs using the HDS.

   Is DTC B1075 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, the headlight circuit is OK at this time. Check pinfits and connections.
4. With the headlight switch OFF, select LIGHTING SYSTEM from the HDS, and enter the DATA LIST.
5. Check the ON/OFF information of the Headlight Switch (BACK-UP) in the DATA LIST.

   Is the information indicator OFF?

   YES - Go to step 6.

   NO - Go to step 10.
6. Turn the headlight switch ON.
7. Check the ON/OFF information of the Headlight Switch (BACK-UP) in the DATA LIST.

   Is the information Indicator ON?

   YES - Troubleshoot **DTC B1278: Headlight Switch ON Position Circuit Malfunction** .

   NO - Go to step 8.
8. Disconnect the relay control module 10P connector (under-hood fuse/relay box connector I) and the wiper/washer switch 8P connector.
9. Check for continuity between the No. 6 terminal of the relay control module 10P connector and the No. 1 terminal of the wiper/washer switch (combination switch control unit) 8P connector.

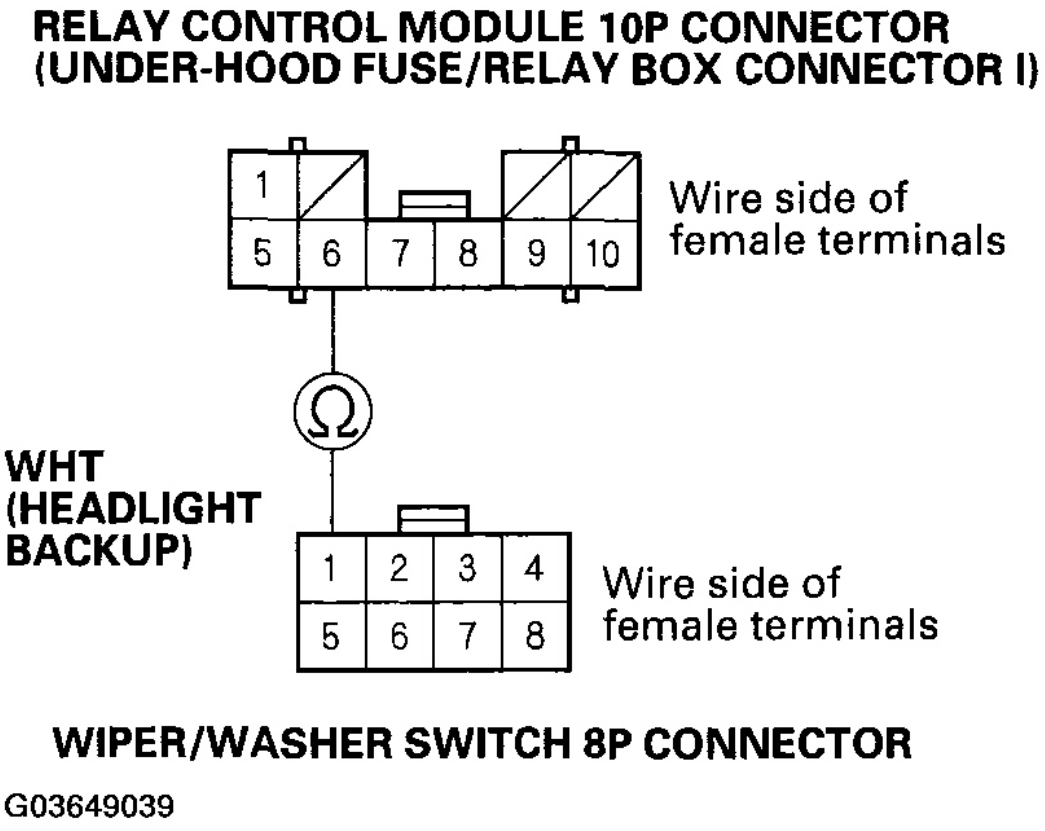


Fig. 25: Checking Continuity Between No. 6 Terminal Of Relay Control Module 10P Connector & No.1 Terminal Of Wiper/Washer Switch 8P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Faulty combination switch control unit; replace the wiper/washer switch.

NO - Repair an open in the WHT wire.

10. Disconnect the relay control module 10P connector.
11. Check for continuity between the No. 6 terminal of the relay control module 10P connector and body ground.

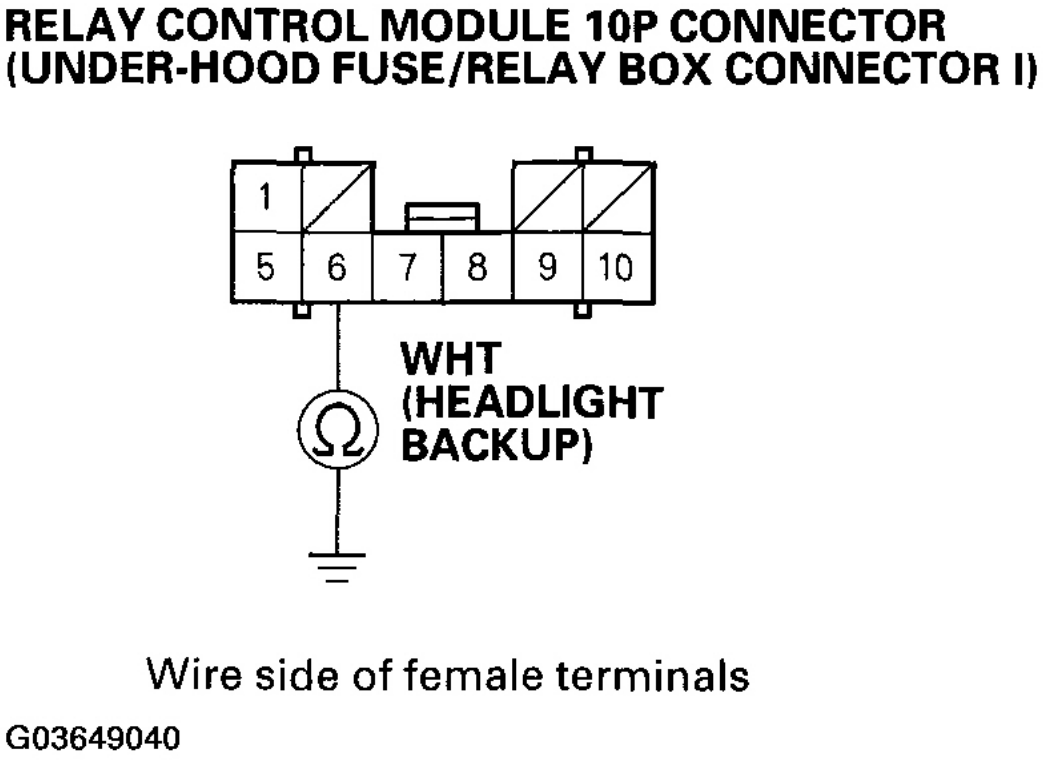


Fig. 26: Checking Continuity Between No. 6 Terminal Of Relay Control Module 10P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair a short in the WHT wire.

NO - Faulty combination switch control unit; replace the wiper/washer switch.

DTC B1078:DAYTIME RUNNING LIGHTS SIGNAL ERROR (CANADA)

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Operate the parking brake lever.
4. Check for DTCs using the HDS.

Is DTC B1078 indicated?

YES - Go to step 5.

NO - Intermittent failure, the daytime running lights system is OK at this time. Check pinfits and connections.

5. Turn the headlight switch ON, then push the combination light switch forward for high beams.

Do both headlights come on?

YES - Go to step 6.

NO - Go to step 9.

6. Turn the headlight switch OFF.
7. Select LIGHTING SYSTEM from the HDS, and enter the DATA LIST.
8. Check the ON/OFF information of the DRL Relay Command (Canada) in the DATA LIST.

Is the information indicator ON?

YES - Replace the daytime running lights relay.

NO - Go to the relay control module input test (see **RELAY CONTROL MODULE INPUT TEST**).

9. Check the No. 3 (10 A) or No. 5 (10 A) fuses in the under-hood fuse/relay box.

Are both fuses OK?

YES - Go to step 10.

NO - Replace the blown fuse and recheck the system.

10. Check headlight bulbs.

Are both bulbs OK?

YES - Go to step 11.

NO - Replace the blown bulb and recheck the system.

11. Check for continuity between the No. 2 terminal of the headlight (high beam)

2P connectors and the No. 8 (left headlight) or No. 10 (right headlight) terminals of the under-hood fuse/relay box 14P connector H.

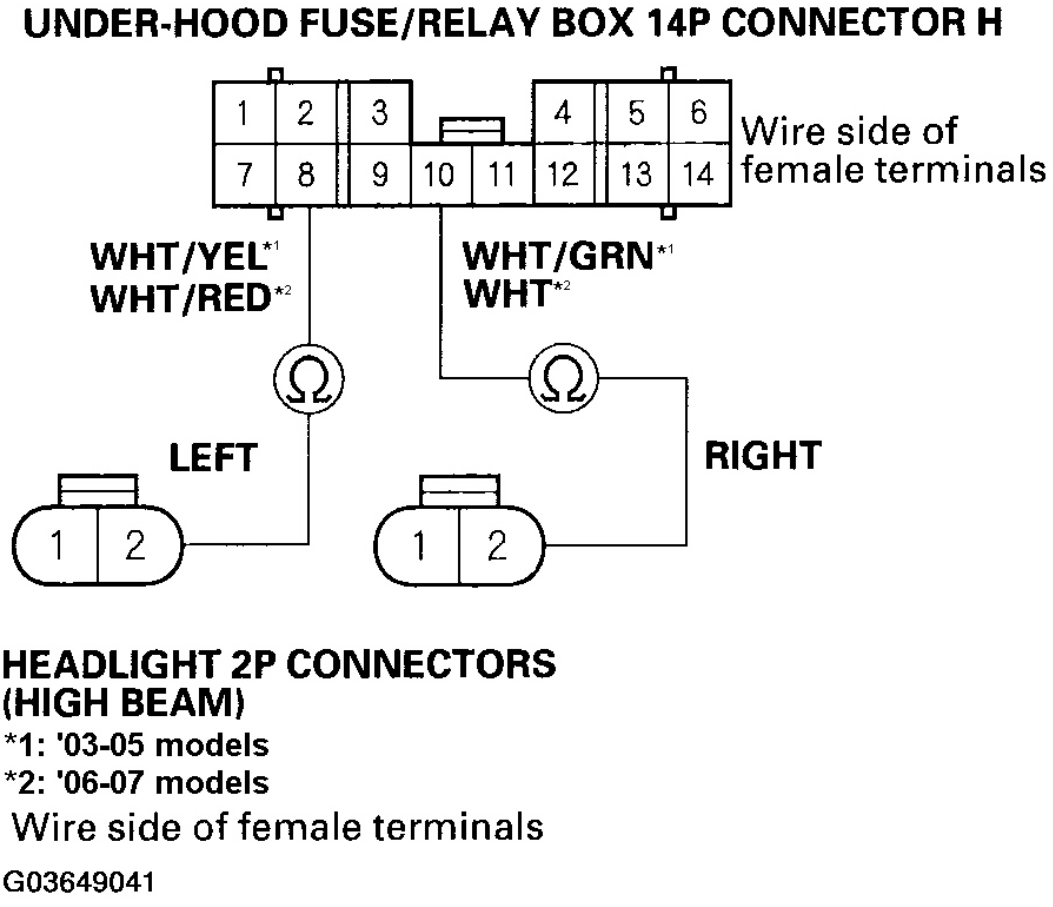


Fig. 27: Checking Continuity Between No. 2 Terminal Of Headlight (High Beam) 2P Connectors & No. 8 (Left Headlight) Or No. 10 (Right Headlight) Terminal Of Under-Hood Fuse/Relay Box Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 12.

NO - Repair an open in the WHT/YEL (left headlight) or WHT/GRN (right headlight) wire.

12. Check for continuity between the No. 1 terminal of the headlight (high beam) 2P connectors and body ground.

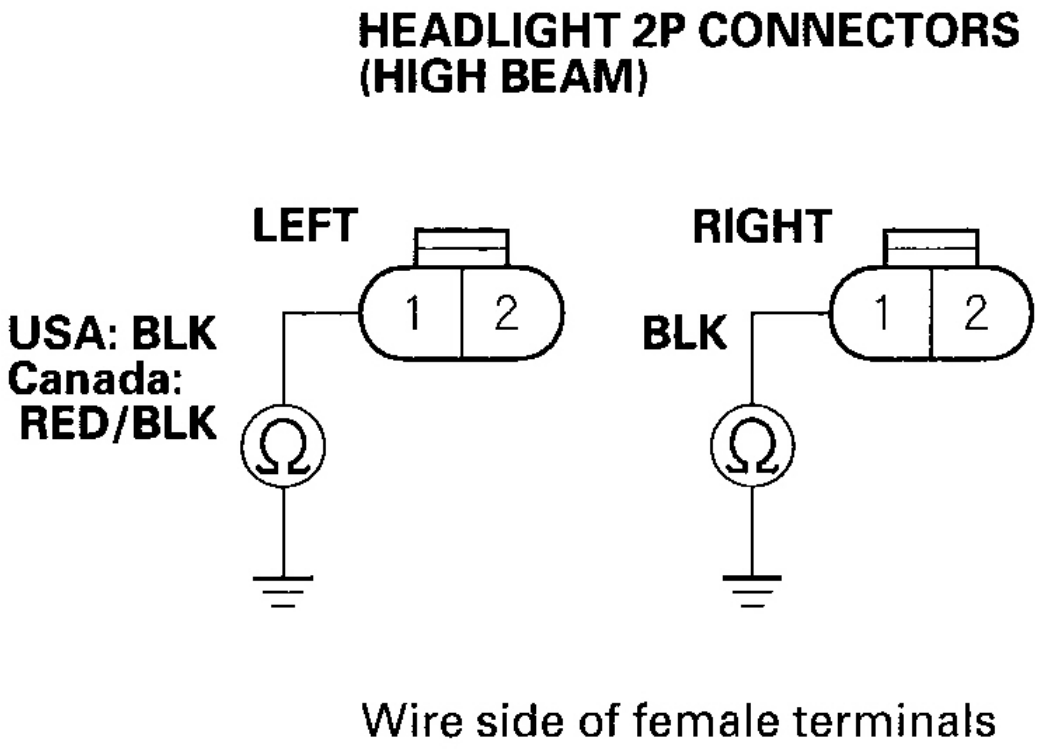


Fig. 28: Checking Continuity Between No. 1 Terminal Of Headlight (High Beam) 2P Connectors And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Faulty relay control module; replace the under-hood fuse/relay box.

NO - Check the daytime running lights relay (left headlight). If OK, repair an open in the BLK wire or poor ground (G201, G301).

DTC B1079: DAYTIME RUNNING LIGHTS MALFUNCTION (USA) ('06-07 MODELS)

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF.
3. Make sure the brake pedal position switch is OFF.
4. Make sure the headlight switch is OFF.
5. Turn the ignition switch ON (II).
6. Check for DTCs with the HDS.

   Is DTC B1079 indicated?

   YES - Go to step 7.

   NO - Intermittent failure. The daytime running light system is OK at this time. Check for loose or poor connections.
7. Turn the headlight switch ON, then push the combination light switch forward for high beams.

   Do both headlights come on?

   YES - Go to step 8.

   NO - If one of the headlights doesn't come on, check the fuse and bulb, and for a poor ground (G201, G301) or an open in the wire. If both headlights don't come on, go to step 11.
8. Turn the headlight switch OFF.
9. Select LIGHTING SYSTEM from the HDS, and enter the DATA LIST.
10. Check the ON/OFF information of the DRL Command in the DATA LIST.

    Is the information indicator ON?

    YES - Go to relay control module input test (see **RELAY CONTROL MODULE INPUT TEST**).

    NO - Substitute a known-good daytime running light control unit and recheck the system
11. Check the No. 3 (10 A) and No. 5 (10 A) fuses in the under-hood fuse/relay box.

Are both fuses OK?

YES - Go to step 12.

NO - Replace the blown fuse, and recheck the system.

12. Check the headlight bulbs.

Are both bulbs OK?

YES - Go to step 13.

NO - Replace the blown bulb, and recheck the system.

13. Disconnect the 2P connector from each headlight high beam.
14. Disconnect under-hood fuse/relay box connector H (14P).
15. Check for continuity between left headlight high beam 2P connector terminal No. 2 and under-hood fuse/relay box connector H (14P) terminal No. 8, and between right headlight high beam 2P connector terminal No. 2 and under-hood fuse/relay box connector H (14P) terminal No. 10.

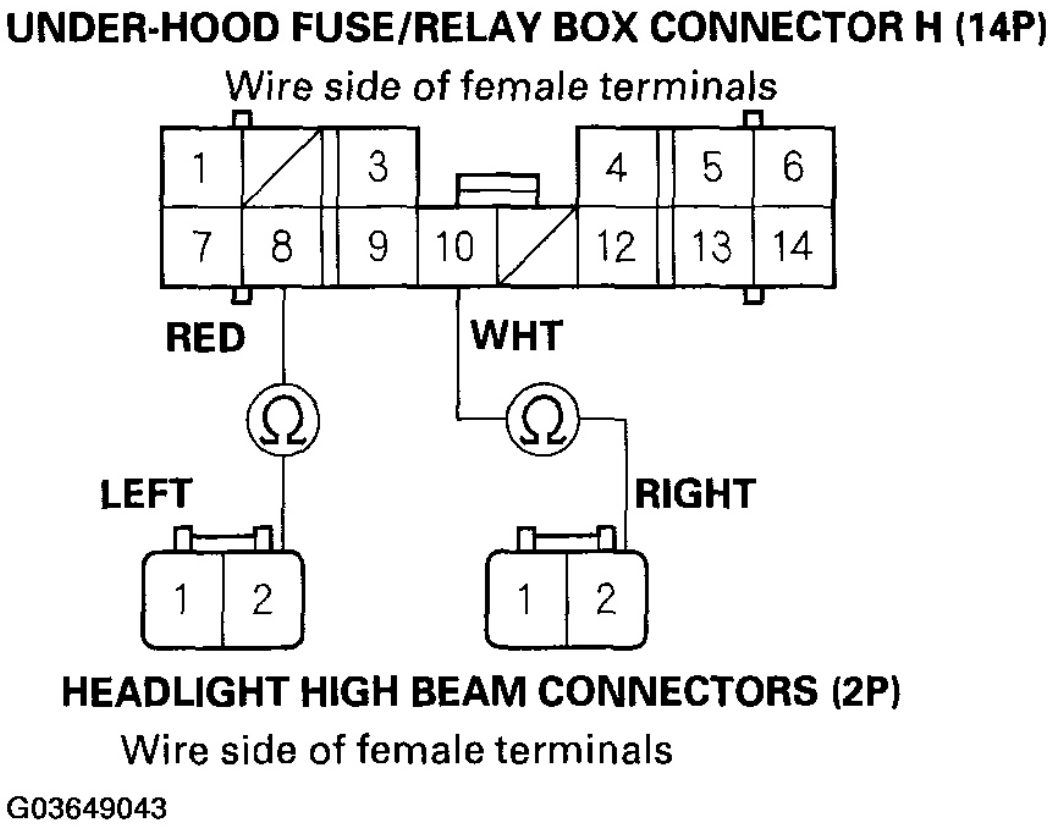


Fig. 29: Checking Continuity Between Left Headlight High Beam 2P Connector Terminal No. 2 & Under-Hood Fuse/Relay Box Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 16.

NO - Repair an open in the wire.

16. Check for continuity between each headlight high beam 2P connector terminal No. 1 and body ground.

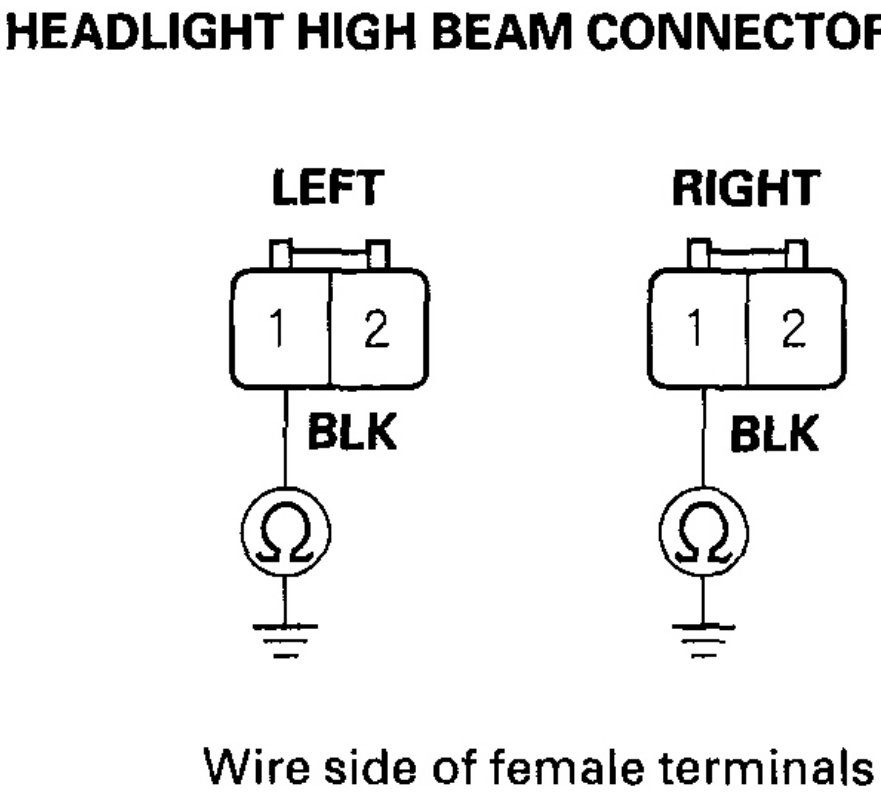


Fig. 30: Checking Continuity Between Each Headlight High Beam 2P Connector Terminal No. 1 & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Faulty relay control module; replace the under-hood fuse/relay box.
NO - Repair an open in the wire or a poor ground (G201, G301).

DTC B1275: HEADLIGHT SWITCH OFF POSITION CIRCUIT MALFUNCTION; DTC B1276: HEADLIGHT SWITCH PARKING (SMALL) POSITION CIRCUIT MALFUNCTION; DTC B1277: HEADLIGHT SWITCH AUTO POSITION CIRCUIT MALFUNCTION; DTC B1278: HEADLIGHT SWITCH ON POSITION CIRCUIT MALFUNCTION

1. Clear the DTCs using the HDS.

2. Cycle the ignition switch to OFF and then back ON.
3. Check for DTCs using the HDS.

Is DTC B1275, B1276, B1277 or B1278 indicated?

YES - Go to step 4.

NO - Intermittent failure, the headlight system is OK at this time. Check pinfits and connections.

4. Reset the DTCs using the HDS.
5. Turn the ignition switch ON (II) and wait for 2 seconds.
6. Turn the parking (small) light switch ON and wait for 2 seconds.
7. Turn the headlight light switch (LOW) ON and wait for 2 seconds.
8. Change the dimmer switch position from low beam to high beam and wait for 2 seconds.
9. Check the DTCs using the HDS.

Is DTC B1275, B1276, B1277, B1278 indicated?

YES - Go to step 10.

NO - Intermittent failure, the combination switch and the control unit are OK at this time. Check pinfits and connections.

10. Disconnect the combination light switch 12P connector from the wiper/washer switch.
11. Perform the combination light switch test (see **COMBINATION LIGHT SWITCH TEST/REPLACEMENT**).

Is the combination light switch check OK?

YES - Faulty combination switch control unit, replace the wiper/washer switch.

NO - Replace the combination light switch.

DTC B1279:HEADLIGHT SWITCH DIMMER POSITION CIRCUIT MALFUNCTION

1. Clear the DTCs using the HDS.

2. Cycle the ignition switch to OFF and then back ON.
3. Check for DTCs using the HDS.

Is DTC B1279 indicated?

YES - Go to step 4.

NO - Intermittent failure. The turn signal switch circuit is OK at this time. Check pinfits and connections.

4. Reset the DTCs by CLEAR MENU (DTC CLEAR) of the HDS.
5. Turn the ignition switch ON (II), then turn the headlight switch ON.
6. Change the combination light switch from low beam to high beam and wait for 2 seconds.
7. Pull and hold the combination light switch lever and keep the passing switch position for more than 2 seconds.
8. Check for DTCs by selecting the DTCs MENU (DTCs) from the HDS.

Is DTC B1279 indicated?

YES - Go to step 9.

NO - Intermittent failure, the combination switch and the combination switch control unit are OK at this time. Check pinfits and connections.

9. Disconnect the combination light switch 12P connector from the wiper/washer switch.
10. Perform the combination light switch test (see **COMBINATION LIGHT SWITCH TEST/REPLACEMENT**).

Is the combination light switch OK?

YES - Faulty combination switch control unit, replace the wiper/washer switch.

NO - Replace the combination light switch.

DTC B1280: TURN SIGNAL SWITCH CIRCUIT MALFUNCTION

1. Clear the DTCs using the HDS.

2. Cycle the ignition switch to OFF and then back ON.
3. Check for DTCs using the HDS.

Is DTC B1280 indicated?

YES - Go to step 4.

NO - Intermittent failure. The turn signal switch circuit is OK at this time. Check pinfits and connections.

4. Reset the DTCs by CLEAR MENU (DTC CLEAR) of the HDS.
5. Turn the ignition switch ON (II).
6. Turn the turn signal switch to the left position and wait for 2 seconds.
7. Turn the turn signal switch to the right position and wait for 2 seconds.
8. Check for DTCs using the HDS.

Is DTC B1280 indicated?

YES - Go to step 9.

NO - Intermittent failure, the turn signal light switch and the combination switch control unit are OK at this time. Check pinfits and connections.

9. Disconnect the combination light switch 12P connector from the wiper/washer switch.
10. Check for short in the turn signal light switch terminals in each switch position (see **COMBINATION LIGHT SWITCH TEST/REPLACEMENT**).

Is there a short?

YES - Faulty, turn signal light switch, replace the combination light switch.

NO - Faulty combination switch control unit, replace the wiper/washer switch.

DAYTIME RUNNING LIGHTS CONTROL UNIT INPUT TEST

USA ('06-07 MODELS)

NOTE:

- **Before troubleshooting the daytime running lights control system, troubleshoot the multiplex integrated control system first using B-CAN System Diagnosis Test Mode A (see TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).**
- **Make sure the headlights high beam come on normally with the combination light switch ON.**

1. Remove the driver's dashboard lower cover (see **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**).
2. Disconnect the 14P connector (A) from the daytime running lights control unit (B).

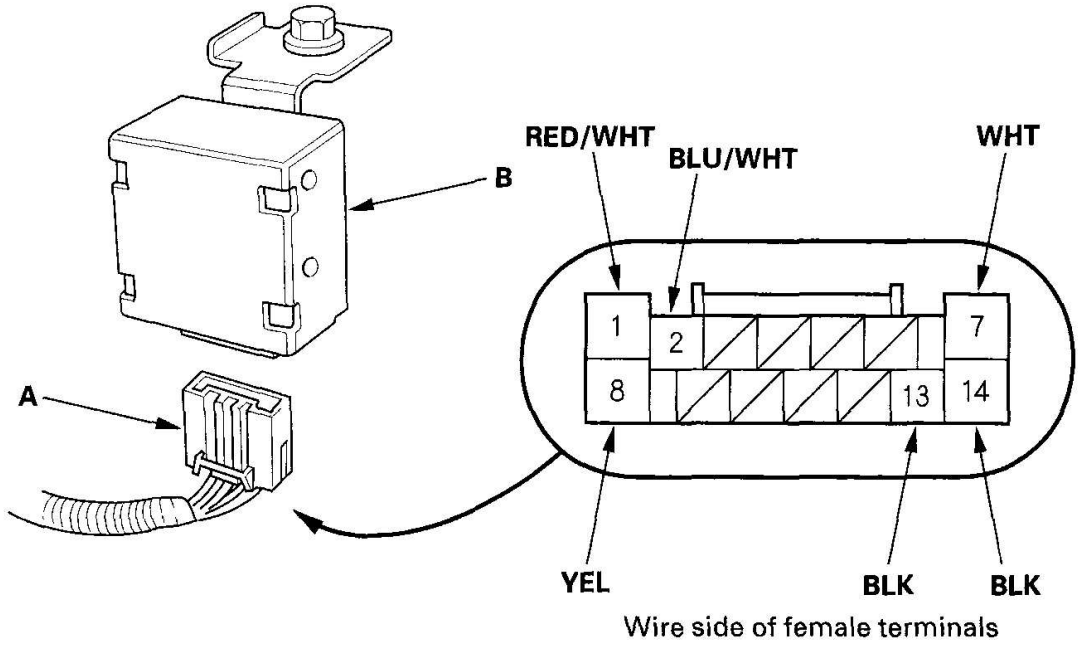


Fig. 31: Disconnecting 14P Connector From Daytime Running Lights Control Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Inspect the connector and socket terminals to be sure they are all making good

contact.

- If the terminals are bent, loose or corroded, repair them as necessary and recheck the system.
- If the terminals look OK, go to step 4.

4. Reconnect the connector to the daytime running lights control unit, and make these input tests at the connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

RUNNING LIGHTS CONTROL UNIT SPECIFICATION

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
13	BLK	Under all conditions	Check for voltage to ground. There should be less than 1 V.	• Poor ground (G501, G601) • An open in the wire
14				
8	YEL	Ignition switch ON (II).	Check for voltage to ground. There should be battery voltage.	• Blown No. 21 (7.5 A) fuse in the driver's under-dash fuse/relay box • An open in the wire
				• Blown No. 19 (40 A) fuse in the under-hood

1	RED/WHT	Under all conditions	Check for voltage to ground There should be battery voltage.	fuse/relay box • Blown No. 3 (10 A) fuse in the driver's under-dash fuse/relay box • An Open in the wire

5. Disconnect the 14P connector from the daytime running lights control unit, and make these input tests at the connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all input tests prove OK, the control unit must be faulty: replace it.

CONTROL UNIT SPECIFICATION

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
2	BLU/WHT	Under all conditions	Check for continuity between the No. 2 terminal and under-hood fuse/relay box connector H (14P) No. 3 terminal: There should be continuity.	An open in the wire

7	WHT	Under all conditions	Check for continuity to ground: There should be continuity.	• Faulty under-hood fuse/relay box • A open in the wire

BRAKE PEDAL POSITION SWITCH TEST

1. Disconnect the 4P connector (A) from the brake pedal position switch (B).

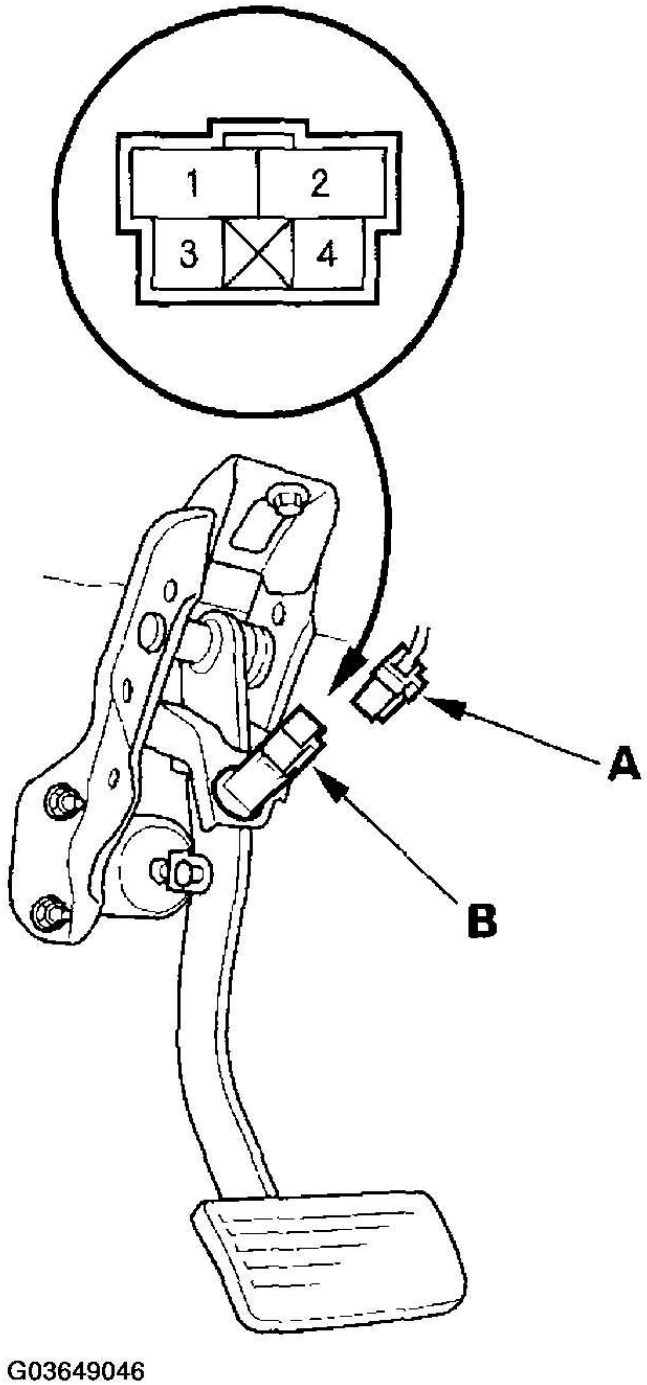


Fig. 32: Disconnecting 4P Connector From Brake Pedal Position Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check for continuity between the No. 1 and No. 2 terminals.
   - There should be continuity when the brake pedal is pressed.
   - There should be no continuity when the brake pedal is released.
3. Check for continuity between the No. 3 and No. 4 terminals (with cruise control).
   - There should be no continuity when the brake pedal is pressed.
   - There should be continuity when the brake pedal is released.
4. If necessary, adjust or replace the switch, or adjust the pedal height (see **PEDAL HEIGHT**).

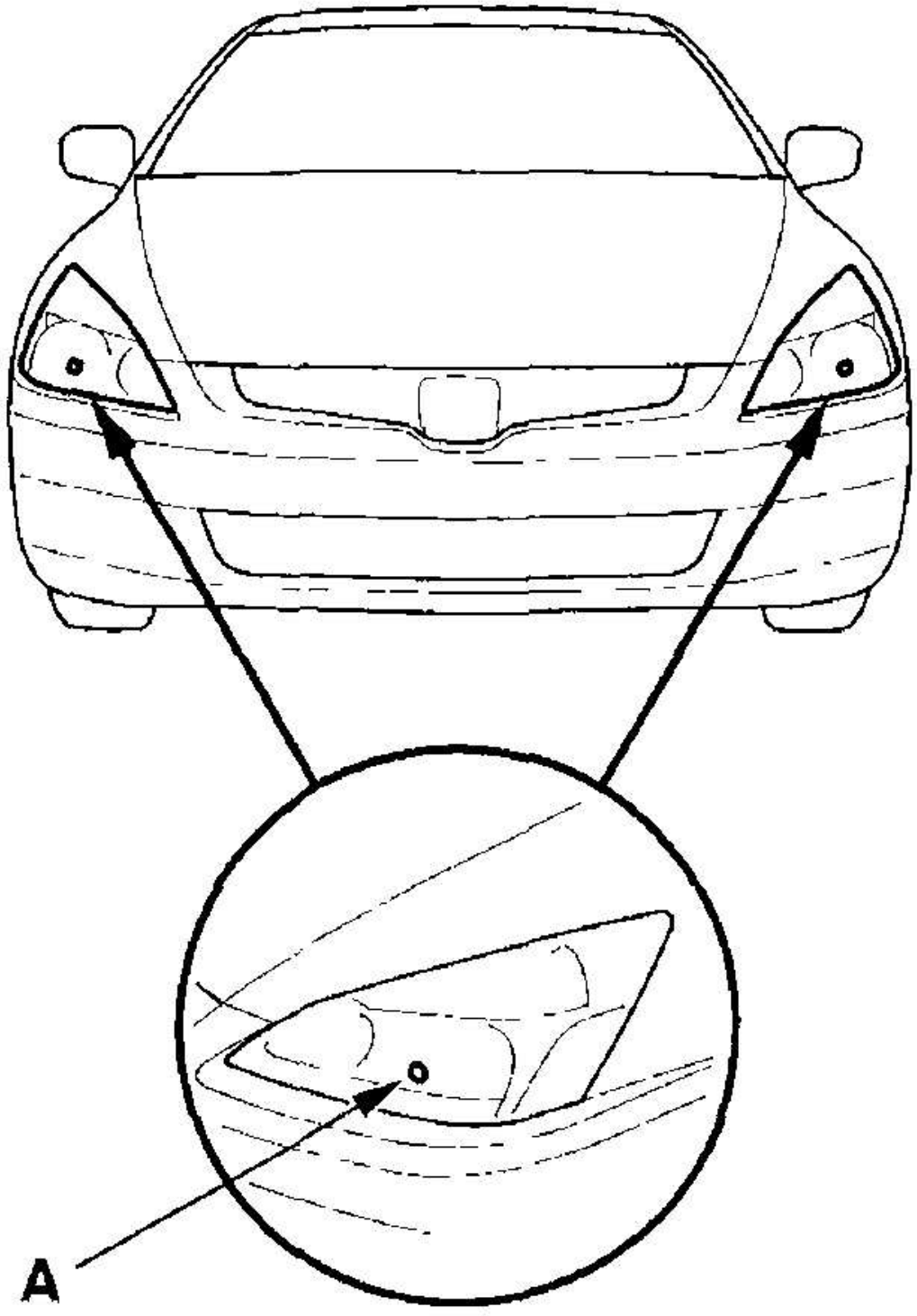
HEADLIGHT ADJUSTMENT

CAUTION: Headlights become very hot during use; do not touch them or any attaching hardware immediately after they have been turned off.

Before adjusting the headlights:

- Park the vehicle on a level surface.
- Make sure the tire pressures are correct.
- The driver or someone who weighs the same should sit in the driver's seat.

1. Clean the outer lens so that you can see the center (A) of the headlights.



G03649047

Fig. 33: Cleaning Outer Lens Of Center Of Headlights
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Park the vehicle in front of a wall or a screen (A).

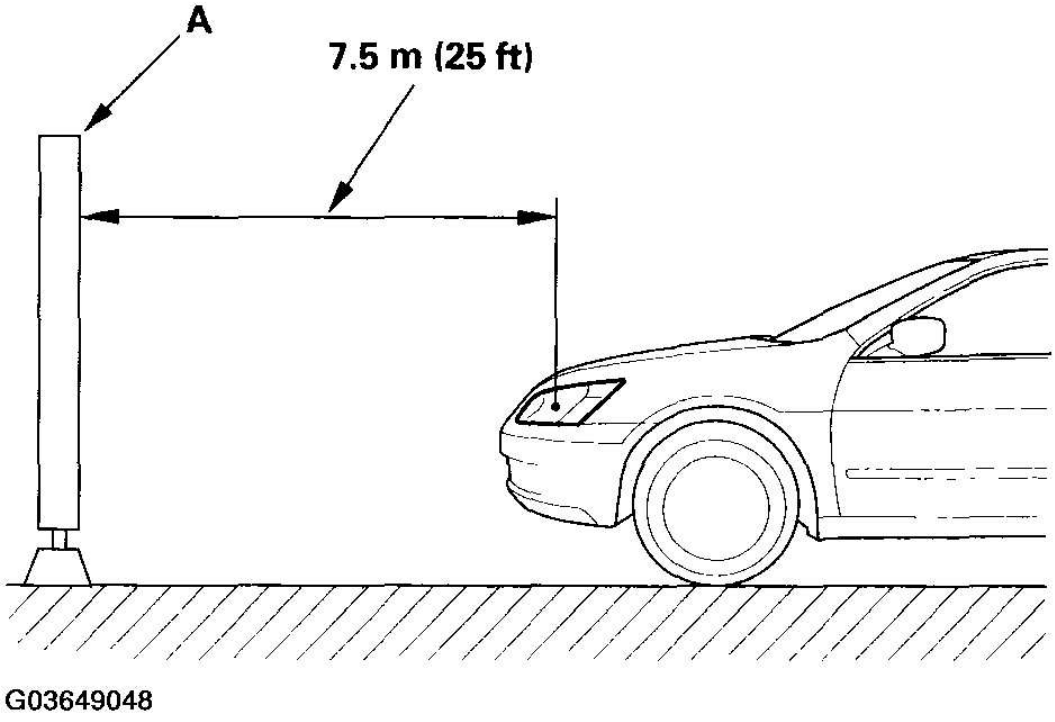


Fig. 34: Parking Vehicle In Front Of Wall Or Screen
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the low beams on.
4. Determine if the headlights are aimed properly.

Vertical adjustment:

Measure the height of the headlights (A). The lights should reflect 52 mm (2.1 in.) below headlight height (B).

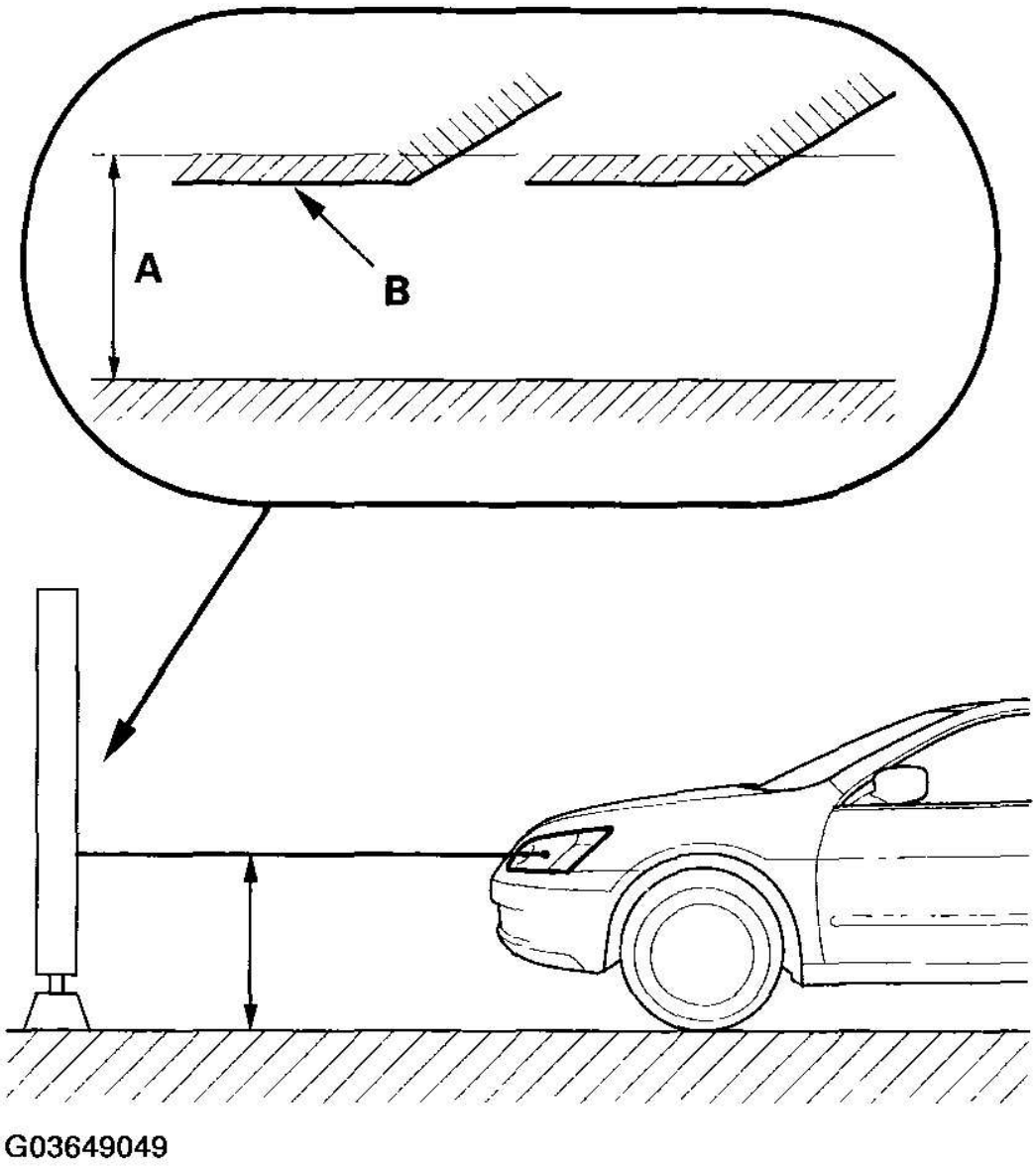


Fig. 35: Measuring Height Of Headlights Lights
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If necessary, open the hood and adjust the headlights to local requirements by turning the vertical adjuster.

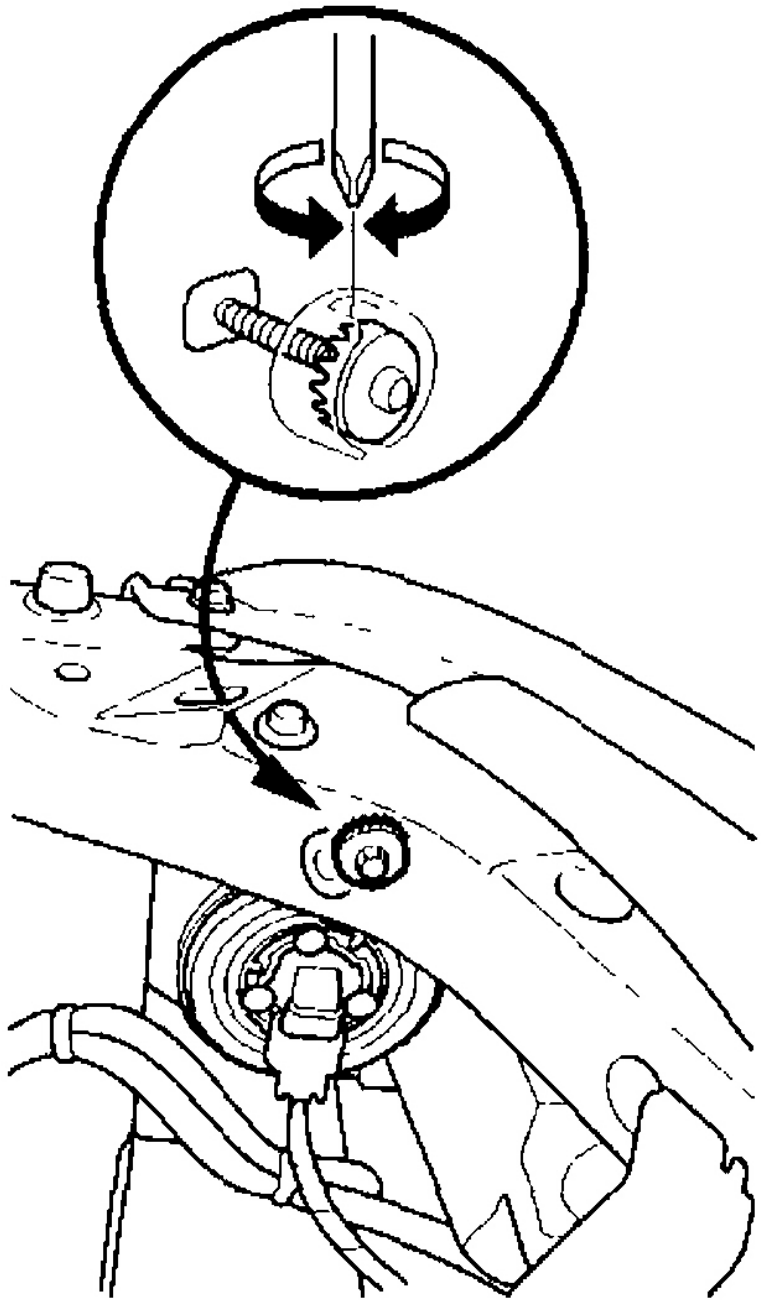


Fig. 36: Opening Hood And Adjusting Headlights Turning Vertical Adjuster
Courtesy of AMERICAN HONDA MOTOR CO., INC.

HEADLIGHT REPLACEMENT

1. Remove the front bumper.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
2. Remove the connectors (A) from the headlight assembly (B).

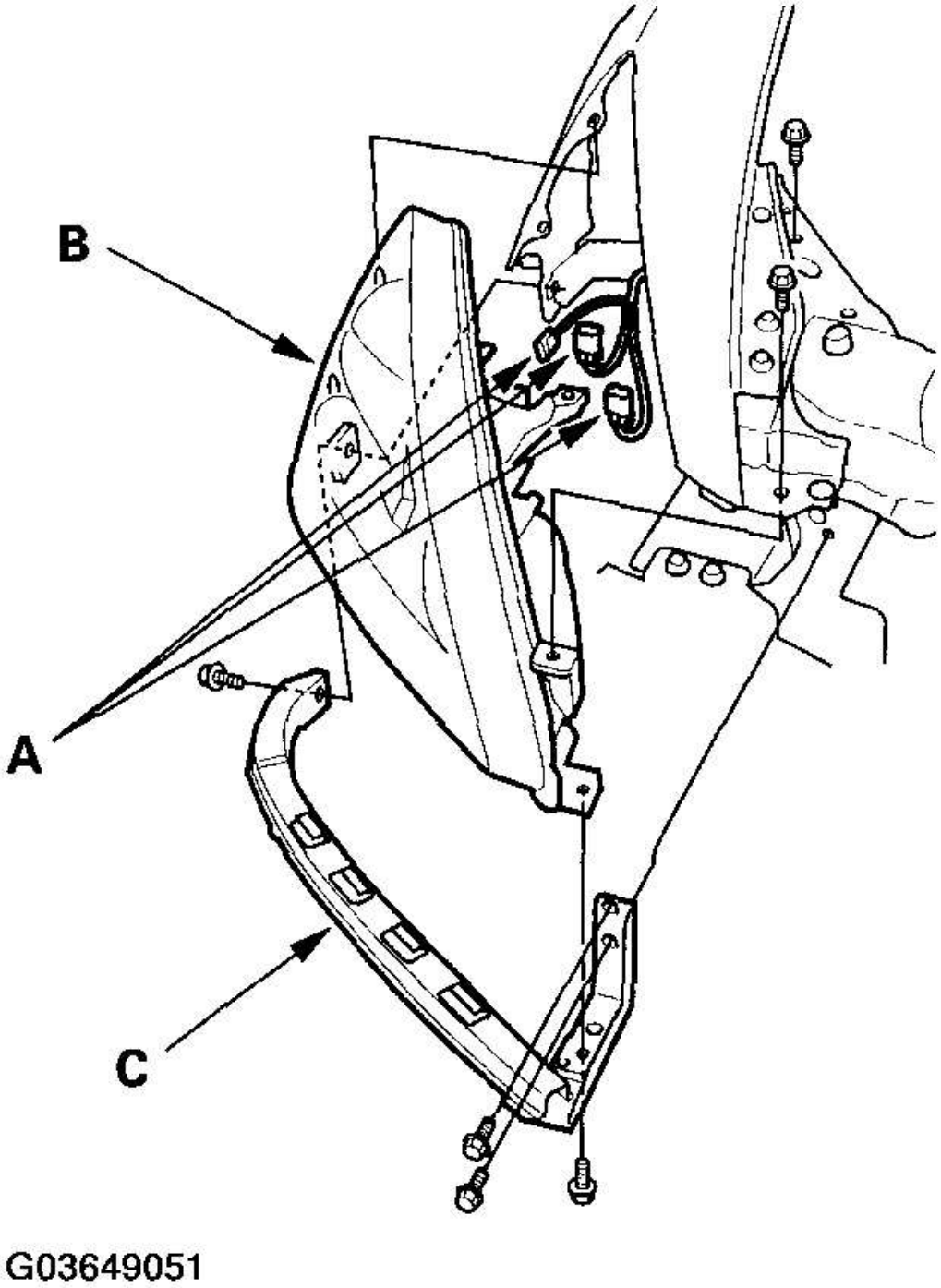


Fig. 37: Removing Connectors From Headlight Assembly

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the five mounting bolts and the harness clip, then remove the headlight.
4. Remove the bolt and the corner upper beam (C) from the headlight.
5. Install the headlight in the reverse order of removal.
6. After replacement, adjust the headlight to local requirement.

BULB REPLACEMENT

HEADLIGHT

1. For low beam headlight bulb, remove the inner fender (see **FRONT INNER FENDER REPLACEMENT**).
2. Disconnect the 2P connectors (A) from the headlight.

Headlight (high beam): 60 W

Headlight (low beam): 51 W

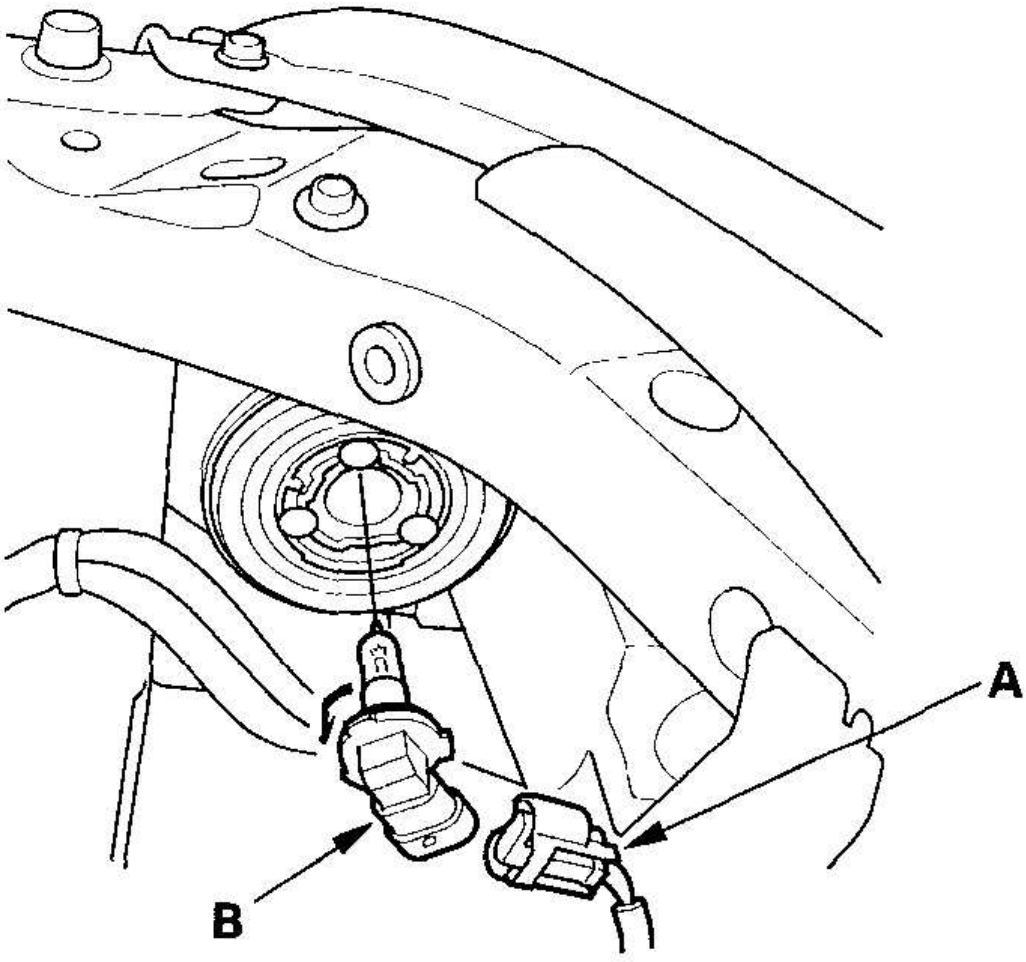


Fig. 38: Disconnecting 2P Connectors From Headlight (High Beam)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

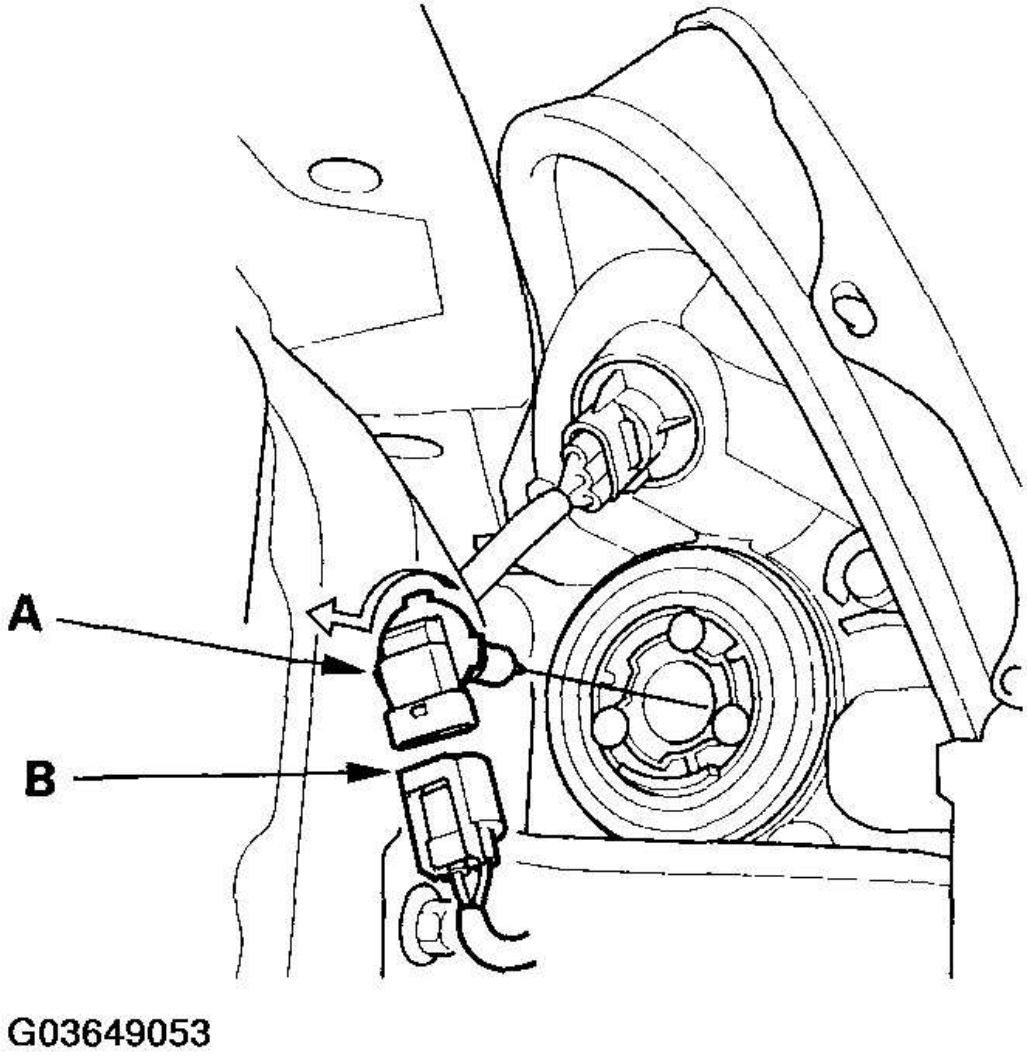


Fig. 39: Disconnecting 2P Connectors From Headlight (Low Beam)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the bulb socket (B) 45° counterclockwise to remove the bulb.
4. Install a new bulb in the reverse order of removal.

FRONT TURN SIGNAL/SIDE MARKER LIGHTS

1. Remove the inner fender (see **FRONT INNER FENDER**

REPLACEMENT).

2. Disconnect the 3P connector (A) from the front turn signal/side marker light.

Front Turn Signal/Side Marker Lights: 21/5 W

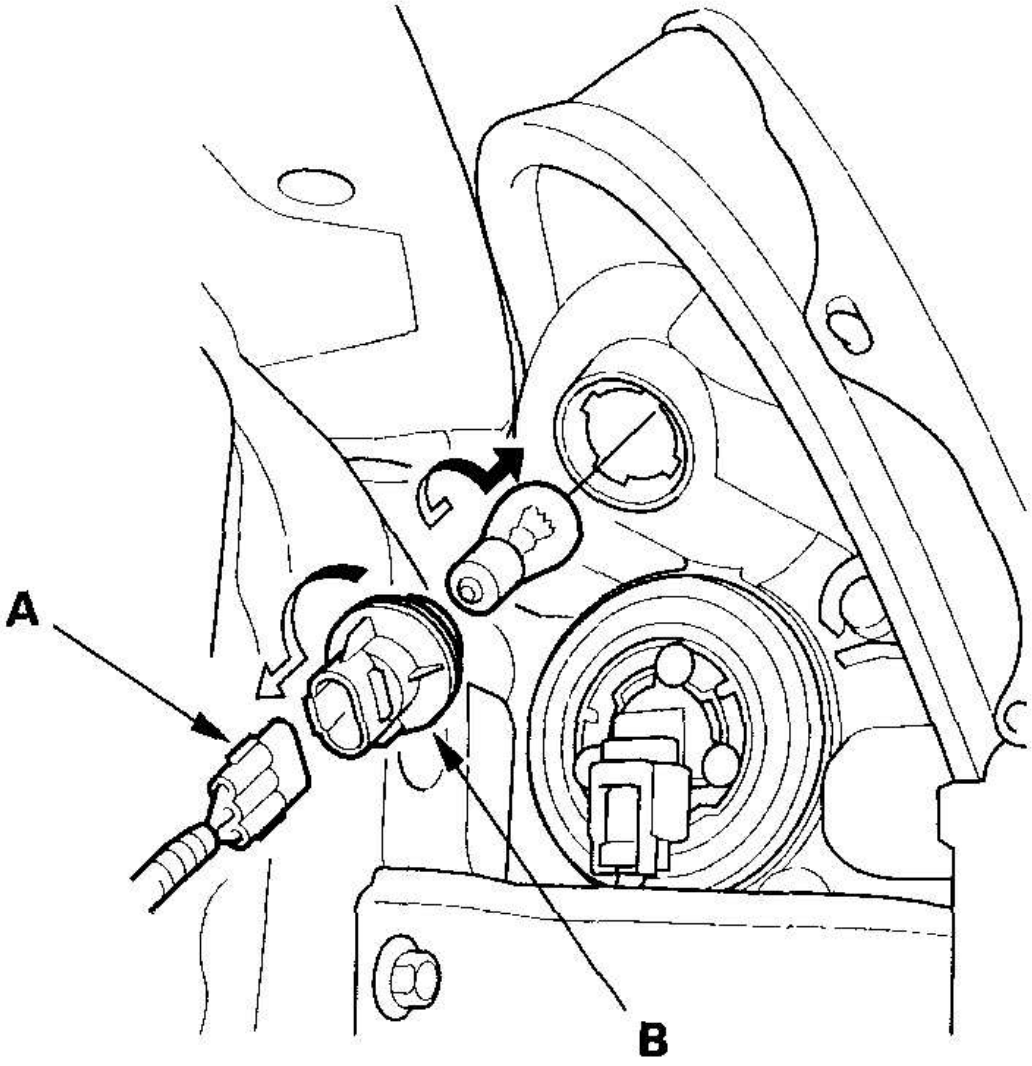


Fig. 40: Disconnecting 3P Connector From Front Turn Signal/Side Marker Light

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the bulb socket (B) 45° counterclockwise to remove the bulb.
4. Install a new bulb in the reverse order of removal.

TAILLIGHT REPLACEMENT

TAILLIGHT (2-DOOR)

1. Remove the rear bumper (see **REAR BUMPER REMOVAL/INSTALLATION**).
2. Open the trunk lid and remove the trunk side trim panel (see **TRIM REMOVAL/INSTALLATION - TRUNK AREA**).
3. Disconnect the connectors (A) from the taillights (B).

Brake/Taillight ('03-05 models): 21/5 W

Back-up Light ('03-05 models): 16 W

Brake/Taillight ('06-07 models): LED

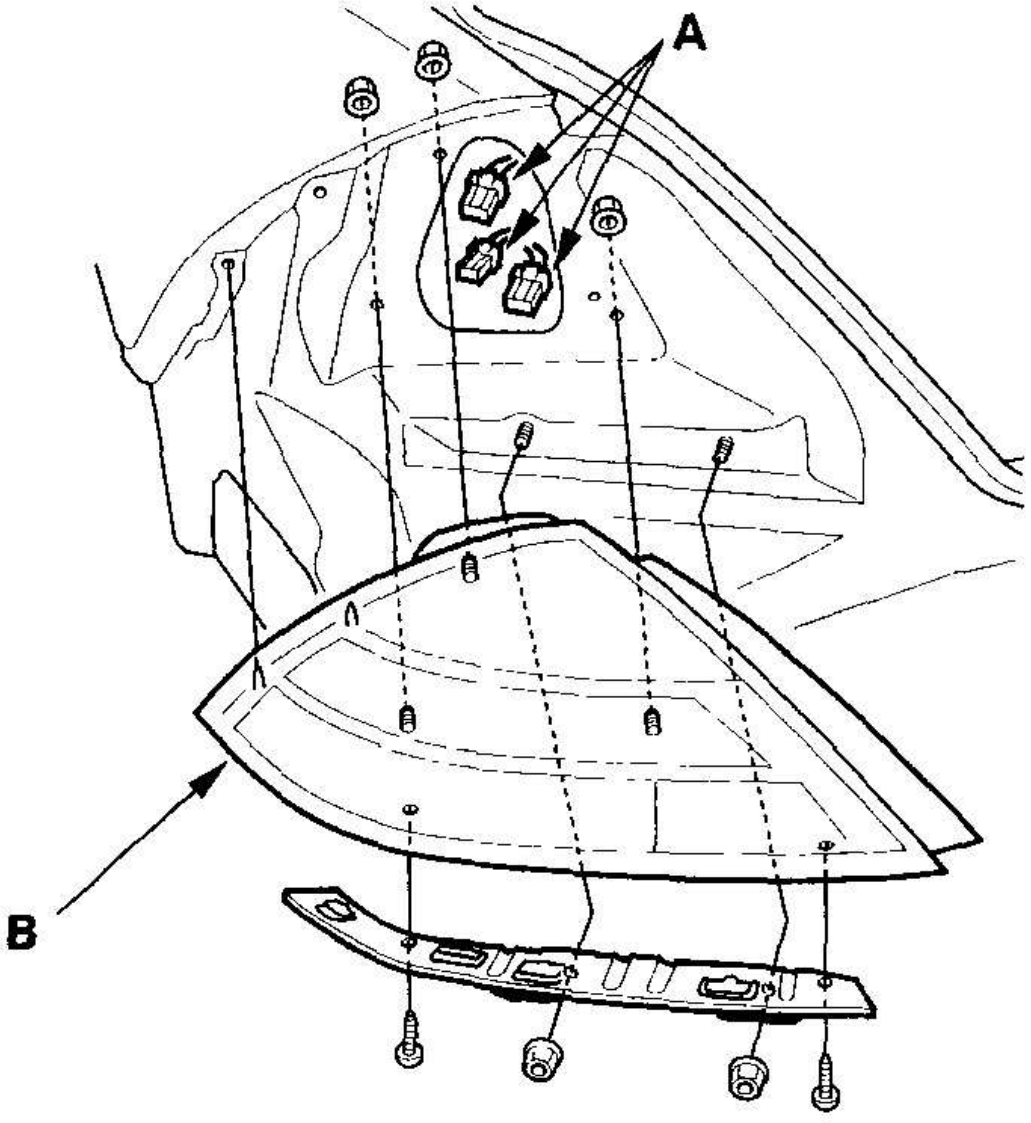


Fig. 41: Disconnecting Connectors From Taillights ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

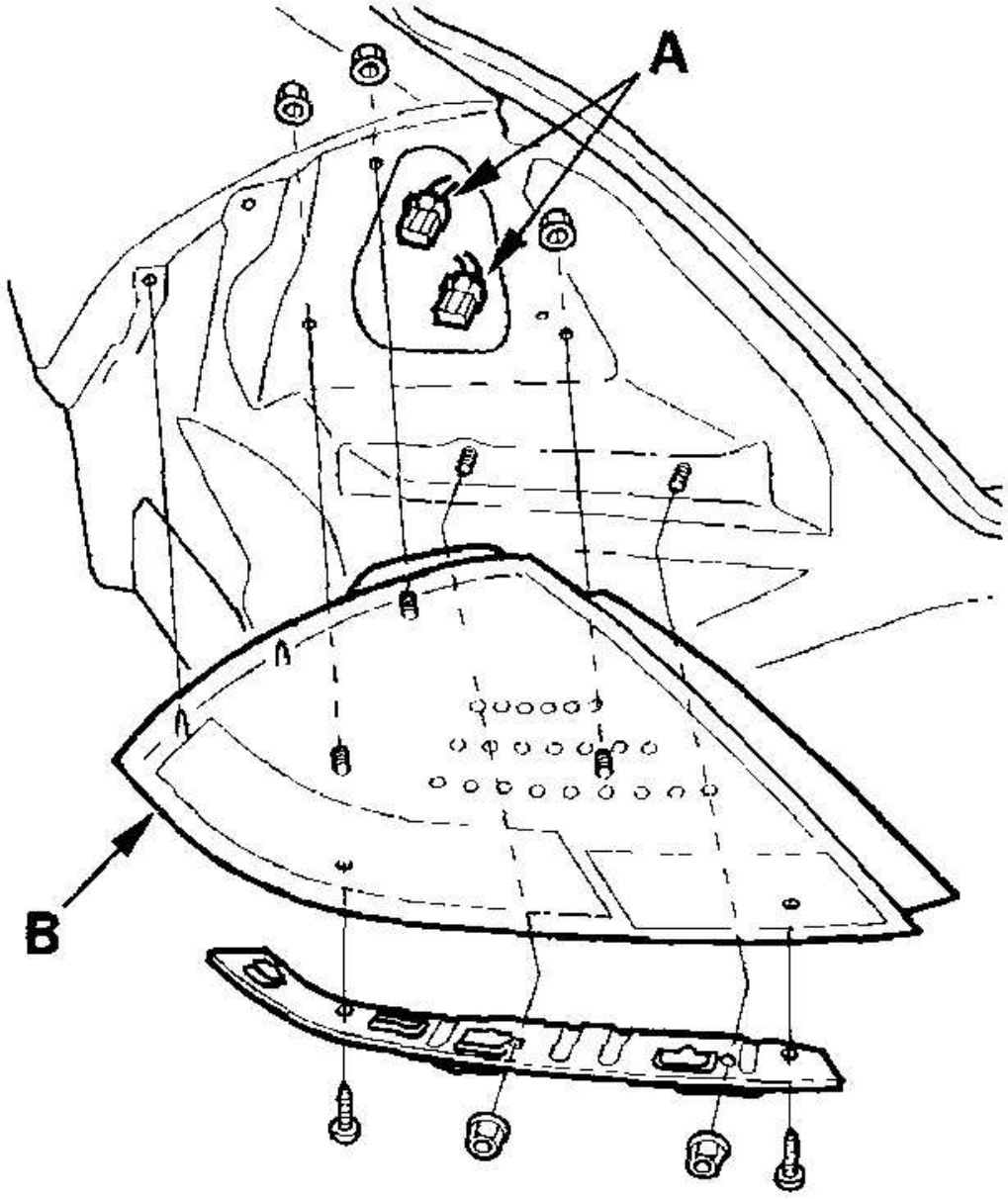


Fig. 42: Disconnecting Connectors From Taillights ('06-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the mounting nuts and screws, then remove the taillight.
5. Turn the turn signal light bulb socket 45° counterclockwise to remove the bulb.

Turn Signal Light: 21 W

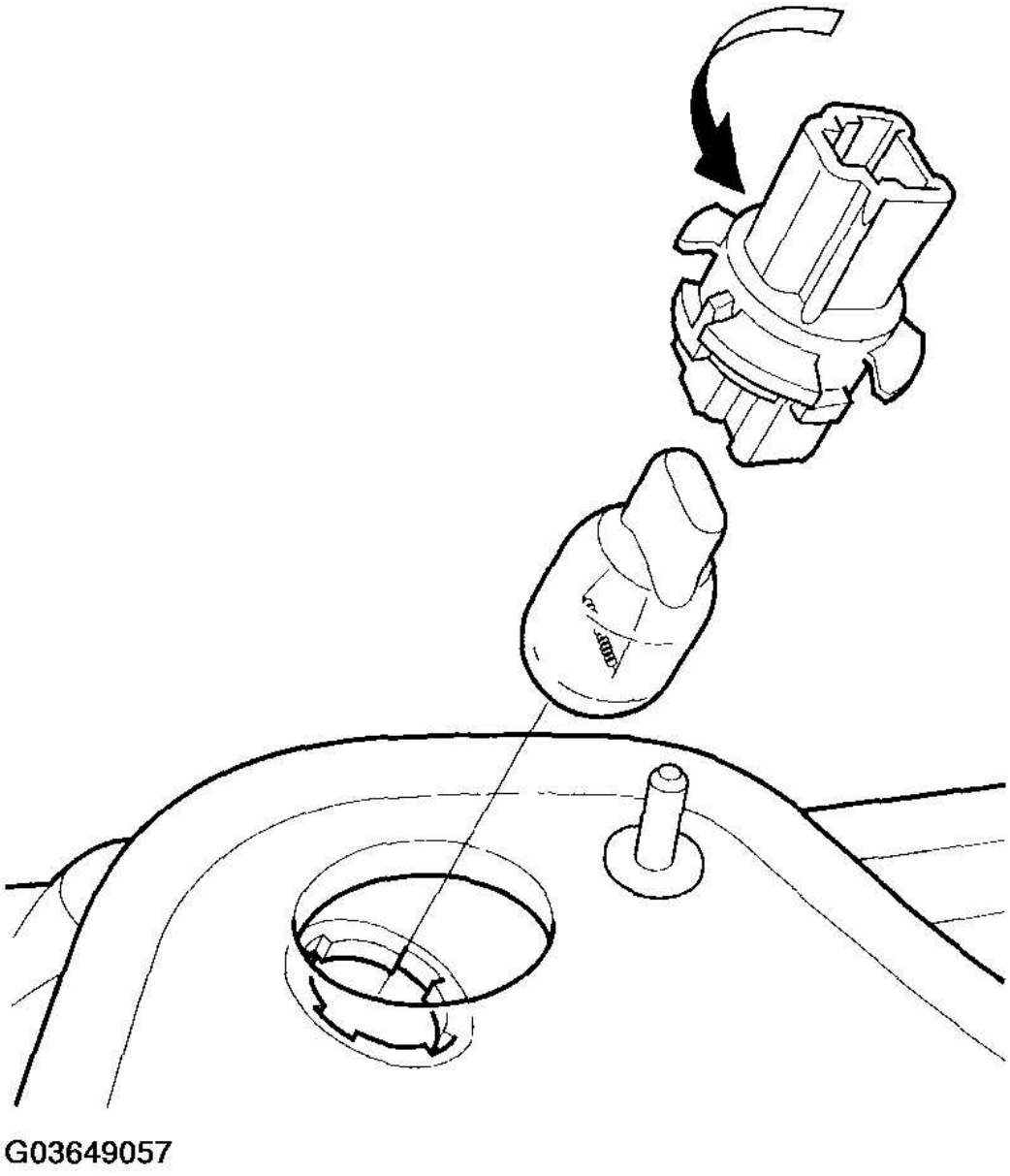


Fig. 43: Turning Signal Light Bulb Socket Counterclockwise

Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Inspect the gasket; replace it if it is distorted or stays compressed.
7. Install the taillight in the reverse order of removal and tighten the nuts to 5 N.m (0.5 kgf.m, 4 ldf.ft).
8. After installing the taillight, run water over it to make sure it does not leak.

TAILLIGHT (4-DOOR)

1. Remove the rear bumper (see **4-DOOR**).
2. Open the trunk lid and remove the trunk side trim panel (see **4-DOOR ('03-05 MODELS)**).
3. Disconnect the connectors (A) from the taillights (B).

Brake/Taillight ('03-05 models): 21/5 W

Brake/Taillight ('06 model): LED

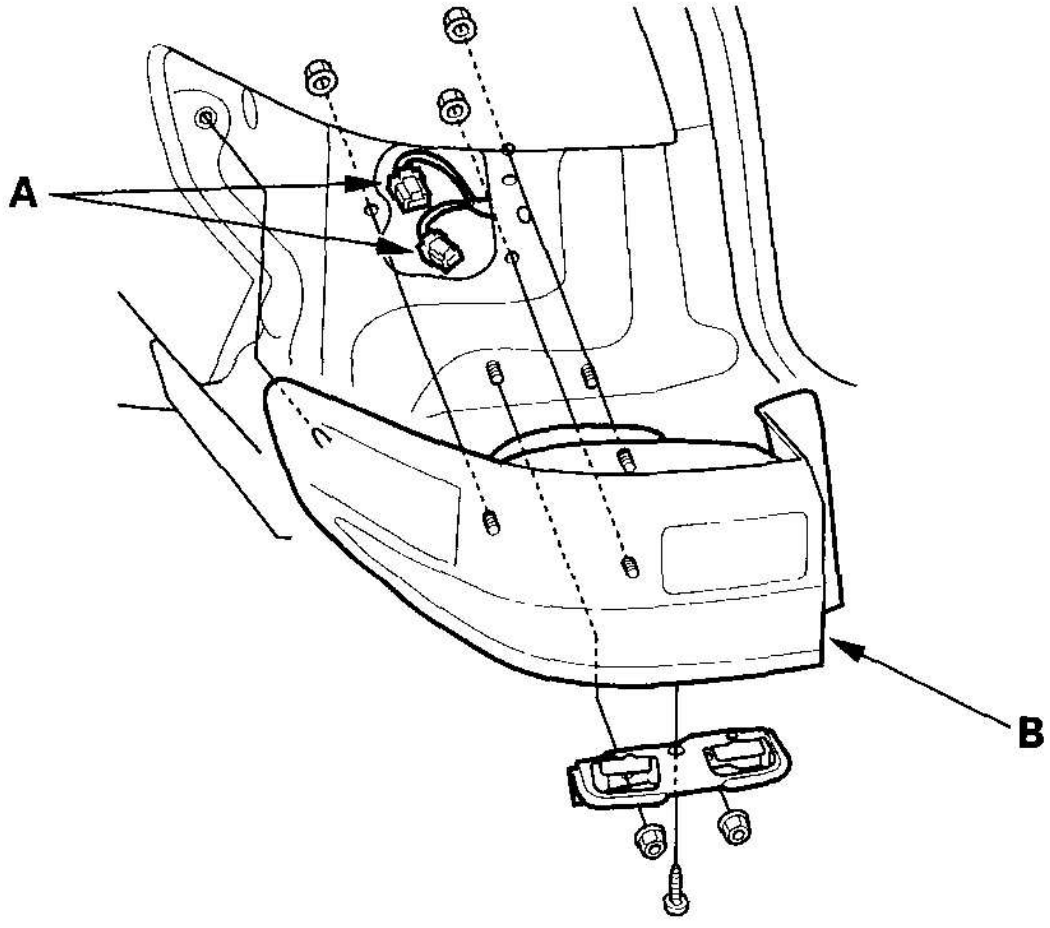


Fig. 44: Disconnecting Connectors From Taillights ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

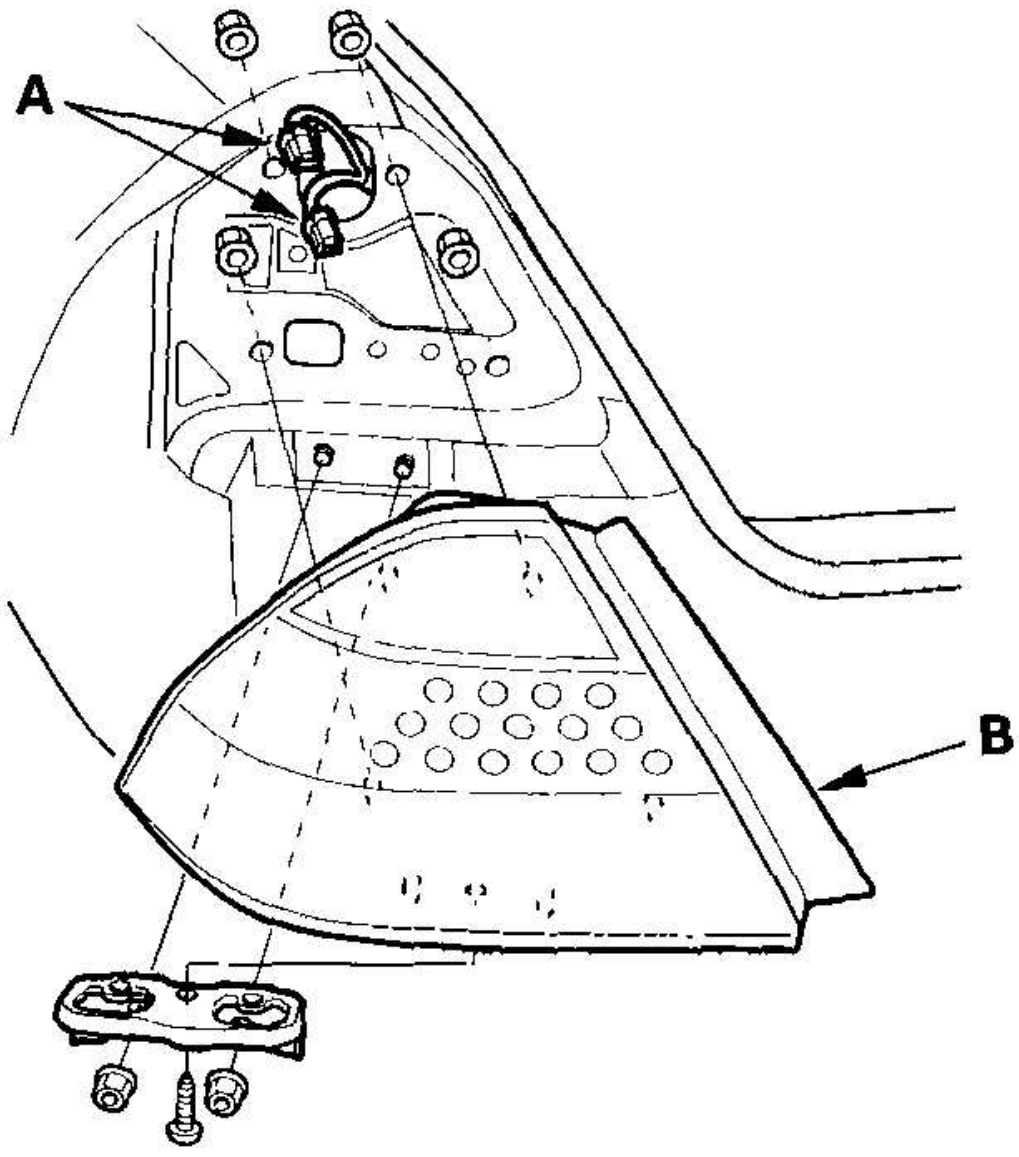


Fig. 45: Disconnecting Connectors From Taillights ('06-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the mounting nuts and screws, then remove the taillight.
5. Turn the turn signal light bulb socket 45° counterclockwise to remove the bulb.

Turn Signal Light: 21 W

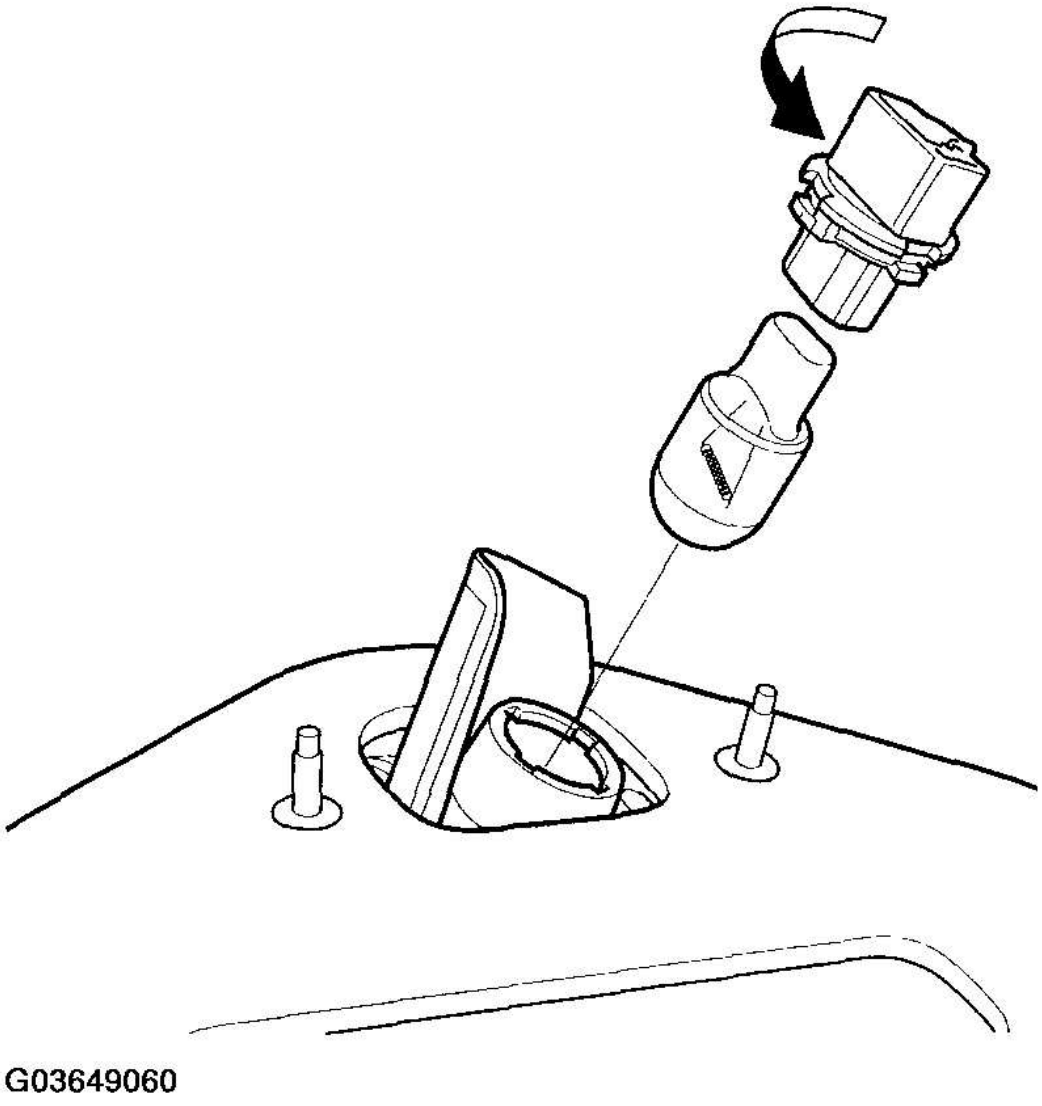


Fig. 46: Turning Signal Light Bulb Socket Counterclockwise
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Inspect the gasket; replace it if it is distorted or stays compressed.
7. Install the taillight in the reverse order of removal and tighten the nuts to 5 N.m (0.5 kgf.m, 4 ldf.ft).

8. After installing the taillight, run water over it to make sure it does not leak.

INNER TAILLIGHT (4-DOOR) ('03-05 MODELS)

1. Open the trunk lid and disconnect the connectors (A) from the trunk lid.

   Taillight: 5 W

   Back-up Light: 21 W

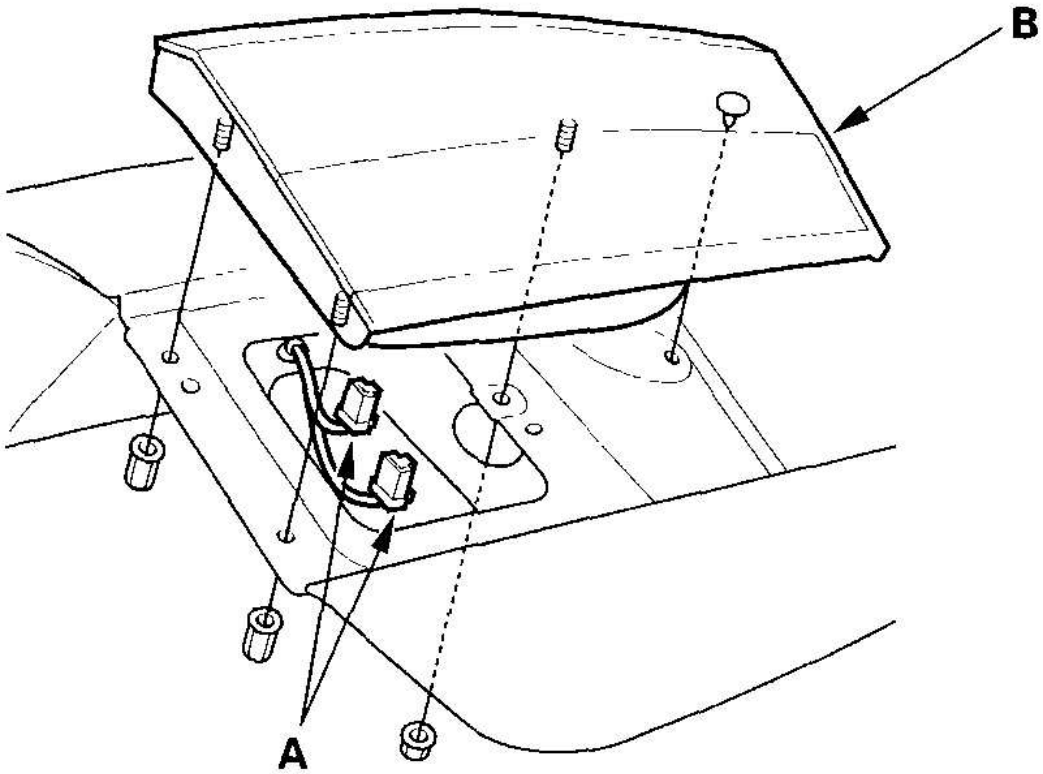


Fig. 47: Opening Trunk Lid And Disconnecting Connectors From Trunk Lid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the three nuts and the inner taillight (B).

3. Turn the bulb socket 45° counterclockwise to remove the bulb.
4. Inspect the gasket; replace it. If it is distorted or stays compressed.
5. Install the taillight and tighten the nuts to 5 N.m (0.5 kgf.m, 4 lbf.ft).
6. After installing the taillight, run water over it to make sure it does not leak.

LICENSE PLATE LIGHT REPLACEMENT

1. 2-door, 4-door ('06-07 models): Remove the rear license plate trim (see **'03-07 MODELS 2-DOOR**).
2. Pull the license plate light assembly out, and disconnect the 2P connector (A) from the light.

   License Plate Light: 5 W

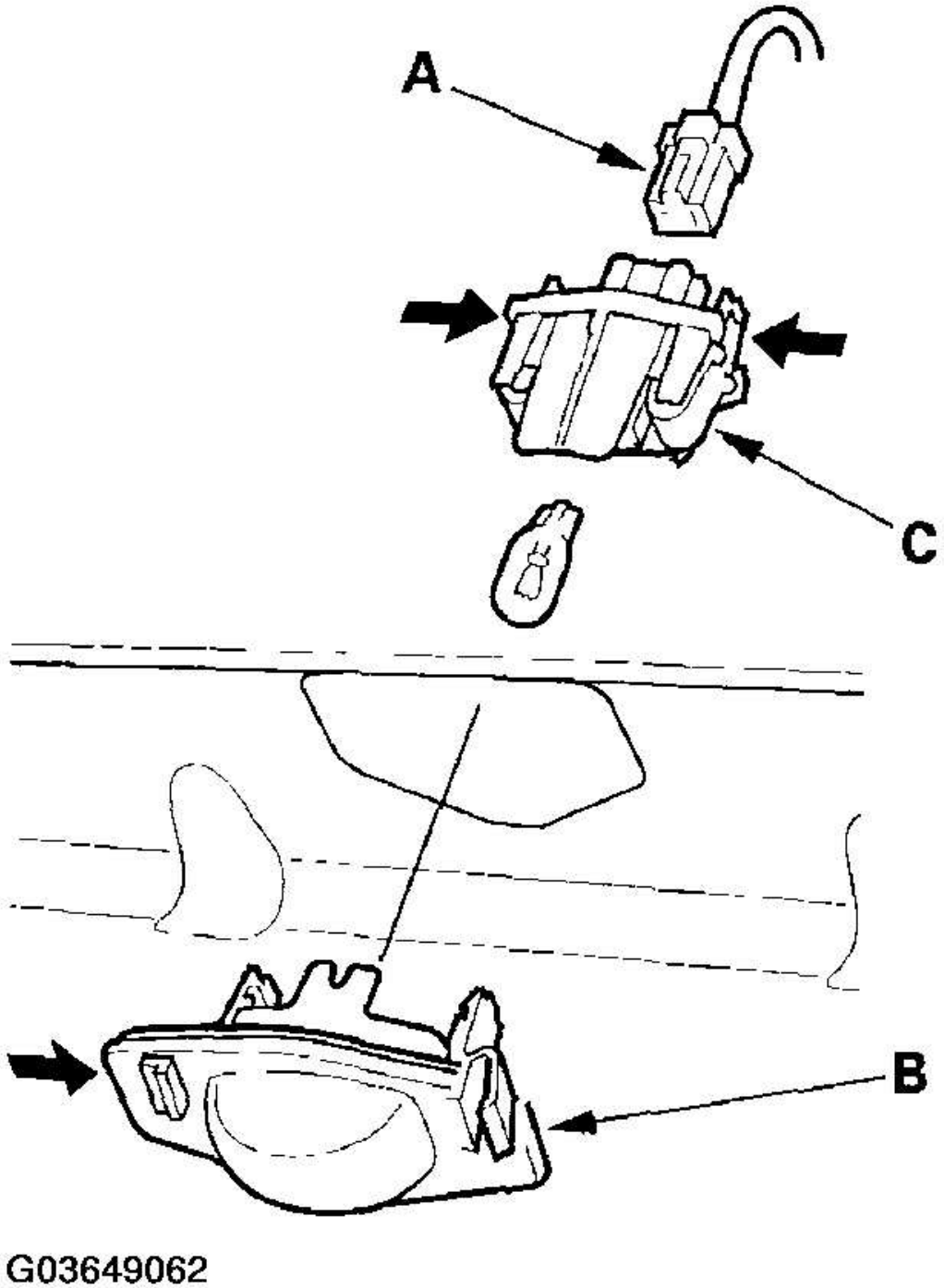


Fig. 48: Disconnecting 2P Connector From Light (4-Door - '03-05 Models)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

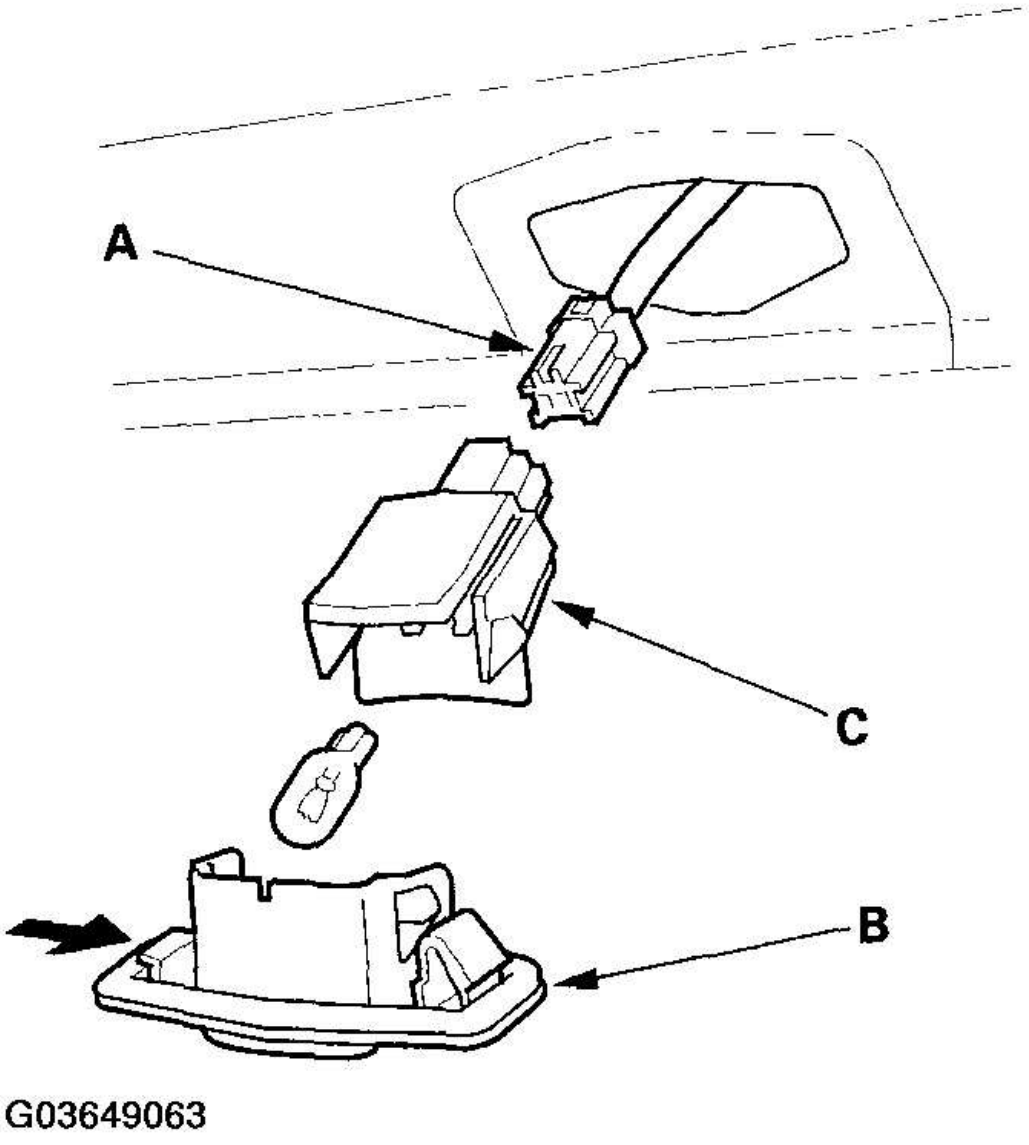


Fig. 49: Disconnecting 2P Connector From Light (2-Door, 4-Door - '06-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Separate the lens (B) and housing (C), then remove the bulb.

4. Install the light in the reverse order of removal.

TAILLIGHT/BRAKE LIGHT LED REPLACEMENT

2-door ('06-07 models)

1. Remove the taillight (see **TAILLIGHT REPLACEMENT**).
2. Remove the gasket (A) from the taillight.

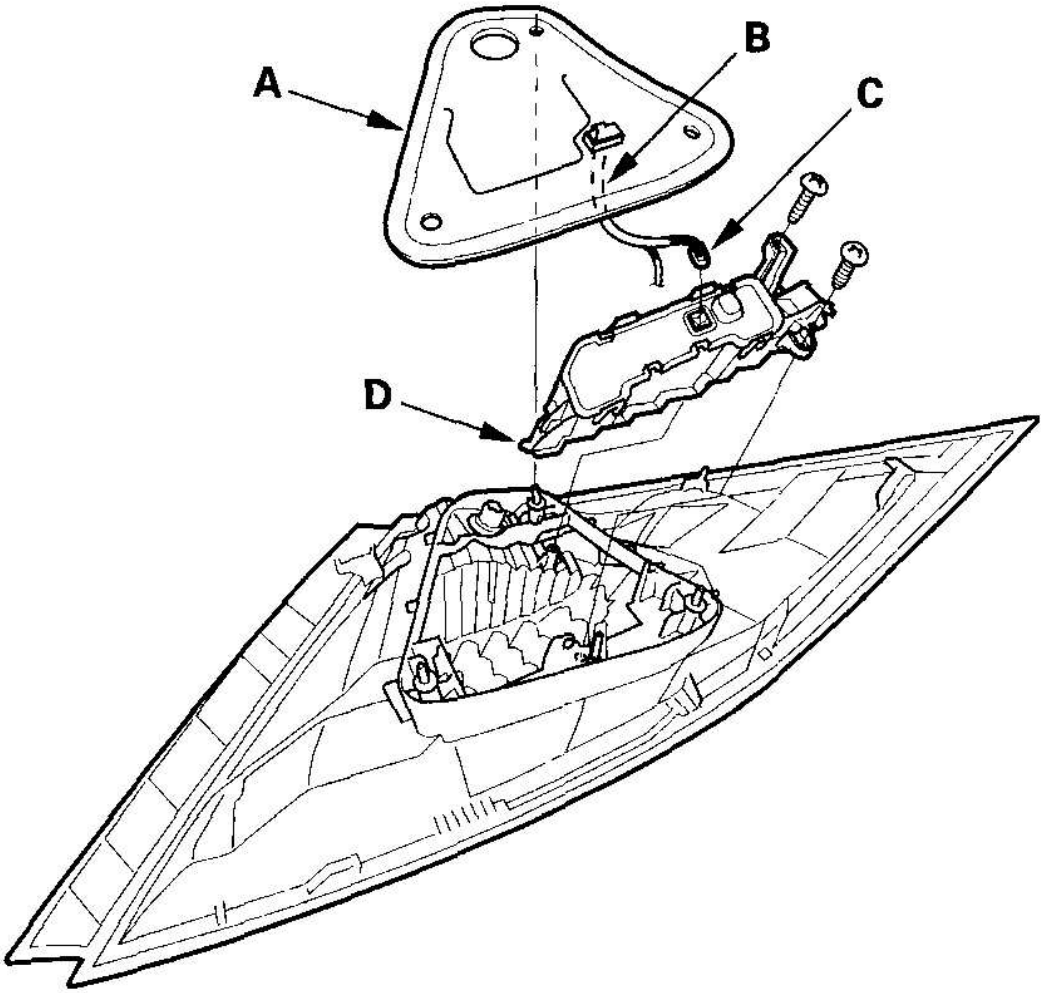


Fig. 50: Removing Gasket From Taillight

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Release and uncoil the taillight harness (B) from the taillight housing. Note the installation of the harness.
4. Remove the four screws. Carefully disconnect the connector (C) from the taillight/brake light LED (D).
5. Inspect the gaskets. If the gaskets are distorted or compressed, replace them.
6. Install the new LED in the reverse order of removal.

4-DOOR ('06-07 MODELS)

1. Remove the taillight (see **TAILLIGHT (4-DOOR)**).
2. Remove the gasket (A) from the taillight.

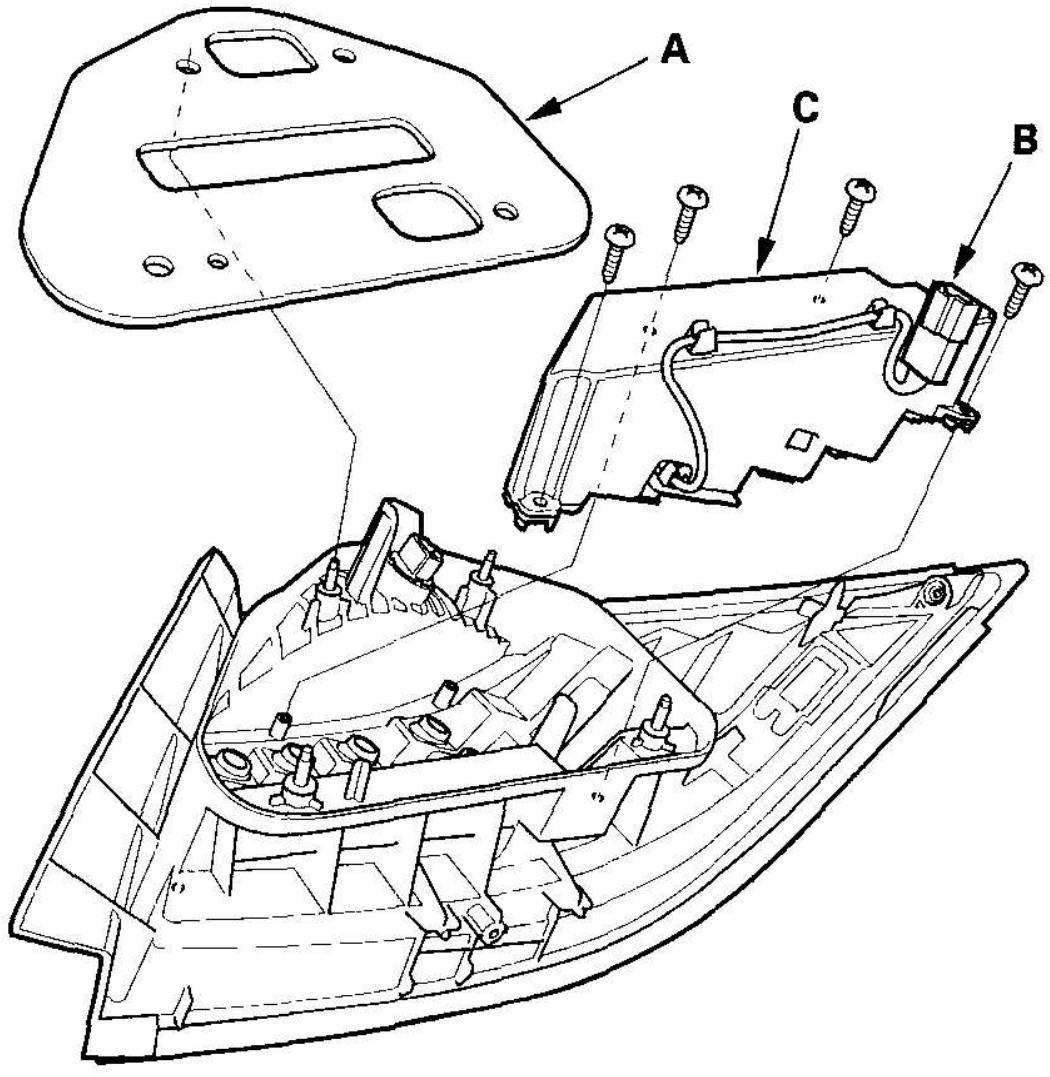


Fig. 51: Removing Gasket From Taillight
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the four screws. Carefully disconnect the connector (B) from the taillight/brake light LED (C).
4. Inspect the gaskets. If the gaskets are distorted or compressed, replace them.
5. Install the new LED in the reverse order of removal.

BACK-UP LIGHT BULB REPLACEMENT

4-DOOR ('06-07 MODELS)

1. Open the trunk lid and remove the trunk lid trim (see **4-DOOR**).
2. Disconnect the 2P connector from the back-up light.
3. Turn the bulb socket (A) 45° counterclockwise, then remove the bulb (B).

Back-up Light: 21 CP

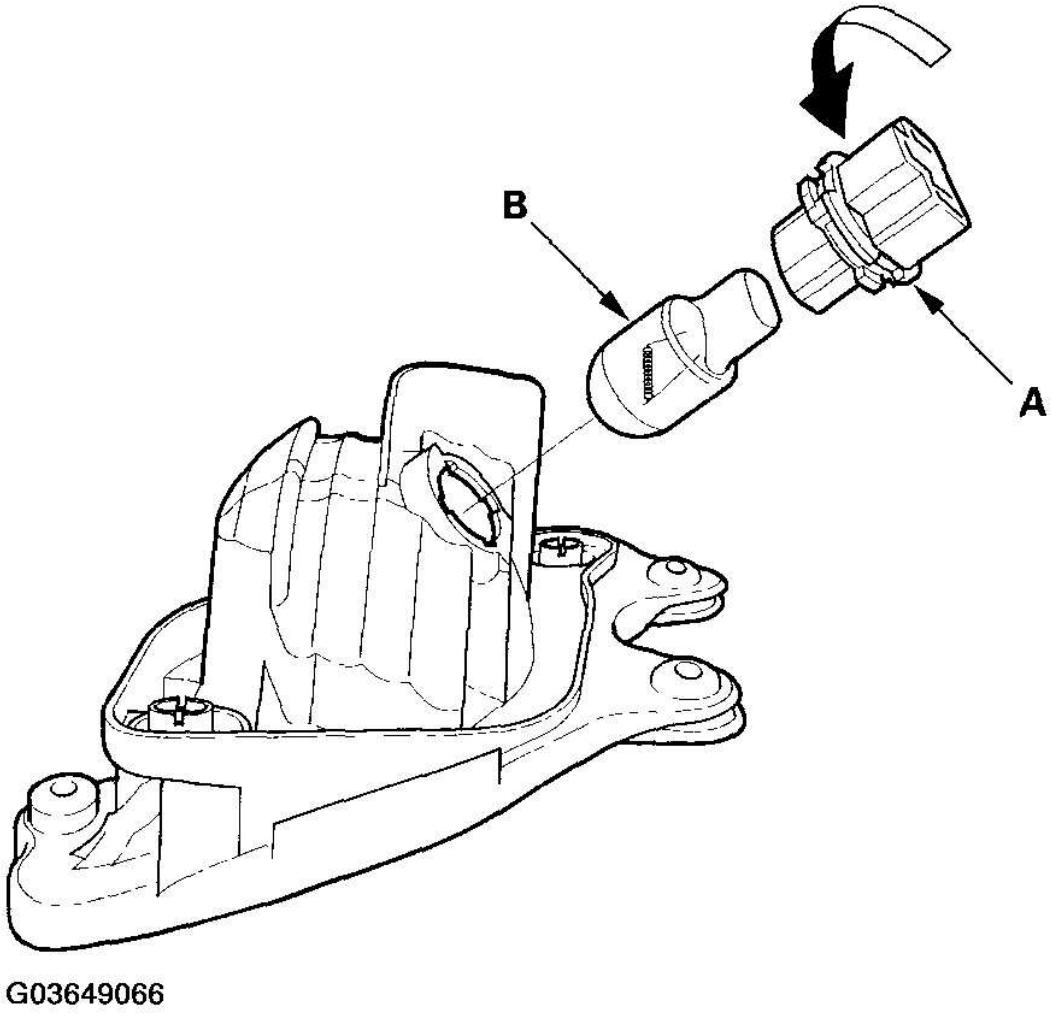


Fig. 52: Turning Bulb Socket Counterclockwise

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the bulb in the reverse order of removal.

BACK-UP LIGHT REPLACEMENT

4-DOOR ('06-07 MODELS)

1. Remove the rear license trim (see **REAR LICENSE TRIM REPLACEMENT**).
2. Remove the four screws, then remove the back-up lights (A).

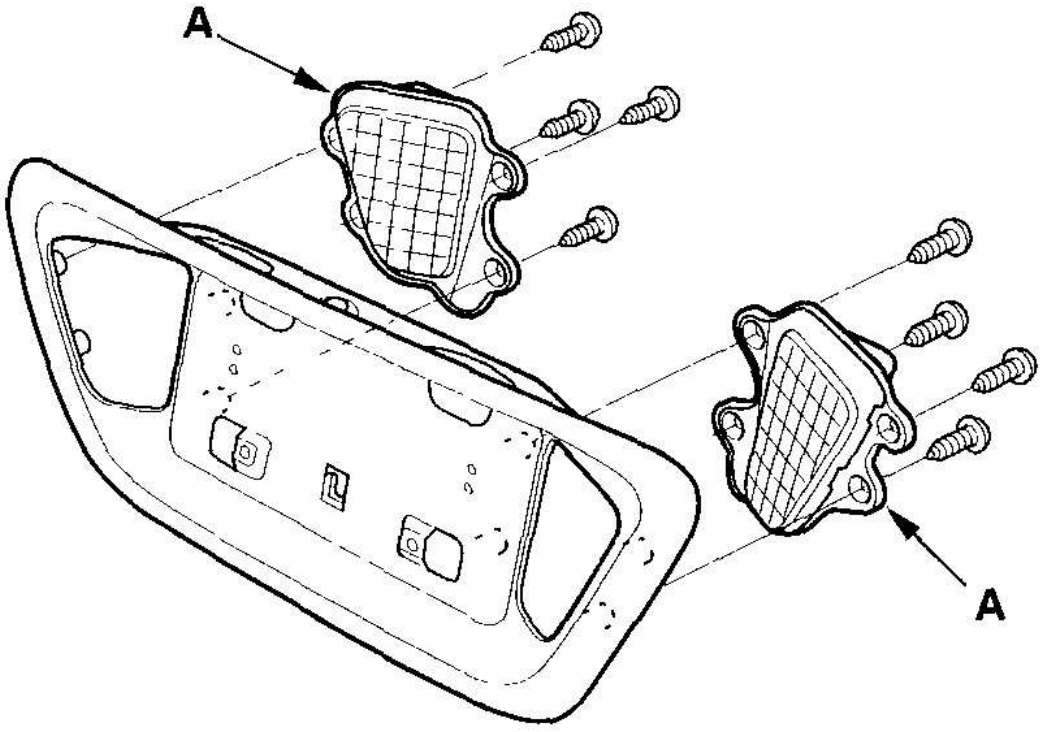


Fig. 53: Removing Back-Up Lights
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the back-up lights in the reverse order of removal.

HIGH MOUNT BRAKE LIGHT REPLACEMENT

BULB REPLACEMENT ('03-05 MODELS)

1. Open the trunk lid and disconnect the 2P connector (A) from the bulb socket (B).

   High Mount Brake Light: 21 W

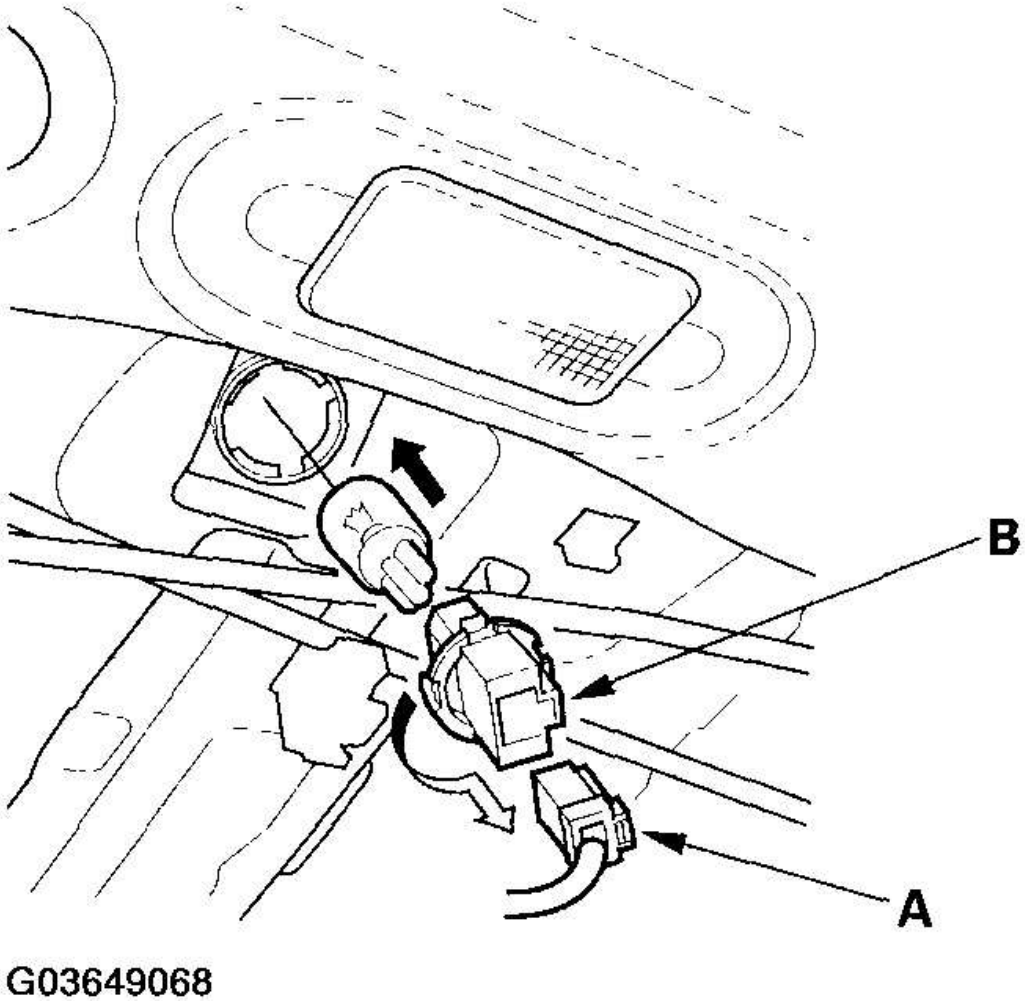


Fig. 54: Disconnecting 2P Connector From Bulb Socket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Turn the bulb socket (B) 45° counterclockwise to remove the bulb.

HOUSING REPLACEMENT ('03-05 MODELS)

1. Remove the rear shelf.
   - 2 door (see **2-DOOR**)
   - 4 door (see **4-DOOR**)
2. Remove the high mount brake light housing (A) from the cover (B).

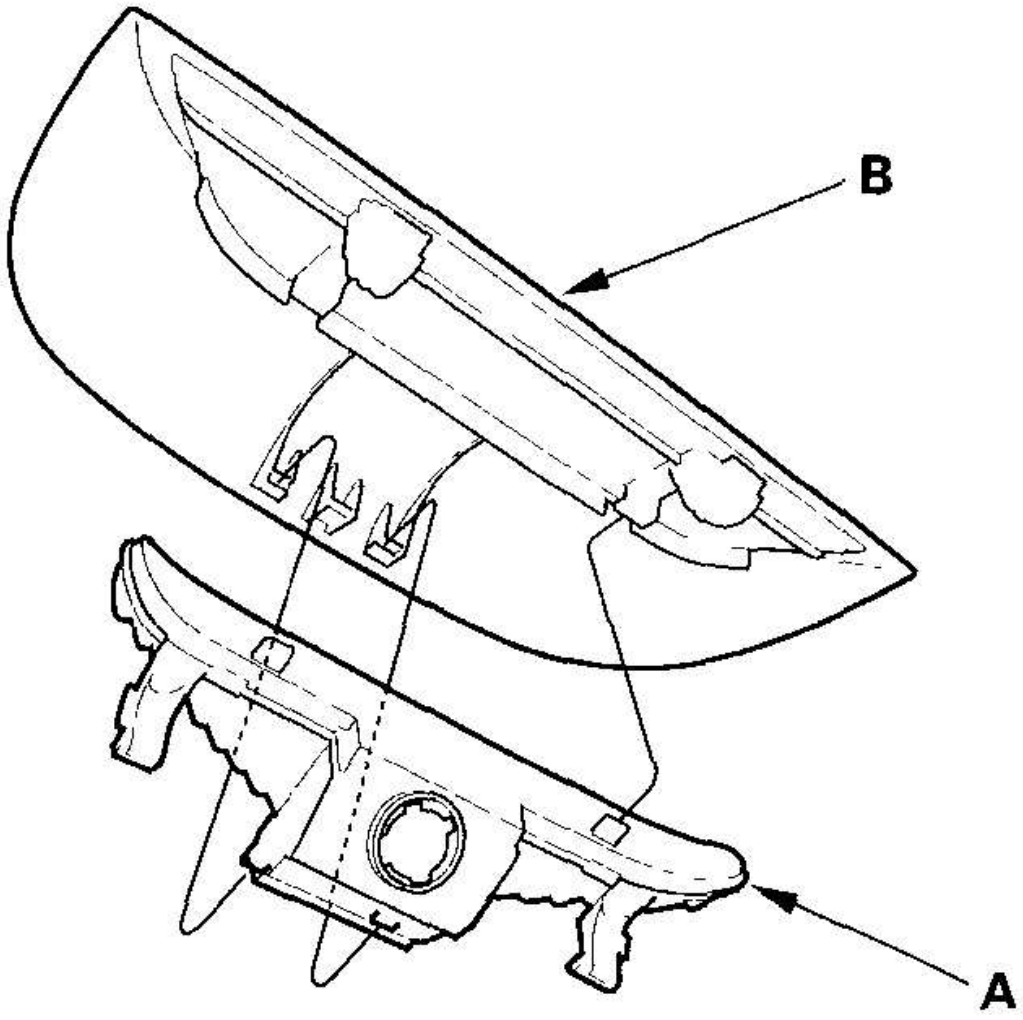


Fig. 55: Removing High Mount Brake Light Housing From Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

'06-07 MODELS

1. Open the trunk lid.
2. Remove the trunk lid trim.
   - 2 door (see **2-DOOR**)

- 4 door (see **4-DOOR**)

3. Remove the four nuts and the high mount brake light (A).

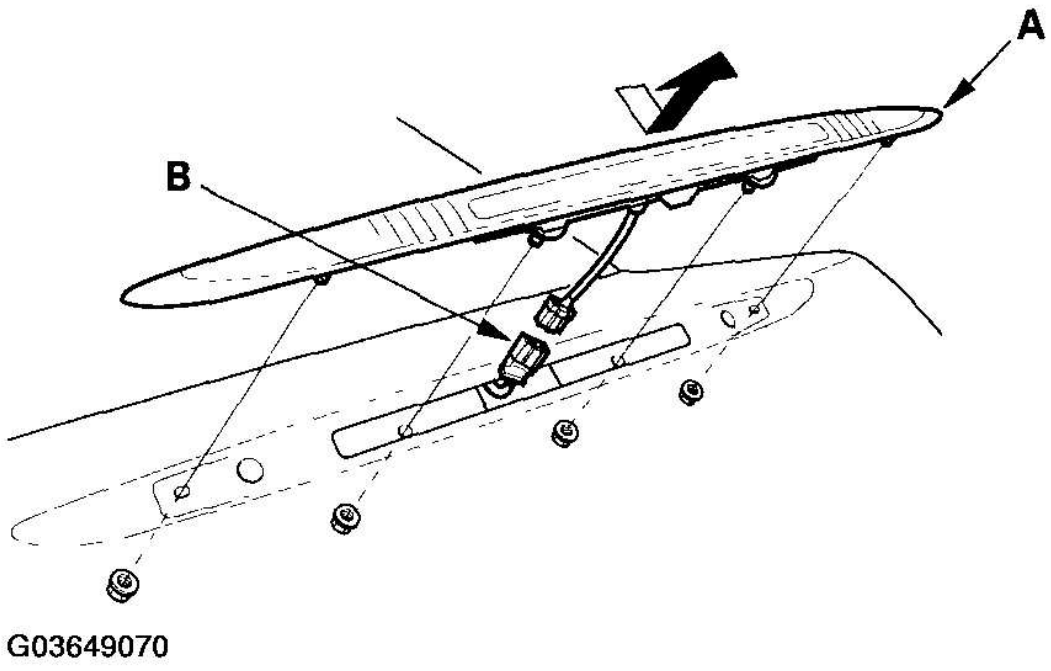
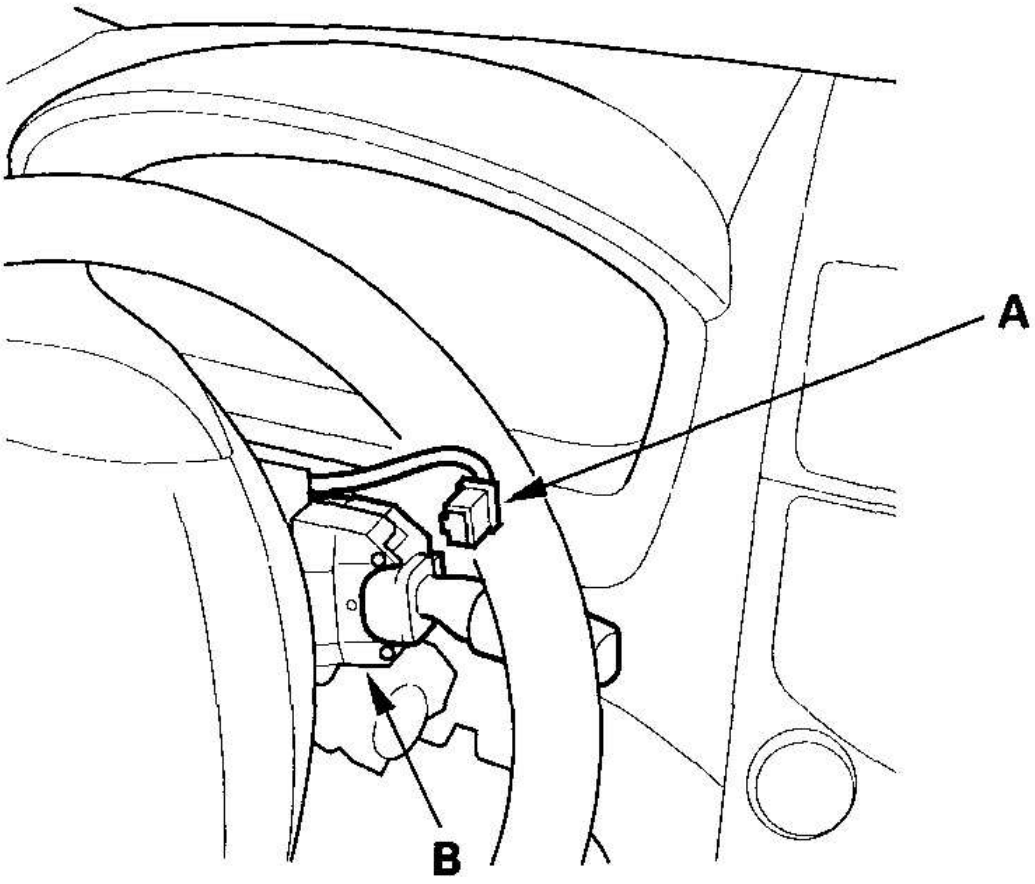


Fig. 56: Removing High Mount Brake Light
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Disconnect the 2P connector (B) from the high mount brake light.
5. Install the light in the reverse order of removal.

COMBINATION LIGHT SWITCH TEST/REPLACEMENT

1. Remove the dashboard lower cover (see **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**).
2. Remove the steering column covers (see **STEERING COLUMN REMOVAL AND INSTALLATION**).
3. Disconnect the 12P connector (A) from the wiper/washer switch (B).



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Fig. 57: Disconnecting 12P Connector From Wiper/Washer Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the two screws, then slide out the combination light switch (A).

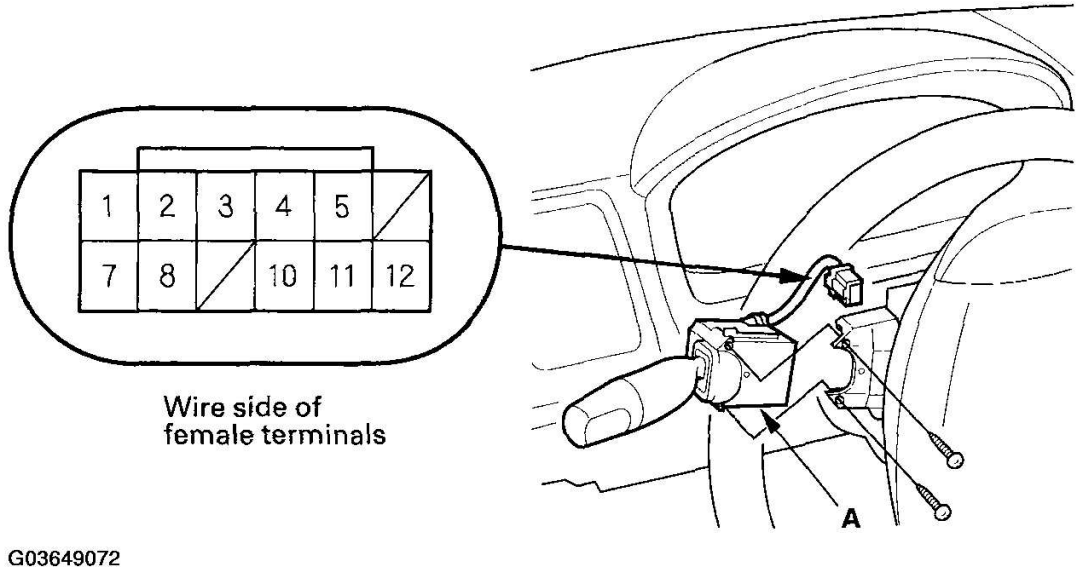


Fig. 58: Sliding Out Combination Light Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Inspect the connector terminals to be sure they are all making good contact.
   - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
   - If the terminals look OK, check for continuity between the terminals in each switch position according to the tables shown in **Fig. 59** & **Fig. 60**.
     - If the continuity is not as specified, replace the switch.

     Light switch:

Light switch:

Position			Terminal 1	2	3	8	7	12
Headlight switch	OFF		○					○
							○	○
	≡D	LOW		○			○	○
		HIGH		○			○	○
						○		○
Passing switch	OFF							
	ON				○			○

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Fig. 59: Checking Continuity Between Terminals Table (Light Switch)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Turn signal switch:

Position \ Terminal	4	10	12
LEFT	○		○
NEUTRAL			
RIGHT		○	○

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Fig. 60: Checking Continuity Between Terminals Table (Turn Signal Switch)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ACCESSORIES & EQUIPMENT

Exterior Trim - Accord (V6)

SIDE SILL PANEL REPLACEMENT

1. Remove the side sill panel.
   -1 Remove the screws (A), and if equipped, remove the splash guard (B).
   -2 Pull the inner fender (C) back as necessary, and remove the clips (D, E), fastening the side sill panel (F) and the middle floor under cover (G).
   -3 Slide the side sill panel forward, and remove it. The side clips (H) will stay in the body.
   -4 Remove the side clips from the body.

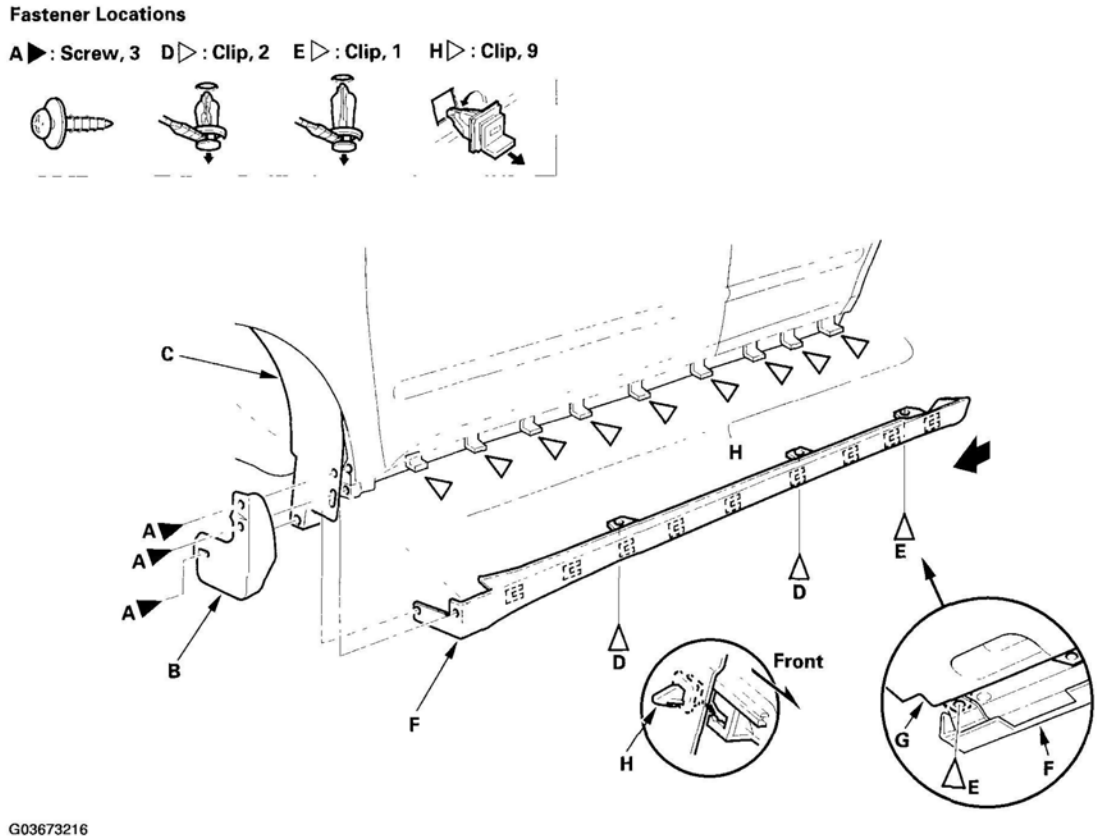


Fig. 1: Identifying Side Sill Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check the clips for damage or stress-whitening, and replace them with new one.
3. Install the side clips on the side sill panel.
4. Hold the panel up, and fit all the side clips into the holes in the body, then push on the panel until the clips snap into place.
5. Install all the clips.
6. Reinstall the inner fender and splash guard.

EMBLEM/STICKER REPLACEMENT

2-DOOR

NOTE: When removing the emblems/sticker, take care not to scratch the body.

1. Clean the body surface with a sponge dampened in alcohol. After cleaning, keep oil, grease, and water from getting on the surface.
2. Apply the emblems/sticker where shown. When installing the LEV/ULEV sticker on the inside surface of the quarter glass, align the sticker application tape with the edge of the black ceramic and alignment mark on the quarter glass, then press the sticker into place, and remove the application tape.

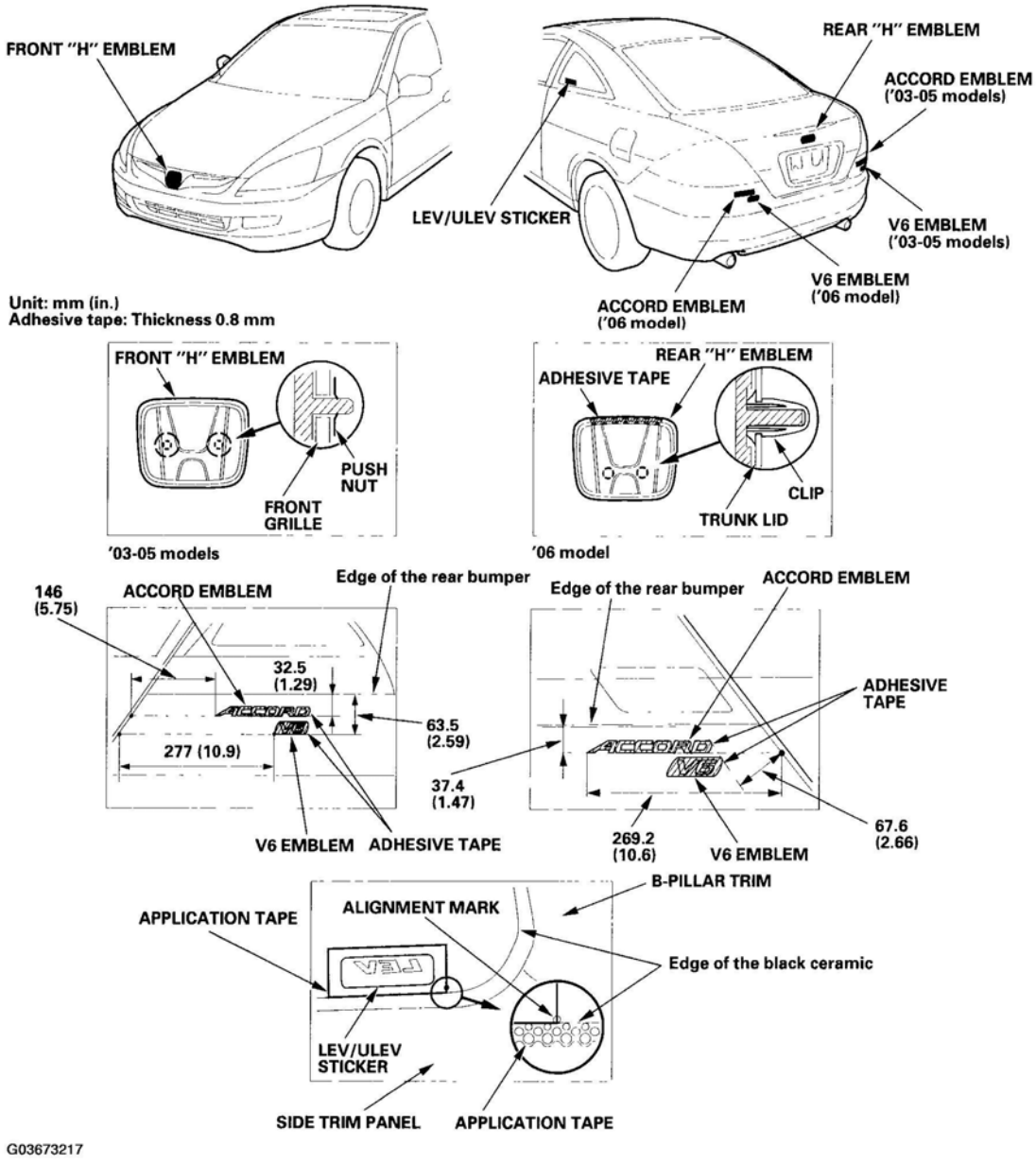


Fig. 2: Identifying Emblem/Sticker (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-05 MODELS 4-DOOR

NOTE: When removing the emblems/sticker, take care not to scratch the body.

1. Clean the body surface with a sponge dampened in alcohol. After cleaning, keep oil, grease, and water from getting on the surface.
2. Apply the emblems/sticker where shown. When installing the LEV/ULEV sticker ('03-05 models), SULEV sticker ('03-04 models) on the inside surface of the rear door quarter glass, align rear edge of the application tape and bottom of the sticker with the glass mark, then press the sticker into place, and remove the application tape.

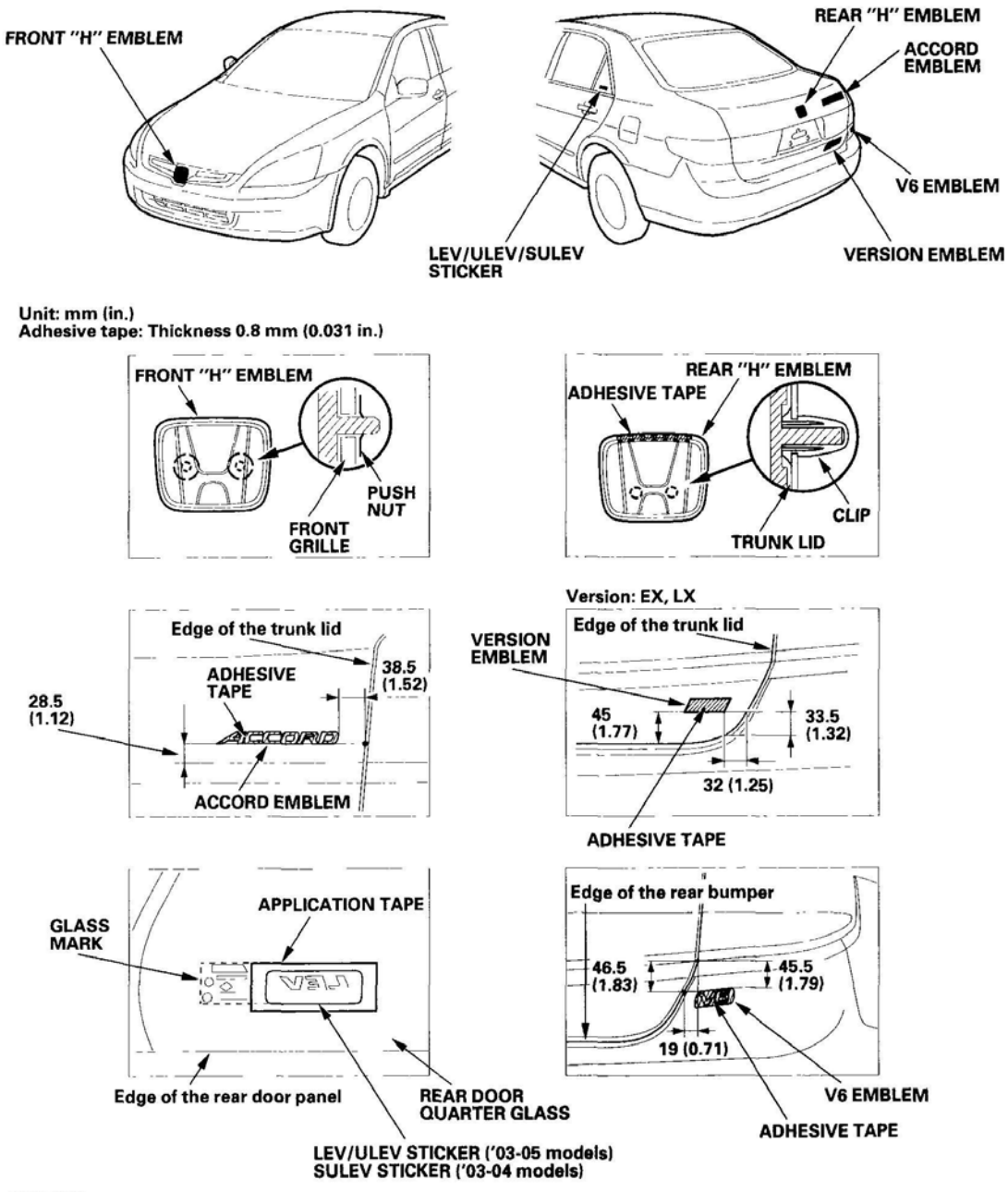


Fig. 3: Identifying Emblem/Sticker (2003-05 Models 4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2006-2007 MODEL 4-DOOR

NOTE: When removing the emblems/sticker, take care not to

scratch the body.

1. Clean the body surface with a sponge dampened in alcohol. After cleaning, keep oil, grease, and water from getting on the surface.
2. Apply the emblems/sticker where shown. When installing the LEV/ULEV sticker on the inside surface of the rear door quarter glass, align rear edge of the application tape and bottom of the sticker with the glass mark, then press the-sticker into place, and remove the application tape.

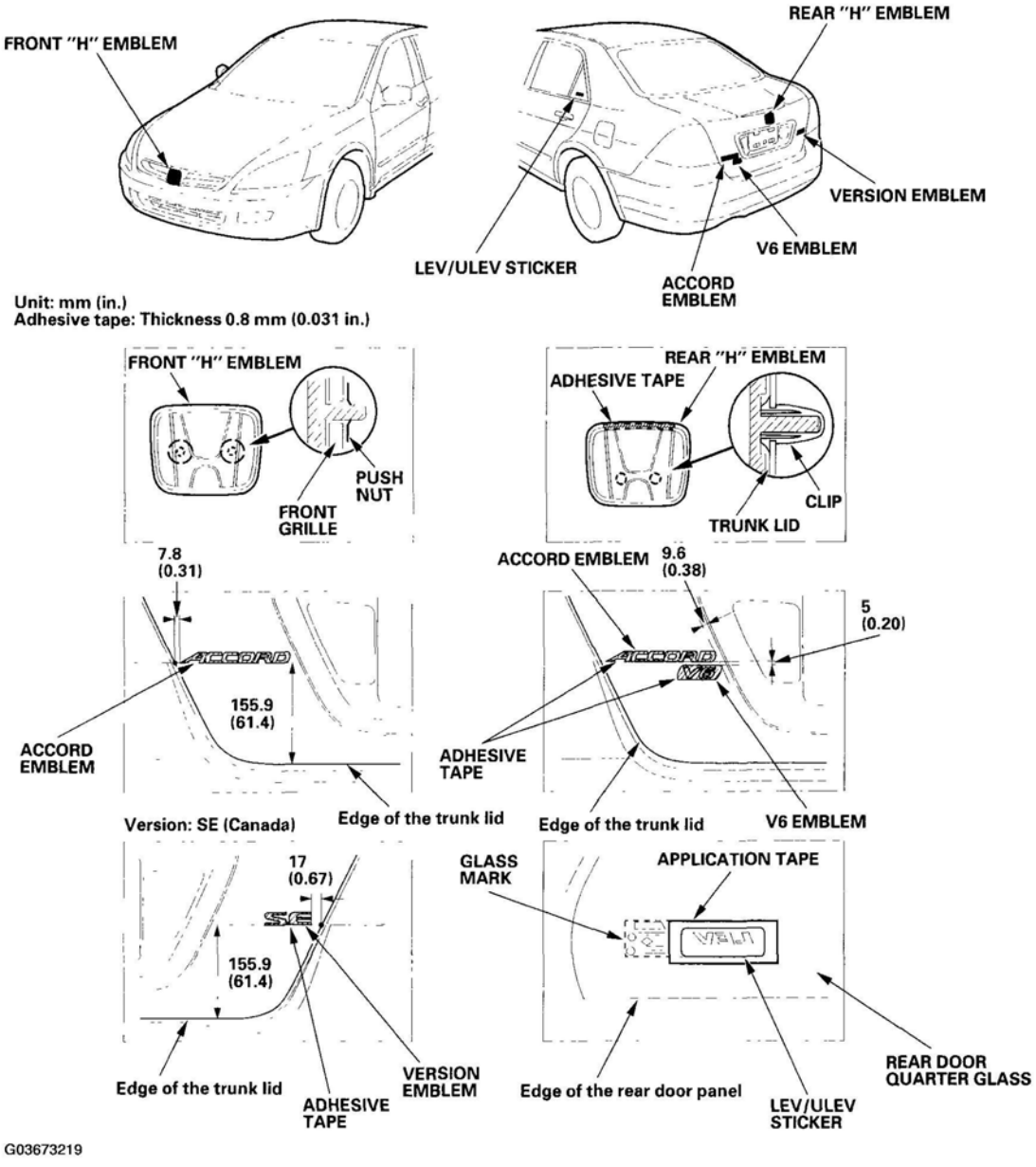


Fig. 4: Identifying Emblem/Sticker (2006-07 Model 4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ACCESSORIES & EQUIPMENT

Exterior Trim - Accord

FRONT GRILLE REPLACEMENT

Special Tools Required

KTC trim tool set SOJATP2014

2-DOOR

NOTE: Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.

1. Remove the front bumper (see **2-DOOR**).
2. '03-05 models: Remove the screws and release the hooks (A), and remove the front grille (B) from the front bumper (C) by pulling it out. Take care not to scratch the front bumper.

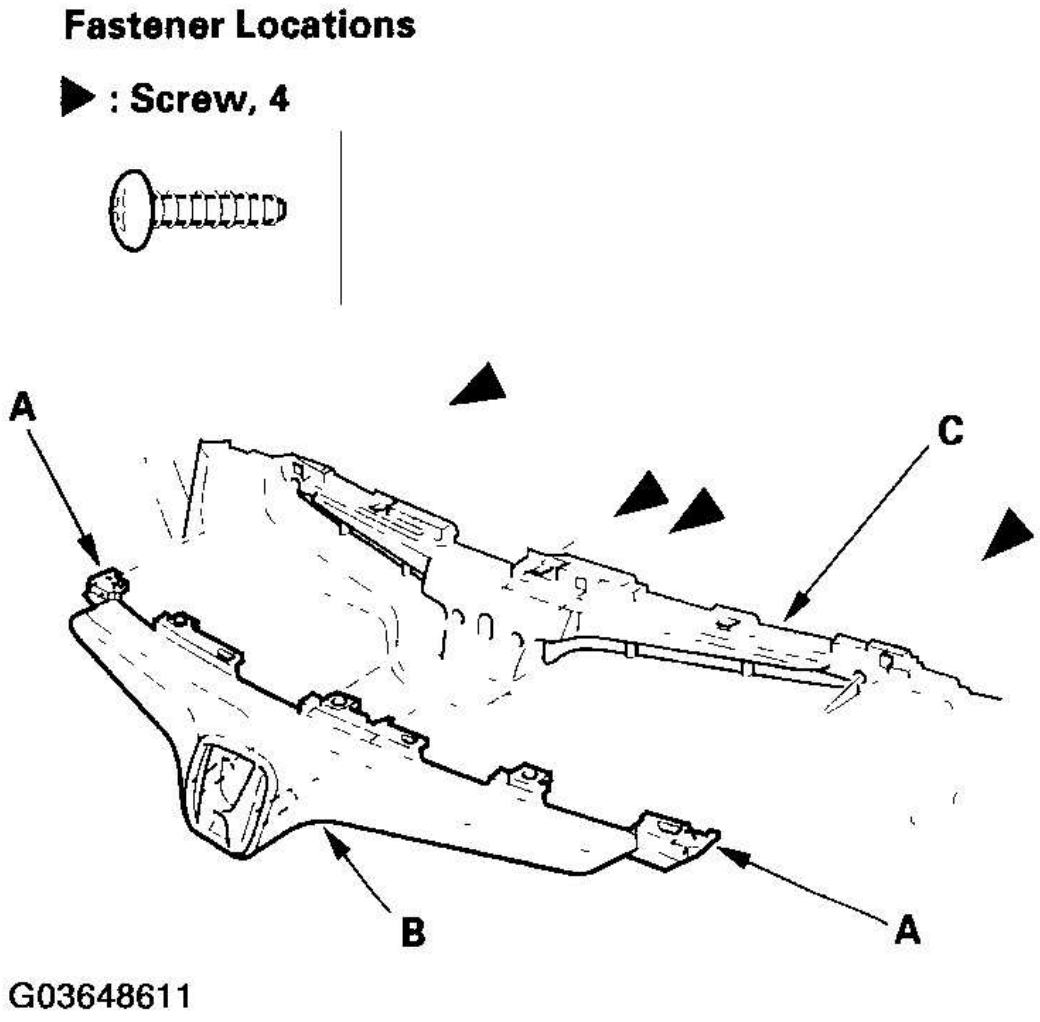


Fig. 1: Removing Front Grille (2003-05 Models - 2-Door))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. '06-07 models: Remove the clips (A) and screws (B), and remove the front grille (C) from the front bumper (D) by pulling it out. Take care not to scratch the front bumper.

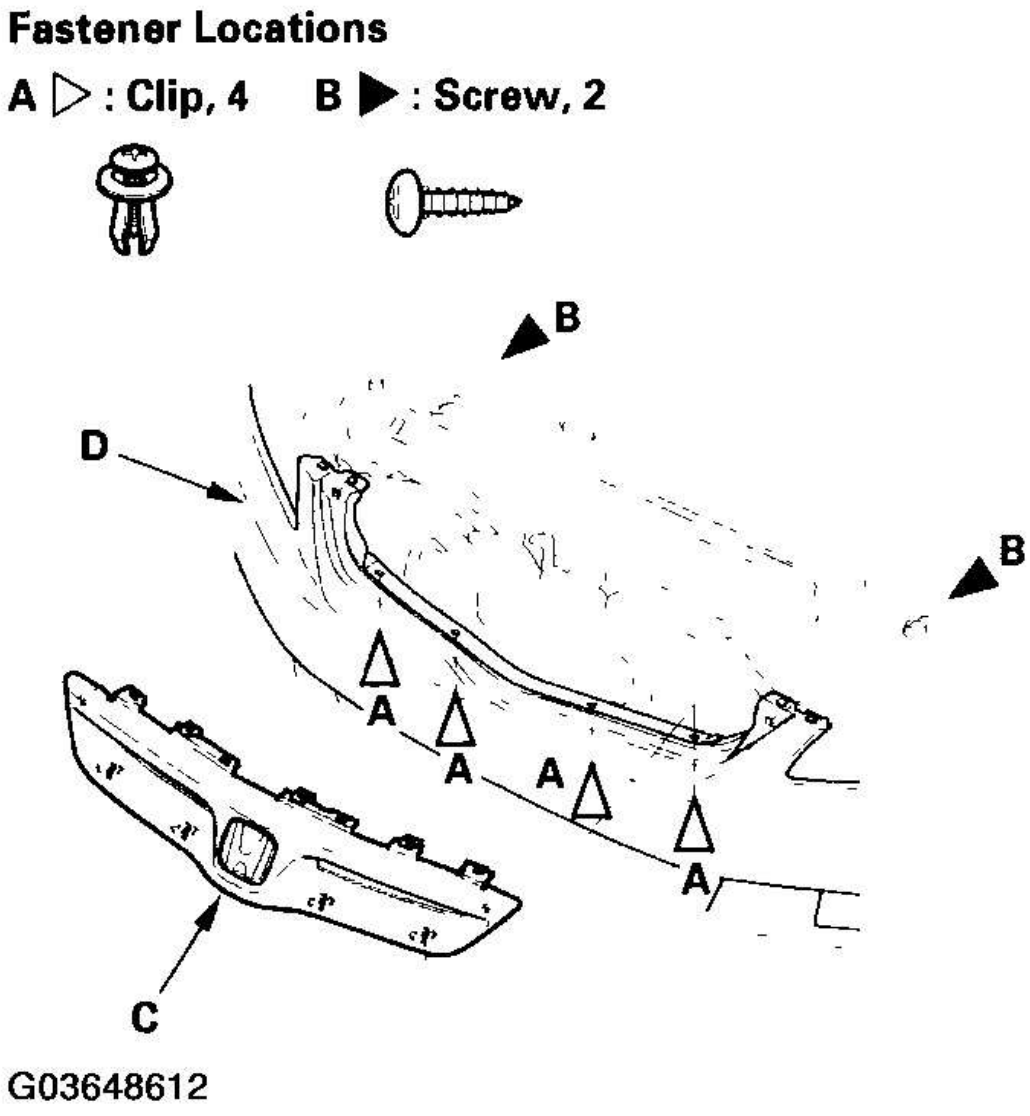


Fig. 2: Removing Front Grille (2006 Model - 2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the grille in the reverse order of removal.

Special Tools Required

KTC trim tool set SOJATP2014

4-DOOR

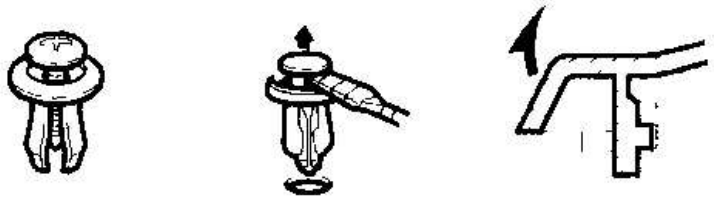
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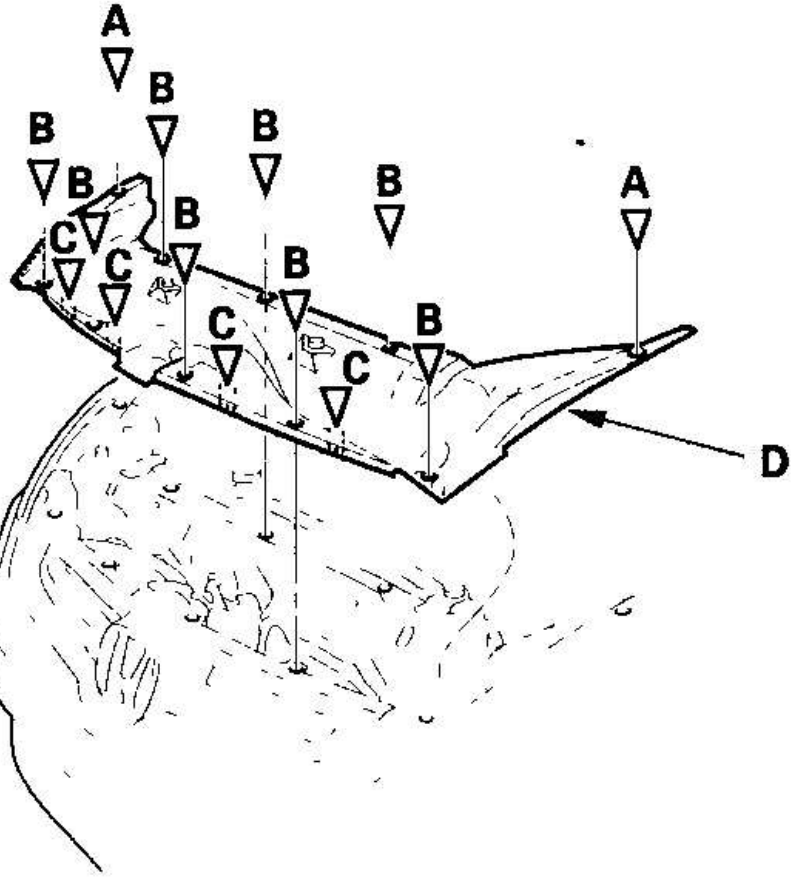
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Take care not to scratch the front bulkhead cover and front grille.**

1. Remove the clips (A, B) and detach the hooks (C), then remove the front bulkhead cover (D).

Fastener Locations

A▷ : Clip, 2 B▷ : Clip, 8 C▷ : Hook, 4





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Fig. 3: Removing Front Bulkhead Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. '03-05 models: Remove the clips, then remove the front grille (A). Take care not to drop the clips inside the front bumper.

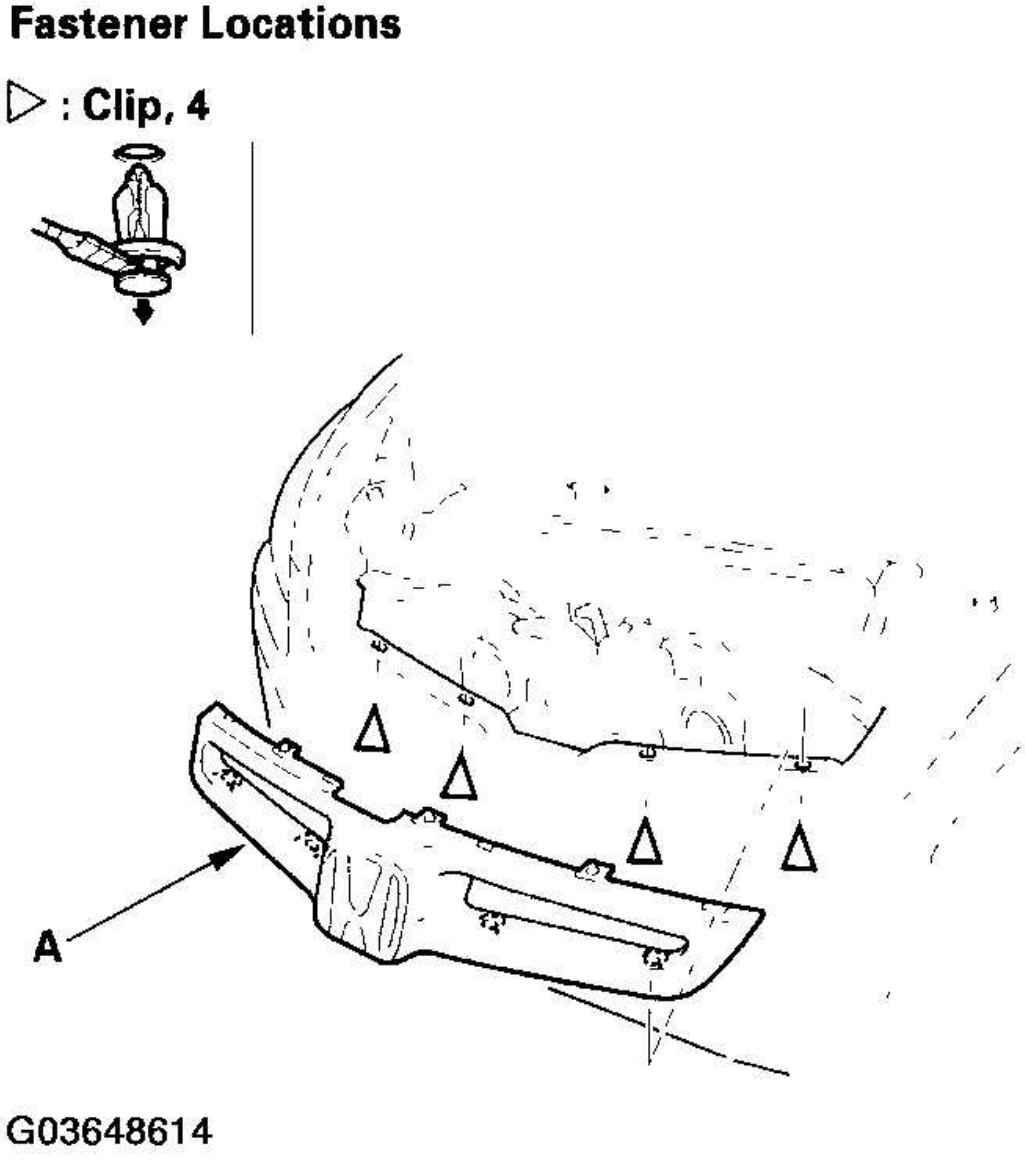


Fig. 4: Removing Front Grille (2003-05 Models - 4-Door)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. '06-07 models: Remove the clips (A) and screws (B), then remove the front grille (C). Take care not to drop the clips and screws inside the front bumper (D).

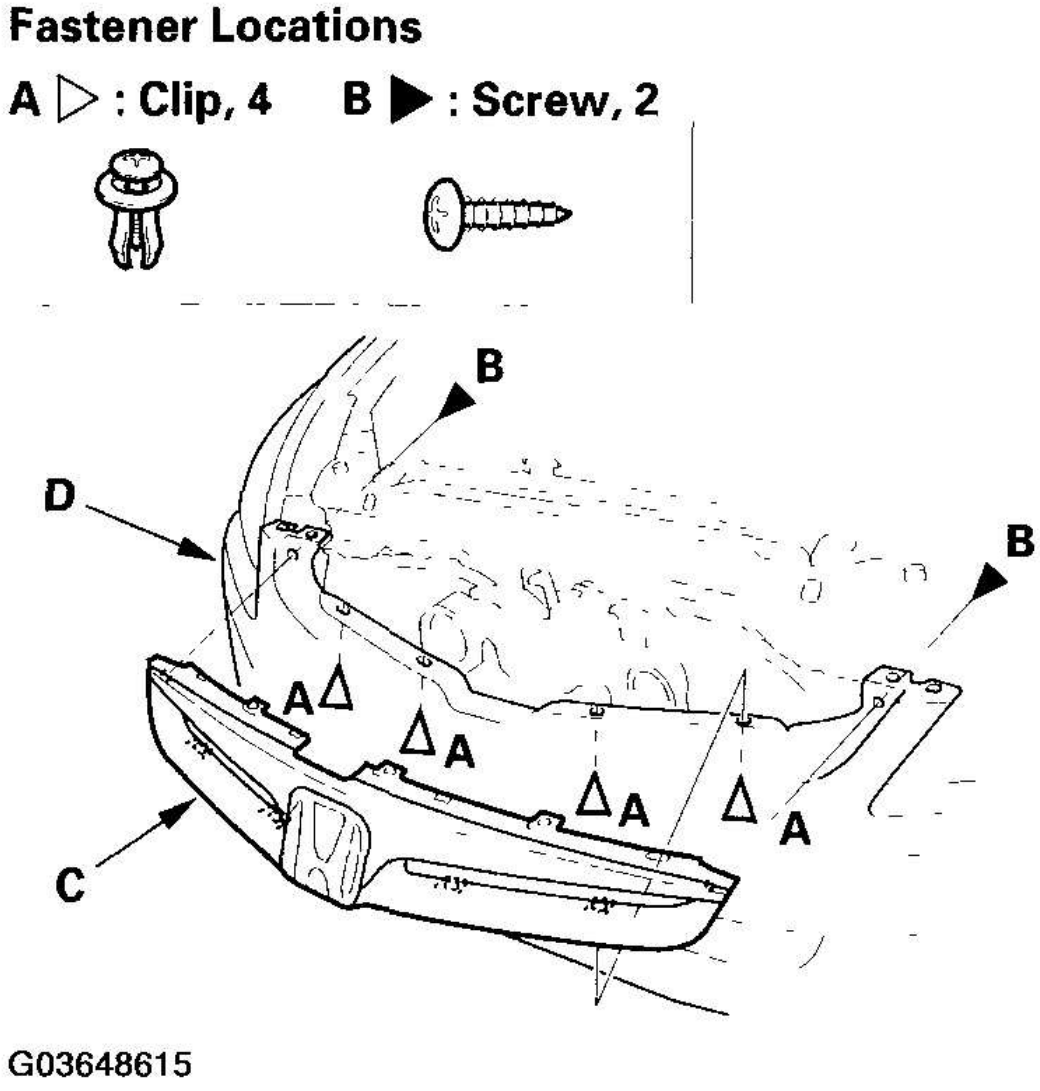


Fig. 5: Removing Front Grille ('06-07 Models - 4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. '06-07 models: If necessary, remove the screws, then remove the upper grille molding (A) from the front grille.

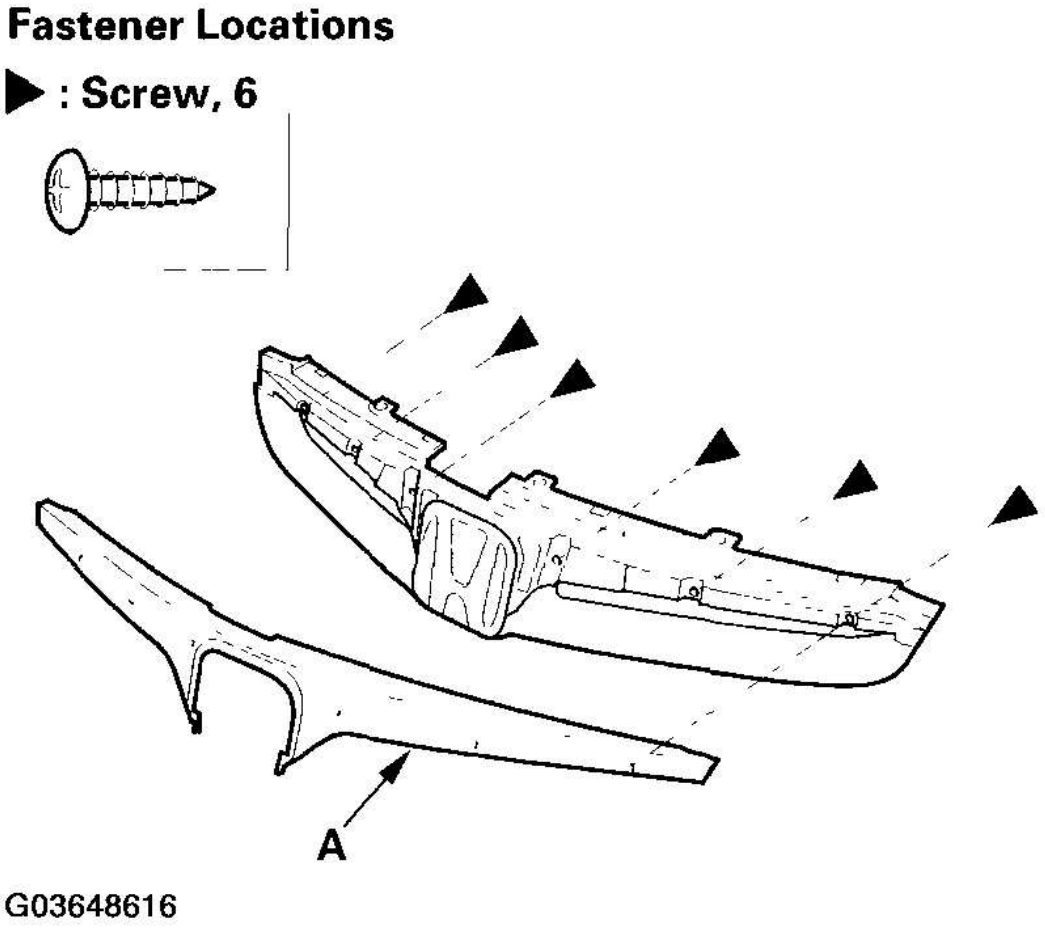


Fig. 6: Removing Upper Grille Molding From Front Grille (2006 Models - 4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the front grille in the reverse order of removal, and note these items:
   - Check the clip is not damaged or stress-whitened, and if necessary, replaced it with new one.
   - Push the front hook portions into place securely.

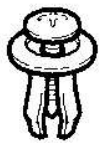
FRONT FENDER TRIM REPLACEMENT

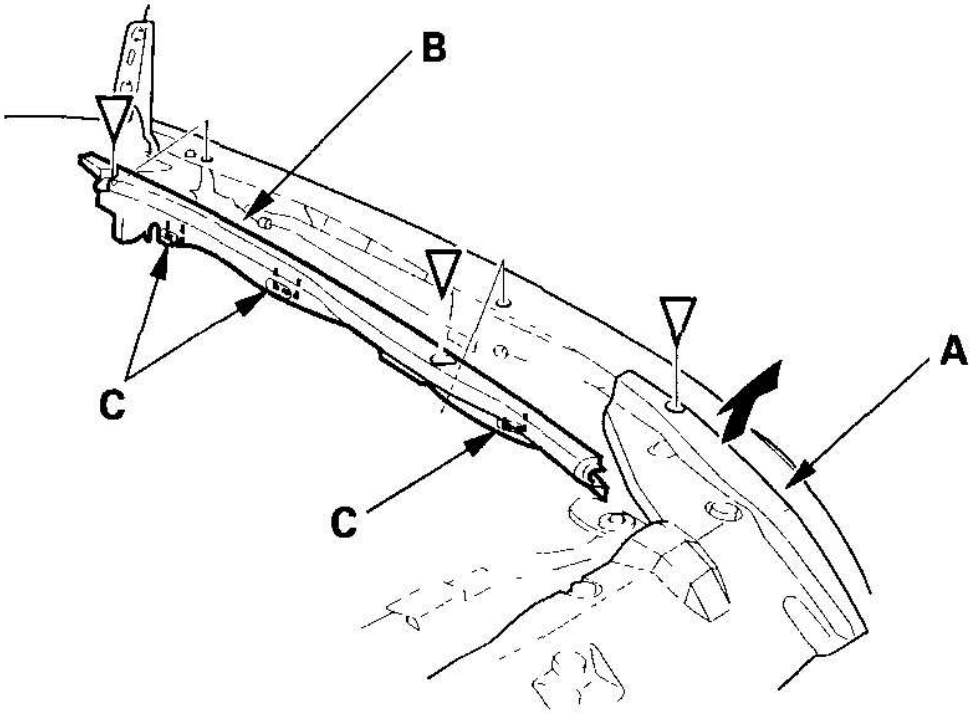
NOTE: Take care not to scratch the body.

1. Remove the clips fastening the front bulkhead cover (A) and the front fender trim (B).

Fastener Locations

▷ : **Clip, 3**





G03648617

Fig. 7: Removing Clips Fastening Front Bulkhead Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Pull up the rear of the front bulkhead cover, then remove the front fender trim by releasing the hooks (C) from the body.
3. Install the trim in the reverse order of removal, and check if the clip is damaged or stress-whitened, and if necessary, replace it with new one.

COWL COVER REPLACEMENT

1. Remove the windshield wiper arms (see **WIPER MOTOR REPLACEMENT**).
2. Remove the hood rear seal (A) by pulling it out. Using a clip remover, detach the clips (B) from the cowl covers. Take care not to scratch the cowl covers.

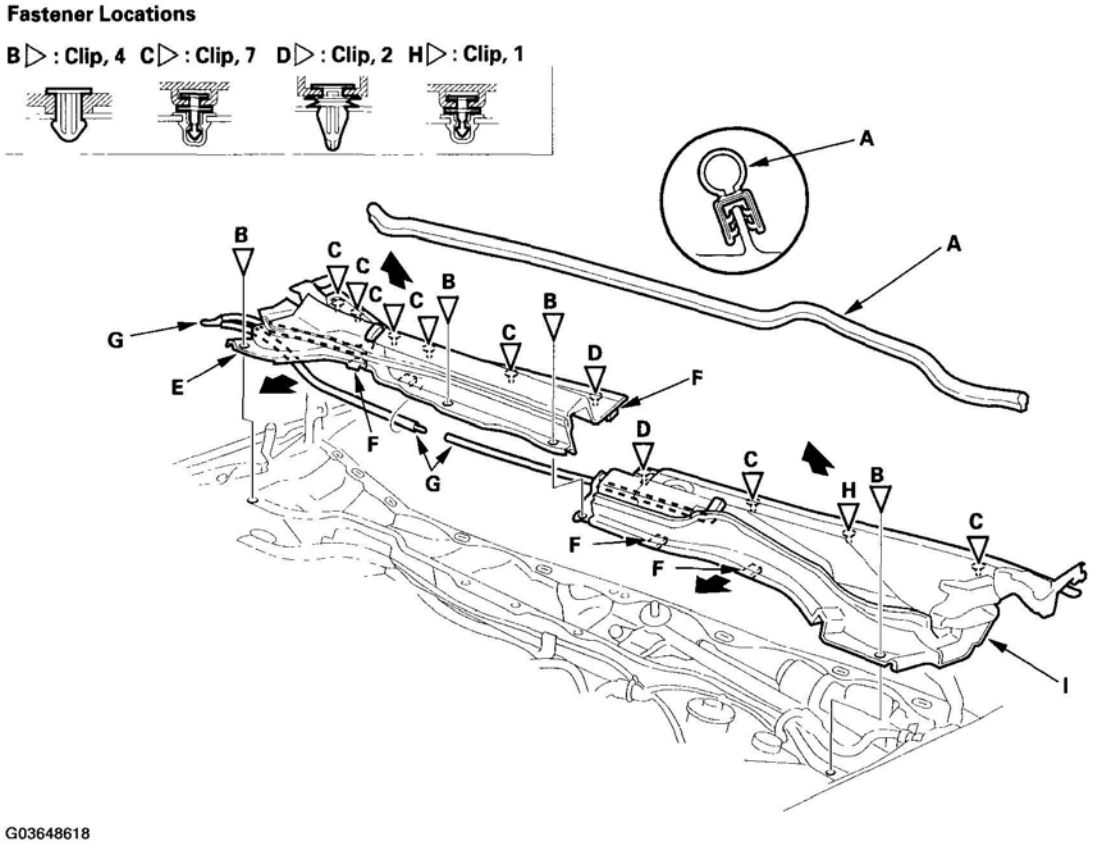


Fig. 8: Removing Hood Rear Seal

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Detach the clips (C, D) by carefully pulling the passenger's cowl cover (E) upward, and release the hooks (F) on the passenger's cowl cover from the driver's side, then remove the cover. Take care not to scratch the body.
4. Disconnect the windshield washer tubes (G).
5. Detach the clips (C, D, H) by carefully pulling the driver's cowl cover (I) upward, then remove the cover. Take care not to scratch the body.
6. Install the covers in the reverse order of removal, and note these items:
   - Check if the clip is damaged or stress-whitened, and if necessary, replace it with new one.
   - Make sure the washer tubes are connected securely.

ROOF MOLDING REPLACEMENT

Special Tools Required

KTC trim tool set SOJATP2014

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to damage the windshield.**
- **Do not use any of metallic tools to remove the roof molding, or you may chip the edge of the windshield and cracks in the windshield will occur.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Take care not to bend the roof molding.**

MOLDING REPLACEMENT

1. Remove the cowl cover (see **COWL COVER REPLACEMENT**).
2. Remove the windshield portion of the roof molding (A).

   -1 Carefully insert a plastic trim tool (B) under the molding next to the clip (C).

-2 While pulling the clip portion of the molding up by hand, push each of the eight small hooks (D) in the numbered sequence shown in **Fig. 9** to release the clip from the retainer (E).

Do not try to pry up the clip even if it is hard to release from the retainer.

-3 Gradually work your way up to release each of the upper clips (F, G, H).

-4 Slide the molding off the lower clip (I).

-5 Rotate the lower clip to remove it.

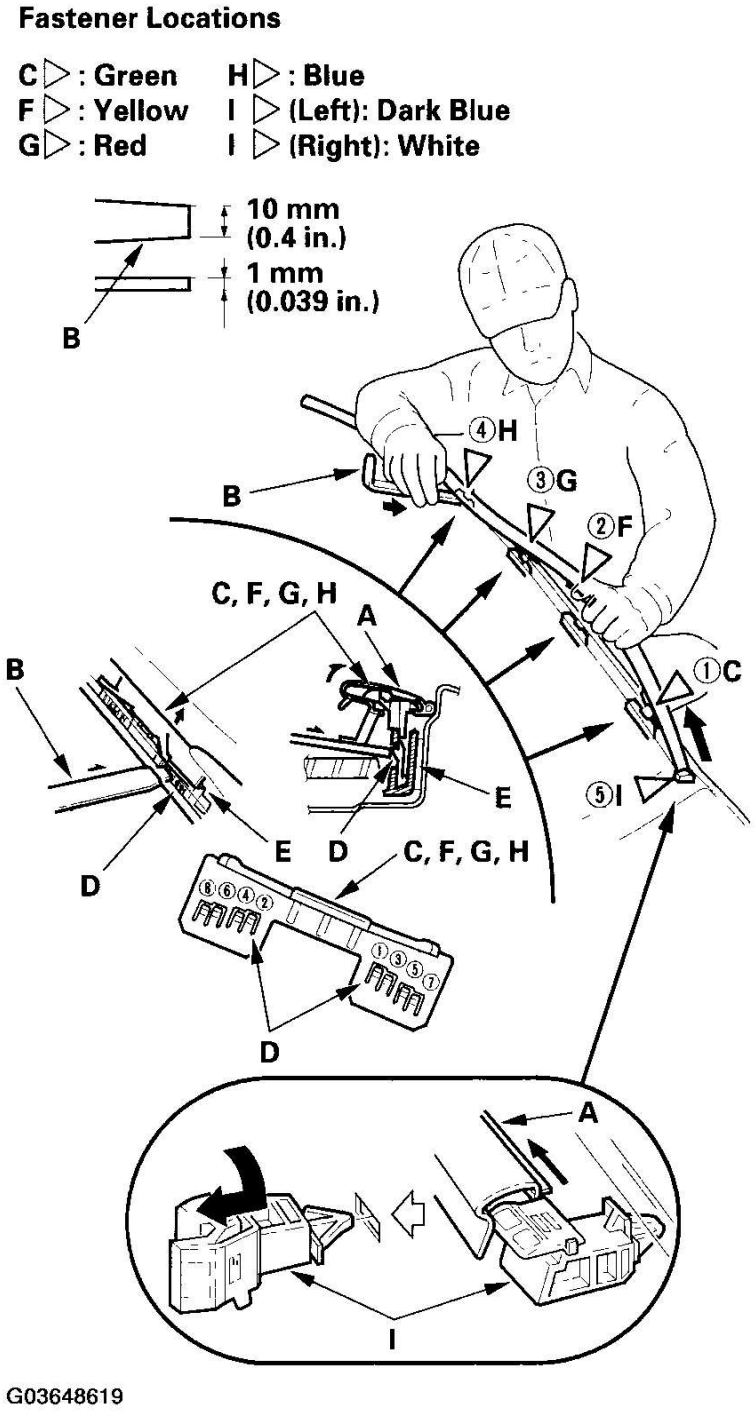


Fig. 9: Removing Windshield Portion Of Roof Molding
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Pull up and slide the middle portion (A) of the roof molding to release it from the retainers (B).

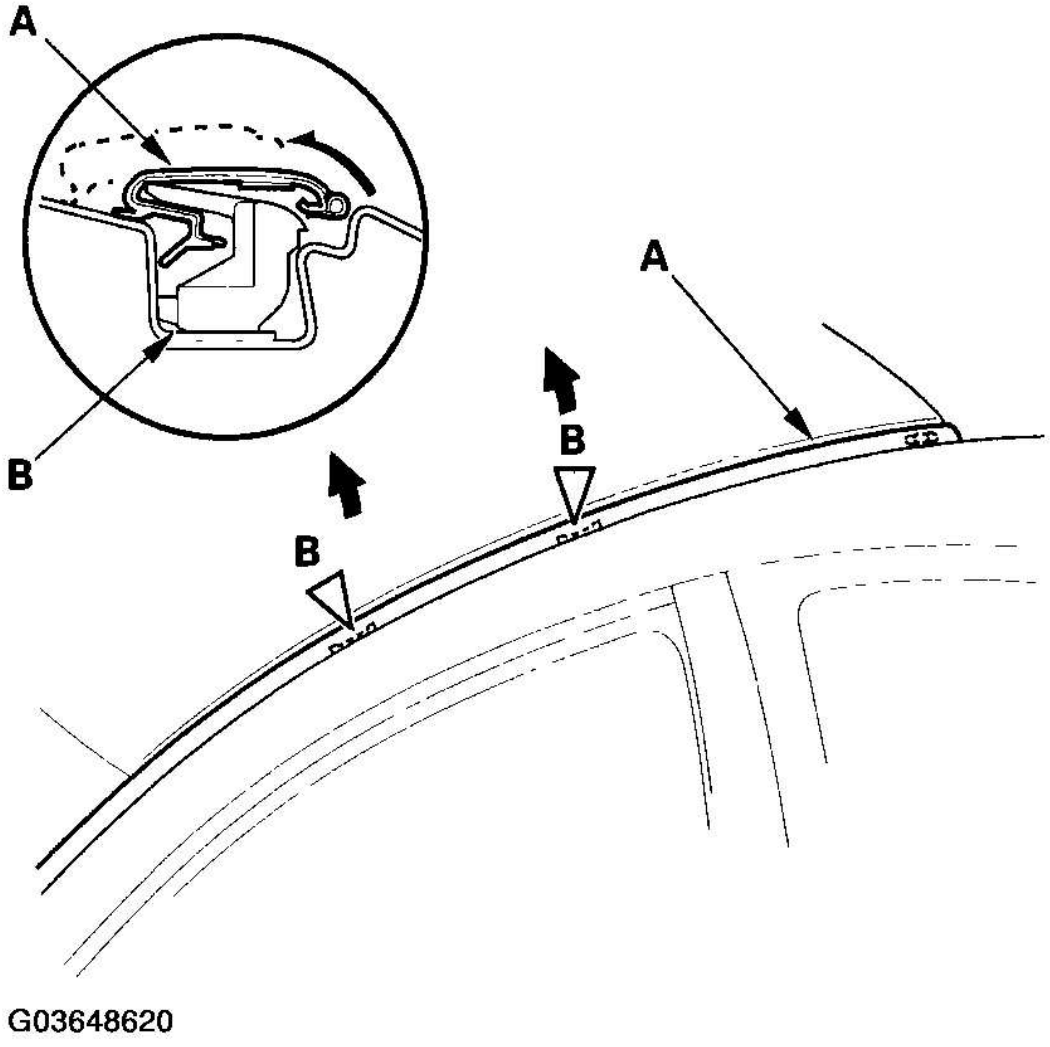


Fig. 10: Sliding Middle Portion Of Roof Molding (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

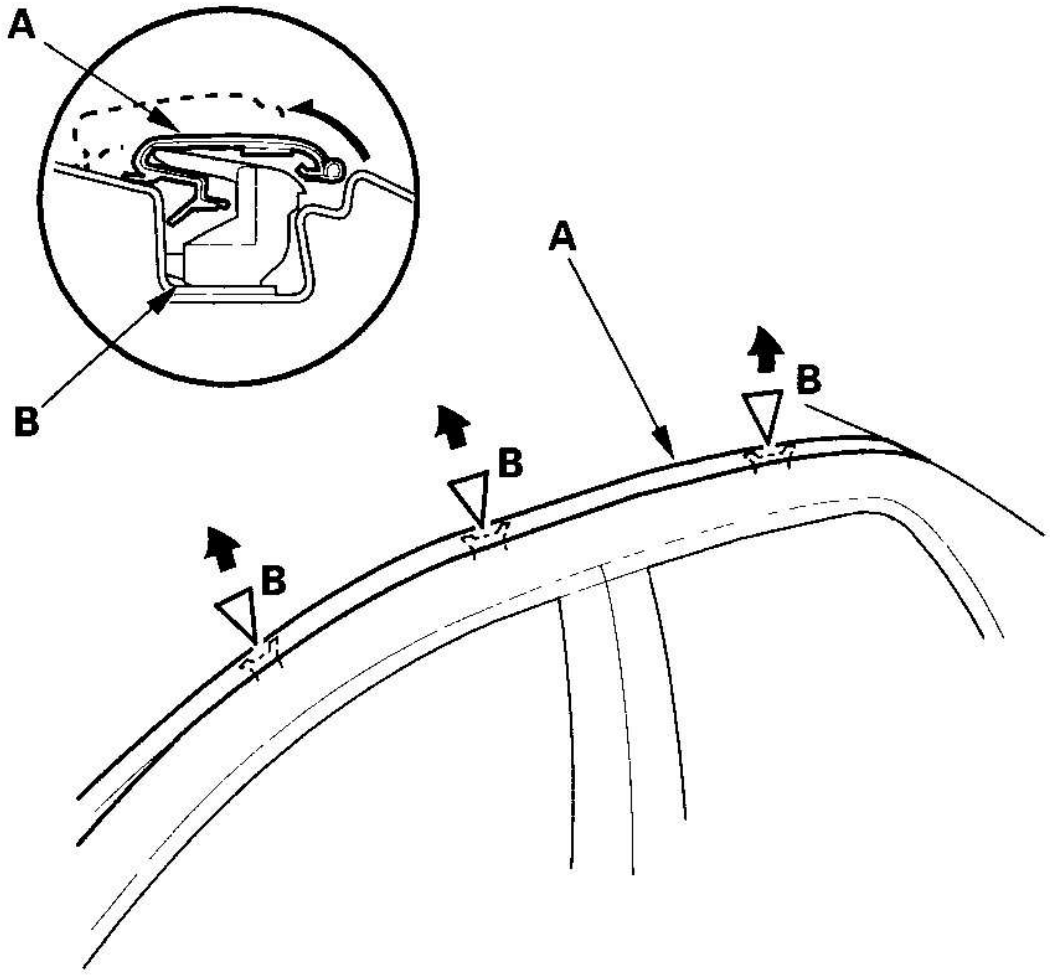


Fig. 11: Sliding Middle Portion Of Roof Molding (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Pull up the front portion of roof molding.
5. Pull up and release the rear end of the roof molding (A) from the pin (B), then remove the roof molding (C).

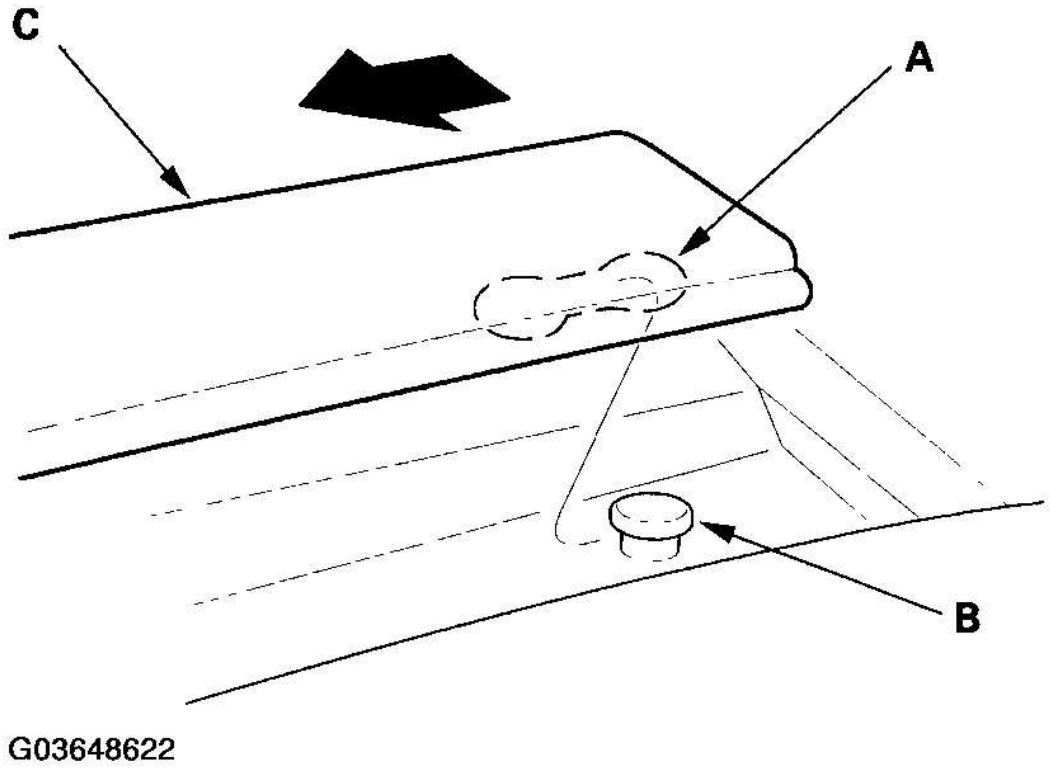


Fig. 12: Releasing Rear End Of Roof Molding From Pin
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the molding in the reverse order of removal, and note these items:
   - Make sure the roof molding is installed securely.
   - Check if the clip is damaged or stressed whitened, and if necessary, replace it with new one.

RETAINER REPLACEMENT (4-DOOR ADHESIVE TYPE)

1. Gradually scrape off the adhesive tape (A) under the retainers (B) while heating it with a heat gun.

NOTE:
- **Do not heat the painted body surface around the retainers too much.**

- **To keep the exterior resin parts near the A-pillar from being overheated by the heat gun, wrap them with aluminum foil.**

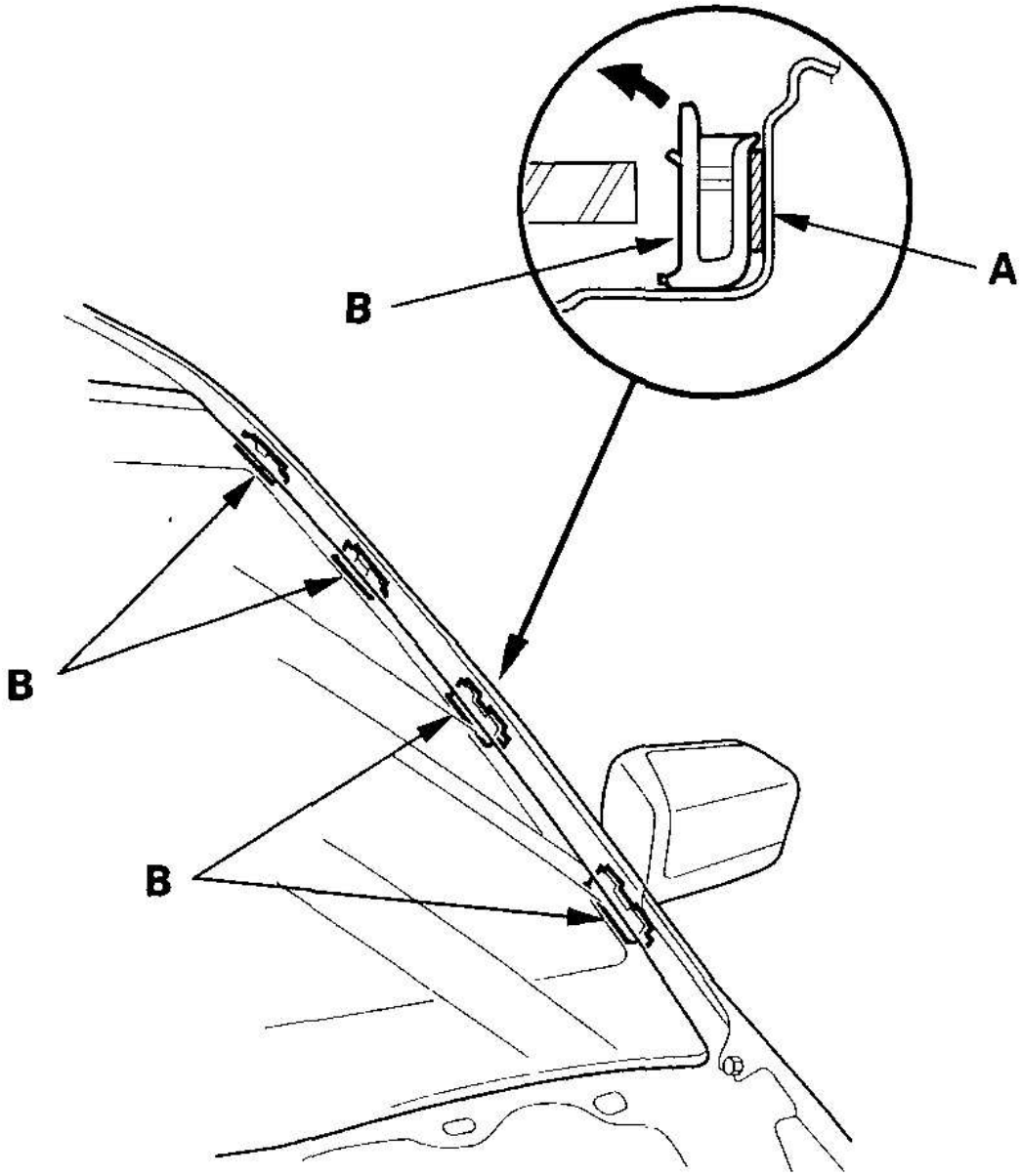


Fig. 13: Scraping Off Adhesive Tape Under Retainers

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Clean the body bonding surface with a sponge dampened in alcohol. After cleaning, keep oil, grease, and water from getting on the surface.
3. Install the upper retainers (A) and the lower retainers (B).

   -1 Peel the adhesive backing away from the upper and lower retainers.

   -2 Line up the retainers with the alignment marks (C) on the body, and attach the retainers with adhesive tape (D) (3M 9259, or equivalent).

   -3 Apply epoxy two-part mixing adhesive (E) around the edge of the retainers as shown below.

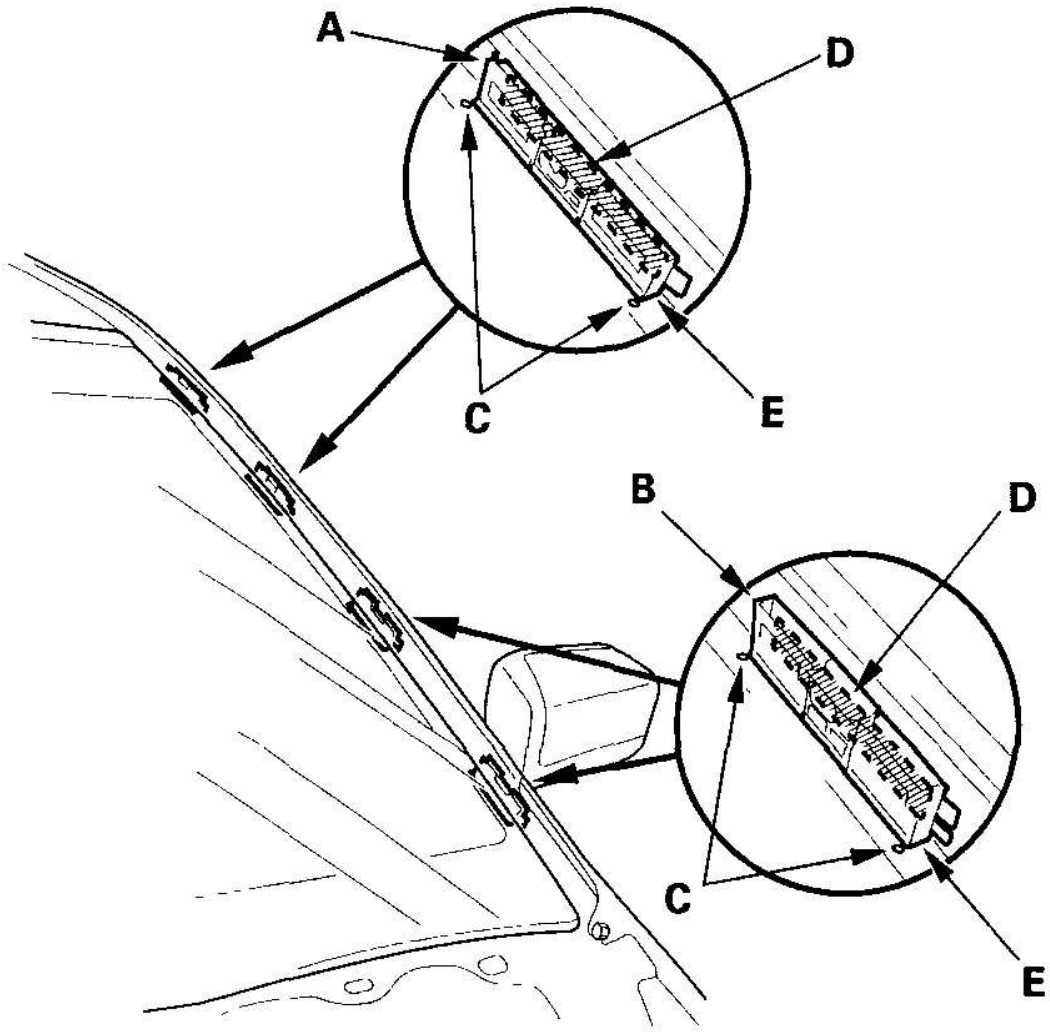


Fig. 14: Installing Upper And Lower Retainers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

RETAINER REPLACEMENT (T-STUD TYPE)

1. While prying the middle hooks (A) with a flat-tip screwdriver, slide the upper retainers (B) and lower retainers (C) upward to release them from the T-studs (D) on the A-pillar. Take care not to scratch the body.

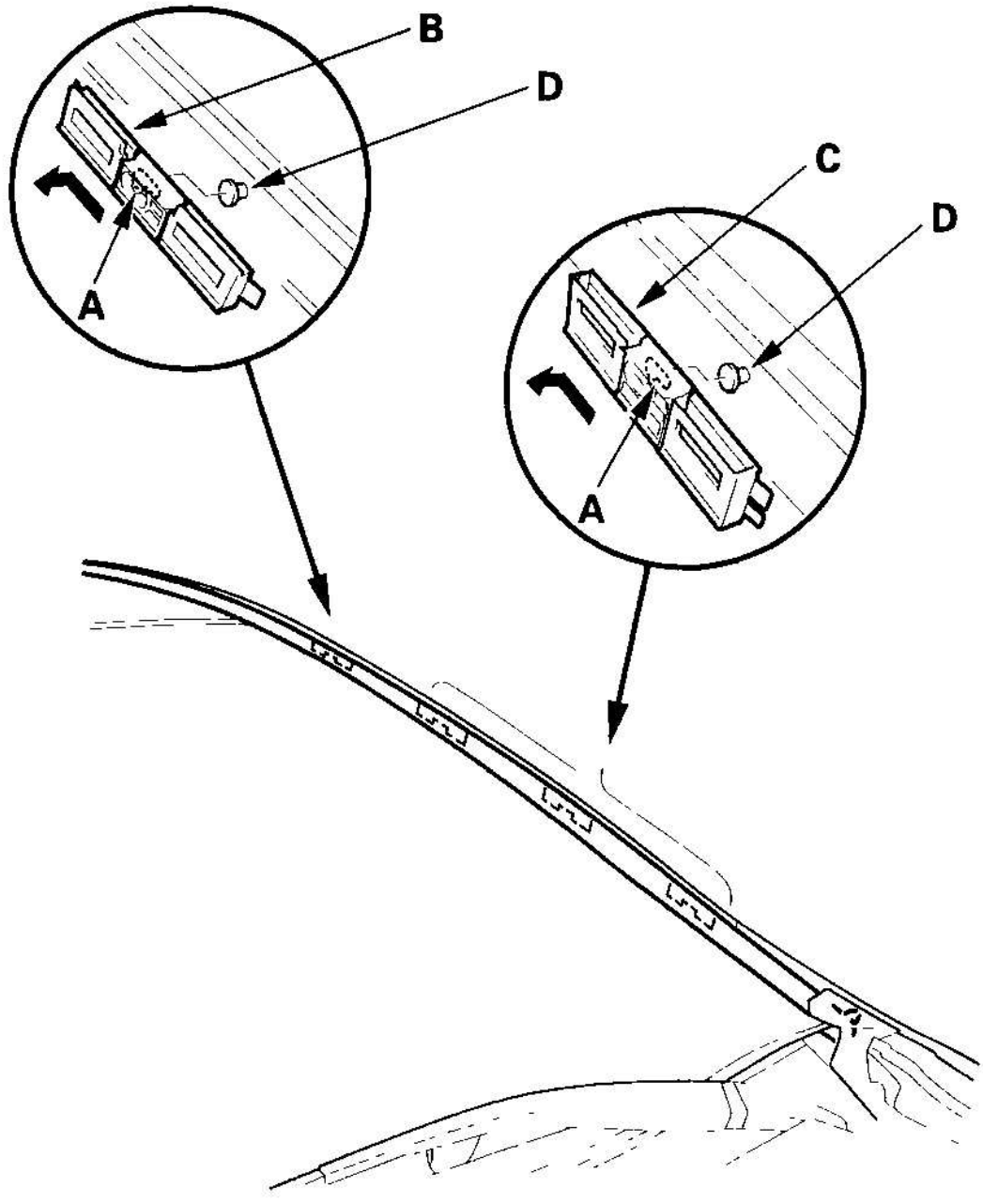


Fig. 15: Sliding Upper Retainers And Lower Retainers (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

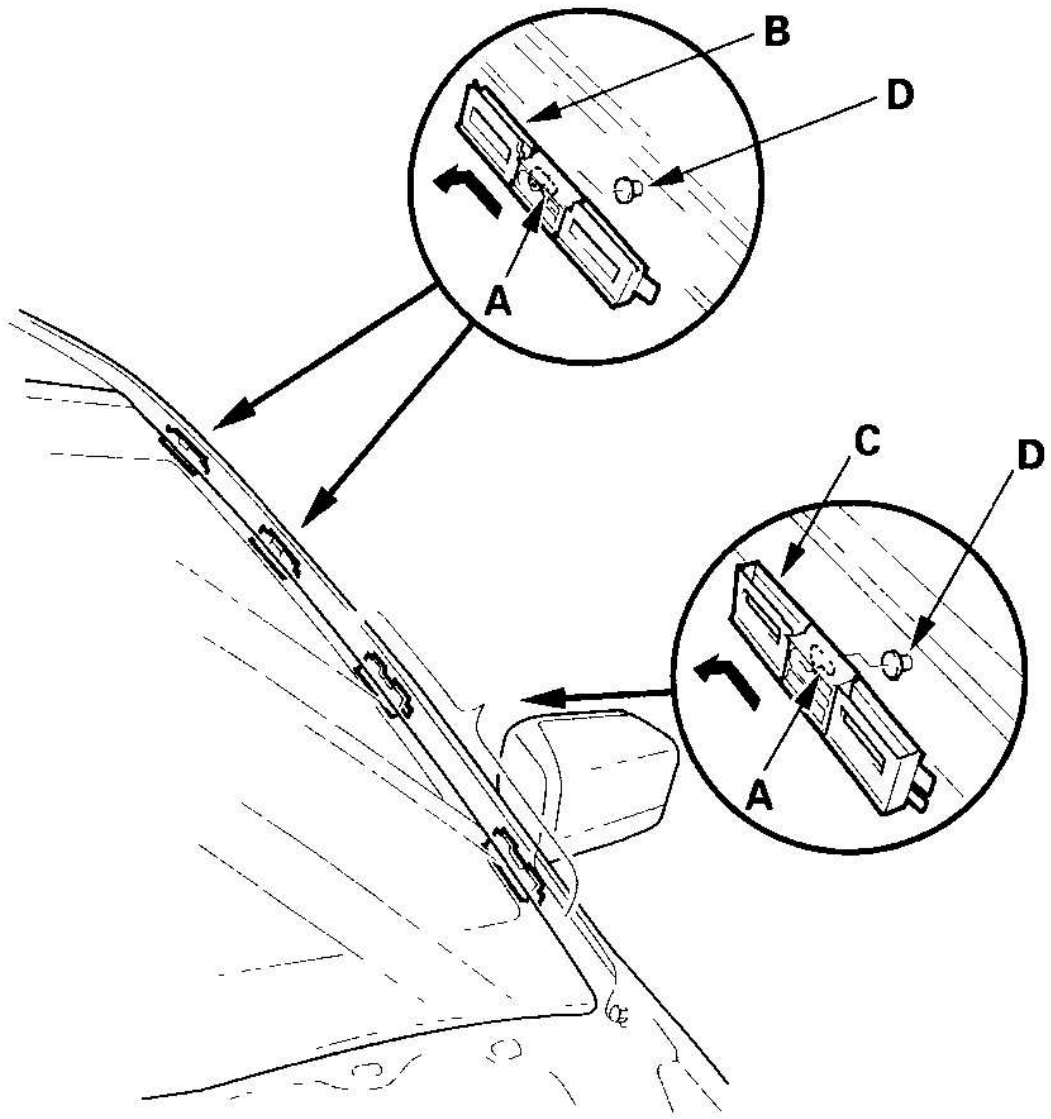


Fig. 16: Sliding Upper Retainers And Lower Retainers (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the retainers in the reverse order of removal.

DOOR MOLDING REPLACEMENT

Special Tools Required

KTC trim tool set SOJATP2014

4-DOOR

NOTE:

- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Be careful not to pry too far or you may bend the molding.**
- **Put on gloves to protect your hands.**

1. Prepare to release the molding clips from inside the vehicle.
   - To remove the front door molding, remove the front door panel (see **FRONT DOOR PANEL REMOVAL/INSTALLATION**) and plastic cover.
   - To remove the rear door molding, remove the rear door panel (see **REAR DOOR PANEL REMOVAL/INSTALLATION**) and plastic cover.
2. Release the clips (A) and gently pry the front door molding (B) or rear door molding (C) away from the door while separating the adhesive tape (D, E, F).

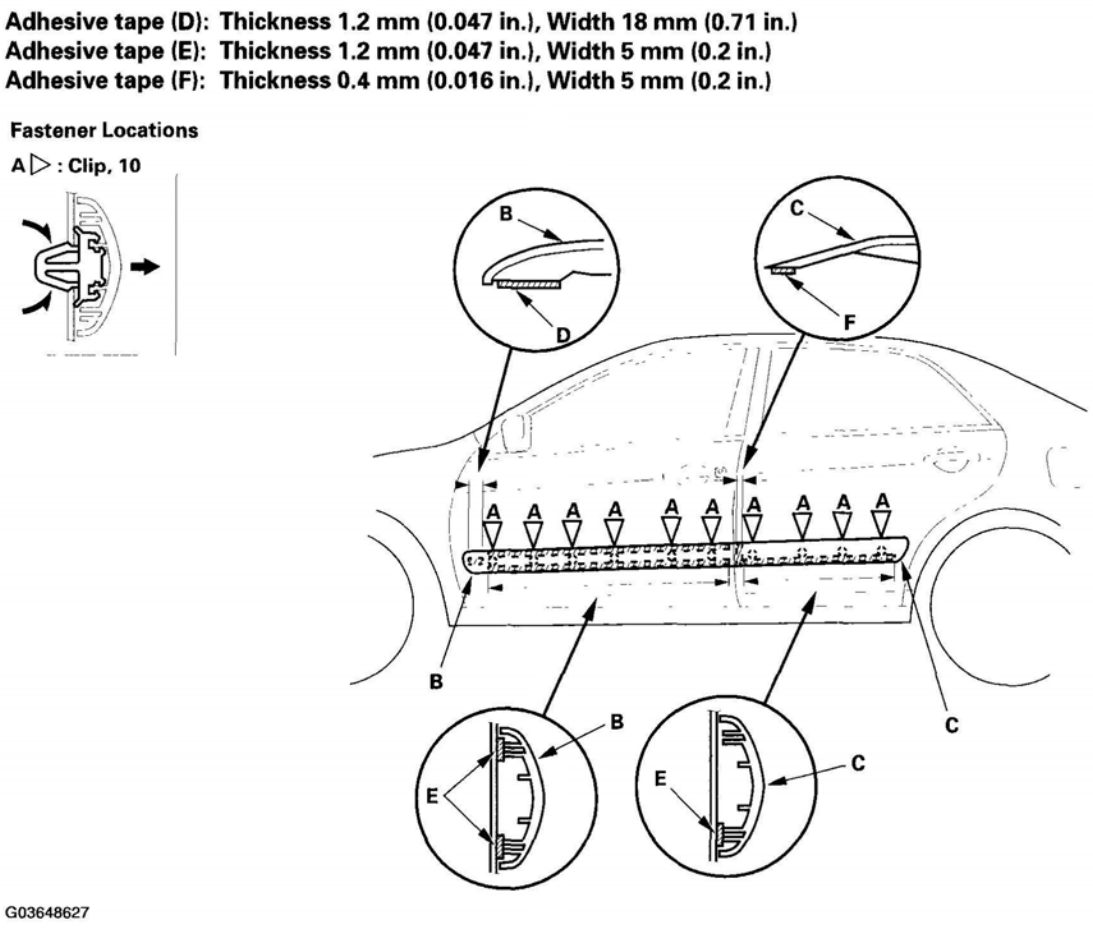


Fig. 17: Removing Front & Rear Door Moldings While Separating Adhesive Tape
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the moldings in the reverse order or removal, and check the clips for damage or stress-whitening, and replace them with new ones and adhesive tape.

SIDE SILL PANEL REPLACEMENT

1. Remove the side sill panel.

   -1 On the back of the wheel Arch, remove the screws. If equipped, remove the front splash guard (A).

   -2 Remove the expansion clips (B).

-3 Pull the inner fender (C) back as necessary, and slide the side sill panel (D) forward, and remove it. The side clips (E) will stay in the body.

-4 Remove the side clips from the body.

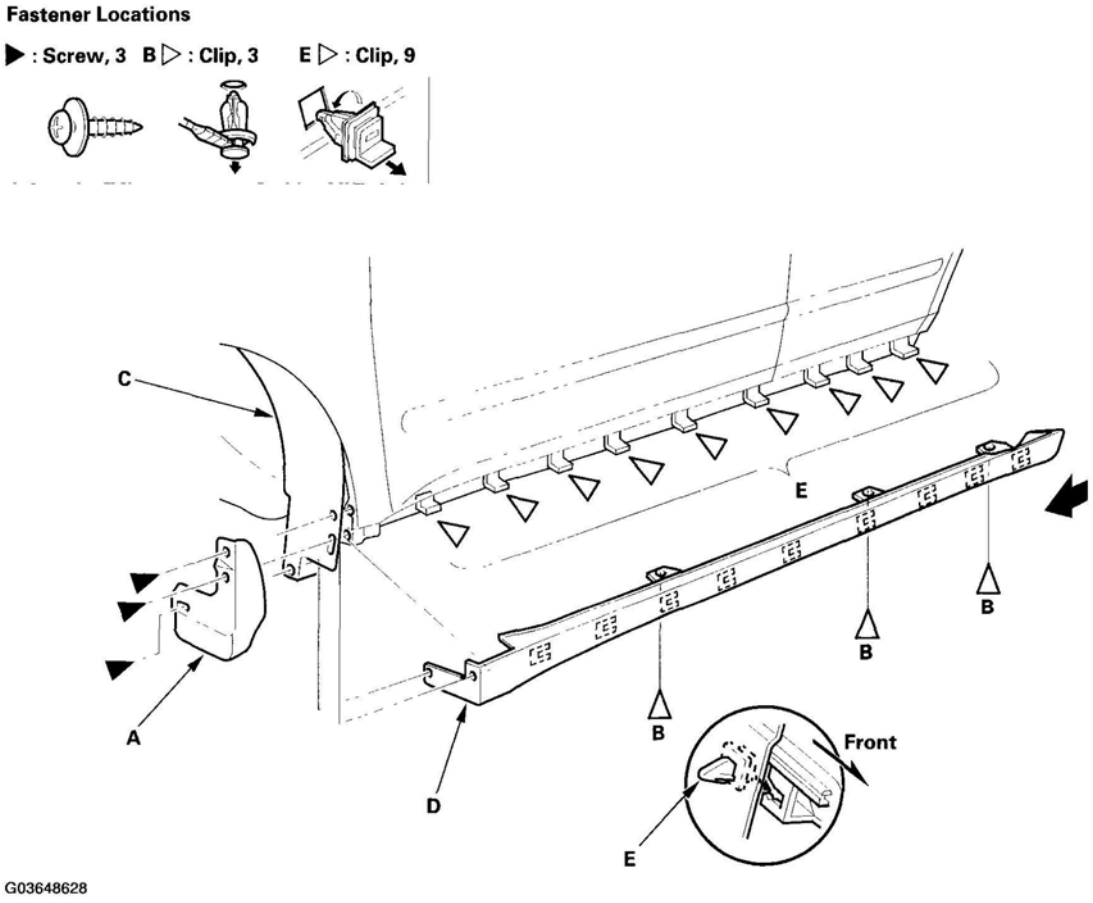


Fig. 18: Removing Side Sill Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check if the clip is damaged or stress whitened, and if necessary, replace it with new one.
3. Install the side clips on the side sill panel.
4. Hold the panel up, and fit all the side clips into the holes in the body, then push on the panel until the clips snap into place.
5. Install all the expansion clips.
6. Reinstall the inner fender (and splash guard).

REAR LICENSE TRIM REPLACEMENT

'03-07 MODELS 2-DOOR

1. On the inside of the trunk lid, remove the nuts (A), and release the clips (B, C, D), then remove the rear license trim (E). Take care not to scratch the trunk lid.

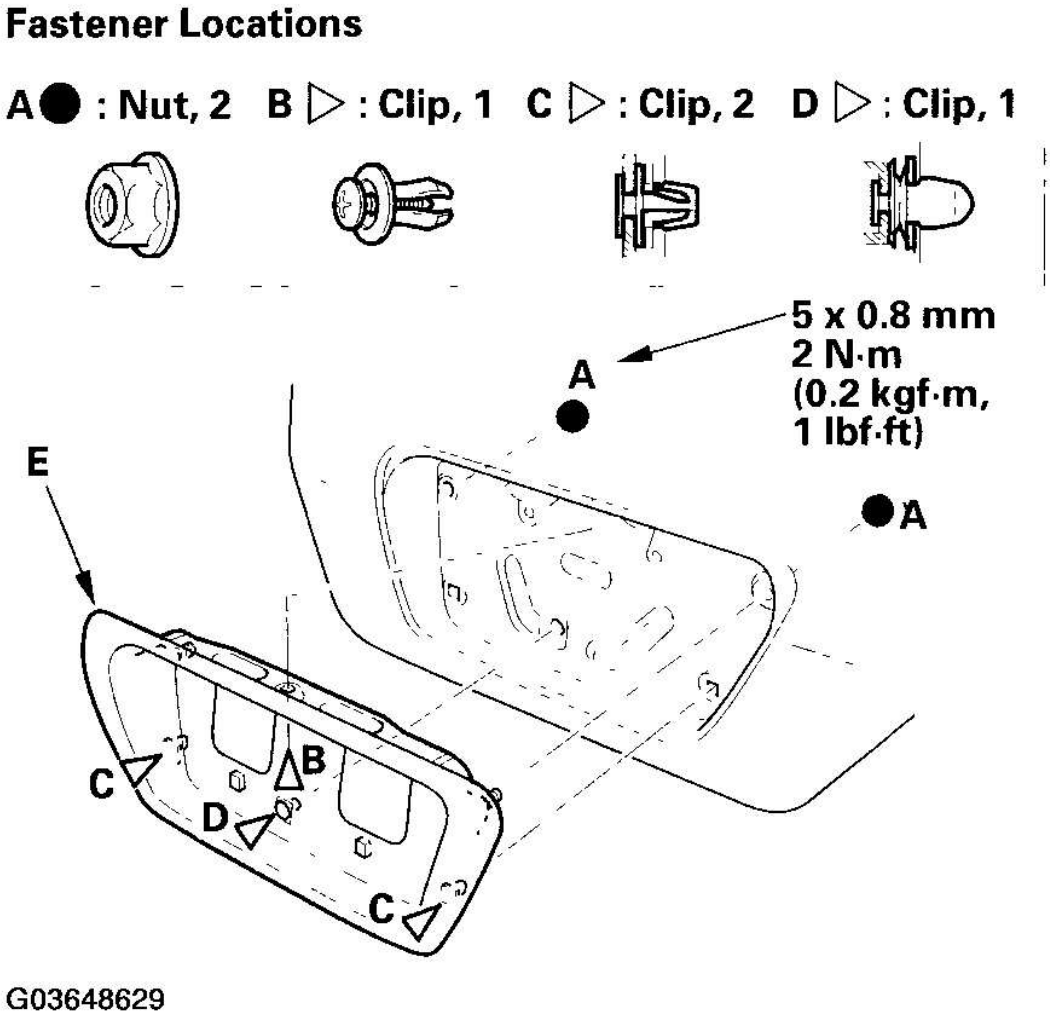


Fig. 19: Removing Rear License Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the trim in the reverse order of removal, and check if the clip is damaged or stress-whitened, and if necessary, replace it with new one.

'06-07 MODEL 4-DOOR

NOTE: Put on gloves to protect your hands.

1. Remove the trunk lid trim (see **4-DOOR**).
2. From inside the trunk lid, disconnect back-up connectors (A), then remove the nuts.

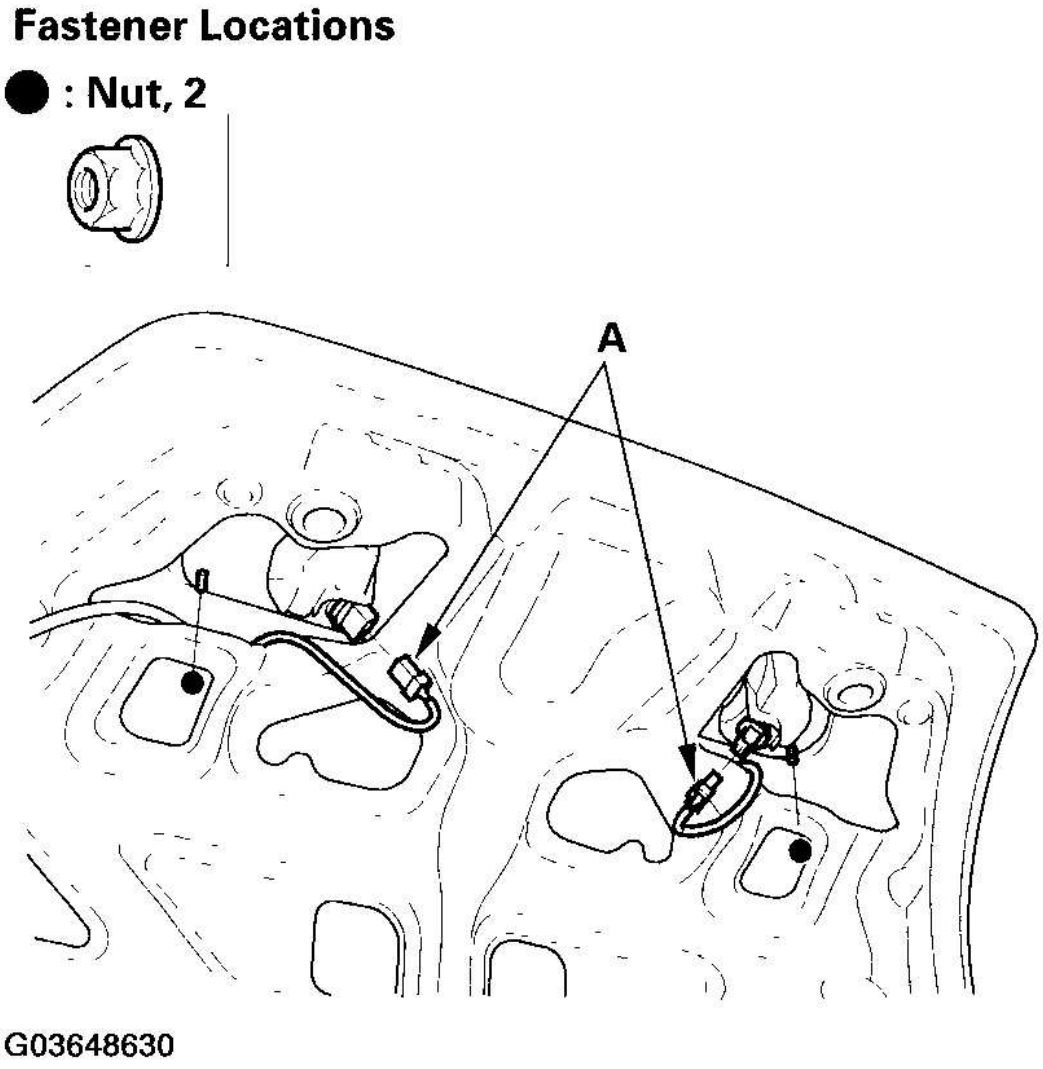


Fig. 20: Disconnecting Back-Up Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. On the inside of the trunk lid, release the clips (A, B, C), then remove the rear license trim (D). Take care not to scratch the trunk lid.

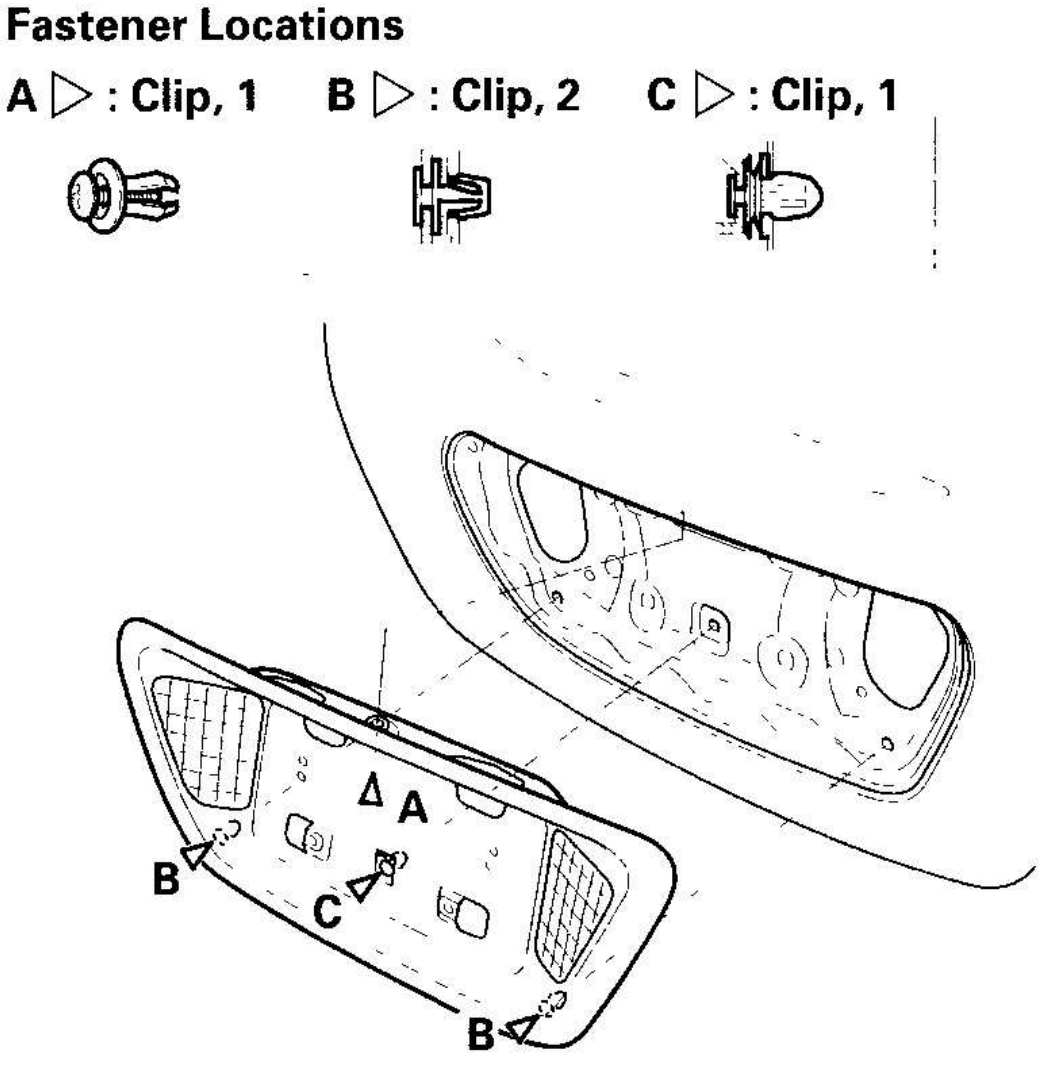


Fig. 21: Removing Clips And Rear License Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TRUNK LID SPOILER REPLACEMENT

'05 MODEL 2-DOOR (CANADA)

NOTE: Put on gloves to protect your hands.

1. Remove the trunk trim panel (see **2-DOOR**).
2. From inside the trunk, remove the bolts and nuts.

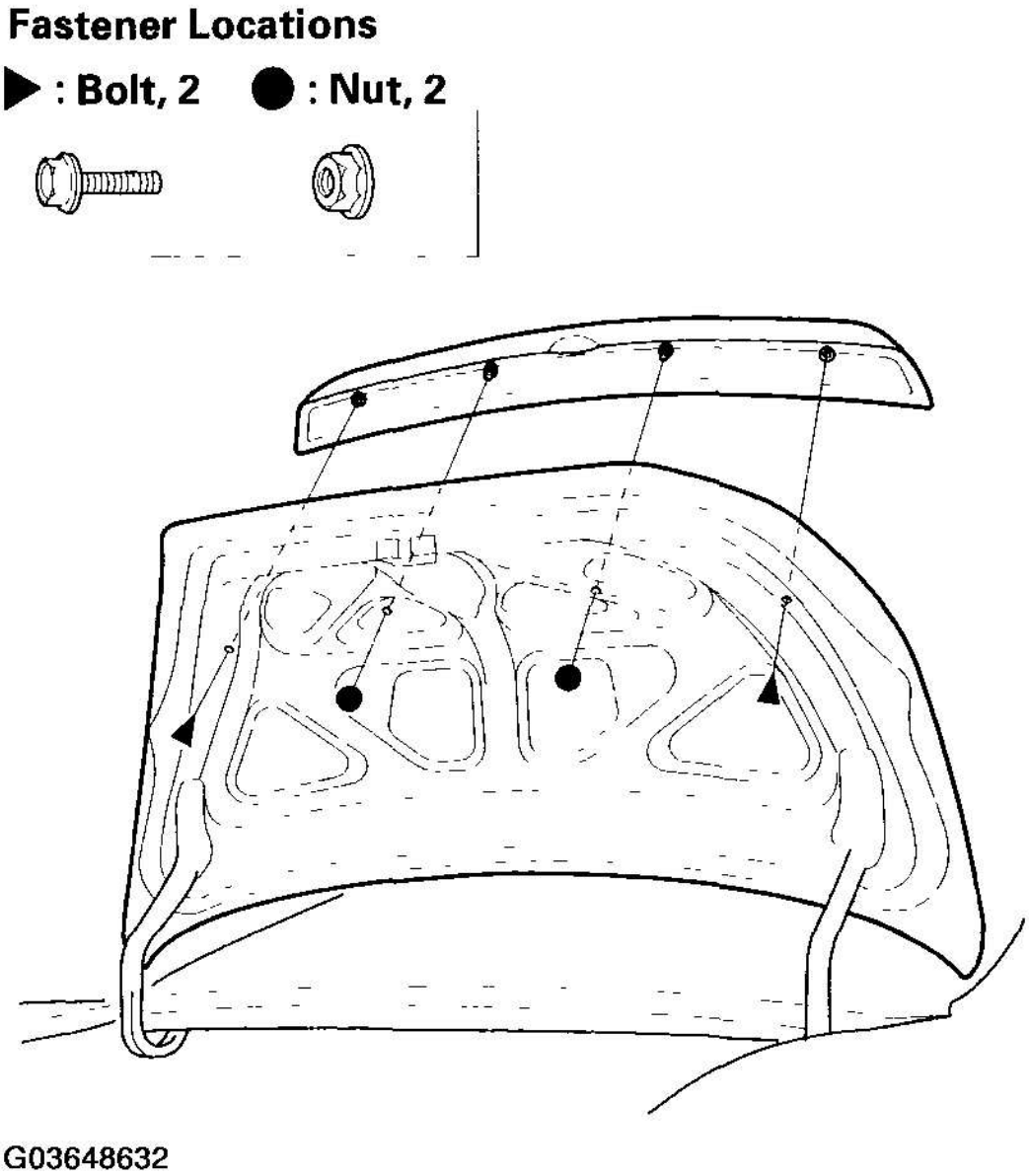


Fig. 22: Removing Trunk Bolts And Nuts

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the spoiler in the order of removal.

EMBLEM/STICKER REPLACEMENT

2-DOOR

NOTE: When removing the emblems/sticker, take care not to scratch the body.

1. Clean the body surface with a sponge dampened in alcohol. After cleaning, keep oil, grease, and water from getting on the surface.
2. Apply the emblems/sticker where shown below. When installing the LEV/ULEV/PZEV ('05-07 models) sticker on the inside surface of the quarter glass, align the sticker application tape with the edge of the black ceramic and the alignment mark on the quarter glass, then press the sticker into place, and remove the application tape.

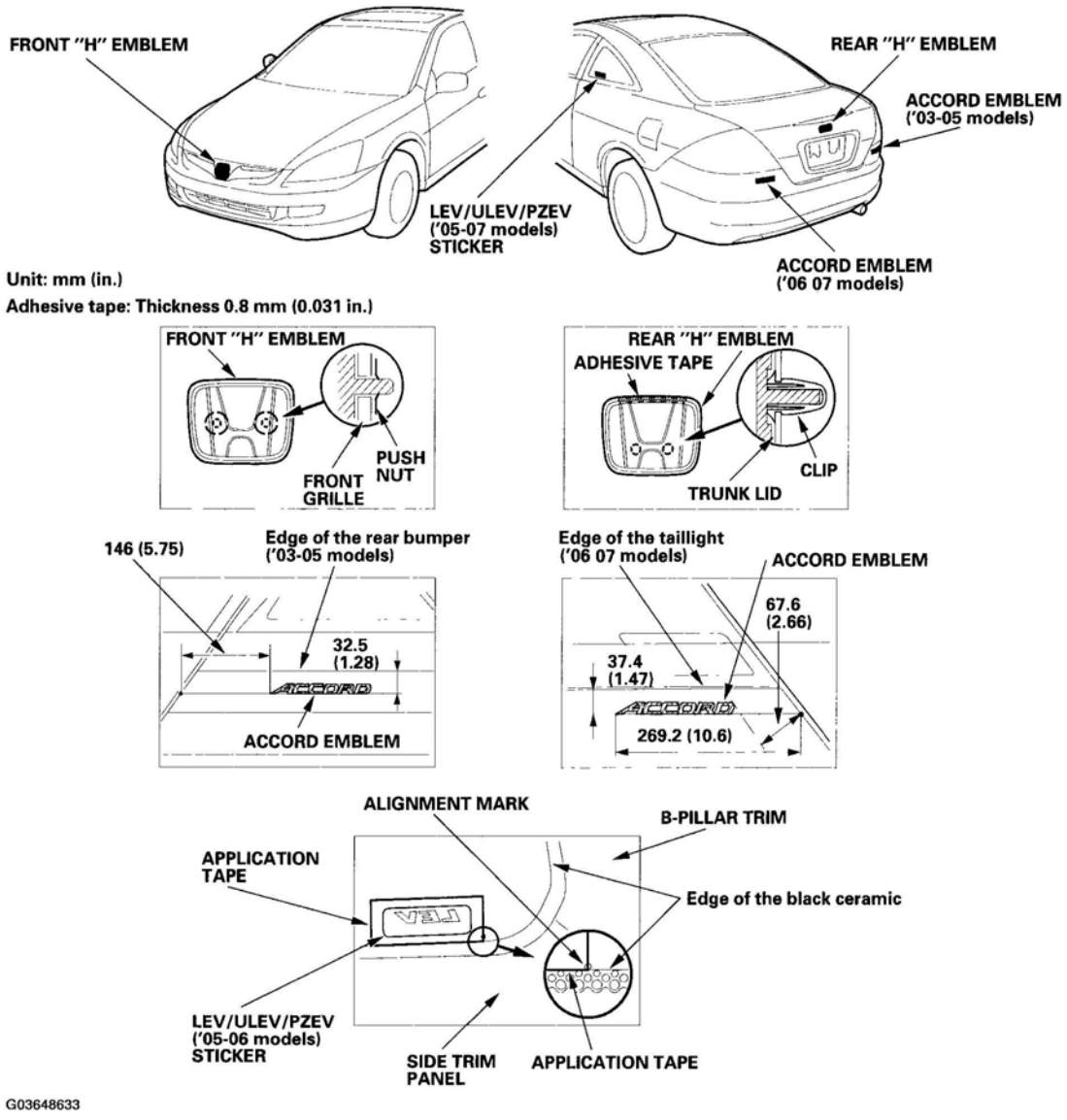


Fig. 23: Applying Emblem/Sticker (2-Door Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

'03-05 MODELS 4-DOOR

NOTE: When removing the emblems/sticker, take care not to scratch the body.

1. Clean the body surface with a sponge dampened in alcohol. After cleaning, keep oil, grease, and water from getting on the surface.

2. Apply the emblems/sticker where shown below. When installing the LEV/ULEV/SULEV ('03-05 models)/ZEV/PZEV/AT-PZEV ('05-07 models) sticker on the inside surface of the rear door quarter glass, align the rear edge of the application tape and bottom of the sticker with the glass mark, then press the sticker into place, and remove the application tape.

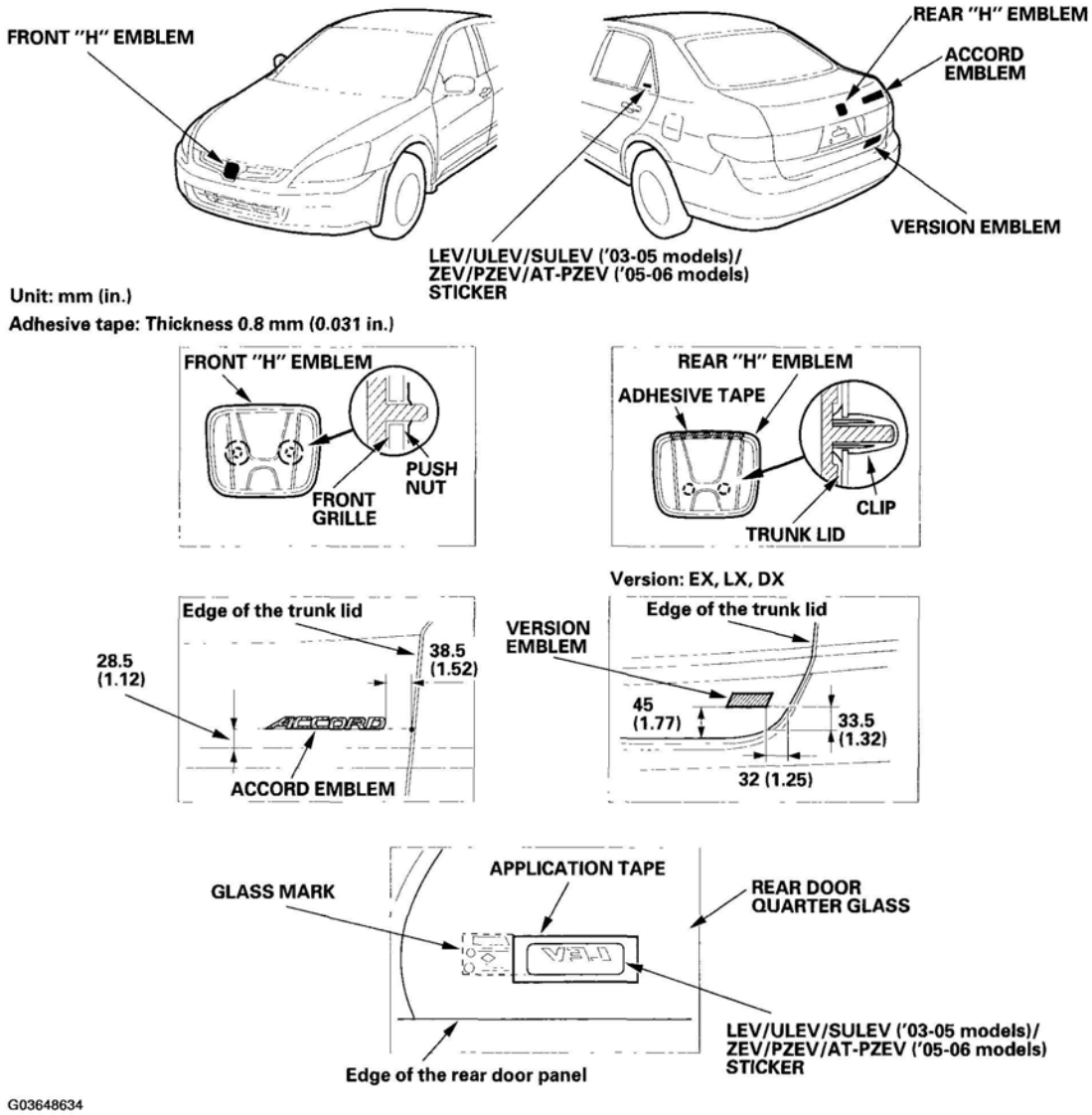


Fig. 24: Applying Emblem/Sticker (2003-05 Models 4-Door) Courtesy of AMERICAN HONDA MOTOR CO., INC.

'06-07 MODEL 4-DOOR

NOTE: When removing the emblems/sticker, take care not to scratch the body.

1. Clean the body surface with a sponge dampened in alcohol. After cleaning, keep oil, grease, and water from getting on the surface.
2. Apply the emblems/sticker where shown below. When installing the LEV/ZEV/PZEV/AT-PZEV sticker on the inside surface of the rear door quarter glass, align the rear edge of the application tape and bottom of the sticker with the glass mark, then press the sticker into place, and remove the application tape.

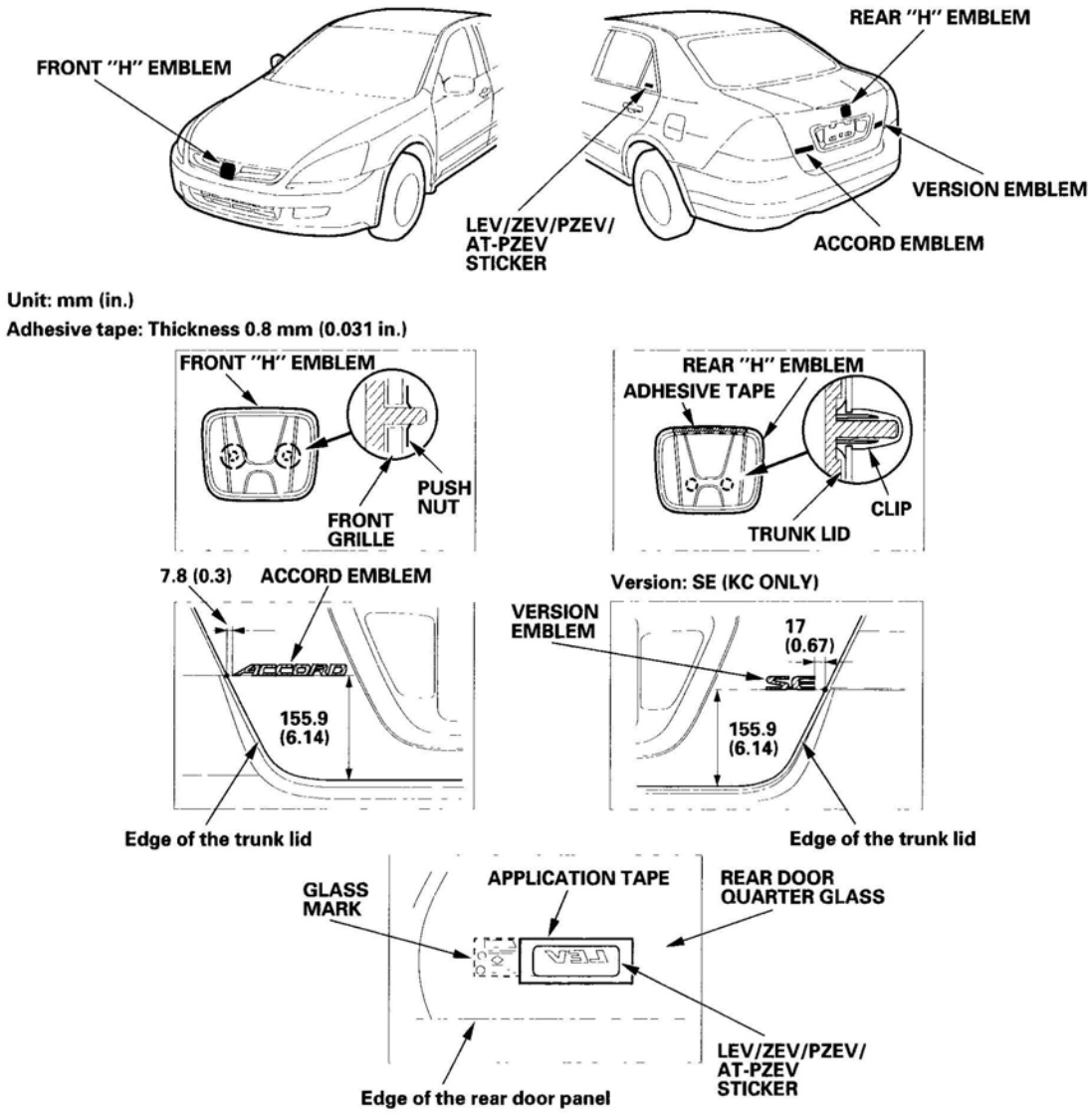


Fig. 25: Applying Emblem/Sticker (2006 Model 4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ENGINE

Fan Controls - Accord (V6)

COMPONENT LOCATION INDEX

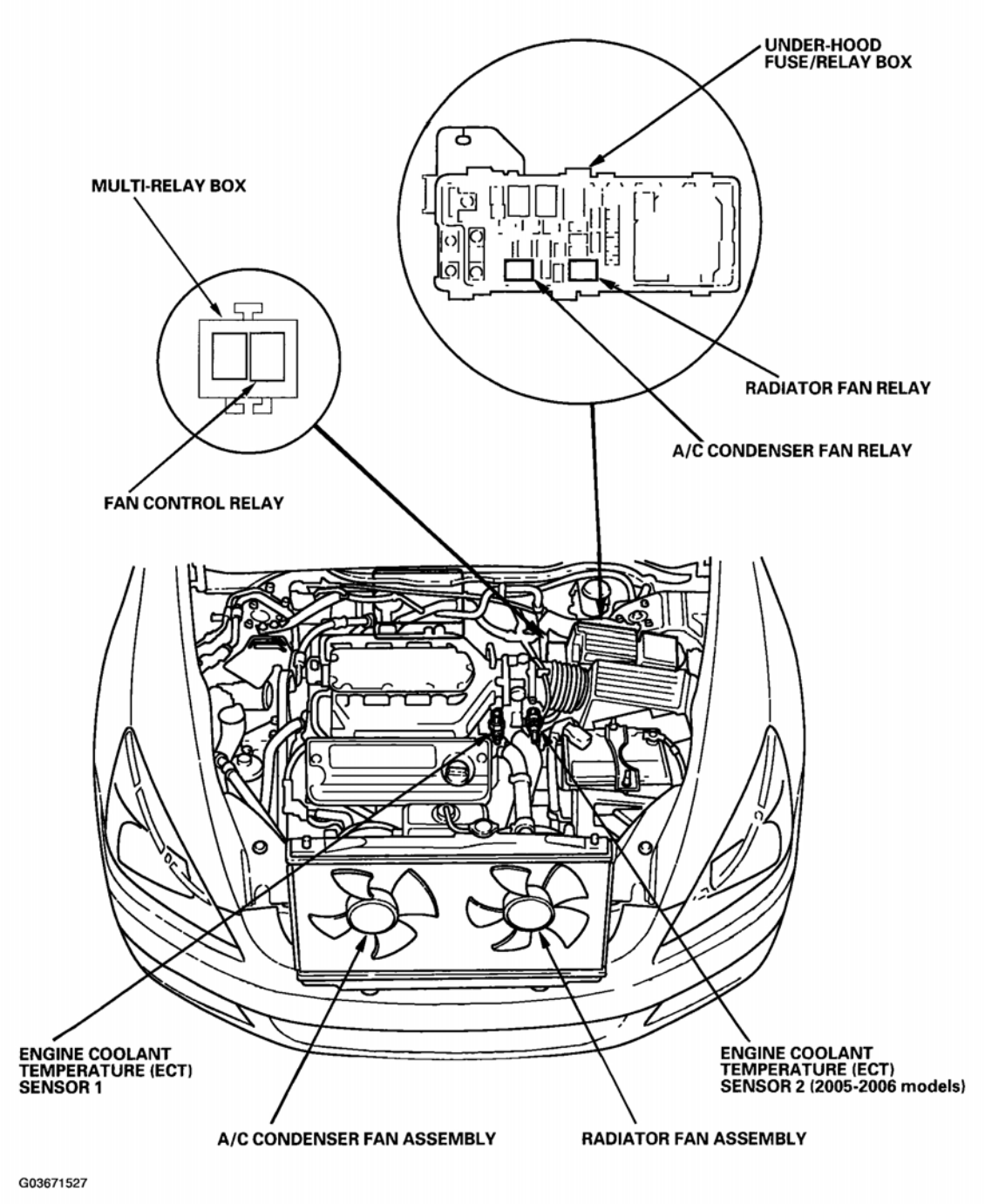


Fig. 1: Locating Fan Controls Components

Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic Procedure	Also check for
Engine overheats	1. Inspect the water pump (see **WATER PUMP INSPECTION**). 2. Check the thermostat (see **THERMOSTAT TEST**). 3. Check for any engine coolant leakage (from gaskets, hoses, O-rings, etc.). 4. Check for dirt, leaves, or insects on radiator and condenser. 5. Check for a damaged or deformed fan shroud. 6. Check for a plugged or deteriorated radiator hoses. 7. Check the radiator cap (see **RADIATOR CAP TEST**). 8. Inspect the fan motors (see **FAN MOTOR TEST**) or fan relays (see **POWER RELAY TEST**). 9. Check for plugged heater core or hoses. 10. Check the coolant level. 11. Check for deteriorated coolant. 12. Check for a damaged cylinder head gasket.	
The radiator fan runs at	Radiator fan high speed circuit	Cleanliness

low speed, but does not run at high speed when the engine coolant temperature is above 206°F (97°C)	troubleshooting (see **RADIATOR FAN HIGH SPEED CIRCUIT TROUBLESHOOTING**).	and tightness of all connectors
With the A/C off and the engine coolant temperature at 206°F (97°C) or below, the A/C condenser fan runs at high speed and the radiator fan does not run. When the engine coolant temperature is above 206° F (97°C), both fans run at high speed	Remove the fan control relay, and test. • If the relay is faulty, replace it. • If the relay is OK, check for a short in the wire between fan control relay 5P socket terminal No. 1 and condenser fan motor 2P connector terminal No. 1.	Cleanliness and tightness of all connectors
The radiator fan and the A/C condenser fan run at high speed with the ignition switch ON (II), the A/C off, and the engine coolant temperature below 204 °F (95 °C)	Check for a short in the wire between radiator fan relay 4P socket terminal No. 4 and ECM/PCM connector terminal A7.	Cleanliness and tightness of all connectors
Both the radiator fan and the A/C condenser fan run at low speed with the ignition switch ON (II) and the A/C off	Check for a short in the wire between A/C condenser fan relay 4P socket terminal No. 4 and ECM/PCM connector terminal A6.	Cleanliness and tightness of all connectors
Both the radiator fan and the A/C condenser fan do not run at low speed with the A/C on	Radiator and A/C condenser fans low speed circuit troubleshooting (see **RADIATOR AND A/C CONDENSER FAN LOW SPEED CIRCUIT TROUBLESHOOTING**).	Cleanliness and tightness of all connectors
The A/C condenser fan does not run at all. The radiator fan does not run at	A/C condenser fans high speed circuit troubleshooting (see **A/C CONDENSER FAN HIGH SPEED**	Cleanliness and tightness

low speed, but it runs at high speed	**CIRCUIT TROUBLESHOOTING**).	of all connectors
Both the radiator fan and the A/C condenser fan do not run at high speed when the engine coolant temperature is above 206° F (97°C)	Check for an open in the wire between radiator fan relay 4P socket terminal No. 4 and ECM/PCM connector terminal A7.	Cleanliness and tightness of all connectors

CIRCUIT DIAGRAM

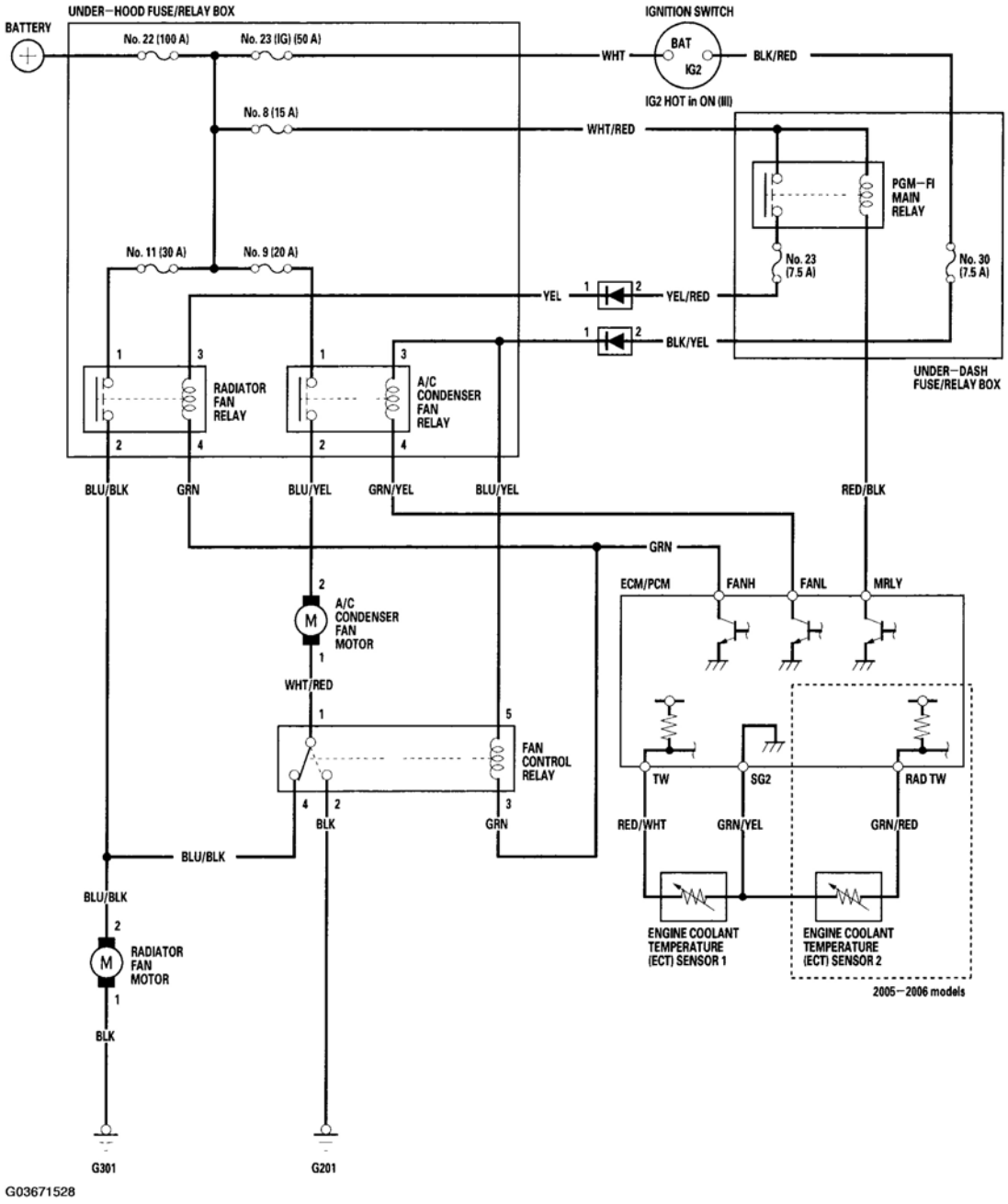


Fig. 2: Fan Controls Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

RADIATOR FAN HIGH SPEED CIRCUIT TROUBLESHOOTING

1. Check the No. 11 (30 A) fuse in the under-hood fuse/relay box, and the No. 23 (7.5 A) fuse in the under-dash fuse/relay box.

Are the fuses OK?

YES - Go to step 2.

NO - Replace the fuse(s) and recheck.

2. Remove the radiator fan relay from the under-hood fuse/relay box and test it (see **POWER RELAY TEST**).

Is the relay OK?

YES - Go to step 3.

NO - Replace the radiator fan relay.

3. Measure the voltage between radiator fan relay 4P socket terminal No. 1 and body ground.

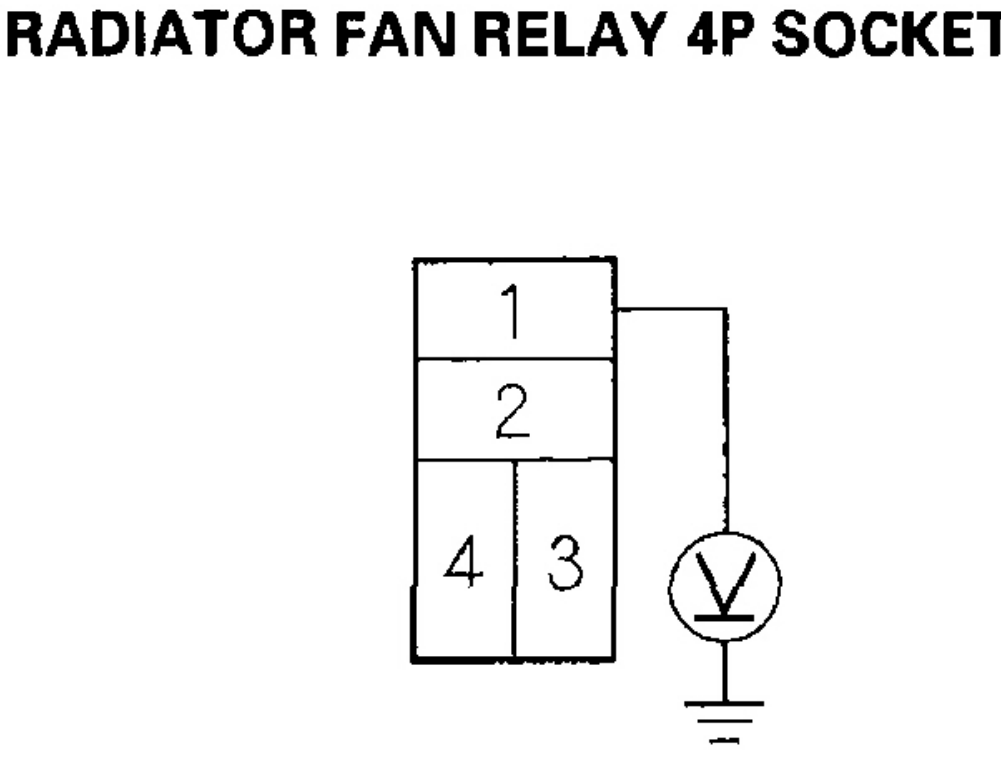


Fig. 3: Measuring Voltage Between Radiator Fan Relay 4P Socket Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 4.

NO - Repair an open in the wire between radiator fan relay 4P socket terminal No. 1 and the under-hood fuse/relay box.

4. Connect radiator fan relay 4P socket terminals No. 1 and No. 2 with a jumper wire.

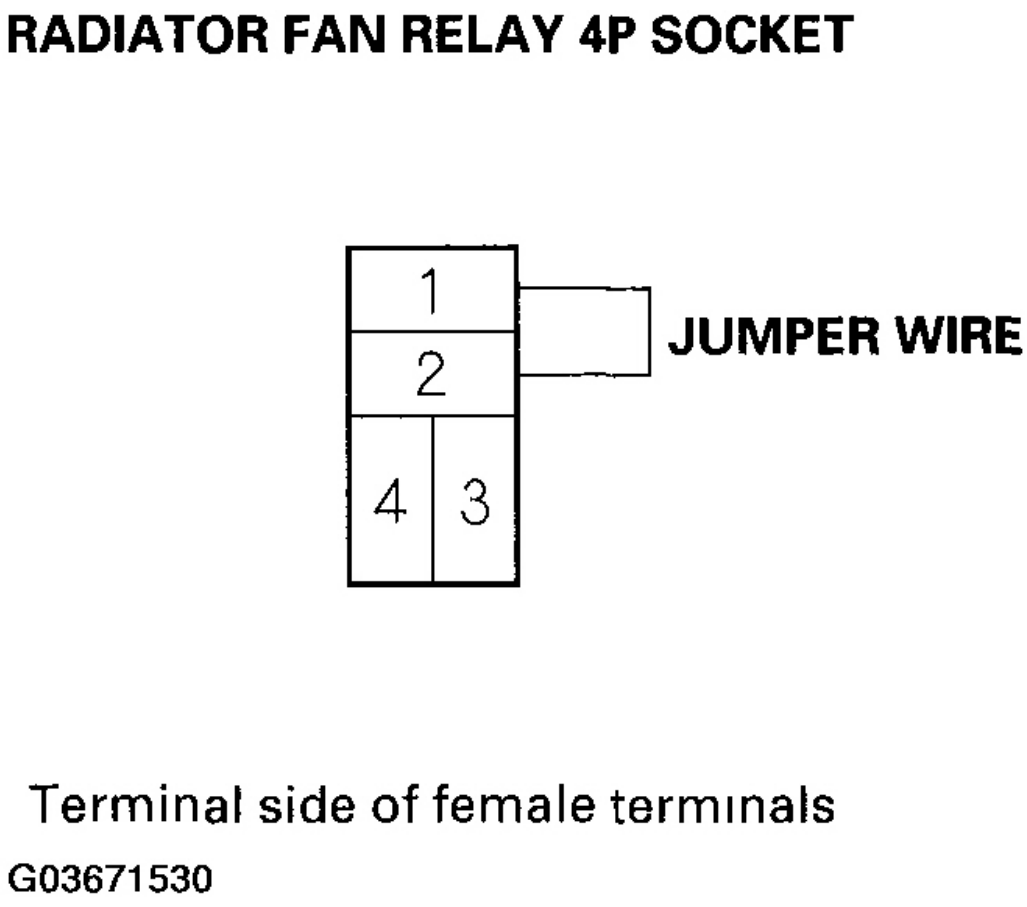


Fig. 4: Connecting Radiator Fan Relay 4P Socket Terminals No. 1 And No. 2 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the radiator fan run at high speed?

YES - Go to step 5.

NO - Repair an open in the wire between radiator fan relay 4P socket terminal No. 2 and radiator fan motor 2P connector terminal No. 2.

5. Turn the ignition switch ON (II).
6. Measure voltage between radiator fan relay 4P socket terminal No. 3 and body ground.

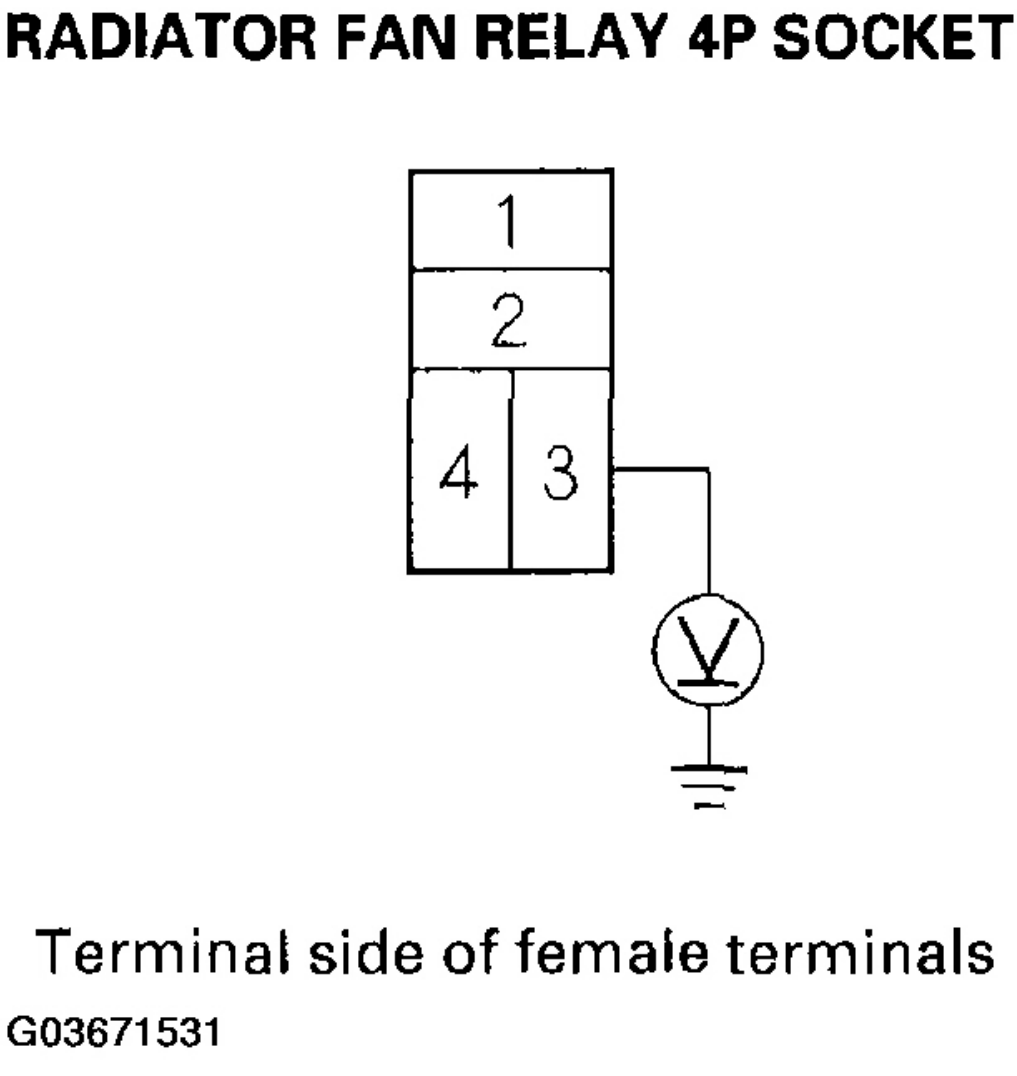


Fig. 5: Measuring Voltage Between Radiator Fan Relay 4P Socket Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Repair an open in the wire between radiator fan relay 4P socket terminal No. 4 and engine control module (ECM)/the powertrain control module (PCM) (A3).

NO - Repair an open in the wire between radiator fan relay 4P socket terminal No. 3 and the under-dash fuse/relay box.

2003-07 ENGINE

Fan Controls - Accord

COMPONENT LOCATION INDEX

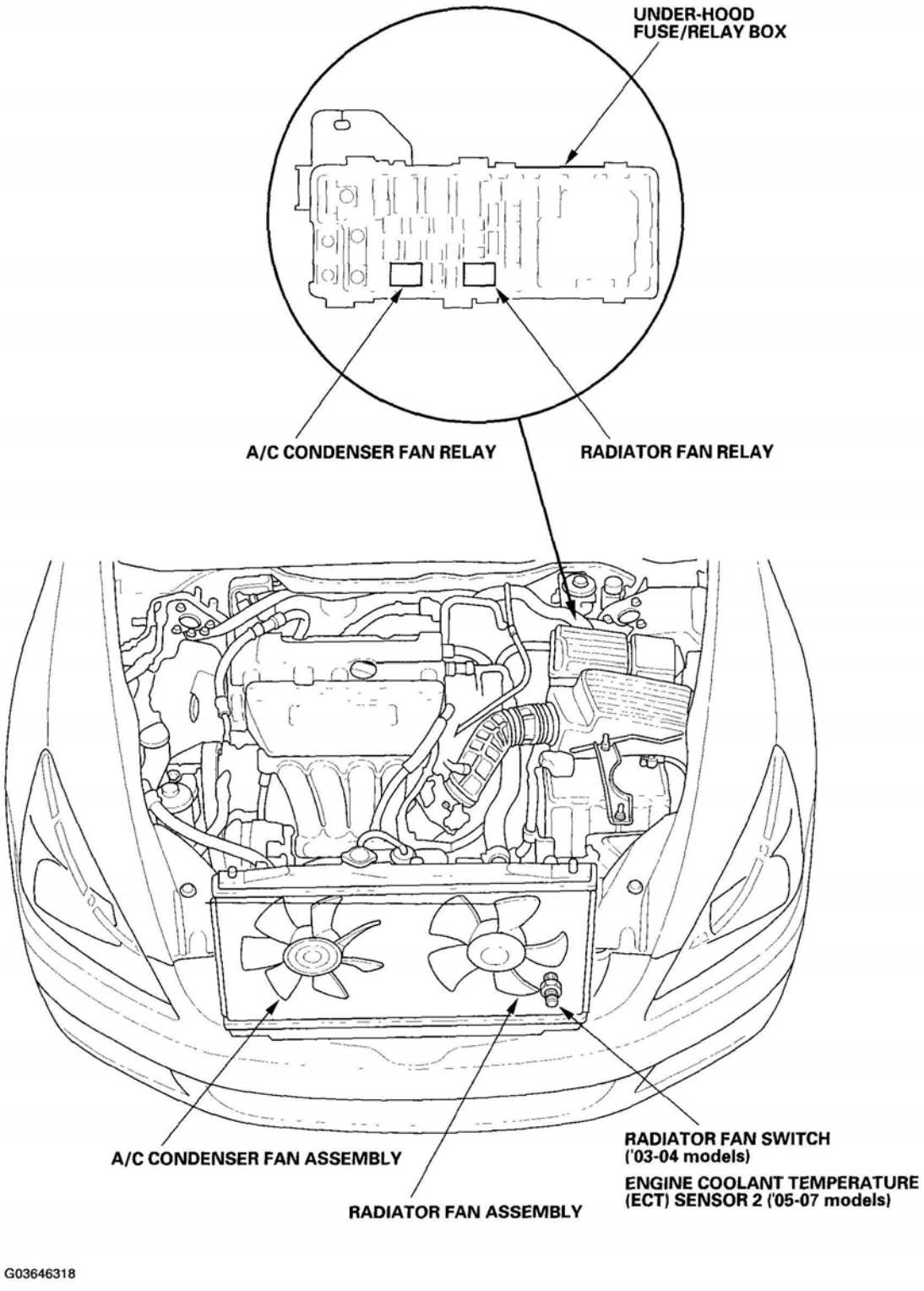


Fig. 1: Identifying Fan Controls Component Location Index
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

'03-04 MODELS

SYMPTOM TROUBLESHOOTING INDEX (2003-2004 MODELS)

Symptom	Diagnostic procedure	Also check for
Engine overheats	1. Inspect the water pump (see **WATER PUMP INSPECTION**). 2. Check for a broken drive belt (see **DRIVE BELT INSPECTION**). 3. Check the drive belt auto-tensioner (see **DRIVE BELT AUTO-TENSIONER INSPECTION**). 4. Check the thermostat (see **THERMOSTAT TEST**). 5. Check for the coolant leakage (from gaskets, hoses, O-rings, etc.). 6. Check for dirt, leaves, or insects on radiator and condenser. 7. Check for damaged or deformed fan shroud. 8. Check for plugged or deteriorated radiator hoses. 9. Check the radiator cap (see **RADIATOR CAP**	

	TEST). 10. Inspect the fan motors or fan relays. 11. Check for plugged heater core or hose(s). 12. Check the coolant level. 13. Check for deteriorated coolant. 14. Check for a damaged cylinder head gasket.	
The radiator fan does not run at all	Radiator fan circuit troubleshooting (see **RADIATOR FAN CIRCUIT TROUBLESHOOTING**).	Cleanliness and tightness of all connectors
The radiator fan does not run for engine cooling, but it runs with the A/C on	Radiator fan switch circuit troubleshooting (Open) (see **RADIATOR FAN SWITCH CIRCUIT TROUBLESHOOTING (OPEN)**).	Cleanliness and tightness of all connectors
The radiator fan runs with the ignition switch ON (II), the A/C off, and the engine coolant temperature below 199°F (93° C)	Radiator fan switch circuit troubleshooting (Short) (see **RADIATOR FAN SWITCH CIRCUIT TROUBLESHOOTING (SHORT)**).	Cleanliness and tightness of all connectors
The A/C condenser fan does not run at all (but the	A/C condenser fan circuit troubleshooting (see **A/C CONDENSER FAN**	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**)

radiator fan runs with the A/C on)	**CIRCUIT TROUBLESHOOTING**).	• Cleanliness and tightness of all connectors
Both the radiator fan and the A/C condenser fan do not run with the A/C on (but the A/C compressor runs with the A/C on)	Radiator and A/C condenser fan common circuit troubleshooting (see **RADIATOR AND A/C CONDENSER FAN COMMON CIRCUIT TROUBLESHOOTING**).	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Cleanliness and tightness of all connectors
The A/C compressor clutch does not engage (but both the radiator fan and the A/C condenser fan run with the A/C on)	A/C compressor clutch circuit troubleshooting (see **A/C COMPRESSOR CLUTCH CIRCUIT TROUBLESHOOTING**).	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Cleanliness and tightness of all connectors

'05-07 MODELS

SYMPTOM TROUBLESHOOTING INDEX (2005-2006 MODELS)

Symptom	Diagnostic procedure	Also check for
	1. Inspect the water pump (see **WATER PUMP INSPECTION**). 2. Check for a broken drive belt (see **DRIVE BELT INSPECTION**). 3. Check the drive belt auto-tensioner (see **DRIVE BELT AUTO-TENSIONER**	

Engine overheats	**INSPECTION**). 4. Check the thermostat (see **THERMOSTAT TEST**). 5. Check for the coolant leakage (from gaskets, hoses, O-rings, etc.). 6. Check for dirt, leaves, or insects on radiator and condenser. 7. Check for damaged or deformed fan shroud. 8. Check for plugged or deteriorated radiator hoses. 9. Check the radiator cap (see **RADIATOR CAP TEST**). 10. Inspect the fan motors or fan relays. 11. Check for plugged heater core or hose(s). 12. Check the coolant level. 13. Check for deteriorated coolant. 14. Check for a damaged cylinder head gasket.	
The radiator fan does not run at all	Radiator fan circuit troubleshooting (see **2005-2006 Models**).	Cleanliness and tightness of all connectors
Both the radiator fan and the A/C condenser fan	Remove the radiator fan relay, and test.	

run with the ignition switch ON (II), the A/C off, and the engine coolant temperature below 199°F (93° C)	• If the relay is faulty, replace it. • If the relay is OK, repair a short in the wire between radiator fan relay 4P socket terminal No. 4 and ECM/PCM connector terminal E12.	Cleanliness and tightness of all connectors
The A/C condenser fan does not run at all (but the radiator fan runs with the A/C on)	A/C condenser fan circuit troubleshooting (see **A/C CONDENSER FAN CIRCUIT TROUBLESHOOTING**).	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Cleanliness and tightness of all connectors
Both the radiator fan and the A/C condenser fan do not run with the A/C on (but the A/C compressor runs with the A/C on)	Radiator and A/C condenser fan common circuit troubleshooting (see **RADIATOR AND A/C CONDENSER FAN COMMON CIRCUIT TROUBLESHOOTING**).	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Cleanliness and tightness of all connectors
The A/C compressor clutch does not engage (but both the radiator fan and the A/C condenser fan run with the A/C on)	A/C compressor clutch circuit troubleshooting (see **A/C COMPRESSOR CLUTCH CIRCUIT TROUBLESHOOTING**).	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Cleanliness and tightness of all connectors

CIRCUIT DIAGRAM

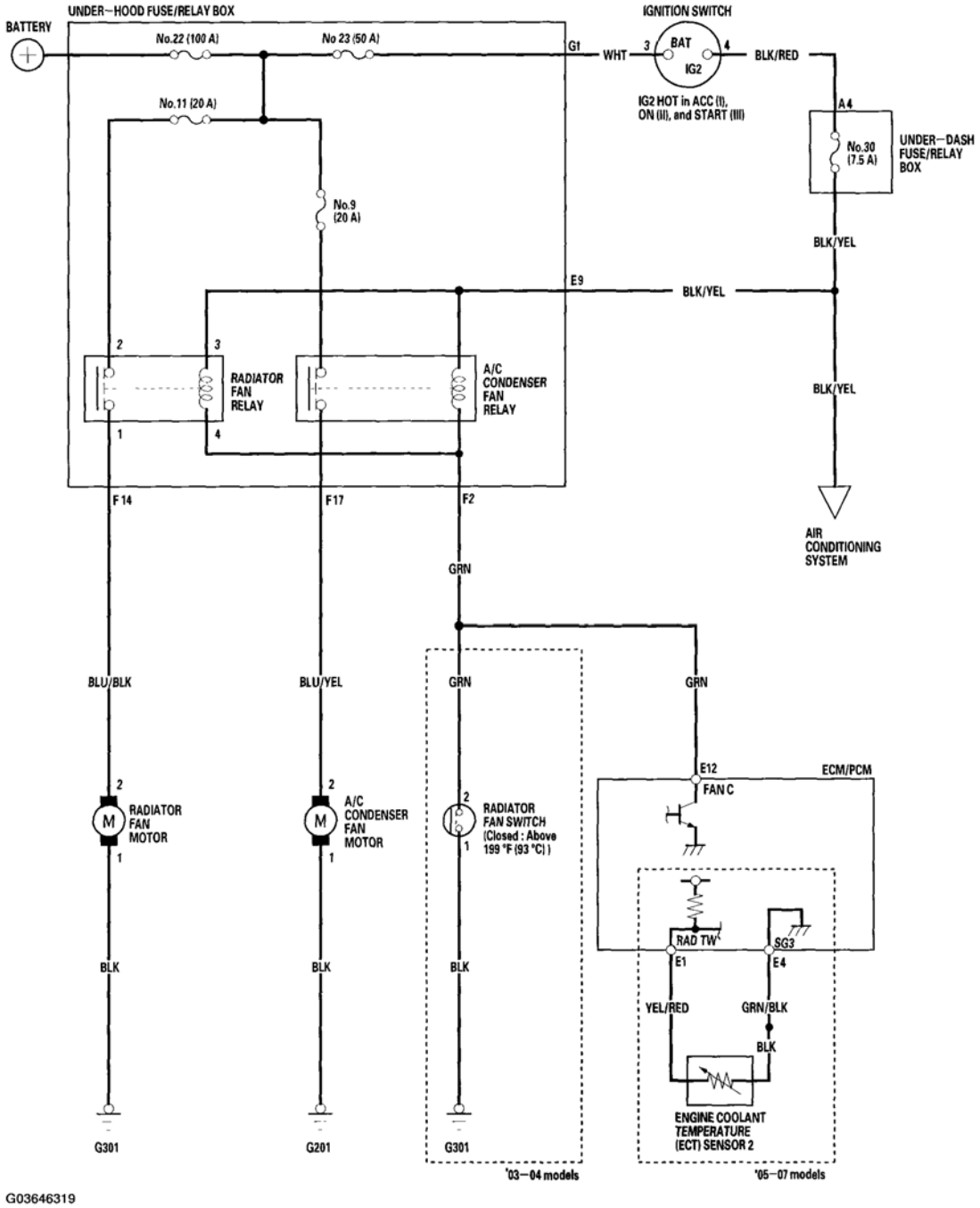


Fig. 2: Identifying Fan Controls Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

RADIATOR FAN CIRCUIT TROUBLESHOOTING

'03-04 MODELS

NOTE: Before beginning this troubleshooting procedure, refer to SYMPTOM TROUBLESHOOTING INDEX.

1. Check the No. 11 (20 A) fuse in the under-hood fuse/relay box, and the No. 30 (7.5 A) fuse in the under-dash fuse/relay box.

   Are the fuses OK?

   YES - Reinstall the fuse, then got to step 2.

   NO - Replace the fuse(s) and recheck.

2. Remove the radiator fan relay from the under-hood fuse/relay box, and test it (see **UNDER-HOOD FUSE/RELAY BOX (EXCEPT HYBRID & V6)**).

   Is the relay OK?

   YES - Go to step 3.

   NO - Replace the radiator fan relay.

3. Measure the voltage between radiator fan relay 4P socket terminal No. 2 and body ground.

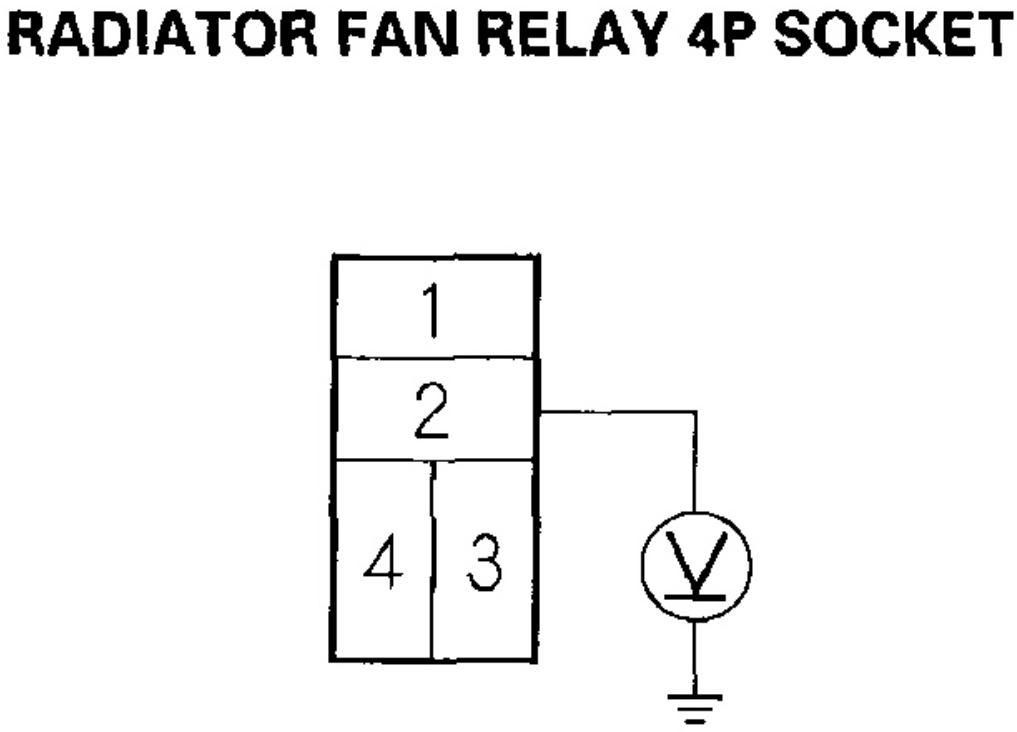


Fig. 3: Measuring Voltage Between Radiator Fan Relay 4P Socket Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 4.
NO - Replace the under-hood fuse/relay box.

4. Connect radiator fan relay 4P socket terminal No. 1 and No. 2 with a jumper wire.

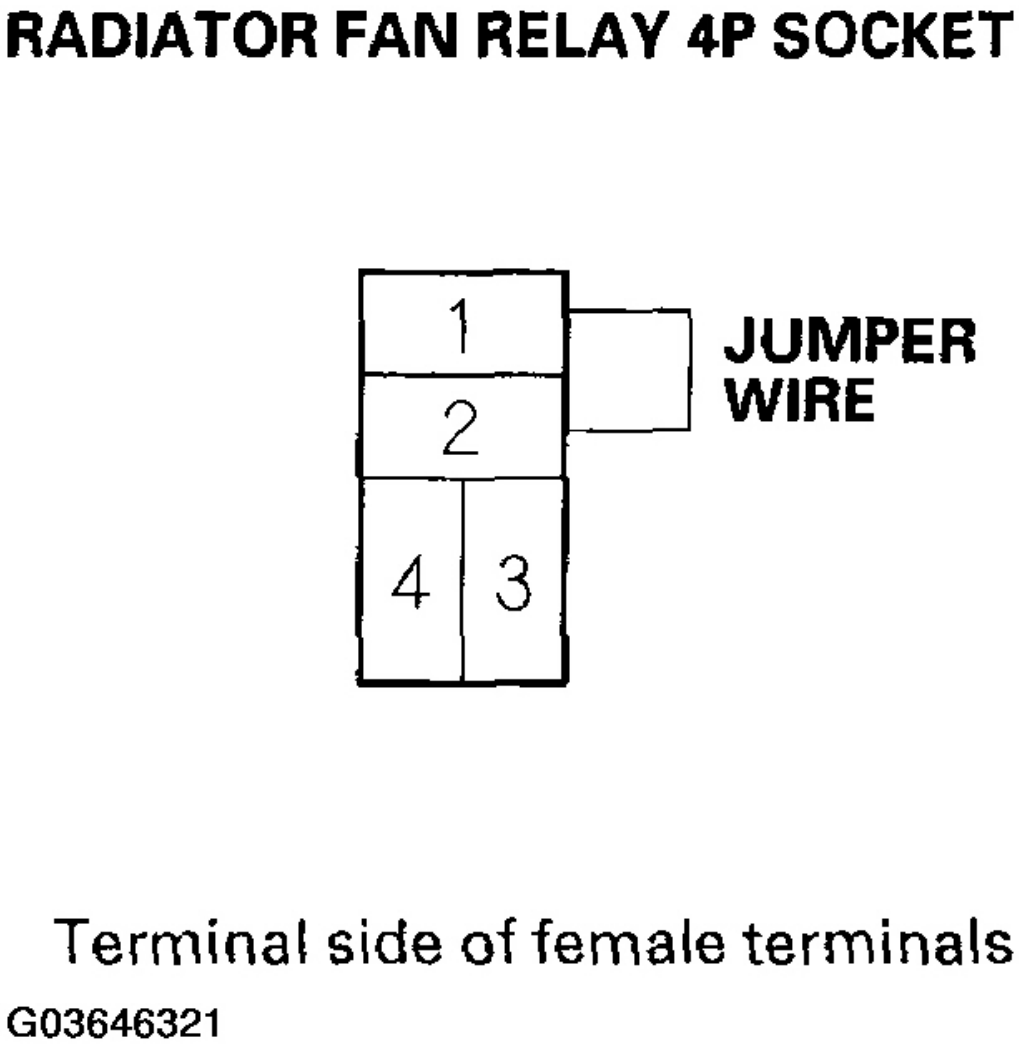


Fig. 4: Connecting Radiator Fan Relay 4P Socket Terminal No. 1 And No. 2 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the radiator fan run?

YES - Go to step 5.

NO - Go to step 6.

5. Disconnect the jumper, and turn the ignition switch ON (II). Check for voltage between radiator fan relay 4P socket terminal No. 3 and body ground.

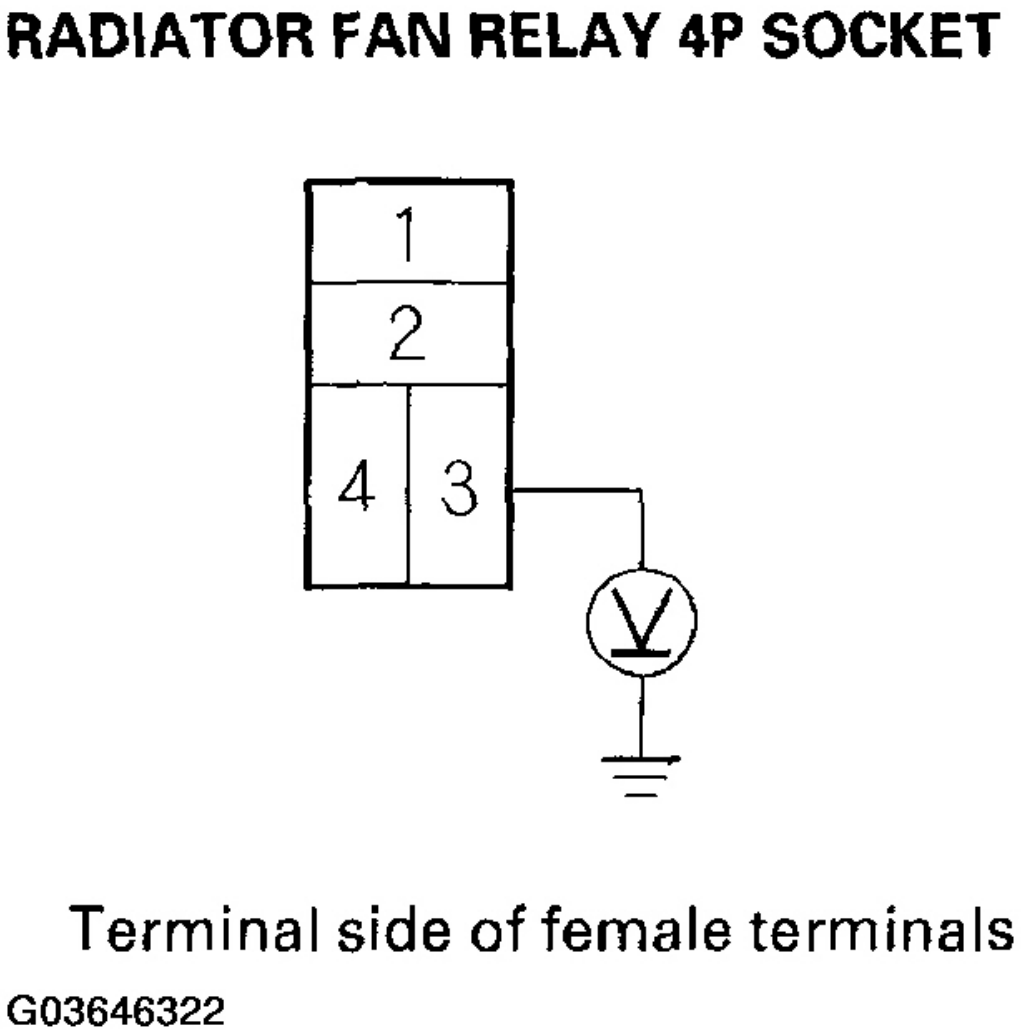


Fig. 5: Checking For Voltage Between Radiator Fan Relay 4P Socket Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 9.

NO - Repair an open in the wire between the under-hood fuse/relay box and under-dash fuse/relay box.

6. Disconnect the radiator fan motor 2P connector.
7. Check for continuity between radiator fan relay 4P socket terminal No. 1 and radiator fan motor 2P connector terminal No. 2.

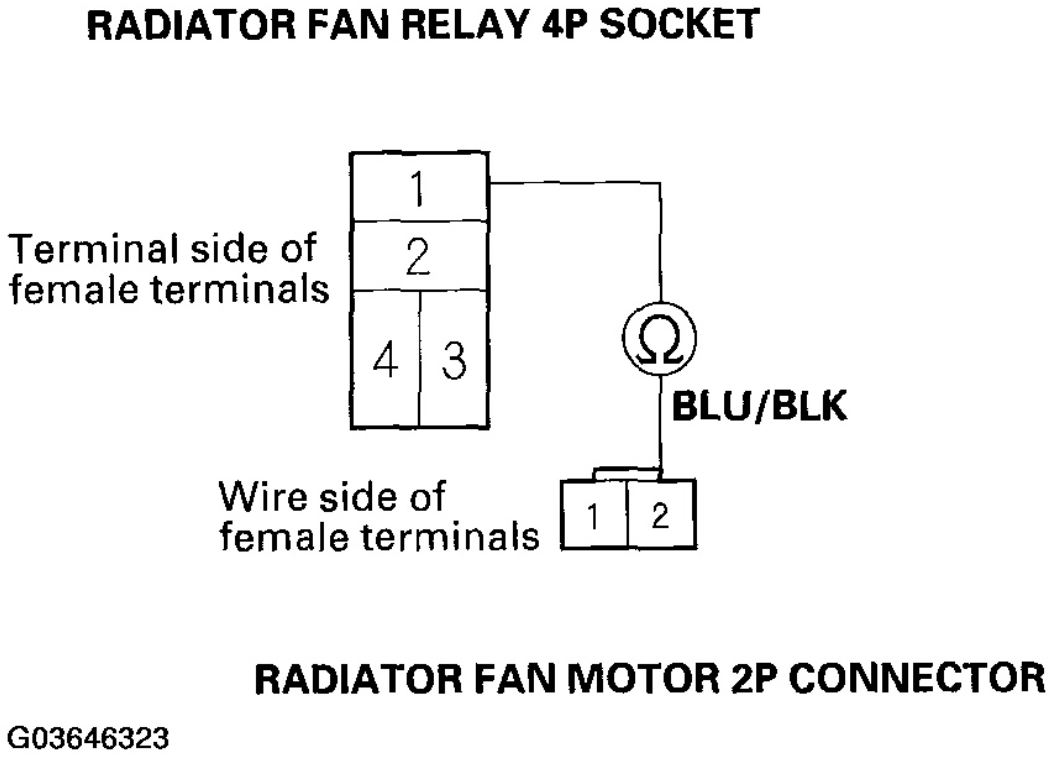


Fig. 6: Checking Continuity Between Radiator Fan Relay 4P Socket And Radiator Fan Motor 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 8.

NO - Repair an open in the wire between the under-hood fuse/relay box and radiator fan motor 2P connector terminal No. 2.

8. Check for continuity between radiator fan motor 2P connector terminal No. 1 and body ground.

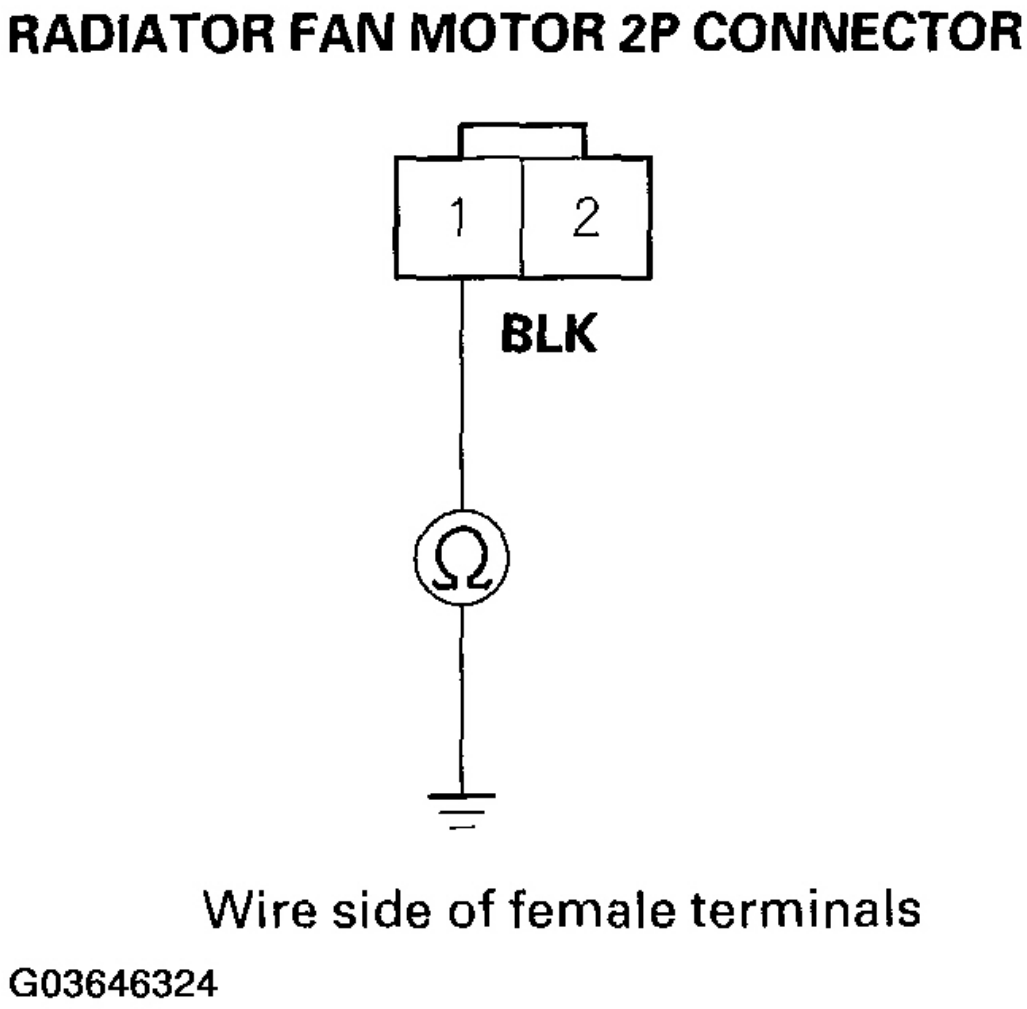


Fig. 7: Checking Continuity Between Radiator Fan Motor 2P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the radiator fan motor (see **RADIATOR AND FAN REPLACEMENT**).

NO - Repair an open in the wire between radiator fan motor 2P connector terminal No. 1 and body ground. If the wire is OK, check for a poor ground at G301.

9. Reinstall the radiator fan relay.
10. Disconnect the radiator fan switch 2P connector.
11. Connect radiator fan switch 2P connector terminal No. 1 and No. 2 with a jumper wire.

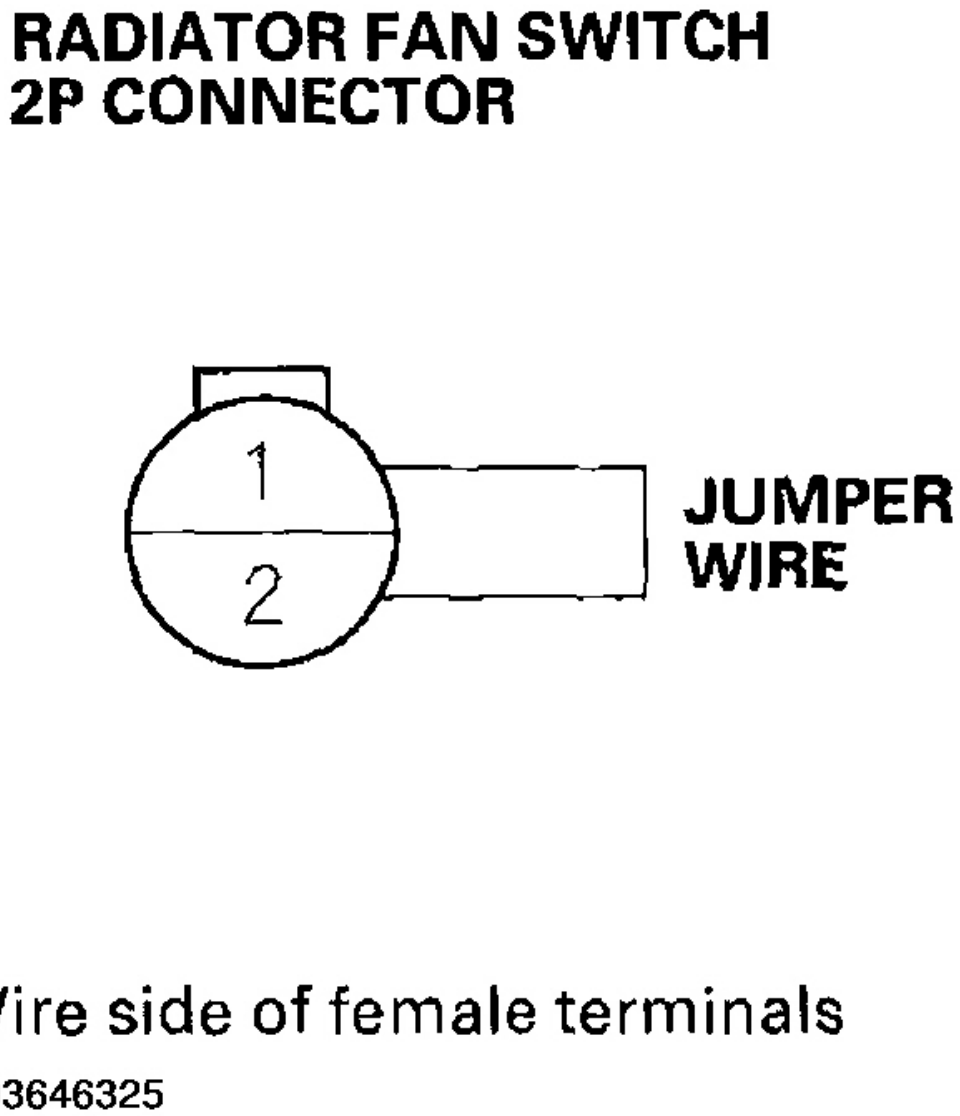


Fig. 8: Connecting Radiator Fan Switch 2P Connector Terminal No. 1 And No. 2 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the radiator fan run?

YES - Replace the radiator fan switch (see **Radiator Fan Switch**

Replacement).

NO - Go to step 12.

12. Remove the jumper wire, and measure the voltage between radiator fan switch 2P connector terminal No. 2 and body ground.

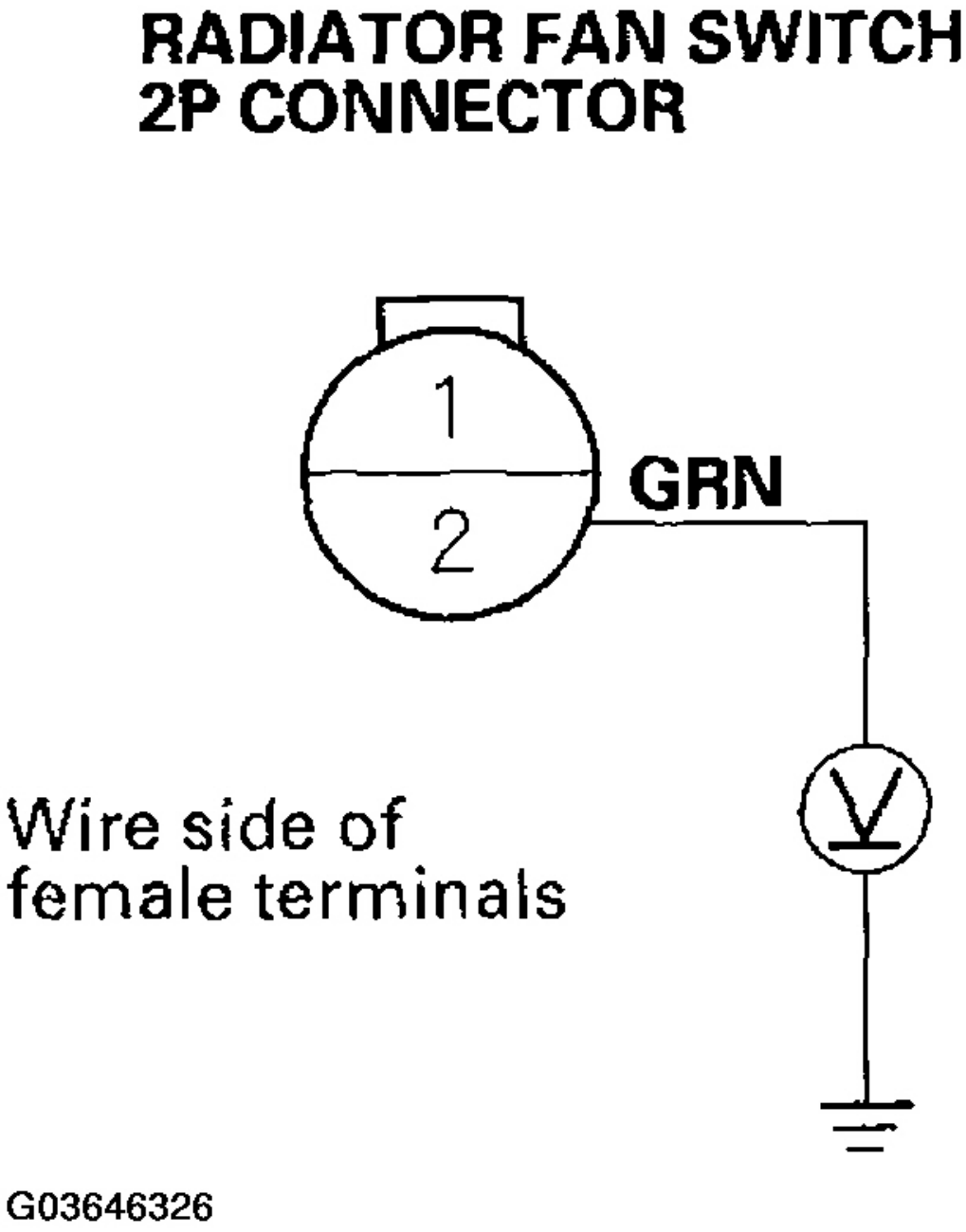


Fig. 9: Measuring Voltage Between Radiator Fan Switch 2P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Repair an open in the wire between radiator fan switch 2P connector terminal No. 1 and body ground. If the wire is OK, check for a poor ground at G301.

NO - Repair open in the wire between radiator fan switch 2P connector terminal No. 2 and the under-hood fuse/relay box.

'05-07 MODELS

NOTE: Before beginning this troubleshooting procedure, refer to SYMPTOM TROUBLESHOOTING INDEX.

1. Check the No. 11 (20 A) fuse in the under-hood fuse/relay box, and the No. 30 (7.5 A) fuse in the under-dash fuse/relay box.

   Are the fuses OK?

   YES - Reinstall the fuse, then go to step 2.

   NO - Replace the fuse(s) and recheck.
2. Remove the radiator fan relay from the under-hood fuse/relay box, and test it (see **UNDER-HOOD FUSE/RELAY BOX (EXCEPT HYBRID & V6**).

   Is the relay OK?

   YES - Reinstall the fuse, then go to step 3.

   NO - Replace the radiator fan relay.
3. Measure the voltage between radiator fan relay 4P socket terminal No. 2 and body ground.

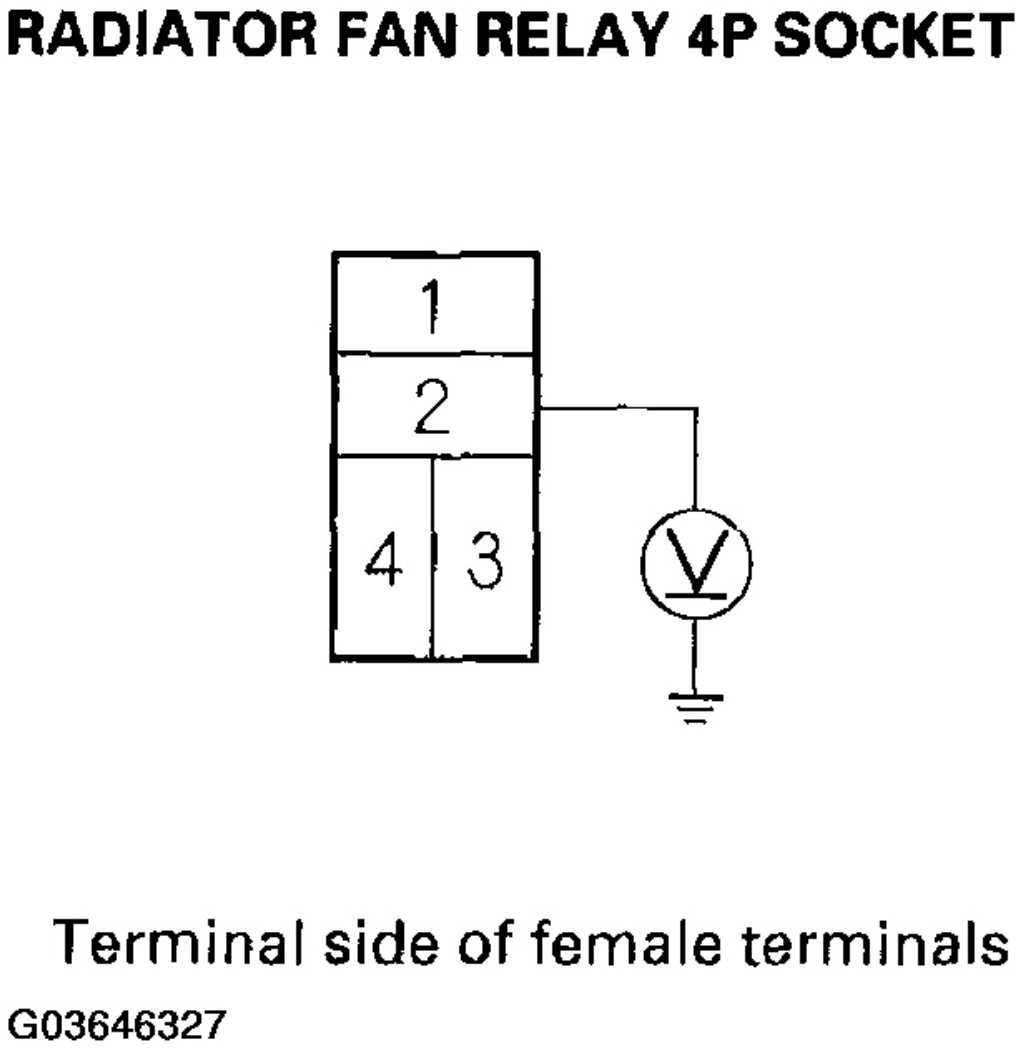


Fig. 10: Measuring Voltage Between Radiator Fan Relay 4P Socket Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 4.
NO - Replace the under-hood fuse/relay box.

4. Connect radiator fan relay 4P socket terminal No. 1 and No. 2 with a jumper wire.

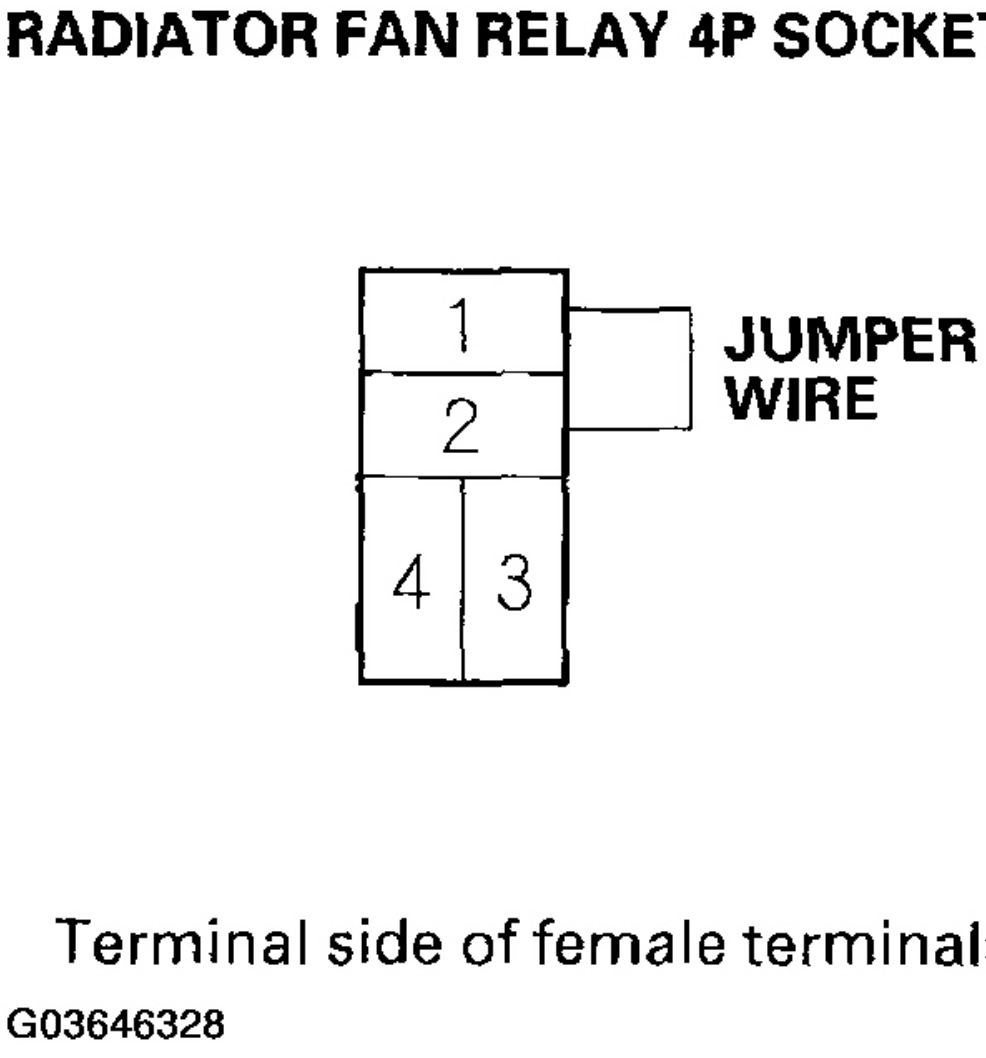


Fig. 11: Connecting Radiator Fan Relay 4P Socket Terminal No. 1 And No. 2 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the radiator fan run?

YES - Go to step 5.

NO - Go to step 6.

5. Disconnect the jumper, and turn the ignition switch ON (II). Check for voltage between radiator fan relay 4P socket terminal No. 3 and body ground.

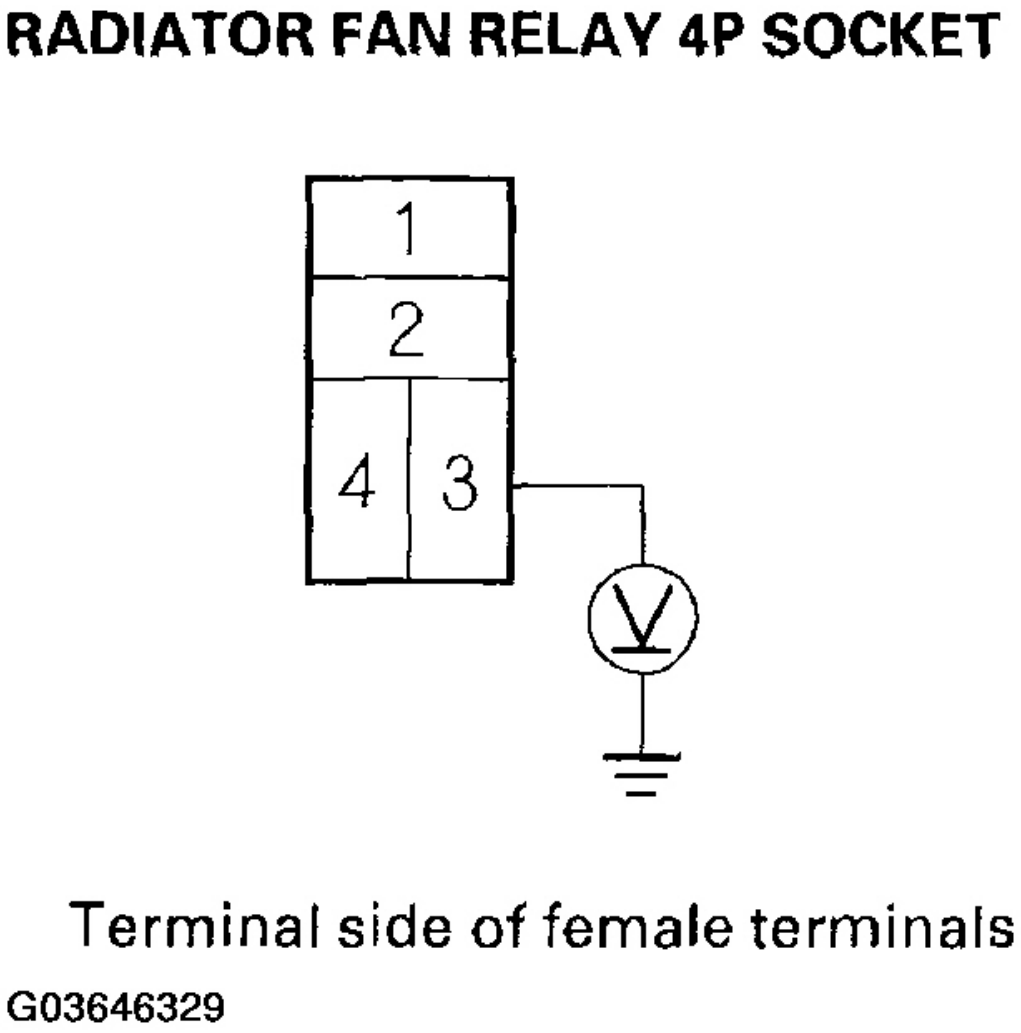


Fig. 12: Checking Voltage Between Radiator Fan Relay 4P Socket Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 9.

NO - Repair an open in the wire between the under-hood fuse/relay box and under-dash fuse/relay box.

6. Disconnect the radiator fan motor 2P connector.
7. Check for continuity between radiator fan relay 4P socket terminal No. 1 and radiator fan motor 2P connector terminal No. 2.

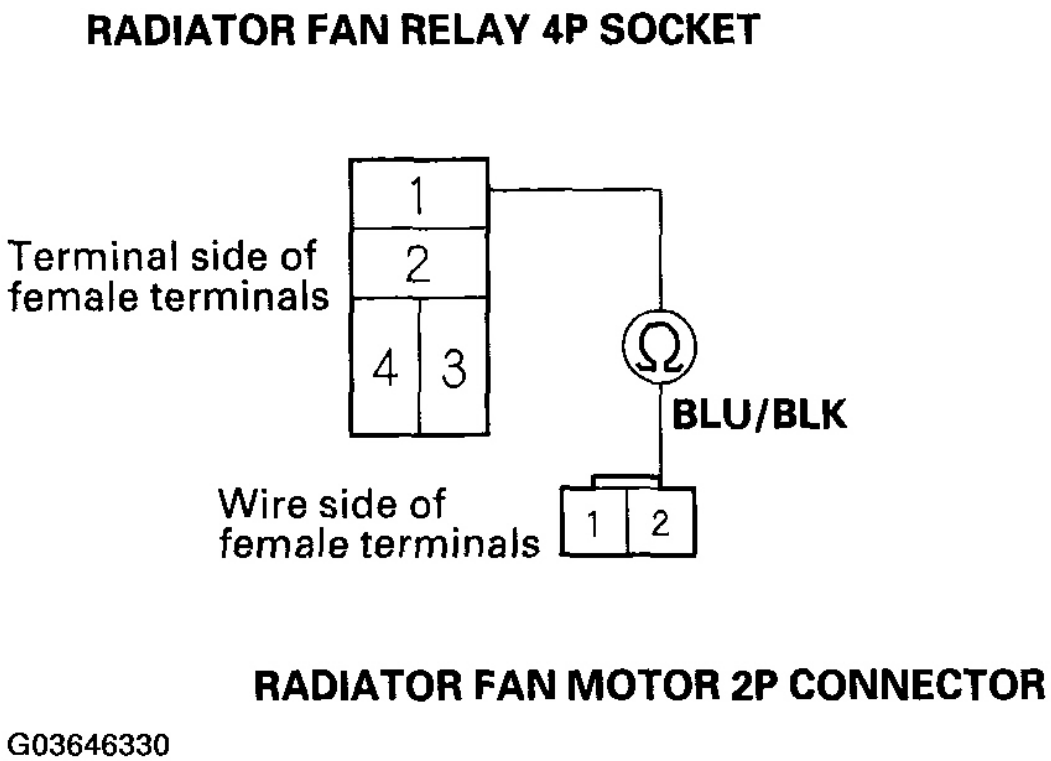


Fig. 13: Checking Continuity Between Radiator Fan Relay 4P Socket And Radiator Fan Motor 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 8.

NO - Repair an open in the wire between the under-hood fuse/relay box and radiator fan motor 2P connector terminal No. 2.

8. Check for continuity between radiator fan motor 2P connector terminal No. 1 and body ground.

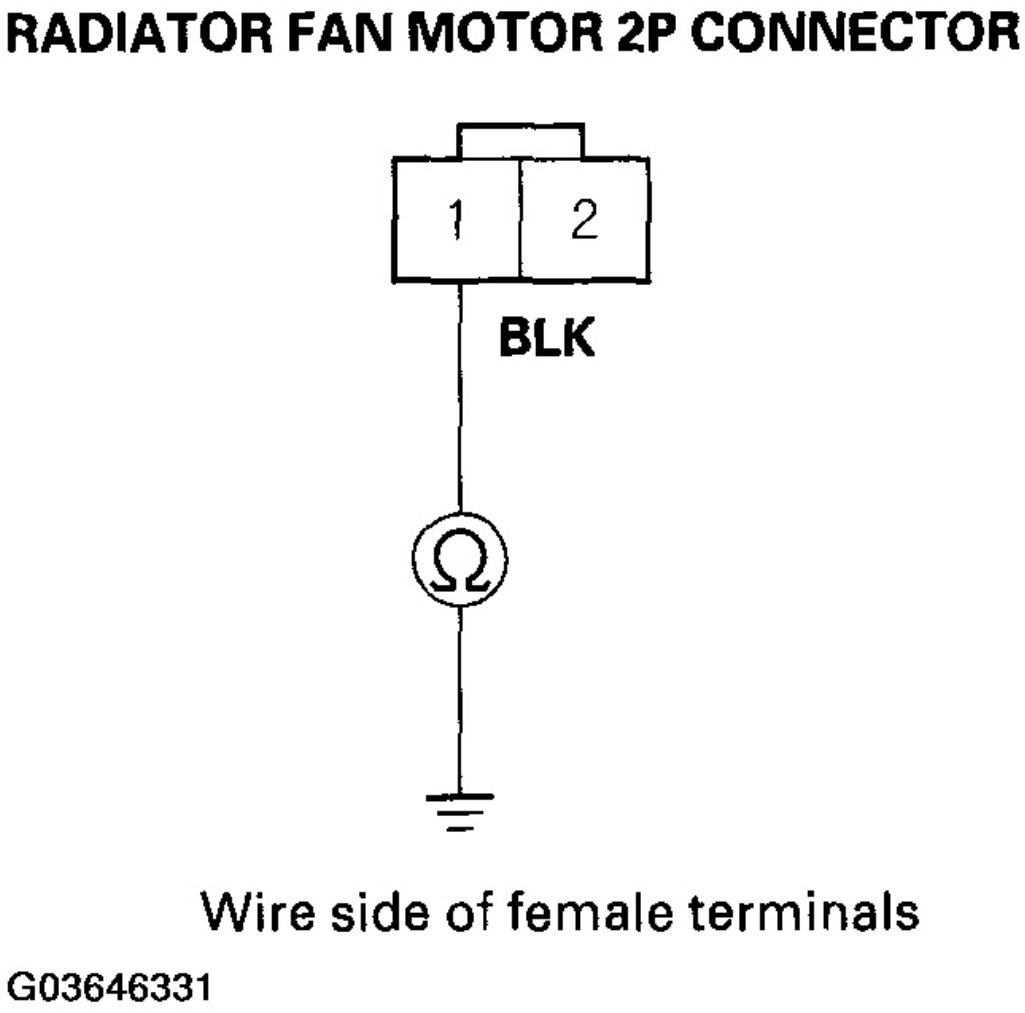


Fig. 14: Checking Continuity Between Radiator Fan Motor 2P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the radiator fan motor (see **RADIATOR AND FAN REPLACEMENT**).

NO - Repair an open in the wire between radiator fan motor 2P connector terminal No. 1 and body ground. If the wire is OK, check for a poor ground at G301.

9. Connect the Honda Diagnostic System (HDS) to the data link connector (DLC) (see step 2 on **HOW TO USE THE HDS (HONDA DIAGNOSTIC SYSTEM)**). Turn the ignition switch ON (II), and jump the SCS line with the HDS, then turn the ignition switch OFF.

NOTE: This step must be done to protect the engine control module (ECM)/powertrain control module (PCM) from damage.

10. Disconnect ECM/PCM connector E (31P).
11. Check for continuity between ECM/PCM connector terminal E12 and body ground.

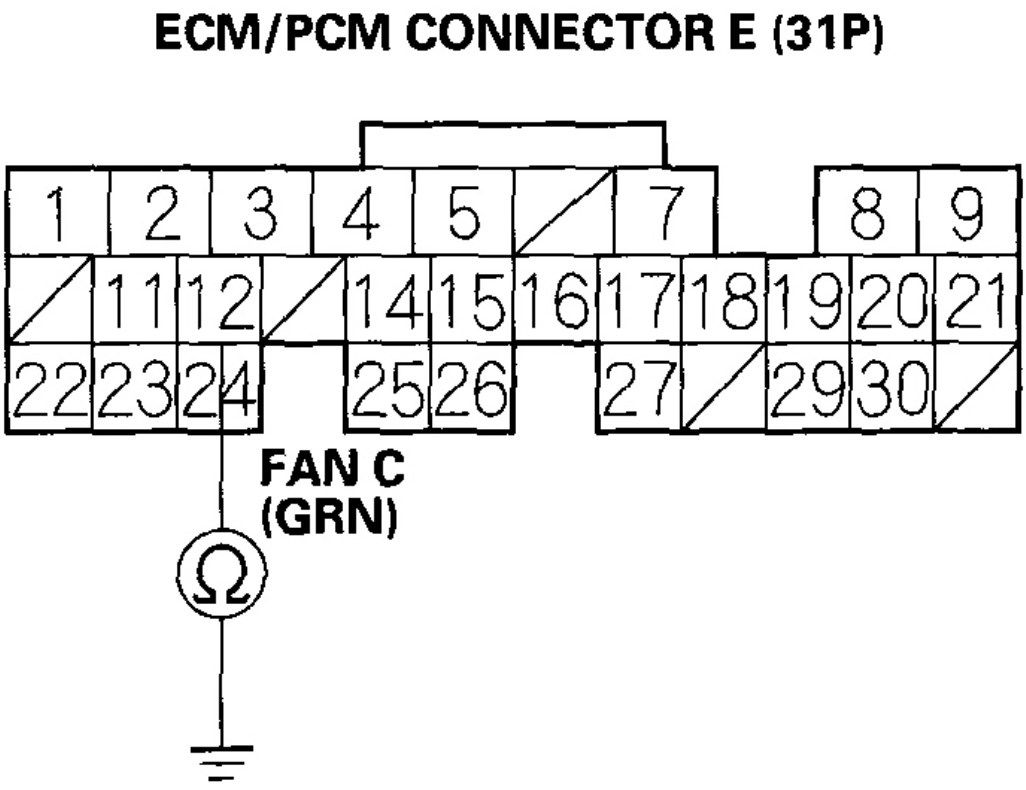


Fig. 15: Checking Continuity Between ECM/PCM Connector Terminal E12 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair a short in the wire between the under-hood fuse/relay box and the ECM/PCM.

NO - Repair an open in the wire between the under-hood fuse/relay box and the ECM/PCM.

RADIATOR FAN SWITCH CIRCUIT TROUBLESHOOTING (OPEN)

'03-04 MODELS

NOTE: Before beginning this troubleshooting procedure, refer to SYMPTOM TROUBLESHOOTING INDEX.

1. Disconnect the radiator fan switch 2P connector.
2. Turn the ignition switch ON (II).
3. Measure voltage between radiator fan switch 2P connector terminal No. 2 and body ground.

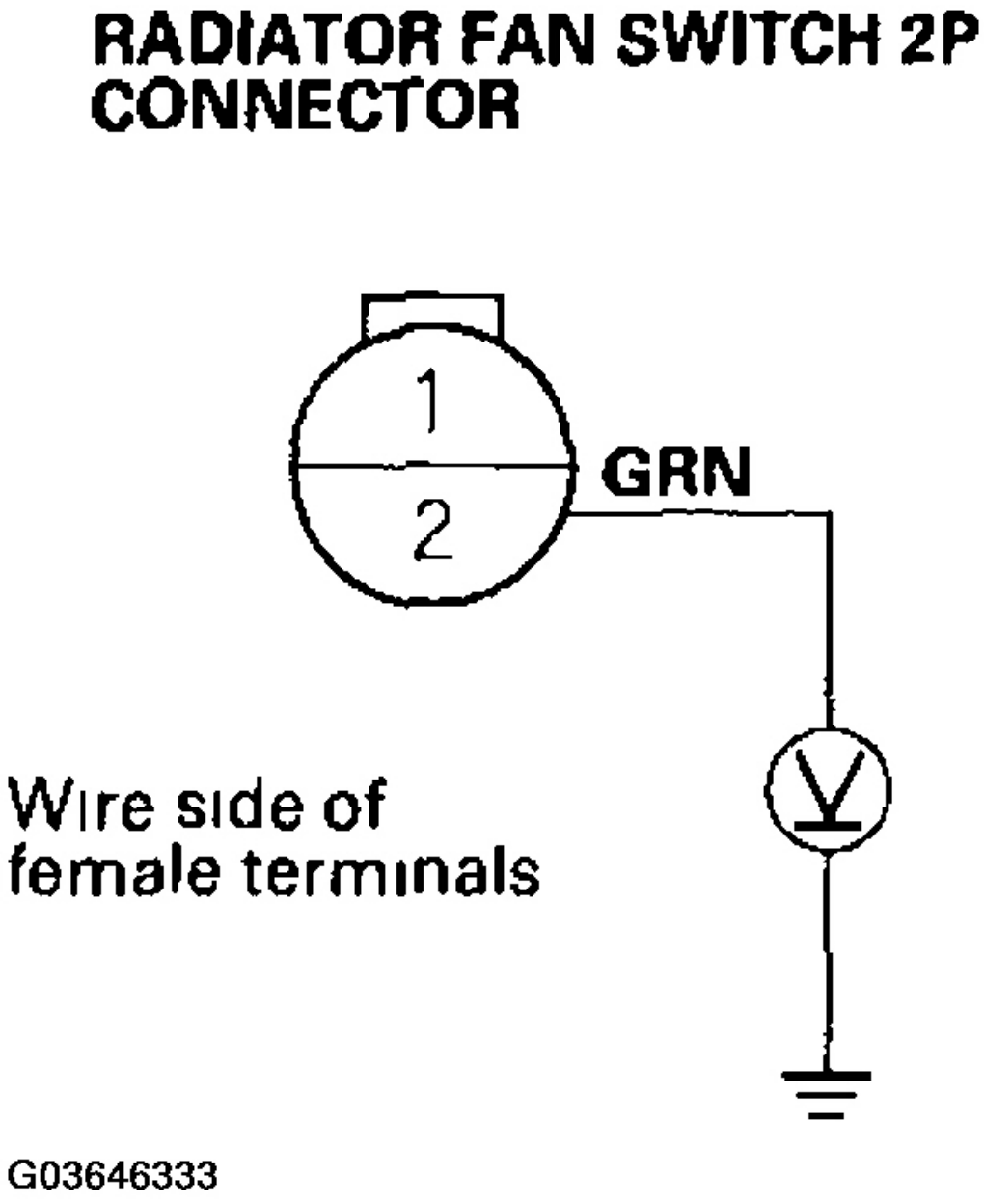


Fig. 16: Measuring Voltage Between Radiator Fan Switch 2P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 4.

NO - Repair an open in the wire between radiator fan switch 2P connector terminal No. 2 and under-hood fuse/relay box.

4. Turn the ignition switch OFF, and check for continuity between radiator fan switch 2P connector terminal No. 1 and body ground.

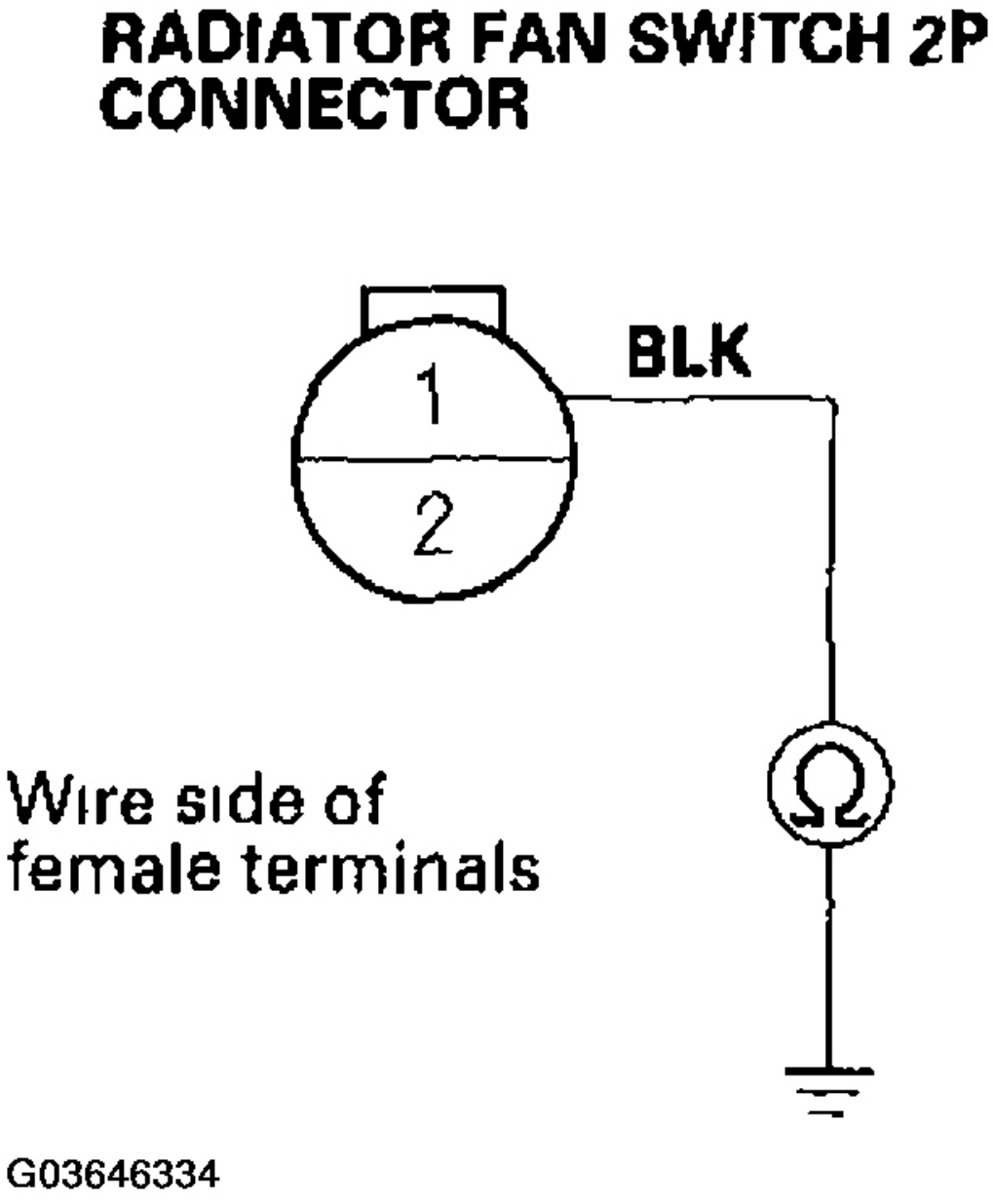


Fig. 17: Checking Continuity Between Radiator Fan Switch 2P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the radiator fan switch (see **Radiator Fan Switch Replacement**).

NO - Repair an open in the wire between radiator fan switch 2P connector terminal No. 1 and body ground. If the wire is OK, check for a poor ground at G301.

RADIATOR FAN SWITCH CIRCUIT TROUBLESHOOTING (SHORT)

'03-'04 MODELS

NOTE: Before beginning this troubleshooting procedure, refer to SYMPTOM TROUBLESHOOTING INDEX.

1. Remove the radiator fan relay from the under-hood fuse/relay box, and test it (see **UNDER-HOOD FUSE/RELAY BOX (EXCEPT HYBRID & V6**).

   Is the relay OK?

   YES - Go to step 2.

   NO - Replace the radiator fan relay.
2. Remove the radiator fan switch, and test it (see **Radiator Fan Switch Replacement**).

   Is the radiator fan switch OK?

   YES - Go to step 3.

   NO - Replace the radiator fan switch (see **Radiator Fan Switch Replacement**).
3. Disconnect the under-hood fuse relay box 20P connector.
4. Check for continuity between radiator fan switch 2P connector terminal No. 2 and body ground.

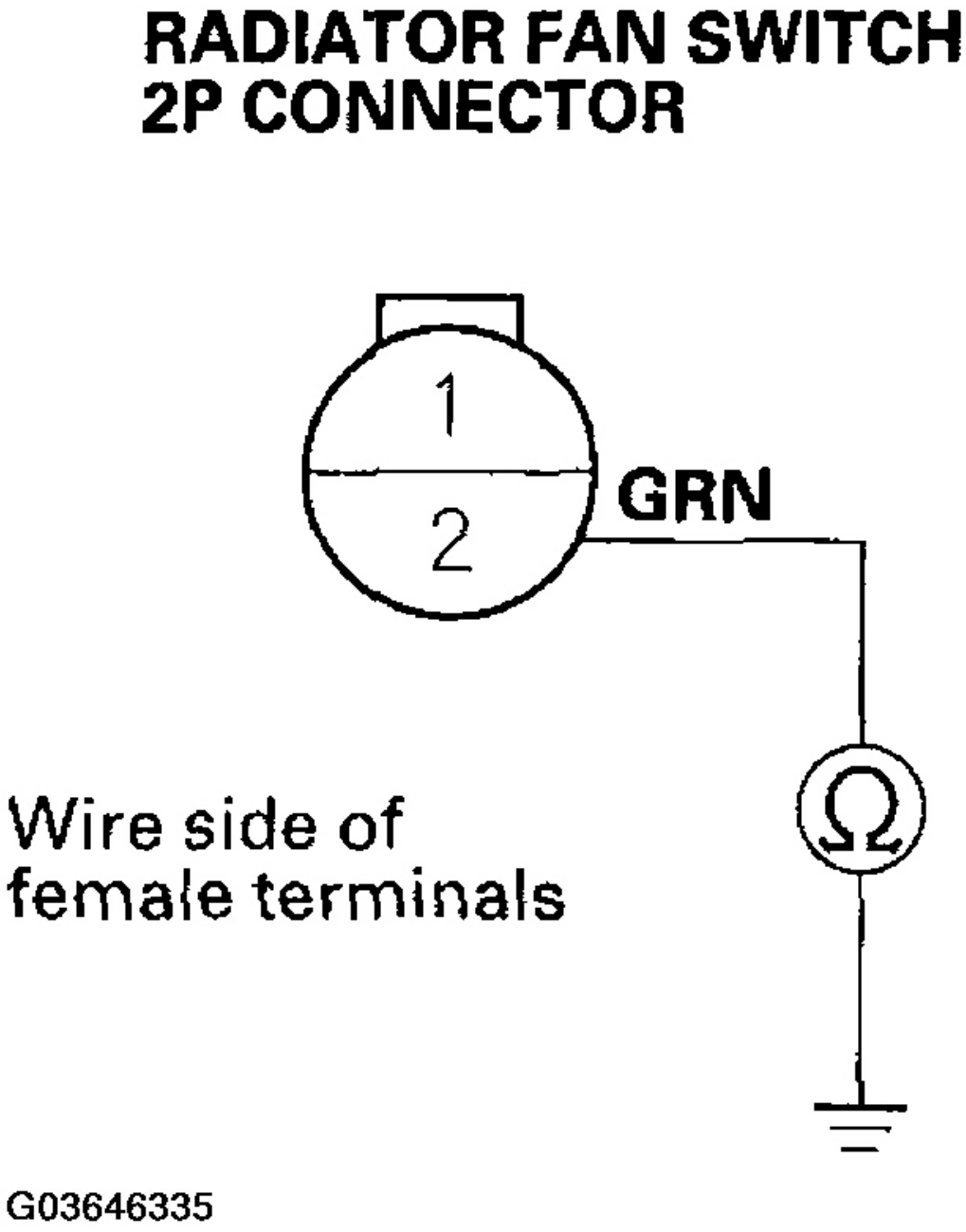


Fig. 18: Checking Continuity Between Radiator Fan Switch 2P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair a short in the wire between radiator fan switch 2P connector terminal No. 2 and under-hood fuse/relay box.

NO - Replace the under-hood fuse/relay box.

RADIATOR FAN SWITCH TEST

'03-04 MODELS

NOTE: Bleed air from the cooling system after installing the radiator fan switch (see COOLANT REPLACEMENT).

1. Remove the radiator fan switch from the radiator (see **RADIATOR AND FAN REPLACEMENT**).
2. Suspend the radiator fan switch (A) in a container of water as shown below.

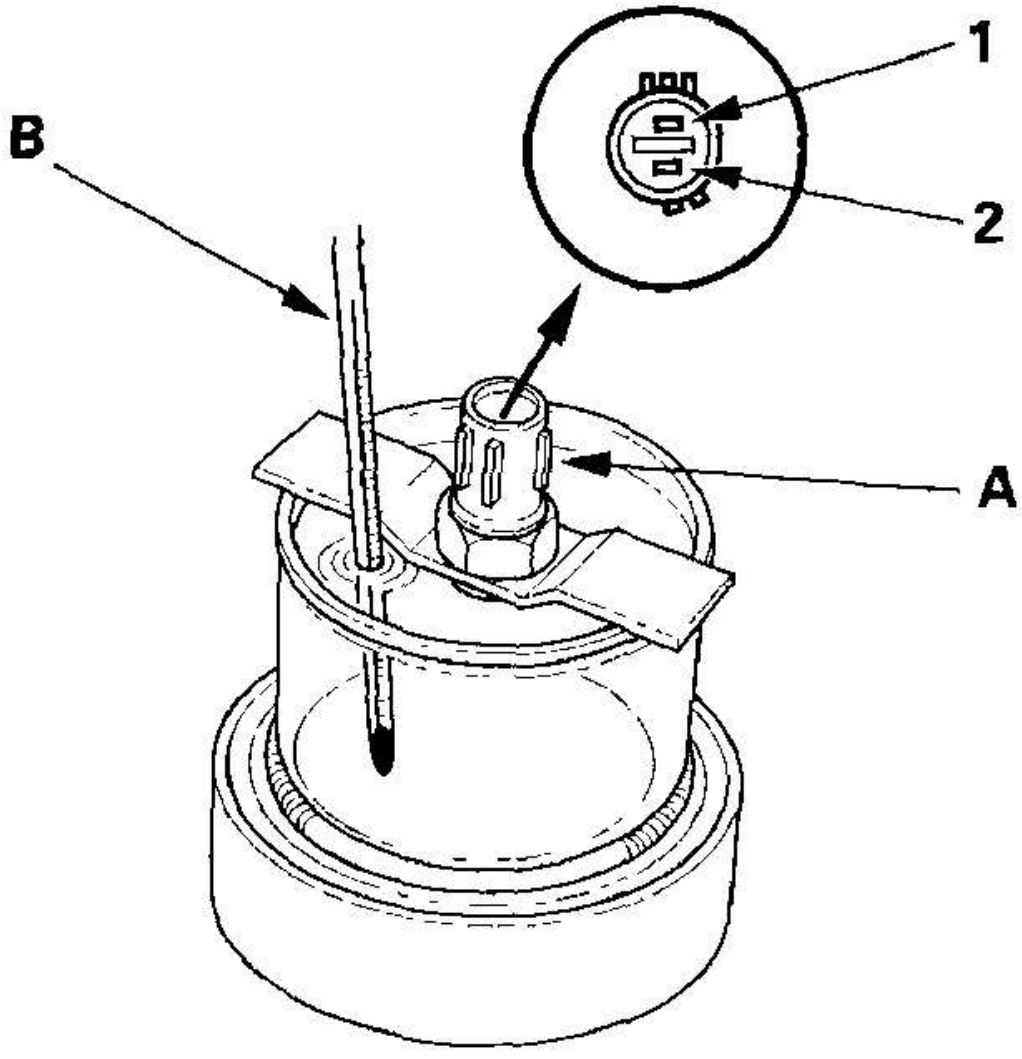


Fig. 19: Suspending Radiator Fan Switch In Container Of Water
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Heat the water, and check the temperature with a thermometer. Do not let the thermometer (B) touch the bottom of the hot container.
4. Measure the continuity between terminal No. 1 and terminal No. 2 according to table below. .

Operation		Temperature	Terminal 1	Terminal 2
SWITCH	ON	196—203 °F (91—95 °C)	○—○	
	OFF	5—15 °F (3—8 °C) lower than the temperature when it goes on		

G03646337

Fig. 20: Terminal Continuity Specification Table
Courtesy of AMERICAN HONDA MOTOR CO., INC.

RADIATOR FAN SWITCH REPLACEMENT

'03-04 MODELS

1. Drain the engine coolant (see **COOLANT REPLACEMENT**).
2. Remove the splash shield.
3. Disconnect the radiator fan switch connector (A), then remove the radiator fan switch (B).

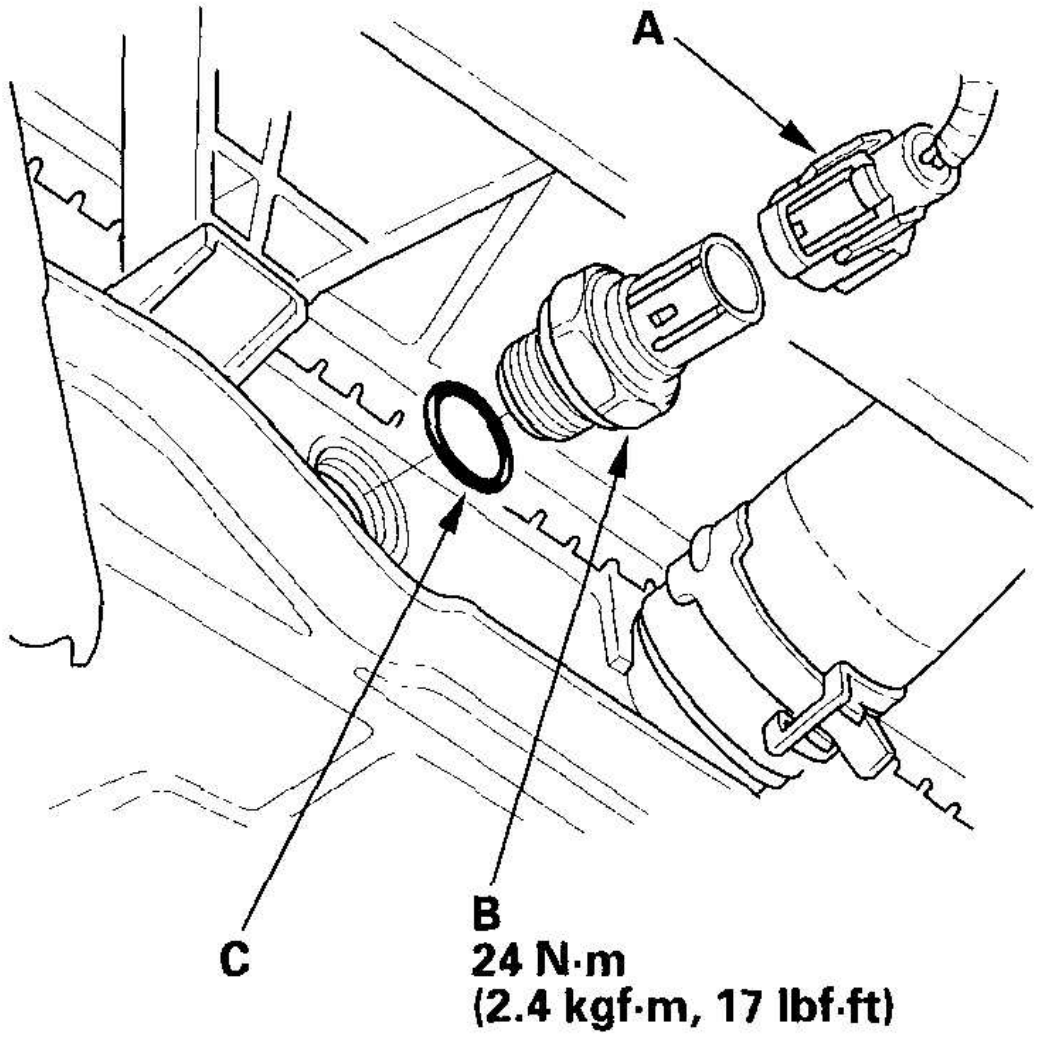


Fig. 21: Disconnecting Radiator Fan Switch Connector And Radiator Fan Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the radiator fan switch with a new O-ring (C).
5. Refill the radiator with engine coolant, and bleed air from the cooling system with the heater valve open (see step 6 on **COOLANT REPLACEMENT**).

2003-07 ACCESSORIES & EQUIPMENT

Fenderwell - Accord

FRONT INNER FENDER REPLACEMENT

NOTE: Take care not to scratch the body.

1. Remove the front inner fender (A).

   -1 On the back of the wheel arch, remove the screws (B). If equipped, remove the front splash guard (C).

   -2 From under the front bumper (D), remove the bolts (E) securing the front bumper, splash shield (F), and front inner fender, and remove the clip (G) securing the front bumper and front inner fender.

   -3 From the wheel arch, remove the clips (H, I) securing the front inner fender (and splash shield) to the body.

   -4 Release the hook (J) of the splash shield, then remove the front inner fender.

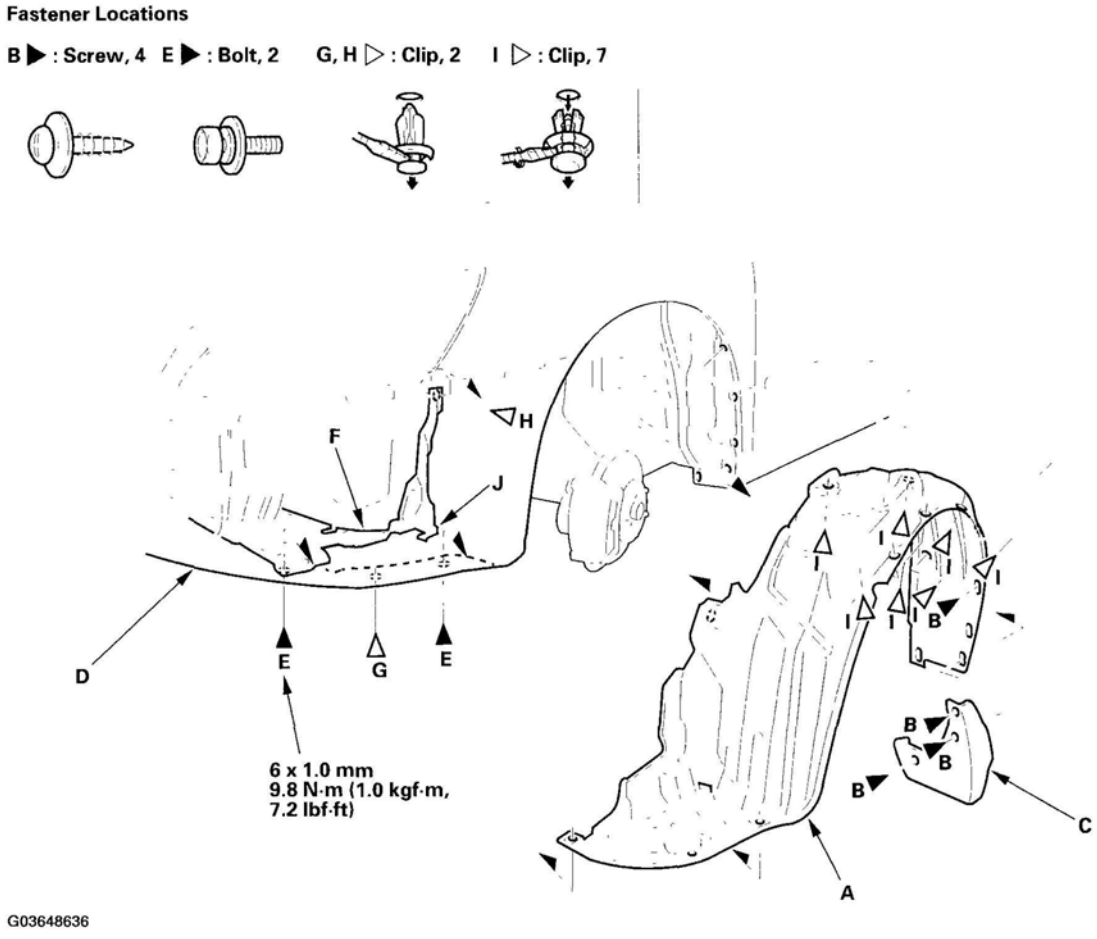


Fig. 1: Removing Front Inner Fender
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the inner fender in the reverse order of removal, and check the clips for damage or stress-whitened, and if necessary, replace it with new one.

SPLASH SHIELD REPLACEMENT

NOTE: Take care not to scratch the body.

1. Remove the splash shield (A).

   -1 From both wheel arches, remove the bolts (B) and clips (C) securing the front inner fender (D) and splash shield to the body.

   -2 From under the front bumper (E), remove the clips (F).

-3 Pull the splash shield out.

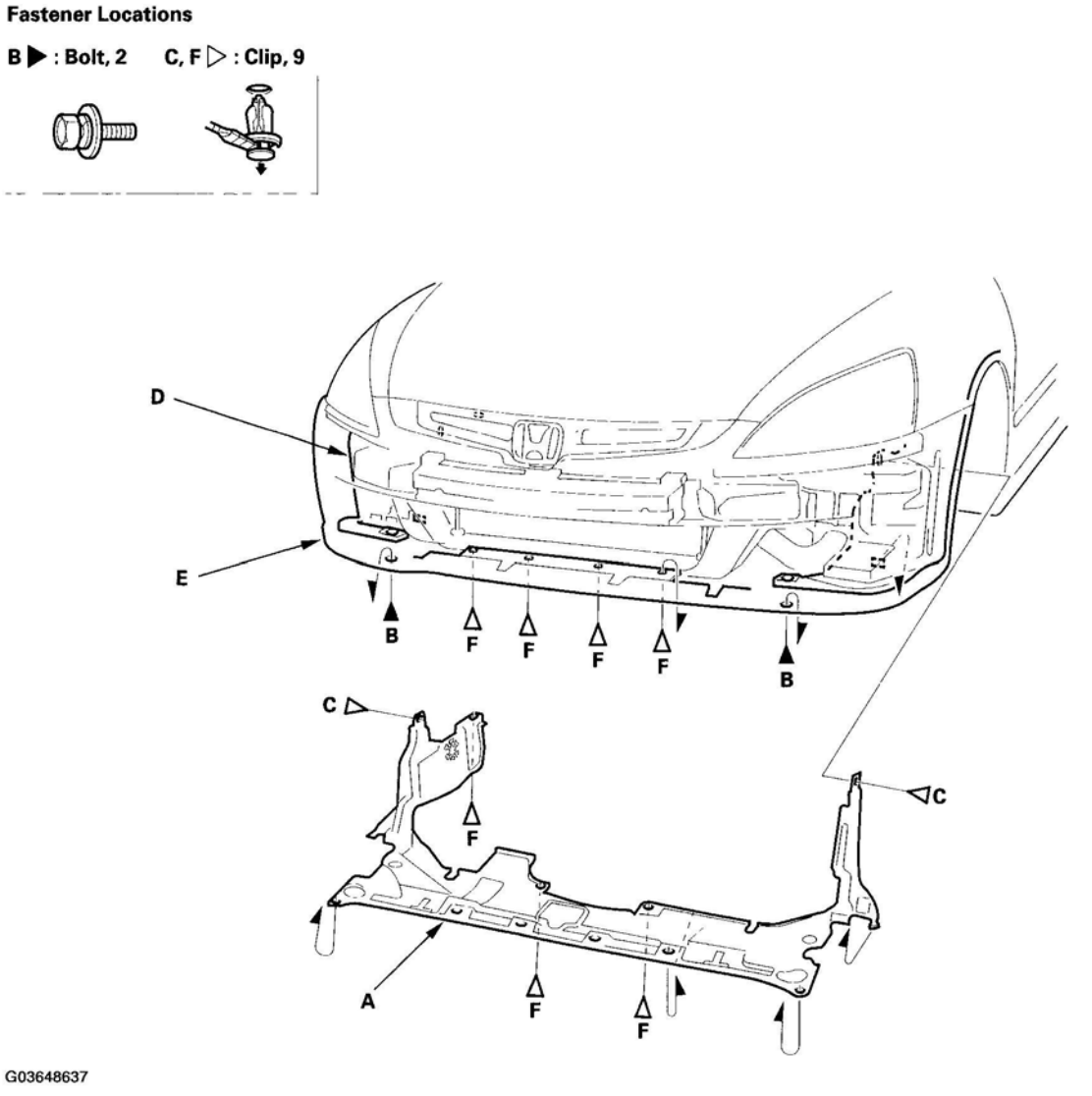


Fig. 2: Removing Splash Shield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the splash shield in the reverse order of removal, and check if the clip is damaged or stress-whitened, and replace it with new one.

FRONT FENDER FAIRING REPLACEMENT

1. Remove the front inner fender as necessary (see **FRONT INNER FENDER**

REPLACEMENT).

2. Open the front door. Remove the upper clip (A), and from inside the door, remove the lower clip (A) securing the front fender fairing (B) and front fender (C).

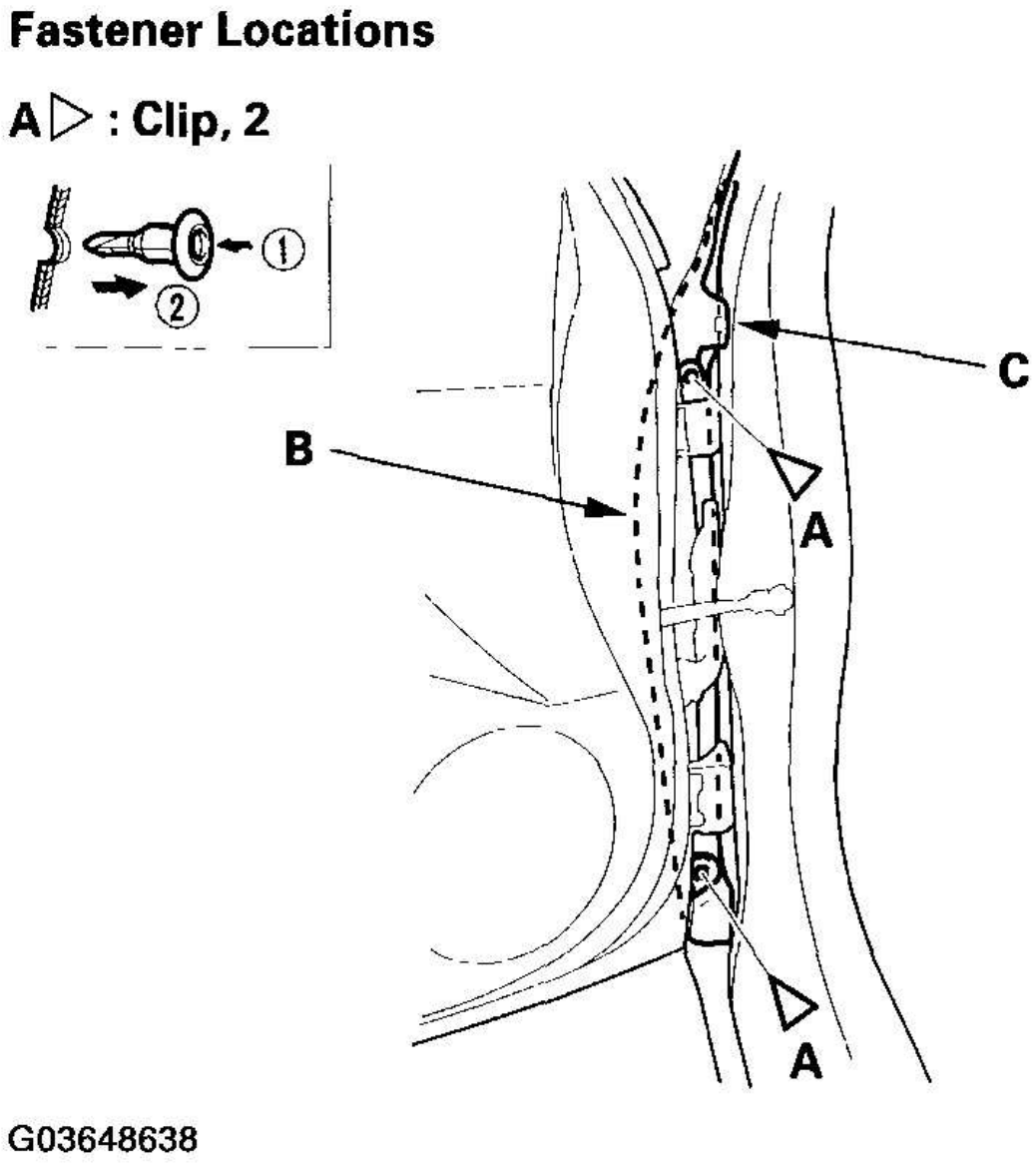
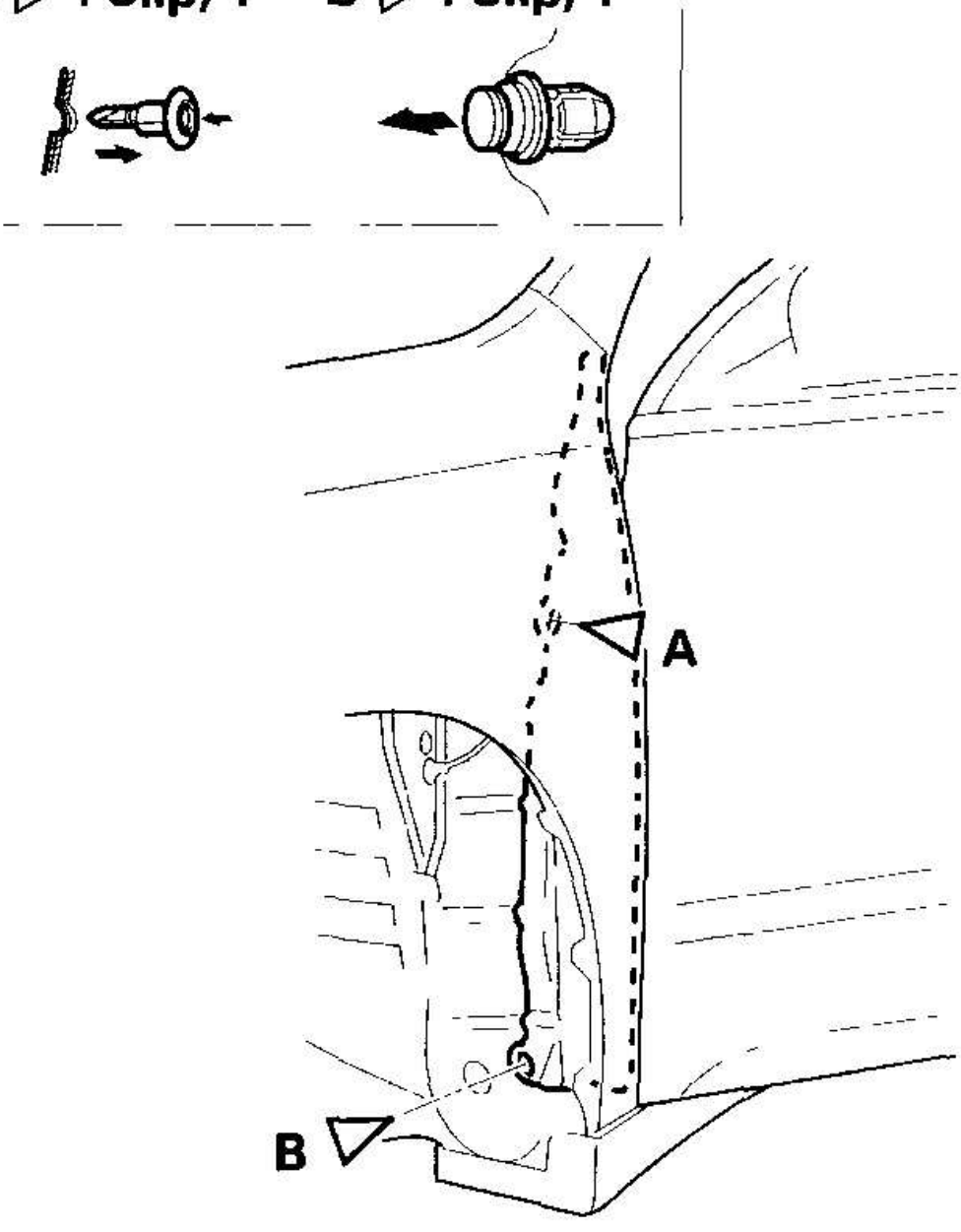


Fig. 3: Removing Upper & Lower Clips
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. From the wheel arch, remove the clip (A), and then release the clip (B).

Fastener Locations

A ▷ : Clip, 1 B ▷ : Clip, 1



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Fig. 4: Removing Clip From Wheel Arch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the front fender fairing (A).

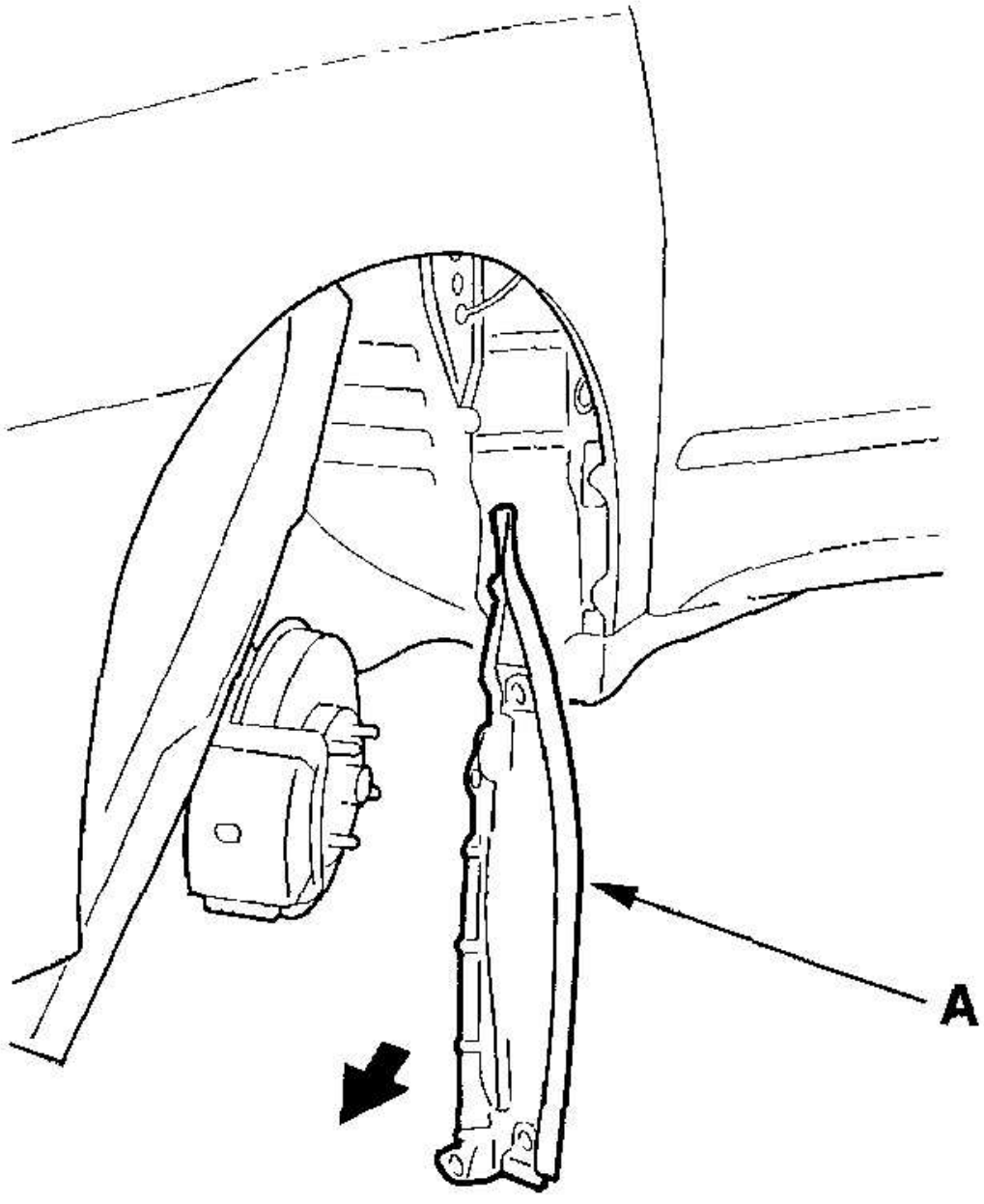


Fig. 5: Removing Front Fender Fairing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the fender fairing in the reverse order of removal, and note these items:
   - Check if the clip is damaged or stress-whitened, and if necessary, replace it with new one.
   - Before installing the clips in the door opening area, install the front fender fairing (A) to the front fender (B) properly as shown below.

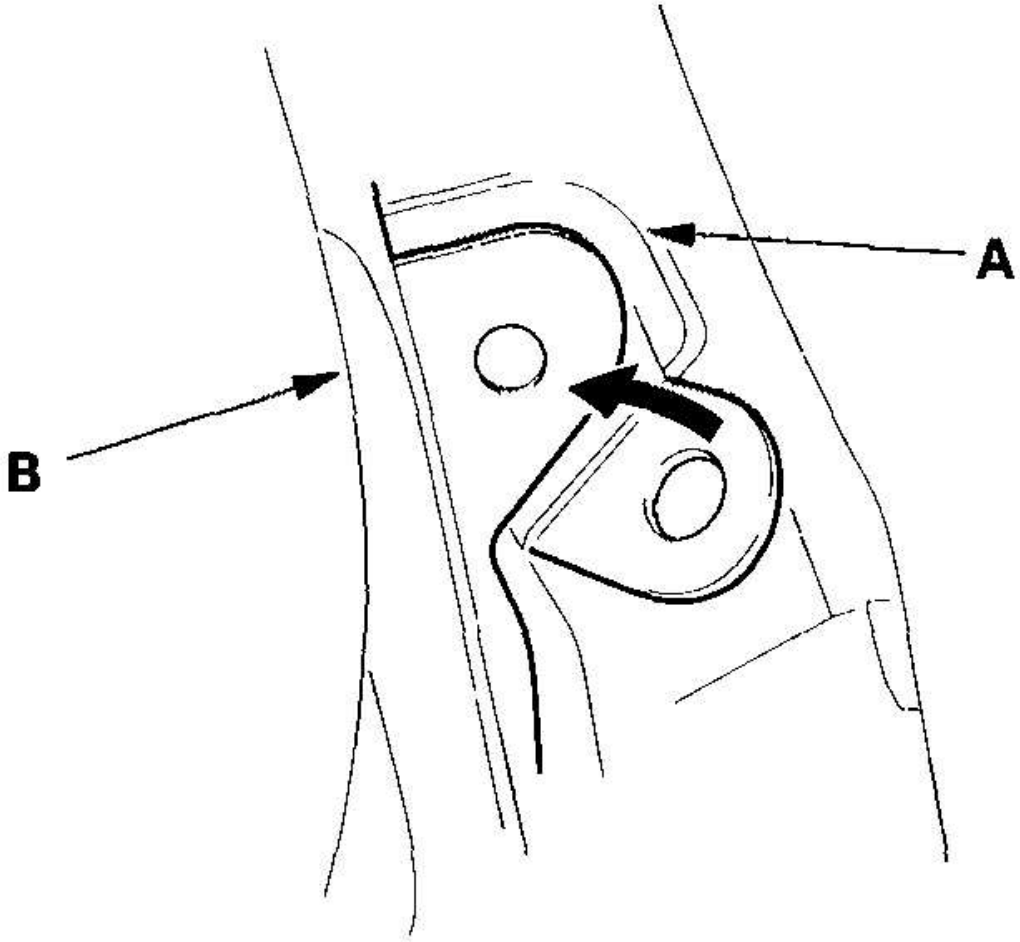


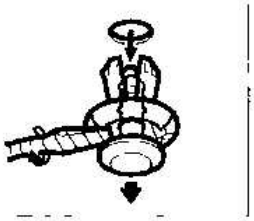
Fig. 6: Installing Fender Fairing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

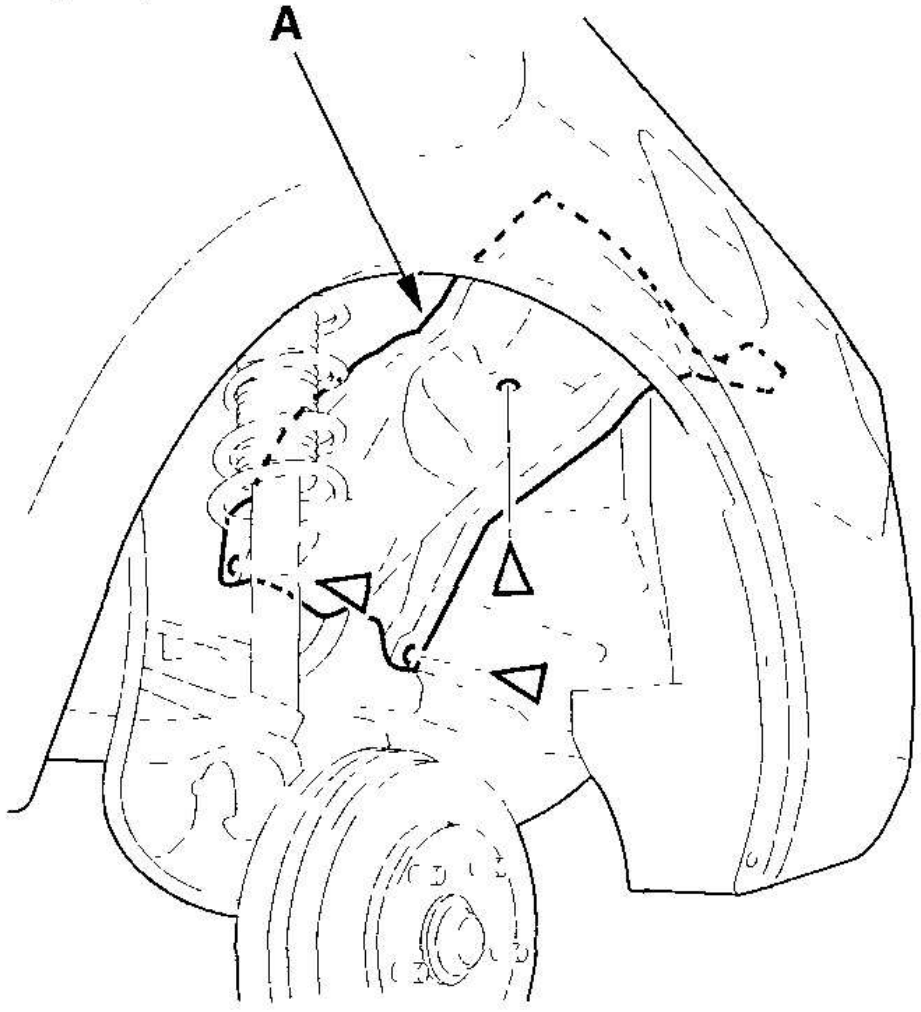
FUEL PIPE PROTECTOR REPLACEMENT

1. Remove the clips, then remove the fuel pipe protector (A). Take care not to scratch the body.

Fastener Locations

▷ : **Clip, 3**





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Fig. 7: Removing Fuel Pipe Protector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the protector in the reverse order of removal, and check if the clip is damaged or stress-whitened, and if necessary, replace it with new one.

REAR INNER FENDER REPLACEMENT

NOTE: Take care not to scratch the body.

1. Remove the screws, then remove rear inner fender (A) from the rear bumper (B) and body.

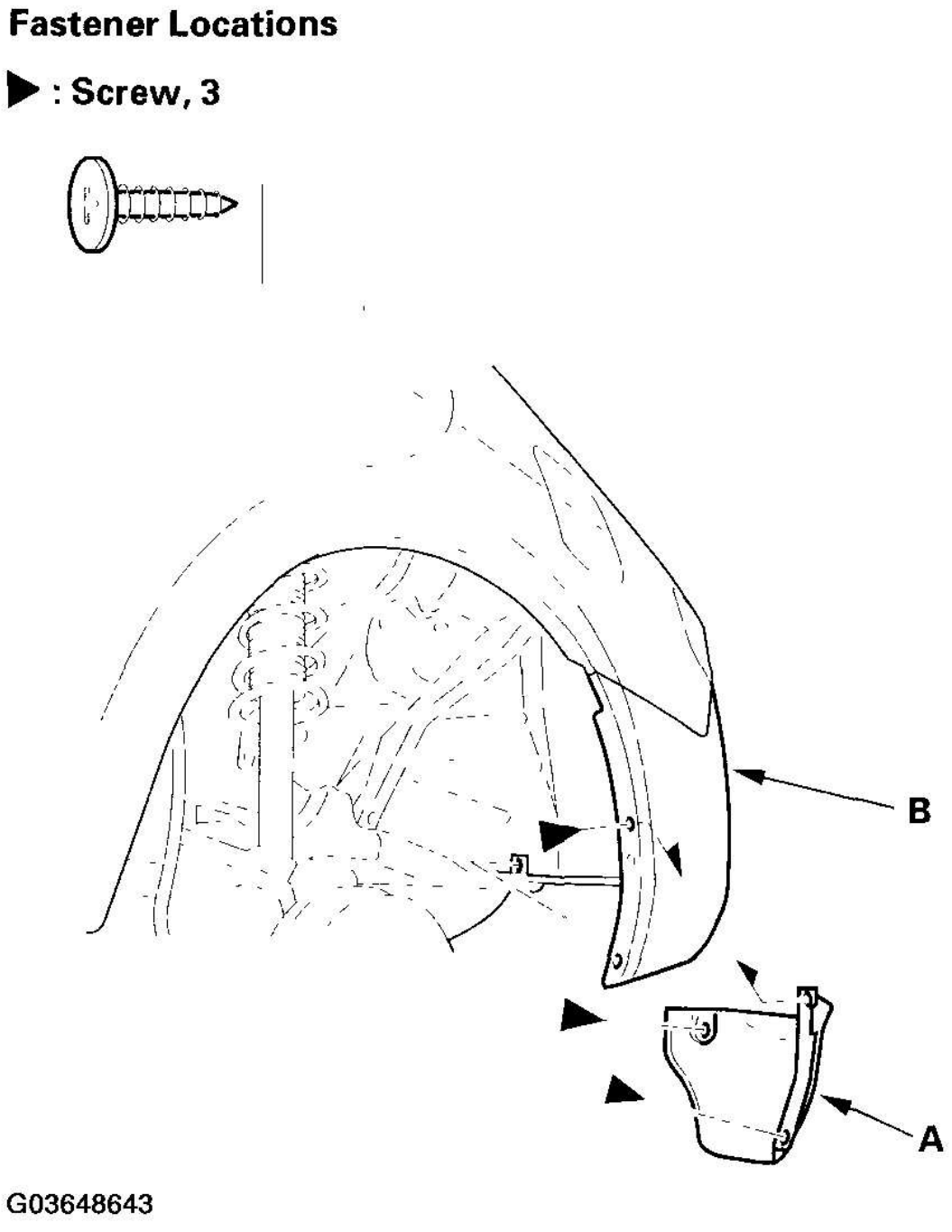


Fig. 8: Removing Rear Inner Fender From Rear Bumper And Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the inner fender in the reverse order of removal, and check if the clip is

damaged or stress-whitened, and if necessary, replace it with new one.

REAR AIR OUTLET REPLACEMENT

1. Remove the rear bumper, 2-door (see **2-DOOR**) or 4-door (see **4-DOOR**).
2. Detach the hooks (A), then remove the rear air outlet (B). Take care not to scratch the body.

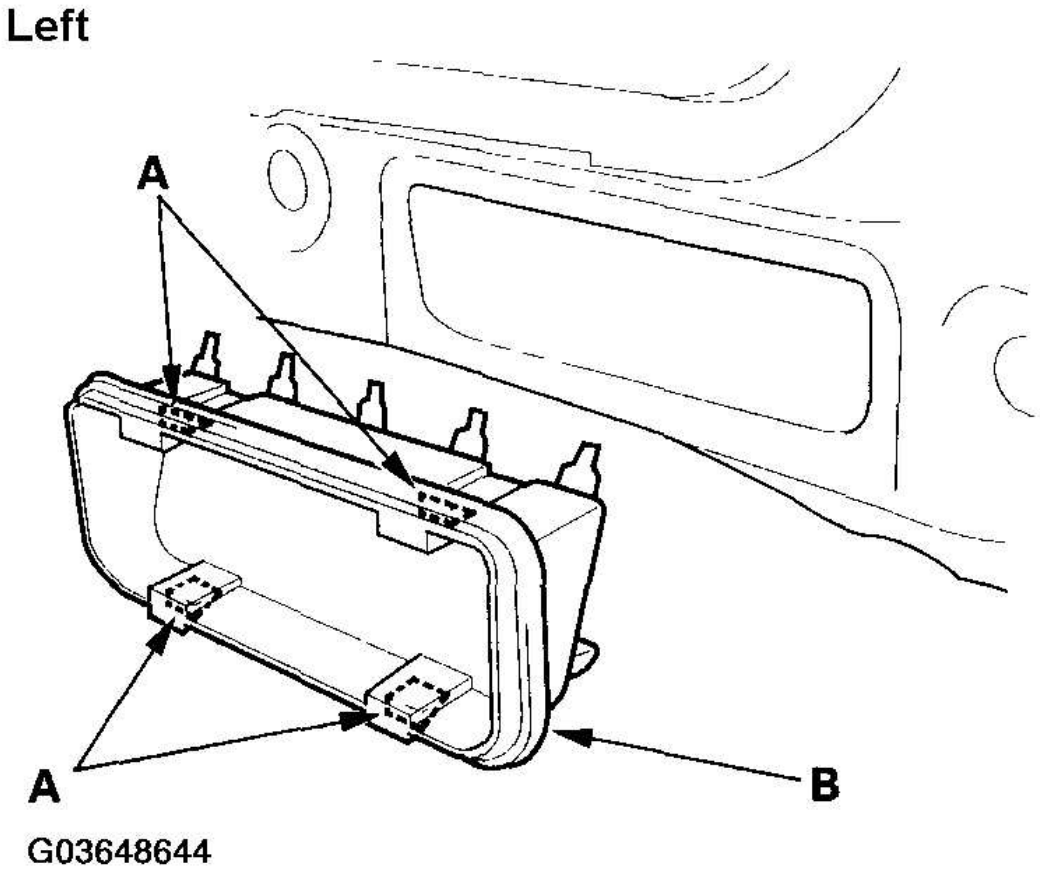


Fig. 9: Removing Rear Air Outlet (Left)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

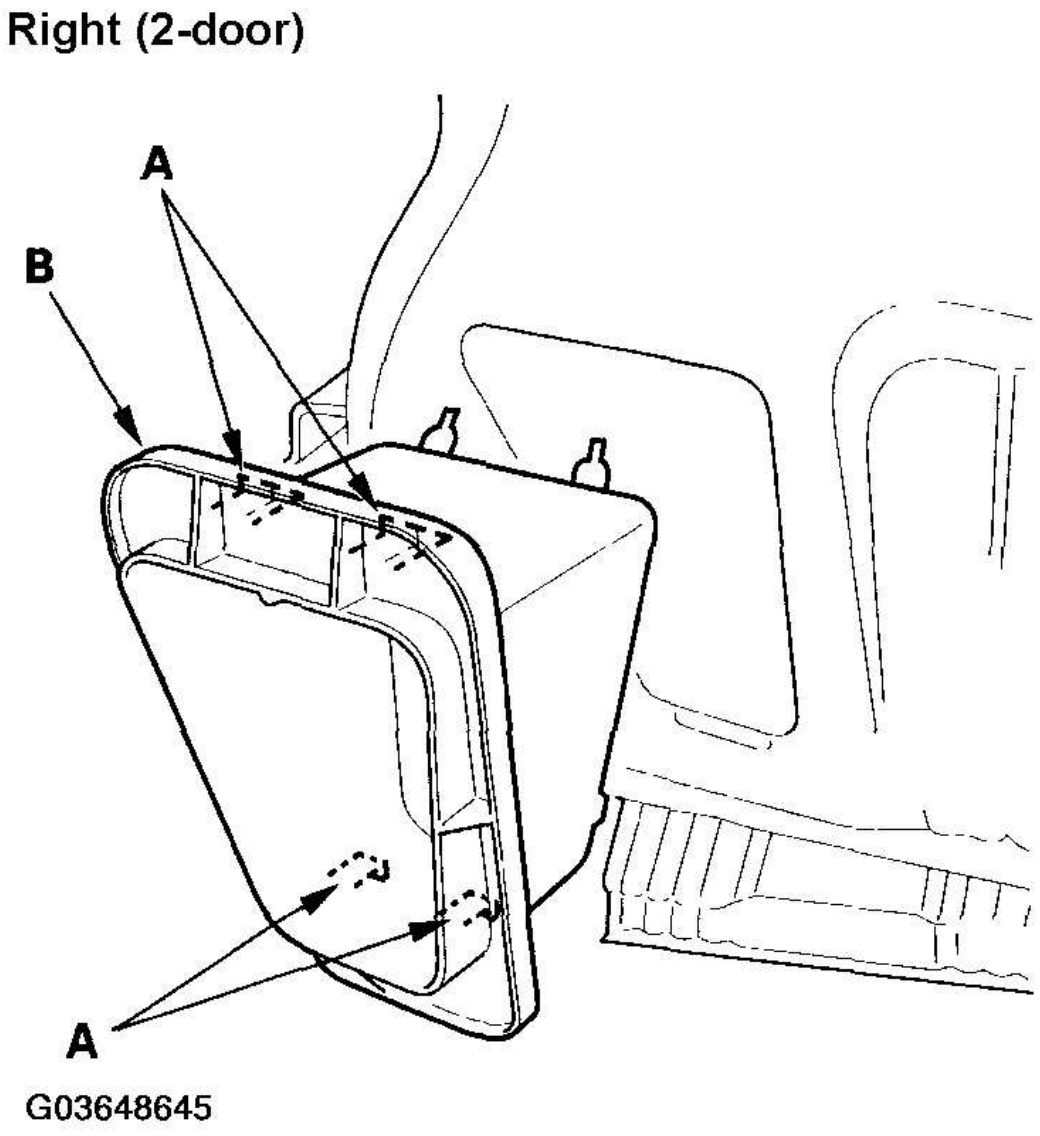


Fig. 10: Removing Rear Air Outlet (Right - 2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the air outlet by pushing on the hook portions until the hooks snap into place.

2003-07 ACCESSORIES & EQUIPMENT

Frame - Accord

MIDDLE CROSS-MEMBER GUSSET REPLACEMENT

2-DOOR

NOTE: Take care not to scratch the body.

1. Remove the side trim panel (see **TRIM REMOVAL/INSTALLATION - REAR SIDE AREA**).
2. Pull back the rear part of the carpet, as necessary.
3. Detach the floor wire harness clip (A), and remove seat cushion clip (B).

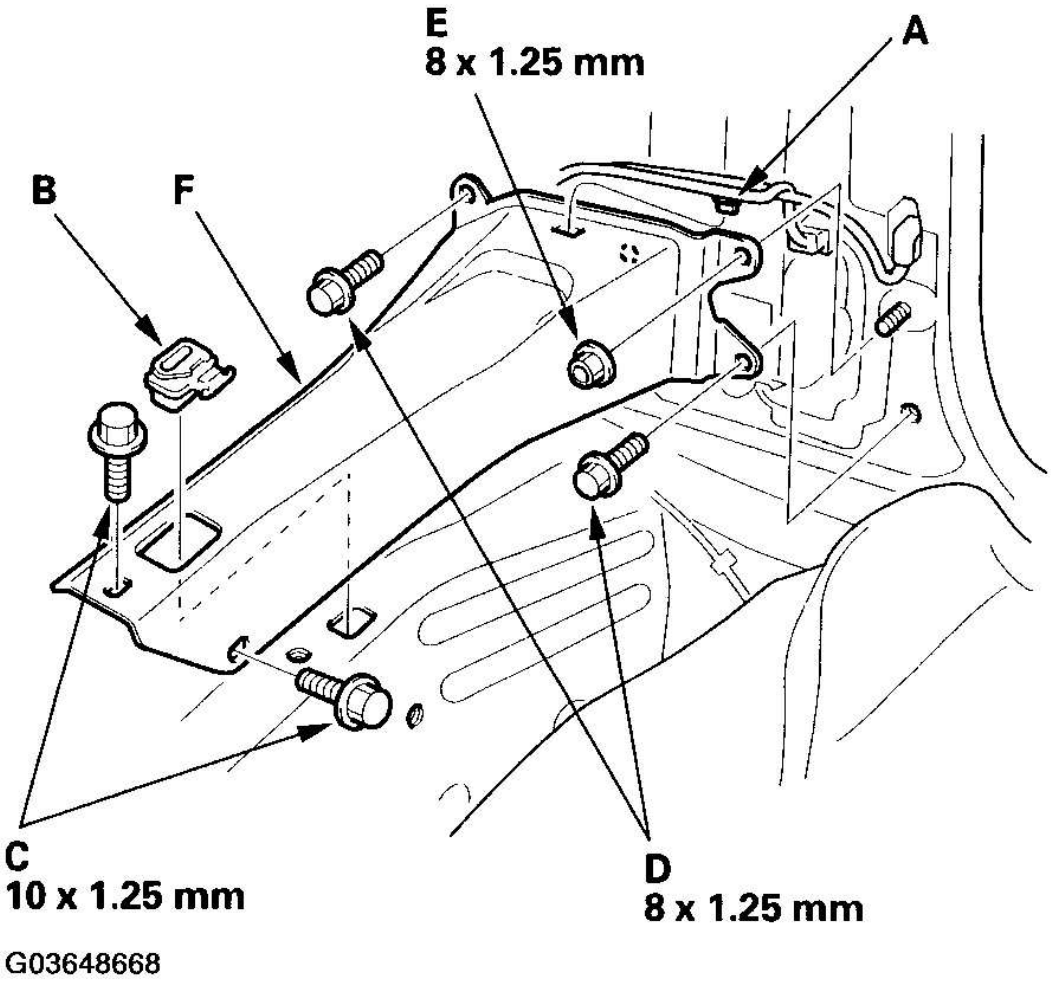


Fig. 1: Detaching Floor Wire Harness Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the bolts (C, D) and nut (E), then remove the middle cross-member gusset (F).
5. Install the gusset in the reverse order of removal. When installing the mounting bolts for the middle cross-member gusset (A), torque the mounting hardware in the sequence shown below. If the mounting bolts are not torqued in this sequence, damage to the quarter panel will occur.

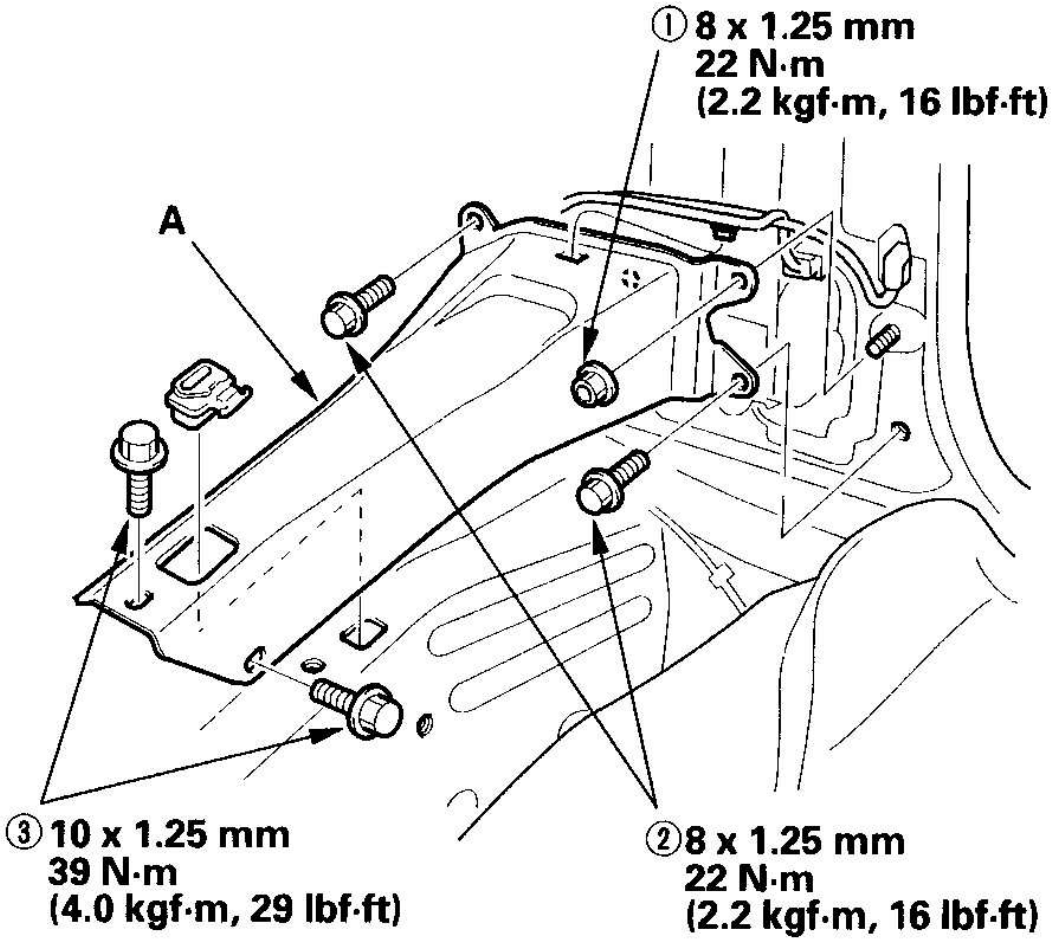


Fig. 2: Installing Middle Cross-Member Gusset Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRAME STIFFENER REPLACEMENT

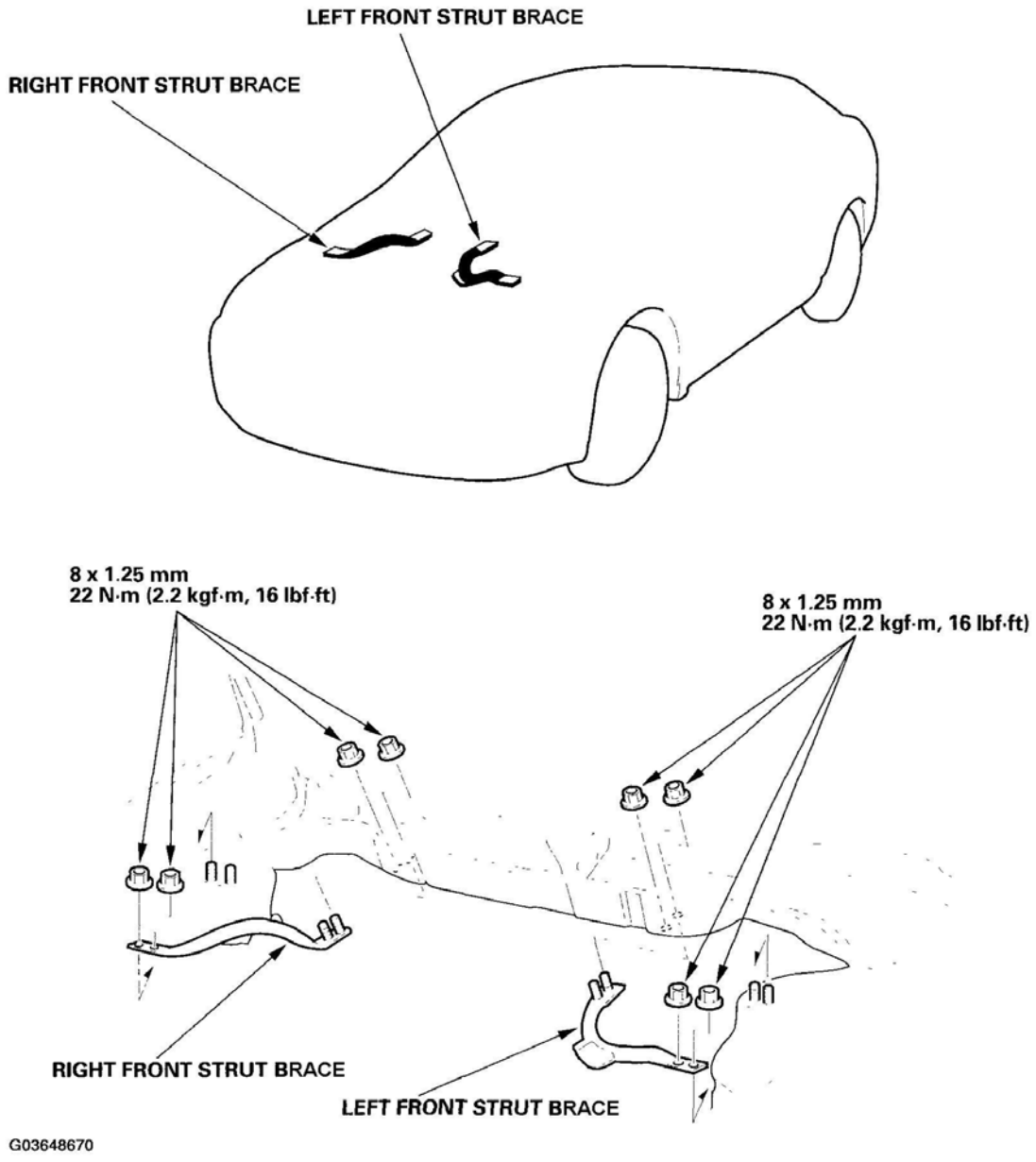


Fig. 3: Identifying Frame Stiffener
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SUBFRAME REPLACEMENT

FRONT SUBFRAME TORQUE

After removing the subframe mounting bolts, front suspension subframe middle mounting rubber mounting bolts, front suspension subframe rear bracket mounting

bolts, and front suspension subframe rear damper front mounting bolt, be sure to replace them with new ones.

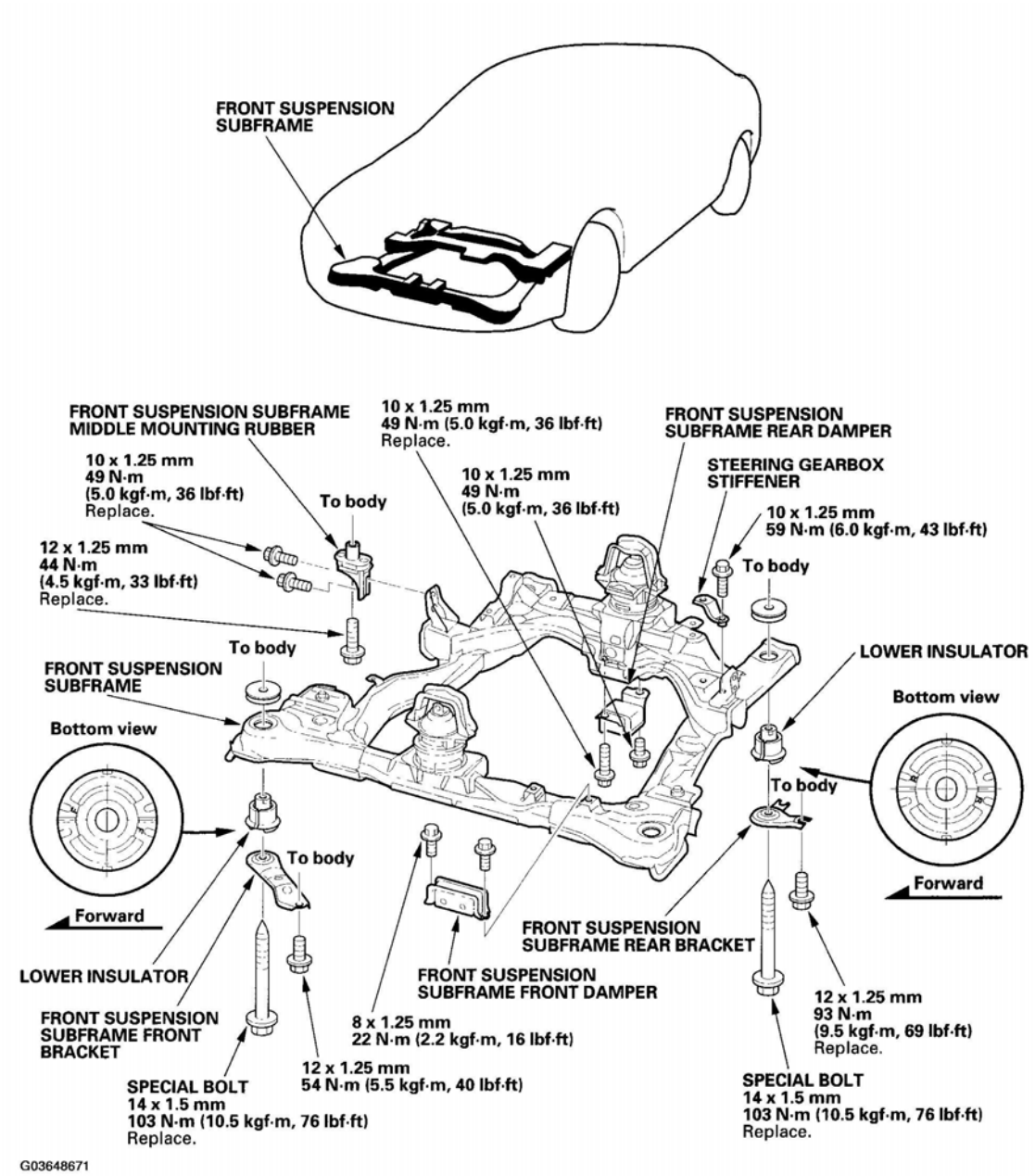


Fig. 4: Tightening Front Subframe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT SUBFRAME ALIGNMENT

NOTE:

- **Before removing the subframe, make an alignment mark for the front suspension subframe rear bracket as shown below.**
- **When installing, align both installation reference holes in the subframe with both reference holes in the body using a screwdriver or tapered punch as a guide.**
- **After mounting the subframe and brackets loosely, align the reference marks with the edge of the rear brackets then tighten all bolts.**

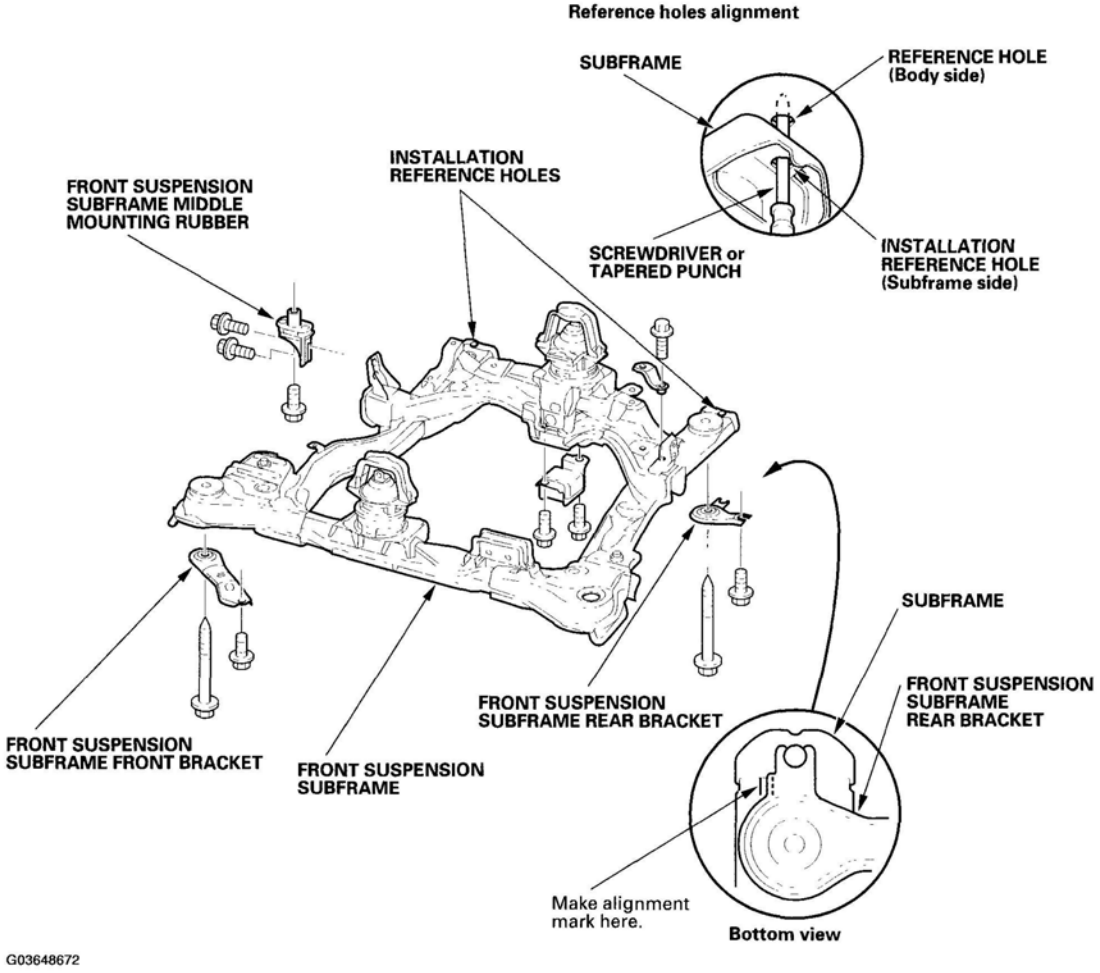


Fig. 5: Aligning Front Subframe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REAR SUBFRAME TORQUE

After removing the subframe mounting bolts, be sure to replace them with new ones.

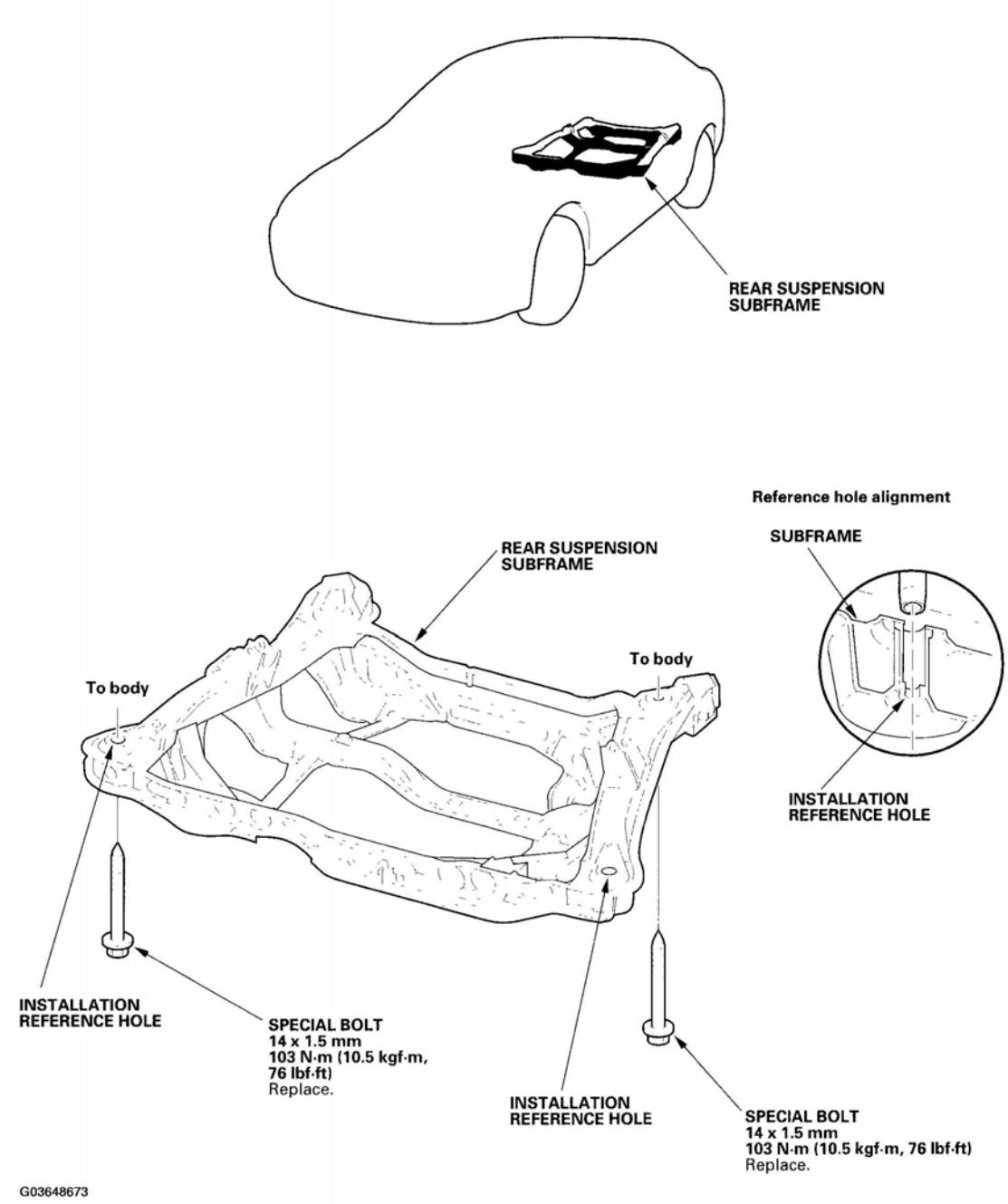
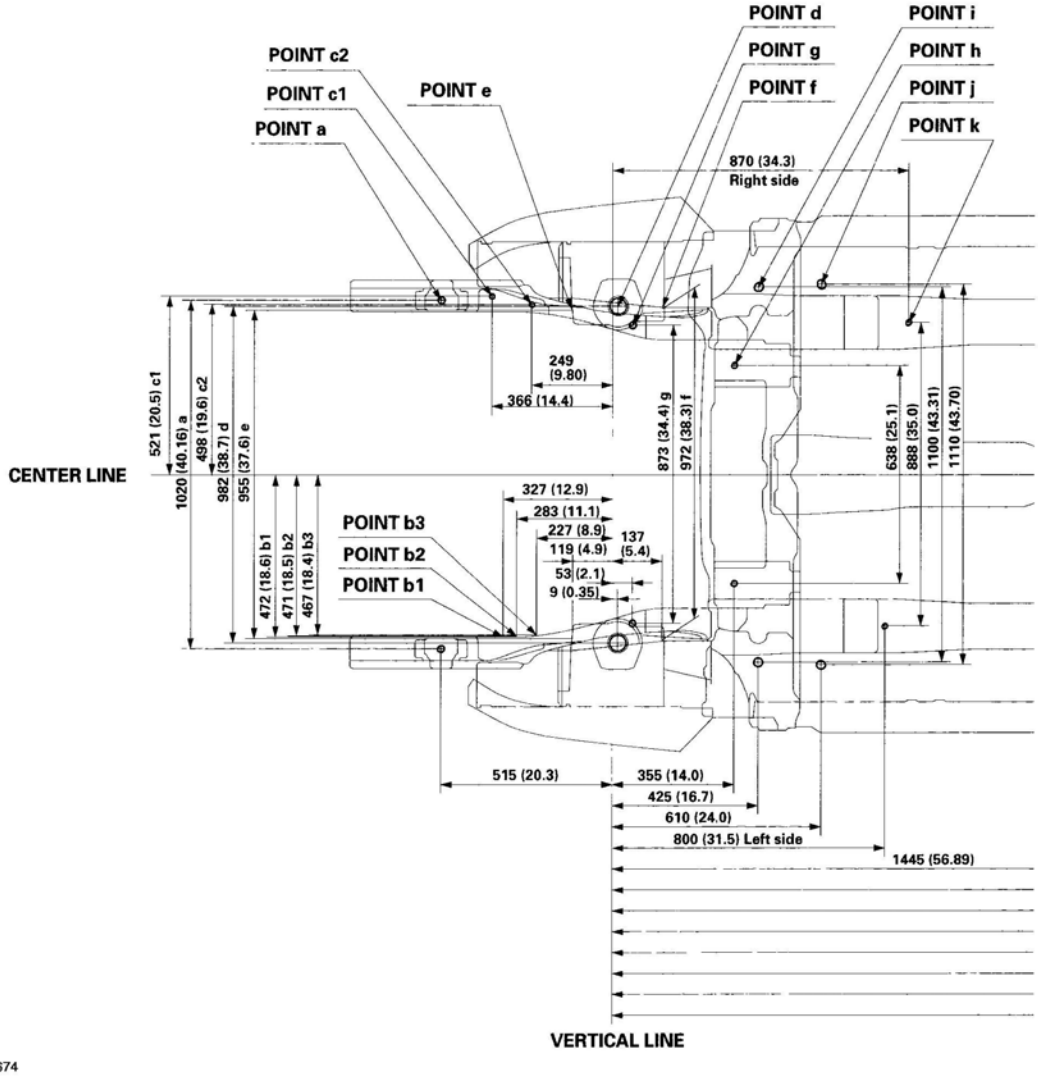


Fig. 6: Tightening Rear Subframe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRAME REPAIR CHART

2-DOOR TOP VIEW

Unit: mm (in.)	a	For front subframe ø16 (0.63)	e	For front upper arm ø13 (0.51)
ø: Inner diameter	b1	For transmission mount ø13 (0.51) Left side	f	For front upper arm ø13 (0.51)
	b2	For transmission mount ø15 (0.59) Left side	g	For front subframe ø15 (0.59)
	b3	For transmission mount ø13 (0.51) Left side	h	For front subframe ø16 (0.63)
	c1	For engine side mount ø15 (0.59) Right side	i	Locating hole ø25 (0.98)
	c2	For engine side mount ø15 (0.59) Right side	j	Locating hole ø25 (0.98)
	d	Front damper center ø50 (1.97)	k	Locating hole ø15 (0.59)



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Fig. 7: Frame Repair Chart (2-Door Top View - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

l	Locating hole ø25 (0.98)	p	For rear subframe ø17 (0.67)
m	Locating hole ø20 (0.79)	q	Locating hole ø15 (0.59)
n	For rear subframe ø14.4 (0.57)	r	Locating hole ø25 (0.98)
o	Rear damper center ø52 (2.05)	s	Locating hole ø11 (0.43)

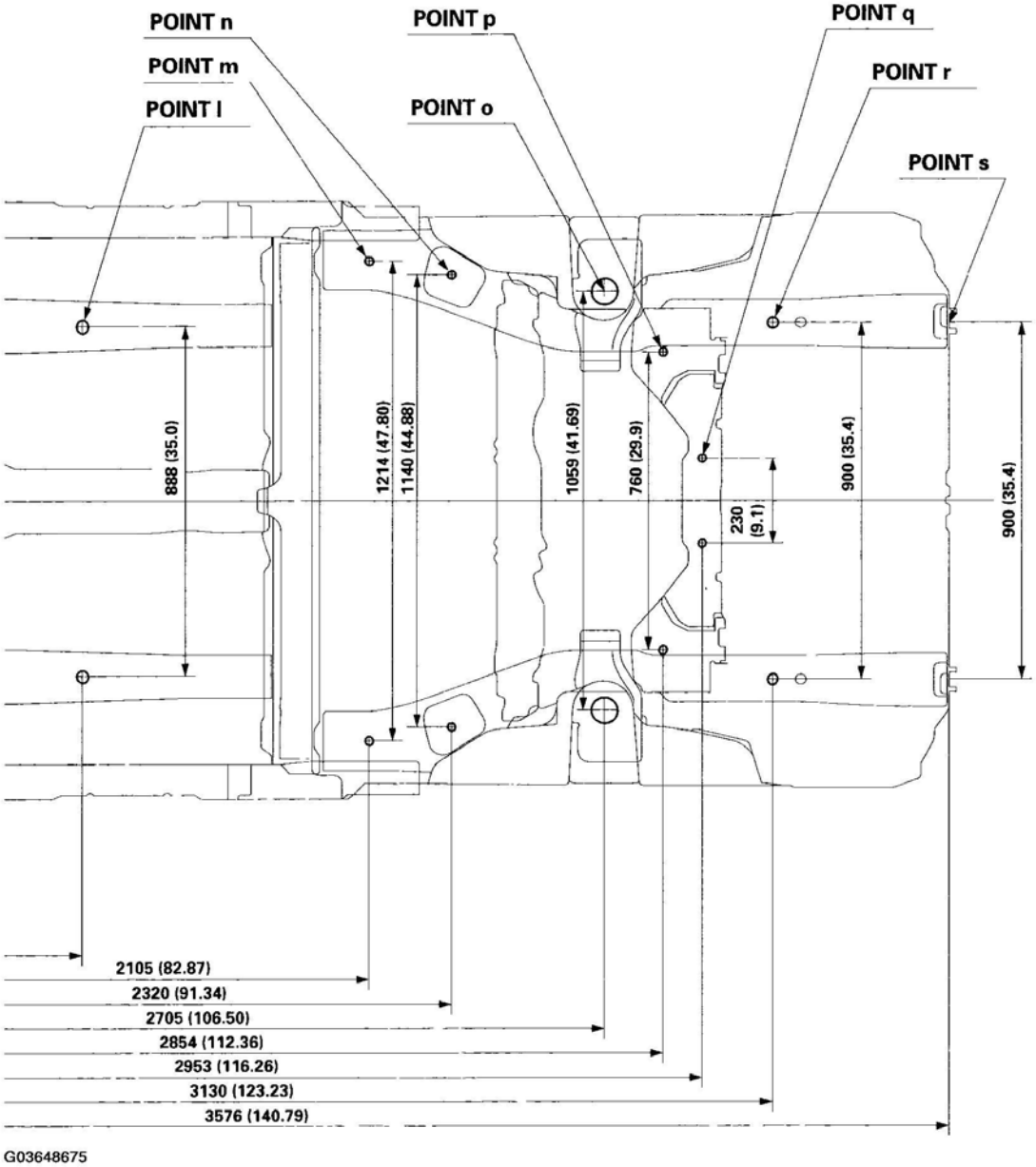
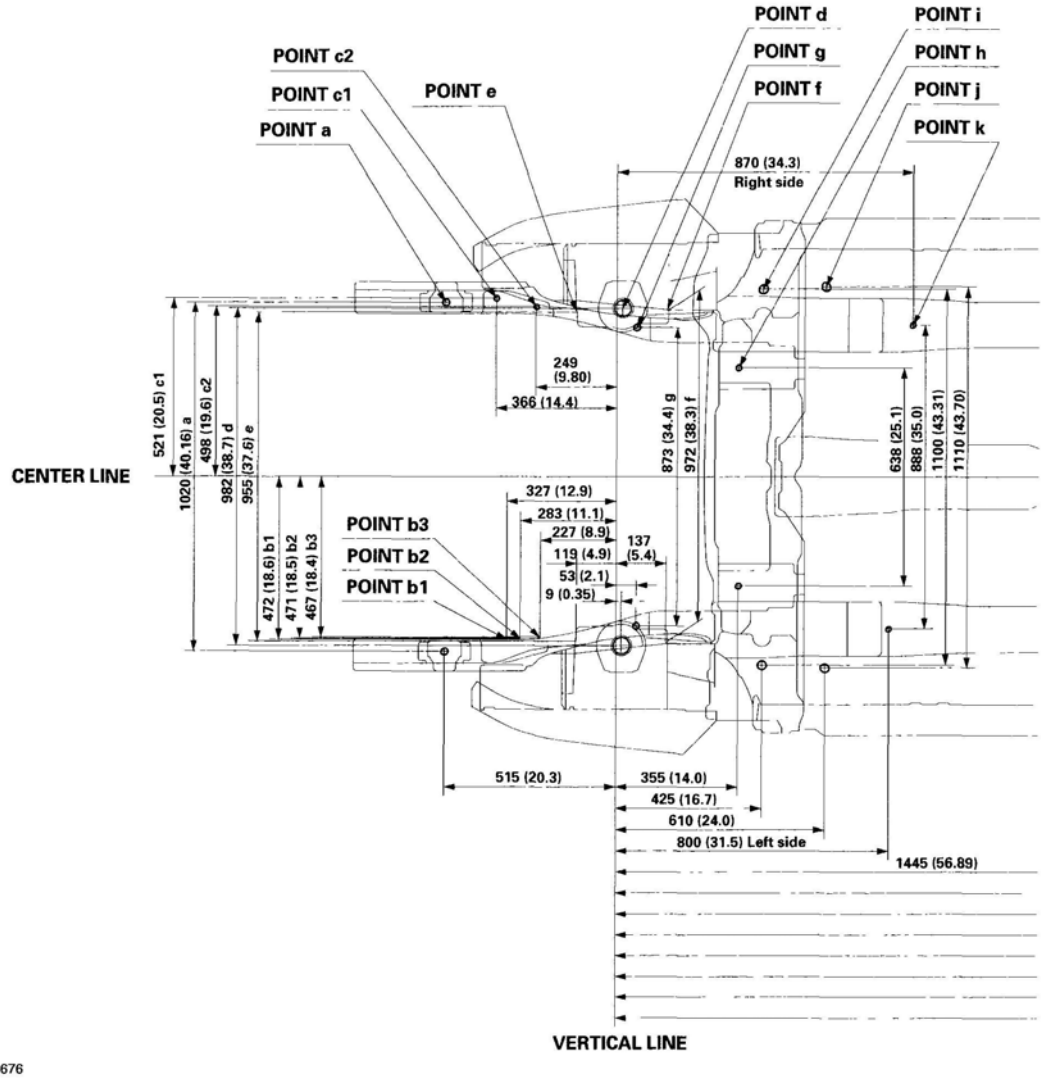


Fig. 8: Frame Repair Chart (2-Door Top View - 2 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR TOP VIEW

Unit: mm (in.)	a	For front subframe ø16 (0.63)	e	For front upper arm ø13 (0.51)
ø: Inner diameter	b1	For transmission mount ø13 (0.51) Left side	f	For front upper arm ø13 (0.51)
	b2	For transmission mount ø15 (0.59) Left side	g	For front subframe ø15 (0.59)
	b3	For transmission mount ø13 (0.51) Left side	h	For front subframe ø16 (0.63)
	c1	For engine side mount ø15 (0.59) Right side	i	Locating hole ø25 (0.98)
	c2	For engine side mount ø15 (0.59) Right side	j	Locating hole ø25 (0.98)
	d	Front damper center ø50 (1.97)	k	Locating hole ø15 (0.59)



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Fig. 9: Frame Repair Chart (4-Door Top View - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

l	Locating hole ø25 (0.98)	p	For rear subframe ø17 (0.67)
m	Locating hole ø20 (0.79)	q	Locating hole ø15 (0.59)
n	For rear subframe ø14.4 (0.57)	r	Locating hole ø25 (0.98)
o	Rear damper center ø52 (2.05)	s	Locating hole ø11 (0.43)

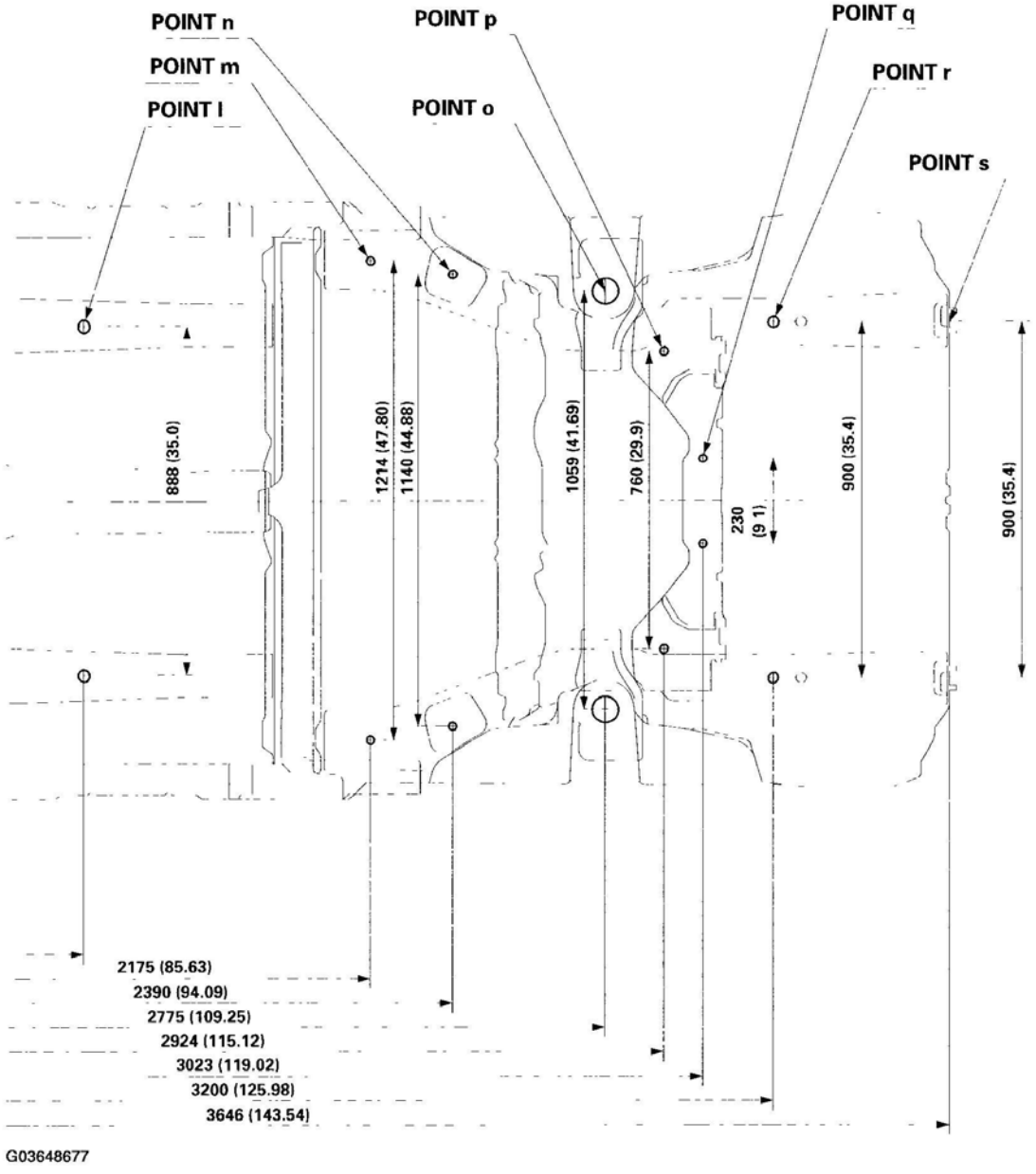


Fig. 10: Frame Repair Chart (4-Door Top View - 2 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

SIDE VIEW

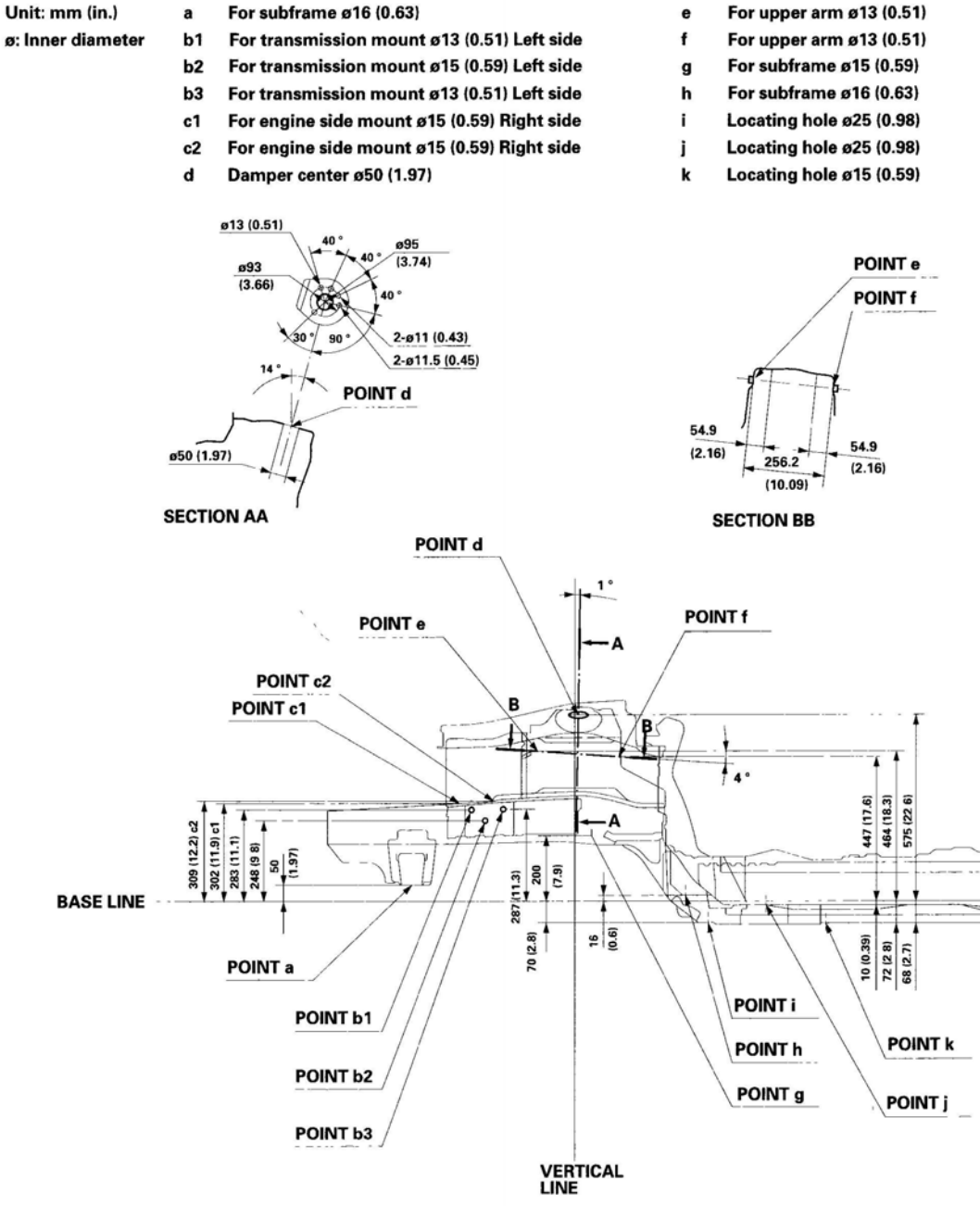


Fig. 11: Frame Repair Chart (Side View - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

l	Locating hole ø25 (0.98)	p	For subframe ø17 (0.67)
m	Locating hole ø20 (0.79)	q	Locating hole ø15 (0.59)
n	For subframe ø14.4 (0.57)	r	Locating hole ø25 (0.98)
o	Rear damper center ø52 (2.05)	s	Locating hole ø11 (0.43)

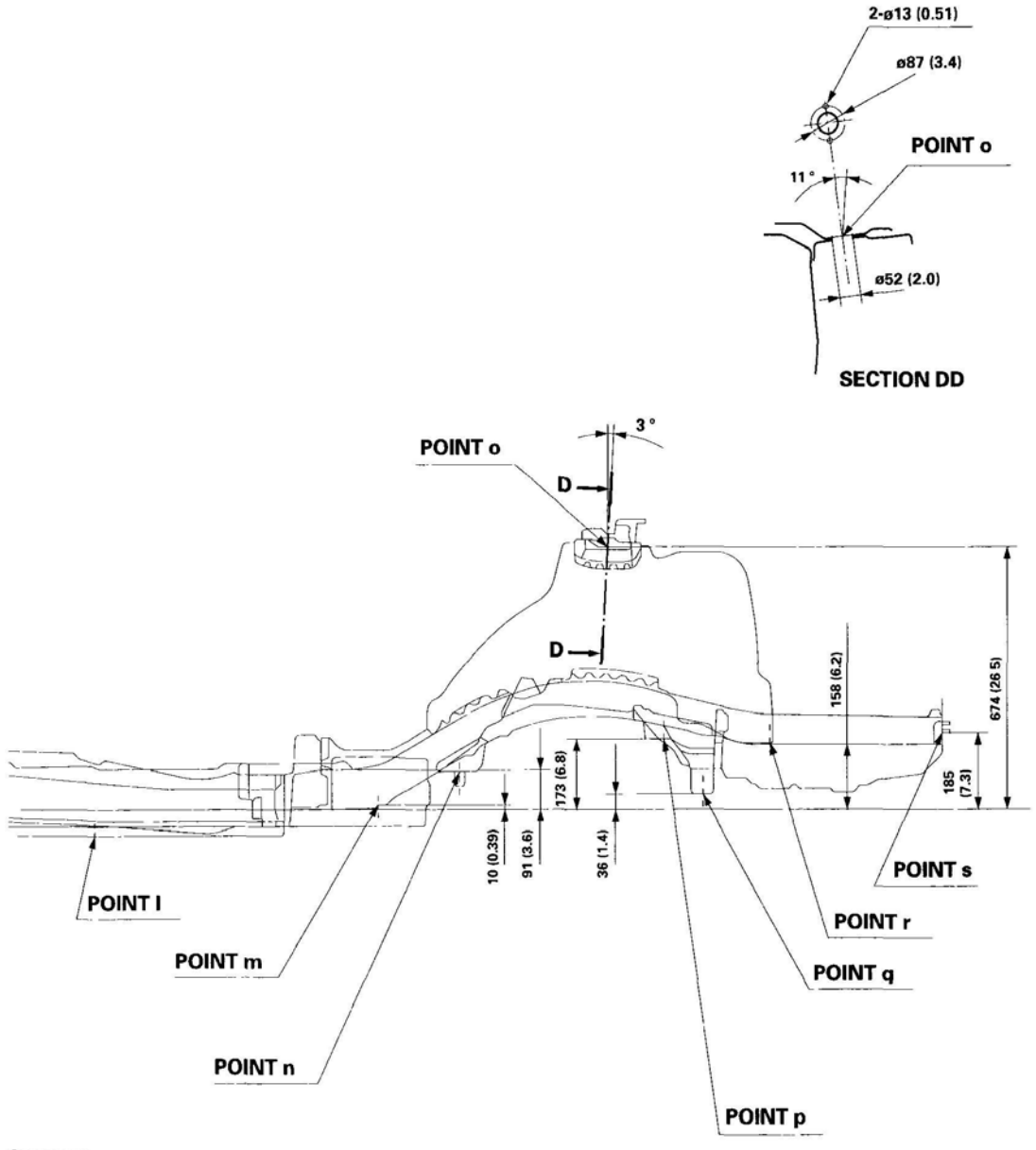


Fig. 12: Frame Repair Chart (Side View - 2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 SUSPENSION

Front Suspension - Accord

KNUCKLE/HUB/WHEEL BEARING REPLACEMENT

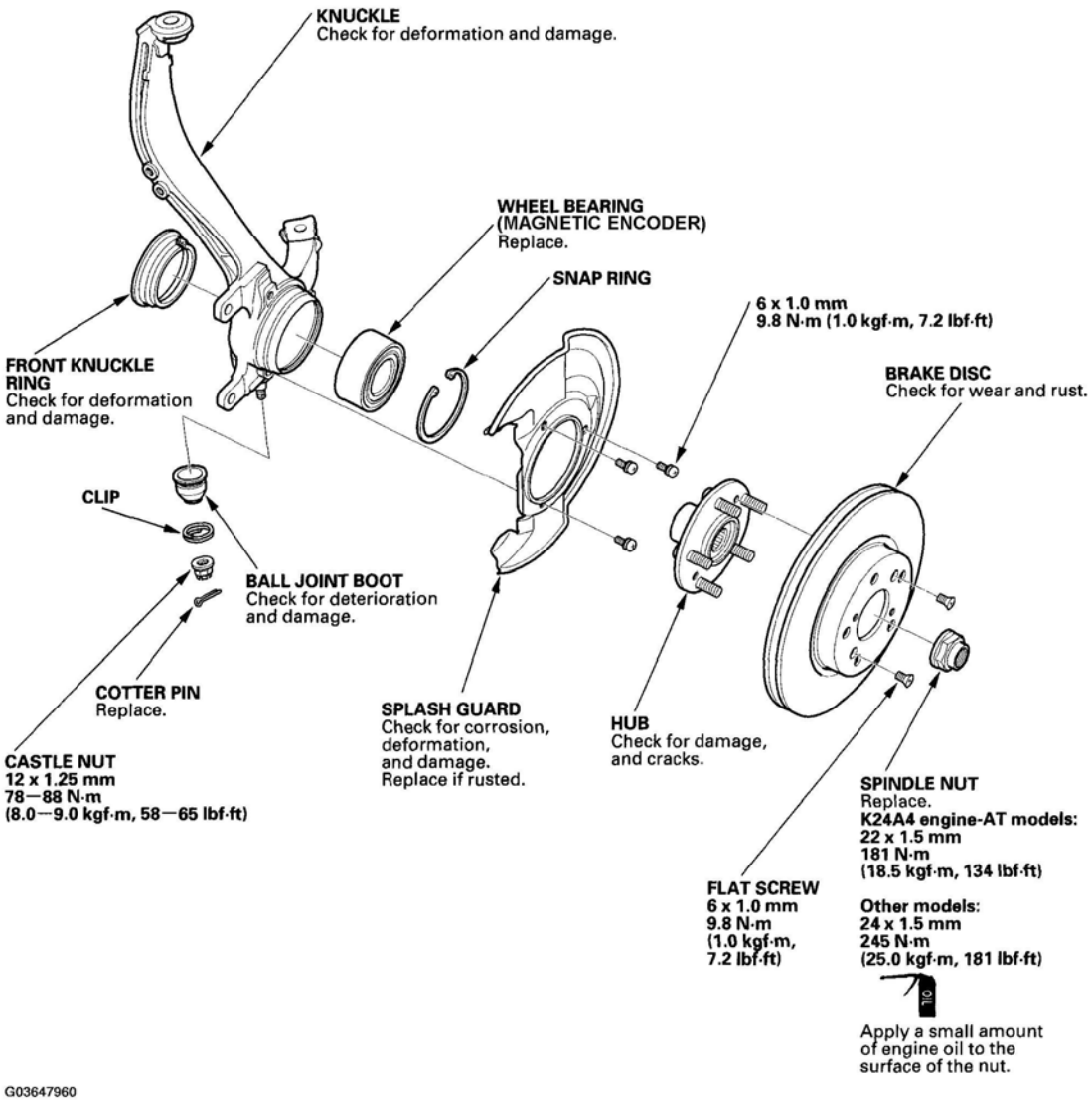


Fig. 1: Exploded View Of Knuckle/Hub/Wheel Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

- Ball joint remover, 28 mm 07MAC-SL0A202

- Attachment, 78 x 90 mm 07GAD-SD40101
- Hub dis/assembly tool, 42 mm 07GAF-SD40100
- Ball joint thread protector, 12 mm 07AAF-SDAA100
- Attachment, 72 x 75 mm 07746-0010600
- Driver 07749-0010000
- Support base 07965-SD90100

KNUCKLE/HUB REPLACEMENT

1. Raise the front of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the wheel nuts and front wheel.

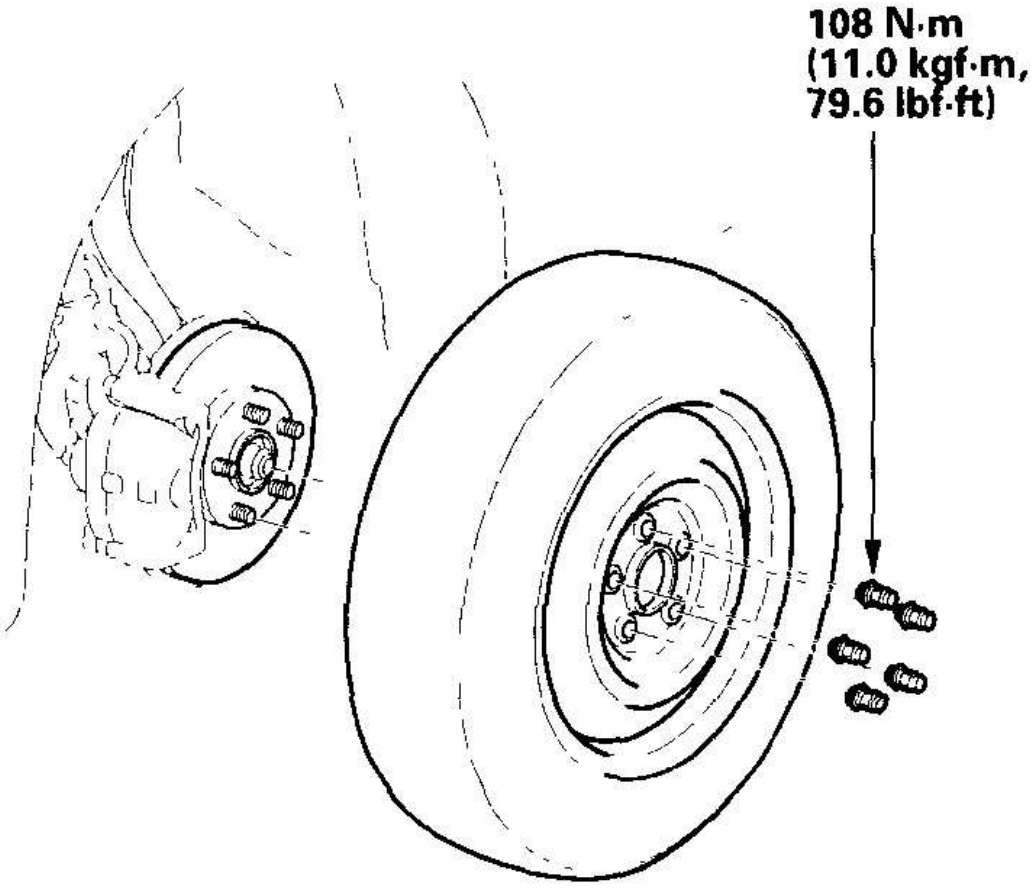


Fig. 2: Removing Wheel Nuts And Front Wheel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the brake hose mounting bracket (A).

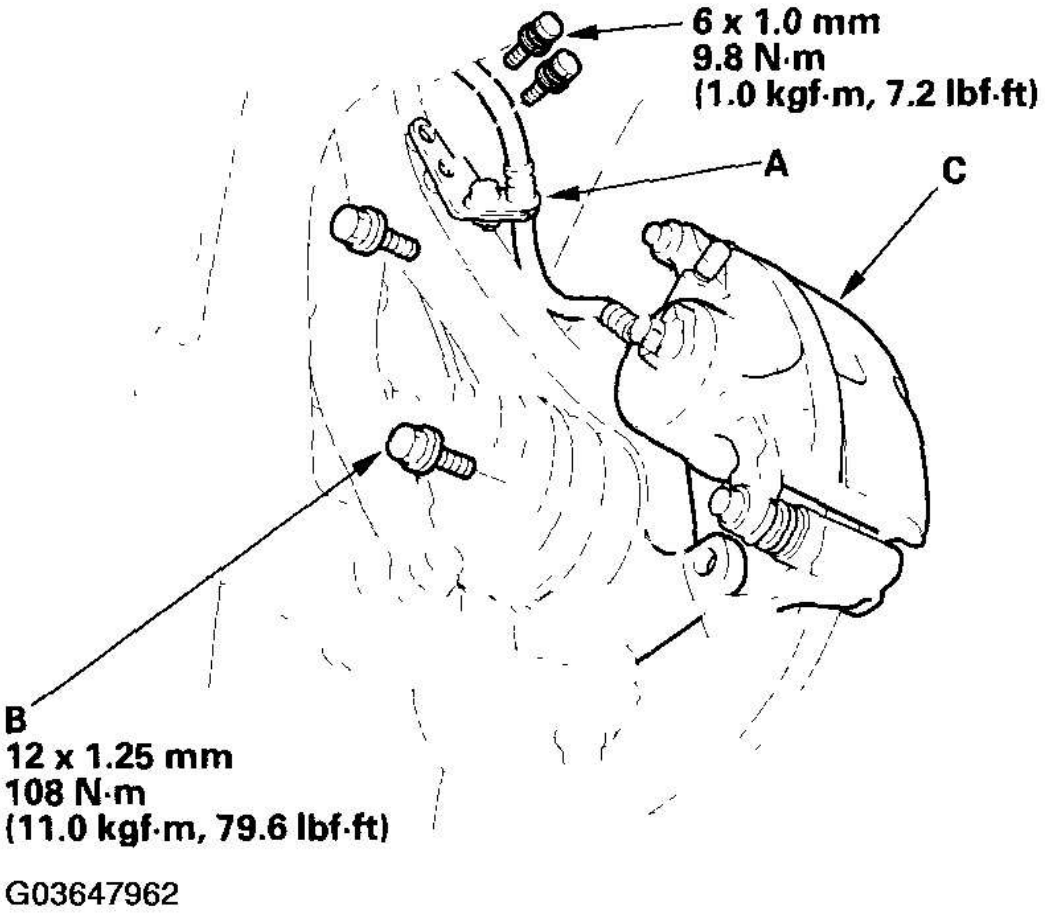


Fig. 3: Removing Brake Hose Mounting Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the brake caliper bracket mounting bolts (B), and remove the caliper assembly (C) from the knuckle. To prevent damage to the caliper assembly or brake hose, use a short piece of wire to hang the caliper assembly from the undercarriage. Do not twist the brake hose with force.
5. Remove the wheel sensor (A) from the knuckle. Do not disconnect the wheel sensor connector.

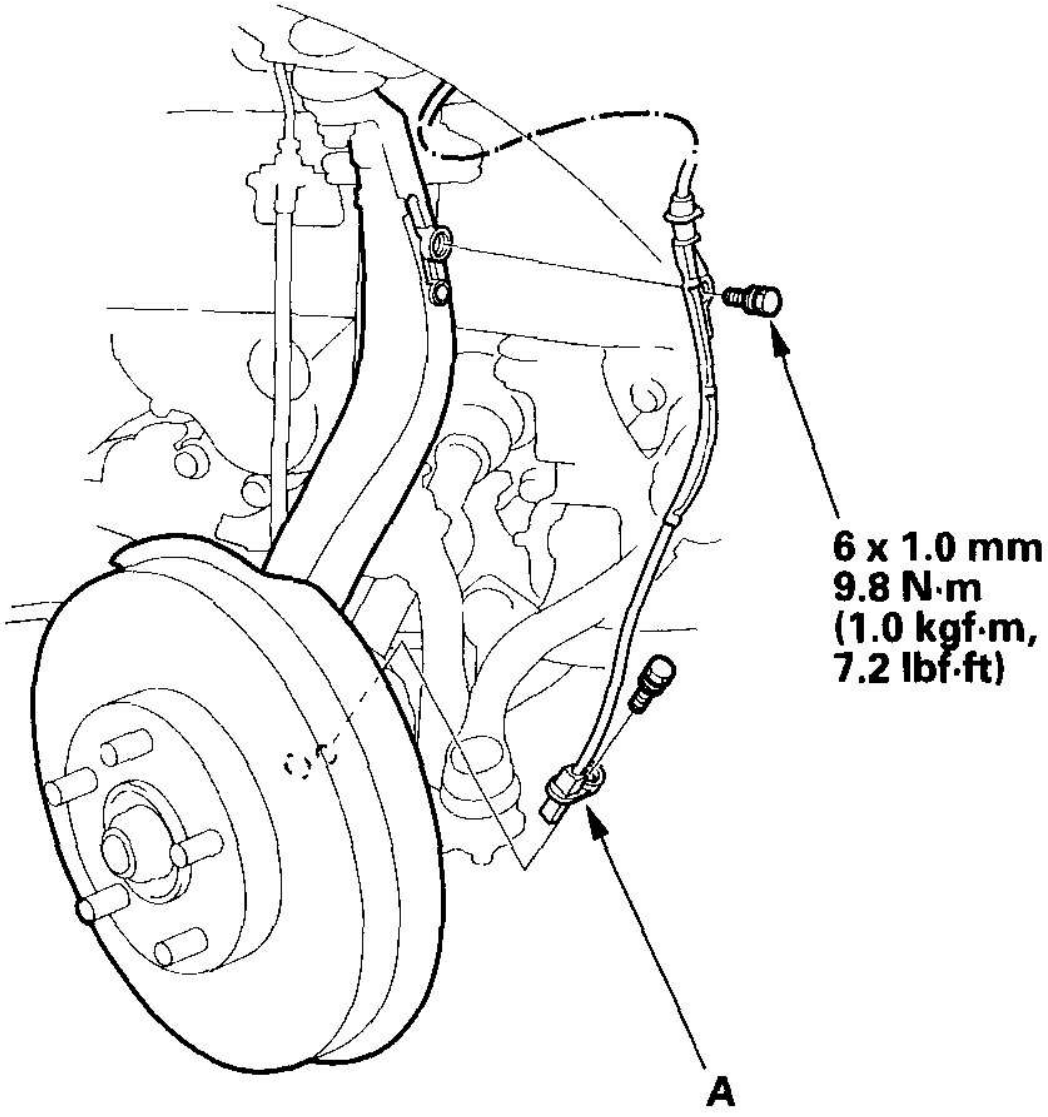


Fig. 4: Removing Wheel Sensor From Knuckle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Raise the stake (A), and remove the spindle nut (B).

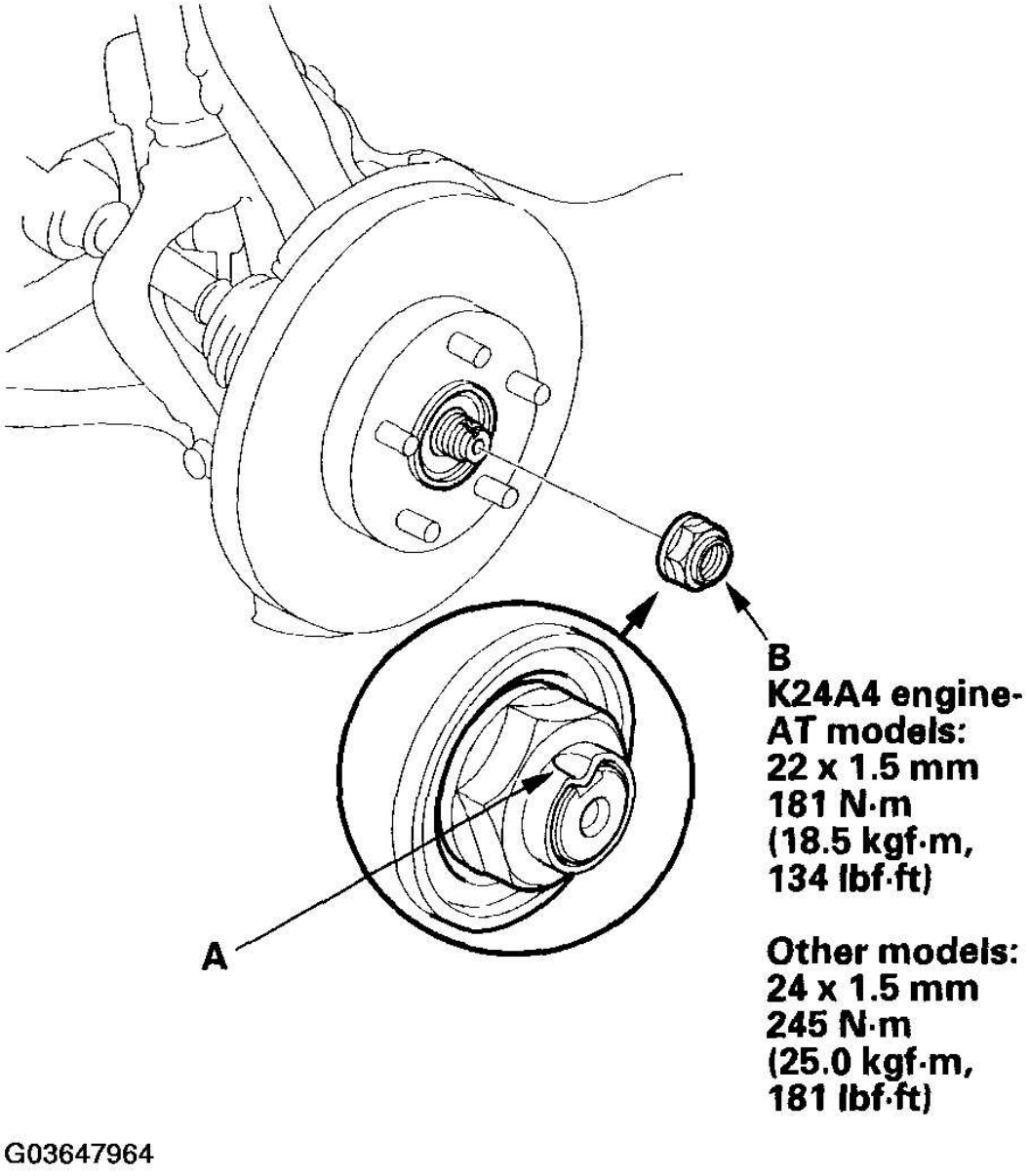


Fig. 5: Removing Spindle Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the 6 mm brake disc retaining screws (A).

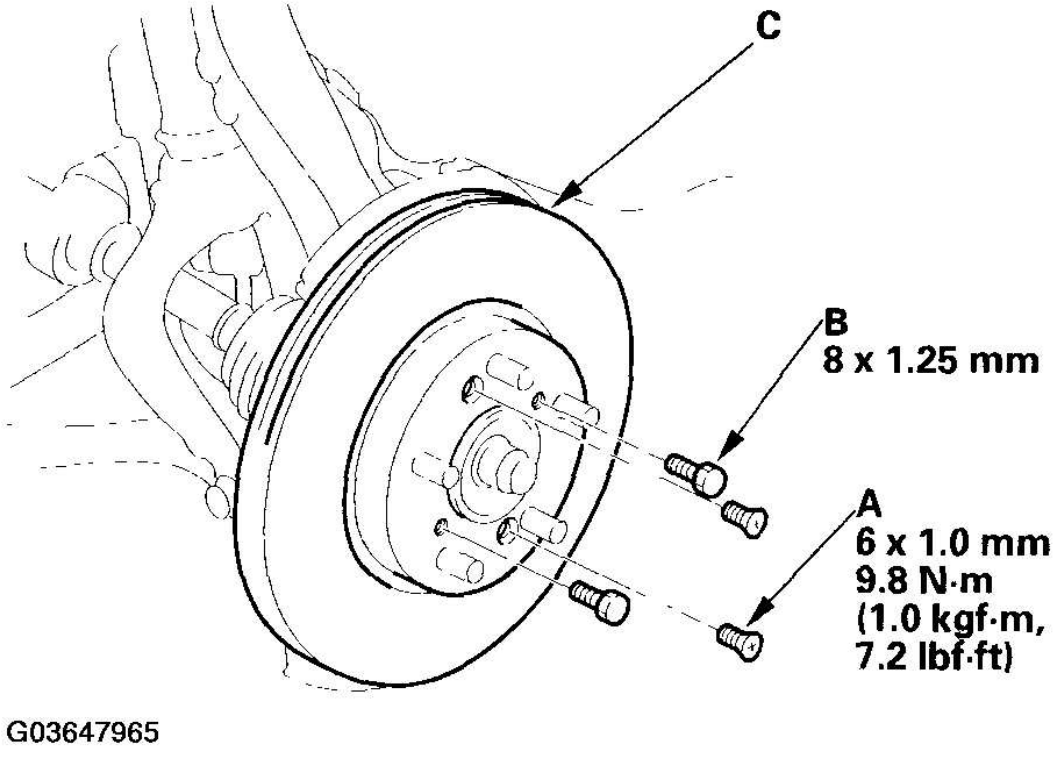


Fig. 6: Removing Brake Disc Retaining Screws
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the brake disc (B) from the hub.

NOTE: If the brake disc has dung to the hub. Screw two 8x1.25 mm bolts (C) into the disc to push it away from the hub. Turn each bolt two turns at a time to prevent the brake disc from binding.

9. Check the front hub for damage and cracks.
10. Remove the cotter pin (A) from the tie-rod end ball joint, and loosen the nut (B).

NOTE: During installation, install the new cotter pin after tightening the nut, and bend its end as shown below.

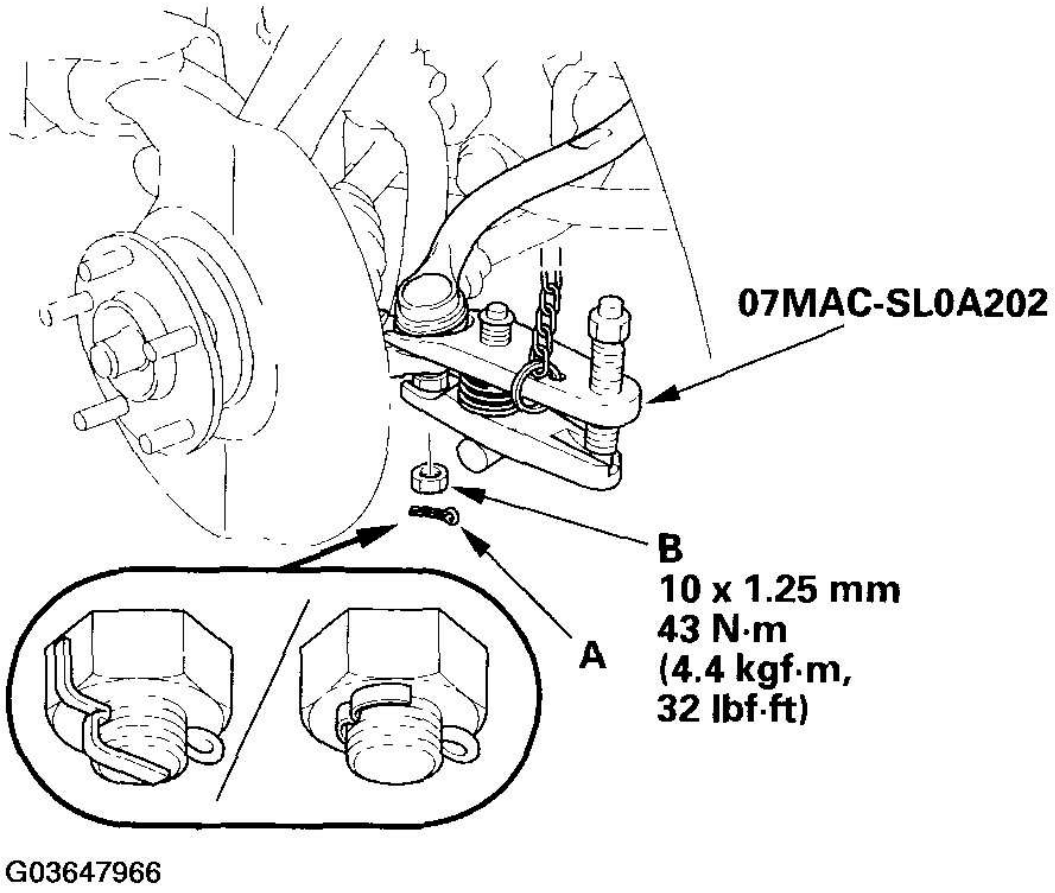


Fig. 7: Removing Cotter Pin From Tie-Rod End Ball Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Disconnect the tie-rod end ball joint from the knuckle using the ball joint remover (see **BALL JOINT REMOVAL**).
12. Remove the cotter pin (A) from the lower arm ball joint, and loosen the nut (B).

NOTE:

- **To avoid damaging the ball joint, install the ball join thread protector on the threads of the ball joint.**
- **Be careful not to damage the ball joint boot when installing the ball joint remover.**

- **Do not force or hammer on the lower arm, or pry between the lower arm and the knuckle. You could damage the ball joint.**
- **Insert the new cotter pin in to the ball joint pin hole from the front to the rear of the vehicle, and bend its end as shown below.**

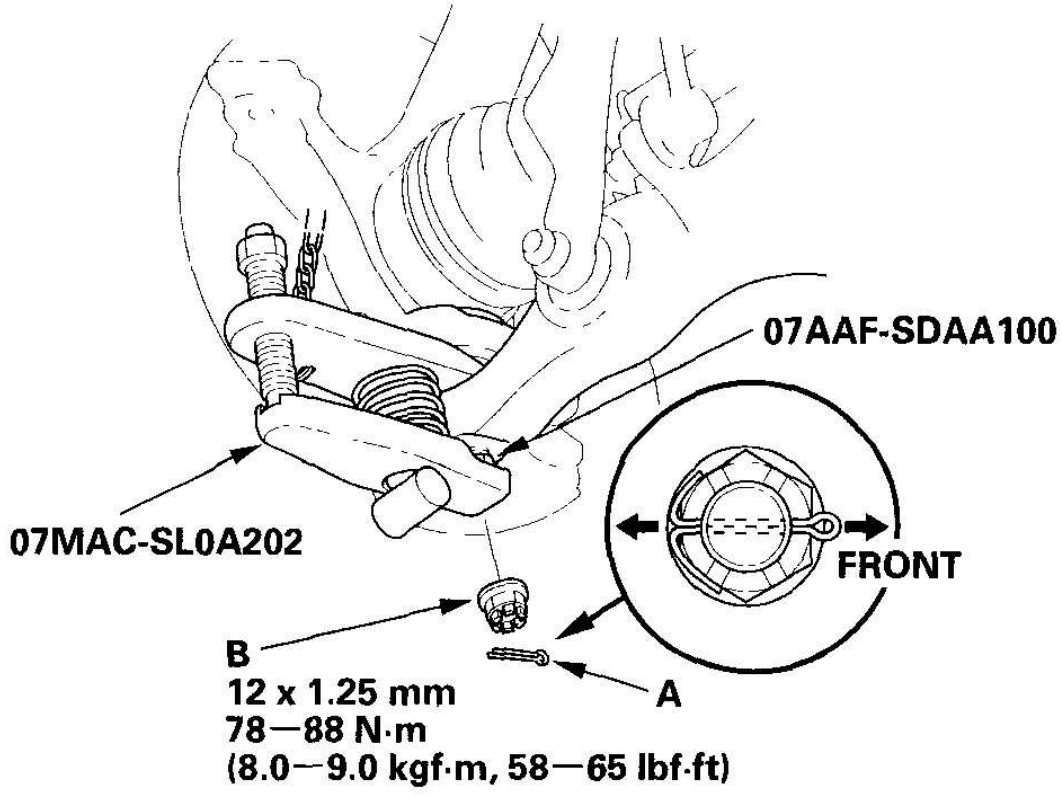


Fig. 8: Removing Cotter Pin From Lower Arm Ball Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Disconnect the lower arm ball joint from the lower arm using the ball joint thread protector and ball joint remover (see **BALL JOINT REMOVAL**).
14. Remove the cotter pin (A) from the upper arm ball joint, and loosen the nut (B).

NOTE: During installation, insert the new cotter pin into the ball joint pin from the front to the rear of the vehicle, and bend its end as shown below.

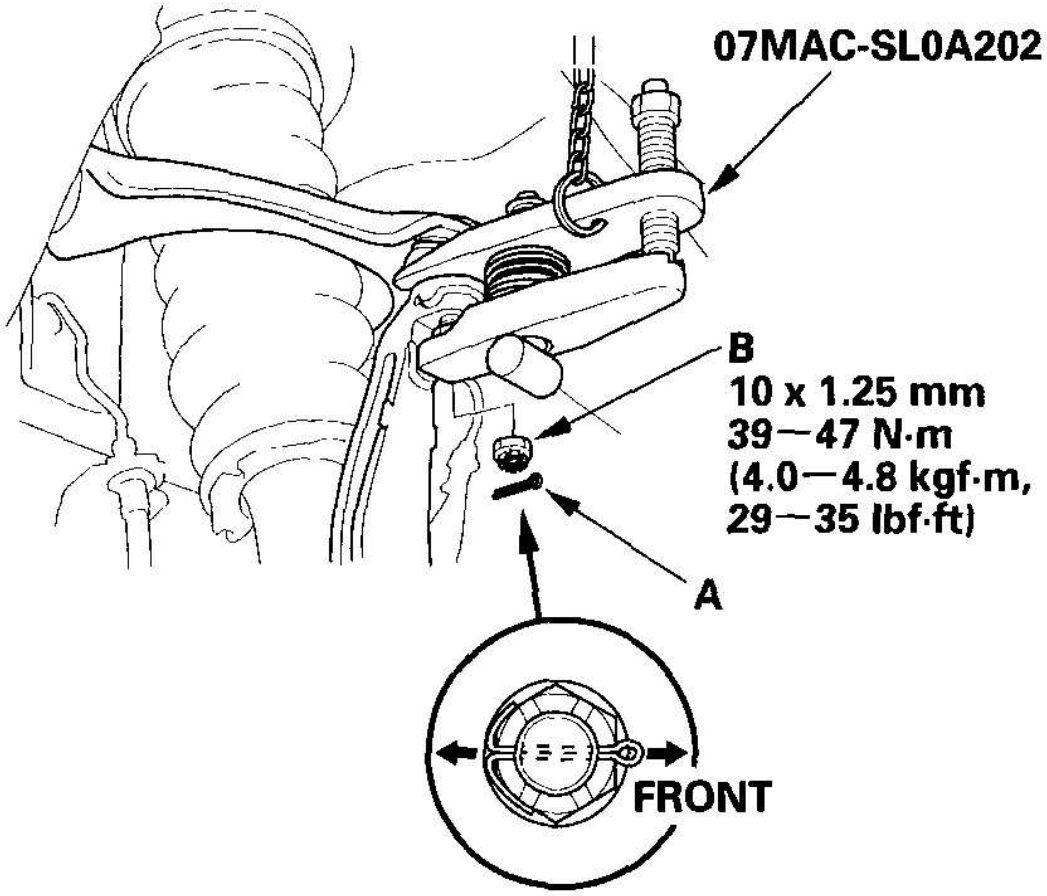


Fig. 9: Removing Cotter Pin From Upper Arm Ball Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Disconnect the upper arm ball joint from the knuckle using the ball joint remover (see **BALL JOINT REMOVAL**).
16. Remove the driveshaft outboard joint (A) from the knuckle (B) by tapping the driveshaft end (C) with a plastic hammer while drawing the hub outward, then remove the knuckle.

NOTE:

- **Do not pull the driveshaft end outward. The inner driveshaft joint may come apart.**
- **During installation, apply grease to the mating surface of the wheel bearing and driveshaft outboard joint (see DRIVESHAFT INSTALLATION).**

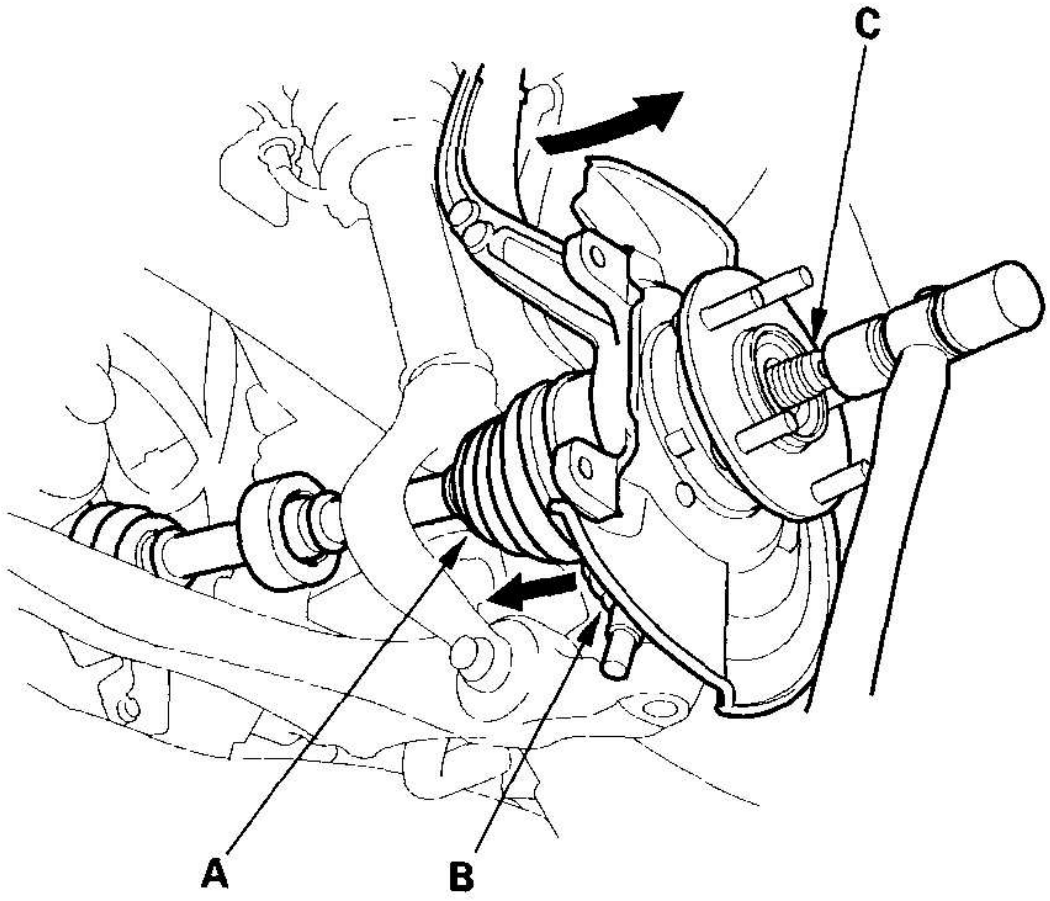


Fig. 10: Removing Driveshaft Outboard Joint From Knuckle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Install the knuckle/hub in the reverse order of removal, and note these items:
    - Be careful not to damage the ball joint boot when installing the knuckle.

- Tighten all mounting hardware to the specified torque values.
- Before connecting the lower arm ball joint to the lower arm, degrease the threaded section and tapered portion of the ball joint pin, the lower arm connecting hole, and the threaded section and mating surface of the castle nut.
- First install all the components and lightly tighten the bolts and nuts, then raise the suspension to load it with the vehicle's weight before fully tightening to the specified torque values. Do not place the jack against the ball joint pin of the knuckle.
- Torque the castle nut to the lower torque specification, then tighten it only far enough to align the slot with the ball joint pin hole. Do not align the castle nut by loosening it.
- Install a new cotter pin on the castle nut after torquing.
- Use a new spindle nut on reassembly.
- Before installing the spindle nut, apply a small amount of engine oil to the seating surface of the nut. After tightening, use a drift to stake the spindle nut shoulder against the driveshaft.
- Before installing the brake disc, clean the mating surface of the front hub and the inside of the brake disc.
- Before installing the wheel, clean the mating surface of the brake disc and the inside of the wheel.
- Check the front wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

WHEEL BEARING (MAGNETIC ENCODER) REPLACEMENT

1. Separate the hub (A) from the knuckle (B) using the special tool and a hydraulic press. Hold the knuckle with the attachment (C) of the hydraulic press or equivalent tool. Be careful not to deform the splash guard. Hold onto the hub to keep it from falling when pressed clear.

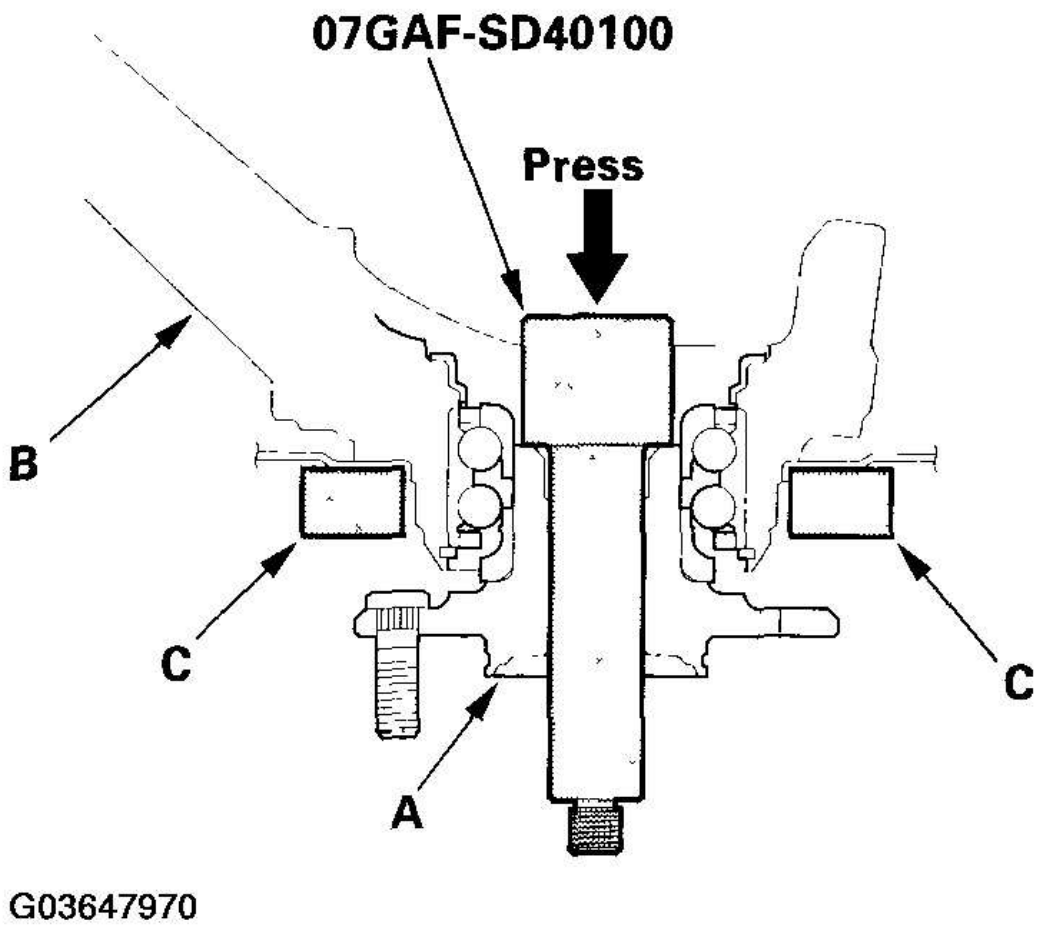


Fig. 11: Separating Hub From Knuckle Using Special Tool And Hydraulic Press
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Press the wheel bearing inner race (A) off of the hub (B) using the special tool, commercially available bearing separator (C), and a press.

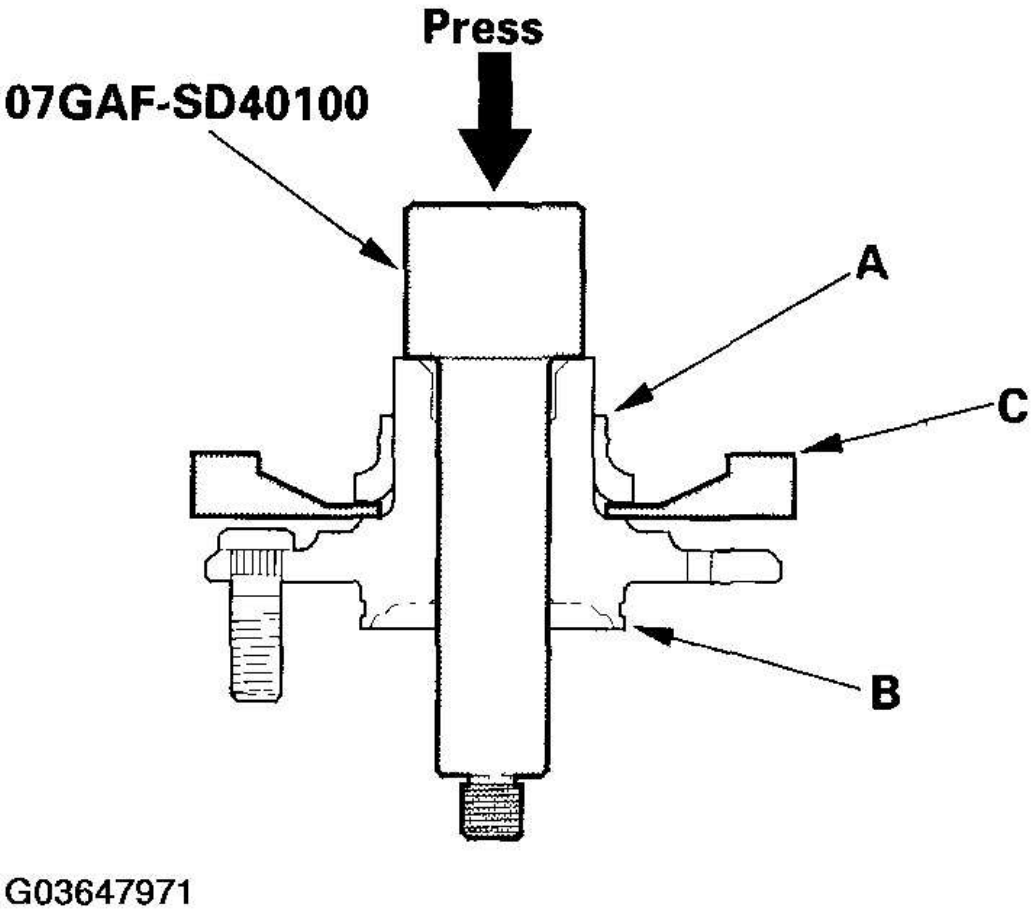


Fig. 12: Pressing Wheel Bearing Inner Race Off Of Hub
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the snap ring (A) and the splash guard (B) from the knuckle (C).

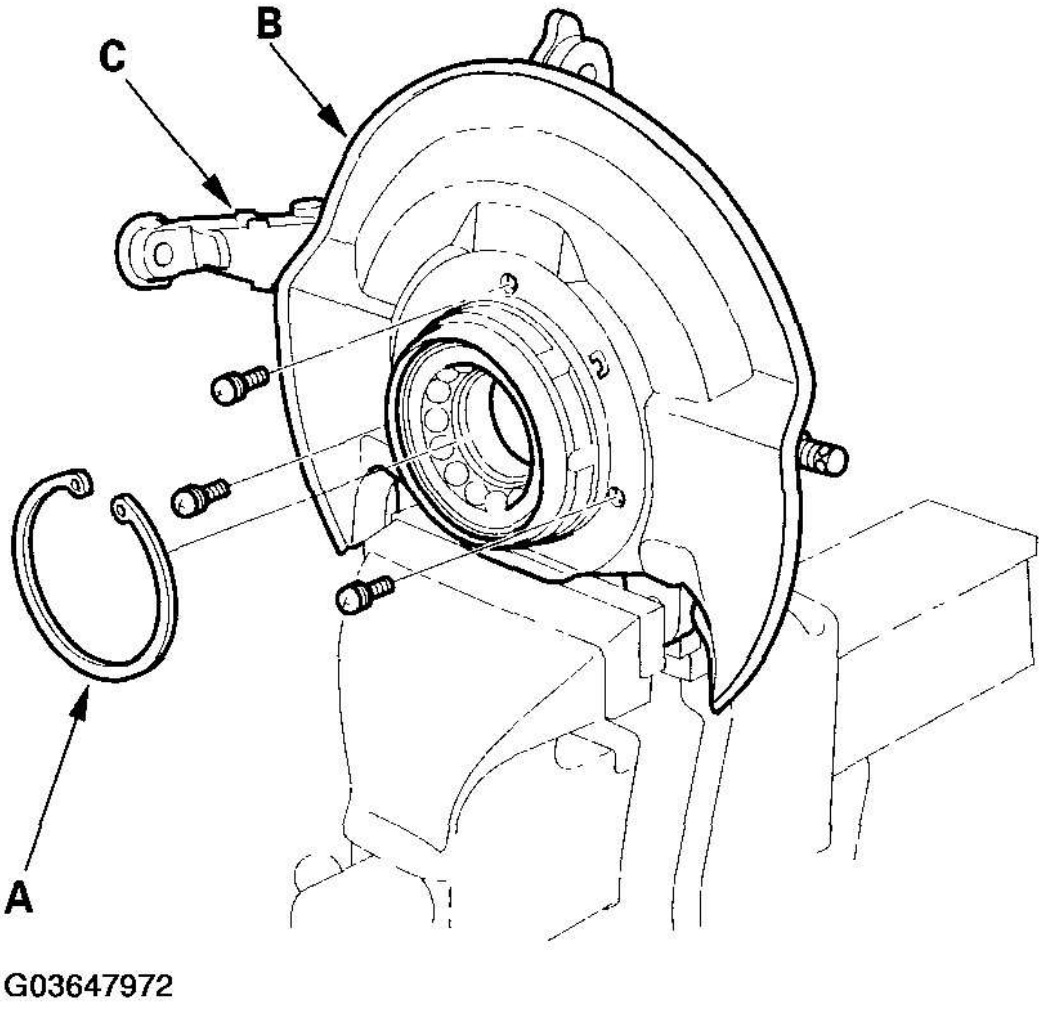


Fig. 13: Removing Snap Ring And Splash Guard
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check the front knuckle ring (A) for damage or deformation, and replace it if necessary.

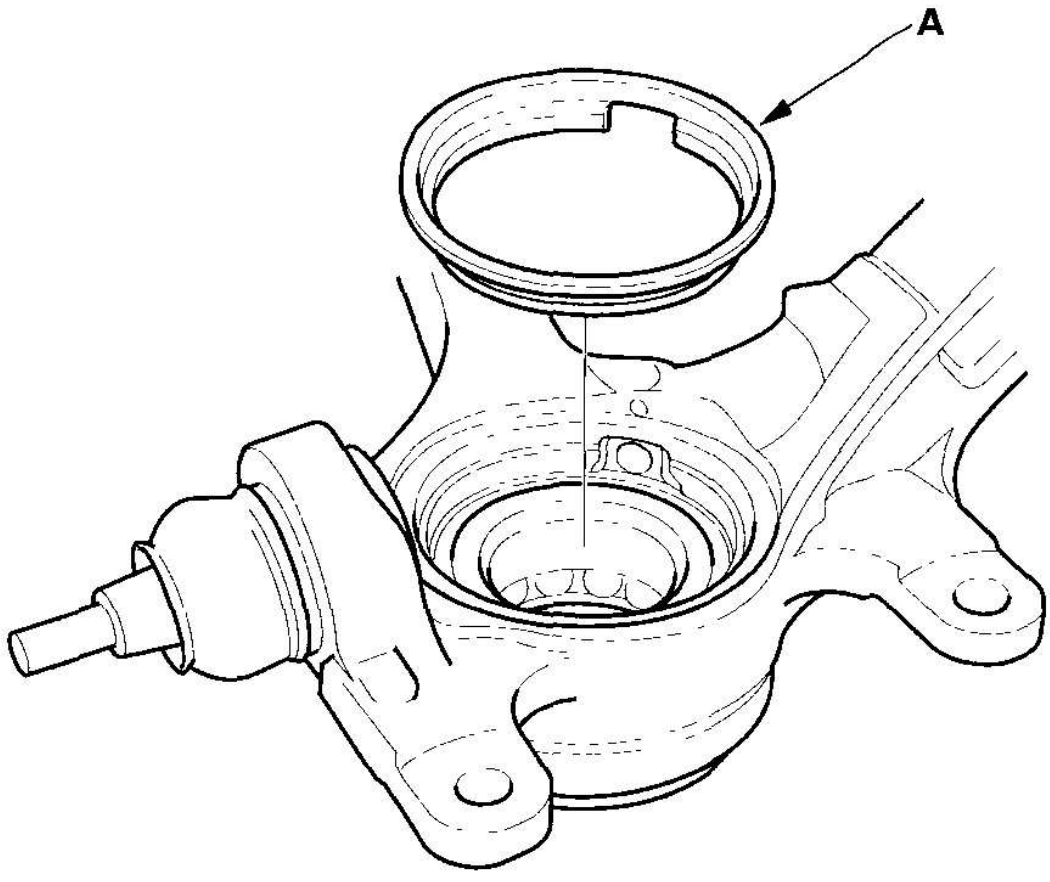


Fig. 14: Checking Front Knuckle Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Press the wheel bearing (A) out of the knuckle (B) using the attachment, the driver and a press.

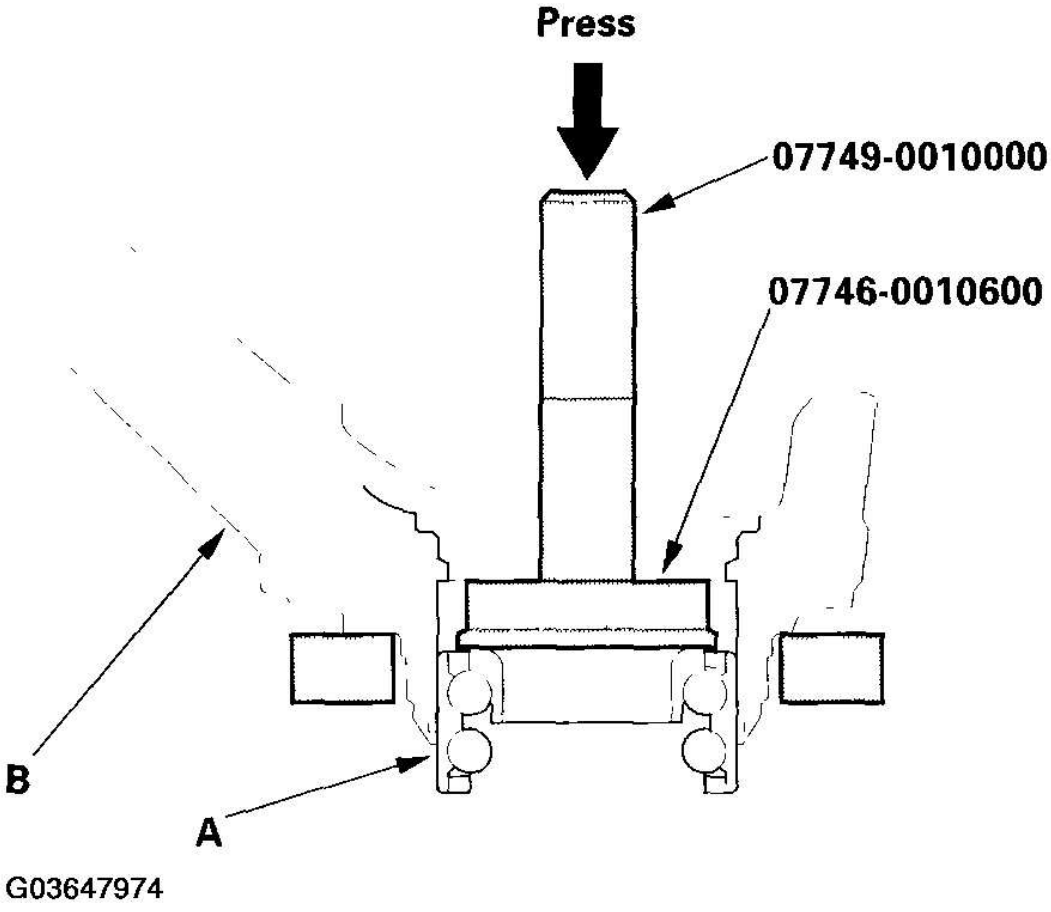


Fig. 15: Pressing Wheel Bearing Out Of Knuckle Using Special Tools And Press
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Wash the knuckle and hub thoroughly in high flash point solvent before reassembly.
7. Press a new wheel bearing (A) into the knuckle (B) using the old bearing (C), a steel plate (D), the attachment, the support base, and a press.

NOTE:

- **Install the wheel bearing with the wheel sensor magnetic encoder (E) (brown color), toward the inside of the knuckle.**

- **Remove any oil, grease, dust, metal debris, and other foreign material from the encoder surface.**
- **Keep any magnetic tools away from the encoder surface.**
- **Be careful not to damage the encoder surface when you insert the wheel bearing.**

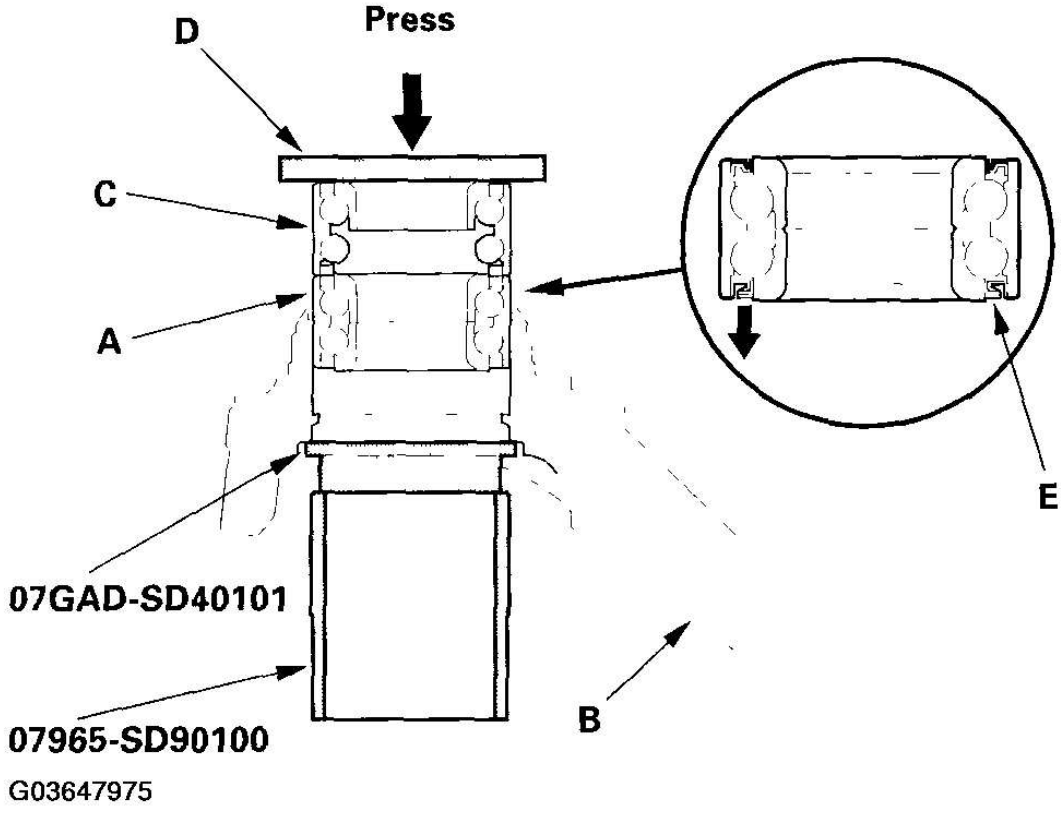


Fig. 16: Pressing Wheel Bearing Into Knuckle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the new front knuckle ring (A) on the inside of the knuckle by aligning the cutout portion (B) on the ring with the wheel sensor hole (C) in the knuckle. Be careful not to damage or deform the ring when installing it.

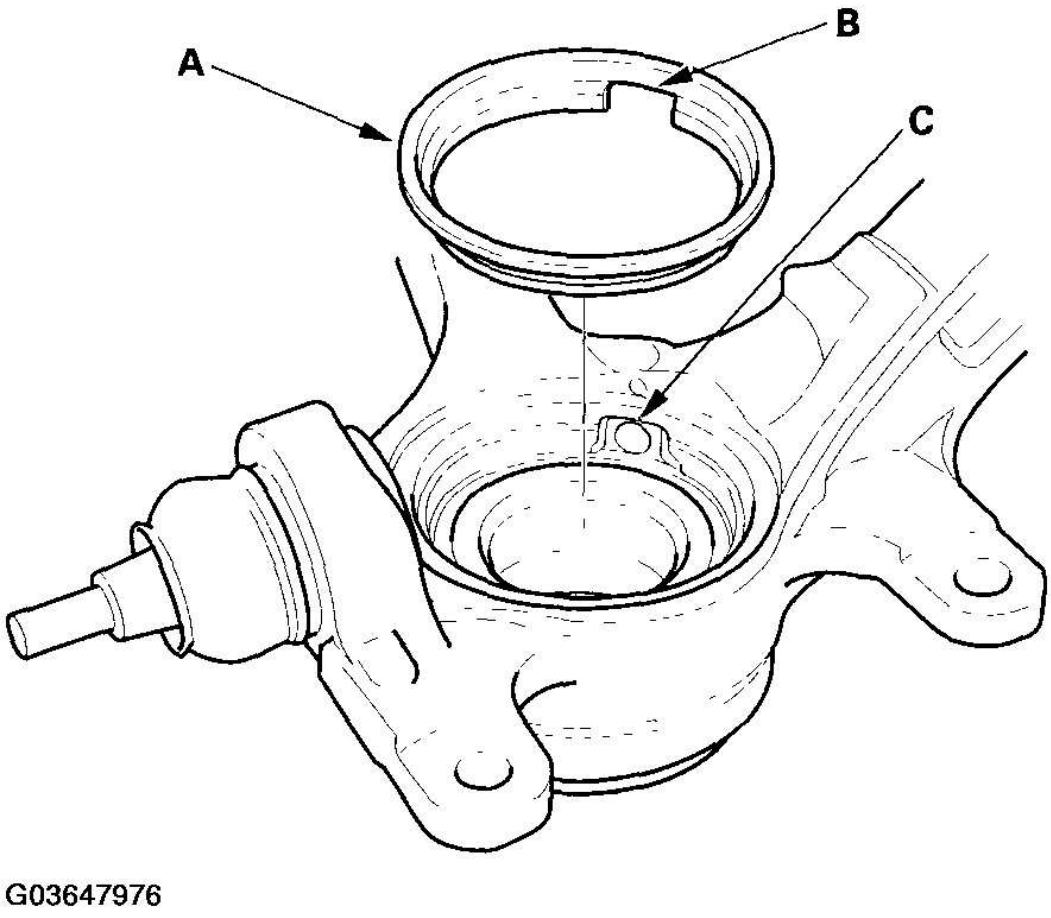


Fig. 17: Installing Front Knuckle Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the snap ring (A) securely in the knuckle (B).

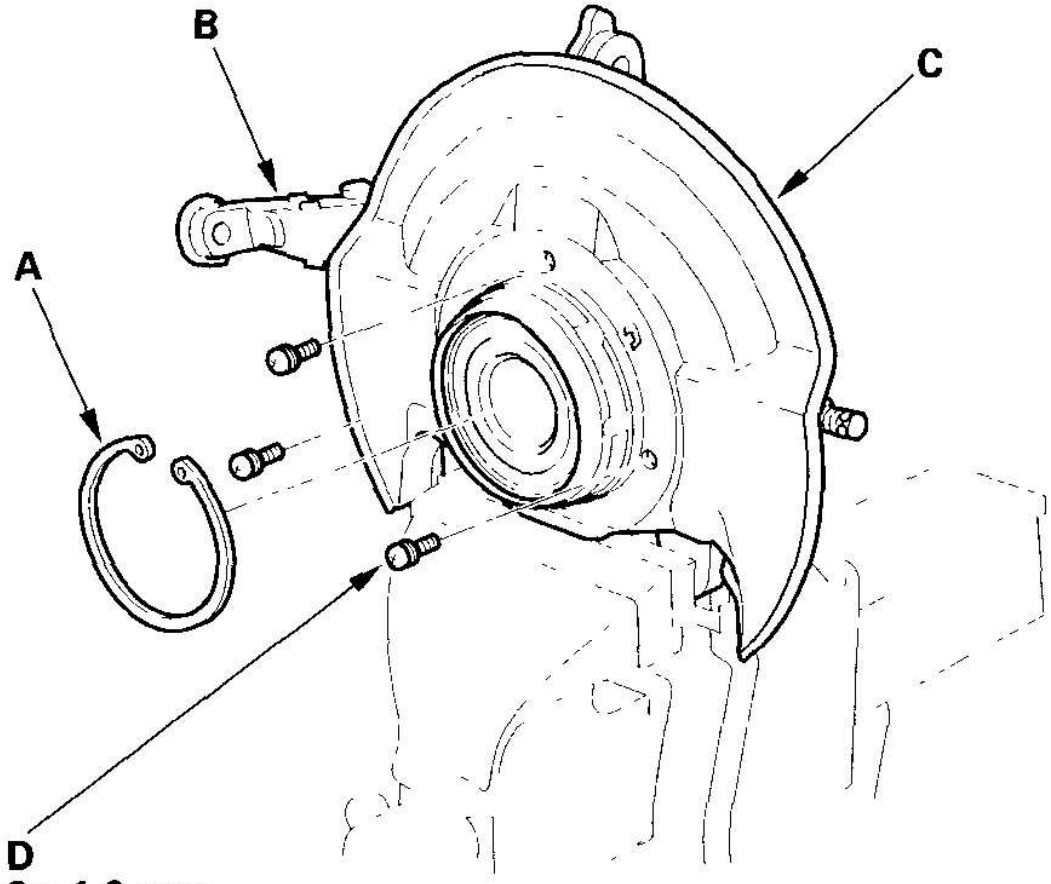


Fig. 18: Installing Snap Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Install the splash guard (C), and tighten the screws (D) to the specified torque value.
11. Install the hub (A) onto the knuckle (B) using the attachment, the driver support base, and a hydraulic press. Be careful not to distort the splash guard (C).

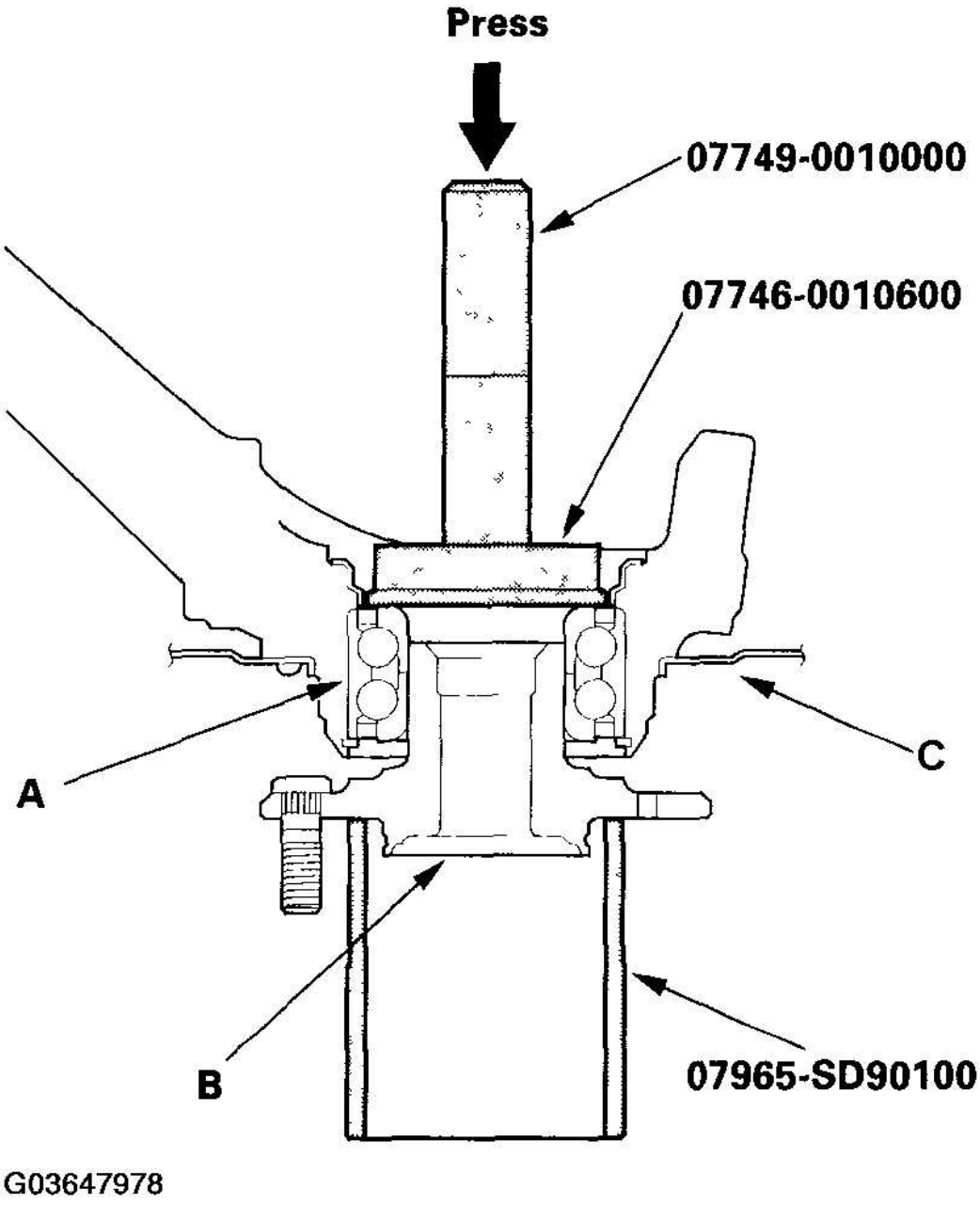


Fig. 19: Pressing Wheel Bearing Onto Hub Using Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BALL JOINT BOOT REPLACEMENT

Special Tools Required

Ball joint boot clip guide 07GAG-SD40700

1. Remove the knuckle (see **Knuckle/Hub Replacement**).
2.
3. Pack the interior and lip (A) of a new boot with grease. Keep the grease off of the boot-to-knuckle mating surface (B).

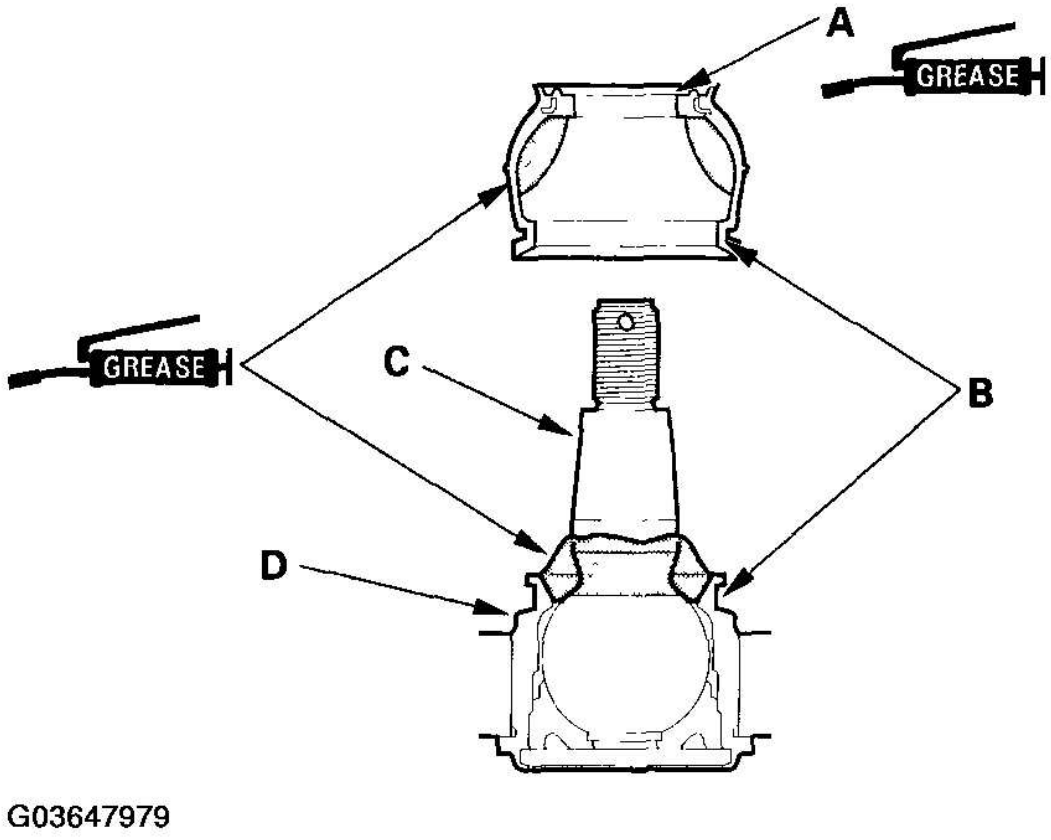


Fig. 20: Packing Interior And Lip Of New Boot With Grease
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Wipe the grease off the tapered portion of the pin (C), and pack fresh grease into the base (D). Do not let dirt, or other foreign materials get into the boot.

5. Install the boot on the ball joint, then squeeze it gently to force out any air.
6. Adjust the special tool with the adjusting bolt (A) until its base is just above the groove around the bottom of the boot. Then slide the clip (B) over the tool and into position on the boot.

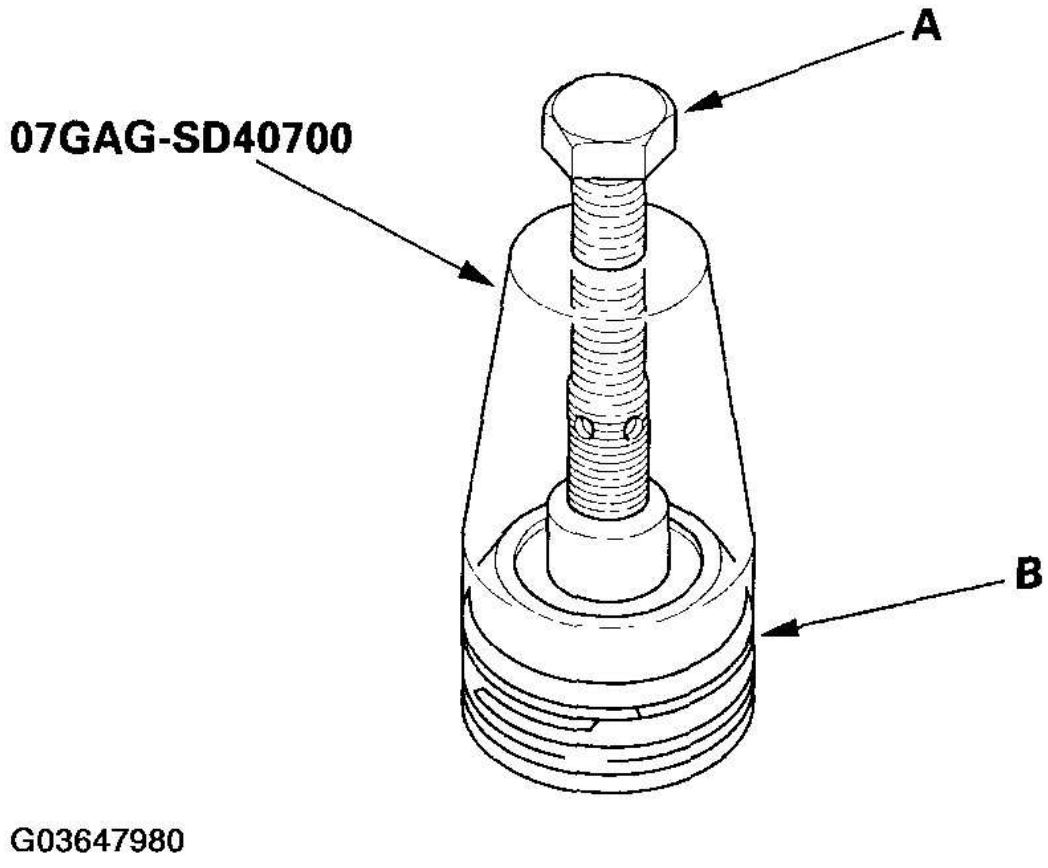


Fig. 21: Adjusting Special Tool With Adjusting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. After installing a boot, wipe any grease off the exposed portion of the ball joint pin.
8. Install the knuckle (see **Knuckle/Hub Replacement**).

UPPER ARM REPLACEMENT

Special Tools Required

Ball joint remover, 28 mm 07MAC-SL0A202

1. Remove the front damper (see **REMOVAL**).
2. Remove the wheel sensor bracket (A) from the upper arm (B).

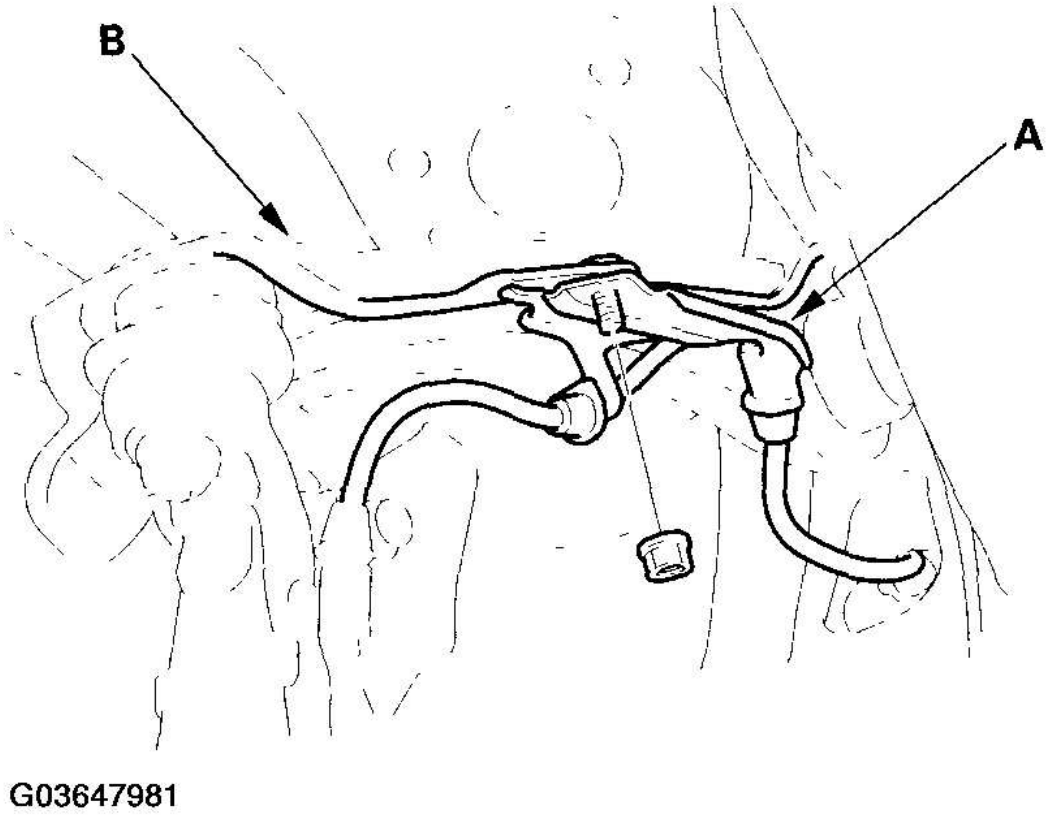


Fig. 22: Removing Wheel Sensor Bracket From Upper Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the cotter pin (A) from the upper arm ball joint, and loosen the nut (B).

NOTE: During installation, insert the new cotter pin into the ball joint pin hole from the front to the rear of vehicle,

and bend its end as shown below.

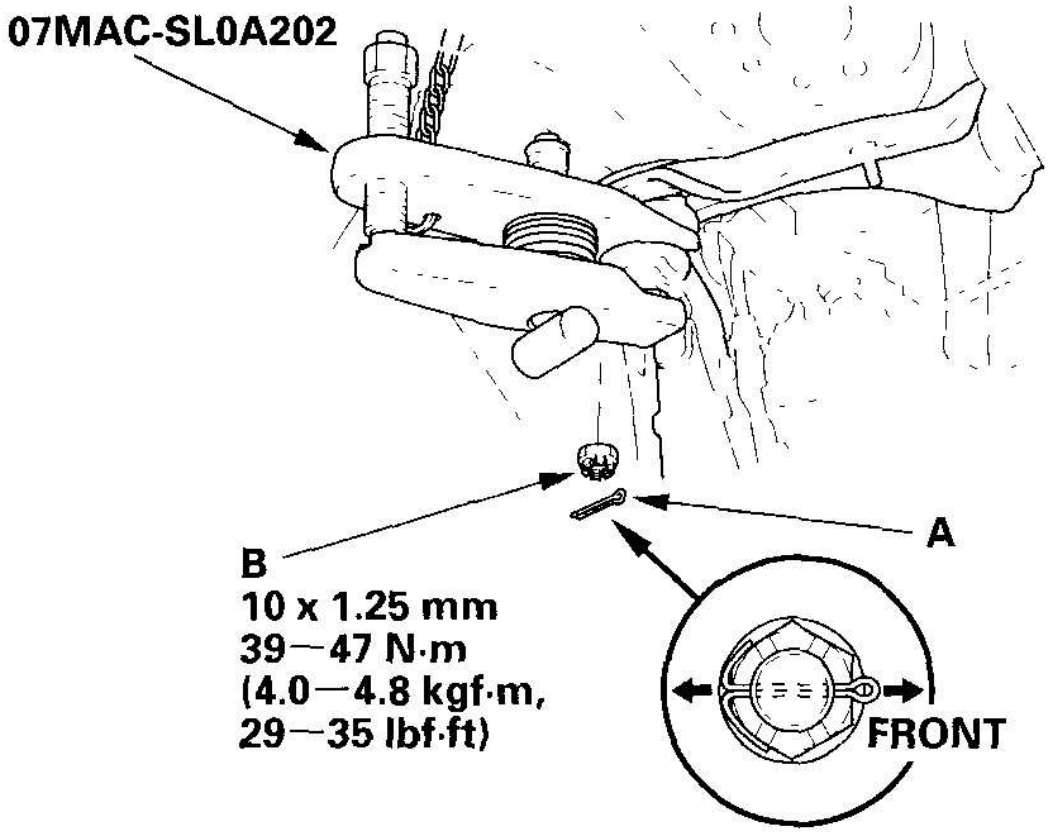


Fig. 23: Removing Cotter Pin From Upper Arm Ball Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Disconnect the upper arm ball joint from the knuckle using the ball joint remover (see **BALL JOINT REMOVAL**).
5. Remove the upper arm mounting bolts (A), and remove the upper arm (B).

NOTE: During installation, install the new upper arm mounting bolts.

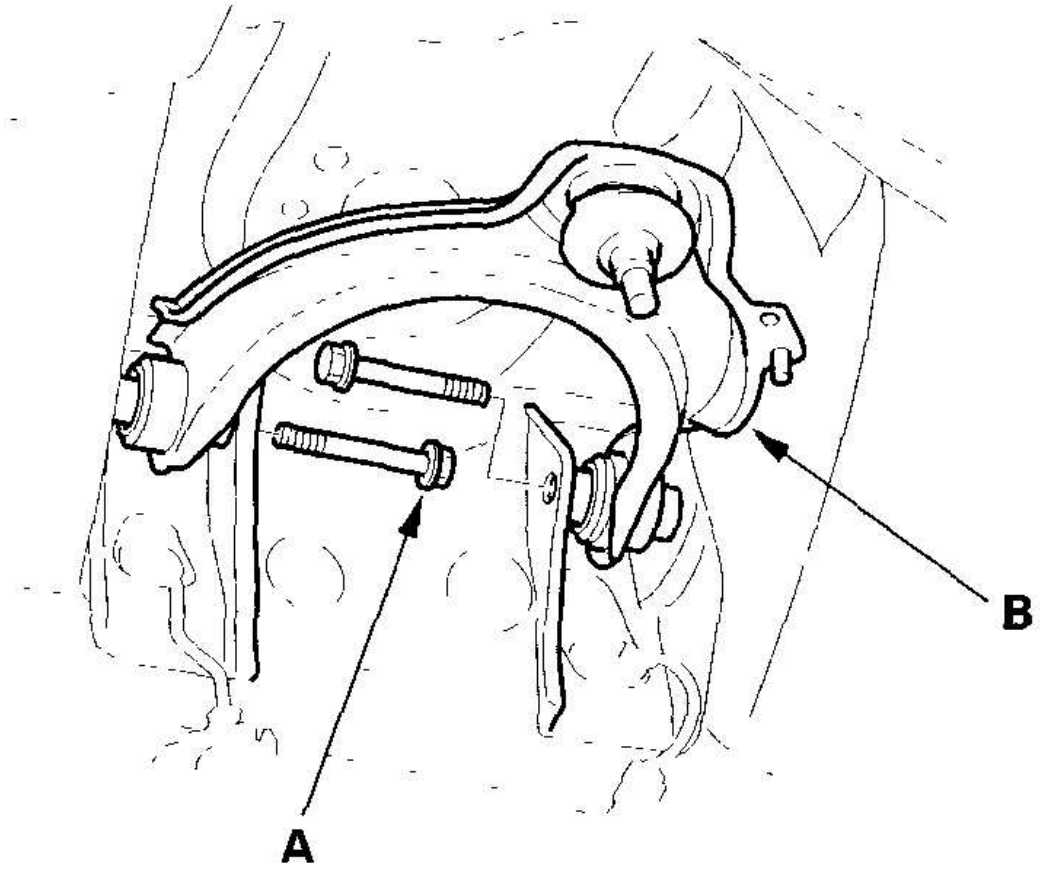


Fig. 24: Removing Upper Arm Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the upper arm by inserting a rod (A) of appropriate size (O.D. 6 mm/L: 300 mm) into the positioning holes (B), and place the upper arm (C) on the rod to position it before tightening the upper arm mounting bolts.

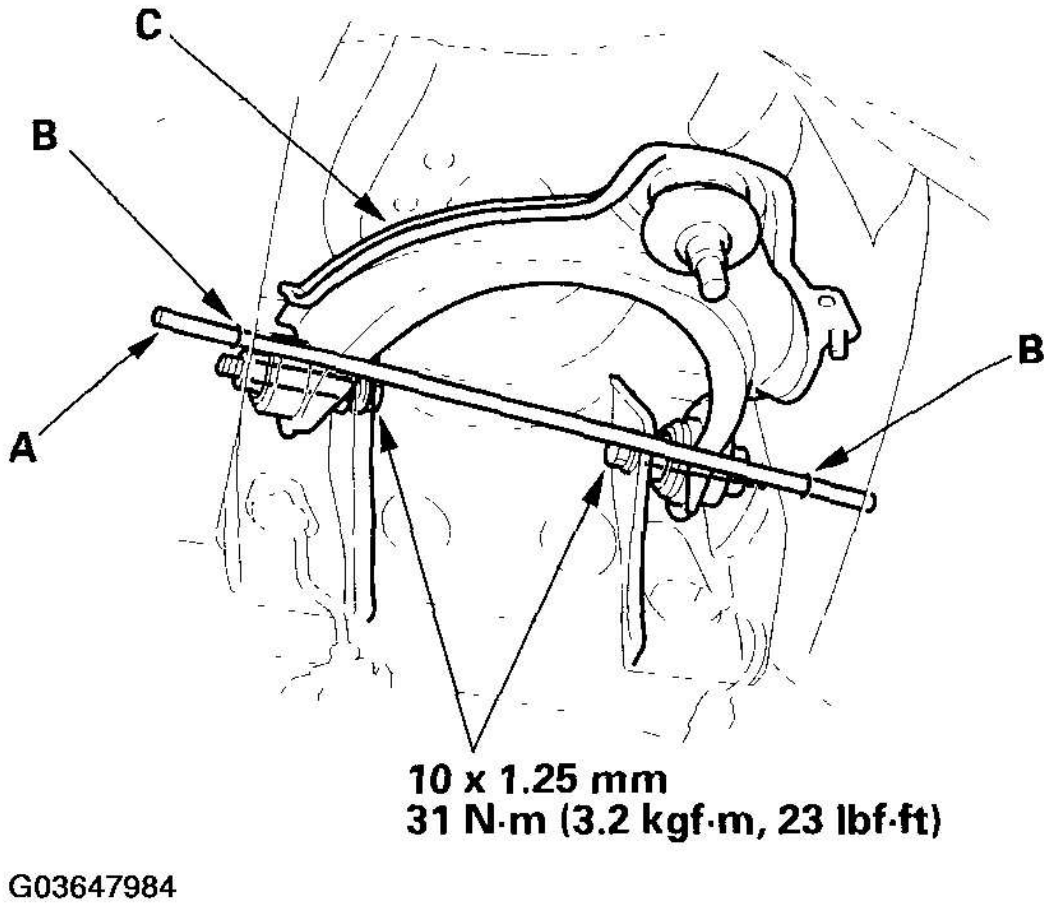


Fig. 25: Installing Upper Arm By Inserting Rod Into Positioning Holes
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the remaining parts in the reverse order of removal, and note these items:
   - Be careful not to damage the ball joint boot when installing the knuckle.
   - Before connecting the ball joint to the knuckle, degrease the threaded section and tapered portion of the ball joint pin, the knuckle connecting hole, the threaded section, and the mating surface of the castle nut.
   - Tighten all mounting hardware to specified torque values.
   - First install all the components and lightly tighten the bolts and nuts, then raise the suspension to load it with the vehicle's weight before fully

tightening to the specified torque values. Do not place the jack against the ball joint pin of the knuckle.

- Torque the castle nut to the lower torque specification, then tighten it only far enough to align the slot with the ball joint pin hole. Do not align the castle nut by loosening it.
- Install a new cotter pin on the castle nut after torquing.
- Before installing the wheel, clean the mating surface on the brake disc and the inside of the wheel.
- Check the front wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

LOWER ARM REMOVAL/INSTALLATION

Special Tools Required

- Ball joint thread protector, 12 mm 07AAF-SDAA100
- Ball joint remover, 28 mm 07MAC-SL0A202

1. Raise the front of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the front wheel.
3. Remove the damper fork (A) from the damper (B) and lower arm (C).

NOTE: During installation, insert the damper fork into the damper lower end so the aligning tab (D) is aligned with the slot (E) in the damper fork. Replace the damper fork mounting nut (F) and bolt (G) with a new one.

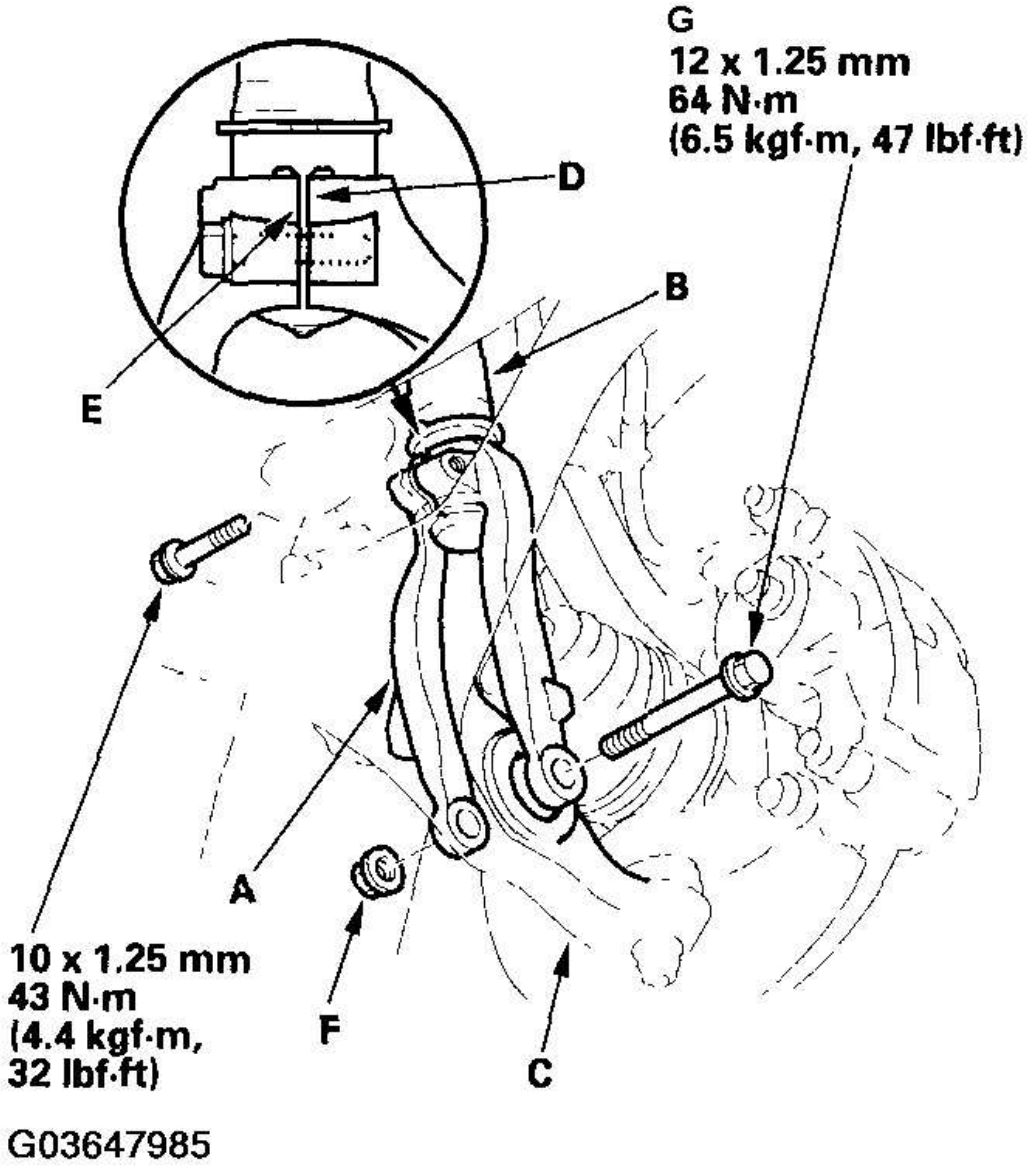


Fig. 26: Removing Damper Fork From Damper And Lower Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the flange nut (A) while holding the joint pin (B) with a hex wrench (C), and disconnect the stabilizer link (D) from the lower arm (E).

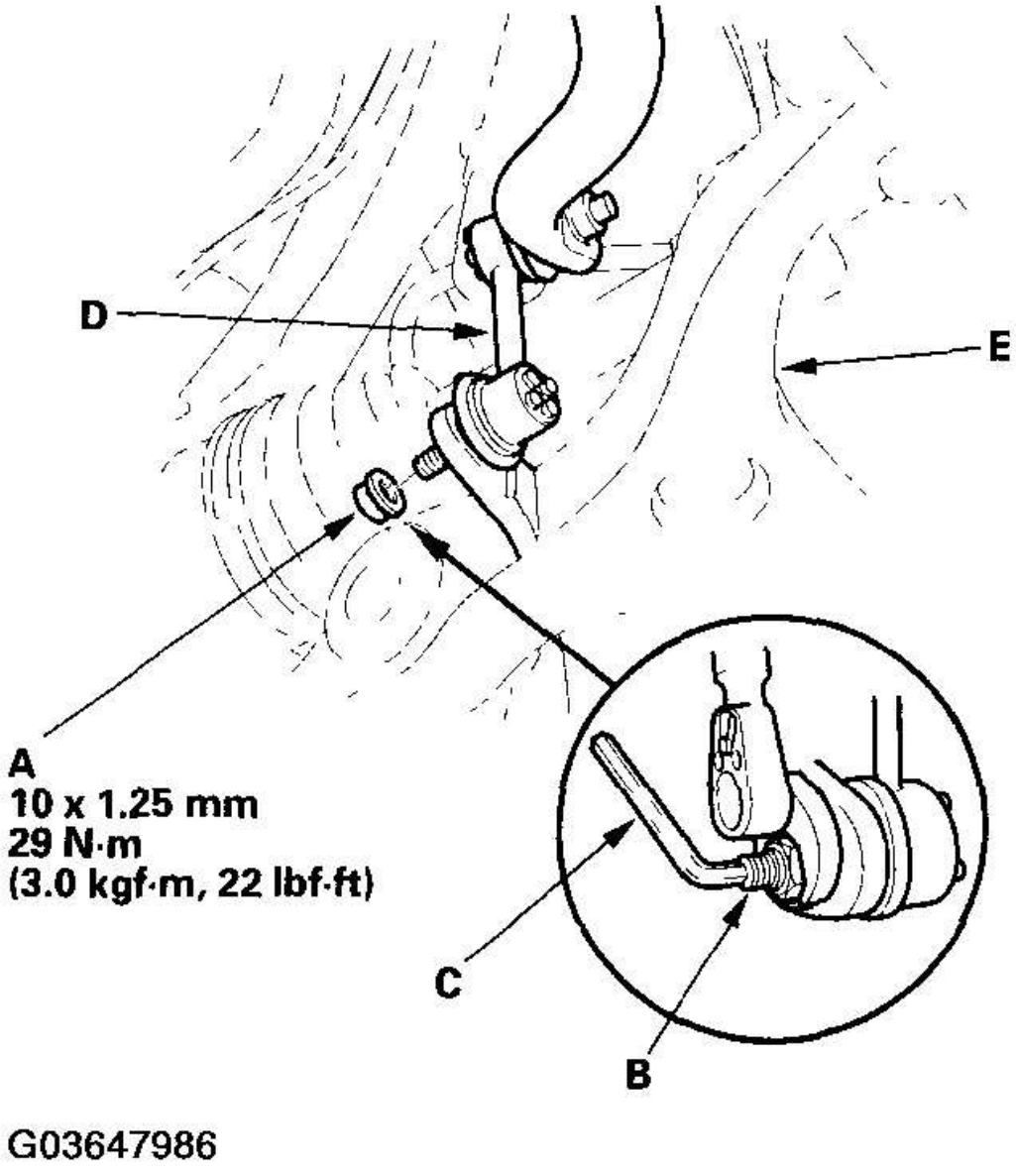


Fig. 27: Removing Flange Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the cotter pin (A) from the lower arm ball joint castle nut (B), and remove the nut.

NOTE:

- **To avoid damaging the ball joint, install the ball joint thread protector on the threads of the ball joint.**
- **Be careful not to damage the ball joint boot when installing the remover.**
- **Do not force or hammer on the lower arm, or pry between the lower arm and knuckle. You could damage the ball joint.**
- **Insert the new cotter pin into the ball joint pin hole from the front to the rear of vehicle, and bend its end as shown below.**

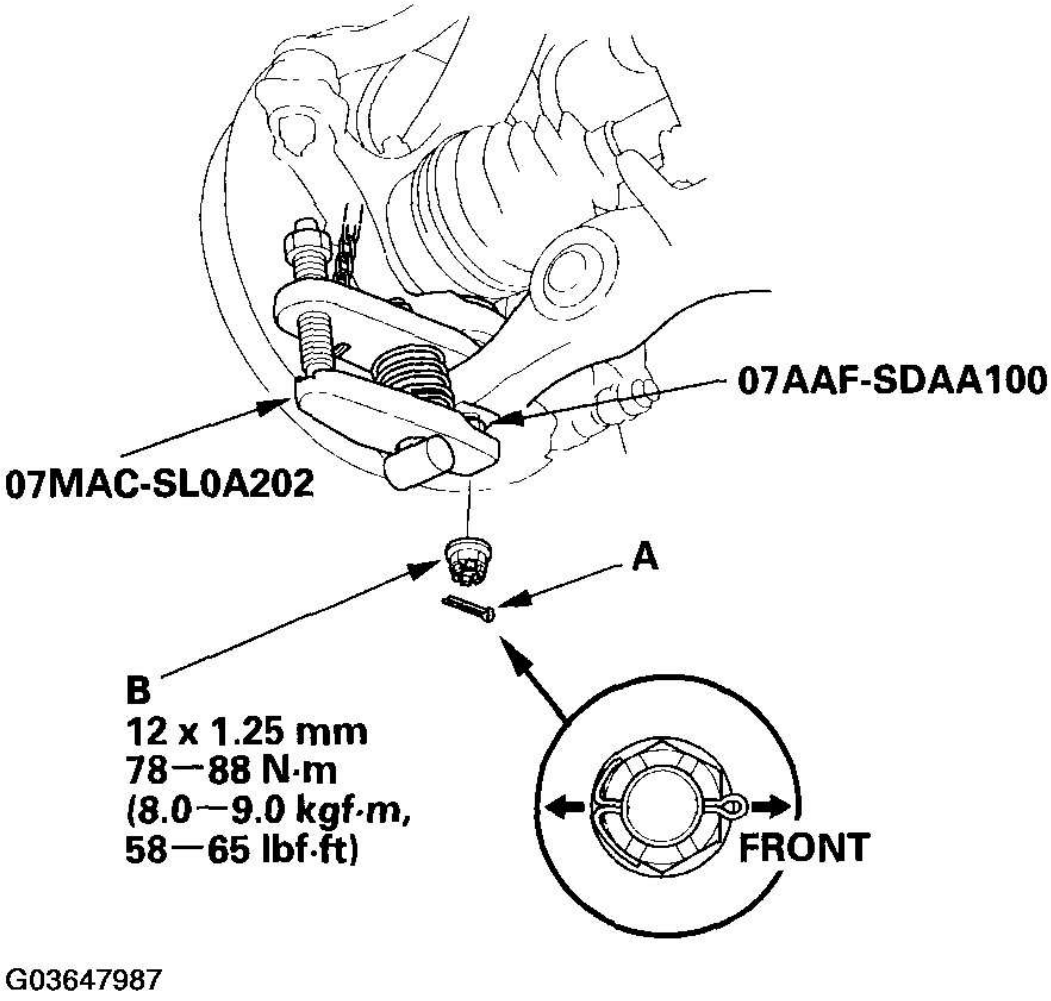


Fig. 28: Removing Cotter Pin From Lower Arm Ball Joint Castle Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Disconnect the lower arm ball joint from the knuckle using the ball joint thread protector and the ball joint remover (see **BALL JOINT REMOVAL**).
7. Remove the flange bolts, and remove the lower arm (A).

NOTE: During installation, install the new flange bolts.

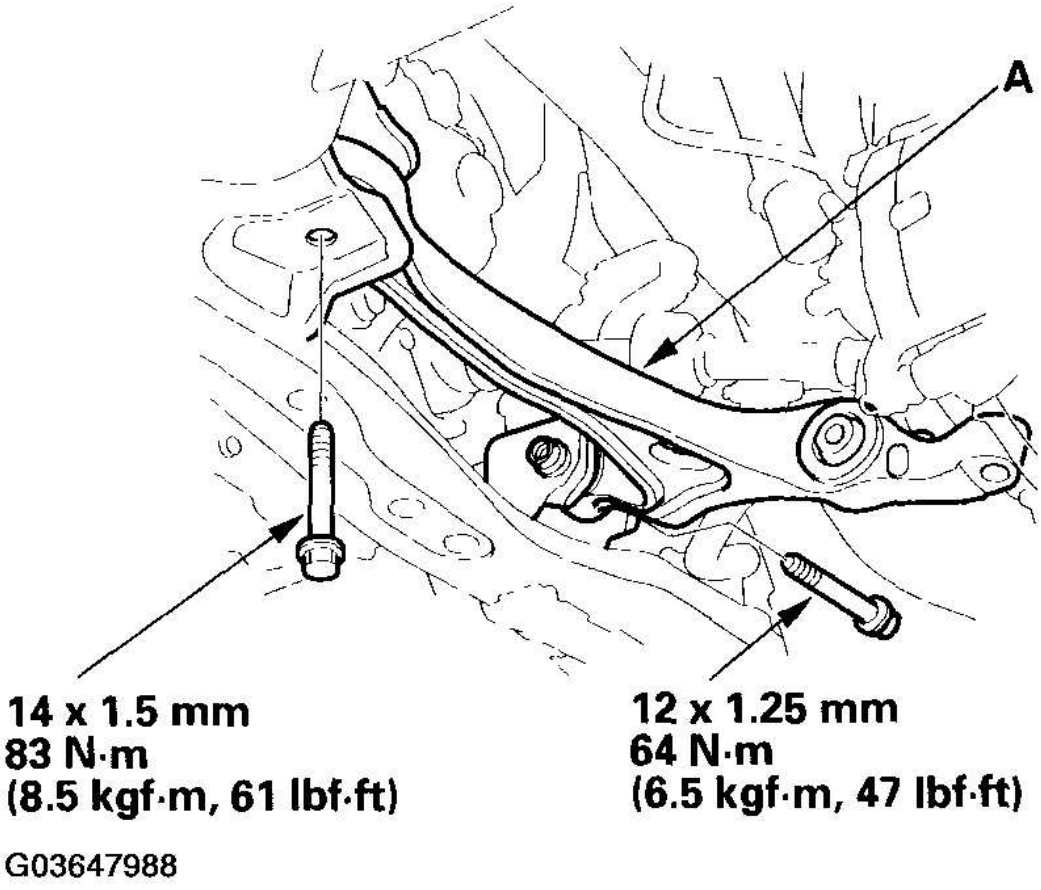


Fig. 29: Removing Flange Bolts And Lower Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the lower arm in the reverse order of removal, and note these items:
   - Be careful not to damage the ball joint boot when installing the knuckle.
   - Tighten all mounting hardware to the specified torque values.
   - Before connecting the lower arm ball joint to the lower arm, degrease the threaded section and tapered portion of the ball joint pin, the lower arm connecting hole, and the threaded section and mating surface of the castle nut.
   - First install all the components and lightly tighten the bolts and nuts, then raise the suspension to load it with the vehicle's weight before fully

tightening to the specified torque values. Do not place the jack against the ball joint pin of the knuckle.

- Torque the castle nut to the lower torque specification, then tighten it only far enough to align the slot with the ball joint pin hole. Do not align the castle nut by loosening it.
- Install a new cotter pin on the castle nut after torquing.
- Before installing the wheel, clean the mating surface of the brake disc and the inside of the wheel.
- Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

STABILIZER LINK REPLACEMENT

1. Raise the front of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the front wheels.
3. Remove the self-locking nut (A) and flange nut (B) while holding the respective joint pin (C) with a hex wrench (D), and remove the stabilizer link (E).

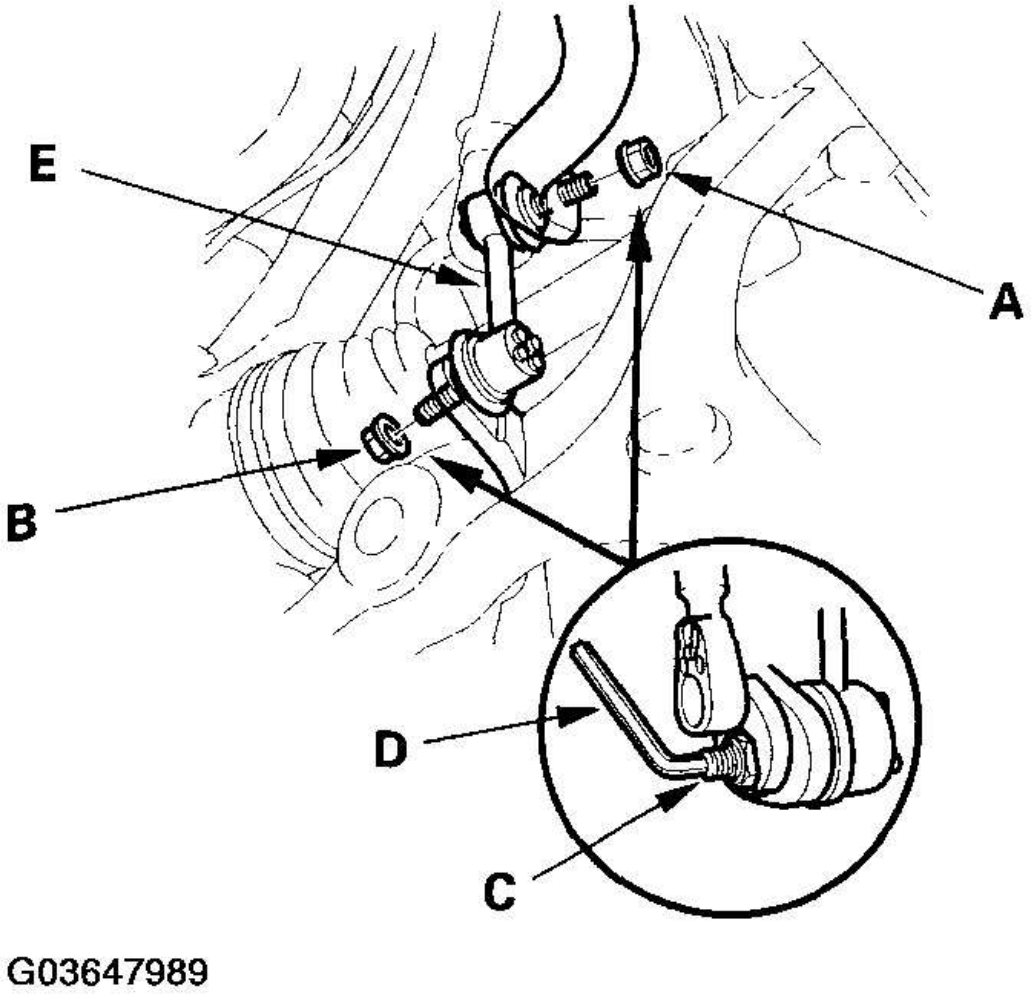


Fig. 30: Removing Self-Locking Nut And Flange Nut Holding Joint Pin With Hex Wrench
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the stabilizer link (A) on the stabilizer bar (B) and lower arm (C) with the joint pins set at the center of their range of the movement.

NOTE: The left stabilizer link has a yellow paint mark (D), while the right stabilizer link has a white paint mark.

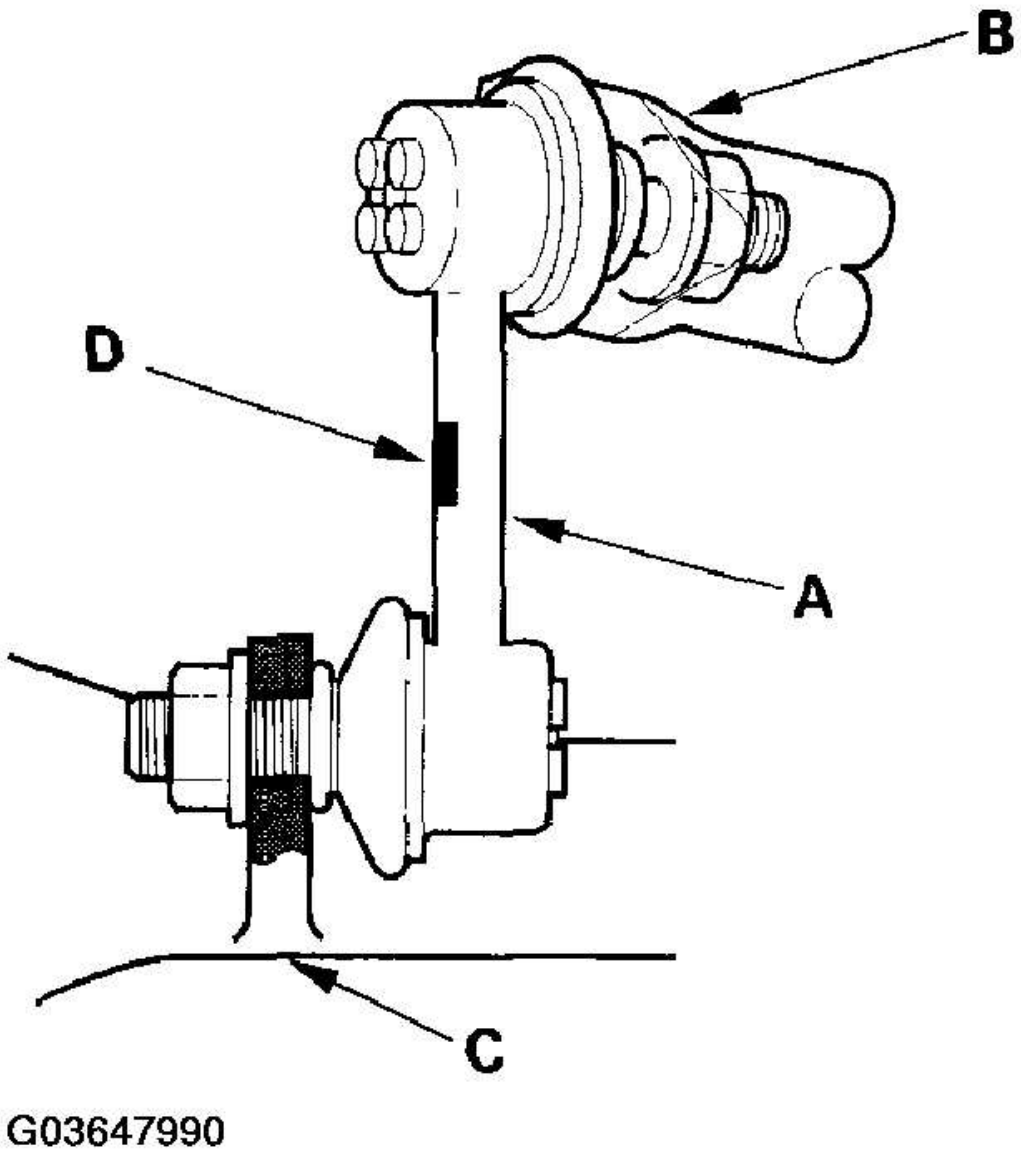


Fig. 31: Installing Stabilizer Link On Stabilizer Bar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install a new self-locking nut and flange nut, and lightly tighten them.

NOTE: Use a new self-locking nut on reassembly.

6. Place the floor jack under the lower arm, and raise the suspension to load it with the vehicle's weight.

NOTE: Do not place the jack against the ball joint pin of the knuckle.

7. Tighten the new self-locking nut (A) and flange nut (B) to the specified torque values while holding the respective joint pins (C) with a hex wrench (D).

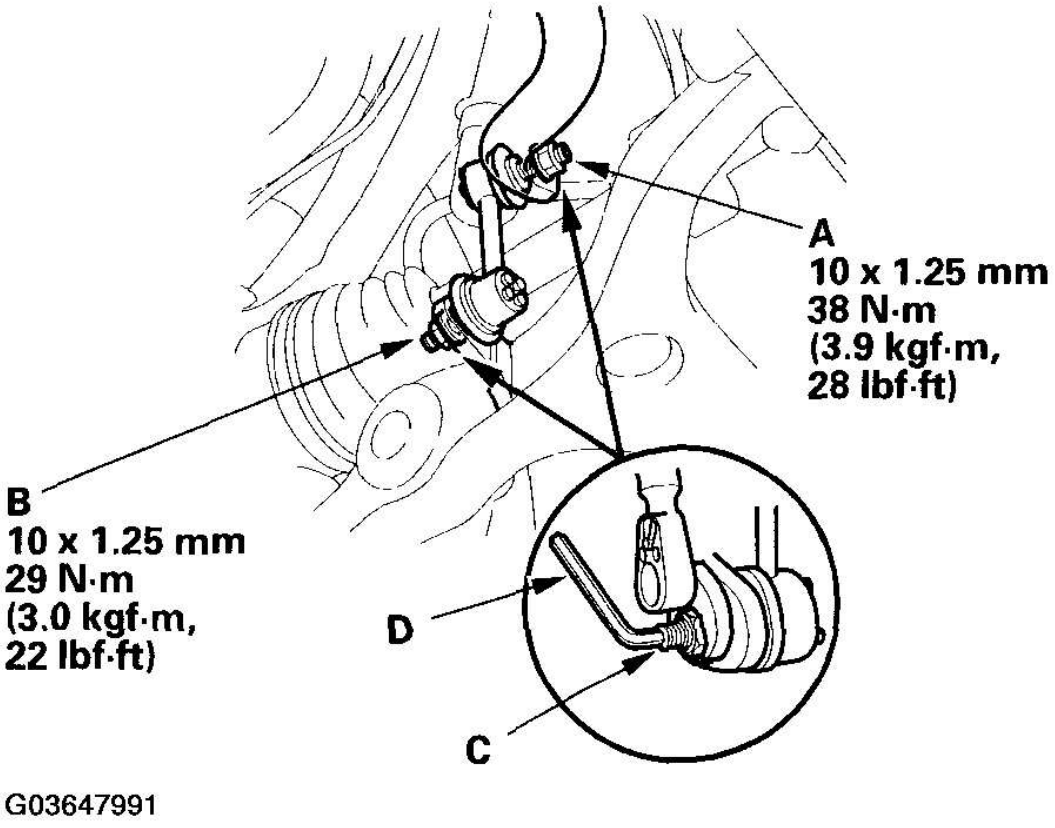


Fig. 32: Tightening New Self-Locking Nut And Flange Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Reinstall all removed parts and test-drive the vehicle.
9. After 5 minutes of driving, tighten the self-locking nut again to the specified torque value.

STABILIZER BAR REPLACEMENT

1. Raise the front of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the front wheels.
3. Disconnect the stabilizer links from the stabilizer bar on the right and left (see **STABILIZER LINK REPLACEMENT**).
4. Remove the front suspension subframe (A) from the body (see **SUBFRAME REPLACEMENT**).

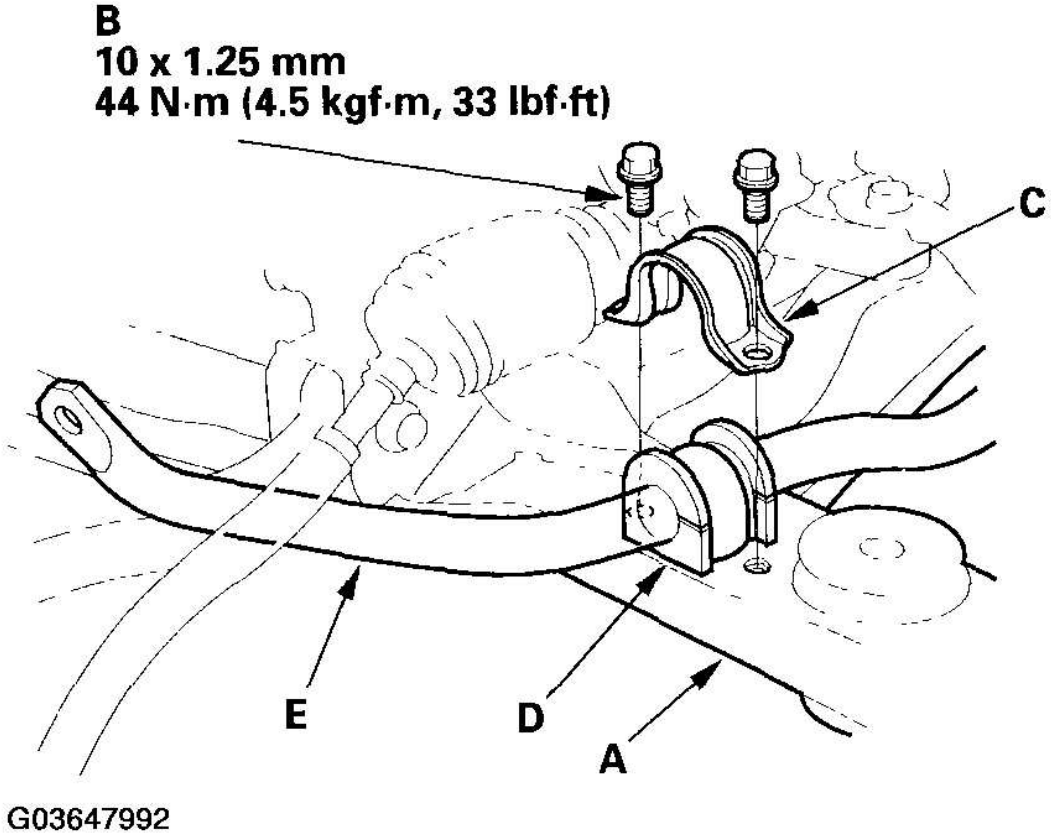


Fig. 33: Removing Front Suspension Subframe From Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the flange bolts (B) and bushing holders (C), then remove the

bushings (D) and the stabilizer bar (E).

6. Install the stabilizer bar in the reverse order of removal, and note these items:
   - Note the right and left direction of the stabilizer bar.
   - Align the ends of the paint marks (A) on the stabilizer bar with each end of the bushings (B).
   - Note the (front to rear) direction of the bushing holders.
   - Refer to **STABILIZER LINK REPLACEMENT** to connect the stabilizer bar to the links .
   - Before installing the wheel, clean the mating surfaces on the brake disc and the inside of the wheel.
   - Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

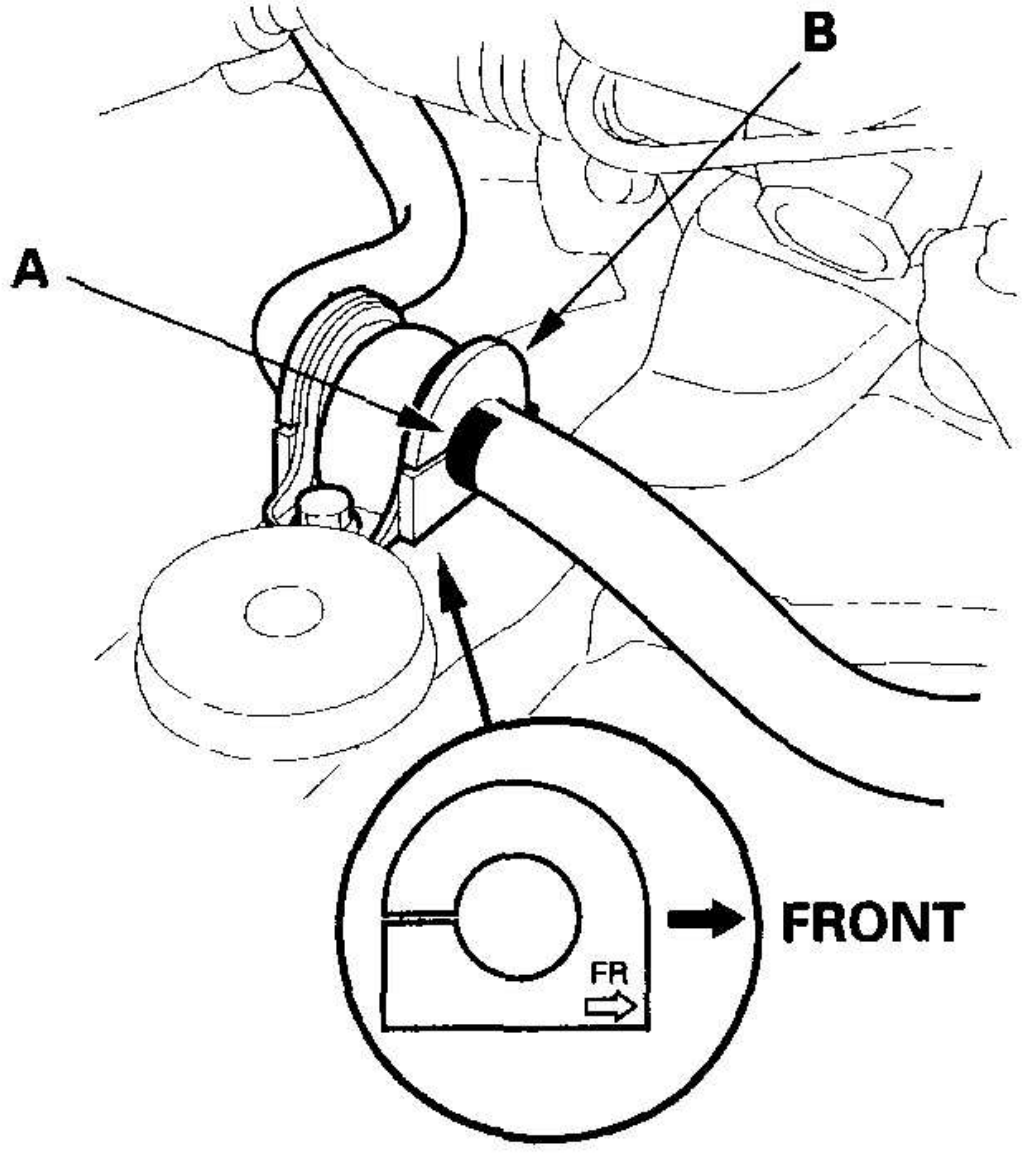


Fig. 34: Aligning Ends Of Paint Marks On Stabilizer Bar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DAMPER/SPRING REMOVAL AND INSTALLATION

REMOVAL

1. Raise the front of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the front wheel.
3. Remove the damper fork (A) from the damper (B) and lower arm (C).

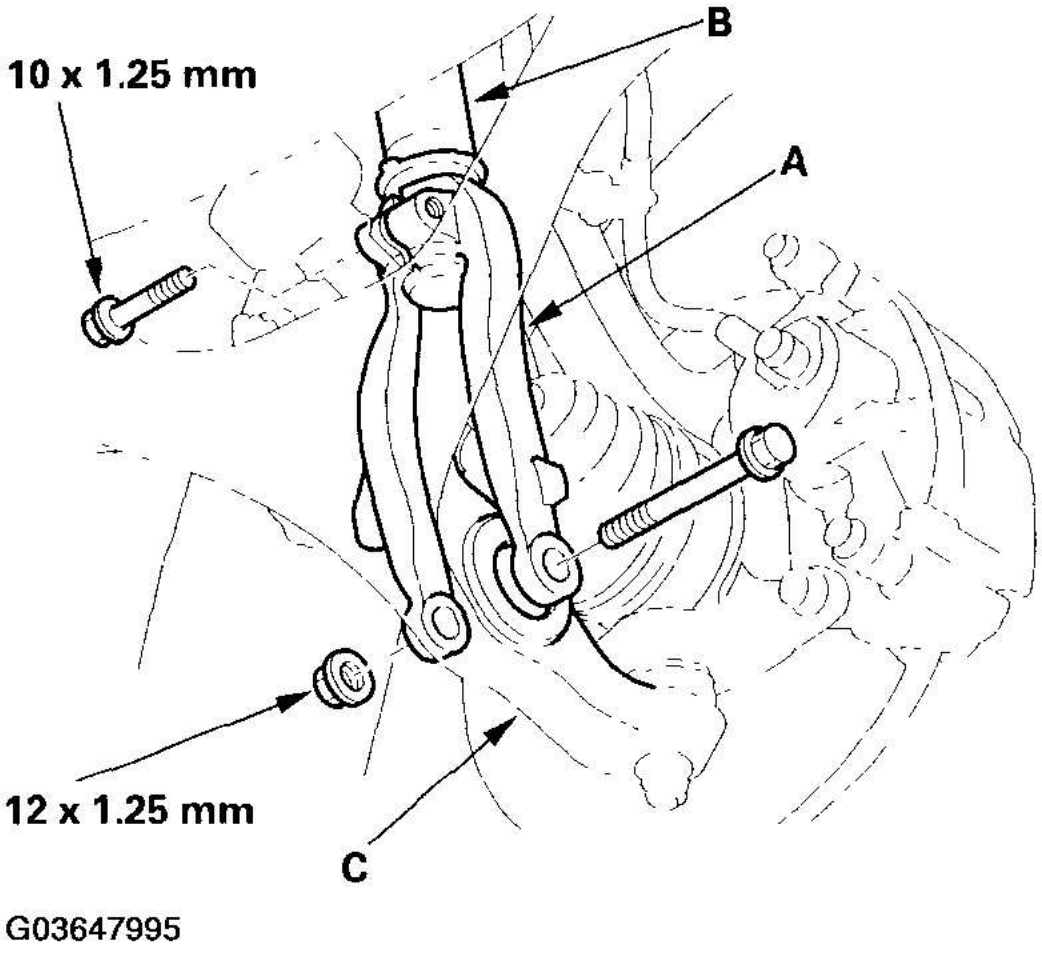


Fig. 35: Removing Damper Fork From Damper And Lower Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the two 8 mm flange nuts (A) and three 10 mm flange nuts (B) from the top of the damper, and remove the damper assembly (C).

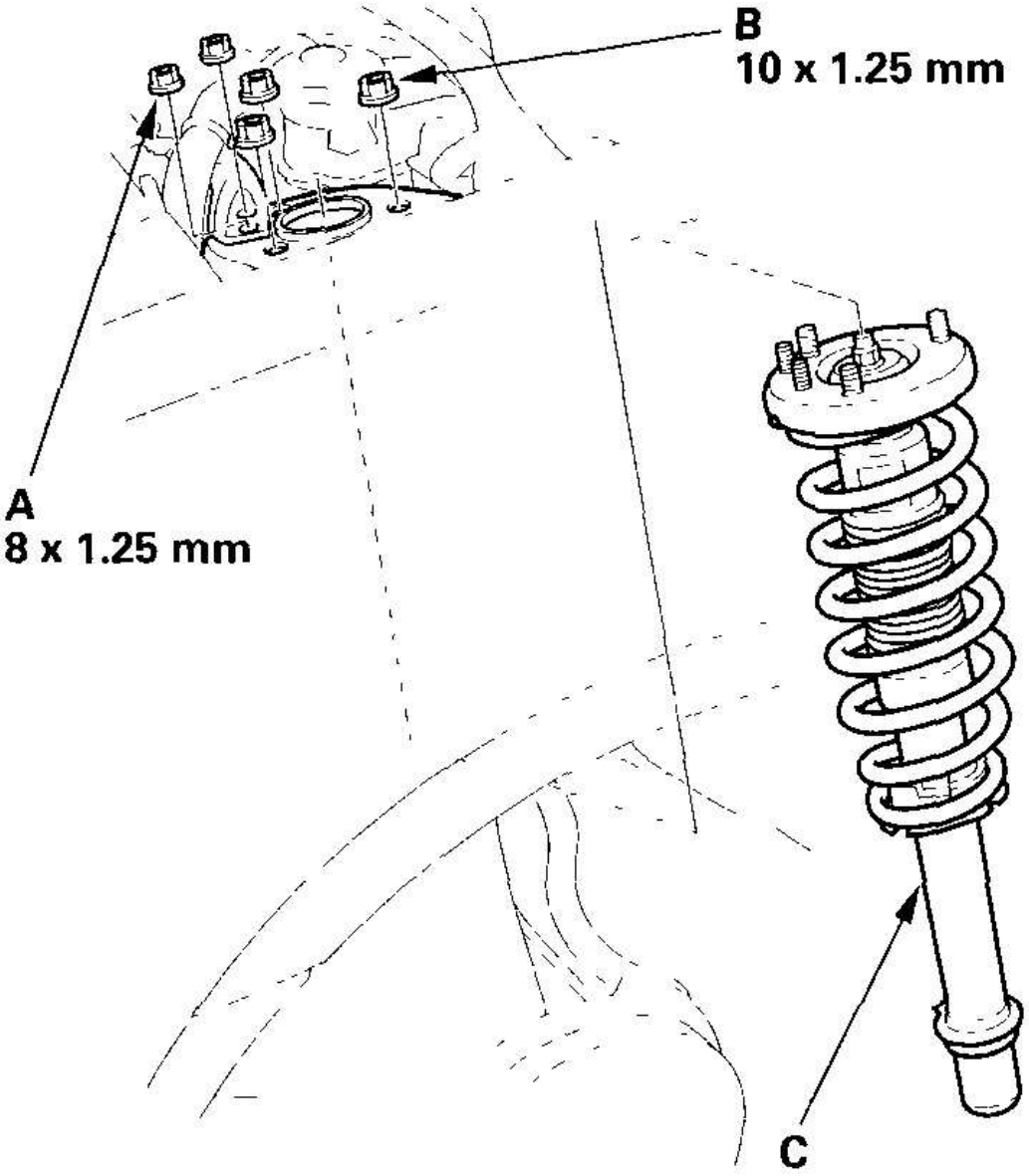


Fig. 36: Removing Flange Nuts From Top Of Damper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INSTALLATION

1. Position the damper assembly (A) in the body with the aligning tab (B) facing inside, then loosely install the flange nuts.

NOTE: Be careful not to damage the body.

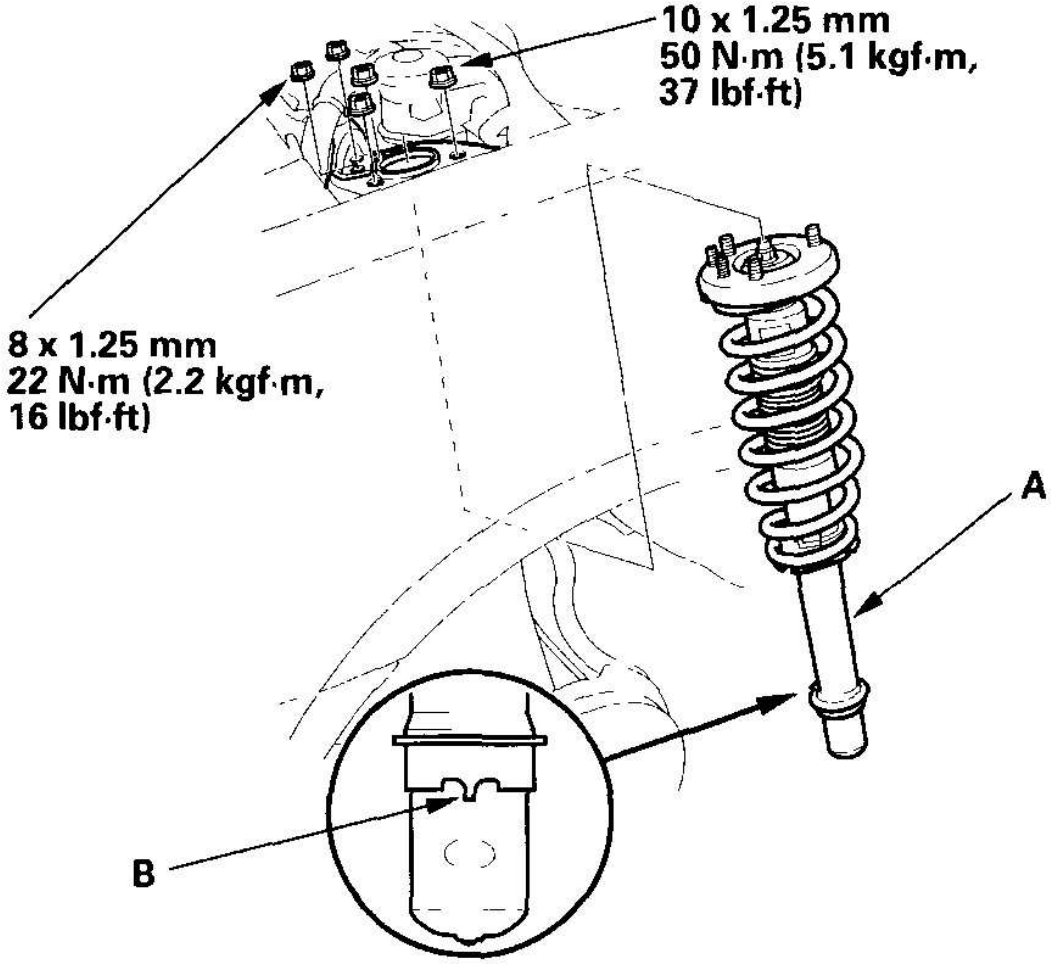


Fig. 37: Positioning Damper Assembly Aligning Tab Facing Inside
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the damper fork (A) over the driveshaft and onto the lower arm. Install the front damper in the damper fork so the aligning tab (B) is aligned with the

slot (C) in the damper fork.

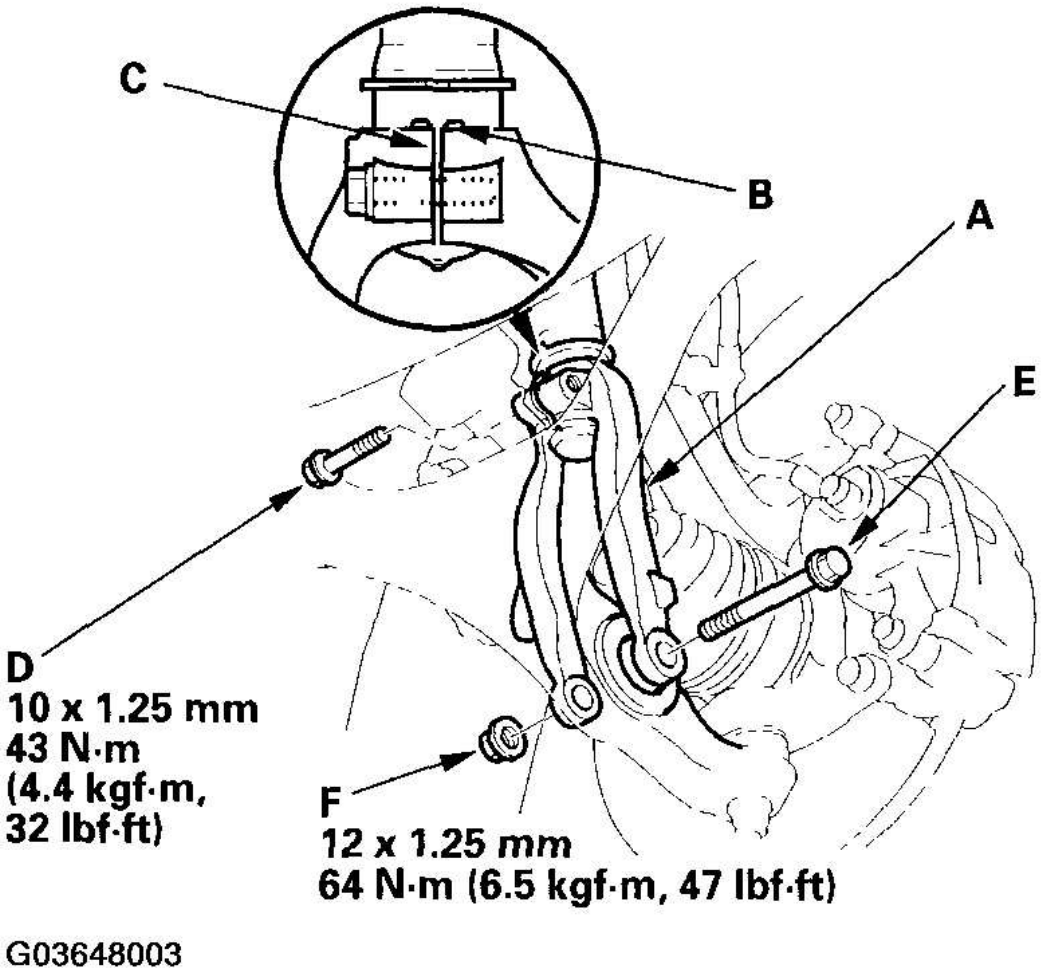


Fig. 38: Installing Damper Fork Over Driveshaft And Onto Lower Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Loosely install the damper pinch bolt (D) into the damper fork.
4. Install the new flange bolt (E) to the damper fork and lower arm, and lightly tighten the new damper fork mounting nut (F).
5. Place the floor jack under the lower arm, and raise the suspension to load it with the vehicle's weight.
6. Tighten the flange nuts on the top of the damper to the specified torque values.

7. Tighten the damper pinch bolts to the specified torque value.
8. Tighten the flange nut on the damper fork to the specified torque value.
9. Clean the mating surface of the brake disc and the inside of the wheel, then install the front wheel.
10. Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

DAMPER/SPRING DIASSEMBLY, INSPECTION, AND REASSEMBLY

EXPLODED VIEW

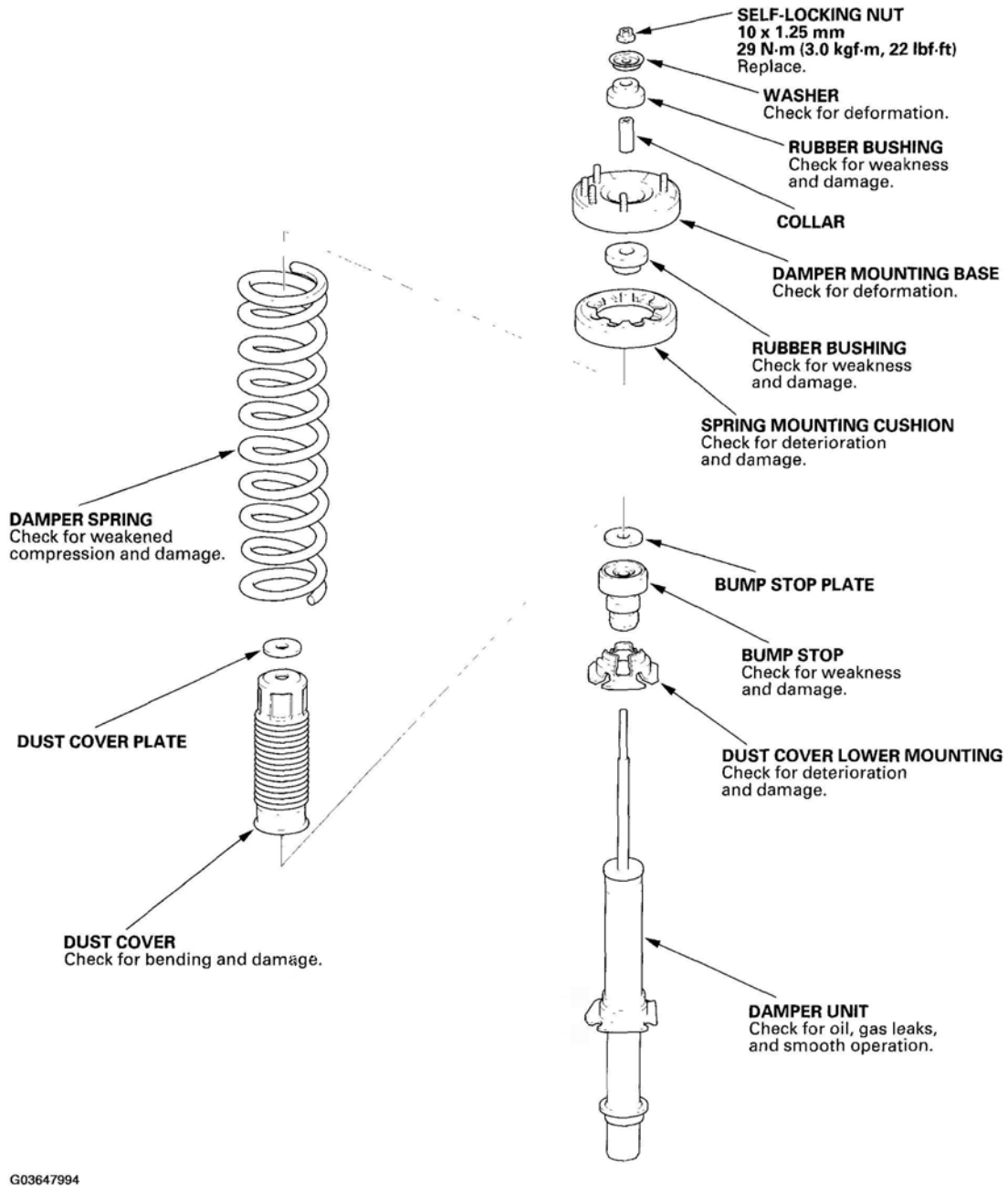


Fig. 39: Exploded View Of Damper/Spring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NOTE: When compressing the damper spring, use a commercially available strut spring compressor (Branick MST-580A or Model 7200, or equivalent). According to the manufacturer's

instructions.

DISASSEMBLY

NOTE: When compressing the damper spring, use a commercially available strut spring compressor (branick MST-580A or Model 7200, or equivalent). According to the maufacturer's instructions.

1. Compress the damper spring, then remove the self-locking nut (A) while holding the damper shaft with a hex wrench (B). Do not compress the spring more than necessary to remove the nut.

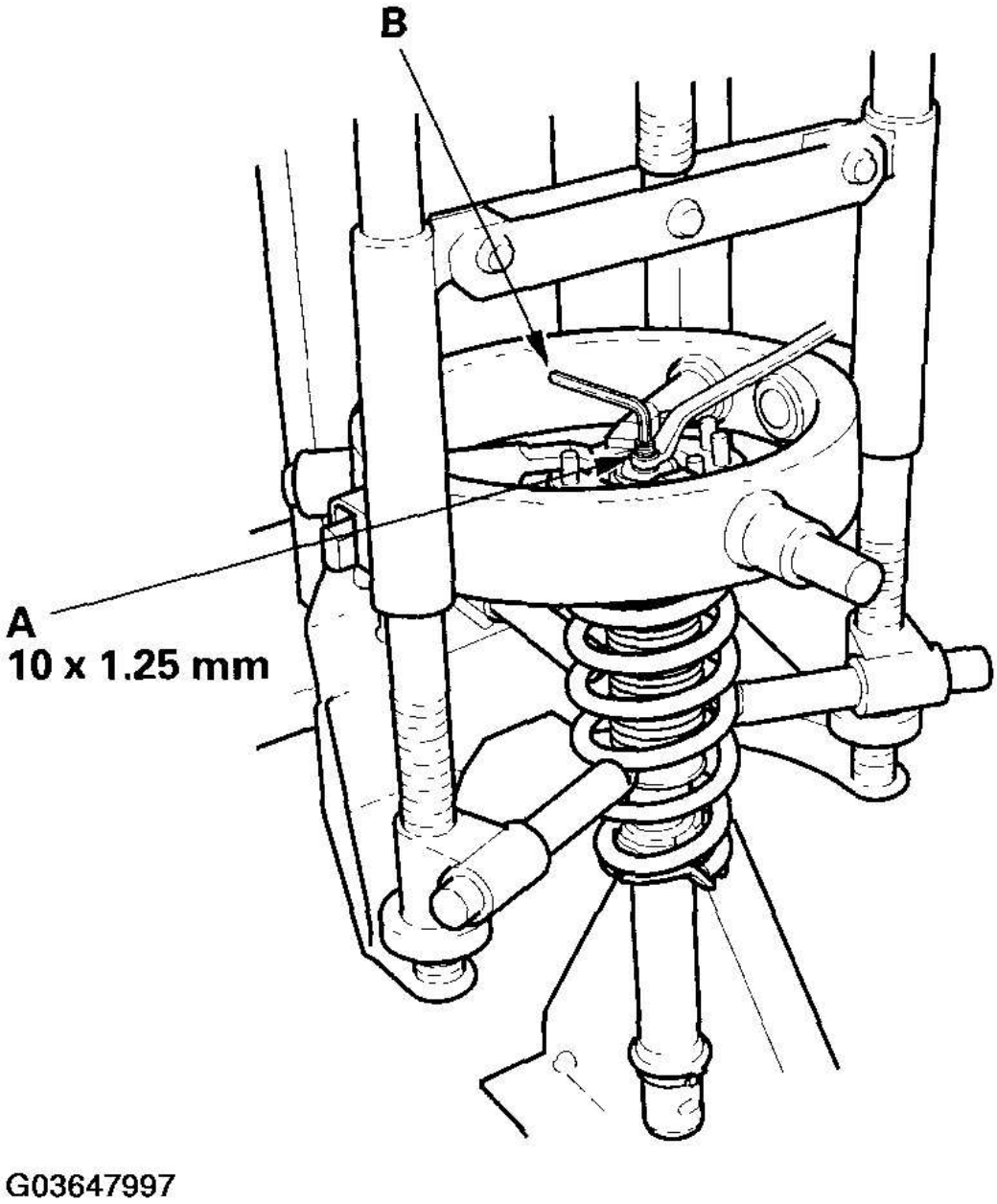


Fig. 40: Removing Self-Locking Nut Holding Damper Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Release the pressure from the strut spring compressor, then disassemble the damper as shown in the **Exploded View**.

INSPECTION

1. Reassemble all the parts, except for the spring mounting cushion and spring.
2. Compress the damper assembly by hand, and check for smooth operation through a full stroke, both compression and extension. The damper should extend smoothly and constantly when compression is released. If it does not, the gas is leaking and the damper should be replaced.

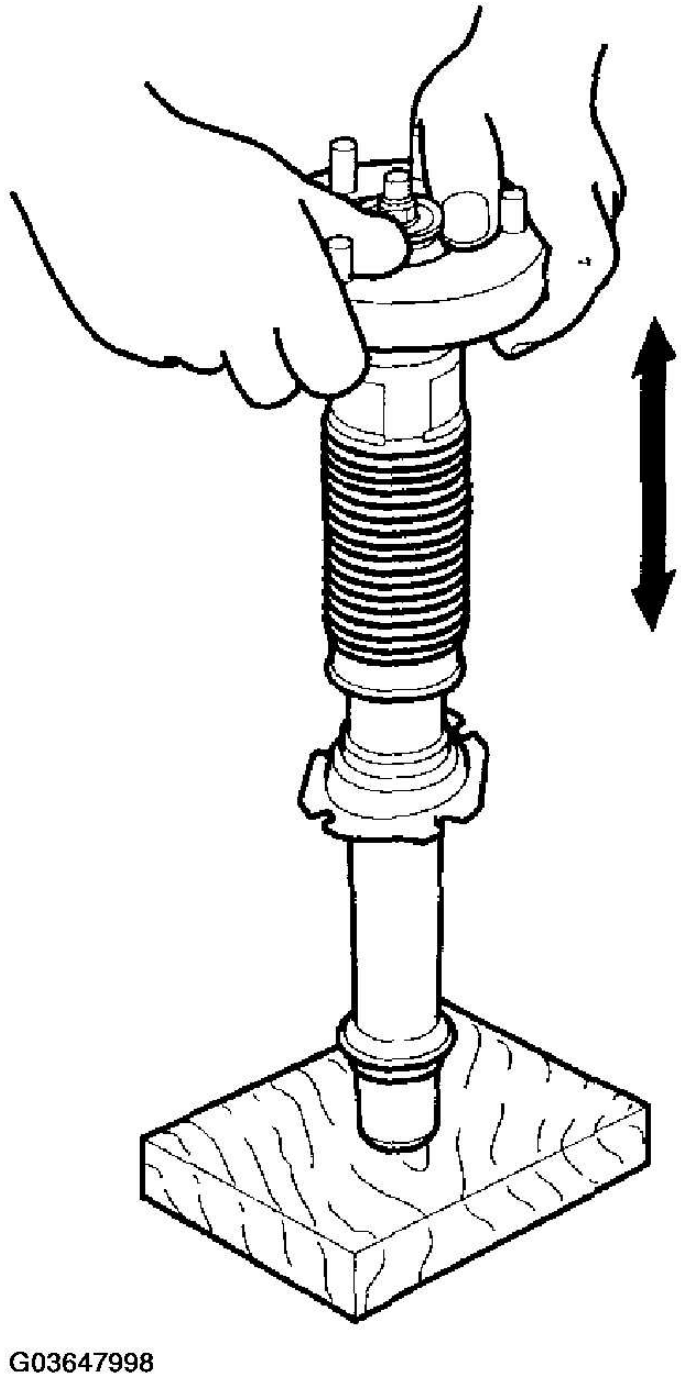


Fig. 41: Compressing Damper Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for oil leaks, abnormal noises, and binding during these tests.

REASSEMBLY

NOTE: Refer to the Exploded View as needed.

1. Assemble the damper disassembled parts except for the washer and self-locking nut.
2. Install the damper assembly on commercially available strut spring compressor (A), and compress the spring lightly.

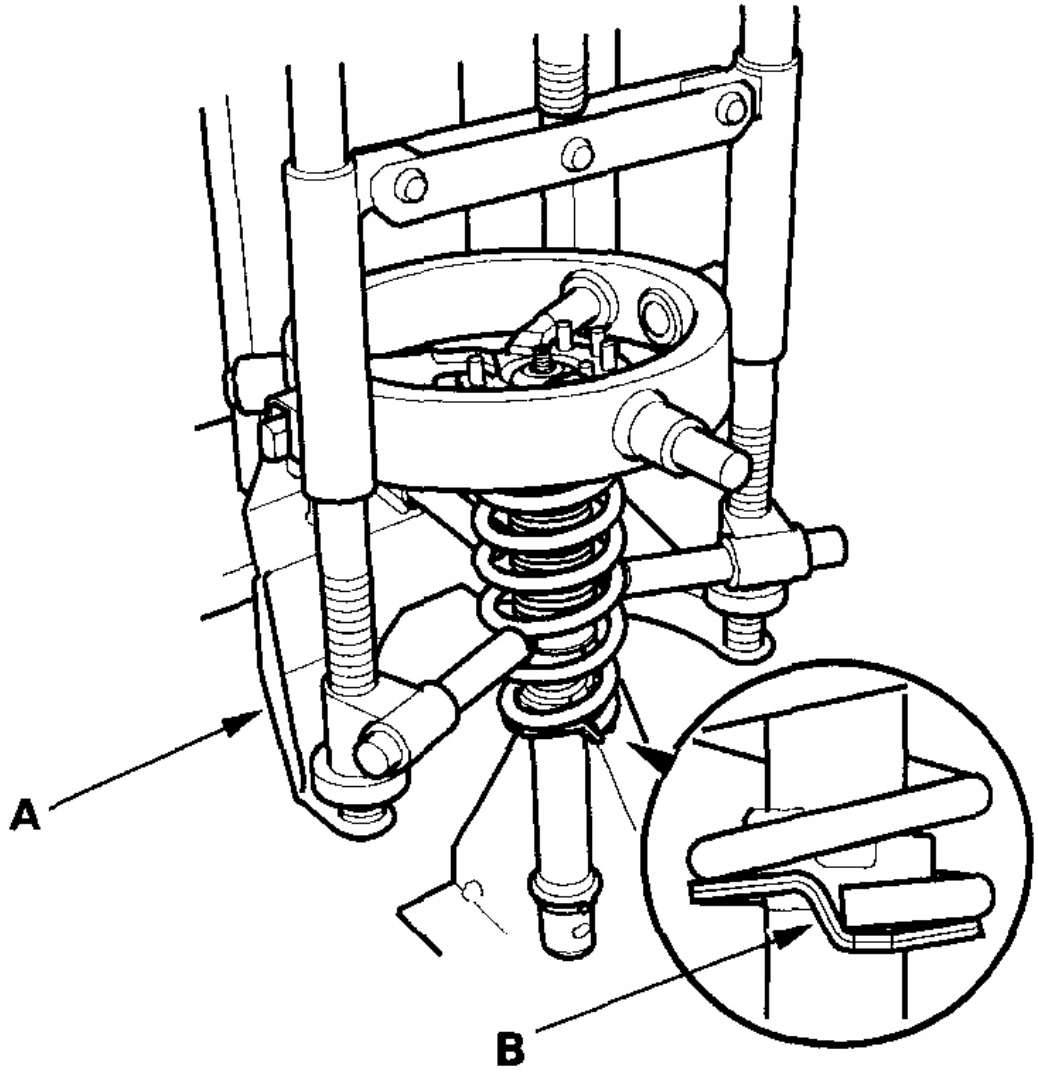


Fig. 42: Installing Damper Assembly On Commercially Available Strut Spring Compressor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Align the bottom of the spring and the stepped part (B) of the lower spring seat.
4. Position the damper mounting base (A) so the stud bolt (B) in it is aligned with

the aligning tab (C) in the damper unit.

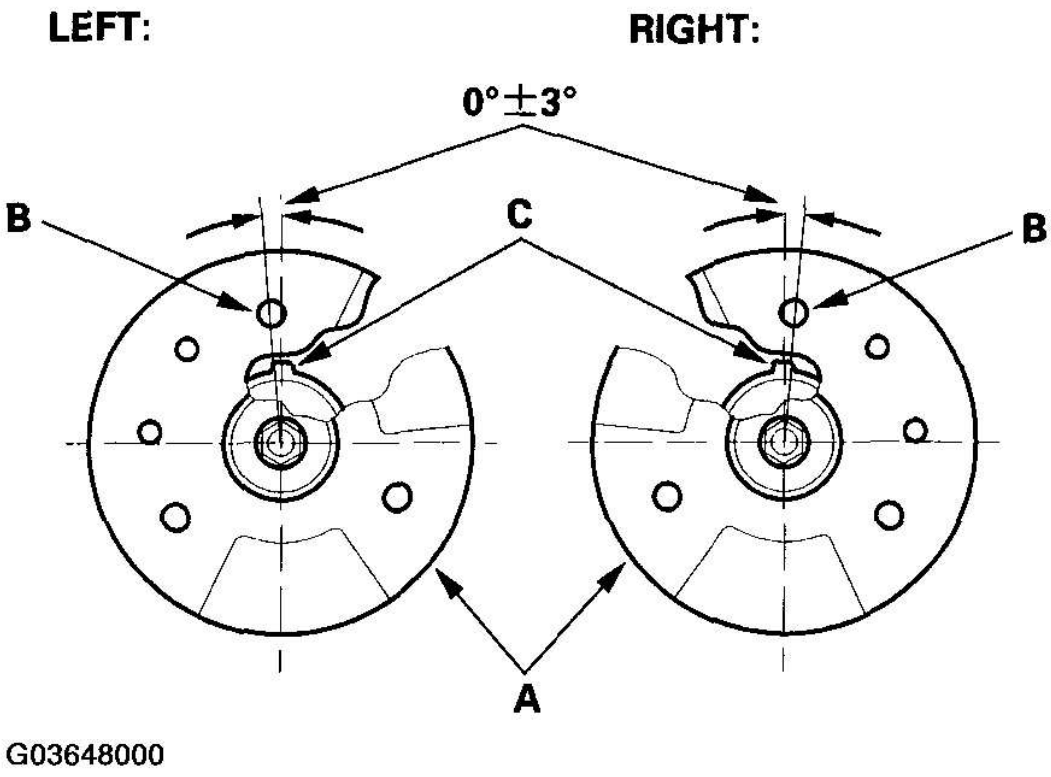


Fig. 43: Positioning Damper Mounting Base
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Compress the damper spring. Do not compress the spring excessively.
6. Install the washer (A) and a new 10 mm self-locking nut (B). Hold the damper shaft with a hex wench (C), and tighten the 10 mm self-locking nut to the specified torque value.

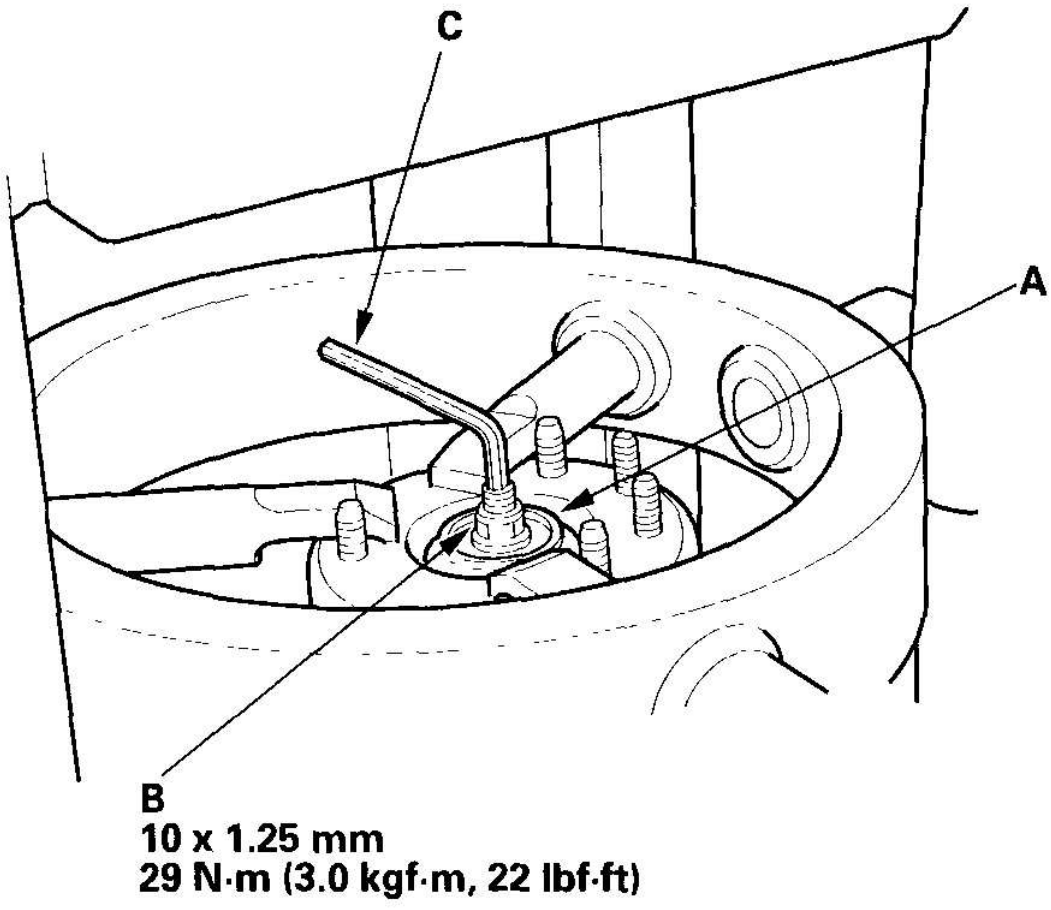


Fig. 44: Installing Washer And Self-Locking Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the damper assembly from the strut spring compressor.

2003-07 ENGINE PERFORMANCE

Fuel & Emissions Systems - Accord (V6)

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07AAA-S0XA100	Fuel Sender Wrench	1
②	07AAJ-S6MA150	Fuel Pressure Gauge Attachment Set	1
③	07JAZ-001000B	Vacuum/Pressure Gauge, 0—4 in.Hg	1
④	07SAZ-001000A	Backprobe Set	2
⑤	07NAJ-P07010A	Pressure Gauge Adapter	1
⑥	07ZAJ-S5A0200	Oil Pressure Hose	1
⑦-1	07406-0020201	A/T Pressure Hose	1
⑦-2	07406-0070300	A/T Low Pressure Gauge W/Panel	1
⑦-3	07MAJ-PY4011A	A/T Pressure Hose, 2,210 mm	1
⑦-4	07MAJ-PY40120	A/T Pressure Hose, Adapter	1
⑧	07406-004000A	Fuel Pressure Gauge	1

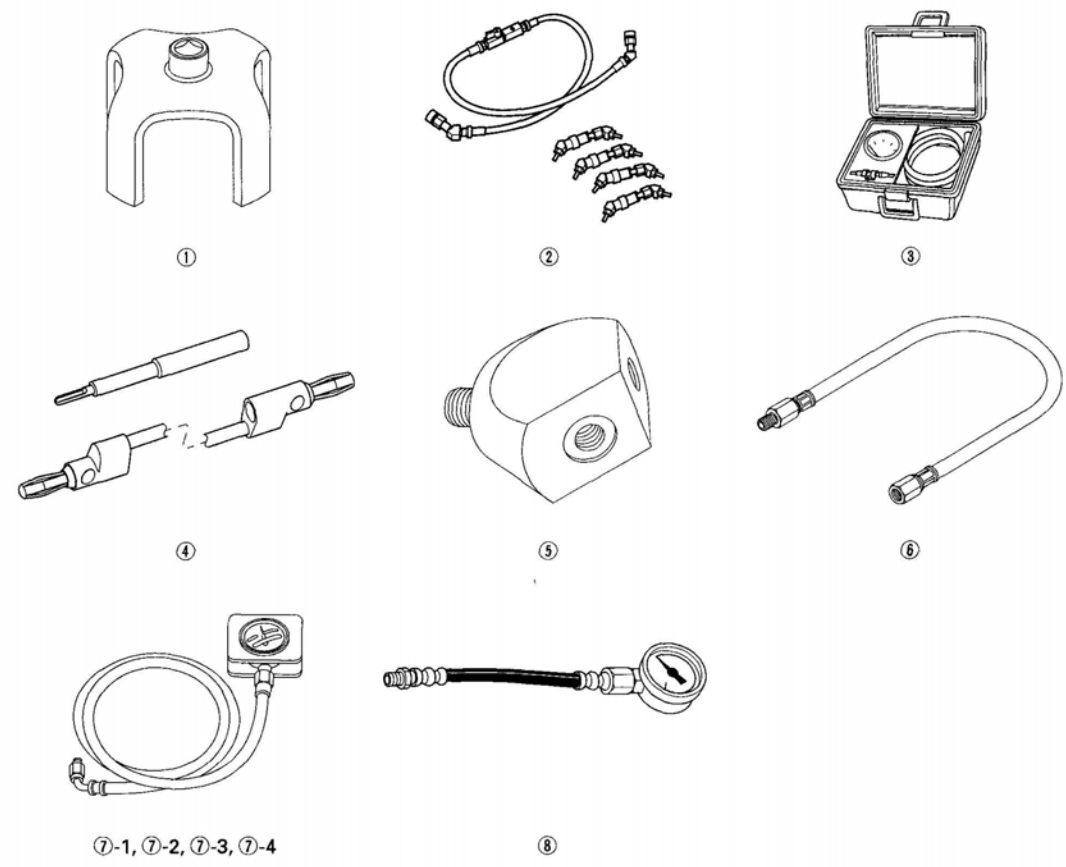


Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

INTERMITTENT FAILURES

The term "intermittent failure" means a system may have had a failure, but it checks OK now. If the malfunction indicator lamp (MIL) on the dash does not come on, check for poor connections or loose pins at all connectors related to the circuit that you are troubleshooting. If the MIL was on but then went out, the original problem may have been intermittent.

OPENS AND SHORTS

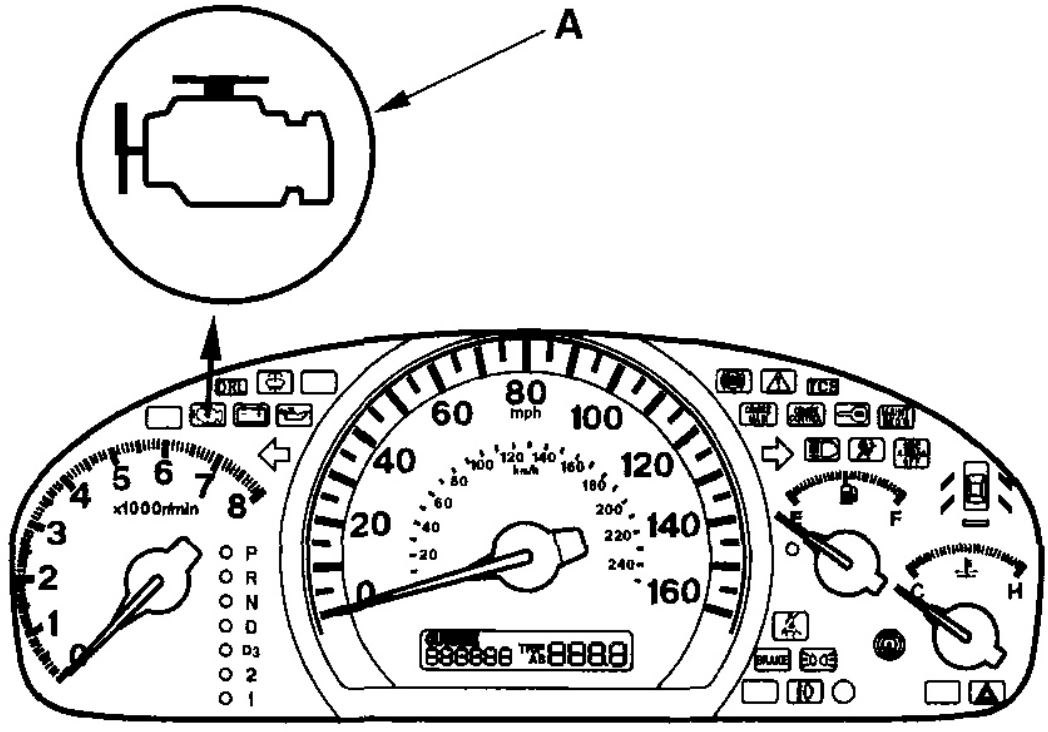
"Open" and "Short" are common electrical terms. An open is a break in a wire or at a connection. A short is an accidental connection of a wire to ground or to another wire. In simple electronics, this usually means something won't work at all. With complex electronics (such as ECMs and PCMs) this can sometimes mean something works, but not the way it's supposed to.

HOW TO USE THE HDS (HONDA DIAGNOSTIC SYSTEM)

If the MIL (Malfunction Indicator Lamp) has come on

1. Start the engine, and check the MIL (A).

NOTE: If the ignition switch is turned ON (II), and the engine is not started, the MIL stays on for 15-20 seconds (see HOW TO SET READINESS CODES).



G03671533

Fig. 2: Identifying MIL
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. If the MIL stays on, connect the HDS to the data link connector (DLC) (A) located under the driver's side of the dashboard.

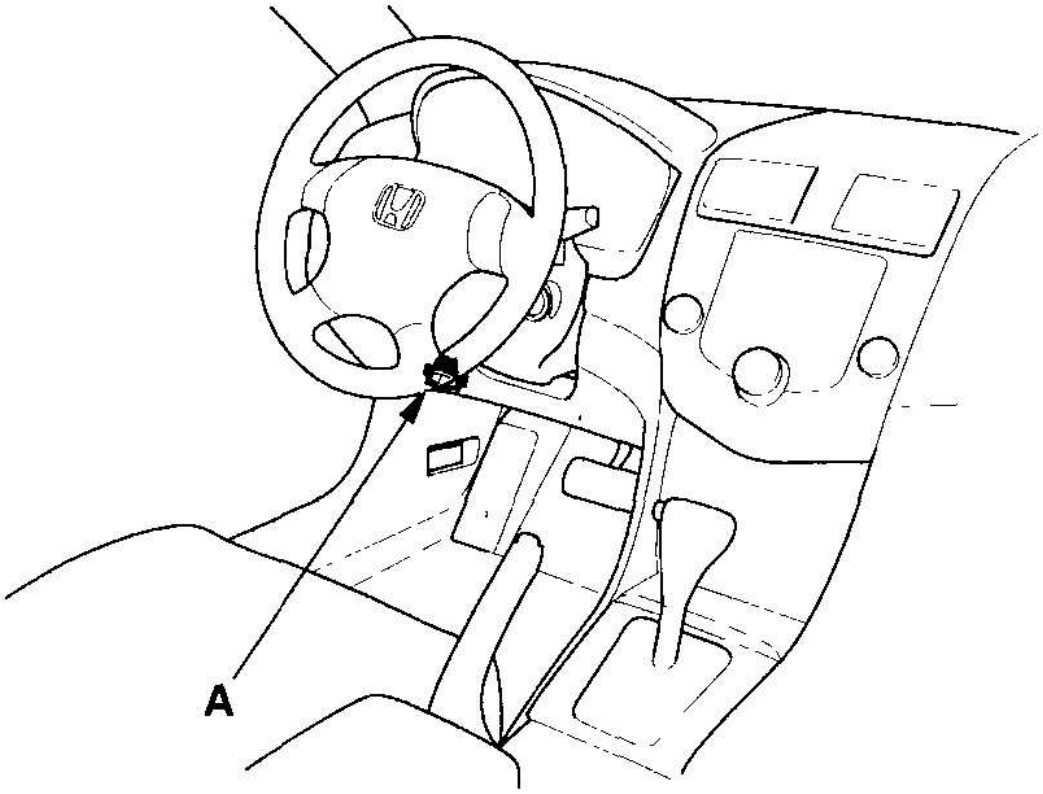


Fig. 3: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch ON (II).
4. Check the diagnostic trouble code (DTC) and note it. Also check the freeze data and/or on board snapshot data, and download any data found. Then refer to the indicated **DTC Troubleshooting Index** , and begin the appropriate troubleshooting procedure.

NOTE:

- **Freeze data indicates the engine conditions when the first malfunction, misfire, or fuel trim malfunction was detected.**
- **The HDS can read the DTC, freeze data, current**

data, and other engine control module (ECM)/powertrain control module (PCM) data.

- **For specific operations, refer to the user's manual that came with the HDS.**

5. If no DTCs are found, go to MIL troubleshooting (see **MIL CIRCUIT TROUBLESHOOTING**).

If the MIL did not stay on

If the MIL did not stay on but there is a driveability problem, do the symptom troubleshooting.

If you can't duplicate the DTC

Some of the troubleshooting requires you to reset the ECM/PCM and try to duplicate the DTC. If the problem is intermittent and you can't duplicate the code, do not continue through the procedure. To do so will only result in confusion and possibly, a needlessly replaced ECM/PCM.

HDS CLEAR COMMAND

The ECM/PCM stores various specific data to correct the system even if there is no electrical power such as when the battery negative terminal or No. 8 FI ECU (ECM/PCM) (15 A) fuse are disconnected. Stored data based on failed parts should be cleared by using the "CLEAR COMMAND" of the HDS, if parts are replaced.

The HDS has three kinds of clear commands to meet this purpose. They are DTC clear, ECM/PCM reset, and CKP pattern clear. DTC clear command erases all stored DTC codes, freeze data, readiness codes, and the onboard snapshot. This must be done with the HDS after reproducing the DTC during troubleshooting. The ECM/PCM reset command erases all stored DTC codes, freeze data, readiness codes, on-board snapshot, and all specific data to correct the system except CKP pattern. If the CKP pattern data in the ECM/PCM was cleared, you must do the CKP pattern learn procedure. The CKP pattern clear command erases only CKP pattern data. This command is for repair of a misfire or the CKP sensor.

SCAN TOOL CLEAR COMMAND

If you are using a generic scan tool to clear commands, be aware that there is only one setting for clearing the ECM/PCM, and it clears all commands at the same time (CKP pattern learn, idle learn, readiness codes, freeze data, on-board snapshot, and DTCs). After you clear all commands, you then need to do these procedures, in this order: ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**); CKP pattern learn procedure; Test-drive to set readiness codes to complete (see **HOW TO SET READINESS CODES**).

DTC CLEAR

1. Clear the DTC with the HDS while the engine is stopped.
2. Turn the ignition switch OFF.
3. Turn the ignition switch ON (II), and wait for 30 seconds.
4. Turn the ignition switch OFF, and disconnect the HDS from the DLC.

ECM/PCM RESET

This command clears stored specific data from each vehicle such as DTCs, freeze data, on-board snapshot, and readiness codes. It does not clear CKP pattern data.

1. Reset the ECM/PCM with the HDS while the engine is stopped.
2. Turn the ignition switch OFF.
3. Turn the ignition switch ON (II), and wait for 30 seconds.
4. Turn the ignition switch OFF, and disconnect the HDS from the DLC.
5. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).

CKP PATTERN CLEAR/CKP PATTERN LEARN

Clear/Learn Procedure (With the HDS)

1. Connect the HDS to the data link connector (DLC) (A) located under the driver's side of the dashboard.

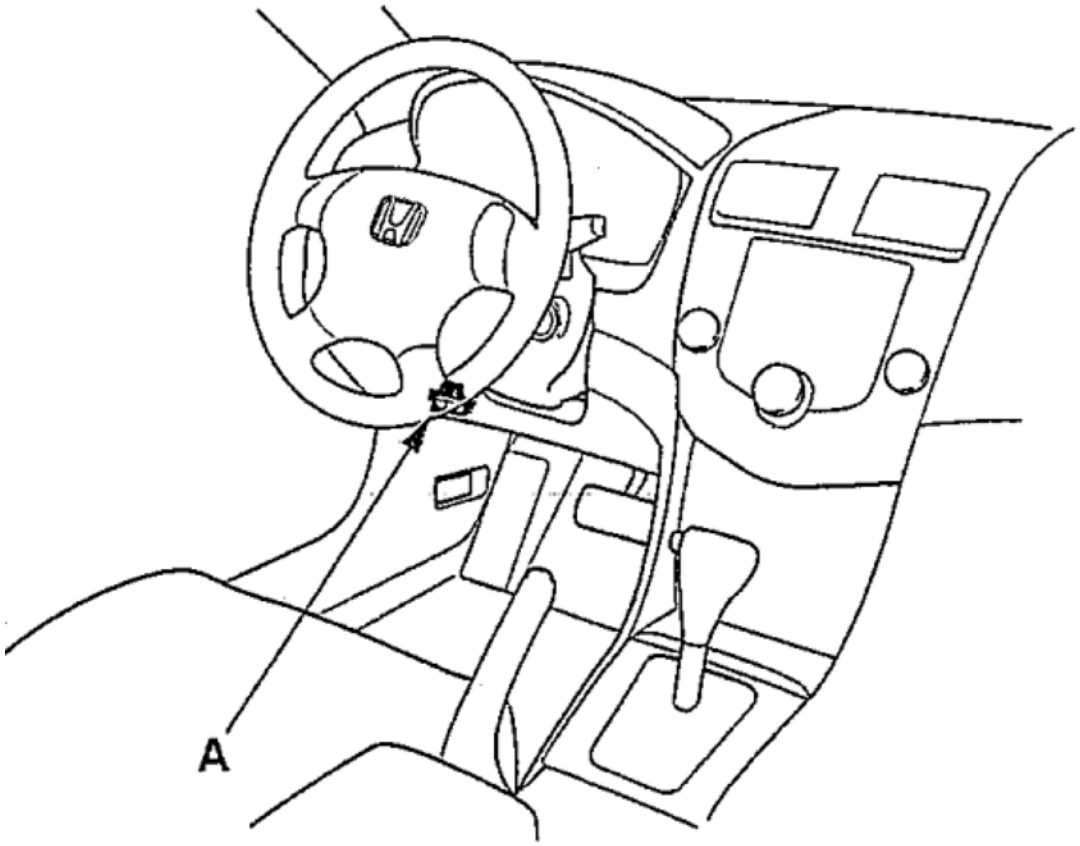


Fig. 4: Identifying Data Link Plug
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Turn the ignition switch ON
3. Make sire the HDS communicated with the ECM/PCM. If it doesn't, go to the DLC circuit troubleshooting.
4. Select CRANK PATTERN in the ADJUSTMENT MENU with the HDS.
5. Select CRANK PATTERN LEARNING with the HDS, and follow the screen prompts.

HOW TO END A TROUBLESHOOTING SESSION (REQUIRED AFTER ANY TROUBLESHOOTING)

1. Reset the ECM/PCM with the HDS.
2. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).

3. Turn the ignition switch OFF.
4. Disconnect the HDS from the DLC.

NOTE: The ECM/PCM is part of the immobilizer system. If you replace the ECM/PCM, it will have a different immobilizer code. In order for the engine to start, you must rewrite the immobilizer code with the HDS.

HOW TO REMOVE THE ECM/PCM CONNECTORS FOR TESTING

If DTC troubleshooting requires voltage or resistance checks at the ECM/PCM connectors, remove the ECM/PCM connectors and test it:

1. Turn the ignition switch OFF.
2. Jump the SCS line with the HDS.
3. Remove the center lower cover (A).

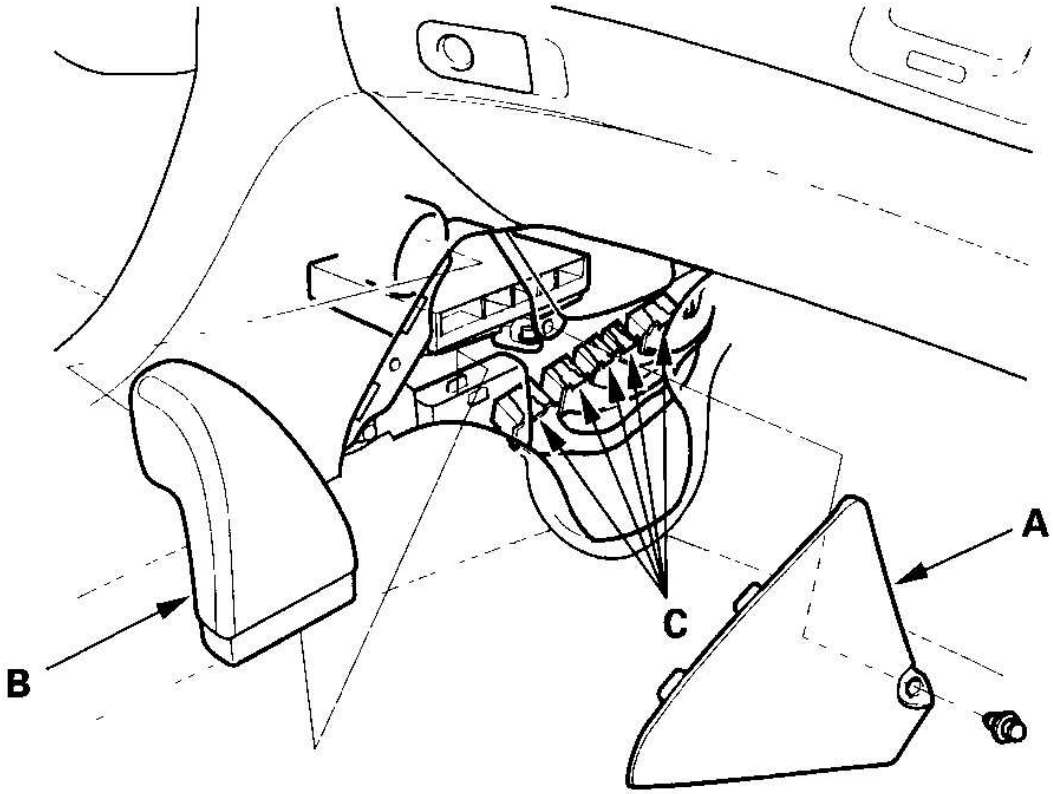


Fig. 5: Removing Center Lower Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the duct (B).
5. Disconnect ECM/PCM connectors (C).
6. Open the SCS line with the HDS.

HOW TO TROUBLESHOOT CIRCUITS AT THE ECM/PCM

Special Tools Required

- Digital multimeter KS-AHM-32-003 (1) or a commercially available digital multimeter
- Backprobe set 07SAZ-001000A (2)

1. Connect the backprobe adapters (A) to the stacking patch cords (B), and connect the cords to a digital multimeter.

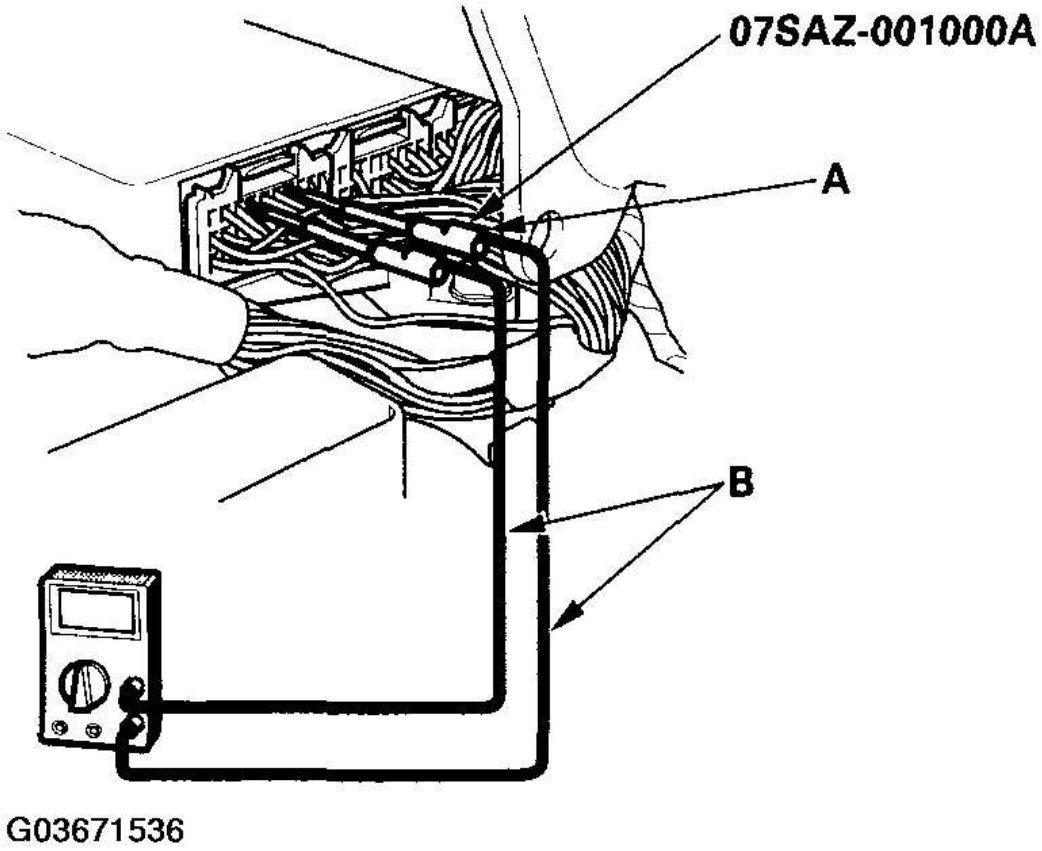


Fig. 6: Connecting Backprobe Adapters To Stacking Patch Cords
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Using the wire insulation as a guide for the contoured tip of the backprobe adapter, gently slide the tip into the connector from the wire side until it touches the end of the wire terminal.
3. If you cannot get to the wire side of the connector or the wire side is sealed (A), disconnect the connector, and probe the terminals (B) from the terminal side. Do not force the probe into the connector.

NOTE: Do not puncture the insulation on a wire. Punctures can cause poor or intermittent electrical connections.

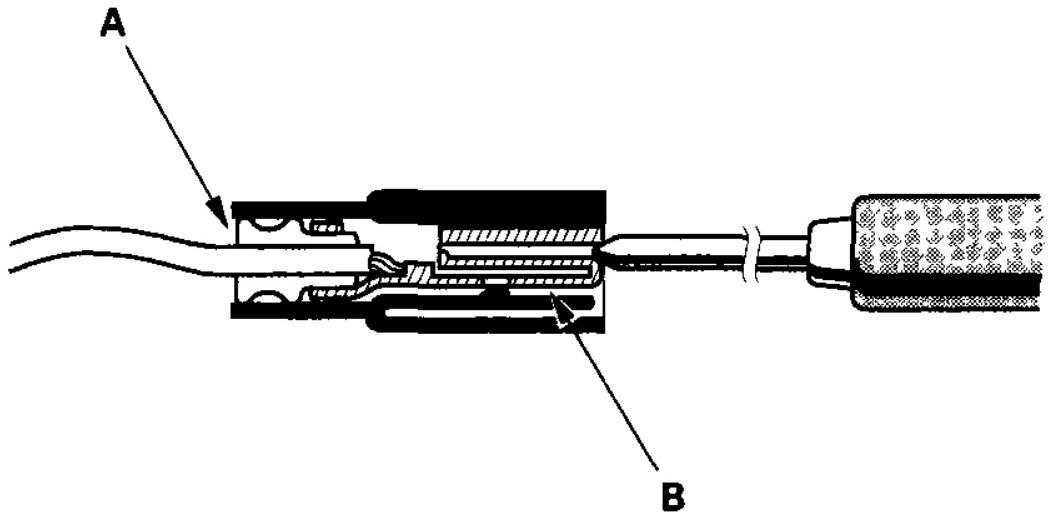


Fig. 7: Disconnecting Connector And Probe Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING

Special Tools Required

Honda interface module (HIM) EQS05A35570

Use this procedure when you have to substitute a known-good ECM/PCM in a troubleshooting procedure. Update the ECM/PCM only if the ECM/PCM does not have the latest software loaded.

NOTE: Do not turn the ignition switch OFF while updating the ECM/PCM. If you turn the ignition switch OFF before completion, the ECM/PCM can be damaged.

HOW TO UPDATE THE ECM/PCM

NOTE:

- **To ensure the latest program is installed, do an ECM/PCM update whenever the ECM/PCM is substituted or replaced.**
- **You can not update an ECM/PCM with the program it already has. It will only accept a new program.**
- **Before you update the ECM/PCM, make sure the vehicle's battery is fully charged.**
- **To prevent ECM/PCM damage, do not operate anything electrical (audio system, brakes, A/C, power windows, moonroof, door locks, etc.) during the update.**
- **If you need to diagnose the Honda interface module (HIM) because the HIM's red (# 3) light came on or was flashing during the update, leave the ignition switch in the ON (II) position when you disconnect the HIM from the data link connector (DLC). This will prevent ECM/PCM damage.**
- **High temperature in the engine compartment might cause the ECM/PCM to become too hot to run the update. If the engine has been running before this procedure, open the hood and cool the engine compartment.**

1. Turn the ignition switch ON (II). Do not start the engine.
2. Connect the HDS to the data link connector (DLC) (A) located under the driver's side of the dashboard.

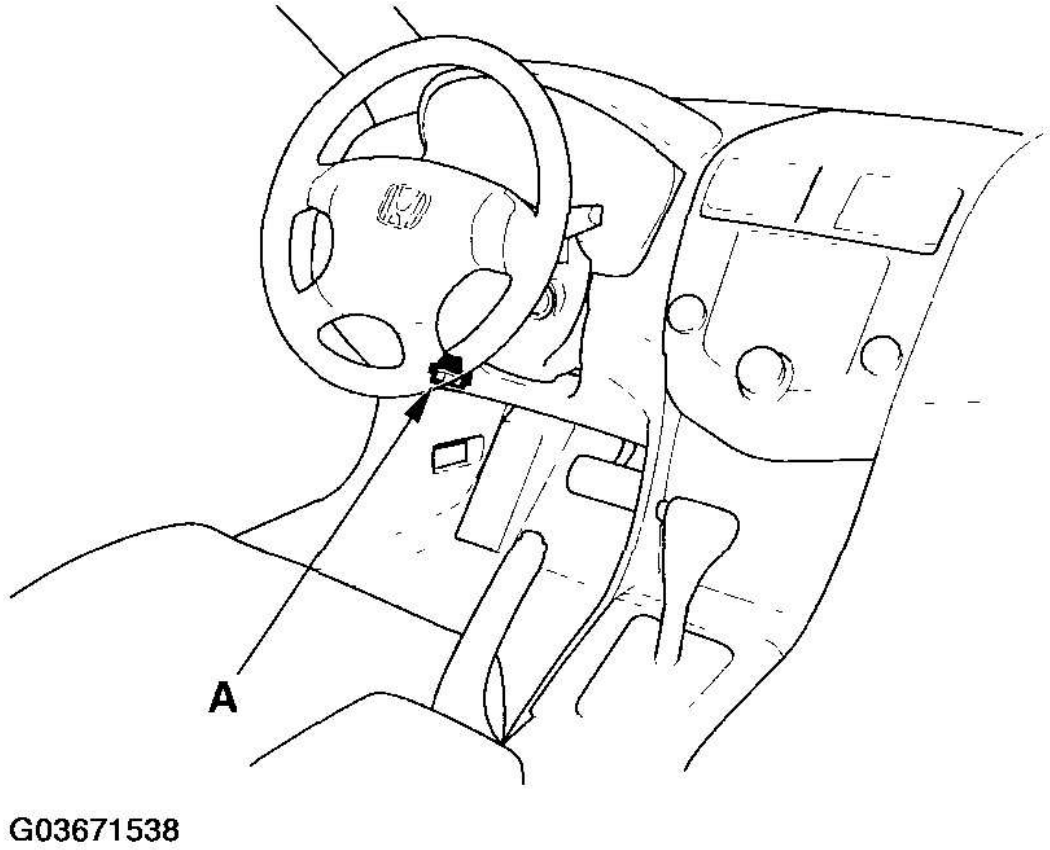


Fig. 8: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Select the INSPECTION MENU with the HDS.
4. Do the TP POSITION CHECK in the ETCS TEST.
5. If the HDS does not have the update function, disconnect the HDS from the vehicle and connect the Honda interface module (HIM).
6. If the software in the ECM/PCM is the latest, disconnect the HDS or the HIM from the DLC, and go back to the procedure that you were doing. If the software in the ECM/PCM is not the latest, do the ECM/PCM update procedure as described on the HIM label or in the ECM/PCM update system.

NOTE: If the ECM/PCM update system requires you to cool the

ECM/PCM, follow what is shown in the screen.

7. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
8. Do the CKP pattern clear/pattern learn procedure.

HOW TO SUBSTITUTE THE ECM/PCM

1. Connect the HDS to the data link connector (DLC) (A) located under the driver's side of the dashboard.

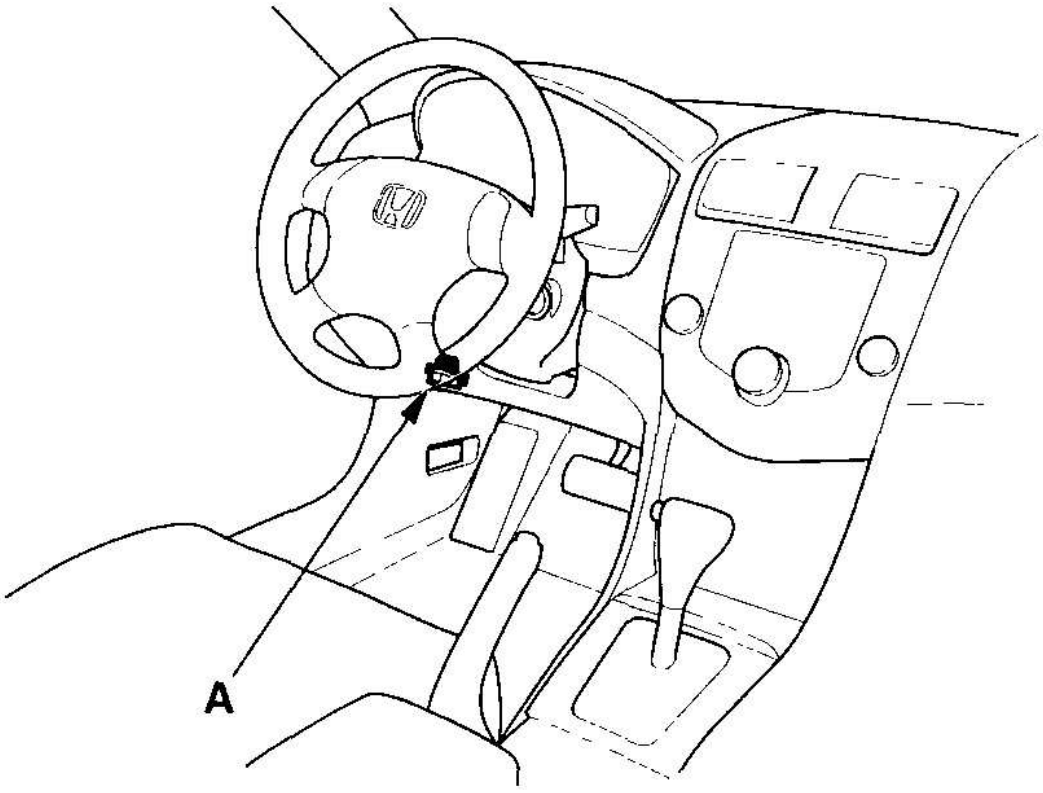


Fig. 9: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Make sure the HDS communicates with the ECM/PCM. If it doesn't, skip steps 3 to 5 and clean the throttle body after this procedure.
3. Turn the ignition switch ON (II).
4. Select the INSPECTION MENU with the HDS.
5. Do the TP POSITION CHECK in the ETCS TEST.
6. Turn the ignition switch OFF.
7. Jump the SCS line with the HDS.
8. Remove the center lower covers (A).

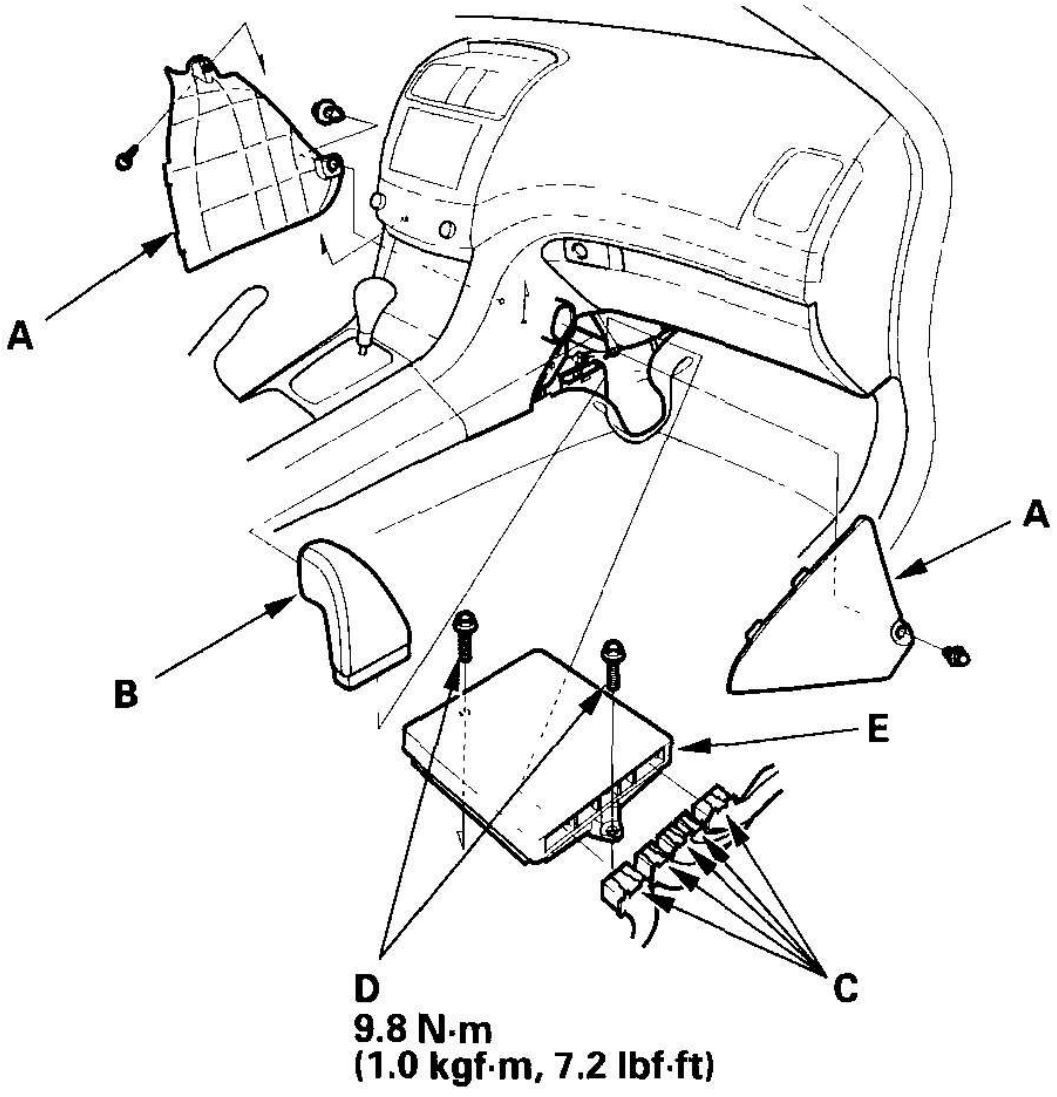


Fig. 10: Removing Center Lower Covers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the duct (B).
10. Disconnect ECM/PCM connectors (C).
11. Remove the bolts (D), then remove the ECM/PCM (E).
12. Install a known-good ECM/PCM in the reverse order of removal.

13. Open the SCS with the HDS.
14. Turn the ignition switch ON (II).

NOTE: 2005-2007 models: DTC P0630 "VIN Not Programmed or Mismatch" may be stored because the VIN has not been programmed into the ECM/PCM; ignore it, and continue this procedure.

15. Input the VIN to the ECM/PCM with the HDS.
16. Rewrite the immobilizer code with the ECM/PCM replacement procedure in the HDS; it allows you to start the engine.
17. Reset the ECM/PCM with the HDS.
18. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
19. Do the CKP pattern clear/pattern learn procedure with the HDS.

OBD STATUS

The OBD status shows the current system status of each DTC and all of the parameters. This function is used to see if the technician's repair was successfully finished. The results of diagnostic tests for the DTC are displayed as:

- PASSED: On board diagnosis is successfully finished.
- FAILED: On board diagnosis has finished but failed.
- EXECUTING: The vehicle is in enable criteria conditions for the DTC and the on board diagnosis is running.
- NOT COMPLETED: The on board diagnosis was running but is out of the enable conditions for the DTC.
- OUT OF CONDITION: The vehicle has stayed out of the enable conditions for the DTC.

DTC TROUBLESHOOTING INDEX

DTC (MIL indication *1)	Two Drive Cycle Method	Detection Item	MIL
P0107 (3) *8	—	Manifold Absolute Pressure (MAP) Sensor Circuit Low Voltage	ON
P0107 (3) *6	—	Manifold Absolute Pressure (MAP) Sensor Circuit Low Voltage	ON
P0108 (3)	—	Manifold Absolute Pressure (MAP) Sensor Circuit High Voltage	ON
P0111 (10) *6	—	Intake Air Temperature (IAT) Sensor Circuit Range/Performance Problem	ON
P0112 (10) *8	—	Intake Air Temperature (IAT) Sensor Circuit Low Voltage	ON
P0112 (10) *6	—	Intake Air Temperature (IAT) Sensor Circuit Low Voltage	ON
P0113 (10)	—	Intake Air Temperature (IAT) Sensor Circuit High Voltage	ON
P0116 (86) *8	○	Engine Coolant Temperature (ECT) Sensor Range/Performance Problem	ON
P0116 (86) *6	○	Engine Coolant Temperature (ECT) Sensor 1 Range/Performance Problem	ON
P0117 (6) *8	—	Engine Coolant Temperature (ECT) Sensor Circuit Low Voltage	ON
P0117 (6) *6	—	Engine Coolant Temperature (ECT) Sensor/Engine Coolant Temperature (ECT) Sensor 1 Circuit Low Voltage	ON
P0118 (6)	—	Engine Coolant Temperature (ECT) Sensor/Engine Coolant Temperature (ECT) Sensor 1 Circuit High Voltage	ON
P0122 (7)	—	Throttle Position (TP) Sensor A Circuit Low Voltage	ON
P0123 (7)	—	Throttle Position (TP) Sensor A Circuit High Voltage	ON
P0125 (86) *8	○	Engine Coolant Temperature (ECT) Sensor Slow Response	ON
P0125 (86) *6	○	Engine Coolant Temperature (ECT) Sensor Slow Response	ON
P0128 (87) *8	○	Cooling System Malfunction	ON
P0128 (87) *6	○	Cooling System Malfunction	ON
P0133 (157) *8	○	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) Circuit Slow Response	ON
P0133 (157) *6	○	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) Circuit Slow Response	ON
P0134 (151)	—	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) Heater System Malfunction	ON
P0135 (151)	—	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) Heater Circuit Malfunction	ON
P0137 (161) *8	○	Rear Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 1, Sensor 2)) Circuit Low Voltage	ON
P0137 (161) *6	○	Rear Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 1, Sensor 2)) Circuit Low Voltage	ON
P0138 (161) *8	○	Rear Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 1, Sensor 2)) Circuit High Voltage	ON
P0138 (161) *6	○	Rear Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 1, Sensor 2)) Circuit High Voltage	ON
P0139 (161) *8	○	Rear Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 1, Sensor 2)) Circuit Slow Response	ON
P0139 (161) *6	○	Rear Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 1, Sensor 2)) Circuit Slow Response	ON
P0141 (163)	—	Rear Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 1, Sensor 2)) Heater Circuit Malfunction	ON
P0153 (158) *8	○	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) Circuit Slow Response	ON
P0153 (158) *6	○	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) Circuit Slow Response	ON
P0154 (152)	—	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) Heater System Malfunction	ON
P0155 (152)	—	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) Heater Circuit Malfunction	ON
P0157 (162) *8	○	Front Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 2, Sensor 2)) Circuit Low Voltage	ON
P0157 (162) *6	○	Front Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 2, Sensor 2)) Circuit Low Voltage	ON
P0158 (162) *8	○	Front Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 2, Sensor 2)) Circuit High Voltage	ON
P0158 (162) *6	○	Front Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 2, Sensor 2)) Circuit High Voltage	ON
P0159 (162) *8	○	Front Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 2, Sensor 2)) Circuit Slow Response	ON
P0159 (162) *6	○	Front Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 2, Sensor 2)) Circuit Slow Response	ON

NOTE: The above DTCs are indicated when the PGM-FI system is selected in the HDS.
Some automatic transmission DTCs cause the MIL to come on. If the MIL is on and no DTCs are indicated in the PGM-FI system, select the A/T system, and check for automatic transmission DTCs.

* 1: The above DTCs are indicated by a blinking MIL when the SCS service signal line is jumped with the HDS.
* 6: 2005-2006 models
* 8: 2003-2004 models

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Fig. 11: DTC Troubleshooting Chart (1 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC (MIL indication*1)	Two Drive Cycle Method	Detection Item	MIL
P0161 (164)	———	Front Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 2, Sensor 2)) Heater Circuit Malfunction	ON
P0171 (153)	○	Rear Bank (Bank 1) Fuel System Too Lean	ON
P0172 (153)	○	Rear Bank (Bank 1) Fuel System Too Rich	ON
P0174 (154)	○	Front Bank (Bank 2) Fuel System Too Lean	ON
P0175 (154)	○	Front Bank (Bank 2) Fuel System Too Rich	ON
P0222 (7)	———	Throttle Position (TP) Sensor B Circuit Low Voltage	ON
P0223 (7)	———	Throttle Position (TP) Sensor B Circuit High Voltage	ON
P0300 (77), and any combination of the following P0301 (71), P0302 (72), P0303 (73), P0304 (74), P0305 (75), P0306 (76)	○	Random Misfire Detected	ON
P0301 (71)	○	No. 1 Cylinder Misfire Detected	ON
P0302 (72)	○	No. 2 Cylinder Misfire Detected	ON
P0303 (73)	○	No. 3 Cylinder Misfire Detected	ON
P0304 (74)	○	No. 4 Cylinder Misfire Detected	ON
P0305 (75)	○	No. 5 Cylinder Misfire Detected	ON
P0306 (76)	○	No. 6 Cylinder Misfire Detected	ON
P0325 (23)	———	Knock Sensor Circuit Malfunction	ON
P0335 (4)	———	Crankshaft Position (CKP) Sensor A No Signal	ON
P0339 (4)	———	Crankshaft Position (CKP) Sensor A Intermittent Interruption	ON
P0340 (9)	———	Camshaft Position (CMP) Sensor No Signal	ON
P0344 (9)	———	Camshaft Position (CMP) Sensor Intermittent Interruption	ON
P0385 (54)	———	Crankshaft Position (CKP) Sensor B No Signal	ON
P0389 (54)	———	Crankshaft Position (CKP) Sensor B Intermittent Interruption	ON
P0401 (80)	○	Exhaust Gas Recirculation (EGR) Insufficient Flow	ON
P0404 (12)	○	Exhaust Gas Recirculation (EGR) Control Circuit Range/Performance Problem	ON
P0406 (12)	———	Exhaust Gas Recirculation (EGR) Valve Position Sensor Circuit High Voltage	ON

NOTE: The above DTCs are indicated when the PGM-FI system is selected in the HDS.
Some automatic transmission DTCs cause the MIL to come on. If the MIL is on and no DTCs are indicated in the PGM-FI system, select the A/T system, and check for automatic transmission DTCs.

* 1: The above DTCs are indicated by a blinking MIL when the SCS service signal line is jumped with the HDS.

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Fig. 12: DTC Troubleshooting Chart (2 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC (MIL indication *1)	Two Drive Cycle Method	Detection Item	MIL
P0420 (165) *8	○	Rear Bank Catalyst System Efficiency Below Threshold (Bank 1)	ON
P0420 (165) *6	○	Rear Bank Catalyst System Efficiency Below Threshold (Bank 1)	ON
P0430 (166) *8	○	Front Bank Catalyst System Efficiency Below Threshold (Bank 2)	ON
P0430 (166) *6	○	Front Bank Catalyst System Efficiency Below Threshold (Bank 2)	ON
P0442 (90) *8	○	Evaporative Emission (EVAP) System Small Leak Detected	ON
P0443 (92)	—	Evaporative Emission (EVAP) Canister Purge Valve Circuit Malfunction	ON
P0455 (90) *6	○	Evaporative Emission (EVAP) System Very Small Leak Detected	ON
P0451 (91)	○	Fuel Tank Pressure (FTP) Sensor Range/Performance Problem	ON
P0452 (91) *8	—	Fuel Tank Pressure (FTP) Sensor Circuit Low Voltage	ON
P0452 (91) *6	—	Fuel Tank Pressure (FTP) Sensor Circuit Low Voltage	ON
P0453 (91)	—	Fuel Tank Pressure (FTP) Sensor Circuit High Voltage	ON
P0456 (90)	○	Evaporative Emission (EVAP) System Very Small Leak Detected	ON
P0457 (90)	○	Evaporative Emission (EVAP) System Leak Detected/Fuel Cap Loose or Missing	ON
P0461 (121) *6	—	Fuel Level Sensor (Fuel Gauge Sending Unit) Range/Performance Problem	OFF
P0462 (121) *6	—	Fuel Level Sensor (Fuel Gauge Sending Unit) Circuit Low Voltage	OFF
P0463 (121) *6	—	Fuel Level Sensor (Fuel Gauge Sending Unit) Circuit High Voltage	OFF
P0496 (92)	○	Evaporative Emission (EVAP) System High Purge Flow	ON
P0497 (90)	○	Evaporative Emission (EVAP) System Low Purge Flow	ON
P0498 (117)	—	Evaporative Emission (EVAP) Canister Vent Shut Valve Control Circuit Low Voltage	ON
P0499 (117)	—	Evaporative Emission (EVAP) Canister Vent Shut Valve Control Circuit High Voltage	ON
P0506 (14)	○	Idle Control System RPM Lower than Expected	ON
P0507 (14)	○	Idle Control System RPM Higher than Expected	ON
P0562 (34) *6	—	Charging System Low Voltage	OFF
P0563 (34)	—	Engine Control Module (ECM)/Powertrain Control Module (PCM) Power Source Circuit Unexpected Voltage	ON
P0602 (196) *9	—	Engine Control Module (ECM)/Powertrain Control Module (PCM) Programming Error	OFF
P0603 (131)	—	Engine Control Module (ECM)/Powertrain Control Module (PCM) Internal Control Module Keep Alive Memory (KAM) Error	ON
P0630 (139) *6	—	VIN Not Programmed or Mismatch	ON
P0641 (133) *6	—	Sensor Reference Voltage A Malfunction	ON
P0685 (135)	○	Engine Control Module (ECM)/Powertrain Control Module (PCM) Power Control Circuit/Internal Circuit Malfunction	ON
P0700 (70) *2, *3	—	Automatic Transaxle System Malfunction	ON
P0700 (70) *3	—	Automatic Transaxle System Malfunction	OFF
P0715 (123) *4	—	Input Shaft (Mainshaft) Speed Sensor Circuit Malfunction	OFF
P0720 (122) *4	—	Output Shaft (Countershaft) Speed Sensor Circuit Malfunction	ON
P1109 (90) *6	—	Barometric Pressure (BARO) Sensor Circuit Out of Range High	ON

NOTE: The above DTCs are indicated when the PGM-FI system is selected in the HDS.
Some automatic transmission DTCs cause the MIL to come on. If the MIL is on and no DTCs are indicated in the PGM-FI system, select the A/T system, and check for automatic transmission DTCs.

* 1: The above DTCs are indicated by a blinking MIL when the SCS service signal line is jumped with the HDS.
* 2: The D indicator and the MIL may come on simultaneously.
* 3: A/T
* 4: M/T
* 6: 2005-2006 models
* 8: 2003-2004 models
* 9: 2006 model

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Fig. 13: DTC Troubleshooting Chart (3 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC (MIL indication *1)	Two Drive Cycle Method	Detection Item	MIL
P1077 (106) *4	○	Intake Manifold Tuning (IMT) (Intake Manifold Runner Control (IMRC)) Valve Stuck in High RPM Position	ON
P1078 (106) *4	○	Intake Manifold Tuning (IMT) (Intake Manifold Runner Control (IMRC)) Valve Stuck in Low RPM Position	ON
P1116 (86) *6	———	Engine Coolant Temperature (ECT) Sensor Performance Problem	ON
P1128 (5)	○	Manifold Absolute Pressure (MAP) Sensor Signal Lower Than Expected	ON
P1129 (5)	○	Manifold Absolute Pressure (MAP) Sensor Signal Higher Than Expected	ON
P1172 (158) *6	———	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) Circuit Out of Range High	ON
P1174 (158) *6	———	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) Circuit Out of Range High	ON
P1297 (20)	———	Electrical Load Detector (ELD) Circuit Low Voltage	OFF
P1298 (20)	———	Electrical Load Detector (ELD) Circuit High Voltage	OFF
P1454 (91)	○	Fuel Tank Pressure (FTP) Sensor Range/Performance Problem	ON
P1549 (34) *6	———	Charging System High Voltage	OFF
P16BB (116) *6	———	Alternator B Terminal Circuit Low Voltage	OFF
P16BC (116) *6	———	Alternator FR Terminal Circuit/IGP Circuit Low Voltage	OFF
P1683 (40)	———	Throttle Valve Default Position Spring Performance Problem	ON
P1684 (40)	———	Throttle Valve Return Spring Performance Problem	ON
P2101 (40)	———	Throttle Actuator System Malfunction	ON
P2108 (40)	———	Throttle Actuator Control Module Problem	ON
P2118 (40)	———	Throttle Actuator Current Range/Performance Problem	ON
P2122 (37) *8	———	Accelerator Pedal Position (APP) Sensor A (Throttle Position (TP) Sensor D) Circuit Low Voltage	ON
P2122 (37) *6	———	Accelerator Pedal Position (APP) Sensor A (Throttle Position (TP) Sensor D) Circuit Low Voltage	ON
P2123 (37)	———	Accelerator Pedal Position (APP) Sensor A (Throttle Position (TP) Sensor D) Circuit High Voltage	ON
P2127 (37) *8	———	Accelerator Pedal Position (APP) Sensor B (Throttle Position (TP) Sensor E) Circuit Low Voltage	ON
P2127 (37) *6	———	Accelerator Pedal Position (APP) Sensor B (Throttle Position (TP) Sensor E) Circuit Low Voltage	ON
P2128 (37)	———	Accelerator Pedal Position (APP) Sensor B (Throttle Position (TP) Sensor E) Circuit High Voltage	ON
P2135 (7)	———	Throttle Position (TP) Sensor A/B Voltage Incorrect Correlation	ON
P2138 (37)	———	Accelerator Pedal Position (APP) Sensor A/B (Throttle Position (TP) Sensor D/E) Incorrect Voltage Correlation	ON
P2176 (40)	———	Throttle Actuator Control System Idle Position Not Learned	ON
P2183 (192) *6	———	Engine Coolant Temperature (ECT) Sensor 2 Circuit Range/Performance Problem	ON
P2184 (192) *6	———	Engine Coolant Temperature (ECT) Sensor 2 Circuit Low Voltage	ON
P2185 (192) *6	———	Engine Coolant Temperature (ECT) Sensor 2 Circuit High Voltage	ON
P2195 (155)	———	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) Signal Stuck Lean	ON
P2197 (156)	———	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) Signal Stuck Lean	ON
P2227 (13)	○	Barometric Pressure (BARO) Sensor Range/Performance Problem	ON
P2228 (13) *8	———	Barometric Pressure (BARO) Sensor Circuit Low Voltage	ON
P2228 (13) *6	———	Barometric Pressure (BARO) Sensor Circuit Low Voltage	ON
P2229 (13)	———	Barometric Pressure (BARO) Sensor Circuit High Voltage	ON
P2237 (155)	———	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) IP Line High Voltage	ON
P2238 (155)	———	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) IP Line Low Voltage	ON
P2240 (156)	———	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) IP Line High Voltage	ON
P2241 (156)	———	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) IP Line Low Voltage	ON

NOTE: The above DTCs are indicated when the PGM-FI system is selected in the HDS.
Some automatic transmission DTCs cause the MIL to come on. If the MIL is on and no DTCs are indicated in the PGM-FI system, select the A/T system, and check for automatic transmission DTCs.

* 1: The above DTCs are indicated by a blinking MIL when the SCS service signal line is jumped with the HDS.
* 4: M/T
* 6: 2005-2006 models
* 8: 2003-2004 models

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Fig. 14: DTC Troubleshooting Chart (4 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC (MIL indication *1)	Two Drive Cycle Method	Detection Item	MIL
P2243 (155)	—	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) VCENT Line High Voltage	ON
P2245 (155)	—	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) VCENT Line Low Voltage	ON
P2247 (156)	—	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) VCENT Line High Voltage	ON
P2249 (156)	—	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) VCENT Line Low Voltage	ON
P2251 (155)	—	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) VS Line High Voltage	ON
P2252 (155)	—	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) VS Line Low Voltage	ON
P2254 (156)	—	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) VS Line High Voltage	ON
P2255 (156)	—	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) VS Line Low Voltage	ON
P2270 (161) *6	—	Rear Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 1, Sensor 2)) Circuit Signal Stuck Lean	ON
P2271 (161) *6	—	Rear Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 1, Sensor 2)) Circuit Signal Stuck Rich	ON
P2272 (162) *6	—	Front Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 2, Sensor 2)) Circuit Signal Stuck Lean	ON
P2273 (162) *6	—	Front Secondary Heated Oxygen Sensor (Secondary HO2S (Bank 2, Sensor 2)) Circuit Signal Stuck Rich	ON
P2279 (109)	○	Intake Air System Leak	ON
P2413 (12)	○	Exhaust Gas Recirculation (EGR) System Malfunction	ON
P2422 (117)	○	Evaporative Emission (EVAP) Canister Vent Shut Valve Stuck Closed Malfunction	ON
P2552 (40)	—	Throttle Actuator Control Module Relay Malfunction	ON
P2610 (132) *6	—	Engine Control Module (ECM)/Powertrain Control Module (PCM) Ignition Off Internal Timer Performance Problem	ON
P2627 (155) *8	—	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) LABEL Circuit Low Voltage	ON
P2627 (155) *6	—	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) LABEL Circuit Low Voltage	ON
P2628 (155)	—	Rear Air Fuel Ratio (A/F) Sensor (Bank 1, Sensor 1) LABEL Circuit High Voltage	ON
P2630 (156) *8	—	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) LABEL Circuit Low Voltage	ON
P2630 (156) *6	—	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) LABEL Circuit Low Voltage	ON
P2631 (156)	—	Front Air Fuel Ratio (A/F) Sensor (Bank 2, Sensor 1) LABEL Circuit High Voltage	ON
P2646 (22)	—	Rocker Arm Oil Pressure Switch (VTEC Oil Pressure Switch) Circuit Low Voltage	ON
P2647 (22)	—	Rocker Arm Oil Pressure Switch (VTEC Oil Pressure Switch) Circuit High Voltage	ON
P2648 (21)	—	Rocker Arm Oil Control Solenoid (VTEC Solenoid Valve) Circuit Low Voltage	ON
P2649 (21)	—	Rocker Arm Oil Control Solenoid (VTEC Solenoid Valve) Circuit High Voltage	ON
P2A00 (157)	—	Rear A/F Sensor Circuit Range/Performance Problem (Bank 1, Sensor 1)	ON
P2A03 (158)	—	Front A/F Sensor Circuit Range/Performance Problem (Bank 2, Sensor 1)	ON
U0073 (126) *10	—	F-CAN Malfunction (BUS-OFF)	OFF
U0073 (126) *9	—	F-CAN Malfunction (BUS-OFF)	ON
U0107 (30)	—	Lost Communication With Throttle Actuator Control Module	ON
U0121 (126) *10	—	F-CAN Malfunction (TCS-Engine Control Module (ECM)/Powertrain Control Module (PCM))	OFF
U0122 (126) *9	—	F-CAN Malfunction (VSA-Engine Control Module (ECM)/Powertrain Control Module (PCM))	OFF
U0155 (126) *10	—	F-CAN Malfunction (Gauge Control Module-Engine Control Module (ECM)/Powertrain Control Module (PCM))	OFF
U0155 (126) *9	—	F-CAN Malfunction (BUS-OFF)	ON

NOTE: The above DTCs are indicated when the PGM-FI system is selected in the HDS.
Some automatic transmission DTCs cause the MIL to come on. If the MIL is on and no DTCs are indicated in the PGM-FI system, select the A/T system, and check for automatic transmission DTCs.

* 1: The above DTCs are indicated by a blinking MIL when the SCS service signal line is jumped with the HDS.
* 6: 2005-2006 models
* 8: 2003-2004 models
* 9: 2006 model
* 10: 2003-2005 models

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Fig. 15: DTC Troubleshooting Chart (5 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

When the vehicle has one of these symptoms, check for a diagnostic trouble code (DTC) with the HDS. If there is no DTC, do the diagnostic procedure for the symptom, in the sequence listed, until you find the cause.

SYMPTOM CHART

Symptom	Diagnostic procedure	Also check for
Engine will not start (MIL works OK, no DTCs set)	1. Test the battery, refer to **BATTERY (EXCEPT HYBRID & V6)** . 2. Test the starter solenoid (see **STARTER SOLENOID TEST**). 3. Check the fuel pressure (see **FUEL PRESSURE TEST**). 4. Troubleshoot the fuel pump circuit (see **FUEL PUMP CIRCUIT TROUBLESHOOTING**).	• Low compression • No ignition spark • Intake air leaks • Locked up engine • Broken timing belt • Contaminated fuel
Engine will not start (MIL comes on and stays on, or never comes on at all, no DTCs set)	Troubleshoot the MIL circuit (see **MIL CIRCUIT TROUBLESHOOTING**).	
Engine will not start (immobilizer indicator stays on or flashes)	Troubleshoot the immobilizer system (see **TROUBLESHOOTING**).	
Engine will not start (immobilizer	Troubleshoot the immobilizer	

indicator stays on or flashes)	system (see **TROUBLESHOOTING**).	
Engine starts but stalls immediately (MIL works OK, no DTCs set, immobilizer indicator stays on or flashes)	Troubleshoot the immobilizer system (see **TROUBLESHOOTING**).	
Engine is hard to start (MIL works OK, no DTCs set)	1. Test the battery, refer to **BATTERY (EXCEPT HYBRID & V6)** . 2. Check the fuel pressure (see **FUEL PRESSURE TEST**). 3. Clean the throttle body (see **THROTTLE BODY CLEANING**).	• Low compression • Intake air leaks • Contaminated fuel • Weak spark
Engine starts but stalls immediately (MIL works OK, no DTCs set, immobilizer indicator stays on or flashes)	Troubleshoot the immobilizer system (see **TROUBLESHOOTING**).	
Engine is hard to start (MIL works OK, no DTCs set)	1. Test the battery, refer to **BATTERY (EXCEPT HYBRID & V6)** . 2. Check the fuel pressure (see **FUEL PRESSURE TEST**). 3. Clean the throttle body (see **THROTTLE BODY CLEANING**).	• Low compression • Intake air leaks • Contaminated fuel • Weak spark

Cold fast idle too low (MIL works OK, no DTCs set)	1. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**). 2. Check the idle speed (see **IDLE SPEED INSPECTION**). 3. Clean the throttle body (see **THROTTLE BODY CLEANING**).	
Cold fast idle too high (MIL works OK, no DTCs set)	1. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**). 2. Check the idle speed (see **IDLE SPEED INSPECTION**). 3. Inspect/adjust the throttle cable (see **THROTTLE CABLE ADJUSTMENT**). 4. Do the throttle position learning check (see **THROTTLE POSITION LEARNING CHECK**).	
Idle speed fluctuates	1. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**). 2. Check the idle speed (see **IDLE SPEED INSPECTION**).	

(MIL works OK, no DTCs set)	3. Inspect/adjust the throttle cable (see **THROTTLE CABLE ADJUSTMENT**). 4. Do the carbon accumulation check (see **CARBON ACCUMULATION CHECK**).	Intake vacuum leaks
After warming up, idle speed is below specification without load (MIL works OK, no DTCs set)	1. 2003-2004 models: Troubleshoot the alternator FR signal circuit (see **ALTERNATOR FR SIGNAL CIRCUIT TROUBLESHOOTING**). 2. 2005-2006 models: Troubleshoot the alternator FR signal circuit (see **ALTERNATOR FR SIGNAL CIRCUIT TROUBLESHOOTING**). 3. Do the carbon accumulation check (see **CARBON ACCUMULATION CHECK**).	
After warming up,	1. Inspect/adjust the throttle cable (see **THROTTLE CABLE ADJUSTMENT**). 2. 2003-2004 models: Troubleshoot the alternator FR signal circuit (see **ALTERNATOR FR**	

idle speed is above specification without load (MIL works OK, no DTCs set)	**SIGNAL CIRCUIT TROUBLESHOOTING**). 3. 2005-2006 models: Troubleshoot the alternator FR signal circuit (see **ALTERNATOR FR SIGNAL CIRCUIT TROUBLESHOOTING**). 4. Inspect the APP sensor (see **APP SENSOR INSPECTION**).	
Low power (MIL works OK, no DTCs set)	1. Check the fuel pressure (see **FUEL PRESSURE TEST**). 2. Inspect/adjust the throttle cable (see **THROTTLE CABLE ADJUSTMENT**).	• Low compression • Incorrect camshaft timing • Incorrect engine oil level
Engine stalls (MIL works OK, no DTCs set)	1. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**). 2. Check the fuel pressure (see **FUEL PRESSURE TEST**). 3. Check the idle speed (see **IDLE SPEED INSPECTION**). 4. Troubleshoot the brake pedal position switch signal CIRCUIT (see **BRAKE PEDAL POSITION SWITCH SIGNAL**	• Intake air leaks • Faulty harness and sensor connections

	CIRCUIT TROUBLESHOOTING).	
Difficult to refuel (MIL works OK, no DTCs set)	1. Check the fuel vent tube between the EVAP canister and the fuel tank. 2. Check the fuel tank vapor recirculation tube between the fuel pipe and the fuel tank. 3. Replace the fuel tank (see **FUEL TANK REPLACEMENT**).	Malfunctioning gas station filling nozzle.
Fuel overflows during refueling (No DTC set)	Replace the fuel tank (see **FUEL TANK REPLACEMENT**).	Malfunctioning gas station filling nozzle.

SYSTEM DESCRIPTION

ELECTRONIC CONTROL SYSTEM

The functions of the fuel and emission control systems are managed by the engine control module (ECM) on vehicles with manual transmissions or the powertrain control module (PCM) on vehicles with automatic transmissions.

Self-diagnosis

The ECM/PCM detects a failure of a signal from a sensor or from another control unit and stores a Temporary DTC or a DTC in erasable memory (RAM). Depending on the failure, a DTC is stored in either the first or the second drive cycle. When a DTC is stored, the ECM/PCM turns on the malfunction indicator lamp (MIL) by supplying ground to the MIL circuit.

- **One Drive Cycle Detection Method**

When an abnormality occurs in the signal from a sensor or from another control unit, the ECM/PCM stores a DTC for the failure in the RAM and turns on the MIL immediately.

- **Two Drive Cycle Detection Method**

When an abnormality occurs in the signal from a sensor or from another control unit in the first drive cycle, the ECM/PCM stores a Temporary DTC for the failure in RAM. The MIL does not come on at this time. If the failure continues in the second drive cycle, the ECM/PCM stores a DTC in erasable memory and turns on the MIL.

Fail-safe Function

When an abnormality occurs in the signal from a sensor or from another control unit, the ECM/PCM ignores that signal and assumes, pre-programmed value that allows the engine to continue running. This causes a DTC to be stored and the MIL to come on.

MIL Bulb Check and Readiness Code Condition

When the ignition switch is turned ON (II), the ECM/PCM supplies ground to the MIL circuit for about 15 to 20 seconds to check the bulb condition. If any readiness codes are not set to complete, the MIL flashes five times. If all readiness codes are set to complete, the MIL goes off.

Self Shut Down (SSD) Mode

After the ignition switch is turned OFF, the ECM/PCM stays on (up to 15 minutes). If the ECM/PCM connector is disconnected during this time, the ECM/PCM may be damaged. To cancel this mode, disconnect the negative cable from the battery or jump the SCS line with the HDS after the ignition switch is turned OFF.

ECM/PCM ELECTRICAL CONNECTIONS

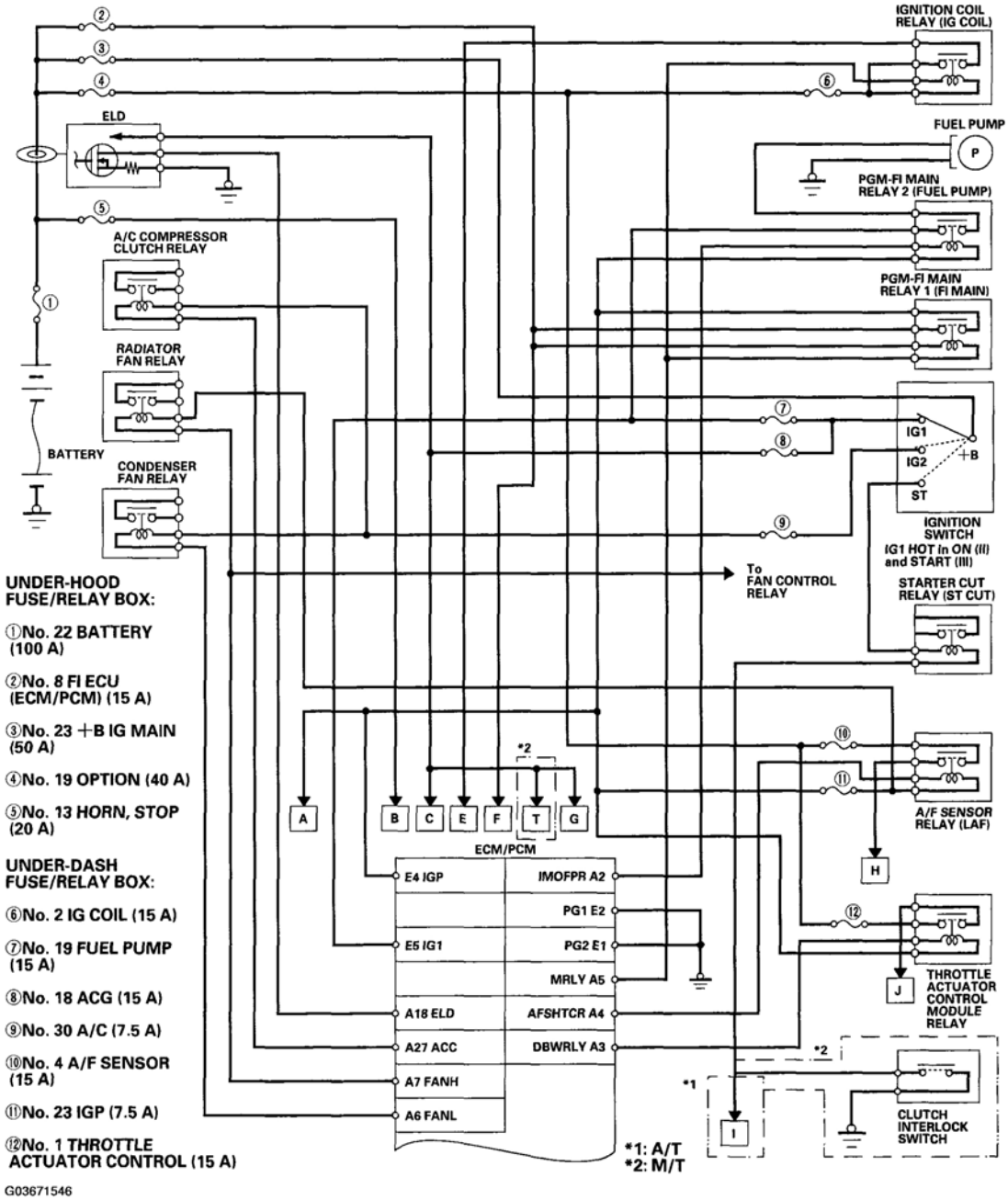


Fig. 16: ECM/PCM Electrical Connections Wiring Diagram (1 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

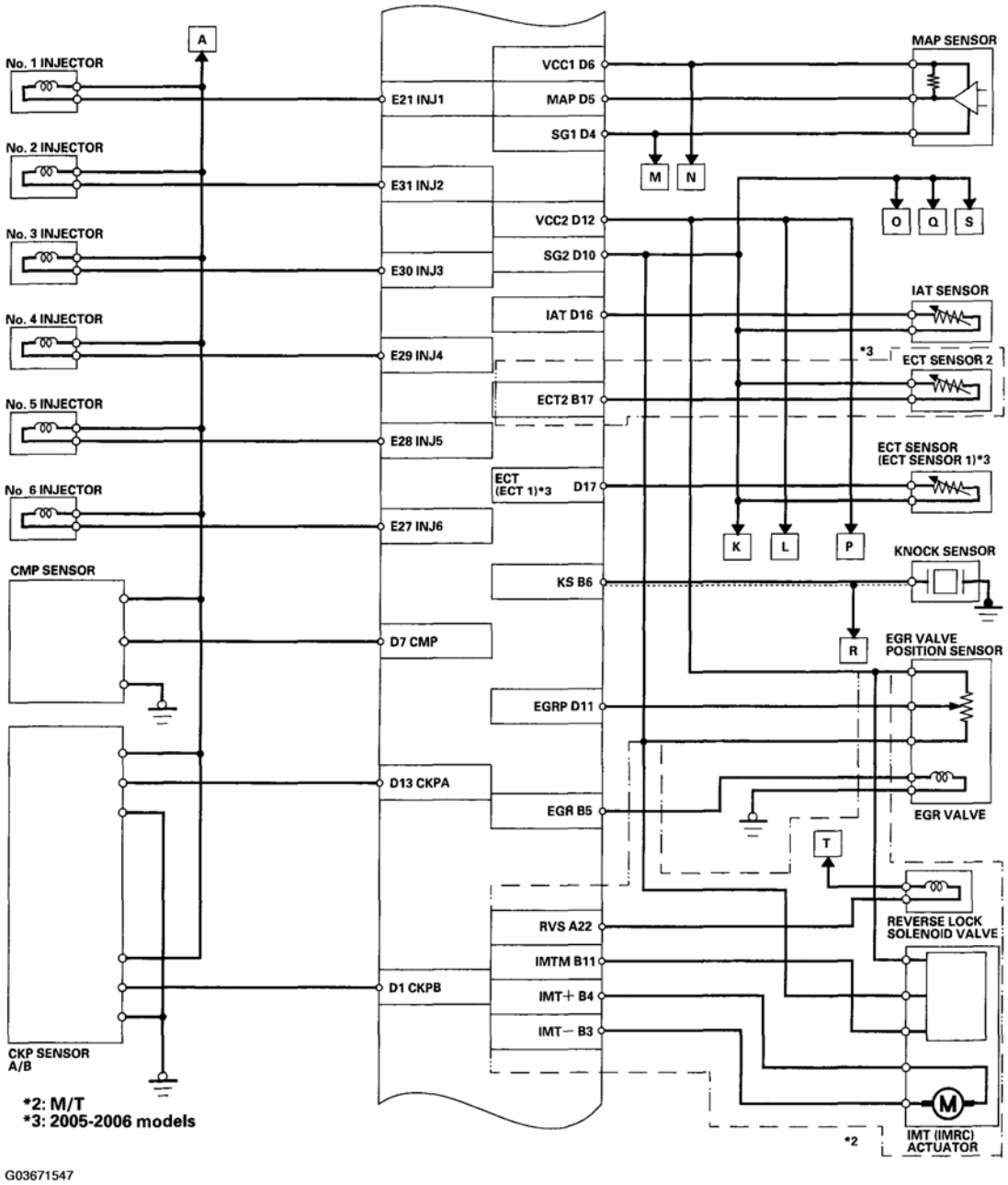


Fig. 17: ECM/PCM Electrical Connections Wiring Diagram (2 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

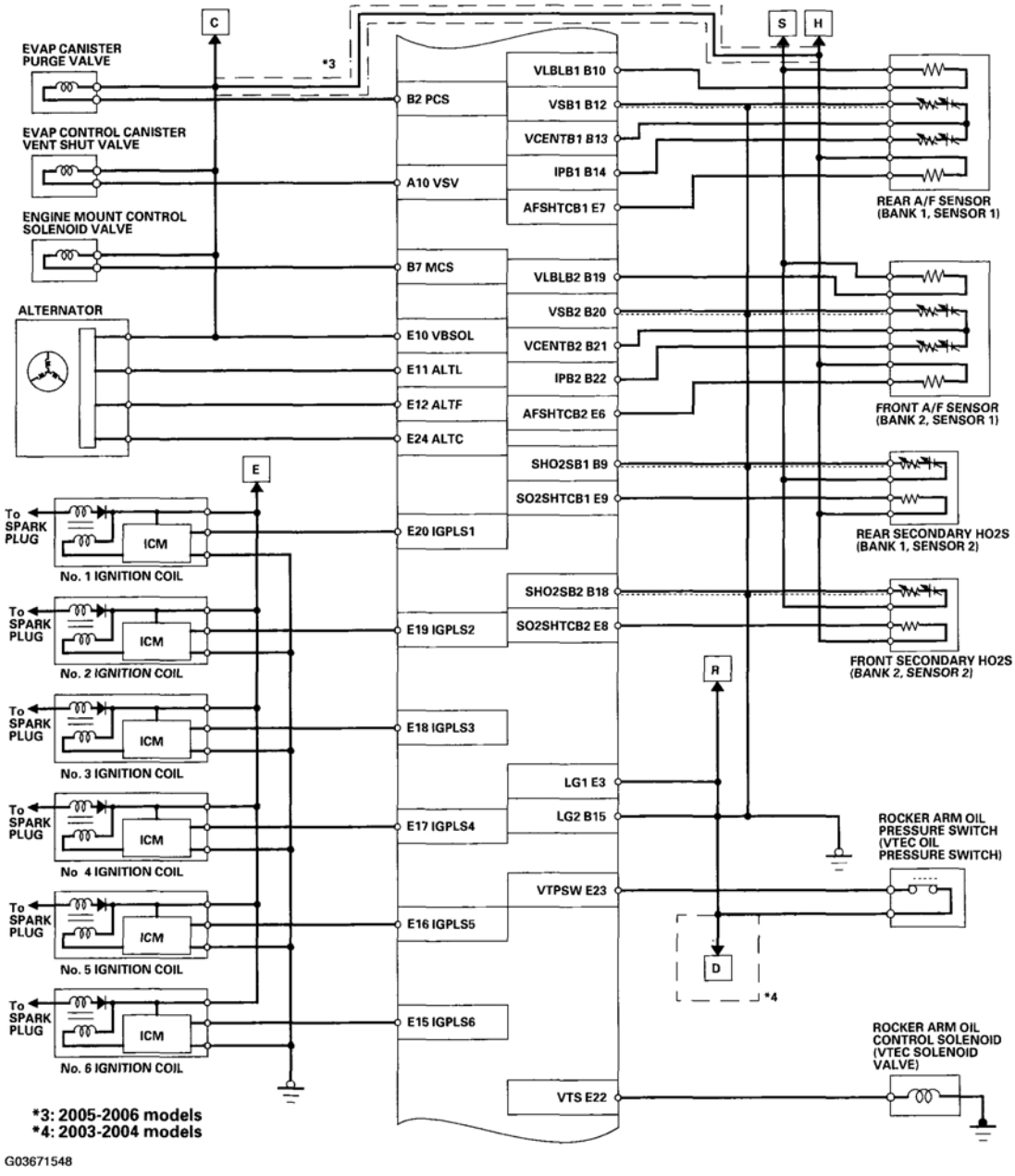


Fig. 18: ECM/PCM Electrical Connections Wiring Diagram (3 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

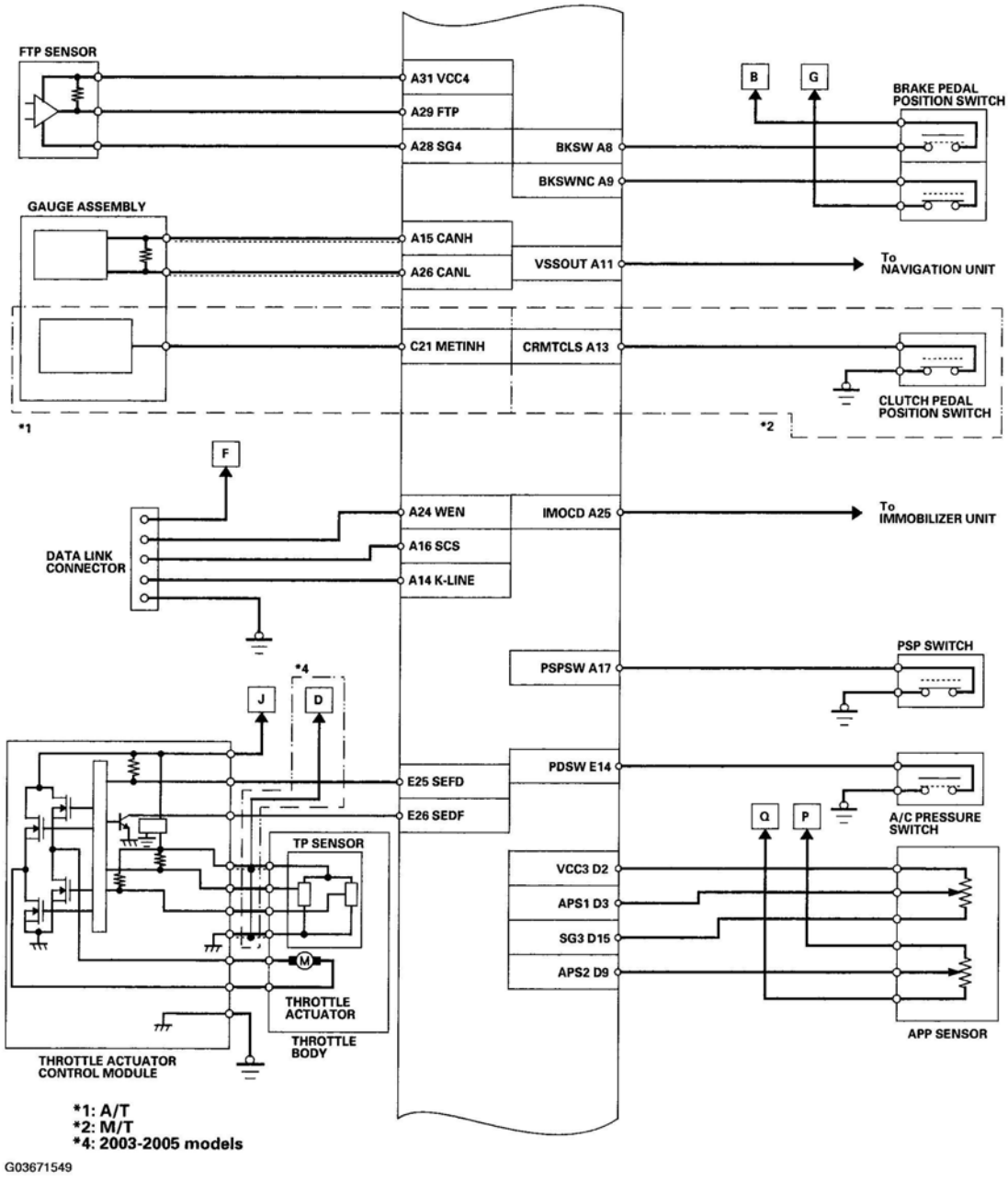


Fig. 19: ECM/PCM Electrical Connections Wiring Diagram (4 Of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

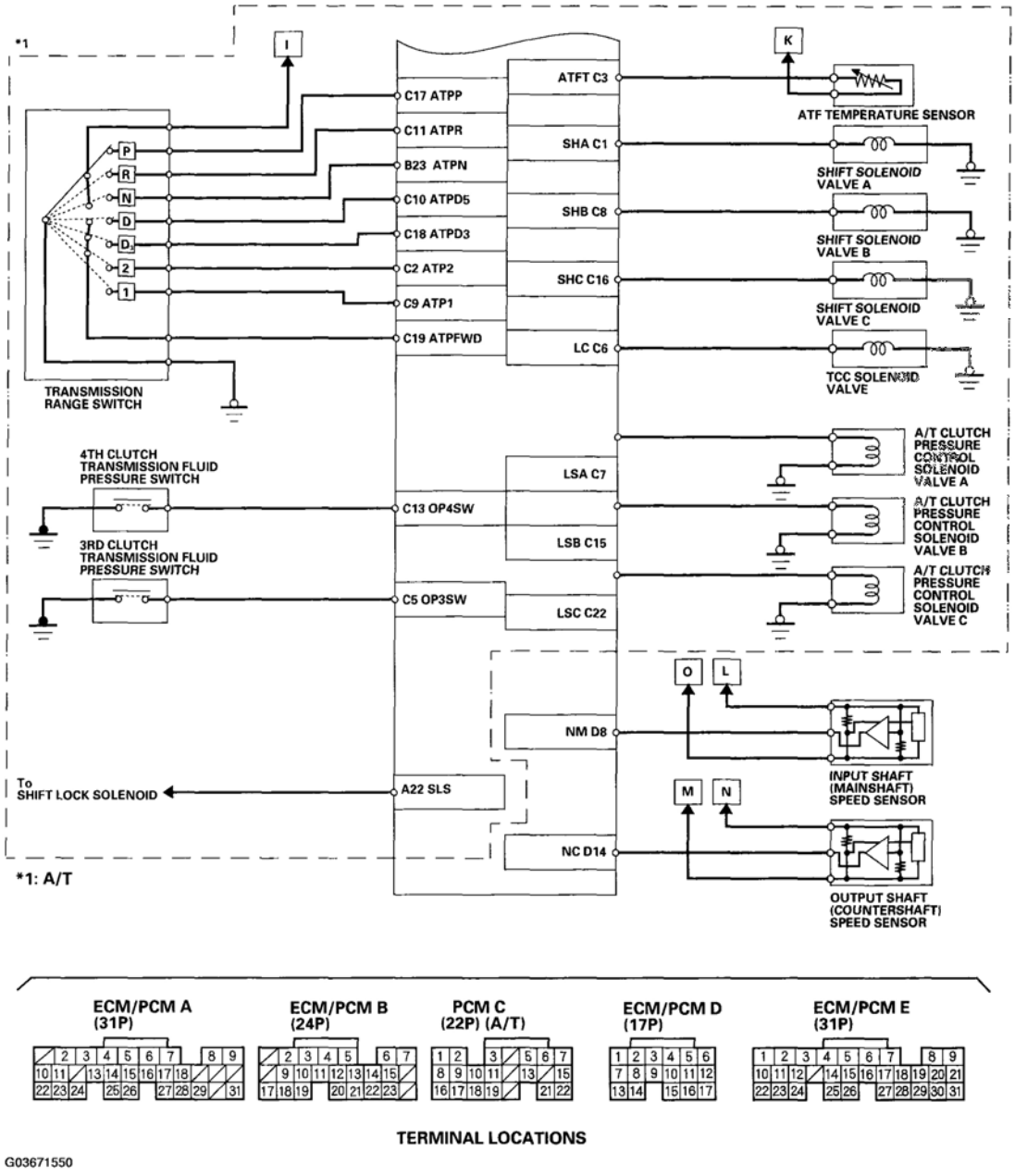
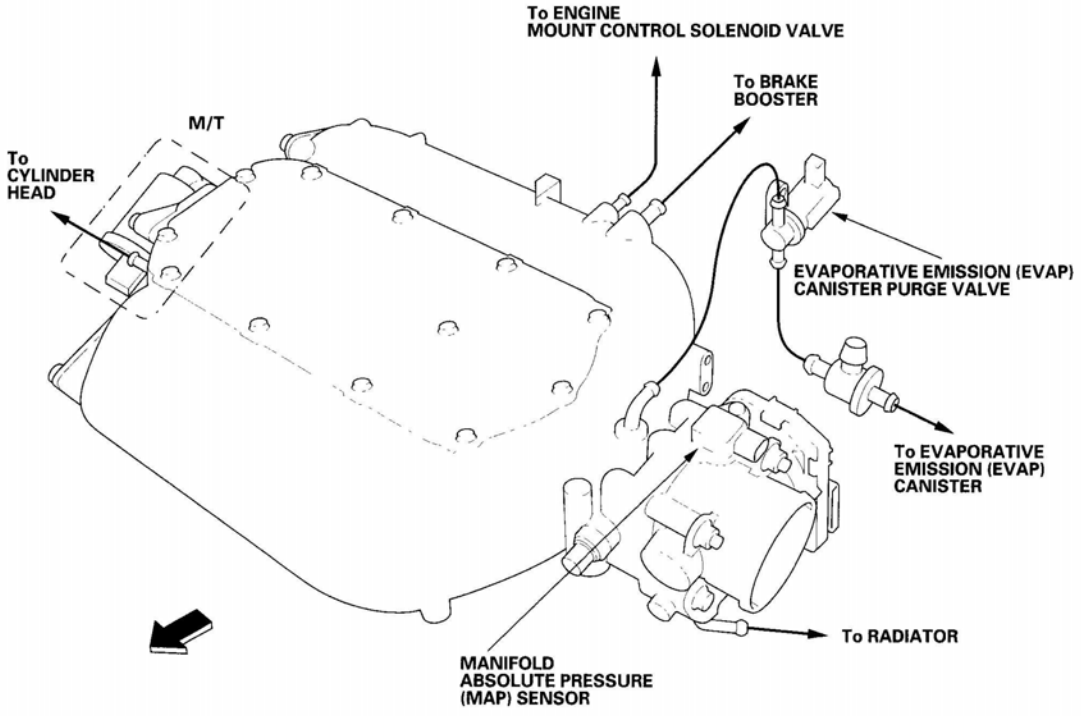


Fig. 20: ECM/PCM Electrical Connections Wiring Diagram (5 Of 5) Courtesy of AMERICAN HONDA MOTOR CO., INC.

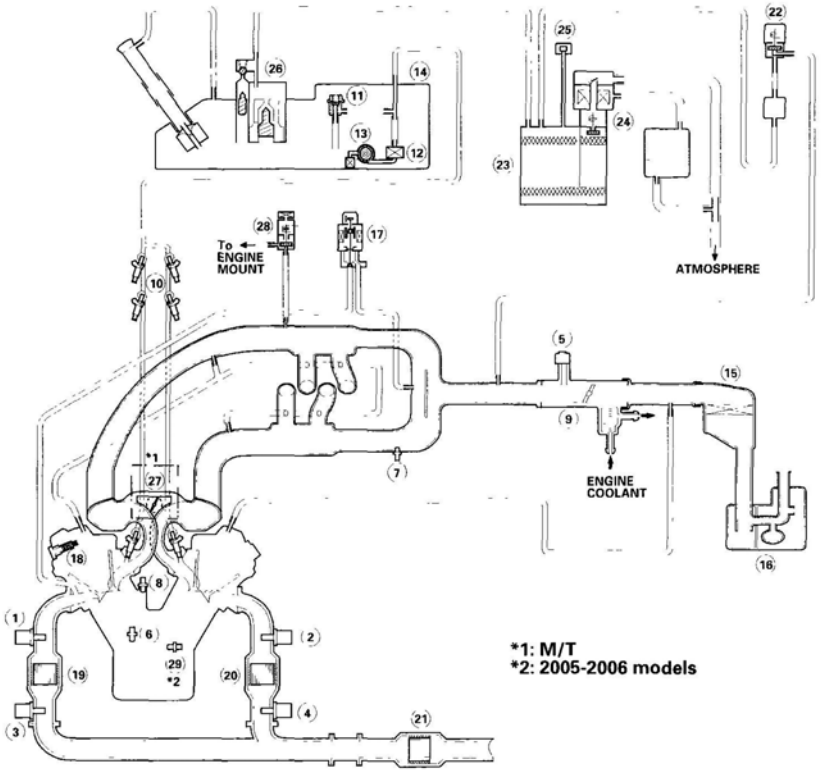
VACUUM HOSE ROUTING



*: This illustration shows 2003-2005 models.
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Fig. 21: Identifying Vacuum Hose Routing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VACUUM DISTRIBUTION



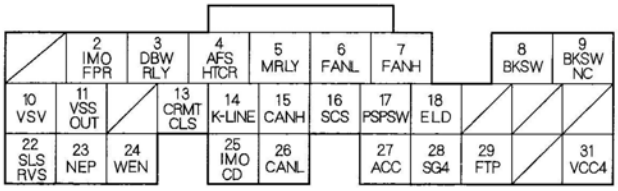
① FRONT AIR FUEL RATIO (A/F) SENSOR (BANK 2, SENSOR 1)
② REAR AIR FUEL RATIO (A/F) SENSOR (BANK 1, SENSOR 1)
③ FRONT SECONDARY HEATED OXYGEN SENSOR (SECNODARY HO2S) (BANK 2, SENSOR 2)
④ REAR SECONDARY HEATED OXYGEN SENSOR (SECNODARY HO2S) (BANK 1, SENSOR 2)
⑤ MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR
⑥ ENGINE COOLANT TEMPERATURE (ECT) SENSOR (2003-2004 models) (ENGINE GOOLANT TEMPERATURE (ECT) SENSOR 1 (2005-2006 models)
⑦ INTAKE AIR TEMPERATURE (IAT) SENSOR
⑧ KNOCK SENSOR
⑨ THROTTLE BODY
⑩ INJECTOR
⑪ FUEL PRESSURE REGULATOR
⑫ FUEL FILTER
⑬ FUEL PUMP
⑭ FUEL TANK
⑮ AIR CLEANER
⑯ RESONATOR
⑰ EXHAUST GAS RECIRCULATION (EGR) VALVE and POSITION SENSOR
⑱ POSITIVE CRANKCASE VENTILATION (PCV) VALVE
⑲ FRONT WARM UP THREE WAY CATALYTIC CONVERTER
⑳ REAR WARM UP THREE WAY CATALYTIC CONVERTER
㉑ THREE WAY CATALYTIC CONVERTER
㉒ EVAPORATIVE EMISSION (EVAP) CANISTER PURGE VALVE
㉓ EVAPORATIVE EMISSION (EVAP) CANISTER
㉔ EVAPORATIVE EMISSION (EVAP) CANISTER VENT SHUT VALVE
㉕ FUEL TANK PRESSURE (FTP) SENSOR
㉖ FUEL TANK VAPOR CONTROL VALVE
㉗ INTAKE MANIFOLD TUNING (IMT) (INTAKE MANIFOLD RUNNER CONTROL (IMRC)) ACTUATOR
㉘ ENGINE MOUNT CONTROL SOLENOID VALVE
㉙ ENGINE COOLANT TEMPERATURE (ECT) SENSOR 2 (2005-2006 models)

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Fig. 22: Identifying Vacuum Distribution
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM/PCM INPUTS AND OUTPUTS AT CONNECTOR A (31P)

NOTE: Standard battery voltage is 12 V.



Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
2	GRN/YEL	IMOFPR (IMMOBILIZER FUEL PUMP RELAY)	Drives PGM-FI main relay 2 (FUEL PUMP)	0 V for 2 seconds after turning ignition switch ON (II), then battery voltage
3	BRN/YEL	DBWRLY (THROTTLE ACTUATOR CONTROL MODULE (DBW) RELAY)	Drives throttle actuator control module (DBW) relay	With ignition switch ON (II): about 0 V
4	PNK	AFSHTCR (AIR FUEL RATIO (A/F) SENSOR RELAY)	Drives A/F sensor relay	With ignition switch ON (II): about 0 V
5	RED/BLK	MRLY (PGM-FI MAIN RELAY)	Drives PGM-FI main relay 1 (FI MAIN) Power source for DTC memory	With ignition switch ON (II): about 0 V With ignition switch OFF: battery voltage
6	GRN/WHT	FANL (RADIATOR FAN RELAY LOW)	Drives condenser fan relay	With ignition switch ON (II): battery voltage
7	GRN	FANH (RADIATOR FAN RELAY, FAN CONTROL RELAY HIGH)	Drives radiator fan relay, fan control relay	With ignition switch ON (II): battery voltage
8	WHT/BLK	BKSW (BRAKE PEDAL POSITION SWITCH)	Detects brake pedal position switch signal	With brake pedal released: about 0 V With brake pedal pressed: battery voltage
9	BRN/BLK	BKSWNC (BRAKE PEDAL POSITION SWITCH)	Detects brake pedal position switch signal	With ignition switch ON (II) and brake pedal released: battery voltage With ignition switch ON (II) and brake pedal pressed: about 0 V
10	LT GRN/RED	VSV (EVAPORATIVE EMISSION (EVAP) CANISTER VENT SHUT VALVE)	Drives EVAP canister vent shut valve	With ignition switch ON (II): battery voltage
11	BLU/WHT	VSSOUT (VEHICLE SPEED SENSOR OUTPUT SIGNAL)	Sends vehicle speed sensor signal	Depending on vehicle speed: pulses
13*2	LT BLU	CRMTCLS (CLUTCH PEDAL POSITION SWITCH)	Detects clutch pedal position switch signal	With ignition switch ON (II) and clutch pedal released: about 0 V With ignition switch ON (II) and clutch pedal pressed: battery voltage
14	BLU	K-LINE	Sends and receives HDS signal	With ignition switch ON (II) and the HDS disconnected: pulses or battery voltage
15	WHT	CANH (CAN COMMUNICATION SIGNAL HIGH)	Sends communication signal	With ignition switch ON (II): pulses

* 2: M/T

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Fig. 23: Identifying ECM/PCM Inputs And Outputs At Connector A (31P) (1 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Terminal number	Wire color	Terminal name	Description	Signal
16	BRN	SCS (SERVICE CHECK SIGNAL)	Detects service check signal	With the service check signal shorted with the HDS: about 0 V With the service check signal opened: about 5.0 V
17	BLU/YEL	PSPSW (POWER STEERING PRESSURE SWITCH SIGNAL)	Detects PSP switch signal	At idle with steering wheel in straight ahead position: about 0 V At idle with steering wheel at full lock: battery voltage
18	BLU/BLK	ELD (ELECTRICAL LOAD DETECTOR (ELD))	Detects ELD signal	With ignition switch ON (II): about 0.1—4.8 V (depending on electrical load)
22*1	YEL/BLK	SLS (SHIFT LOCK SOLENOID)	Drives shift lock solenoid	With ignition switch ON (II), in Park, brake pedal pressed, and accelerator released: about 0 V
22*2	GRN/WHT	RVS (REVERSE LOCK SOLENOID VALVE)	Drives reverse lock solenoid valve	With vehicle speed below 9 mph (15 km/h): battery voltage With vehicle speed above 13 mph (20 km/h): about 0 V
23	BLU/RED	NEP	Not used	
24	RED/WHT	WEN (WRITE ENABLE SIGNAL)	Detects write enable signal	With ignition switch ON (II): about 0 V
25	RED/BLU	IMOCD (IMMOBILIZER CODE)	Detects immobilizer signal	
26	RED	CANL (CAN COMMUNICATION SIGNAL LOW)	Sends communication signal	With ignition switch ON (II): pulses
27	RED	ACC (A/C CLUTCH RELAY)	Drives A/C clutch relay	With compressor ON: about 0 V With compressor OFF: battery voltage
28	GRN/BLK	SG4 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
29	LT GRN	FTP (FUEL TANK PRESSURE (FTP) SENSOR)	Detects FTP sensor signal	With ignition switch ON (II) and fuel fill cap removed: about 2.5 V
31	YEL/GRN	VCC4 (SENSOR VOLTAGE)	Provides sensor voltage	With ignition switch ON (II): about 5.0 V With ignition switch OFF: about 0 V

* 1: A/T
* 2. M/T

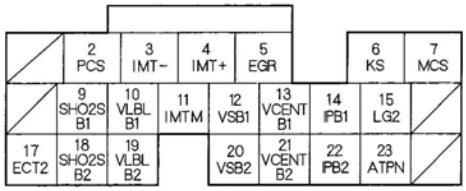
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Fig. 24: Identifying ECM/PCM Inputs And Outputs At Connector A (31P) (2 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM/PCM INPUTS AND OUTPUTS AT CONNECTOR B (24P)

NOTE: Standard battery voltage is 12 V.



Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
2	RED/YEL	PCS (EVAPORATIVE EMISSION (EVAP) CANISTER PURGE VALVE)	Drives EVAP canister purge valve	With engine running, engine coolant below 140 °F (60 °C): battery voltage With engine running, engine coolant above 140 °F (60 °C): duty controlled
3*2	WHT/RED	IMT− (INTAKE MANIFOLD TUNING (IMT) (INTAKE MANIFOLD RUNNER CONTROL (IMRC)) ACTUATOR −SIDE)	Ground for IMT (IMRC) actuator	With ignition switch ON (II): about 0 V
4*2	WHT/BLU	IMT+ (INTAKE MANIFOLD TUNING (IMT) (INTAKE MANIFOLD RUNNER CONTROL (IMRC)) ACTUATOR +SIDE)	Drives IMT (IMRC) actuator	With ignition switch ON (II): about 0 V With engine speed above 4,200 rpm: momentary battery voltage
5	BLU/RED	EGR (EXHAUST GAS RECIRCULATION (EGR) VALVE)	Drives EGR valve	With EGR operating: duty controlled With EGR not operating: about 0 V
6	RED/BLU	KS (KNOCK SENSOR)	Detects knock sensor signal	With engine knocking: pulses
7	BLU/YEL	MCS (ENGINE MOUNT CONTROL SOLENOID VALVE)	Drives engine mount control solenoid valve	At idle: about 0 V Above idle: battery voltage
9	GRN	SHO2SB1 (SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) BANK 1, SENSOR 2)	Detects rear secondary HO2S (Bank 1, sensor 2) signal	With throttle fully opened from idle with fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
10	WHT	VLBLB1 (LABEL RESISTER BANK 1)	Detects rear A/F sensor (Bank 1, sensor 1) LABEL signal	With engine running: 0.4−4.6 V
11*2	WHT/BLK	IMTM (INTAKE MANIFOLD TUNING (IMT) (INTAKE MANIFOLD RUNNER CONTROL (IMRC)) ACTUATOR MOONITOR)	Detects IMT (IMRC) actuator position	With engine running: about 5.0 V With engine speed above 4,200 rpm: about 0 V

* 1: A/T
* 2: M/T

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Fig. 25: Identifying ECM/PCM Inputs And Outputs At Connector B (24P) (1 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Terminal number	Wire color	Terminal name	Description	Signal
12	BLU	VSB1 (VS CELL +BANK 1)	Detects the rear A/F sensor (Bank 1, sensor 1) VS CELL signal	With engine running: 3.4—4.8 V
13	RED	VCENTB1 (VIRTUAL GROUND BANK 1)	Reference voltage supply for rear A/F sensor (Bank 1, sensor 1)	With fully warmed up engine at idle: 3.4—3.8 V
14	GRN	IPB1 (IP CELL +BANK 1)	Detects rear A/F sensor (Bank 1, sensor 1) pump cell	With engine running: 2.0—5.6 V
15	BRN/YEL	LG2 (LOGIC GROUND)	Ground circuit for the PCM	Less than 1.0 V at all times
17*3	GRN/RED	ECT2 (ENGINE COOLANT TEMPERATURE (ECT) SENSOR 2)	Detects ECT sensor 2 signal	With ignition switch ON (II): about 0.1—4.8 V (depending on engine coolant temperature)
18	WHT	SHO2SB2 (SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) BANK 2, SENSOR 2)	Detects front secondary HO2S (Bank 2, sensor 2) signal	With throttle fully opened from idle with fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
19	WHT/RED	VLBLB2 (LABEL RESISTER BANK 2)	Detects front A/F (Bank 2, sensor 1) LABEL signal	With engine running: 0.4—4.6 V
20	RED/BLU	VSB2 (VS CELL +BANK 2)	Detects front A/F sensor (Bank 2, sensor 1) VS CELL signal	With engine fully warmed up and running: 3.4—4.8 V
21	RED/WHT	VCENTB2 (VIRTUAL GROUND BANK 2)	Reference voltage supply for front A/F sensor (Bank 2, sensor 1)	With fully warmed up engine at idle: 3.4—3.8 V
22	GRN/RED	IPB2 (IP CELL +BANK 2)	Detects front A/F sensor (Bank 2, sensor 1) pump cell	With engine running: 2.0—5.6 V
23*1	RED/BLK	ATPN (TRANSMISSION RANGE SWITCH NEUTRAL POSITION)	Detects transmission range switch Neutral position signal	In Neutral position: about 0 V In any other position: battery voltage

* 1: A/T
* 3: 2005-2006 models

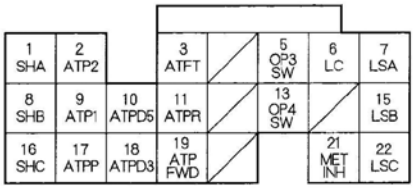
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Fig. 26: Identifying ECM/PCM Inputs And Outputs At Connector B (24P) (2 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

PCM INPUTS AND OUTPUTS AT CONNECTOR C (22P)

NOTE: Standard battery voltage is 12 V.



Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1*1	BLU/YEL	SHA (SHIFT SOLENOID VALVE A)	Drives shift solenoid valve A	With engine running in 1, 2, D3 or D (in 1st, 2nd gear), or D (in 5th gear): battery voltage With engine running in Neutral, Park, R, or D (in 4th gear), D, D3 (in 3rd gear): about 0 V
2*1	BLU	ATP2 (TRANSMISSION RANGE SWITCH 2)	Detects transmission range switch 2 signal	In 2: about 0 V In any other position: about 5.0 V
3*1	BLU/YEL	ATFT (ATF TEMPERATURE SENSOR)	Detects ATF temperature signal	With ignition ON (II): about 0.2—4.0 V (about 1.8 V at operating temperature) (depending on ATF temperature)
5*1	BLU/WHT	OP3SW (3RD CLUTCH TRANSMISSION FLUID PRESSURE SWITCH)	Detects 3rd clutch transmission fluid pressure switch input	With ignition switch ON (II): • Without 3rd clutch pressure: battery voltage • With 3rd clutch pressure: about 0 V
6*1	YEL	LC (TORQUE CONVERTER CLUTCH (TCC) SOLENOID VALVE)	Drives TCC solenoid valve	With lock-up ON: battery voltage With lock-up OFF: about 0 V
7*1	RED	LSA (A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A)	Drives A/T clutch pressure control solenoid valve A	With ignition switch ON(II): duty controlled
8*1	GRN/WHT	SHB (SHIFT SOLENOID VALVE B)	Drives shift solenoid valve B	With engine running 1, 2, D3 or D (in 1st, 2nd, 3rd gear), or Neutral, Park, or R: battery voltage With engine running in D (in 4th, 5th gear): about 0 V
9*1	BRN	ATP1 (TRANSMISSION RANGE SWITCH 1ST POSITION)	Detects transmission range switch 1 signal input	In 1: about 0 V In any other position: battery voltage
10*1	YEL/GRN	ATPD5 (TRANSMISSION RANGE SWITCH D POSITION)	Detects transmission range switch D signal input	In D: about 0 V In any other position: battery voltage
11*1	WHT	ATPR (TRANSMISSION RANGE SWITCH R POSITION)	Detects transmission range switch R signal input	In R: about 0 V In any other position: battery voltage
13*1	BLU/YEL	OP4SW (4TH CLUTCH TRANSMISSION FLUID PRESSURE SWITCH)	Detects 4th clutch transmission fluid pressure switch input	With ignition switch ON (II): • Without 4th clutch pressure: battery voltage • With 4th clutch pressure: about 0 V
15*1	BRN/WHT	LSB (A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE B)	Drives A/T clutch pressure control solenoid valve B	With ignition switch ON (II): duty controlled
16*1	GRN	SHC (SHIFT SOLENOID VALVE C)	Drives shift solenoid valve C	With engine running in 1, or D, D3 (in 1st, 3rd, 5th gear): battery voltage With engine running in Neutral, Park, R, 2, D (in 4th gear), D, D3 (in 2nd gear): about 0 V
17*1	BLU/BLK	ATPP (TRANSMISSION RANGE SWITCH PARK)	Detects transmission range switch Park signal	In Park: about 0 V In any other position: battery voltage
18*1	RED	ATPD3 (TRANSMISSION RANGE SWITCH D3)	Detects transmission range switch D3 signal	In D3: about 0 V In any other position: battery voltage
19*1	BLU/YEL	ATPFWD (TRANSMISSION RANGE SWITCH D3/D/2)	Detects transmission range switch D3/D/2 signal	In D3, D2: about 0 V In any other position: battery voltage
21*1	GRN/WHT	METINH (METER DISPLAY INHIBIT SIGNAL)	Sends inhibit signal	With ignition switch ON (II): battery voltage
22*1	GRN/RED	LSC (A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE C)	Drives A/T clutch pressure control solenoid valve C	With ignition switch ON (II): duty controlled

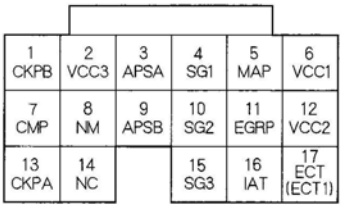
* 1: A/T

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Fig. 27: Identifying PCM Inputs And Outputs At Connector C (22P) Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM/PCM INPUTS AND OUTPUTS AT CONNECTOR D (17P)

NOTE: Standard battery voltage is 12 V.



Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

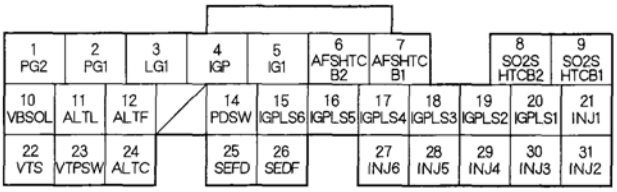
Terminal number	Wire color	Terminal name	Description	Signal
1	BLU/RED	CKPB (CRANKSHAFT POSITION (CKP) SENSOR B)	Detects CKP sensor B signal	With engine running: pulses
2	YEL/GRN	VCC3 (SENSOR VOLTAGE)	Provides sensor voltage	With ignition switch ON (II): about 5.0 V With ignition switch OFF: about 0 V
3	RED/BLU	APSA (ACCELERATOR PEDAL POSITION (APP) SENSOR A)	Detects APP sensor A signal	With ignition switch ON (II) and accelerator pedal pressed: about 4.5 V With ignition switch ON (II) and accelerator pedal released: about 0.5 V
4	GRN/WHT	SG1 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
5	GRN/RED	MAP (MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR)	Detects MAP sensor signal	With ignition switch ON (II): about 3.0 V At idle: about 1.0 V (depending on engine speed)
6	YEL/RED	VCC1 (SENSOR VOLTAGE)	Provides sensor voltage	With ignition switch ON (II): about 5.0 V With ignition switch OFF: about 0 V
7	YEL	CMP (CAMSHAFT POSITION (CMP) SENSOR)	Detects CMP sensor signal	With engine running: pulses
8	RED	NM (INPUT SHAFT (MAINSHAFT) SPEED SENSOR)	Detects input shaft (mainshaft) speed sensor signals	With ignition switch ON (II): 0 V or about 5.0 V With engine at idling in N position: about 2.5 V
9	RED/YEL	APSB (ACCELERATOR PEDAL POSITION (APP) SENSOR B)	Detects APP sensor B signal	With ignition switch ON (II) and accelerator pedal pressed: about 2.3 V With ignition switch ON (II) and accelerator pedal released: about 0.2 V
10	GRN/YEL	SG2 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
11	WHT/BLK	EGRP (EXHAUST GAS RECIRCULATION (EGR) VALVE POSITION SENSOR)	Detects EGR valve position sensor signal	With engine running: 1.2—3.0 V (depending on EGR valve lift)
12	YEL/BLU	VCC2 (SENSOR VOLTAGE)	Provides sensor voltage	With ignition switch ON (II): about 5.0 V With ignition switch OFF: about 0 V
13	BLU	CKPA (CRANKSHAFT POSITION (CKP) SENSOR A)	Detects CKP sensor A signal	With engine running: pulses
14	BLU	NC (OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR)	Detects output shaft (countershaft) speed sensor signals	With ignition switch ON (II) and front wheels rotated by hand: pulses
15	GRN	SG3 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
16	RED/YEL	IAT (INTAKE AIR TEMPERATURE (IAT) SENSOR)	Detects IAT sensor signal	With ignition switch ON (II): about 0.1—4.8 V (depending on intake air temperature)
17	RED/WHT	ECT (ENGINE COOLANT TEMPERATURE (ECT) SENSOR)*4 ECT1 (ENGINE COOLANT TEMPERATURE (ECT) SENSOR 1)*3	Detects ECT sensor*4 (ECT sensor 1)*3 signal	With ignition switch ON (II): about 0.1—4.8 V (depending on engine coolant temperature)

* 3: 2005-2006 models
* 4: 2003-2004 models

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Fig. 28: Identifying ECM/PCM Inputs And Outputs At Connector D (17P) Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM/PCM INPUTS AND OUTPUTS AT CONNECTOR E (31P)



Wire side of female terminals

NOTE: *Standard battery voltage is 12 V.*

Terminal number	Wire color	Terminal name	Description	Signal
1	BLK	PG2 (POWER GROUND)	Ground circuit for ECM/ PCM circuit	Less than 1.0 V at all times
2	BLK	PG1 (POWER GROUND)	Ground circuit for ECM/ PCM circuit	Less than 1.0 V at all times
3	BRN/YEL	LG1 (LOGIC GROUND)	Ground circuit for ECM/ PCM circuit	Less than 1.0 V at all times
4	YEL/BLK	IGP (POWER SOURCE)	Power source for ECM/PCM circuit	With ignition switch ON (II): battery voltage With ignition switch OFF: about 0 V
5	BLK/YEL	IG1 (IGNITION SIGNAL)	Detects ignition signal	With ignition switch ON (II): battery voltage With ignition switch OFF: about 0 V
6	GRN/WHT	AFSHTCB2 (AIR FUEL RATIO (A/F) SENSOR HEATER CONTROL BANK 2)	Drives front A/F sensor heater (Bank 2, sensor 1)	With ignition switch ON (II): battery voltage With fully warmed up engine running: about 0 V or pulses
7	BLK/WHT	AFSHTCB1 (AIR FUEL RATIO (A/F) SENSOR HEATER CONTROL BANK 1)	Drives rear A/F sensor heater (Bank 1, sensor 1)	With ignition switch ON (II): battery voltage With fully warmed up engine running: about 0 V or pulses
8	GRN/RED	SO2SHTCB2 (SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) HEATER CONTROL BANK 2)	Drives front secondary HO2S heater (Bank 2, sensor 2)	With ignition switch ON (II): battery voltage With fully warmed up engine running: duty controlled
9	BLK/WHT	SO2SHTCB1 (SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) HEATER CONTROL BANK 1)	Drives rear secondary HO2S heater (Bank 1, sensor 2)	With ignition switch ON (II): battery voltage With fully warmed up engine running: duty controlled
10	BLK/YEL	VBSOL (POWER SOURCE FOR SOLENOID VALVES)	Power source for solenoid valve	With ignition switch ON (II): battery voltage With ignition switch OFF: about 0 V
11	WHT/BLU	ALTL (ALTERNATOR L SIGNAL)	Detects alternator L signal	With ignition switch ON (II): about 0 V With engine running: battery voltage
12	WHT/RED	ALTF (ALTERNATOR FR SIGNAL)	Detects alternator FR signal	With engine running: 0—5.0 V (depending on electrical load)
14	RED/GRN	PDSW (A/C PRESSURE SWITCH)	Detects A/C pressure switch signal	With A/C pressure switch ON: about 0 V With A/C pressure switch OFF: battery voltage

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Fig. 29: Identifying ECM/PCM Inputs And Outputs At Connector E (31P) (1 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Terminal number	Wire color	Terminal name	Description	Signal
15	BRN/WHT	IGPLS6 (No. 6 IGNITION COIL PULSE)	Drives No. 6 ignition coil	With ignition switch ON (II): about 0 V With engine running: pulses
16	BLK/RED	IGPLS5 (No. 5 IGNITION COIL PULSE)	Drives No. 5 ignition coil	
17	BRN	IGPLS4 (No. 4 IGNITION COIL PULSE)	Drives No. 4 ignition coil	
18	WHT/BLU	IGPLS3 (No. 3 IGNITION COIL PULSE)	Drives No. 3 ignition coil	
19	BLU/RED	IGPLS2 (No. 2 IGNITION COIL PULSE)	Drives No. 2 ignition coil	
20	YEL/GRN	IGPLS1 (No. 1 IGNITION COIL PULSE)	Drives No. 1 ignition coil	
21	BRN	INJ1 (No. 1 INJECTOR)	Drives No. 1 injector	At idle: duty controlled With ignition switch ON (II): battery voltage
22	GRN/YEL	VTS (ROCKER ARM OIL CONTROL SOLENOID (VTEC SOLENOID VALVE))	Drives rocker arm oil control solenoid (VTEC solenoid valve)	At idle: about 0 V
23	BLU/BLK	VTPSW (ROCKER ARM OIL PRESSURE SWITCH (VTEC OIL PRESSURE SWITCH))	Detects rocker arm oil pressure switch (VTEC oil pressure switch signal)	With engine at low speed: about 0 V With engine at high speed: battery voltage
24	WHT/GRN	ALTC (ALTERNATOR CONTROL)	Sends alternator control signal	With engine running and fully warmed up: battery voltage (depending on electrical load)
25	GRN	SEFD (THROTTLE ACTUATOR CONTROL SERIAL SIGNAL)	Sends throttle actuator control serial signal	
26	BLU	SEDF (THROTTLE ACTUATOR CONTROL SERIAL SIGNAL)	Detects throttle actuator control serial signal	
27	WHT/BLU	INJ6 (No. 6 INJECTOR)	Drives No. 6 injector	At idle: duty controlled With ignition switch ON (II): battery voltage
28	BLK/RED	INJ5 (No. 5 INJECTOR)	Drives No. 5 injector	
29	YEL	INJ4 (No. 4 INJECTOR)	Drives No. 4 injector	
30	BLU	INJ3 (No. 3 INJECTOR)	Drives No. 3 injector	
31	RED	INJ2 (No. 2 INJECTOR)	Drives No. 2 injector	

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Fig. 30: Identifying ECM/PCM Inputs And Outputs At Connector E (31P) (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PGM-FI SYSTEM

The programmed fuel injection (PGM-FI) system is a sequential multiport fuel injection system.

Air Conditioning (A/C) Compressor Clutch Relay

When the ECM receives a demand for cooling from the A/C system, it delays the compressor from being energized and enriches the mixture to assure smooth transition to the A/C mode.

Air Fuel Ratio (A/F) Sensor

The A/F sensor operates over a wide air/fuel range. The A/F sensor is installed upstream of the TWC, and sends signals to the ECM/PCM which varies the duration of fuel injection accordingly.

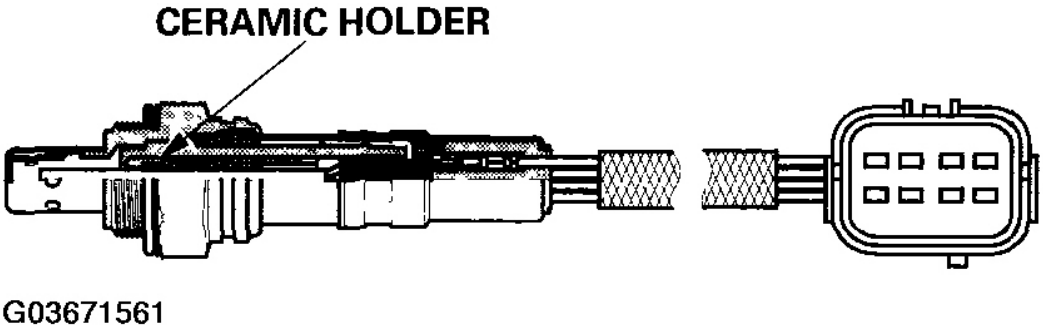


Fig. 31: Identifying A/F Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Barometric Pressure (BARO) Sensor

The BARO sensor is inside the ECM/PCM. It converts atmospheric pressure into a voltage signal that is used by the ECM/PCM to modify the basic duration of the fuel injection discharge.

Camshaft Position (CMP) Sensor

The CMP sensor input is used by the ECM/PCM to determines ignition timing at start up (cranking) and when crank angle is abnormal.

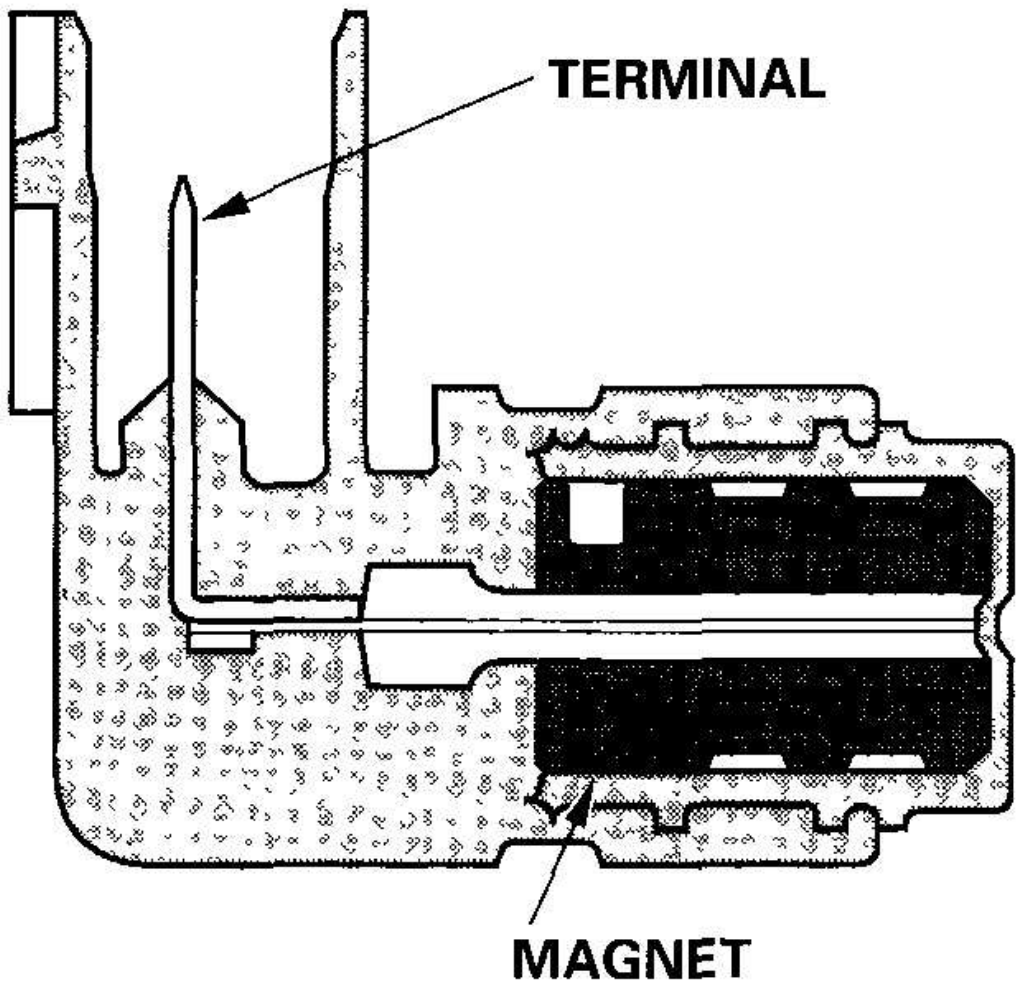


Fig. 32: Identifying CMP Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Crankshaft Position (CKP) Sensor

This CKP sensor detects crankshaft speed and is used by the ECM/PCM to determine ignition timing and timing for fuel injection of each cylinder as well as detecting engine misfire.

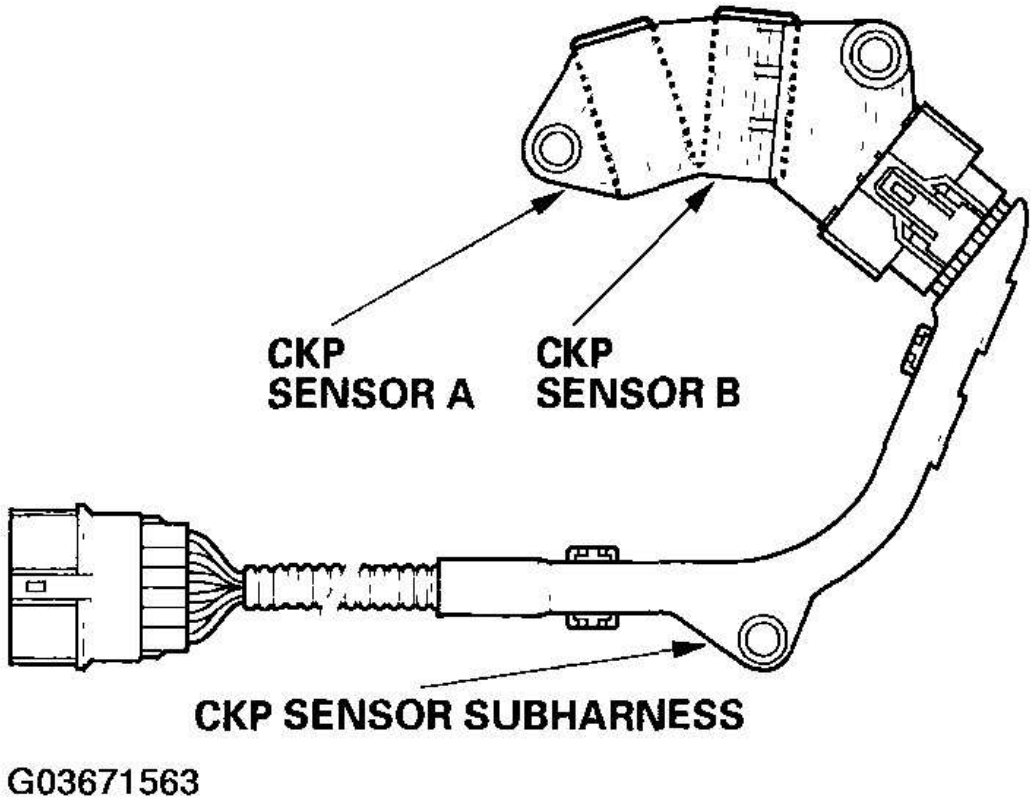


Fig. 33: Identifying CKP Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Engine Coolant Temperature (ECT) Sensor (2005-2007 models: Engine Coolant Temperature (ECT) Sensor 1)

The ECT sensor (2005-2007 models: ECT sensor 1) is a temperature dependent resistor (thermistor). The resistance of the thermistor decreases as the engine coolant temperature increases.

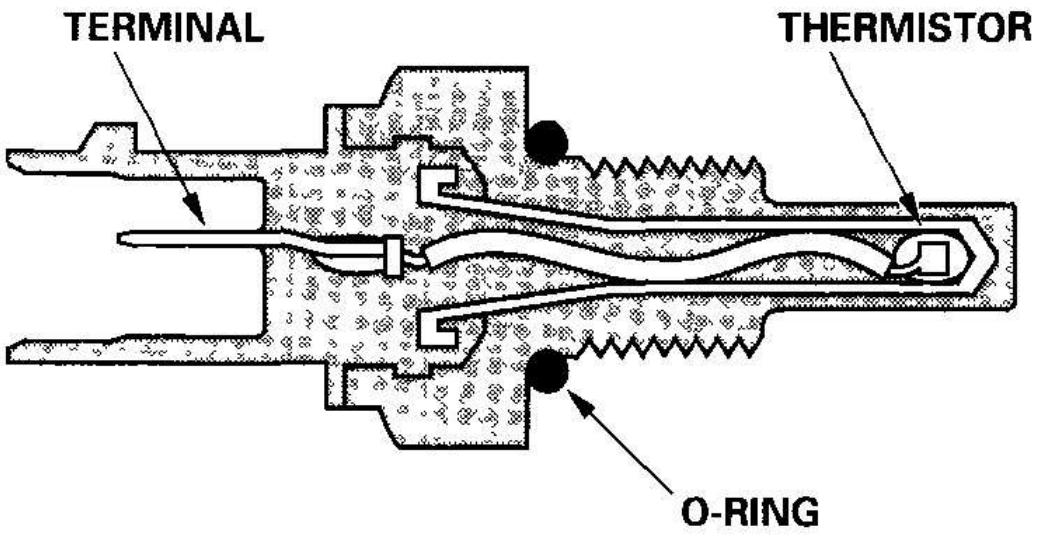


Fig. 34: Identifying ECT Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Ignition Timing Control

The ECM/PCM contains the memory for basic ignition timing at various engine speeds and manifold absolute pressure. It also adjusts the timing according to engine coolant temperature.

Injector Timing and Duration

The ECM/PCM contains the memory for basic discharge duration at various engine speeds and manifold pressures. The basic discharge duration, after being read out from the memory, is further modified by signals sent from various sensors to obtain the final discharge duration.

By monitoring long term fuel trim, the ECM/PCM detects long term malfunctions in the fuel system and sets a diagnostic trouble code (DTC).

Input Shaft (Mainshaft) Speed Sensor

This sensor detects mainshaft speed.

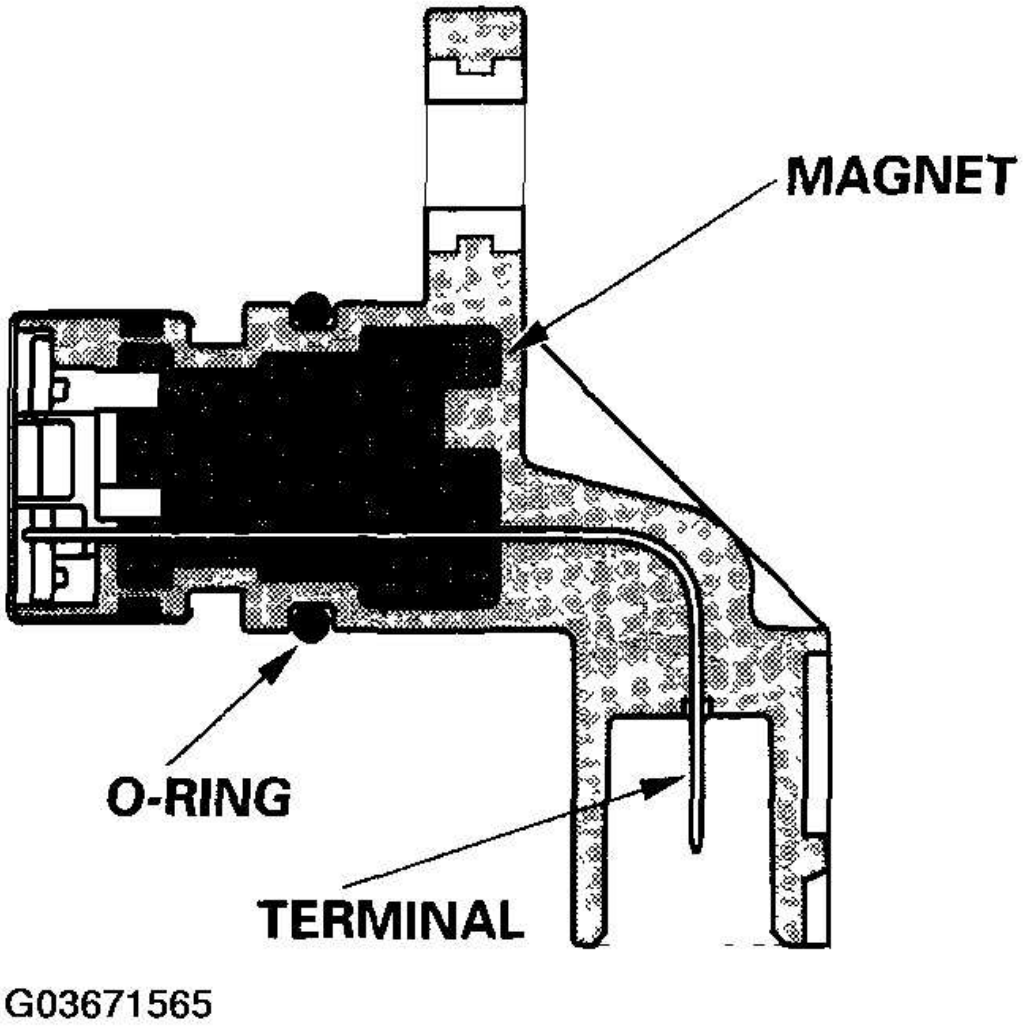


Fig. 35: Identifying Input Shaft (Mainshaft) Speed Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Intake Air Temperature (IAT) Sensor

The IAT sensor is a temperature dependent resistor (thermistor). The resistance of the thermistor decreases as the intake air temperature increases.

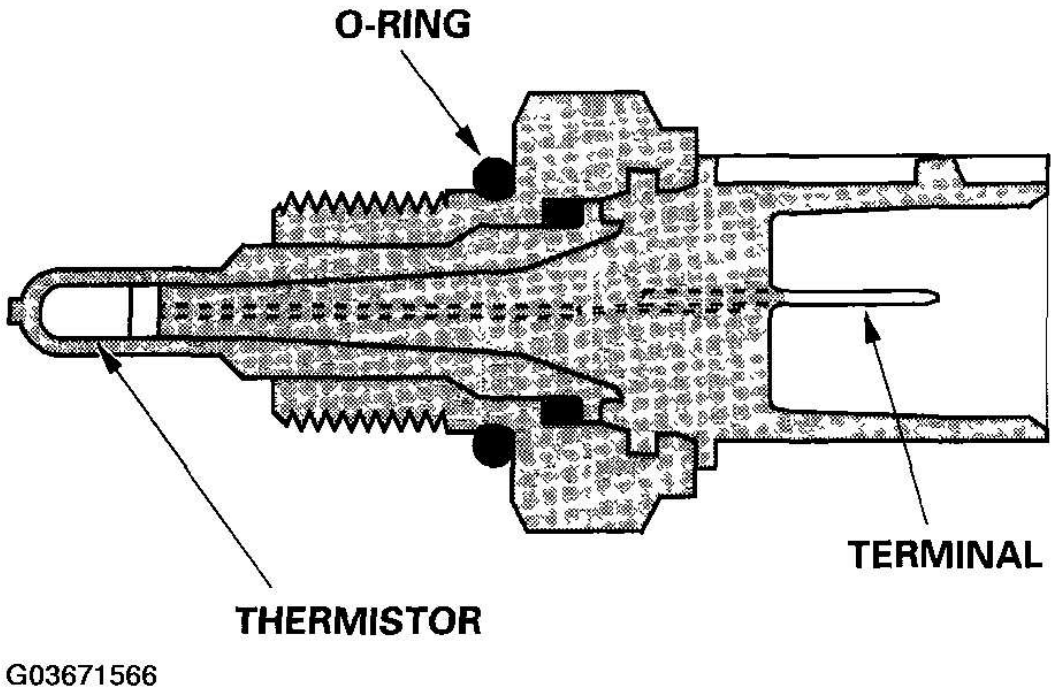


Fig. 36: Identifying IAT Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Knock Sensor

The knock control system adjusts the ignition timing to minimize knock.

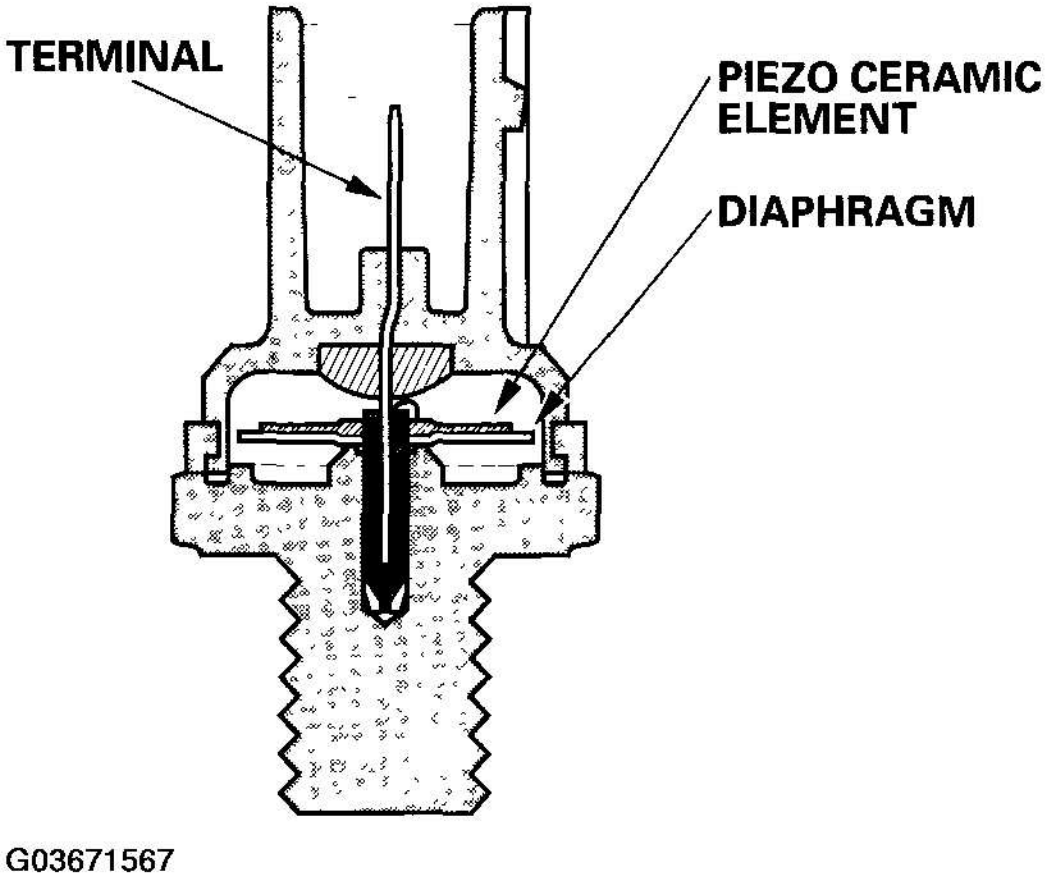


Fig. 37: Identifying Knock Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Malfunction Indicator Lamp (MIL) Indication (In relation to Readiness Codes)

The vehicle has certain "readiness codes" that are part of the on-board diagnostics for the emissions systems. If the vehicle's battery has been disconnected or gone dead, if the DTCs have been cleared, or if the ECM/PCM has been reset, these codes are reset. In some states, part of the emissions testing is to make sure these codes are set to complete. If all of them are not set to complete, the vehicle may fail the test, or the test cannot be finished.

To check if the readiness codes are set to complete, turn the ignition switch ON (II), but do not start the engine. The MIL will come on for 15-20 seconds. If it then goes

off, the readiness codes are complete. If it flashes five times, one or more readiness codes are not complete. To set each code, drive the vehicle or run the engine as described in the procedures (see **HOW TO SET READINESS CODES**).

Manifold Absolute Pressure (MAP) Sensor

The MAP sensor converts manifold absolute pressure into electrical signals to the ECM/PCM.

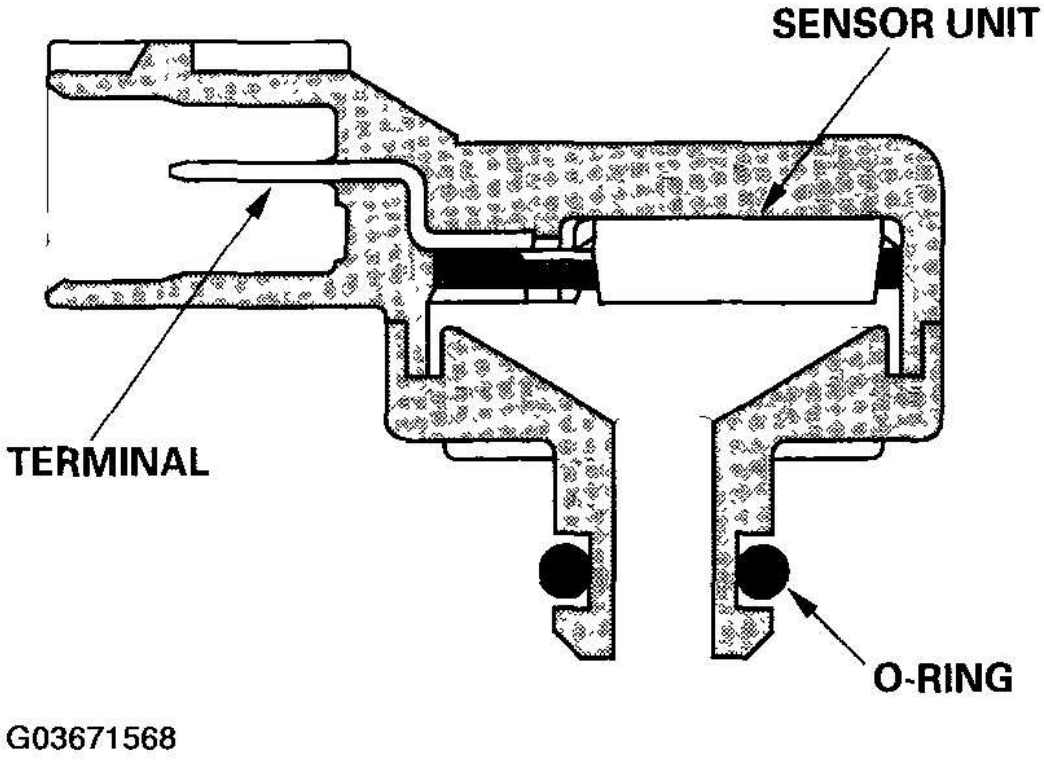


Fig. 38: Identifying MAP Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Output Shaft (Countershaft) Speed Sensor

This sensor detects countershaft speed.

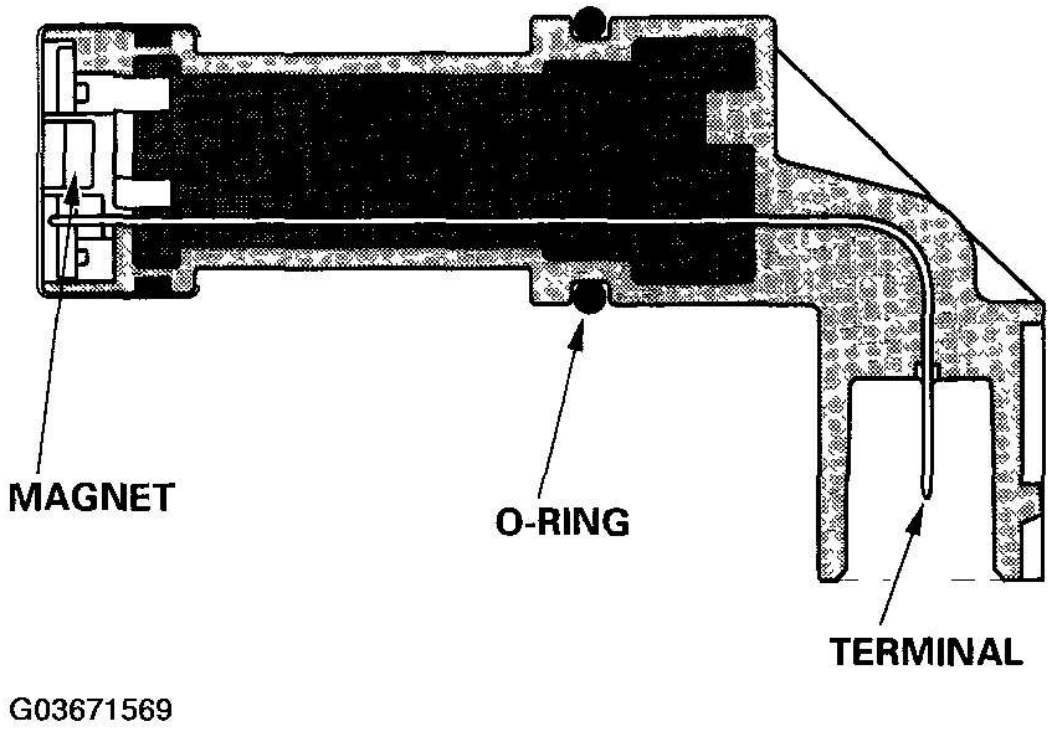


Fig. 39: Identifying Output Shaft (Countershaft) Speed Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Secondary Heated Oxygen Sensor (Secondary HO2S)

The secondary HO2S detects the oxygen content in the exhaust gas downstream of the warm up three way catalytic converter (WU-TWC), and sends signals to the ECM/PCM. To stabilize its output, the sensor has an internal heater. The ECM/PCM compares the HO2S output with the A/F sensor output to determine catalyst efficiency. The secondary HO2S is on the WU-TWC.

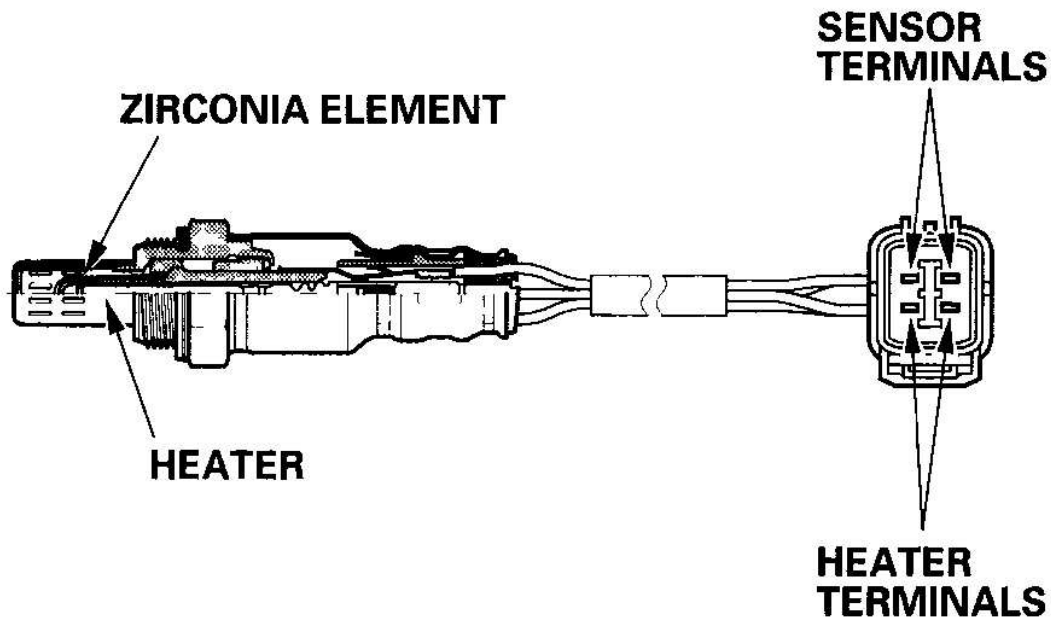


Fig. 40: Identifying Secondary HO2S
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Electronic Throttle Control System

The throttle is electronically controlled by the electronic throttle control system. Refer to **Electronic Throttle Control System Diagram** .

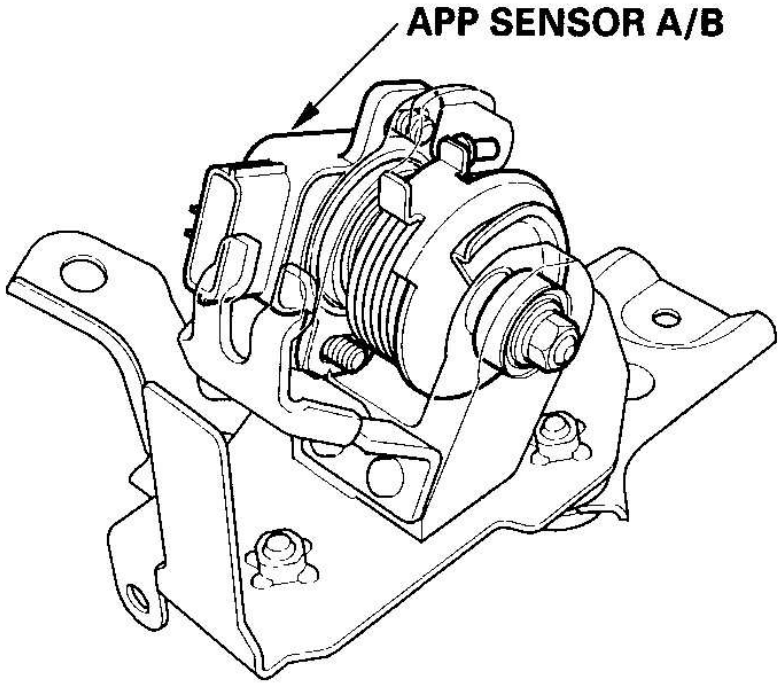
Idle control: When the engine is idling, the ECM/PCM controls the throttle actuator to maintain the proper idle speed according to engine loads.

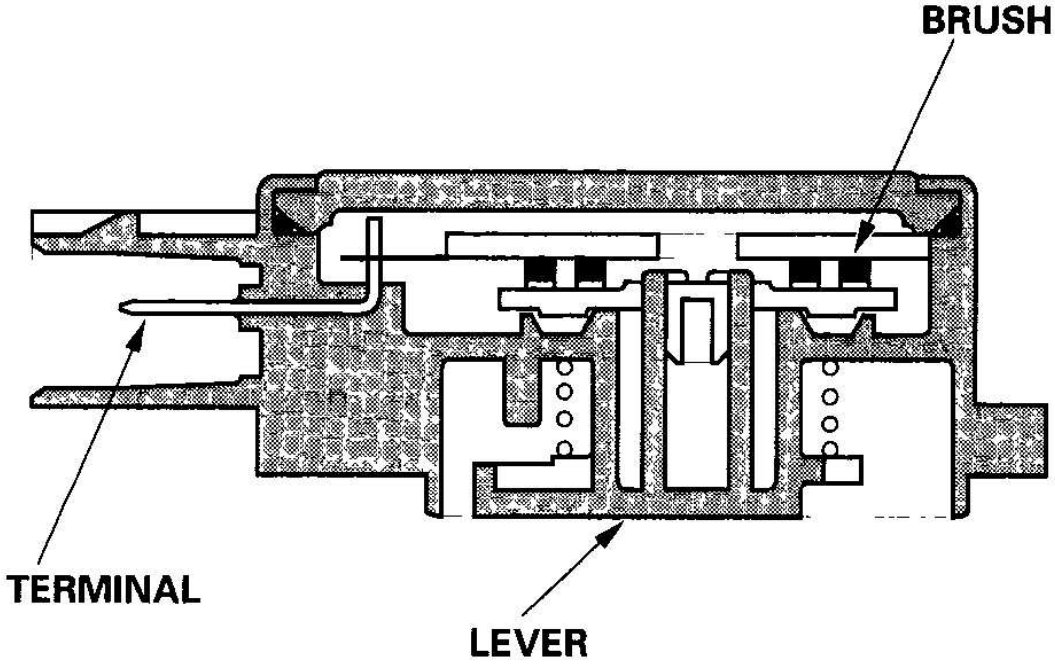
Acceleration control: When the accelerator pedal is pressed, the ECM/PCM opens the throttle valve depending on the accelerator pedal position (APP) sensor signal.

Cruise control: The ECM/PCM controls the throttle actuator to maintain set speed when the cruise control is operating. The throttle actuator takes the place of the cruise control actuator.

Accelerator Pedal Position (APP) Sensor

As the accelerator pedal position changes, the sensor varies the signal voltage to the ECM/PCM.





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Fig. 41: Identifying APP Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Throttle Body

The throttle body is a single-barrel side draft type. The lower portion of the throttle valve is heated by engine coolant from the cylinder head to prevent icing of the throttle plate.

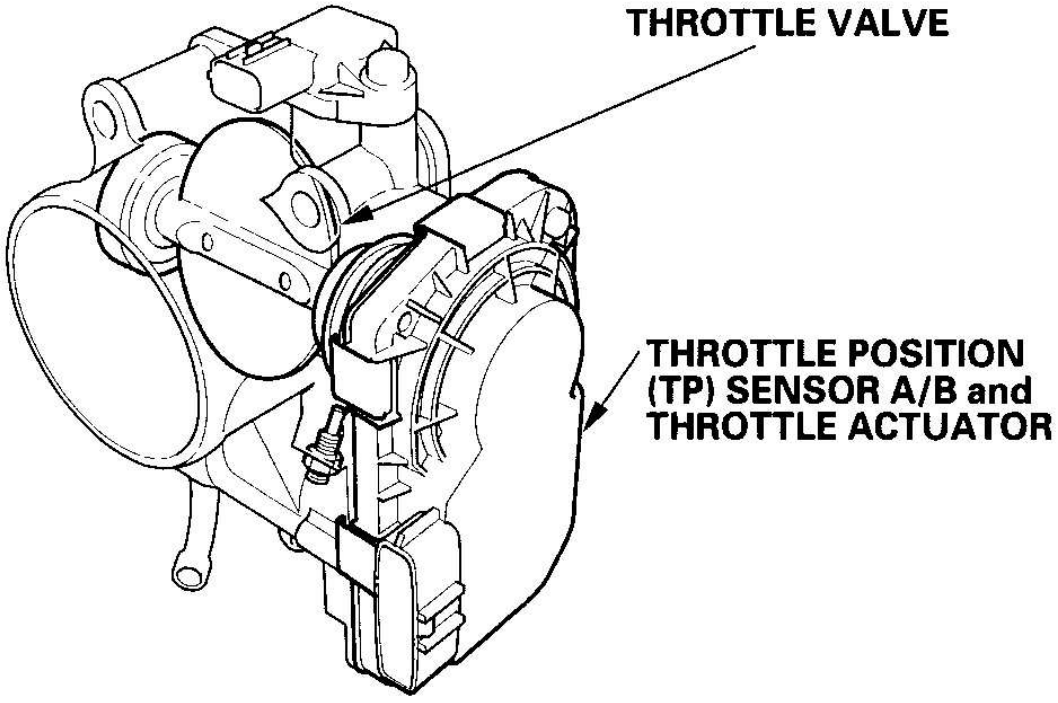


Fig. 42: Identifying Throttle Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

IDLE CONTROL SYSTEM

When the engine is cold, the A/C compressor is on, the transmission is in gear, the brake pedal is pressed, the power steering load is high, or the alternator is charging, the ECM/PCM controls current to the throttle actuator to maintain the correct idle speed.

Brake Pedal Position Switch

The brake pedal position switch signals the ECM/PCM when the brake pedal is pressed.

Power Steering Pressure (PSP) Switch

The PSP switch signals the ECM/PCM when the power steering load is high.

FUEL SUPPLY SYSTEM

Fuel Cutoff Control

During deceleration with the throttle valve closed, current to the injectors is cut off to improve fuel economy at engine speeds over 850 rpm (M/T: 950 rpm). Fuel cutoff control also occurs when the engine speed exceeds 6,900 rpm, regardless of the position of the throttle valve, to protect the engine from over-revving. When the vehicle is stopped, the ECM/PCM cuts the fuel at engine speeds over 5,000 rpm. Engine speed of fuel cut is lower on a cold engine.

Fuel Pump Control

When the ignition is turned on, the ECM/PCM grounds PGM-FI main relay 2 (FUEL PUMP) which feeds current to the fuel pump for 2 seconds to pressurize the fuel system. With the engine running, the ECM/PCM grounds PGM-FI main relay 2 (FUEL PUMP) and feeds current to the fuel pump. When the engine is not running and the ignition is on, the ECM/PCM cuts ground to PGM-FI main relay 2 (FUEL PUMP) which cuts current to the fuel pump.

PGM-FI Main Relay 1 and 2

PGM-FI main relay 1 (FI MAIN) is energized whenever the ignition switch is ON (II) to supply battery voltage to the ECM/PCM, power to the injectors, and power for PGM-FI main relay 2 (FUEL PUMP). PGM-FI main relay 2 (FUEL PUMP) is energized to supply power to the fuel pump for 2 seconds when the ignition switch is turned ON (II), and when the engine is cranking or running.

CATALYTIC CONVERTER SYSTEM

Warm Up/Three Way Catalytic Converter (WU-TWC) and Three Way Catalytic Converter (TWC)

The WU-TWC/TWC converts hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) in the exhaust gas to carbon dioxide (CO_2), nitrogen (N_2), and water vapor.

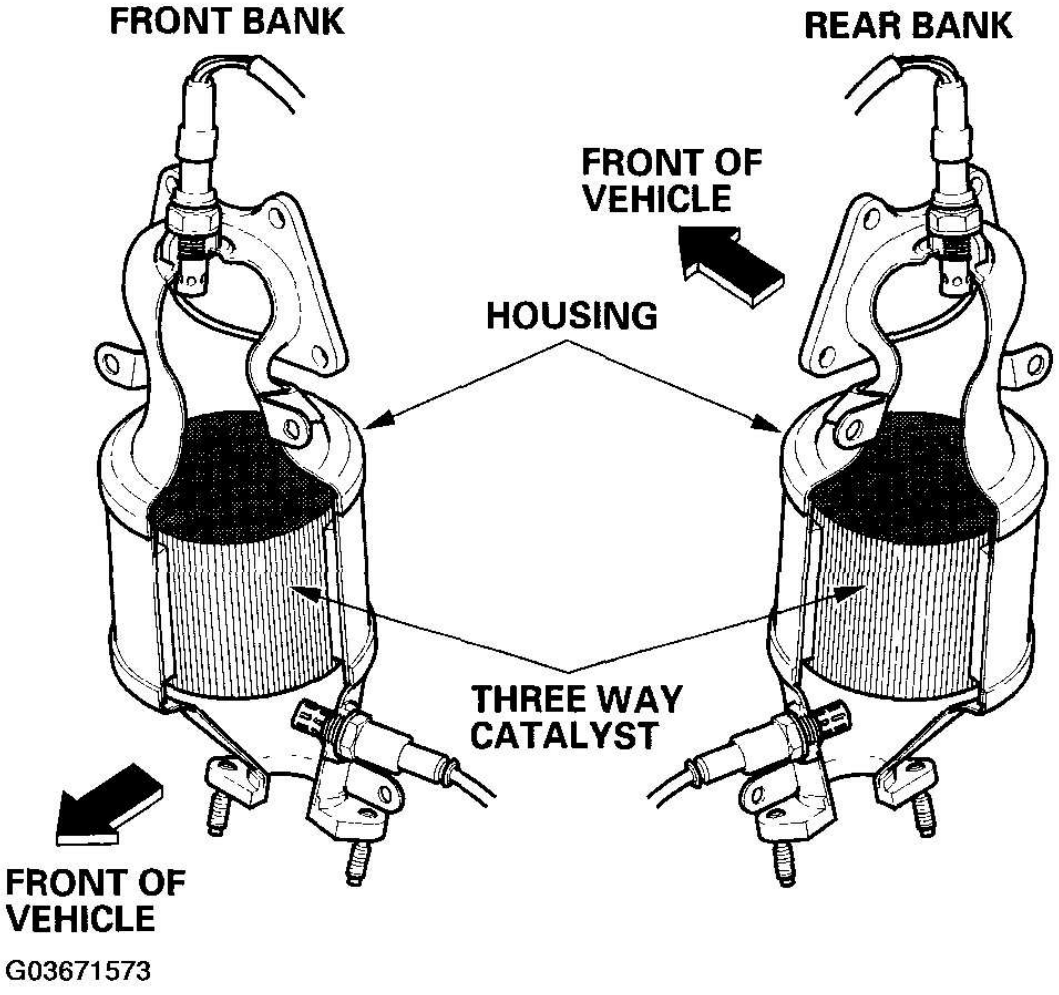


Fig. 43: Identifying Catalytic Converter System (WU-TWC)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

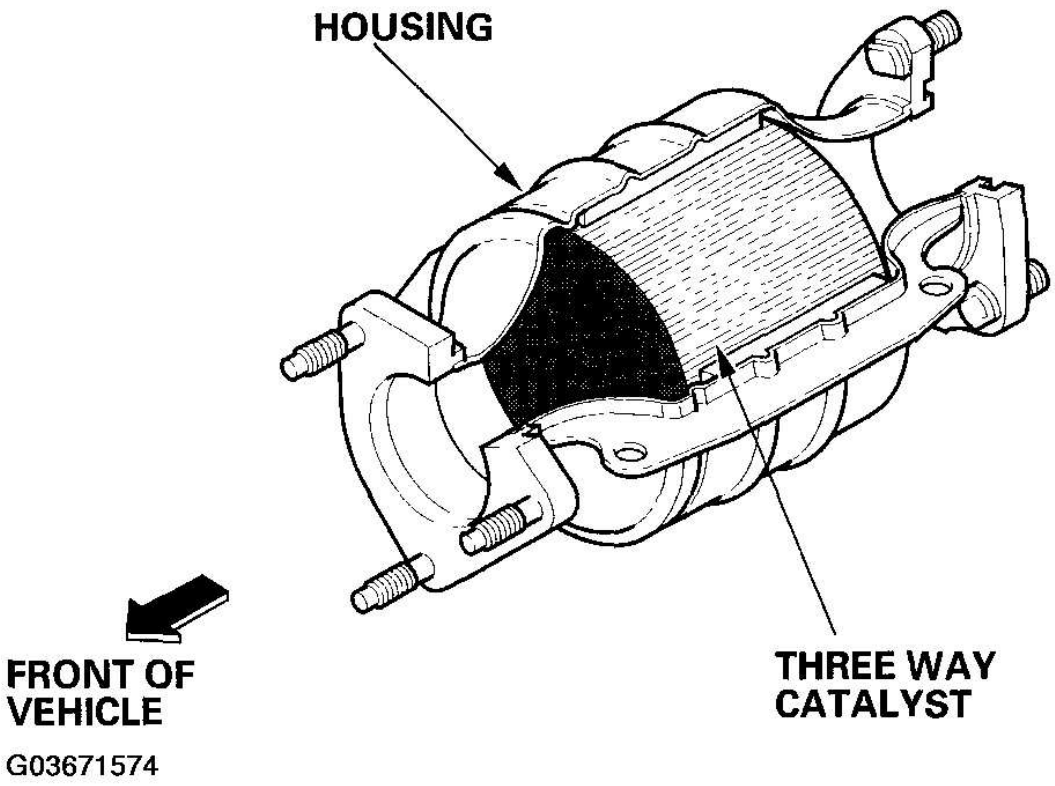


Fig. 44: Identifying Catalytic Converter System (TWC)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EXHAUST GAS RECIRCULATION (EGR) SYSTEM

Refer to the **Exhaust Gas Recirculation (EGR) System Diagram** .

EGR Valve

The EGR valve lowers peak combustion temperatures and reduces oxides of nitrogen emissions (NOx) by recirculating exhaust gas through the intake manifold and into the combustion chambers.

POSITIVE CRANKCASE VENTILATION (PCV) SYSTEM

The PCV valve prevents blow-by gasses from escaping into the atmosphere by venting them into the intake manifold.

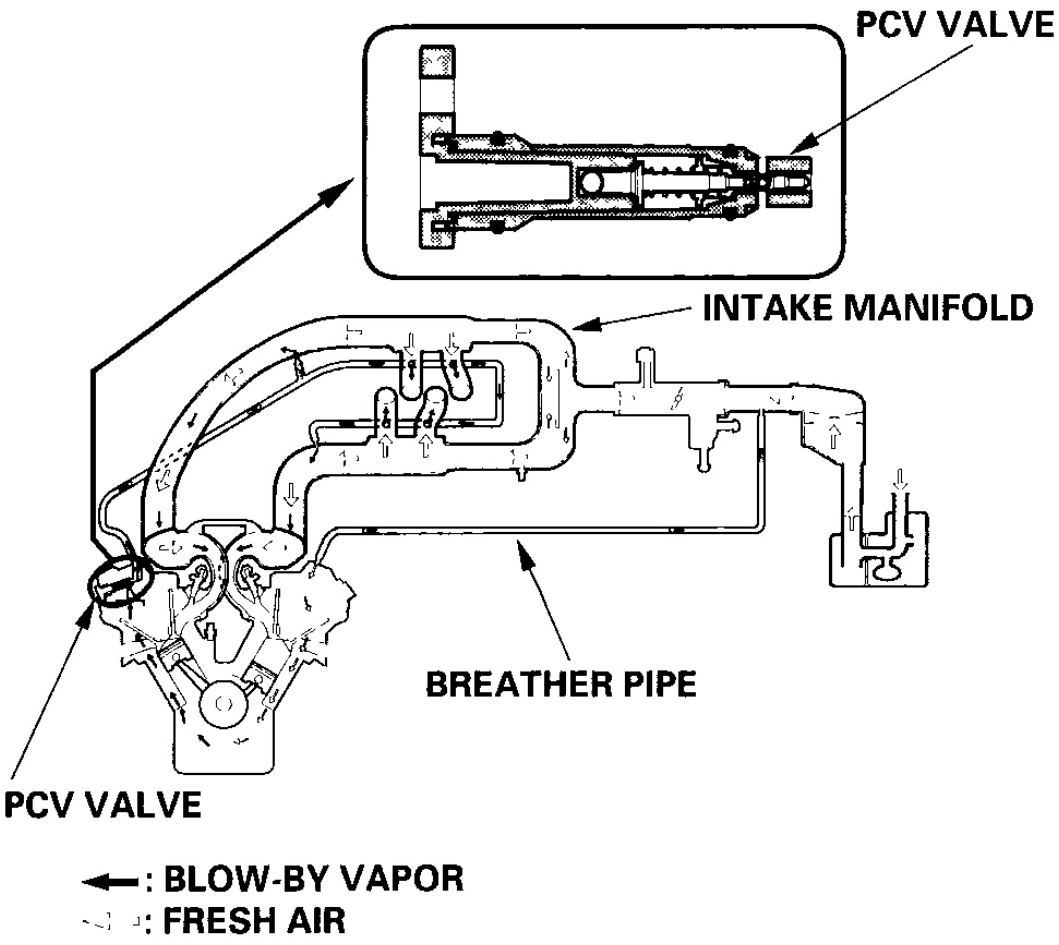


Fig. 45: Identifying PCV System
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EVAPORATIVE EMISSION (EVAP) CONTROL SYSTEM

Refer to the **Evaporative Emission (EVAP) Control Diagram** .

EVAP Canister

The EVAP canister temporarily stores fuel vapor from the fuel tank until it can be purged from the EVAP canister into the engine and burned.

EVAP Canister Purge Valve

When the engine coolant temperature is below 140°F (60°C), the ECM/PCM turns off the EVAP canister purge valve which cuts vacuum to the EVAP canister.

Fuel Tank Pressure (FTP) Sensor

The FTP sensor converts fuel tank absolute pressure into an electrical input to the ECM/PCM.

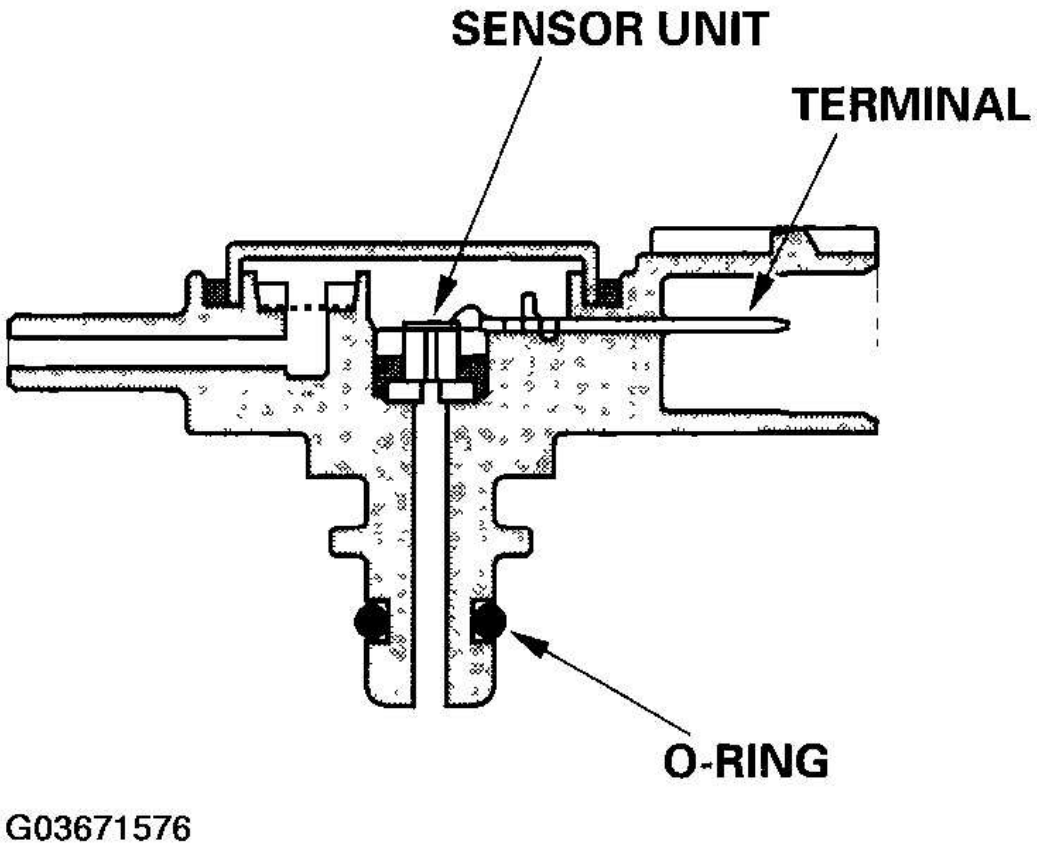


Fig. 46: Identifying FTP Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EVAP Canister Vent Shut Valve

The EVAP canister vent shut valve is on the EVAP canister.

The EVAP canister vent shut valve controls the venting of the EVAP canister.

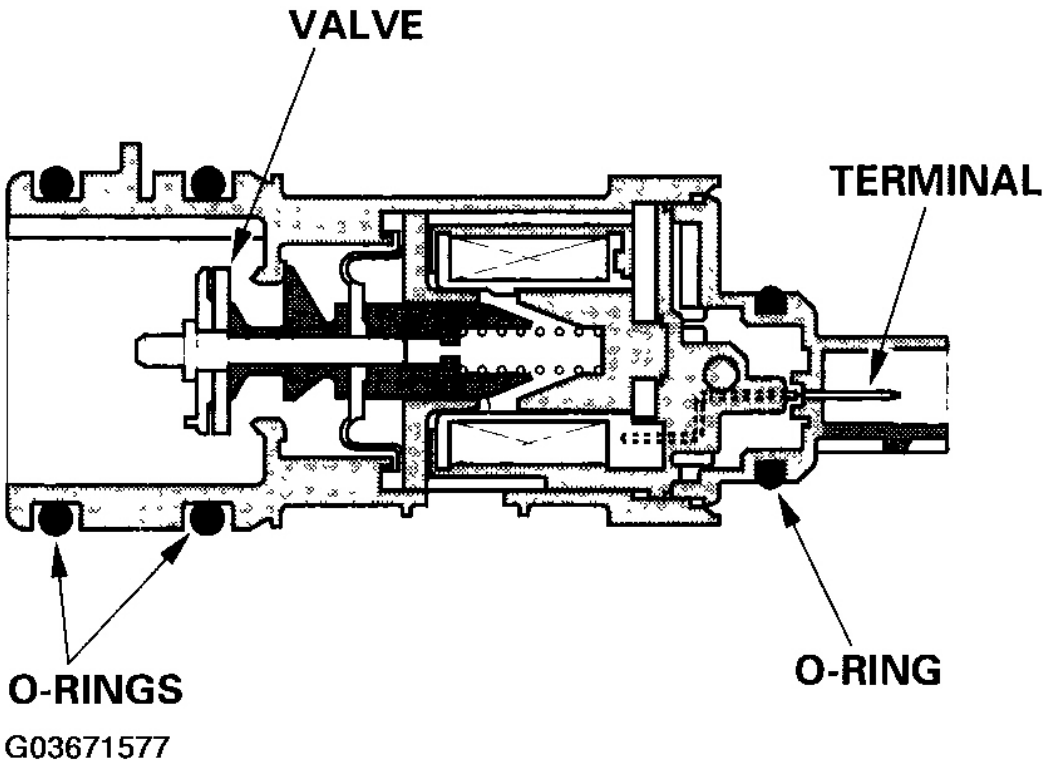


Fig. 47: Identifying EVAP Canister Vent Shut Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FUEL CAP WARNING MESSAGE

The ECM/PCM detects whether the fuel fill cap is loose or missing under certain conditions and alerts the driver by showing the information in the odometer/ outside temperature display. If the ECM/PCM detects a small volume leak, the MIL may come on during the second drive cycle and store a DTC.

First drive cycle

During the first drive cycle after a cold start, the ECM/ PCM alerts the driver to check the fuel fill cap by showing a "CHECK FUEL CAP" message in the odometer/outside temperature display (A), and it stores Temporary DTC P0457

"Evaporative Emission (EVAP) System Leak Detected/Fuel Cap Loose or Missing". Tightening the fuel cap does not make the message go off immediately.

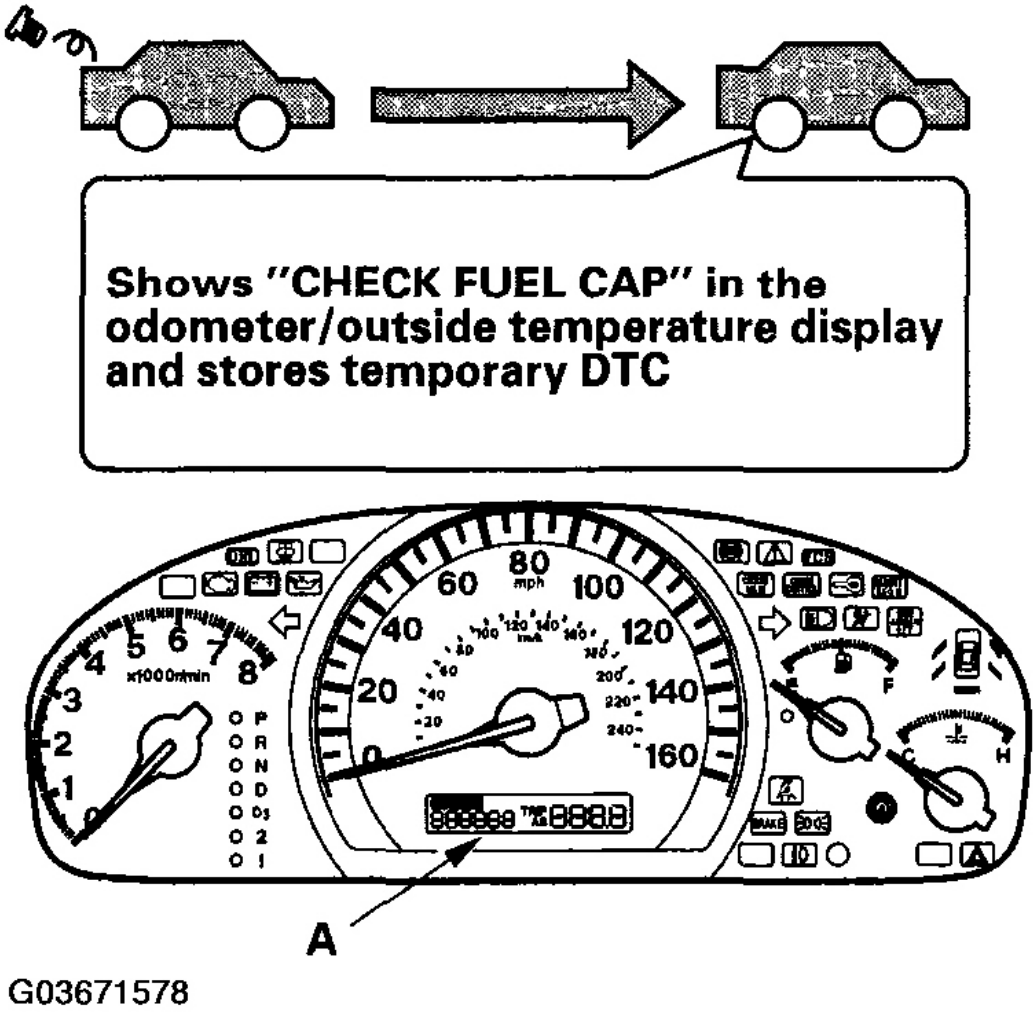


Fig. 48: Identifying Odometer/Outside Temperature Display
Courtesy of AMERICAN HONDA MOTOR CO., INC.

To make the message go off (with the HDS)

Procedure

1. Tighten the fuel fill cap three clicks (2003-2004 models), or until it clicks

(2005-2007 models).

2. Clear the Temporary DTC with the HDS.
3. Verify there is no leak by doing the EVAP FUNCTION TEST in the INSPECTION MENU with the HDS.

To make the message go off (without the HDS)

Procedure

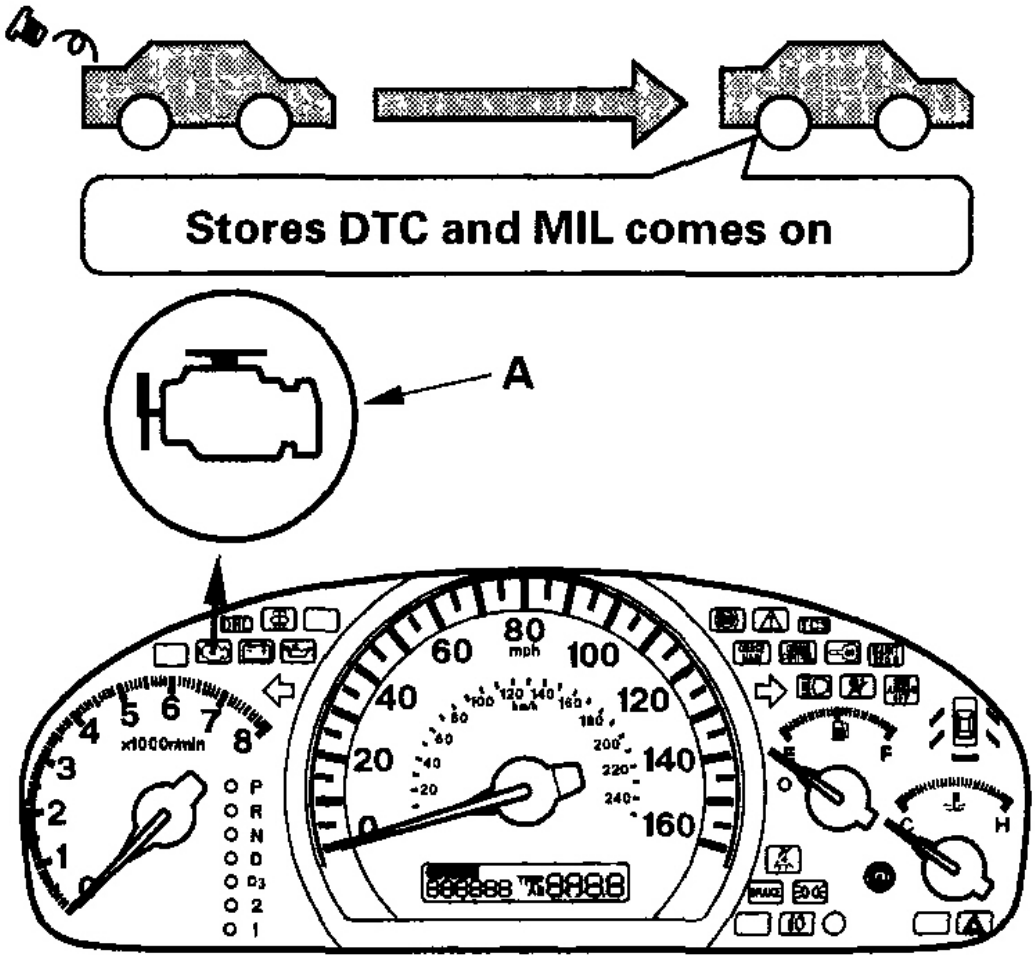
1. Tighten the fuel fill cap three clicks (2003-2004 models), or until it clicks (2005-2007 models).
2. Turn the ignition switch OFF.
3. Start the engine, and drive at a steady speed over 28 mph (45 km/h), without moving the accelerator pedal, for about 1 minute. Do step 2 and 3 several times.

Second drive cycle

During the second drive cycle after a cold start, if the fuel fill cap is still loose or missing, the ECM/PCM alerts the driver to check the fuel fill cap by showing a "CHECK FUEL CAP" message in the odometer/outside temperature display as same as the first drive cycle. Tightening the fuel cap does not make the message go off immediately.

Third drive cycle

During the third drive cycle after a cold start, if the fuel fill cap is still loose or missing, the ECM/PCM stores DTC P0457 "Evaporative Emission (EVAP) System Leak Detected/Fuel Cap Loose or Missing". The malfunction indicator lamp (MIL) (A) comes on, and the "CHECK FUEL CAP" message goes off.



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Fig. 49: Identifying MIL
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ELECTRONIC THROTTLE CONTROL SYSTEM DIAGRAM

The electronic throttle control system consists of the throttle actuator, throttle position (TP) sensor A/B, accelerator pedal position (APP) sensor A/B, throttle actuator control module, and the ECM/PCM. The throttle is electronically controlled by this system.

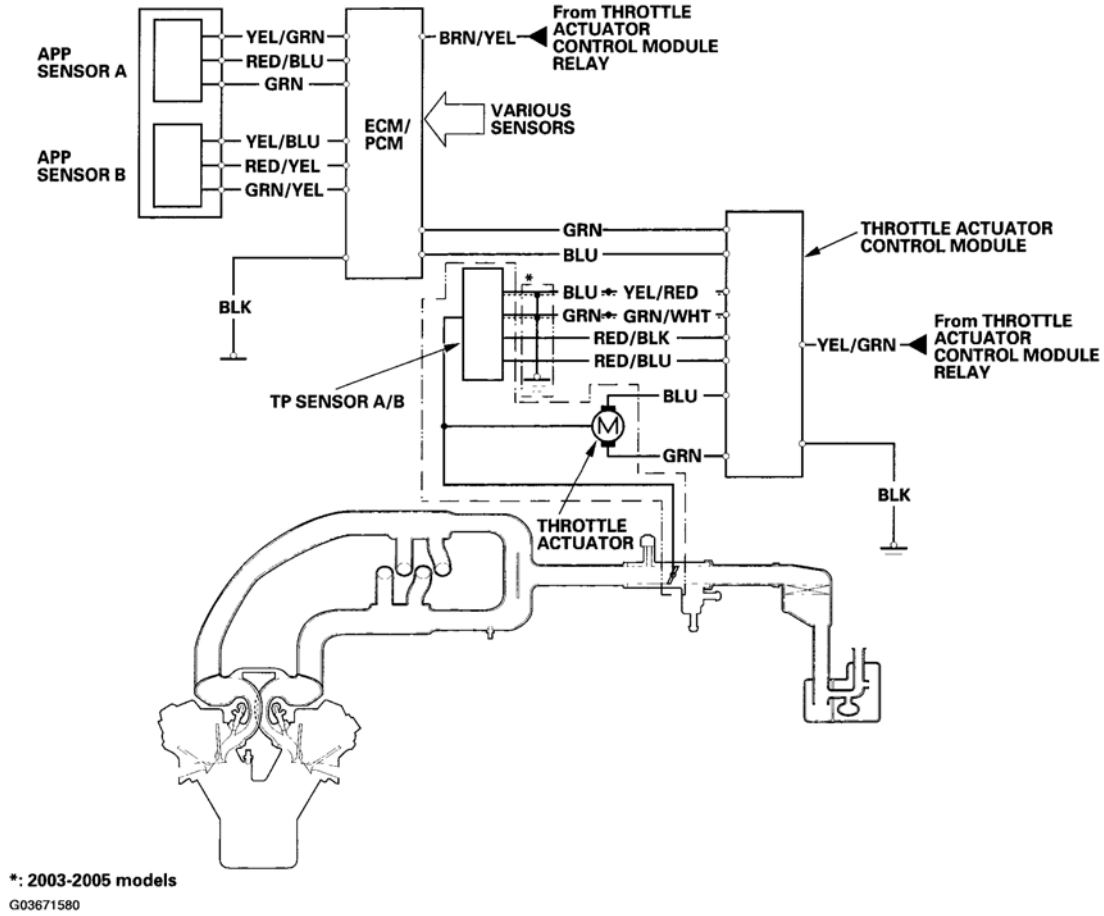
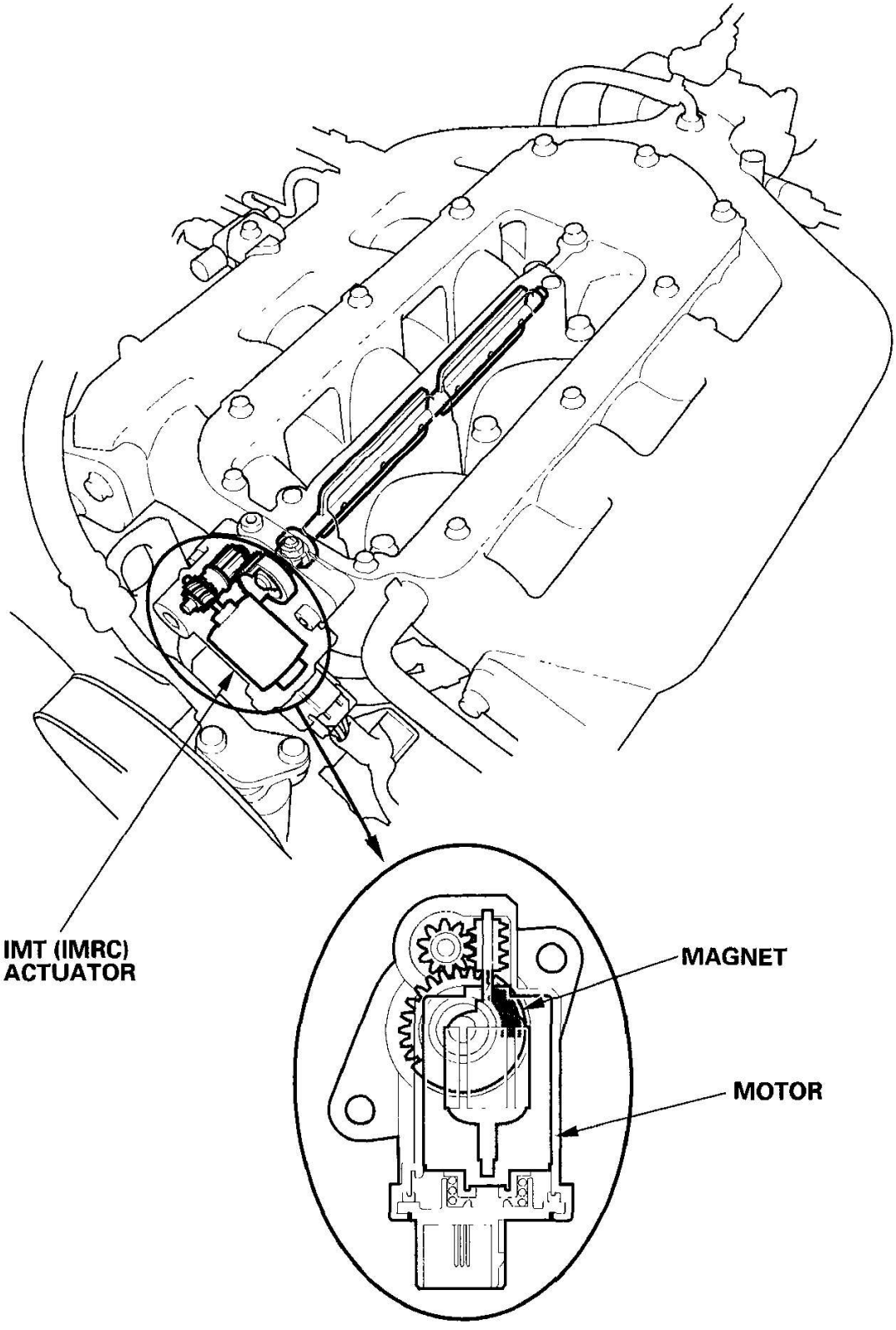


Fig. 50: Identifying Electronic Throttle Control System Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INTAKE MANIFOLD TUNING (IMT) (INTAKE MANIFOLD RUNNER CONTROL (IMRC)) SYSTEM

Engine power is achieved by closing and opening the intake manifold tuning (IMT) (intake manifold runner control (IMRC)) actuator. When the valve is closed, there is high torque at low engine speed. When the valve is open, there is high torque at high engine speed.

The intake manifold tuning (IMT) (intake manifold runner control (IMRC)) valve actuator has a sensor that detects the IMT (IMRC) valve position and sends it to the ECM/PCM.



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Fig. 51: Identifying IMT (Intake Manifold Runner Control (IMRC)) System
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EXHAUST GAS RECIRCULATION (EGR) SYSTEM DIAGRAM

The EGR system reduces oxides of nitrogen (NOx) emissions by recirculating exhaust gas through the EGR valve and the intake manifold into the combustion chambers. The ECM/PCM memory includes the ideal EGR valve position for varying operating conditions.

The EGR valve position sensor detects the amount of EGR valve lift and sends it to the ECM/PCM. The ECM/PCM then compares it with the ideal lift in its memory (based on signals sent from other sensors). If there is any difference between the two, the ECM/PCM cuts current to the EGR valve.

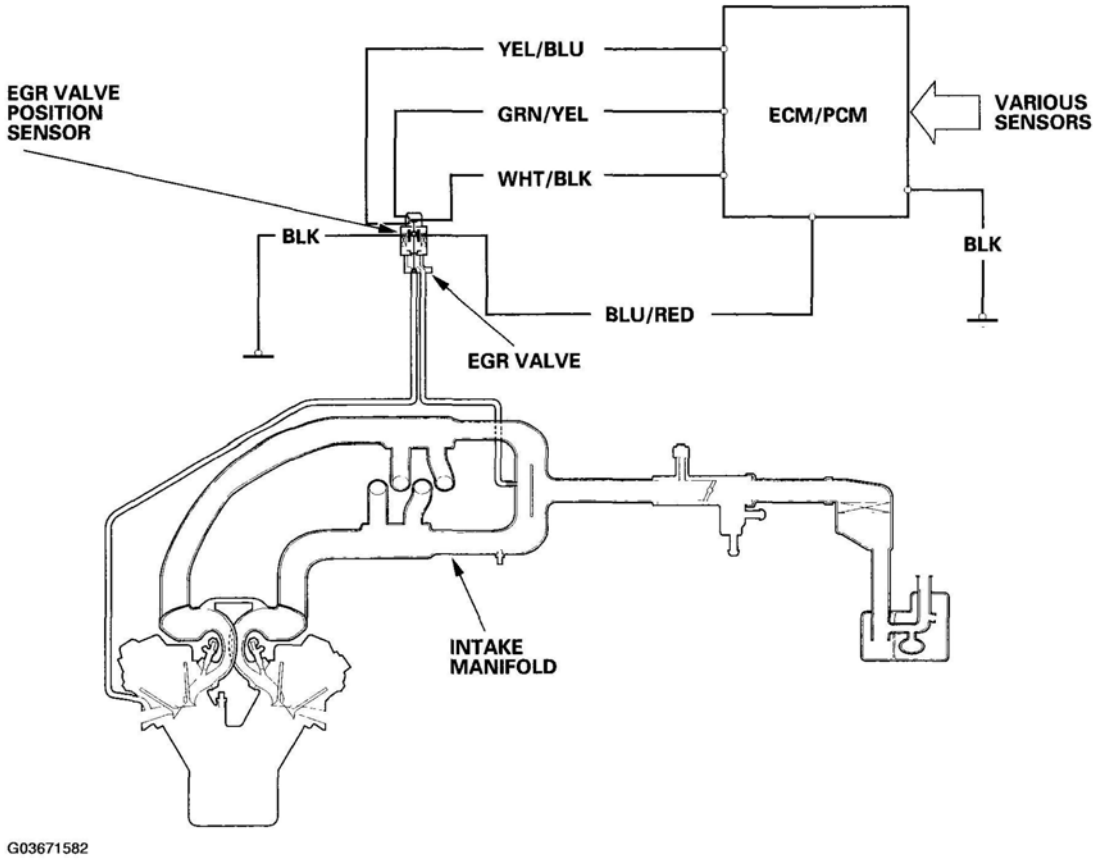


Fig. 52: Identifying EGR System Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EVAPORATIVE EMISSION (EVAP) CONTROL DIAGRAM

The EVAP controls minimize the amount of fuel vapor escaping to the atmosphere. Vapor from the fuel tank is temporarily stored in the EVAP canister until it can be purged from the canister into the engine and burned.

- The EVAP canister is purged by drawing fresh air through it and into a port on the intake manifold.

  The purging vacuum is controlled by the EVAP canister purge valve, which operates whenever engine coolant temperature is above 140 °F (60 °C).

- During refueling, the fuel tank vapor control valve opens with the pressure in the fuel tank, and feeds the fuel vapor to the EVAP canister.

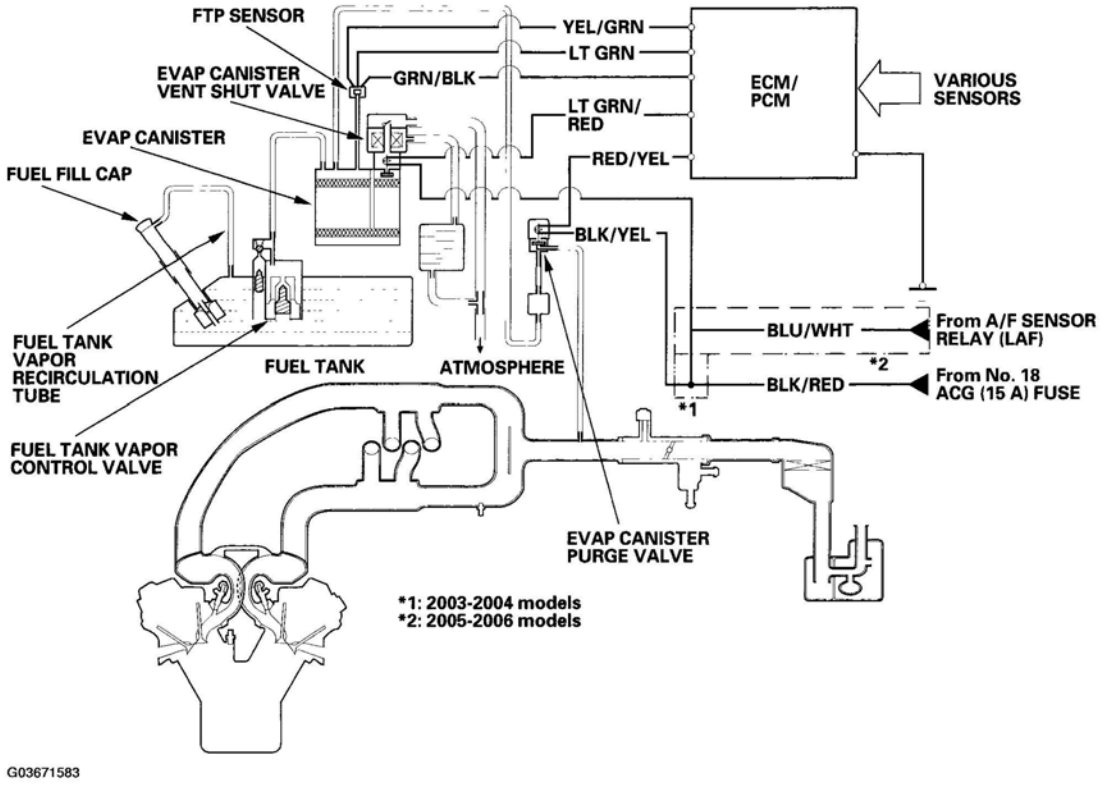


Fig. 53: Identifying EVAP Control Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM/PCM CIRCUIT DIAGRAM

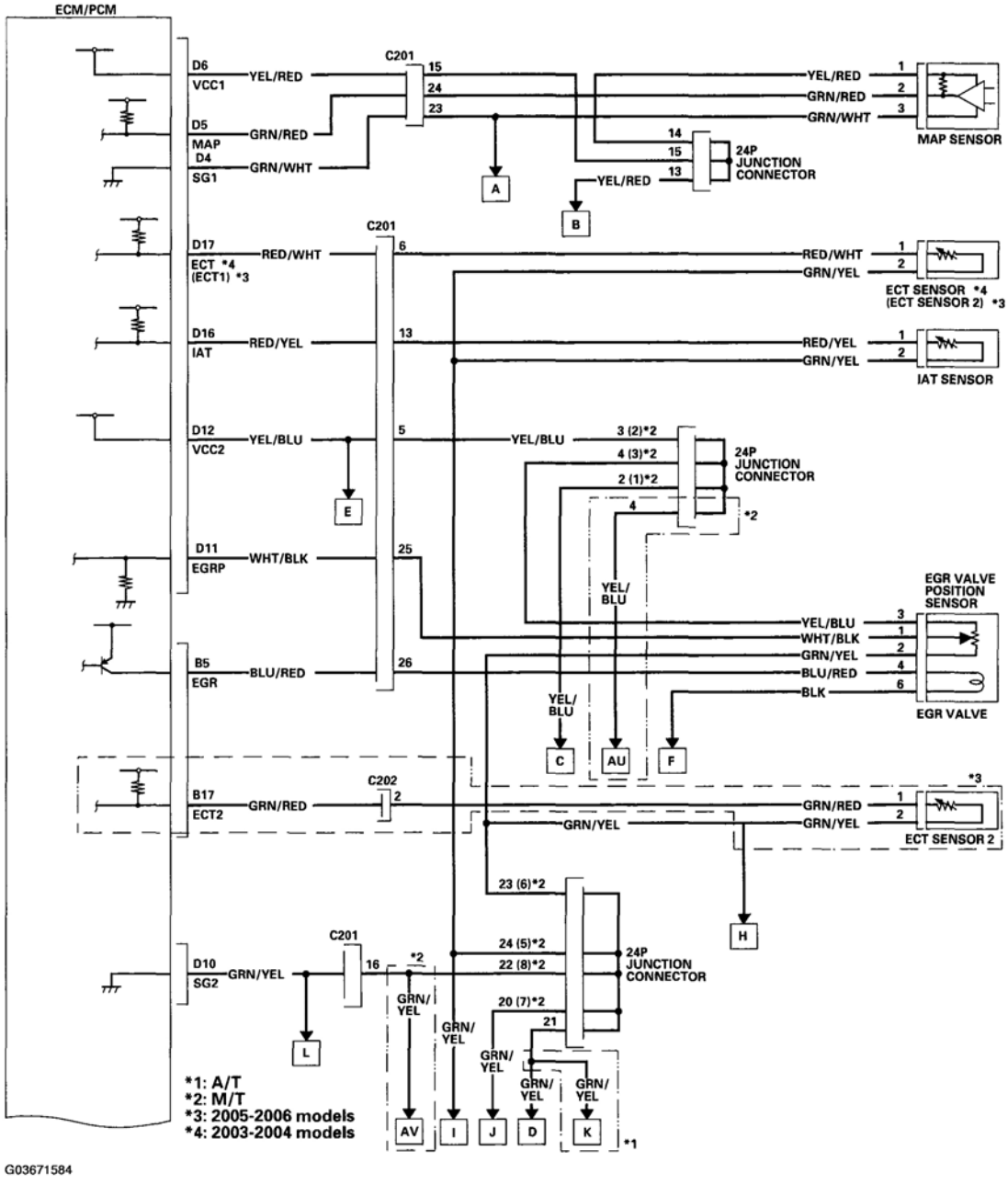


Fig. 54: ECM/PCM Circuit Diagram (1 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

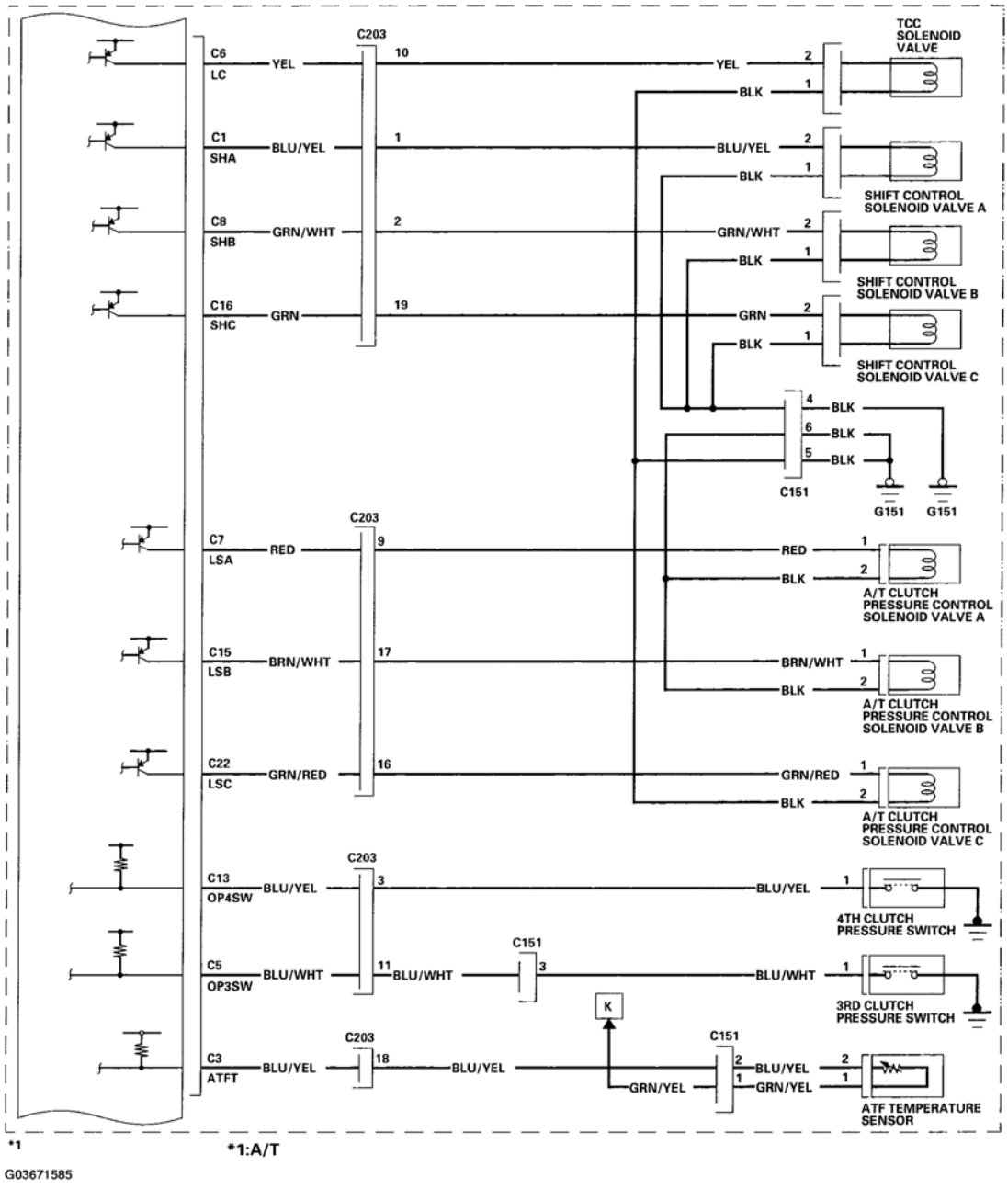


Fig. 55: ECM/PCM Circuit Diagram (2 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

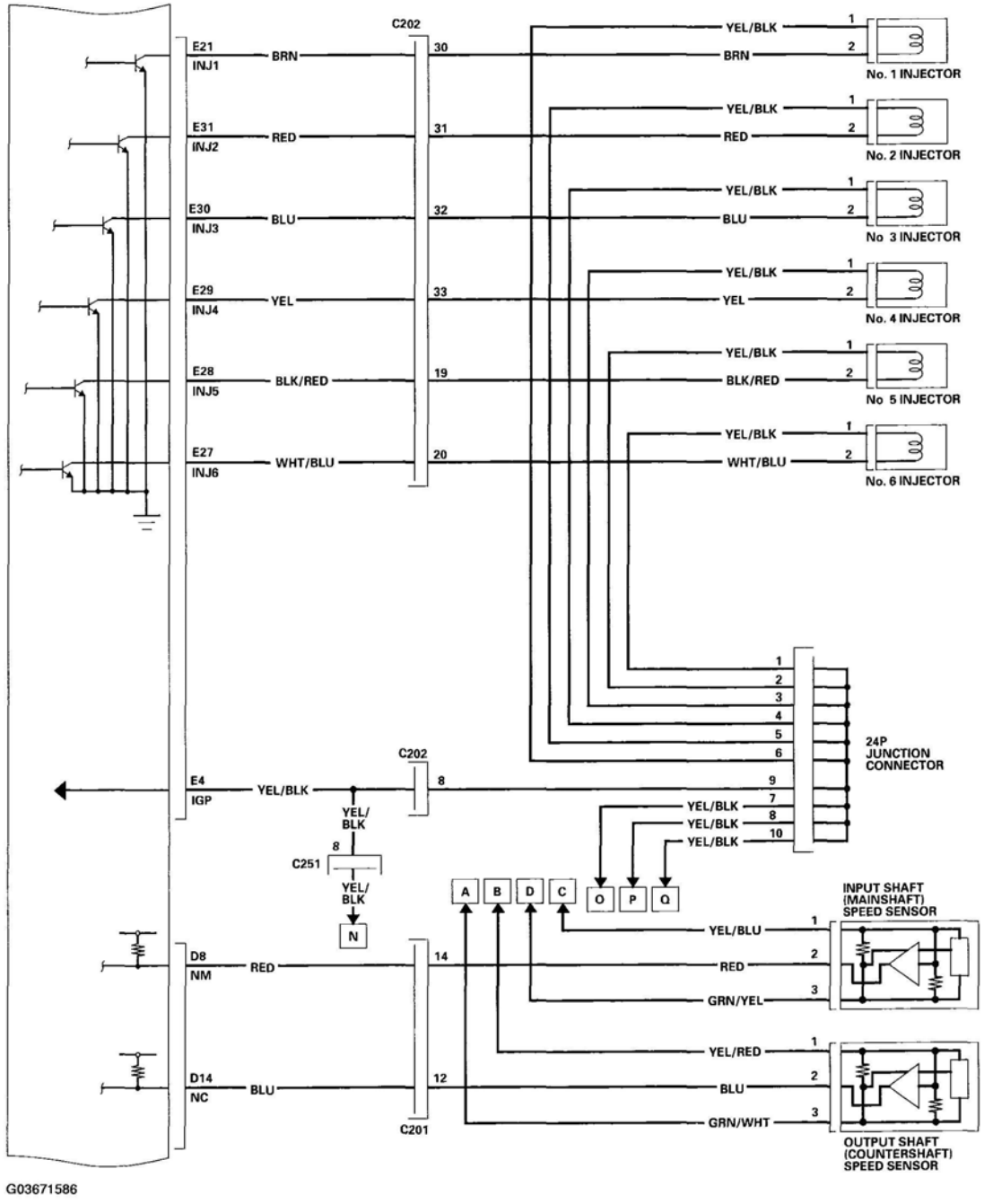


Fig. 56: ECM/PCM Circuit Diagram (3 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

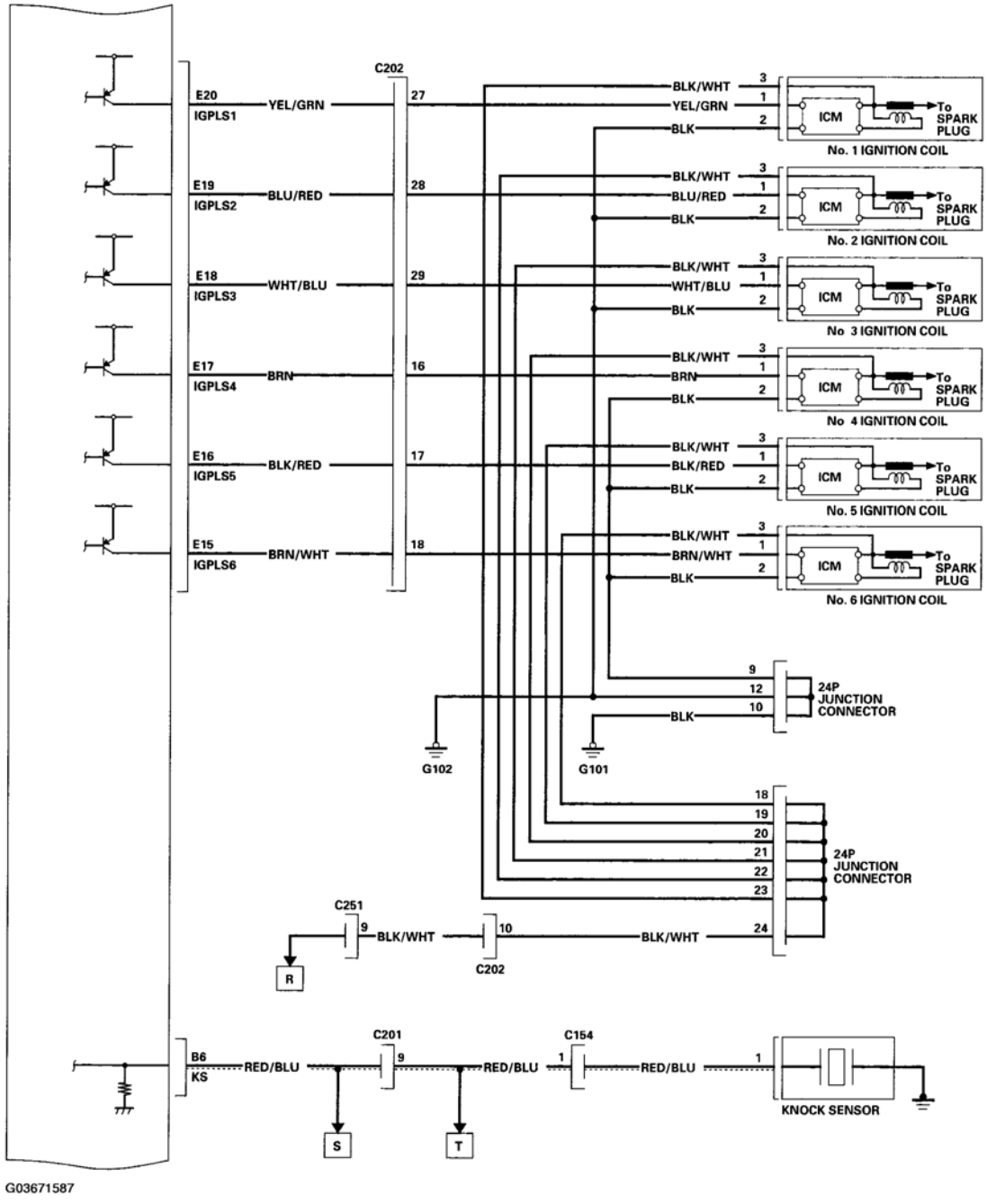


Fig. 57: ECM/PCM Circuit Diagram (4 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

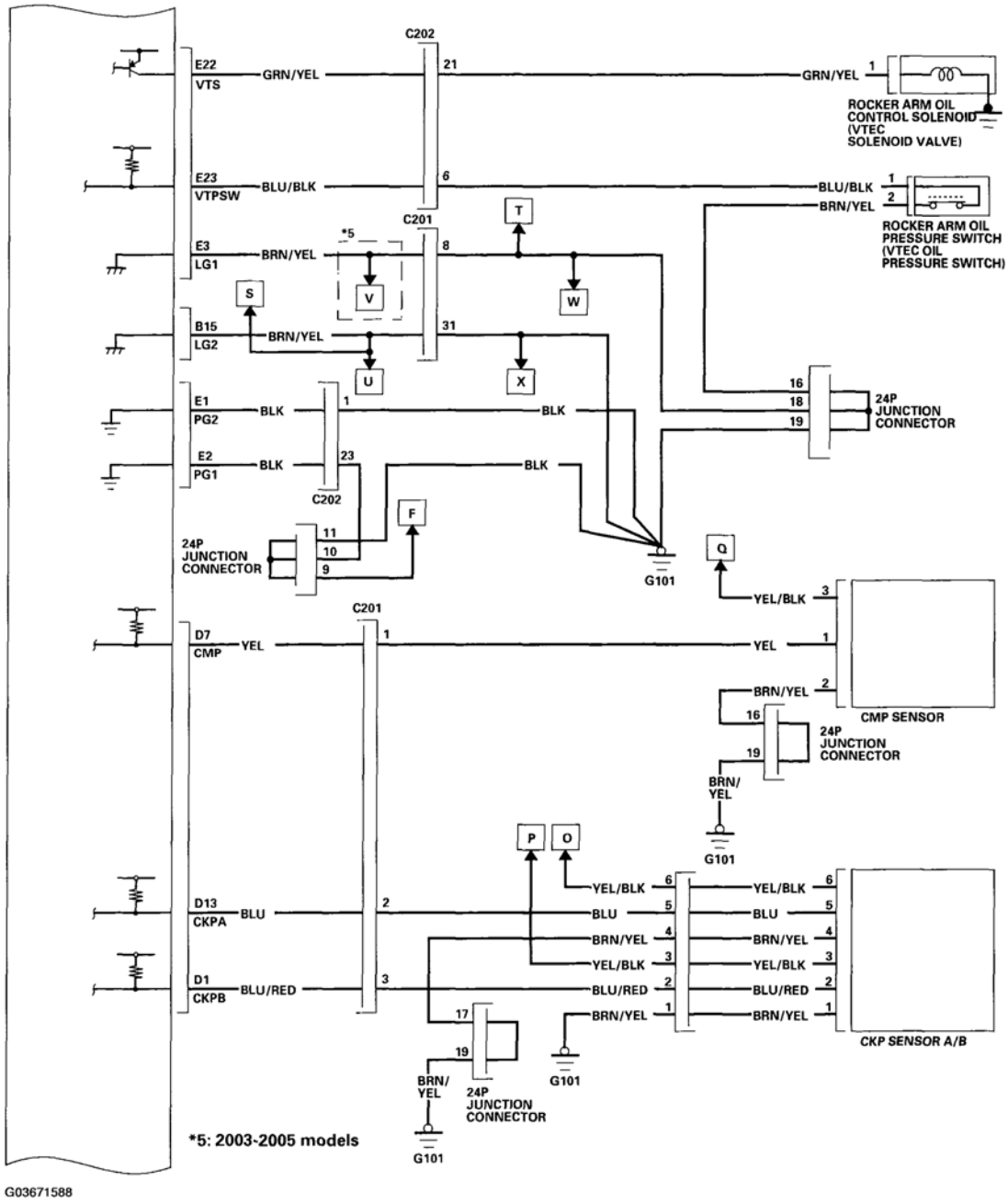


Fig. 58: ECM/PCM Circuit Diagram (5 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

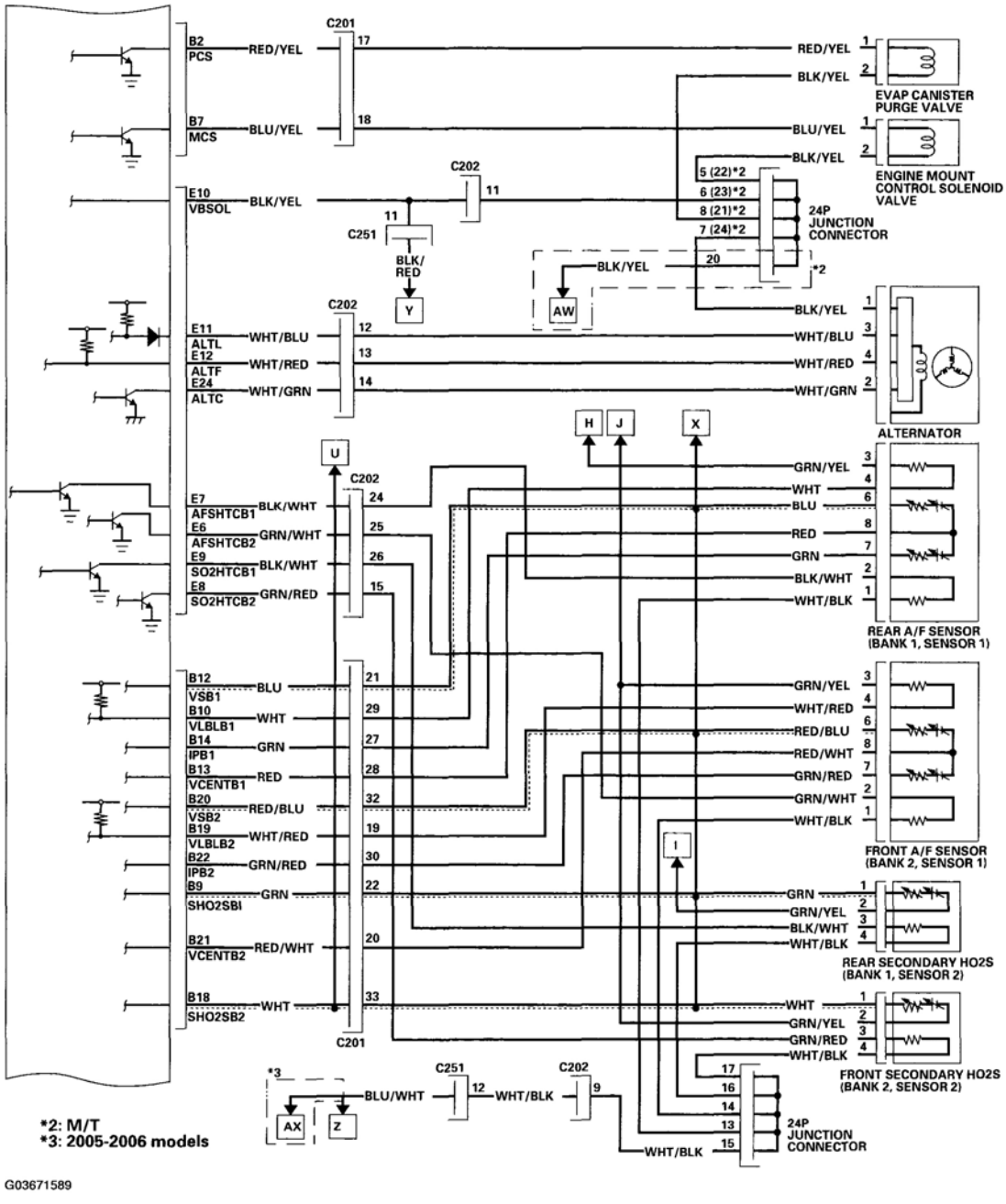


Fig. 59: ECM/PCM Circuit Diagram (6 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

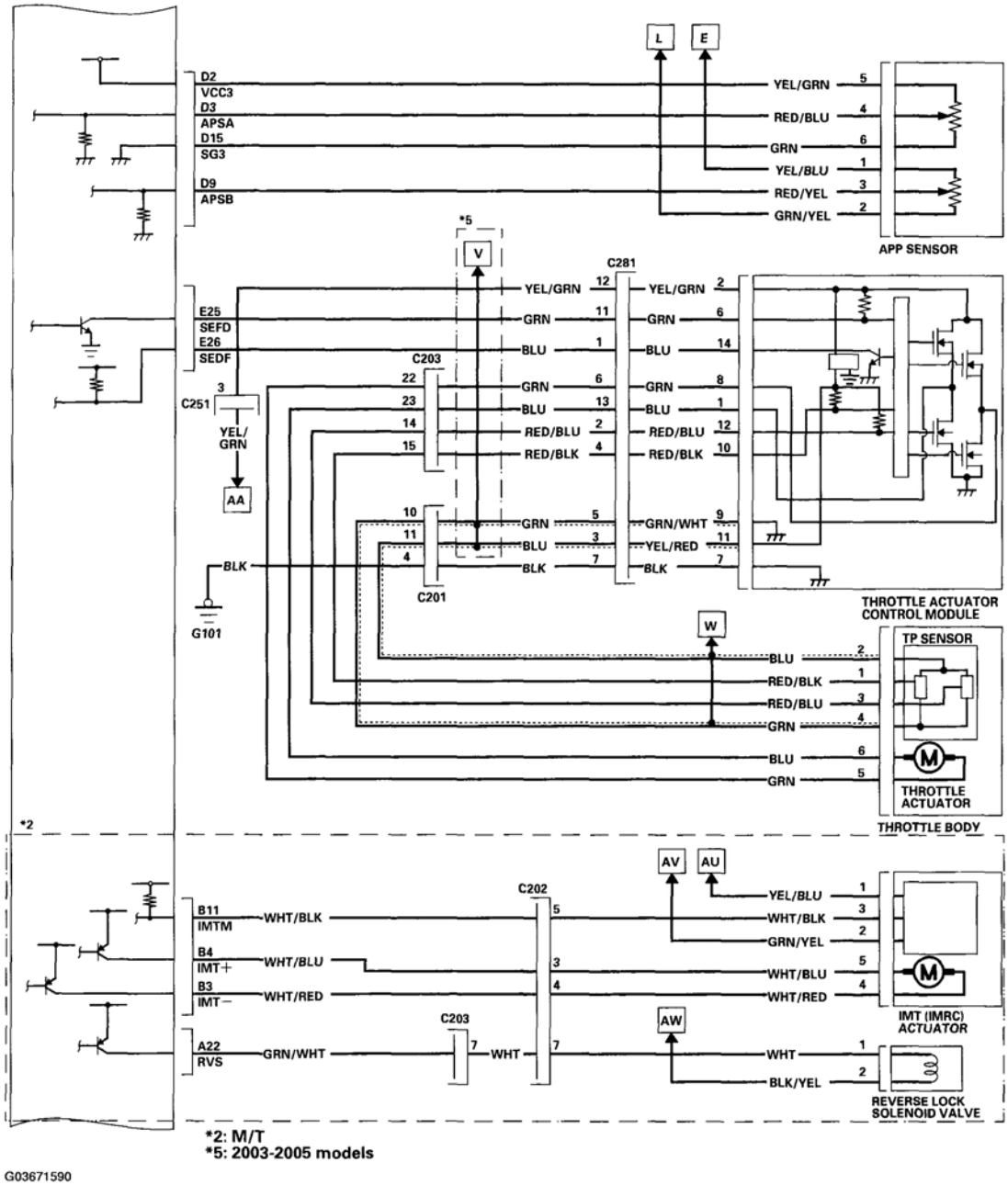


Fig. 60: ECM/PCM Circuit Diagram (7 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

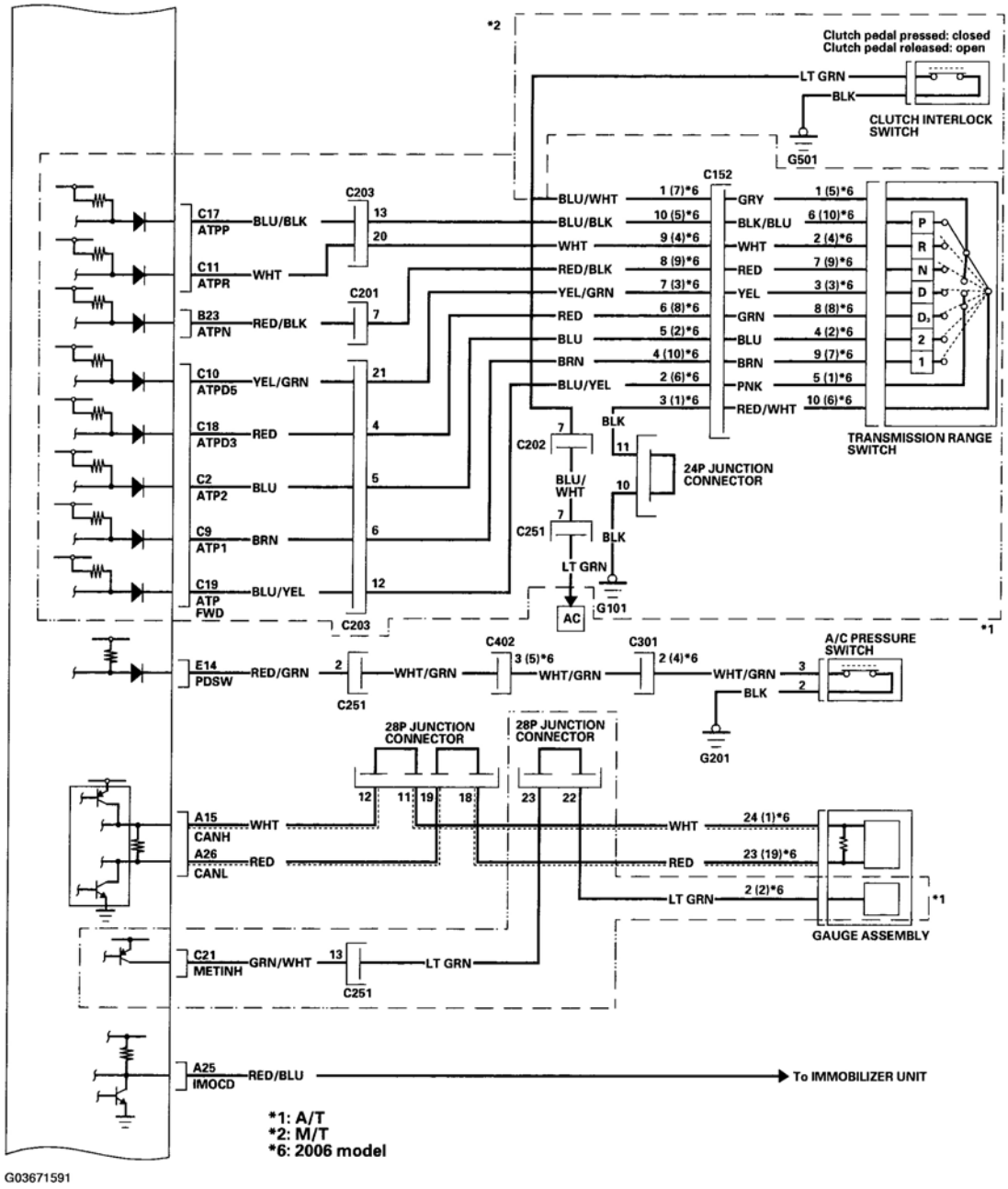


Fig. 61: ECM/PCM Circuit Diagram (8 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

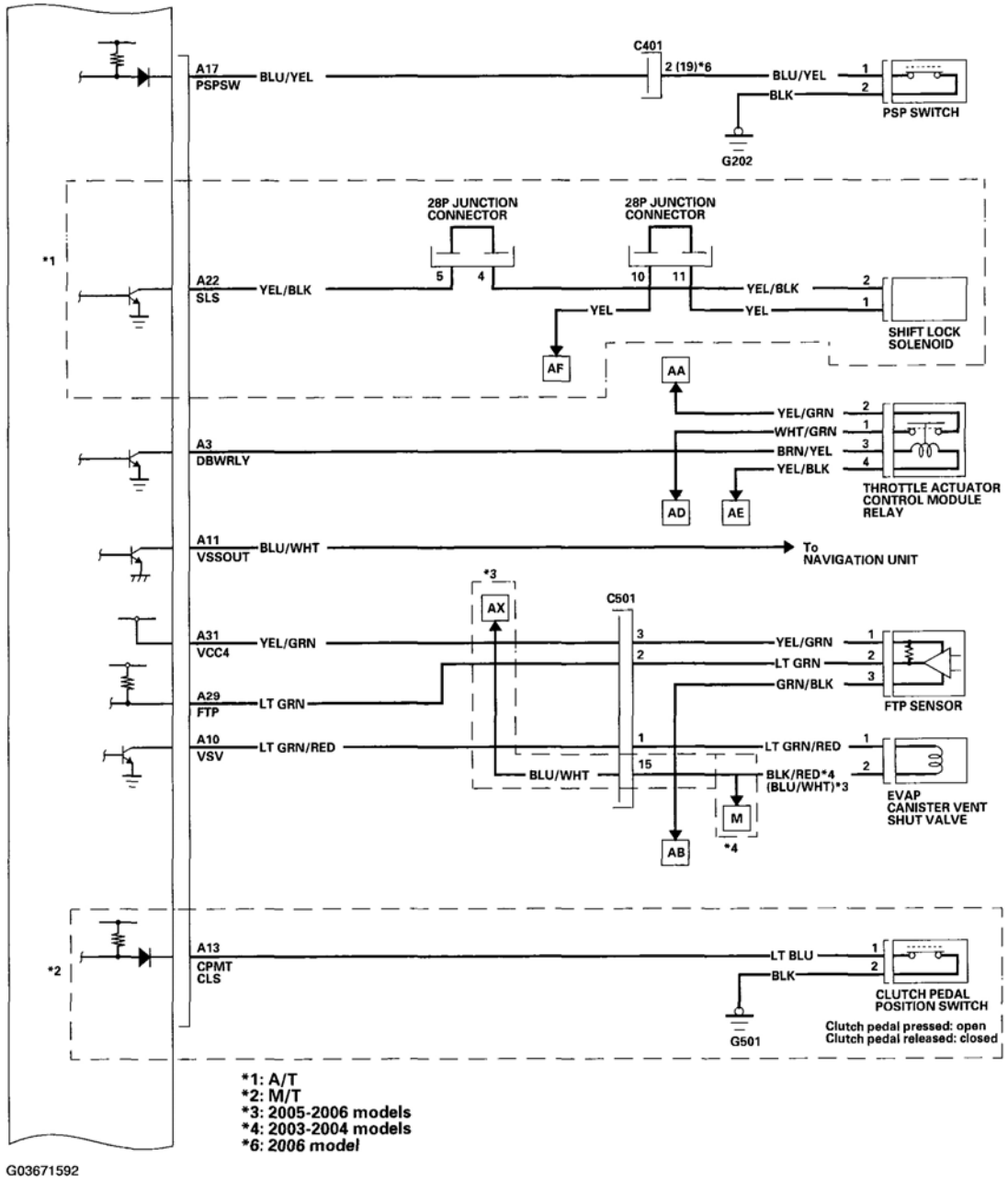


Fig. 62: ECM/PCM Circuit Diagram (9 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

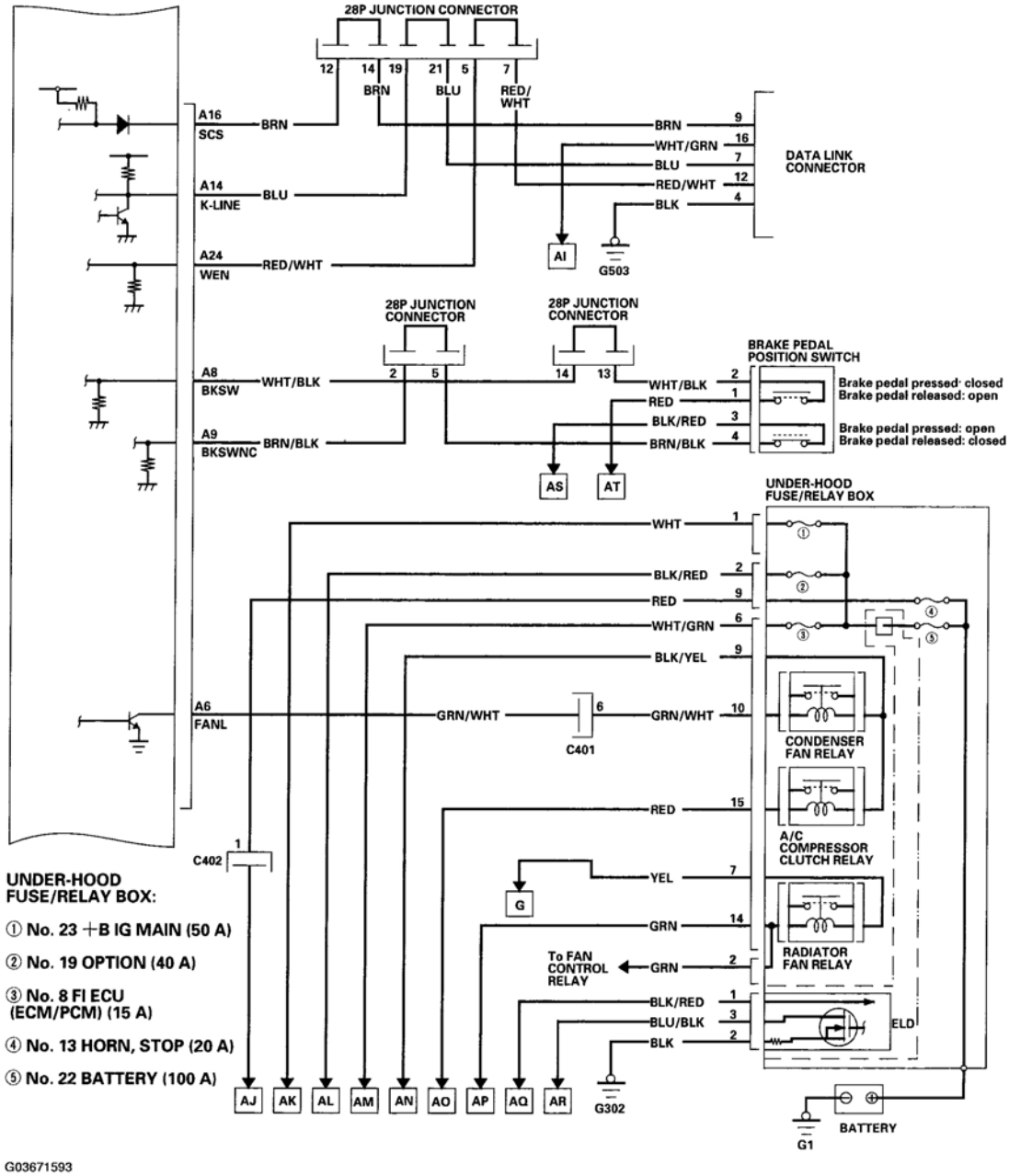


Fig. 63: ECM/PCM Circuit Diagram (10 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

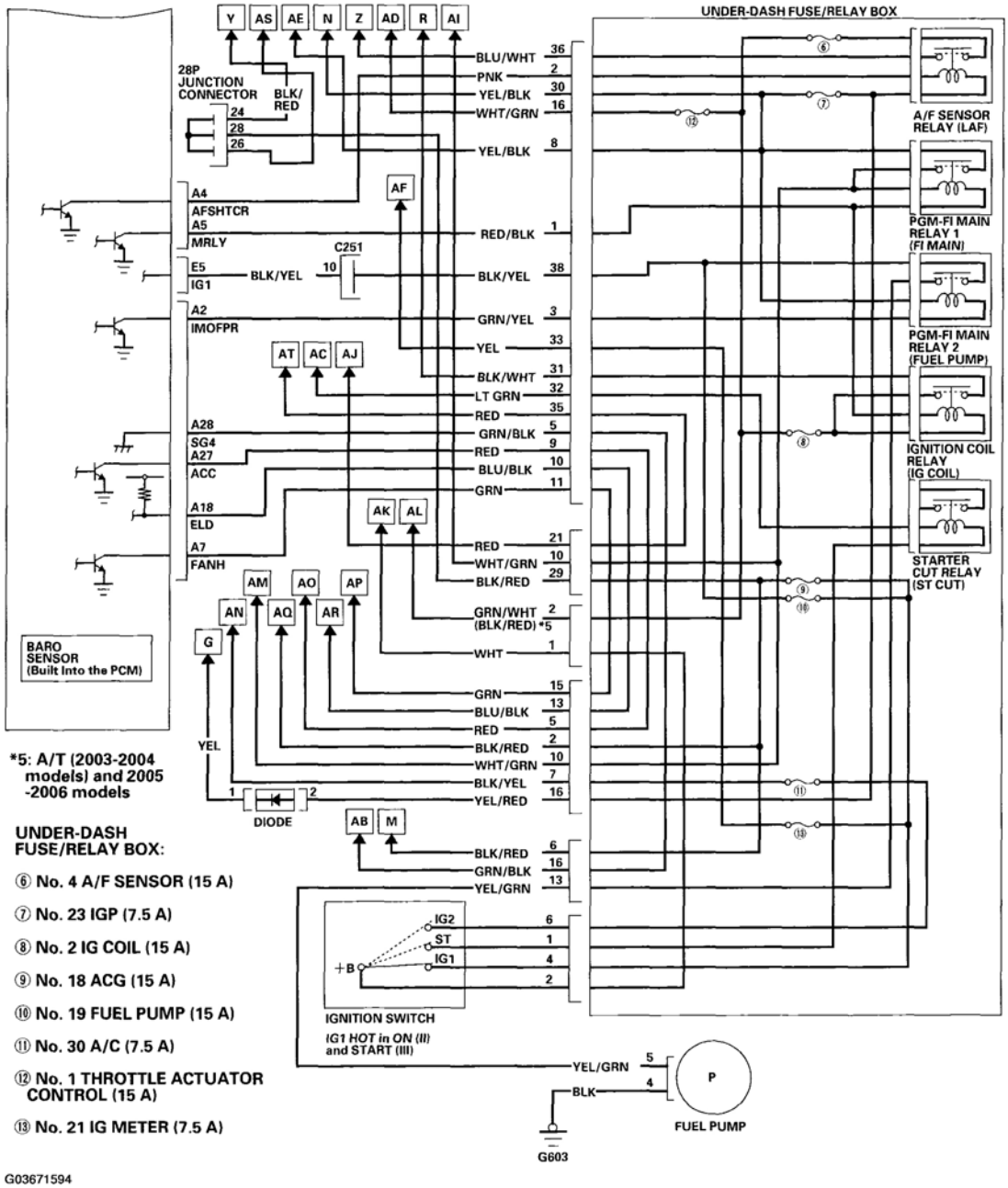


Fig. 64: ECM/PCM Circuit Diagram (11 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

HOW TO SET READINESS CODES

MALFUNCTION INDICATOR LAMP (MIL) INDICATION (IN RELATION TO READINESS CODES)

The vehicle has certain "readiness codes" that are part of the on-board diagnostics for the emissions systems. If the vehicle's battery has been disconnected or gone dead, if the DTCs have been cleared, or if the ECM/PCM has been reset, these readiness codes are reset. In some states, part of the emissions testing is to make sure these codes are set to complete. If all of them are not set to complete, the vehicle may fail the emission test, or the test cannot be finished.

To check if the readiness codes are set to complete, turn the ignition switch ON (II), but do not start the engine. The MIL will come on for 15-20 seconds. If it then goes off, the readiness codes are complete. If it flashes five times, one or more readiness codes are not set to complete. To set readiness codes from incomplete to complete, do the procedure for the appropriate code.

To check the status of a specific DTC system, check the OBD status in the DTC MENU with the HDS (see **OBD STATUS**). This screen displays the code, the current data list of the enable criteria, and the status of the readiness testing.

CATALYTIC CONVERTER MONITOR AND READINESS CODE

NOTE:

- **Do not turn the ignition switch off during the procedure.**
- **All readiness codes are cleared when the battery is disconnected or when the ECM/PCM is cleared with the HDS.**
- **Low ambient temperatures or excessive stop-and-go traffic may increase the drive time needed to switch the readiness code from incomplete to complete.**
- **The readiness code will not switch to complete until all the enable criteria are met.**
- **If a fault in the secondary HO2S system caused the MIL to come on, the readiness code cannot be set to complete until you correct the fault.**

Enable Criteria

- ECT at 158°F (70°C) or higher.
- Intake air temperature (IAT) at - 13°F (- 25°C) or higher.

- Vehicle speed sensor (VSS) reads more than 3 mph (5 km/h).

Procedure

1. Connect the HDS to the vehicle's data link connector (DLC), and bring up the READINESS CODES screen for Catalyst in the DTCs MENU.
2. Start the engine.
3. Test-drive the vehicle under stop-and-go conditions with short periods of steady cruise. After about 5 miles (8 km), the readiness code should switch to completed.
4. If the readiness code is still not set to complete, check for a Temporary DTC with the HDS. If there is no DTC, one or more of the enable criteria were probably not met; repeat the procedure.

EVAPORATIVE EMISSION (EVAP) CONTROL SYSTEM MONITOR AND READINESS CODE

NOTE: All readiness codes are cleared when the battery is disconnected or when the ECM/PCM is cleared with the HDS.

Enable Criteria

- Battery voltage is higher than 10.5 V.
- Engine at idle.
- ECT sensor between 176°F (80°C) and 212°F (100°C).
- MAP sensor less than 46.6 kPa (14 in.Hg, 350 mmHg).
- Vehicle speed 0 mph (0 km/h).
- IAT sensor between 32°F (0°C) and 212°F (100°C).

Procedure

1. Connect the HDS to the vehicle's data link connector (DLC).
2. Start the engine.
3. Select EVAP TEST in the INSPECTION MENU with the HDS, then select the FUNCTION TEST in the EVAP TEST MENU.
    - If the functions are normal, readiness is complete.

- If the functions are not normal, go to the next step.

4. If the readiness code is still not set to complete, check for a Temporary DTC. If there is no DTC, one or more of the enable criteria were probably not met; repeat the procedure.

AIR FUEL RATIO (A/F) SENSOR MONITOR AND READINESS CODE

NOTE:

- **Do not turn the ignition switch off during the procedure.**
- **All readiness codes are cleared when the battery is disconnected or when the ECM/PCM is cleared with the HDS.**

Enable Criteria

ECT at 158°F (70°C) or higher.

Procedure

1. Start the engine.
2. Test-drive the vehicle under stop-and-go conditions with short periods of steady cruise. During the drive, decelerate (with the throttle fully closed) for 5 seconds. After about 3.5 miles (5.6 km), the readiness code should switch from incomplete to complete.
3. Check the readiness codes screen for the Air Fuel Ratio (A/F) Sensor in the DTCs MENU with the HDS.
   - If the screen shows complete, readiness is complete.
   - If the screen shows not complete, go to the next step.
4. Check for a Temporary DTC. If there is no DTC, the enable criteria was probably not met. Select the DATA LIST Menu. Check the ECT in the ALL DATA LIST with the HDS. If the ECT is lower than 158°F (70°C), run the engine until it is higher than 158°F (70°C), then repeat the procedure.

AIR FUEL RATIO (A/F) SENSOR HEATER MONITOR READINESS CODE

NOTE: All readiness codes are cleared when the battery is disconnected or when the ECM/PCM is cleared with the

HDS.

Procedure

1. Start the engine, and let it idle for 1 minute. The readiness code should switch from incomplete to complete.
2. If the readiness code is still not set to complete, check for a Temporary DTC. If there is no DTC, repeat the procedure.

MISFIRE MONITOR AND READINESS CODE

- This readiness code is always set to available because misfiring is continuously monitored.
- Monitoring pauses, and the misfire counter resets, if the vehicle is driven over a rough road.
- Monitoring also pauses, and the misfire counter holds at its current value, if the throttle position changes more than a predetermined value, or if driving conditions fall outside the range of any related enable criteria.

FUEL SYSTEM MONITOR AND READINESS CODE

- This readiness code is always set to available because the fuel system is continuously monitored during closed loop operation.
- Monitoring pauses when the catalytic converter, EVAP control system, and A/F sensor monitors are active.
- Monitoring also pauses when any related enable criteria are not being met. Monitoring resumes when the enable criteria is again being met.

COMPREHENSIVE COMPONENT MONITOR AND READINESS CODE

This readiness code is always set to available because the comprehensive component monitor is continuously running whenever the engine is cranking or running.

EGR MONITOR AND READINESS CODE

NOTE:

- **Do not turn the ignition switch off during the procedure.**

- **All readiness codes are cleared when the battery is disconnected or when the ECM/PCM is cleared with the HDS.**

Enable Criteria

ECT at 176 °F (80 °C) or higher.

Procedure

1. Connect the HDS to the vehicle's data link connector (DLC).
2. Start the engine.
3. Drive at a steady speed with the A/T in D or M/T in 4th gear, 50-62 mph (80-100 km/h) or above for more than 10 seconds.
4. With the A/T in D or M/T in 4th gear, decelerate from 62 mph (100 km/h) or above by completely releasing the throttle for at least 5 seconds. If the engine is stopped during this procedure, go to step 2 and do the procedure again.
5. Check the OBD status screen for DTC P0401 in the DTC's MENU with the HDS.
   - If it is passed, readiness is complete.
   - If it is not passed, go to step 3 and retest.

2003-07 ENGINE PERFORMANCE

Fuel And Emission System - Accord

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07AAA-S0XA100	Fuel Sender Wrench	1
②	07AAJ-S6MA150	Fuel Pressure Gauge Attachment Set	1
③	07JAZ-001000B	Vacuum/Pressure Gauge, 0—4 in.Hg	1
④	07SAZ-001000A	Backprobe Set	2
⑤	07NAJ-P07010A	Pressure Gauge Adapter	1
⑥	07ZAJ-S5A0200	Oil Pressure Hose	1
⑦-1	07406-0020201	A/T Pressure Hose	1
⑦-2	07406-0070300	A/T Low Pressure Gauge W/Panel	1
⑦-3	07MAJ-PY4011A	A/T Pressure Hose, 2,210 mm	1
⑦-4	07MAJ-PY40120	A/T Pressure Hose, Adapter	1
⑧	07406-004000A	Fuel Pressure Gauge	1

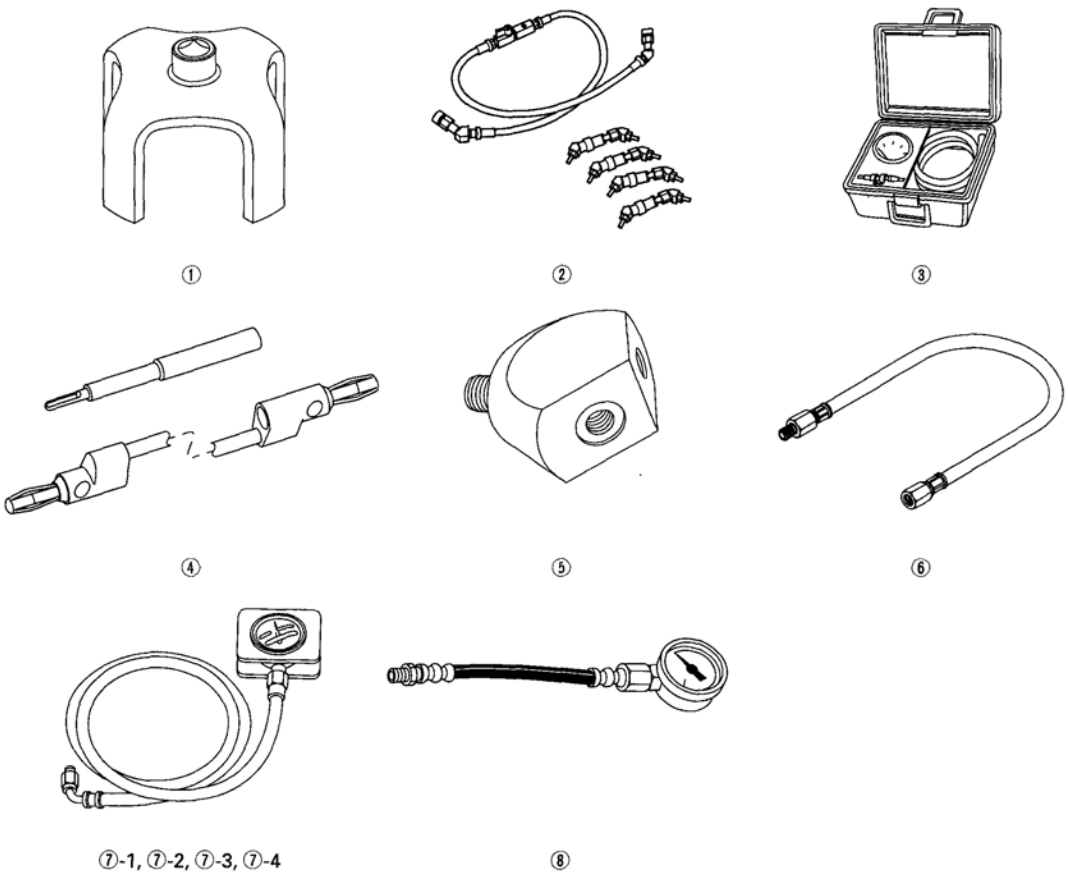


Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

INTERMITTENT FAILURES

The term "intermittent failure" means a system may have had a failure, but it checks OK now. If the malfunction indicator lamp (MIL) on the dash does not come on, check for poor connections or loose pins at all connectors related to the circuit that you are troubleshooting. If the MIL was on, but then went out, the original problem may have been intermittent.

OPENS AND SHORTS

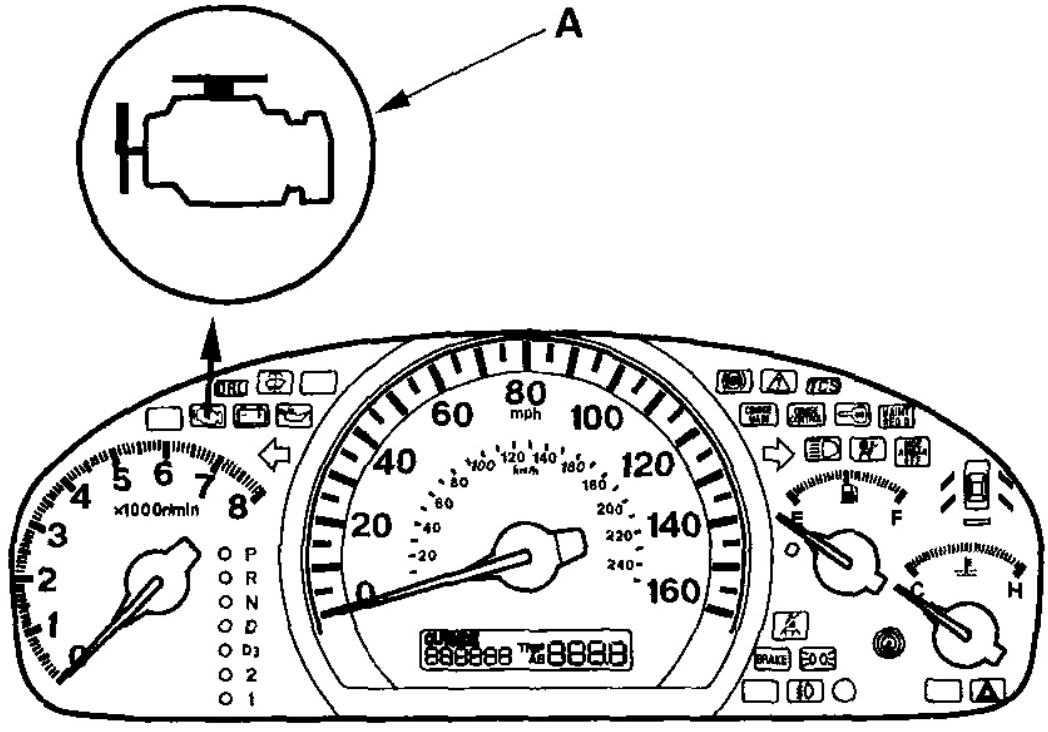
"Open" and "Short" are common electrical terms. An open is a break in a wire or at a connection. A short is an accidental connection of a wire to ground or to another wire. In simple electronics, this usually means something won't work at all. With complex electronics (such as ECMs and PCMs) this can sometimes mean something works, but not the way it's supposed to.

HOW TO USE THE HDS (HONDA DIAGNOSTIC SYSTEM)

If the MIL (Malfunction Indicator Lamp) has come on

1. Start the engine, and check the MIL (A).

NOTE: If the ignition switch is turned ON (II), and the engine is not started, the MIL will stay on for 15-20 seconds (see HOW TO SET READINESS CODES).



G03646340

Fig. 2: Identifying MIL
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. If the MIL stays on, connect the HDS to the data link connector (DLC) (A) located under the driver's side of the dashboard.

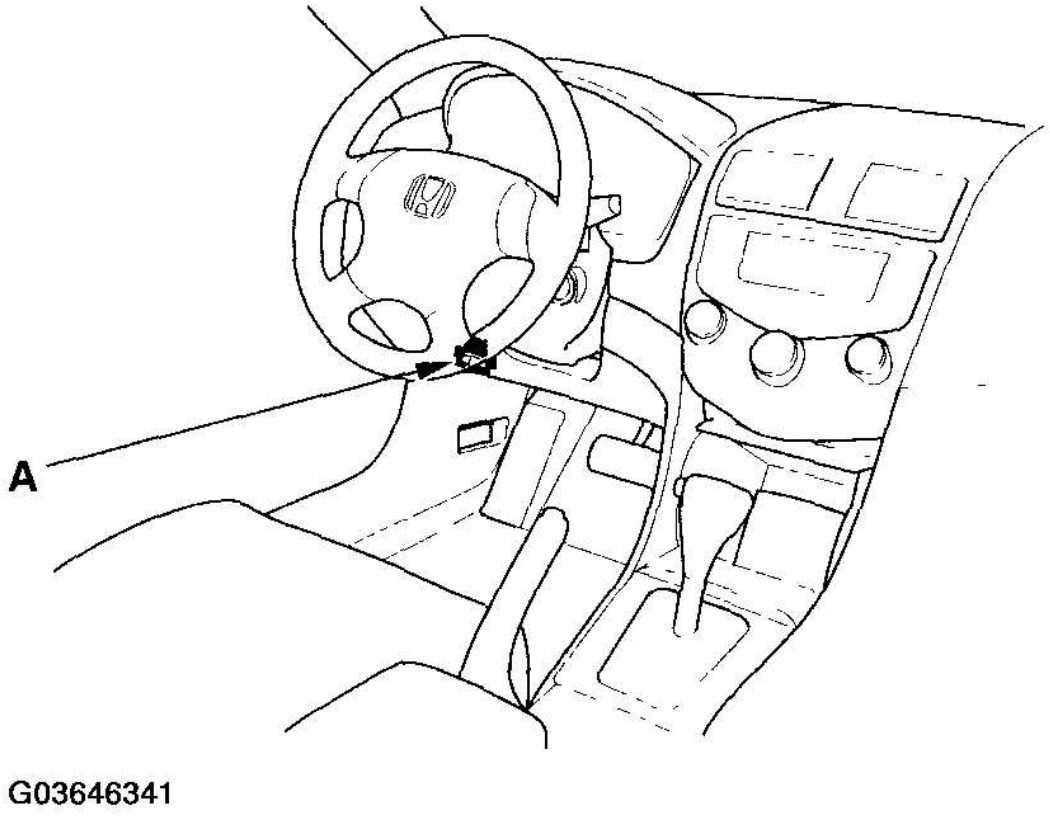


Fig. 3: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch ON (II).
4. Make sure the HDS communicates with the ECM/PCM. If it doesn't, go to the DLC circuit troubleshooting (see **DLC CIRCUIT TROUBLESHOOTING**).
5. Check the diagnostic trouble code (DTC) and note it. Also check the freeze data/or on-board snapshot data, and download any data found. Then refer to the indicated DTC's troubleshooting, and begin the appropriate troubleshooting procedure.

NOTE:

- **Freeze data indicates the engine conditions when the first malfunction, misfire, or fuel trim malfunction was detected.**

- **The HDS can read the DTC, freeze data, on-board snapshot, current data, and other engine control module (ECM)/powertrain control module (PCM) data.**
- **For specific operations, refer to the user's manual that came with the HDS.**

6. If no DTCs are found, go to MIL troubleshooting (see **MIL CIRCUIT TROUBLESHOOTING**).

If the MIL did not stay on

If the MIL did not stay on but there is a driveability problem, do the symptom troubleshooting.

If you can't duplicate the DTC

Some of the troubleshooting requires you to reset the ECM/PCM and try to duplicate the DTC. If the problem is intermittent and you can't duplicate the code, do not continue through the procedure. To do so will only result in confusion and possibly, a needlessly replaced ECM/PCM.

HDS CLEAR COMMAND

The ECM/PCM stores various specific data to correct the system even if there is no electrical power such as when the battery negative terminal or No. 8 Fl ECU (ECM/PCM) (15 A) fuse are disconnected. Stored data based on failed parts should be cleared by using the "CLEAR COMMAND" of the HDS, if parts are replaced.

The HDS has three kinds of clear commands to meet this purpose. They are DTC clear, ECM/PCM reset, and CKP pattern clear. DTC clear command erases all stored DTC codes, freeze data, readiness codes, and on-board snapshot. This must be done with the HDS after reproducing the DTC during troubleshooting. The ECM/PCM reset command erases all stored DTC codes, freeze data, readiness codes, on-board snapshot, and all specific data to correct the system except CKP pattern. If the CKP pattern data in the ECM/PCM was cleared, you must do the CKP pattern learn procedure. The CKP pattern clear command erases only CKP

pattern data. This command is for repair of a misfire or the CKP sensor.

SCAN TOOL CLEAR COMMAND

If you are using a generic scan tool to clear commands, be aware that there is only one setting for clearing the ECM/PCM, and it clears all commands at the same time (CKP pattern learn, idle learn, readiness codes, freeze data, on-board snapshot, and DTCs). After you clear all commands, you then need to do these procedures, in this order: ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**); CKP pattern learn procedure; Test-drive to set readiness codes to complete (see **HOW TO SET READINESS CODES**).

DTC CLEAR

1. Clear the DTC with the HDS while the engine is stopped.
2. Turn the ignition switch OFF.
3. Turn the ignition switch ON (II). Wait 30 seconds.
4. Turn the ignition switch OFF, and disconnect the HDS from the DLC.

ECM/PCM RESET

1. Reset the ECM/PCM with the HDS while the engine is stopped.
2. Turn the ignition switch OFF.
3. Turn the ignition switch ON (II), and wait 30 seconds.
4. Turn the ignition switch OFF, and disconnect the HDS from the DLC.
5. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).

CRANK (CKP) PATTERN CLEAR/CRANK (CKP) PATTERN LEARN; CLEAR/LEARN PROCEDURE (WITH THE HDS)

1. Connect the HDS to the data link connector (DLC) (A) located under the driver's side of the dashboard.

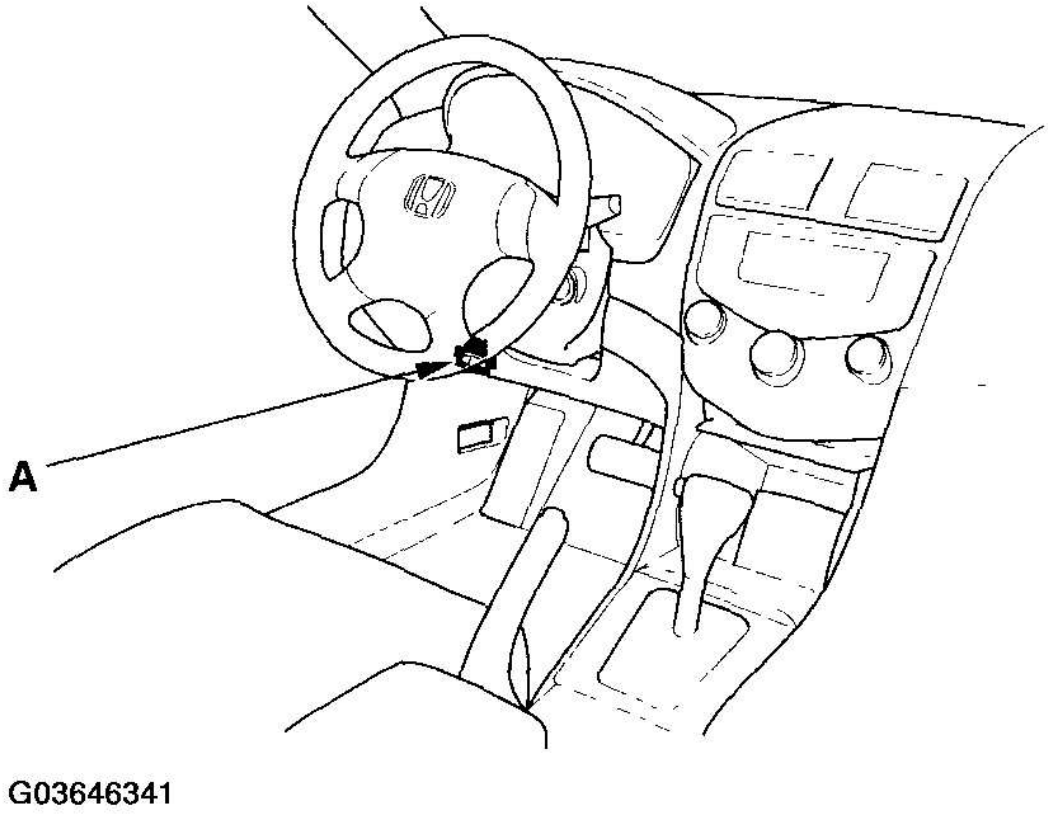


Fig. 4: Connecting HDS To Data Link Connector

2. Turn the ignition switch ON (II).
3. Make sure the HDS communications with the ECM/PCM. If it doesn't, go to the DLC circuit troubleshooting (see **DLC CIRCUIT TROUBLESHOOTING**).
4. Select CRANK PATTERN in the ADJUSTMENT MENU with the HDS.
5. Select CRANK PATTERN LEARNING with HDS, and follow the screen prompts.

LEARN PROCEDURE (WITHOUT THE HDS

1. Start the engine. Hold the engine speed at 3,000 rpm without load (in park or neutral) until the radiator fan comes on.
2. Test-drive the vehicle on a level road:Decelerate (with the throttle fully closed)

from an engine speed of 2,500 rpm down to 1,000 rpm with A/T in 2 position, or M/T in 1st gear.

3. Repeat step 2 several times.
4. Turn the ignition switch OFF.
5. Turn the ignition switch ON (II), and wait for 30 seconds.

HOW TO END A TROUBLESHOOTING SESSION (REQUIRED AFTER ANY TROUBLESHOOTING)

1. Reset the ECM/PCM with the HDS.
2. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
3. Turn the ignition switch OFF.
4. Disconnect the HDS from the DLC.

NOTE: The ECM/PCM is part of the immobilizer system. If you replace the ECM/PCM, it will have a different immobilizer code. In order for the engine to start, you must rewrite the immobilizer code with the HDS.

HOW TO TROUBLESHOOT CIRCUITS AT THE ECM/PCM

Special Tools Required

- Digital multimeter KS-AHM-32-003 (1) or a commercially available digital multimeter
- Backprobe set 07SAZ-001000A (2)

1. Connect the backprobe adapters (A) to the stacking patch cords (B), and connect the cords to a digital multimeter.

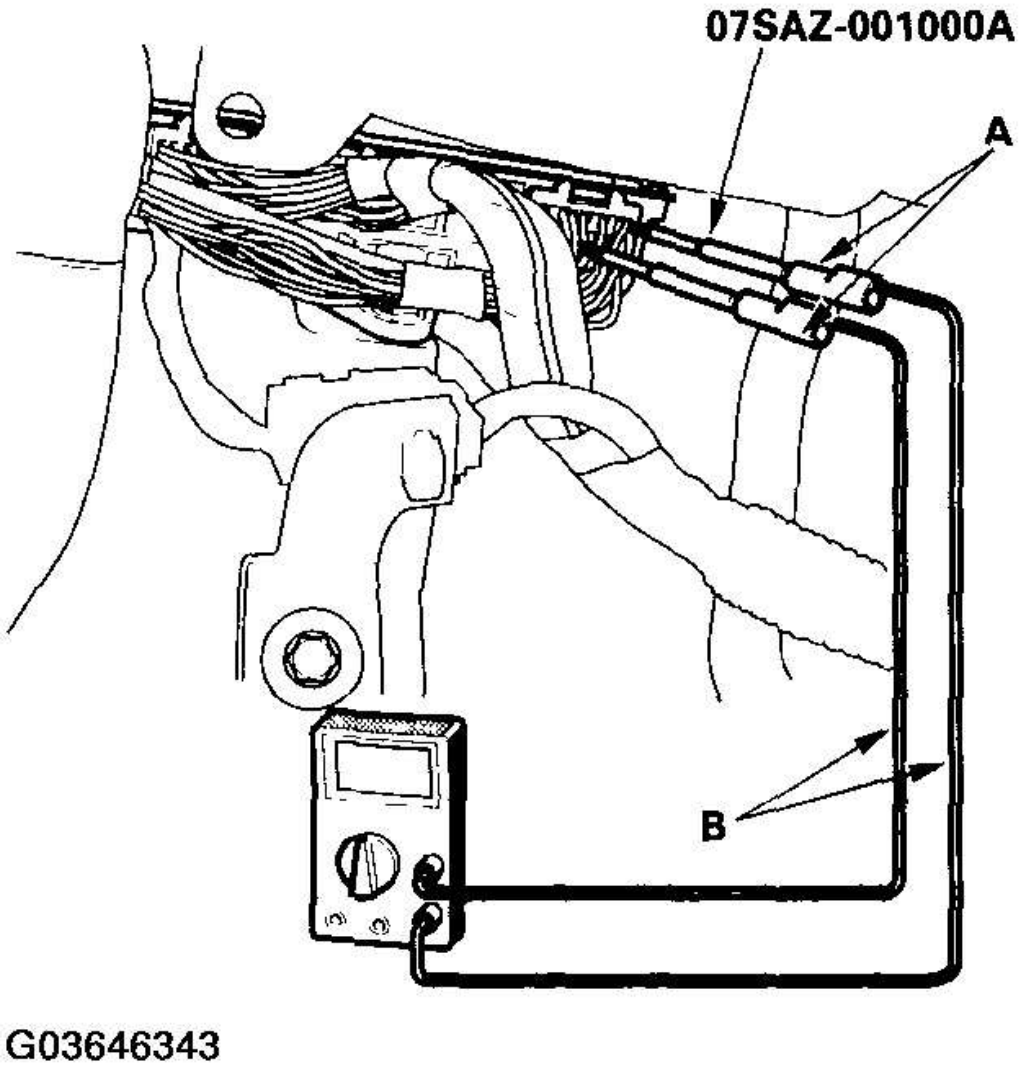


Fig. 5: Connecting Backprobe Adapters To Stacking Patch Cords
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Using the wire insulation as a guide for the contoured tip of the backprobe adapter, gently slide the tip into the connector from the wire side until it touches the end of the wire terminal.
3. If you cannot get to the wire side of the connector or the wire side is sealed (A), disconnect the connector and probe the terminals (B) from the terminal

side. Do not force the probe into the connector.

NOTE: Do not puncture the insulation on a wire. Punctures can cause poor or intermittent electrical connections.

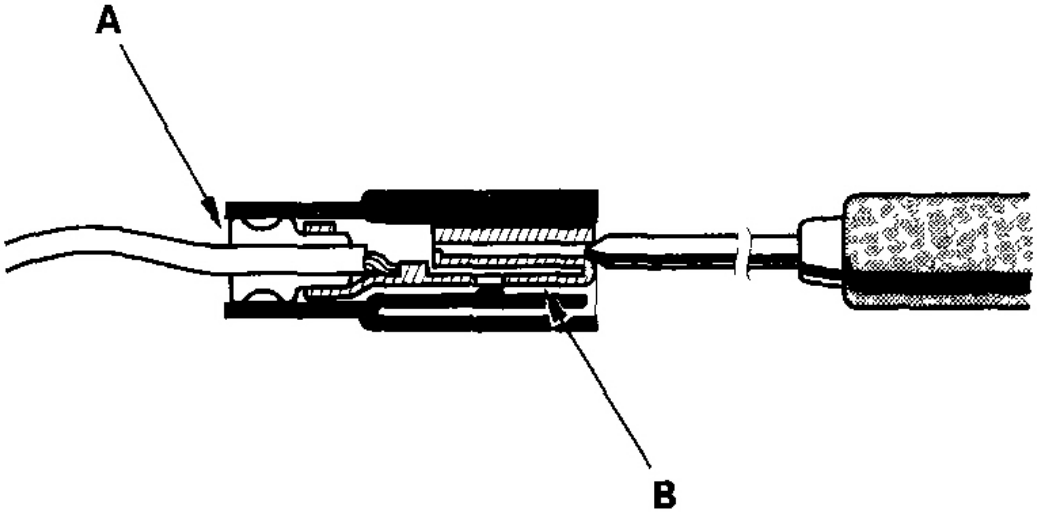


Fig. 6: Disconnecting Connector And Probe Terminals From Terminal Side
Courtesy of AMERICAN HONDA MOTOR CO., INC.

UPDATING THE ECM/PCM

Special Tools Required

- Honda diagnostic system (HDS)
- Honda interface module (HIM)
- HDS pocket tester

NOTE:

- **Use this procedure when you need to update the ECM/PCM during troubleshooting procedures.**
- **Make sure the HDS/HIM has the latest sofware version.**

- **Before you update the ECM/PCM, make sure the vehicle's battery is fully changed.**
- **Never turn the ignition switch OFF during the update. If there is a problem with update, leave the ignition switch ON.**
- **To prevent ECM/PCM damage, do not operate anything electrical (headlights, audio system brakes, A/C, power windows, door locks, etc.) during the update.**
- **To ensure the latest program is installed, do an ECM/PCM update whenever the ECM/PCM is substituted or replaced.**
- **You cannot update an ECM/PCM with the program it already has. It will only accept a new program.**
- **If you need to diagnose the Honda interface module (HIM) because the HIM's red (# 3) light came on or was flashing during the update, leave the ignition switch in the ON (II) position when you disconnect the HIM from the data link connector (DLC). This will prevent ECM/PCM damage.**

1. Turn the ignition switch ON (II). Do not start the engine.
2. Connect the HDS to the data link connector (DLC) (A) located under the driver's side of the dashboard.

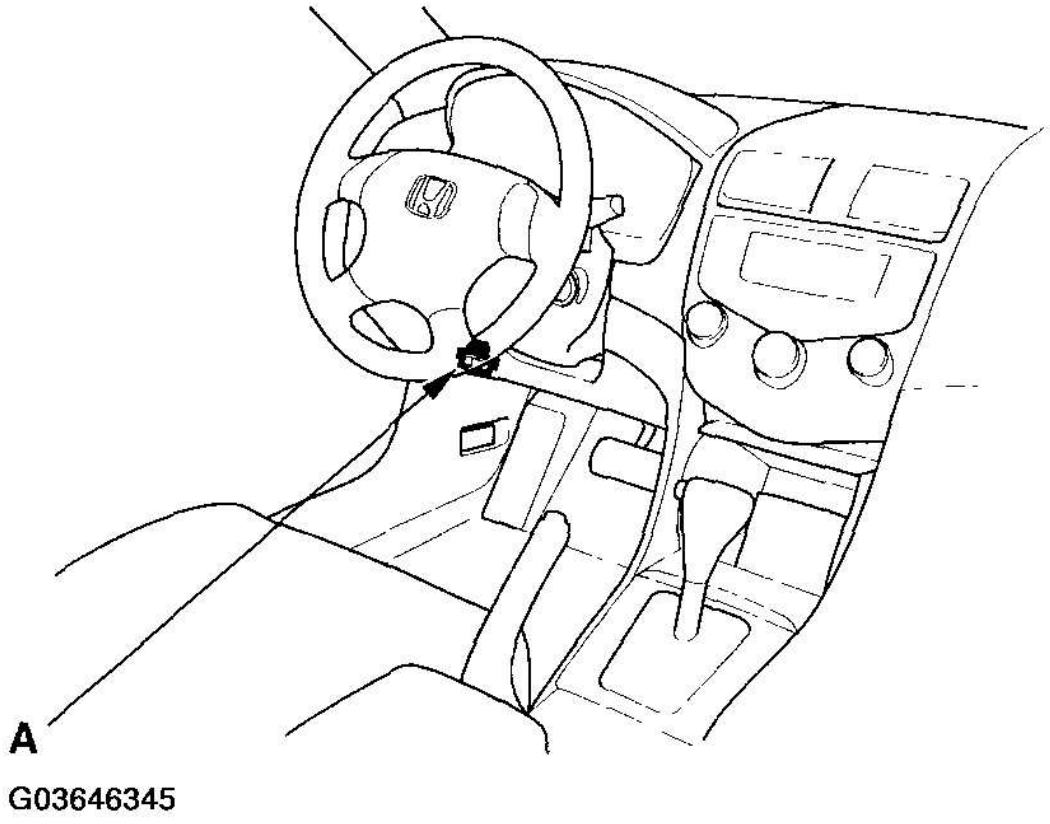


Fig. 7: Connecting HDS Or HIM To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Make sure the HDS communicates with the ECM/PCM. If it doesn't, go to the DLC circuit troubleshooting (see**DLC CIRCUIT TROUBLESHOOTING**). '06-07 models: If you are returning from the DLC circuit troubleshooting, skip steps 4 and 5, then clean the throttle body after updating the ECM/PCM (see **THROTTLE BODY CLEANING**).
4. '06-07 models: Select the INSPECTION MENU with HDS.
5. '06-07 models: Select the ETCS TEST, then select the TP POSITION CHECK, and follow the screen prompts with the HDS.
6. Exit the HDS diagnostic system, then select the update mode, and follow the screen prompts to update the ECM/PCM.
7. If the software in the ECM/PCM is the latest, disconnect the HDS/HIM from

the DLC and go back to the procedure that you were doing. If the software in the ECM/PCM is not the latest, follow the instructions on the screen. If prompted to choose the PGM-FI system or the A/T system, make sure you update both.

NOTE: If the ECM/PCM update system requires you to cool the ECM/PCM, follow the screen prompts. If you run into a problem (programming takes over 15 minutes, status bar goes over 100%, D or immobilizer indicator flashes, HDS tablet freezes, etc.) during the update procedure, following these steps to minimize the chance of damaging the ECM/PCM:

- **Leave the ignition switch in the "ON (II)" position.**
- **Connect a jumper battery (do not connect a battery charger).**
- **Shut down the HDS.**
- **Disconnect the HDS from the HDS.**
- **Reboot the HDS.**
- **Reconnect the HDS to the DLC, and try the update procedure again.**

8. 05-07 models: If the TP POSTION CHECK failed in step 6, clean the throttle body (see **THROTTLE BODY CLEANING**).
9. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
10. Do the CKP pattern clear/pattern learn procedure with the HDS.

SUBSTITUTE THE ECM/PCM

Special Tools Required

- Honda diagnostic system (HDS)
- Honda interface module (HIM)
- HDS pocket tester

NOTE: Use this procedure when you need to substitute a known-good ECM/PCM during troubleshooting procedures.

1. Connect the HDS to the data link connector (DLC) (A) located under the driver's side of the dashboard.

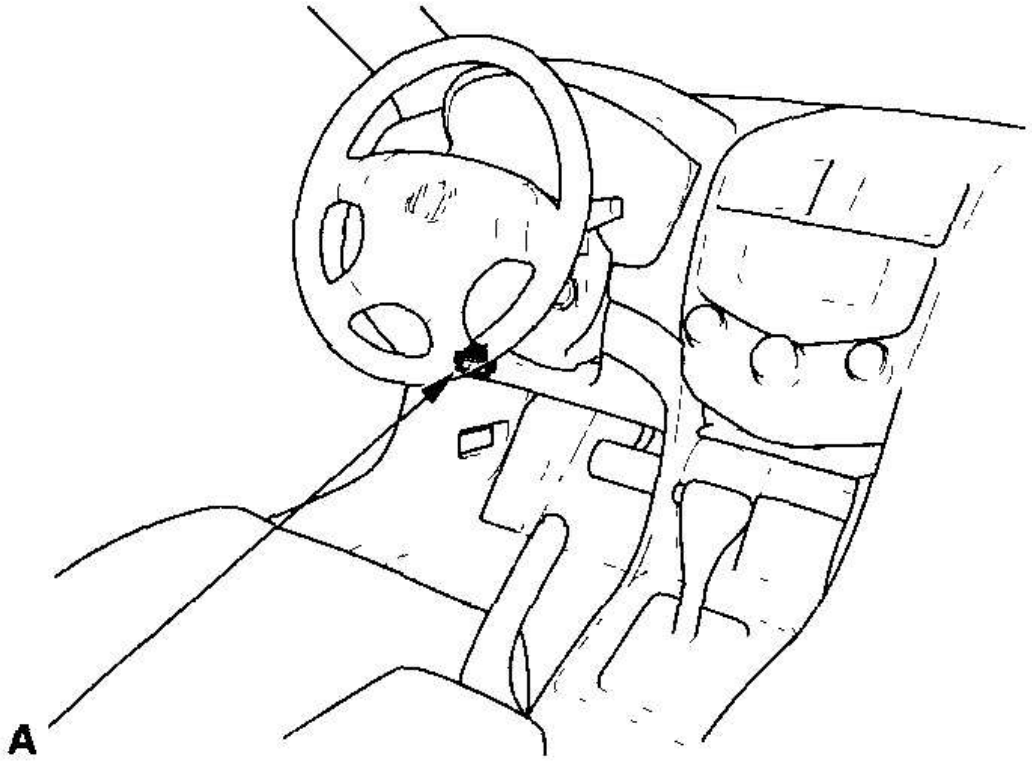


Fig. 8: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Turn the ignition switch ON (II).
3. Make sure the HDS communicates with the ECM/PCM. If it doesn't, go to the DLC circuit troubleshooting (see **DLC CIRCUIT TROUBLESHOOTING**). '06-07 models: If you are returning from DLC circuit troubleshooting skip steps 4 to 11, then clean the throttle body after substituting the ECM/PCM (see

THROTTLE BODY CLEANING).

4. '06-07 models: Select the INSPECTION MENU with the HDS.
5. '06-07 models: Select the ETCS TEST, then select the TP POSITION CHECK, and follow the screen prompts.
6. Turn the ignition switch OFF.
7. Jump the SCS line with the HDS.
8. Remove the center lower covers (A).

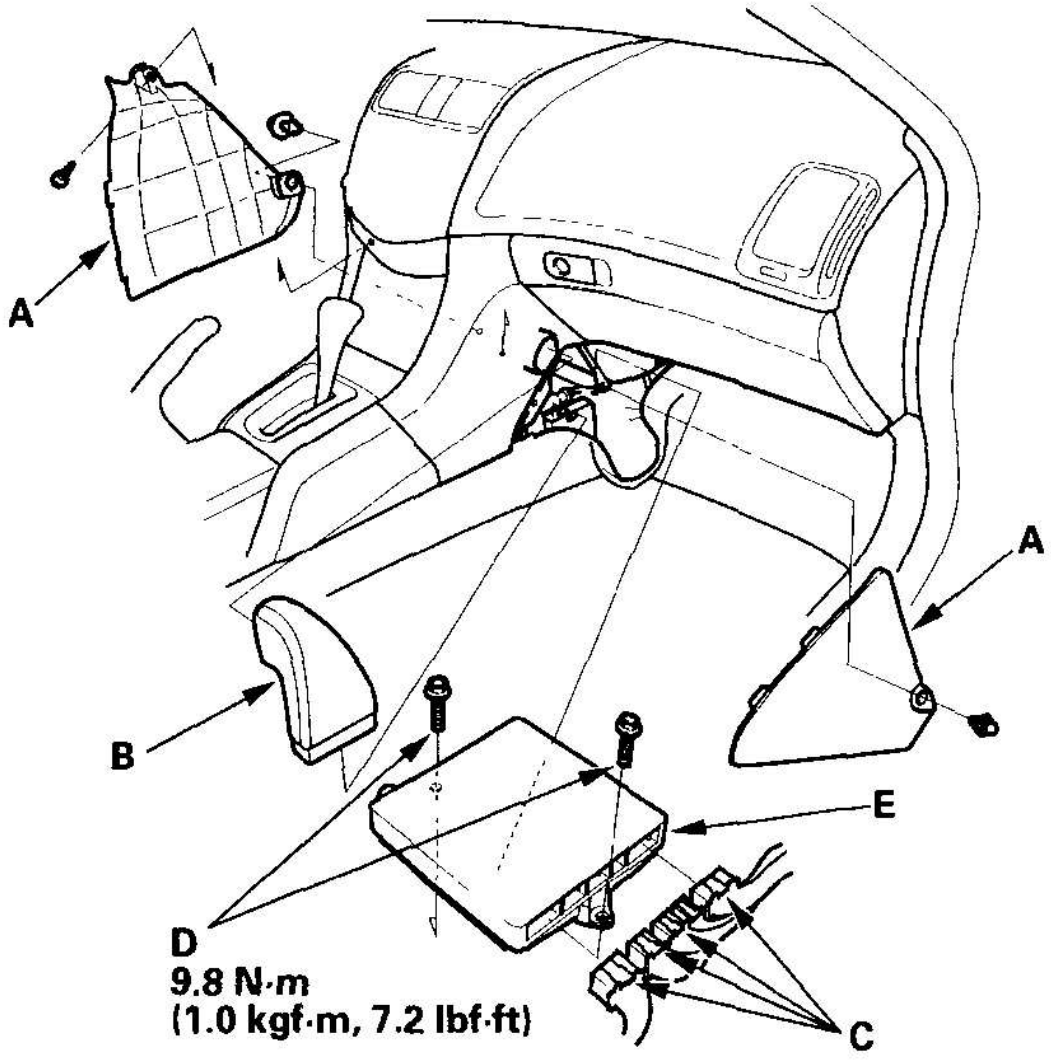


Fig. 9: Removing Center Lower Covers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the duct (B).
10. Disconnect ECM/PCM connectors (C).
11. Remove the bolts (D), then remove the ECM/PCM (E).
12. Install the ECM/PCM in the reverse order of removal.

13. Open the SCS line with the HDS.
14. Turn the ignition switch ON (II).

NOTE: '05-07 models:DTC P0630 "VIN Not Programmed or Mismatch" may be stored because VIN has not been programmed into the ECM/PCM; ignore it, and continue this procedure.

15. '05-07 models: Manually input the VIN to the ECM/PCM with the HDS.
16. Update the ECM/PCM if it does not have the latest software.
17. Select the IMMOBI SYSTEM with the HDS.
18. Enter the immobilizer code with the ECM/PCM replacement procedure in the HDS; it allows you to start the engine.
19. Reset the ECM/PCM with the HDS.
20. '06-07 models: if the TP POSITION CHECK failed in step 5, clean the throttle body (see **THROTTLE BODY CLEANING**).
21. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
22. Do the CKP pattern clear/pattern learn procedure with the HDS.

OBD STATUS

The OBD status shows the current system status of each DTC and all of the parameters. This function is used to see if the technician's repair was successfully finished. The results of diagnostic tests for the DTC are displayed as:

- PASSED: On board diagnosis is successfully finished.
- FAILED: On board diagnosis has finished but failed.
- EXECUTING: The vehicle is in enable criteria conditions for the DTC and the on board diagnosis is running.
- NOT COMPLETED: The on board diagnosis was running but is out of the enable conditions of the DTC.
- OUT OF CONDITION: The vehicle has stayed out of the enable conditions of the DTC.

DTC TROUBLESHOOTING INDEX

DTC (MIL indication *1)	Two Drive Cycle Detection	Detection Item	MIL
P0010 (56)	—	Variable Valve Timing Control (VTC) Oil Control Solenoid Valve Malfunction	ON
P0011 (56)	○	Variable Valve Timing Control (VTC) System Malfunction	ON
P0101 (50) *2	○	Mass Air Flow (MAF) Sensor Circuit Range/Performance Problem	ON
P0102 (50) *2	—	Mass Air Flow (MAF) Sensor Circuit Low Voltage	ON
P0103 (50) *2	—	Mass Air Flow (MAF) Sensor Circuit High Voltage	ON
P0107 (3) *9	—	Manifold Absolute Pressure (MAP) Sensor Circuit Low Voltage	ON
P0107 (3) *8	—	Manifold Absolute Pressure (MAP) Sensor Circuit Low Voltage	ON
P0108 (3)	—	Manifold Absolute Pressure (MAP) Sensor Circuit High Voltage	ON
P0111 (10) *8	○	Intake Air Temperature (IAT) Sensor Circuit Range/Performance Problem	ON
P0112 (10) *3	—	Intake Air Temperature (IAT) Sensor Circuit Low Voltage	ON
P0112 (10) *2	—	Intake Air Temperature (IAT) Sensor Circuit Low Voltage	ON
P0113 (10) *3	—	Intake Air Temperature (IAT) Sensor Circuit High Voltage	ON
P0113 (10) *2	—	Intake Air Temperature (IAT) Sensor Circuit High Voltage	ON
P0116 (86) *9	○	Engine Coolant Temperature (ECT) Sensor Circuit Range/ Performance Problem	ON
P0116 (86) *8	○	Engine Coolant Temperature (ECT) Sensor 1 Circuit Range/ Performance Problem	ON
P0117 (6)	—	Engine Coolant Temperature (ECT) Sensor/Engine Coolant Temperature (ECT) Sensor 1 Circuit Low Voltage	ON
P0118 (6)	—	Engine Coolant Temperature (ECT) Sensor/Engine Coolant Temperature (ECT) Sensor 1 Circuit High Voltage	ON
P0122 (7) *9	—	Throttle Position (TP) Sensor Circuit Low Voltage	ON
P0122 (7) *15	—	Throttle Position (TP) Sensor Circuit Low Voltage	ON
P0122 (7) *13	—	Throttle Position (TP) Sensor A Circuit Low Voltage	ON
P0123 (7) *12	—	Throttle Position (TP) Sensor Circuit High Voltage	ON
P0123 (7) *13	—	Throttle Position (TP) Sensor A Circuit High Voltage	ON
P0125 (86) *9	○	Engine Coolant Temperature (ECT) Sensor Malfunction/Slow Response	ON
P0125 (86) *8	○	Engine Coolant Temperature (ECT) Sensor 1 Malfunction/Slow Response	ON
P0128 (87) *9	○	Cooling System Malfunction	ON
P0128 (87) *8	○	Cooling System Malfunction	ON
P0133 (61) *9	○	Air Fuel Ratio (A/F) Sensor (Sensor 1) Malfunction/Slow Response	ON
P0133 (61) *8	○	Air Fuel Ratio (A/F) Sensor (Sensor 1) Malfunction/Slow Response	ON
P0134 (41)	○	Air Fuel Ratio (A/F) Sensor (Sensor 1) Heater System Malfunction	ON
P0135 (41)	—	Air Fuel Ratio (A/F) Sensor (Sensor 1) Heater Circuit Malfunction	ON
P0137 (63) *9	—	Secondary Heated Oxygen Sensor (Secondary HO2S (Sensor 2)) Circuit Low Voltage	ON
P0137 (63) *8	—	Secondary Heated Oxygen Sensor (Secondary HO2S (Sensor 2)) Circuit Low Voltage	ON
P0138 (63) *9	—	Secondary Heated Oxygen Sensor (Secondary HO2S (Sensor 2)) Circuit High Voltage	ON
P0138 (63) *8	—	Secondary Heated Oxygen Sensor (Secondary HO2S (Sensor 2)) Circuit High Voltage	ON
P0139 (63) *9	○	Secondary Heated Oxygen Sensor (Secondary HO2S (Sensor 2)) Slow Response	ON
P0139 (63) *8	○	Secondary Heated Oxygen Sensor (Secondary HO2S (Sensor 2)) Slow Response	ON
P0141 (65)	—	Secondary Heated Oxygen Sensor (Secondary HO2S (Sensor 2)) Heater Circuit Malfunction	ON
P0171 (45)	○	Fuel System Too Lean	ON
P0172 (45)	○	Fuel System Too Rich	ON

NOTE: The above DTCs are indicated when the PGM-FI system is selected in the HDS.
Some automatic transmission DTCs cause the MIL to come on. If the MIL is on and no DTCs are indicated in the PGM-FI system, select the A/T system, and check for automatic transmission DTCs.

* 1: These DTCs are indicated by a blinking MIL when the SCS line is jumped with the HDS.
* 2: '03-04 SULEV, LX-P models and '05-07 models
* 3: Except '03-04 SULEV, LX-P models
* 8: '05-07 models
* 9: '03-04 models
* 12: '03-05 models
* 13: '06-07 models
* 15: '05 model

Fig. 10: DTC Troubleshooting Index (1 of 4)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC (MIL indication *1)	Two Drive Cycle Detection	Detection Item	MIL
P0222 (7) *13	—	Throttle Position (TP) Sensor B Circuit Low Voltage	ON
P0223 (7) *13	—	Throttle Position (TP) Sensor B Circuit High Voltage	ON
P0300 (75) any combination of the following P0301 (71) P0302 (72) P0303 (73) P0304 (74)	○	Random Misfire Detected	ON
P0301 (71)	○	No. 1 Cylinder Misfire Detected	ON
P0302 (72)	○	No. 2 Cylinder Misfire Detected	ON
P0303 (73)	○	No. 3 Cylinder Misfire Detected	ON
P0304 (74)	○	No. 4 Cylinder Misfire Detected	ON
P0325 (23)	—	Knock Sensor Circuit Malfunction	ON
P0335 (4)	—	Crankshaft Position (CKP) Sensor No Signal	ON
P0339 (4)	—	Crankshaft Position (CKP) Sensor Circuit Intermittent Interruption	ON
P0340 (57)	—	Camshaft Position (CMP) Sensor A No Signal	ON
P0341 (57)	—	Camshaft Position (CMP) Sensor and Crankshaft Position (CKP) Sensor Incorrect Phase Detected	ON
P0344 (57)	—	Camshaft Position (CMP) Sensor A Circuit Intermittent Interruption	ON
P0365 (8)	—	Camshaft Position (CMP) Sensor B No Signal	ON
P0369 (8)	—	Camshaft Position (CMP) Sensor B Circuit Intermittent Interruption	ON
P0401 (80)	○	Exhaust Gas Recirculation (EGR) Insufficient Flow	ON
P0404 (12)	○	Exhaust Gas Recirculation (EGR) Valve Circuit Range/Performance Problem	ON
P0406 (12)	—	Exhaust Gas Recirculation (EGR) Valve Position Sensor Circuit High Voltage	ON
P0420 (67) *9	○	Catalyst System Efficiency Below Threshold	ON
P0420 (67) *8	○	Catalyst System Efficiency Below Threshold	ON
P0442 (90) *9	○	Evaporative Emission (EVAP) System Small Leak Detected	ON
P0443 (92)	—	Evaporative Emission (EVAP) Canister Purge Valve Circuit Malfunction	ON
P0451 (91)	○	Fuel Tank Pressure (FTP) Sensor Circuit Range/Performance Problem	ON
P0452 (91) *9	—	Fuel Tank Pressure (FTP) Sensor Circuit Low Voltage	ON
P0452 (91) *8	—	Fuel Tank Pressure (FTP) Sensor Circuit Low Voltage	ON
P0453 (91)	—	Fuel Tank Pressure (FTP) Sensor Circuit High Voltage	ON
P0455 (90) *8	○	Evaporative Emission (EVAP) System Large Leak Detected	ON
P0456 (90)	○	Evaporative Emission (EVAP) System Very Small Leak Detected	ON
P0457 (90)	○	Evaporative Emission (EVAP) System Leak Detected/Fuel Fill Cap Loose or Missing	ON
P0461 (121) *8	—	Fuel Level Sensor (Fuel Gauge Sending Unit) Circuit Range/ Performance Problem	OFF
P0462 (121) *8	—	Fuel Level Sensor (Fuel Gauge Sending Unit) Circuit Low Voltage	OFF
P0463 (121) *8	—	Fuel Level Sensor (Fuel Gauge Sending Unit) Circuit High Voltage	OFF
P0496 (92)	○	Evaporative Emission (EVAP) System High Purge Flow	ON
P0497 (90)	○	Evaporative Emission (EVAP) System Low Purge Flow	ON
P0498 (117)	—	Evaporative Emission (EVAP) Canister Vent Shut Valve Circuit Low Voltage	ON
P0499 (117)	—	Evaporative Emission (EVAP) Canister Vent Shut Valve Circuit High Voltage	ON
P0506 (14) *12	○	Idle Control System RPM Lower Than Expected	ON
P0506 (14) *13	○	Idle Control System RPM Lower Than Expected	ON
P0507 (14) *12	○	Idle Control System RPM Higher Than Expected	ON
P0507 (14) *13	○	Idle Control System RPM Higher Than Expected	ON
P050A (167) *13	○	Cold Start Idle Air Control System Performance	ON
P050B (167) *13	○	Cold Start Ignition Timing Performance	ON
P0511 (14) *12	—	Idle Air Control (IAC) Valve Circuit Malfunction	ON
P0562 (34) *8	—	Charging System Low Voltage	OFF
P0563 (34)	—	Engine Control Module (ECM)/Powertrain Control Module (PCM) Power Source Circuit Unexpected Voltage	OFF

NOTE: The above DTCs are indicated when the PGM-FI system is selected in the HDS.
Some automatic transmission DTCs cause the MIL to come on. If the MIL is on and no DTCs are indicated in the PGM-FI system, select the A/T system, and check for automatic transmission DTCs.

* 1: These DTCs are indicated by a blinking MIL when the SCS line is jumped with the HDS.
* 8: '05-07 models
* 9: '03-04 models
* 12: '03-05 models
* 13: '06-07 models

Fig. 11: DTC Troubleshooting Index (2 of 4)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC (MIL indication *1)	Two Drive Cycle Detection	Detection Item	MIL
P0602 (196) *8	—	Engine Control Module (ECM)/Powertrain Control Module (PCM) Programming Error	ON
P0603 (131)	—	Engine Control Module (ECM)/Powertrain Control Module (PCM) Internal Control Module Keep Alive Memory (KAM) Error	ON
P0606 (0)	—	Engine Control Module (ECM)/Powertrain Control Module (PCM) Processor Malfunction	ON
P0630 (139) *8	—	VIN Not Programmed or Mismatch	ON
P0685 (135)	—	Engine Control Module (ECM)/Powertrain Control Module (PCM) Power Control Circuit/Internal Circuit Malfunction	ON
P0700 (70) *16	—	Automatic Transaxle Control System Malfunction	ON
P0700 (70)	—	Automatic Transaxle Control System Malfunction	OFF
P0720 (122) *4	—	Output Shaft (Countershaft) Speed Sensor Circuit Malfunction	ON
P1009 (56)) *19	—	Variable Valve Timing Control (VTC) Advance Malfunction	ON
P1109 (13) *8	—	Barometric Pressure (BARO) Sensor Circuit Out of Range High	ON
P1116 (86) *8	○	Engine Coolant Temperature (ECT) Sensor 1 Circuit Performance Problem	ON
P1121 (7) *12	○	Throttle Position (TP) Sensor Signal Lower Than Expected	ON
P1122 (7) *12	○	Throttle Position (TP) Sensor Signal Higher Than Expected	ON
P1128 (5)	○	Manifold Absolute Pressure (MAP) Sensor Signal Lower Than Expected	ON
P1129 (5)	○	Manifold Absolute Pressure (MAP) Sensor Signal Higher Than Expected	ON
P1157 (48)	—	Air Fuel Ratio (A/F) Sensor (Sensor 1) AFS Circuit High Voltage	ON
P1172 (61) *8	—	Air Fuel Ratio (A/F) Sensor (Sensor 1) Circuit Out of Range High	ON
P1297 (20)	—	Electrical Load Detector (ELD) Circuit Low Voltage	OFF
P1298 (20)	—	Electrical Load Detector (ELD) Circuit High Voltage	OFF
P1454 (91)	○	Fuel Tank Pressure (FTP) Sensor Circuit Range/Performance Problem	ON
P1549 (34) *9	—	Charging System High Voltage	OFF
P1683 (40) *13	—	Throttle Valve Default Position Spring Performance Problem	ON
P1684 (40) *13	—	Throttle Valve Return Spring Performance Problem	ON
P16BB (116) *8	—	Alternator B Terminal Circuit Low Voltage	OFF
P16BC (116) *8	—	Alternator FR Terminal Circuit/IGP Circuit Low Voltage	OFF
P2101 (40) *13	—	Throttle Actuator System Malfunction	ON
P2108 (40) *13	—	Throttle Actuator Control Module Problem	ON
P2118 (40) *13	—	Throttle Actuator Current Range/Performance Problem	ON
P2122 (37) *13	—	Accelerator Pedal Position (APP) Sensor A (Throttle Position (TP) Sensor D) Circuit Low Voltage	ON
P2123 (37) *13	—	Accelerator Pedal Position (APP) Sensor A (Throttle Position (TP) Sensor D) Circuit High Voltage	ON
P2127 (37) *13	—	Accelerator Pedal Position (APP) Sensor B (Throttle Position (TP) Sensor E) Circuit Low Voltage	ON
P2128 (37) *13	—	Accelerator Pedal Position (APP) Sensor B (Throttle Position (TP) Sensor E) Circuit High Voltage	ON
P2135 (7) *13	—	Throttle Position (TP) Sensor A/B Incorrect Voltage Correlation	ON
P2138 (37) *13	—	Accelerator Pedal Position (APP) Sensor A/B (Throttle Position (TP) Sensor D/E) Incorrect Voltage Correlation	ON
P2176 (40) *13	—	Throttle Actuator Control System Idle Position Not Learned	ON
P2183 (192) *8	○	Engine Coolant Temperature (ECT) Sensor 2 Circuit Range/ Performance Problem	ON
P2184 (192) *8	—	Engine Coolant Temperature (ECT) Sensor 2 Circuit Low Voltage	ON
P2185 (192) *8	—	Engine Coolant Temperature (ECT) Sensor 2 Circuit High Voltage	ON
P2195 (48)	—	Air Fuel Ratio (A/F) Sensor (Sensor 1) Signal Stuck Lean	ON

NOTE: The above DTCs are indicated when the PGM-FI system is selected in the HDS.
Some automatic transmission DTCs cause the MIL to come on. If the MIL is on and no DTCs are indicated in the PGM-FI system, select the A/T system, and check for automatic transmission DTCs.

* 1: These DTCs are indicated by a blinking MIL when the SCS line is jumped with the HDS.
* 4: M/T
* 8: '05-07 models
* 12: '03-05 models
* 13: '06-07 models
* 16: The D indicator and the MIL may come on at the same time (A/T)
* 19: '04-07 models

Fig. 12: DTC Troubleshooting Index (3 of 4)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC (MIL indication *1)	Two Drive Cycle Detection	Detection Item	MIL
P2227 (13)	○	Barometric Pressure (BARO) Sensor Circuit Range/Performance Problem	ON
P2228 (13)	—	Barometric Pressure (BARO) Sensor Circuit Low Voltage	ON
P2229 (13)	—	Barometric Pressure (BARO) Sensor Circuit High Voltage	ON
P2238 (48)	—	Air Fuel Ratio (A/F) Sensor (Sensor 1) AFS+ Circuit Low Voltage	ON
P2252 (48)	—	Air Fuel Ratio (A/F) Sensor (Sensor 1) AFS− Circuit Low Voltage	ON
P2270 (63) *8	○	Secondary Heated Oxygen Sensor (Secondary HO2S (Sensor 2)) Circuit Signal Stuck Lean	ON
P2271 (63) *8	○	Secondary Heated Oxygen Sensor (Secondary HO2S (Sensor 2)) Circuit Signal Stuck Rich	ON
P2279 (109) *7	○	Intake Air System Leak Detected	ON
P2413 (12)	○	Exhaust Gas Recirculation (EGR) System Malfunction	ON
P2422 (117)	○	Evaporative Emission (EVAP) Canister Vent Shut Valve Stuck Closed Malfunction	ON
P2552 (40) *13	—	Throttle Actuator Control Module Relay Malfunction	ON
P2610 (132) *8	—	Engine Control Module (ECM)/Powertrain Control Module (PCM) Ignition Off Internal Timer Performance Problem	ON
P2646 (22)	—	Rocker Arm Oil Pressure Switch (VTEC Oil Pressure Switch) Circuit Low Voltage	ON
P2647 (22)	—	Rocker Arm Oil Pressure Switch (VTEC Oil Pressure Switch) Circuit High Voltage	ON
P2648 (21)	—	Rocker Arm Oil Control Solenoid (VTEC Solenoid Valve Circuit) Low Voltage	ON
P2649 (21)	—	Rocker Arm Oil Control Solenoid (VTEC Solenoid Valve Circuit) High Voltage	ON
P2A00 (61)	○	Air Fuel Ratio (A/F) Sensor (Sensor 1) Circuit Range/Performance Problem	ON
U0073 (126) *17	—	F-CAN Malfunction (Bus-Off)	OFF
U0073 (126) *18	—	F-CAN Malfunction (Bus-Off)	OFF
U0107 (30) *13	—	Lost Communication With Throttle Actuator Control Module	ON
U0155 (126) *5	—	F-CAN Malfunction (Engine Control Module (ECM)/Powertrain Control Module (PCM)-Gauge Control Module)	OFF
U0155 (126) *6	—	F-CAN Malfunction (Engine Control Module (ECM)/Powertrain Control Module (PCM)-Gauge Control Module)	OFF
U0155 (126) *13	—	F-CAN Malfunction (Engine Control Module (ECM)/Powertrain Control Module (PCM)-Gauge Control Module)	ON
U0155 (126) *14	—	F-CAN Malfunction (Engine Control Module (ECM)/Powertrain Control Module (PCM)-Gauge Control Module)	ON
U1102 (126) *10	—	F-CAN Malfunction (Bus-Off)	OFF
U1102 (126) *11	—	F-CAN Malfunction (Bus-Off)	OFF
U1102 (126) *13	—	F-CAN Malfunction (Bus-Off)	ON
U1102 (126) *14	—	F-CAN Malfunction (Bus-Off)	ON

NOTE: The above DTCs are indicated when the PGM-FI system is selected in the HDS.
Some automatic transmission DTCs cause the MIL to come on. If the MIL is on and no DTCs are indicated in the PGM-FI system, select the A/T system, and check for automatic transmission DTCs.

* 1: These DTCs are indicated by a blinking MIL when the SCS line is jumped with the HDS.
* 5: '03-05 models with Navigation System
* 6: '03-05 models without Navigation System
* 7: '03-04 models except SULEV, LX-P models
* 8: '05-07 models
* 10: '05 model with Navigation System
* 11: '05 model without Navigation System
* 13: '06-07 models with Navigation System
* 14: '06-07 models without Navigation System
* 17: '03-04 models with Navigation System
* 18: '03-04 models without Navigation System

Fig. 13: DTC Troubleshooting Index (4 of 4)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

When the vehicle has one of these symptoms, check for a diagnostic trouble code (DTC) with the HDS. If there is no DTC, do the diagnostic procedure for the symptom, in the sequence listed, until you find the cause.

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for

Engine will not start (MIL works OK, no DTCs set)	1. Test the battery (see **BATTERY TEST**). 2. Test the starter solenoid (see **STARTER SOLENOID TEST**). 3. Check the fuel pressure (see **FUEL PRESSURE TEST**). 4. Troubleshoot the fuel pump circuit (see **FUEL PUMP CIRCUIT TROUBLESHOOTING**).	• Low compression • No ignition spark • Intake air leaks • Locked up engine • Broken cam chain • Contaminated fuel
Engine will not start (MIL comes on and stays on, or never comes on at all, no DTCs set)	Troubleshoot the MIL circuit (see **MIL CIRCUIT TROUBLESHOOTING**).	
Engine will not start (immobilizer indicator stays on or flashes)	Troubleshoot the immobilizer system (see **TROUBLESHOOTING**).	
Engine starts but stalls immediately (MIL works OK, no DTCs set)	Troubleshoot the immobilizer system (see **TROUBLESHOOTING**).	
Engine is hard to start (MIL works OK, no DTCs set)	1. Test the battery (see **BATTERY TEST**) 2. Check the fuel pressure (see **FUEL PRESSURE TEST**). 3. '06-07 models: Clean the throttle body (see **THROTTLE BODY**	• Low compression • Intake air leaks • Contaminated fuel • Weak spark

	CLEANING).	
Cold fast idle too low (MIL works OK, no DTCs set)	1. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**). 2. Check the idle speed (see **IDLE SPEED INSPECTION**). 3. '06-07 models: Clean the throttle body (see **THROTTLE BODY CLEANING**).	
Cold fast idle too high (MIL works OK, no DTCs set)	1. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**). 2. Check the idle speed (see **IDLE SPEED INSPECTION**). 3. Inspect/adjust the throttle cable; '03-05 models (see **'03-05 MODELS**) or '06-07 models (see **'06-07 MODEL**). 4. '03-05 models: Test the throttle body (see **'03-05 MODELS**). 5. '06-07 models: Do the throttle position learning check (see **THROTTLE POSITION SENSOR SIGNAL INSPECTION**).	
	1. Do the ECM/PCM idle	

Idle speed fluctuates (MIL works OK, no DTCs set)	learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**). 2. Check the idle speed (see **IDLE SPEED INSPECTION**). 3. Inspect/adjust the throttle cable; '03-05 models (see **'03-05 MODELS**) or '06-07 models (see **'06-07 MODEL**). 4. '03-05 models: Test the throttle body (see **'03-05 MODELS**). 5. '06-07 models: Do the carbon accumulation check (see **'06-07 MODELS**).	Intake vacuum leaks

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for
After warming up, idle speed is below specification without load (MIL works OK, no DTCs set)	1. '03-04 models: Troubleshoot the alternator FR signal circuit (see **'03-04 MODELS**). 2. '05-07 models: Troubleshoot the alternator FR signal circuit (see **'05-07 MODELS**). 3. '03-05 models: Test the throttle body (see **'03-05 MODELS**). 4. '06-07 model: Do the carbon accumulation check (see **'06-07 MODELS**).	

	5. Troubleshoot the PSP switch signal circuit (see **PSP SWITCH SIGNAL CIRCUIT TROUBLESHOOTING**). 6. Troubleshoot the A/C signal circuit (see **A/C SIGNAL CIRCUIT TROUBLESHOOTING**).	
After warming up, idle speed is above specification without load (MIL works OK, no DTCs set)	1. Inspect/adjust the throttle cable; '03-05 models (see **'03-05 MODELS**), '06-07 models (see **'06-07 MODEL**). 2. '03-04 models: Troubleshoot the alternator FR signal circuit (see **'03-04 MODELS**). 3. '05-07 models: Troubleshoot the alternator FR signal circuit (see **'05-07 MODELS**). 4. '06-07 models: Inspect the APP sensor (see **APP SENSOR SIGNAL INSPECTION**). 5. '03-05 models: Inspect the TP sensor (see **THROTTLE POSITION SENSOR SIGNAL INSPECTION**). 6. Troubleshoot the PSP switch signal circuit (see **PSP SWITCH SIGNAL**	

	CIRCUIT TROUBLESHOOTING). 7. Troubleshoot the A/C signal circuit (see **A/C SIGNAL CIRCUIT TROUBLESHOOTING**).	
Low power (MIL works OK, no DTCs set)	1. Check the fuel pressure (see **FUEL PRESSURE TEST**). 2. '03-05 models: Test the throttle body (see **'03-05 MODELS**). 3. Inspect/adjust the throttle cable; '03-05 models (see **'03-05 MODELS**), '06-07 models (see **'06-07 MODEL**).	• Low compression • Incorrect camshaft timing • Incorrect engine oil level
Engine stalls (MIL works OK, no DTCs set)	1. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**). 2. Check the fuel pressure (see **FUEL PRESSURE TEST**). 3. Check the idle speed (see **IDLE SPEED INSPECTION**). 4. Troubleshoot the brake pedal position switch signal circuit (see **BRAKE PEDAL POSITION SWITCH SIGNAL CIRCUIT**	• Intake air leaks • Faulty harness and sensor connections

	TROUBLESHOOTING).	
Difficult to refuel (MIL works OK, no DTCs set)	1. Check the fuel vent tube between the EVAP canister and the fuel tank. 2. Check the fuel tank vapor recirculation tube between the fuel pipe and the fuel tank. 3. Check the fuel tank signal tube between the fuel pipe and the fuel tank (SULEV and LX-P models). 4. Replace the fuel tank (see **FUEL TANK REPLACEMENT**).	Malfunctioning gas station filling nozzle.
Fuel overflows during refueling (No DTCs set)	Replace the fuel tank (see **FUEL TANK REPLACEMENT**).	Malfunctioning gas station filling nozzle.
Fuel overflows during refuel (No DTCs set).		
Replace the fuel tank (see **FUEL TANK REPLACEMENT**).		
Malfunction gas station filling nozzle.		

SYSTEM DESCRIPTION

ELECTRONIC CONTROL SYSTEM

The functions of the fuel and emission control systems are managed by the engine control module (ECM) on vehicles with manual transmission, or the powertrain control module (PCM) on vehicles with automatic transmissions.

Self-diagnosis

The ECM/PCM detects a failure of a signal from a sensor or from another control unit and stores a Temporary DTC or a DTC. Depending on the failure, a DTC is stored in the either first or the second drive cycle. When a DTC is stored, the ECM/PCM turns on the malfunction indicator lamp (MIL) by supplying ground to the MIL circuit.

- **One Drive Cycle Detection Method**

  When an abnormality occurs in the signal from a sensor or from another control unit, the ECM/PCM stores a DTC and turns on the MIL.

- **Two Drive Cycle Detection Method**

  When an abnormality occurs in the signal from a sensor or from another control unit in the first drive cycle, the ECM/PCM stores a Temporary DTC. The MIL does not come on at this time. If the failure continues in the second drive cycle, the ECM/PCM stores a DTC in erasable memory and turns on the MIL.

Fail-safe Function

When an abnormality occurs in the signal from a sensor or from another control unit, the ECM/PCM ignores that signal, and substitutes a pre programmed value for them that allows the engine to continue running. This causes a DTC to be stored and the MIL to comes on.

MIL Bulb Check and Readiness Code Condition

When the ignition switch is turned ON (II), the ECM/PCM supplies ground to the MIL circuit for about 15 to 20 seconds to check the bulb condition. If any readiness codes are not set to complete, the MIL flashes five times. If all readiness codes are set to complete, the MIL goes out.

Self Shut Down (SSD) Mode

After the ignition switch is turned OFF, the ECM/PCM stays on (up to 15 minutes). If the ECM/PCM connector is disconnected during this time, the ECM/PCM may be damaged. To cancel this mode, disconnect the negative cable from the battery or jump the SCS line with the HDS after the ignition switch is turned OFF.

ECM/PCM Electrical Connections

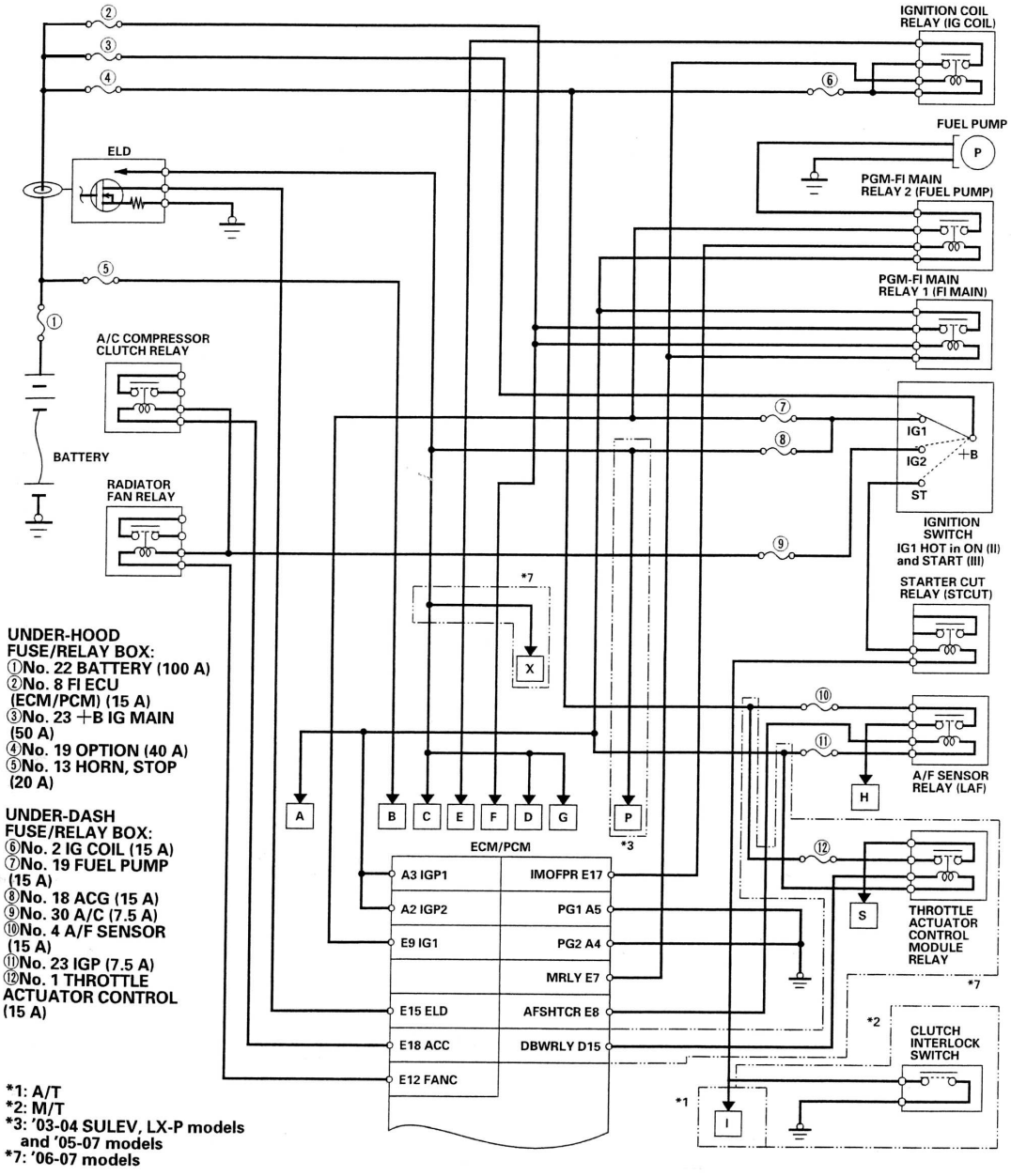


Fig. 14: ECM/PCM Electrical Connection Wiring Diagram (1 of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

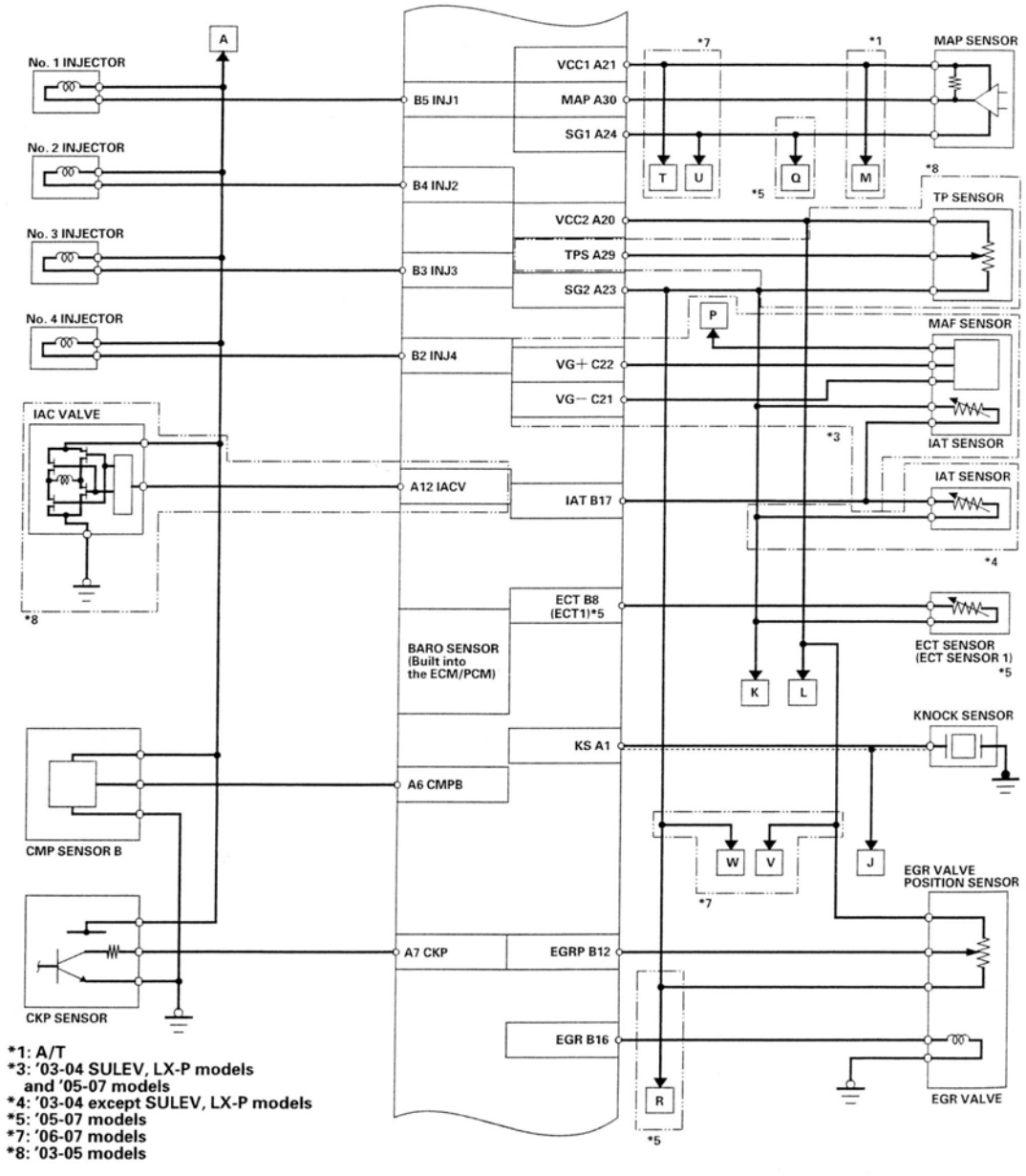


Fig. 15: ECM/PCM Electrical Connection Wiring Diagram (2 of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

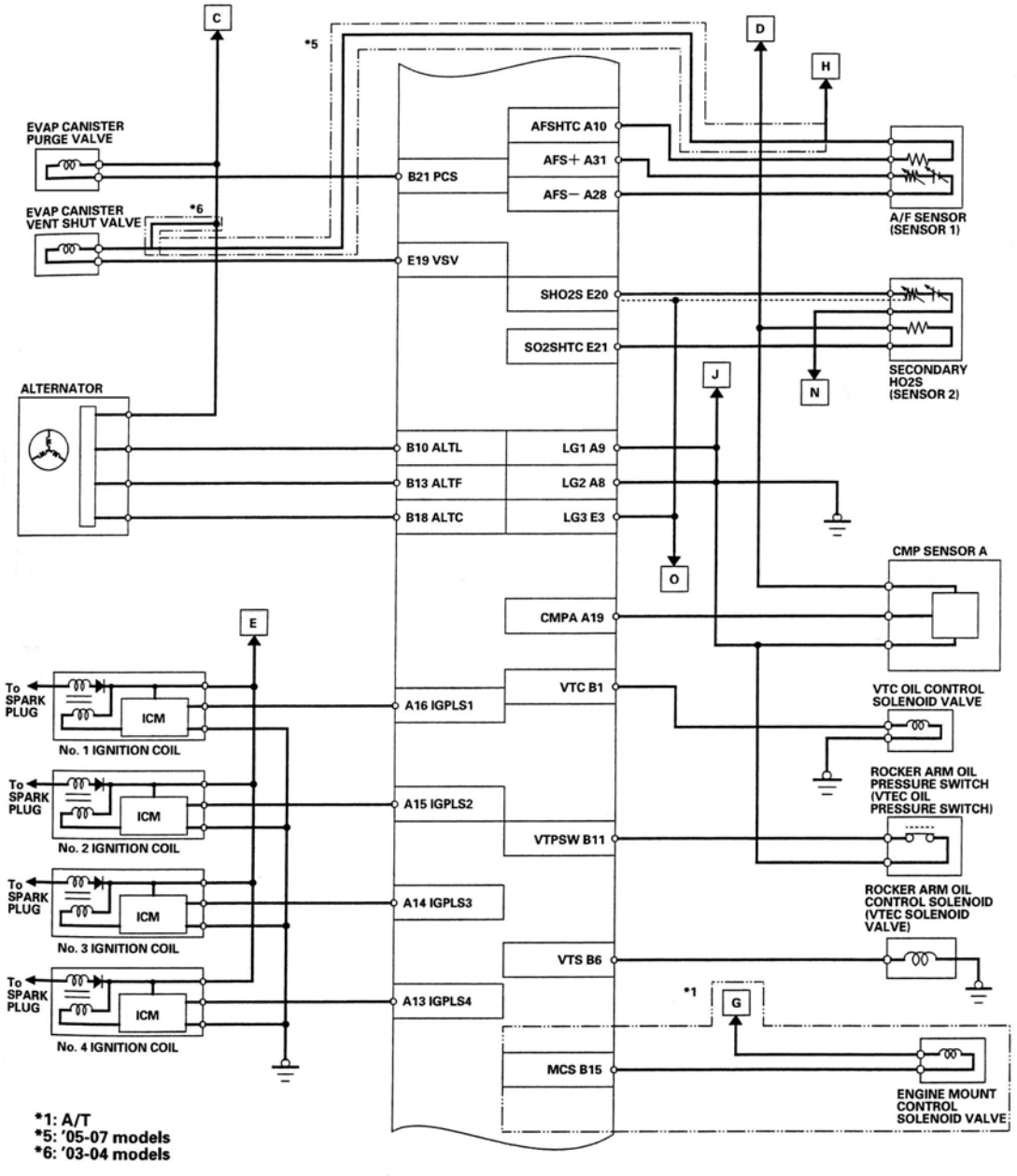


Fig. 16: ECM/PCM Electrical Connection Wiring Diagram (3 of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

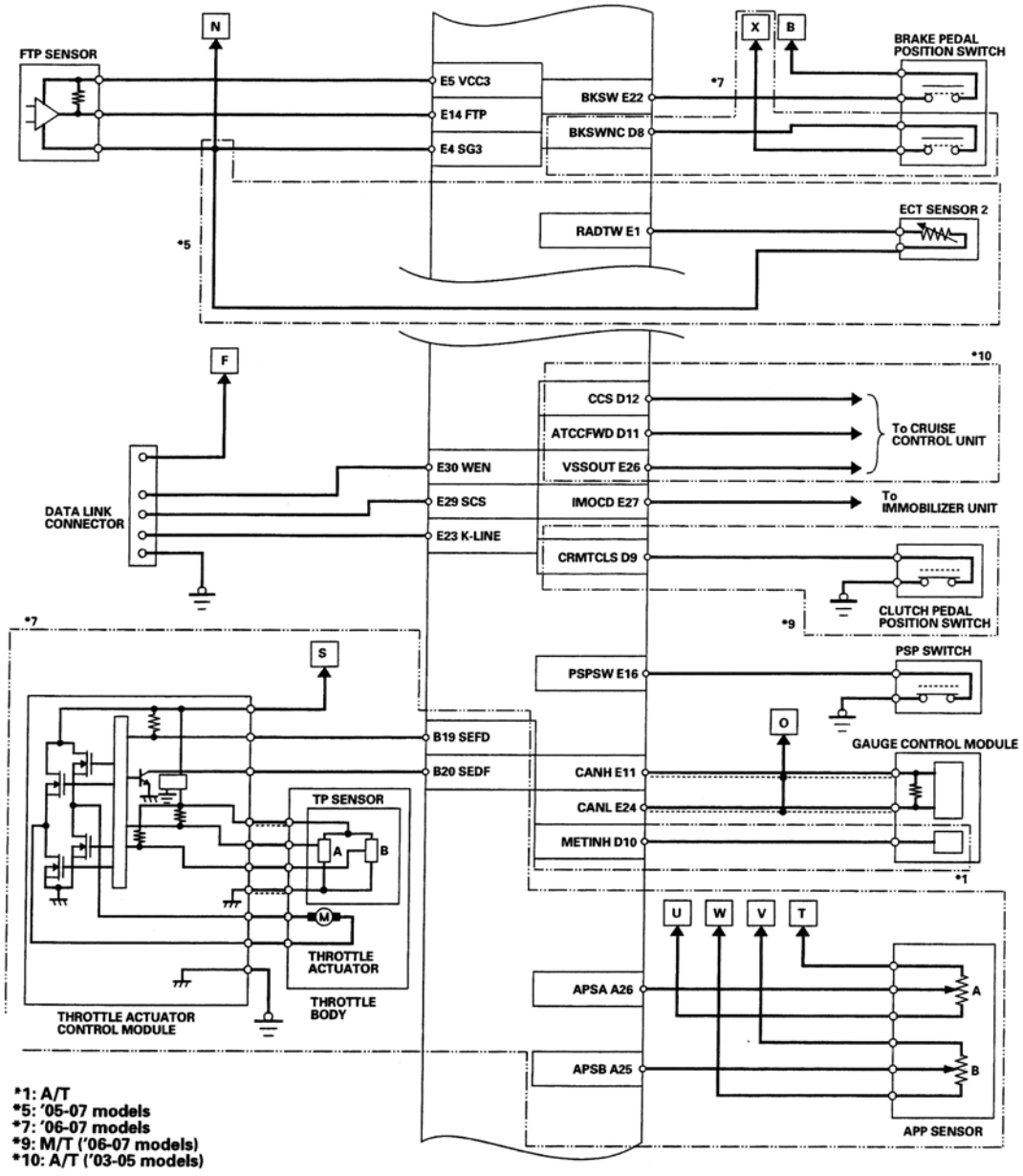


Fig. 17: ECM/PCM Electrical Connection Wiring Diagram (4 of 5)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

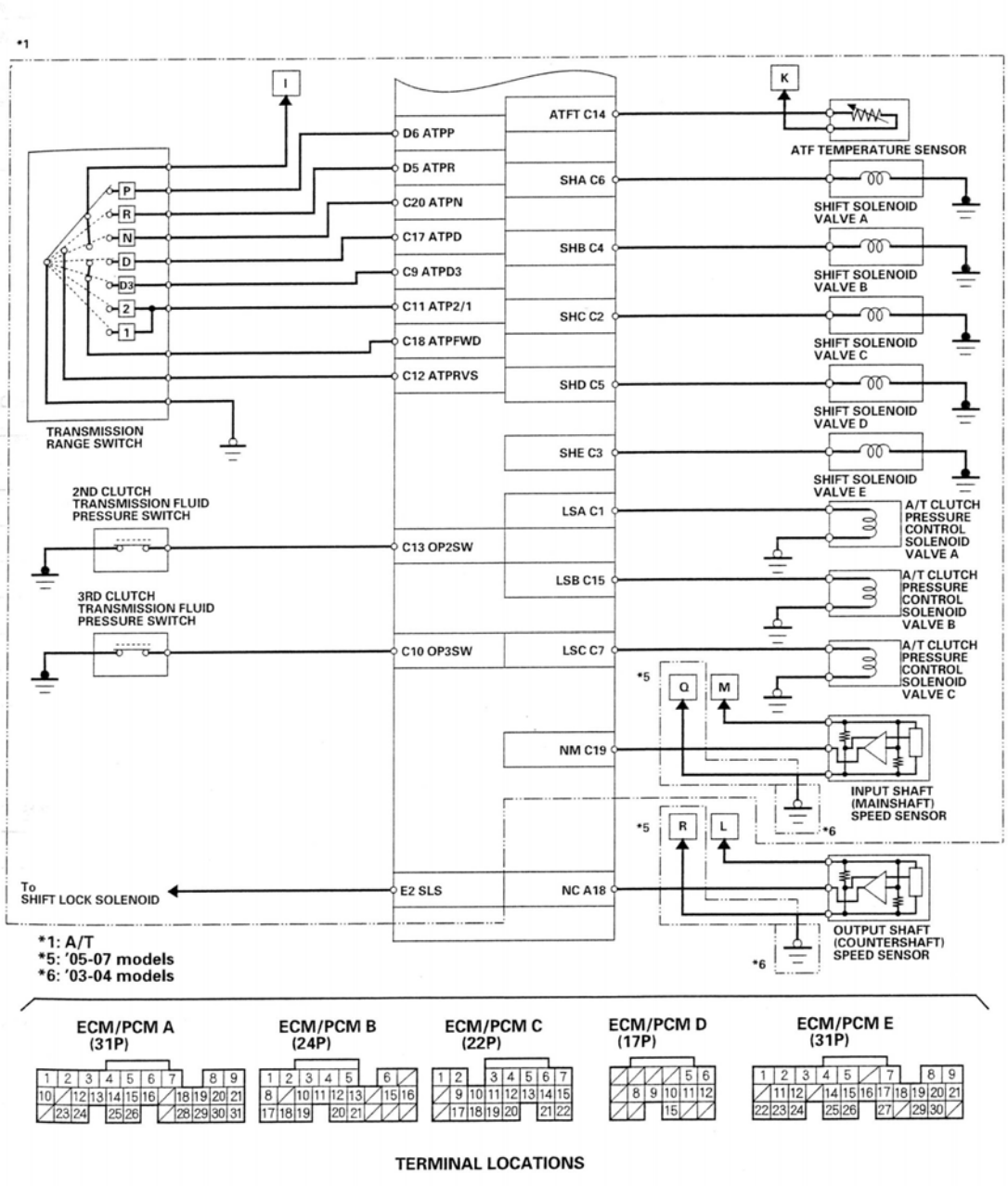
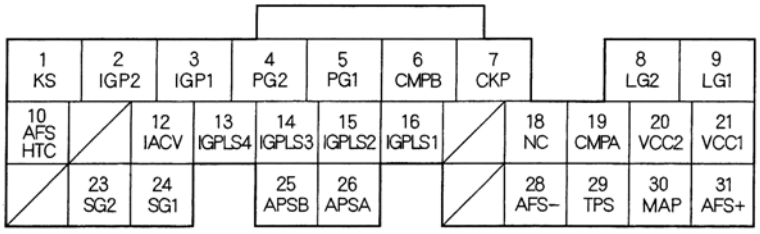


Fig. 18: ECM/PCM Electrical Connection Wiring Diagram (5 of 5) Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM/PCM INPUTS AND OUTPUTS AT CONNECTOR A (31P)



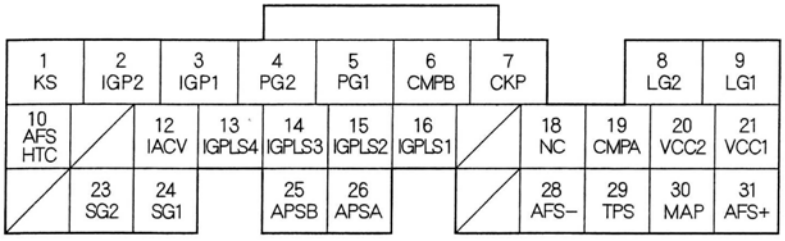
Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	RED/BLU	KS (KNOCK SENSOR)	Detects knock sensor signal	With engine knocking: pulses
2	YEL/BLK	IGP2 (POWER SOURCE)	Power source for ECM/PCM circuit	With ignition switch ON (II): battery voltage With ignition switch OFF: about 0 V
3	YEL/BLK	IGP1 (POWER SOURCE)	Power source for ECM/PCM circuit	With ignition switch ON (II): battery voltage With ignition switch OFF: about 0 V
4	BLK	PG2 (POWER GROUND)	Ground circuit for ECM/ PCM	Less than 1.0 V at all times
5	BLK	PG1 (POWER GROUND)	Ground circuit for ECM/ PCM	Less than 1.0 V at all times
6	GRN	CMPB (CAMSHAFT POSITION SENSOR B)	Detects CMP sensor B signal	With engine running: pulses With the ignition switch ON (II): about 5.0 V
7	BLU	CKP (CRANKSHAFT POSITION SENSOR)	Detects CKP sensor signal	With engine running: pulses With the ignition switch ON (II): about 5.0 V
8	BRN/YEL	LG2 (LOGIC GROUND)	Ground circuit for ECM/ PCM	Less than 1.0 V at all times
9	BRN/YEL	LG1 (LOGIC GROUND)	Ground circuit for ECM/ PCM	Less than 1.0 V at all times
10	GRN	AFSHTC (AIR FUEL RATIO (A/F) SENSOR HEATER CONTROL)	Drives A/F sensor heater	With ignition switch ON (II): battery voltage With fully warmed up engine running: about 0 V
12*6	BLK/RED	IACV (IDLE AIR CONTROL (IAC) VALVE)	Drives IAC valve	With engine running: duty controlled
13	BRN	IGPLS4 (No. 4 IGNITION COIL PULSE)	Drives No. 4 ignition coil	With ignition switch ON (II): about 0 V With engine running: pulses
14	WHT/BLU	IGPLS3 (No. 3 IGNITION COIL PULSE)	Drives No. 3 ignition coil	
15	BLU/RED	IGPLS2 (No. 2 IGNITION COIL PULSE)	Drives No. 2 ignition coil	
16	YEL/GRN	IGPLS1 (No. 1 IGNITION COIL PULSE)	Drives No. 1 ignition coil	
18	BLK/BLU	NC (OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR)	Detects output shaft (countershaft) speed sensor signal	With ignition switch ON (II): about 0 V or about 5.0 V While driving: about 2.5 V
19	BLU/WHT	CMPA (CAMSHAFT POSITION SENSOR A)	Detects CMP sensor A signal	With engine running: pulses With ignition switch ON (II): about 5.0 V

* 6: '03-05 models

Fig. 19: ECM/PCM Inputs & Outputs at Connector A (31P) (1 of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



Wire side of female terminals

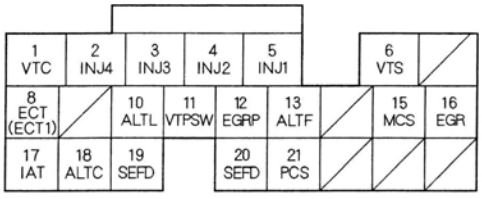
NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
20	YEL/BLU	VCC2 (SENSOR VOLTAGE)	Provides sensor voltage	With ignition switch ON (II): about 5.0 V With ignition switch OFF: about 0 V
21	YEL/RED	VCC1 (SENSOR VOLTAGE)	Provides sensor voltage	With ignition switch ON (II): about 5.0 V With ignition switch OFF: about 0 V
23	GRN/YEL	SG2 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
24	GRN/WHT	SG1 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
25*7	RED/YEL	APSB (ACCELERATOR PEDAL POSITION (APP) SENSOR B)	Detects APP sensor B signal	With ignition switch ON (II) and accelerator pedal pressed: about 2.3 V With ignition switch ON (II) and accelerator pedal released: about 0.2 V
26*7	RED/BLU	APSA (ACCELERATOR PEDAL POSITION (APP) SENSOR A)	Detects APP sensor A signal	With ignition switch ON (II) and accelerator pedal pressed: about 4.5 V With ignition switch ON (II) and accelerator pedal released: about 0.5 V
28	RED/YEL	AFS− (AIR FUEL RATIO (A/F) SENSOR, SENSOR 1 −SIDE)	Detects A/F sensor (sensor 1) signal	
29*6	RED/BLK	TPS (THROTTLE POSITION SENSOR)	Detects TP sensor signal	With throttle fully open: about 4.5 V With throttle fully closed: about 0.5 V
30	GRN/RED	MAP (MANIFOLD ABSOLUTE PRESSURE SENSOR)	Detects MAP sensor signal	With ignition switch ON (II): about 3.0 V At idle: about 1.0 V (depending on engine speed)
31	RED	AFS+ (AIR FUEL RATIO (A/F) SENSOR, SENSOR 1 +SIDE)	Detects A/F sensor (sensor 1) signal	

* 6: '03-05 models
* 7: '06-07 models

Fig. 20: ECM/PCM Inputs & Outputs at Connector A (31P) (2 of 2) Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM/PCM INPUTS AND OUTPUTS AT CONNECTOR B (24P)



Wire side of female terminals

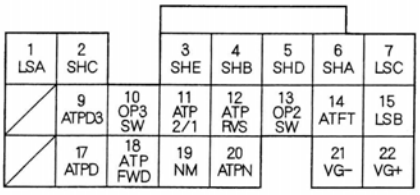
NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	BLU/WHT	VTC (VTC OIL CONTROL SOLENOID VALVE)	Drives VTC oil control solenoid valve	With ignition switch ON (II): 0 V
2	YEL	INJ4 (No. 4 INJECTOR)	Drives No. 4 injector	At idle: duty controlled With ignition switch ON (II): battery voltage
3	BLU	INJ3 (No. 3 INJECTOR)	Drives No. 3 injector	
4	RED	INJ2 (No. 2 INJECTOR)	Drives No. 2 injector	
5	BRN	INJ1 (No. 1 INJECTOR)	Drives No. 1 injector	
6	GRN/YEL	VTS (ROCKER ARM OIL CONTROL SOLENOID (VTEC SOLENOID VALVE))	Drives rocker arm oil control solenoid (VTEC solenoid valve)	At idle: about 0 V
8	RED/WHT	ECT (ENGINE COOLANT TEMPERATURE SENSOR ((ECT 1) ENGINE COOLANT TEMPERATURE SENSOR 1)*4)	Detects ECT sensor (ECT sensor 1)*4 signal	With ignition switch ON (II): about 0.1—4.8 V (depending on engine coolant temperature) With fully warmed up engine: about 0.5—0.7 V
10	WHT/BLU	ALTL (ALTERNATOR L SIGNAL)	Detects alternator signal	With ignition switch ON (II): about 0 V With engine running: battery voltage
11	BLU/BLK	VTPSW (ROCKER ARM OIL PRESSURE SWITCH (VTEC OIL PRESSURE SWITCH))	Detects rocker arm oil pressure switch (VTEC oil pressure switch) signal	With engine at low speed: about 0 V With engine at high speed: battery voltage
12	WHT/BLK	EGRP (EXHAUST GAS RECIRCULATION (EGR) VALVE POSITION SENSOR)	Detects EGR valve position sensor signal	With engine running: about 1.2—3.0 V (depending on EGR valve lift)
13	WHT/RED	ALTF (ALTERNATOR FR SIGNAL)	Detects alternator FR signal	With engine running: about 0—5.0 V (depending on electrical load)
15*2	BLU/YEL	MCS (ENGINE MOUNT CONTROL SOLENOID VALVE)	Drives engine mount control solenoid valve	At idle: about 0 V Above idle: battery voltage With ignition switch ON (II): battery voltage
16	BLU/RED	EGR (EXHAUST GAS RECIRCULATION (EGR) VALVE)	Drives EGR valve	With EGR operating: duty controlled With EGR not operating: about 0 V
17	RED/YEL	IAT (INTAKE AIR TEMPERATURE SENSOR)	Detects IAT sensor signal	With ignition switch ON (II): about 0.1—4.8 V (depending on intake air temperature)
18	WHT/GRN	ALTC (ALTERNATOR CONTROL)	Sends alternator control signal	With engine running and fully warmed up: about 8.0 V
19*7	GRN	SEFD (THROTTLE ACTUATOR CONTROL SERIAL SIGNAL)	Sends throttle actuator control serial signal	
20*7	BLU	SEFD (THROTTLE ACTUATOR CONTROL SERIAL SIGNAL)	Detects throttle actuator control serial signal	
21	YEL/BLU	PCS (EVAPORATIVE EMISSION CANISTER PURGE VALVE)	Drives EVAP canister purge valve	With engine running, engine coolant below 131°F (55 °C): battery voltage With engine running, engine coolant above 131 °F (55 °C): duty controlled

* 2: A/T
* 4: '05-07 models
* 7: '06-07 models

Fig. 21: ECM/PCM Inputs & Outputs at Connector B (24P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM/PCM INPUTS AND OUTPUTS AT CONNECTOR C (22P)



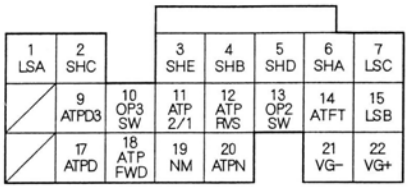
Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1*2	RED/BLK	LSA (A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE A)	Drives A/T clutch pressure control solenoid valve A	With ignition switch ON (II): duty controlled
2*2	GRN	SHC (SHIFT SOLENOID VALVE C)	Drives shift solenoid valve C	With engine running in N, 1, or in D or D3 (in 1st, 3rd, and 5th gears): battery voltage With engine running in P, R, 2, or D or D3 (in 2nd, 4th gears): about 0 V
2*3	BLU/WHT	Not used		
3*2	YEL	SHE (SHIFT SOLENOID VALVE E)	Drives shift solenoid valve E	With engine running in P, R: battery voltage With engine running in N, or in D, D3, 2, and 1: about 0 V
3*3	RED/BLK	Not used		
4*2	GRN/WHT	SHB (SHIFT SOLENOID VALVE B)	Drives shift solenoid valve B	With engine running in P, R, N, 2, and 1, or D, D3 (in 1st, 2nd gears): battery voltage With engine running in D, D3 (in 3rd, 4th, 5th gears): about 0 V
4*3	RED	Not used		
5*2	GRN/RED	SHD (SHIFT SOLENOID VALVE D)	Drives shift solenoid valve D	With engine running in 2 or D, D3 (in 2nd, 5th gears): battery voltage With engine running in P, R, N, 1, D, or D3 position (in 1st, 3rd, 4th, gears): about 0 V
5*3	GRN/RED	Not used		
6*2	BLU/BLK	SHA (SHIFT SOLENOID VALVE A)	Drives shift solenoid valve A	With engine running in R and 1, or D, D3 (in 1st, 4th, 5th gears): battery voltage With engine running in P, N, 2, D, or D3 (in 2nd, 3rd gears): about 0 V
7*2	BLU/YEL	LSC (A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE C)	Drives A/T clutch pressure control solenoid valve C	With ignition switch ON (II): duty controlled
9*2	RED	ATPD3 (TRANSMISSION RANGE SWITCH D3)	Detects transmission range switch D3 position signal input	In D3 position: about 0 V In any other position: battery voltage
10*2	BLU/WHT	OP3SW (3RD CLUTCH TRANSMISSION FLUID PRESSURE SWITCH)	Detects 3rd clutch transmission fluid pressure switch signal output	With ignition switch ON (II): about 5.0 V With 3rd clutch pressure: about 0 V

* 2: A/T
* 3: M/T ('05-07 models)

Fig. 22: ECM/PCM Inputs & Outputs at Connector C (22P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



Wire side of female terminals

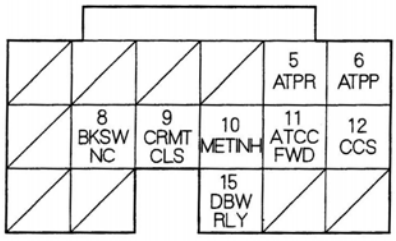
NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
11*2	GRN/RED	ATP2/1 (TRANSMISSION RANGE SWITCH 2ND/1ST)	Detects transmission range switch 2/1 position signal input	In 2/1 position: about 0 V In any other position: battery voltage
12*2	RED/WHT	ATPRVS (TRANSMISSION RANGE SWITCH R)	Detects transmission range switch R position signal input	In R position: about 0 V In any other position: battery voltage
13*2	BLU/RED	OP2SW (2ND CLUTCH TRANSMISSION FLUID PRESSURE SWITCH)	Detects 2nd clutch transmission fluid pressure switch signal input	With ignition switch ON (II): about 5.0 V With 2nd clutch pressure: about 0 V
14*2	RED/YEL	ATFT (ATF TEMPERATURE SENSOR)	Detects ATF temperature sensor signal input	With ignition switch ON (II): about 0.2—4.8 V (depending on ATF temperature)
15*2	BRN/WHT	LSB (A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE B)	Drives A/T clutch pressure control solenoid valve B	With ignition switch ON (II): duty controlled
15*3	RED/WHT	Not used		
17*2	YEL/GRN	ATPD (TRANSMISSION RANGE SWITCH D)	Detects transmission range switch D position signal input	In D position: about 0 V In any other position: battery voltage
18*2	BLU/YEL	ATPFWD (TRANSMISSION RANGE SWITCH D, D3, 2)	Detects transmission range switch D, D3, 2 position signal input	In D, D3, and 2 position: about 0 V In any other position: battery voltage
19*2	WHT/RED	NM (INPUT SHAFT (MAINSHAFT) SPEED SENSOR)	Detects input shaft (mainshaft) speed sensor signal	With ignition switch ON (II): about 0 V or about 5.0 V With engine running in N position: about 2.5 V
20*2	RED/BLK	ATPN (TRANSMISSION RANGE SWITCH NEUTRAL)	Detects transmission range switch N position signal input	In N position: about 0 V In any other position: battery voltage
21*1	BLK/RED	VG— (MASS AIR FLOW (MAF) SENSOR —SIDE)	Ground for MAF sensor signal	
22*1	RED/GRN	VG+ (MASS AIR FLOW (MAF) SENSOR +SIDE)	Detects MAF sensor signal	At idle: 1.1—1.6 V

* 1: '03-04 SULEV, LX-P models and '05-07 models
* 2: A/T
* 3: M/T ('05-07 models)

Fig. 23: ECM/PCM Inputs & Outputs at Connector C (22P) (2 of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM/PCM INPUTS AND OUTPUTS AT CONNECTOR D (17P)



Wire side of female terminals

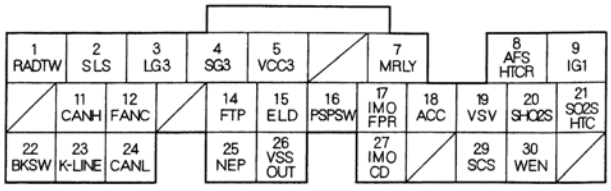
NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
5*2	WHT	ATPR (TRANSMISSION RANGE SWITCH R)	Detects transmission range switch R position signal input	In R position: about 0 V In any other position: battery voltage
6*2	BLU/RED	ATPP (TRANSMISSION RANGE SWITCH PARK)	Detects transmission range switch P position signal input	In P position: about 0 V In any other position: battery voltage
8*7	BRN/BLK	BKSWNC (BRAKE PEDAL POSITION SWITCH)	Detects brake pedal position switch signal	With ignition switch ON (II) and brake pedal released: battery voltage With ignition switch ON (II) and brake pedal pressed: about 0 V
9*8	LT BLU	CRMTCLS (CRUISE CLUTCH PEDAL POSITION SIGNAL)	Detects cruise clutch pedal position switch signal	With ignition switch ON (II) and clutch pedal released: about 0 V With ignition switch ON (II) and clutch pedal pressed: battery voltage
10*2	GRN	METINH (METER DISPLAY INHIBIT SIGNAL)	Sends inhibit signal	With ignition switch ON (II): battery voltage
11*9	PNK	ATCCFWD (TRANSMISSION RANGE SWITCH CRUISE CONTROL FWD SIGNAL)	Sends P and D3 transmission range switch signal to cruise control unit	In D, D3 position: about 0 V In any other than D, D3 position: battery voltage
12*9	BLU/BLK	CCS (CRUISE CONTROL SIGNAL)	Detects cruise control signal	With cruise control on: pulses
15*7	BRN/YEL	DBWRLY (THROTTLE ACTUATOR CONTROL MODULE RELAY)	Drives throttle actuator control module relay	With ignition switch ON (II): about 0 V

*2:A/T
*7:'06-07 models
*8: M/T ('06-07 models)
*9: A/T ('03-05 models)

Fig. 24: ECM/PCM Inputs & Outputs Connector D (17P) Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM/PCM INPUTS AND OUTPUTS AT CONNECTOR E (31P)



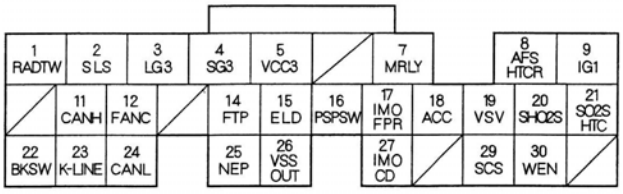
Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1*4	YEL/RED	RADTW (RADIATOR FAN CONTROL)	Detects ECT sensor 2 signal	With ignition switch ON (II): about 0.1—4.9 V (depending on engine coolant temperature)
2*2	YEL/BLK	SLS (SHIFT LOCK SOLENOID)	Drives shift lock solenoid	With ignition switch ON (II), in P position, brake pedal pressed, and accelerator released: about 0 V
3	BRN/YEL	LG3 (LOGIC GROUND)	Ground for ECM/PCM control circuit	Less than 1.0 V at all times
4	GRN/BLK	SG3 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
5	YEL/GRN	VCC3 (SENSOR VOLTAGE)	Provides sensor voltage	With ignition switch ON (II): about 5.0 V With ignition switch OFF: about 0 V
7	RED/BLK	MRLY (PGM-FI MAIN RELAY)	Drives PGM-FI main relay 1 (FI MAIN) Power source for DTC memory	With ignition switch ON (II): about 0 V With ignition switch OFF: battery voltage
8	PNK	AFSHTCR (AIR FUEL RATIO (A/F) SENSOR HEATER CONTROL RELAY)	Drives A/F sensor heater relay	With ignition switch ON (II): about 0 V
9	BLK/YEL	IG1 (IGNITION SIGNAL)	Detects ignition signal	With ignition switch ON (II): battery voltage With ignition switch OFF: about 0 V
11	WHT	CANH (CAN COMMUNICATION SIGNAL HIGH)	Sends communication signal	With ignition switch ON (II): pulses
12	GRN	FANC (RADIATOR FAN CONTROL)	Drives radiator fan relay	With radiator fan running: about 0 V With radiator fan stopped: battery voltage
14	LT GRN	FTP (FUEL TANK PRESSURE (FTP) SENSOR)	Detects FTP sensor signal	With ignition switch ON (II) and fuel fill cap off: about 2.5 V
15	BLU/BLK	ELD (ELECTRICAL LOAD DETECTOR)	Detects ELD signal	With ignition switch ON (II): about 0.1—4.8 V (depending on electrical load)
16	BLU/YEL	PSPSW (POWER STEERING PRESSURE SWITCH SIGNAL)	Detects PSP switch signal	At idle with steering wheel straight ahead: about 0 V At idle with steering wheel at full lock: battery voltage
17	GRN/YEL	IMOFPR (IMMOBILIZER FUEL PUMP RELAY)	Drives PGM-FI main relay 2 (FUEL PUMP)	0 V for 2 seconds after turning ignition switch ON (II), then battery voltage
18	RED	ACC (A/C CLUTCH RELAY)	Drives A/C clutch relay	With compressor ON: about 0 V With compressor OFF: battery voltage
19	LT GRN/RED	VSV (EVAPORATIVE EMISSION (EVAP) CANISTER VENT SHUT VALVE)	Drives EVAP canister vent shut valve	With ignition switch ON (II): battery voltage
20	WHT/RED	SHO2S (SECONDARY HEATED OXYGEN SENSOR (SECONDAY HO2S) SENSOR 2)	Detects secondary HO2S (sensor 2) signal	With throttle fully closed at idle and fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V

* 2: A/T
* 4: '05-06 models

Fig. 25: ECM/PCM Inputs & Outputs at Connector E (31P) (1 of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



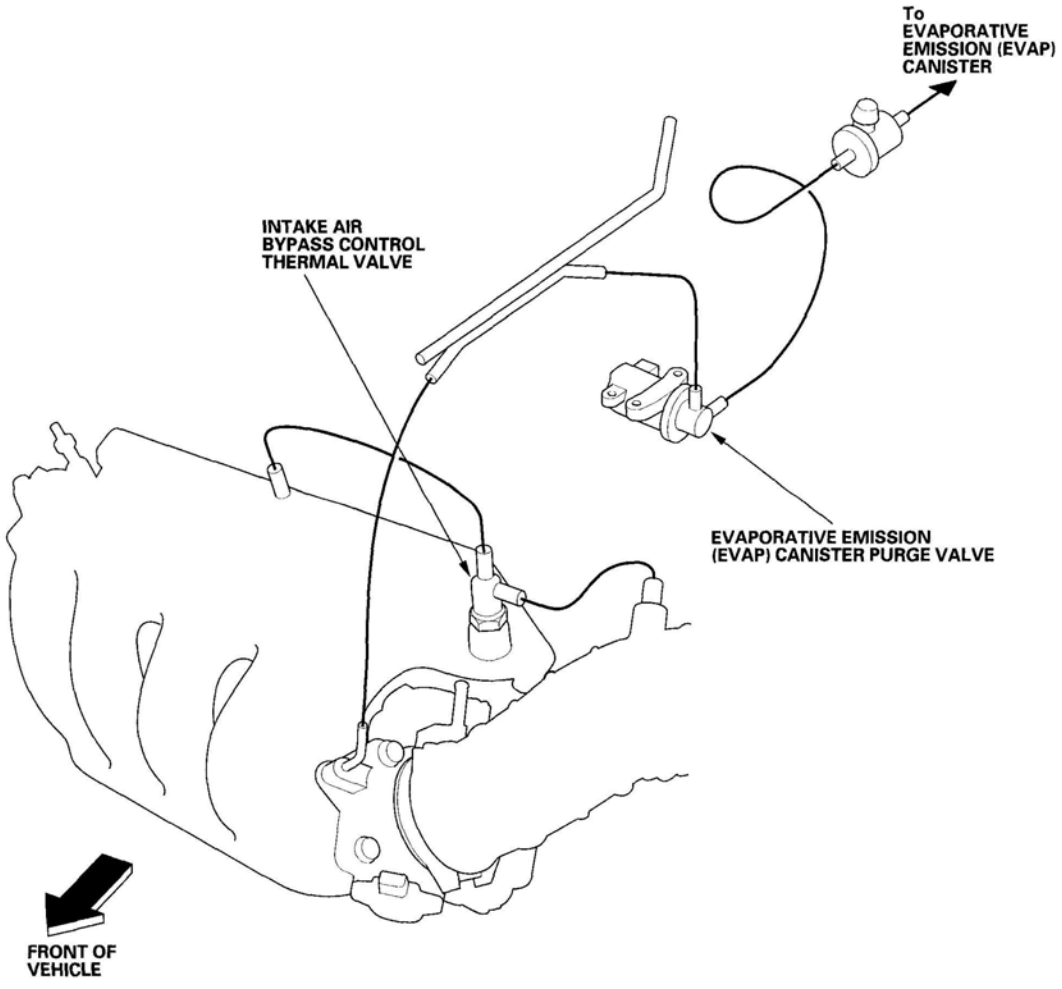
Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
21	BLK/WHT	SO2SHTC (SECONDARY HEATED OXYGEN SENSOR (SECONDAY HO2S) HEATER CONTROL)	Drives secondary HO2S heater	With ignition switch ON (II): battery voltage With fully warmed up engine running: duty controlled
22	WHT/BLK	BKSW (BRAKE PEDAL POSITION SWITCH)	Detects brake pedal position switch signal	With brake pedal released: about 0 V With brake pedal pressed: battery voltage
23	BLU	K-LINE	Sends and receives HDS signals	With ignition switch ON (II) and the HDS disconnected: pulses or battery voltage
24	RED	CANL (CAN COMMUNICATION SIGNAL LOW)	Sends communication signal	With ignition switch ON (II): pulses
25	BLU/RED	NEP	Not used	
26	BLU/WHT	VSSOUT (OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR OUTPUT SIGNAL)	Sends output shaft (countershaft) speed sensor signal	Depending on vehicle speed: pulses With ignition switch ON (II): battery voltage
27	RED/BLU	IMOCD (IMMOBILIZER CODE)	Detects immobilizer signal	
29	BRN	SCS (SERVICE CHECK SIGNAL)	Detects service check signal	With service check signal shorted using HDS: about 0 V With service check signal open: about 5.0 V
30	RED/WHT	WEN (WRITE ENABLE SIGNAL)	Detects write enable signal	With ignition switch ON (II): about 0 V

Fig. 26: ECM/PCM Inputs & Outputs at Connector E (31P) (2 of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VACUUM HOSE ROUTING

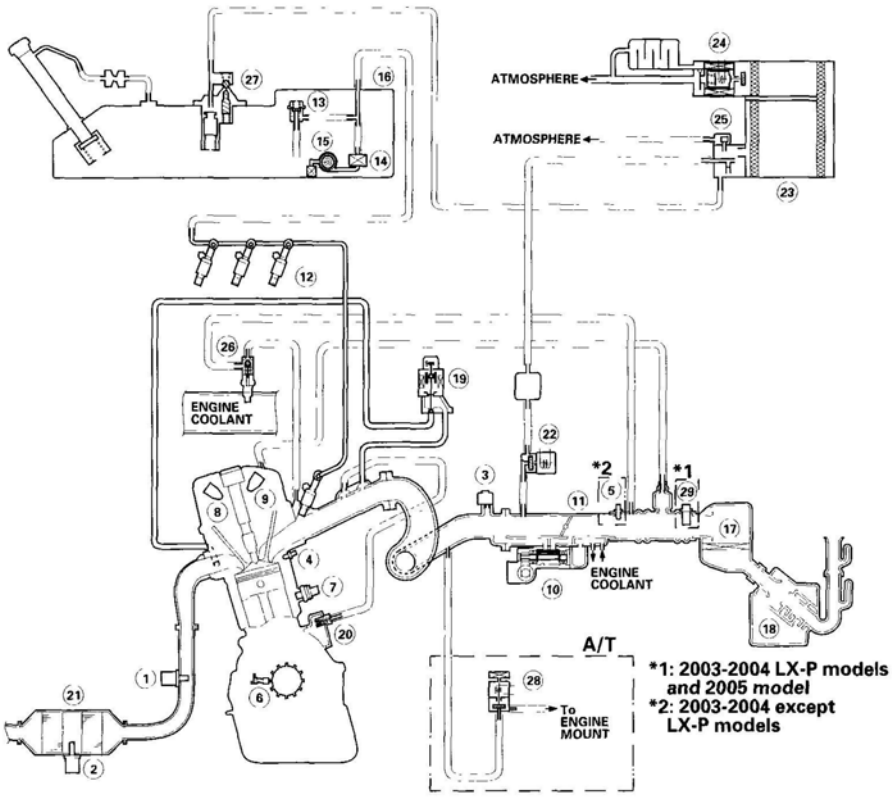


*: This illustration shows 2003-2005 models.
G03646363

Fig. 27: Identifying Vacuum Hose Routing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VACUUM DISTRIBUTION

Non-SULEV model

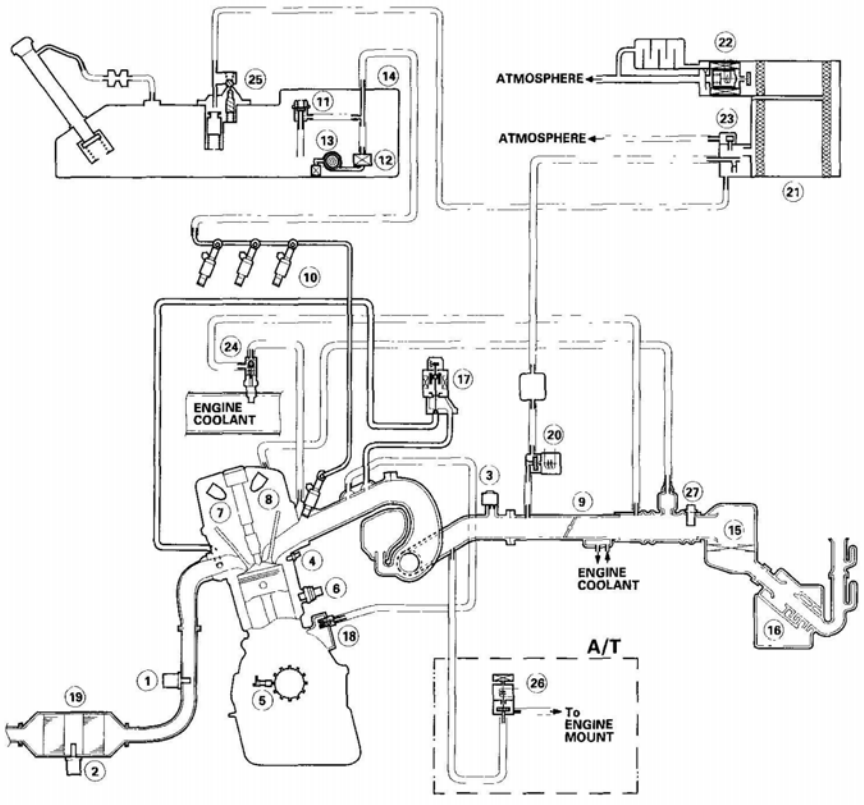


① AIR FUEL RATIO (A/F) SENSOR (SENSOR 1)
② SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) (SENSOR 2)
③ MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR
④ ENGINE COOLANT TEMPERATURE (ECT) SENSOR (2005 model: ENGINE COOLANT TEMPERATURE (ECT) SENSOR 1)
⑤ INTAKE AIR TEMPERATURE (IAT) SENSOR
⑥ CRANKSHAFT POSITION (CKP) SENSOR
⑦ KNOCK SENSOR
⑧ CAMSHAFT POSITION (CMP) SENSOR B
⑨ CAMSHAFT POSITION (CMP) SENSOR A
⑩ IDLE AIR CONTROL (IAC) VALVE
⑪ THROTTLE BODY
⑫ INJECTOR
⑬ FUEL PRESSURE REGULATOR
⑭ FUEL FILTER
⑮ FUEL PUMP
⑯ FUEL TANK
⑰ AIR CLEANER
⑱ RESONATOR
⑲ EXHAUST GAS RECIRCULATION (EGR) VALVE and POSITION SENSOR
⑳ POSITIVE CRANKCASE VENTILATION (PCV) VALVE
㉑ THREE WAY CATALYTIC CONVERTER
㉒ EVAPORATIVE EMISSION (EVAP) CANISTER PURGE VALVE
㉓ EVAPORATIVE EMISSION (EVAP) CANISTER
㉔ EVAPORATIVE EMISSION (EVAP) CANISTER VENT SHUT VALVE
㉕ FUEL TANK PRESSURE (FTP) SENSOR
㉖ INTAKE AIR BYPASS CONTROL THERMAL VALVE
㉗ FUEL TANK VAPOR CONTROL VALVE
㉘ ENGINE MOUNT CONTROL SOLENOID VALVE
㉙ MASS AIR FLOW (MAF) SENSOR and INTAKE AIR TEMPERATURE (IAT) SENSOR

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Fig. 28: Identifying Vacuum Distribution (Non-SULEV Model (2003-2005 Models))

Courtesy of AMERICAN HONDA MOTOR CO., INC.

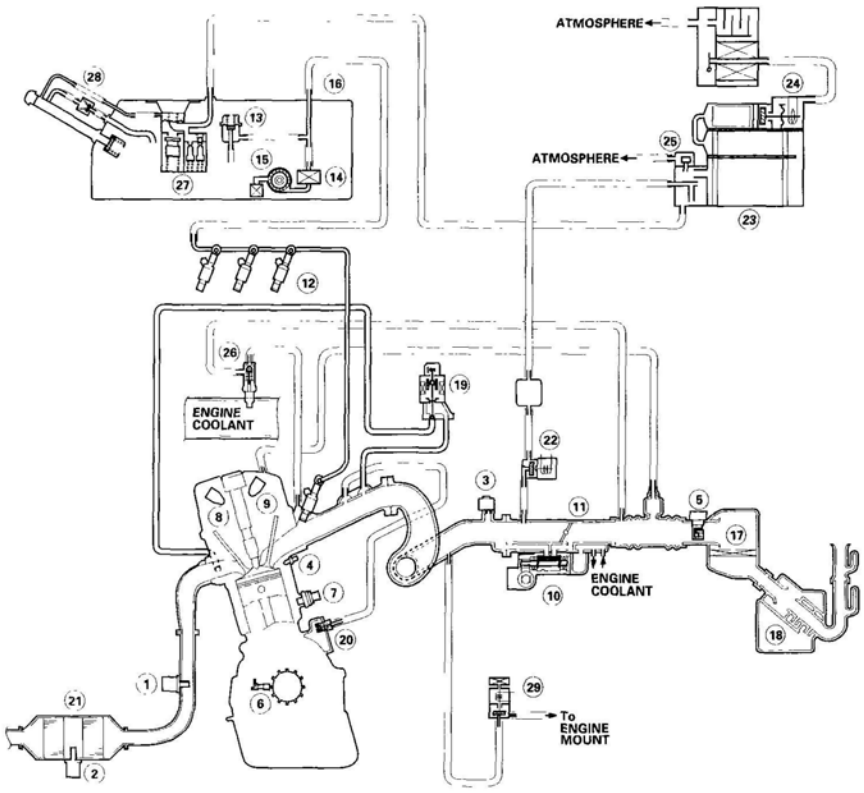


① AIR FUEL RATIO (A/F) SENSOR (SENSOR 1)
② SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) (SENSOR 2)
③ MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR
④ ENGINE COOLANT TEMPERATURE (ECT) SENSOR 1
⑤ CRANKSHAFT POSITION (CKP) SENSOR
⑥ KNOCK SENSOR
⑦ CAMSHAFT POSITION (CMP) SENSOR B
⑧ CAMSHAFT POSITION (CMP) SENSOR A
⑨ THROTTLE BODY
⑩ INJECTOR
⑪ FUEL PRESSURE REGULATOR
⑫ FUEL FILTER
⑬ FUEL PUMP
⑭ FUEL TANK
⑮ AIR CLEANER
⑯ RESONATOR
⑰ EXHAUST GAS RECIRCULATION (EGR) VALVE and POSITION SENSOR
⑱ POSITIVE CRANKCASE VENTILATION (PCV) VALVE
⑲ THREE WAY CATALYTIC CONVERTER
⑳ EVAPORATIVE EMISSION (EVAP) CANISTER PURGE VALVE
㉑ EVAPORATIVE EMISSION (EVAP) CANISTER
㉒ EVAPORATIVE EMISSION (EVAP) CANISTER VENT SHUT VALVE
㉓ FUEL TANK PRESSURE (FTP) SENSOR
㉔ INTAKE AIR BYPASS CONTROL THERMAL VALVE
㉕ FUEL TANK VAPOR CONTROL VALVE
㉖ ENGINE MOUNT CONTROL SOLENOID VALVE
㉗ MASS AIR FLOW (MAF) SENSOR and INTAKE AIR TEMPERATURE (IAT) SENSOR

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Fig. 29: Identifying Vacuum Distribution (Non-SULEV Model (2006-07 Models))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

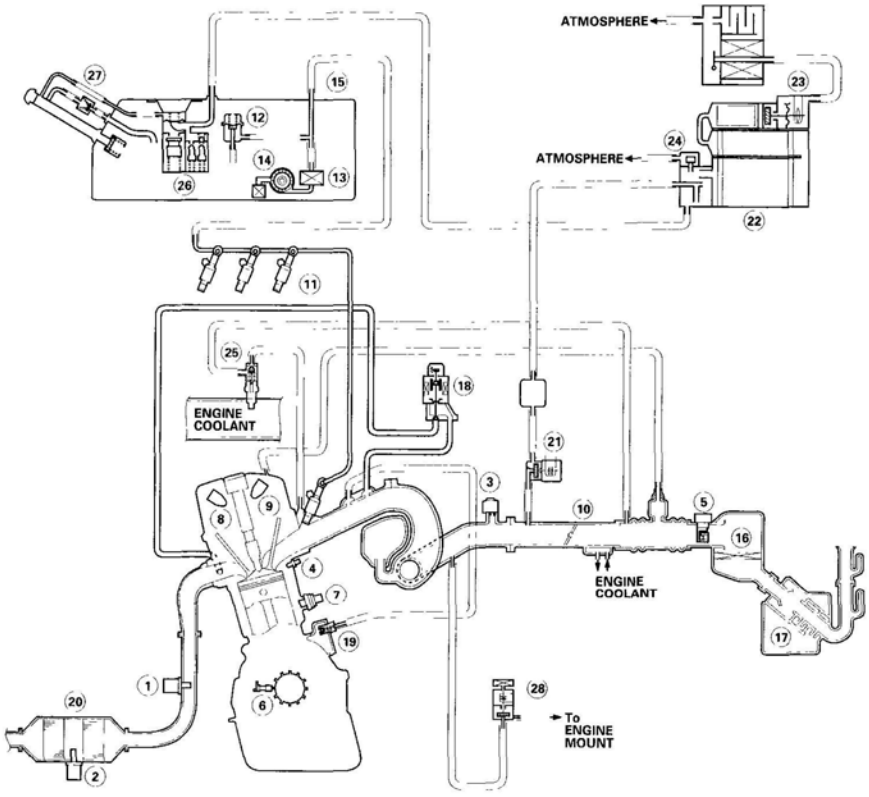
SULEV model



① AIR FUEL RATIO (A/F) SENSOR (SENSOR 1)
② SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) (SENSOR 2)
③ MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR
④ ENGINE COOLANT TEMPERATURE (ECT) SENSOR (2005 model: ENGINE COOLANT TEMPERATURE (ECT) SENSOR 1)
⑤ MASS AIR FLOW (MAF) SENSOR and INTAKE AIR TEMPERATURE (IAT) SENSOR
⑥ CRANKSHAFT POSITION (CKP) SENSOR
⑦ KNOCK SENSOR
⑧ CAMSHAFT POSITION (CMP) SENSOR B
⑨ CAMSHAFT POSITION (CMP) SENSOR A
⑩ IDLE AIR CONTROL (IAC) VALVE
⑪ THROTTLE BODY
⑫ INJECTOR
⑬ FUEL PRESSURE REGULATOR
⑭ FUEL FILTER
⑮ FUEL PUMP
⑯ FUEL TANK
⑰ AIR CLEANER
⑱ RESONATOR
⑲ EXHAUST GAS RECIRCULATION (EGR) VALVE and POSITION SENSOR
⑳ POSITIVE CRANKCASE VENTILATION (PCV) VALVE
㉑ THREE WAY CATALYTIC CONVERTER
㉒ EVAPORATIVE EMISSION (EVAP) CANISTER PURGE VALVE
㉓ EVAPORATIVE EMISSION (EVAP) CANISTER
㉔ EVAPORATIVE EMISSION (EVAP) CANISTER VENT SHUT VALVE
㉕ FUEL TANK PRESSURE (FTP) SENSOR
㉖ INTAKE AIR BYPASS CONTROL THERMAL VALVE
㉗ FUEL TANK VAPOR CONTROL VALVE
㉘ FUEL TANK VAPOR RECIRCULATION VALVE
㉙ ENGINE MOUNT CONTROL SOLENOID VALVE

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Fig. 30: Identifying Vacuum Distribution (SULEV Model (2003-2005 Models))
Courtesy of AMERICAN HONDA MOTOR CO., INC.



① AIR FUEL RATIO (A/F) SENSOR (SENSOR 1)
② SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) (SENSOR 2)
③ MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR
④ ENGINE COOLANT TEMPERATURE (ECT) SENSOR 1
⑤ MASS AIR FLOW (MAF) SENSOR and INTAKE AIR TEMPERATURE (IAT) SENSOR
⑥ CRANKSHAFT POSITION (CKP) SENSOR
⑦ KNOCK SENSOR
⑧ CAMSHAFT POSITION (CMP) SENSOR B
⑨ CAMSHAFT POSITION (CMP) SENSOR A
⑩ THROTTLE BODY
⑪ INJECTOR
⑫ FUEL PRESSURE REGULATOR
⑬ FUEL FILTER
⑭ FUEL PUMP
⑮ FUEL TANK
⑯ AIR CLEANER
⑰ RESONATOR
⑱ EXHAUST GAS RECIRCULATION (EGR) VALVE and POSITION SENSOR
⑲ POSITIVE CRANKCASE VENTILATION (PCV) VALVE
⑳ THREE WAY CATALYTIC CONVERTER
㉑ EVAPORATIVE EMISSION (EVAP) CANISTER PURGE VALVE
㉒ EVAPORATIVE EMISSION (EVAP) CANISTER
㉓ EVAPORATIVE EMISSION (EVAP) CANISTER VENT SHUT VALVE
㉔ FUEL TANK PRESSURE (FTP) SENSOR
㉕ INTAKE AIR BYPASS CONTROL THERMAL VALVE
㉖ FUEL TANK VAPOR CONTROL VALVE
㉗ FUEL TANK VAPOR RECIRCULATION VALVE
㉘ ENGINE MOUNT CONTROL SOLENOID VALVE

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Fig. 31: Identifying Vacuum Distribution (SULEV Model (2006-2007 Models)) Courtesy of AMERICAN HONDA MOTOR CO., INC.

PGM-FI SYSTEM

The programmed fuel injection (PGM-FI) system is a sequential multiport fuel injection system.

Air Conditioning (A/C) Compressor Clutch Relay

When the ECM/PCM receives a demand for cooling from the A/C system, it delays the compressor from being energized and enriches the mixture to assure smooth transition to the A/C mode.

Air Fuel Ratio (A/F) Sensor

The A/F sensor operates over a wide air/fuel range. The A/F sensor is installed upstream of the TWC, and sends signals to the ECM/PCM which varies the duration of fuel injection accordingly.

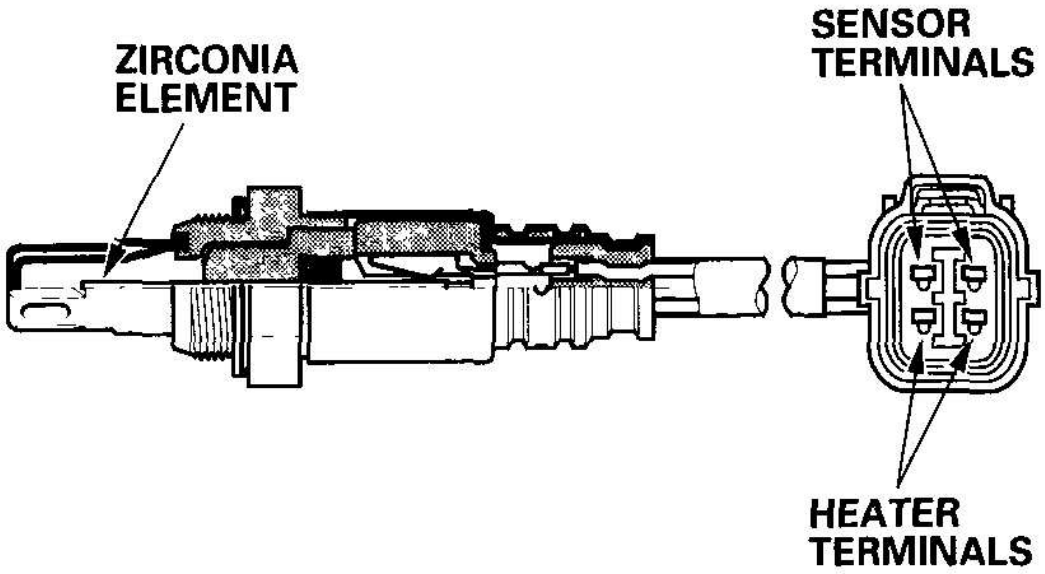


Fig. 32: Identifying Air Fuel Ratio Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Barometric Pressure (BARO) Sensor

The BARO sensor is inside the ECM/PCM. It converts atmospheric pressure into a voltage signal that the ECM/PCM uses to modify the basic duration of the fuel injection discharge.

Camshaft Position (CMP) Sensor B

CMP sensor B detects the position of the No. 1 cylinder as a reference for sequential fuel injection to each cylinder.

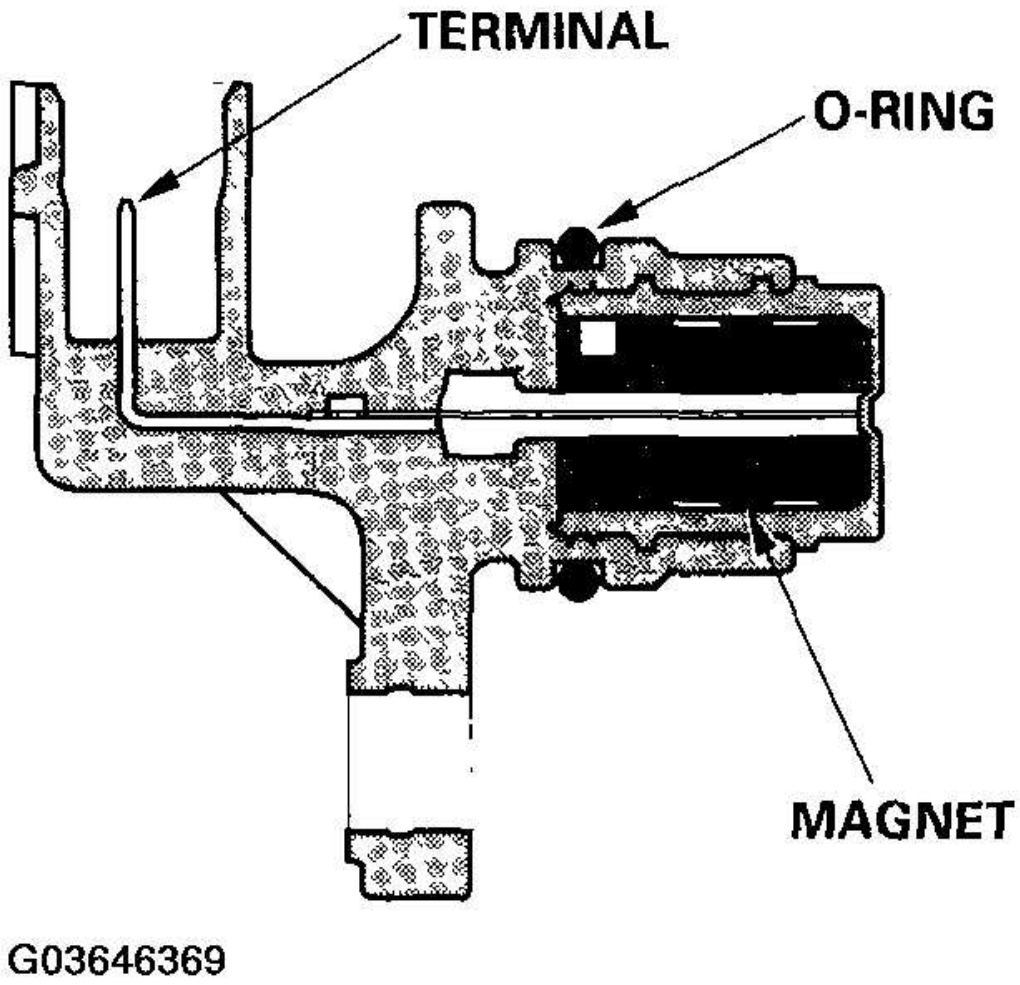


Fig. 33: Identifying Camshaft Position Sensor B
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Crankshaft Position (CKP) Sensor

The CKP sensor detects crankshaft speed and is used by the ECM/PCM to determine ignition timing and timing for fuel injection of each cylinder, as well as detecting engine misfire.

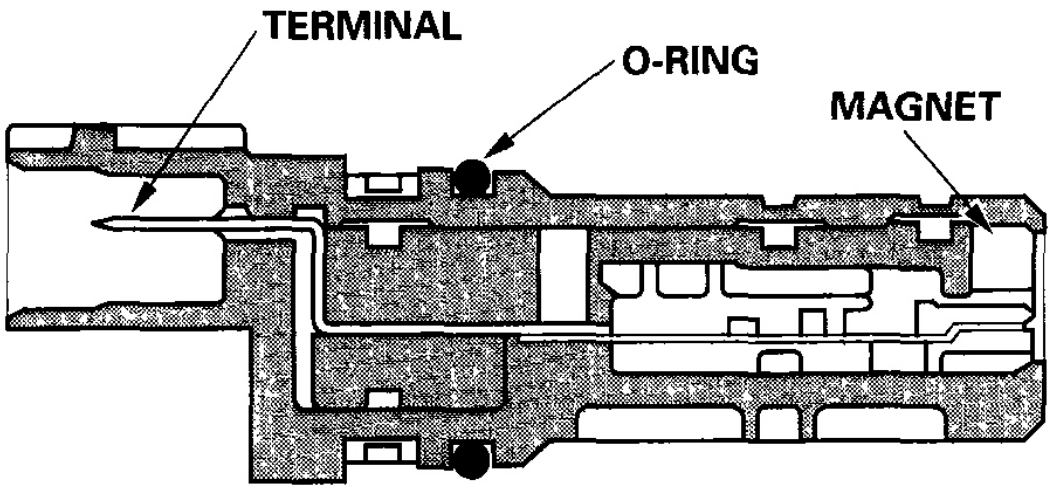


Fig. 34: Identifying Crankshaft Position Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Engine Coolant Temperature (ECT) Sensor ('05-07 models: Engine Coolant Temperature (ECT) Sensor 1)

The ECT sensor ('05-07 models: ECT sensor 1) is a temperature dependent resistor (thermistor). The resistance of the thermistor decreases as the engine coolant temperature increases.

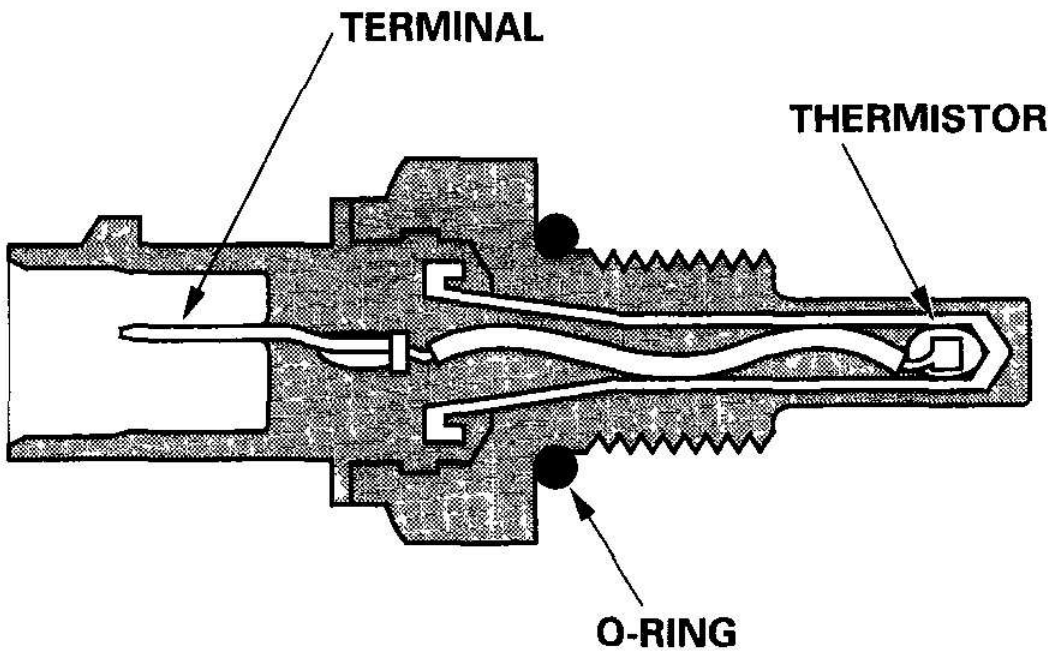


Fig. 35: Identifying ECT Sensor (2005-2007 Models: ECT Sensor 1)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Ignition Timing Control

The ECM/PCM contains the memory for basic ignition timing at various engine speeds and manifold absolute pressures. It also adjusts the timing according to engine coolant temperature and intake air temperature.

Injector Timing and Duration

The ECM/PCM contains the memory for basic discharge duration at various engine speeds and manifold pressures. The basic discharge duration, after being read out from the memory, is further modified by signals sent from various sensors to obtain the final discharge duration.

By monitoring long term fuel trim, the ECM/PCM detects long term malfunctions in the fuel system and sets a diagnostic trouble code (DTC).

Intake Air Temperature (IAT) Sensor (except '03-04 SULEV, LX-P models, and '05-07 models)

The IAT sensor is a temperature dependent resistor (thermistor). The resistance of the thermistor decreases as the intake air temperature increases.

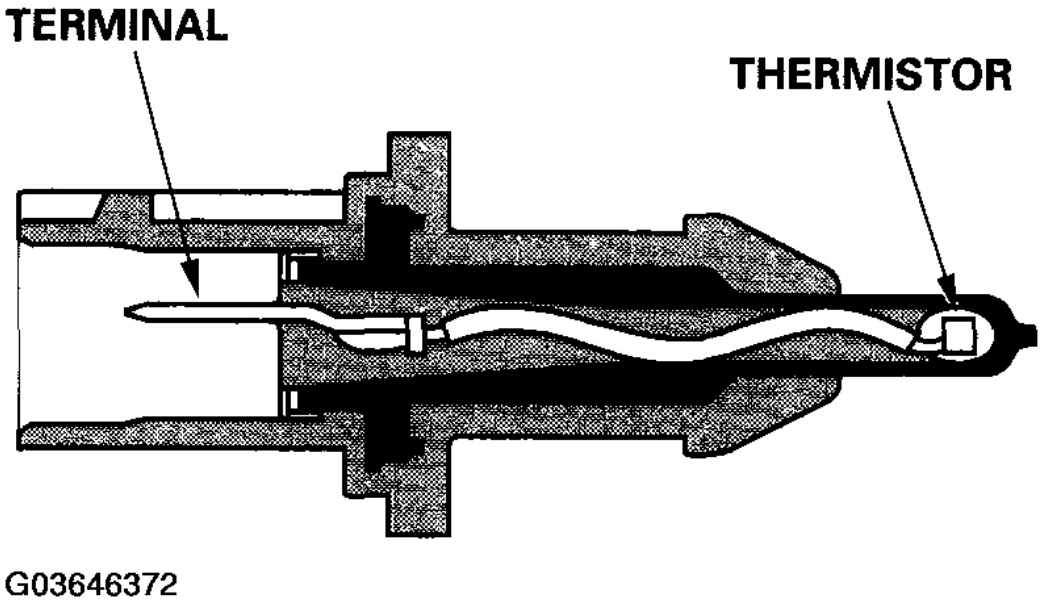


Fig. 36: Identifying IAT Sensor (Except 2003-2004 SULEV, LX-P Models And 2005-2007 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Knock Sensor

The knock control system adjusts the ignition timing to minimize knock.

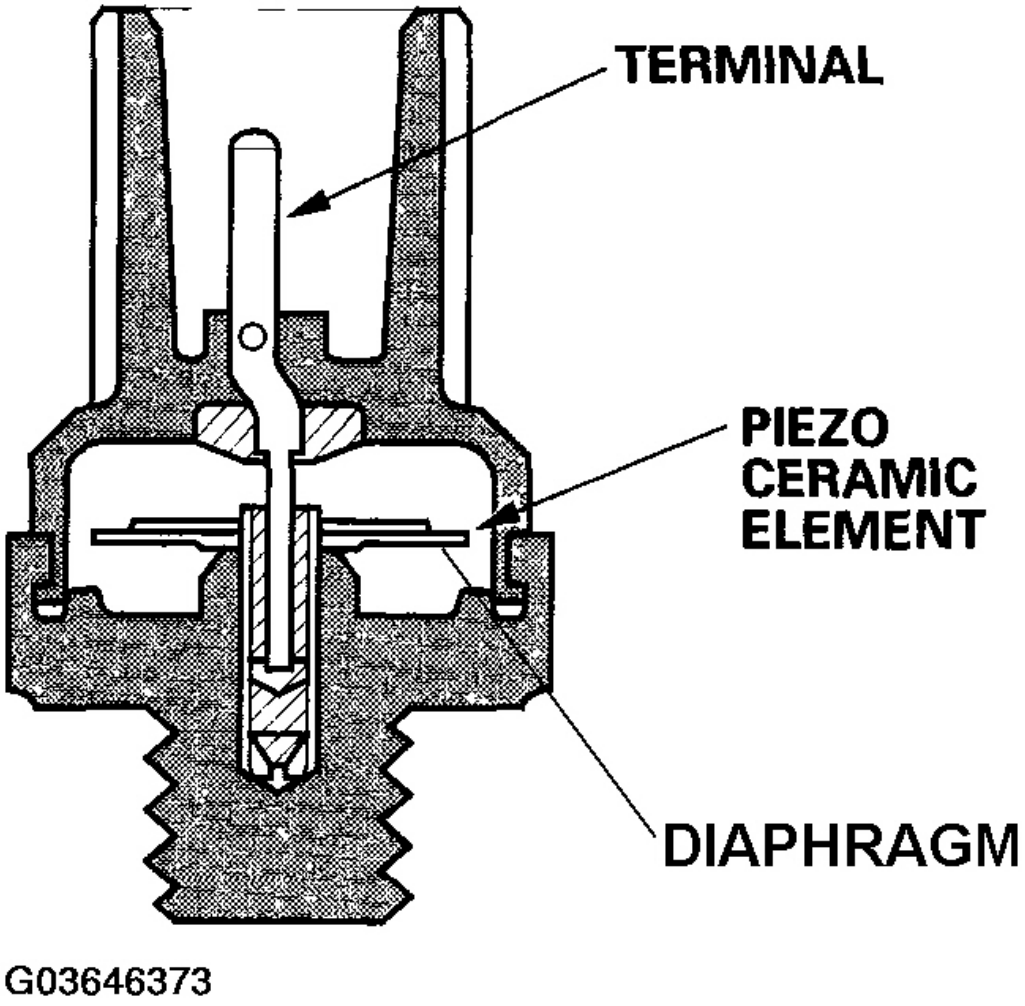


Fig. 37: Identifying Knock Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Malfunction Indicator Lamp (MIL) Indication (In relation to Readiness Codes)

The vehicle has certain "readiness codes" that are part of the on-board diagnostics for the emissions systems. If the vehicle's battery has been disconnected or gone dead, if the DTCs have been cleared, or if the ECM/PCM has been reset, these codes are reset. In some states, part of the emissions testing is to make sure these codes are set to complete. If all of them are not set to complete, the vehicle may fail

the test, or the test cannot be finished.

To check if the readiness codes are set to complete, turn the ignition switch ON (II), but do not start the engine. The MIL will come on for 15---20 seconds. If it then goes off, the readiness codes are complete. If it flashes five times, one or more readiness codes are not complete. To set each code, drive the vehicle or run the engine as described in the procedures (see **HOW TO SET READINESS CODES**).

Manifold Absolute Pressure (MAP) Sensor

The MAP sensor converts manifold absolute pressure into electrical signals to the ECM/PCM.

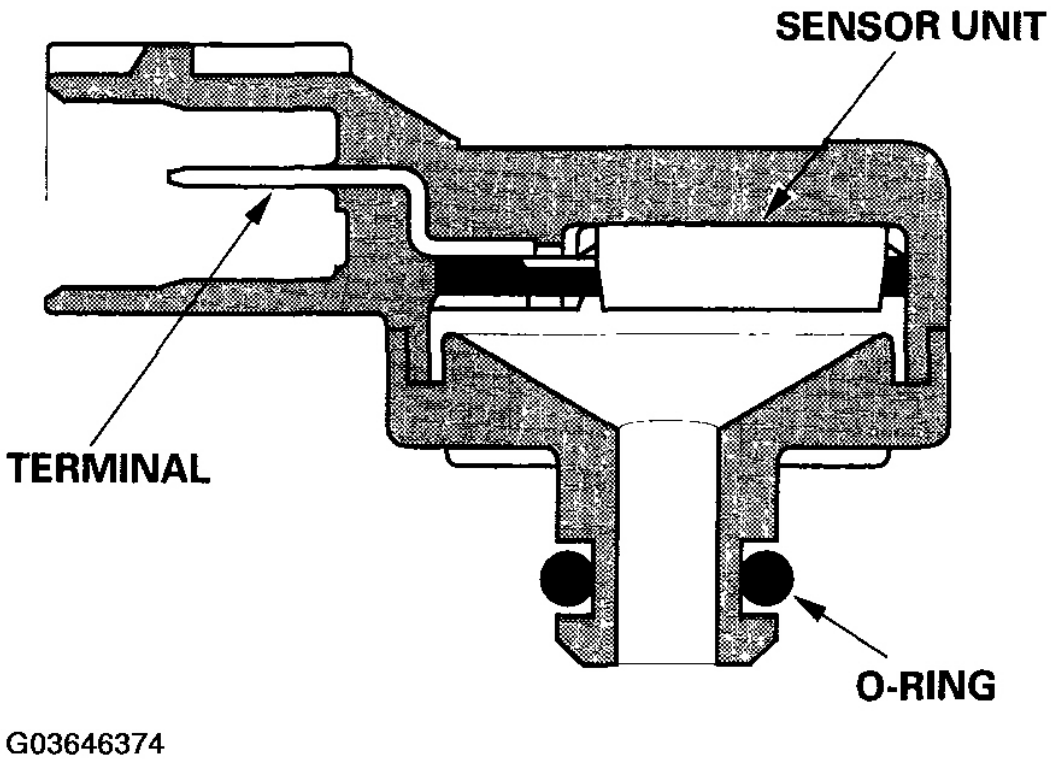


Fig. 38: Identifying Manifold Absolute Pressure Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Mass Air Flow (MAF) Sensor/Intake Air Temperature (IAT) Sensor ('03-04 SULEV, LX-P models, and '05-07 models)

The mass air flow (MAF) sensor/intake air temperature (IAT) sensor contains a hot wire and a thermistor. It is located in the intake air passage. The resistance of the hot wire and thermistor change due to intake air temperature and air flow. The control circuit in the MAF sensor controls the current to keep the hot wire at a set temperature. The current is converted to voltage in the control circuit, then output to the ECM/PCM.

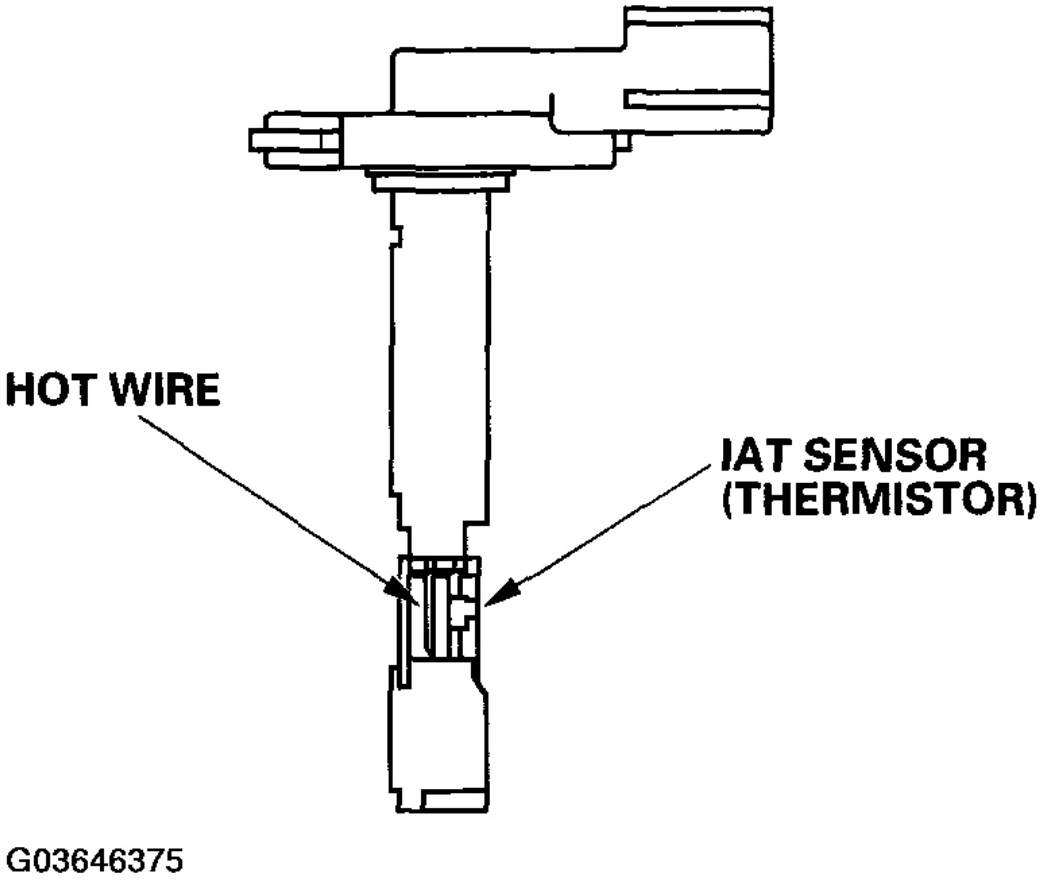


Fig. 39: Identifying MAF Sensor/IAT Sensor (2003-2004 SULEV, LX-P Models And 2005-2007 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Output Shaft (Countershaft) Speed Sensor (M/T)

This sensor detects countershaft speed.

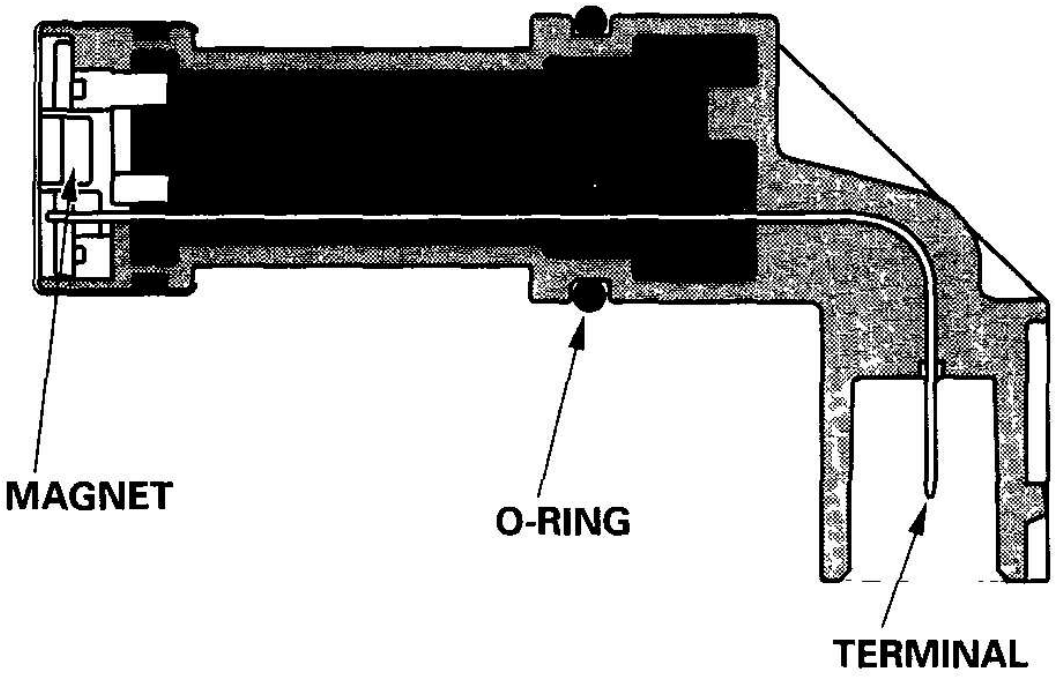


Fig. 40: Identifying Output Shaft (Countershaft) Speed Sensor (M/T)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Secondary Heated Oxygen Sensor (Secondary HO2S)

The secondary HO2S detects the oxygen content in the exhaust gas downstream of the three way catalytic converter (TWC), and sends signals to the ECM/PCM which varies the duration of fuel injection accordingly. To stabilize its output, the sensor has an internal heater. The ECM/PCM compares the HO2S output with the A/F sensor output to determine catalyst efficiency. The secondary HO2S is on the TWC.

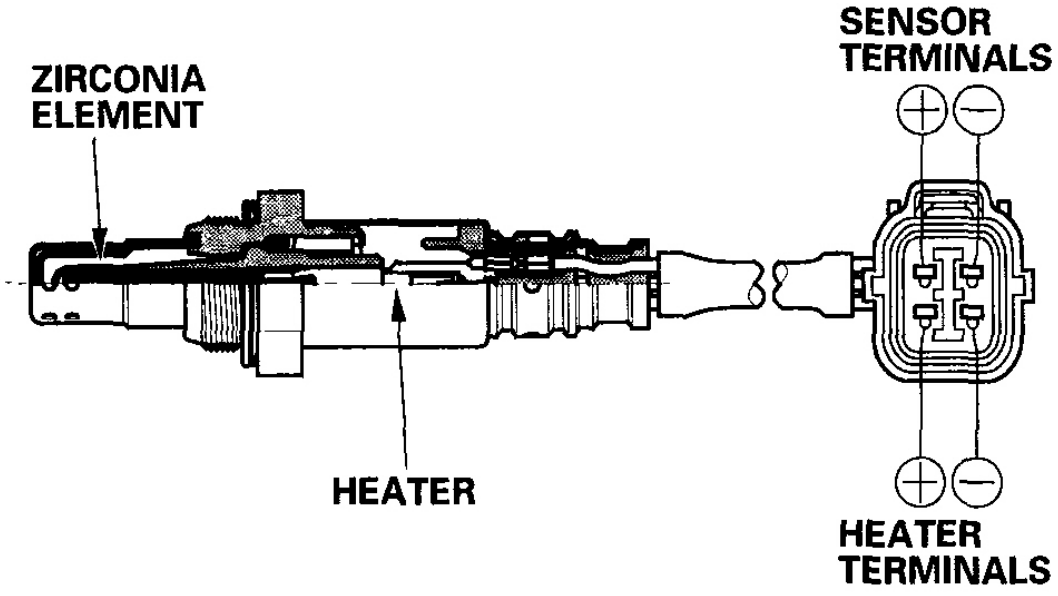


Fig. 41: Identifying Secondary Heated Oxygen Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Throttle Position (TP) Sensor ('03-05 models)

The TP sensor is a potentiometer connected to the throttle valve shaft. As the throttle position changes, the sensor varies the signal voltage to the ECM/PCM. The TP sensor is not available separately from the throttle body.

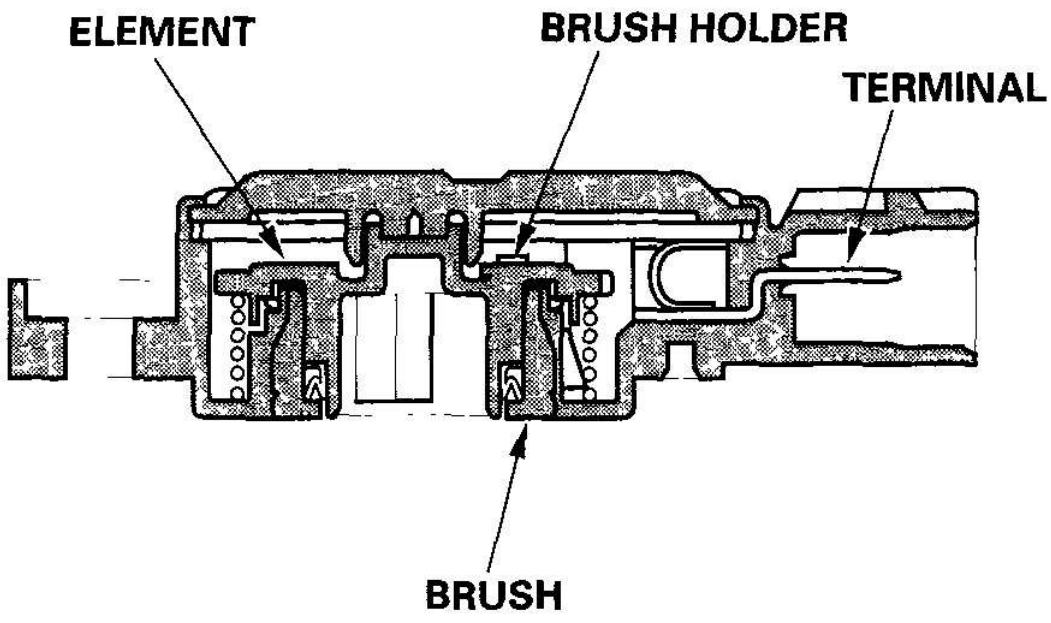


Fig. 42: Identifying Throttle Position Sensor (2003-2005 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ELECTRONIC THROTTLE CONTROL SYSTEM ('06-07 MODELS)

The throttle is electronically controlled by the electronic throttle control system. Refer to the **Electronic Throttle Control System Diagram ('06-07 models)** to see a functional layout of the system.

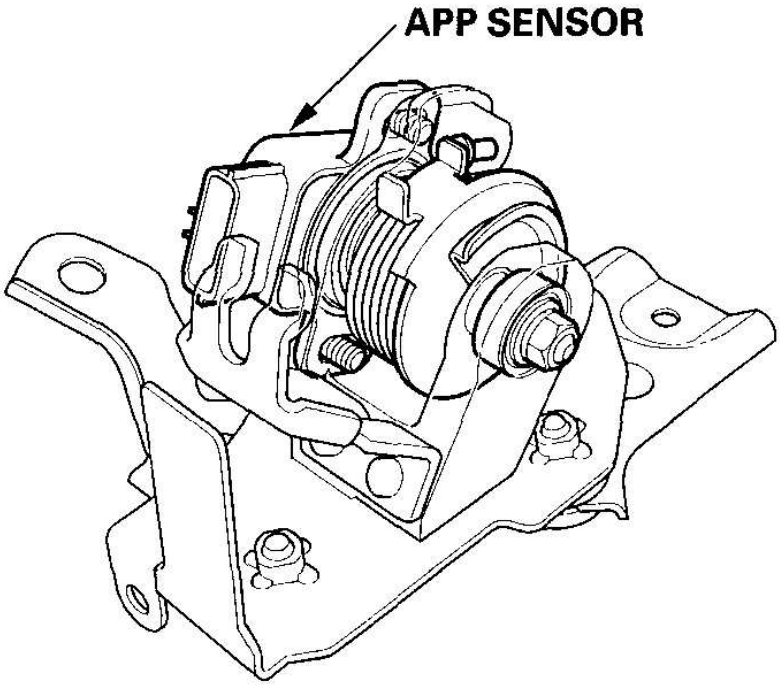
Idle control: When the engine is idling, the ECM/PCM controls the throttle actuator to maintain the proper idle speed according to engine loads.

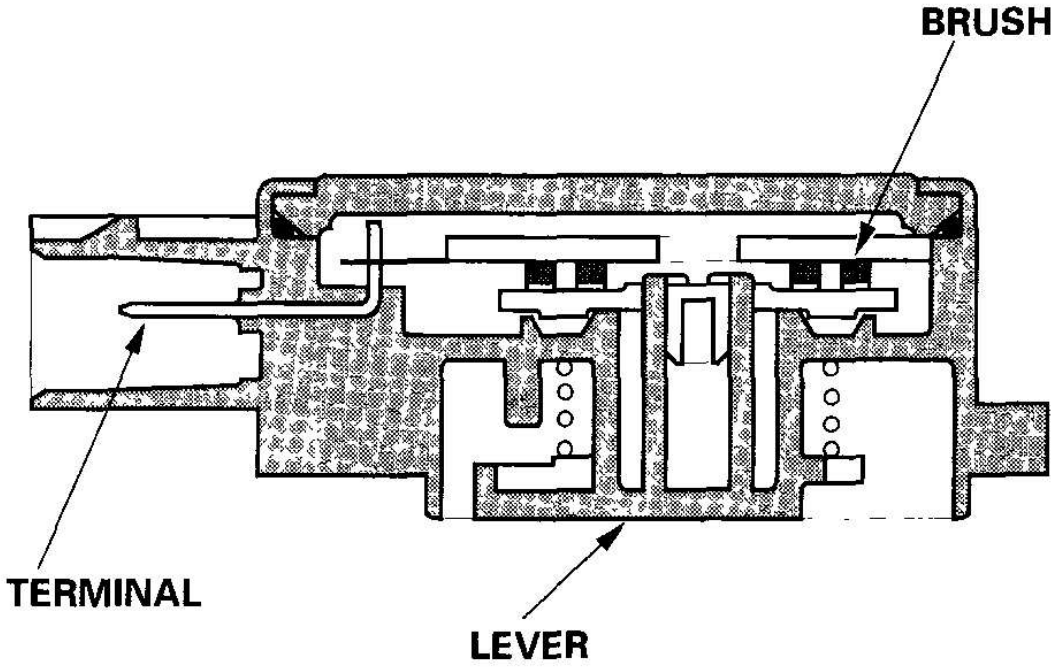
Acceleration control: When the accelerator pedal is pressed, the ECM/PCM opens the throttle valve depending on the accelerator pedal position (APP) sensor signal.

Cruise control: The ECM/PCM controls the throttle actuator to maintain set speed when the cruise control is operating. The throttle actuator takes the place of the cruise control actuator.

Accelerator Pedal Position (APP) Sensor

As the accelerator pedal position changes, the sensor varies the signal voltage to the ECM/PCM.





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Fig. 43: Identifying Accelerator Pedal Position Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Throttle Body

The throttle body is a single-barrel side draft type. The lower portion of the throttle valve is heated by engine coolant from the cylinder head to prevent icing of the throttle plate.

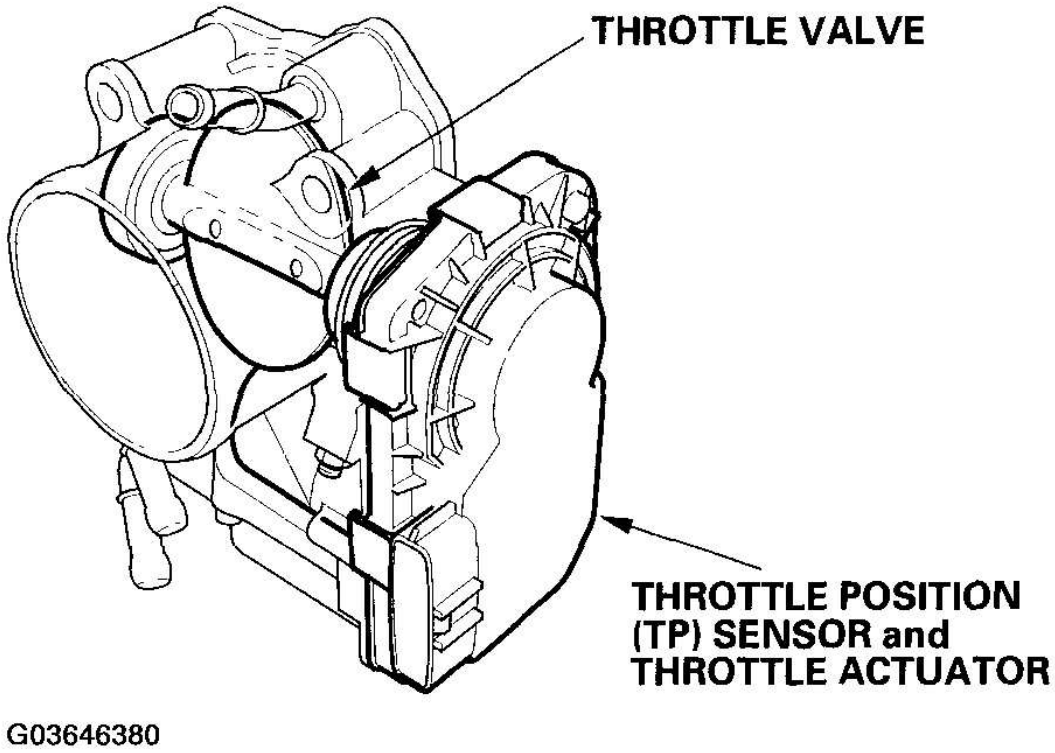


Fig. 44: Identifying Throttle Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

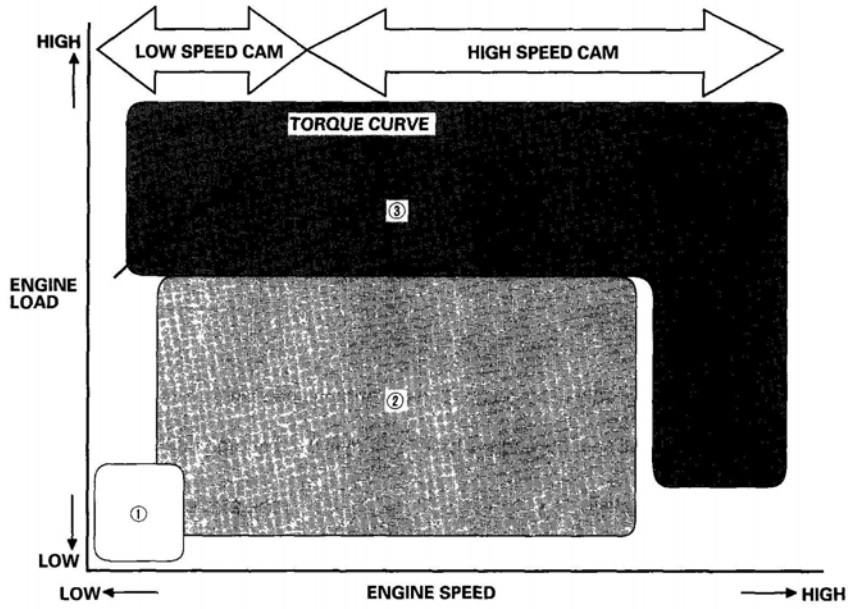
VTEC/VTC

- The i-VTEC has a VTC (Variable Valve Timing Control) mechanism on the intake camshaft in addition to the usual VTEC.

  This mechanism improves fuel efficiency and reduces exhaust emissions at all

levels of engine speed, vehicle speed, and engine load.

- The VTEC mechanism changes the valve lift and timing by using more than one cam profile.
- The VTC changes the phase of the intake camshaft via oil pressure. It changes the intake valve timing continuously.



Driving Condition	VTC Control	Description
① Light-load	Base Position	Cam angle is retarded to reduce the entry of exhaust gas into the intake port.
② Medium/high-load	Advance Control	To reduce pumping loss, the intake valve is closed quickly to help reduce the entry of air/fuel mixture into the intake port and improve the charging effect.
③ High speed	Advance-Base Position	Cam phase angle is controlled for optimum valve timing and maximum engine power.

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Fig. 45: Identifying VTEC/VTC Flow System
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VTC System

- The VTC system makes continuous intake valve timing changes based on operating conditions.
- Intake valve timing is optimized to allow the engine to produce maximum power.

- Cam angle is advanced to obtain the EGR effect and reduce pumping loss. The intake valve is closed quickly to reduce the entry of the air/fuel mixture into the intake port and improve the charging effect.
- The system reduces the cam advance at idle, stabilizes combustion, and reduces engine speed.
- If a malfunction occurs, the VTC system control is disabled and the valve timing is fixed at the fully retarded position.

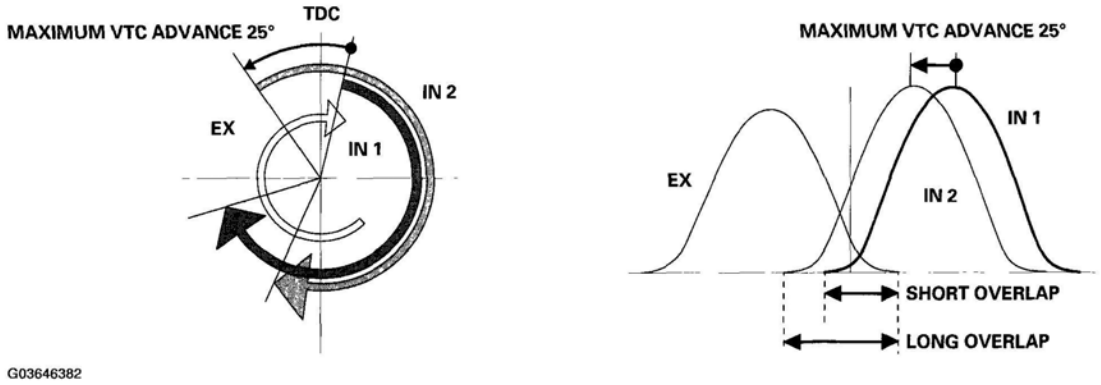


Fig. 46: Identifying VTC System
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VTEC System

- The VTEC system changes the cam profile to correspond to the engine speed. It maximizes torque at low engine speed and output at high engine speed.
- The low lift cam is used at low engine speeds, and the high lift cam is used at high engine speeds.

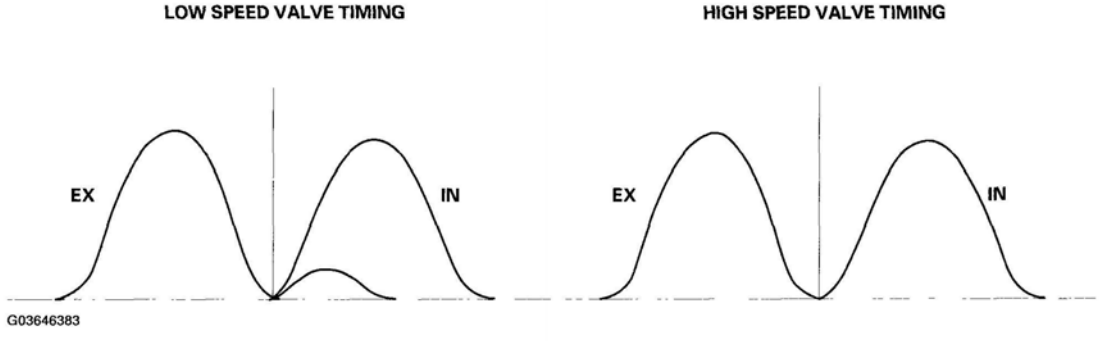


Fig. 47: Identifying VTEC System
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VTEC/VTC

System Diagram

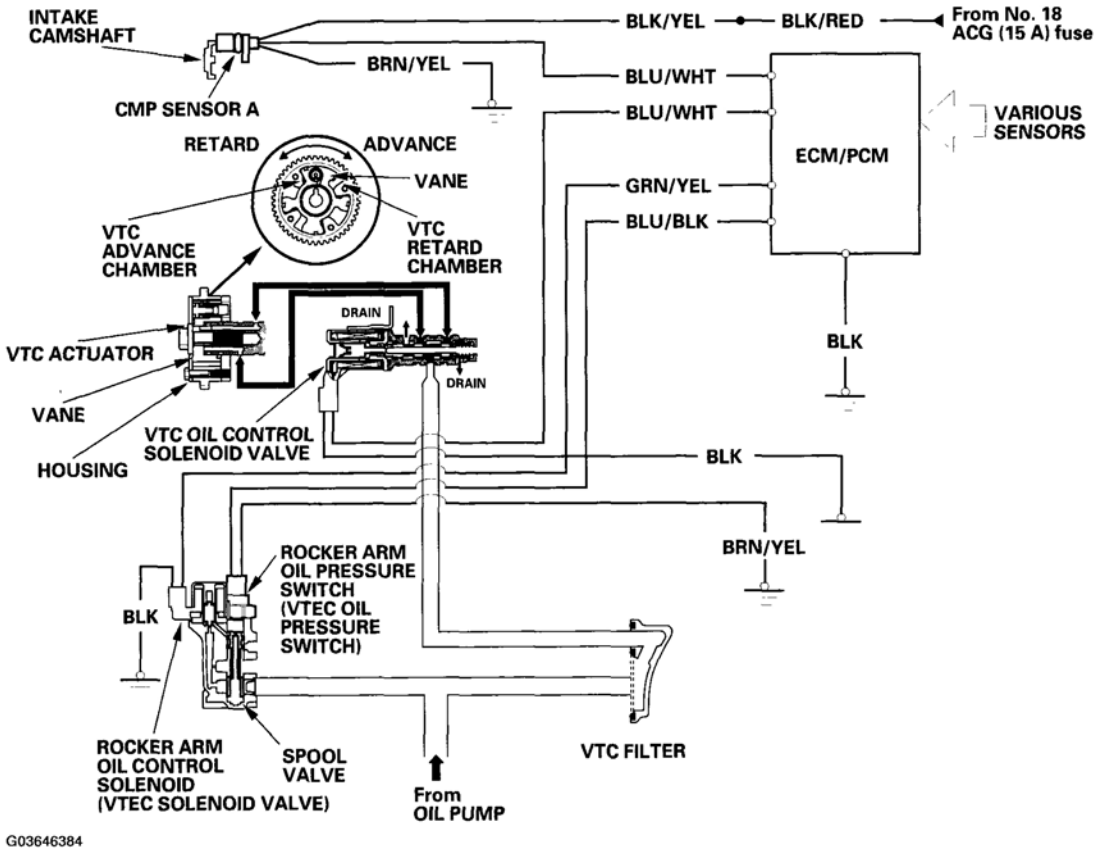


Fig. 48: VTEC/VTC System Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Camshaft Position (CMP) Sensor A

CMP sensor A detects camshaft angle position for the VTC system.

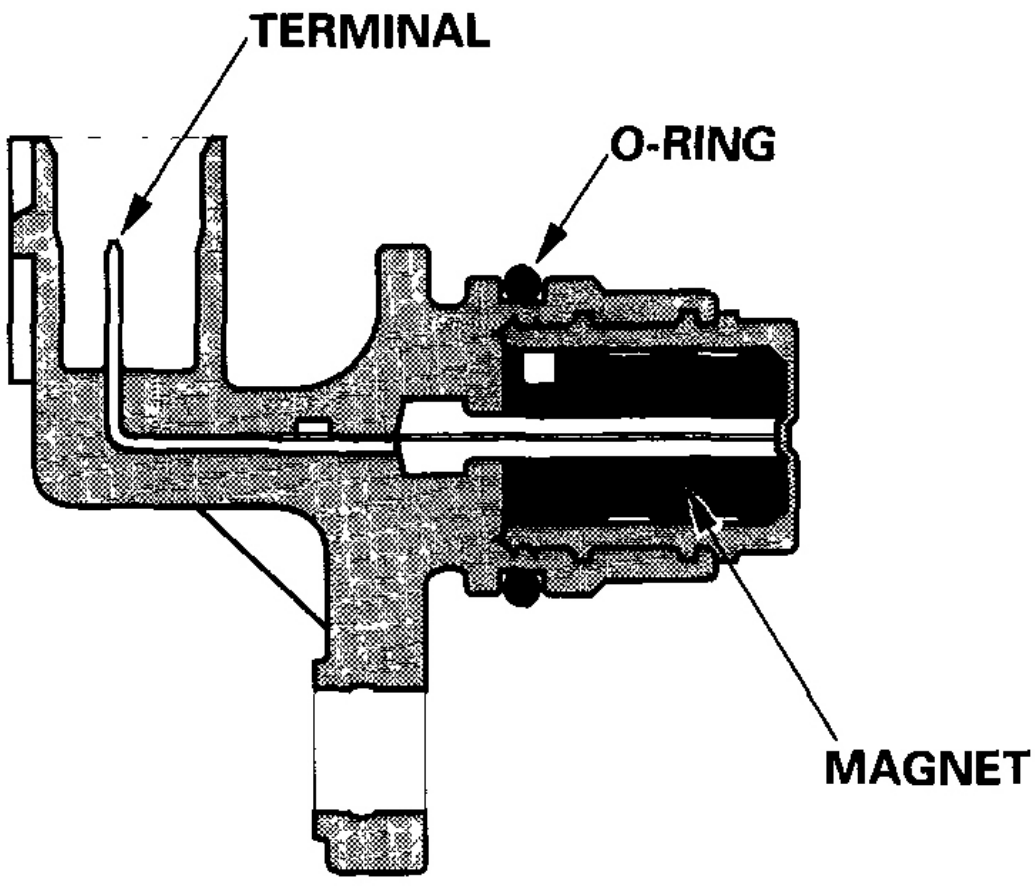


Fig. 49: Identifying Camshaft Position Sensor A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

IDLE CONTROL SYSTEM

'03-05 models

When the engine is cold, the A/C compressor is on, the transmission is in gear, the brake pedal is pressed, the power steering load is high, or the alternator is charging, the ECM/PCM controls current to the idle air control (IAC) valve to maintain the correct idle speed. Refer to the **Idle Control System Diagram (2003-2005 models)** to see the functional layout of the system.

'06-07 models

When the engine is cold, the A/C compressor is on, the transmission is in gear, the brake pedal is pressed, the power steering load is high, or the alternator is charging, the ECM/PCM controls current to the throttle actuator to maintain the correct idle speed.

Brake Pedal Position Switch

The brake pedal position switch signals the ECM/PCM when the brake pedal is pressed.

Idle Air Control (IAC) Valve ('03-05 models)

To maintain proper idle speed, the IAC valve changes the amount of air bypassing the throttle body in response to an electrical signal from the ECM/PCM.

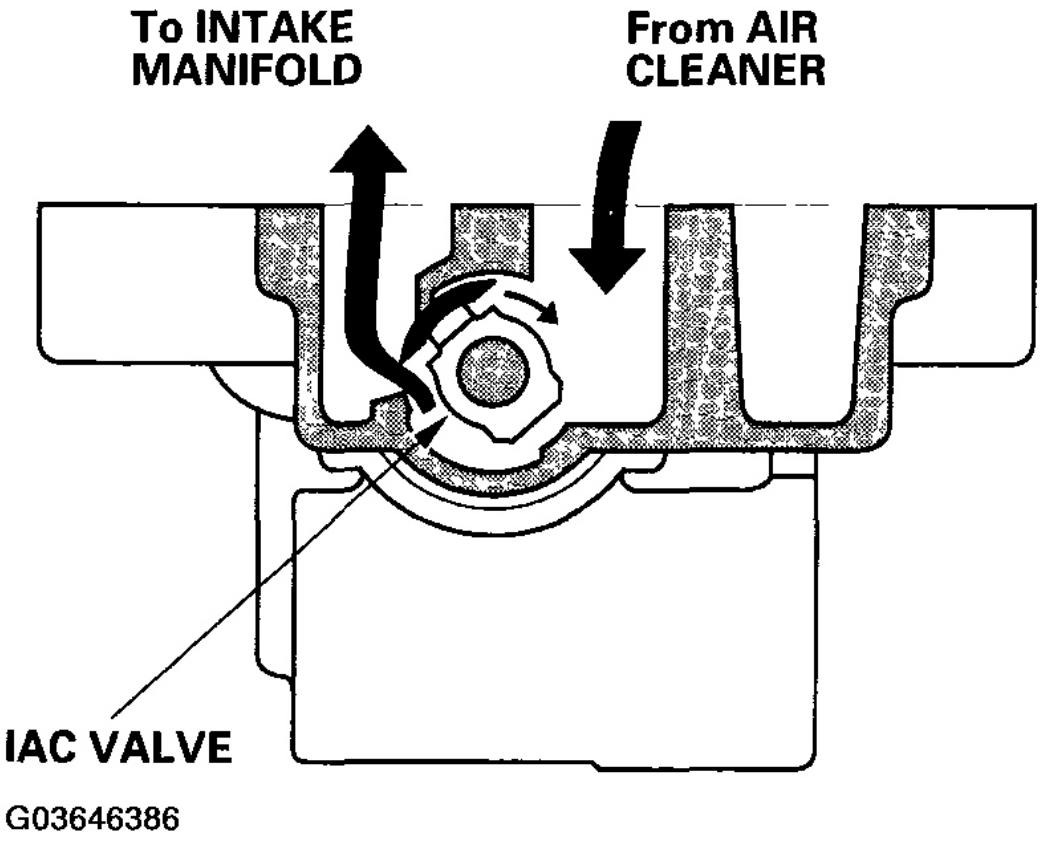


Fig. 50: Identifying Idle Air Control Valve (2003-2005 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Power Steering Pressure (PSP) Switch

The PSP switch signals the ECM/PCM when the power steering load is high.

FUEL SUPPLY SYSTEM

Fuel Cutoff Control

During deceleration with the throttle valve closed, current to the injectors is cut off to improve fuel economy at engine speeds over 1,000 rpm (A/T ('06-07 models): 1,200 rpm). Fuel cutoff control also occurs when the engine speed exceeds 6,700 rpm, regardless of the position of the throttle valve, to protect the engine from over-revving. When the vehicle is stopped, the ECM/PCM cuts the fuel at engine speeds

over 5,000 rpm (M/T ('03-05 models: 4,200 rpm)). The engine speed of fuel cut is lower on a cold engine.

Fuel Pump Control

When the ignition is turned on, the ECM/PCM grounds PGM-FI main relay 2 (FUEL PUMP) which feeds current to the fuel pump for 2 seconds to pressurize the fuel system. With the engine running, the ECM/PCM grounds PGM-FI main relay 2 (FUEL PUMP) and feeds current to the fuel pump. When the engine is not running and the ignition is on, the ECM/PCM cuts ground to PGM-FI main relay 2 (FUEL PUMP) which cuts current to the fuel pump.

PGM-FI Main Relay 1 and 2

PGM-FI main relay 1 (Fl MAIN) is energized whenever the ignition switch is ON (II) to supply battery voltage to the ECM/PCM, power to the injectors, and power for PGM-FI main relay 2 (FUEL PUMP). PGM-FI main relay 2 (FUEL PUMP) is energized to supply power to the fuel pump for 2 seconds when the ignition switch is turned ON (II), and when the engine is cranking or running.

INTAKE AIR SYSTEM

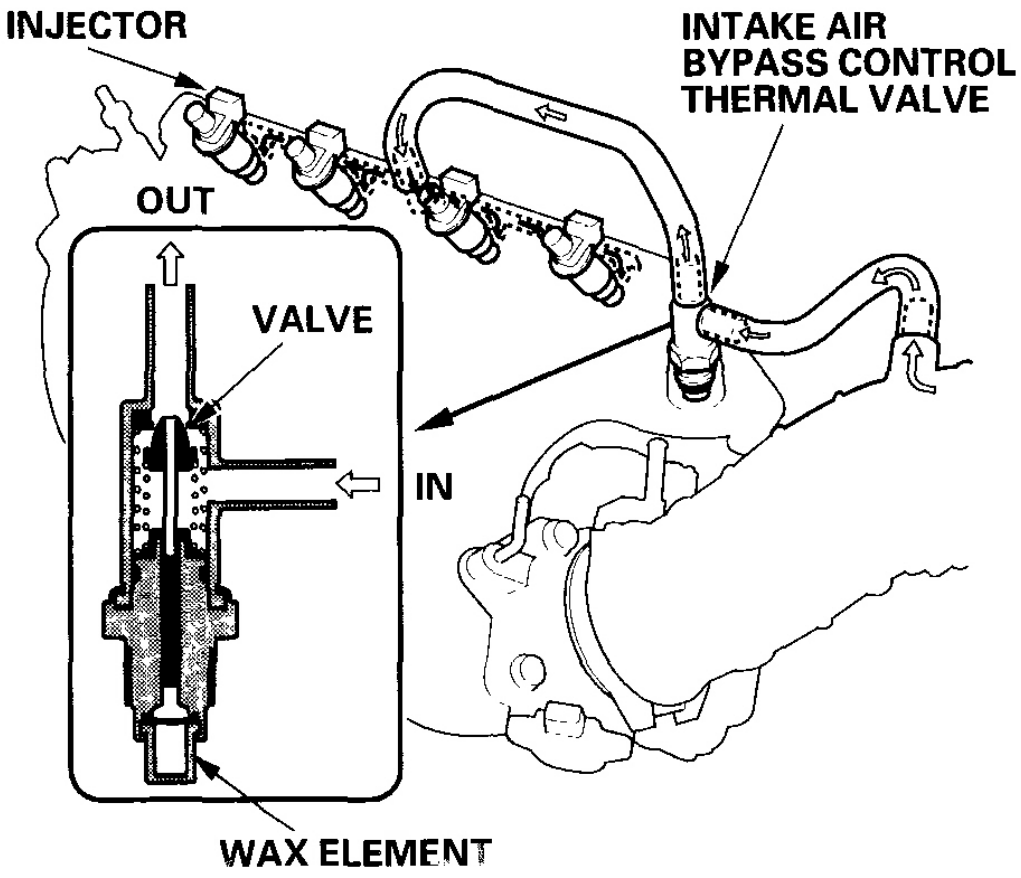
Refer to the **Intake Air System Diagram** to see a functional layout of the system.

Intake Air Bypass Control Thermal Valve

When the engine is cold, the intake air bypass control thermal valve sends air to the injector.

The amount of air is regulated by engine coolant temperature.

Once the engine is hot, the intake air bypass thermal valve closes, stopping air to the injector.



*: This illustration shows 2003-2005 models.

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Fig. 51: Identifying Intake Air Bypass Control Thermal Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Throttle Body ('03-05 models)

The throttle body is a single-barrel side draft type. The lower portion of the idle air control (IAC) valve is heated by engine coolant from the cylinder head to prevent icing of the throttle plate.

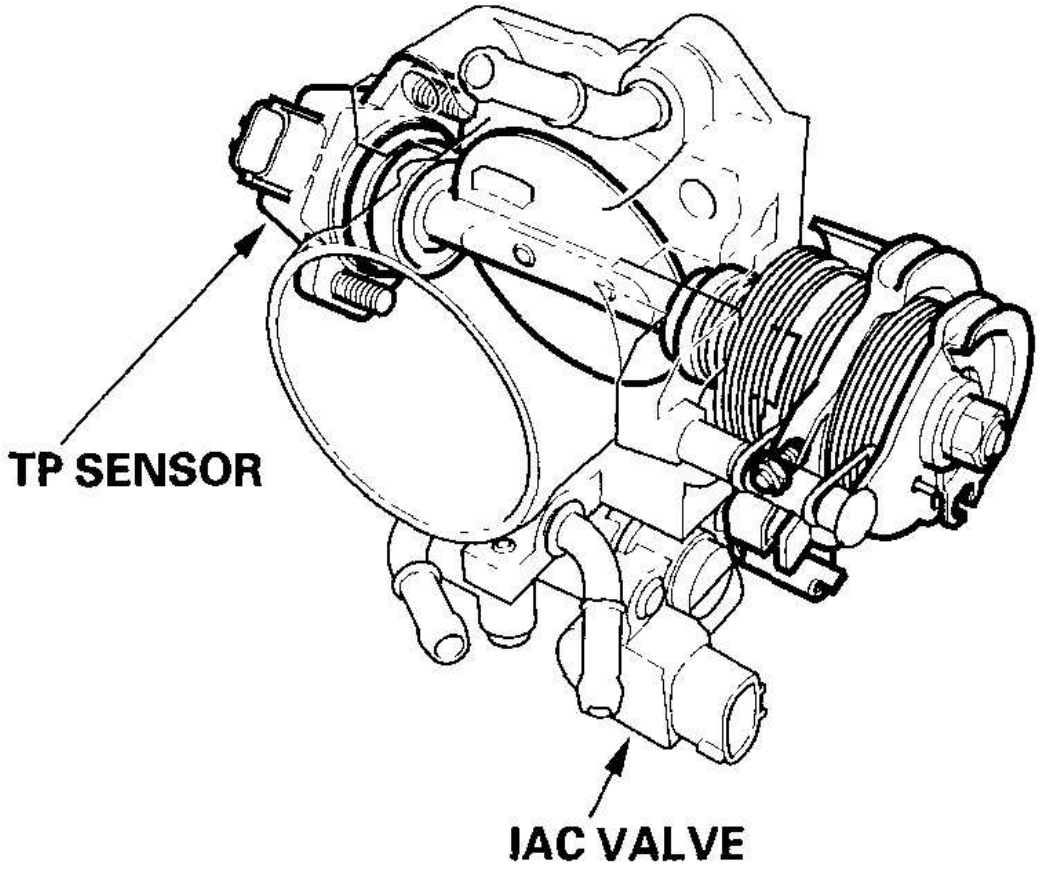


Fig. 52: Identifying Throttle Valve Body (2003-2005 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CATALYTIC CONVERTER SYSTEM

Three Way Catalytic Converter (TWC)

The TWC converts hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) in the exhaust gas to carbon dioxide (CO_2), nitrogen (N_2), and water vapor.

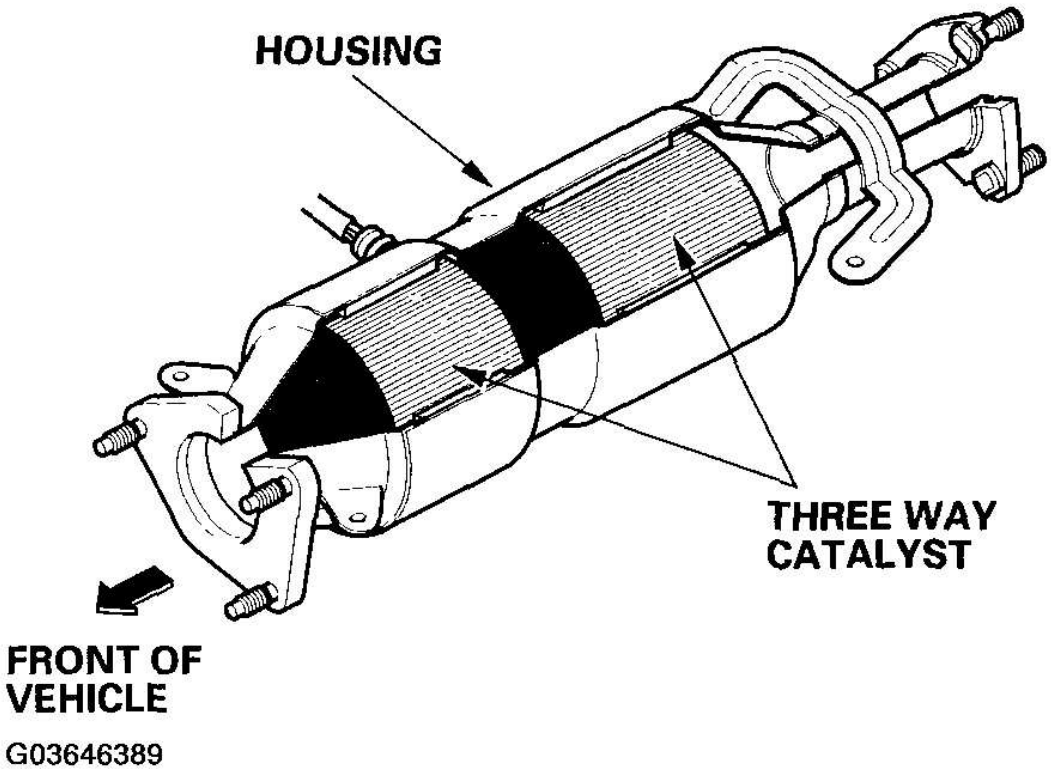


Fig. 53: Identifying Three Way Catalytic Converter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

POSITIVE CRANKCASE VENTILATION (PCV) SYSTEM

The PCV valve prevents blow-by gasses from escaping into the atmosphere by venting them into the intake manifold.

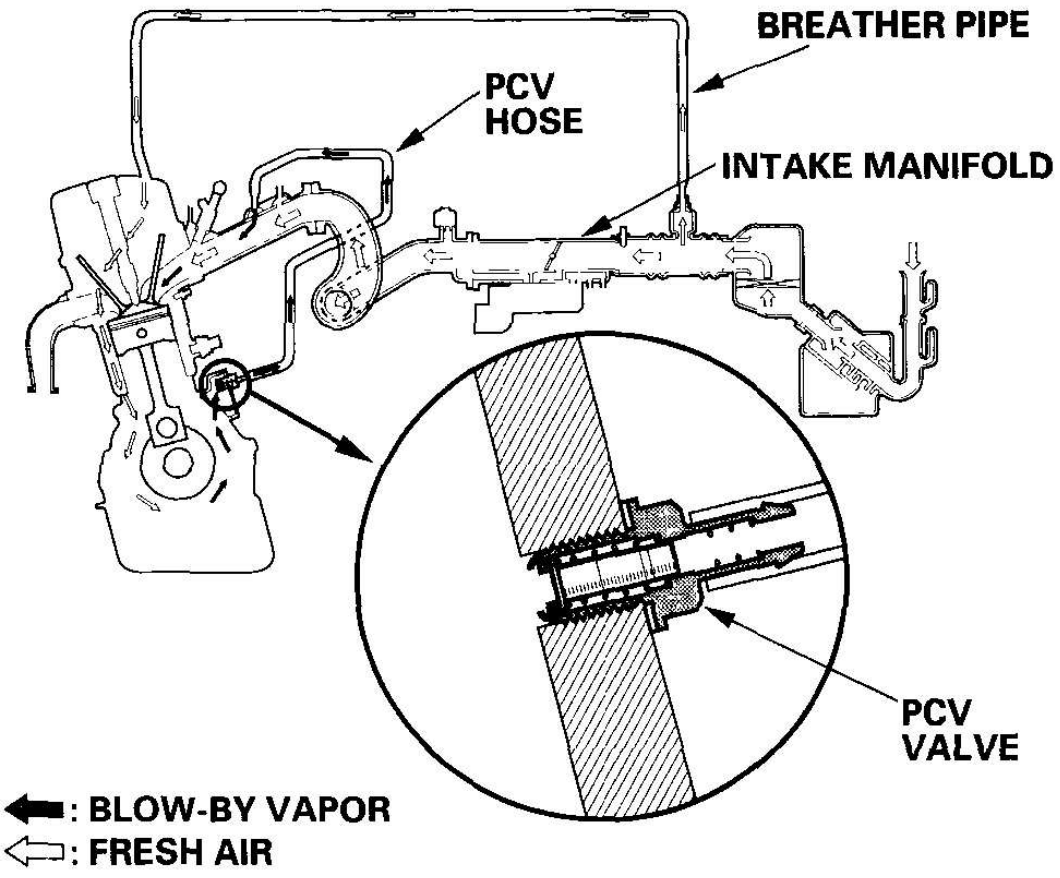


Fig. 54: Identifying Positive Crankcase Ventilation System
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EXHAUST GAS RECIRCULATION (EGR) SYSTEM

Refer to the **Exhaust Gas Recirculation (EGR) System Diagram** to see a functional layout of the system.

EGR Valve

The EGR valve lowers peak combustion temperatures and reduces oxides of nitrogen emissions (NOx) by recirculating exhaust gas through the intake manifold and into the combustion chambers.

EVAPORATIVE EMISSION (EVAP) CONTROL SYSTEM

Refer to the **Evaporative Emission (EVAP) Control Diagram** to see a functional layout of the system.

EVAP Canister

The EVAP canister temporarily stores fuel vapor from the fuel tank until it can be purged from the EVAP canister into the engine and burned.

EVAP Canister Purge Valve

When the engine coolant temperature is below 131°F (55°C), the ECM/PCM turns off the EVAP canister purge valve which cuts vacuum to the EVAP canister.

Fuel Tank Pressure (FTP) Sensor

The FTP sensor converts fuel tank absolute pressure into an electrical input to the ECM/PCM.

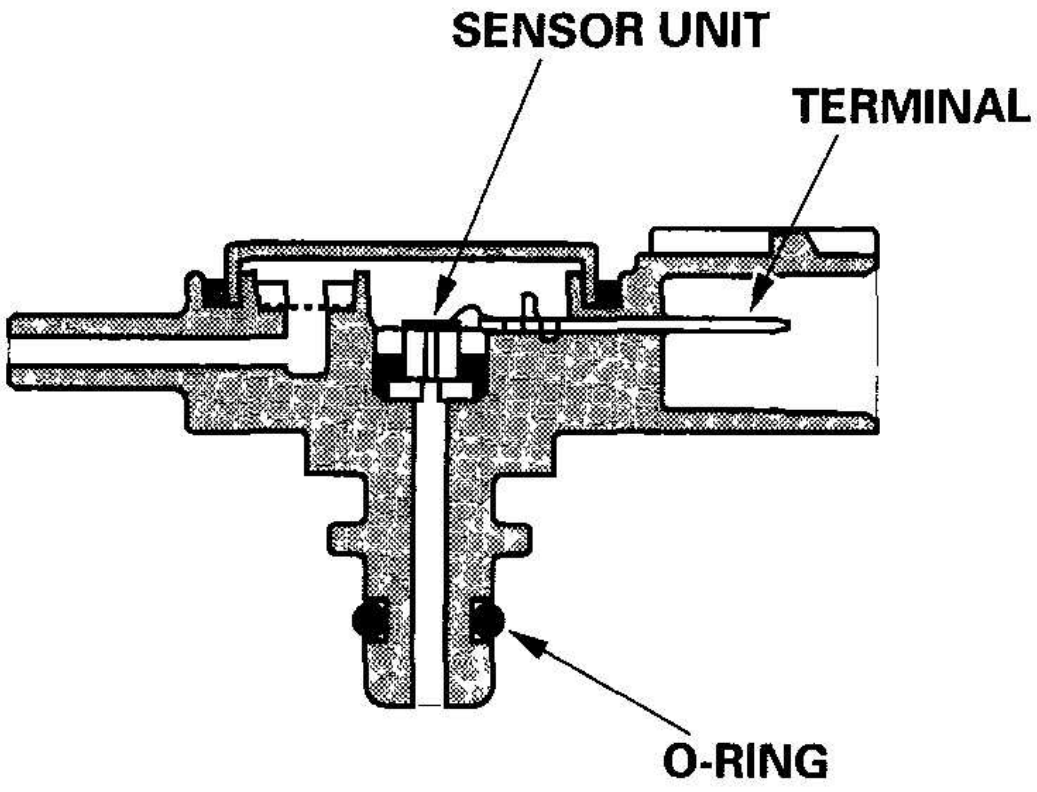


Fig. 55: Identifying Fuel Tank Pressure Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EVAP Canister Vent Shut Valve

The EVAP canister vent shut valve is on the EVAP canister.

The EVAP canister vent shut valve controls the venting of the EVAP canister.

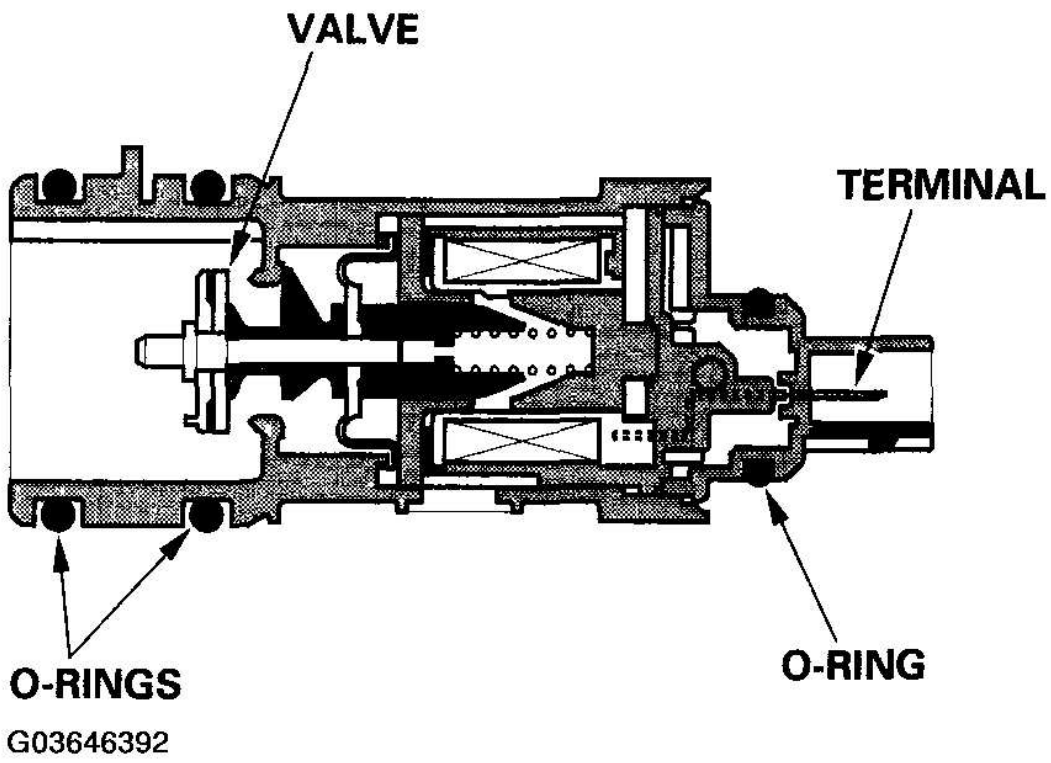


Fig. 56: Identifying EVAP Canister Vent Shut Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FUEL CAP WARNING MESSAGE (2005-2007 MODELS)

The ECM/PCM detects whether the fuel fill cap is loose or missing under certain conditions and alerts the driver by showing the information in the odometer/outside temperature display. If the ECM/PCM detects a small volume leak, the MIL may come on during the second drive cycle and store a DTC.

First drive cycle

During the first drive cycle after a cold start, the ECM/PCM alerts the driver to check the fuel fill cap by showing a "CHECK FUEL CAP" message in the odometer/outside temperature display (A), and it stores Temporary DTC P0457 "Evaporative Emission (EVAP) System Leak Detected/Fuel Cap Loose or Missing". Tightening the fuel cap does not make the message go off immediately.

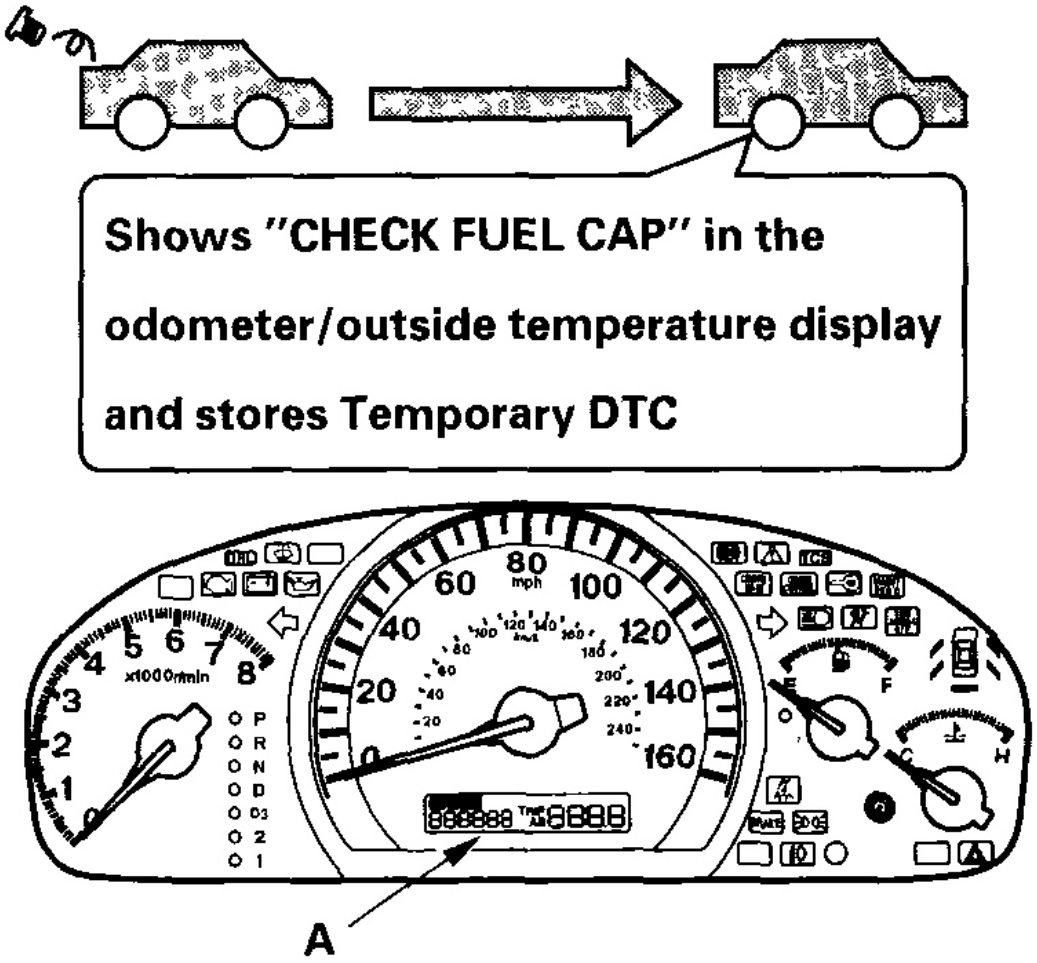


Fig. 57: Identifying Fuel Cap Warning Message (First Drive Cycle)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

To make the message go off (With the HDS)

Procedure

1. Tighten the fuel fill cap until it clicks at least once.
2. Clear the Temporary DTC with the HDS.
3. Verify there is no leak by doing the EVAP FUNCTION TEST in the

INSPECTION MENU with the HDS. Start the engine, and drive at a steady speed over 28 mph (45 km/h), without moving the accelerator pedal, for about 1 minute.

To make the message go off (Without the HDS)

Procedure

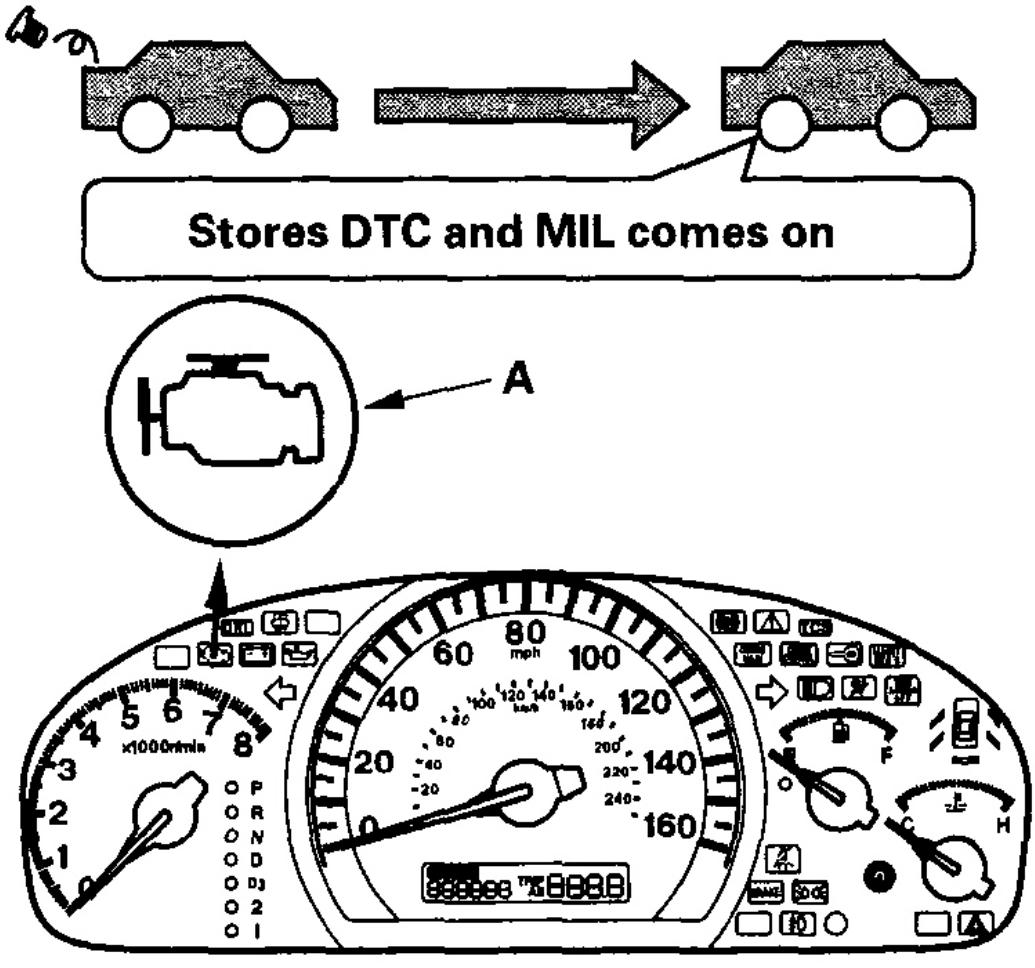
1. Tighten the fuel fill cap until it clicks at least once.
2. Turn the ignition switch OFF.
3. Start the engine, and drive at a steady speed over 28 mph (45 km/h), without moving the accelerator pedal, for about 1 minute.

Second drive cycle

During the second drive cycle after a cold start, if the fuel fill cap is still loose or missing, the ECM/PCM alerts the driver to check the fuel fill cap by showing a "CHECK FUEL CAP" message in the odometer/outside temperature display as same as the first drive cycle. Tightening the fuel cap does not make the message go off immediately.

Third drive cycle

During the third drive cycle after a cold start, if the fuel fill cap is still loose or missing, the ECM/PCM stores DTC P0457 "Evaporative Emission (EVAP) System Leak Detected/Fuel Cap Loose or Missing". The malfunction indicator lamp (MIL) (A) comes on, and the "CHECK FUEL CAP" message goes off.



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Fig. 58: Identifying MIL (Third Drive Cycle)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

IDLE CONTROL SYSTEM DIAGRAM ('03-05 MODELS)

The engine idle speed is controlled by the idle air control (IAC) valve:

- After the engine starts, the IAC valve opens for a certain amount of time. The amount of air is increased to raise the idle speed.
- When the engine coolant temperature is low, the IAC valve is opened to obtain

the proper fast idle speed. The amount of bypassed air is controlled in relation to engine coolant temperature.

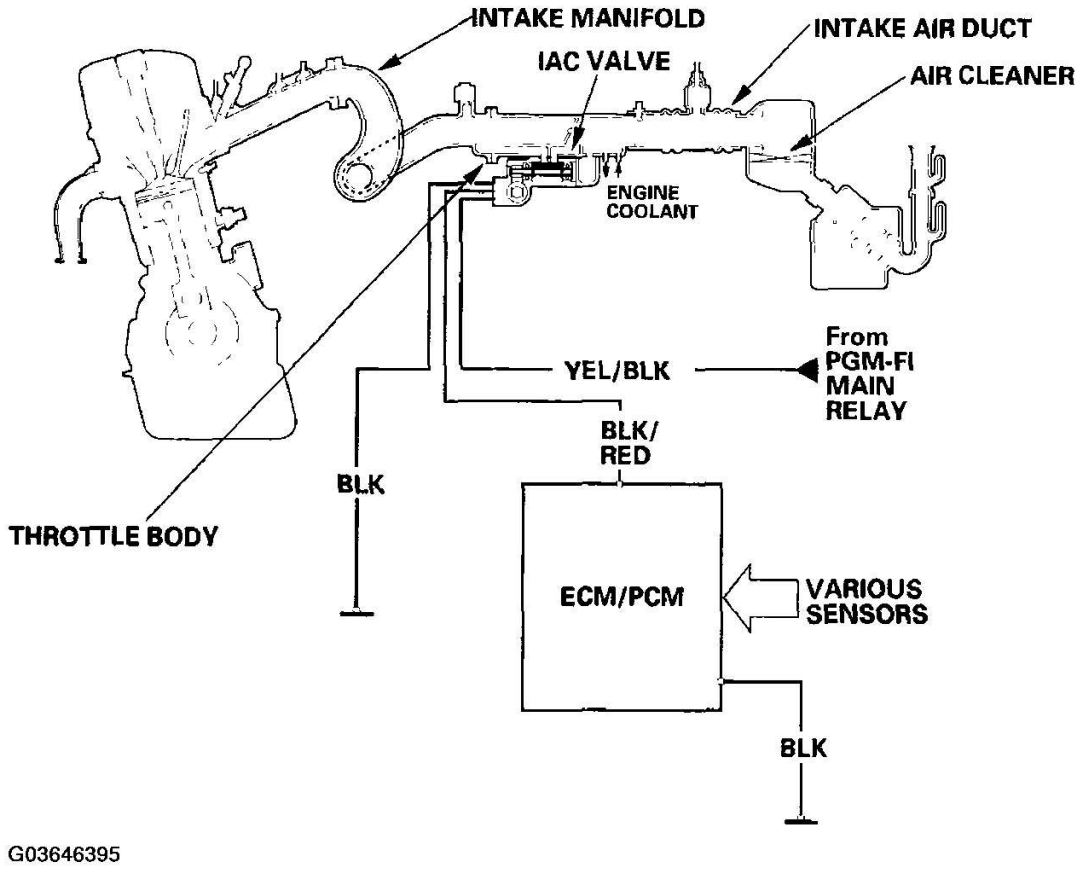
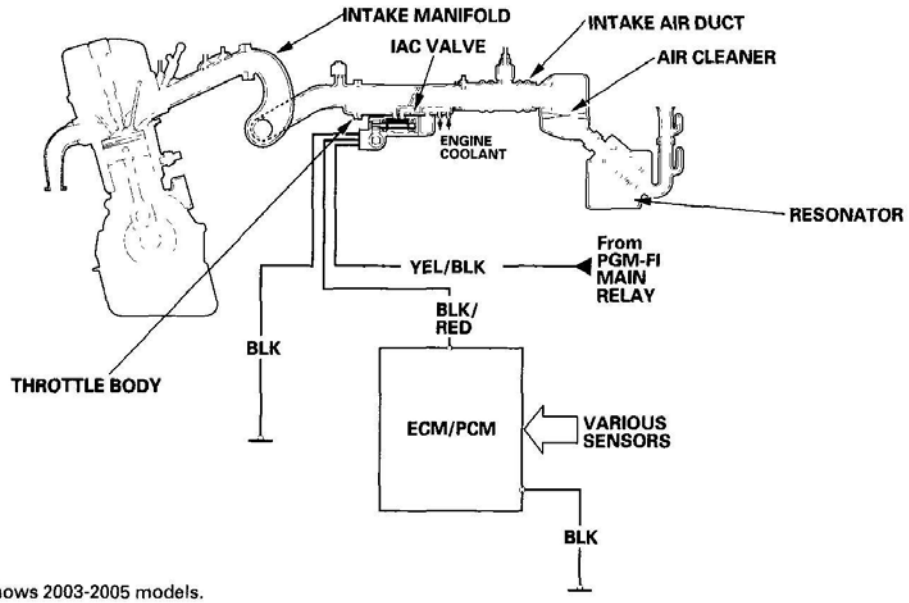


Fig. 59: Identifying Idle Control System Diagram (2003-2005 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INTAKE AIR SYSTEM DIAGRAM

This system supplies air for engine needs. A resonator in the intake air duct provides additional silencing as air is drawn into the system.



*: This illustration shows 2003-2005 models.

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Fig. 60: Identifying Intake Air System Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ELECTRONIC THROTTLE CONTROL SYSTEM DIAGRAM ('06-07 MODELS)

The electronic throttle control system consists of the throttle actuator, throttle position (TP) sensor, accelerator pedal position (APP) sensor, throttle actuator control module, and the ECM/PCM. The throttle is electronically controlled by this system.

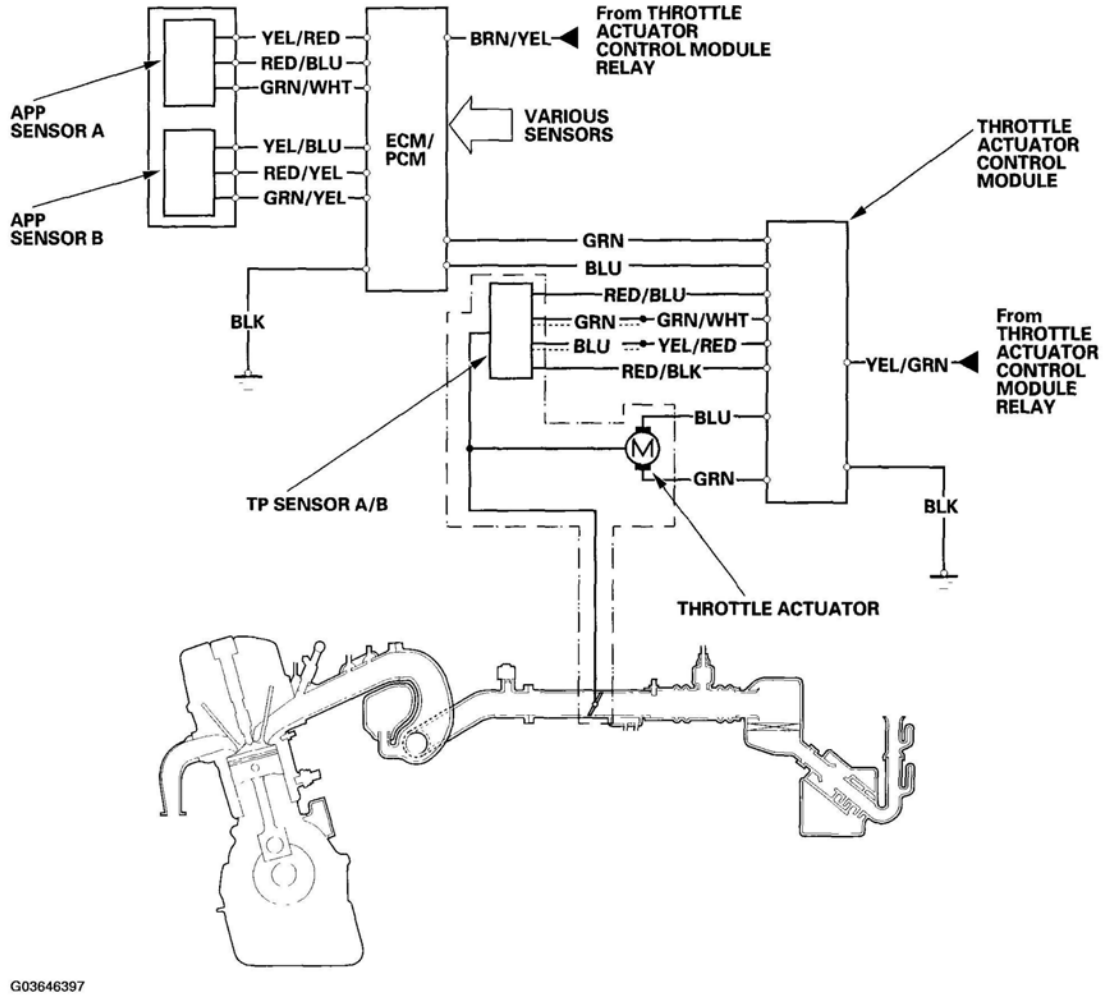


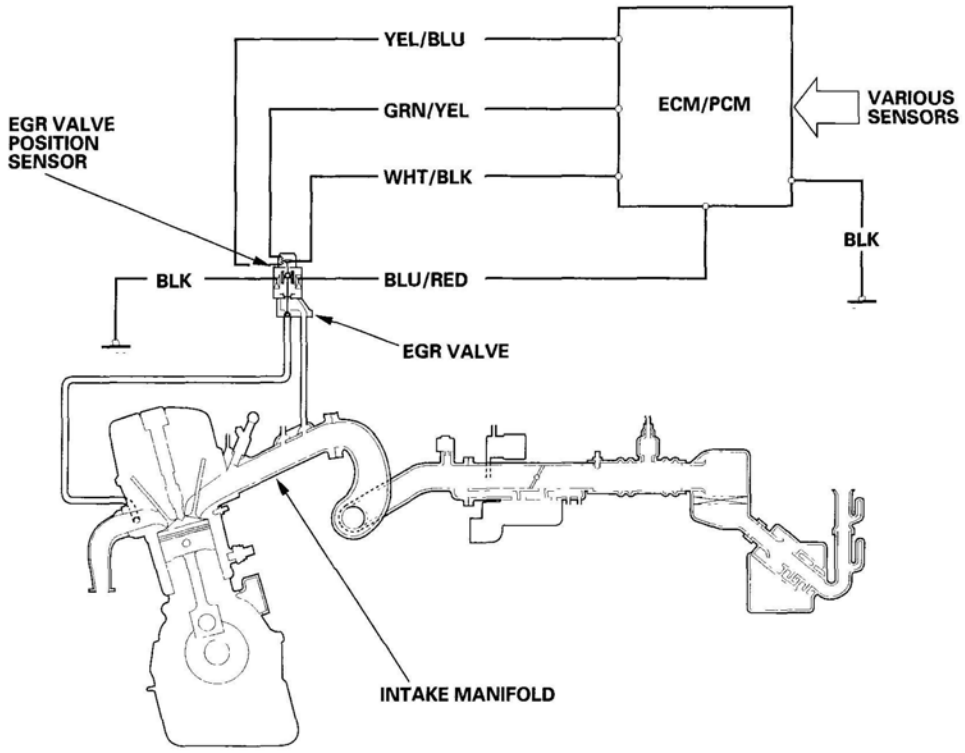
Fig. 61: Identifying Electronic Throttle Control System Diagram ('06-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EXHAUST GAS RECIRCULATION (EGR) SYSTEM DIAGRAM

The EGR system reduces oxides of nitrogen (NOx) emissions by recirculating exhaust gas through the EGR valve and the intake manifold into the combustion chambers. The ECM/PCM memory includes the ideal EGR valve position for varying operating conditions.

The EGR valve position sensor detects the amount of EGR valve lift and sends it to the ECM/PCM. The ECM/PCM then compares it with the ideal lift in its memory (based on signals sent from other sensors). If there is any difference between the

two, the ECM/PCM cuts current to the EGR valve.



*: This illustration shows 2003-2005 models.
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Fig. 62: Identifying Exhaust Gas Recirculation System Diagram (2003-2005 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EVAPORATIVE EMISSION (EVAP) CONTROL DIAGRAM

The EVAP controls minimize the amount of fuel vapor escaping to the atmosphere. Vapor from the fuel tank is temporarily stored in the EVAP canister until it can be purged from the canister into the engine and burned.

- The EVAP canister is purged by drawing fresh air through it and into a port on the intake manifold.

  The purging vacuum is controlled by the EVAP canister purge valve, which operates whenever engine coolant temperature is above 131 °F (55 °C).

- During refueling, the fuel tank vapor control valve opens with the pressure in the fuel tank, and feeds the fuel vapor to the EVAP canister (SULEV model).

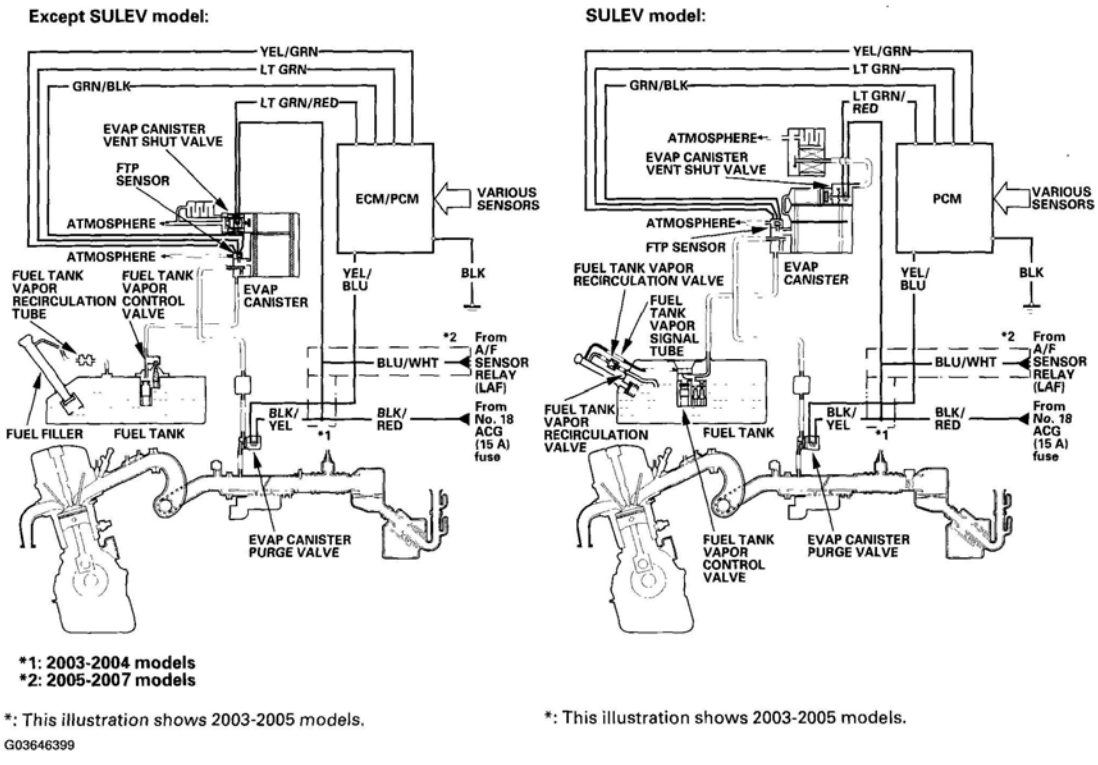


Fig. 63: Identifying Evaporative Emission Control Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ECM/PCM CIRCUIT DIAGRAM

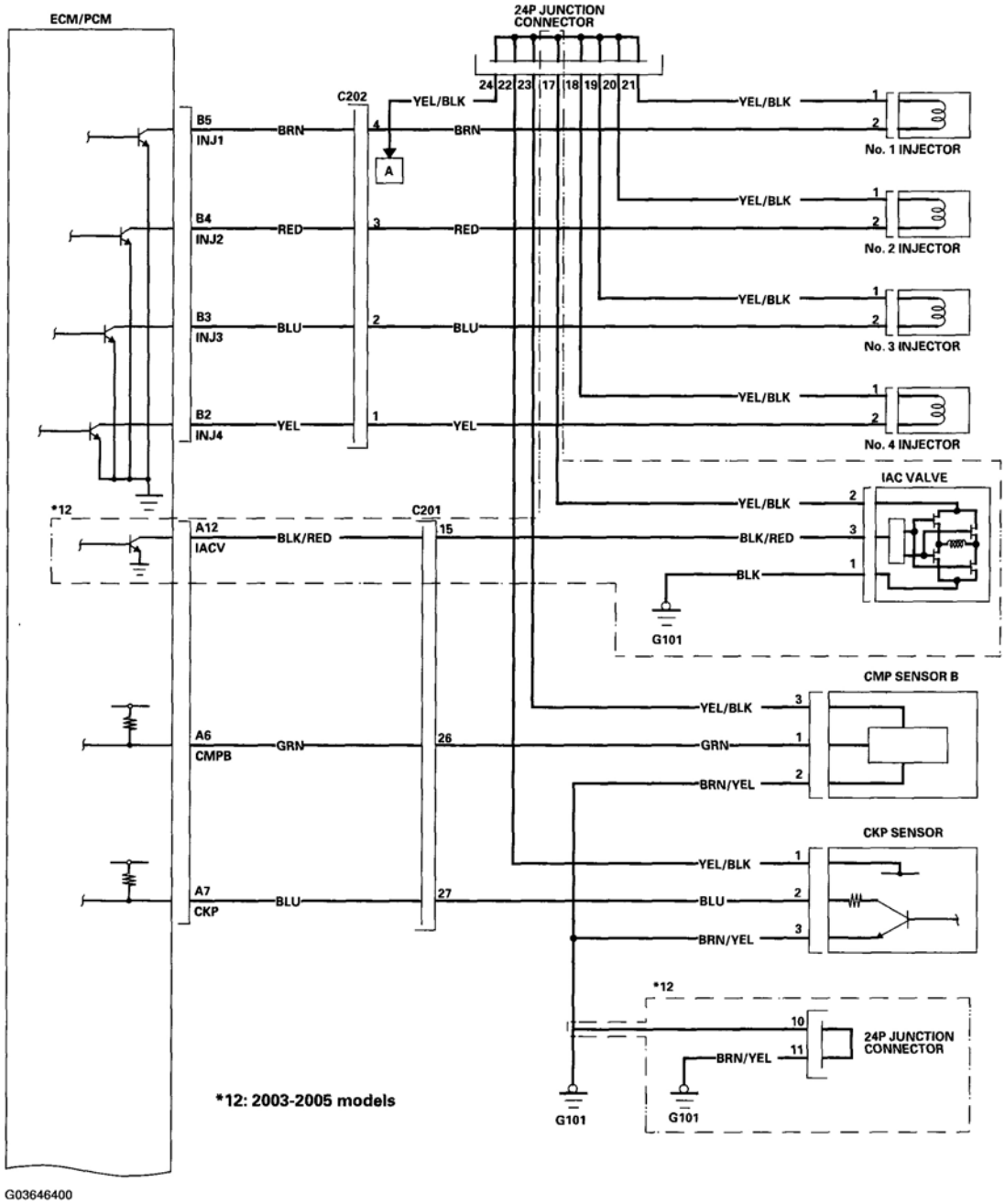
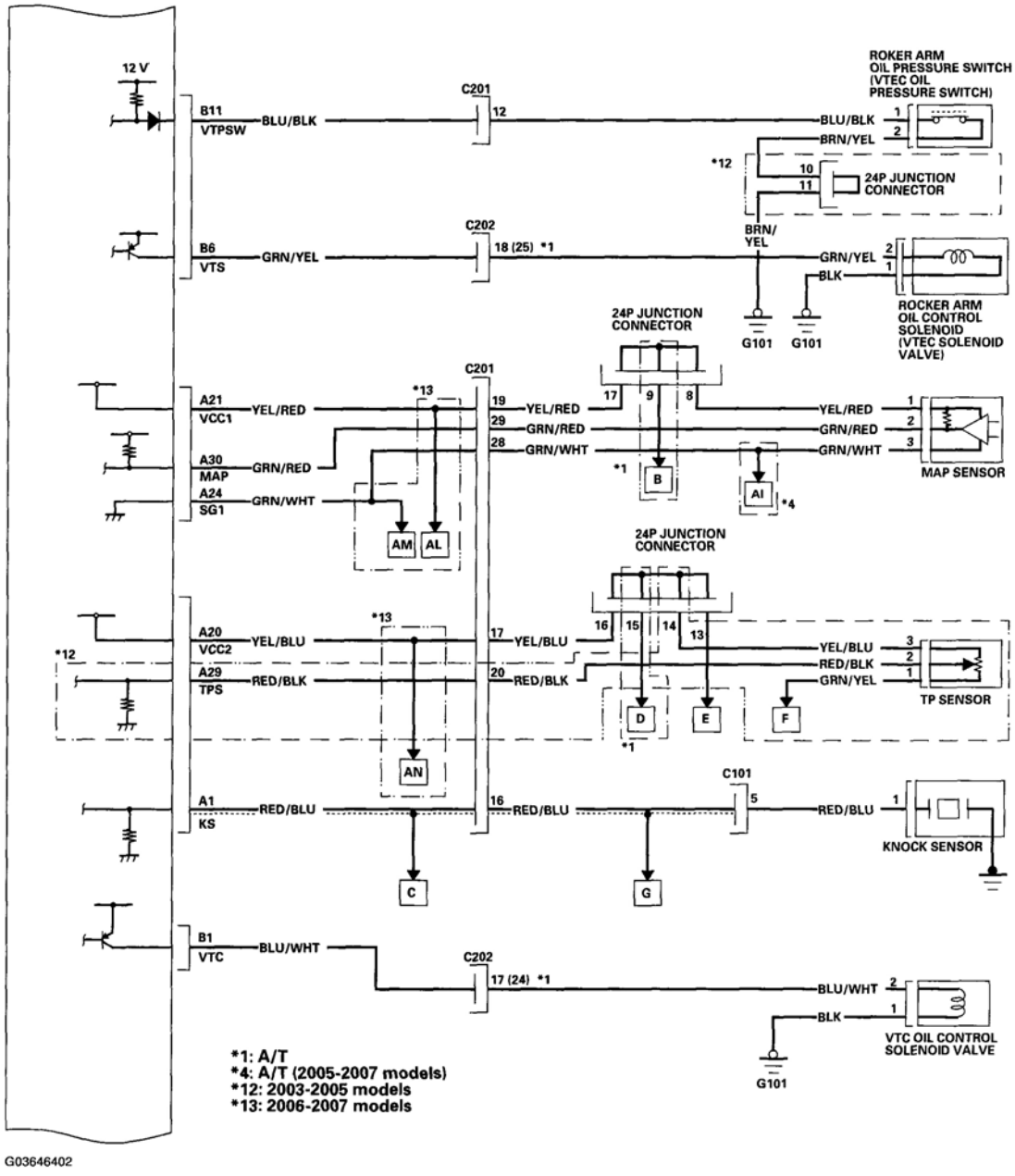
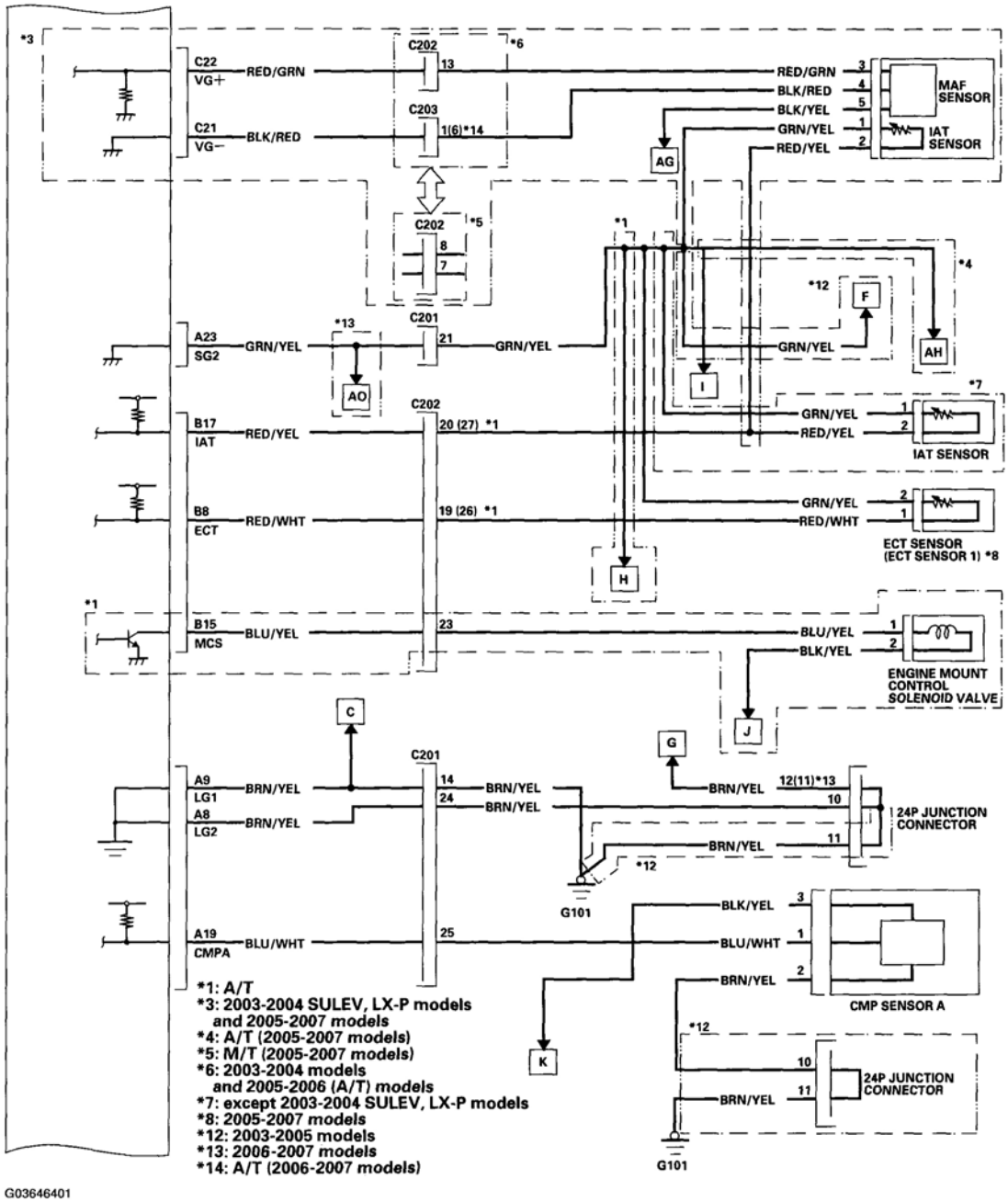


Fig. 64: ECM/PCM Circuit Diagram (1 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 65: ECM/PCM Circuit Diagram (2 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 66: ECM/PCM Circuit Diagram (3 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

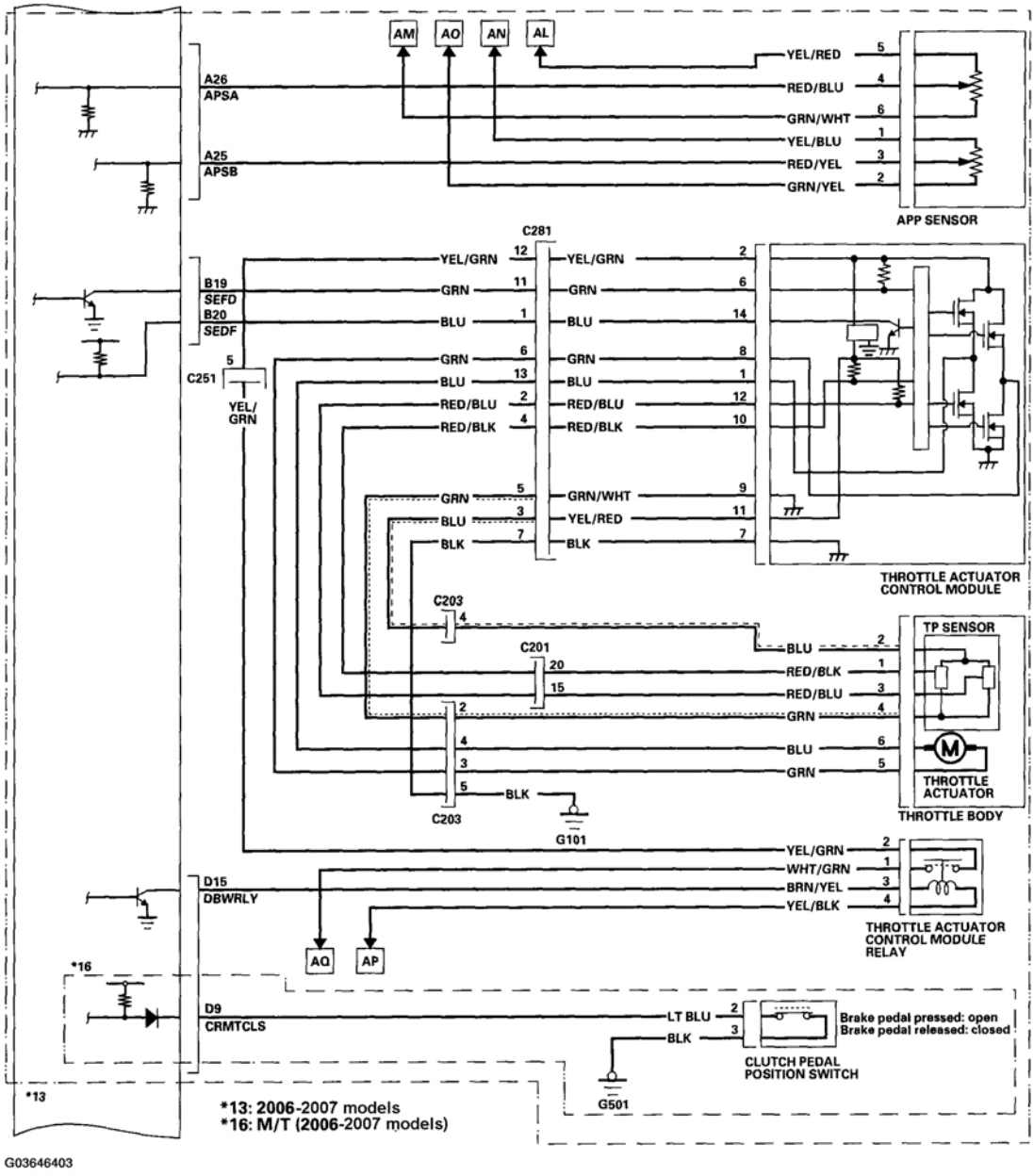


Fig. 67: ECM/PCM Circuit Diagram (4 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

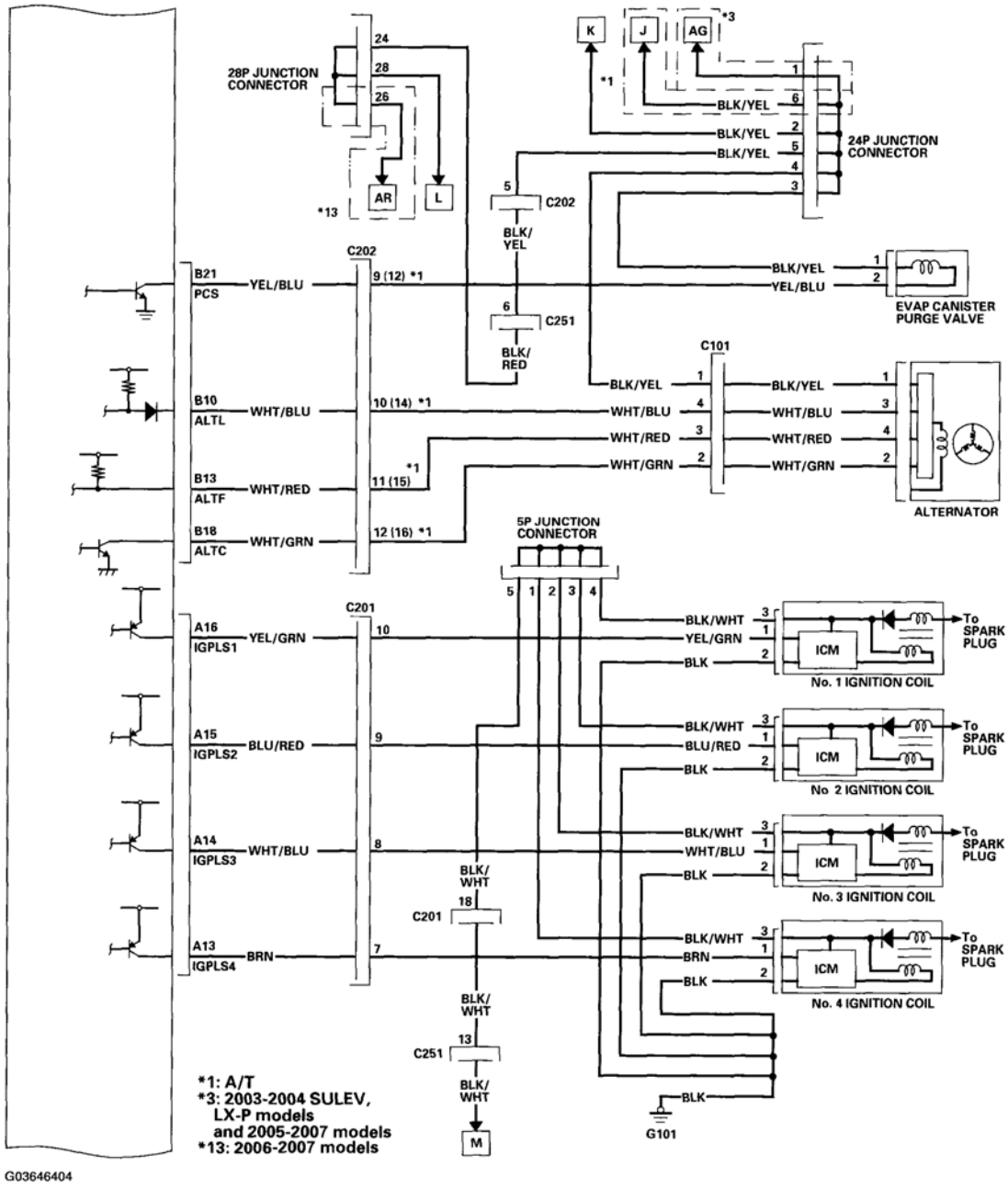
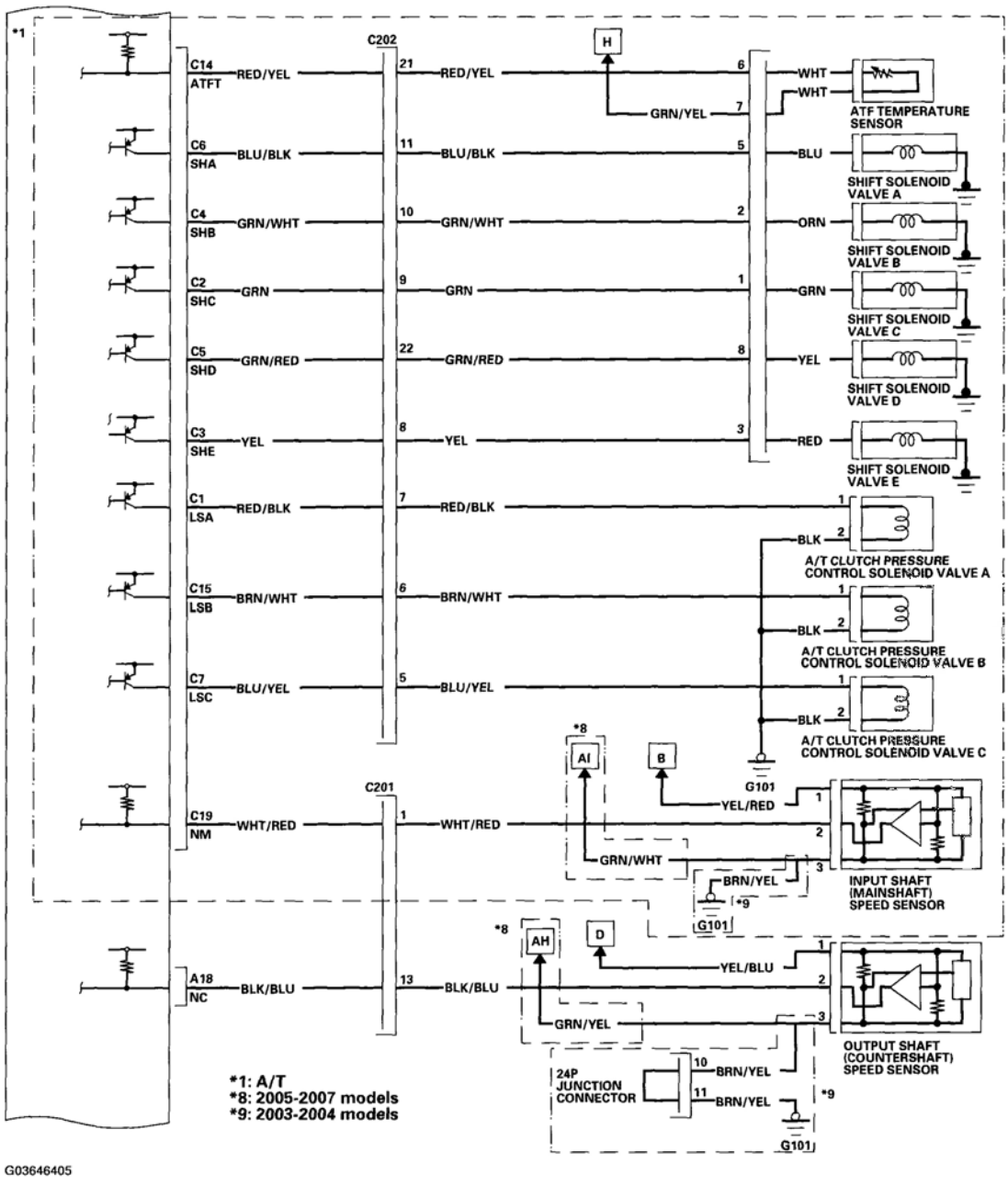


Fig. 68: ECM/PCM Circuit Diagram (5 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 69: ECM/PCM Circuit Diagram (6 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

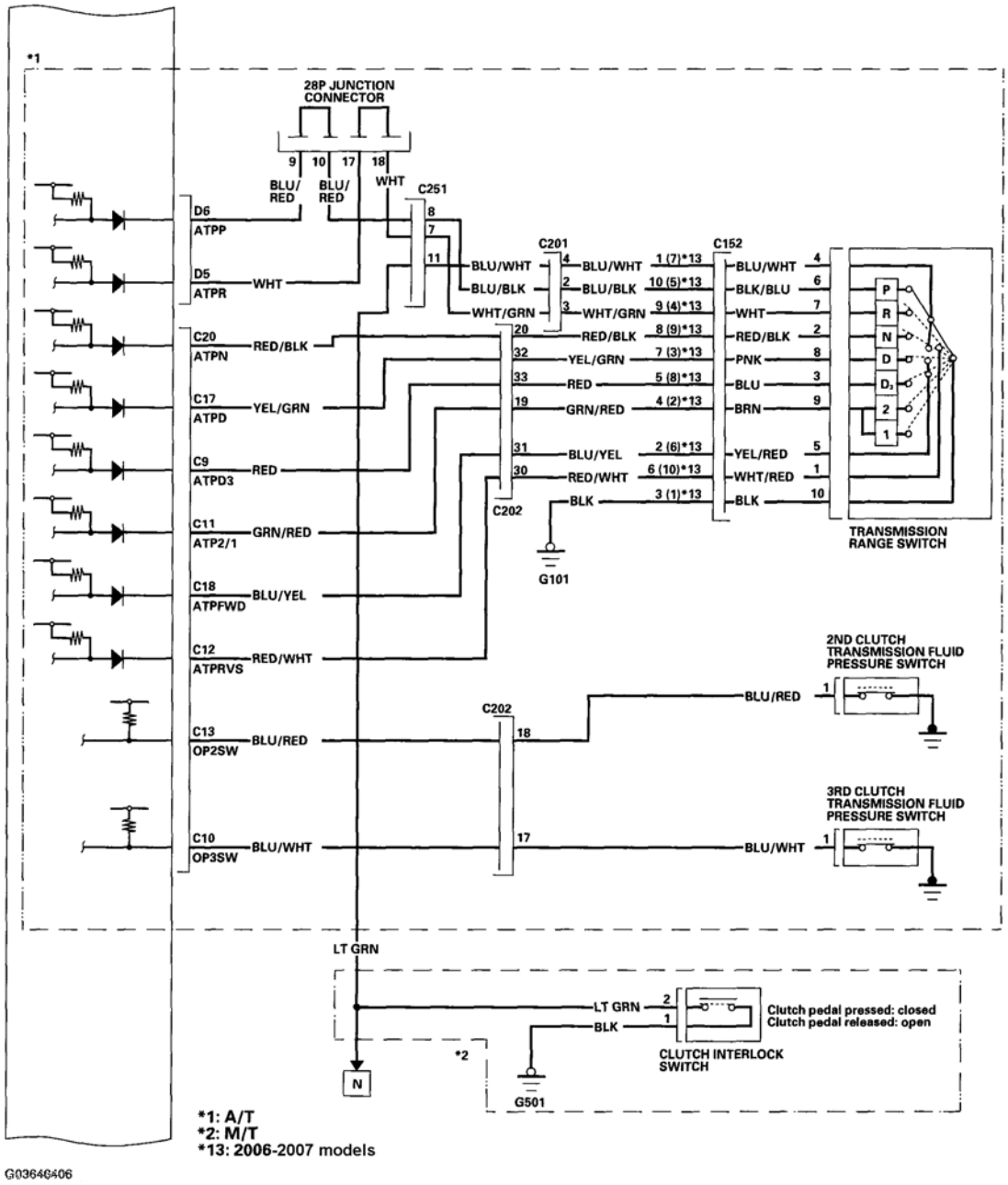


Fig. 70: ECM/PCM Circuit Diagram (7 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

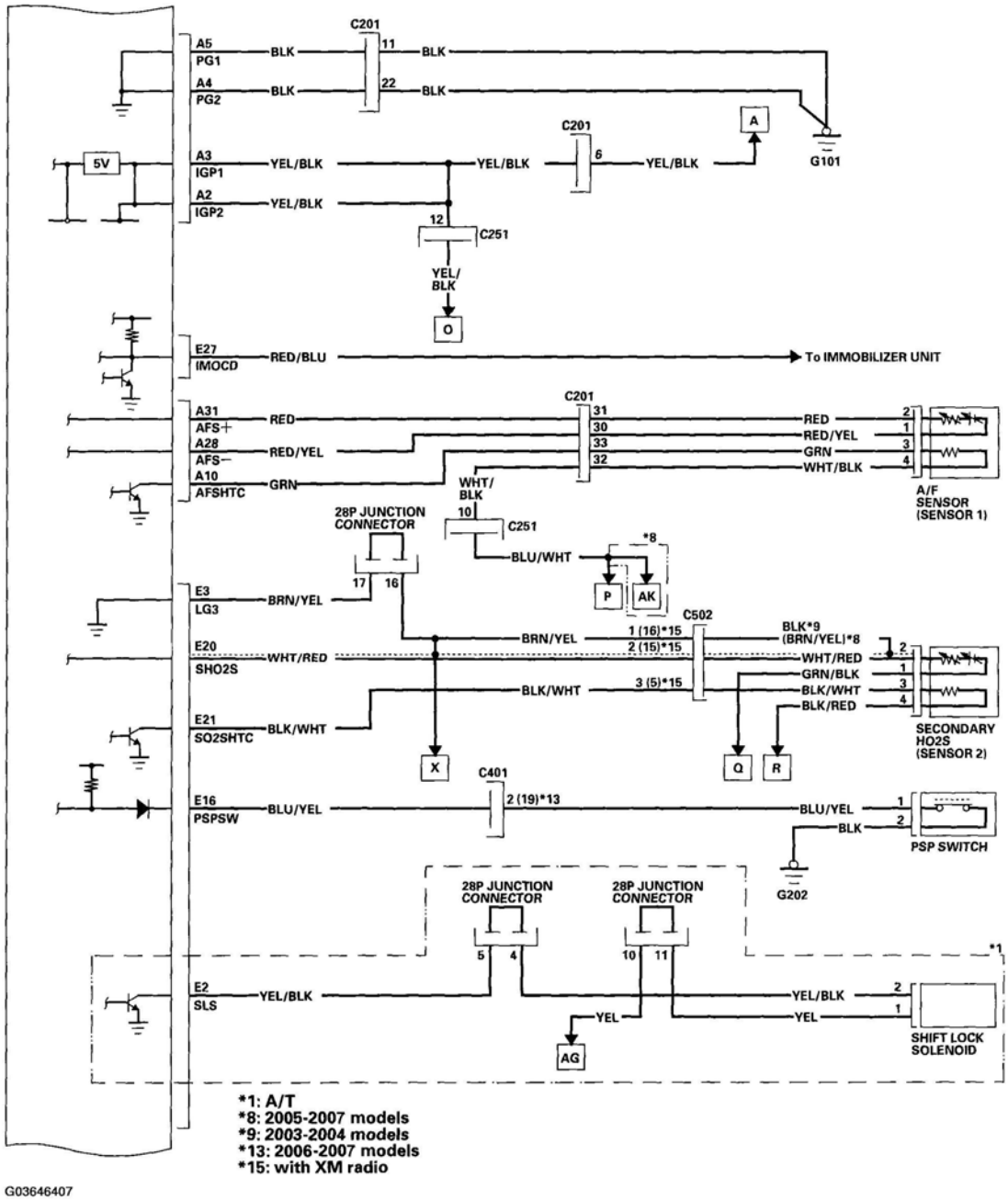


Fig. 71: ECM/PCM Circuit Diagram (8 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

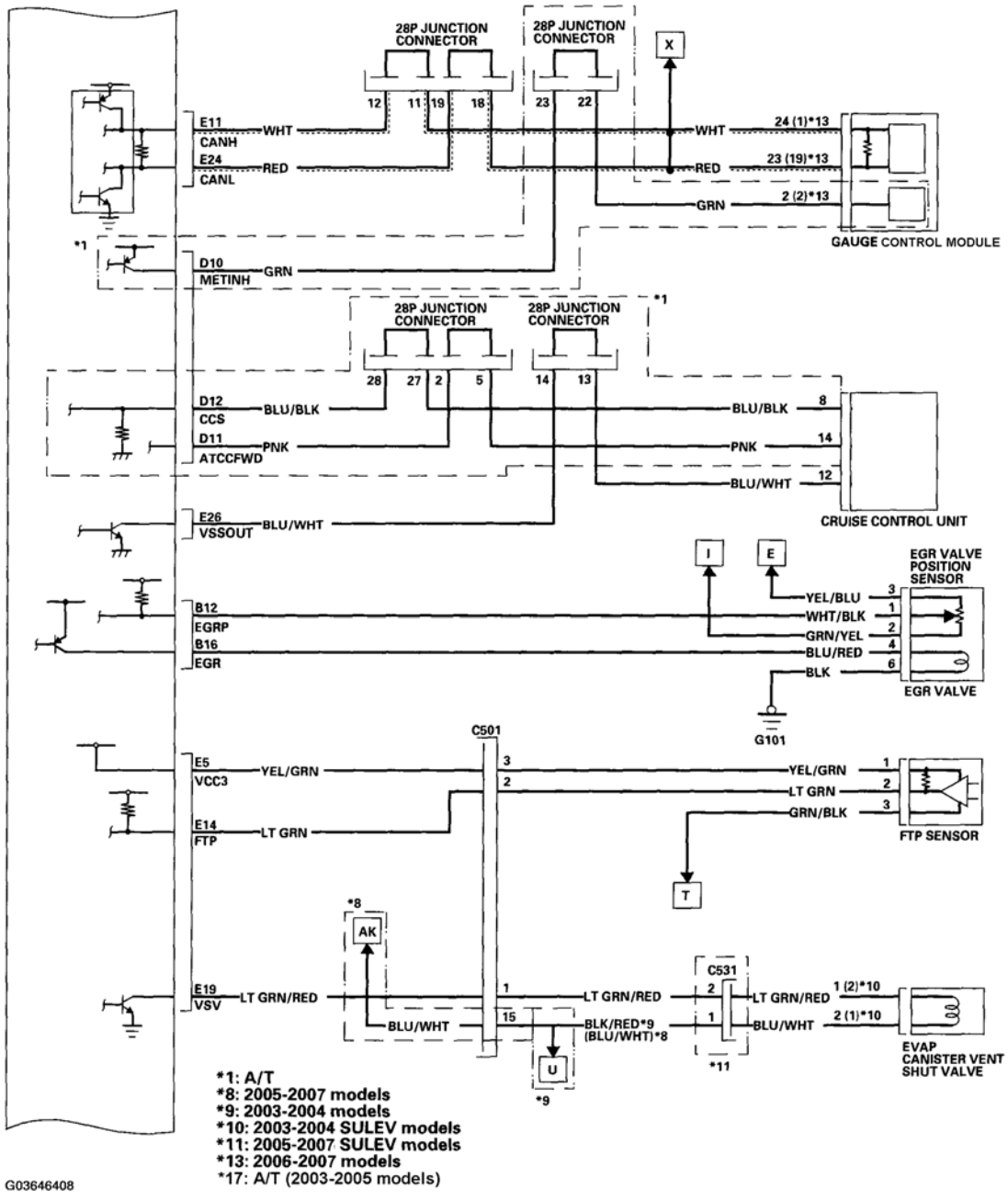


Fig. 72: ECM/PCM Circuit Diagram (9 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

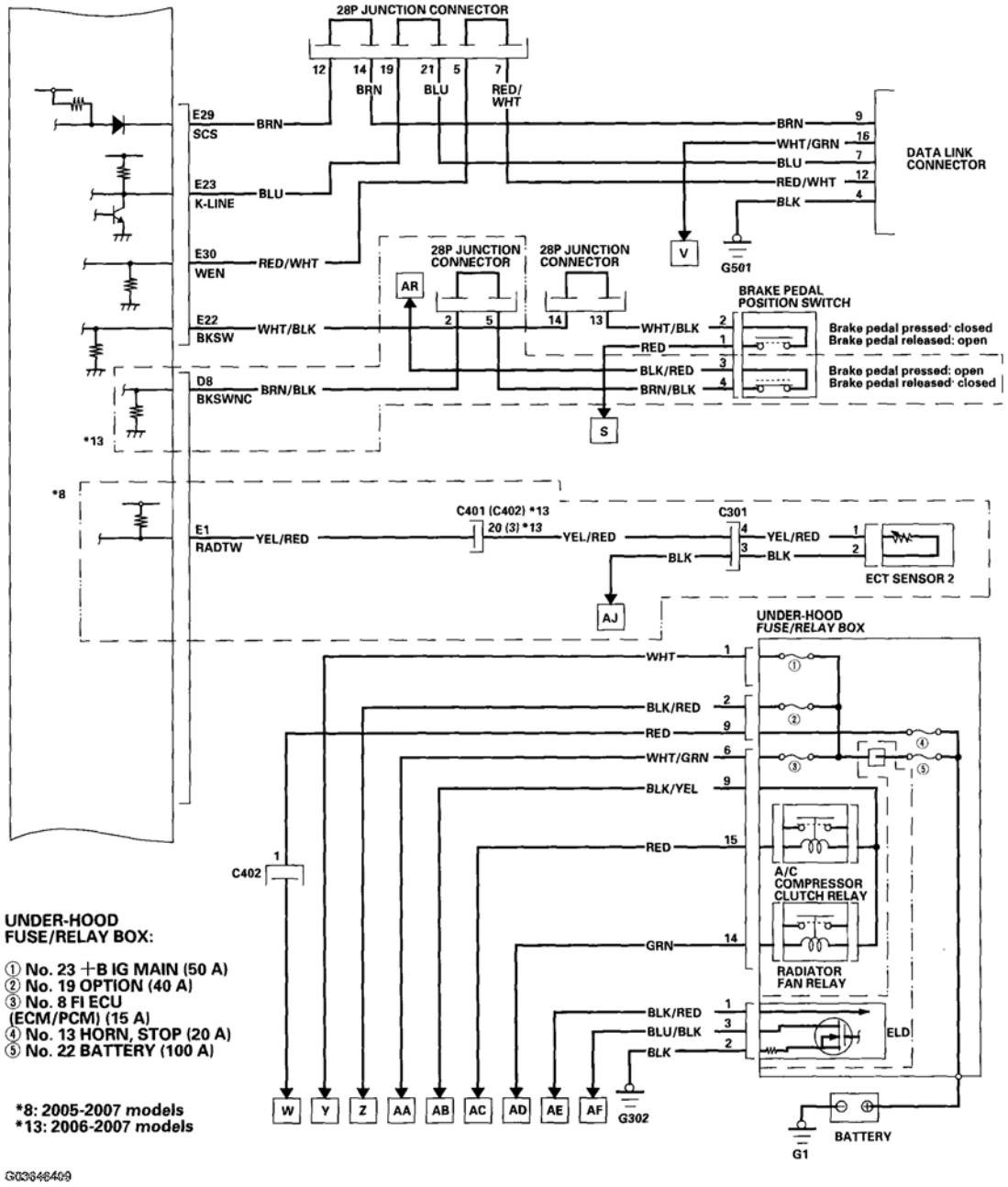


Fig. 73: ECM/PCM Circuit Diagram (10 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

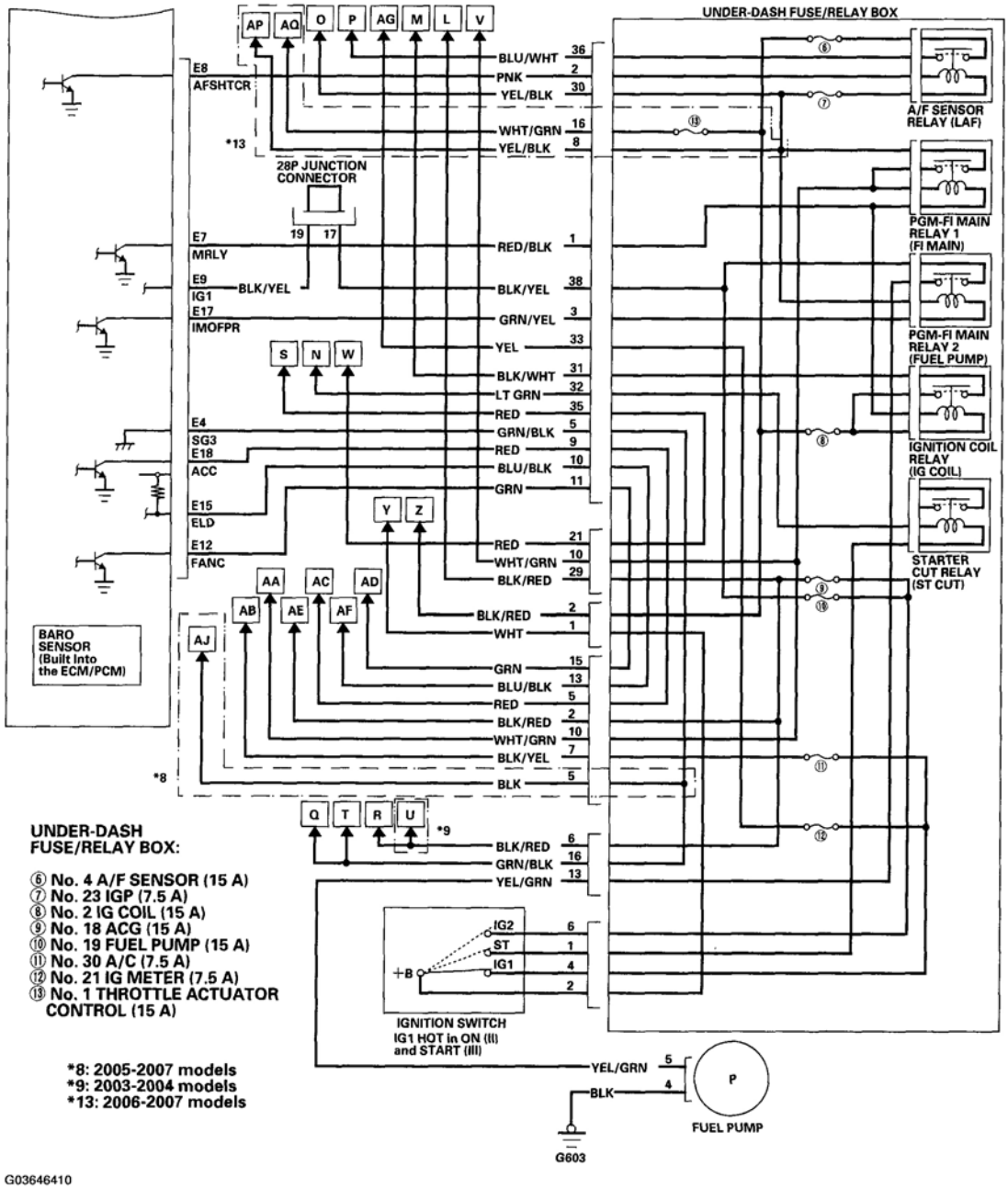


Fig. 74: ECM/PCM Circuit Diagram (11 Of 11)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

HOW TO SET READINESS CODES

MALFUNCTION INDICATOR LAMP (MIL) INDICATION (IN RELATION TO READINESS CODES)

The vehicle has certain "readiness codes" that are part of the on-board diagnostics for the emissions systems. If the vehicle's battery has been disconnected or gone dead, if the DTCs have been cleared, or if the ECM/PCM has been reset, these readiness codes are reset. In some states, part of the emissions testing is to make sure these codes are set to complete. If all of them are not set to complete, the vehicle may fail the emission test, or the test cannot be finished.

To check if the readiness codes are set to complete, turn the ignition switch ON (II), but do not start the engine. The MIL will come on for 15-20 seconds. If it then goes off, the readiness codes are complete. If it flashes five times, one or more readiness codes are not set to complete. To set readiness codes from incomplete to complete, do the procedure for the appropriate code.

To check the status of a specific DTC system, check the OBD status in the DTC MENU with the HDS (see **SUBSTITUTE THE ECM/PCM**). This screen displays the code, the current data list of the enable criteria, and the status of the readiness testing.

CATALYTIC CONVERTER MONITOR AND READINESS CODE

NOTE:

- **Do not turn the ignition switch off during the procedure.**
- **All readiness codes are cleared when the battery is disconnected or when the ECM/PCM is cleared with the HDS.**
- **Low ambient temperatures or excessive stop-and-go traffic may increase the drive time needed to switch the readiness code from incomplete to complete.**
- **The readiness code will not switch to complete until all the enable criteria are met.**
- **If a fault in the secondary HO2S system caused the MIL to come on, the readiness code cannot be set to complete until you correct the fault.**

Enable Criteria

- ECT at 158°F (70°C) or more.

- Intake air temperature (IAT) at -13°F (-25°C) or higher.
- Vehicle speed sensor (VSS) reads more than 3 mph (5 km/h).

Procedure

1. Connect the HDS to the vehicle's data link connector (DLC), and bring up the READINESS CODEs screen for Catalyst in the DTCs MENU.
2. Start the engine.
3. Test-drive the vehicle under stop-and-go conditions with short periods of steady cruise. After about 5 miles (8 km), the readiness code should switch to completed.
4. If the readiness code is still not set to complete, check for a Temporary DTC with the HDS. If there is no DTC, one or more of the enable criteria were probably not met; repeat the procedure.

EVAPORATIVE EMISSION (EVAP) CONTROL SYSTEM MONITOR AND READINESS CODE

NOTE: All readiness codes are cleared when the battery is disconnected or when the ECM/PCM is cleared with the HDS.

Enable Criteria

- Battery voltage is higher than 10.5 V.
- Engine at idle.
- ECT sensor between 176°F (80°C) and 212°F (100°C).
- MAP sensor less than 46.6 kPa (14 in.Hg, 350 mmHg).
- Vehicle speed 0 mph (0 km/h).
- IAT sensor between 32°F (0°C) and 212°F (100°C).

Procedure

1. Connect the HDS to the vehicle's data link connector (DLC).
2. Start the engine.
3. Select EVAP TEST in the INSPECTION MENU with the HDS, then select the FUNCTION TEST in the EVAP TEST MENU.

- If the functions are normal, readiness is complete.
- If the functions are not normal, go to the next step.

4. If the readiness code is still not set to complete, check for a temporary DTC. If there is no DTC, one or more of the enable criteria were probably not met; repeat the procedure.

AIR FUEL RATIO (A/F) SENSOR MONITOR AND READINESS CODE

NOTE:
- **Do not turn the ignition switch off during the procedure.**
- **All readiness codes are cleared when the battery is disconnected or when the ECM/PCM is cleared with the HDS.**

Enable Criteria

ECT at 158°F (70°C) or more.

Procedure

1. Start the engine.
2. Test-drive the vehicle under stop-and-go conditions with short periods of steady cruise. During the drive, decelerate (with the throttle fully closed) for 5 seconds. After about 3.5 miles (5.6 km), the readiness code should switch from incomplete to complete.
3. Check the readiness codes screen for the Air Fuel Ratio (A/F) Sensor in the DTCs MENU with the HDS.
   - If the screen shows complete, readiness is complete.
   - If the screen shows not complete, go to the next step.
4. Check for a Temporary DTC. If there is no DTC, the enable criteria was probably not met. Select the DATA LIST Menu. Check the ECT in the ALL DATA LIST with the HDS. If the ECT is lower than 158°F (70°C), run the engine until it is higher than 158°F (70°C), then repeat the procedure.

AIR FUEL RATIO (A/F) SENSOR HEATER MONITOR READINESS CODE

NOTE: All readiness codes are cleared when the battery is

disconnected or when the ECM/PCM is cleared with the HDS.

Procedure

1. Start the engine, and let it idle for 1 minute. The readiness code should switch from incomplete to complete.
2. If the readiness code is still not set to complete, check for a temporary DTC. If there is no DTC, repeat the procedure.

MISFIRE MONITOR AND READINESS CODE

- This readiness code is always set to available because misfiring is continuously monitored.
- Monitoring pauses, and the misfire counter resets, if the vehicle is driven over a rough road.
- Monitoring also pauses, and the misfire counter holds at its current value, if the throttle position changes more than a predetermined value, or if driving conditions fall outside the range of any related enable criteria.

FUEL SYSTEM MONITOR AND READINESS CODE

- This readiness code is always set to available because the fuel system is continuously monitored during closed loop operation.
- Monitoring pauses when the catalytic converter, EVAP control system, and A/F sensor monitors are active.
- Monitoring also pauses when any related enable criteria are not being met. Monitoring resumes when the enable criteria is again being met.

COMPREHENSIVE COMPONENT MONITOR AND READINESS CODE

This readiness code is always set to available because the comprehensive component monitor is continuously running whenever the engine is cranking or running.

EGR MONITOR AND READINESS CODE

NOTE:

- **Do not turn the ignition switch off during the procedure.**
- **All readiness codes are cleared when the battery is disconnected or when the ECM/PCM is cleared with the HDS.**

Enable Criteria

ECT at 176°F (80°C) or more.

Procedure

1. Connect the HDS to the vehicle's data link connector (DLC).
2. Start the engine.
3. Drive at a steady speed with the A/T in D or M/T in 4th gear, 50-62 mph (80-100 km/h) or above for more than 10 seconds.
4. With the A/T in D or M/T in 4th gear, decelerate from 62 mph (100 km/h) or above by completely releasing the throttle for at least 5 seconds. If the engine is stopped during this procedure, go to step 2 and do the procedure again.
5. Check the OBD status screen for DTC P0401 in the DTC's MENU with the HDS.
   - If it is passed, readiness is complete.
   - If it is not passed, go to step 3 and retest.

2003-07 ENGINE PERFORMANCE

Fuel Supply System - Accord (V6)

COMPONENT LOCATION INDEX

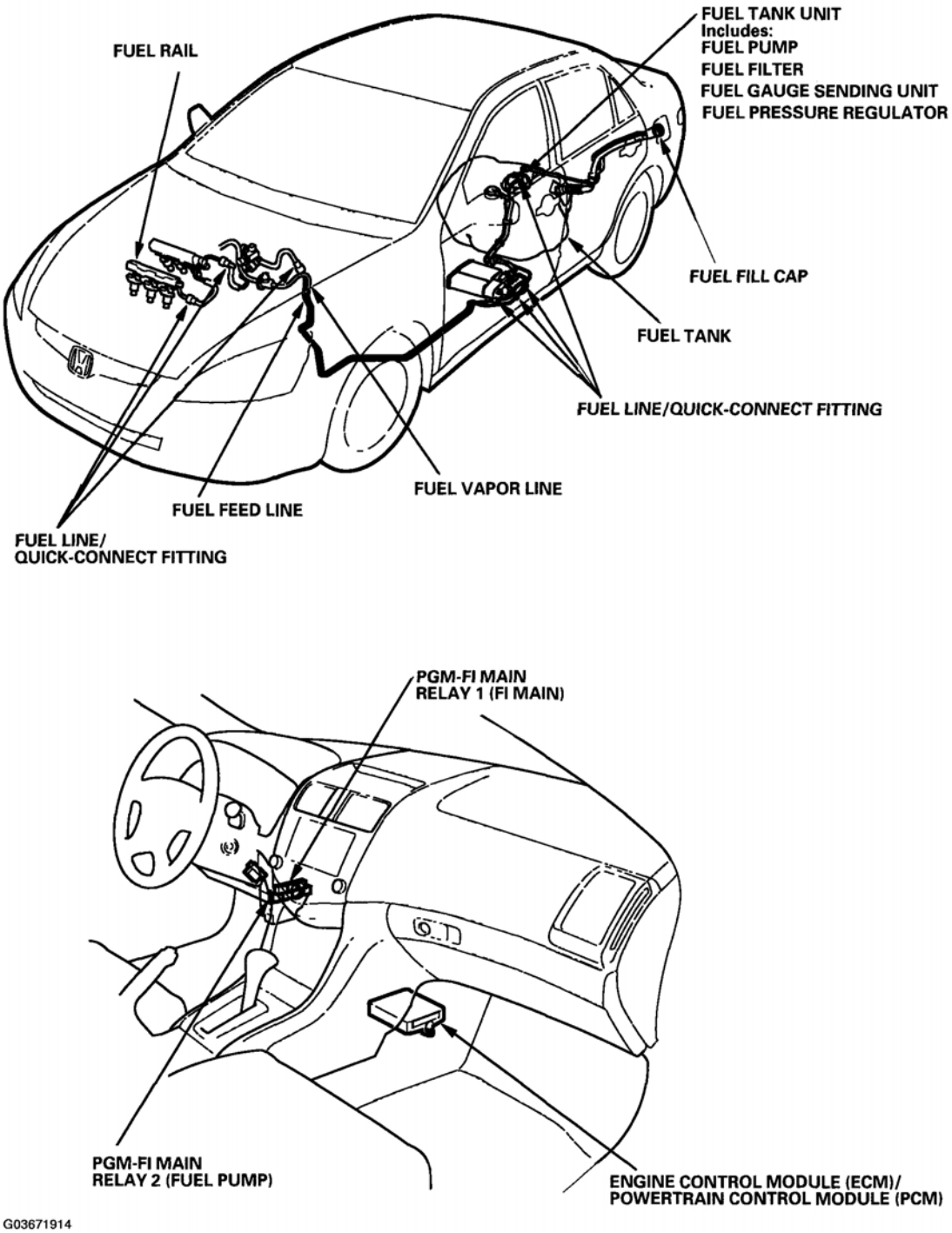


Fig. 1: Identifying Fuel Supply System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC CODES

DTC CHART

DTC	Description
DTC P0461	Fuel Level Sensor (Fuel Gauge Sending Unit) Range/Performance Problem (2005-2007 models)
DTC P0462	Fuel Level Sensor (Fuel Gauge Sending Unit) Circuit Low Voltage (2005-2007 models)
DTC P0463	Fuel Level Sensor (Fuel Gauge Sending Unit) Circuit High Voltage (2005-2007 models)

DTC TROUBLESHOOTING

DTC P0461: FUEL LEVEL SENSOR (FUEL GAUGE SENDING UNIT) RANGE/PERFORMANCE PROBLEM (2005-2007 MODELS)

NOTE:

- **Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**
- **Because it requires 162 miles (260 km) of driving without refueling to complete this diagnosis, DTC P0461 cannot be duplicated during this troubleshooting.**

1. Test the fuel gauge sending unit (see **2005-2007 MODELS**).

   Is the fuel gauge sending unit OK?

   YES - Check for poor connections or loose terminals at the fuel gauge sending unit and the gauge assembly.

   NO - Replace the fuel gauge sending unit (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**), then go to step 2.
2. Turn the ignition switch ON (II).
3. Reset the ECM/PCM with the HDS.
4. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).

5. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0461 is indicated, check for poor connections or loose terminals at the fuel gauge sending unit and the gauge assembly, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

NO - Troubleshooting is complete.

DTC P0462: FUEL LEVEL SENSOR (FUEL GAUGE SENDING UNIT) CIRCUIT LOW VOLTAGE (2005-2007 MODELS)

NOTE:

- **Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**
- **Information marked with an asterisk (*) applies to 2005 model.**
- **Information marked with double asterisk (**) applies to 2007 model.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS, and wait 5 seconds.
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0462 indicated?

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the gauge control module and the fuel gauge sending unit.

4. Turn the ignition switch OFF.
5. Remove the trunk floor trim panel.
6. Remove the access panel from the floor.

7. Disconnect the fuel tank unit 5P connector.
8. Turn the ignition switch ON (II).
9. Clear the DTC with the HDS, and wait 5 seconds.
10. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0463 indicated?

YES - Replace the fuel gauge sending unit (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**), then go to step 22.

NO - Go to step 11.

11. Turn the ignition switch OFF.
12. Remove the gauge control module, refer to **GAUGE CONTROL MODULE REPLACEMENT** .
13. Disconnect the gauge control module 30P* (36P)** connector.
14. Check for continuity between fuel tank unit 5P connector terminal No. 2 and body ground.

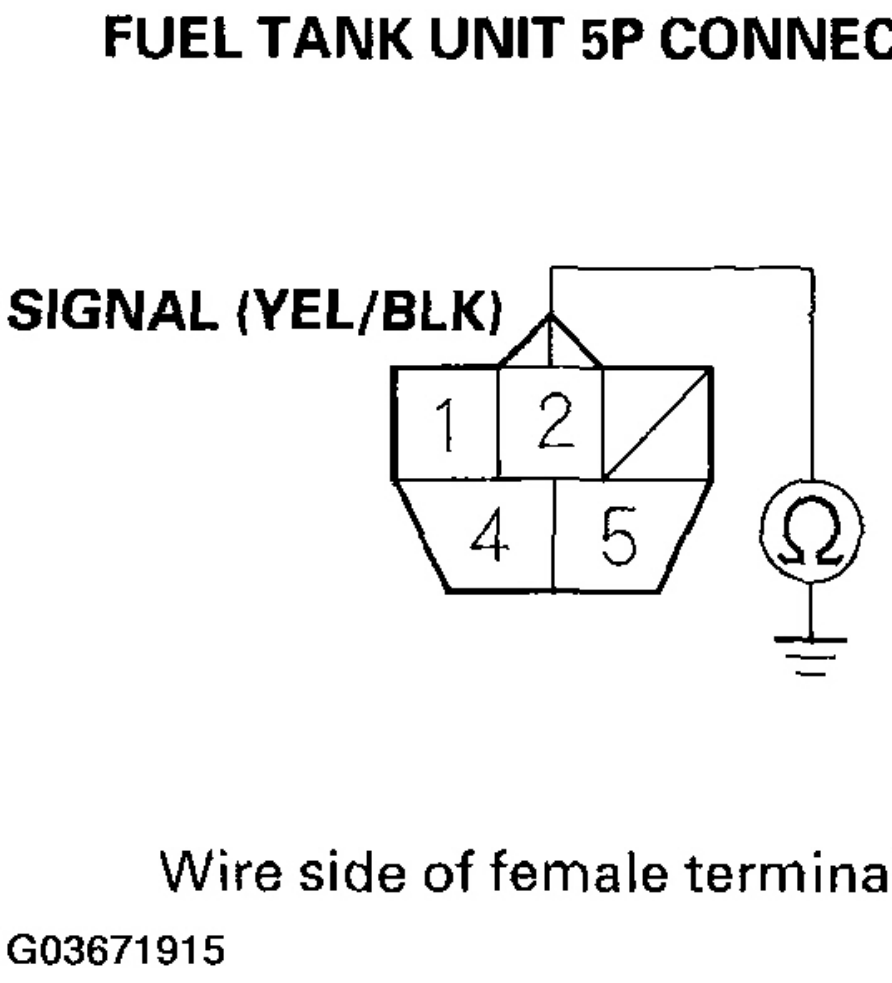


Fig. 2: Checking Continuity Between Fuel Tank Unit 5P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the gauge control module (signal line) and the fuel gauge sending unit, then go to step 23.

NO - Go to step 15.

15. Reconnect the gauge control module 30P* (36P**) connector.

16. Remove the fuel tank unit (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).
17. Connect the fuel tank unit 5P connector.
18. Turn the ignition switch ON (II).
19. Clear the DTC with the HDS.
20. Set the float (A) to the E position.

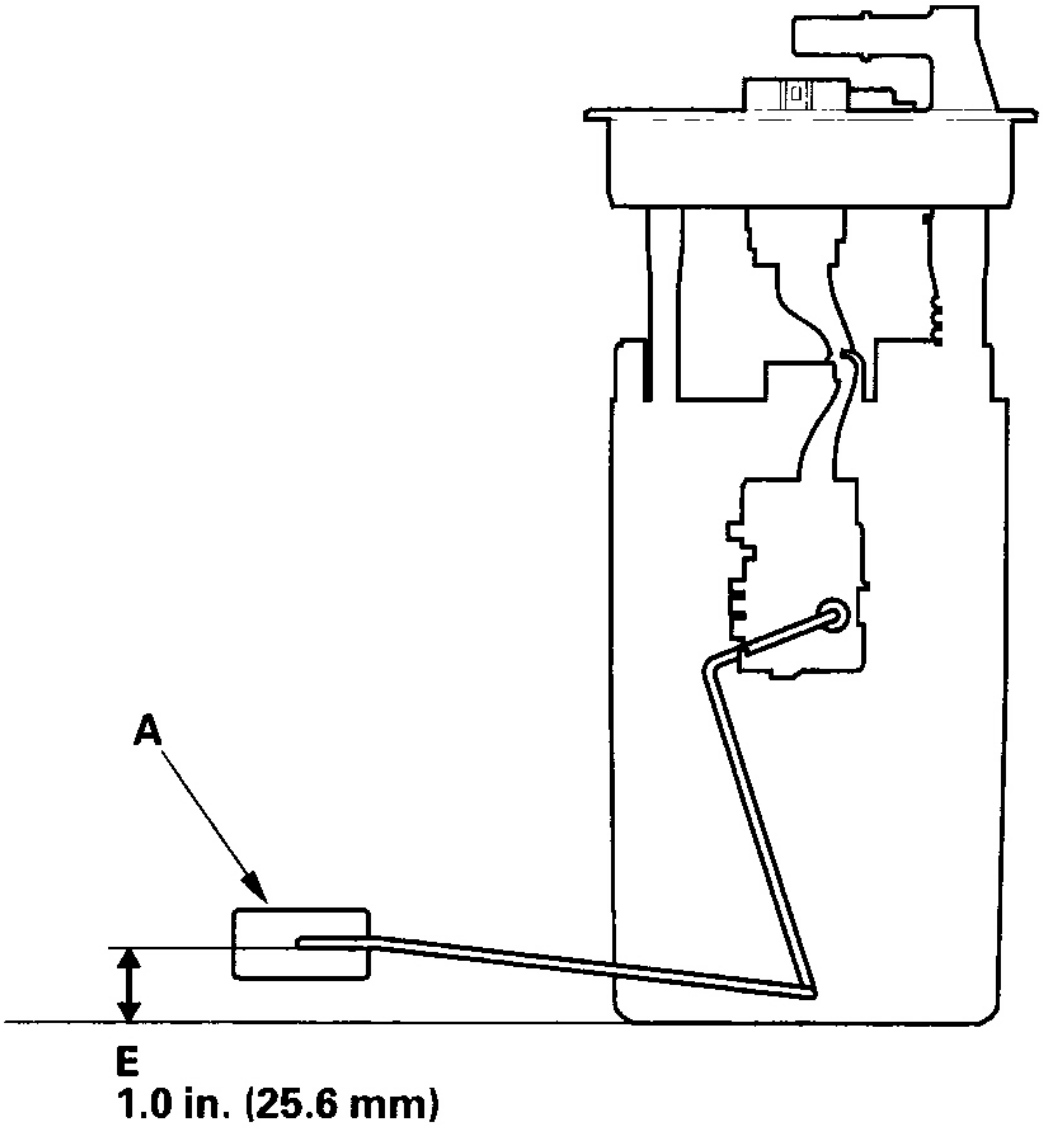


Fig. 3: Setting Float To E Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Check the fuel gauge.

Does the gauge move to the empty position?

YES - Go to step 29.

NO - Replace the gauge control module, refer to **GAUGE CONTROL MODULE REPLACEMENT** , then go to step 22.

22. Turn the ignition switch OFF.
23. Reconnect all connectors.
24. Install the parts in the reverse order of removal.
25. Turn the ignition switch ON (II).
26. Reset the ECM/PCM with the HDS.
27. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
28. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0462 is indicated, check for poor connections or loose terminals at the gauge control module and the fuel gauge sending unit, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

NO - Troubleshooting is complete.

29. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**).
30. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0462 is indicated, check for poor connections or loose terminals at the gauge control module and the fuel gauge sending unit, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

DTC P0463: FUEL LEVEL SENSOR (FUEL GAUGE SENDING UNIT) CIRCUIT HIGH VOLTAGE (2005-2007 MODELS)

NOTE:

- **Before you troubleshoot, record all freeze data and any on-board snapshot, and review the general troubleshooting information (see GENERAL TROUBLESHOOTING INFORMATION).**
- **Information marked with an asterisk (*) applies to 2005 model.**
- **Information marked with double asterisk (**) applies to 2007 model.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS, and wait 5 seconds.
3. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P0463 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the gauge control module and the fuel gauge sending unit.
4. Turn the ignition switch OFF.
5. Remove the trunk floor trim panel.
6. Remove the access panel from the floor.
7. Disconnect the fuel tank unit 5P connector.
8. Connect fuel tank unit 5P connector terminal No. 1 to body ground with a jumper wire.

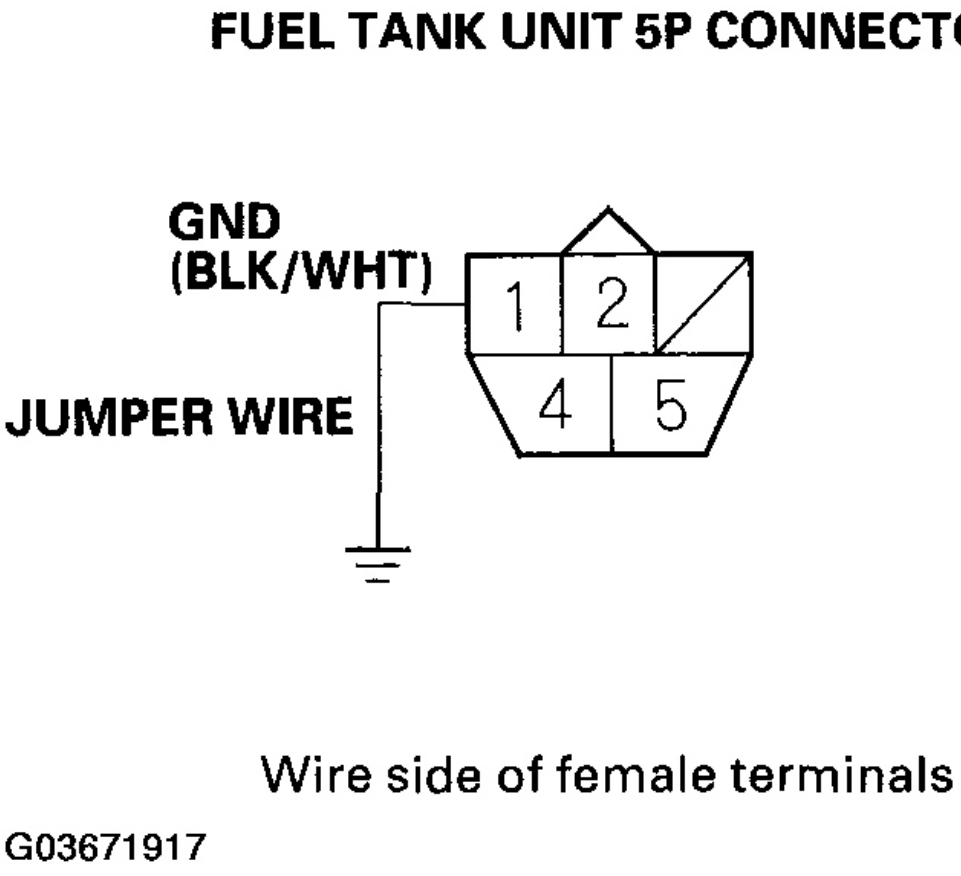


Fig. 4: Connecting Fuel Tank Unit 5P Connector Terminal To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the gauge control module, refer to **GAUGE CONTROL MODULE REPLACEMENT** .
10. Disconnect the gauge control module 30P* (36P**) connector.
11. Check for continuity between gauge control module 30P* (36P**) connector terminal No. 3 and body ground.

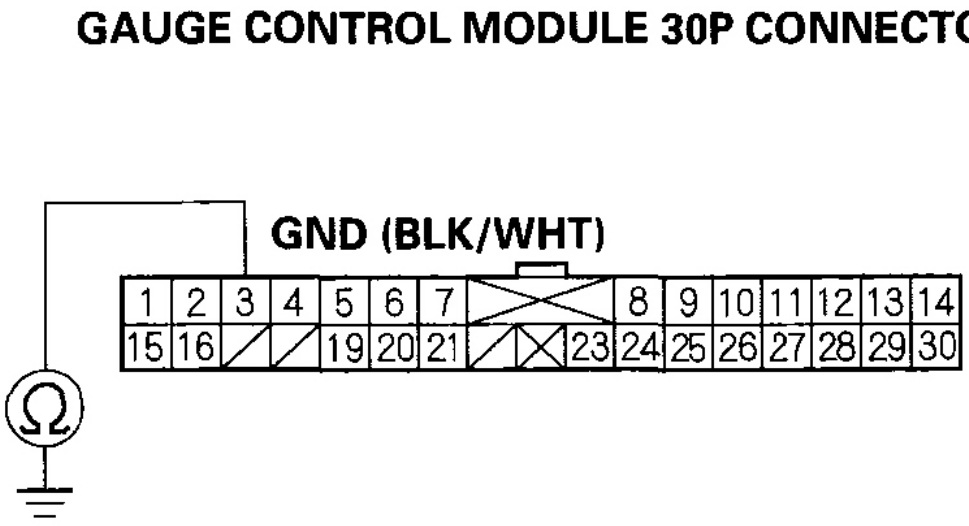


Fig. 5: Checking Continuity Between Gauge Control Module 30P* Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

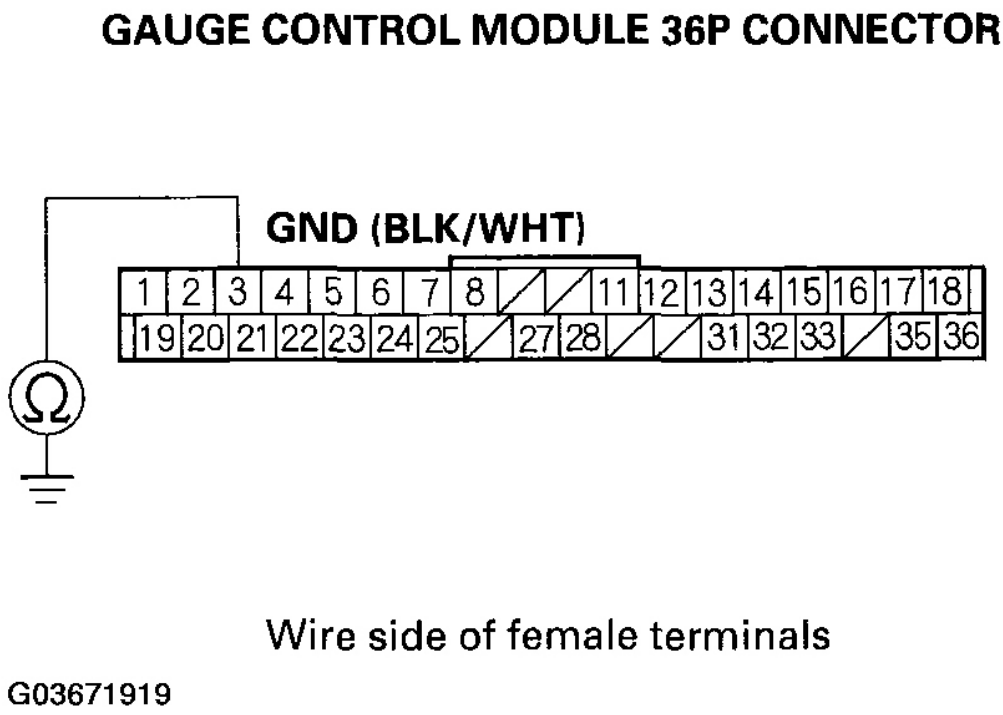


Fig. 6: Checking Continuity Between Gauge Control Module 36P Connector Terminal And Body Ground**
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 12.

NO - Repair open in the wire between the gauge control module (GND line) and the fuel gauge sending unit, then go to step 24.

12. Connect fuel tank unit 5P connector terminal No. 2 to body ground with a jumper wire.

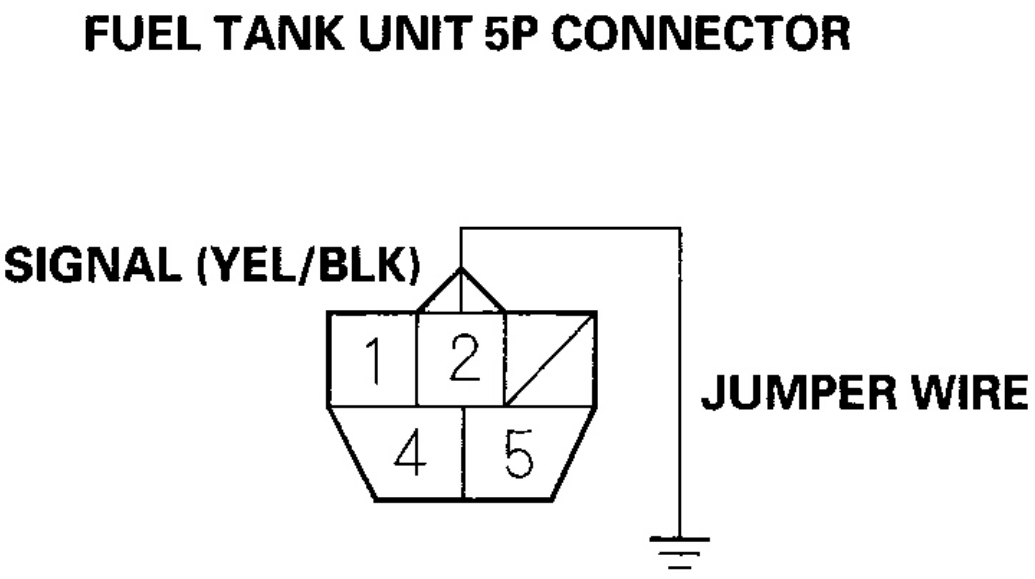


Fig. 7: Connecting Fuel Tank Unit 5P Connector Terminal To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Check for continuity between gauge control module 30P* (36P**) connector terminal No. 4 and body ground.

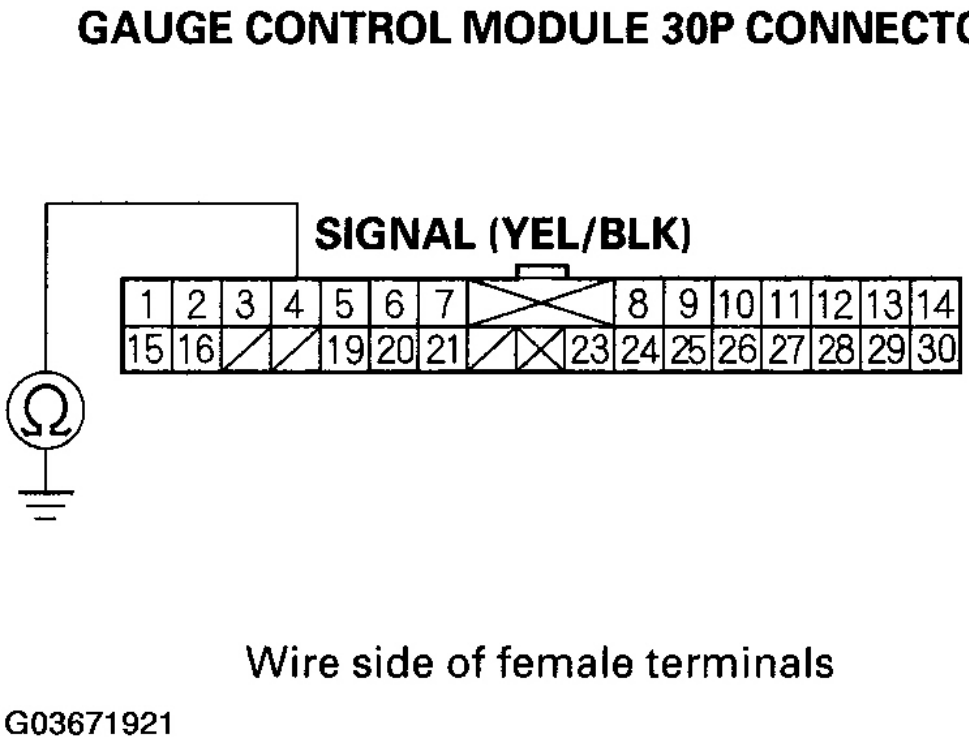


Fig. 8: Checking Continuity Between Gauge Control Module 30P* Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

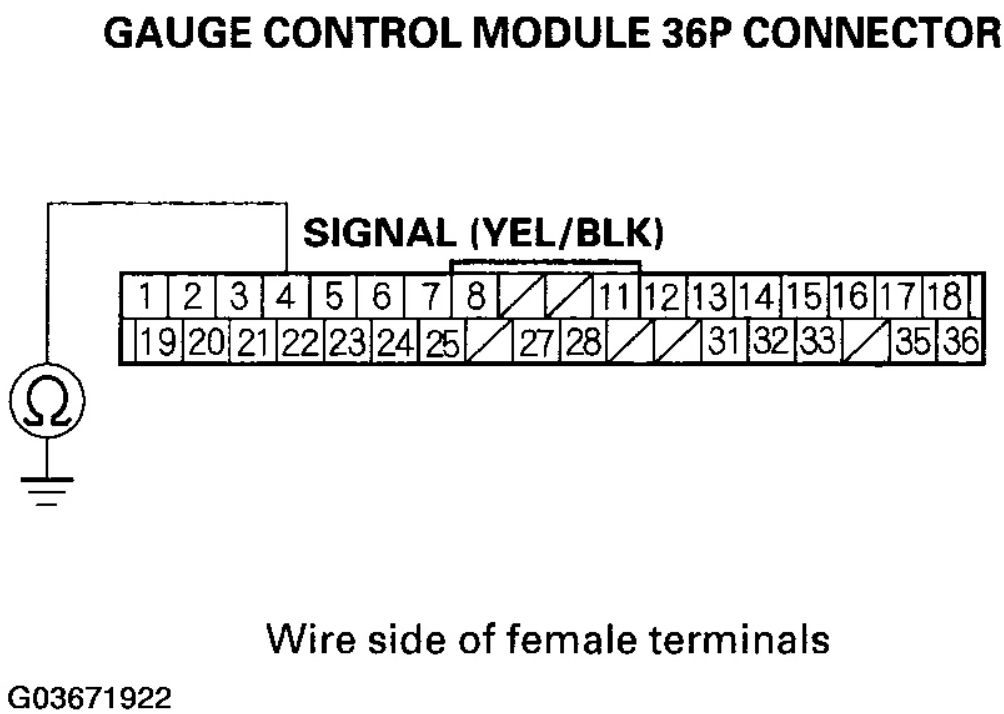


Fig. 9: Checking Continuity Between Gauge Control Module 36P Connector Terminal And Body Ground**
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 14.

NO - Repair open in the wire between the gauge control module (signal line) and the fuel gauge sending unit, then go to step 24.

14. Remove the jumper wire from the fuel tank unit 5P connector.
15. Remove the fuel tank unit (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).
16. Test the fuel gauge sending unit (see **2005-2007 MODELS**).

Is the fuel gauge sending unit OK?

YES - Go to step 17.

NO - Replace the fuel gauge sending unit (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**), then go to step 23.

17. Connect the fuel tank unit 5P connector.
18. Reconnect the gauge control module 30P* (36P**) connector.
19. Turn the ignition switch ON (II).
20. Clear the DTC with the HDS.
21. Set the float (A) to the F position.

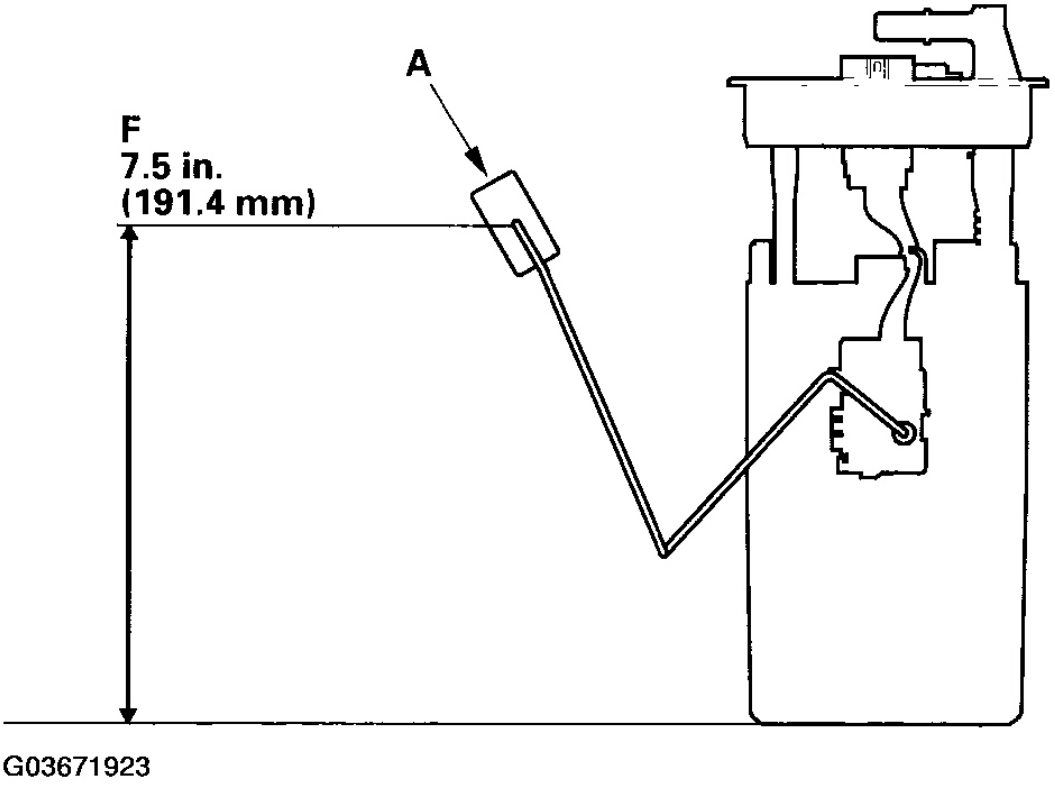


Fig. 10: Setting Float To F Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Check the fuel gauge.

Does the gauge move to the full position?

YES - Go to step 30.

NO - Replace the gauge control module, refer to **GAUGE CONTROL MODULE REPLACEMENT** , then go to step 23.

23. Turn the ignition switch OFF.
24. Reconnect all connectors.
25. Install the parts in the reverse order of removal.
26. Turn the ignition switch ON (II).
27. Reset the ECM/PCM with the HDS.
28. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
29. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0463 is indicated, check for poor connections or loose terminals at the gauge control module and the fuel gauge sending unit, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

NO - Troubleshooting is complete.

30. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**).
31. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0463 is indicated, check for poor connections or loose terminals at the gauge control module and the fuel gauge sending unit, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.

NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

FUEL PUMP CIRCUIT TROUBLESHOOTING

If you suspect a problem with the fuel pump, check that the fuel pump actually runs; when it is on, you will hear some noise if you listen to the fuel fill port with the fuel fill cap removed. The fuel pump should run for 2 seconds when the ignition switch is first turned on. If the fuel pump does not make noise, check as follows:

1. Turn the ignition switch OFF.
2. Remove the left kick panel, refer top **SIDE SILL PANEL REPLACEMENT** , then remove PGM-FI main relay 2 (FUEL PUMP) (A) from the under-dash fuse/ relay box.

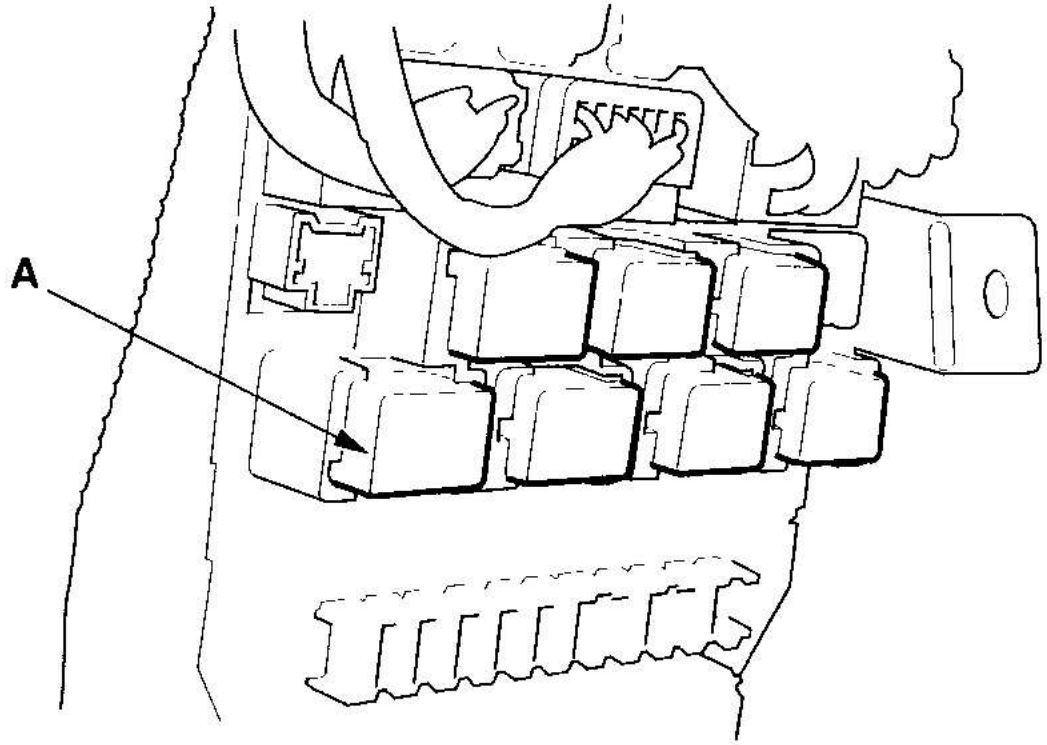


Fig. 11: Identifying PGM-FI Main Relay 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch ON (II).
4. Measure voltage between PGM-FI main relay 2 (FUEL PUMP) 4P connector terminal No. 3 and body ground.

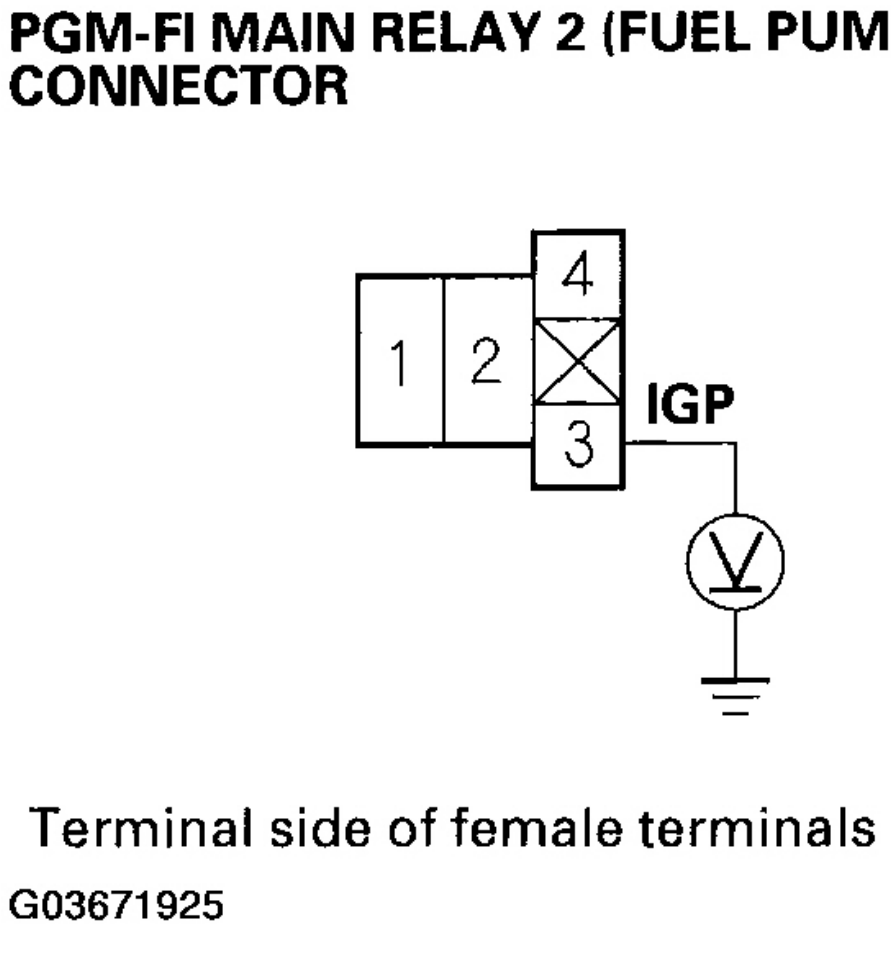


Fig. 12: Measuring Voltage Between PGM-FI Main Relay 2 4P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 5.

NO -

- Replace PGM-FI main relay 1 (FI MAIN).
- If needed, replace the under-dash fuse/relay box, refer to **UNDER-DASH FUSE/RELAY BOX (EXCEPT HYBRID & V6)** .

5. Measure voltage between PGM-FI main relay 2 (FUEL PUMP) 4P connector terminal No. 1 and body ground.

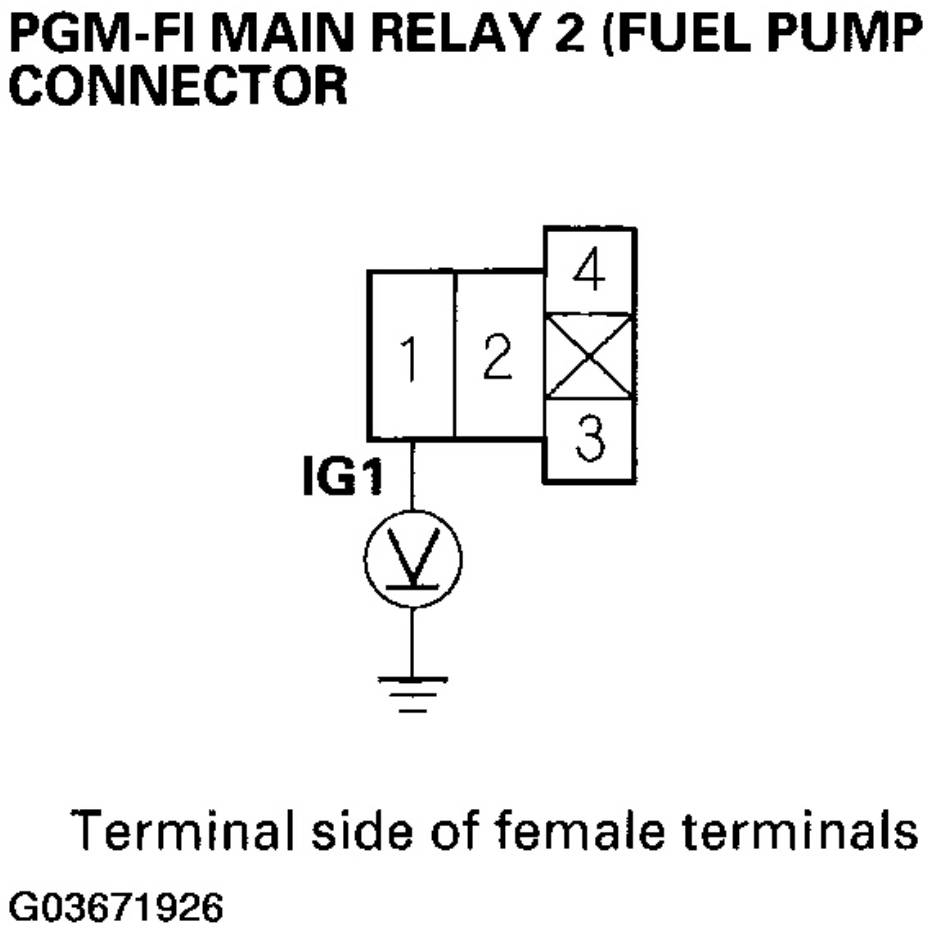


Fig. 13: Measuring Voltage Between PGM-FI Main Relay 4P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 6.

NO -

- Check the No. 19 FUEL PUMP (15 A) fuse in the under-dash fuse/relay box.
- If needed, replace the under-dash fuse/relay box, refer to **UNDER-DASH FUSE/RELAY BOX (EXCEPT HYBRID & V6)** .

6. Turn the ignition switch OFF.
7. Connect PGM-FI main relay 2 (FUEL PUMP) 4P connector terminal No. 4 to body ground with a jumper wire.

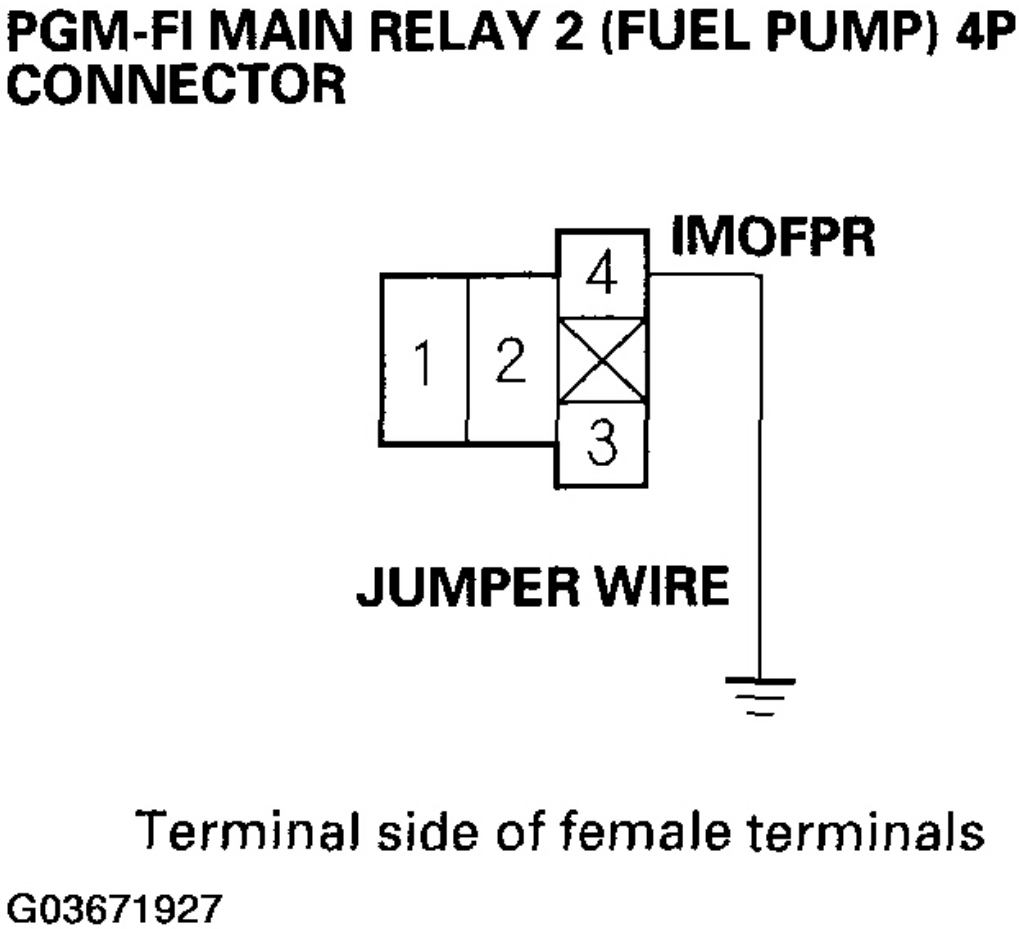


Fig. 14: Connecting PGM-FI Main Relay 4P Connector Terminal To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Turn the ignition switch OFF.
9. Jump the SCS line with the HDS.
10. Disconnect ECM/PCM connector A (31P).
11. Check for continuity between body ground and ECM/PCM connector terminal A2.

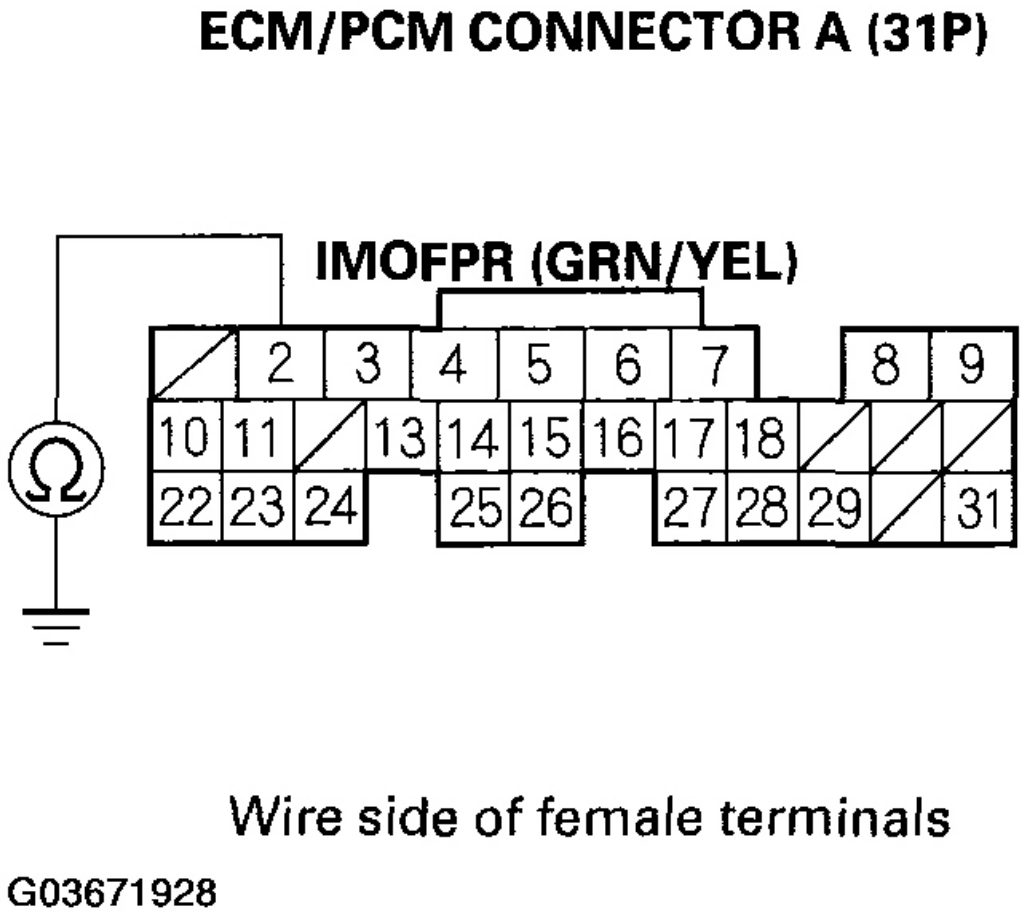


Fig. 15: Checking Continuity Between Body Ground And ECM/PCM Connector Terminal A2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 12.

NO - Repair open in the wire between PGM-FI main relay 2 (FUEL PUMP) and the ECM/PCM (A2).

12. Reinstall PGM-FI main relay 2 (FUEL PUMP).
13. Connect ECM/PCM connector terminal A5 to body ground with jumper wire.

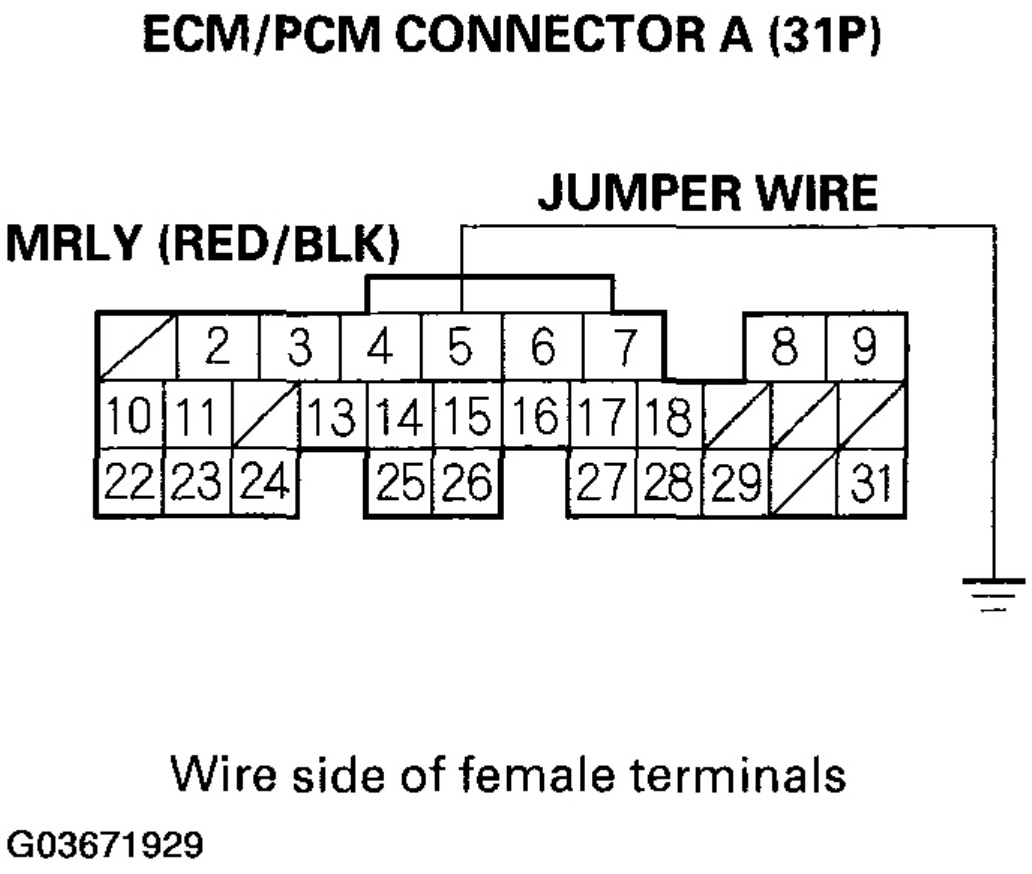


Fig. 16: Connecting ECM/PCM Connector Terminal A5 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Turn the ignition switch ON (II).
15. Measure voltage between ECM/PCM connector terminal A2 and body ground.

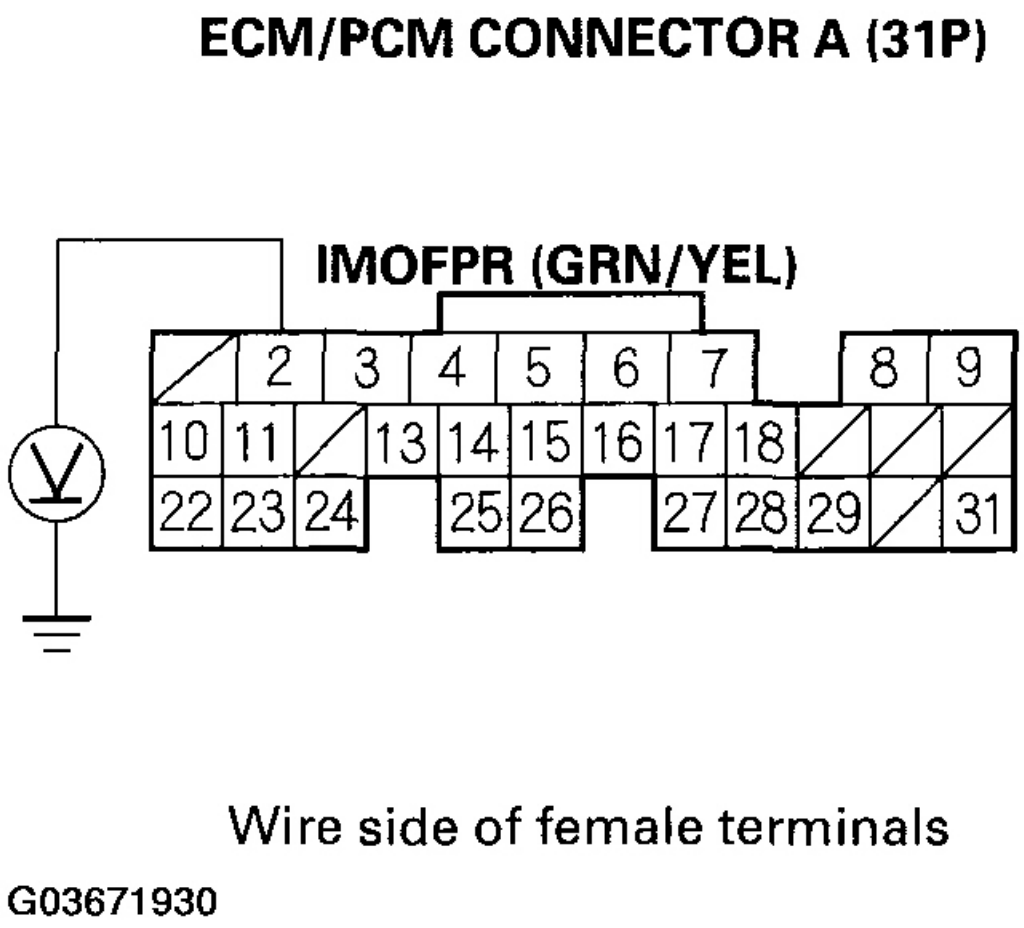


Fig. 17: Measuring Voltage Between ECM/PCM Connector Terminal A2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 16.
NO - Replace PGM-FI main relay 2 (FUEL PUMP).

16. Turn the ignition switch OFF.
17. Reconnect ECM/PCM connector A (31P).
18. Open the SCS line with the HDS.

19. Turn the ignition switch OFF.
20. Turn the ignition switch ON (II), and measure voltage between ECM/PCM connector terminal A2 and body ground within 2 seconds.

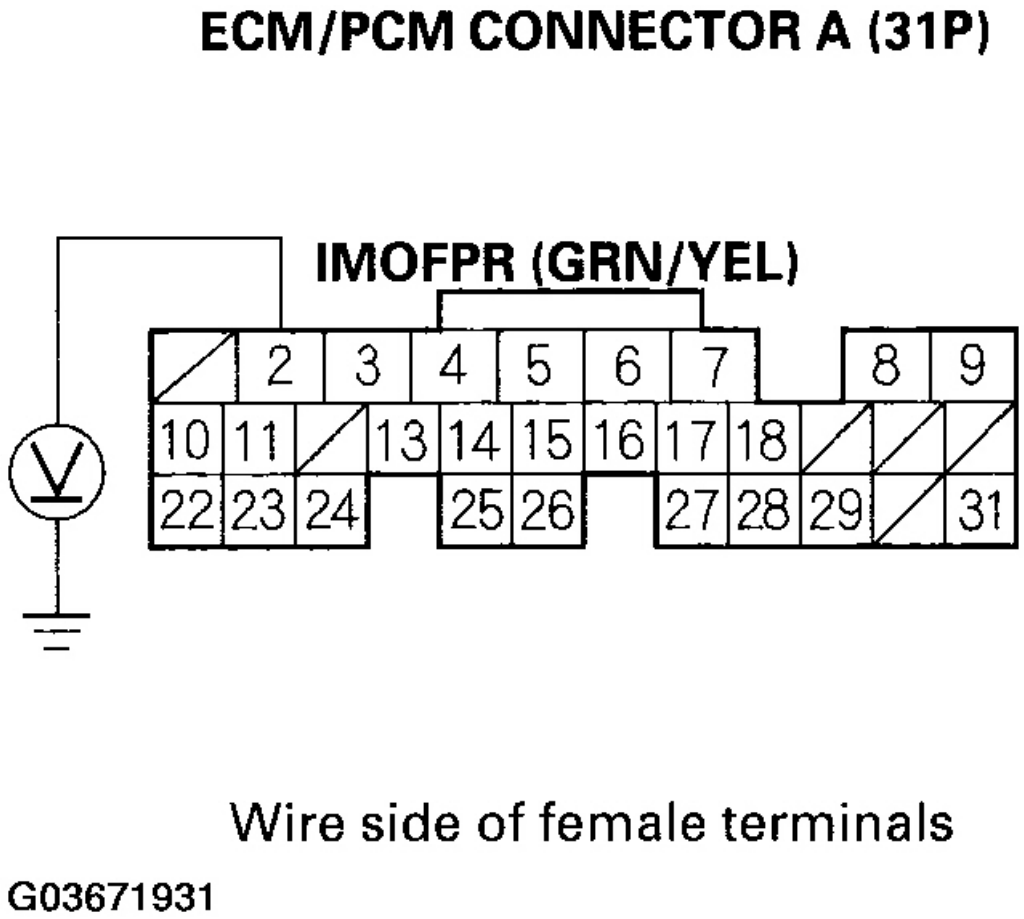


Fig. 18: Measuring Voltage Between ECM/PCM Connector Terminal A2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Update the ECM/PCM if it does not have the latest software, or

substitute a known-good ECM/ PCM (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING** , then recheck. If the symptom/ indication goes away with a known-good ECM/PCM, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**), then go to step 21.

NO - If needed, replace the under-dash fuse/relay box, refer to **UNDER-DASH FUSE/RELAY BOX (EXCEPT HYBRID & V6)** , then go to step 21.

21. Turn the ignition switch OFF.
22. Remove the trunk floor trim panel.
23. Remove the access panel from the floor (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).
24. Turn the ignition switch ON (II), and measure voltage between fuel pump 5P connector terminal No. 5 and body ground within 2 seconds.

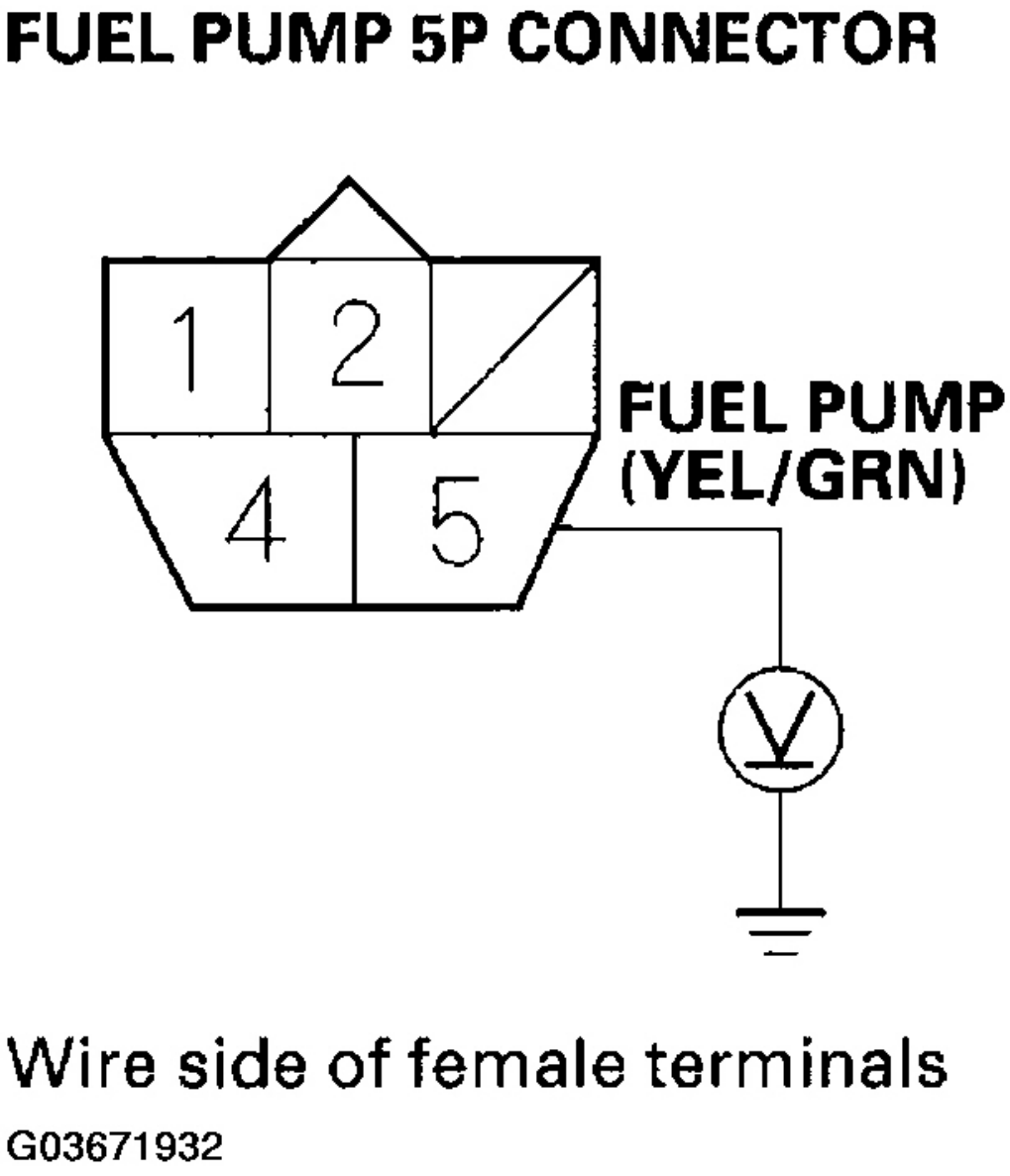


Fig. 19: Measuring Voltage Between Fuel Pump 5P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 29.

NO - Go to step 25.

25. Turn the ignition switch OFF.
26. Remove PGM-FI main relay 2 (FUEL PUMP).
27. Connect PGM-FI main relay 2 (FUEL PUMP) 4P connector terminals No. 1 and No. 2 with a jumper wire.

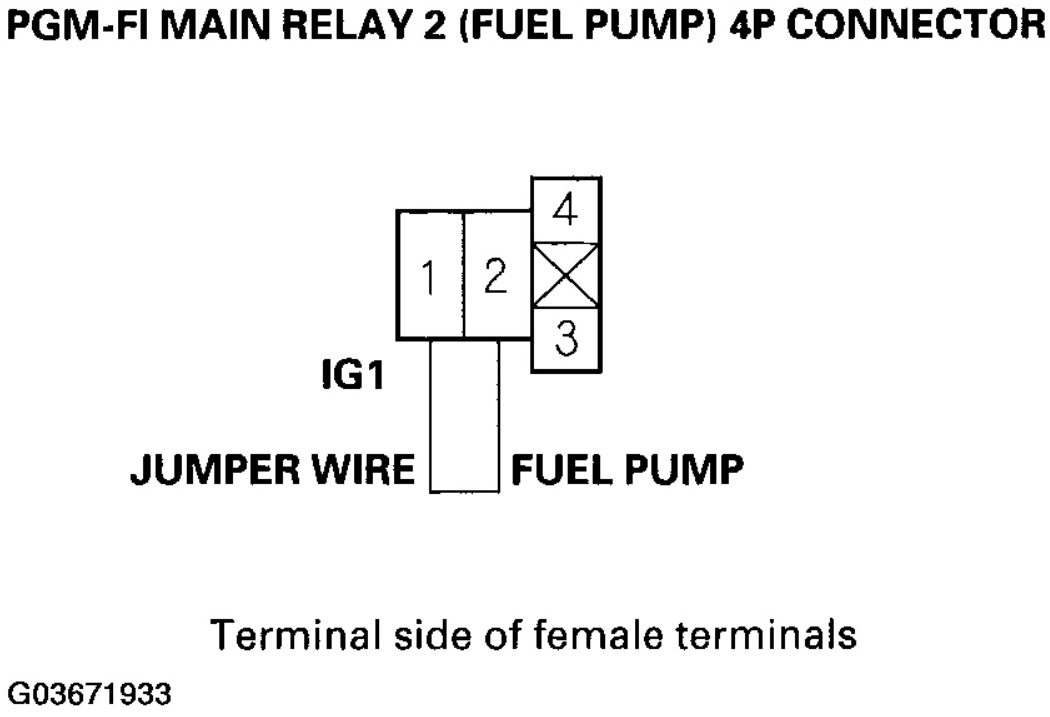


Fig. 20: Connecting PGM-FI Main Relay 4P Connector Terminals With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

28. Turn the ignition switch ON (II), and measure voltage between fuel pump 5P connector terminal No. 5 and body ground within 2 seconds.

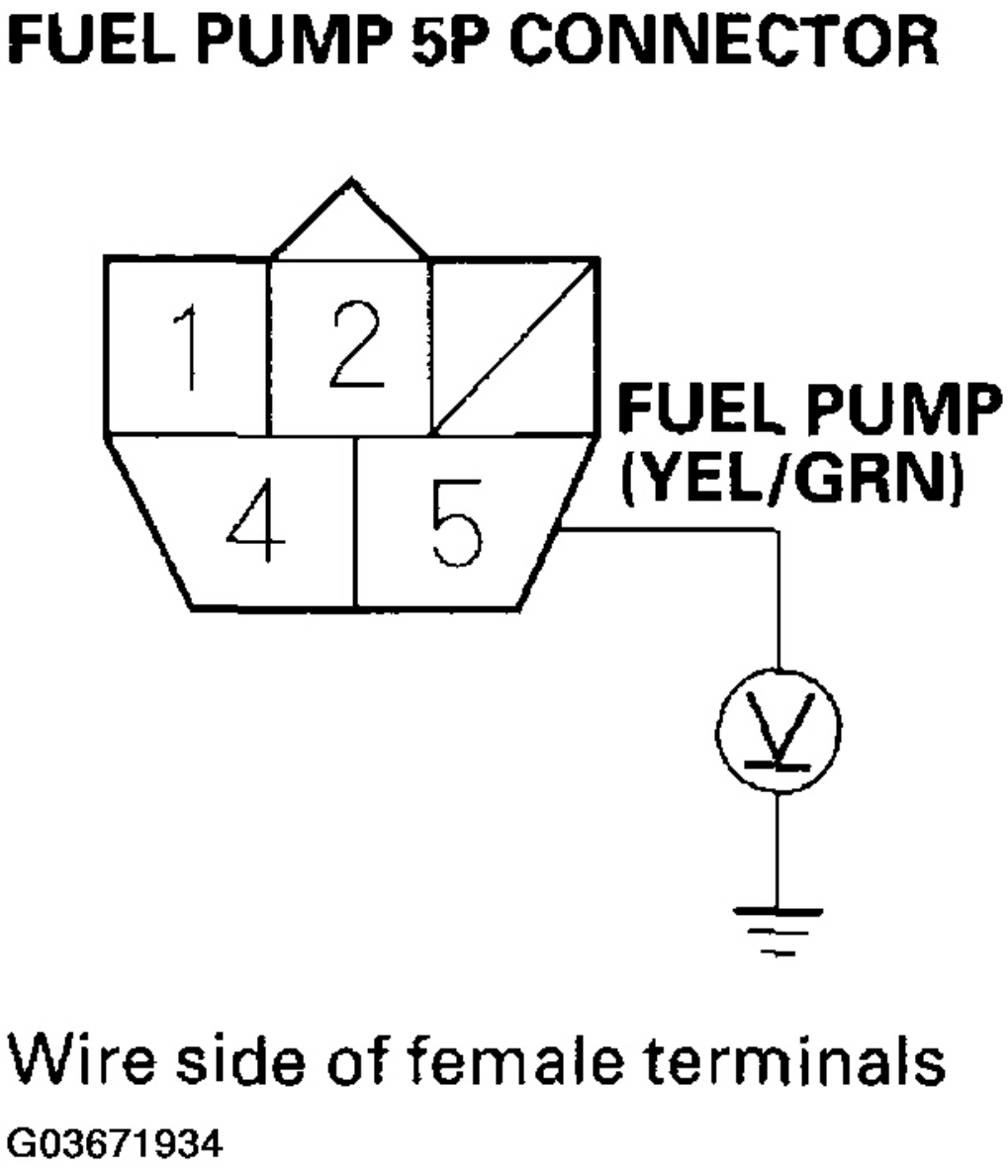


Fig. 21: Measuring Voltage Between Fuel Pump 5P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Replace PGM-FI main relay 2 (FUEL PUMP).

NO - Repair open in the wire between PGM-FI main relay 2 (FUEL PUMP) and the fuel pump 5P connector.

29. Turn the ignition switch OFF.
30. Check for continuity between fuel pump 5P connector terminal No. 4 and body ground.

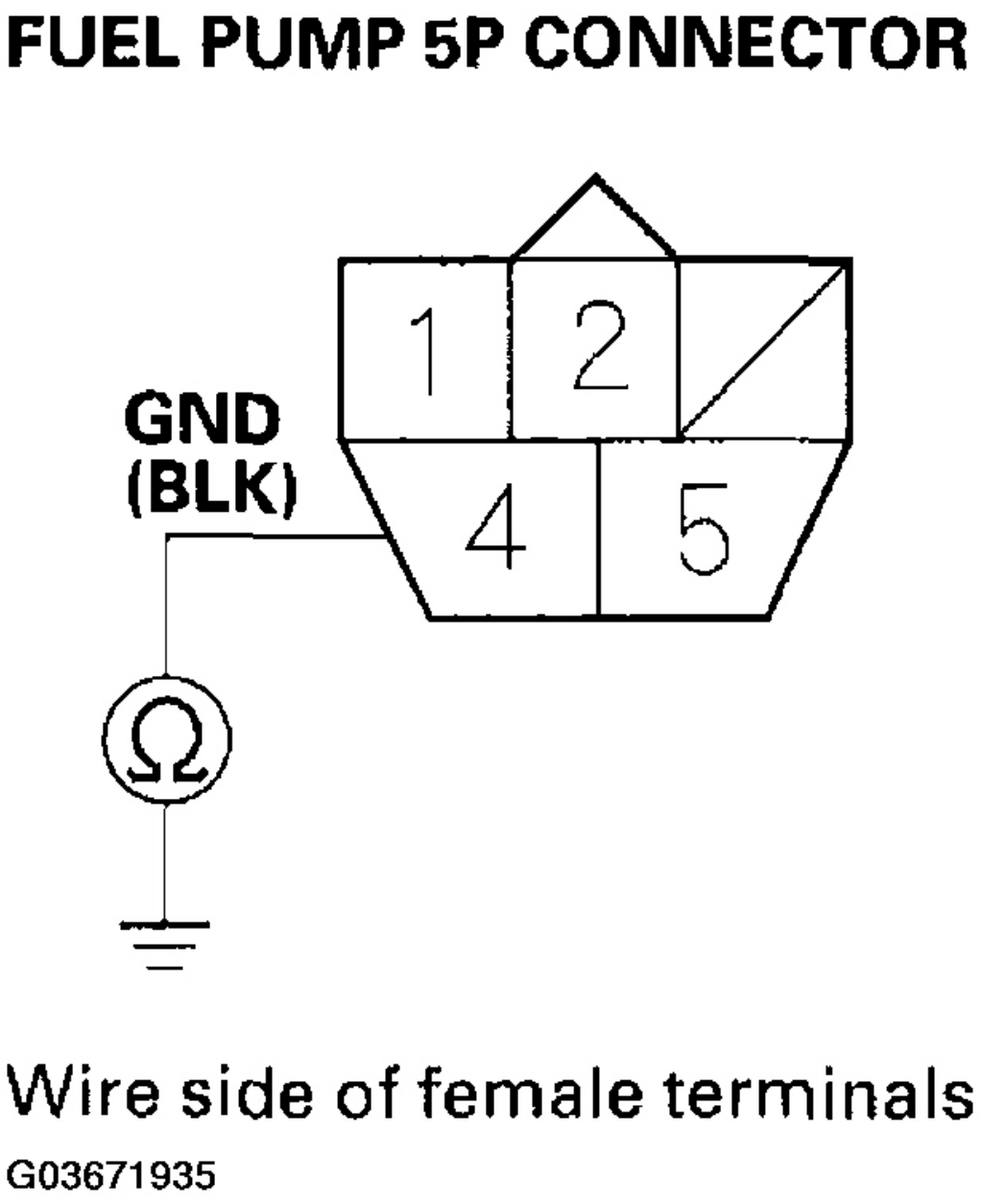


Fig. 22: Checking Continuity Between Fuel Pump 5P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the fuel pump.

NO - Repair open in the wire between the fuel pump 5P connector and G603.

FUEL PRESSURE RELIEVING

Before disconnecting fuel lines or hoses, relieve pressure from the system by stopping the fuel pump and disconnecting the fuel tube/quick connect fitting in the engine compartment.

WITH THE HDS

1. Remove the fuel fill cap.
2. Turn the ignition switch ON (II).
3. From the INSPECTION MENU of the HDS, select Fuel Pump OFF, then start the engine, and let it idle until it stalls.
4. Turn the ignition switch OFF.

NOTE:

- **Do not allow the engine to idle above 1,000 rpm or the ECM/PCM will continue to operate the fuel pump.**
- **A DTC or a Temporary DTC may be set during this procedure. Check for DTCs, and clear them as needed (see GENERAL TROUBLESHOOTING INFORMATION).**

5. Turn the ignition switch OFF.
6. Make sure you have the anti-theft code for the radio and the navigation system (if equipped), then write down the frequencies for the radio's preset buttons.
7. Disconnect the negative cable from the battery.
8. Remove the quick-connect fitting cover (A).

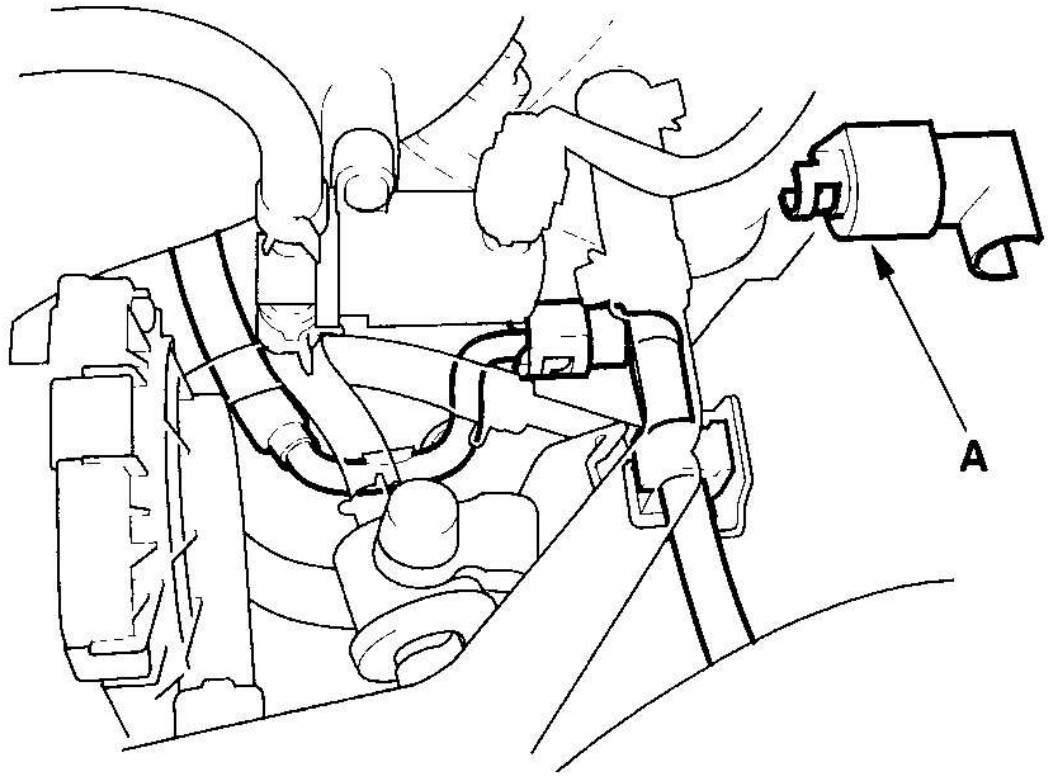


Fig. 23: Identifying Quick-Connect Fitting Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Check the fuel quick-connect fitting for dirt, and clean it if needed.
10. Place a rag or shop towel over the quick-connect fitting (A).

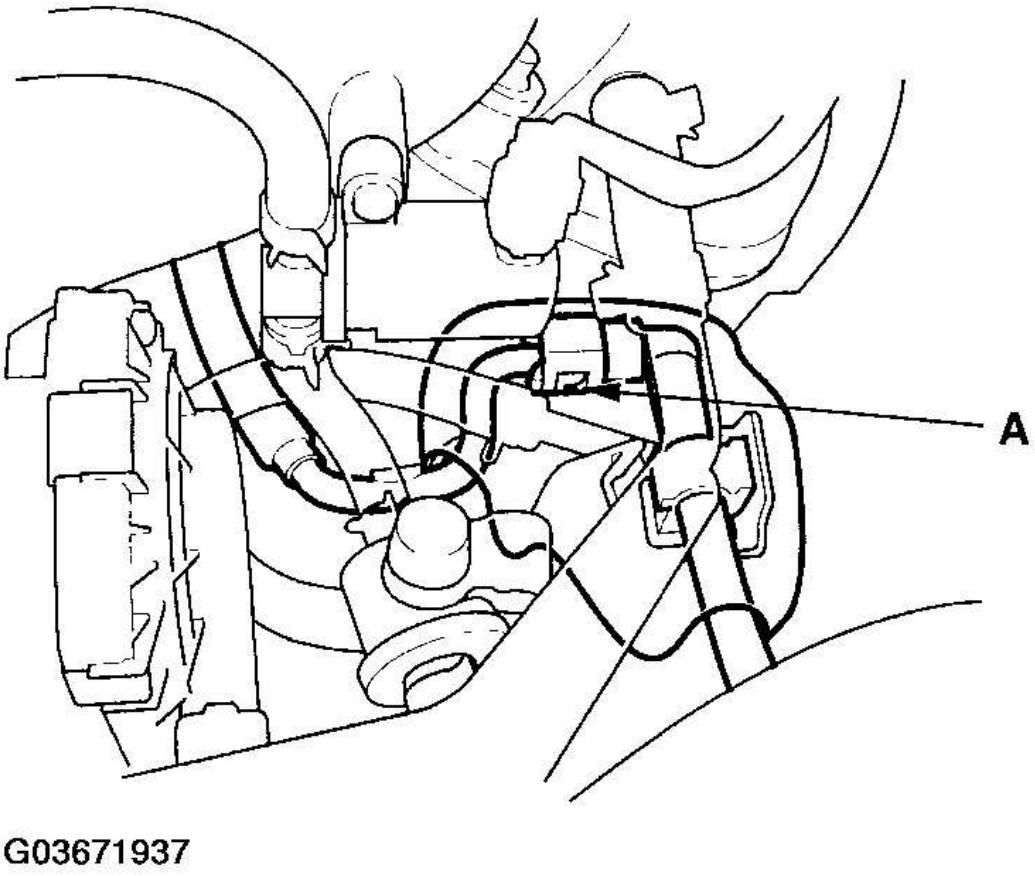


Fig. 24: Placing Rag Or Shop Towel Over Quick-Connect Fitting
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Disconnect the quick-connect fitting (A): Hold the connector (B) with one hand, and squeeze the retainer tabs (C) with the other hand to release them from the locking tabs (D). Pull the connector off.

NOTE:

- **Be careful not to damage the line (E) or other parts.**
- **Do not use tools.**
- **If the connector does not move, keep the retainer tabs pressed down, and alternately pull and push the connector until it comes off easily.**

- **Do not remove the retainer from the line; once removed, the retainer must be replaced with a new one.**

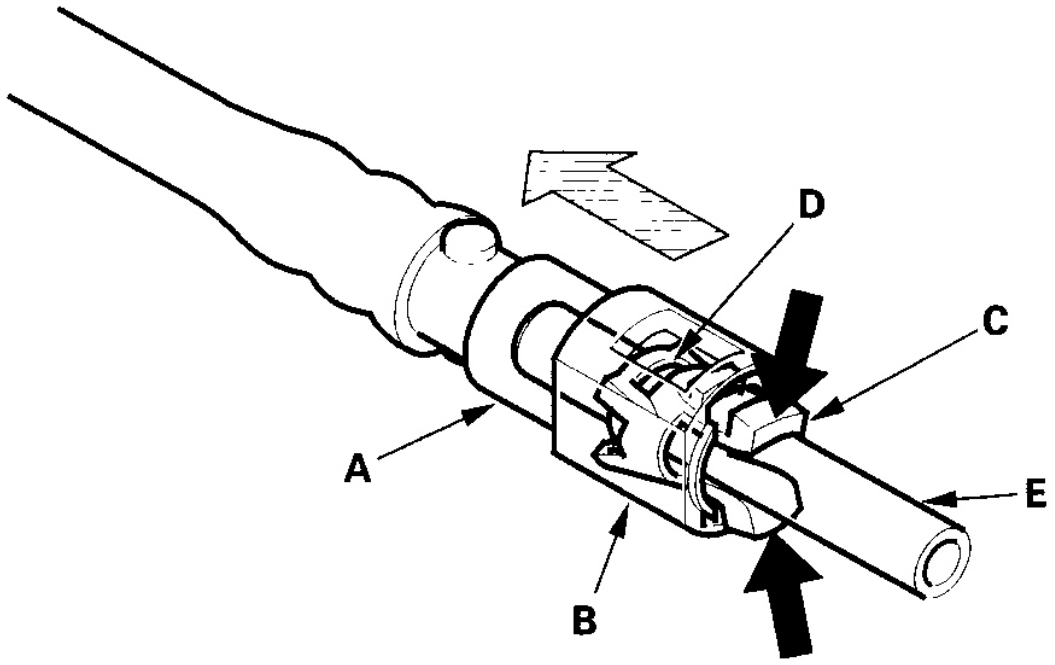


Fig. 25: Disconnecting Quick-Connect Fitting
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. After disconnecting the quick-connect fitting, check it for dirt or damage (see step 4 in **Fuel Line/Quick-Connect Fitting Removal**).
13. Reconnect the negative cable to the battery, and do these items:
    - Power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .
    - Enter the anti-theft codes for the radio and the navigation system, then enter the customer's radio station presets.
    - Reset the clock.

WITHOUT THE HDS

1. Make sure you have the anti-theft code for the radio, and the navigation system (if equipped), then write down the frequencies for the radio's preset buttons.
2. Remove the left kick panel, refer to **2-DOOR - DOOR SILL AREA** or **4-DOOR - FRONT DOOR SILL AREA** , then remove PGM-FI main relay 2 (FUEL PUMP) (A) from the under-dash fuse/ relay box.

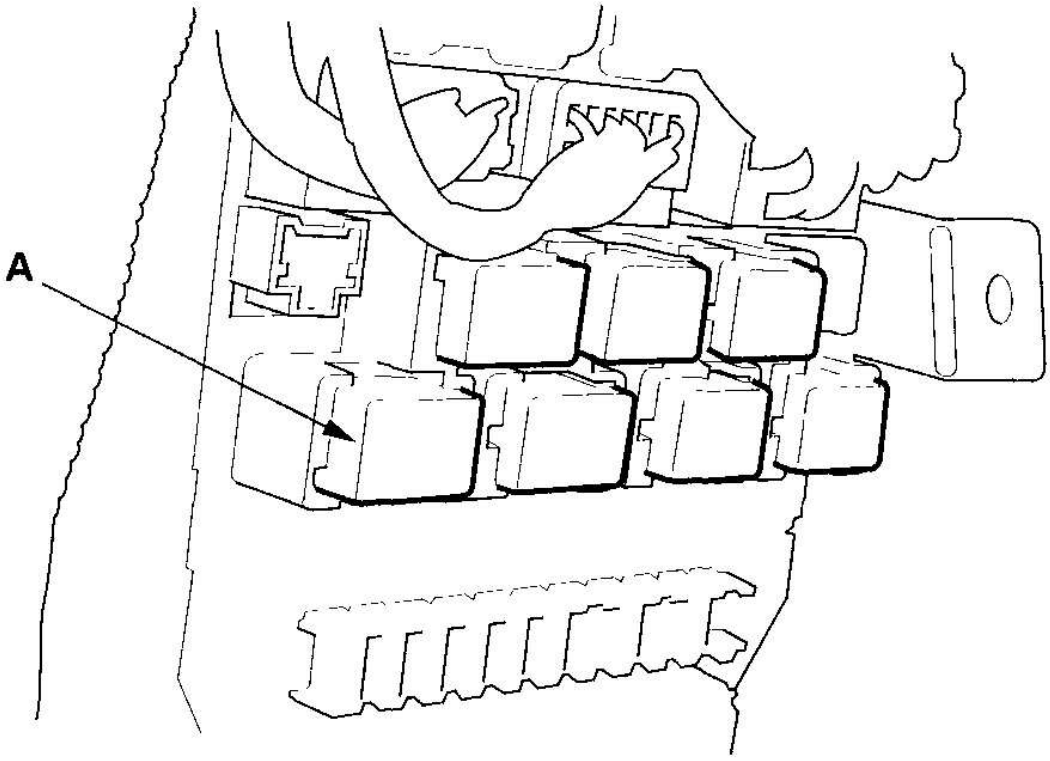


Fig. 26: Identifying PGM-FI Main Relay
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Start the engine, and let it idle until it stalls.

NOTE: If any DTCs are stored, clear and ignore them.

4. Turn the ignition switch OFF.
5. Remove the fuel fill cap.
6. Disconnect the negative cable from the battery.
7. Remove the quick-connect fitting cover (A).

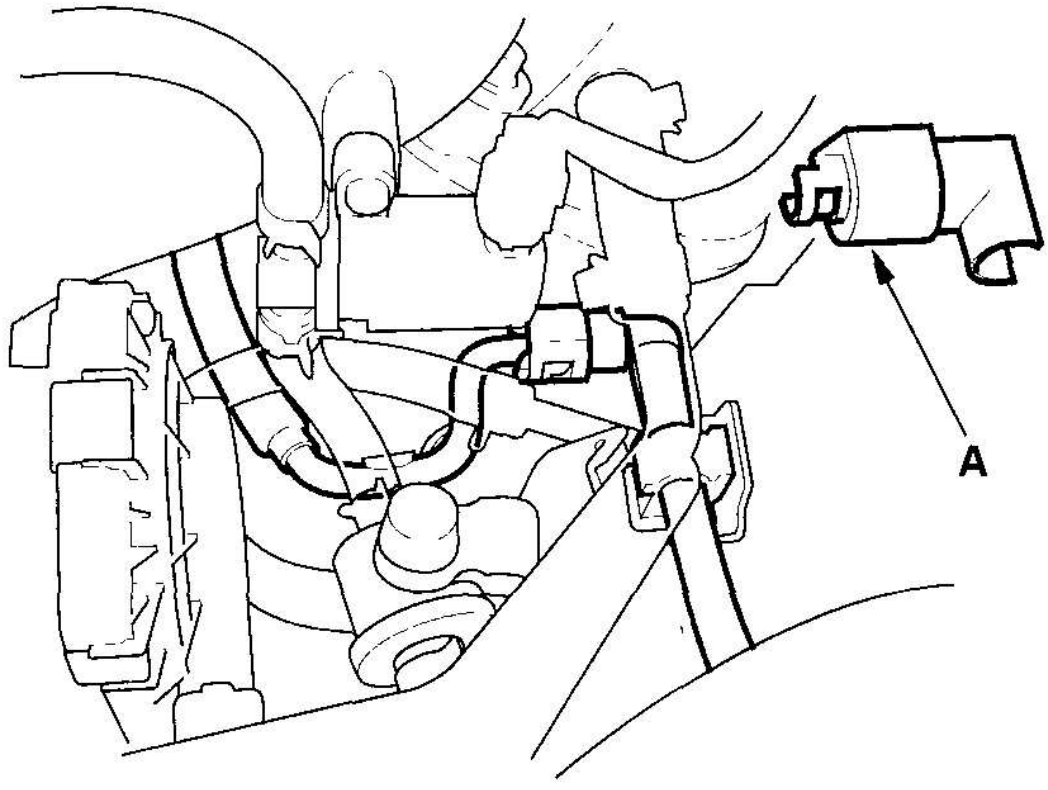


Fig. 27: Identifying Quick-Connect Fitting Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Check the fuel quick-connect fitting for dirt, and clean it if needed.
9. Place a rag or shop towel over the quick-connect fitting (A).

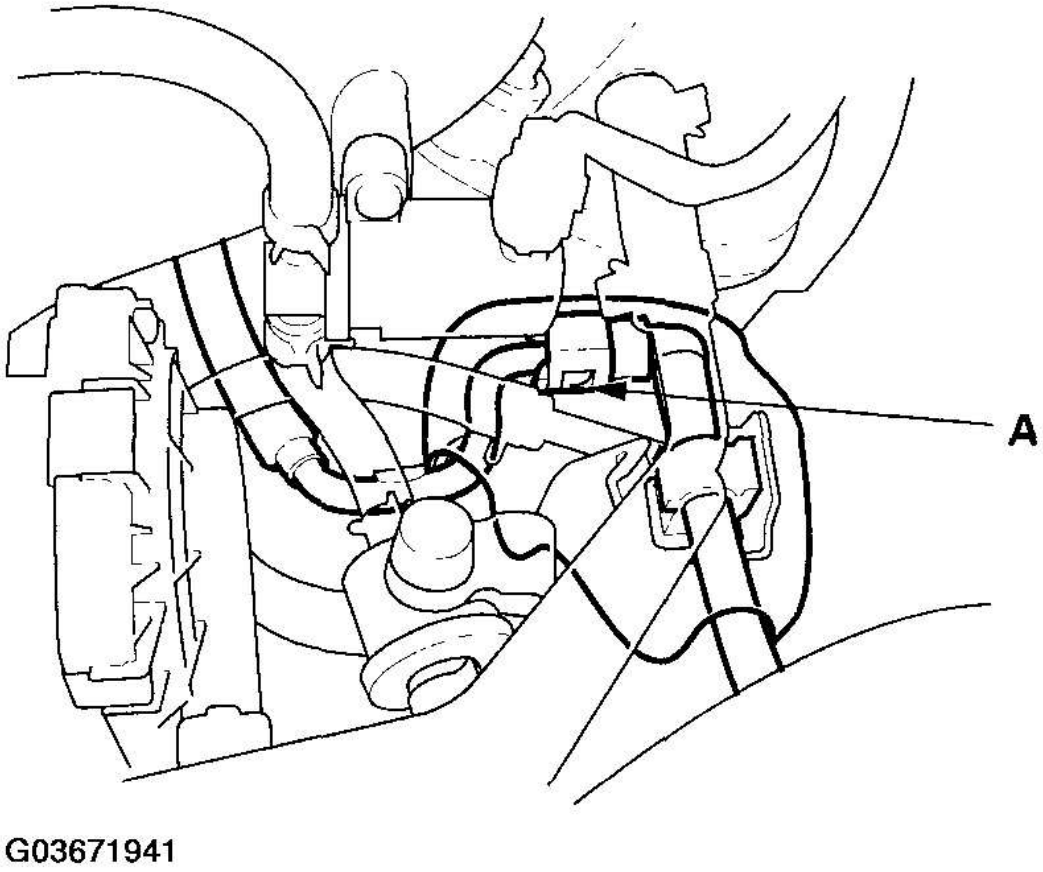


Fig. 28: Placing Rag Or Shop Towel Over Quick-Connect Fitting
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Disconnect the quick-connect fitting (A): Hold the connector (B) with one hand, and squeeze the retainer tabs (C) with the other hand to release them from the locking tabs (D). Pull the connector off.

NOTE:

- **Be careful not to damage the line (E) or other parts.**
- **Do not use tools.**
- **If the connector does not move, keep the retainer tabs pressed down, and alternately pull and push the connector until it comes off easily.**

- **Do not remove the retainer from the line; once removed, the retainer must be replaced with a new one.**

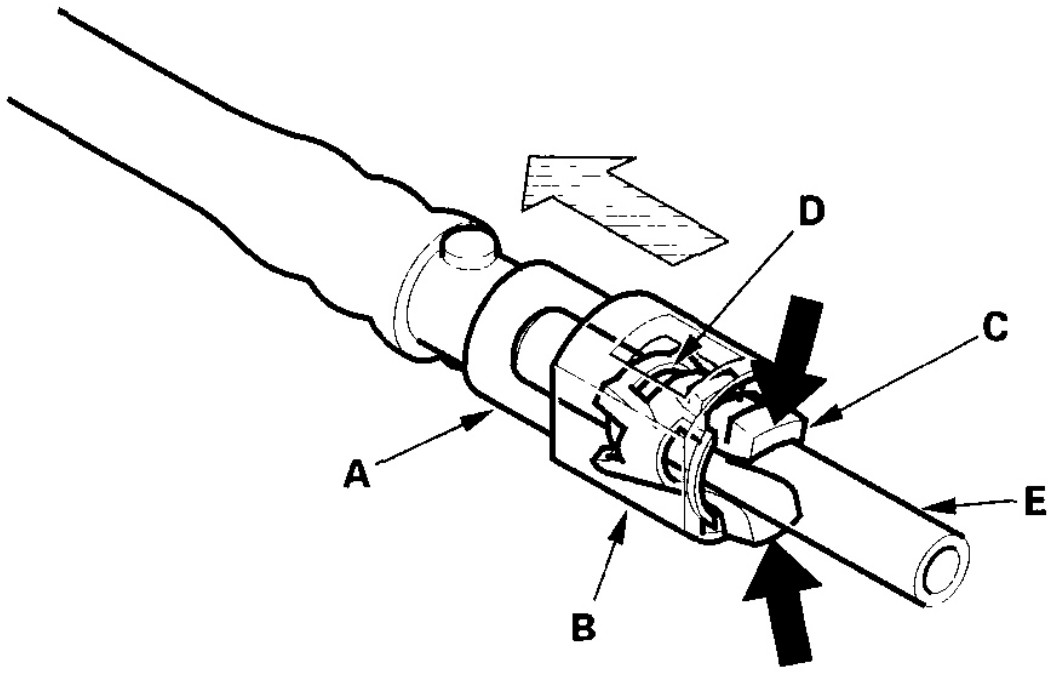


Fig. 29: Disconnecting Quick-Connect Fitting
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. After disconnecting the quick-connect fitting, check it for dirt or damage (see step 4 in **Fuel Line/Quick-Connect Fitting Removal**).
12. Reconnect the negative cable to the battery, and do these items:
    - Power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .
    - Enter the anti-theft codes for the radio and the navigation system, then enter the customer's radio station presets.
    - Reset the clock.

FUEL PRESSURE TEST

Special Tools Required

- Fuel pressure gauge 07406-004000A
- Fuel pressure gauge attachment set 07AAJ-S6MA150

1. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
2. Disconnect the quick-connect fitting. Attach the fuel pressure gauge set and the fuel pressure gauge.

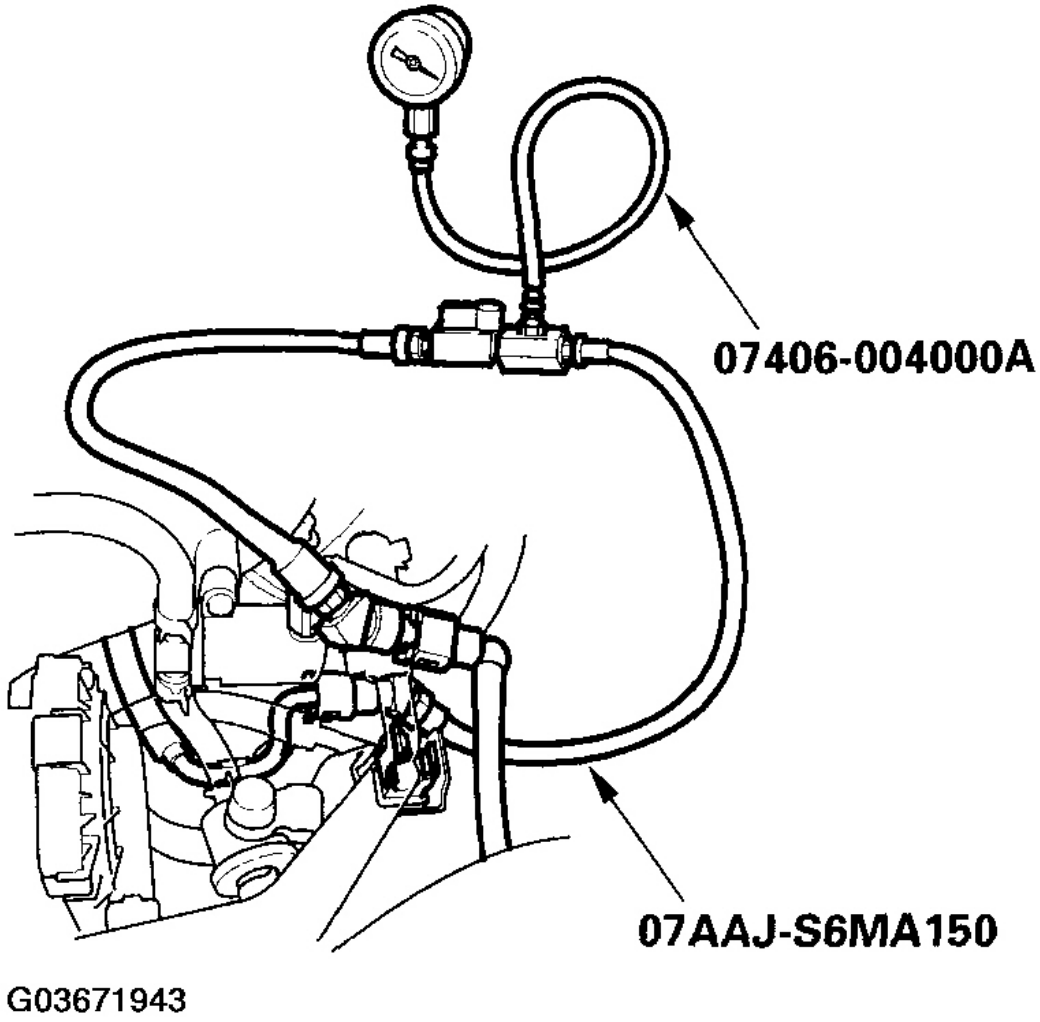


Fig. 30: Attaching Fuel Pressure Gauge Set And Fuel Pressure Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Start the engine, and let it idle.
   - If the engine starts, go to step 5.
   - If the engine does not start, go to step 4.
4. Check to see if the fuel pump is running: listen to the fuel filler port with the fuel fill cap removed. The fuel pump should run for 2 seconds when the ignition switch is first turned on.

- If the pump runs, go to step 5.
- If the pump does not run, do the fuel pump circuit troubleshooting (see **FUEL PUMP CIRCUIT TROUBLESHOOTING**).

5. Read the fuel pressure gauge. The pressure should be 380-430 kPa (3.9-4.4 kgf/cm^2 , 55-63 psi).
   - If the pressure is OK, the test is complete.
   - If the pressure is out of specification, replace the fuel pressure regulator (see **FUEL PRESSURE REGULATOR REPLACEMENT**) and the fuel filter (see **FUEL FILTER REPLACEMENT**), then recheck the fuel pressure.

FUEL TANK DRAINING

1. Remove the fuel tank unit (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).
2. Using a hand pump, a hose, and a container suitable for fuel, draw the fuel from the fuel tank.
3. Install the fuel tank unit (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).

FUEL LINE INSPECTION

Check the fuel system lines, hoses, and fuel filter for damage, leaks, or deterioration. Replace any damaged parts.

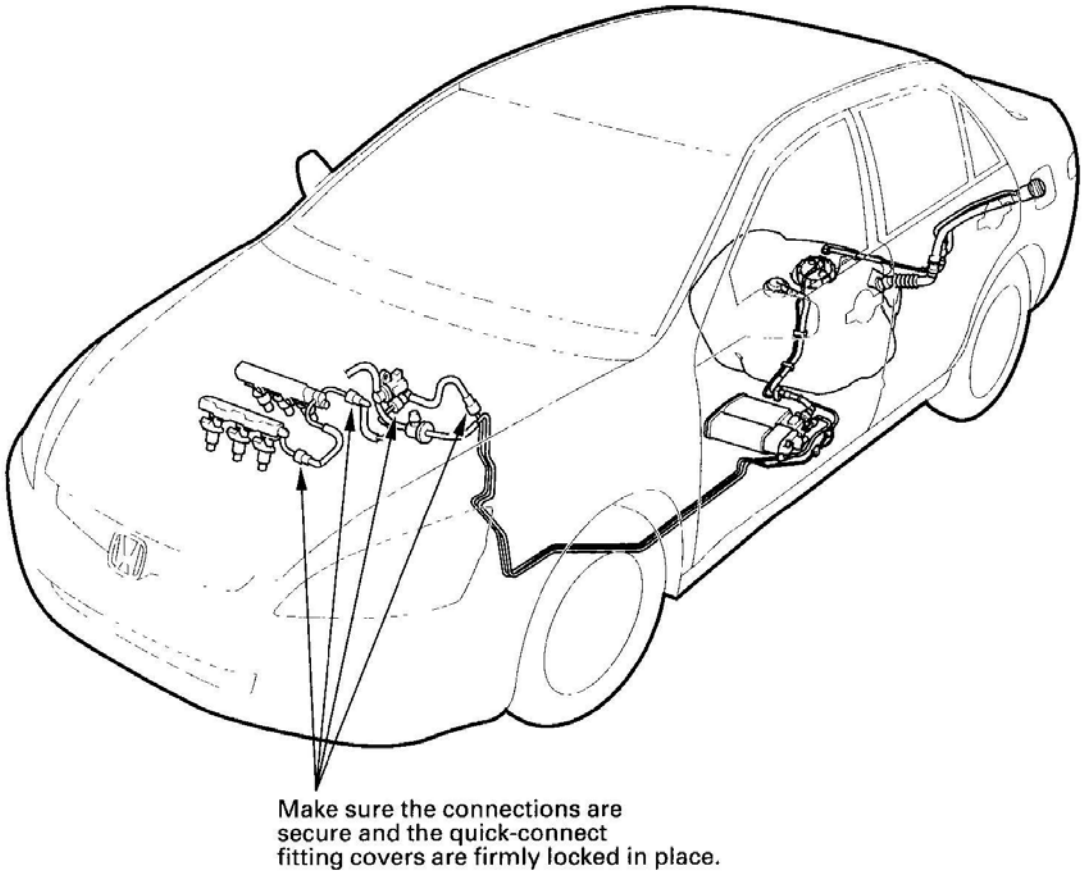


Fig. 31: Inspecting Fuel Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Check all clamps and retighten any if necessary.

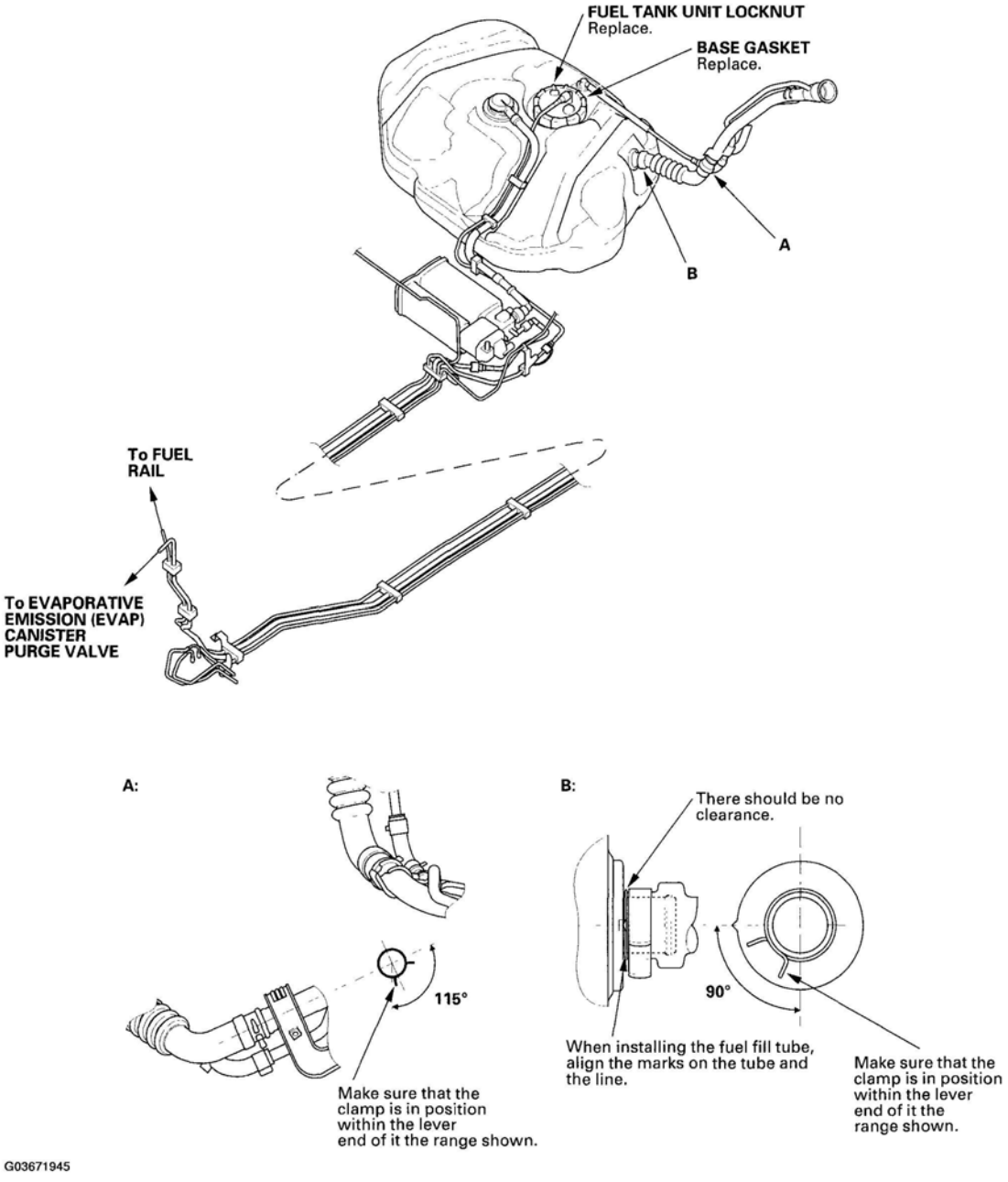


Fig. 32: Checking Clamps
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FUEL LINE/QUICK-CONNECT FITTING PRECAUTIONS

The fuel line/quick-connect fittings (A), (B), (C), (D) connect the fuel rail (E) to the fuel feed hose (F), the fuel feed hose to the fuel feed hose (G), the fuel feed hose to

the fuel line (H), and the fuel line (I) to the fuel tank unit (J) and the fuel vapor line (K) to the EVAP canister (L). When removing or installing the fuel feed hose, fuel tank unit or fuel tank, it is necessary to disconnect or connect the quick-connect fittings. Pay attention to the following:

- The fuel feed hoses, fuel line, and quick-connect fittings are not heat-resistant; be careful not to damage them during welding or other heat-generating procedures.
- The fuel feed hoses, fuel line, and quick-connect fittings are not acid-proof; do not touch them with a shop towel that was used for wiping battery electrolyte. Replace them if they came into contact with electrolyte or something similar.
- When connecting or disconnecting the fuel feed hoses, fuel line, and quick-connect fittings, be careful not to bend or twist them excessively. Replace them if they are damaged.

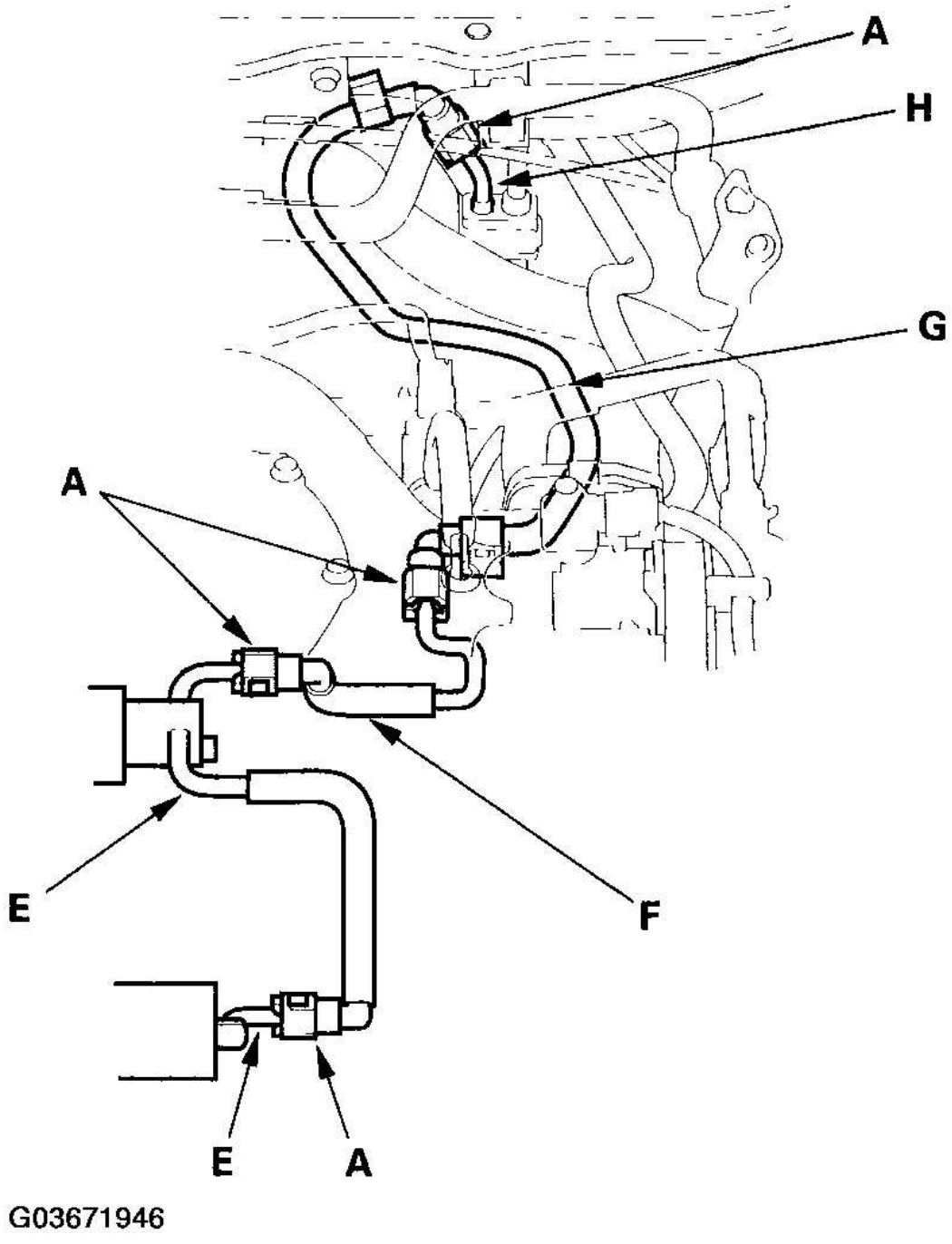
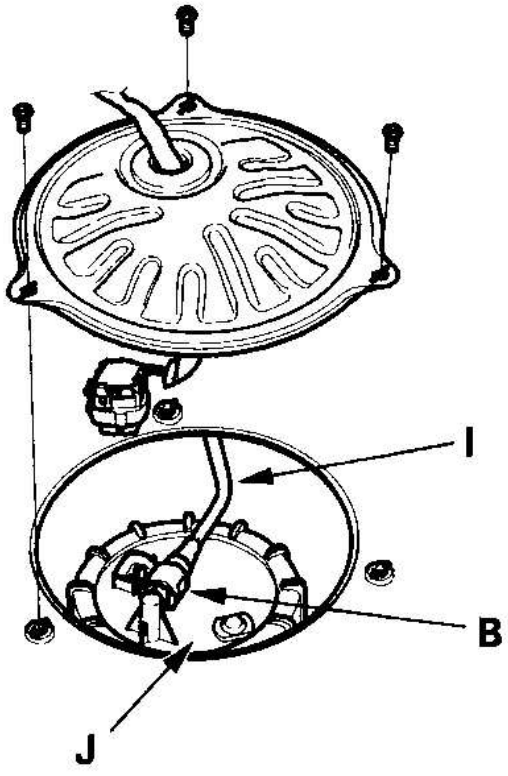


Fig. 33: Precautions Of Fuel Line/Quick-Connect Fitting (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.


I
B
J

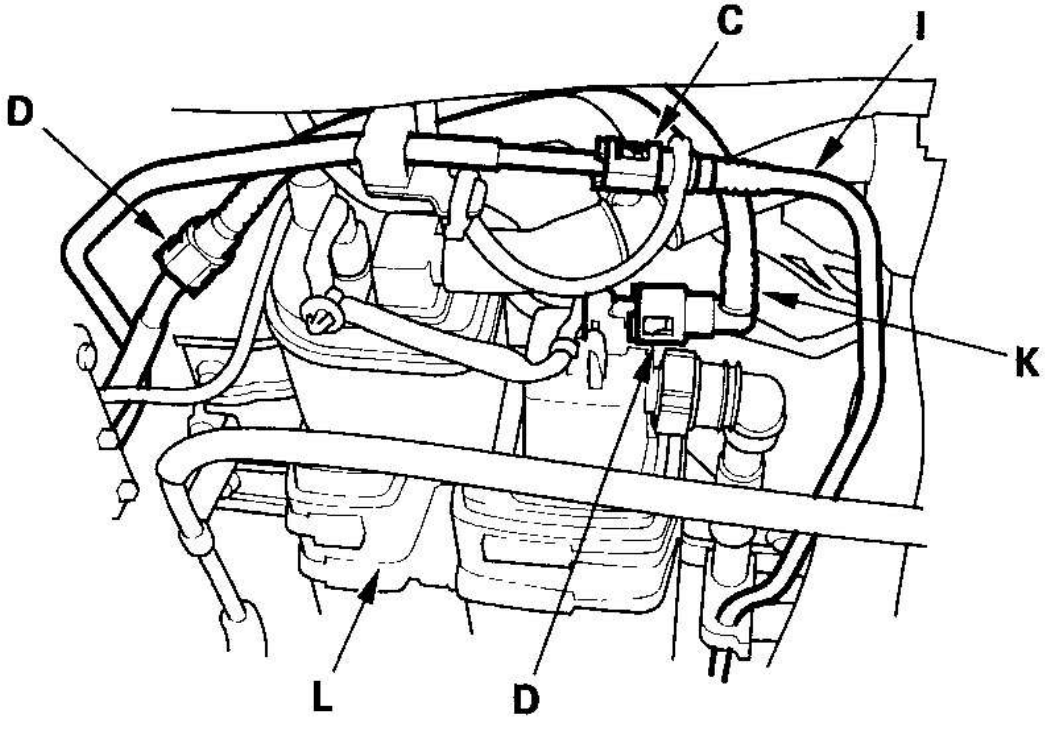

C
I
D
K
L
D

Fig. 34: Precautions Of Fuel Line/Quick-Connect Fitting (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A disconnected quick-connect fitting can be reconnected, but the retainer on the mating line cannot be reused once it has been removed from the line. Replace the retainer when:

- replacing the fuel rail.
- replacing the fuel line.
- replacing the fuel pump.
- replacing the fuel filter.
- replacing the fuel gauge sending unit.
- replacing EVAP purge line.
- replacing EVAP canister.
- it has been removed from the line.
- it is damaged.

RETAINER COLOR SPECIFICATION

Place	Manufacturer	Retainer color	Piping diameter
A	Tokai	Blue green	0.3 in. (8 mm)
B	Tokai	Orange	0.4 in. (9.5 mm)
C	Tokai	Green	0.2 in. (6.3 mm)
D	Tokai	Orange	0.4 in. (9.5 mm)

FUEL LINE/QUICK-CONNECT FITTING REMOVAL

NOTE: Before you work on the fuel lines and fittings, see FUEL LINE/QUICK-CONNECT FITTING PRECAUTIONS .

1. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).

2. Check the fuel quick-connect fitting (A) for dirt, and clean it if needed.

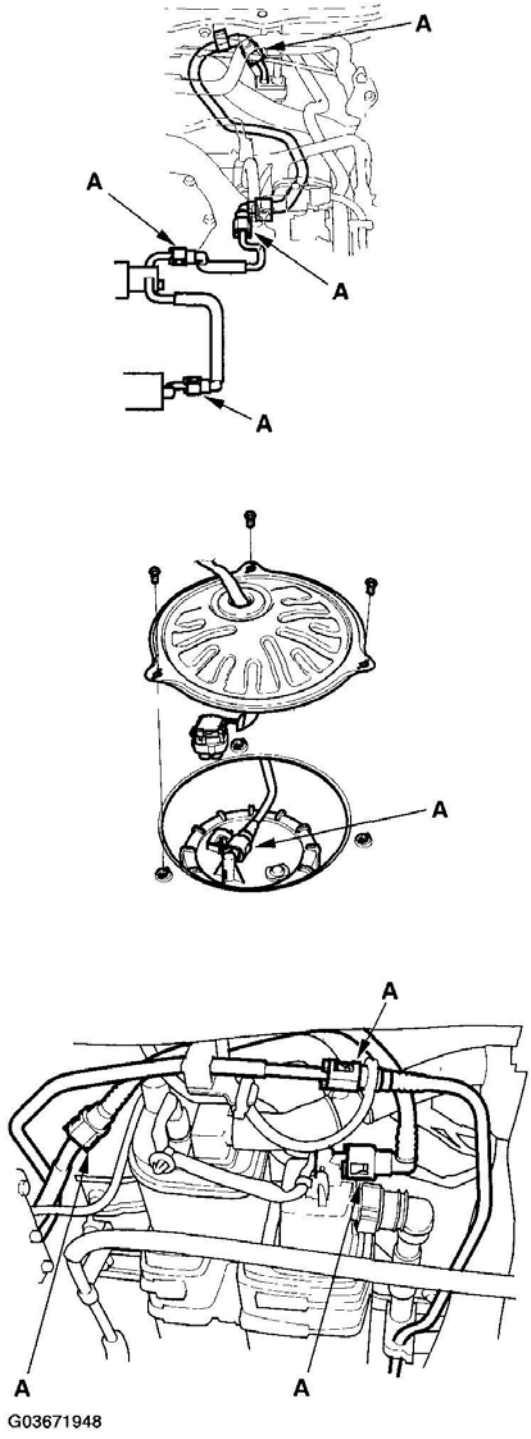


Fig. 35: Checking Fuel Quick-Connect Fitting For Dirt

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Place a rag or shop towel over the quick-connect fitting.

   Hold the connector (A) with one hand, and squeeze the retainer tabs (B) with the other hand to release them from the locking tabs (C). Pull the connector off.

NOTE:

- **Be careful not to damage the line (D) or other parts. Do not use tools.**
- **If the connector does not move, keep the retainer tabs pressed down, and alternately pull and push the connector until it comes off easily.**
- **Do not remove the retainer from the line; once removed, the retainer must be replaced with a new one.**

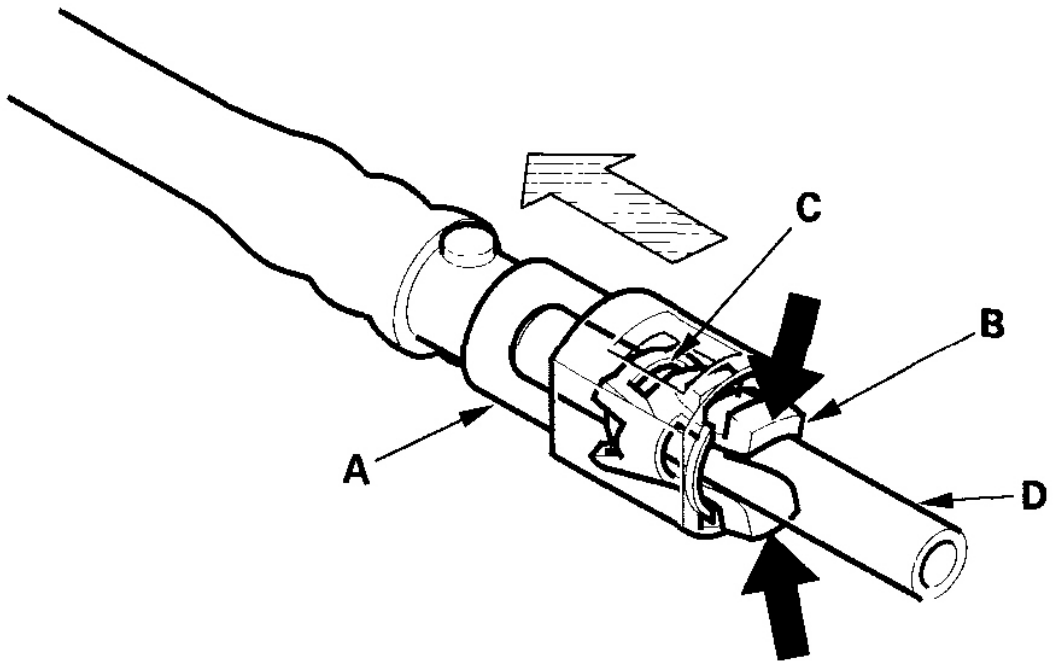


Fig. 36: Holding Connector And Squeezing Retainer Tabs To Release

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check the contact area (A) of the line (B) for dirt or damage.
   - If it is dirty, clean it.
   - If it is rusty or damaged, replace the fuel pump, fuel filter, or fuel feed line.

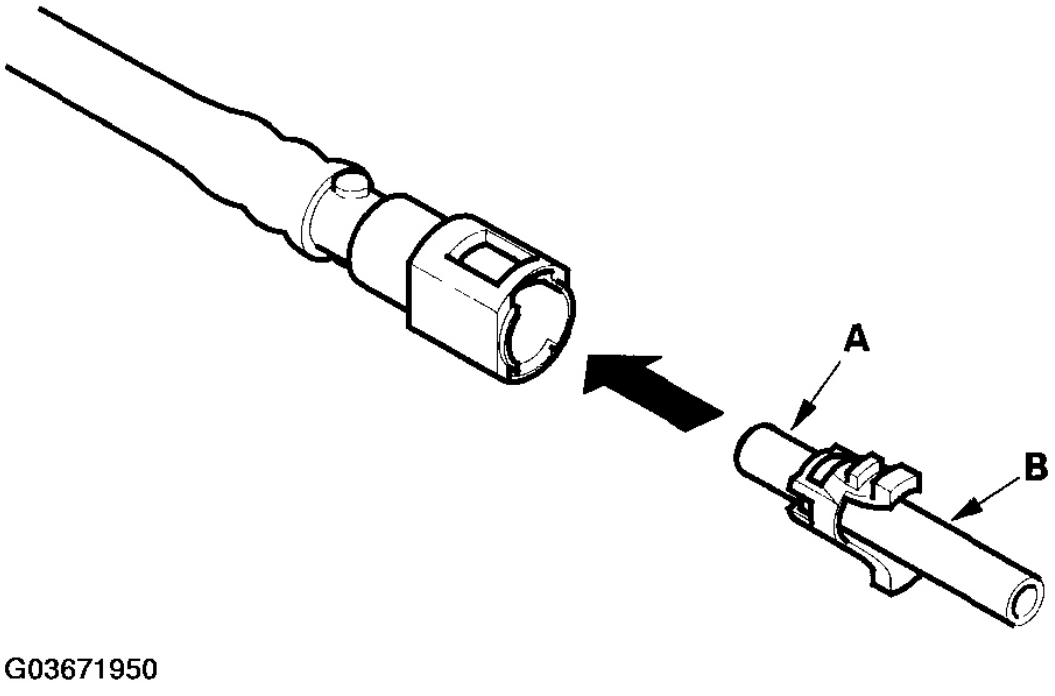


Fig. 37: Checking Contact Area
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. To prevent damage and keep foreign matter out, cover the disconnected connector and line ends with plastic bags (A).

NOTE: The retainer cannot be reused once it has been removed from the line. Replace the retainer when:

- replacing the fuel rail.
- replacing the fuel feed line.

- replacing the fuel pump.
- replacing the fuel filter.
- replacing the fuel gauge sending unit.
- it has been removed from the line.
- replacing EVAP purge line.
- replacing EVAP canister.
- It is damaged.

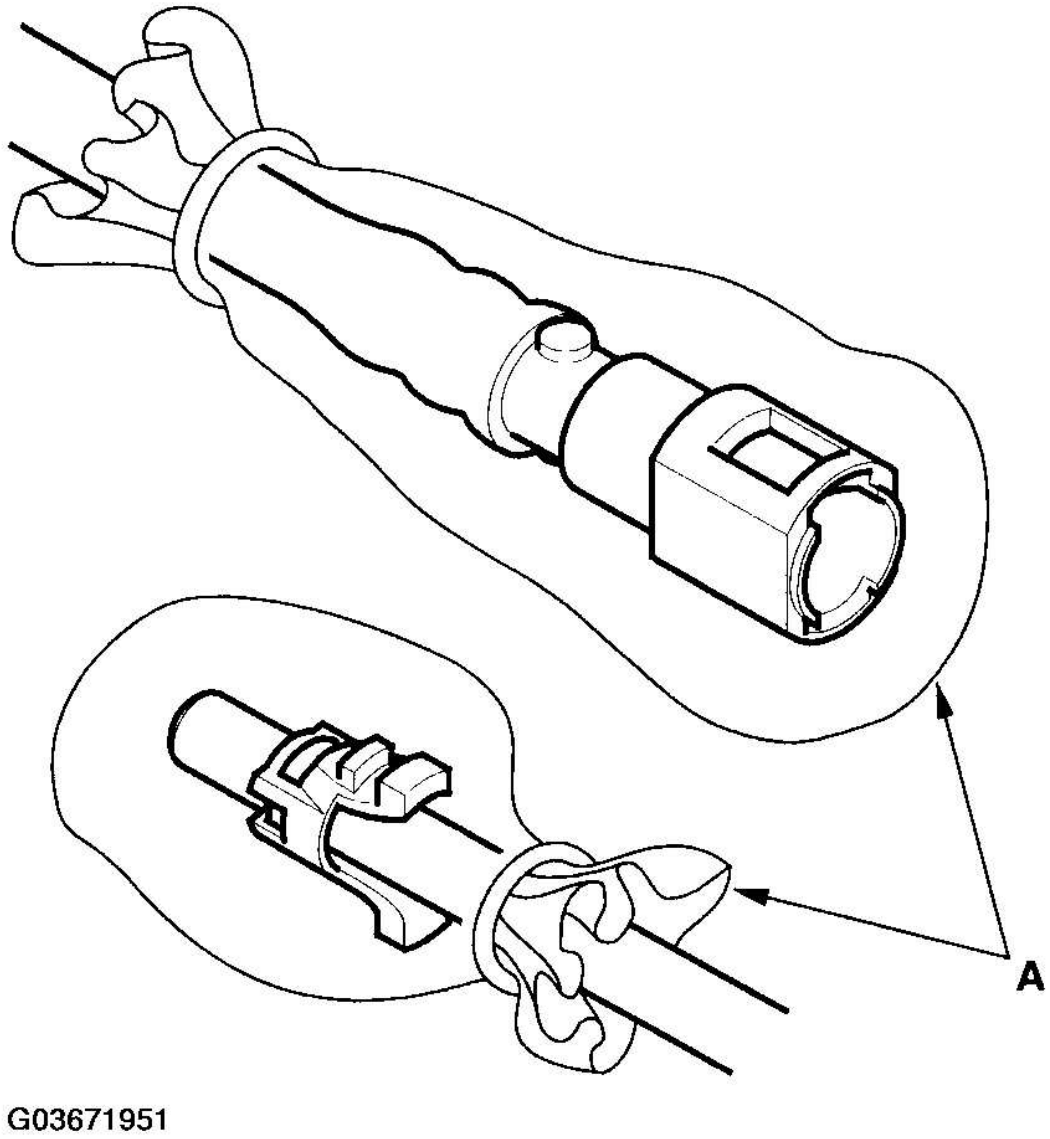


Fig. 38: Covering Disconnected Connector And Line Ends With Plastic Bags
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FUEL LINE/QUICK-CONNECT FITTING INSTALLATION

NOTE: Before you work on the fuel lines and fittings, see FUEL LINE/QUICK-CONNECT FITTING PRECAUTIONS .

1. Check the contact area (A) of the line (B) for dirt or damage, and clean it if needed.

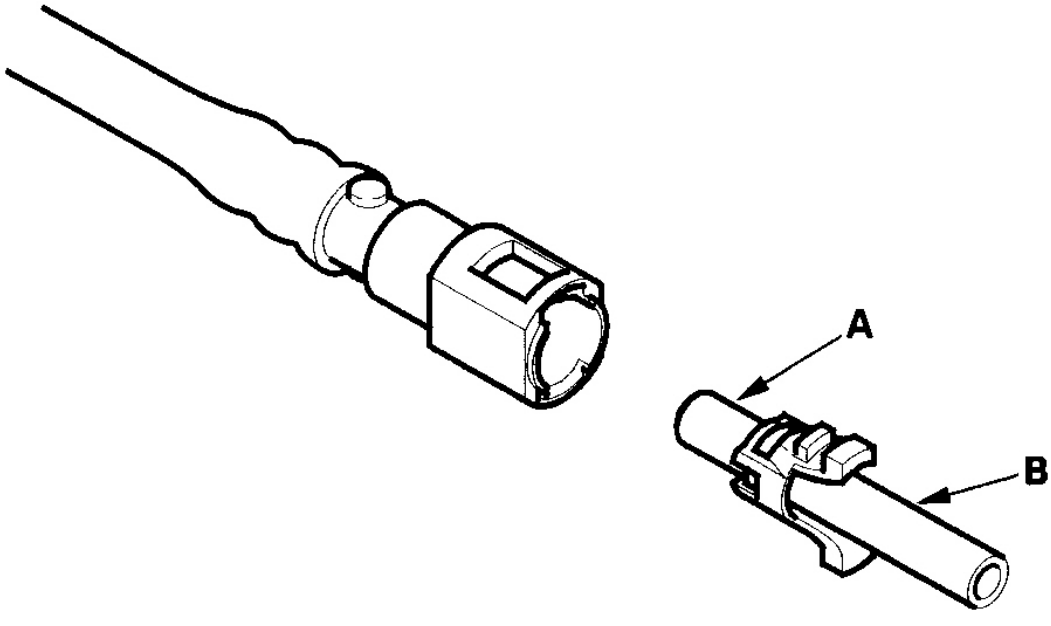


Fig. 39: Checking Contact Area Of Line For Dirt Or Damage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Insert a new retainer (A) into the connector (B) if the retainer is damaged, or after:
   - replacing the fuel rail.
   - replacing the fuel feed line.
   - replacing the fuel pump.
   - replacing the fuel filter.
   - replacing the fuel gauge sending unit.
   - replacing EVAP purge line.
   - replacing EVAP canister.
   - removing the retainer from the line.

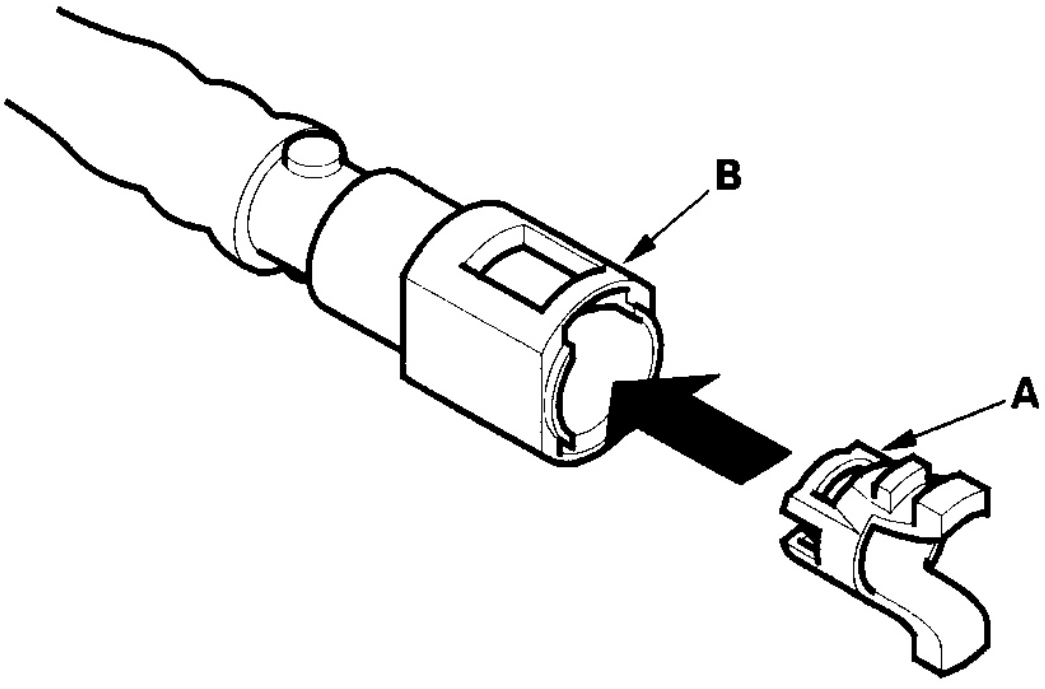


Fig. 40: Inserting Retainer Into Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Before connecting a new fuel tube/quick-connect fitting assembly (A), remove the old retainer from the mating line.

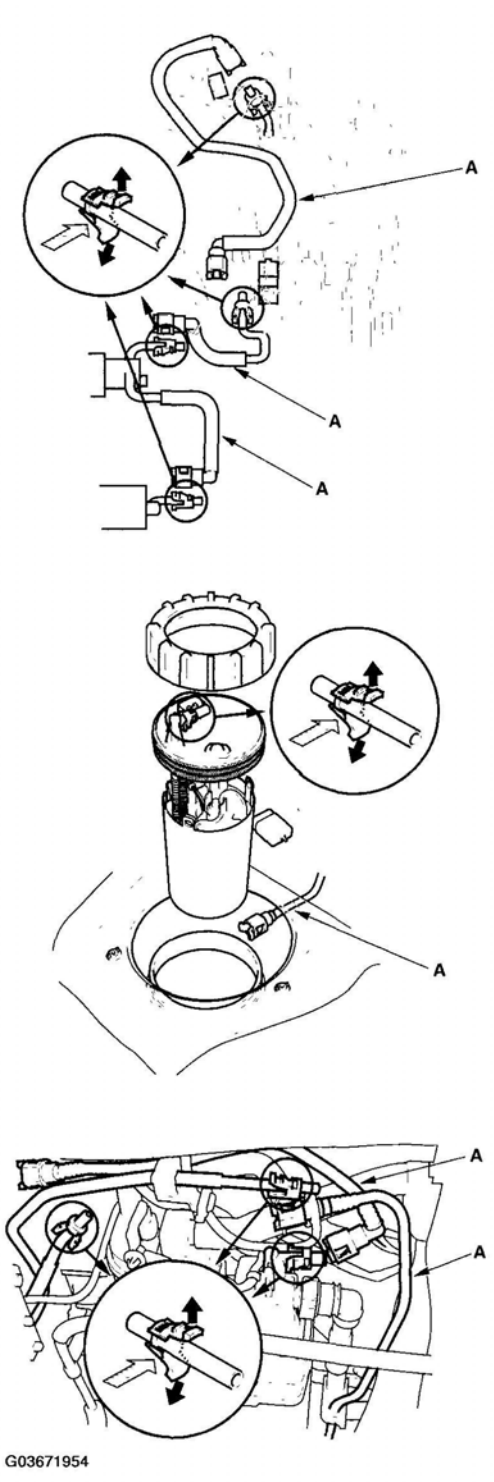


Fig. 41: Identifying Old Retainer From Mating Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Align the quick-connect fittings with the line (A), and align the retainer locking tabs (B) with the connector tabs (C). Then press the quick-connect fittings onto the line until both retainer pawls lock with a clicking sound.

NOTE: If it is hard to connect, put a small amount of new engine oil on the line end.

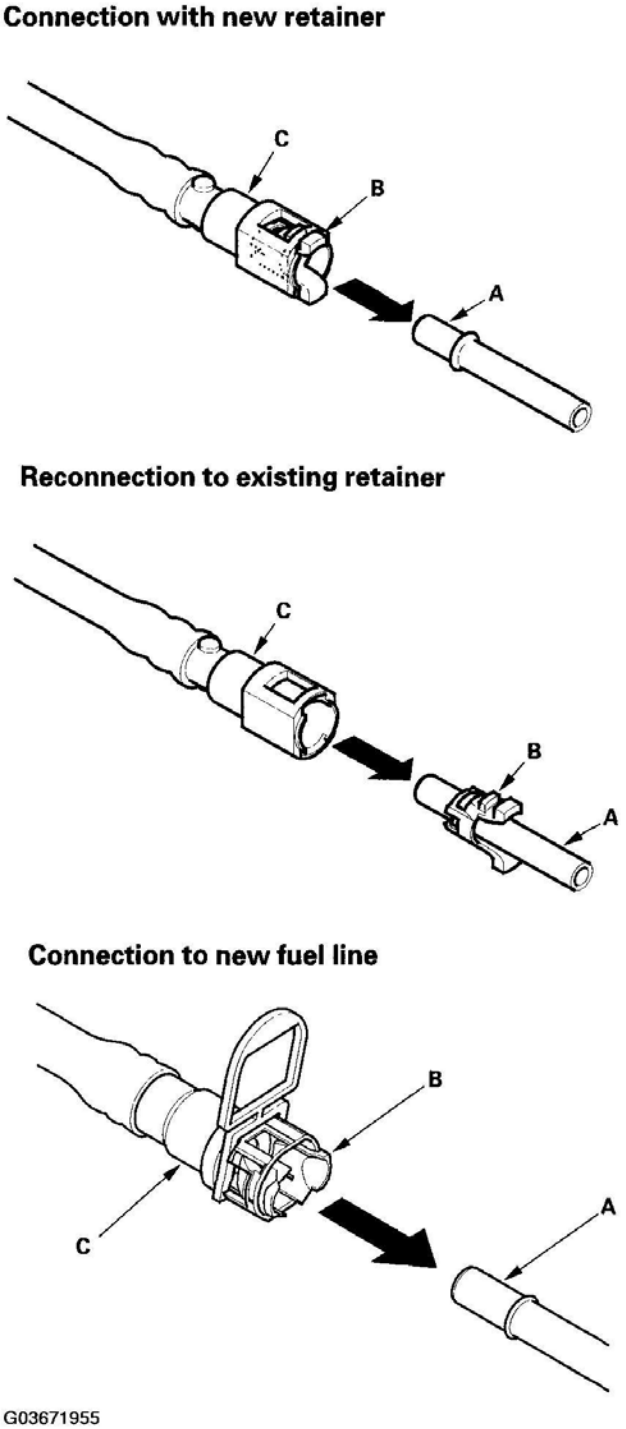
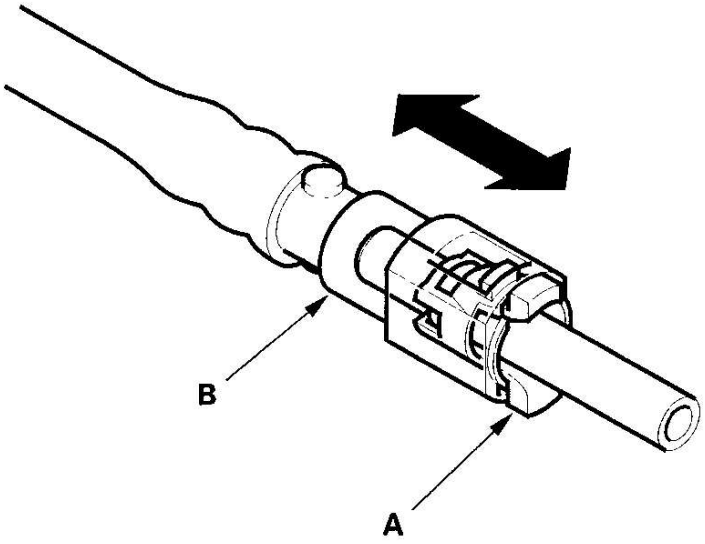


Fig. 42: Aligning Quick-Connect Fittings With Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

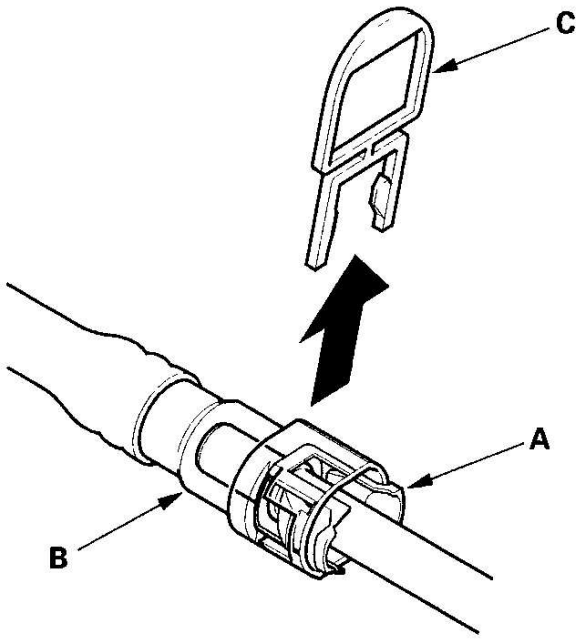
5. When you are reconnecting the connector with the old retainer, make sure the connection is secure and the tabs (A) are firmly locked into place; check visually and also by pulling the connector (B). When you are replacing the fuel line with a new one, make sure you remove the ring pull (C) upwards after you confirm the connection is secure.

NOTE: Before you remove the ring pull, make sure the fuel line connection is secure. If the connection is not secure, the ring pull could break when you try to remove it.

Reconnection to existing retainer



Connection to new fuel line



G03671956

Fig. 43: Making Sure Connection Is Secure And Tabs Firmly Locked Into Place

Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Turn the ignition switch ON (II). The fuel pump will run for about 2 seconds, and fuel pressure will rise. Repeat two or three times, and check that there is no leakage in the fuel supply system.

FUEL PRESSURE REGULATOR REPLACEMENT

1. Remove the fuel tank unit (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).
2. Remove the holder (A).

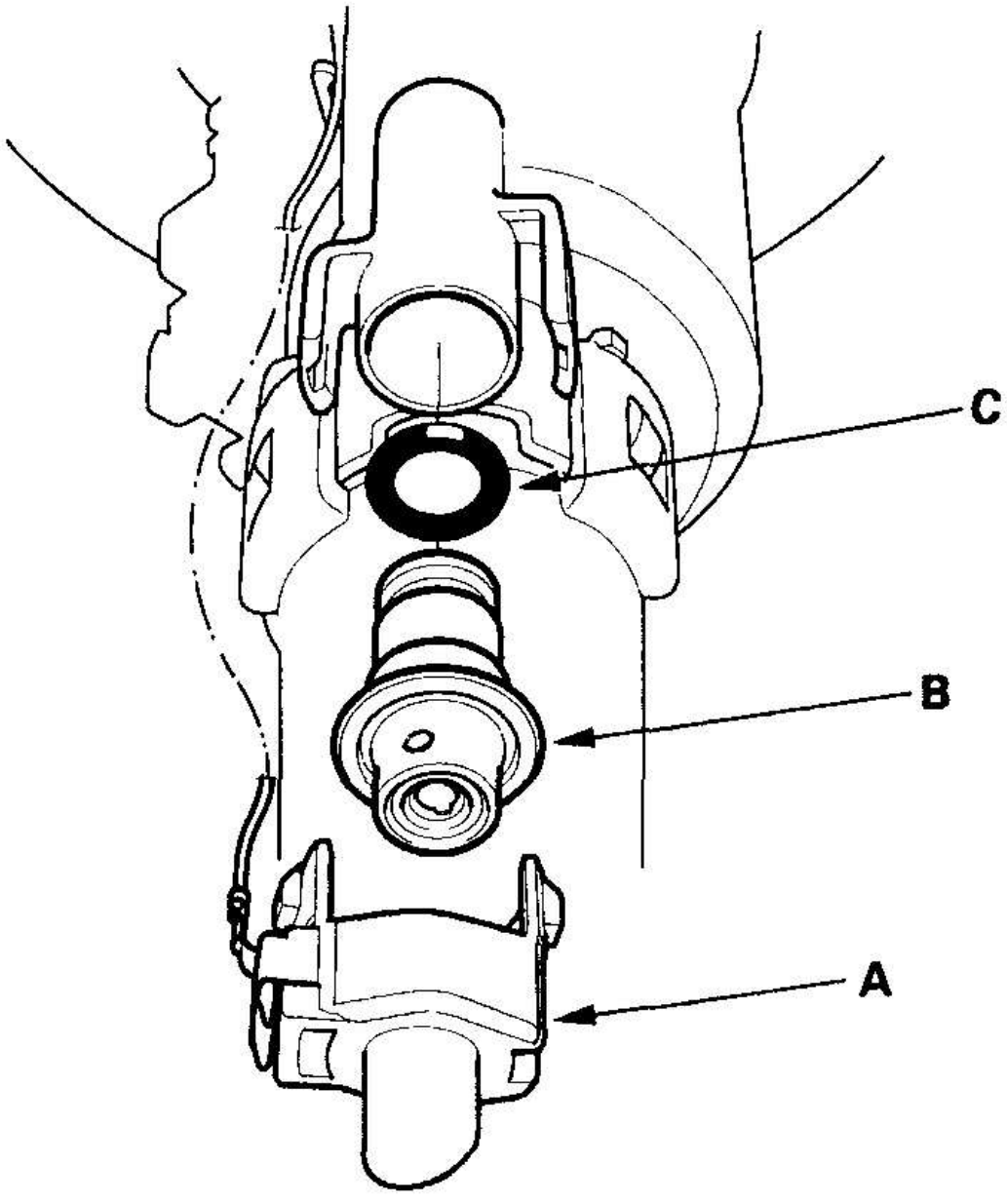


Fig. 44: Identifying Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the fuel pressure regulator (B).

4. Install the regulator in the reverse order of removal with a new O-ring (C).

NOTE: Coat the O-ring with clean engine oil.

FUEL FILTER REPLACEMENT

The fuel filter should be replaced whenever the fuel pressure drops below the specified value (see **FUEL PRESSURE TEST**), after making sure that the fuel pump and the fuel pressure regulator are OK.

1. Remove the fuel tank unit (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).
2. Remove the fuel filter set (A).

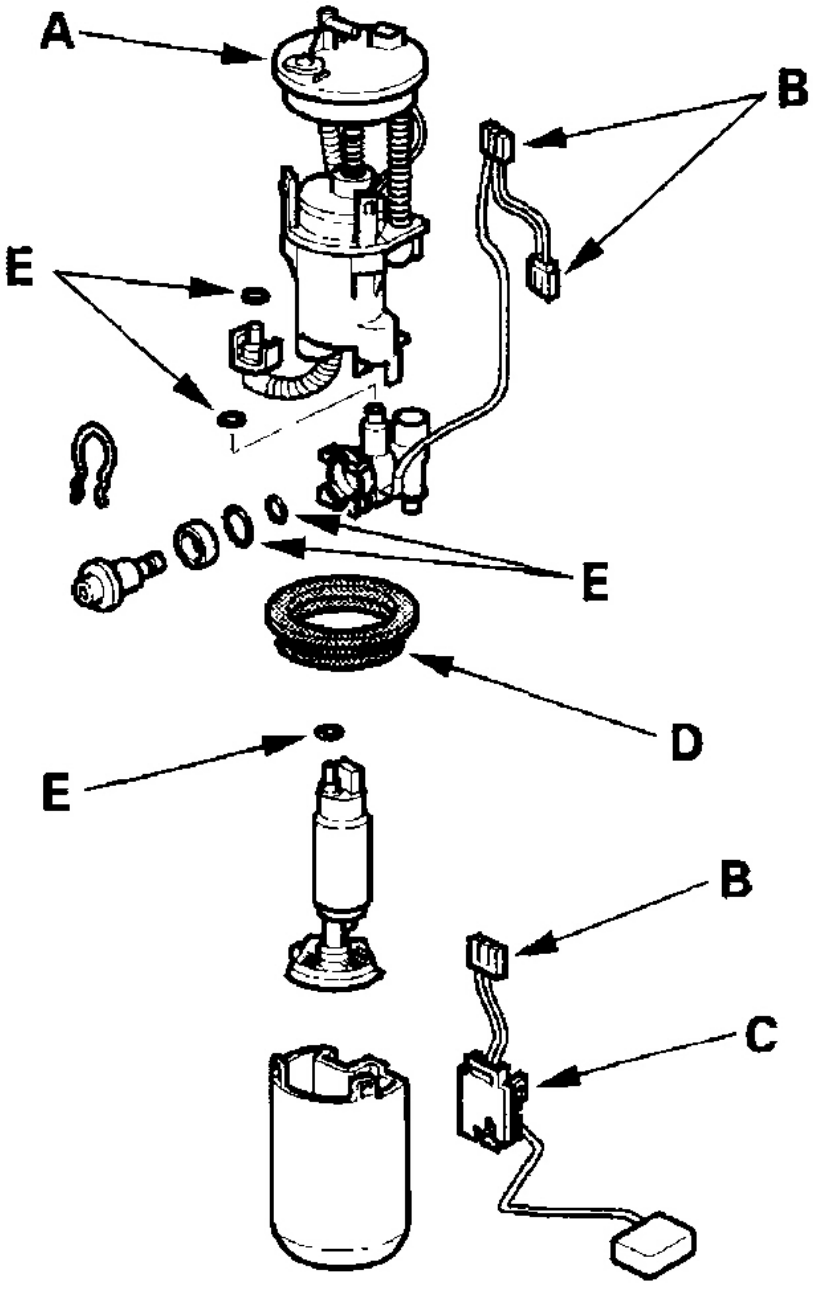


Fig. 45: Identifying Fuel Filter Set
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check these items before installing the fuel tank unit:
   - When connecting the wire harness, make sure the connection is secure and the connectors (B) are firmly locked into place.
   - When installing the fuel gauge sending unit (C), make sure the connection is secure and the connector is firmly locked into place. Be careful not to bend or twist it excessively.
4. Install the parts in the reverse order of removal with a new base gasket (D) and new O-rings (E). When installing the fuel tank unit, align the marks on the unit and the fuel tank (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).

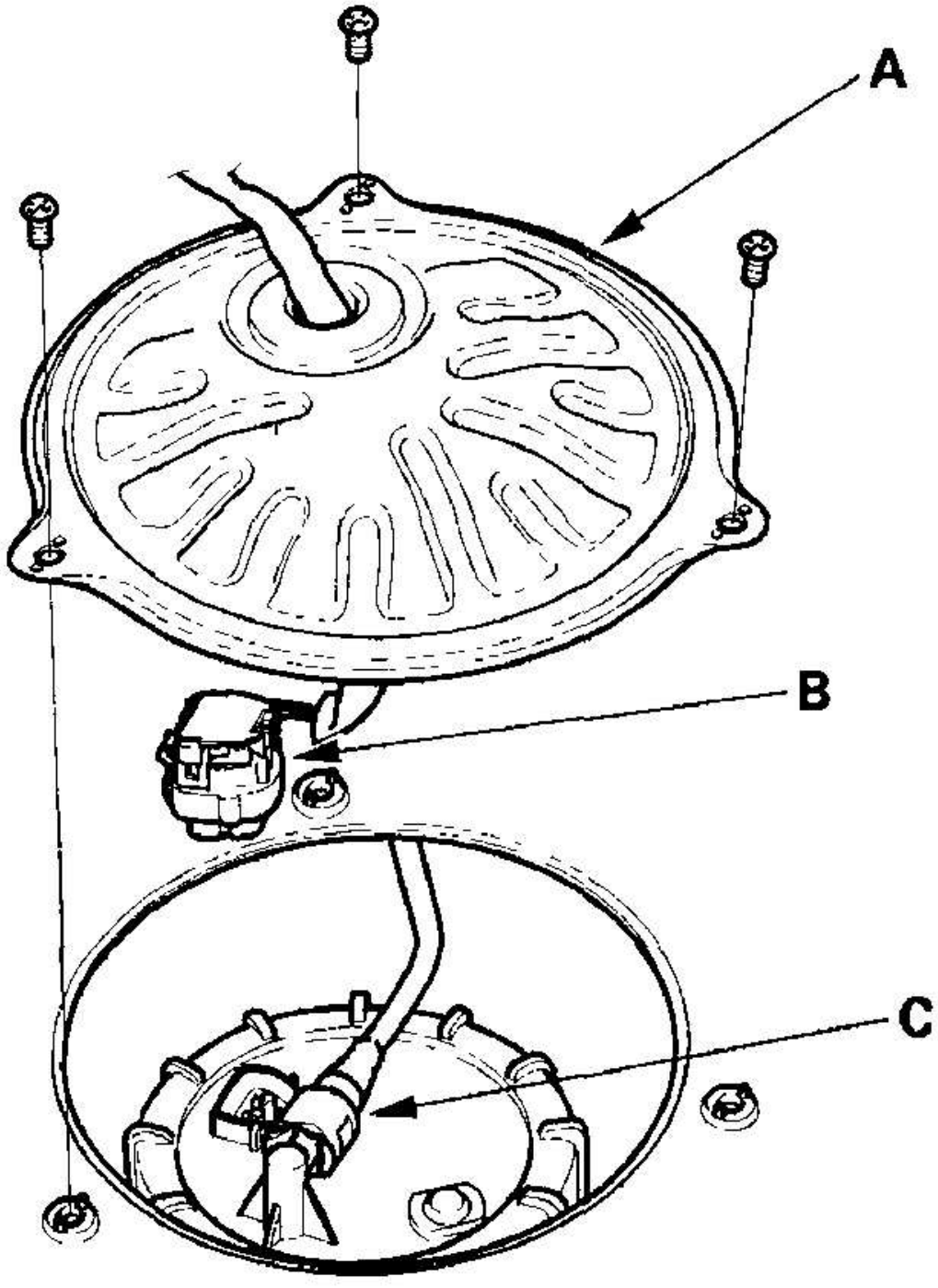
NOTE: Replace the fuel tank unit locknut (A), and base gasket as a set.

FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT

Special Tools Required

Fuel sender wrench 07AAA-SOXA100

1. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
2. Remove the fuel fill cap.
3. Remove the trunk floor.
4. Remove the access panel (A) from the floor.



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Fig. 46: Identifying Access Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the fuel pump 5P connector (B).
6. Disconnect the quick-connect fitting (C) from the fuel tank unit.
7. Using the special tool, loosen the fuel tank unit locknut (A).

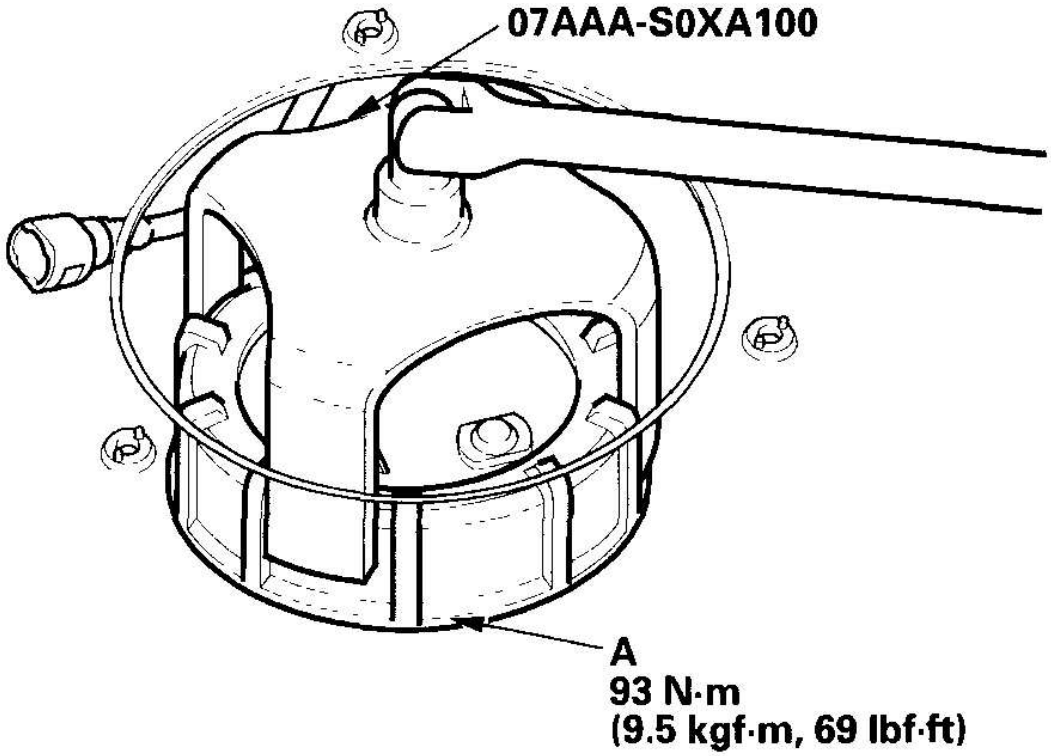


Fig. 47: Loosening Fuel Tank Unit Locknut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the locknut (A) and the fuel tank unit.

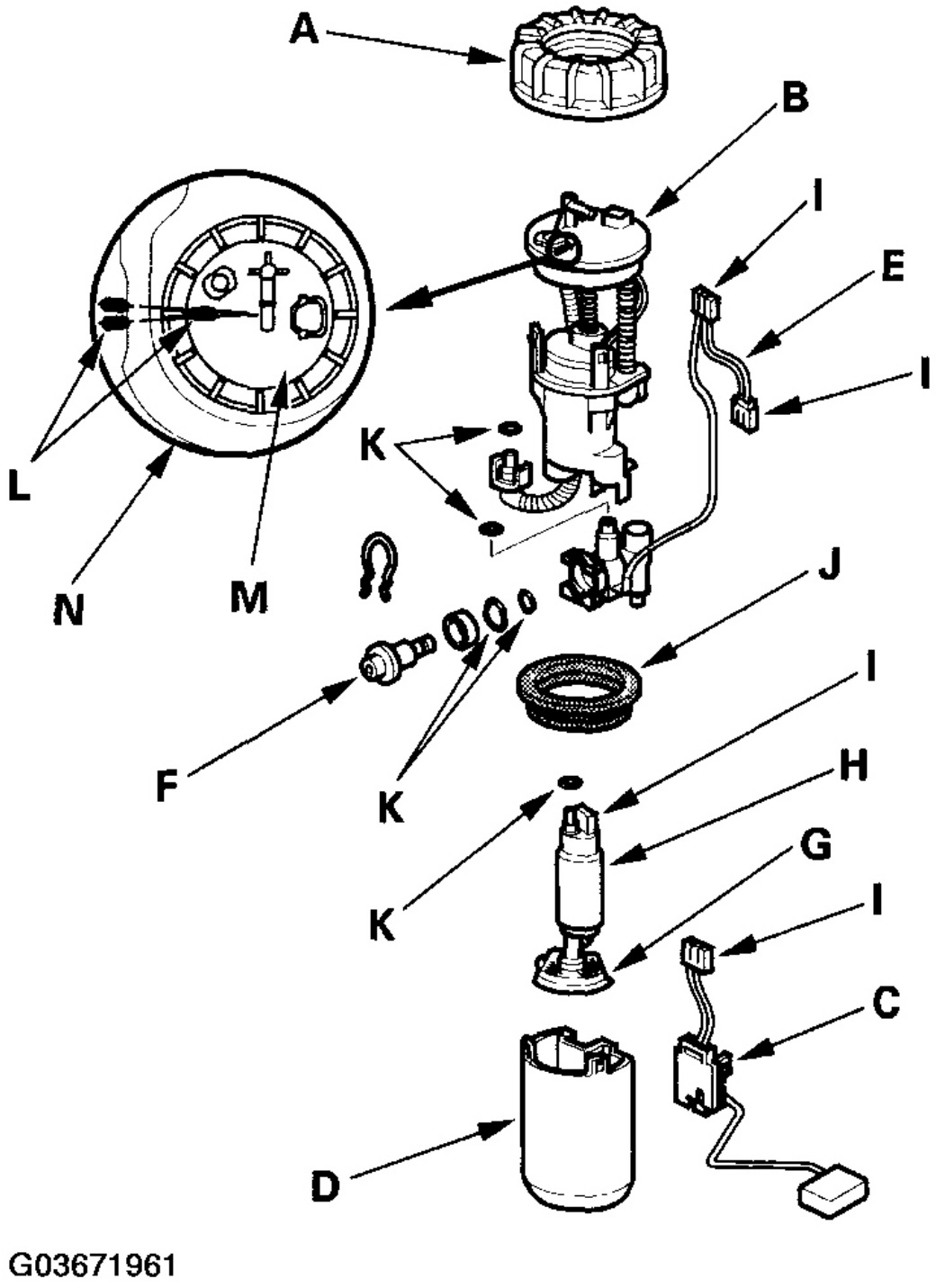


Fig. 48: Identifying Locknut And Fuel Tank Unit

Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the fuel filter (B), the fuel gauge sending unit (C), the case (D), the wire harness (E), and the fuel pressure regulator (F).
10. Check these items before installing the fuel tank unit:
    - Make sure the connection is secure and the suction filter (G) is firmly connected to the fuel pump (H).
    - When connecting the wire harness, make sure the connection is secure and the connectors (I) are firmly locked into place.
    - When installing the fuel gauge sending unit, make sure the connection is secure and the connector is firmly locked into place. Be careful not to bend or twist it excessively.
11. Install the parts in the reverse order of removal with a new base gasket (J), new locknut, and new O-rings (K). When installing the fuel tank unit, align the marks (L) on the unit (M) and the fuel tank (N).

FUEL TANK REPLACEMENT

REMOVAL

1. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
2. Drain the fuel tank (see **FUEL TANK DRAINING**).
3. Loosen the rear wheel nuts slightly, then raise the vehicle, and make sure it is securely supported. Remove the rear wheels.
4. Release the parking brake.
5. Remove the mufflers and exhaust pipe B (see **EXHAUST PIPE AND MUFFLER REPLACEMENT**).
6. Disconnect the fuel fill neck tube (A) and breather hose (B).

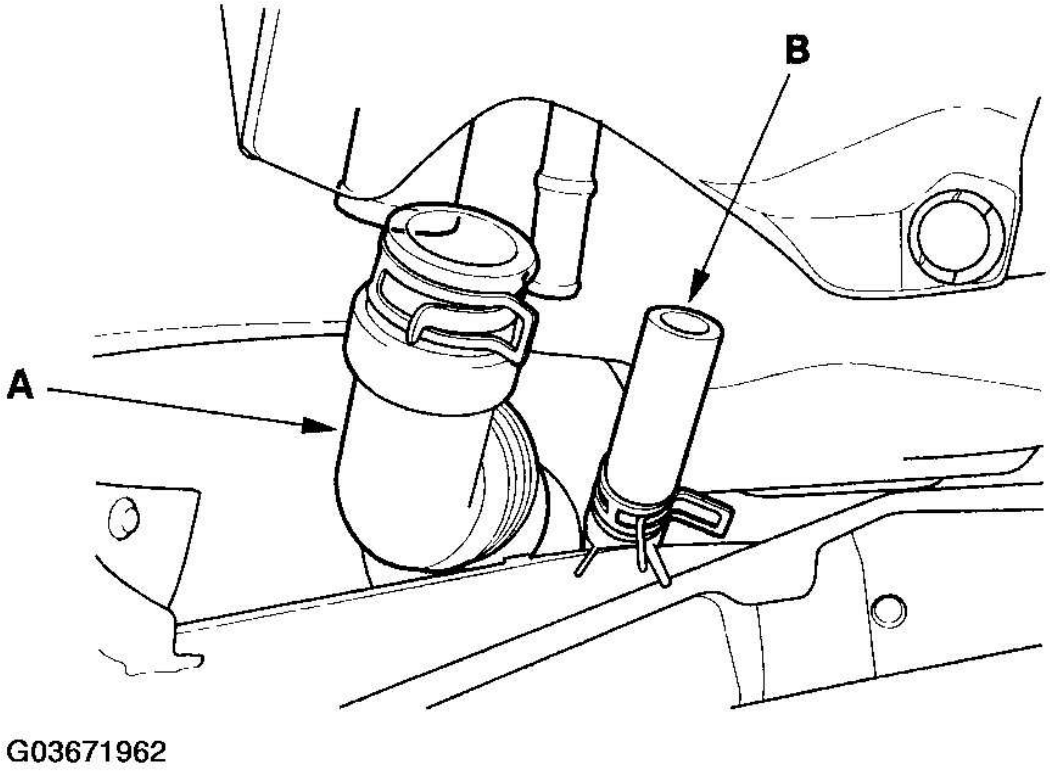


Fig. 49: Disconnecting Fuel Fill Neck Tube And Breather Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Disconnect the vapor line (A) from the EVAP canister (B) then disconnect the fuel line (C).

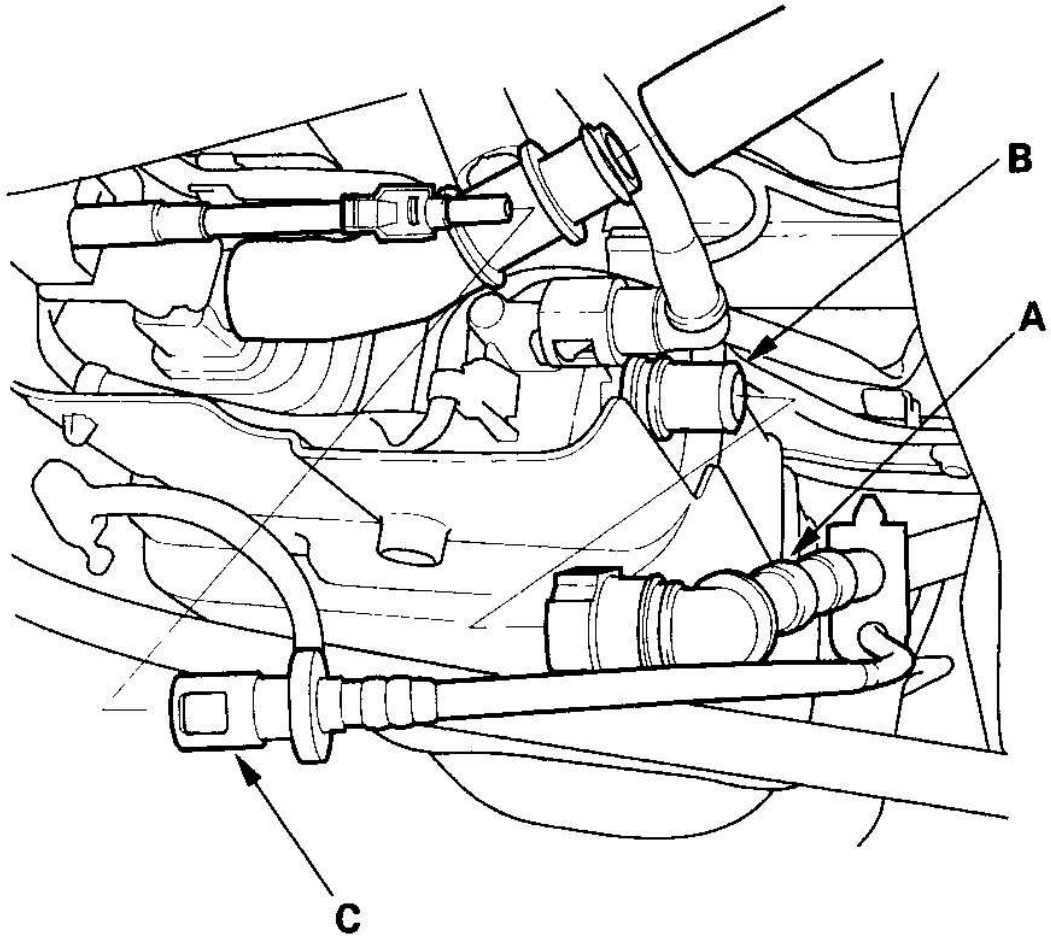


Fig. 50: Disconnecting Vapor Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Disconnect the wheel sensor 2P connector (A).

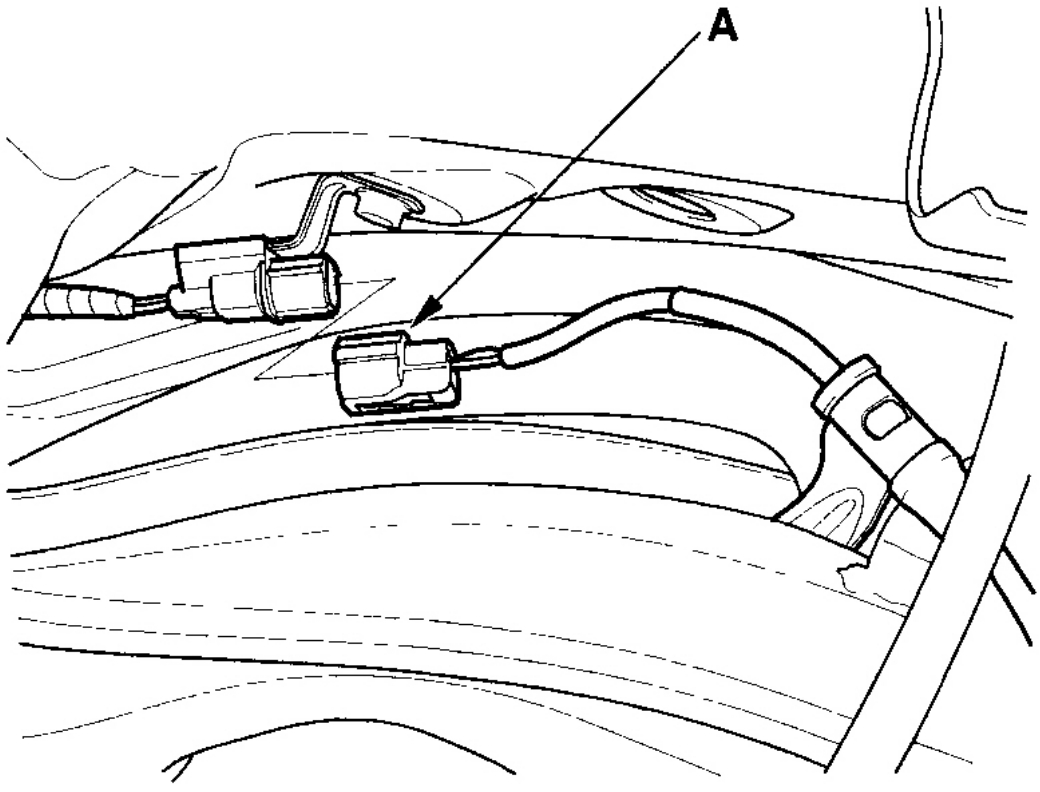


Fig. 51: Disconnecting Wheel Sensor 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the clip (A), parking brake cable (B), two caliper bolts (C), and caliper body (D).

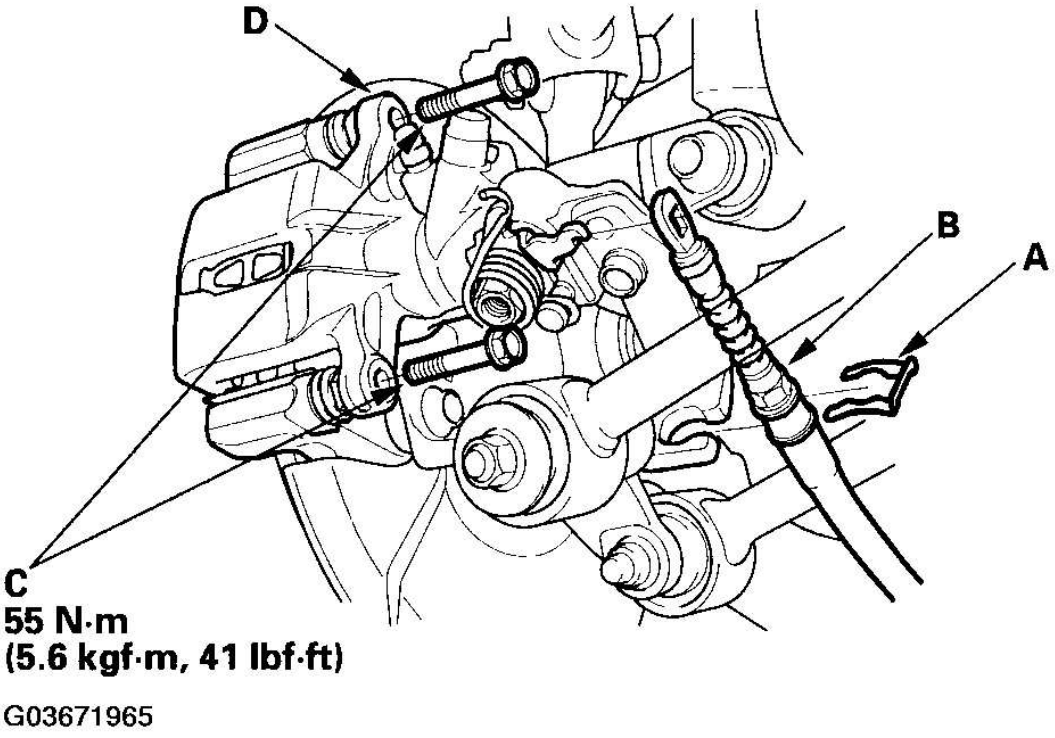


Fig. 52: Identifying Clip, Parking Brake Cable, Caliper Bolts And Caliper Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the brake hose bracket (A).

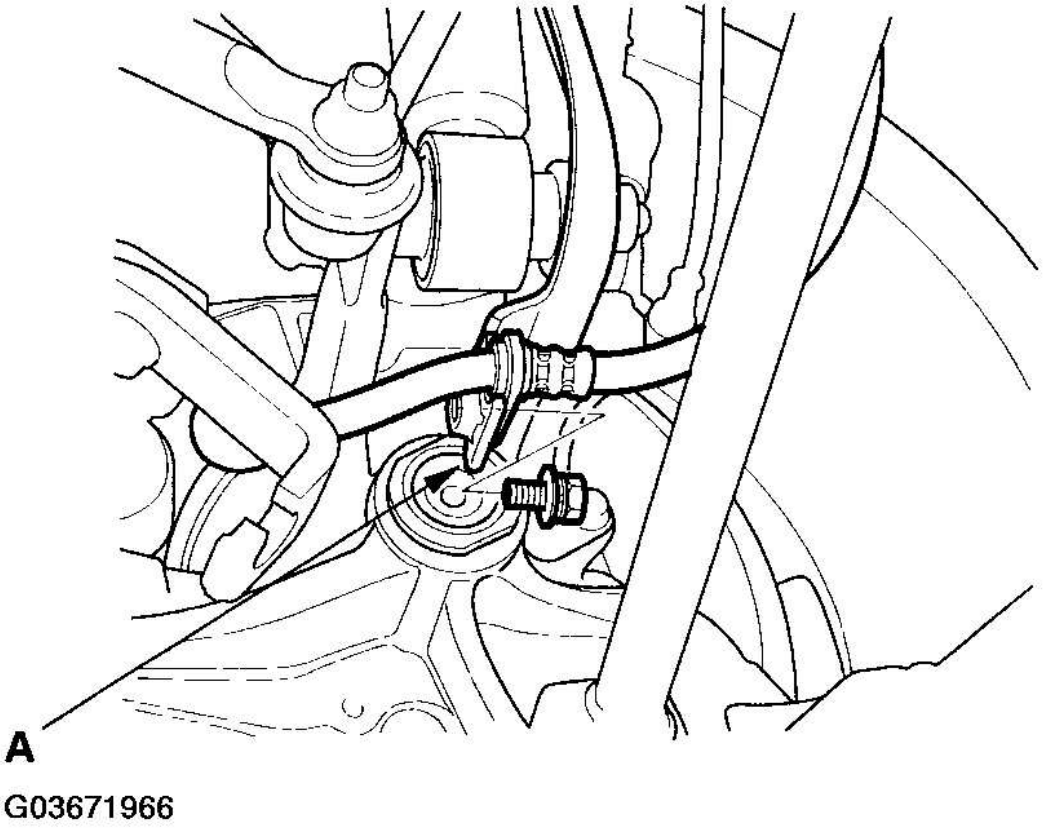


Fig. 53: Identifying Brake Hose Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Hook the caliper body (A) onto the damper spring (B).

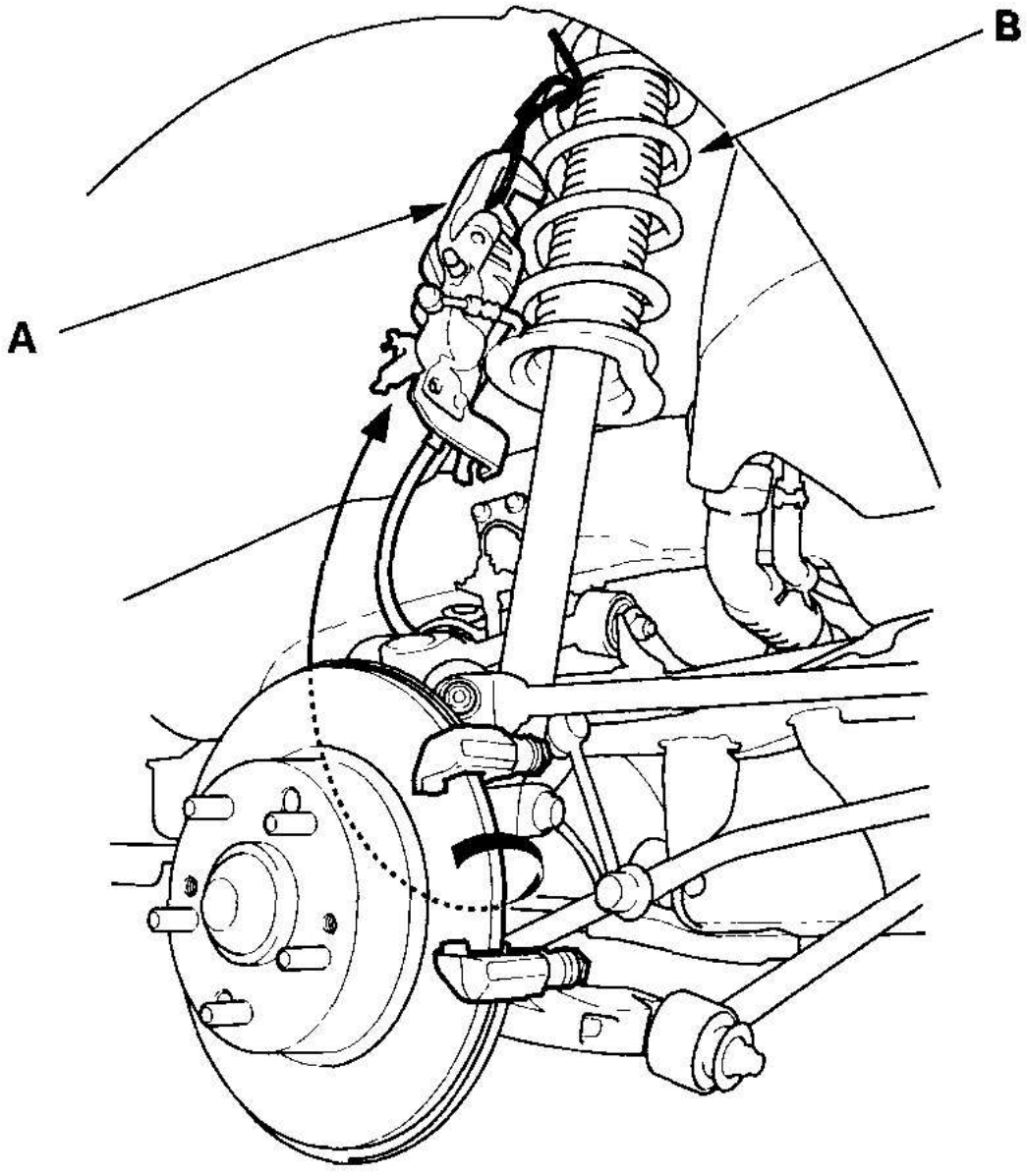


Fig. 54: Hooking Caliper Body Onto Damper Spring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the flange bolt (A).

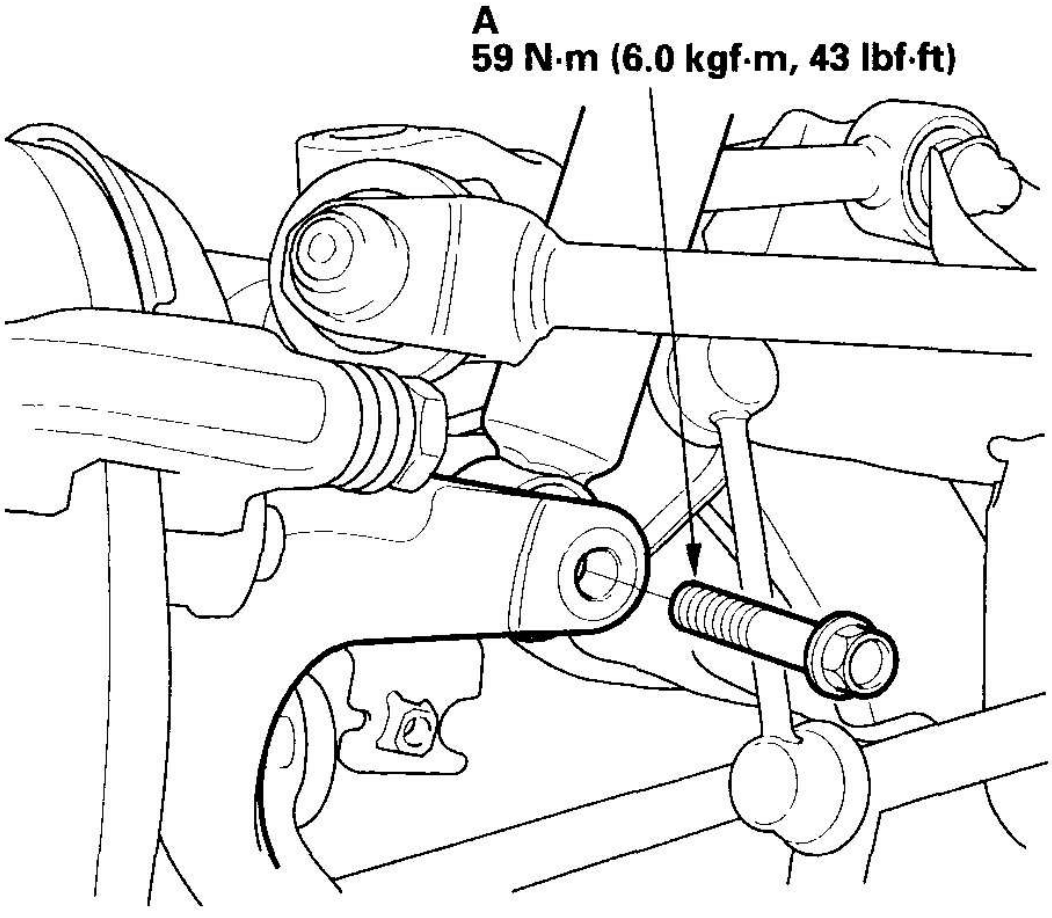
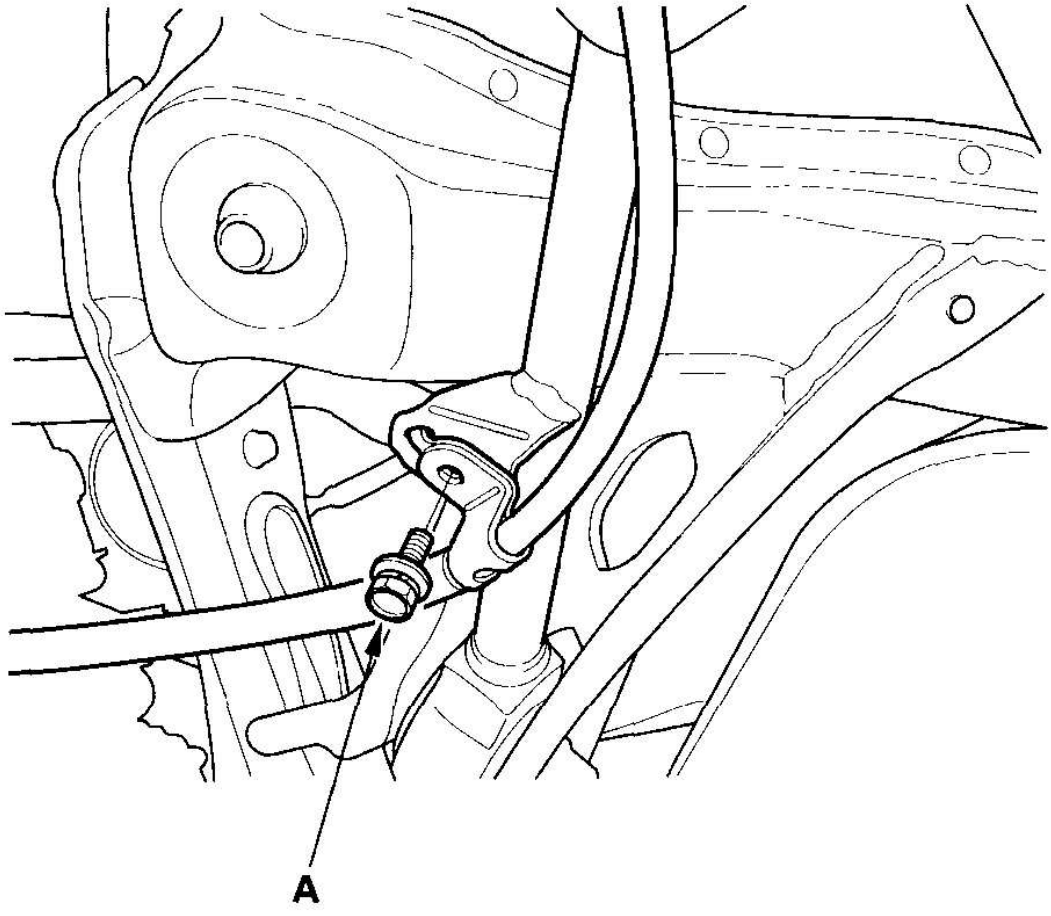


Fig. 55: Identifying Flange Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Remove the parking brake cable bracket bolt (A).



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Fig. 56: Identifying Parking Brake Cable Bracket Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Remove the heat shield (A). Place a jack or support under the rear suspension subframe. Remove the mounting bolts (B). Remove the rear suspension subframe.

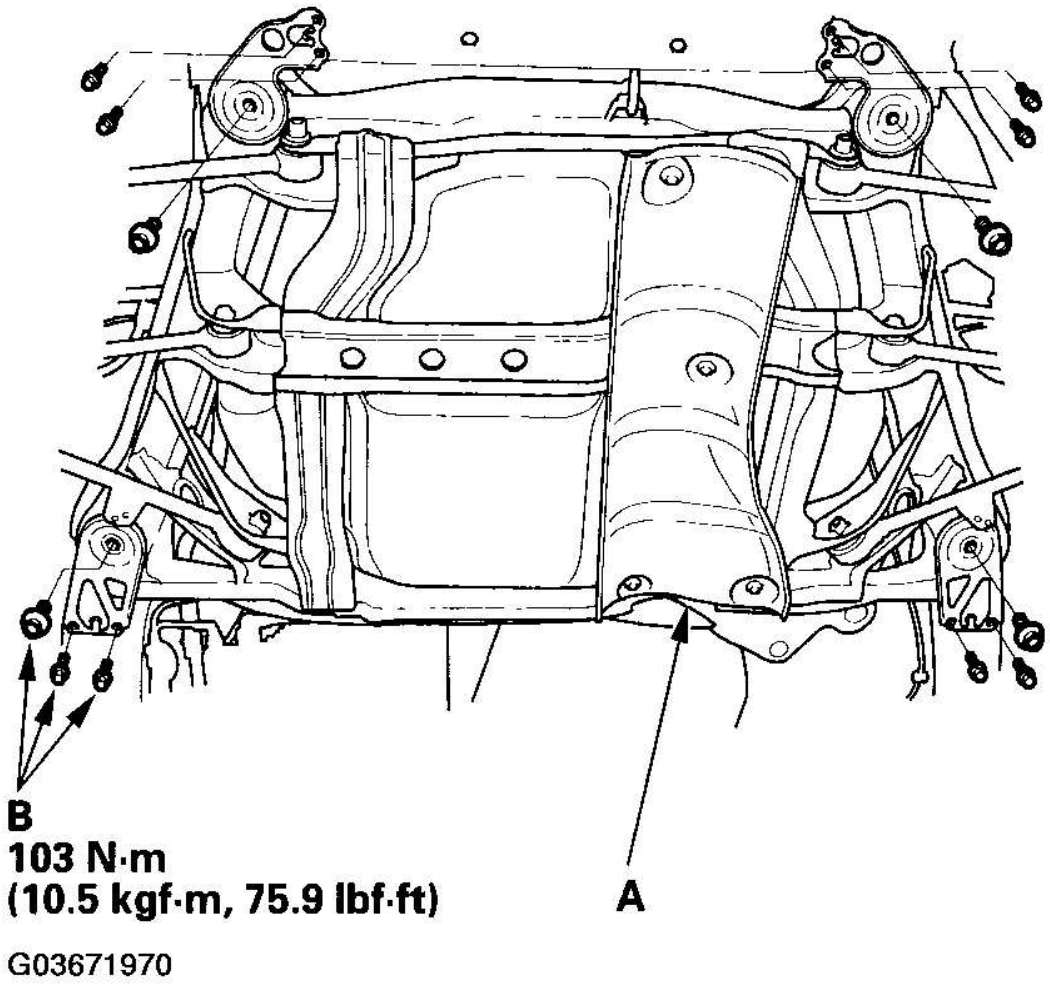


Fig. 57: Identifying Heat Shield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the bolts (A) and the fuel tank straps (B).

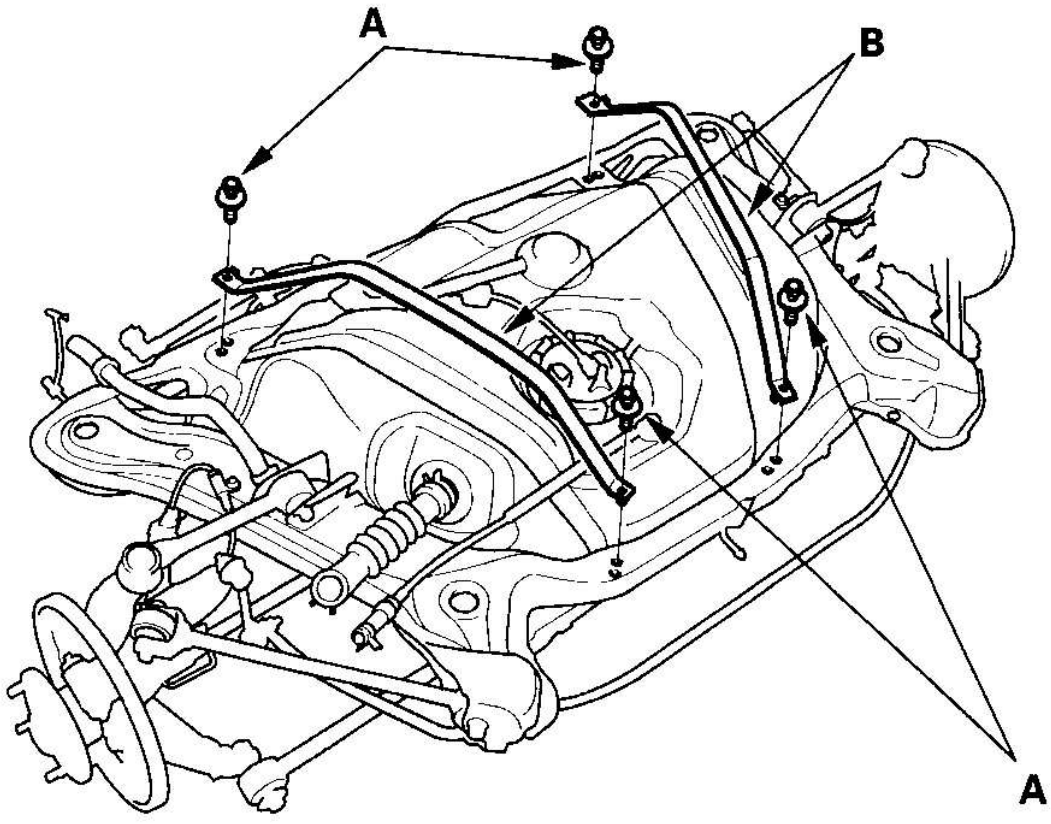


Fig. 58: Identifying Fuel Tank Straps
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Lift the fuel tank out of the subframe.

INSTALLATION

1. Install the fuel tank straps (A), and tighten the bolts (B).

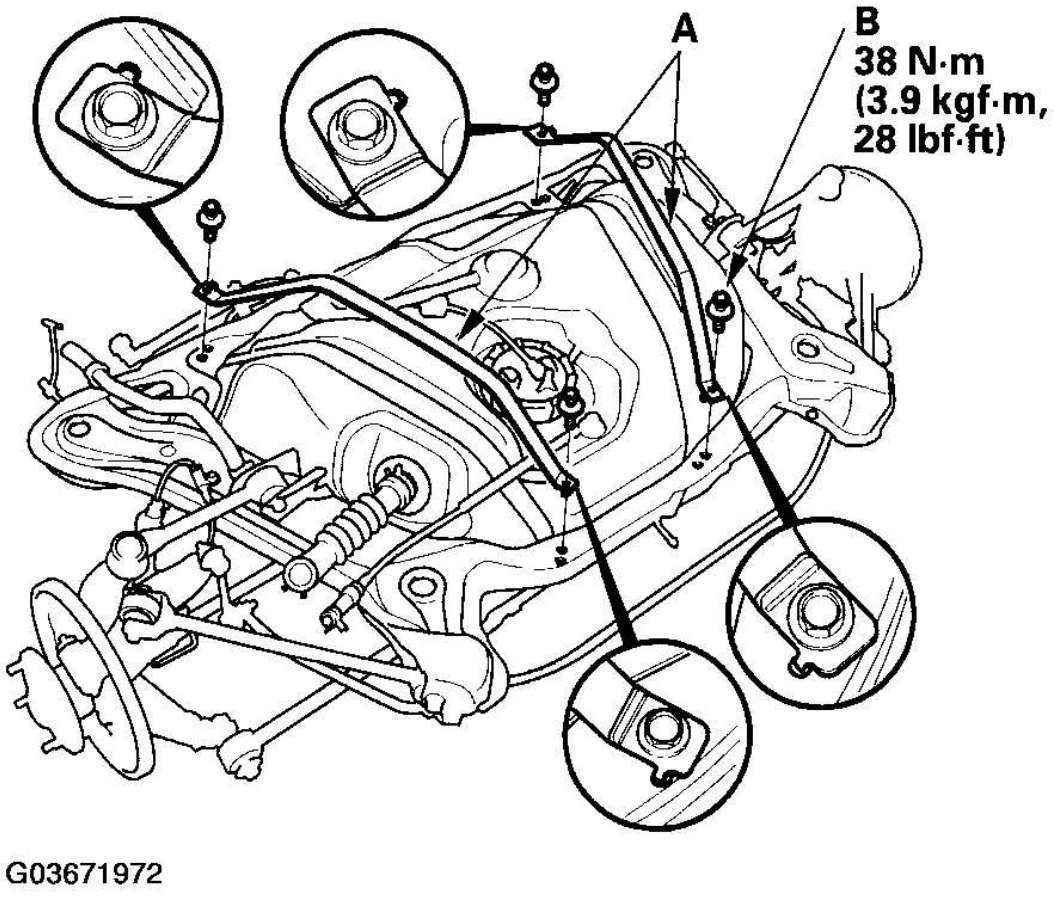


Fig. 59: Identifying Fuel Tank Straps
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Place a jack or support under the rear suspension subframe. Install the subframe, aligning the pins (A) with the holes in the subframe.

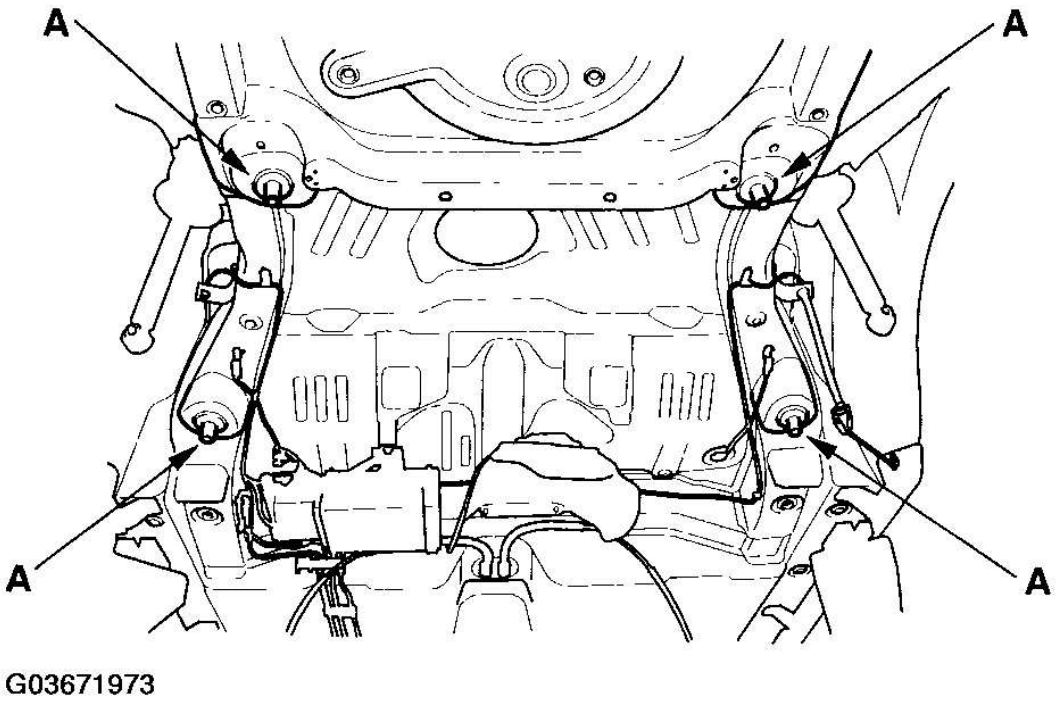


Fig. 60: Identifying Subframe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the remaining parts in the reverse order of removal.
4. If equipped with drum brakes, bleed the brake system after installing the brake hose, refer to **BRAKE SYSTEM BLEEDING** . If not, go to step 5.
5. After installation, do a wheel alignment, refer to **WHEEL ALIGNMENT** .

FUEL GAUGE SENDING UNIT TEST

2003-2004 MODELS

NOTE: For the fuel gauge system circuit diagram, refer to the Gauges Circuit Diagram (see CIRCUIT DIAGRAM).

1. Do multiplex integrated control system troubleshooting test mode A, refer to (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

- If no problem is found, go to step 2.
- If DTC B1175 is indicated, go to the **DTC B1175: FUEL GAUGE SENDING UNIT SIGNALS INPUT ERROR** .

2. Check the No. 21 METER (7.5 A) fuse in the under-dash fuse/relay box.
3. Do the gauge drive circuit check, refer to **SELF-DIAGNOSTIC FUNCTION** .
   - If the fuel gauge needle sweeps from the minimum to maximum position and then returns to minimum, the gauge is OK. Go to step 4.
   - If the fuel gauge needle does not sweep correctly, replace the gauge assembly and retest.
4. Turn the ignition switch OFF.
5. Remove the trunk floor.
6. Remove the access panel (A) from the floor.

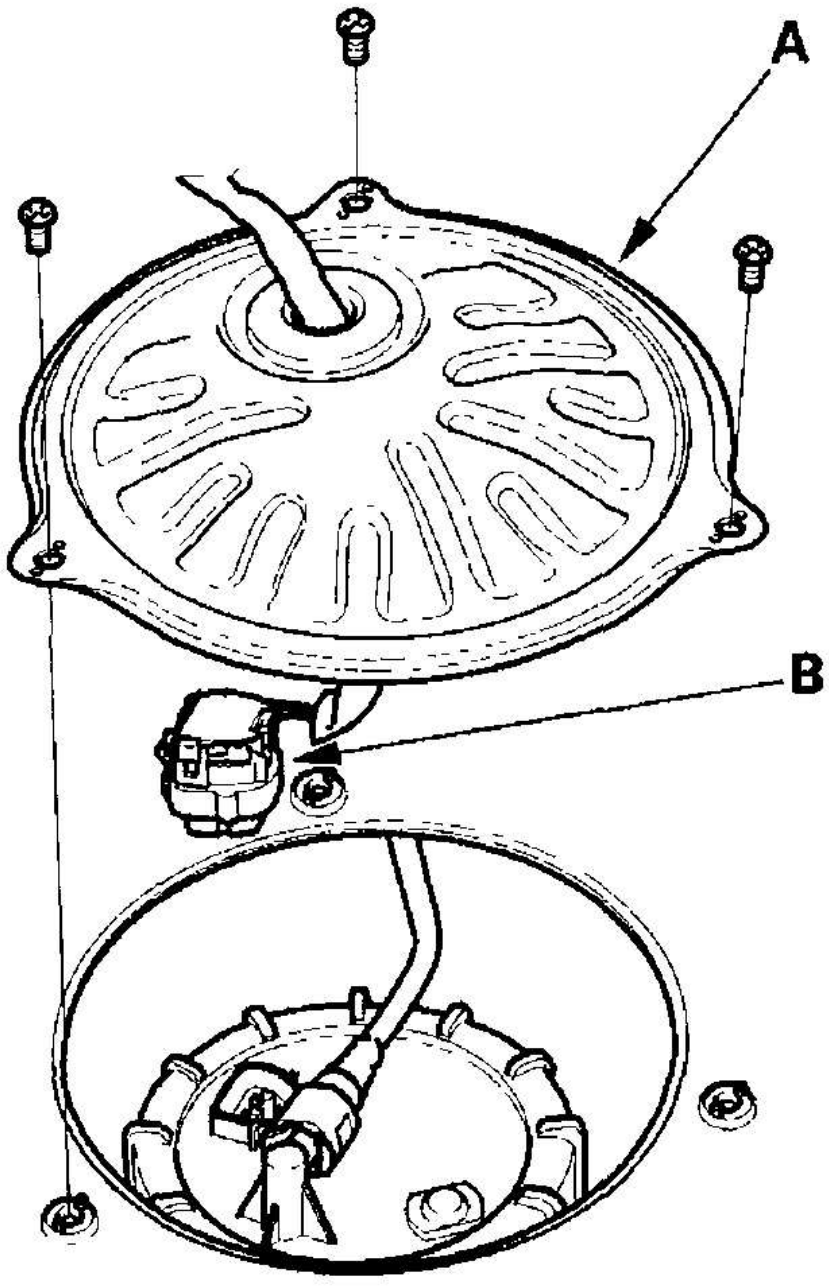


Fig. 61: Identifying Access Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Disconnect the fuel pump 5P connector (B).
8. Remove the fuel tank unit from the fuel tank (see**FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT).**
9. Measure resistance between the No. 1 and No. 2 terminals of the fuel pump 5P connector with the float at E (EMPTY), 1/2 (HALF FULL), and F (FULL) positions.

   If you do not get the following readings, replace the fuel gauge sending unit (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).

FLOAT POSITION SPECIFICATION

Float Position	F 7.6 in. (191.4mm)	1/2 4.4 in. (113.1mm)	LOW 2.0 in. (52.4 mm)	E 0.8 in. (25.6 mm)
Resistance (ohms)	19 to 21	205.5 to 215.5	487.9 to 617.1	770 to 790

NOTE: Remove the No. 15 BACK UP (40 A) fuse from the under-hood fuse/relay box for at least 10 seconds after completing troubleshooting, otherwise it may take up to 20 minutes for the fuel gauge to indicate the correct fuel level.

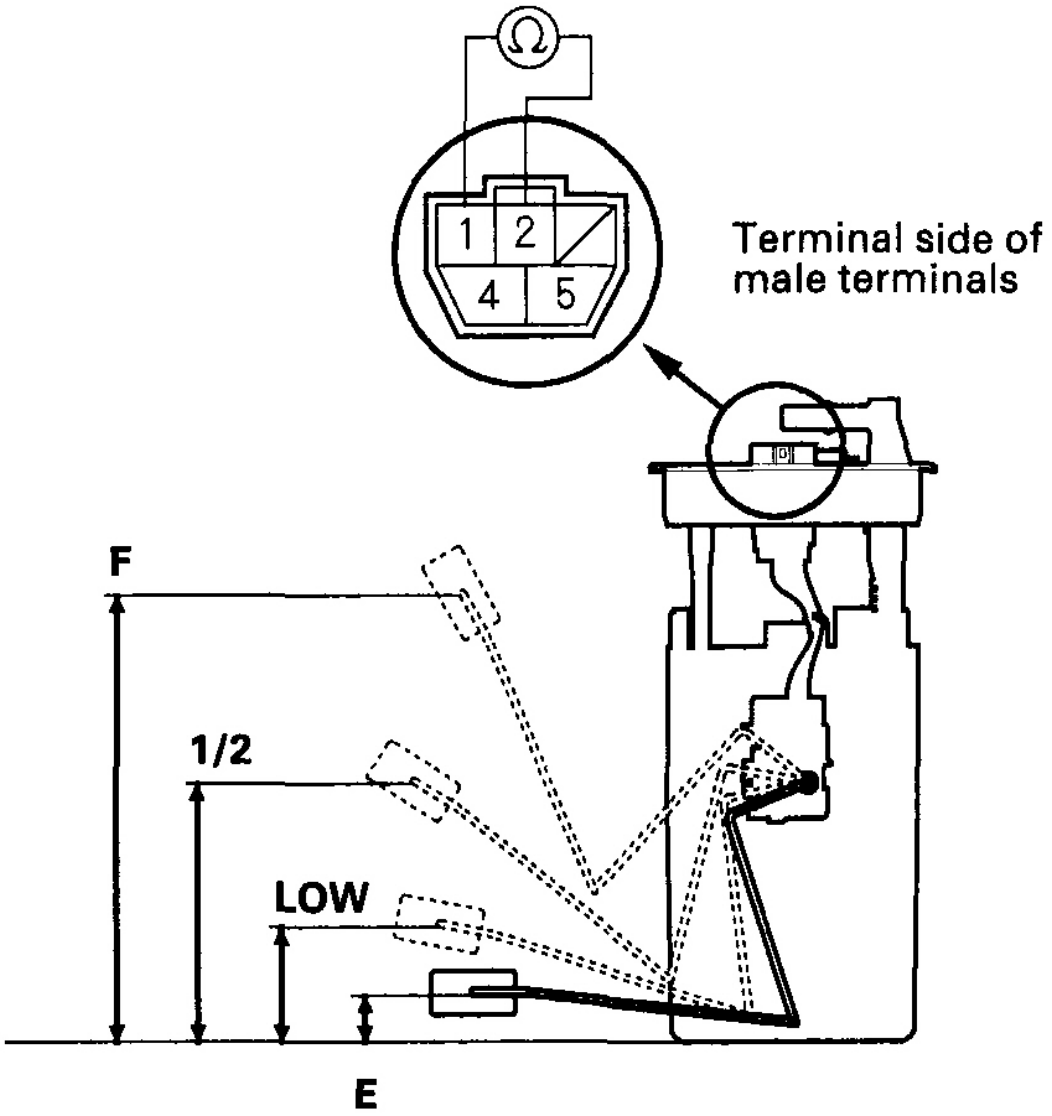


Fig. 62: Measuring Resistance Between Terminals Of Fuel Pump 5P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2005-2007 MODELS

NOTE: For the fuel gauge system circuit diagram, refer to the

Gauges Circuit Diagram; 2005 model (see 2003-05 MODELS), 2006-07 models (see 2006-07 MODEL).

1. Check the No. 21 METER (7.5 A) fuse in the under-dash fuse/relay box before testing.
2. 2005 model:

   Do multiplex integrated control system

   troubleshooting test mode A, refer to **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A** .

   2006-07 models:

   Do the B-CAN system diagnosis Test Mode A

   troubleshooting, refer to **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A** .

   - If no problem is found, go to step 3.
   - If DTC B1175 or B1176 is indicated, goto the indicated DTC's troubleshooting.
3. Turn the ignition switch OFF.
4. Remove the trunk floor.
5. Remove the access panel (A) from the floor.

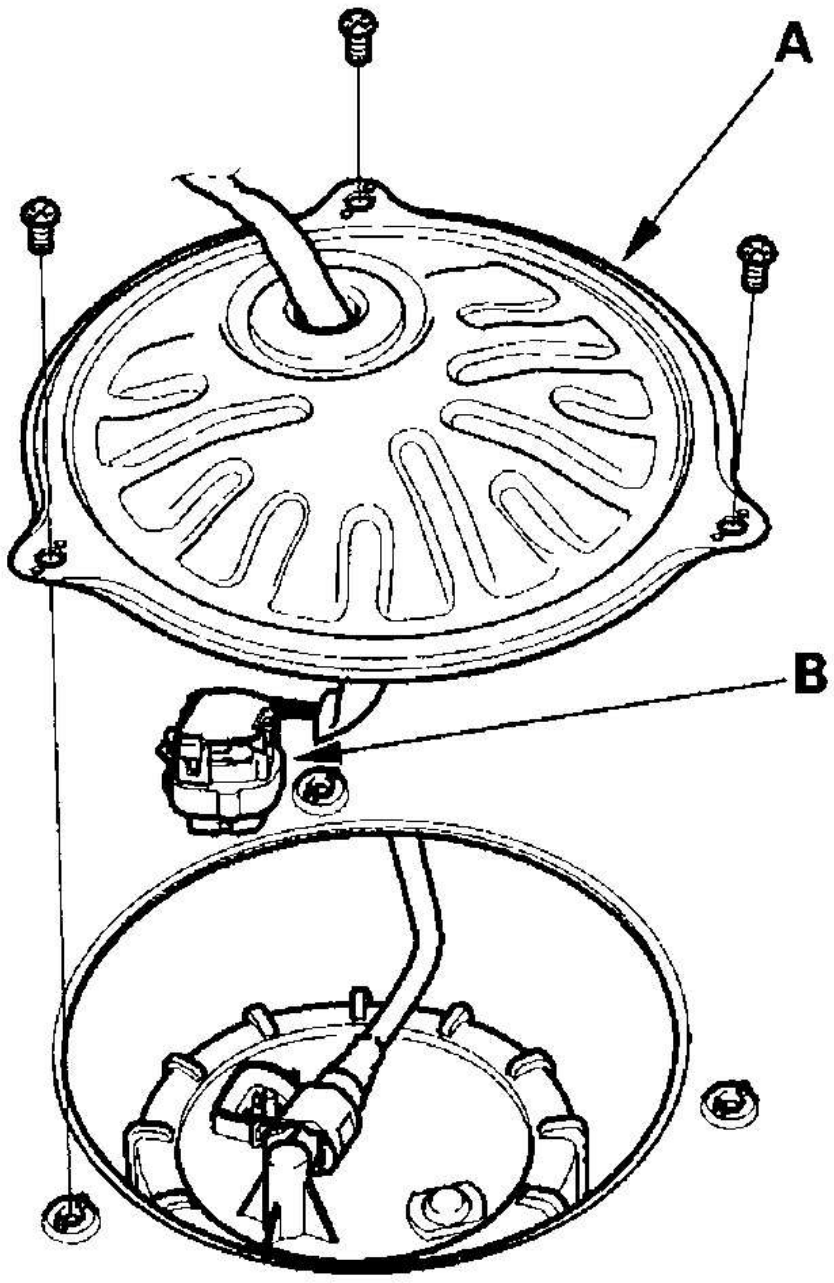


Fig. 63: Identifying Access Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Disconnect the fuel tank unit 5P connector (B).
7. Measure voltage between fuel tank unit 5P connector terminals No. 1 and No. 2 with the ignition switch ON (II). There should be battery voltage.
   - If the voltage is OK, go to step 8.
   - If the voltage is not as specified, check for:

     -a short in the YEL/BLK wire to ground.

     -an open in the YEL/BLK or BLK/WHT wire.

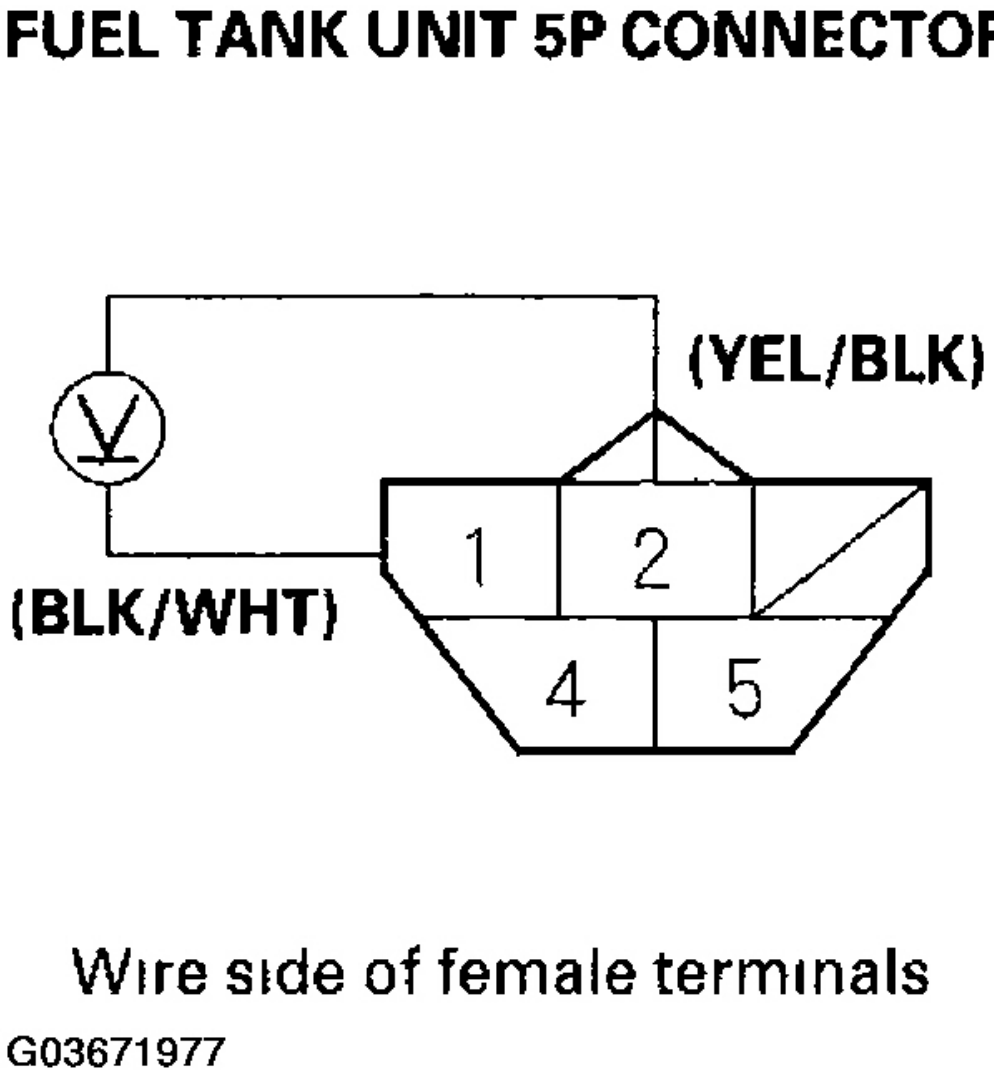


Fig. 64: Measuring Voltage Between Fuel Tank Unit 5P Connector Terminals With Ignition Switch ON (II)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Turn the ignition switch OFF.
9. Remove the fuel tank unit from the fuel tank (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).
10. Measure resistance between fuel tank unit 5P connector terminals No. 1 and

No. 2 with the float at E (EMPTY), LOW (LOW FUEL INDICATOR), 1/2 (HALF FULL), and F (FULL) positions.

If you do not get the following readings, replace the fuel gauge sending unit (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).

FLOAT POSITION SPECIFICATION

Float Postion	**F 7.6 in. (191.4mm)**	**1/2 4.4 in. (113.1 mm)**	**LOW 2.0 in. (52.4 mm)**	**E 0.8 in. (25.6 mm)**
Resistance (ohms)	19 to 21	205.5 to 215.5	487.9 to 617.1	770 to 790

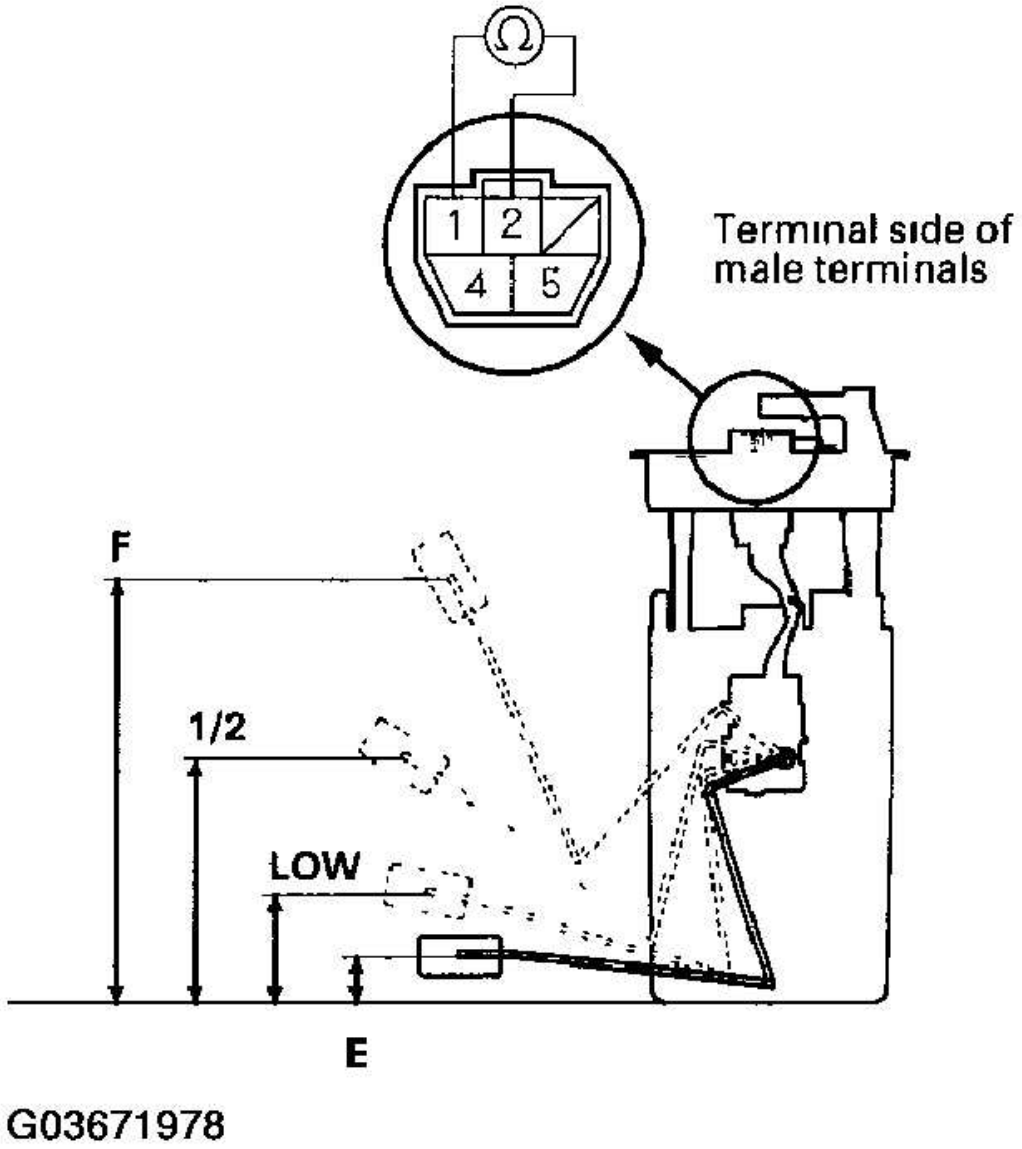


Fig. 65: Measuring Resistance Between Fuel Tank Unit 5P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Reconnect the fuel tank unit 5P connector.
12. Remove the No. 15 BACK UP (40 A) fuse from the under-hood fuse/relay box

for at least 10 seconds, then reinstall it.

13. Turn the ignition switch ON (II).
14. Check that the pointer of the fuel gauge indicates "F" with the float at F.
    - If the pointer of the fuel gauge does not indicate "F" replace the gauge assembly.
    - If the gauge is OK, the test is complete.

NOTE:

- **The pointer of the fuel gauge returns to the bottom of the gauge dial when the ignition switch is OFF, regardless of the fuel level.**
- **Remove the No. 15 BACK UP (40 A) fuse from the under-hood fuse/relay box for at least 10 seconds after completing troubleshooting, otherwise it may take up to 20 minutes for the fuel gauge to indicate the correct fuel level.**

LOW FUEL INDICATOR TEST

1. Do the gauge drive circuit check, refer to **SELF-DIAGNOSTIC FUNCTION** .
    - If the low fuel indicator flashes, go to step 2.
    - If the low fuel indicator does not flash, replace the gauge control module assembly.
2. 2003-2005 models:

   Do multiplex integrated control system

   troubleshooting test mode A, refer to **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A** .

   2006-2007 models:

   Do the B-CAN system diagnosis Test Mode A troubleshooting, refer to **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A** .

- If any DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**.
- If no DTCs are indicated, go to step 3.

3. Do the fuel gauge sending unit test (see **FUEL GAUGE SENDING UNIT TEST**).

2003-06 ENGINE PERFORMANCE

Fuel Supply System - Accord

COMPONENT LOCATION INDEX

NON-SULEV MODEL

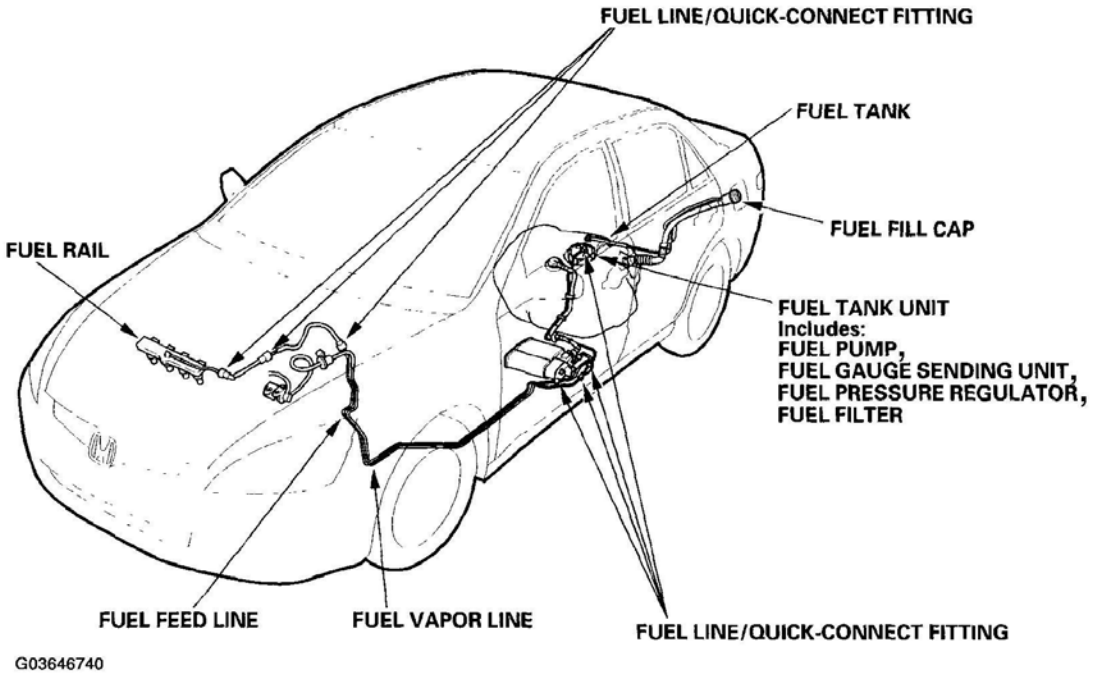


Fig. 1: Locating Fuel Supply System Components (Non-SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SULEV MODEL

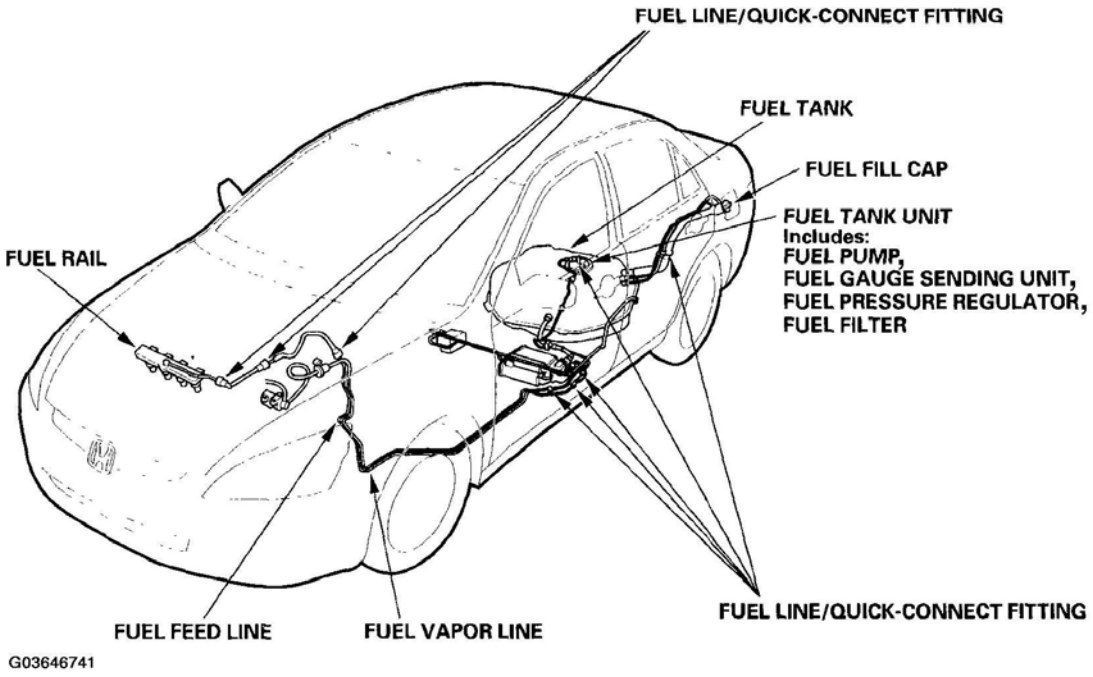


Fig. 2: Locating Fuel Supply System Components (SULEV Model - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

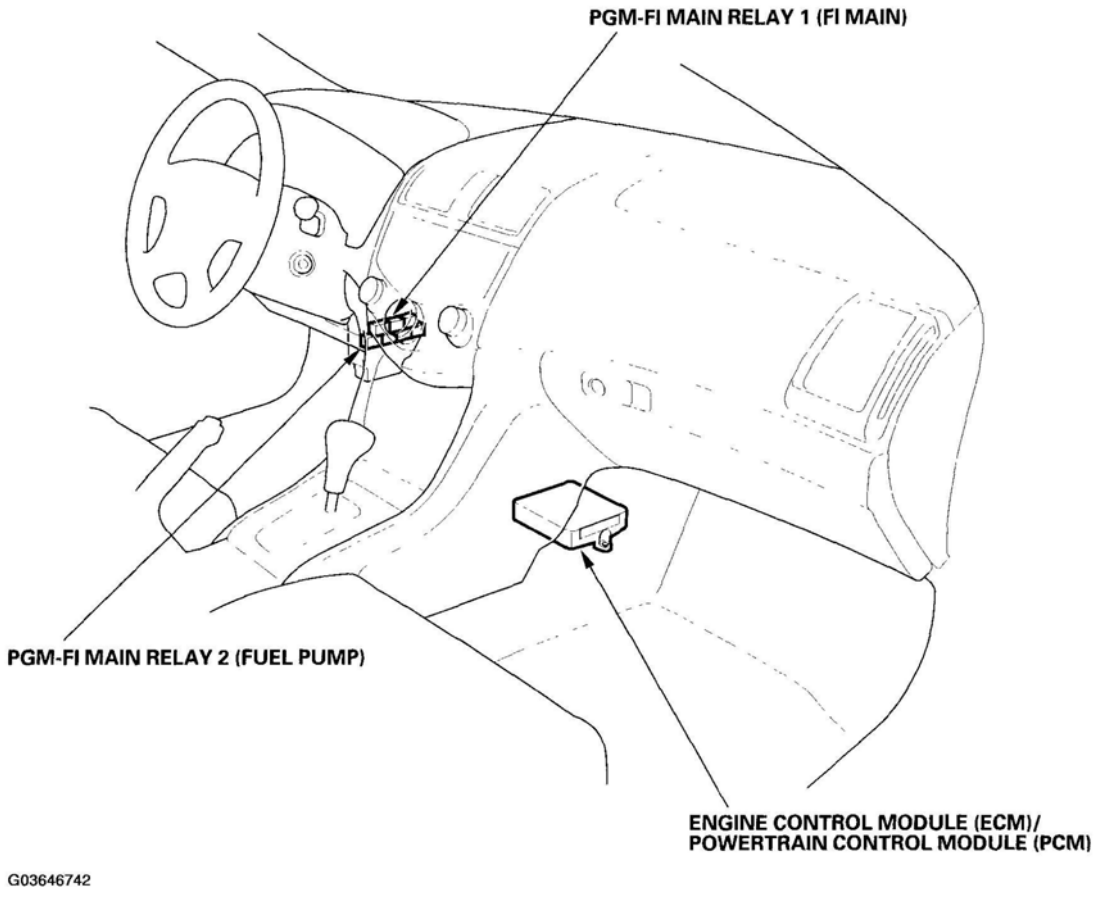


Fig. 3: Locating Fuel Supply System Components (SULEV Model - 2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC CODES

DTC INDEX

DTC	Description
DTC P0461	Fuel Level Sensor (Fuel Gauge Sending Unit) Range/Performance Problem (2005-2006 models)
DTC P0462	Fuel Level Sensor (Fuel Gauge Sending Unit) Circuit Low Voltage (2005-2006 models)
DTC P0463	Fuel Level Sensor (Fuel Gauge Sending Unit) Circuit High Voltage (2005-2006 models)

DTC TROUBLESHOOTING

DTC P0461: FUEL LEVEL SENSOR (FUEL GAUGE SENDING UNIT) RANGE/PERFORMANCE PROBLEM (2005-2006 MODELS)

NOTE: Because it requires 162 miles (260 km) of driving without refueling to complete this diagnosis, DTC P0461 cannot be duplicated during this troubleshooting.

1. Test the fuel gauge sending unit (see **NON-SULEV MODEL**).

   Is the fuel gauge sending unit OK?

   YES - Check for poor connections or loose terminals at the fuel gauge sending unit and the gauge assembly.

   NO - Replace the fuel gauge sending unit; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**), then go to step 2.
2. Turn the ignition switch ON (II).
3. Reset the ECM/PCM with the HDS.
4. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
5. Check for Temporary DTCs or DTCs with the HDS.

   Are any Temporary DTCs or DTCs indicated?

   YES - If DTC P0461 is indicated, check for poor connections or loose terminals at the fuel gauge sending unit and the gauge assembly, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

   NO - Troubleshooting is complete.

DTC P0462: FUEL LEVEL SENSOR (FUEL GAUGE SENDING UNIT) CIRCUIT LOW VOLTAGE (2005-2006 MODELS)

NOTE:

- **Information marked with an asterisk (*) applies to 2005**

model.

- **Information marked with double asterisk (**) applies to 2006 model.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS, and wait 5 seconds.
3. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0462 indicated?

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the gauge control module and the fuel gauge sending unit.

4. Turn the ignition switch OFF.
5. Remove the trunk floor trim panel.
6. Remove the access panel from the floor.
7. Disconnect the fuel tank unit 5P connector.
8. Turn the ignition switch ON (II).
9. Clear the DTC with the HDS, and wait 5 seconds.
10. Check for Temporary DTCs or DTCs with the HDS.

Is DTC P0463 indicated?

YES - Go to step 11.

NO - Replace the fuel gauge sending unit; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**), then go to step 22.

11. Turn the ignition switch OFF.
12. Remove the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**).
13. Disconnect the gauge control module 30P* (36P**) connector.
14. Check for continuity between fuel tank unit 5P connector terminal No. 2 and

body ground.

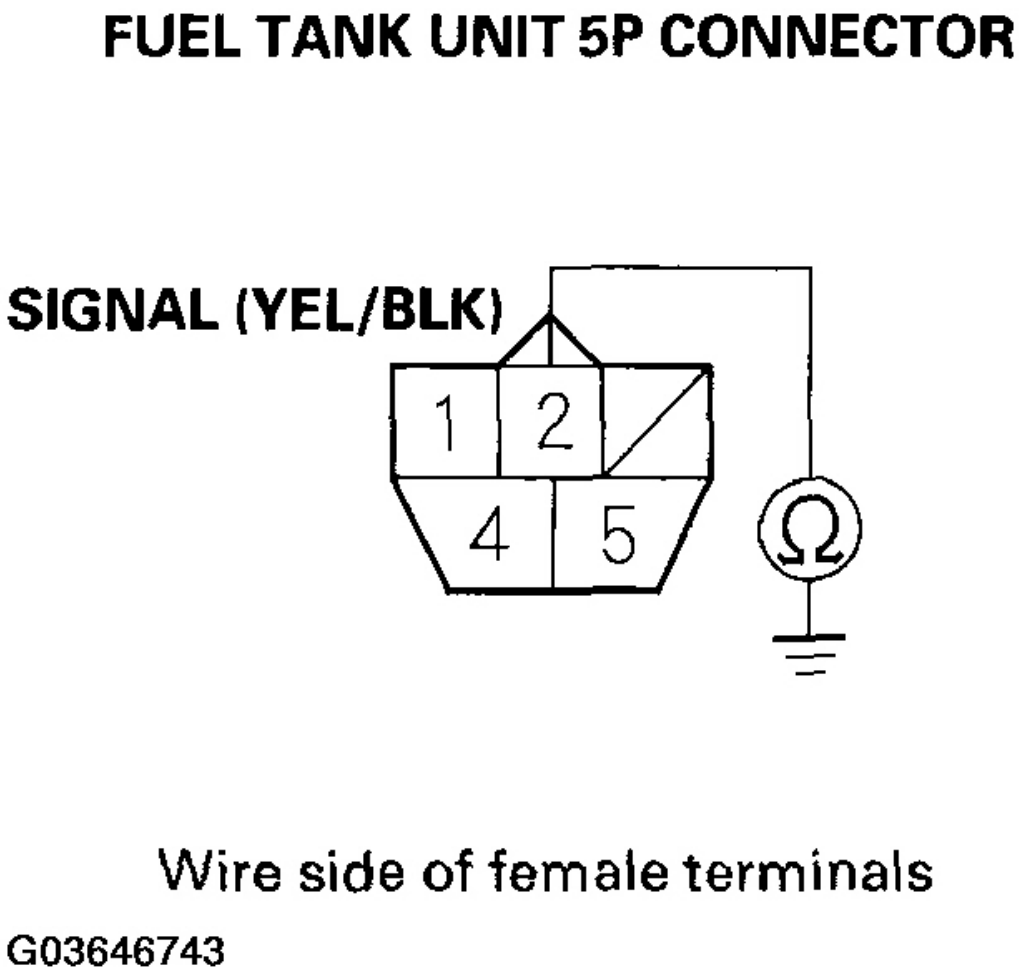


Fig. 4: Checking For Continuity Between Fuel Tank Unit 5P Connector Terminal No. 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

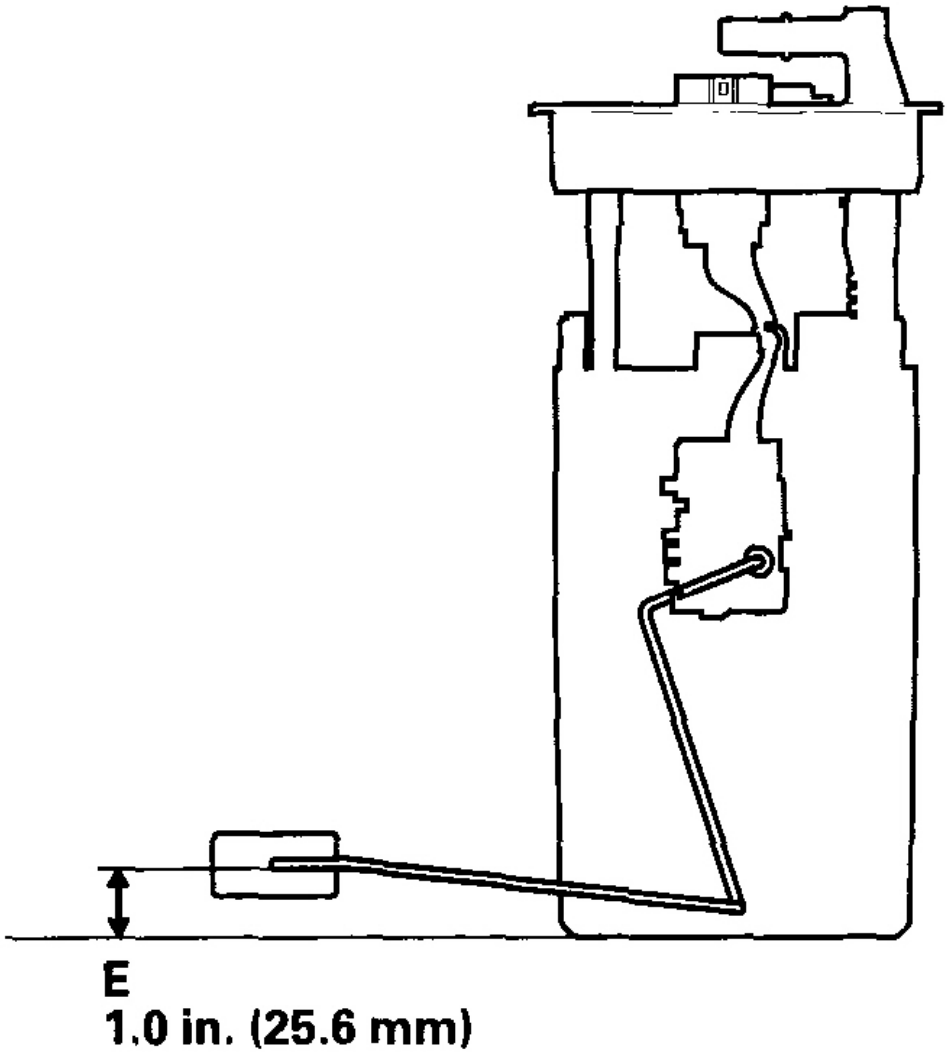
Is there continuity?

YES - Repair short in the wire between the gauge control module (signal line) and the fuel gauge sending unit, then go to step 23.

NO - Go to step 15.

15. Reconnect the gauge control module 30P* (36P**) connector.
16. Remove the fuel tank unit; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**).
17. Connect the fuel tank unit 5P connector.
18. Turn the ignition switch ON (II).
19. Clear the DTC with the HDS.
20. Set the float (A) to the E position.

Non-SULEV model



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Fig. 5: Setting Float To E Position (Non-SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

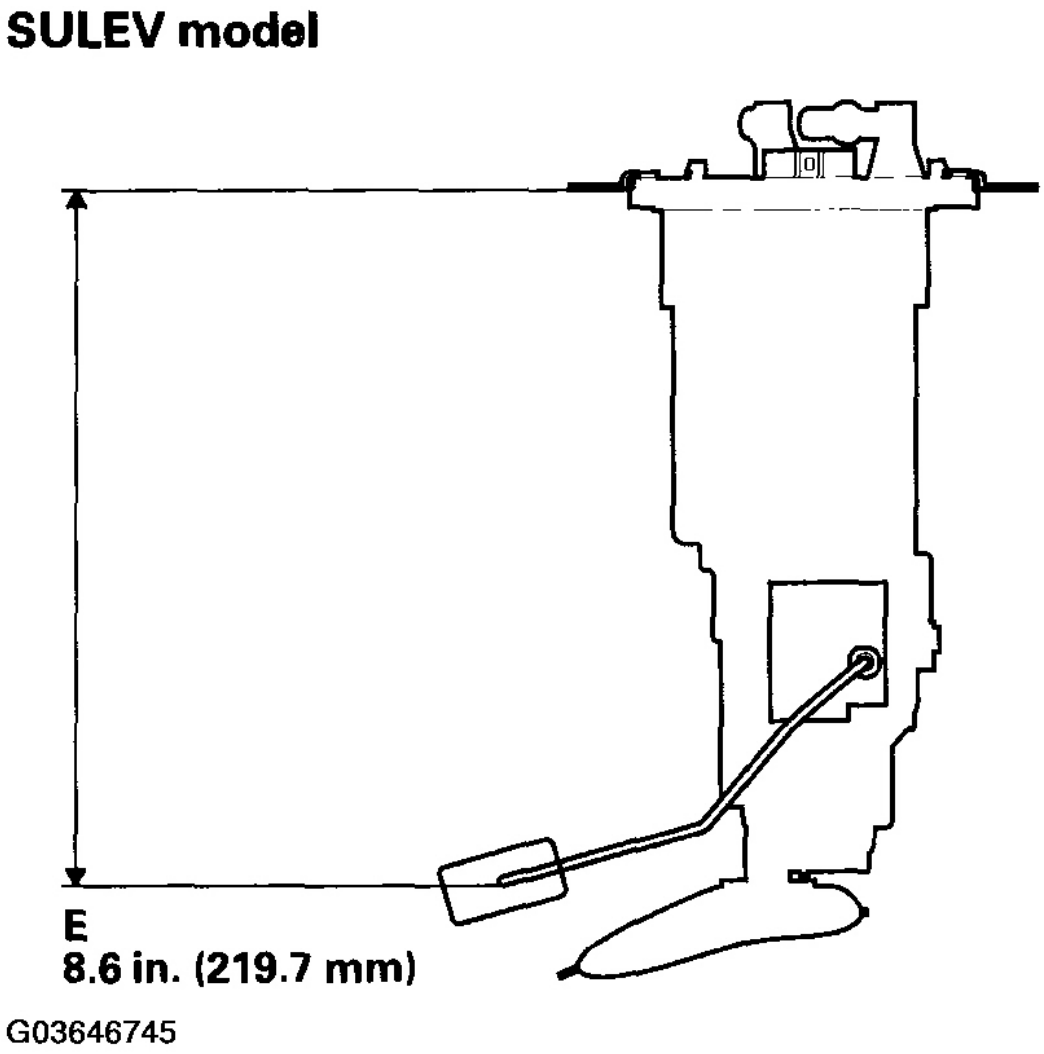


Fig. 6: Setting Float To E Position (SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Check the fuel gauge.

Does the gauge move to the empty position?

YES - Go to step 29.

NO - Replace the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**), then go to step 22.

22. Turn the ignition switch OFF.
23. Reconnect all connectors.
24. Install the parts in the reverse order of removal.
25. Turn the ignition switch ON (II).
26. Reset the ECM/PCM with the HDS.
27. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
28. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

    YES - If DTC P0462 is indicated, check for poor connections or loose terminals at the gauge control module and the fuel gauge sending unit, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

    NO - Troubleshooting is complete.
29. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **UPDATING THE ECM/PCM**).
30. Check for Temporary DTCs or DTCs with the HDS.

    Are any Temporary DTCs or DTCs indicated?

    YES - If DTC P0462 is indicated, check for poor connections or loose terminals at the gauge control module and the fuel gauge sending unit, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

    NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

DTC P0463: FUEL LEVEL SENSOR (FUEL GAUGE SENDING UNIT) CIRCUIT HIGH VOLTAGE (2005-2006 MODELS)

NOTE:

- **Information marked with an asterisk (*) applies to 2005 model.**

- **Information marked with double asterisk (**) applies to 2006 model.**

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS, and wait 5 seconds.
3. Check for Temporary DTCs or DTCs with the HDS.

   Is DTC P0463 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the gauge control module and the fuel gauge sending unit.
4. Turn the ignition switch OFF.
5. Remove the trunk floor trim panel.
6. Remove the access panel from the floor.
7. Disconnect the fuel tank unit 5P connector.
8. Connect fuel tank unit 5P connector terminal No. 1 to body ground with a jumper wire.

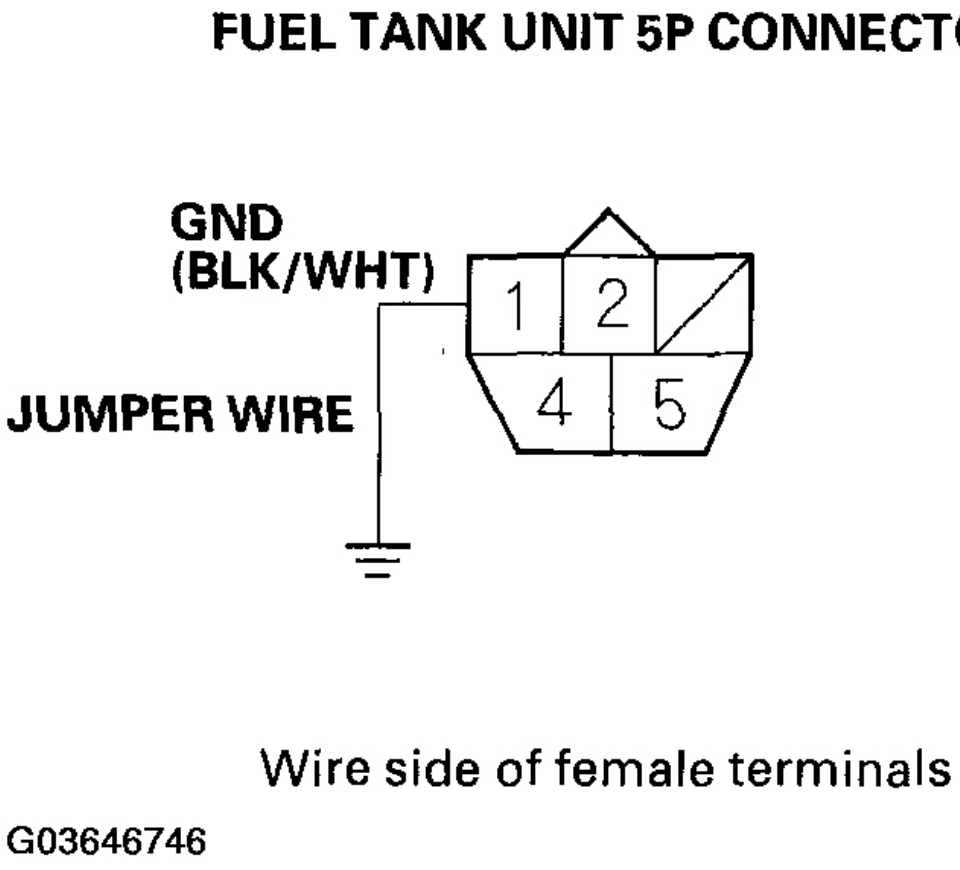


Fig. 7: Connecting Fuel Tank Unit 5P Connector Terminal No. 1 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**).
10. Disconnect the gauge control module 30P* (36P**) connector.
11. Check for continuity between gauge control module 30P* (36P**) connector terminal No. 3 and body ground.

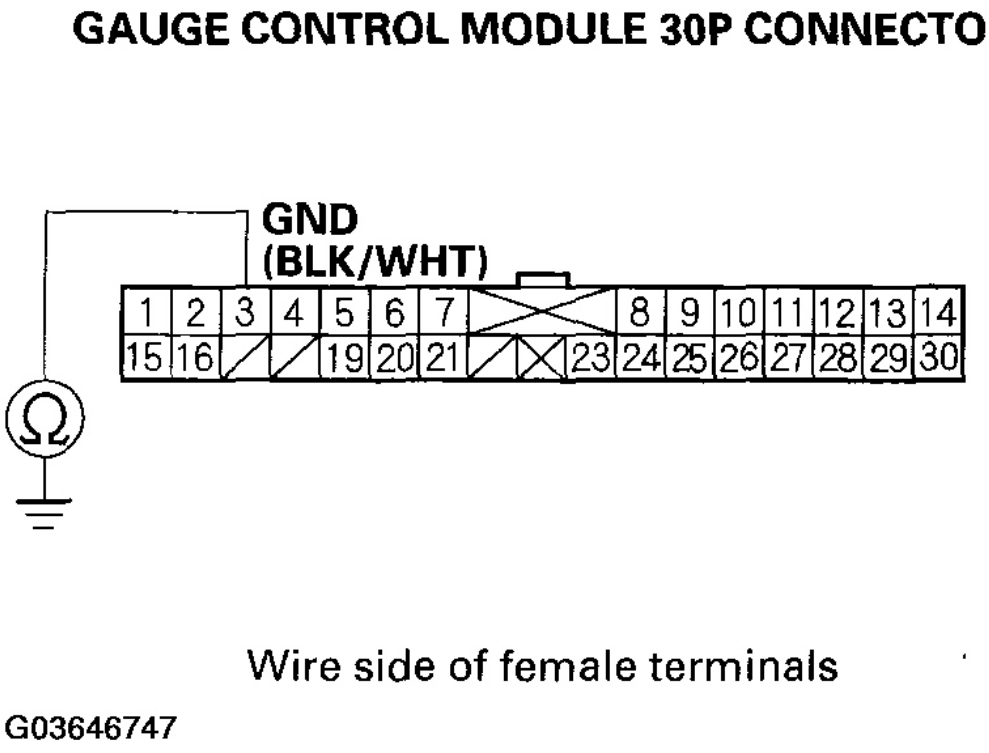


Fig. 8: Checking Continuity Between Gauge Control Module 30P* Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

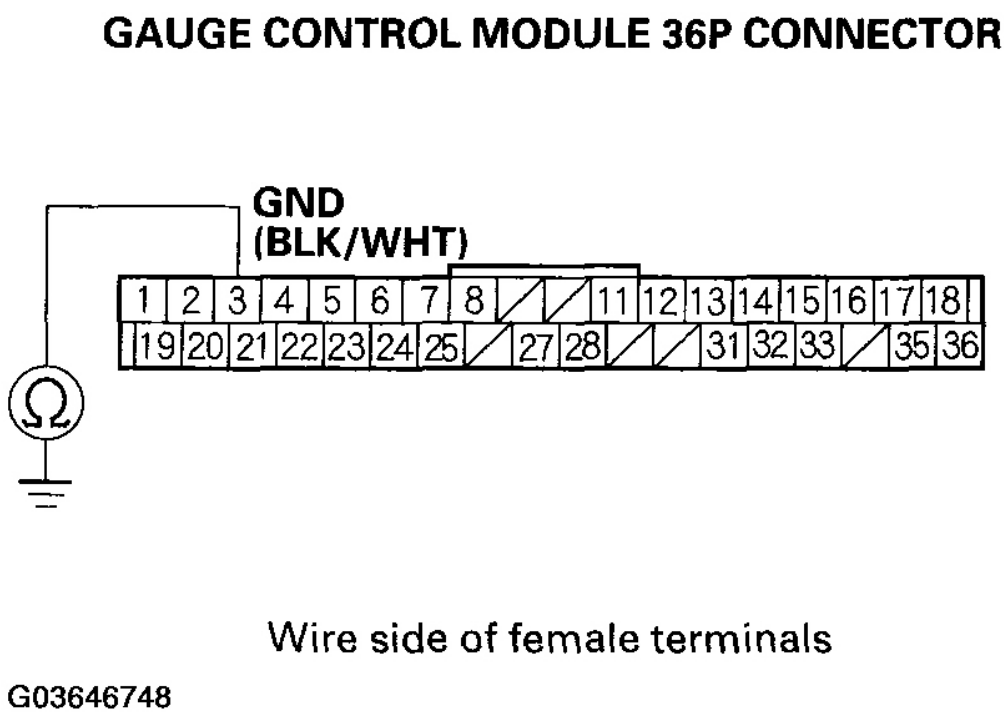


Fig. 9: Checking Continuity Between Gauge Control Module 36P Connector Terminal No. 3 And Body Ground**
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 12.

NO - Repair open in the wire between the gauge control module (GND line) and the fuel gauge sending unit, then go to step 24.

12. Connect fuel tank unit 5P connector terminal No. 2 to body ground with a jumper wire.

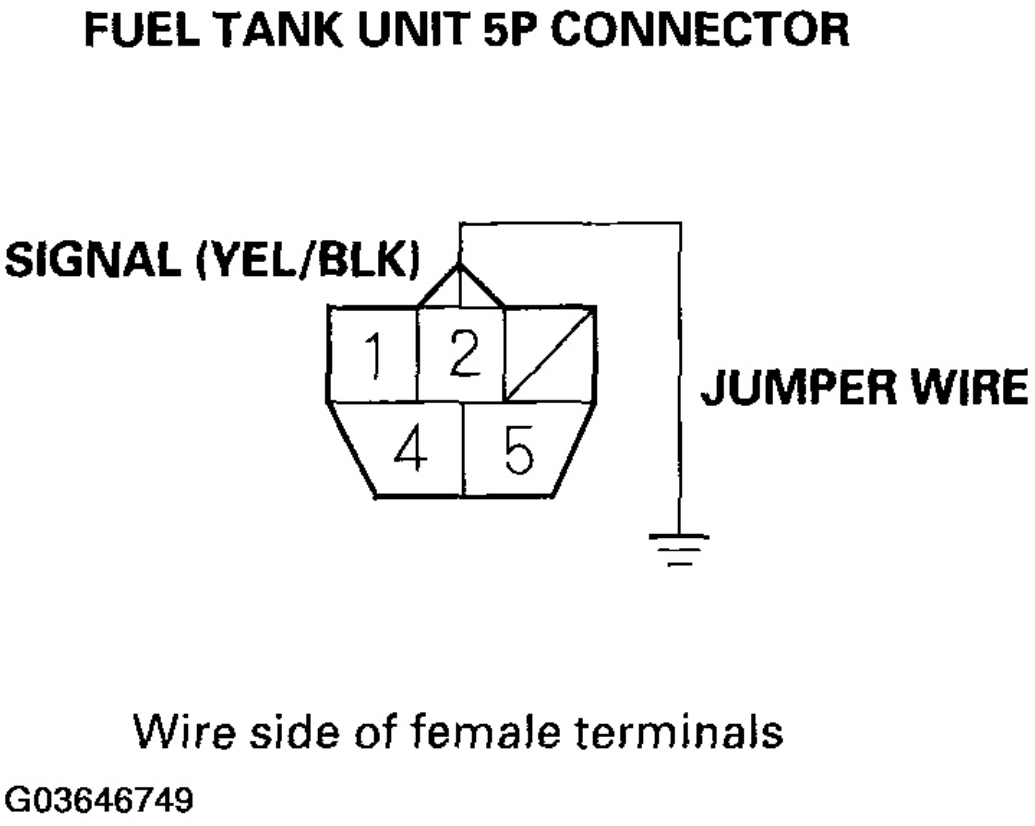


Fig. 10: Connecting Fuel Tank Unit 5P Connector Terminal No. 2 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Check for continuity between gauge control module 30P* (36P**) connector terminal No. 4 and body ground.

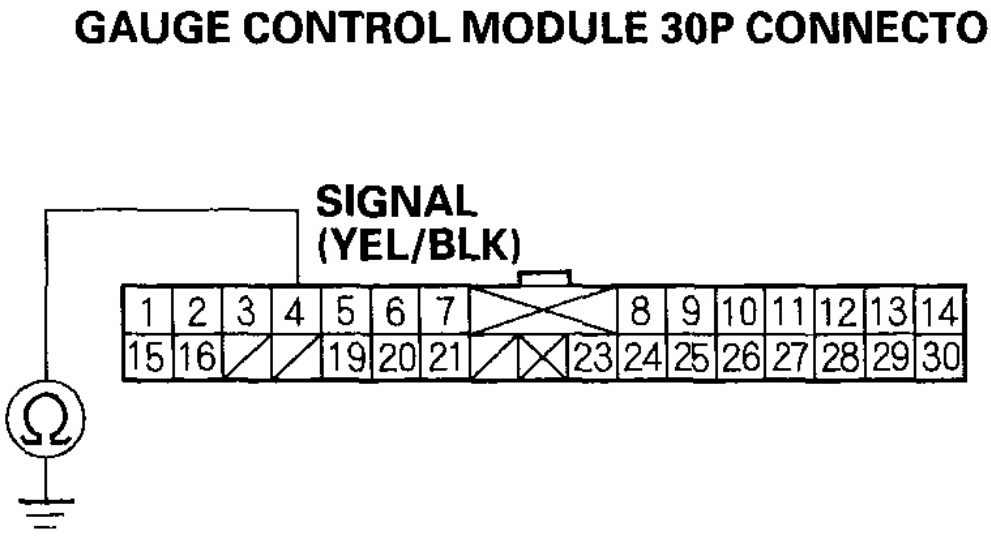


Fig. 11: Checking Continuity Between Gauge Control Module 30P* Connector Terminal No. 4 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

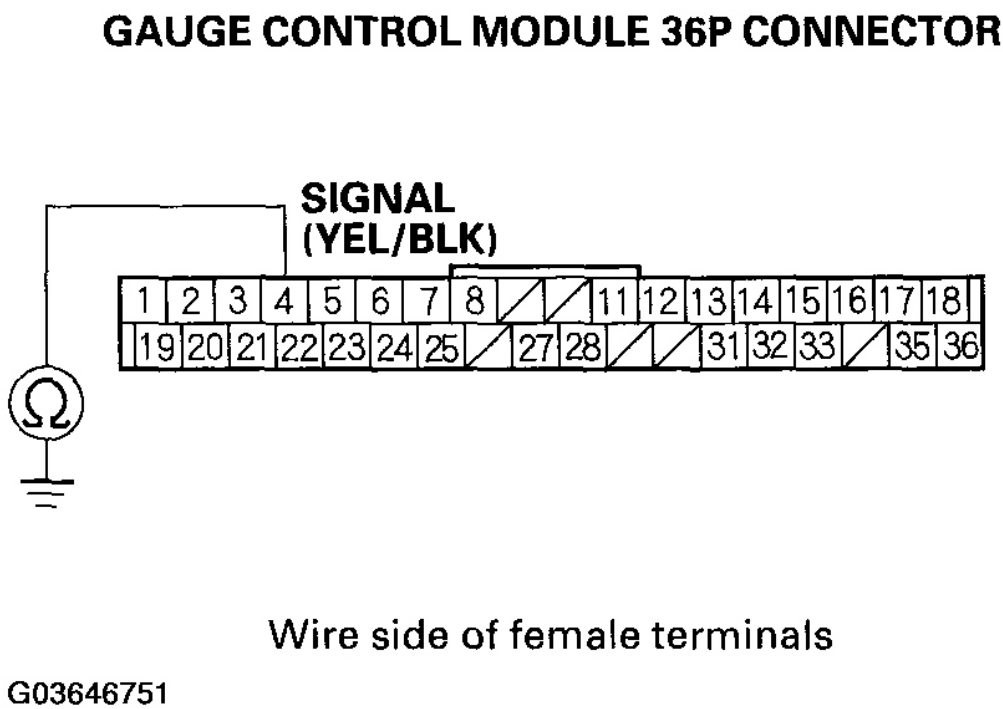


Fig. 12: Checking Continuity Between Gauge Control Module 36P Connector Terminal No. 4 And Body Ground**
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 14.

NO - Repair open in the wire between the gauge control module (signal line) and the fuel gauge sending unit, then go to step 24.

14. Remove the jumper wire from the fuel tank unit 5P connector.
15. Remove the fuel tank unit; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**).
16. Test the fuel gauge sending unit; Non-SULEV model (see **FUEL GAUGE SENDING UNIT TEST**), SULEV model (see **NON-SULEV MODEL**).

Is the fuel gauge sending unit OK?

YES - Go to step 17.

NO - Replace the fuel gauge sending unit; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**), then go to step 23.

17. Connect the fuel tank unit 5P connector.
18. Reconnect the gauge control module 30P* (36P**) connector.
19. Turn the ignition switch ON (II).
20. Clear the DTC with the HDS.
21. Set the float (A) to the F position.

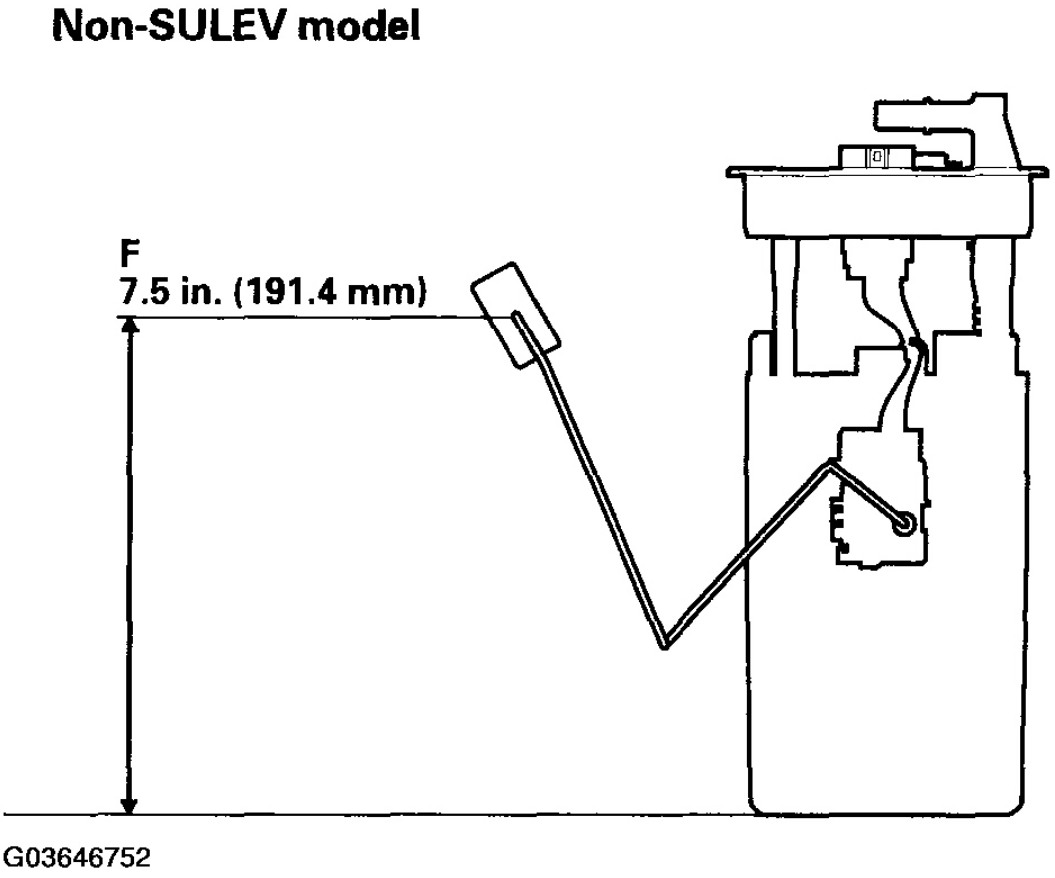


Fig. 13: Setting Float To F Position (Non-SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

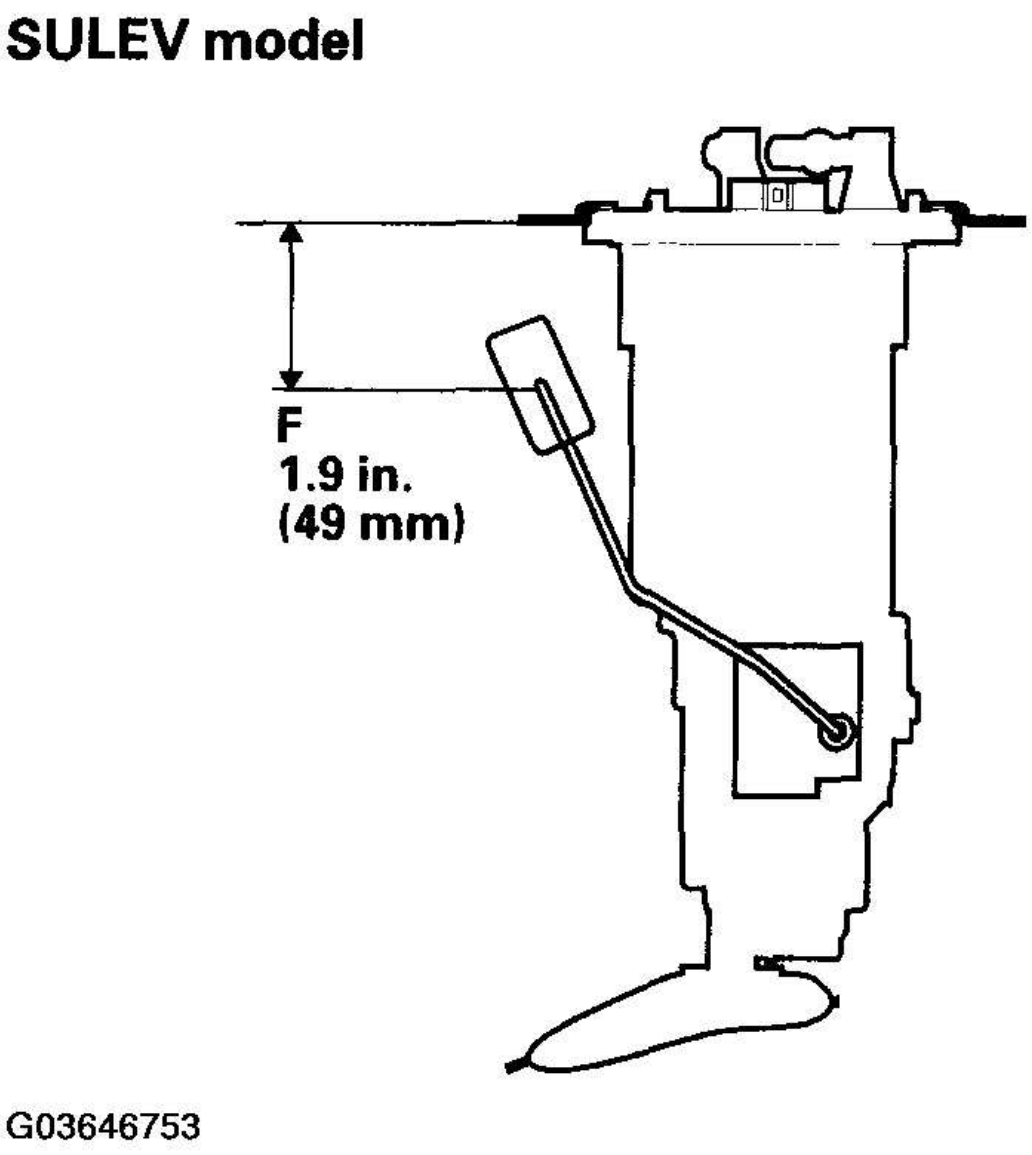


Fig. 14: Setting Float To F Position (SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Check the fuel gauge.

Does the gauge move to the full position?

YES - Go to step 30.

NO - Replace the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**), then go to step 23.

23. Turn the ignition switch OFF.
24. Reconnect all connectors.
25. Install the parts in the reverse order of removal.
26. Turn the ignition switch ON (II).
27. Reset the ECM/PCM with the HDS.
28. Do the ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
29. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0463 is indicated, check for poor connections or loose terminals at the gauge control module and the fuel gauge sending unit, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

NO - Troubleshooting is complete.

30. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **UPDATING THE ECM/PCM**).
31. Check for Temporary DTCs or DTCs with the HDS.

Are any Temporary DTCs or DTCs indicated?

YES - If DTC P0463 is indicated, check for poor connections or loose terminals at the gauge control module and the fuel gauge sending unit, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

NO - If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

FUEL PUMP CIRCUIT TROUBLESHOOTING

If you suspect a problem with the fuel pump, check that the fuel pump actually runs; when it is on, you will hear some noise if you listen to the fuel fill port with the fuel fill cap removed. The fuel pump should run for 2 seconds when the ignition switch is first turned on. If the fuel pump does not make noise, check as follows:

1. Turn the ignition switch OFF.
2. Remove the left kick panel; 2-door (see **2-DOOR - DOOR SILL AREA**) or 4-door (see **4-DOOR - FRONT DOOR SILL AREA**), then remove PGM-FI main relay 2 (FUEL PUMP) (A) from the under-dash fuse/relay box.

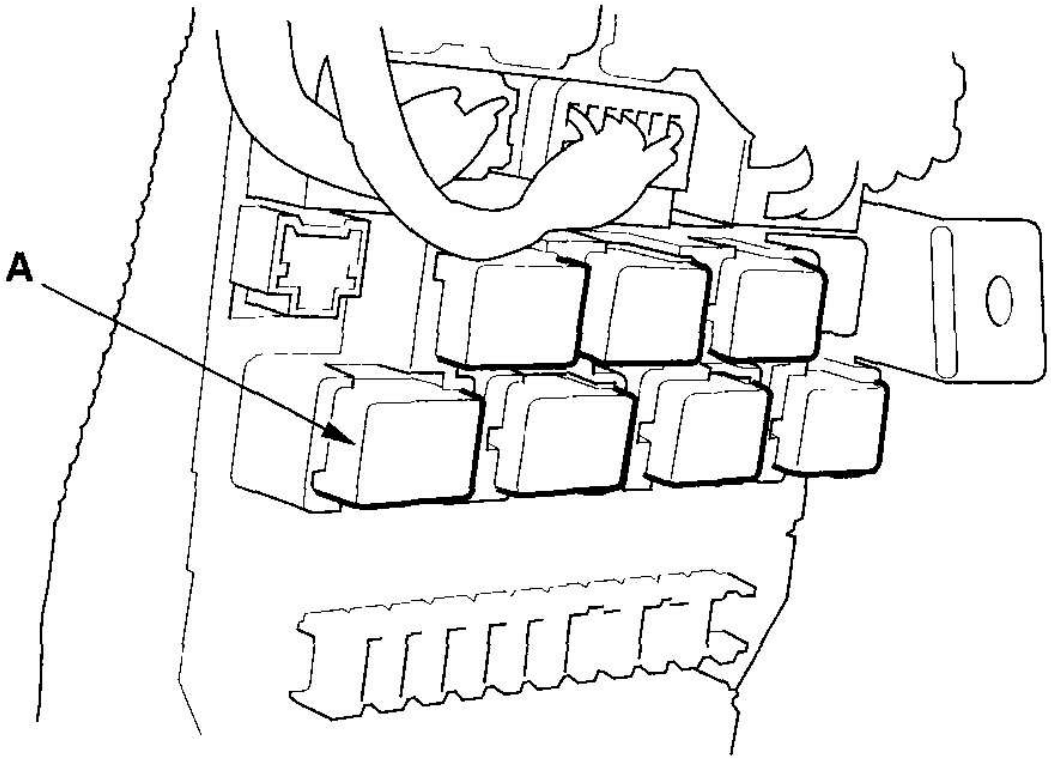


Fig. 15: Removing PGM-FI Main Relay 2 (FUEL PUMP)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch ON (II).
4. Measure voltage between PGM-FI main relay 2 (FUEL PUMP) 4P connector

terminal No. 3 and body ground.

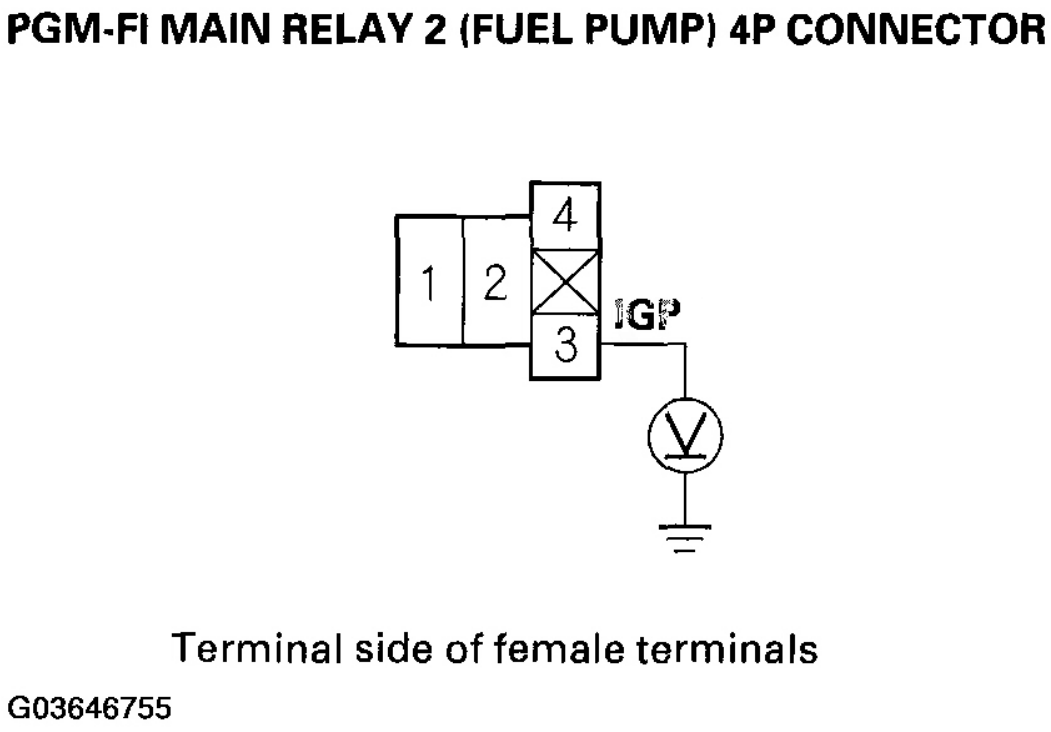


Fig. 16: Measuring Voltage Between PGM-FI Main Relay 2 (Fuel Pump) 4P Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 5.
NO -

- Replace PGM-FI main relay 1 (FI MAIN)
- If needed, replace the under-dash fuse/relay box.

5. Measure voltage between PGM-FI main relay 2 (FUEL PUMP) 4P connector terminal No. 1 and body ground.

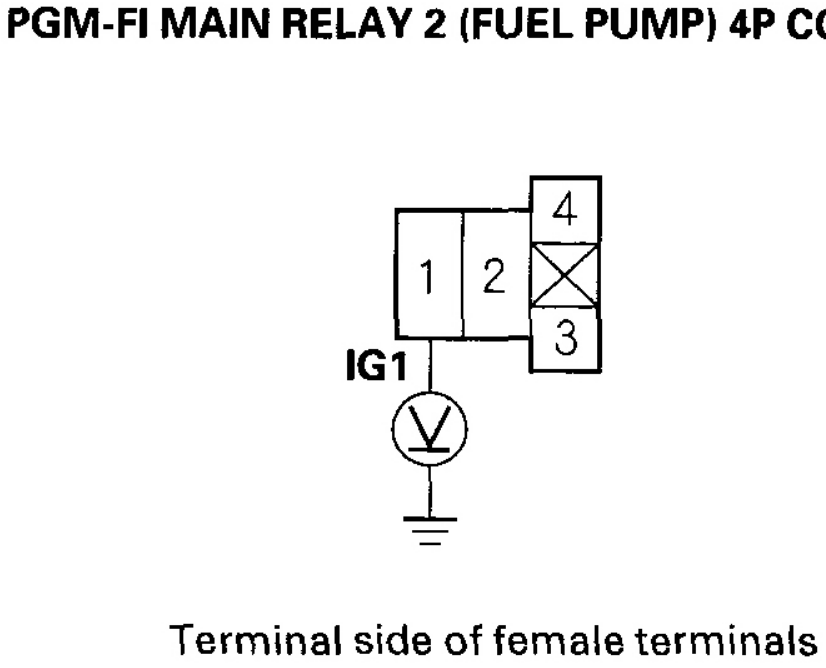


Fig. 17: Measuring Voltage Between PGM-FI Main Relay 2 (Fuel Pump) 4P Connector Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 6.

NO -

- Replace the No. 19 FUEL PUMP (15 A) fuse in the under-dash fuse/relay box.
- If needed, replace the under-dash fuse/relay box.

6. Turn the ignition switch OFF.
7. Connect PGM-FI main relay 2 (FUEL PUMP) 4P connector terminal No. 4 to body ground with a jumper wire.

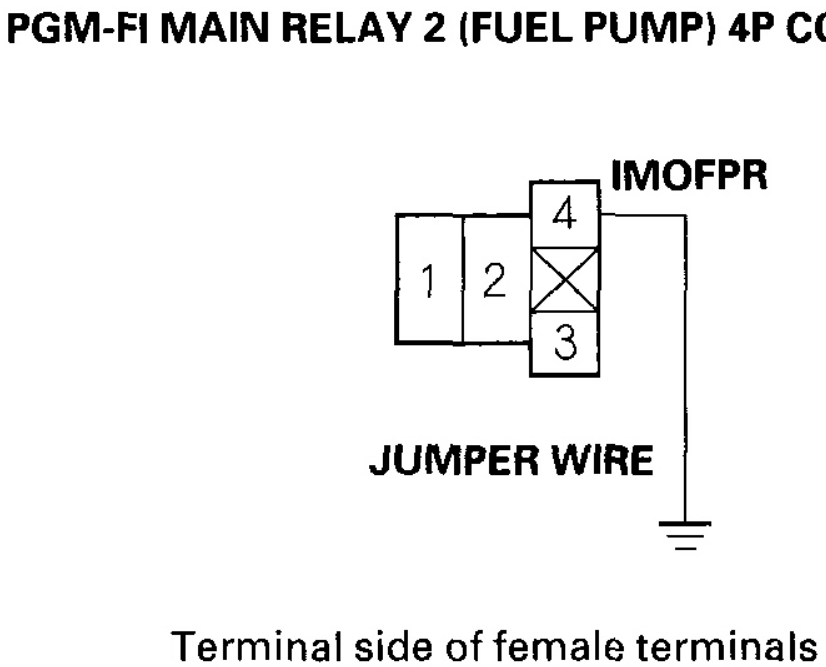


Fig. 18: Connecting PGM-FI Main Relay 2 (Fuel Pump) 4P Connector Terminal No. 4 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Turn the ignition switch OFF.
9. Jump the SCS line with the HDS.
10. Disconnect ECM/PCM connector E (31 P).
11. Check for continuity between body ground and ECM/PCM connector terminal E17.

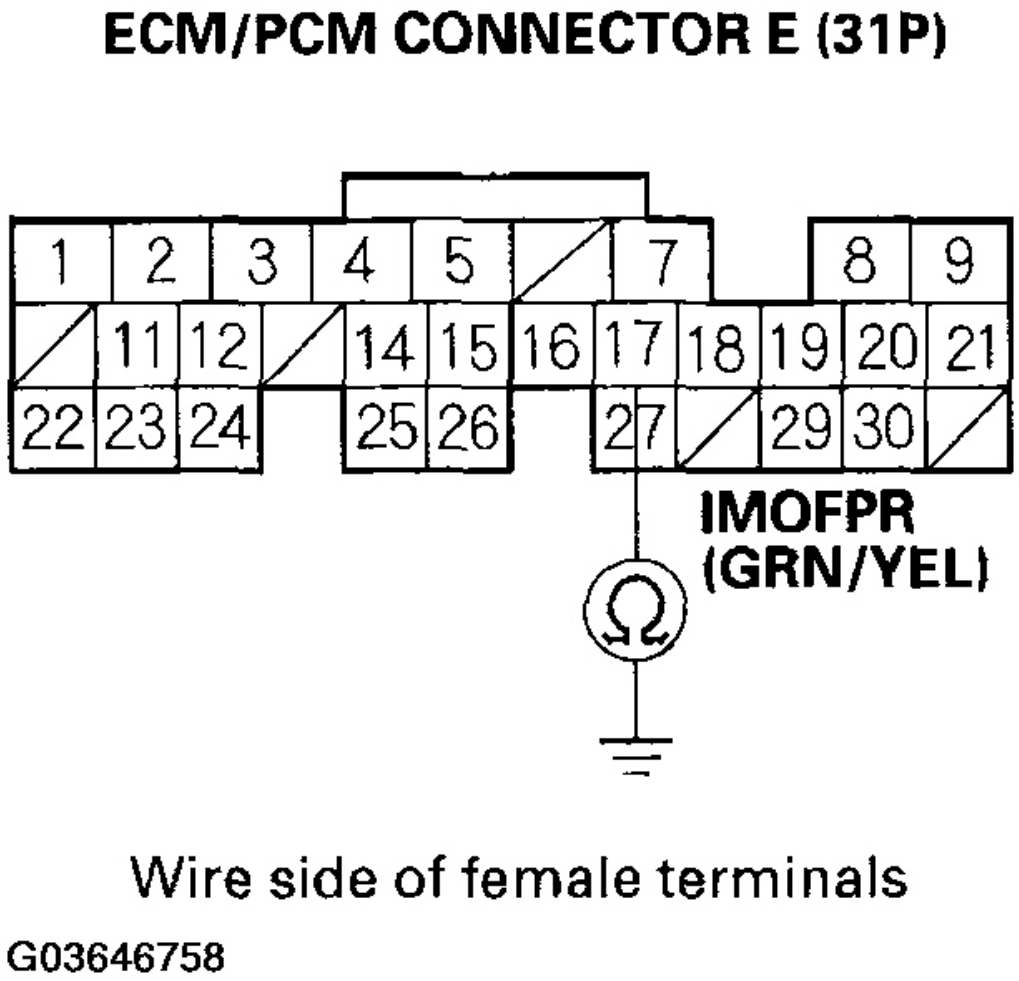


Fig. 19: Checking Continuity Between Body Ground And ECM/PCM Connector Terminal E17
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 12.

NO - Repair open in the wire between PGM-FI main relay 2 (FUEL PUMP) and the ECM/PCM (E17).

12. Reinstall PGM-FI main relay 2 (FUEL PUMP).

13. Connect ECM/PCM connector terminal E7 to body ground with a jumper wire.

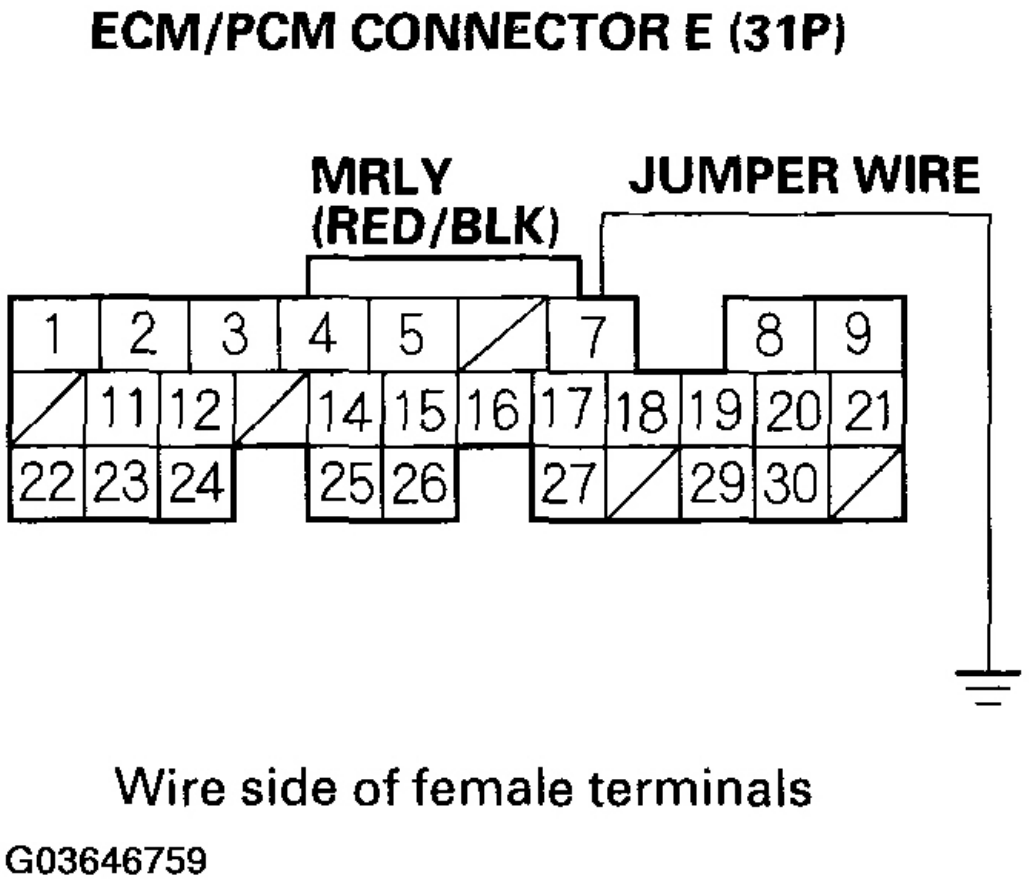


Fig. 20: Connecting ECM/PCM Connector Terminal E7 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Turn the ignition switch ON (II).
15. Measure voltage between ECM/PCM connector terminal E17 and body ground.

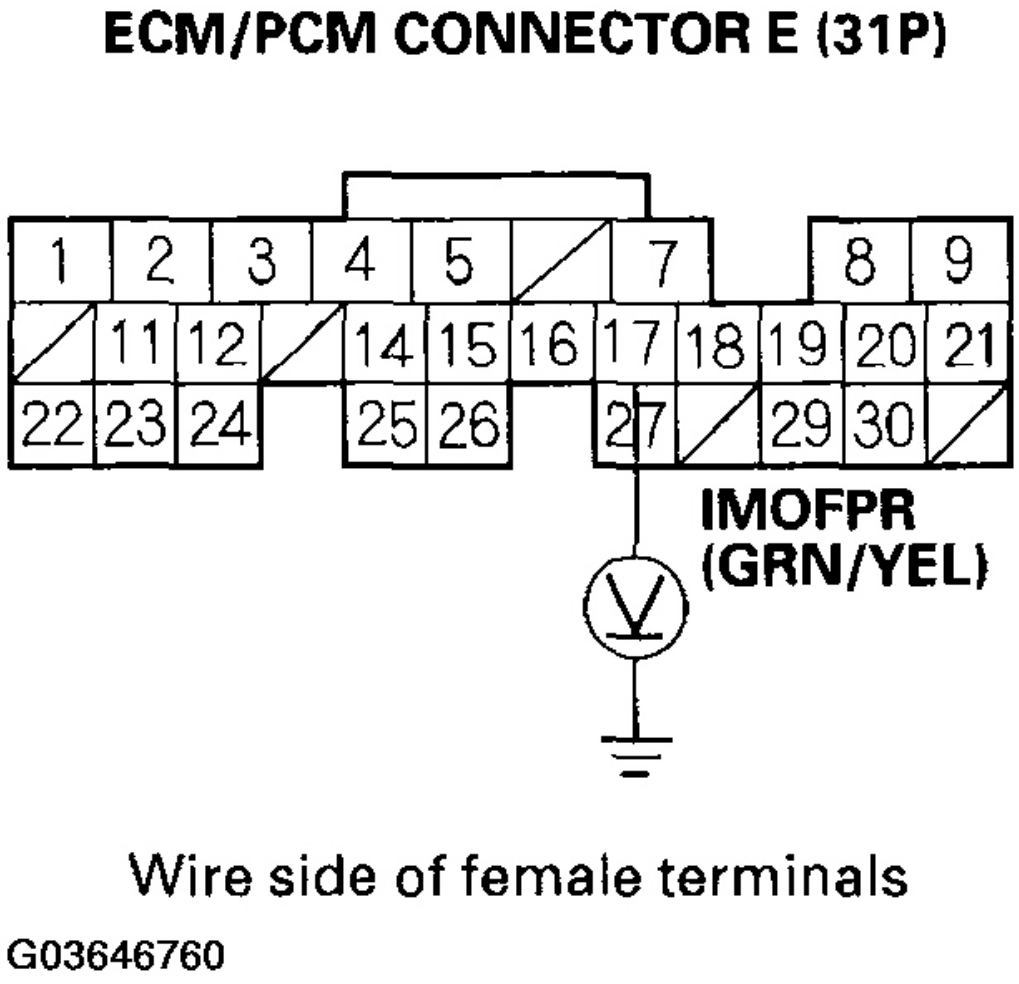


Fig. 21: Measuring Voltage Between ECM/PCM Connector Terminal E17 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 16.
NO - Replace PGM-FI main relay 2 (FUEL PUMP).

16. Turn the ignition switch OFF.
17. Reconnect ECM/PCM connector E (31P), and disconnect the jumper wire.

18. Open the SCS line with the HDS.
19. Turn the ignition switch OFF.
20. Turn the ignition switch ON (II), and measure voltage between ECM/PCM connector terminal E17 and body ground within 2 seconds.

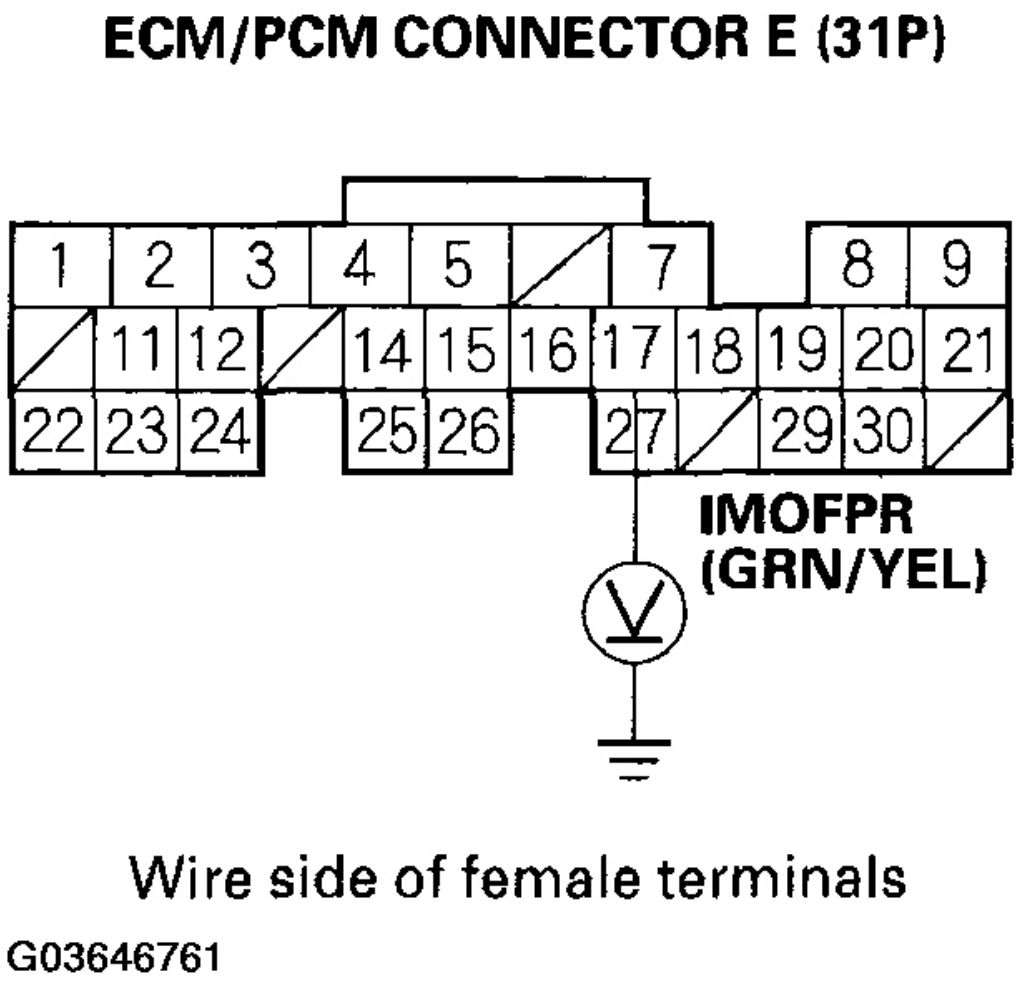


Fig. 22: Measuring Voltage Between ECM/PCM Connector Terminal E17 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see **UPDATING THE ECM/PCM**), then recheck. If the symptom/indication goes away with a known-good ECM/PCM, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**), then go to step 21.

NO - If needed, replace the under-dash fuse/relay box, then go to step 21.

21. Turn the ignition switch OFF.
22. Remove the trunk floor.
23. Remove the access panel from the floor; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**).
24. Turn the ignition switch ON (II), and measure voltage between fuel pump 5P connector terminal No. 5 and body ground within 2 seconds.

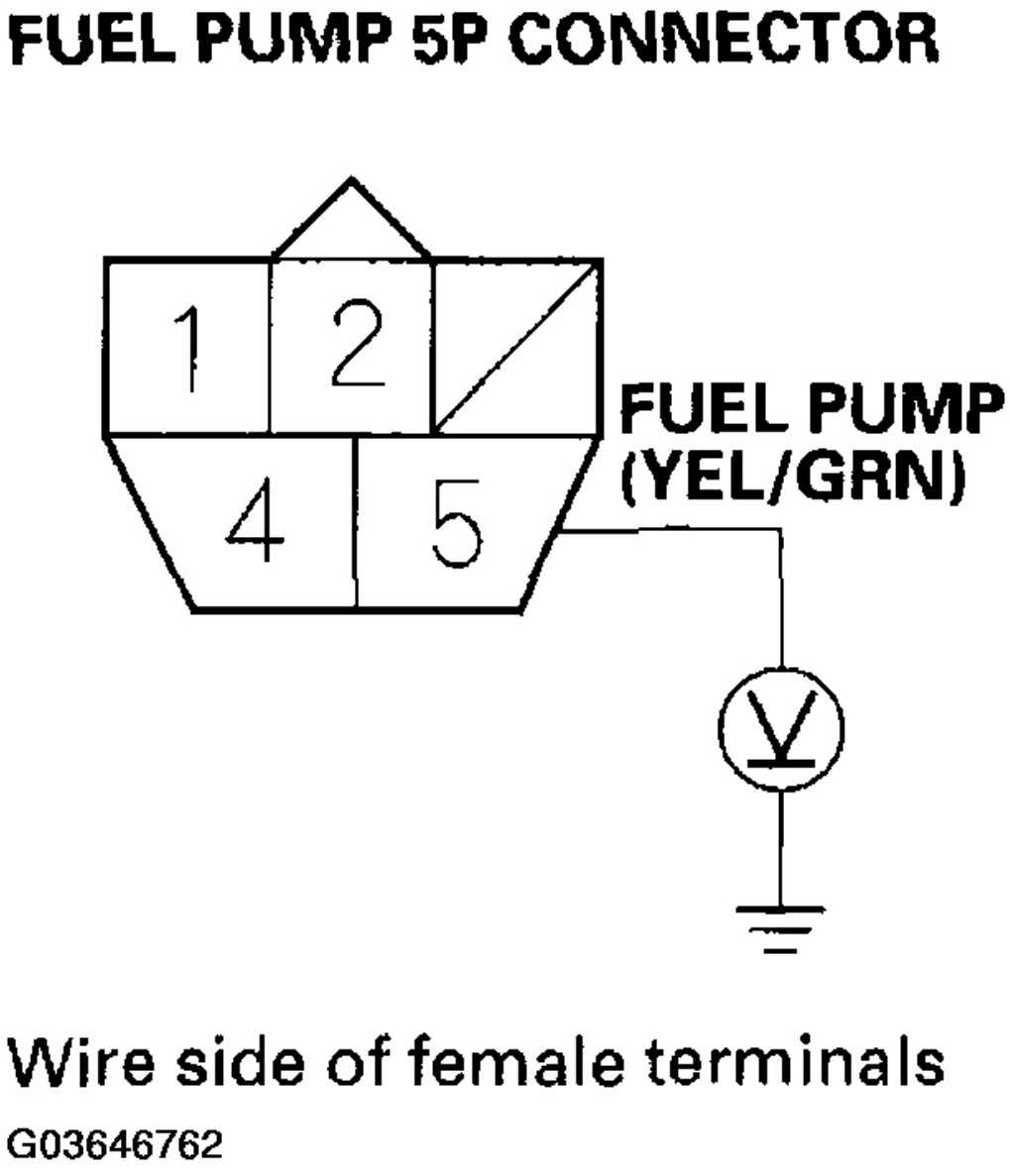


Fig. 23: Measuring Voltage Between Fuel Pump 5P Connector Terminal No. 5 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 29.

NO - Go to step 25.

25. Turn the ignition switch OFF.
26. Remove PGM-FI main relay 2 (FUEL PUMP).
27. Connect PGM-FI main relay 2 (FUEL PUMP) 4P connector terminals No. 1 and No. 2 with a jumper wire.

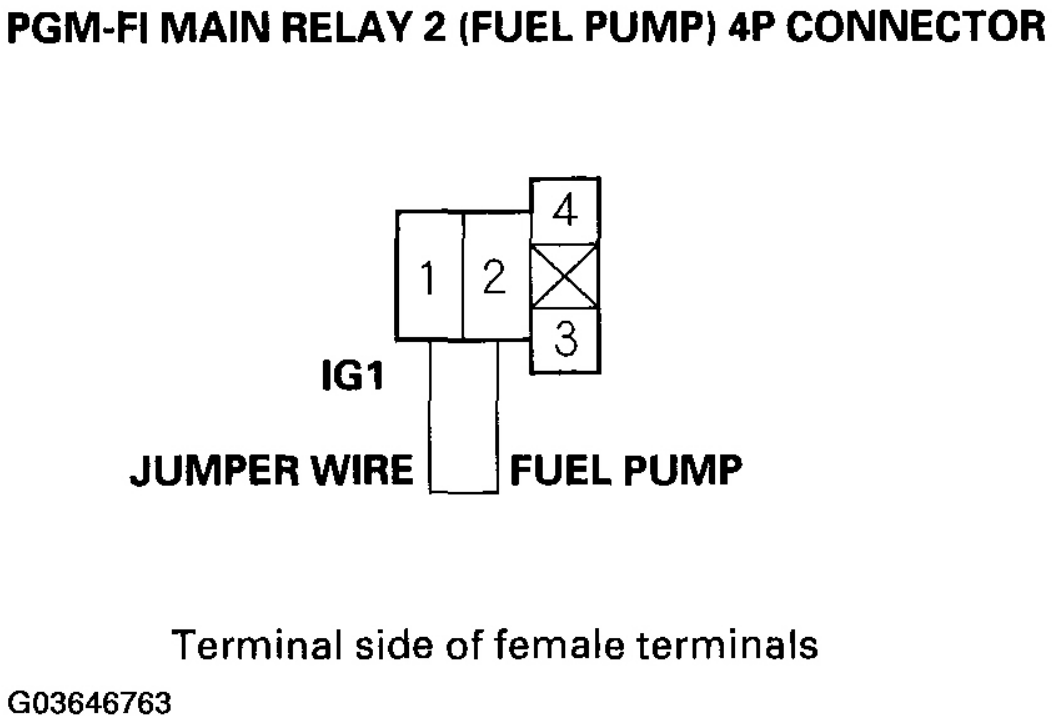


Fig. 24: Connecting PGM-FI Main Relay 2 (Fuel Pump) 4P Connector Terminals No. 1 And No. 2 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

28. Turn the ignition switch ON (II), and measure voltage between fuel pump 5P connector terminal No. 5 and body ground.

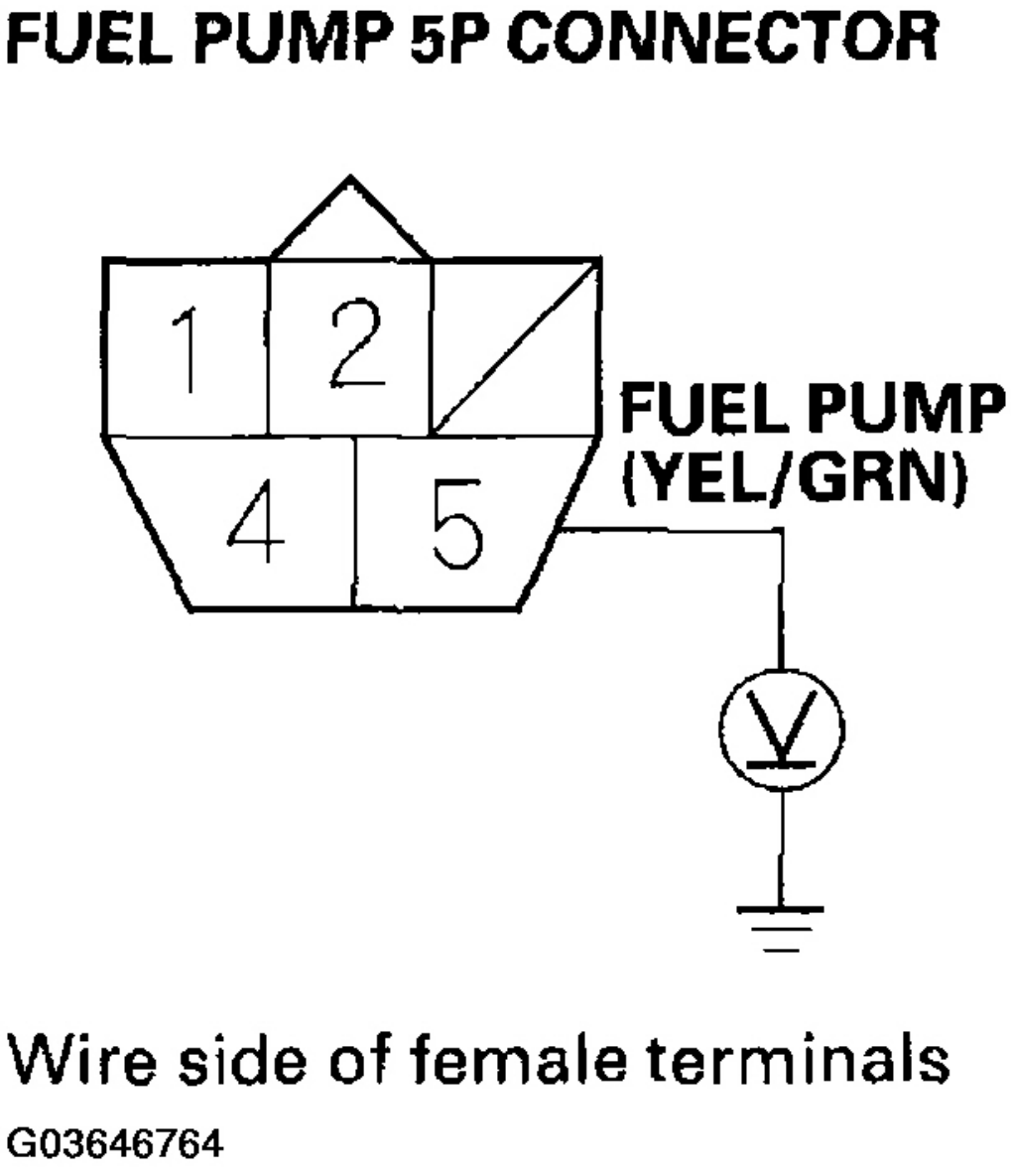


Fig. 25: Measuring Voltage Between Fuel Pump 5P Connector Terminal No. 5 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Replace PGM-FI main relay 2 (FUEL PUMP).

NO - Repair open in the wire between PGM-FI main relay 2 (FUEL PUMP) and the fuel pump 5P connector.

29. Turn the ignition switch OFF.
30. Check for continuity between fuel pump 5P connector terminal No. 4 and body ground.

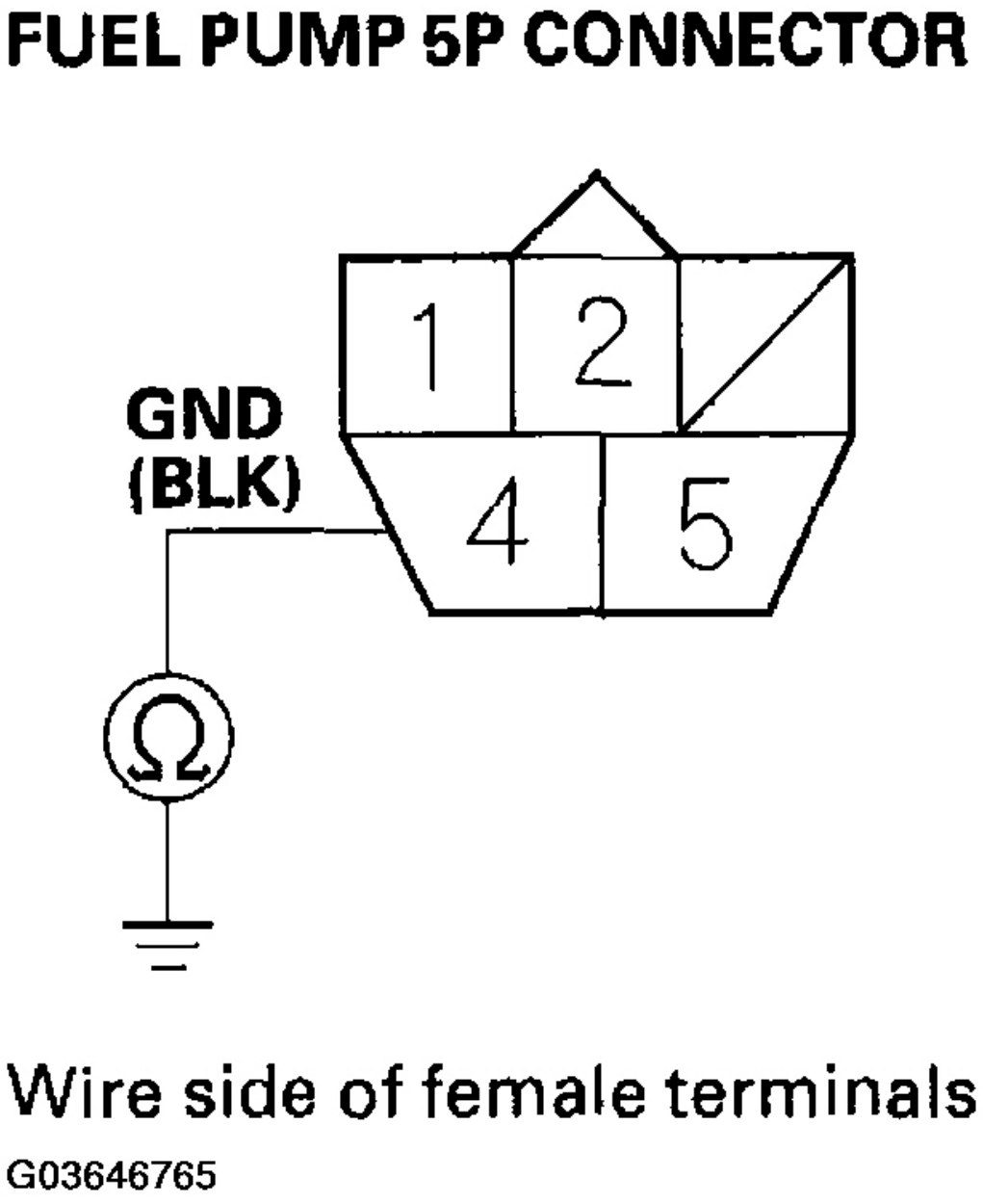


Fig. 26: Checking Continuity Between Fuel Pump 5P Connector Terminal No. 4 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the fuel pump.

NO - Repair open in the wire between the fuel pump 5P connector and G603.

FUEL PRESSURE RELIEVING

Before disconnecting fuel lines or hoses, relieve pressure from the system by stopping the fuel pump and disconnecting the fuel tube/quick connect fitting in the engine compartment.

WITH THE HDS

1. Remove the fuel fill cap.
2. Turn the ignition switch ON (II).
3. From the INSPECTION MENU of the HDS, select Fuel Pump OFF, then start the engine, and let it idle until it stalls.
4. Turn the ignition switch OFF.

NOTE:

- **Do not allow the engine to idle above 1,000 rpm or the ECM/PCM will continue to operate the fuel pump.**
- **A DTC or a Temporary DTC may be set during this procedure. Check for DTCs, and clear them as needed (see GENERAL TROUBLESHOOTING INFORMATION).**

5. Turn the ignition switch OFF.
6. Make sure you have the anti-theft code for the radio and the navigation system (if equipped), then write down the frequencies for the radio's preset buttons.
7. Disconnect the negative cable from the battery.
8. Remove the quick-connect fitting cover (A).

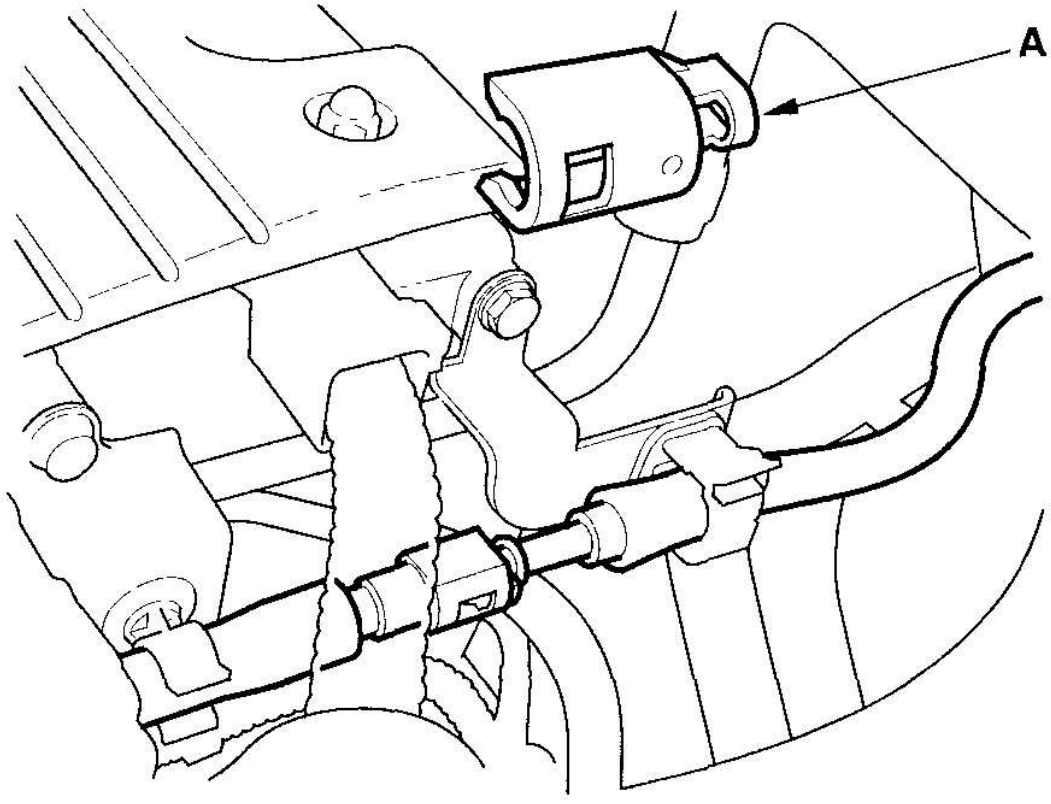
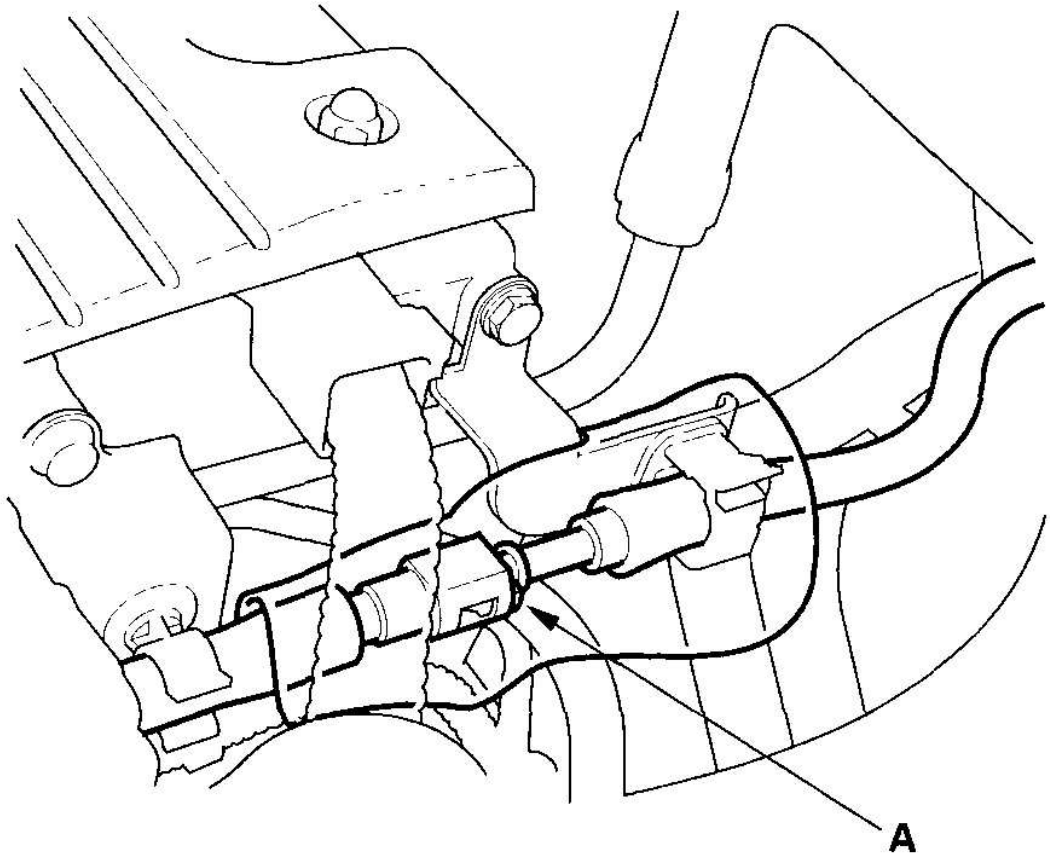


Fig. 27: Removing Quick-Connect Fitting Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Check the fuel quick-connect fitting for dirt, and clean it if needed.
10. Place a rag or shop towel over the quick-connect fitting (A).



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Fig. 28: Placing Rag Or Shop Towel Over Quick-Connect Fitting
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Disconnect the quick-connect fitting (A): Hold the connector (B) with one hand, and squeeze the retainer tabs (C) with the other hand to release them from the locking tabs (D). Pull the connector off.

NOTE:

- **Be careful not to damage the line (E) or other parts.**
- **Do not use tools.**
- **If the connector does not move, keep the retainer tabs pressed down, and alternately pull and push the connector until it comes off easily.**

- **Do not remove the retainer from the line; once removed, the retainer must be replaced with a new one.**

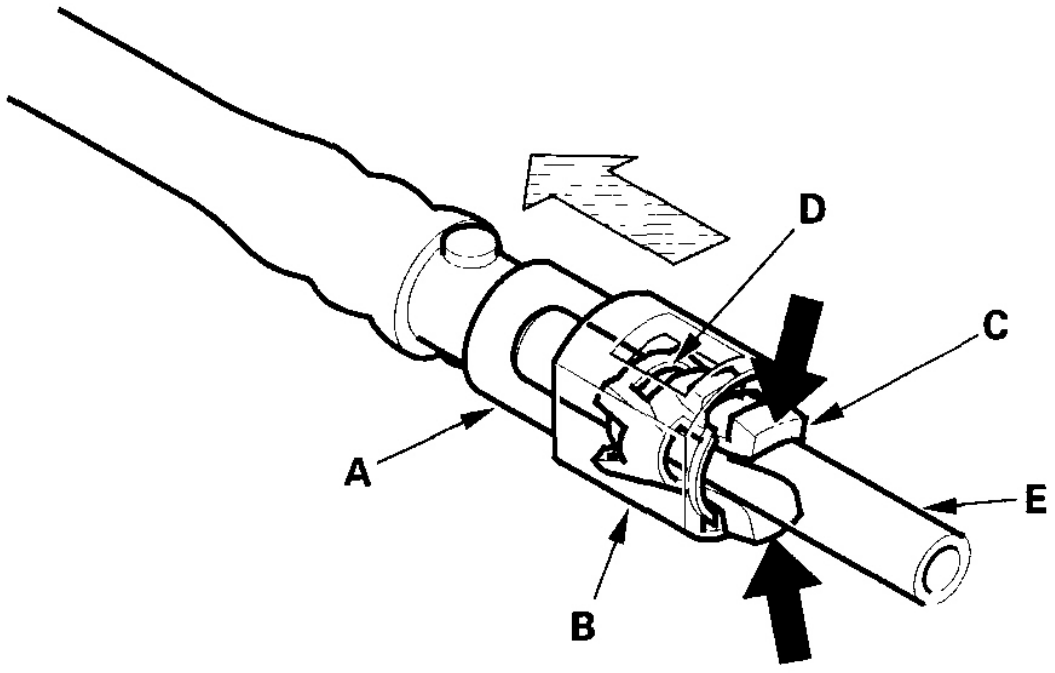


Fig. 29: Disconnecting Quick-Connect Fitting
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. After disconnecting the quick-connect fitting, check it for dirt or damage (see step 4 in **Fuel Line/Quick-Connect Fitting Removal**).
13. Reconnect the negative cable to the battery, and do these items:
    - Power window control unit reset procedure (see **RESETTING THE POWER WINDOW CONTROL UNIT**).
    - Enter the anti-theft codes for the radio and the navigation system, then enter the customer's radio station presets.
    - Reset the clock.

WITHOUT THE HDS

1. Make sure you have the anti-theft code for the radio, and the navigation system (if equipped) then write down the frequencies for the radio's preset buttons.
2. Remove the left kick panel; 2-door (see **2-DOOR - DOOR SILL AREA**) or 4-door (see **4-DOOR - FRONT DOOR SILL AREA**), then remove PGM-FI main relay 2 (FUEL PUMP) (A) from the under-dash fuse/relay box.

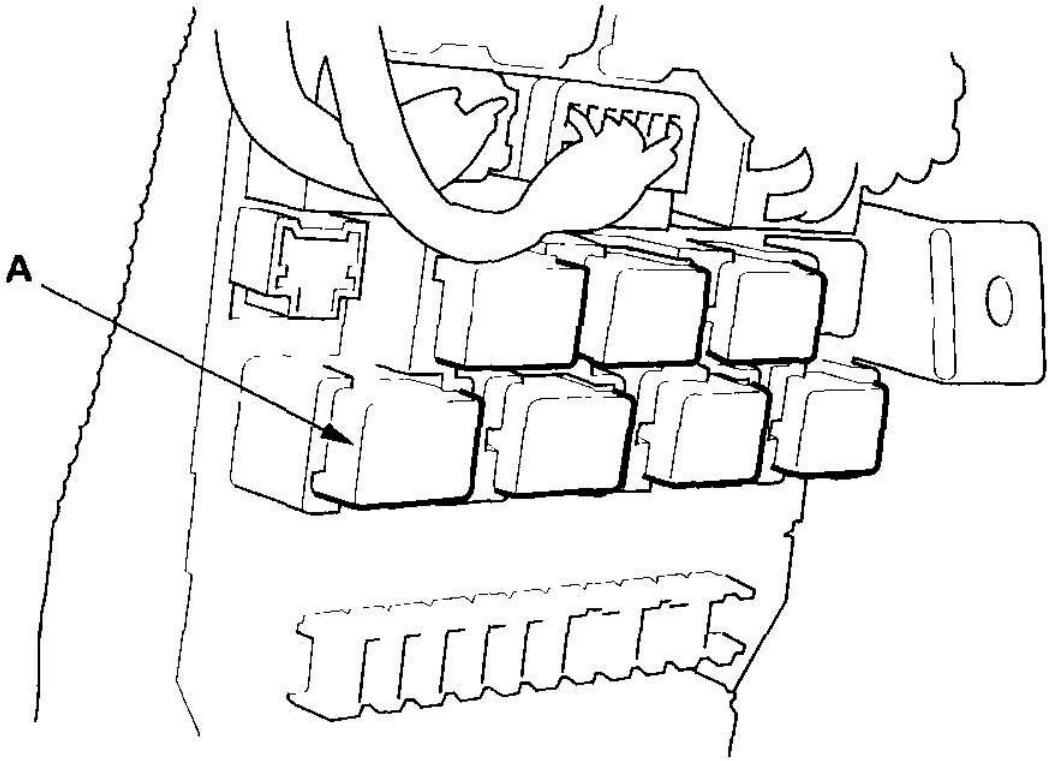


Fig. 30: Removing PGM-FI Main Relay 2 (Fuel Pump)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Start the engine, and let it idle until it stalls.

NOTE: If any DTCs are stored, clear and ignore them.

4. Turn the ignition switch OFF.
5. Remove the fuel fill cap.
6. Disconnect the negative cable from the battery.
7. Remove the quick-connect fitting cover (A).

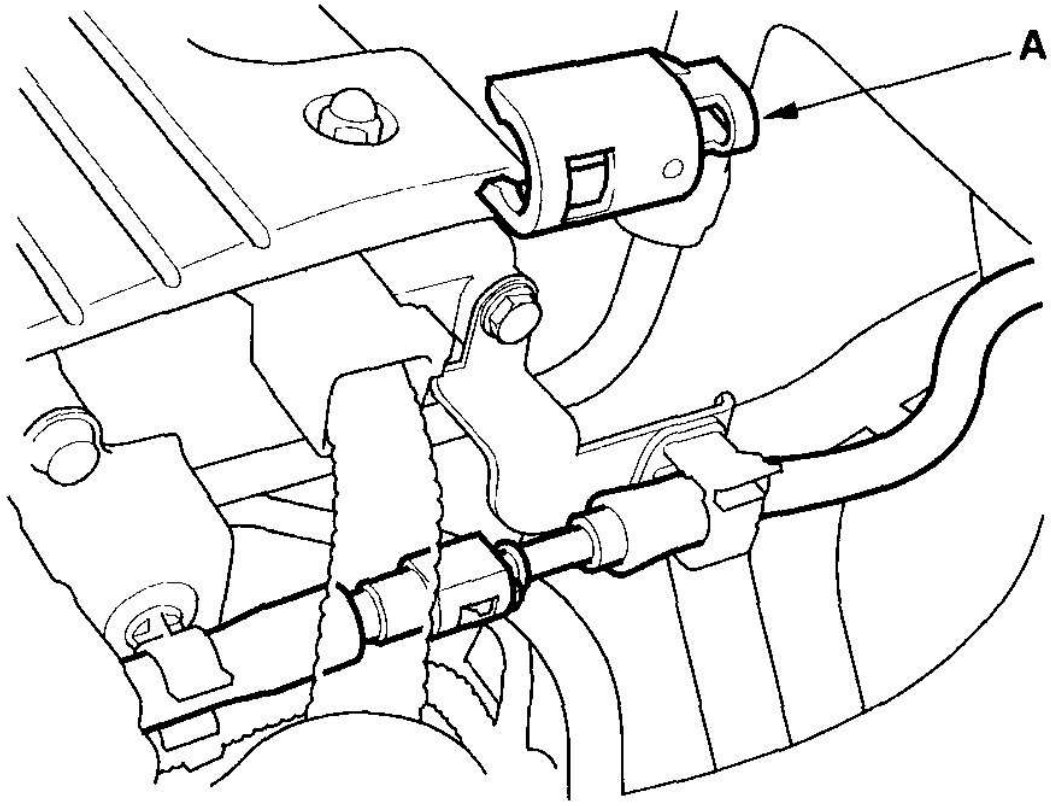
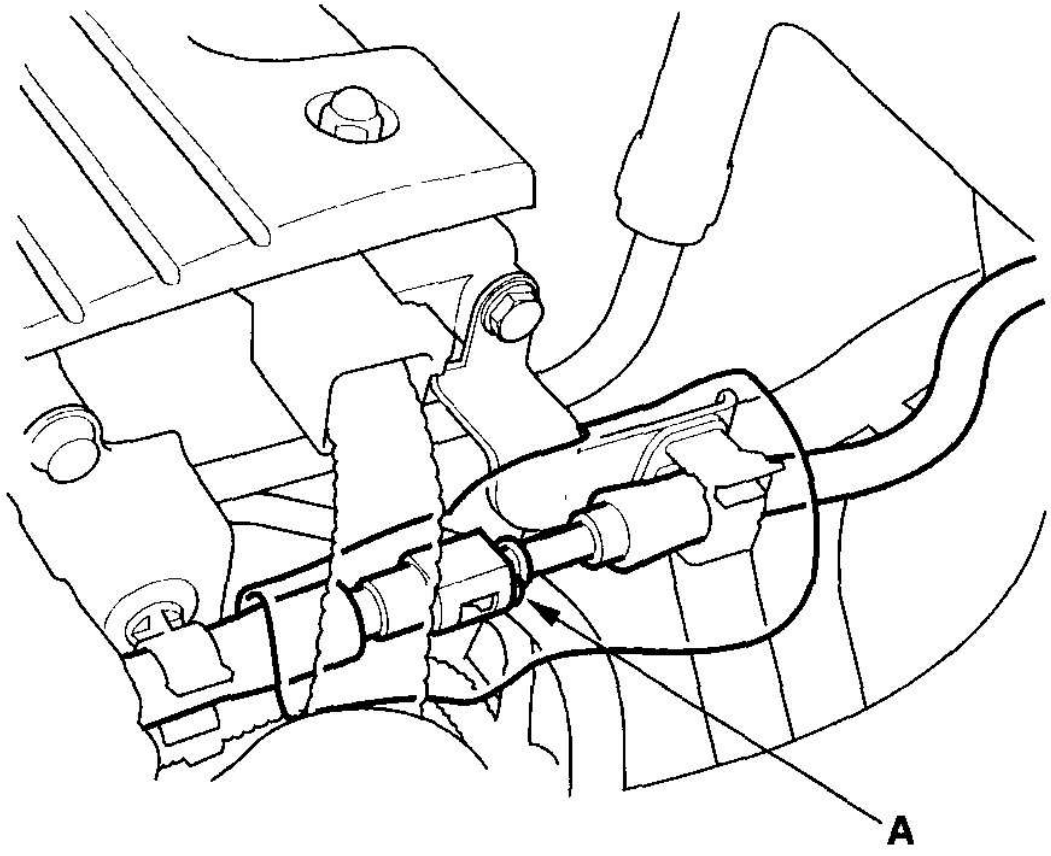


Fig. 31: Removing Quick-Connect Fitting Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Check the fuel quick-connect fitting for dirt, and clean it if needed.
9. Place a rag or shop towel over the quick-connect fitting (A).



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Fig. 32: Placing Rag Or Shop Towel Over Quick-Connect Fitting
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Disconnect the quick-connect fitting (A): Hold the connector (B) with one hand, and squeeze the retainer tabs (C) with the other hand to release them from the locking tabs (D). Pull the connector off.

NOTE:

- **Be careful not to damage the line (E) or other parts.**
- **Do not use tools.**
- **If the connector does not move, keep the retainer tabs pressed down, and alternately pull and push the connector until it comes off easily.**

- **Do not remove the retainer from the line; once removed, the retainer must be replaced with a new one.**

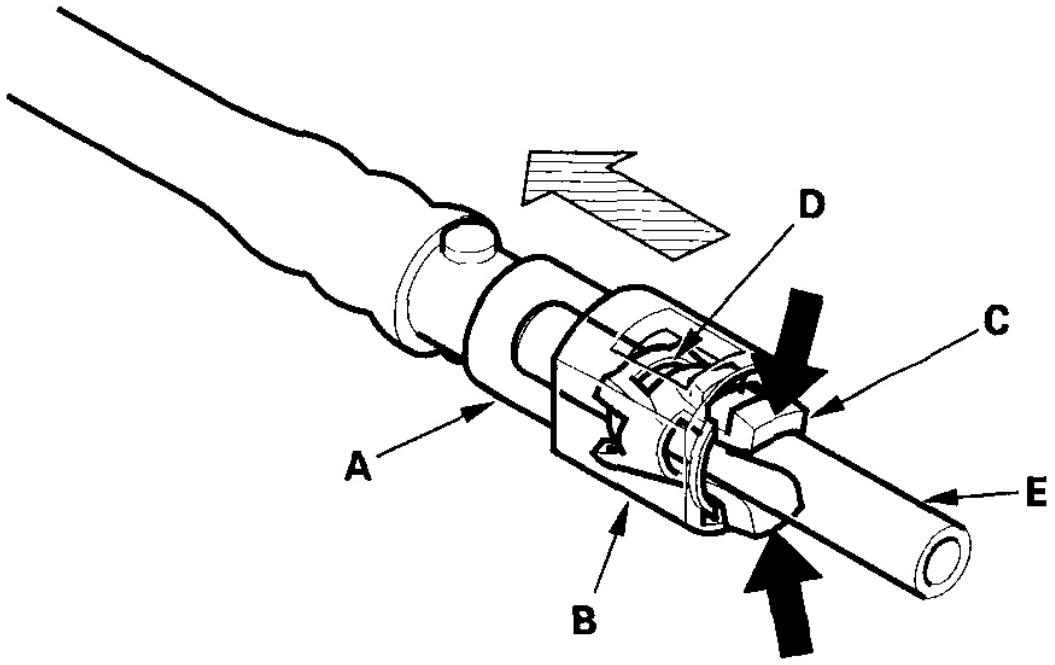


Fig. 33: Disconnecting Quick-Connect Fitting
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. After disconnecting the quick-connect fitting, check it for dirt or damage (see step 4 in **Fuel Line/Quick-Connect Fitting Removal**).
12. Reconnect the negative cable to the battery, and do these items:
    - Power window control unit reset procedure (see **RESETTING THE POWER WINDOW CONTROL UNIT**).
    - Enter the anti-theft codes for the radio and the navigation system, then enter the customer's radio station presets.
    - Reset the clock.

FUEL PRESSURE TEST

Special Tools Required

- Fuel pressure gauge 07406-004000A
- Fuel pressure gauge attachment set 07AAJ-S6MA150

1. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
2. Disconnect the quick-connect fitting. Attach the fuel pressure gauge set and the fuel pressure gauge.

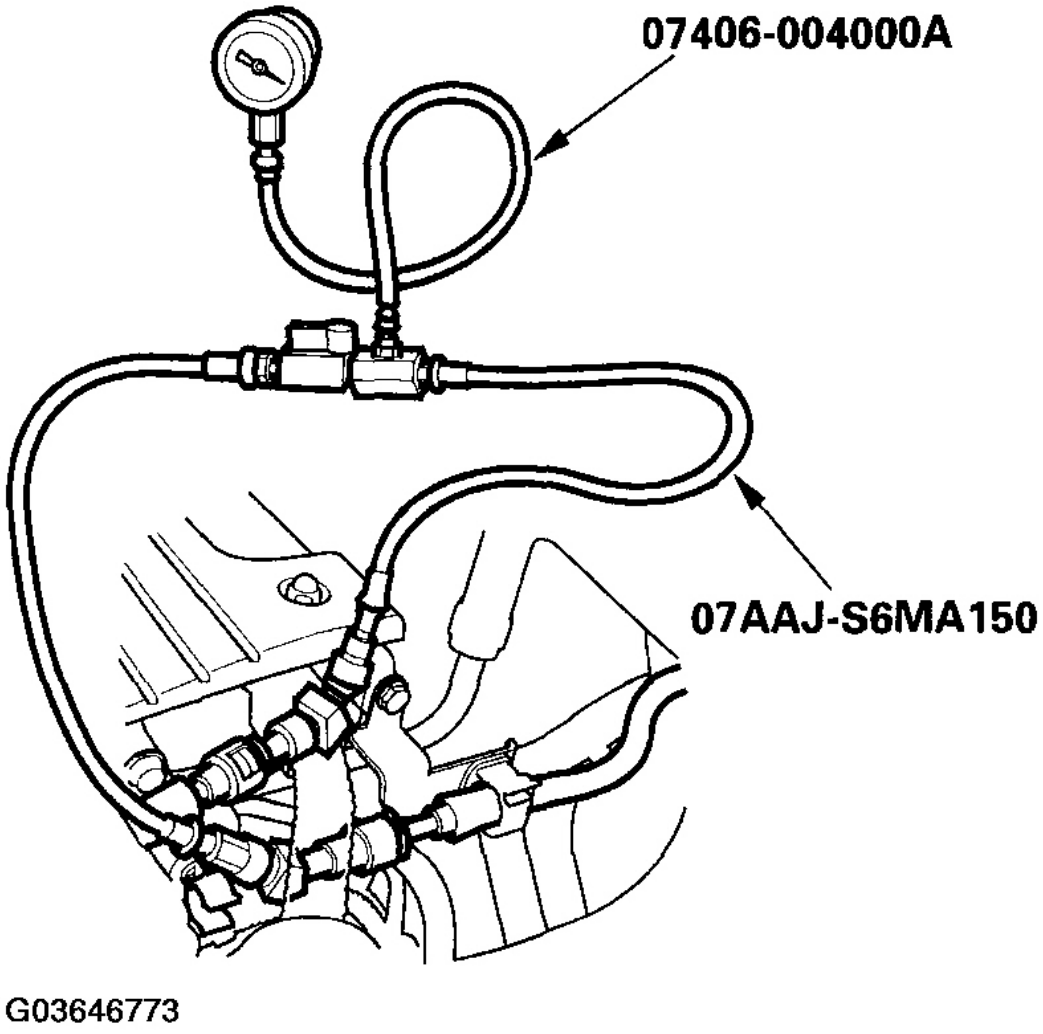


Fig. 34: Attaching Fuel Pressure Gauge Set And Fuel Pressure Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Start the engine, and let it idle.
   - If the engine starts, go to step 5.
   - If the engine does not start, go to step 4.
4. Check to see if the fuel pump is running: Listen to the fuel filler port with the fuel fill cap removed. The fuel pump should run for 2 seconds when the ignition switch is first turned on.

- If the pump runs, go to step 5.
- If the pump does not run, do the fuel pump circuit troubleshooting (see **FUEL PUMP CIRCUIT TROUBLESHOOTING**).

5. Read the fuel pressure gauge. The pressure should be:

   2003-2004 SULEV models and 2006 (except SULEV) model

   320-370 kPa (3.3-3.8 kgf/cm^2 , 47-54 psi)

   2003-2004 (except SULEV) models, 2005 model, and 2006 SULEV model

   330-380 kPa (3.4-3.9 kgf/cm^2 , 48-55 psi)

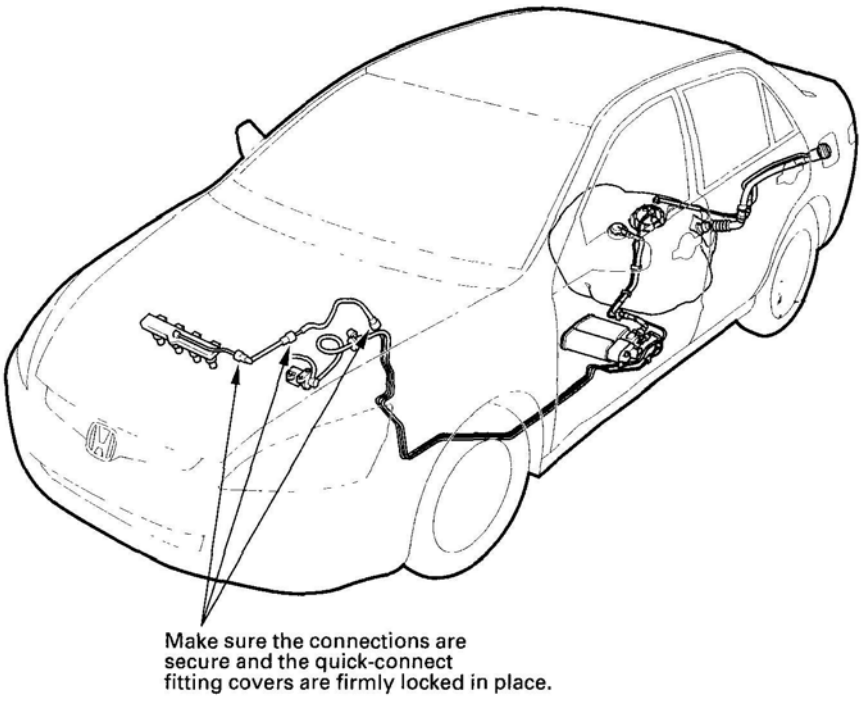
   - If the pressure is OK, the test is complete.
   - If the pressure is out of specification, replace the fuel pressure regulator; Non-SULEV model (see **FUEL PRESSURE REGULATOR REPLACEMENT**) or SULEV model (see **FUEL PRESSURE REGULATOR REPLACEMENT**) and the fuel filter (see **FUEL FILTER REPLACEMENT**), then recheck the fuel pressure.

FUEL TANK DRAINING

1. Remove the fuel tank unit; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**).
2. Using a hand pump, a hose, and a container suitable for fuel, draw the fuel from the fuel tank.
3. Install the fuel tank unit; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**).

FUEL LINE INSPECTION

Check the fuel system lines and hoses for damage, leaks, and deterioration. Replace any damaged parts.



*: This illustration shows non-SULEV model.

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Fig. 35: Checking Fuel System Lines And Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Check all clamps, and retighten any if necessary.

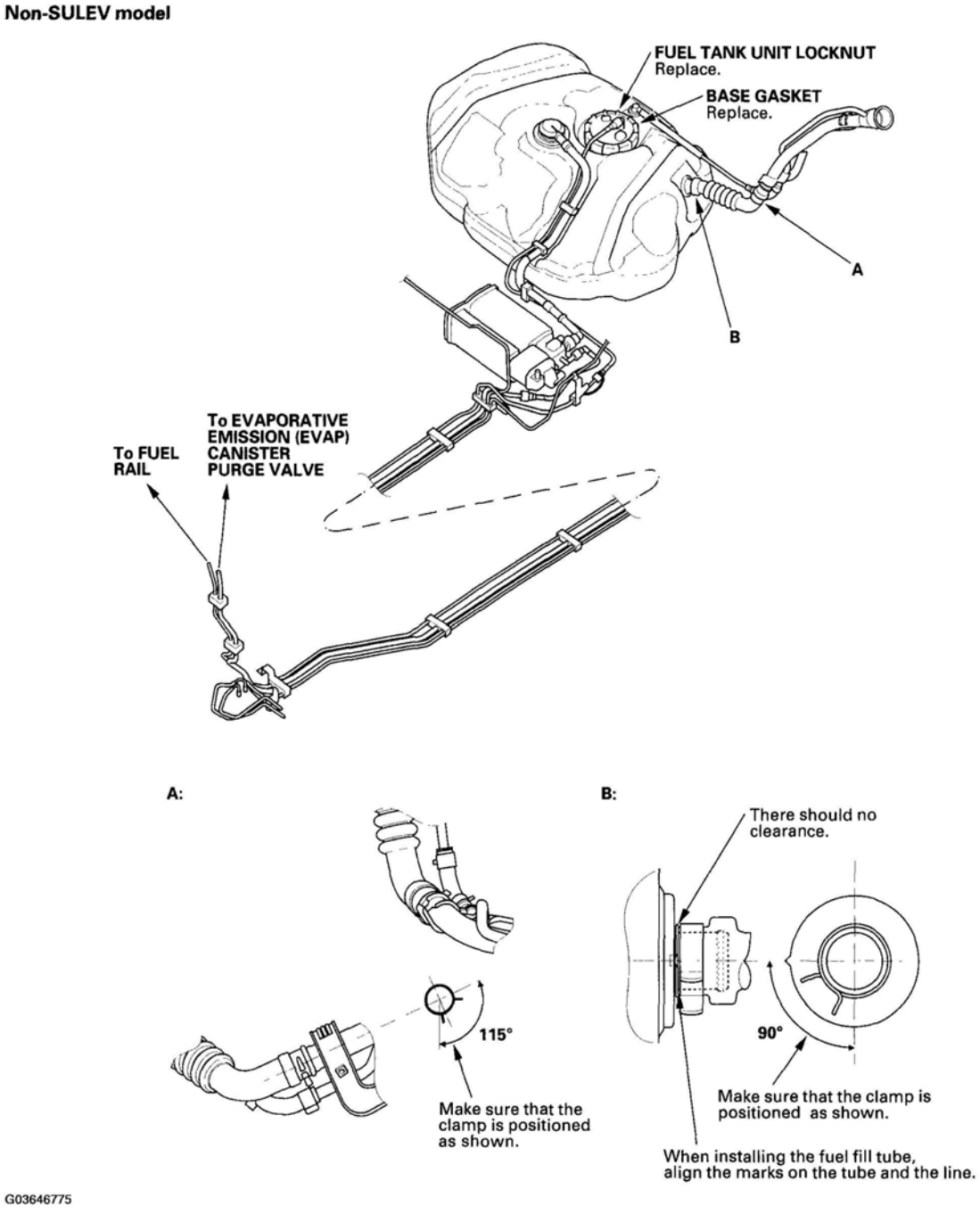


Fig. 36: Inspecting Fuel Line (Non-SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

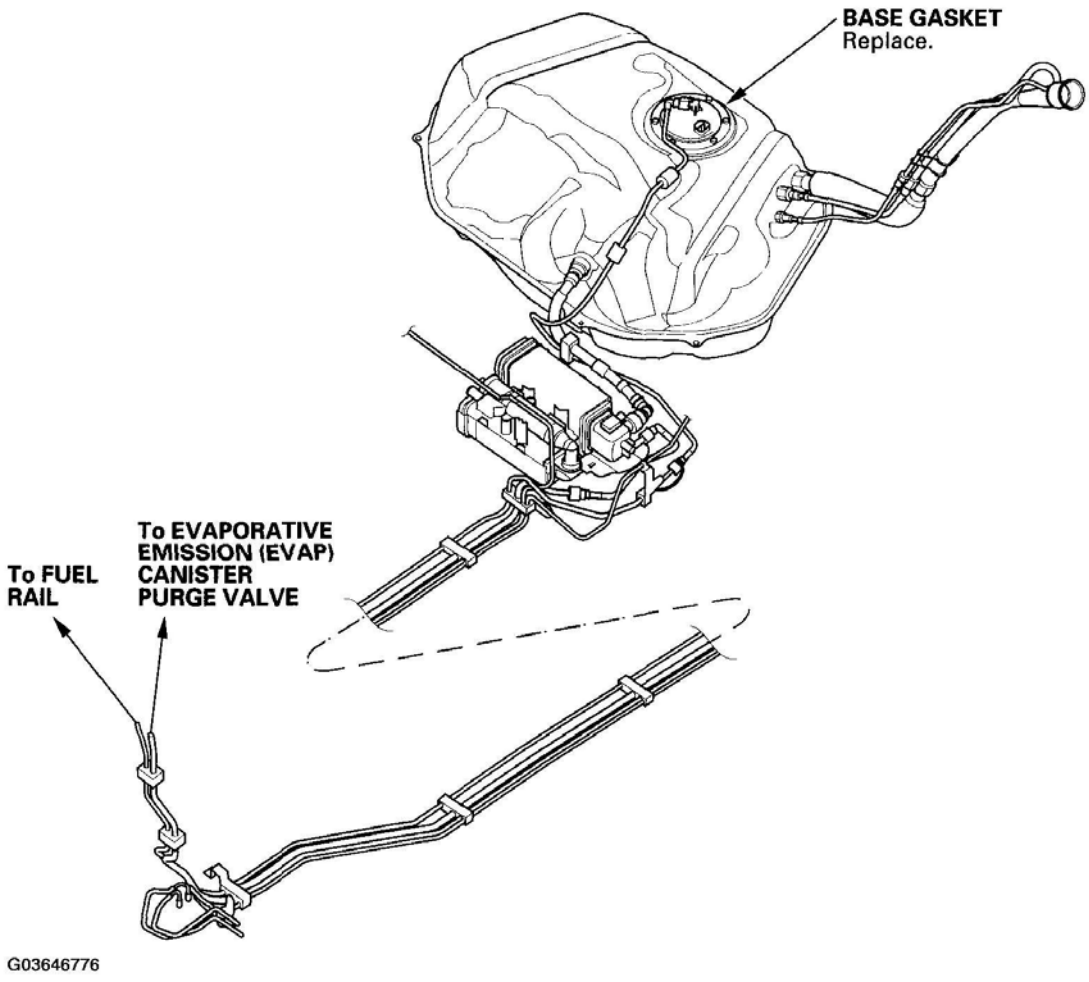


Fig. 37: Inspecting Fuel Line (SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FUEL LINE/QUICK-CONNECT FITTING PRECAUTIONS

The fuel line/quick-connect fittings connect the fuel rail (A) to fuel feed hose (B), fuel feed hose to the fuel feed hose (C), the fuel feed hose to the fuel line (D), and the fuel line (E) to the fuel tank unit (F) and the fuel vapor line (G) to the EVAP canister (H) (SULEV model: and fuel fill neck tube (I), fuel tank vapor signal tube (J), fuel tank vapor recirculation tube (K) to the fuel tank). When removing or installing the fuel feed hose, fuel tank unit, or fuel tank, it is necessary to disconnect or connect the quick-connect fittings.

Pay attention to the following:

- The fuel feed hoses, fuel line, and quick-connect fittings are not heat-resistant; be careful not to damage them during welding or other heat-generating procedures.
- The fuel feed hoses, fuel line, and quick-connect fittings are not acid-proof; do not touch them with a shop towel that was used for wiping battery electrolyte. Replace them if they came into contact with electrolyte or something similar.
- When connecting or disconnecting the fuel feed hoses, fuel line, and quick-connect fittings, be careful not to bend or twist them excessively. Replace them if they are damaged.

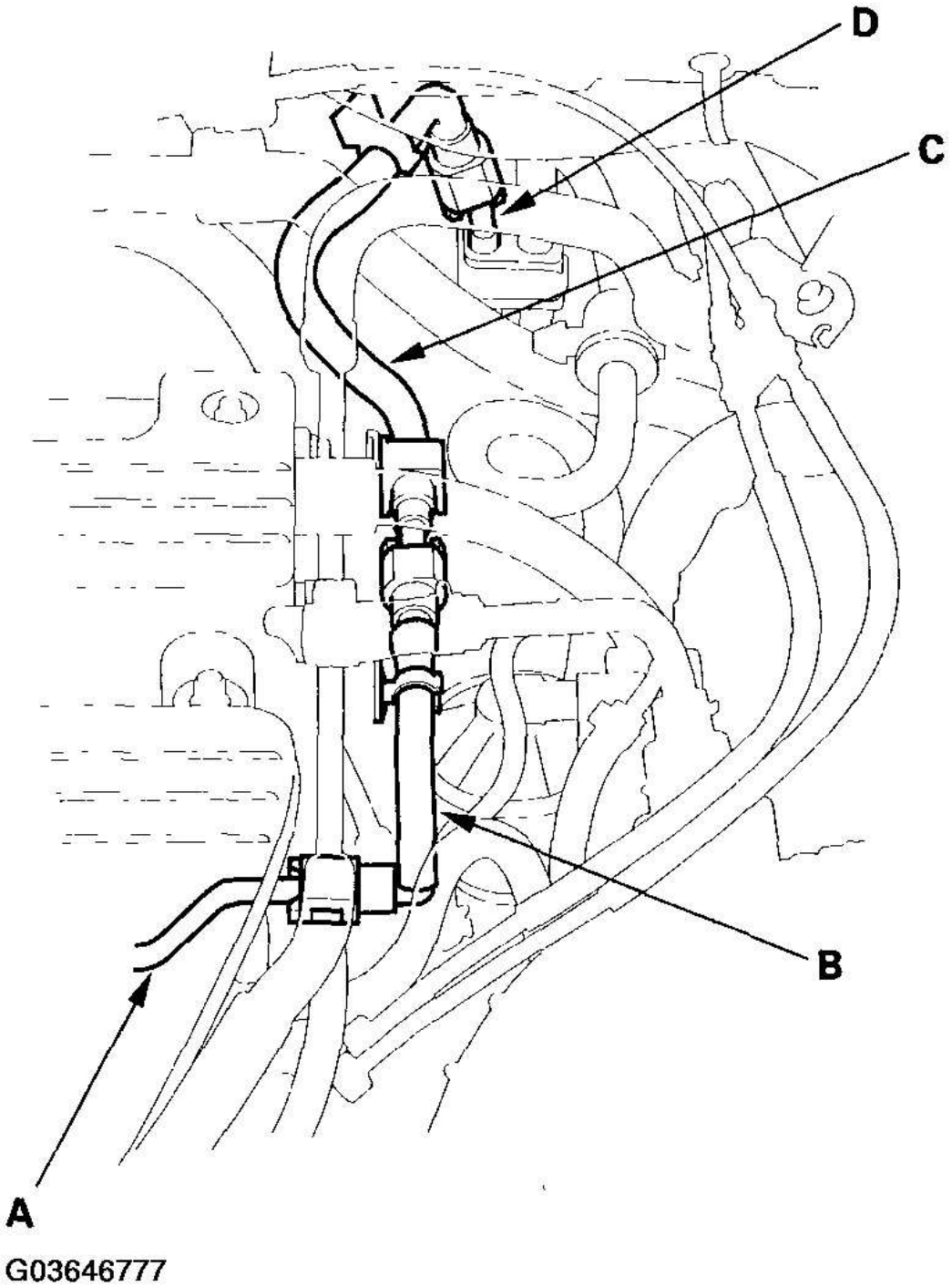
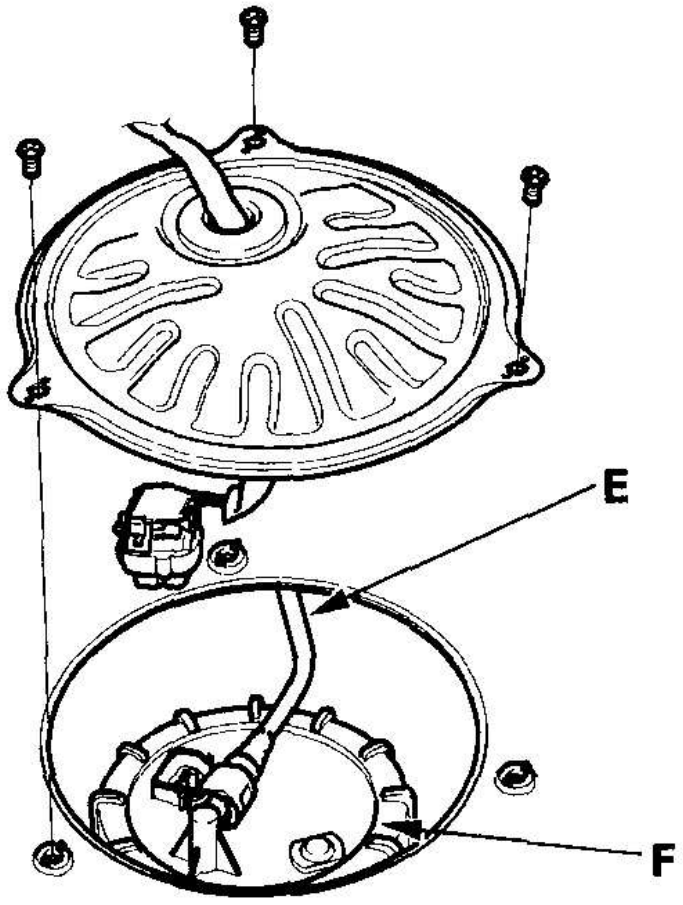


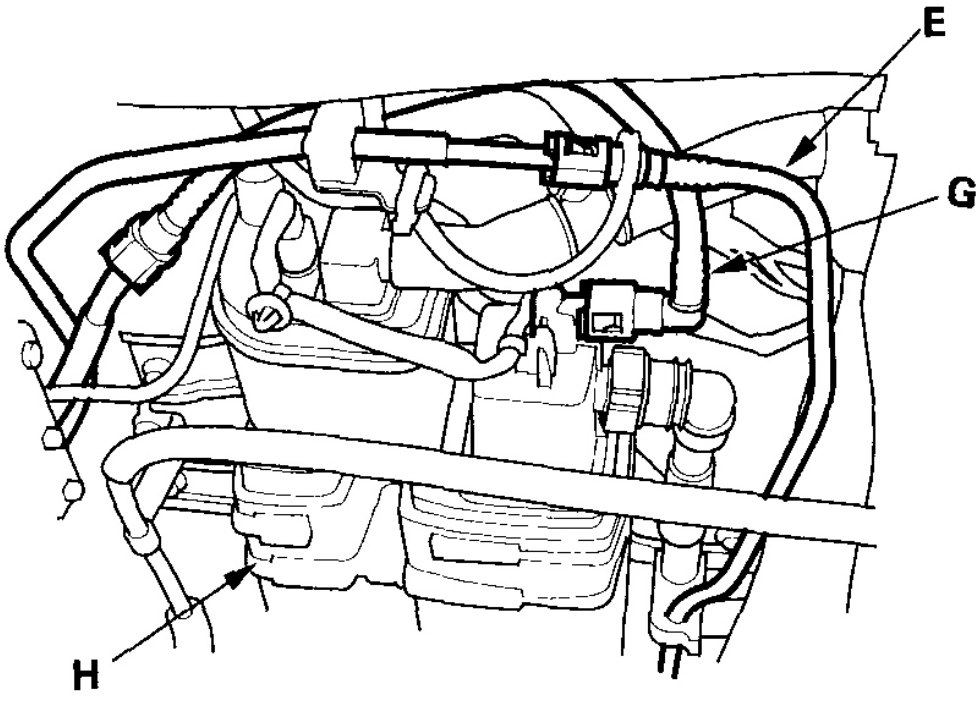
Fig. 38: Identifying Fuel Line/Quick-Connect Fitting Precautions (1 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



*: This illustration shows the non-SULEV model.

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Fig. 39: Identifying Fuel Line/Quick-Connect Fitting Precautions (2 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



*: This illustration shows the non-SULEV model.

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Fig. 40: Identifying Fuel Line/Quick-Connect Fitting Precautions (3 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

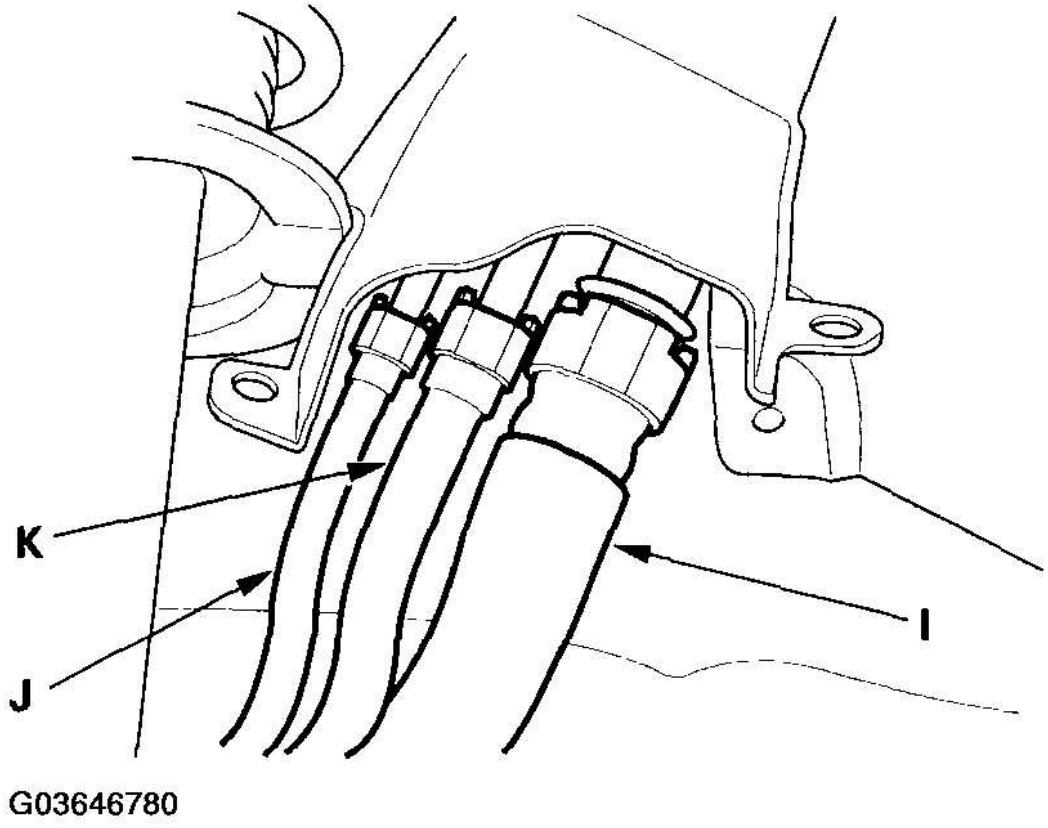


Fig. 41: Identifying Fuel Line/Quick-Connect Fitting Precautions (SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A disconnected quick-connect fitting can be reconnected, but the retainer on the mating line cannot be reused once it has been removed from the line. Replace the retainer when:

- replacing the fuel rail.
- replacing the fuel line.
- replacing the fuel pump.
- replacing the fuel filter.
- replacing the fuel gauge sending unit.
- replacing the fuel tank (SULEV model).

- it has been removed from the line.
- replacing EVAP purge line.
- replacing EVAP canister.
- it is damaged.

RETAINER SPECIFICATIONS

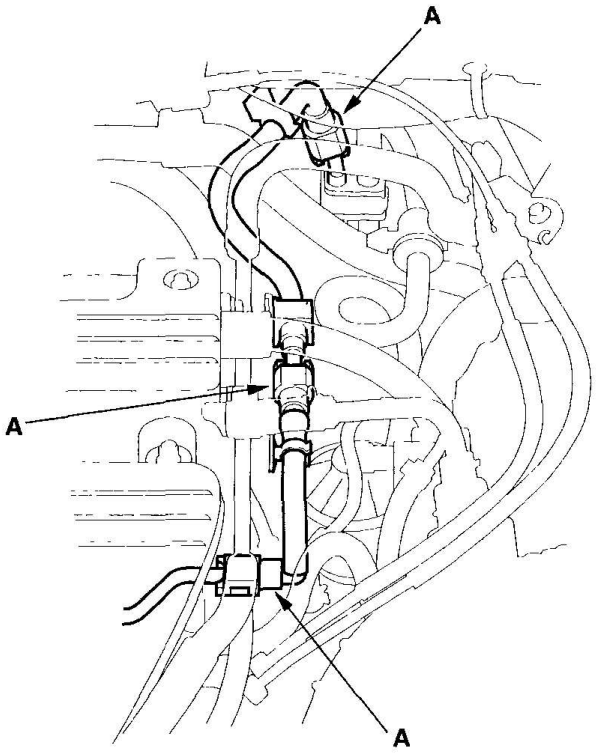
Retainer location	Manufacturer	Retainer color	Piping diameter
Engine compartment fuel feed hose A, fuel rail side	Tokai	Blue/green	0.3 in. (8 mm)
Engine compartment fuel feed hose A, fuel feed hose B side and fuel hose B	Tokai	Green	0.2 in. (6.3 mm)
Fuel tank unit: Fuel feed line, fuel tank unit side	Tokai	Orange	0.4 in. (9.5 mm)
Fuel tank unit: Fuel feed line, fuel line side	Tokai	Green	0.2 in. (6.3 mm)
EVAP canister: fuel vapor line	Tokai	Orange	0.4 in. (9.5 mm)
Fuel tank unit: Fuel feed neck tube (SULEV model)	Tokai	Grey	1.1 in. (28.55 mm)
Fuel tank unit: Fuel tank vapor recirculation tube (SULEV model)	Tokai	Natural	0.5 in. (11.8 mm)
Fuel tank unit:			

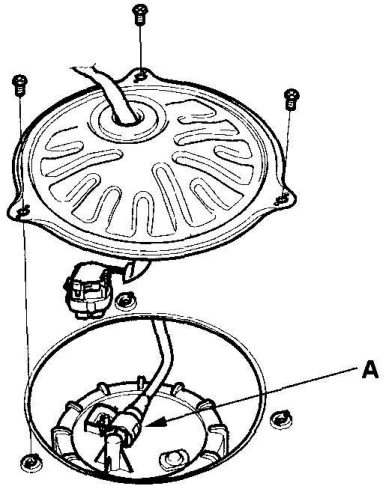
Fuel feed tank vapor signal tube, fuel tank side (SULEV model)	Tokai	Green	0.2 in. (6.3 mm)
Fuel tank unit: Fuel tank vapor signal tube, fuel fill side (SULEV model)	Tokai	Blue/green	0.3 in. (8 mm)

FUEL LINE/QUICK-CONNECT FITTING REMOVAL

NOTE: Before you work on the fuel lines and fittings, read the "Fuel Line/Quick-Connect Fitting Precautions" (see FUEL LINE/QUICK-CONNECT FITTING PRECAUTIONS).

1. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
2. Check the fuel quick-connect fitting (A) for dirt, and clean it if needed.



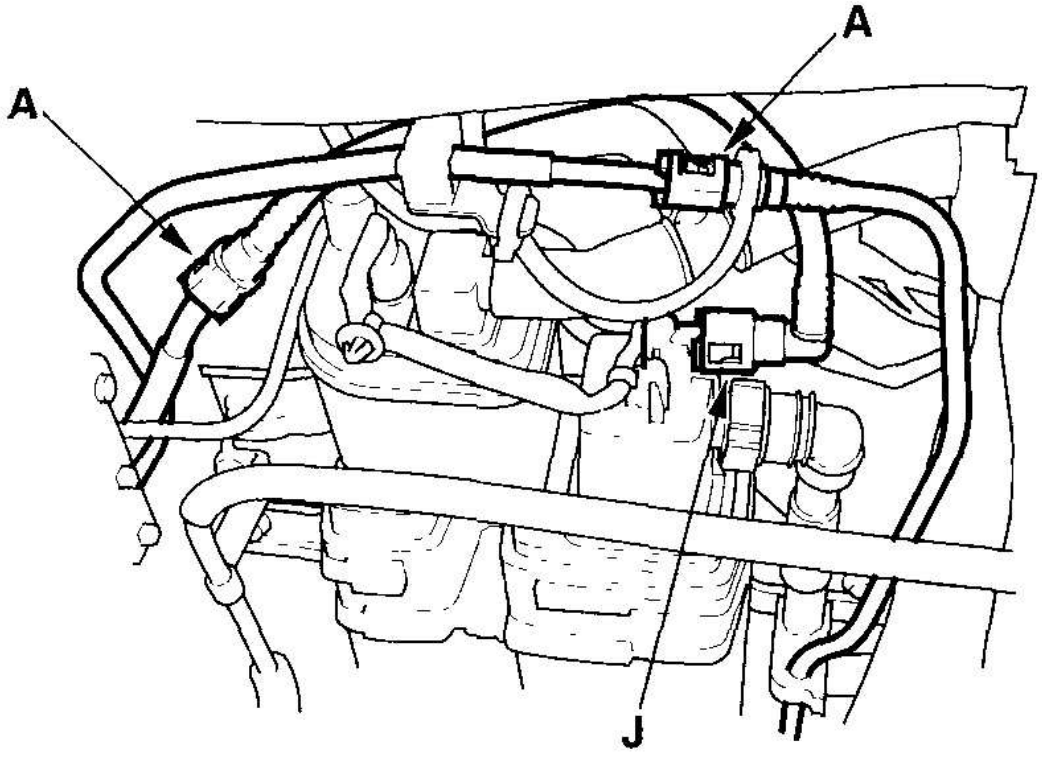


*: This illustration shows the non-SULEV model.

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Fig. 42: Checking Fuel Quick-Connect Fitting For Dirt (Non-SULEV Model - 1 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.



*: This illustration shows the non-SULEV model.

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Fig. 43: Checking Fuel Quick-Connect Fitting For Dirt (Non-SULEV Model - 2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

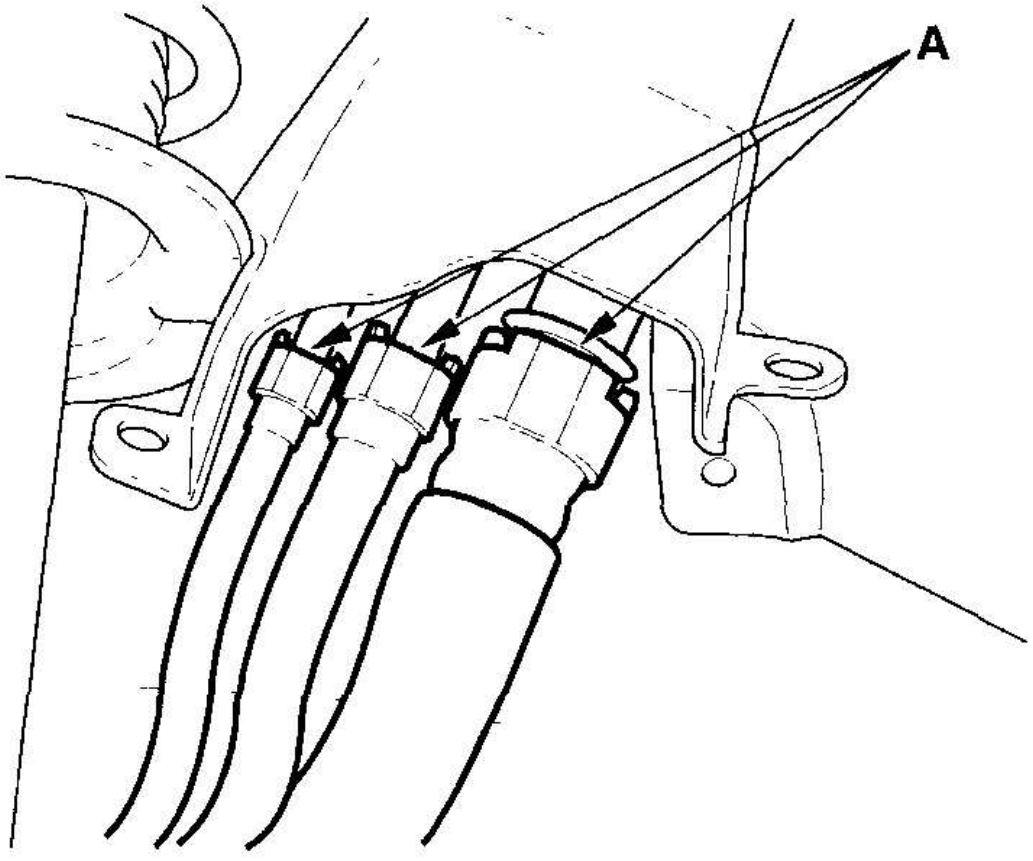


Fig. 44: Checking Fuel Quick-Connect Fitting For Dirt (SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Place a rag or shop towel over the quick-connect fitting. Hold the connector (A) with one hand, and squeeze the retainer tabs (B) with the other hand to release them from the locking tabs (C). Pull the connector off.

NOTE:

- **Be careful not to damage the line (D) or other parts. Do not use tools.**
- **If the connector does not move, keep the retainer tabs pressed down, and alternately pull and push**

the connector until it comes off easily.

- **Do not remove the retainer from the line; once removed, the retainer must be replaced with a new one.**

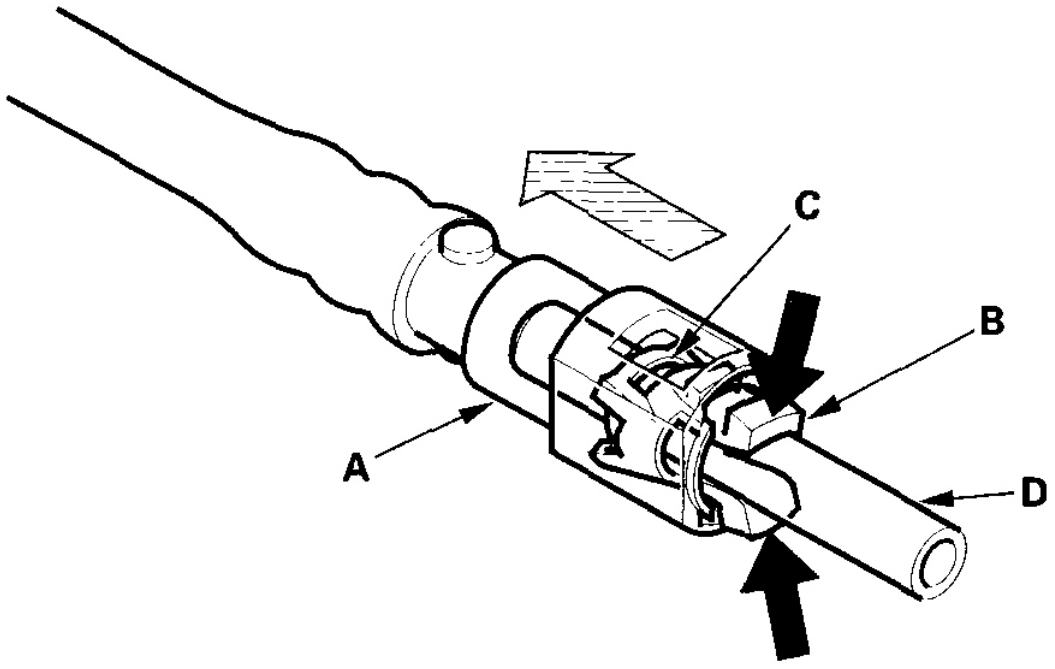


Fig. 45: Holding Connector And Squeezing Retainer Tabs To Release From Locking Tabs
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check the contact area (A) of the line (B) for dirt or damage.
   - If it is dirty, clean it.
   - If it is rusty or damaged, replace the fuel pump, fuel filter, or fuel feed line.

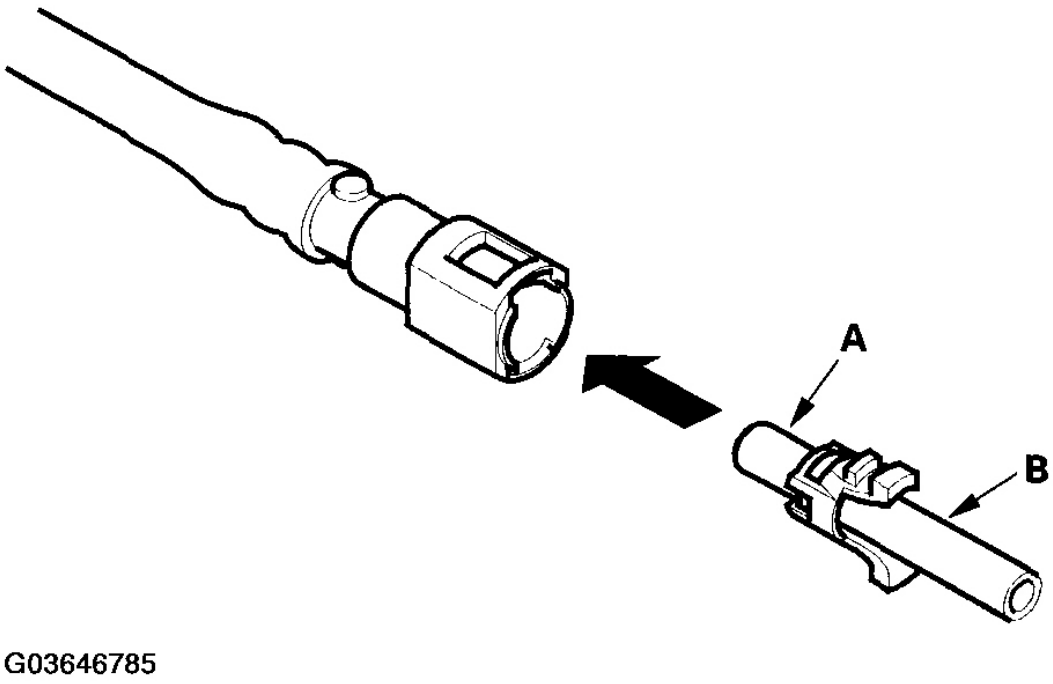


Fig. 46: Checking Contact Area Of Line For Dirt Or Damage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. To prevent damage and keep foreign matter out, cover the disconnected connector and line ends with plastic bags (A).

NOTE: The retainer cannot be reused once it has been removed from the line.

Replace the retainer when:

- replacing the fuel rail.
- replacing the fuel feed line.
- replacing the fuel pump.
- replacing the fuel filter.
- replacing the fuel gauge sending unit.
- it has been removed from the line.

- replacing EVAP purge line.
- replacing EVAP canister.
- it is damaged.

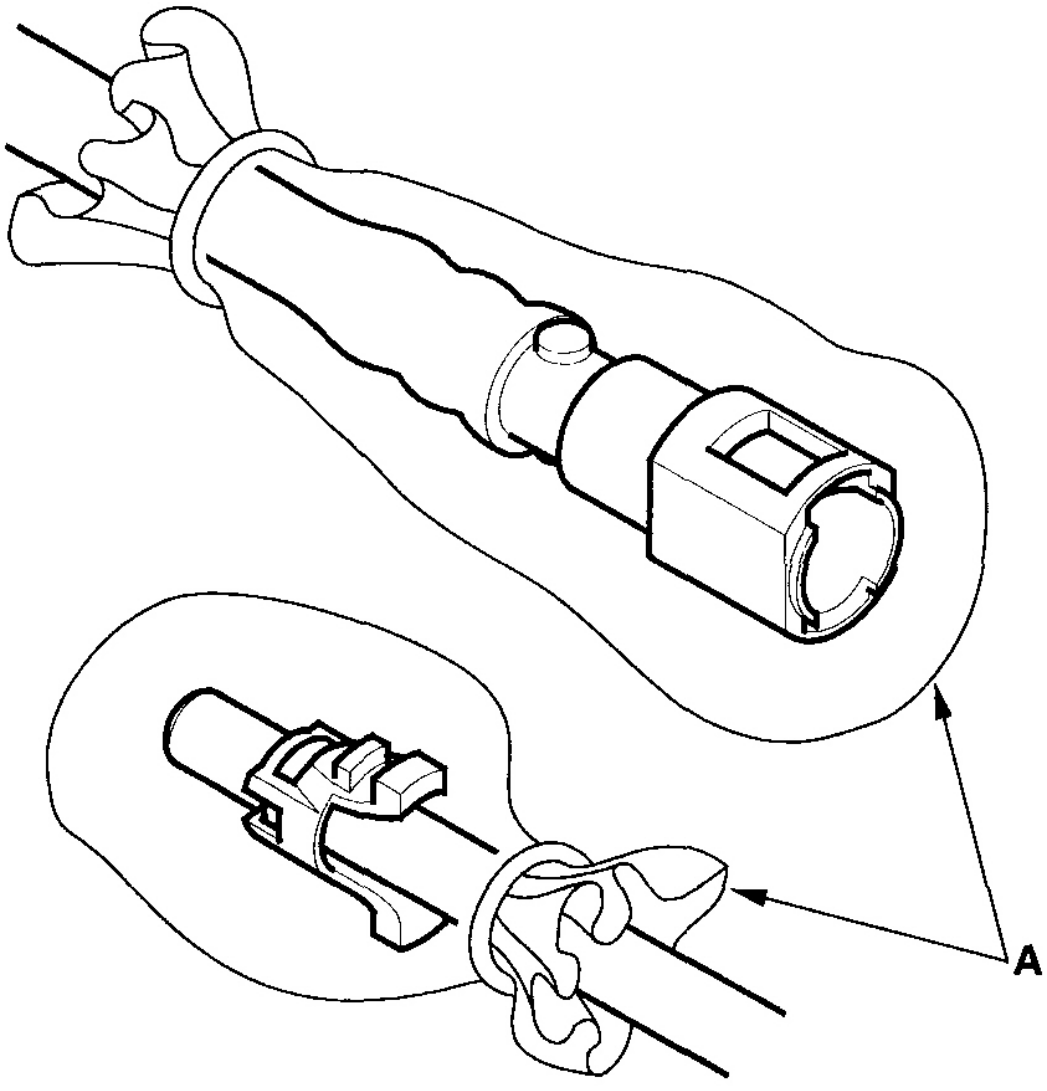


Fig. 47: Covering Disconnected Connector And Line Ends With Plastic Bags
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FUEL LINE/QUICK-CONNECT FITTING INSTALLATION

NOTE: Before you work on the fuel line and fittings, read the "Fuel Line/Quick-Connect Fitting Precautions" (see FUEL LINE/QUICK-CONNECT FITTING PRECAUTIONS).

1. Check the contact area (A) of the line (B) for dirt or damage, and clean it if needed.

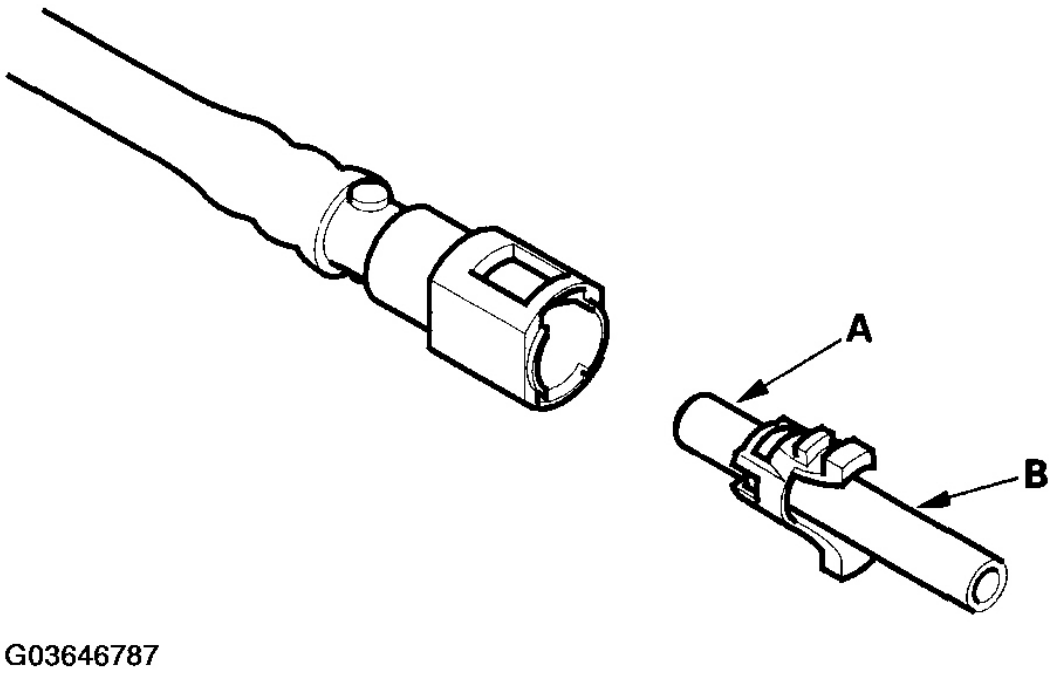


Fig. 48: Checking Contact Area Of Line For Dirt Or Damage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Insert a new retainer (A) into the connector (B) if the retainer is damaged, or after:
   - replacing the fuel rail.
   - replacing the fuel feed line.
   - replacing the fuel pump.
   - replacing the fuel filter.

- replacing the fuel gauge sending unit
- removing the retainer from the line.
- replacing EVAP purge line.
- replacing EVAP canister.

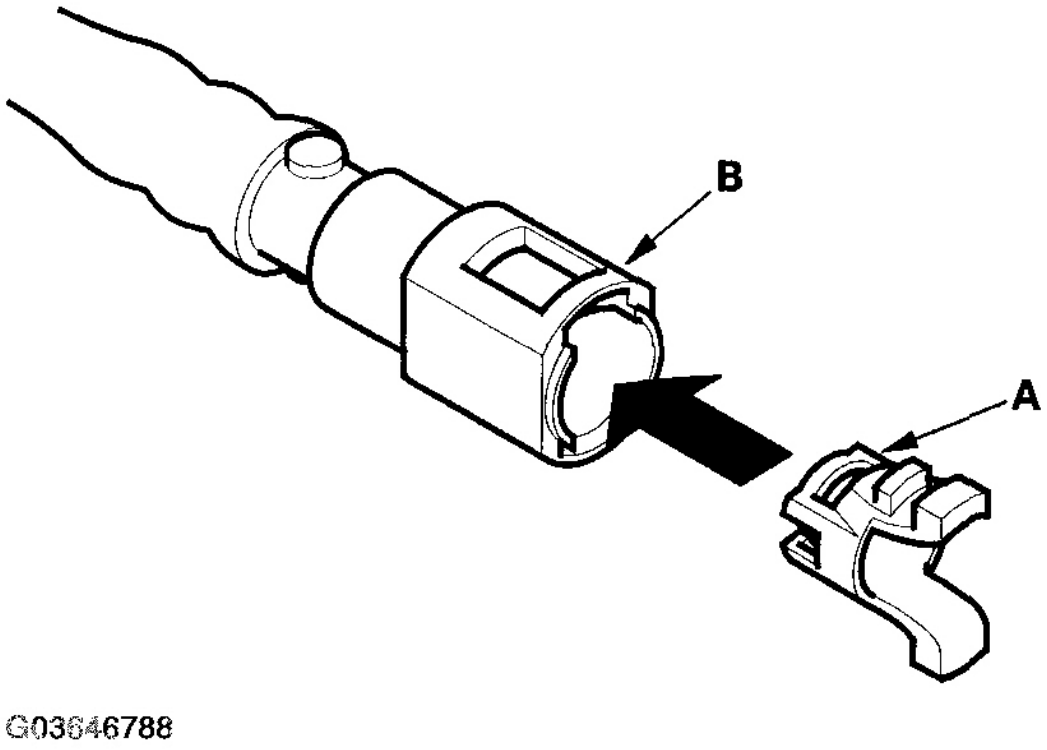


Fig. 49: Inserting Retainer Into Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Before connecting a new fuel tube/quick-connect fitting assembly (A), remove the old retainer from the mating line.

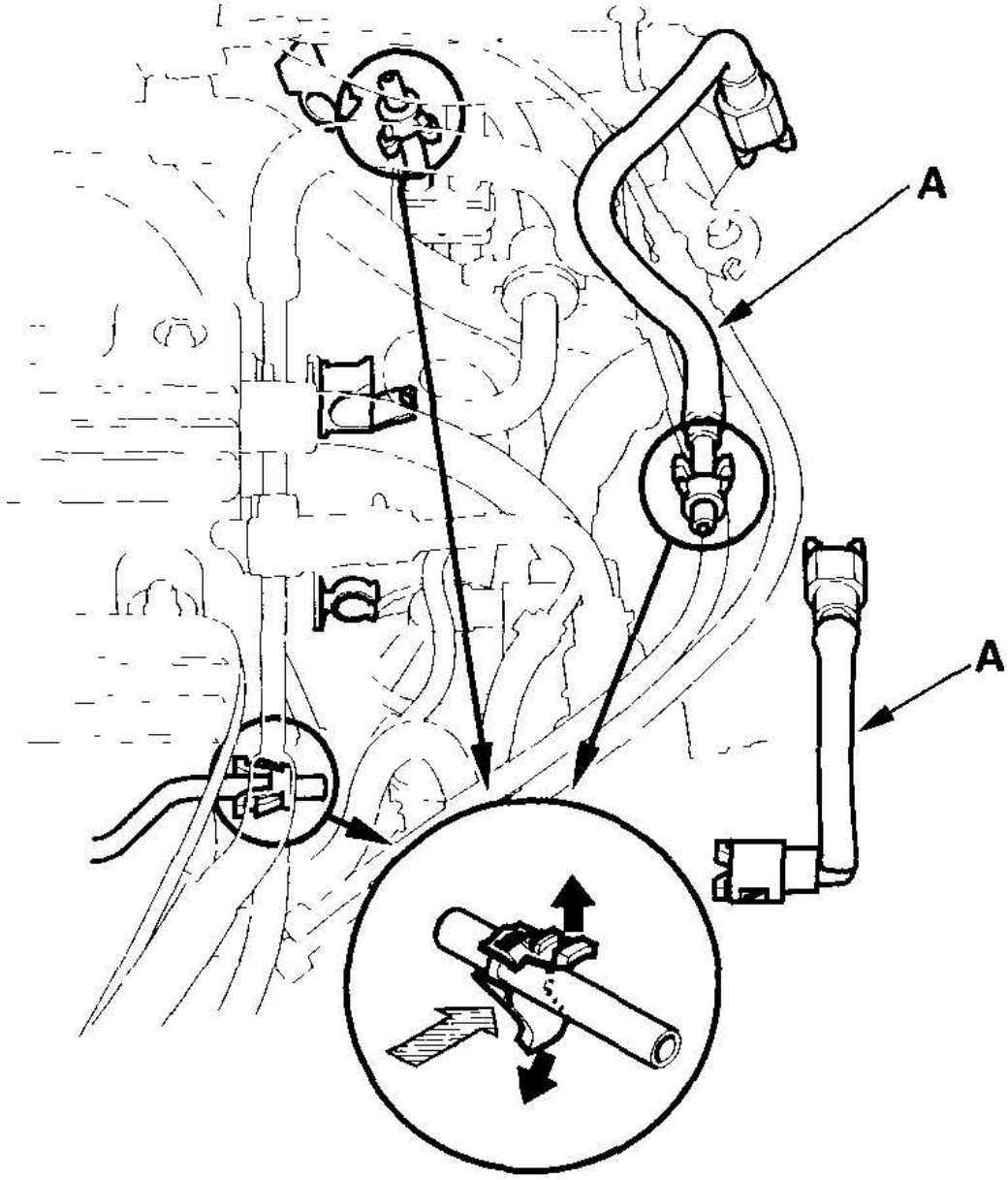


Fig. 50: Connecting Fuel Tube/Quick-Connect Fitting Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

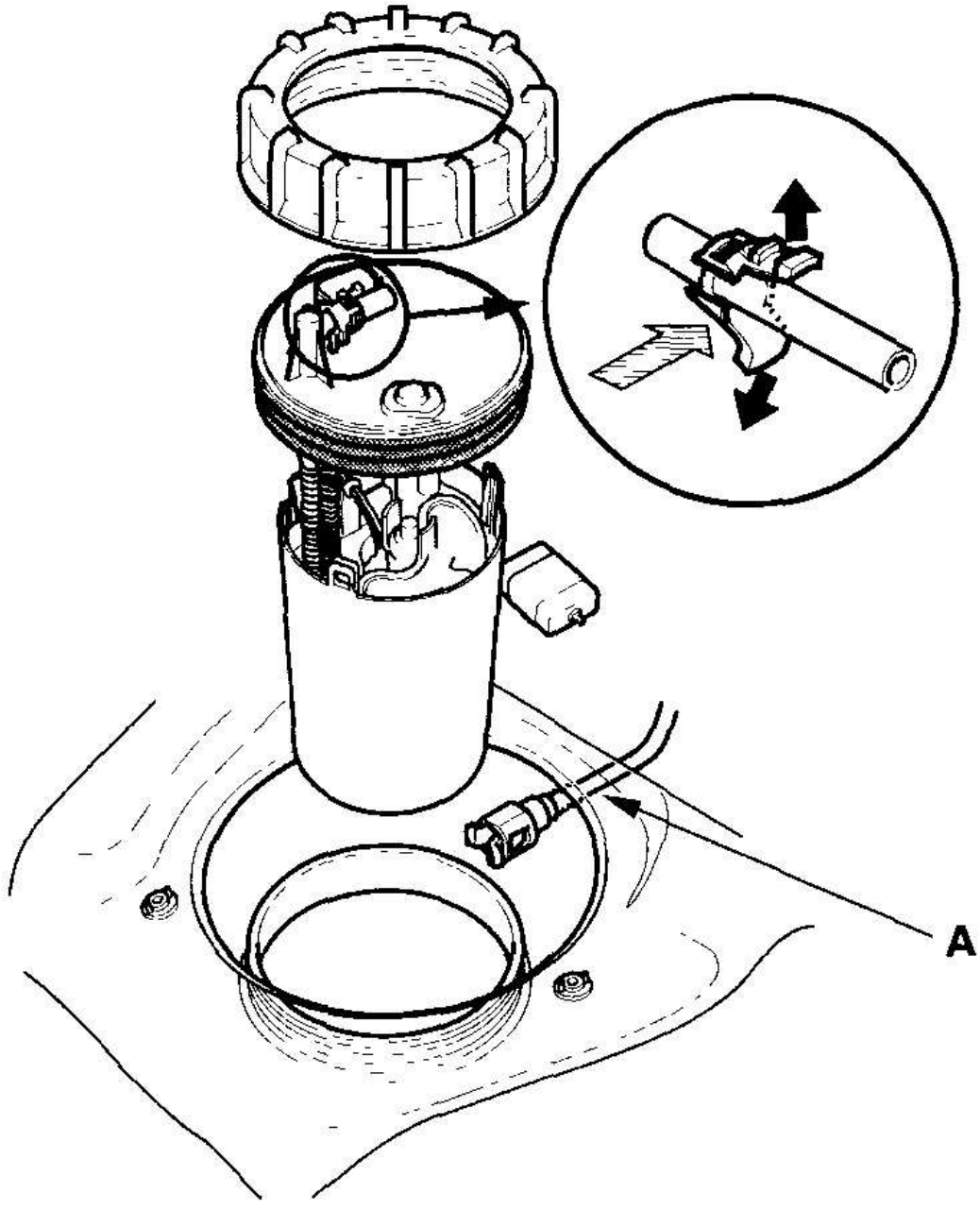


Fig. 51: Connecting Fuel Tube/Quick-Connect Fitting Assembly (Non-SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

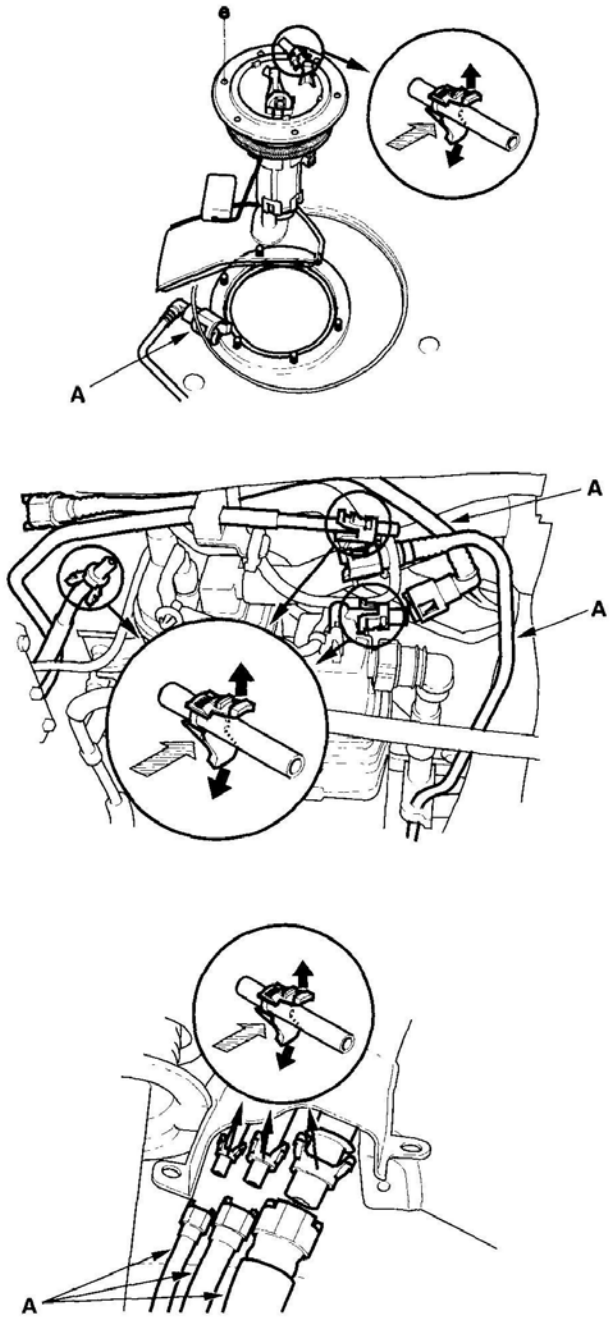


Fig. 52: Connecting Fuel Tube/Quick-Connect Fitting Assembly (SULEV Model)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Align the quick-connect fittings with the line (A), and align the retainer locking tabs (B) with the connector tabs (C), then press the quick-connect fittings onto the line until both retainer pawls lock with a clicking sound.

NOTE: If it is hard to connect, put a small amount of new engine oil on the line end.

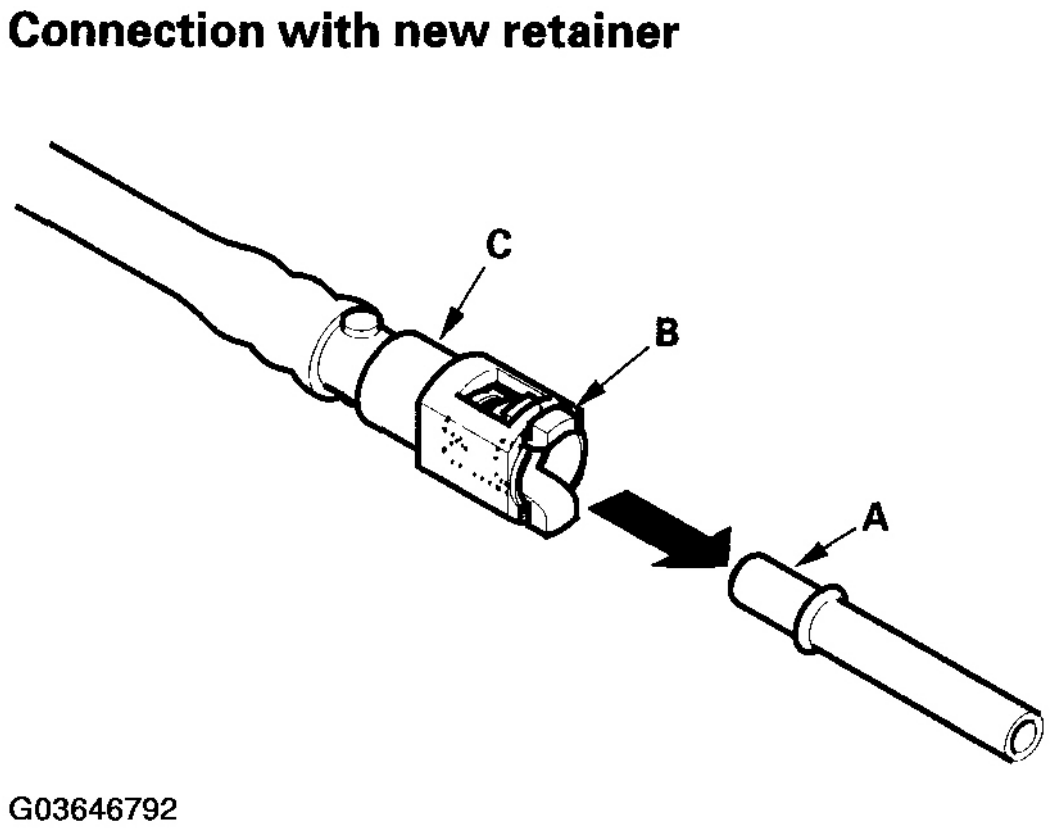


Fig. 53: Connection With New Retainer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

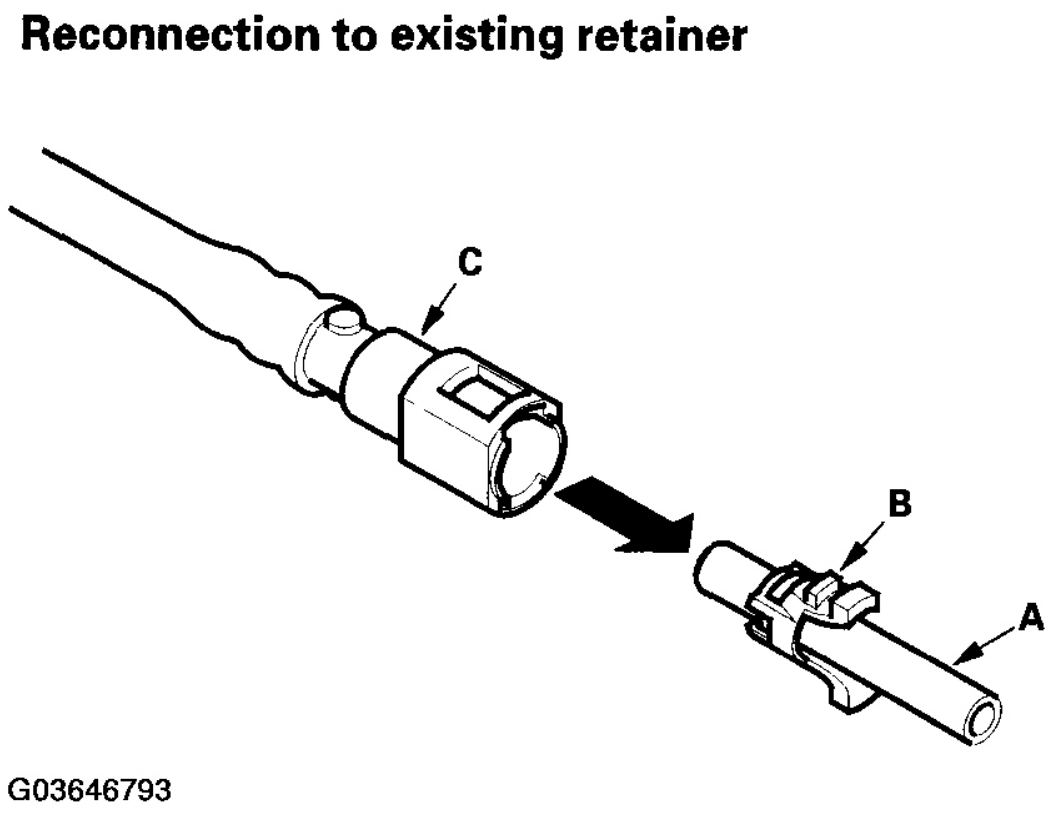


Fig. 54: Reconnection To Existing Retainer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

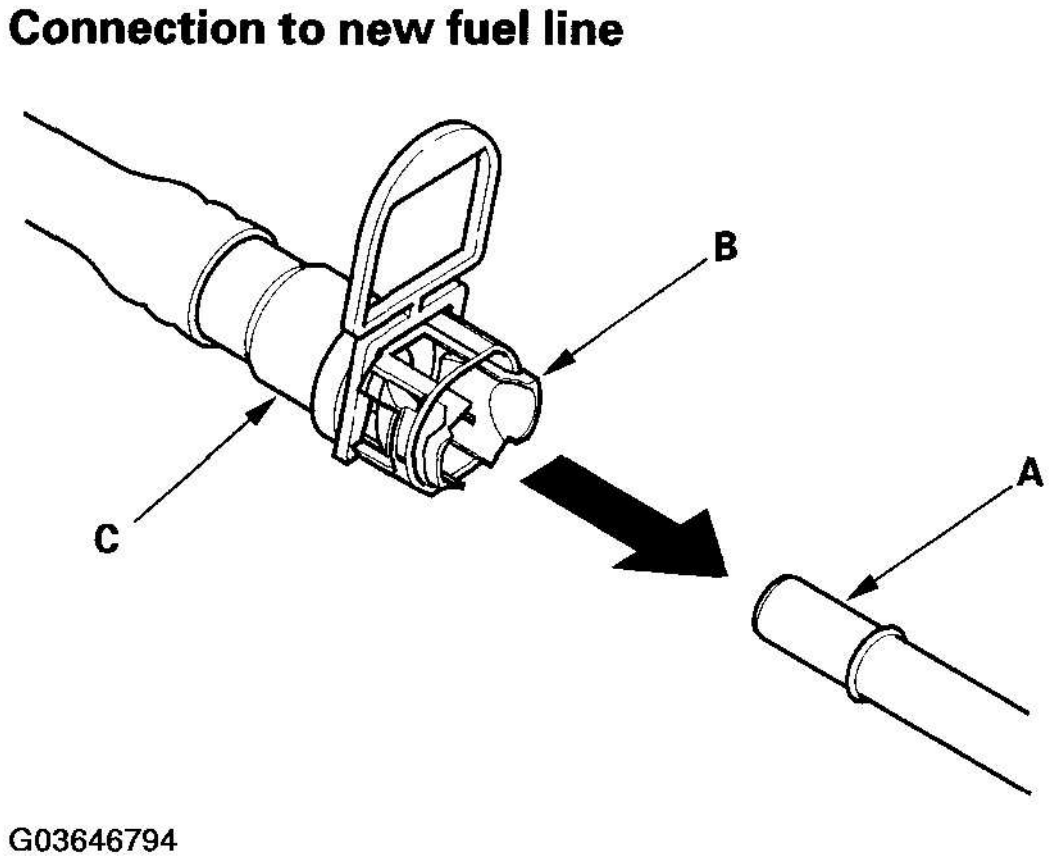


Fig. 55: Connection To New Fuel Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. When you reconnect the connector with the old retainer, make sure the connection is secure and the tabs (A) are firmly locked into place; check visually and also by pulling the connector (B). When you replace the fuel line with a new one, make sure you remove the ring pull (C) upwards after you confirm the connection is secure.

NOTE: Before you remove the ring pull, make sure the fuel line connection is secure. If the connection is not secure, the ring pull could break when you try to remove it.

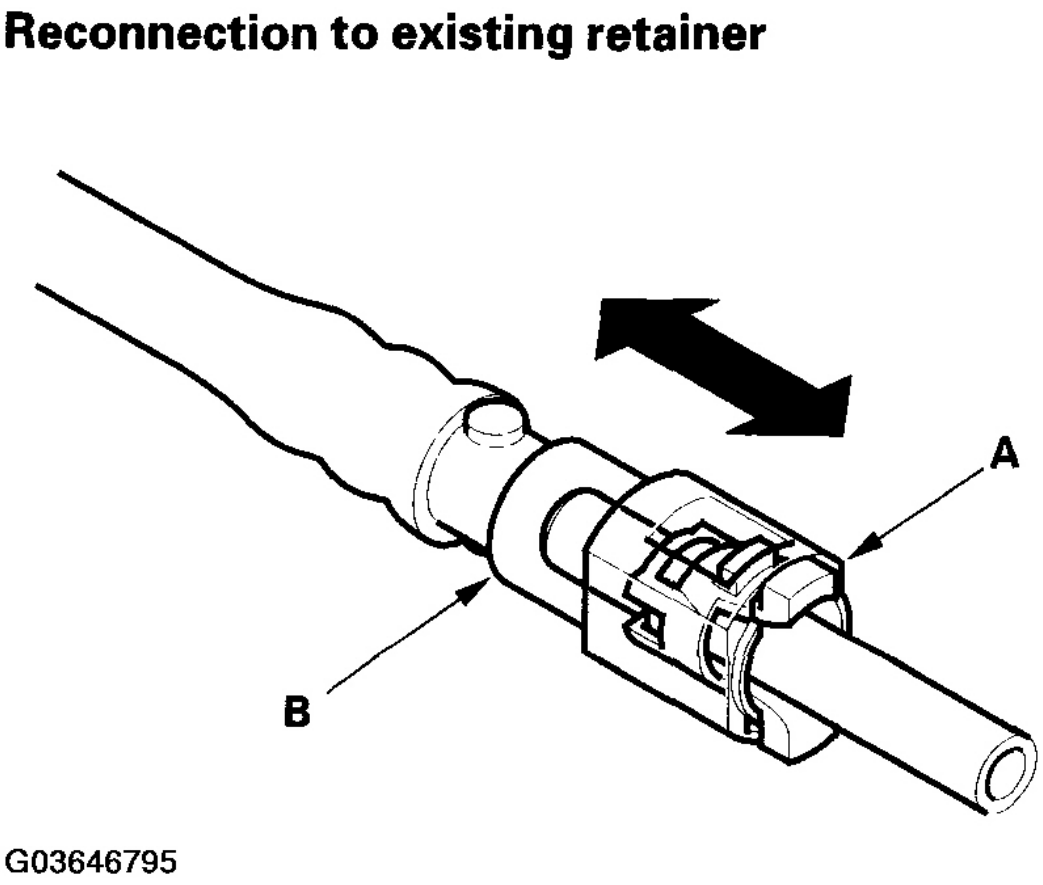


Fig. 56: Reconnecting To Existing Retainer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

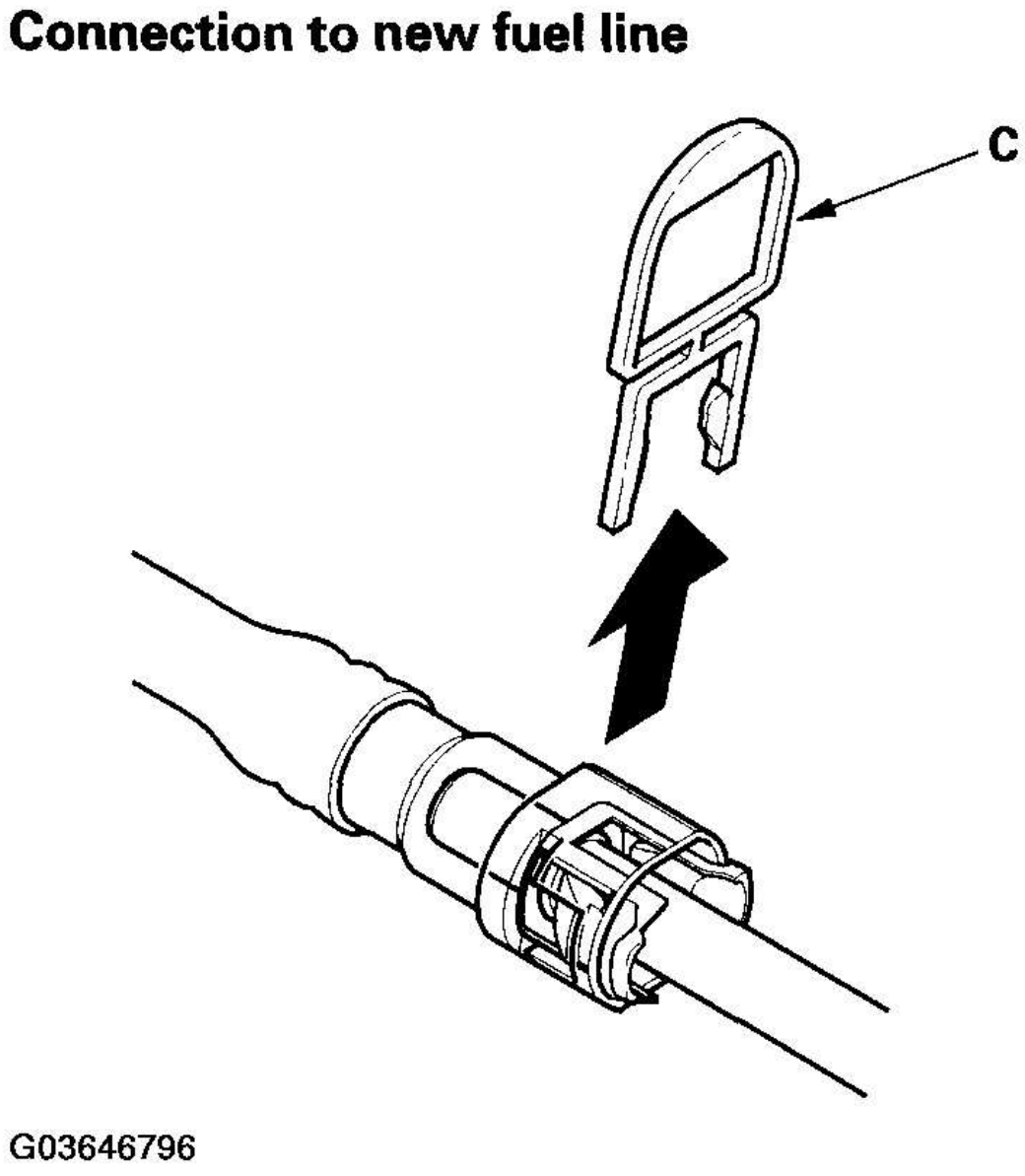


Fig. 57: Connecting To New Fuel Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Reconnect the negative cable to the battery, and turn the ignition switch ON (II). The fuel pump will run for about 2 seconds, and fuel pressure will rise. Repeat this two or three times, and check that there is no leakage in the fuel

supply system.

FUEL PRESSURE REGULATOR REPLACEMENT

NON-SULEV MODEL

1. Remove the fuel tank unit (see **Non-SULEV model**).
2. Remove the clip (A).

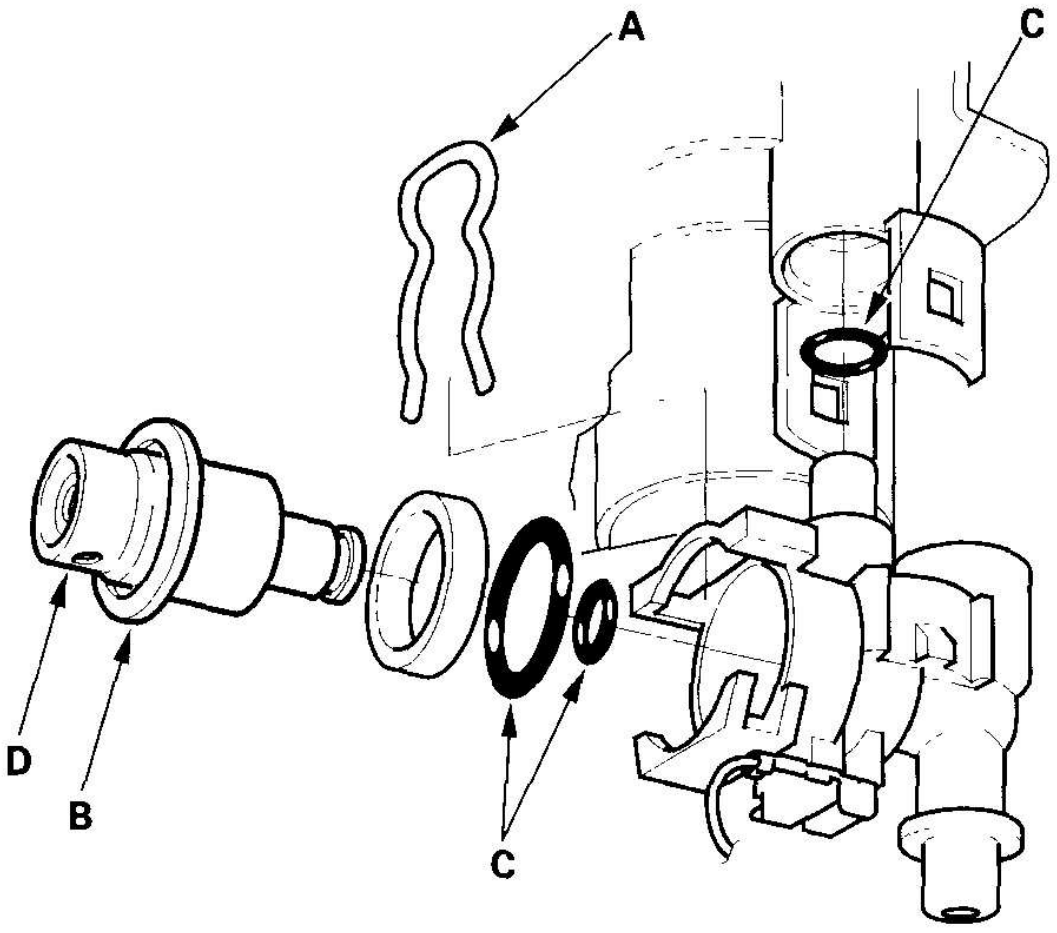


Fig. 58: Removing Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the fuel pressure regulator (B).
4. Install the regulator in the reverse order of removal with new O-rings (C).

   Make sure the regulator is installed with the drain hole (D) facing down.

SULEV MODEL

1. Remove the fuel tank unit (see **SULEV model**).
2. Remove the holder (A).

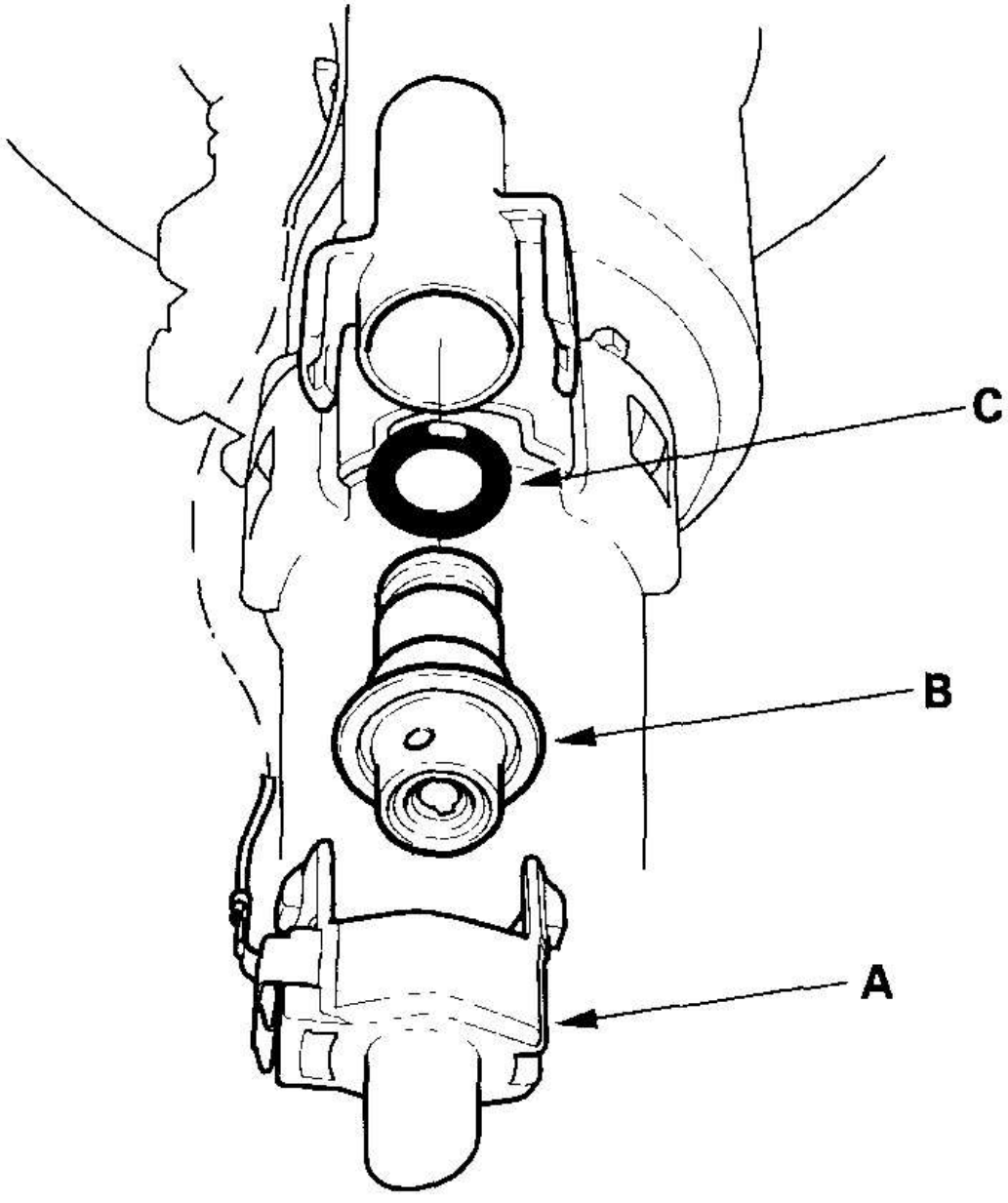


Fig. 59: Removing Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the fuel pressure regulator (B).

4. Install the regulator in the reverse order of removal with a new O-ring (C).

NOTE: Coat the O-ring with clean engine oil.

FUEL FILTER REPLACEMENT

The fuel filter should be replaced whenever the fuel pressure drops below the specified value (see **FUEL PRESSURE RELIEVING**), after making sure that the fuel pump and the fuel pressure regulator are OK.

1. Remove the fuel tank unit; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**).
2. Remove the fuel filter set (A).

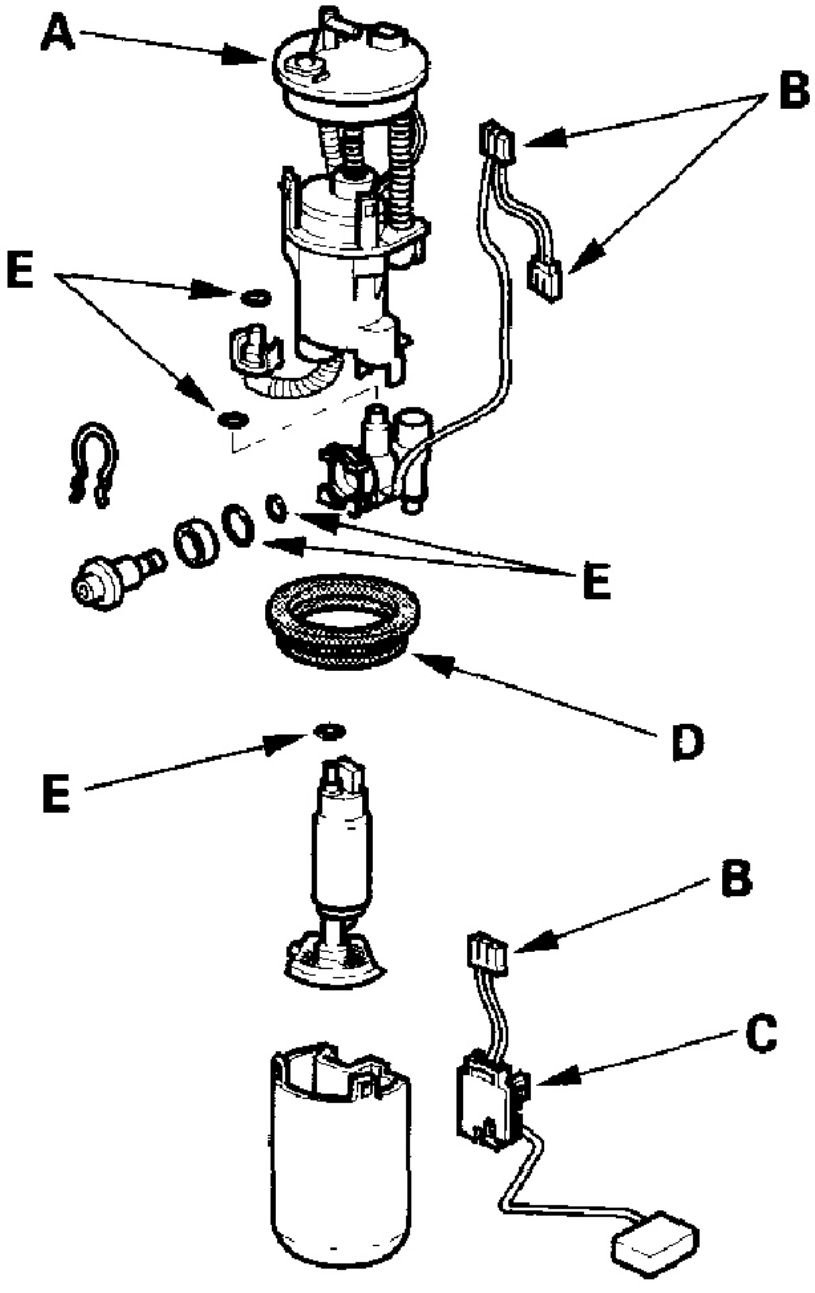


Fig. 60: Removing Fuel Filter Set (Non-SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

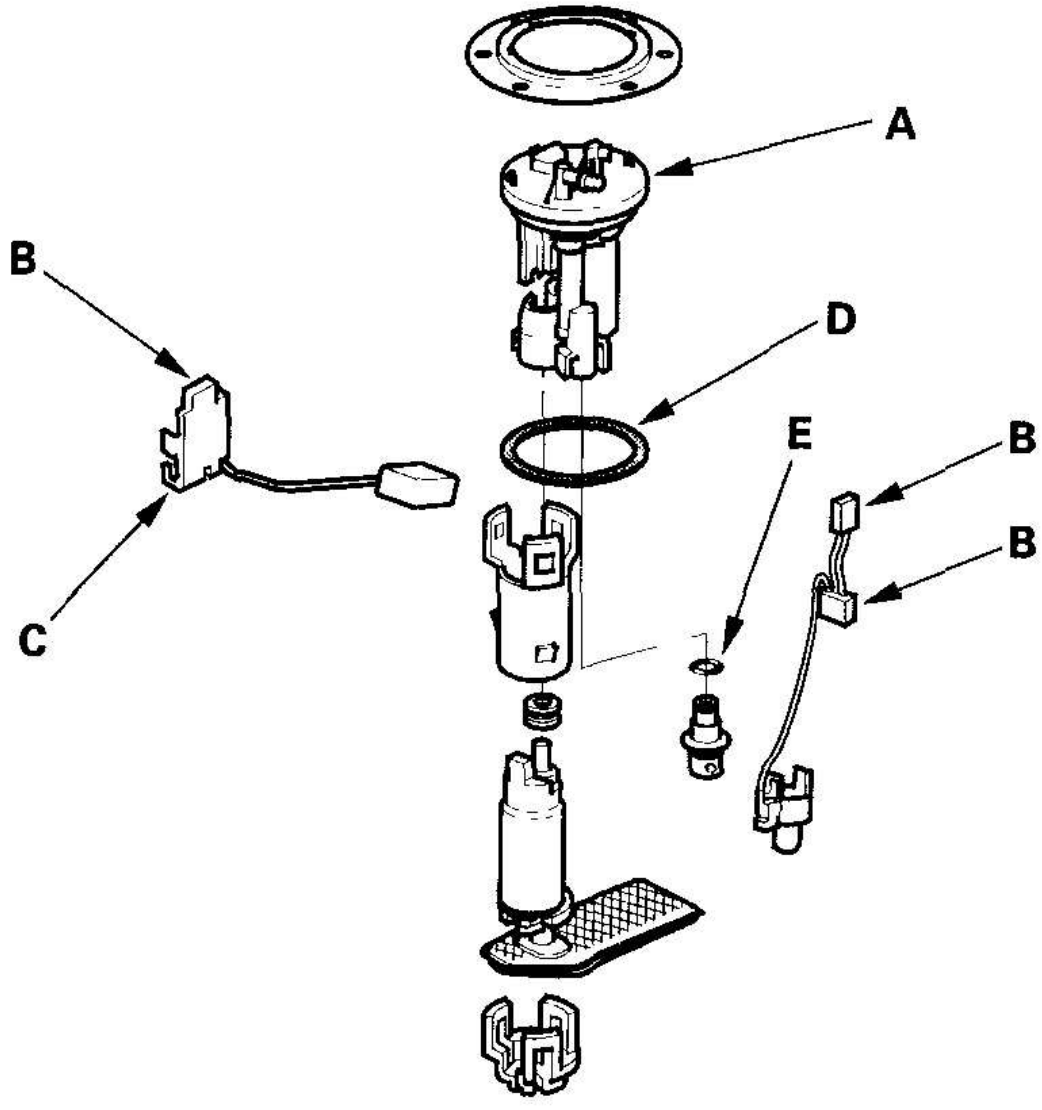


Fig. 61: Removing Fuel Filter Set (SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check these items before installing the fuel tank unit:
   - When connecting the wire harness, make sure the connection is secure and the connectors (B) are firmly locked into place.
   - When installing the fuel gauge sending unit (C), make sure the connection

is secure and the connector is firmly locked into place. Be careful not to bend or twist it excessively.

4. Install the parts in the reverse order of removal with a new base gasket (D) and new O-rings (E). When installing the fuel tank unit, align the marks on the unit and the fuel tank (see **FUEL TANK REPLACEMENT**).

NOTE: For non-SULEV models, replace the fuel tank unit locknut and base gasket as a set.

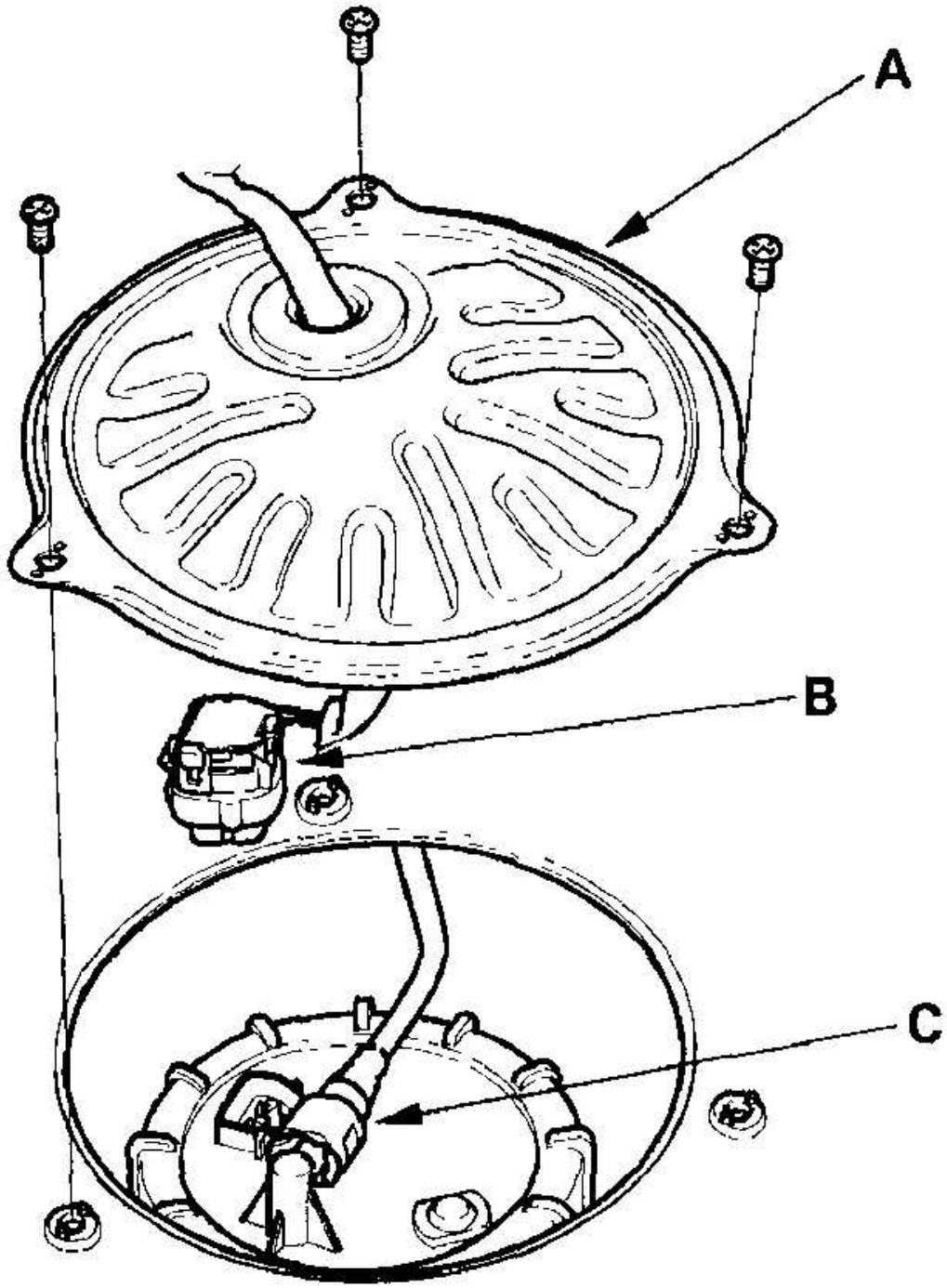
FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT

Special Tools Required

Fuel sender wrench 07AAA-S0XA100

NON-SULEV MODEL

1. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
2. Remove the fuel fill cap.
3. Remove the trunk floor.
4. Remove the access panel (A) from the floor.



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Fig. 62: Removing Access Panel From Floor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the fuel pump 5P connector (B).
6. Disconnect the quick-connect fitting (C) from the fuel tank unit.
7. Using the special tool, loosen the fuel tank unit locknut (A).

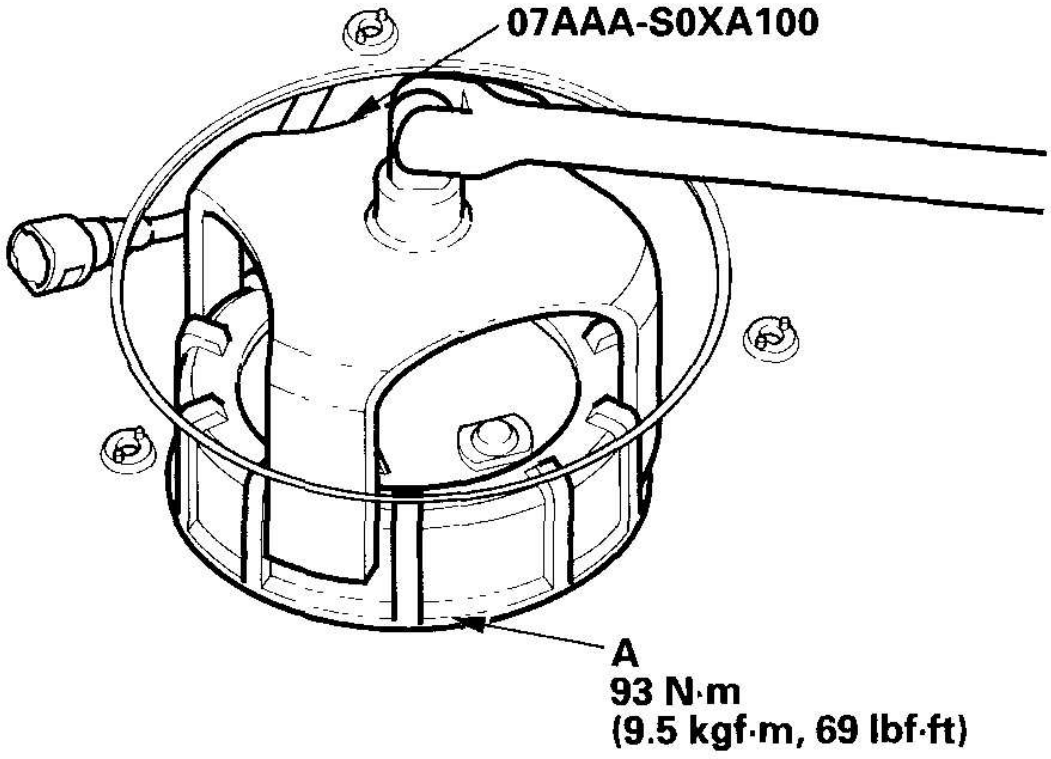


Fig. 63: Loosening Fuel Tank Unit Locknut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the locknut (A) and the fuel tank unit.

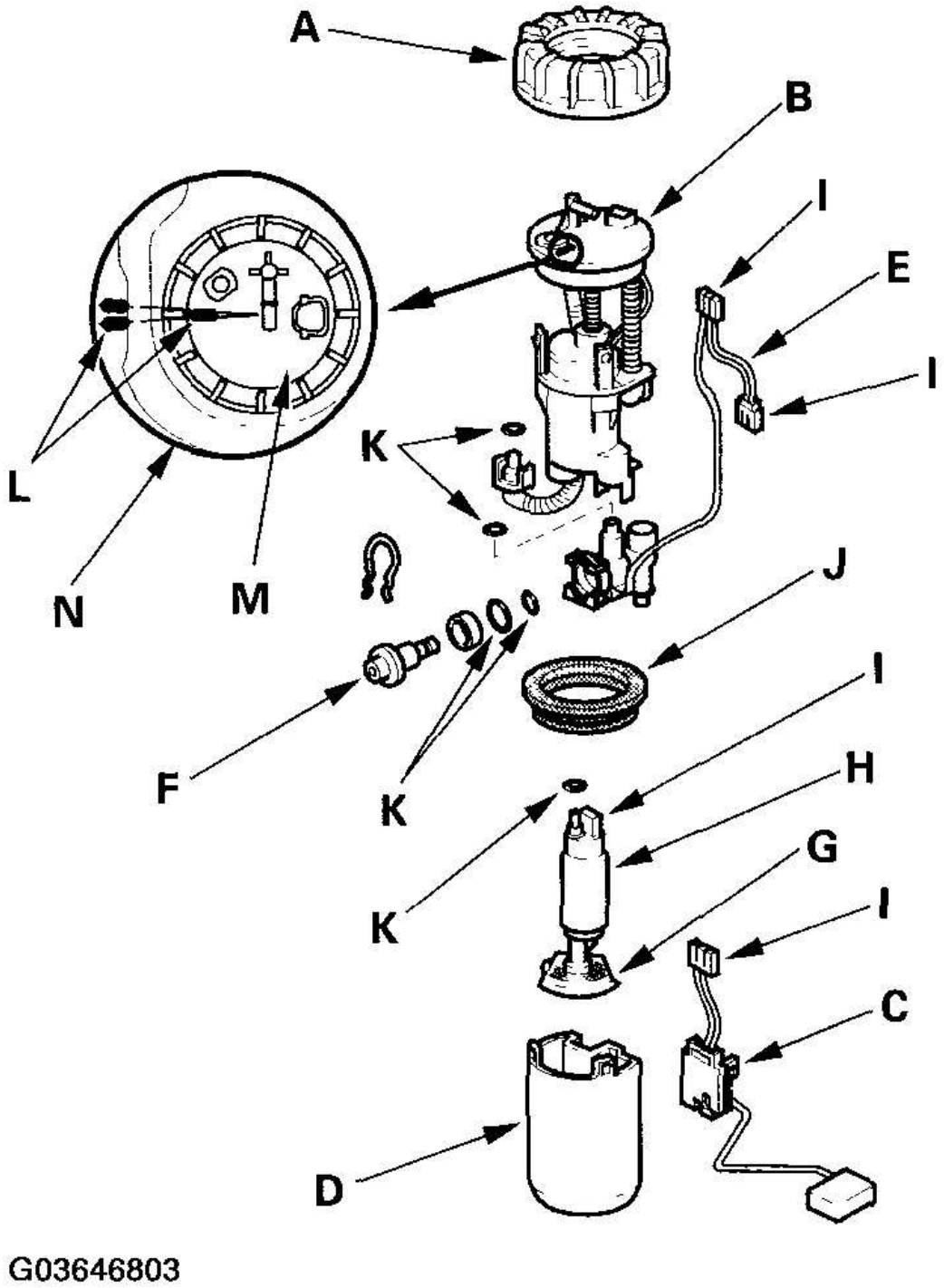


Fig. 64: Removing Locknut And Fuel Tank Unit

Courtesy of AMERICAN HONDA MOTOR CO., INC.

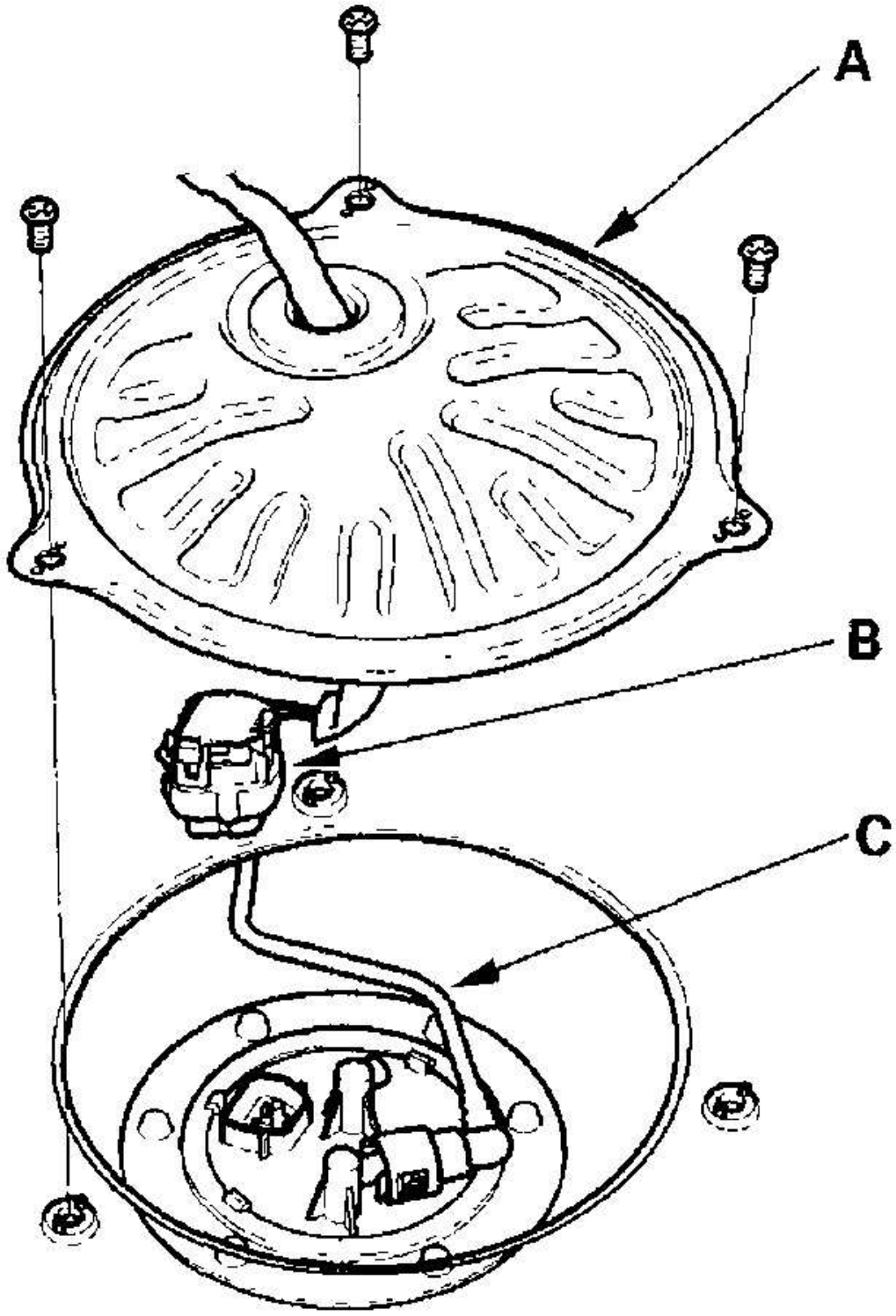
9. Remove the fuel filter (B), the fuel gauge sending unit (C), the case (D), the wire harness (E), and the fuel pressure regulator (F).
10. Check these items before installing the fuel tank unit:
    - Make sure the connection is secure and the suction filter (G) is firmly connected to the fuel pump (H).
    - When connecting the wire harness, make sure the connection is secure and the connectors (I) are firmly locked into place.
    - When installing the fuel gauge sending unit, make sure the connection is secure and the connector is firmly locked into place. Be careful not to bend or twist it excessively.
11. Install the parts in the reverse order of removal with a new base gasket (J), new locknut, and new O-rings (K). When installing the fuel tank unit, align the marks (L) on the unit (M) and the fuel tank (N).

Special Tools Required

Fuel sender wrench 07AAA-S0XA100

SULEV MODEL

1. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
2. Remove the fuel fill cap.
3. Remove the trunk floor.
4. Remove the access panel (A) from the floor.



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Fig. 65: Removing Access Panel From Floor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the fuel pump 5P connector (B).
6. Disconnect the quick-connect fitting (C) from the fuel tank unit.
7. Remove the fuel tank unit (A).

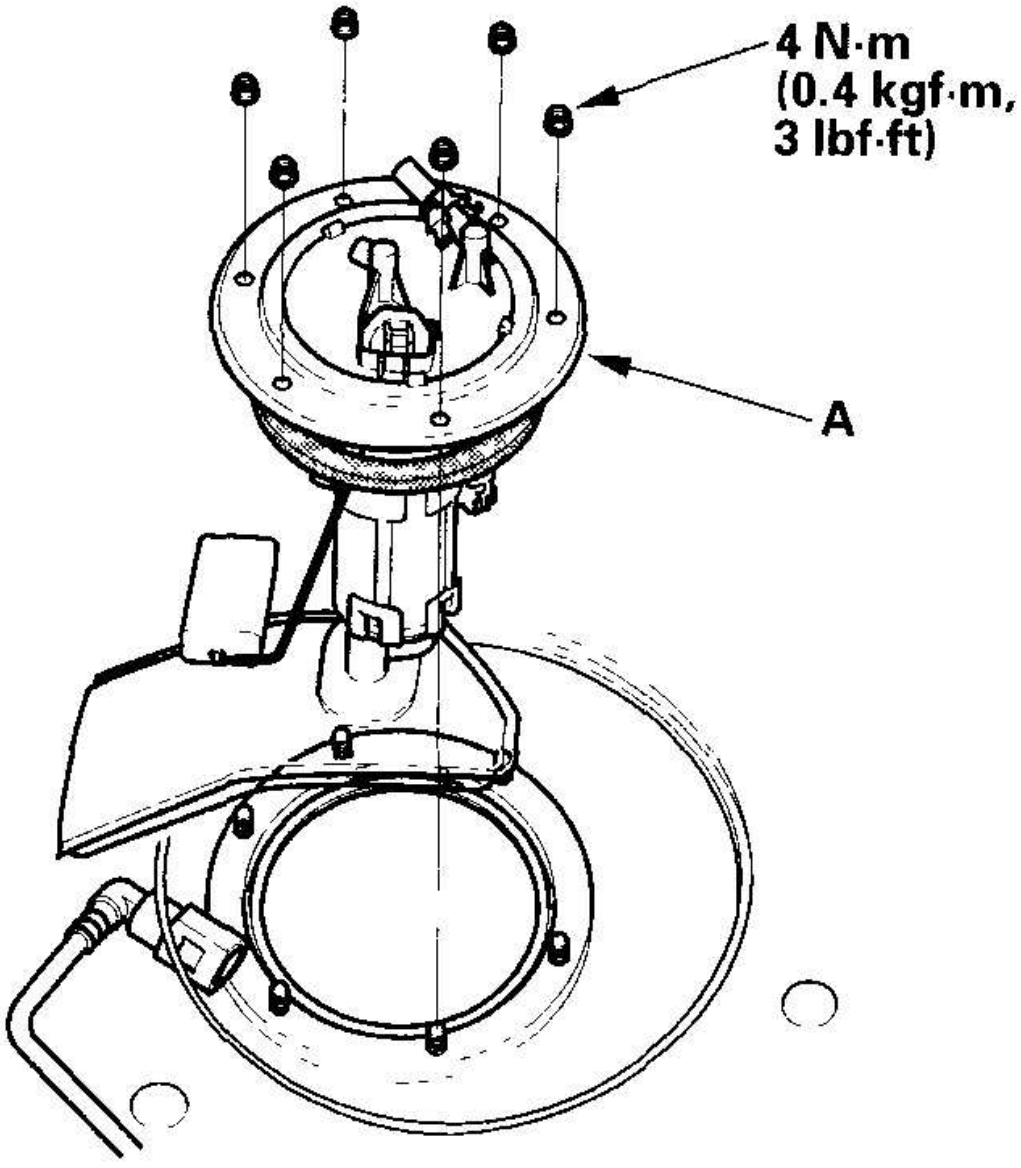


Fig. 66: Removing Fuel Tank Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the strainer case (A), the fuel gauge sending unit (B), and the wire harness (C).

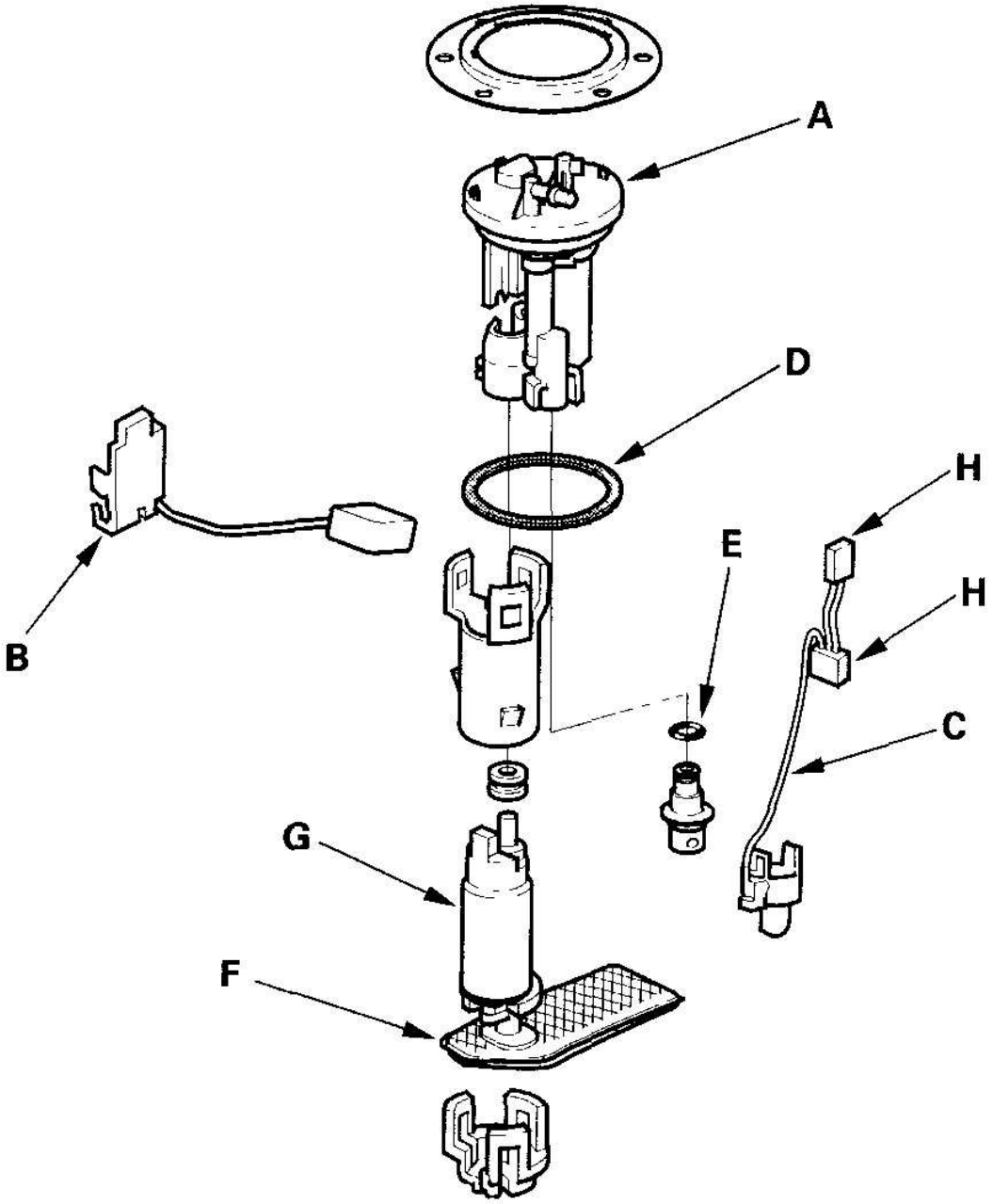


Fig. 67: Removing Strainer Case, Fuel Gauge Sending Unit And Wire Harness

Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the part in the reverse order of removal with a new base gasket (D) and new O-ring (E), then check these items:
   - Make sure the connection is secure and the suction filter (F) is firmly connected to the fuel pump (G).
   - When connecting the wire harness, make sure the connection is secure and the connectors (H) are firmly locked into place.
   - When installing the fuel gauge sending unit, make sure the connection is secure and the connector is firmly locked into place. Be careful not to bend or twist it excessively.

FUEL TANK REPLACEMENT

REMOVAL

1. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
2. Drain the fuel tank (see **FUEL TANK DRAINING**).
3. Loosen the rear wheel nuts slightly, then raise the vehicle, and make sure it is securely supported. Remove the rear wheels.
4. Release the parking brake.
5. SULEV model:

   Remove the fuel tank covers (A).

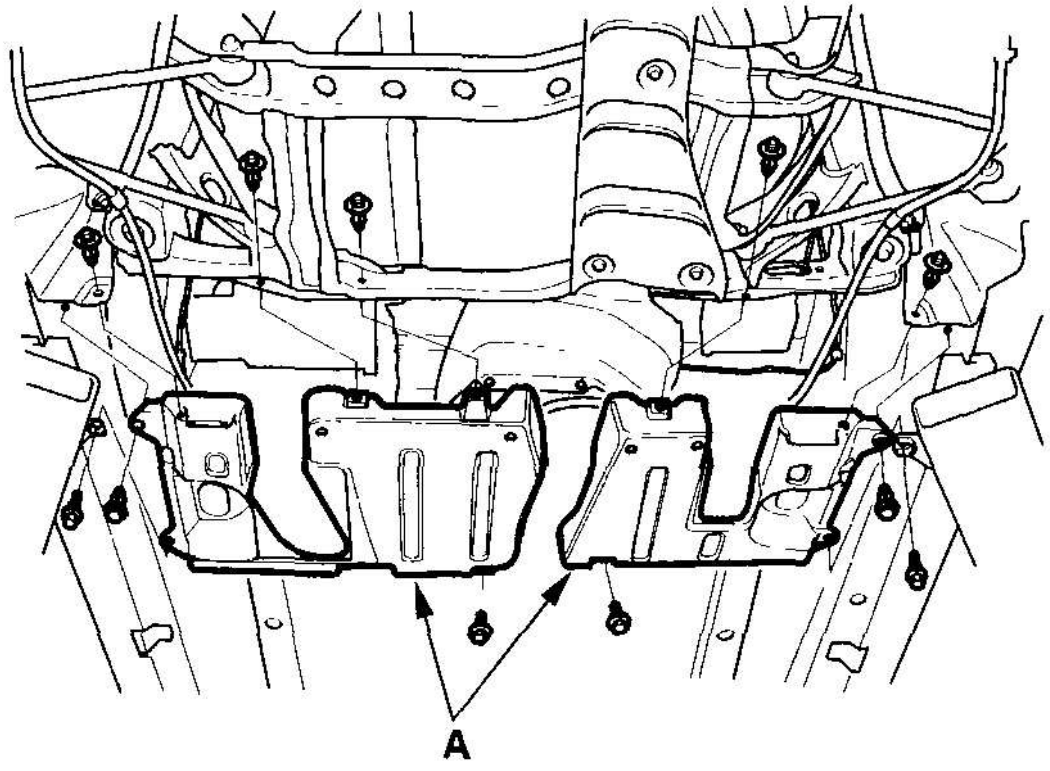


Fig. 68: Removing Fuel Tank Covers (SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the exhaust muffler (see **EXHAUST PIPE AND MUFFLER REPLACEMENT**).
7. Non-SULEV model:

   Disconnect the fuel fill neck tube (A) and breather hose (B).

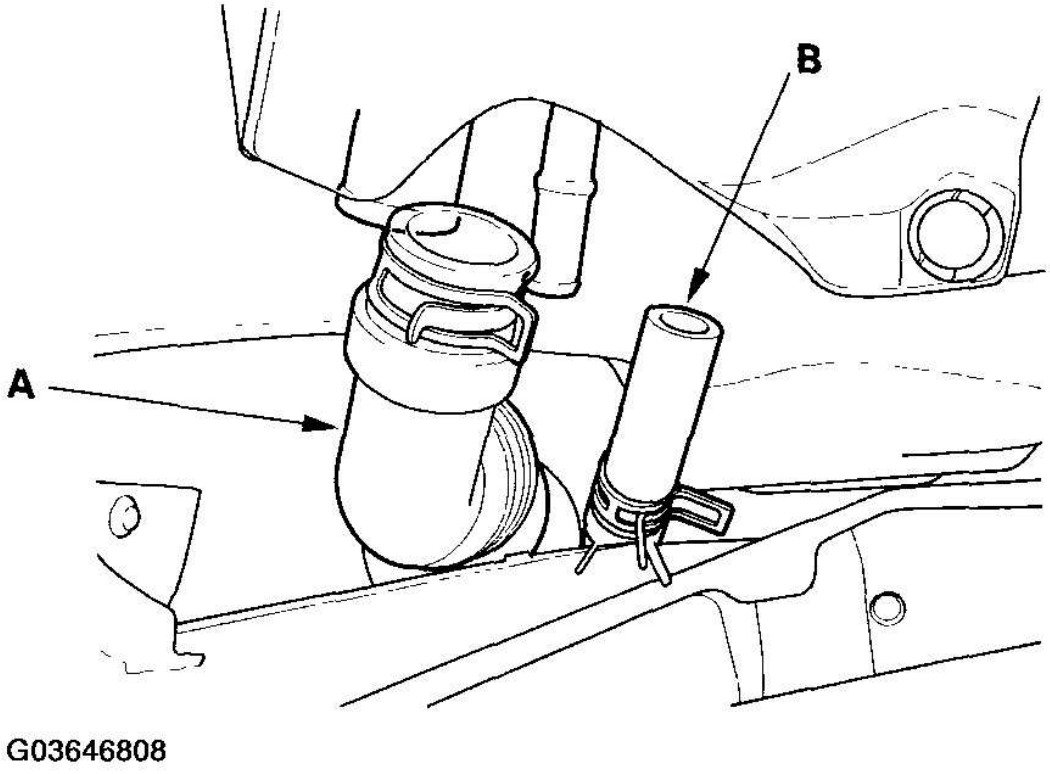


Fig. 69: Disconnecting Fuel Fill Neck Tube And Breather Hose (Non-SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. SULEV model:

   Disconnect the fuel fill neck tube (A), fuel tank vapor recirculation tube (B), and fuel tank vapor signal tube (C).

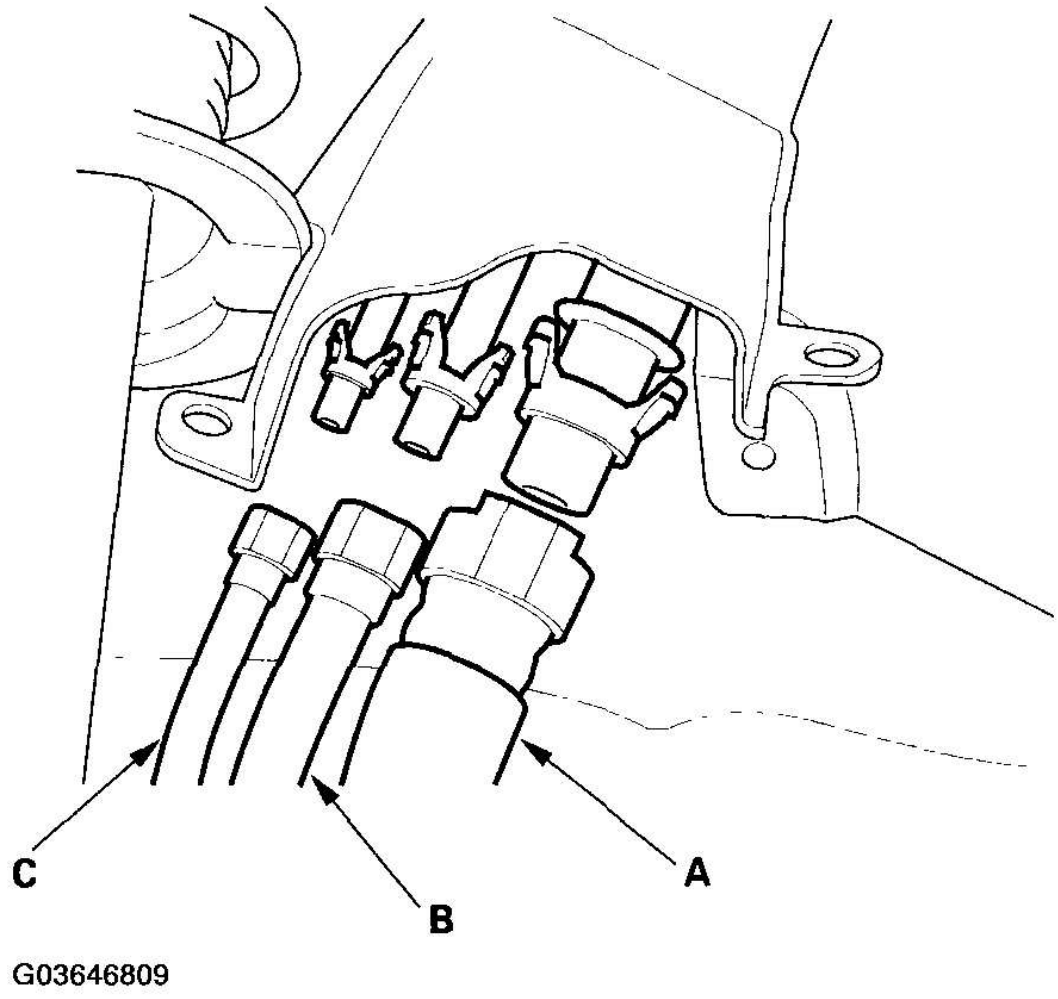
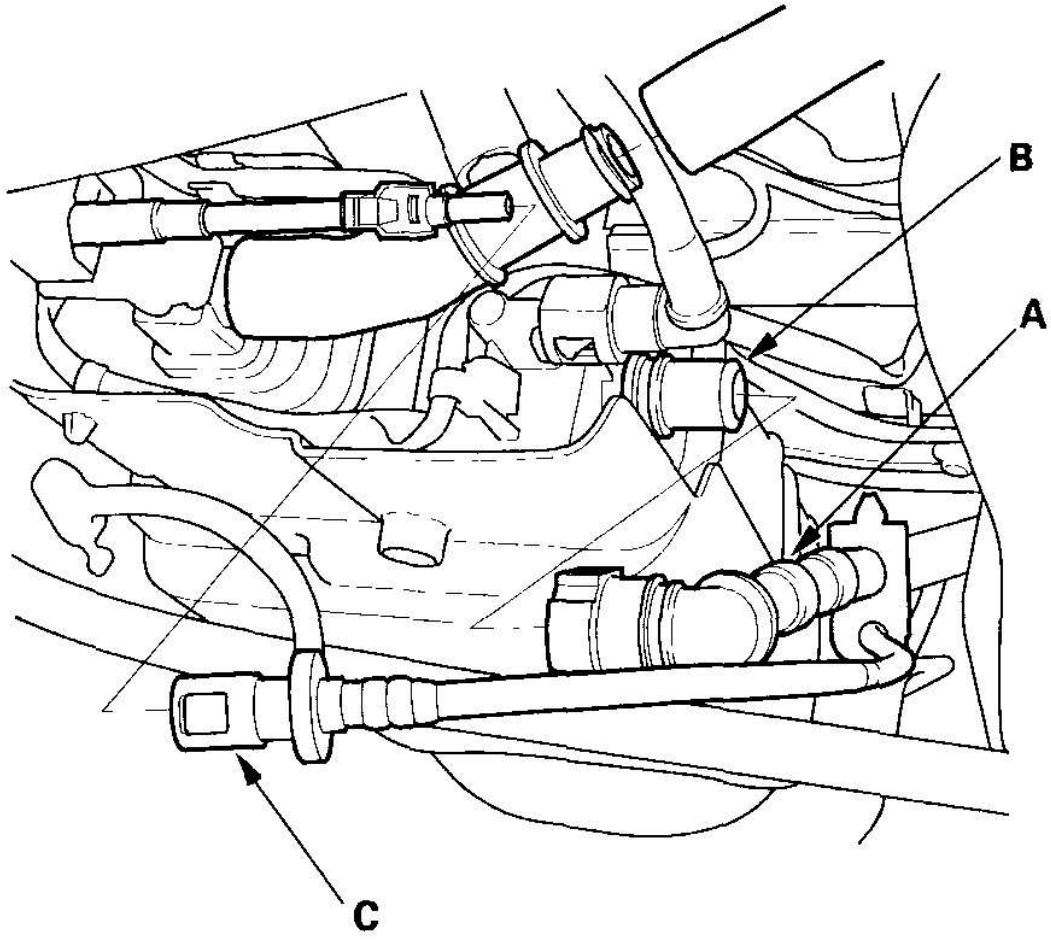


Fig. 70: Disconnecting Fuel Fill Neck Tube, Fuel Tank Vapor Recirculation Tube And Fuel Tank Vapor Signal Tube (SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Disconnect the vapor line (A) from the EVAP canister (B). Then disconnect the fuel line (C).



*: This illustration shows the non-SULEV model.

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Fig. 71: Disconnecting Vapor Line From EVAP Canister
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Disconnect the wheel sensor 2P connector (A).

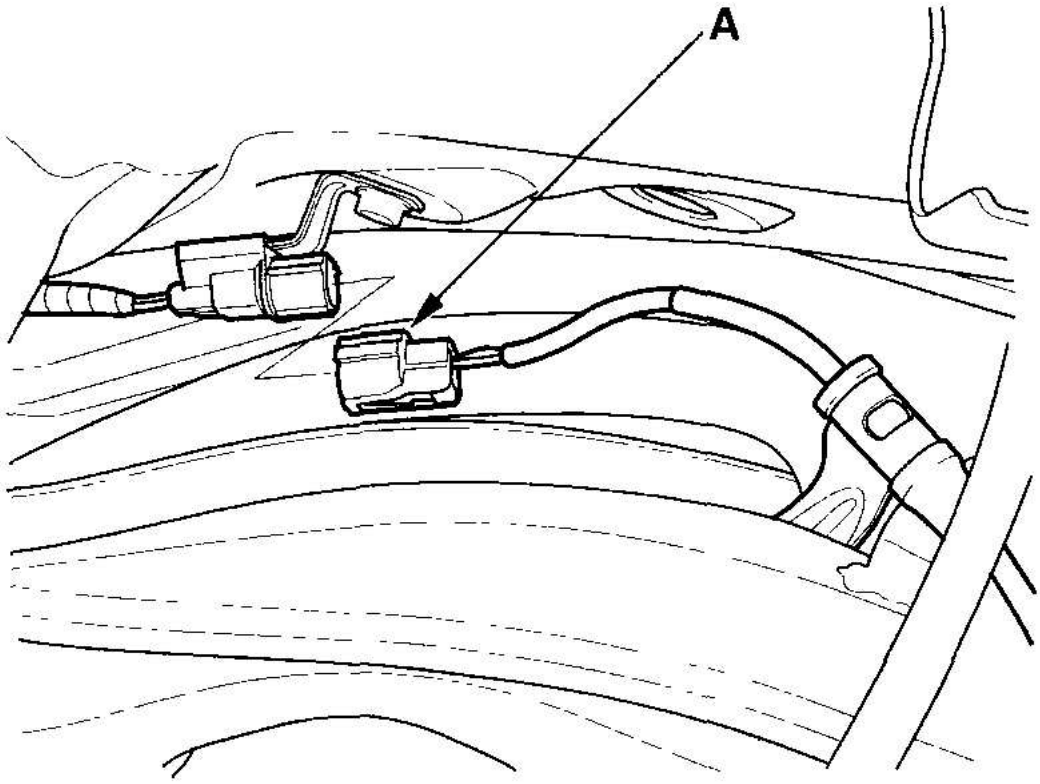


Fig. 72: Disconnecting Wheel Sensor 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. If the vehicle has rear drum brakes, go to step 14. If it has rear disc brakes, remove the clip (A), parking brake cable (B), two caliper bolts (C), and caliper body (D).

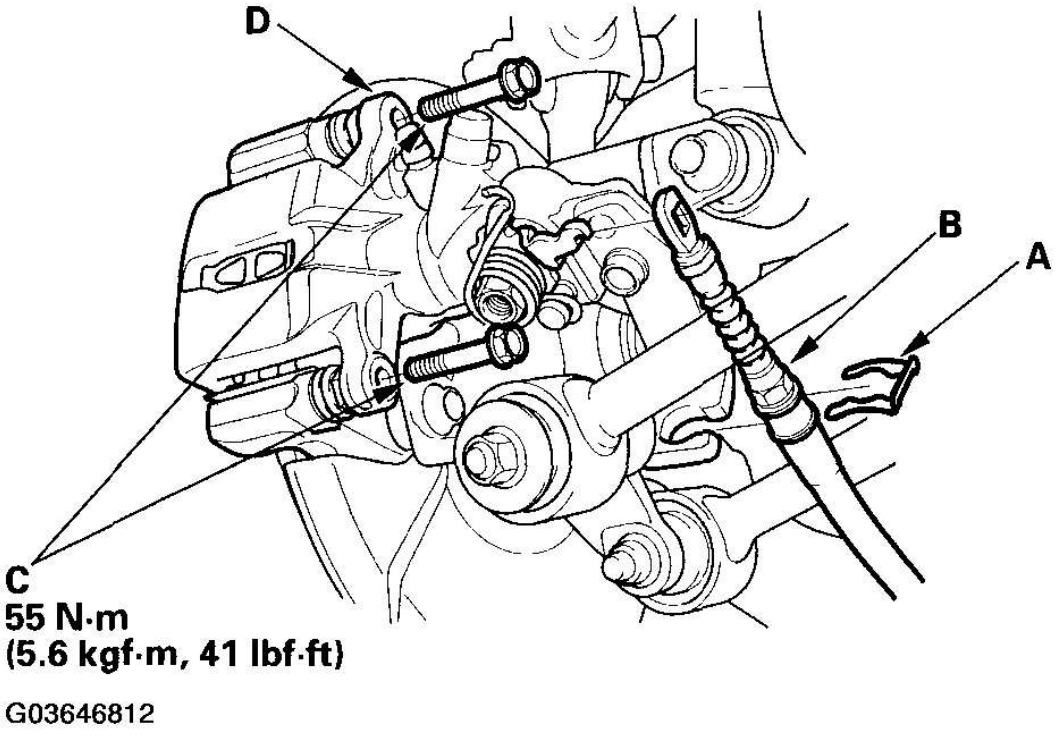


Fig. 73: Removing Clip, Parking Brake Cable, Two Caliper Bolts And Caliper Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the brake hose bracket (A).

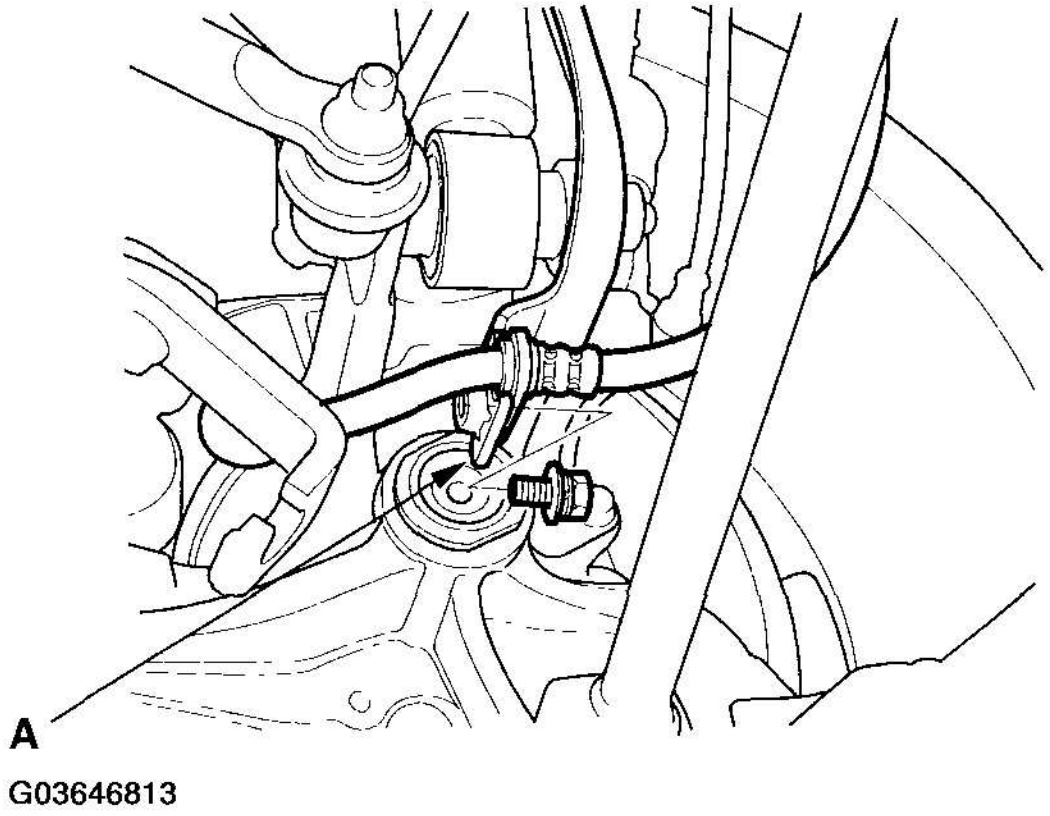


Fig. 74: Removing Brake Hose Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Hook the caliper body (A) on the damper spring (B), then go to step 17.

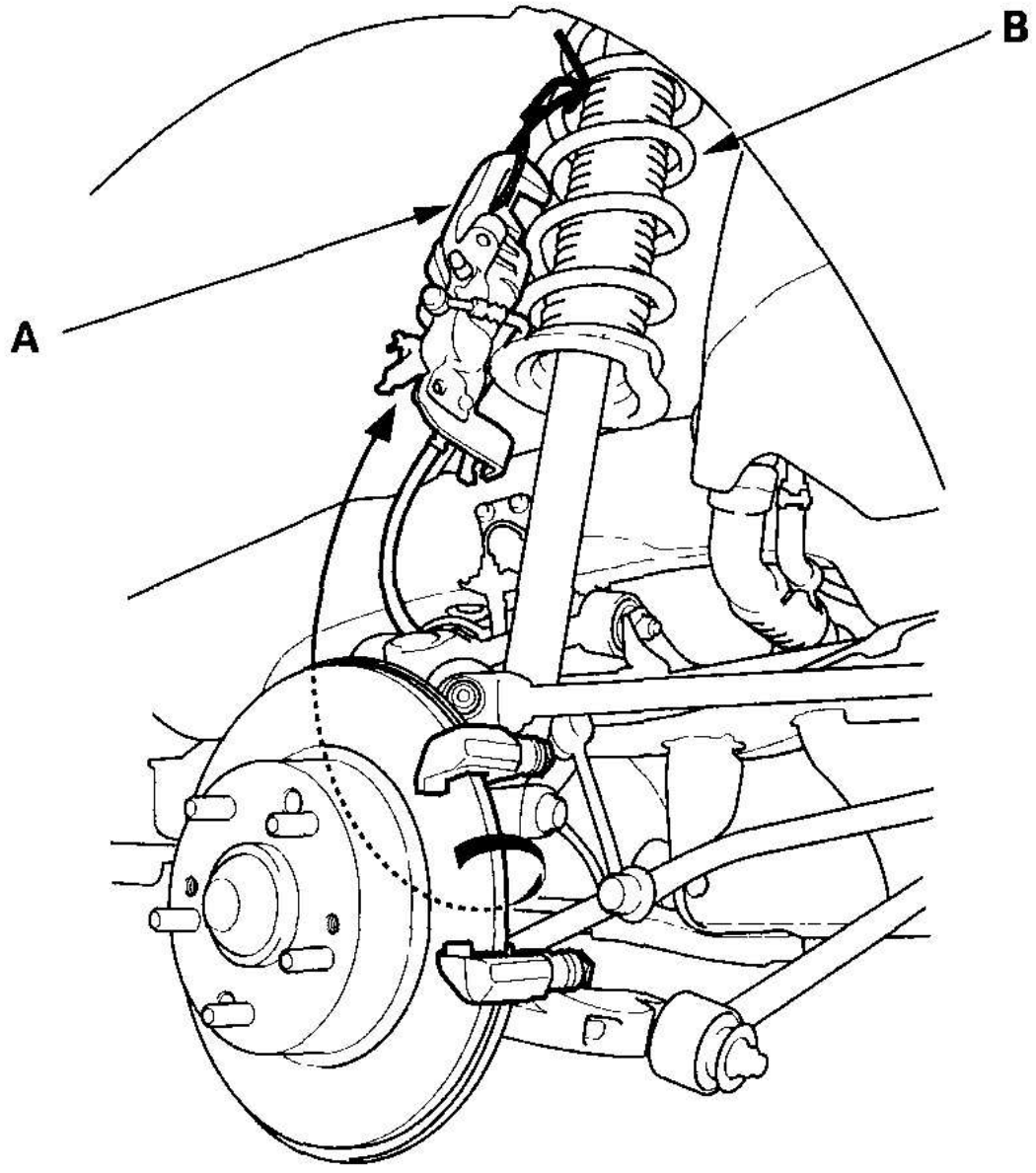


Fig. 75: Hooking Caliper Body On Damper Spring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Disconnect the brake line (A) and the brake hose clip (B).

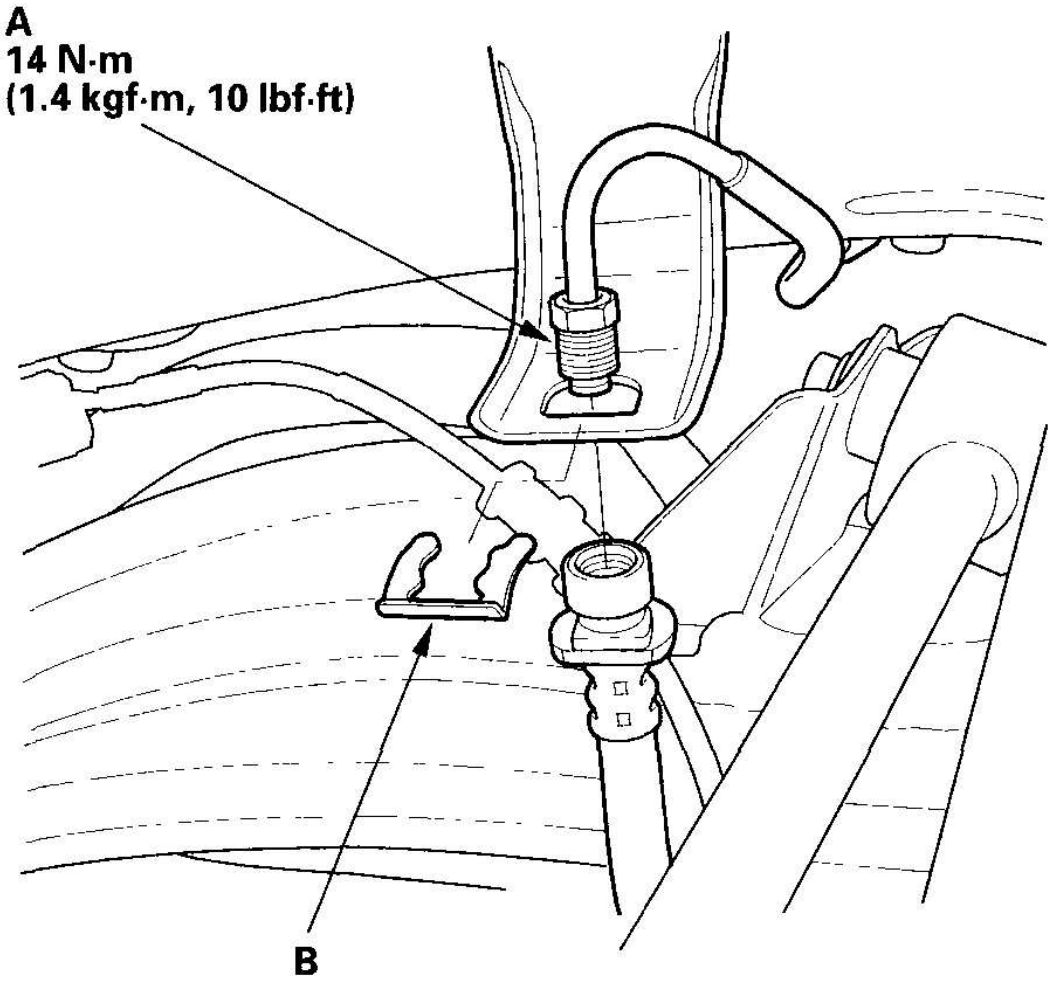


Fig. 76: Disconnecting Brake Line And Brake Hose Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the bolts (A) from the brake plate (B).

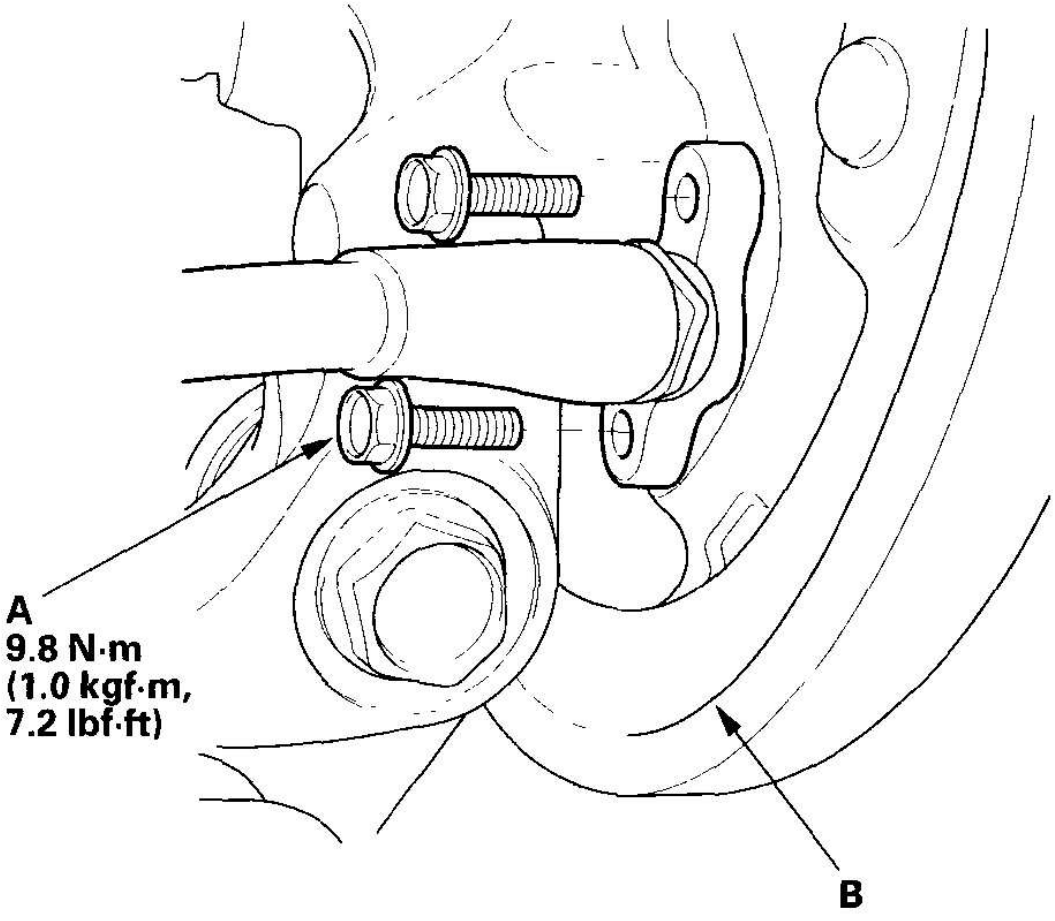


Fig. 77: Removing Bolts From Brake Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Remove the parking brake cable (A).

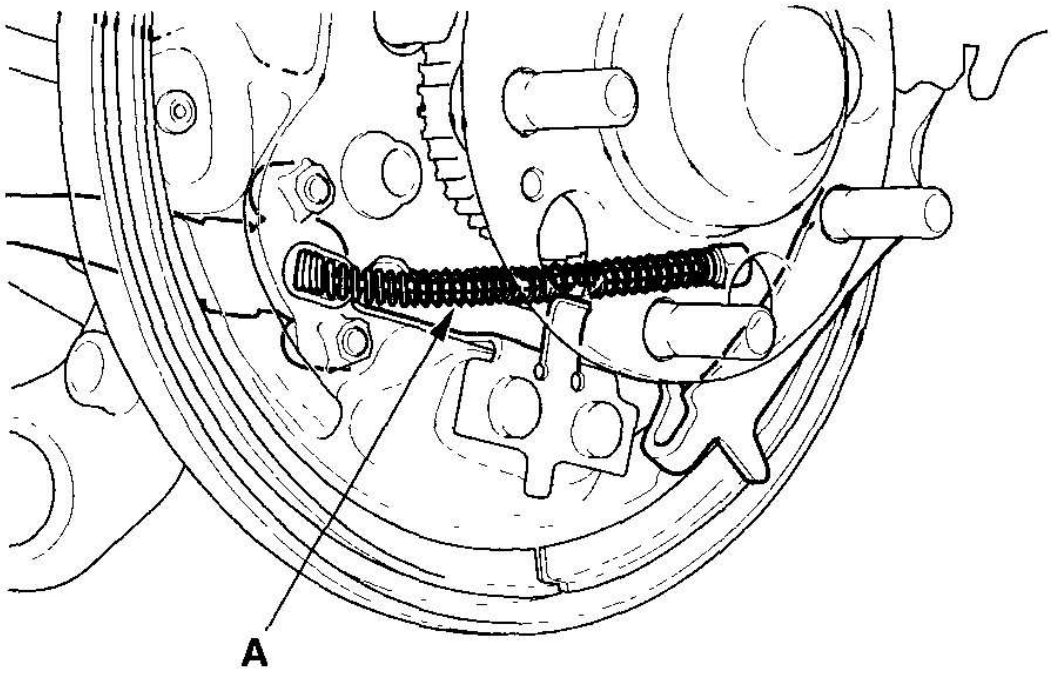


Fig. 78: Removing Parking Brake Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Remove the flange bolt (A).

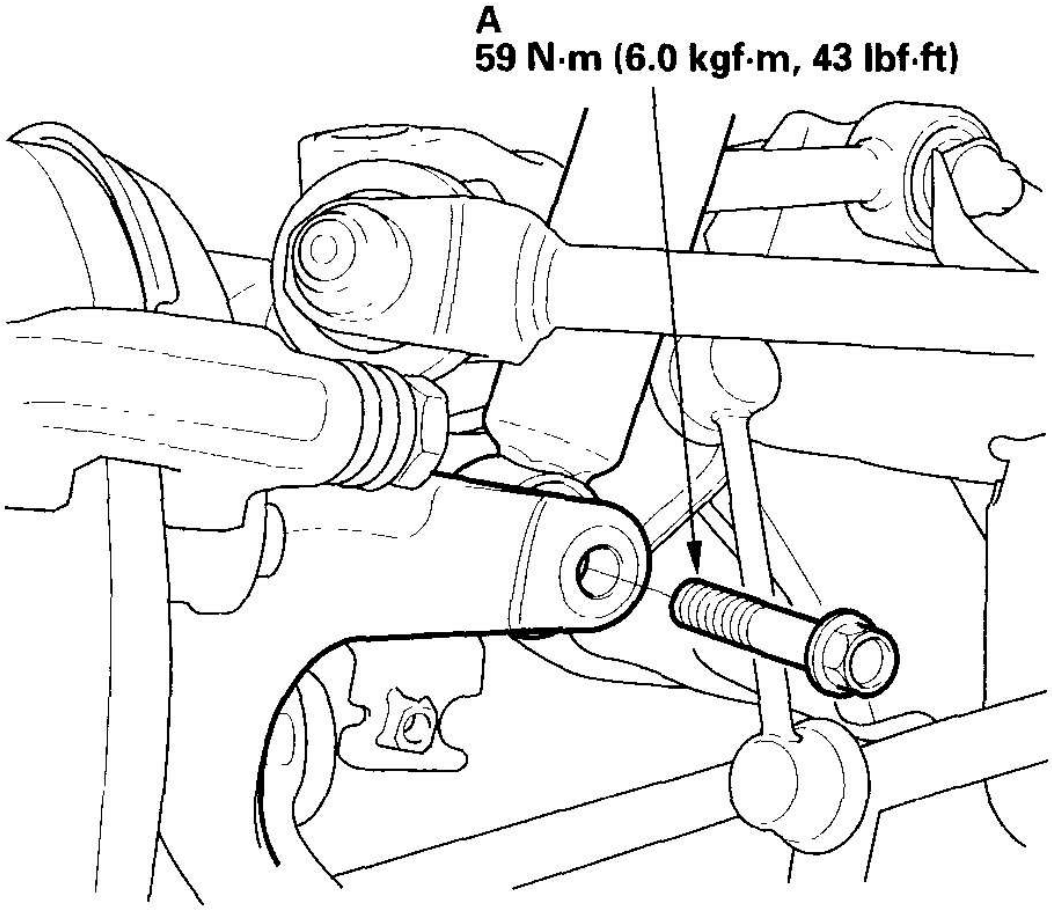
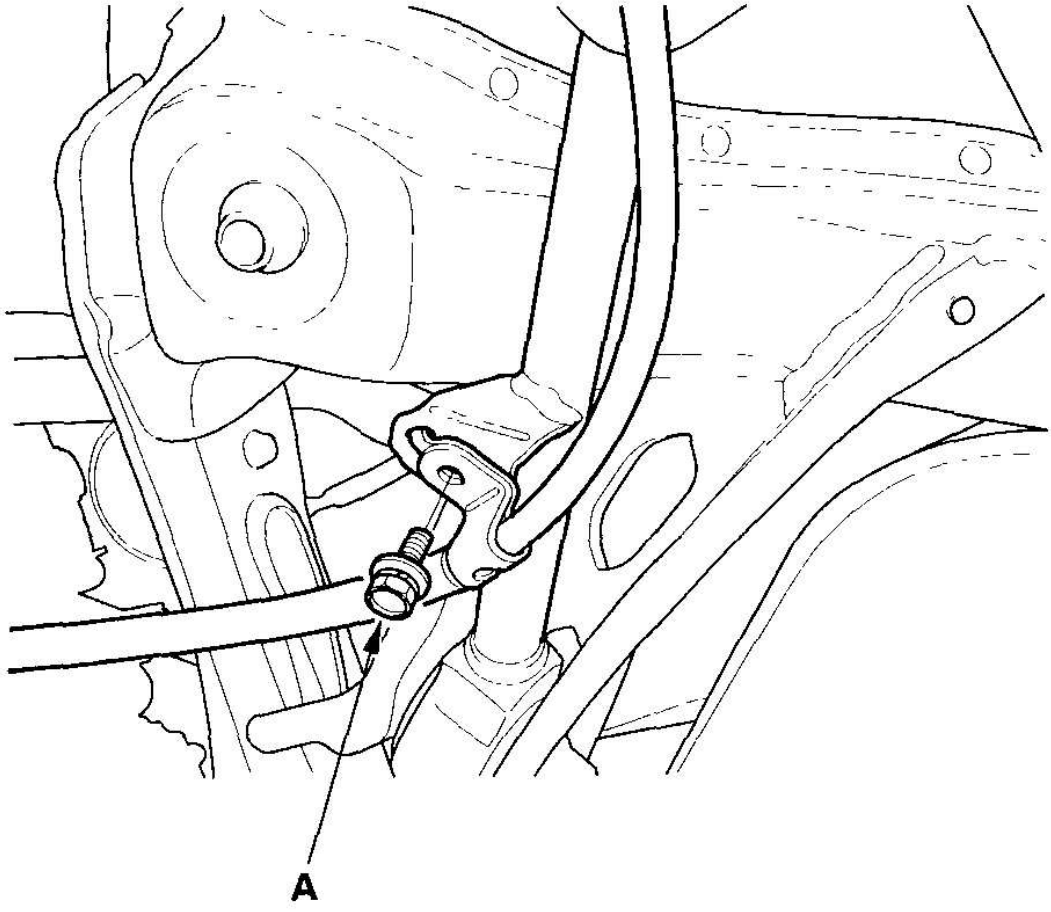


Fig. 79: Removing Flange Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Remove the parking brake cable bracket (A).



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Fig. 80: Removing Parking Brake Cable Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Remove the heat shield (A). Place a jack or support under the suspension subframe. Remove the mounting bolts (B). Remove the rear suspension subframe.

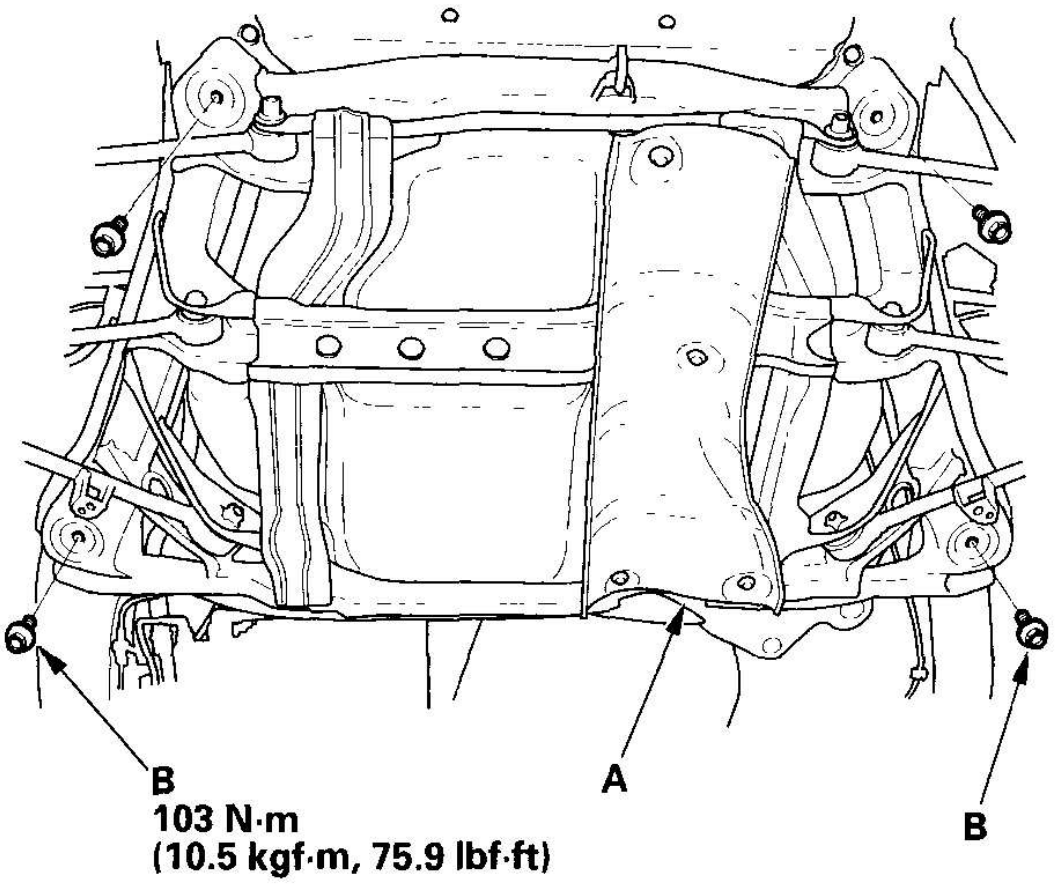


Fig. 81: Removing Heat Shield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Remove the bolts (A) and the fuel tank straps (B).

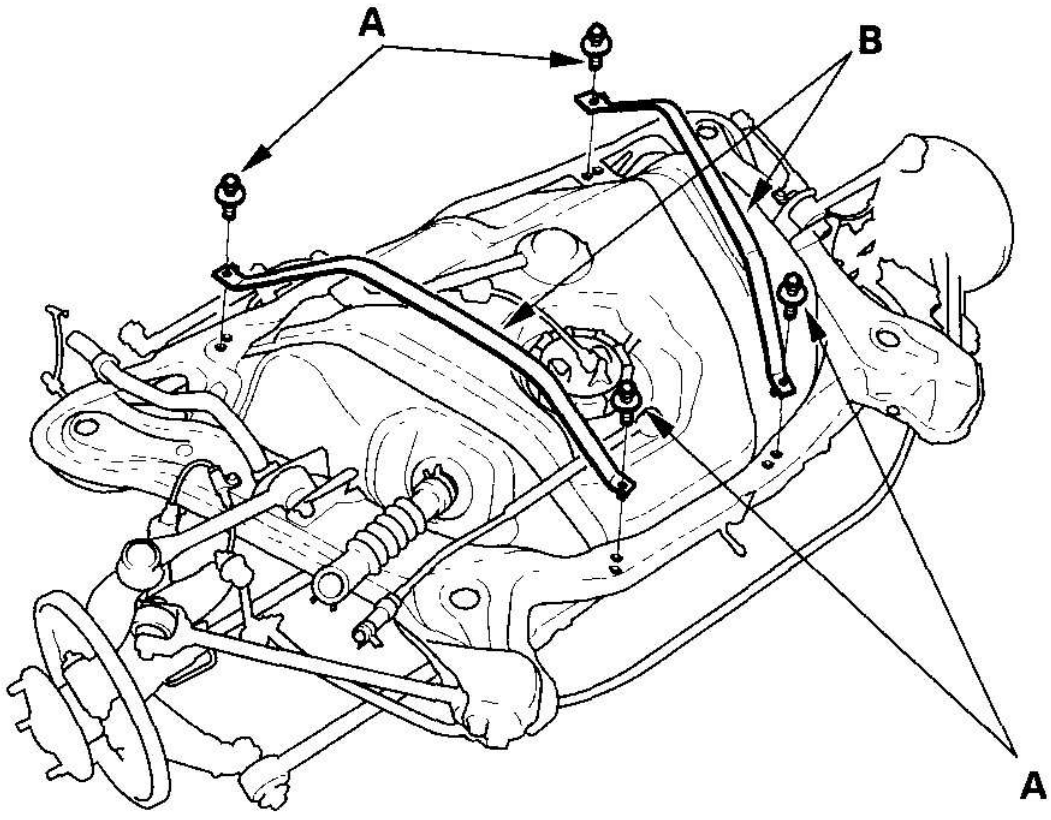


Fig. 82: Removing Bolts And Fuel Tank Straps
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Lift the fuel tank out of the subframe.

INSTALLATION

1. Install the tank straps (A), and tighten the bolts (B).

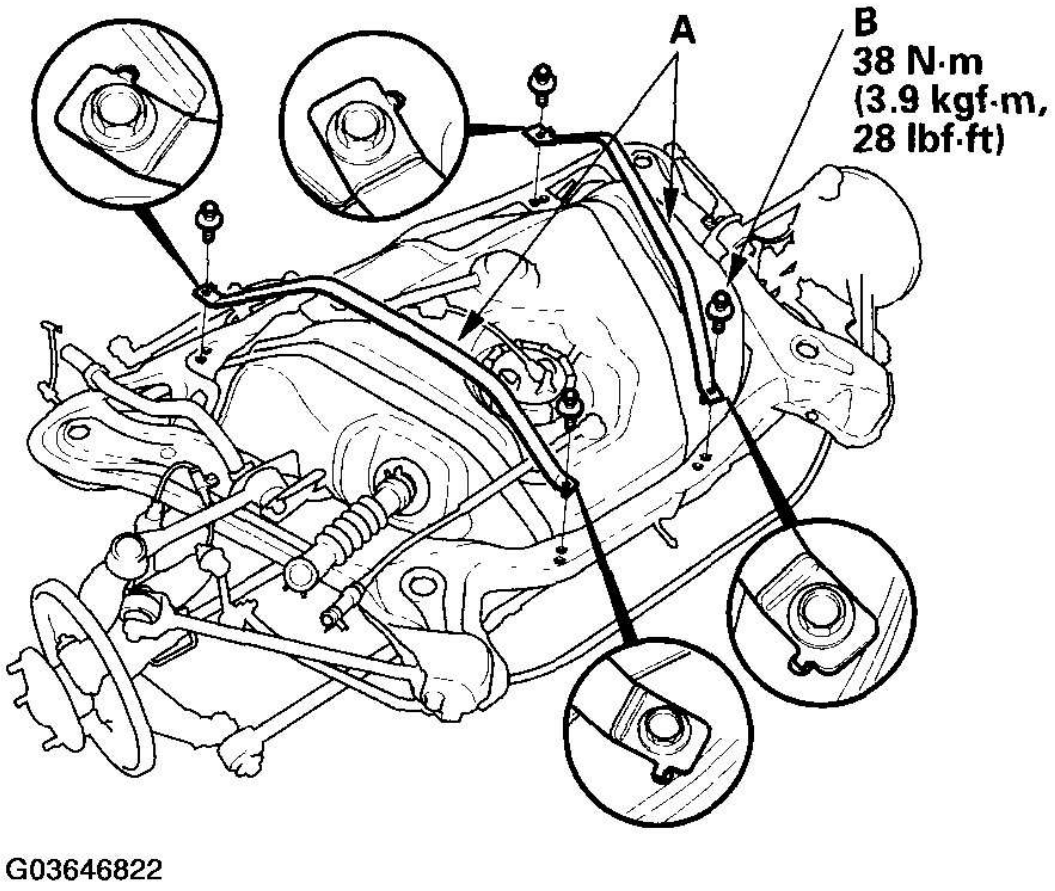


Fig. 83: Installing Tank Straps
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Place a jack or support under the rear suspension subframe. Install the rear suspension subframe, aligning the pins (A) with the holes in the rear suspension subframe.

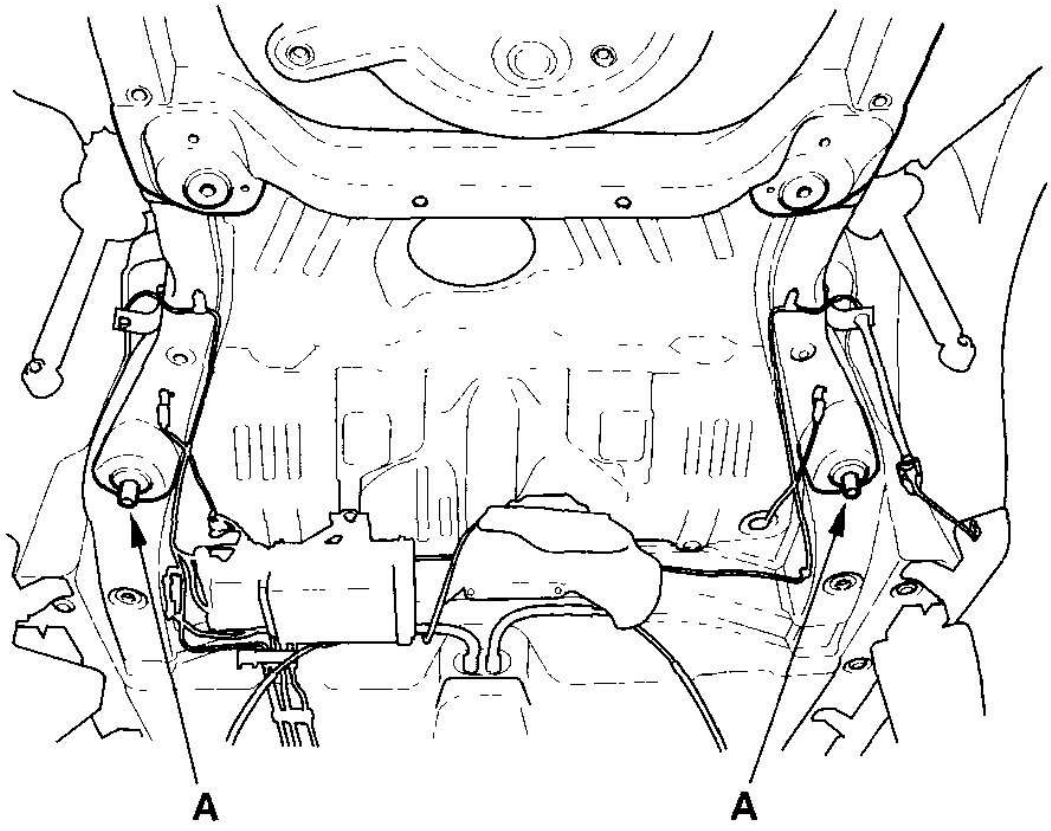


Fig. 84: Aligning Pins With Holes In Rear Suspension Subframe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

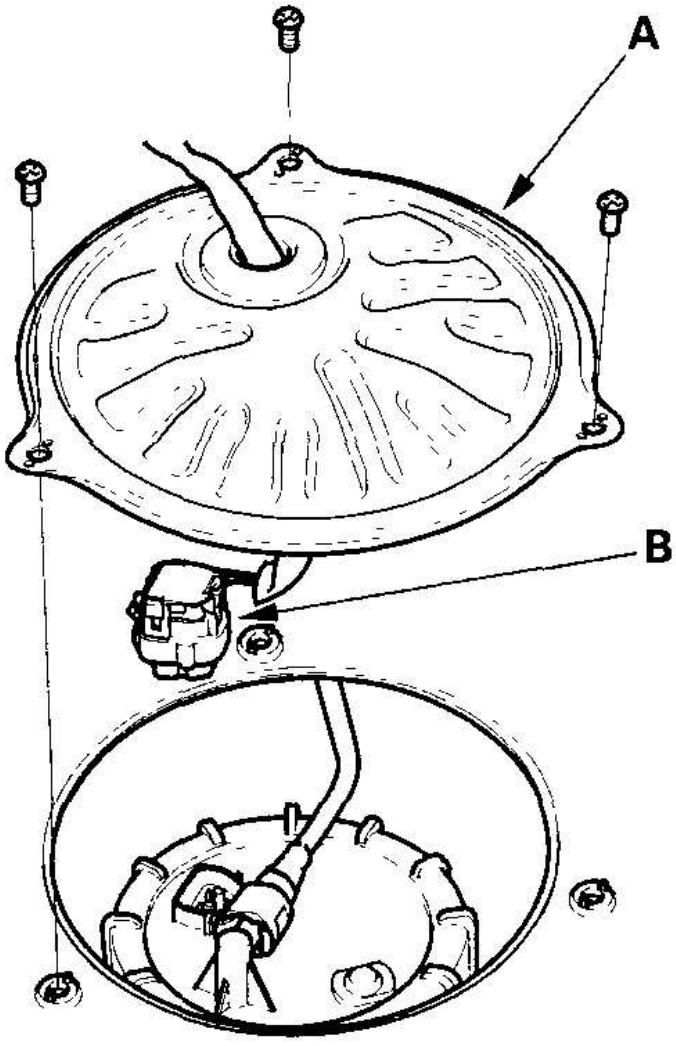
3. Install the remaining parts in the reverse order of removal.
4. If equipped with drum brakes, bleed the brake system after installing the brake hose (see **BRAKE HOSE REPLACEMENT**). If not, go to step 5.
5. After installation, check the wheel alignment (see **WHEEL ALIGNMENT**).

FUEL GAUGE SENDING UNIT TEST

2003-2004 MODELS

NOTE: For the fuel gauge system circuit diagram, refer to the Gauges Circuit Diagram (see CIRCUIT DIAGRAM).

1. Do multiplex integrated control system troubleshooting test mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).
   - If no problem is found, go to step 2.
   - If DTC B1175 is indicated, go to the DTC B1175 troubleshooting (see **DTC B1175: FUEL GAUGE SENDING UNIT SIGNALS INPUT ERROR**).
2. Check the No. 21 METER (7.5 A) fuse in the under-dash fuse/relay box.
3. Do the gauge drive circuit check (see **THE GAUGE DRIVE CIRCUIT CHECK**).
   - If the fuel gauge needle sweeps from the minimum to maximum position and then returns to minimum, the gauge is OK. Go to step 4.
   - If the fuel gauge needle does not sweep correctly, replace the gauge assembly and retest.
4. Turn the ignition switch OFF.
5. Remove the trunk floor.
6. Remove the access panel (A) from the floor.



*: This illustration shows the non-SULEV model.

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Fig. 85: Removing Access Panel From Floor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Disconnect the fuel tank unit connector (B).
8. Non-SULEV model:

Remove the fuel tank unit from the fuel tank (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).

9. SULEV model:

   Remove the fuel tank unit from the fuel tank (see **SULEV model**).

10. Measure resistance between the No. 1 and No. 2 terminals of the fuel tank unit 5P connector with the float at E (EMPTY), 1/2 (HALF FULL), and F (FULL) positions.

    If you do not get the following readings, replace the fuel gauge sending unit; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**).

FUEL TANK UNIT 5P CONNECTOR TERMINALS RESISTANCE (NON-SULEV MODEL)

Float Position	F 7.5 in. (191.4 mm)	1/2 4.4 in. (113.1 mm)	LOW 2.0 in. (52.4 mm)	E 1.0 in. (25.6 mm)
Resistance (ohms)	19 to 21	205.5 to 215.5	487.9 to 617.1	770 to 790

FUEL TANK UNIT 5P CONNECTOR TERMINALS RESISTANCE (SULEV MODEL)

Float Position	F 1.9 in. (49 mm)	1/2 5.2 in. (132.4 mm)	LOW 7.6 in. (194.1 mm)	E 8.6 in. (219.7 mm)
Resistance (ohms)	19 to 21	215.4 to 225.4	491.7 to 634.2	770 to 790

NOTE: Remove the No. 15 BACK UP (40 A) fuse from the under-hood fuse/relay box for at least 10 seconds after completing troubleshooting, otherwise it may take up to 20 minutes for the fuel gauge to indicate the correct fuel level.

Non-SULEV model

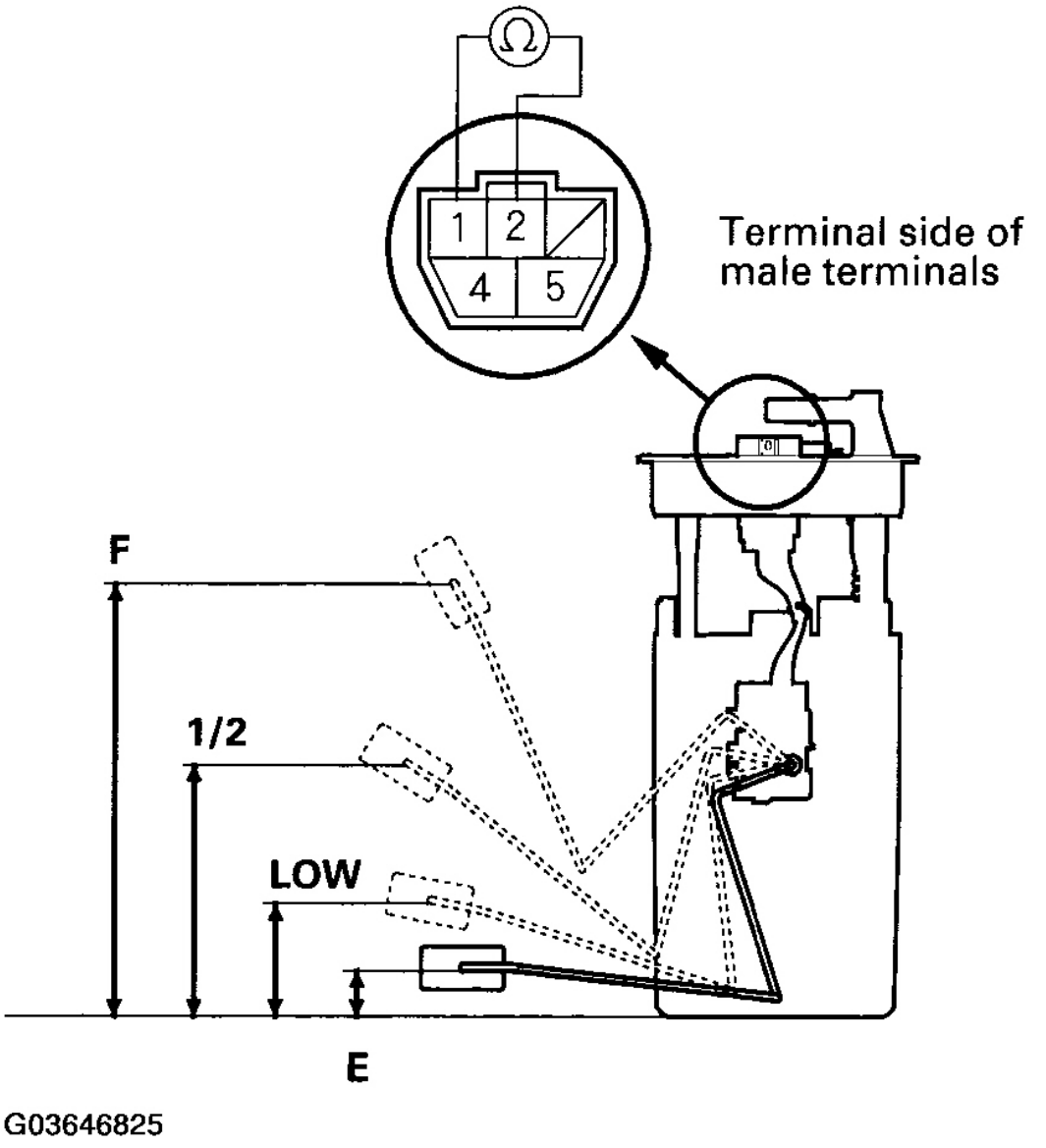


Fig. 86: Identifying Fuel Float Position (Non-SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SULEV model

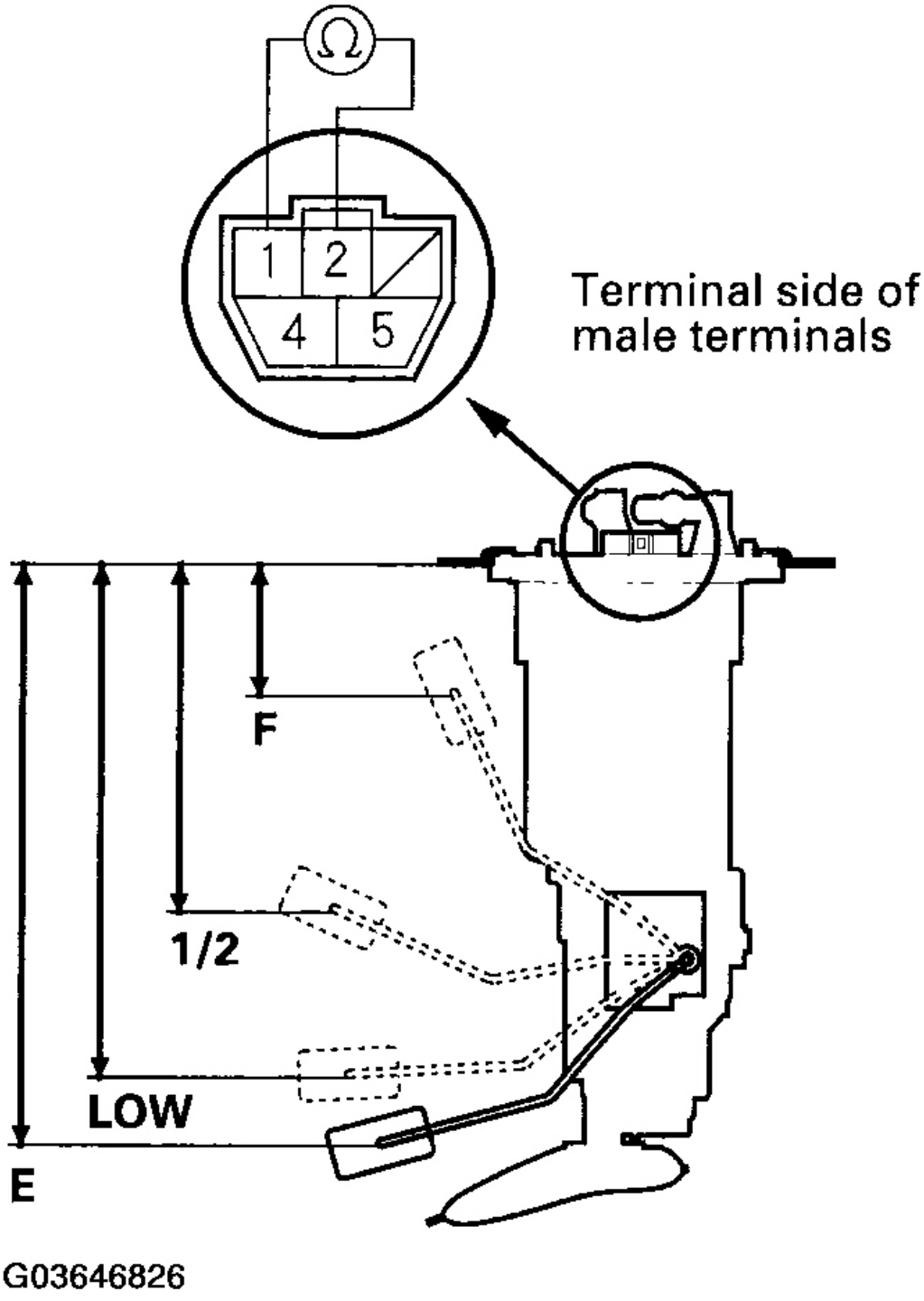


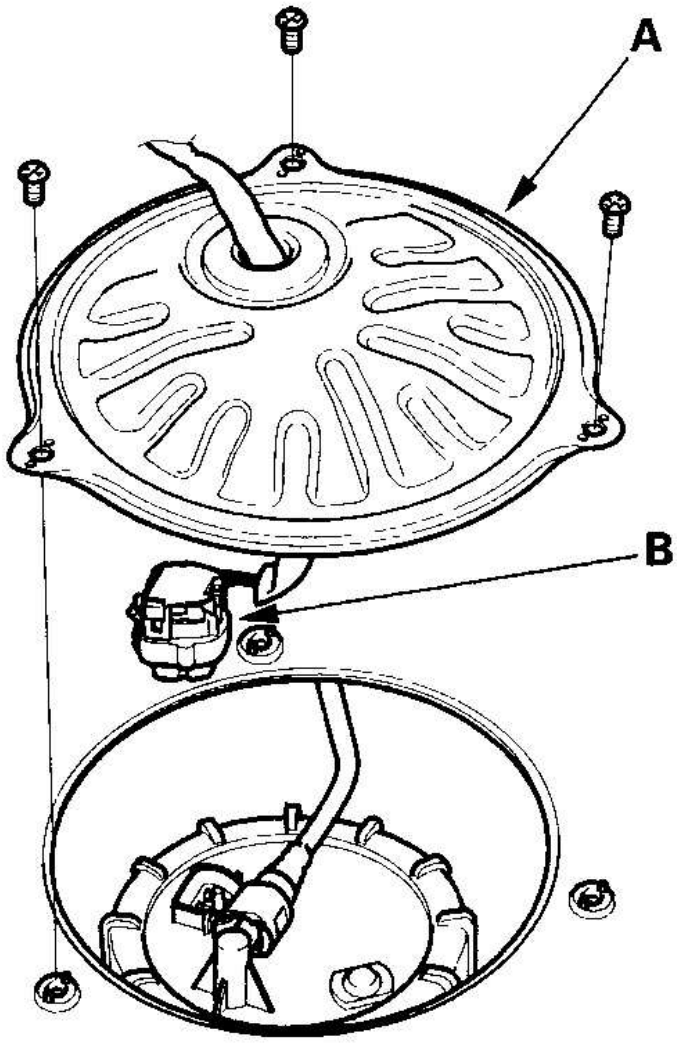
Fig. 87: Identifying Fuel Float Position (SULEV Model)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2005-2006 MODELS

NOTE: For the fuel gauge system circuit diagram, refer to the Gauges Circuit Diagram; 2003-2005 models (see '03-05 MODELS) or 2006 model (see '06 MODEL).

1. Check the No. 21 METER (7.5 A) fuse in the under-dash fuse/relay box before testing.
2. Do the B-CAN system diagnosis Test Mode A troubleshooting (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).
   - If no problem is found, go to step 3.
   - If DTC B1175 or B1176 is indicated, go to the indicated DTC's troubleshooting.
3. Turn the ignition switch OFF.
4. Remove the trunk floor.
5. Remove the access panel (A) from the floor.



*: This illustration shows the non-SULEV model.

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Fig. 88: Removing Access Panel From Floor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Disconnect the fuel tank unit connector (B).
7. Measure voltage between fuel tank unit 5P connector terminals No. 1 and No. 2 with the ignition switch ON (II). There should be battery voltage.

- If the voltage is OK, go to step 8.
- If the voltage is not as specified, check for:
  - a short in the YEL/BLK wire to ground.
  - an open in the YEL/BLK or BLK/WHT wire.

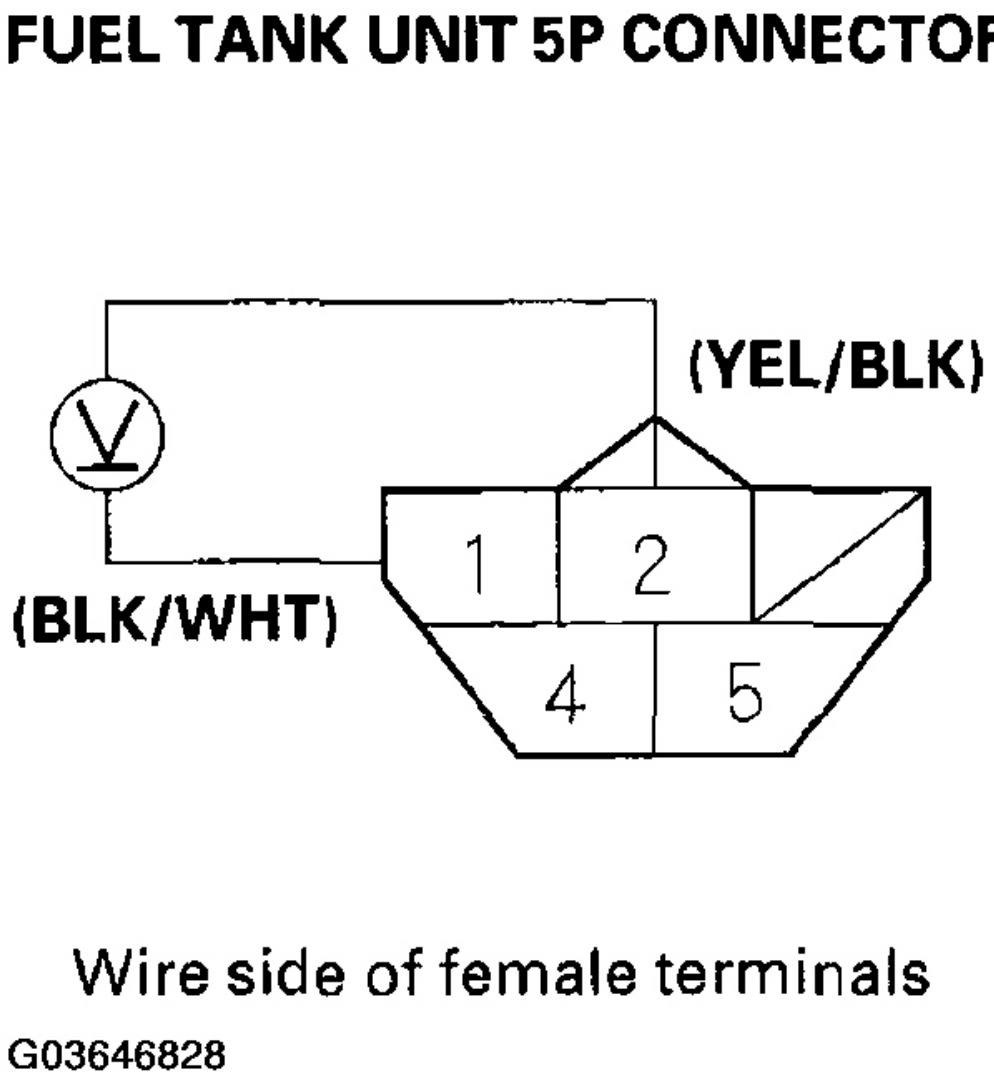


Fig. 89: Measuring Voltage Between Fuel Tank Unit 5P Connector Terminals No. 1 And No. 2

Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Turn the ignition switch OFF.
9. Non-SULEV model:

   Remove the fuel tank unit from the fuel tank (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).

10. SULEV model:

    Remove the fuel tank unit from the fuel tank (see **SULEV model**).

11. Measure resistance between fuel tank unit 5P connector terminals No. 1 and No. 2 with the float at E (EMPTY), LOW (LOW FUEL INDICATOR), 1/2 (HALF FULL), and F (FULL) positions.

    If you do not get the following readings, replace the fuel gauge sending unit; Non-SULEV model (see **Non-SULEV model**) or SULEV model (see **SULEV model**).

FUEL TANK UNIT 5P CONNECTOR TERMINALS RESISTANCE (NON-SULEV MODEL)

Float Position	F 7.5 in. (191.4 mm)	1/2 4.4 in. (113.1 mm)	LOW 2.0 in. (52.4 mm)	E 1.0 in. (25.6 mm)
Resistance (ohms)	19 to 21	205.5 to 215.5	487.9 to 617.1	770 to 790

FUEL TANK UNIT 5P CONNECTOR TERMINALS RESISTANCE (SULEV MODEL)

Float Position	F 1.9 in. (49 mm)	1/2 5.2 in. (132.4 mm)	LOW 7.6 in. (194.1 mm)	E 8.6 in. (219.7 mm)
Resistance (ohms)	19 to 21	215.4 to 225.4	491.7 to 634.2	770 to 790

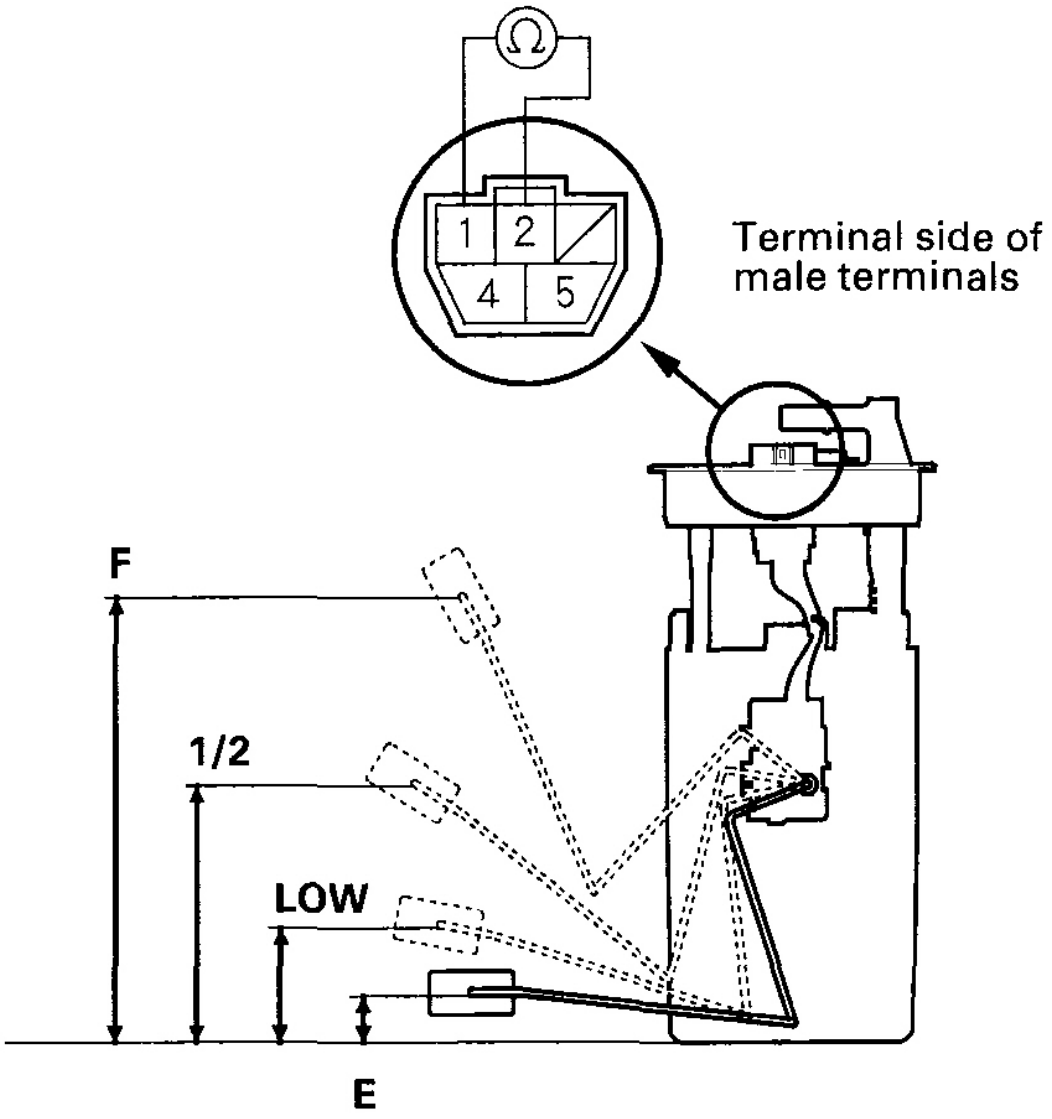


Fig. 90: Measuring Resistance Between Fuel Tank Unit 5P Connector Terminals No. 1 And No. 2 With Float At E (EMPTY), LOW (LOW FUEL INDICATOR), 1/2 (HALF FULL), And F (FULL) Positions (Non-SULEV Model)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

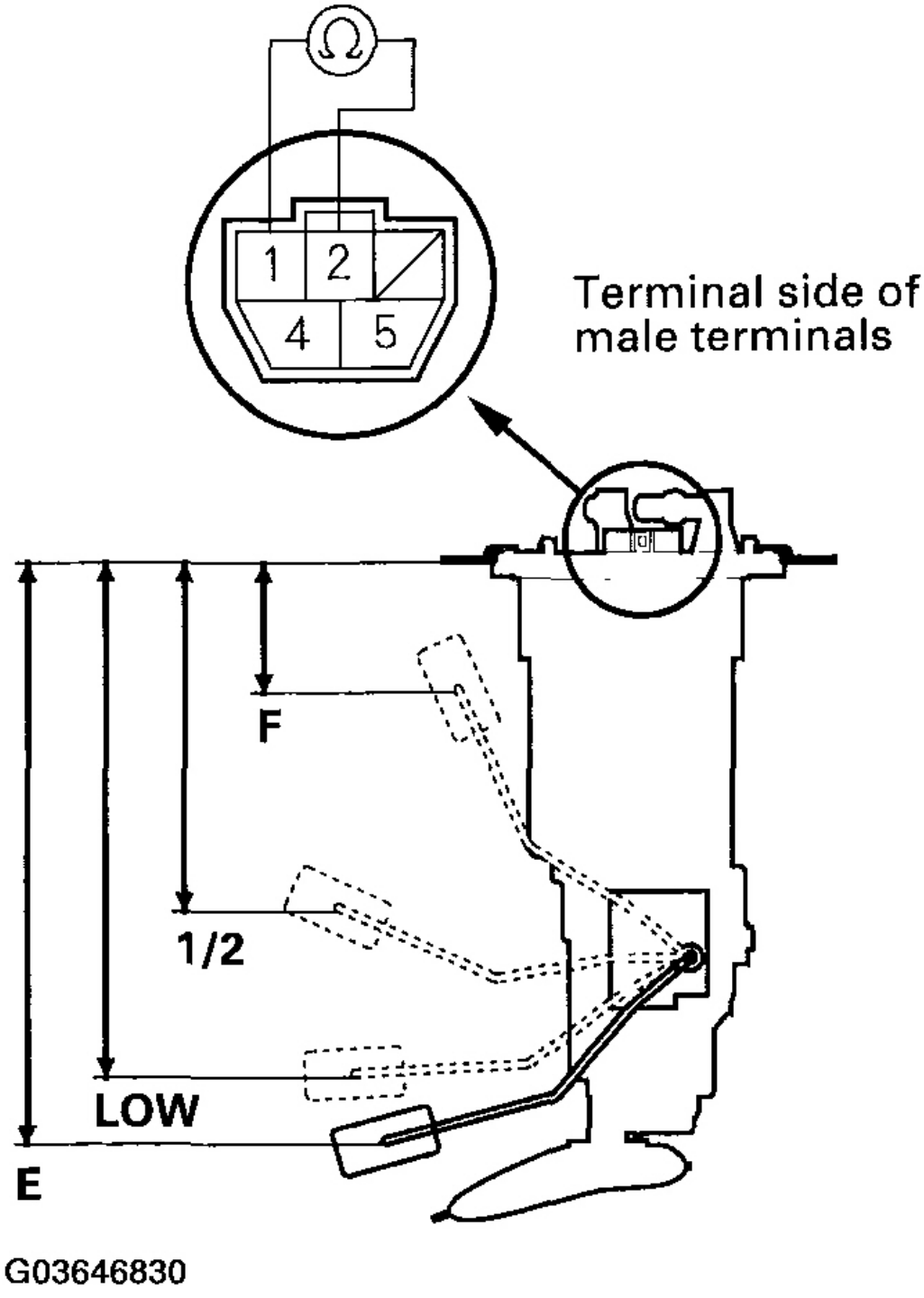


Fig. 91: Measuring Resistance Between Fuel Tank Unit 5P Connector

Terminals No. 1 And No. 2 With Float At E (EMPTY), LOW (LOW FUEL INDICATOR), 1/2 (HALF FULL), And F (FULL) Positions (SULEV Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Reconnect the fuel tank unit 5P connector.
13. Remove the No. 15 BACK UP (40 A) fuse from the under-hood fuse/relay box for at least 10 seconds, then reinstall it.
14. Turn the ignition switch ON (II).
15. Check that the pointer of the fuel gauge indicates "F" with the float at F.
    - If the pointer of the fuel gauge does not indicate "F" replace the gauge assembly.
    - If the gauge is OK, the test is complete.

NOTE:

- **The pointer of the fuel gauge returns to the bottom of the gauge dial when the ignition switch is OFF, regardless of the fuel level.**
- **Remove the No. 15 BACK UP (40 A) fuse from the under-hood fuse/relay box for at least 10 seconds after completing troubleshooting, otherwise it may take up to 20 minutes for the fuel gauge to indicate the correct fuel level.**

LOW FUEL INDICATOR TEST

1. Do the gauge drive circuit check (see **THE GAUGE DRIVE CIRCUIT CHECK**).
    - If the low fuel indicator flashes, go to step 2.
    - If the low fuel indicator does not flash, replace the gauge control module assembly.
2. Do the B-CAN system diagnosis Test Mode A troubleshooting (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).
    - If any DTCs are indicated, go to the indicated DTC's troubleshooting.

- If no DTCs are indicated, go to step 3.

3. Do the fuel gauge sending unit test; 2003-2004 models (see **2003-2004 models**) or 2005-2006 models (see **2005-2006 models**).

2003-07 ACCESSORIES & EQUIPMENT

Gauges - Accord (V6)

COMPONENT LOCATION INDEX

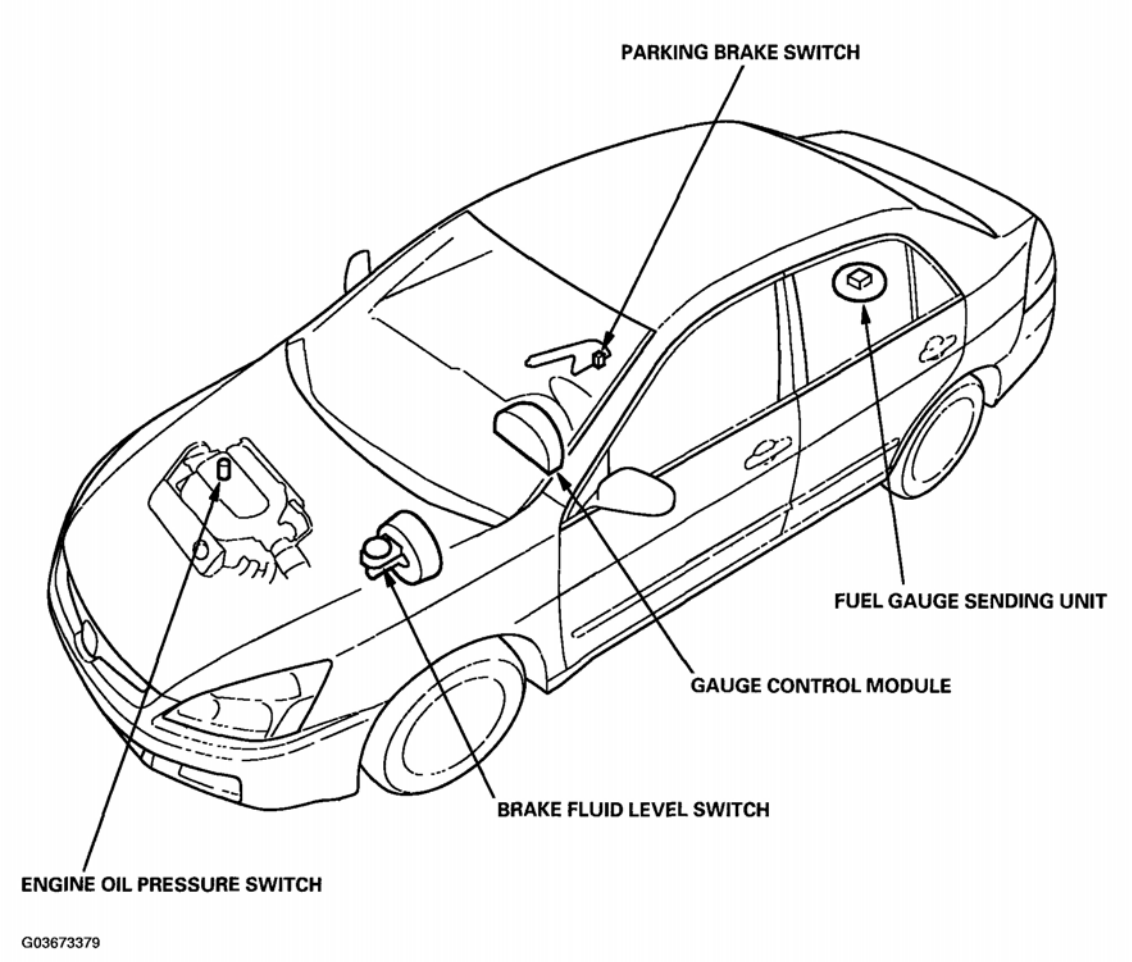


Fig. 1: Locating Gauges Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

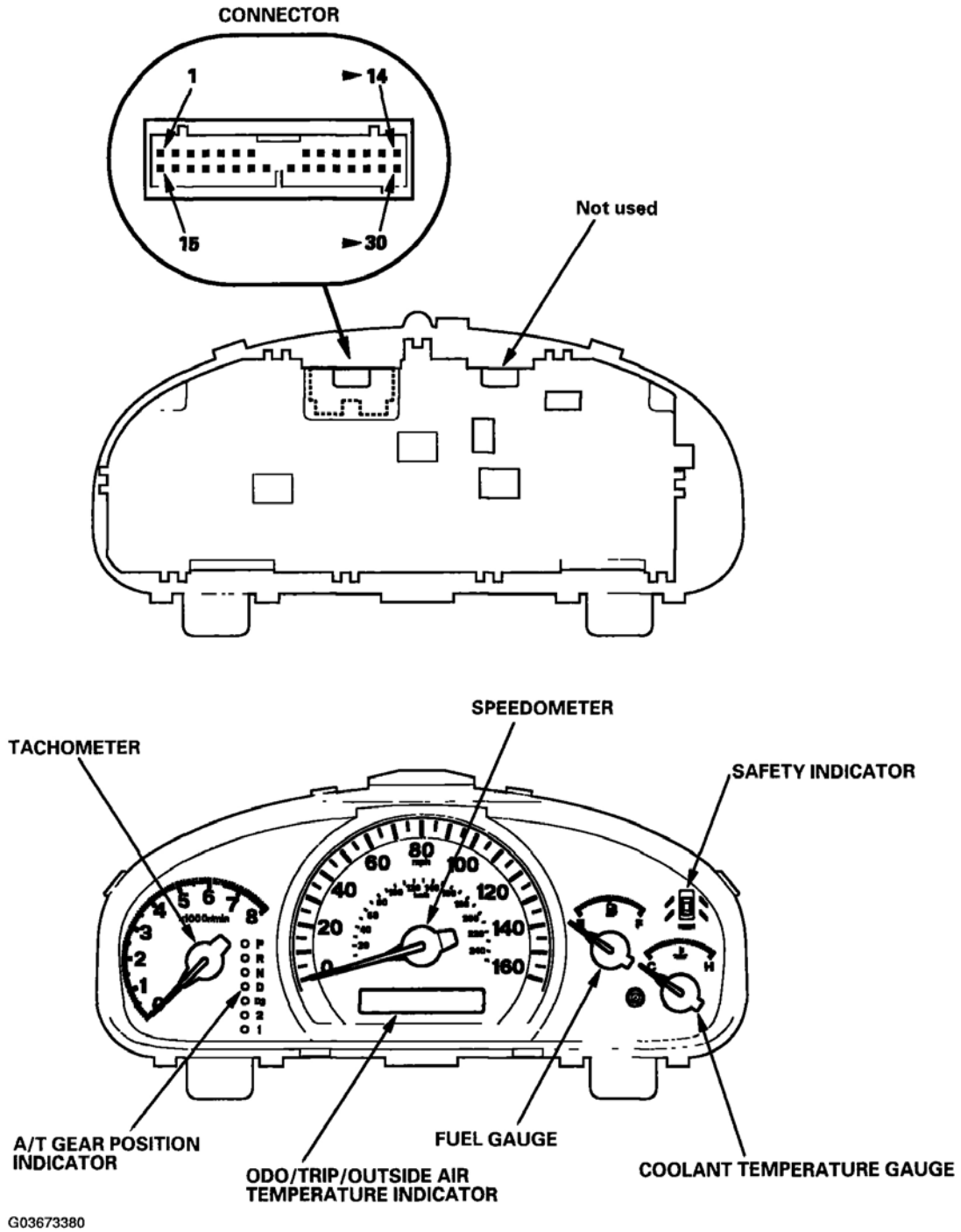


Fig. 2: Locating Gauges Components (2003-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

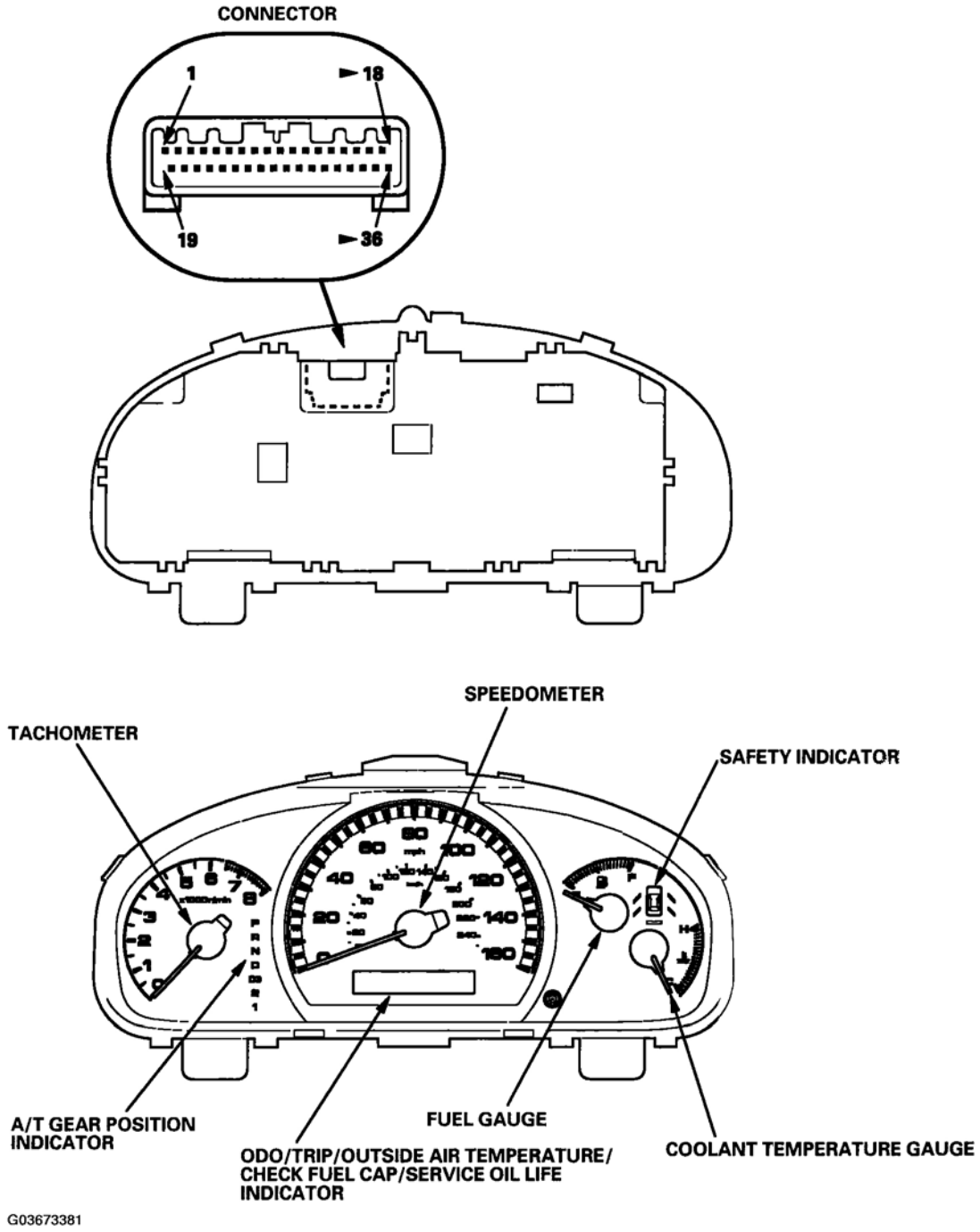


Fig. 3: Locating Gauges Components (2006-07 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SELF-DIAGNOSTIC FUNCTION

Before troubleshooting the gauge system, refer to multiplex integrated control system B-CAN System Diagnosis Test Mode A and refer to **MOTOR TEST** .

The gauge control module has a self-diagnostic function.

- The beeper drive circuit check
- The indicator drive circuit check
- The switch input test
- The LCD segments check
- The gauges drive circuit check (Speedometer, Tachometer, Fuel gauge, Coolant temperature gauge)
- The communication line check (of the body-controller area network (B-CAN) communication line and the fast-controller area network (F-CAN) communication line between the gauges).

NOTE: Indicators are also controlled via the communication line.

ENTERING THE SELF-DIAGNOSTIC FUNCTION

Before running the self-diagnostic function, check the No. 7 (10 A) fuse and the No. 21 (7.5 A) fuse in the under-dash fuse/relay box.

1. Push and hold the trip/reset button.
2. Turn the headlights ON.
3. Turn the ignition switch ON (II).
4. Within 5 sec, turn the headlights OFF, then ON and OFF again.
5. Within 5 sec, release the trip/reset button, and then push and release the button three times repeatedly.

NOTE:

- **While in the self-diagnostic mode, the dash lights brightness controller operates normally.**
- **While in the self-diagnostic mode, the trip/reset button is used to start The Beeper Drive Circuit Check and The Indicator Drive Circuit Check.**

- **If the vehicle speed exceeds 1.2 mph (2 km/h) or the ignition switch is turned OFF, the self-diagnostic mode ends.**

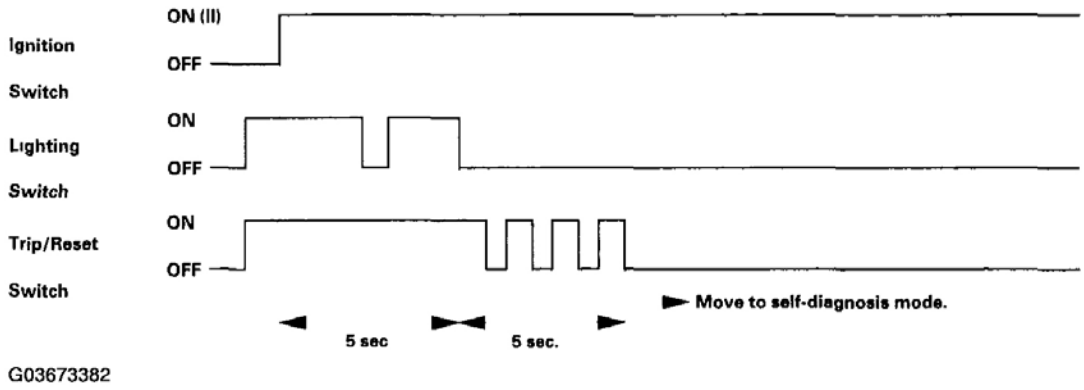


Fig. 4: Trip/Reset Button Blinking Pattern
Courtesy of AMERICAN HONDA MOTOR CO., INC.

THE BEEPER DRIVE CIRCUIT CHECK

When entering the self-diagnostic mode, the beeper sounds five times.

THE INDICATOR DRIVE CIRCUIT CHECK

When entering the self-diagnostic mode, the following indicator lights blink:

Seat belt indicator, charging system indicator, low fuel indicator, maintenance required indicator, security indicator, high beam indicator, lights on indicator, malfunction indicator lamp (MIL), A/T gear position indicator, ABS indicator, cruise main indicator and safety indicators (doors and trunk).

SWITCH INPUT CHECK

After the intermittent beeper sounds at the initial stage of the self-diagnostic function, a beeper sounds continuously while any of the following switch inputs are switched from OFF to ON:

Cruise control main cruise set, cruise cancel, cruise resume, TCS OFF ('03-05

models), VSA OFF ('06-07 model), and parking brake switches.

THE LCD SEGMENT CHECK

When entering the self-diagnostic mode, the odo/trip segments and outside air temperature segment blink five times.

THE GAUGE DRIVE CIRCUIT CHECK

When entering the self-diagnostic mode, the speedometer, the tachometer, the fuel gauge, and the coolant temperature gauge needles sweep from the minimum position to maximum position, then return to the minimum position.

NOTE: After the beeper stops sounding and the gauge needles return to the minimum position, pushing the trip/reset button starts the Beeper Drive Circuit Check (one beep) and the Gauge Drive Circuit Check again.
The check cannot be started again until the gauge needles return to the minimum position.

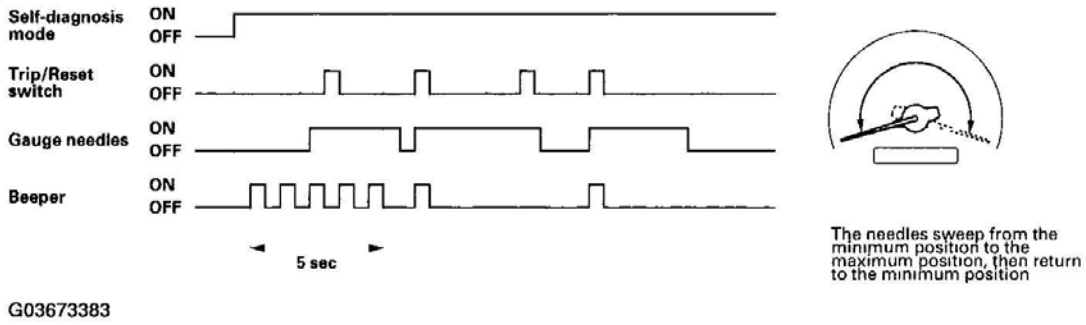


Fig. 5: Gauge Drive Circuit Blinking Pattern
Courtesy of AMERICAN HONDA MOTOR CO., INC.

If a needle fails to sweep or the beeper does not sound, replace the gauge control module.

THE COMMUNICATION LINE CHECK

While in the self-diagnostic mode, the Communication Line Check starts after the

odo/trip LCD Segments Check. If all segments comes on, the communication line is OK.

- If the word "Error 1" is indicated, there is a malfunction in the communication line between the gauge control module and the fast-controller area network (F-CAN). Check for DTCs in the ECM/PCM. If no DTCs are found, go to B-CAN System Diagnosis Test Mode A and refer to **MOTOR TEST** .
- If the word "Error 2" is indicated, there is a malfunction in the communication line between the gauge control module and the body-controller area network (B-CAN). Go to B-CAN System Diagnosis Test Mode A and refer to **MOTOR TEST** .
- If the word "Error 3" is indicated, there is a malfunction in the communication line between the gauge control module and the body-controller area network (B-CAN) and the fast-controller area network (F-CAN). Check for DTCs in the ECM/PCM. If no DTCs are found, go to B-CAN System Diagnosis Test Mode A and refer to **MOTOR TEST** .



Fig. 6: Identifying Communication Line Check
Courtesy of AMERICAN HONDA MOTOR CO., INC.

If any communication line errors are found, go to B-CAN System Diagnosis Test Mode A and refer to **MOTOR TEST** .

ENDING THE SELF-DIAGNOSTIC FUNCTION

Turn the ignition switch OFF.

NOTE: If the vehicle speed exceeds 1.2 mph (2 km/h), the self-diagnostic function ends.

RESETTING THE MAINTENANCE REQUIRED INDICATOR

Blinking pattern:

BLINKING PATTERN

Miles (km)	Maintenance Reminder Light
At 5,900 (9,440) to 6,100 (9,760)	Blinks for 10 seconds when the ignition switch is turned ON (II).
At 7,400 (11,840) to 7,600 (12,160)	Comes on and stays on while the ignition switch is ON (II).

HOW TO RESET

Push and hold the trip/reset button, turn the ignition switch ON (II), and continue to hold the button for more than 10 seconds or until the indicator goes out.

CIRCUIT DIAGRAM

2003-05 MODELS

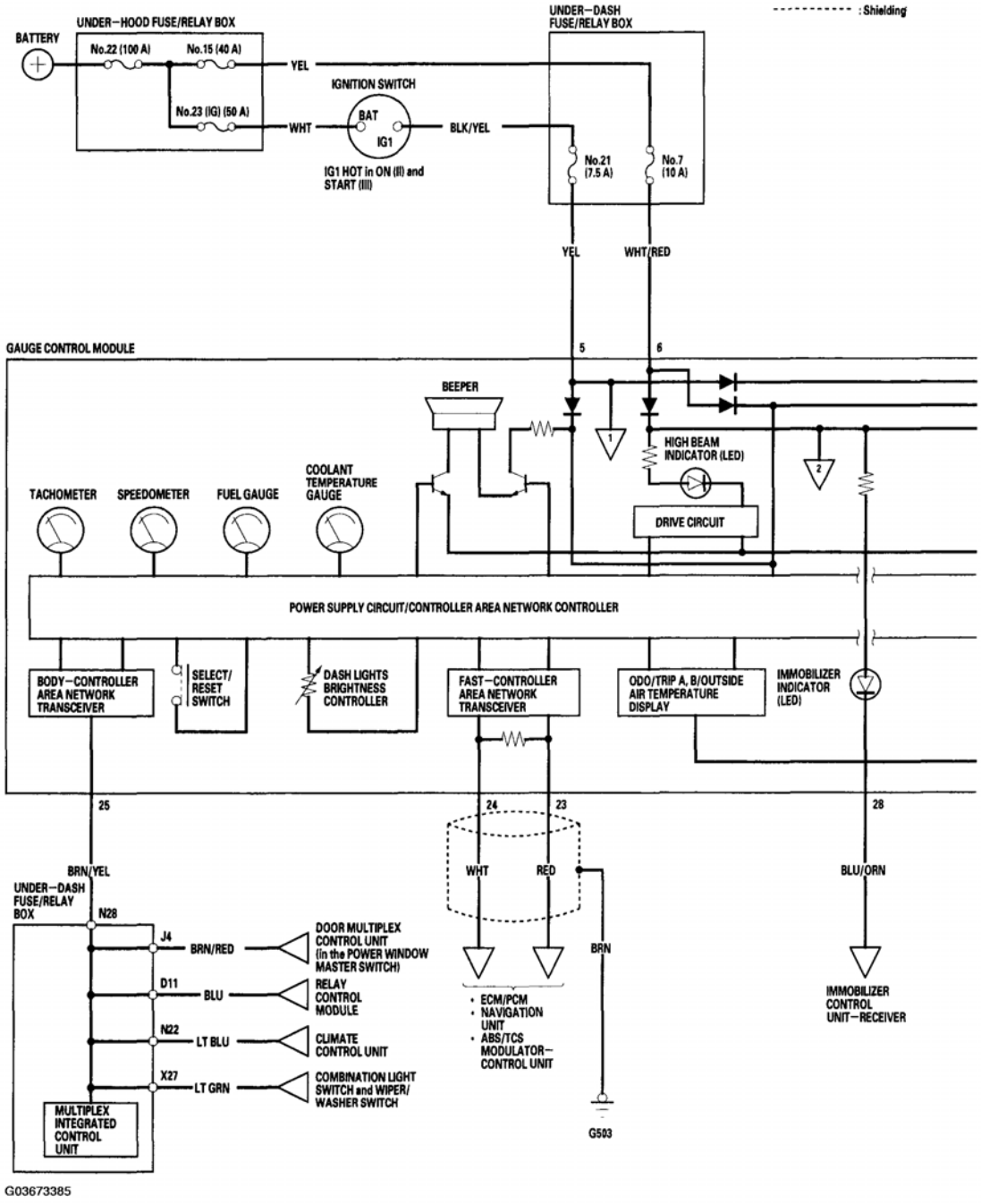


Fig. 7: Gauges Circuit Diagram (2003-05 Models - 1 Of 7)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

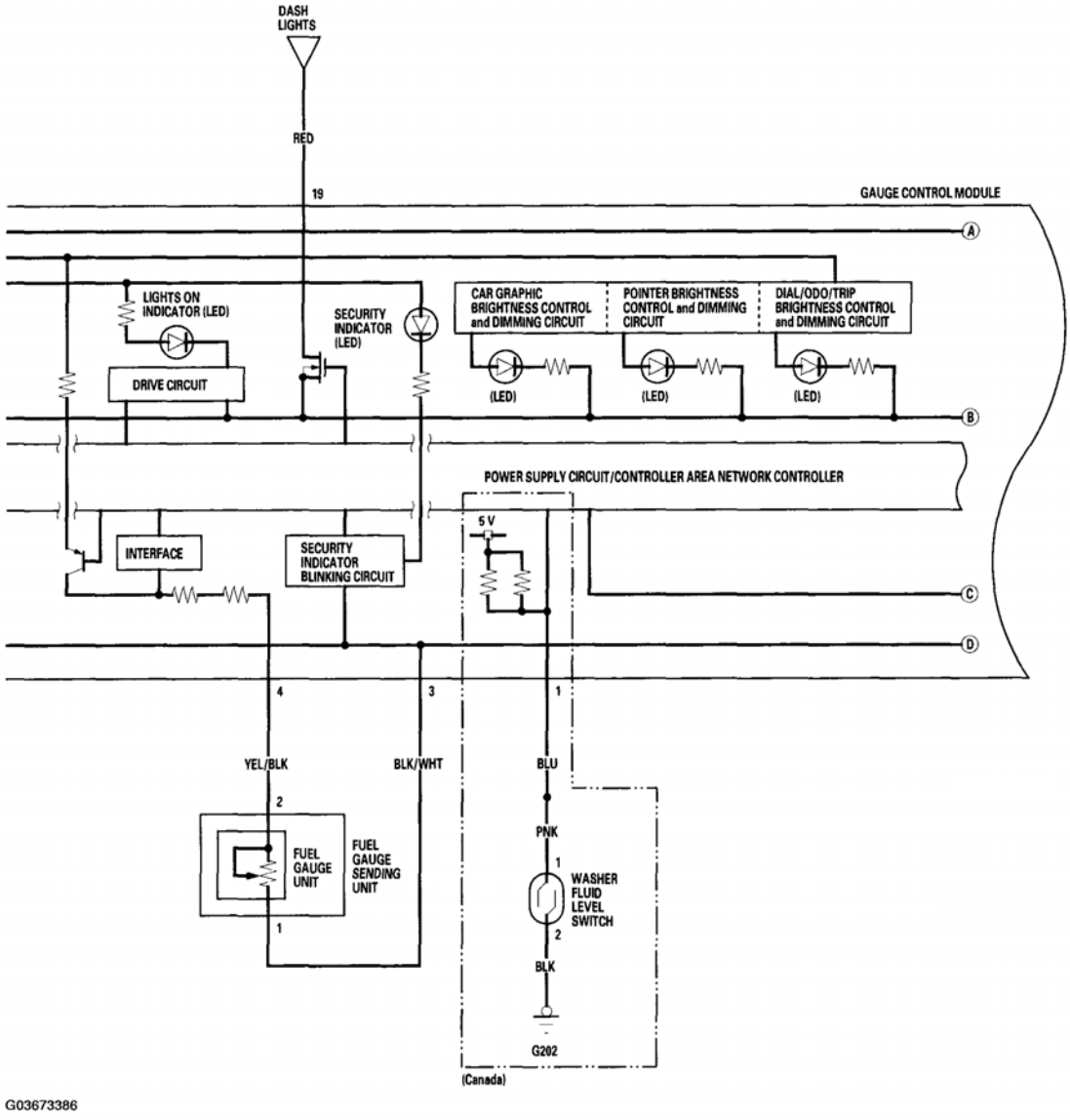


Fig. 8: Gauges Circuit Diagram (2003-05 Models - 2 Of 7)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

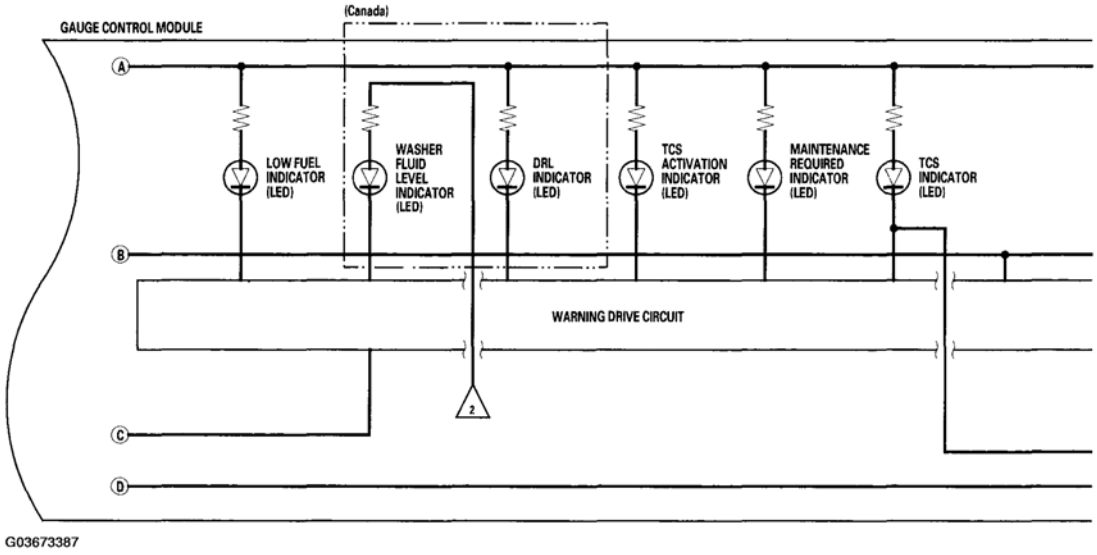


Fig. 9: Gauges Circuit Diagram (2003-05 Models - 3 Of 7)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

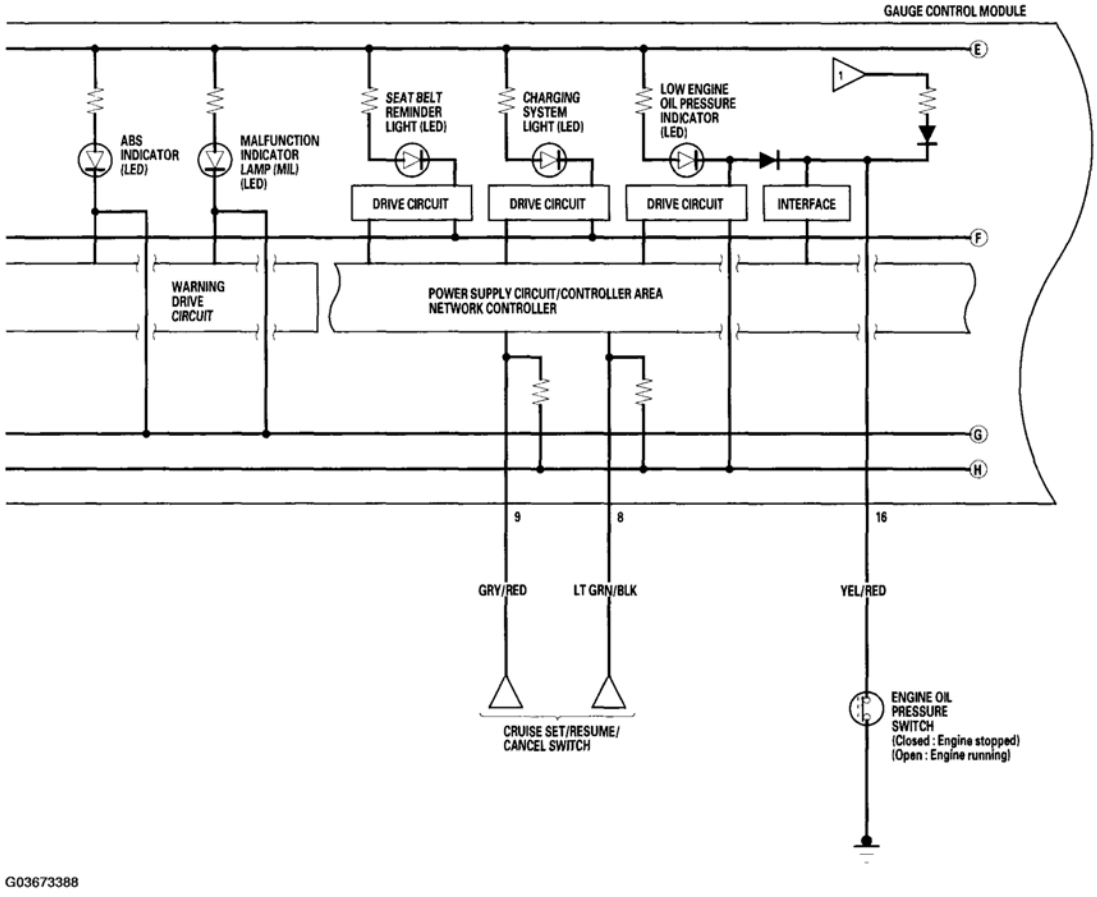


Fig. 10: Gauges Circuit Diagram (2003-05 Models - 4 Of 7)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

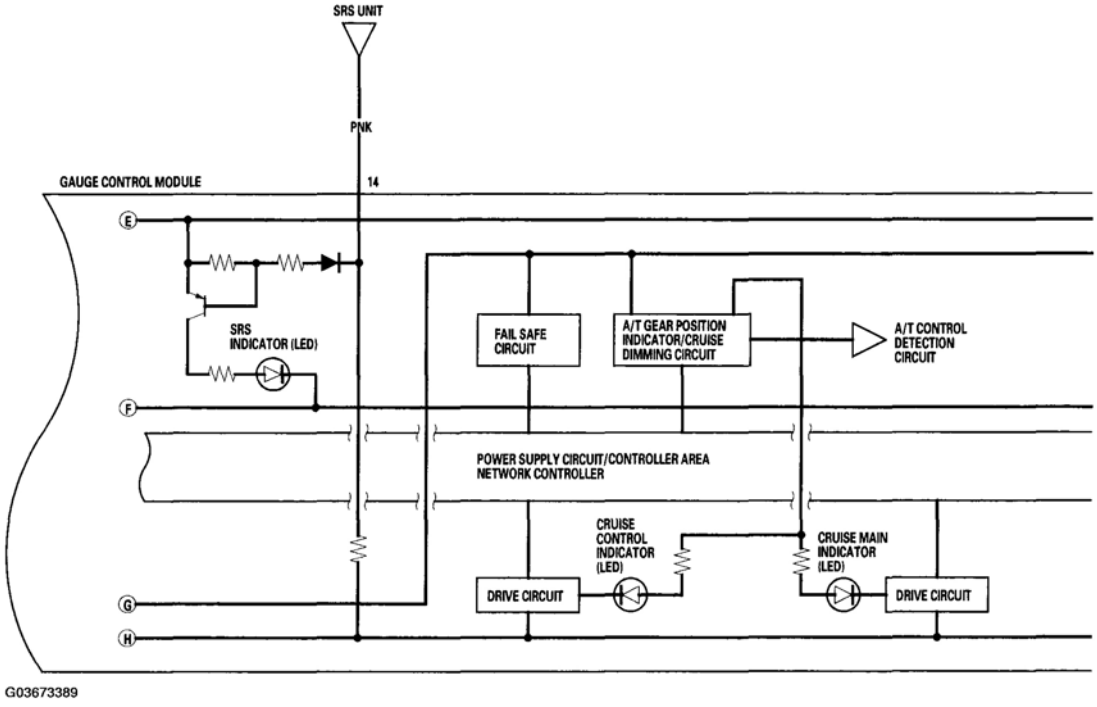


Fig. 11: Gauges Circuit Diagram (2003-05 Models - 5 Of 7)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

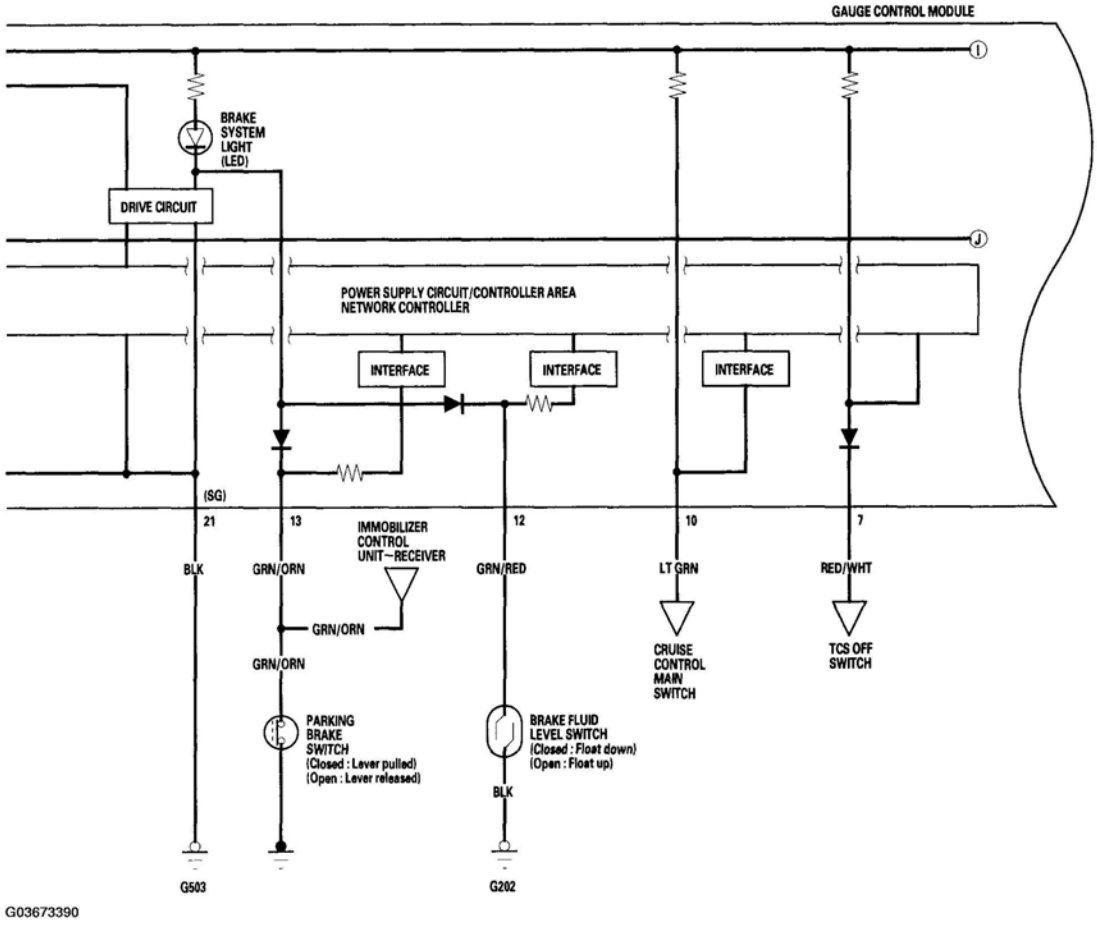


Fig. 12: Gauges Circuit Diagram (2003-05 Models - 6 Of 7)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

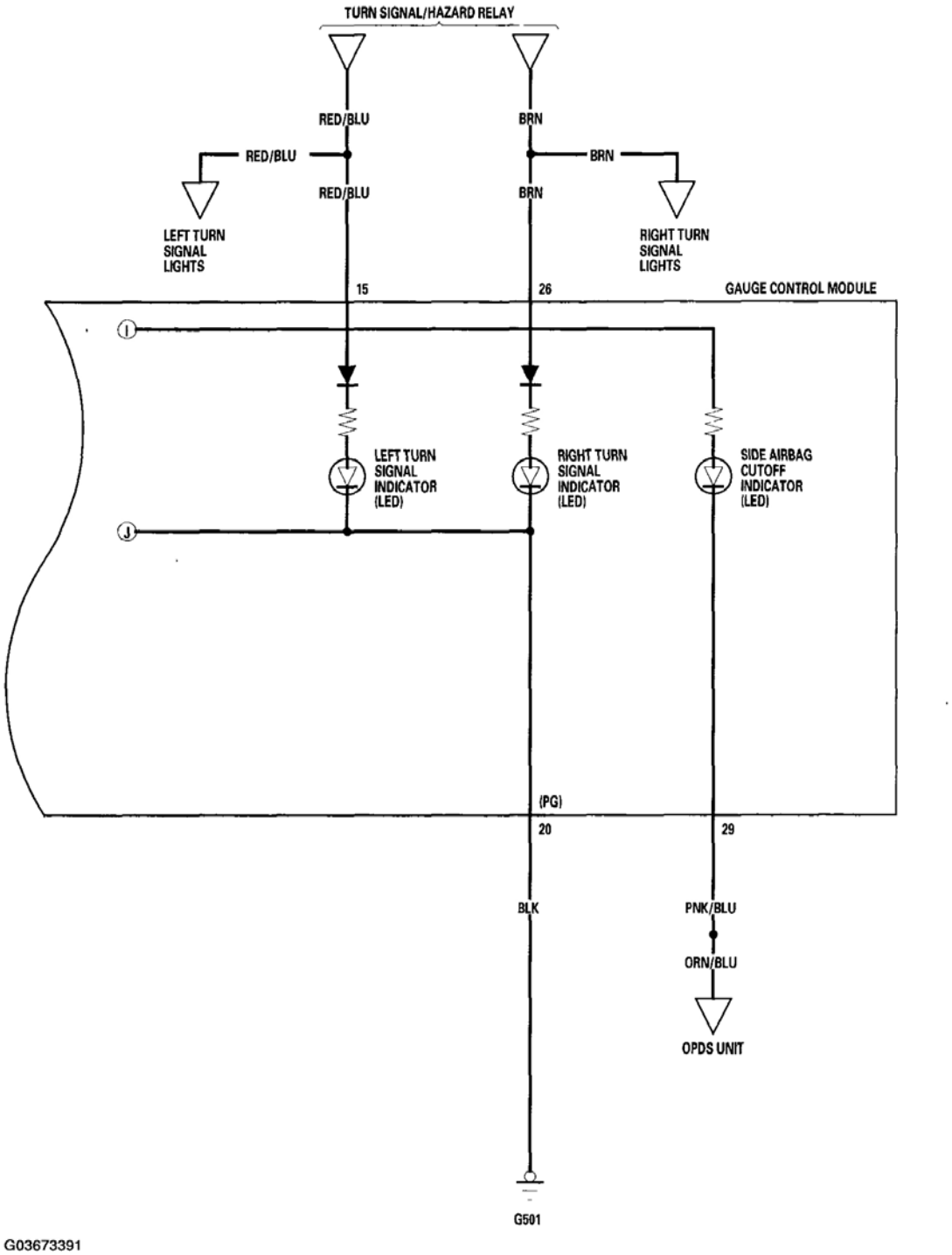


Fig. 13: Gauges Circuit Diagram (2003-05 Models - 7 Of 7)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

2006-07 MODEL

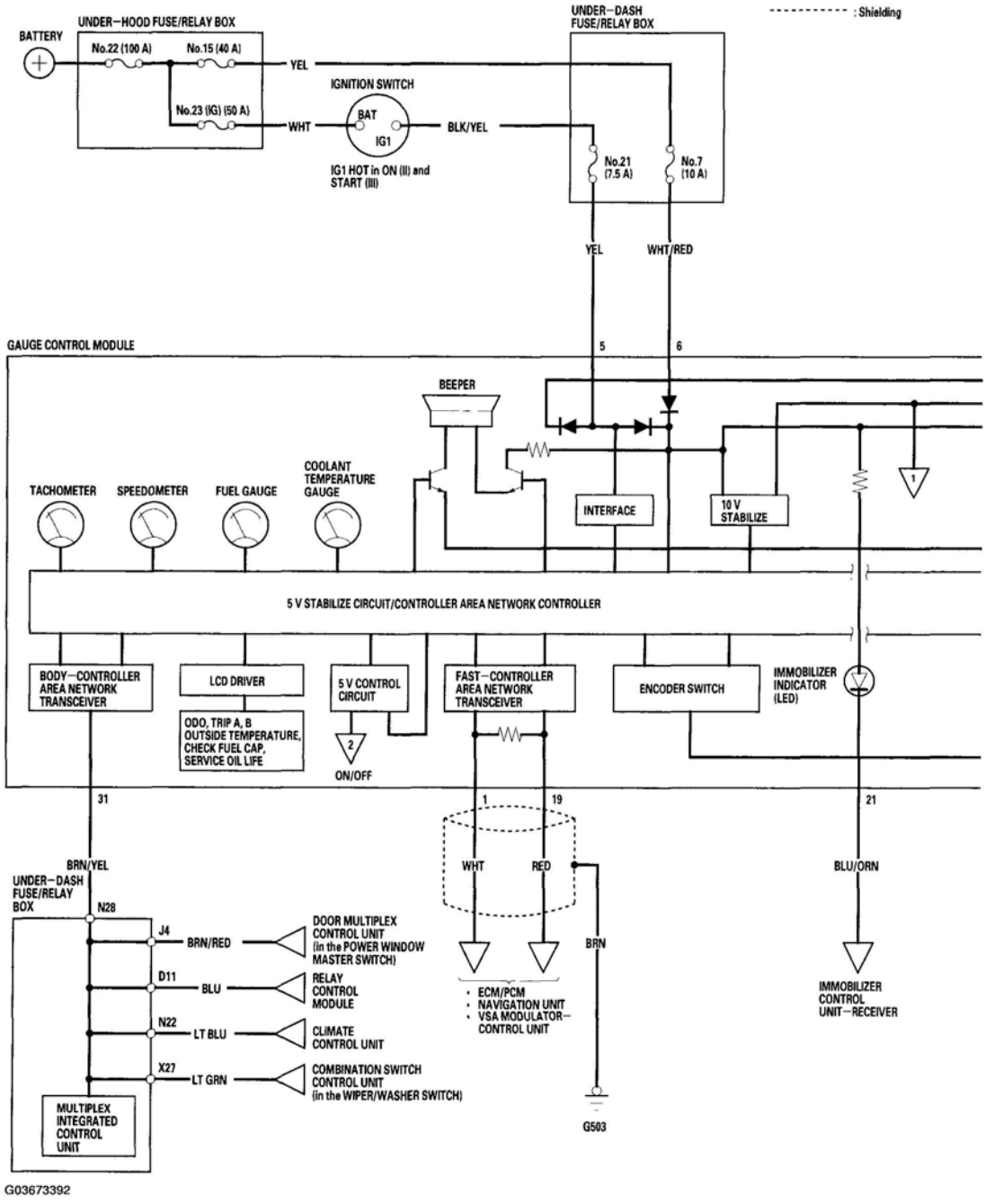


Fig. 14: Gauges Circuit Diagram (2006-07 Model - 1 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

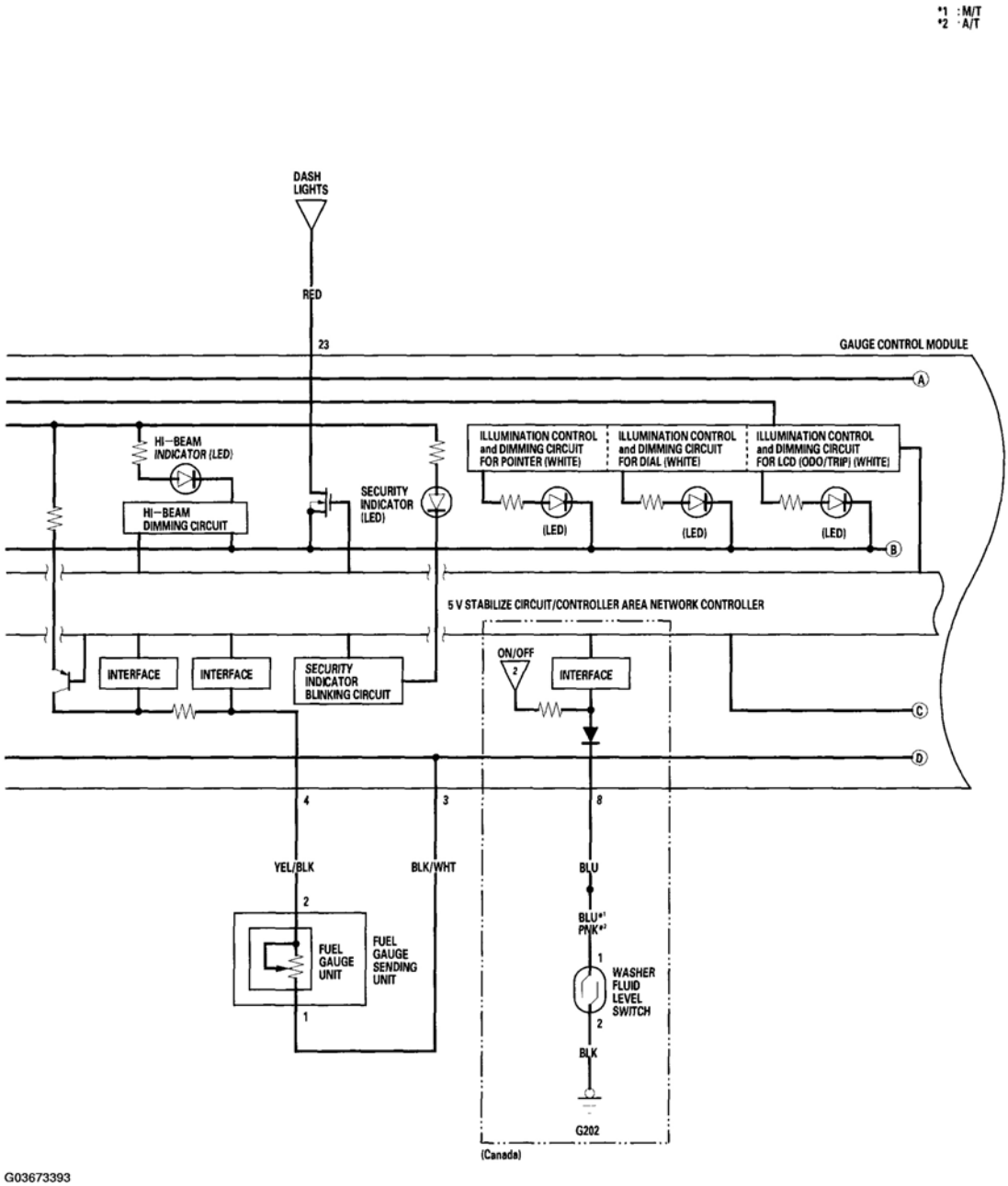


Fig. 15: Gauges Circuit Diagram (2006-07 Model - 2 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

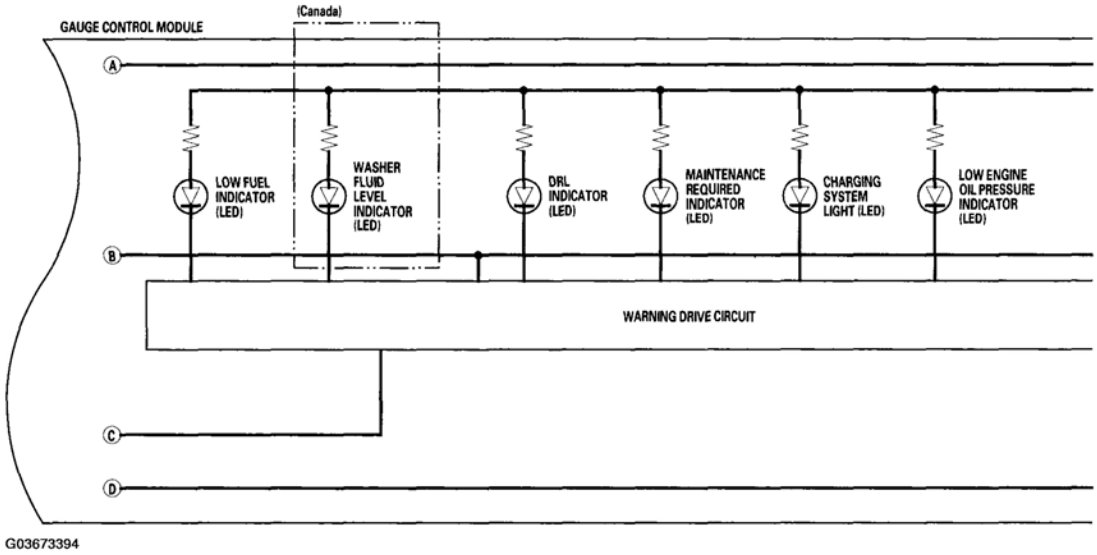


Fig. 16: Gauges Circuit Diagram (2006-07 Model - 3 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

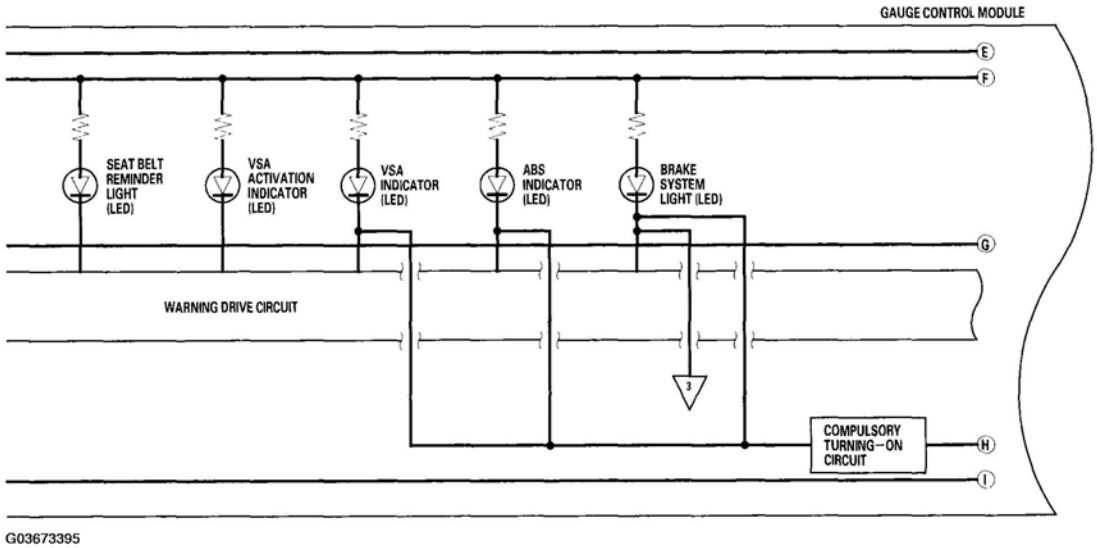


Fig. 17: Gauges Circuit Diagram (2006-07 Model - 4 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

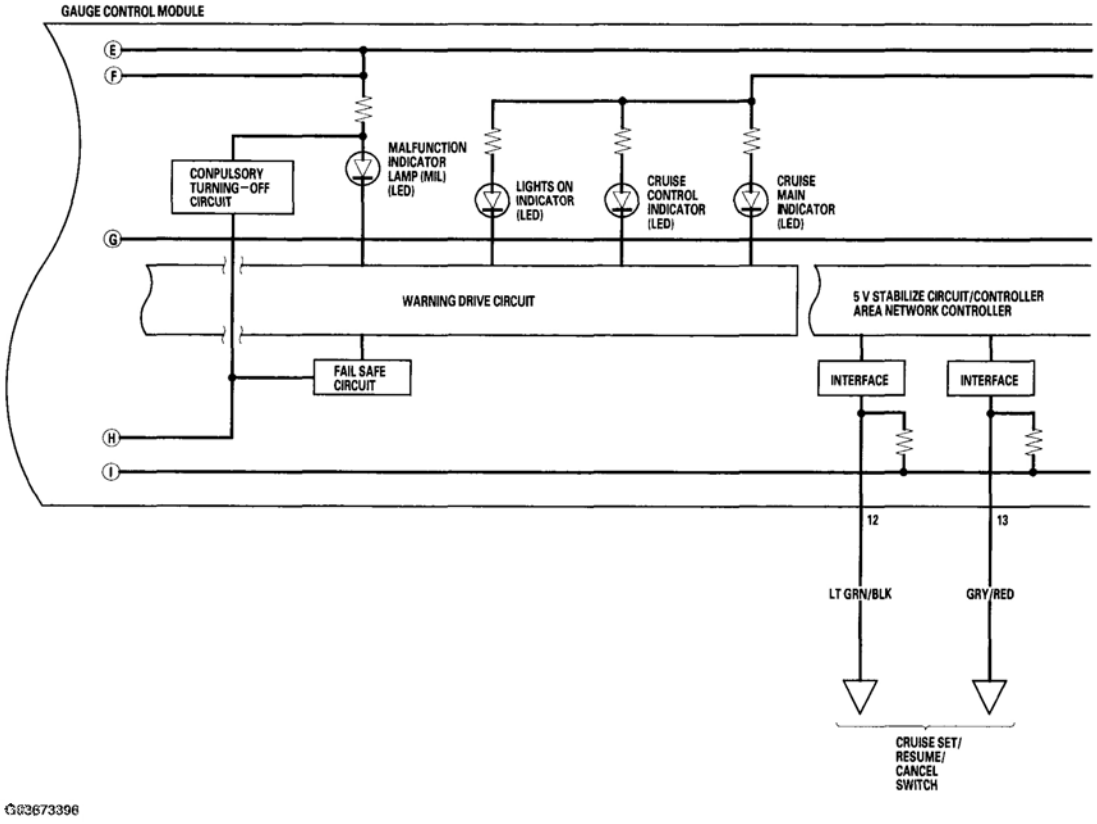


Fig. 18: Gauges Circuit Diagram (2006-07 Model - 5 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

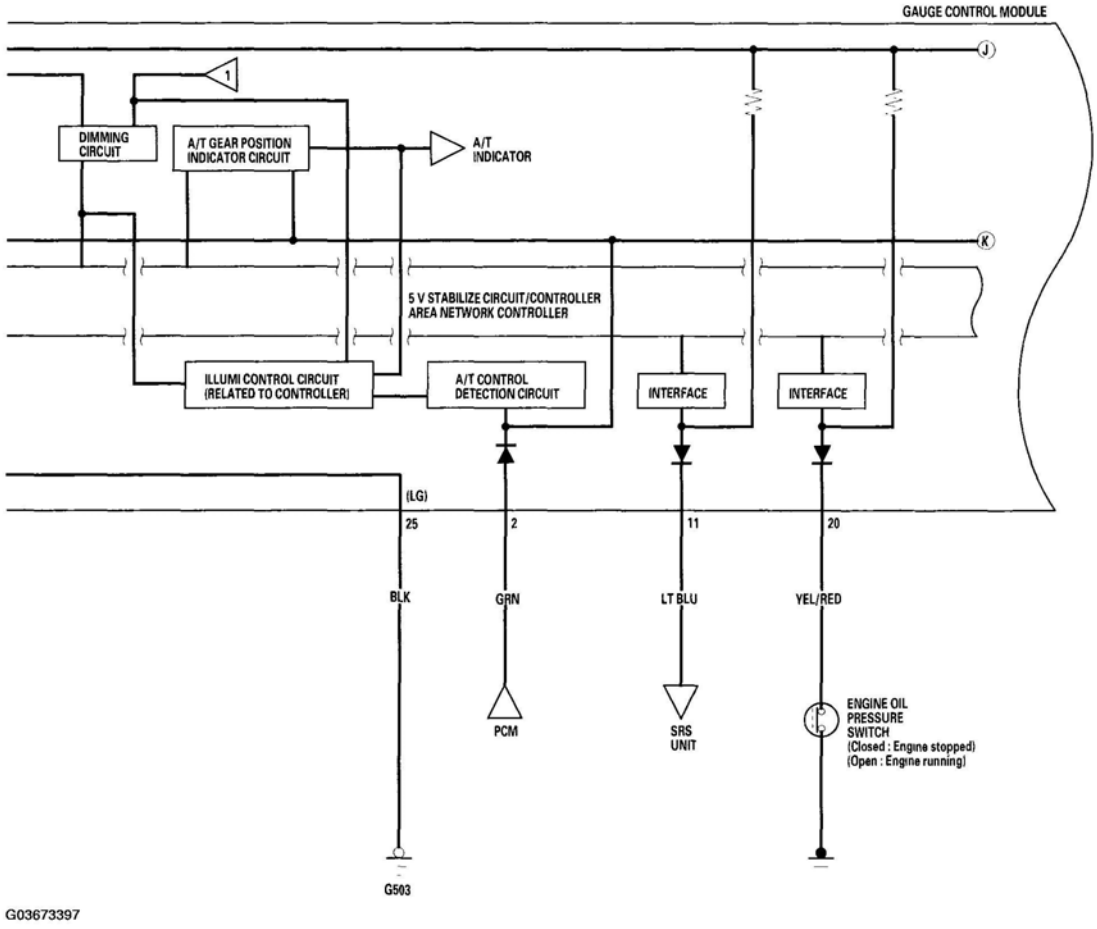


Fig. 19: Gauges Circuit Diagram (2006-07 Model - 6 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

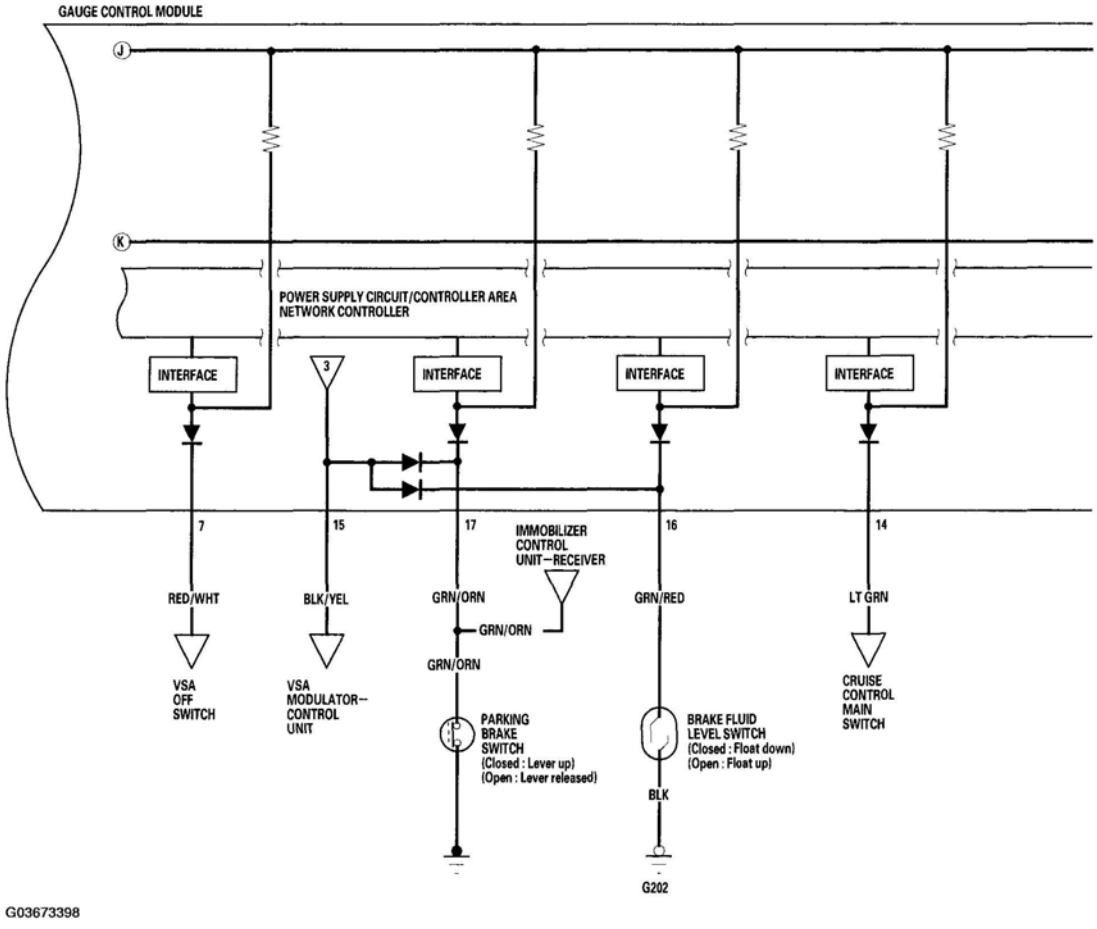


Fig. 20: Gauges Circuit Diagram (2006-07 Model - 7 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

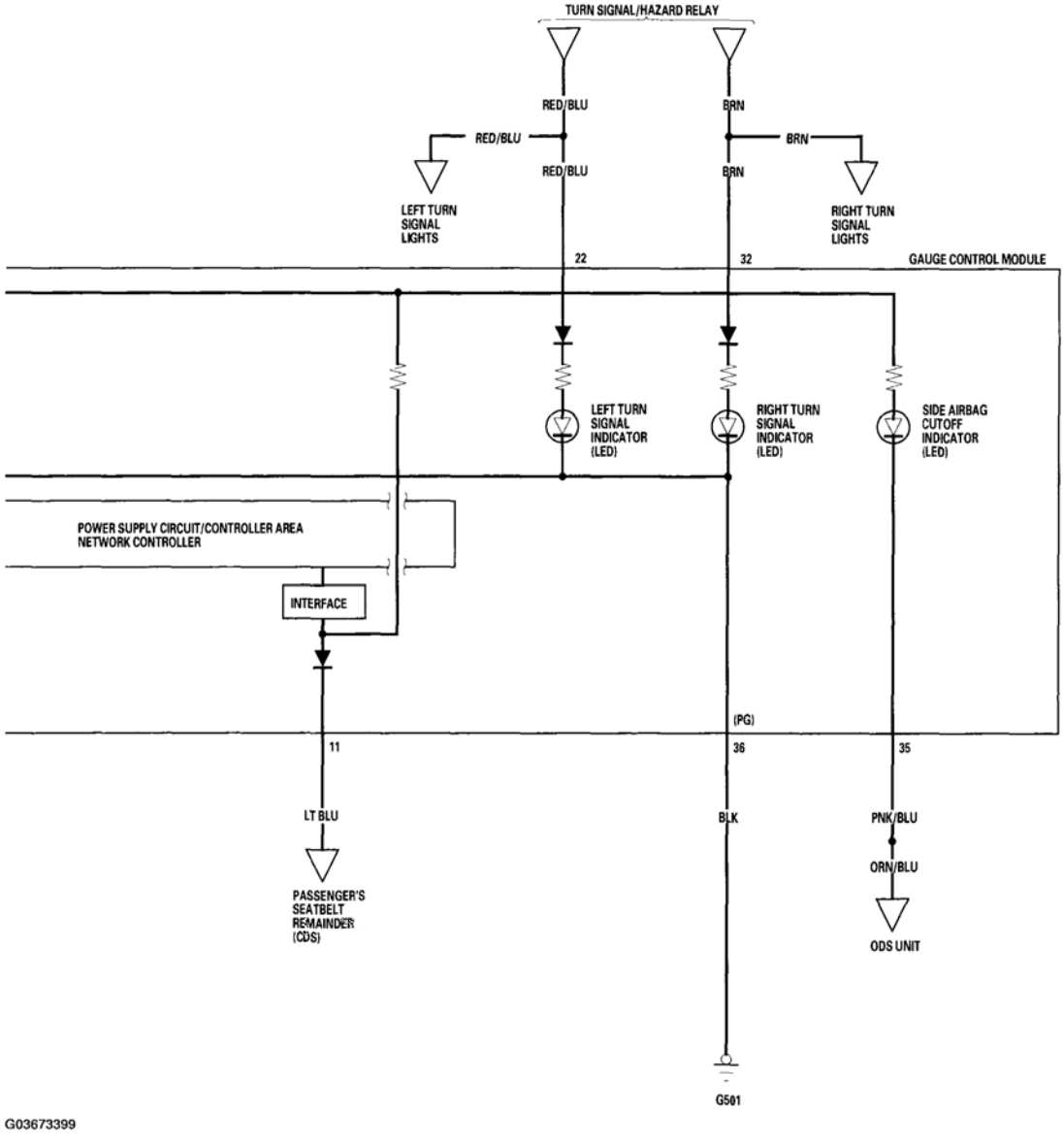


Fig. 21: Gauges Circuit Diagram (2006-07 Model - 8 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ACCESSORIES & EQUIPMENT

Gauges - Accord

COMPONENT LOCATION INDEX

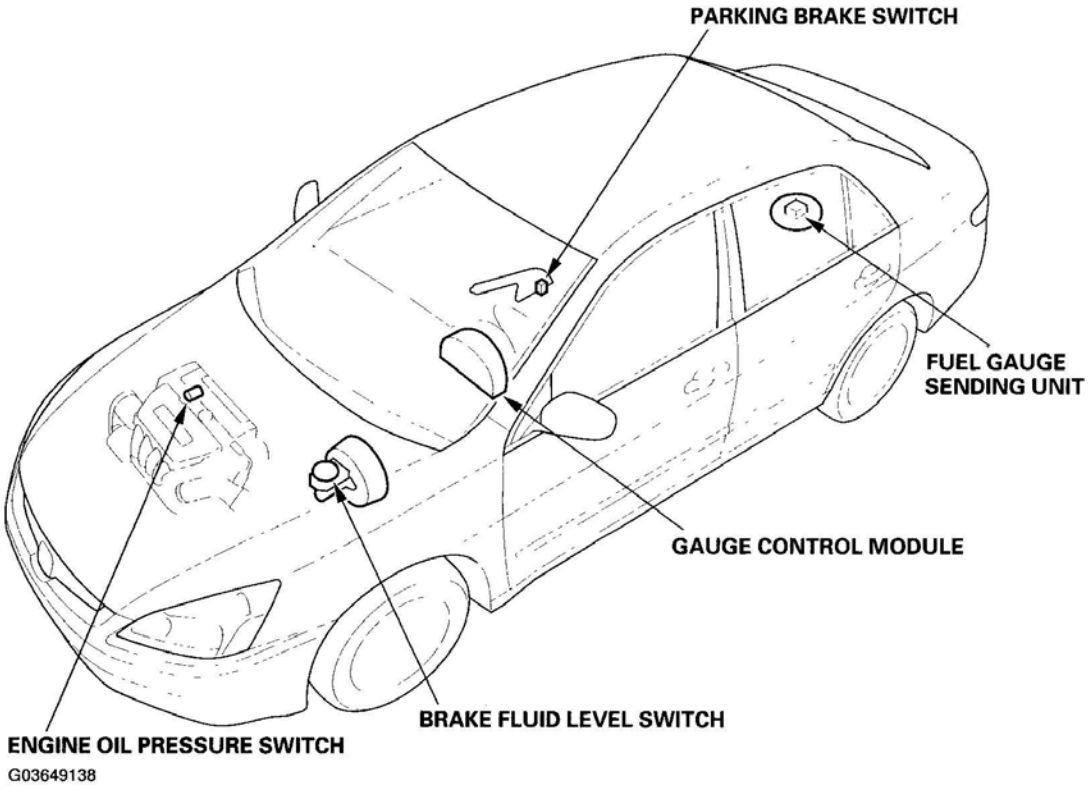


Fig. 1: Locating Gauges Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

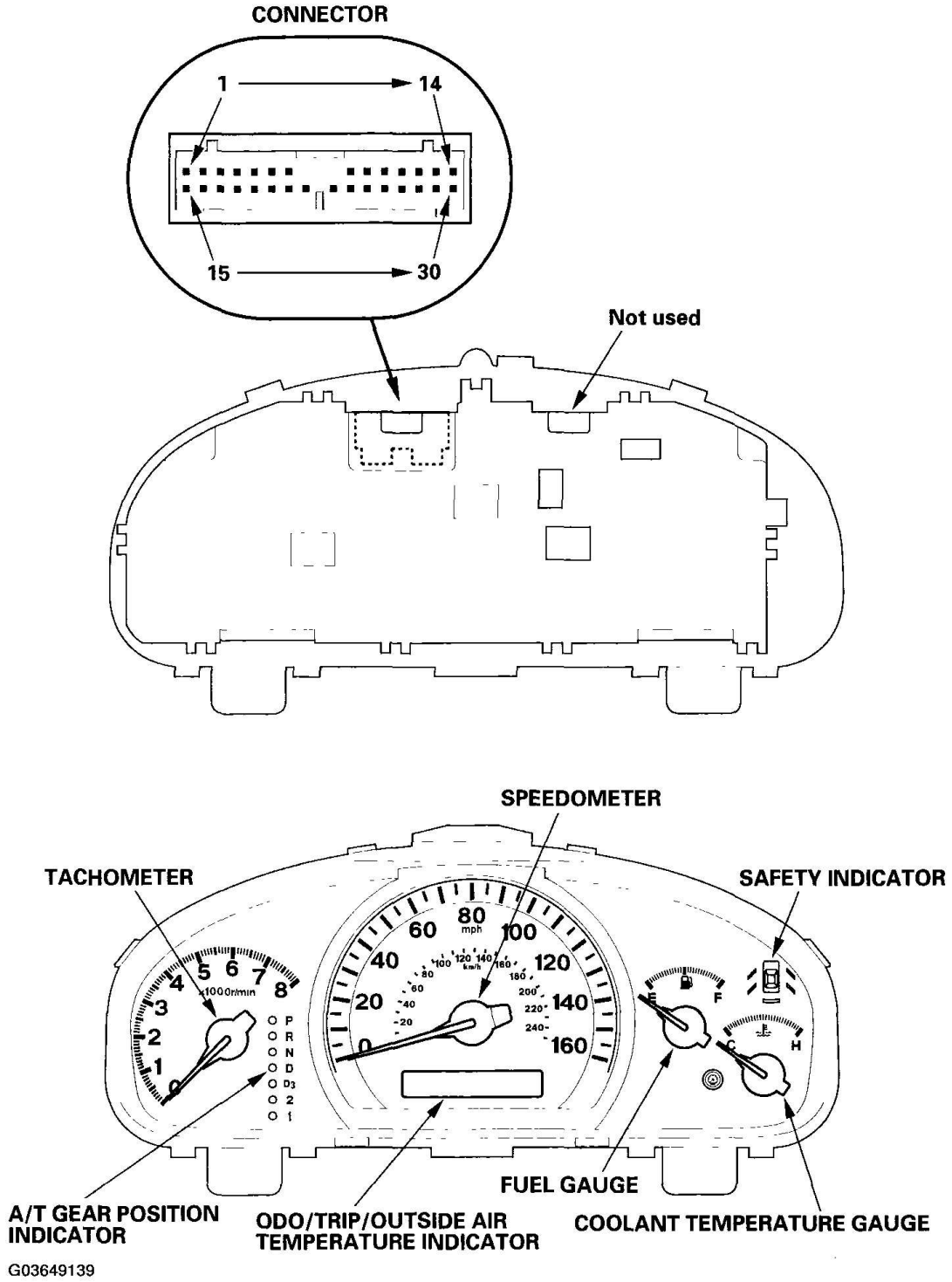
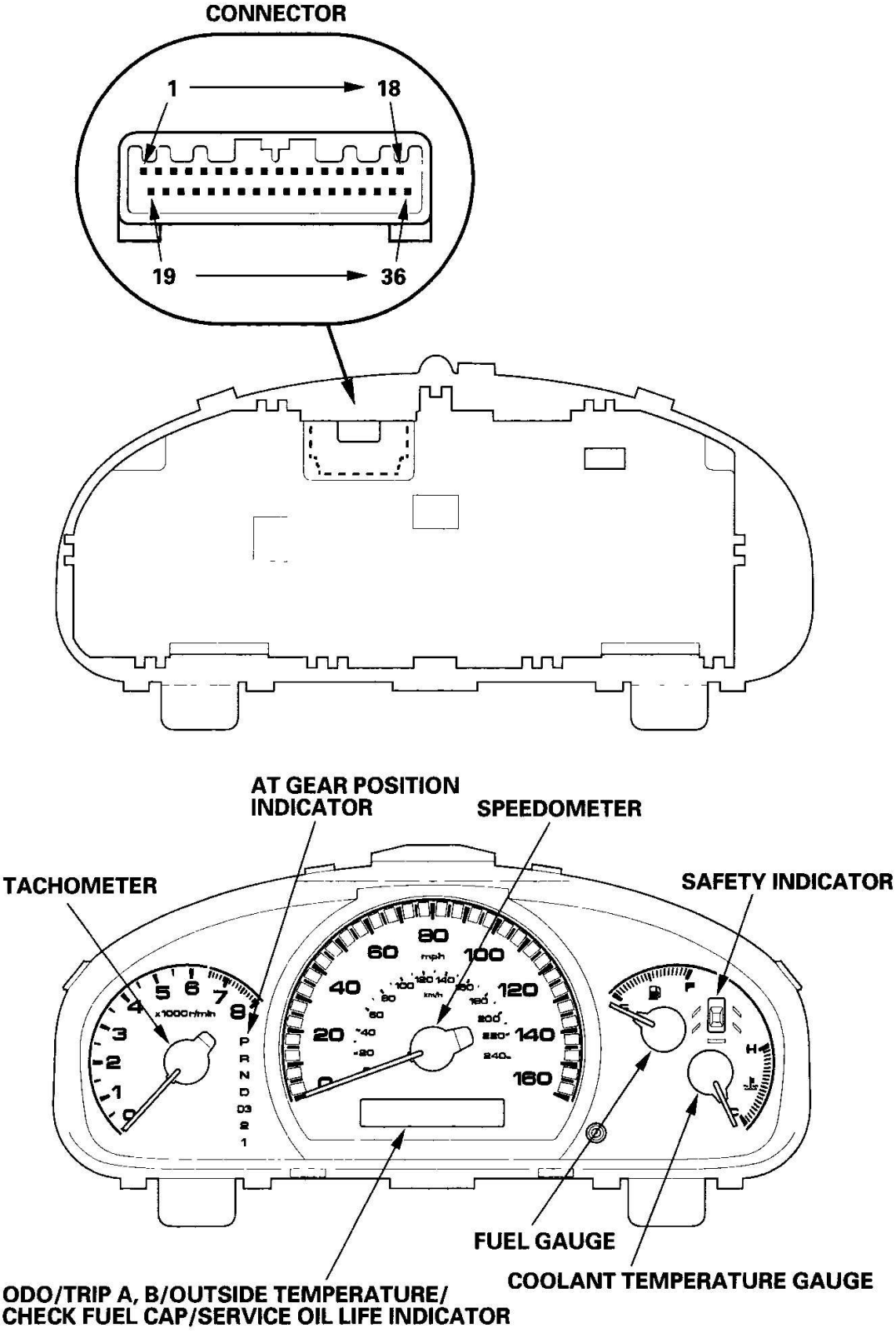


Fig. 2: Locating Gauges Components (03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.


CONNECTOR
1
18
19
36
AT GEAR POSITION INDICATOR
SPEEDOMETER
TACHOMETER
SAFETY INDICATOR
FUEL GAUGE
COOLANT TEMPERATURE GAUGE
ODO/TRIP A, B/OUTSIDE TEMPERATURE/
CHECK FUEL CAP/SERVICE OIL LIFE INDICATOR

G03649140

Fig. 3: Locating Gauges Components (06-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SELF-DIAGNOSTIC FUNCTION

Before troubleshooting the gauge system, refer to multiplex integrated control system B-CAN System Diagnosis Test Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

The gauge control module has a self-diagnostic function.

- The beeper drive circuit check
- The indicator drive circuit check
- The switch input test
- The LCD segments check
- The gauges drive circuit check (Speedometer, Tachometer, Fuel gauge, Coolant temperature gauge)
- The communication line check (of the body-controller area network (B-CAN) communication line and the frame-controller area network (F-CAN) communication line between the gauges).

NOTE: Indicators are also controlled via the communication line.

ENTERING THE SELF-DIAGNOSTIC FUNCTION

Before running the self-diagnostic function, check the No. 7 (10 A) fuse and the No. 21 (7.5 A) fuse in the under-dash fuse/relay box.

1. Push and hold the trip/reset button.
2. Turn the headlights ON.
3. Turn the ignition switch ON (II).
4. Within 5 sec., turn the headlights OFF, then ON and OFF again.
5. Within 5 sec., release the trip/reset button, and then push and release the button three times repeatedly.

NOTE:

- **While in the self-diagnostic mode, the dash lights brightness controller operates normally.**
- **While in the self-diagnostic mode, the trip/reset button is used to start the Beeper Drive Circuit Test and the Gauge Drive Circuit Check.**
- **If the vehicle speed exceeds 1.2 mph (2 km/h) or the ignition switch is turned OFF, the self-diagnostic mode ends.**

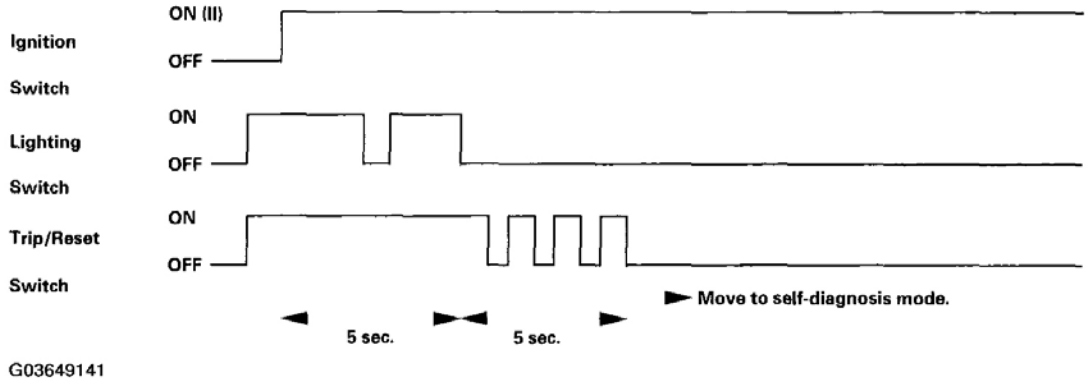


Fig. 4: Self-Diagnostic Function Blinking Pattern
Courtesy of AMERICAN HONDA MOTOR CO., INC.

THE BEEPER DRIVE CIRCUIT CHECK

When entering the self-diagnostic mode, the beeper sounds five times.

THE INDICATOR DRIVE CIRCUIT CHECK

When entering the self-diagnostic mode, the following indicator lights blink:

Seat belt indicator, charging system indicator, low fuel indicator, maintenance required indicator, security indicator, high beam indicator, lights on indicator, malfunction indicator lamp (MIL), A/T gear position indicator, ABS indicator, cruise main indicator and safety indicators (doors and trunk).

SWITCH INPUT CHECK

After the intermittent beeper sounds at the initial stage of the self-diagnostic function, a beeper sounds continuously while any of the following switch inputs are switched from OFF to ON:

Cruise control main cruise set, cruise cancel, cruise resume, and parking brake switches.

THE LCD SEGMENT CHECK

When entering the self-diagnostic mode, the odo/trip segments and outside air temperature segment blink five times.

THE GAUGE DRIVE CIRCUIT CHECK

When entering the self-diagnostic mode, the speedometer, the tachometer, the fuel gauge, and the coolant temperature gauge needles sweep from the minimum position to maximum position, then return to the minimum position.

NOTE: After the beeper stops sounding and the gauge needles return to the minimum position, pushing the trip/reset button starts the Beeper Drive Circuit Check (one beep) and the Gauge Drive Circuit Check again.
The check cannot be started again until the gauge needles return to the minimum position.

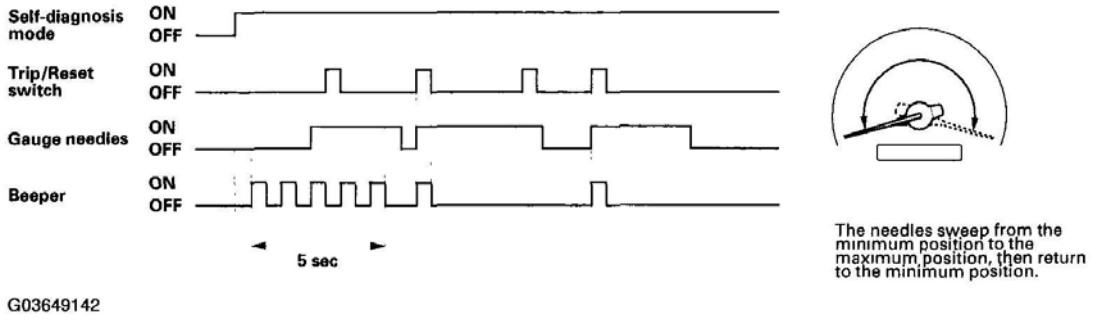


Fig. 5: Gauge Drive Circuit Check Blinking Pattern
Courtesy of AMERICAN HONDA MOTOR CO., INC.

If a needle fails to sweep or the beeper does not sound, replace the gauge control

module.

THE COMMUNICATION LINE CHECK

While in the self-diagnostic mode, the Communication Line Check starts after the odo/trip LCD Segments Check. If all segments comes on, the communication line is OK.

- If the word "Error 1" is indicated, there is a malfunction in the communication line between the gauge control module and the frame-controller area network (F-CAN). Check for DTCs in the ECM/PCM. If no DTCs are found, go to B-CAN System Diagnosis Test Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).
- If the word "Error 2" is indicated, there is a malfunction in the communication line between the gauge control module and the body-controller area network (B-CAN). Go to B-CAN System Diagnosis Test Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).
- If the word "Error 3" is indicated, there is a malfunction in the communication line between the gauge control module and the body-controller area network (B-CAN) and the frame-controller area network (F-CAN). Check for DTCs in the ECM/PCM. If no DTCs are found, go to B-CAN System Diagnosis Test Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

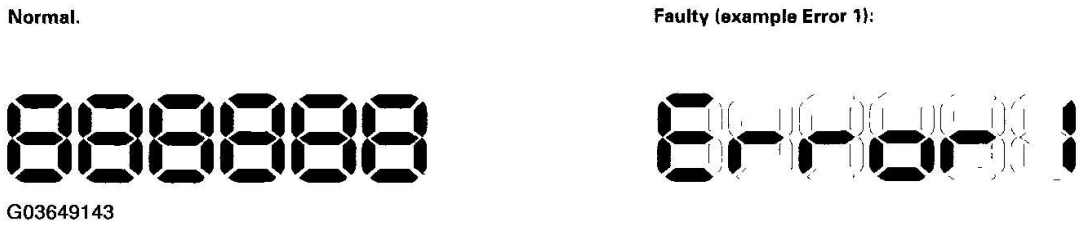


Fig. 6: Communication Line Check Display
Courtesy of AMERICAN HONDA MOTOR CO., INC.

If any communication line errors are found, go to B-CAN System Diagnosis Test

Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

ENDING THE SELF-DIAGNOSTIC FUNCTION

Turn the ignition switch OFF.

NOTE: If the vehicle speed exceeds 1.2 mph (2 km/h), the self-diagnostic function ends.

CIRCUIT DIAGRAM

'03-05 MODELS

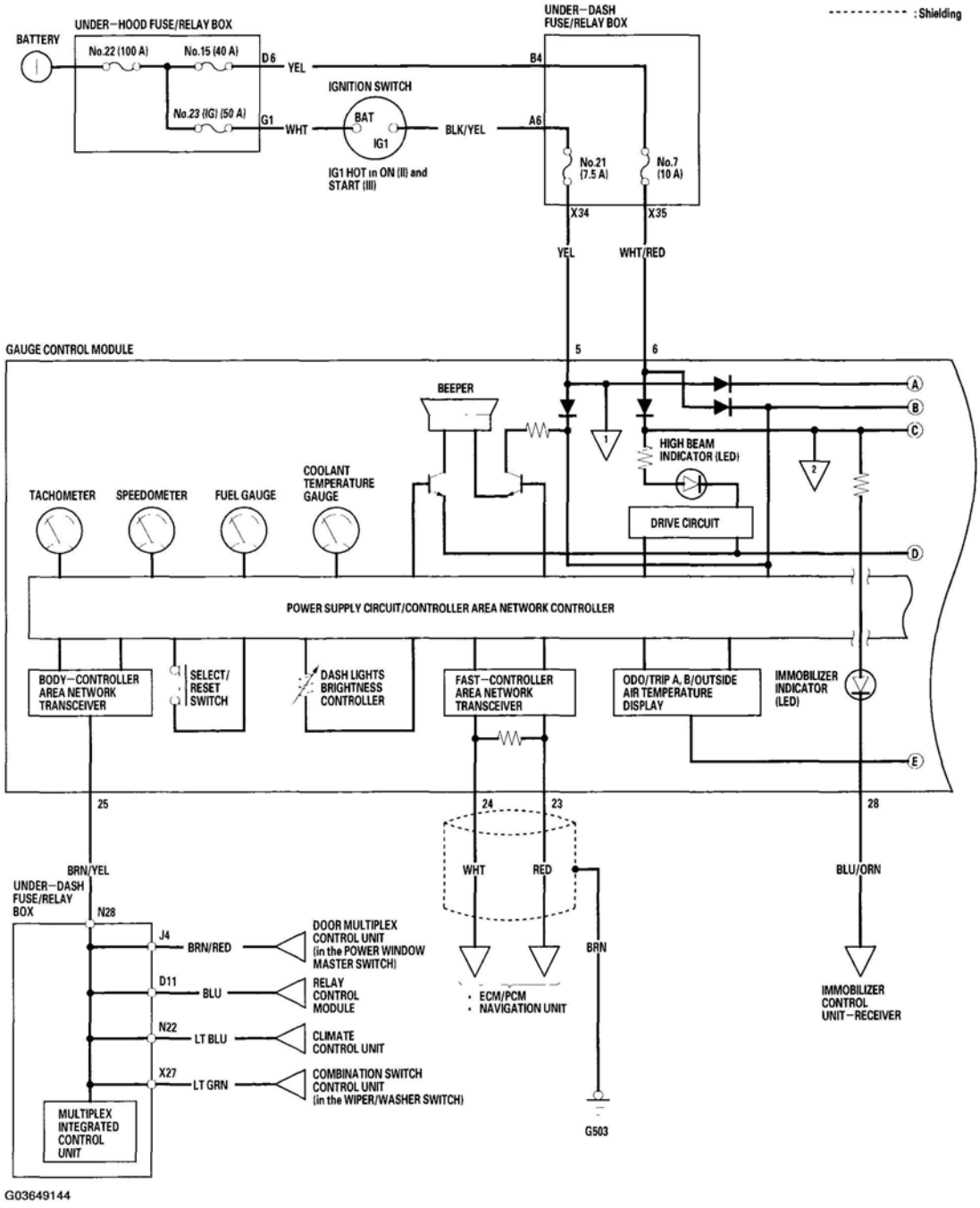
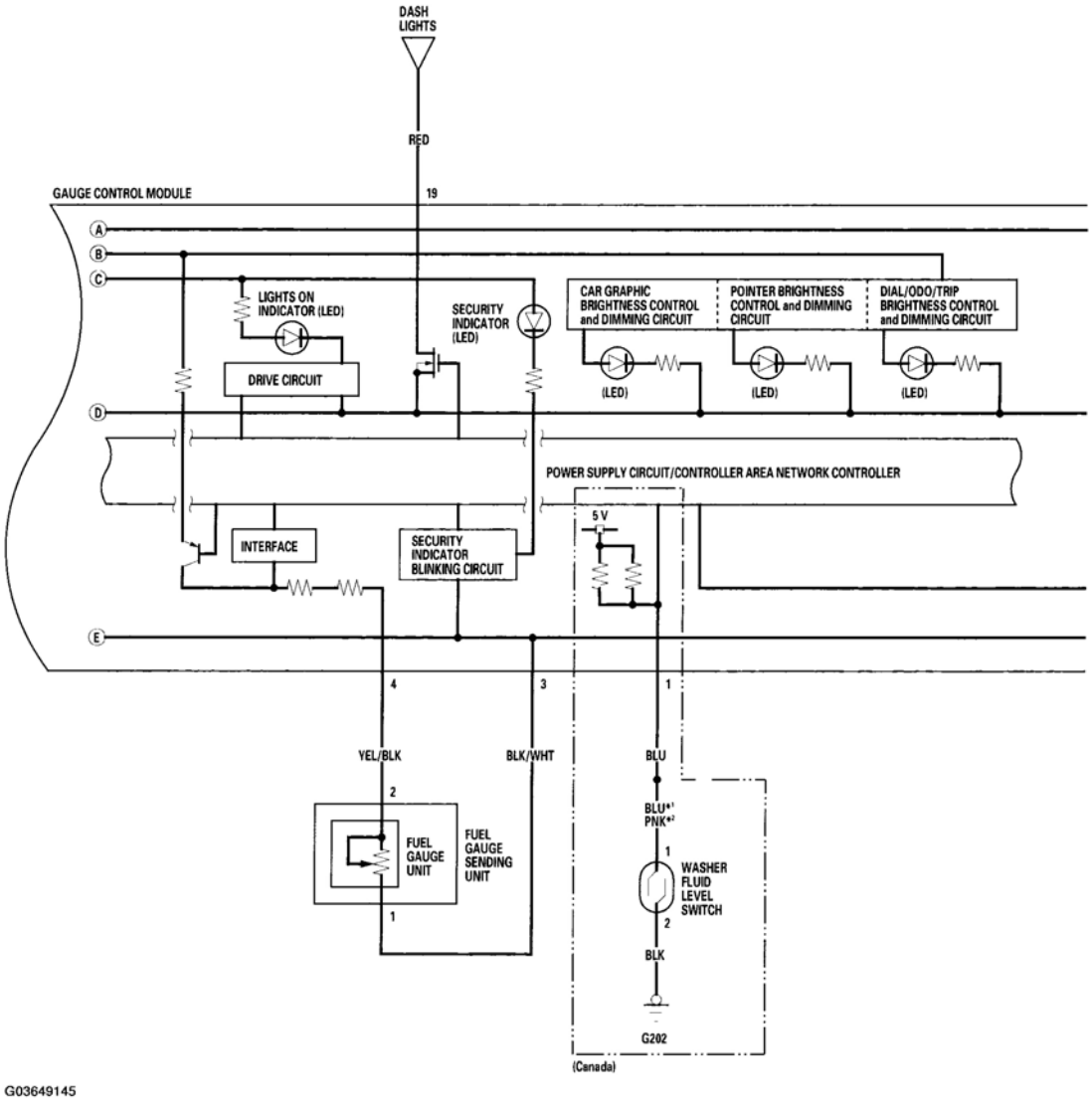


Fig. 7: Identifying Gauges Circuit Diagram (03-05 Models - 1 Of 7)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G03649145

Fig. 8: Identifying Gauges Circuit Diagram (03-05 Models - 2 Of 7)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

*1 :M/T
*2 :A/T

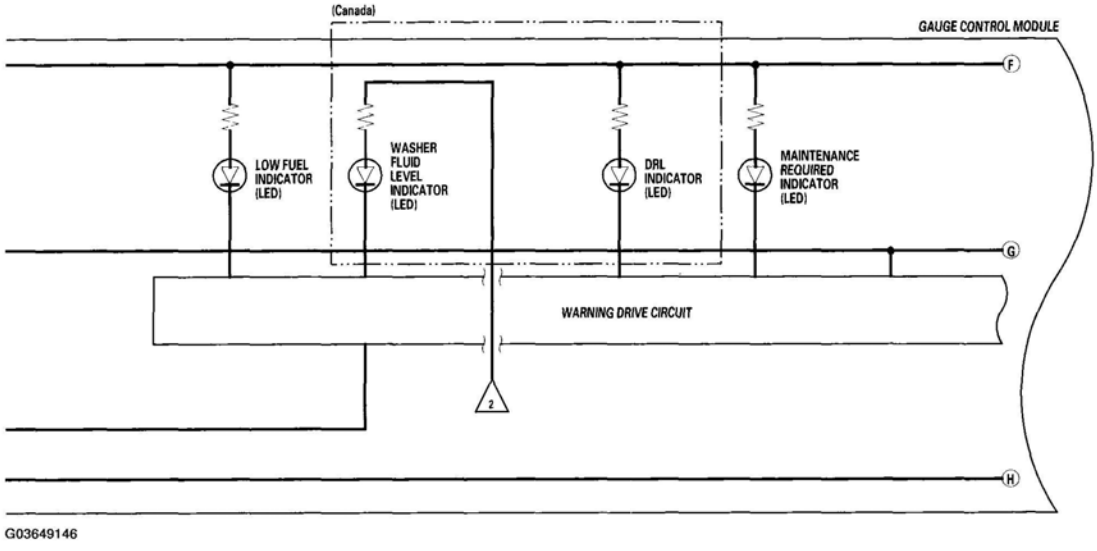


Fig. 9: Identifying Gauges Circuit Diagram (03-05 Models - 3 Of 7)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

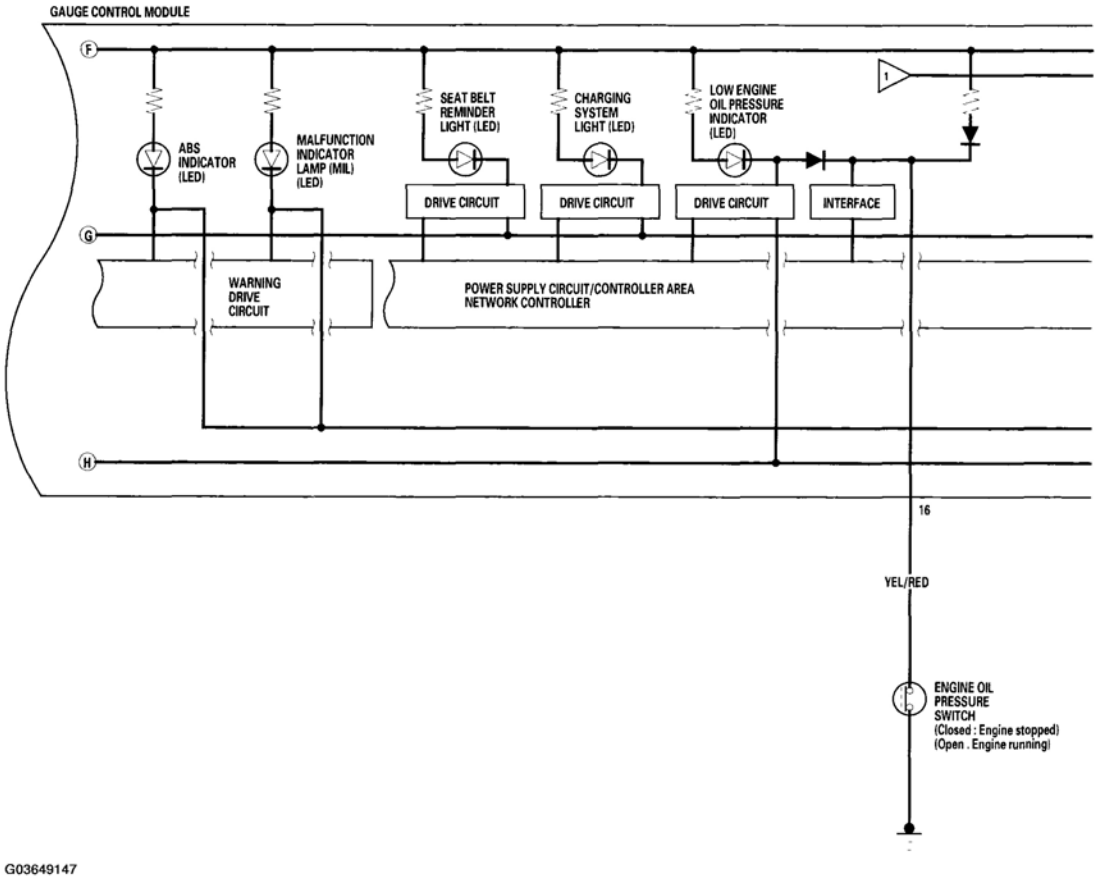


Fig. 10: Identifying Gauges Circuit Diagram (03-05 Models - 4 Of 7)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

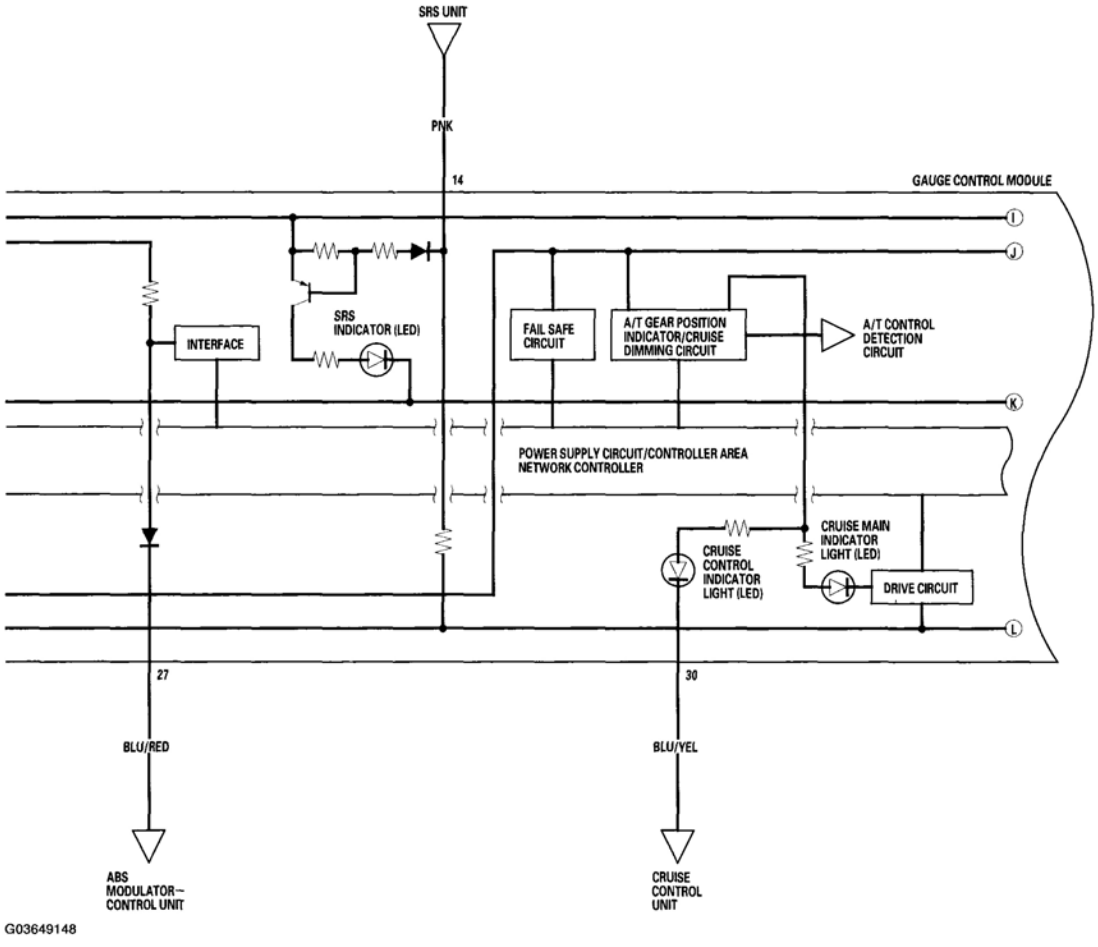


Fig. 11: Identifying Gauges Circuit Diagram (03-05 Models - 5 Of 7)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

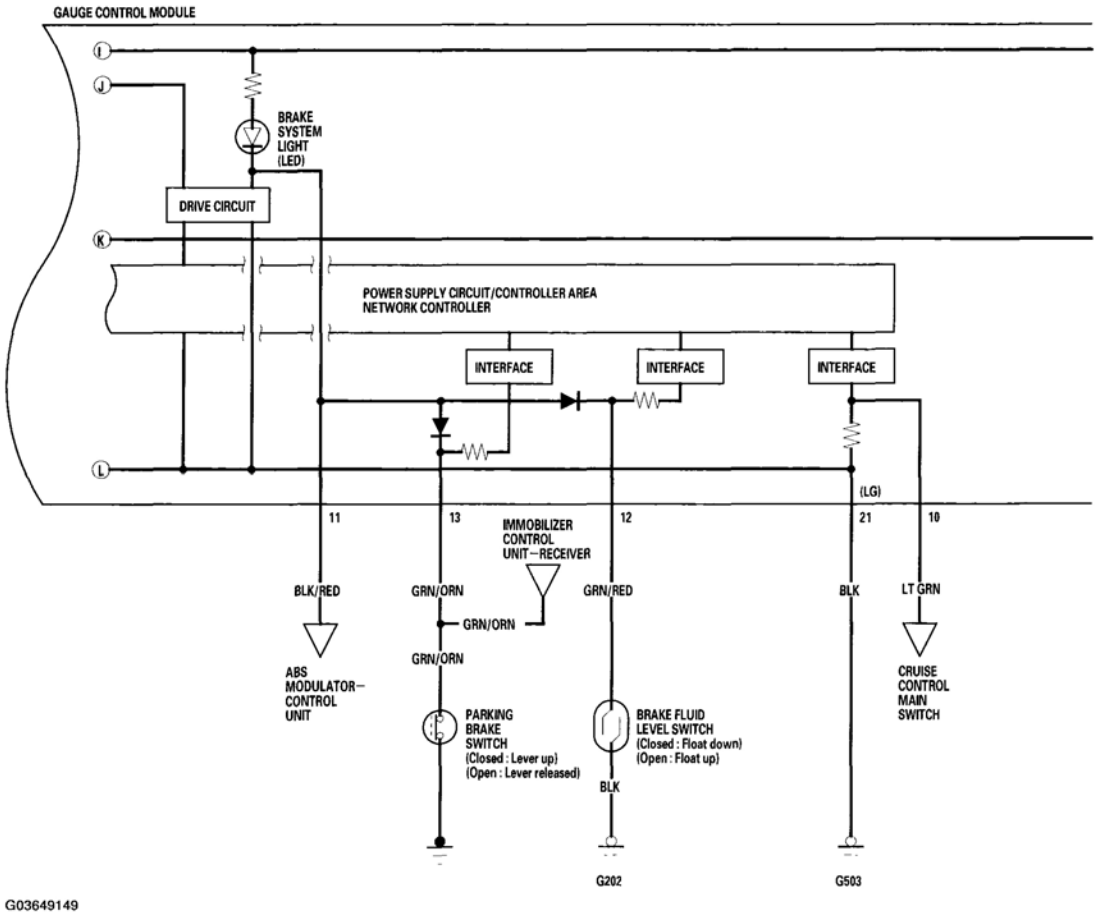


Fig. 12: Identifying Gauges Circuit Diagram (03-05 Models - 6 Of 7)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

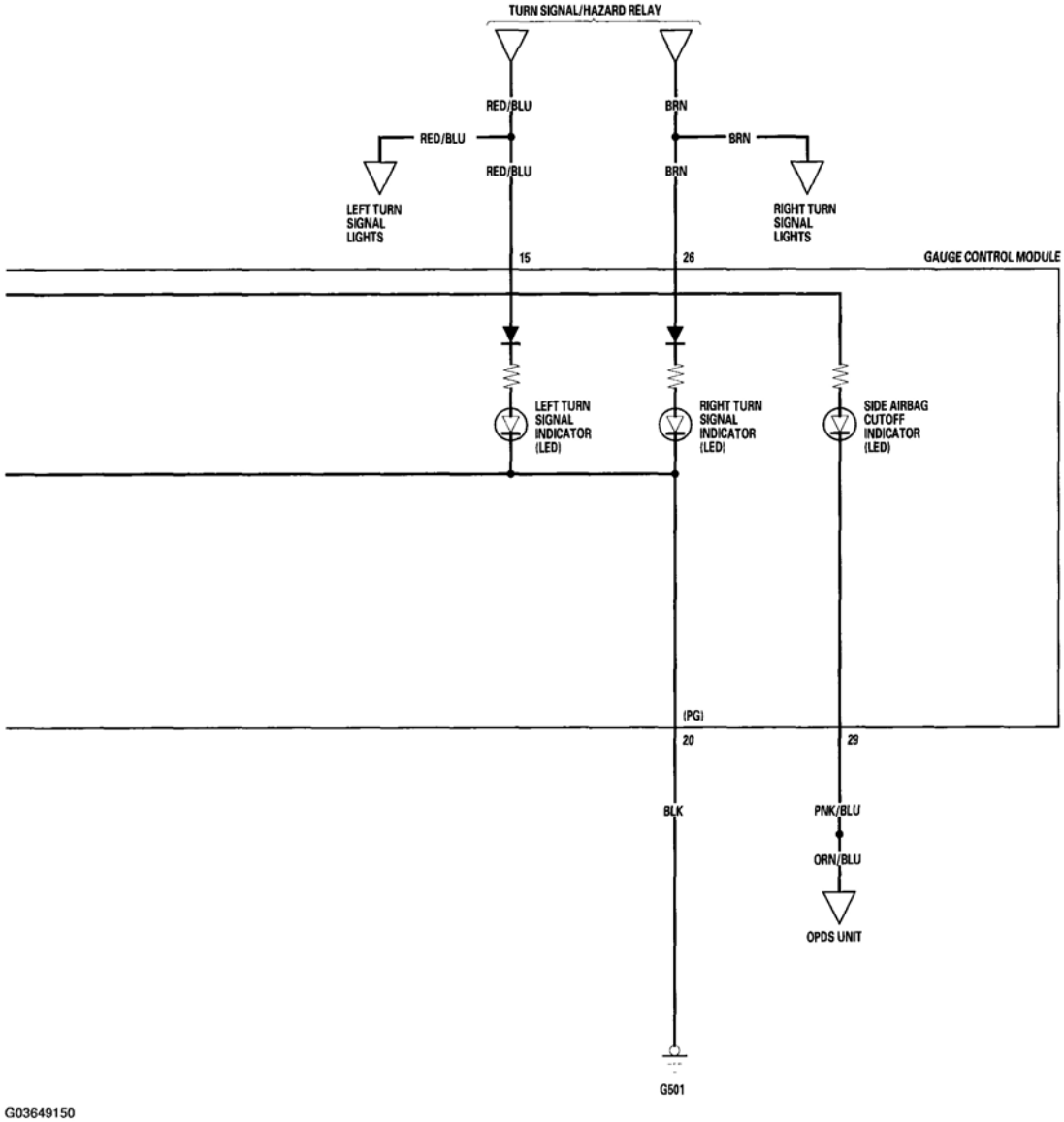


Fig. 13: Identifying Gauges Circuit Diagram (03-05 Models - 7 Of 7) Courtesy of AMERICAN HONDA MOTOR CO., INC.

'06-07 MODELS

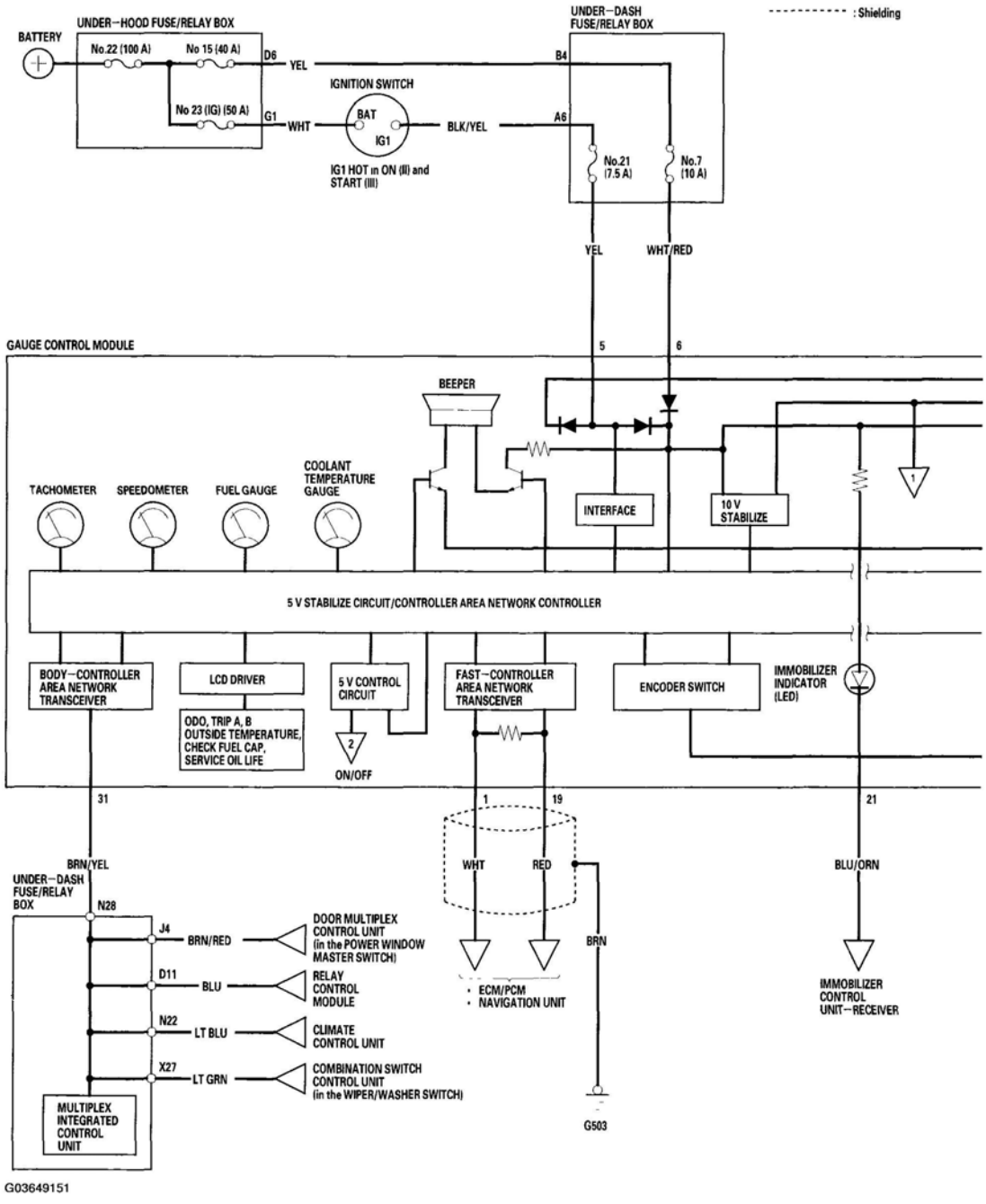


Fig. 14: Identifying Gauges Circuit Diagram ('06 Models - 1 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

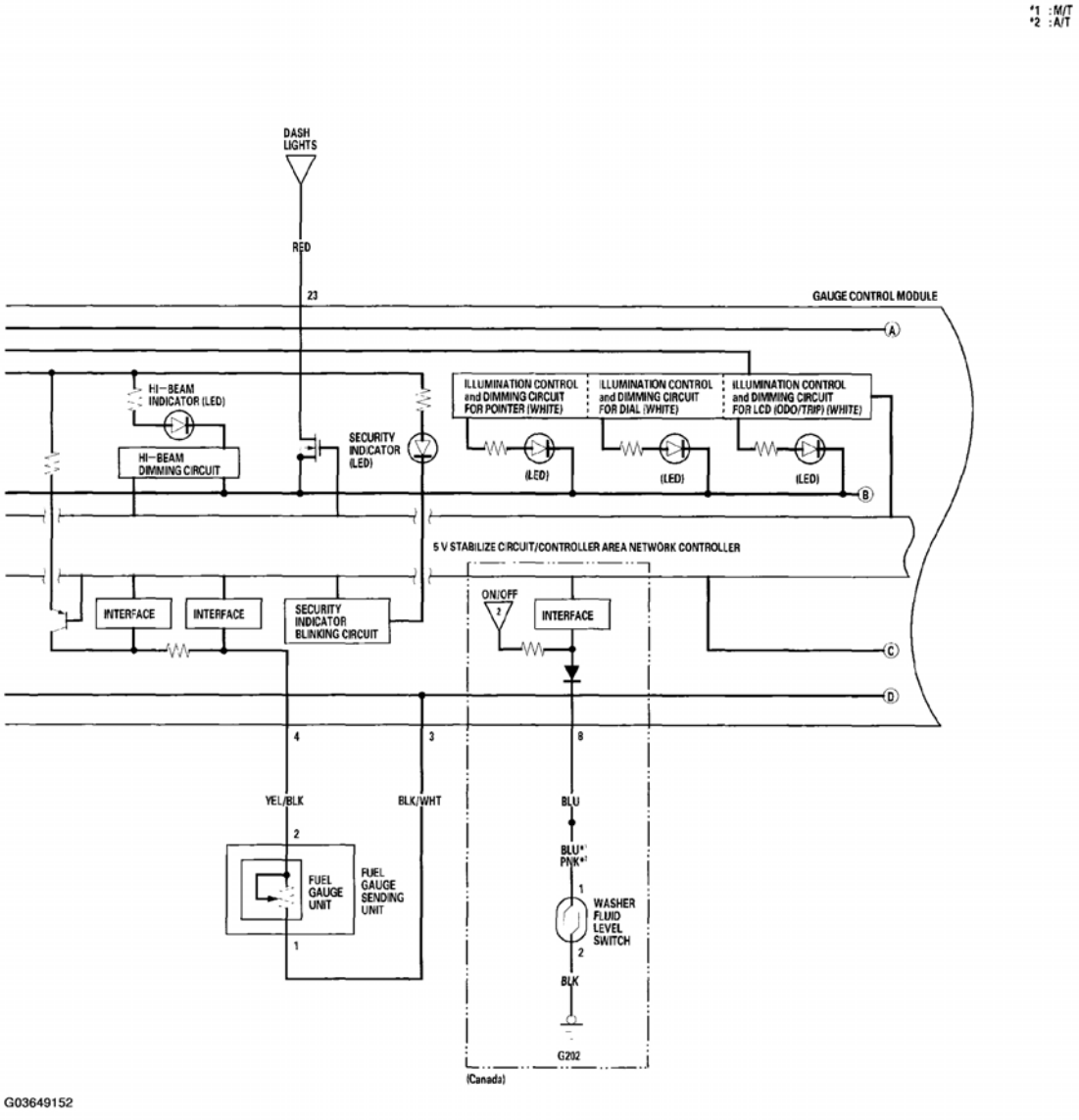


Fig. 15: Identifying Gauges Circuit Diagram ('06 Models - 2 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

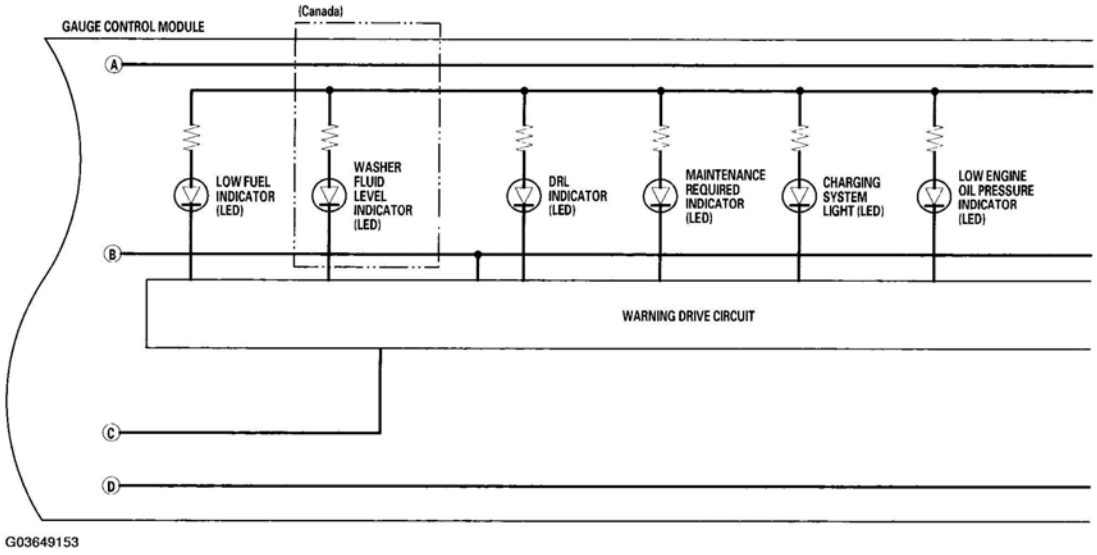


Fig. 16: Identifying Gauges Circuit Diagram ('06 Models - 3 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

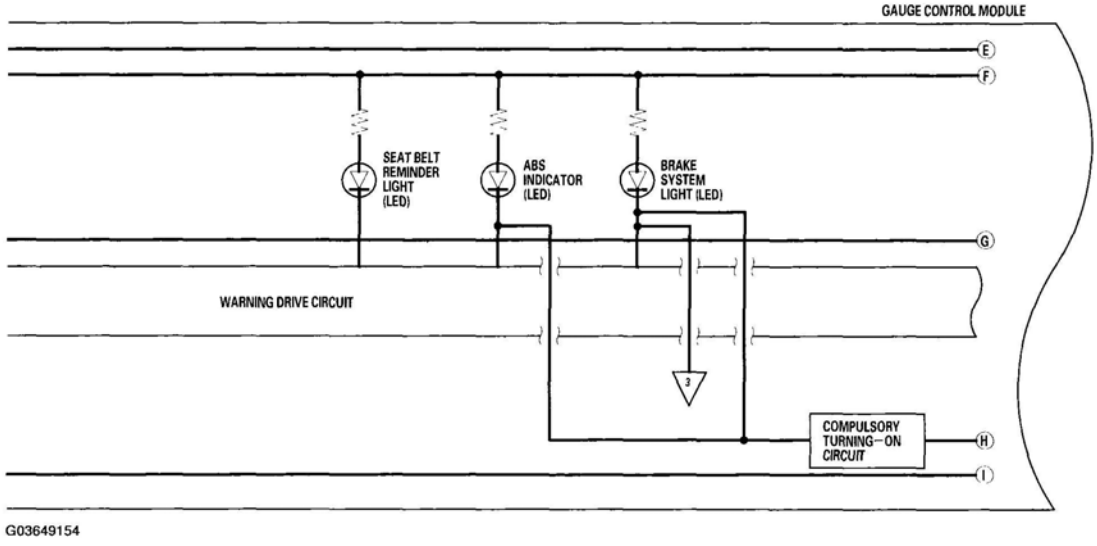


Fig. 17: Identifying Gauges Circuit Diagram ('06 Models - 4 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

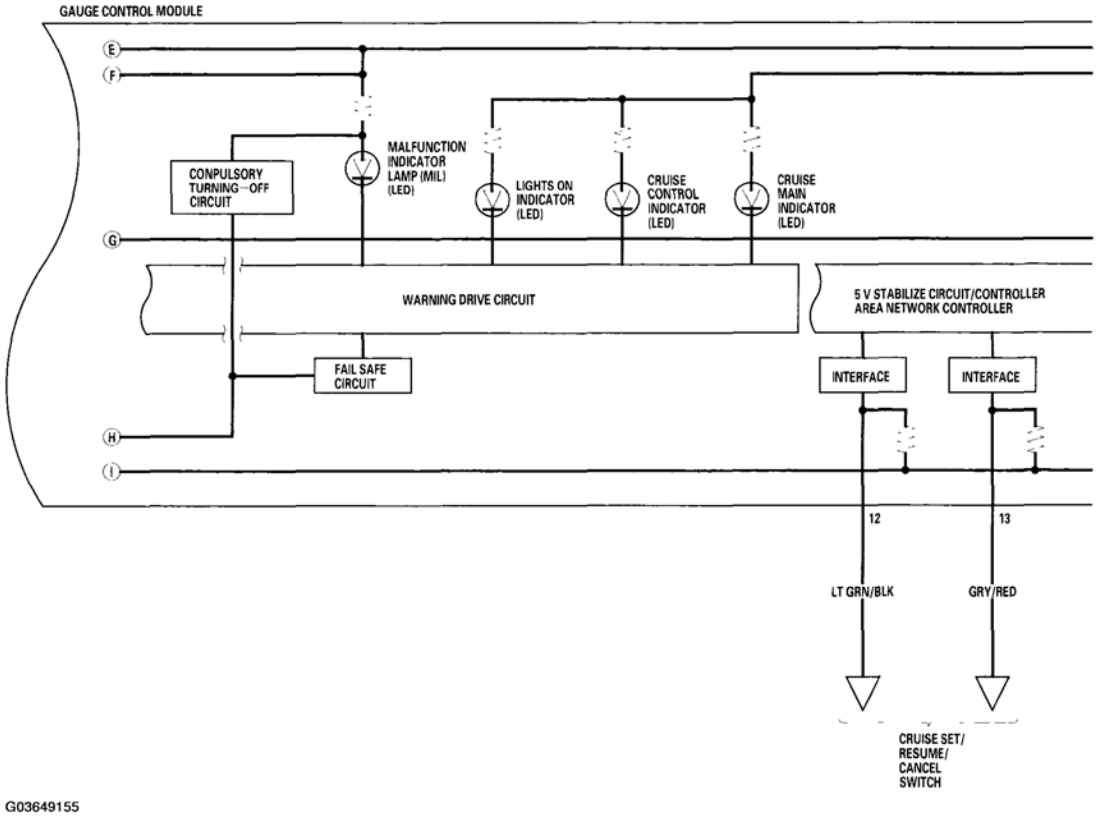


Fig. 18: Identifying Gauges Circuit Diagram ('06 Models - 5 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

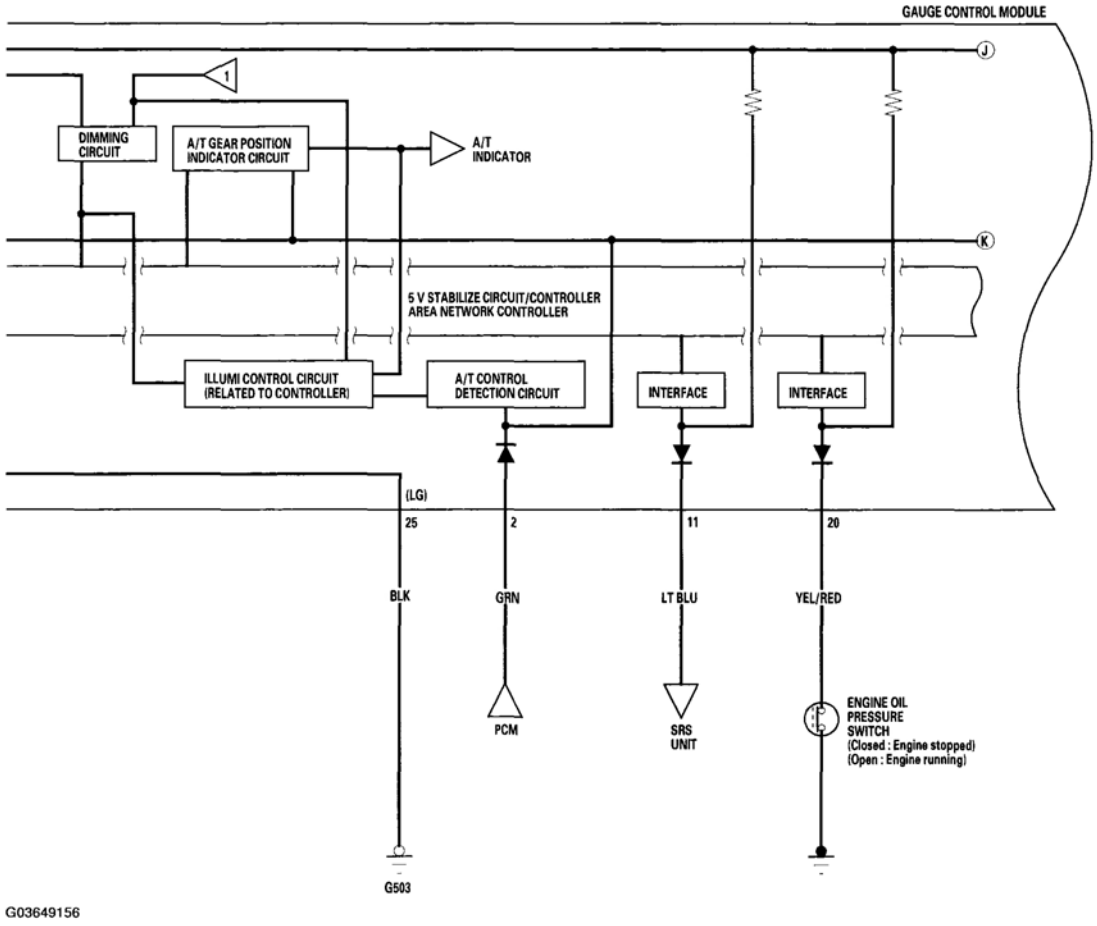


Fig. 19: Identifying Gauges Circuit Diagram ('06 Models - 6 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

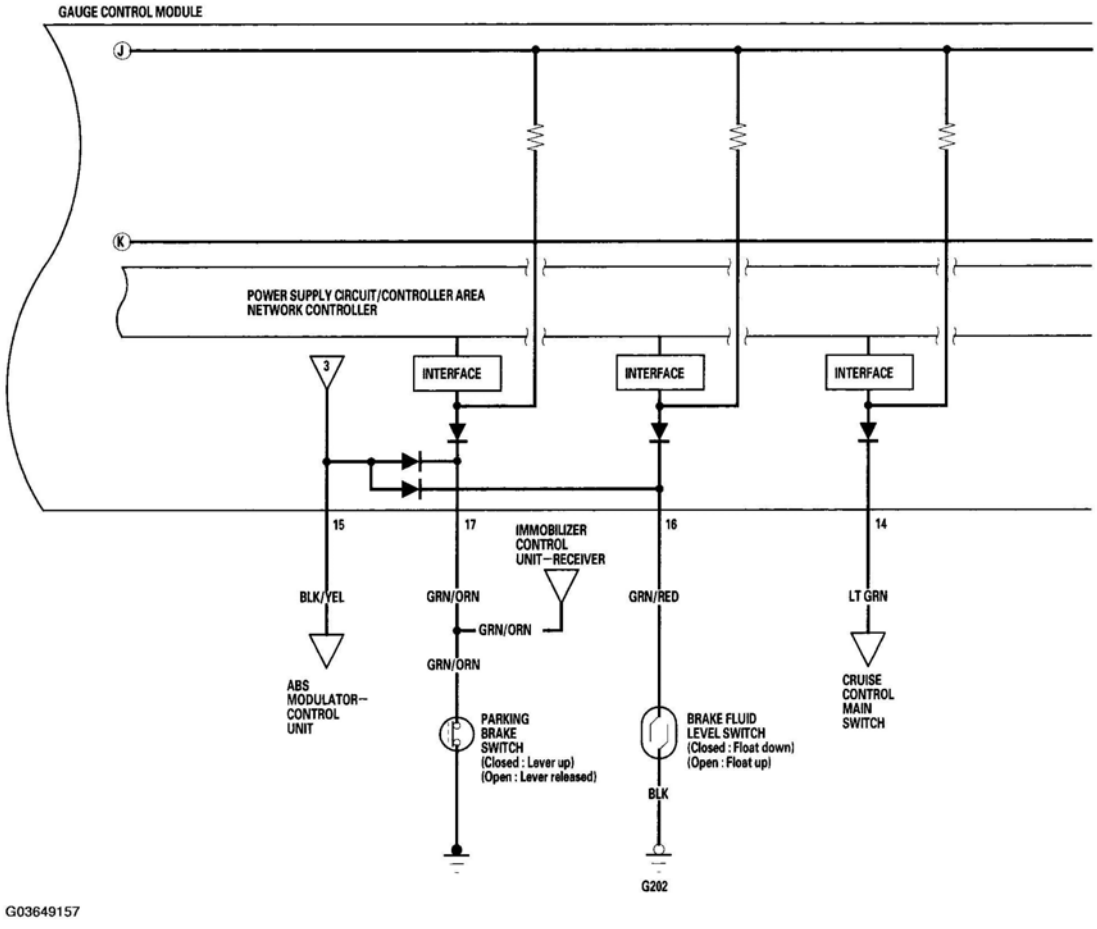


Fig. 20: Identifying Gauges Circuit Diagram ('06 Models - 7 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

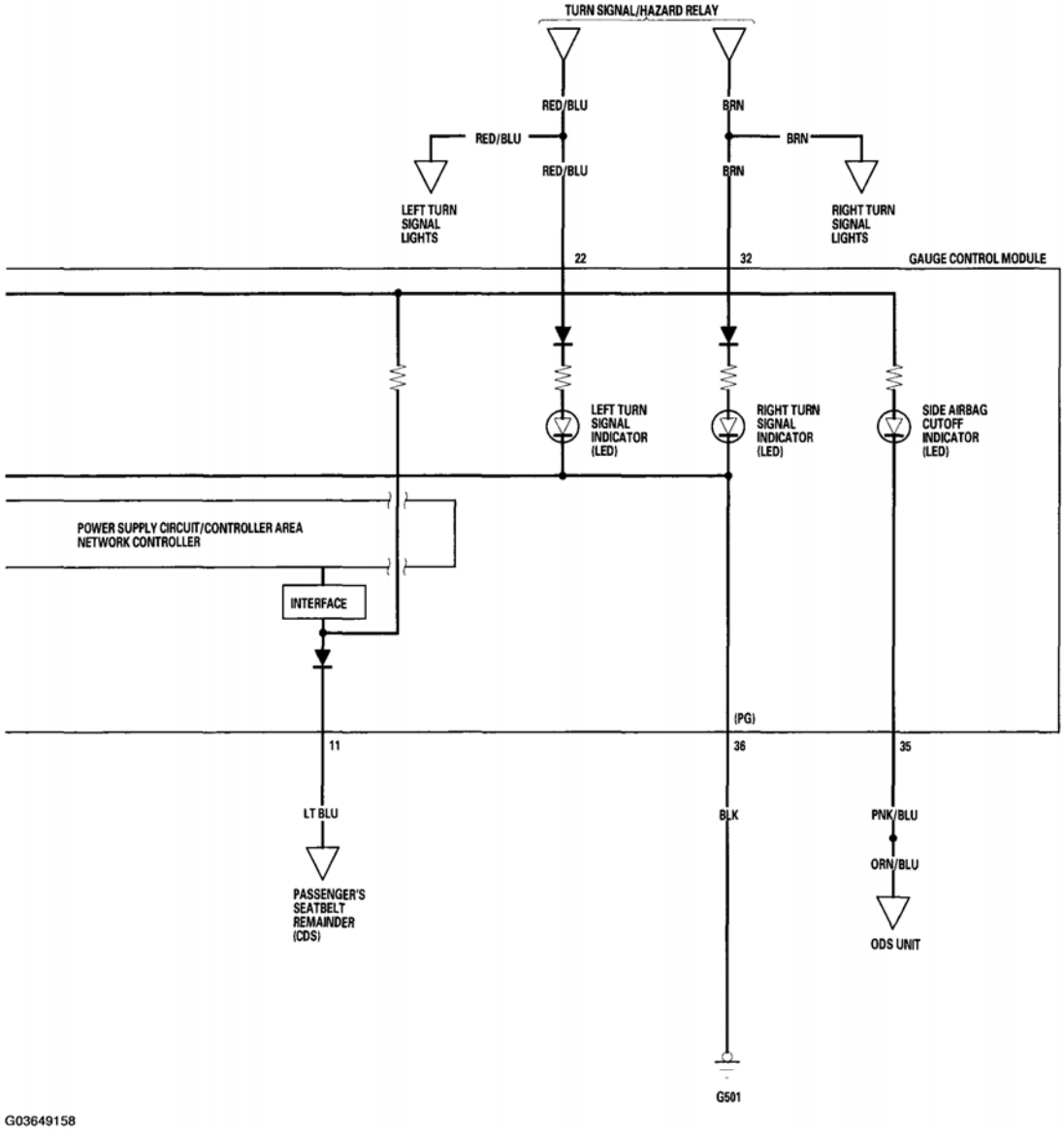


Fig. 21: Identifying Gauges Circuit Diagram ('06 Models - 8 Of 8)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GAUGE CONTROL MODULE REPLACEMENT

1. Remove the instrument panel (see **INSTRUMENT PANEL REMOVAL/INSTALLATION**), then remove the upper column cover (see **STEERING COLUMN REMOVAL AND INSTALLATION**).
2. Place a clean shop towel (A) under the gauge control module to prevent

scratching the steering column or dash panel.

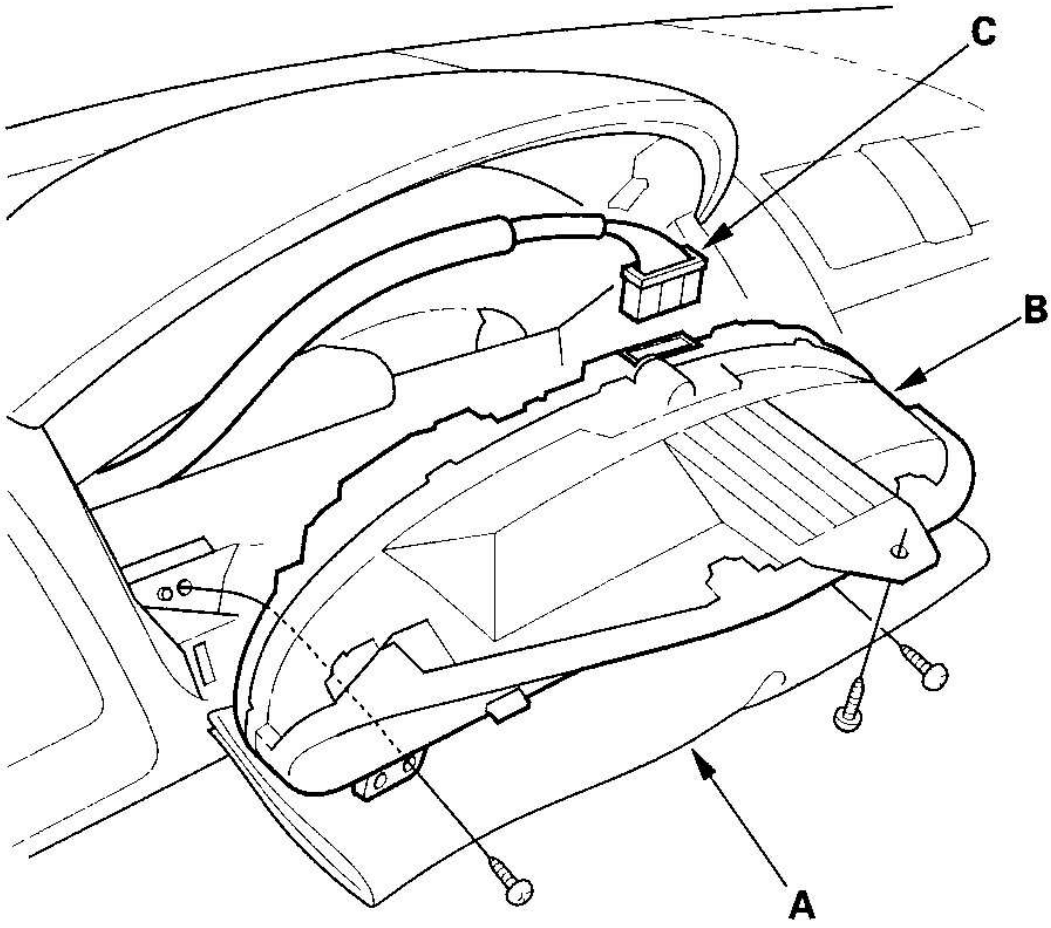


Fig. 22: Placing Shop Towel Under Gauge Control Module
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the screws from the gauge control module (B).
4. Disconnect the 30P ('03-05 models) or 36P ('06-07 models) connector (C), and remove the gauge control module.
5. Install the gauge control module in the reverse order of removal.

REWRITING THE ODO DATA ON A NEW GAUGE CONTROL MODULE

NOTE:

- **If the HDS retrieves the ODO data from the gauge control module, the ODO value on the ODO/TRIP display will appear as "---------", making the ODO function unusable, and the HDS will be unable to retrieve additional ODO values.**
- **Rewriting is not possible on a gauge control module that does not communicate.**
- **Obtain a new gauge control module before starting the rewriting process.**

1. Before replacing the gauge control module, connect the HDS to the data link connector.
2. Select GAUGES AND INDICATORS from the HDS menu display.
3. Select "ODO REWRITE" from the ADJUSTMENTS menu display, and follow the instructions on the menu display to retrieve the ODO value.
4. Replace the gauge control module.
5. Follow the instructions on the menu display to write the new ODO value to the new gauge control module.

OUTSIDE AIR TEMPERATURE INDICATOR TEST

NOTE: To test the outside air temperature sensor (see OUTSIDE AIR TEMPERATURE SENSOR TEST).

The outside air temperature sensor for the indicator is mounted behind the front bumper. Because of this, the temperature reading can be affected by heat reflection from the road, engine heat, and even exhaust from the surrounding traffic. To prevent bogus readings, the display uses a specific logic as shown.

The outside air is warmer than when the ignition switch was turned OFF (ACC or LOCK) position:

- If the ignition switch was turned OFF for less than 2 hours, the displayed temperature when you turn the ignition switch to ON (II) stays at the ignition switch-off temperature until the vehicle has gone faster than 18 mph (30 km/h)

for 30 seconds, then rises 1 degree every minute until the outside air temperature is reached.

- If the ignition switch was turned OFF for 2 hours or more, the displayed temperature when you turn the ignition switch to ON (II) the display immediately updates to the measured outside air temperature.

The outside air is cooler than when the ignition switch was turned OFF (ACC or LOCK) position:

- If the ignition switch was turned OFF for less than 2 hours, the displayed temperature when you turn the ignition switch to ON (II) is the ignition switch-off temperature.

  The displayed temperature then drops 1 degree every 2 seconds until the reading matches the outside air temperature.

- If the ignition switch was turned OFF for 2 hours or more, the displayed temperature is the measured outside air temperature.

FORCED DISPLAY

You can also force the indicator to display the measured temperature.

1. Turn the ignition switch OFF.
2. Remove the No. 7 (10 A) fuse from the under-dash fuse/relay box for 60 seconds, then reinstall it.
3. Turn the ignition switch ON (II).

TROUBLESHOOTING

If the indicator displays "- - -" for more than 2 seconds after selecting the outside air temperature display mode, check the climate control system for DTCs, or an open in the LT BLU wire between the under-dash fuse/relay box and the climate control unit.

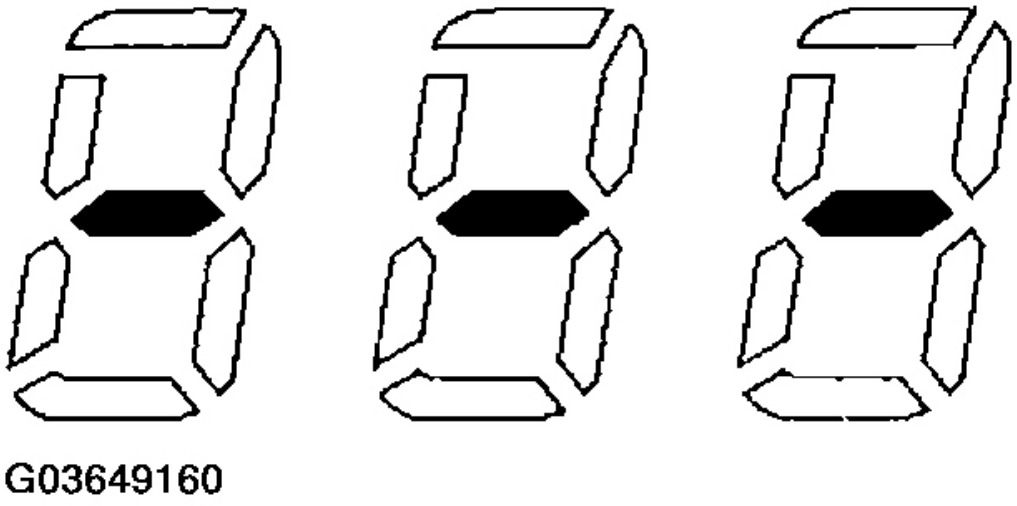


Fig. 23: Identifying Indicator Displays
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CALIBRATION

NOTE: This procedure must be done after the temperature sensor stabilizes.

The outside air temperature indicator's displayed temperature can be recalibrated +/- 3° to meet the customer's expectations.

1. Turn the ignition switch ON (II).
2. Press and hold the reset select button for 10 seconds. While you continue to hold the button, the display will scroll through temperature settings from +/-3° to -3° as shown below.

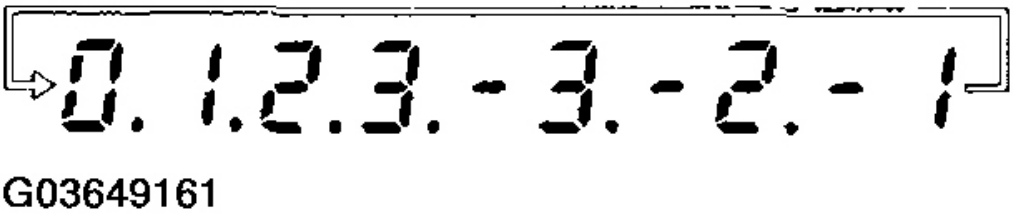


Fig. 24: Recalibration Of Outside Air Temperature Indicator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. When the desired correction value appears on the display, release the button, and the recalibrated outside air temperature will be displayed.

   Each time a desired correction valve is entered, it replaces the previous valve.

   Example:

   Incorrect value = 68°F (20°C)
   Desired correction valve = +2°F (+1°C)
   Correct valve = 70°F (21°C)
   Desired correction valve = -2°F (-1°C)
   Correct valve = 66°F (19°C)

NOTE: To recalibrate the display to the true temperature, remove the outside air temperature sensor (A), but leave it connected. Submerge the sensor and a thermometer (B) in a container of ice water (C). Select the calibration mode as described above, then recalibrate the display to the true temperature.

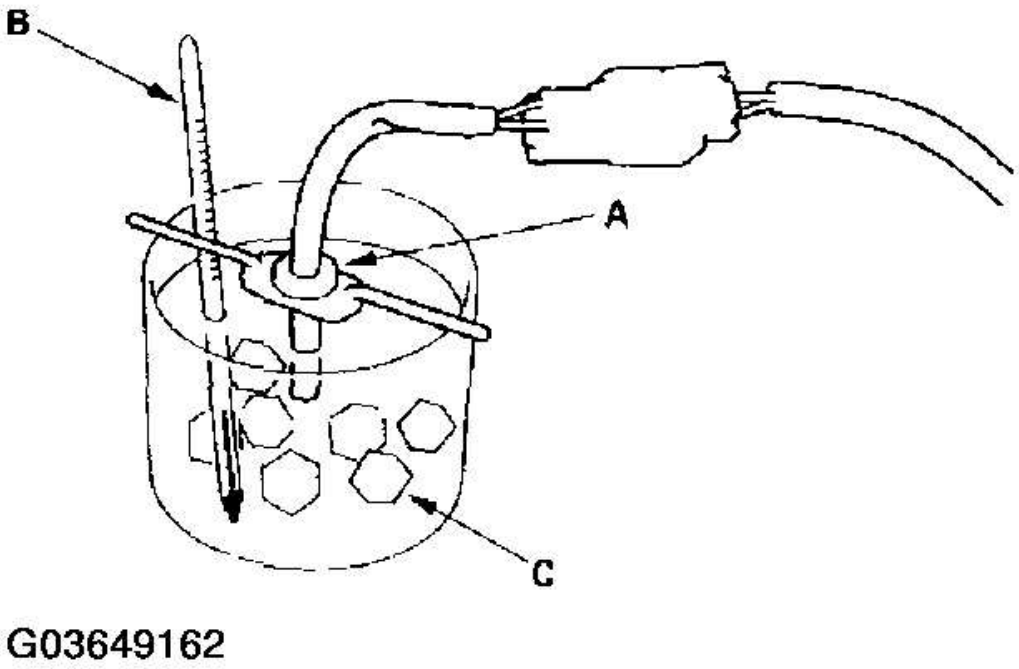


Fig. 25: Recalibration Of Temperature
Courtesy of AMERICAN HONDA MOTOR CO., INC.

RESETTING THE MAINTENANCE REQUIRED INDICATOR

MAINTENANCE REMINDER LIGHT BLINKING PATTERN

Miles (km)	Maintenance Reminder Light
At 7,900 (12,640) to 8,100 (12,960)	Blinks for 10 seconds when the ignition switch is turned ON (II).
At 9,900 (15,840) to 11,000 (16,160)	Comes on and stays on while the ignition switch is ON (II).

HOW TO RESET

Push and hold the trip/reset button, turn the ignition switch ON (II), and continue to hold the button for more than 10 seconds.

DTC TROUBLESHOOTING

DTC B1152: GAUGE CONTROL MODULE EEPROM ERROR

1. Clear the DTCs using the HDS.
2. Start the engine.
3. Check for DTCs by selecting the DTCs MENU (DTCs) from the HDS.

Is DTC B1152 indicated?

YES - Faulty gauge control module; replace the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**).

NO - Intermittent failure, the gauge control module is OK at this time. Check pinfits and connections. If the connections are good, check the battery condition (see **BATTERY TEST**), and the charging system (see **ALTERNATOR AND REGULATOR CIRCUIT TROUBLESHOOTING**).

DTC B1155: GAUGE CONTROL MODULE LOST COMMUNICATION WITH THE COMBINATION SWITCH CONTROL UNIT (HEADLIGHT SWITCH MESSAGE)

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Check for DTCs by selecting the DTCs MENU (DTCs) from the HDS.

Is DTC B1155 indicated?

YES - Go to step 4.

NO - Intermittent failure. The gauge control system is OK at this time. Check pinfits and connections.

4. Check for DTCs by selecting the DTCs MENU (DTCs) from the HDS.

Is DTC B1007 or B1062 also indicated?

YES - Go to Combination Switch Control Unit Input Test (see **COMBINATION SWITCH CONTROL UNIT INPUT TEST**).

NO - Go to Gauge Control Module Input Test.

- '03-05 models: see **'03-05 MODELS**
- '06-07 models: see **'06 MODEL**

DTC B1156: GAUGE CONTROL MODULE LOST COMMUNICATION WITH THE COMBINATION SWITCH CONTROL UNIT (WIPER SWITCH MESSAGE)

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Check for DTCs by selecting the DTCs MENU (DTCs) from the HDS.

Is DTC B1156 indicated?

YES - Go to step 4.

NO - Intermittent failure. The gauge control system is OK at this time. Check pinfits and connections.

4. Check for DTCs by selecting the DTCs MENU (DTCs) of the HDS.

Is DTC B1009 or B1063 also indicated?

YES - Go to Combination Switch Control Unit Input Test (see **COMBINATION SWITCH CONTROL UNIT INPUT TEST**).

NO - Go to Gauge Control Module Input Test.

- '03-05 models: see **'03-05 MODELS**
- '06-07 models: see **'06 MODEL**

DTC B1157: GAUGE CONTROL MODULE LOST COMMUNICATION WITH MULTIPLEX INTEGRATED CONTROL UNIT (MICU)

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Check for DTCs by selecting the DTCs MENU (DTCs) from the HDS.

Is DTC B1157 indicated?

YES - Go to step 4.

NO - Intermittent failure. The gauge control system is OK at this time.

Check pinfits and connections.

4. Check for DTCs by selecting the DTCs MENU (DTCs) from the HDS.

Are DTCs B1055 and B1255 also indicated?

YES - Go to Multiplex Integrated Control Unit Input Test (see **MICU INPUT TEST**).

NO - Go to Gauge Control Module Input Test.

- '03-05 models: see **'03-05 MODELS**
- '06-07 model: see **'06 MODEL**

DTC B1158: GAUGE CONTROL MODULE LOST COMMUNICATION WITH RELAY MODULE

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Check for DTCs by selecting the DTCs MENU (DTCs) from the HDS.

Is DTC B1158 indicated?

YES - Go to step 4.

NO - Intermittent failure. The gauge control system is OK at this time. Check pinfits and connections.

4. Check for DTCs by the DTCs MENU (DTCs) of the HDS.

Is DTC B1005 also indicated?

YES - Go to Relay Control Module Input Test (see **RELAY CONTROL MODULE INPUT TEST**).

NO - Go to Gauge Control Module Input Test.

- '03-05 models: see **'03-05 MODELS**
- '06-07 model: see **'06 MODEL**

DTC B1159: GAUGE CONTROL MODULE LOST COMMUNICATION (DOOR SWITCH MESSAGE) WITH THE MULTIPLEX INTEGRATED CONTROL UNIT (MICU)

1. Clear the DTCs using the HDS.

2. Cycle the ignition switch to OFF and then back ON.
3. Check for DTCs by selecting the DTCs MENU (DTCs) from the HDS.

Is DTC B1159 indicated?

YES - Go to step 4.

NO - Intermittent failure. The gauge control system is OK at this time. Check pinfits and connections.

4. Check for DTCs by selecting the DTCs MENU (DTCs) from the HDS.

Is DTC B1057 also indicated?

YES - Go to Multiplex Integrated Control Unit Input Test (see **MICU INPUT TEST**).

NO - Go to Gauge Control Module Input Test.

- '03-05 models: see **'03-05 MODELS**
- '06-07 models: see **'06 MODEL**

DTC B1160: GAUGE CONTROL MODULE LOST COMMUNICATION WITH THE DOOR MULTIPLEX CONTROL UNIT (DOOR LOCK SWITCH MESSAGE)

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Check for DTCs by selecting the DTCs MENU (DTCs) from the HDS.

Is DTC B1160 indicated?

YES - Go to step 4.

NO - Intermittent failure. The gauge control system is OK at this time. Check pinfits and connections.

4. Check for DTCs by the DTCs MENU (DTCs) of the HDS.

Is DTC B1006 or B1058 also indicated?

YES - Go to Door Multiplex Control Unit Input Test (see **DOOR MULTIPLEX CONTROL UNIT INPUT TEST**).

NO - Go to Gauge Control Module Input Test.

- '03-05 models: see **'03-05 MODELS**
- '06-07 models: see **'06 MODEL**

DTC B1175: FUEL GAUGE SENDING UNIT SIGNALS INPUT ERROR

1. Do the fuel gauge sending unit test (see **FUEL GAUGE SENDING UNIT TEST**).

   Is the fuel gauge sending unit OK?

   YES - Go to step 2.

   NO - Replace the fuel gauge sending unit.
2. Disconnect the 30P ('03-05 models) or 36P ('06-07 models) from the gauge control module and the 5P connector from the fuel pump/fuel gauge sending unit.
3. Check for continuity between the No. 3 and No. 4 terminals of the gauge control module 30P ('03-05 models) or 36P ('06-07 models) connector and No. 1 and No. 2 terminals of the fuel pump/fuel gauge sending unit 5P connector.

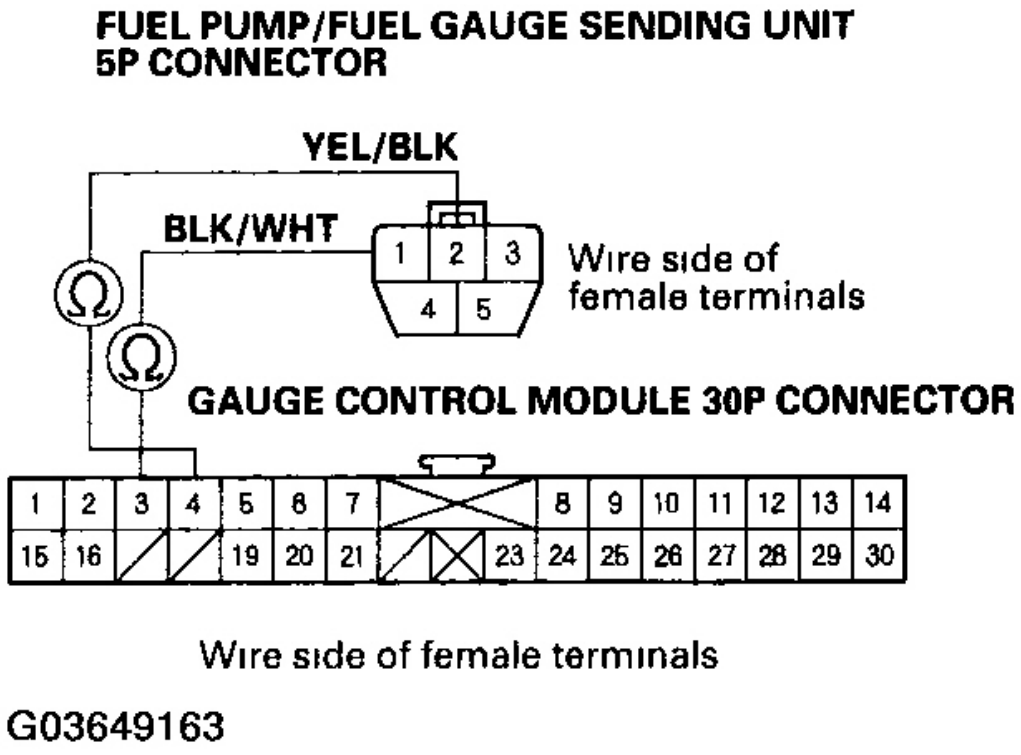


Fig. 26: Checking Continuity Between No. 3 & 4 Terminals Of Gauge Control Module 30P Connector And No. 1 & 2 Terminals Of Fuel Pump/Fuel Gauge Sending Unit 5P Connector ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

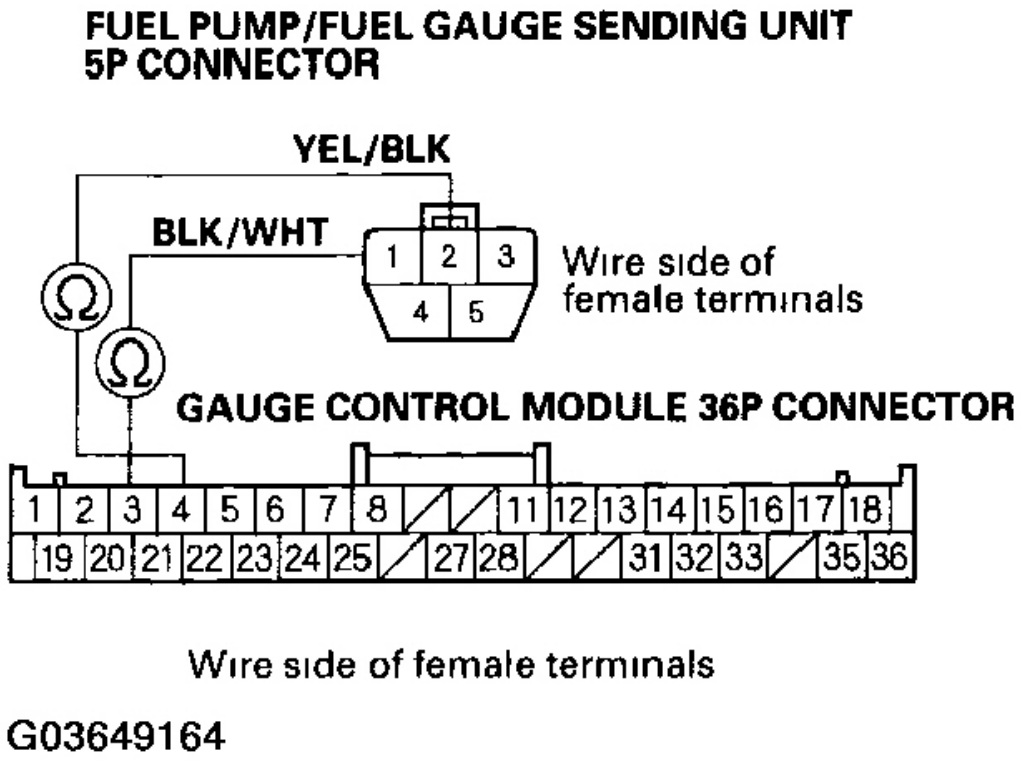


Fig. 27: Checking Continuity Between No.3 & 4 Terminals Of Gauge Control Module 36P Connector And No. 1 & 2 Terminals Of Fuel Pump/Fuel Gauge Sending Unit 5P Connector ('06 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 4.

NO - Repair an open in the BLK/WHT or YEL/BLK wire between the gauge control module and fuel gauge sending unit.

4. Check for continuity between the No. 3 and No. 4 terminals of the gauge control module 30P ('03-05 models) or 36P ('06-07 models) connector and body ground.

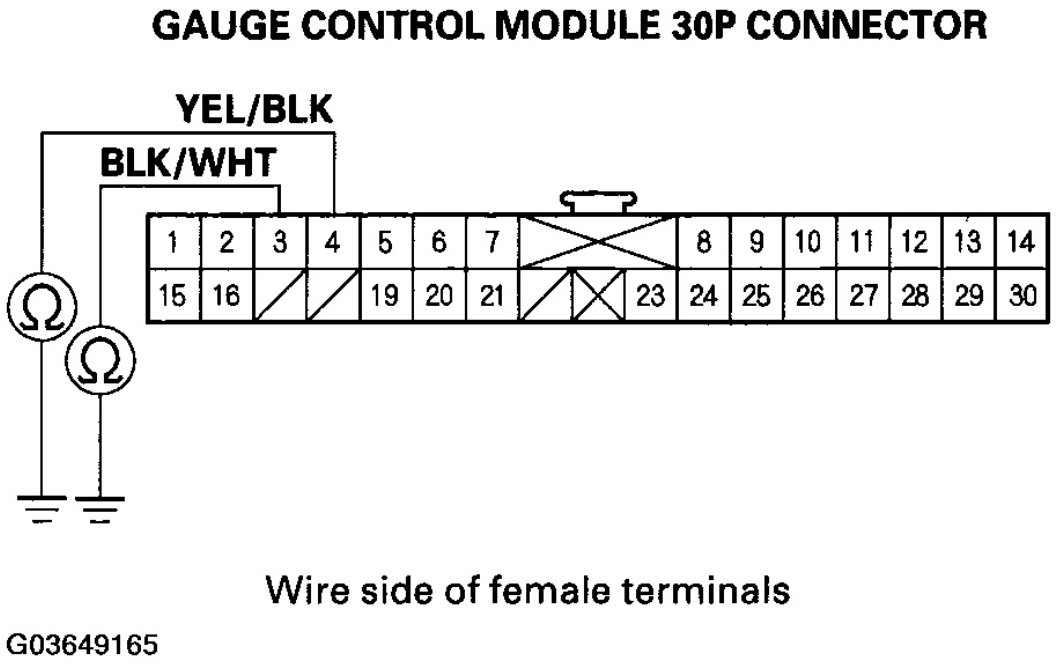


Fig. 28: Checking Continuity Between No. 3 & 4 Terminals Of Gauge Control Module 30P Connector And Body Ground ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

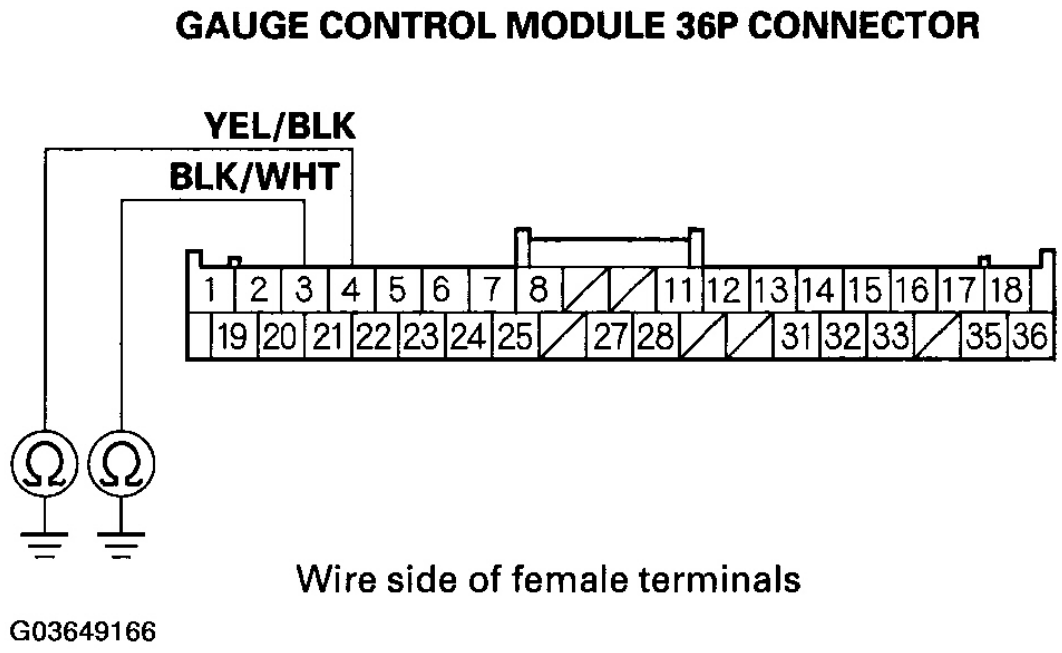


Fig. 29: Checking Continuity Between No. 3 &4 Terminals Of Gauge Control Module 36P Connector And Body Ground ('06-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair a short in the BLK/WHT or YEL/BLK wire.

NO - Inspect all pinfits between the gauge control module and the sending unit. If circuit integrity is good, and the problem still exist, swap gauge control module with a known-good one. If the problem is gone, replace the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**).

DTC B1177: ABNORMAL BATTERY VOLTAGE (7.5 V)

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Check the DTCs by selecting the DTCs MENU (DTCs) from the HDS.

Is DTC B1177 indicated?

YES - Go to step 5.

NO - Go to step 4.

4. Crank the engine.

Is DTC B1177 indicated?

YES - Go to step 5.

NO - Intermittent failure. The gauge control module and power supply voltage (IG1) that is supplied to the gauge control module are OK at this time.

5. Check the battery (see **BATTERY TEST**), and the charging system (see **ALTERNATOR AND REGULATOR CIRCUIT TROUBLESHOOTING**).

Is the battery condition and the charging system normal?

YES - Go to step 6.

NO - Abnormal battery condition which needs a recharge or replacement, or a charging system repair.

6. With the gauge control module 30P ('03-05 models), 36P ('06-07 models) connector still connected, turn the ignition switch to ON, and check for voltage between the No. 5 terminal and body ground.

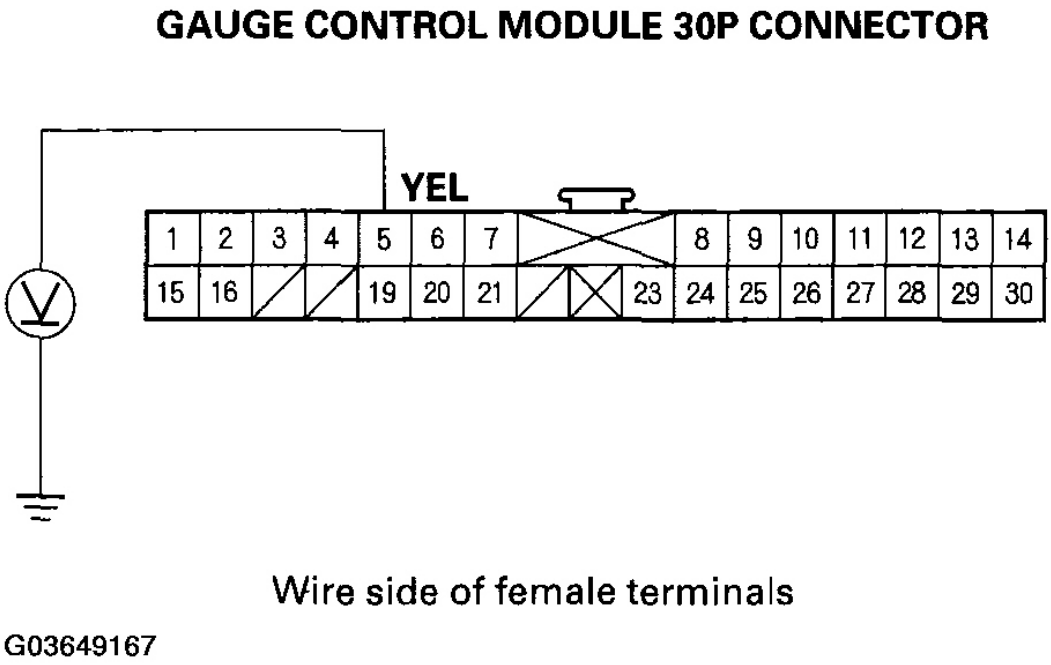


Fig. 30: Checking For Voltage Between No. 5 Terminal And Body Ground ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

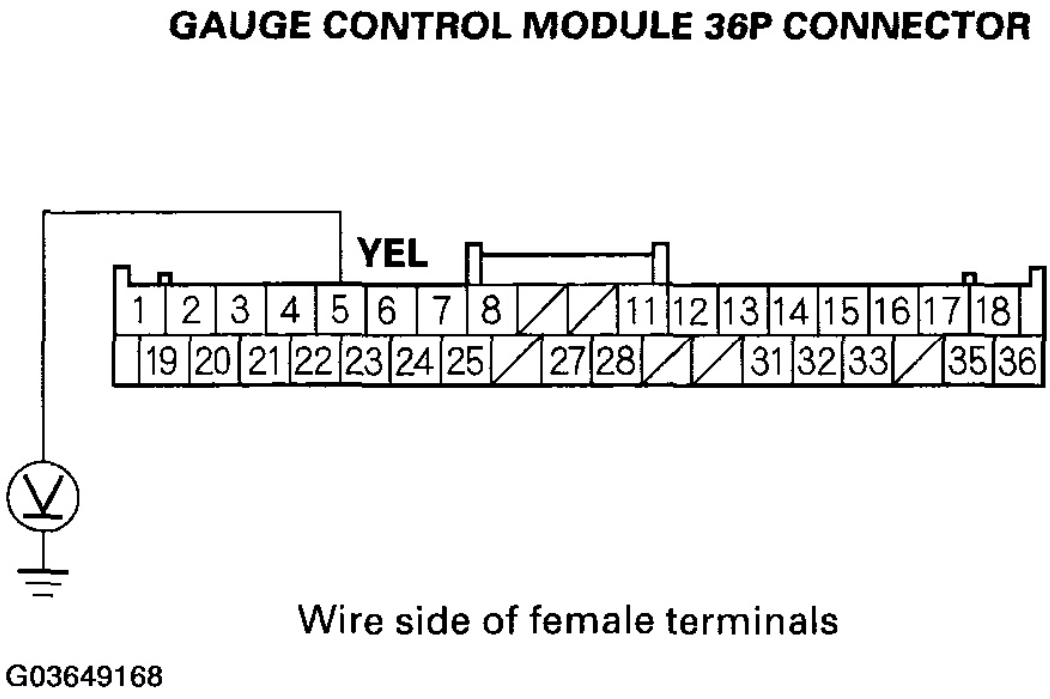


Fig. 31: Checking For Voltage Between No. 5 Terminal And Body Ground ('06-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 7.5 V or more?

YES - Go to step 7.

NO - Repair an open or high resistance in the YEL wire between the gauge control module and under-dash fuse/relay box.

7. Check for voltage between the No. 5 and No. 21 terminals.

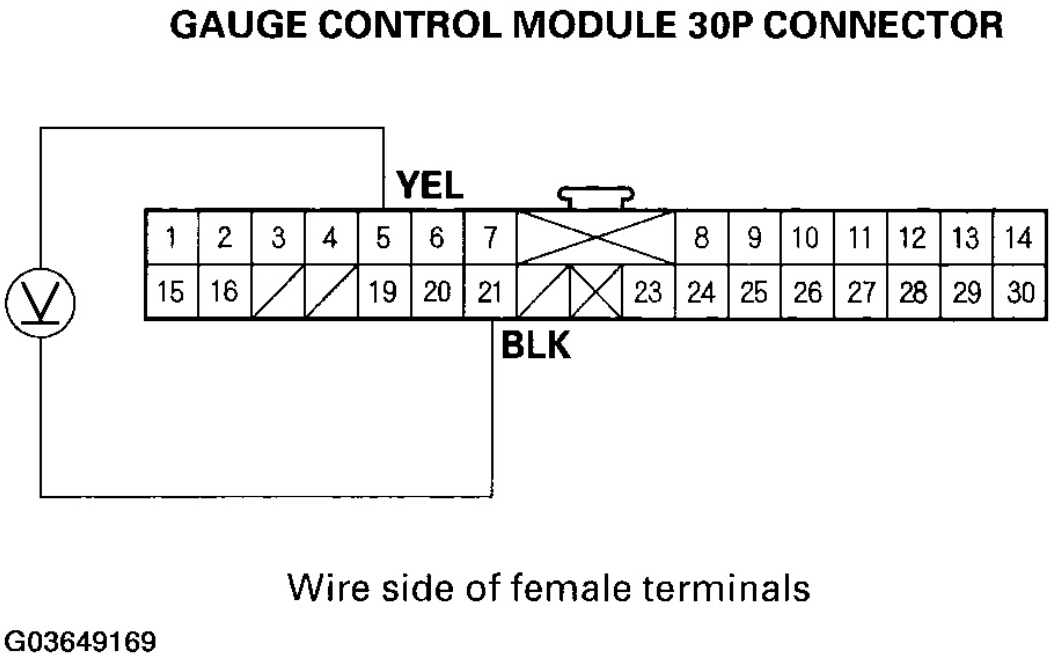


Fig. 32: Checking For Voltage Between No. 5 And No. 21 Terminals ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

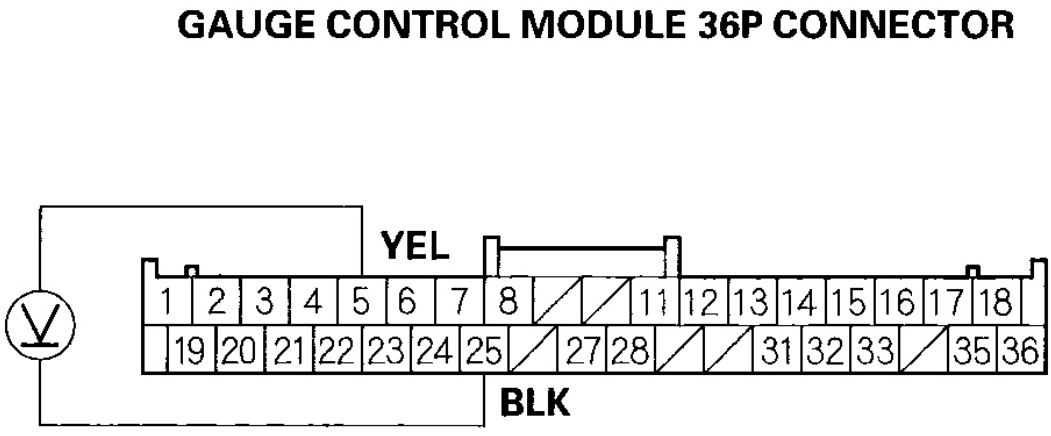


Fig. 33: Checking For Voltage Between No. 5 And No. 21 Terminals ('06-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 7.5 V or more?

YES - Faulty gauge control module; Replace the gauge control module (see **GAUGE CONTROL MODULE REPLACEMENT**).

NO - Repair an open or high resistance in the BLK wire between the gauge control module and ground.

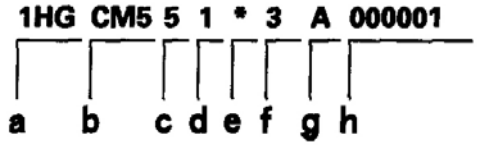
2003-07 GENERAL INFORMATION

OEM General Information - Accord

CHASSIS AND PAINT CODES

'03 4-DOOR MODEL

Vehicle Identification Number



a. Manufacturer, Make and Type of Vehicle
1HG: HONDA OF AMERICA MFG., INC., U.S.A.
HONDA passenger vehicle
3HG: HONDA DE MEXICO S.A.DE.C.V.
HONDA passenger vehicle
JHM: HONDA MOTOR CO., LTD.
HONDA passenger vehicle

b. Line, Body and Engine Type
CM5: ACCORD/K24A4

c. Body Type and Transmission Type
5: 4-door Sedan/5-speed Manual
6: 4-door Sedan/5-speed Automatic

d. Vehicle Grade (Series)

U.S. model	Canada model
1: DX	1: DX
3: LX, LX-SULEV	3: LX
4: LX, LX-SULEV with Side Airbag	4: LX with Side Airbag
6: EX, EX-L EX-SULEV, EX-L-SULEV	6: EX, EX-L
7: EX, EX-L, EX-L-SULEV with Navigation	

e. Check Digit

f. Model Year
3: 2003

g. Factory Code
A:Marysville, Ohio Factory in U.S.A.
C:Saitama Factory in Japan
G:El Salto Factory in Mexico

h. Serial Number
000001—: U.S. model
700001—: U.S. model
800001—: Canada model

G03645777

Fig. 1: Identifying Vehicle Identification Number (2003 4-Door Model - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

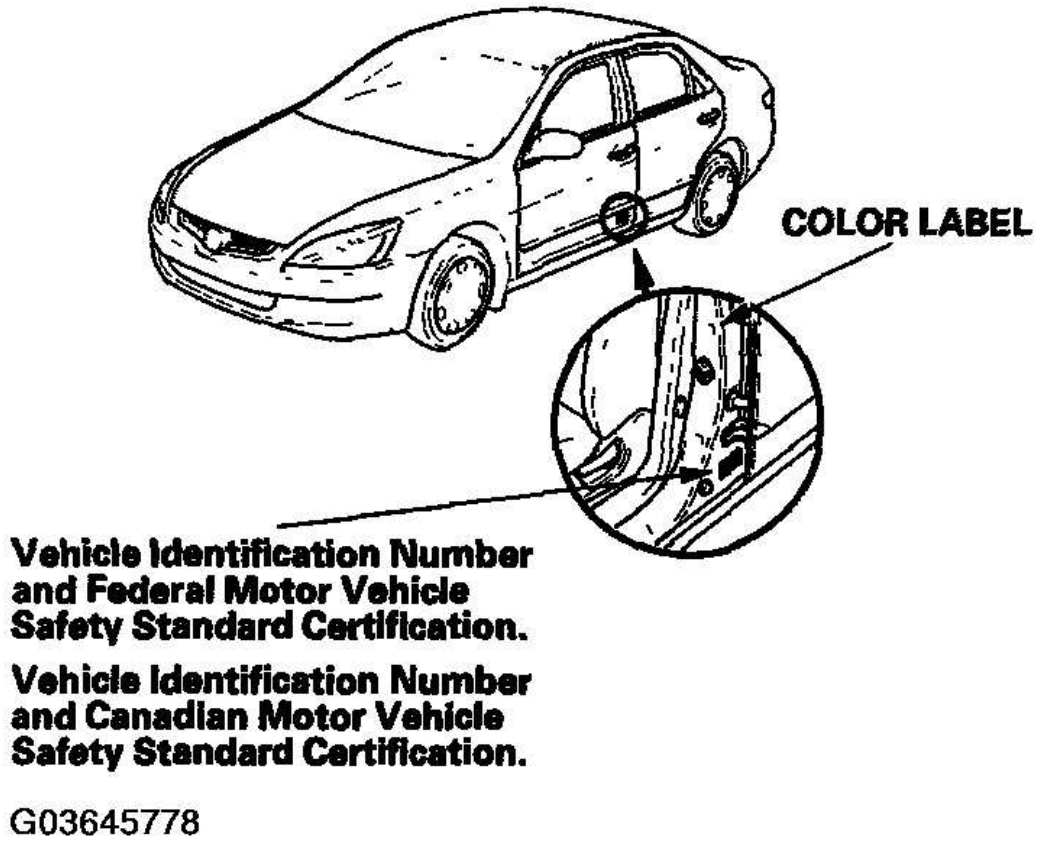
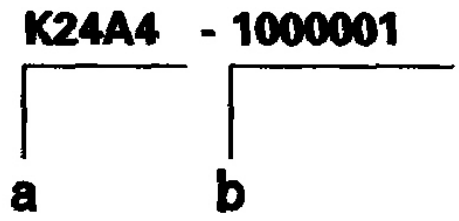


Fig. 2: Identifying Vehicle Identification Number (2003 4-Door Model - 2 Of 2) Courtesy of AMERICAN HONDA MOTOR CO., INC.

Engine Number



a. Engine Type

K24A4: 2.4 L DOHC i-VTEC Sequential Multiport Fuel-injected engine

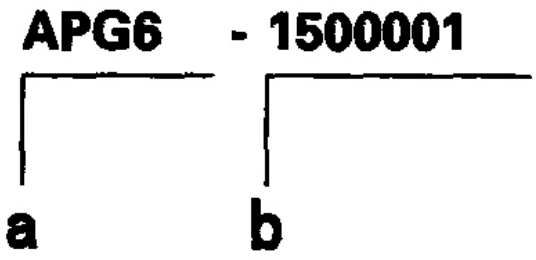
b. Serial Number

1HG: 1000001—
3HG: 1000001—
JHM: 1500001—

G03645779

Fig. 3: Identifying Engine Number (2003 4-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Transmission Number



a. Transmission Type
APG6: 5-speed Manual (1500001—)
MCLA: 5-speed Automatic (1000001—)
b. Serial Number
1000001—: MCLA
1500001—: APG6

G03645780

Fig. 4: Identifying Transmission Number (2003 4-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Paint Code

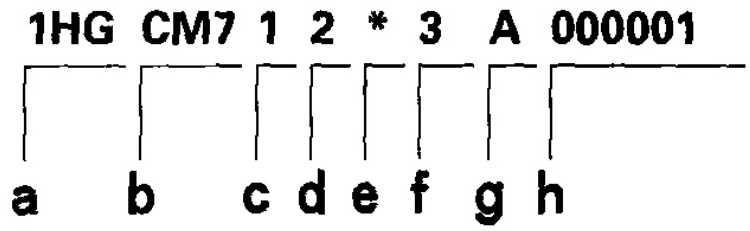
Code	Color	U.S.	Canada
B-92P	Nighthawk Black Pearl	○	○
B-96P	Eternal Blue Pearl	○	○
G-508P	Noble Green Pearl	○	
NH-578	Taffeta White	○	
NH-623M	Satin Silver Metallic	○	○
NH-658P	Graphite Pearl	○	○
R-522P	Redondo Red Pearl	○	○
YR-538M	Desert Mist Metallic	○	○

G03645781

Fig. 5: Paint Code Chart (2003 4-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

'03 2-DOOR MODEL

Vehicle Identification Number



a. Manufacturer, Make and Type of Vehicle
1HG: HONDA OF AMERICA MFG., INC., U.S.A.
HONDA passenger vehicle

b. Line, Body and Engine Type
CM7: ACCORD COUPE/K24A4

c. Body Type and Transmission Type
1: 2-door Coupe/5-speed Manual
2: 2-door Coupe/5-speed Automatic

d. Vehicle Grade (Series)

U.S. model	Canada model
2: LX	2: LX
3: LX with Side Airbag	3: LX with Side Airbag
6: EX, EX-L	6: EX, EX-L
7: EX-L	

e. Check Digit

f. Model Year
3: 2003

g. Factory Code
A:Marysville, Ohio Factory in U.S.A.

h. Serial Number
000001—: U.S. model
800001—: Canada model

G03645782

Fig. 6: Identifying Vehicle Identification Number (2003 2-door Model - 1 Of 2) Courtesy of AMERICAN HONDA MOTOR CO., INC.

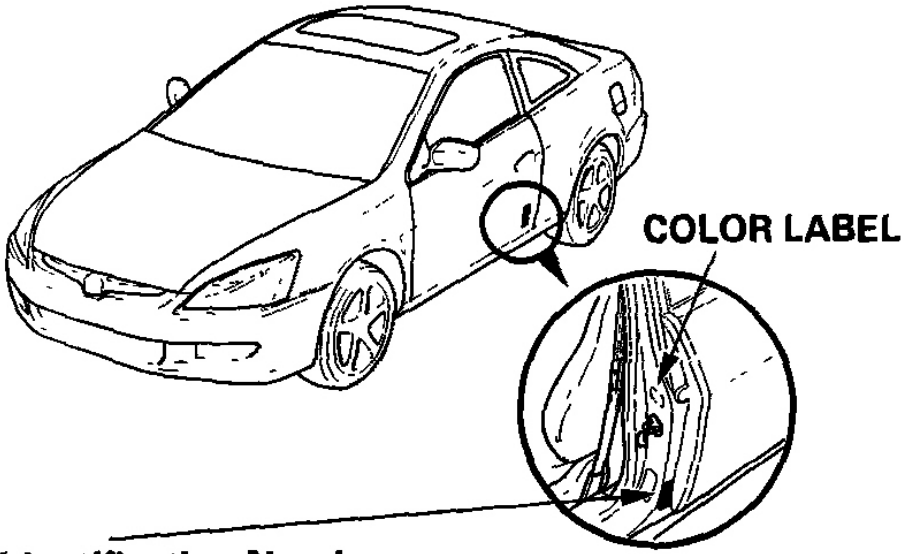
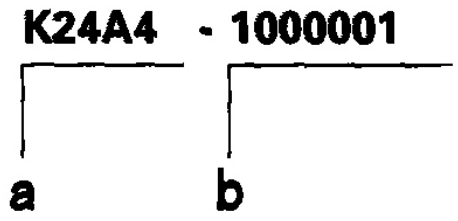


Fig. 7: Identifying Vehicle Identification Number (2003 2-door Model - 2 Of 2) Courtesy of AMERICAN HONDA MOTOR CO., INC.

Engine Number



a. Engine Type
K24A4: 2.4 L DOHC i-VTEC Sequential Multiport Fuel-injected engine

b. Serial Number
G03645784

Fig. 8: Identifying Engine Number (2003 2-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Transmission Number

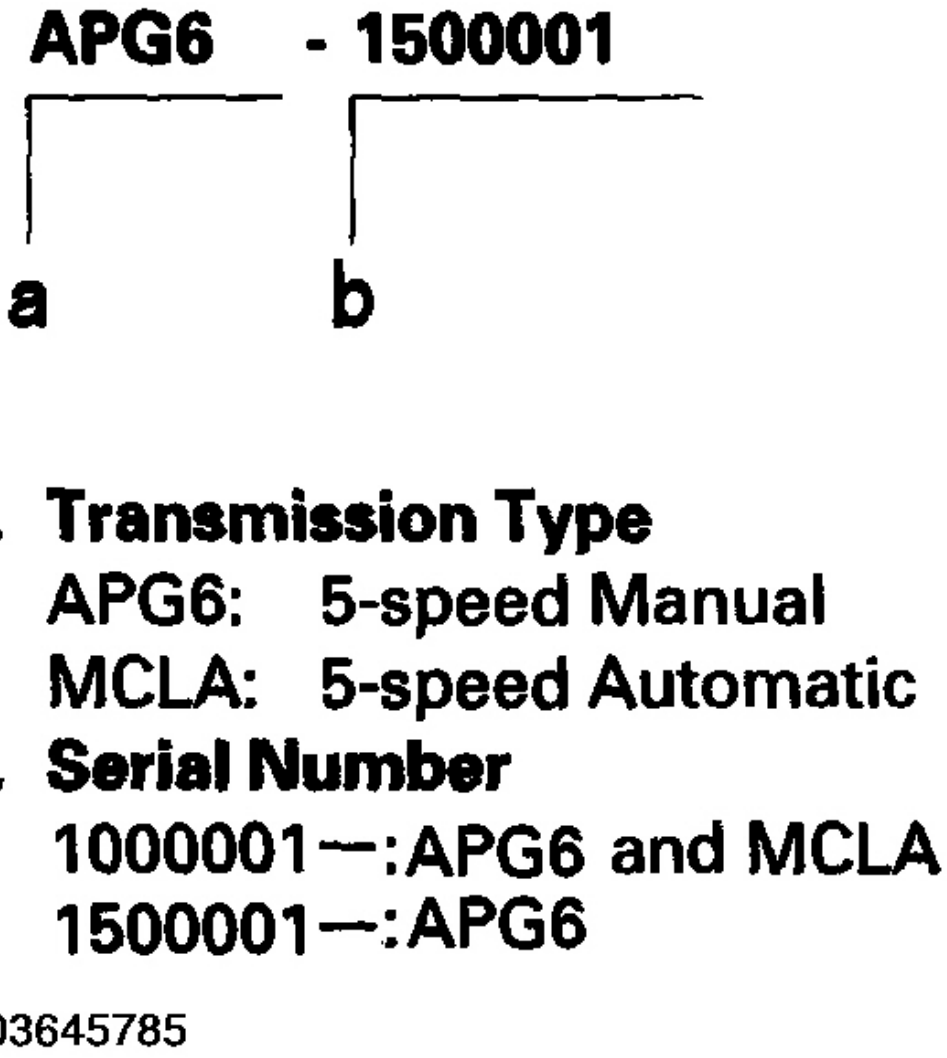


Fig. 9: Identifying Transmission Number (2003 2-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Paint Code

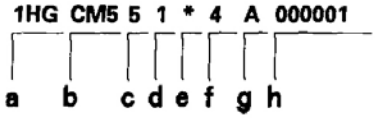
Code	Color	U.S.	Canada
B-92P	Nighthawk Black Pearl	○	○
G-508P	Noble Green Pearl	○	
B-517P	Sapphire Blue Pearl	○	○
NH-578	Taffeta White	○	
NH-623M	Satin Silver Metallic	○	○
NH-658P	Graphite Pearl	○	
R-94P	San Marino Red	○	
R-522P	Redondo Red Pearl		○
YR-538M	Desert Mist Metallic	○	○

G03645786

Fig. 10: Paint Code Chart (2003 2-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

'04 4-DOOR MODEL

Vehicle Identification Number



a. Manufacturer, Make and Type of Vehicle
1HG: HONDA OF AMERICA MFG., INC., U.S.A.
HONDA passenger vehicle
3HG: HONDA DE MEXICO S.A.DE.C.V.
HONDA passenger vehicle
JHM: HONDA MOTOR CO., LTD.
HONDA passenger vehicle

b. Line, Body and Engine Type
CM5: ACCORD/K24A4

c. Body Type and Transmission Type
5: 4-door Sedan/5-speed Manual
6: 4-door Sedan/5-speed Automatic

d. Vehicle Grade (Series)

U.S. model	Canada model
1: DX	1: DX
3: LX, LX-SULEV	3: LX
4: LX with Side Airbag, LX-SULEV with Side Airbag	4: LX with Side Airbag
6: EX, EX-SULEV	6: EX, EX-L
7: EX with Side Curtain Airbag, EX-L with Navigation, EX-SULEV with Side Curtain Airbag, EX-L-SULEV with Navigation	
8: EX-L, EX-L-SULEV	

e. Check Digit

f. Model Year
4: 2004

g. Factory Code
A:Marysville, Ohio Factory in U.S.A.
C:Saitama Factory in Japan
G:El Salto Factory in Mexico

h. Serial Number
000001—: U.S. models
700001—: U.S. models
800001—: Canada models

G03645787

Fig. 11: Identifying Vehicle Identification Number (2004 4-door Model - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

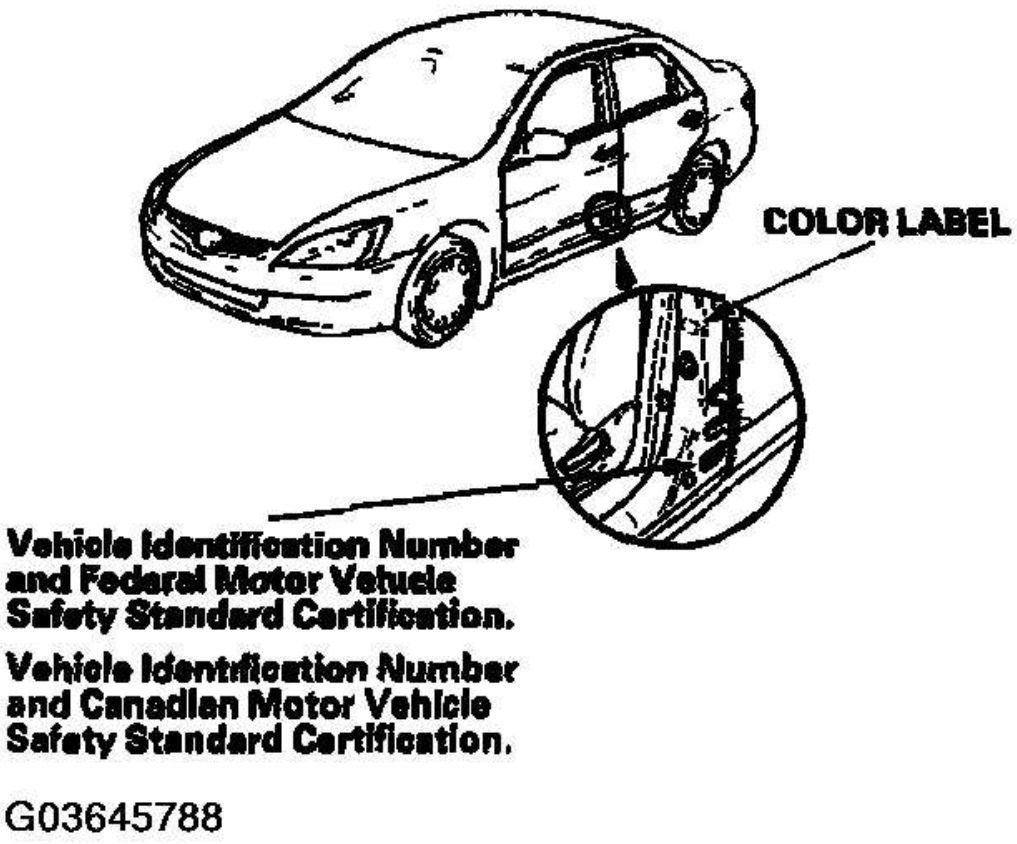
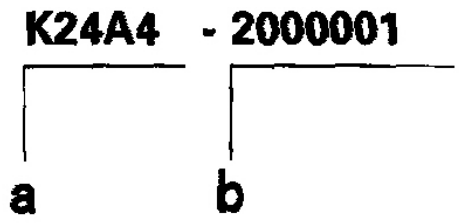


Fig. 12: Identifying Vehicle Identification Number (2004 4-door Model - 2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Engine Number



a. Engine Type

K24A4: 2.4 L DOHC i-VTEC Sequential Multiport Fuel-injected engine

b. Serial Number

2000001—: 1HG:
2300001—: 1HG: (SULEV)
2400001—: 3HG:
2500001—: JHM:

G03645789

Fig. 13: Identifying Engine Number (2004 4-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Transmission Number

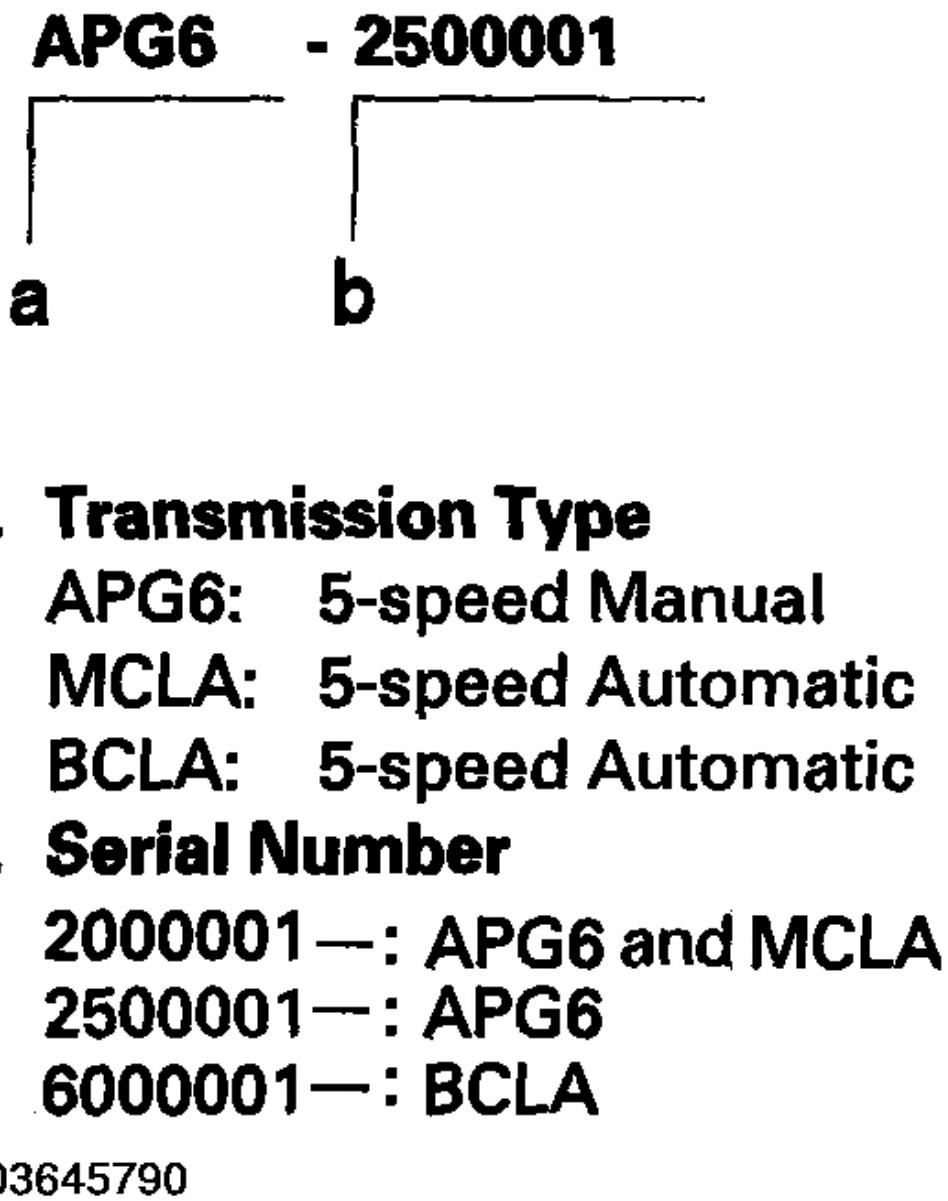


Fig. 14: Identifying Transmission Number (2004 4-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Paint Code

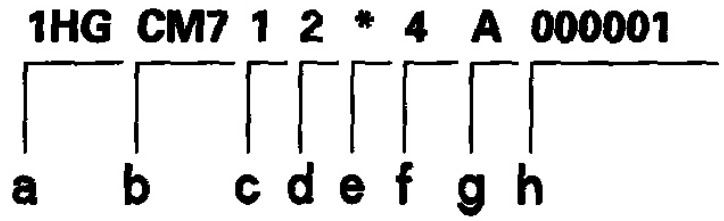
Code	Color	U.S.	Canada
B-92P	Nighthawk Black Pearl	○	○
B-96P	Eternal Blue Pearl	○	○
G-516P	Deep Green Pearl	○	○
NH-578	Taffeta White	○	
NH-623M	Satin Silver Metallic	○	○
NH-658P	Graphite Pearl	○	○
R-522P	Redondo Red Pearl	○	○
YR-538M	Desert Mist Metallic	○	○

G03645791

Fig. 15: Paint Code Chart (2004 4-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2004 2-DOOR MODEL

Vehicle Identification Number



a. Manufacturer, Make and Type of Vehicle
1HG: HONDA OF AMERICA MFG., INC., U.S.A.
HONDA passenger vehicle

b. Line, Body and Engine Type
CM7: ACCORD COUPE/K24A4

c. Body Type and Transmission Type
1: 2-door Coupe/5-speed Manual
2: 2-door Coupe/5-speed Automatic

d. Vehicle Grade (Series)

U.S. models	Canada models
2: LX	2: LX
3: LX with Side Airbag	3: LX with Side Airbag
5: EX with Side Airbag	6: EX, EX-L
6: EX-L	
7: EX with Side Curtain Airbag, EX-L with Navigation	

e. Check Digit

f. Model Year
4: 2004

g. Factory Code
A:Marysville, Ohio Factory in U.S.A.

h. Serial Number
000001—: U.S. models
800001—: Canada models

G03645792

Fig. 16: Identifying Vehicle Identification Number (2004 2-door Model - 1 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

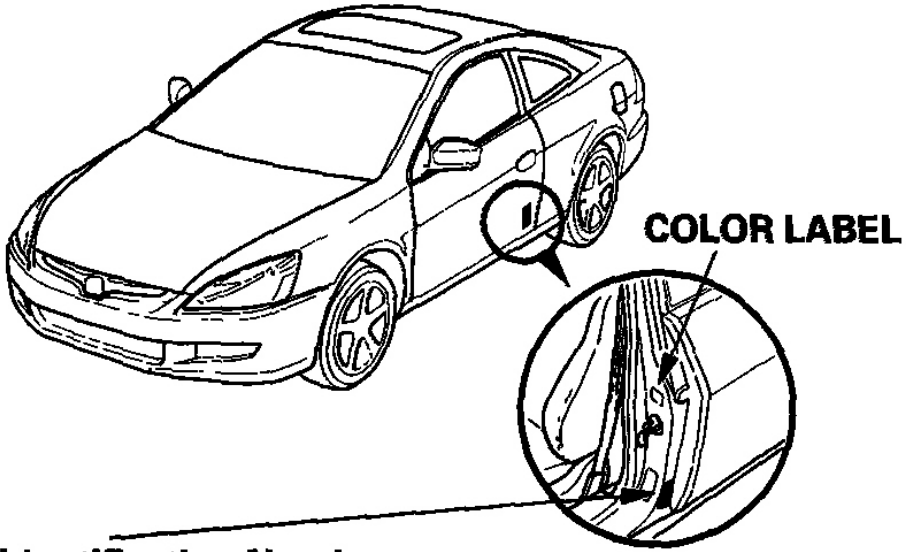
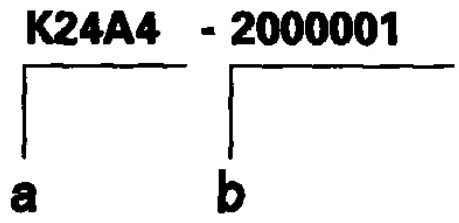


Fig. 17: Identifying Vehicle Identification Number (2004 2-door Model - 2 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Engine Number



a. Engine Type

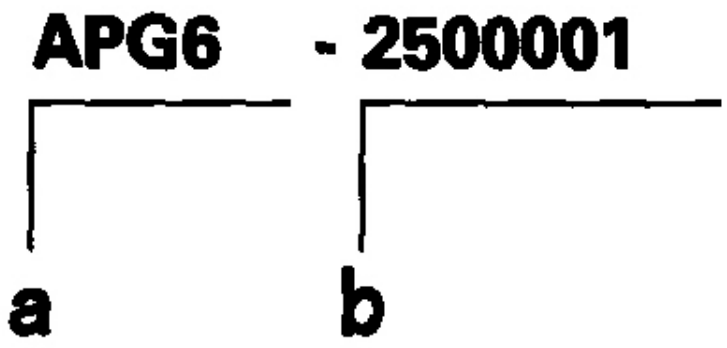
K24A4: 2.4 L DOHC i-VTEC Sequential Multiport Fuel-injected engine

b. Serial Number

G03645794

Fig. 18: Identifying Engine Number (2004 2-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Transmission Number



a. Transmission Type

APG6: 5-speed Manual

BCLA: 5-speed Automatic

b. Serial Number

2500001—: APG6

6000001—: BCLA

G03645795

Fig. 19: Identifying Transmission Number (2004 2-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Paint Code

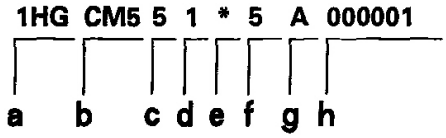
Code	Color	U.S.	Canada
B-92P	Nighthawk Black Pearl	○	○
G-516P	Deep Green Pearl	○	
B-517P	Sapphire Blue Pearl	○	○
NH-578	Taffeta White	○	
NH-623M	Satin Silver Metallic	○	○
NH-658P	Graphite Pearl	○	○
R-94P	San Marino Red	○	
R-522P	Redondo Red Pearl		○
YR-538M	Desert Mist Metallic	○	

G03645796

Fig. 20: Paint Code Chart (2004 2-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2005 4-DOOR MODEL

Vehicle Identification Number



a. Manufacturer, Make and Type of Vehicle
1HG: HONDA OF AMERICA MFG., INC., U.S.A.
HONDA passenger vehicle
3HG: HONDA DE MEXICO S.A.DE.C.V.
HONDA passenger vehicle
JHM: HONDA MOTOR CO., LTD.
HONDA passenger vehicle

b. Line, Body and Engine Type
CM5: ACCORD/K24A4

c. Body Type and Transmission Type
5: 4-door Sedan/5-speed Manual
6: 4-door Sedan/5-speed Automatic

d. Vehicle Grade (Series)

U.S. models	Canada models
1: DX, DX, VP	1: DX
4: LX, LX-P, LX-SULEV	4: LX
6: EX, EX-SULEV, EX-L	6: EX, EX-L
7: EX, EX-L with Navigation, EX-SULEV, EX-L SULEV with Navigation	
8: EX-L, EX-L-SULEV	

e. Check Digit

f. Model Year
5: 2005

g. Factory Code
A:Marysville, Ohio Factory in U.S.A.
C:Saitama Factory in Japan
G:El Salto Factory in Mexico

h. Serial Number
000001—: U.S. models
700001—: U.S. models
800001—: Canada models

G03645797

Fig. 21: Identifying Vehicle Identification Number (2005 4-door Model - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

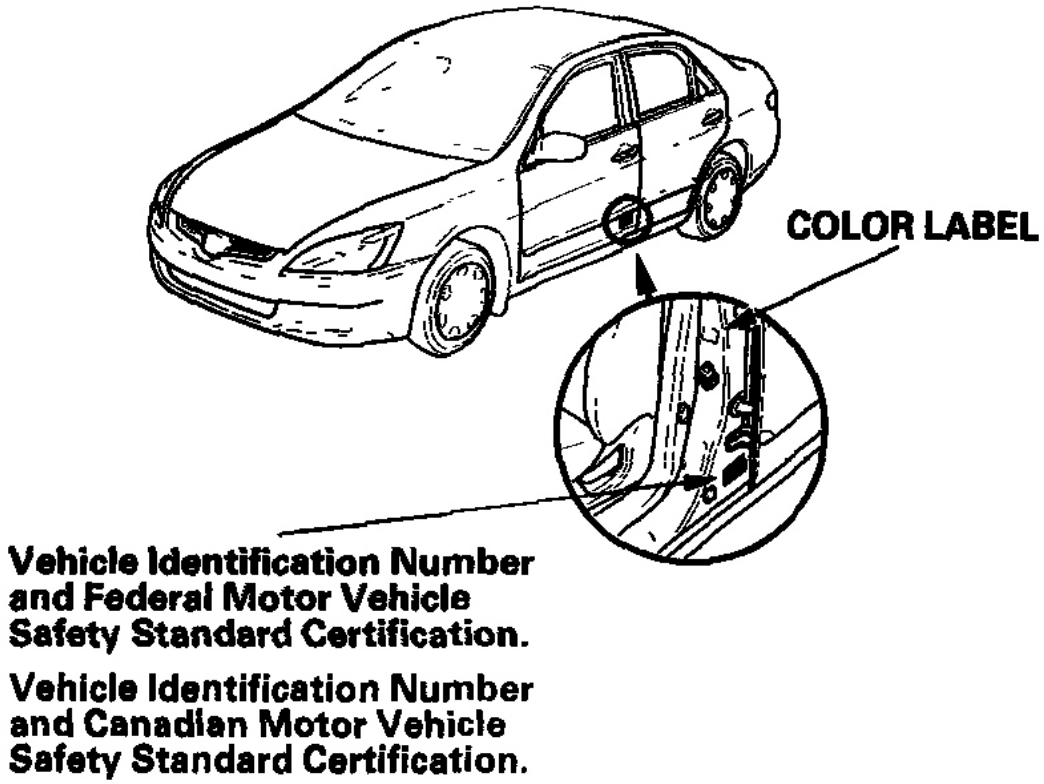
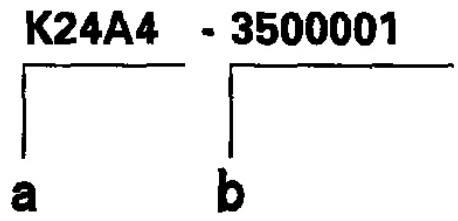


Fig. 22: Identifying Vehicle Identification Number (2005 4-door Model - 2 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Engine Number



a. Engine Type

K24A4: 2.4 L DOHC i-VTEC Sequential Multiport Fuel-injected engine

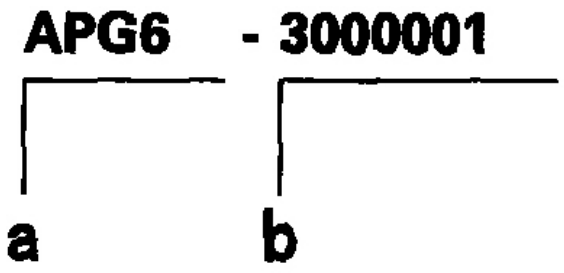
b. Serial Number

3000001—: 1HG:
3300001—: 1HG: (SULEV)
3400001—: 3HG
3500001—: JHM
3700001—: JHM (SULEV)

G03645799

Fig. 23: Identifying Engine Number (2005 4-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Transmission Number



a. Transmission Type

APG6: 5-speed Manual
MCLA: 5-speed Automatic
BCLA: 5-speed Automatic

b. Serial Number

3000001—: APG6 and MCLA
7000001—: BCLA
8400001—: APG6

G03645800

Fig. 24: Identifying Transmission Number (2005 4-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Paint Code

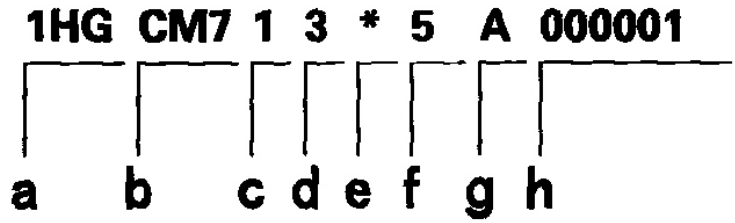
Code	Color	U.S.	Canada
B-92P	Nighthawk Black Pearl	○	○
B-96P	Eternal Blue Pearl	○	○
G-516P	Deep Green Pearl	○	○
NH-578	Taffeta White	○	
NH-623M	Satin Silver Metallic	○	○
NH-658P	Graphite Pearl	○	○
R-522P	Redondo Red Pearl	○	○
YR-538M	Desert Mist Metallic	○	○

G03645801

Fig. 25: Paint Code Chart (2005 4-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2005 2-DOOR MODEL

Vehicle Identification Number



a. Manufacturer, Make and Type of Vehicle

1HG: HONDA OF AMERICA MFG., INC., U.S.A.
HONDA passenger vehicle

b. Line, Body and Engine Type

CM7: ACCORD COUPE/K24A4

c. Body Type and Transmission Type

1: 2-door Coupe/5-speed Manual
2: 2-door Coupe/5-speed Automatic

d. Vehicle Grade (Series)

U.S. model	Canada model
3: LX, LX-SULEV	3: LX
5: SE, SE-SULEV	6: EX, EX-L
6: EX-L, EX-L-SULEV	
7: EX, EX-SULEV	

e. Check Digit

f. Model Year

5: 2005

g. Factory Code

A:Marysville, Ohio Factory in U.S.A.

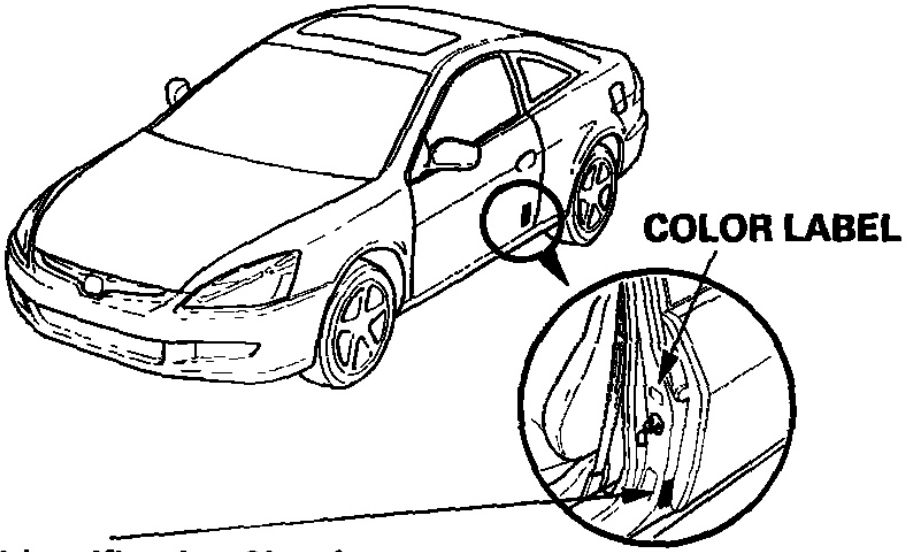
h. Serial Number

000001—: U.S. models
800001—: Canada models

G03645802

Fig. 26: Identifying Vehicle Identification Number (2005 2-door Model - 1 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.



Vehicle Identification Number and Federal Motor Vehicle Safety Standard Certification.

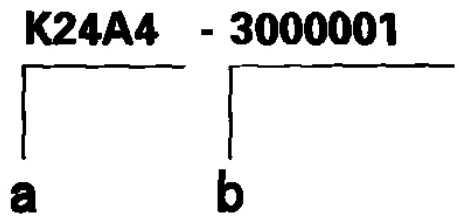
Vehicle Identification Number and Canadian Motor Vehicle Safety Standard Certification.

G03645803

Fig. 27: Identifying Vehicle Identification Number (2005 2-door Model - 2 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Engine Number



a. Engine Type

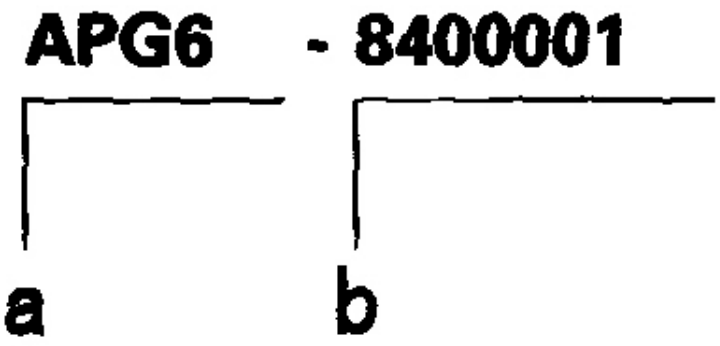
K24A4: 2.4 L DOHC i-VTEC Sequential Multiport Fuel-injected engine

b. Serial Number

G03645804

Fig. 28: Identifying Engine Number (2005 2-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Transmission Number



a. Transmission Type

APG6: 5-speed Manual

BCLA: 5-speed Automatic

b. Serial Number

7000001—: APG6

8400001—: BCLA

G03645805

Fig. 29: Identifying Transmission Number (2005 2-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Paint Code

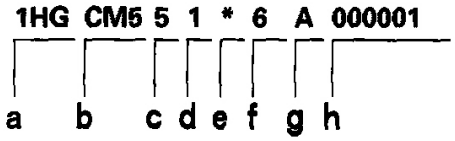
Code	Color	U.S.	Canada
B-92P	Nighthawk Black Pearl	○	○
G-516P	Deep Green Pearl	○	
B-517P	Sapphire Blue Pearl	○	○
NH-578	Taffeta White	○	
NH-623M	Satin Silver Metallic	○	○
NH-658P	Graphite Pearl	○	○
R-94P	San Marino Red	○	
R-522P	Redondo Red Pearl		○
YR-538M	Desert Mist Metallic	○	

G03645806

Fig. 30: Paint Code Chart (2005 2-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2006 4-DOOR MODEL

Vehicle Identification Number



a. Manufacturer, Make and Type of Vehicle
1HG: HONDA OF AMERICA MFG., INC., U.S.A.
HONDA passenger vehicle
3HG: HONDA DE MEXICO S.A.DE.C.V.
HONDA passenger vehicle
JHM: HONDA MOTOR CO., LTD.
HONDA passenger vehicle

b. Line, Body and Engine Type
CM5: ACCORD/K24A8

c. Body Type and Transmission Type
5: 4-door Sedan/5-speed Manual
6: 4-door Sedan/5-speed Automatic

d. Vehicle Grade (Series)

U.S. model	Canada models
1: VP	1: DX
3: SE	3: SE
4: LX, LX-P, LX-SULEV	7: EX, EX-L with Navigation
7: EX, EX-L with Navigation, EX-L SULEV with Navigation	8: EX-L
8: EX-L, EX-L-SULEV	

e. Check Digit

f. Model Year
6: 2006

g. Factory Code
A:Marysville, Ohio Factory in U.S.A.
C:Saitama Factory in Japan
G:El Salto Factory in Mexico

h. Serial Number
000001—: U.S. models
700001—: U.S. models
800001—: Canada model

G03645807

Fig. 31: Identifying Vehicle Identification Number (2006 4-door Model - 1 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

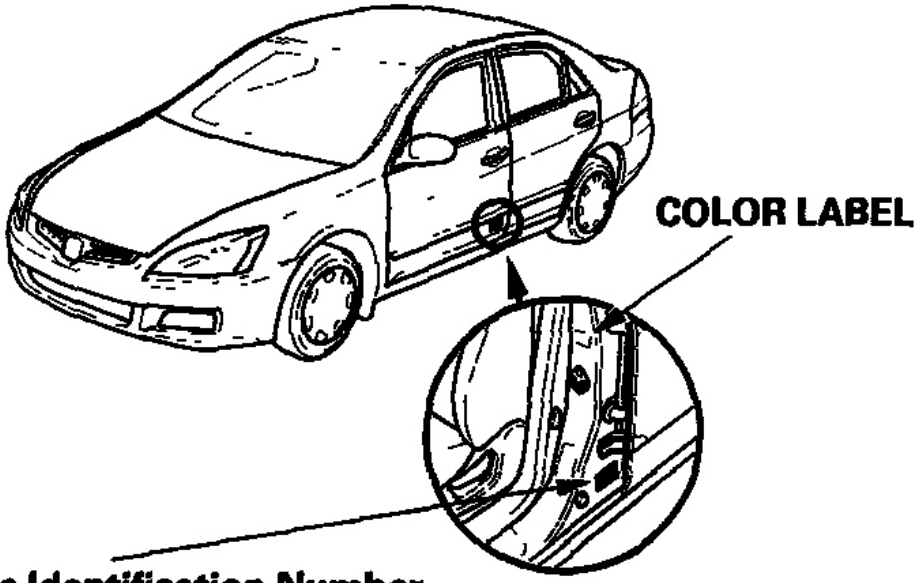
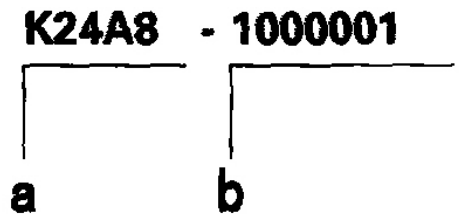


Fig. 32: Identifying Vehicle Identification Number (2006 4-door Model - 2 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Engine Number



a. Engine Type

K24A8: 2.4 L DOHC i-VTEC Sequential Multiport Fuel-injected engine

b. Serial Number

1000001—: 1HG
1300001—: 1HG SULEV
1400001—: 3HG
1500001—: JHM
1700001—: JHM SULEV

G03645809

Fig. 33: Identifying Engine Number (2006 4-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Transmission Number

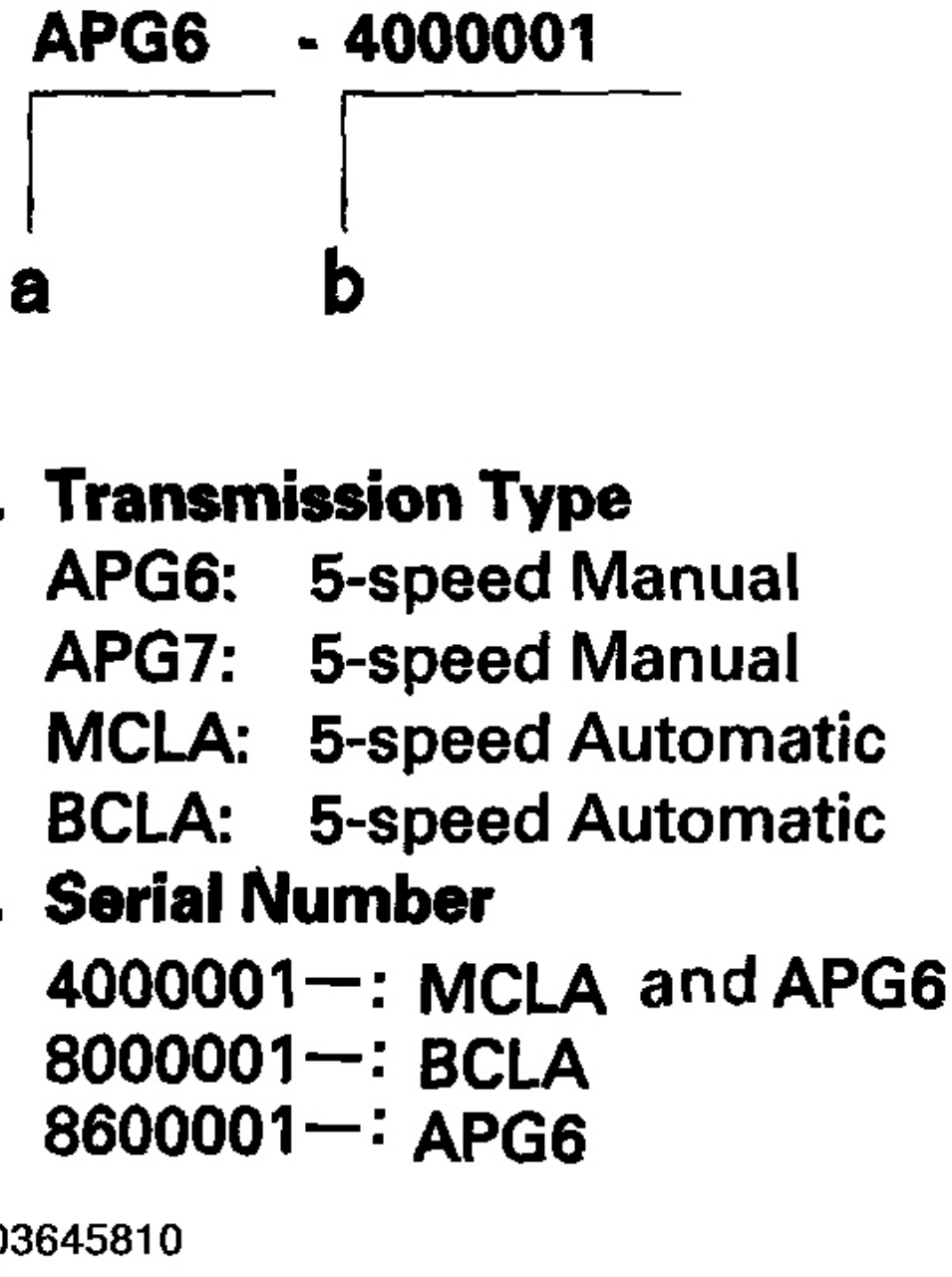


Fig. 34: Identifying Transmission Number (2006 4-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Paint Code

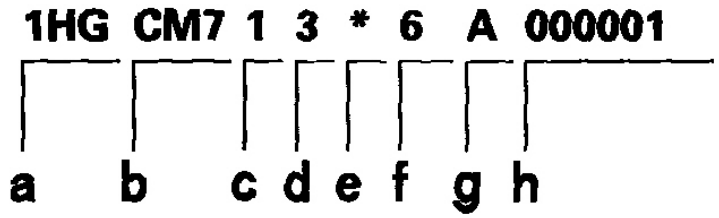
Code	Color	U.S.	Canada
B-92P	Nighthawk Black Pearl	○	○
B-517P	Sapphire Blue Pearl	○	○
B-536P	Royal Blue Pearl	○	○
NH-578	Taffeta White	○	
NH-658P	Graphite Pearl	○	○
NH-700M	Alabaster Silver Metallic	○	○
R-522P	Redondo Red Pearl	○	○
YR-538M	Desert Mist Metallic	○	○
YR-562P	Carbon Bronze Pearl	○	○

G03645811

Fig. 35: Paint Code Chart (2006 4-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2006 2-DOOR MODEL

Vehicle Identification Number



a. Manufacturer, Make and Type of Vehicle
1HG: HONDA OF AMERICA MFG., INC., U.S.A.
HONDA passenger vehicle

b. Line, Body and Engine Type
CM7: ACCORD COUPE/K24A8

c. Body Type and Transmission Type
1: 2-door Coupe/5-speed Manual
2: 2-door Coupe/5-speed Automatic

d. Vehicle Grade (Series)

U.S. model	Canada models
3: LX, LX-SULEV	3: LX
6: EX-L, EX-L-SULEV	6: EX, EX-L
7: EX, EX-SULEV EX-L with Navigation, EX-L -SULEV with Navigation	7: EX-L with Navigation

e. Check Digit

f. Model Year
6: 2006

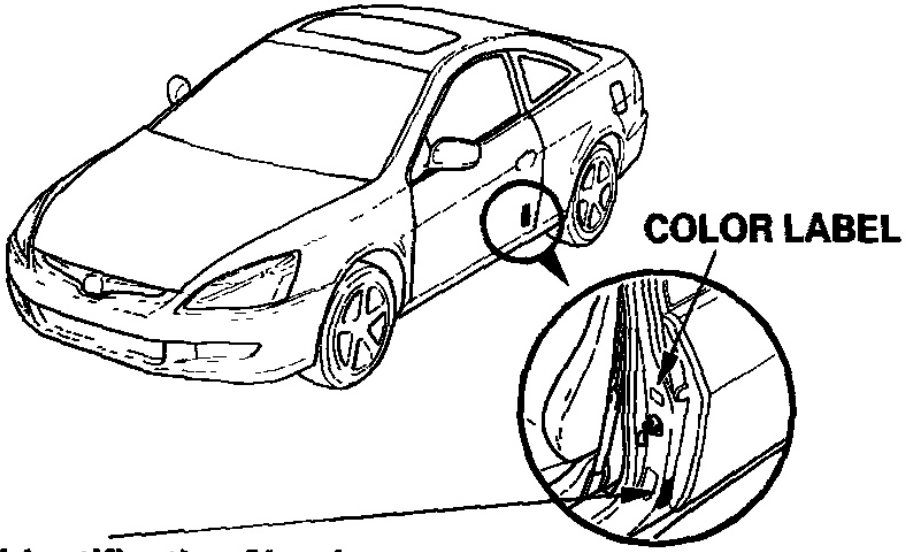
g. Factory Code
A:Marysville, Ohio Factory in U.S.A.

h. Serial Number
000001—: U.S. models
800001—: Canada models

G03645812

Fig. 36: Identifying Vehicle Identification Number (2006 2-door Model - 1 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.



Vehicle Identification Number and Federal Motor Vehicle Safety Standard Certification.

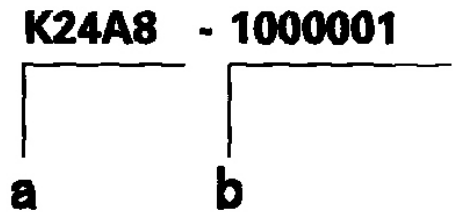
Vehicle Identification Number and Canadian Motor Vehicle Safety Standard Certification.

G03645813

Fig. 37: Identifying Vehicle Identification Number (2006 2-door Model - 2 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Engine Number



a. Engine Type
K24A8: 2.4 L DOHC i-VTEC Sequential Multiport Fuel-injected engine

b. Serial Number
1000001—:IHG
1300001—:IHG(SULEV)

G03645814

Fig. 38: Identifying Engine Number (2006 2-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Transmission Number

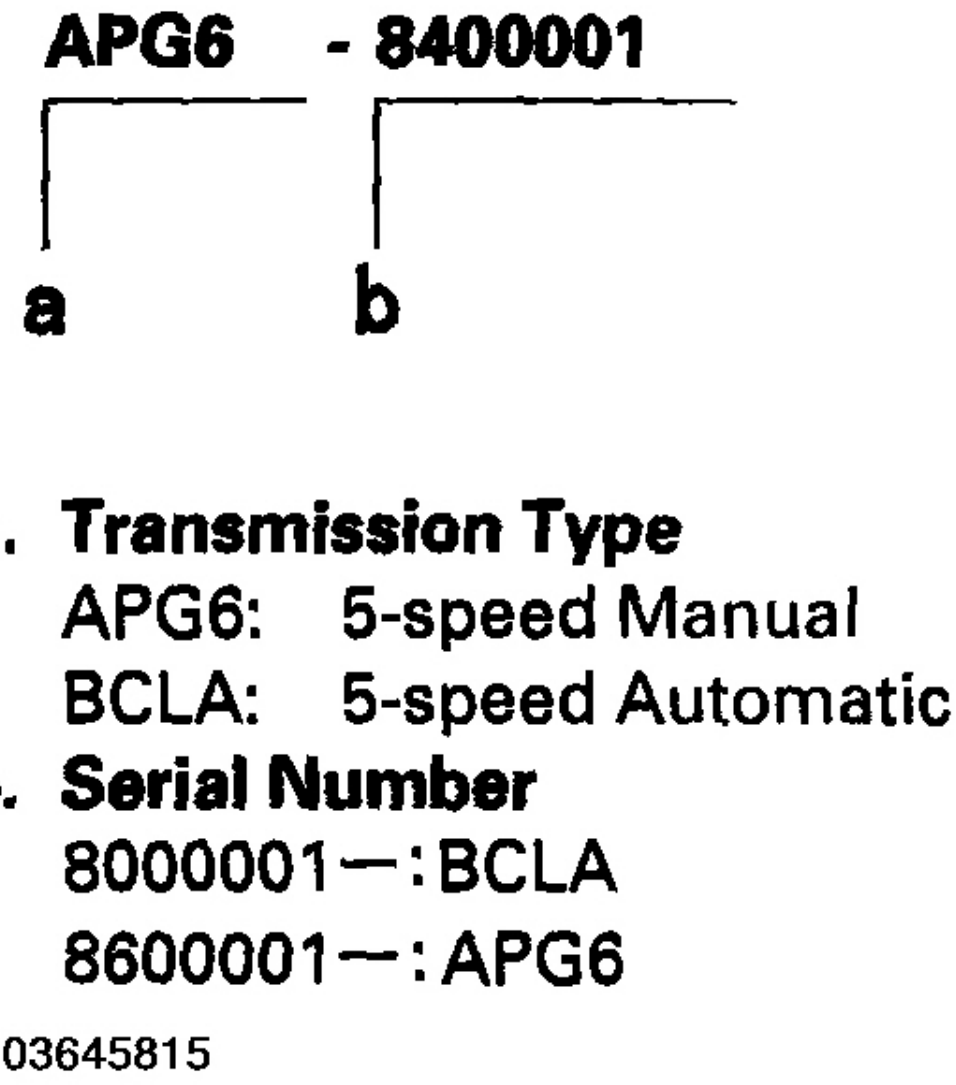


Fig. 39: Identifying Transmission Number (2006 2-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Paint Code

Code	Color	U.S.	Canada
B-92P	Nighthawk Black Pearl	○	○
B-517P	Sapphire Blue Pearl	○	○
B-542M	Cool Blue Metallic	○	○
NH-578	Taffeta White	○	
NH-658P	Graphite Pearl	○	○
NH-700M	Alabaster Silver Metallic	○	○
R-94	San Marino Red	○	○
YR-538M	Desert Mist Metallic	○	

G03645816

Fig. 40: Paint Code Chart (2006 2-door Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2007 4-DOOR MODEL

Vehicle Identification Number

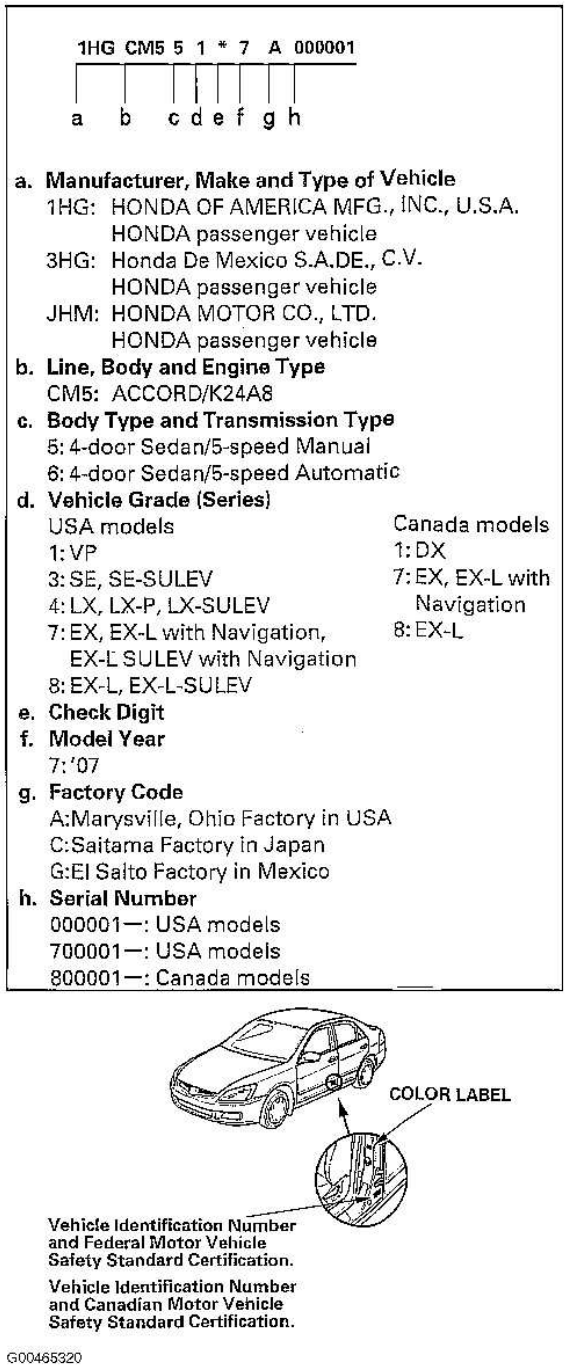
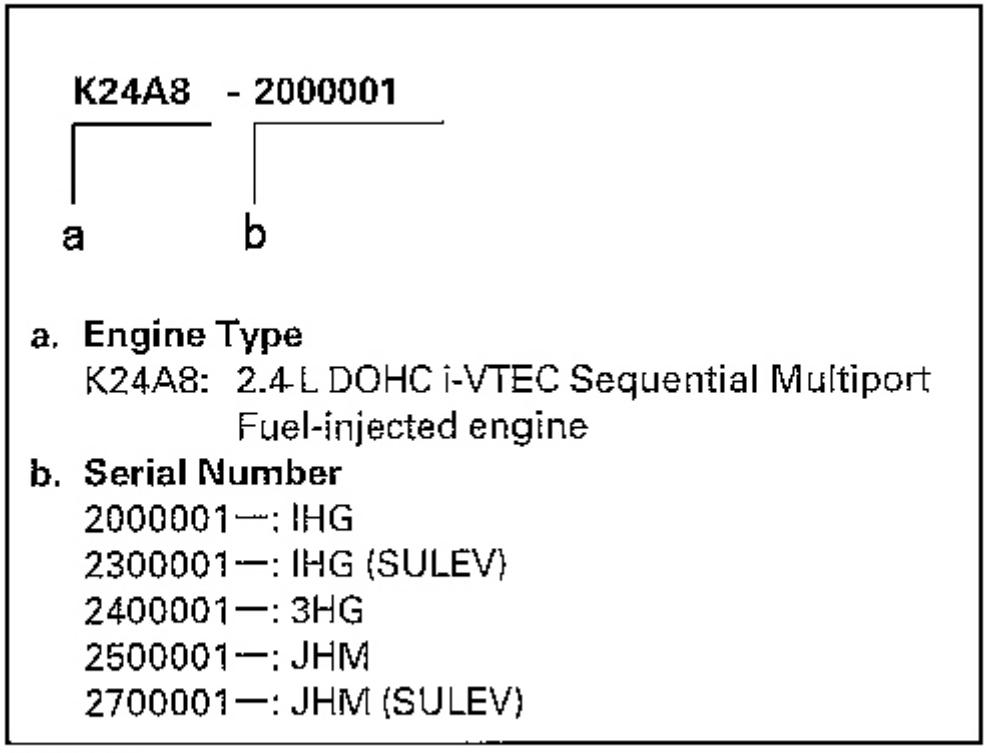


Fig. 41: Identifying Vehicle Identification Number
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Engine Number



G00465324

Fig. 42: Identifying Engine Number
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Transmission Number

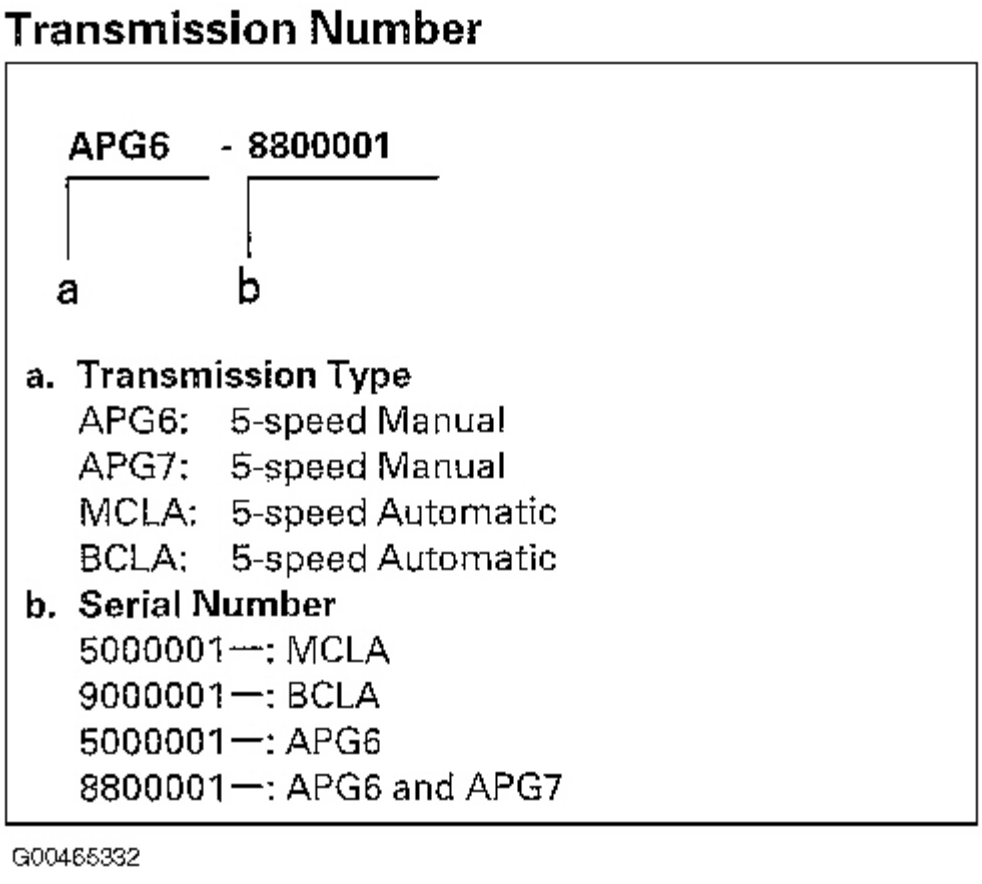


Fig. 43: Identifying Transmission Number
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Paint Code

Paint Code

Code	Color	USA Models	Canada Models
B-92P	Nighthawk Black Pearl	○	○
B-536P	Royal Blue Pearl	○	
NH-578	Taffeta White	○	○
NH-658P	Graphite Pearl	○	○
NH-700M	Alabaster Silver Metallic	○	○
YR-538M	Desert Mist Metallic	○	
YR-562P	Carbon Bronze Pearl	○	○
R-528P	Moroccan Red Pearl	○	○
B-517P	Sapphire Blue Pearl		○
B-542M	Cool Blue Metallic	○	

G00465336

Fig. 44: Identifying Paint Code
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2007 2-DOOR MODEL

Vehicle Identification Number

'07 2-door Model

Vehicle Identification Number

1HG CM7 1 3 * 7 A 000001

a b c d e f g h

a. Manufacturer, Make and Type of Vehicle
1HG: HONDA OF AMERICA MFG., INC., U.S.A.
HONDA passenger vehicle

b. Line, Body and Engine Type
CM7: ACCORD COUPE/K24A8

c. Body Type and Transmission Type
1: 2-door Coupe/5-speed Manual
2: 2-door Coupe/5-speed Automatic

d. Vehicle Grade (Series)

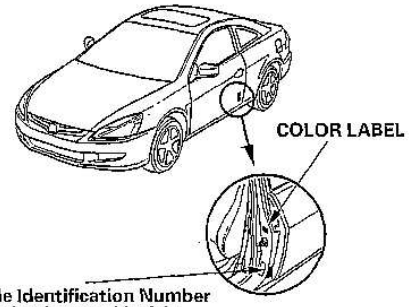
USA models	Canada models
3: LX, LX-SULEV	6: EX-SE, EX-L
6: EX-L, EX-L-SULEV	7: EX-L with Navigation
7: EX, EX-SULEV, EX-L with Navigation, EX-L -SULEV with Navigation	

e. Check Digit

f. Model Year
7: '07

g. Factory Code
A: Marysville, Ohio Factory in USA

h. Serial Number
000001—: USA models
800001—: Canada models



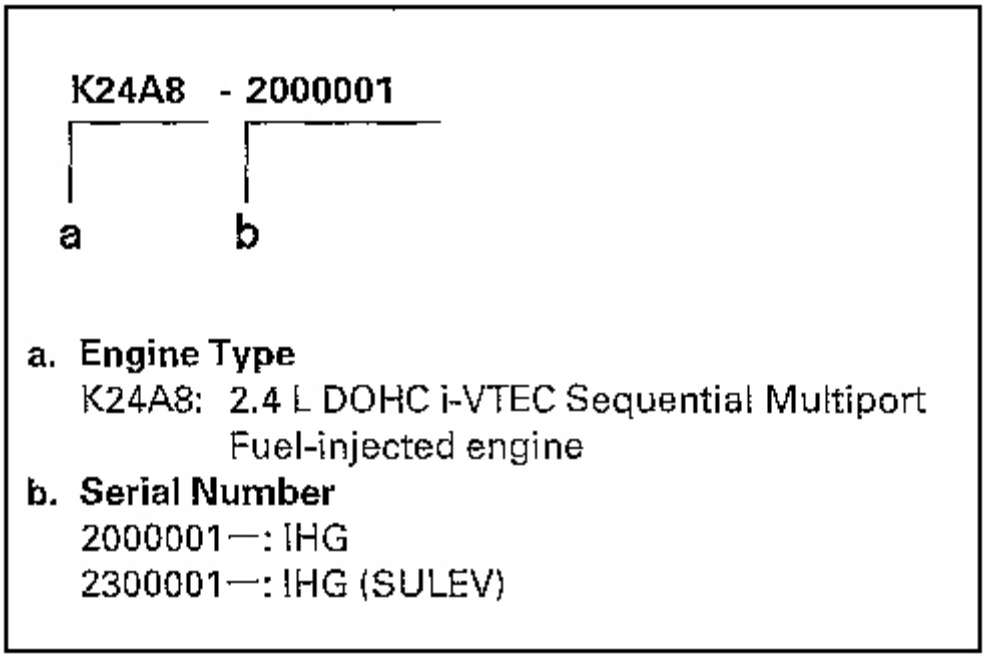
Vehicle Identification Number and Federal Motor Vehicle Safety Standard Certification.

Vehicle Identification Number and Canadian Motor Vehicle Safety Standard Certification.

G00465340

Fig. 45: Identifying Vehicle Identification Number
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Engine Number



G00465344

Fig. 46: Identifying Engine Number
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Transmission Number

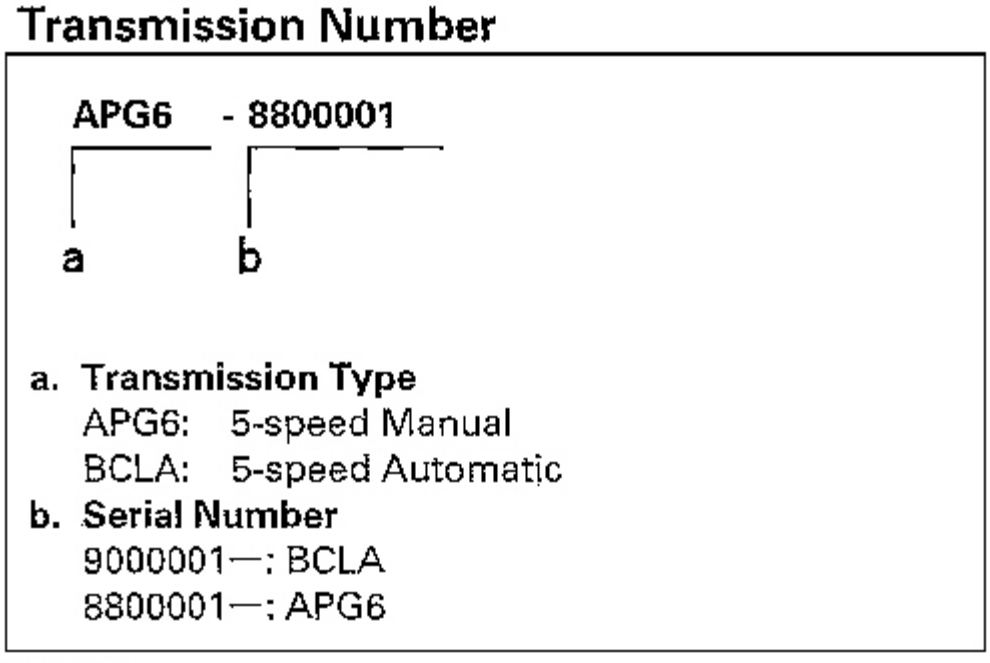


Fig. 47: Identifying Transmission Number
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Paint Code

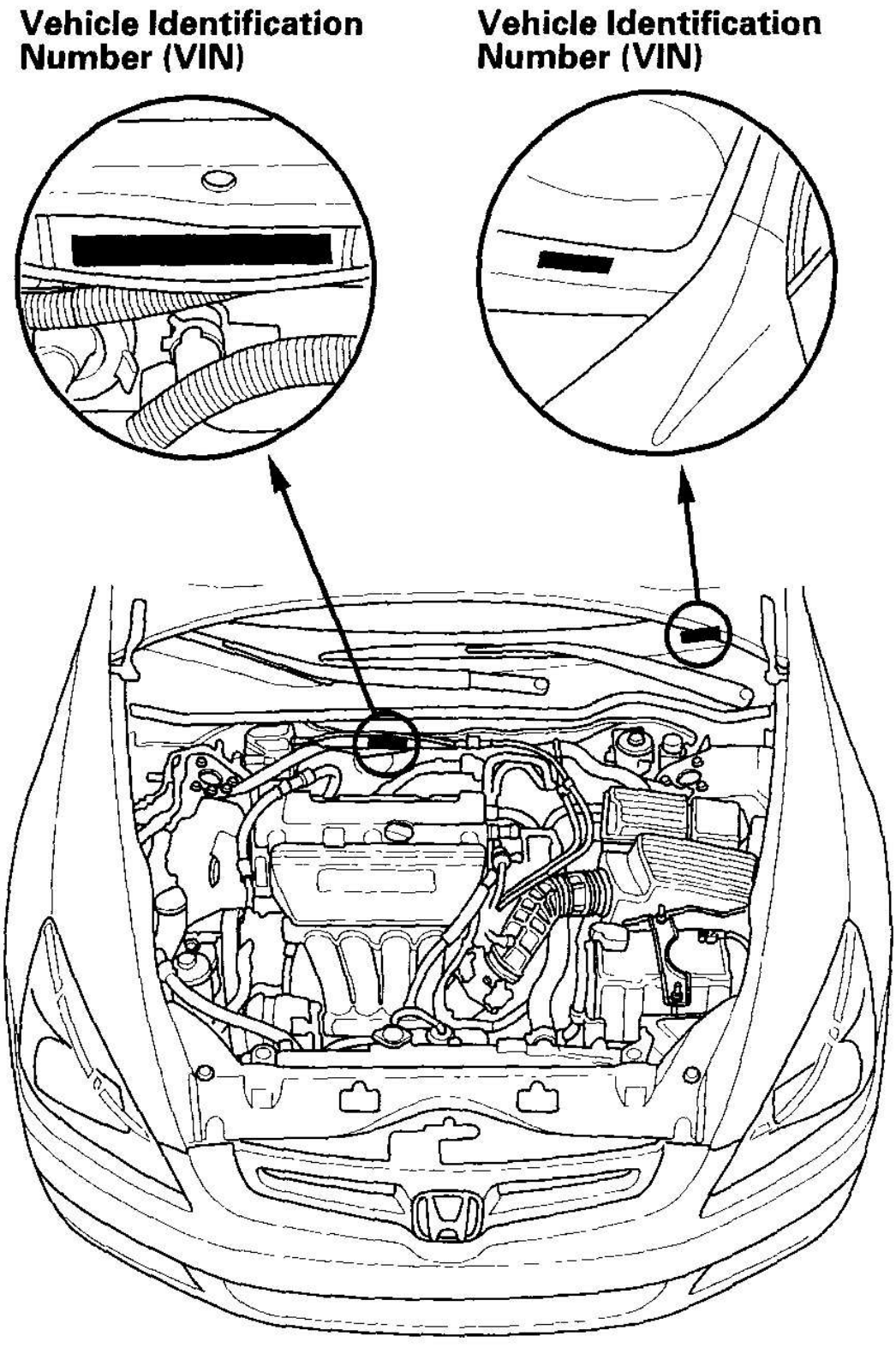
Paint Code

Code	Color	USA Models	Canada Models
B-92P	Nighthawk Black Pearl	○	○
B-517P	Sapphire Blue Pearl	○	
B-542M	Cool Blue Metallic	○	○
NH-578	Taffeta White	○	
NH-658P	Graphite Pearl	○	○
NH-700M	Alabaster Silver Metallic	○	○
R-94	San Marino Red	○	○
YR-538M	Desert Mist Metallic	○	

G00465348

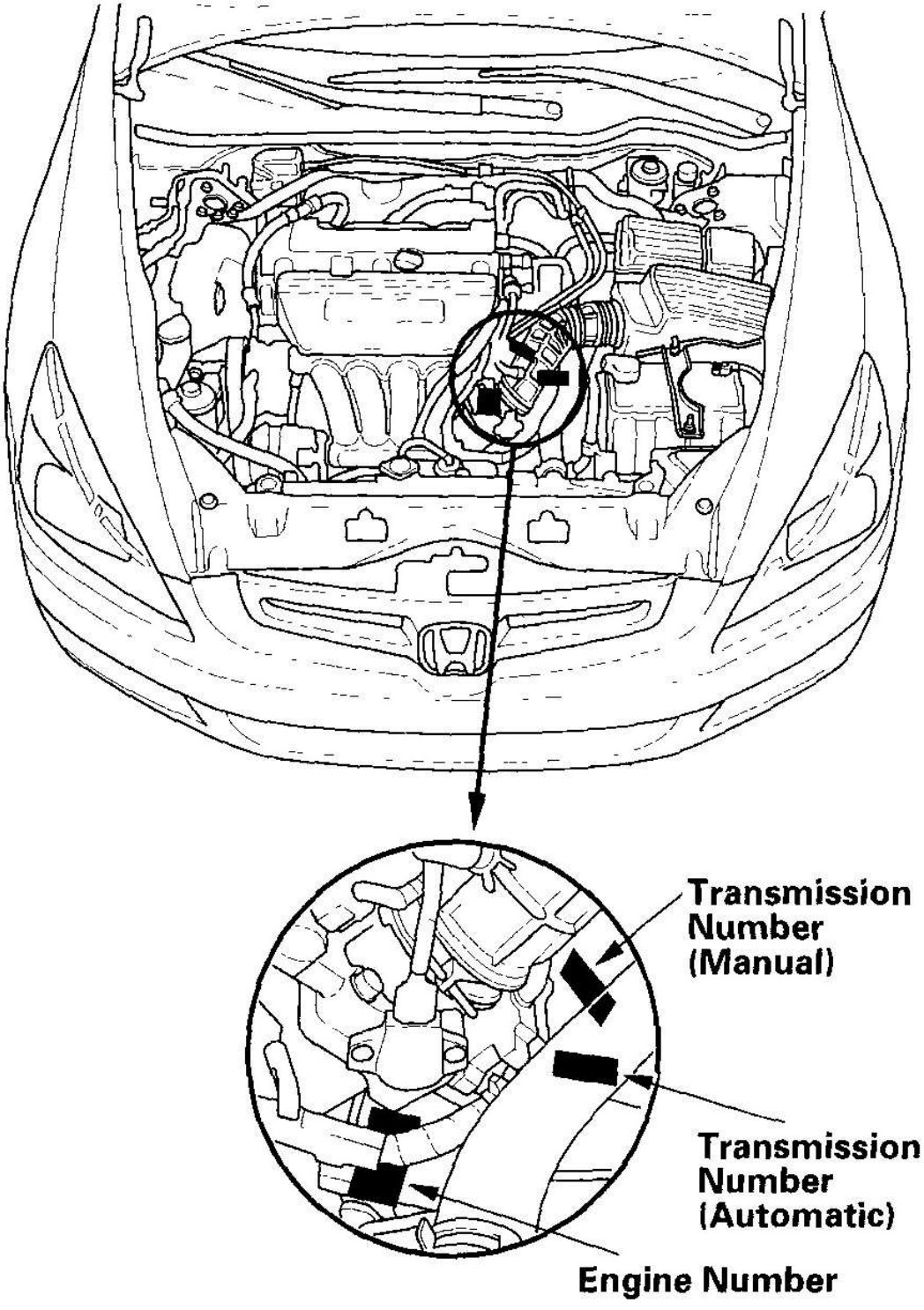
Fig. 48: Identifying Paint Code
Courtesy of AMERICAN HONDA MOTOR CO., INC.

IDENTIFICATION NUMBER LOCATIONS


Vehicle Identification Number (VIN)
Vehicle Identification Number (VIN)

G03645817

Fig. 49: Locating Identification Number (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.


Transmission Number (Manual)
Transmission Number (Automatic)
Engine Number

G03645818

Fig. 50: Locating Identification Number (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DANGER/WARNING/CAUTION LABEL LOCATIONS

NOTE: FRONT PASSENGER (CHILD SEAT) AIRBAG WARNING TAG is installed on the glove box on the U.S. model.

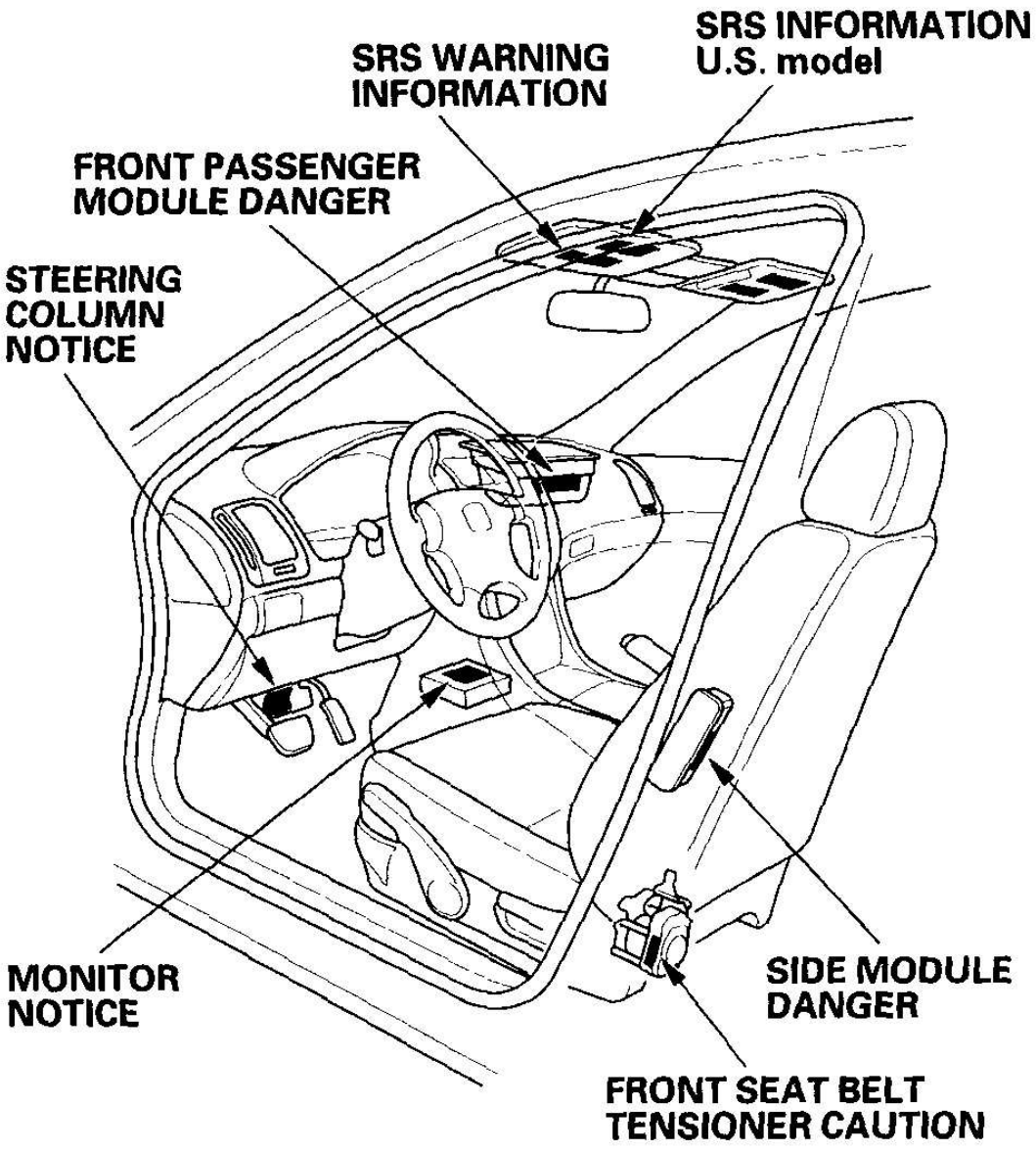


Fig. 51: Locating Danger/Warning/Caution Label (Passenger's Compartment)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Steering Wheel:

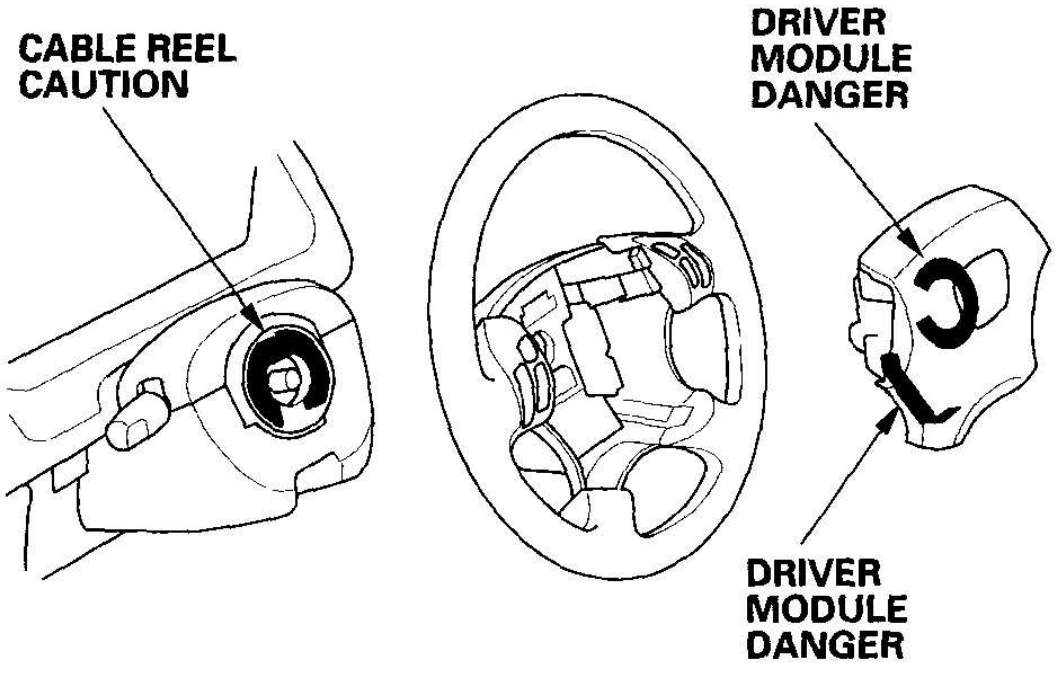


Fig. 52: Locating Danger/Warning/Caution Label (Steering Wheel)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NOTE: The illustration below shows the 4-door Sedan model.

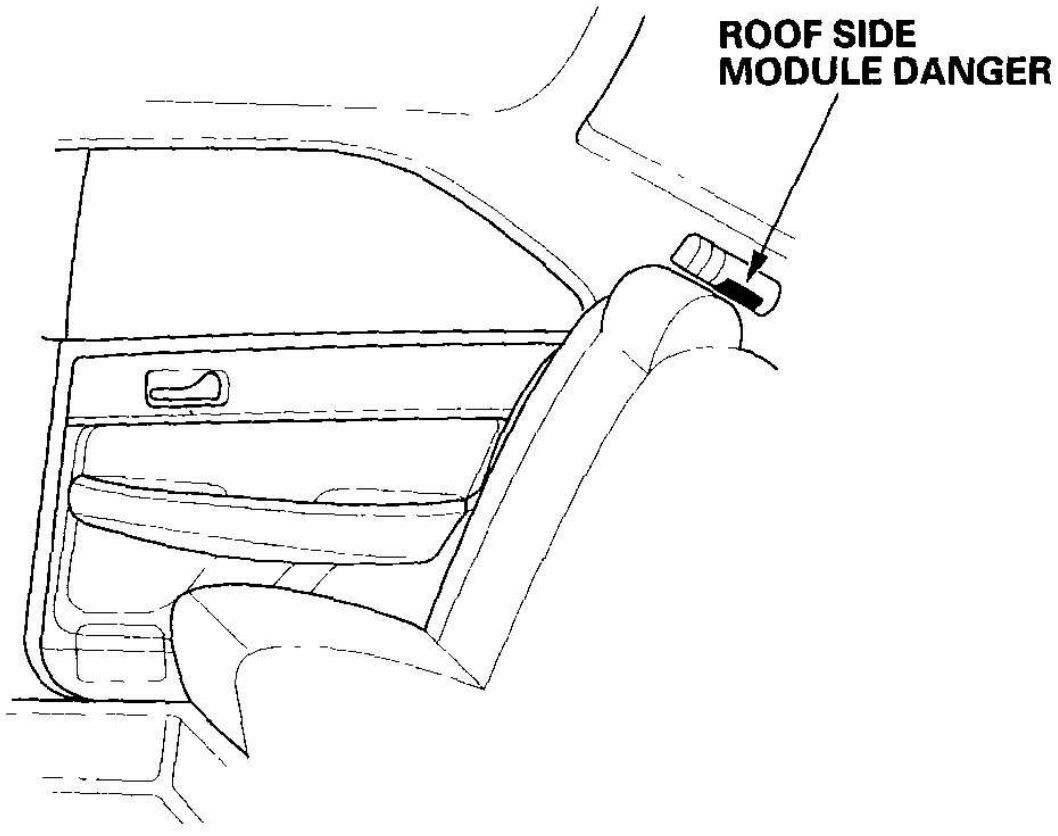
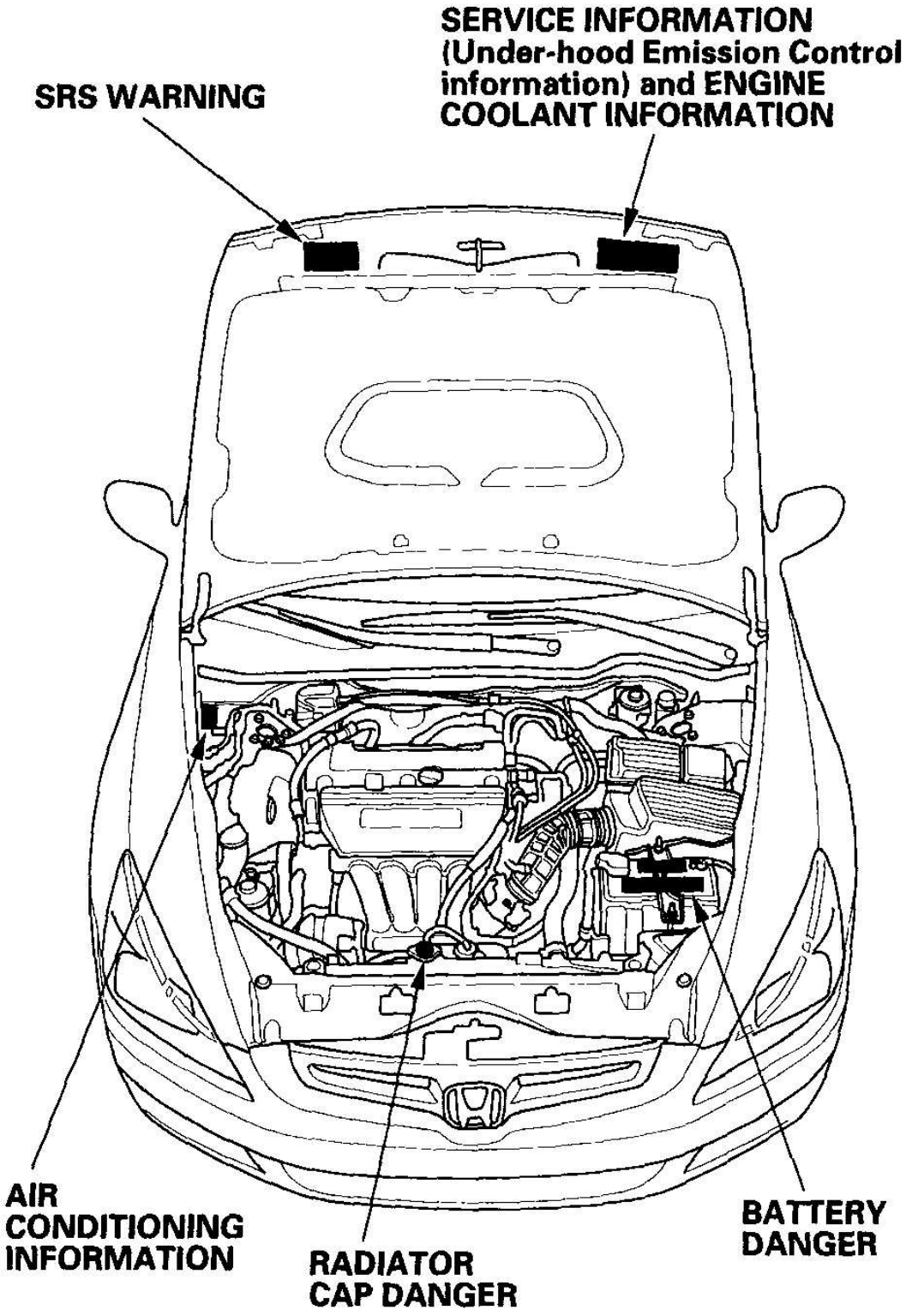


Fig. 53: Locating Danger/Warning/Caution Label (Rear Compartment)
Courtesy of AMERICAN HONDA MOTOR CO., INC.


SERVICE INFORMATION
(Under-hood Emission Control
information) and ENGINE
COOLANT INFORMATION
SRS WARNING
AIR
CONDITIONING
INFORMATION
RADIATOR
CAP DANGER
BATTERY
DANGER

G03645822

Fig. 54: Locating Danger/Warning/Caution Label (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

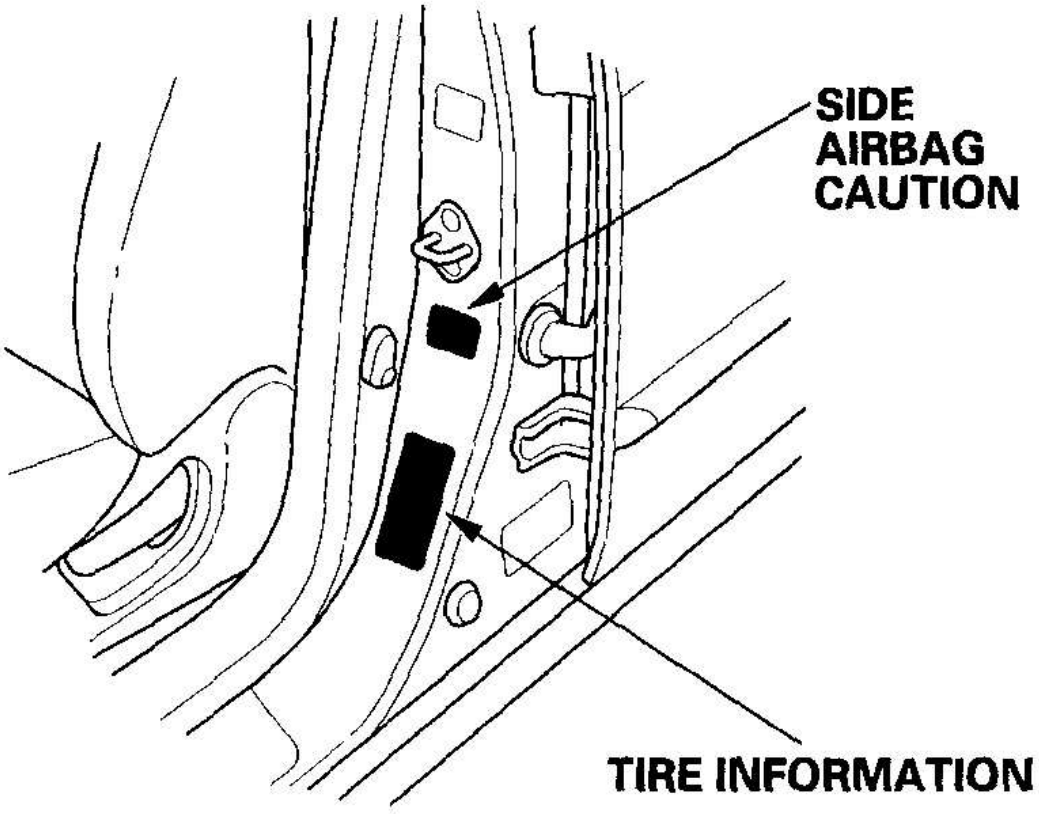
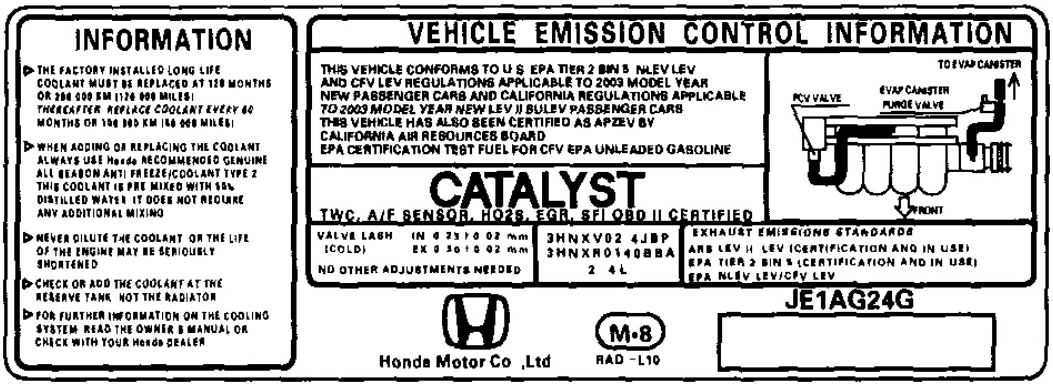


Fig. 55: Locating Danger/Warning/Caution Label (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

UNDER-HOOD EMISSION CONTROL LABEL

EMISSION GROUP IDENTIFICATION



G03645824

Fig. 56: Example Of Emission Group Identification Label
Courtesy of AMERICAN HONDA MOTOR CO., INC.

'03 Model

- KA (Federal)

  THIS VEHICLE CONFORMS TO U.S. EPA TIER 2 BIN 5 NLEV LEV AND CLEAN-FUEL VEHICLE REGULATIONS APPLICABLE TO 2003 MODEL YEAR NEW PASSENGER CARS AND CALIFORNIA REGULATIONS APPLICABLE TO 2003 MODEL YEAR NEW LEV II LEV PASSENGER CARS.

- KL (California)

  THIS VEHICLE CONFORMS TO U.S. EPA TIER 2 BIN 5 NLEV LEV AND CFV LEV REGULATIONS APPLICABLE TO 2003 MODEL YEAR NEW PASSENGER CARS AND CALIFORNIA REGULATIONS APPLICABLE TO 2003 MODEL YEAR NEW LEV II SULEV PASSENGER CARS. THIS VEHICLE HAS ALSO BEEN CERTIFIED AS A PZEV BY CALIFORNIA AIR RESOURCES BOARD.

'04 Model

- KA (Federal)

THIS VEHICLE CONFORMS TO U.S. EPA TIER 2 BIN 5 AND CFV LEV REGULATIONS APPLICABLE TO 2004 MODEL YEAR NEW PASSENGER CARS AND CALIFORNIA REGULATIONS APPLICABLE TO 2004 MODEL YEAR NEW LEV II LEV PASSENGER CARS. EPA CERTIFICATION TEST FUEL FOR CFV: EPA UNLEADED GASOLINE.

- KL (California)

  THIS VEHICLE CONFORMS TO U.S. EPA TIER 2 BIN 5 AND CFV LEV REGULATIONS APPLICABLE TO 2004 MODEL YEAR NEW PASSENGER CARS AND CALIFORNIA REGULATIONS APPLICABLE TO 2004 MODEL YEAR NEW LEV II SULEV PASSENGER CARS. THIS VEHICLE HAS ALSO BEEN CERTIFIED AS A PZEV BY CALIFORNIA AIR RESOURCES BOARD. EPA CERTIFICATION TEST FUEL FOR CFV: EPA UNLEADED GASOLINE.

'05 Model

- KA (Federal)

  THIS VEHICLE CONFORMS TO U.S. EPA TIER 2 BIN 5 AND CFV LEV REGULATIONS APPLICABLE TO 2005 MODEL YEAR NEW PASSENGER CARS AND CALIFORNIA REGULATIONS APPLICABLE TO 2005 MODEL YEAR NEW LEV II LEV PASSENGER CARS. EPA CERTIFICATION TEST FUEL FOR CFV: EPA UNLEADED GASOLINE.

- KL (California)

  THIS VEHICLE CONFORMS TO U.S. EPA TIER 2 BIN 2 AND CFV LEV REGULATIONS APPLICABLE TO 2005 MODEL YEAR NEW PASSENGER CARS AND CALIFORNIA REGULATIONS APPLICABLE TO 2005 MODEL YEAR NEW LEV II SULEV PASSENGER CARS. THIS VEHICLE HAS ALSO BEEN CERTIFIED AS A PZEV BY CALIFORNIA AIR RESOURCES BOARD. EPA CERTIFICATION TEST FUEL FOR CFV: EPA UNLEADED GASOLINE.

'06 Model

- KA (Federal)

  THIS VEHICLE CONFORMS TO U.S. EPA TIER 2 BIN 5 REGULATIONS APPLICABLE TO 2006 MODEL YEAR NEW PASSENGER CARS AND CALIFORNIA REGULATIONS APPLICABLE TO 2006 MODEL YEAR NEW LEV II LEV PASSENGER CARS.

- KL (California)

  THIS VEHICLE CONFORMS TO U.S. EPA TIER 2 BIN 2 REGULATIONS APPLICABLE TO 2006 MODEL YEAR NEW PASSENGER CARS AND CALIFORNIA REGULATIONS APPLICABLE TO 2006 MODEL YEAR NEW LEV II SULEV PASSENGER CARS. THIS VEHICLE HAS ALSO BEEN CERTIFIED AS A PZEV BY CALIFORNIA AIR RESOURCE BOARD.

'07 Model

- KA (Federal)

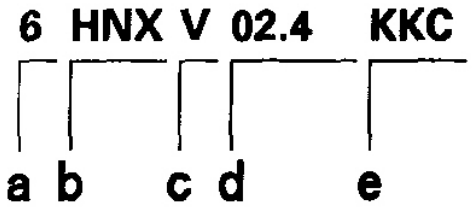
  THIS VEHICLE CONFORMS TO U.S. EPA TIER 2 BIN 5 REGULATIONS APPLICABLE TO 2007 MODEL YEAR NEW PASSENGER CARS AND CALIFORNIA REGULATIONS APPLICABLE TO 2007 MODEL YEAR NEW LEV II LEV PASSENGER CARS.

- KL (California)

  THIS VEHICLE CONFORMS TO U.S. EPA TIER 2 BIN 2 REGULATIONS APPLICABLE TO 2007 MODEL YEAR NEW PASSENGER CARS AND CALIFORNIA REGULATIONS APPLICABLE TO 2007 MODEL YEAR NEW LEV II SULEV PASSENGER CARS. THIS VEHICLE HAS ALSO BEEN CERTIFIED AS A PZEV BY CALIFORNIA AIR RESOURCE BOARD.

TEST GROUP AND EVAPORATIVE FAMILY

Test Group:



a. Model Year

3: 2003
4: 2004
5: 2005
6: 2006
7: 2007

b. Manufacturer Subcode

HNX: HONDA

c. Family Type

V: LDV

d. Displacement Group

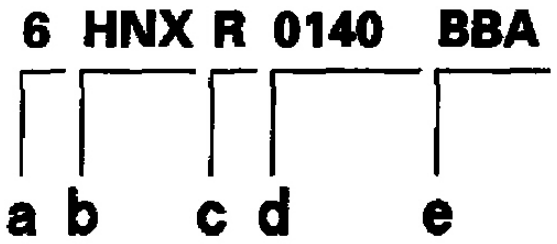
e. Sequence Characters

JBP:'03 KA (Federal) Model
LBP:'04 KA (Federal) Model
KCV:'03 and 04 KL (California) Model
VBP:'05 KA (Federal) Model
ECV:'05 KL (California) Model
KKC:'06 and'07 KA (Federal) Model
CMC:'06 and'07 KL (California) Model

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Fig. 57: Identifying Test Group
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Evaporative Family:



a. Model Year

3: '03
4: '04
5: '05
6: '06
7: '07

b. Manufacturer Subcode

HNX: HONDA

c. Family Type

R: EVAP/ORVR

d. Canister Work Capacity

0140: KA (Federal)
0135: KL (California)

e. Sequence Characters

BBA: KA (Federal)
BCA: KL (California)

G03645826

Fig. 58: Identifying Evaporative Family Label

Courtesy of AMERICAN HONDA MOTOR CO., INC.

LIFT AND SUPPORT POINTS

NOTE: If you are going to remove heavy components such as suspension or the fuel tank from the rear of the vehicle, first support the front of the vehicle with tall safety stands. When substantial weight is removed from the rear of the vehicle, the center of gravity can change and cause the vehicle to tip forward on the hoist.

FRAME HOIST

1. Position the hoist lift blocks (A), under the vehicle's front support points (B) and rear support points (C).

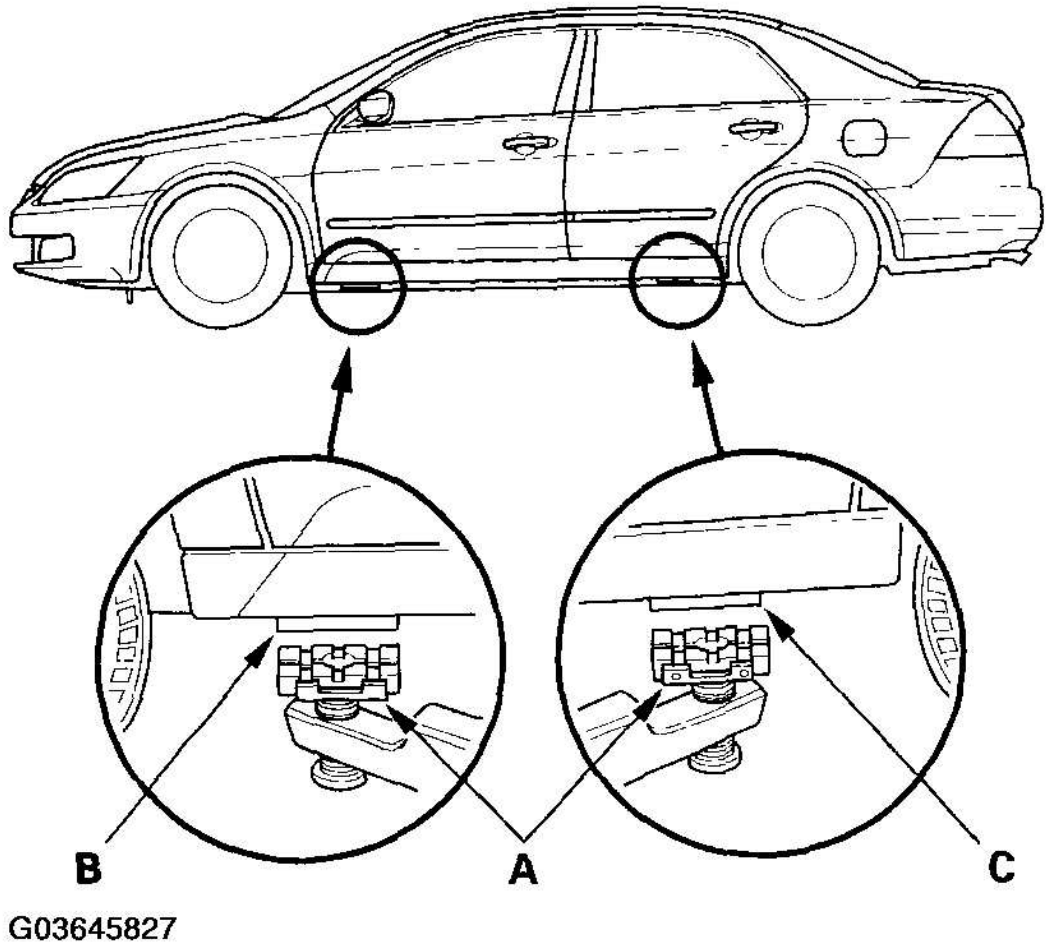


Fig. 59: Positioning Hoist Lift Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Raise the hoist a few inches, and rock the vehicle gently to be sure it is firmly supported.
3. Raise the hoist to full height, and inspect the lift points for solid contact with the lift blocks.

SAFETY STANDS

To support the vehicle on safety stands, use the same support points (B and C) as for a frame hoist. Always use safety stands when working on or under any vehicle

that is supported only by a jack.

FLOOR JACK

1. When lifting the front of the vehicle, set the parking brake. When lifting the rear of the vehicle, put the shift lever in reverse for manual transmission, or in the P position for automatic transmission.
2. Block the wheels that are not being lifted.
3. Position the floor jack under the front jacking bracket (A) or rear jacking bracket (B), center the jacking bracket in the jack lift platform (C), and jack up the vehicle high enough to fit the safety stands under it.

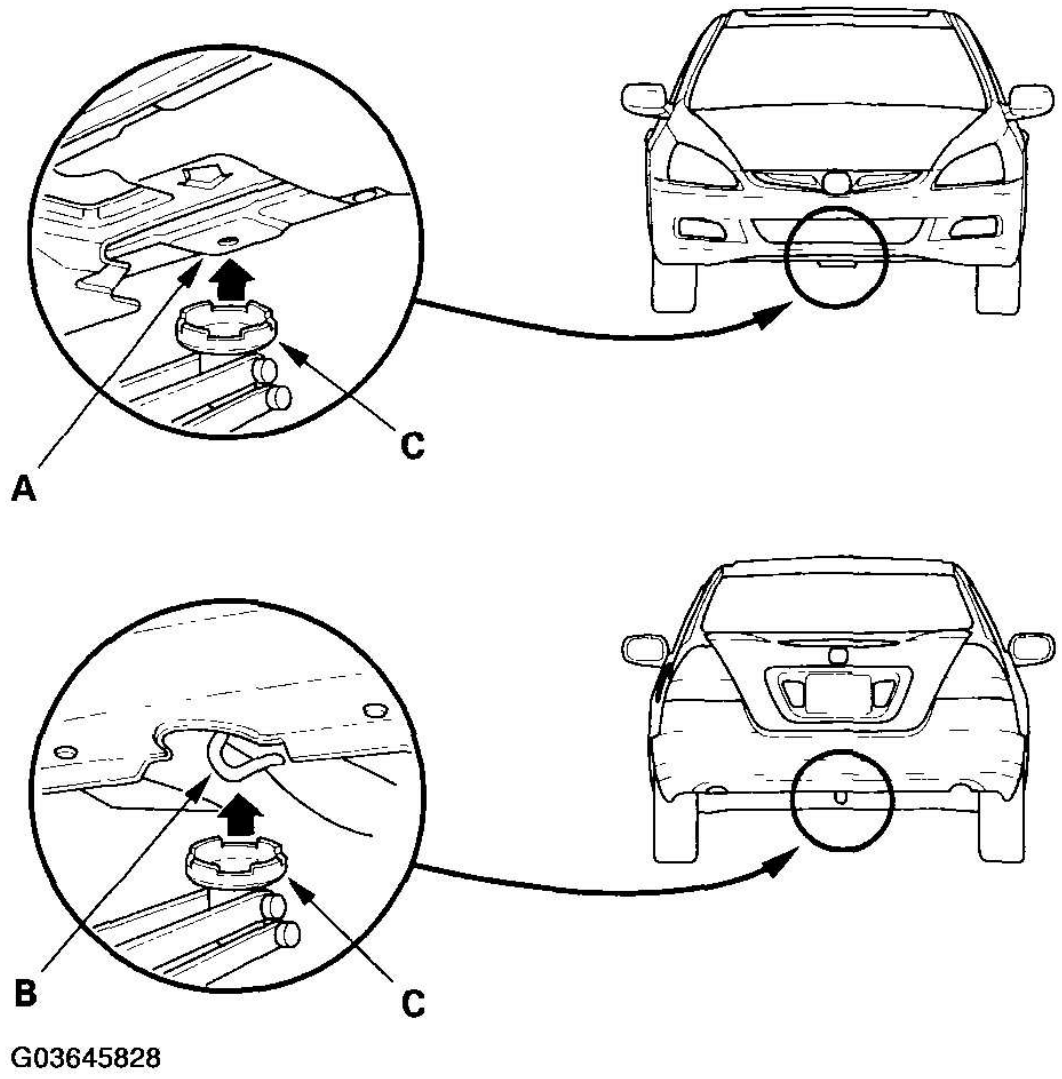


Fig. 60: Positioning Floor Jack Under Front Jacking Bracket Or Rear Jacking Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Position the safety stands under the support points and adjust them so the vehicle is level.
5. Lower the vehicle onto the stands.

TOWING

If the vehicle needs to be towed, call a professional towing service. Never tow the vehicle behind another vehicle with just a rope or chain. It is very dangerous.

EMERGENCY TOWING

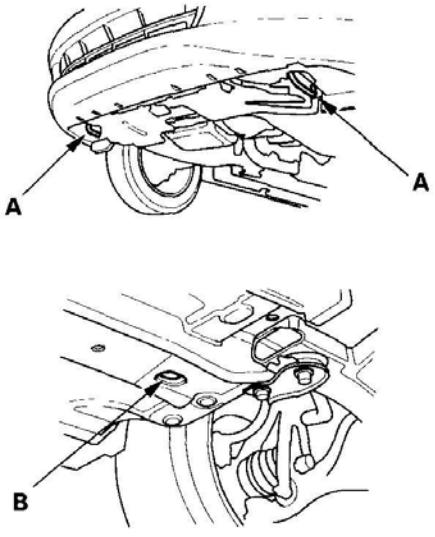
There are three popular methods of towing a vehicle.

Flat-bed Equipment - The operator loads the vehicle on the back of a truck. **This is the best way of transporting the vehicle** .

To accommodate flat-bed equipment, the vehicle is equipped with towing hooks (A) and tie down hook slots (B), rear towing hook (C), and rear tie down hook slots (D).

The towing hook can be used with a winch to pull the vehicle onto the truck, and the tie down hook slots can be used to secure the vehicle to the truck.

Front :



Rear:

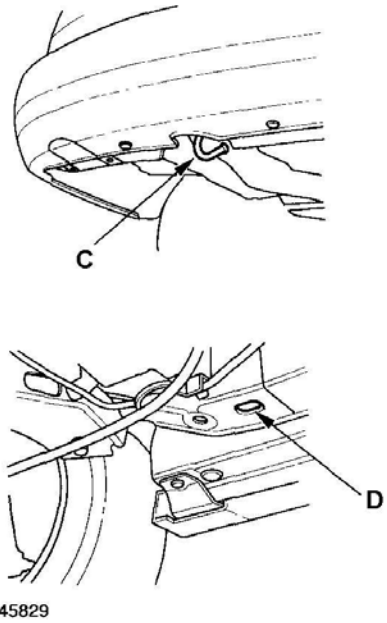


Fig. 61: Locating Towing Hooks And Tie Down Hook Slots
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Wheel Lift Equipment - The tow truck uses two pivoting arms that go under the tires (front or rear) and lifts them off the ground. The other two wheels remain on the ground. **This is an acceptable way of towing the vehicle.**

Sling-type Equipment - The tow truck uses metal cables with hooks on the ends. These hooks go around parts of the frame or suspension and the cables lift that end of the vehicle off the ground. The vehicle's suspension and body can be seriously damaged if this method of towing is attempted.

If the vehicle cannot be transported by flat-bed, it should be towed with the front wheels off the ground. If due to damage, the vehicle must be towed with the front wheels on the ground, do the following:

MANUAL TRANSMISSION

- Release the parking brake.
- Shift the transmission in Neutral.
- Leave the ignition switch in the ACCESSORY (I) position so the steering wheel does not lock.

AUTOMATIC TRANSMISSION

- Release the parking brake.
- Start the engine.
- Shift to D position, then to the N position.
- Turn off the engine.
- Leave the ignition switch in the ACCESSORY (I) position so the steering wheel does not lock.

It is best to tow the vehicle no farther than 50 miles (80 km), and keep the speed below 35 mph (55 km/h).

NOTE:

- **Improper towing preparation will damage the transmission. Follow the above procedure exactly. If you cannot shift the transmission or start the engine (automatic transmission), the vehicle must be**

transported on a flat-bed.

- **Trying to lift or tow the vehicle by the bumpers will cause serious damage. The bumpers are not designed to support the vehicle's weight.**

PARTS MARKING

To deter vehicle theft, certain major components are marked with the vehicle identification number (VIN). Original parts have self-adhesive labels. Replacement body parts have generic self-adhesive labels. These labels should not be removed. The original engine or transmission VIN plates are not transferable to the replacement engine or transmission.

NOTE: Be careful not to damage the parts marking labels during body repair. Mask the labels before repairing the part.

2003-07 ACCESSORIES & EQUIPMENT

Glass - Accord

COMPONENT LOCATION INDEX

2-DOOR

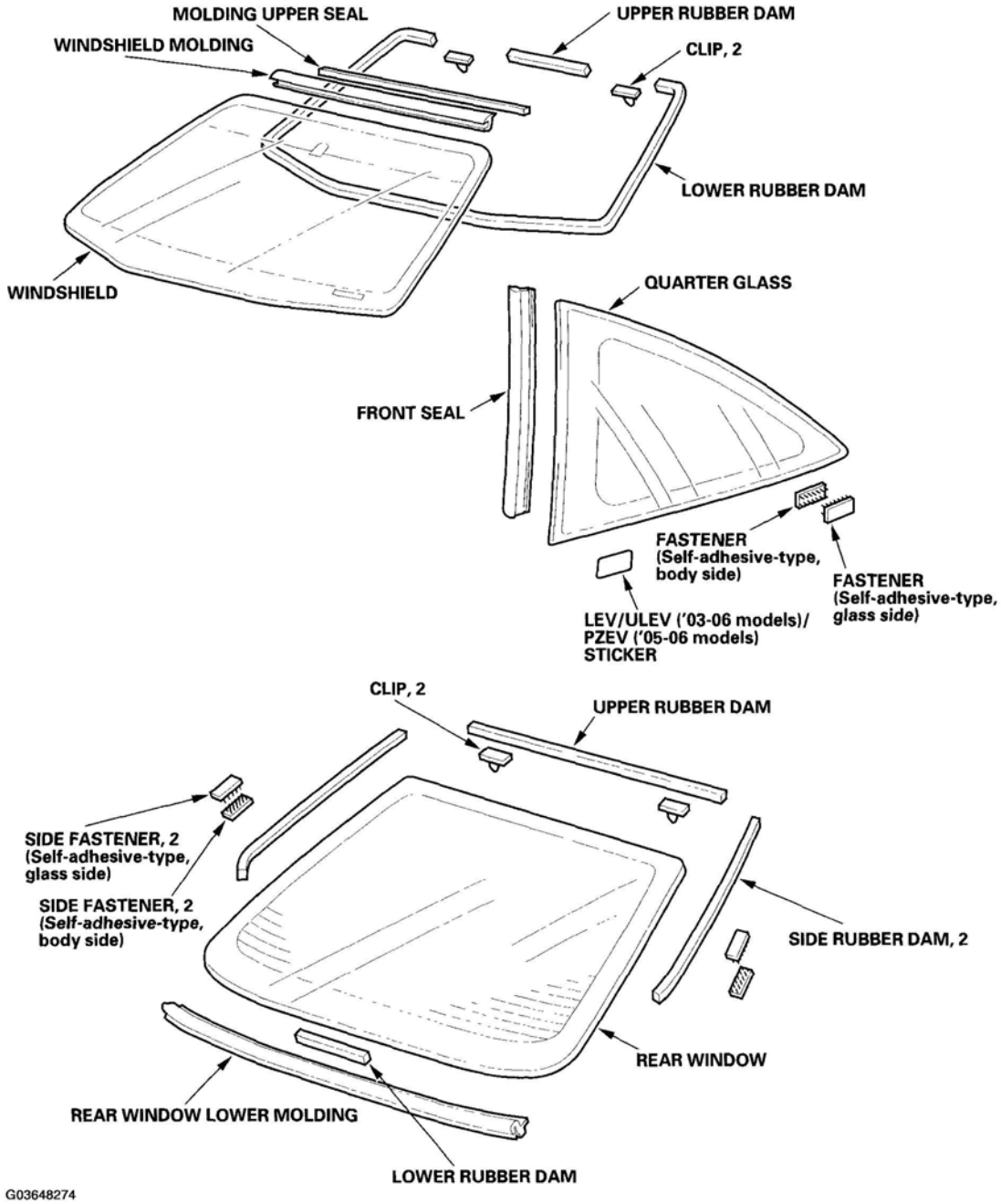


Fig. 1: Identifying Glass Component Location (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR

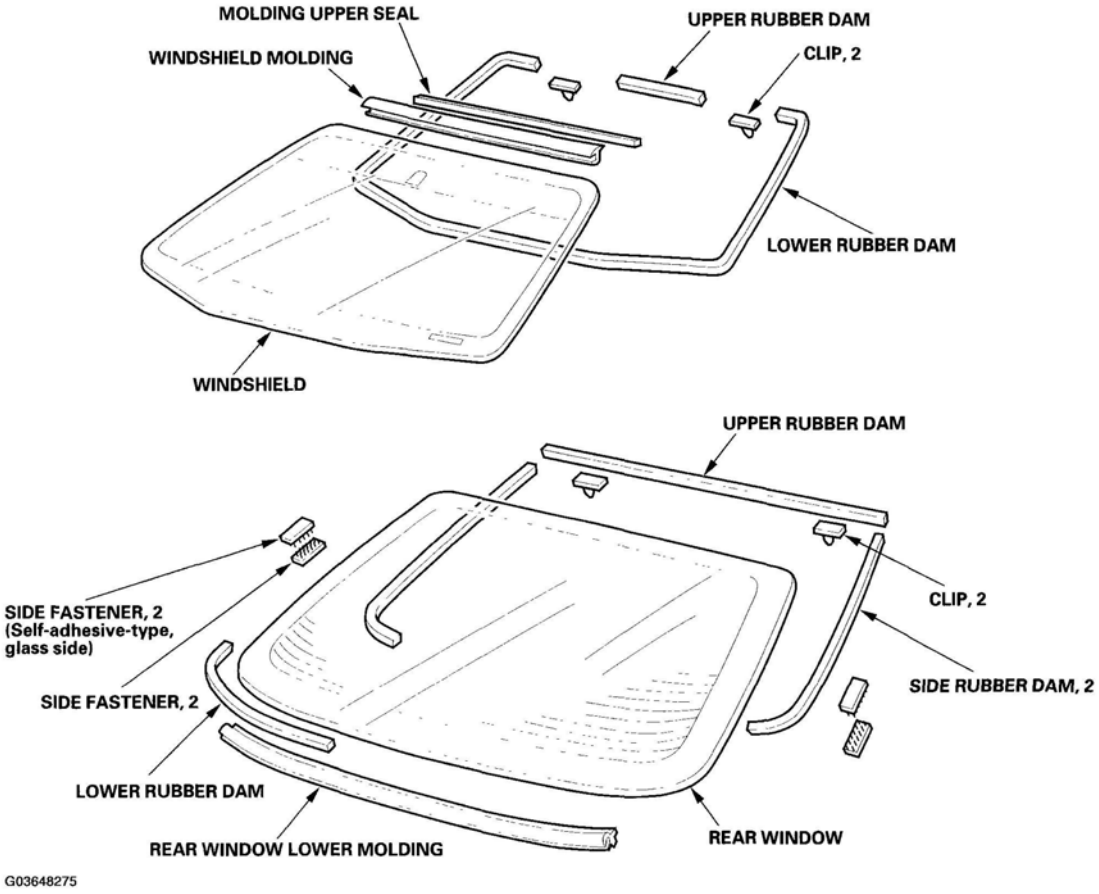


Fig. 2: Identifying Glass Component Location (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

WINDSHIELD REPLACEMENT

NOTE:

- **Put on gloves to protect your hands.**
- **Wear eye protection while cutting the glass adhesive with piano wire.**
- **Use seat covers to avoid damaging the seat.**
- **When replacing a broken windshield, a commercially**

available windshield cutter can be efficiently used for cutting the adhesive. For details, follow the instructions of the tool manufacturer.

1. Remove these items:
   - Windshield wiper arms (see **WIPER MOTOR REPLACEMENT**)
   - Cowl covers (see **COWL COVER REPLACEMENT**)
   - Rearview mirror (see **REARVIEW MIRROR REPLACEMENT**)
   - A-pillar trim, both sides, 2-door without side curtain airbags (see **A-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**), 2-door with side curtain airbags (see **A-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-06 MODELS)**), 4-door without side curtain airbags (see **A-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**), 4-door with side curtain airbags (see **A-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-06 MODELS)**)
   - Roof moldings (see **ROOF MOLDING REPLACEMENT**)
2. Remove the molding (A) from the upper edge of the windshield (B). If necessary, cut the molding with a utility knife.

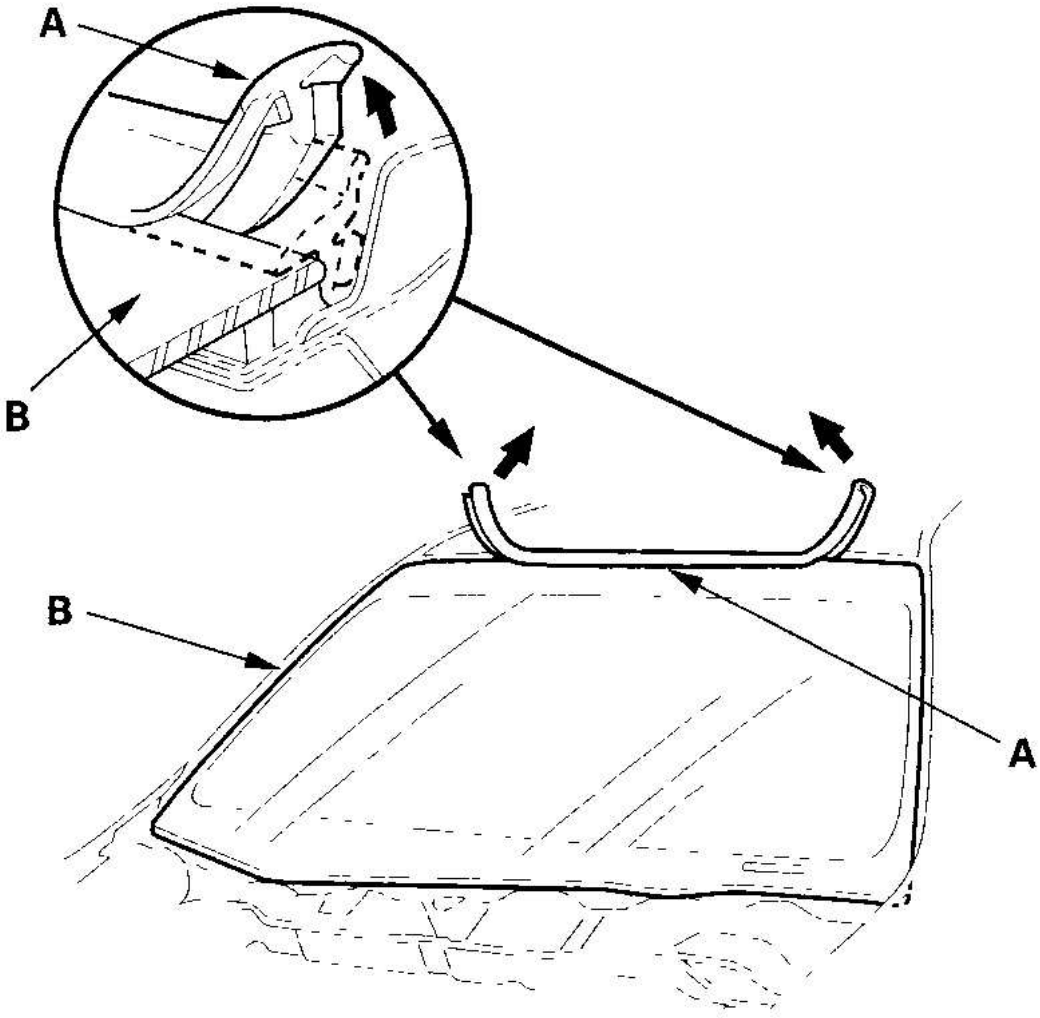


Fig. 3: Removing Molding From Upper Edge Of Windshield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the old windshield is to be reinstalled, make alignment marks across the glass and body with a grease pencil.
4. Pull down the front portion of the headliner (see **HEADLINER REMOVAL/INSTALLATION**). Take care not to bend the headliner excessively, as you may crease or break it.
5. Apply protective tape along the edge of the dashboard and body. Using an awl,

make a hole through the rubber dam and adhesive from inside the vehicle at the corner portion of the windshield. Push a piece of piano wire through the hole, and wrap each end around a piece of wood.

6. With a helper on the outside, pull the piano wire (A) back and forth in a sawing motion. Hold the piano wire as close to the windshield (B) as possible to prevent damage to the body and dashboard. Carefully cut through the rubber dam and adhesive (C) around the entire windshield.

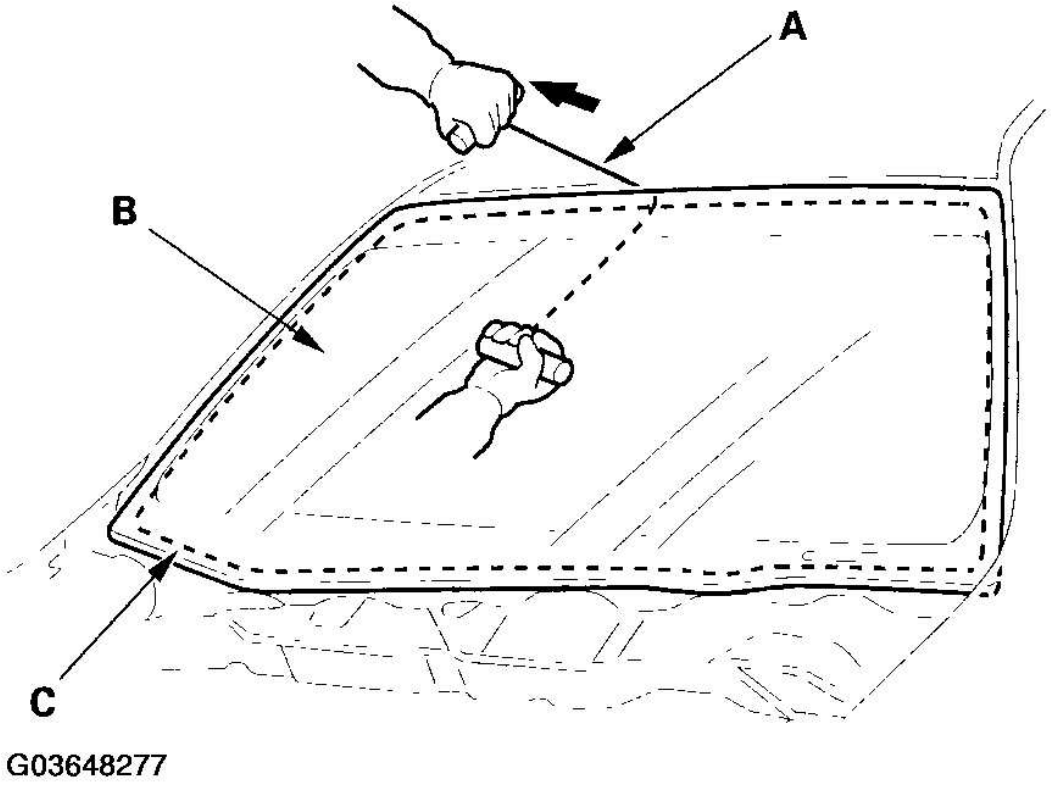


Fig. 4: Pulling Piano Wire Back And Forth In Sawing Motion
Courtesy of AMERICAN HONDA MOTOR CO., INC.

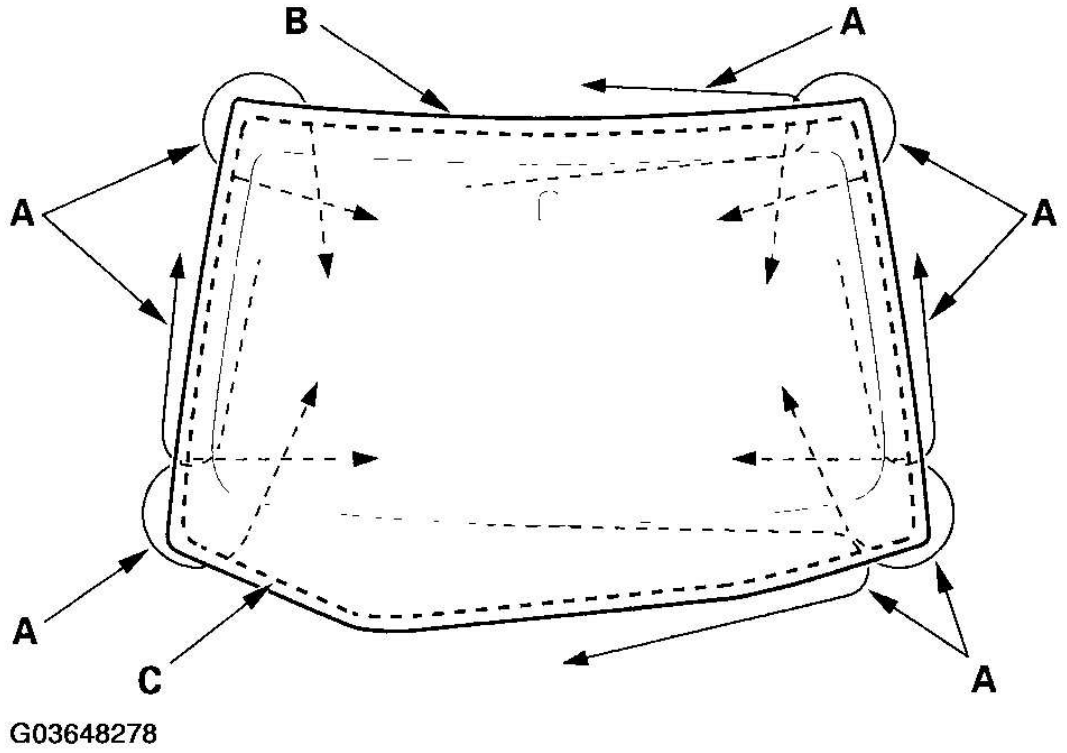


Fig. 5: Identifying Cutting Positions
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Carefully remove the windshield.
8. With a knife, scrape the old adhesive smooth to a thickness of about 2 mm (0.08 in.) on the bonding surface around the entire windshield opening flange:
   - Do not scrape down to the painted surface of the body; damaged paint will interfere with proper bonding.
   - Remove the rubber dam and fasteners from the body.
   - Replace the dashboard seal with a new one.
9. Clean the body bonding surface with a sponge dampened in alcohol. After cleaning, keep oil, grease and water from getting on the clean surface.
10. If the old windshield is to be reinstalled, use a putty knife to scrape off all of the old adhesive, the fasteners and the rubber dam from the windshield. Clean the inside face and the edge of the windshield with alcohol where new adhesive

is to be applied. Make sure the bonding surface is kept free of water, oil and grease.

11. Attach the upper rubber dam (A), lower rubber dam (B), and clips (C) with adhesive tape to the inside face of the windshield (D) as shown in **Fig. 6**:
    - Be sure the rubber dam and clips line up with the alignment marks (E).
    - Be careful not to touch the windshield where adhesive will be applied.

    Rubber dams adhesive tape:

    Thickness 0.16 mm (0.0063 in.)
    Width 3.5 mm (0.14 in.)

    Clips adhesive tape:

    Thickness 0.4 mm (0.016 in.)
    Width 10 mm (0.39 in.)

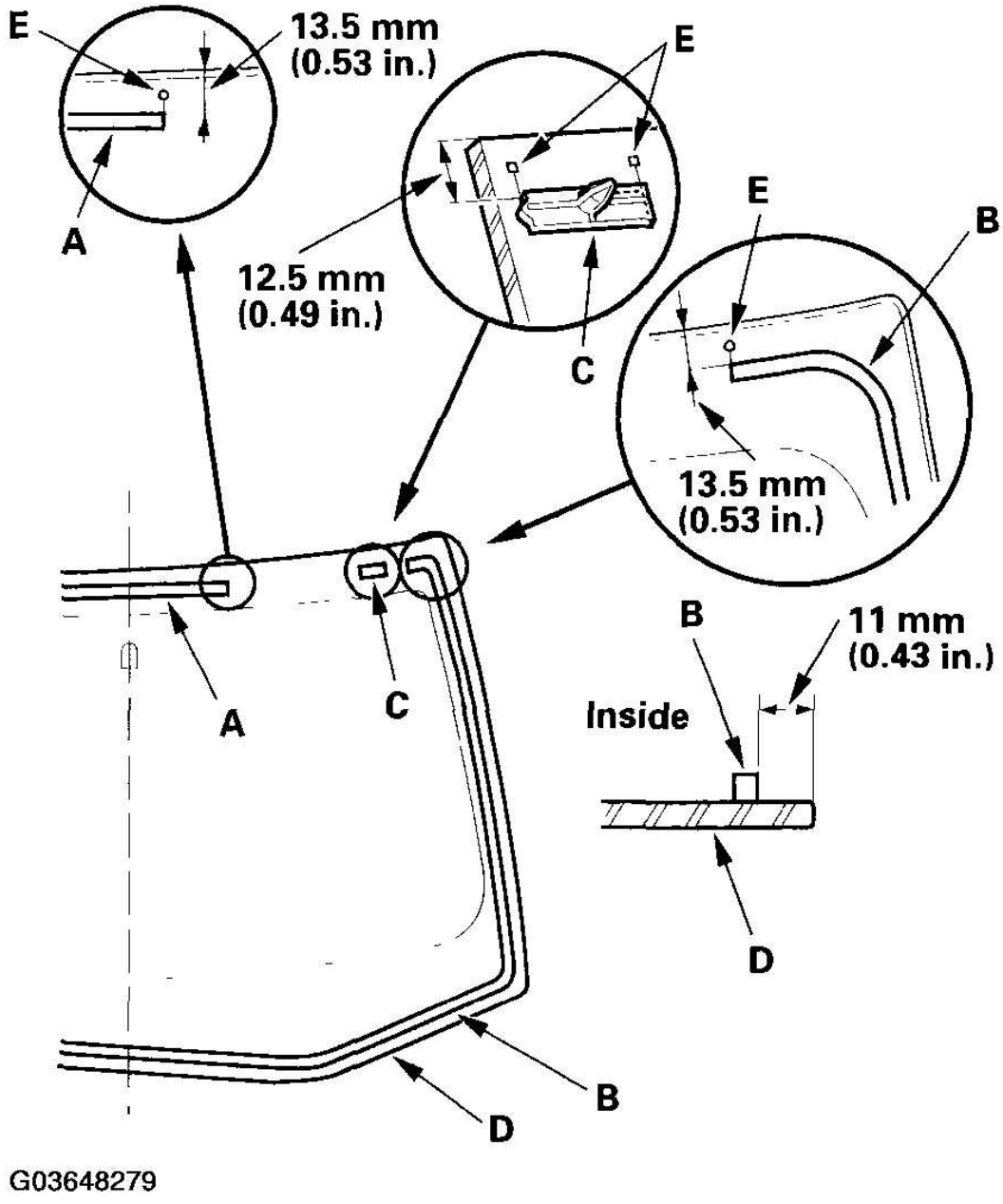


Fig. 6: Attaching Upper Rubber Dam, Lower Rubber Dam And Clips With Adhesive Tape To Inside Face Of Windshield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Attach the molding (A) with adhesive tape (B) to the upper edge of the windshield (C). Be careful not to touch the windshield where adhesive will be

applied.

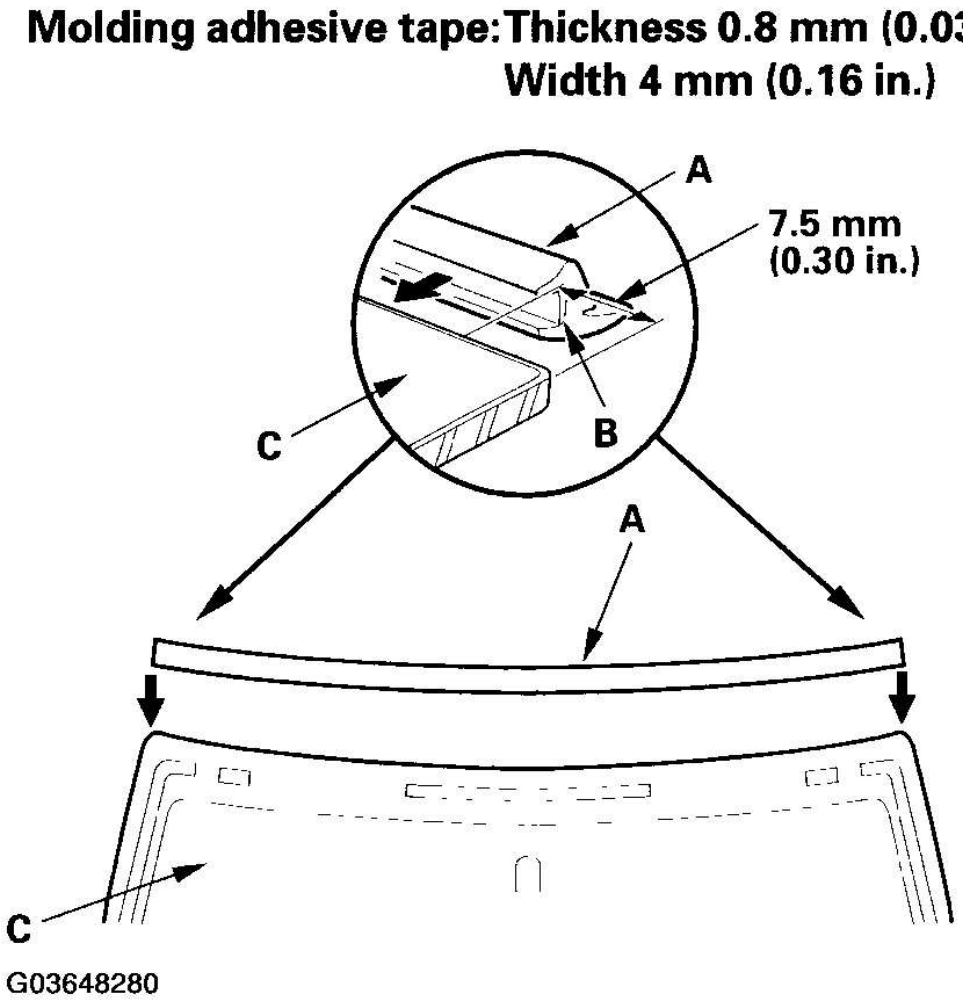


Fig. 7: Attaching Molding With Adhesive Tape To Upper Edge Of Windshield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Apply primer to the molding (A), then attach the molding upper seal (B) with adhesive tape to the inside surface of the molding as shown below.

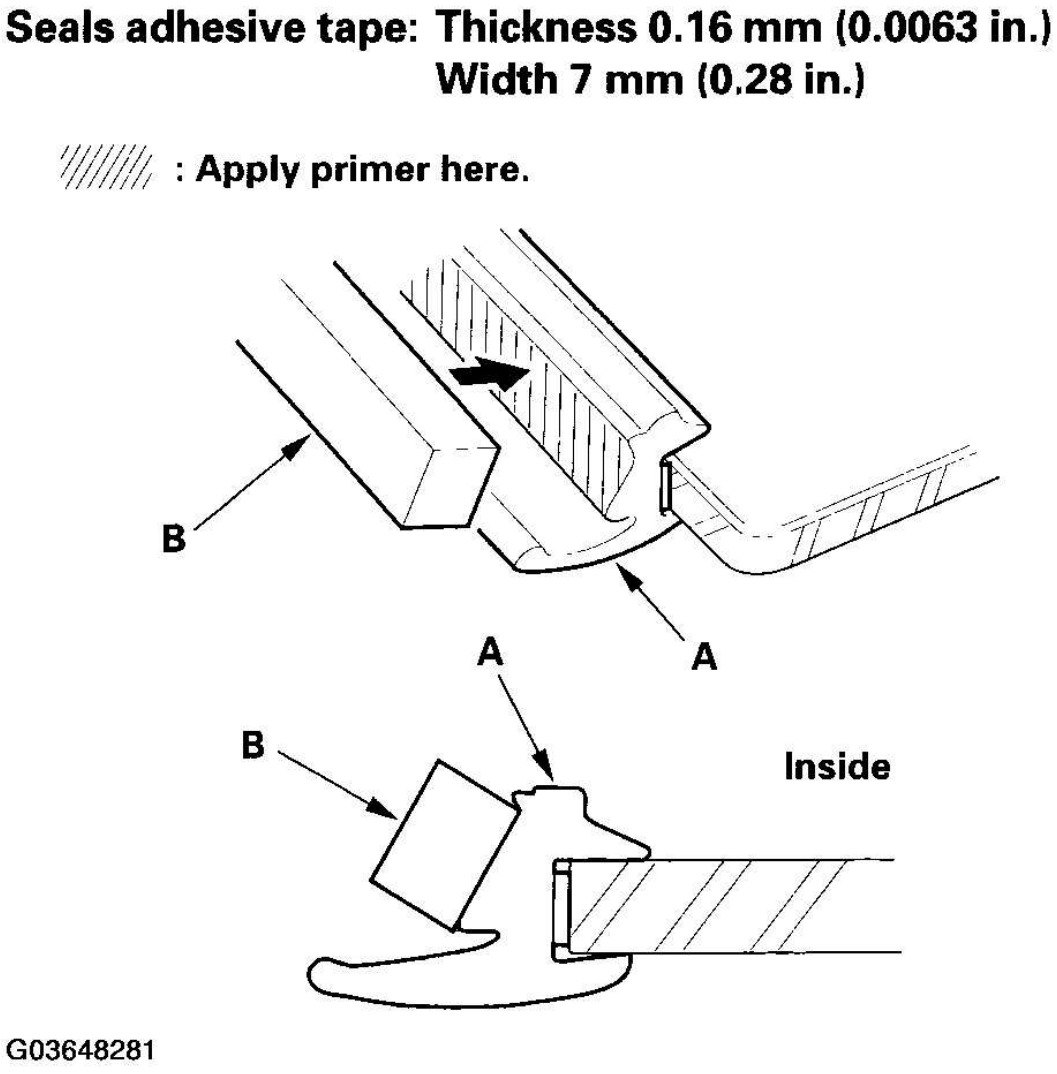


Fig. 8: Applying Primer To Molding
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Set the windshield in the opening, and center it. Make alignment marks (A) across the windshield and body with a grease pencil at the four points shown below. Make sure both clips (B) contact with the edge of the body holes. Be careful not to touch the windshield where adhesive will be applied.

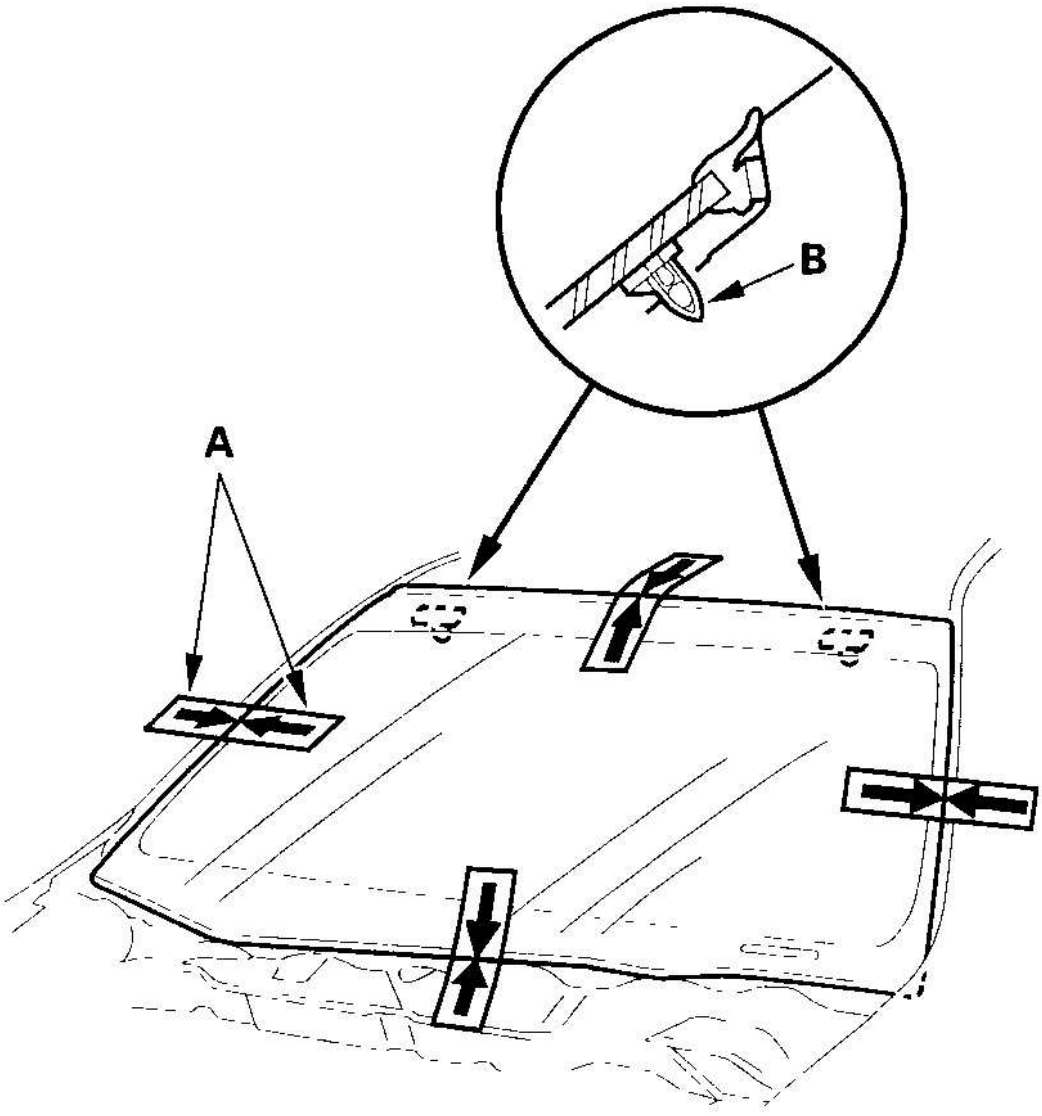


Fig. 9: Making Alignment Marks Across Windshield And Body With Grease Pencil
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the windshield.
16. With a sponge, apply a light coat of glass primer around the edge of the windshield (A) between the dams (B) and molding (C) as shown in **Fig. 10**,

then lightly wipe it off with gauze or cheesecloth:

- Apply glass primer to the molding.
- Do not apply body primer to the windshield, and do not get body and glass primer sponges mixed up.
- Never touch the primed surfaces with your hands. If you do, the adhesive may not bond to the windshield properly, causing a leak after the windshield is installed.
- Keep water, dust, and abrasive materials away from the primed surfaces.

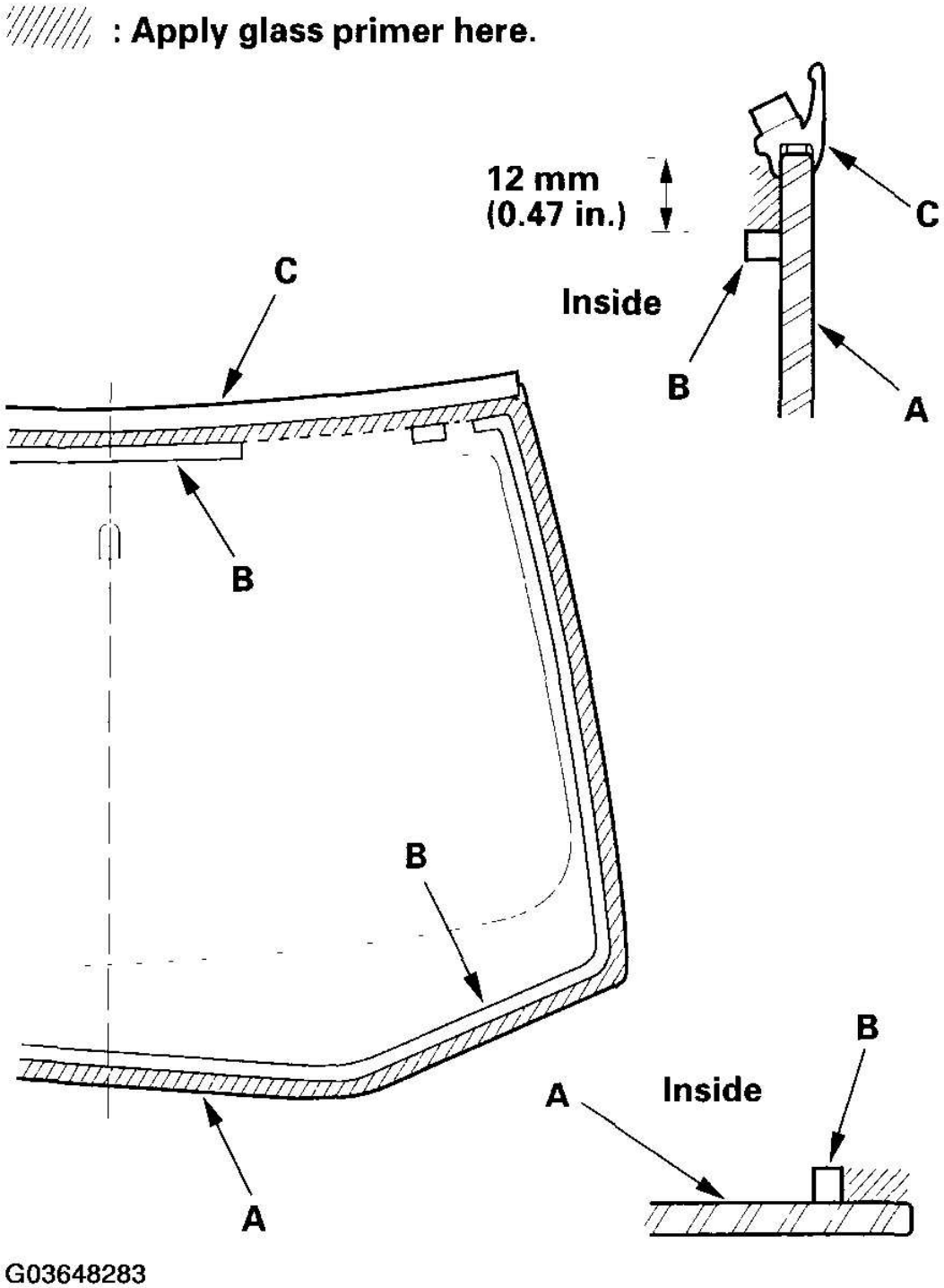


Fig. 10: Applying Coat Of Primer Around Edge Of Windshield Between Dams And Molding

Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. With a sponge, carefully apply a light coat of body primer to any exposed paint or metal around the flange where new adhesive will be applied. Let the primer dry for at least 10 minutes:
    - Do NOT apply body primer to any remaining original adhesive on the flange.
    - Be careful not to mix up the body and glass primer sponges.
    - Never touch the primed surfaces with your hands.

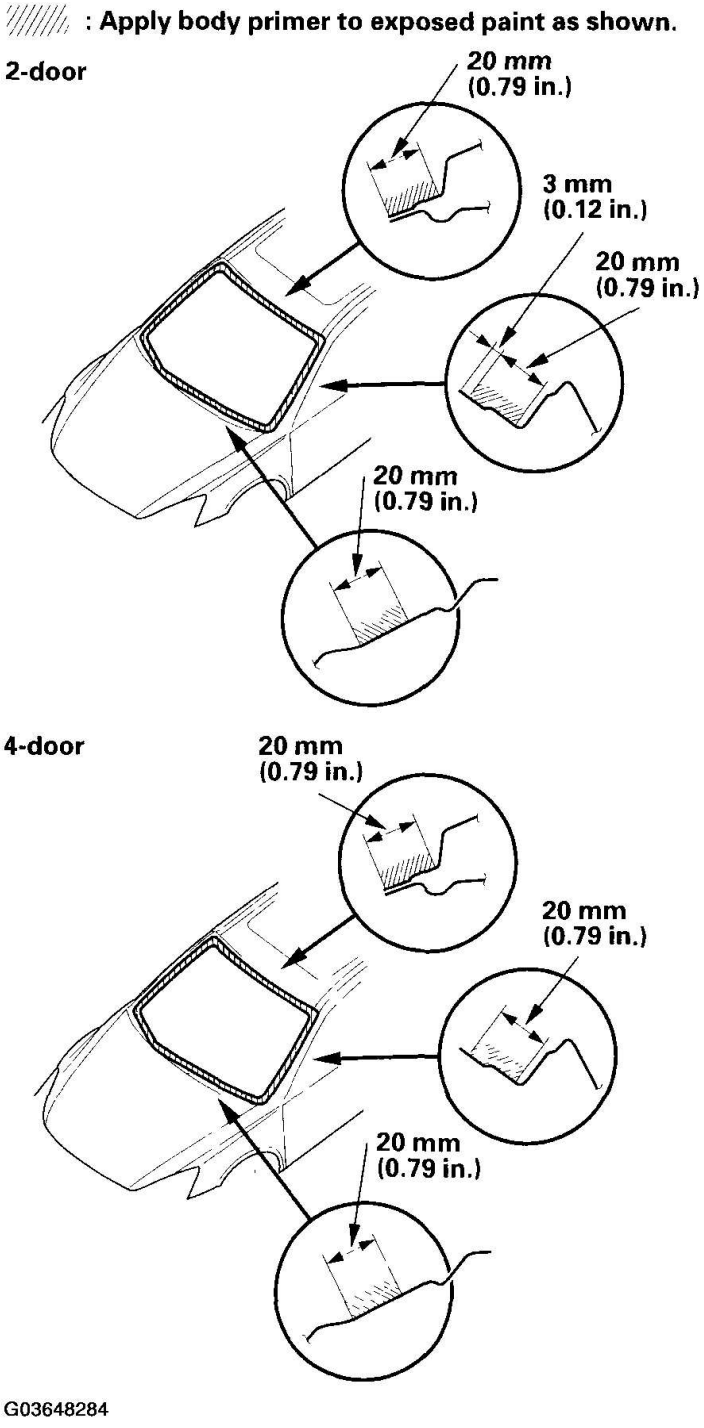


Fig. 11: Applying Coat Of Body Primer To Exposed Paint Or Metal Around Flange

Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Cut a "V" in the end of the nozzle (A) on the adhesive cartridge as shown below.

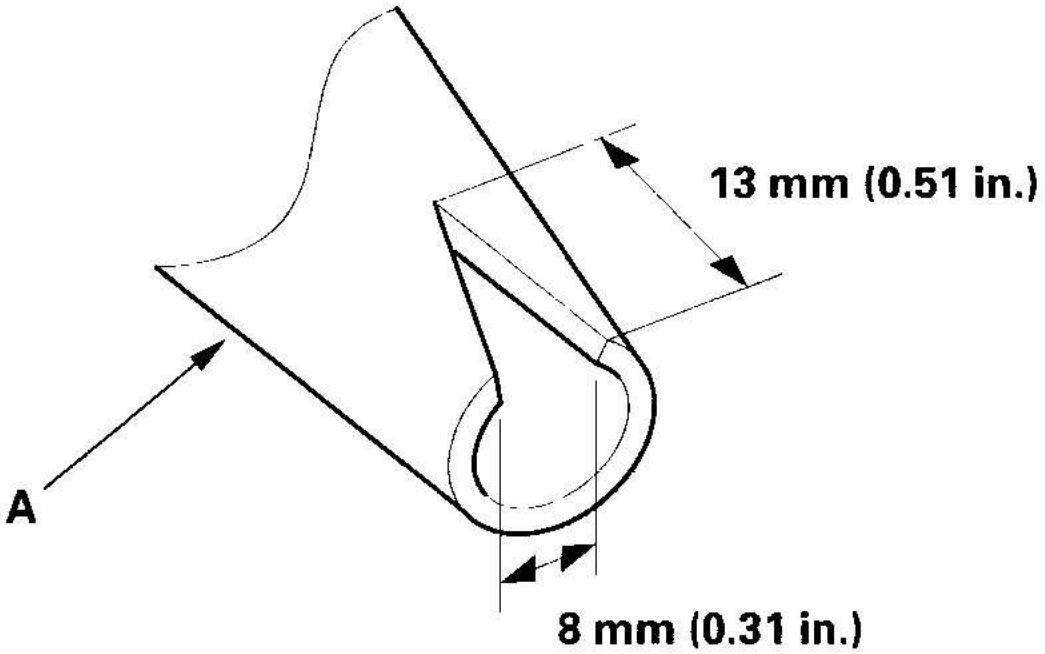
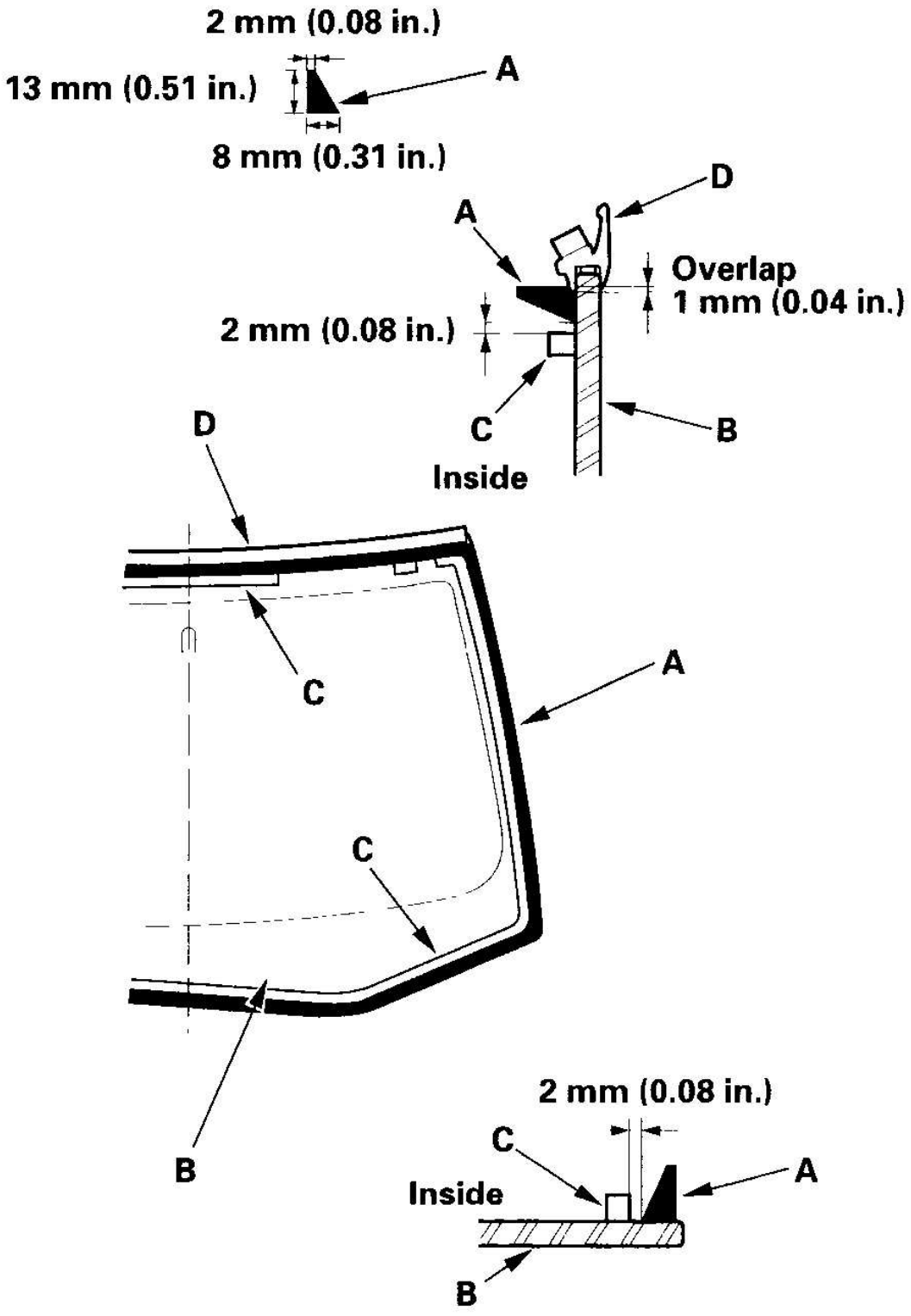


Fig. 12: Cutting "V" In End Of Nozzle On Adhesive Cartridge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Pack adhesive into the cartridge without air pockets to ensure continuous delivery. Put the cartridge in a caulking gun, and run a bead of adhesive (A) around the edge of the windshield (B) between the dams (C) and molding (D) as shown below. Apply the adhesive within 30 minutes after applying the glass primer. Make a slightly thicker bead at each corner.


2 mm (0.08 in.)
13 mm (0.51 in.)
A
8 mm (0.31 in.)
D
A
Overlap
1 mm (0.04 in.)
2 mm (0.08 in.)
C
B
Inside
D
C
A
C
B
2 mm (0.08 in.)
C
A
Inside
B

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Fig. 13: Running Bead Of Adhesive Around Edge Of Windshield Between Dams And Molding
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Use suction cups to hold the windshield over the opening, align it with the alignment marks made in step 14, and set it down on the adhesive. Lightly push on the windshield until its edges are fully seated on the adhesive all the way around. Do not open or close the doors until the adhesive is dry.
21. Scrape or wipe the excess adhesive off with a putty knife or towel. To remove adhesive from a painted surface or the windshield, wipe with a soft shop towel dampened with alcohol.
22. Let the adhesive dry for at least 1 hour, then spray water over the windshield and check for leaks. Mark leaking areas, and let the windshield dry, then seal with sealant:
    - Let the vehicle stand for at least 4 hours after windshield installation. If the vehicle has to be used within the first 4 hours, it must be driven slowly.
    - Keep the windshield dry for the first hour after installation.
23. Reinstall all remaining removed parts.

NOTE: Advise the customer not to do the following things for 2 to 3 days:

- **Slam the doors with all the windows rolled up.**
- **Twist the body excessively (such as when going in and out of driveways at an angle or driving over rough, uneven roads).**

REAR WINDOW REPLACEMENT

NOTE:

- **Put on gloves to protect your hands.**
- **Wear eye protection while cutting the glass adhesive with piano wire.**
- **Use seat covers to avoid damaging any surfaces.**

- **Do not damage the rear window defogger grid lines, window antenna grid lines, and terminals.**

1. Remove these items:
   - Trunk lid
   - Rear shelf, 2-door (see **2-DOOR**), 4-door (see **4-DOOR**)
2. Disconnect the window antenna connectors (A) and rear window defogger connectors (B).

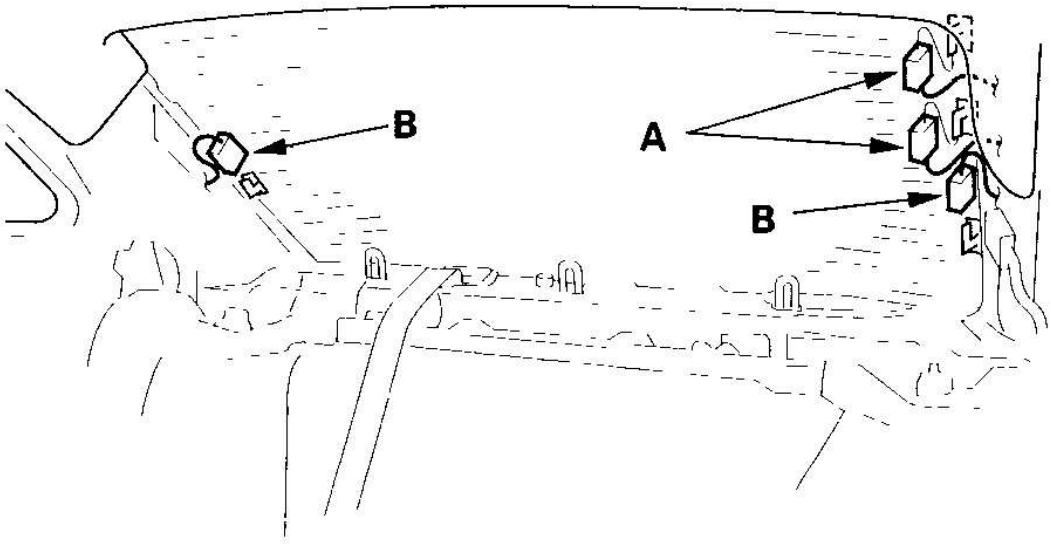


Fig. 14: Disconnecting Window Antenna Connectors And Rear Window Defogger Connectors (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

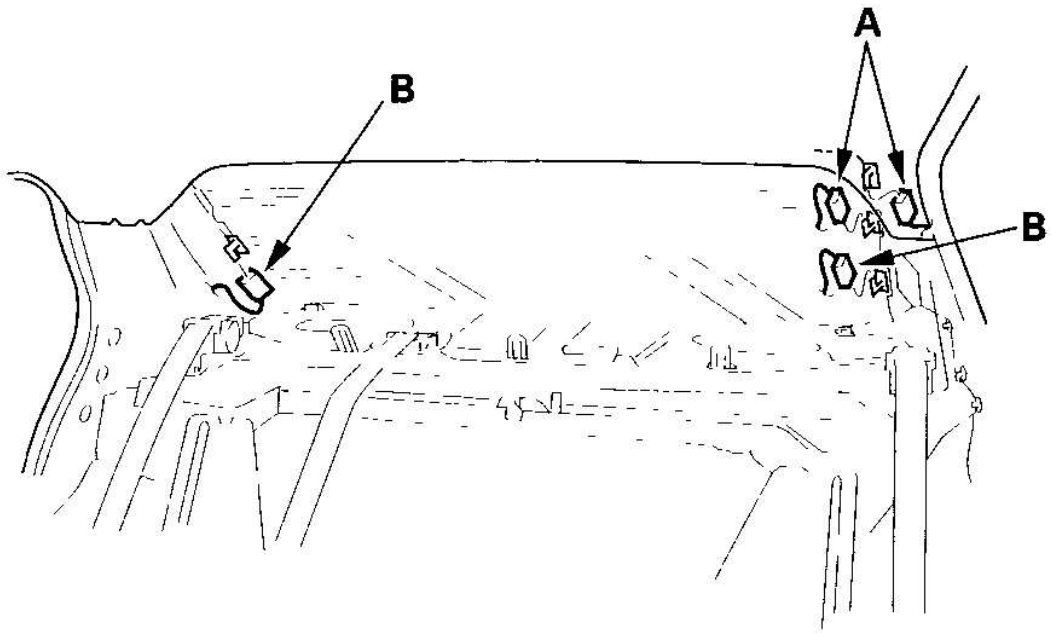


Fig. 15: Disconnecting Window Antenna Connectors And Rear Window Defogger Connectors (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the old rear window is to be reinstalled, make alignment marks across the glass and body with a grease pencil.
4. Pull down the rear portion of the headliner (A) by detaching the clips (B). Take care not to bend the headliner excessively, as you may crease or break it.

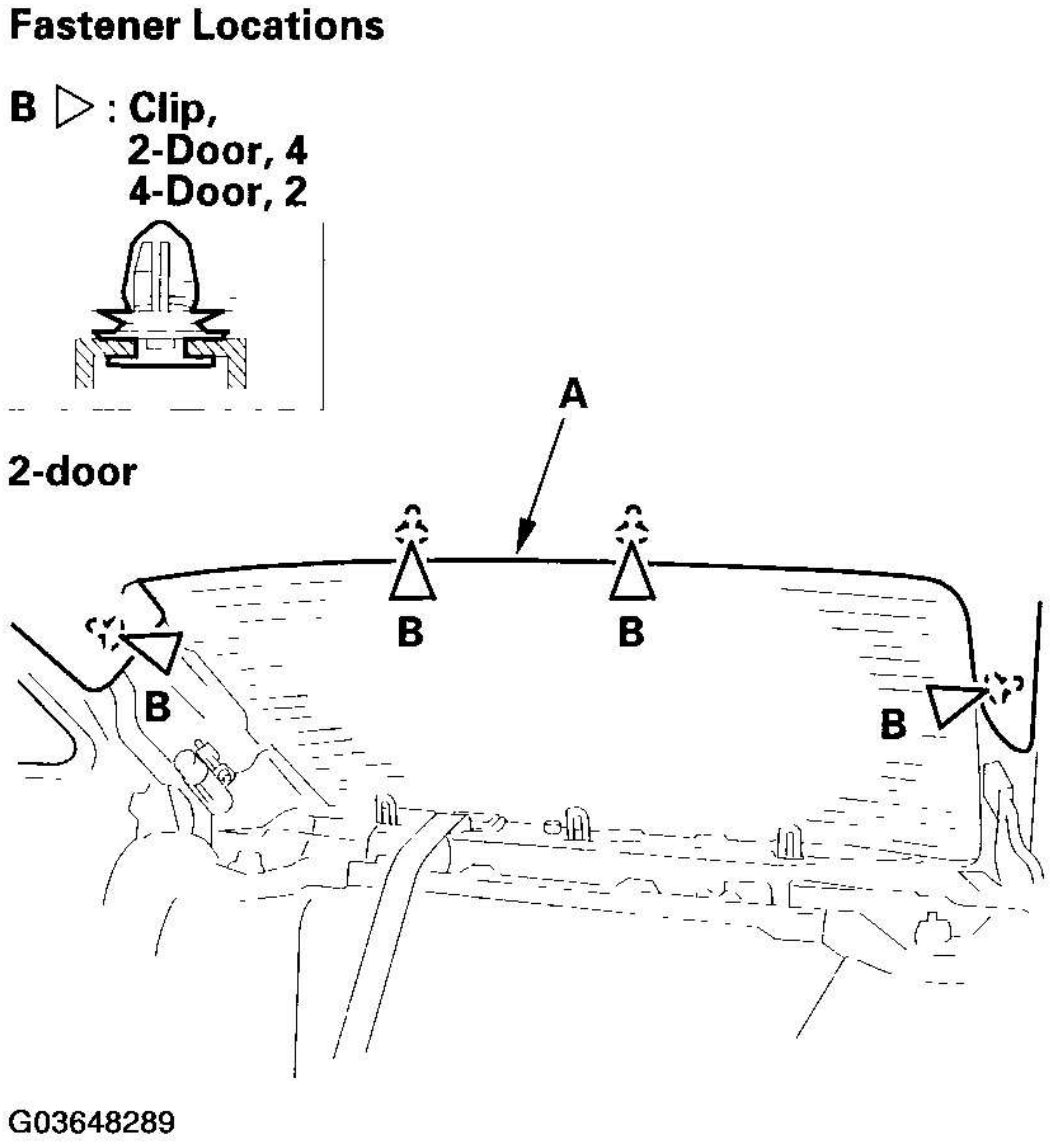


Fig. 16: Pulling Down Rear Portion Of Headliner By Detaching Clips (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

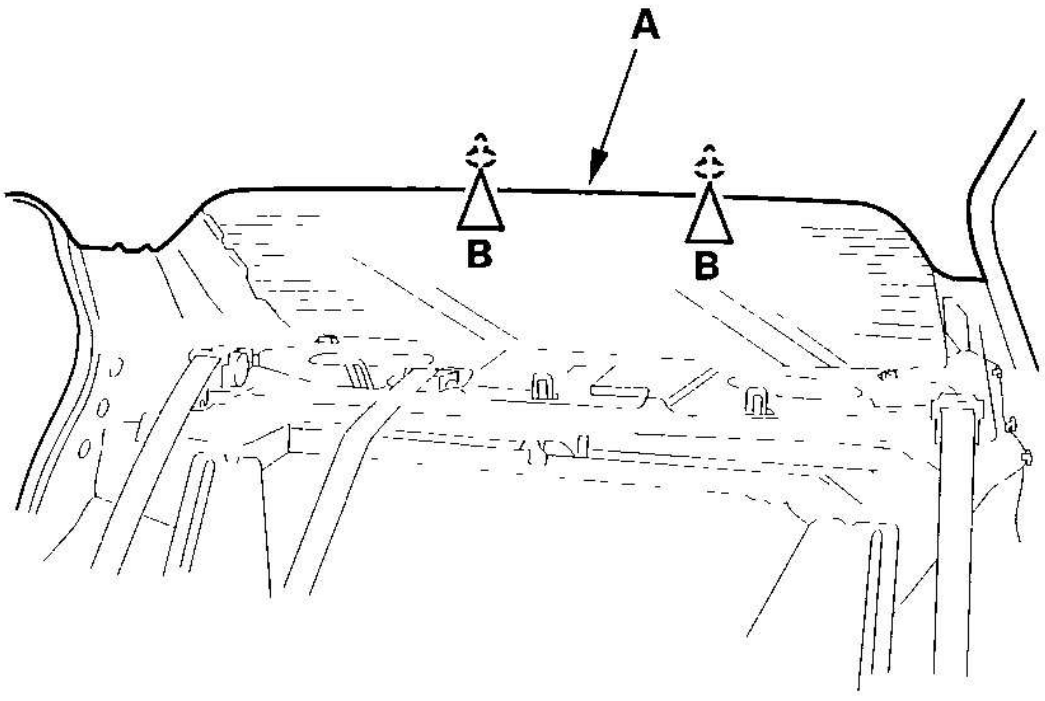


Fig. 17: Pulling Down Rear Portion Of Headliner By Detaching Clips (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Apply protective tape along the inside and outside edges of the body. Using an awl, make a hole through the adhesive from inside the vehicle at the corner portion of the rear window. Push a piece of piano wire through the hole, and wrap each end around a piece of wood.
6. Remove the molding (A) from the lower edge of the rear window (B). If necessary, cut the molding with a utility knife.

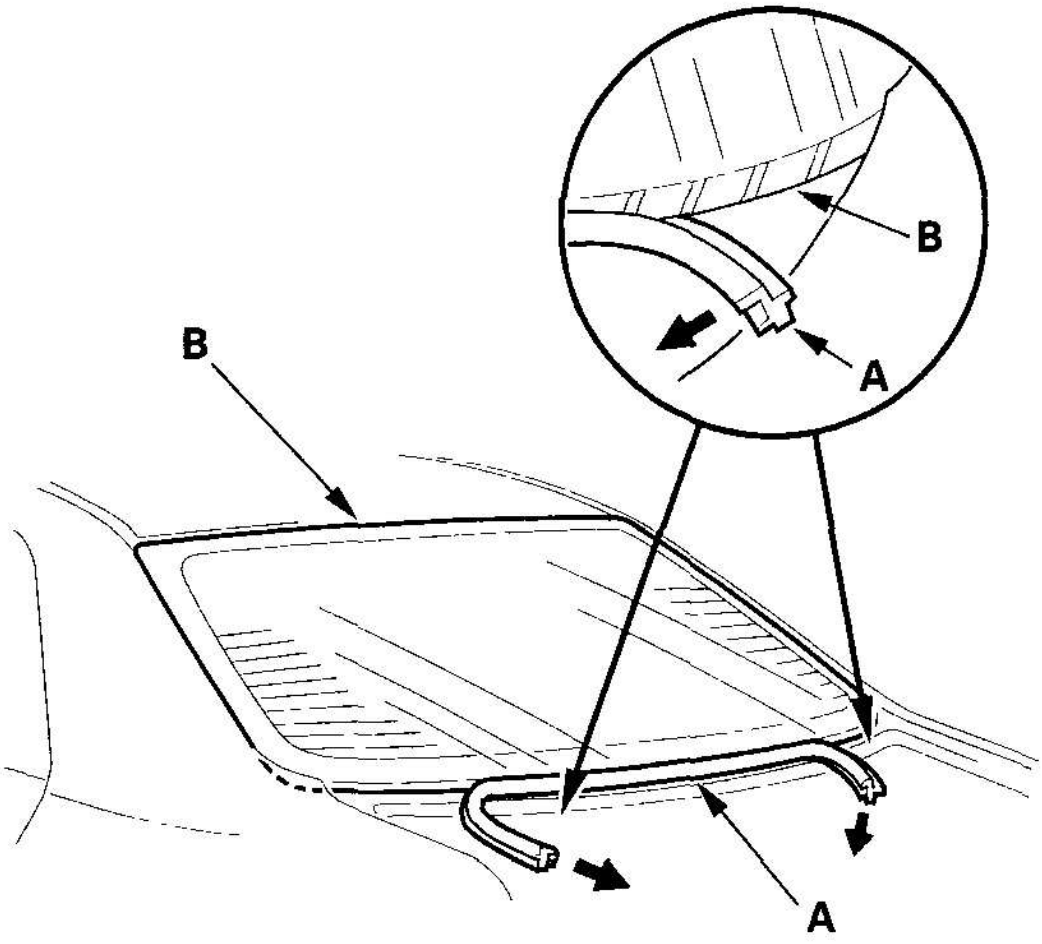
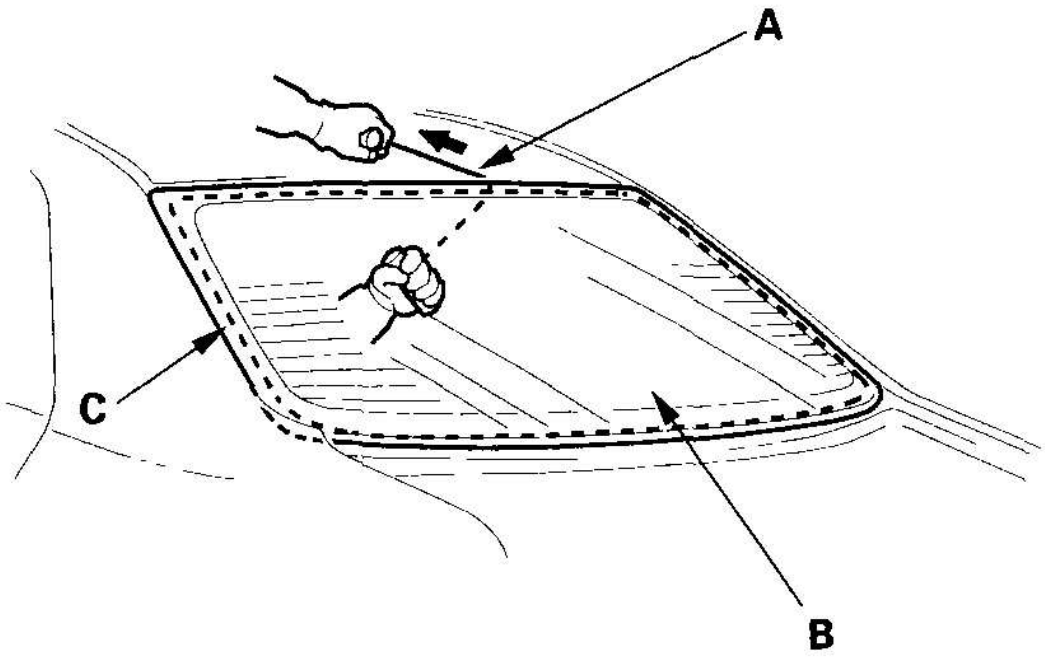


Fig. 18: Removing Molding From Lower Edge Of Rear Window
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. With a helper on the outside, pull the piano wire (A) back and forth in a sawing motion. Hold the piano wire as close to the rear window (B) as possible to prevent damage to the body, and carefully cut through the adhesive (C) around the entire rear window.



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Fig. 19: Pulling The Piano Wire Back And Forth In Sawing Motion
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Cutting positions

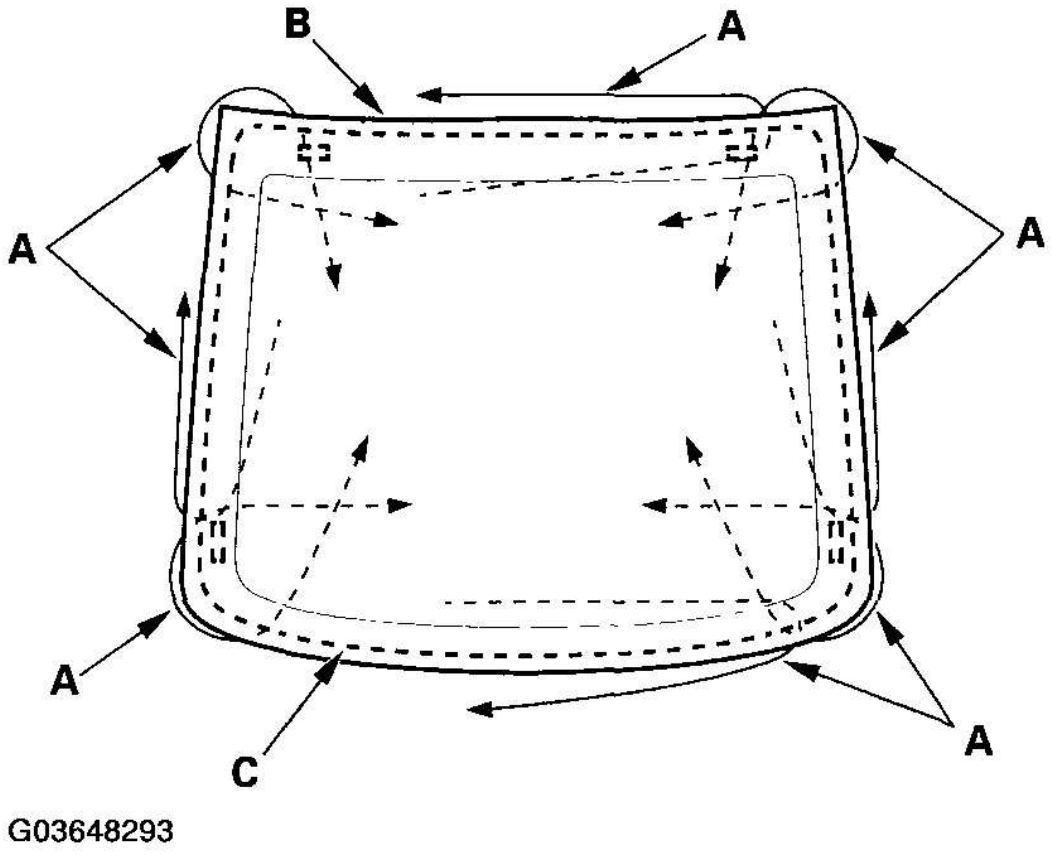


Fig. 20: Identifying Cutting Positions (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

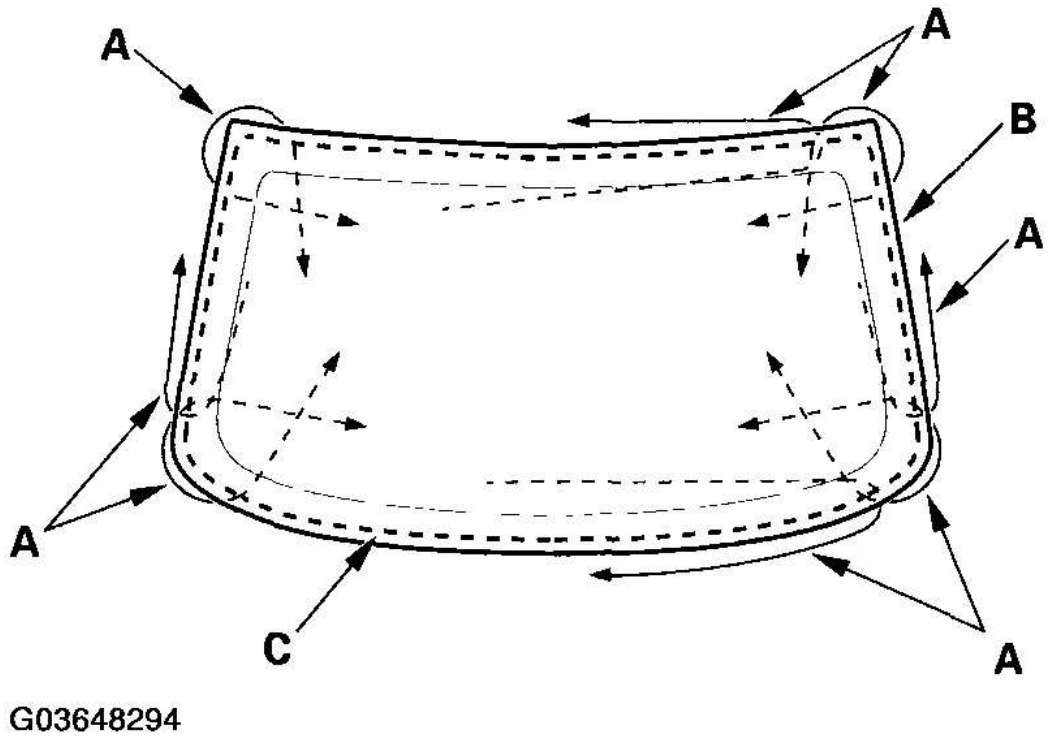


Fig. 21: Identifying Cutting Positions (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Carefully remove the rear window.
9. With a putty knife, scrape the old adhesive smooth to a thickness of about 2 mm (0.08 in.) on the bonding surface around the entire rear window opening flange:
   - Do not scrape down to the painted surface of the body; damaged paint will interfere with proper bonding.
   - Remove the fasteners from the body.
10. Clean the body bonding surface with a sponge dampened in alcohol. After cleaning, keep oil, grease and water from getting on the surface.
11. If the old rear window is to be reinstalled, use a putty knife to scrape off all of the old adhesive, the moldings and the fasteners from the rear window. Clean the inside face and the edge of the rear window with alcohol where new

adhesive is to be applied. Make sure the bonding surface is kept free of water, oil and grease.

12. Attach the upper rubber dam (A), side rubber dam (B), lower rubber dam (C), clips (D), and fasteners (E) with adhesive tape to the inside face of the rear window (F) as shown in **Fig. 22** or **Fig. 23**:
    - First attach the upper rubber dam, then attach the side rubber dams around the edge of the rear window. Be sure top of the side rubber dam contacts with bottom of the upper rubber dam. If necessary, cut the rubber dam.
    - Be sure the side rubber dam, clips, and fasteners line up with the alignment marks (G).
    - Attach the lower rubber dam, around the edge of the windshield (H).
    - Be careful not to touch the windshield where adhesive will be applied.

    Rubber dams adhesive tape:

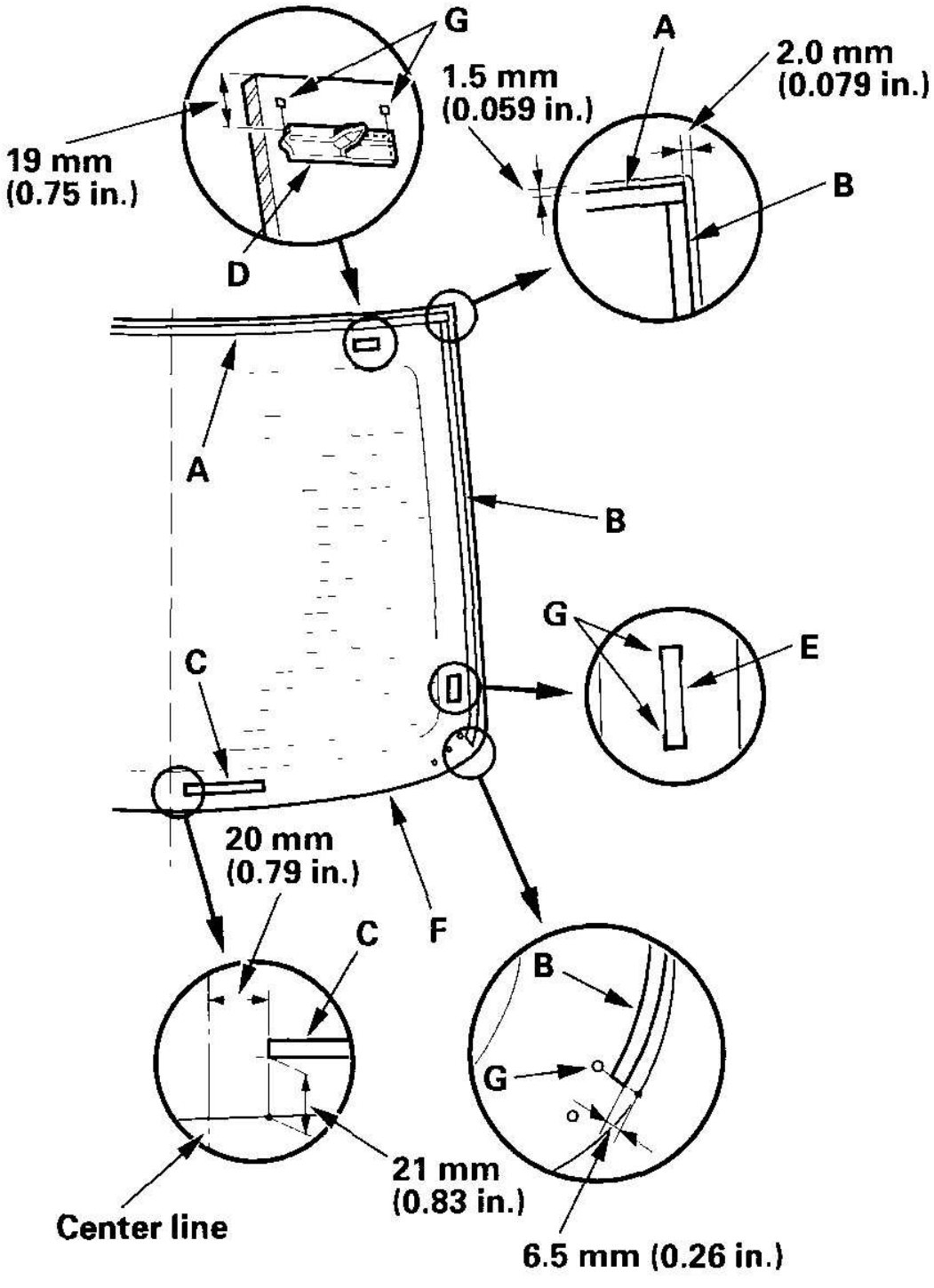
    Thickness 0.16 mm (0.0063 in.)
    Width 4 mm (0.16 in.)

    Clips adhesive tape:

    Thickness 0.4 mm (0.016 in.)
    Width 10 mm (0.39 in.)

    Fasteners adhesive tape:

    Thickness 0.8 mm (0.03 in.)
    Width 7 mm (0.28 in.)


G
A
2.0 mm
(0.079 in.)
1.5 mm
(0.059 in.)
19 mm
(0.75 in.)
B
D
A
B
G
E
C
20 mm
(0.79 in.)
C
F
B
G
21 mm
(0.83 in.)
Center line
6.5 mm (0.26 in.)

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Fig. 22: Attaching Upper Rubber Dam, Side Rubber Dam, Lower Rubber Dam, Clips And Fasteners (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

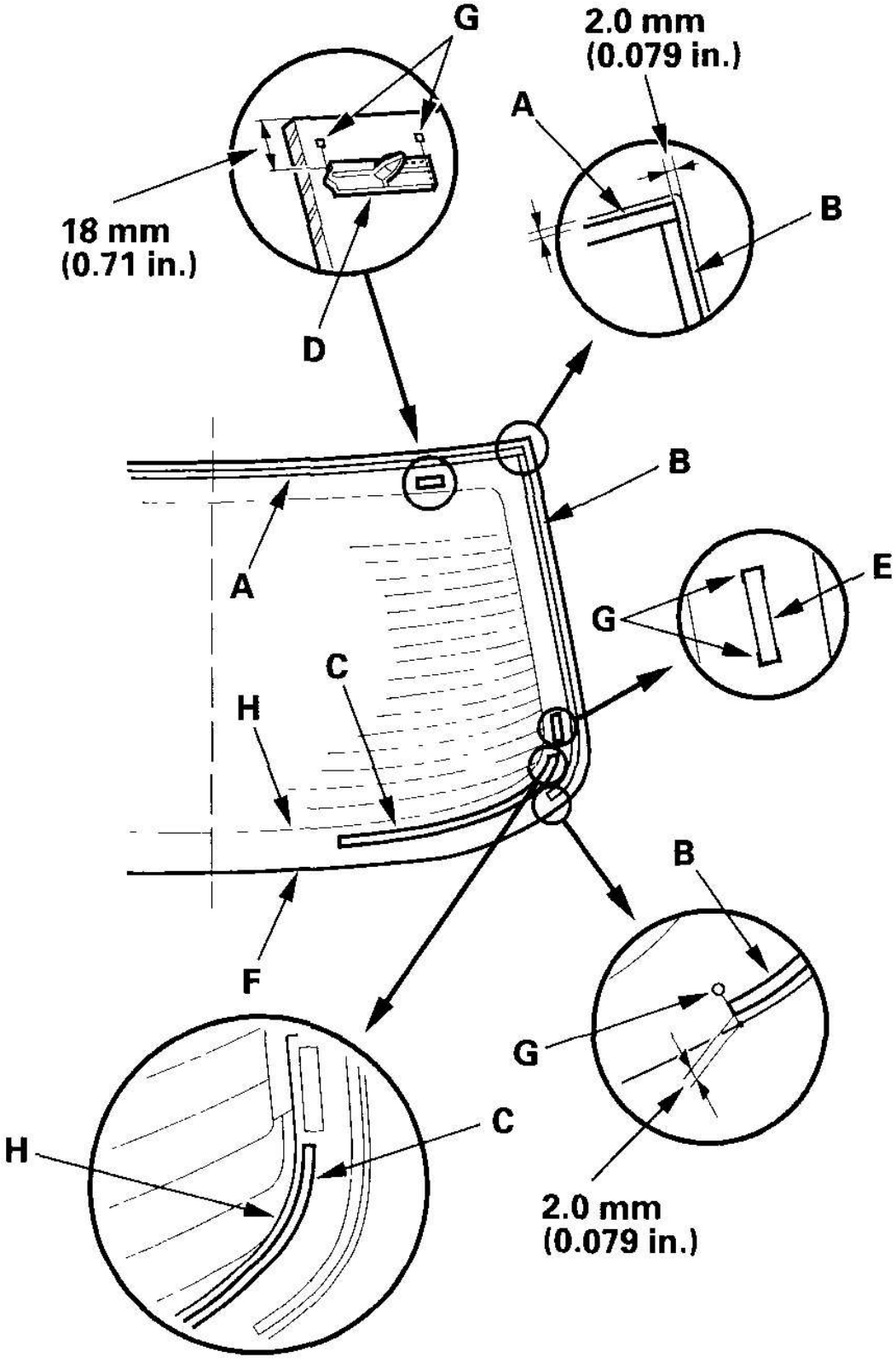
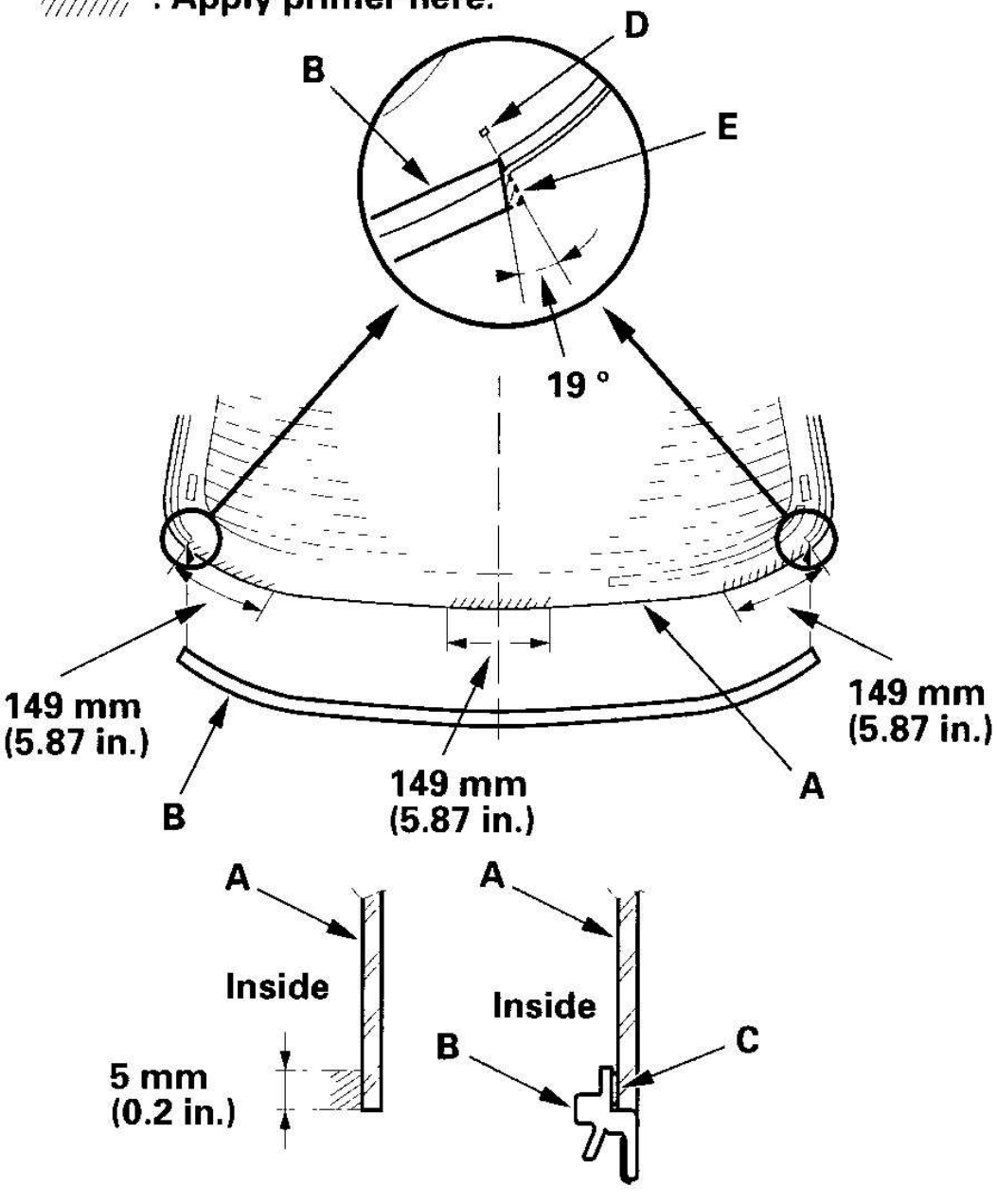

G
2.0 mm
(0.079 in.)
A
B
18 mm
(0.71 in.)
D
B
A
E
G
C
H
B
F
G
C
H
2.0 mm
(0.079 in.)

Fig. 23: Attaching Upper Rubber Dam, Side Rubber Dam, Lower Rubber Dam, Clips And Fasteners (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. 4-door: Apply primer to the edge of the rear window (A) where the molding adhesive tape will be attached as shown in **Fig. 24**. Attach the molding (B) with adhesive tape (C) to the lower edge of the rear window:
    - Be sure both ends of the molding line up with the alignment marks (D) of the rear window.
    - After installing the molding, cut the ends (E) of the molding as shown in **Fig. 24**.
    - Be careful not to touch the windshield where adhesive will be applied.

Molding adhesive tape:
Thickness 0.2 mm (0.0079 in.)
Width 4 mm (0.16 in.)

: Apply primer here.



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Fig. 24: Applying Primer To Edge Of Rear Window (4-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Attach the fasteners (A) with adhesive tape to the rear window opening flange (B) of the body on both sides.

Fasteners adhesive tape:

Thickness 0.8 mm (0.031 in.)
Width 9 mm (0.35 in.)

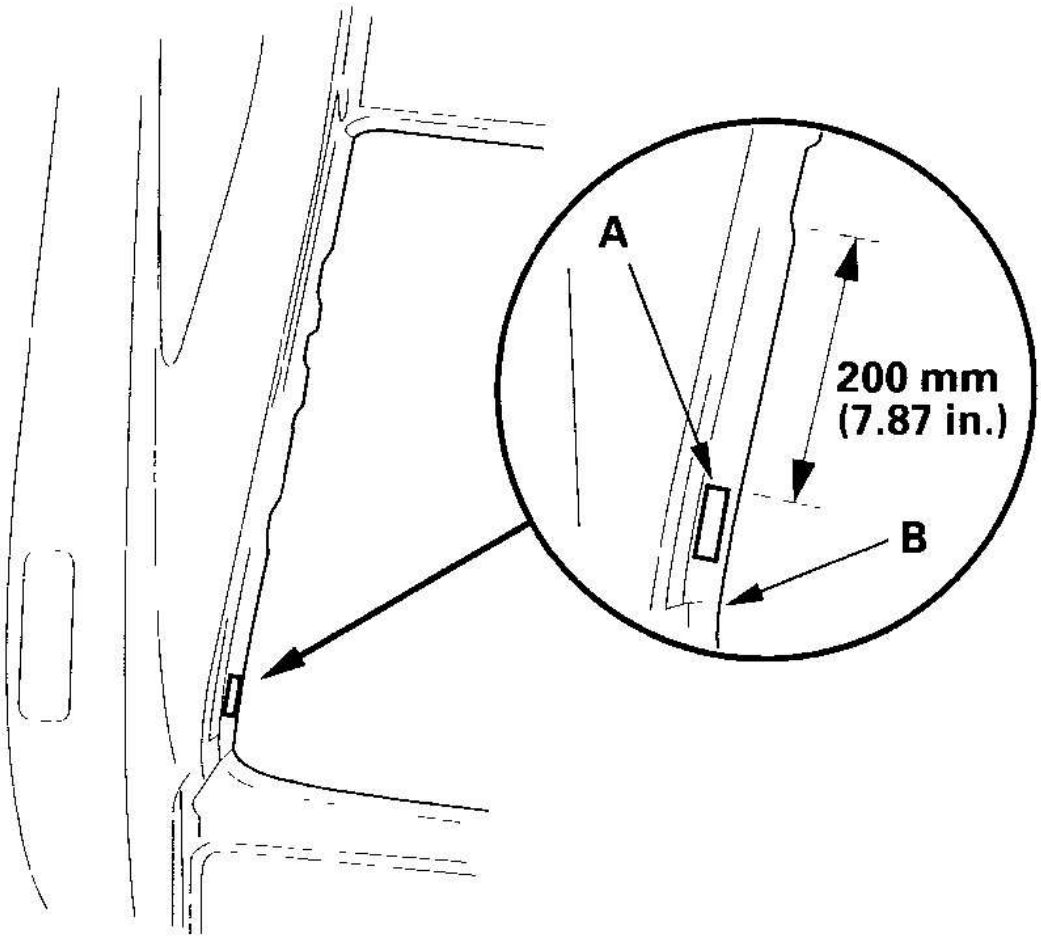


Fig. 25: Attaching Fasteners With Adhesive Tape To Rear Window Opening Flange Of Body (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

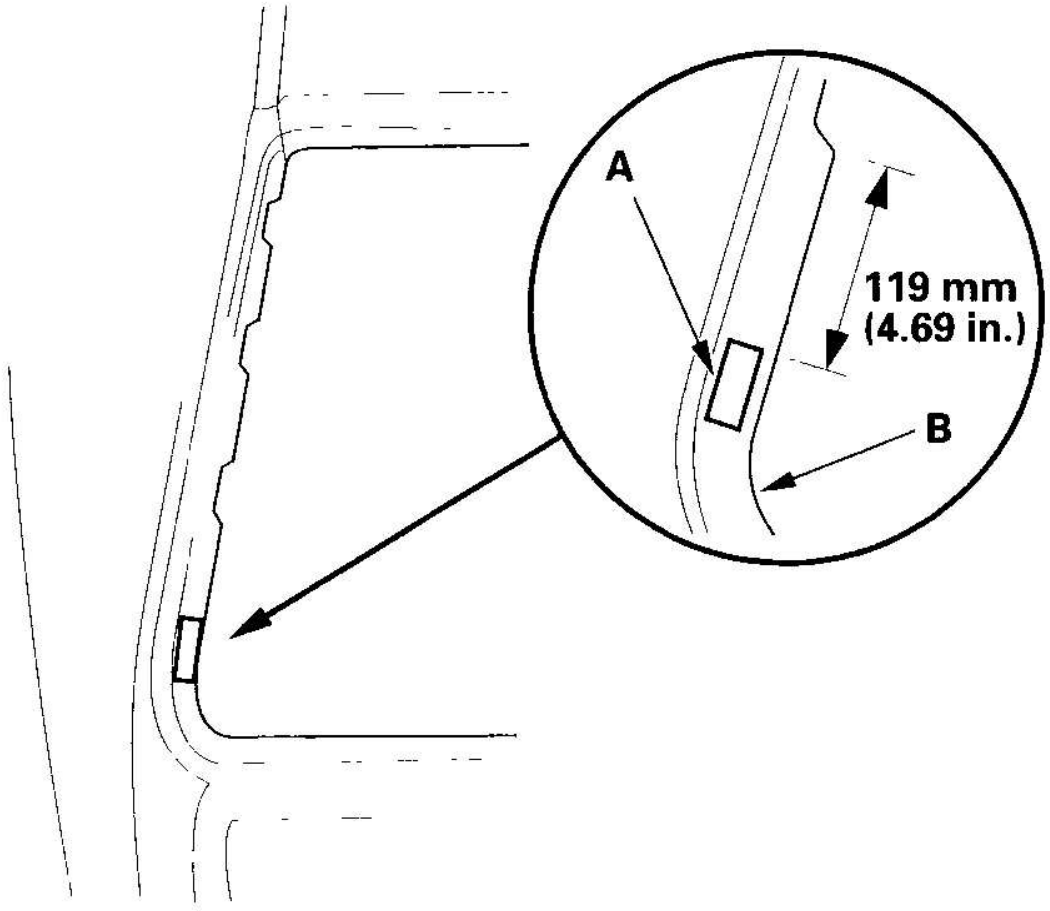


Fig. 26: Attaching Fasteners With Adhesive Tape To Rear Window Opening Flange Of Body (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Set the rear window in the opening, and center it. Make alignment marks (A) across the rear window and body with a grease pencil at the four points shown below. Make sure both upper clips (B) are in the body holes. Be careful not to touch the rear window where adhesive will be applied.

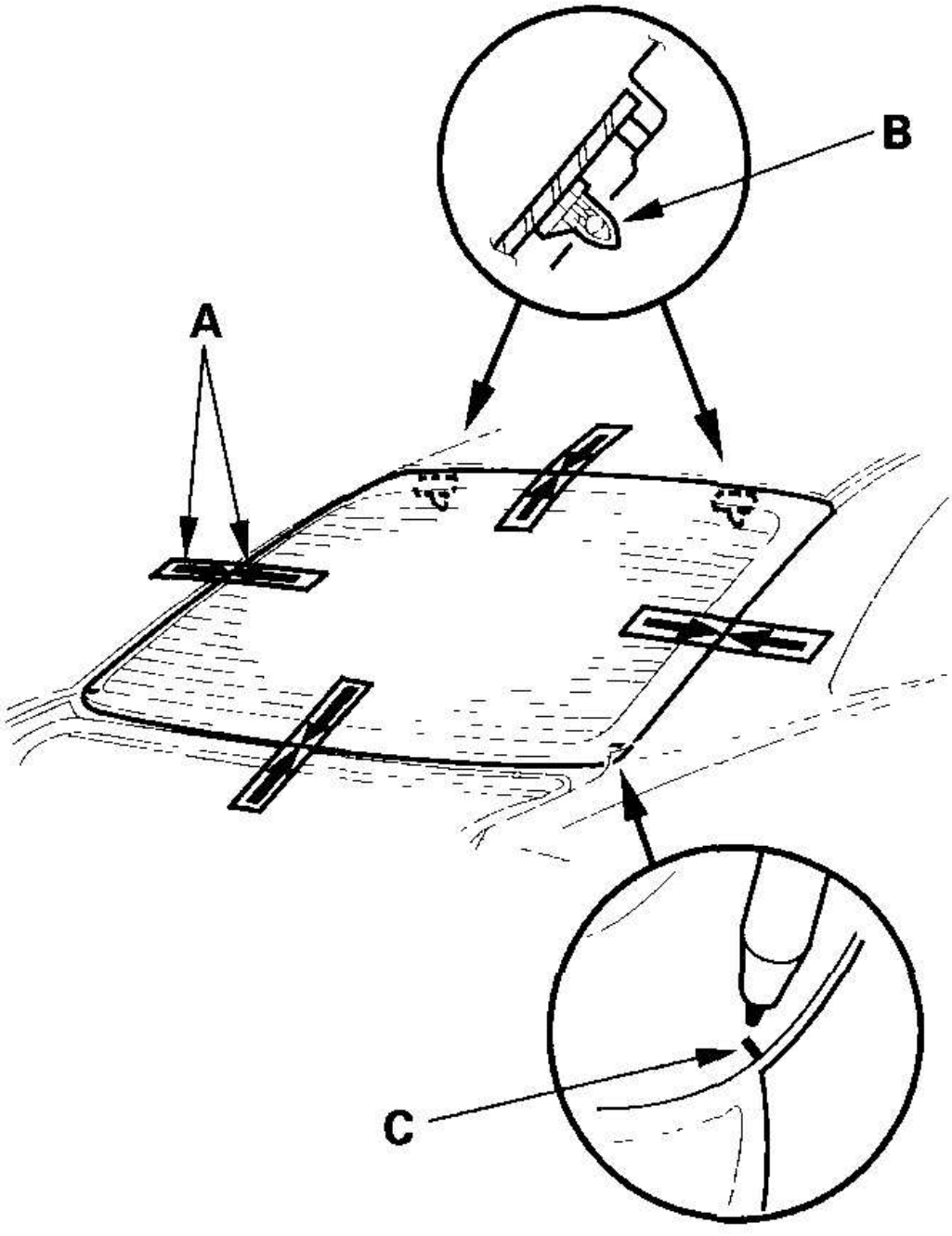


Fig. 27: Identifying Alignment Marks And Upper Clips (2-Door)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

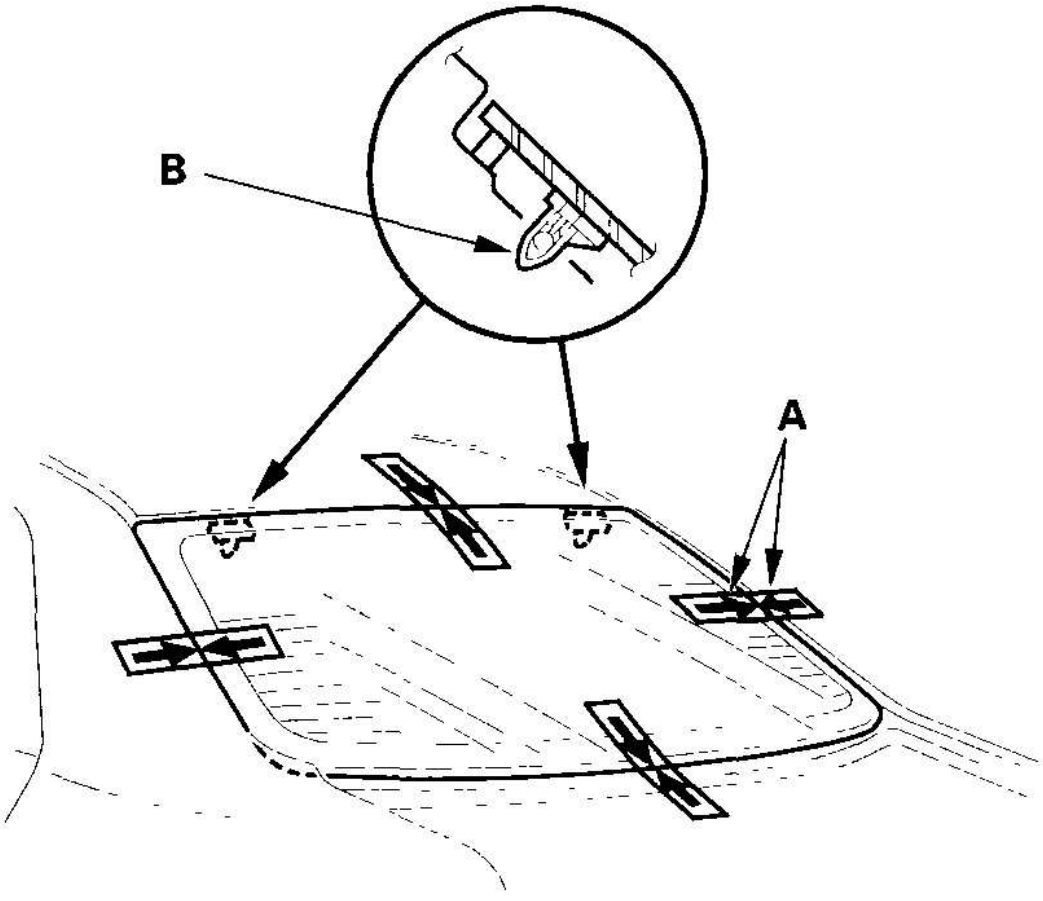


Fig. 28: Identifying Alignment Marks And Upper Clips (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. 2-door: Make alignment marks (C) to the rear window with a grease pencil as shown in **Fig. 27** where the molding will be installed.
17. Remove the rear window.
18. 2-door: Apply primer to the edge of the rear window (A) where the molding adhesive tape will be attached as shown in **Fig. 29**. Attach the molding (B) with adhesive tape (C) to the lower edge of the rear window:

- Be sure both ends of the molding line up with the alignment marks (D) you made in step 16.
- After installing the molding, cut the ends (E) of the molding as shown in **Fig. 29**.
- Be careful not to touch the windshield where adhesive will be applied.

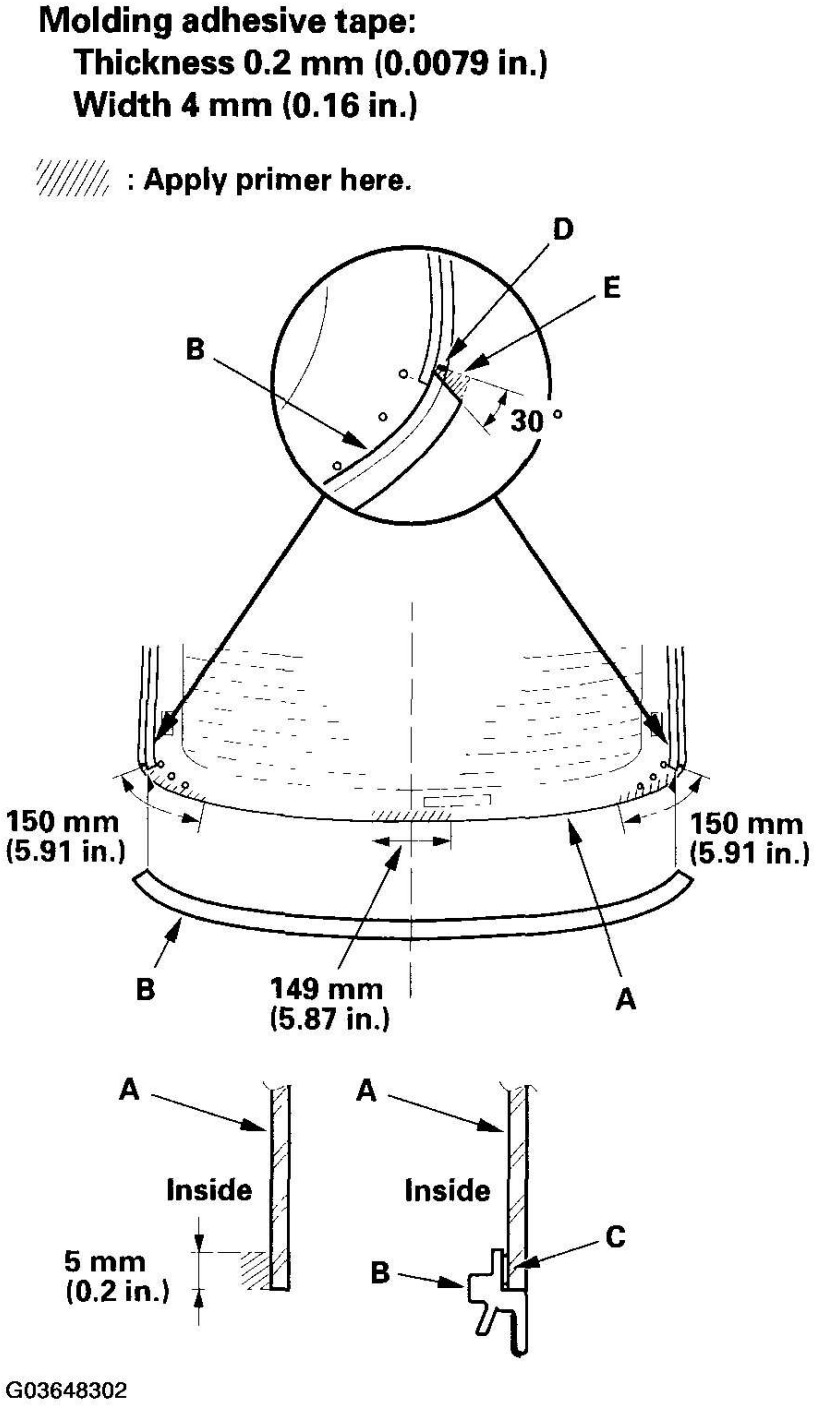
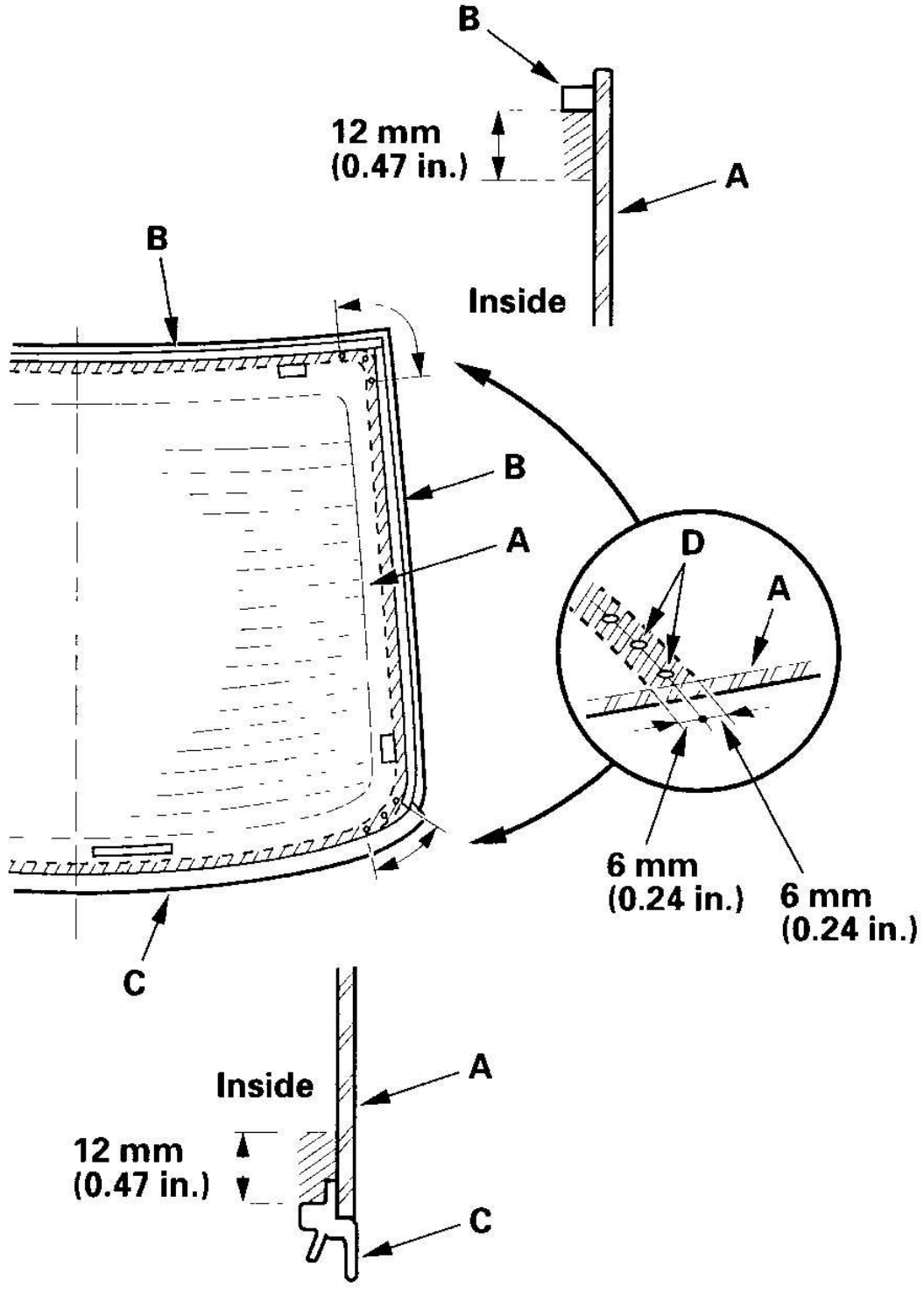


Fig. 29: Applying Primer To Edge Of Rear Window
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. With a sponge, apply a light coat of glass primer along the edge of the rear window (A) between the dams (B) and molding (C) as shown in **Fig. 30** or **Fig. 31**, then lightly wipe it off with gauze or cheesecloth:
    - 2-door: With the printed dots (D) on the rear window as a guide, apply the glass primer to both lower corner portions of the rear window.
    - Do not apply body primer to the rear window, and do not get body and glass primer sponges mixed up.
    - Never touch the primed surfaces with your hands. If you do, the adhesive may not bond to the rear window properly, causing a leak after the rear window is installed.
    - Keep water, dust, and abrasive materials away from the primed surfaces.

: Apply glass primer here.



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Fig. 30: Applying Glass Primer Along Edge Of Rear Window Between Dams And Molding (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

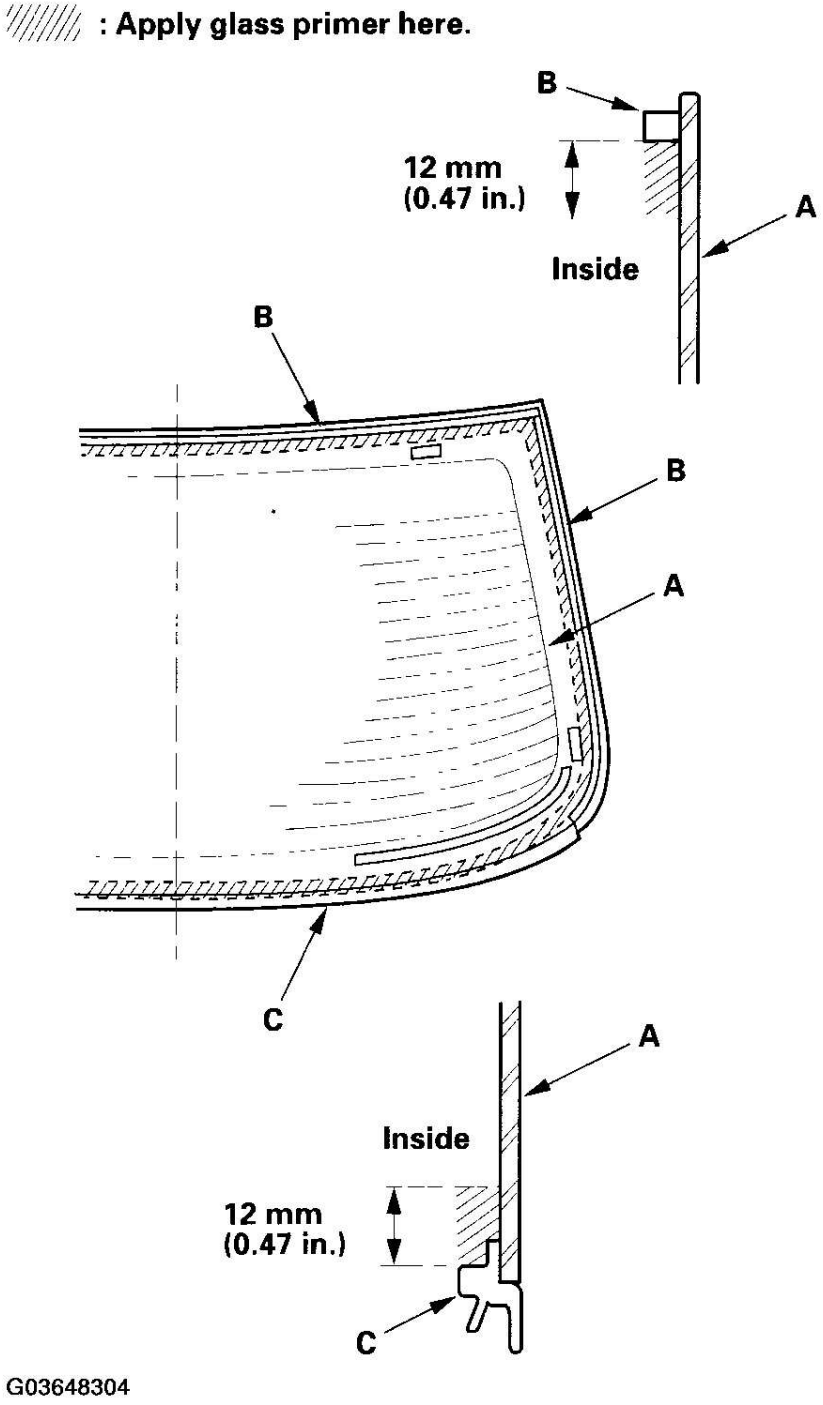


Fig. 31: Applying Glass Primer Along Edge Of Rear Window Between Dams And Molding (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. With a sponge, carefully apply a light coat of body primer to any exposed paint or metal around the flange where new adhesive will be applied. Let the primer dry for at least 10 minutes:
    - Do NOT apply body primer to any remaining original adhesive on the flange.
    - Be careful not to mix up the body and glass primer sponges.
    - Never touch the primed surfaces with your hands.

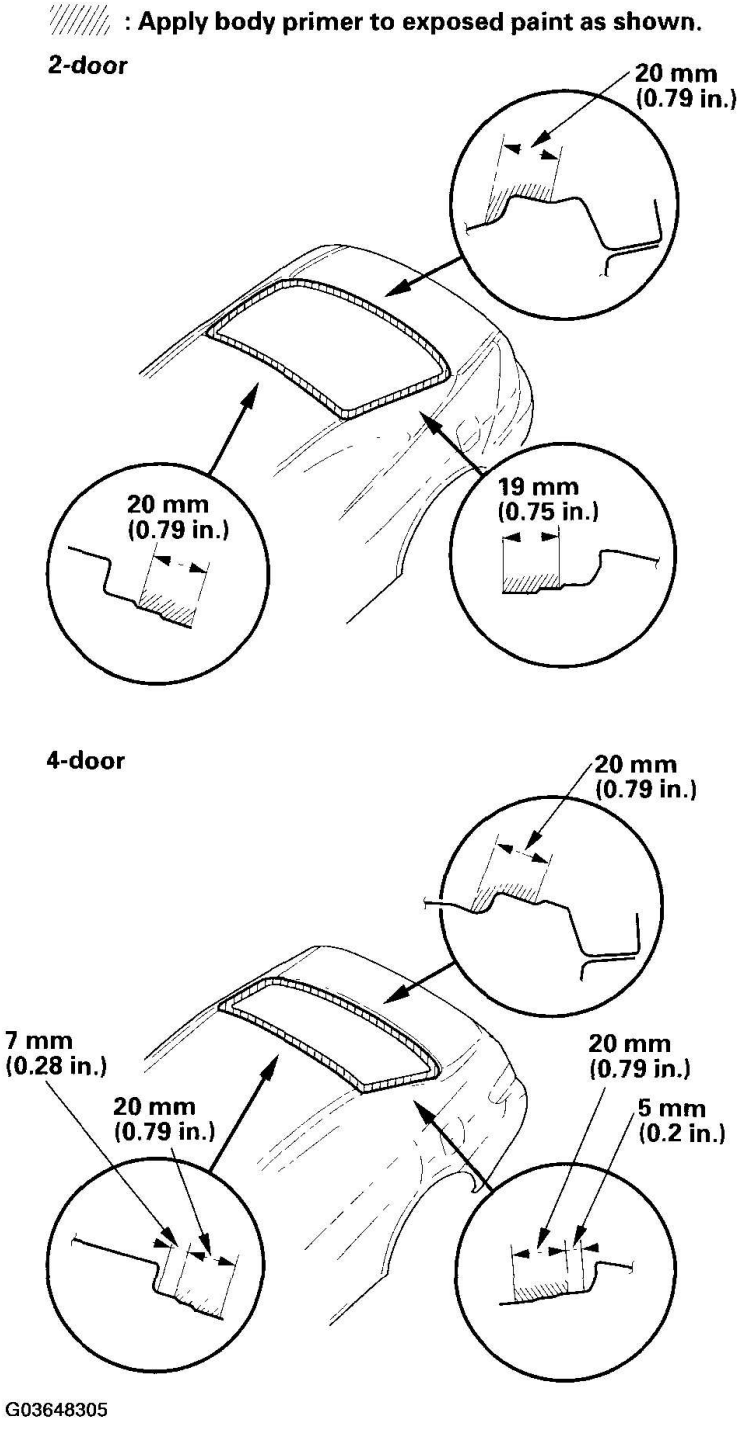


Fig. 32: Applying Light Coat Of Body Primer To Exposed Paint Or Metal Around Flange
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Cut a "V" in the end of the nozzle (A) on the adhesive cartridge as shown below.

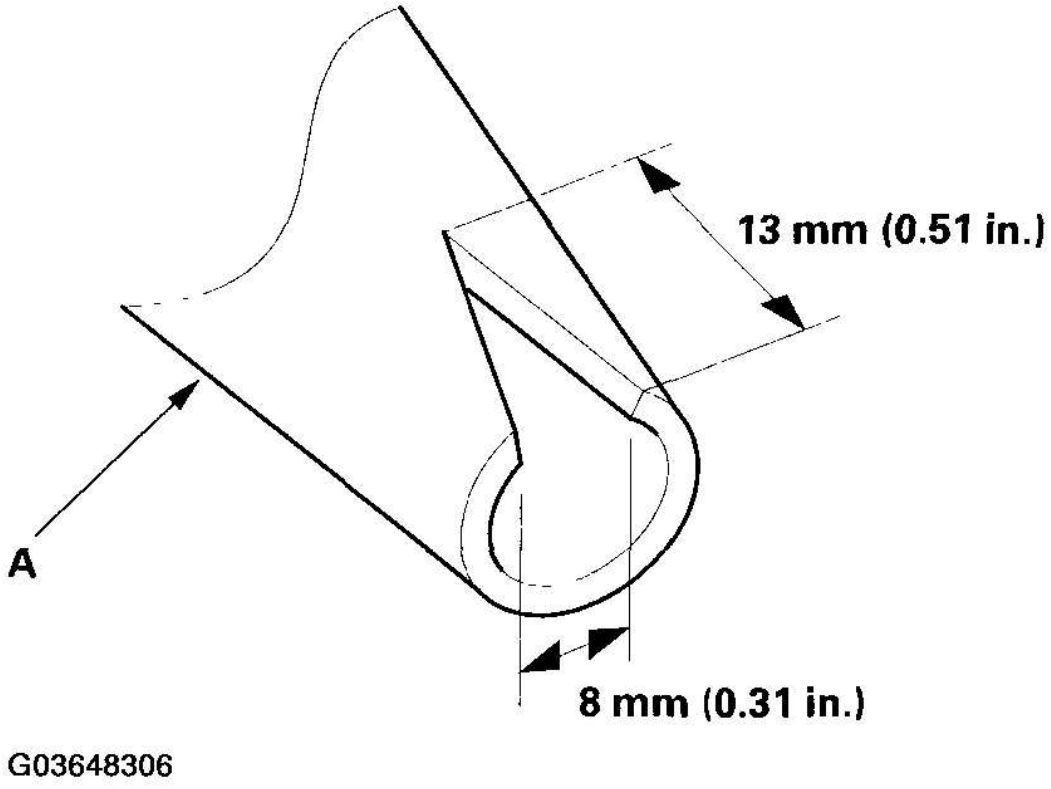


Fig. 33: Cutting "V" In End Of Nozzle On Adhesive Cartridge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Pack adhesive into the cartridge without air pockets to ensure continuous delivery. Put the cartridge in a caulking gun, and run a bead of adhesive (A) around the edge of the rear window (B) between the dams (C) and molding (D) as shown in **Fig. 34** for 2-door & **Fig. 35** for 4-door:
    - 2-door: With the printed dots (E) on the rear window as a guide, apply the adhesive to both side portions of the rear window.
    - Apply the adhesive within 30 minutes after applying the glass primer. Make a slightly thicker bead at each corner.

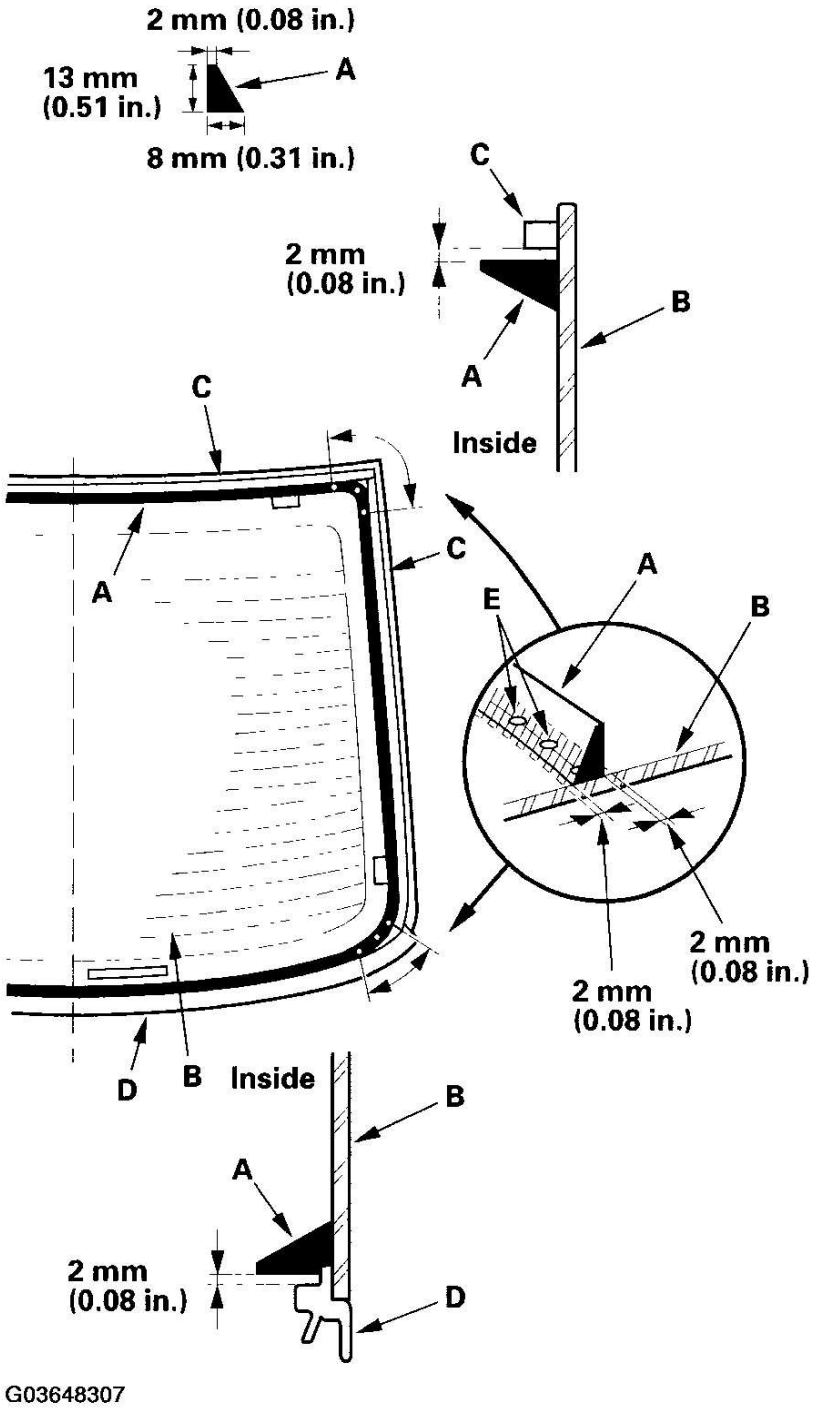


Fig. 34: Running Bead Of Adhesive Around Edge Of Rear Window Between Dams And Molding (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-door

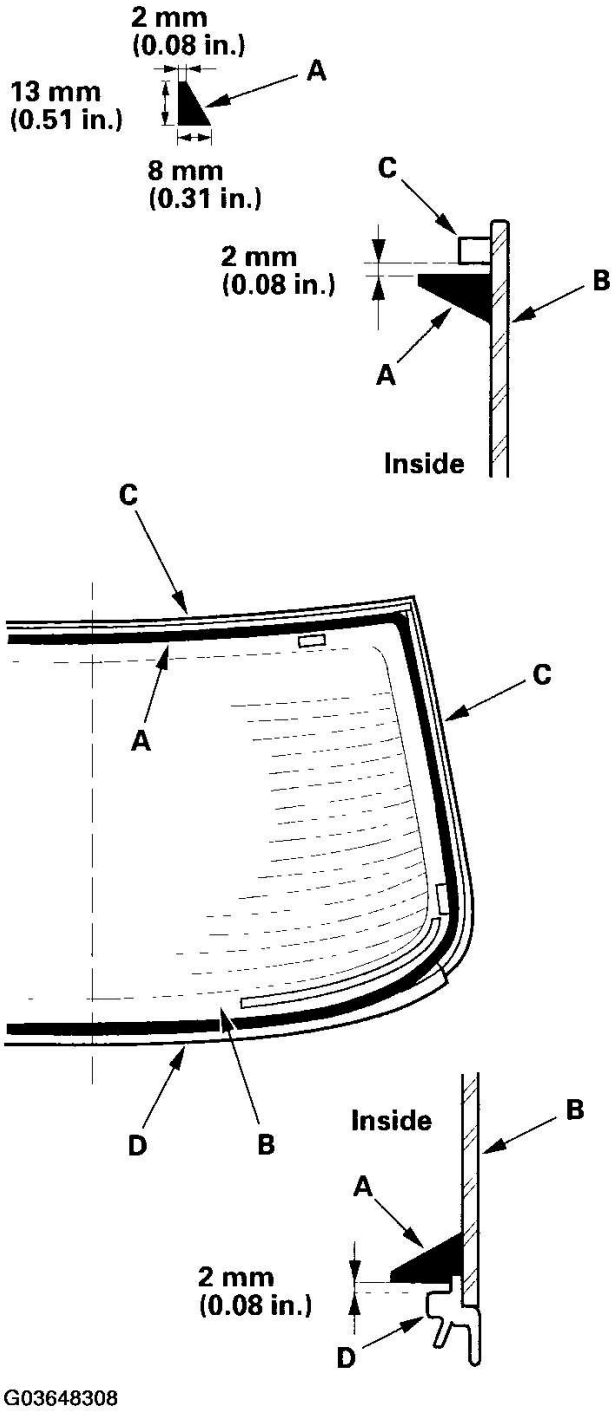


Fig. 35: Running Bead Of Adhesive Around Edge Of Rear Window

Between Dams And Molding (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Use suction cups to hold the rear window over the opening, align it with the alignment marks you made in step 15, and set it down on the adhesive. Lightly push on the rear window until its edges are fully seated on the adhesive all the way around. Do not open or close the doors until the adhesive is dry.

NOTE: Do not open or close any of the doors for about an hour until the adhesive is dry.

24. Scrape or wipe the excess adhesive off with a putty knife or towel. To remove adhesive from a painted surface or the rear window, use a soft shop towel dampened with alcohol.
25. After the adhesive has dried, spray water over the rear window and check for leaks. Mar the leaking sealant. Let the vehicle stand for at least 4 hours after rear window installation. If the vehicle has to be used within the first 4 hours, it must be driven slowly.
26. Reinstall all remaining removed parts.

NOTE: Advise the customer not to do the following things for 2 to 3 days:

- **Slam the doors with all the windows rolled up.**
- **Twist the body excessively (such as when going in and out of driveways at an angle or driving over rough, uneven roads).**

QUARTER GLASS REPLACEMENT

2-DOOR

NOTE:

- **Put on gloves to protect your hands.**
- **Use seat covers to avoid damaging any surface.**

1. Remove these items:

- C-pillar trim, without side curtain airbags (see **2-DOOR-C-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**), with side curtain airbags (see **2-DOOR-C-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-06 MODELS)**)
- Side trim panel, as necessary (see **TRIM REMOVAL/INSTALLATION - REAR SIDE AREA**)
- Front seat belt upper anchor (see step 6 on **FRONT SEAT BELT - 2-DOOR**)
- B-pillar upper trim, without side curtain airbags (see **2-DOOR-B-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**), with side curtain airbags (see **2-DOOR-B-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-06 MODELS)**)

2. Apply protective tape along the inside and outside edges of the body, and along the edge of the headliner. Using an awl, make a hole through the adhesive from inside the vehicle. Push a piece of piano wire through the hole, and wrap each end around a piece of wood.
3. Remove the front seal (A) from the front edge of the quarter glass (B). If necessary, cut the front seal with a utility knife.

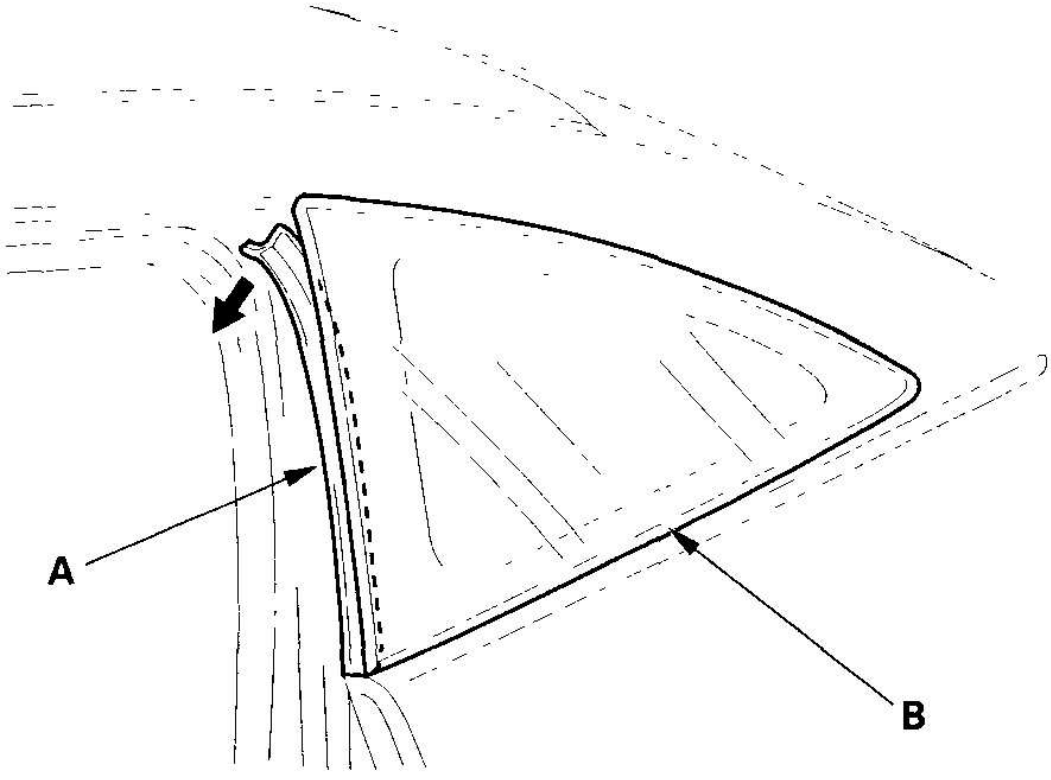


Fig. 36: Removing Front Seal From Front Edge Of Quarter Glass
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Carefully cut through the adhesive (A) at the rear corner portion of the quarter glass (B) with a utility knife. With a helper on the outside, pull the piano wire (C) back and forth in a sawing motion. Hold the piano wire as close to the quarter glass as possible to prevent damage to the body, and carefully cut through the adhesive around the entire quarter glass:
   - If the quarter glass is to be reinstalled, take care not to damage the molding (D).
   - If the molding is damaged, replace the quarter glass, molding, and clips (E) as an assembly.
   - If any of the clips are broken, the quarter glass can be reinstalled using butyl tape (refer to step 9).

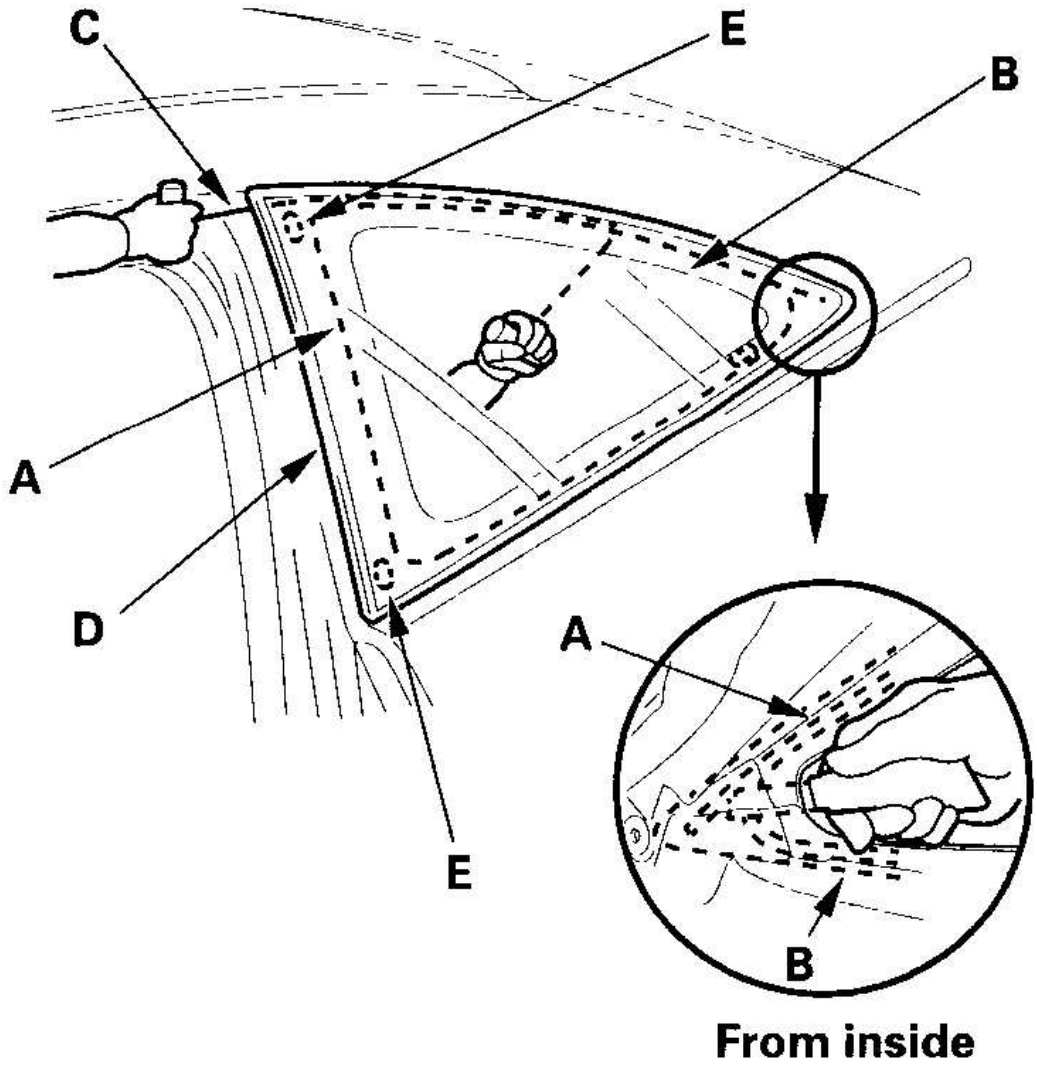


Fig. 37: Cutting Adhesive At Rear Corner Portion Of Quarter Glass
Courtesy of AMERICAN HONDA MOTOR CO., INC.

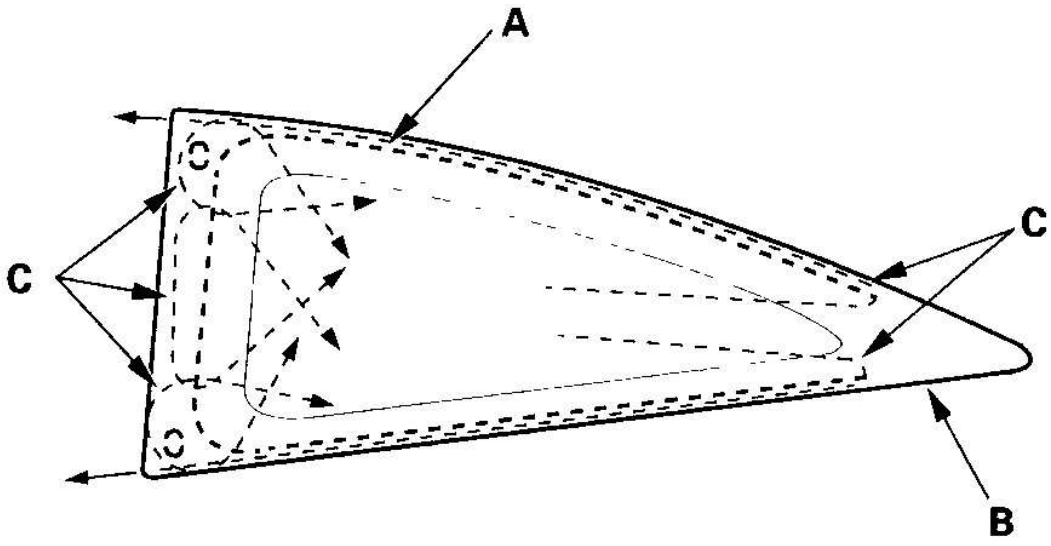


Fig. 38: Identifying Cutting Positions
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Carefully remove the quarter glass.
6. With a putty knife, scrape the old adhesive smooth to a thickness of about 2 mm (0.08 in.) on the bonding surface around the entire quarter glass opening flange:
   - Do not scrape down to the painted surface of the body; damaged paint will interfere with proper bonding.
   - Remove the clips and fastener from the body.
7. Clean the body bonding surface with a sponge dampened in alcohol. After cleaning, keep oil, grease, and water from getting on the surface.
8. If the old quarter glass is to be reinstalled, use a putty knife to scrape off all of the old adhesive, any broken clips, and the fastener from the glass. Clean the inside face and the edge of the glass with alcohol where new adhesive is to be applied. Make sure the bonding surface is kept free of water, oil, and grease.
9. If the old quarter glass is to be reinstalled (and either clip is broken off the molding), apply a light coat of primer, then apply butyl tape (A) to the molding

(B) as shown in **Fig. 39**. Attach the fastener (C) with adhesive tape to the inside face of the quarter glass (D):

- Be careful not to touch the quarter glass where adhesive will be applied.
- Do not peel the separator off the butyl tape.

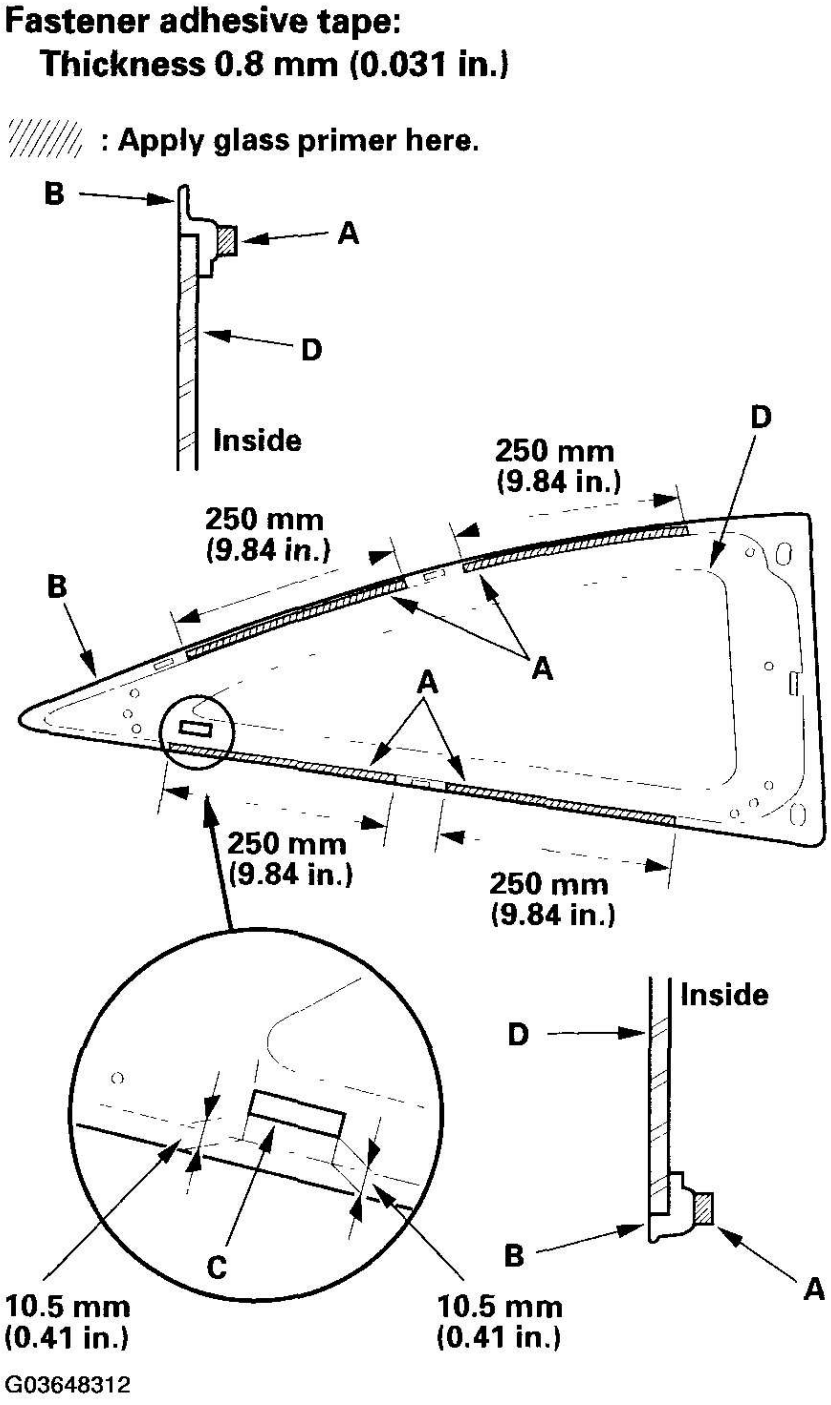


Fig. 39: Applying Butyl Tape To Molding
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Attach the front seal (A) with adhesive tape (B) onto the molding (C).

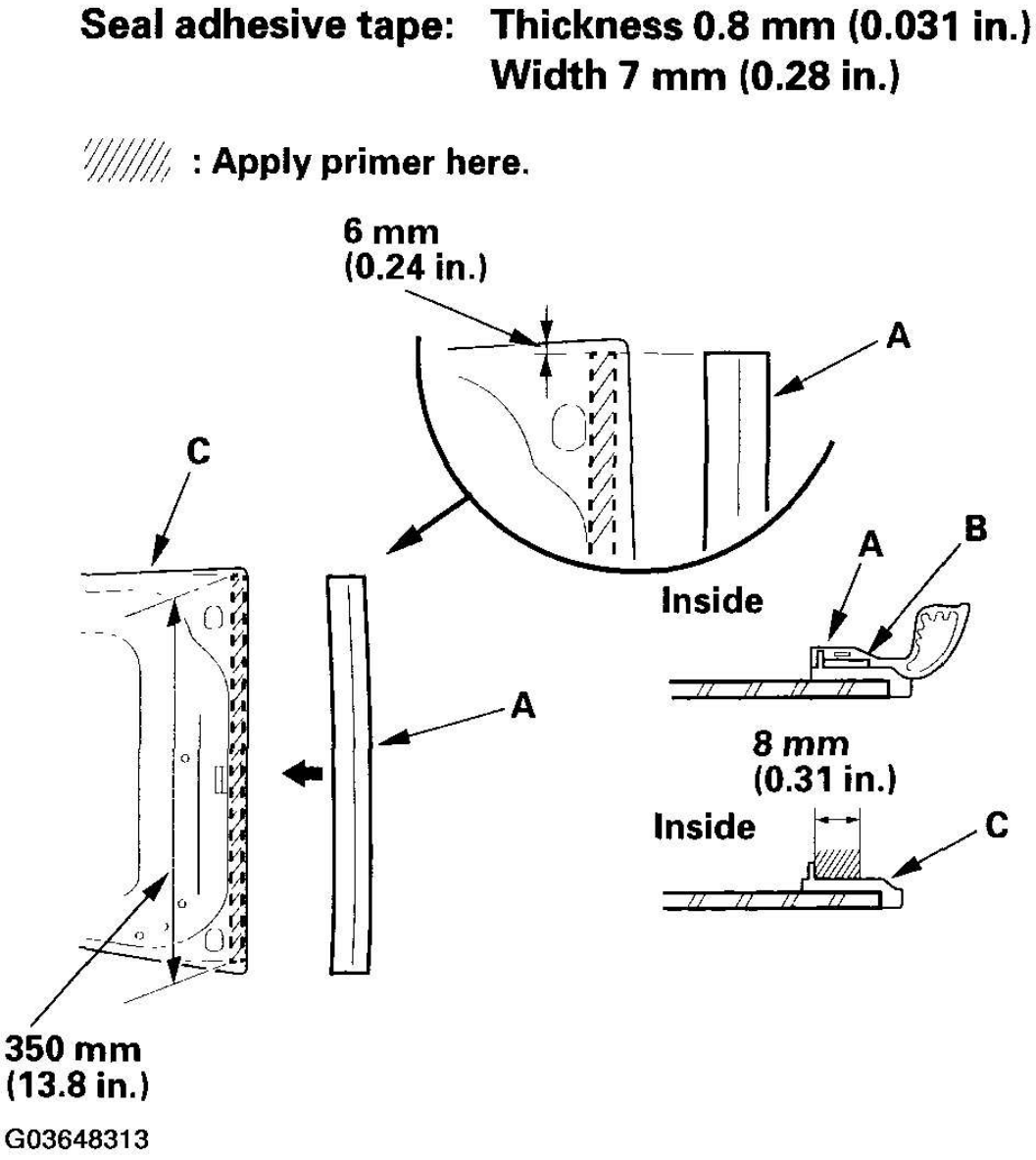


Fig. 40: Attaching Front Seal With Adhesive Tape Onto Molding
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Attach the fastener (A) to the body. Be sure the fastener lines up with the alignment marks (B).

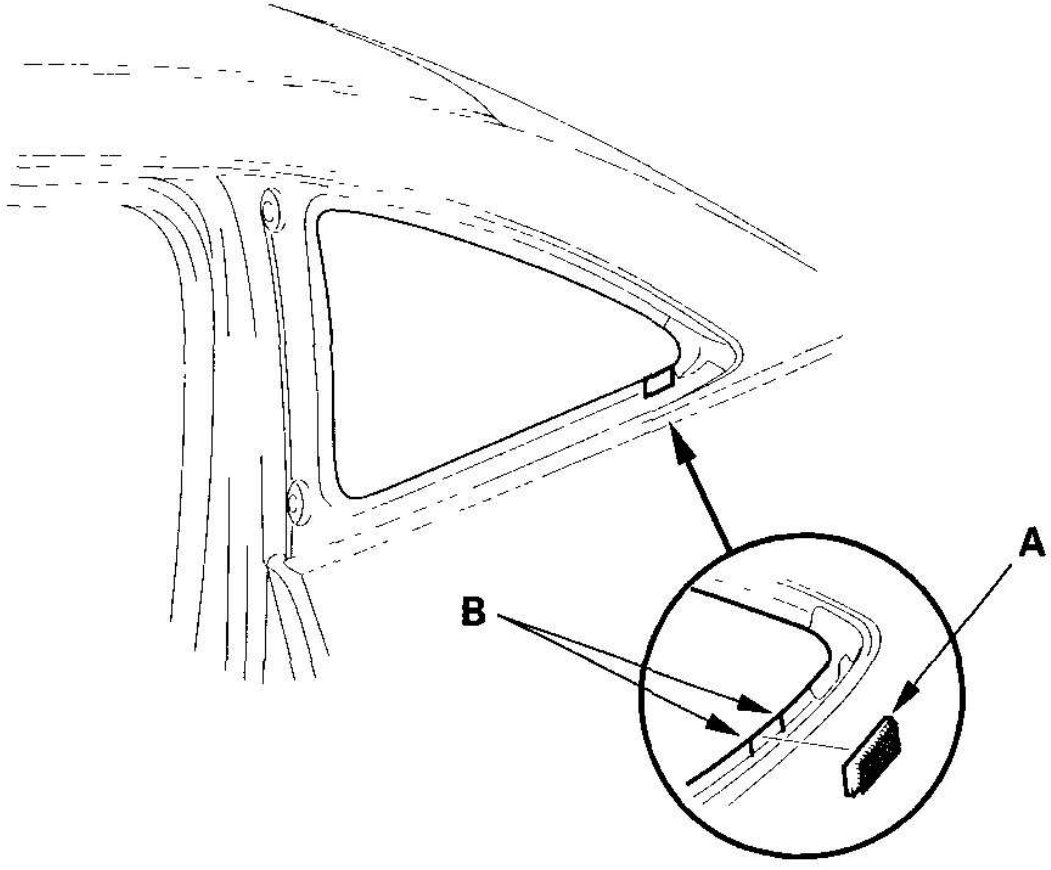


Fig. 41: Attaching Fastener To Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. If the old quarter glass is to be reinstalled (and either clip is broken off the molding), seal the body holes with pieces of urethane tape (A). Then set the quarter glass upright in the opening, and make alignment marks (B) across the quarter glass and body with a grease pencil at the three points shown below. Be careful not to touch the quarter glass where adhesive will be applied.

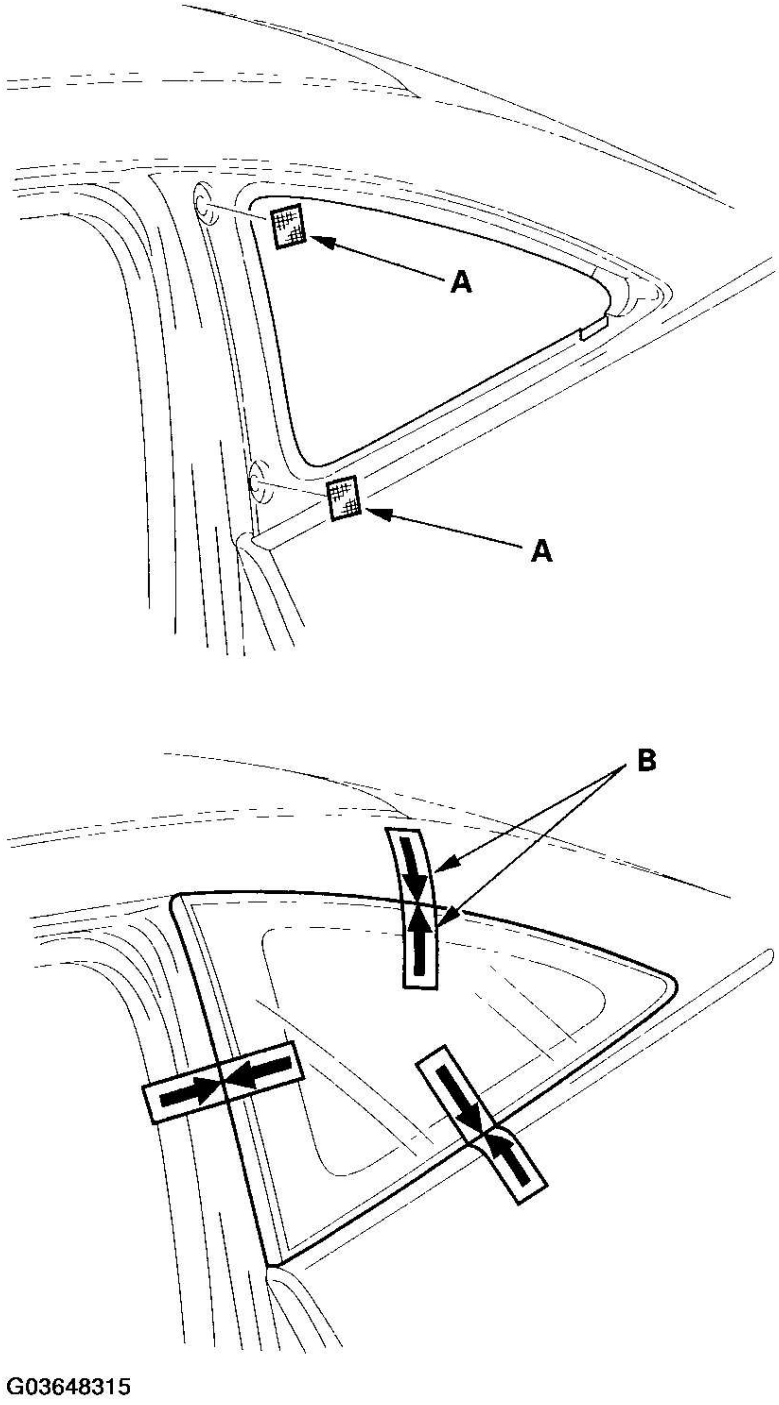


Fig. 42: Sealing Body Holes With Pieces Of Urethane Tape
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Remove the quarter glass.
14. With a sponge, apply a light coat of glass primer along the edge of the front seal (A) and molding (B) as shown in **Fig. 43**, then lightly wipe it off with gauze or cheesecloth:
    - With the printed dots (C) on the quarter glass (D) as a guide, apply the glass primer to the front portion of the quarter glass.
    - Do not apply body primer to the quarter glass, and do not get body and glass primer sponges mixed up.
    - Never touch the primed surfaces with your hands. If you do, the adhesive may not bond to the quarter glass properly, causing a leak after the quarter glass is installed.
    - Keep water, dust, and abrasive materials away from the primed surfaces.

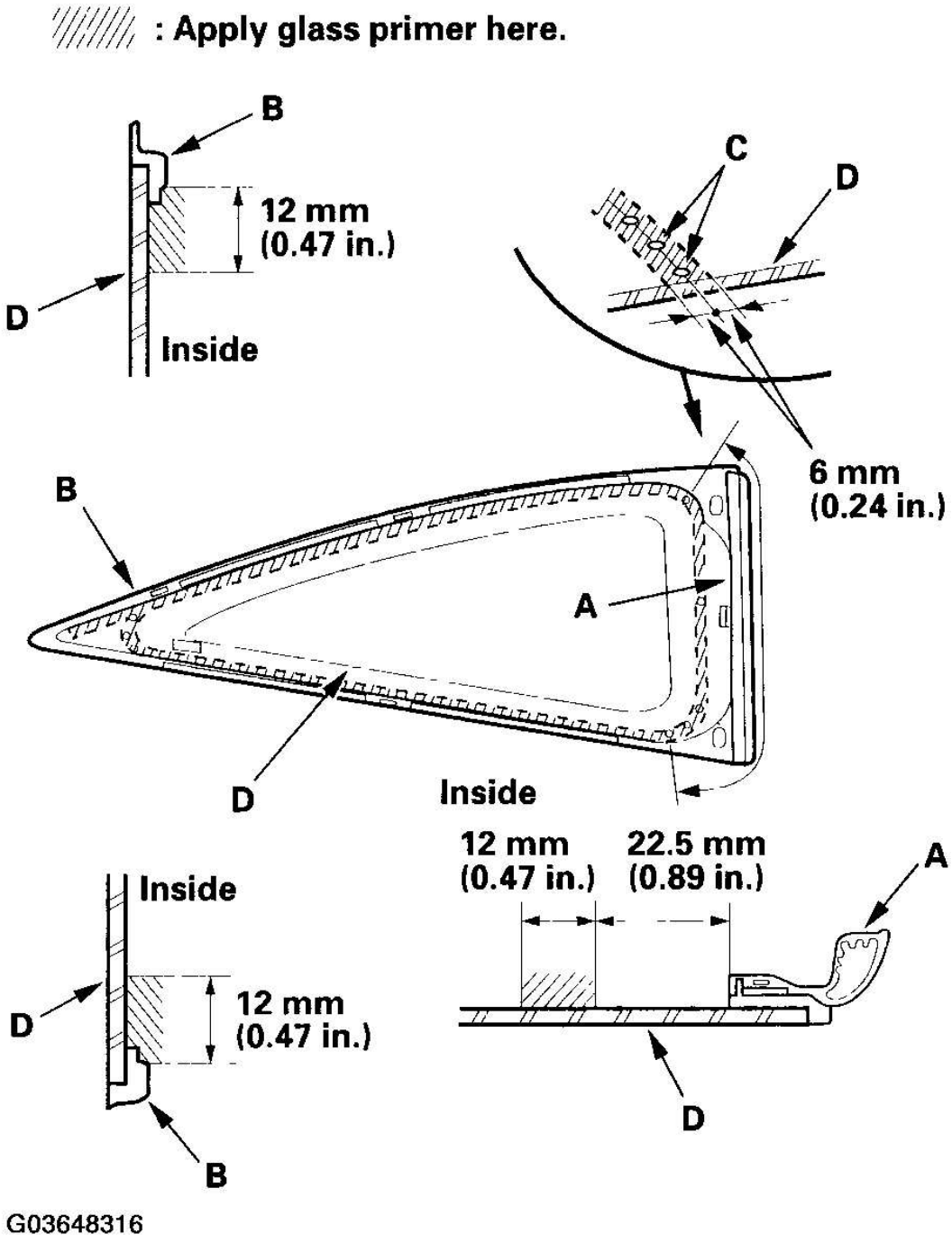


Fig. 43: Applying Light Coat Of Glass Primer Along Edge Of Front Seal And Molding

Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. With a sponge, carefully apply a light coat of body primer to any exposed paint or metal around the flange where new adhesive will be applied. Let the primer dry for at least 10 minutes:
    - Do NOT apply body primer to any remaining original adhesive on the flange.
    - Be careful not to mix up the body and glass primer sponges.
    - Never touch the primed surfaces with your hands.

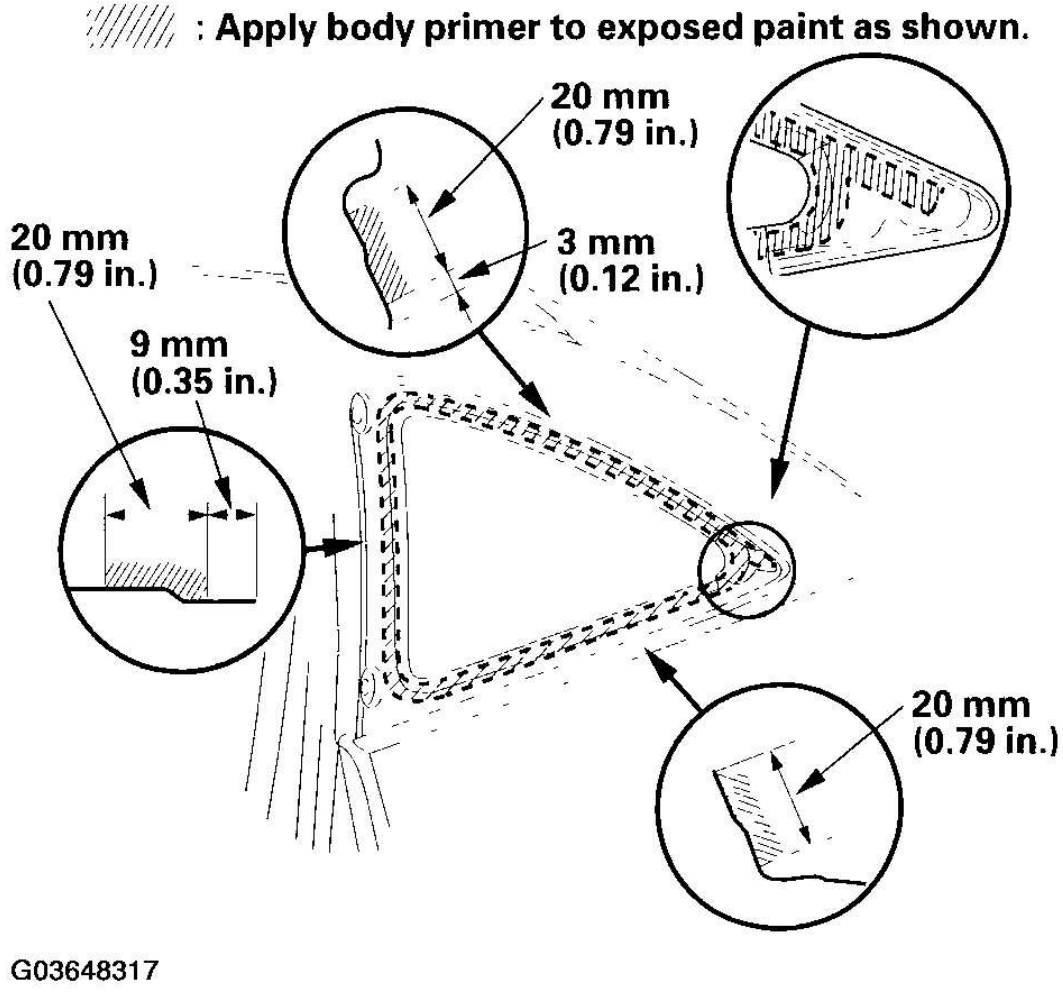


Fig. 44: Applying Light Coat Of Body Primer To Exposed Paint Or Metal Around Flange
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Cut a "V" in the end of the nozzle (A) on the adhesive cartridge as shown below.

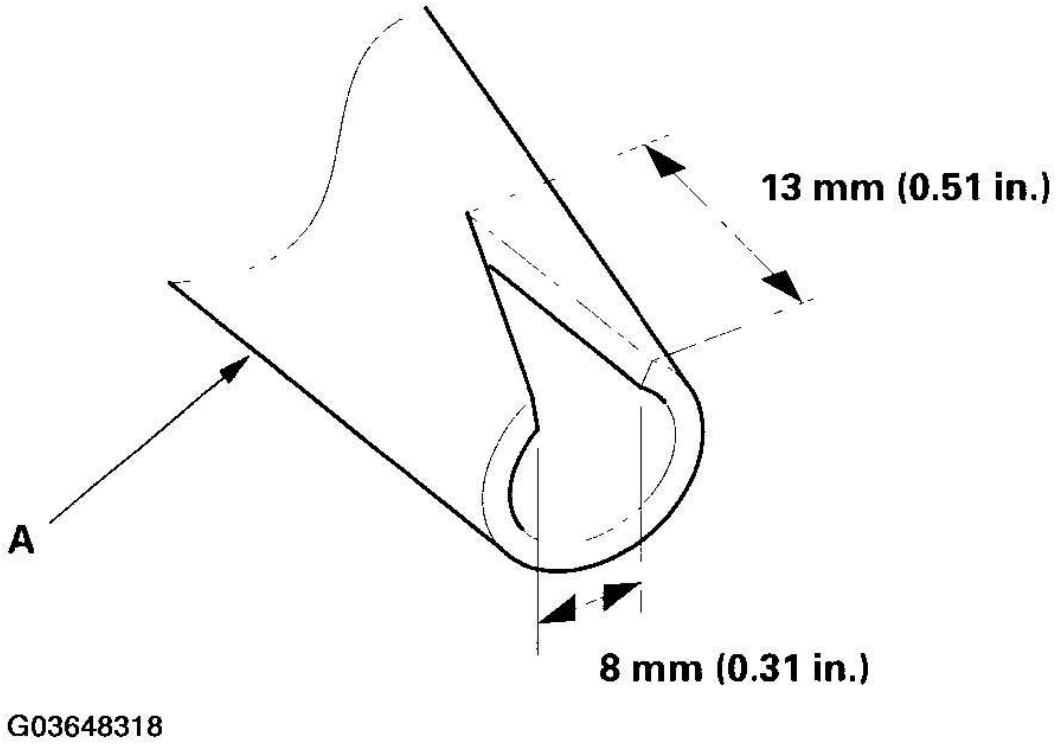


Fig. 45: Cutting "V" In End Of Nozzle On Adhesive Cartridge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Pack adhesive into the cartridge without air pockets to ensure continuous delivery. Put the cartridge in a caulking gun, and run a bead of adhesive (A) around the edge of the front seal (B) and molding (C) as shown below. With the glass primer (D) you applied in step 14 on the quarter glass (E) as a guide, apply the adhesive to the upper and lower corner portions of the quarter glass. Apply the adhesive within 30 minutes after applying the glass primer. Make a slightly thicker bead at each corner.

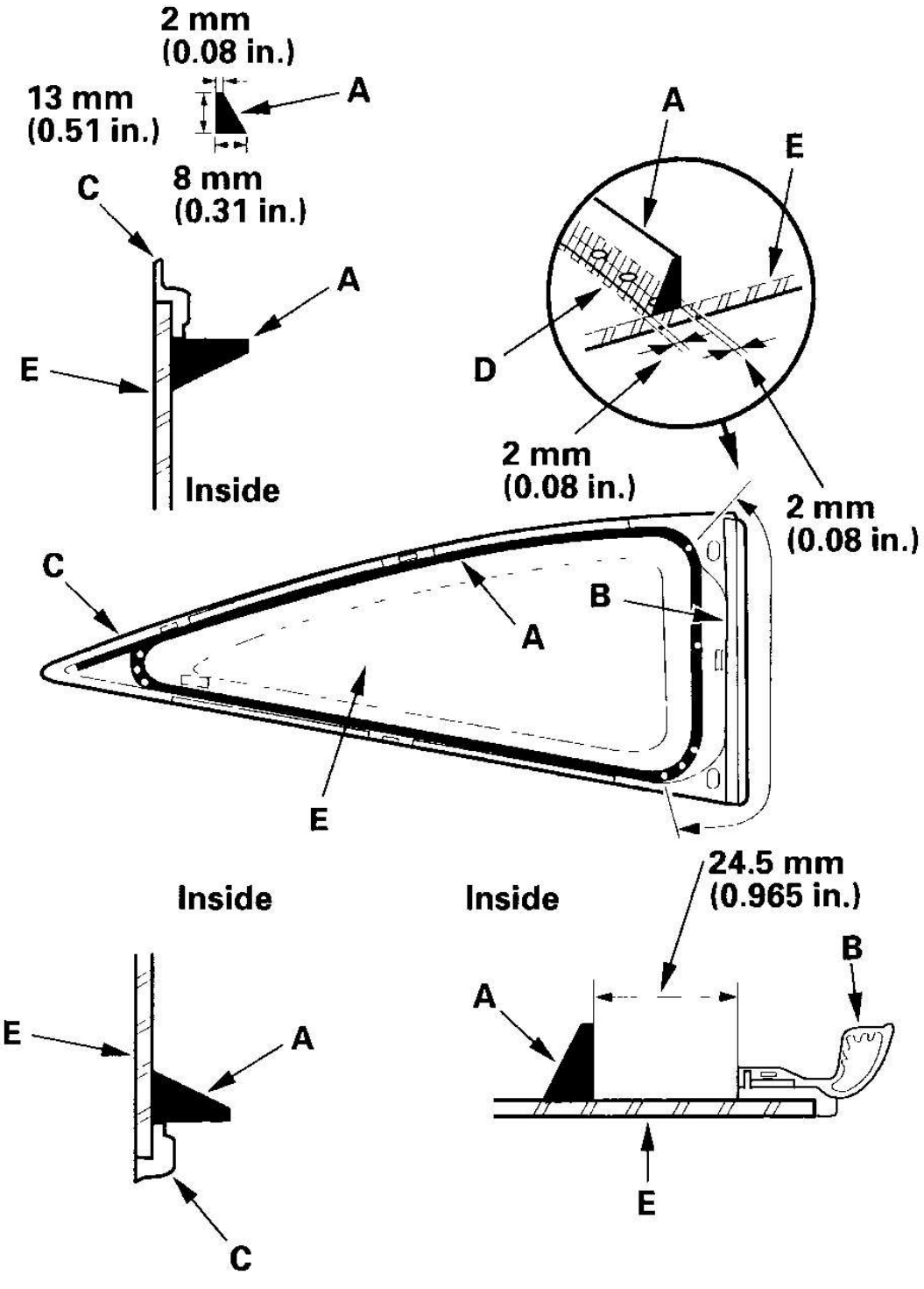

2 mm
(0.08 in.)
13 mm
(0.51 in.)
A
C
8 mm
(0.31 in.)
A
E
Inside
A
E
D
2 mm
(0.08 in.)
2 mm
(0.08 in.)
C
A
B
E
Inside
E
A
C
Inside
24.5 mm
(0.965 in.)
B
A
E
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Fig. 46: Running Bead Of Adhesive Around The Edge Of The Front Seal And Molding
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Use suction cups (A) to hold the quarter glass (B) over the opening, align the clips or the alignment marks (C) made in step 12, and set it down on the adhesive. Lightly push on the quarter glass until its edges are fully seated on the adhesive all the way around.

NOTE: Do not open or close the doors for about an hour until the adhesive is dry.

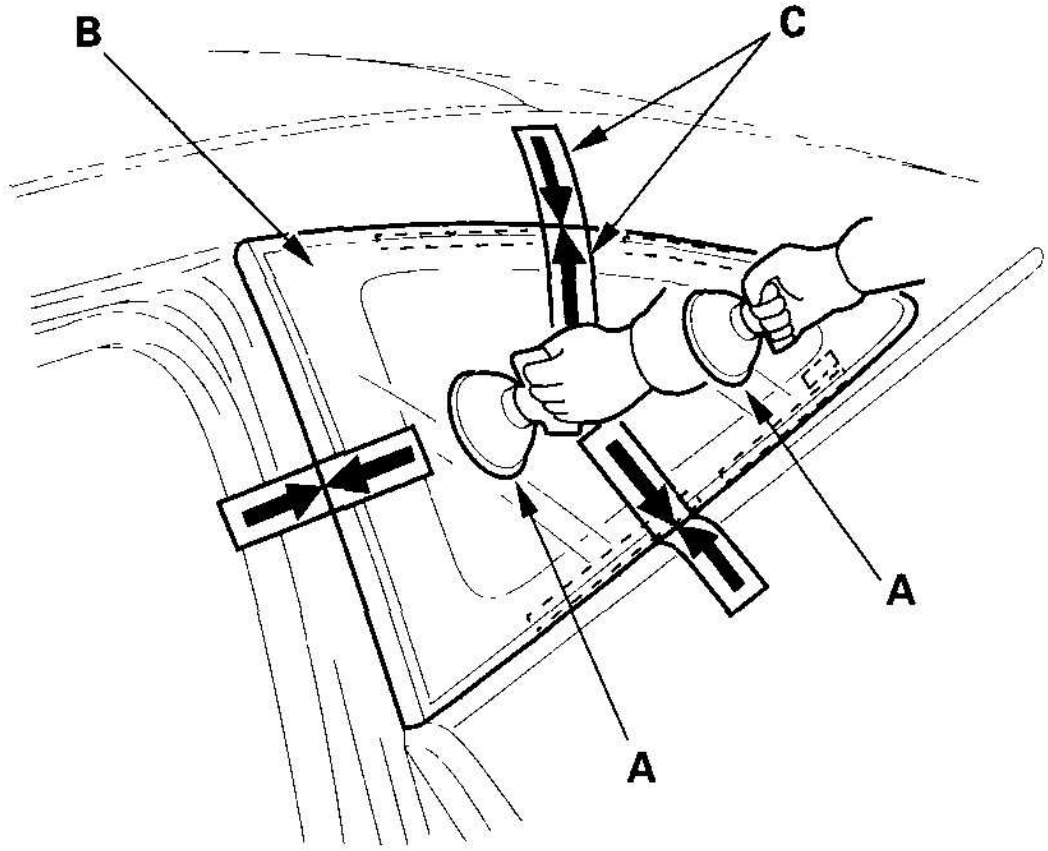


Fig. 47: Using Suction Cups To Hold Quarter Glass Over Opening

Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Scrape or wipe the excess adhesive off with a putty knife or towel. To remove adhesive from a painted surface or the quarter glass, wipe with a soft shop towel dampened with alcohol.
20. After the adhesive has dried, spray water over the quarter glass and check for leaks. Mark the leaking areas and let the quarter glass dry, then seal with sealant. Let the vehicle stand for at least 4 hours after quarter glass installation. If the vehicle has to be used within the first 4 hours, it must be driven slowly.
21. Reinstall all remaining removed parts.

NOTE: Advise the customer not to do the following things for 2 to 3 days:

- **Slam the doors with all the windows rolled up.**
- **Twist the body excessively (such as when going in and out of driveways at an angle or driving over rough, uneven roads).**

2003-07 ACCESSORIES & EQUIPMENT

Hood - Accord (V6)

HOOD SUPPORT STRUT REPLACEMENT

STABILUS TYPE

1. Remove the bolts securing the hood support strut (A) to the hood.

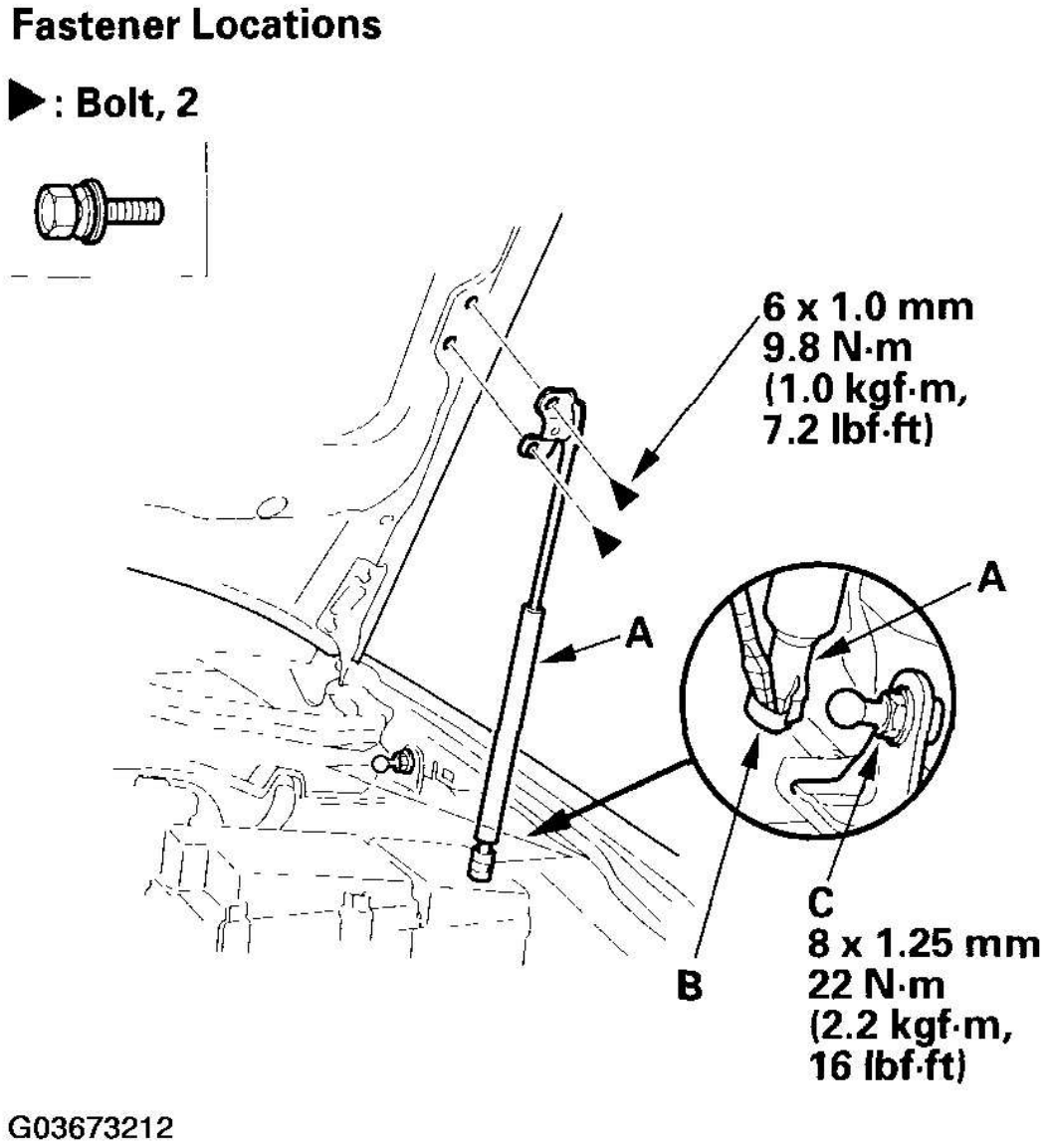


Fig. 1: Identifying Hood Support Strut Bolts (STABILUS Type)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Use a flat-tip screwdriver to pry the support strut clip (B) away from the strut, but do not remove the clip completely. While an assistant supports the hood, pull the support strut off the pivot bolt (C). Take care not to scratch the body or hood.

3. Push the clip (A) into its original position, and then push the support strut (B) onto the pivot bolt (C).

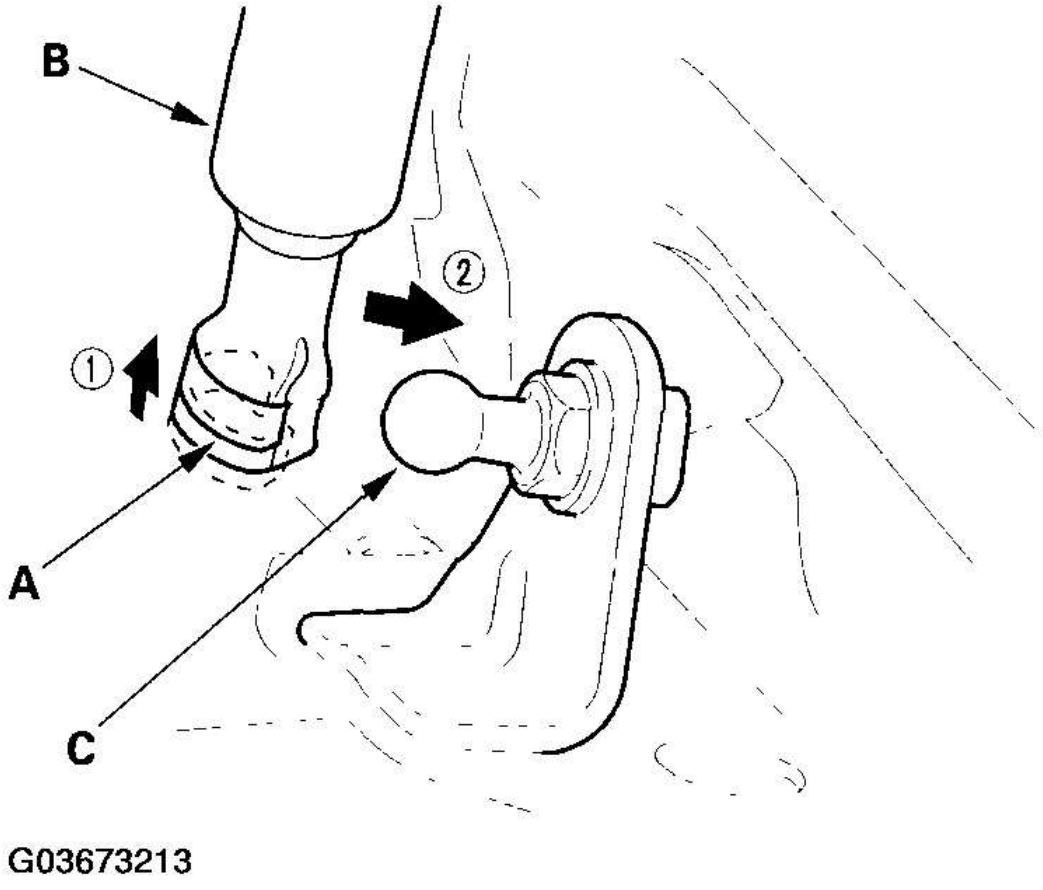


Fig. 2: Pushing Support Strut Onto Pivot Bolt (STABILUS Type)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Reinstall the bolts.

SHOWA TYPE ('03-05 MODELS)

1. While an assistant supports the hood, remove the pivot bolt (A) and hood side bolts, then remove the support strut (B). Take care not to scratch the body or hood.

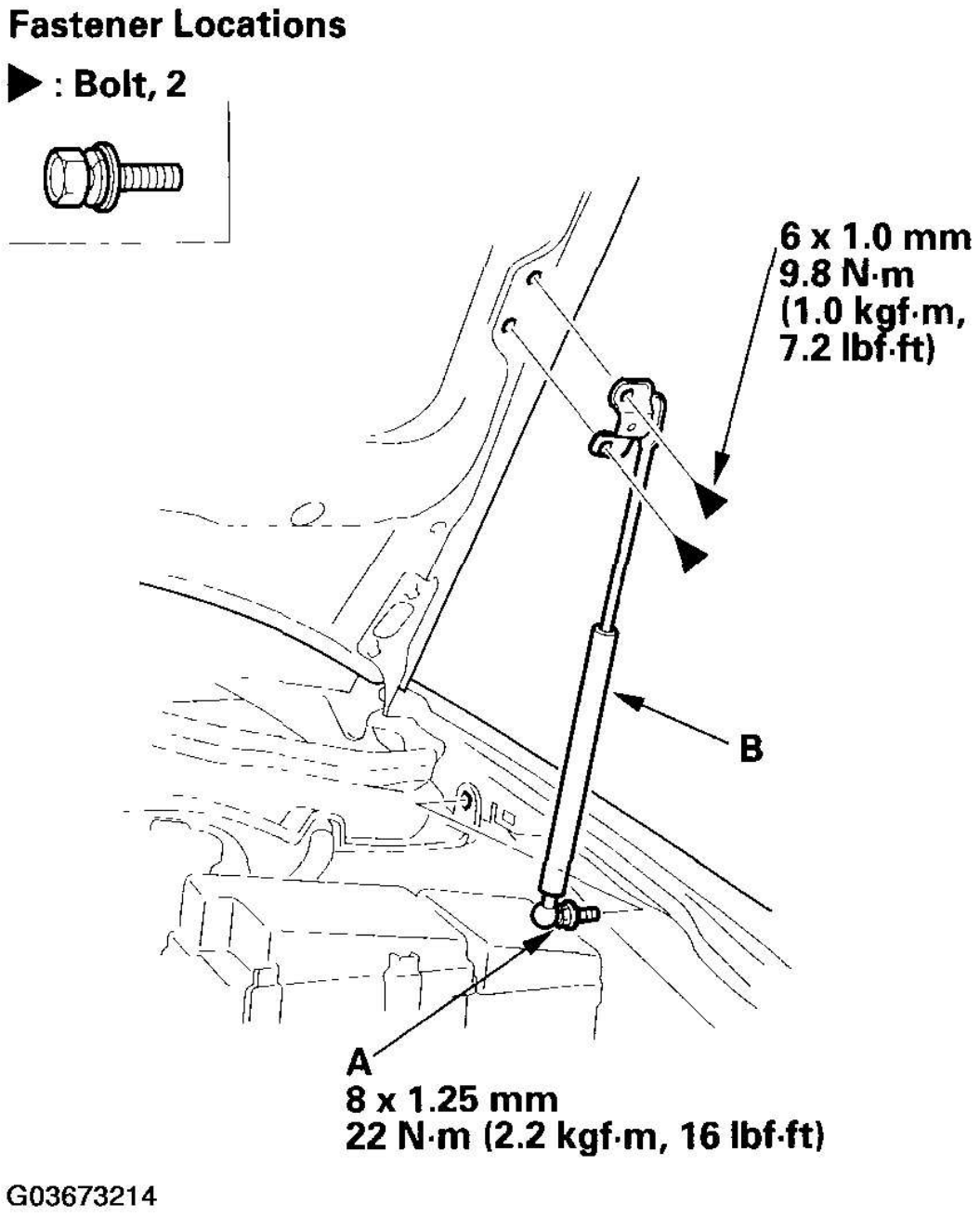


Fig. 3: Identifying Pivot Bolt & Hood Side Bolts (SHOWA Type)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the pivot bolt first, and then install the hood side bolts.

2003-07 ACCESSORIES & EQUIPMENT

Hood - Accord

ADJUSTMENT

1. Slightly loosen each hood hinge bolt.
2. Adjust the hood (A) alignment in this sequence.
   - Adjust the hood right and left, as well as forward and rearward, by using the elongated holes on the hood hinges (B).
   - Turn the hood edge cushions (C), as necessary, to make the hood fit flush with the body at the front and side edges.

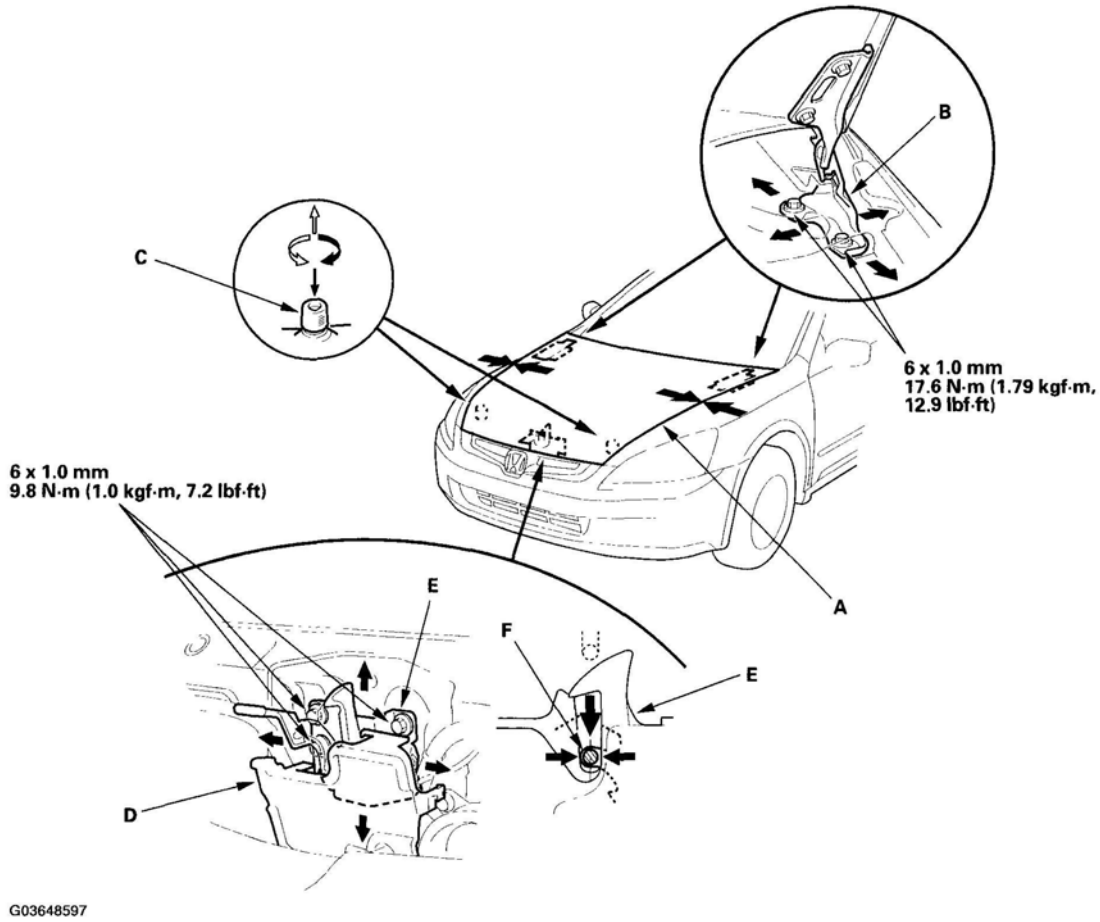


Fig. 1: Adjusting Hood Alignment
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the front bulkhead cover (see step 1 in **FRONT GRILLE REPLACEMENT**), and release the upper portion of the hood latch cover (D) as necessary. Adjust the hood latch (E) to obtain the proper height at the forward edge, and move the hood latch right or left until the striker (F) is centered in the hood latch.
4. Tighten the bolts to the specified torque.
5. Check that the hood opens properly and closes securely.
6. Apply touch-up paint to the hinge mounting bolts and around the hinges.
7. Apply multipurpose grease to the hood latch and hood hinge as indicated by the arrows shown below.

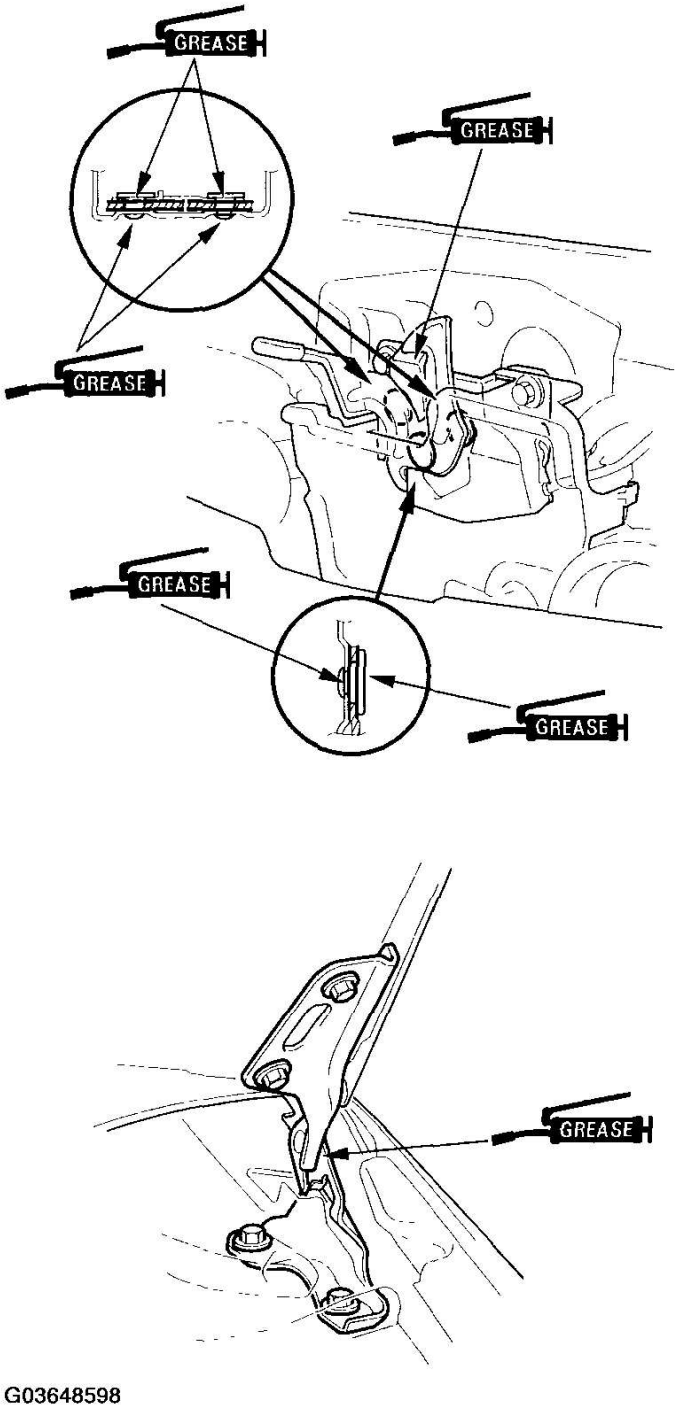


Fig. 2: Applying Multipurpose Grease To Hood Latch And Hood Hinge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Reinstall the front bulkhead cover.

HOOD SEAL AND HOOD MOLDING REPLACEMENT

1. Using a clip remover, detach the clips (A, B), then remove the hood seal (C) and hood corner seals (D).

   On Canadian models; remove the hood molding (E). Take care not to scratch the hood.

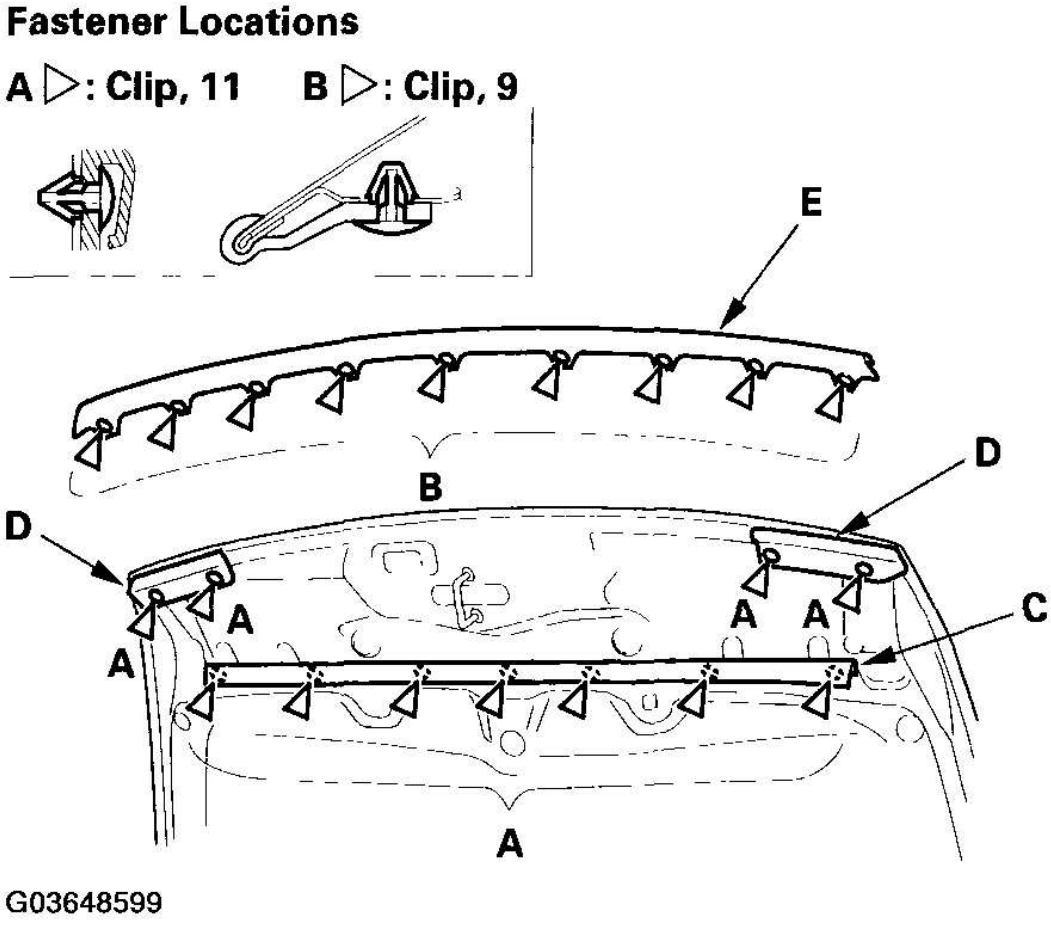


Fig. 3: Detaching Clips And Removing Hood Seal & Hood Corner Seals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

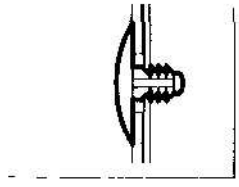
2. Install the seals in the reverse order of removal, and check the clip is damage or stress-whitened, and if necessary replace it with new one.

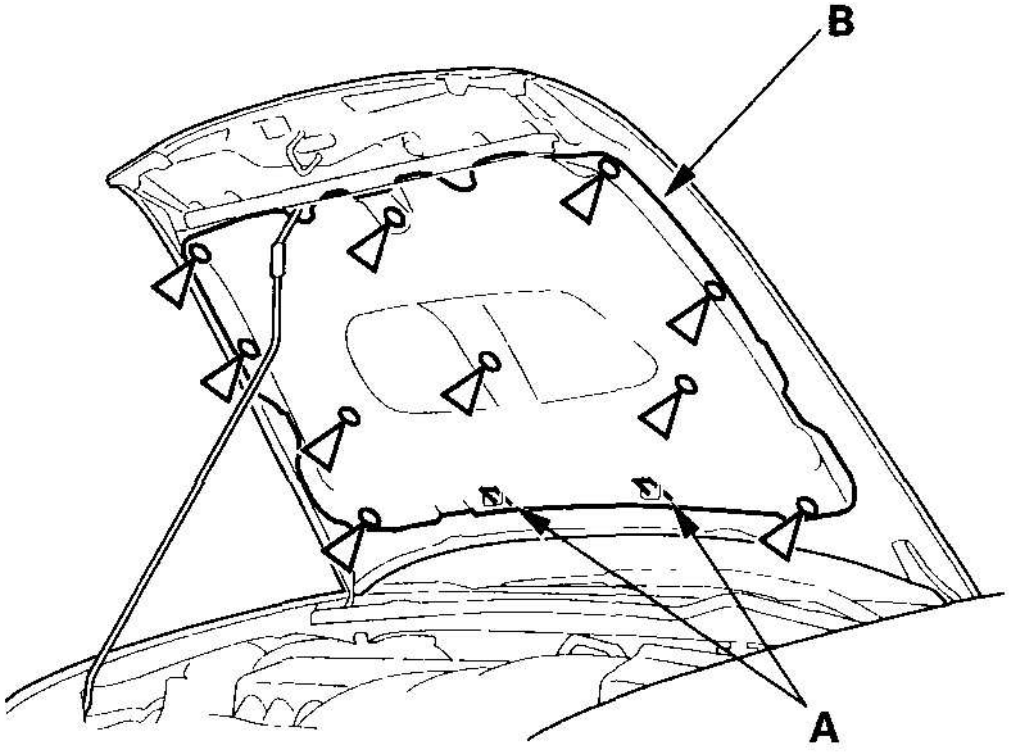
HOOD INSULATOR REPLACEMENT

1. Using a clip remover, detach the clips. Release the hooks (A), then remove the hood insulator (B). Take care not to scratch the hood.

Fastener Locations

▷ : Clip, 10





G03648600

Fig. 4: Removing Hood Insulator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the insulator in the reverse order of removal, and check if the clip is damaged or stress-whitened, and replace it with new one.

2003-07 ACCESSORIES & EQUIPMENT

Horns - Accord

COMPONENT LOCATION INDEX

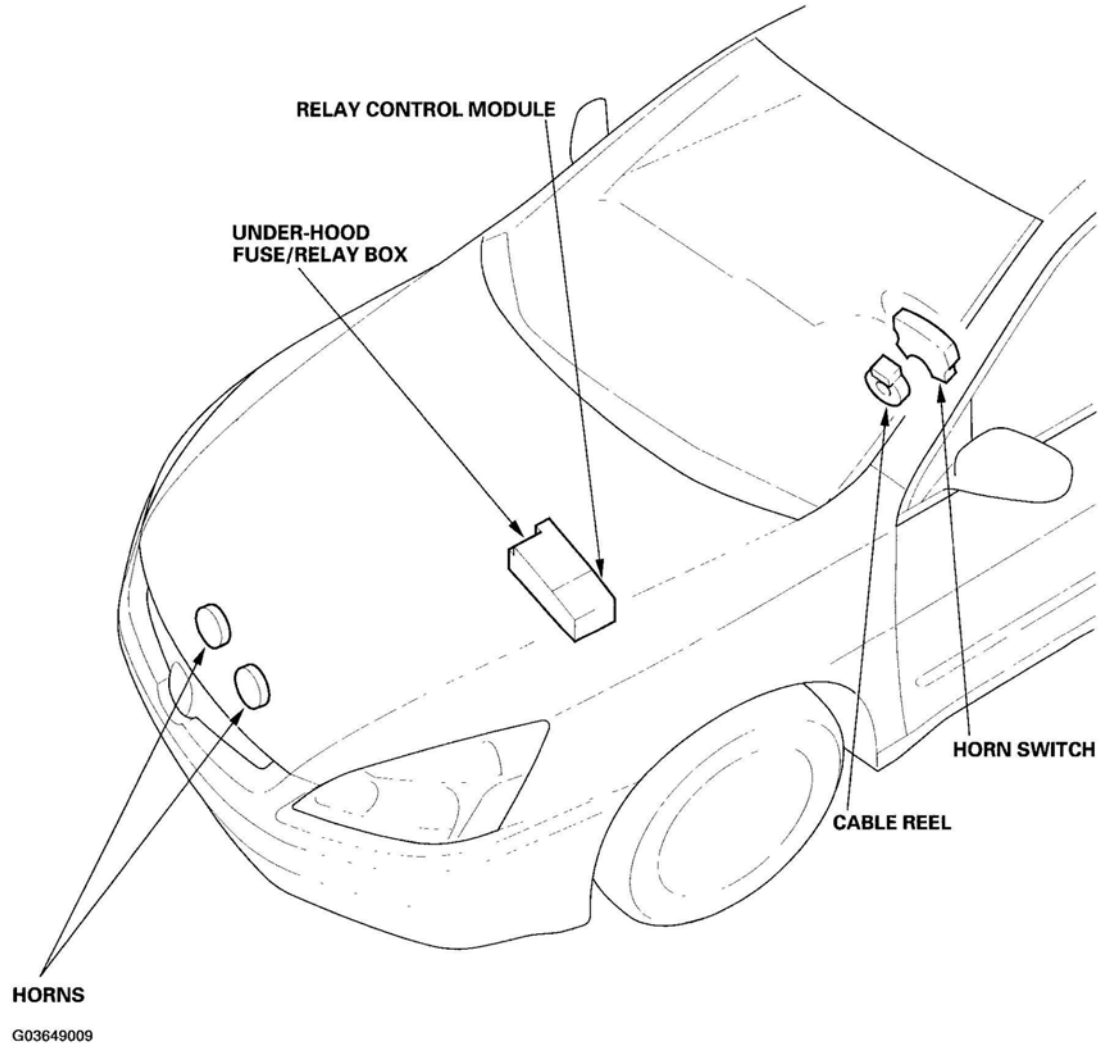


Fig. 1: Identifying Horns Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

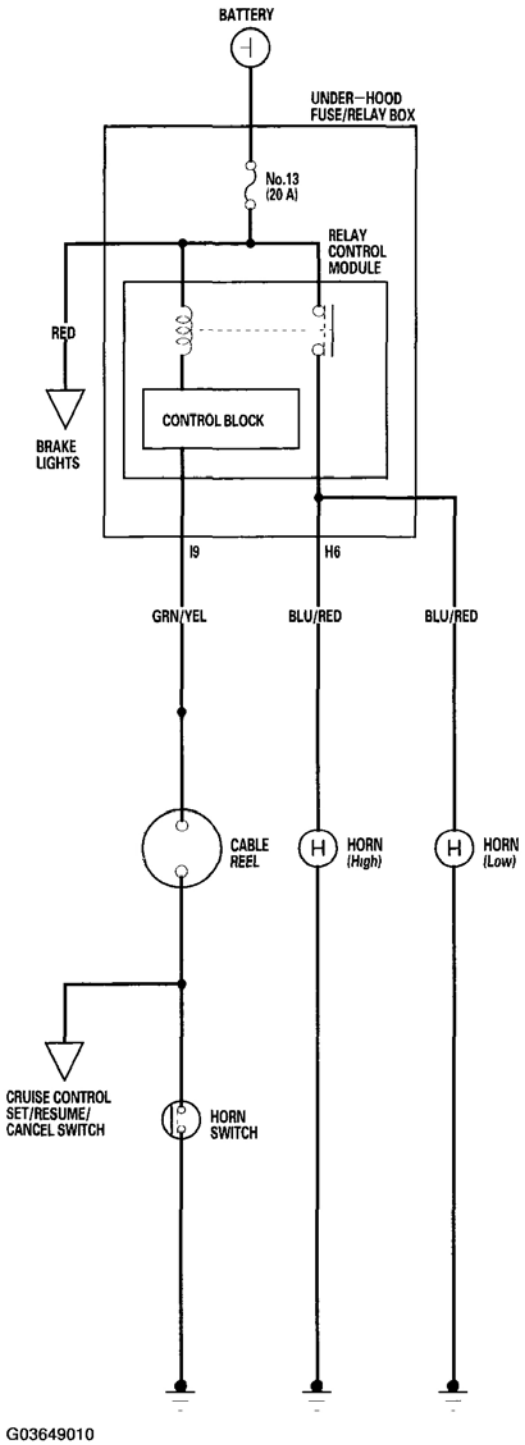


Fig. 2: Identifying Horns Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

HORN TEST/REPLACEMENT

1. Remove the front bulkhead cover (see **FRONT GRILLE REPLACEMENT**).
2. Disconnect the 1P connector (A) from each horn (B).

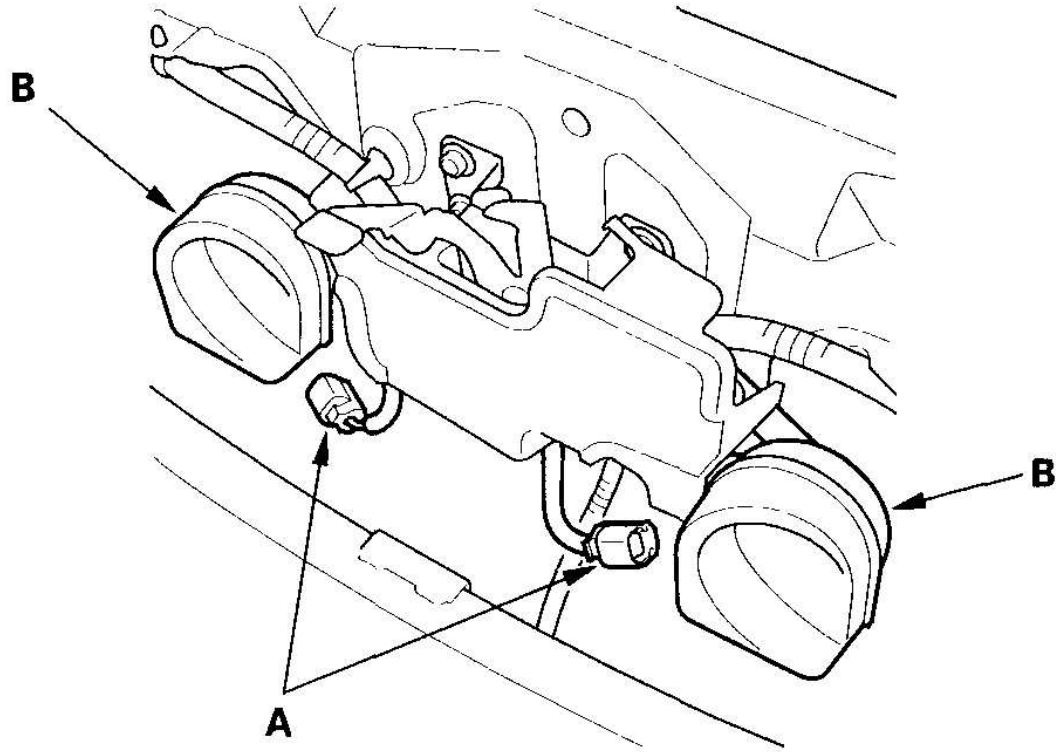


Fig. 3: Disconnecting 1P Connector From Each Horn
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Test the horn by connecting battery power to the terminal (A) and grounding the bracket (B). The horn should sound.

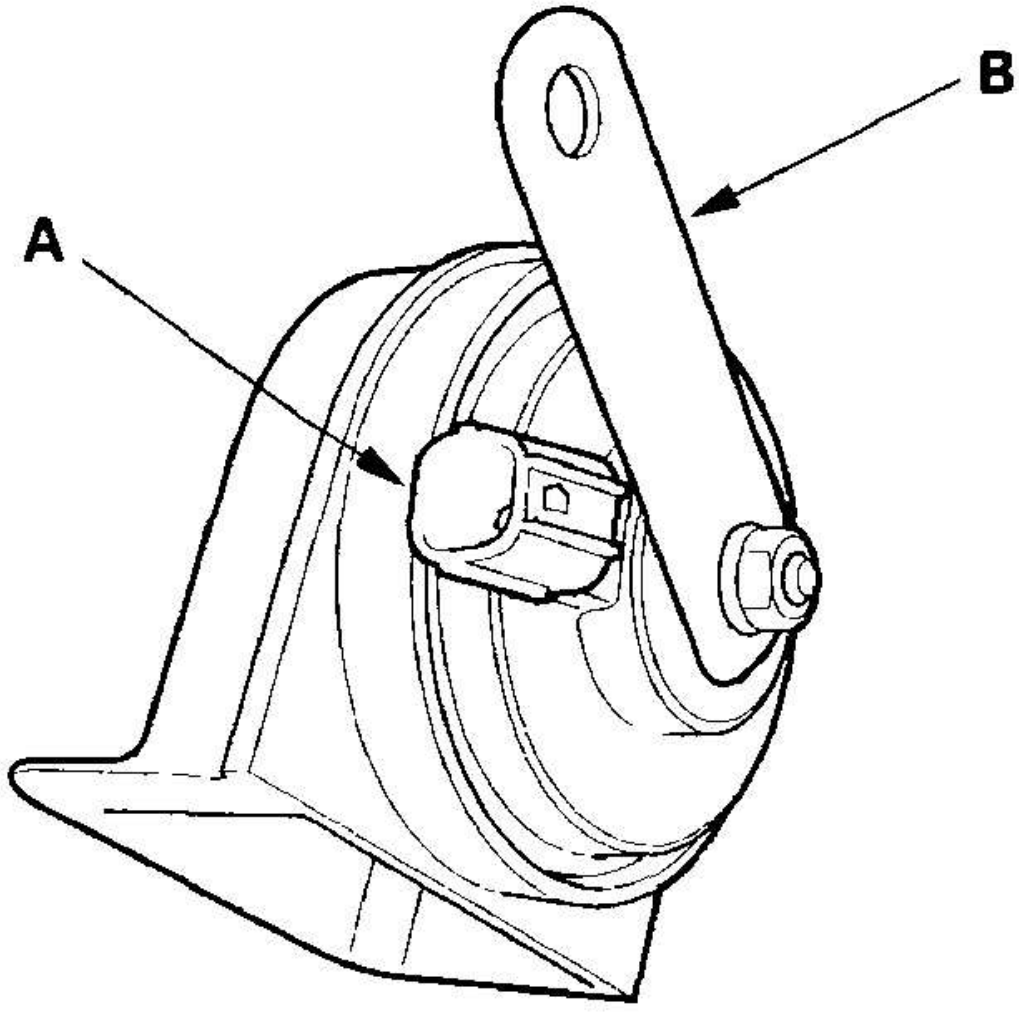


Fig. 4: Testing Horn Connecting Battery Power To Terminal And Grounding Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If it fails to sound, replace it.

HORN SWITCH TEST

1. Remove the steering column covers (see **STEERING COLUMN REMOVAL AND INSTALLATION**).
2. Disconnect the cable reel 5P (13P) connector (A) from the dashboard wire harness.

   ( ): With cruise control

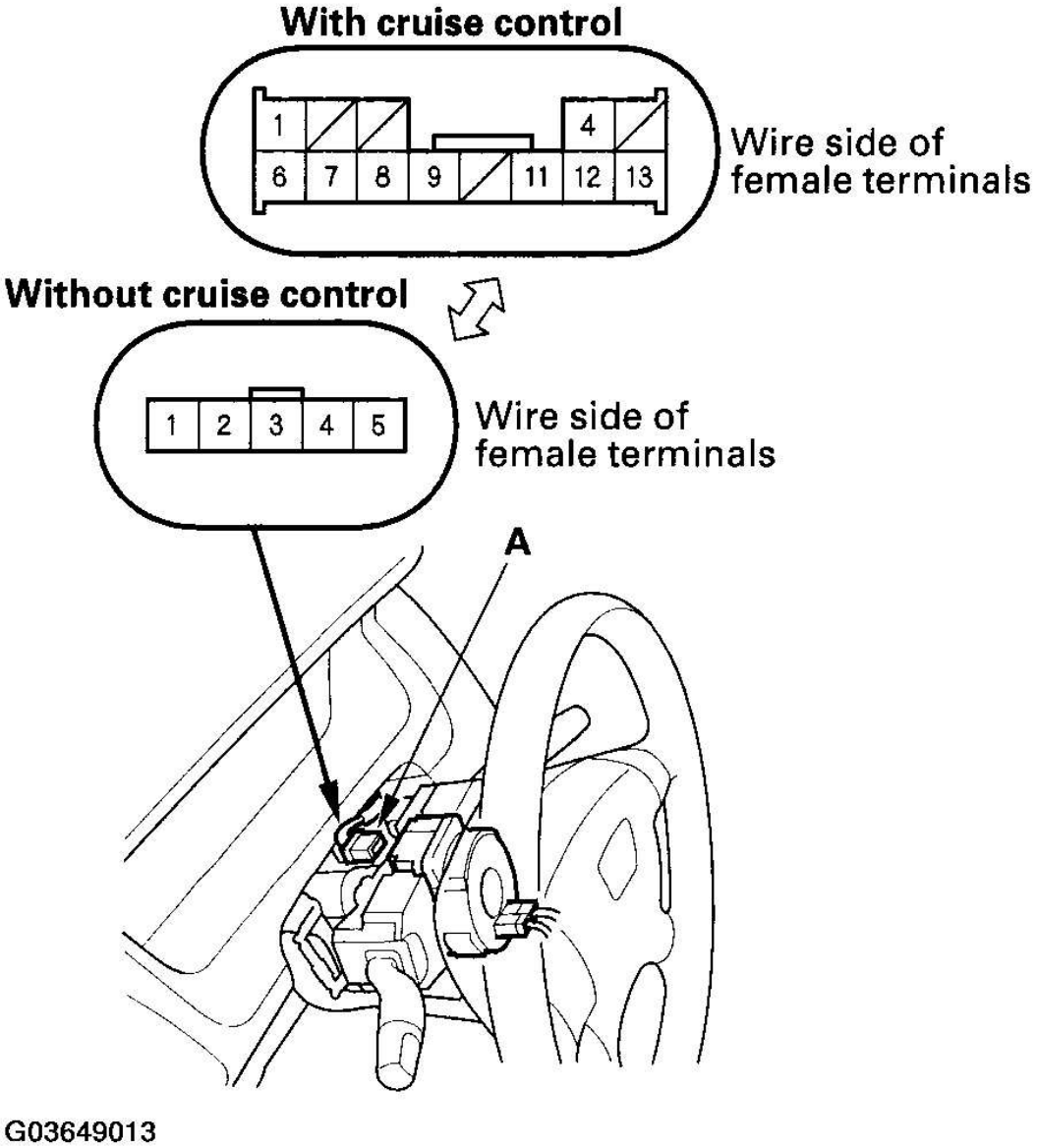


Fig. 5: Disconnecting Cable Reel 5P (13P) Connector From Dashboard Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Using a jumper wire, connect the No. 1 terminal of the dashboard wire harness 5P (or 13P) connector to body ground.
   - If the horns sound, go to step 4.
   - If the horns don't sound, check these items:
     -No. 13 (20 A) fuse in the under-hood fuse/relay box.
     -Relay control module in the under-hood fuse/relay box.
     -Horns (see **CIRCUIT DIAGRAM**).
     -An open in the wire.
4. Reconnect the cable reel 5P (13P) connector A to the dashboard wire harness.

( ): With cruise control

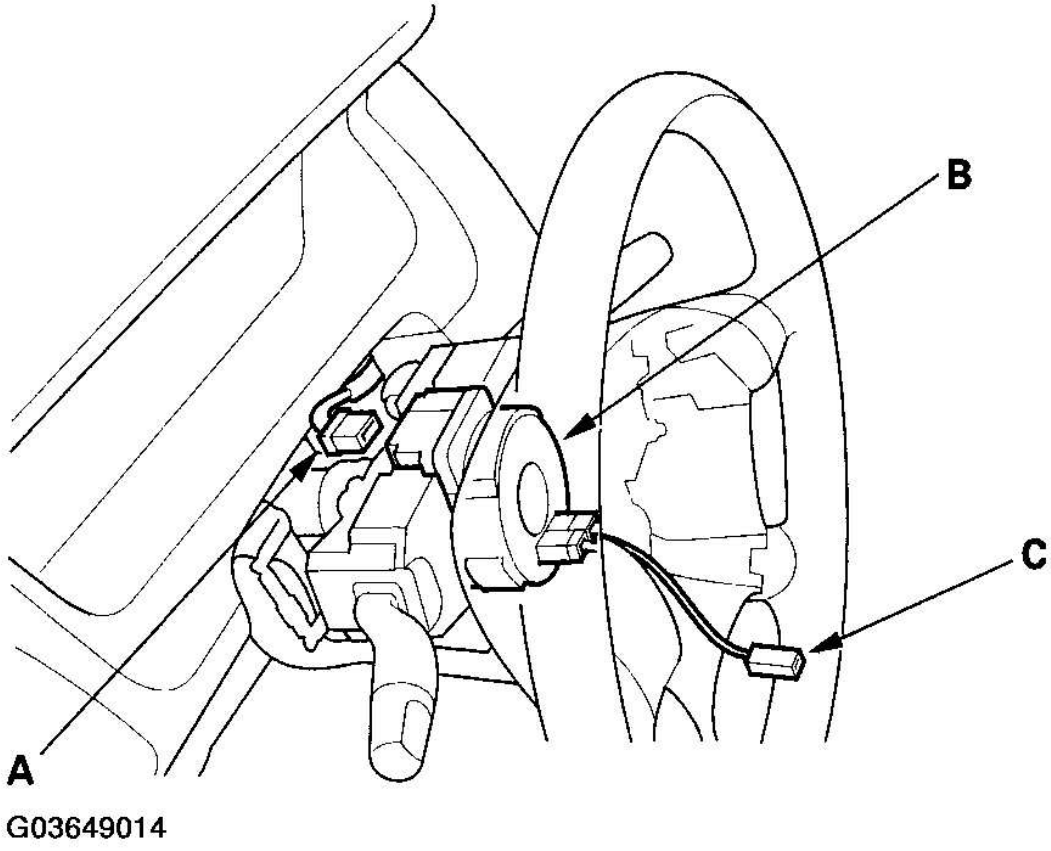


Fig. 6: Reconnecting Cable Reel 5P (13P) Connector To Dashboard Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the driver's airbag assembly (see **DRIVER'S AIRBAG REPLACEMENT**), and disconnect the horn switch 1P positive terminal from the cable reel (B).
6. Using a jumper wire, connect the cable reel side 1P connector (C) to body ground, and turn the wheel side to side.
   - If the horns sound, replace the driver's airbag assembly.
   - If the horns don't sound or sounds intermittently, replace the cable reel.

2003-07 HVAC

Heating/Air Conditioning - Accord (V6)

SUPPLEMENTAL RESTRAINT SYSTEM (SRS) (IF HVAC MAINTENANCE IS REQUIRED)

The Accord SRS includes a driver's airbag in the steering wheel hub, a passenger's airbag in the dashboard above the glove box, seat belt tensioners in the front seat belt retractors, side curtain airbags in the sides of the roof, and side airbags in the front seat-backs. Information necessary to safely service the SRS is **SRS (SUPPLEMENTAL RESTRAINT SYSTEM) (EXCEPT HYBRID & V6)** . Servicing, disassembling, or replacing these items require special precautions and tools, and should be done only by an authorized Honda dealer.

- To avoid rendering the SRS inoperative, which could lead to personal injury or death in the event of a severe frontal or side collision, all SRS service work must be performed by an authorized Honda dealer.
- Improper service procedures, including incorrect removal and installation of the SRS, could lead to personal injury caused by unintentional deployment of the airbags and/or side airbags.
- Do not bump or impact the SRS unit, front impact sensors, or side impact sensors when the ignition switch is ON (II), or for at least 3 minutes after the ignition switch is turned OFF; otherwise, the system may fail in a collision, or the airbags may deploy.
- SRS electrical connectors are identified by yellow color coding. Related components are located in the steering column, front console, dashboard, dashboard lower panel, in the dashboard above the glove box, in the front seats, in the roof side, and around the floor. Do not use electrical test equipment on these circuits.

COMPONENT LOCATION INDEX

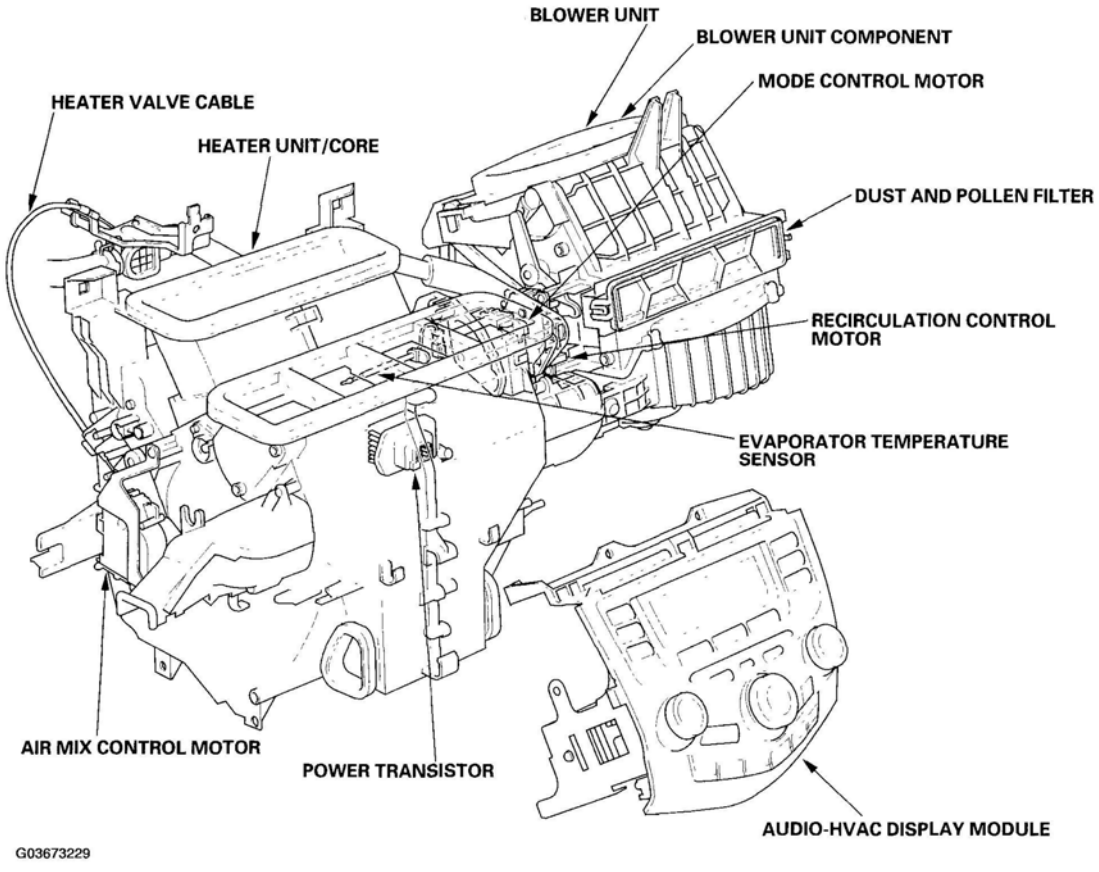


Fig. 1: Locating Heating/Air Conditioning Components (4-Door - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

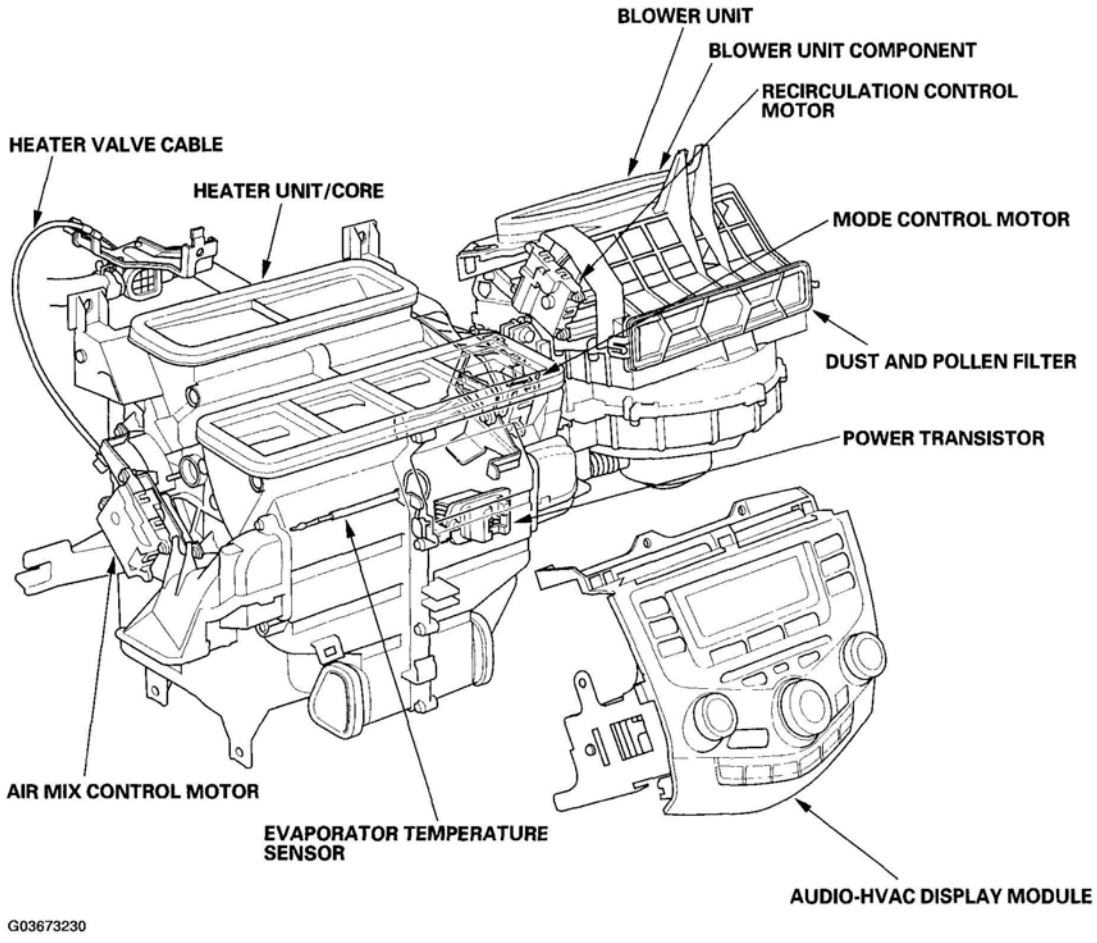


Fig. 2: Locating Heating/Air Conditioning Components (2-Door - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

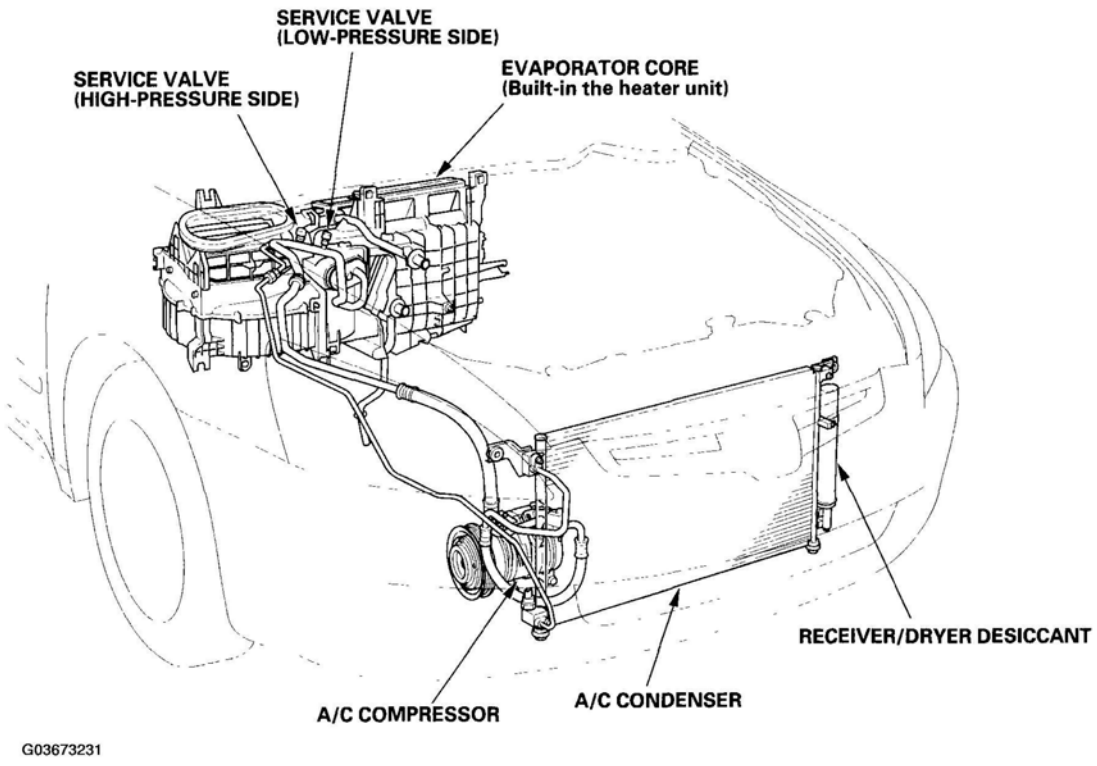


Fig. 3: Locating Heating/Air Conditioning Components (4-Door - 2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

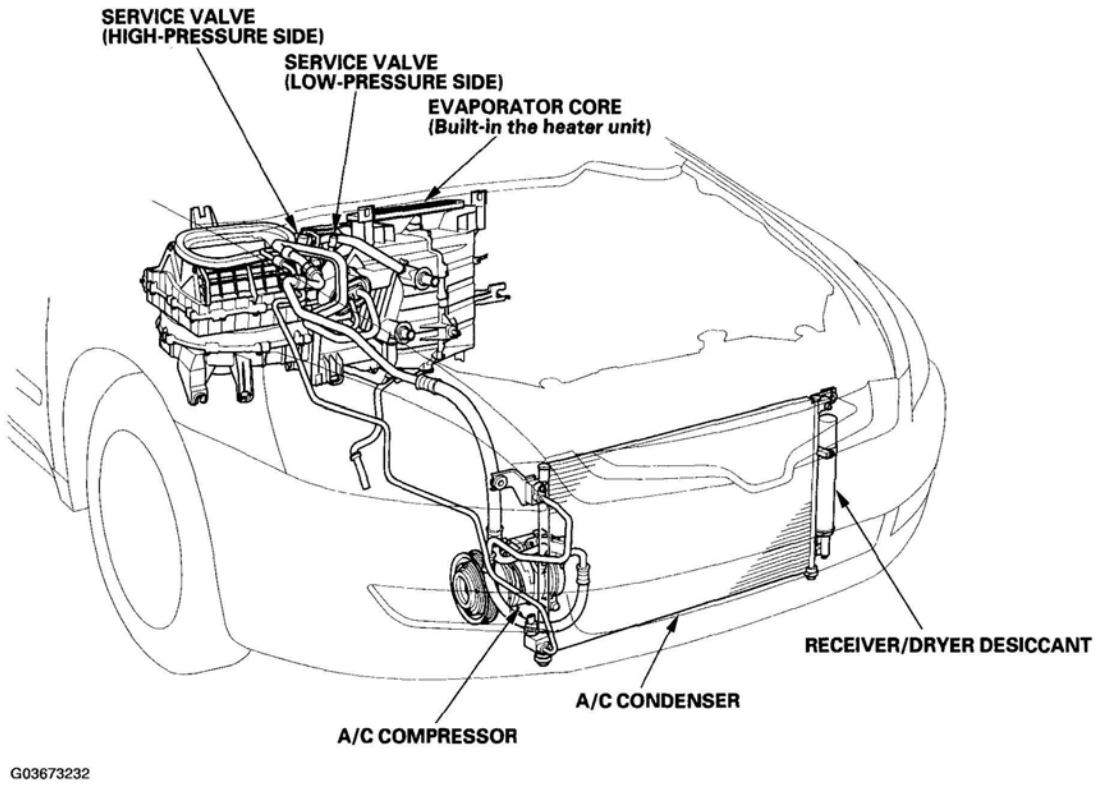


Fig. 4: Locating Heating/Air Conditioning Components (2-Door - 2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

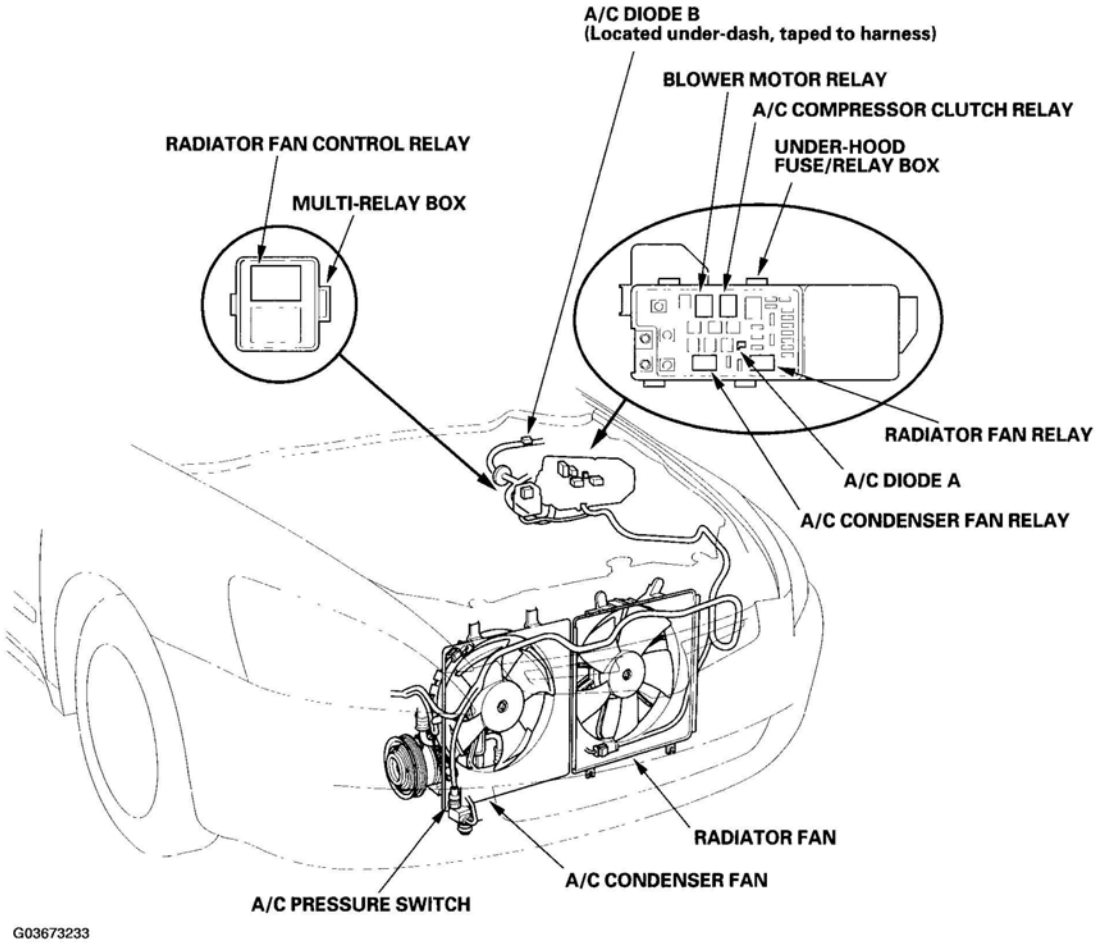


Fig. 5: Locating Heating/Air Conditioning Components (4-Door/2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C REFRIGERANT OIL REPLACEMENT

Recommended PAG oil: DENSO ND-OIL8

- P/N 38897-PR7-A01AH: 120 mL(4fl.oz)
- P/N 38899-PR7-A01: 40 mL (1 1/3 fl.oz)

Add the recommended refrigerant oil in the amount listed if you replace any of the following parts.

- To avoid contamination, do not return the oil to the container once dispensed, and never mix it with other refrigerant oils.

- Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
- Do not spill the refrigerant oil on the vehicle; it may damage the paint; if it gets on the paint, wash it off immediately.

RECOMMENDED REFRIGERANT OIL

A/C condenser	25ml (5/6 fl.oz)
Evaporator	45 ml (1 1/2 fl.oz)
Line or Hose	10 ml (1/3 fl.oz)
Receiver/Dryer	10 ml (1/3 fl.oz)
Leakage repair	25 ml (fl.oz)
A/C compressor	For A/C compressor replacement, subtract the volume oil drained from the removed A/C compressor from 160 ml (5 1/3 fl.oz), and drain the calculated volume of oil from the new A/C compressor: 160ml (5 1/3 fl.oz) - Volume of removed A/C compressor = Volume drain from new A/C compressor.

NOTE: Even if no oil is drained from the removed A/C compressor, don't drain more than 50 mL (1 2/3 fl.oz) from the new A/C compressor.

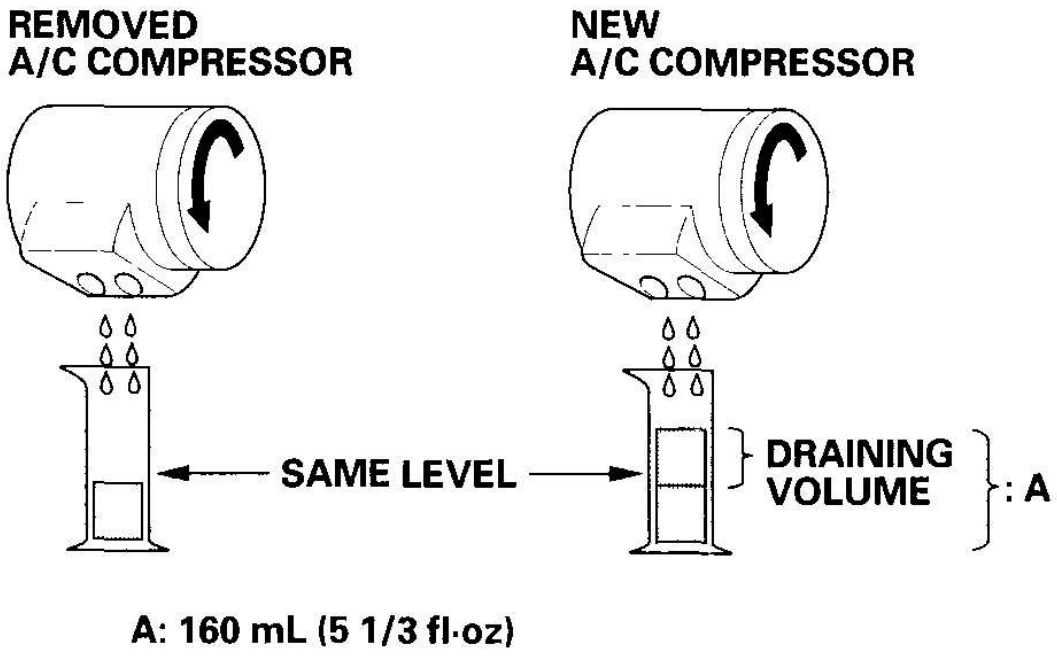
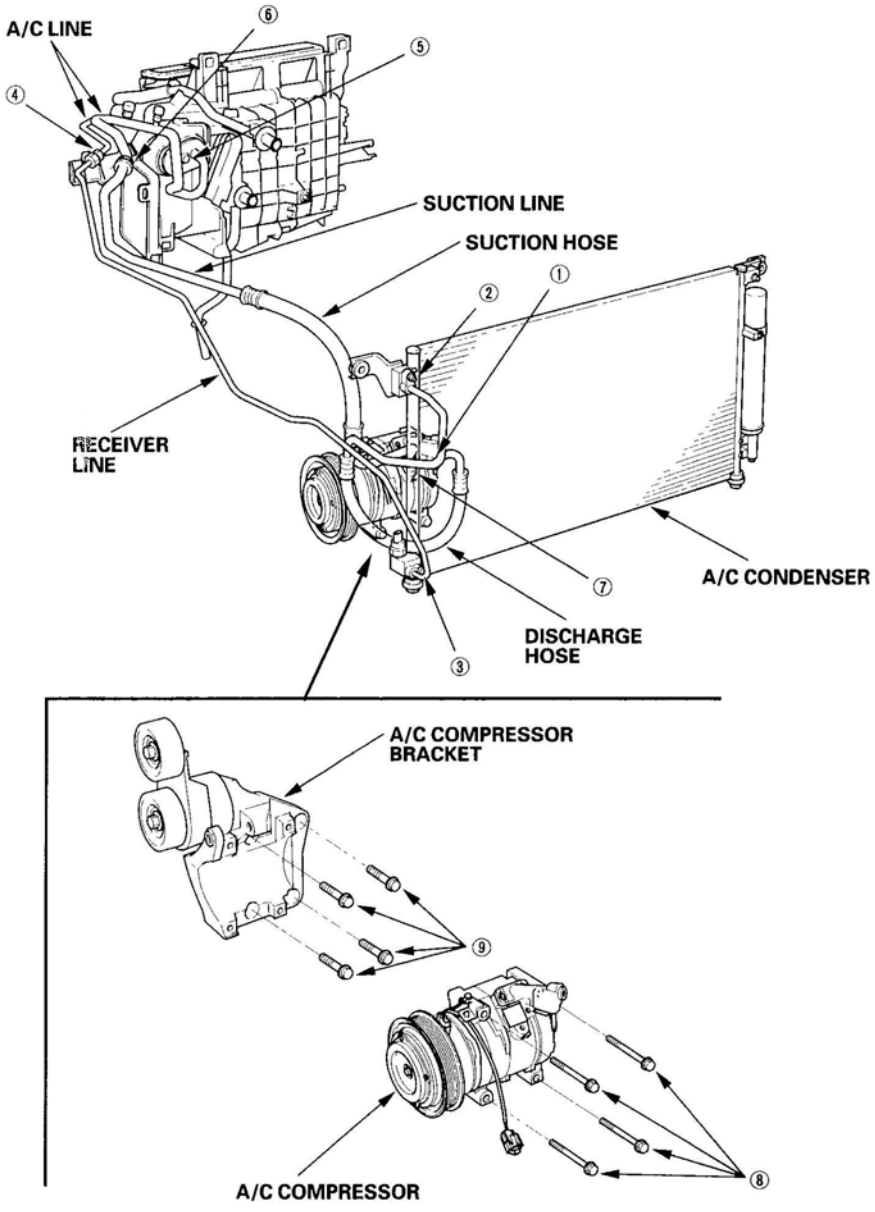


Fig. 6: Identifying A/C Compressor Fluid Level
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR

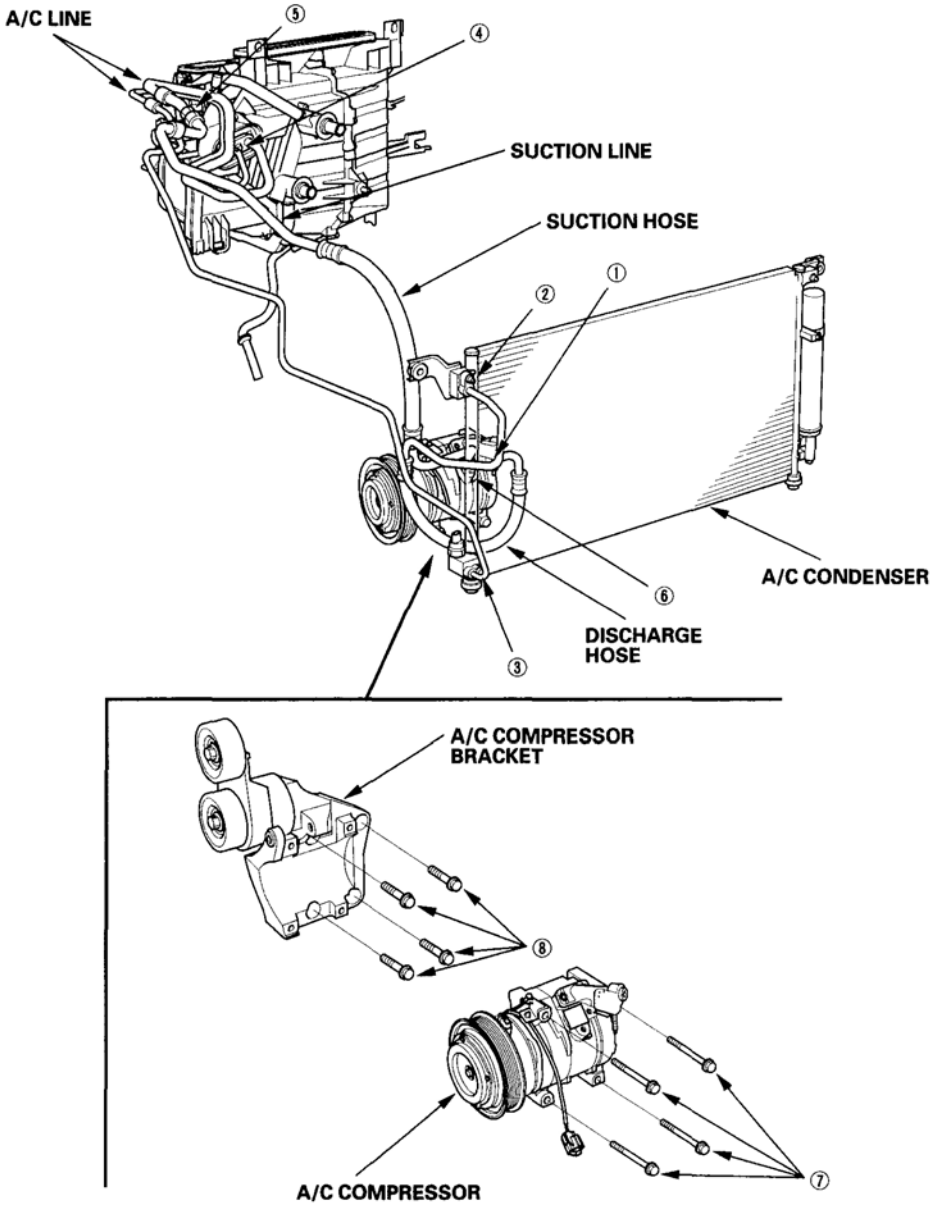


① Discharge hose to the A/C compressor (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
② Discharge hose to the A/C condenser (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
③ Receiver line to the A/C condenser (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
④ Receiver line to the A/C line: 13 N·m (1.3 kgf·m, 9.4 lbf·ft)
⑤ A/C line to the evaporator (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
⑥ Suction line to the A/C line: 31 N·m (3.2 kgf·m, 23 lbf·ft)
⑦ Suction hose to the A/C compressor (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
⑧ A/C compressor to the A/C compressor bracket (8 x 1.25 mm): 22 N·m (2.2 kgf·m, 16 lbf·ft)
⑨ A/C compressor bracket to the engine block (10 x 1.25 mm): 44 N·m (4.5 kgf·m, 33 lbf·ft)

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Fig. 7: Identifying A/C Compressor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2-DOOR



① Discharge hose to the A/C compressor (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
② Discharge hose to the A/C condenser (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
③ A/C line to the A/C condenser (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
④ A/C line to the evaporator (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
⑤ Suction line to the A/C line: 31 N·m (3.2 kgf·m, 23 lbf·ft)
⑥ Suction hose to the A/C compressor (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
⑦ A/C compressor to the A/C compressor bracket (8 x 1.25 mm): 22 N·m (2.2 kgf·m, 16 lbf·ft)
⑧ A/C compressor bracket to the engine block (10 x 1.25 mm): 44 N·m (4.5 kgf·m, 33 lbf·ft)

G03673236

Fig. 8: Identifying A/C Compressor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also
Recirculation control doors do not change between Fresh and Recirculate	Recirculation control motor circuit troubleshooting, refer to **RECIRCULATION CONTROL MOTOR CIRCUIT TROUBLESHOOTING**	• HVAC DT **G** **TROUBLESH** **INFOR** • Blown fuse No. 3 the under-dash • Cleanliness and t all
Blower, heater controls, and A/C do not work	Audio-HVAC display module power and ground circuits troubleshooting, refer to **AUDIO-HVAC DISPLAY PANEL POWER AND GROUND CIRCUIT TROUBLESHOOTING**	• HVAC DT **G** **TROUBLESH** **INFOR** • Blown fuse No. 3 the under-dash • Poor grou • Cleanliness and t all
Both fans do not run at low speed with the A/C on (but the A/C compressor runs with the A/C on)	Radiator and A/C condenser fan low speed circuit troubleshooting (see **RADIATOR AND A/C CONDENSER FAN LOW SPEED CIRCUIT TROUBLESHOOTING**)	• HVAC DT **G** **TROUBLESH** **INFOR** • Blown fuse No. the under-hood box, and No. 30 (7 under-dash fus • Poor grou • Cleanliness and t

		all
The A/C condenser fan does not run at high speed (but both fans run at low speed and the A/C compressor operates with the A/C on)	A/C condenser fan high speed circuit troubleshooting (see **A/C CONDENSER FAN HIGH SPEED CIRCUIT TROUBLESHOOTING**)	• HVAC DT **G TROUBLESH INFOR** • Blown fuse No. 3 the under-dash • Poor grou • Cleanliness and t all
Both fans do not run at high speed with the A/C on (but both fans run at low speed and the A/C compressor operates with the A/C on)	Radiator and A/C condenser fan high speed circuit troubleshooting (see **RADIATOR AND A/C CONDENSER FAN HIGH SPEED CIRCUIT TROUBLESHOOTING**).	• HVAC DT **G TROUBLESH INFOR** • Cleanliness and t all
The A/C compressor clutch does not engage (but both fans run with the A/C on)	A/C compressor clutch circuit troubleshooting (see **A/C COMPRESSOR CLUTCH CIRCUIT TROUBLESHOOTING**).	• HVAC DT **G TROUBLESH INFOR** • Blown fuse No. 1 the under-hood box, and No. 30 (7 under-dash fus • Cleanliness and t all
A/C system does not come on (both fans and	A/C pressure switch circuit troubleshooting (see **A/C**	• Body DTCs in t of the MI ***TROUBLESH - B-CAN DIAGNOSIS TE

the A/C compressor do not work); heater is OK	**PRESSURE SWITCH CIRCUIT TROUBLESHOOTING**).	• HVAC DT **G** **TROUBLESH** **INFORM** • Cleanliness and t all
Recirculation button does not work	1. Turn the ignition switch ON (II). 2. Press the recirculation button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to **RECIRCULATION CONTROL MOTOR TEST** . 2-door, see **2-DOOR** 4-door, see **4-DOOR** • If the LED does not turn on or off, replace the audio-HVAC display panel.	
Defroster button does	1. Turn the ignition switch ON (II). 2. Press the defroster button several times and check the button's LED. The LED should toggle on and off as the button is pressed.	

not work	• If the LED turns on and off, go to **GENERAL TROUBLESHOOTING INFORMATION**). • If the LED does not turn on or off, replace the audio-HVAC display panel.	
Rear window defogger button does not work	1. Turn the ignition switch ON (II). 2. Press the rear window defogger button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to **FUNCTION TEST** . • If the LED does not turn on or off, replace the audio-HVAC display panel	
A/C button does not work	1. Turn the ignition switch ON (II). 2. Turn the fan control dial ON. 3. Press the A/C button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to (see	

	GENERAL TROUBLESHOOTING INFORMATION). • If the LED does not turn on or off, replace the audio-HVAC display panel.	
MAX A/C button does not work	1. Turn the ignition switch ON (II). 2. Turn the fan control dial ON. 3. Press the MAX A/C button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to **GENERAL TROUBLESHOOTING INFORMATION** . • If the LED does not turn on or off, replace the audio-HVAC display panel.	
Mode button (VENT) does not work	1. Turn the ignition switch ON (II). 2. Press the MODE (VENT) button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to **GENERAL TROUBLESHOOTING**	

	INFORMATION). • If the LED does not turn on or off, replace the audio-HVAC display panel.	
Mode button (VENT/FLOOR) does not work	1. Turn the ignition switch ON (II). 2. Press the MODE (VENT/FLOOR) button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to **GENERAL TROUBLESHOOTING INFORMATION** . • If the LED does not turn on or off, replace the	
Mode button (FLOOR) does not work	1. Turn the ignition switch ON (II). 2. Press the MODE (FLOOR) button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to **GENERAL TROUBLESHOOTING INFORMATION** . • If the LED does not turn on or off, replace the	
	1. Turn the ignition switch ON	

Mode button (DEFROSTER/FLOOR) does not work	(II). 2. Press the MODE (DEFROSTER/FLOOR) button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to **GENERAL TROUBLESHOOTING INFORMATION** . • If the LED does not turn on or off, replace the	
Audio-HVAC display panel will not run self-diagnosis	1. Turn the ignition switch ON (II). 2. Press the A/C button, and then OFF button and check the display. • If the display turns on and off as the buttons are pressed, and there are no DTCs stored, troubleshootthe individual symptoms. • If the display does not respond as the buttons are pressed, check for loose or poor connections at the audio-HVAC display panel. If the connections are OK, replace the audio-HVAC display panel.	

SYSTEM DESCRIPTION

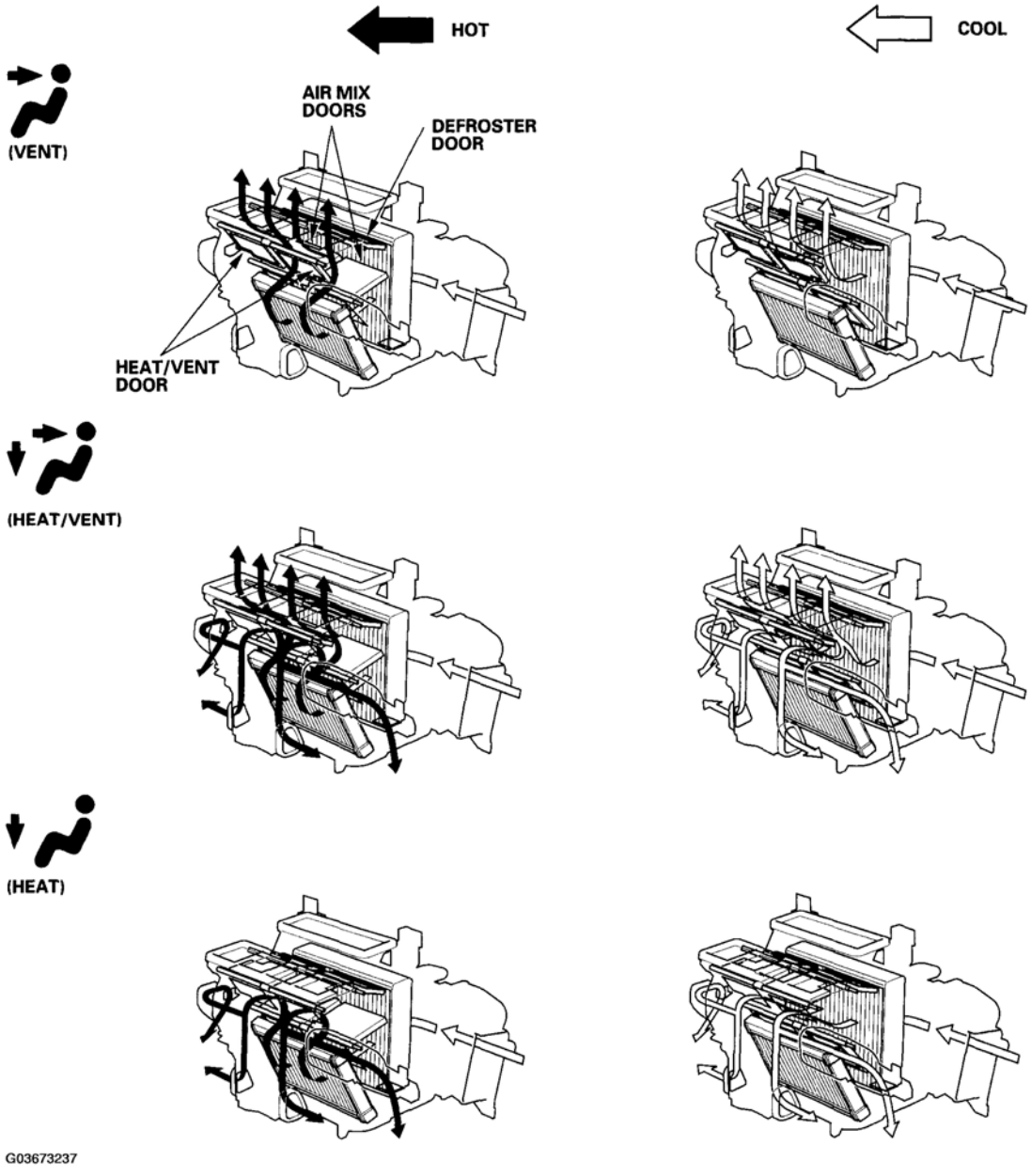


Fig. 9: Identifying Air Flow System Description (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

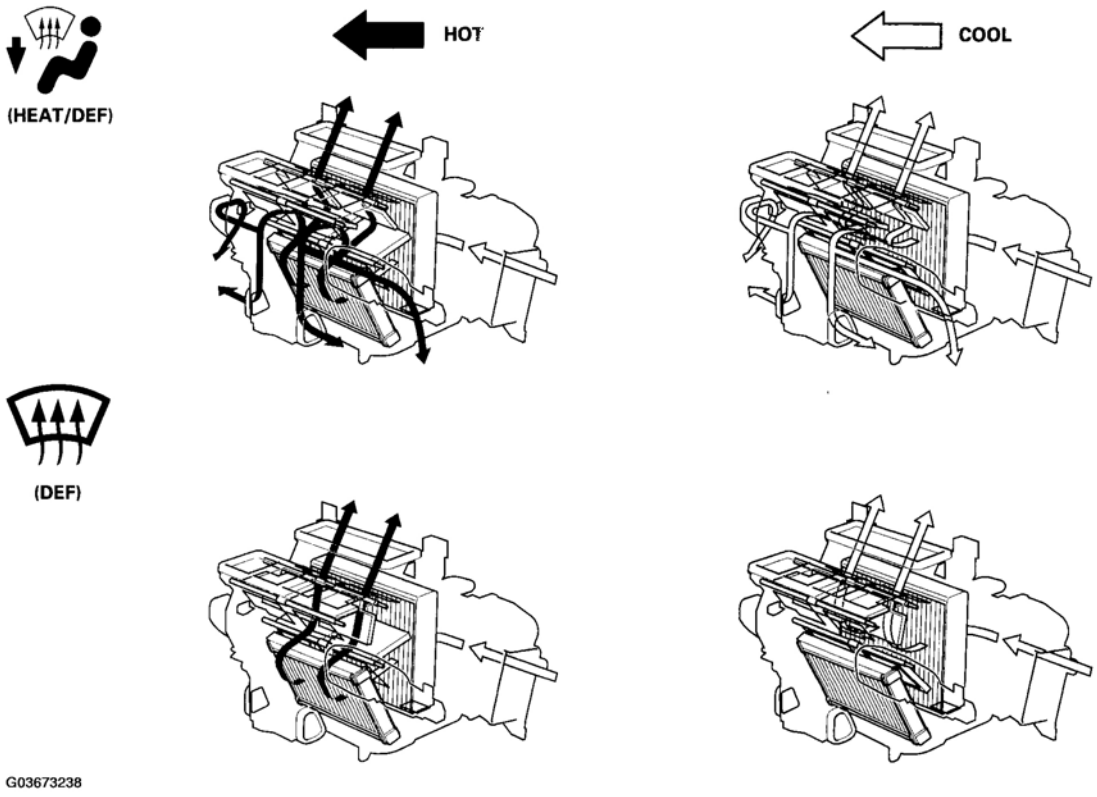


Fig. 10: Identifying Air Flow System Description (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

The air conditioning system removes heat from the passenger compartment by circulating refrigerant through the system.

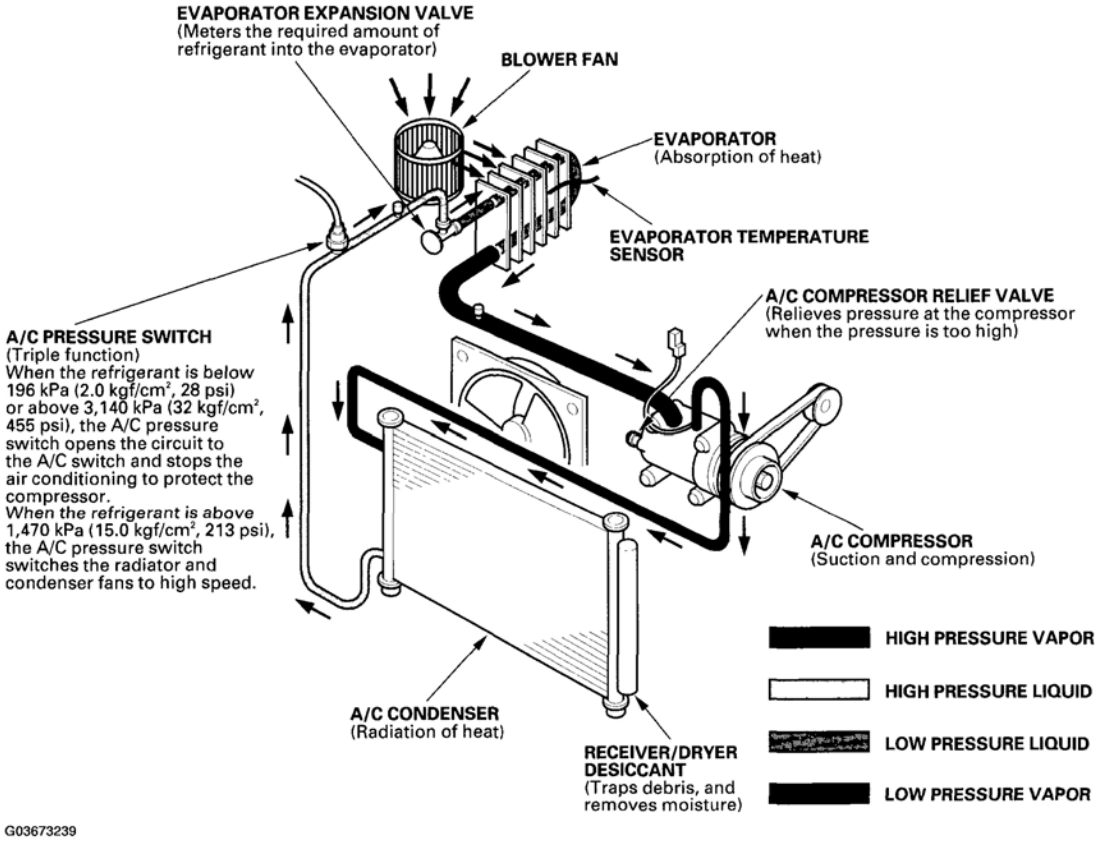


Fig. 11: Air Conditioning System Description
Courtesy of AMERICAN HONDA MOTOR CO., INC.

This vehicle uses HFC-134a (R-134a) refrigerant which does not contain chlorofluorocarbons. Pay attention to the following service items:

- Do not mix refrigerants CFC-12 (R-12) and HFC-134a (R-134a). They are not compatible.
- Use only the recommended polyalkyleneglycol (PAG) refrigerant oil (DENSO ND-OIL 8) designed for the R-134a compressor. Intermixing the recommended (PAG) refrigerant oil with any other refrigerant oil will result in compressor failure.
- All A/C system parts (compressor, discharge line, suction line, evaporator, condenser, receiver/dryer, expansion valve, O-rings for joints) are designed for refrigerant R-134a. Do not exchange with R-12 parts.
- Use a halogen gas leak detector designed for refrigerant R-134a.

- R-12 and R-134a refrigerant servicing equipment are not interchangeable. Use only a recovery/recycling/charging station that is U.L.-listed and is certified to meet the requirements of SAE J2210to service the R-134a air conditioning systems.
- Always recover the refrigerant R-134a with an approved recovery/recycling/charging station before disconnecting any A/C fitting.

A/C PRESSURE SWITCH

The A/C pressure switch consists of a high-low pressure switch (A/C pressure switch A) and a middle pressure switch (A/C pressure switch B).

- High-low pressure switch

  If the refrigerant pressure becomes too high (due to blockage or lack of airflow at the condenser), or too low (due to leakage), the A/C pressure switch stops the A/C request signal to the PCM and the compressor stops operating.

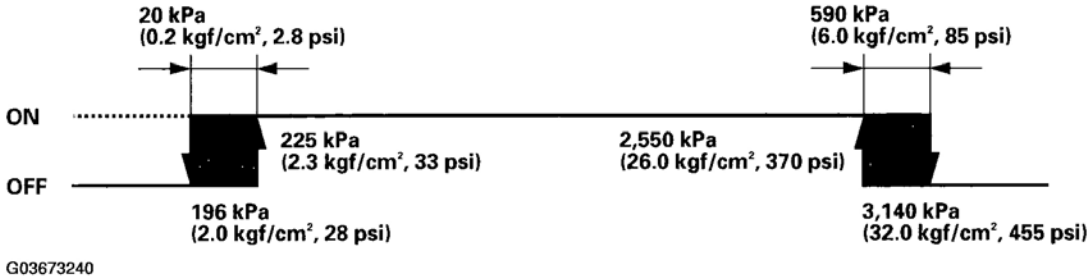


Fig. 12: A/C High-low Pressure Switch Operation
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- Middle pressure switch

  If the refrigerant pressure goes above or below 1,470 kPa (15.0 kgf/cm^2 , 213 psi), the A/C pressure switch opens or closes to signal the PCM to change the speed of the condenser fan and radiator fan (high-low).

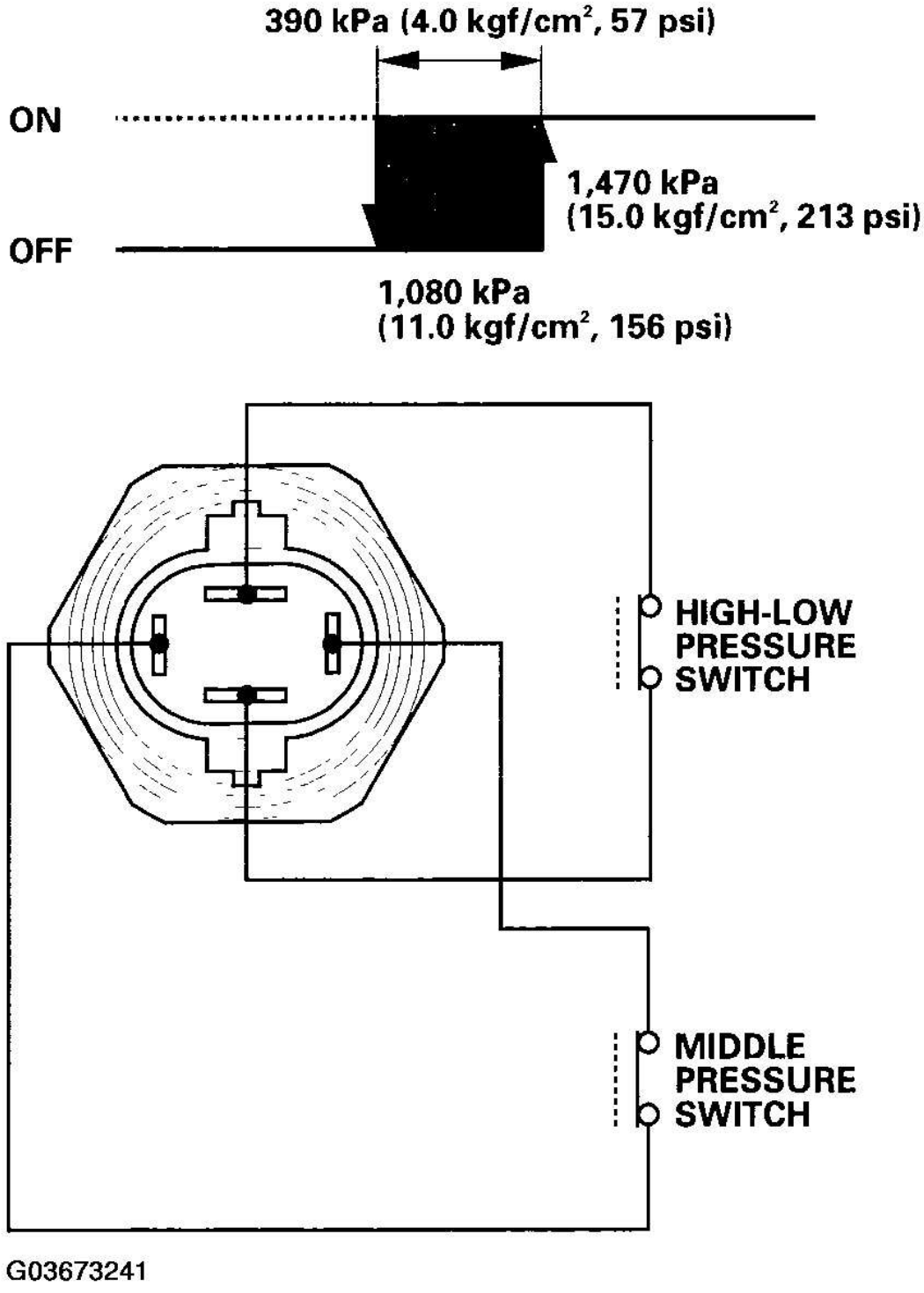
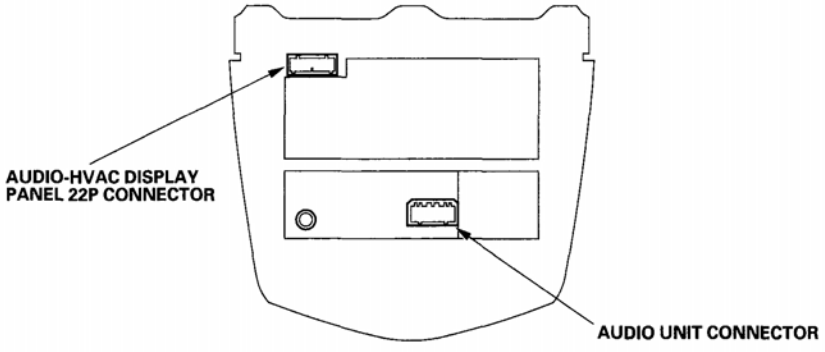


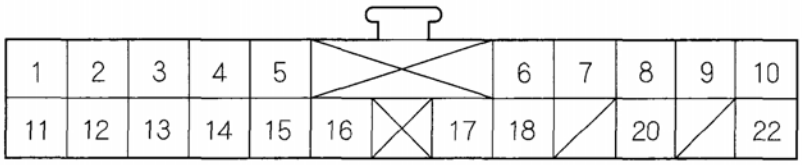
Fig. 13: A/C Middle Pressure Switch Operation

Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUDIO-HVAC DISPLAY PANEL INPUTS AND OUTPUTS



AUDIO-HVAC DISPLAY PANEL 22P CONNECTOR



Wire side of female terminals

Cavity	Wire color	Signal	
1	BLU	A/C PRESSURE SWITCH	OUTPUT
2	RED/YEL	MODE 1	INPUT
3	RED/BLU	MODE 2	INPUT
4	WHT/BLU	MODE 3	INPUT
5	YEL/GRN	MODE 4	INPUT
6	YEL/BLK	REAR WINDOW DEFOGGER RELAY	OUTPUT
7	LT GRN/RED	RECIRCULATE	OUTPUT
8	GRN/WHT	FRESH	OUTPUT
9	RED/BLK	SENSOR COMMON GROUND	OUTPUT
10	BRN	EVAPORATOR TEMPERATURE SENSOR	INPUT
11	YEL/RED	MODE VENT	OUTPUT
12	YEL/BLU	MODE DEF	OUTPUT
13	PNK/BLU	AIR MIX HOT	OUTPUT
14	GRN	AIR MIX COOL	OUTPUT
15	BLU/RED	BLOWER FEEDBACK	INPUT
16	BLU/YEL	POWER TRANSISTOR CONTROL	OUTPUT
17	PNK/BLK	AIR MIX POTENTIAL	INPUT
18	GRY	AIR MIX POTENTIAL +5 V	OUTPUT
19	———	———	———
20	BLK/YEL	IG2 (Power)	INPUT
21	———	———	———
22	BLK	GROUND (G503)	INPUT

G03673242

Fig. 14: Identifying Audio-HVAC Display Panel Inputs And Outputs
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

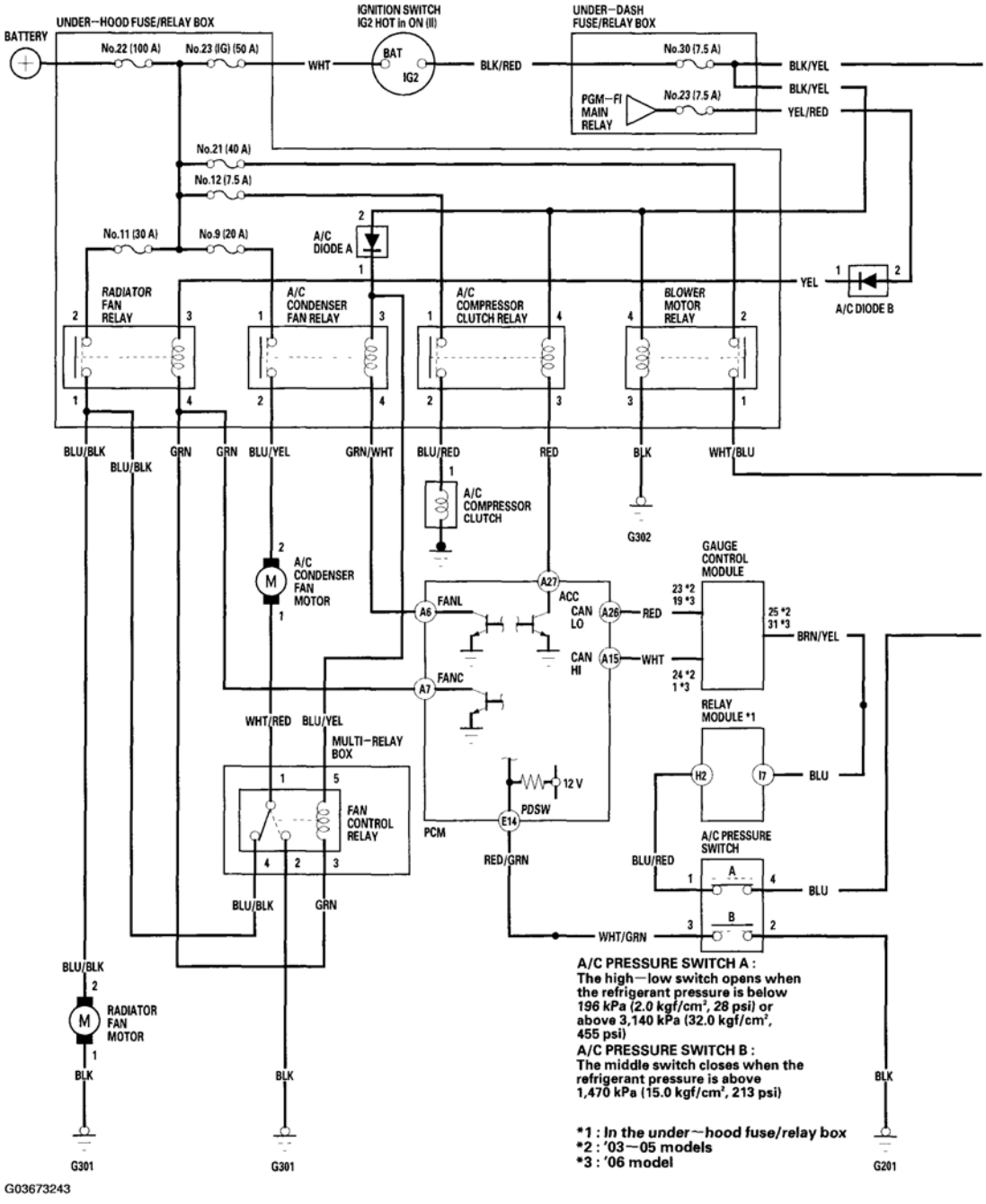


Fig. 15: Identifying Heating/Air Conditioning Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

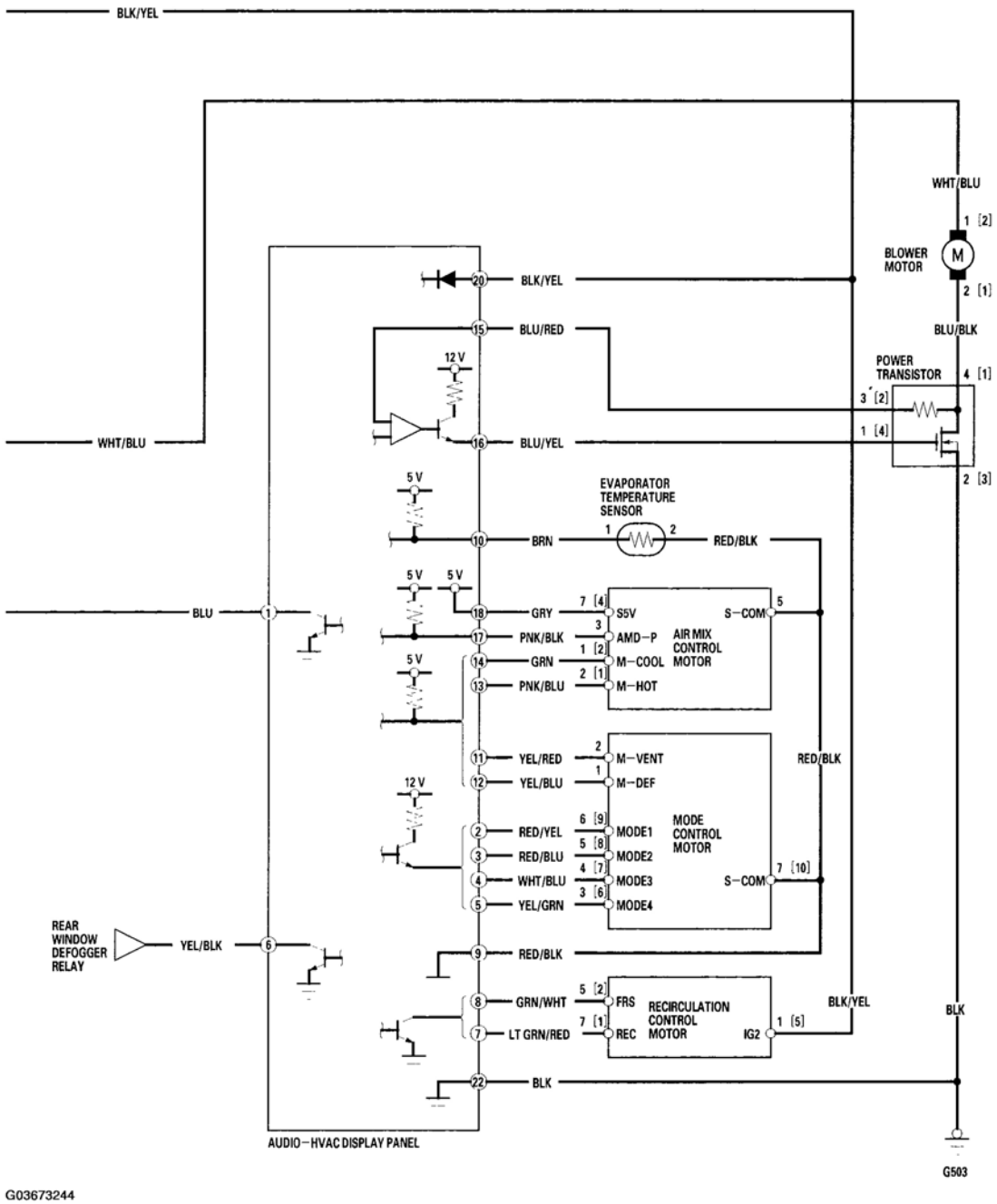


Fig. 16: Identifying Heating/Air Conditioning Circuit Diagram (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

RADIATOR AND A/C CONDENSER FAN LOW SPEED CIRCUIT TROUBLESHOOTING

NOTE:

- **Do not use this troubleshooting procedure if the compressor is inoperative. Refer to the SYMPTOM TROUBLESHOOTING INDEX.**
- **Before performing symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Check the No. 9 (20A) fuse in the under-hood fuse/relay box, and the No. 30 (7.5A) fuse in the under-dash fuse/relay box.

   Are the fuses OK?

   YES - Go to step 2.

   NO - Replace the fuse(s), and recheck.
2. Remove the A/C condenser fan relay from the under-hood fuse/relay box, and test it, refer to **POWER RELAY TEST** .

   Is the relay OK?

   YES - Go to step 3.

   NO - Replace the A/C condenser fan relay.
3. Measure the voltage between the No. 1 terminal of the A/C condenser fan relay 4P socket and body ground.

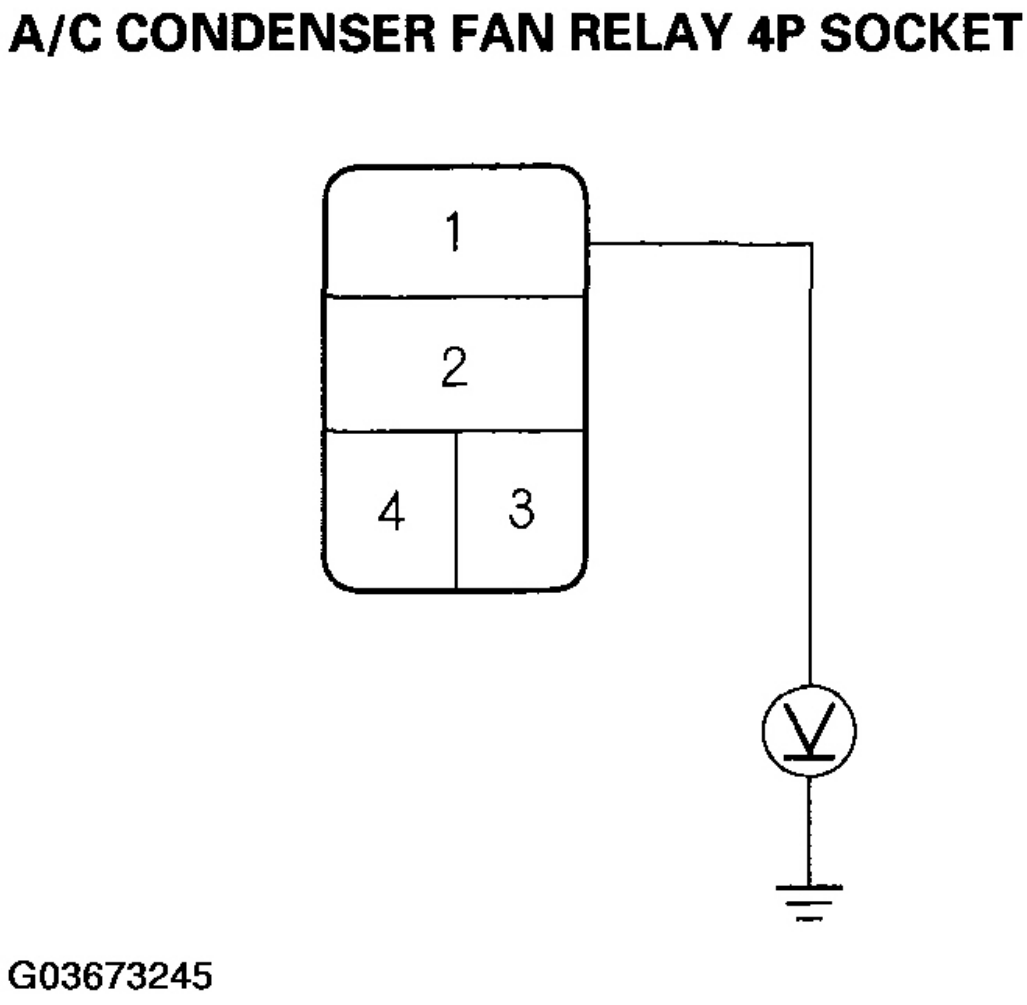


Fig. 17: Measuring Voltage Between No. 1 Terminal Of A/C Condenser Fan Relay 4P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 4.

NO - Replace the under-hood fuse/relay box.

4. Connect the No. 1 and No. 2 terminals of the A/C condenser fan relay 4P socket with a jumper wire.

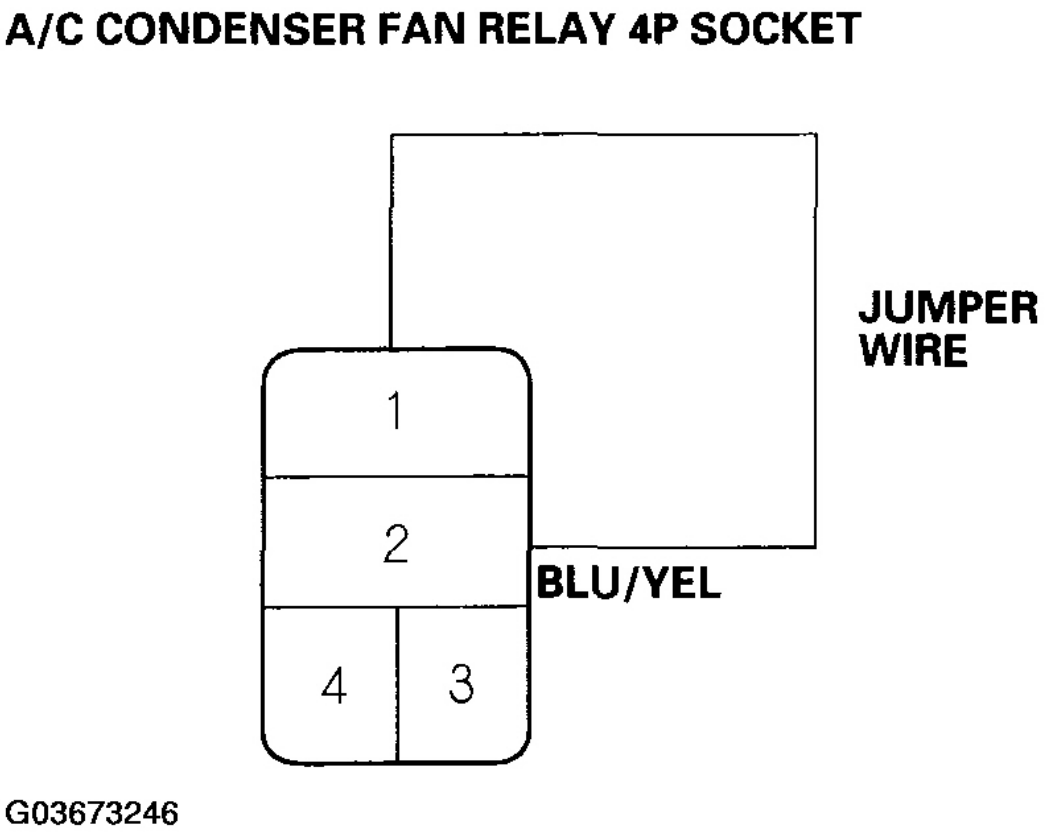


Fig. 18: Connecting No. 1 And No. 2 Terminals Of A/C Condenser Fan Relay 4P Socket With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the A/C condenser fan run?

YES - Go to step 5.
NO - Go to step 13.

5. Disconnect the jumper wire.
6. Turn the ignition switch ON (II).
7. Measure the voltage between the No. 3 terminal of the A/C condenser fan relay 4P socket and body ground.

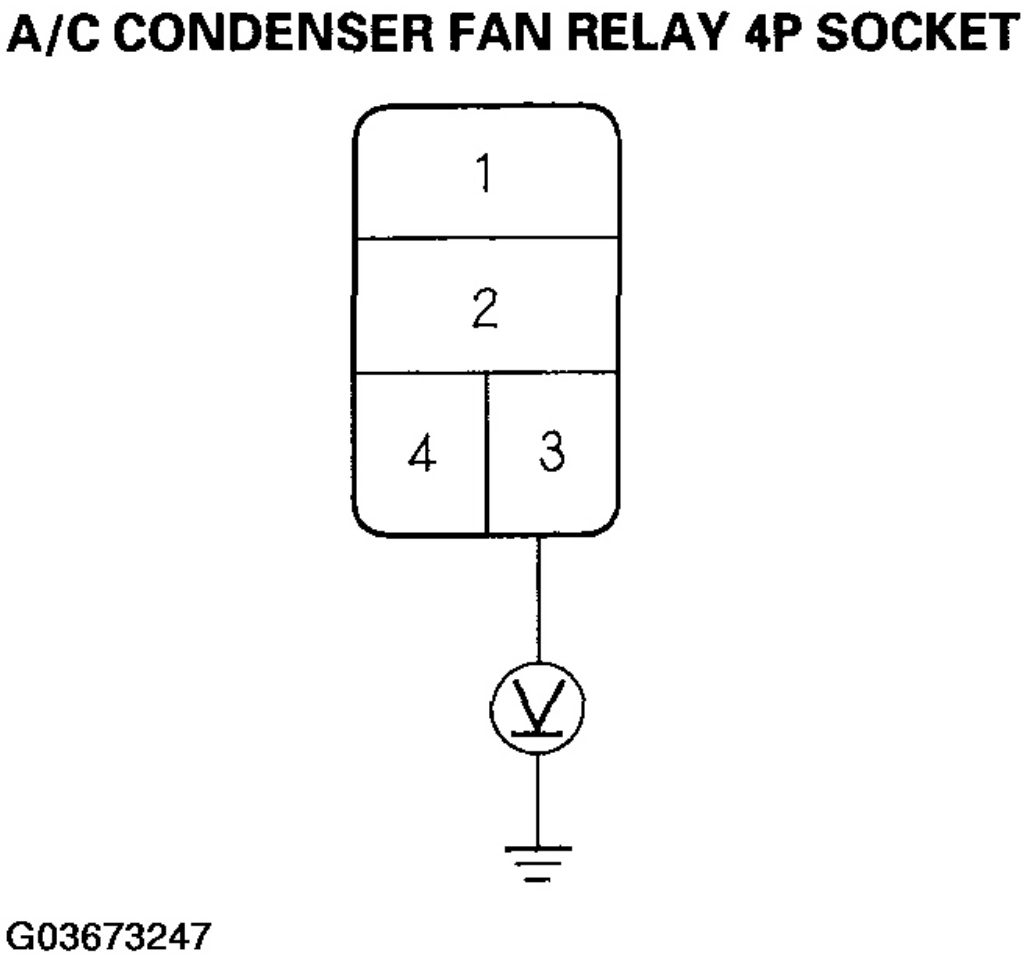


Fig. 19: Measuring Voltage Between No. 3 Terminal Of A/C Condenser Fan Relay 4P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 8.
NO - Go to step 31.

8. Turn the ignition switch OFF.
9. Reinstall the A/C condenser fan relay.

10. Make sure the A/C switch is OFF.
11. Turn the ignition switch ON (II).
12. Using the backprobe set, measure the voltage between the No. 6 terminal of PCM connector A (31P) and body ground with the PCM connectors connected.

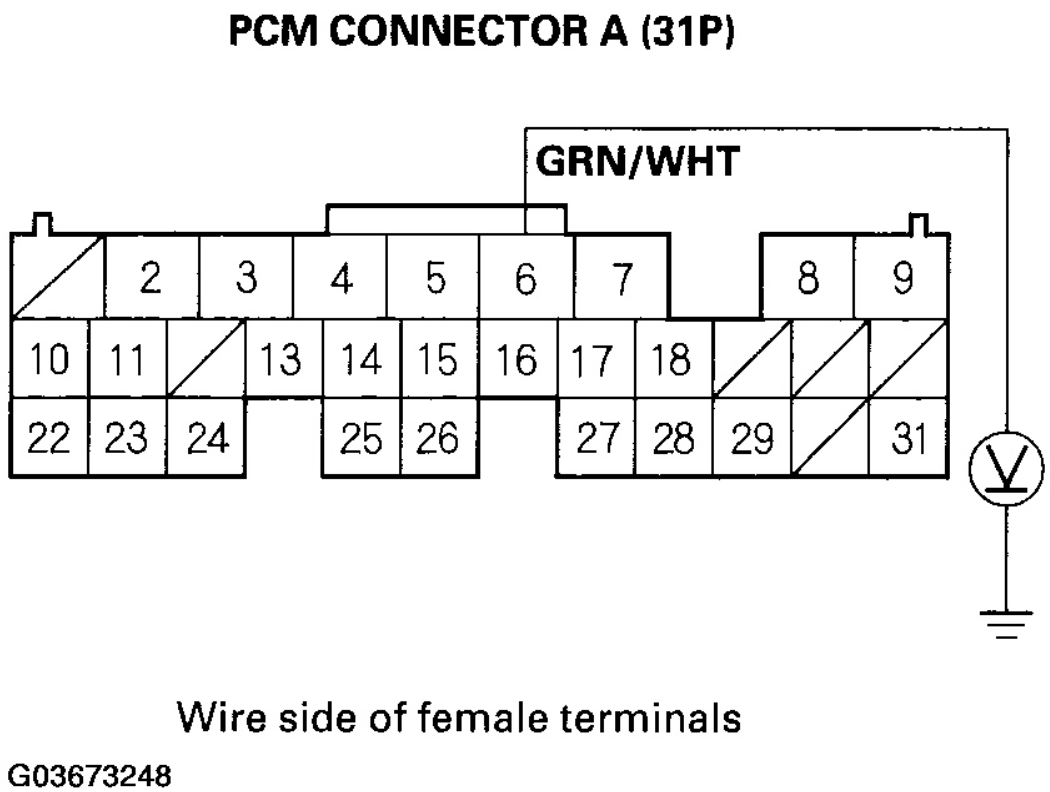


Fig. 20: Measuring Voltage Between No. 6 Terminal Of PCM Connector A (31P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Check for loose wires or poor connections at No. 6 terminal of PCM connector A (31P). If the connections are good, substitute a known-good PCM, and recheck. If the symptom/indication goes away, replace the original PCM, then perform the PCM idle learn procedure (see

ECM/PCM IDLE LEARN PROCEDURE).

NO - Repair open in the wire between the condenser fan relay and the PCM.

13. Disconnect the jumper wire.
14. Reinstall the A/C condenser fan relay.
15. Disconnect the A/C condenser fan 2P connector.
16. Turn the ignition switch ON (II), then turn the A/C and blower fan switches ON.
17. Measure the voltage between the No. 2 terminal of the A/C condenser fan 2P connector and body ground.

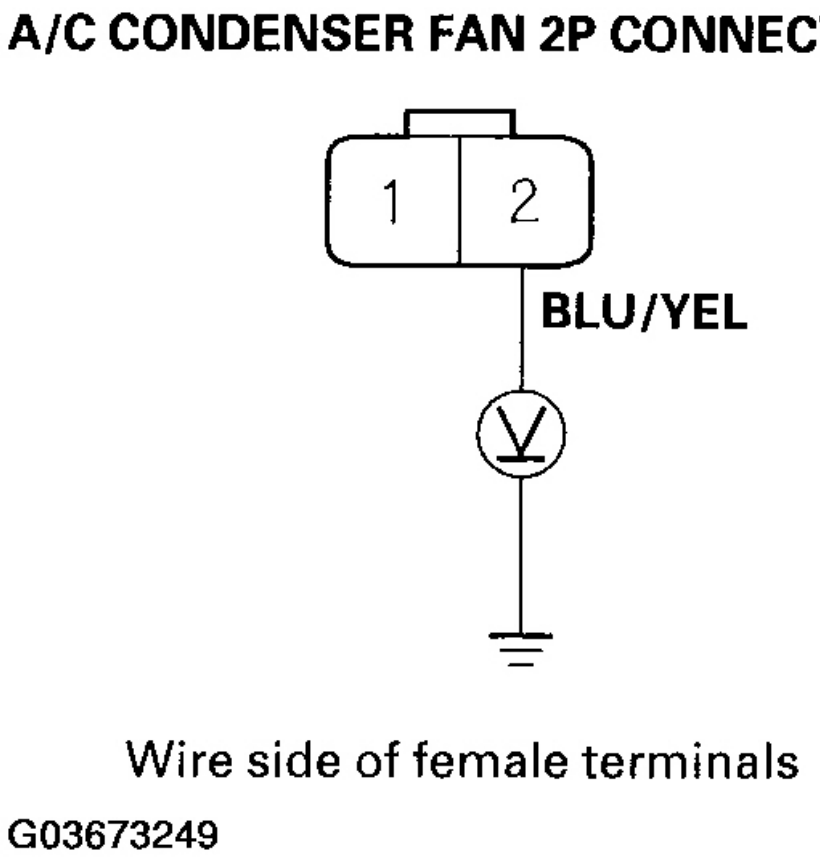


Fig. 21: Measuring Voltage Between No. 2 Terminal Of A/C Condenser

Fan 2P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 18.

NO - Repair open in the wire between the A/C condenser fan relay and the A/C condenser fan.

18. Turn the A/C and fan switches OFF, then turn the ignition switch OFF.
19. Reconnect the A/C condenser fan 2P connector.
20. Connect the No. 1 terminal of the A/C condenser fan 2P connector to body ground with jumper wire.

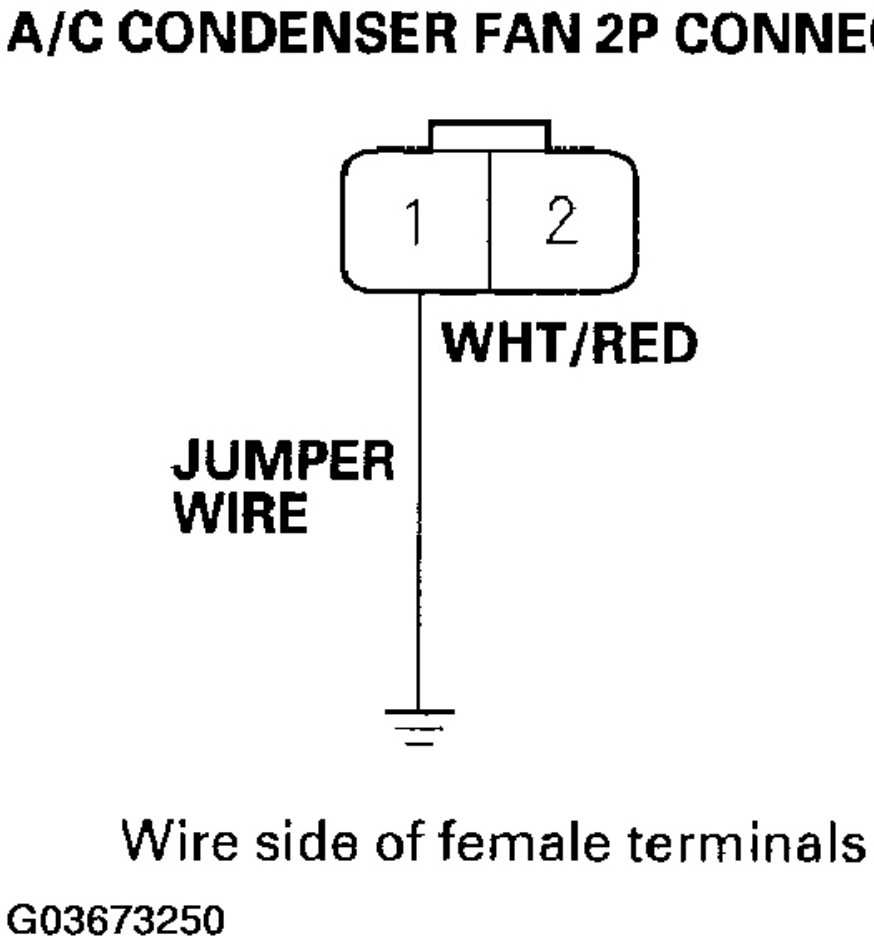


Fig. 22: Connecting No. 1 Terminal Of A/C Condenser Fan 2P Connector To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Turn the ignition switch ON (II), then turn the A/C and fan switches ON.

    Does the A/C condenser fan run?

    YES - Go to step 22.
    NO - Replace the A/C condenser fan motor.
22. Turn the A/C and fan switches OFF, then turn the ignition switch OFF.

23. Disconnect the jumper wire.
24. Remove the fan control relay from the multi-relay box, and test it (see **POWER RELAY TEST**).

    Is the relay OK?

    YES - Go to step 25.

    NO - Replace the fan control relay.
25. Turn the ignition switch ON (II), then turn the A/C and fan switches ON.
26. Measure the voltage between the No. 1 terminal of the fan control relay 5P socket and body ground.

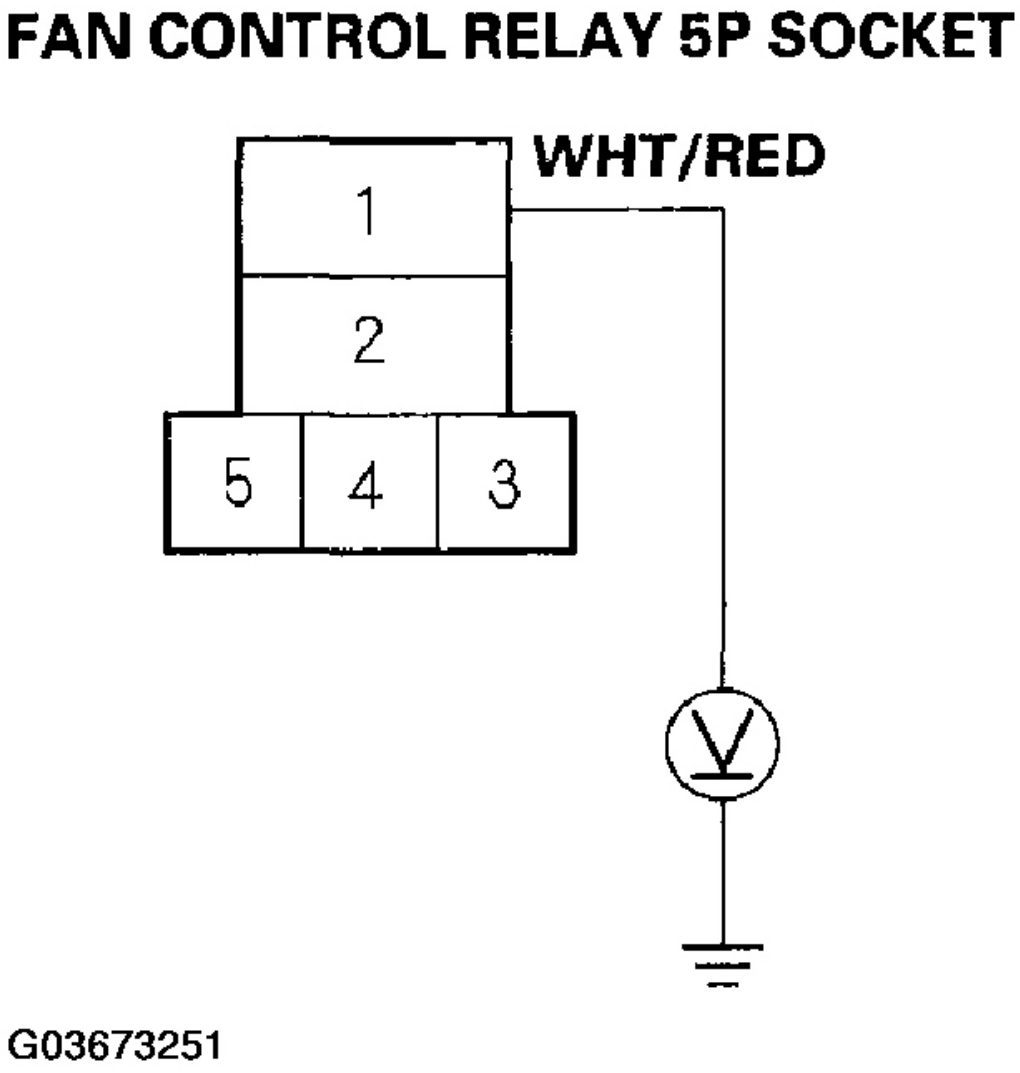


Fig. 23: Measuring Voltage Between No. 1 Terminal Of Fan Control Relay 5P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 27.
NO - Repair open in the wire between the A/C condenser fan and the fan

control relay.

27. Turn the A/C and fan switches OFF, then turn the ignition switch OFF.
28. Disconnect the radiator fan 2P connector.
29. Check for continuity between the No. 4 terminal of the fan control relay 5P socket and the No. 2 terminal of the radiator fan 2P connector.

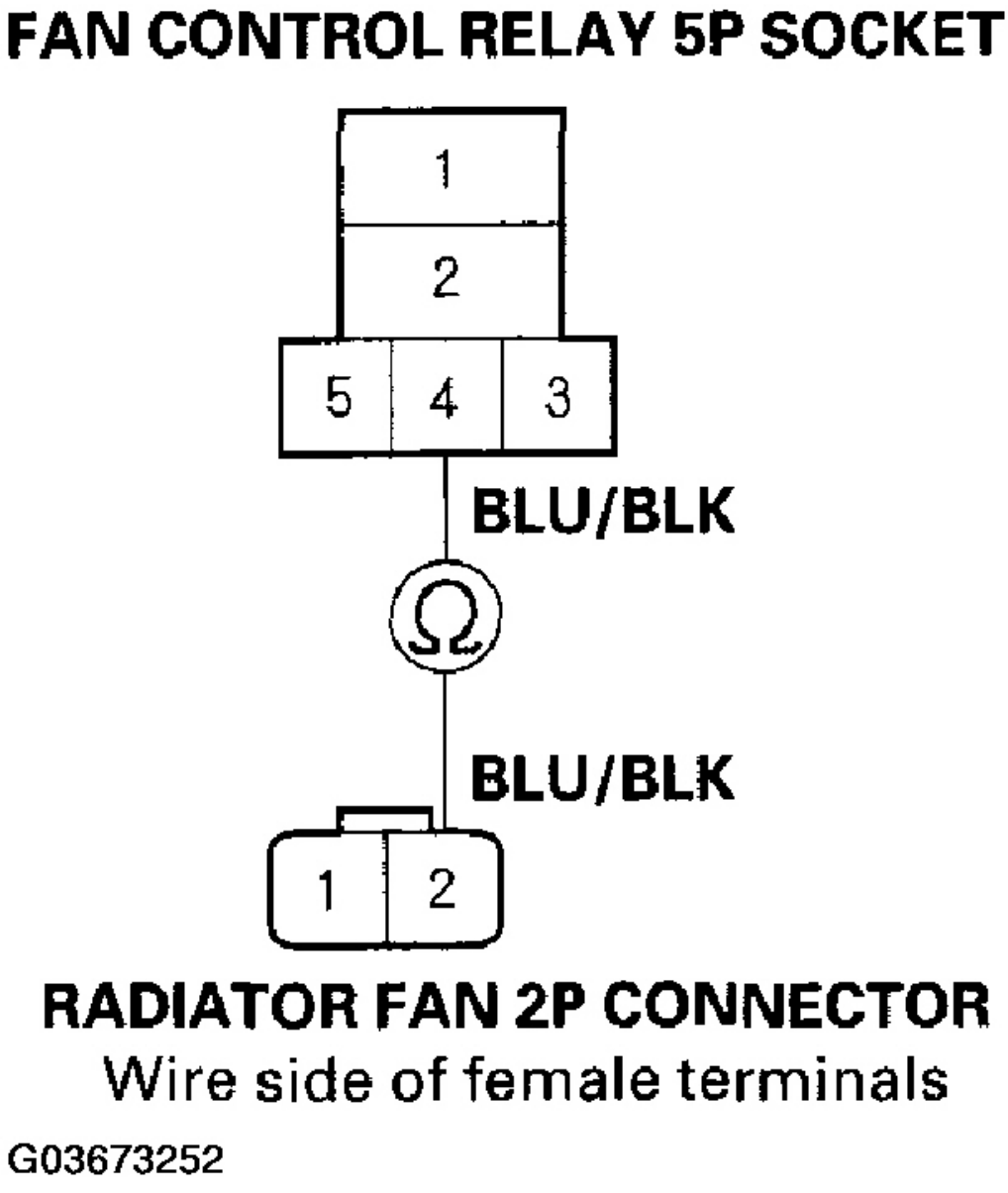


Fig. 24: Checking For Continuity Between No. 4 Terminal Of Fan Control Relay 5P Socket And No. 2 Terminal Of Radiator Fan 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

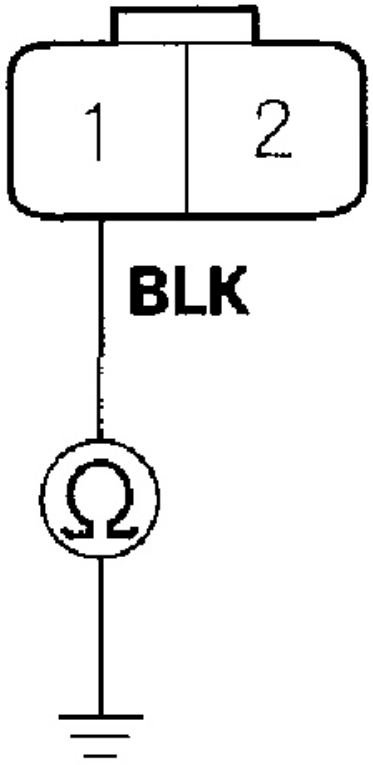
Is there continuity?

YES - Go to step 30.

NO - Repair open in the wire between the fan control relay and the radiator fan.

30. Check for continuity between the No. 1 terminal of the radiator fan 2P connector and body ground.

RADIATOR FAN 2P CONNECTOR



Wire side of female terminals

G03673253

Fig. 25: Checking For Continuity Between No. 1 Terminal Of Radiator Fan 2P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

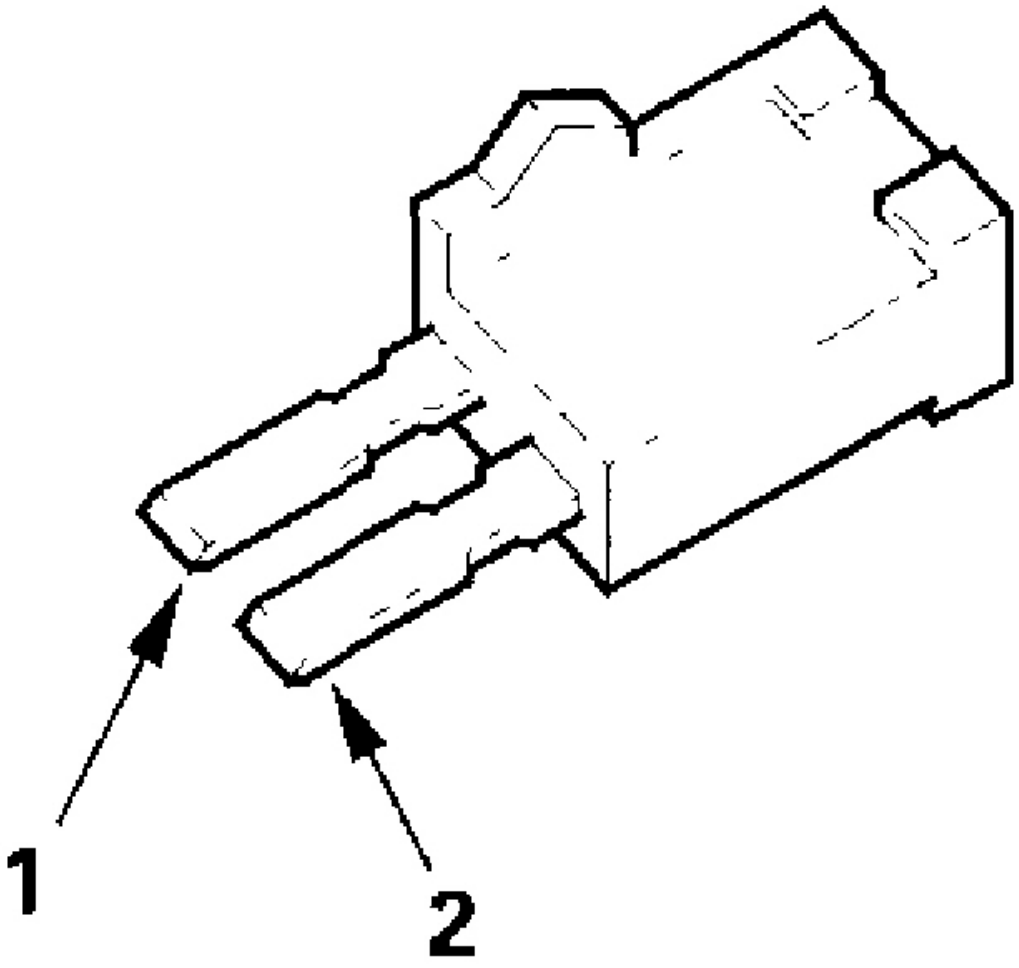
Is there continuity?

YES - Replace the radiator fan motor.

NO - Check for an open in the wire between the radiator fan and body ground. If the wire is OK, check for poor ground at G301.

31. Turn the ignition switch OFF.
32. Remove A/C diode A from the under-hood fuse/ relay box.
33. Check for current flow in both directions between the No. 1 and No. 2 terminals of A/C diode A.

A/C DIODE A





G03673254

Fig. 26: Checking For Current Flow In Both Directions Between No. 1 And No. 2 Terminals Of A/C Diode A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there current flow in only one direction?

YES - Go to step 34.

NO - Replace A/C diode A.

34. Turn the ignition switch ON (II).
35. Measure the voltage between the No. 2 terminal of A/C diode A 2P socket and body ground.

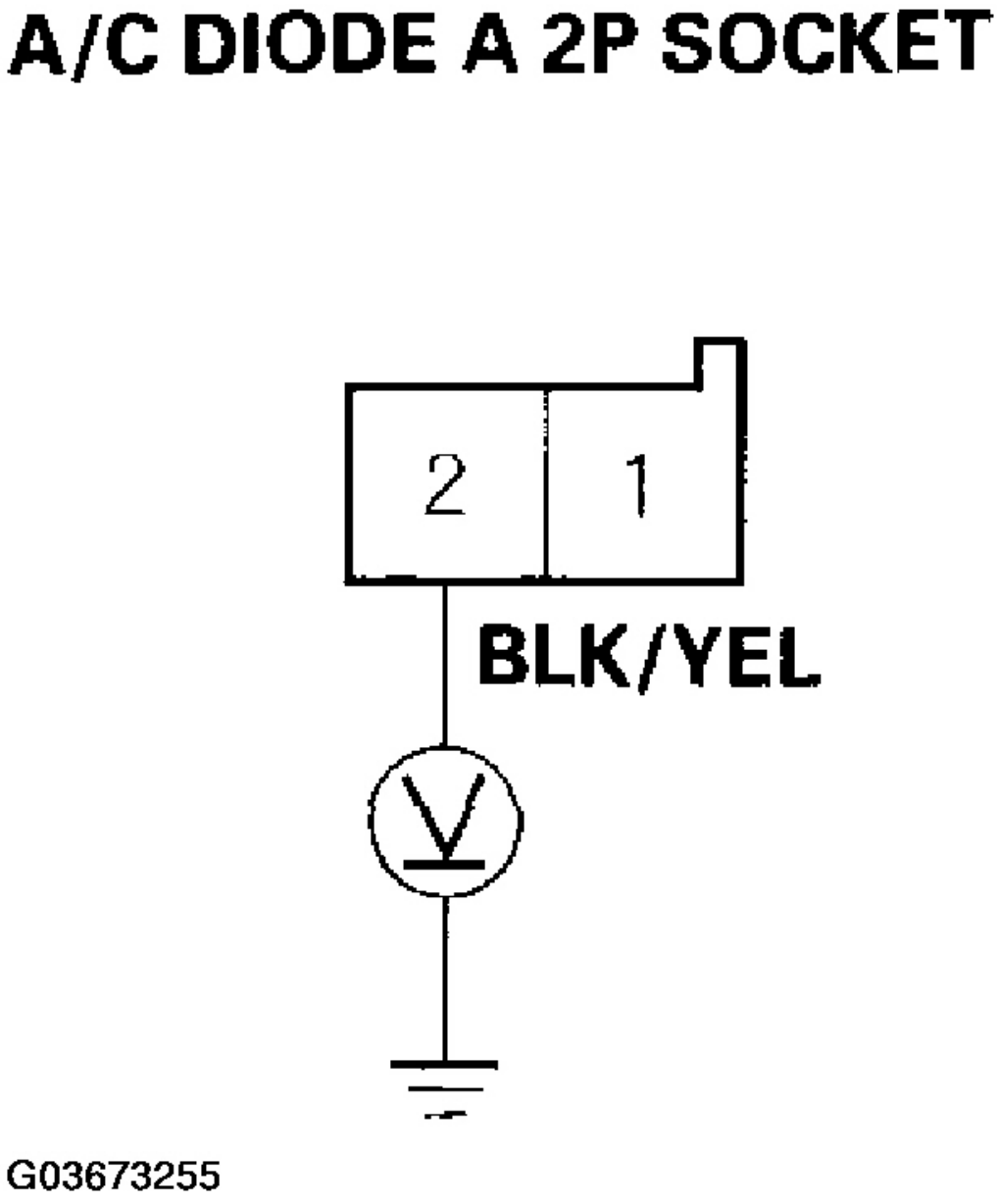


Fig. 27: Measuring Voltage Between No. 2 Terminal Of A/C Diode A 2P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Replace the under-hood fuse/relay box.

NO - Repair open in the wire between the No. 30 fuse in the under-dash fuse/relay box and A/C diode A.

A/C CONDENSER FAN HIGH SPEED CIRCUIT TROUBLESHOOTING

NOTE:

- **Do not use this troubleshooting procedure if the radiator fan and/or the A/C compressor is inoperative.**

  Refer to the SYMPTOM TROUBLESHOOTING INDEX.

- **Before performing symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Check the No. 30 (7.5A)fuse in the under-dash fuse/relay box.

   Is the fuse OK?

   YES - Go to step 2.

   NO - Replace the fuse, and recheck.
2. Remove the fan control relay from the multi-relay box, and test it (see **POWER RELAY TEST**).

   Is the relay OK?

   YES - Go to step 3.

   NO - Replace the fan control relay.
3. Turn the ignition switch ON (II).
4. Measure the voltage between the No. 5 terminal of the fan control relay 5P socket and body ground.

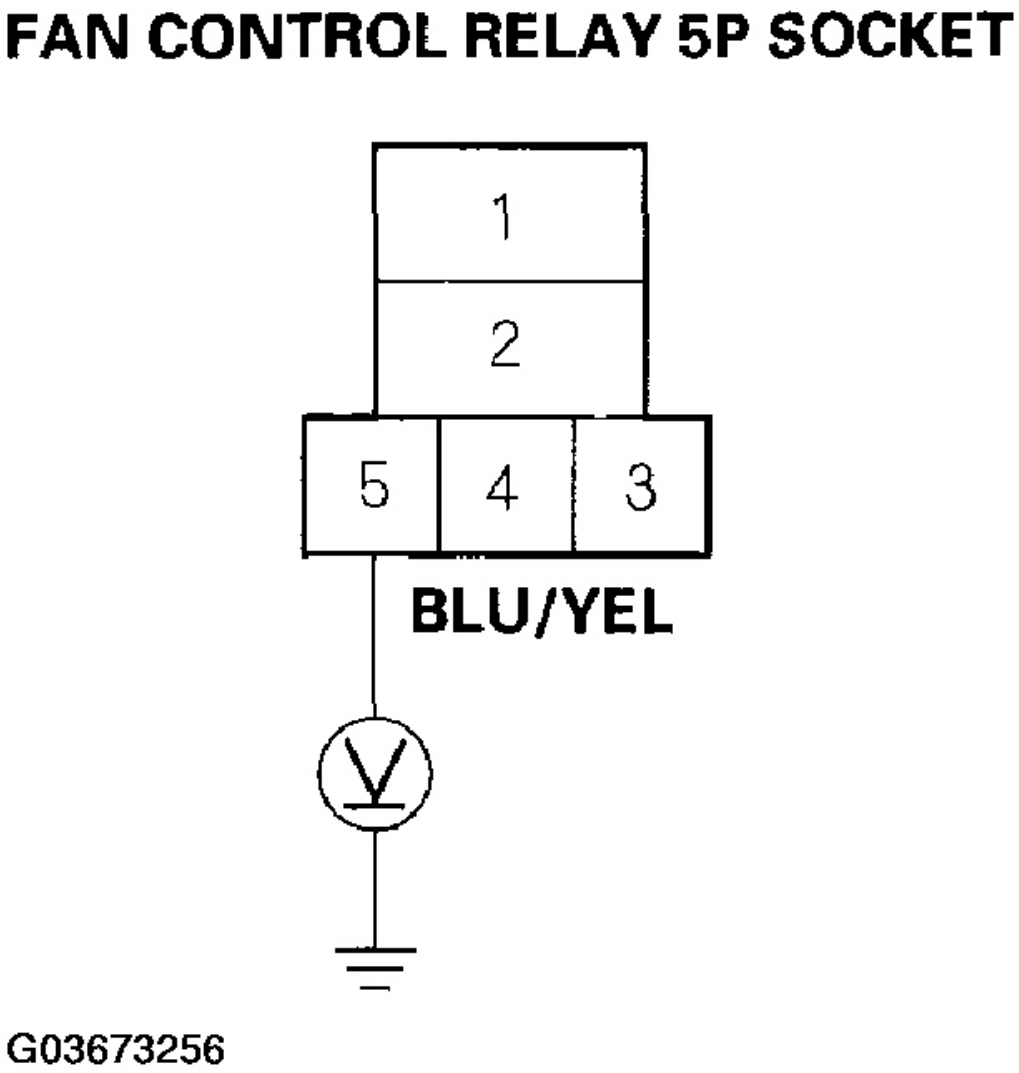


Fig. 28: Measuring Voltage Between No. 5 Terminal Of Fan Control Relay 5P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 5.
NO - Go to step 9.

5. Turn the ignition switch OFF.
6. Check for continuity between the No. 2 terminal of the fan control relay 5P socket and body ground.

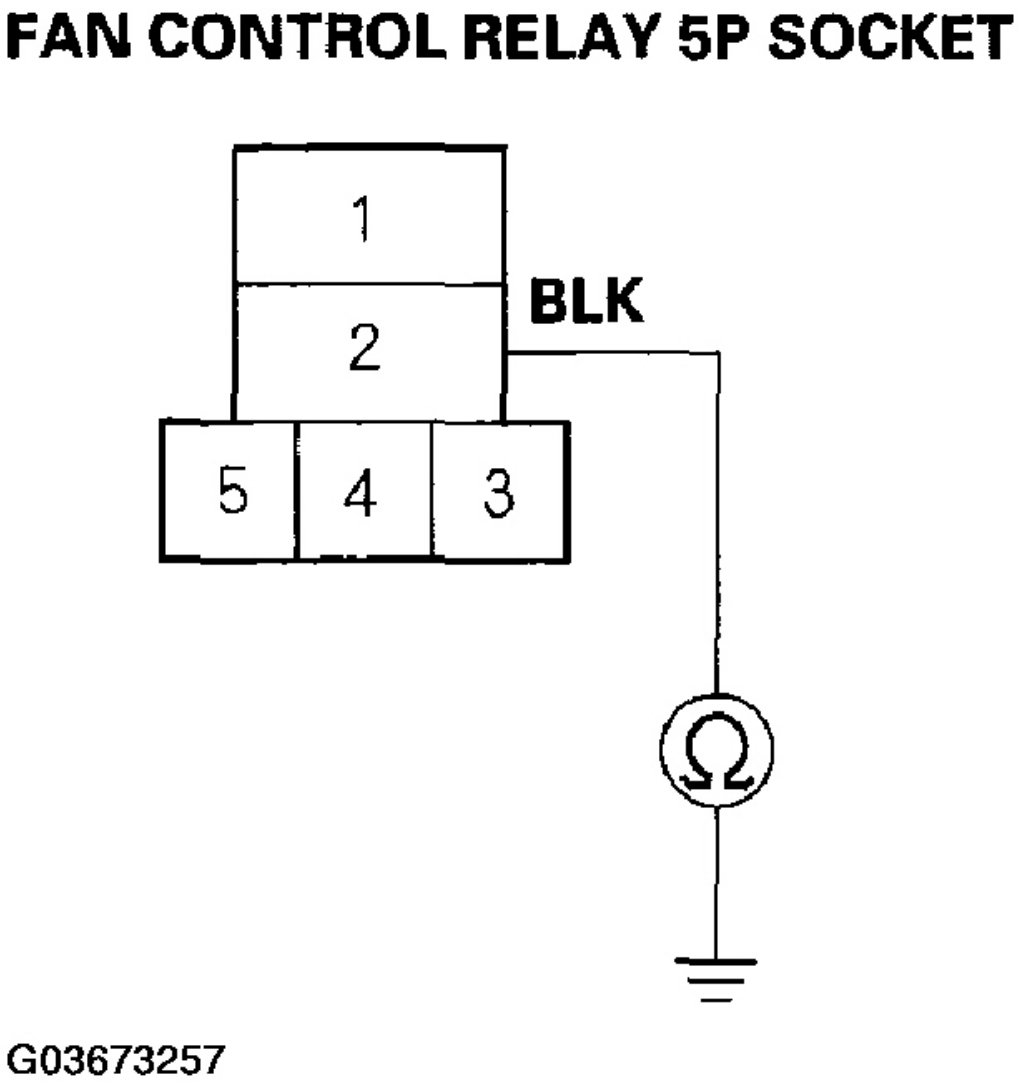


Fig. 29: Checking For Continuity Between No. 2 Terminal Of Fan Control Relay 5P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 7.

NO - Check for an open in the wire between the fan control relay and body ground. If the wire is OK, check for poor ground at G301.

7. Remove the radiator fan relay from the under-hood fuse/relay box.
8. Check for continuity between the No. 3 terminal of the fan control relay 5P socket and the No.4 terminal of the radiator fan relay 4P socket.

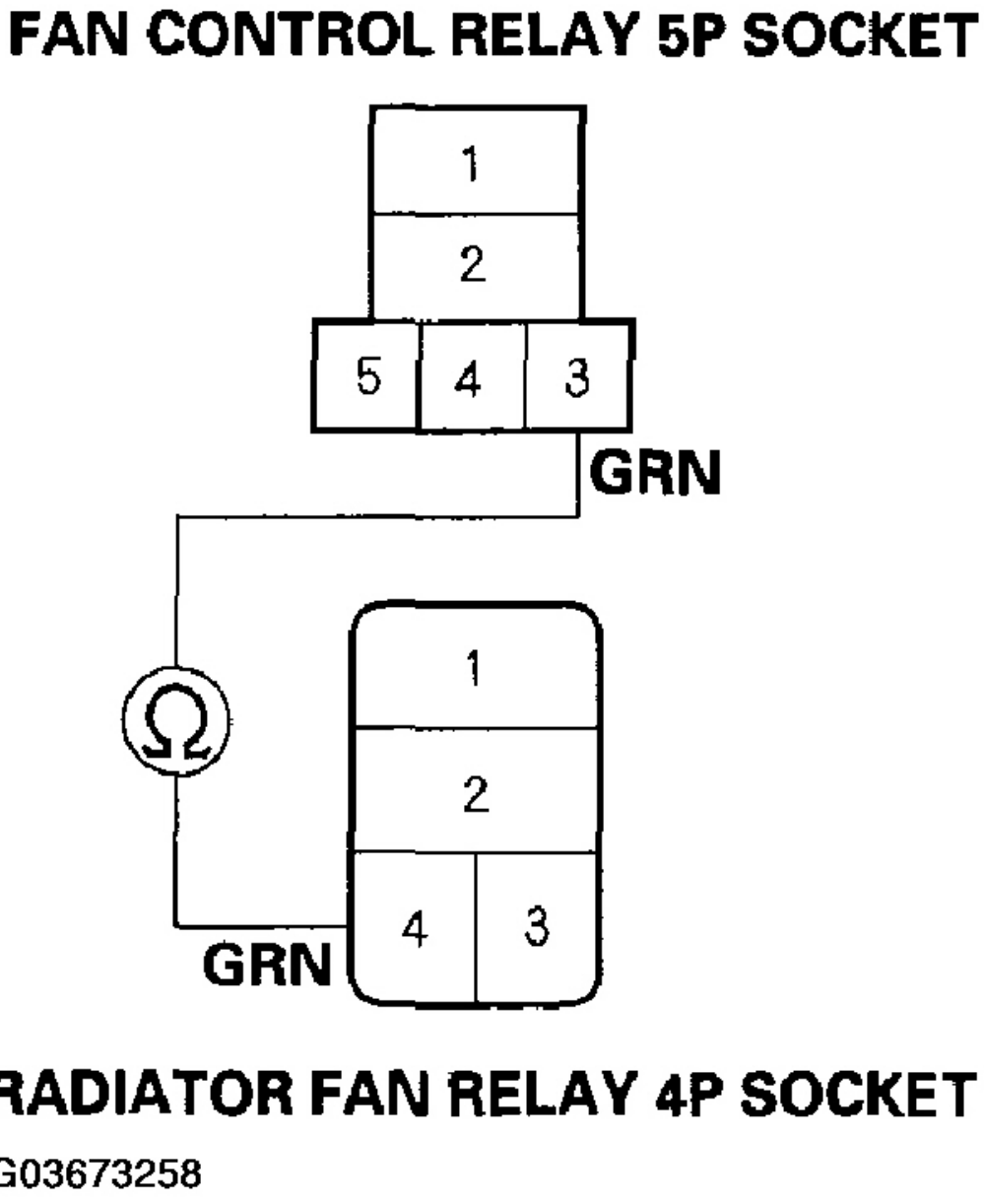


Fig. 30: Checking For Continuity Between Terminal Of Fan Control Relay 5P Socket And Terminal Of Radiator Fan Relay 4P Socket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

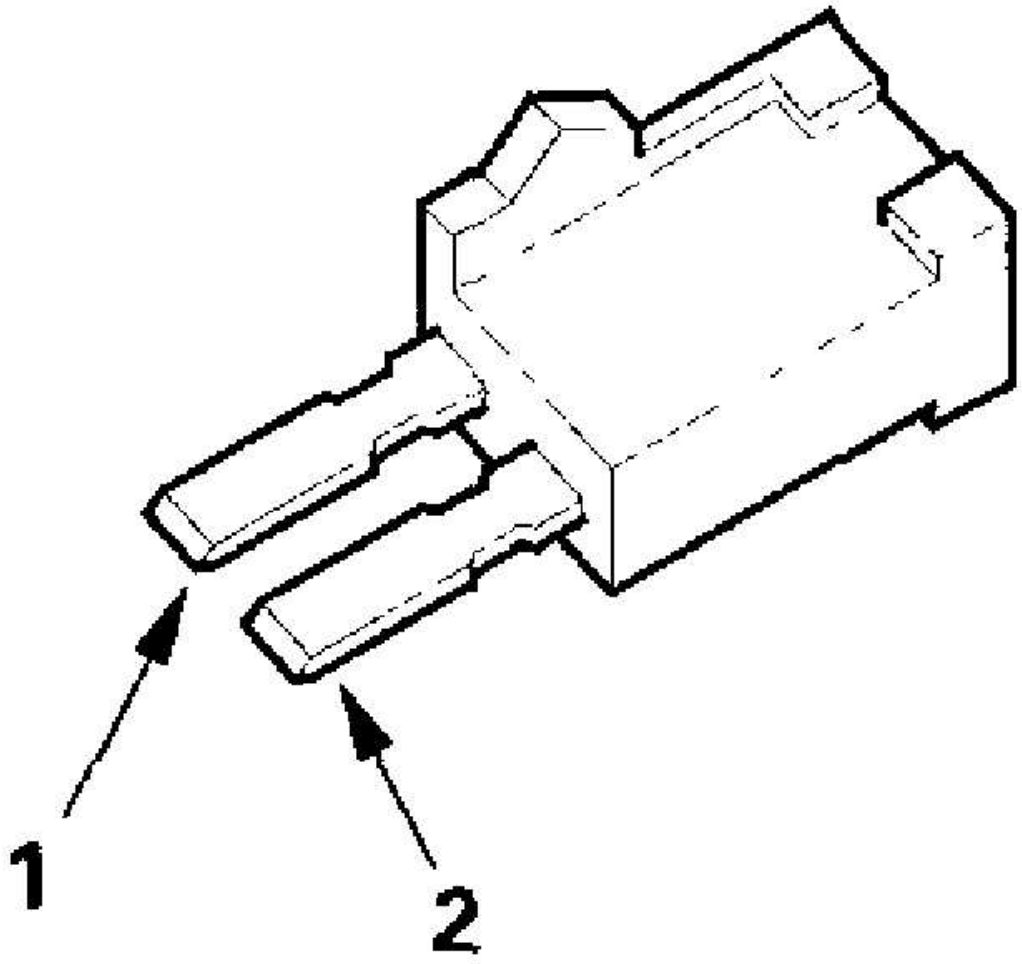
Is there continuity?

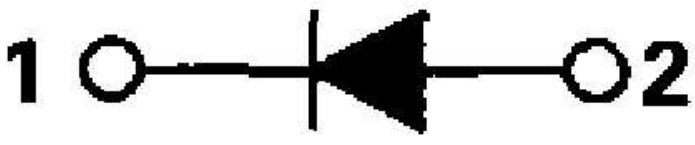
YES - Repair open in the wire between the radiator fan relay and the PCM.

NO - Repair open in the wire between the fan control relay and the radiator fan relay.

9. Turn the ignition switch OFF.
10. Remove A/C diode A from the under-hood fuse/ relay box.
11. Check for current flow in both directions between the No. 1 and No. 2 terminals of A/C diode A.

A/C DIODE A





G03673259

Fig. 31: Checking For Current Flow In Both Directions Between No. 1 And No. 2 Terminals Of A/C Diode A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there current flow in only one direction?

YES - Go to step 12.

NO - Replace A/C diode A.

12. Turn the ignition switch ON (II).
13. Measure the voltage between the No. 2 terminal of A/C diode A 2P socket and body ground.

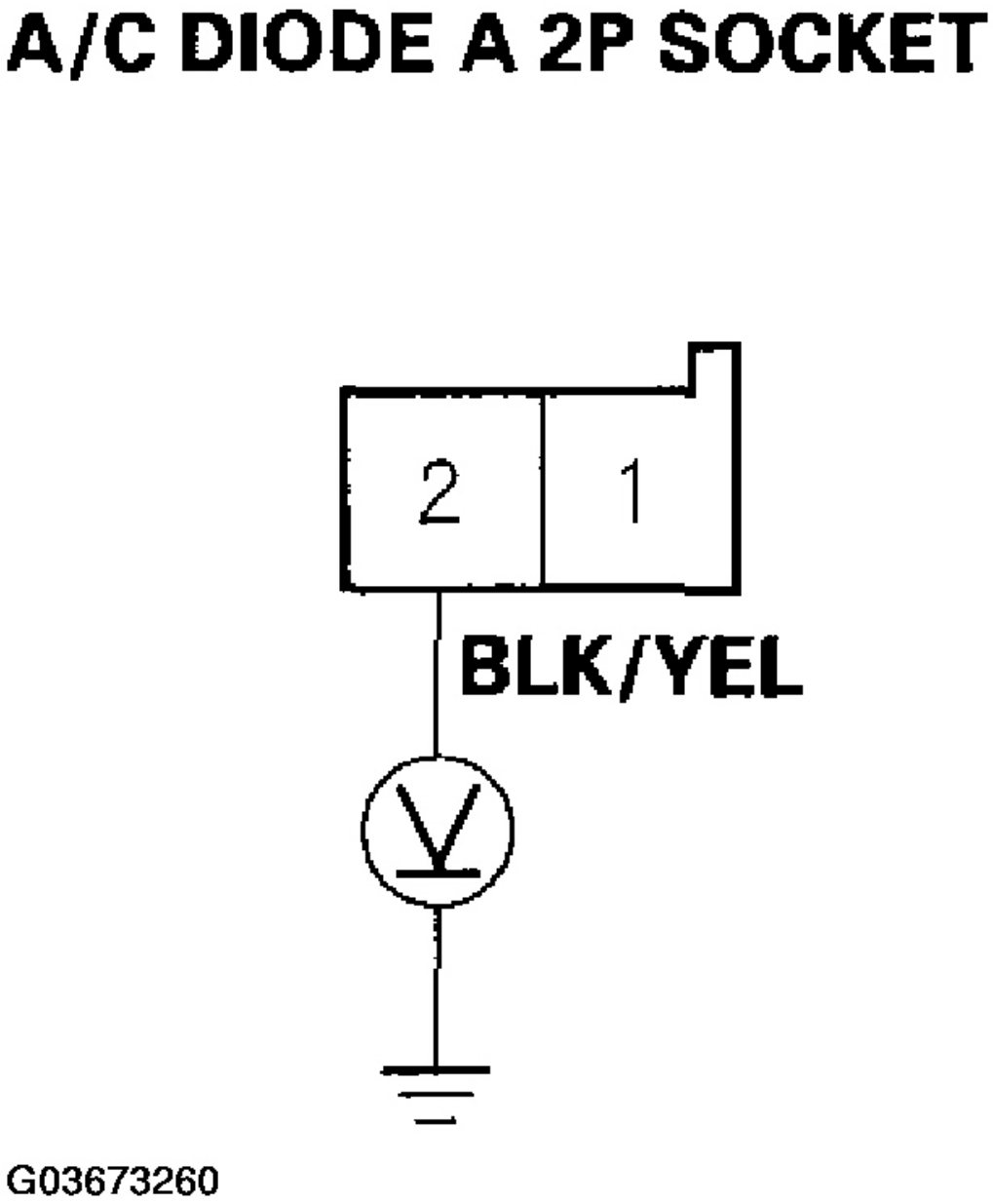


Fig. 32: Measuring Voltage Between No. 2 Terminal Of A/C Diode A 2P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Repair open in the wire between A/C diode A and the fan control relay.

NO - Repair open in the wire between the No. 30 fuse in the under-dash fuse/relay box and A/C diode A.

RADIATOR AND A/C CONDENSER FAN HIGH SPEED CIRCUIT TROUBLESHOOTING

NOTE:

- **Do not use this troubleshooting procedure if only one fan is inoperative, or if the A/C compressor is inoperative. Refer to the SYMPTOM TROUBLESHOOTING INDEX.**
- **Before performing symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Disconnect the A/C pressure switch 4P connector.
2. Check for continuity between the No. 2 terminal of the A/C pressure switch 4P connector and body ground.

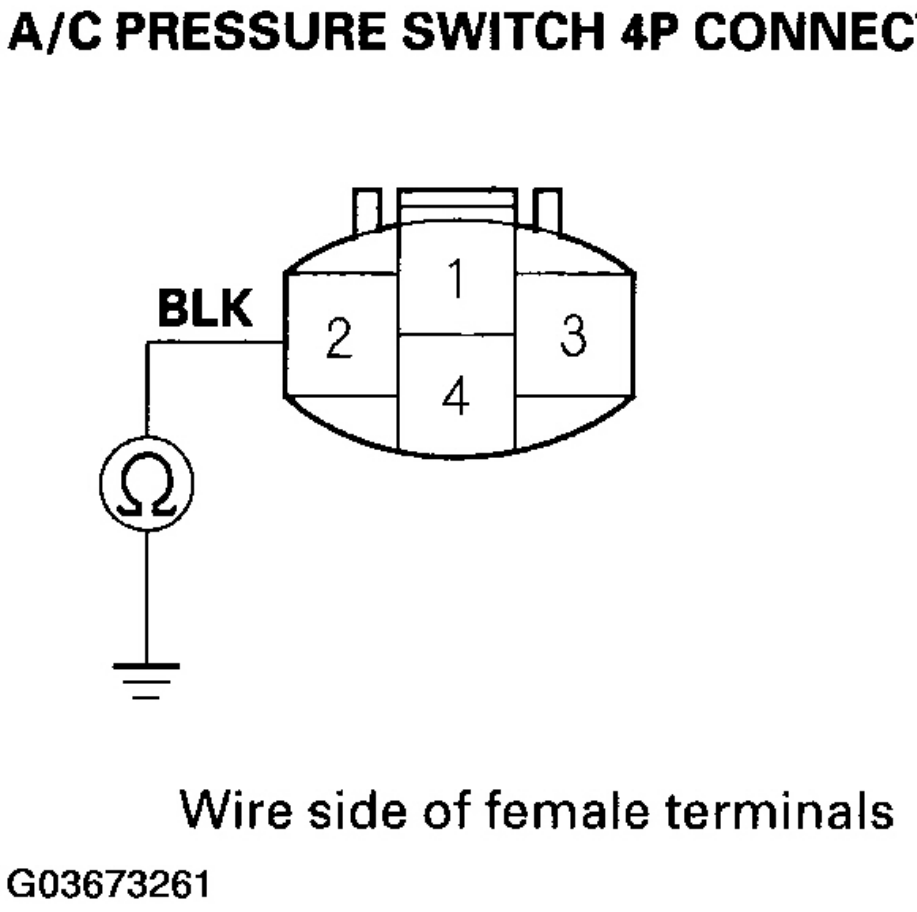


Fig. 33: Checking For Continuity Between No. 2 Terminal Of A/C Pressure Switch 4P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 3.

NO - Check for an open in the wire between the A/C pressure switch and body ground. If the wire is OK, check for poor ground at G201.

3. Using the backprobe set, check for continuity between the No. 14 terminal of PCM connector E (31P) and the No. 3 terminal of the A/C pressure switch 4P connector.

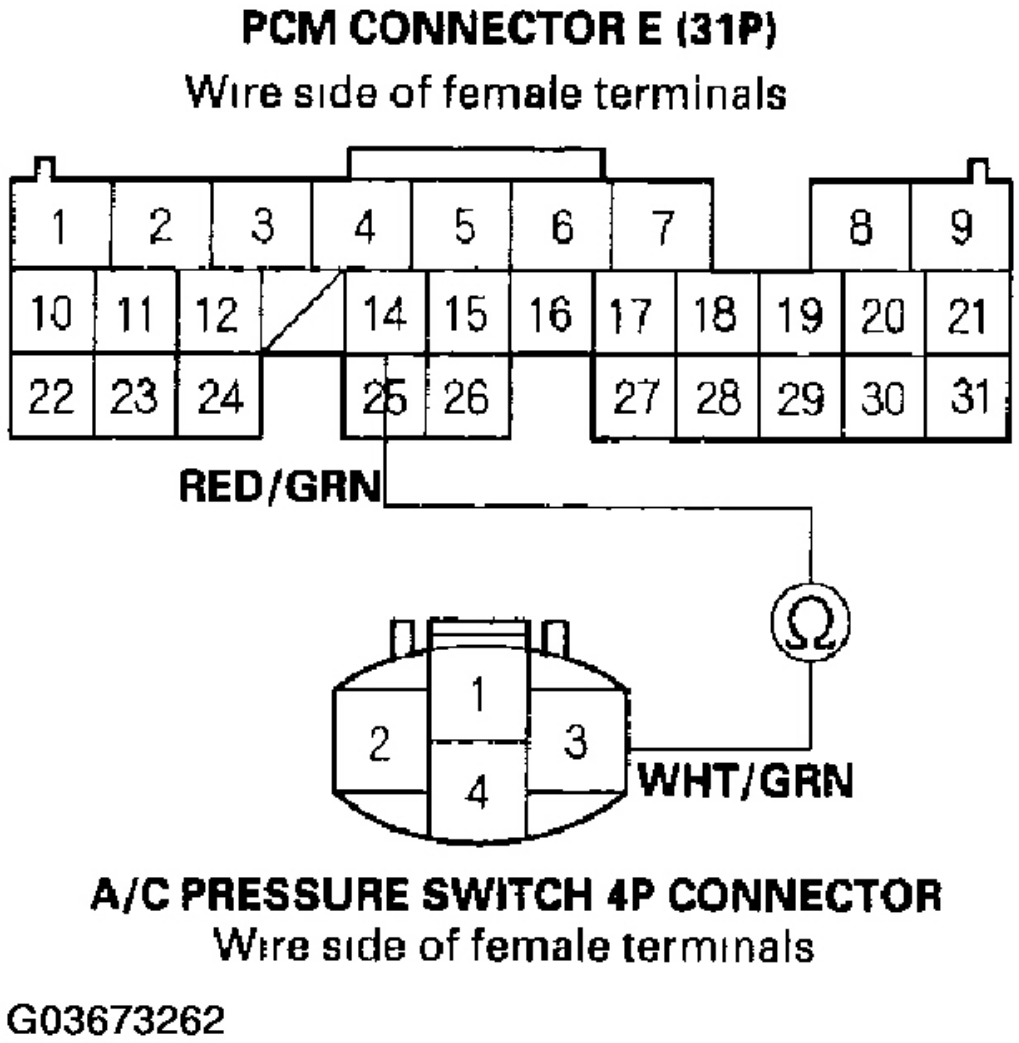


Fig. 34: Checking For Continuity Between Terminal Of PCM Connector E (31P) And Terminal Of A/C Pressure Switch 4P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 4.

NO - Repair open in the wire between the PCM and the A/C pressure switch.

4. Turn the ignition switch ON (II).
5. Turn the A/C and blower fan switches on.
6. Connect the No. 2 and No. 3 terminals of the A/C pressure switch 4P connector with a jumper wire.

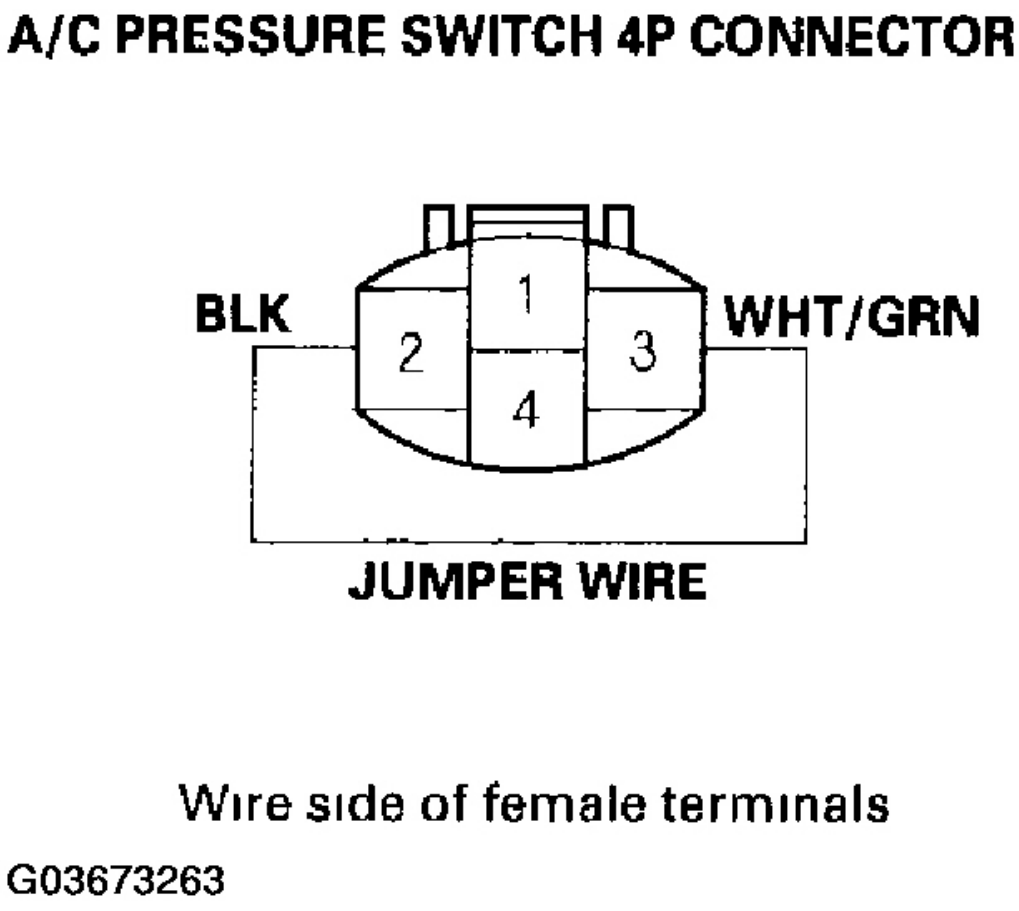


Fig. 35: Connecting No. 2 And No. 3 Terminals Of A/C Pressure Switch 4P Connector With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the radiator and A/C condenser fans run high speed?

YES - Replace the A/C pressure switch.

NO - Check for loose wires or poor connections at PCM connector E (31P) and at the A/C pressure switch 4P connector. If the connections are good, substitute a known-good PCM, and recheck. If the symptom/indication goes away, replace the original PCM, the perform the PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).

A/C COMPRESSOR CLUTCH CIRCUIT TROUBLESHOOTING

NOTE:

- **Do not use this troubleshooting procedure if the fans are also inoperative with the A/C on. Refer to the SYMPTOM TROUBLESHOOTING INDEX.**
- **Before performing symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Check the No. 12 (7.5A) fuse in the under-hood fuse/relay box, and the No. 30 (7.5A) fuse in the under-dash fuse/relay box.

   Are the fuses OK?

   YES - Go to step 2.

   NO - Replace the fuse(s), and recheck.
2. Check the engine coolant temperature, throttle position, and idle speed (use the HDS PGM-FI data list if possible).

   TEMPERATURE SENSOR

ECT Sensor	169-194°F (76-90°C)
TP Sensor	About 0.5 V
RPM	MT: More than 750 AT: More than 730

   Is the coolant temperature, throttle position, or idle speed OK?

   YES - Go to step 3.

   NO - Troubleshoot and repair the cause of the high engine coolant

temperature, low idle, or excessively high throttle position sensor reading.

3. Remove the A/C compressor clutch relay from the under-hood fuse/relay box, and test it, refer to **POWER RELAY TEST** .

Is the relay OK?

YES - Go to step 4.

NO - Replace the A/C compressor clutch relay.

4. Measure the voltage between the No. 1 terminal of the A/C compressor clutch relay 4P socket and body ground.

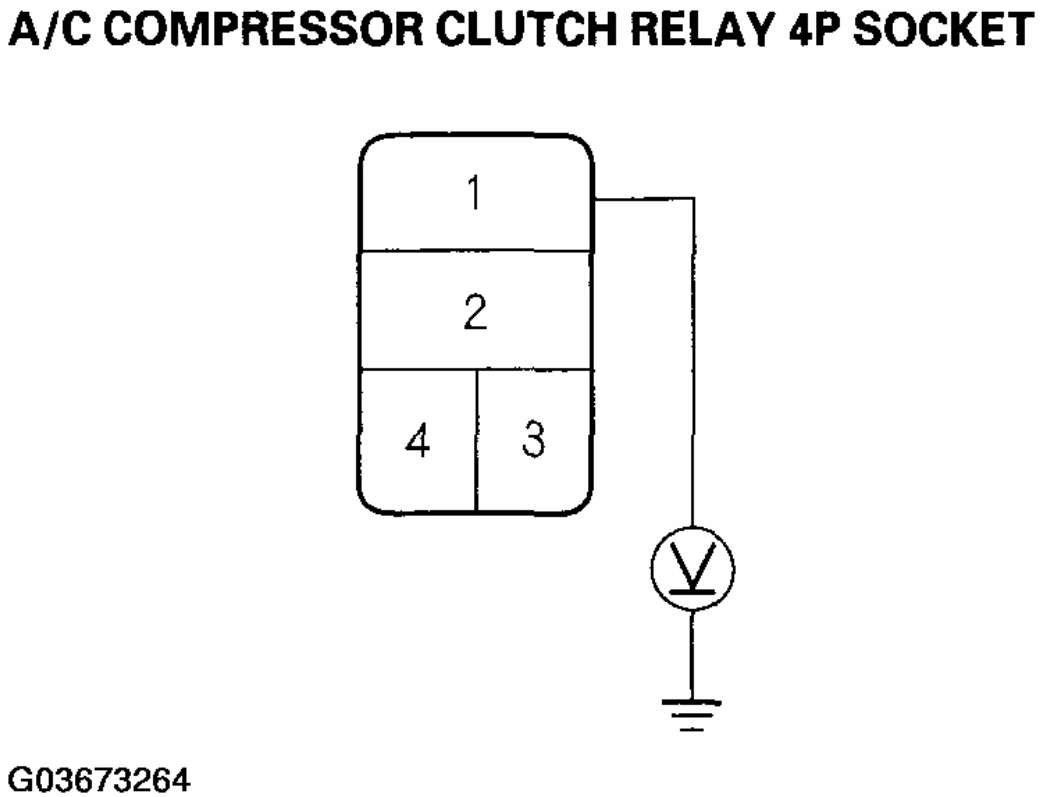


Fig. 36: Measuring Voltage Between No. 1 Terminal Of A/C Compressor Clutch Relay 4P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 5.

NO - Replace the under-hood fuse/relay box.

5. Connect the No. 1 and No. 2 terminals of the A/C compressor clutch relay 4P socket with a jumper wire.

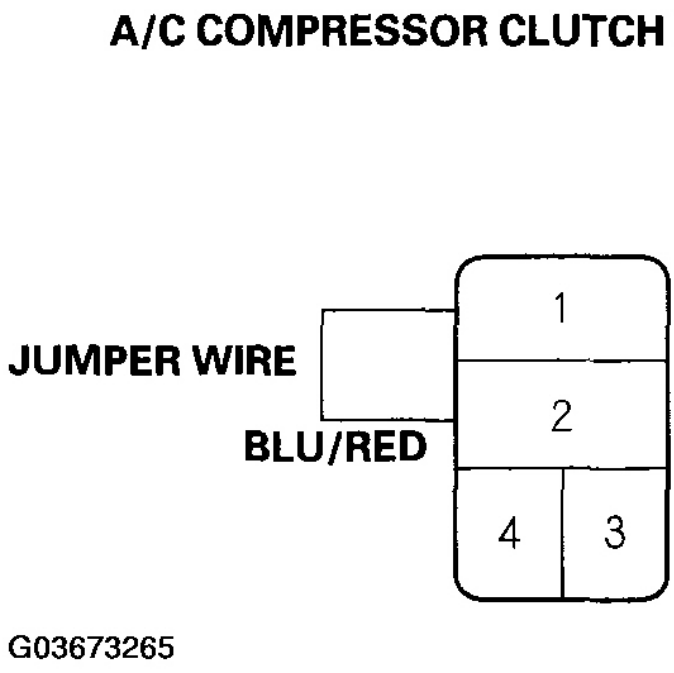


Fig. 37: Connecting No. 1 And No. 2 Terminals Of A/C Compressor Clutch Relay 4P Socket With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the A/C compressor clutch click?

YES - Go to step 6.

NO - Go to step 14.

6. Disconnect the jumper wire.
7. Turn the ignition switch ON (II).

8. Measure the voltage between the No. 4 terminal of the A/C compressor clutch relay 4P socket and body ground.

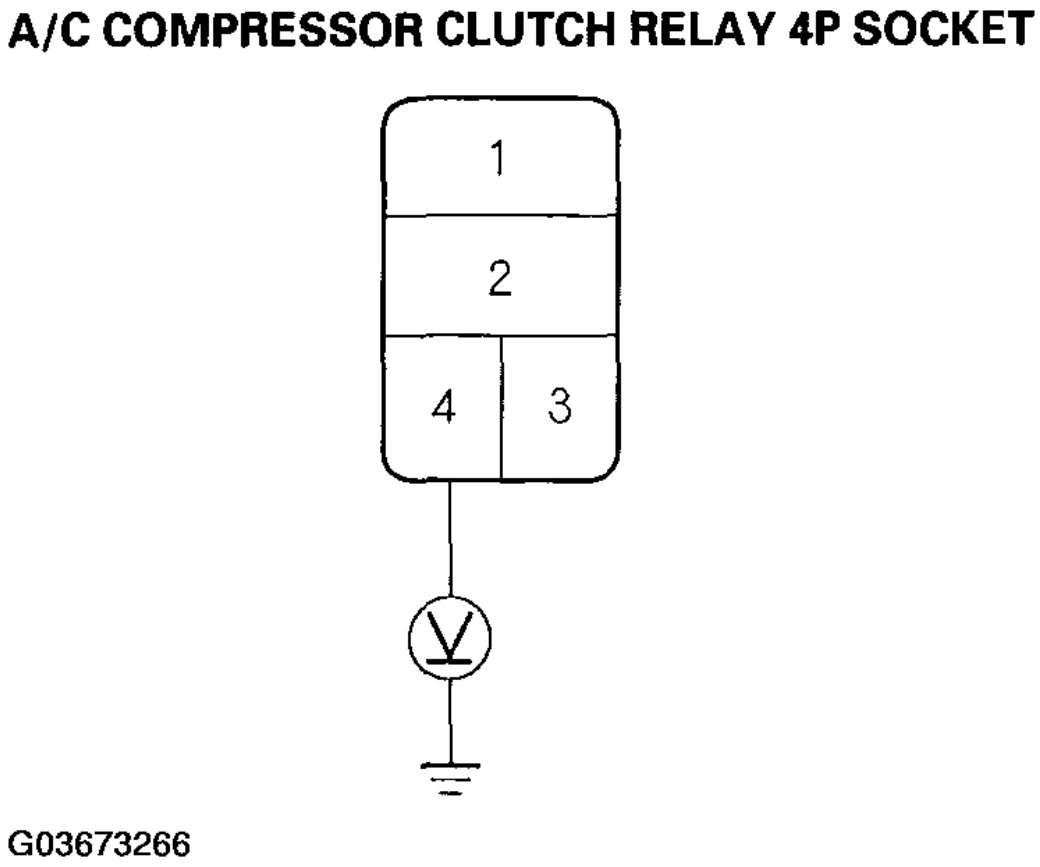


Fig. 38: Measuring Voltage Between No. 4 Terminal Of A/C Compressor Clutch Relay 4P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 9.

NO - Repair open in the wire between the No. 30 fuse in the under-dash fuse/relay box and the A/C compressor clutch relay.

9. Turn the ignition switch OFF.

10. Reinstall the A/C compressor clutch relay.
11. Make sure the A/C switch is OFF.
12. Turn the ignition switch ON (II).
13. Using the backprobe set, measure the voltage between the No. 27 terminal of PCM connector A (31P) and body ground with the PCM connectors connected.

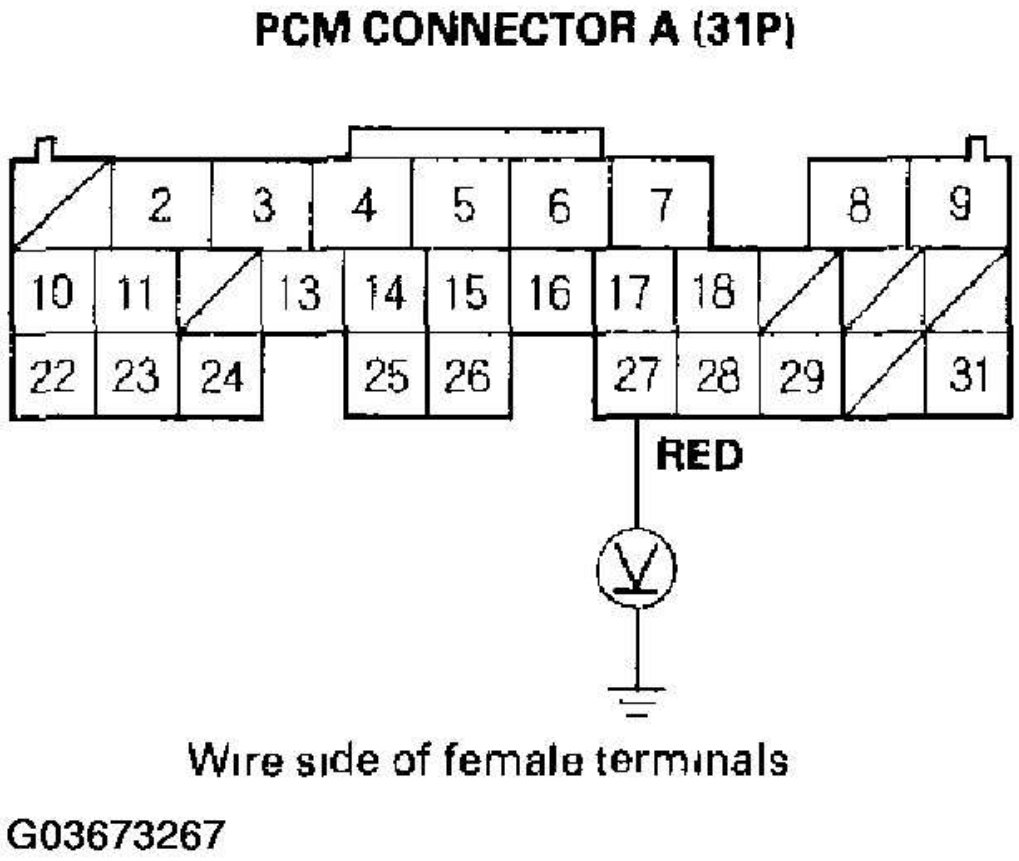


Fig. 39: Measuring Voltage Between No. 27 Terminal Of PCM Connector A (31P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Check for loose wires or poor connections at No. 27 terminal of PCM connector A (31P). If the connections are good, substitute a known-good PCM, and recheck. If the symptom/indication goes away, replace the original PCM then perform the PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).

NO - Repair open in the wire between the A/C compressor clutch relay and the PCM.

14. Disconnect the jumper wire.
15. Disconnect the A/C compressor clutch 1P connector.
16. Check for continuity between the No. 2 terminal of the A/C compressor clutch relay 4P socket and the No. 1 terminal of the A/C compressor clutch 1P connector.

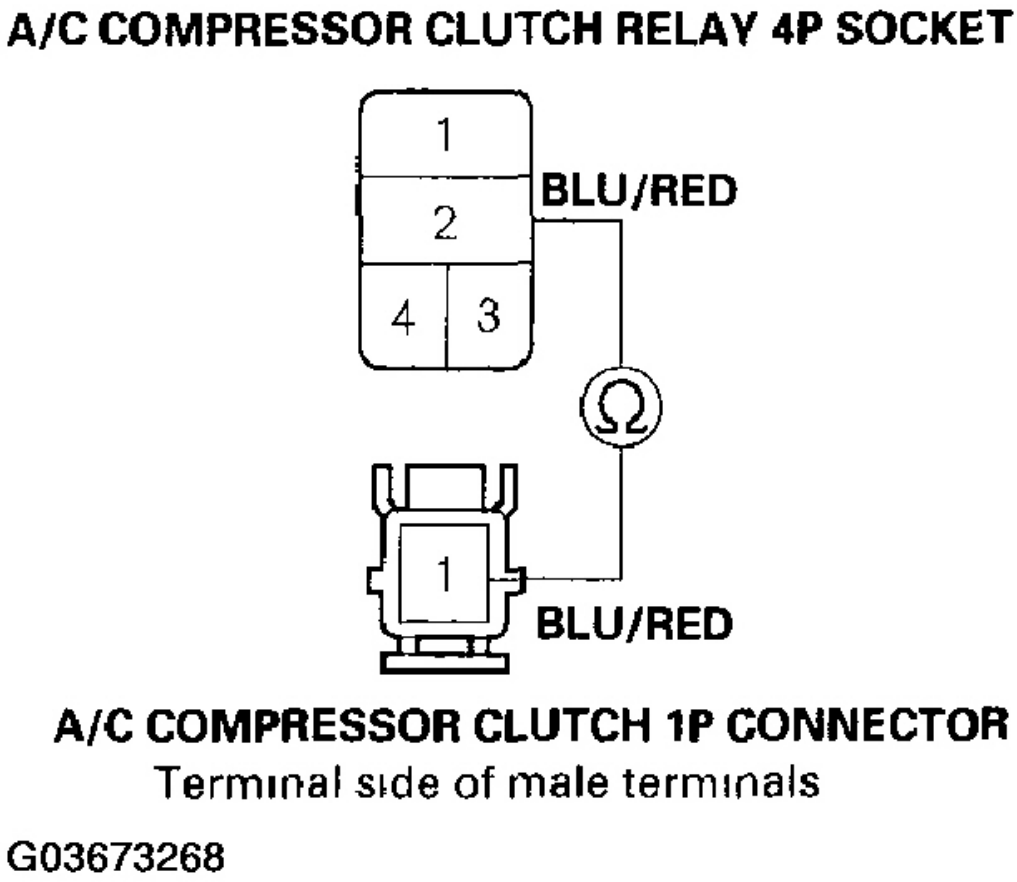


Fig. 40: Checking Continuity Between Terminal Of A/C Compressor Clutch Relay 4P Socket And Terminal Of A/C Compressor Clutch 1P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check the A/C compressor clutch clearance, and the A/C compressor clutch field coil (see **A/C COMPRESSOR CLUTCH CHECK**). Repair as needed.

NO - Repair open in the wire between the A/C compressor clutch relay and the A/C compressor clutch.

A/C PRESSURE SWITCH CIRCUIT TROUBLESHOOTING

NOTE:

- **Do not use this troubleshooting procedure if any of the following items are operative; A/C condenser fan, radiator fan, A/C compressor, or if the heater is inoperative. Refer to the SYMPTOM TROUBLESHOOTING INDEX.**
- **Before performing symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Check for body DTCs in test mode A of the MICS, refer to **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

   Are there any DTCs indicated?

   YES - Do the appropriate troubleshooting for the DTC indicated.

   NO - Go to step 2.
2. Disconnect the A/C pressure switch 4P connector.
3. Turn the ignition switch ON (II).
4. Measure the voltage between the No. 1 terminal of the A/C pressure switch 4P connector and body ground.

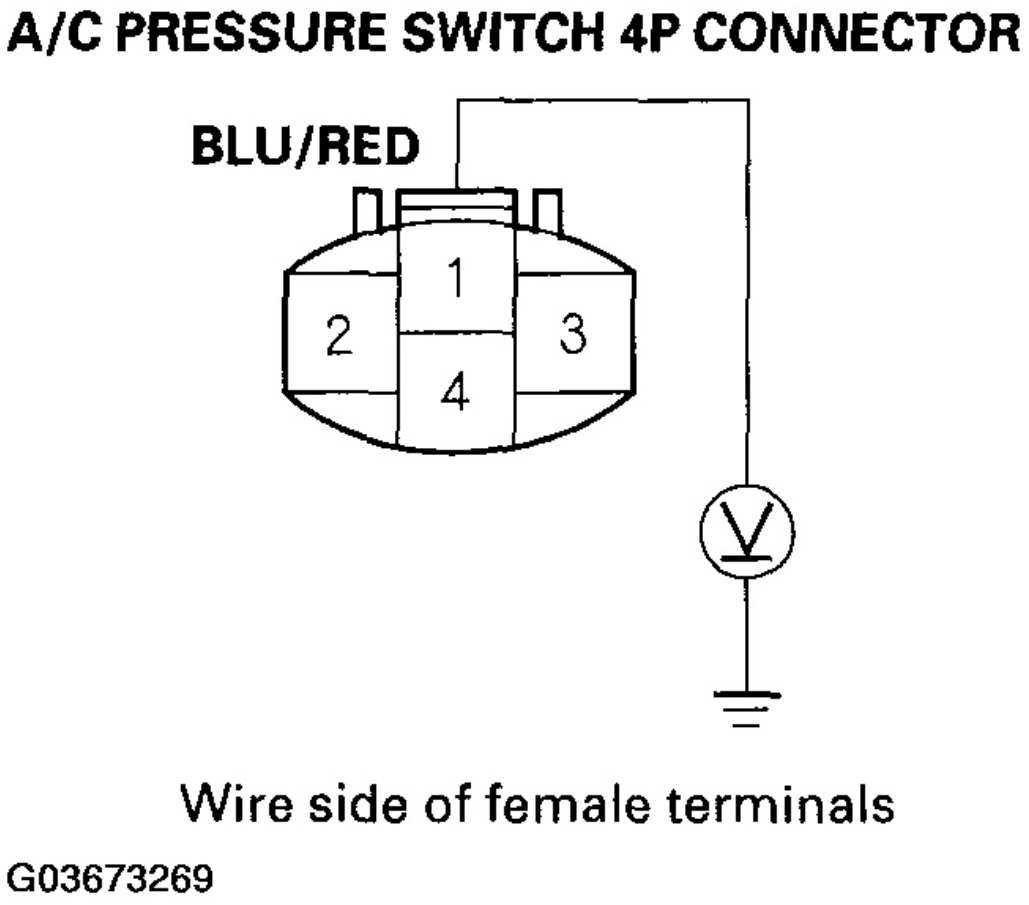


Fig. 41: Measuring Voltage Between No. 1 Terminal Of A/C Pressure Switch 4P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 5 V or more?

YES - Go to step 5.

NO - Repair open in the wire between the relay module and the A/C pressure switch. If the wire is OK, replace the relay module.

5. Turn the ignition switch OFF.
6. Check for continuity between the No. 1 and No. 4 terminals of the A/C pressure switch.

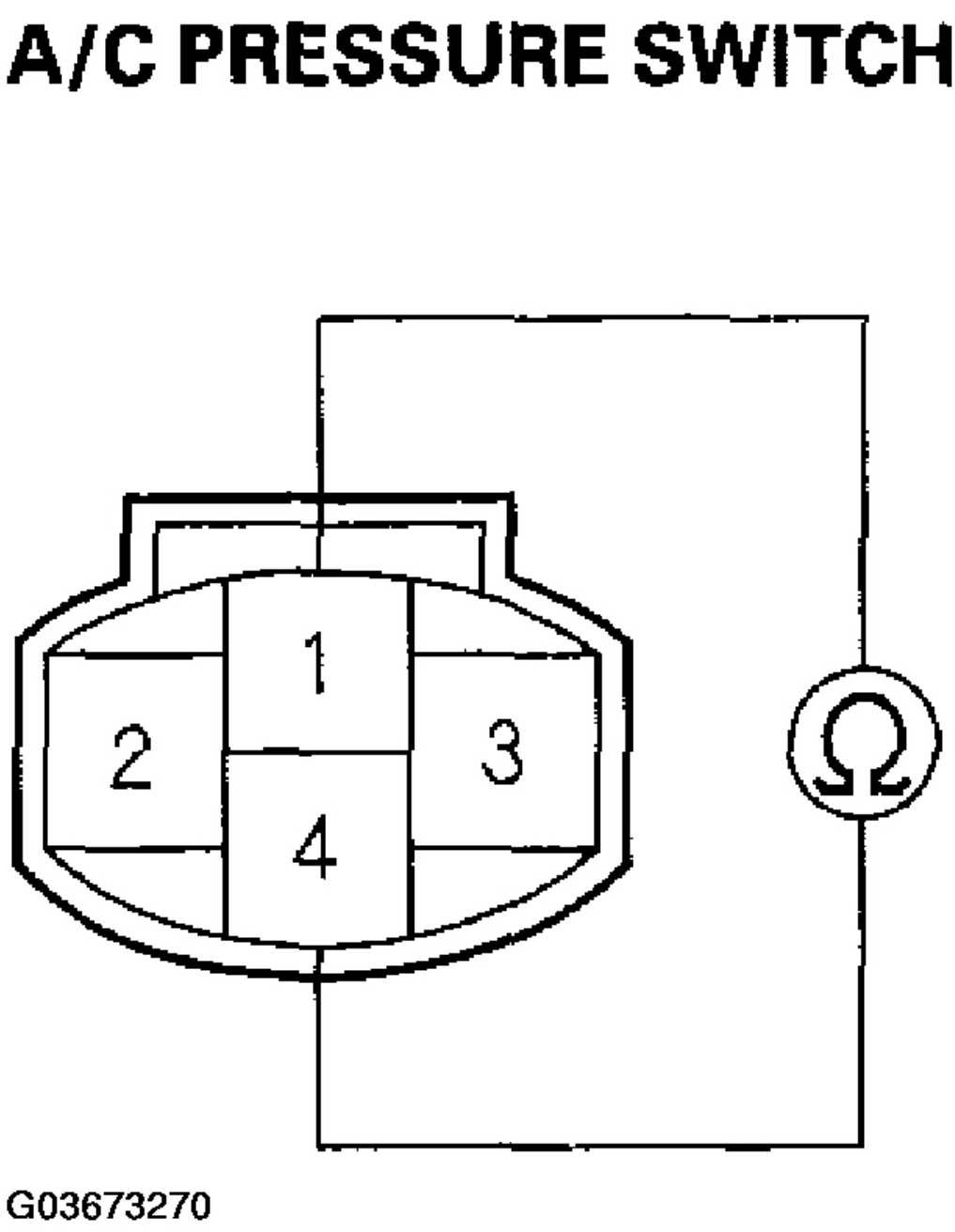


Fig. 42: Checking For Continuity Between No. 1 And No. 4 Terminals Of A/C Pressure Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 7.

NO - Go to step 16.

7. Reconnect the A/C pressure switch 4P connector.
8. Disconnect audio-HVAC display panel 22P connector.
9. Turn the ignition switch ON (II).
10. Measure the voltage between the No. 1 terminal of audio-HVAC display panel 22P connector and body ground.

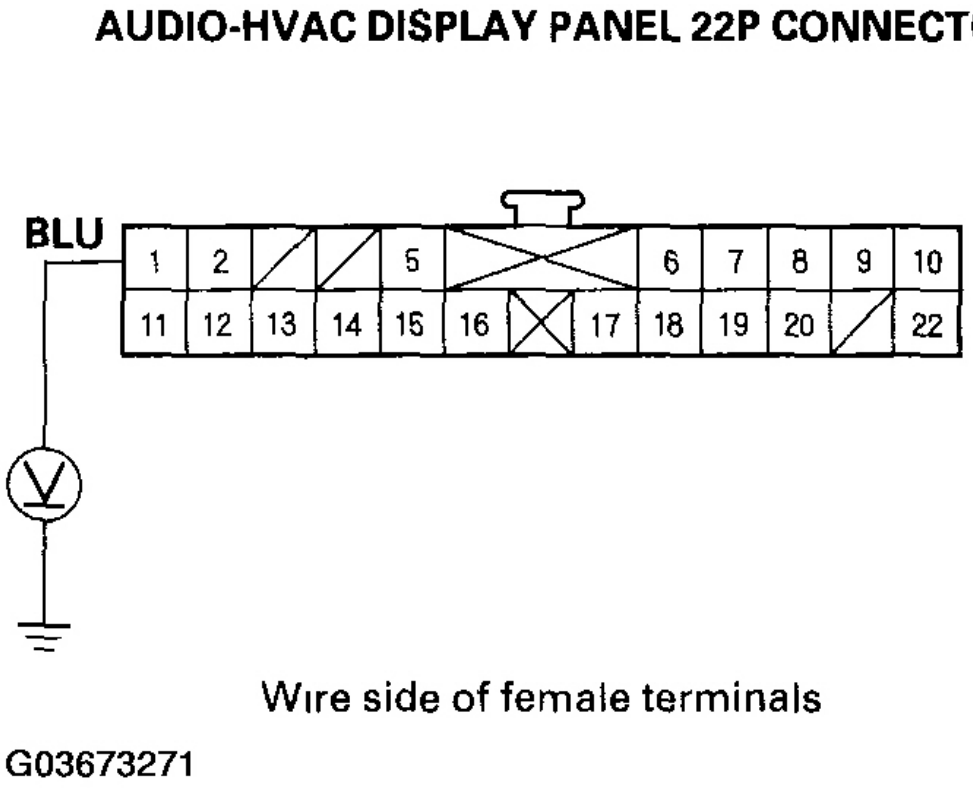


Fig. 43: Measuring Voltage Between No. 1 Terminal Of Audio-HVAC Display Panel 22P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 5 V or more?

YES - Go to step 11.

NO - Repair open in the wire between the audio-HVAC display panel and the A/C pressure switch.

11. Turn the ignition switch OFF.
12. Measure the resistance between the No. 9 and No. 10 terminals of the audio-HVAC display panel 22P connector.

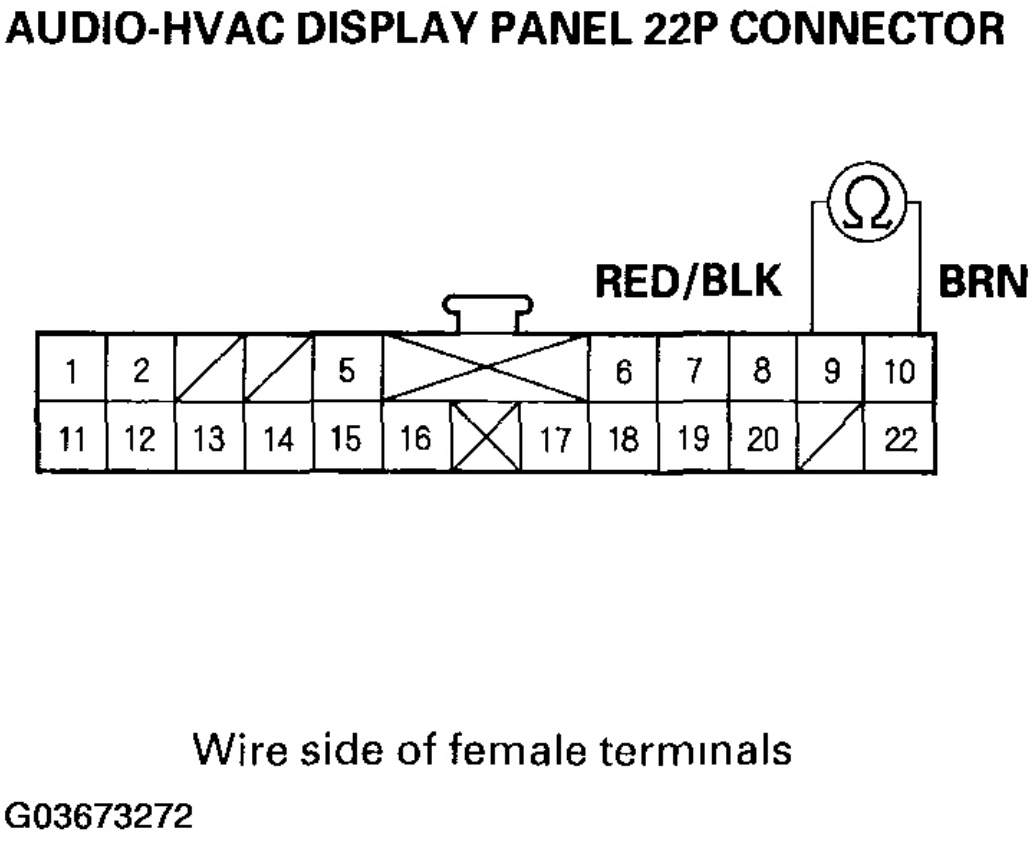


Fig. 44: Measuring Resistance Between No. 9 And No. 10 Terminals Of Audio-HVAC Display Panel 22P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance less than 24 kohms?

YES - Go to step 13.

NO - Repair cause of high resistance in the evaporator temperature circuit.

13. Reconnect the audio-HVAC display panel 22P connector.
14. Turn the ignition switch ON (II).
15. Check the blower motor operation at several speeds.

Does the blower motor operate at all speeds?

YES - Check for loose wires or poor connections at the audio-HVAC display panel 22P connector and at the A/C pressure switch 4P connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original front panel assembly.

NO - Repair the problem in the blower motor circuit.

16. Check for proper A/C system pressure.

Is the pressure within specifications?

YES - Replace the A/C pressure switch.

NO - Repair the A/C pressure problem.

AIR MIX CONTROL MOTOR REPLACEMENT

4-DOOR

1. Remove the driver's dashboard lower cover, then remove the driver's dashboard under cover, refer to **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION** .
2. Disconnect the 7P connector (A) from the air mix control motor (B). Remove the self-tapping screws and the air mix control motor from the heater unit.

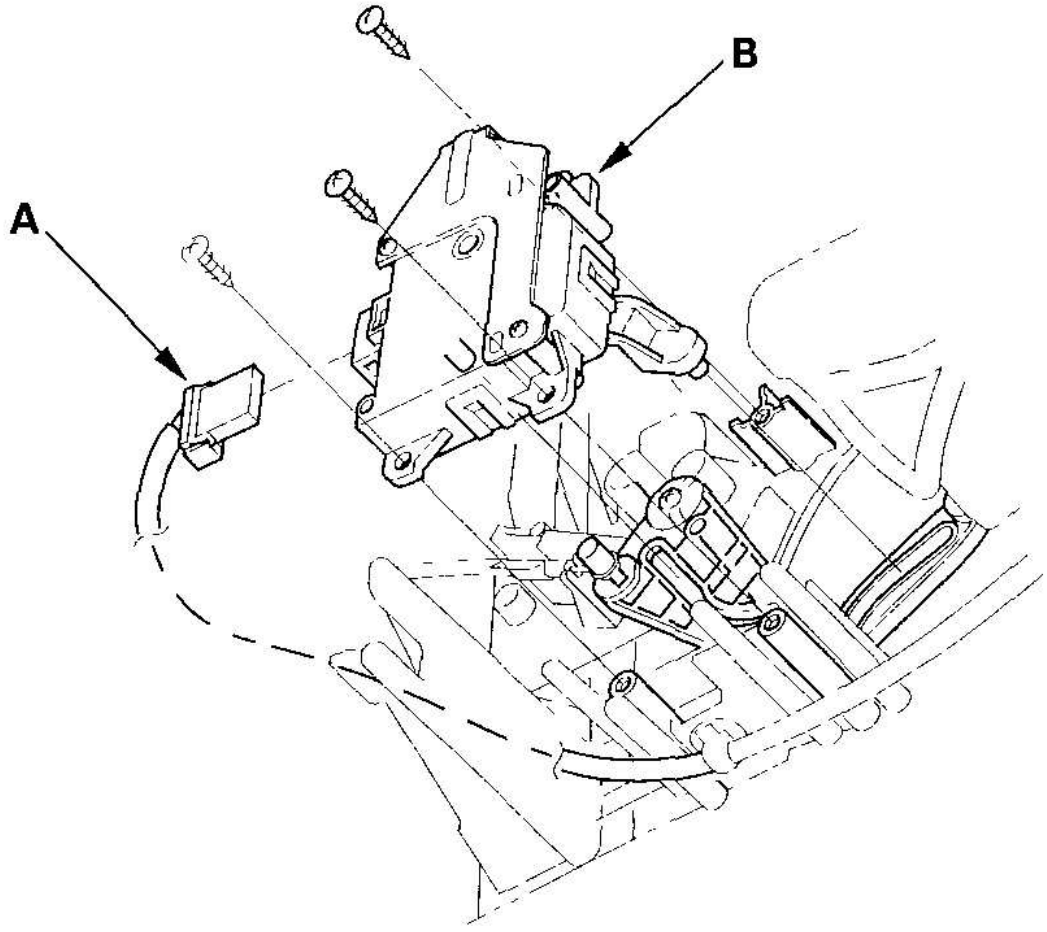


Fig. 45: Disconnecting 7P Connector From Air Mix Control Motor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal.

   Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

2-DOOR

1. Remove the driver's dashboard lower cover, then remove the driver's

dashboard under cover, refer to **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION** .

2. Disconnect the 5P connector (A) from the air mix control motor (B). Remove wire harness clip (C), the self-tapping screws and the air mix control motor from the heater unit.

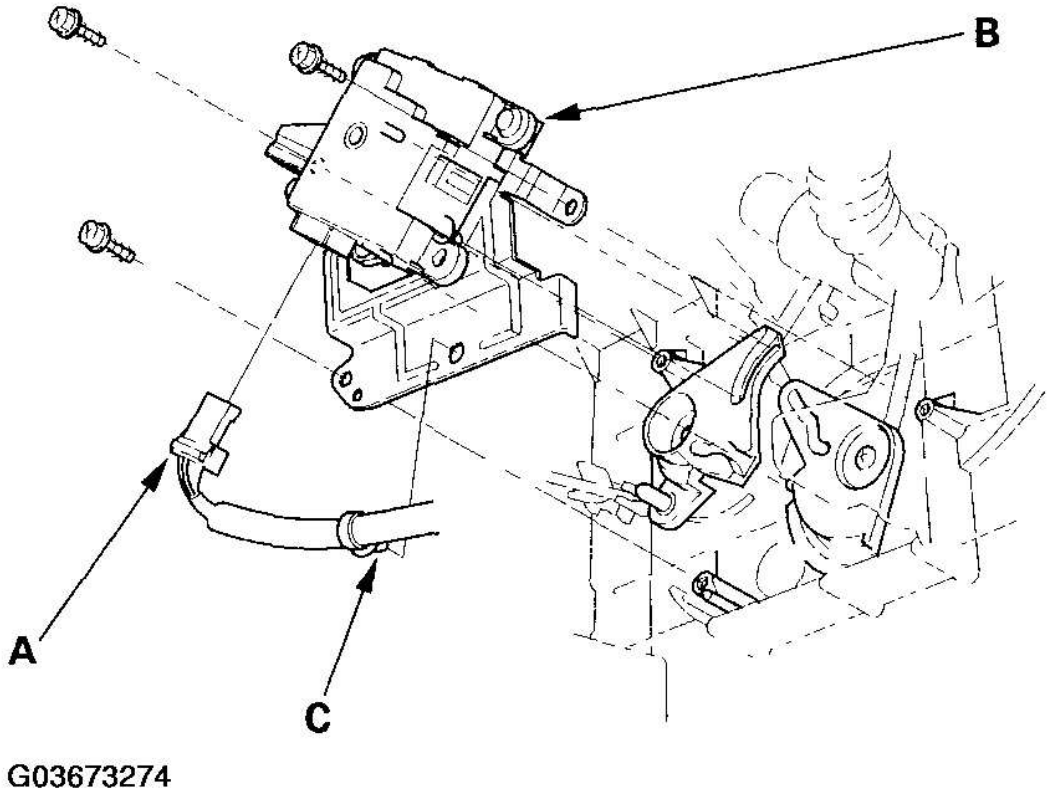


Fig. 46: Disconnecting 5P Connector From Air Mix Control Motor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

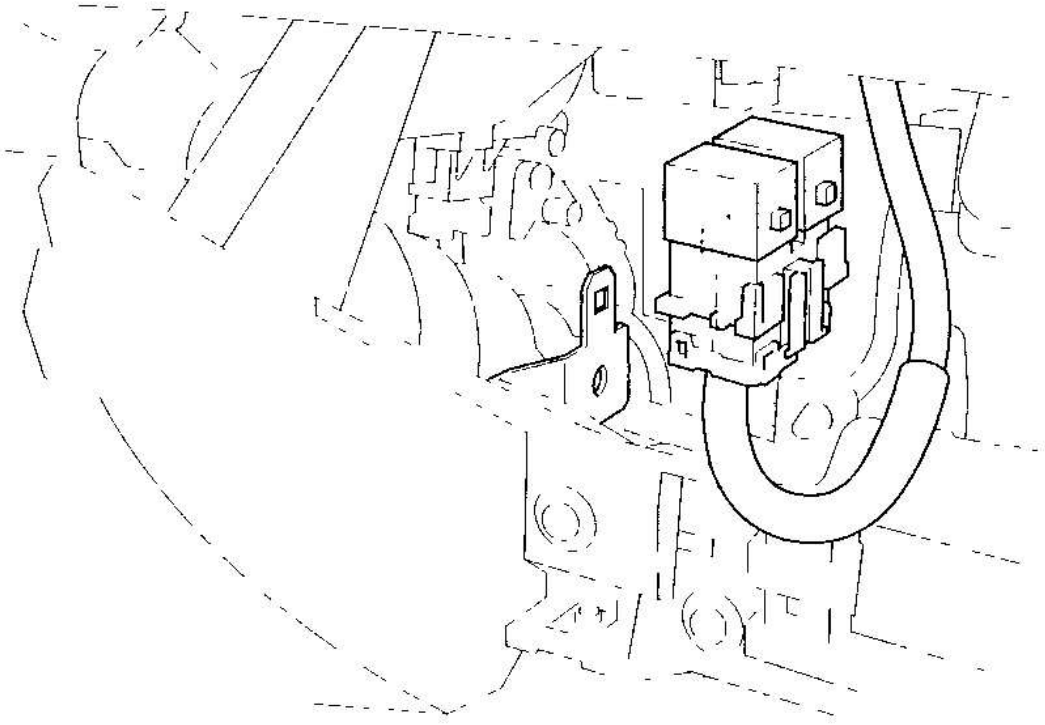
3. Install the motor in the reverse order of removal.

   Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

MODE CONTROL MOTOR REPLACEMENT

4-DOOR

1. Open the glove box. Remove the damper from the glove box, then release the glove box stops and let the glove box hang down, refer to **GLOVE BOX REMOVAL/INSTALLATION** .
2. Remove the relays from the bracket.



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Fig. 47: Removing Relays From Bracket (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the 7P connector (A) from the mode control motor (B). Remove the self-tapping screws and the mode control motor from the heater unit.

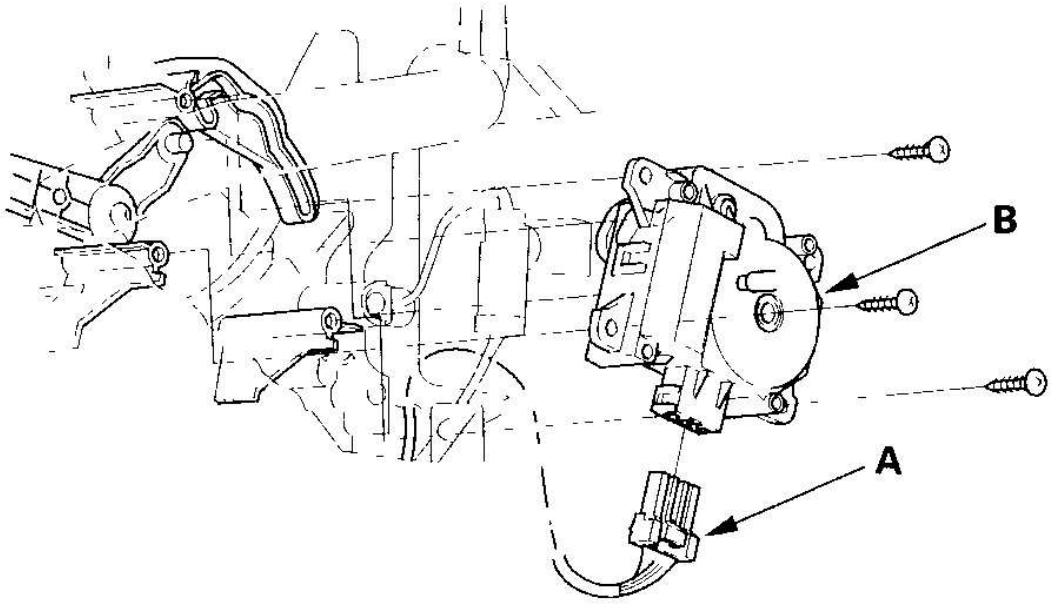


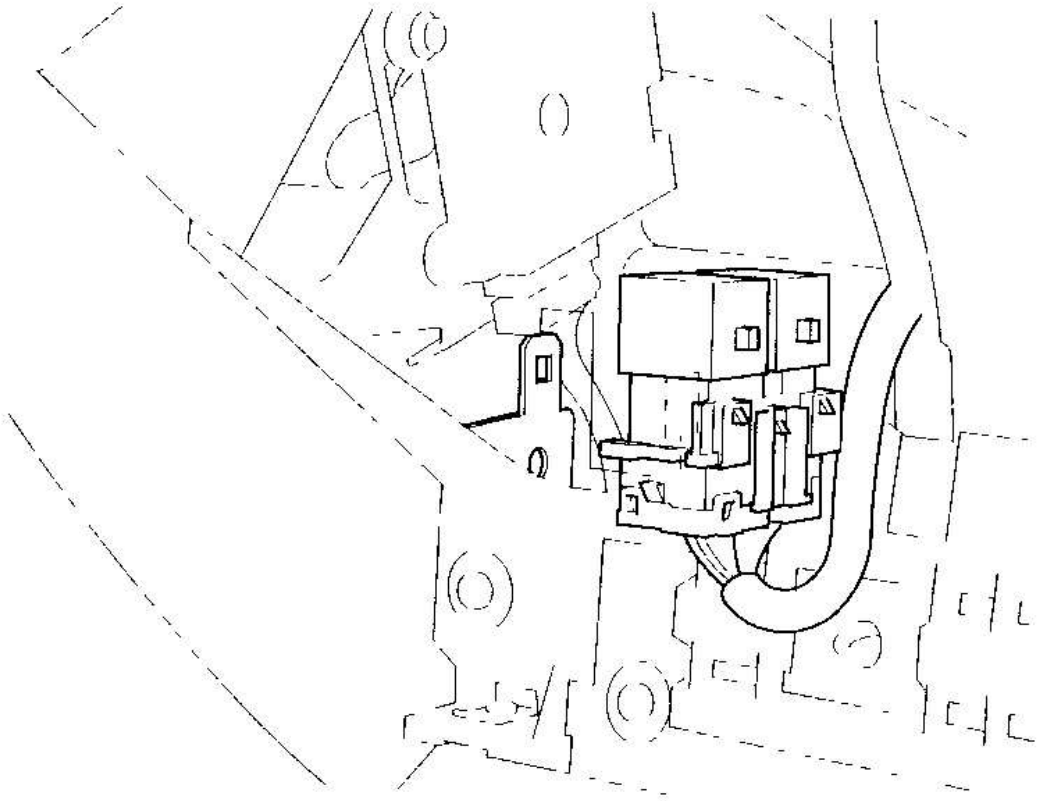
Fig. 48: Disconnecting 7P Connector From Mode Control Motor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the motor in the reverse order of removal.

   After installation, make sure the motor runs smoothly.

2-DOOR

1. Open the glove box. Remove the damper from the glove box, then release the glove box stops and let the glove box hang down, refer to **GLOVE BOX REMOVAL/INSTALLATION** .
2. Remove the relays from the bracket.



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Fig. 49: Removing Relays From Bracket (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the 10P connector (A) from the mode control motor (B). Remove the self-tapping screws and the mode control motor from the heater unit.

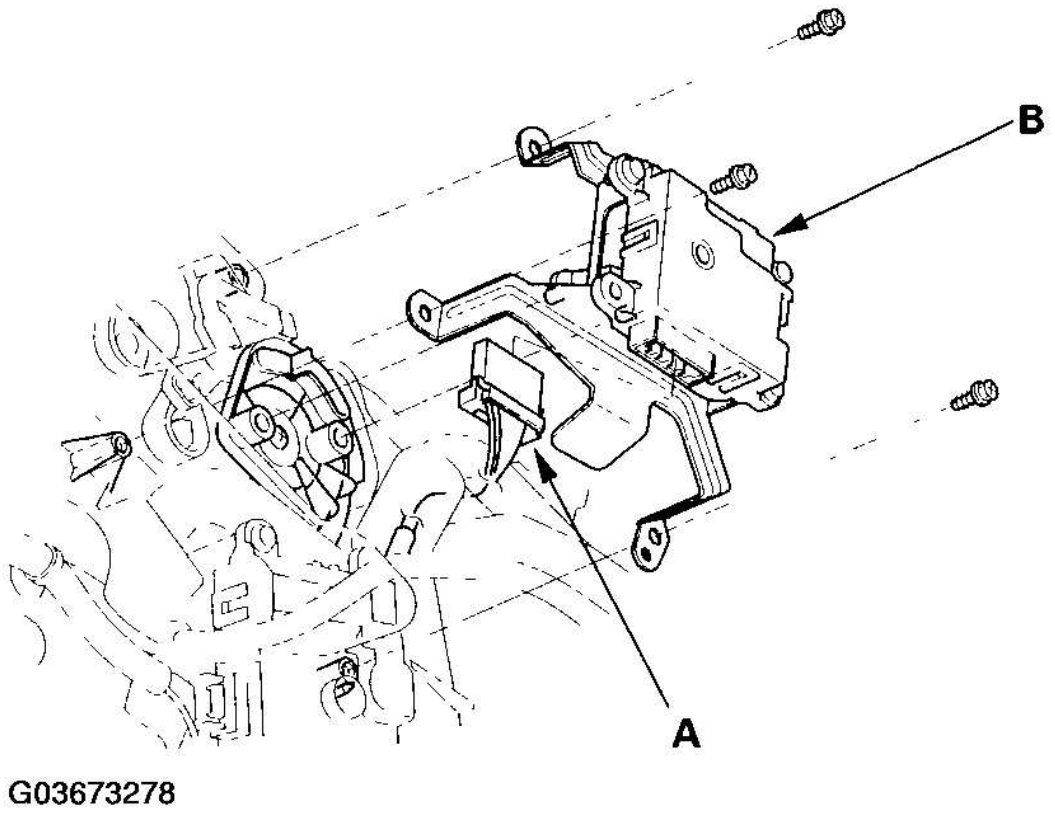


Fig. 50: Disconnecting 10P Connector From Mode Control Motor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

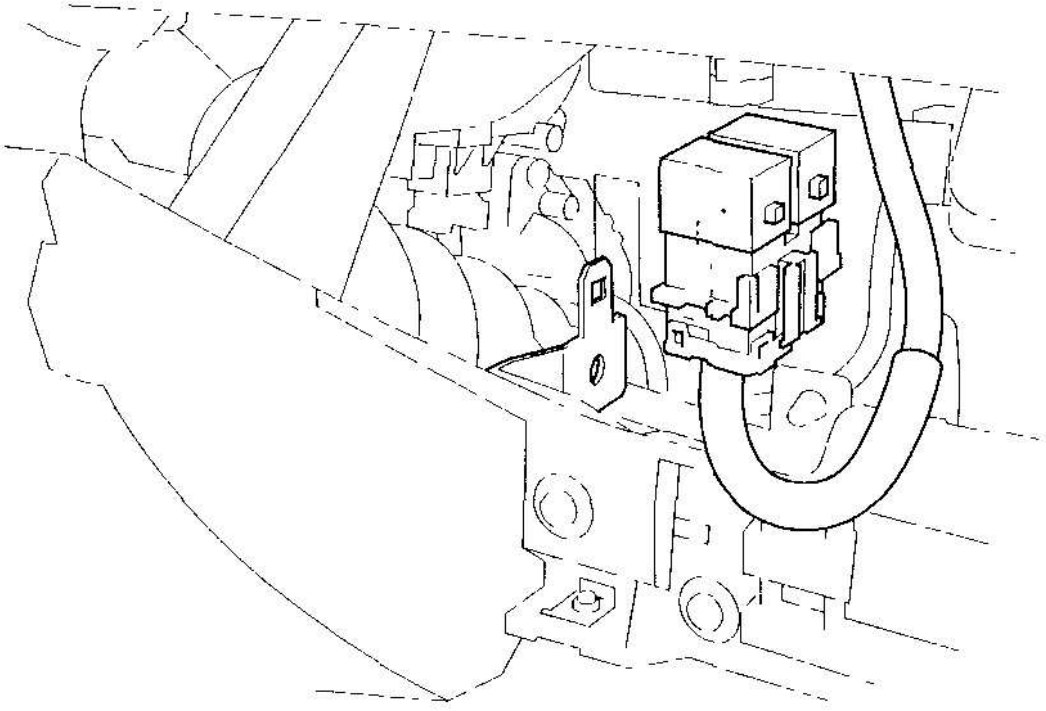
4. Install the motor in the reverse order of removal.

   After installation, make sure the motor runs smoothly.

RECIRCULATION CONTROL MOTOR REPLACEMENT

4-DOOR

1. Open the glove box. Remove the damper from the glove box, then release the glove box stops and let the glove box hang down, refer to **GLOVE BOX REMOVAL/INSTALLATION** .
2. Remove the relays from the bracket.



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Fig. 51: Removing Relays From Bracket (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the 7P connector (A) from the recirculation control motor (B). Remove the self-tapping screws and the recirculation control motor from the blower unit.

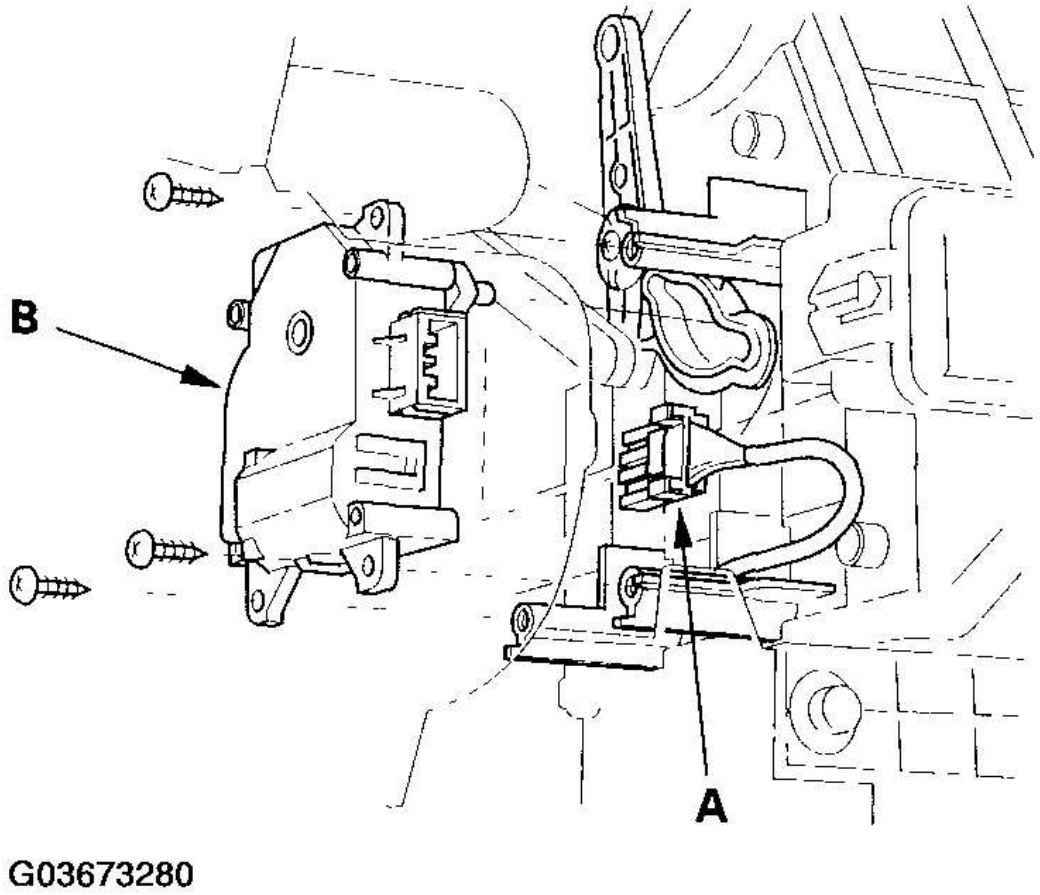


Fig. 52: Disconnecting 7P Connector From Recirculation Control Motor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the motor in the reverse order of removal.

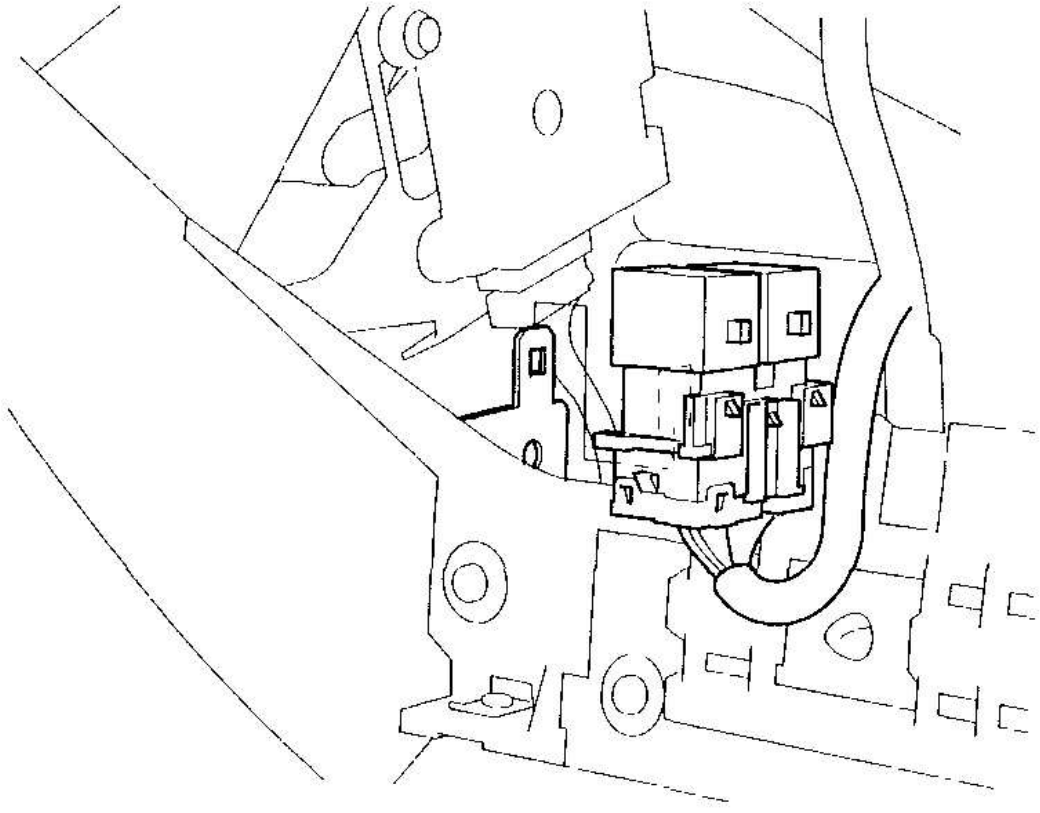
   Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

2-DOOR

1. Open the glove box. Remove the damper from the glove box, then release the glove box stops and let the glove box hang down, refer to **GLOVE BOX**

REMOVAL/INSTALLATION .

2. Remove the relays from the bracket.



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Fig. 53: Removing Relays From Bracket (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the 5P connector (A) from the recirculation control motor (B). Remove the self-tapping screws and the recirculation control motor from the blower unit.

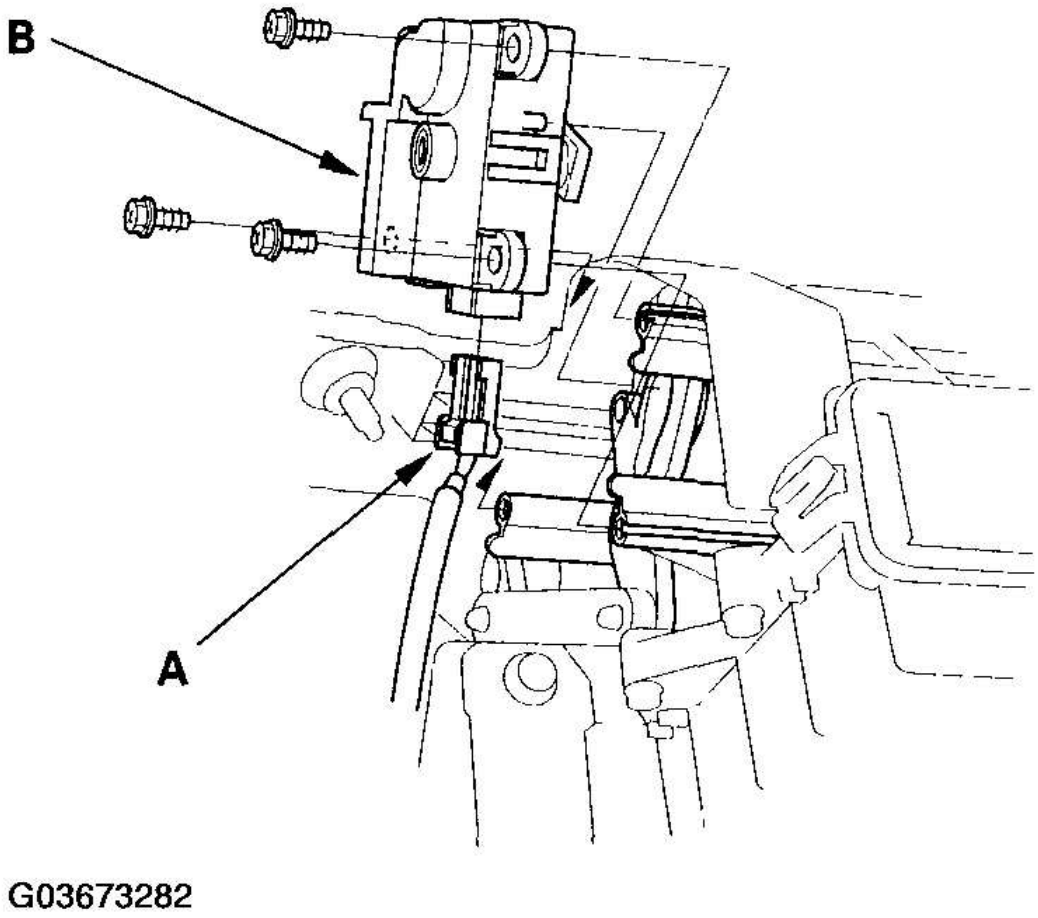


Fig. 54: Disconnecting 5P Connector From Recirculation Control Motor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

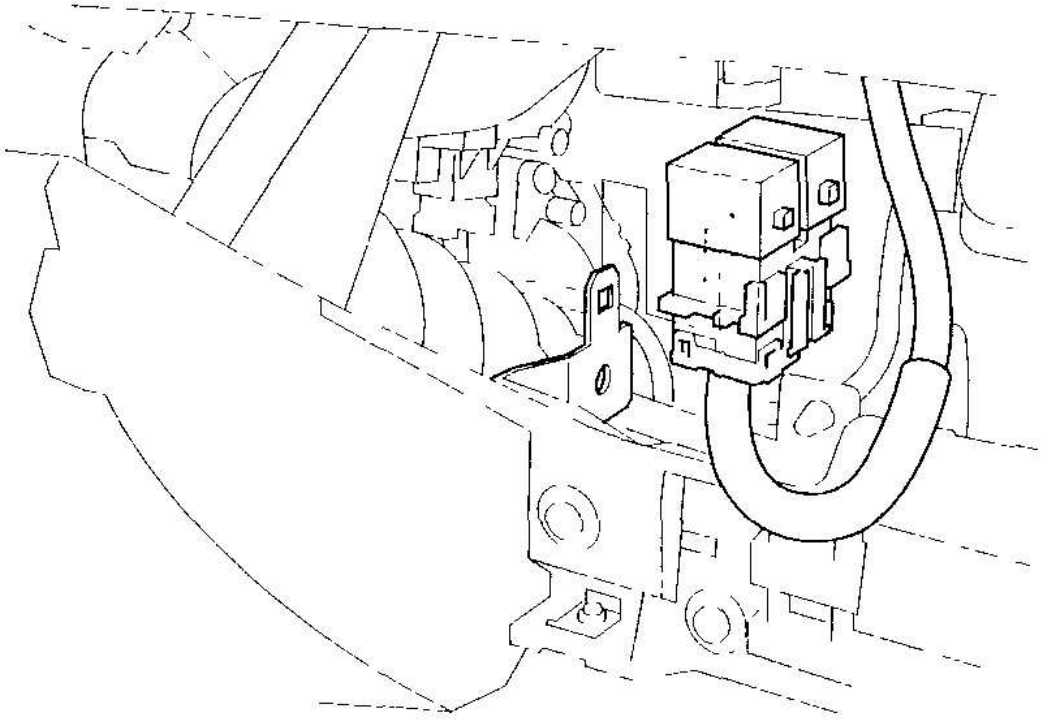
4. Install the motor in the reverse order of removal.

   Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

EVAPORATOR TEMPERATURE SENSOR REPLACEMENT

4-DOOR

1. Open the glove box. Remove the damper from the glove box, then release the glove box stops and let the glove box hang down, refer to **GLOVE BOX REMOVAL/INSTALLATION** .
2. Remove the relays from the bracket.



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Fig. 55: Removing Relays From Bracket (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the 2P connector (A) from the evaporator temperature sensor (B), then remove the connector clip (C). Remove the self-tapping screw, and carefully pull out the evaporator temperature sensor.

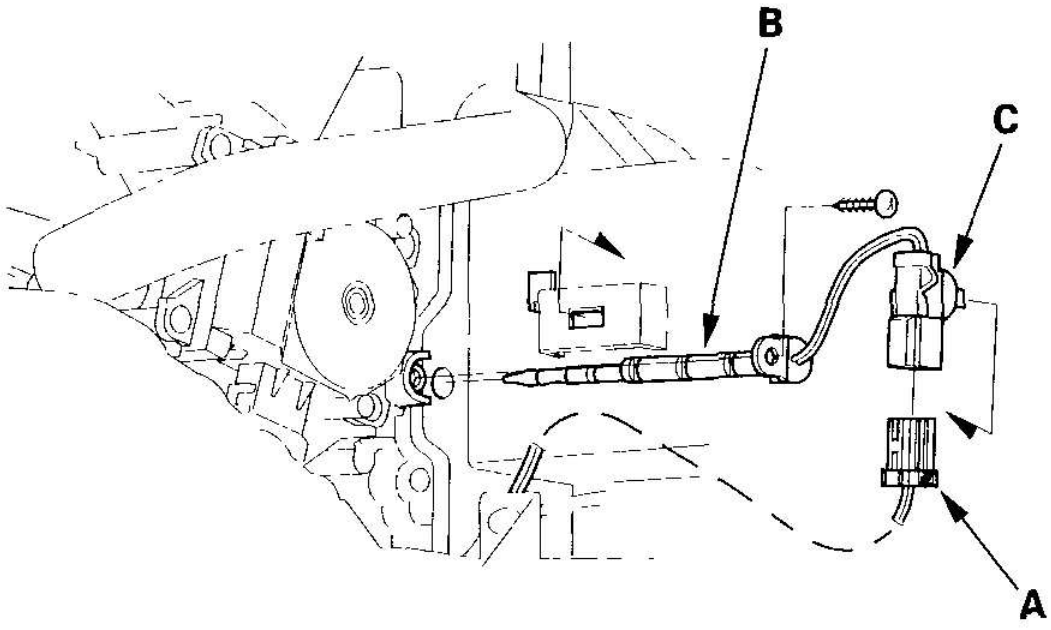
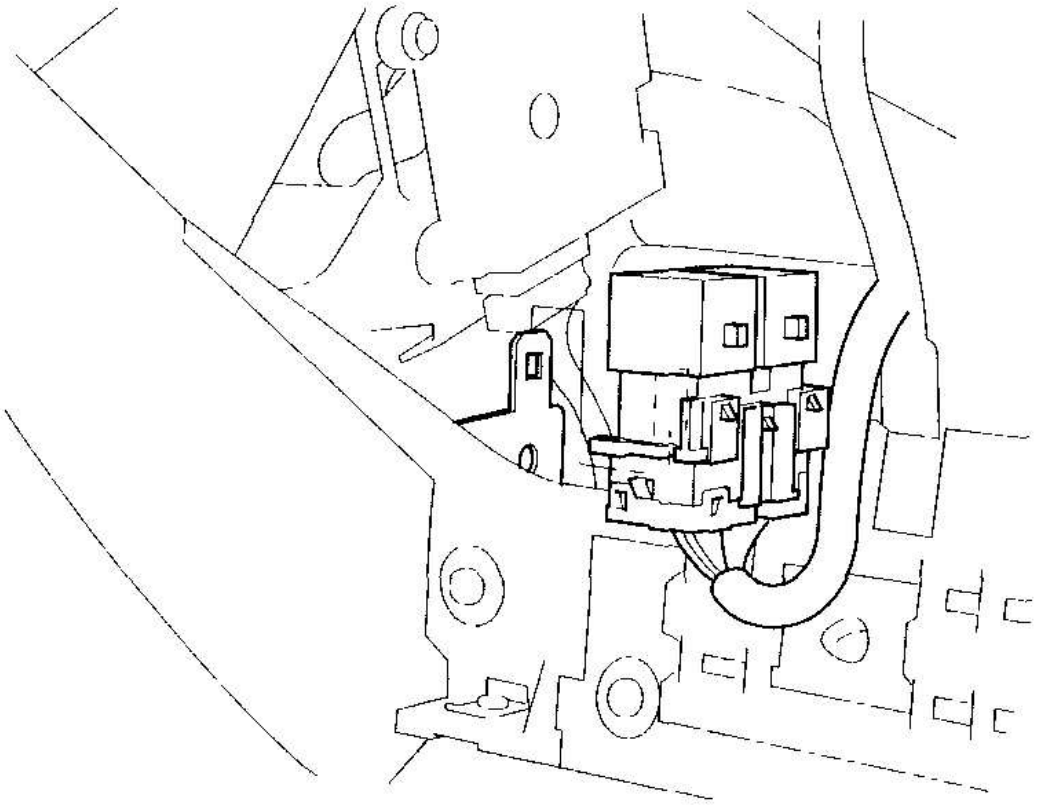


Fig. 56: Disconnecting 2P Connector From Evaporator Temperature Sensor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the sensor in the reverse order of removal.

2-DOOR

1. Open the glove box. Remove the damper from the glove box, then release the glove box stops and let the glove box hang down, refer to **GLOVE BOX REMOVAL/INSTALLATION** .
2. Remove the relays from the bracket.



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Fig. 57: Removing Relays From Bracket (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the 2P connector (A) from the evaporator temperature sensor (B), then remove the connector clip (C). Remove the self-tapping screw, and carefully pull out the evaporator temperature sensor.

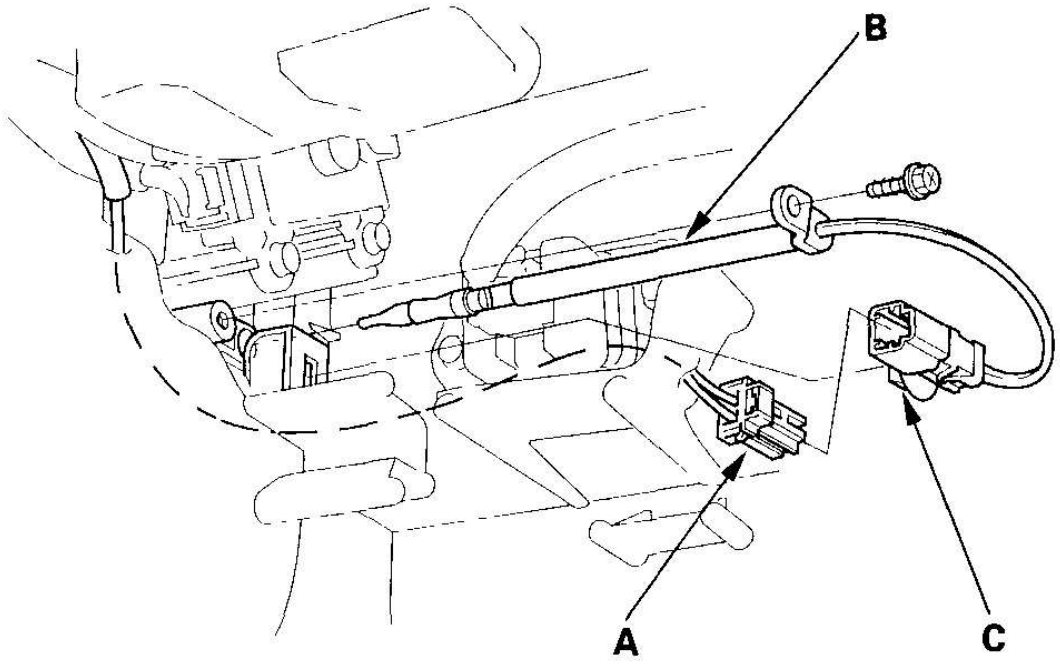


Fig. 58: Disconnecting 2P Connector From Evaporator Temperature Sensor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the sensor in the reverse order of removal.

BLOWER UNIT REMOVAL AND INSTALLATION

4-DOOR

1. Remove the glove box, refer to **GLOVE BOX REMOVAL/INSTALLATION** , passenger's dashboard lower cover, refer to **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION** and the passenger's kick panel, refer to **TRIM REMOVAL/INSTALLATION - DOOR AREA** .
2. Remove the connector clips (A), the wire harness clip (B), and bolt. Cut the plastic cross brace (C) in the glove box opening with diagonal cutters in the area shown. Retain these parts to be reinstalled later.

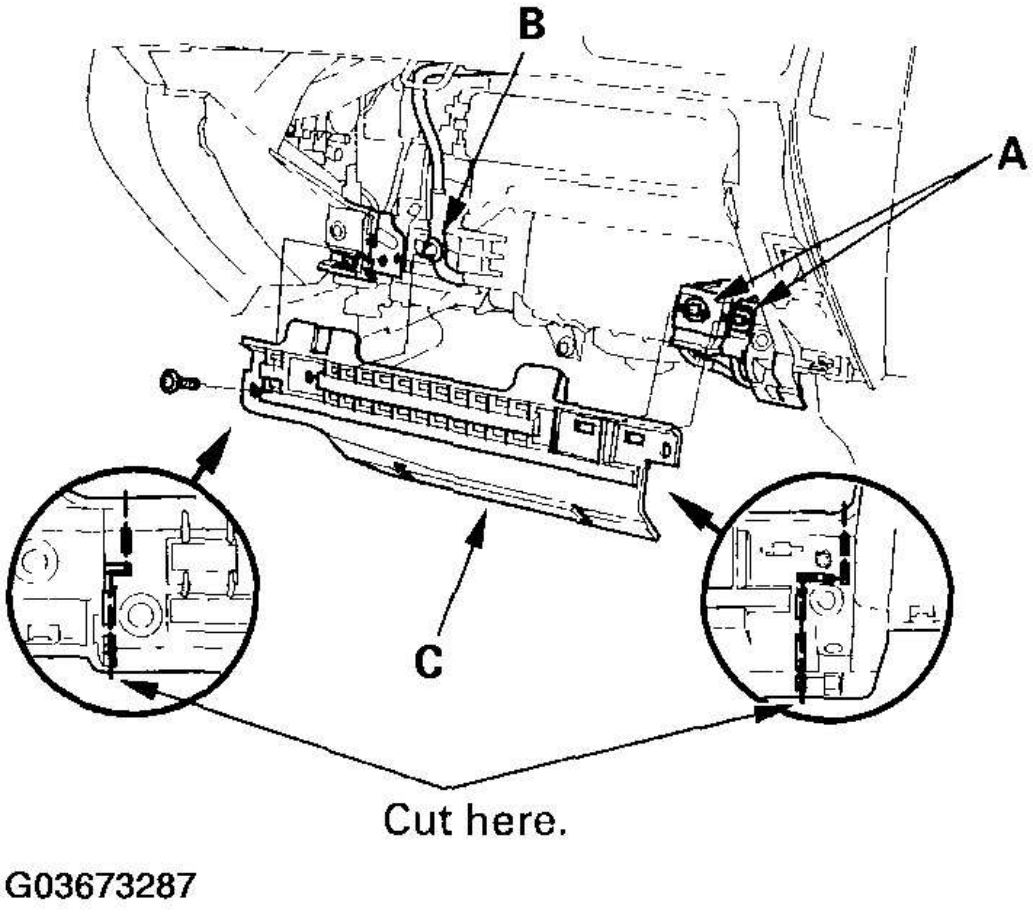


Fig. 59: Removing Connector Clips, Wire Harness Clip And Bolt (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the connectors (A) from the blower motor and the recirculation control motor, then remove the wire harness clips (B) and the connector clip (C). Remove the mounting nuts, the mounting bolts and the blower unit (D).

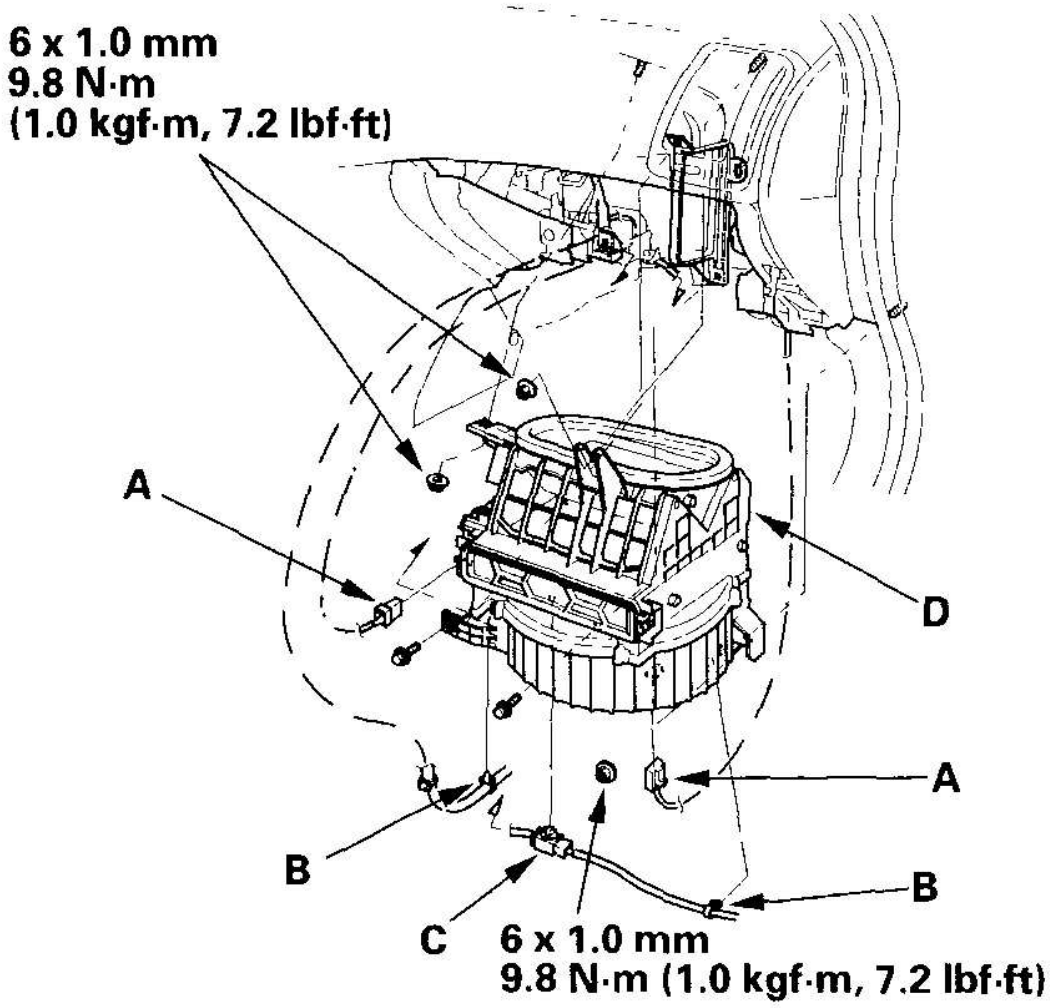


Fig. 60: Disconnecting Connectors From Blower Motor And Recirculation Control Motor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the unit in the reverse order of removal.

   Make sure that there is no air leakage.

2-DOOR

1. Remove the glove box, refer to **GLOVE BOX REMOVAL/INSTALLATION** , passenger's dashboard lower cover, refer to **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION** and the passenger's kick panel, refer to **TRIM REMOVAL/INSTALLATION - DOOR AREA** .
2. Remove the connector clips (A), the wire harness clip (B), and bolt. Cut the plastic cross brace (C) in the glove box opening with diagonal cutters in the area shown in **Fig. 61**. Retain these parts to be reinstalled later.

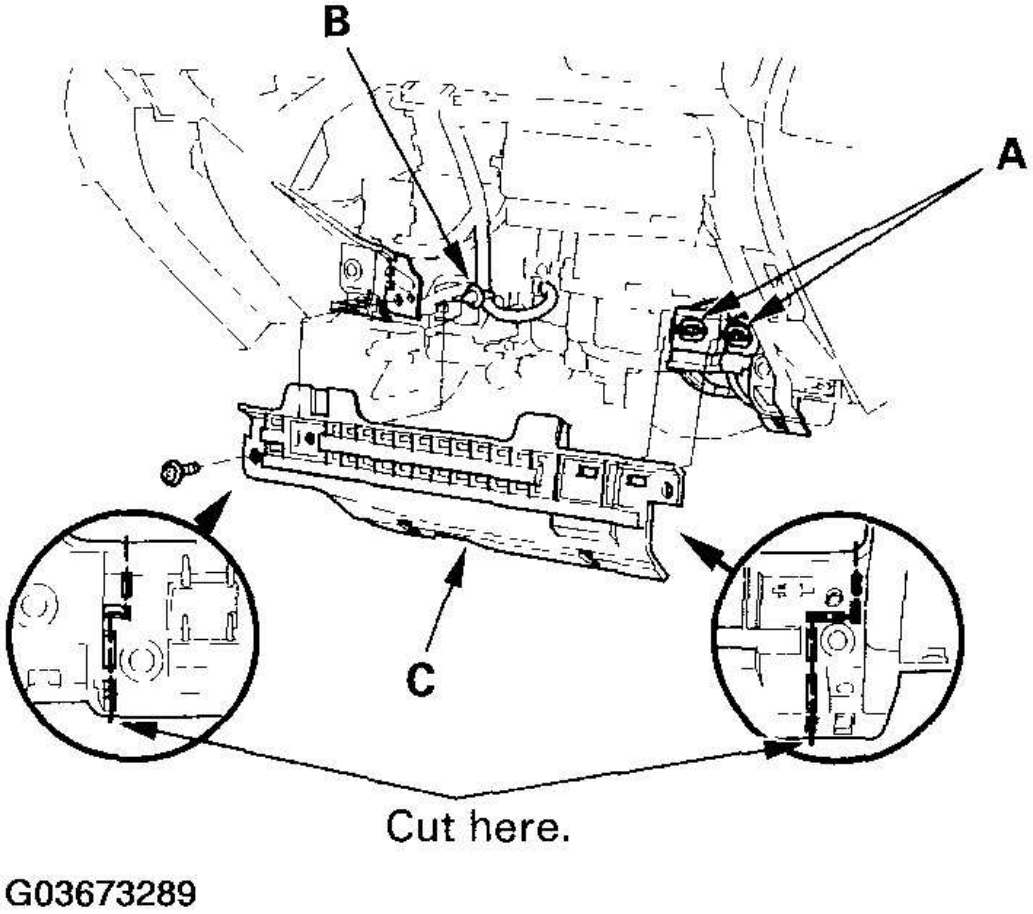


Fig. 61: Removing Connector Clips, Wire Harness Clip And Bolt (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the connectors (A) from the blower motor and the recirculation control motor, then remove the wire harness clip (B) and the connector clip (C). Remove the mounting nuts, the mounting bolts and the blower unit (D).

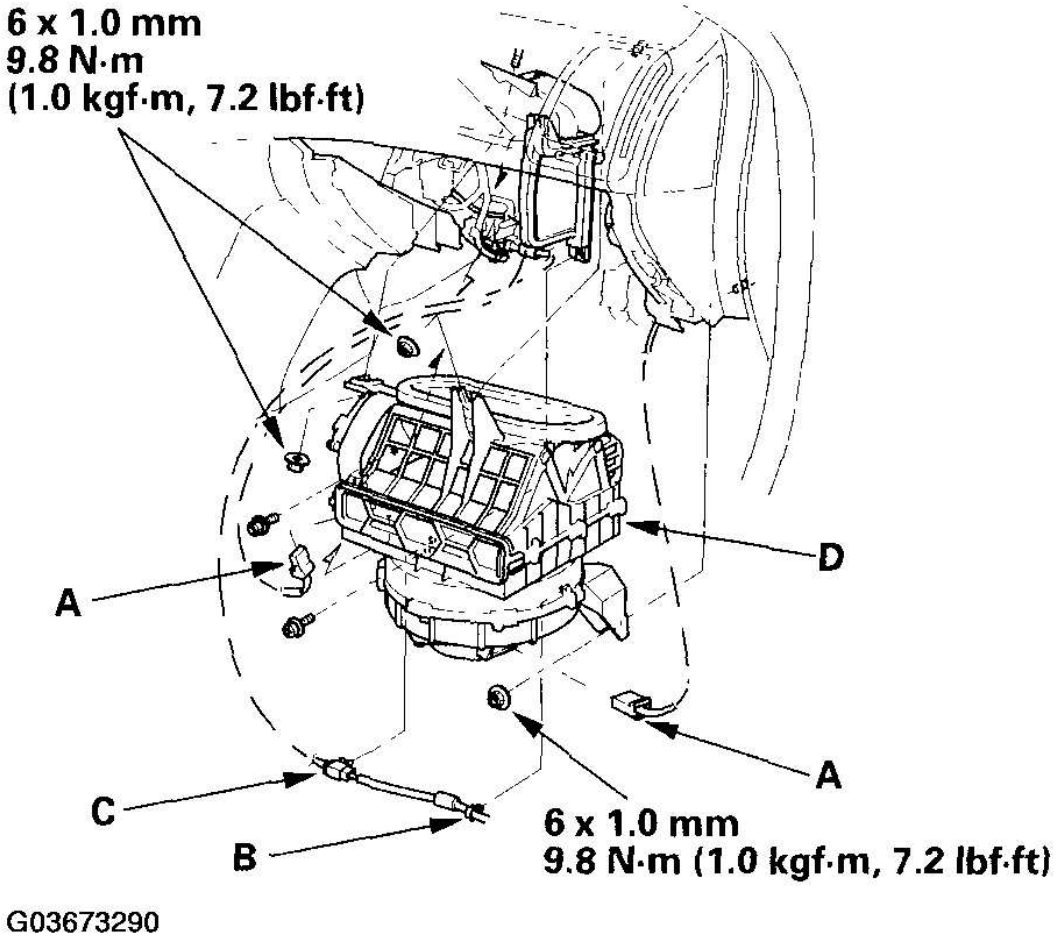


Fig. 62: Disconnecting Connectors From Blower Motor And Recirculation Control Motor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the unit in the reverse order of removal.

   Make sure that there is no air leakage.

EVAPORATOR CORE REPLACEMENT

4-DOOR

1. Recover the refrigerant with a recovery/recycling/ charging station, refer to **REFRIGERANT RECOVERY** .
2. Remove the bolt, then disconnect the suction line (A) and the receiver line (B) from the evaporator core.

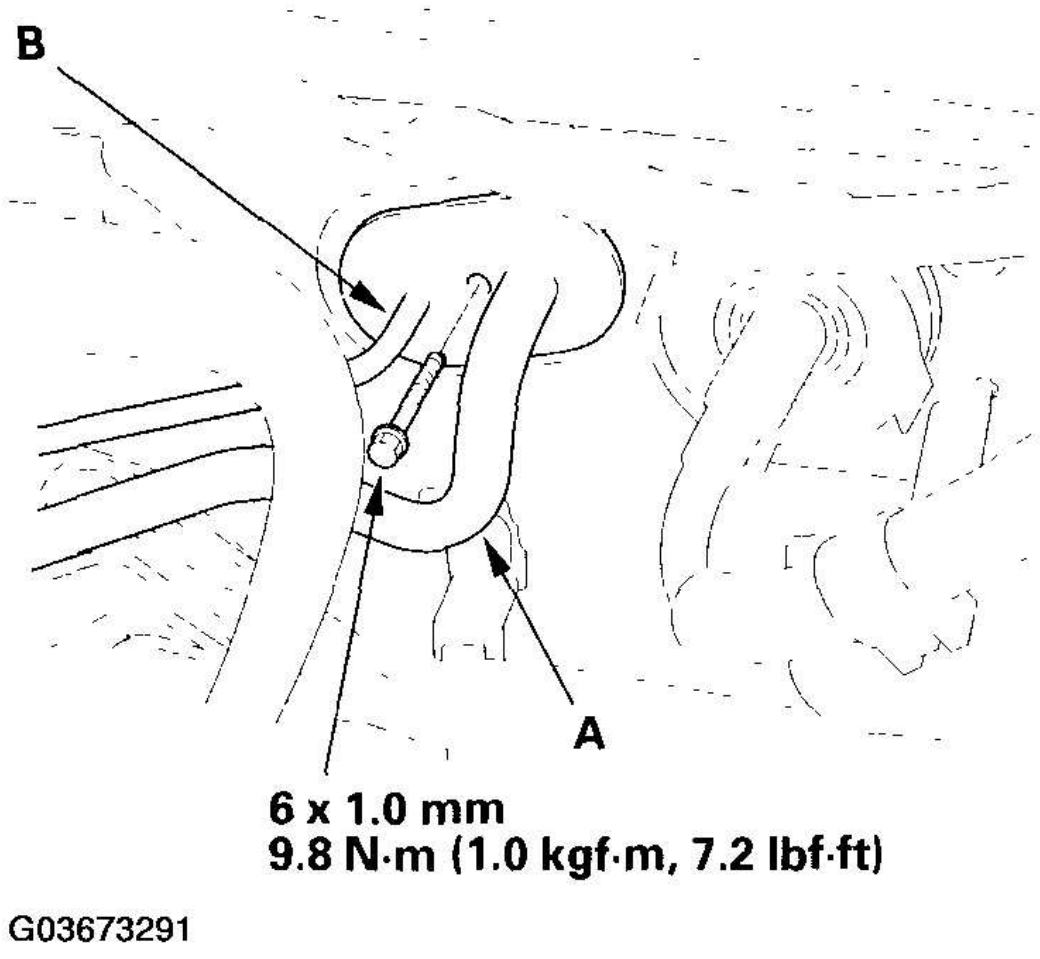
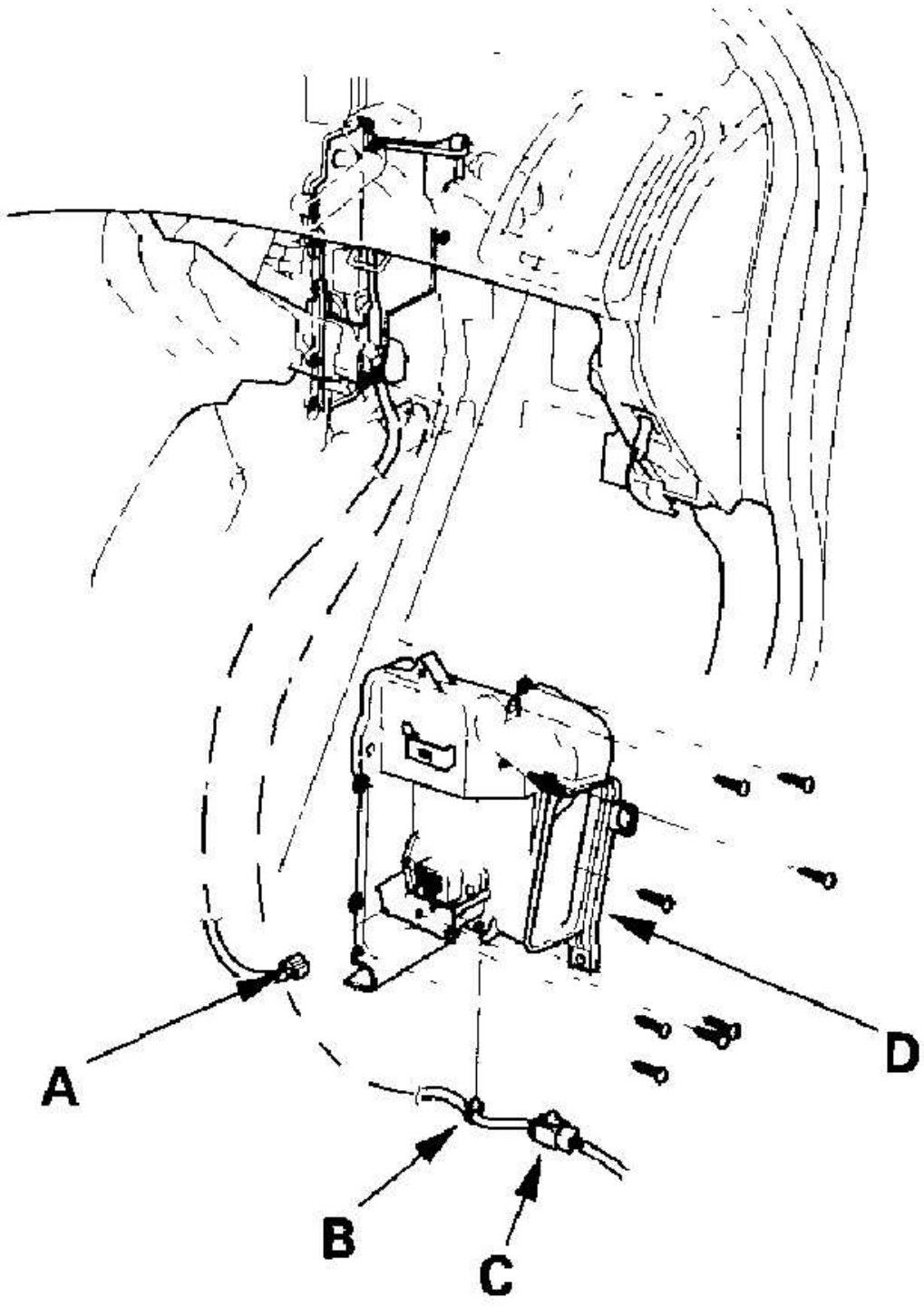


Fig. 63: Disconnecting Suction Line And Receiver Line From Evaporator Core (4-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the blower unit (see **BLOWER UNIT REMOVAL AND**

INSTALLATION).

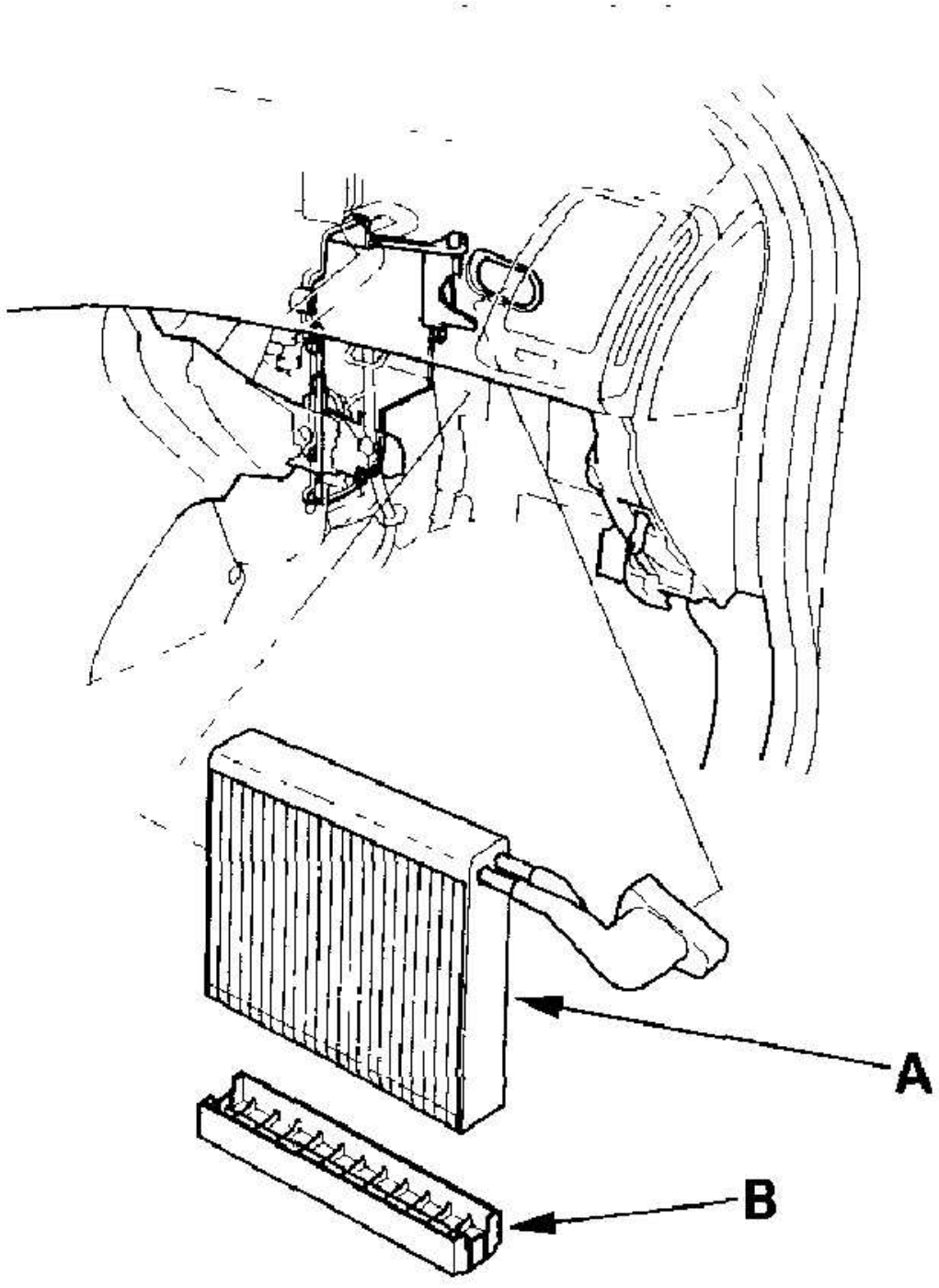
4. Remove the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR REPLACEMENT**).
5. Disconnect the connector (A) from the power transistor, then remove the wire harness clip (B), the connector clip (C), the self-tapping screws, and the expansion valve cover (D).



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Fig. 64: Disconnecting Connector From Power Transistor (4-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Carefully pull out the evaporator core (A) and the plate (B) without bending the pipes.



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Fig. 65: Pulling Out Evaporator Core And Plate (4-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the core in the reverse order of removal, and note these items:
   - If you're installing a new evaporator core, add refrigerant oil (DENSO ND-OIL 8), refer to **A/C REFRIGERANT OIL REPLACEMENT**).
   - Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
   - Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
   - Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
   - Make sure that there is no air leakage.
   - Charge the system, refer to **SYSTEM CHARGING** .

2-DOOR

1. Recover the refrigerant with a recovery/recycling/charging station, refer to **REFRIGERANT RECOVERY** .
2. Remove the bolt, then disconnect the suction line (A) and the receiver line (B) from the evaporator core.

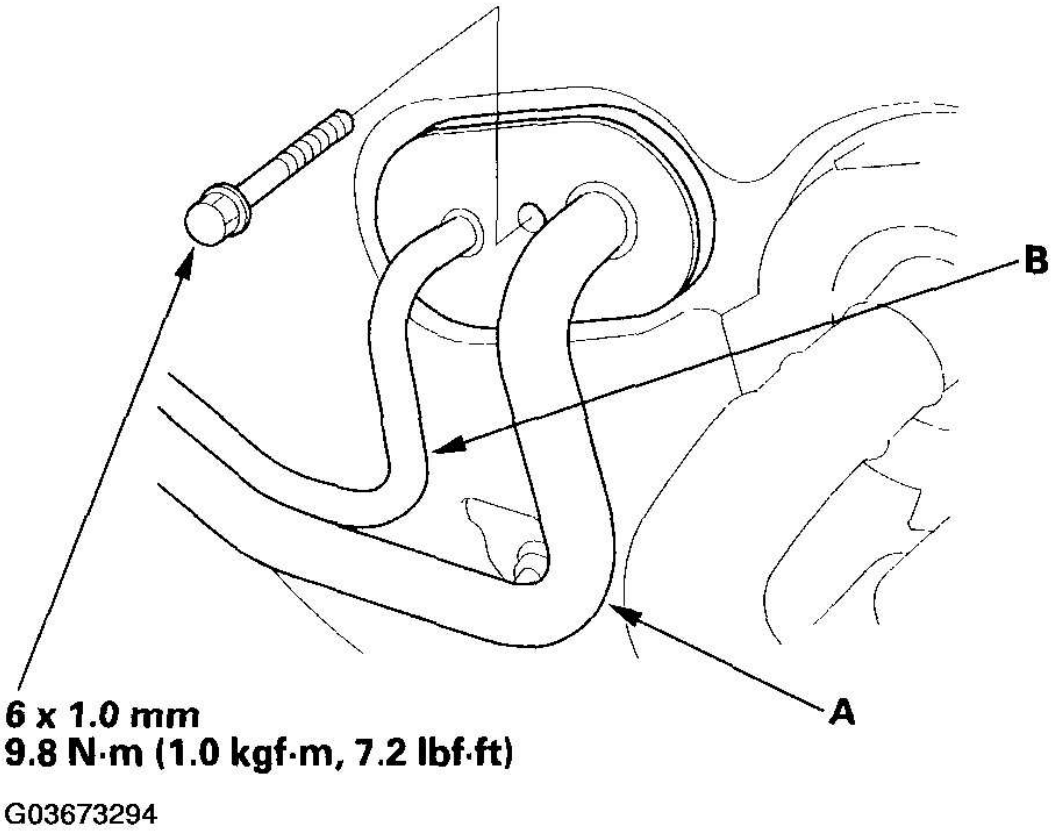


Fig. 66: Disconnecting Suction Line And Receiver Line From Evaporator Core (2-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the blower unit (see **BLOWER UNIT REMOVAL AND INSTALLATION**).
4. Remove the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR REPLACEMENT**).
5. Disconnect the connector (A) from the power transistor, then remove the wire harness clip (B), the self-tapping screws, and the expansion valve cover (C).

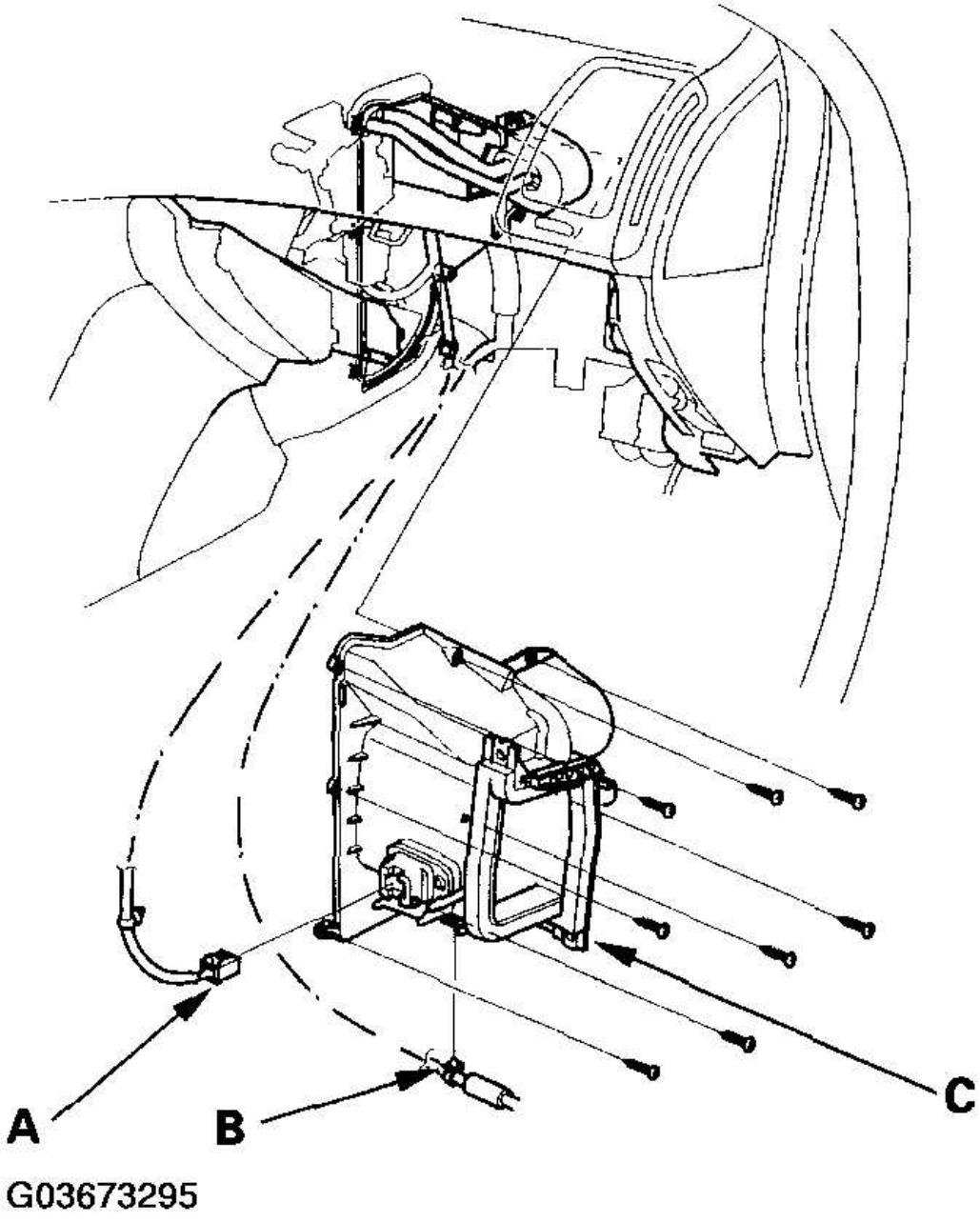


Fig. 67: Disconnecting Connector From Power Transistor (2-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Carefully pull out the evaporator core without bending the pipes.

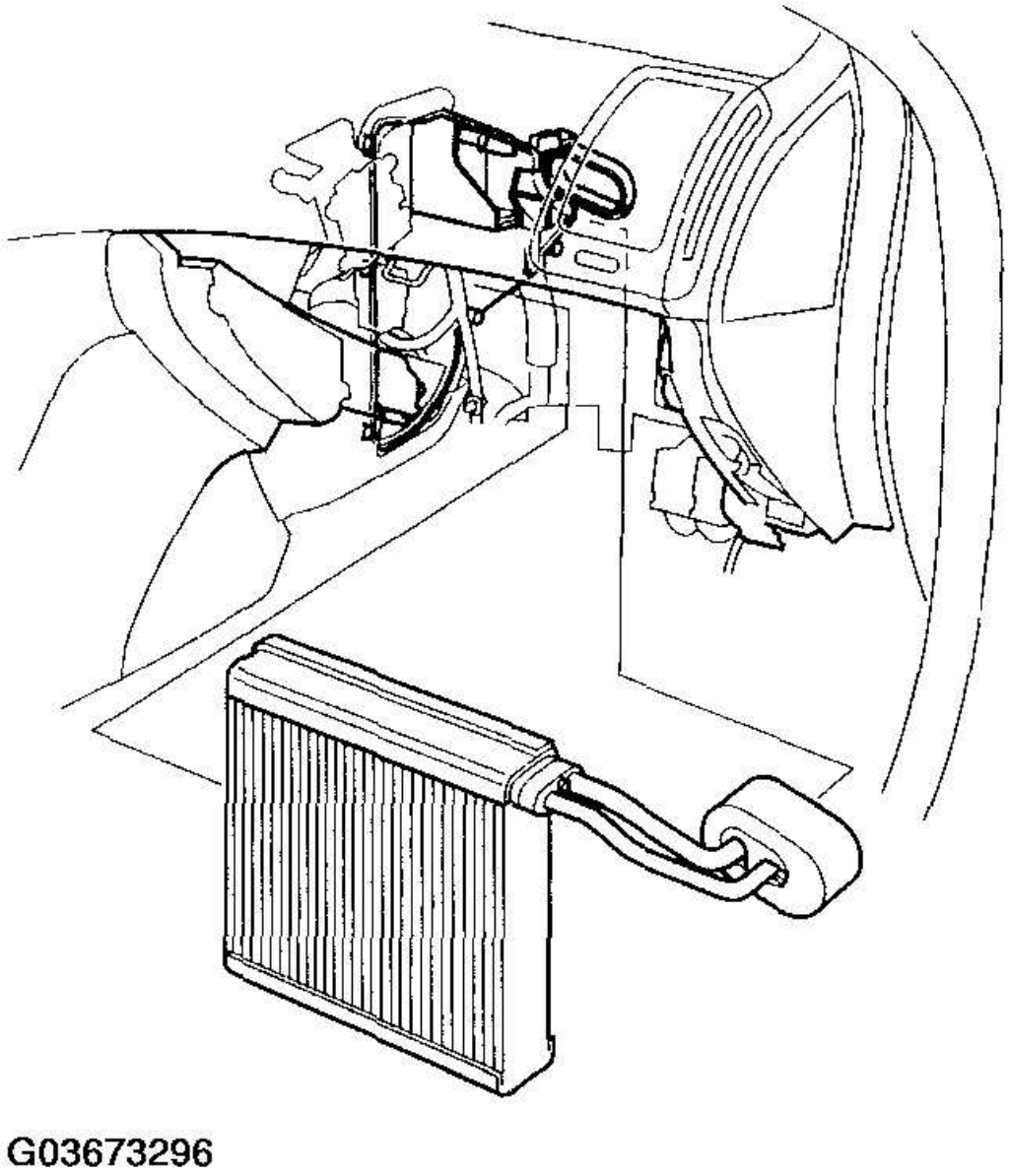


Fig. 68: Pulling Out Evaporator Core (2-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the core in the reverse order of removal, and note these items:
    - If you're installing a new evaporator core, add refrigerant oil (DENSO

ND-OIL 8), refer to **A/C REFRIGERANT OIL REPLACEMENT** .

- Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
- Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
- Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
- Make sure that there is no air leakage.
- Charge the system, refer to **SYSTEM CHARGING** .

HEATER UNIT/CORE REPLACEMENT

SRS components are located in this area. Review the SRS component locations, refer to **COMPONENT LOCATION INDEX** and the precautions and procedures, refer to **PRECAUTIONS AND PROCEDURES** before performing repairs of service.

1. Make sure you have the anti-theft code for the radio and the navigation system, then write down the frequencies for the radio's preset buttons.
2. Disconnect the negative cable from the battery.
3. With air conditioning; disconnect the suction and receiver lines from the evaporator core.
   - 4-door (see **4-DOOR**)
   - 2-door (see **2-DOOR**)
4. From under the hood, open the cable clamp (A), then disconnect the heater valve cable (B) from the heater valve arm (C). Turn the heater valve arm to the fully opened position as shown.

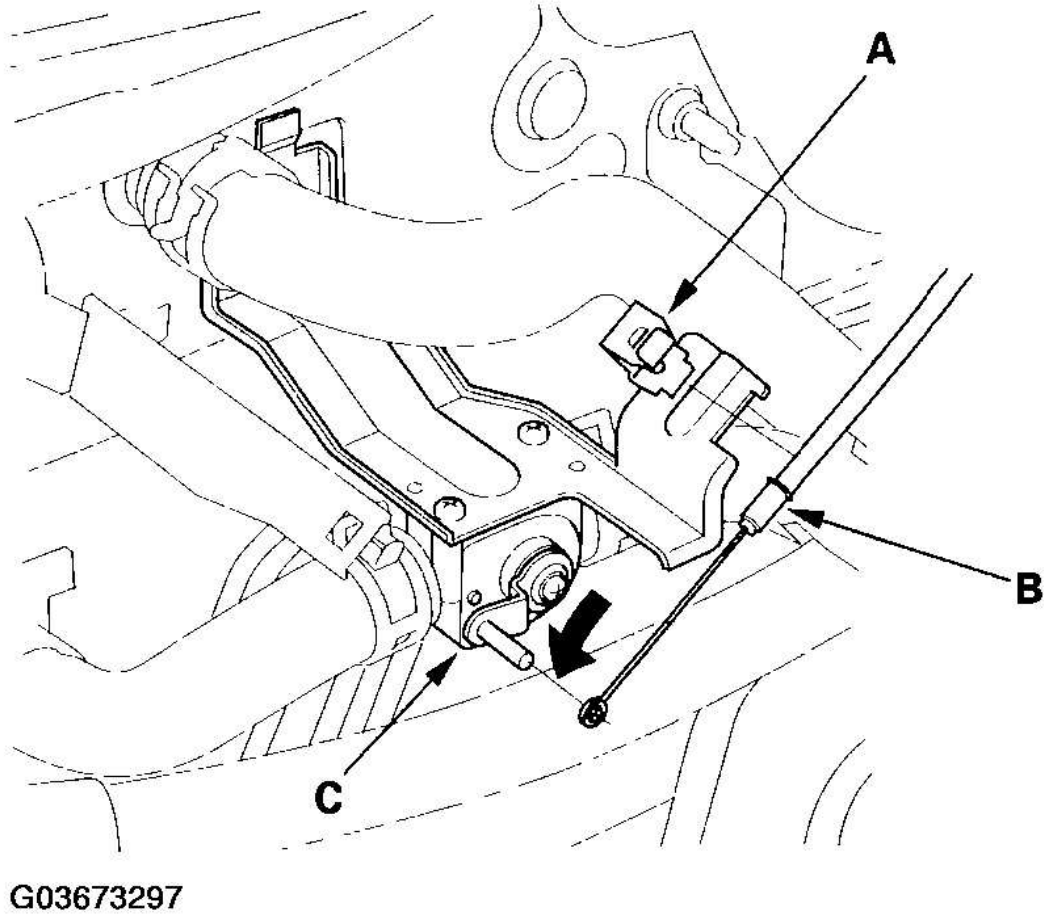


Fig. 69: Disconnecting Heater Valve Cable From Heater Valve Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. When the engine is cool, drain the engine coolant from the radiator, refer to **COOLANT CHECK** .
6. Slide the hose clamps (A) back, then disconnect the inlet heater hose (B) and the outlet heater hose (C) from the heater unit. Engine coolant will run out when the hoses are disconnected; drain it into a clean drip pan. Be sure not to let coolant spill on the electrical parts or the painted surfaces. If any coolant spills, rinse it off immediately.

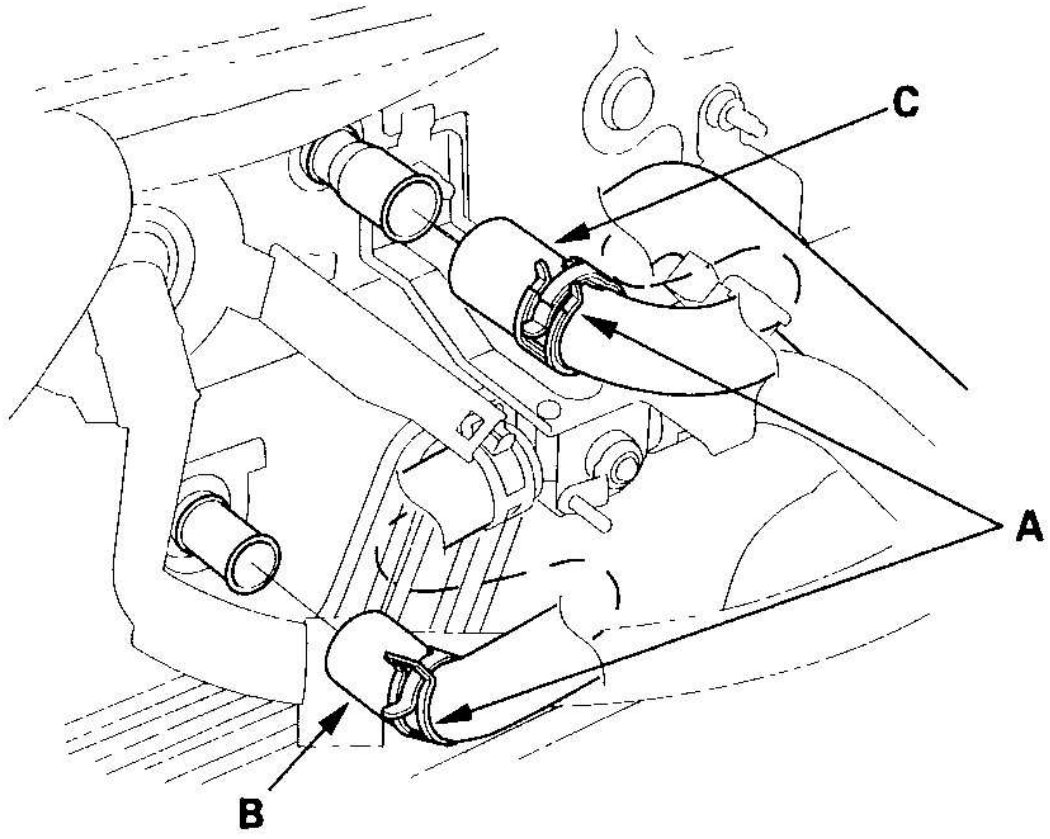


Fig. 70: Sliding Hose Clamps And Disconnecting Inlet & Outlet Heater Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the mounting nut from the heater unit.

   Take care not to damage or bend the fuel lines and the brake lines, etc.

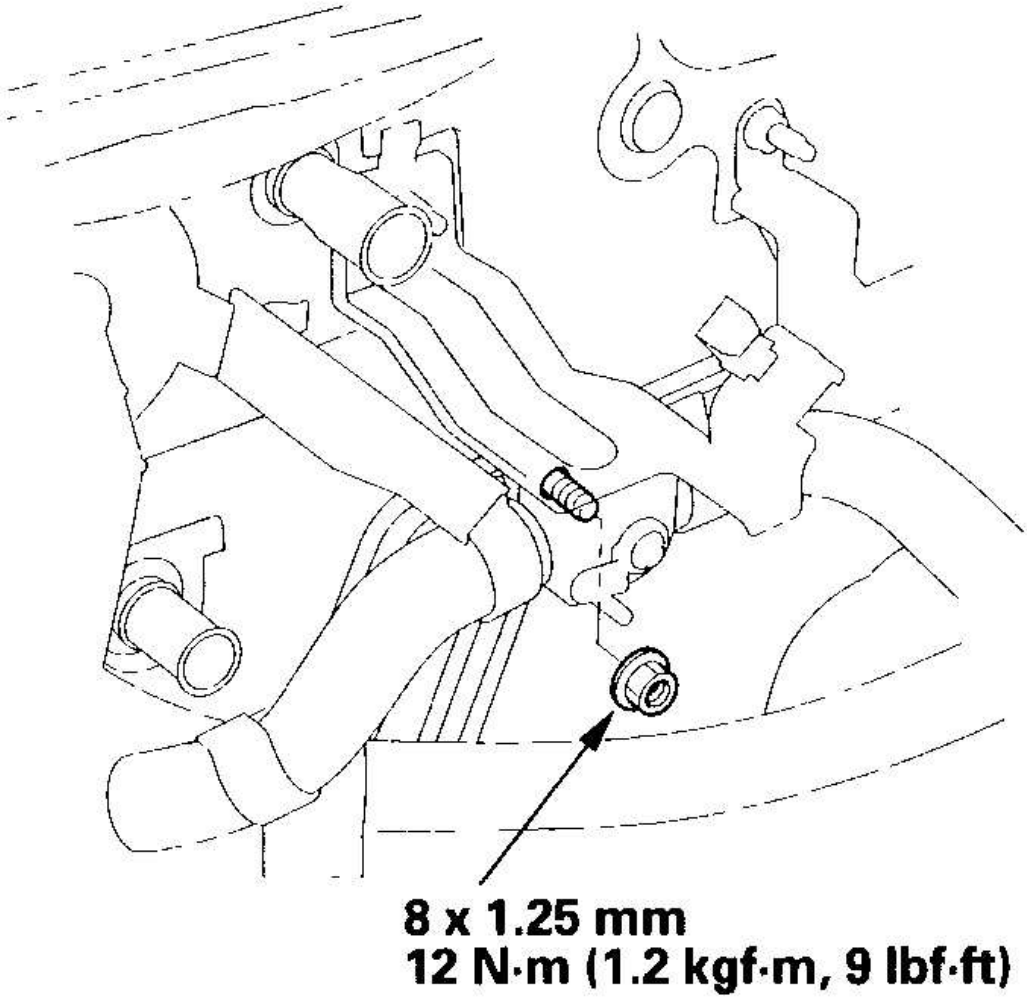


Fig. 71: Removing Mounting Nut From Heater Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the dashboard, refer to **DASHBOARD/STEERING HANGER BEAM REMOVAL/INSTALLATION** .
9. Disconnect the connectors (A) from the air mix control motor, the evaporator temperature sensor, the power transistor, and the recirculation control motor, then remove the wire harness clips (B), the connector clips (C) and the wire

harness (D).

Remove the heater ducts (E), then remove the mounting nuts and the blower-heater unit (F).

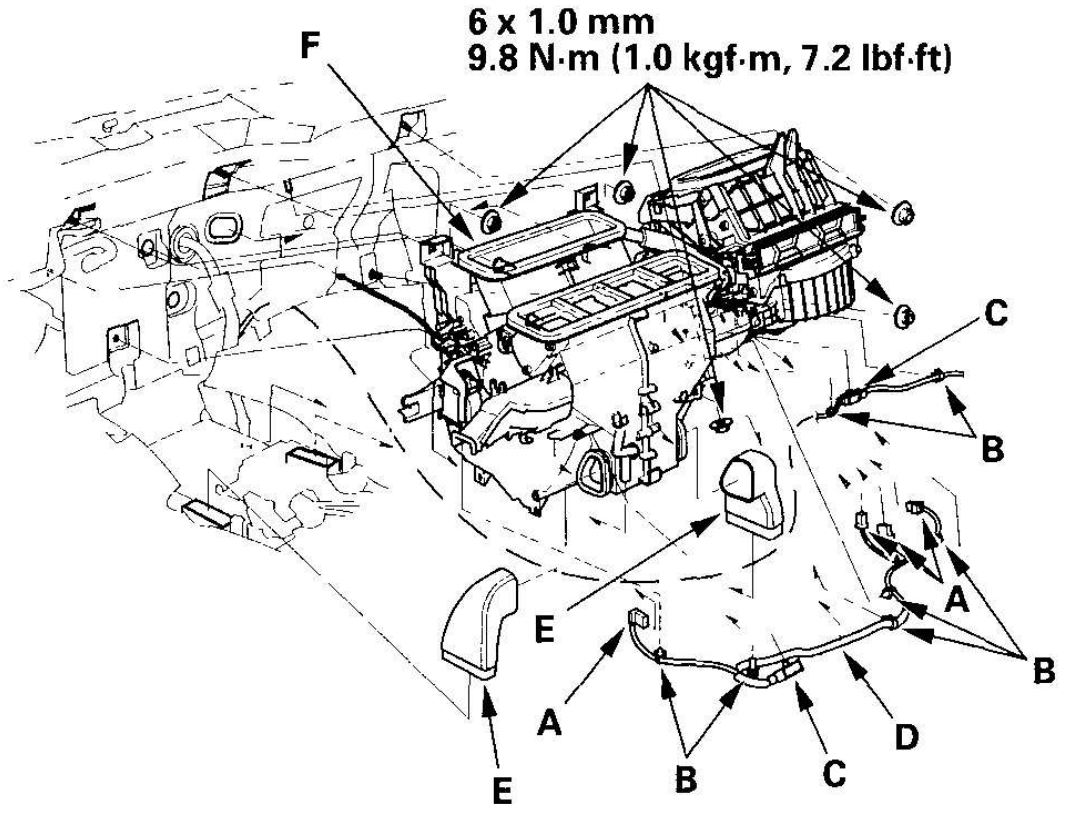


Fig. 72: Disconnecting Connectors From Air Mix Control Motor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2-door

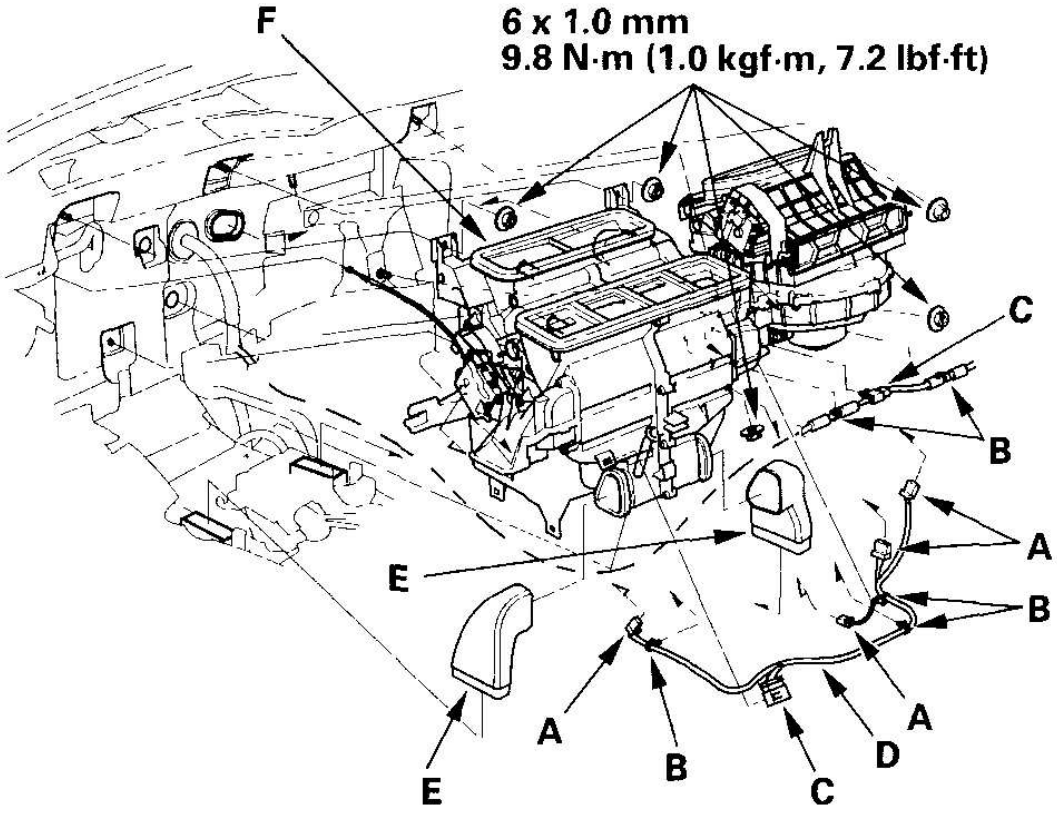


Fig. 73: Disconnecting Connectors From Air Mix Control Motor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the self-tapping screws, the evaporator temperature sensor (C) and the joint duct A, then remove the self-tapping screws and the joint duct B (4-door). Remove the self-tapping screws, then remove the passenger's heater outlet (D), and the heater core cover (E). Remove the self-tapping screws and the mode control motor (F) (2-door). Remove the self-tapping screws, the heater pipe brackets (G), the grommets (H) and carefully pull out the heater core (I) so you don't bend the inlet outlet pipes.

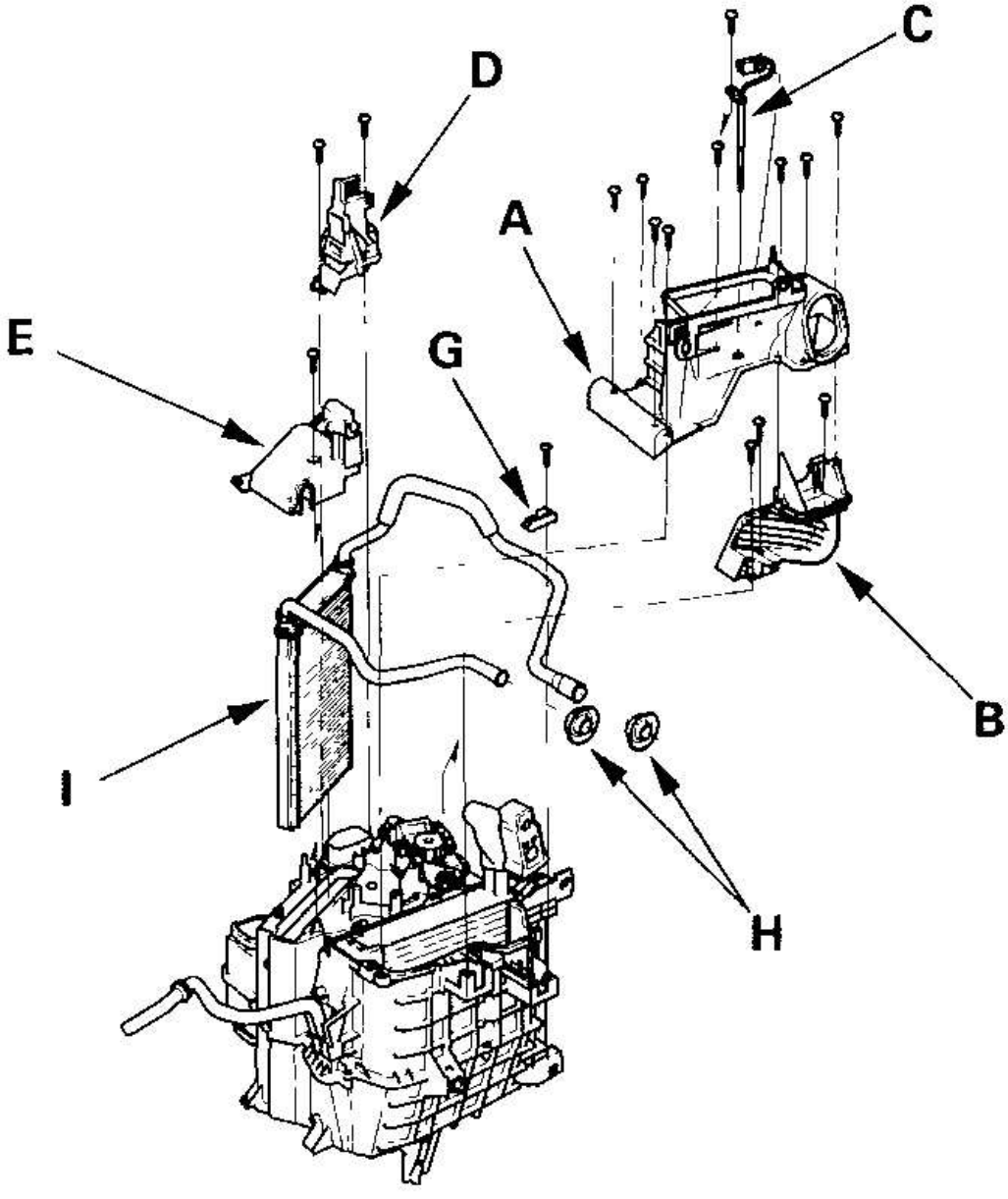


Fig. 74: Removing Self-Tapping Screws, Evaporator Temperature Sensor And Joint Duct A (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2-door

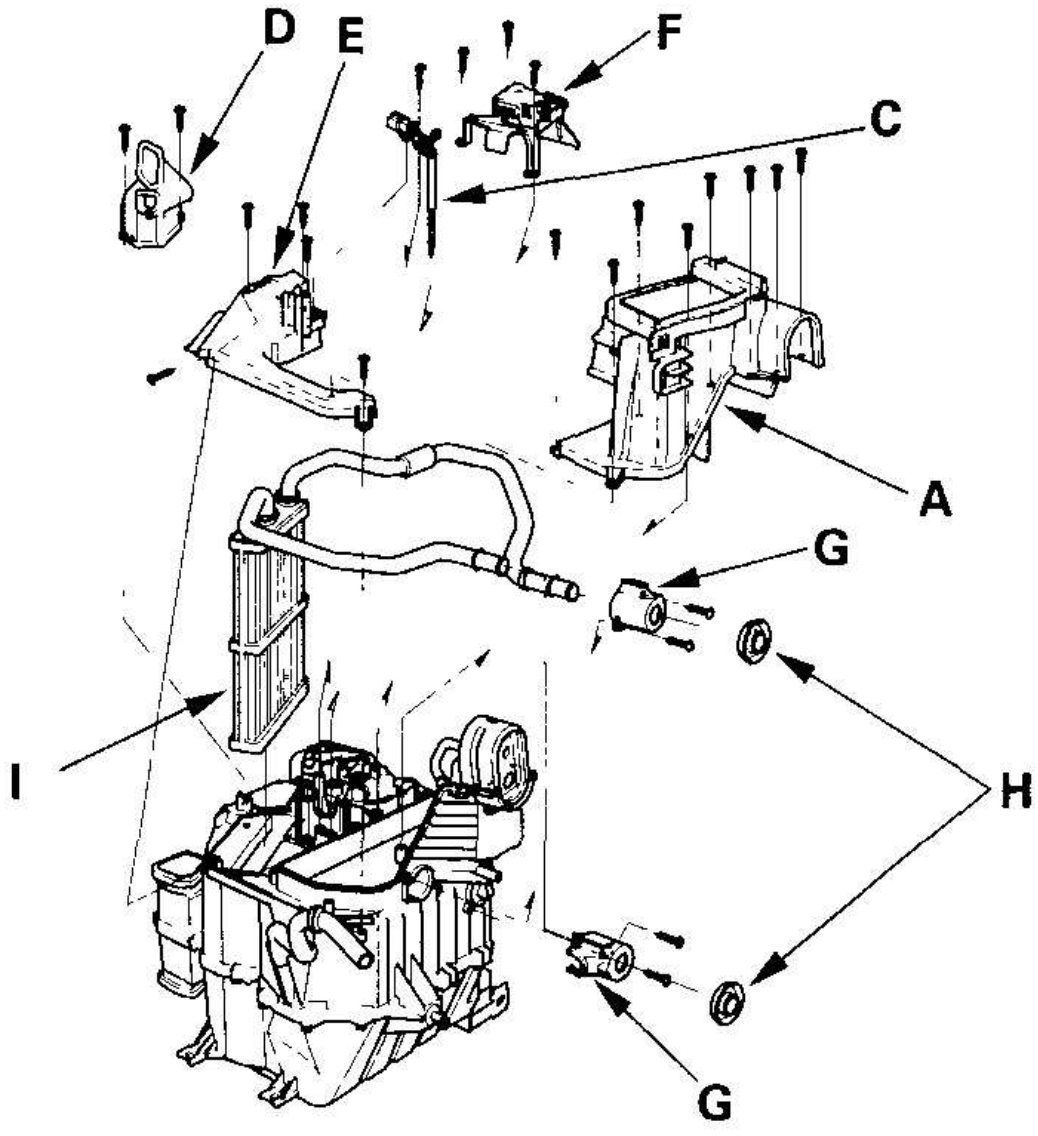


Fig. 75: Removing Self-Tapping Screws, Evaporator Temperature Sensor And Joint Duct A (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the heater core, and the evaporator core in the reverse order of removal.
12. Install the heater unit in the reverse order of removal, and note these items:
    - Do not interchange the inlet and outlet heater hoses, and install the hose clamps securely.
    - Refill the cooling system with engine coolant, refer to **COOLANT CHECK** .
    - Adjust the heater valve cable, refer to **HEATER VALVE CABLE ADJUSTMENT** .
    - Make sure that there is no coolant leakage.
    - Make sure that there is no air leakage.
    - Refer to evaporator core replacement (see step 6 in **EVAPORATOR CORE REPLACEMENT**).
    - Reset the power window control unit, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .
    - Enter the anti-theft codes for the radio and the navigation system, then enter the customer's radio station presets.

A/C COMPRESSOR REPLACEMENT

1. If the A/C compressor is marginally operable, run the engine at idle speed, and let the air conditioning work for a few minutes, then shut the engine off.
2. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the frequencies for the radio's preset buttons.
3. Disconnect the negative cable from the battery.
4. Recover the refrigerant with a recovery/recycling/charging station, refer to **REFRIGERANT RECOVERY** .
5. Remove the ignition coil cover (see step 1 in **IGNITION COIL REMOVAL/INSTALLATION**), and the alternator (see **ALTERNATOR REMOVAL AND INSTALLATION**).
6. Remove the A/C compressor clutch connector (A) from the A/C condenser fan shroud (B). Disconnect the A/C condenser fan connector (C), then remove the wire harness clip (D) from the A/C condenser fan shroud. Remove the hose (E) from the radiator. Loosen the lower mounting bolt, then remove the upper

mounting bolts and the A/C condenser fan shroud. Be careful not to damage the radiator fins when removing the A/C condenser fan shroud.

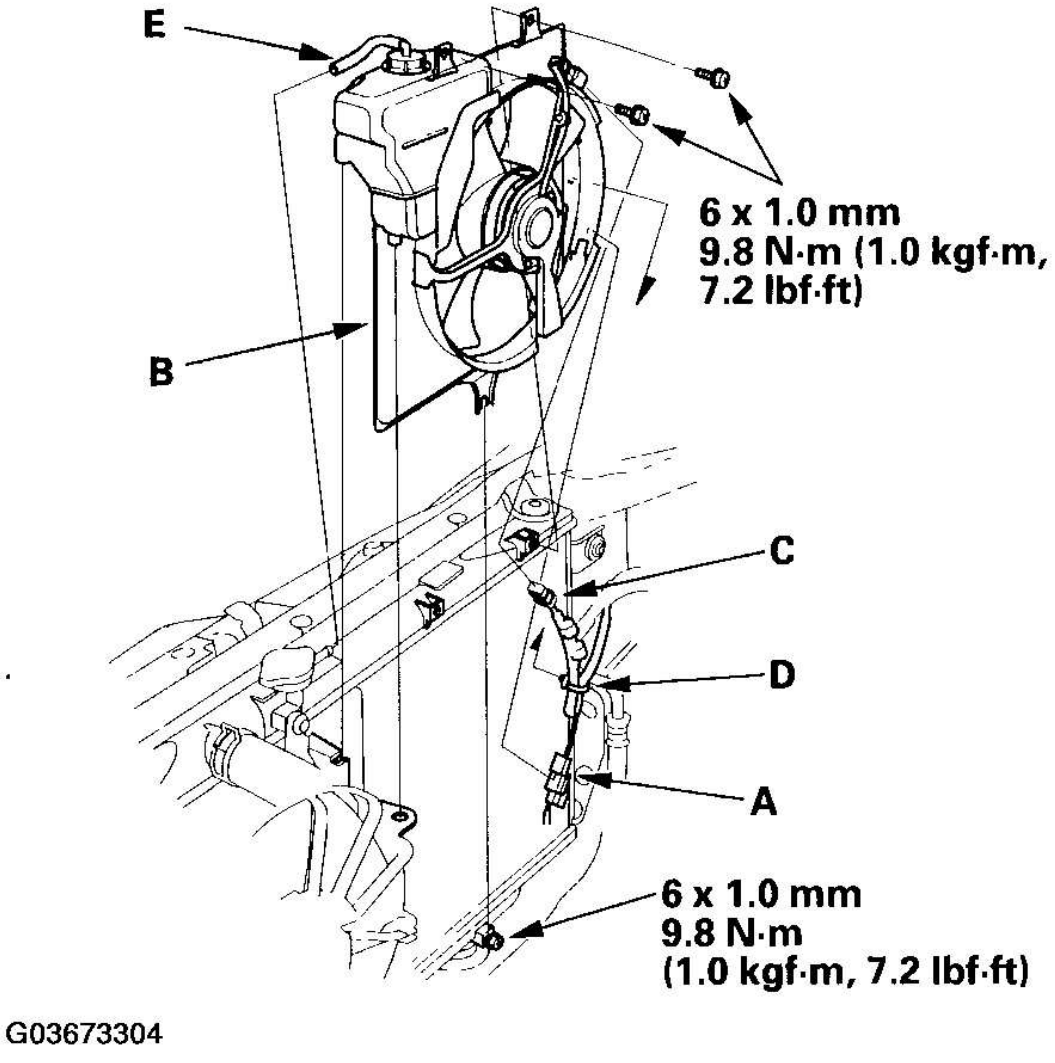


Fig. 76: Removing A/C Compressor Clutch Connector From A/C Condenser Fan Shroud
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Disconnect the A/C compressor clutch connector (A). Remove the bolt and the nut, then disconnect the suction line (B) and discharge line (C) from the A/C compressor. Plug or cap the lines immediately after disconnecting them to

avoid moisture and dust contamination.

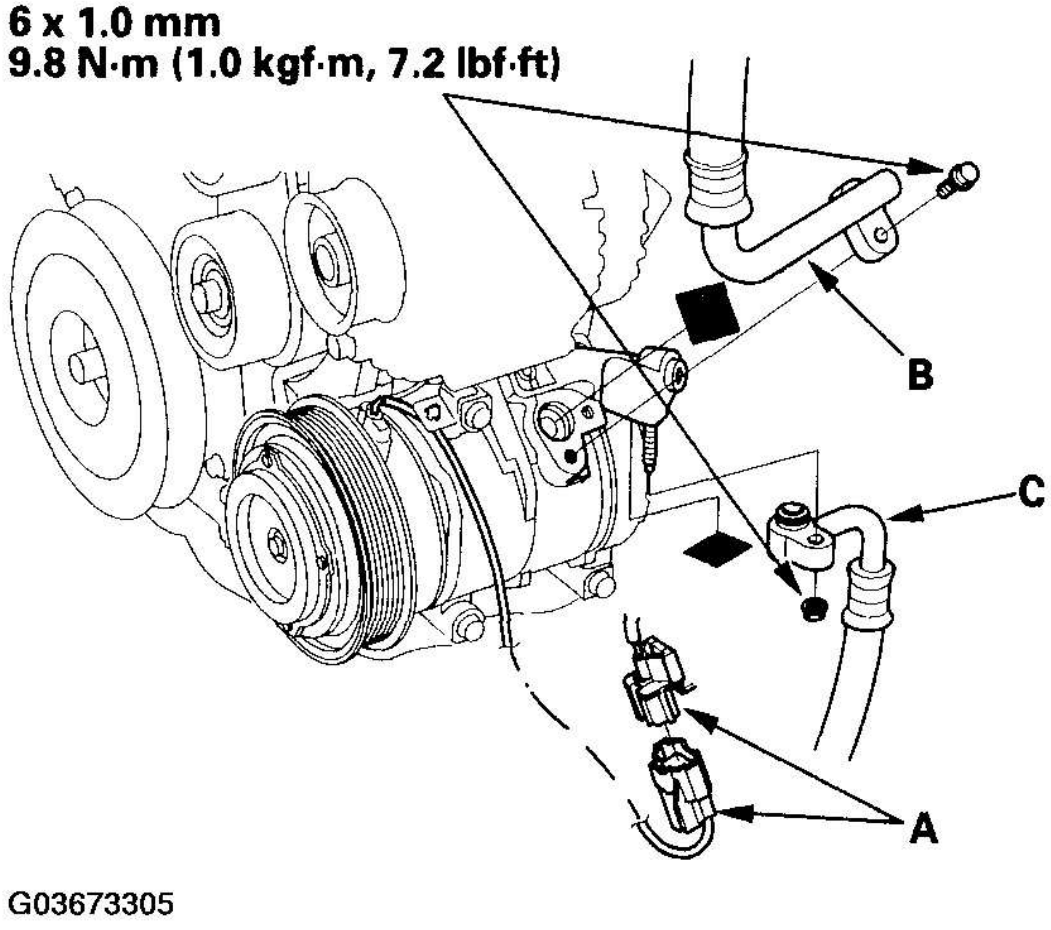


Fig. 77: Disconnecting A/C Compressor Clutch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the mounting bolts and the A/C compressor. Be careful not to damage the radiator fins when removing the A/C compressor.

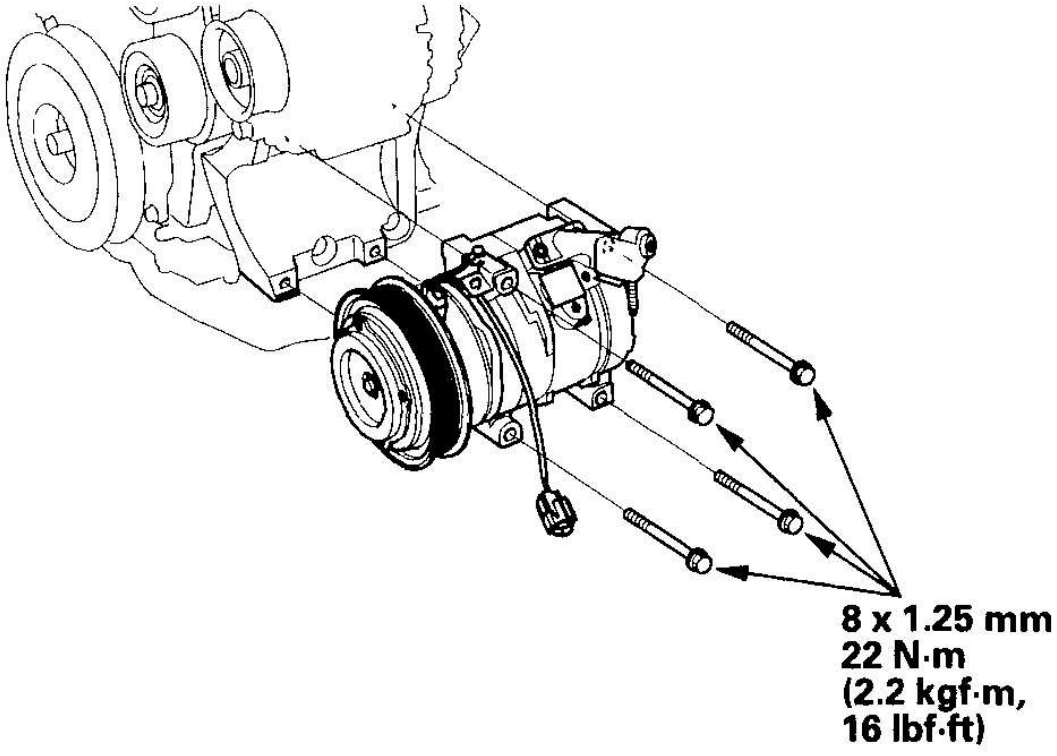


Fig. 78: Removing A/C Compressor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the A/C compressor in the reverse order of removal, and note these items:
   - If you're installing a new A/C compressor, you must calculate the amount of refrigerant oil to be removed from it, refer to **A/C REFRIGERANT OIL REPLACEMENT** .
   - Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
   - Use refrigerant oil (DENSO ND-OIL 8) for HFC-134a DENSO piston type A/C compressor only.
   - To avoid contamination, do not return the oil to the container once dispensed, and never mix it with other refrigerant oils.

- Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
- Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
- Be careful not to damage the radiator fins when installing the A/C compressor, the alternator or the A/C condenser fan shroud.
- Charge the system, refer to **SYSTEM CHARGING** .
- Reset the power window control unit, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .
- Enter the anti-theft codes for the radio and the navigation system, then enter the customer's radio station presets.

A/C COMPRESSOR CLUTCH CHECK

1. Check the pressure plate for discoloration, peeling, or other damage. If there is damage, replace the clutch set (see **A/C COMPRESSOR CLUTCH OVERHAUL**).
2. Check the pulley bearing play and drag by rotating the pulley by hand. Replace the clutch set with a new one if it is noisy or has excessive play/drag (see **A/C COMPRESSOR CLUTCH OVERHAUL**).

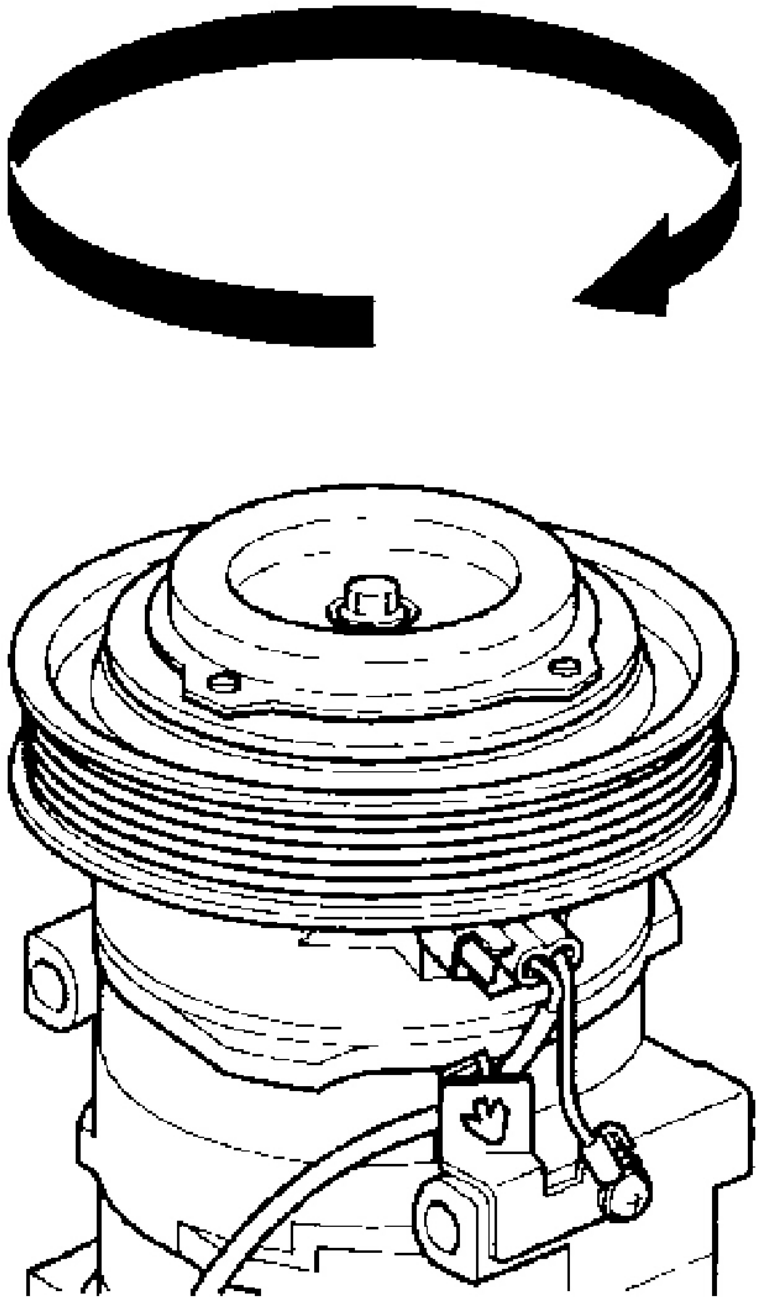


Fig. 79: Checking Pulley Bearing Play
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Measure the clearance between the rotor pulley (A) and the pressure plate (B) all the way around. If the clearance is not within specified limits, remove the pressure plate (see **A/C COMPRESSOR CLUTCH OVERHAUL**) and add or remove shims as needed to increase or decrease clearance.

   Clearance: 0.35-0.6 mm (0.014-0.024 in.)

   NOTE: The shims are available in three thicknesses: 0.1 mm, 0.3 mm and 0.5 mm.

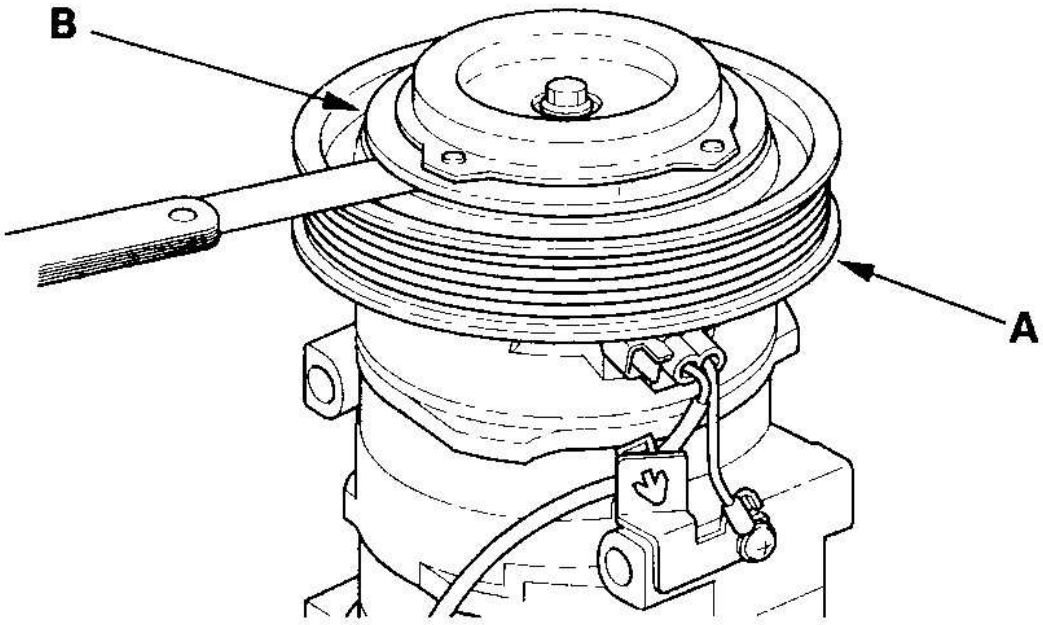


Fig. 80: Measuring Clearance Between Rotor Pulley And Pressure Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check resistance of the field coil. If resistance is not within specifications, replace the field coil (see **A/C COMPRESSOR CLUTCH OVERHAUL**).

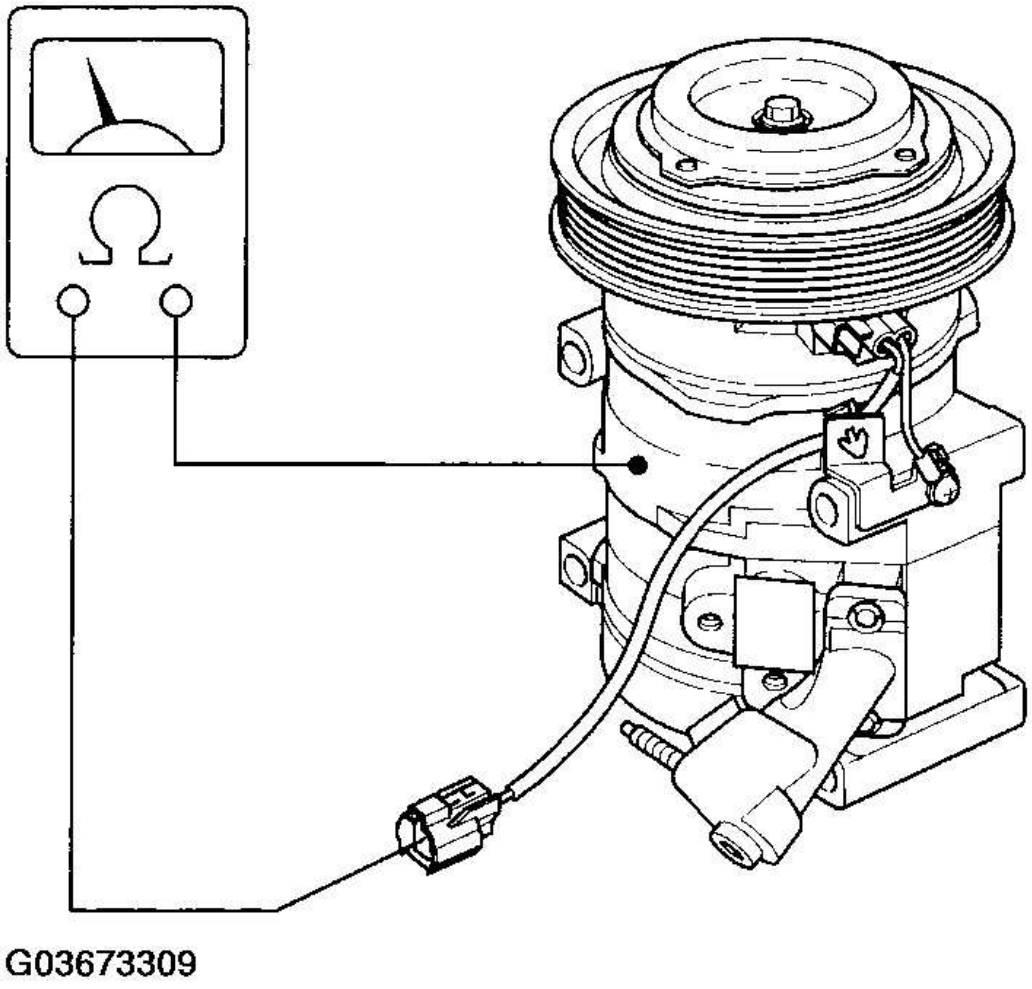


Fig. 81: Checking Resistance Of Field Coil
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C COMPRESSOR CLUTCH OVERHAUL

Special Tools Required

A/C clutch holder, Robinair 10204 or Kent-Moore J37872, or Honda Tool and Equipment KMT-J33939, commercially available

1. Remove the center bolt (A) while holding the pressure plate with a

commercially available A/C clutch holder (B).

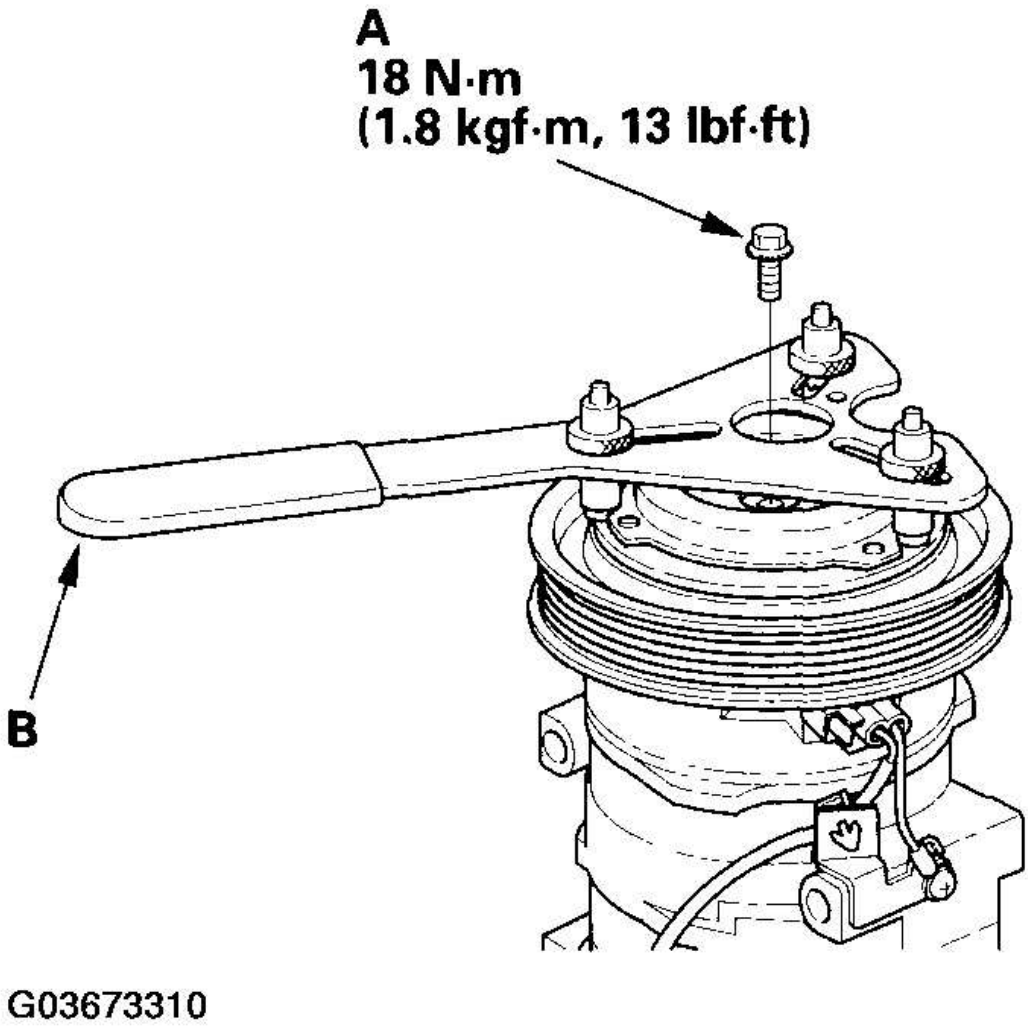
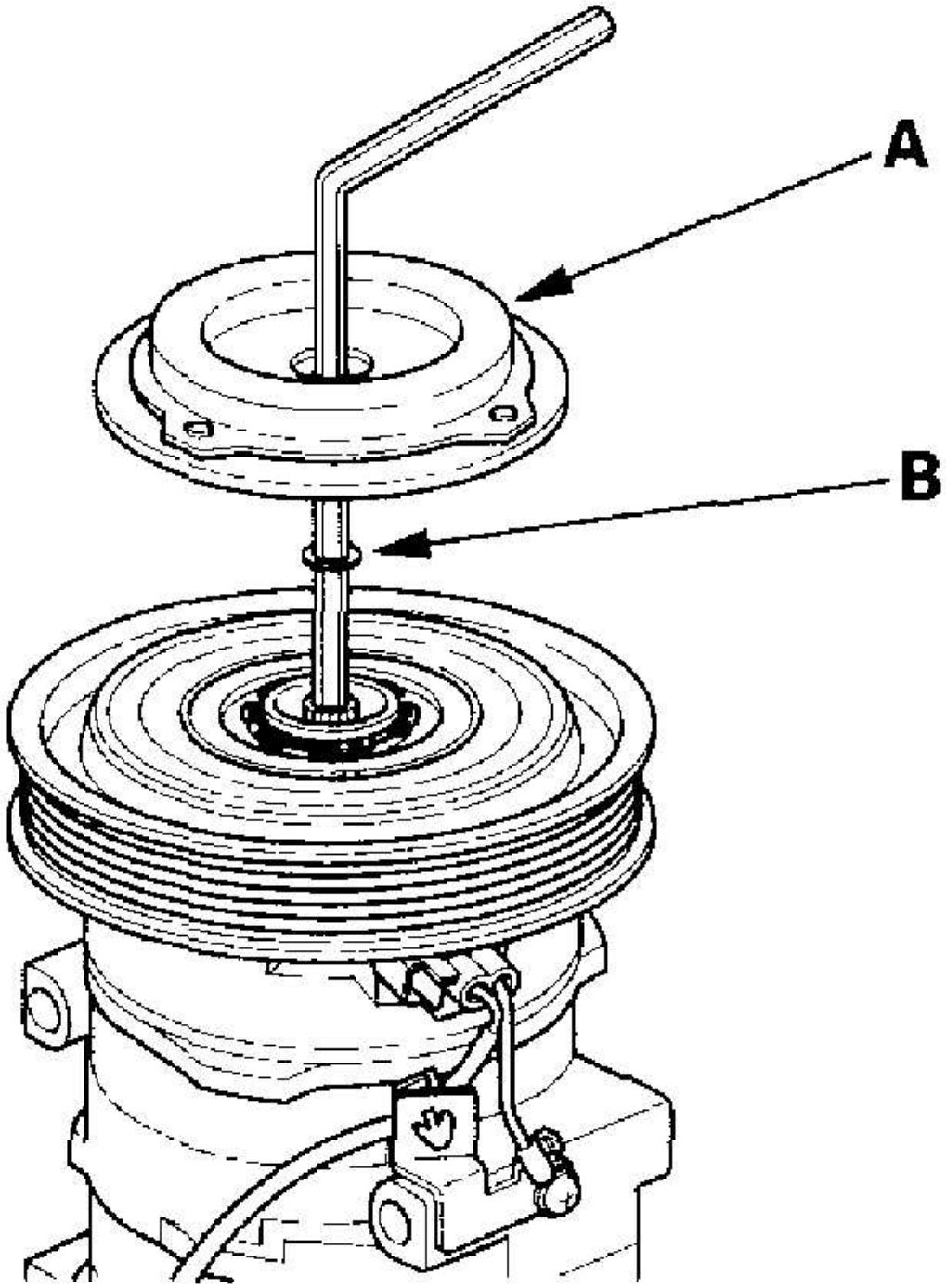


Fig. 82: Removing Center Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the pressure plate (A) and shim(s) (B), taking care not to lose the shim (s). If the clutch needs adjustment, increase or decrease the number and thickness of shims as necessary, then reinstall the pressure plate, and recheck its clearance (see **A/C COMPRESSOR CLUTCH CHECK**).

NOTE: The shims are available in three thicknesses: 0.1 mm, 0.3 mm and 0.5 mm.



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Fig. 83: Removing Pressure Plate And Shim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If you are replacing the field coil, remove the snap ring (A) with snap ring pliers, then remove the pulley (B). Be careful not to damage the pulley or the A/C compressor.

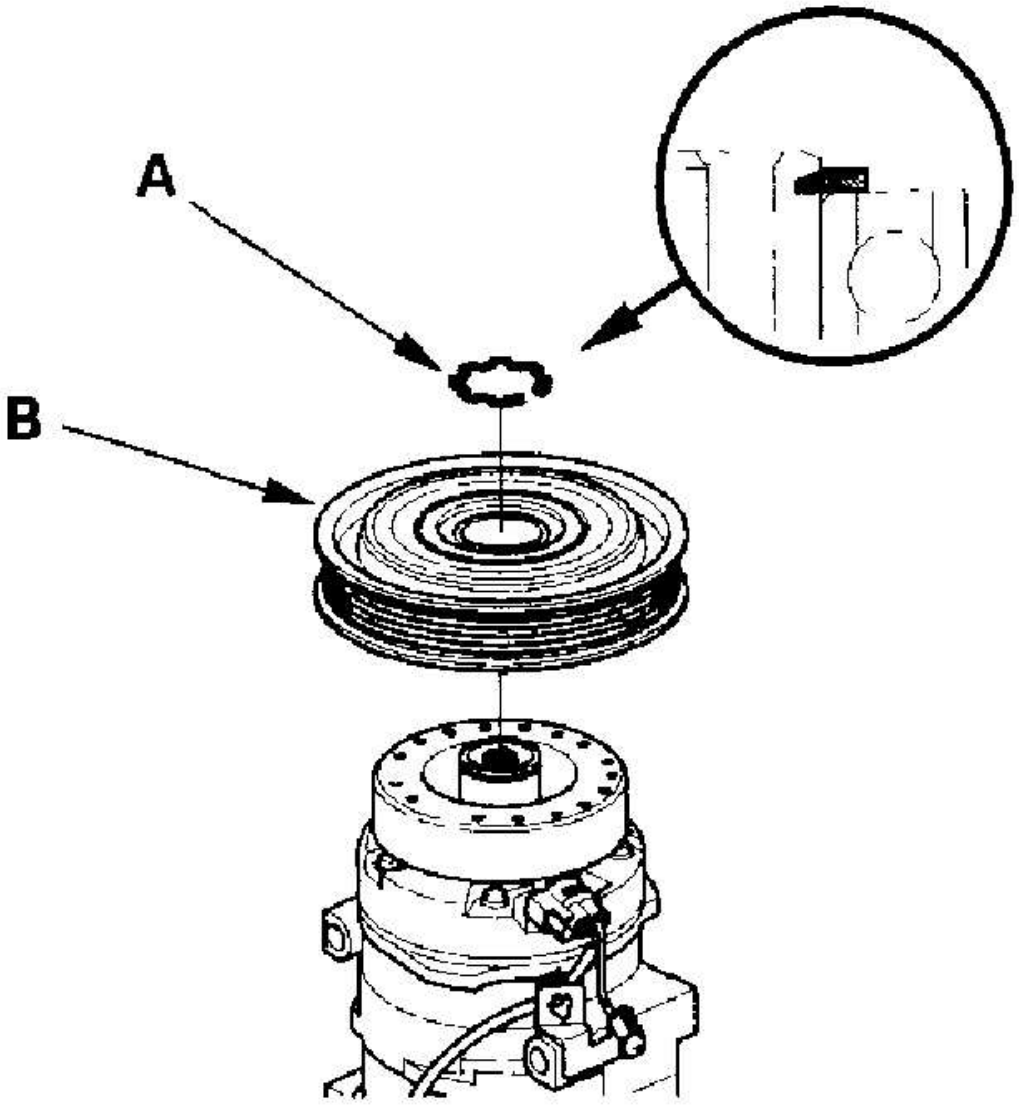


Fig. 84: Removing Snap Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the screw from the field coil ground terminal (A), then remove the wire harness (B) and the bracket (C). Disconnect the field coil connector (D). Remove the snap ring (E) with snap ring pliers, then remove the field coil (F).

Be careful not to damage the field coil or the A/C compressor.

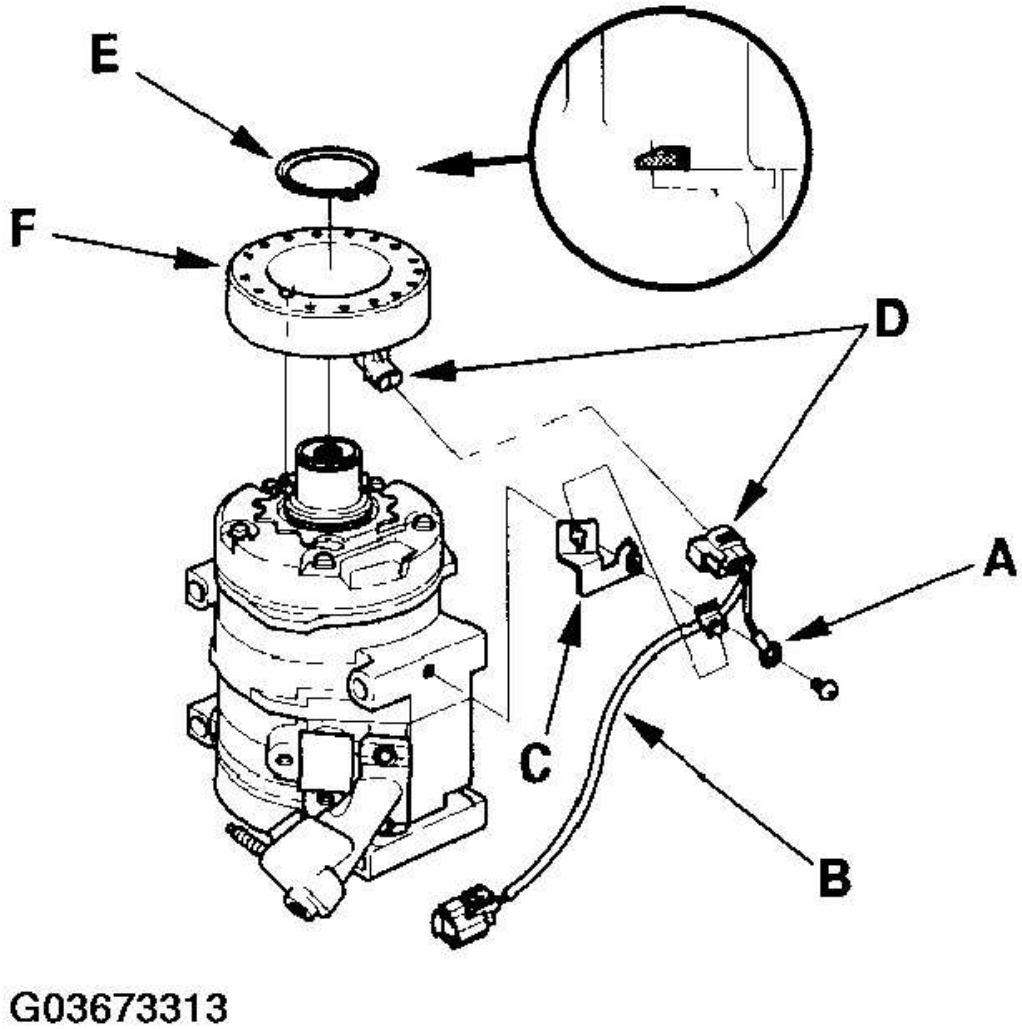


Fig. 85: Removing Snap Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Reassemble the clutch in the reverse order of disassembly, and note these items:
   - Install the field coil with the wire side facing down, and align the boss on the field coil with the hole in the A/C compressor.

- Clean the pulley and A/C compressor sliding surfaces with contact cleaner or other non-petroleum solvent.
- Install new snap rings, note the installation direction, and make sure they are fully seated in the groove.
- Make sure that the pulley turns smoothly after it's reassembled.
- Route and clamp the wires properly or they can be damaged by the pulley.

A/C COMPRESSOR RELIEF VALVE REPLACEMENT

1. Recover the refrigerant with a recovery/recycling/charging station, refer to **REFRIGERANT RECOVERY** .
2. Remove the relief valve (A) and the O-ring (B). Plug the opening to keep foreign matter from entering the system and the A/C compressor oil from running out.

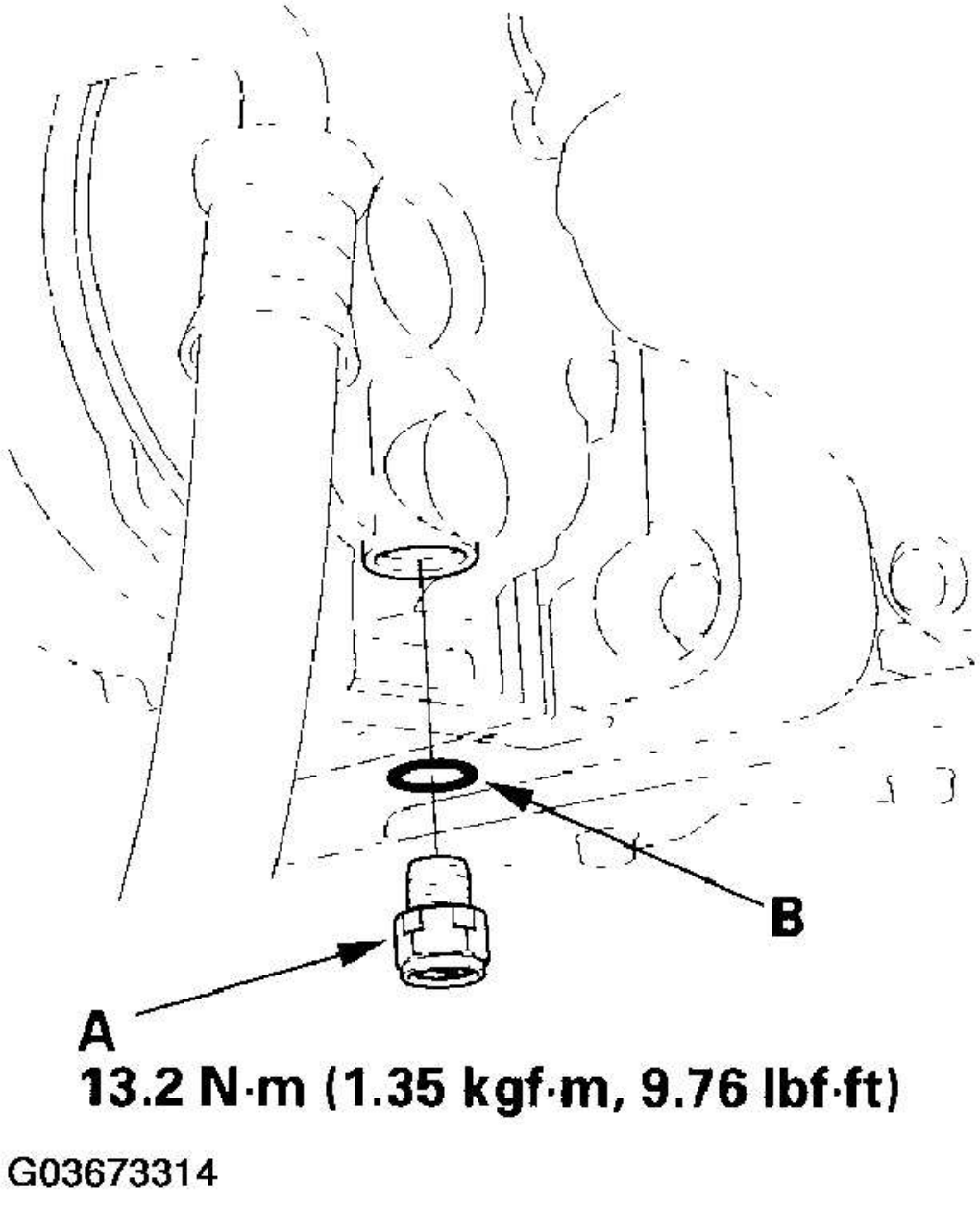


Fig. 86: Removing Relief Valve And O-Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Clean the mating surfaces.

4. Replace the O-ring with a new one at the relief valve, and apply a thin coat of refrigerant oil before installing it.
5. Remove the plug, and install and tighten the relief valve.
6. Charge the system, refer to **SYSTEM CHARGING** .

A/C CONDENSER REPLACEMENT

1. Make sure you have the anti-theft code for the radio and the navigation system, then write down the frequencies for the radio's preset buttons.
2. Recover the refrigerant with a recovery/recycling charging station, refer to **REFRIGERANT RECOVERY** .
3. Remove the front bulkhead cover .
    - 2-door
    - 4-door
4. Remove the battery and the battery box.
5. Remove the clips (A), then remove the air intake cover (B) and the air intake tube or duct (C).

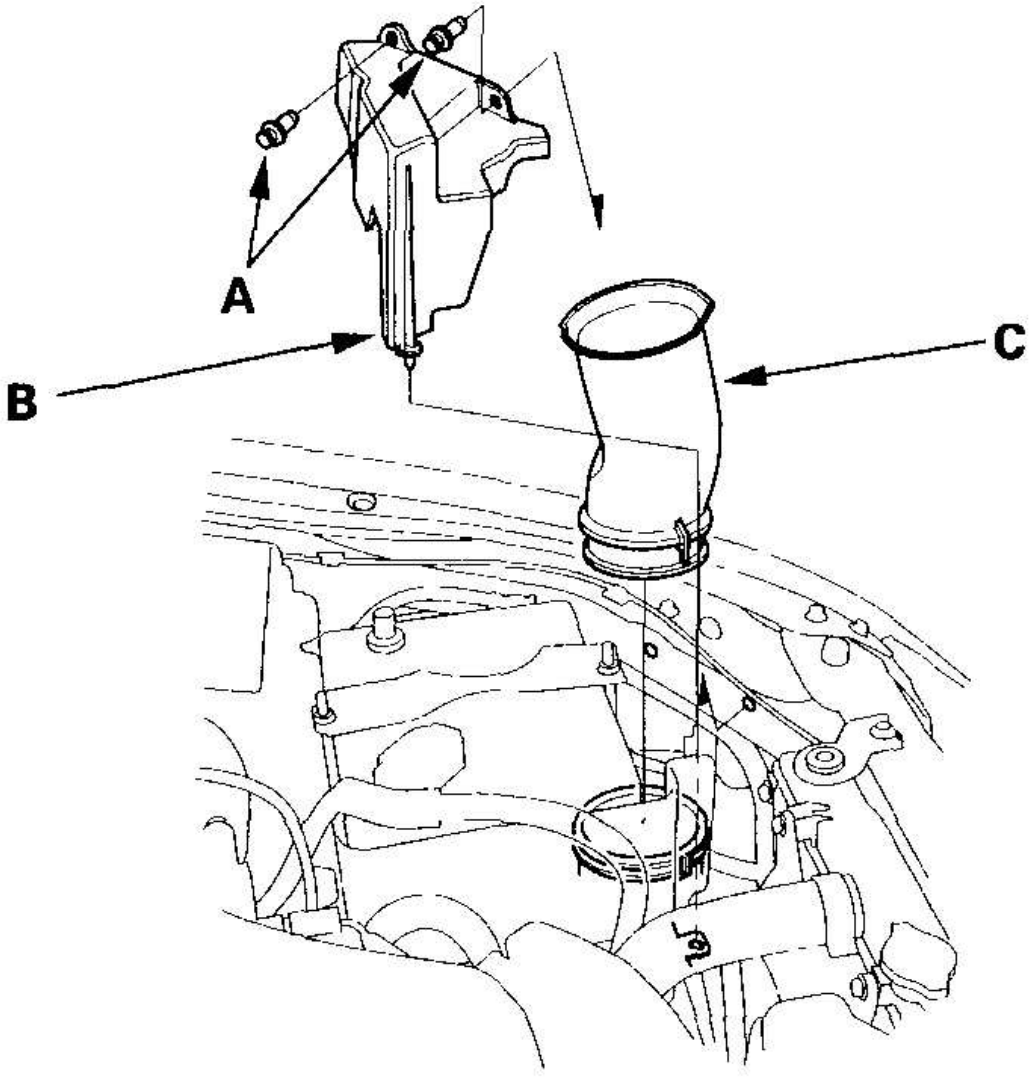


Fig. 87: Removing Air Intake Cover And Air Intake Tube Or Duct
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the A/C compressor clutch connector (A) from the A/C condenser fan shroud (B). Disconnect the A/C condenser fan connector (C), then remove the wire harness clip (D) from the A/C condenser fan shroud. Remove the hose (E) from the radiator. Loosen the lower mounting bolt, then remove the upper

mounting bolts and the A/C condenser fan shroud. Be careful not to damage the radiator fins when removing the A/C condenser fan shroud.

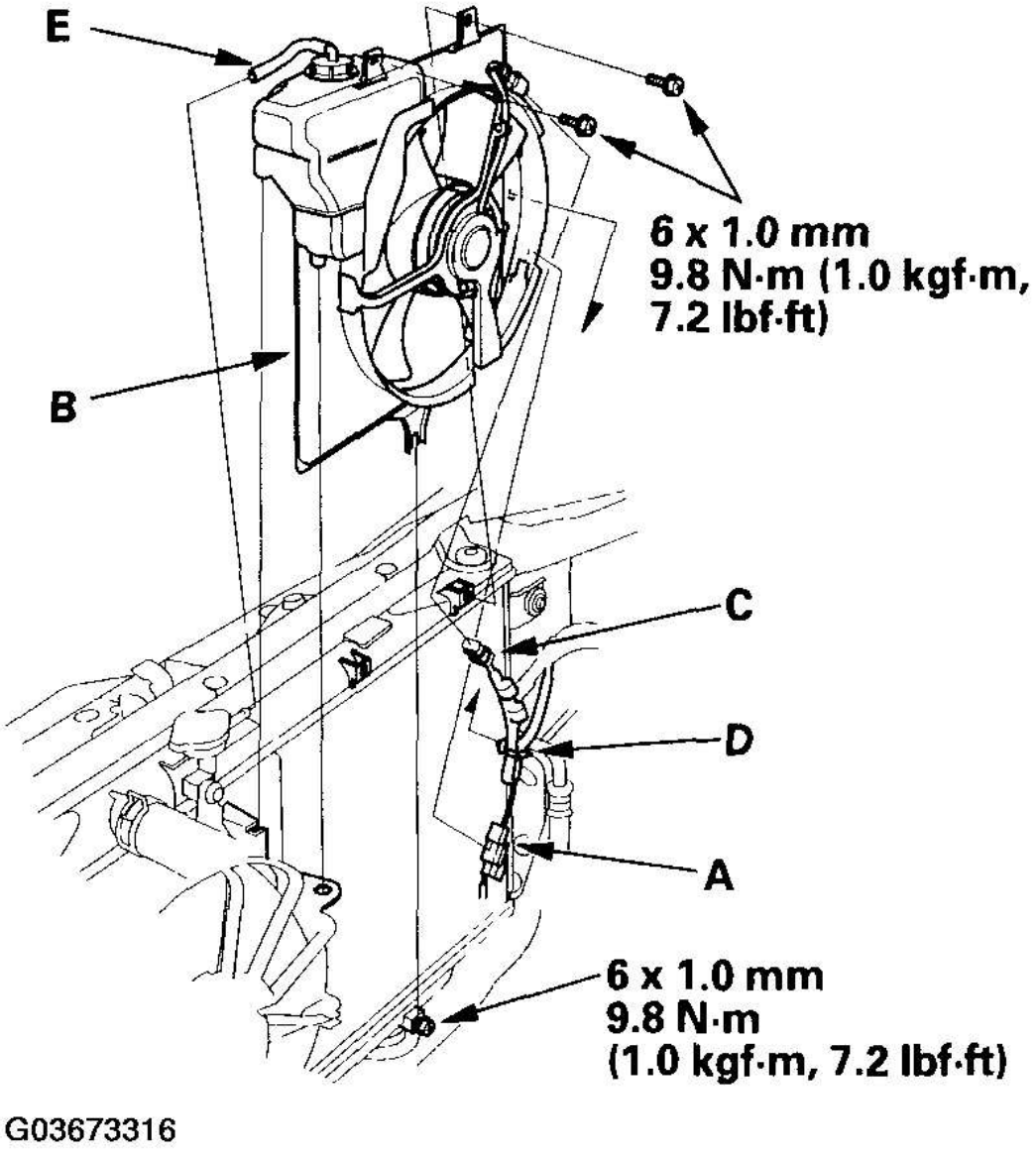


Fig. 88: Removing A/C Compressor Clutch Connector From A/C Condenser Fan Shroud
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the bolts and the radiator upper mount brackets.

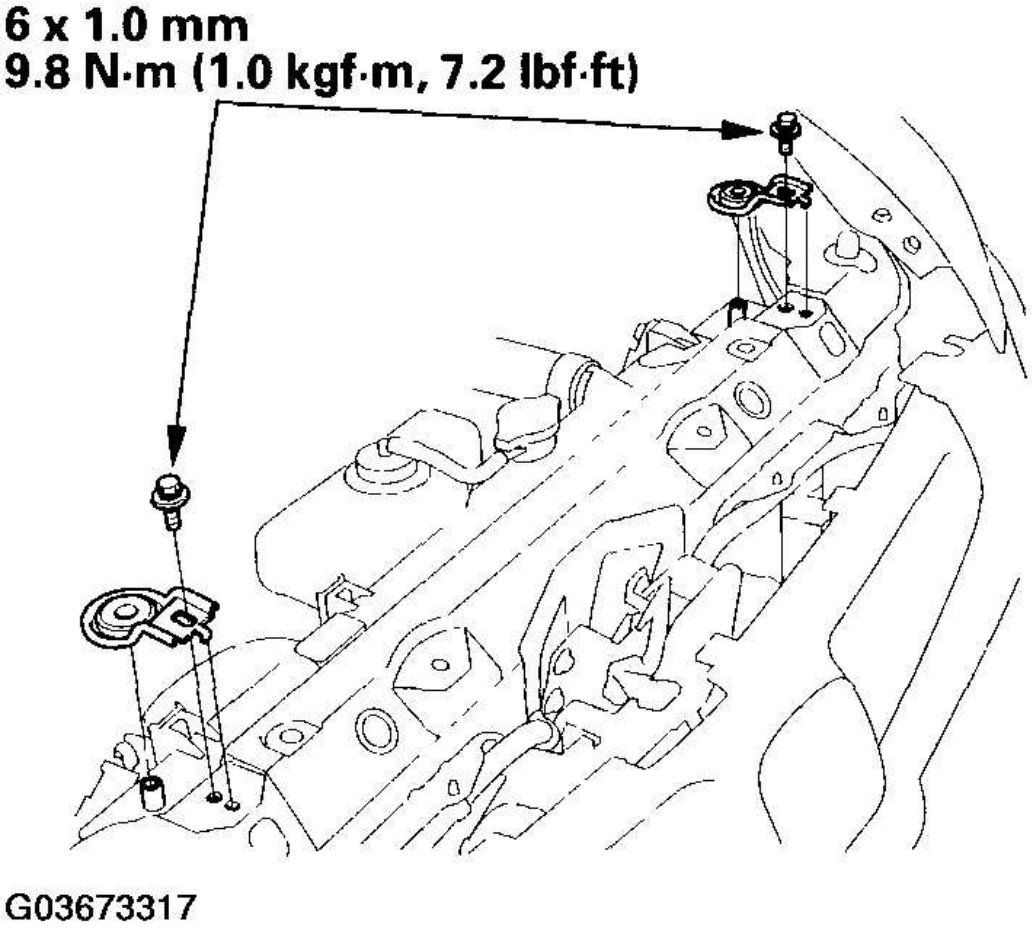


Fig. 89: Removing Bolts And Radiator Upper Mount Brackets
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the bolt, then disconnect the receiver line (A) from the A/C condenser. Disconnect the A/C pressure switch connector (B).

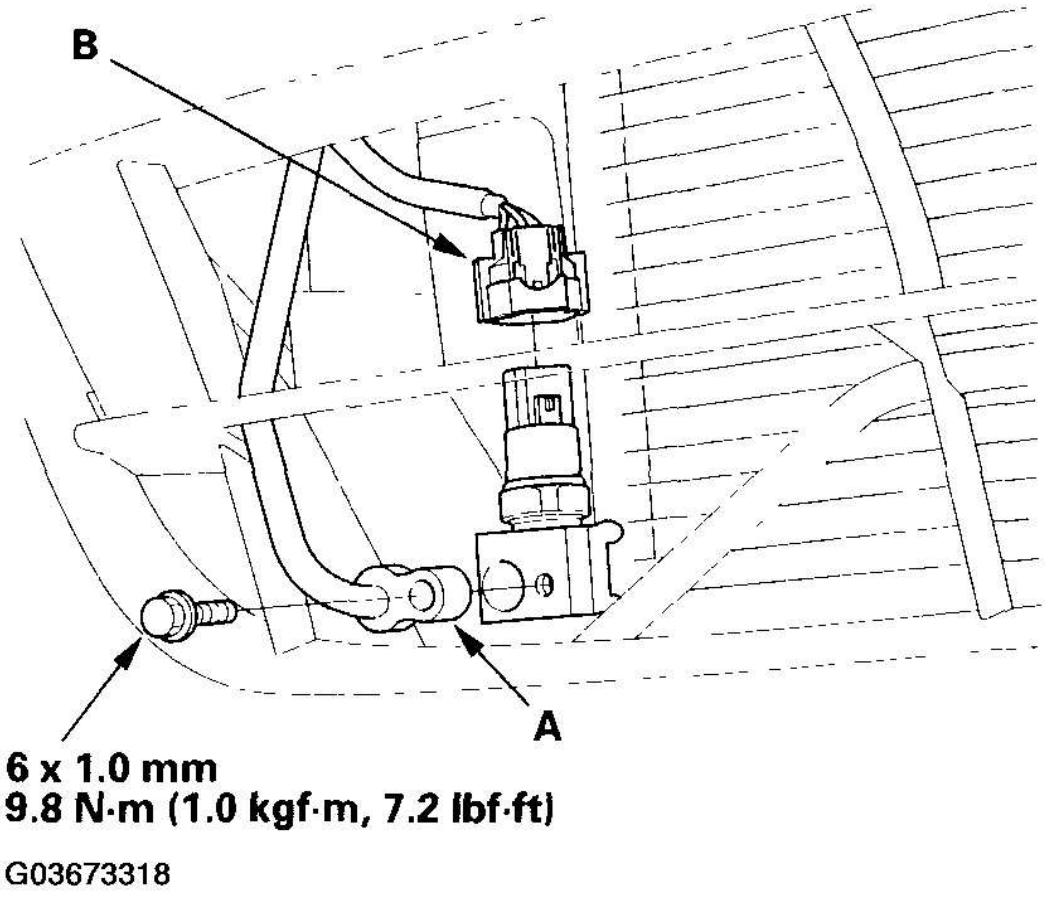


Fig. 90: Disconnecting A/C Pressure Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the bolts from the A/C condenser.

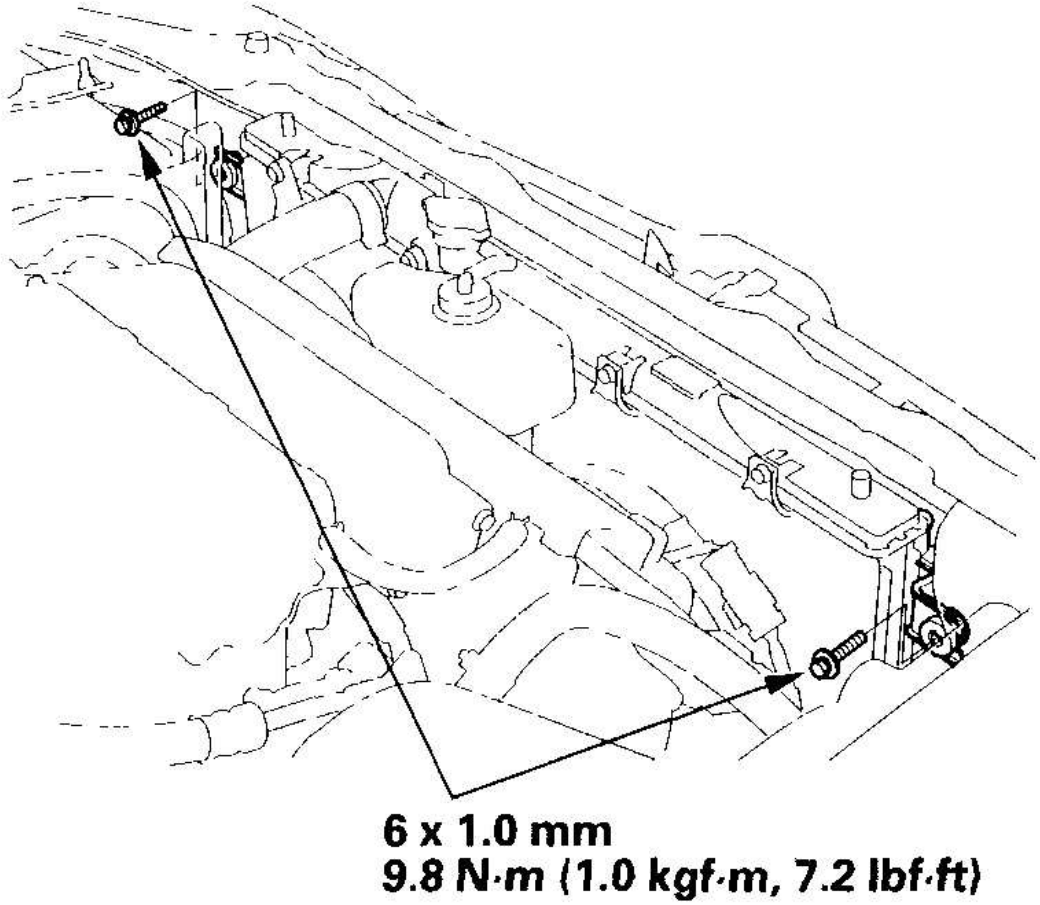


Fig. 91: Removing Bolts From A/C Condenser
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the nut, then disconnect the discharge line from the A/C condenser.

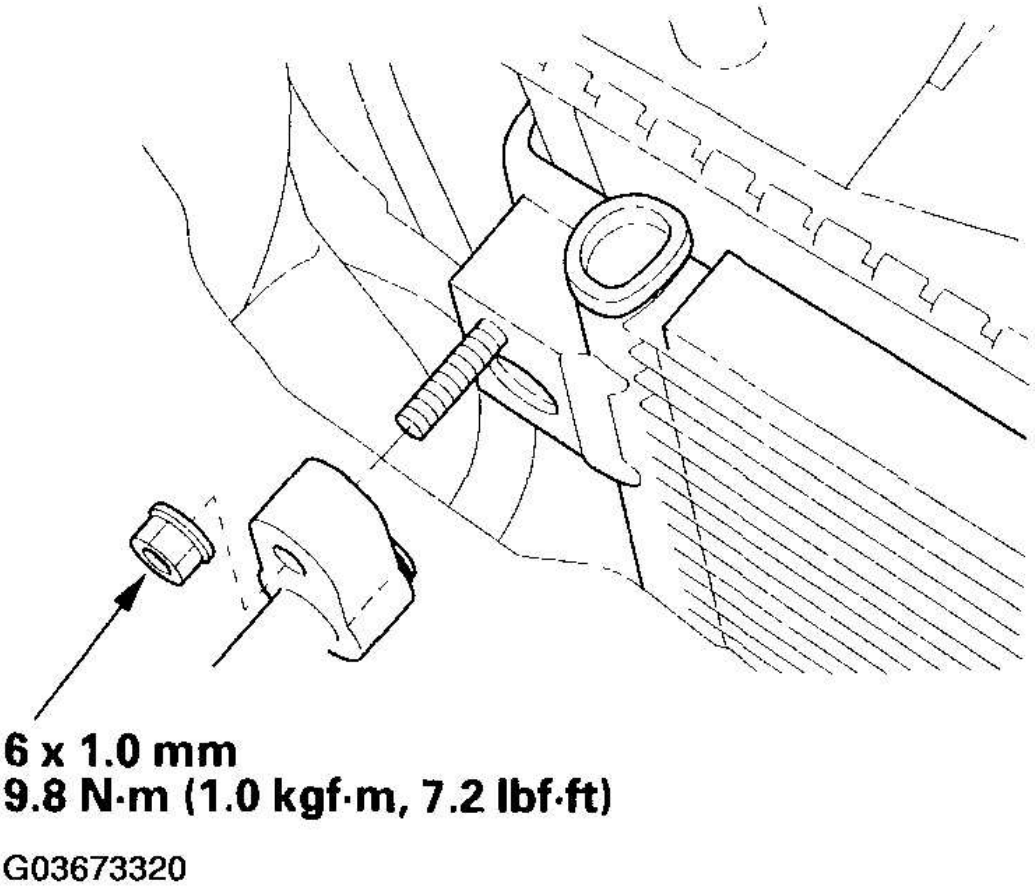


Fig. 92: Disconnecting Discharge Line From A/C Condenser
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the A/C condenser by lifting it up. Be careful not to damage the radiator and A/C condenser fins when removing the A/C condenser.

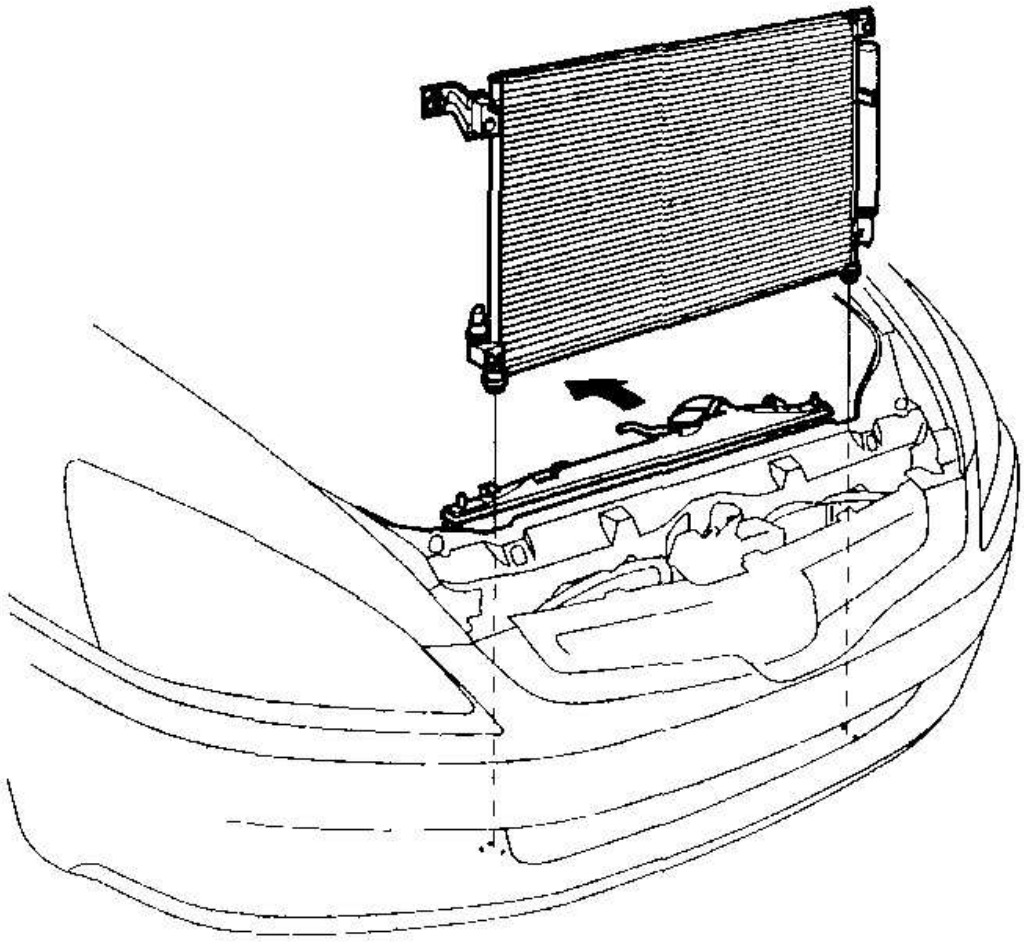


Fig. 93: Removing A/C Condenser
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Install the A/C condenser in the reverse order of removal, and note these items:
    - If you're installing a new A/C condenser, add refrigerant oil (DENSO ND-OIL 8), refer to **A/C REFRIGERANT OIL REPLACEMENT** .
    - Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.

- Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
- Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
- Be careful not to damage the radiator or the A/C condenser fins when installing the A/C condenser.
- Charge the system, refer to **SYSTEM CHARGING** .
- Reset the power window control unit, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .
- Enter the anti-theft codes for the radio and the navigation system, then enter the customer's radio station presets.

A/C SYSTEM TEST

PERFORMANCE TEST

WARNING:

- **Compressed air mixed with R-134a forms a combustible vapor.**
- **The vapor can burn or explode causing serious injury.**
- **Never use compressed air to pressure test R-134a service equipment or vehicle air conditioning systems.**

CAUTION:

- **Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.**
- **Be careful when connecting service equipment.**
- **Do not breathe refrigerant or vapor.**

The performance test will help determine if the air conditioner system is operating within specifications.

Use only service equipment that is U.L-listed and is certified to meet the requirements of SAE J2210 to remove HFC-134a (R-134a) from the air

conditioning system.

If accidental system discharge occurs, ventilate work area before resuming service.

R-134a service equipment or vehicle air conditioning systems should not be pressure tested or leak tested with compressed air.

Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

1. Connect a R-134a refrigerant recovery/recycling/charging station to the high-pressure service port and the low-pressure service port, following the equipment manufacturer's instructions.
2. Determine the relative humidity and air temperature.
3. Open the glove box. Remove the damper from the glove box, then release the glove box stops and let the glove box hang down, refer to **GLOVE BOX REMOVAL/INSTALLATION** .
4. Insert a thermometer (A) in the center vent.

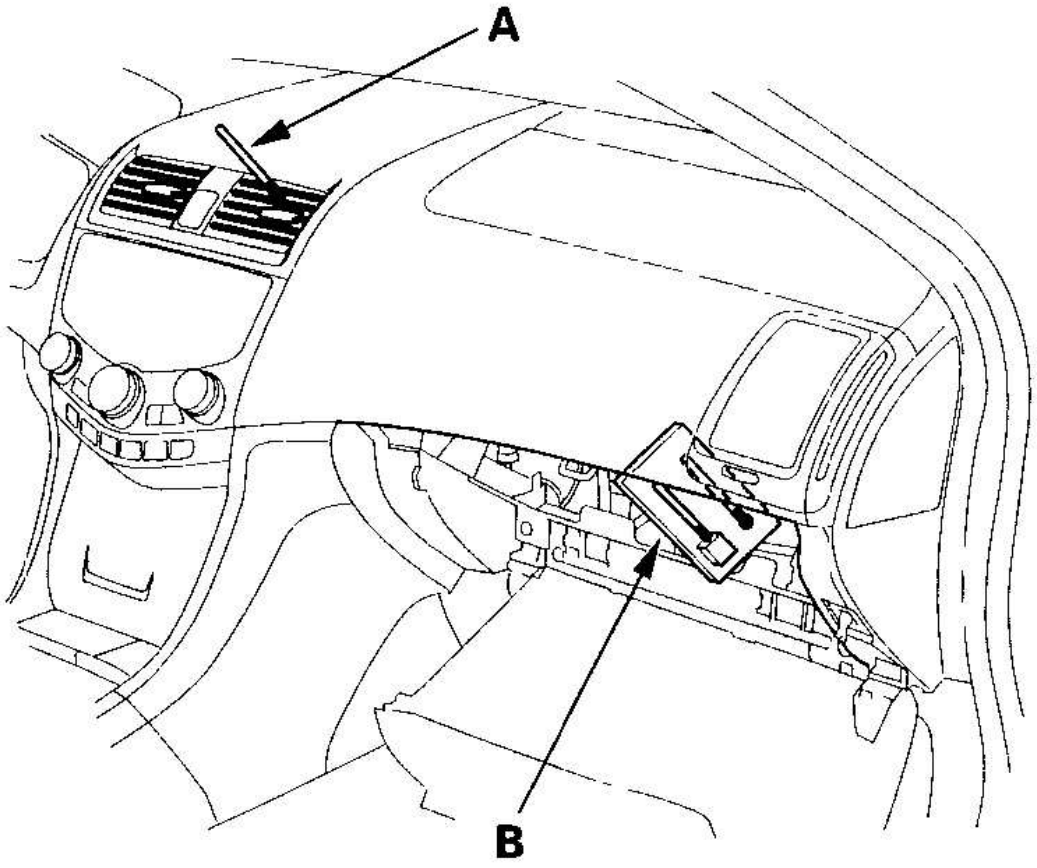


Fig. 94: Inserting Thermometer In Center Vent
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Place a thermometer (B) near the blower unit.
6. Test conditions:
   - Avoid direct sunlight.
   - Open hood.
   - Open front doors.
   - Set the temperature control dial to Max Cool, the mode control switch to Vent and the recirculation control switch to Recirculate.
   - Turn the A/C switch on and the fan switch to Max.

- Run the engine at 1,500 rpm.
- No driver or passengers in vehicle.

7. After running the air conditioning for 10 minutes under the above test conditions, read the delivery temperature from the thermometer in the center vent, the intake temperature near the blower unit, and the high and low system pressure from the A/C gauges.

PRESSURE TEST

Test results	Related symptoms	Probable cause	Remedy
Discharge (high) pressure abnormally high	After stopping A/C compressor, pressure drops about 196 kPa (2.0 kgf/cm^2 , 28 psi) quickly, and then falls gradually.	Air in system	Recover, evacuate, refer to **SYSTEM EVACUATION** , and recharge with specified amount, refer to **SYSTEM CHARGING** .
	Reduced or no airflow through A/C condenser.	• Clogged A/C condenser or radiator fins • A/C condenser or radiator fan not working properly	• Clean. • Check voltage and fan rpm. • Check fan direction.
	Line to A/C condenser is excessively hot.	Restricted flow of refrigerant in system	Restricted lines.
Discharge	High and low-pressures are balanced soon after stopping A/C compressor. Low side is higher than normal.	• Faulty A/C compressor discharge valve • Faulty A/C compressor	Replace the A/C compressor.

pressure abnormally low		seal	
	Outlet of expansion valve is not frosted, low-pressure gauge indicates vacuum	• Faulty expansion valve • Moisture in system	• Replace. • Recover, evacuate, and recharge with specified amount.
Suction (low) pressure abnormally low	Expansion valve is not frosted, and low-pressure line is not cold. Low-pressure gauge indicates vacuum.	• Frozen expansion valve (Moisture in system) • Faulty expansion valve	• Recover, evacuate, and recharge with specified amount. • Replace the expansion valve.
	Discharge temperature is low, and the airflow from vents is restricted.	Frozen evaporator	Run the fan with A/C compressor off, then check evaporator temperature sensor.
	Expansion valve is frosted.	Clogged expansion valve	Clean or replace.
Suction pressure abnormally high	Low-pressure hose and check joint are cooler than the temperature around evaporator.	Expansion valve open too long	Repair or replace.
	Suction pressure is lowered when A/C condenser is cooled by water.	Excessive refrigerant in system	Recover, evacuate, and recharge with specified amount.
	High and low-pressure are equalized as soon	• Faulty gasket • Faulty high-	

	as the A/C compressor is stopped, and both gauges fluctuate while running.	pressure valve • Foreign particle stuck in high-pressure valve	Replace the A/C compressor.
Suction and discharge pressures abnormally high	Reduced airflow through A/C condenser.	• Clogged A/C condenser or radiator fins • A/C condenser or radiator fan not working properly	• Clean. • Check voltage and fan rpm. • Check fan direction.
Suction and discharge pressures abnormally low	Low-pressure hose and metal end areas are cooler than evaporator.	Clogged or kinked low-pressure hose parts	Repair or replace.
	Temperature around expansion valve is too low compared with that around receiver/dryer.	Clogged high-pressure line	Repair or replace.
Refrigerant leaks	A/C compressor clutch is dirty.	A/C compressor shaft seal leaking	Replace the A/C compressor.
	A/C compressor bolt(s) are dirty.	Leaking around bolt(s)	Tighten bolt(s) or replace A/C compressor.
	A/C compressor gasket is wet with oil.	Gasket leaking	Replace the A/C compressor.
	A/C fitting is dirty.	Leaking O-ring	Clean A/C fitting and replace O-ring.

8. To complete the charts:

- Mark the delivery temperature along the vertical line.
- Mark the intake temperature (ambient air temperature) along the bottom line.
- Draw a line straight up from the air temperature to the humidity.
- Mark a point 10% above and 10% below the humidity level.
- From each point, draw a horizontal line across the delivery temperature.
- The delivery temperature should fall between the two lines.
- Complete the low-side pressure test and high-side pressure test in the same way.
- Any measurements outside the line may indicate the need for further inspection.

EXAMPLE OF TEMPERATURE AND PRESSURE

Example	Intake temperature (dry):	86°F (30°C) Humidity level 70%
	Intake temperature (wet):	77.9°F (25.5°C)
	Intake pressure:	245 kPa (2.5 kgf/cm^2) (78.3 psi)
	Delivery temperature:	61.2°F (16.2°C)
	Delivery pressure:	1902 kPa (19.4 kgf/cm^2) (275.9 psi)
Results:	Within normal range	

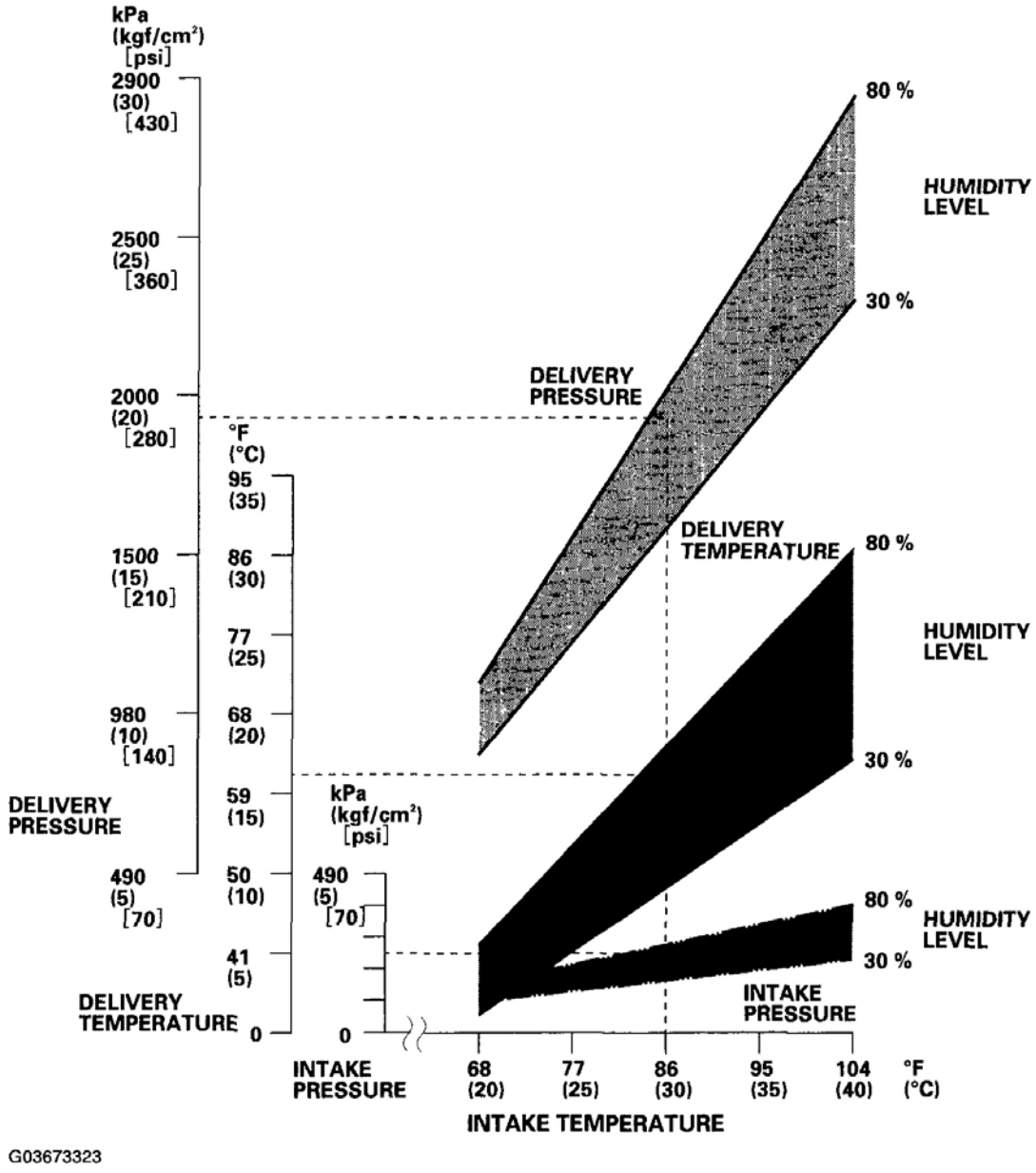


Fig. 95: Example Of Intake Temperature/Pressure Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 HVAC

Heating/Air Conditioning - Accord

COMPONENT LOCATION INDEX

4-DOOR

Fig. 1: Identifying Heating/Air Conditioning Component Location (Underdash)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2-DOOR

Fig. 2: Identifying Heating/Air Conditioning Component Location (Underdash)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR

Fig. 3: Identifying Heating/Air Conditioning Component Location (Underhood)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2-DOOR

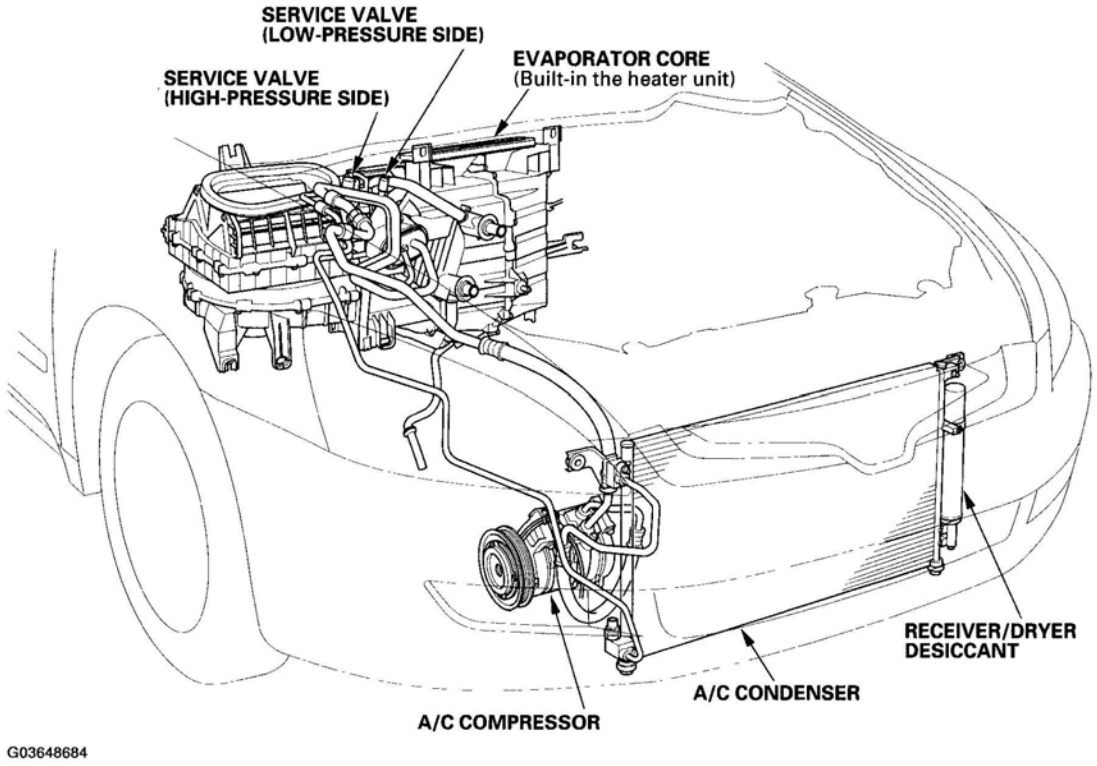


Fig. 4: Identifying Heating/Air Conditioning Component Location (Underhood)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR/2-DOOR

Fig. 5: Identifying Heating/Air Conditioning Component Location (Cooling Fans)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C SERVICE TIPS AND PRECAUTIONS

WARNING:

- **Compressed air mixed with R-134a forms a combustible vapor.**
- **The vapor can burn or explode causing serious injury.**
- **Never use compressed air to pressure test R-134a service equipment or vehicle air conditioning systems.**

CAUTION:

- **Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.**
- **Be careful when connecting service equipment.**
- **Do not breathe refrigerant or vapor.**

The air conditioning system uses HFC-134a (R-134a) refrigerant and polyalkyleneglycol (PAG) refrigerant oil, which are not compatible with CFC-12 (R-12) refrigerant and mineral oil. Do not use R-12 refrigerant or mineral oil in this system, and do not attempt to use R-12 servicing equipment; damage to the air conditioning system or your servicing equipment will result. Use only service equipment that is U.L.-listed and is certified to meet the requirements of SAE J2210 to remove R-134a from the air conditioning system.

If accidental system discharge occurs, ventilate work area before resuming service.

R-134a service equipment or vehicle air conditioning systems should not be pressure tested or leak tested with compressed air.

Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

- Always disconnect the negative cable from the battery whenever replacing air conditioning parts.
- Keep moisture and dirt out of the system. When disconnecting any lines, plug or cap the fittings immediately; don't remove the caps or plugs until just before you reconnect each line.
- Before connecting any hose or line, apply a few drops of refrigerant oil to the O-ring.
- When tightening or loosening a fitting, use a second wrench to support the matching fitting.
- When discharging the system, use a R-134a refrigerant recovery/recycling/charging station; don't release refrigerant into the atmosphere.

A/C REFRIGERANT OIL REPLACEMENT

Recommended PAG oil: DENSO ND-OIL 8

- P/N 38897-PR7-A01AH: 120 mL (4 fl.oz)
- P/N 38899-PR7-A01: 40 mL (1 1/3 fl.oz)

Add the recommended refrigerant oil in the amount listed if you replace any of the following parts.

- To avoid contamination, do not return the oil to the container once dispensed, and never mix it with other refrigerant oils.
- Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
- Do not spill the refrigerant oil on the vehicle; it may damage the paint; if it gets on the paint, wash it off immediately.

RECOMMENDED REFRIGERANT OIL

A/C condenser	25 mL (5/6 fl. oz)
Evaporator	45 mL (1 1/2 fl. oz)
Line or hose	10 mL (1/3 fl. oz)
Receiver/Dryer	10 mL (1/3 fl. oz)
Leakage repair	25 mL (5/6 fl. oz)
A/C Compressor	For A/C compressor replacement, subtract the volume of oil drained from rmoved A/C compressor from 160 mL (5 1/3 fl. oz), and drain the calculated volumne of oil from the new A/C compressor: 160 mL (5 1/3 fl.oz) - Volume of removed A/C compressor = volume to drain from new A/C compressor.

NOTE: Even if no oil is drained from the removed A/C compressor, don't drain more than 50 mL (1 2/3 fl.oz) from the new A/C compressor.

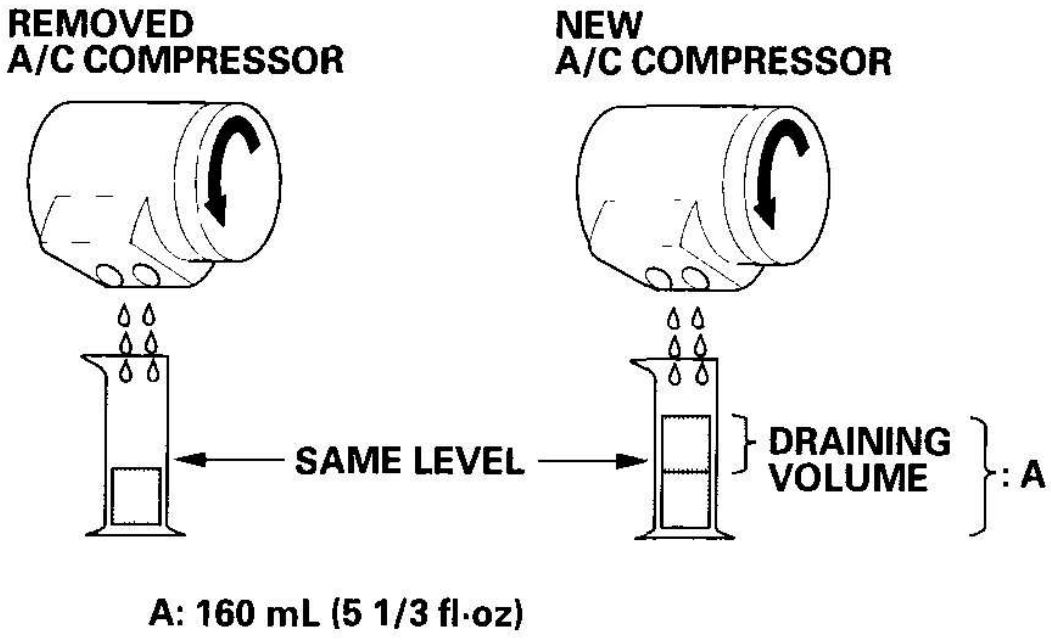


Fig. 6: Identifying A/C Compressor Fluid Level
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR

Fig. 7: Replacing A/C Refrigerant Oil (4-Door)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2-DOOR

Fig. 8: Replacing A/C Refrigerant Oil (2-Door)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

HOW TO RETRIEVE A DTC

The audio-HVAC display panel has a self-diagnostic function for heating, ventilation, and air conditioning system. To run the self-diagnostic function, do the following:

1. Turn the ignition switch OFF.
2. Turn the fan switch OFF.
3. Set the temperature control dial on Max Cool, then push the mode control button to select Vent.
4. Turn the ignition switch ON (II).
5. Press and hold the recirculation control button.
6. While holding the button down, press the rear window defogger button five times within 10 seconds. The recirculation indicator blinks two times, then the self-diagnostic will begin.
    - If there is any problem in the system after self-diagnostic is finished, the recirculation indicator will blink Diagnostic Trouble Code (DTC) 1 through 6. If there are any problems in the evaporator temperature sensor circuit, the A/C indicator will blink DTC 7 or 8.
    - If no DTC's are found, the indicator will not blink.

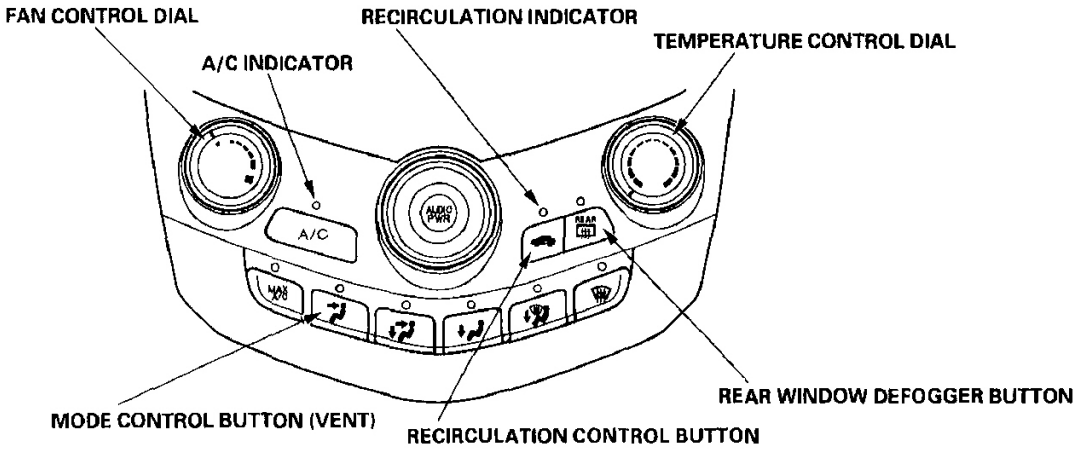


Fig. 9: Pressing Rear Window Defogger Button
Courtesy of AMERICAN HONDA MOTOR CO., INC.

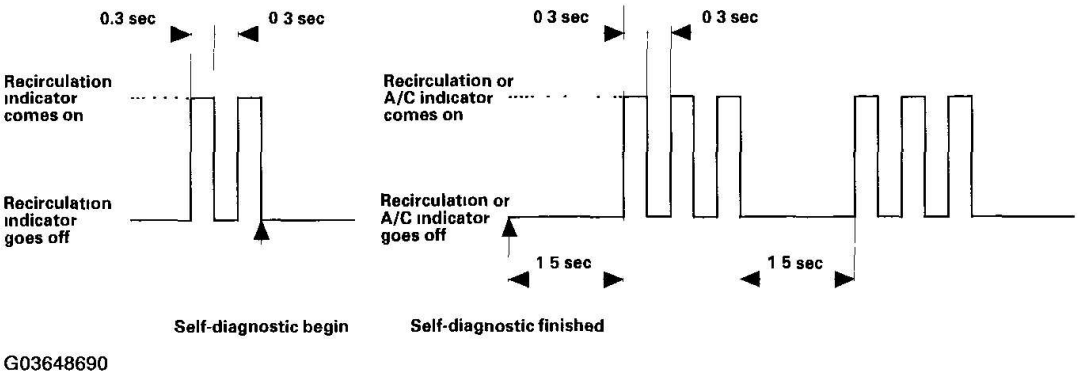


Fig. 10: Example Of DTC Indication Pattern (DTC 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Cancelling the Self-diagnostic Function

7. Turn the ignition switch OFF to cancel the self-diagnostic function. After completing repair work, run the self-diagnostic function again to make sure that there are no other malfunctions.

Max Cool Position Function

When the mode control button is in the MAX COOL position, the audio-HVAC display panel will automatically select the recirculation mode and turn the A/C on. The recirculation switch and A/C switch are disabled and cannot be turned off in this mode. If the audio-HVAC display panel fails to function as described, replace it.

DTC TROUBLESHOOTING INDEX

DTC (RECIRCULATION INDICATOR BLINKS)

DTC (Recirculation Indicator Blinks)	Detection Item	Refer To
1	An open in the air mix control motor circuit	(see **DTC 1: AN OPEN IN THE AIR MIX CONTROL MOTOR CIRCUIT**)
2	A short in the air mix control motor circuit	(see **DTC 2: A SHORT IN THE AIR MIX CONTROL MOTOR CIRCUIT**)
3	A problem in the air mix control linkage, door, or motor	(see **DTC 3: A PROBLEM IN THE AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR**)
4	An open or short in the mode control motor circuit	(see **DTC 4: AN OPEN OR SHORT IN THE MODE CONTROL MOTOR CIRCUIT**)
5	A problem in the mode control linkage, doors, or motor	(see **DTC 5: A PROBLEM IN THE MODE CONTROL LINKAGE, DOORS, OR MOTOR**)
6	A problem in the blower	(see **DTC 6: A PROBLEM IN THE**

	motor circuit	**BLOWER MOTOR CIRCUIT**)

DTC (A/C INDICATOR BLINKS)

DTC (A/C Indicator Blinks)	Detection Item	Refer To
7	An open in the evaporator temperature sensor circuit	(see **DTC 7: An Open in the Evaporator Temperature Sensor Circuit**)
8	A short in the evaporator temperature sensor circuit	(see **DTC 8: A Short in the Evaporator Temperature Sensor Circuit**)

In case of multiple problems, the recirculation indicator will indicate only the DTC with the least number of blinks.

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for
Recirculation control doors do not change between Fresh and Recirculate	Recirculation control motor circuit troubleshooting (see **RECIRCULATION CONTROL MOTOR CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Blown fuse No. 30 (7.5A) in the under-dash fuse/relay box • Cleanliness and tightness of all connectors
	Audio-HVAC display panel power and ground circuit	• HVAC DTCs (see **GENERAL TROUBLESHOOTING**

Blower, heater controls, and A/C do not work	troubleshooting (see **AUDIO-HVAC DISPLAY PANEL POWER AND GROUND CIRCUIT TROUBLESHOOTING**)	**INFORMATION**) • Blown fuse No. 30 (7.5A) in the under-dash fuse/relay box • Poor ground at G503 • Cleanliness and tightness of all connectors
The A/C condenser fan does not run at all (but radiator fan runs with the A/C on)	A/C condenser fan circuit troubleshooting (see **A/C CONDENSER FAN CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Blown fuse No. 9 (20A) in the under-hood fuse/relay box, and No. 30 (7.5A) in the under-dash fuse/relay box • Poor ground at G201 • Cleanliness and tightness of all connectors
Both fans do not run with the A/C on (but the A/C compressor runs with the A/C on)	Radiator and A/C condenser fan common circuit troubleshooting (see **RADIATOR AND A/C CONDENSER FAN COMMON CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Blown fuse No. 9 (20A) and No. 11 (20A) in the under-hood fuse/relay box, and No. 30 (7.5A) in the under-dash fuse/relay box • Cleanliness and tightness of all connectors
		• HVAC DTCs (see **GENERAL**

		TROUBLESHOOTING INFORMATION) • Blown fuse No. 12 (7.5A) in the under-hood fuse/relay box, and No. 30 (7.5A) in the under-dash fuse/relay box • Cleanliness and tightness of all connectors
The A/C compressor clutch does not engage (but both fans run with the A/C on)	A/C compressor clutch circuit troubleshooting (see **A/C COMPRESSOR CLUTCH CIRCUIT TROUBLESHOOTING**)	
A/C system does not come on (both fans and the A/C compressor do not work); heater is OK	A/C pressure switch circuit troubleshooting (see **A/C PRESSURE SWITCH CIRCUIT TROUBLESHOOTING**)	• Body DTCs in test mode A of the MICS (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**) • HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Cleanliness and tightness of all connectors • Blown fuse No. 30 (7.5A) in the under-dash fuse/relay box

SYMPTOM AND DIAGNOSTIC PROCEDURE

Symptom	Diagnostic procedure
Recirculation button does not work	1. Turn the ignition switch ON (II). 2. Press the recirculation button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go

	to recirculation control motor test, 4-door (see **4-door**) or 2-door (see **2-door**). • If the LED does not turn on or off, replace the audio-HVAC display panel.
Defroster button does not work	1. Turn the ignition switch ON (II). 2. Press the defroster button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to self-diagnostic (see **GENERAL TROUBLESHOOTING INFORMATION**). • If the LED does not turn on or off, replace the audio-HVAC display panel.
Rear window defogger button does not work	1. Turn the ignition switch ON (II). 2. Press the rear window defogger button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to rear window defogger troubleshooting (see **FUNCTION TEST**). • If the LED does not turn on or off, replace the audio-HVAC display panel.
	1. Turn the ignition switch ON (II).

A/C button does not work	2. Turn the fan control dial ON. 3. Press the A/C button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to self-diagnostic (see **GENERAL TROUBLESHOOTING INFORMATION**). • If the LED does not turn on or off, replace the audio-HVAC display panel.
MAX A/C button does not work	1. Turn the ignition switch ON (II). 2. Turn the fan control dial ON. 3. Press the MAX A/C button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to self-diagnostic (see **GENERAL TROUBLESHOOTING INFORMATION**). • If the LED does not turn on or off, replace the audio-HVAC display panel.
	1. Turn the ignition switch ON (II). 2. Press the MODE (VENT) button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go

Mode button (VENT) does not work	to self-diagnostic (see **GENERAL TROUBLESHOOTING INFORMATION**). • If the LED does not turn on or off, replace the audio-HVAC display panel.
Mode button (VENT/FLOOR) does not work	1. Turn the ignition switch ON (II). 2. Press the MODE (VENT/FLOOR) button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to self-diagnostic (see **GENERAL TROUBLESHOOTING INFORMATION**). • If the LED does not turn on or off, replace the audio-HVAC display panel.
Mode button (FLOOR) does not work	1. Turn the ignition switch ON (II). 2. Press the MODE (FLOOR) button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to self-diagnostic (see **GENERAL TROUBLESHOOTING INFORMATION**). • If the LED does not turn on or off, replace the audio-HVAC

	display panel.
Mode button (DEFROSTER/FLOOR) does not work	1. Turn the ignition switch ON (II). 2. Press the MODE (DEFROSTER/FLOOR) button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to self-diagnostic (see **GENERAL TROUBLESHOOTING INFORMATION**). • If the LED does not turn on or off, replace the audio-HVAC display panel.
Audio-HVAC display panel will not run self-diagnosis	1. Turn the ignition switch ON (II). 2. Press the A/C button, and then OFF button and check the display. • If the display turns on and off as the buttons are pressed, there are no DTCs stored, troubleshoot the individual symptoms. • If the display does not respond as the buttons are pressed, check for loose or poor connections at the audio-HVAC display panel. If the connections are OK, replace the audio-HVAC display panel.

SYSTEM DESCRIPTION

Fig. 11: Identifying Air Flow System Description (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Fig. 12: Identifying Air Flow System Description (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

The air conditioning system removes heat from the passenger compartment by circulating refrigerant through the system.

Fig. 13: Air Conditioning System Description
Courtesy of AMERICAN HONDA MOTOR CO., INC.

This vehicle uses HFC-134a (R-134a) refrigerant which does not contain chlorofluorocarbons. Pay attention to the following service items:

- Do not mix refrigerants CFC-12 (R-12) and HFC-134a (R-134a). They are not compatible.
- Use only the recommended polyalkyleneglycol (PAG) refrigerant oil (DENSO ND-OIL 8) designed for the R-134a compressor. Intermixing the recommended (PAG) refrigerant oil with any other refrigerant oil will result in compressor failure.
- All A/C system parts (compressor, discharge line, suction line, evaporator, condenser, receiver/dryer, expansion valve, O-rings for joints) are designed for refrigerant R-134a. Do not exchange with R-12 parts.
- Use a halogen gas leak detector designed for refrigerant R-134a.

- R-12 and R-134a refrigerant servicing equipment are not interchangeable. Use only a recovery/recycling/charging station that is U.L.-listed and is certified to meet the requirements of SAE J2210 to service the R-134a air conditioning systems.
- Always recover the refrigerant R-134a with an approved recovery/recycling/charging station before disconnecting any A/C fitting.

AUDIO-HVAC DISPLAY PANEL INPUTS AND OUTPUTS

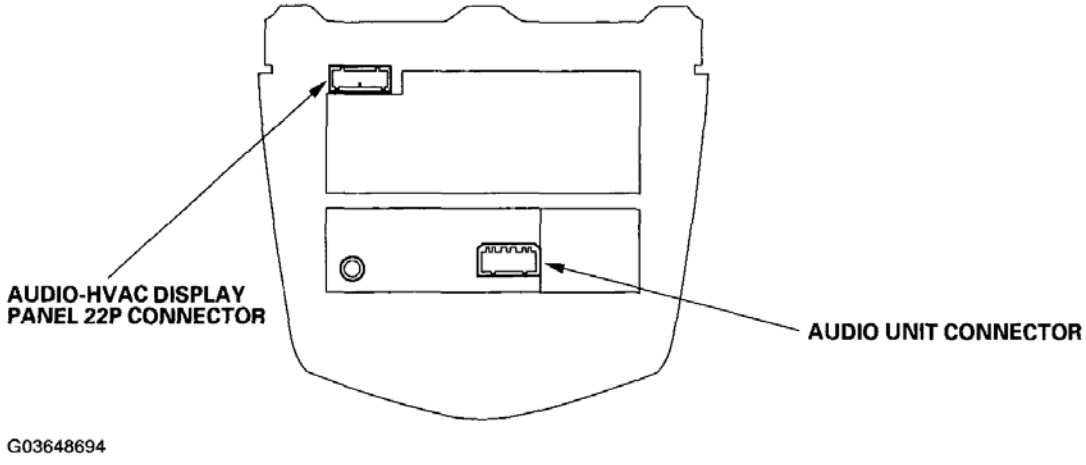


Fig. 14: Identifying Audio-HVAC Display Panel Inputs And Outputs
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Fig. 15: Identifying Audio-HVAC Display Panel 22P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

Fig. 16: Identifying Heating And Air Conditioning Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Fig. 17: Identifying Heating And Air Conditioning Circuit Diagram (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC CODES

DTC CHART

DTC	Description
DTC 1	An Open in the Air Mix Control Motor Circuit
DTC 2	A Short in the Air Mix Control Motor Circuit
DTC 3	A Problem in the Air Mix Control Linkage, Door, or Motor
DTC 4	An Open or Short in the Mode Control Motor Circuit
DTC 5	A Problem in the Mode Control Linkage, Doors, or Motor
DTC 6	A Problem in the Blower Motor Circuit
DTC 7	An Open in the Evaporator Temperature Sensor Circuit
DTC 8	A Short in the Evaporator Temperature Sensor Circuit

DTC 1: AN OPEN IN THE AIR MIX CONTROL MOTOR CIRCUIT

1. Disconnect the air mix control motor 7P (4-door) or 5P (2-door) connector.
2. Disconnect audio-HVAC display panel 22P connector.
3. Check for continuity between the following terminals of audio-HVAC display panel 22P connector and the air mix control motor 7P (4-door) or 5P (2-door) connector.

AUDIO-HVAC DISPLAY PANEL 22P CONNECTOR AND AIR MIX CONTROL MOTOR 7P (4-door)

22P	7P
No. 9	No. 5
No. 13	No. 2
No. 14	No. 1
No. 17	No. 3
No. 18	No. 7

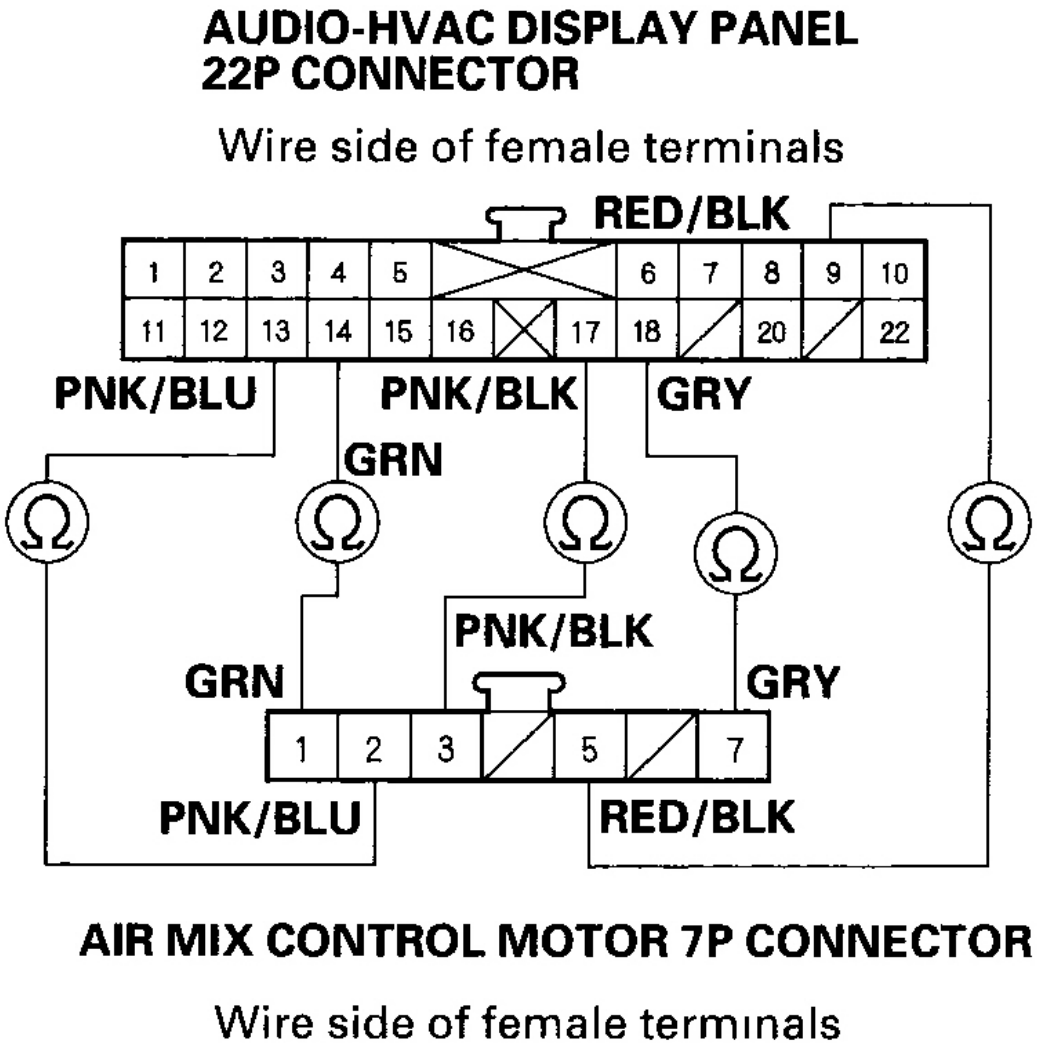


Fig. 18: Checking Continuity Between Audio-HVAC Display Panel & Air Mix Control Motor 7P (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUDIO-HVAC DISPLAY PANEL 22P CONNECTOR AND AIR MIX CONTROL MOTOR 5P (4-door)

22P	5P
No. 9	No. 5

No. 13	No. 1
No. 14	No. 2
No. 17	No. 3
No. 18	No. 4

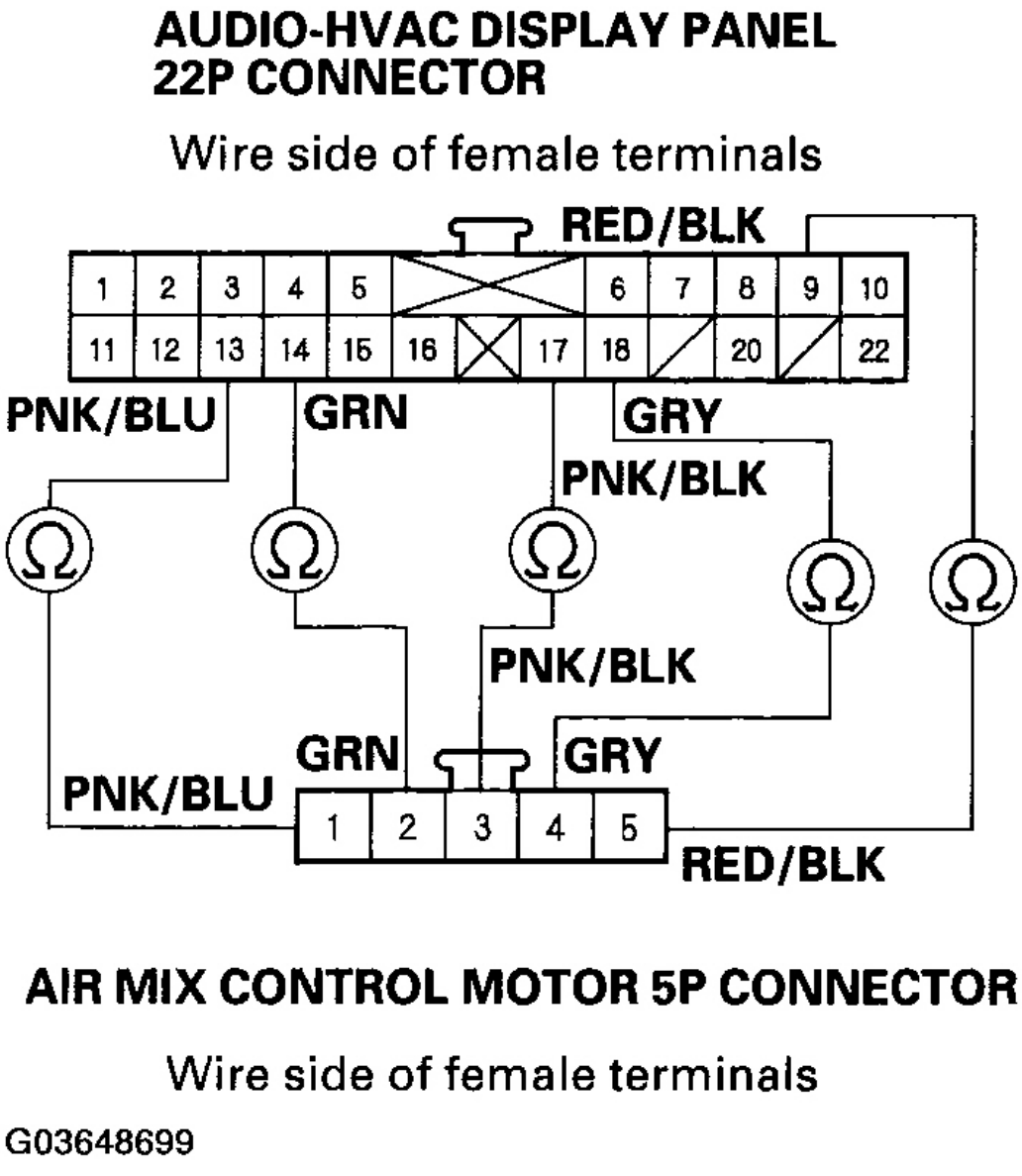


Fig. 19: Checking Continuity Between Audio-HVAC Display Panel & Air

Mix Control Motor 5P (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at audio-HVAC display panel 22P connector and at the air mix control motor 7P (4-door) or 5P (2-door) connector. If the connections are good, test the air mix control motor, 4-door (see **4-door**) or 2-door (see **AIR MIX CONTROL MOTOR TEST**). If the air mix control motor is OK, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Repair any open in the wire(s) between the audio-HVAC display panel and the air mix control motor.

DTC 2: A SHORT IN THE AIR MIX CONTROL MOTOR CIRCUIT

1. Disconnect the air mix control motor 7P (4-door) or 5P (2-door) connector.
2. Disconnect audio-HVAC display panel 22P connector.
3. Check for continuity between body ground and audio-HVAC display panel 22P connector terminals No. 9, 13, 14, 17, and 18 individually.

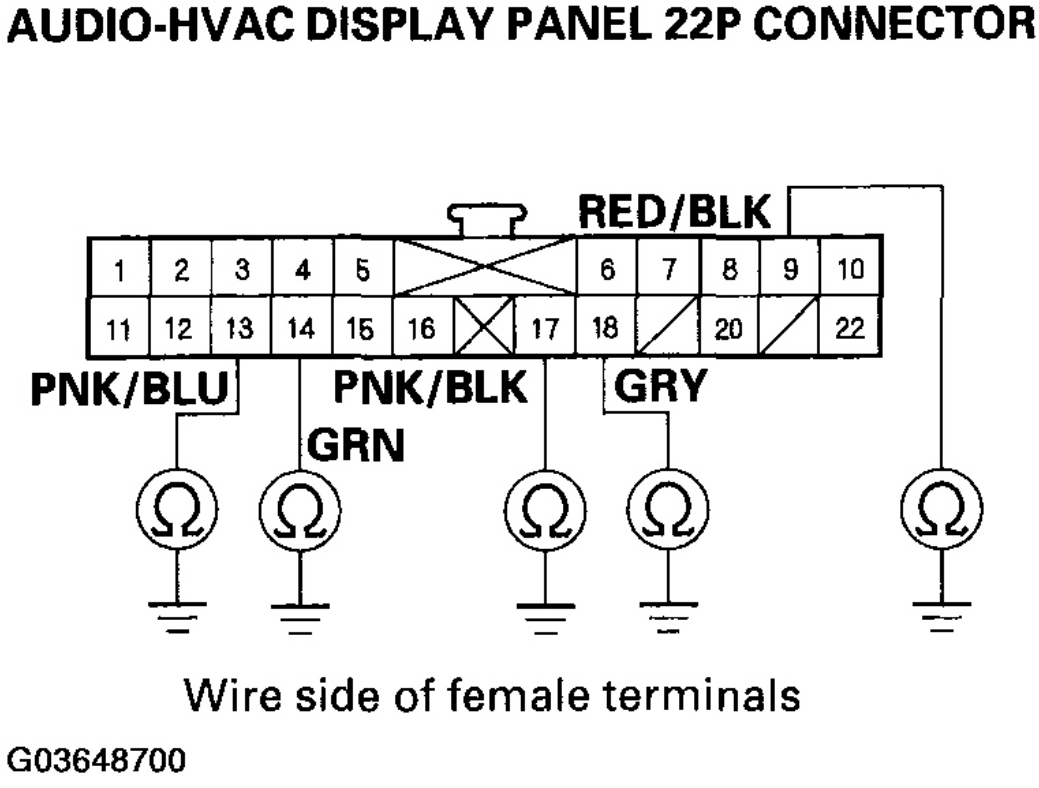


Fig. 20: Checking For Continuity Between Body Ground And Audio-HVAC Display Panel 22P Connector Terminals Individually
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair any short to body ground in the wire(s) between the audio-HVAC display panel and the air mix control motor.

NO - Go to step 4.

4. Turn the ignition switch ON (II), and check the same terminals for voltage.

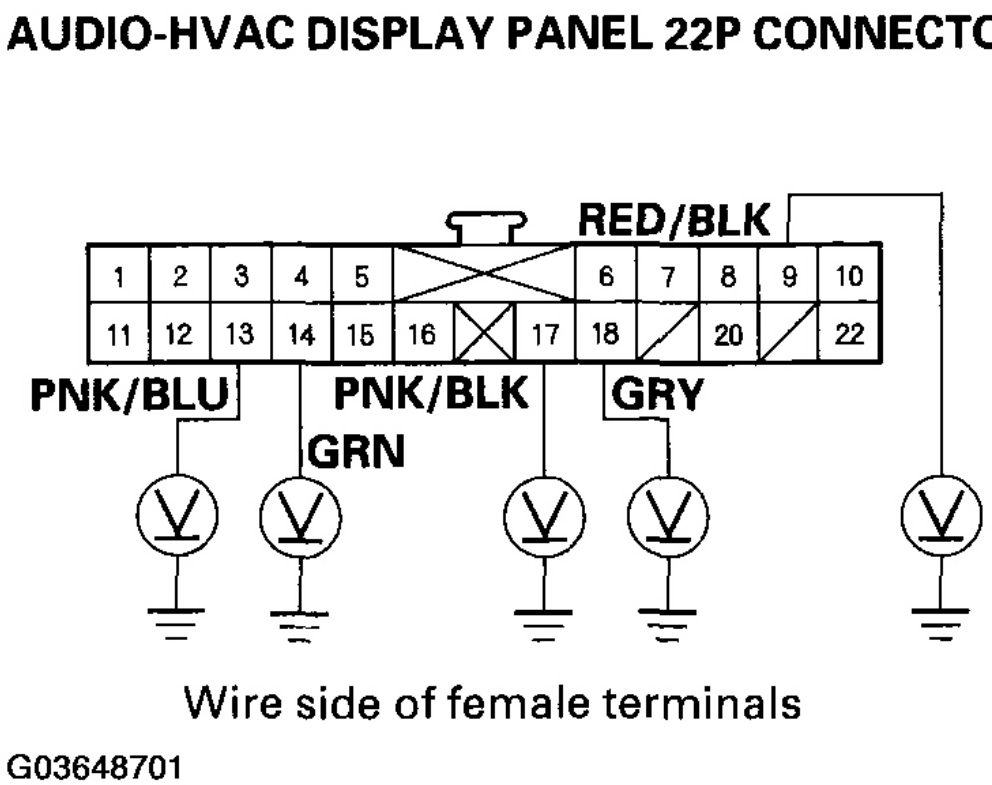


Fig. 21: Checking Terminals For Voltage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair any short to power in the wire(s) between the audio-HVAC display panel and the air mix control motor. This short may also damage the audio-HVAC display panel. Repair the short to power before replacing the audio-HVAC display panel.

NO - Test the air mix control motor, 4-door (see **4-door**) or 2-door (see **2-door**). If the air mix control motor is OK, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

DTC 3: A PROBLEM IN THE AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR

1. Test the air mix control motor.
   - 4-door (see **4-door**)
   - 2-door (see **2-door**)

   Is the air mix control motor OK?

   YES - Substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

   NO - Replace the air mix control motor, or repair the linkage and doors.

DTC 4: AN OPEN OR SHORT IN THE MODE CONTROL MOTOR CIRCUIT

1. Disconnect the mode control motor 7P (4-door) or 10P (2-door) connector.
2. Disconnect audio-HVAC display panel 22P connector.
3. Check for continuity between body ground and audio-HVAC display panel 22P connector terminals No. 2, 3, 4, 5, 9, 11, and 12 individually.

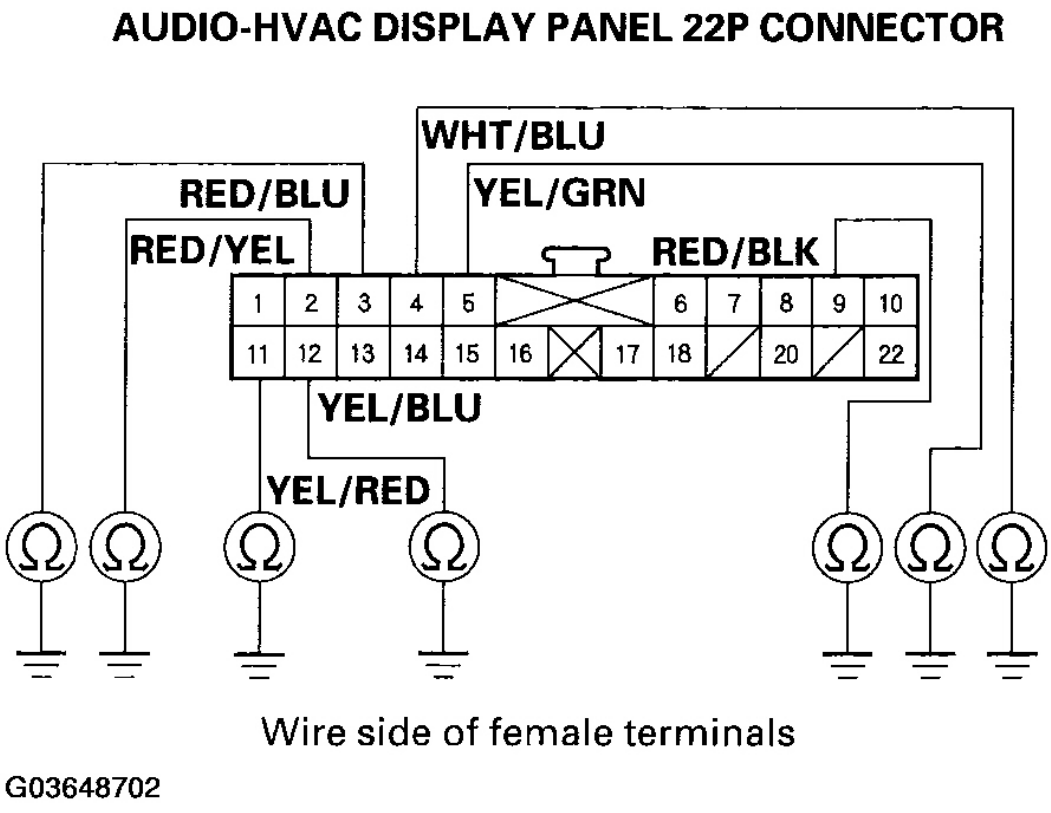


Fig. 22: Checking For Continuity Between Body Ground And Audio-HVAC Display Panel 22P Connector Terminals Individually
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair any short to body ground in the wire(s) between the audio-HVAC display panel and the mode control motor.

NO - Go to step 4.

4. Turn the ignition switch ON (II), and check the same terminals for voltage.

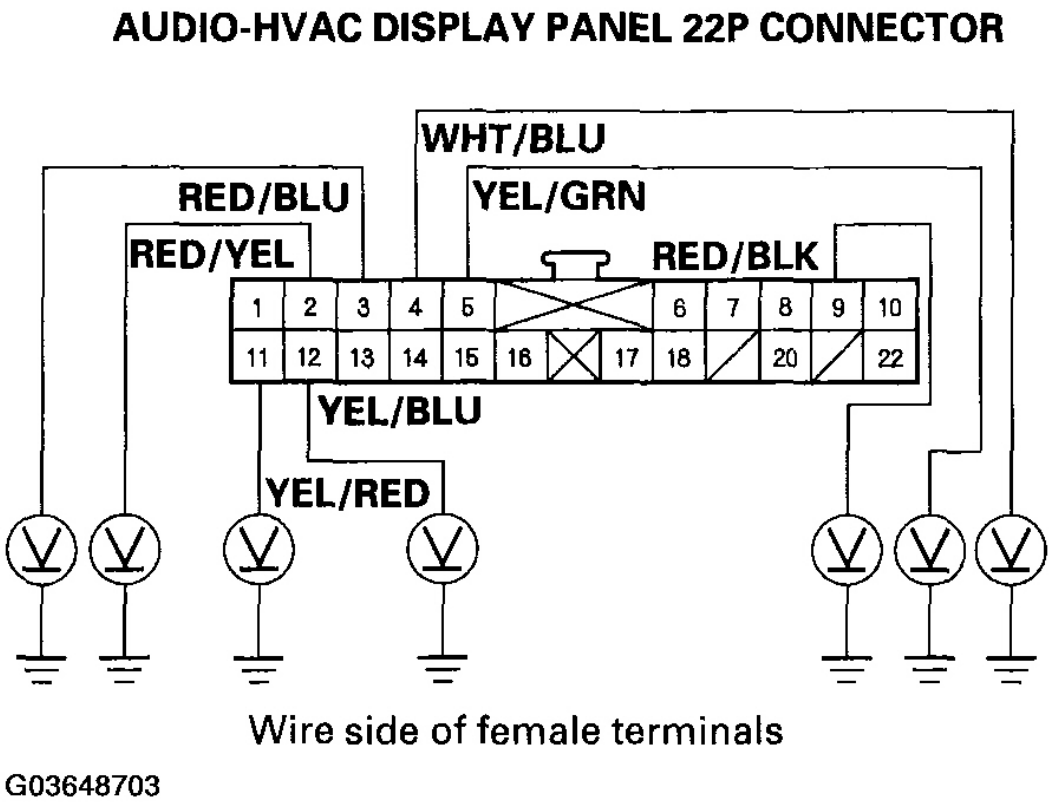


Fig. 23: Checking Terminals For Voltage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair any short to power in the wire(s) between the audio-HVAC display panel and the mode control motor. This short may also damage the audio-HVAC display panel. Repair the short to power before replacing the audio-HVAC display panel.

NO - Go to step 5.

5. Turn the ignition switch OFF, and check for continuity between the following terminals of audio-HVAC display panel 22P connector and the mode control motor 7P (4-door) or 10P (2-door) connector.

AUDIO-HVAC DISPLAY PANEL 22P CONNECTOR AND CONTROL

MOTOR 7P CONNECTOR (4-DOOR)

22P	7P
No. 2	No. 6
No. 3	No. 5
No. 4	No. 4
No. 5	No. 3
No. 9	No. 7
No. 11	No. 2
No. 12	No. 1

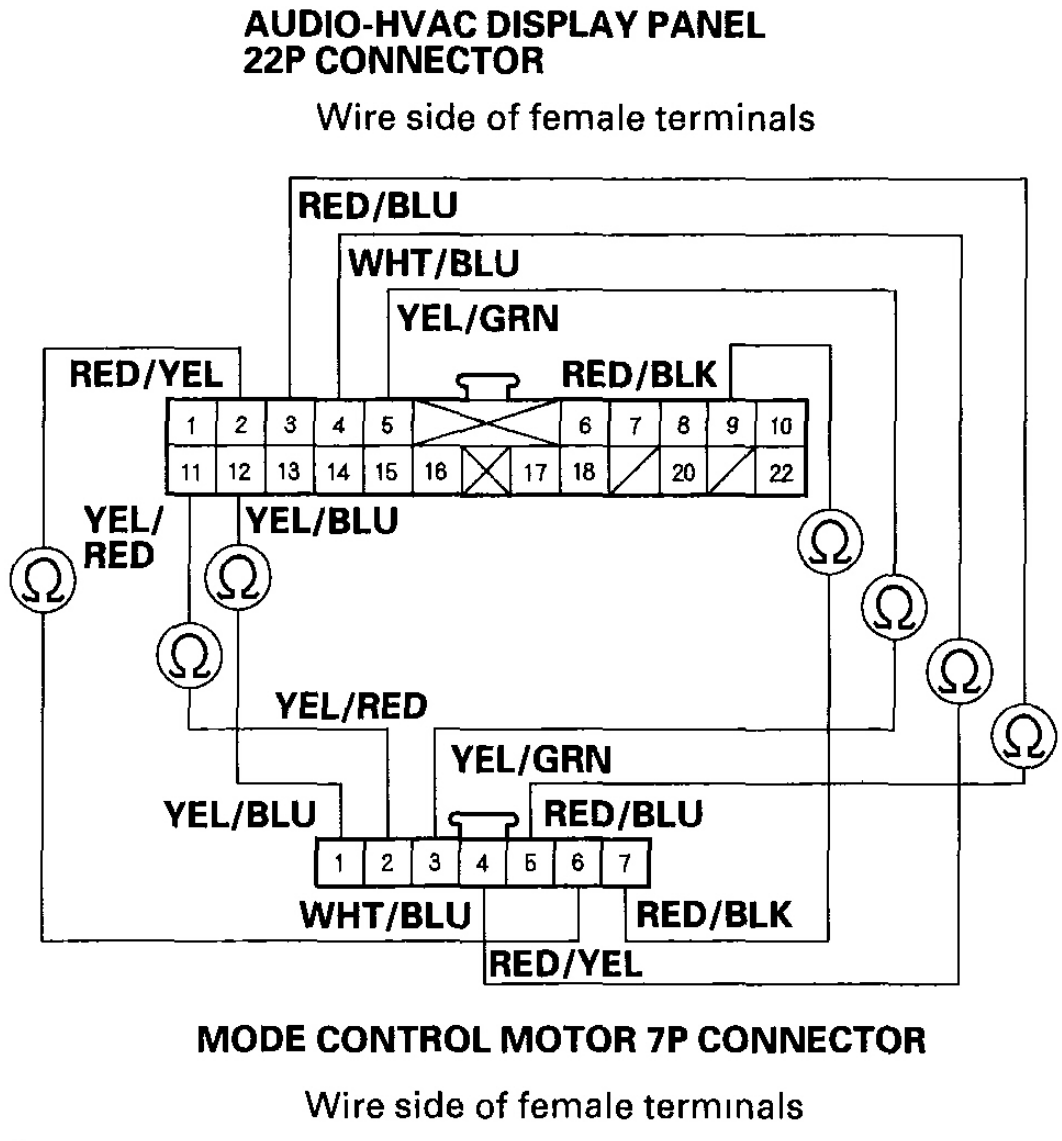


Fig. 24: Checking For Continuity Between Terminals Of Audio-HVAC Display Panel 22P Connector (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUDIO-HVAC DISPLAY PANEL 22P CONNECTOR AND 10P CONNECTOR (2-DOOR)

22P	10P

No. 2	No. 9
No. 3	No. 8
No. 4	No. 7
No. 5	No. 6
No. 9	No. 10
No. 11	No. 2
No. 12	No. 1

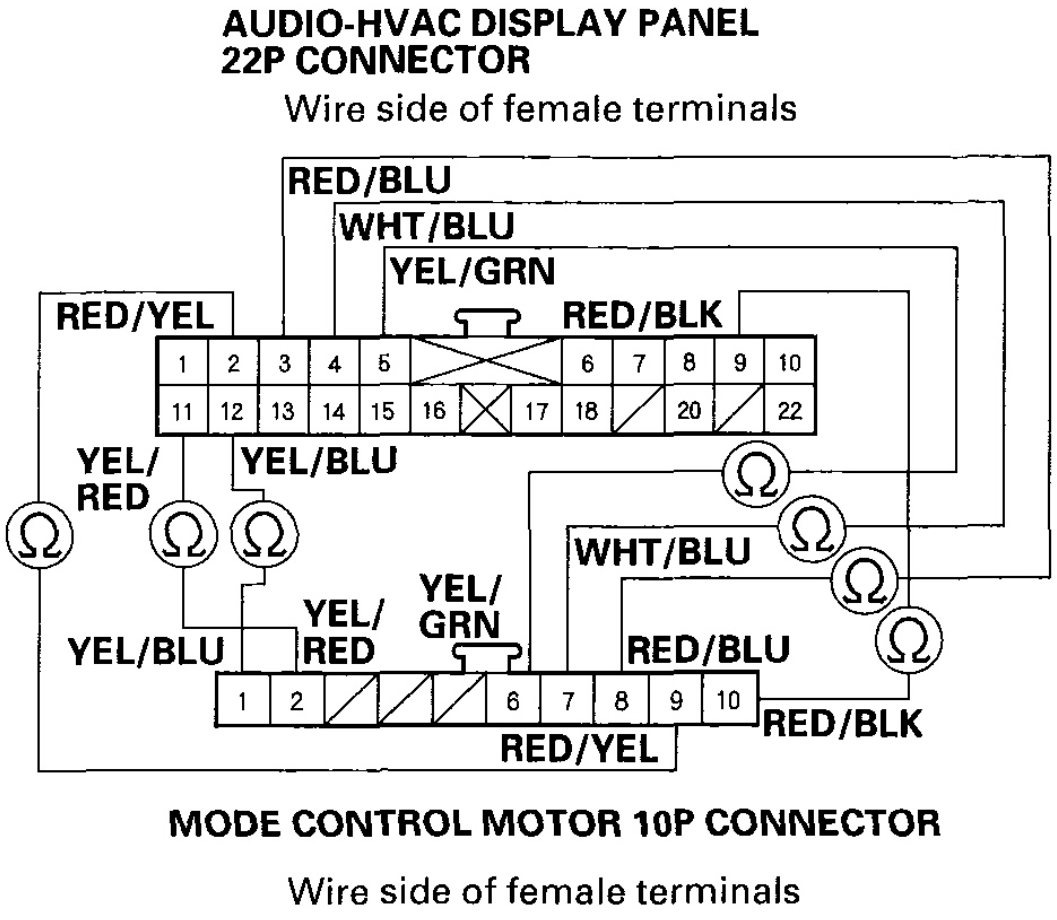


Fig. 25: Checking For Continuity Between Terminals Of Audio-HVAC Display Panel 22P Connector (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at audio-HVAC display panel 22P connector and at the mode control motor 7P (4-door) or 10P (2-door) connector. If the connections are good, test the mode control motor, 4-door (see **4-door**) or 2-door (see **2-door**). If the mode control motor is OK, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Repair any open in the wire(s) between the audio-HVAC display panel and the mode control motor.

DTC 5: A PROBLEM IN THE MODE CONTROL LINKAGE, DOORS, OR MOTOR

1. Test the mode control motor, 4-door (see **4-door**) or 2-door (see **2-door**).

Is the mode control motor OK?

YES - Substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Replace the mode control motor, or repair the linkage and doors.

DTC 6: A PROBLEM IN THE BLOWER MOTOR CIRCUIT

1. Check the No. 21 (40A) fuse in the under-hood fuse/relay box, and the No. 30 (7.5A) fuse in the under-dash fuse/relay box.

Are the fuses OK?

YES - Go to step 2.

NO - Replace the fuse(s), and recheck.

2. Connect the No. 2 (4-door) or No. 1 (2-door) terminal of the blower motor 2P connector to body ground with a jumper wire.

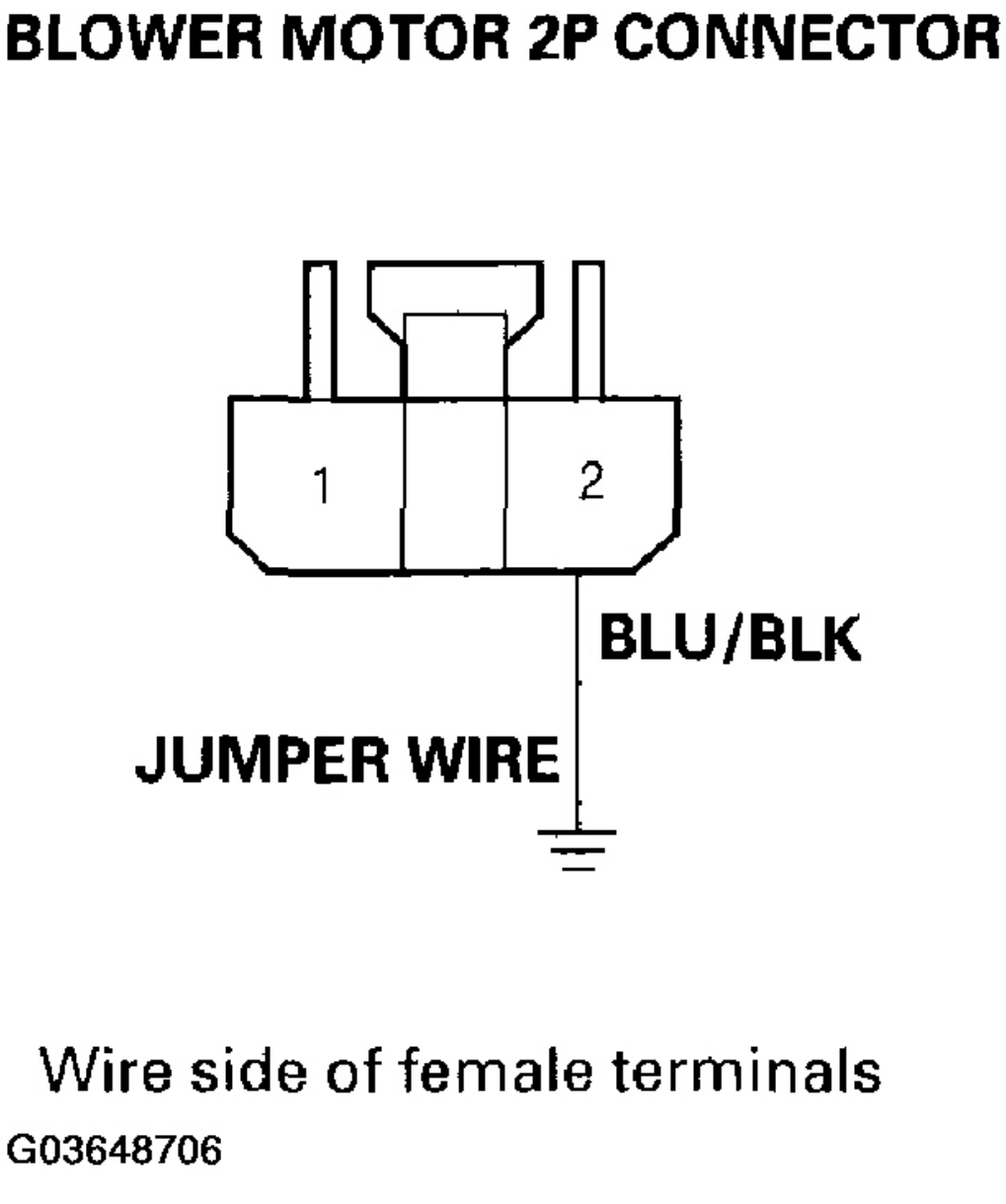


Fig. 26: Connecting No. 2 Terminal Of Blower Motor Connector To Body Ground With Jumper Wire (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

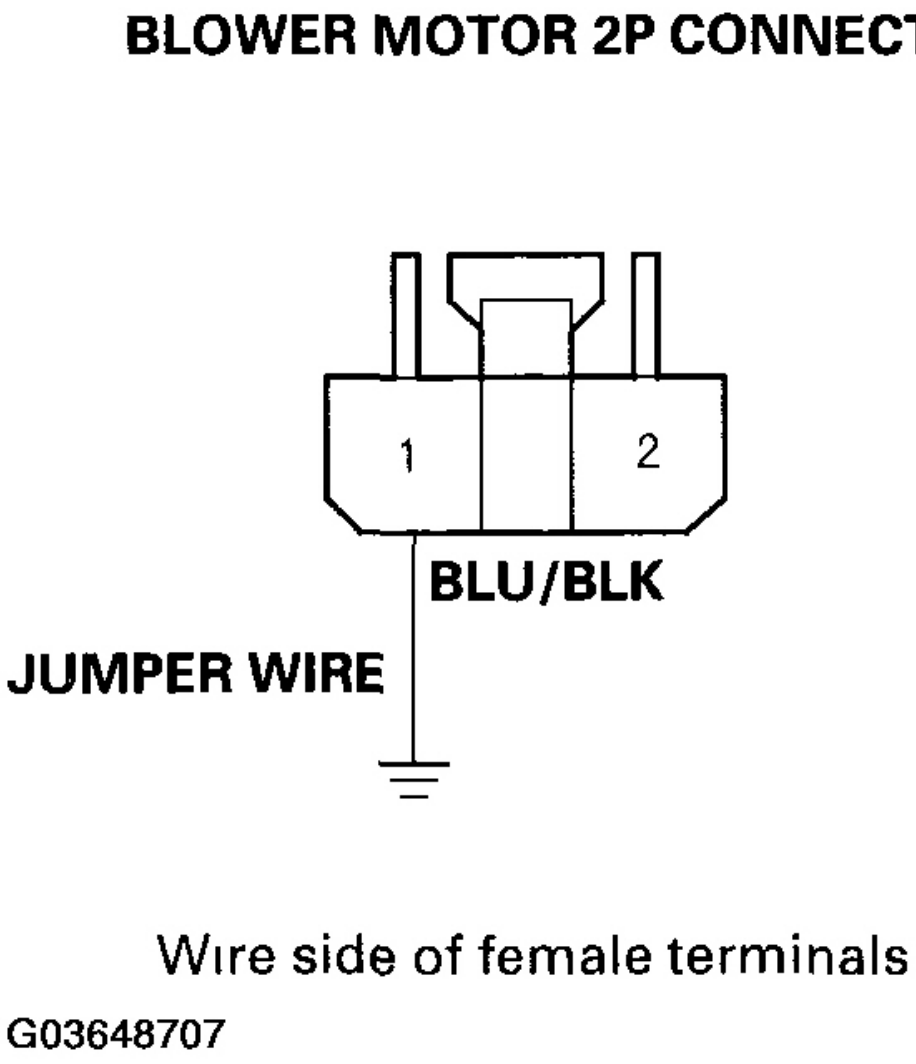


Fig. 27: Connecting No. 1 Terminal Of Blower Motor Connector To Body Ground With Jumper Wire (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch ON (II).

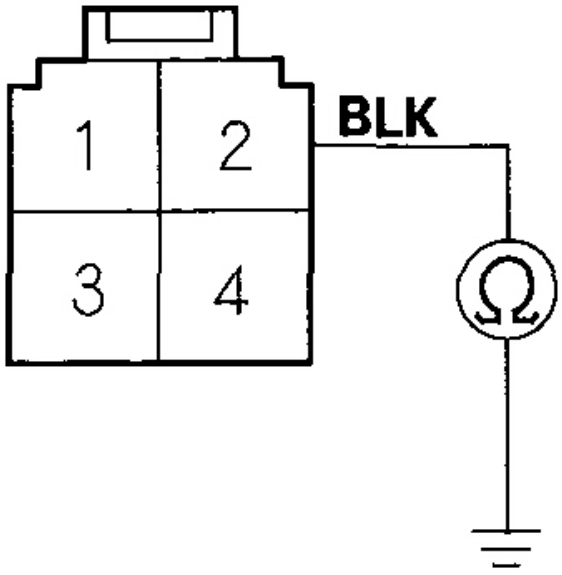
   Does the blower motor run?

   YES - Go to step 4.

NO - Go to step 17.

4. Turn the ignition switch OFF.
5. Disconnect the jumper wire.
6. Disconnect the power transistor 4P connector.
7. Check for continuity between the No. 2 (4-door) or No. 3 (2-door) terminal of the power transistor 4P connector and body ground.

POWER TRANSISTOR 4P CONNECTOR



Wire side of female terminals

G03648708

Fig. 28: Checking Continuity Between No.2 Terminal & Body Ground (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

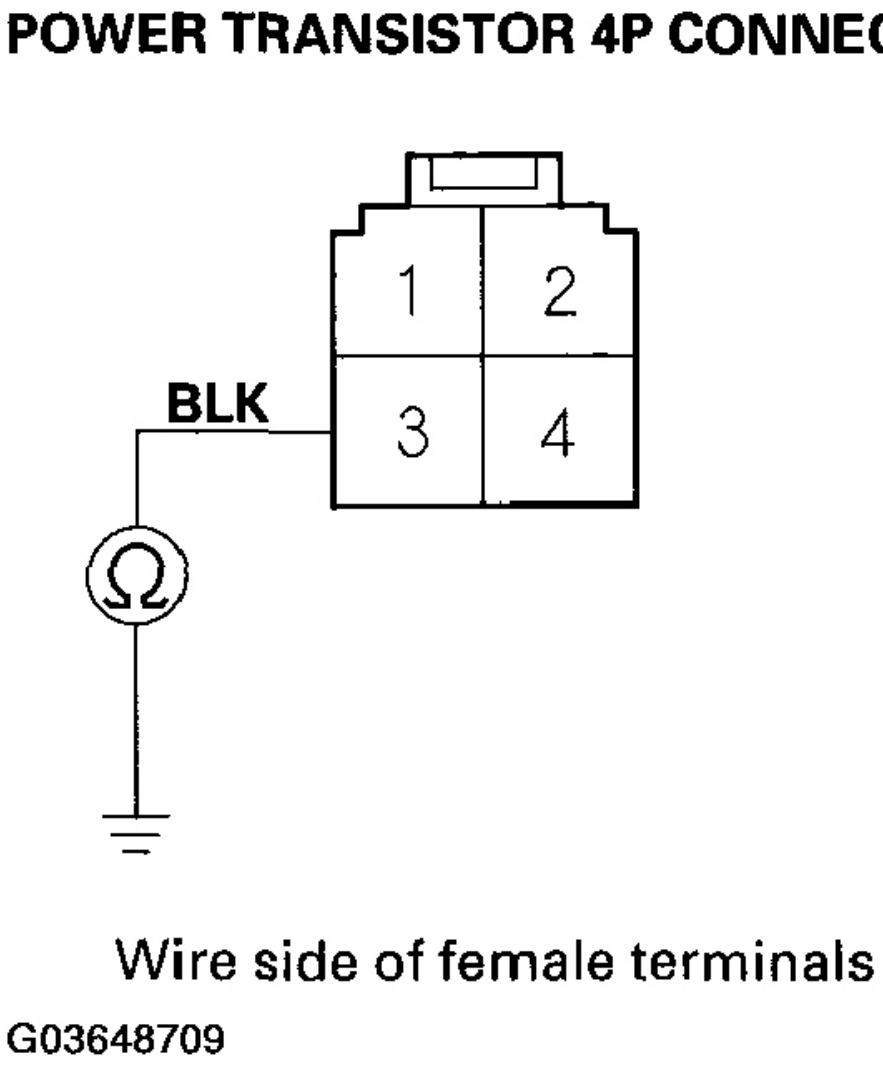


Fig. 29: Checking Continuity Between No.3 Terminal & Body Ground (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 8.

NO - Check for an open in the wire between the power transistor and body ground. If the wire is OK, check for poor ground at G503.

8. Connect the No. 2 and No. 4 (4-door) or No. 1 and No. 3 (2-door) terminals of the power transistor 4P connector with a jumper wire.

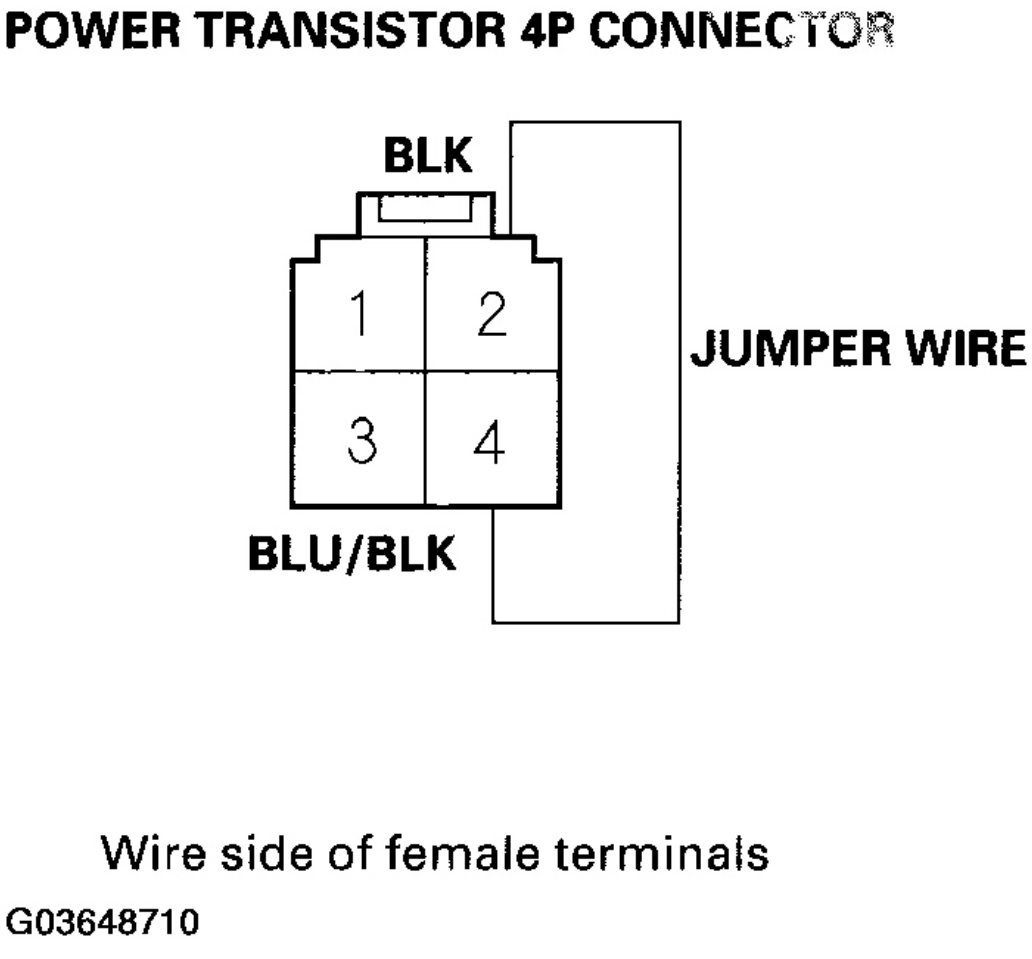


Fig. 30: Connecting No.2 & No.4 Terminals With Jumper Wire (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

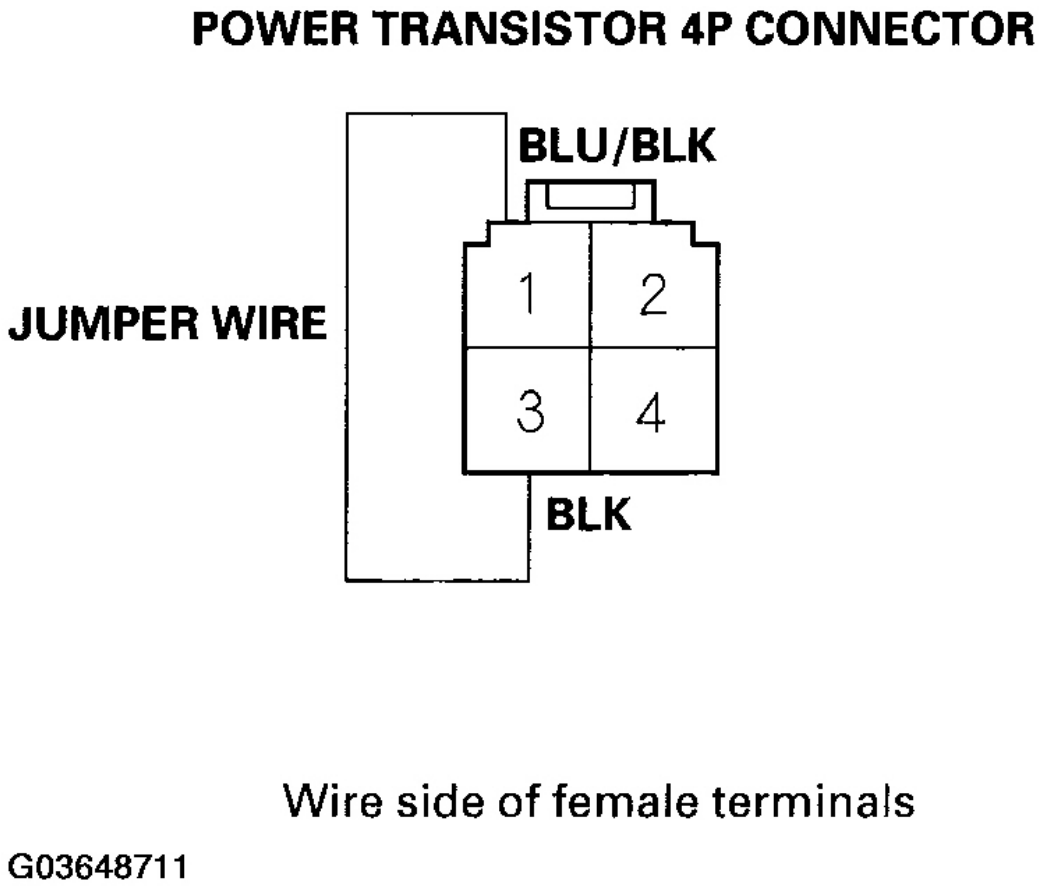


Fig. 31: Connecting No.1 & No.3 Terminals With Jumper Wire (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Turn the ignition switch ON (II).

   Does the blower motor run at high speed?

   YES - Go to step 10.

   NO - Repair open in the BLU/BLK wire between the power transistor and the blower motor.
10. Turn the ignition switch OFF.
11. Disconnect the jumper wire.

12. Disconnect audio-HVAC display panel 22P connector.
13. Check for continuity between the No. 15 and No. 16 terminals of audio-HVAC display panel 22P connector and body ground individually.

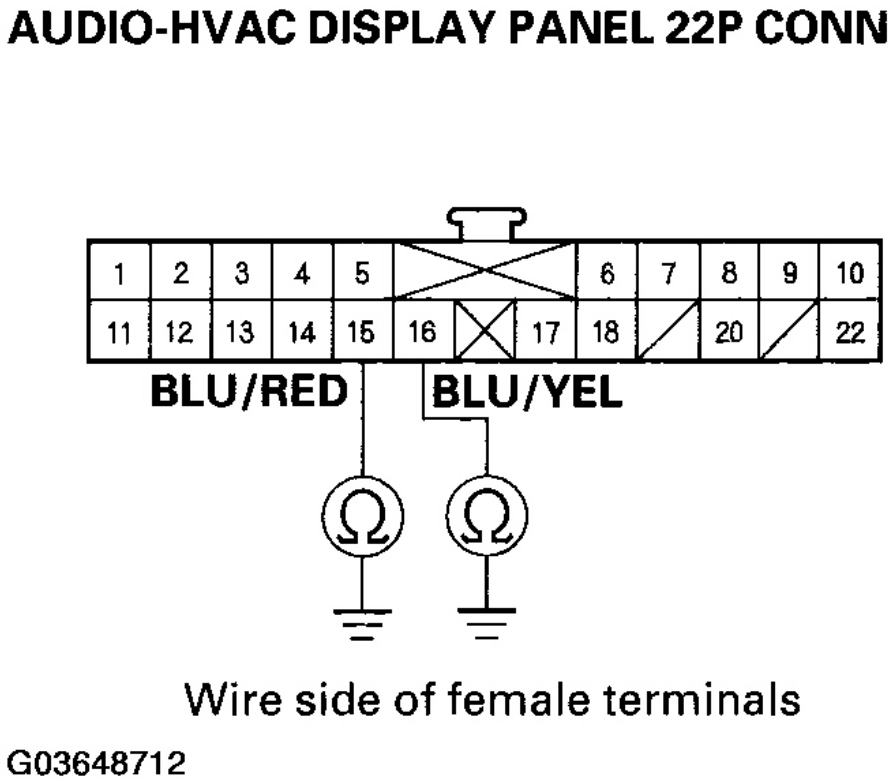


Fig. 32: Checking For Continuity Between No. 15 And No. 16 Terminals & Body Ground Individually
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair any short to body ground in the wire(s) between the audio-HVAC display panel and the power transistor.

NO - Go to step 14.

14. Check the continuity between the following terminals of audio-HVAC display panel 22P connector and the power transistor 4P connector.

AUDIO-HVAC DISPLAY PANEL 22P CONNECTOR AND POWER TRANSISTOR 4P CONNECTOR (4-DOOR)

22P	4P
No. 15	No. 3
No. 16	No. 1

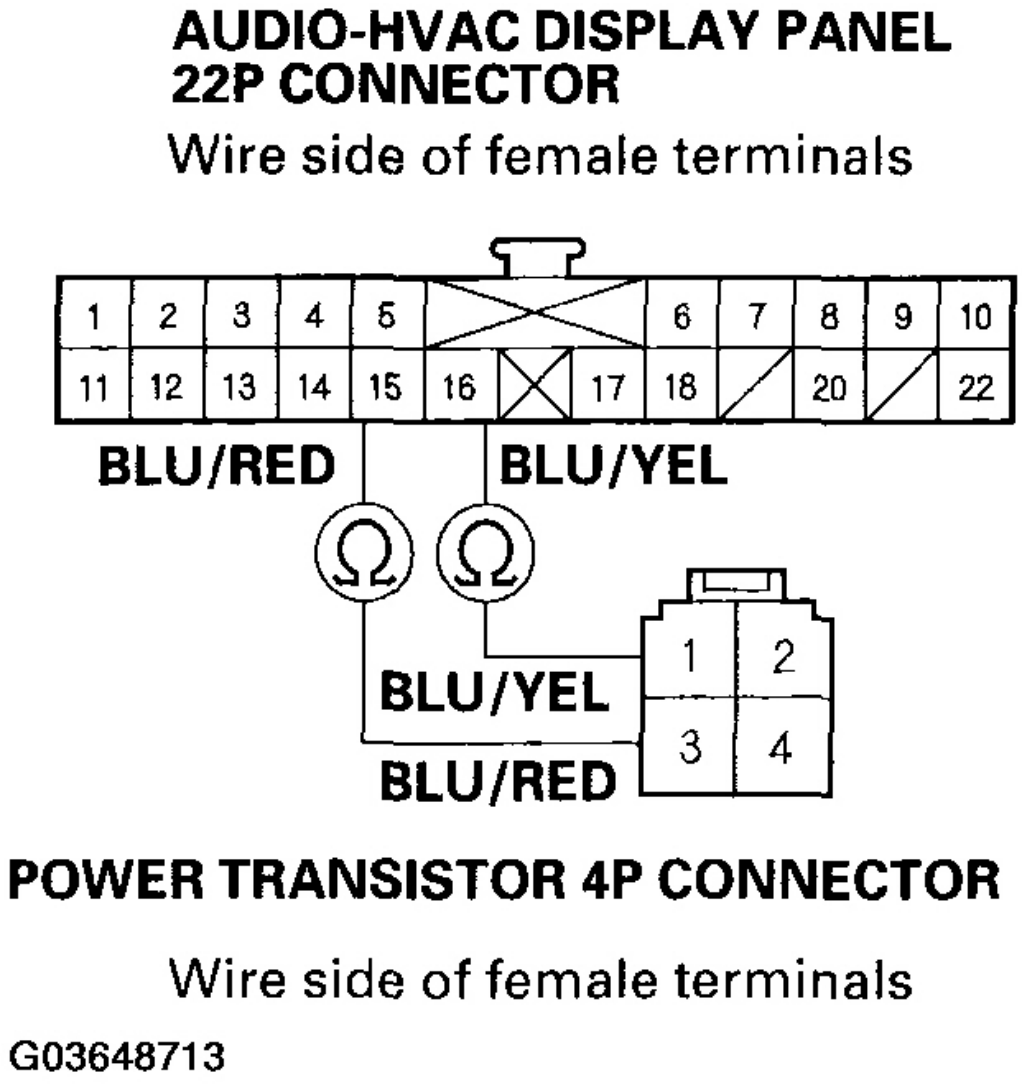


Fig. 33: Checking Continuity Between 22P Connector & 4P Connector (4-

Door)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUDIO-HVAC DISPLAY PANEL 22P CONNECTOR AND POWER TRANSISTOR 4P CONNECTOR (2-DOOR)

22P	4P
No. 15	No. 2
No. 16	No. 4

No. 4

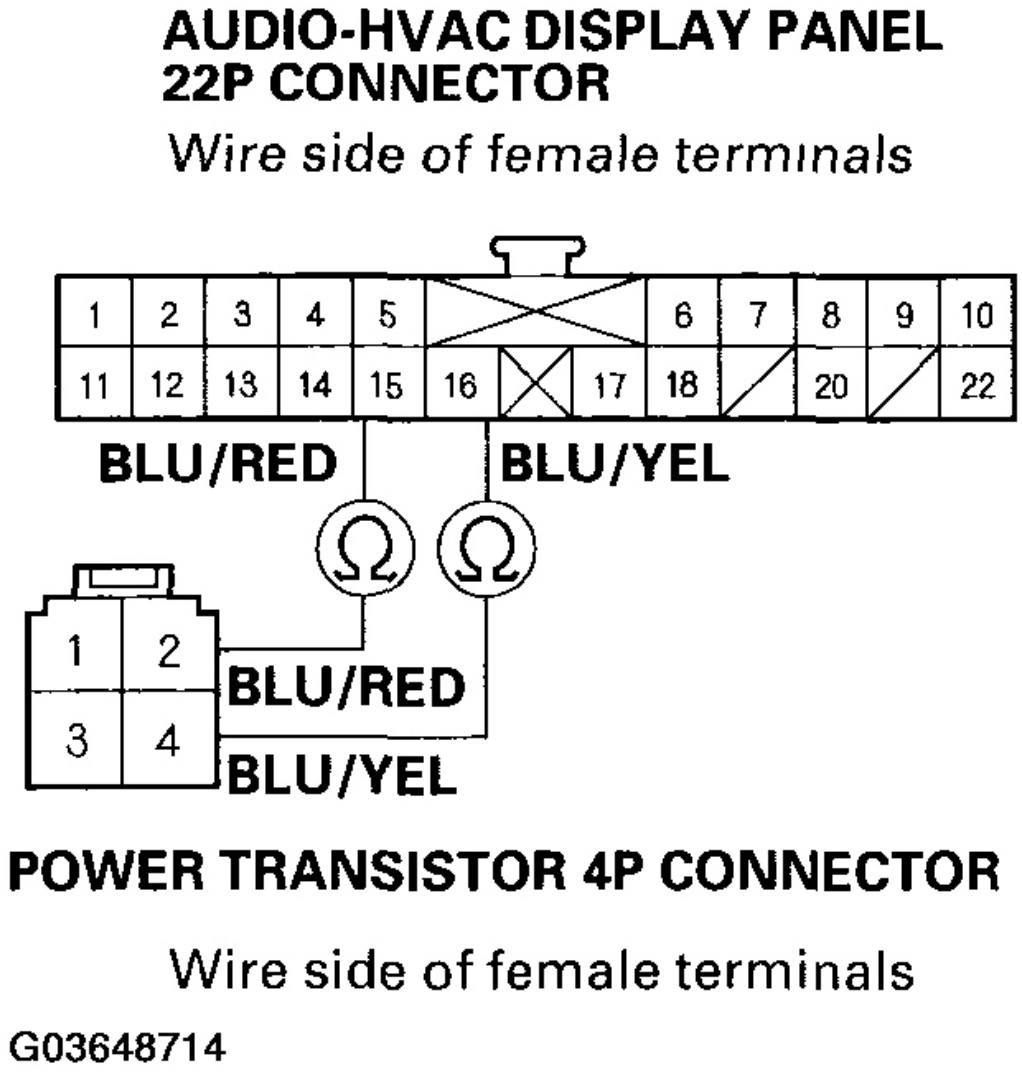


Fig. 34: Checking Continuity Between 22P Connector & 4P Connector (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 15.
NO - Repair any open in the wire(s) between the audio-HVAC display

panel and the power transistor.

15. Reconnect audio-HVAC display panel 22P connector.
16. Test the power transistor (see **POWER TRANSISTOR TEST**).

Is the power transistor OK?

YES - Check for loose wires or poor connections at audio-HVAC display panel 22P connector and at the power transistor 4P connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Replace the power transistor.

17. Disconnect the jumper wire.
18. Disconnect the blower motor 2P connector.
19. Measure the voltage between the No. 1 (4-door) or No. 2 (2-door) terminal of the blower motor 2P connector and body ground.

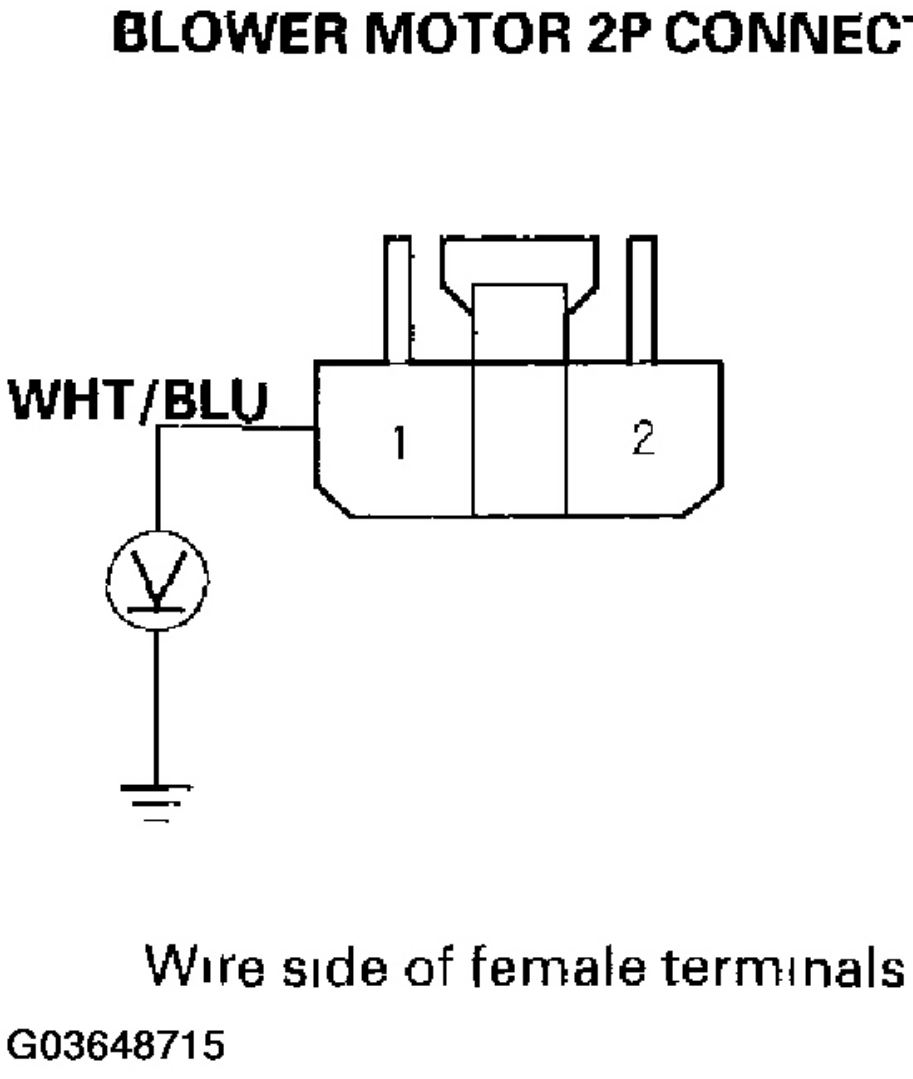


Fig. 35: Measuring Voltage Between No. 1 Terminal Of Blower Motor & Body Ground (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

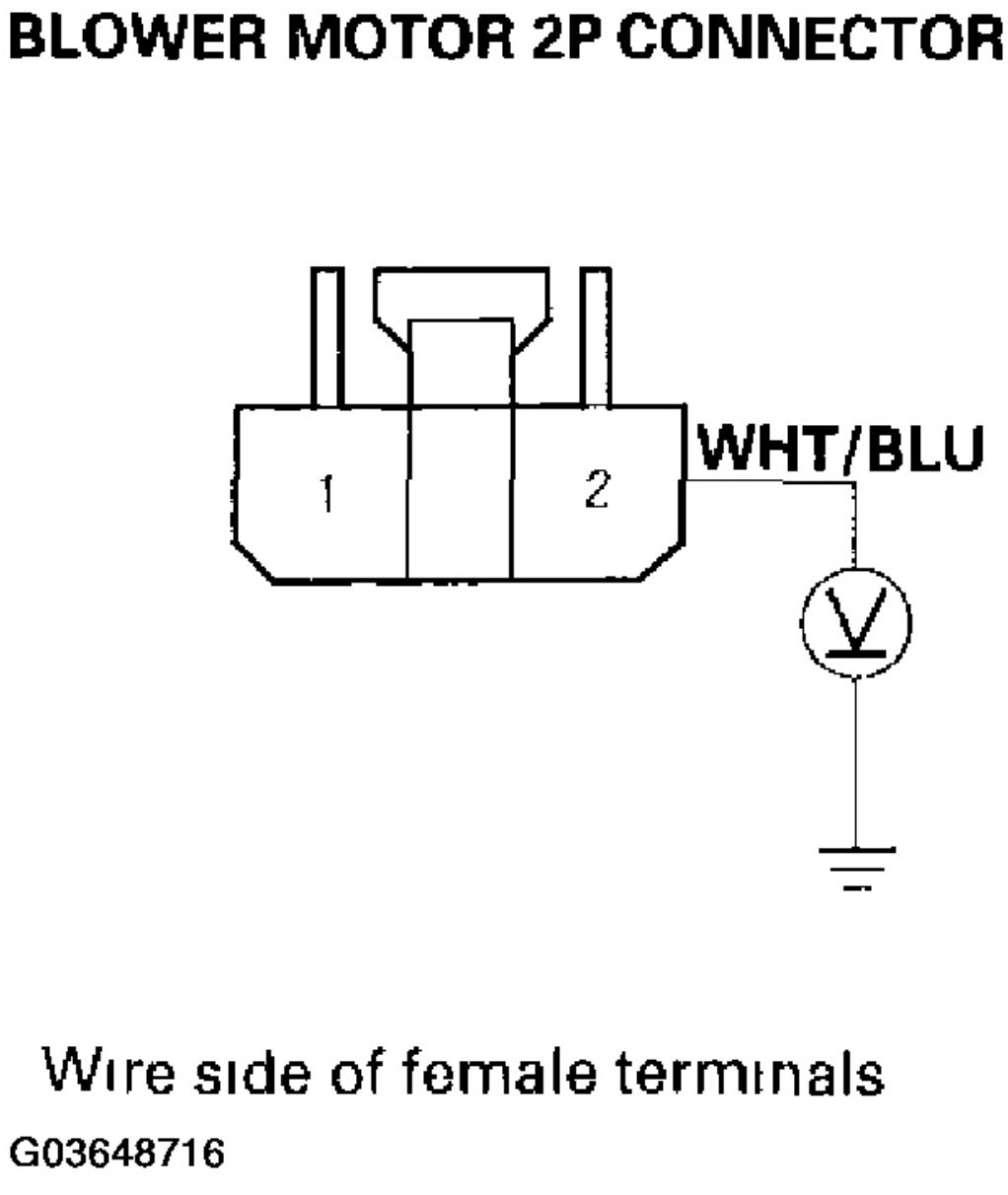


Fig. 36: Measuring Voltage Between No. 2 Terminal Of Blower Motor & Body Ground (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Replace the blower motor.

NO - Go to step 20.

20. Turn the ignition switch OFF.
21. Remove the blower motor relay from the under-hood fuse/relay box, and test it (see **POWER RELAY TEST**).

Is the relay OK?

YES - Go to step 22.

NO - Replace the blower motor relay.

22. Measure the voltage between the No. 2 terminal of the blower motor relay 4P socket and body ground.

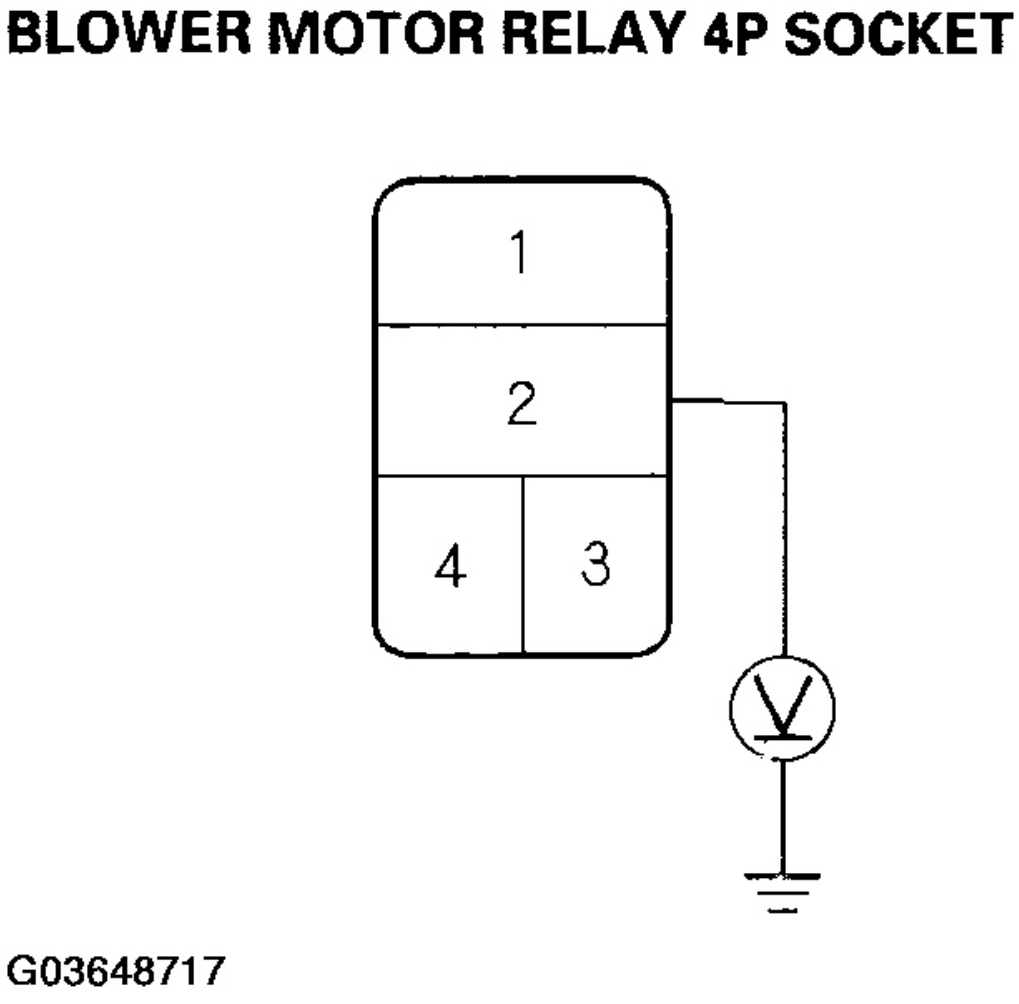


Fig. 37: Measuring Voltage Between No. 2 Terminal Of Blower Motor Relay 4P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 23.
NO - Replace the under-hood fuse/relay box.

23. Turn the ignition switch ON (II).

24. Measure the voltage between the No. 4 terminal of the blower motor relay 4P socket and body ground.

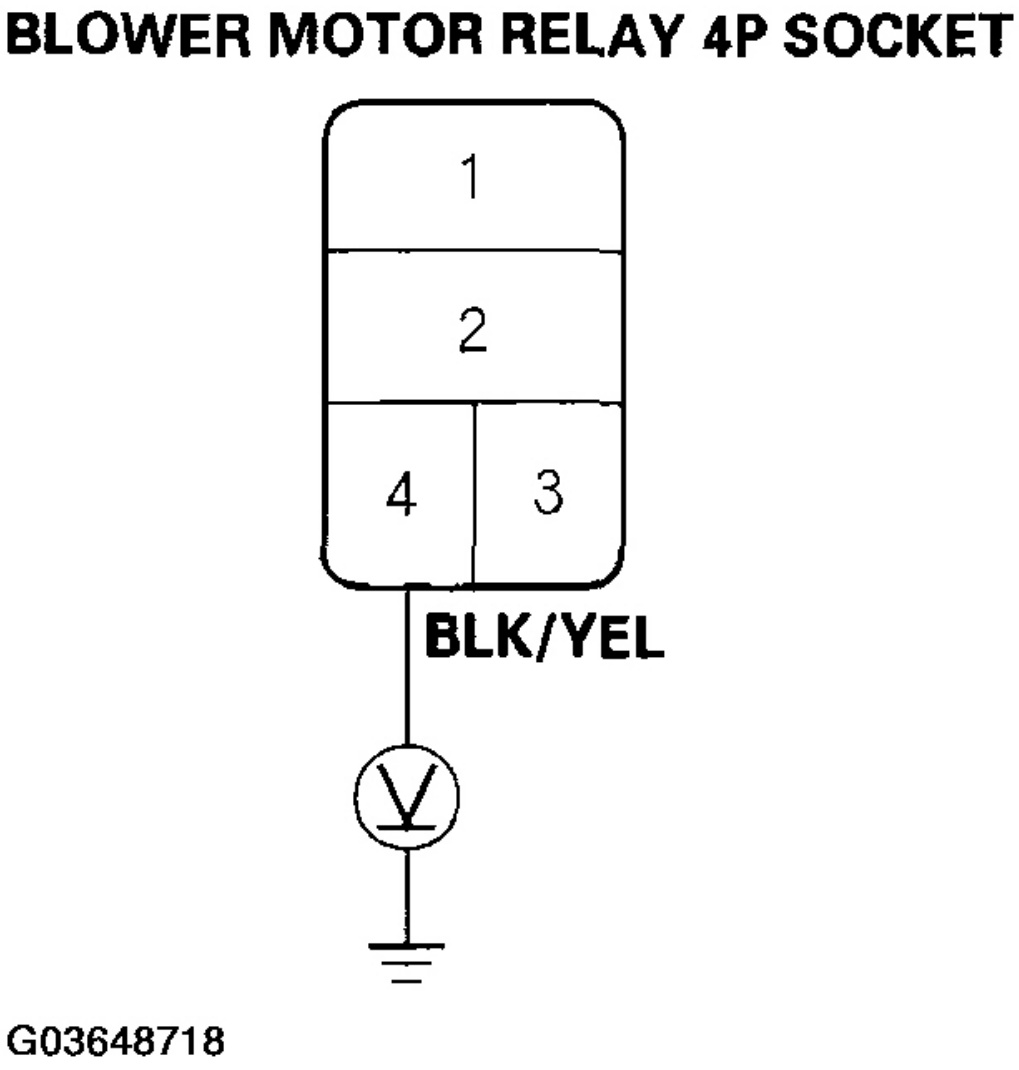


Fig. 38: Measuring Voltage Between No. 4 Terminal Of Blower Motor Relay 4P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

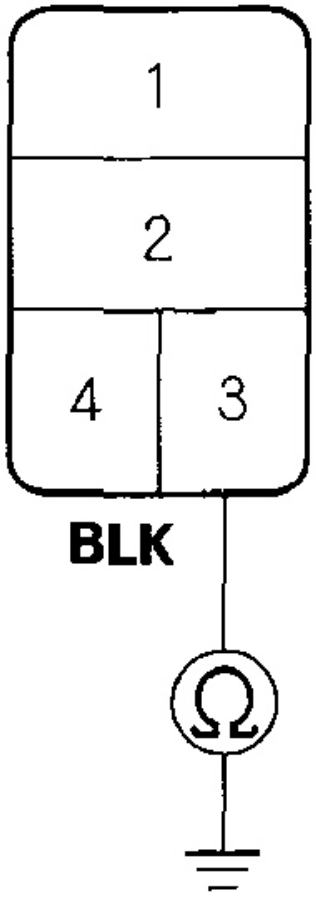
Is there battery voltage?

YES - Go to step 25.

NO - Repair open in the wire between the No. 30 fuse in the under-dash fuse/relay box and the blower motor relay.

25. Turn the ignition switch OFF.
26. Check for continuity between the No. 3 terminal of the blower motor relay 4P socket and body ground.

BLOWER MOTOR RELAY 4P SOCKET



G03648719

Fig. 39: Checking For Continuity Between No. 3 Terminal Of Blower Motor Relay 4P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair open in the WHT/BLU wire between the blower motor relay and the blower motor.

NO - Check for an open in the wire between the blower motor relay and body ground. If the wire is OK, check for poor ground at G302.

DTC 7: AN OPEN IN THE EVAPORATOR TEMPERATURE SENSOR CIRCUIT

1. Remove the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR TEST**) and test it.

   Does the evaporator temperature sensor test OK?

   YES - Go to step 2.

   NO - Replace the evaporator temperature sensor.
2. Disconnect the audio-HVAC display panel 22P connector.
3. Check for continuity between the No. 10 terminal of audio-HVAC display panel 22P connector and the No. 1 terminal of the evaporator temperature sensor 2P connector.

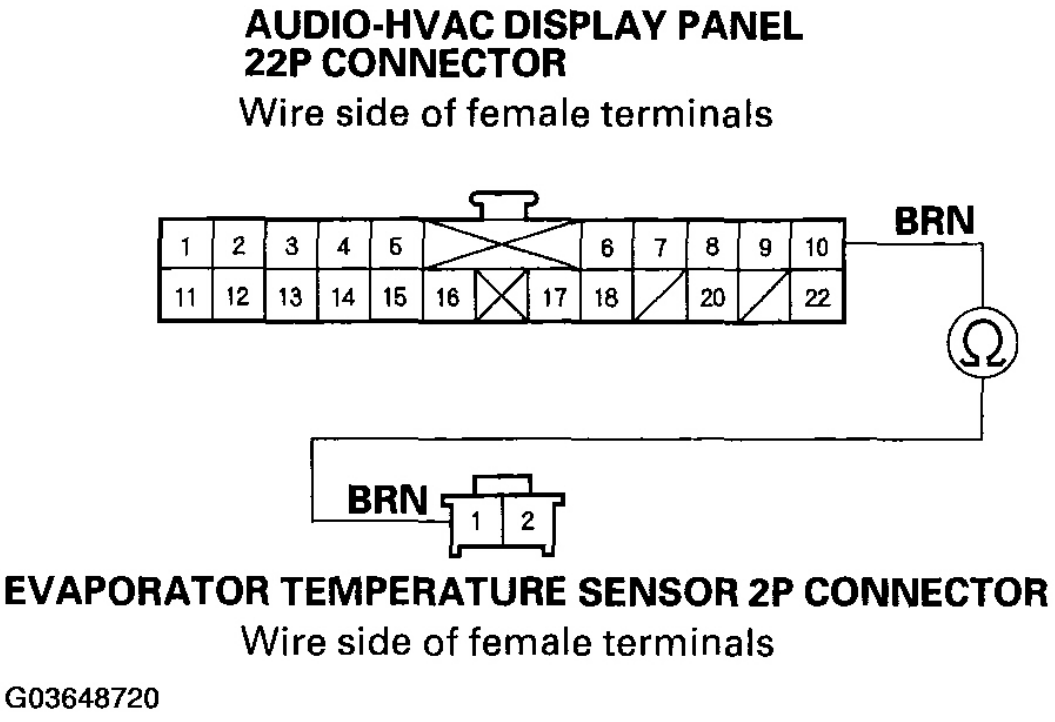


Fig. 40: Checking Continuity Between No. 10 Terminal Of 22P Connector & No.1 Terminal Of EVAP Temp Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 4.

NO - Repair open in the wire between the audio-HVAC display panel and the evaporator temperature sensor.

4. Check for continuity between the No. 9 terminal of audio-HVAC display panel 22P connector and the No. 2 terminal of the evaporator temperature sensor 2P connector.

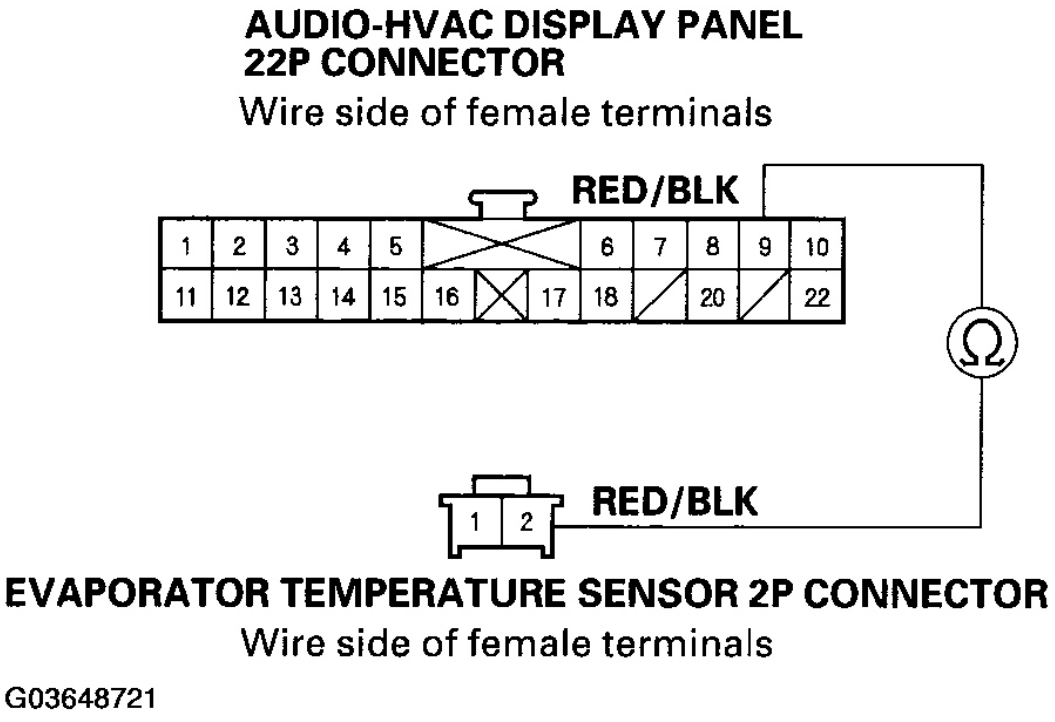


Fig. 41: Checking Continuity Between No. 9 Terminal Of 22P Connector & No.2 Terminal Of EVAP Temp Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at audio-HVAC display panel 22P connectors and at the evaporator temperature sensor 2P connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Repair open in the wire between the audio-HVAC display panel and the evaporator temperature sensor.

DTC 8: A SHORT IN THE EVAPORATOR TEMPERATURE SENSOR CIRCUIT

1. Remove the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR TEST**) and test it.

Is the resistance within the specifications shown on the graph in Fig. 81? .

YES - Go to step 2.

NO - Replace the evaporator temperature sensor.

2. Disconnect the audio-HVAC display panel 22P connector.
3. Check for continuity between the No. 10 terminal of audio-HVAC display panel 22P connector and body ground.

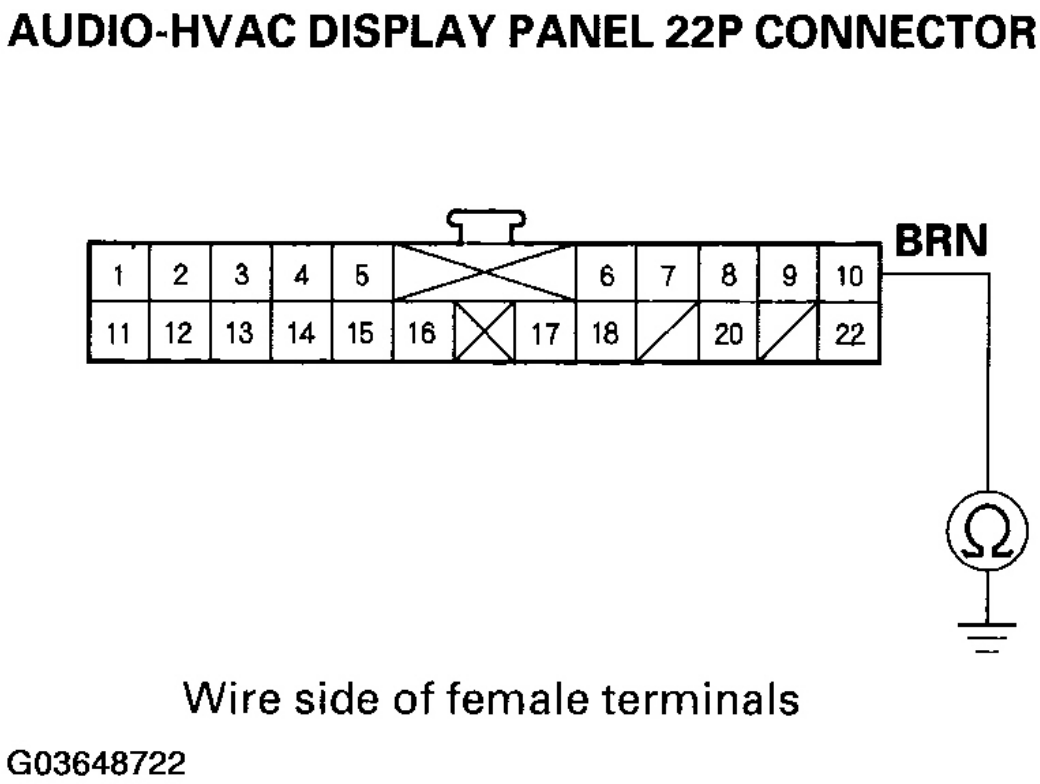


Fig. 42: Checking Continuity Between No. 10 Terminal Of 22P Connector & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the audio-HVAC

display panel and the evaporator temperature sensor.

NO - Substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

RECIRCULATION CONTROL MOTOR CIRCUIT TROUBLESHOOTING

1. Check the No. 30 (7.5A) fuse in the under-dash fuse/relay box.

   Is the fuse OK?

   YES - Go to step 2.

   NO - Replace the fuse, and recheck.
2. Disconnect the recirculation control motor 7P (4-door) or 5P (2-door) connector.
3. Turn the ignition switch ON (II).
4. Measure the voltage between the No. 1 (4-door) or No. 5 (2-door) terminal of the recirculation control motor 7P (4-door) or 5P (2-door) connector and body ground.

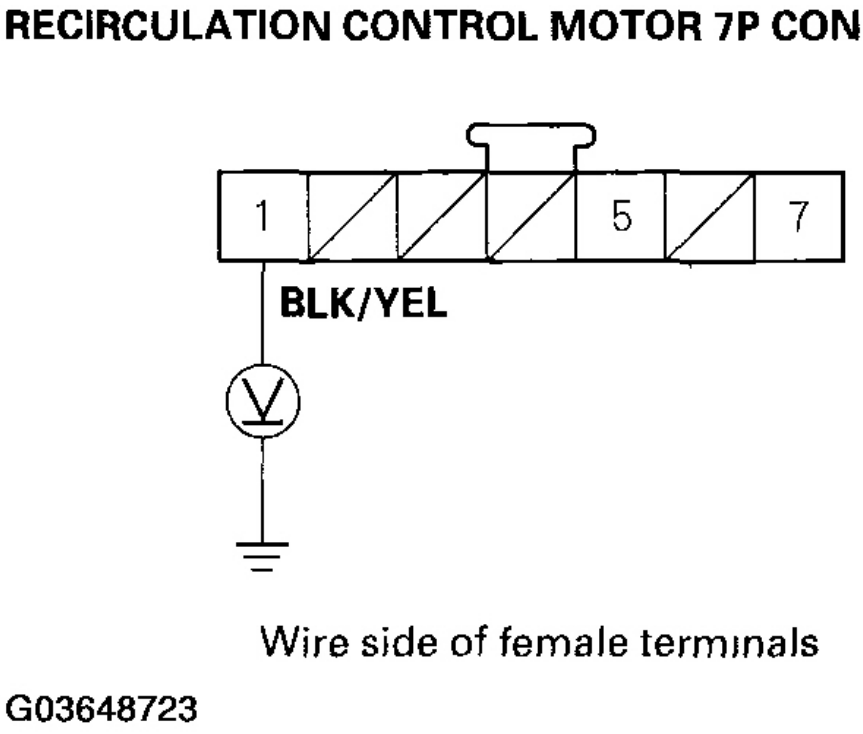


Fig. 43: Measuring Voltage Between No. 1 Terminal Of Recirculation Control Motor & Body Ground (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

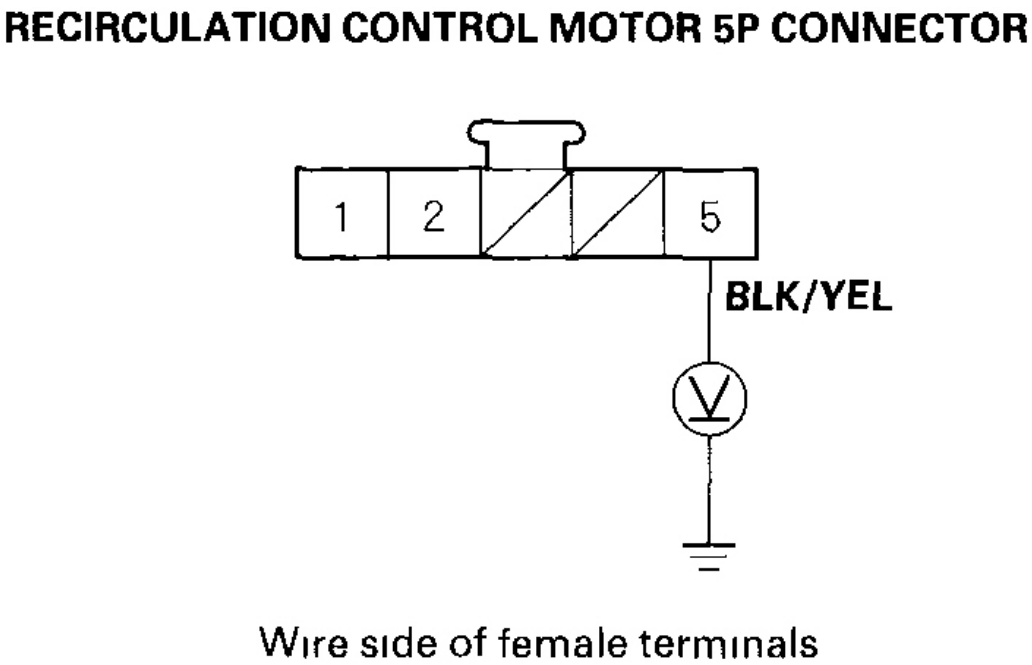


Fig. 44: Measuring Voltage Between No.5 Terminal Of Recirculation Control Motor & Body Ground (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 5.

NO - Repair open in the wire between the No. 30 fuse in the under-dash fuse/relay box and the recirculation control motor.

5. Turn the ignition switch OFF.
6. Test the recirculation control motor.
   - 4-door (see **4-door**)
   - 2-door (see **2-door**))

Is the recirculation control motor OK?

YES - Go to step 7.

NO - Replace the recirculation control motor.

7. Disconnect the audio-HVAC display panel 22P connector.
8. Check for continuity between the No. 7 and No. 8 terminals of audio-HVAC display panel 22P connector and body ground individually.

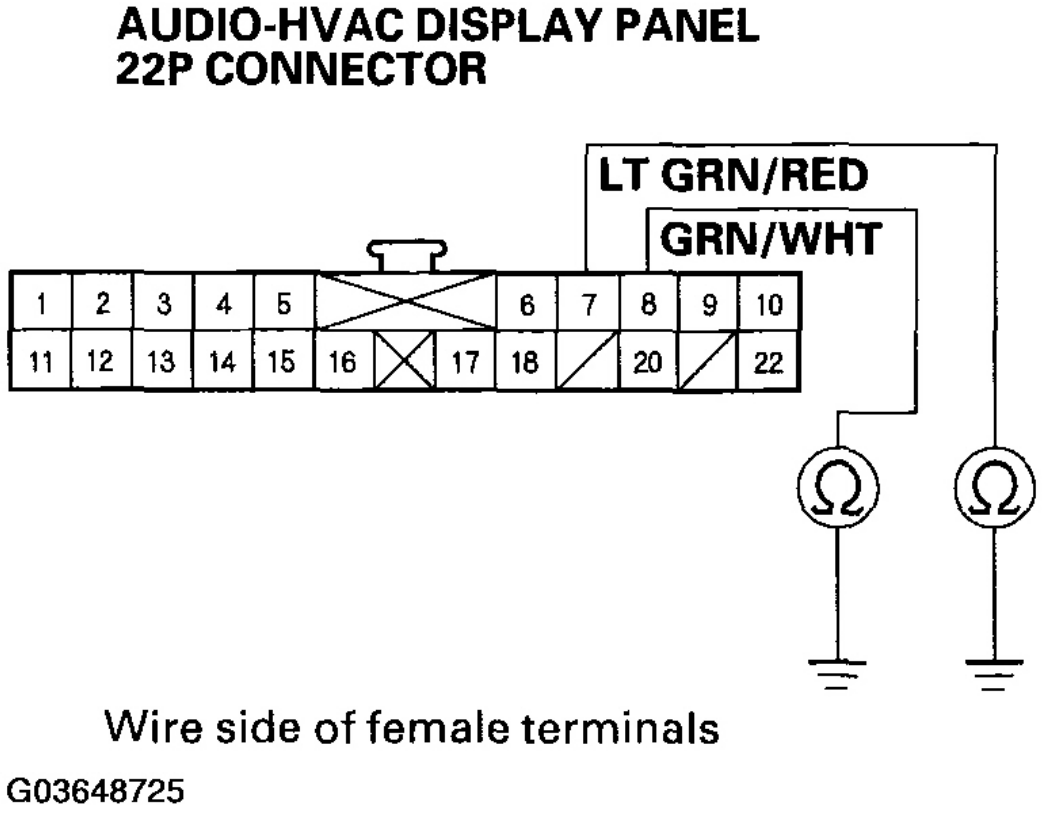


Fig. 45: Checking For Continuity Between No. 7 And No. 8 Terminals & Body Ground Individually
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair any short to body ground in the wire(s) between the audio-HVAC display panel and the recirculation control motor.

NO - Go to step 9.

9. Turn the ignition switch ON (II), and check the same wires for voltage.

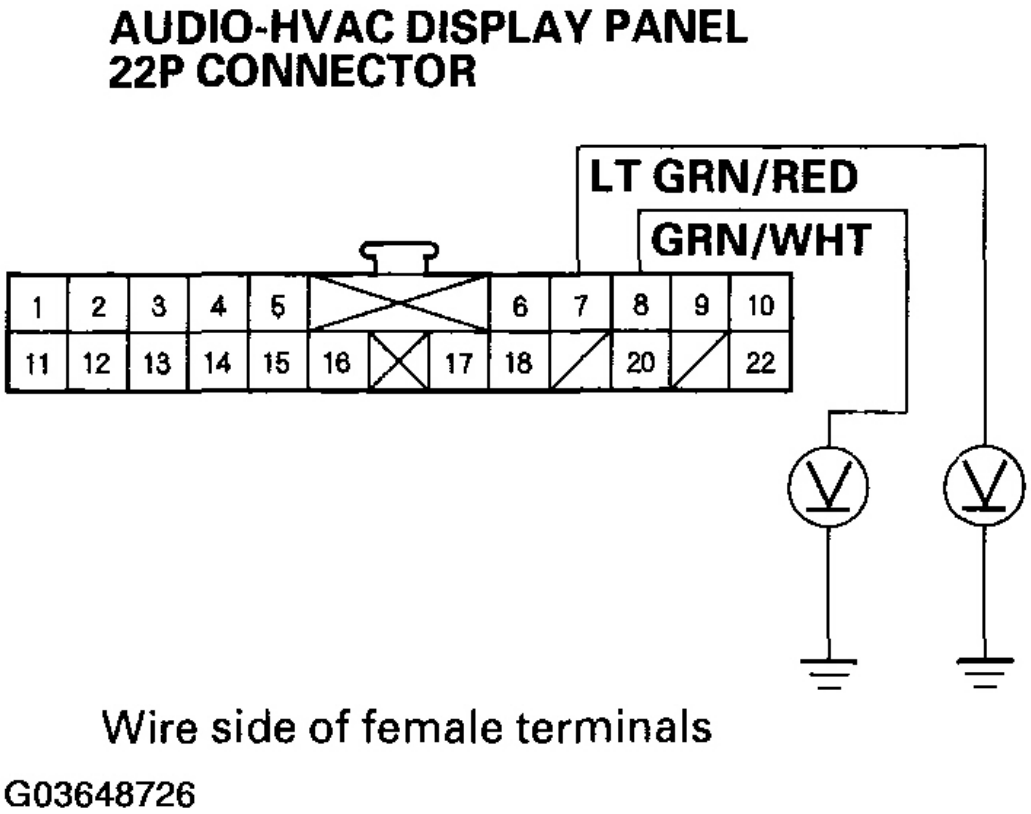


Fig. 46: Checking Wires For Voltage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair any short to power in the wire(s) between the audio-HVAC display panel and the recirculation control motor. This short may also damage the audio-HVAC display panel. Repair the short to power before replacing the audio-HVAC display panel.

NO - Go to step 10.

10. Turn the ignition switch OFF.

11. Check for continuity between the following terminals of audio-HVAC display panel 22P connector and the recirculation control motor 7P (4-door) or 5P (2-door) connector.

AUDIO-HVAC DISPLAY PANEL 22P CONNECTOR AND RECIRCULATION CONTROL MOTOR 7P (4-DOOR) CONNECTOR

22P	7P
No. 7	No. 7
No. 8	No. 5

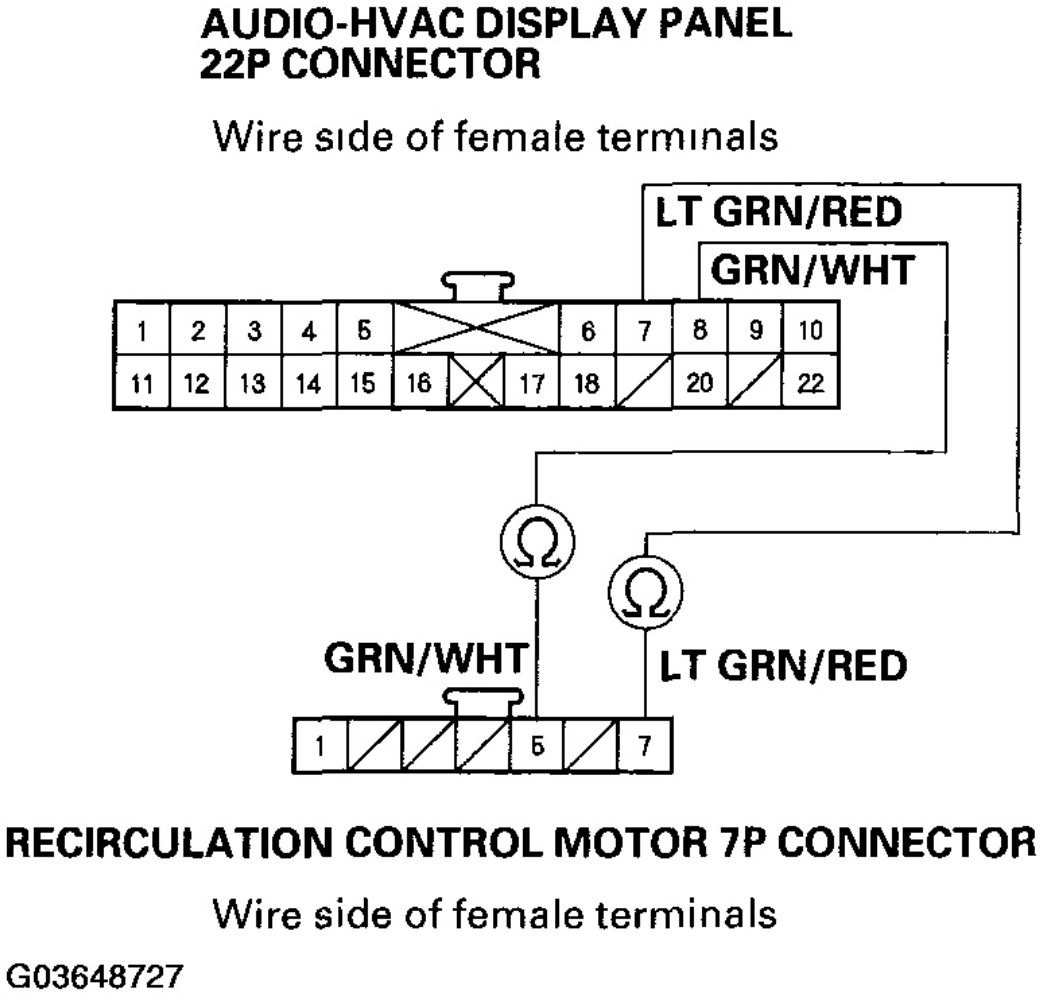


Fig. 47: Checking For Continuity Between Terminals Of Audio-HVAC Display Panel 22P Connector (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUDIO-HVAC DISPLAY PANEL 22P CONNECTOR AND RECIRCULATION CONTROL MOTOR 5P (2-DOOR) CONNECTOR

22P	5P
No. 7	No. 1
No. 8	No. 2

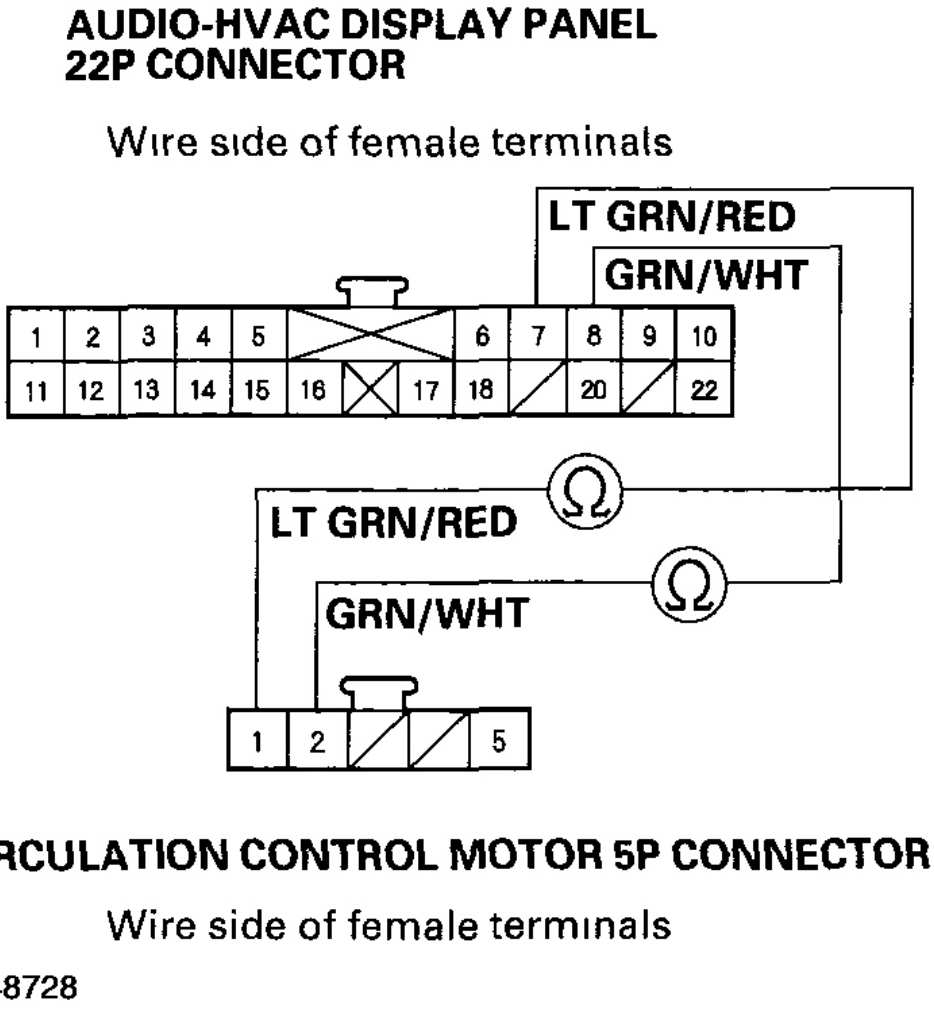


Fig. 48: Checking For Continuity Between Terminals Of Audio-HVAC Display Panel 22P Connector (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at audio-HVAC display panel 22P connector and at the recirculation control motor 7P (4-door) or 5P (2-door) connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Repair any open in the wire(s) between the audio-HVAC display panel and the recirculation control motor.

AUDIO-HVAC DISPLAY PANEL POWER AND GROUND CIRCUIT TROUBLESHOOTING

1. Check the No. 30 (7.5A) fuse in the under-dash fuse/relay box.

   Is the fuse OK?

   YES - Go to step 2.

   NO - Replace the fuse, and recheck.
2. Disconnect audio-HVAC display panel 22P connector.
3. Turn the ignition switch ON (II).
4. Measure the voltage between the No. 20 terminal of audio-HVAC display panel 22P connector and body ground.

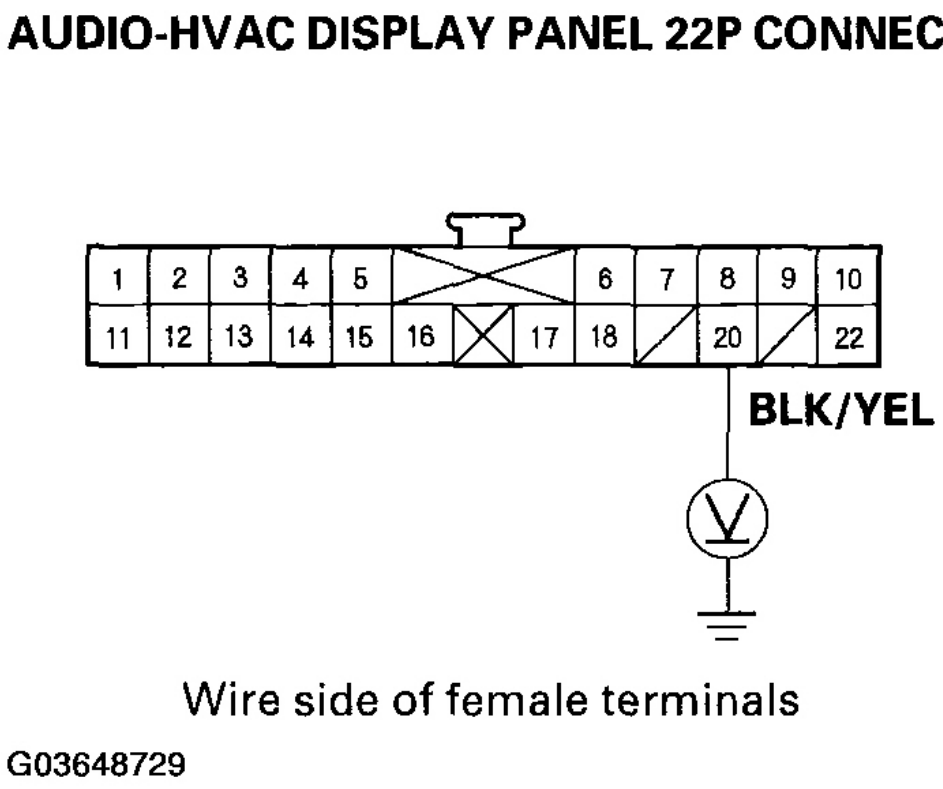


Fig. 49: Measuring Voltage Between No. 20 Terminal Of Audio-HVAC Display Panel Connector & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 5.

NO - Repair open in the wire between the No. 30 fuse in the under-dash fuse/relay box and the audio-HVAC display panel.

5. Turn the ignition switch OFF.
6. Check for continuity between the No. 22 terminal of audio-HVAC display panel 22P connector and body ground.

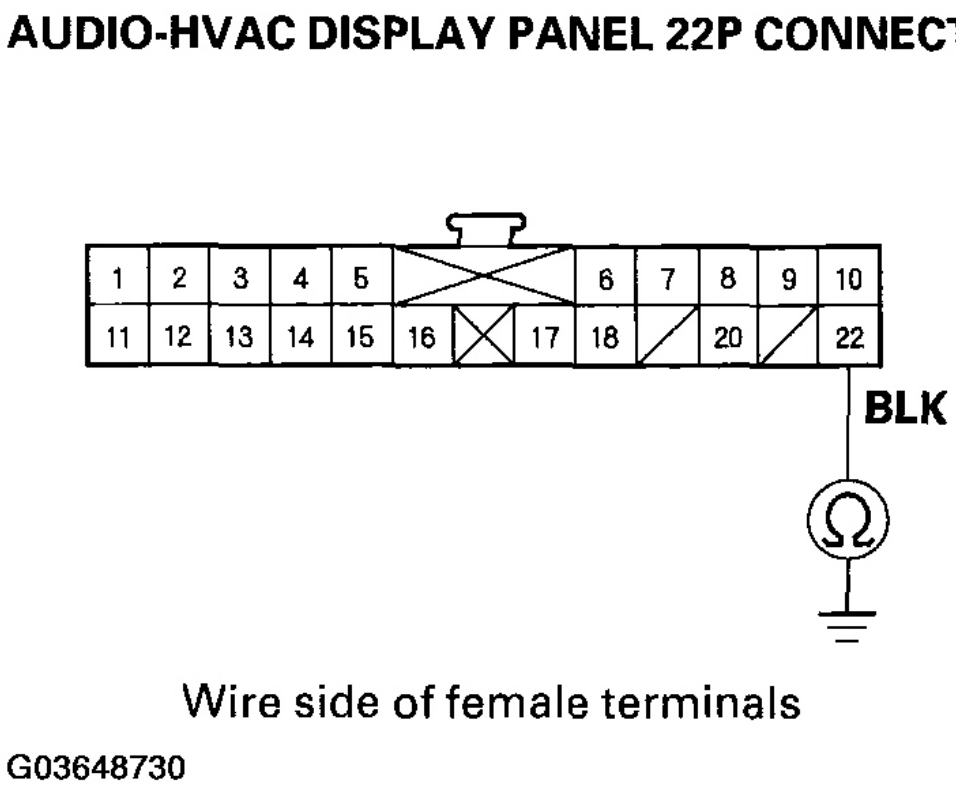


Fig. 50: Checking For Continuity Between No. 22 Terminal Of Audio-HVAC Display Panel Connector & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at audio-HVAC display panel 22P connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Check for an open in the wire between the audio-HVAC display panel and body ground. If the wire is OK, check for poor ground at G503.

A/C CONDENSER FAN CIRCUIT TROUBLESHOOTING

NOTE: Do not use this troubleshooting procedure if the radiator fan and/or the A/C compressor is inoperative. Refer to SYMPTOM TROUBLESHOOTING INDEX.

1. Check the No. 9 (20A) fuse in the under-hood fuse/relay box, and the No. 30 (7.5A) fuse in the under-dash fuse/relay box.

   Are the fuses OK?

   YES - Go to step 2.

   NO - Replace the fuse(s), and recheck.
2. Remove the A/C condenser fan relay from the under-hood fuse/relay box, and test it (see **POWER RELAY TEST**).

   Is the relay OK?

   YES - Go to step 3.

   NO - Replace the A/C condenser fan relay.
3. Measure the voltage between the No. 1 terminal of the A/C condenser fan relay 4P socket and body ground.

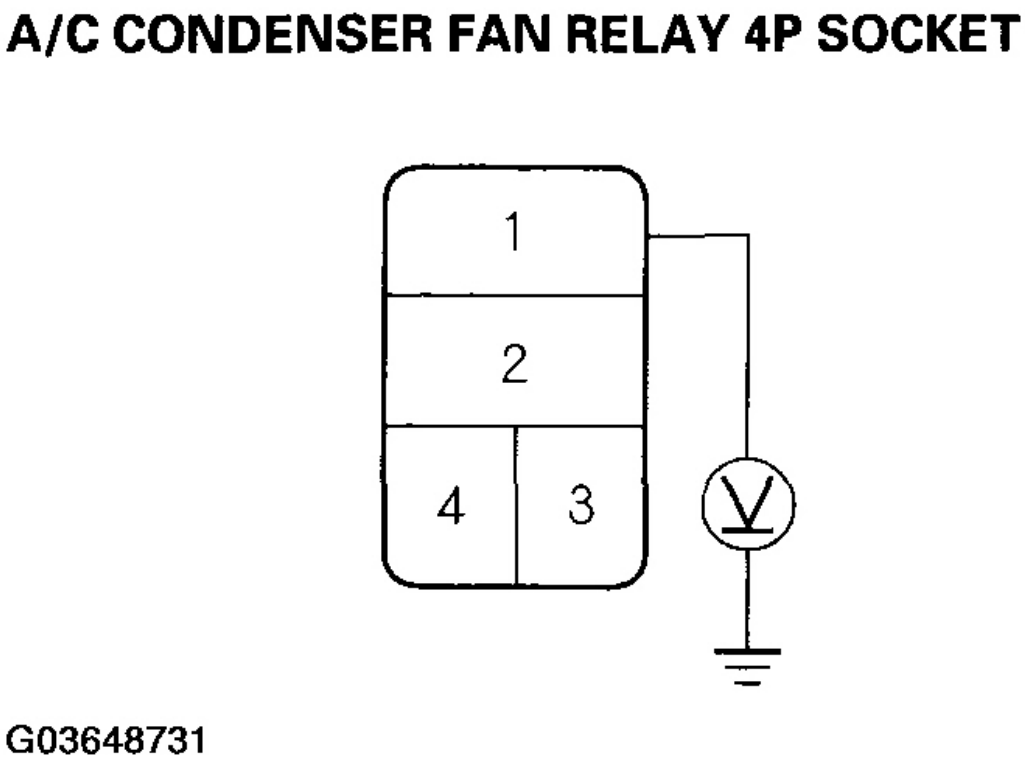


Fig. 51: Measuring Voltage Between No. 1 Terminal Of A/C Condenser Fan Relay & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 4.

NO - Replace the under-hood fuse/relay box.

4. Connect the No. 1 and No. 2 terminals of the A/C condenser fan relay 4P socket with a jumper wire.

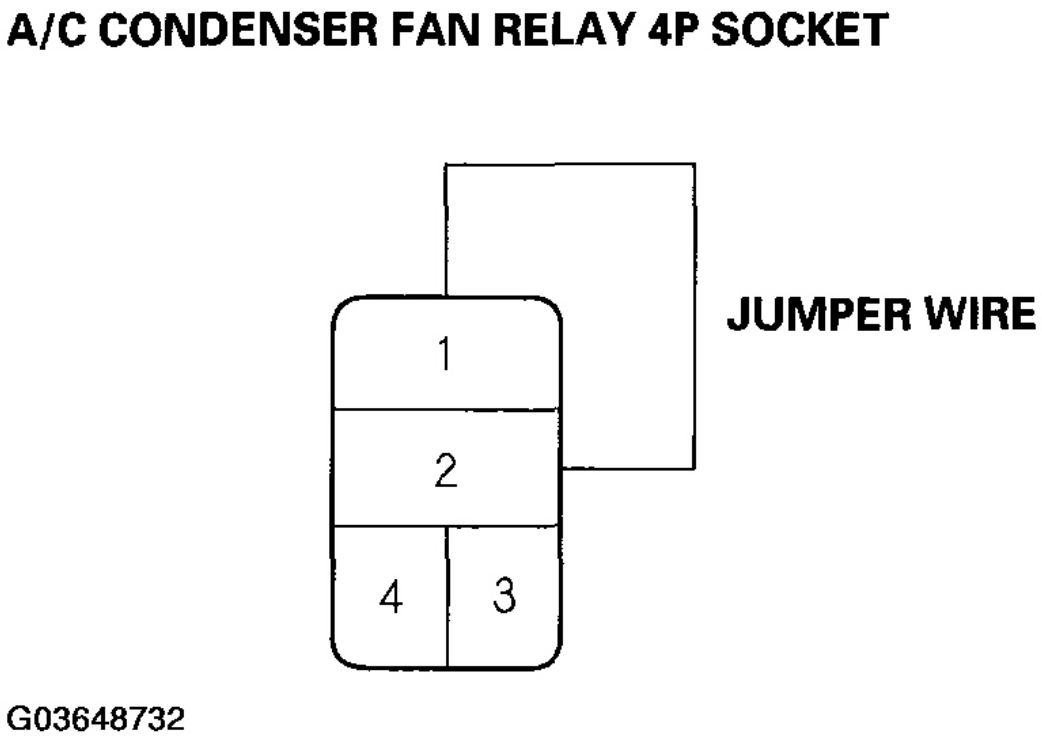


Fig. 52: Connecting No. 1 And No. 2 Terminals Of A/C Condenser Fan Relay 4P Socket With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the A/C condenser fan run?

YES - Go to step 5.
NO - Go to step 8.

5. Disconnect the jumper wire.
6. Turn the ignition switch ON (II).
7. Measure the voltage between the No. 3 terminal of the A/C condenser fan relay 4P socket and body ground.

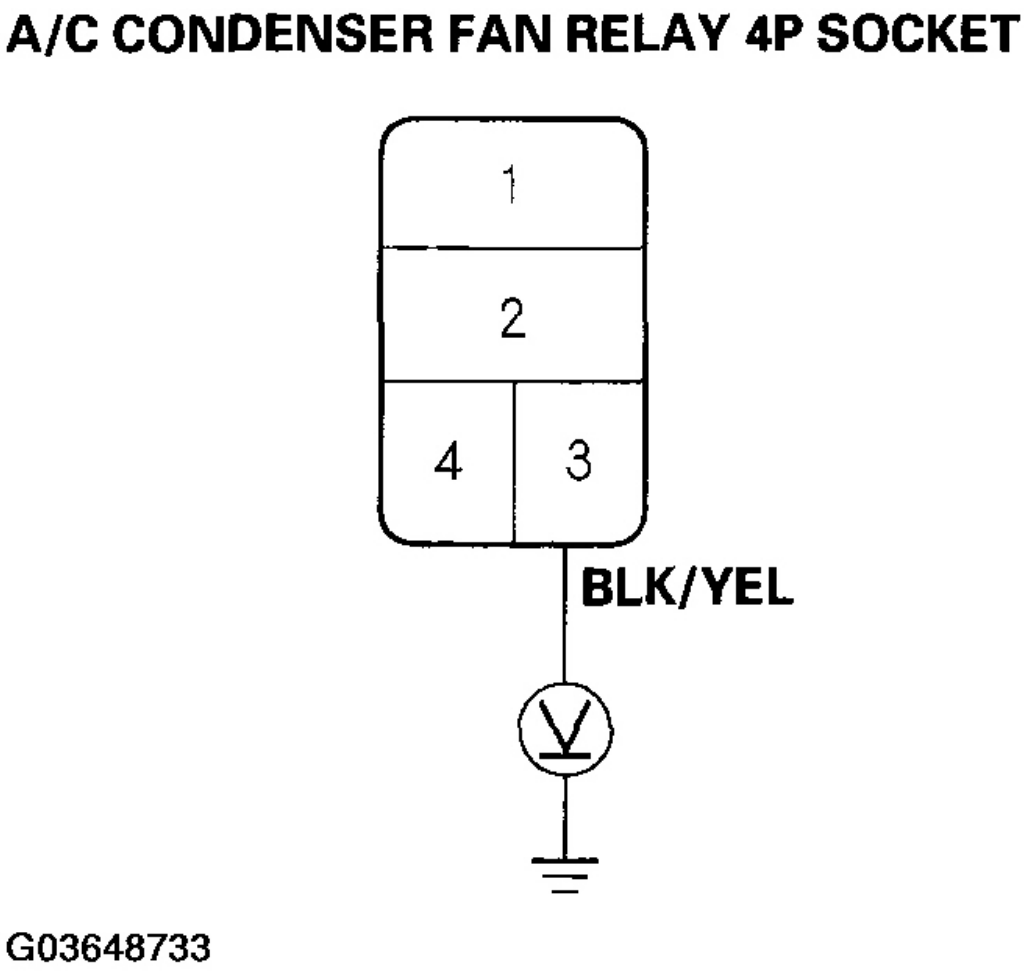


Fig. 53: Measuring Voltage Between No. 3 Terminal Of A/C Condenser Fan Relay And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Replace the under-hood fuse/relay box.

NO - Repair open in the wire between the No. 30 fuse in the under-dash fuse/relay box and the A/C condenser fan relay.

8. Disconnect the jumper wire.

9. Disconnect the A/C condenser fan 2P connector.
10. Check for continuity between the No. 2 terminal of the A/C condenser fan relay 4P socket and the No. 2 terminal of the A/C condenser fan 2P connector.

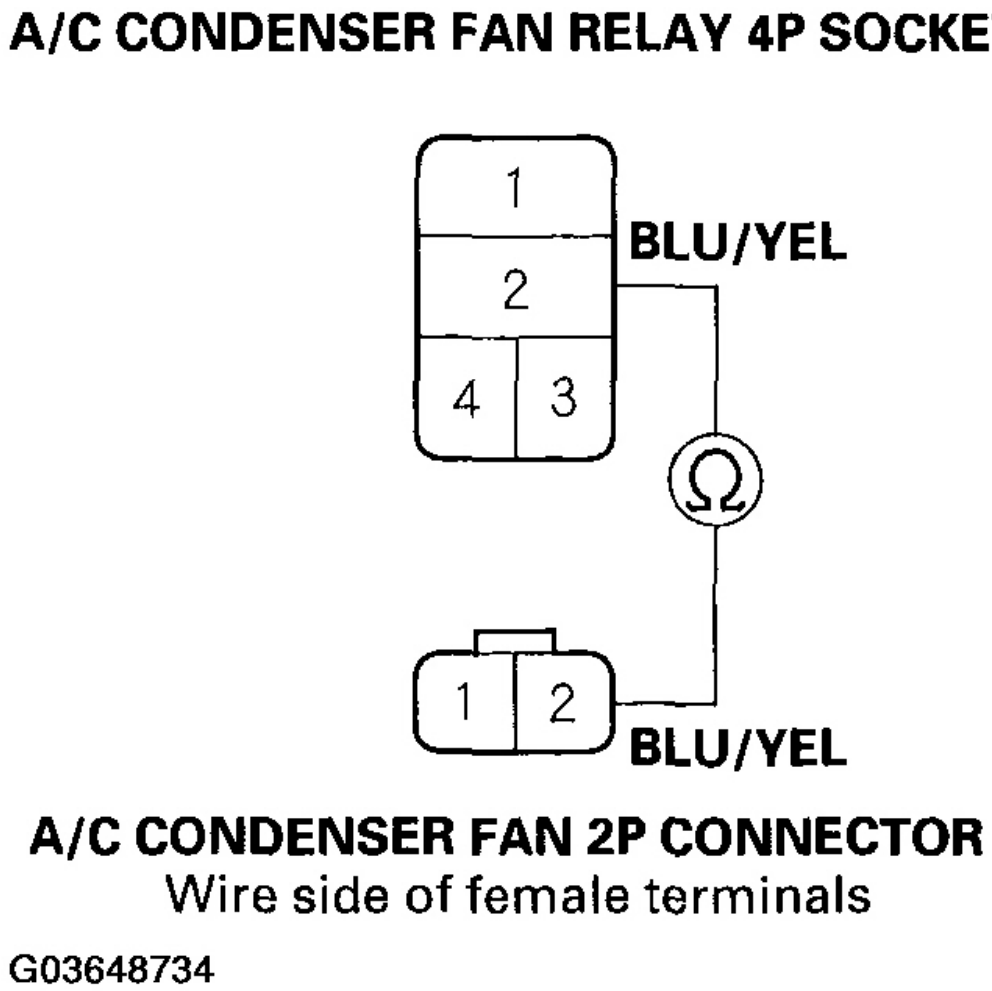


Fig. 54: Checking For Continuity Between No. 2 Terminal Of A/C Condenser Fan Relay 4P Socket & 2P Socket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 11.

NO - Repair open in the wire between the A/C condenser fan relay and the A/C condenser fan.

11. Check for continuity between the No. 1 terminal of the A/C condenser fan 2P connector and body ground.

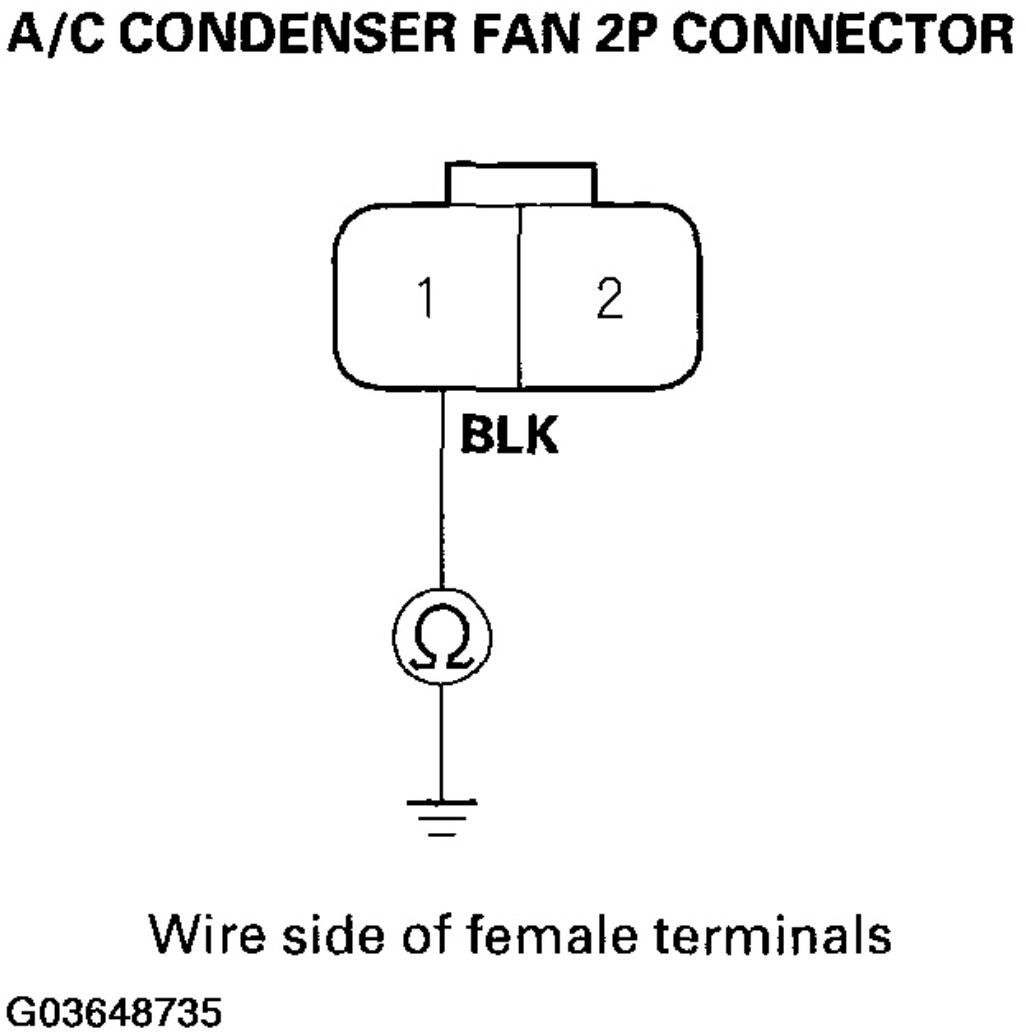


Fig. 55: Checking For Continuity Between No. 1 Terminal Of A/C Condenser Fan 2P Connector And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the A/C condenser fan motor.

NO - Check for an open in the wire between the A/C condenser fan and body ground. If the wire is OK, check for poor ground at G201.

RADIATOR AND A/C CONDENSER FAN COMMON CIRCUIT TROUBLESHOOTING

NOTE:

- **Do not use this troubleshooting procedure if only one fan is inoperative, or if the A/C compressor is inoperative. Refer to SYMPTOM TROUBLESHOOTING INDEX.**
- **Before performing symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Check the No. 9 (20A) and No. 11 (20A) fuses in the under-hood fuse/relay box, and the No. 30 (7.5A) fuse in the under-dash fuse/relay box.

   Are the fuses OK?

   YES - Go to step 2.

   NO - Replace the fuse(s), and recheck.
2. Remove the A/C condenser fan relay from the under-hood fuse/relay box.
3. Turn the ignition switch ON (II).
4. Measure the voltage between the No. 3 terminal of the A/C condenser fan relay 4P socket and body ground.

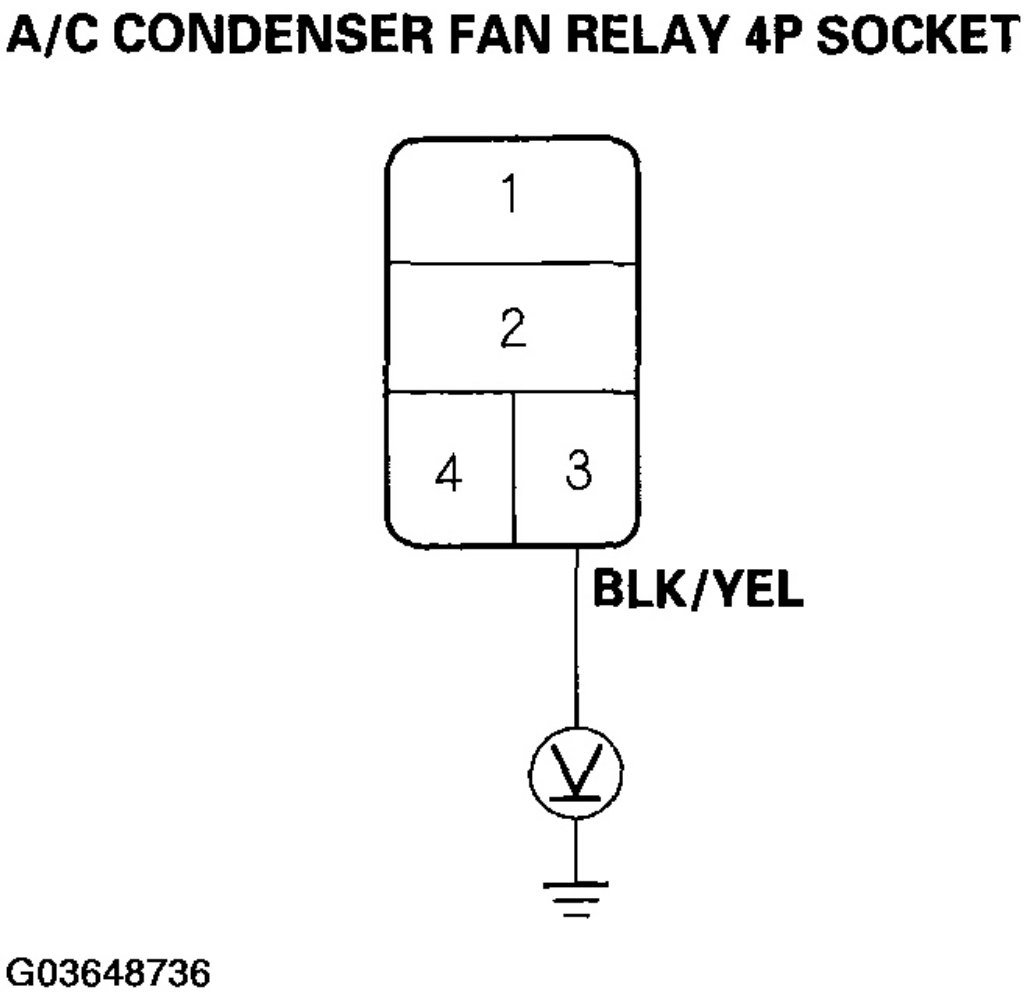


Fig. 56: Measuring Voltage Between No. 3 Terminal Of A/C Condenser Fan Relay & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 5.

NO - Repair open in the wire between the No. 30 fuse in the under-dash fuse/relay box and the A/C condenser fan relay.

5. Turn the ignition switch OFF.

6. Reinstall the A/C condenser fan relay.
7. Make sure the A/C switch is OFF, and the engine coolant temperature is below 199°F (93°C).
8. Turn the ignition switch ON (II).
9. Using a backprobe set, measure the voltage between the No. 12 terminal of ECM/PCM connector E (31P) and body ground with the ECM/PCM connectors connected.

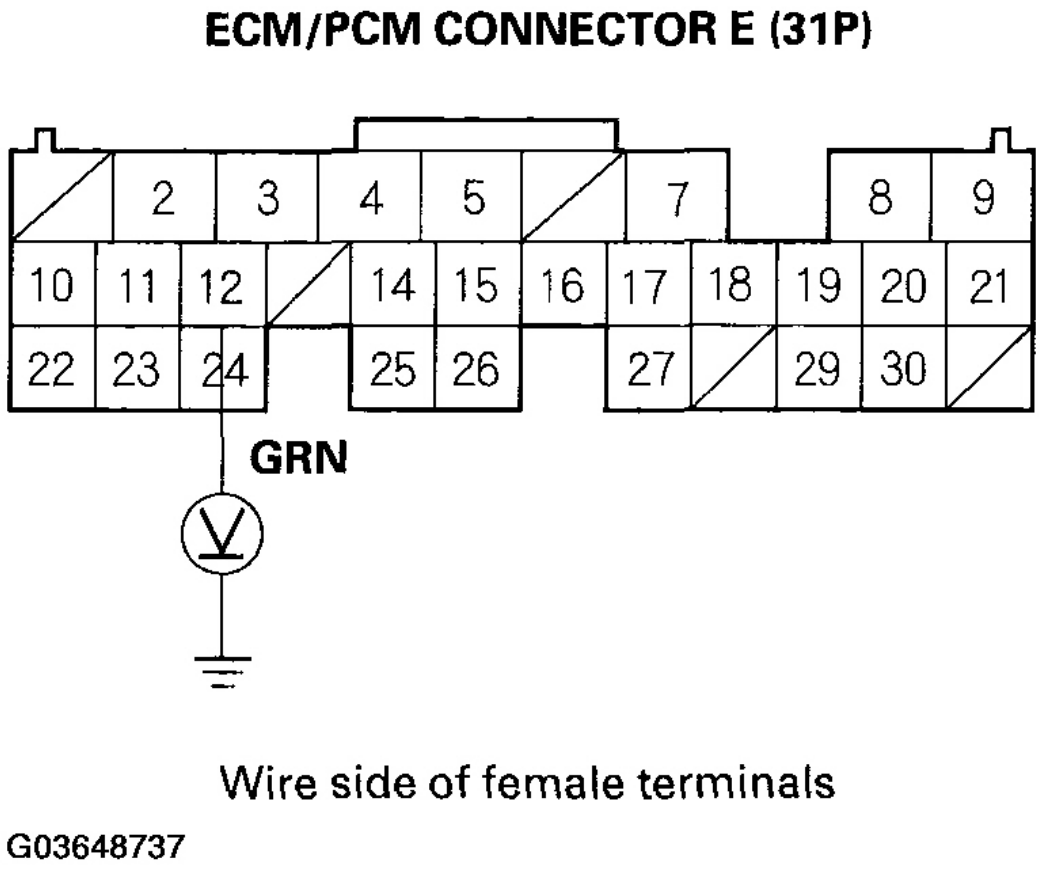


Fig. 57: Measuring Voltage Between No. 12 Terminal Of ECM/PCM Connector E (31P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Check for loose wires or poor connections at terminal E12 of the ECM/PCM connector E (31P). If the connections are good, substitute a known-good ECM/PCM, and recheck. If the symptom/indication goes away, replace the original ECM/PCM.

NO - Repair open in the wire between the radiator fan relay, the A/C condenser fan relay, and the ECM/PCM.

NOTE: After replacing the ECM/PCM, do the following items:

- **ECM/PCM idle learn procedure (see ECM/PCM IDLE LEARN PROCEDURE).**
- **Reset the power window control unit (see RESETTING THE POWER WINDOW CONTROL UNIT).**
- **Enter the anti-theft codes for the radio and navigation system, then enter the customer's radio station presets.**

A/C COMPRESSOR CLUTCH CIRCUIT TROUBLESHOOTING

NOTE:

- **Do not use this troubleshooting procedure if the fans are also inoperative. Refer to SYMPTOM TROUBLESHOOTING INDEX.**
- **Before performing symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Check the No. 12 (7.5A) fuse in the under-hood fuse/relay box, and the No. 30 (7.5A) fuse in the under-dash fuse/relay box.

   Are the fuses OK?

   YES - Go to step 2.

   NO - Replace the fuse(s), and recheck.

2. Check the engine coolant temperature, throttle position, and idle speed (use the HDS PGM-FI data list if possible).

ENGINE COOLANT TEMPERATURE

ECT Sensor	169-194°F (76-90°C)
TPS	About 0.5
RPM MT	More than 700 AT More than 800

Is the coolant temperature, throttle position, and idle speed OK?

YES - Go to step 3.

NO - Troubleshoot and repair the cause of the high engine coolant temperature, low idle, or excessively high throttle position sensor reading.

3. Remove the A/C compressor clutch relay from the under-hood fuse/relay box, and test it (see **POWER RELAY TEST**).

Is the relay OK?

YES - Go to step 4.

NO - Replace the A/C compressor clutch relay.

4. Measure the voltage between the No. 1 terminal of the A/C compressor clutch relay 4P socket and body ground.

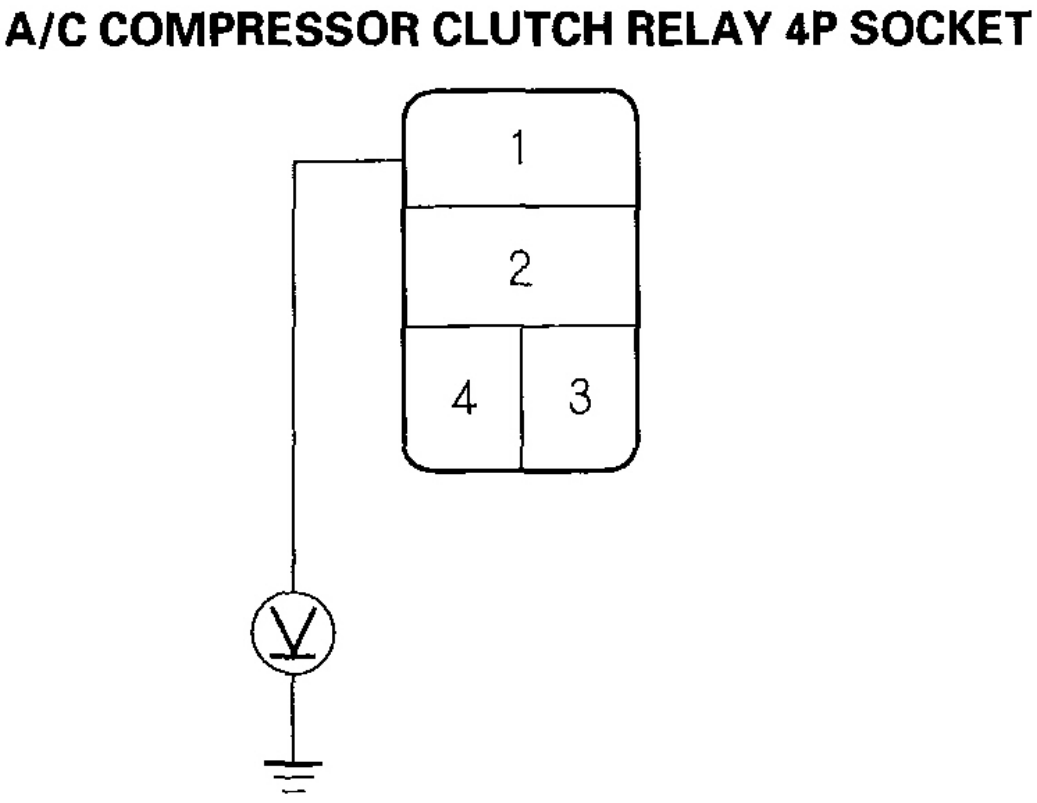


Fig. 58: Measuring Voltage Between No. 1 Terminal Of A/C Compressor Clutch Relay & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 5.

NO - Replace the under-hood fuse/relay box.

5. Connect the No. 1 and No. 2 terminals of the A/C compressor clutch relay 4P socket with a jumper wire.

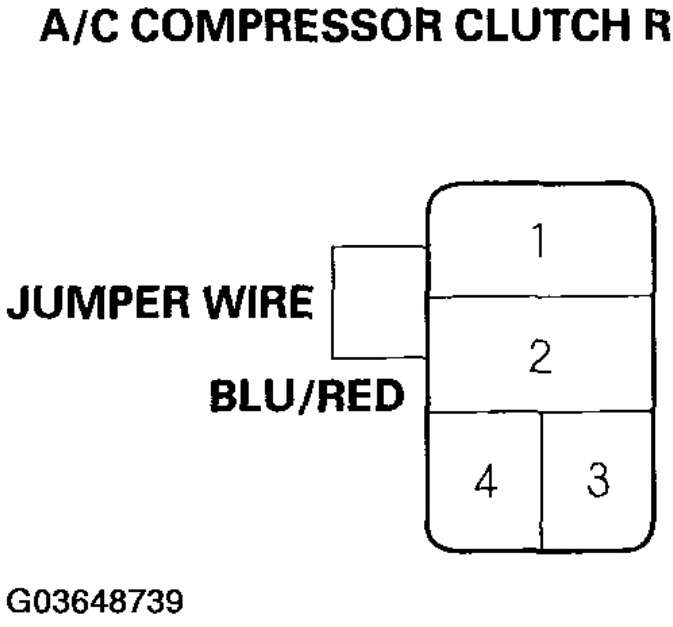


Fig. 59: Connecting No. 1 And No. 2 Terminals Of A/C Compressor Clutch Relay With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the A/C compressor clutch click ?

YES - Go to step 6.

NO - Go to step 14.

6. Disconnect the jumper wire.
7. Turn the ignition switch ON (II).
8. Measure the voltage between the No. 4 terminal of the A/C compressor clutch relay 4P socket and body ground.

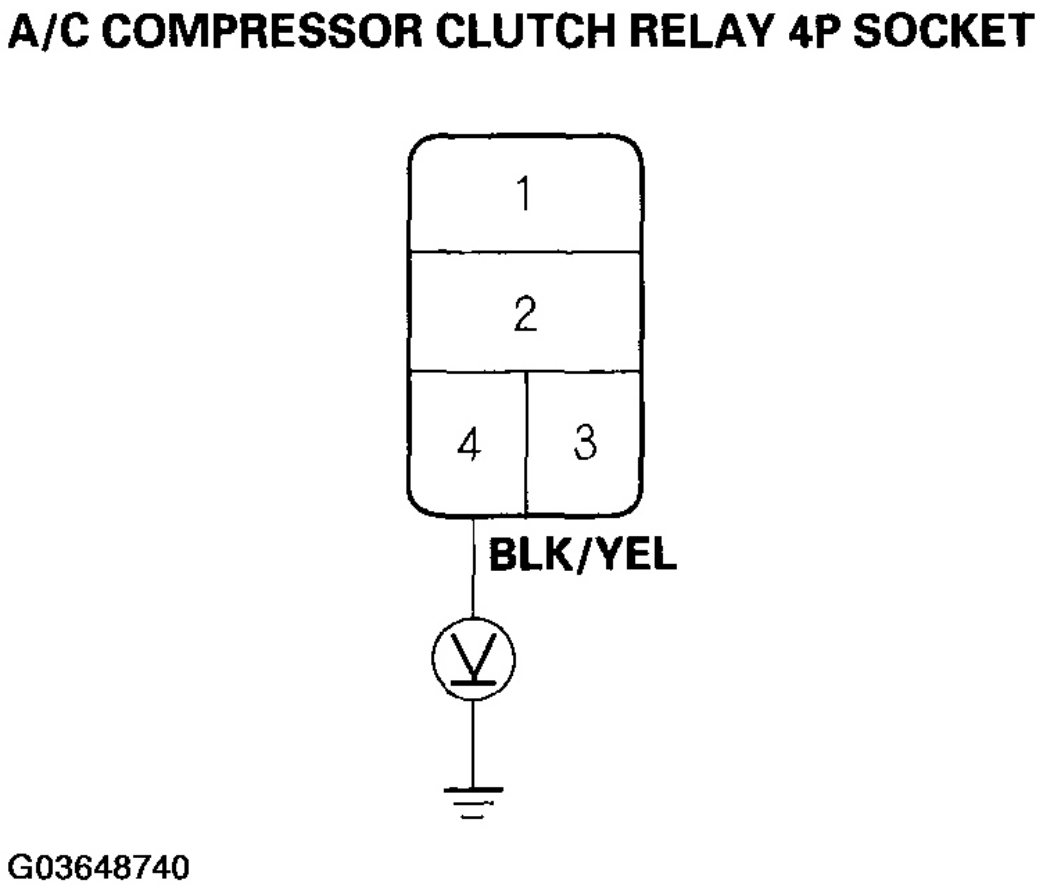


Fig. 60: Measuring Voltage Between No. 4 Terminal Of A/C Compressor Clutch Relay & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 9.

NO - Repair open in the wire between the No. 30 fuse in the under-dash fuse/relay box and the A/C compressor clutch relay.

9. Turn the ignition switch OFF.
10. Reinstall the A/C compressor clutch relay.
11. Make sure the A/C switch is OFF.

12. Turn the ignition switch ON (II).
13. Using a backprobe set, measure the voltage between the No. 18 terminal of ECM/PCM connector E (31P) and body ground with the ECM/PCM connectors connected.

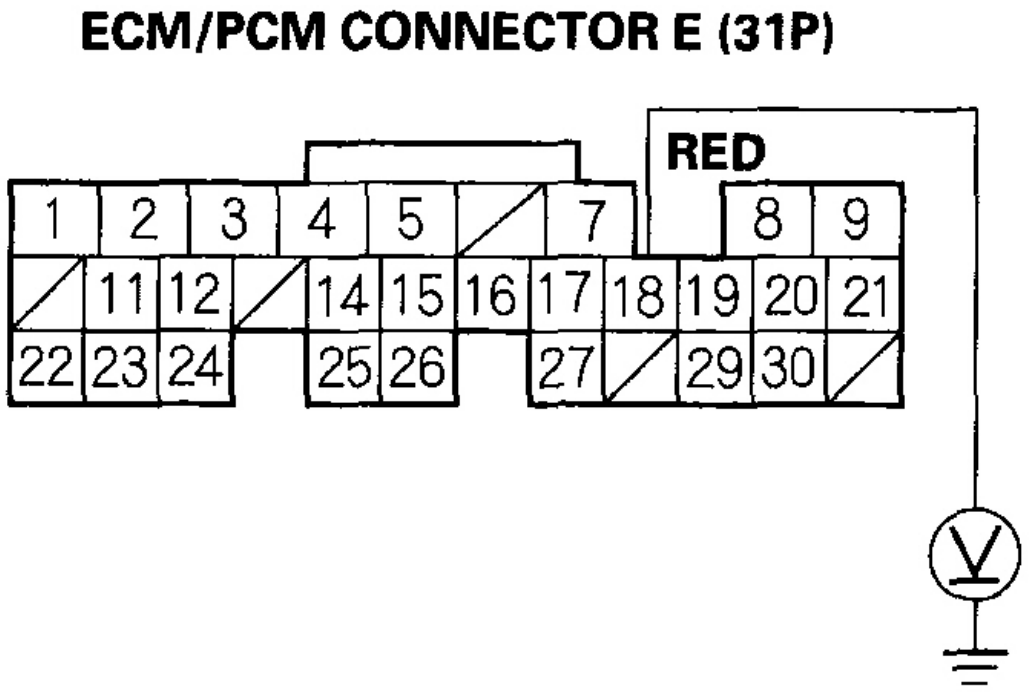


Fig. 61: Measuring Voltage Between No. 18 Terminal Of ECM/PCM Connector E (31P) & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Check for loose wires or poor connections at terminal E18 of the

ECM/PCM connector E (31P). If the connections are good, substitute a known-good ECM/PCM, and recheck. If the symptom/indication goes away, replace the original ECM/PCM.

NO - Repair open in the wire between the A/C compressor clutch relay and the ECM/PCM.

14. Disconnect the jumper wire.
15. Disconnect the A/C compressor clutch 1P connector.
16. Check for continuity between the No. 2 terminal of the A/C compressor clutch relay 4P socket and the No. 1 terminal of the A/C compressor clutch 1P connector.

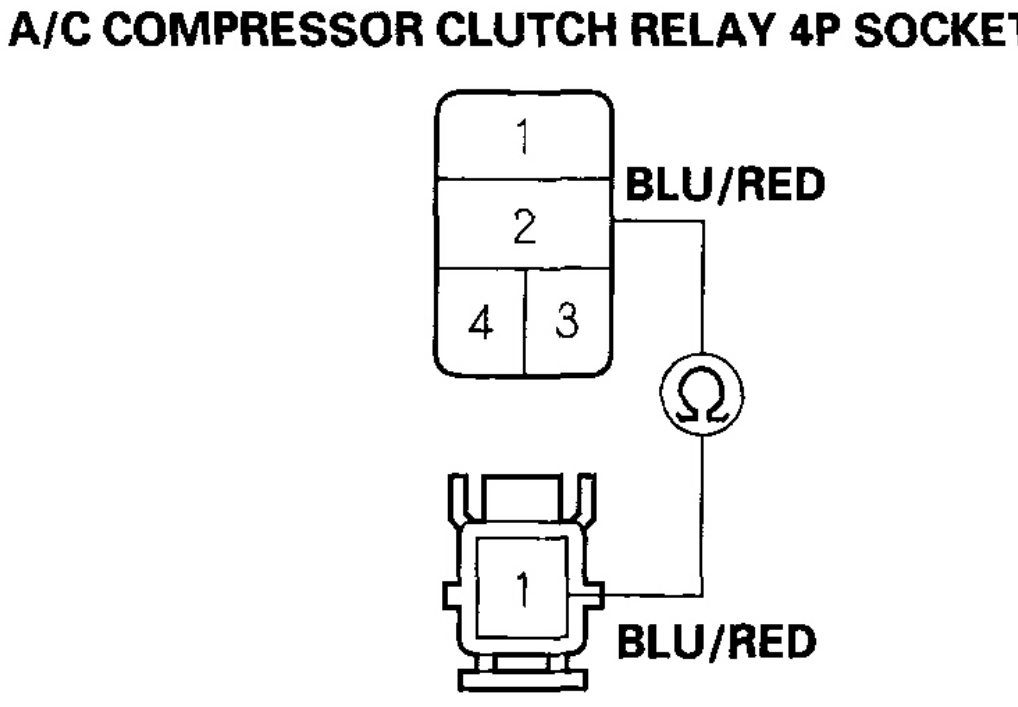


Fig. 62: Checking Continuity Between No. 2 Terminal Of A/C Compressor

Clutch Relay & No.1 Of A/C Clutch 1P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check the A/C compressor clutch clearance, and the A/C compressor clutch field coil (see **A/C COMPRESSOR CLUTCH CHECK**). Repair as needed.

NO - Repair open in the wire between the A/C compressor clutch relay and the A/C compressor clutch.

A/C PRESSURE SWITCH CIRCUIT TROUBLESHOOTING

NOTE:

- **Do not use this troubleshooting procedure if the following items are operative; A/C condenser fan, radiator fan, A/C compressor, or if the heater is inoperative. Refer to SYMPTOM TROUBLESHOOTING INDEX.**
- **Before performing symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Check for body DTCs in test mode A of the MICS (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

   Are the any DTCs indicated?

   YES - Do the appropriate troubleshooting for the DTC indicated.

   NO - Go to step 2.
2. Disconnect the A/C pressure switch 2P connector.
3. Turn the ignition switch ON (II).
4. Measure the voltage between the No. 1 terminal of the A/C pressure switch 2P connector and body ground.

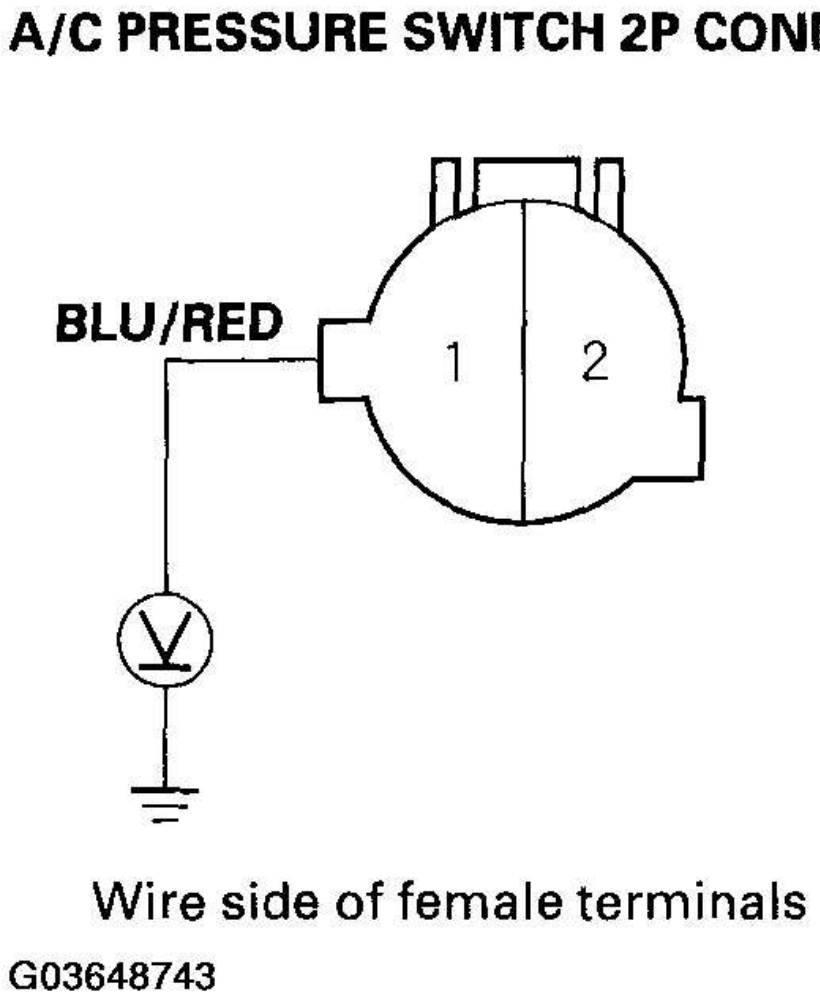


Fig. 63: Measuring Voltage Between No. 1 Terminal Of A/C Pressure Switch 2P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 5 V or more?

YES - Go to step 5.
NO - Go to step 13.

5. Turn the ignition switch OFF.

6. Check for continuity between the No. 1 and No. 2 terminals of the A/C pressure switch.

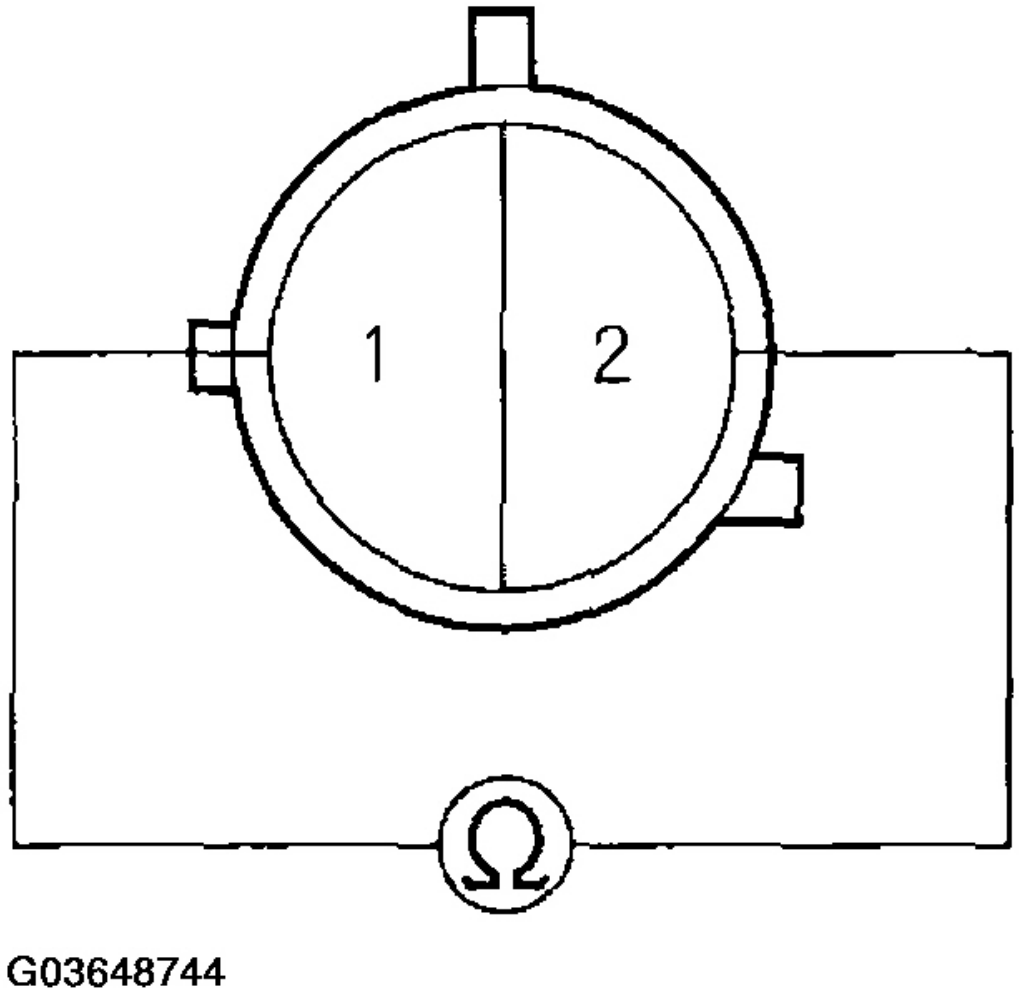


Fig. 64: Checking For Continuity Between No. 1 And No. 2 Terminals Of A/C Pressure Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 7.
NO - Go to step 14.

7. Reconnect the A/C pressure switch 2P connector.
8. Disconnect audio-HVAC display panel 22P connector.
9. Turn the ignition switch ON (II).
10. Measure the voltage between the No. 1 terminal of audio-HVAC display panel 22P connector and body ground.

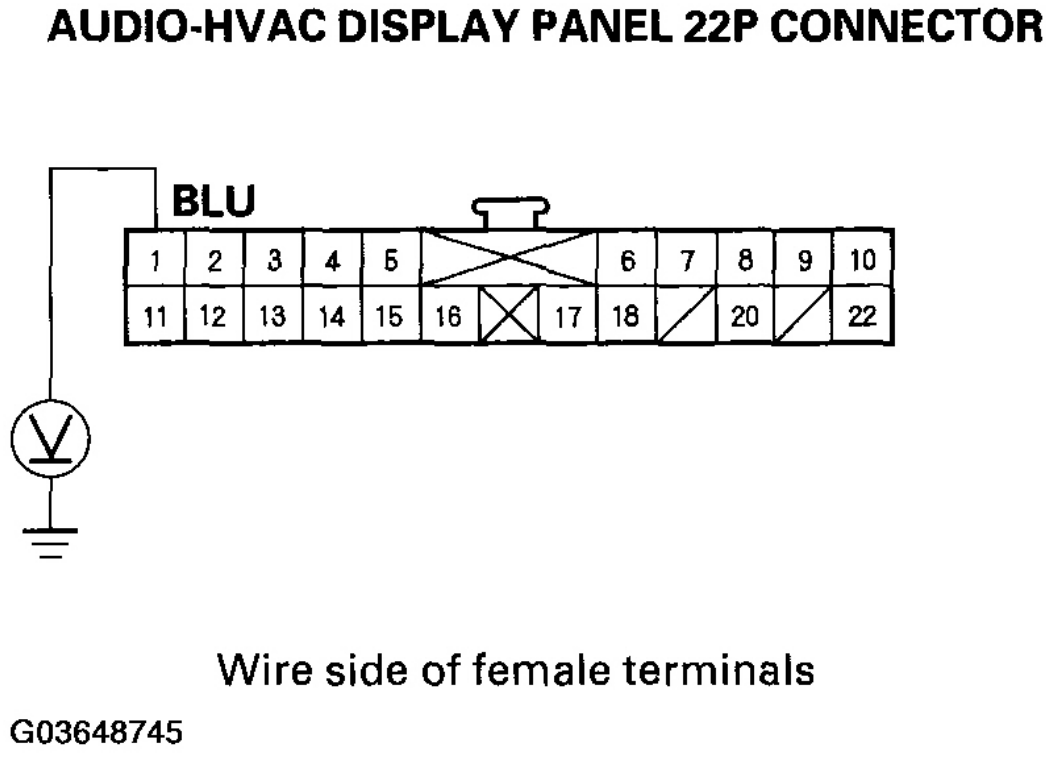


Fig. 65: Measuring Voltage Between No. 1 Terminal Of Audio-HVAC

Display Panel Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 5 V or more?

YES - Go to step 11.

NO - Repair open in the wire between the audio-HVAC display panel and the A/C pressure switch.

11. Turn the ignition switch OFF.
12. Measure the resistance between the No. 9 and No. 10 terminals of the audio-HVAC display panel 22P connector.

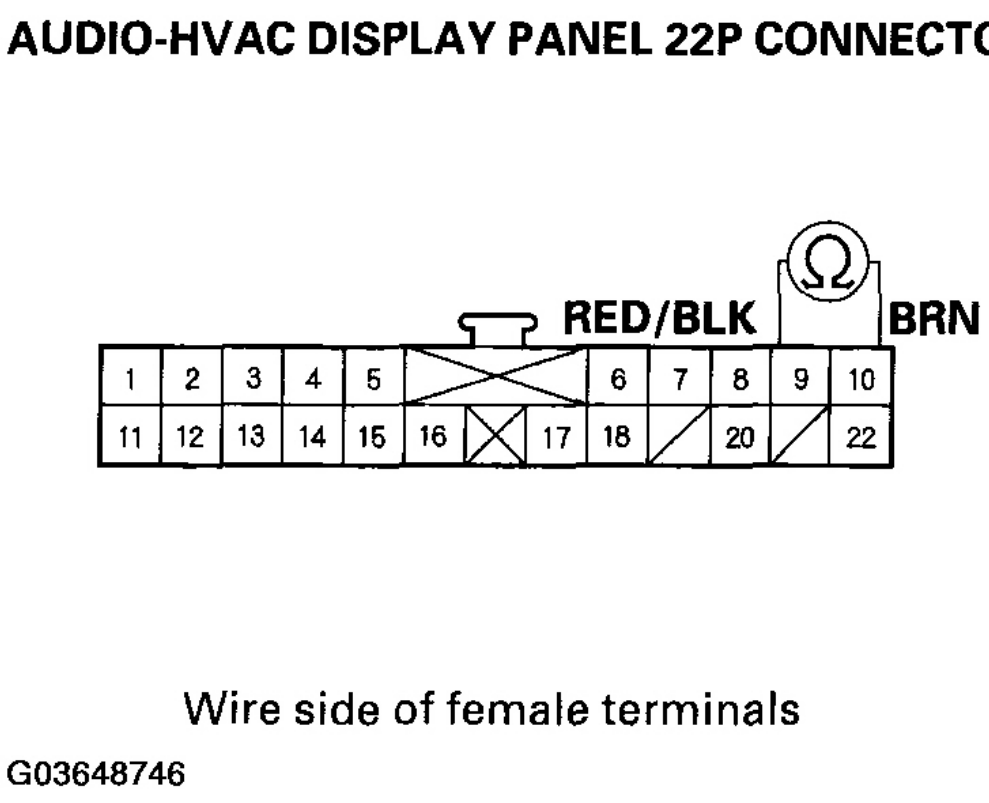


Fig. 66: Measuring Resistance Between No. 9 And No. 10 Terminals Of Audio-HVAC Display Panel 22P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance less than 24 k ohms?

YES - Check for loose wires or poor connections at audio-HVAC display panel 22P connector and at the A/C pressure switch 2P connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Repair cause of high resistance in the evaporator temperature circuit.

13. Measure the voltage between the No. 2 terminal of under-hood fuse/relay box connector H (14P) and body ground with the under-hood fuse/relay box connectors connected.

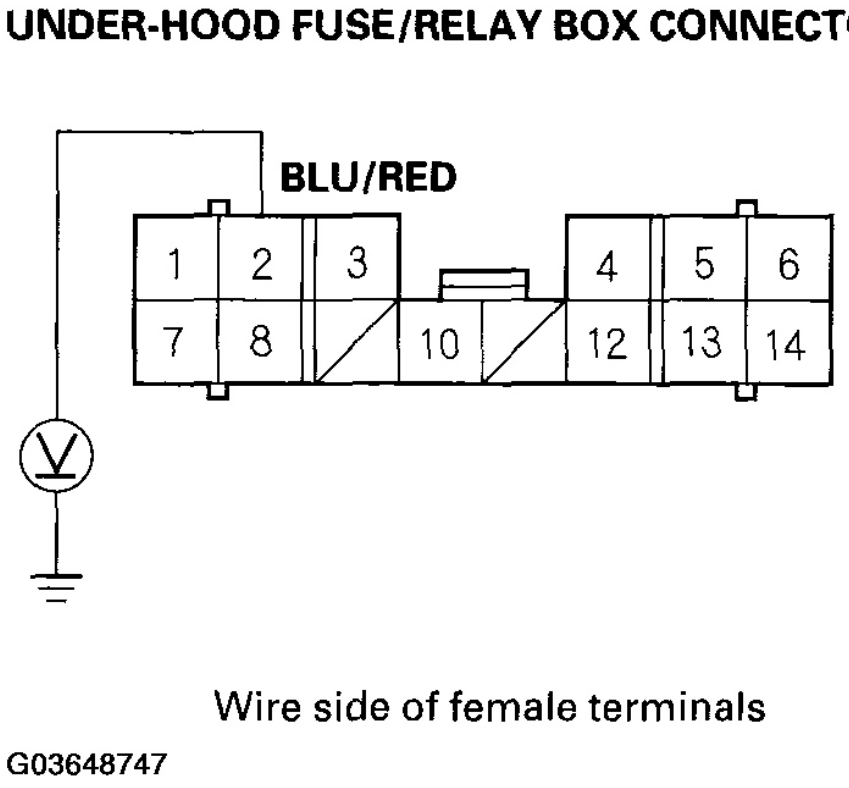


Fig. 67: Measuring Voltage Between No. 2 Terminal Of Under-Hood Fuse/Relay Box Connector & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 5 V or more?

YES - Repair open in the wire between the under-hood fuse/relay box and the A/C pressure switch.

NO - Check for loose or poor connections at the No. 2 terminal of the under-hood fuse/relay box. If the connections are OK, replace the under-hood fuse/relay box.

14. Check for proper A/C system pressure.

Is the pressure within specifications?

YES - Replace the A/C pressure switch.

NO - Repair the A/C pressure problem.

AIR MIX CONTROL MOTOR TEST

4-DOOR

1. Disconnect the 7P connector from the air mix control motor.

NOTE: Incorrectly applying power and ground to the air mix control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 1 terminal of the air mix control motor, and ground the No. 2 terminal; the air mix control motor should run, and stop at Max Cool. If it doesn't, reverse the connections; the air mix control motor should run, and stop at Max Hot.
3. If the air mix control motor did not run in step 2, remove it, then check the air mix control linkage and door for smooth movement.
   - If the linkage and door move smoothly, replace the air mix control motor.
   - If the linkage or door sticks or binds, repair them as needed.
   - If the air mix control motor runs smoothly, go to step 4.

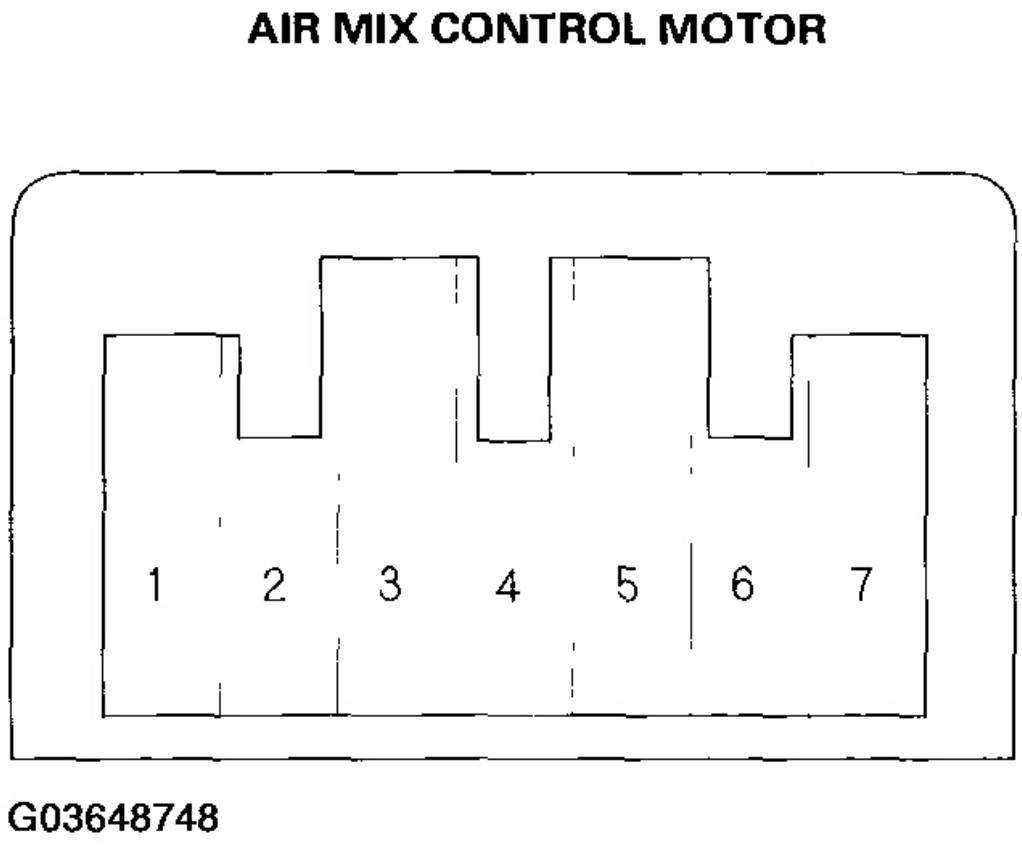


Fig. 68: Checking Air Mix Control Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the resistance between the No. 5 and No. 7 terminals. It should be between 4.2 to 7.8 k ohms.
5. Reconnect the air mix control motor 7P connector, then turn the ignition switch ON (II).
6. Using the backprobe set, measure the voltage between the No. 3 and No. 5 terminals.

   Max Cool-about 0.5 V

   Max Hot-about 4.5 V

7. If either the resistance or voltage readings are not as specified, replace the air mix control motor.

2-DOOR

1. Disconnect the 5P connector from the air mix control motor.

NOTE: Incorrectly applying power and ground to the air mix control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 1 terminal of the air mix control motor, and ground the No. 2 terminal; the air mix control motor should run, and stop at Max Hot. If it doesn't, reverse the connections; the air mix control motor should run, and stop at Max Cool.
3. If the air mix control motor did not run in step 2, remove it, then check the air mix control linkage and door for smooth movement.
   - If the linkage and door move smoothly, replace the air mix control motor.
   - If the linkage or door sticks or binds, repair them as needed.
   - If the air mix control motor runs smoothly, go to step 4.

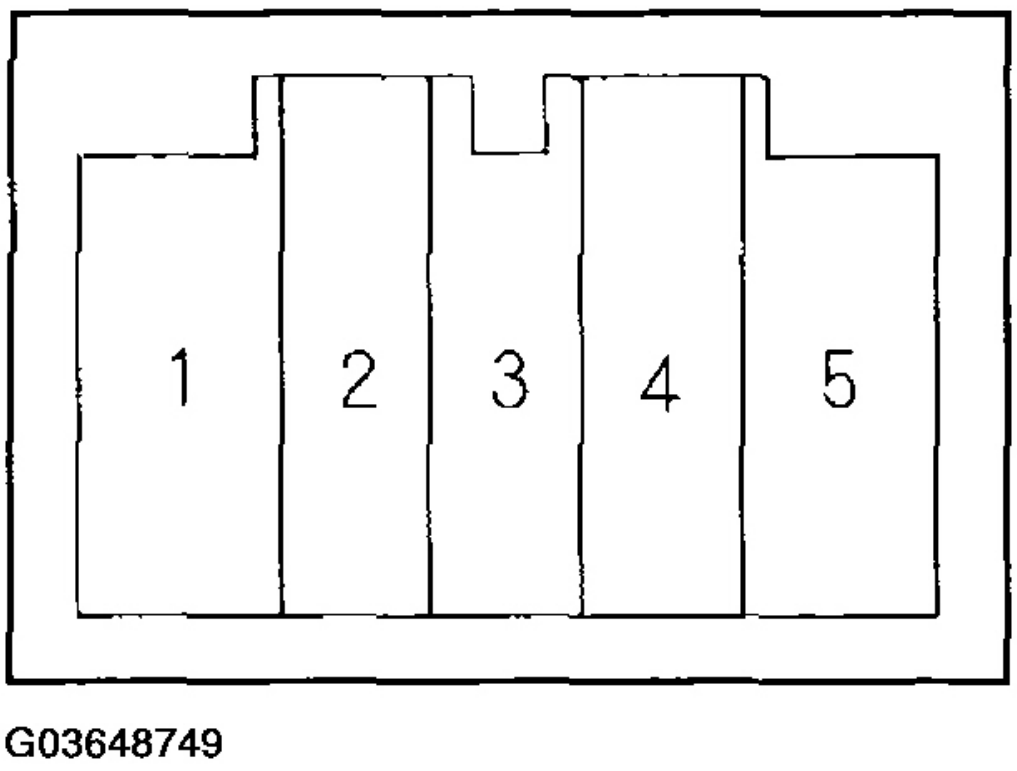


Fig. 69: Checking Air Mix Control Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the resistance between the No. 5 and No. 7 terminals. It should be between 4.2 to 7.8 k ohms.
5. Reconnect the air mix control motor 7P connector, then turn the ignition switch ON (II).
6. Using the backprobe set, measure the voltage between the No. 3 and No. 5 terminals.

Max Cool-about 1.0 V

Max Hot-about 4.0 V

7. If either the resistance or voltage readings are not as specified, replace the air mix control motor.

AIR MIX CONTROL MOTOR REPLACEMENT

4-DOOR

1. Disconnect the 7P connector (A) from the air mix control motor (B). Remove the self-tapping screws and the air mix control motor from the heater unit.

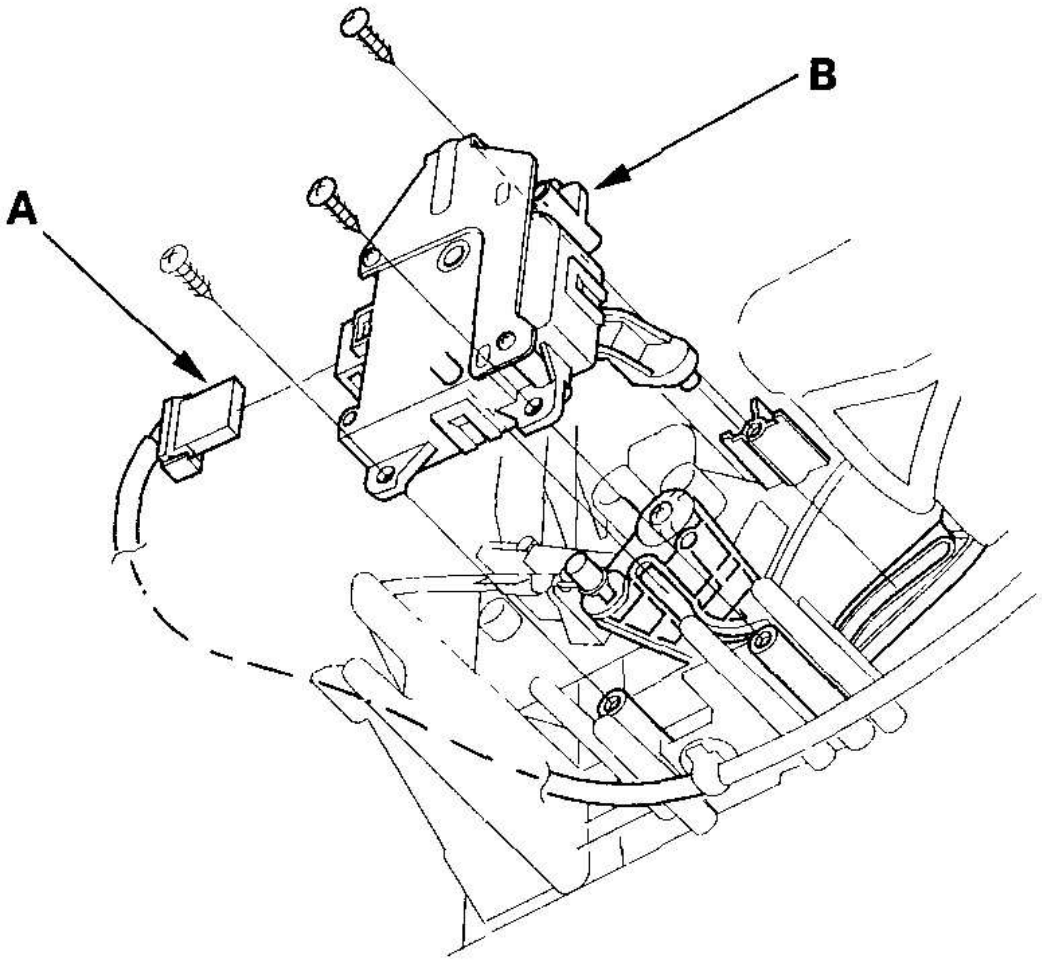


Fig. 70: Disconnecting Connector From Air Mix Control Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

2-DOOR

1. Disconnect the 5P connector (A) from the air mix control motor (B). Remove the self-tapping screws and the air mix control motor from the heater unit.

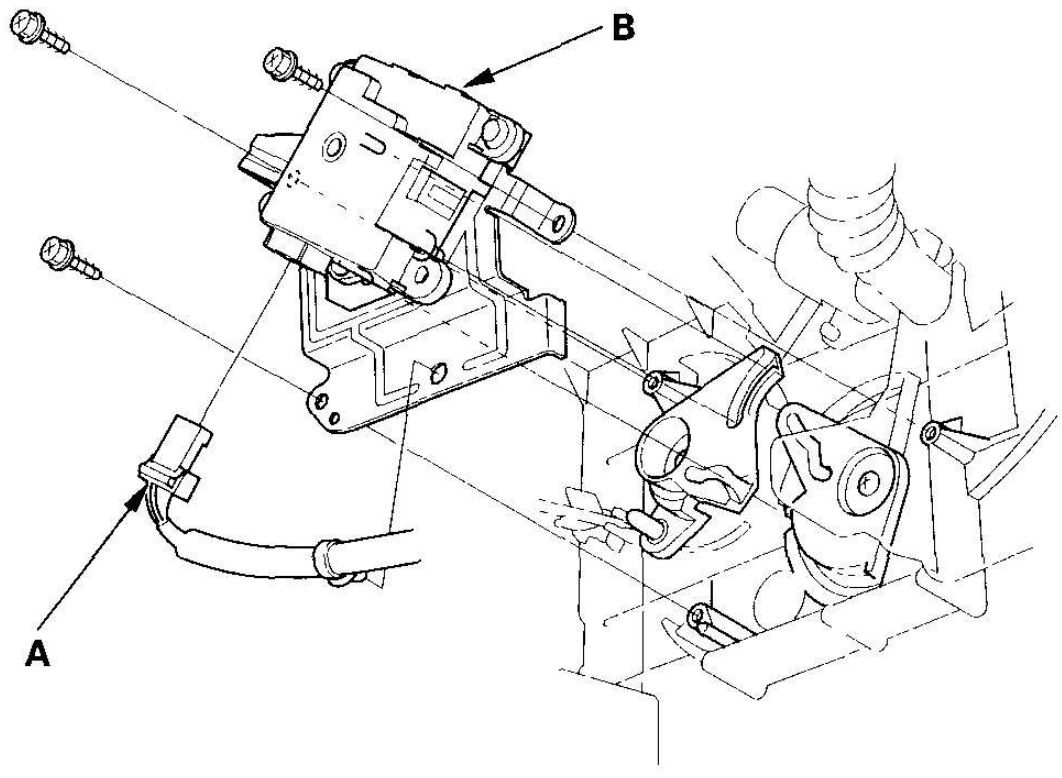


Fig. 71: Disconnecting Connector From Air Mix Control Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

MODE CONTROL MOTOR TEST

4-DOOR

1. Disconnect the 7P connector from the mode control motor.

NOTE: Incorrectly applying power and ground to the mode control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 2 terminal of the mode control motor, and ground the No. 1 terminal; the mode control motor should run smoothly, and stop at Vent. If it doesn't, reverse the connections; the mode control motor should run smoothly, and stop at Defrost. When the mode control motor stops running, disconnect battery power immediately.

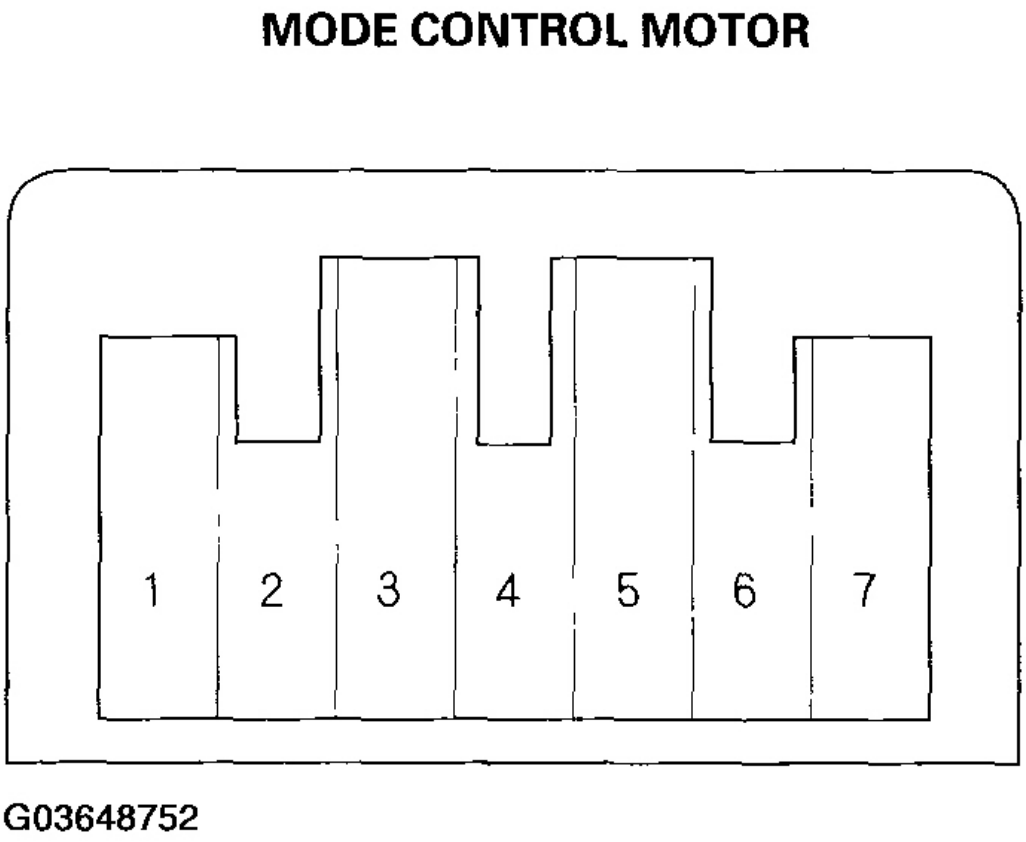


Fig. 72: Connecting Battery Power To No. 2 Terminal Of Mode Control Motor And Ground No. 1 Terminal (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the mode control motor did not run in step 2, remove it, then check the mode control linkage and doors for smooth movement.
   - If the linkage and doors move smoothly, replace the mode control motor.

- If the linkage or doors stick or bind, repair them as needed.
- If the mode control motor runs smoothly, go to step 4.

4. Use a digital multimeter with an output of 1 mA or less at the 20 k ohms range. With the mode control motor running as in step 2, check for continuity between the No. 3, 4, 5 and 6 terminals and the No. 7 terminal individually. There should be continuity for a moment at each terminal as the motor moves past the switch's terminal.
5. If there is no continuity for a moment at each terminal, replace the mode control motor.

2-DOOR

1. Disconnect the 10P connector from the mode control motor.

NOTE: Incorrectly applying power and ground to the mode control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 2 terminal of the mode control motor, and ground the No. 1 terminal; the mode control motor should run smoothly, and stop at Vent. If it doesn't, reverse the connections; the mode control motor should run smoothly, and stop at Defrost. When the mode control motor stops running, disconnect battery power immediately.

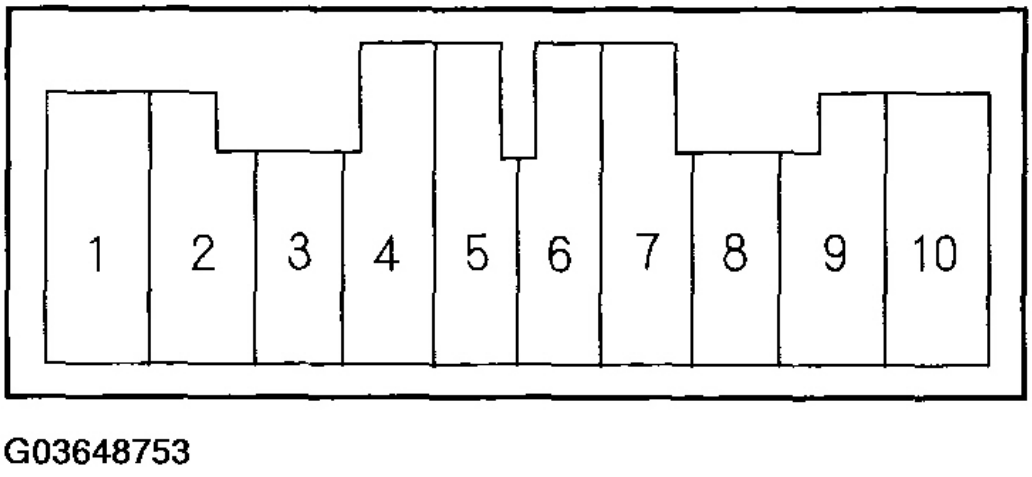


Fig. 73: Connecting Battery Power To No. 2 Terminal Of Mode Control Motor And Ground No. 1 Terminal (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the mode control motor did not run in step 2, remove it, then check the mode control linkage and doors for smooth movement.
   - If the linkage and doors move smoothly, replace the mode control motor.
   - If the linkage or doors stick or bind, repair them as needed.
   - If the mode control motor runs smoothly, go to step 4.
4. Use a digital multimeter with an output of 1 mA or less at the 20 k ohms range. With the mode control motor running as in step 2, check for continuity between the No. 6, 7, 8 and 9 terminals and the No. 10 terminal individually. There should be continuity for a moment at each terminal as the motor moves past the switch's terminal.
5. If there is no continuity for a moment at each terminal, replace the mode

control motor.

MODE CONTROL MOTOR REPLACEMENT

4-DOOR

1. Open the glove box. Remove the damper from the glove box, then let the glove box hang down (see **GLOVE BOX REMOVAL/INSTALLATION**).
2. Disconnect the 7P connector (A) from the mode control motor (B). Remove the self-tapping screws and the mode control motor from the heater unit.

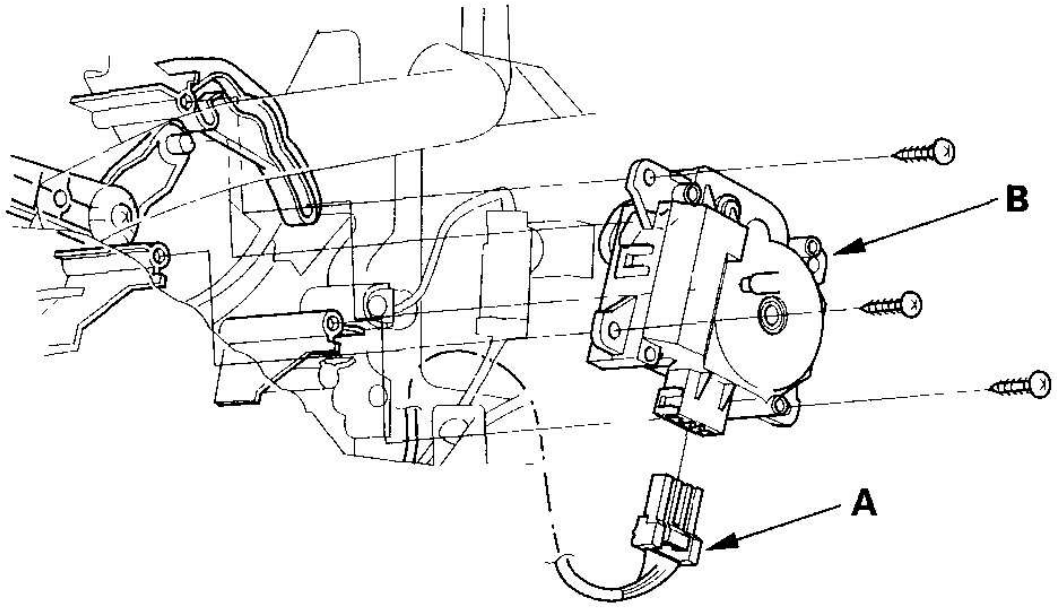


Fig. 74: Disconnecting Connector From Mode Control Motor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal. After installation, make sure the motor runs smoothly.

2-DOOR

1. Open the glove box. Remove the damper from the glove box, then let the glove

box hang down (see **GLOVE BOX REMOVAL/INSTALLATION**).

2. Disconnect the 10P connector (A) from the mode control motor (B). Remove the self-tapping screws and the mode control motor from the heater unit.

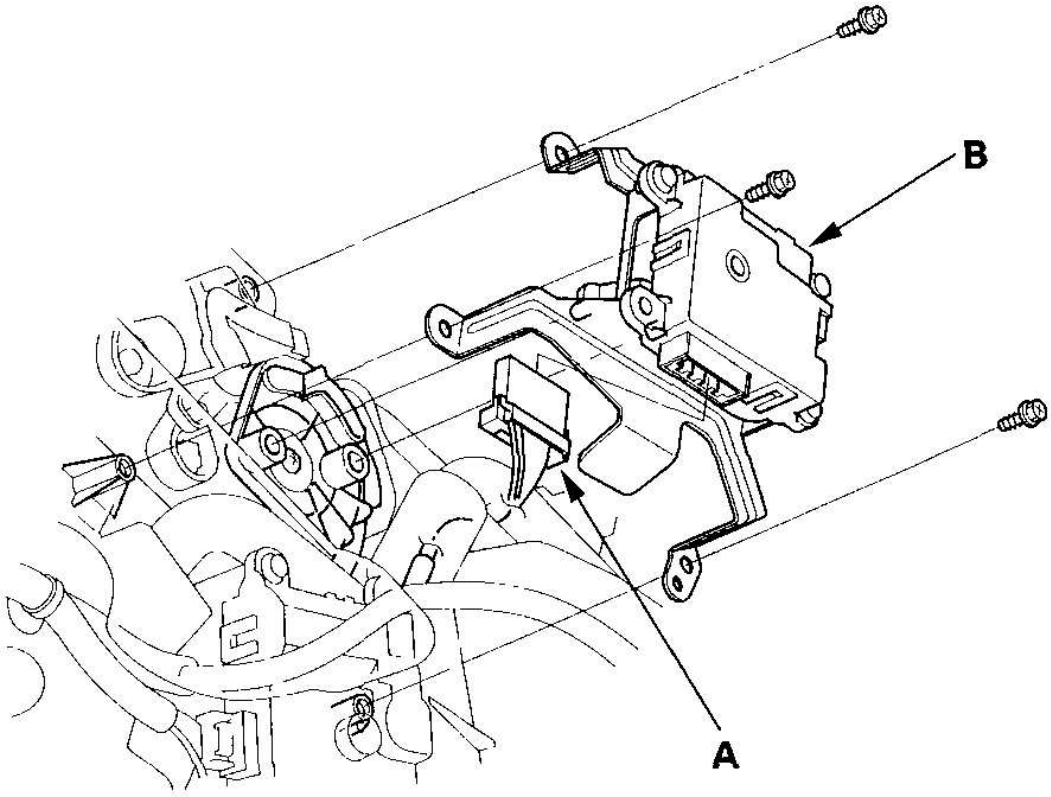


Fig. 75: Disconnecting Connector From Mode Control Motor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal. After installation, make sure the motor runs smoothly.

RECIRCULATION CONTROL MOTOR TEST

4-DOOR

1. Disconnect the 7P connector from the recirculation control motor.

NOTE: Incorrectly applying power and ground to the recirculation control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 1 terminal of the recirculation control motor, and ground the No. 5 or No. 7 terminals; the recirculation control motor should run smoothly. To avoid damaging the recirculation control motor, do not reverse power and ground. Disconnect the No. 5 or No. 7 terminals from ground; the recirculation control motor should stop at Fresh (when the No. 7 terminal is disconnected) or Recirculate (when the No. 5 terminal is disconnected). Don't cycle the recirculation control motor for a long time.

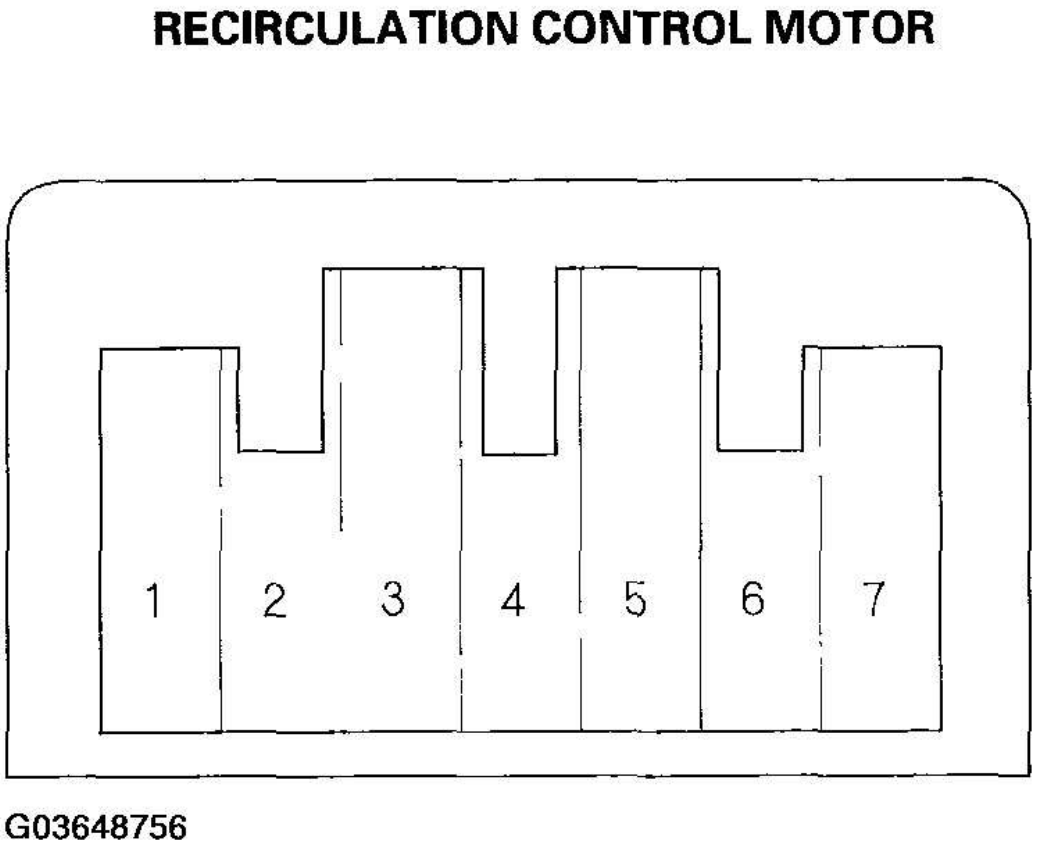


Fig. 76: Connecting Battery Power To No. 1 Terminal Of Recirculation Control Motor And Ground No. 5 Or No. 7 Terminals (4-Door)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the recirculation control motor did not run in step 2., remove it, then check the recirculation control linkage and doors for smooth movement.
   - If the linkage and doors move smoothly, replace the recirculation control motor.
   - If the linkage or doors stick or bind, repair them as needed.

2-DOOR

1. Disconnect the 5P connector from the recirculation control motor.

NOTE: Incorrectly applying power and ground to the recirculation control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 5 terminal of the recirculation control motor, and ground the No. 1 or No. 2 terminals; the recirculation control motor should run smoothly. To avoid damaging the recirculation control motor, do not reverse power and ground. Disconnect the No. 1 or No. 2 terminals from ground; the recirculation control motor should stop at Fresh (when the No. 1 terminal is disconnected) or Recirculate (when the No. 2 terminal is disconnected). Don't cycle the recirculation control motor for a long time.

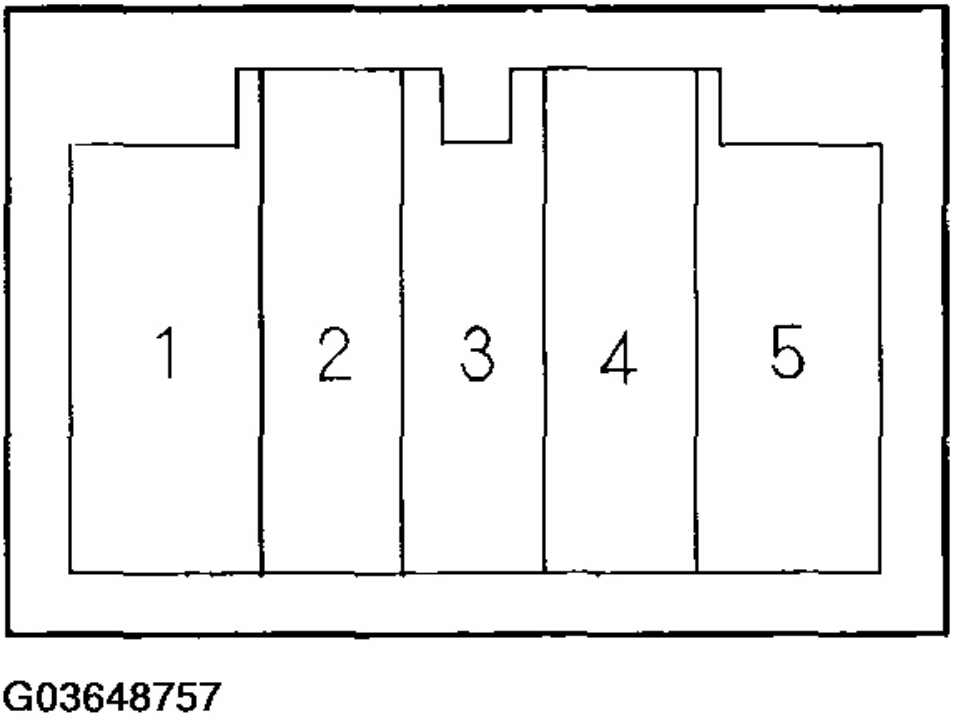


Fig. 77: Connecting Battery Power To No. 5 Terminal Of Recirculation Control Motor & Ground No. 1 Or No. 2 (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the recirculation control motor did not run in step 2, remove it, then check the recirculation control linkage and doors for smooth movement.
   - If the linkage and doors move smoothly, replace the recirculation control motor.
   - If the linkage or doors stick or bind, repair them as needed.

RECIRCULATION CONTROL MOTOR REPLACEMENT

4-DOOR

1. Open the glove box. Remove the damper from the glove box, then let the glove box hang down (see **GLOVE BOX REMOVAL/INSTALLATION**).
2. Disconnect the 7P connector (A) from the recirculation control motor (B). Remove the self-tapping screws and the recirculation control motor from the blower unit.

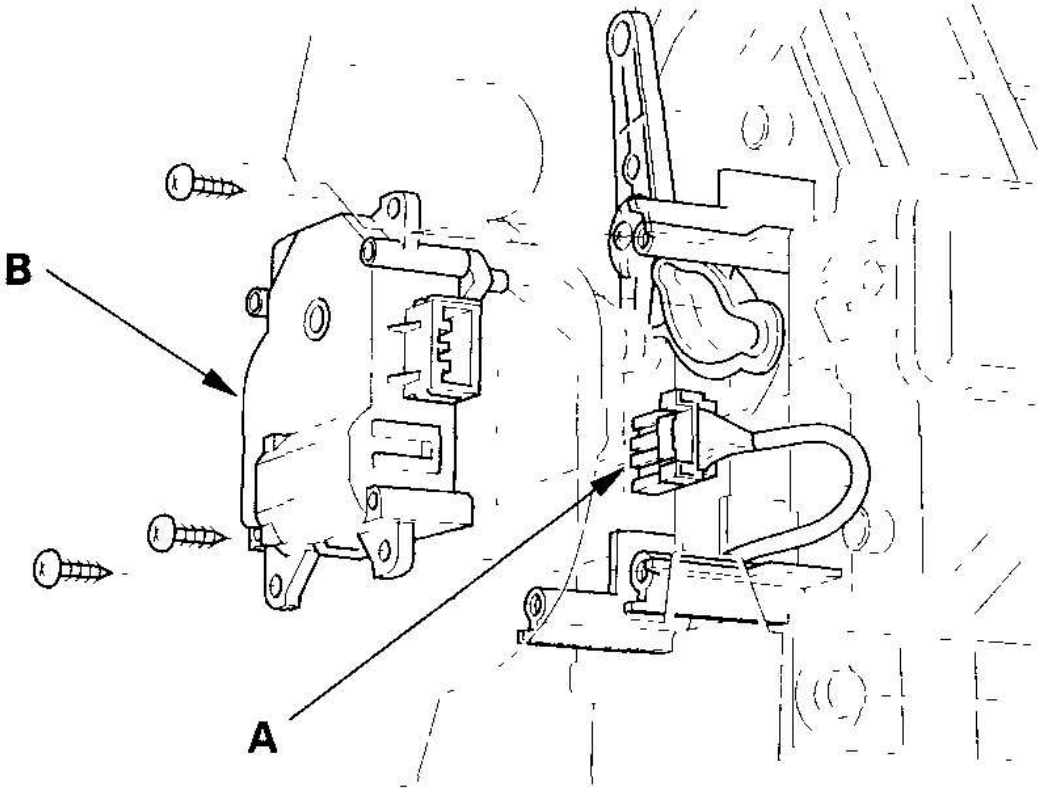


Fig. 78: Disconnecting Connector From Recirculation Control Motor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

2-DOOR

1. Open the glove box. Remove the damper from the glove box, then let the glove box hang down (see **GLOVE BOX REMOVAL/INSTALLATION**).
2. Disconnect the 5P connector (A) from the recirculation control motor (B). Remove the self-tapping screws and the recirculation control motor from the blower unit.

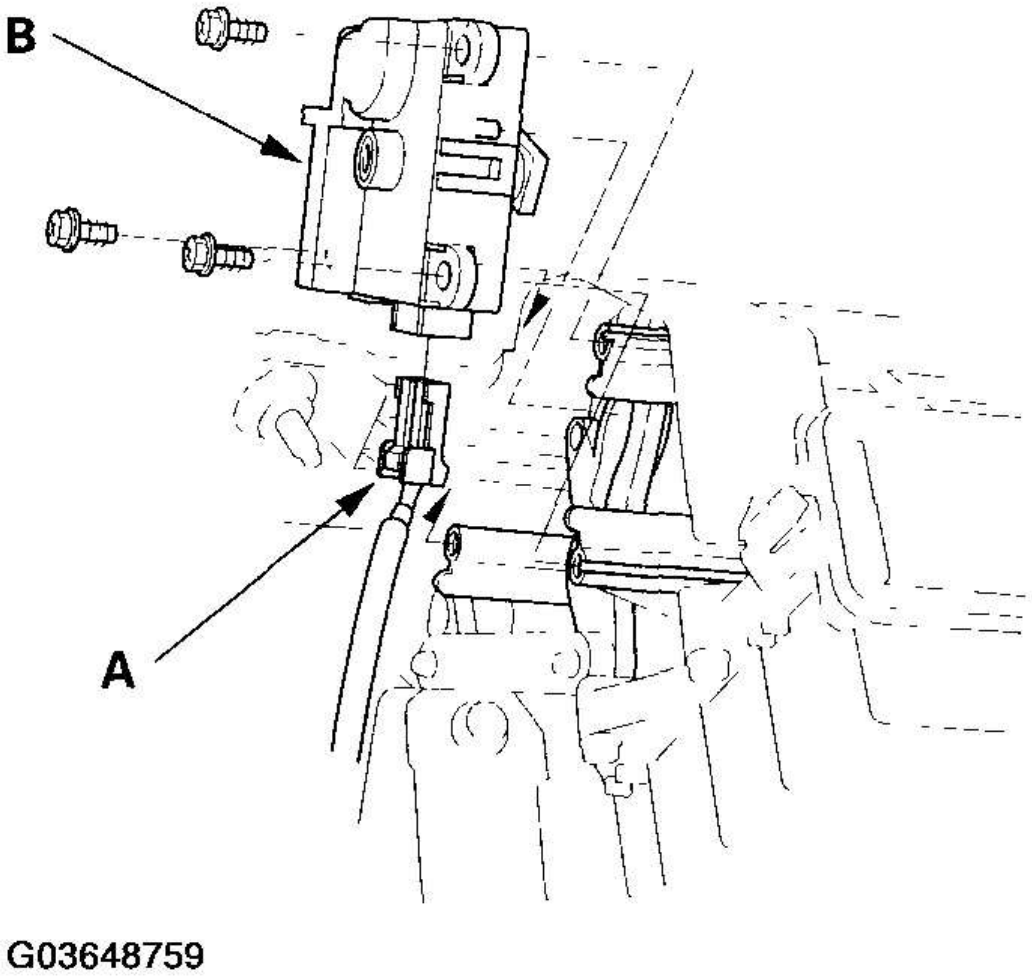


Fig. 79: Disconnecting Connector From Recirculation Control Motor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

EVAPORATOR TEMPERATURE SENSOR TEST

1. First, dip the sensor in ice water (32°F) (0°C) and measure the resistance

between its terminals.

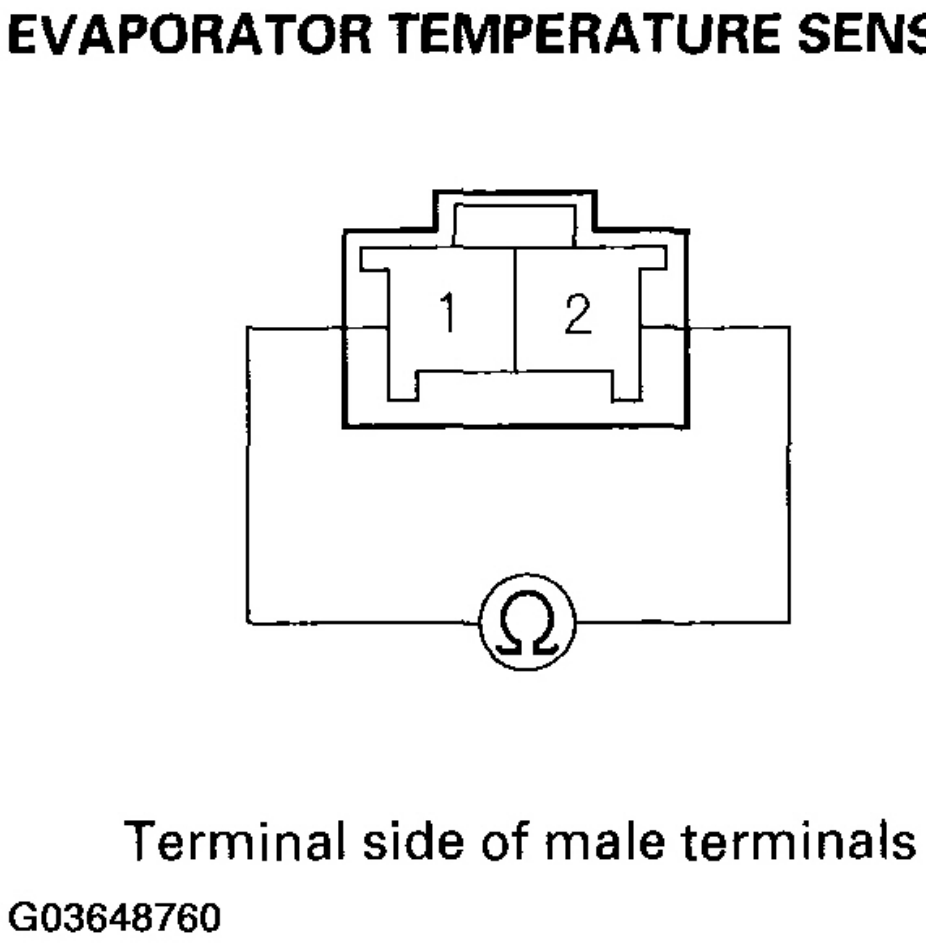


Fig. 80: Measuring Resistance Between Terminals Dipping Sensor In Ice Water
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Next, pour warm water on the sensor and check for a change in resistance.
3. Compare the resistance readings with the specifications in the graph shown in **Fig. 81**; the resistance should be within the specifications.

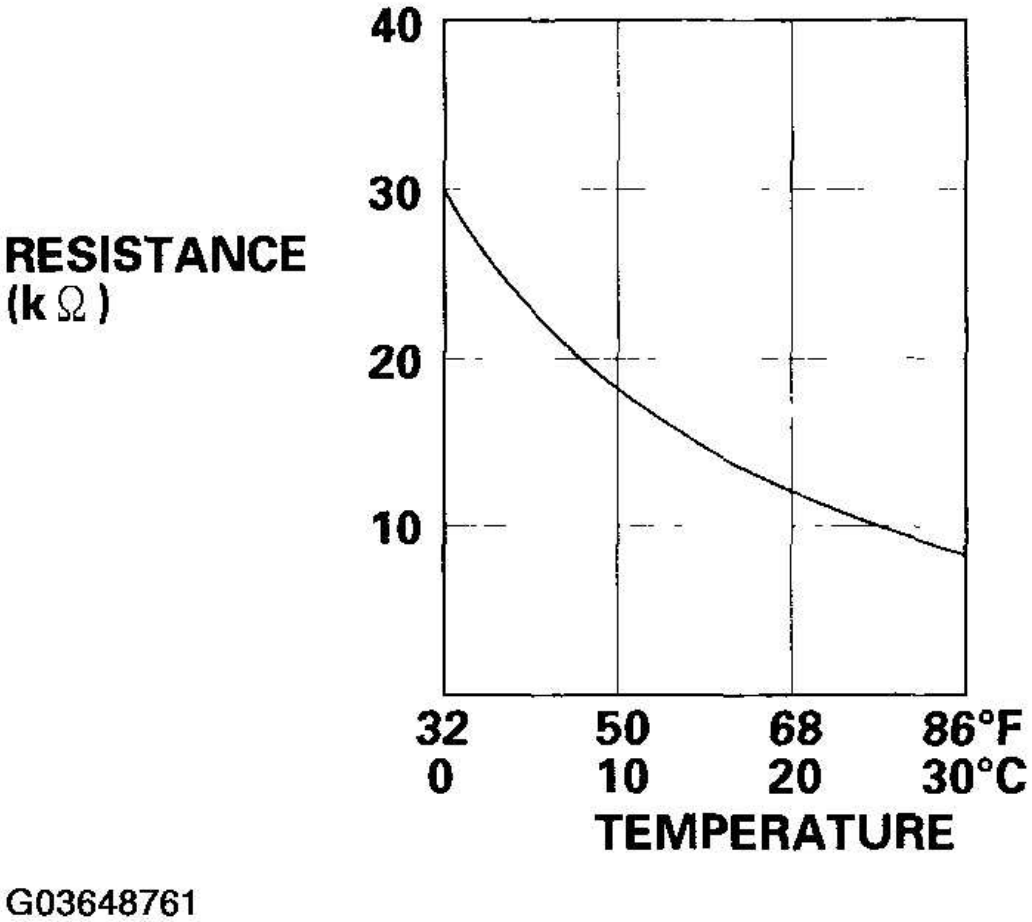


Fig. 81: Resistance To Temperature Graph
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EVAPORATOR TEMPERATURE SENSOR REPLACEMENT

1. Open the glove box. Remove the damper from the glove box, then let the glove box hang down (see **GLOVE BOX REMOVAL/INSTALLATION**).
2. Disconnect the 2P connector (A) from the evaporator temperature sensor (B), then remove the connector clip (C). Remove the self-tapping screw, and carefully pull out the evaporator temperature sensor.

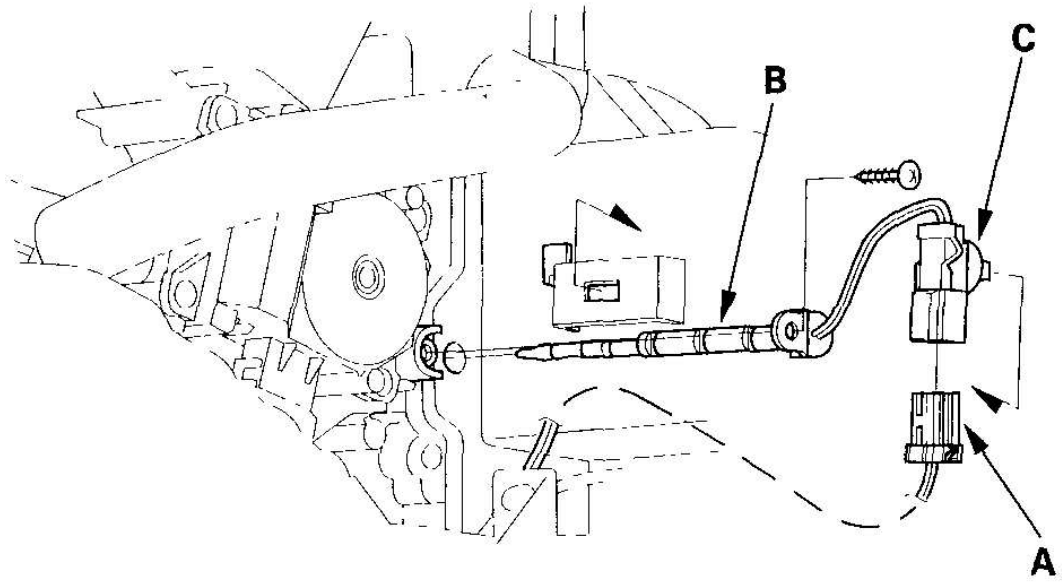


Fig. 82: Disconnecting Connector From Evaporator Temperature Sensor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

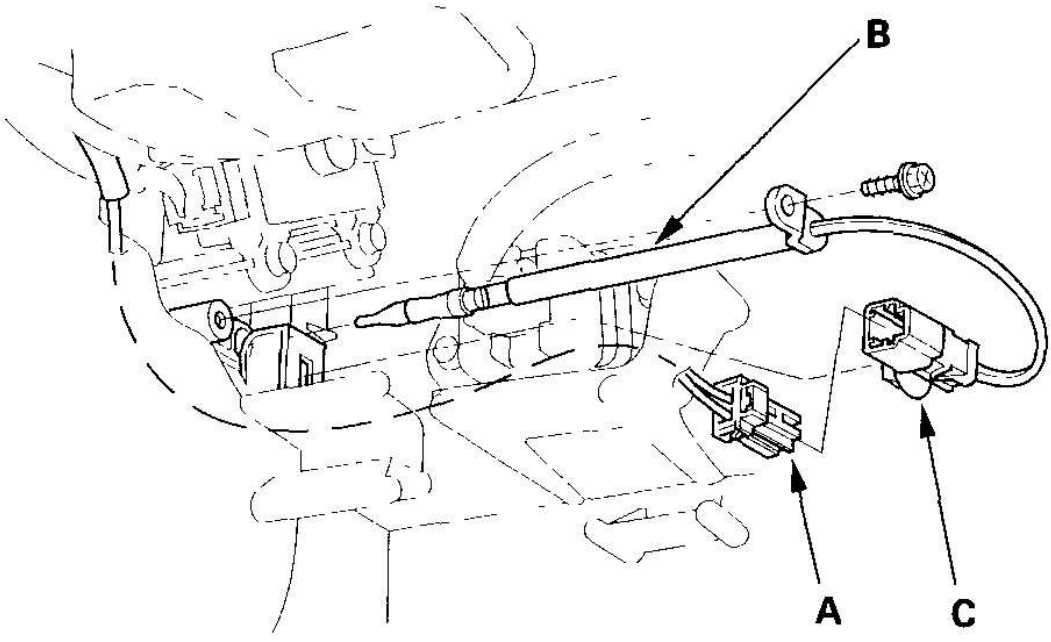


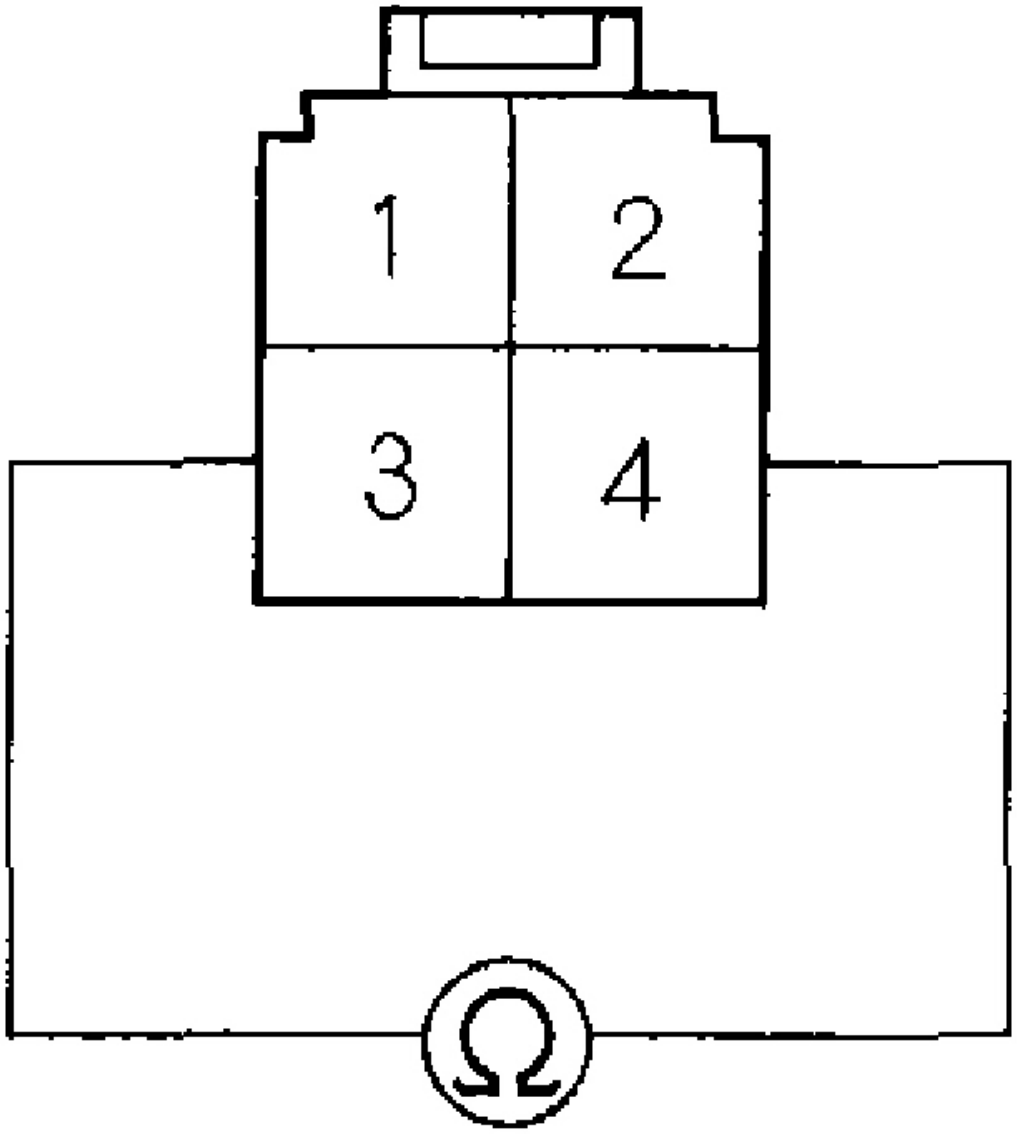
Fig. 83: Disconnecting Connector From Evaporator Temperature Sensor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the sensor in the reverse order of removal.

POWER TRANSISTOR TEST

1. Disconnect the 4P connector from the power transistor.
2. Measure the resistance between the No. 3 and No. 4 (4-door) or No. 1 and No. 2 (2-door) terminals of the power transistor. It should be about 1.4-1.5 k ohms.
   - If the resistance is within the specifications, go to step 3.
   - If the resistance is not within the specifications, replace the power transistor.

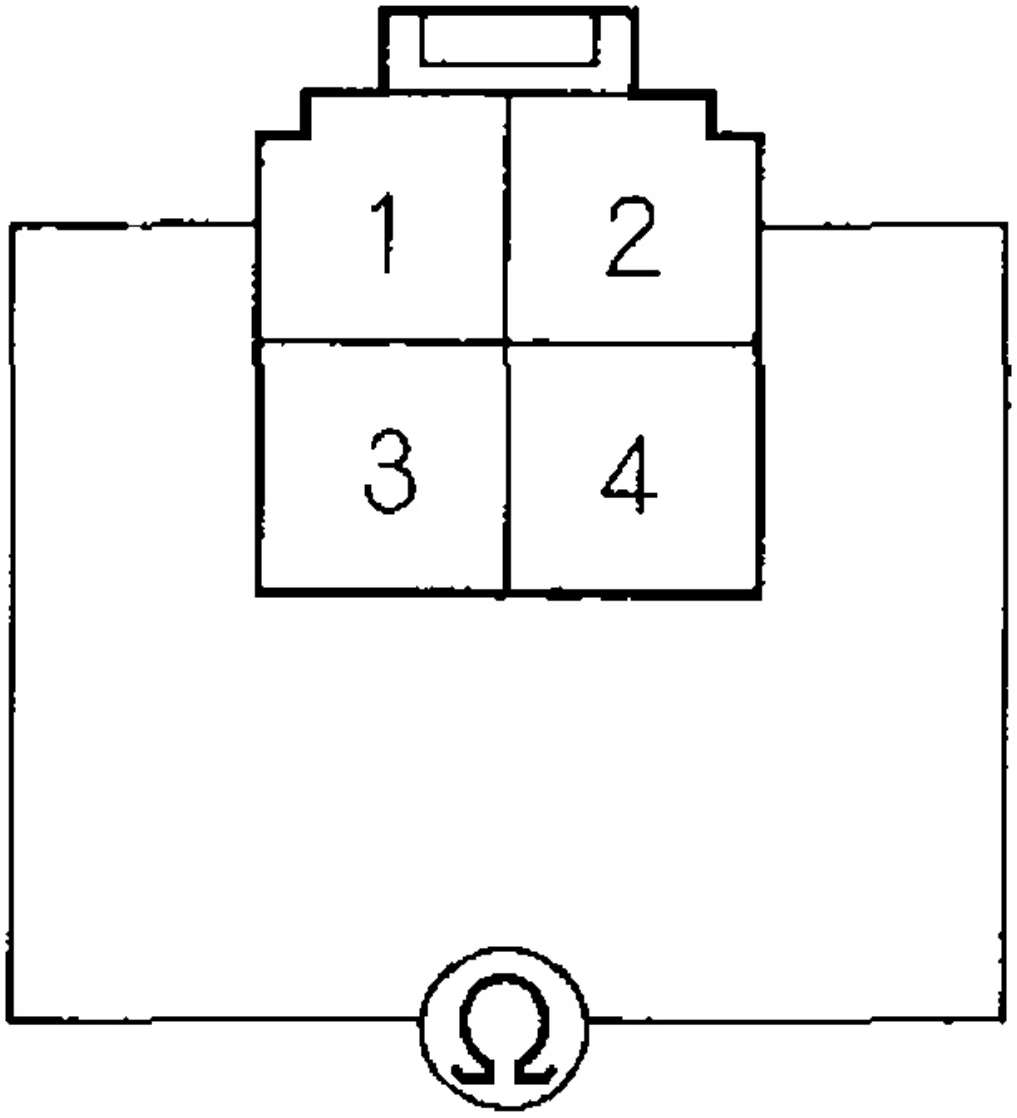
POWER TRANSISTOR



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Fig. 84: Measuring Resistance Between No. 3 And No. 4 Terminals Of Power Transistor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

POWER TRANSISTOR



G03648765

Fig. 85: Measuring Resistance Between No. 1 And No. 2 Terminals Of Power Transistor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Carefully release the lock tab on the No. 1 (4-door) or No. 4 (2-door) terminal (BLU/YEL) (A) in the 4P connector, then remove the terminal and insulate it from body ground.

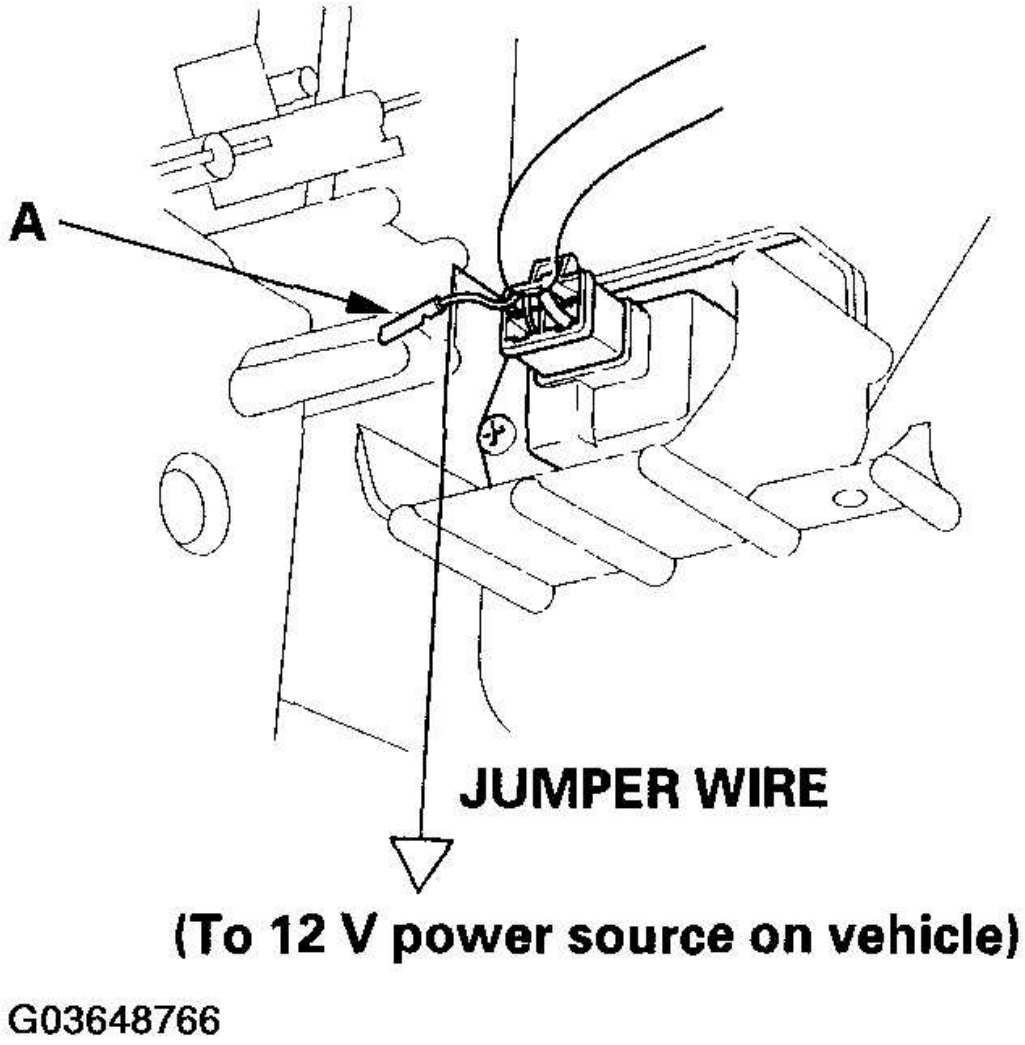


Fig. 86: Releasing Lock Tab No. 1 Terminal In 4P Connector (4-Door)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

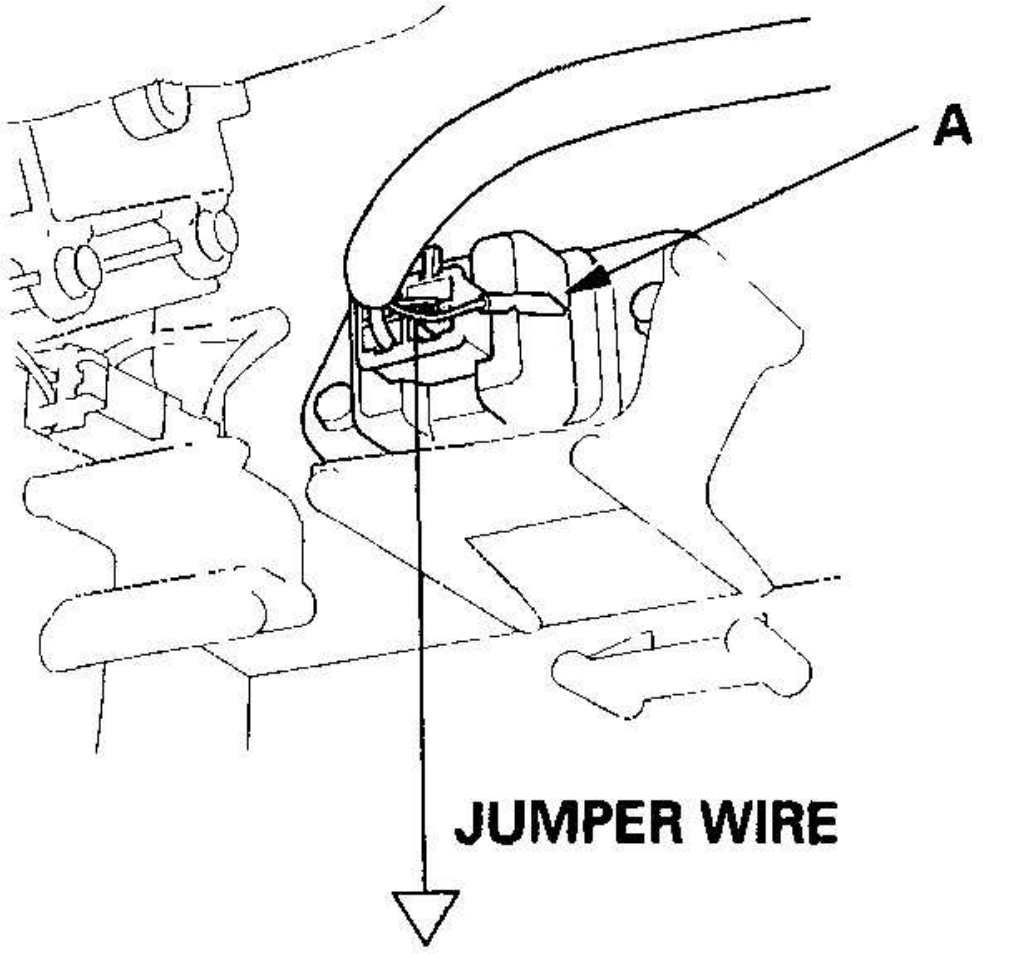


Fig. 87: Releasing Lock Tab No. 4 Terminal In 4P Connector (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Reconnect the 4P connector to the power transistor.
5. Supply 12 volts to the No. 1 (4-door) or No. 4 (2-door) cavity of the power

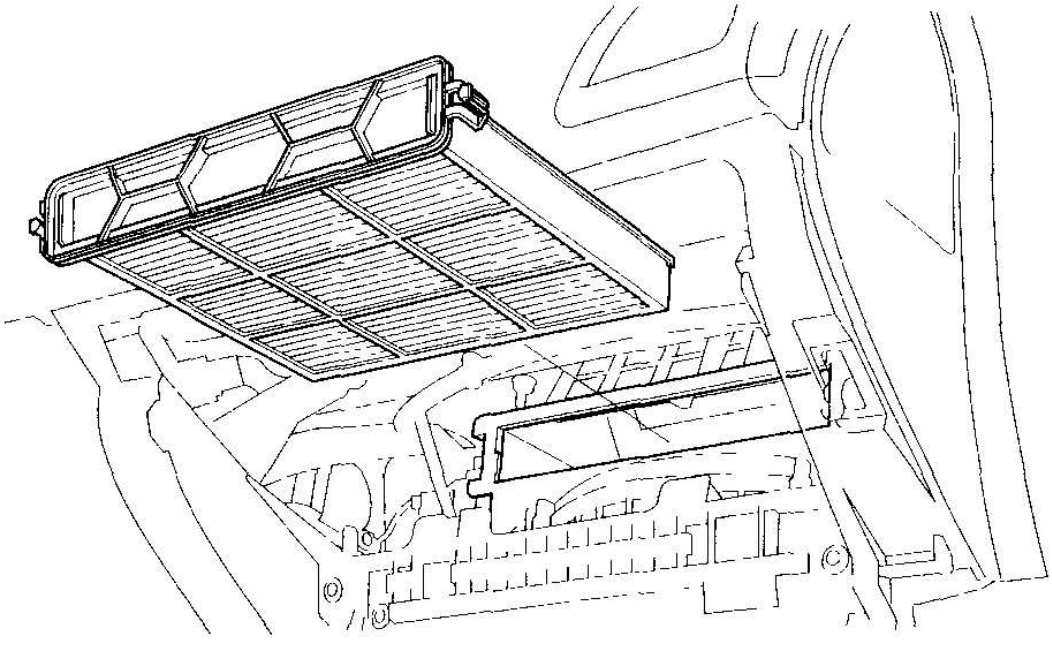
transistor connector with a jumper wire.

6. Turn the ignition switch ON (II), and check that the blower motor runs.
   - If the blower motor does not run, replace the power transistor.
   - If the blower motor runs, the power transistor is OK.

DUST AND POLLEN FILTER REPLACEMENT

The dust and pollen filter should be replaced every 30,000 miles (48,000 km) or 24 months, whichever comes first. Replace the filter more often if the airflow is less than usual, or if the vehicle is driven in areas that have high concentrations of soot from industry or diesel powered vehicles.

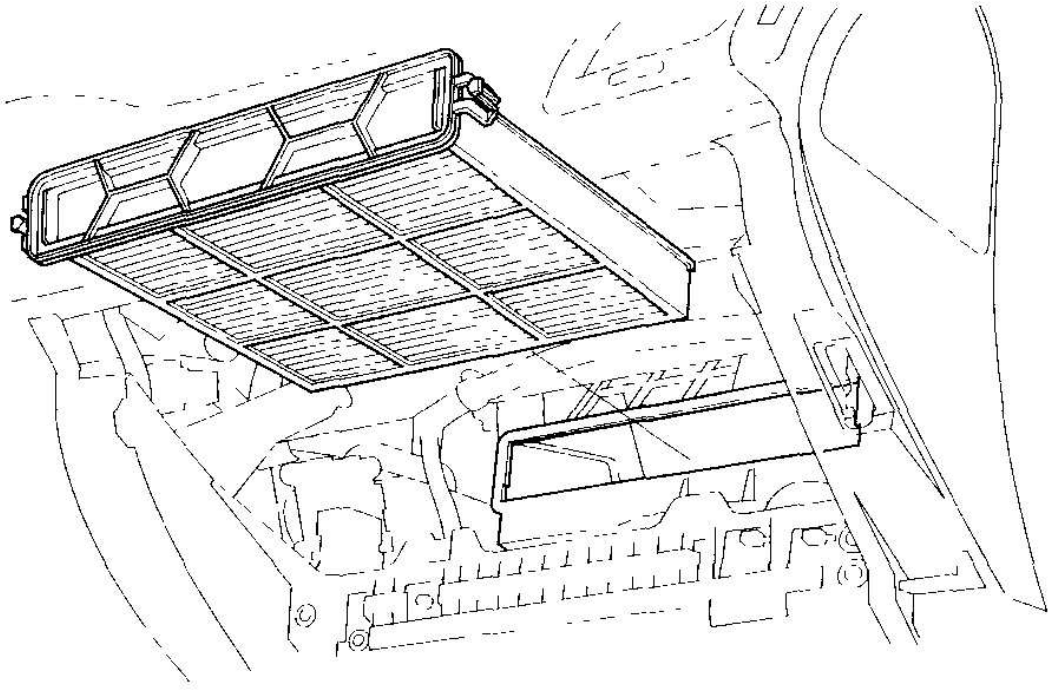
1. Open the glove box. Remove the damper from the glove box then let the glove box hang down (see **GLOVE BOX REMOVAL/INSTALLATION**).
2. Remove the dust and pollen filter assembly from the evaporator case.



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Fig. 88: Removing Dust And Pollen Filter Assembly From Evaporator

Case (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 89: Removing Dust And Pollen Filter Assembly From Evaporator Case (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the filter (A) from the housing (B), and replace the filter.

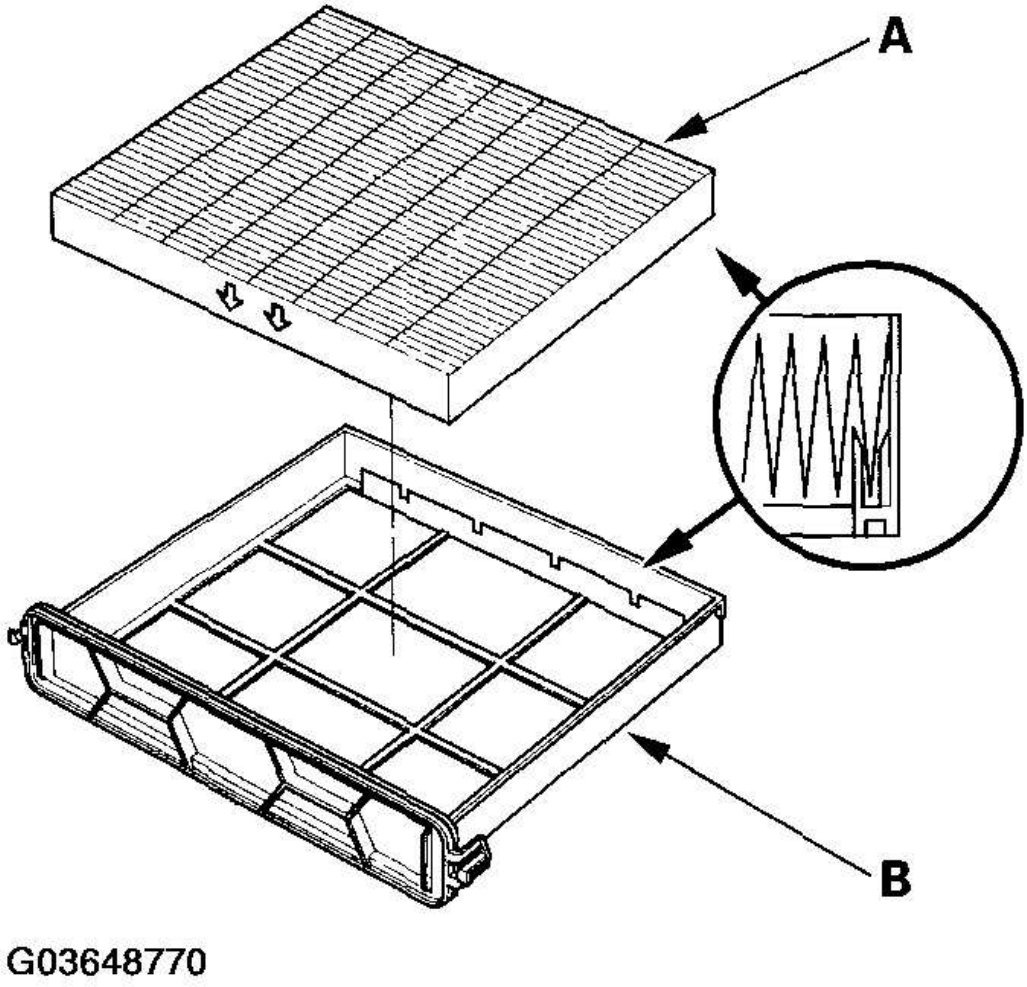


Fig. 90: Removing Filter From Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the filter in the reverse order of removal.

   Make sure that there is no air leaking out of the evaporator.

BLOWER UNIT REMOVAL AND INSTALLATION

4-DOOR

1. Remove the glove box (see **GLOVE BOX REMOVAL/INSTALLATION**), and the passenger's kick panel (see **4-DOOR - FRONT DOOR SILL AREA**).
2. Remove the connector clips (A), the wire harness clip (B), and bolt. Cut the plastic cross brace (C) in the glove box opening with diagonal cutters in the area shown in **Fig. 91**. Retain these parts to be reinstalled later.

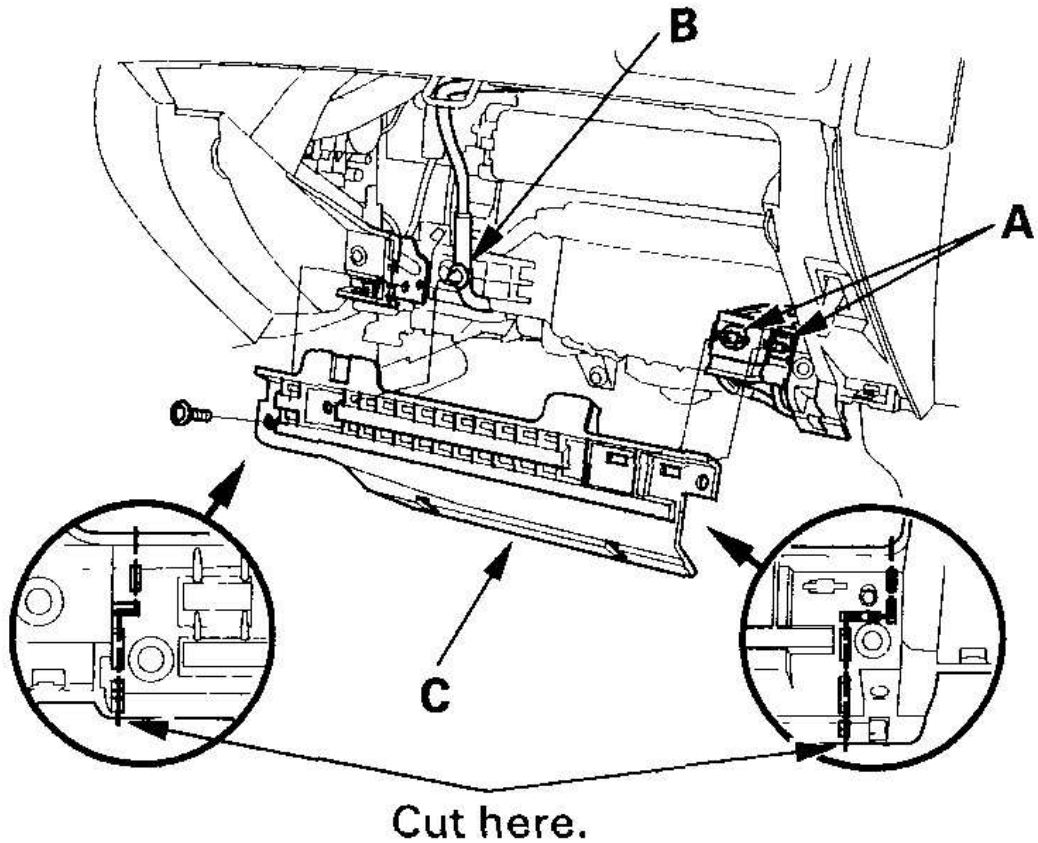


Fig. 91: Cutting Plastic Cross Brace With Diagonal Cutters
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the connectors (A) from the blower motor, and the recirculation control motor, then remove the wire harness clip (B). Remove the mounting

nuts, the mounting bolts and the blower unit (C).

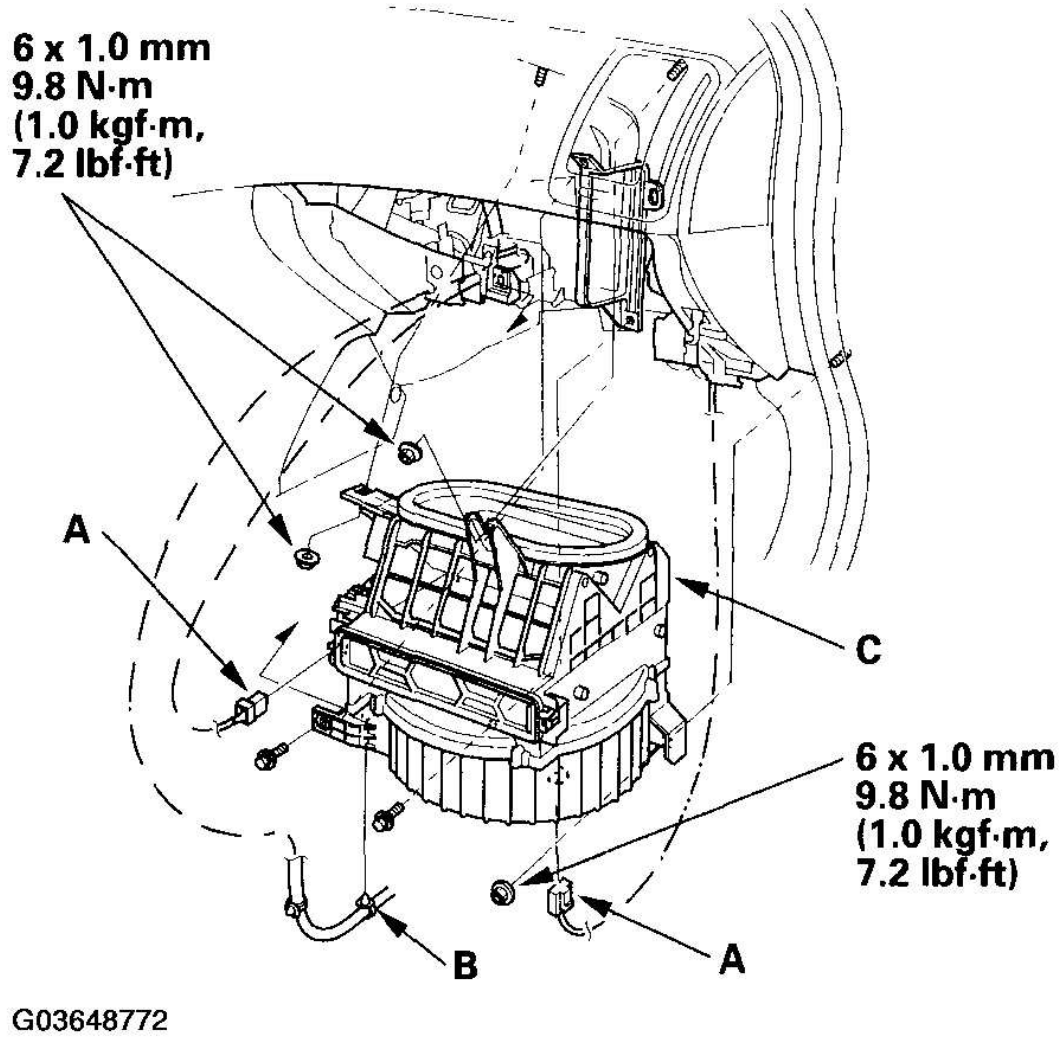


Fig. 92: Disconnecting Connectors From Blower Motor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the unit in the reverse order of removal.

   Make sure that there is no air leakage.

2-DOOR

1. Remove the glove box (see **GLOVE BOX REMOVAL/INSTALLATION**), and the passenger's kick panel (see **TRIM REMOVAL/INSTALLATION - DOOR AREA**).
2. Remove the connector clips (A), the wire harness clip (B), and bolt. Cut the plastic cross brace (C) in the glove box opening with diagonal cutters in the area shown in **Fig. 93**. Retain these parts to be reinstalled later.

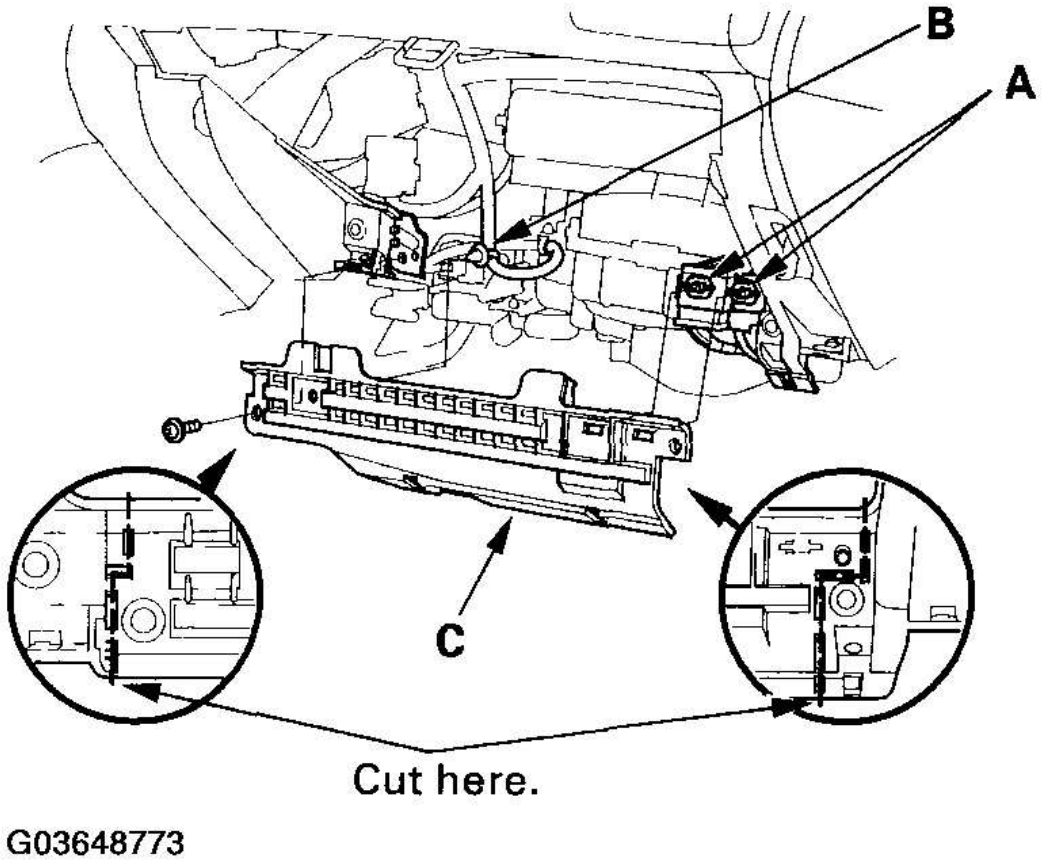


Fig. 93: Cutting Plastic Brace With Diagonal Cutters
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the connectors (A) from the blower motor, and the recirculation control motor. Remove the mounting nuts, the mounting bolts and the blower unit (B).

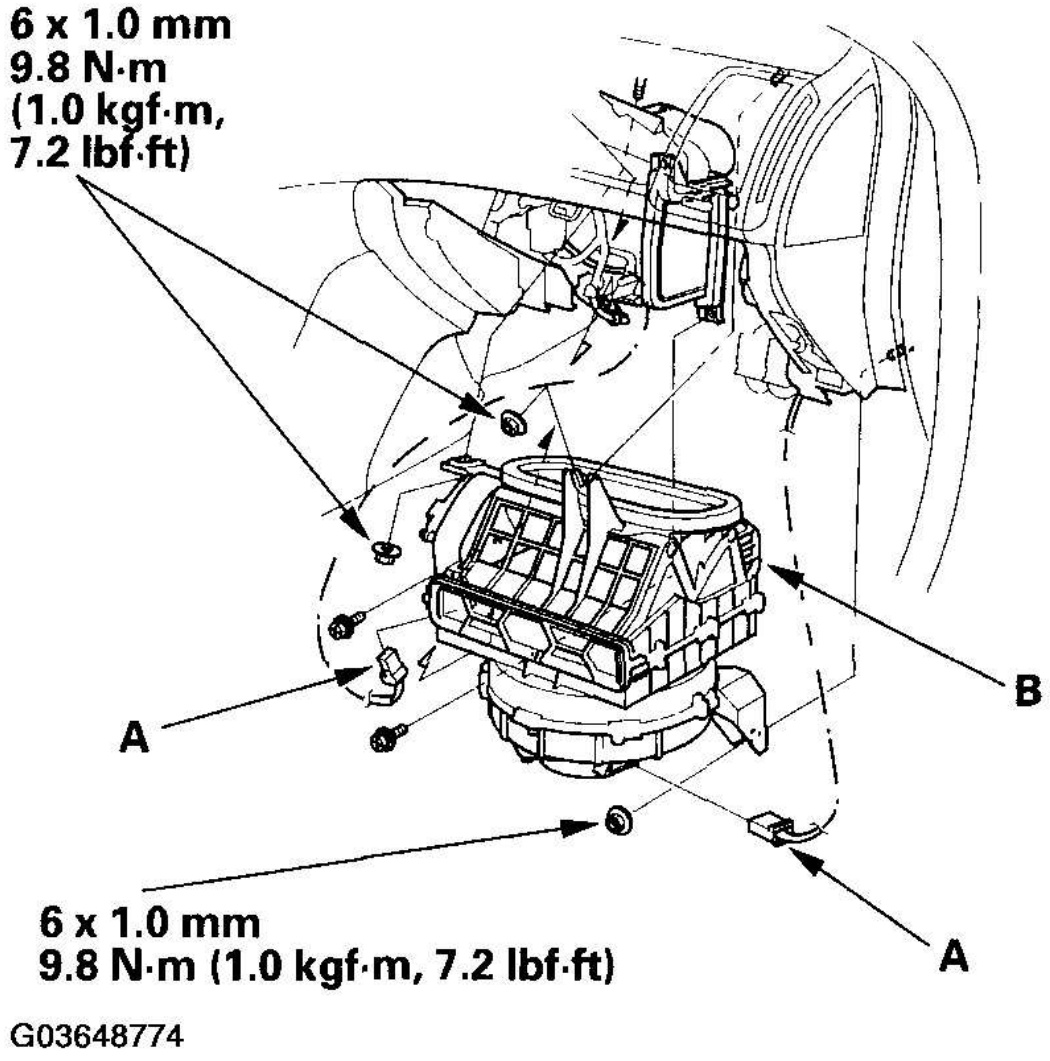


Fig. 94: Disconnecting Connectors From Blower Motor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the unit in the reverse order of removal.

   Make sure that there is no air leakage.

BLOWER UNIT COMPONENT REPLACEMENT

Note these items when overhauling the blower unit:

- The recirculation control motor (A), blower motor cooling hose (B) (2-door), blower motor cover (C) (2-door), the blower motor (D) and the dust and pollen filter (E) can be replaced without removing the blower unit.
- Before reassembly, make sure the recirculation control linkage and doors move smoothly without binding.
- After reassembly, make sure the recirculation control motor runs smoothly, 4-door (see **4-door**) or 2-door (see **2-door**).

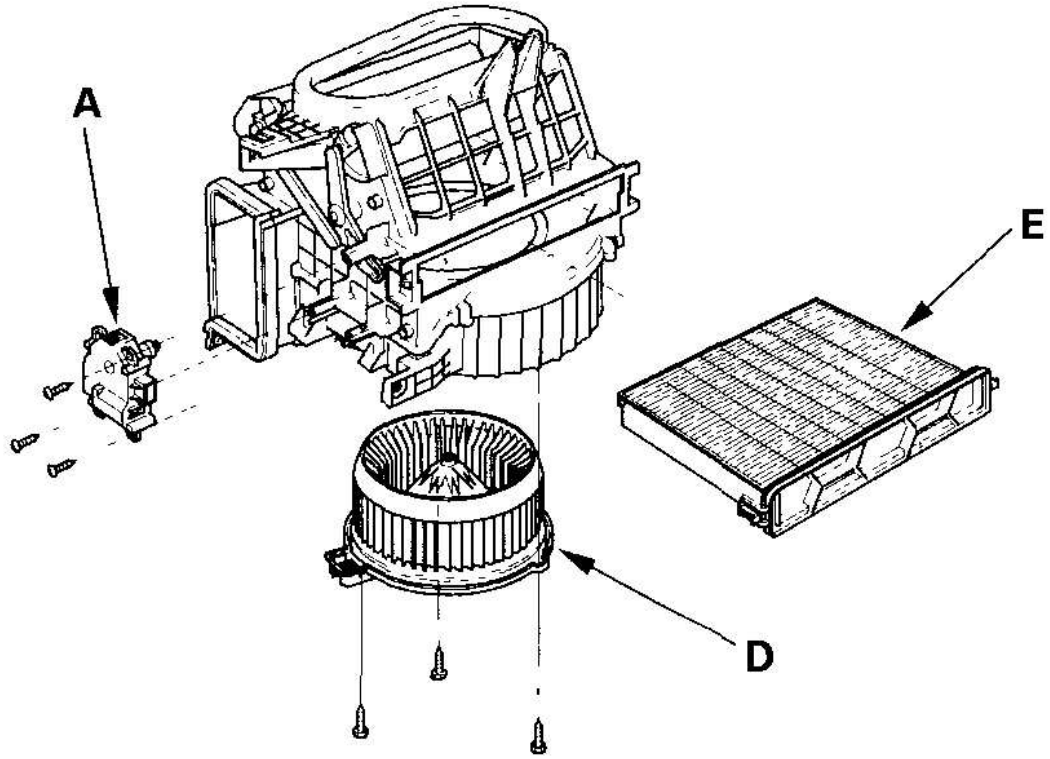


Fig. 95: Replacing Blower Unit Component (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2-door:

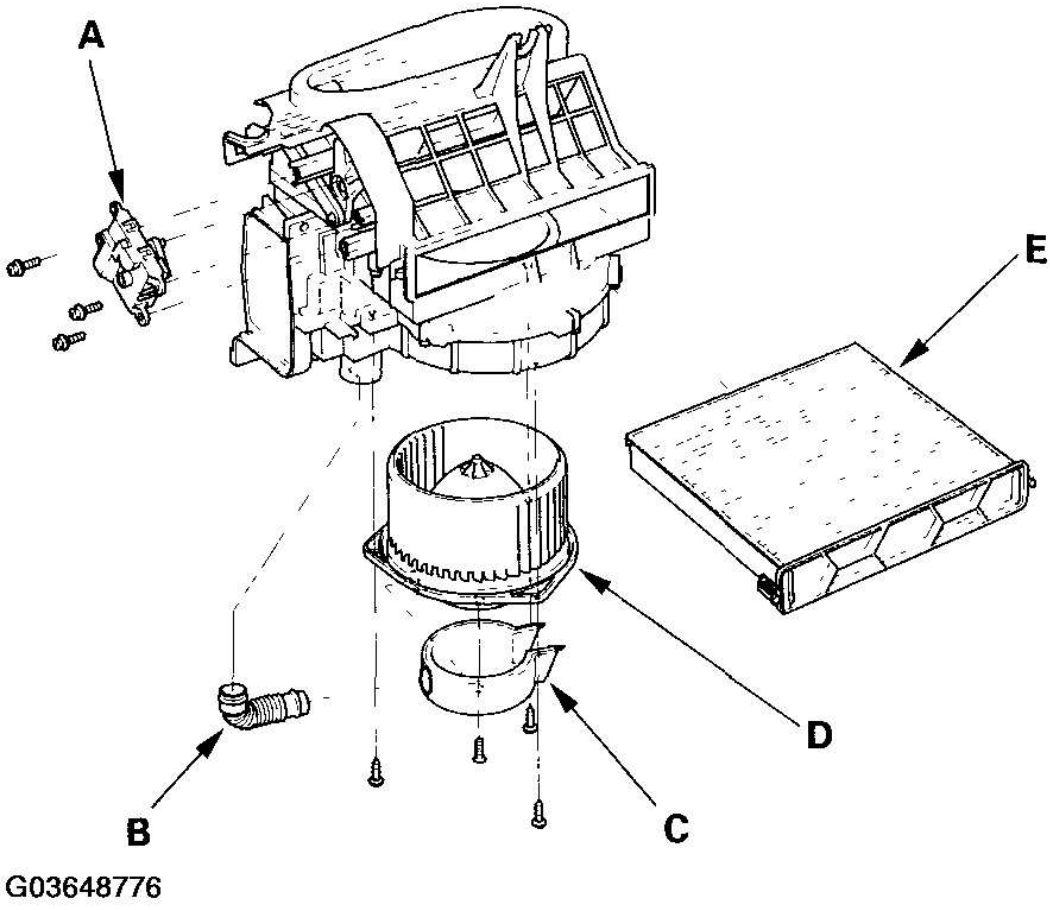


Fig. 96: Replacing Blower Unit Component (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

HEATER UNIT/CORE REPLACEMENT

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs of service.

1. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the frequencies for the radio's preset buttons.
2. Disconnect the negative cable from the battery.
3. With air conditioning; disconnect the suction and receiver lines from the

evaporator core, 4-door (see **4-DOOR**) or 2-door (see **2-DOOR**).

4. From under the hood, open the cable clamp (A), then disconnect the heater valve cable (B) from the heater valve arm (C). Turn the heater valve arm to the fully opened position as shown in **Fig. 97**.

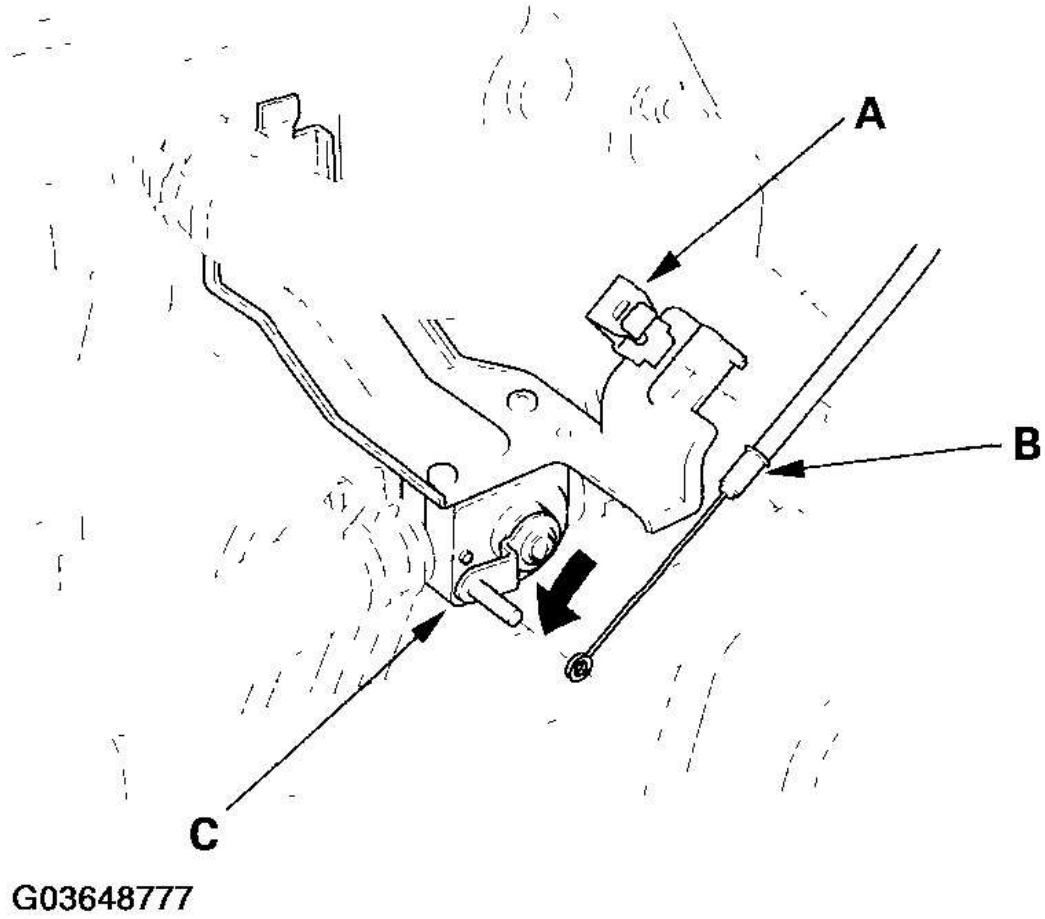


Fig. 97: Disconnecting Heater Valve Cable From Heater Valve Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. When the engine is cool, drain the engine coolant from the radiator (see **COOLANT CHECK**).
6. Slide the hose clamps (A) back, then disconnect the inlet heater hose (B) and the outlet heater hose (C) from the heater unit. Engine coolant will run out

when the hoses are disconnected; drain it into a clean drip pan. Be sure not to let coolant spill on the electrical parts or the painted surfaces. If any coolant spills, rinse it off immediately.

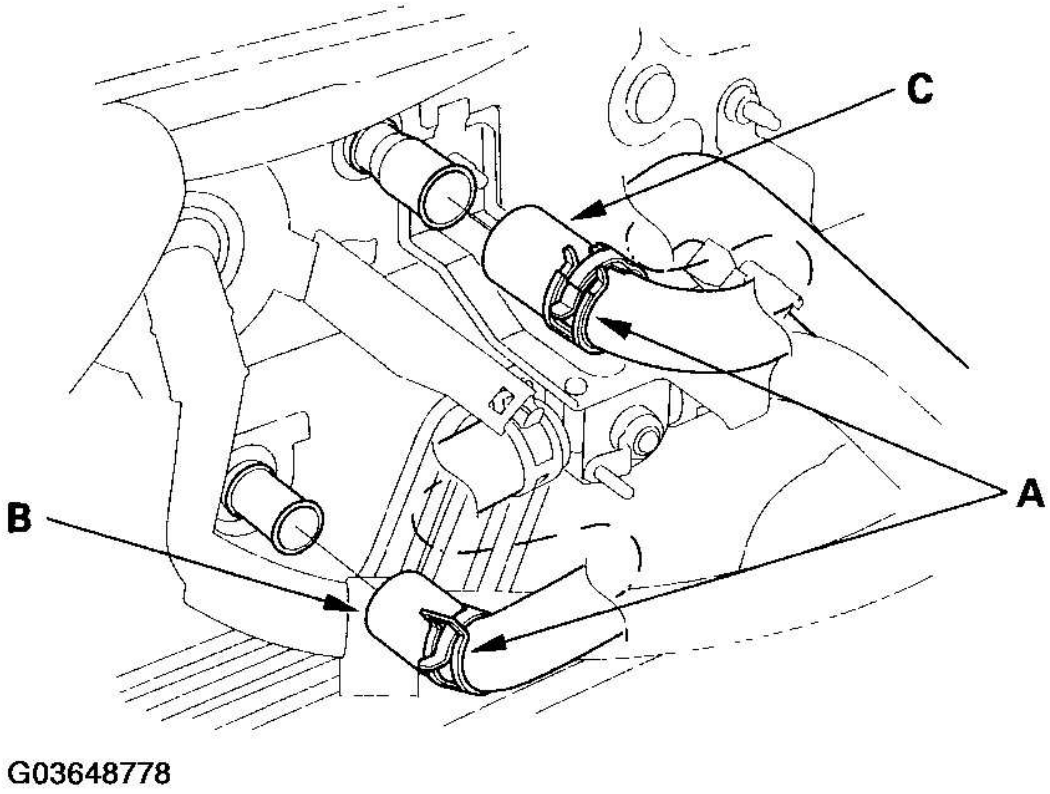


Fig. 98: Disconnecting Hose Clamps
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the mounting nut from the heater unit.

   Take care not to damage or bend the fuel lines and the brake lines, etc.

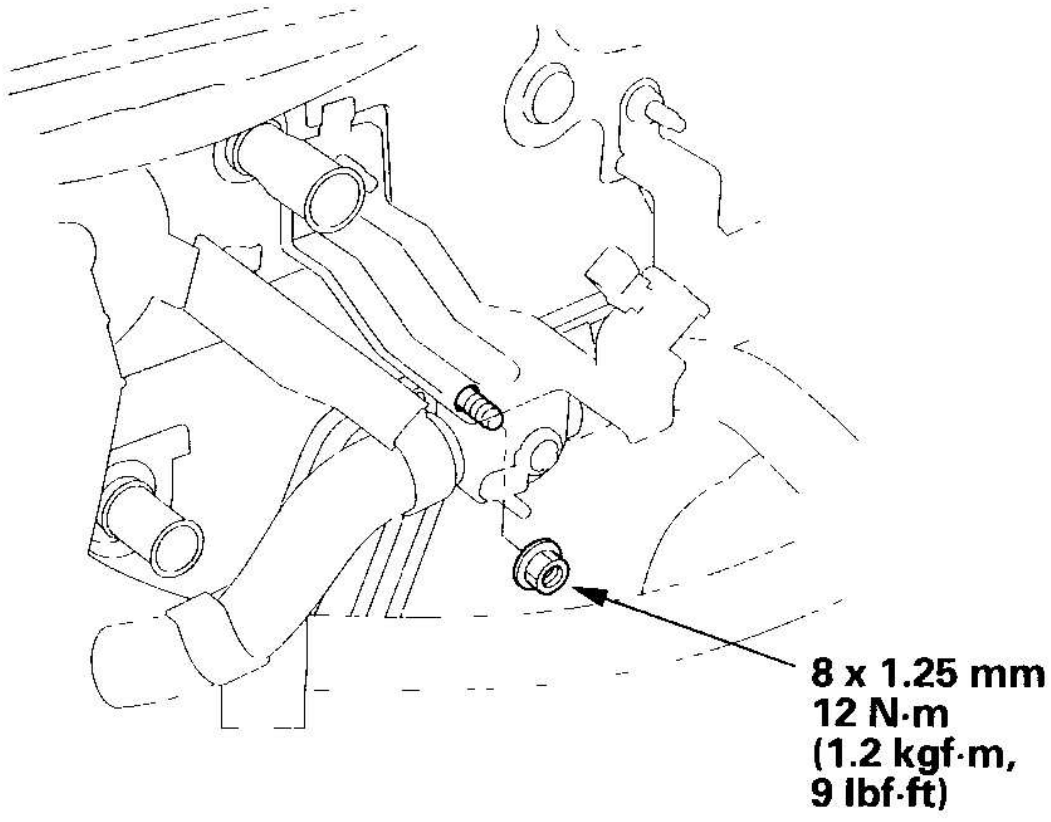


Fig. 99: Removing Mounting Nut From Heater Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the dashboard (see **DASHBOARD/STEERING HANGER BEAM REMOVAL/INSTALLATION**).
9. Disconnect the connectors (A) from the air mix control motor, the evaporator temperature sensor, the power transistor, and the recirculation control motor, then remove the wire harness clips (B), the connector clip (C) and the wire harness (D). Remove the heater ducts (E), then remove the mounting nuts and the blower-heater unit (F).

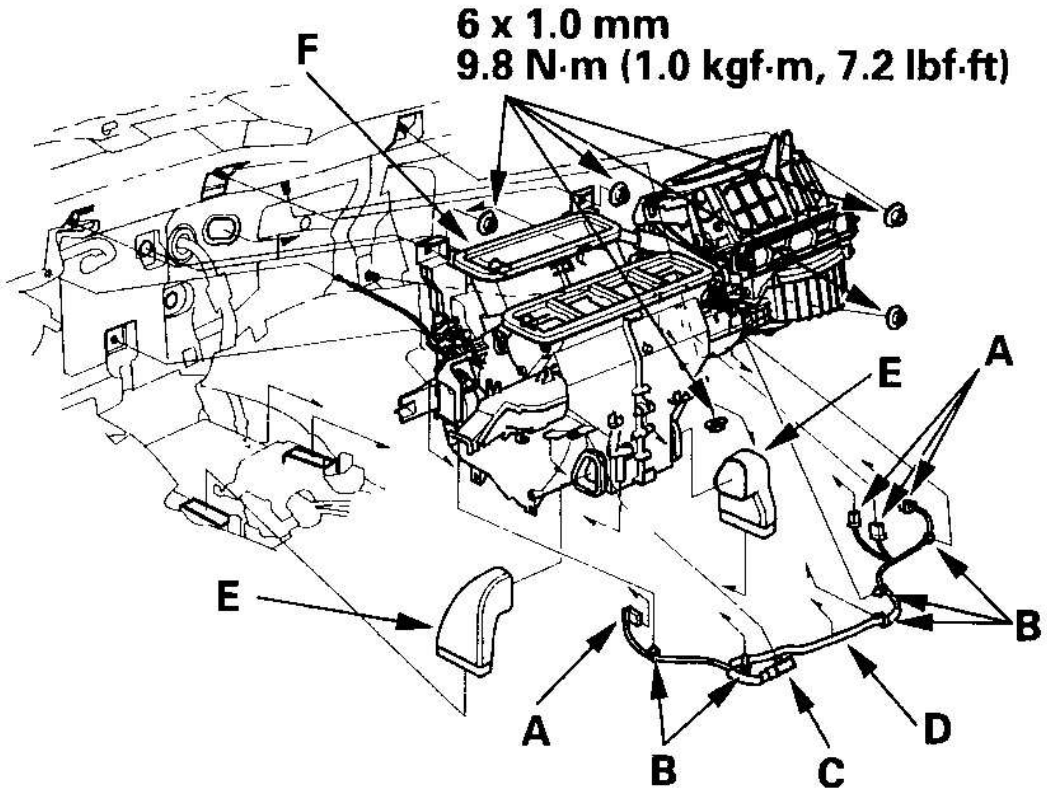


Fig. 100: Disconnecting Connectors From Air Mix Control Motor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

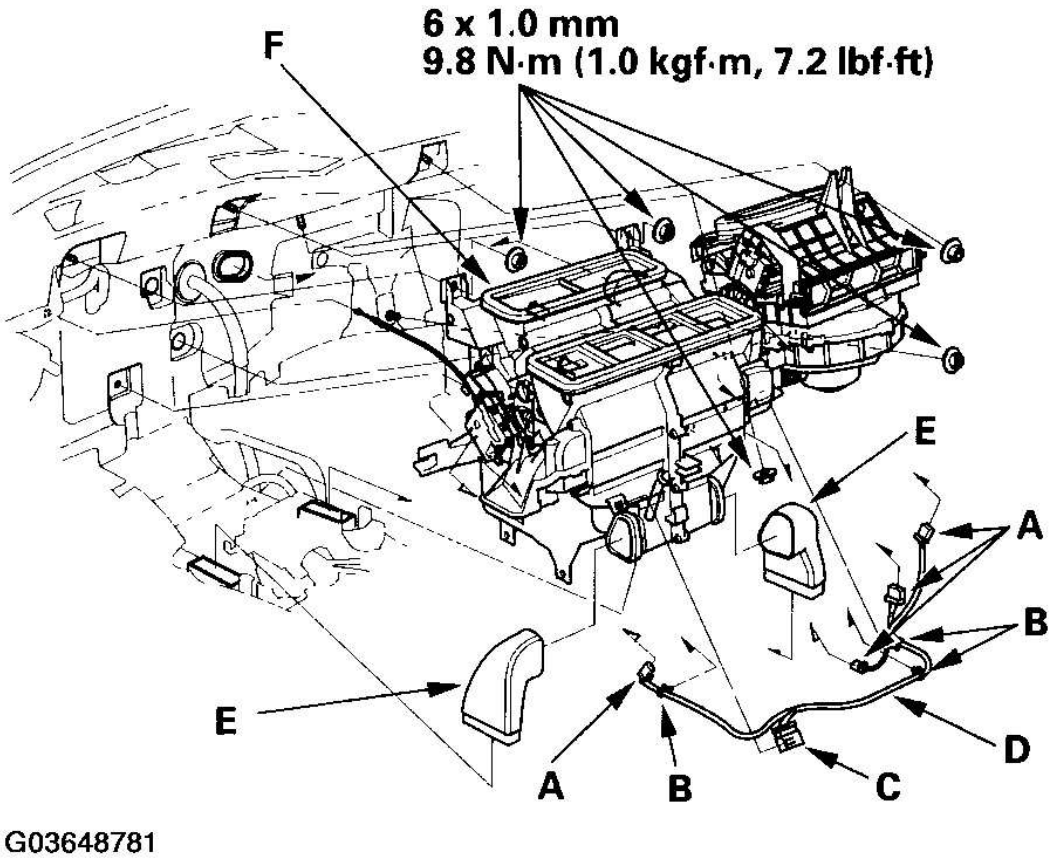


Fig. 101: Disconnecting Connectors From Air Mix Control Motor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the self-tapping screws, the evaporator temperature sensor (C) and the joint duct A, then remove the self-tapping screws and the joint duct B (4-door). Remove the self-tapping screws, then remove the passenger's heater outlet (D), and the heater core cover (E). Remove the self-tapping screws and the mode control motor (F) (2-door). Remove the self-tapping screws, the heater pipe brackets (G), the grommets (H) and carefully pull out the heater core (I) so you don't bend the inlet and outlet pipes.

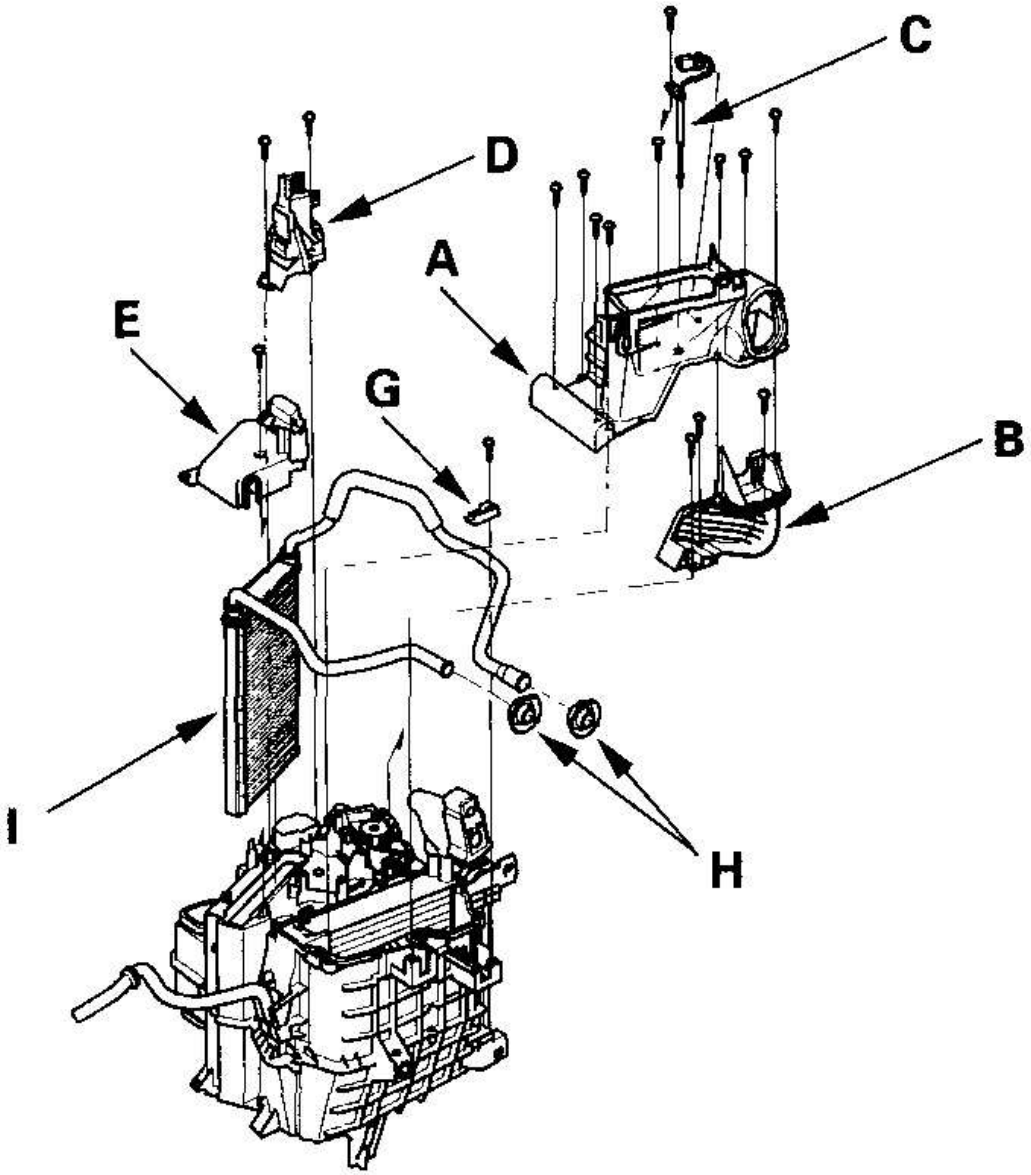


Fig. 102: Removing Self-Tapping Screws, Evaporator Temperature Sensor And Joint Duct A (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

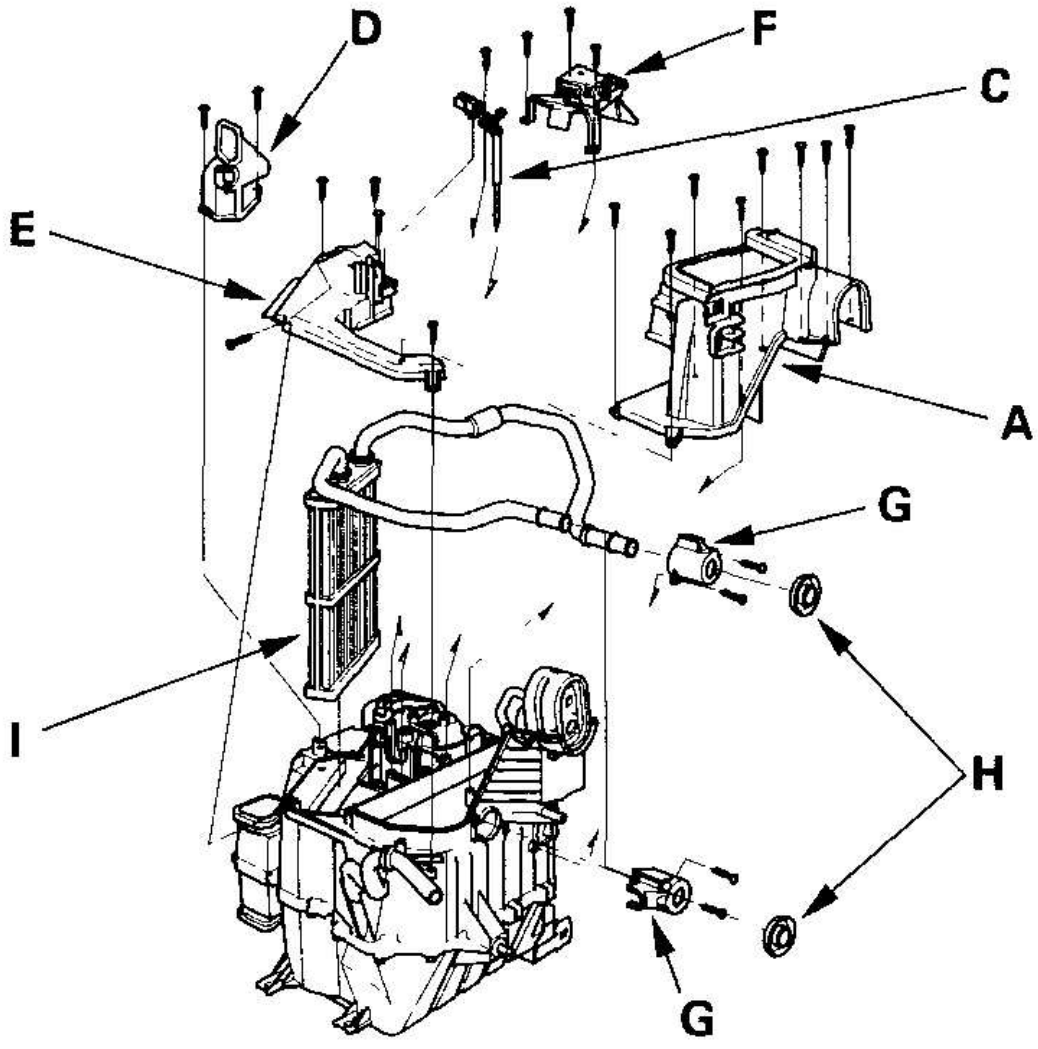


Fig. 103: Removing Self-Tapping Screws, Evaporator Temperature Sensor And Joint Duct A (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the heater core and the evaporator core (with A/C) in the reverse order of removal.
12. Install the heater unit in the reverse order of removal, and note these items:
    - Do not interchange the inlet and outlet heater hoses, and install the hose

clamps securely.

- Refill the cooling system with engine coolant (see **COOLANT CHECK**).
- Adjust the heater valve cable (see **HEATER VALVE CABLE ADJUSTMENT**).
- Make sure that there is no coolant leakage.
- Make sure that there is no air leakage.
- With air conditioning: refer to evaporator core replacement (see **EVAPORATOR CORE REPLACEMENT**).
- Reset the power window control unit (see **RESETTING THE POWER WINDOW CONTROL UNIT**).
- Enter the anti-theft codes for the radio and the navigation system, then enter the customer's radio station presets.

HEATER VALVE CABLE ADJUSTMENT

1. From under the hood, open the cable clamp (A), then disconnect the heater valve cable (B) from the heater valve arm (C).

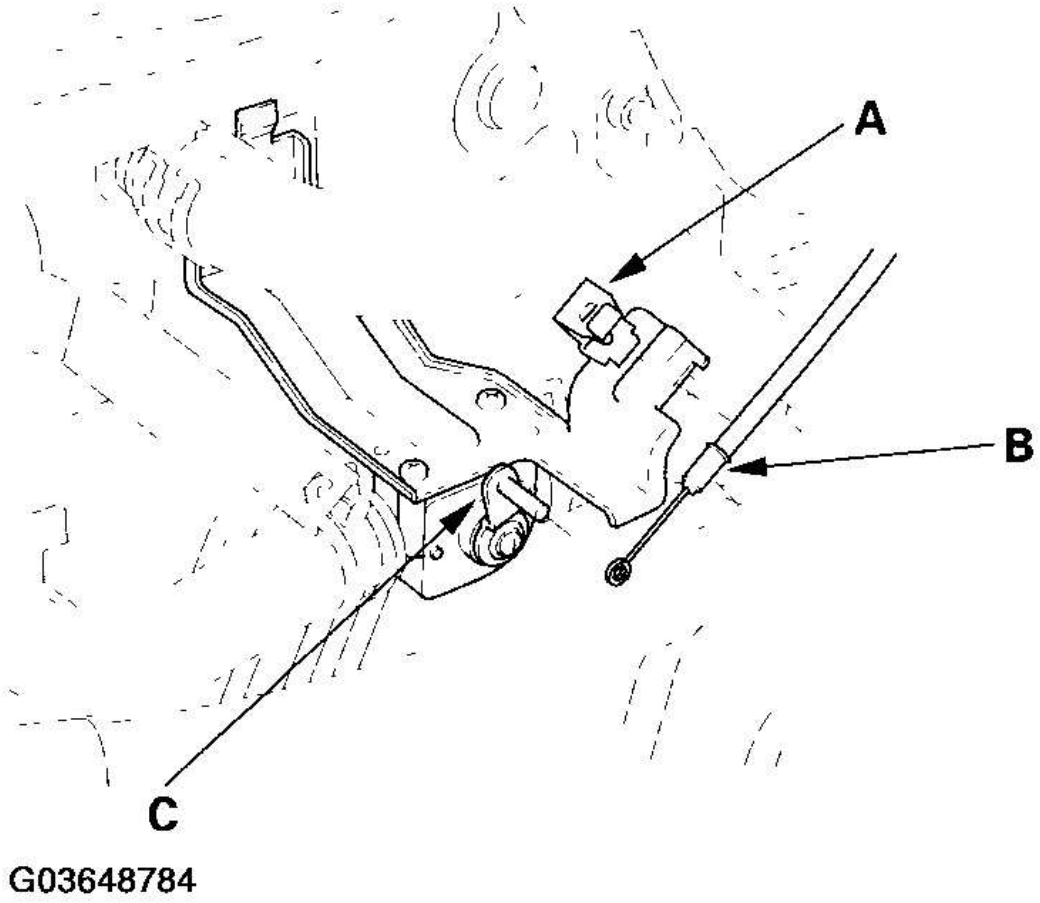


Fig. 104: Opening Cable Clamp And Disconnecting Heater Valve Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. From under the dash, disconnect the heater valve cable housing from the cable clamp (A), and disconnect the heater valve cable (B) from the air mix control linkage (C).

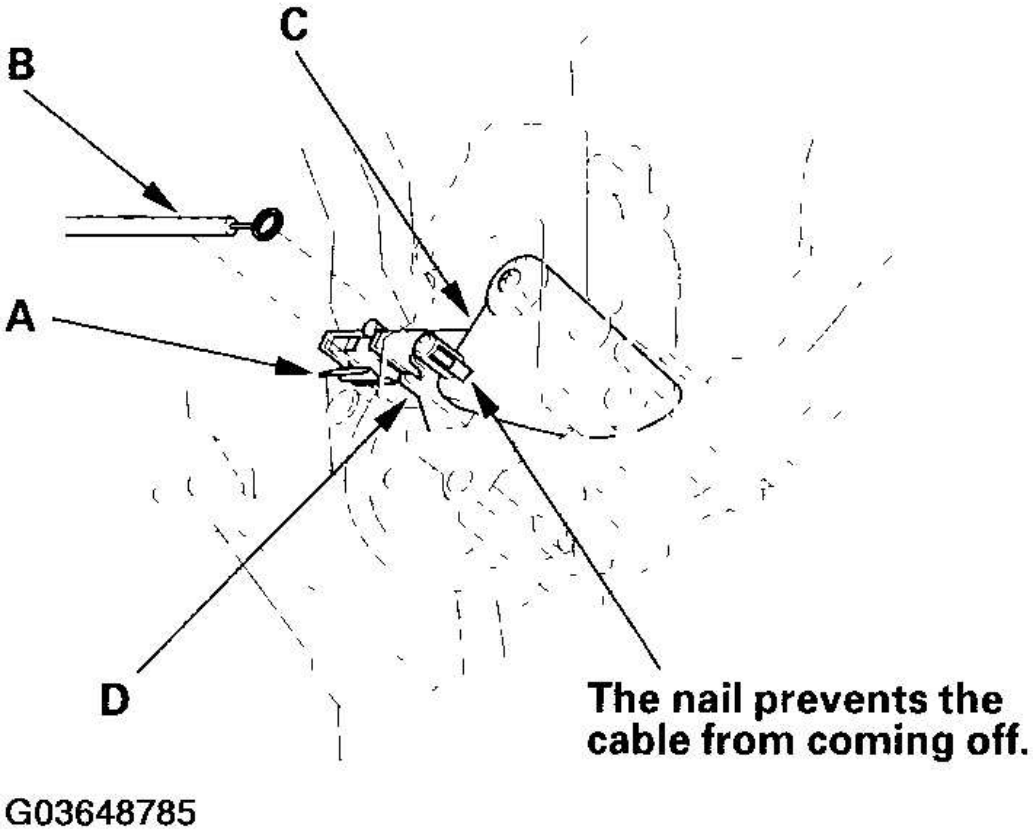


Fig. 105: Disconnecting Heater Valve Cable From Cable Clamp (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

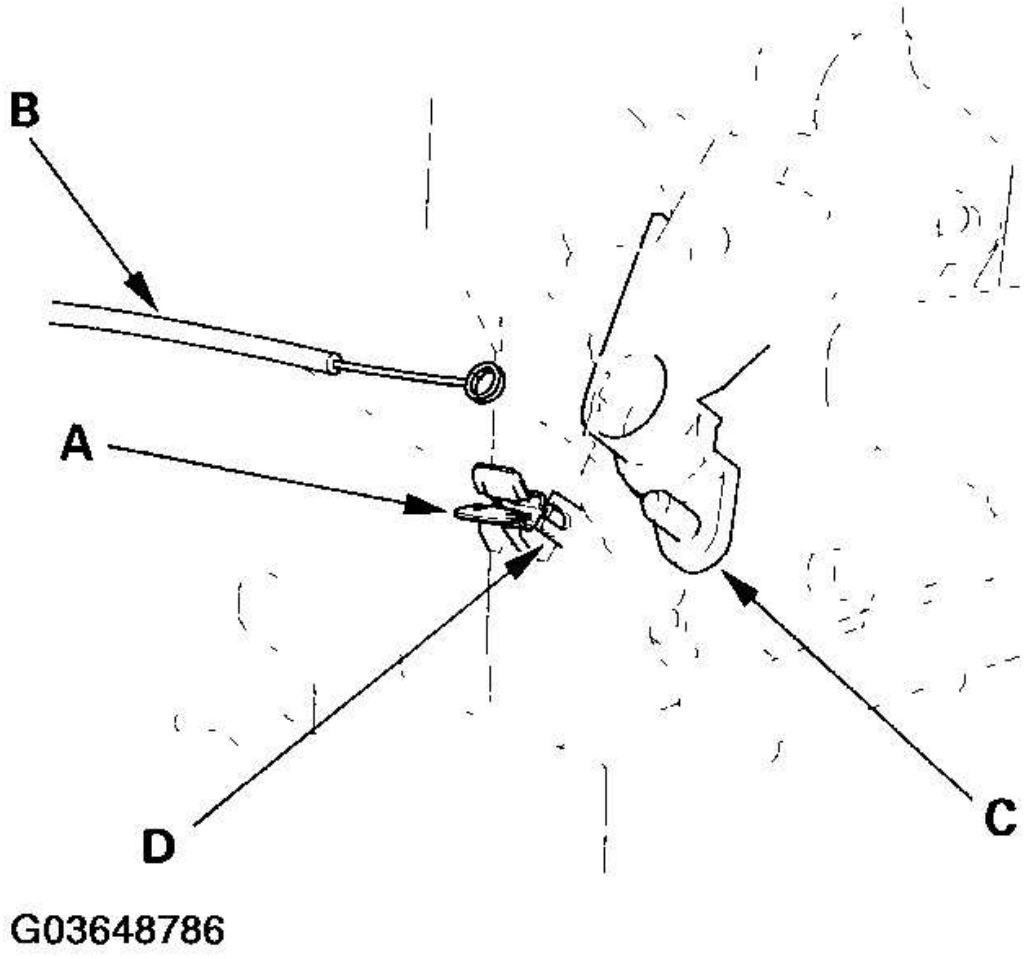


Fig. 106: Disconnecting Heater Valve Cable From Cable Clamp (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Set the temperature control dial to Max Cool (LO) with the ignition switch ON (II).
4. Attach the heater valve cable (B) to the air mix control linkage (C) as shown in step 2. Hold the end of the heater valve cable housing against the stop (D), then snap the heater valve cable housing into the cable clamp (A).

NOTE:

- **Insert the ring from the end of the cable securely to**

the linkage pin.

- **4-door: Insert the ring over the nail, making sure it is correctly attached.**
- **2-door: Insert the ring all the way to the base of the pin.**

5. From under the hood, turn the heater valve arm (C) to the fully closed position and hold it as shown in **Fig. 107**. Attach the heater valve cable (B) to the heater valve arm, and gently pull on the heater valve cable housing to take up any slack, then install the heater valve cable housing into the cable clamp (A).

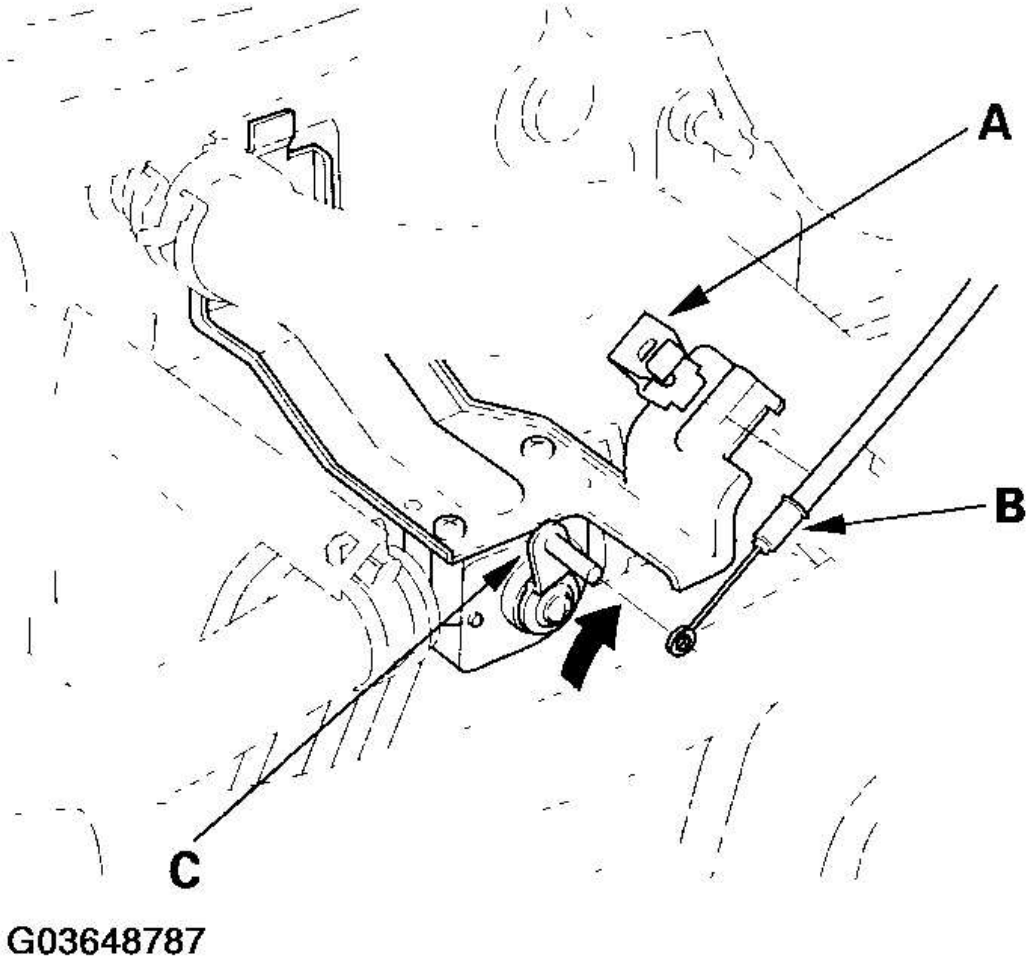


Fig. 107: Turning Heater Valve Arm To Fully Closes Position And Hold
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EVAPORATOR CORE REPLACEMENT

4-DOOR

1. Recover the refrigerant with a recovery/recycling/charging station (see **REFRIGERANT RECOVERY**).
2. Remove the bolt, then disconnect the suction line (A) and the receiver line (B) from the evaporator core.

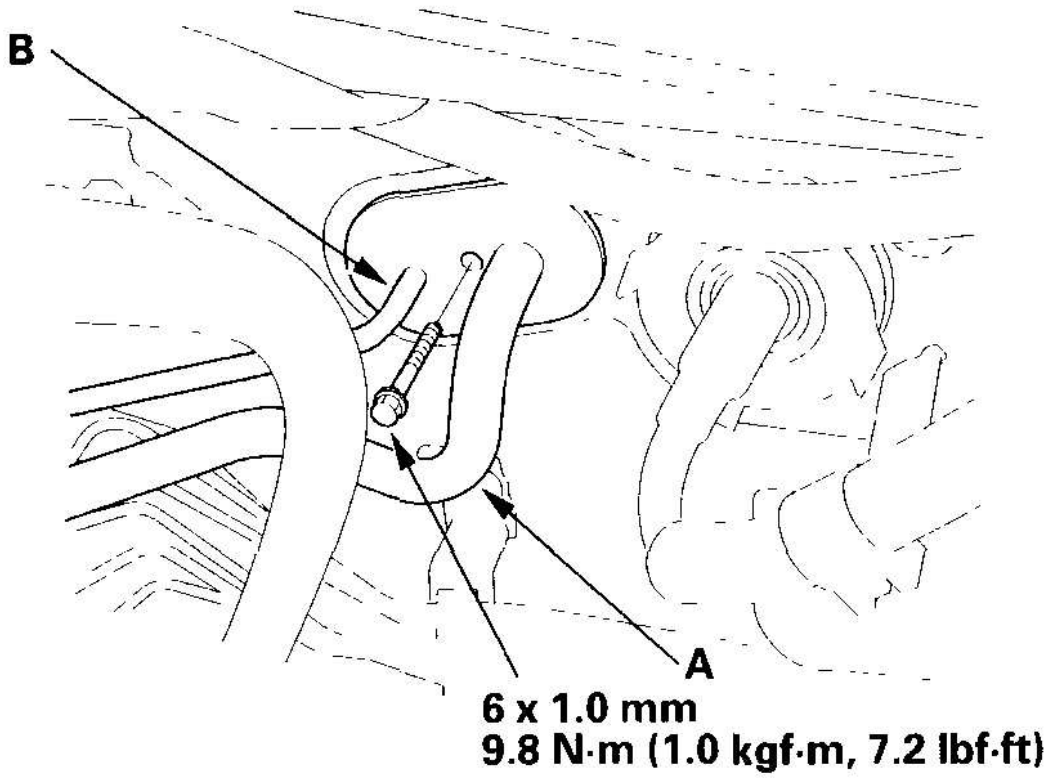


Fig. 108: Disconnecting Suction Line & Receiver Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the blower unit, 4-door (see **4-DOOR**) or 2-door (see **2-DOOR**).
4. Remove the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR TEST**).
5. Disconnect the connector (A) from the power transistor, then remove the self-tapping screws, and the expansion valve cover (B).

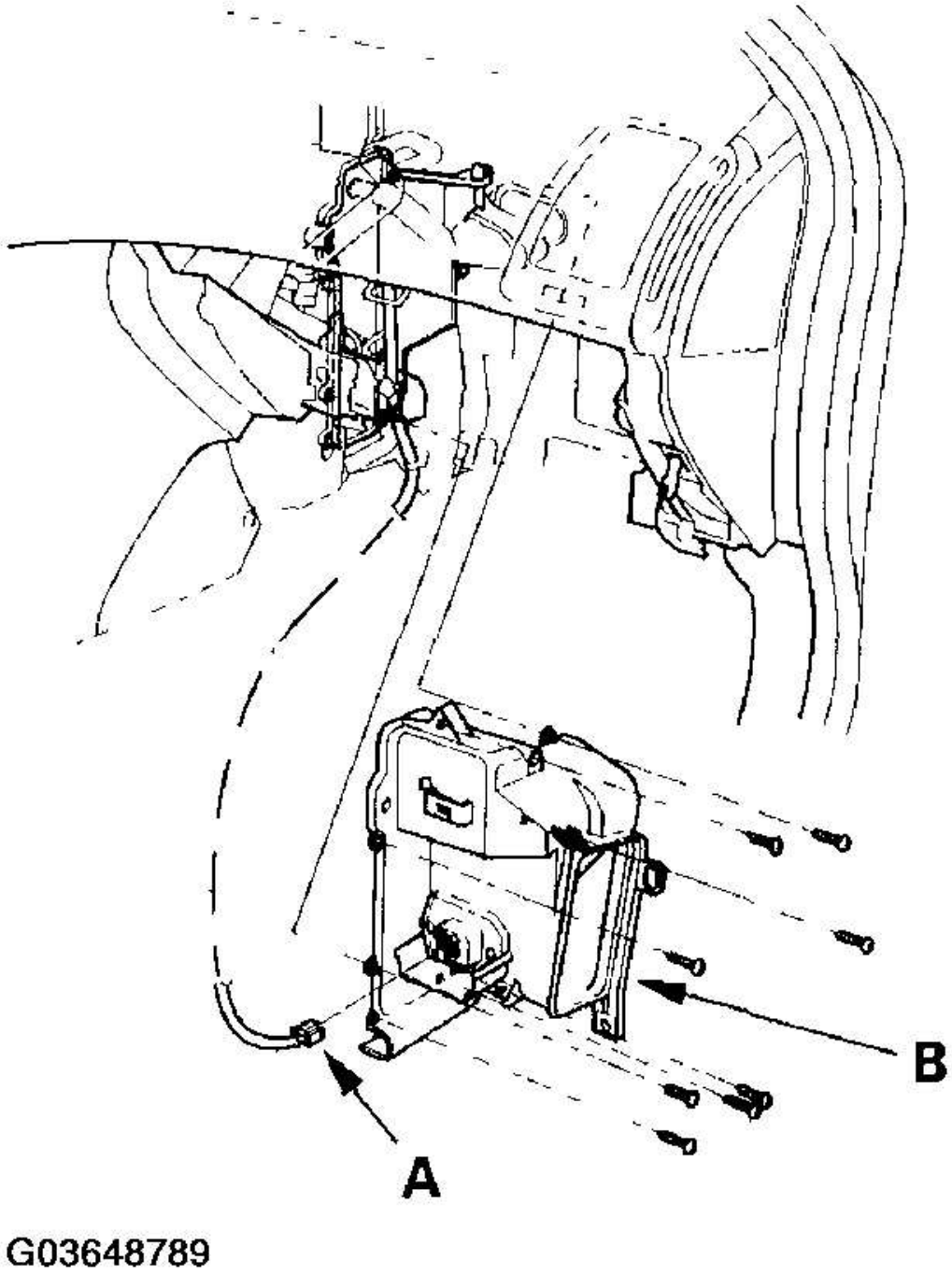
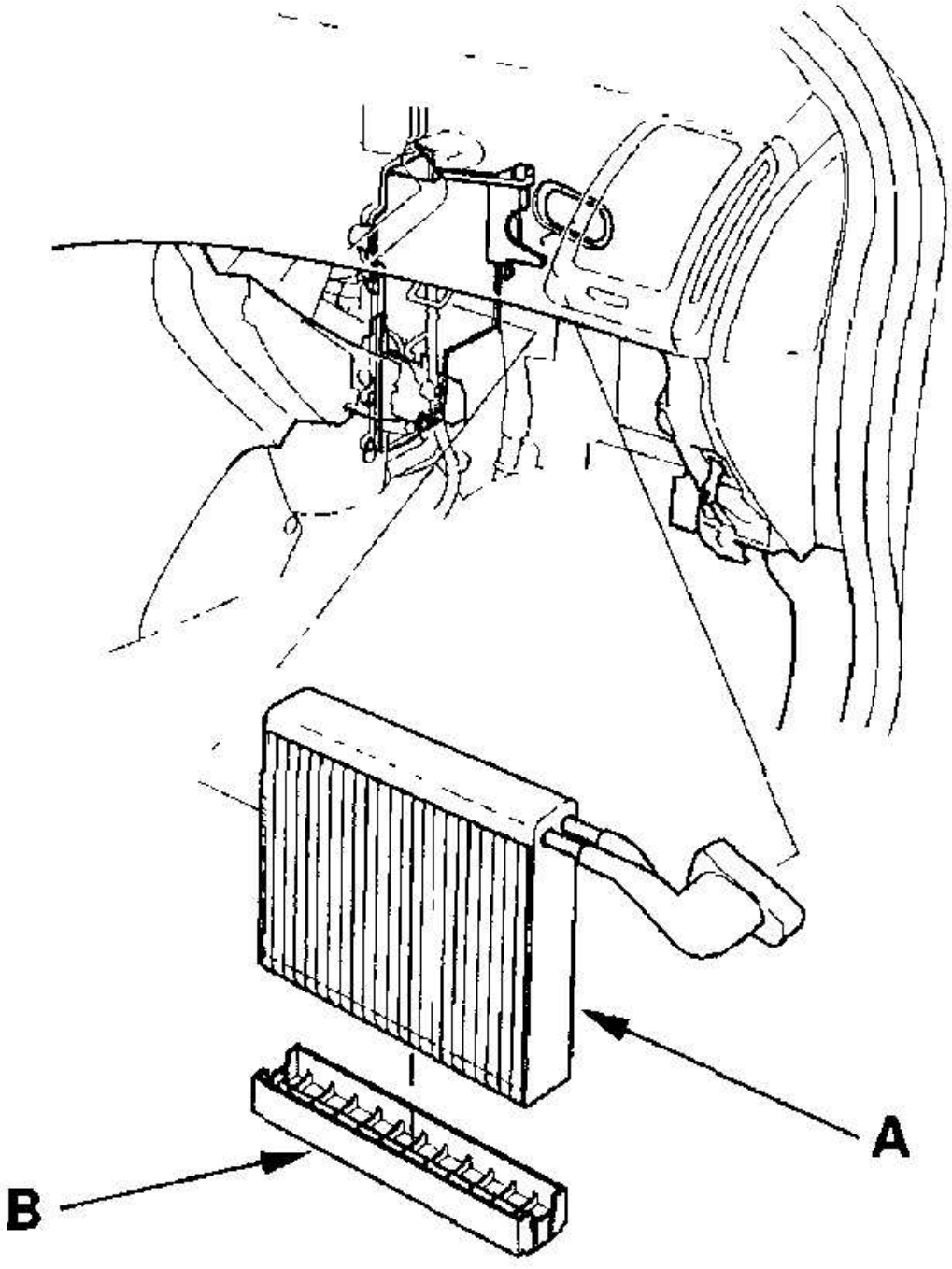


Fig. 109: Disconnecting Connector From Power Transistor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Carefully pull out the evaporator core (A) and the plate (B) without bending the pipes.



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Fig. 110: Pulling Out Evaporator Core And Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the core in the reverse order of removal, and note these items:
   - If you're installing a new evaporator core, add refrigerant oil (DENSO ND-OIL 8) (see **A/C REFRIGERANT OIL REPLACEMENT**).
   - Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
   - Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
   - Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
   - Make sure that there is no air leakage.
   - Charge the system (see **SYSTEM CHARGING**).

2-DOOR

1. Recover the refrigerant with a recovery/recycling/charging station (see **REFRIGERANT RECOVERY**).
2. Remove the bolt, then disconnect the suction line (A) and the receiver line (B) from the evaporator core.

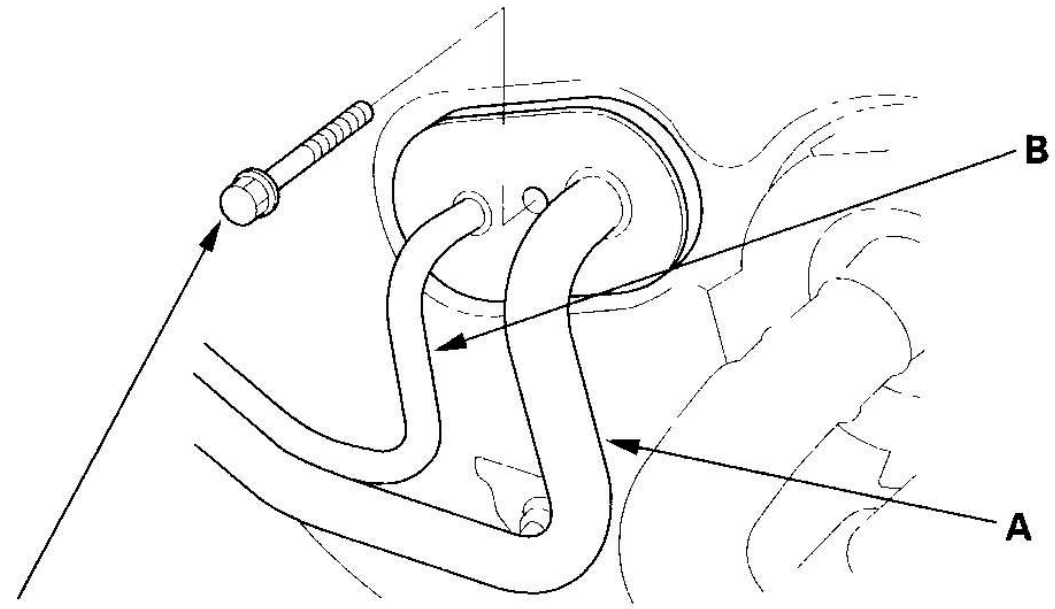


Fig. 111: Disconnecting Suction Line And Receiver Line (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the blower unit, 4-door (see **4-DOOR**) or 2-door (see **2-DOOR**).
4. Remove the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR TEST**).
5. Disconnect the connector (A) from the power transistor, then remove the self-tapping screws, and the expansion valve cover (B).

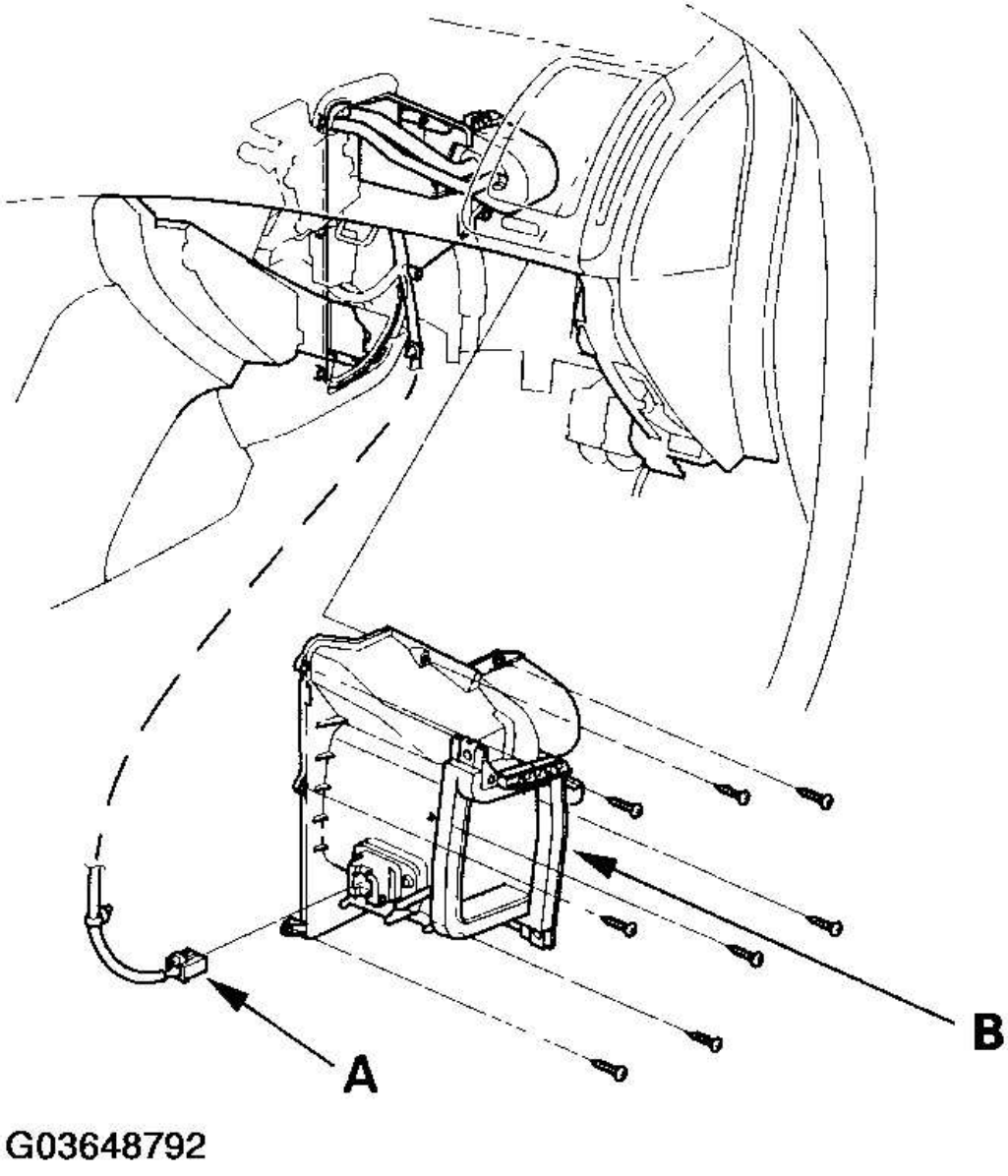


Fig. 112: Disconnecting Connector From Power Transistor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Carefully pull out the evaporator core without bending the pipes.

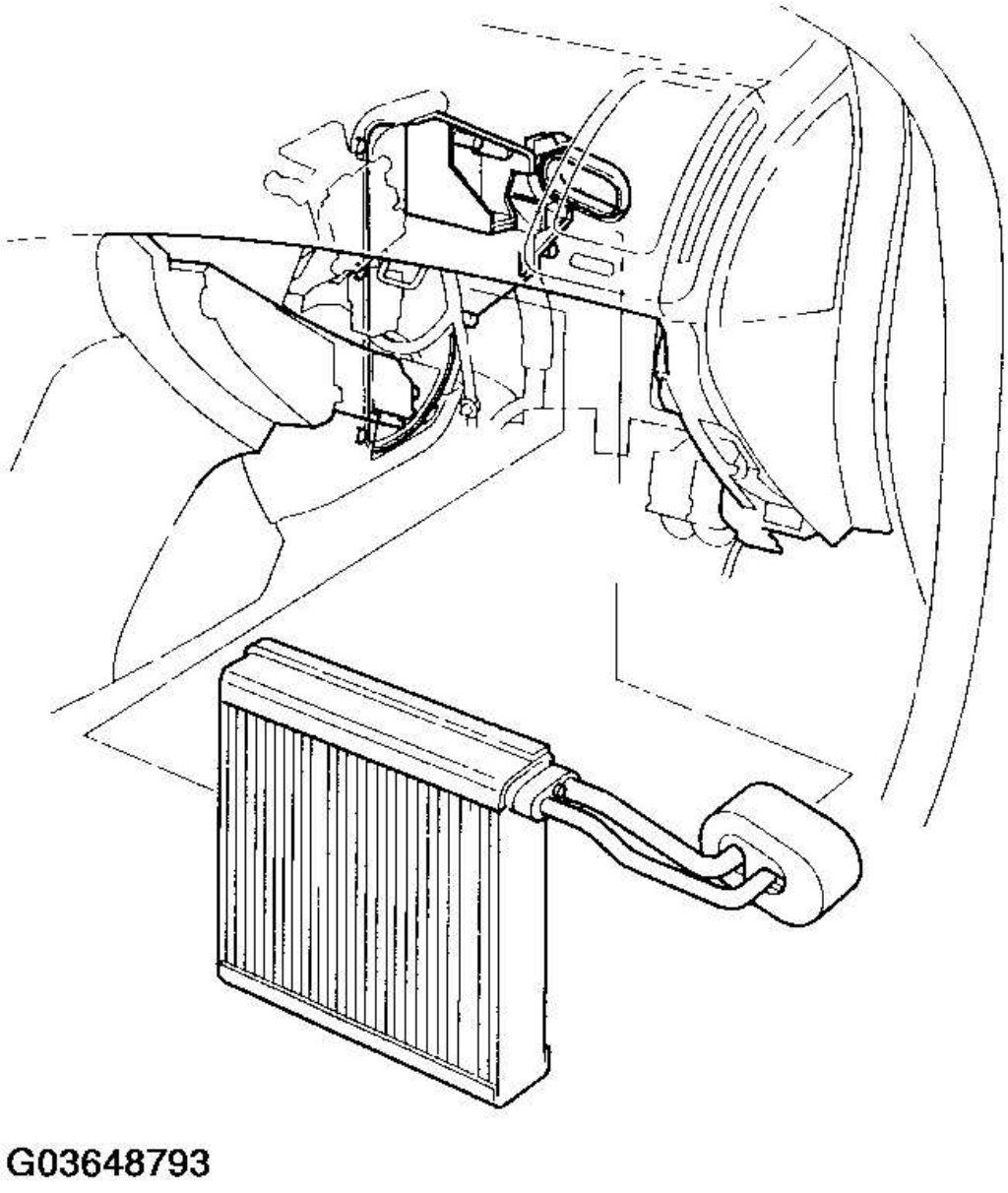


Fig. 113: Pulling Out Evaporator Core
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the core in the reverse order of removal, and note these items:
    - If you're installing a new evaporator core, add refrigerant oil (DENSO

ND-OIL 8) (see **A/C REFRIGERANT OIL REPLACEMENT**).

- Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
- Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
- Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
- Make sure that there is no air leakage.
- Charge the system (see **SYSTEM CHARGING**).

A/C COMPRESSOR REPLACEMENT

1. If the A/C compressor is marginally operable, run the engine at idle speed, and let the air conditioning work for a few minutes, then shut the engine off.
2. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the frequencies for the radio's preset buttons.
3. Disconnect the negative cable from the battery.
4. Recover the refrigerant with a recovery/recycling/charging station (see **REFRIGERANT RECOVERY**).
5. Remove the alternator (see **ALTERNATOR REMOVAL AND INSTALLATION**).
6. Remove the A/C compressor clutch connector (A) from the A/C condenser fan shroud, then disconnect the connector. Remove the bolt and the nut, then disconnect the suction line (B) and discharge line (C) from the A/C compressor. Plug or cap the lines immediately after disconnecting them to avoid moisture and dust contamination.

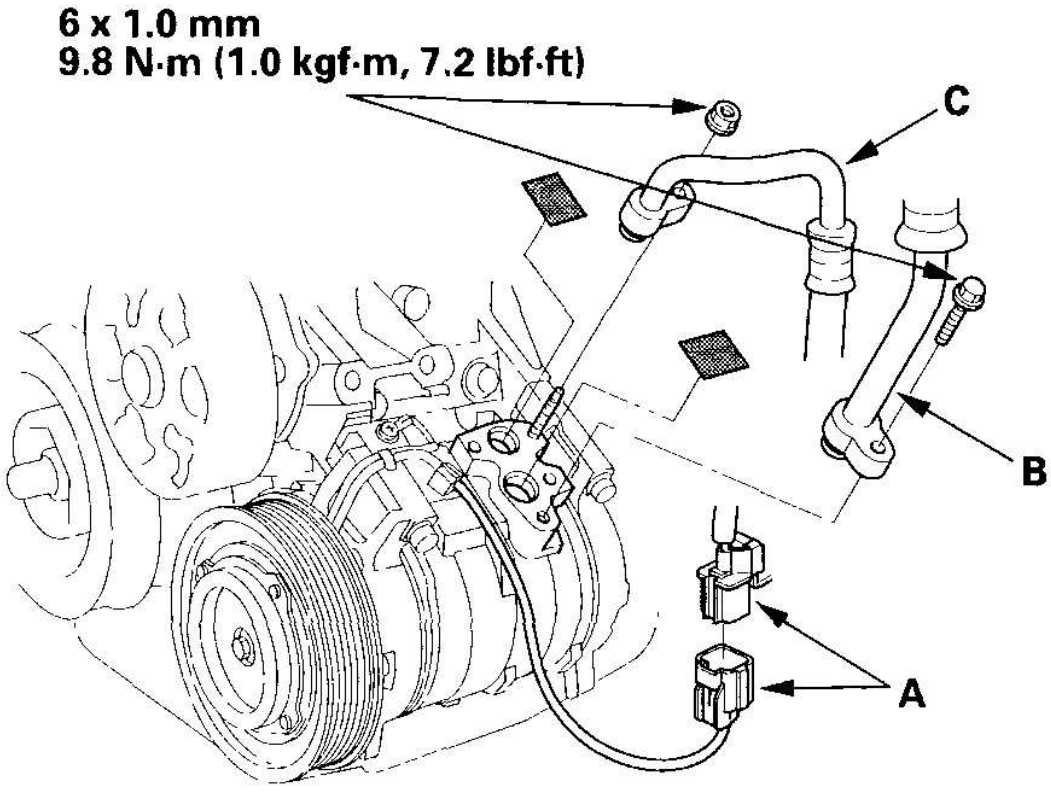


Fig. 114: Removing A/C Compressor Clutch Connector From A/C Condenser Fan Shroud
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the mounting bolts and the A/C compressor. Be careful not to damage the radiator fins when removing the A/C compressor.

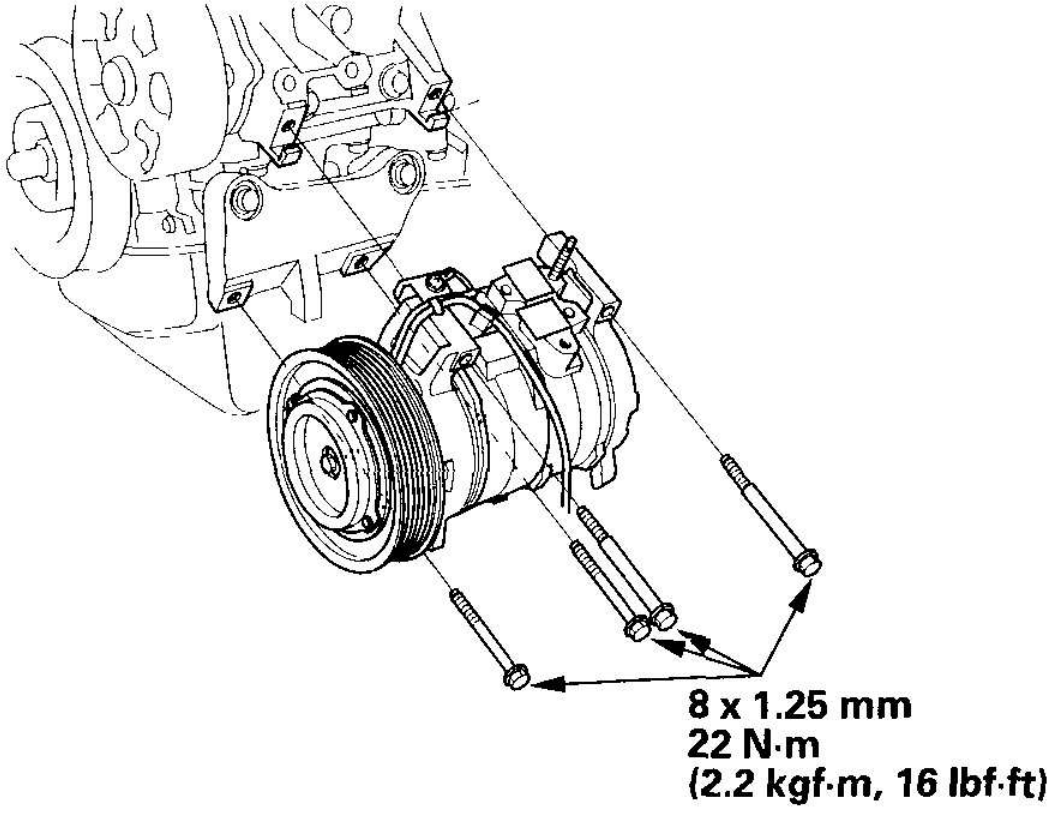


Fig. 115: Removing Mounting Bolts And A/C Compressor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the A/C compressor in the reverse order of removal, and note these items:
   - If you're installing a new A/C compressor, you must calculate the amount of refrigerant oil to be removed from it (see **A/C SERVICE TIPS AND PRECAUTIONS**).
   - Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
   - Use refrigerant oil (DENSO ND-OIL 8) for HFC-134a DENSO piston type A/C compressor only.

- To avoid contamination, do not return the oil to the container once dispensed, and never mix it with other refrigerant oils.
- Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
- Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
- Be careful not to damage the radiator fins when installing the A/C compressor and the A/C condenser fan shroud.
- Charge the system (see **SYSTEM CHARGING**).
- Reset the power window control unit (see **RESETTING THE POWER WINDOW CONTROL UNIT**).
- Enter the anti-theft codes for the radio, and the navigation system, then enter the customer's radio station presets.

A/C COMPRESSOR CLUTCH CHECK

1. Check the pressure plate for discoloration, peeling, or other damage. If there is damage, replace the clutch set (see **A/C COMPRESSOR CLUTCH OVERHAUL**).
2. Check the pulley bearing play and drag by rotating the pulley by hand. Replace the clutch set with a new one if it is noisy or has excessive play/drag (see **A/C COMPRESSOR CLUTCH OVERHAUL**).

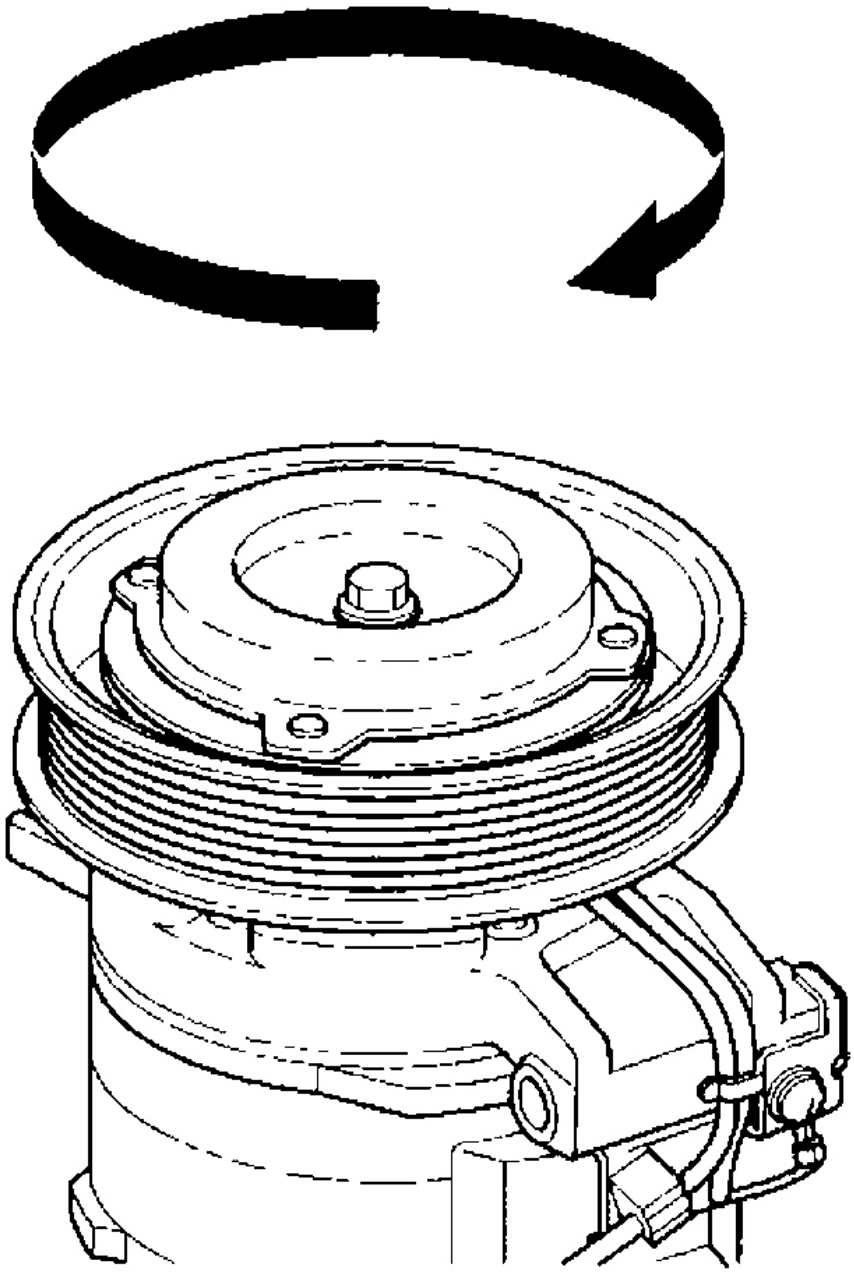


Fig. 116: Checking Pulley Bearing Play And Dragging By Rotating Pulley By Hand
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Measure the clearance between the pulley (A) and the pressure plate (B) with a dial indicator. Zero out the indicator, then apply battery voltage to the A/C compressor clutch. Measure the movement of the pressure plate when the voltage is applied. If the clearance is not within the specified limits, the pressure plate must be reshimmed (see **A/C COMPRESSOR CLUTCH OVERHAUL**).

   Clearance: 0.35-0.6 mm (0.014-0.024 in.)

   NOTE: The shims are available in three thicknesses: 0.1 mm, 0.3 mm and 0.5 mm.

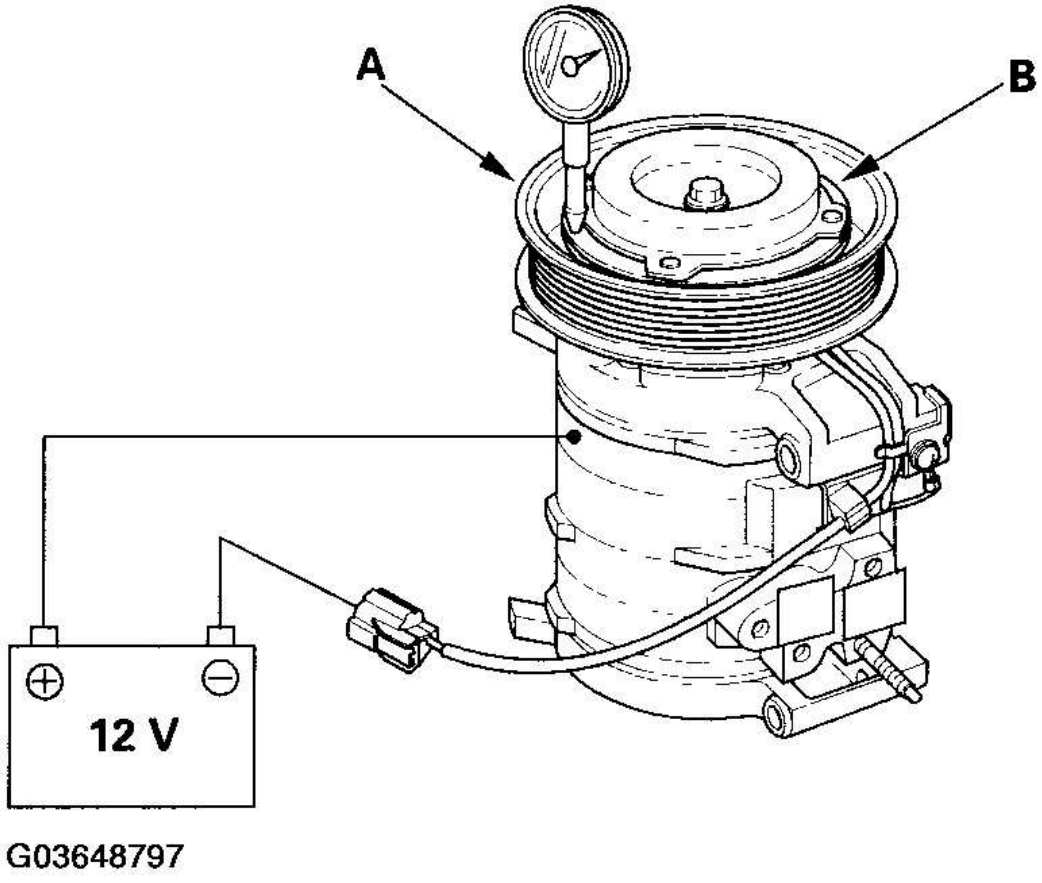


Fig. 117: Measuring Clearance Between Pulley And Pressure Plate With

Dial Indicator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check resistance of the field coil. If resistance is not within specifications, replace the field coil (see **A/C COMPRESSOR CLUTCH OVERHAUL**).

   Field Coil Resistance: 3.9-4.3 ohms at 68°F (20°C)

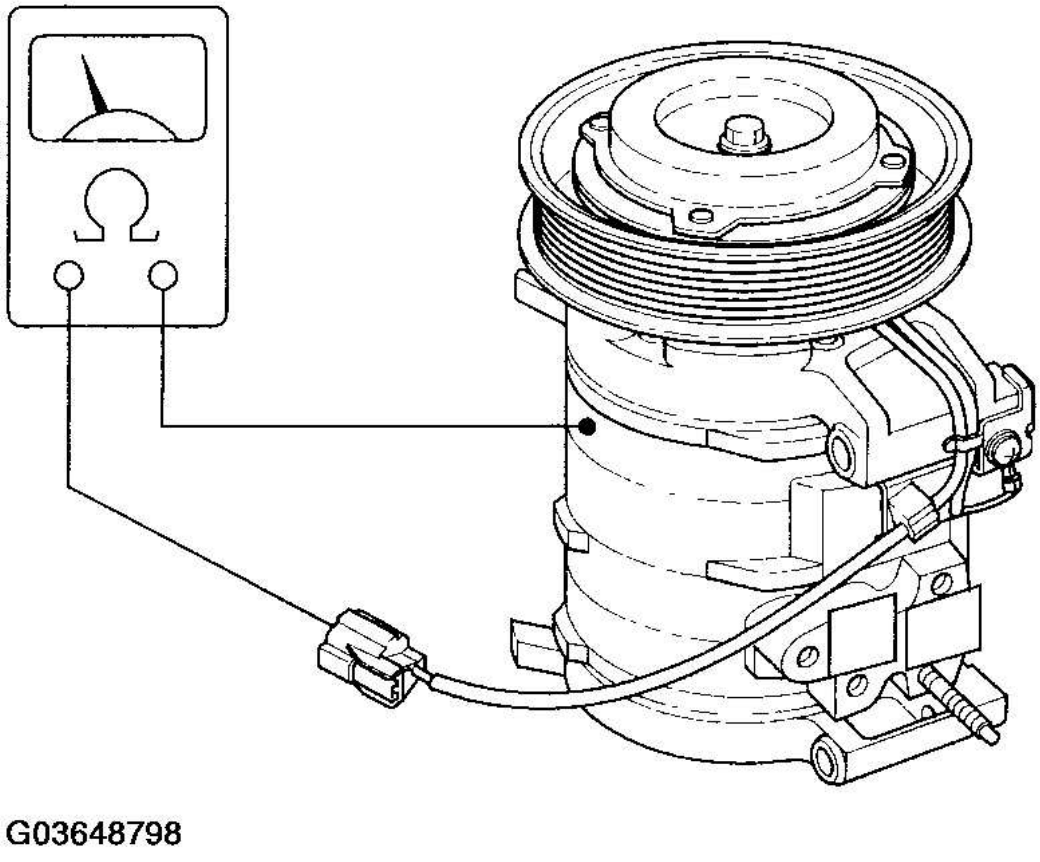


Fig. 118: Checking Resistance Of Field Coil
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C COMPRESSOR CLUTCH OVERHAUL

Special Tools Required

A/C clutch holder, Robinair 10204 or Kent-Moore J37872, or Honda Tool and Equipment KMT-J33939, commercially available

1. Remove the center bolt (A) while holding the pressure plate with a commercially available A/C clutch holder (B).

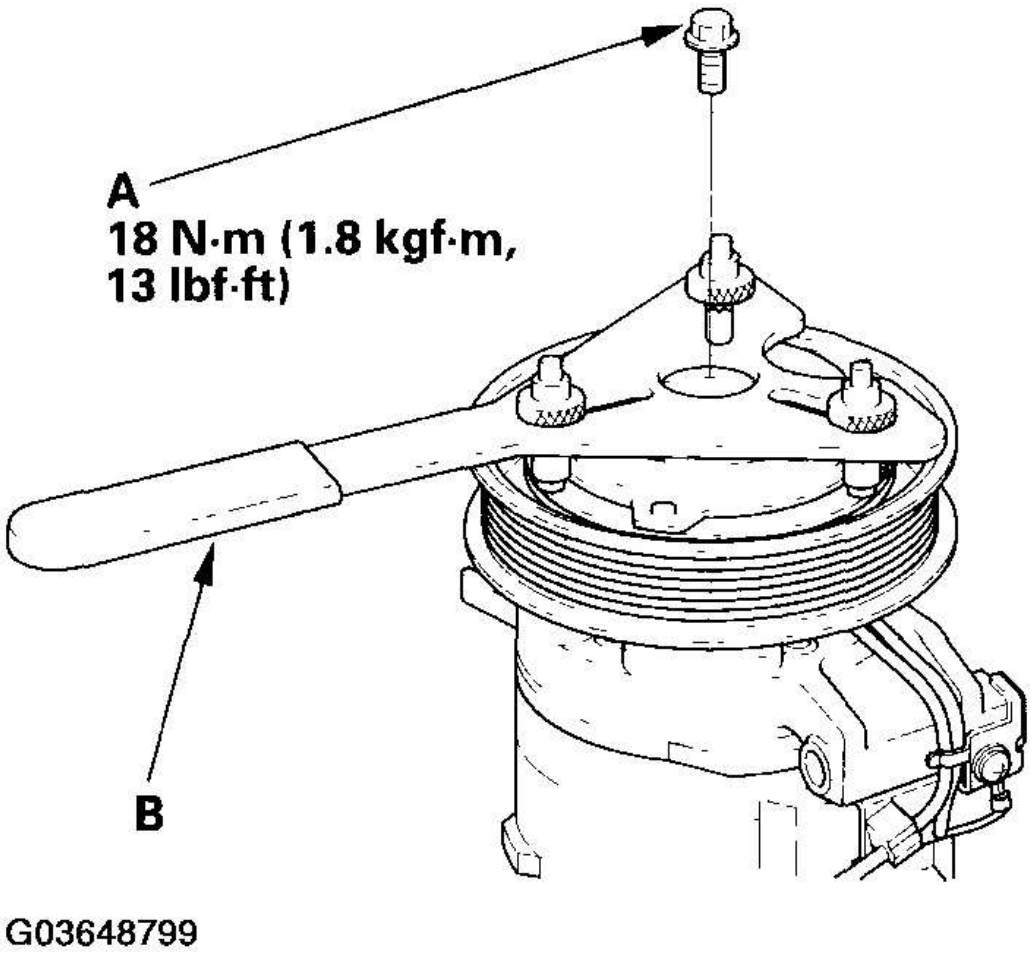


Fig. 119: Removing Center Bolt While Holding Pressure Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the pressure plate (A) and shim(s) (B), taking care not to lose the shim (s). If the clutch needs adjustment, increase or decrease the number and thickness of shims as necessary, then reinstall the pressure plate, and recheck

its clearance (see **A/C COMPRESSOR CLUTCH CHECK**).

NOTE: The shims are available in three thicknesses: 0.1 mm, 0.3 mm and 0.5 mm.

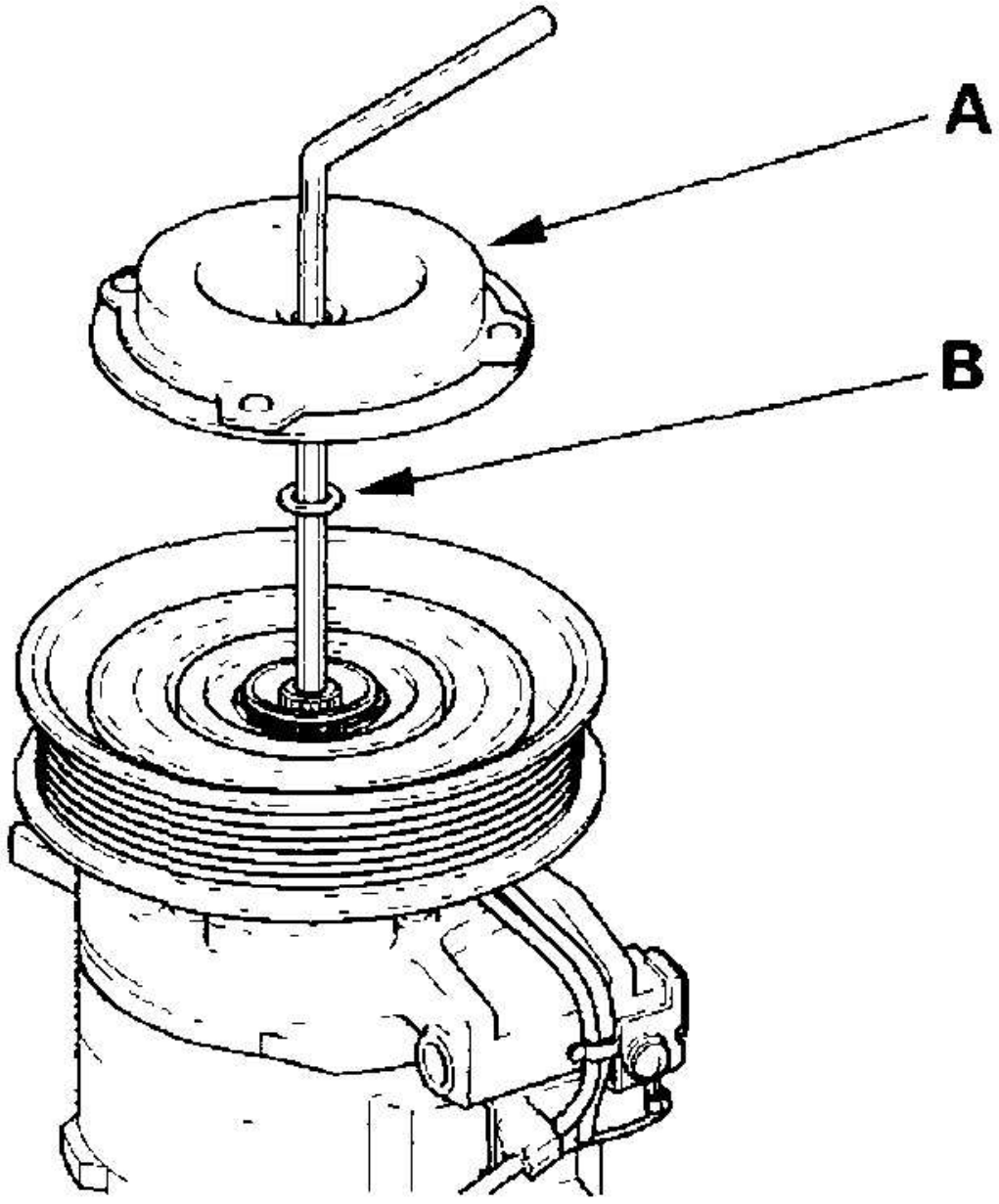


Fig. 120: Removing Pressure Plate And Shim(s)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If you are replacing the field coil, remove the snap ring (A) with snap ring pliers, then remove the pulley (B). Be careful not to damage the pulley or the A/C compressor.

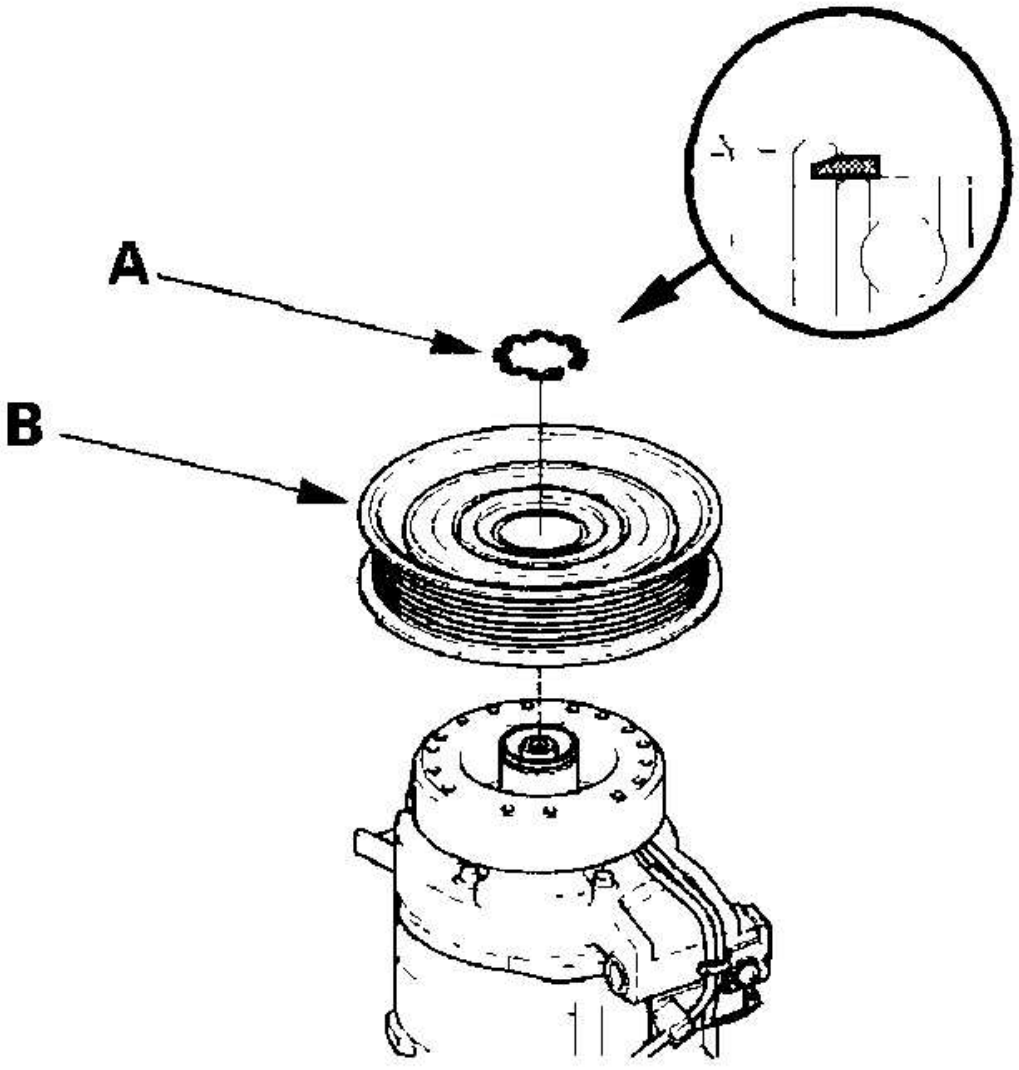


Fig. 121: Removing Snap Ring With Snap Ring Pliers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the screw, the wire harness clip (A), and the holder (B). Remove the snap ring (C) with snap ring pliers, then remove the field coil (D). Be careful not to damage the field coil or the A/C compressor.

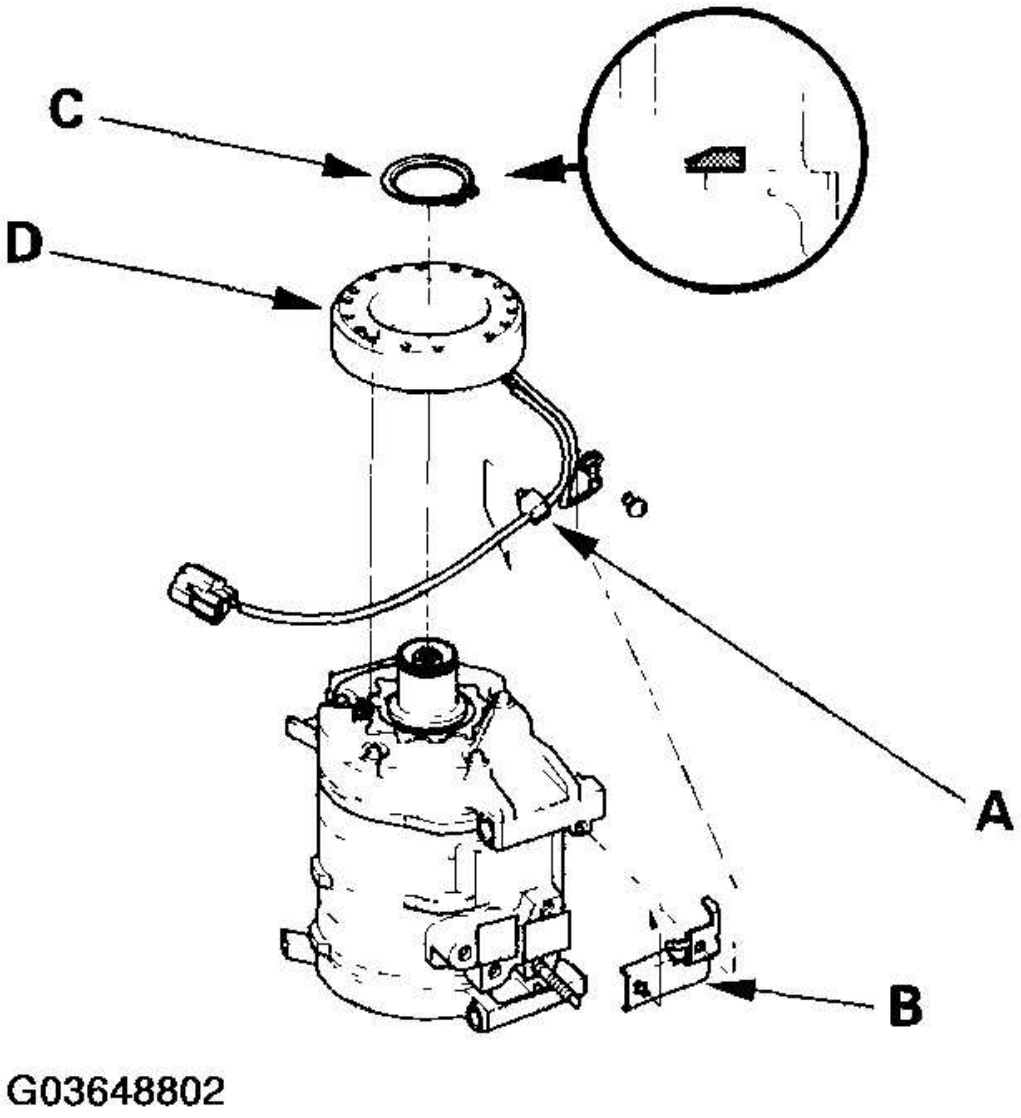


Fig. 122: Removing Field Coil
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Reassemble the clutch in the reverse order of disassembly, and note these items:
   - Install the field coil with the wire side facing down, and align the boss on the field coil with the hole in the A/C compressor.
   - Clean the pulley and A/C compressor sliding surfaces with contact cleaner or other non-petroleum solvent.
   - Install new snap rings, note the installation direction, and make sure they are fully seated in the groove.
   - Make sure that the pulley turns smoothly after it's reassembled.
   - Route and clamp the wires properly or they can be damaged by the pulley.

A/C COMPRESSOR RELIEF VALVE REPLACEMENT

1. Recover the refrigerant with a recovery/recycling/charging station (see **REFRIGERANT RECOVERY**).
2. Remove the relief valve (A) and the O-ring (B). Plug the opening to keep foreign matter from entering the system and the A/C compressor oil from running out.

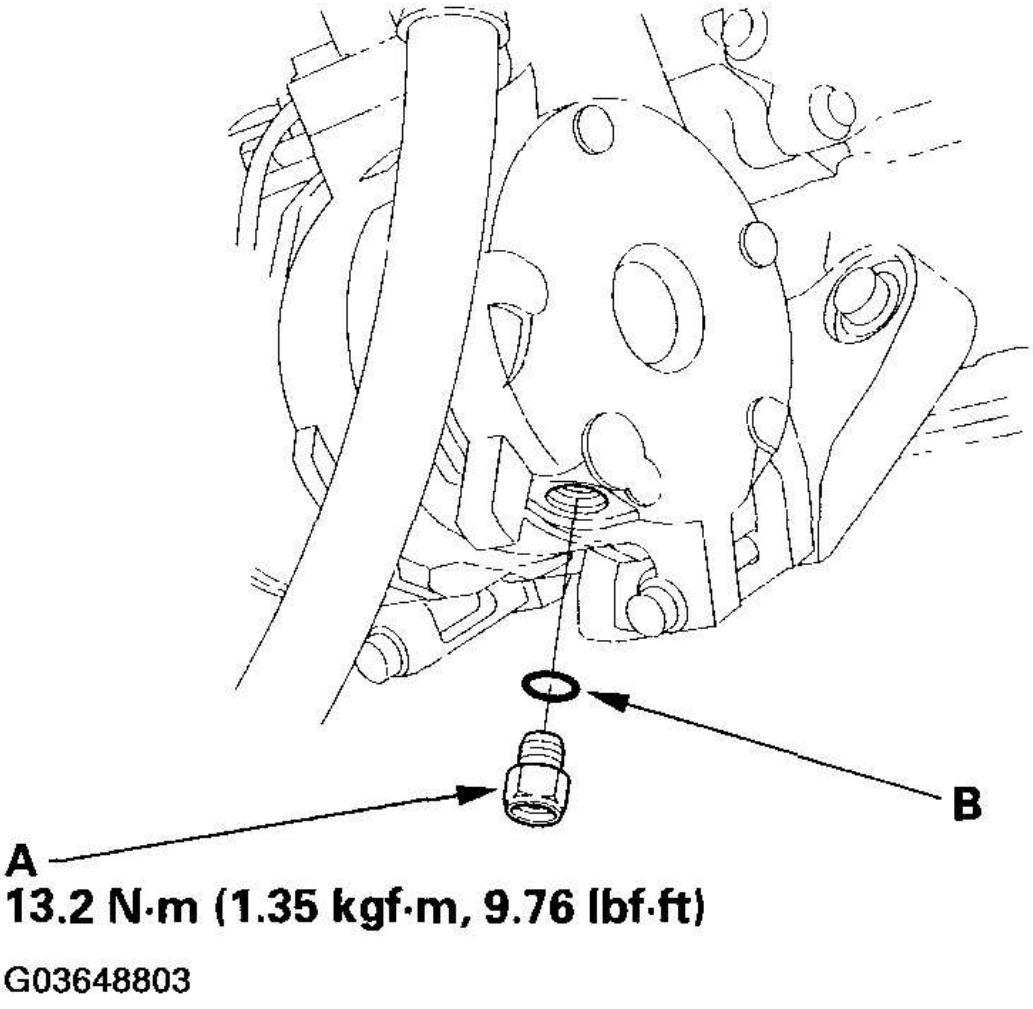


Fig. 123: Removing Relief Valve And O-Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Clean the mating surfaces.
4. Replace the O-ring with a new one at the relief valve, and apply a thin coat of refrigerant oil before installing it.
5. Remove the plug, and install and tighten the relief valve.
6. Charge the system (see **SYSTEM CHARGING**).

A/C CONDENSER REPLACEMENT

1. Recover the refrigerant with a recovery/recycling/charging station (see **REFRIGERANT RECOVERY**).
2. Remove the front bulkhead cover.
   - 4-door (see **4-DOOR**)
   - 2-door (see **2-DOOR**)
3. Remove the clips (A), then remove the air intake cover (B) and the air intake tube or duct (C).

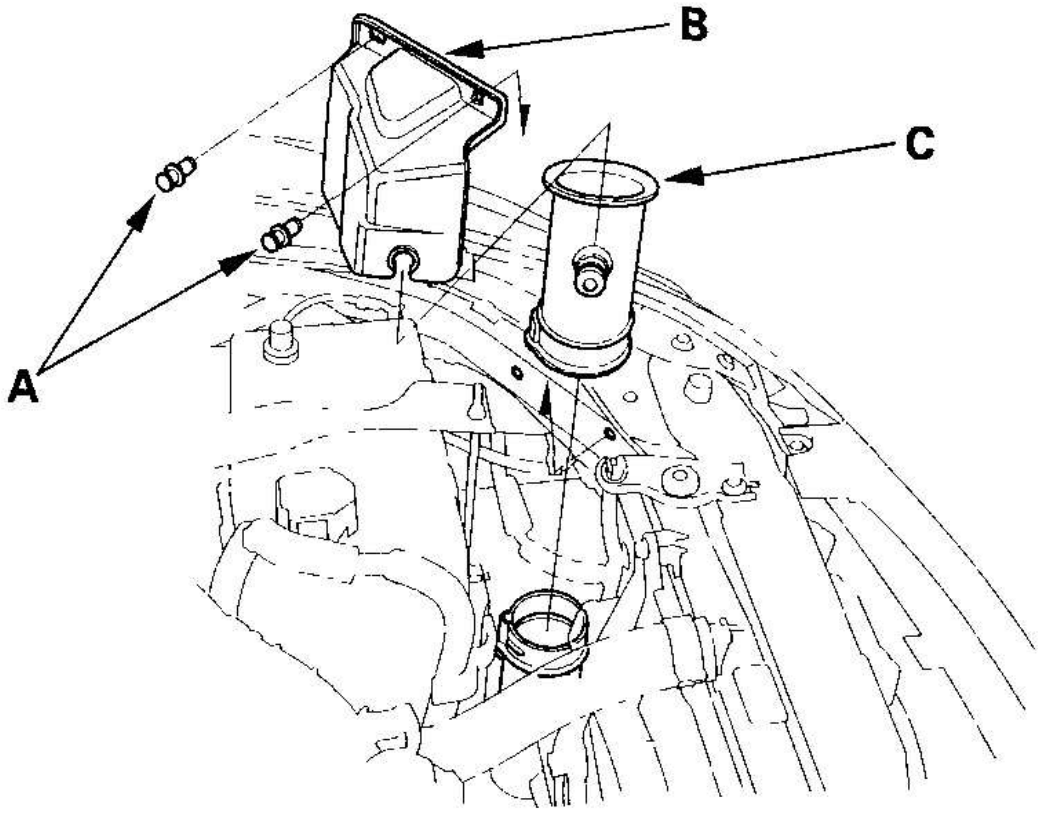


Fig. 124: Removing Air Intake Cover And Air Intake Tube Or Duct
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the bolts and radiator upper mount brackets.

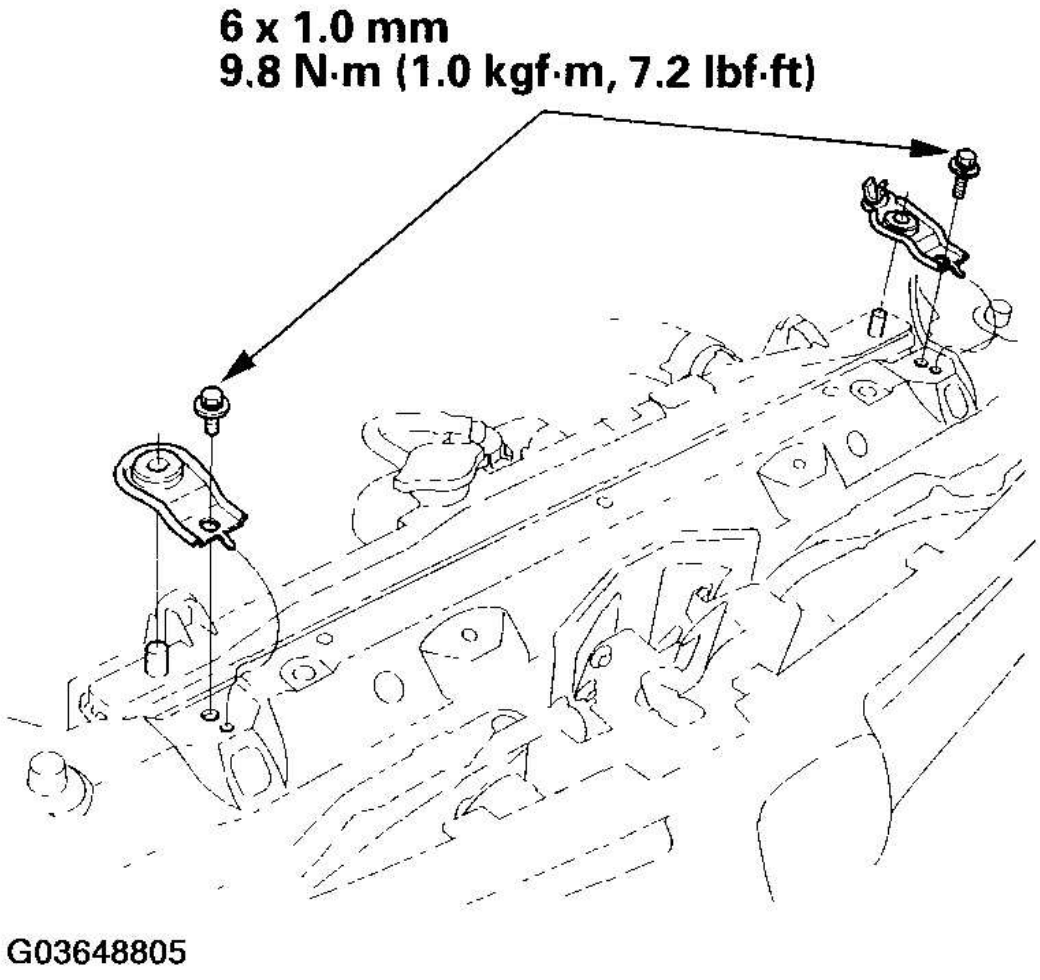


Fig. 125: Removing Radiator Upper Mount Brackets
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the bolt, then disconnect the receiver line (A) from the A/C condenser. Disconnect the A/C pressure switch connector (B).

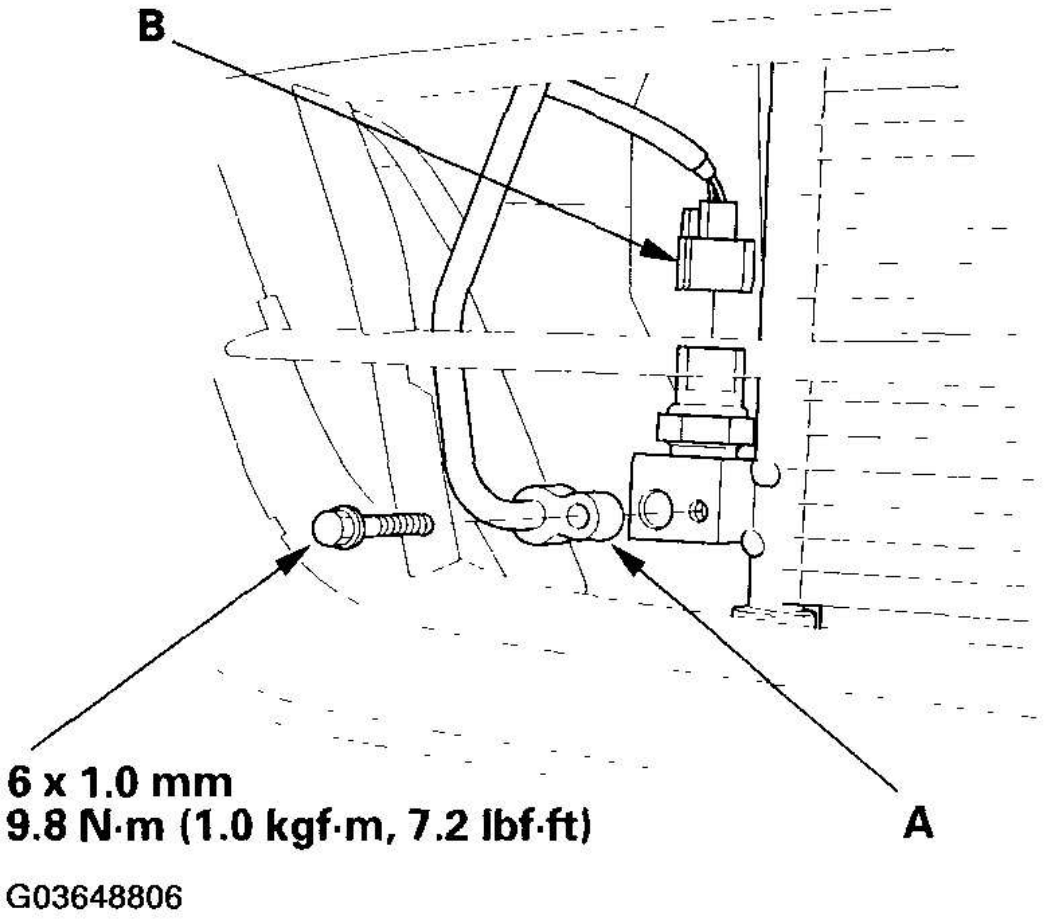


Fig. 126: Disconnecting Receiver Line From A/C Condenser
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the bolts from the A/C condenser.

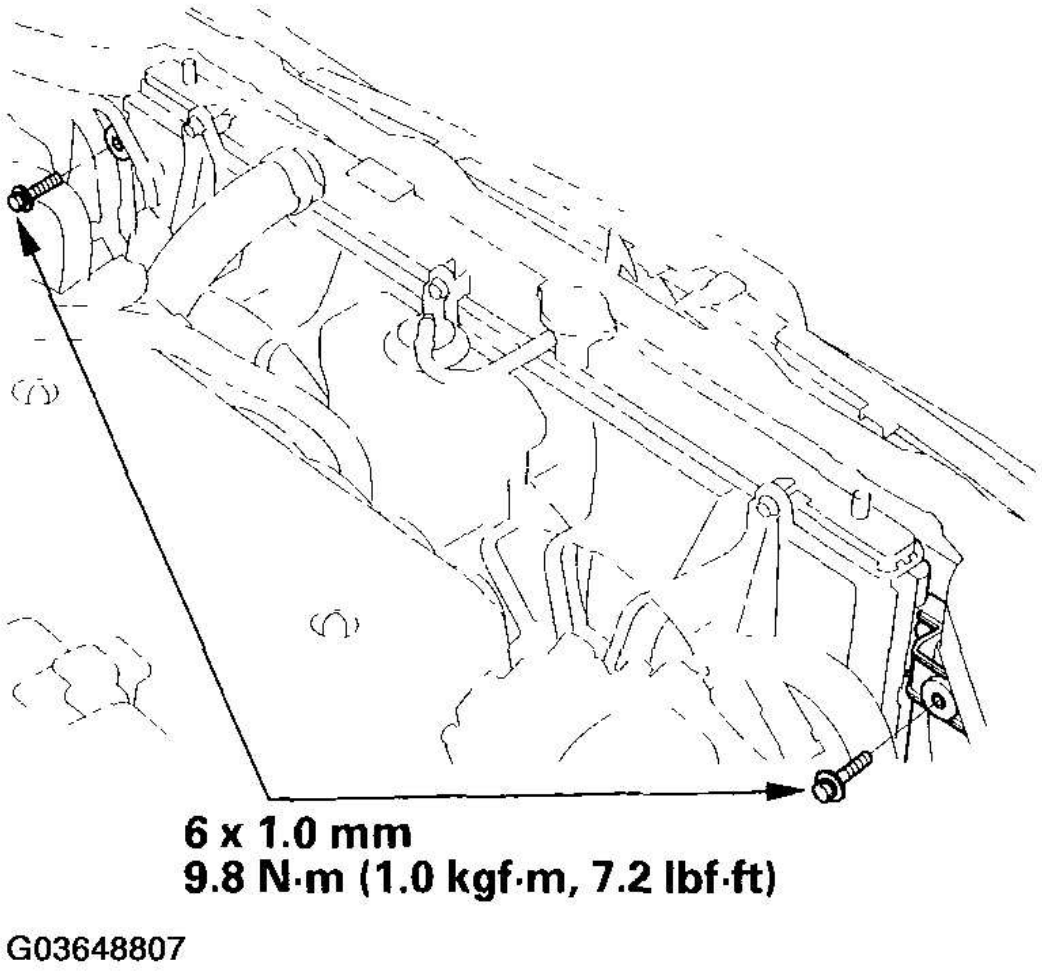


Fig. 127: Removing Bolts From A/C Condenser
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the nut, then disconnect the discharge line from the A/C condenser.

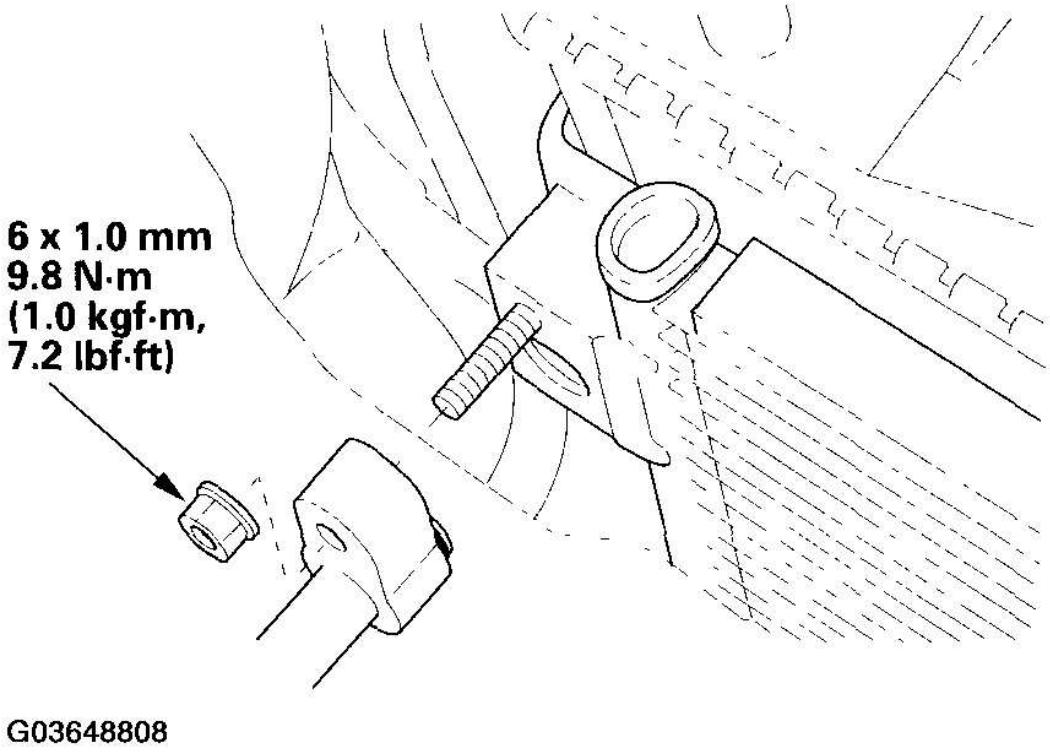


Fig. 128: Disconnecting Discharge Line From A/C Condenser
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the A/C condenser by lifting it up. Be careful not to damage the radiator and A/C condenser fins when removing the A/C condenser.

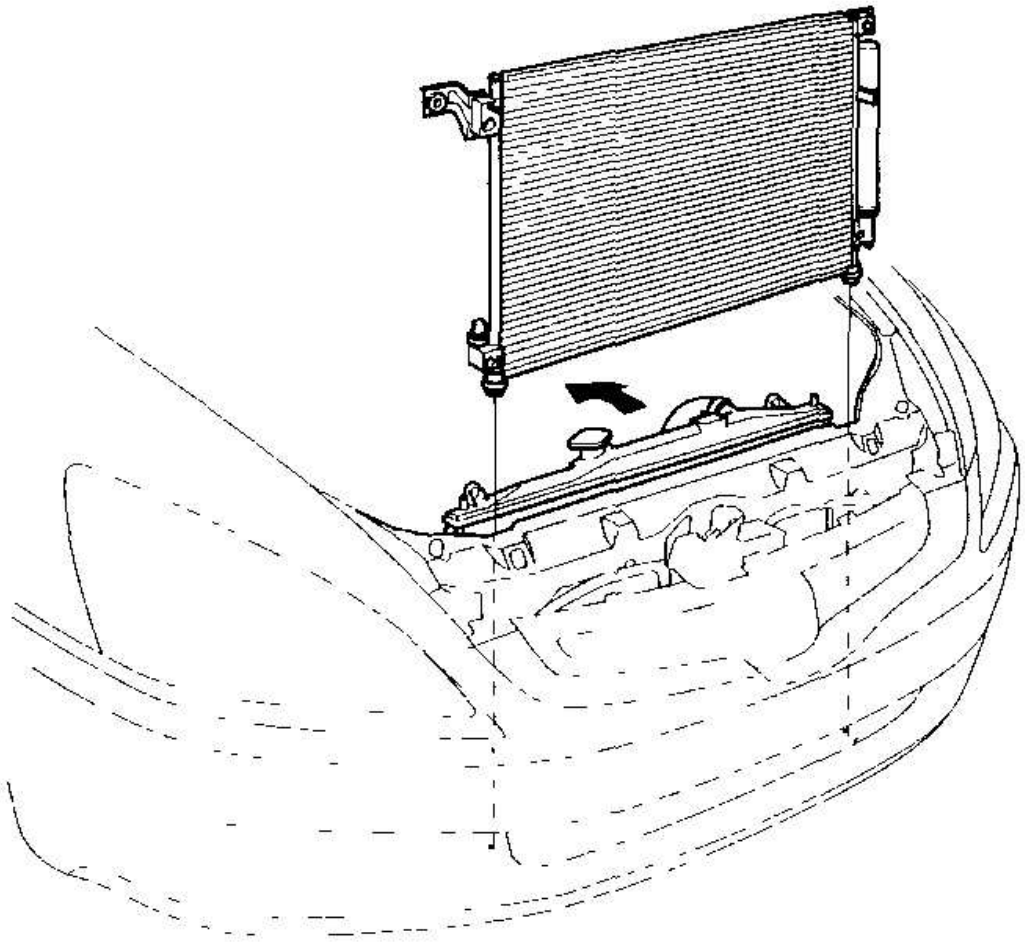


Fig. 129: Removing A/C Condenser By Lifting It Up
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the A/C condenser in the reverse order of removal, and note these items:
   - If you're installing a new A/C condenser, add refrigerant oil (DENSO ND-OIL 8) (see **A/C REFRIGERANT OIL REPLACEMENT**).
   - Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.

- Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
- Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
- Be careful not to damage the radiator or the A/C condenser fins when installing the A/C condenser.
- Charge the system (see **SYSTEM CHARGING**).

RECEIVER/DRYER DESICCANT REPLACEMENT

1. Remove the A/C condenser (see **A/C COMPRESSOR RELIEF VALVE REPLACEMENT**).
2. Remove the bolts from the A/C condenser, then remove the receiver/dryer (A), the bracket (B) and the O-rings (C).

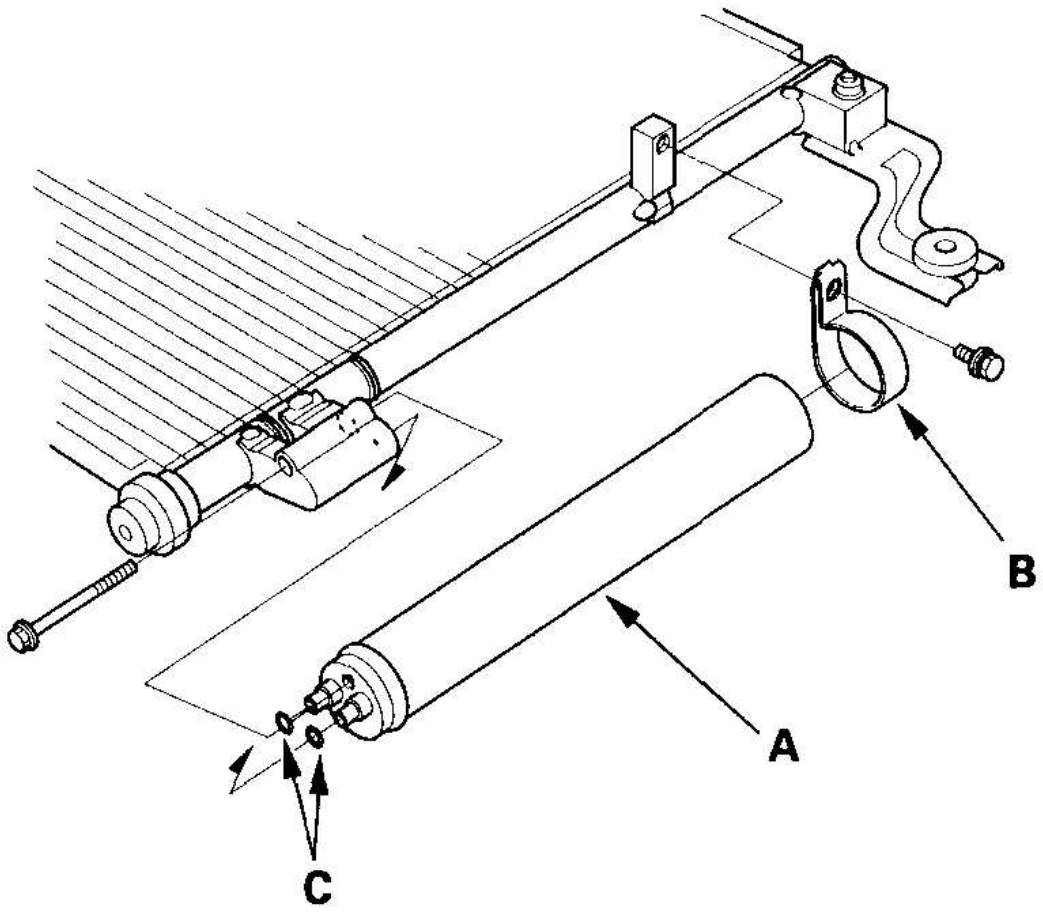


Fig. 130: Removing Receiver/Dryer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the receiver/dryer in the reverse order of removal, and note these items:

   Replace the O-rings with new ones, and apply a thin coat of refrigerant oil (DENSO ND-OIL 8) before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.

REFRIGERANT RECOVERY

CAUTION:

- **Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.**
- **Be careful when connecting service equipment.**
- **Do not breathe refrigerant or vapor.**

Use only service equipment that is U.L-listed and is certified to meet the requirements of SAE J2210 to remove HFC-134a (R-134a) from the air conditioning system.

If accidental system discharge occurs, ventilate work area before resuming service.

Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

1. Connect a R-134a refrigerant recovery/recycling/charging station (A) to the high-pressure service port (B) and the low-pressure service port (C), as shown in **Fig. 131**, following the equipment manufacturer's instructions.

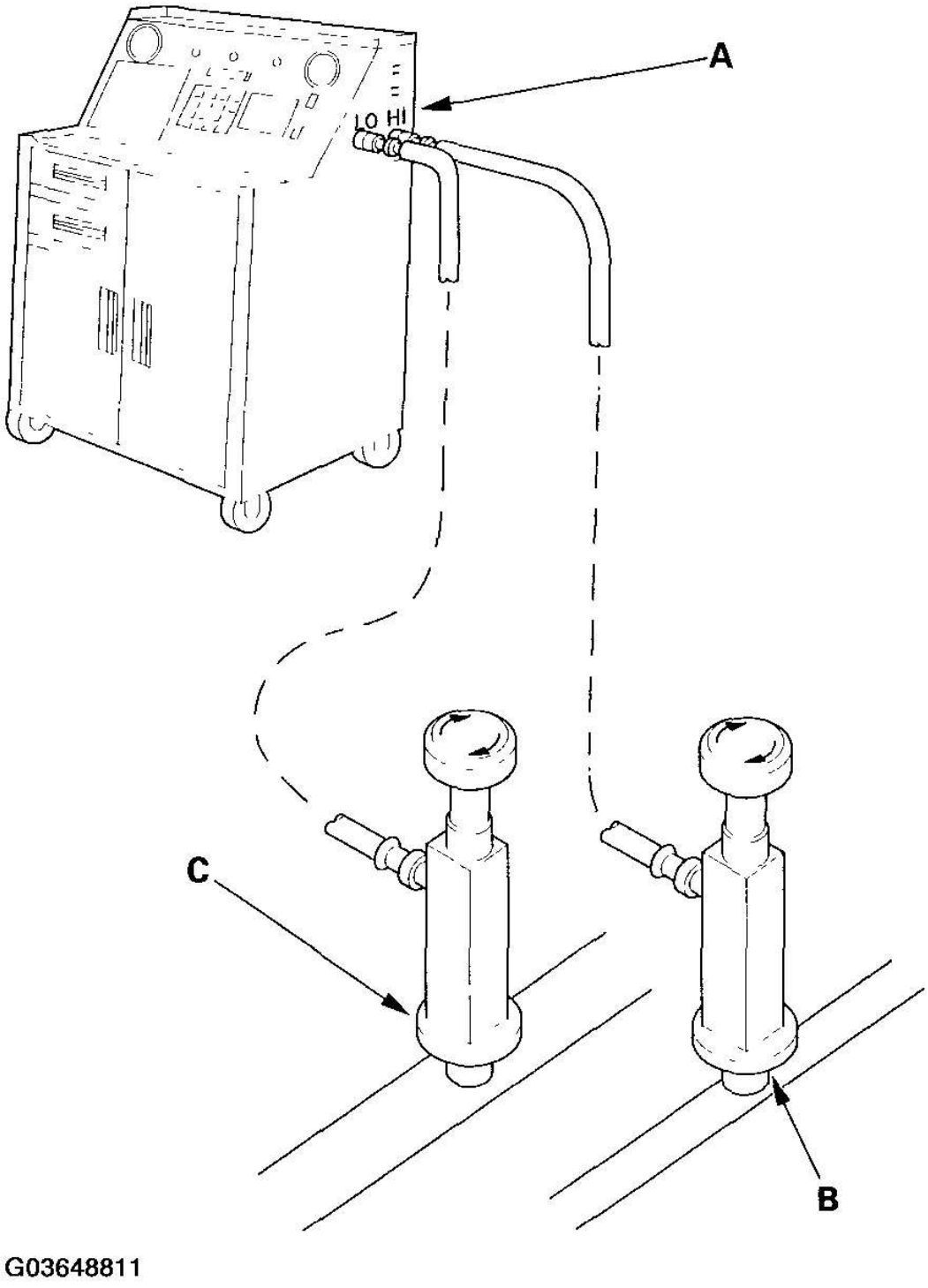


Fig. 131: Connecting R-134a Refrigerant Recovery/Recycling/Charging

Station To High-Pressure Service Port
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the amount of refrigerant oil removed from the A/C system after the recovery process is completed. Be sure to put the same amount of new refrigerant oil back into the A/C system before charging.

SYSTEM EVACUATION

CAUTION:
- **Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.**
- **Be careful when connecting service equipment.**
- **Do not breathe refrigerant or vapor.**

Use only service equipment that is U.L.-listed and is certified to meet the requirements of SAE J2210 to remove HFC-134a (R-134a) from the air conditioning system.

If accidental system discharge occurs, ventilate work area before resuming service.

Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

1. When an A/C System has been opened to the atmosphere, such as during installation or repair, it must be evacuated using a R-134a refrigerant recovery/recycling/charging station. (If the system has been open for several days, the receiver/dryer should be replaced, and the system should be evacuated for several hours.)
2. Connect a R-134a refrigerant recovery/recycling/charging station (A) to the high-pressure service port (B) and the low-pressure service port (C), as shown in **Fig. 132**, following the equipment manufacturer's instructions. Evacuate the system.

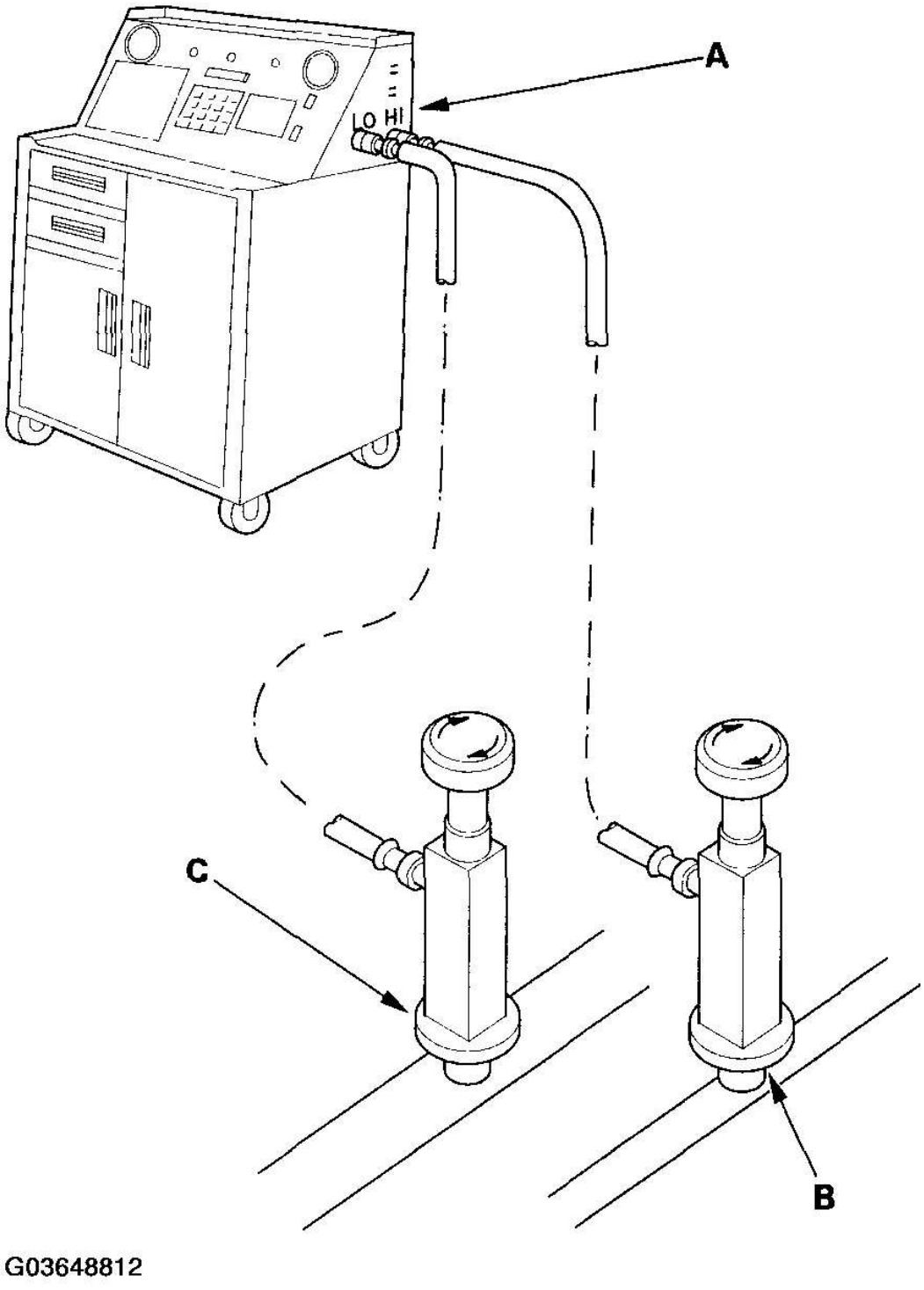


Fig. 132: Connecting R-134a Refrigerant Recovery/Recycling/Charging

Station To High-Pressure Service Port
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the low-pressure does not reach more than 93.3 kPa (700 mmHg, 27.6 in.Hg) in 15 minutes, there is probably a leak in the system. Partially charge the system, and check for leaks (see step 3 in **Refrigerant Leak Test**).

SYSTEM CHARGING

CAUTION:

- **Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.**
- **Be careful when connecting service equipment.**
- **Do not breathe refrigerant or vapor.**

Use only service equipment that is U.L-listed and is certified to meet the requirements of SAE J2210 to remove HFC-134a (R-134a) from the air conditioning system.

If accidental system discharge occurs, ventilate work area before resuming service.

Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

1. Connect a R-134a refrigerant recovery/recycling/charging station (A) to the high-pressure service port (B) and the low-pressure service port (C), as shown in **Fig. 133**, following the equipment manufacturer's instructions.

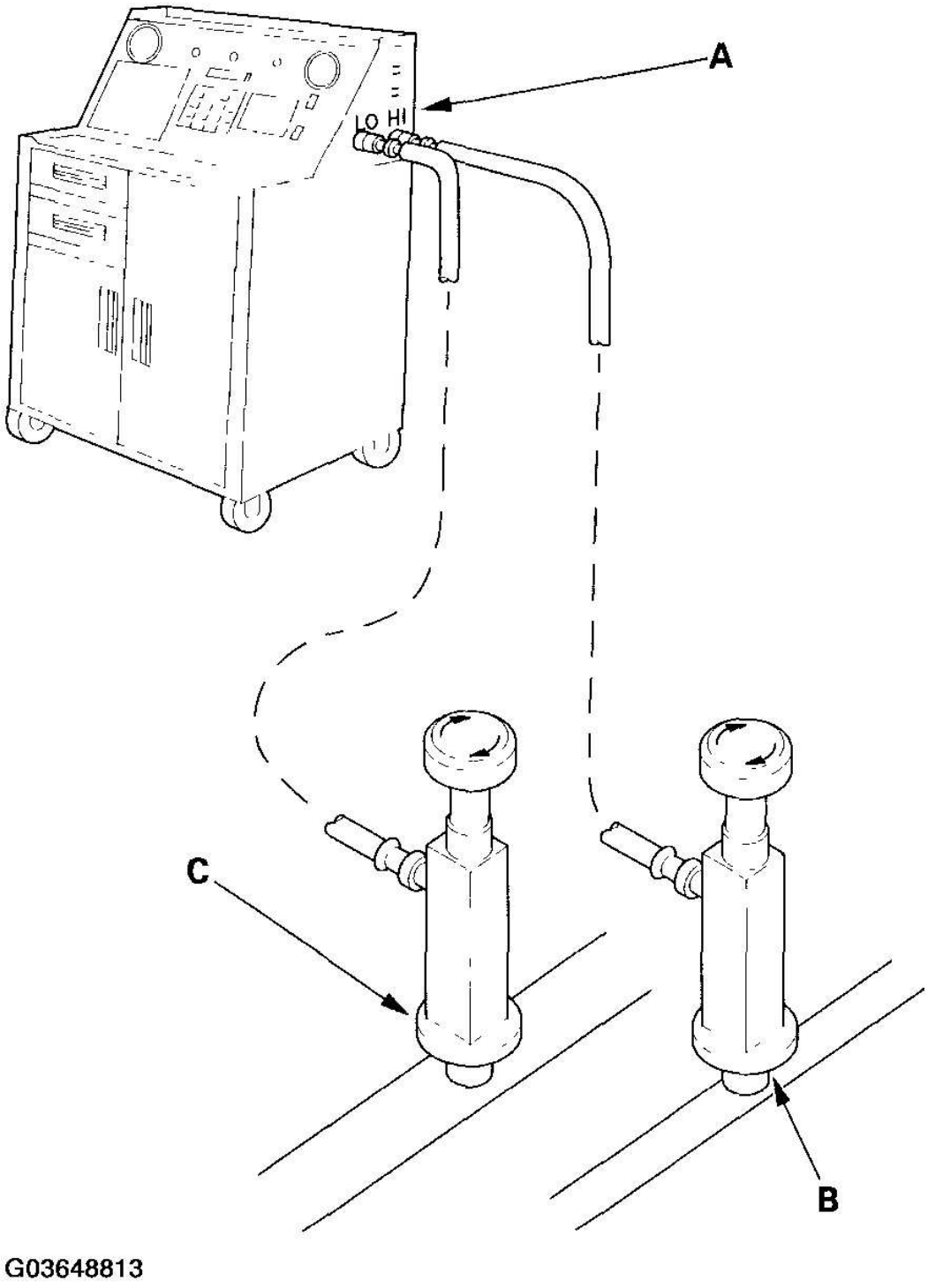


Fig. 133: Connecting R-134a Refrigerant Recovery/Recycling/Charging

Station To High-Pressure Service Port
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Evacuate the system (see **SYSTEM EVACUATION**).
3. Add the same amount of new refrigerant oil to the system that was removed during recovery. Use only DENSO ND-OIL 8 refrigerant oil.
4. Charge the system with the specified amount of R-134a refrigerant. Do not overcharge the system; the compressor will be damaged.

   Select the appropriate units of measure for your refrigerant charging station.

   Refrigerant Capacity:

   500 to 550 g
   0.50 to 0.55 kg
   1.1 to 1.2 lbs
   17.6 to 19.4 oz
5. Check for refrigerant leaks (see **REFRIGERANT LEAK TEST**).
6. Check for system performance (see **PERFORMANCE TEST**).

REFRIGERANT LEAK TEST

Special Tools Required

Leak detector, Honda Tool and Equipment YGK-H-10PM commercially available

WARNING:

- **Compressed air mixed with R-134a forms a combustible vapor.**
- **The vapor can burn or explode causing serious injury.**
- **Never use compressed air to pressure test R-134a service equipment or vehicle air conditioning system.**

CAUTION:

- **Air conditioning refrigerant or lubricant vapor**

can irritate your eyes, nose, or throat.

- **Be careful when connecting service equipment.**
- **Do not breathe refrigerant or vapor.**

Use only service equipment that is U.L.-listed and is certified to meet the requirements of SAE J2210 to remove HFC-134a (R-134a) from the air conditioning system.

If accidental system discharge occurs, ventilate work area before resuming service.

R-134a service equipment or vehicle air conditioning systems should not be pressure tested or leak tested with compressed air.

Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

1. Connect a R-134a refrigerant recovery/recycling/charging station (A) to the high-pressure service port (B) and the low-pressure service port (C), as shown in **Fig. 134**, following the equipment manufacturer's instructions.

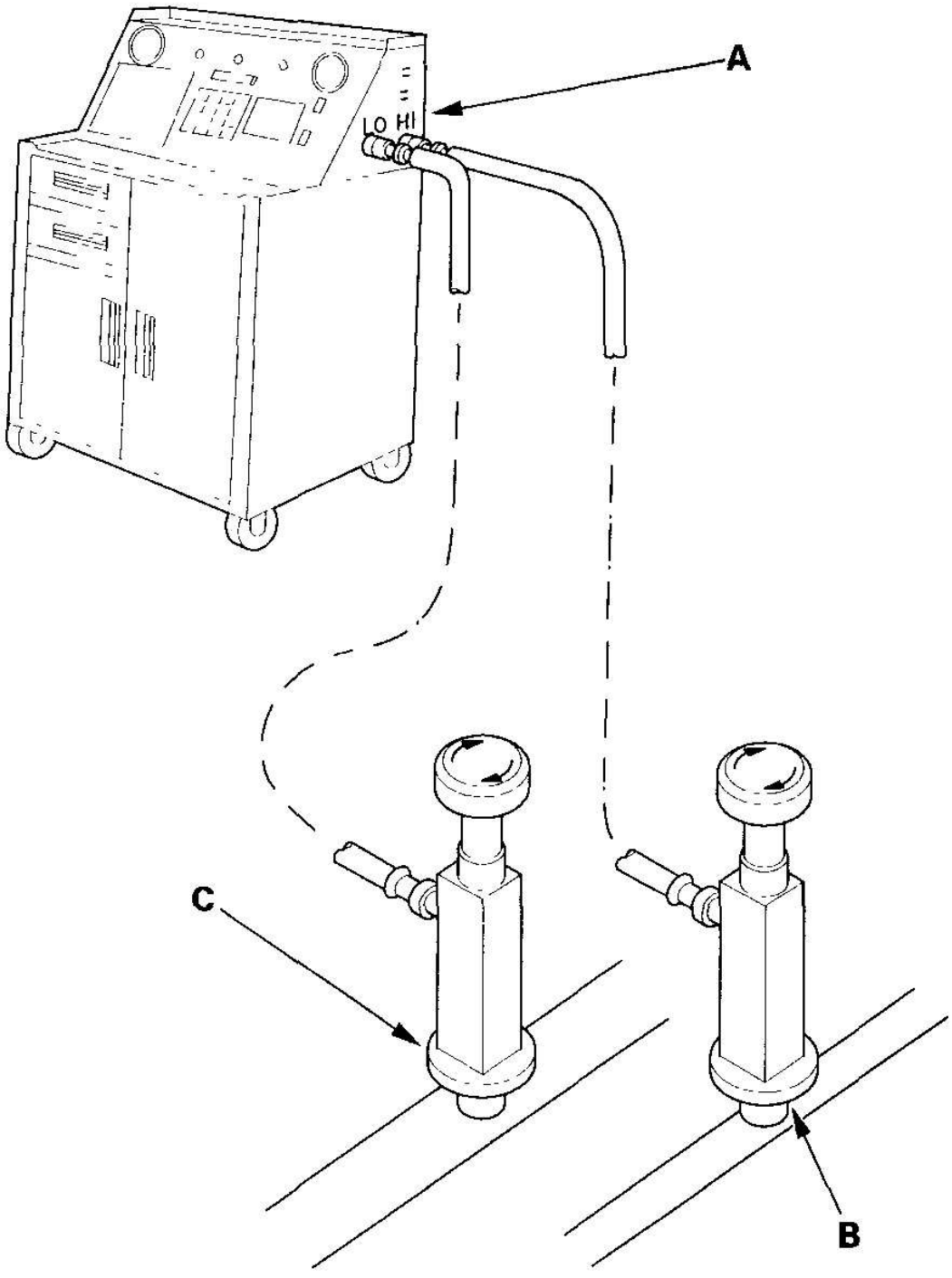


Fig. 134: Connecting R-134a Refrigerant Recovery/Recycling/Charging

Station To High-Pressure Service Port
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Open high pressure valve to charge the system to the specified capacity, then close the supply valve, and disconnect the charging station fittings.

   Select the appropriate units of measure for your refrigerant charging station.

   Refrigerant Capacity:

   500 to 550 g
   0.50 to 0.55 kg
   1.1 to 1.2 lbs
   17.6 to 19.4 oz
3. Check the system for leaks using a R-134a refrigerant leak detector with an accuracy of 14 g (0.5 oz) per year or better.
4. If you find leaks that require the system to be opened (to repair or replace hoses, fittings, etc.), recover the system.
5. After checking and repairing leaks, the system must be evacuated.

A/C SYSTEM TEST

PERFORMANCE TEST

WARNING:

- **Compressed air mixed with R-134a forms a combustible vapor.**
- **The vapor can burn or explode causing serious injury.**
- **Never use compressed air to pressure test R-134a service equipment or vehicle air conditioning systems.**

CAUTION:

- **Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.**
- **Be careful when connecting service equipment.**

- **Do not breathe refrigerant or vapor.**

The performance test will help determine if the air conditioner system is operating within specifications.

Use only service equipment that is U.L.-listed and is certified to meet the requirements of SAE J2210 to remove HFC-134a (R-134a) from the air conditioning system.

If accidental system discharge occurs, ventilate work area before resuming service.

R-134a service equipment or vehicle air conditioning systems should not be pressure tested or leak tested with compressed air.

Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

1. Connect a R-134a refrigerant recovery/recycling/charging station to the high-pressure service port and the low-pressure service port, following the equipment manufacturer's instructions.
2. Determine the relative humidity and air temperature.
3. Open the glove box. Remove the damper from the glove box, then let the glove box hang down (see **GLOVE BOX REMOVAL/INSTALLATION**).
4. Insert a thermometer (A) in the center vent.

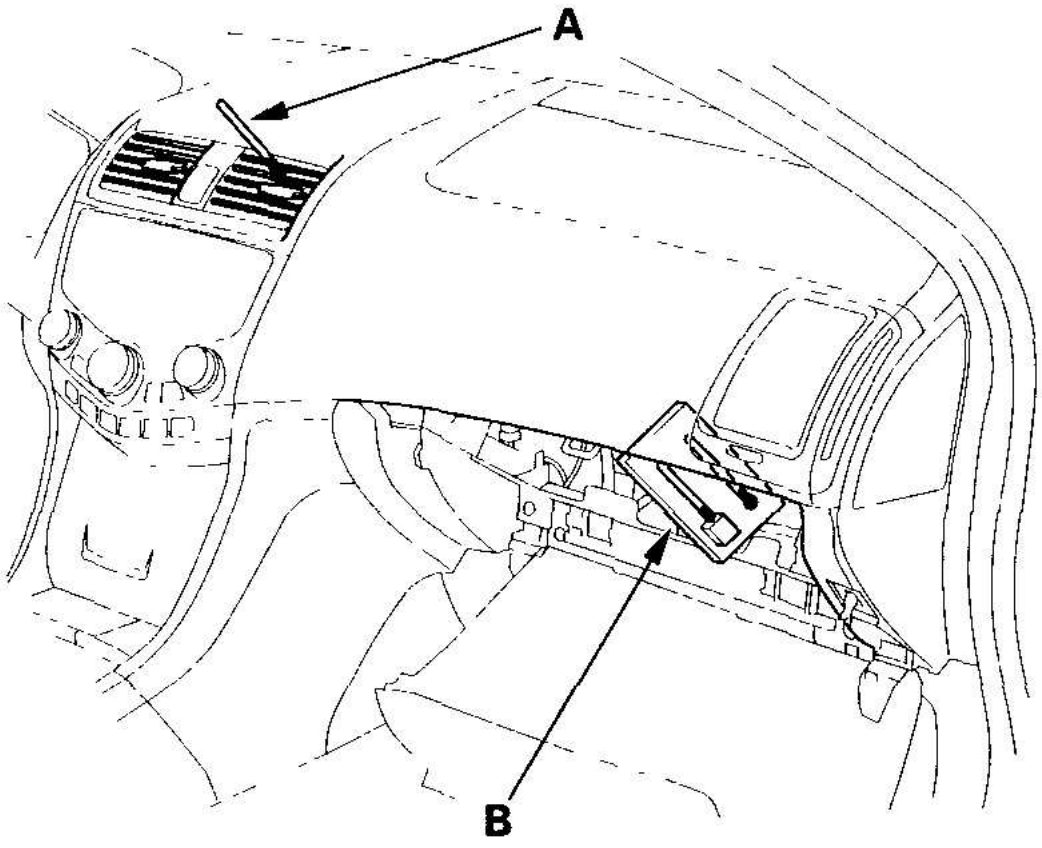


Fig. 135: Inserting Thermometer In Center Vent
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Place a thermometer (B) near the blower unit.
6. Test conditions:
   - Avoid direct sunlight.
   - Open hood.
   - Open front doors.
   - Set the temperature control dial to Max Cool, the mode control switch to Vent and the recirculation control switch to Recirculate.
   - Turn the A/C switch on and the fan switch to Max.

- Run the engine at 1,500 rpm.
- No driver or passengers in vehicle.

7. After running the air conditioning for 10 minutes under the above test conditions, read the delivery temperature from the thermometer in the center vent, the intake temperature near the blower unit, and the high and low system pressure from the A/C gauges.
8. To complete the charts:
   - Mark the delivery temperature along the vertical line.
   - Mark the intake temperature (ambient air temperature) along the bottom line.
   - Draw a line straight up from the air temperature to the humidity.
   - Mark a point 10% above and 10% below the humidity level.
   - From each point, draw a horizontal line across the delivery temperature.
   - The delivery temperature should fall between the two lines.
   - Complete the low-side pressure test and high-side pressure test in the same way.
   - Any measurements outside the line may indicate the need for further inspection.

Fig. 136: Example Of Temperature And Pressure Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PRESSURE TEST

PRESSURE TEST REFERENCE

Test results	Related symptoms	Probable cause	Remedy
	After stopping		Recover, evacuate

	A/C compressor, pressure drops about 196 kPa (2.0 kgf/cm^2 , 28 psi) quickly, and then falls gradually.	Air in system	(see **SYSTEM EVACUATION**), and recharge with specified amount (see **SYSTEM CHARGING**).
Discharge (high) pressure abnormally high	Reduced or no air flow through A/C condenser.	• Clogged A/C condenser or radiator fins • A/C condenser or radiator fan not working properly	• Clean • Check voltage and fan rpm. • Check fan direction.
	Line to A/C condenser is excessively hot.	Restricted flow of refrigerant in system	Restricted lines
Discharge pressure abnormally low	High and low-pressures are balanced soon after stopping A/C compressor. Low side is higher than normal.	• Faulty A/C compressor discharge valve • Faulty A/C compressor seal	Replace the A/C compressor.
	Outlet of expansion valve is not frosted, low-pressure gauge indicates vacuum.	• Faulty expansion valve • Moisture in system	• Replace • Recover, evacuate, and recharge with specified amount.
	Expansion valve is not frosted, and low-pressure line	• Frozen expansion valve (Moisture in	• Recover, evacuate, and recharge with

Suction (low) pressure abnormally low	is not cold. Low-pressure gauge indicates vacuum.	system) • Faulty expansion valve	specified amount. • Replace the expansion valve.
	Discharge temperature is low, and the air flow from vents is restricted.	Frozen evaporator	Run the fan with A/C compressor off, then check evaporator temperature sensor.
	Expansion valve is frosted.	Clogged expansion valve	Clean or replace.
Suction pressure abnormally high	Low-pressure hose and check joint are cooler than the temperature around evaporator.	Expansion valve open too long	Repair or replace.
	Suction pressure is lowered when A/C condenser is cooled by water.	Excessive refrigerant in system	Recover, evacuate, and recharge with specified amount.
	High and low-pressures are equalized as soon as the A/C compressor is stopped, and both gauges fluctuate while running.	• Faulty gasket • Faulty high-pressure valve • Foreign particle stuck in high-pressure valve	Replace the A/C compressor.
Suction and discharge pressures abnormally high	Reduced air flow through A/C condenser.	• Clogged A/C condenser or radiator fins • A/C condenser or radiator fan not working	• Clean • Check voltage and fan rpm. • Check fan direction.

		properly	
Suction and discharge pressures abnormally low	Low-pressure hose and metal end areas are cooler than evaporator.	Clogged or kinked low-pressure hose parts	Repair or replace.
	Temperature around expansion valve is too low compared with that around receiver/dryer.	Clogged high-pressure line	Repair or replace.
Refrigerant leaks	A/C compressor clutch is dirty.	A/C compressor shaft seal leaking	Replace the A/C compressor.
	A/C compressor bolt(s) are dirty.	Leaking around bolt(s)	Tighten bolt(s) or replace the A/C compressor.
	A/C compressor gasket is wet with oil.	Gasket leaking	Replace the A/C compressor.
	A/C fitting is dirty.	Leaking O-ring.	Clean A/C fitting and replace O-ring.

2003-07 HVAC

Climate Control - Accord (V6)

SUPPLEMENTAL RESTRAINT SYSTEM (SRS) (IF HVAC MAINTENANCE IS REQUIRED)

The Accord SRS includes a driver's airbag in the steering wheel hub, a passenger's airbag in the dashboard above the glove box, seat belt tensioners in the front seat belt retractors, side curtain airbags in the sides of the roof, and side airbags in the front seat-backs. Information necessary to safely service the SRS is included in **SRS (SUPPLEMENTAL RESTRAINT SYSTEM) (EXCEPT HYBRID & V6)**

- To avoid rendering the SRS inoperative, which could lead to personal injury or death in the event of a severe frontal or side collision, all SRS service work must be performed by an authorized Honda dealer.
- Improper service procedures, including incorrect removal and installation of the SRS, could lead to personal injury caused by unintentional deployment of the airbags and/or side airbags.
- Do not bump or impact the SRS unit, front impact sensors, or side impact sensors when the ignition switch is ON (II), or for at least 3 minutes after the ignition switch is turned OFF; otherwise, the system may fail in a collision, or the airbags may deploy.
- SRS electrical connectors are identified by yellow color coding. Related components are located in the steering column, front console, dashboard, dashboard lower panel, in the dashboard above the glove box, in the front seats, in the roof side, and around the floor. Do not use electrical test equipment on these circuits.

COMPONENT LOCATION INDEX

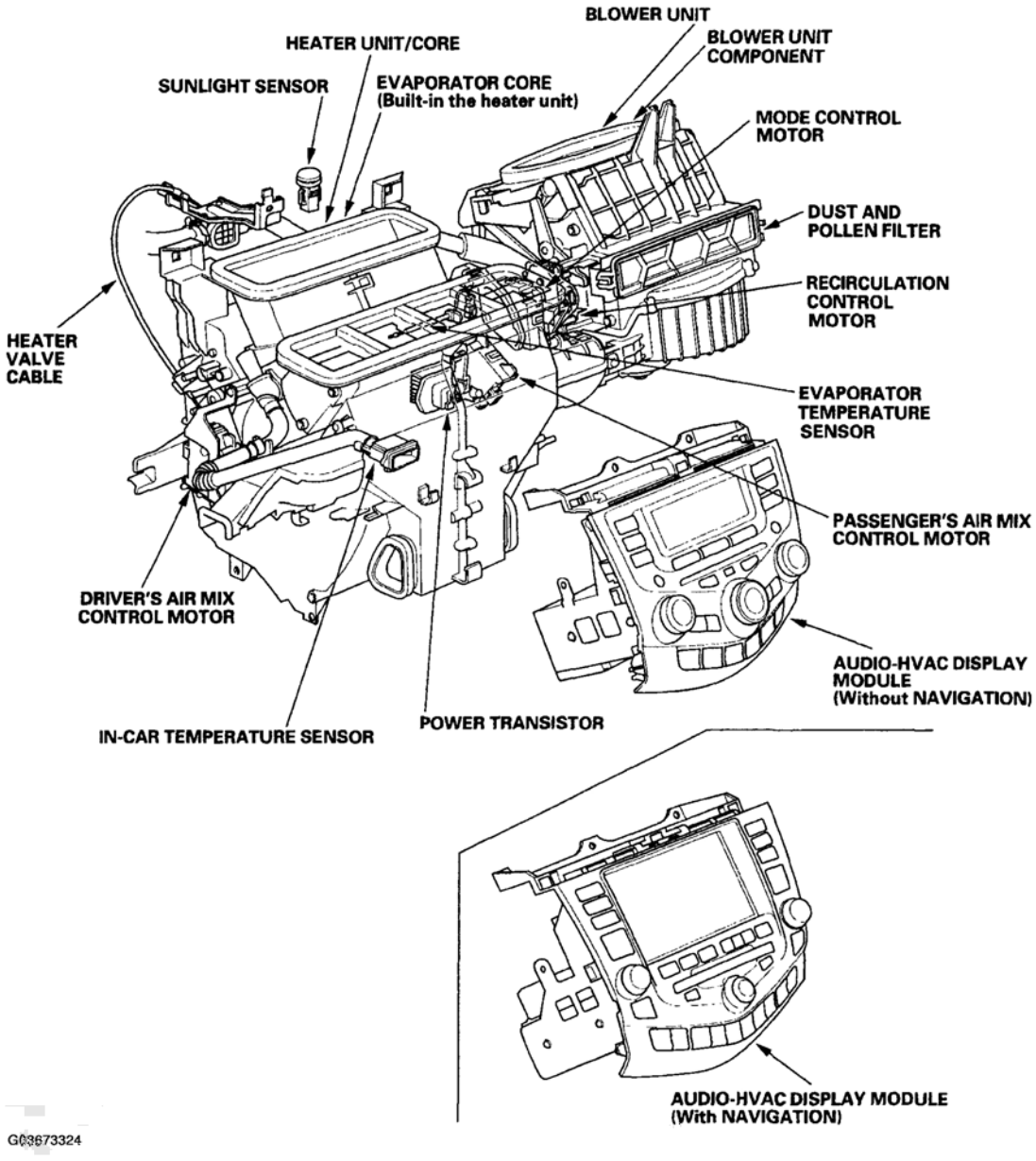


Fig. 1: Locating Climate Control Components (4-Door - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

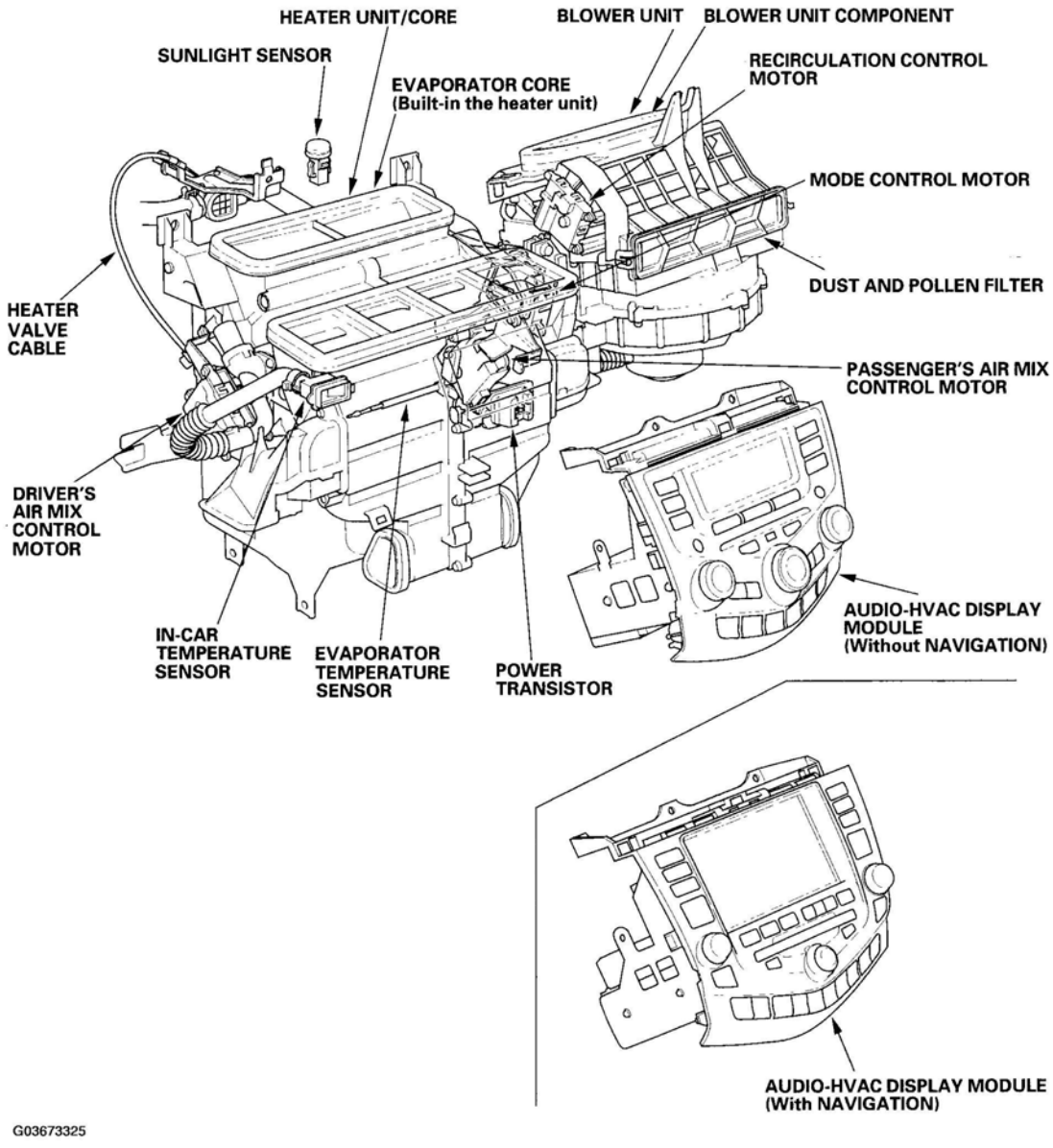


Fig. 2: Locating Climate Control Components (2-Door - 1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

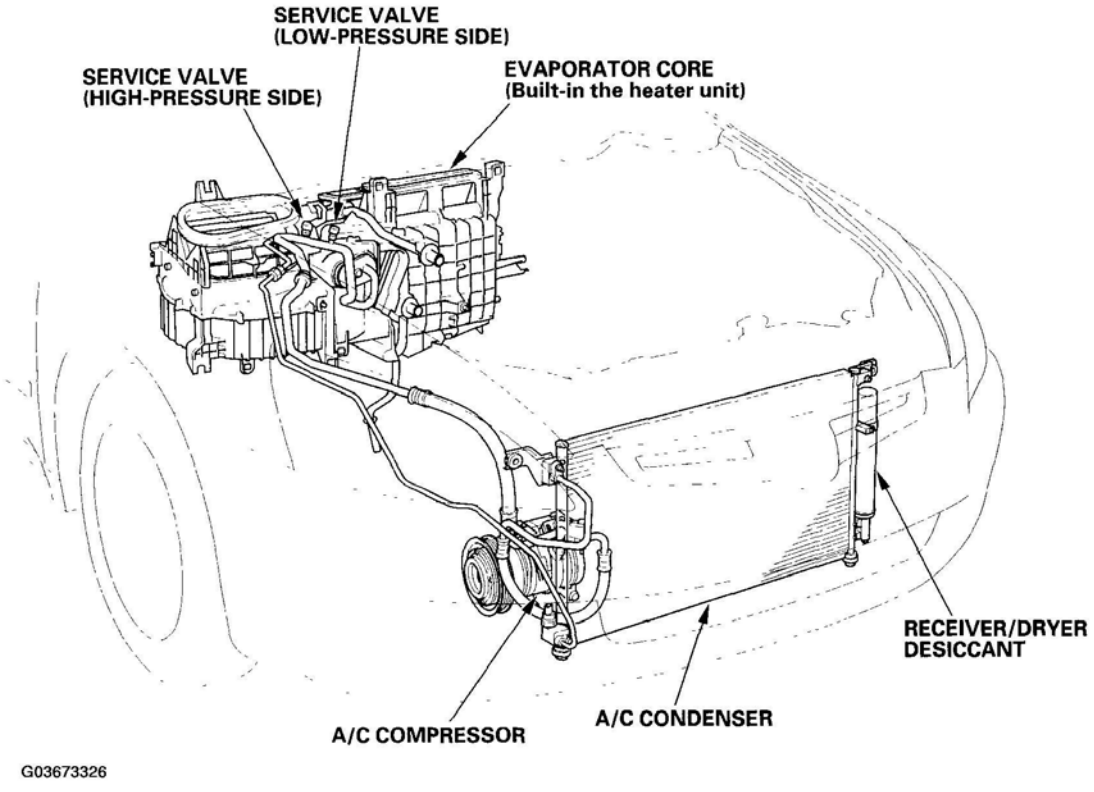


Fig. 3: Locating Climate Control Components (4-Door - 2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

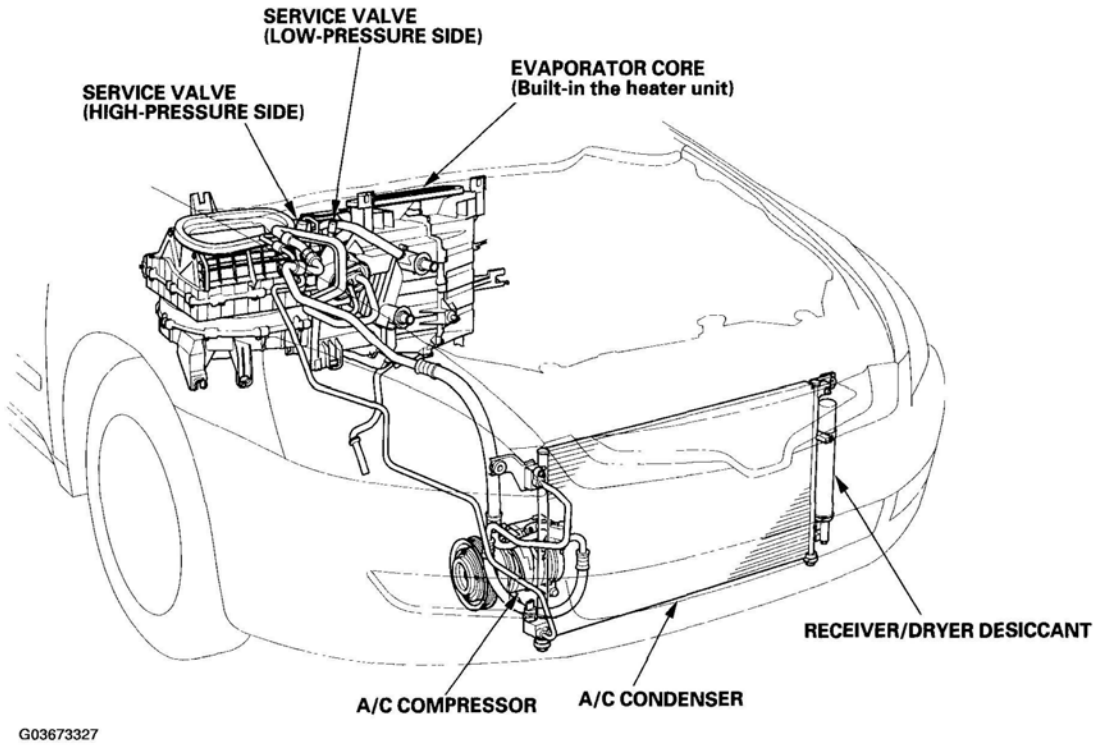


Fig. 4: Locating Climate Control Components (2-Door - 2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

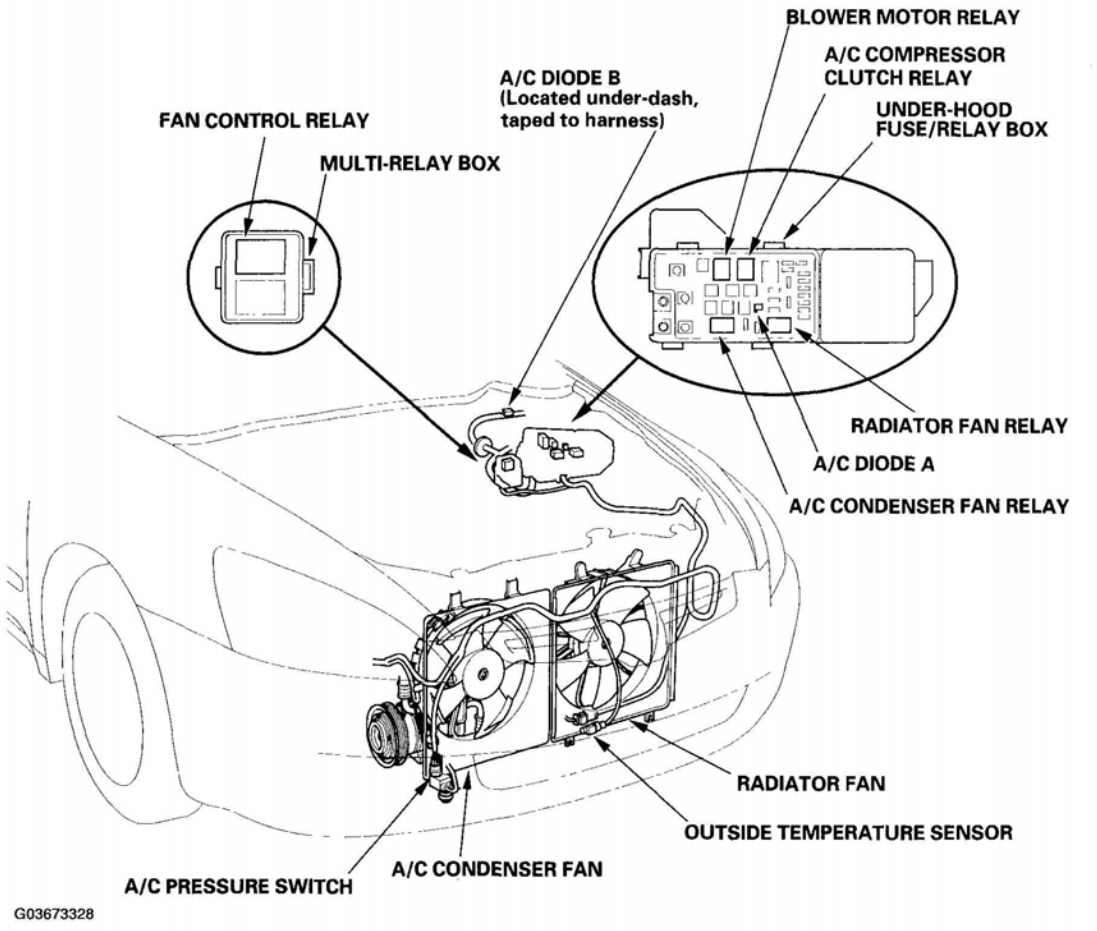


Fig. 5: Locating Climate Control Components (4-Door/2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for
Recirculation control doors do not change between Fresh and Recirculate	Recirculation control motor circuit troubleshooting, refer to **RECIRCULATION CONTROL MOTOR CIRCUIT TROUBLESHOOTING**	• HVAC DTCs, refer to **GENERAL TROUBLESHOOTING INFORMATION** • Blown fuse No. 30 (7.5A) in the under-dash fuse/relay box

		• Cleanliness and tightness of all connectors
Blower, heater controls, and A/C do not work	Climate control power and ground circuits troubleshooting, refer to **CLIMATE CONTROL POWER AND GROUND CIRCUIT TROUBLESHOOTING**	• HVAC DTCs, refer to **GENERAL TROUBLESHOOTING INFORMATION** • Blown fuse No. 30 (7.5A) in the under-dash fuse/relay box • Poor ground at G503 Cleanliness and tightness of all connectors
Both fans do not run at low speed with the A/C on (but the A/C compressor runs with the A/C on)	Radiator and A/C condenser fan low speed circuit troubleshooting (see **RADIATOR AND A/C CONDENSER FAN LOW SPEED CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs, refer to **GENERAL TROUBLESHOOTING INFORMATION** • Blown fuse No. 9 (20A) in the under-hood fuse/relay box, and No. 30 (7.5A) in the under-dash fuse/relay box • Poor ground at G301 • Cleanliness and tightness of all connectors
The A/C condenser fan does not run at high speed with the A/C on (but both fans run at low speed and the A/C	A/C condenser fan high speed circuit troubleshooting (see **A/C CONDENSER FAN HIGH SPEED CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs, refer to **GENERAL TROUBLESHOOTING INFORMATION** • Blown fuse No. 30 (7.5A) in the under-dash fuse/relay box • Poor ground at G201

compressor operates with the A/C on)		• Cleanliness and tightness of all connectors
Both fans do not run at high speed with the A/C on (but both fans run at low speed and the A/C compressor operates with the A/C on)	Radiator and A/C condenser fan high speed circuit troubleshooting (see **RADIATOR AND A/C CONDENSER FAN HIGH SPEED CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs, refer to **GENERAL TROUBLESHOOTING INFORMATION** • Cleanliness and tightness of all connectors
The A/C compressor clutch does not engage (but both fans run with the A/C on)	A/C compressor clutch circuit troubleshooting (see **A/C COMPRESSOR CLUTCH CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs, refer to **GENERAL TROUBLESHOOTING INFORMATION** • Blown fuse No. 12 (7.5A) in the under-hood fuse/relay box, and No. 30 (7.5A) in the under-dash fuse/relay box • Cleanliness and tightness of all connectors
A/C system does not come on (both fans and the A/C compressor do not work); heater is OK	A/C Pressure Switch Circuit Troubleshooting (see **A/C PRESSURE SWITCH CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs, refer to **GENERAL TROUBLESHOOTING INFORMATION** • Cleanliness and tightness of all connectors
Blower fan	ECT troubleshooting, refer to	• Powertrain DTCs, refer

runs slower than expected in cold weather	**GENERAL TROUBLESHOOTING INFORMATION**) **NOTE:** **It is normal for the blower to run slowly until the engine coolant temperature begins to rise. If the blower continues to run slowly for an abnormal length of time, continue to troubleshoot the problem.**	**GENERAL TROUBLESHOOTING INFORMATION**)
AUTO button does not work	1. Turn the ignition switch ON (II). 2. Press the OFF button, then press the AUTO button and check the display. • If AUTO is displayed, but the climate control is not working properly, do the self-diagnostic, refer to **GENERAL TROUBLESHOOTING INFORMATION** . • If AUTO is not displayed, check for poor connections at the climate control connector, if the connections are OK, replace the audio-HVAC display panel.	Climate control power and ground circuit troubleshooting, refer to **CLIMATE CONTROL POWER AND GROUND CIRCUIT TROUBLESHOOTING**
OFF button does not work	1. Turn the ignition switch ON (II). 2. Press the AUTO button, then press the OFF button and check the display. • If climate control display	

	turns off, go to **GENERAL TROUBLESHOOTING INFORMATION** . • If the climate control display does not turn on, replace the audio-HVAC display panel.	
Dual button does not work	1. Turn the ignition switch ON (II). 2. Press the AUTO button, then press the DUAL button several times and check the DUAL button LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to **GENERAL TROUBLESHOOTING INFORMATION** . • If the LED does not turn on or off, replace the audio-HVAC display panel.	
Recirculation button does not work	1. Turn the ignition switch ON (II). 2. Press the recirculation button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to recirculation	

	control motor test, refer to **RECIRCULATION CONTROL MOTOR CIRCUIT TROUBLESHOOTING** : 4-door: **4-DOOR** 2-door: **2-DOOR** • If the LED does not turn on or off, replace the audio-HVAC display panel.	
Defroster button does not work	1. Turn the ignition switch ON (II). 2. Press the AUTO button, then press the defroster button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to **GENERAL TROUBLESHOOTING INFORMATION** . • If the LED does not turn on or off, replace the audio-HVAC display panel.	
Rear window defogger button does not work	1. Turn the ignition switch ON (II). 2. Press the rear window defogger button several times and check the button's LED. The LED should toggle on and off as the	

	button is pressed. • If the LED turns on and off, go to **FUNCTION TEST** . • If the LED does not turn on or off, replace the audio-HVAC display panel.	
MODE button does not work	1. Turn the ignition switch ON (II). 2. Press the MODE button and check the display. • If the display scrolls through the modes as the MODE button is pressed, go to **GENERAL TROUBLESHOOTING INFORMATION** . • If the display does not scroll the modes as the MODE button is pressed, replace the audio-HVAC display panel.	
Fan control button does not work	1. Turn the ignition switch ON (II). 2. Press the AUTO button, then adjust the fan control button up/down and check the display. • If the display indicates the fan speed selection up/down, go to **GENERAL TROUBLESHOOTING**	

	INFORMATION . • If the display does not indicate the fan speed selection up/down, replace the audio-HVAC display panel.	
TEMP control dial does not work	1. Turn the ignition switch ON (II). 2. Press the AUTO button, then adjust the TEMP control dial up/down and check the display. • If the display indicates the change in temperature up/down, go to **GENERAL TROUBLESHOOTING INFORMATION** . • If the display does not indicate the change in temperature up/down, replace the audio-HVAC display panel.	
Passenger's TEMP dial does not work	1. Turn the ignition switch ON (II). 2. Press the AUTO button, press the DUAL button, then adjust the passenger's TEMP control dial up/down and check the display. • If the display indicates the change in temperature up/down for the passenger's side, go to	

	GENERAL TROUBLESHOOTING INFORMATION . • If the display does not indicate the change in temperature up/down for the passenger's side, replace the audio-HVAC display panel.	
Audio-HVAC display panel will not run self-diagnosis	1. Turn the ignition switch ON (II). 2. Press the A/C button, and then OFF button and check the display. • If the display turns on and off as the buttons are pressed, there are no DTCs stored, troubleshoot the individual symptoms. • If the display does not respond as the buttons are pressed, check for loose or poor connections at the audio-HVAC display panel. If the connections are OK, replace the audio-HVAC display panel.	
More than one button is not working	Climate control power and ground circuit troubleshooting, refer to **CLIMATE CONTROL POWER AND GROUND CIRCUIT TROUBLESHOOTING** .	HVAC DTCs, refer to **GENERAL TROUBLESHOOTING INFORMATION**
Audio-HVAC display/button	Audio-HVAC display module illumination troubleshooting, refer	

illumination problems	to **AUDIO-HVAC DISPLAY MODULE ILLUMINATION TROUBLESHOOTING** .	

CIRCUIT DIAGRAM

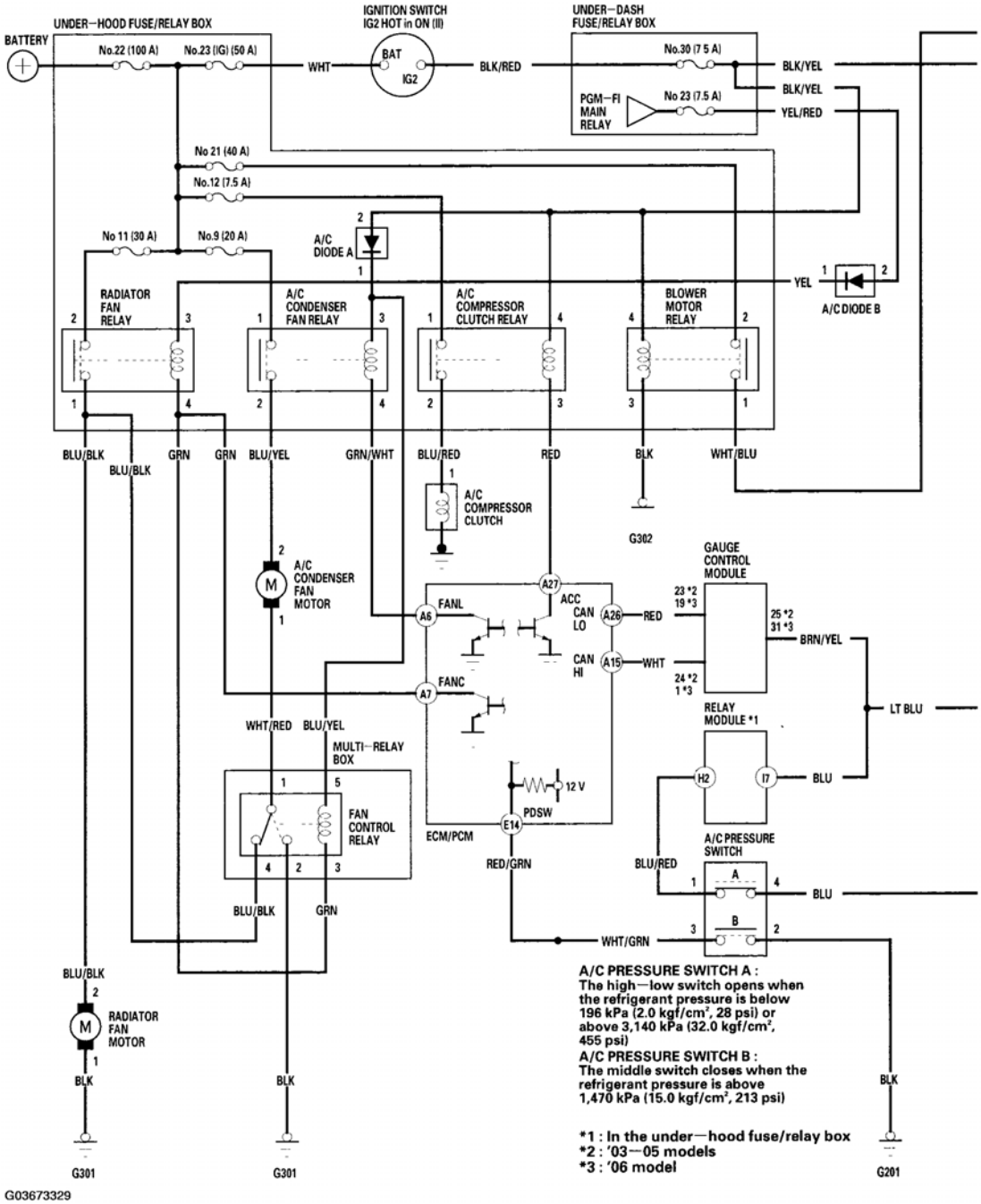


Fig. 6: Climate Control Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

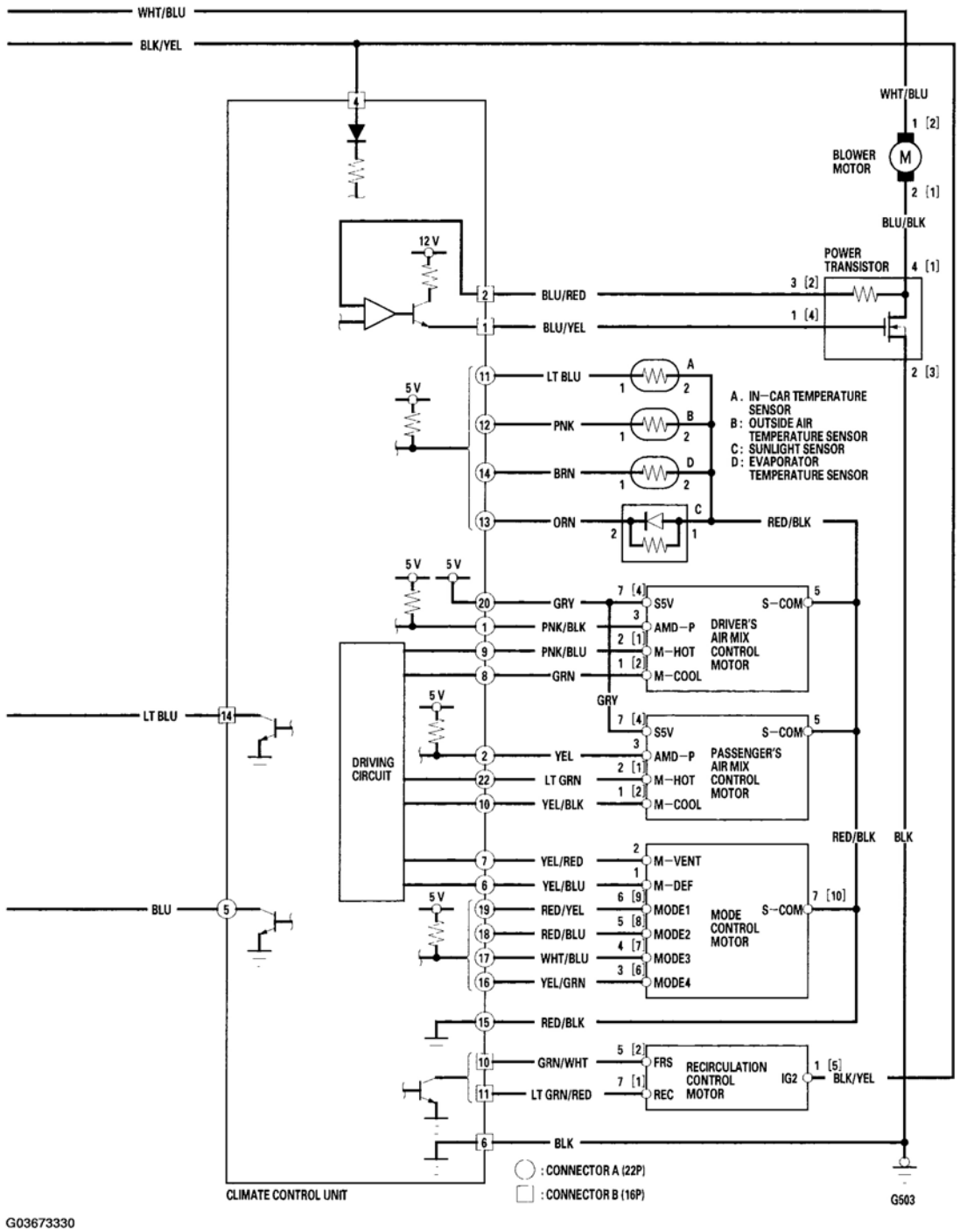


Fig. 7: Climate Control Circuit Diagram (2 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C PRESSURE SWITCH CIRCUIT TROUBLESHOOTING

NOTE:

- **Do not use this troubleshooting procedure if the heater is inoperative or if any of the following items are operative; A/C condenser fan, radiator fan, A/C compressor. Refer to the SYMPTOM TROUBLESHOOTING INDEX.**
- **Before performing symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Check for body DTCs in test mode A of the MICS, refer to **MOTOR TEST** .

   Are there any DTCs indicated?

   YES - Do the appropriate troubleshooting for the DTC indicated.

   NO - Go to step 2.
2. Disconnect the A/C pressure switch 4P connector.
3. Turn the ignition switch ON (II).
4. Measure the voltage between the No. 1 terminal of the A/C pressure switch 4P connector and body ground.

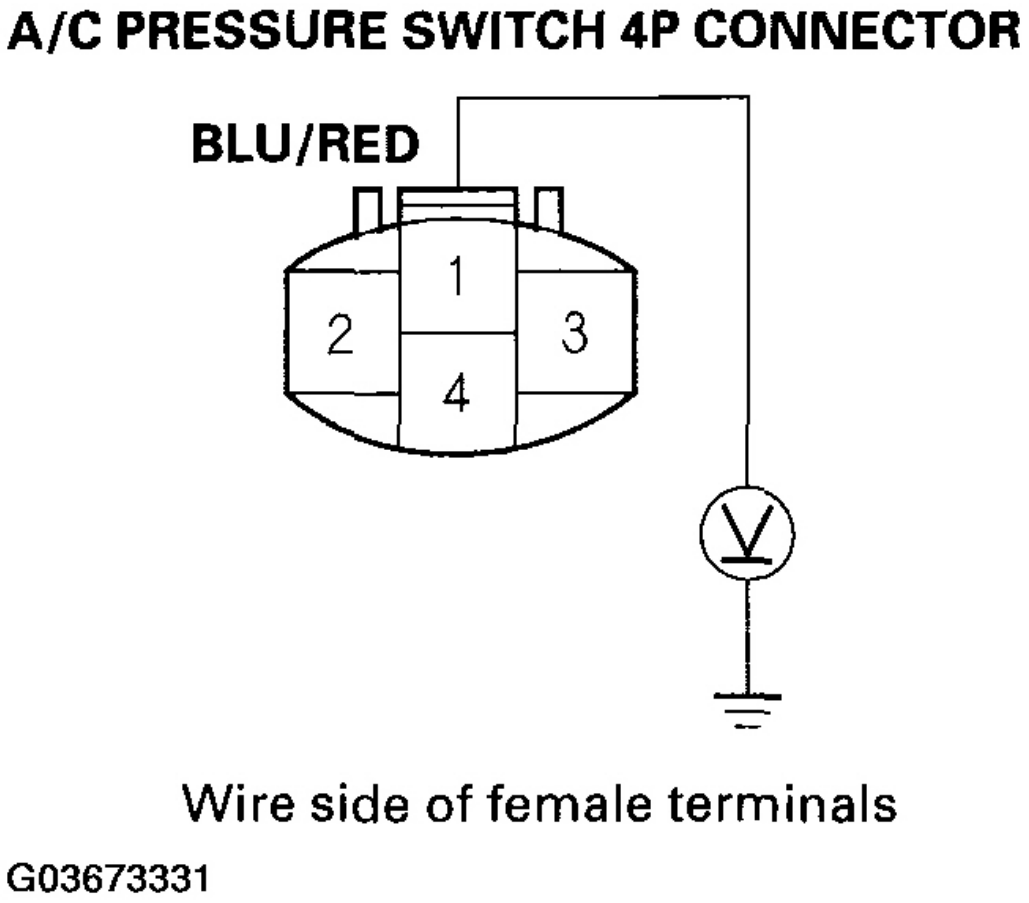


Fig. 8: Measuring Voltage Between No. 1 Terminal Of A/C Pressure Switch 4P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 5 V or more?

YES - Go to step 5.

NO - Repair open in the wire between the relay module and the A/C pressure switch.

5. Turn the ignition switch OFF.
6. Check for continuity between the No. 1 and No. 4 terminals of the A/C pressure switch.

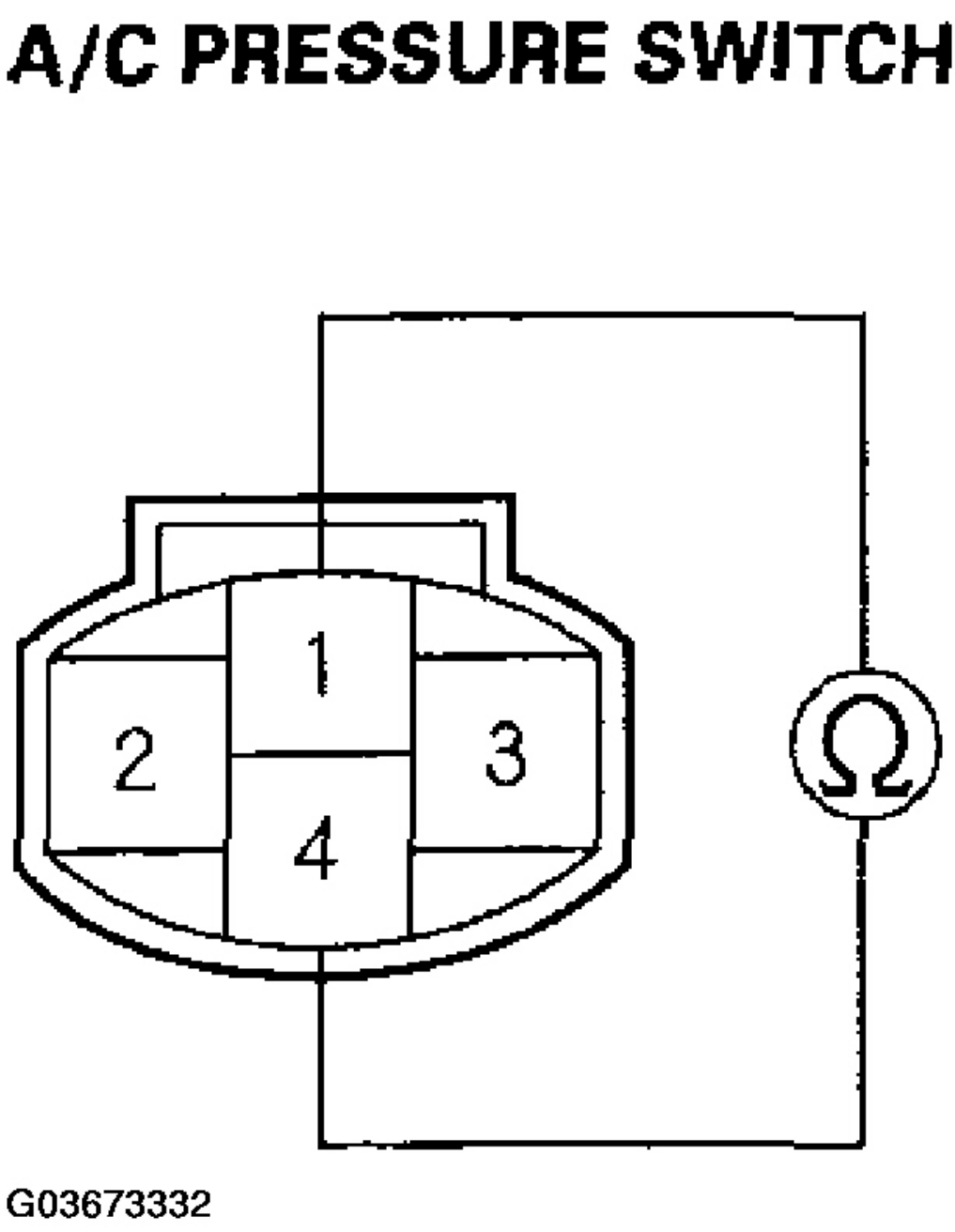


Fig. 9: Checking For Continuity Between No. 1 And No. 4 Terminals Of A/C Pressure Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 7.

NO - Go to step .

7. Reconnect the A/C pressure switch 4P connector.
8. Disconnect audio-HVAC display panel connector A (22P).
9. Turn the ignition switch ON (II).
10. Measure the voltage between the No. 5 terminal of audio-HVAC display panel connector A (22P) and body ground.

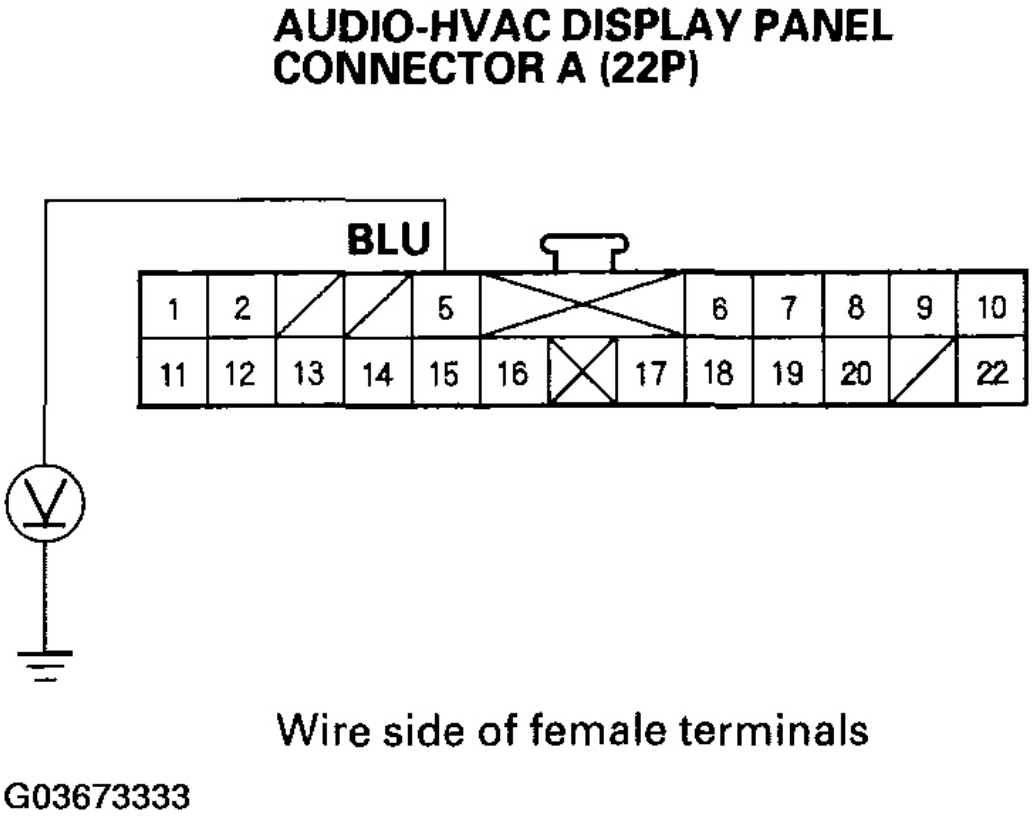


Fig. 10: Measuring Voltage Between No. 5 Terminal Of Audio-Hvac Display Panel Connector A (22P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 5 V or more?

YES - Go to step 11.

NO - Repair the open in the wire between the climate control unit and the A/C pressure switch.

11. Turn the ignition switch OFF.
12. Measure the resistance between the No. 14 and No. 15 terminals of audio-HVAC display panel connector A (22P).

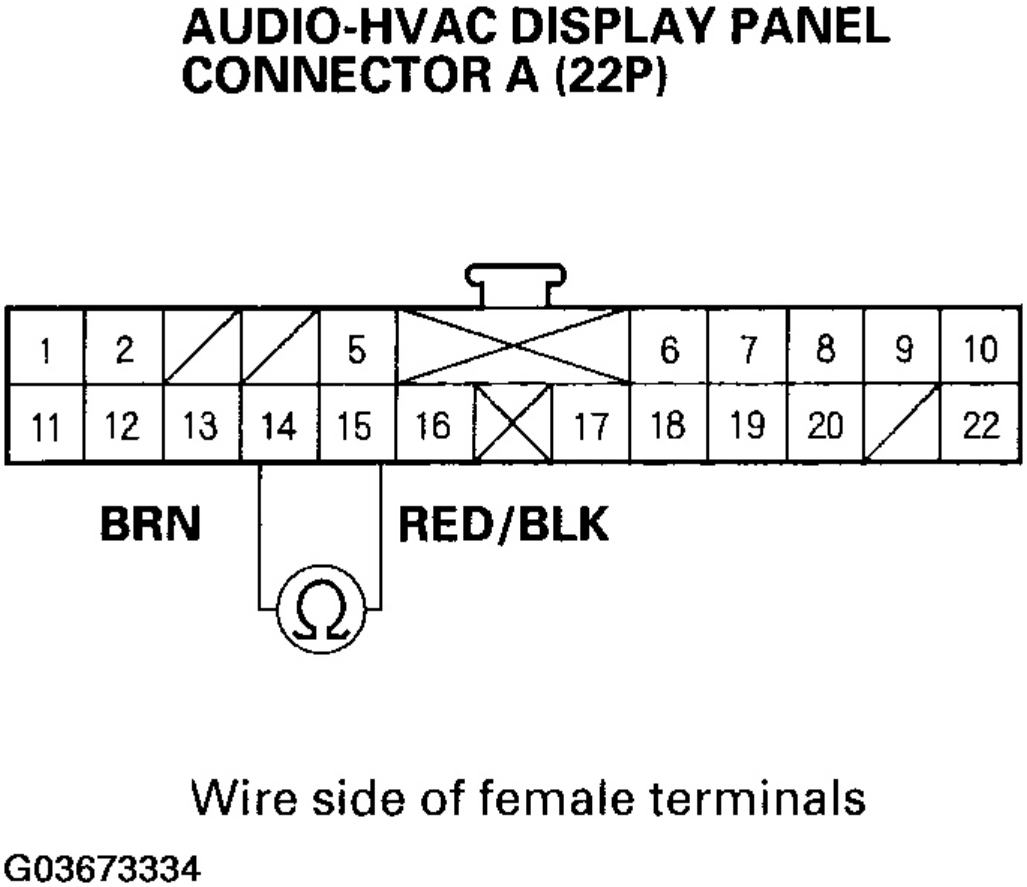


Fig. 11: Measuring Resistance Between No. 14 And No. 15 Terminals Of Audio-HVAC Display Panel Connector A (22P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance less than 24 k ohms?

YES - Go to step 13.

NO - Repair cause of high resistance in the evaporator temperature circuit.

13. Reconnect audio-HVAC display panel connector A (22P).
14. Turn the ignition switch ON (II).
15. Check the blower motor at several speeds.

Does the blower motor operate at all speeds?

YES - Check for loose wires or poor connections at audio-HVAC display panel connector A (22P) and at the A/C pressure switch 2P connector. If the connections are good, substitute a known-good audio-HVAC display panel and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Repair the problem in the blower motor circuit.

16. Check for proper A/C system pressure.

Is the pressure within specifications?

YES - Replace the A/C pressure switch.

NO - Repair the A/C pressure problem.

PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT

4-DOOR

1. Remove the passenger's dashboard lower cover, refer to **PASSENGER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION** .
2. Disconnect the 2P connector (A) from the evaporator temperature sensor. Disconnect the 7P connector (B) from the passenger's air mix control motor (C). Remove the self-tapping screws and the passenger's air mix control motor from the heater unit.

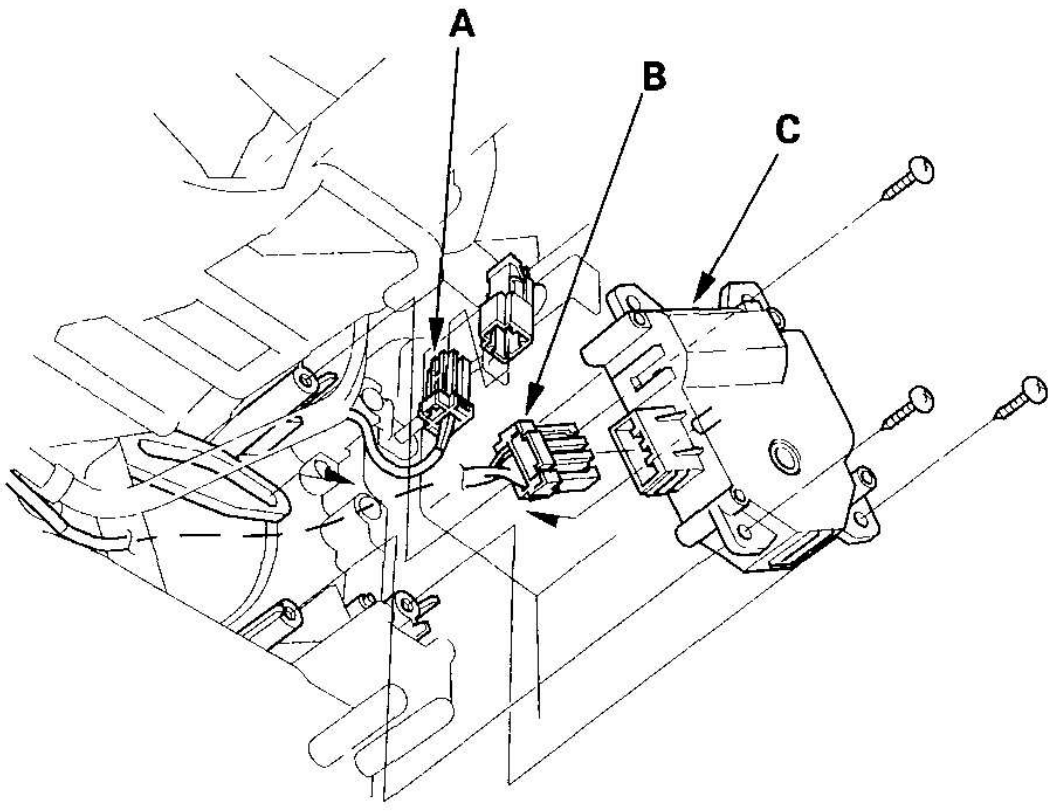


Fig. 12: Disconnecting 2P Connector From Evaporator Temperature Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

2-DOOR

1. Remove the passenger's dashboard lower cover, refer to **PASSENGER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION** .
2. Disconnect the 10P connector (A) from the mode control motor. Disconnect the 2P connector (B) from the evaporator temperature sensor. Disconnect the 5P connector (C) from the passenger's air mix control motor (D). Remove the

self-tapping screws and the passenger's air mix control motor from the heater unit.

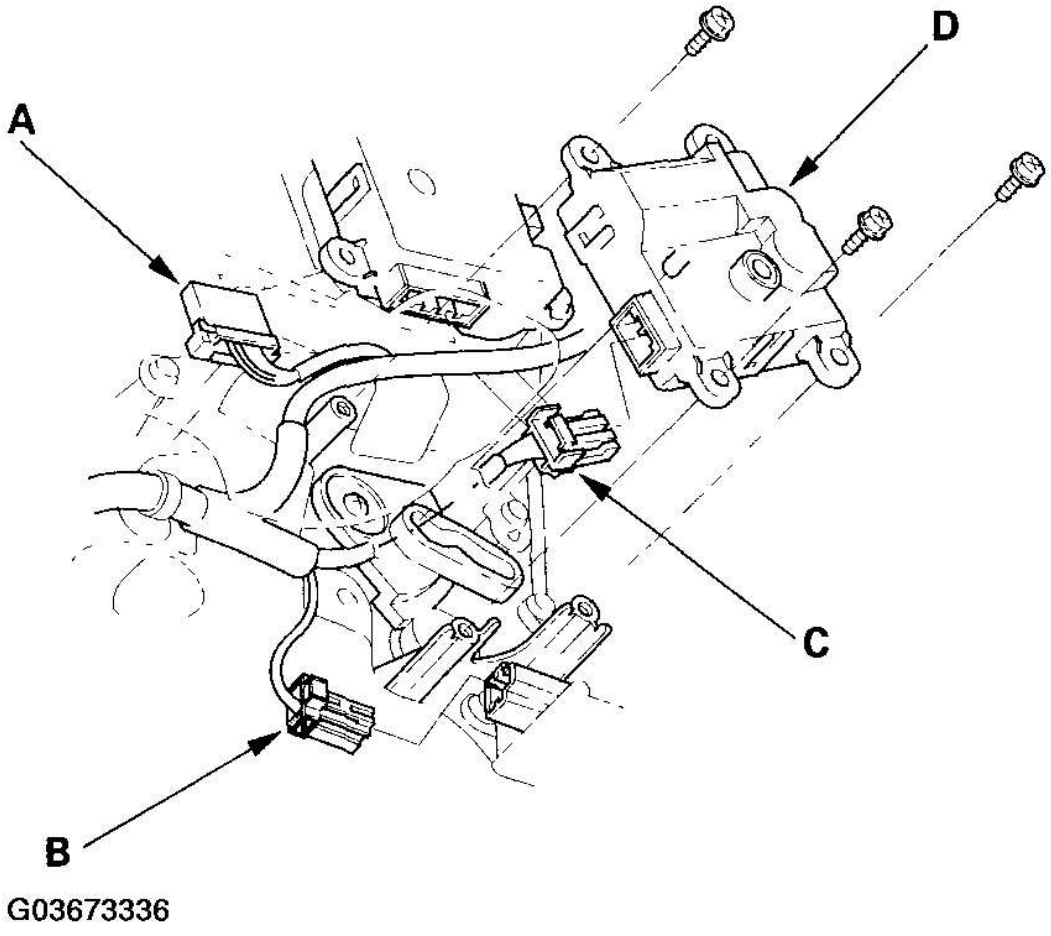


Fig. 13: Disconnecting 10P Connector From Mode Control Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

2003-07 HVAC

Climate Control - Accord

COMPONENT LOCATION INDEX

4-DOOR

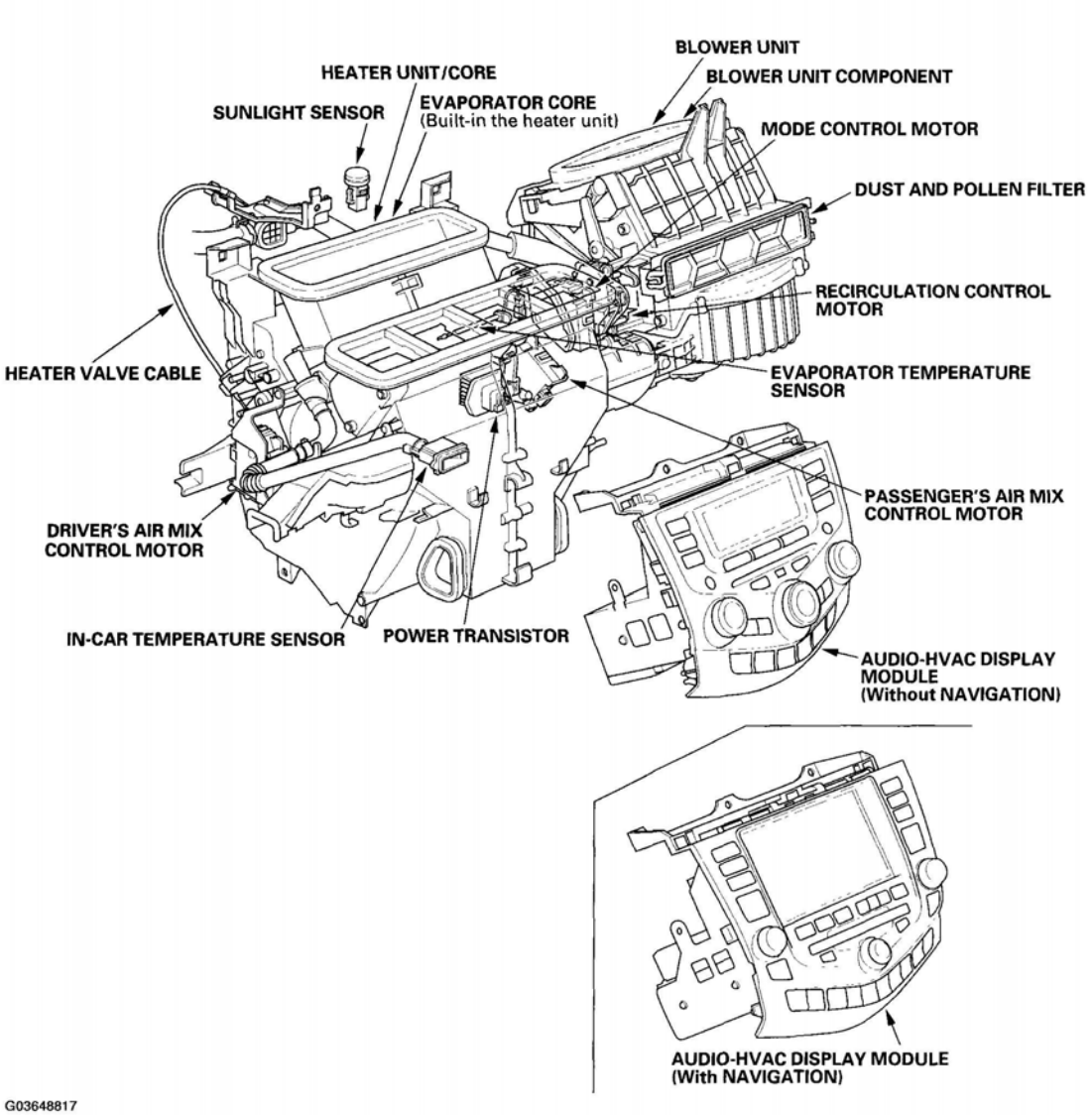


Fig. 1: Identifying Climate Control Component Location - 4-Door
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2-DOOR

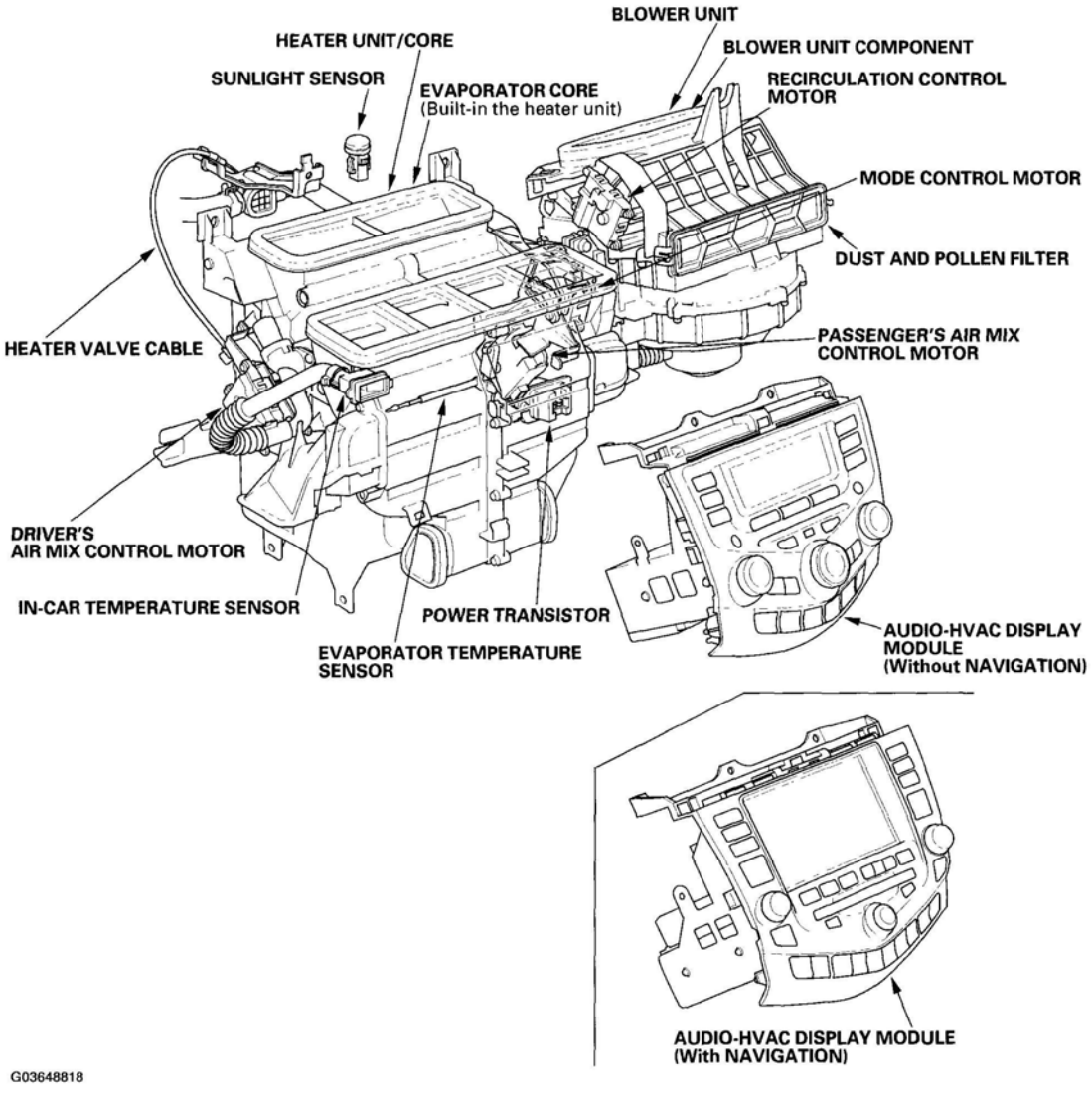


Fig. 2: Identifying Climate Control Component Location - 2-door
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR

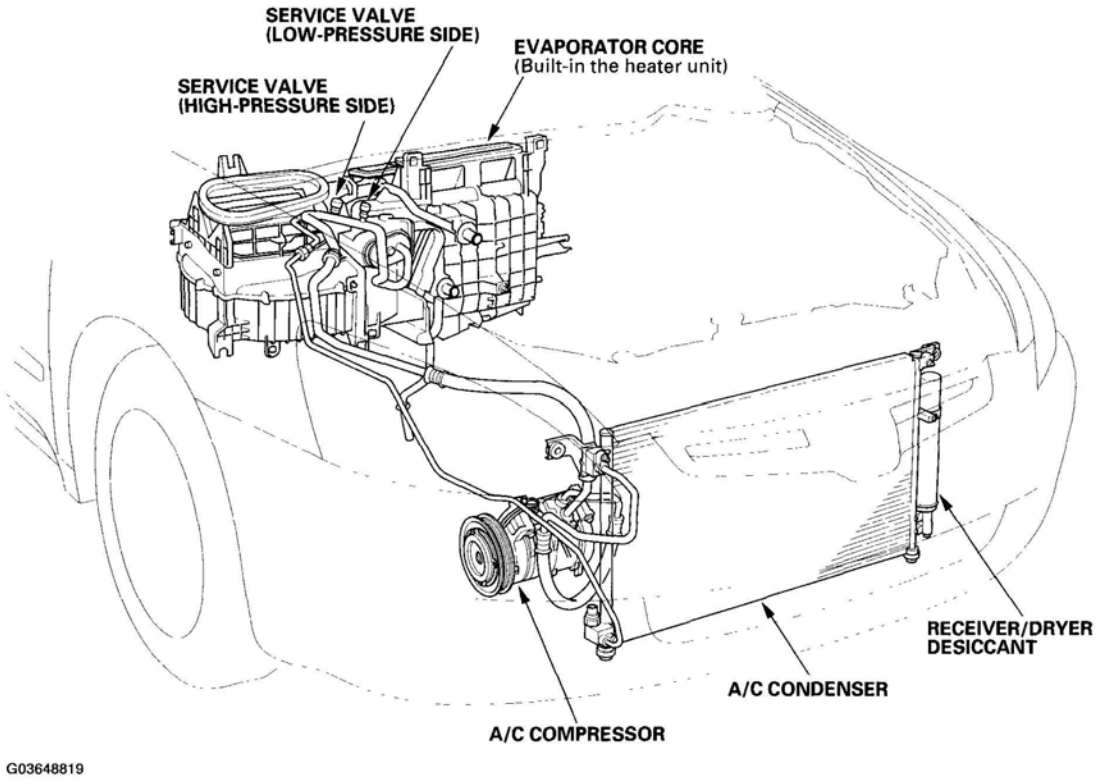


Fig. 3: Identifying Climate Control Component Location - 4-door
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2-DOOR

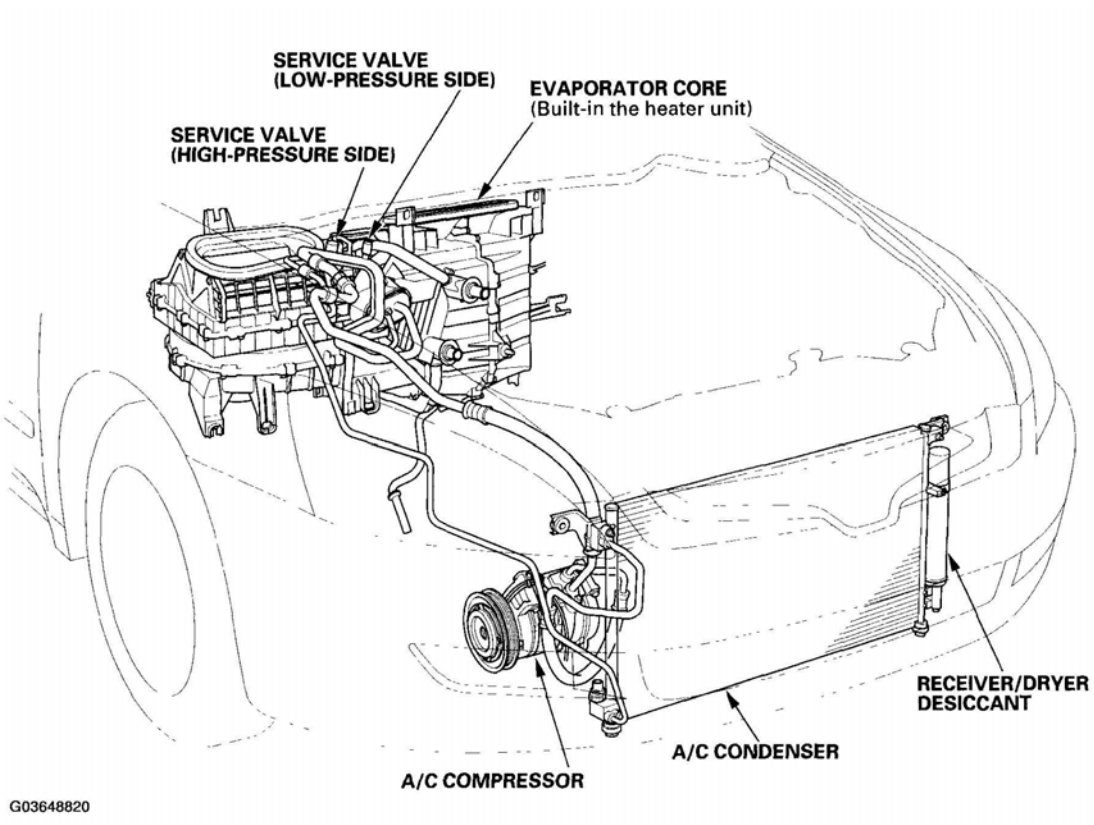


Fig. 4: Identifying Climate Control Component Location - 2-door
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR/2-DOOR

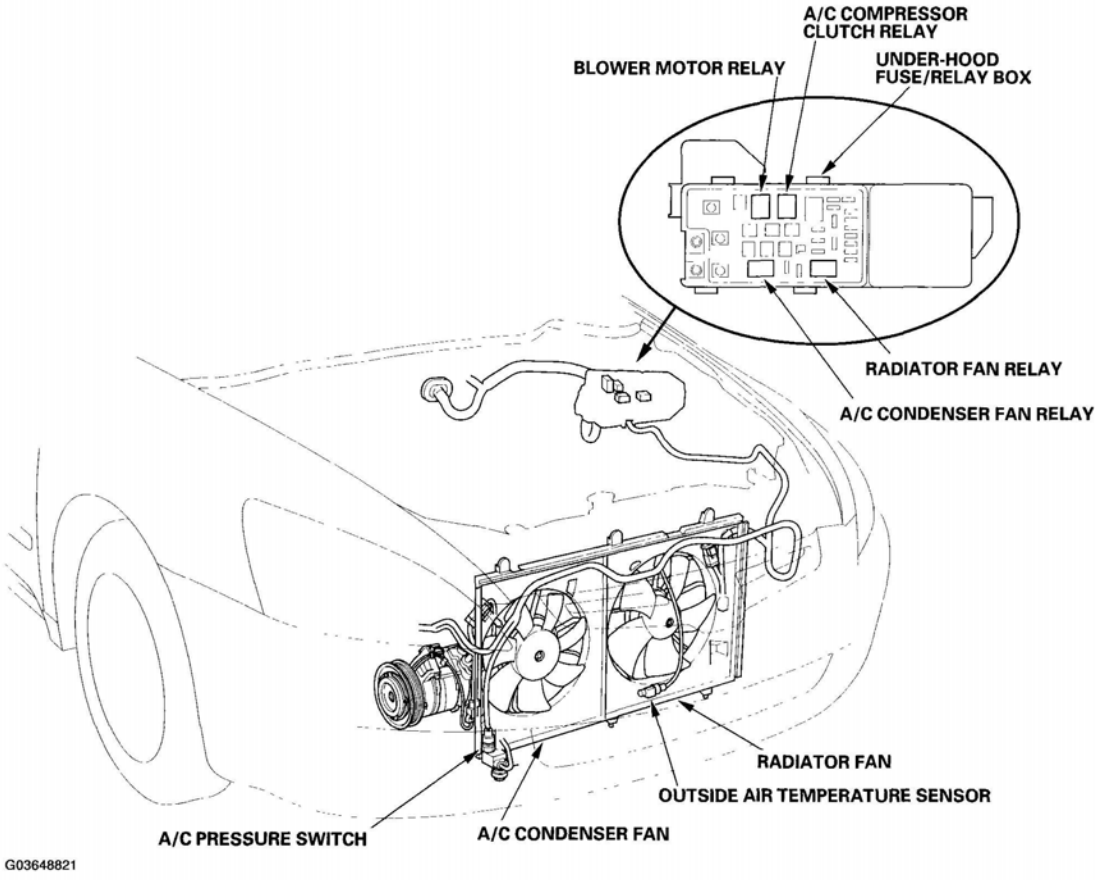


Fig. 5: Identifying Climate Control Component Location - 4-door/2-door
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

HOW TO CHECK FOR DTCS WITH THE HDS

NOTE: Before troubleshooting the climate control system, refer to the multiplex integrated control system test mode A (see TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Make sure the ignition switch is OFF.
2. Connect the HDS to the Data Link Connector (DLC) (A) located under the driver's side of the dashboard.

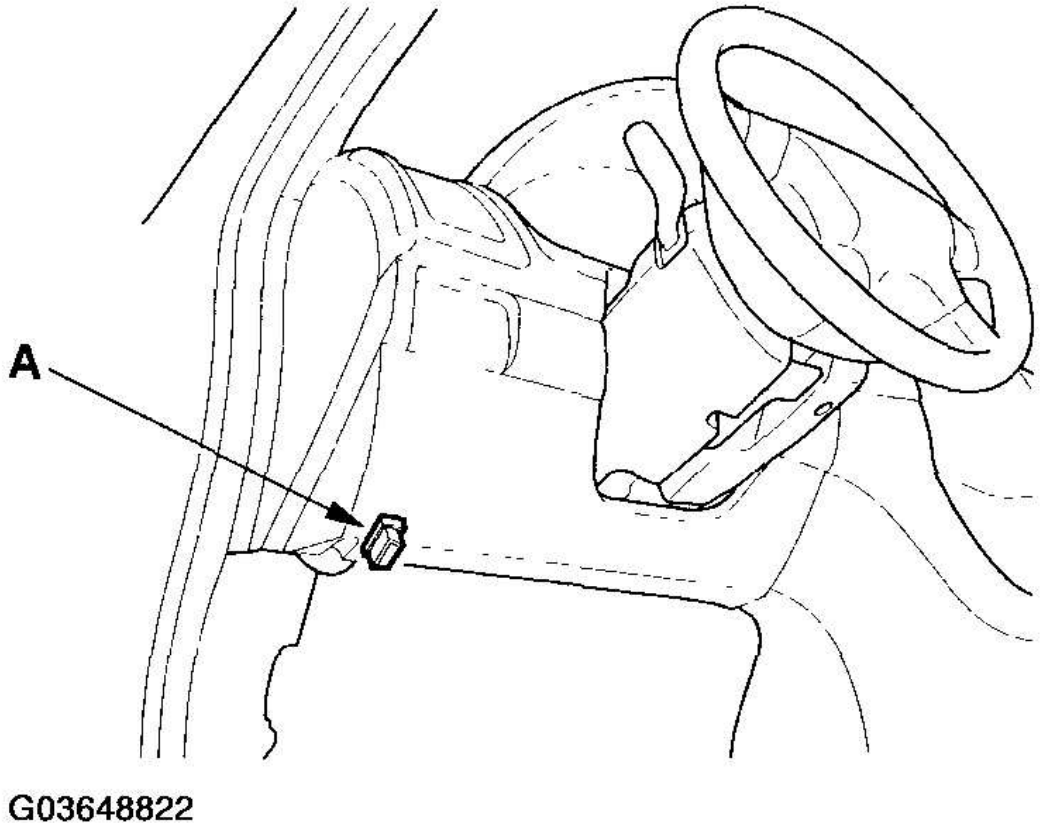


Fig. 6: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch ON (II).
4. Select DTCs in the body electrical climate control mode MENU of the HDS.
5. Check for DTCs. If a DTC is indicated, go to the next step. If no DTC(s) is indicated, refer to **SYMPTOM TROUBLESHOOTING INDEX**.
6. Turn the ignition switch OFF.
7. Disconnect the HDS from the DLC.
8. Do the troubleshooting procedure for the DTC indicated.

HOW TO RETRIEVE A DTC (WITHOUT HDS)

The audio-HVAC display panel has a self-diagnosis function for climate control. To run the self-diagnosis function, do the following:

NOTE: Before troubleshooting the climate control system, refer to the multiplex integrated control system test mode A (see TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Turn the ignition switch ON (II).
2. Set the driver's temperature control dial or button on MAX Cool.
3. Press and hold the OFF button.
4. While holding the OFF button, press the rear window defogger button five times within 10 seconds. The self-diagnosis will begin..

Without Navigation System:

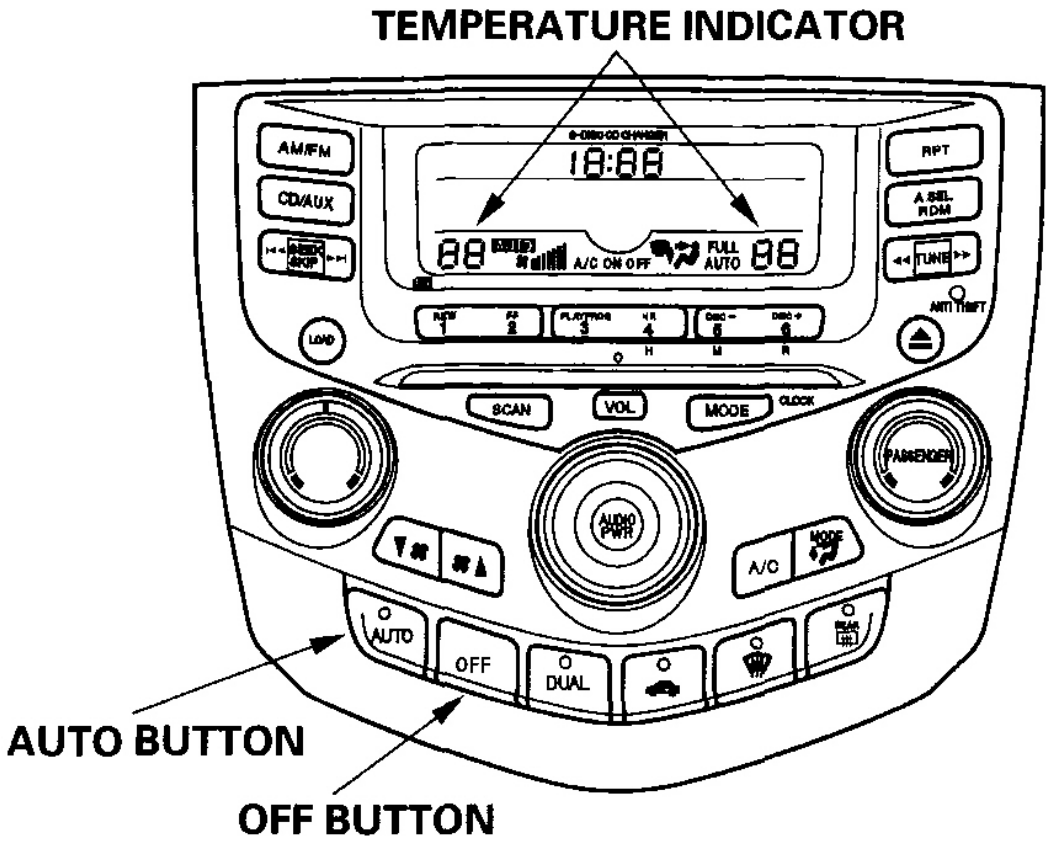


Fig. 7: Locating Auto Button And Off Button (Without Navigation System)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

With Navigation System:

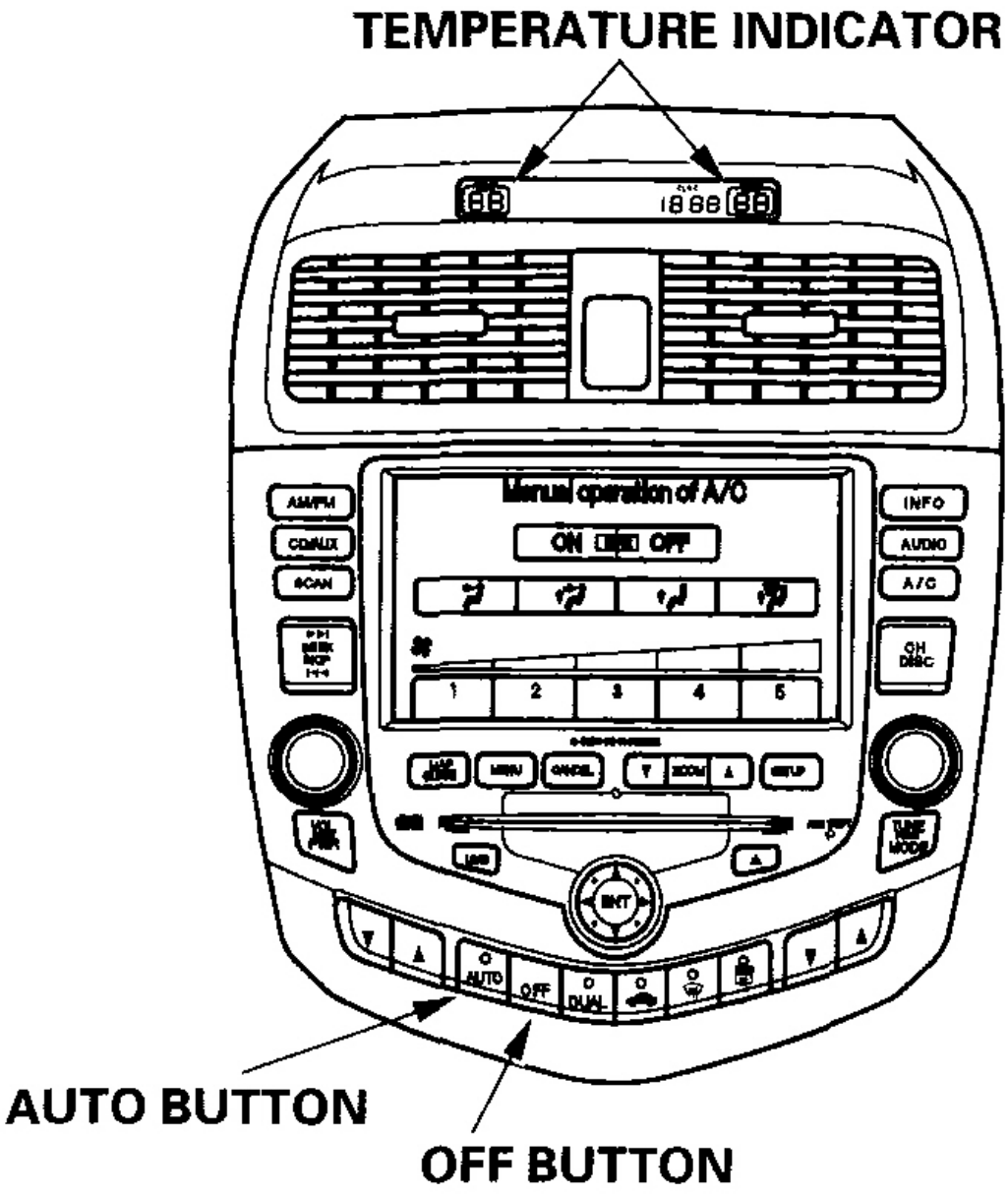


Fig. 8: Locating Auto Button And Off Button (With Navigation System)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

If there are any problems in the system, the temperature indicator will light up the segment (A through Q) corresponding to the error. The temperature indicator will then alternate every second between displaying "88" (all segments lit) and the error code segment (A through Q).

NOTE: The system will only display the DTC when the AUTO and OFF buttons are pressed. If you release the buttons, the display will go blank. To return the display, simply press the AUTO then the OFF buttons again.

To determine the meaning of the DTC, refer to the **DTC TROUBLESHOOTING INDEX**. If no segments light up, the system is still not operating properly, check the sensor inputs to the climate control unit, or refer to **SYMPTOM TROUBLESHOOTING INDEX**.

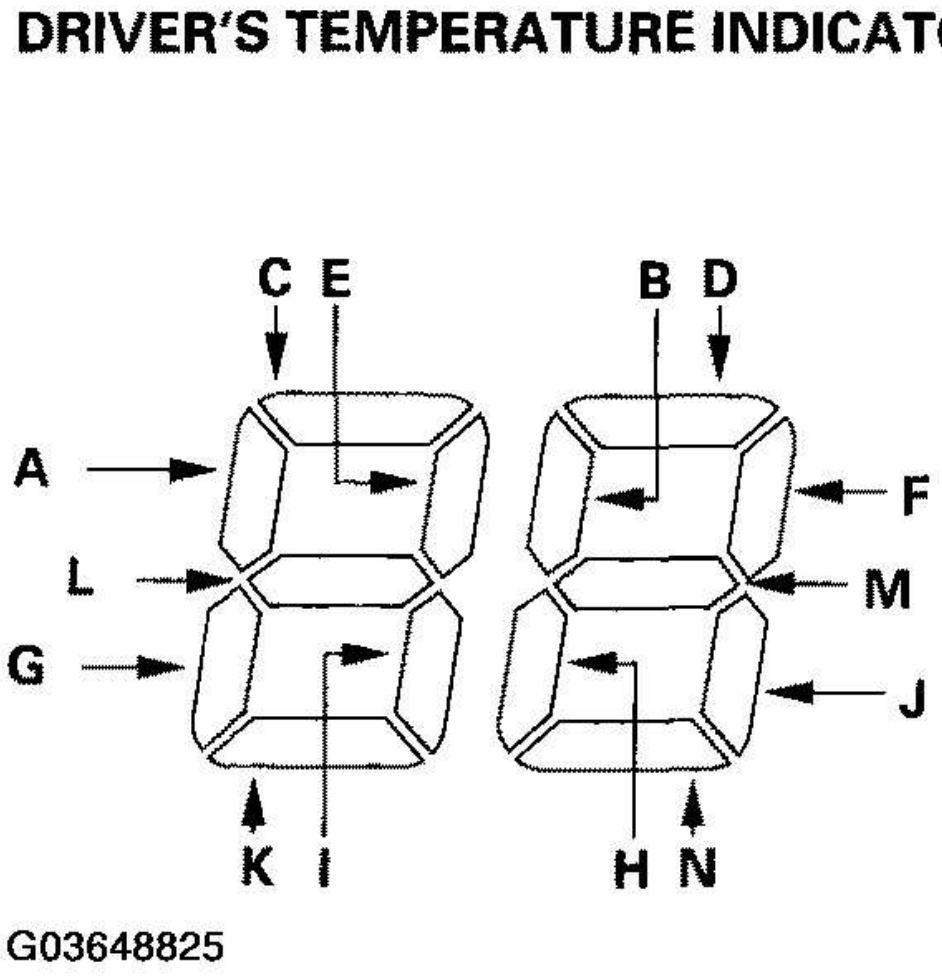


Fig. 9: Identifying Drivers Temperature Indicator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

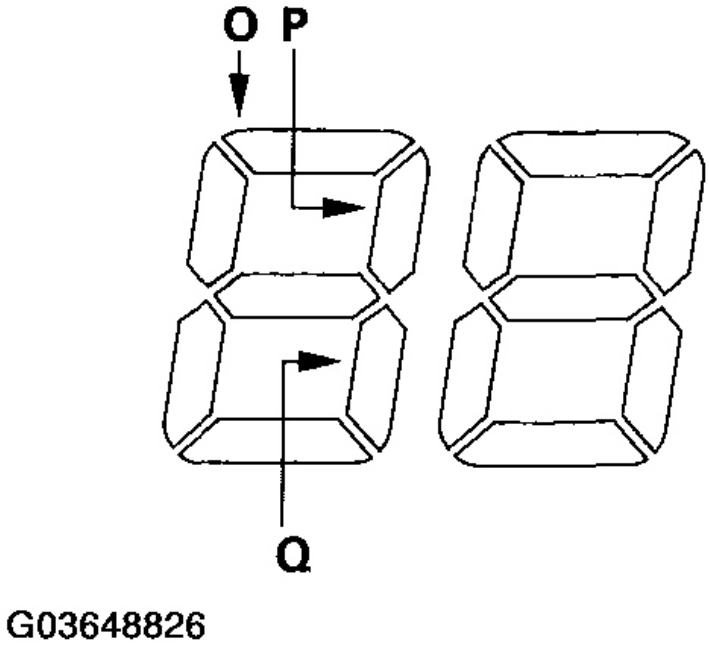


Fig. 10: Identifying Passenger's Temperature Indicator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Cancelling the Self-diagnostic Function

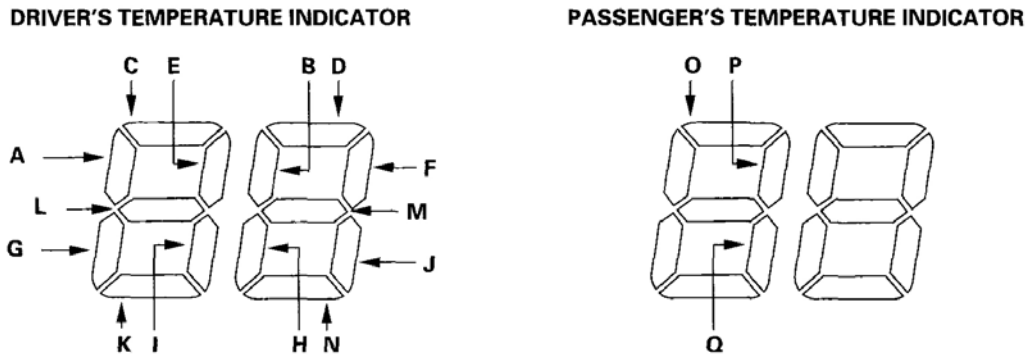
5. Turn the ignition switch OFF to cancel the self-diagnostic function. After completing repair work, run the self-diagnostic function again to make sure that there are no other malfunctions.

CHECKING THE DTCS BY DTC INDICATOR

NOTE: Before troubleshooting the climate control system, refer to the multiplex integrated control system test mode A (see

TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

To retrieve the DTC, you must run the self-diagnostic function. In the case of multiple problems, the respective indicator segments will come on. If indicator segments A, C, E, G, I, L, and O come on at the same time, there may be an open in the common ground wire of the sensors.



DTC (Temperature Indicator segment)	Detection Item
A	An open in the in-car temperature sensor circuit
B	A short in the in-car temperature sensor circuit
C	An open in the outside air temperature sensor circuit
D	A short in the outside air temperature sensor circuit
E	An open in the sunlight sensor circuit
F	A short in the sunlight sensor circuit
G	An open in the evaporator temperature sensor circuit
H	A short in the evaporator temperature sensor circuit
I	An open in the driver's air mix control motor circuit
J	A short in the driver's air mix control motor circuit
K	A problem in the driver's air mix control linkage, door, or motor
L	An open or short in the mode control motor circuit
M	A problem in the mode control linkage, doors, or motor
N	A problem in the blower motor circuit
O	An open in the passenger's air mix control motor circuit
P	A short in the passenger's air mix control motor circuit
Q	A problem in the passenger's air mix control linkage, door, or motor

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Fig. 11: Checking DTCs By DTC Indicator Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DISPLAYING SENSOR INPUTS AT THE CLIMATE CONTROL UNIT

The climate control unit has a mode that displays sensor inputs it receives. This mode shows you what the climate control unit is receiving from each of the sensors, one at a time, and it can help you determine if a sensor is faulty.

Check these items before using the sensor input display mode

1. Turn the ignition switch ON (II), and check the recirculation door function; press the recirculation button to switch from FRESH to RECIRC. The air volume and sound should change slightly.
2. Set the temperature control knob to the desired test temperature. When selecting the test temperature, note these items:
   - "LO" temperature setting will default to MAX COOL, VENT, and RECIRC.
   - "HI" temperature setting will default to MAX HOT, FLOOR, and FRESH.
   - 61 through 89°F settings will use the automatic climate control logic.
3. Turn the ignition switch OFF.

To run the sensor input display mode, follow these steps

1. Turn the ignition switch OFF.
2. Press and hold both the AUTO and DUAL buttons, then start the engine.
3. After the engine starts, release the buttons. The audio-HVAC display panel will flash the sensor number and then the value for that sensor. Record the value displayed.
4. To advance to the next sensor, press the rear window defogger button.

SENSOR ITEM AND DISPLAYED VALUE DESCRIPTION

Sensor	Item	Displayed Value
1	In-car Temperature Sensor	°C
2	Ambient Temperature	°C
3	Solar Radiation Sensor Value: Dark = 00, Flashlight = 04, Cloudy =	$Kcal/m^2 .h$

	10, Sunny = 65	
4	Engine Coolant Temperature	°C
5	Evaporator Outlet Air Temperature	°C
6	Driver's Air Mix Opening (Low value indicates cooler air distribution, higher value indicates warmer air distribution)	% of opening
7	Passenger's Air Mix Opening (Low value indicates cooler air distribution, higher value indicates warmer air distribution)	% of opening
8	Vehicle Speed (Vehicle must be driven to display speed)	Km/h
9	Vent Temperature Air Out (TAO)	°C

NOTE:

- **The sensor values will be displayed in degrees Celsius (℃) or an alphanumeric code. Use the chart to convert the value to degrees Fahrenheit (℉).**
- **If the sensor value displays "Er", this indicates there is an open or short in the circuit or sensor. Check for DTCs using the HDS, or refer to checking DTCs by DTC indication to check for DTCs.**
- **If necessary, compare the sensor input display to an alike, known-good vehicle under the same test conditions.**
- **If the sensor is out of the normal range, refer to the sensor test, or substitute with a known-good**

sensor, and recheck.

5. To cancel the sensor input display mode, press the AUTO button, or turn the ignition off.

Celsius to Fahrenheit Conversion Table

CELSIUS TO FAHRENHEIT CONVERSION (1 OF 2)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0	32	10	50	20	68	30	86	40	104
1	34	11	52	21	70	31	88	41	106
2	36	12	54	22	72	32	90	42	108
3	37	13	55	23	73	33	91	43	109
4	39	14	57	24	75	34	93	44	111
5	41	15	59	25	77	35	95	45	113
6	43	16	61	26	79	36	97	46	115
7	45	17	63	27	81	37	99	47	117
8	46	18	64	28	82	38	100	48	118
9	48	19	66	29	84	39	102	49	120

CELSIUS TO FAHRENHEIT CONVERSION (2 OF 2)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
50	122	60	140	70	158	80	176	90	194
51	124	61	142	71	160	81	178	91	196
52	126	62	144	72	162	82	180	92	198
53	127	63	145	73	163	83	181	93	199
54	128	64	147	74	165	84	183	94	201
55	131	65	149	75	167	85	185	95	203
56	133	66	151	76	169	86	187	96	205
57	135	67	152	77	170	87	188	97	207
58	136	68	154	78	172	88	190	98	208
59	139	69	158	79	174	89	192	99	210

Alphanumeric Conversion Table

ALPHANUMERIC CONVERSION

Display Reading (Alphanumeric)	°C	°F	%
A1 thru A9	-1 thru -9	30 thru 16	-1 thru -9
B0 thru B9	-10 thru -19	14 thru -2	-10 thru -19
C0 thru C9	-20 thru -29	-4 thru -20	-20 thru -29
D0 thru D9	-30 thru -39	-22 thru -38	-30 thru -39
E0 thru E9	-40 thru -49	-40 thru -58	-
F0 thru F9	-50 thru -59	-58 thru -74	+100 thru +109

DTC TROUBLESHOOTING INDEX

CHECKING THE DTCS BY HDS

DTC TROUBLESHOOTING INDEX

DTC	Detection Item or Symptom	ECU	DTC type	Refer To
B1200	Communication circuit error (BUS Off)	Climate control unit	Loss of communication	(see **DTC B1050, B1100, B1150, B1200, B1250: COMMUNICATION BUS LINE ERROR**)
B1202	Climate control unit internal error	Climate control unit	Internal error	(see **DTC B1202: CLIMATE CONTROL UNIT INTERNAL ERROR**)
B1205	Climate control unit lost communication with the gauge control module (VSP/NE message)	Climate control unit	Loss of communication	(see **DTC B1205: CLIMATE CONTROL UNIT LOST COMMUNICATION WITH THE GAUGE CONTROL MODULE (VSP/NE MESSAGE)**)

B1206	Climate control unit lost communication with the gauge control module (ECT message)	Climate control unit	Loss of communication	(see **DTC B1206: CLIMATE CONTROL UNIT LOST COMMUNICATION WITH THE GAUGE CONTROL MODULE (ECT MESSAGE)**)
B1207	Climate control unit lost communication with the gauge control module (ILLUMI message)	Climate control unit	Loss of communication	(see **DTC B1207: CLIMATE CONTROL UNIT LOST COMMUNICATION WITH THE GAUGE CONTROL MODULE (ILLUMI MESSAGE)**)
B1225	An open in the in-car temperature sensor circuit	Climate control unit	Signal error	(see **DTC B1225 OR DTC INDICATOR A: AN OPEN IN THE IN-CAR TEMPERATURE SENSOR CIRCUIT**)
B1226	A short in the in-car temperature sensor circuit	Climate control unit	Signal error	(see **DTC B1226 OR DTC INDICATOR B: A SHORT IN THE IN-CAR TEMPERATURE SENSOR CIRCUIT**)
B1227	An open in the outside air temperature sensor circuit	Climate control unit	Signal error	(see **DTC B1227 OR DTC INDICATOR C: AN OPEN IN THE OUTSIDE AIR TEMPERATURE**

				SENSOR CIRCUIT)
B1228	A short in the outside air temperature sensor circuit	Climate control unit	Signal error	(see **DTC B1228 OR DTC INDICATOR D: A SHORT IN THE OUTSIDE AIR TEMPERATURE SENSOR CIRCUIT**)
B1229	An open in the sunlight sensor circuit	Climate control unit	Signal error	(see **DTC B1229 OR DTC INDICATOR E: AN OPEN IN THE SUNLIGHT SENSOR CIRCUIT**)
B1230	A short in the sunlight sensor circuit	Climate control unit	Signal error	(see **DTC B1230 OR DTC INDICATOR F: A SHORT IN THE SUNLIGHT SENSOR CIRCUIT**)
B1231	An open in the evaporator temperature sensor circuit	Climate control unit	Signal error	(see **DTC B1231 OR DTC INDICATOR G: AN OPEN IN THE EVAPORATOR TEMPERATURE SENSOR CIRCUIT**)
B1232	A short in the evaporator temperature sensor circuit	Climate control unit	Signal error	(see **DTC B1232 OR DTC INDICATOR H: A SHORT IN THE EVAPORATOR TEMPERATURE SENSOR CIRCUIT**)
B1233	An open in the driver's air mix control motor	Climate control	Signal error	(see **DTC B1233 OR DTC INDICATOR I: AN OPEN IN THE DRIVER'S AIR MIX**

	circuit	unit		**CONTROL MOTOR CIRCUIT**)
B1234	A short in the driver's air mix control motor circuit	Climate control unit	Signal error	(see **DTC B1234 OR DTC INDICATOR J: A SHORT IN THE DRIVER'S AIR MIX CONTROL MOTOR CIRCUIT**)
B1235	A problem in the driver's air mix control linkage, door, or motor	Climate control unit	Signal error	(see **DTC B1235 OR DTC INDICATOR K: A PROBLEM IN THE DRIVER'S AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR**)
B1236	An open in the passenger's air mix control motor circuit	Climate control unit	Signal error	(see **DTC B1236 OR DTC INDICATOR O: AN OPEN IN THE PASSENGER'S AIR MIX CONTROL MOTOR CIRCUIT**)
B1237	A short in the passenger's air mix control motor circuit	Climate control unit	Signal error	(see **DTC B1237 OR DTC INDICATOR P: A SHORT IN THE PASSENGER'S AIR MIX CONTROL MOTOR CIRCUIT**)
	A problem in the passenger's air	Climate		(see **DTC B1238 OR DTC INDICATOR Q: A PROBLEM IN THE PASSENGER'S**

B1238	mix control linkage, door, or motor	control unit	Signal error	**AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR**)
B1239	An open or short in the mode control motor circuit	Climate control unit	Signal error	(see **DTC B1239 OR DTC INDICATOR L: AN OPEN OR SHORT IN THE MODE CONTROL MOTOR CIRCUIT**)
B1240	A problem in the mode control linkage, doors, or motor	Climate control unit	Signal error	(see **DTC B1240 OR DTC INDICATOR M: A PROBLEM IN THE MODE CONTROL LINKAGE, DOORS, OR MOTOR**)
B1241	A problem in the blower motor circuit	Climate control unit	Signal error	(see **DTC B1241 OR DTC INDICATOR N: A PROBLEM IN THE BLOWER MOTOR CIRCUIT**)

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for
Recirculation control doors do not change between Fresh and Recirculate	Recirculation control motor circuit troubleshooting (see **RECIRCULATION CONTROL MOTOR CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Blown fuse No. 30 (7.5A) in the under-dash fuse/relay box

		• Cleanliness and tightness of all connectors
Blower, heater controls, and A/C do not work	Climate control power and ground circuit troubleshooting (see **CLIMATE CONTROL POWER AND GROUND CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Blown fuse No. 30 (7.5A) in the under-dash fuse/relay box • Poor ground at G503 • Cleanliness and tightness of all connectors
The A/C condenser fan does not run at all (but the radiator fan runs with the A/C on)	A/C condenser fan circuit troubleshooting (see **A/C CONDENSER FAN CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Blown fuse No. 9 (20A) in the under-hood fuse/relay box, and No. 30 (7.5A) in the under-dash fuse/relay box • Poor ground at G201 • Cleanliness and tightness of all connectors
Both fans do not run with the A/C on (but the A/C compressor runs with the	Radiator and A/C condenser fan common circuit troubleshooting (see **RADIATOR AND A/C CONDENSER FAN COMMON CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Blown fuse No. 9 (20A) and No. 11 (20A) in the under-hood fuse/relay box, and No. 30 (7.5A) in the under-dash fuse/relay

A/C on)		box • Cleanliness and tightness of all connectors
The A/C compressor clutch does not engage (but both fans run with the A/C on)	A/C compressor clutch circuit troubleshooting (see **A/C COMPRESSOR CLUTCH CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Blown fuse No. 12 (7.5A) in the under-hood fuse/relay box, and No. 30 (7.5A) in the under-dash fuse/relay box • Cleanliness and tightness of all connectors
A/C system does not come on (both fans and the A/C compressor do not work); heater is OK	A/C pressure switch circuit troubleshooting (see **A/C PRESSURE SWITCH CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Cleanliness and tightness of all connectors
Blower fan runs slower than expected in cold weather	ECT Troubleshooting (see **DTC P0116: ECT SENSOR CIRCUIT RANGE/PERFORMANCE PROBLEM (2003-2004 MODELS)**) **NOTE:** **It is normal for the blower to run slowly until the engine coolant temperature begins to rise. If the blower continues to run slowly for an abnormal length of time, continue to troubleshoot the problem.**	Powertrain DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**)
	1. Turn the ignition switch ON (II).	

AUTO button does not work	2. Press the OFF button, then press the AUTO button and check the display. • If AUTO is displayed, but the climate control is not working properly, check for DTCs with the HDS (see **GENERAL TROUBLESHOOTING INFORMATION**), or do the self-diagnostic (see **HOW TO RETRIEVE A DTC (WITHOUT HDS)**). • If AUTO is not displayed, check for poor connections at the climate control connector, if the connections are OK, replace the audio-HVAC display panel.	Climate control power and ground circuit troubleshooting (see **CLIMATE CONTROL POWER AND GROUND CIRCUIT TROUBLESHOOTING**).
OFF button does not work	1. Turn the ignition switch ON (II). 2. Press the AUTO button, then press the OFF button and check the display. • If climate control display turns off, check for DTCs with the HDS (see **GENERAL TROUBLESHOOTING INFORMATION**), or go to self-diagnostic (see	

	HOW TO RETRIEVE A DTC (WITHOUT HDS)). • If the climate control display does not turn on, replace the audio-HVAC display panel.	
Dual button does not work	1. Turn the ignition switch ON (II). 2. Press the AUTO button, then press the DUAL button several times and check the DUAL button LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, check for DTCs with the HDS (see **GENERAL TROUBLESHOOTING INFORMATION**), or go to self-diagnostic (see **HOW TO RETRIEVE A DTC (WITHOUT HDS)**). • If the LED does not turn on or off, replace the audio-HVAC display panel.	
	1. Turn the ignition switch ON (II). 2. Press the recirculation button several times and check the button's LED. The LED	

Recirculation button does not work	should toggle on and off as the button is pressed. • If the LED turns on and off go to recirculation control motor test, 4-door (see **4-DOOR**) or 2-door (see **2-DOOR**). • If the LED does not turn on or off, replace the audio-HVAC display panel.	
Defroster button does not work	1. Turn the ignition switch ON (II). 2. Press the AUTO button, then press the defroster button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, check for DTCs with the HDS (see **GENERAL TROUBLESHOOTING INFORMATION**), or go to self-diagnostic (see **HOW TO RETRIEVE A DTC (WITHOUT HDS)**). • If the LED does not turn on or off, replace the audio-HVAC display panel.	
	1. Turn the ignition switch ON	

Rear window defogger button does not work	(II). 2. Press the rear window defogger button several times and check the button's LED. The LED should toggle on and off as the button is pressed. • If the LED turns on and off, go to rear window defogger troubleshooting (see **FUNCTION TEST**) • If the LED does not turn on or off, replace the audio-HVAC display panel.	
MODE button does not work	1. Turn the ignition switch ON (II). 2. Press the MODE button and check the display. • If the display scrolls through the modes as the MODE button is pressed, check for DTCs with the HDS (see **GENERAL TROUBLESHOOTING INFORMATION**), or go to self-diagnostic (see **HOW TO RETRIEVE A DTC (WITHOUT HDS)**). • If the display does not scroll the modes as the MODE button is pressed,	

	replace the audio-HVAC display panel.	
Fan control button does not work	1. Turn the ignition switch ON (II). 2. Press the AUTO button, then adjust the fan control button up/down and check the display. • If the display indicates the fan speed selection up/down, check for DTCs with the HDS (see **GENERAL TROUBLESHOOTING INFORMATION**), or go to self-diagnostic (see **HOW TO RETRIEVE A DTC (WITHOUT HDS)**). • If the display does not indicate the fan speed selection up/down, replace the audio-HVAC display panel.	
	1. Turn the ignition switch ON (II). 2. Press the AUTO button, then adjust the TEMP control dial up/down and check the display. • If the display indicates the change in temperature up/down, check for DTCs with the	

TEMP control dial does not work	HDS (see **GENERAL TROUBLESHOOTING INFORMATION**), or go to self-diagnostic (see **HOW TO RETRIEVE A DTC (WITHOUT HDS)**). • If the display does not indicate the change in temperature up/down, replace the audio-HVAC display panel.	
Passenger's TEMP dial does not work	1. Turn the ignition switch ON (II). 2. Press the AUTO button, press the DUAL button, then adjust the passenger's TEMP control dial up/down and check the display. • If the display indicates the change in temperature up/down for the passenger's side, check for DTCs with the HDS (see **GENERAL TROUBLESHOOTING INFORMATION**), or go to self-diagnostic (see **HOW TO RETRIEVE A DTC (WITHOUT HDS)**). • If the display does not indicate the change in temperature up/down for	

	the passenger's side, replace the audio-HVAC display panel.	
Audio-HVAC display panel will not run self-diagnosis	1. Turn the ignition switch ON (II). 2. Press the A/C button, and then OFF button and check the display. • If the display turns on and off as the buttons are pressed, there are no DTCs stored, troubleshoot the individual symptoms. • If the display does not respond as the buttons are pressed, check for loose or poor connections at the audio-HVAC display panel. If the connections are OK, replace the audio-HVAC display panel.	
More than one button is not working	Climate control power and ground circuit troubleshooting (see **CLIMATE CONTROL POWER AND GROUND CIRCUIT TROUBLESHOOTING**).	HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**).
Audio-HVAC display/button illumination problems	Audio-HVAC display module illumination troubleshooting (see **AUDIO-HVAC DISPLAY MODULE ILLUMINATION TROUBLESHOOTING**).	

SYSTEM DESCRIPTION

DUAL AIR MIX CONTROL SYSTEM

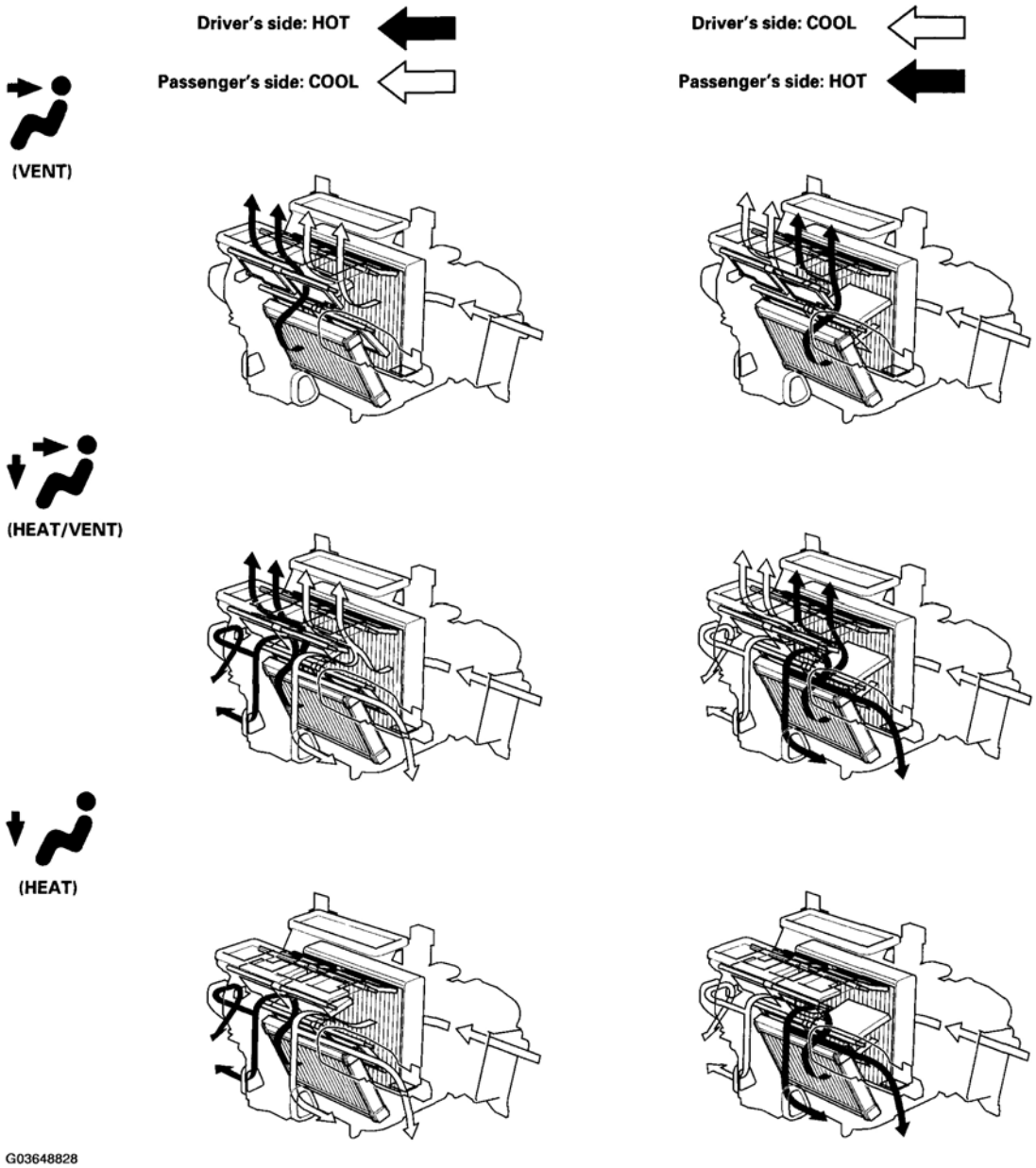


Fig. 12: Identifying Dual Air Mix Control System (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

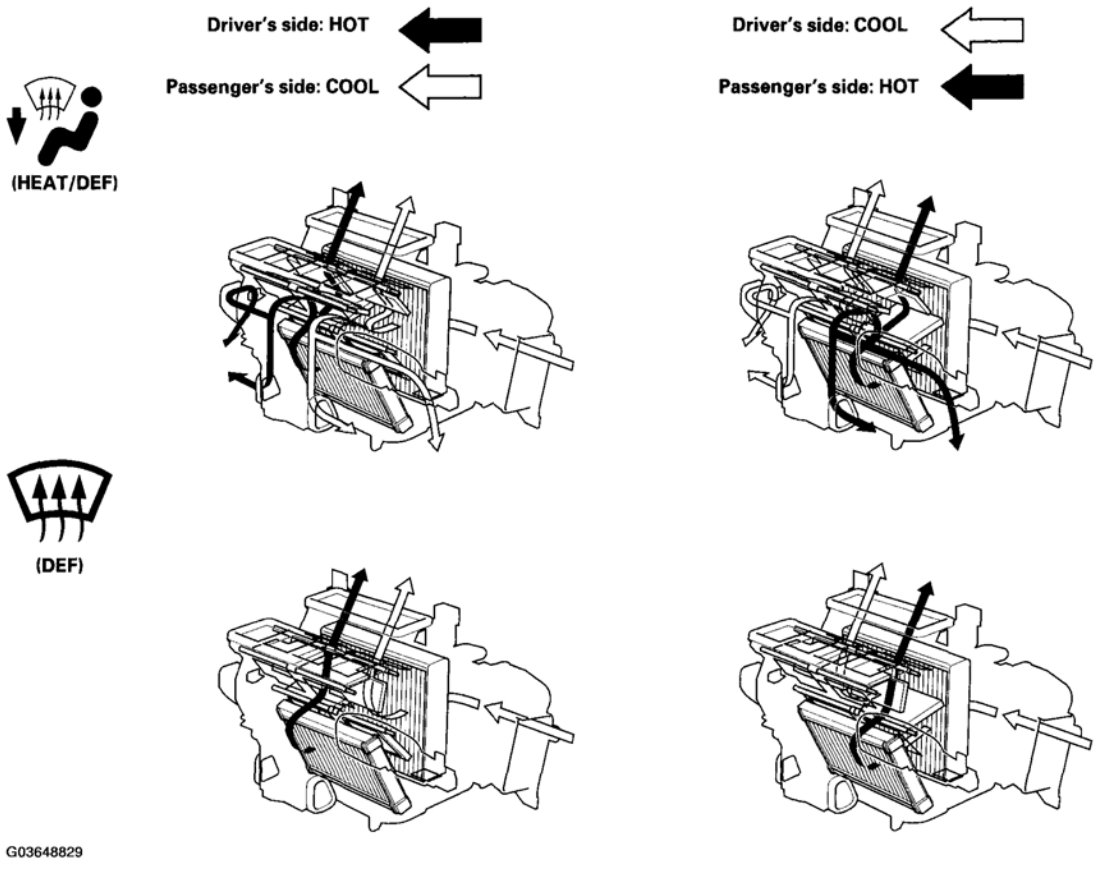


Fig. 13: Identifying Dual Air Mix Control System (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

The air conditioning system removes heat from the passenger compartment by circulating refrigerant through the system.

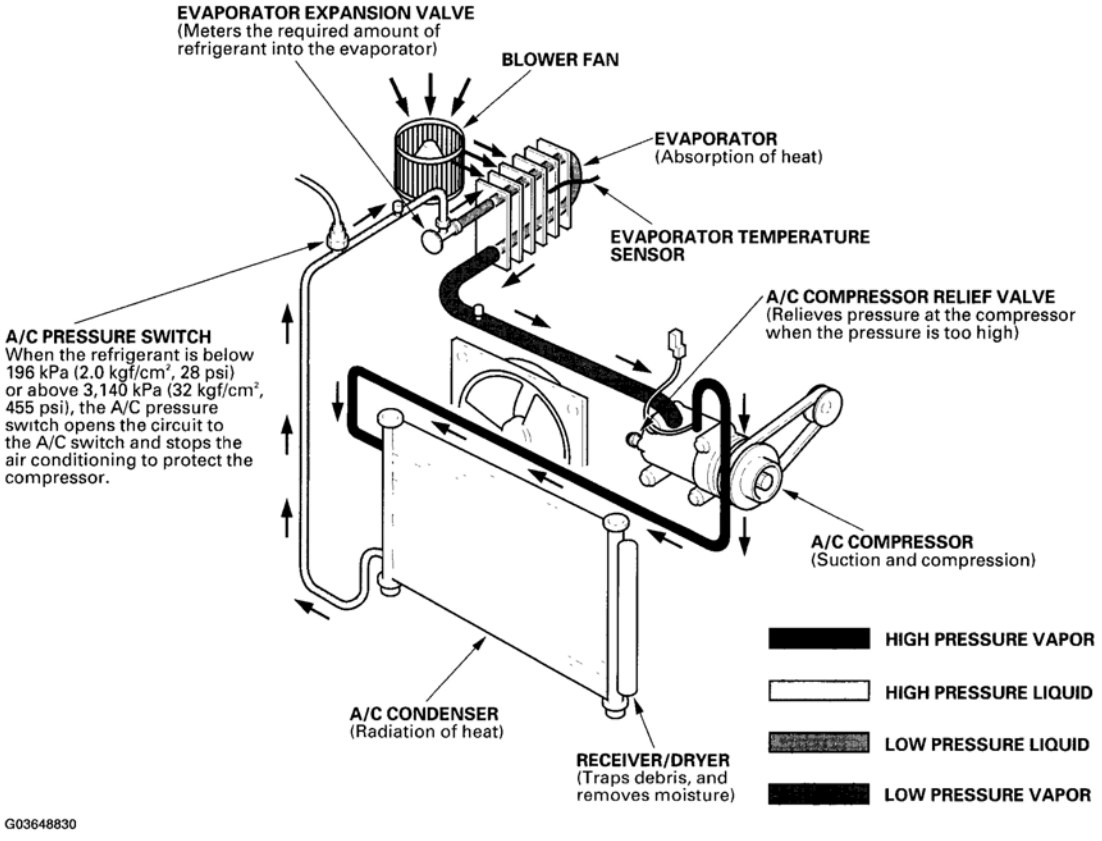


Fig. 14: Identifying Climate Control System
Courtesy of AMERICAN HONDA MOTOR CO., INC.

This vehicle uses HFC-134a (R-134a) refrigerant which does not contain chlorofluorocarbons. Pay attention to the following service items:

- Do not mix refrigerants CFC-12 (R-12) and HFC-134a (R-134a). They are not compatible.
- Use only the recommended polyalkyleneglycol (PAG) refrigerant oil (DENSO ND-OIL 8) designed for the R-134a compressor. Intermixing the recommended (PAG) refrigerant oil with any other refrigerant oil will result in compressor failure.
- All A/C system parts (compressor, discharge line, suction line, evaporator, condenser, receiver/dryer, expansion valve, O-rings for joints) are designed for refrigerant R-134a. Do not exchange with R-12 parts.
- Use a halogen gas leak detector designed for refrigerant R-134a.

- R-12 and R-134a refrigerant servicing equipment are not interchangeable. Use only a recovery/recycling/charging station that is U.L.-listed and is certified to meet the requirements of SAE J2210 to service the R-134a air conditioning systems.
- Always recover the refrigerant R-134a with an approved recovery/recycling/charging station before disconnecting any A/C fitting.

DUAL CLIMATE CONTROL SYSTEM (WITH NAVIGATION SYSTEM) 2004-2005 MODELS

This system automatically controls the temperature and the vent mode of the air direction to the driver and passenger's side, depending on the angle of the sun, and the direction of the vehicle. It calculates information such as date, time, longitude, and latitude from the navigation system, as well as the radiant strength of the sun from the sunlight sensor, to determine the appropriate mode position and temperature to be directed to each side.

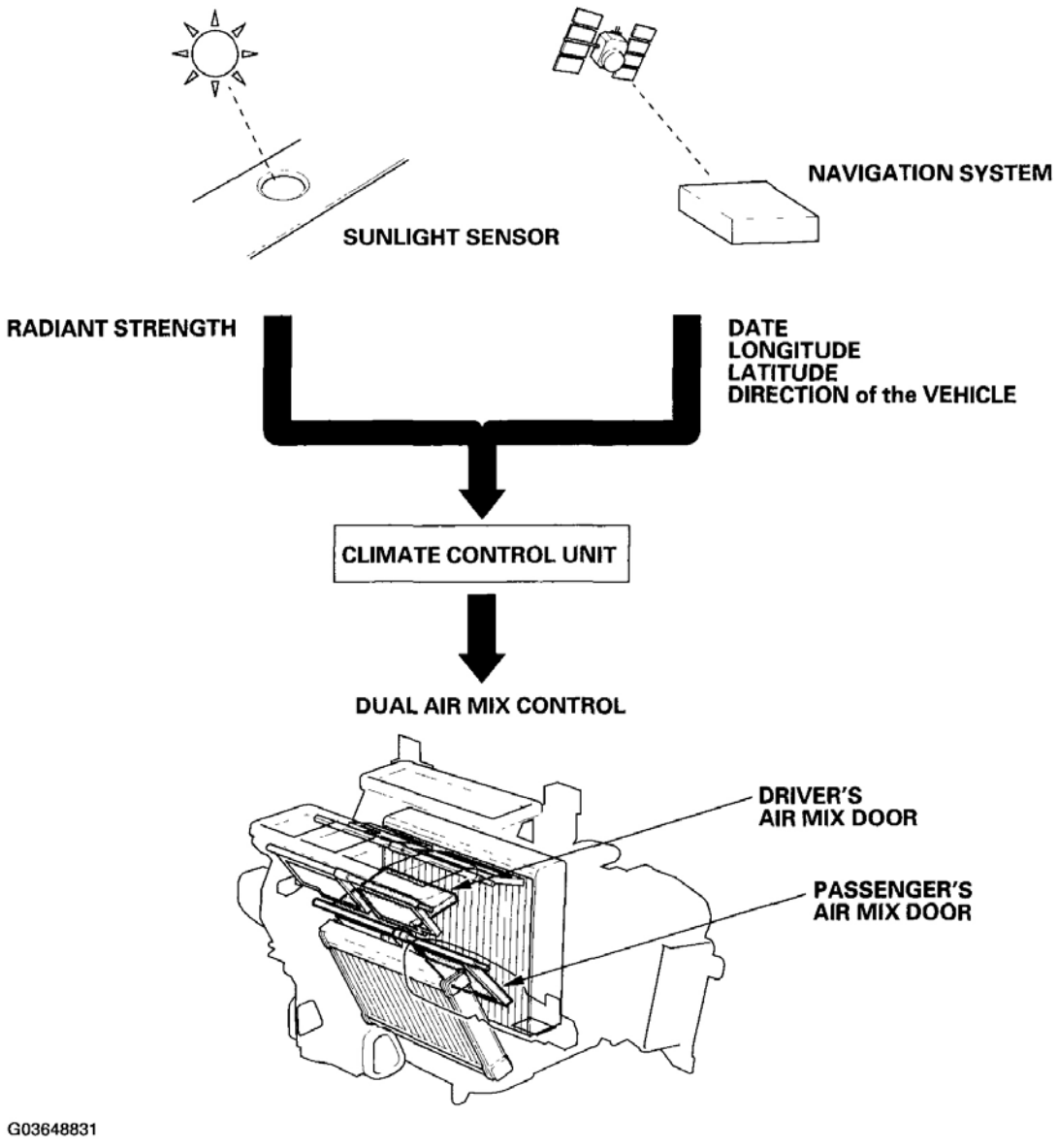


Fig. 15: Identifying Dual Climate Control System (With Navigation System - 2004-2005 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

In the event that the navigation system malfunctions, or when driving in areas where the navigation cannot determine the vehicle position (non-coverage areas, tunnels, etc.), the climate control system will operate the same as a vehicle without navigation.

CLIMATE CONTROL UNIT INPUTS AND OUTPUTS

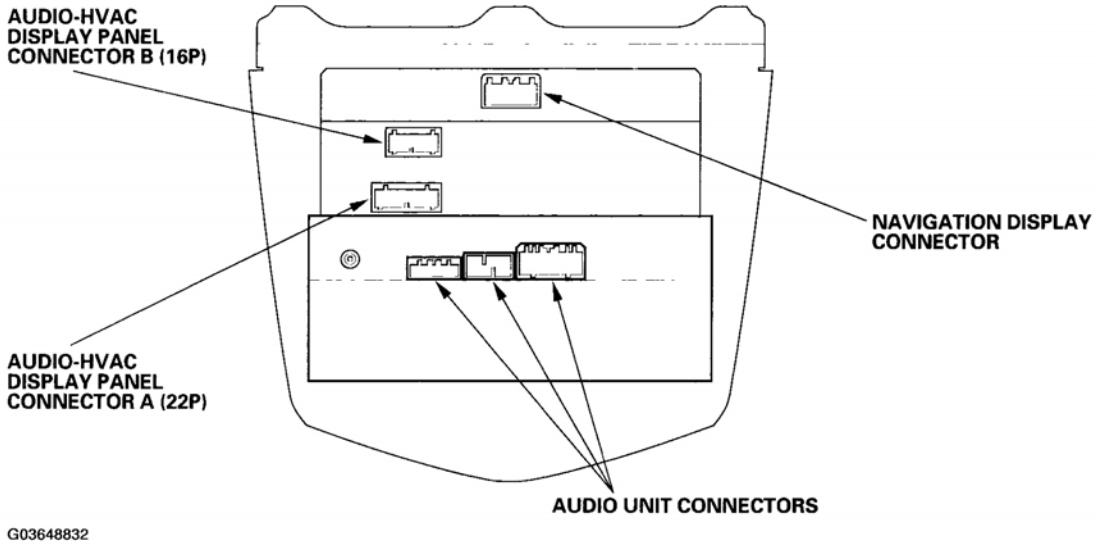


Fig. 16: Identifying Climate Control Unit Inputs And Outputs (With Navigation)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

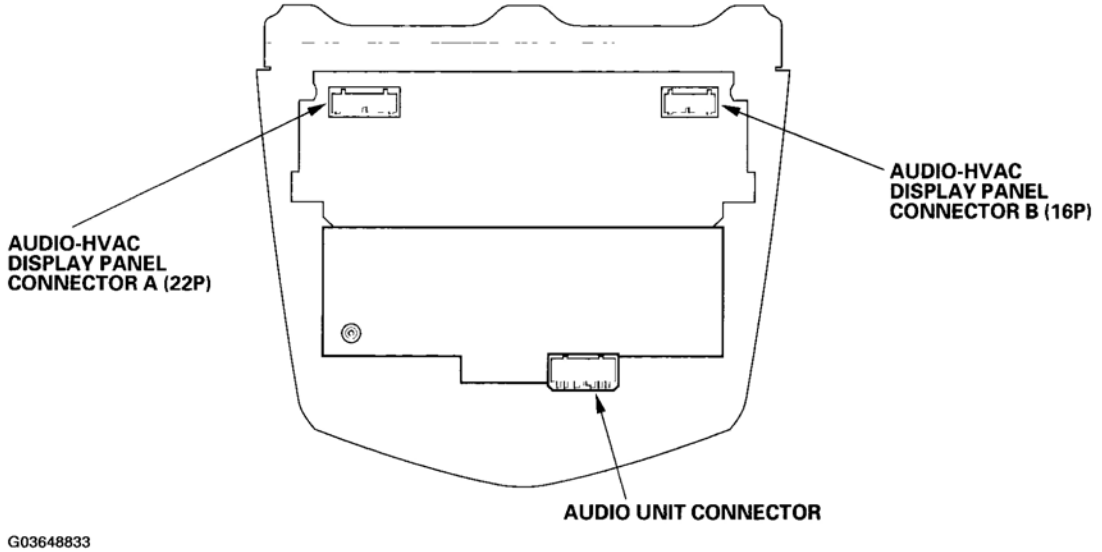
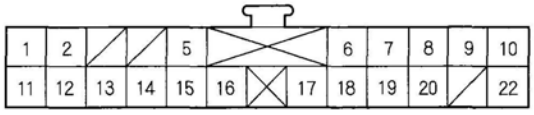


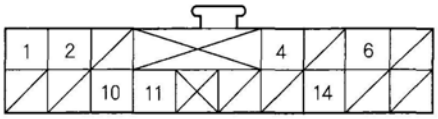
Fig. 17: Identifying Climate Control Unit Inputs And Outputs (Without Navigation)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUDIO-HVAC DISPLAY PANEL CONNECTORS

CONNECTOR A (22P)



CONNECTOR B (16P)



Wire side of female terminals

CONNECTOR A (○ on Circuit Diagram)

Cavity	Wire color	Signal	
1	PNK/BLK	DRIVER'S AIR MIX POTENTIAL	INPUT
2	YEL	PASSENGER'S AIR MIX POTENTIAL	INPUT
3	—	—	—
4	—	—	—
5	BLU	A/C PRESSURE SWITCH	OUTPUT
6	YEL/BLU	MODE DEF	OUTPUT
7	YEL/RED	MODE VENT	OUTPUT
8	GRN	DRIVER'S AIR MIX COOL	OUTPUT
9	PNK/BLU	DRIVER'S AIR MIX HOT	OUTPUT
10	YEL/BLK	PASSENGER'S AIR MIX COOL	OUTPUT
11	LT BLU	IN-CAR TEMPERATURE SENSOR	INPUT
12	PNK	OUTSIDE AIR TEMPERATURE SENSOR	INPUT
13	ORN	SUNLIGHT SENSOR	INPUT
14	BRN	EVAPORATOR TEMPERATURE SENSOR	INPUT
15	RED/BLK	SENSOR COMMON GROUND	OUTPUT
16	YEL/GRN	MODE 4	INPUT
17	WHT/BLU	MODE 3	INPUT
18	RED/BLU	MODE 2	INPUT
19	RED/YEL	MODE 1	INPUT
20	GRY	DRIVER'S AIR MIX POTENTIAL +5 V	OUTPUT
21	—	—	—
22	LT GRN	PASSENGER'S AIR MIX HOT	OUTPUT

CONNECTOR B (□ on Circuit Diagram)

Cavity	Wire color	Signal	
1	BLU/YEL	POWER TRANSISTOR CONTROL	OUTPUT
2	BLU/RED	BLOWER FEEDBACK	INPUT
3	—	—	—
4	BLK/YEL	IG2 (Power)	INPUT
5	—	—	—
6	BLK	GROUND (G503)	INPUT
7	—	—	—
8	—	—	—
9	—	—	—
10	GRN/WHT	FRESH	OUTPUT
11	LT GRN/RED	RECIRCULATE	OUTPUT
12	—	—	—
13	—	—	—
14	LT BLU	MULTIPLEX INTEGRATED CONTROL UNIT	INPUT
15	—	—	—
16	—	—	—

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Fig. 18: Identifying Audio HVAC Display Panel Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

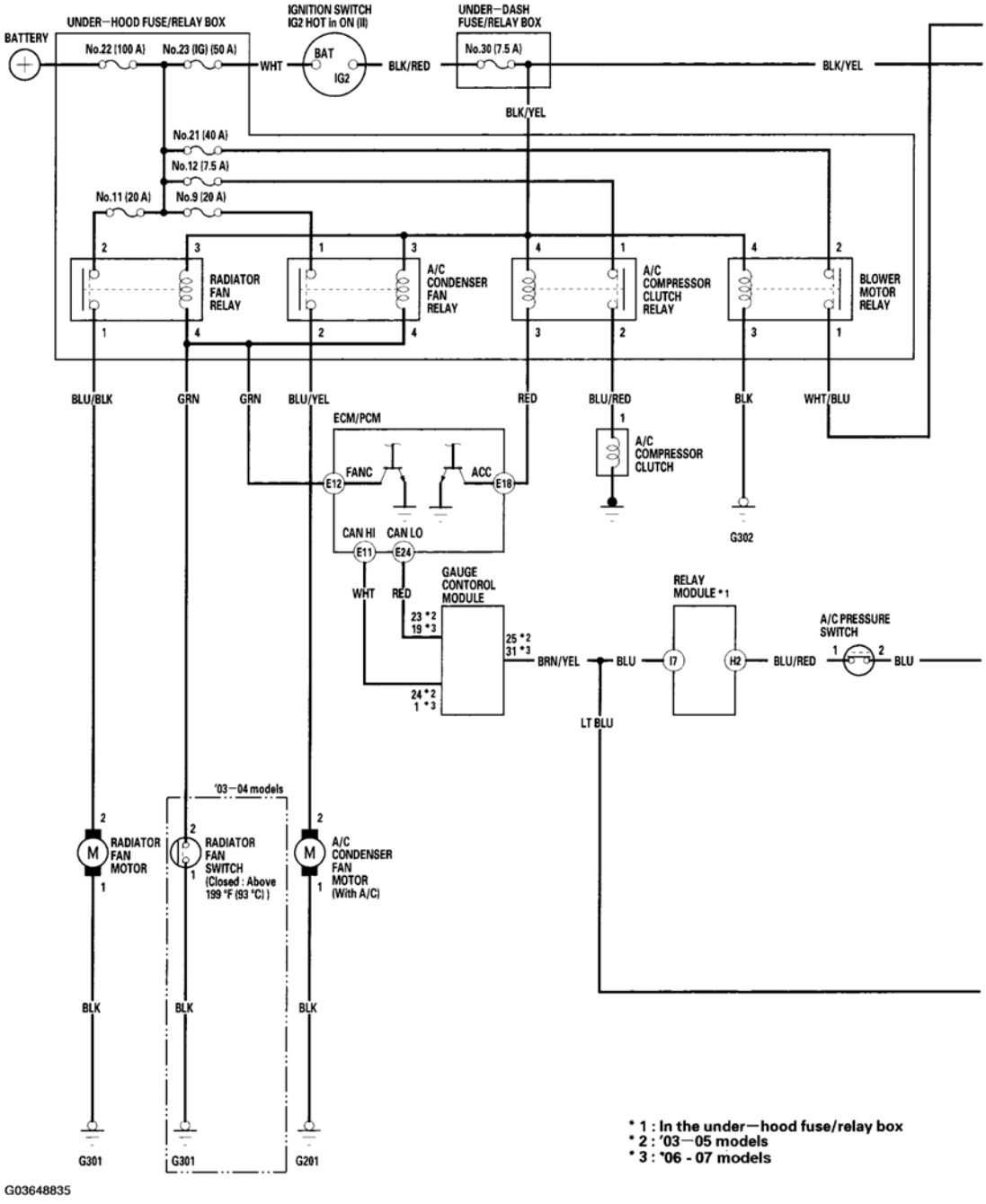


Fig. 19: Identifying Climate Control Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

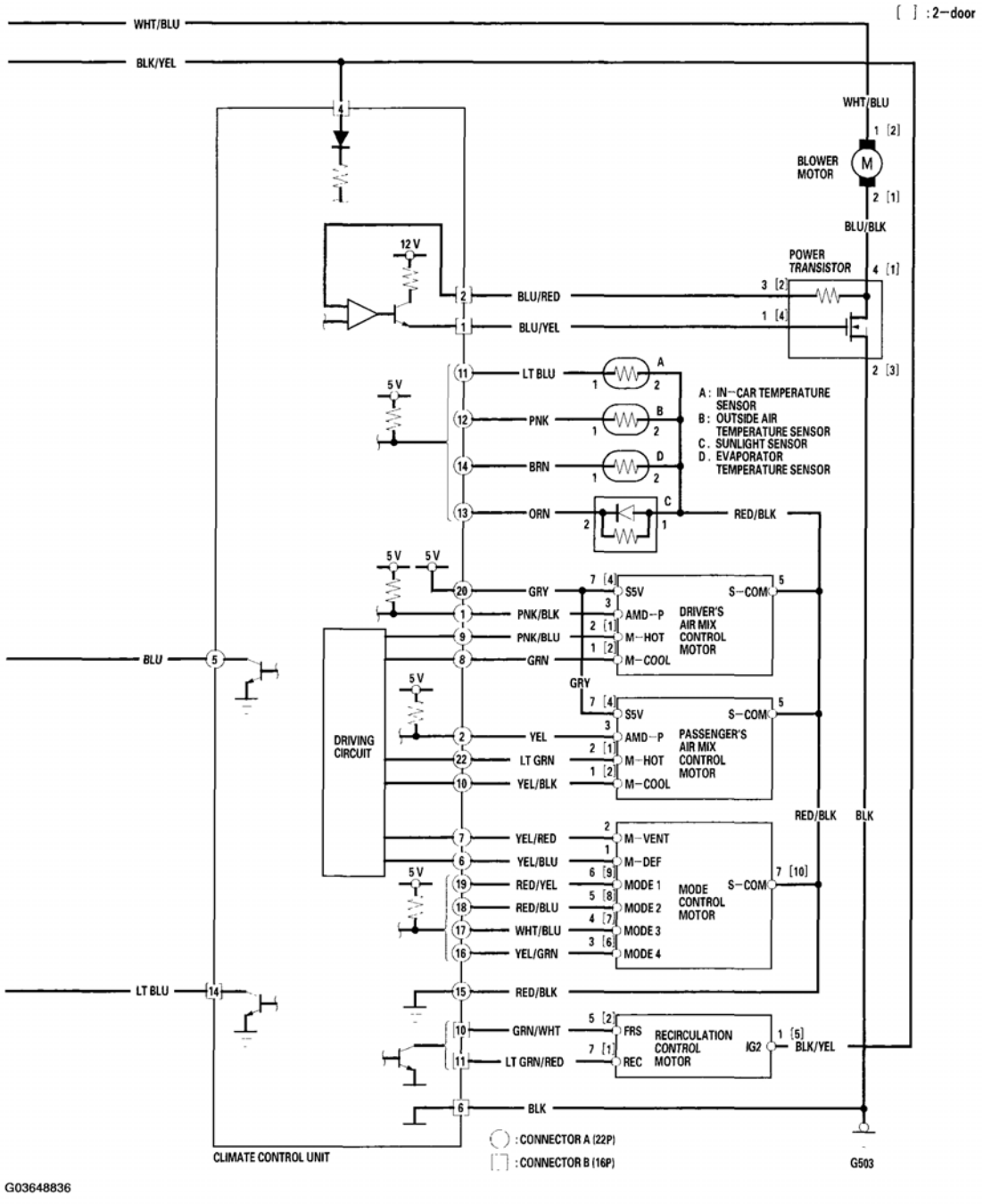


Fig. 20: Identifying Climate Control Circuit Diagram (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC CODE

DTC CODE CHART

DTC	Description
DTC B1225 or DTC indicator A	An Open in the In-car Temperature Sensor Circuit
DTC B1226 or DTC indicator B	A Short in the In-car Temperature Sensor Circuit
DTC B1227 or DTC indicator C	An Open in the Outside Air Temperature Sensor Circuit
DTC B1228 or DTC indicator D	A Short in the Outside Air Temperature Sensor Circuit
DTC B1229 or DTC indicator E	An Open in the Sunlight Sensor Circuit
DTC B1230 or DTC indicator F	A Short in the Sunlight Sensor Circuit
DTC B1231 or DTC indicator G	An Open in the Evaporator Temperature Sensor Circuit
DTC B1232 or DTC indicator H	A Short in the Evaporator Temperature Sensor Circuit
DTC B1233 or DTC indicator I	An Open in the Driver's Air Mix Control Motor Circuit
DTC B1234 or DTC indicator J	A Short in the Driver's Air Mix Control Motor Circuit
DTC B1235 or DTC indicator K	A Problem in the Driver's Air Mix Control Linkage, Door, or Motor
DTC B1239 or DTC indicator L	An Open or Short in the Mode Control Motor Circuit
DTC B1240 or DTC indicator M	A Problem in the Mode Control Linkage, Doors, or Motor
DTC B1241 or DTC indicator N	A Problem in the Blower Motor Circuit
DTC B1236 or DTC indicator O	An Open in the Passenger's Air Mix Control Motor Circuit
DTC B1237 or DTC indicator P	A Short in the Passenger's Air Mix Control Motor Circuit
DTC B1238 or DTC indicator Q	A Problem in the Passenger's Air Mix Control Linkage, Door, or Motor

DTC B1202	Climate Control Unit Internal Error
DTC B1205	Climate Control Unit Lost Communication with the Gauge Control Module (VSP/NE message)
DTC B1206	Climate Control Unit Lost Communication with the Gauge Control Module (ECT message)
DTC B1207	Climate Control Unit Lost Communication with the Gauge Control Module (ILLUMI message)

DTC B1225 OR DTC INDICATOR A: AN OPEN IN THE IN-CAR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

   Is DTC B1225 or A indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections in the in-car temperature sensor circuit.
5. Remove the in-car temperature sensor (see **IN-CAR TEMPERATURE SENSOR TEST**) and test it (see **IN-CAR TEMPERATURE SENSOR TEST**).

   Does the in-car temperature sensor test OK?

   YES - Go to step 6.

   NO - Replace the in-car temperature sensor.
6. Disconnect audio-HVAC display panel connector A (22P).
7. Check for continuity between the No. 11 terminal of audio-HVAC display panel connector A (22P) and the No. 1 terminal of the in-car temperature

sensor 2P connector.

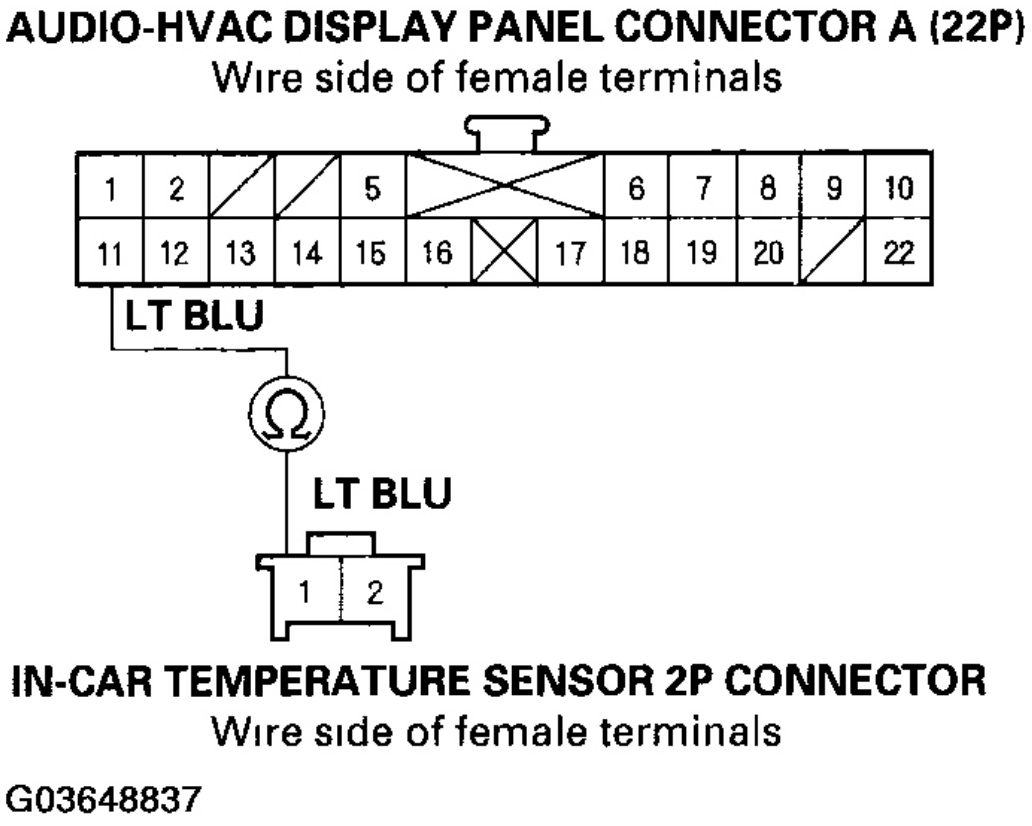


Fig. 21: Checking Continuity Between No. 11 Terminal Of Audio-HVAC Display Panel Connector A (22P) & No. 1 Terminal Of In-Car Temperature Sensor 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 8.

NO - Repair open in the wire between the climate control unit and the in-car temperature sensor.

8. Check for continuity between the No. 15 terminal of audio-HVAC display panel connector A (22P) and the No. 2 terminal of the in-car temperature

sensor 2P connector.

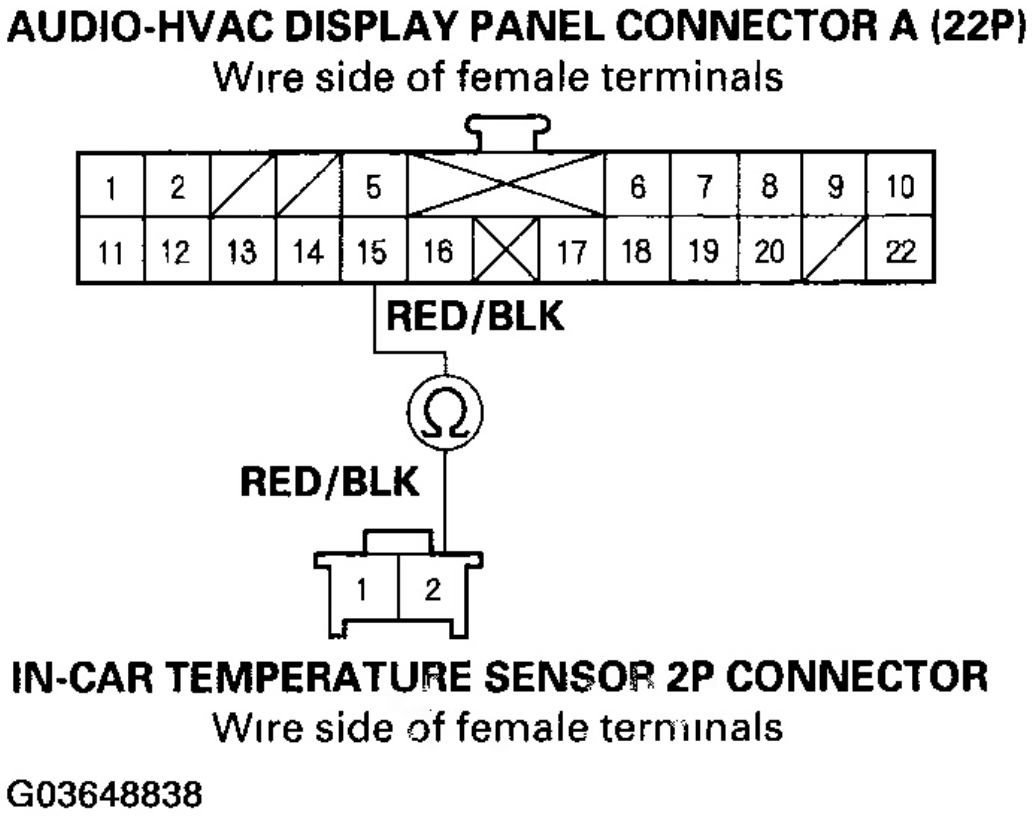


Fig. 22: Checking Continuity Between No. 15 Terminal Of Audio-HVAC Display Panel Connector A (22P) & No. 2 Terminal Of In-Car Temperature Sensor 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at audio-HVAC display panel connector A (22P) and at the in-car temperature sensor 2P connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Repair open in the wire between the climate control unit and the in-car temperature sensor.

DTC B1226 OR DTC INDICATOR B: A SHORT IN THE IN-CAR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

Is DTC B1226 or B indicated?

YES - Go to step 5.

NO - Intermittent failure.

5. Remove the in-car temperature sensor (see **IN-CAR TEMPERATURE SENSOR REPLACEMENT**).
6. Test the in-car temperature sensor (see **IN-CAR TEMPERATURE SENSOR TEST**).

Is the resistance within the specifications in the graph shown in Fig. 73?

YES - Go to step 7.

NO - Replace the in-car temperature sensor.

7. Disconnect audio-HVAC display panel connector A (22P).
8. Check for continuity between the No. 11 terminal of audio-HVAC display panel connector A (22P) and body ground.

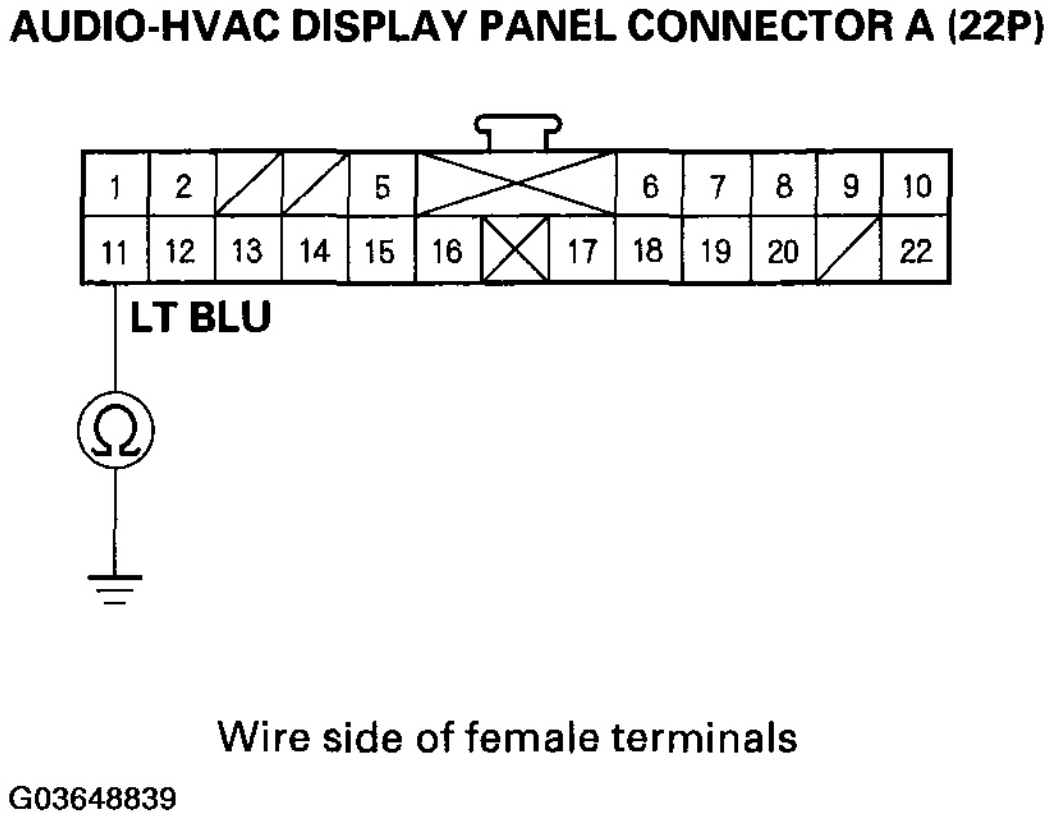


Fig. 23: Checking Continuity Between No. 11 Terminal Of Audio-HVAC Display Panel Connector & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the climate control unit and the in-car temperature sensor.

NO - Substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

DTC B1227 OR DTC INDICATOR C: AN OPEN IN THE OUTSIDE AIR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC.

2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

   Is DTC B1227 or C indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the outside air temperature sensor circuit.
5. Remove the outside air temperature sensor (see **OUTSIDE AIR TEMPERATURE SENSOR REPLACEMENT**) and test it (see **OUTSIDE AIR TEMPERATURE SENSOR TEST**).

   Does the outside air temperature sensor test OK?

   YES - Go to step 6.

   NO - Replace the outside air temperature sensor.
6. Disconnect audio-HVAC display panel connector A (22P).
7. Check for continuity between the No. 12 terminal of audio-HVAC display panel connector A (22P) and the No. 1 terminal of the outside air temperature sensor 2P connector.

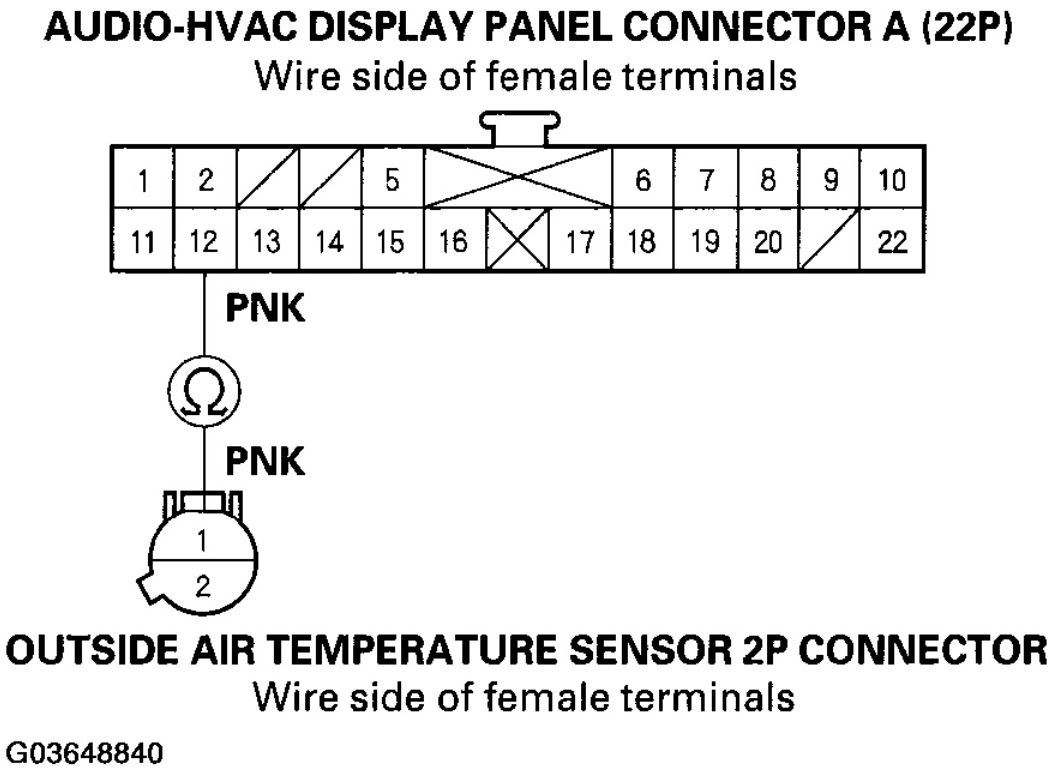


Fig. 24: Checking Continuity Between No. 12 Terminal Of Audio-HVAC Display Panel Connector A (22P) & No. 1 Terminal Of Outside Air Temperature Sensor 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 8.

NO - Repair open in the wire between the climate control unit and the outside air temperature sensor.

8. Check for continuity between the No. 15 terminal of audio-HVAC display panel connector A (22P) and the No. 2 terminal of the outside air temperature sensor 2P connector.

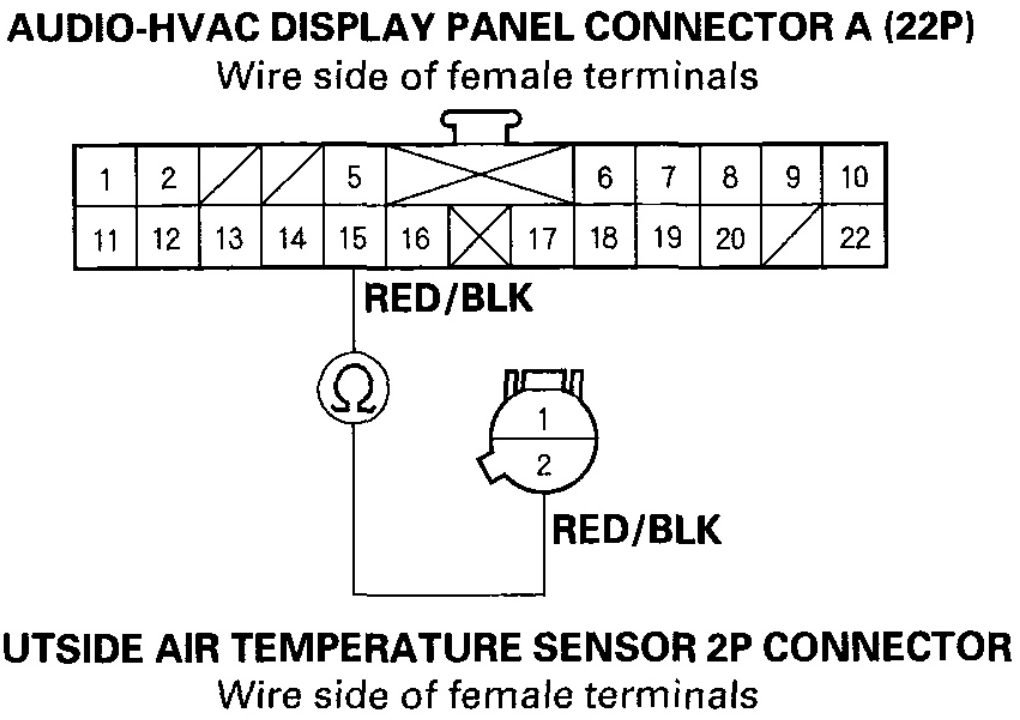


Fig. 25: Checking Continuity Between No. 15 Terminal Of Audio-HVAC Display Panel Connector A (22P) & No. 2 Terminal Of Outside Air Temperature Sensor 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at audio-HVAC display panel connector A (22P) and at the outside air temperature sensor 2P connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Repair open in the wire between the climate control unit and the outside air temperature sensor.

DTC B1228 OR DTC INDICATOR D: A SHORT IN THE OUTSIDE AIR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

   Is DTC B1228 or D indicated?

   YES - Go to step 5.

   NO - Intermittent failure.
5. Remove the outside air temperature sensor (see **OUTSIDE AIR TEMPERATURE SENSOR REPLACEMENT**).
6. Test the outside air temperature sensor (see **OUTSIDE AIR TEMPERATURE SENSOR TEST**).

   Is the resistance within the specifications in the graph shown in Fig. 75?

   YES - Go to step 7.

   NO - Replace the outside air temperature sensor.
7. Disconnect audio-HVAC display panel connector A (22P).
8. Check for continuity between the No. 12 terminal of audio-HVAC display panel connector A (22P) and body ground.

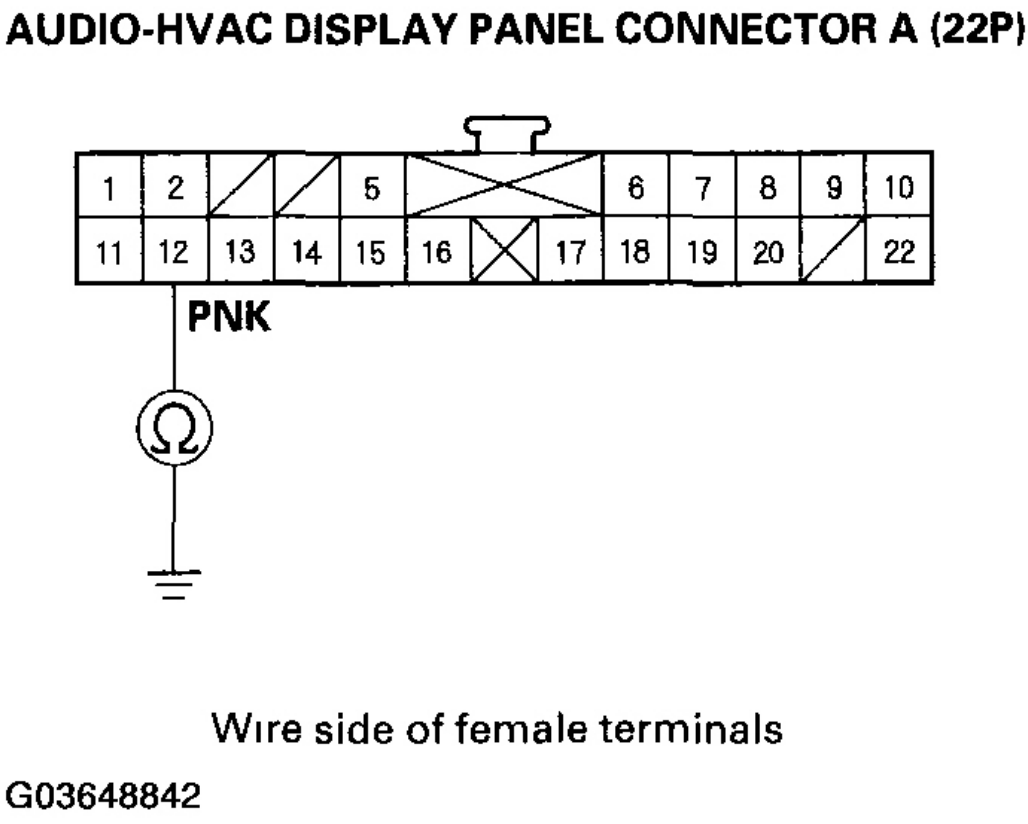


Fig. 26: Checking Continuity Between No. 12 Terminal Of Audio-HVAC Display Panel Connector A (22P) & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the climate control unit and the outside air temperature sensor.

NO - Substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

DTC B1229 OR DTC INDICATOR E: AN OPEN IN THE SUNLIGHT SENSOR CIRCUIT

1. Clear the DTC.

2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

Is DTC B1229 or E indicated?

YES - Go to step 5.

NO - Intermittent failure, check for loose wires or poor connections on the sunlight sensor circuit.

5. Disconnect the sunlight sensor 2P connector.
6. Disconnect audio-HVAC display panel connector A (22P).
7. Check for continuity between the No. 13 terminal of audio-HVAC display panel connector A (22P) and the No. 2 terminal of the sunlight sensor 2P connector.

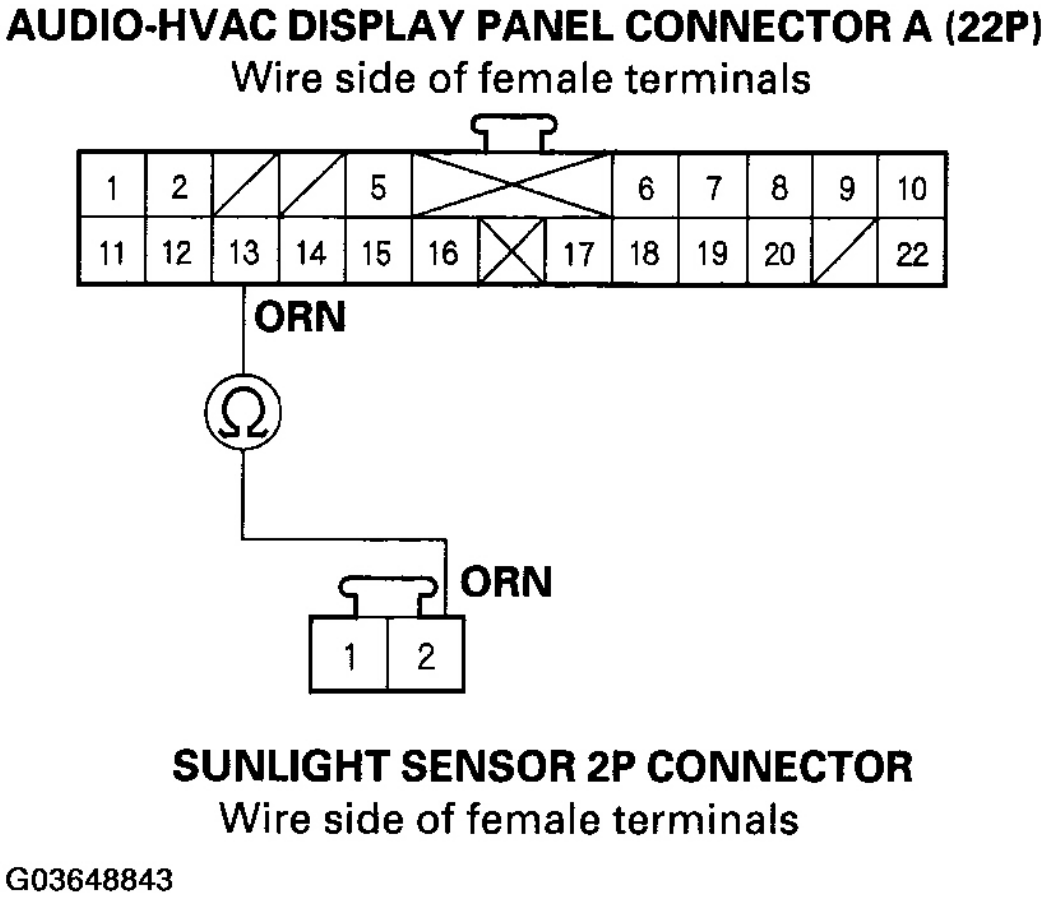


Fig. 27: Checking Continuity Between No. 13 Terminal Of Audio-HVAC Display Panel Connector A (22P) & No. 2 Terminal Of Sunlight Sensor 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 8.

NO - Repair open in the wire between the climate control unit and the sunlight sensor.

8. Check for continuity between the No. 15 terminal of audio-HVAC display panel connector A (22P) and the No. 1 terminal of the sunlight sensor 2P connector.

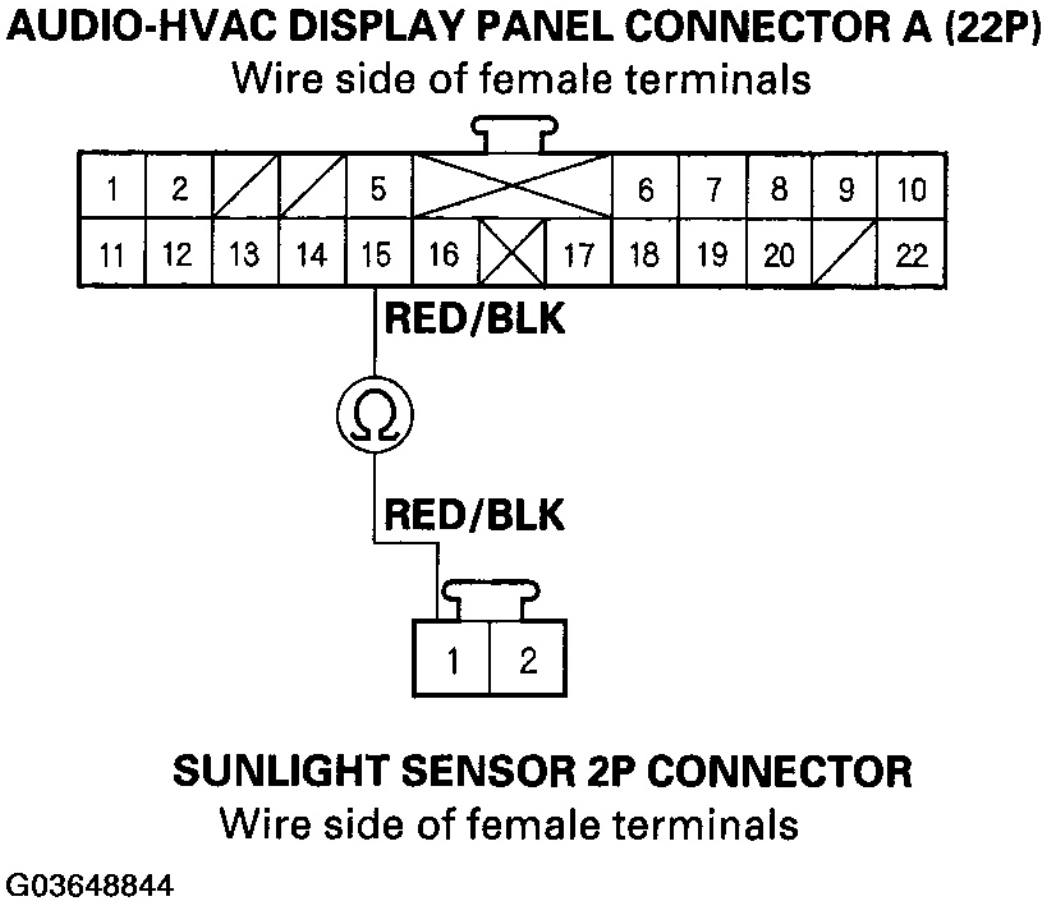


Fig. 28: Checking Continuity Between No. 15 Terminal Of Audio-HVAC Display Panel Connector A (22P) & No. 1 Terminal Of Sunlight Sensor 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 9.

NO - Repair open in the wire between the climate control unit and the sunlight sensor.

9. Reconnect the sunlight sensor 2P connector.
10. Reconnect audio-HVAC display panel connector A (22P).

11. Test the sunlight sensor (see **SUNLIGHT SENSOR TEST**).

Is the sunlight sensor OK?

YES - Check for loose wires or poor connections at audio-HVAC display panel connector A (22P) and at the sunlight sensor 2P connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Replace the sunlight sensor.

DTC B1230 OR DTC INDICATOR F: A SHORT IN THE SUNLIGHT SENSOR CIRCUIT

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

Is DTC B1230 or F indicated?

YES - Go to step 5.

NO - Intermittent failure.

5. Disconnect the sunlight sensor 2P connector.
6. Disconnect audio-HVAC display panel connector A (22P).
7. Check for continuity between the No. 13 terminal of audio-HVAC display panel connector A (22P) and body ground.

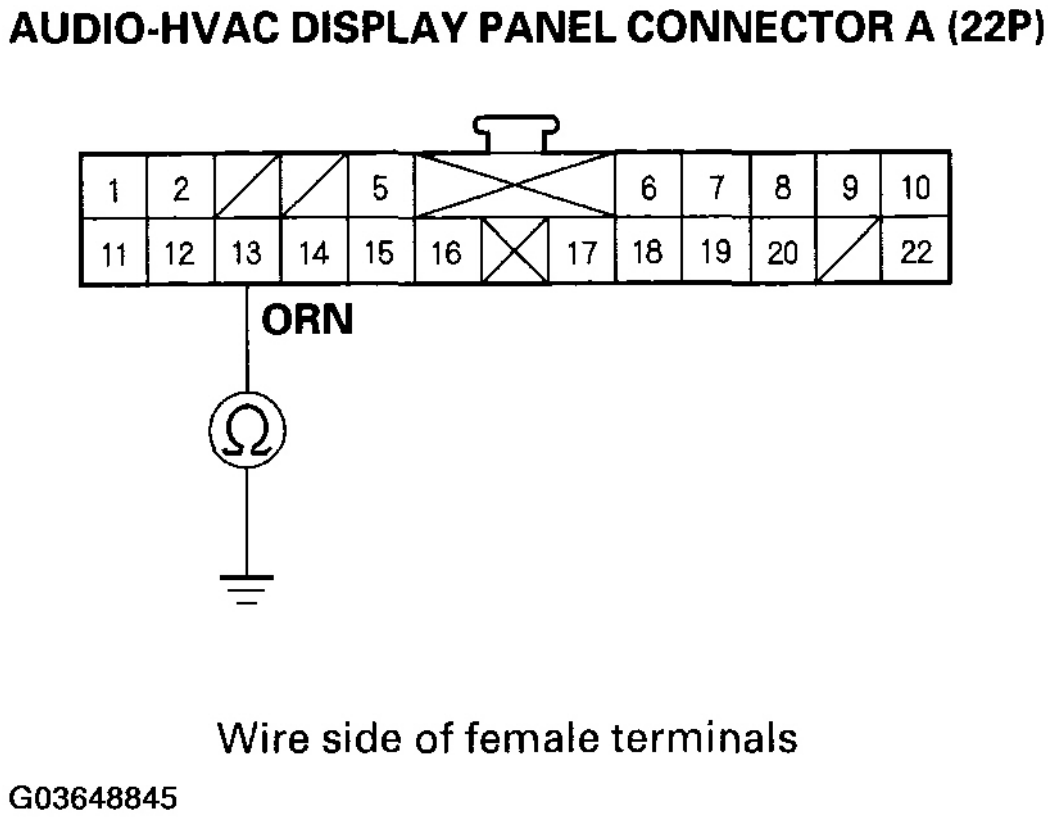


Fig. 29: Checking Continuity Between No. 13 Terminal Of Audio-HVAC Display Panel Connector A (22P) & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the climate control unit and the sunlight sensor.

NO - Go to step 8.

8. Reconnect the sunlight sensor 2P connector.
9. Reconnect audio-HVAC display panel connector A (22P).
10. Test the sunlight sensor (see **SUNLIGHT SENSOR TEST**).

Is the sunlight sensor OK?

YES - Substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Replace the sunlight sensor.

DTC B1231 OR DTC INDICATOR G: AN OPEN IN THE EVAPORATOR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

Is DTC B1231 or G indicated?

YES - Go to step 5.

NO - Intermittent failure, check for loose wires or poor connections on the evaporator temperature sensor circuit.

5. Remove the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR REPLACEMENT**) and test it (see **EVAPORATOR TEMPERATURE SENSOR TEST**).

Does the evaporator temperature sensor test OK?

YES - Go to step 6.

NO - Replace the evaporator temperature sensor.

6. Disconnect audio-HVAC display panel connector A (22P).
7. Check for continuity between the No. 14 terminal of audio-HVAC display panel connector A (22P) and the No. 1 terminal of the evaporator temperature sensor 2P connector.

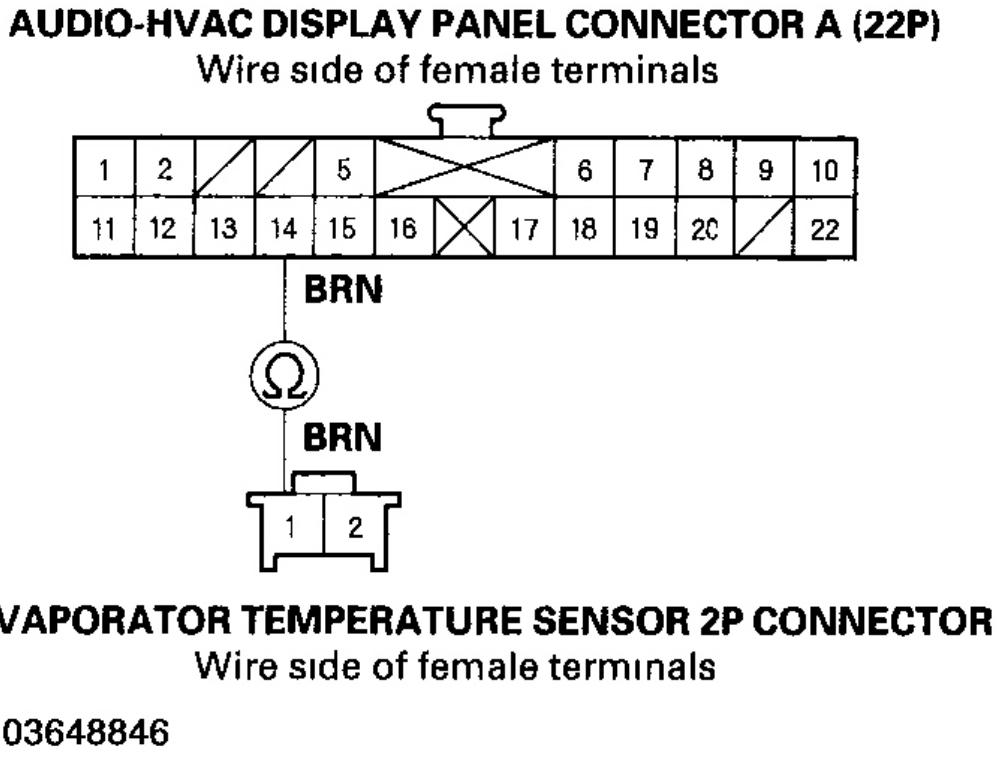


Fig. 30: Checking Continuity Between No. 14 Terminal Of Audio-HVAC Display Panel Connector A (22P) & No. 1 Terminal Of Evaporator Temperature Sensor 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 8.

NO - Repair open in the wire between the climate control unit and the evaporator temperature sensor.

8. Check for continuity between the No. 15 terminal of audio-HVAC display panel connector A (22P) and the No. 2 terminal of the evaporator temperature sensor 2P connector.

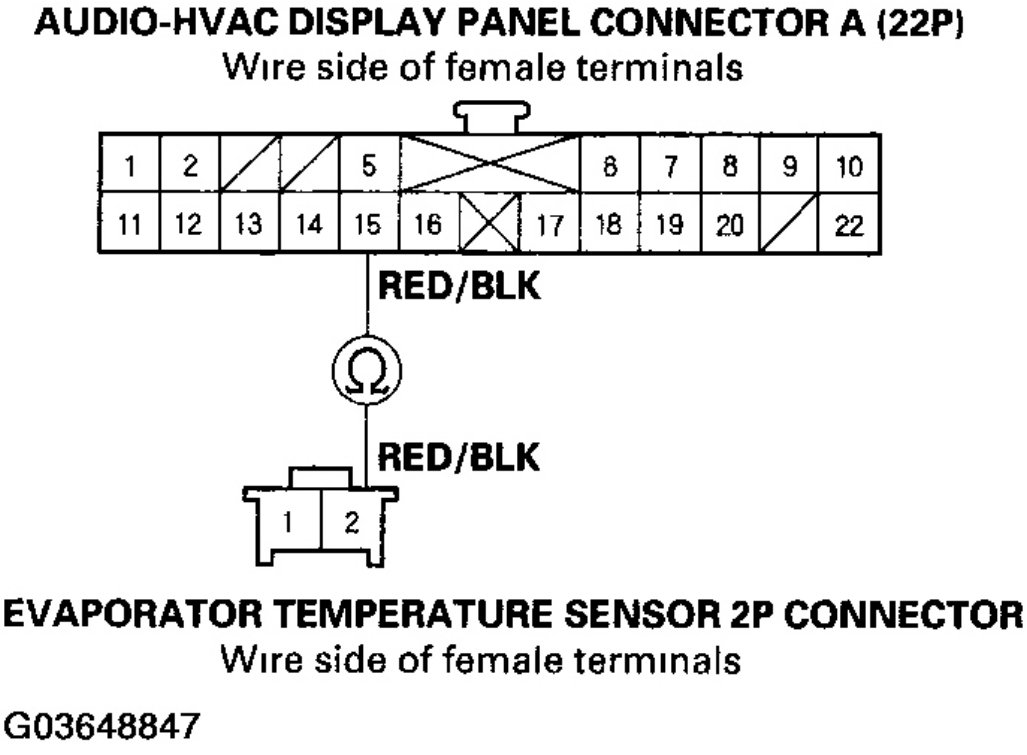


Fig. 31: Checking Continuity Between No. 15 Terminal Of Audio-HVAC Display Panel Connector A (22P) & No. 2 Terminal Of Evaporator Temperature Sensor 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at audio-HVAC display panel connector A (22P) and at the evaporator temperature sensor 2P connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Repair open in the wire between the climate control unit and the evaporator temperature sensor.

DTC B1232 OR DTC INDICATOR H: A SHORT IN THE EVAPORATOR TEMPERATURE SENSOR

CIRCUIT

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

   Is DTC B1232 or H indicated?

   YES - Go to step 5.

   NO - Intermittent failure.
5. Remove the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR REPLACEMENT**).
6. Test the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR TEST**).

   Is the resistance within the specifications in the graph shown in EVAPORATOR TEMPERATURE SENSOR TEST ?

   YES - Go to step 7.

   NO - Replace the evaporator temperature sensor.
7. Disconnect audio-HVAC display panel connector A (22P).
8. Check for continuity between the No. 14 terminal of audio-HVAC display panel connector A (22P) and body ground.

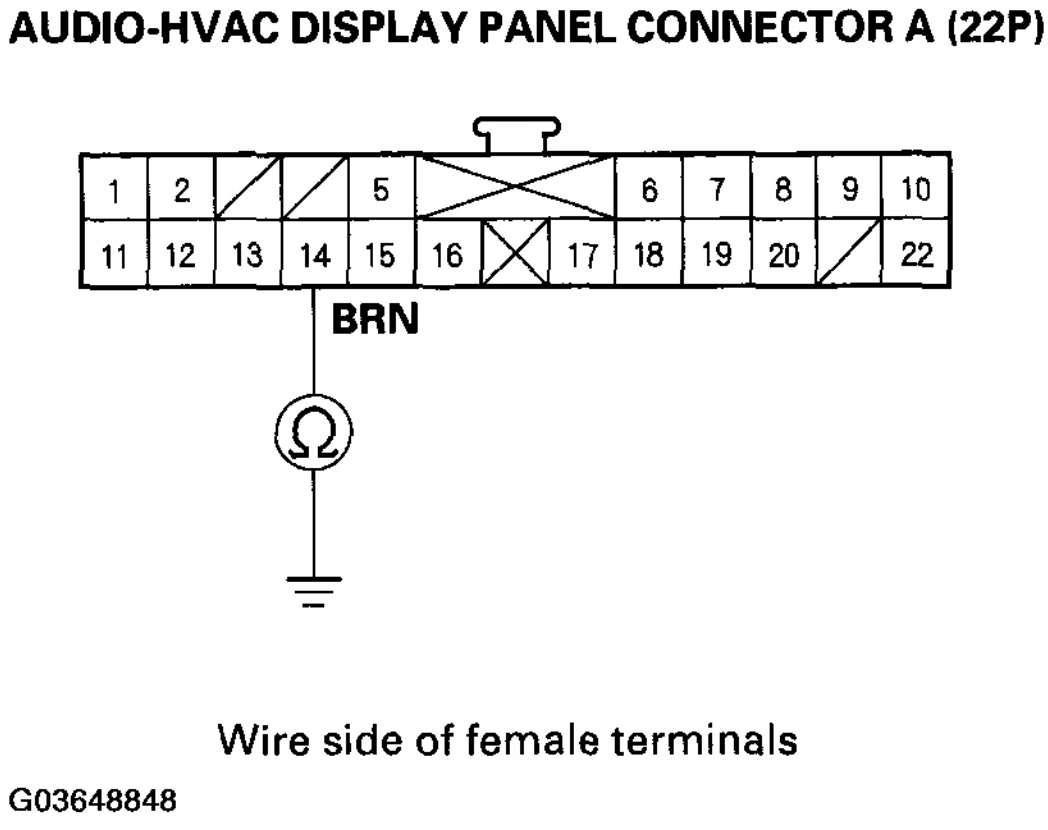


Fig. 32: Checking Continuity Between No. 14 Terminal Of Audio-HVAC Display Panel Connector A (22P) & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the climate control unit and the evaporator temperature sensor.

NO - Substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

DTC B1233 OR DTC INDICATOR I: AN OPEN IN THE DRIVER'S AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

   Is DTC B1233 or I indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the evaporator temperature sensor circuit.
5. Test the driver's air mix control motor.
   - 4-door (see **4-DOOR**)
   - 2-door (see **2-DOOR**)

   Is the driver's air mix control motor OK?

   YES - Go to step 6.

   NO - Replace the driver's air mix control motor.
   - 4-door (see **4-DOOR**)
   - 2-door (see **2-DOOR**)
6. Disconnect the driver's air mix control motor 7P (4-door) or 5P (2-door) connector.
7. Disconnect audio-HVAC display panel connector A (22P).
8. Check for continuity between the following terminals of audio-HVAC display panel connector A (22P) and the driver's air mix control motor 7P (4-door) or 5P (2-door) connector.

AUDIO-HVAC DISPLAY PANEL CONNECTOR A (22P) AND DRIVER'S AIR MIX CONTROL MOTOR 7P CONNECTOR (4-DOOR)

22P	7P
No. 1	No. 3
No. 8	No. 1
No. 9	No. 2

No. 15	No. 5
No. 20	No. 7

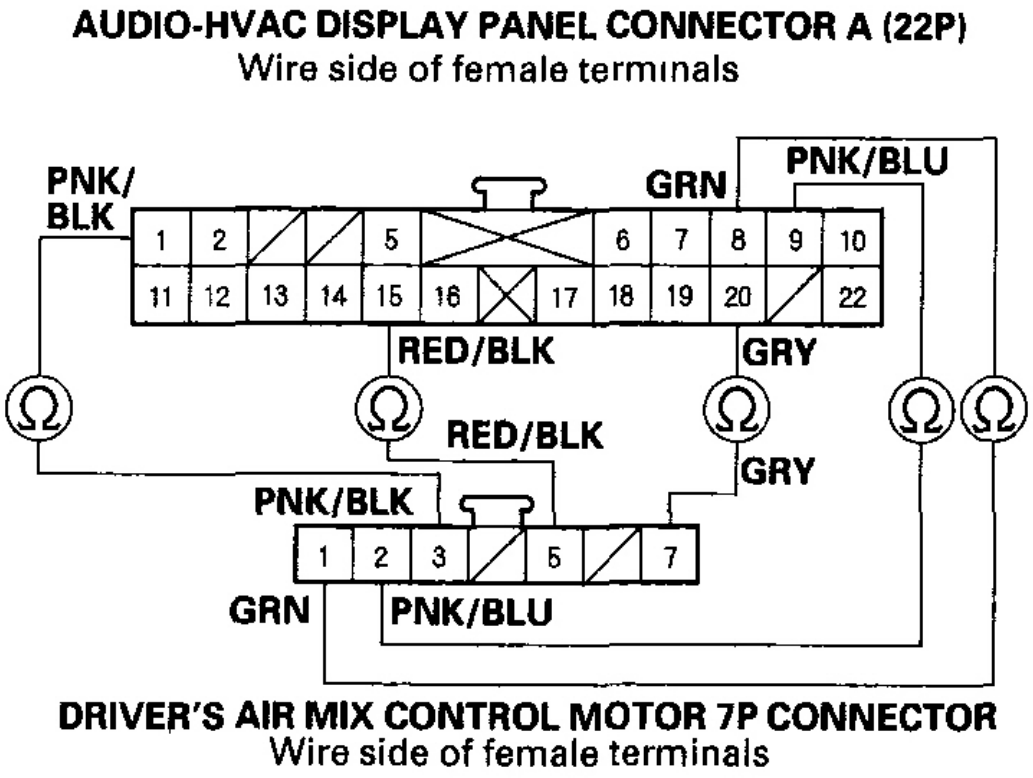


Fig. 33: Checking Continuity Between Terminals Of Audio-HVAC Display Panel Connector A (22P) & Driver's Air Mix Control Motor Connector (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUDIO-HVAC DISPLAY PANEL CONNECTOR A (22P) AND DRIVER'S AIR MIX CONTROL MOTOR 5P CONNECTOR (2-DOOR)

22P:	5P:
No. 1	No. 3
No. 8	No. 2

No. 9	No. 1
No. 15	No. 5
No. 20	No. 4

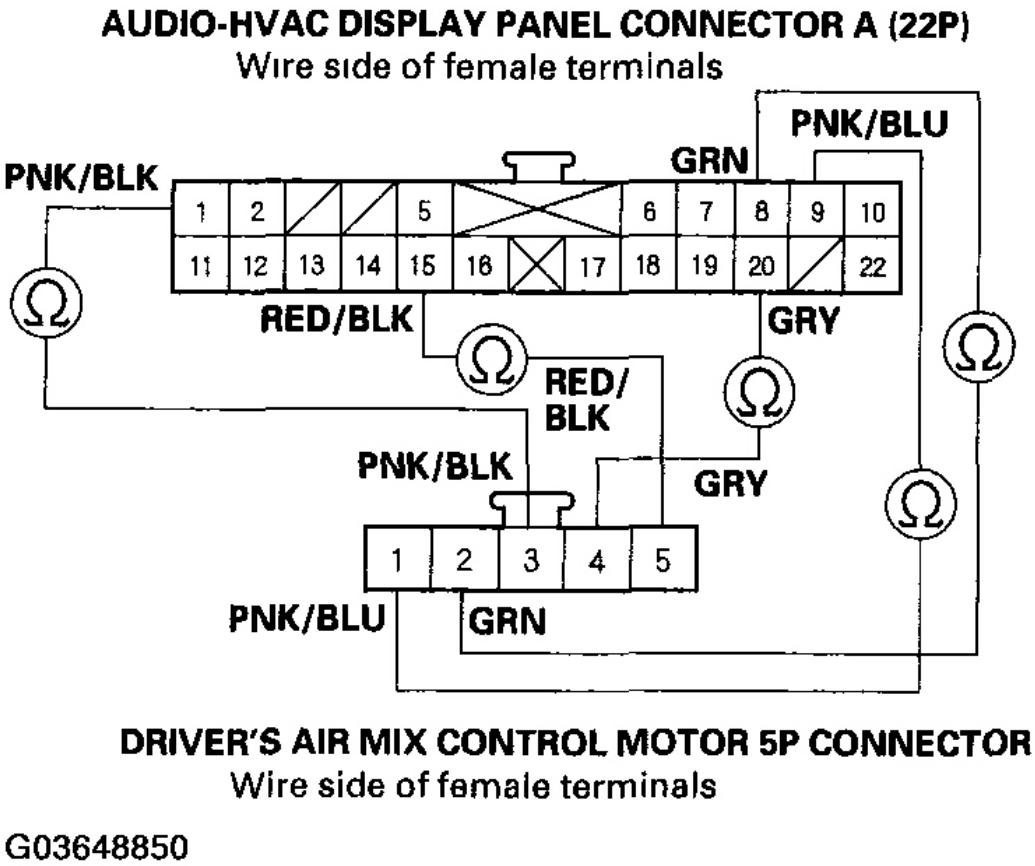


Fig. 34: Checking Continuity Between Audio-HVAC Display Panel Connector A (22P) & Driver's Air Mix Control Motor Connector (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at audio-HVAC display panel connector A (22P) and at the driver's air mix control motor 7P (4-door) or 5P (2-door) connector. If the connections are good, substitute a

known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Repair any open in the wire(s) between the climate control unit and the driver's air mix control motor.

DTC B1234 OR DTC INDICATOR J: A SHORT IN THE DRIVER'S AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

   Is DTC B1234 or J indicated?

   YES - Go to step 5.

   NO - Intermittent failure.
5. Test the driver's air mix control motor.
   - 4-door (see **4-DOOR**)
   - 2-door (see **2-DOOR**)

   Is the driver's air mix control motor OK?

   YES - Go to step 6.

   NO - Replace the driver's air mix control motor.
   - 4-door (see **4-DOOR**)
   - 2-door (see **2-DOOR**)
6. Disconnect the driver's air mix control motor 7P (4-door) or 5P (2-door) connector.
7. Disconnect audio-HVAC display panel connector A (22P).
8. Check for continuity between body ground and audio-HVAC display panel connector A (22P) terminals No. 1, 8, 9, 15 and 20 individually.

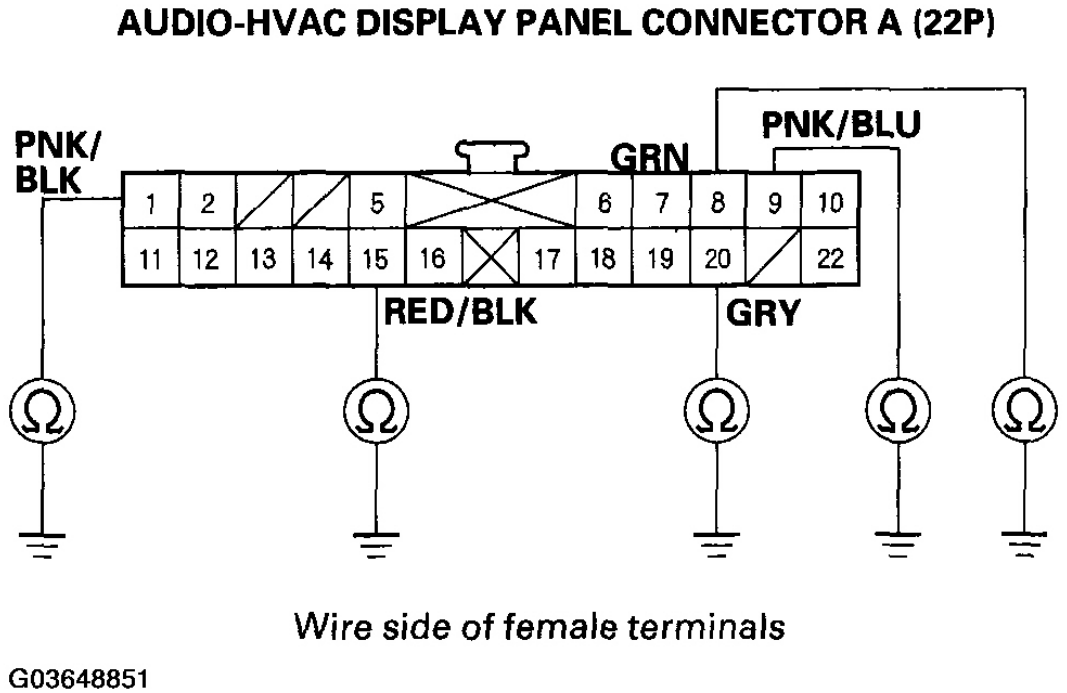


Fig. 35: Checking Continuity Between Body Ground & Audio-HVAC Display Panel Connector A (22P) Terminals No. 1, 8, 9, 15 And 20 Individually
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair any short to body ground in the wire(s) between the climate control unit and the driver's air mix control motor.

NO - Go to step 9.

9. Turn the ignition switch ON (II), and check the same terminals for voltage.

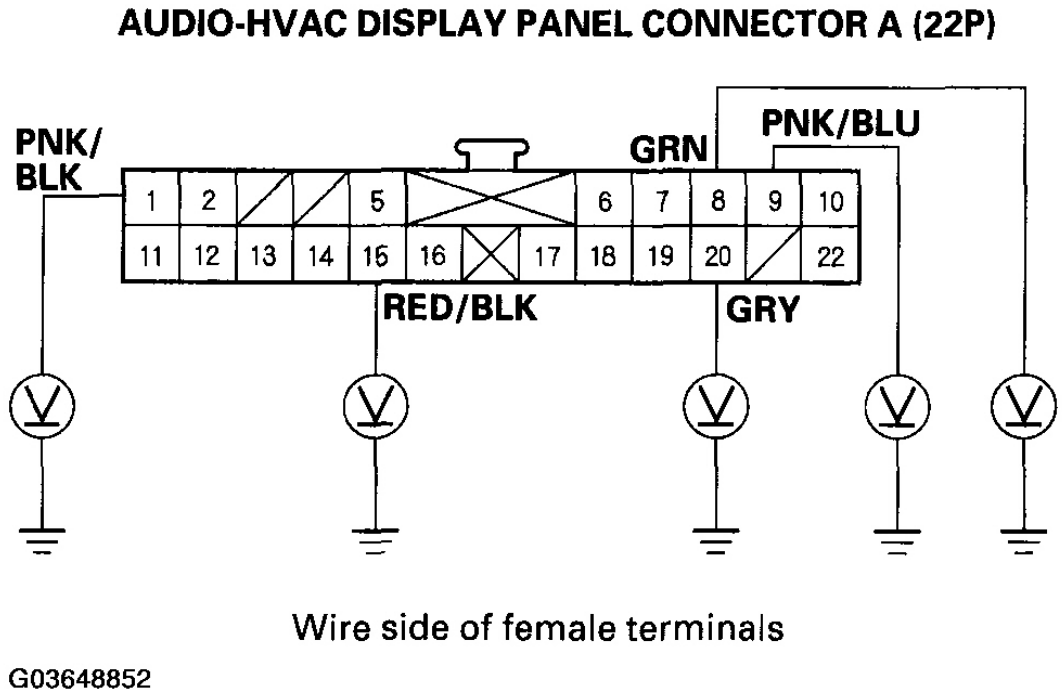


Fig. 36: Checking Terminals For Voltage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair any short to power in the wire(s) between the climate control unit and the driver's air mix control motor. This short may also damage the climate control unit. Repair the short to power before replacing the audio-HVAC display panel.

NO - Substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

DTC B1235 OR DTC INDICATOR K: A PROBLEM IN THE DRIVER'S AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.

3. Operate the climate control system in several modes.
4. Check the DTCs.

Is DTC B1235 or K indicated?

YES - Go to step 5.

NO - Intermittent failure.

5. Test the driver's air mix control motor.
   - 4-door (see **4-DOOR**)
   - 2-door (see **2-DOOR**)

Are the driver's air mix control motor and linkage OK?

YES - Substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Replace the driver's air mix control motor, 4-door (see **4-DOOR**) or 2-door (see **2-DOOR**), or repair the driver's air mix control linkage or door.

DTC B1239 OR DTC INDICATOR L: AN OPEN OR SHORT IN THE MODE CONTROL MOTOR CIRCUIT

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

Is DTC B1239 or L indicated?

YES - Go to step 5.

NO - Intermittent failure, check for loose wires or poor connections on the mode control motor circuit.

5. Test the mode control motor.
   - 4-door (see **4-DOOR**)

- 2-door (see **2-DOOR**)

Is the mode control motor OK?

YES - Go to step 6.

NO - Replace the mode control motor.

- 4-door (see **4-DOOR**)
- 2-door (see **2-DOOR**)

6. Disconnect the mode control motor 7P (4-door) or 10P (2-door) connector.
7. Disconnect audio-HVAC display panel connector A (22P).
8. Check for continuity between body ground and audio-HVAC display panel connector A (22P) terminals No. 6, 7, 15, 16, 17, 18, and 19 individually.

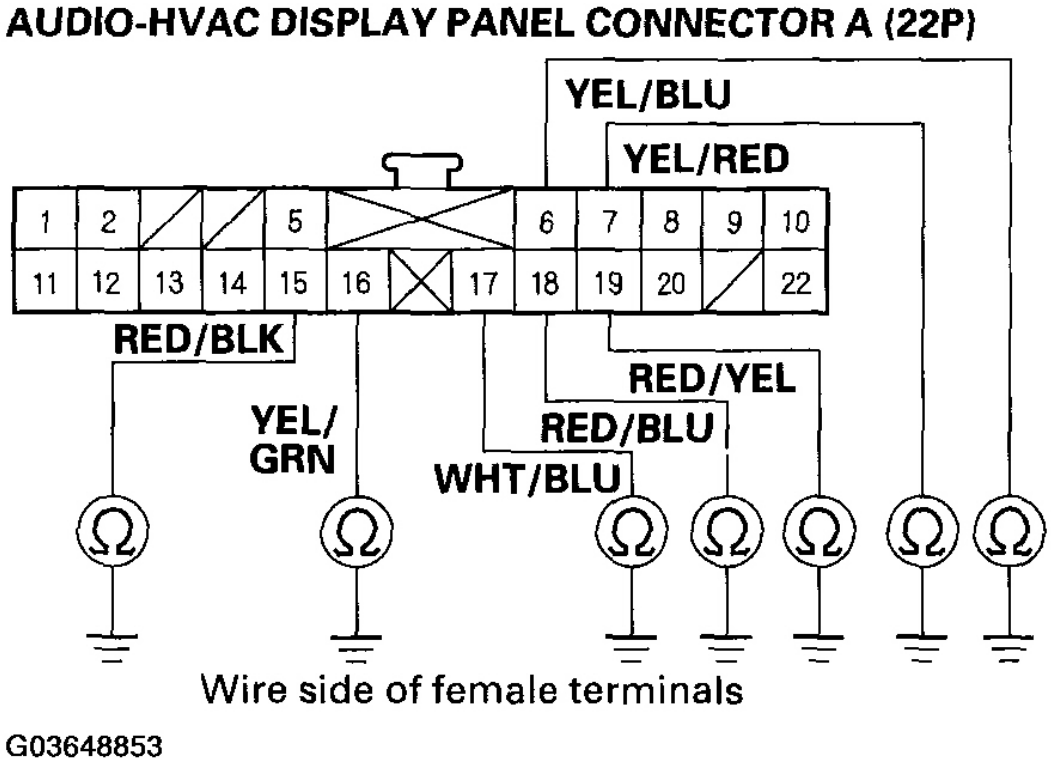


Fig. 37: Checking Continuity Between Body Ground & Audio-HVAC Display Panel Connector A (22P) Terminals No. 6, 7, 15, 16, 17, 18, And 19

Individually
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair any short to body ground in the wire(s) between the climate control unit and the mode control motor.

NO - Go to step 9.

9. Turn the ignition switch ON (II), and check the same terminals for voltage.

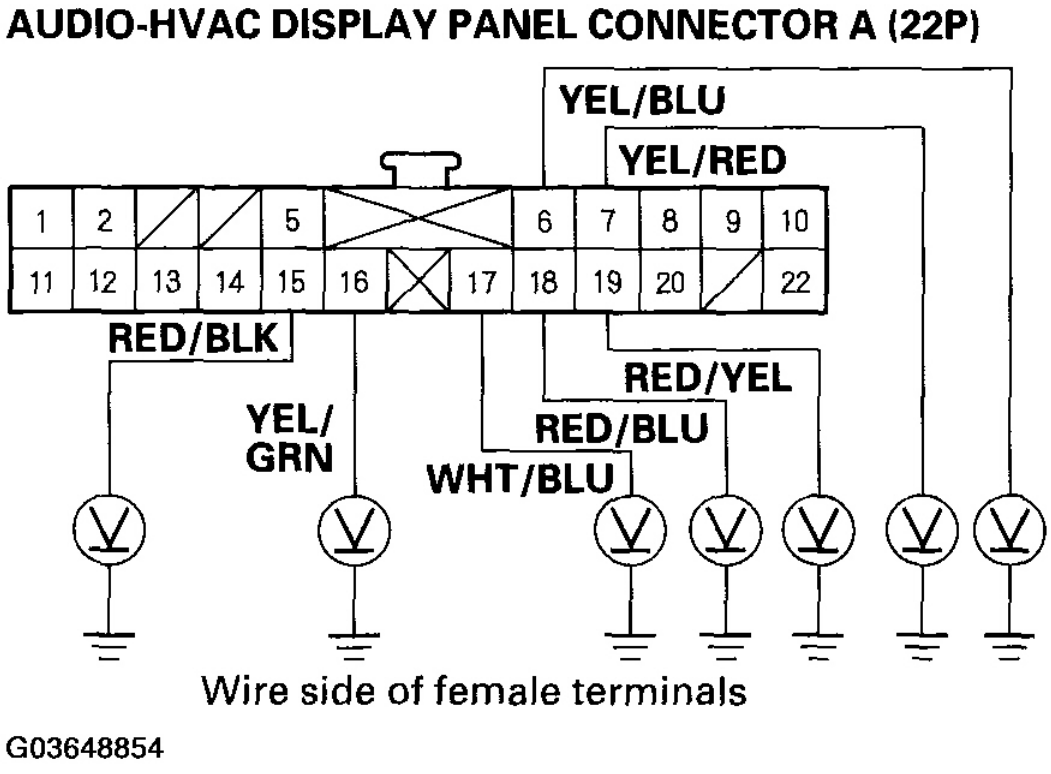


Fig. 38: Checking Same Terminals For Voltage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair any short to power in the wire(s) between the climate

control unit and the mode control motor. This short may also damage the climate control unit. Repair the short to power before replacing the audio-HVAC display panel.

NO - Go to step 10.

10. Turn the ignition switch OFF, and check for continuity between the following terminals of audio-HVAC display panel connector A (22P) and the mode control motor 7P (4-door) or 10P (2-door) connector.

AUDIO-HVAC DISPLAY PANEL CONNECTOR A (22P) AND MODE CONTROL MOTOR 7P CONNECTOR (4-DOOR)

22P	7P
No. 6	No. 1
No. 7	No. 2
No. 15	No. 7
No. 16	No. 3
No. 17	No. 4
No. 18	No. 5
No. 19	No. 6

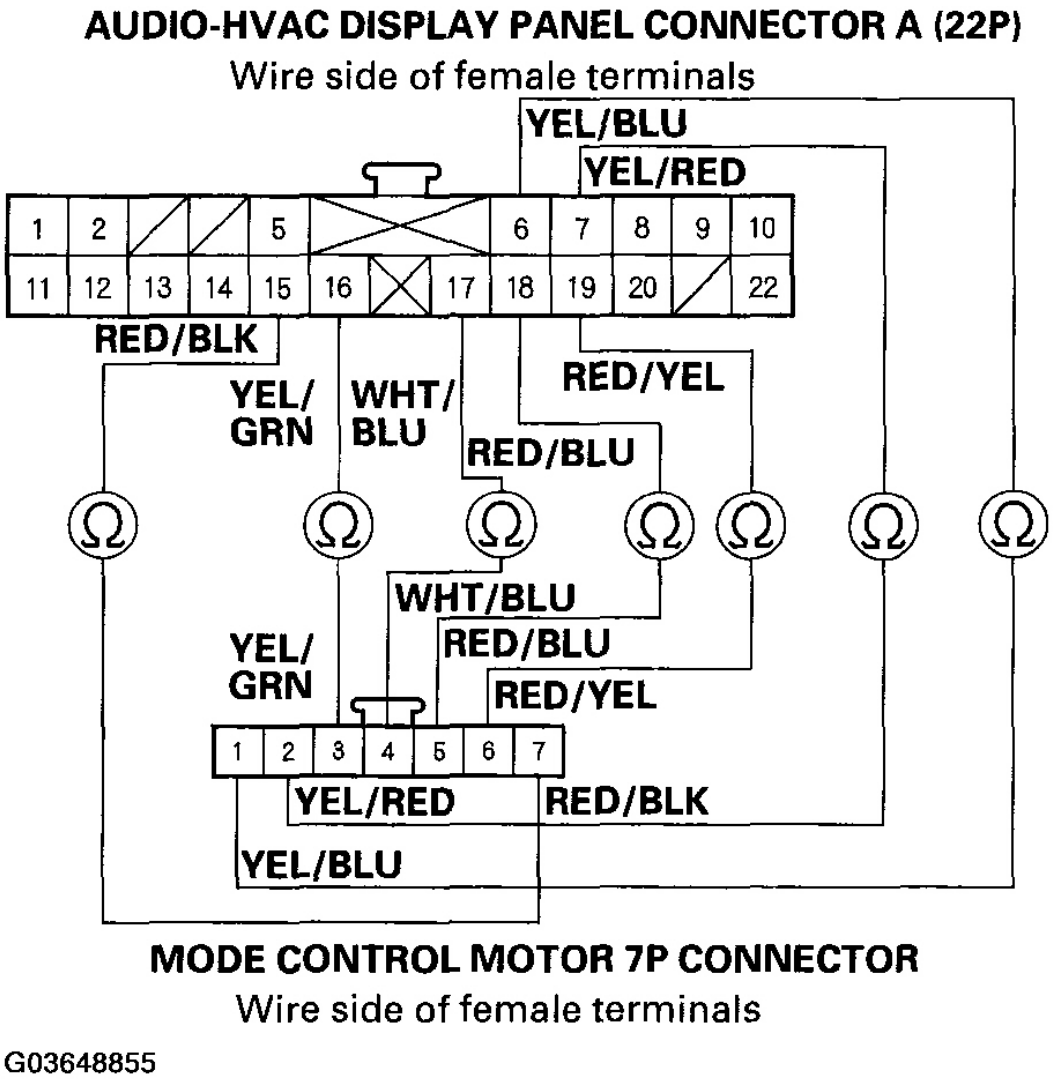


Fig. 39: Checking Continuity Between Terminals Of Audio-HVAC Display Panel Connector A (22P) (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUDIO-HVAC DISPLAY PANEL CONNECTOR A (22P) AND MODE CONTROL MOTOR 10P CONNECTOR (2-DOOR)

22P	10P
No. 6	No. 1
No. 7	No. 2

No. 15	No. 10
No. 16	No. 6
No. 17	No. 7
No. 18	No. 8
No. 19	No. 9

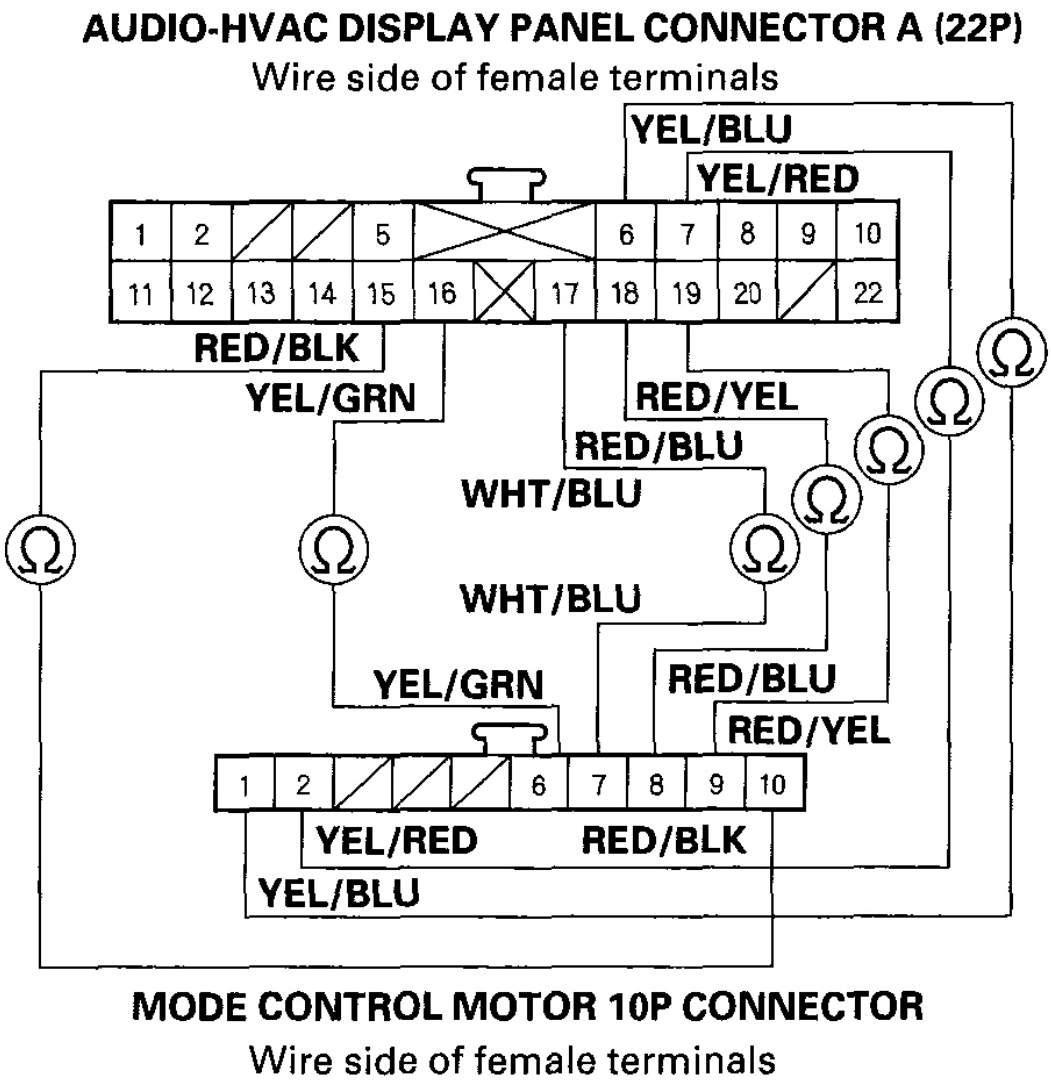


Fig. 40: Checking Continuity Between Terminals Of Audio-HVAC Display Panel Connector A (22P) (2-Door)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at audio-HVAC display panel connector A (22P) and at the mode control motor 7P (4-door) or 10P (2-door) connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Repair any open in the wire(s) between the climate control unit and the mode control motor.

DTC B1240 OR DTC INDICATOR M: A PROBLEM IN THE MODE CONTROL LINKAGE, DOORS, OR MOTOR

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

Is DTC B1240 or M indicated?

YES - Go to step 5.

NO - Intermittent failure.

5. Test the mode control motor.
   - 4-door (see **4-DOOR**)
   - 2-door (see **2-DOOR**)

Are the mode control motor and linkage OK?

YES - Substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Replace the mode control motor, 4-door (see **4-DOOR**) or 2-door (see **2-DOOR**), or repair the mode control linkage or doors.

DTC B1241 OR DTC INDICATOR N: A PROBLEM IN THE BLOWER MOTOR CIRCUIT

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

   Is DTC B1241 or N indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the blower motor circuit.
5. Check the No. 21 (40A) fuse in the under-hood fuse/relay box, and the No. 30 (7.5A) fuse in the under-dash fuse/relay box.

   Are the fuses OK?

   YES - Go to step 6.

   NO - Replace the fuse(s), and recheck.
6. Connect the No. 2 (4-door) or No. 1 (2-door) terminal of the blower motor 2P connector to body ground with a jumper wire.

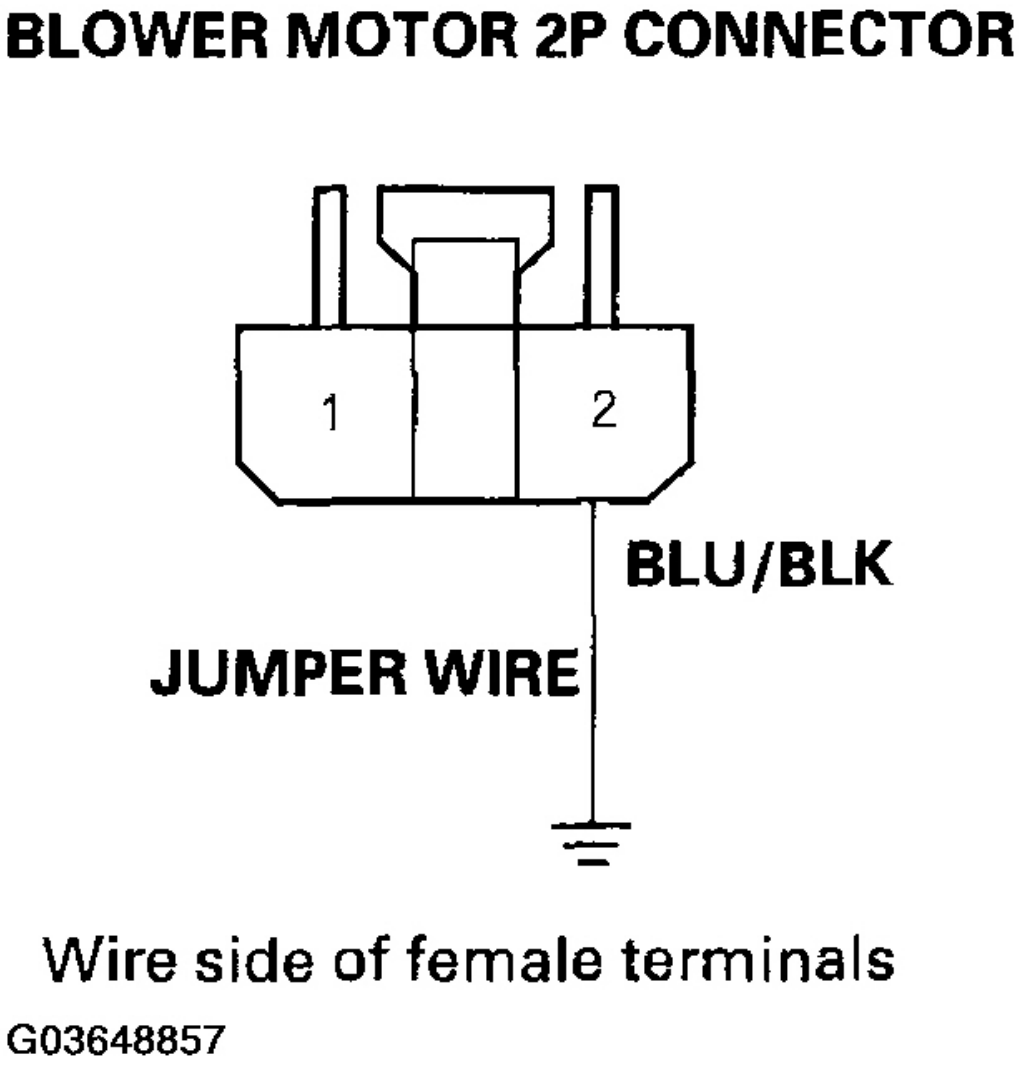


Fig. 41: Connecting No. 2 Terminal Of Blower Motor 2P Connector To Body Ground With Jumper Wire (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

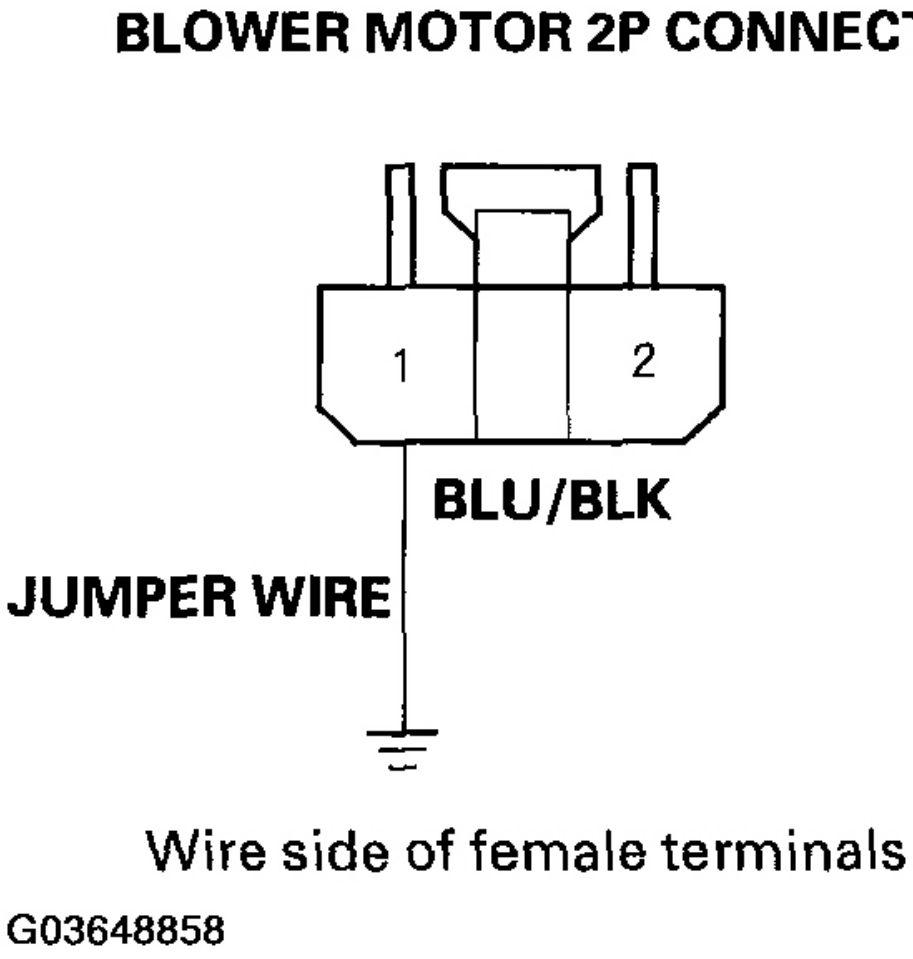


Fig. 42: Connecting No. 1 Terminal Of Blower Motor 2P Connector To Body Ground With Jumper Wire (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Turn the ignition switch ON (II).

   Does the blower motor run?

   YES - Go to step 8.
   NO - Go to step 21.
8. Turn the ignition switch OFF.

9. Disconnect the jumper wire.
10. Disconnect the power transistor 4P connector.
11. Check for continuity between the No. 2 (4-door) or No. 3 (2-door) terminal of the power transistor 4P connector and body ground.

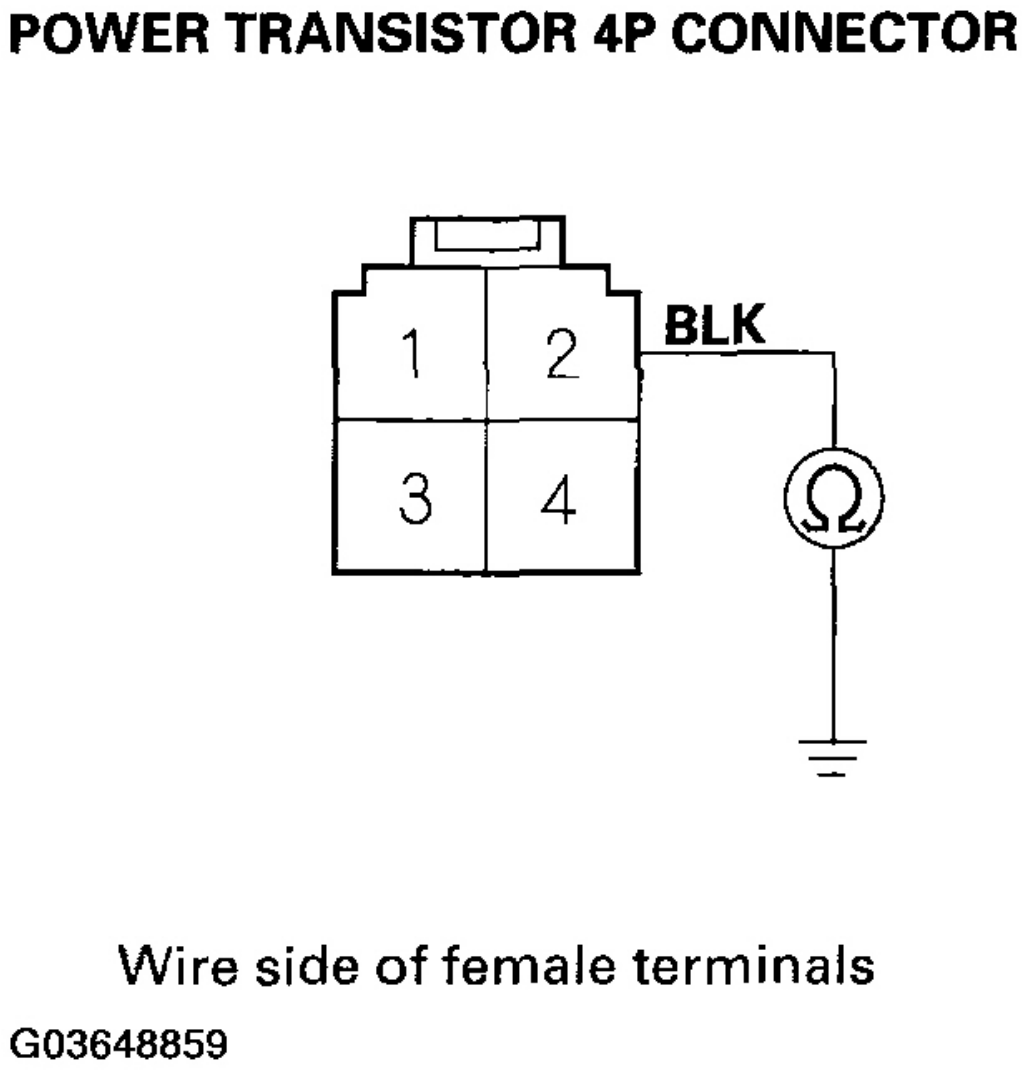


Fig. 43: Checking Continuity Between No. 2 Terminal Of Power Transistor 4P Connector & Body Ground (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

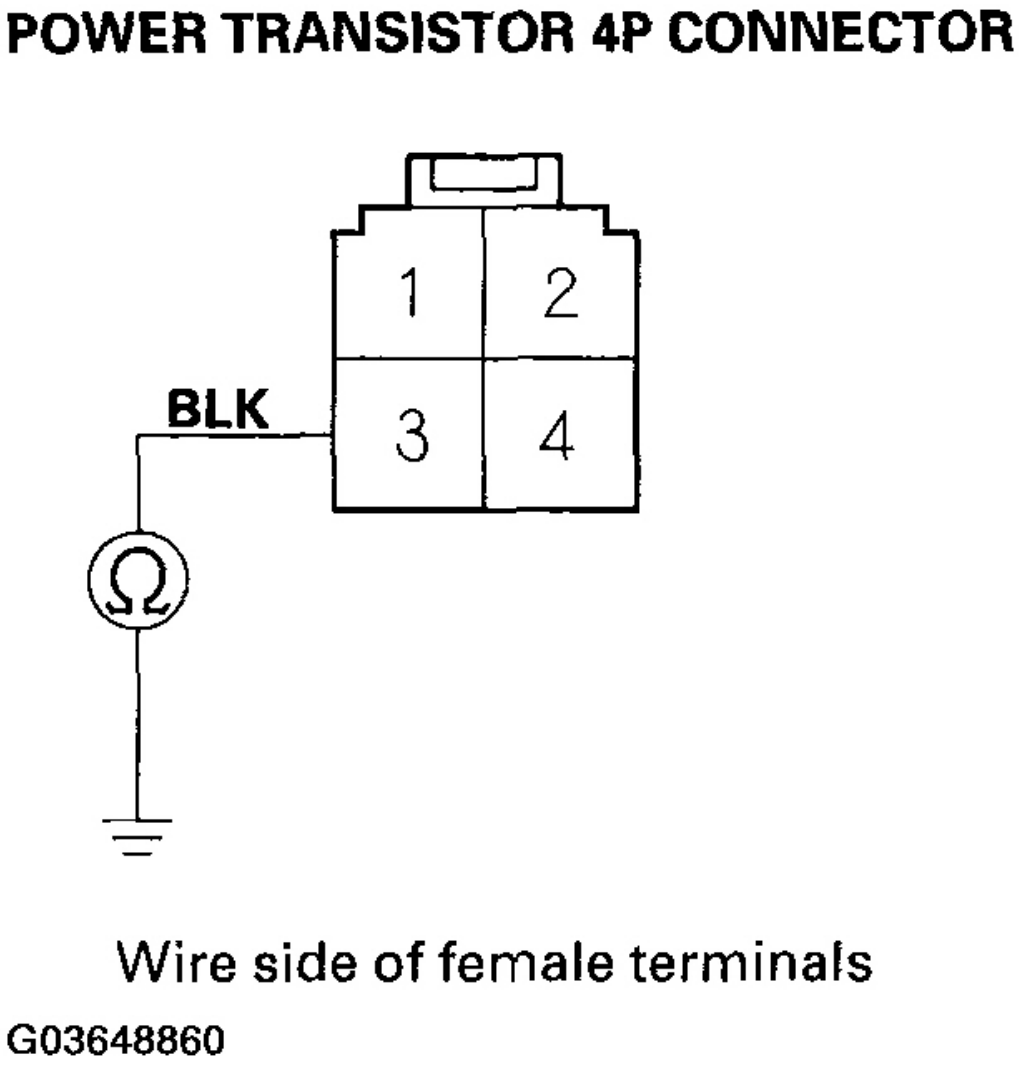


Fig. 44: Checking Continuity Between No. 3 Terminal Of Power Transistor 4P Connector & Body Ground (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 12.
NO - Check for an open in the wire between the power transistor and body

ground. If the wire is OK, check for poor ground at G503.

12. Connect the No. 2 and No. 4 (4-door) or No. 1 and No. 3 (2-door) terminals of the power transistor 4P connector with a jumper wire.

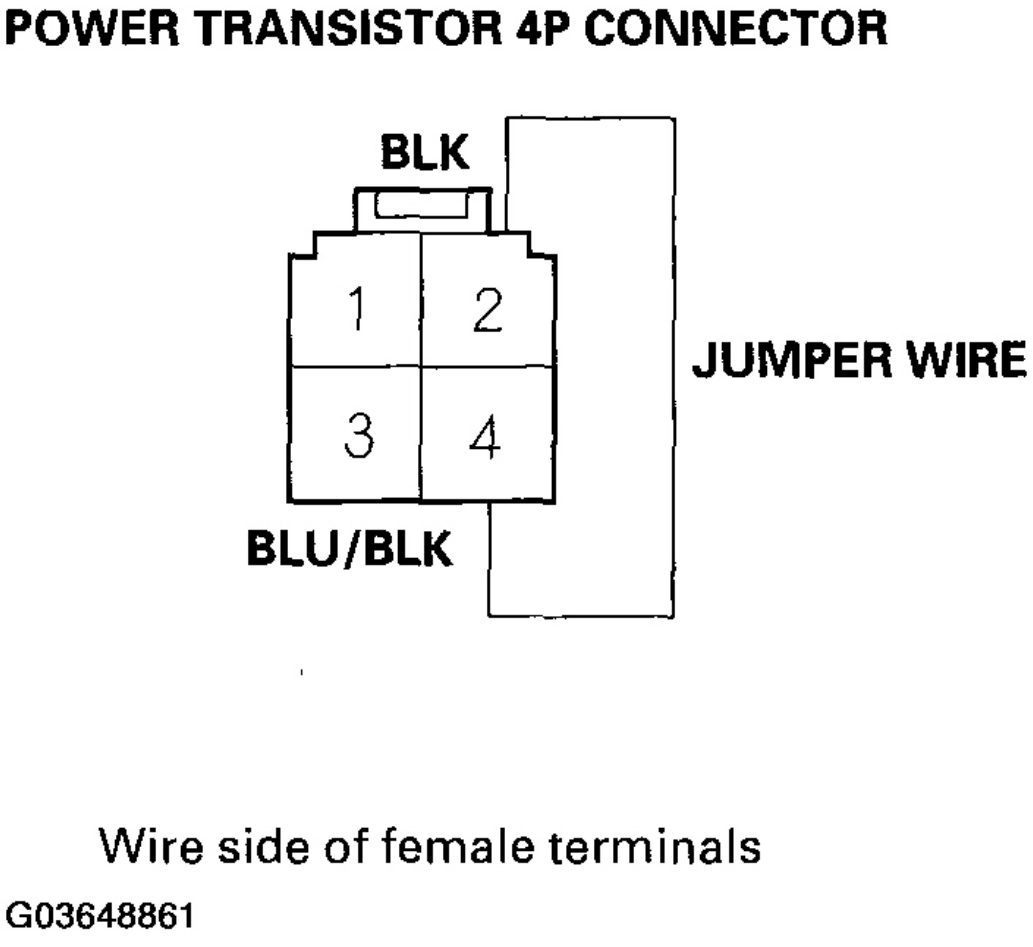


Fig. 45: Connecting No. 2 & No. 4 Terminals Of Power Transistor 4P Connector With Jumper Wire (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

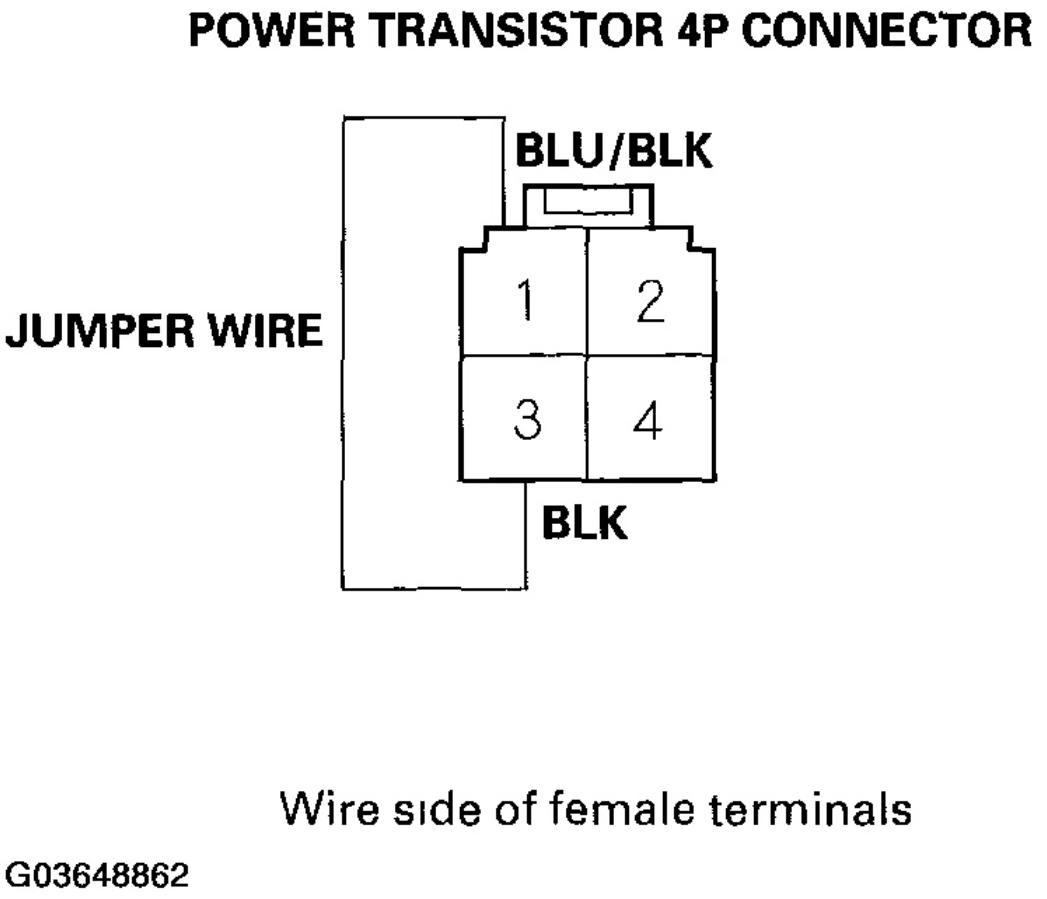


Fig. 46: Connecting No. 1 & No. 3 Terminals Of Power Transistor 4P Connector With Jumper Wire (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Turn the ignition switch ON (II).

    Does the blower motor run at high speed?

    YES - Go to step 14.

    NO - Repair open in the BLU/BLK wire between the power transistor and the blower motor.

14. Turn the ignition switch OFF.

15. Disconnect the jumper wire.
16. Disconnect the audio-HVAC display panel connector B (16P).
17. Check for continuity between the No. 1 and No. 2 terminals of audio-HVAC display panel connector B (16P) and body ground individually.

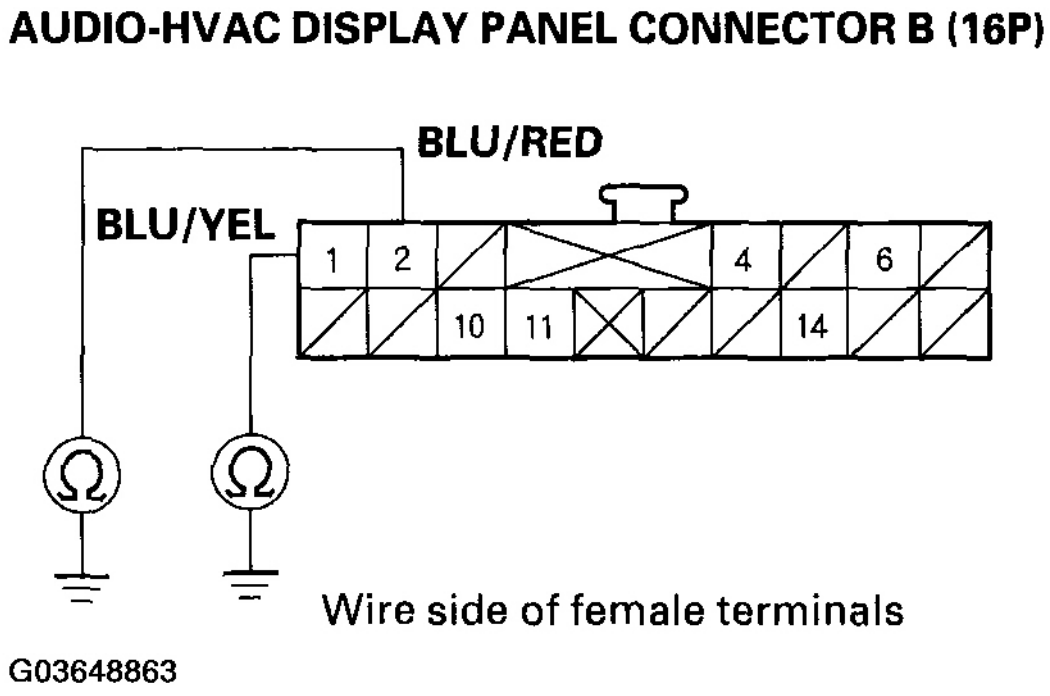


Fig. 47: Checking Continuity Between No. 1 & No. 2 Terminals Of Audio-HVAC Display Panel Connector B (16P) & Body Ground Individually
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair any short to body ground in the wire(s) between the climate control unit and the power transistor.

NO - Go to step 18.

18. Check the continuity between the following terminals of audio-HVAC display panel connector B (16P) and the power transistor 4P connector.

AUDIO-HVAC DISPLAY PANEL CONNECTOR B (16P) AND POWER TRANSISTOR 4P (4-DOOR)

16P	4P
No. 1	No. 1
No. 2	No. 3

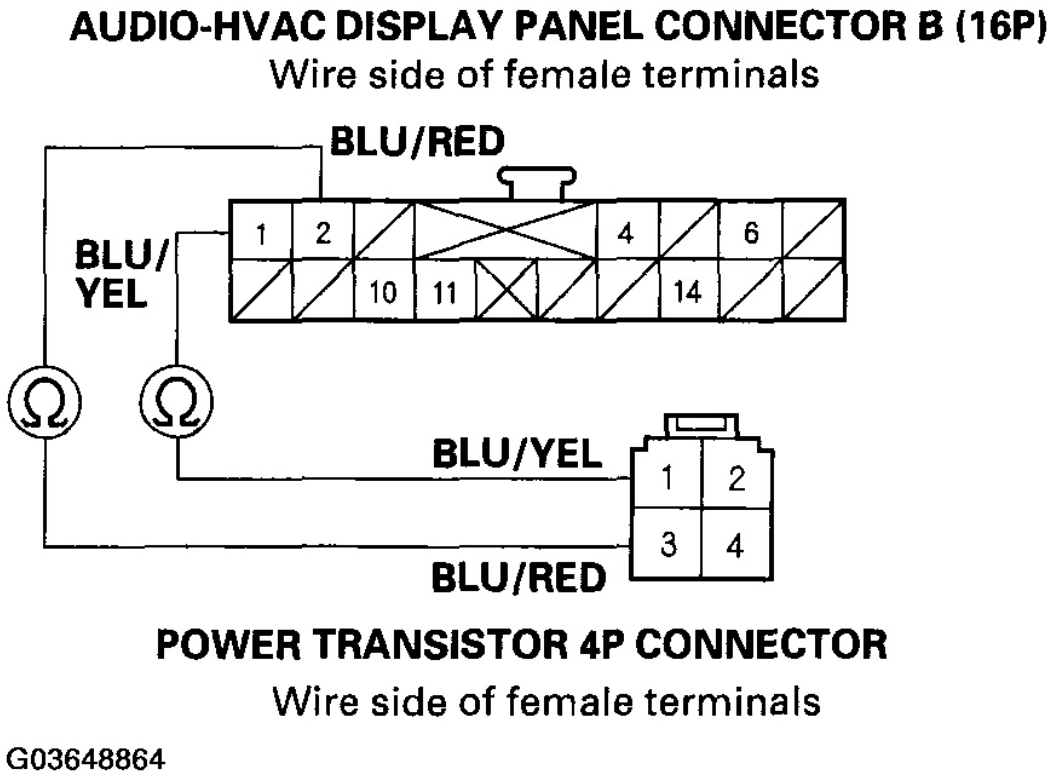


Fig. 48: Checking Continuity Between Terminals Of Audio-HVAC Display Panel Connector B (16P) & Power Transistor 4P Connector (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUDIO-HVAC DISPLAY PANEL CONNECTOR B (16P) AND POWER TRANSISTOR 4P (2-DOOR)

16P	4P
No. 1	No. 4
No. 2	No. 2

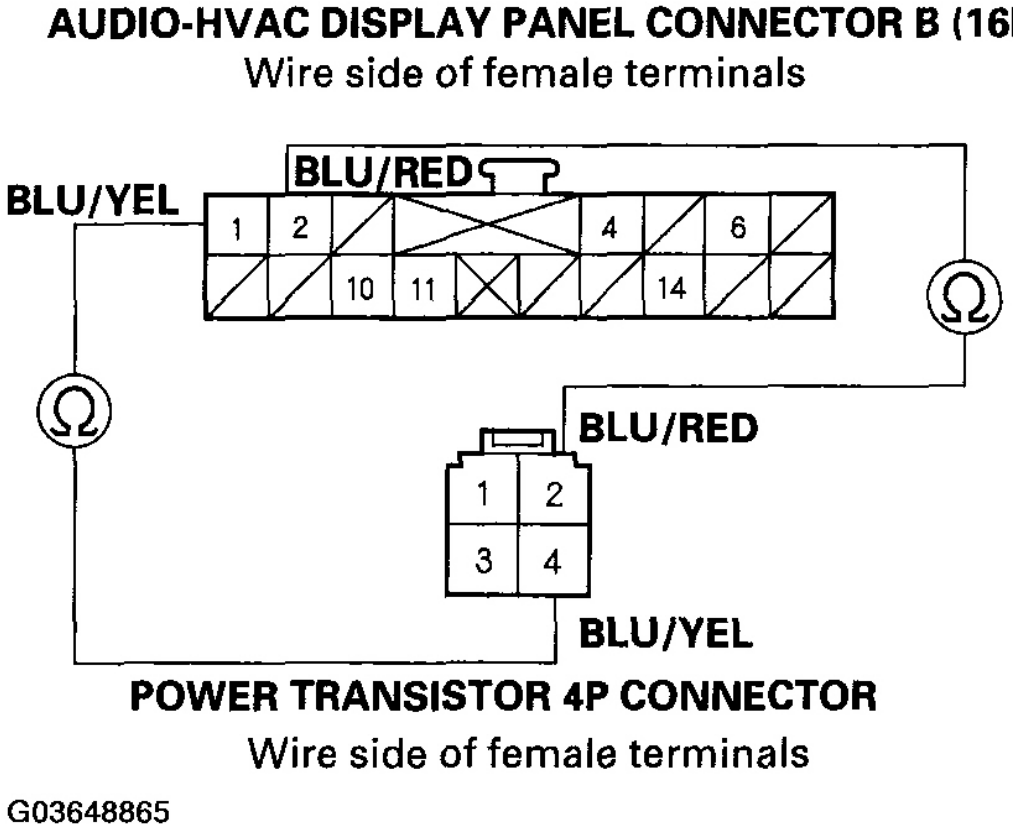


Fig. 49: Checking Continuity Between Terminals Of Audio-HVAC Display Panel Connector B (16P) & Power Transistor 4P Connector (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 19.

NO - Repair any open in the wire(s) between the climate control unit and the power transistor.

19. Reconnect audio-HVAC display panel connector B (16P).
20. Test the power transistor (see **POWER TRANSISTOR TEST**).

Is the power transistor OK?

YES - Check for loose wires or poor connections at audio-HVAC display panel connector B (16P) and at the power transistor 4P connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Replace the power transistor.

21. Disconnect the jumper wire.
22. Disconnect the blower motor 2P connector.
23. Measure the voltage between the No. 1 (4-door) or No. 2 (2-door) terminal of the blower motor 2P connector and body ground.

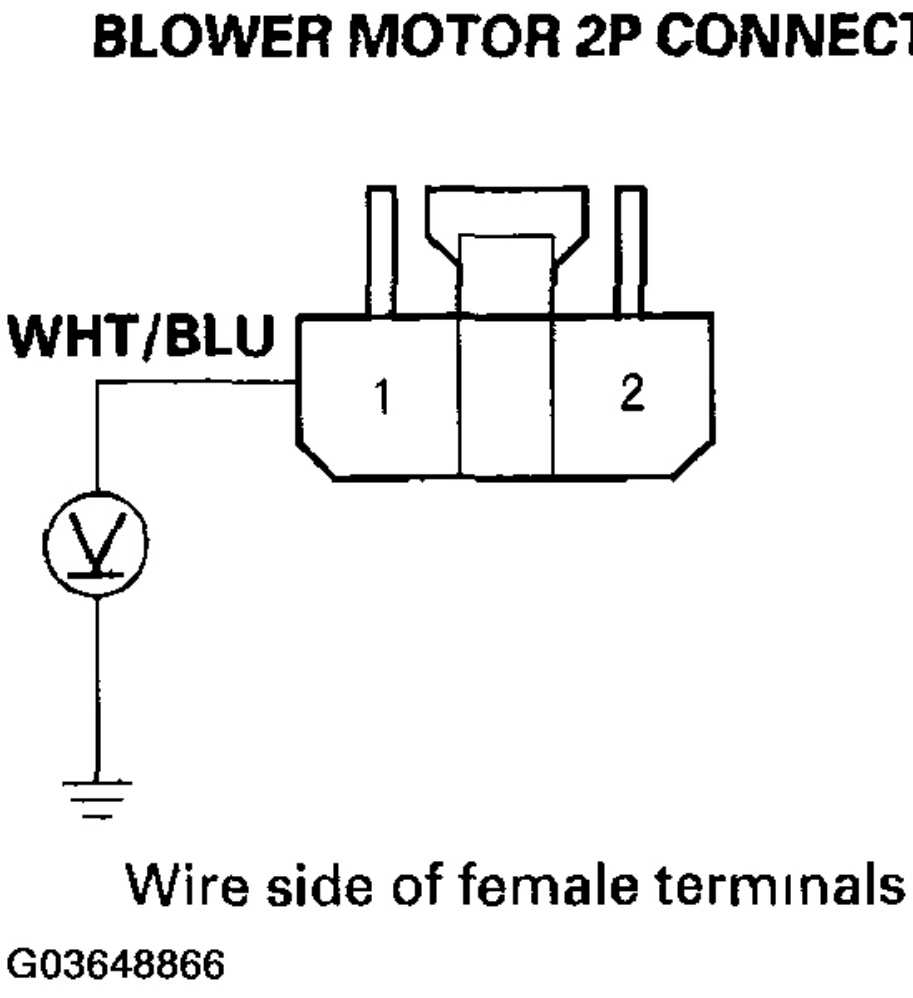


Fig. 50: Measuring Voltage Between No. 1 Terminal Of Blower Motor 2P Connector & Body Ground (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

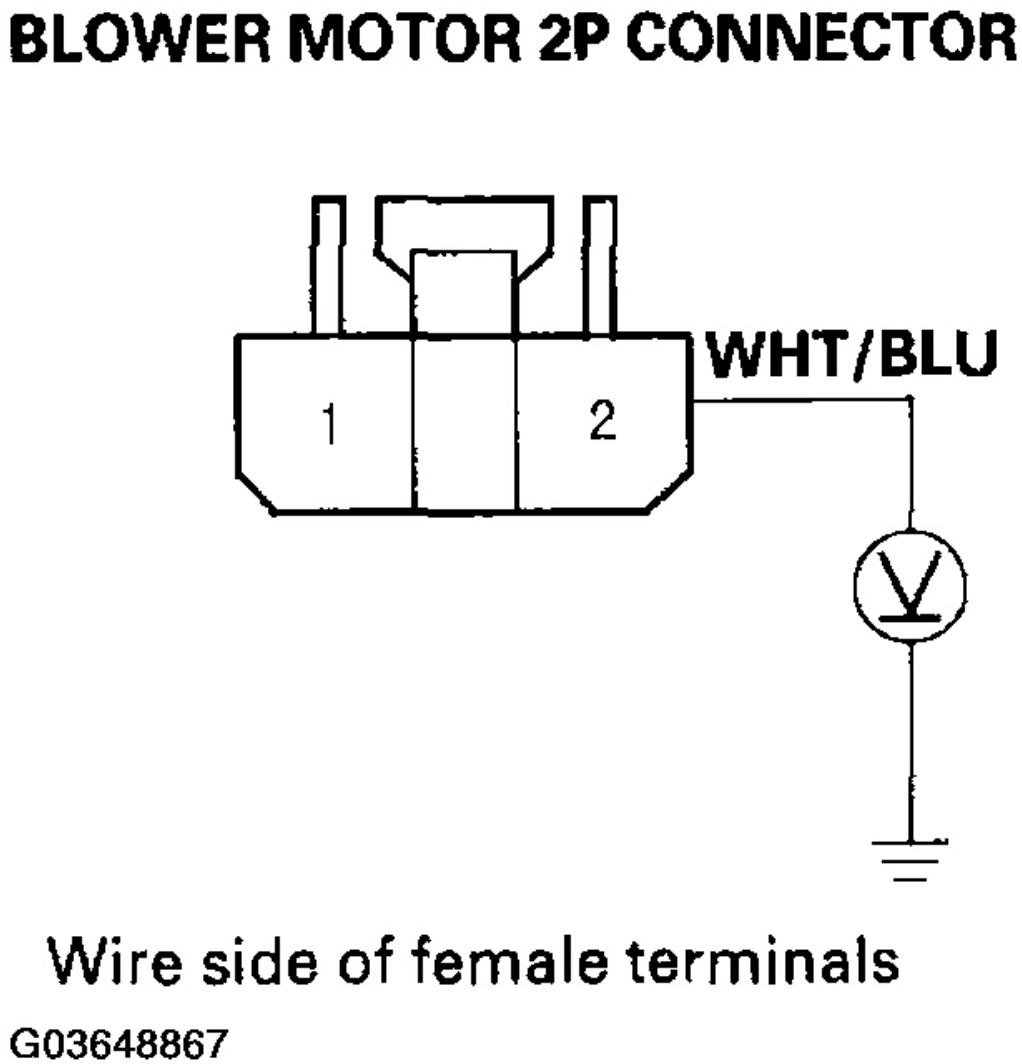


Fig. 51: Measuring Voltage Between No. 2 Terminal Of Blower Motor 2P Connector & Body Ground (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Replace the blower motor.
NO - Go to step 24.

24. Turn the ignition switch OFF.
25. Remove the blower motor relay from the under-hood fuse/relay box, and test it (see **POWER RELAY TEST**).

    Is the relay OK?

    YES - Go to step 26.

    NO - Replace the blower motor relay.
26. Measure the voltage between the No. 2 terminal of the blower motor relay 4P socket and body ground.

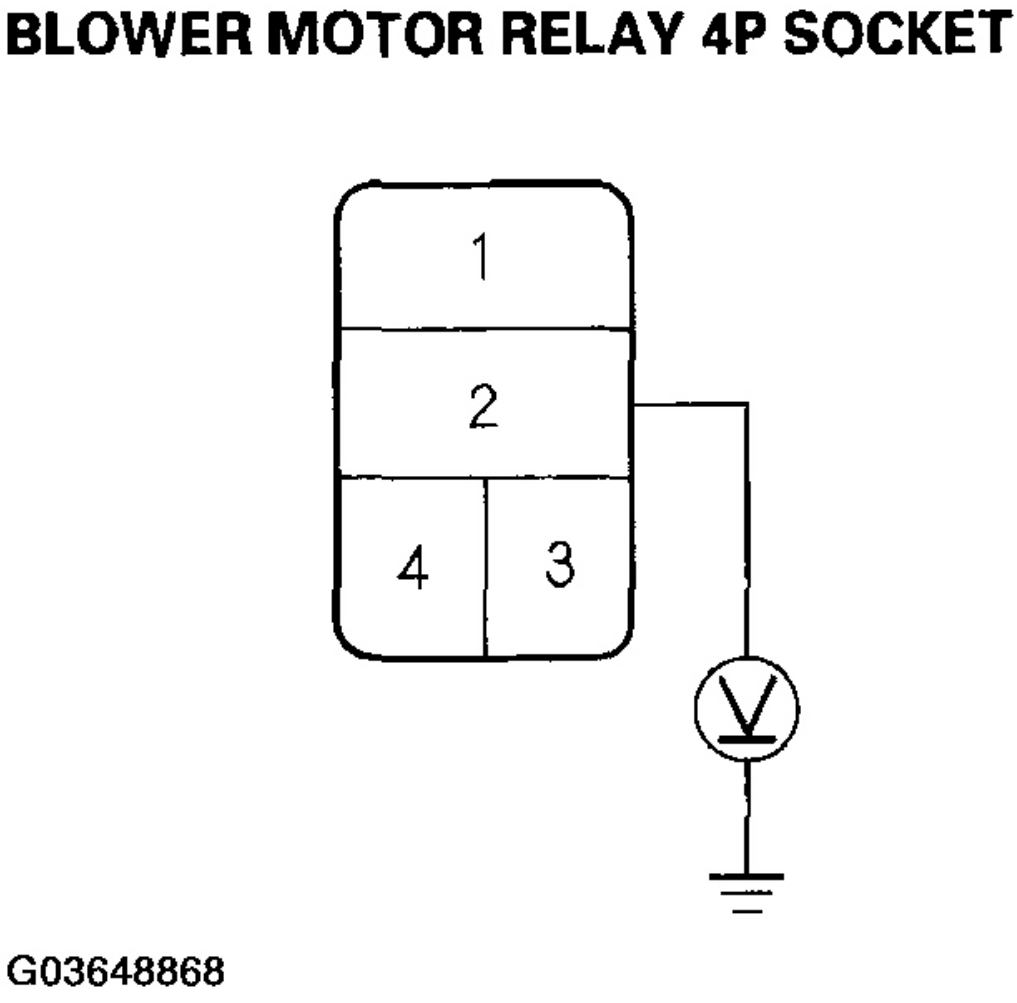


Fig. 52: Measuring Voltage Between No. 2 Terminal Of Blower Motor Relay 4P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 27.
NO - Replace the under-hood fuse/relay box.

27. Turn the ignition switch ON (II).

28. Measure the voltage between the No. 4 terminal of the blower motor relay 4P socket and body ground.

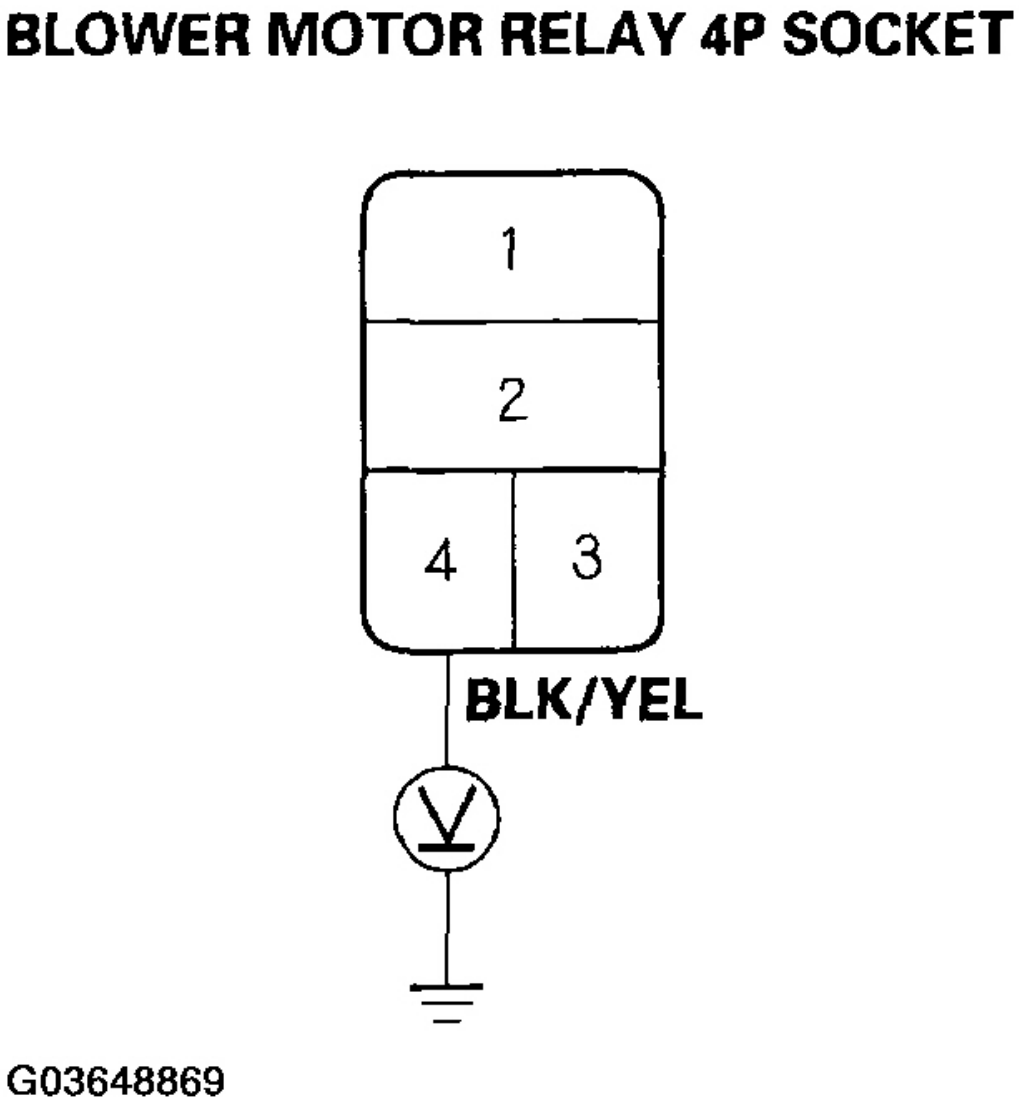


Fig. 53: Measuring Voltage Between No. 4 Terminal Of Blower Motor Relay 4P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 29.

NO - Repair open in the wire between the No. 30 fuse in the under-dash fuse/relay box and the blower motor relay.

29. Turn the ignition switch OFF.
30. Check for continuity between the No. 3 terminal of the blower motor relay 4P socket and body ground.

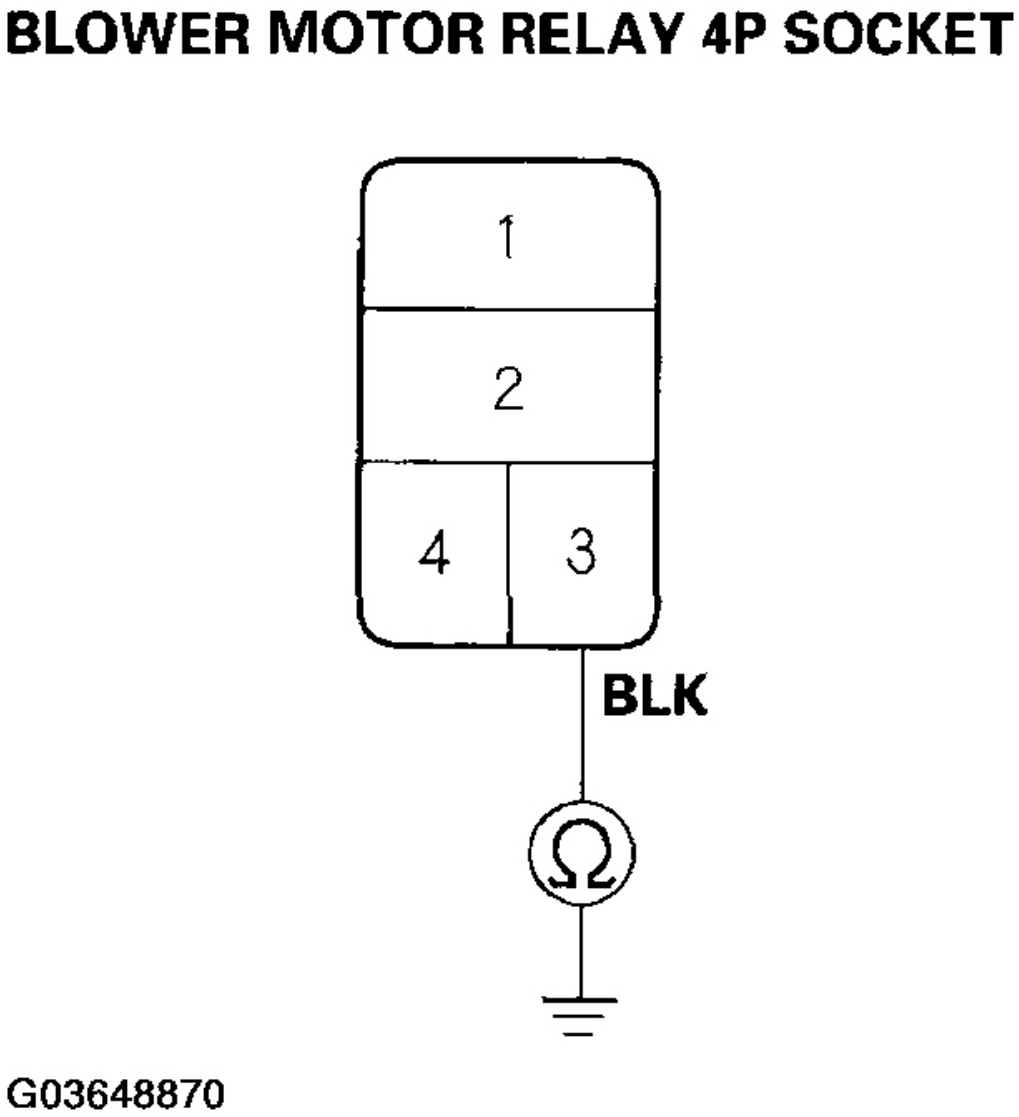


Fig. 54: Checking For Continuity Between No. 3 Terminal Of Blower Motor Relay 4P Socket And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair open in the WHT/BLU wire between the blower motor relay

and the blower motor.

NO - Check for an open in the wire between the blower motor relay and body ground. If the wire is OK, check for poor ground at G302.

DTC B1236 OR DTC INDICATOR O: AN OPEN IN THE PASSENGER'S AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

Is DTC B1236 or O indicated?

YES - Go to step 5.

NO - Intermittent failure, check for loose wires or poor connections on the passenger's air mix control motor circuit.

5. Test the passenger's air mix control motor.
   - 4-door (see **4-DOOR**)
   - 2-door (see **2-DOOR**)

Is the passenger's air mix control motor OK?

YES - Go to step 6.

NO - Replace the passenger's air mix control motor.

- 4-door (see **4-DOOR**)
- 2-door (see **2-DOOR**)

6. Disconnect the passenger's air mix control motor 7P (4-door) or 5P (2-door) connector.
7. Disconnect audio-HVAC display panel connector A (22P).
8. Check for continuity between the following terminals of audio-HVAC display panel connector A (22P) and the passenger's air mix control motor 7P (4-door) or 5P (2-door) connector.

AUDIO-HVAC DISPLAY PANEL CONNECTOR A (22P) AND

PASSENGER'S AIR MIX CONTROL MOTOR 7P (4-DOOR)

22P	7P
No. 2	No. 3
No. 10	No. 1
No. 15	No. 5
No. 20	No. 7
No. 22	No. 2

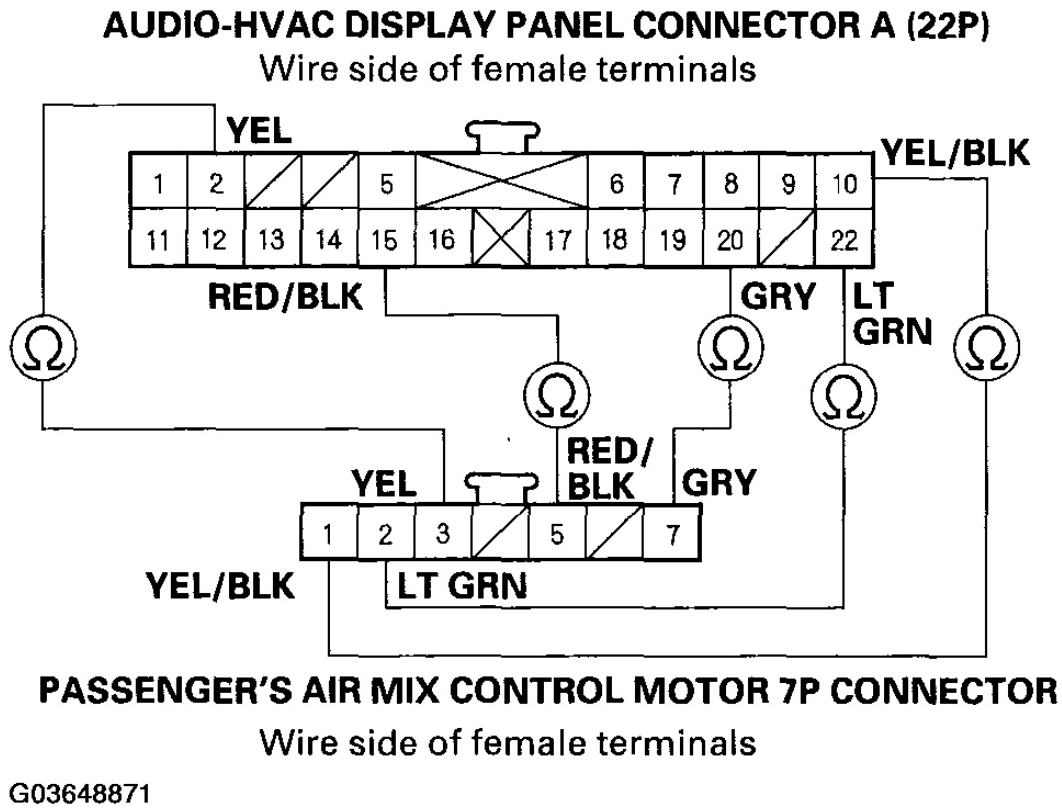


Fig. 55: Checking Continuity Between Terminals Of Audio-HVAC Display Panel Connector A (22P) & Passenger's Air Mix Control Motor 7P Connector (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUDIO-HVAC DISPLAY PANEL CONNECTOR A (22P) AND PASSENGER'S AIR MIX CONTROL MOTOR 5P (2-DOOR)

22P	5P
No. 2	No. 3
No. 10	No. 2
No. 15	No. 5
No. 20	No. 4
No. 22	No. 1

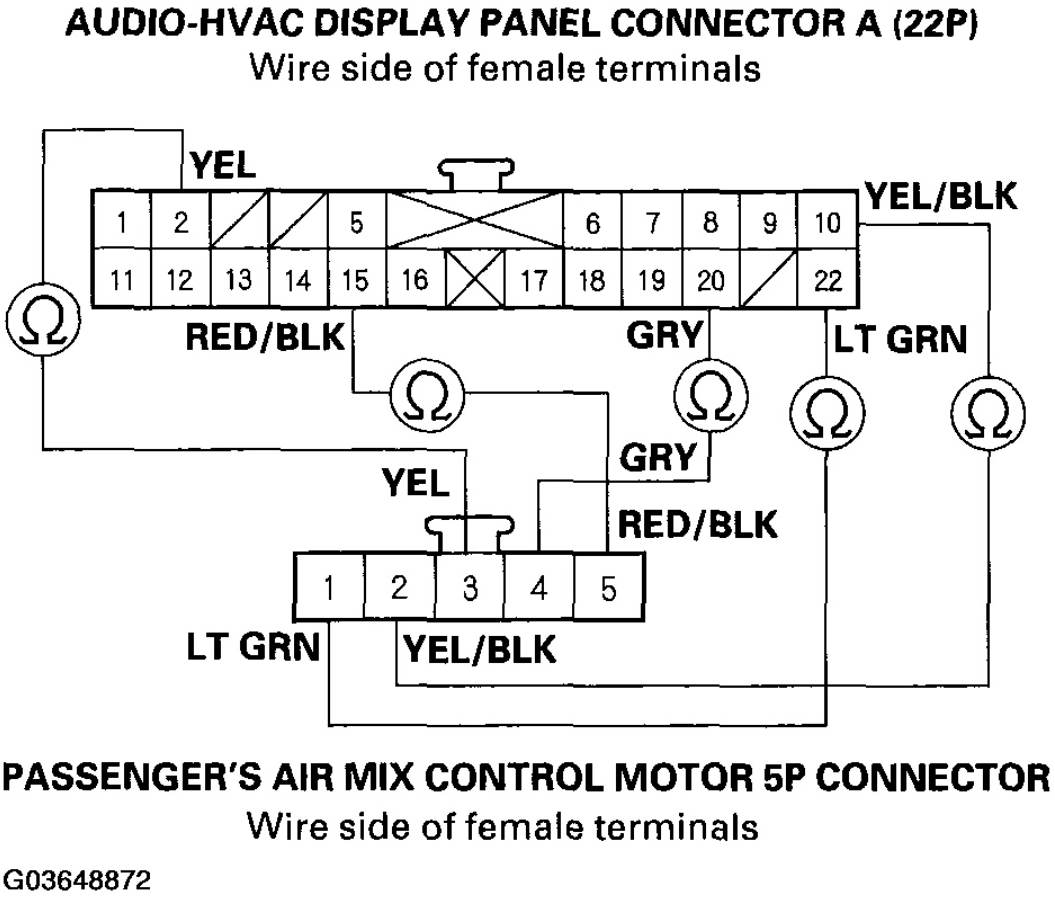


Fig. 56: Checking Continuity Between Terminals Of Audio-HVAC Display Panel Connector A (22P) & Passenger's Air Mix Control Motor 5P Connector (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at audio-HVAC display panel connector A (22P) and at the passenger's air mix control motor 7P (4-door) or 5P (2-door) connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Repair any open in the wire(s) between the climate control unit and the passenger's air mix control motor.

DTC B1237 OR DTC INDICATOR P: A SHORT IN THE PASSENGER'S AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.
3. Operate the climate control system in several modes.
4. Check the DTCs.

Is DTC B1237 or P indicated?

YES - Go to step 5.

NO - Intermittent failure.

5. Test the passenger's air mix control motor.
   - 4-door (see **4-DOOR**)
   - 2-door (see **2-DOOR**)

Is the passenger's air mix control motor OK?

YES - Go to step 6.

NO - Replace the passenger's air mix control motor.

- 4-door (see **4-DOOR**)
- 2-door (see **2-DOOR**)

6. Disconnect the passenger's air mix control motor 7P (4-door) or 5P (2-door) connector.
7. Disconnect audio-HVAC display panel connector A (22P).

8. Check for continuity between body ground and audio-HVAC display panel connector A (22P) terminals No. 2, 10, 15, 20 and 22 individually.

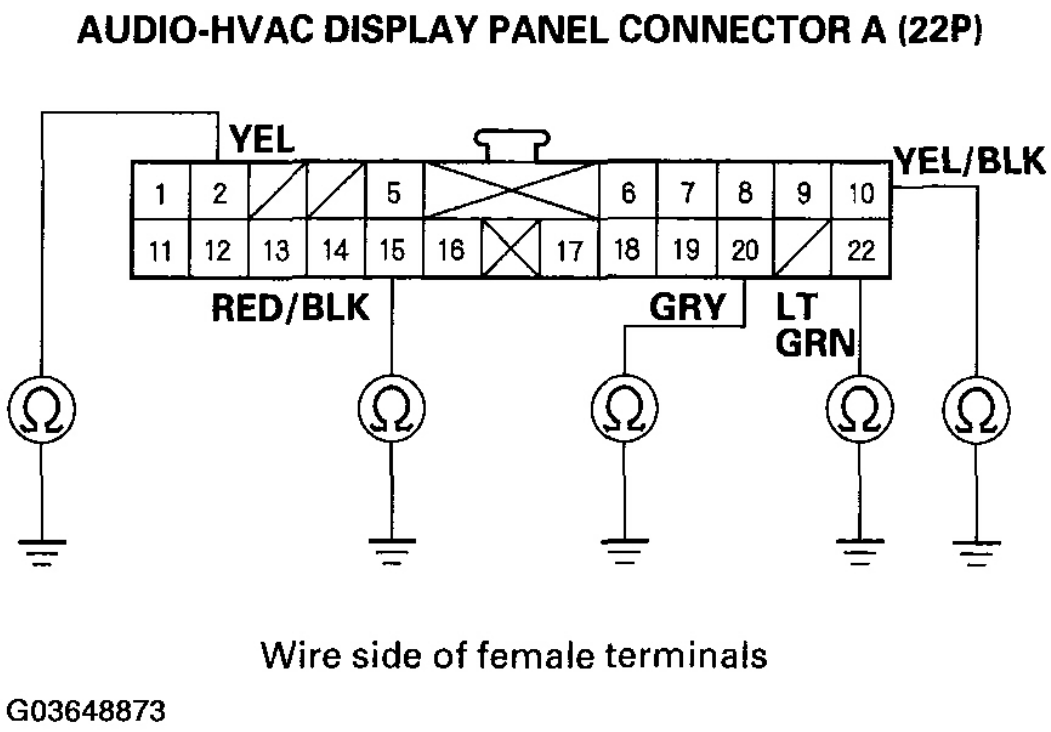


Fig. 57: Checking For Continuity Between Body Ground And Audio-HVAC Display Panel Connector A (22P) Terminals No. 2, 10, 15, 20 & 22 Individually
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair any short to body ground in the wire(s) between the climate control unit and the passenger's air mix control motor.

NO - Go to step 9.

9. Turn the ignition switch ON (II), and check the same terminals for voltage.

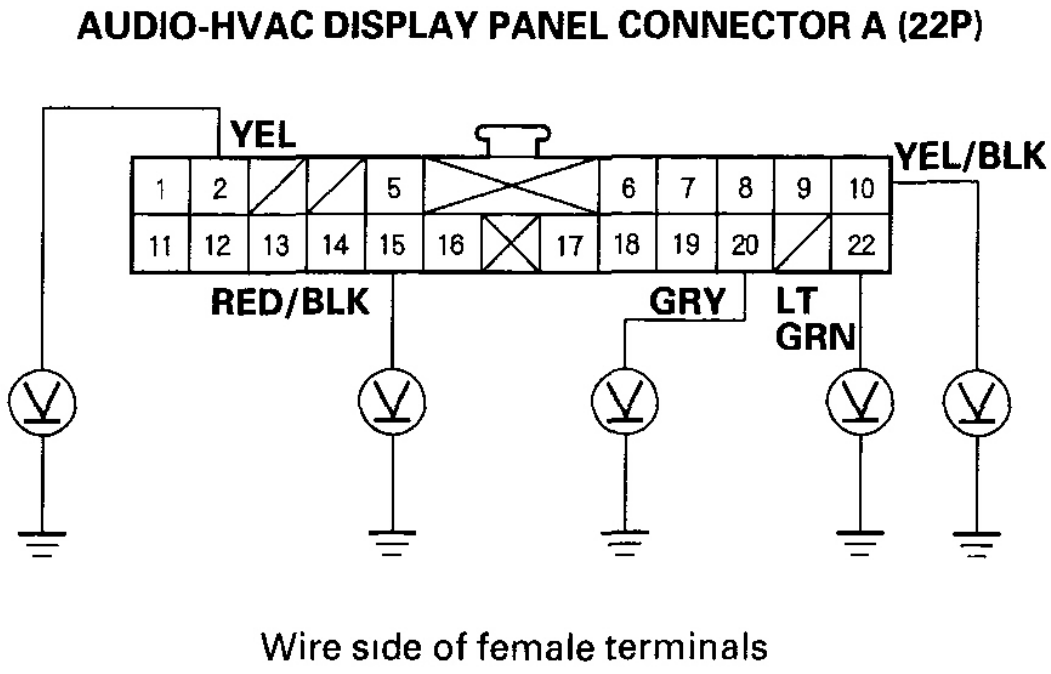


Fig. 58: Checking Same Terminals For Voltage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair any short to power in the wire(s) between the climate control unit and the passenger's air mix control motor. This short may also damage the climate control unit. Repair the short to power before replacing the audio-HVAC display panel.

NO - Substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

DTC B1238 OR DTC INDICATOR Q: A PROBLEM IN THE PASSENGER'S AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR

1. Clear the DTC.
2. Turn the ignition switch OFF, and then ON.

3. Operate the climate control system in several modes.
4. Check the DTCs.

Is DTC B1238 or Q indicated?

YES - Go to step 5.

NO - Intermittent failure.

5. Test the passenger's air mix control motor.
   - 4-door (see **4-DOOR**)
   - 2-door (see **2-DOOR**)

Is the passenger's air mix control motor and linkage OK?

YES - Substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Replace the passenger's air mix control motor, 4-door (see **4-DOOR**) or 2-door (see **2-DOOR**), or repair the passenger's air mix control linkage or door.

DTC B1202: CLIMATE CONTROL UNIT INTERNAL ERROR

1. Clear the DTCs using the HDS.
2. Turn the ignition switch OFF, and then ON.
3. Turn the climate control system on and operate several functions. (A/C on/off, air mix and blend door operations, temperature settings etc..)
4. Check for DTCs by selecting the DTC MENU (DTCs) from the HDS.

Is DTC B1202 indicated?

YES - The climate control unit is faulty; replace the audio-HVAC display panel.

NO - Intermittent failure, the climate control unit is OK at this time.

DTC B1205: CLIMATE CONTROL UNIT LOST COMMUNICATION WITH THE GAUGE CONTROL MODULE (VSP/NE MESSAGE); DTC B1206: CLIMATE CONTROL UNIT LOST

COMMUNICATION WITH THE GAUGE CONTROL MODULE (ECT MESSAGE); DTC B1207: CLIMATE CONTROL UNIT LOST COMMUNICATION WITH THE GAUGE CONTROL MODULE (ILLUMI MESSAGE)

1. Turn the ignition switch ON (II).
2. Push the AUTO button.

   Does the climate control turn on?

   YES - Go to step 3.

   NO - Go to climate control power and ground circuit troubleshooting (see **CLIMATE CONTROL POWER AND GROUND CIRCUIT TROUBLESHOOTING**).
3. Clear the DTCs using the HDS.
4. Turn the ignition switch OFF, and then ON.
5. Turn the climate control system on and operate several functions. (A/C on/off, air mix and blend door operations, temperature settings etc..)
6. Check for DTCs by selecting the DTCs MENU (DTCs) from the HDS.

   Is DTC B1205, B1206 and/or B1207 indicated?

   YES - Go to step 7.

   NO - Intermittent failure, the gauge control module and climate control unit are OK at this time.
7. Check the DTCs by selecting the DTCs MENU (DTCs) from the HDS.

   Is DTC B1008, B1060 and/or B1061 indicated?

   YES - Perform the gauge control module input test (see **SELF-DIAGNOSTIC FUNCTION**).

   NO - Go to step 8.
8. Disconnect audio-HVAC display panel connector B (16P).
9. Disconnect the under-dash fuse/relay box connector N (45P) from the fuse/relay box.
10. Check for continuity between the No. 22 terminal of under-dash fuse/relay box

connector N (45P) and the No. 14 terminal of the audio-HVAC display panel connector B (16P).

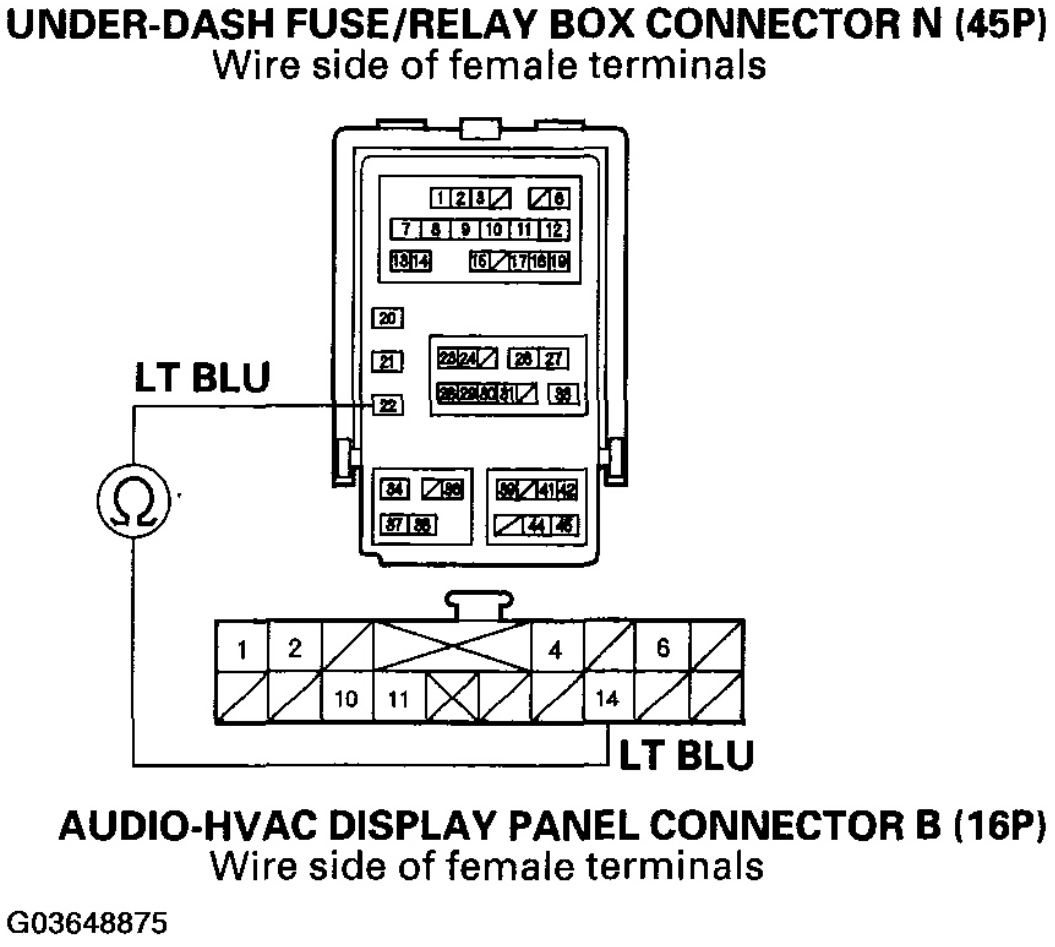


Fig. 59: Checking Continuity Between No. 22 Terminal Of Under-Dash Fuse/Relay Box Connector N (45P) & No. 14 Terminal Of Audio-HVAC Display Panel Connector B (16P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - The gauge control module and/or climate control unit faulty. Substitute one component at a time and recheck. Replace the component that eliminates the DTC/symptom.

NO - Repair open in the wire between the gauge control module and the climate control unit.

RECIRCULATION CONTROL MOTOR CIRCUIT TROUBLESHOOTING

1. Check the No. 30 (7.5A) fuse in the under-dash fuse/relay box.

   Is the fuse OK?

   YES - Go to step 2.

   NO - Replace the fuse, and recheck.
2. Disconnect the recirculation control motor 7P (4-door) or 5P (2-door) connector.
3. Turn the ignition switch ON (II).
4. Measure the voltage between the No. 1 terminal of the recirculation control motor 7P (4-door) or No. 5 terminal of the 5P (2-door) connector and body ground.

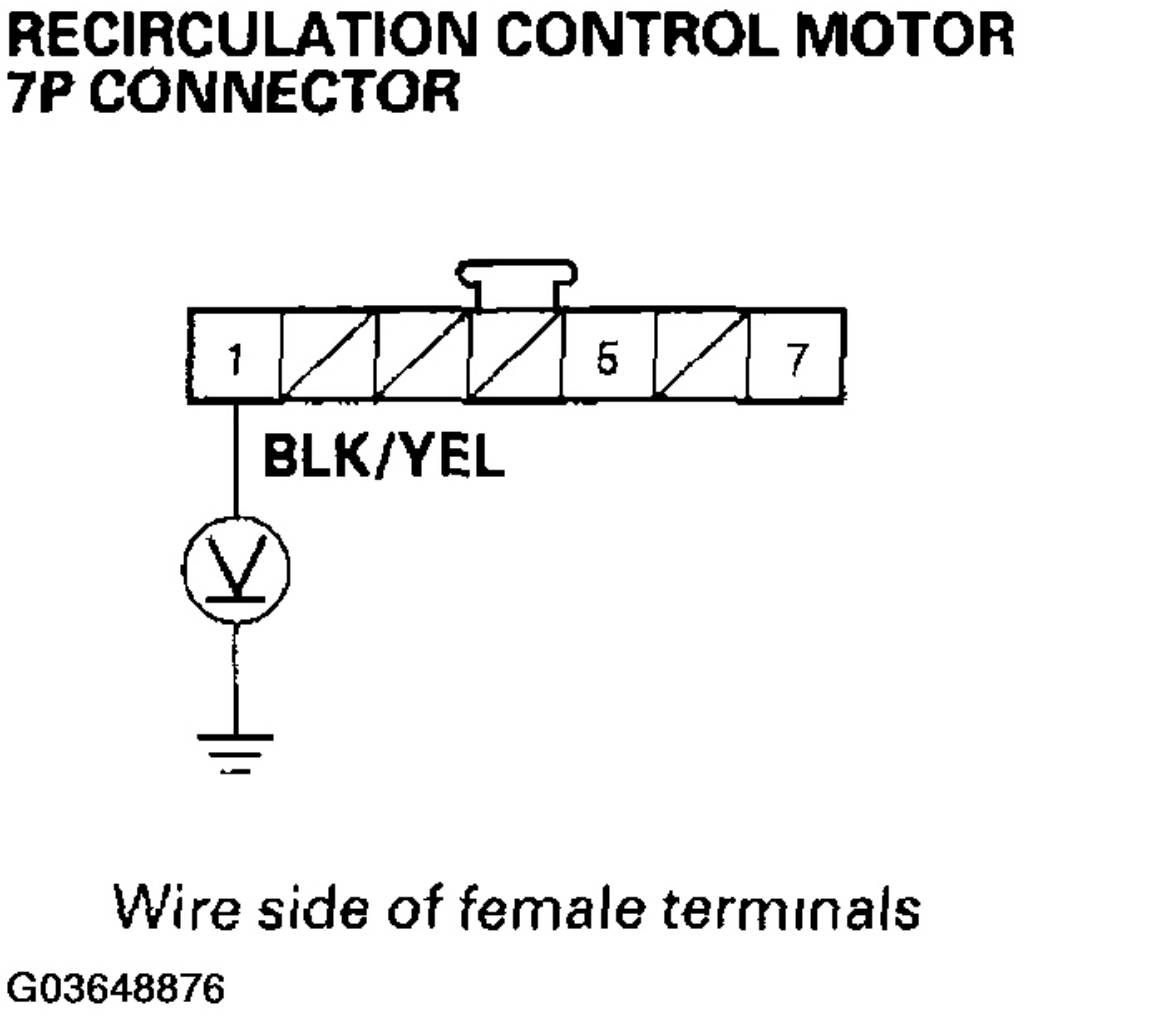


Fig. 60: Measuring Voltage Between No. 1 Terminal Of Recirculation Control Motor 7P Connector & Body Ground (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

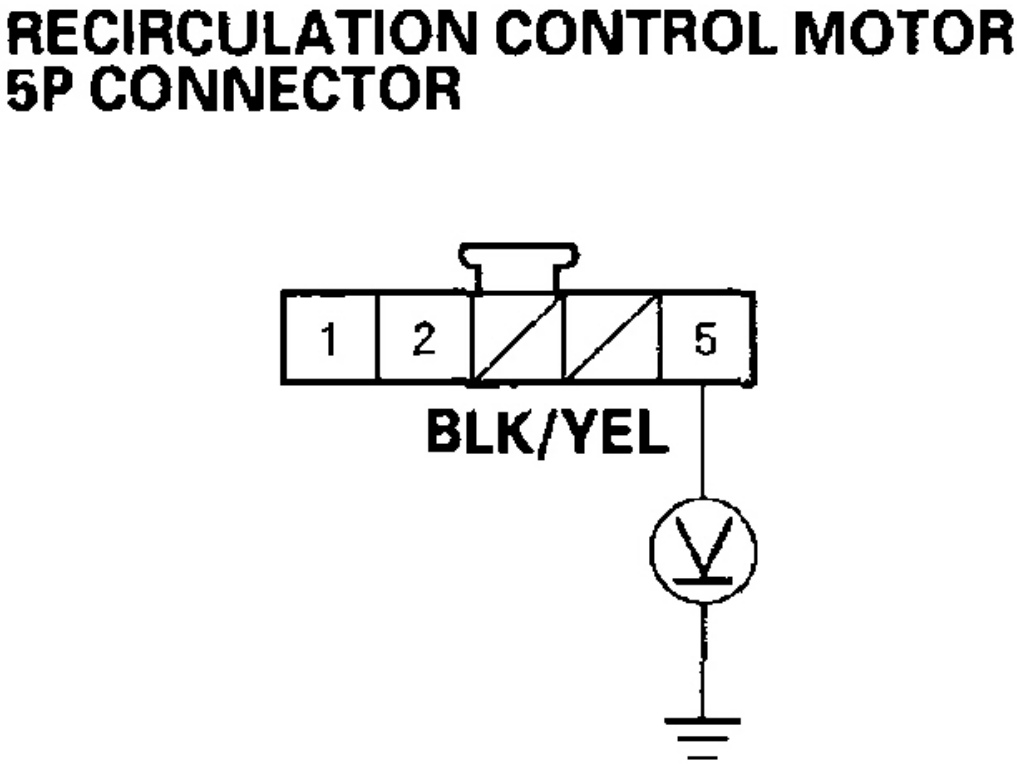


Fig. 61: Measuring Voltage Between No. 1 Terminal Of Recirculation Control Motor 5P Connector & Body Ground (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 5.

NO - Repair open in the wire between the No. 30 fuse in the under-dash fuse/relay box and the recirculation control motor.

5. Turn the ignition switch OFF.
6. Test the recirculation control motor.
   - 4-door (see **4-DOOR**)
   - 2-door (see **2-DOOR**)

   Is the recirculation control motor OK?

   YES - Go to step 7.

   NO - Replace the recirculation control motor, 4-door (see **4-DOOR**) or 2-door (see **2-DOOR**), or repair the recirculation control linkage or doors.
7. Disconnect audio-HVAC display panel connector B (16P).
8. Check for continuity between the No. 10 and No. 11 terminals audio-HVAC display panel connector B (16P) and body ground individually.

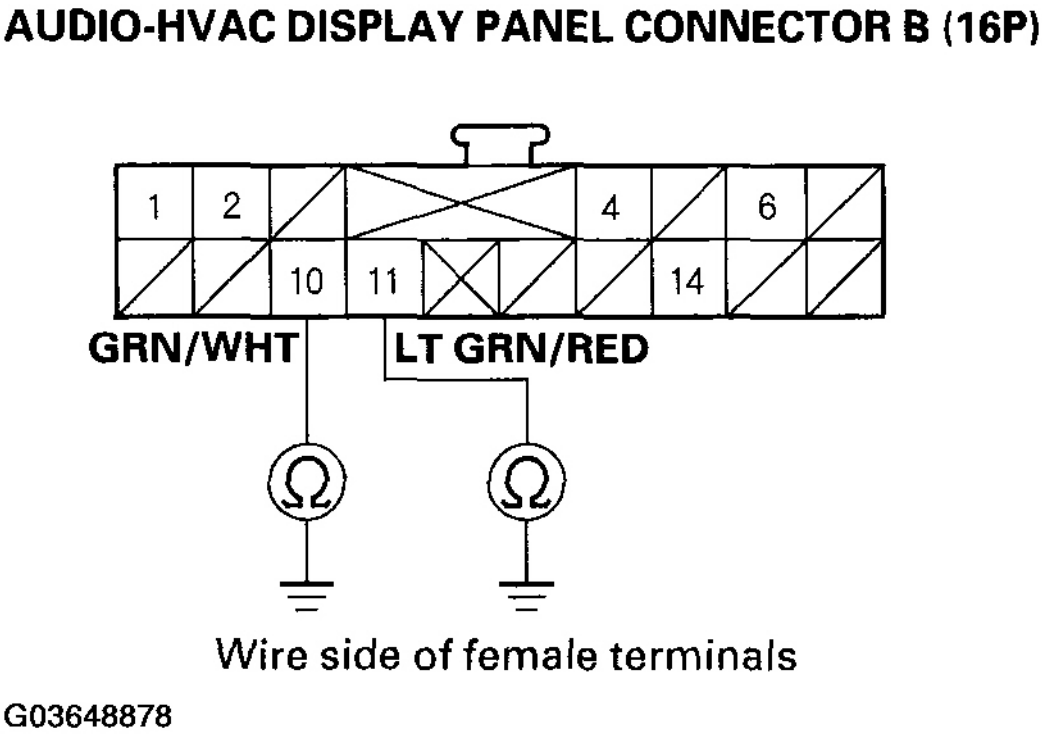


Fig. 62: Checking For Continuity Between No. 10 And No. 11 Terminals

Audio-HVAC Display Panel Connector B (16P) & Body Ground Individually
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair any short to body ground in the wire(s) between the climate control unit and the recirculation control motor.

NO - Go to step 9.

9. Turn the ignition switch ON (II), and check the same wires for voltage.

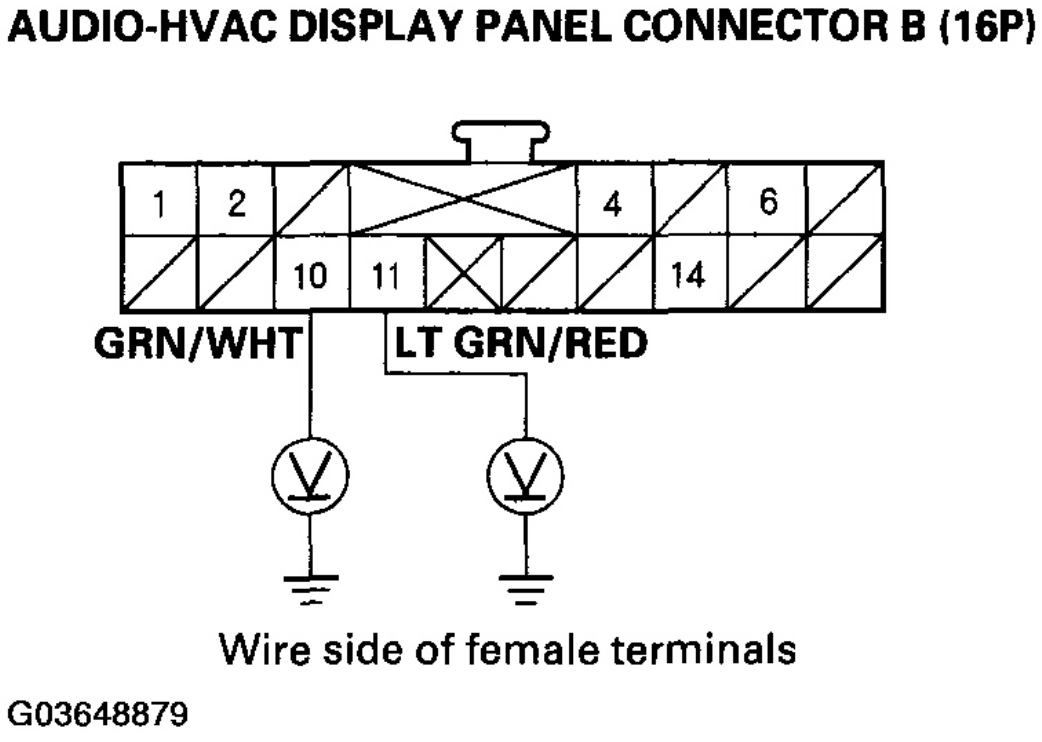


Fig. 63: Checking Same Wires For Voltage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair any short to power in the wire(s) between the climate control unit and the recirculation control motor. This short may also damage the climate control unit. Repair the short to power before replacing the audio-HVAC display panel.

NO - Go to step 10.

10. Turn the ignition switch OFF.
11. Check for continuity between the following terminals of audio-HVAC display panel connector B (16P) and the recirculation control motor 7P (4-door) or 5P (2-door) connector.

AUDIO-HVAC DISPLAY PANEL CONNECTOR B (16P) AND RECIRCULATION CONTROL MOTOR 7P (4-DOOR)

16P	7P
No. 10	No. 5
No. 11	No. 7

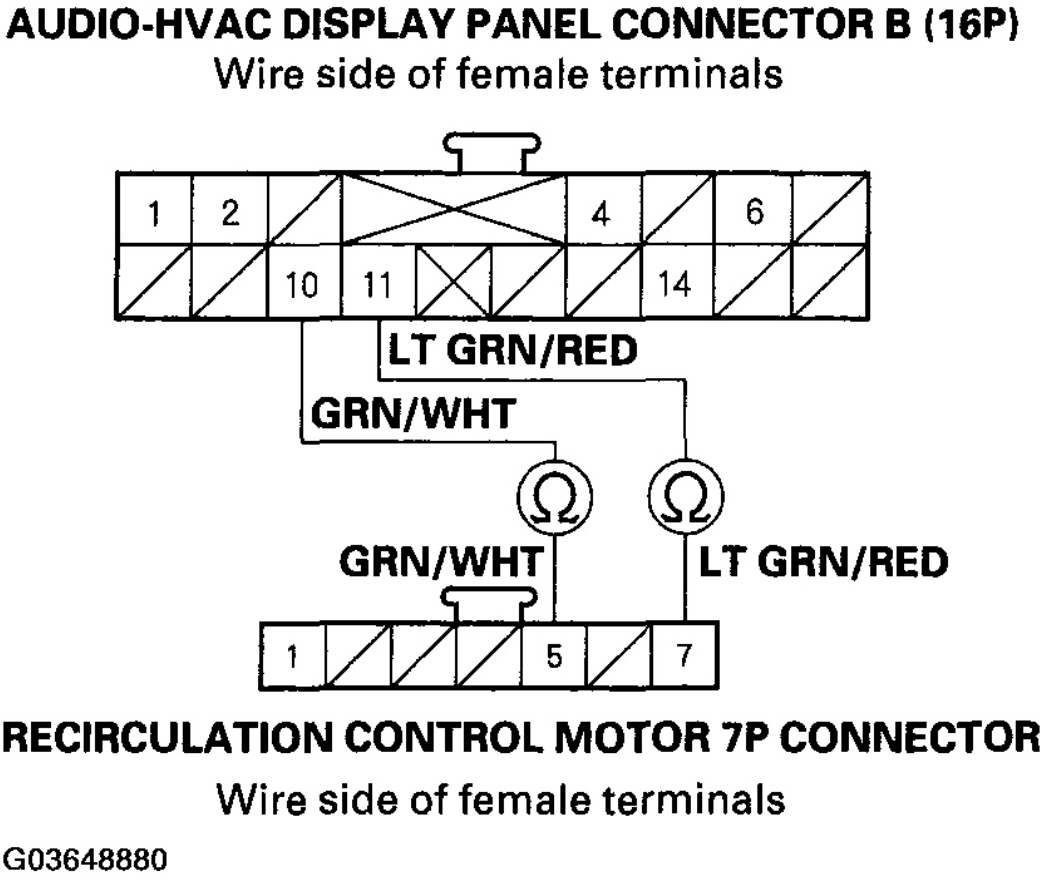


Fig. 64: Checking Continuity Between Terminals Of Audio-HVAC Display Panel Connector B (16P) & Recirculation Control Motor 7P Connector (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUDIO-HVAC DISPLAY PANEL CONNECTOR B (16P) AND RECIRCULATION CONTROL MOTOR 5P (2-DOOR)

16P	5P
No. 10	No. 2
No. 11	No. 1

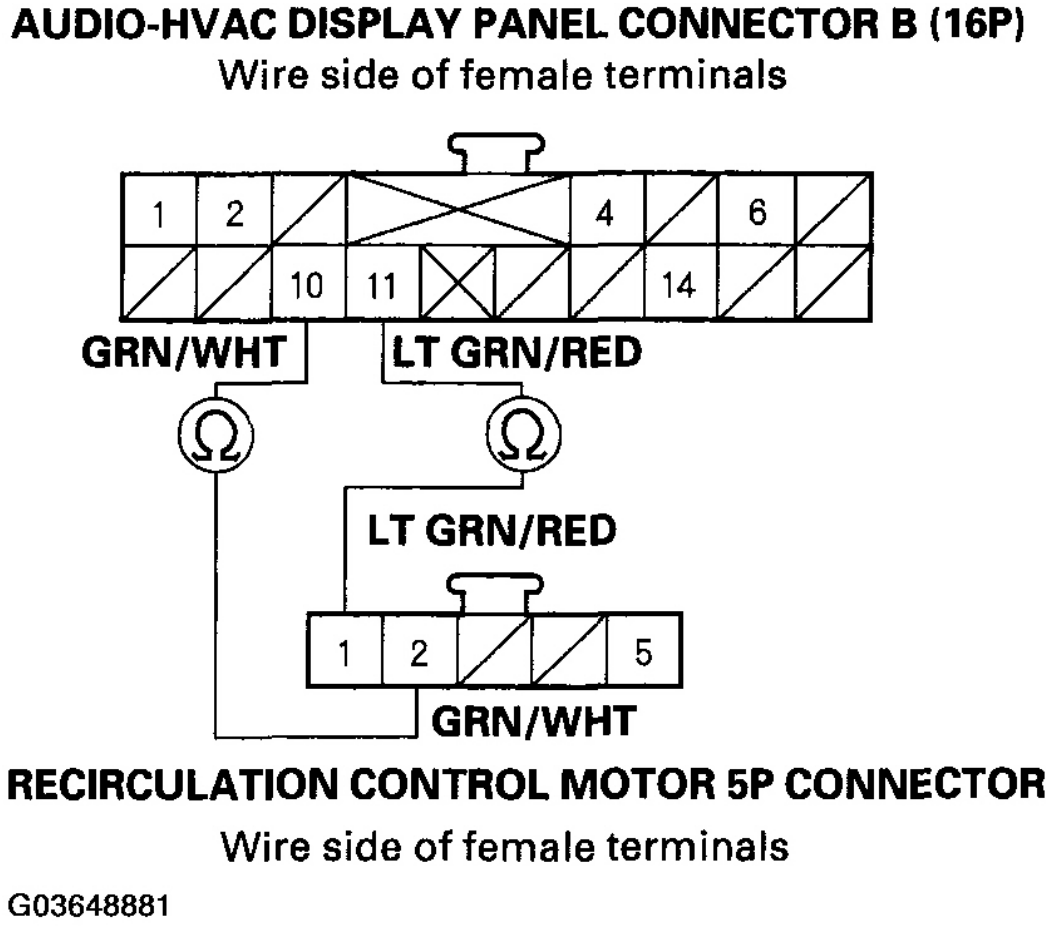


Fig. 65: Checking Continuity Between Terminals Of Audio-HVAC Display Panel Connector B (16P) & Recirculation Control Motor 5P Connector (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at audio-HVAC display panel connector B (16P) and at the recirculation control motor 7P (4-door) or 5P (2-door) connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Repair any open in the wire(s) between the climate control unit and the recirculation control motor.

CLIMATE CONTROL POWER AND GROUND CIRCUIT TROUBLESHOOTING

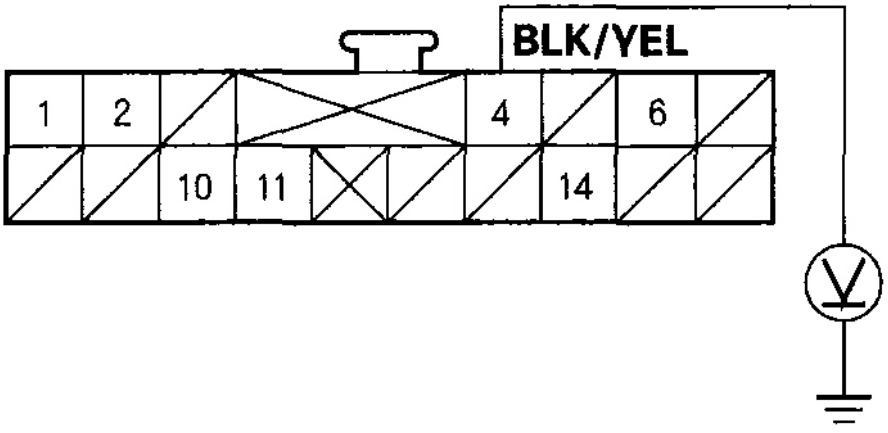
1. Check the No. 30 (7.5A) fuse in the under-dash fuse/relay box.

   Is the fuse OK?

   YES - Go to step 2.

   NO - Replace the fuse, and recheck.
2. Disconnect audio-HVAC display panel connector B (16P).
3. Turn the ignition switch ON (II).
4. Measure the voltage between the No. 4 terminal of audio-HVAC display panel connector B (16P) and body ground.

AUDIO-HVAC DISPLAY PANEL CONNECTOR B (16P)



Wire side of female terminals

G03648882

Fig. 66: Measuring Voltage Between No. 4 Terminal Of Audio-HVAC Display Panel Connector B (16P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 5.

NO - Repair open in the wire between the No. 30 fuse in the driver's under-dash fuse/relay box and the climate control unit.

5. Turn the ignition switch OFF.
6. Check for continuity between the No. 6 terminal of audio-HVAC display panel connector B (16P) and body ground.

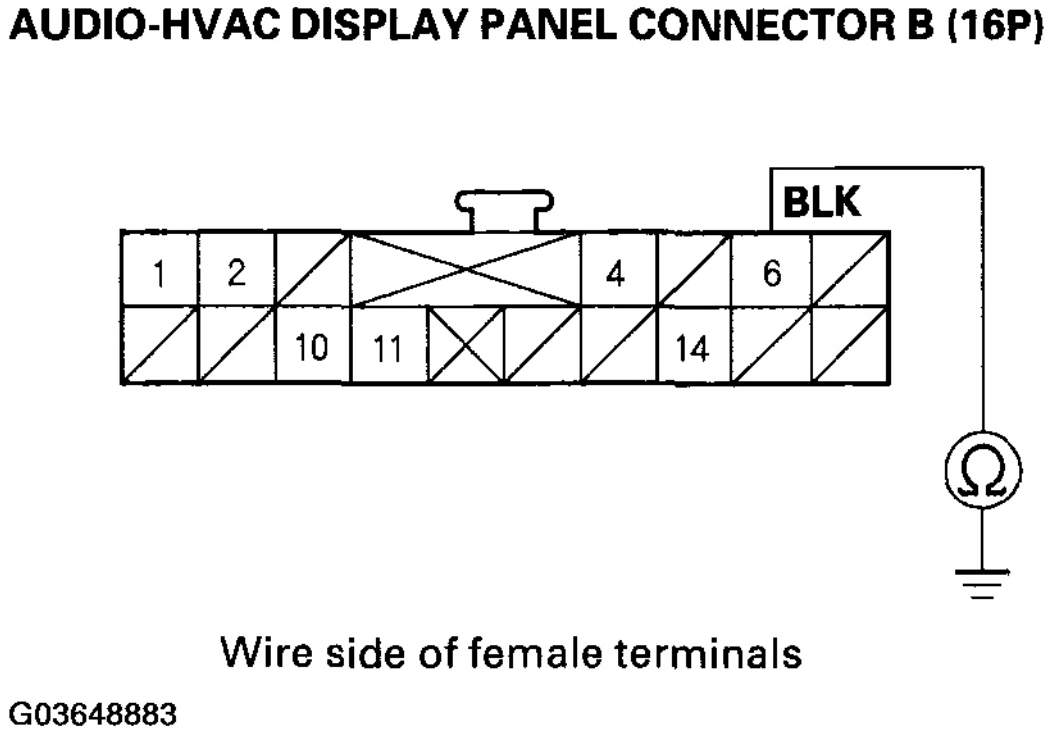


Fig. 67: Checking For Continuity Between No. 6 Terminal Of Audio-HVAC Display Panel Connector & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at audio-HVAC display panel connector B (16P). If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Check for an open in the wire between the climate control unit and body ground. If the wire is OK, check for poor ground at G503.

A/C PRESSURE SWITCH CIRCUIT TROUBLESHOOTING

NOTE:

- **Do not use this troubleshooting procedure if the following items are operative; condenser fan, A/C compressor, or if the heater is inoperative. Refer to SYMPTOM TROUBLESHOOTING INDEX.**
- **Before performing symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Check for body DTCs in test mode A of the multiplex integrated control system (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

   Are there any DTC indicated?

   YES - Do the appropriate troubleshooting for the DTC indicated.

   NO - Go to step 2.
2. Disconnect the A/C pressure switch 2P connector.
3. Turn the ignition switch ON (II).
4. Measure the voltage between the No. 1 terminal of the A/C pressure switch 2P connector and body ground.

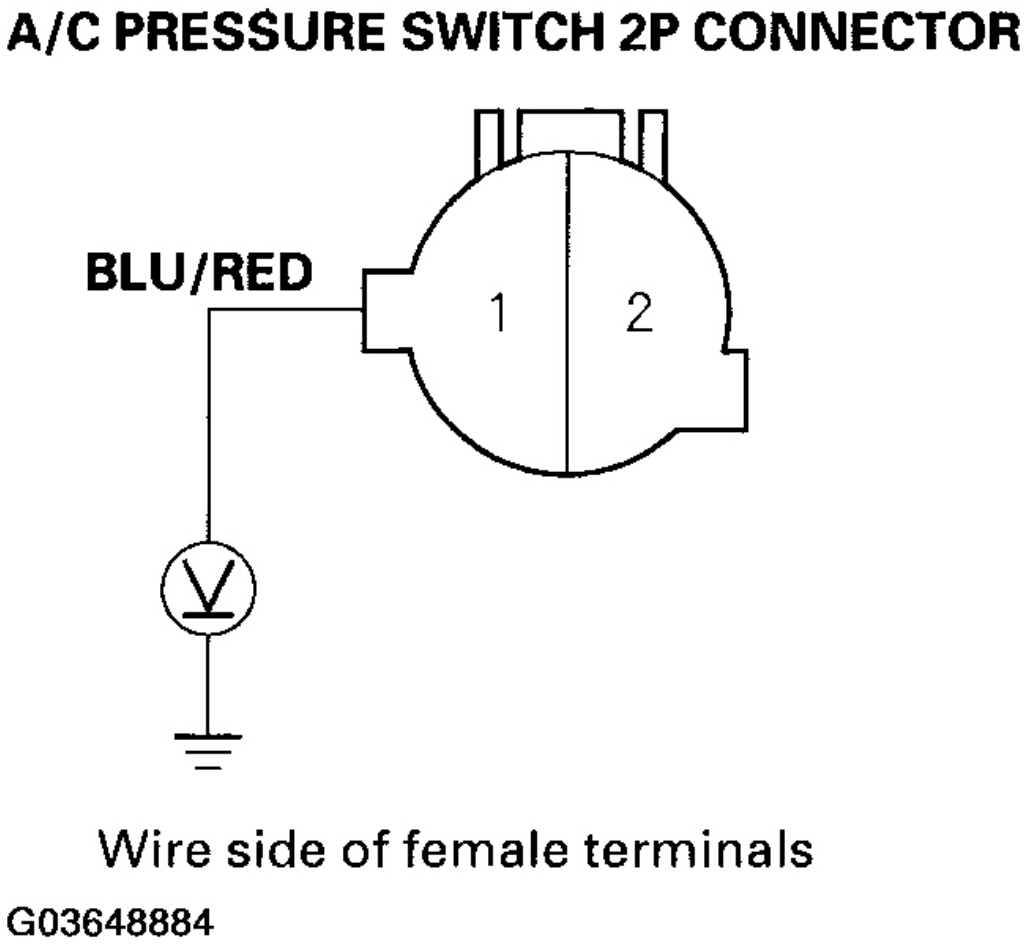


Fig. 68: Measuring Voltage Between No. 1 Terminal Of A/C Pressure Switch 2P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 5 V or more?

YES - Go to step 5.
NO - Go to step 13.

5. Turn the ignition switch OFF.
6. Check for continuity between the No. 1 and No. 2 terminals of the A/C pressure switch.

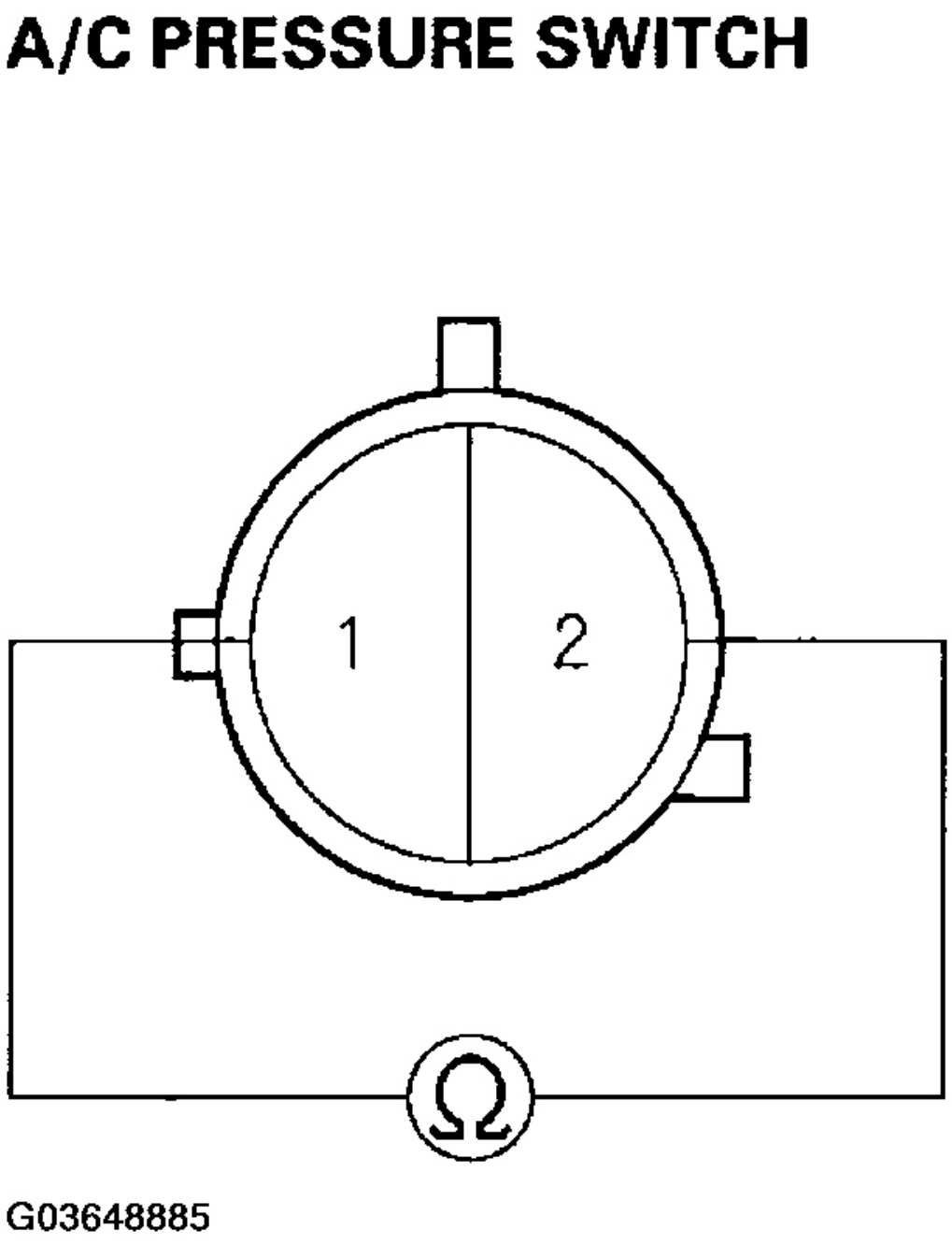


Fig. 69: Checking For Continuity Between No. 1 And No. 2 Terminals Of A/C Pressure Switch

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 7.

NO - Go to step 14.

7. Reconnect the A/C pressure switch 2P connector.
8. Disconnect audio-HVAC display panel connector A (22P).
9. Turn the ignition switch ON (II).
10. Measure the voltage between the No. 5 terminal of the audio-HVAC display panel connector A (22P) and body ground.

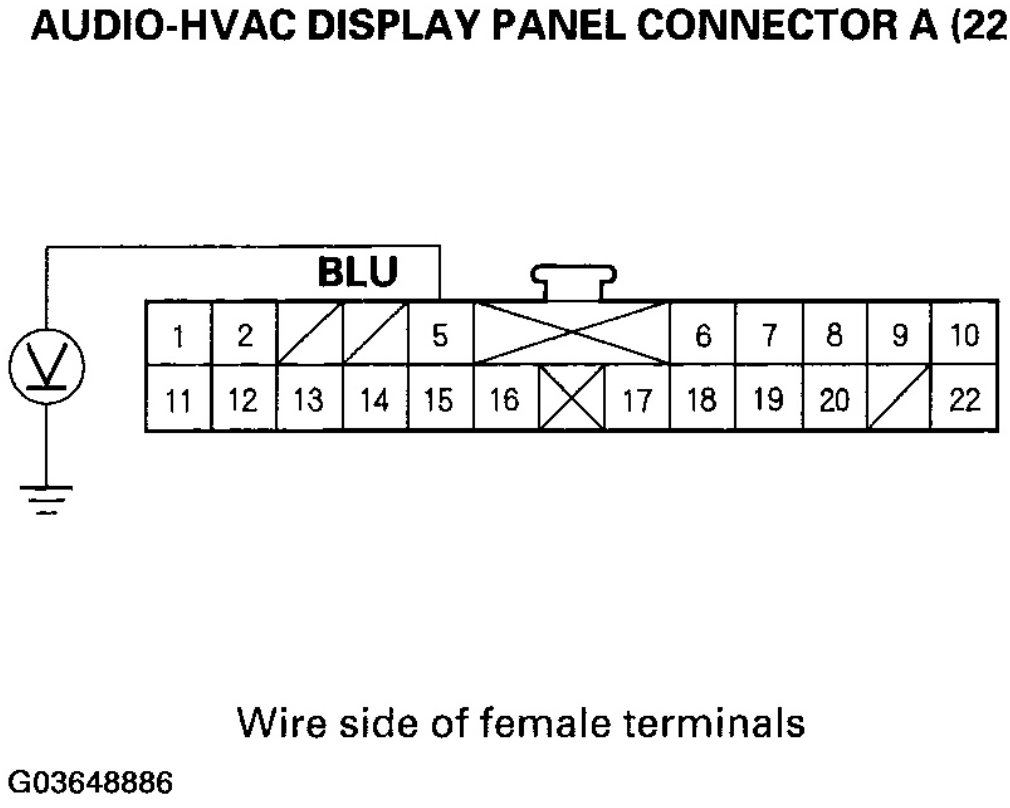


Fig. 70: Measuring Voltage Between No. 5 Terminal Of Audio-HVAC Display Panel Connector A (22P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 5 V or more?

YES - Go to step 11.

NO - Repair open in the wire between the climate control unit and the A/C pressure switch.

11. Turn the ignition switch OFF.
12. Measure the resistance between the No. 14 and No. 15 terminals of the audio-HVAC display panel connector A (22P).

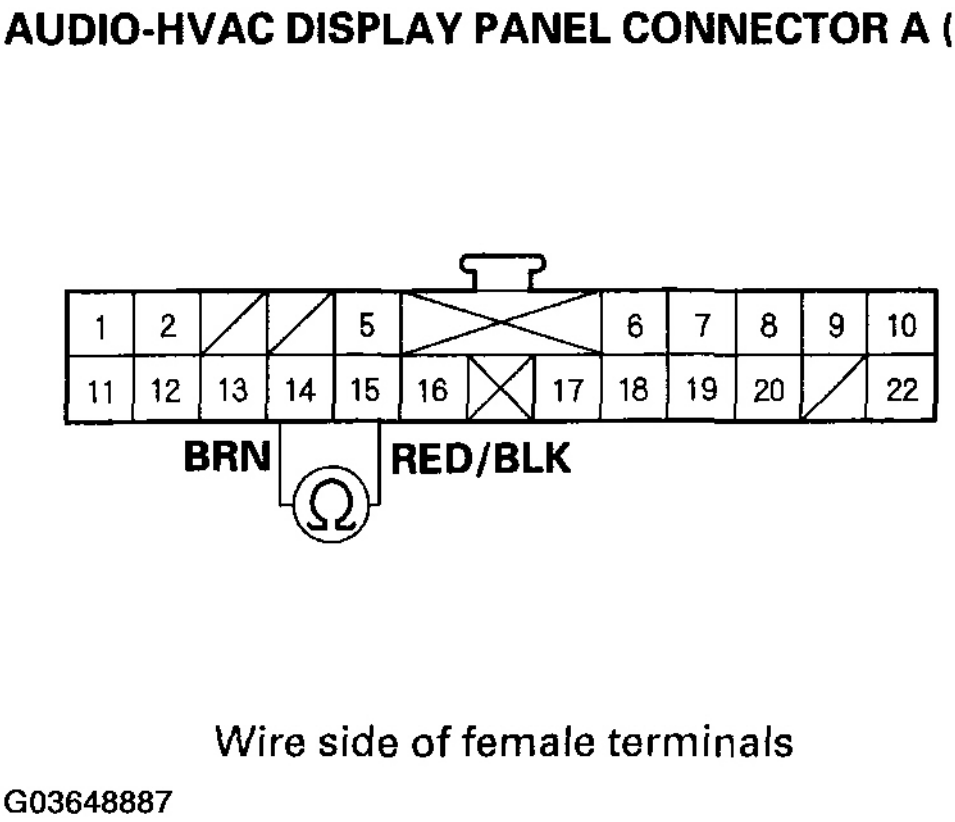


Fig. 71: Measuring Resistance Between No. 14 And No. 15 Terminals Of Audio-HVAC Display Panel Connector A (22P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is the resistance less than 24 k ohms?

YES - Check for loose wires or poor connections at audio-HVAC display panel connector A (22P) and at the A/C pressure switch 2P connector. If the connections are good, substitute a known-good audio-HVAC display panel, and recheck. If the symptom/indication goes away, replace the original audio-HVAC display panel.

NO - Repair cause of high resistance in the evaporator temperature circuit.

13. Measure the voltage between the No. 2 terminal of under-hood fuse/relay box connector H (14P) and body ground with the under-hood fuse/relay box connectors connected.

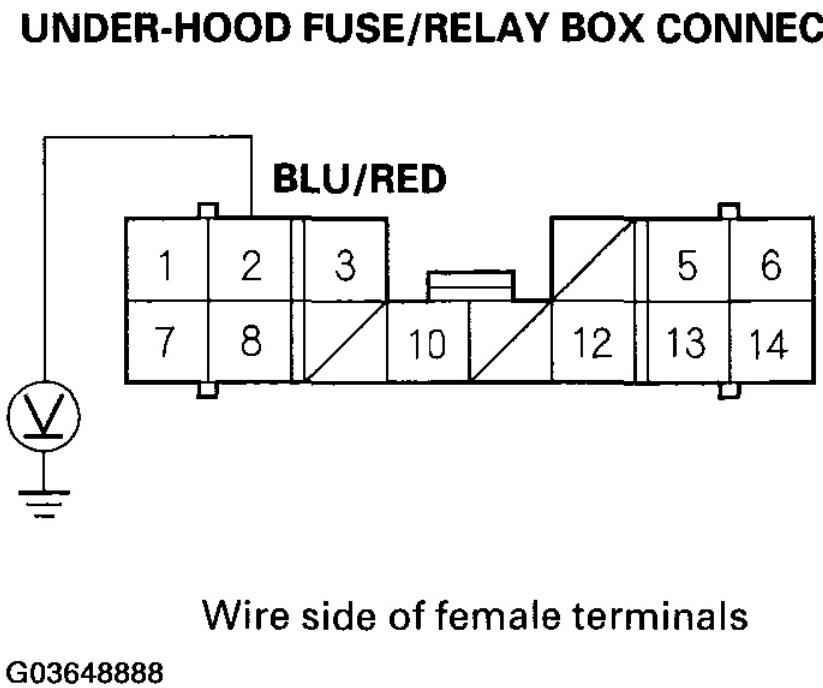


Fig. 72: Measuring Voltage Between No. 2 Terminal Of Under-Hood Fuse/Relay Box Connector H (14P) & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 5 V or more?

YES - Repair open in the wire between the under-hood fuse/relay box and

the A/C pressure switch.

NO - Check for loose or poor connections at the No. 2 terminal of the under-hood fuse/relay box. If the connections are OK, replace the under-hood fuse/relay box.

14. Check for proper A/C system pressure.

Is the pressure within specifications?

YES - Replace the A/C pressure switch.

NO - Repair the A/C pressure problem.

IN-CAR TEMPERATURE SENSOR TEST

Check for a change in resistance by heating or cooling the sensor with a hair drier.

Compare the resistance reading between the No. 1 and No. 2 terminals of the in-car temperature sensor with the specifications in the graph shown in **Fig. 73**; the resistance should be within the specifications.

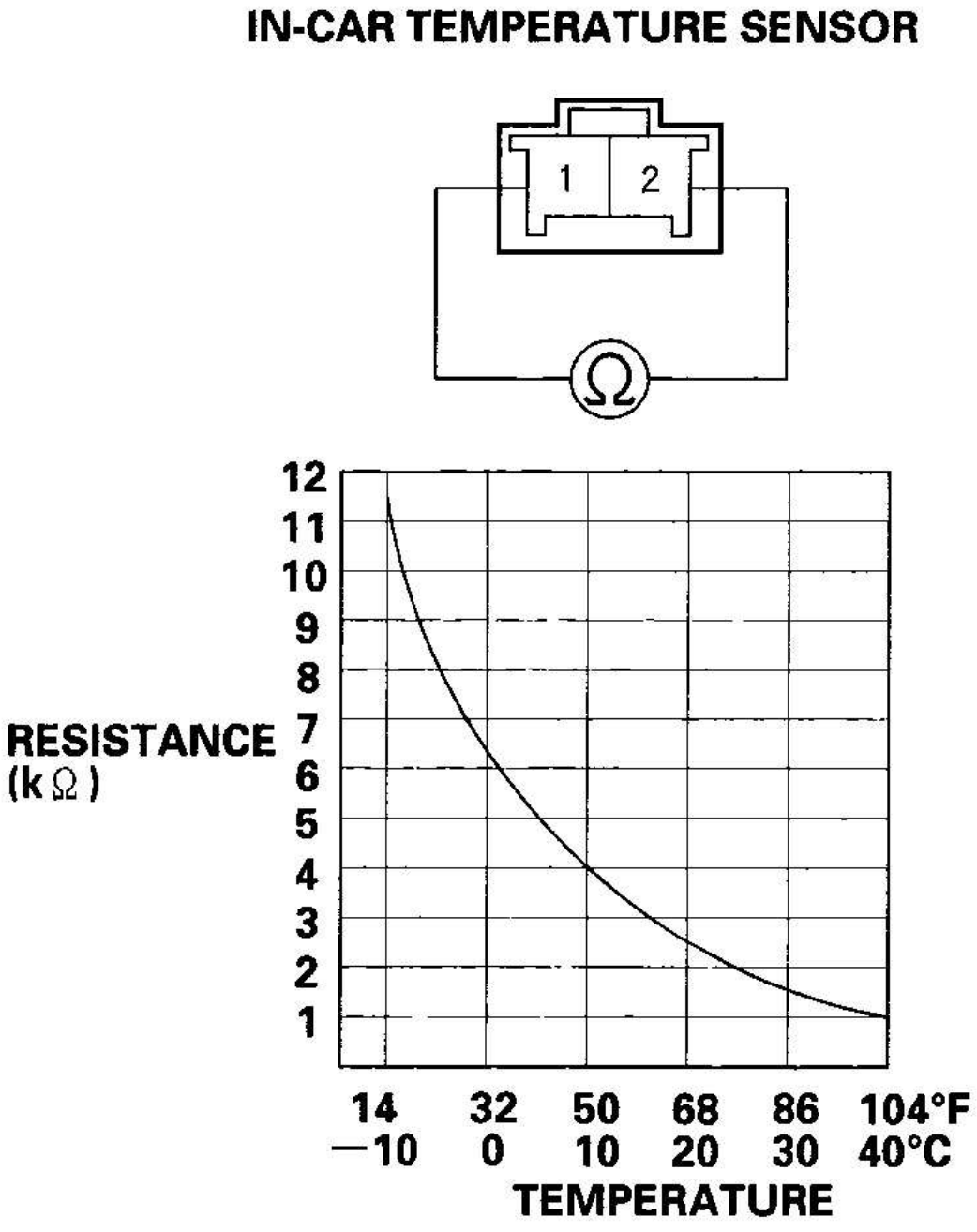


Fig. 73: Checking Resistance By Heating Or Cooling Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

IN-CAR TEMPERATURE SENSOR REPLACEMENT

1. Remove the instrument panel (see **INSTRUMENT PANEL REMOVAL/INSTALLATION**).
2. Remove the self-tapping screw and the in-car temperature sensor (A) from the instrument panel (B).

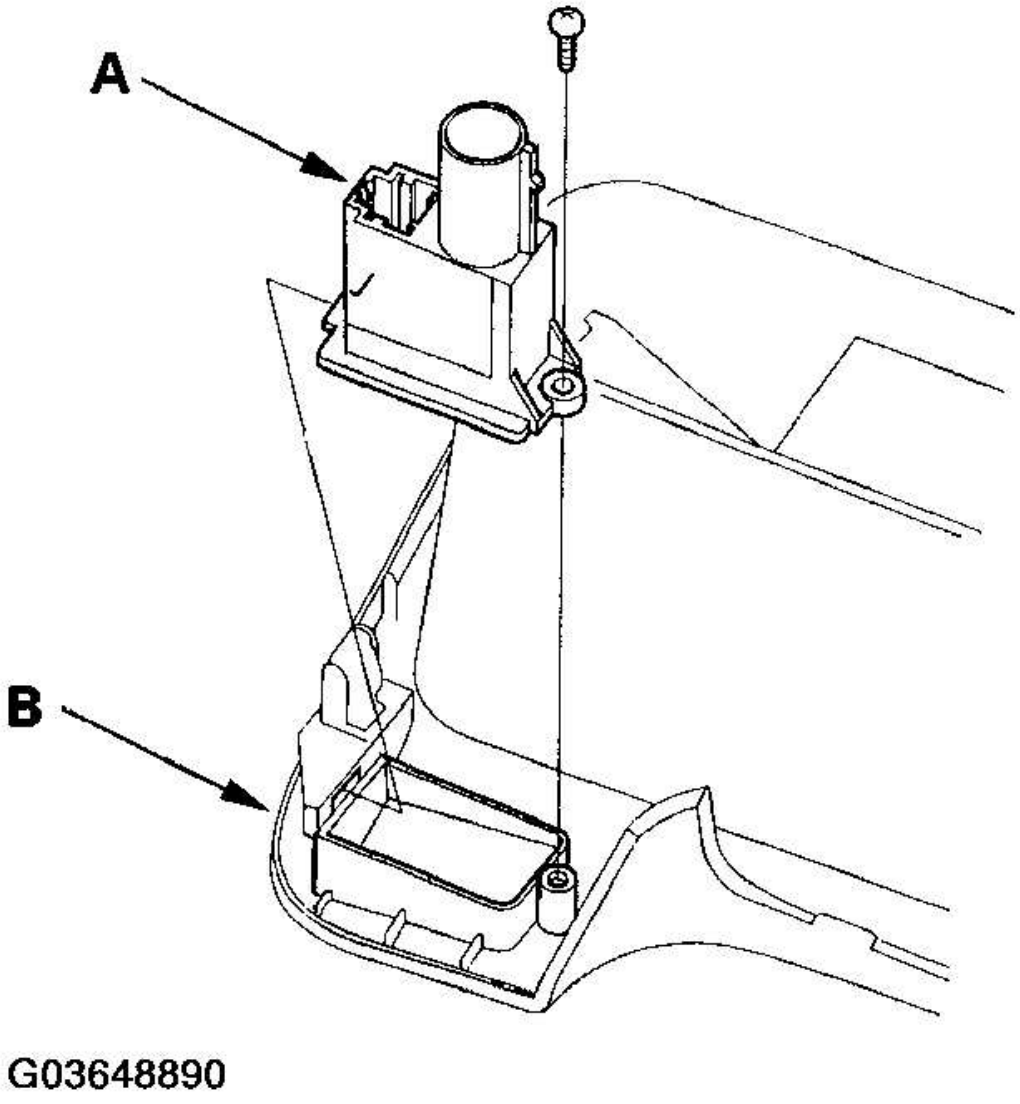


Fig. 74: Removing Self-Tapping Screw And In-Car Temperature Sensor

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the sensor in the reverse order of removal. Be sure to connect the air hose securely.

OUTSIDE AIR TEMPERATURE SENSOR TEST

Dip the sensor in ice water, and measure the resistance. Then pour warm water on the sensor, and check for a change in resistance.

Compare the resistance reading between the No. 1 and No. 2 terminals of the outside air temperature sensor with the specifications in the graph shown in **Fig. 75**; the resistance should be within the specifications.

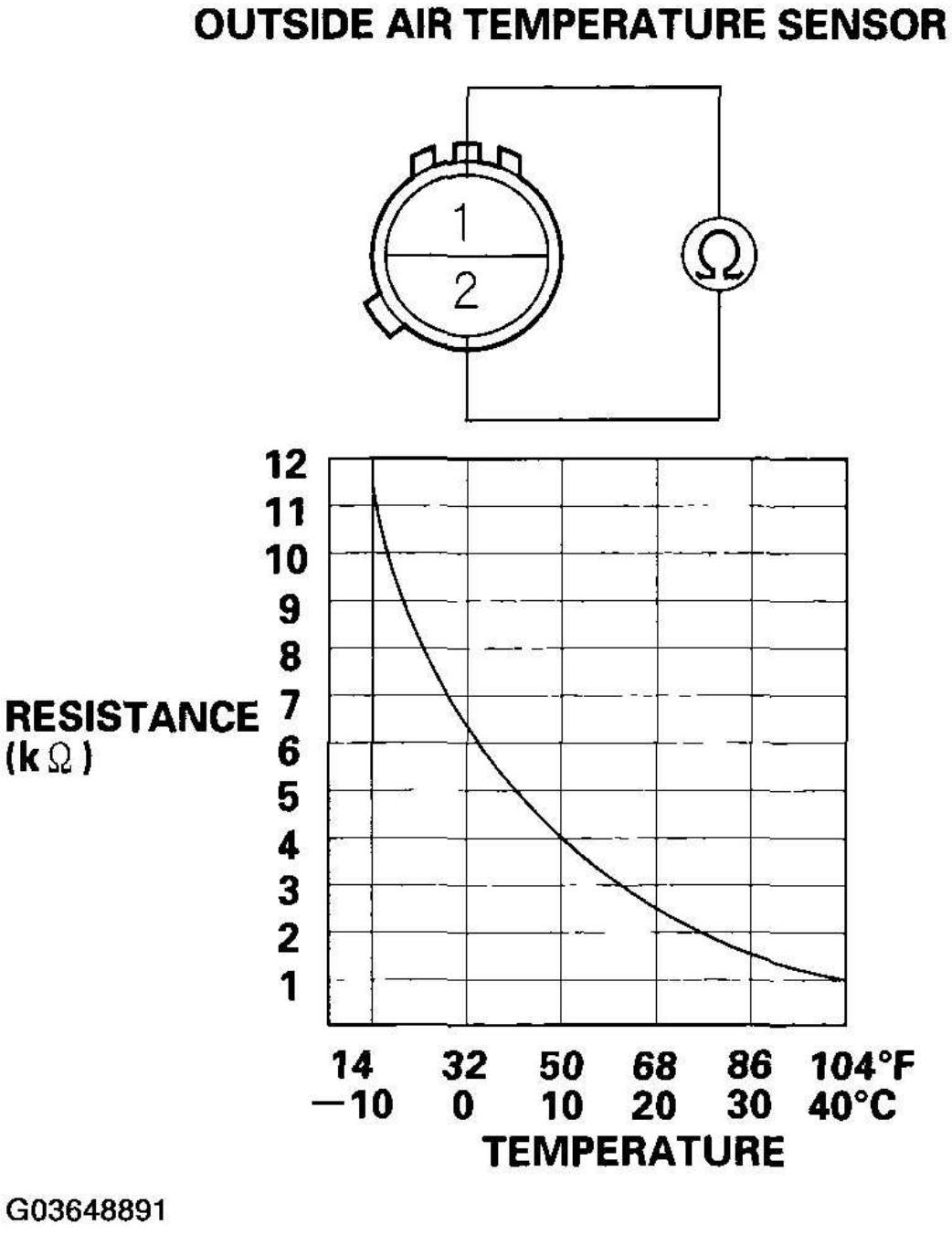


Fig. 75: Checking Resistance Between No. 1 And No. 2 Terminals Of Outside Air Temperature Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

OUTSIDE AIR TEMPERATURE SENSOR REPLACEMENT

1. Lift the tab (A) to release the lock, and remove the outside air temperature sensor (B) from the back of the front bumper beam. Disconnect the 2P connector (C) from the outside air temperature sensor.

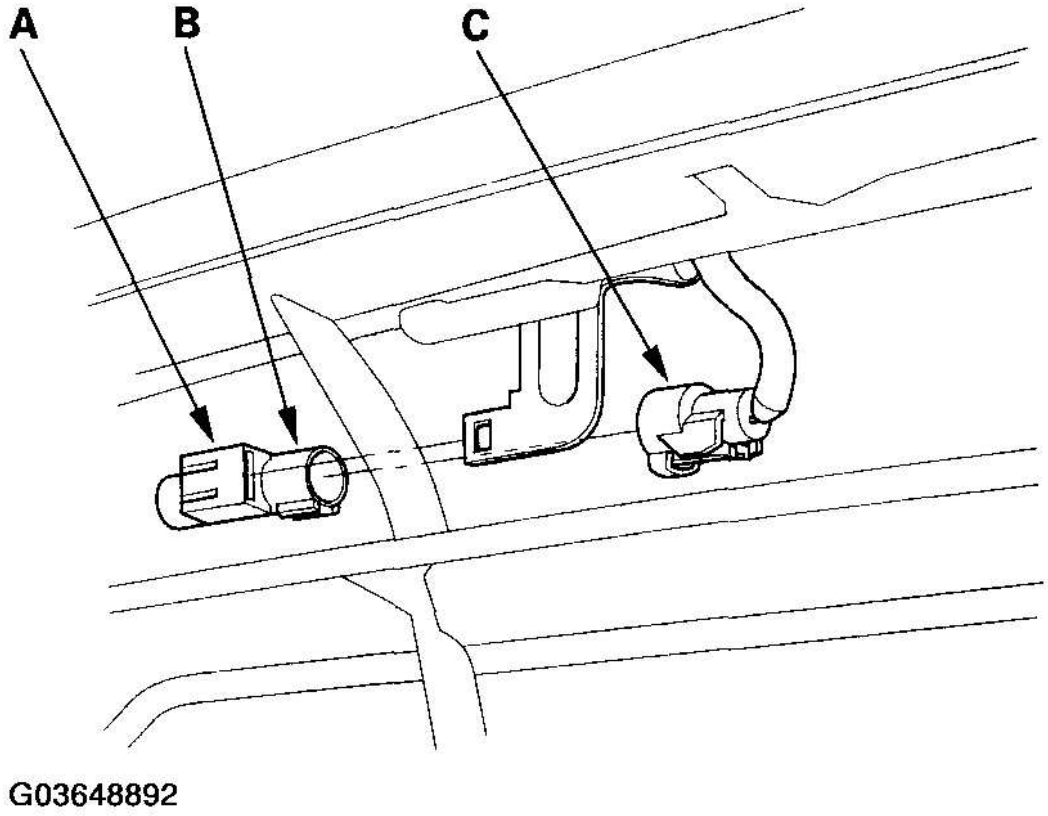


Fig. 76: Releasing Lock & Removing Outside Air Temperature Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the sensor in the reverse order of removal.

SUNLIGHT SENSOR TEST

1. Remove the sunlight sensor, and reconnect the connector.
2. Turn the ignition switch ON (II). Measure the voltage between the terminals

with the (+) probe on the No. 1 terminal and the (-) probe on the No. 2 terminal with the 2P connector connected. The voltage readings will not change under the light of a flashlight or a fluorescent lamp. Voltage should be:

- 3.6-3.7 V or more with the sensor out of direct sunlight.
- 3.3-3.5 V or less with the sensor in direct sunlight.

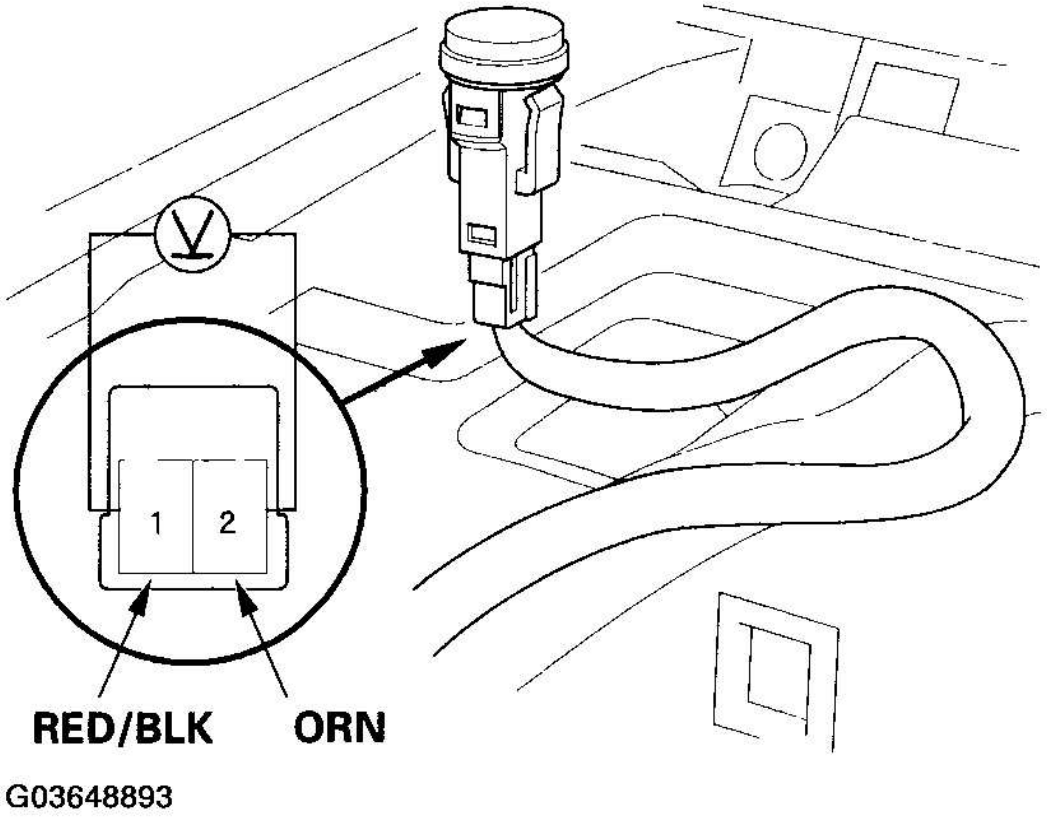


Fig. 77: Measuring Voltage Between Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SUNLIGHT SENSOR REPLACEMENT

1. Remove the upper panel from the dashboard (see **UPPER PANEL REMOVAL/INSTALLATION**).
2. Remove the sunlight sensor (A) from the upper panel (B). Be careful not to

damage the sensor.

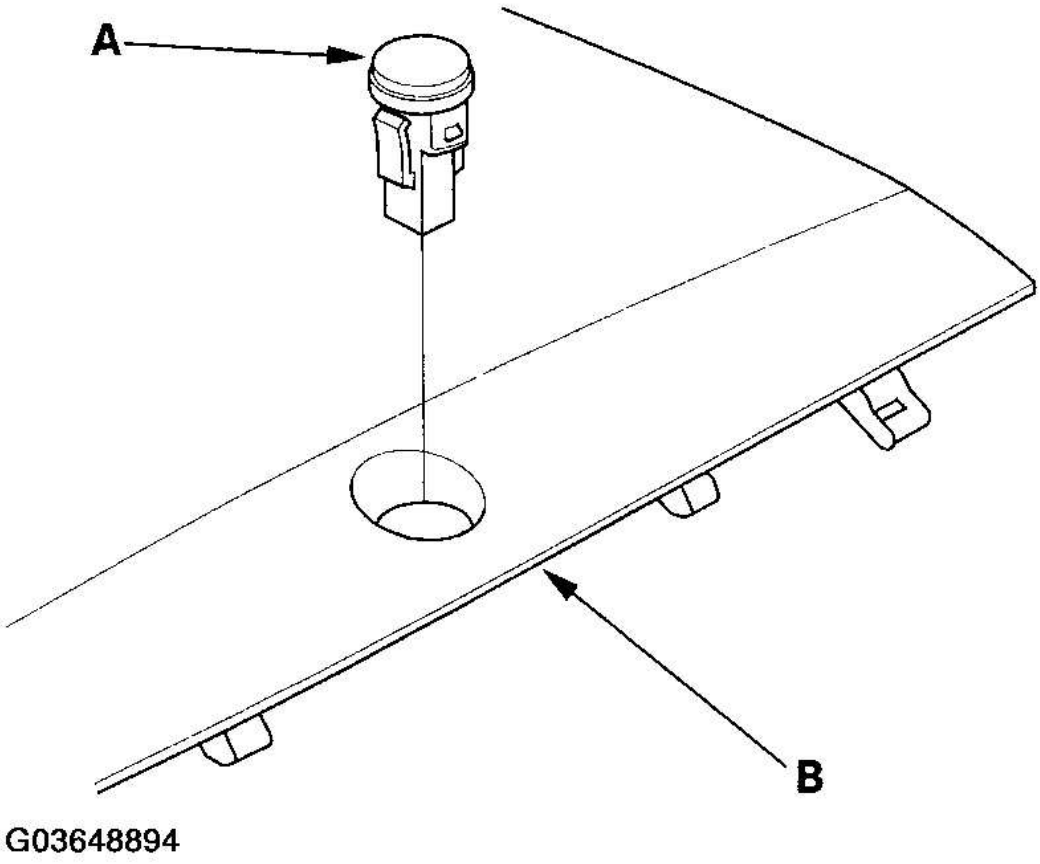


Fig. 78: Removing Sunlight Sensor From Upper Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the sensor in the reverse order of removal.

PASSENGER'S AIR MIX CONTROL MOTOR TEST

4-DOOR

1. Disconnect the 7P connector from the passenger's air mix control motor.

NOTE: Incorrectly applying power and ground to the passenger's air mix control motor will damage it. Follow

the instructions carefully.

2. Connect battery power to the No. 1 terminal of the passenger's air mix control motor, and ground the No. 2 terminal; the passenger's air mix control motor should run, and stop at Max Cool. If it doesn't, reverse the connections; the passenger's air mix control motor should run, and stop at Max Hot.
3. If the passenger's air mix control motor did not run in step 2, remove it, then check the passenger's air mix control linkage and door for smooth movement.
    - If the linkage and door move smoothly, replace the passenger's air mix control motor.
    - If the linkage or door sticks or binds, repair them as needed.
    - If the passenger's air mix control motor runs smoothly, go to step 4.

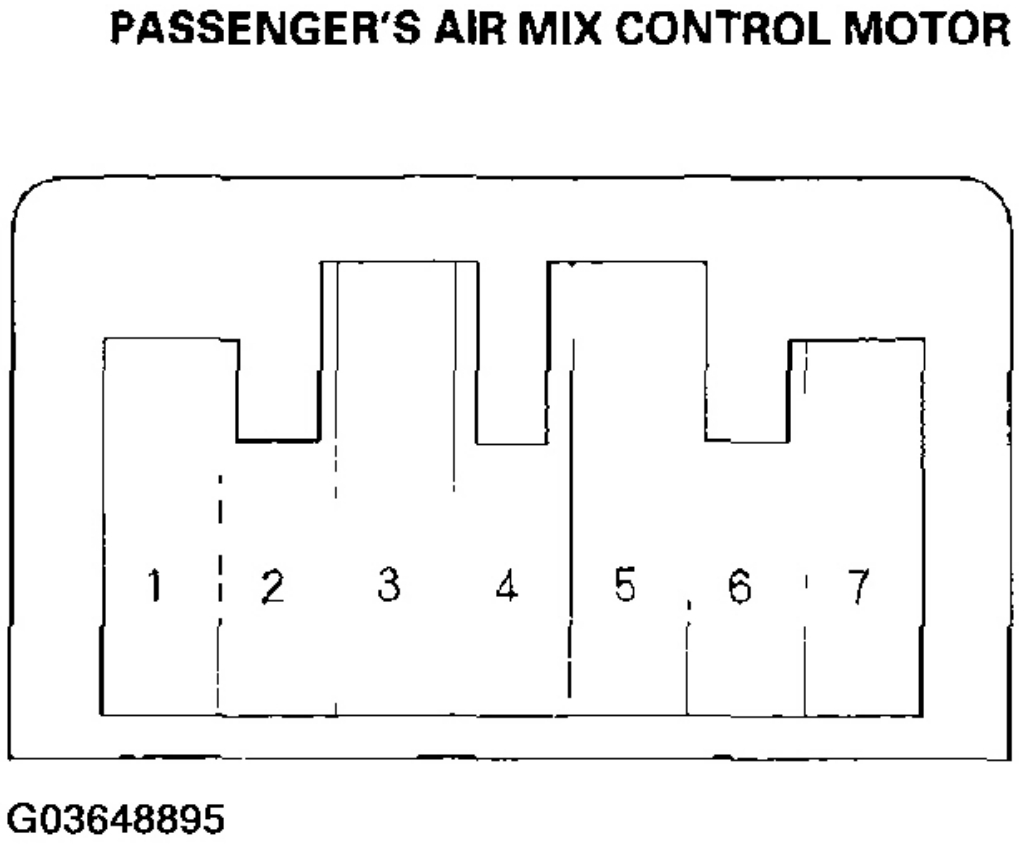


Fig. 79: Checking Passenger's Air Mix Control Motor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the resistance between the No. 5 and No. 7 terminals. It should be between 4.2 to 7.8 kohms.
5. Reconnect the passenger's air mix control motor 7P connector, then turn the ignition switch ON (II).
6. Using the backprobe set, measure the voltage between the No. 3 and No. 5 terminals.

Max Cool-about 1.5 V

Max Hot-about 4.5 V

7. If either the resistance or voltage readings are not as specified, replace the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT**).

2-DOOR

1. Disconnect the 5P connector from the passenger's air mix control motor.

NOTE: Incorrectly applying power and ground to the passenger's air mix control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 1 terminal of the passenger's air mix control motor, and ground the No. 2 terminal; the passenger's air mix control motor should run, and stop at Max Hot. If it doesn't, reverse the connections; the passenger's air mix control motor should run, and stop at Max Cool.
3. If the passenger's air mix control motor did not run in step 2, remove it, then check the passenger's air mix control linkage and door for smooth movement.
   - If the linkage and door move smoothly, replace the passenger's air mix control motor.
   - If the linkage or door sticks or binds, repair them as needed.
   - If the passenger's air mix control motor runs smoothly, go to step 4.

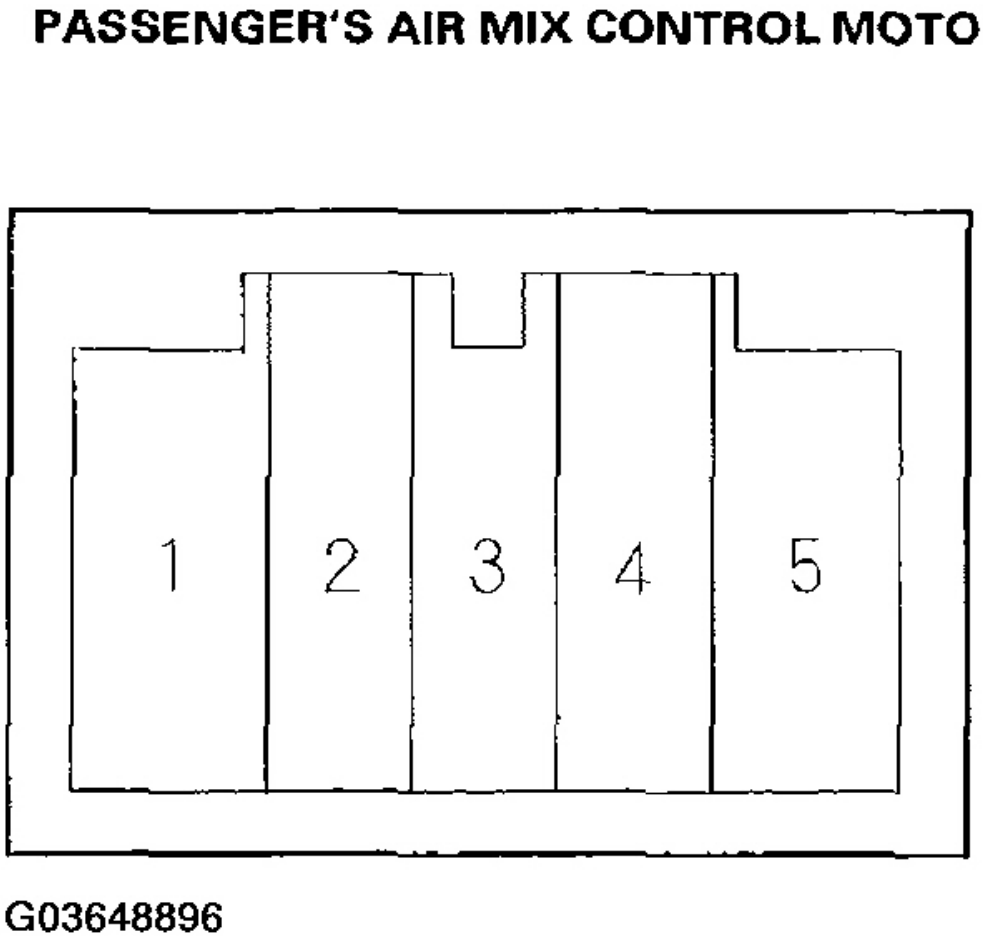


Fig. 80: Checking Passenger's Air Mix Control Motor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the resistance between the No. 4 and No. 5 terminals. It should be between 4.2 to 7.8 kohms.
5. Reconnect the passenger's air mix control motor 5P connector, then turn the ignition switch ON (II).
6. Using the backprobe set, measure the voltage between the No. 3 and No. 5 terminals.

Max Cool-about 10. V

Max Hot-about 4.0 V

7. If either the resistance or voltage readings are not as specified, replace the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT**).

PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT

4-DOOR

1. Disconnect the 2P connector (A) from the evaporator temperature sensor. Disconnect the 7P connector (B) from the passenger's air mix control motor (C). Remove the self-tapping screws and the passenger's air mix control motor from the heater unit.

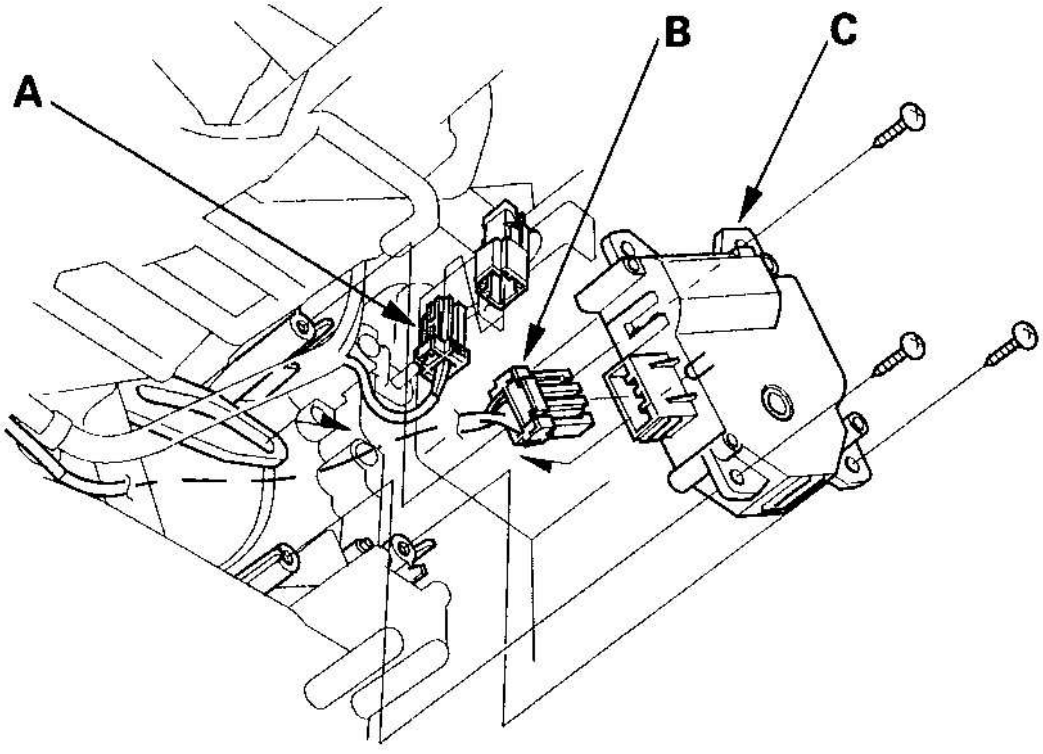


Fig. 81: Disconnecting 2P Connector & Removing Passenger's Air Mix

Control Motor (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

2-DOOR

1. Disconnect the 10P connector (A) from the mode control motor. Disconnect the 2P connector (B) from the evaporator temperature sensor. Disconnect the 5P connector (C) from the passenger's air mix control motor (D). Remove the self-tapping screws and the passenger's air mix control motor from the heater unit.

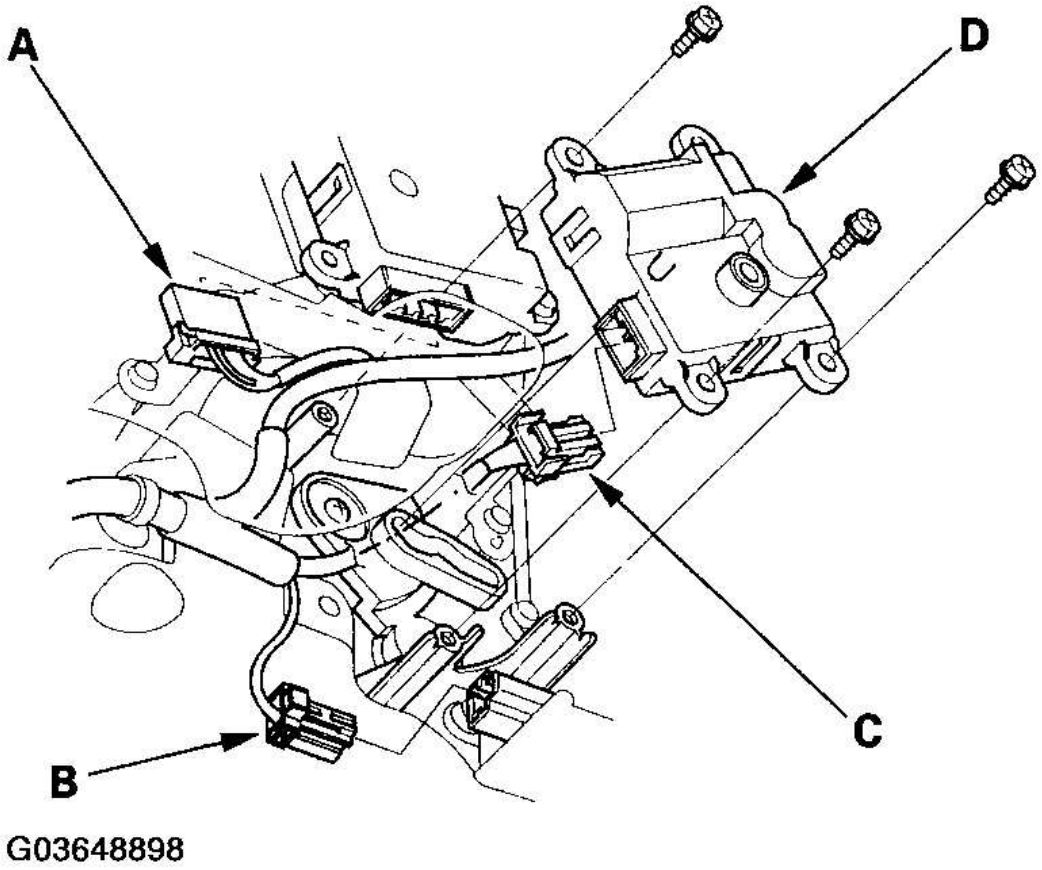


Fig. 82: Disconnecting 10P Connector & Removing Passenger's Air Mix Control Motor (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

2003-07 ENGINE

Ignition System - Accord (V6)

COMPONENT LOCATION INDEX

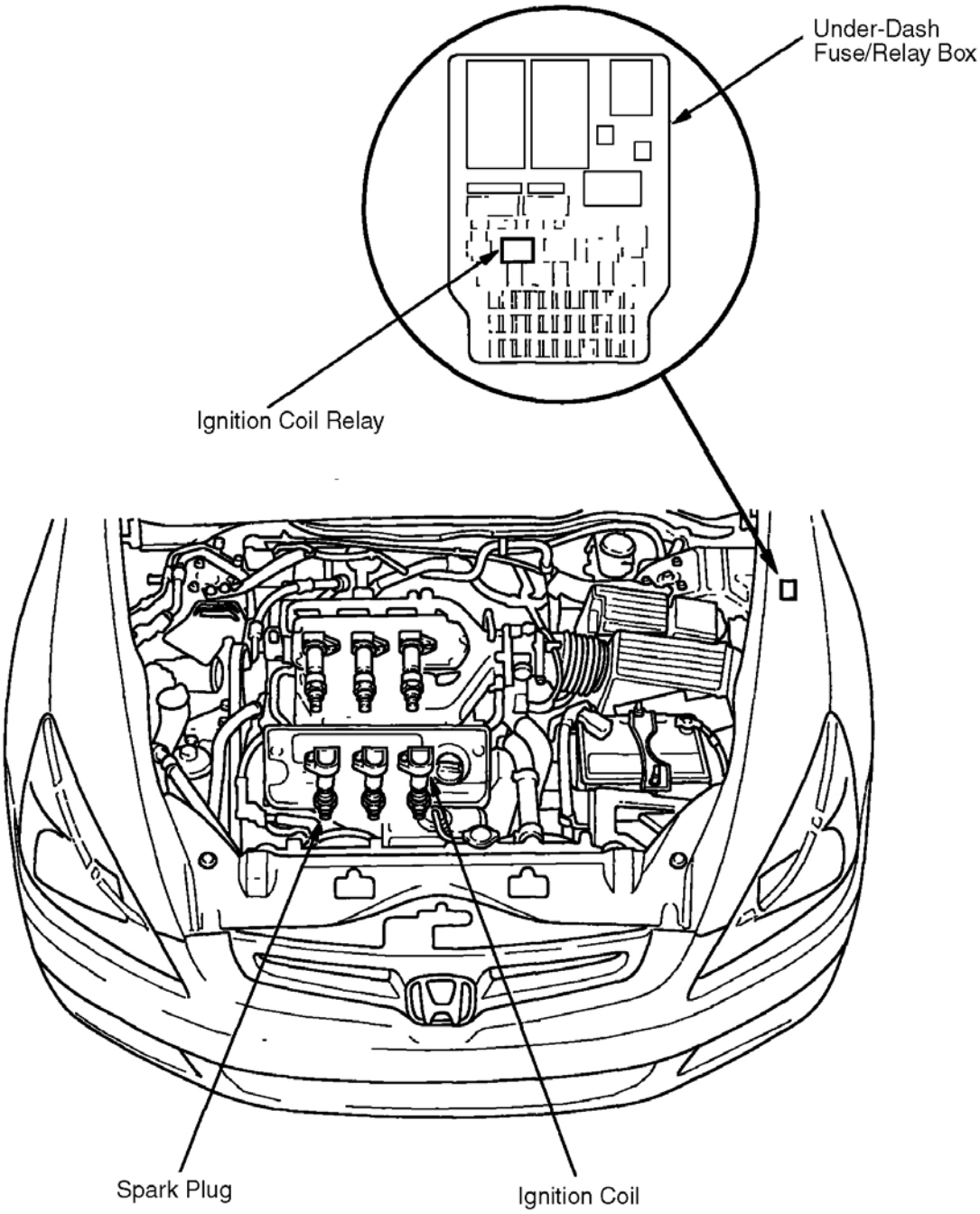


Fig. 1: Locating Ignition System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

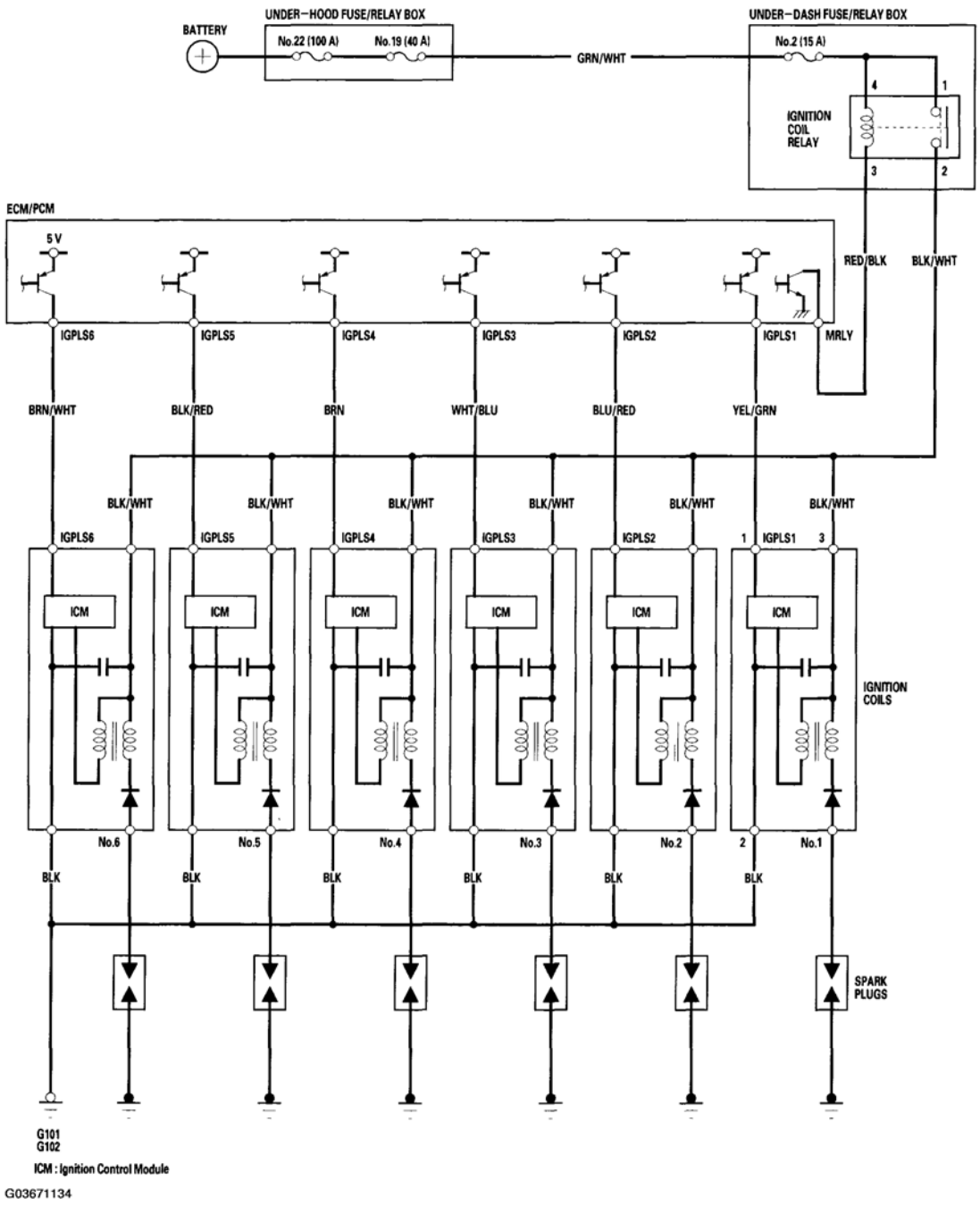
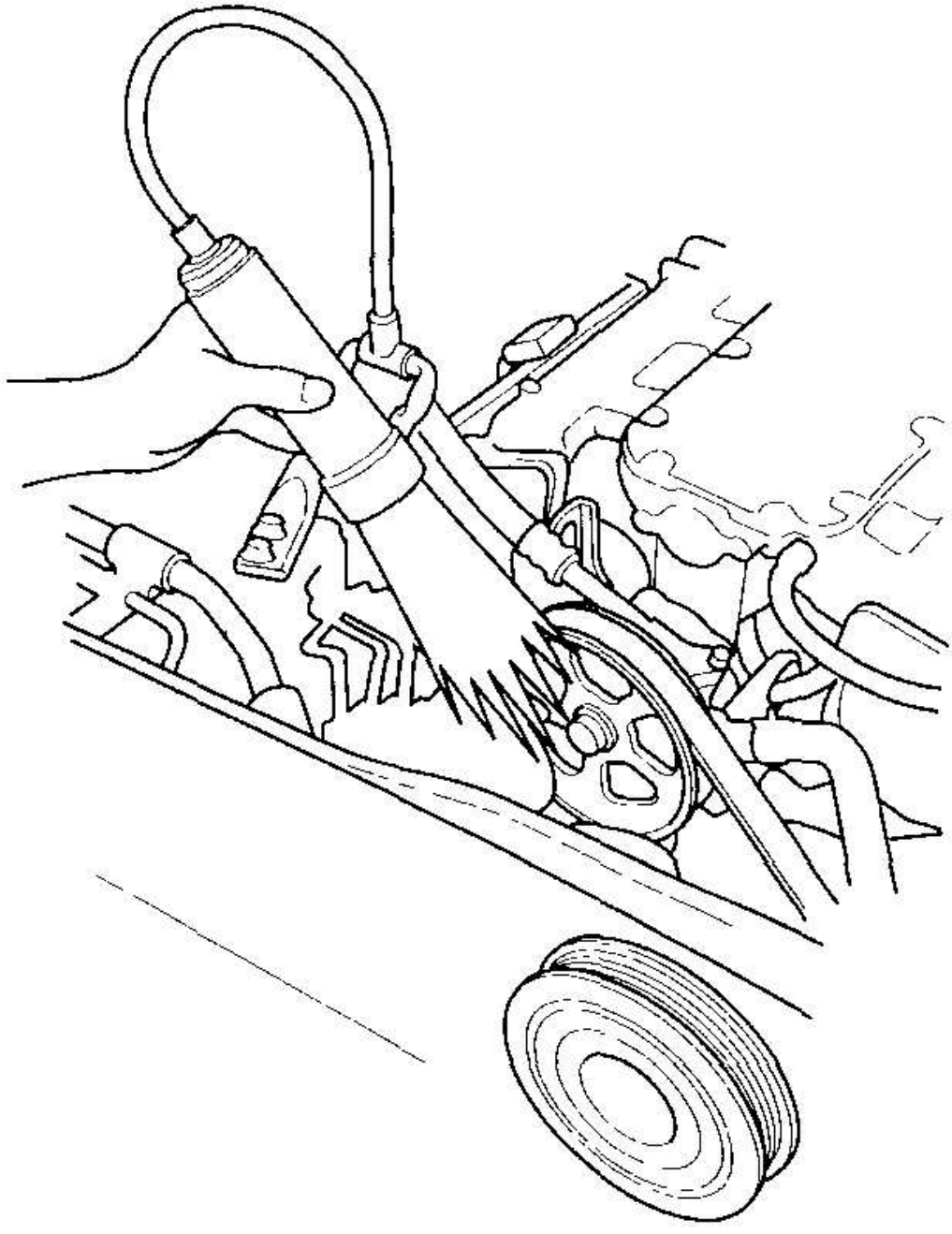


Fig. 2: Ignition System Circuit Diagram

Courtesy of AMERICAN HONDA MOTOR CO., INC.

IGNITION TIMING INSPECTION

1. Connect the Honda Diagnostic System (HDS)to the data link connector (DLC) (see step 2**IF THE MIL (MALFUNCTION INDICATOR LAMP) HAS COME ON**), and check for DTCs. If a DTC is present, diagnose and repair the cause before inspecting the ignition timing.
2. Start the engine. Hold the engine speed at 3,000 rpm with no load (in Neutral) until the radiator fan comes on, then let it idle.
3. Check the idle speed (see **IDLE SPEED INSPECTION**).
4. Select "SCS" mode using the HDS.
5. Connect the timing light to the service loop.



G03671135

Fig. 3: Connecting Timing Light To Service Loop

Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Aim the light toward the pointer (A) on the timing belt cover. Check the ignition timing under a no load condition (headlights, blower fan, rear window defogger, and air conditioner are turned off).

   Ignition Timing

   M/T: 10°+/-2° BTDC (RED mark (B)) at idle in Neutral

   A/T: 10°+/-2° BTDC (RED mark (B)) at idle in Park or Neutral

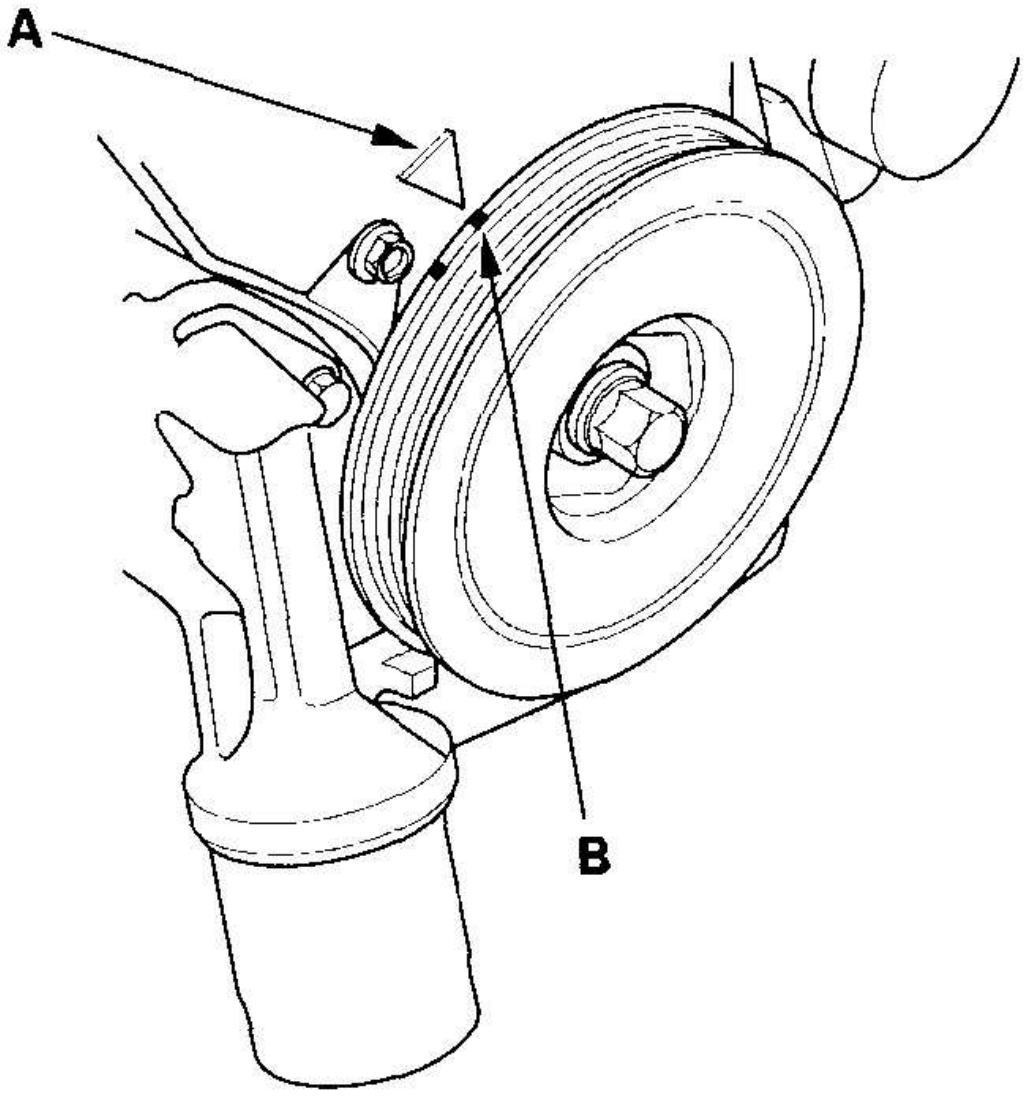


Fig. 4: Checking Ignition Timing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. If the ignition timing differs from the specification, check the cam timing. If the cam timing is OK, update the engine control module (ECM)/ powertrain control module (PCM) if it does not have the latest software (see **ECM/PCM**

UPDATING AND SUBSTITUTION FOR TESTING), or substitute a known-good ECM/PCM (see **HOW TO SUBSTITUTE THE ECM/PCM**), then recheck. If the system works properly, and the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).

8. Disconnect the HDS and the timing light.
9. Secure the service loop to the wire harness with wire ties.

IGNITION COIL REMOVAL/INSTALLATION

1. Remove the ignition coil cover.

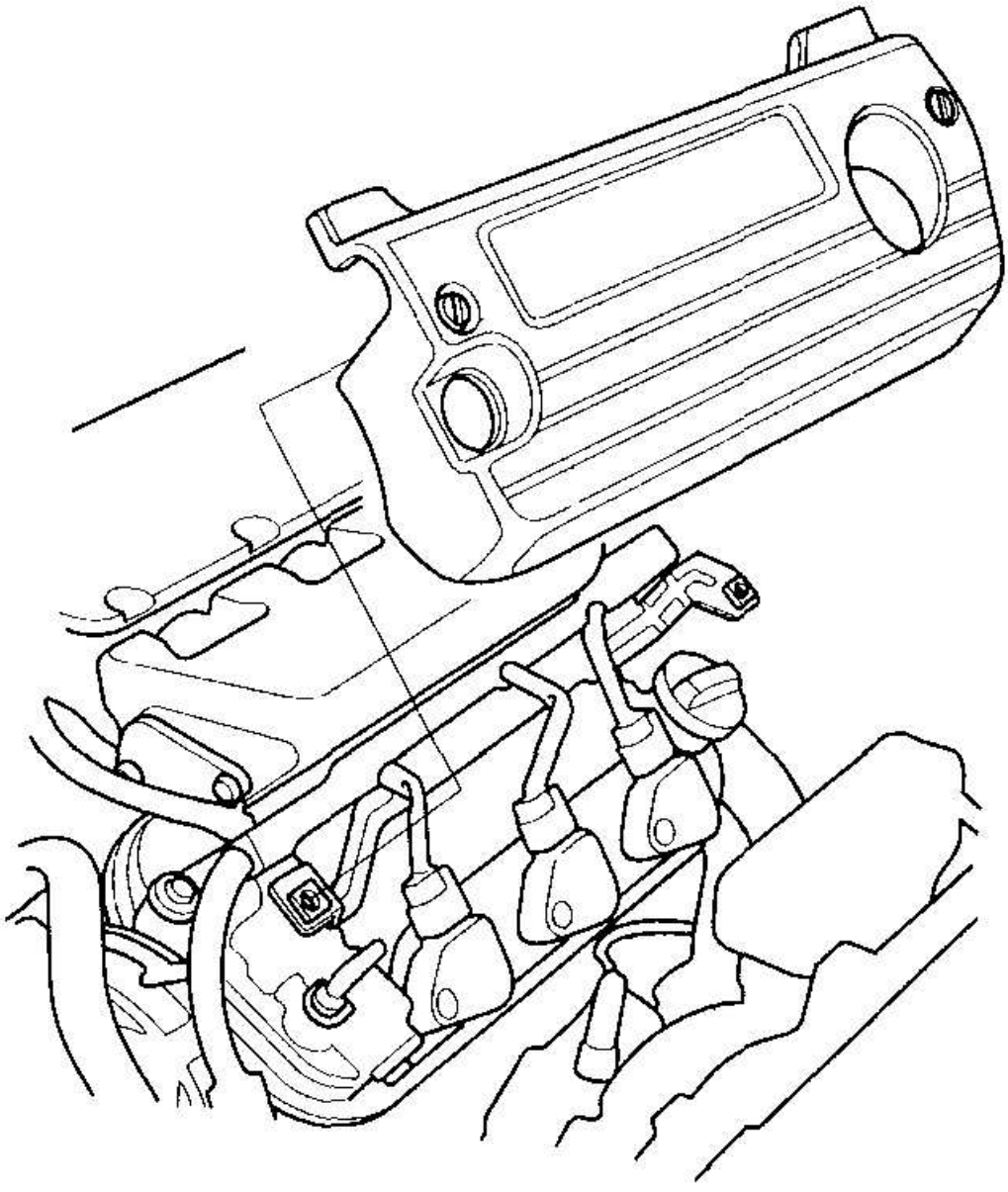


Fig. 5: Identifying Ignition Coil Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Disconnect the ignition coil connectors (A), then remove the front bank

ignition coils (B).

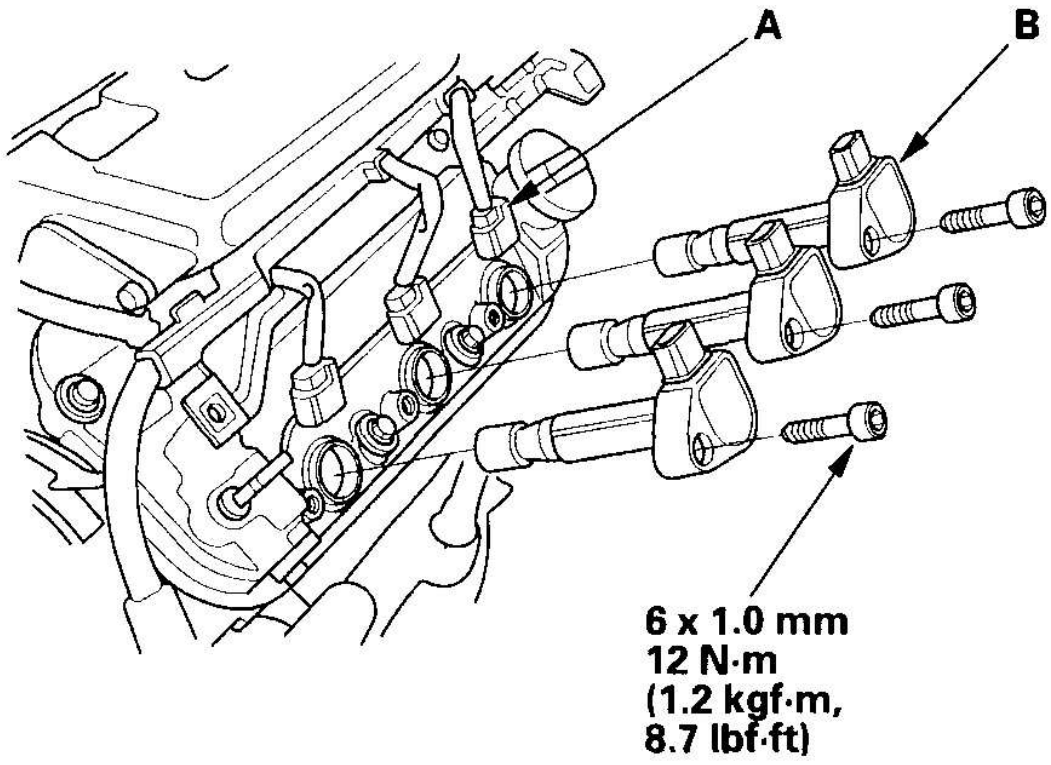


Fig. 6: Identifying Ignition Coil Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the ignition coil connectors (A), then remove the rear bank ignition coils (B).

   6x 1.0 mm

   12Nm(1.2kgfm,8.7lbfft)

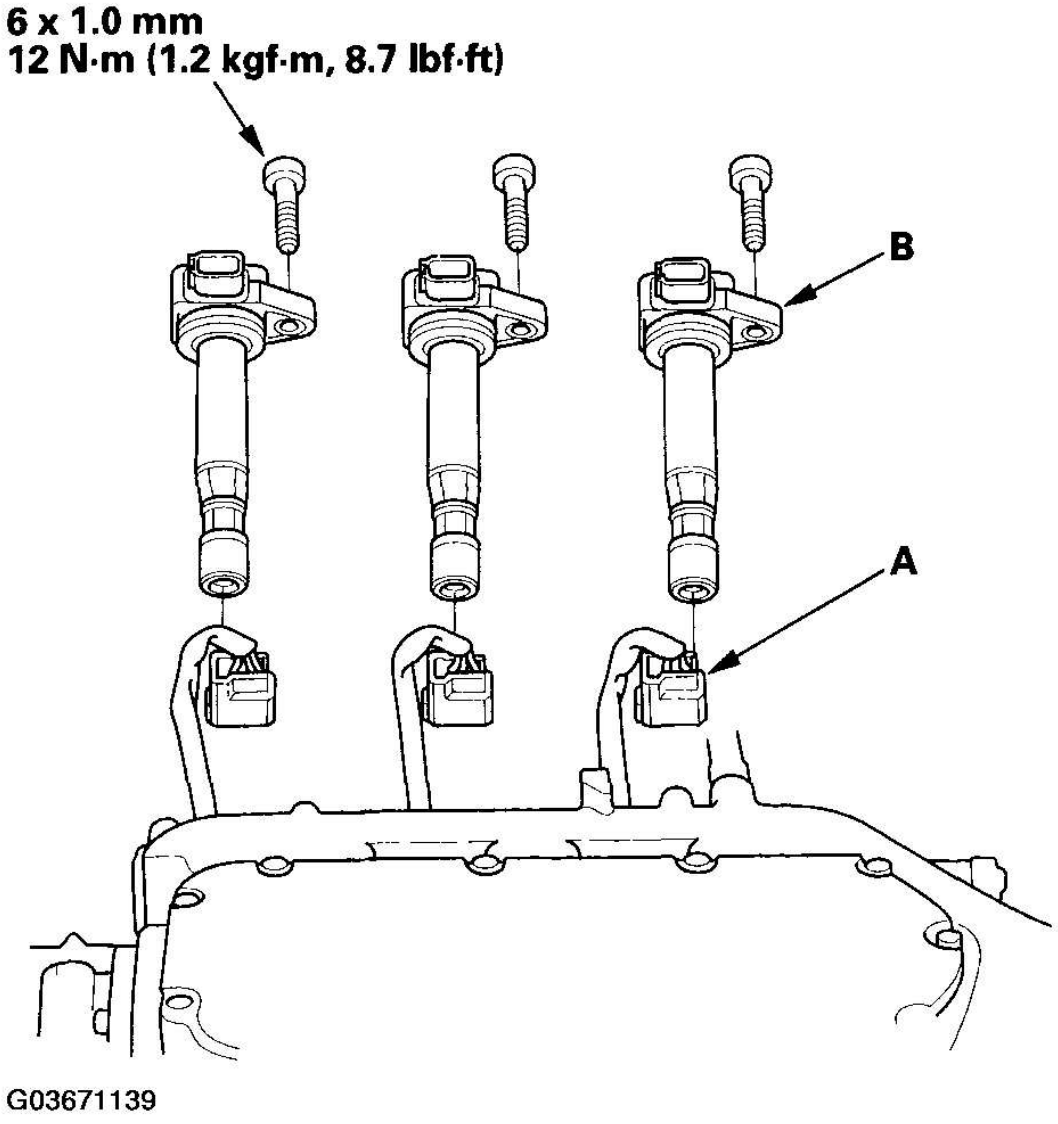


Fig. 7: Identifying Rear Bank Ignition Coils
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the ignition coils in the reverse order of removal.

IGNITION COIL RELAY CIRCUIT TROUBLESHOOTING

1. Check the No. 2 (15 A) fuse in the driver's under-dash fuse/relay box.

Is the fuse OK?

YES - Go to step 2.

NO - Replace the fuse.

2. Remove the ignition coil relay from the under-dash fuse/relay box, and test it (see **POWER RELAY TEST**).

   Is the relay OK?

   YES - Go to step 3.

   NO - Replace the ignition coil relay.

3. Measure the voltage between ignition coil relay 4P socket terminal No. 1 and body ground, then terminal No. 4 and body ground.

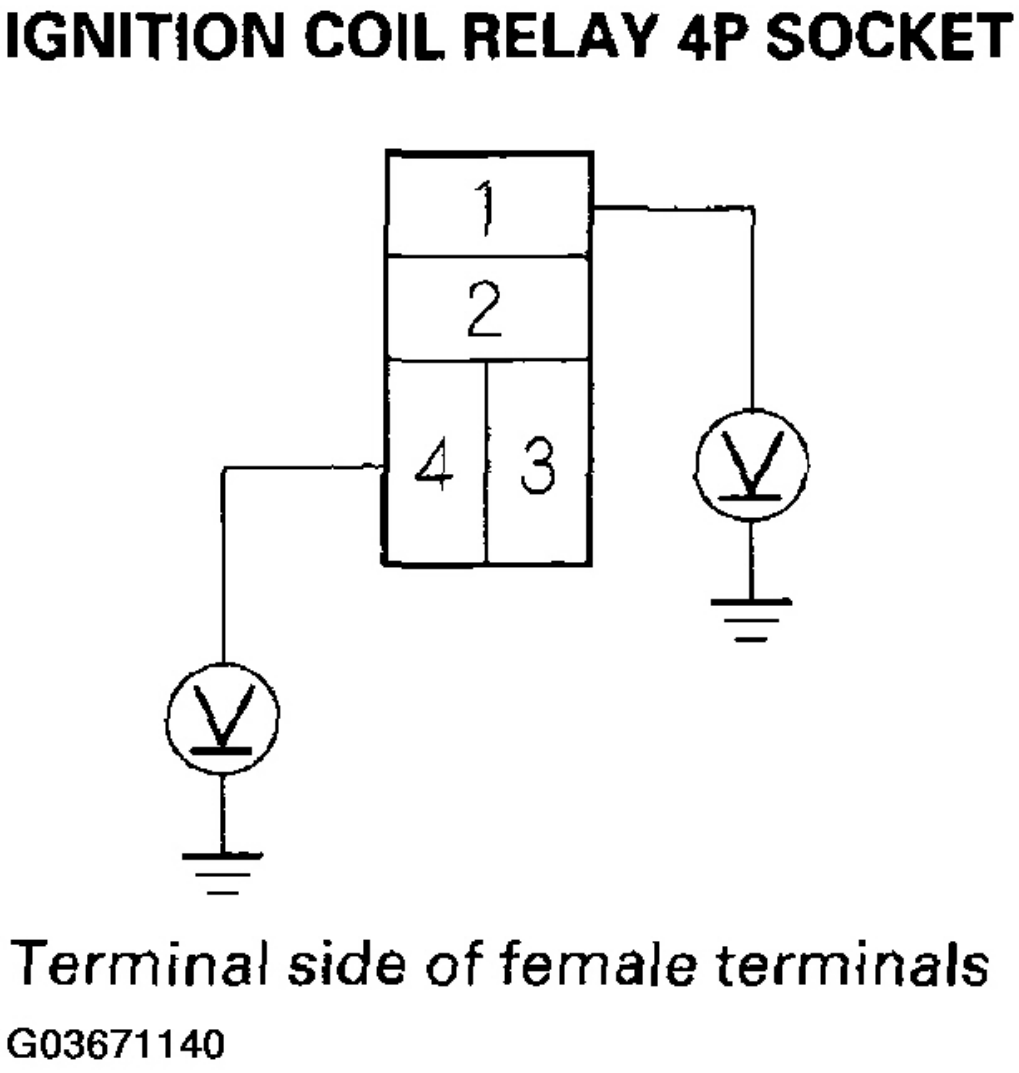


Fig. 8: Measuring Voltage Between Ignition Coil Relay 4P Socket Terminal 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 4.

NO - Replace the under-dash fuse/relay box.

4. Check for continuity between ignition coil relay 4P socket terminal No. 2 and the No. 1 ignition coil 3P connector terminal No. 3.

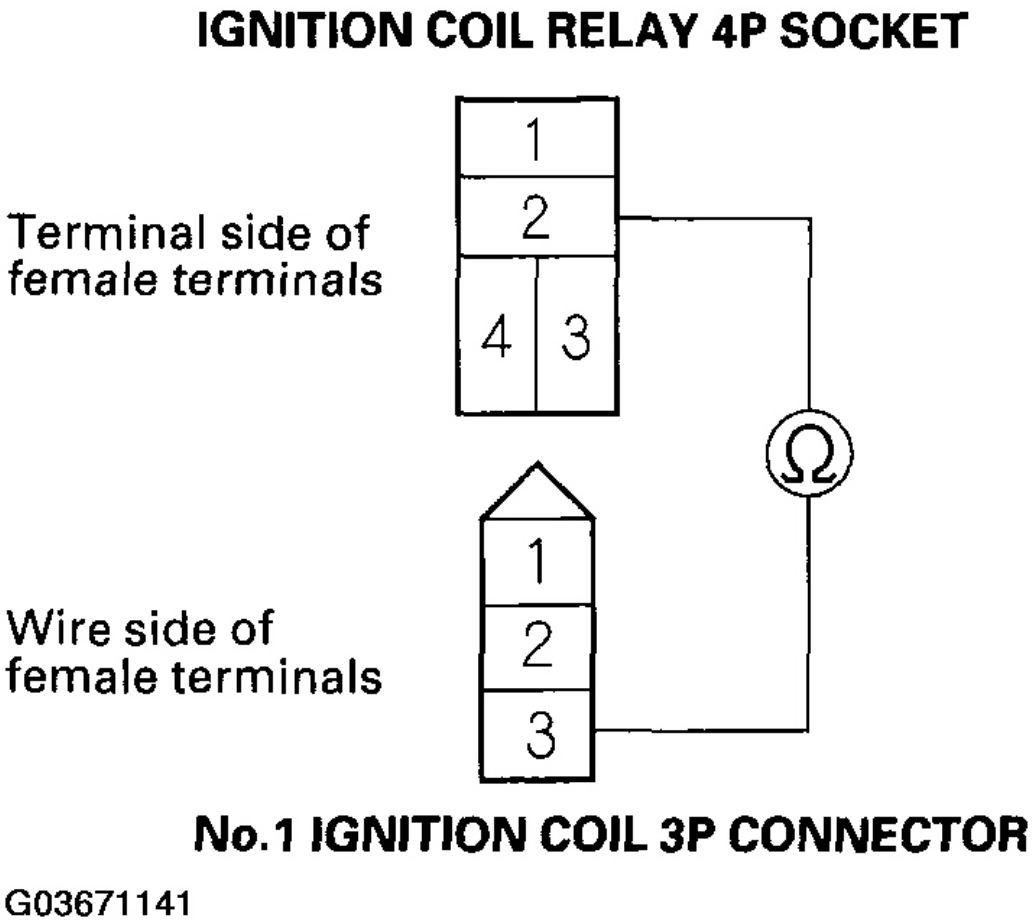


Fig. 9: Checking Continuity Between Ignition Coil Relay 4P Socket Terminal 2 And 1 Ignition Coil 3P Connector Terminal 3
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 5.

NO - Repair an open in the wire between ignition coil relay 4P socket terminal

No. 2 and No. 1 ignition coil 3P connector terminal No. 3.

5. Check for continuity between ignition coil relay 4P socket terminal No. 3 and body ground.

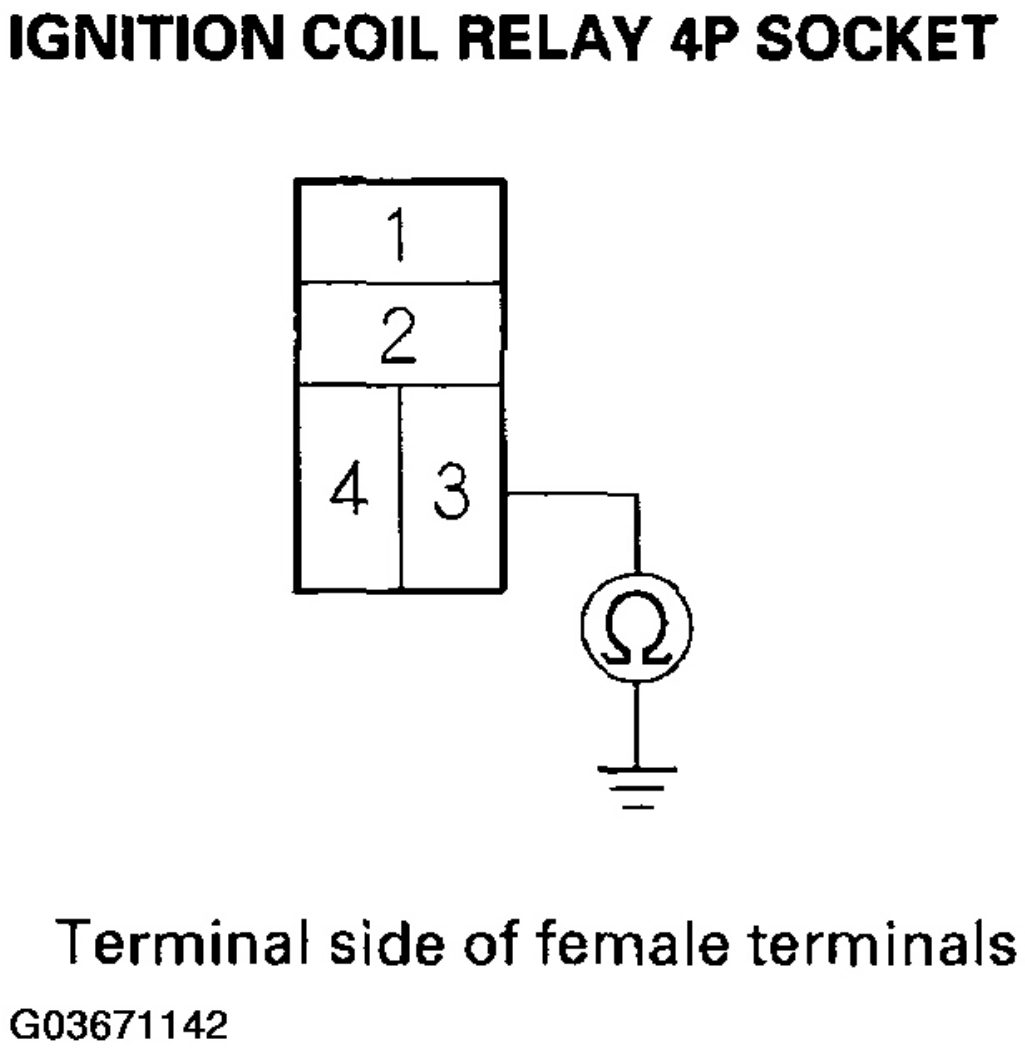


Fig. 10: Checking Continuity Between Ignition Coil Relay 4P Socket Terminal 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair a short in the wire between ignition coil relay 4P socket terminal No. 3 and the PCM (E5).

NO - Go to step 6.

6. Check for continuity between ignition coil relay 4P socket terminal No. 3 and engine control module (ECM)/ powertrain control module (PCM) connector terminal A5.

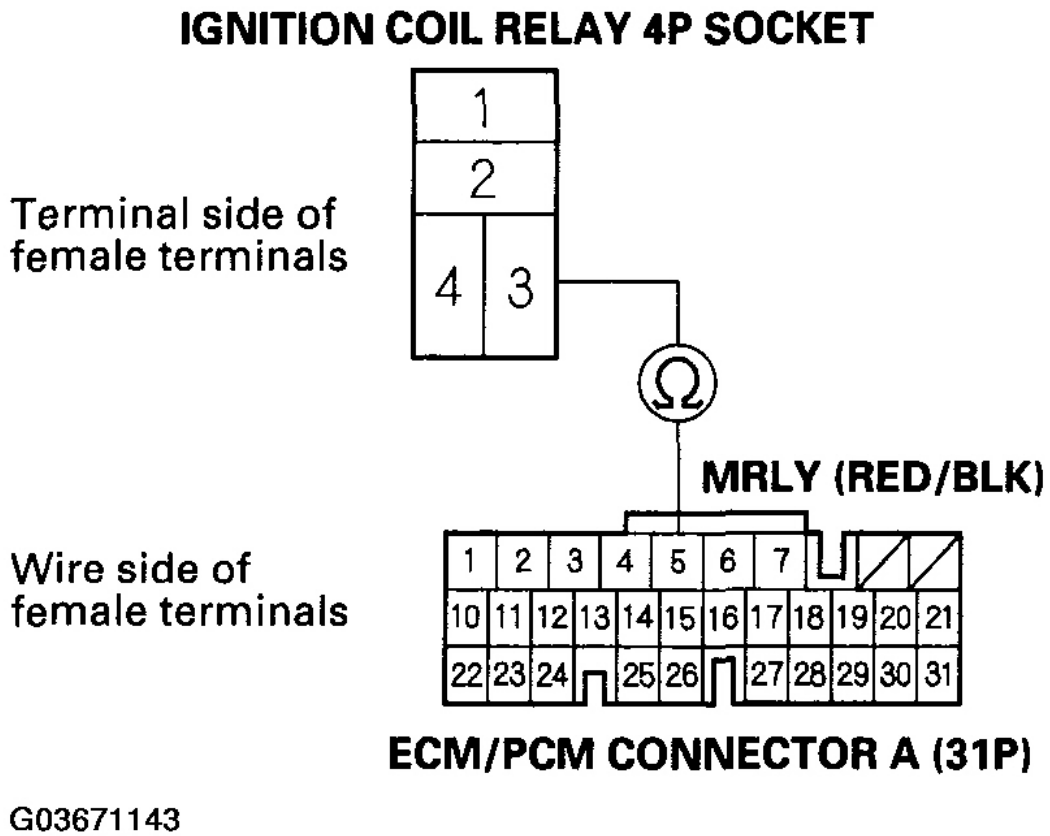


Fig. 11: Checking Continuity Between Coil Relay 4P Socket Terminal 3 And Control Module (ECM)/ Control Module (PCM) Connector Terminal A5
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - The system is OK at this time. Check for loose or poor connections at the ignition coil relay and the ECM/PCM A5.

NO - Repair an open in the wire between ignition coil relay 4P socket terminal No. 3 and the ECM/ PCM(A5).

SPARK PLUG INSPECTION

1. Remove the spark plugs and inspect the electrodes and the ceramic insulator.
   - Burned or worn electrodes may be caused by:
     - Advanced ignition timing
     - Loose spark plug
     - Plug heat range too hot
     - Insufficient cooling
   - Fouled plug may be caused by:
     - Retarded ignition timing
     - Oil in combustion chamber
     - Incorrect spark plug gap
     - Plug heat range too cold
     - Excessive idling/low speed running
     - Clogged air cleaner element
     - Deteriorated ignition coils

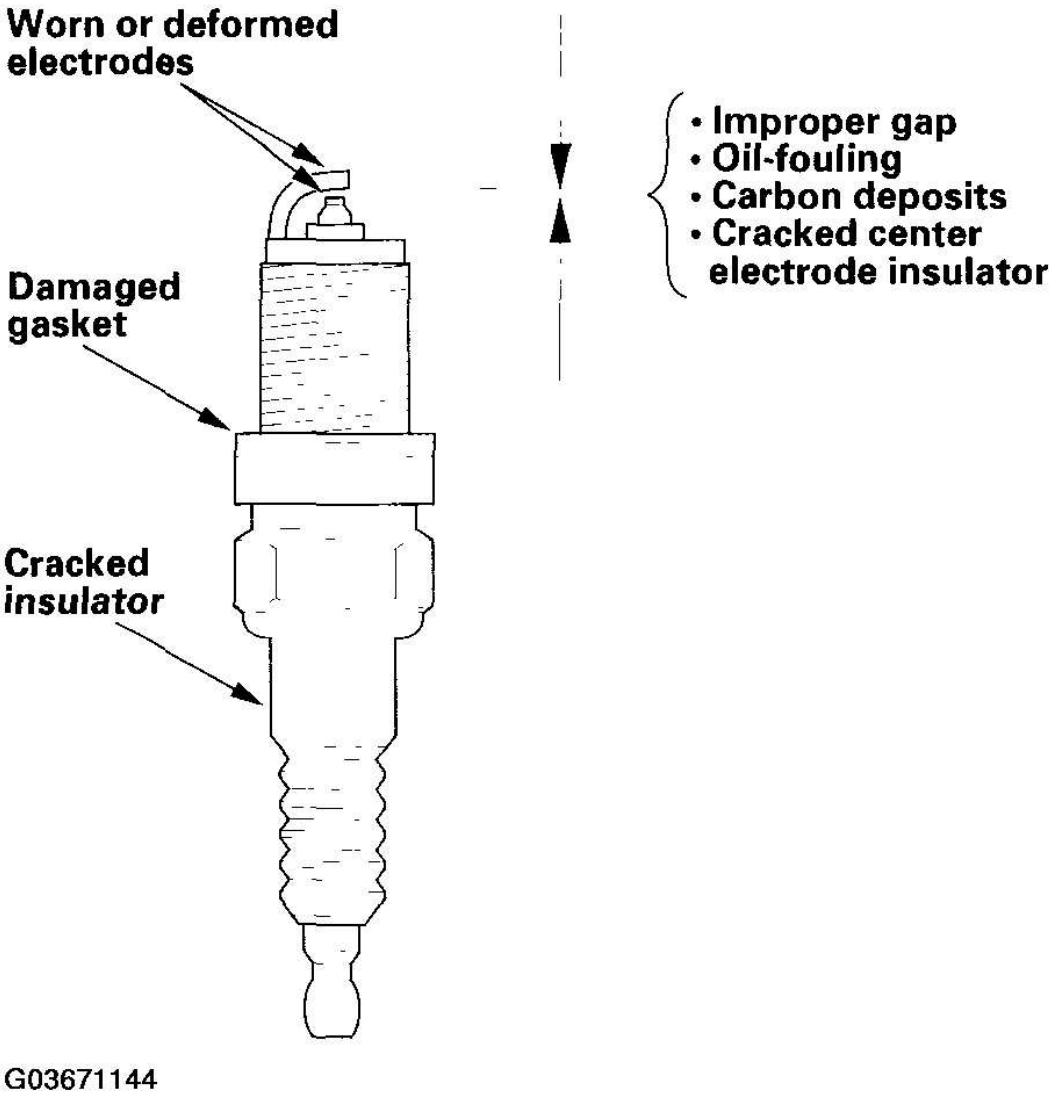


Fig. 12: Inspecting Electrodes And Ceramic Insulator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. If the spark plug electrode is dirty or contaminated, clean the electrode with a plug cleaner.

NOTE:

- **Do not use a wire brush or scrape the iridium electrode since this will damage the electrode.**
- **When using a sand plaster spark plug cleaner, do**

not clean for more than 20 seconds to avoid damaging the electrode.

3. Do not adjust the gap (A) of iridium tip plugs; replace the spark plug if the gap is out of specification.

   Electrode Gap

   Standard (New): 1.0-1.1 mm (0.039-0.043 in.)

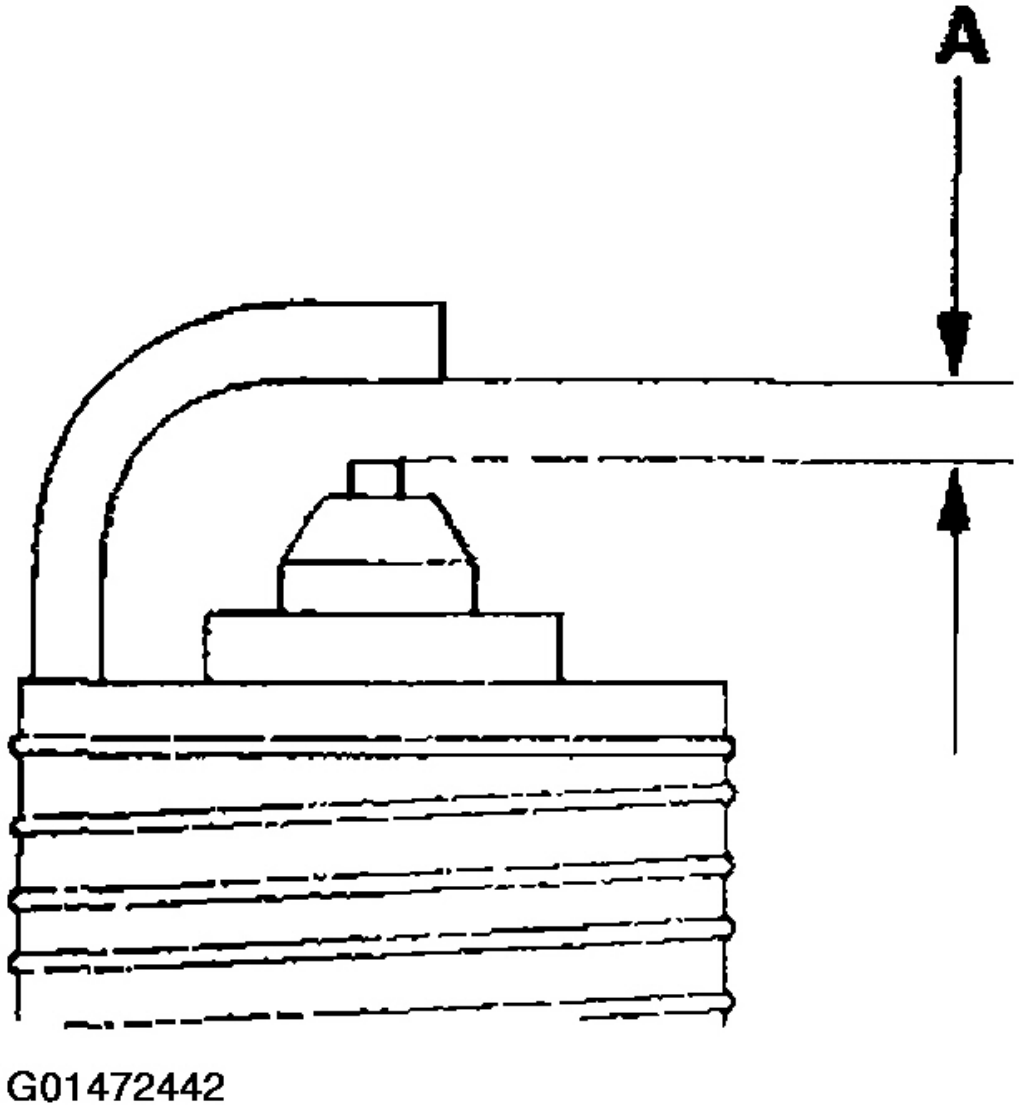


Fig. 13: Inspecting Spark Plug Gap
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Replace the plug at the specified interval or if the center electrode is rounded (A). Use only the spark plugs listed.

Spark Plugs

NGK: IZFR6K11

DENSO: SKJ20DR-M11

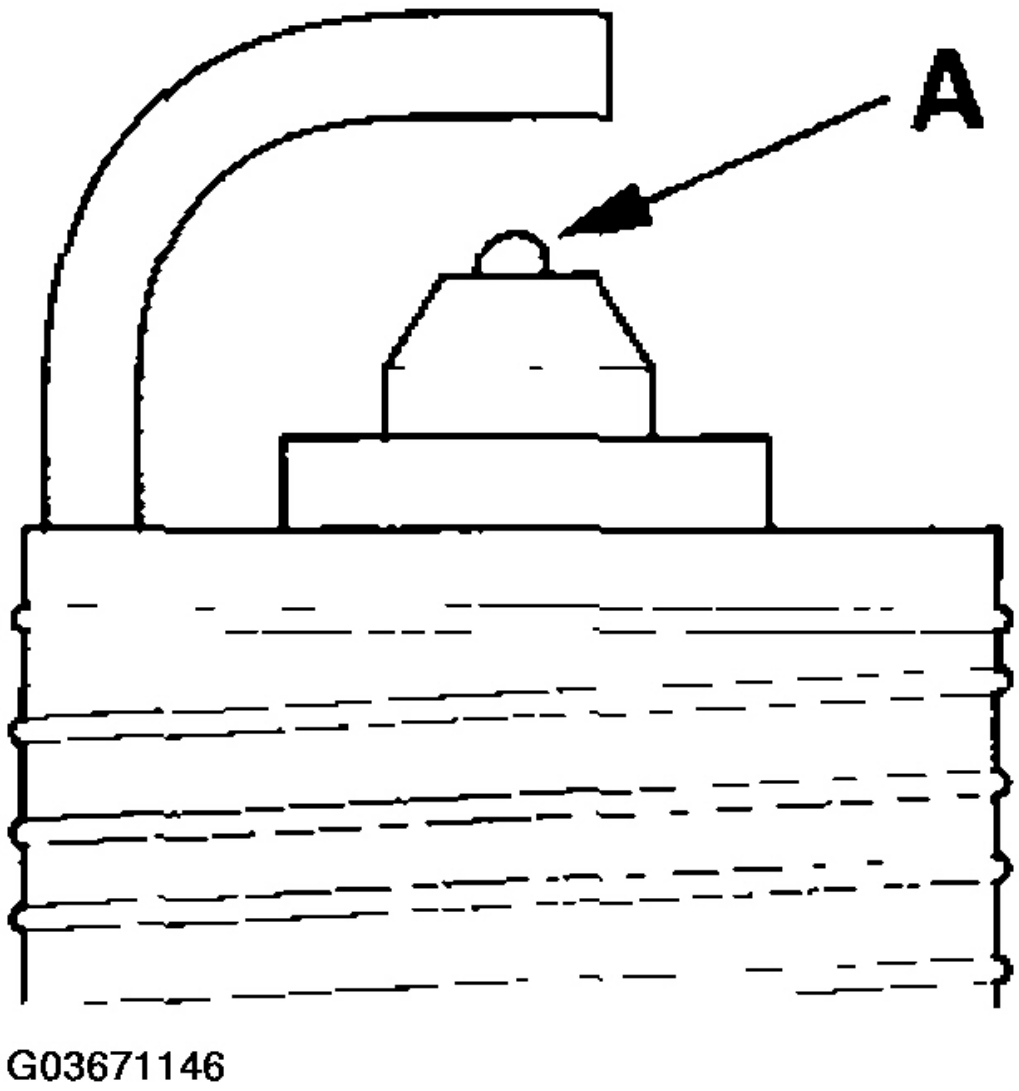


Fig. 14: Inspecting Spark Plug Center Electrode
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Apply a small amount of anti-seize compound to the plug threads, and screw

the plugs into the cylinder head, finger-tight. Then torque them to 18N.m (1.8kgf.m, 13 lbf.ft).

2003-07 ENGINE

Ignition System - Accord

COMPONENT LOCATION INDEX

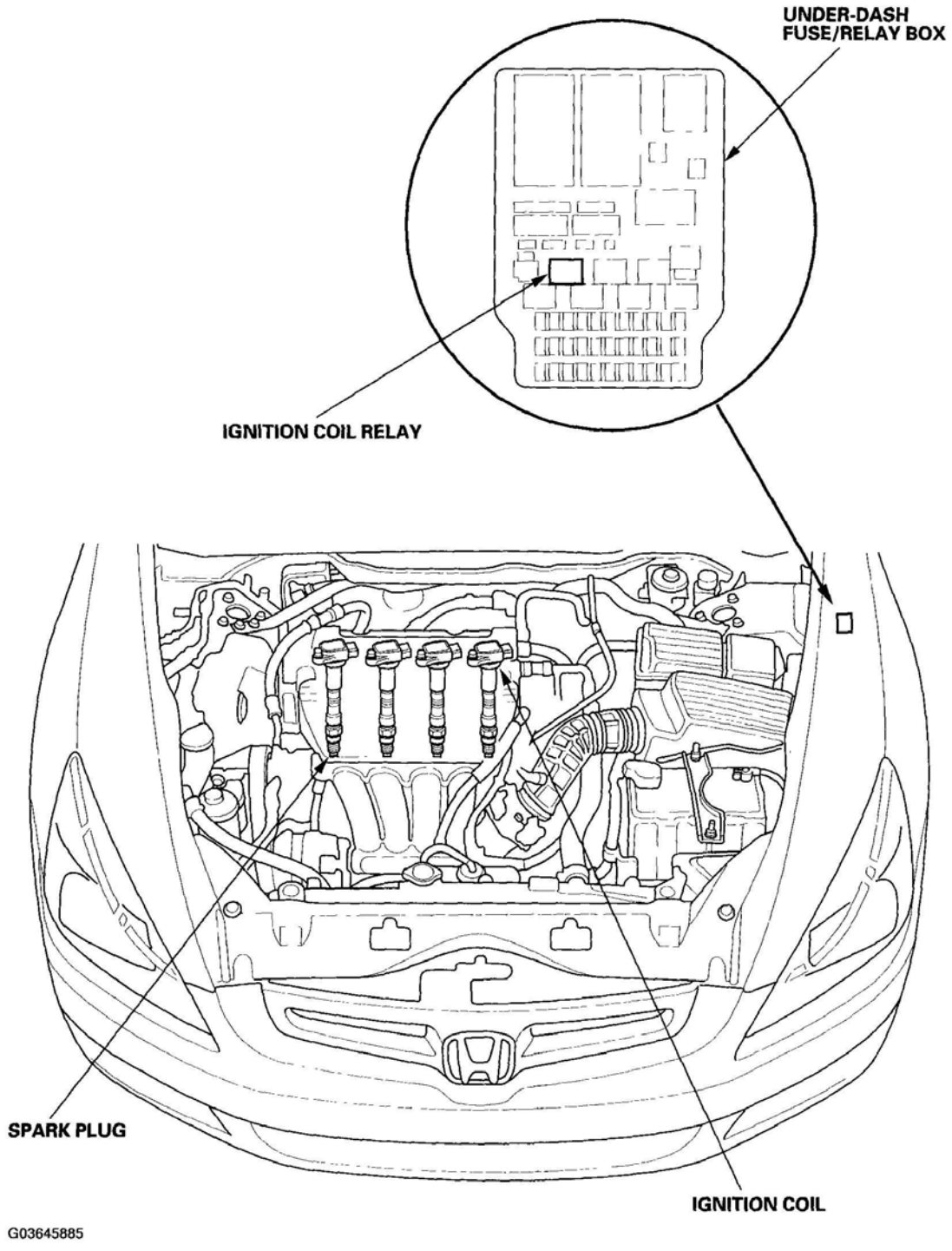


Fig. 1: Identifying Ignition System Component Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

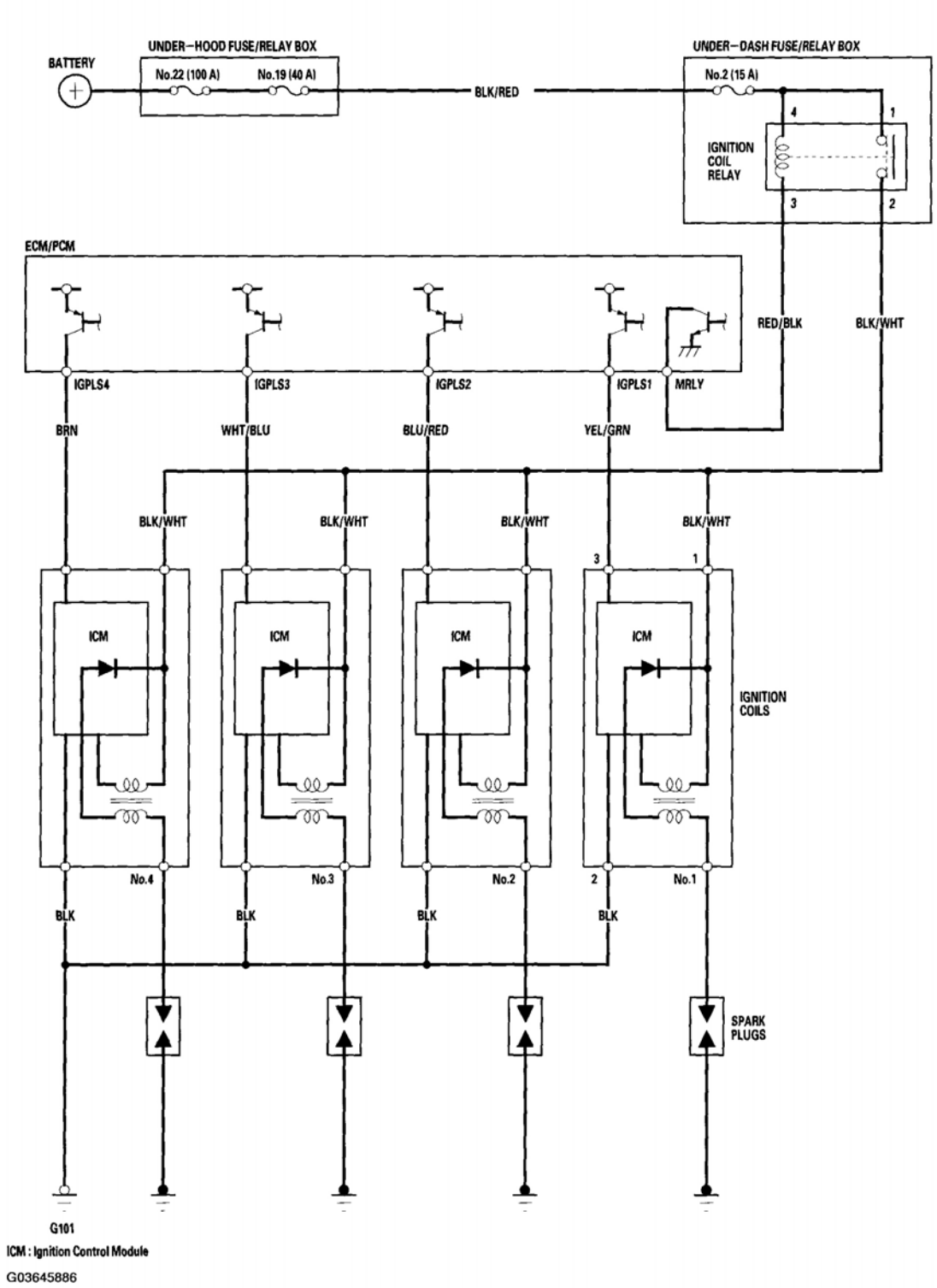
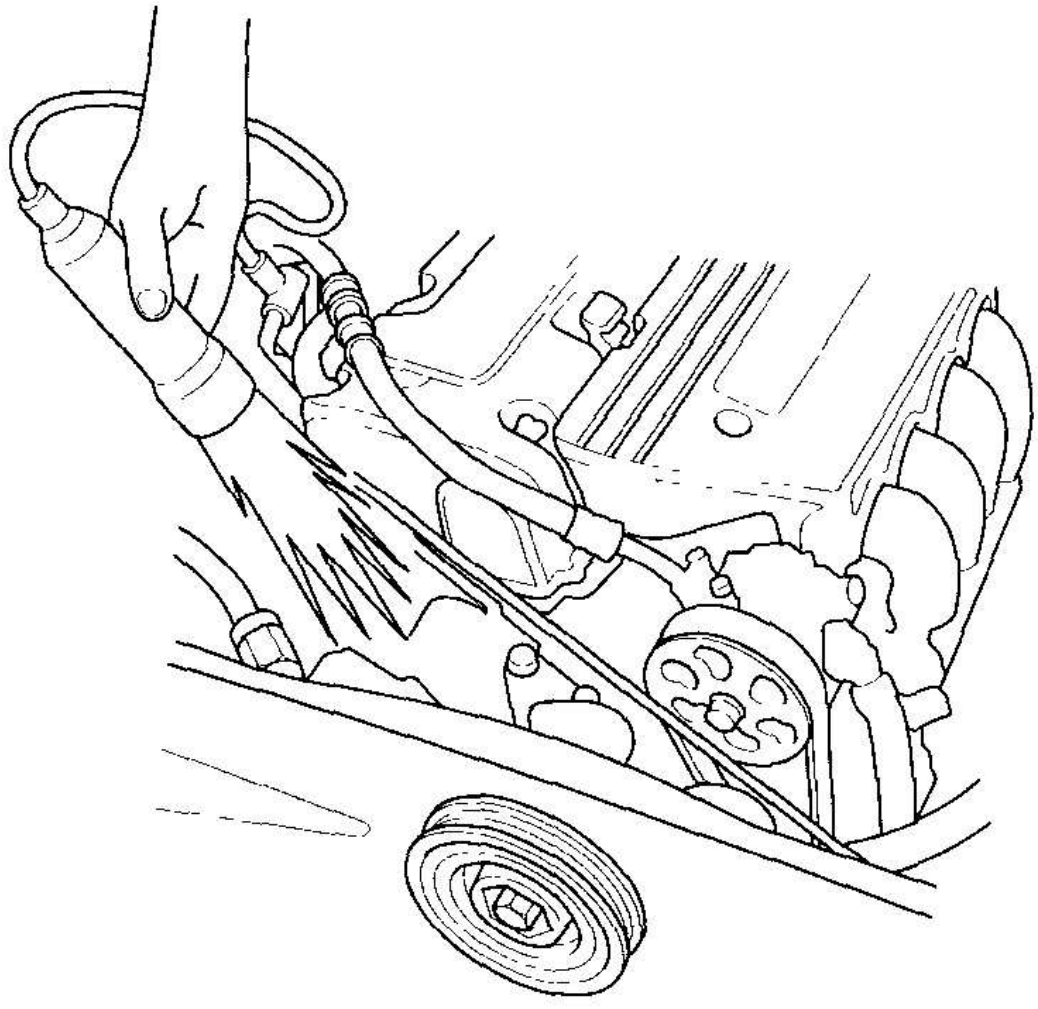


Fig. 2: Ignition System Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

IGNITION TIMING INSPECTION

1. Connect the Honda Diagnostic System (HDS) to the data link connector (DLC) (see step 2 on **HOW TO USE THE HDS (HONDA DIAGNOSTIC SYSTEM)**), and check for DTCs. If a DTC is present, diagnose and repair the cause before inspecting the ignition timing.
2. Start the engine. Hold the engine at 3,000 rpm with no load (in Neutral) until the radiator fan comes on, then let it idle.
3. Check the idle speed (see **IDLE SPEED INSPECTION**).
4. Select "SCS" mode using the HDS.
5. Free the service loop from the wire harness, then connect the timing light to the service loop.



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Fig. 3: Connecting Timing Light To Service Loop
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Aim the light toward the pointer (A) on the cam chain case. Check the ignition timing under a no load condition (headlights, blower fan, rear window defogger, and air conditioner are turned off).

Ignition Timing
M/T: 8°±2° BTDC (RED mark (B)) at idle in Neutral
A/T: 8°±2° BTDC (RED mark (B)) at idle in Park or Neutral

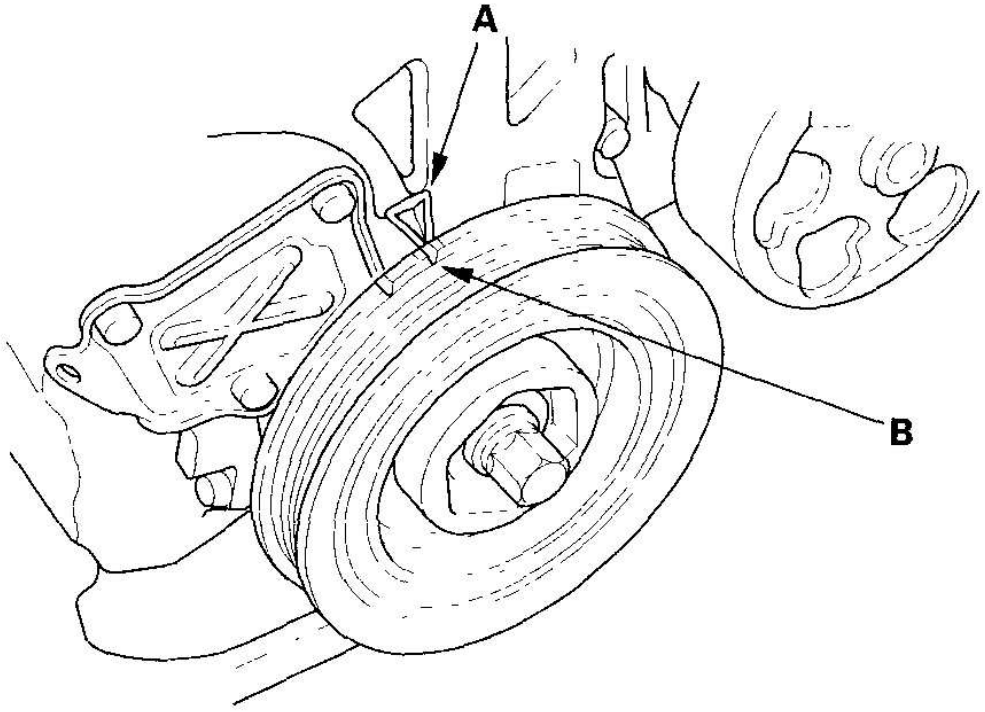


Fig. 4: Aiming Pointer On Cam Chain Case
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. If the ignition timing differs from the specification, check the cam timing. If the cam timing is OK, update the engine control module (ECM)/ powertrain control module (PCM) if it does not have the latest software (see **UPDATING THE ECM/PCM**), or substitute a known-good ECM/PCM (see **SUBSTITUTE THE ECM/PCM**), then recheck. If the system works properly, and the ECM/PCM was substituted, replace the original ECM/PCM (see **ECM/PCM REPLACEMENT**).
8. Disconnect the HDS and the timing light.

9. Secure the service loop to the wire harness with wire ties.

IGNITION COIL REMOVAL/INSTALLATION

1. Remove the ignition coil cover (A), disconnect the ignition coil connectors (B), then remove the ignition coils (C).

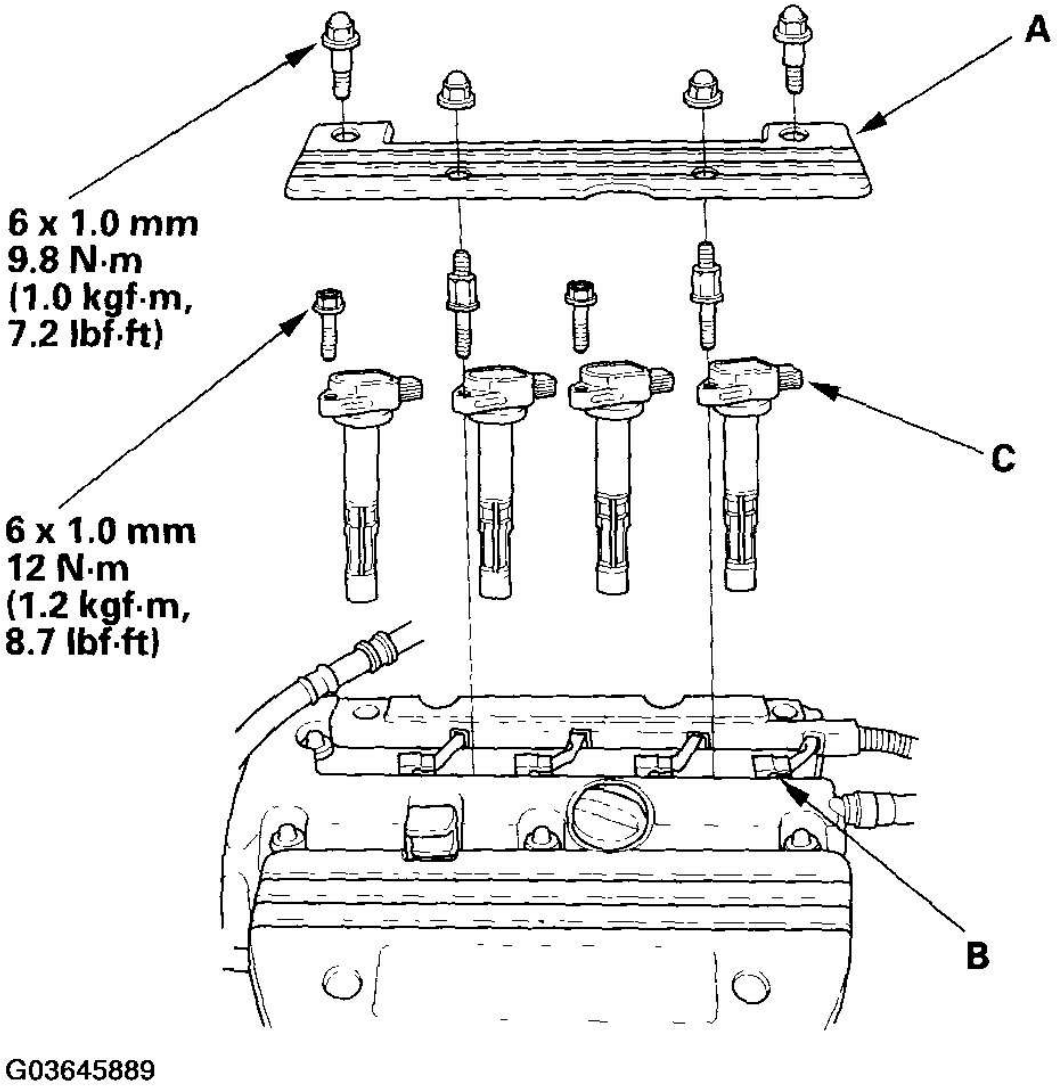


Fig. 5: Removing Ignition Coil Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the ignition coils in the reverse order of removal.

IGNITION COIL RELAY CIRCUIT TROUBLESHOOTING

1. Check the No. 2 (15A) fuse in the under-dash fuse/relay box.

   Is the fuse OK?

   YES - Go to step 2.

   NO - Replace the fuse.

2. Remove the ignition coil relay from the under-dash fuse/relay box, and test it (see **POWER RELAY TEST**).

   Is the relay OK?

   YES - Go to step 3.

   NO - Replace the ignition coil relay.

3. Measure the voltage between ignition coil relay 4P socket terminal No. 1 and body ground, then terminal No. 4 and body ground.

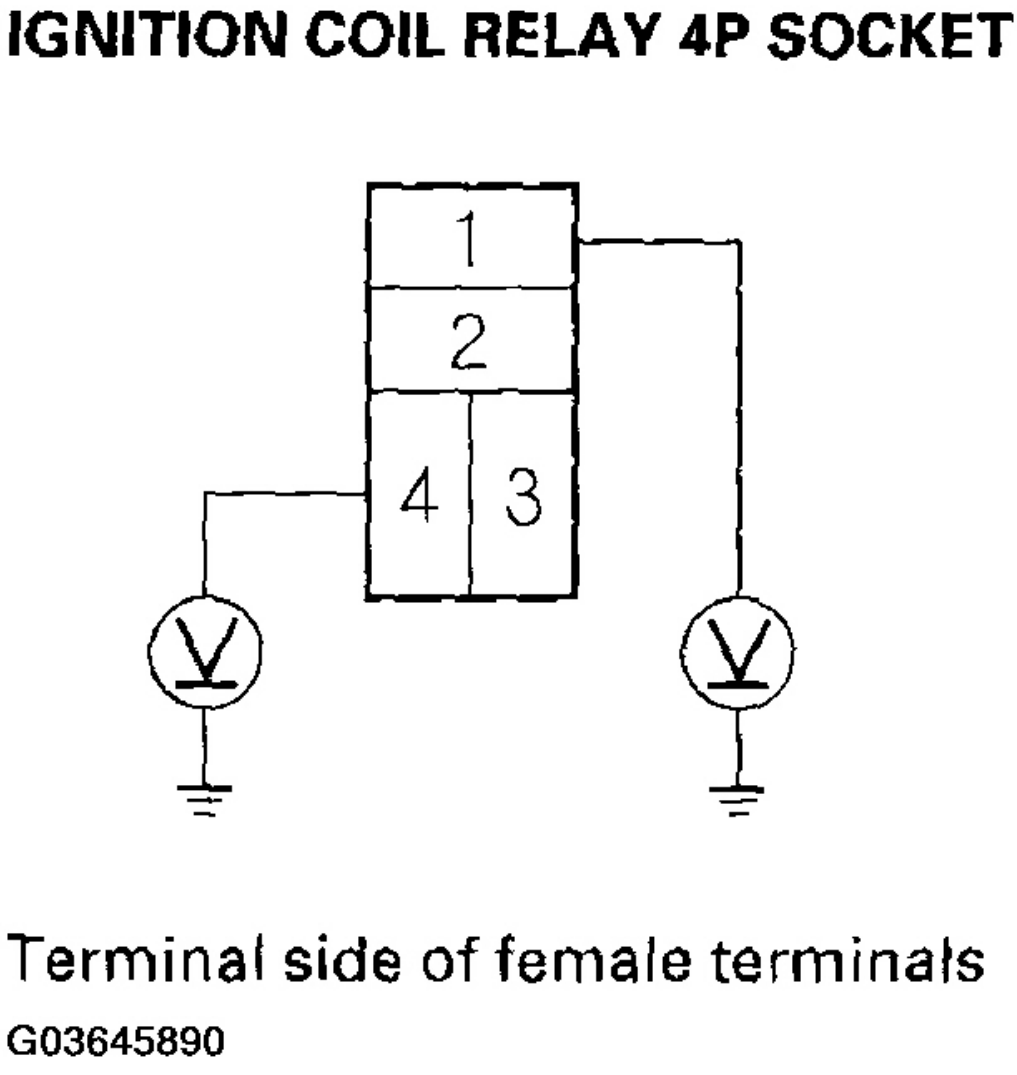


Fig. 6: Measuring The Voltage Between Ignition Coil Relay 4P Socket Terminal No. 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 4.
NO - Replace the under-dash fuse/relay box.

4. Check for continuity between ignition coil relay 4P socket terminal No. 2 and the No. 1 ignition coil 3P connector terminal No. 3.

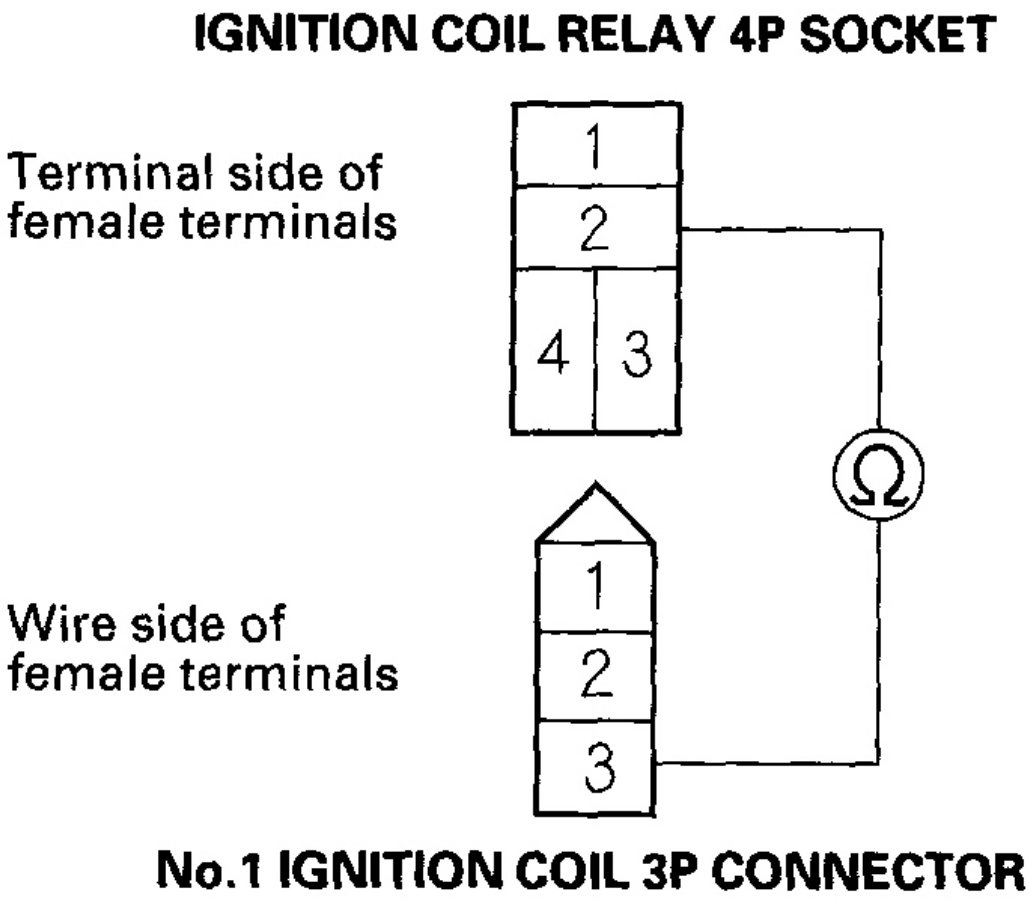


Fig. 7: Checking Continuity Between Ignition Coil Relay 4P Socket Terminal And Ignition Coil 3P Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 5.

NO - Repair an open in the wire between ignition coil relay 4P socket

terminal No. 2 and ignition coil 3P connector terminal No. 3.

5. Check for continuity between ignition coil relay 4P socket terminal No. 3 and body ground.

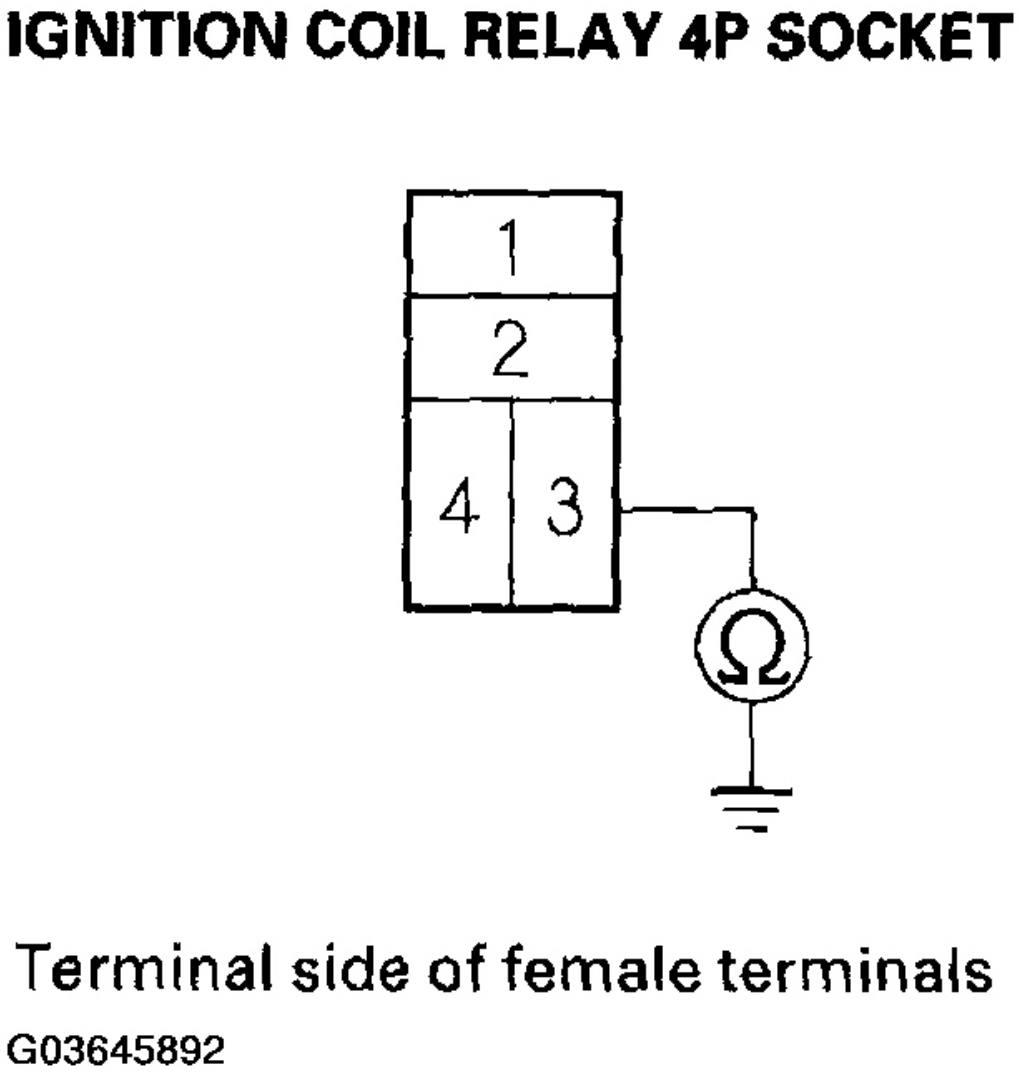


Fig. 8: Checking Continuity Between Ignition Coil Relay 4P Socket Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair a short in the wire between ignition coil relay 4P socket terminal No. 3 and the ECM/PCM (E7).

NO - Go to step 6.

6. Check for continuity between ignition coil relay 4P socket terminal No. 3 and engine control module (ECM)/powertrain control module (PCM) connector terminal E7.

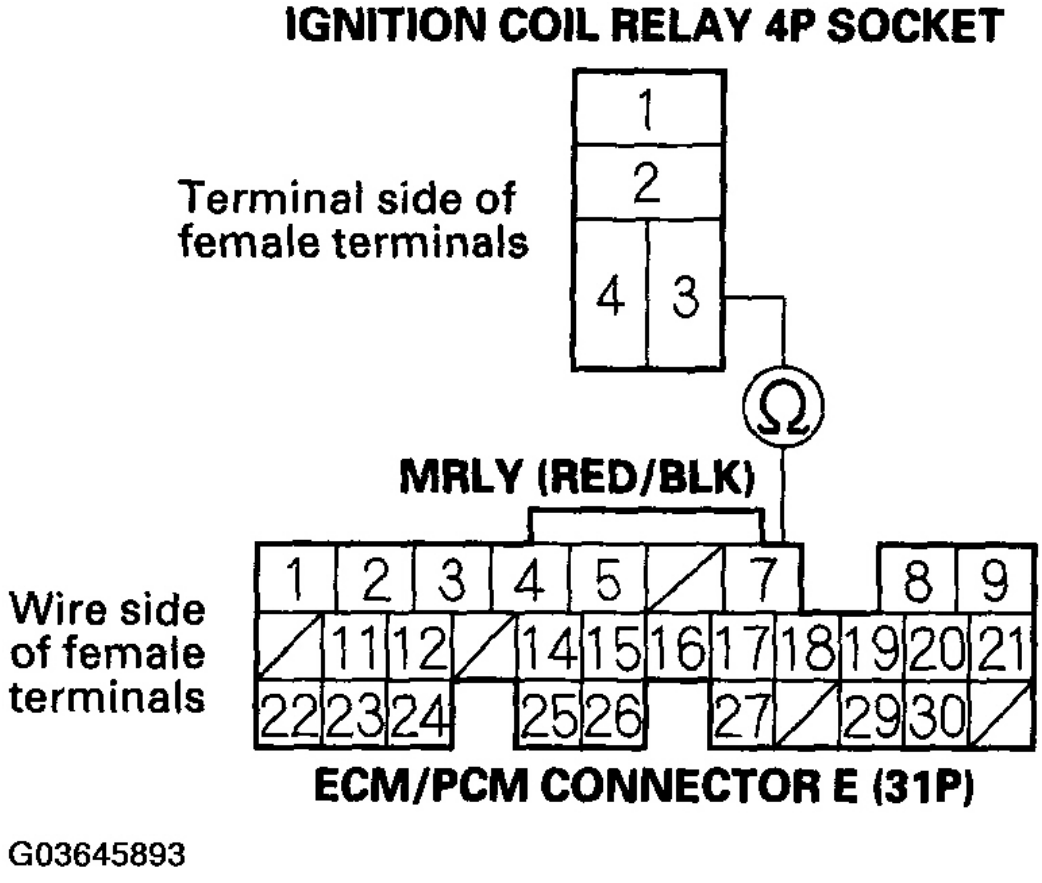


Fig. 9: Checking Continuity Between Ignition Coil Relay 4P Socket Terminal And Engine Control Module Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - The system is OK at this time. Check for loose or poor connections at the ignition coil relay and the ECM/PCM (E7).

NO - Repair an open in the wire between ignition coil relay 4P socket terminal No. 3 and the ECM/PCM (E7).

SPARK PLUG INSPECTION

1. Inspect the electrodes and ceramic insulator.
   - Burned or worn electrodes may be caused by:
     -Advanced ignition timing
     -Loose spark plug
     -Plug heat range too hot
     -Insufficient cooling
   - Fouled plug may be caused by:
     -Retarded ignition timing
     -Oil in combustion chamber
     -Incorrect spark plug gap
     -Plug heat range too cold
     -Excessive idling/low speed running
     -Clogged air cleaner element
     -Deteriorated ignition coils

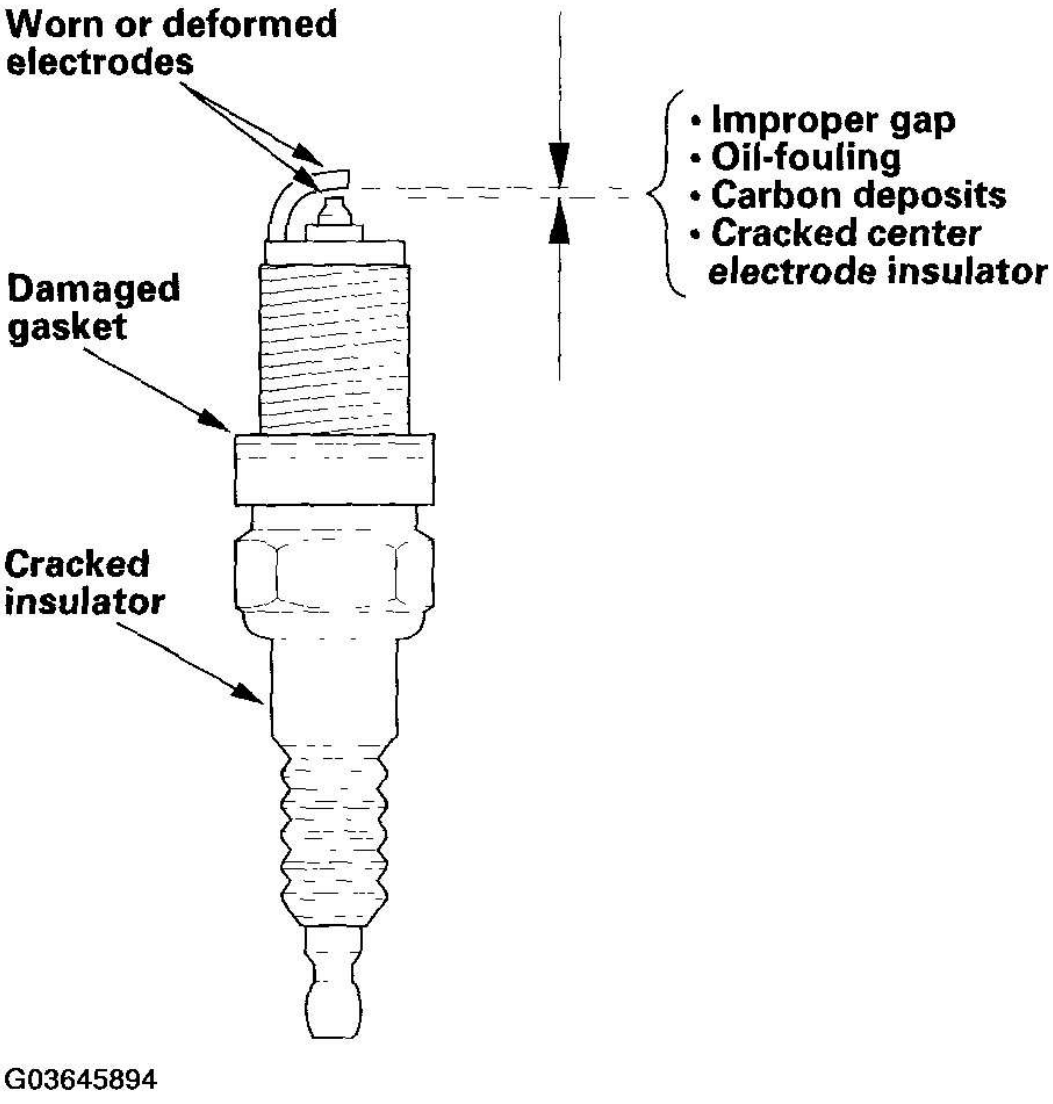


Fig. 10: Inspecting The Electrodes And Ceramic Insulator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. If the spark plug electrode is dirty or contaminated, clean the electrode with a plug cleaner.

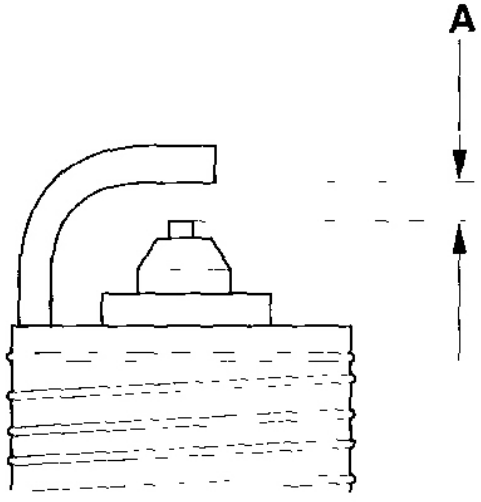
NOTE:

- **Do not use a wire brush or scrape the iridium electrode since this will damage the electrode.**
- **When using a sand blaster spark plug cleaner, do**

not clean for more than 20 seconds to avoid damaging the electrode.

3. Do not adjust the gap (A) or iridium tip plugs; replace the spark plug if the gap is out of specification.

Electrode Gap
Except LX-SULEV, EX-SULEV, EX-L-SULEV:
Standard (New): 1.0—1.1 mm (0.039—0.043 in.)
LX-SULEV, EX-SULEV, EX-L-SULEV:
Standard (New): 1.2—1.3 mm (0.047—0.051 in.)

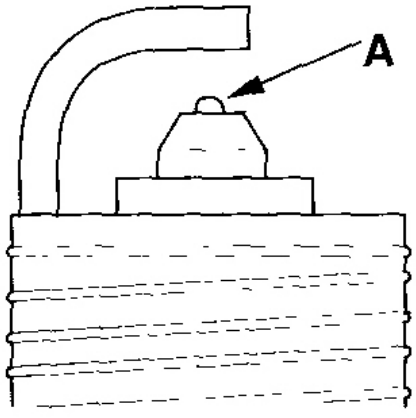


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Fig. 11: Identifying Gap Of Iridium Tip Plugs
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Replace the plug at the specified interval, if the center electrode is rounded (A). Use only the spark plugs listed.

Spark Plugs
Except LX-SULEV, EX-SULEV, EX-L-SULEV:
IZFR6K11 (NGK)
SKJ20DR-M11 (DENSO)
LX-SULEV, EX-SULEV, EX-L-SULEV:
IZFR6K13 (NGK)
SKJ20DR-M13 (DENSO)



G03645896

Fig. 12: Replacing Plug
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Apply a small amount of anti seize compound to the plug threads, and screw the plugs into the cylinder head, finger-tight. Torque them to 18 N•m (1.8 kgf •m, 13 ibf•ft

2003-07 ENGINE

Intake Manifold And Exhaust Systems - Accord (V6)

INTAKE MANIFOLD REMOVAL AND INSTALLATION

EXPLODED VIEW

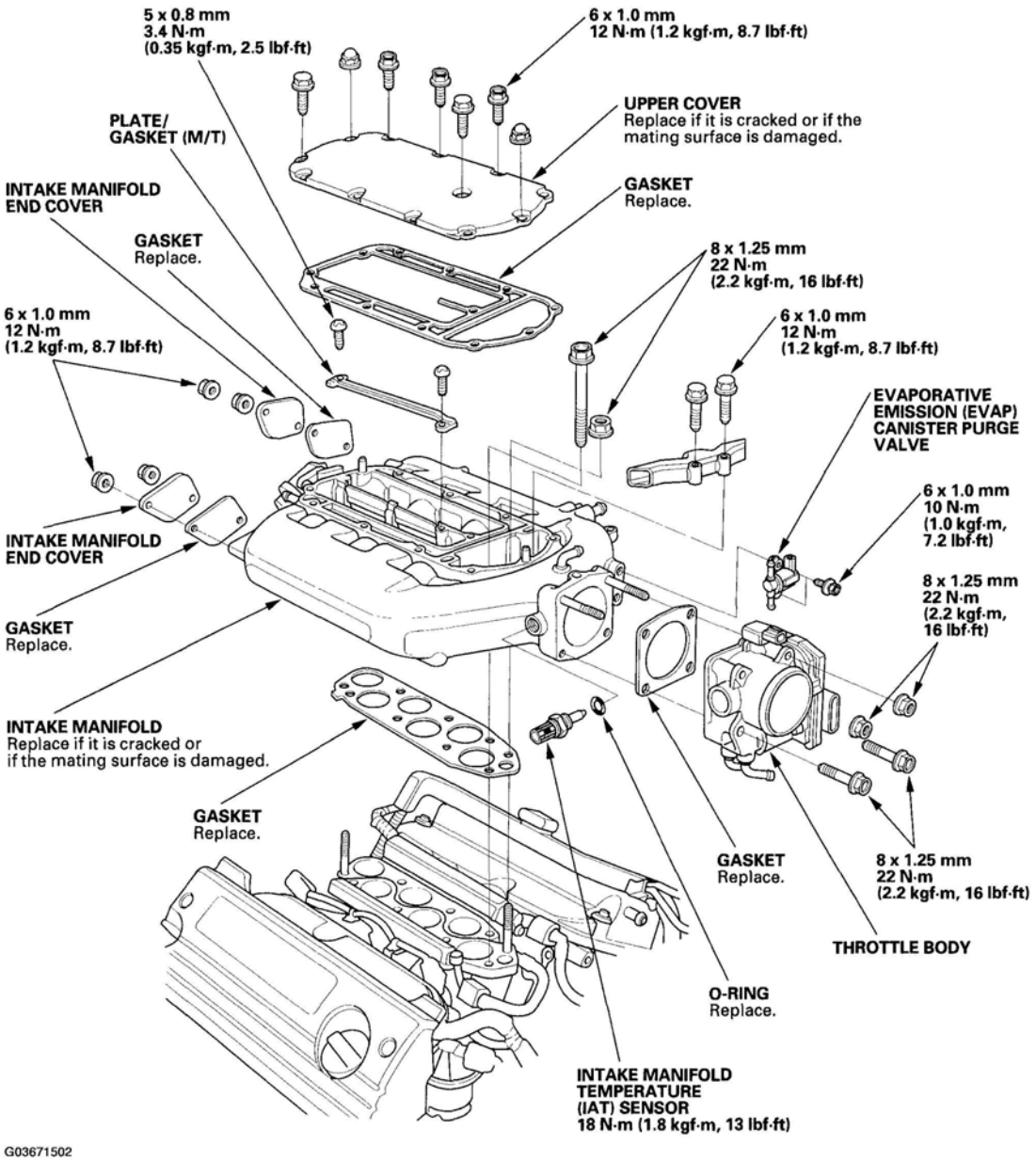


Fig. 1: Exploded View Of Intake Manifold

Courtesy of AMERICAN HONDA MOTOR CO., INC.

REMOVAL

1. Remove the ignition coil cover (see **IGNITION COIL REMOVAL/INSTALLATION**).
2. Remove the breather pipe, then remove the air intake duct.
3. Remove the positive crankcase ventilation (PCV) hose (A), brake booster vacuum hose (B), evaporative emission (EVAP) canister hose (C), and vacuum hose (D).

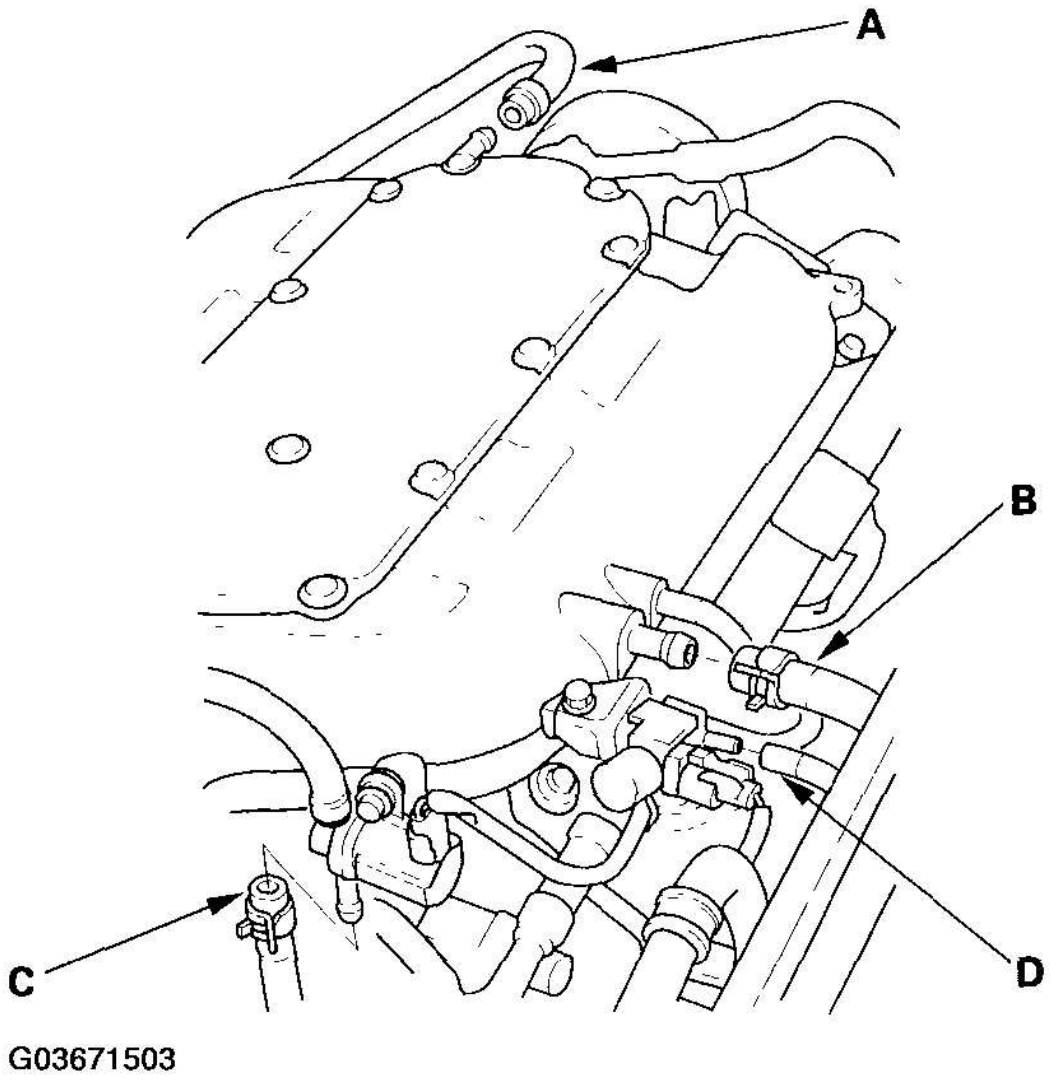


Fig. 2: Identifying PCV Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the water bypass hoses (A), and plug them.

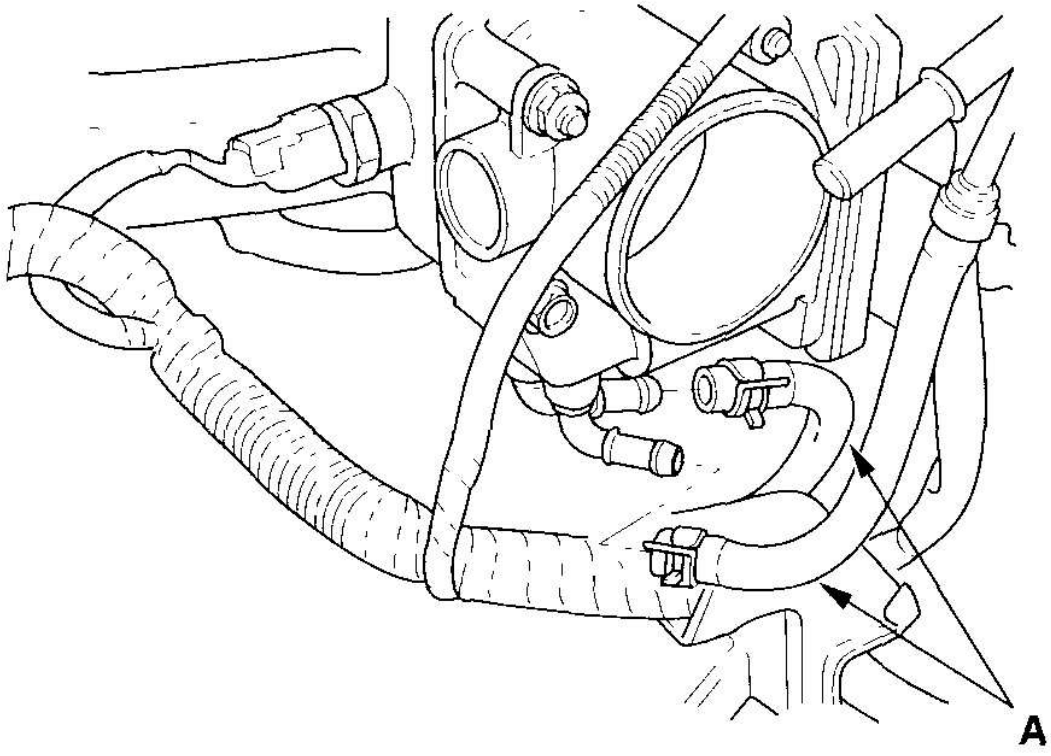


Fig. 3: Identifying Water Bypass Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove these engine wire harness connectors and wire harness clamps from the intake manifold.
   - Intake air temperature (IAT) sensor connector
   - Throttle actuator connector
   - Manifold absolute pressure (MAP) sensor connector
   - Evaporative emission (EVAP) canister purge valve connector
   - Engine mount control solenoid valve connector
   - Intake manifold tuning (IMT) (Intake manifold runner control (IMRC)) actuator connector (M/T)
6. Remove the upper cover mounting bolts and nuts sequentially in two or three steps, then remove the upper cover.

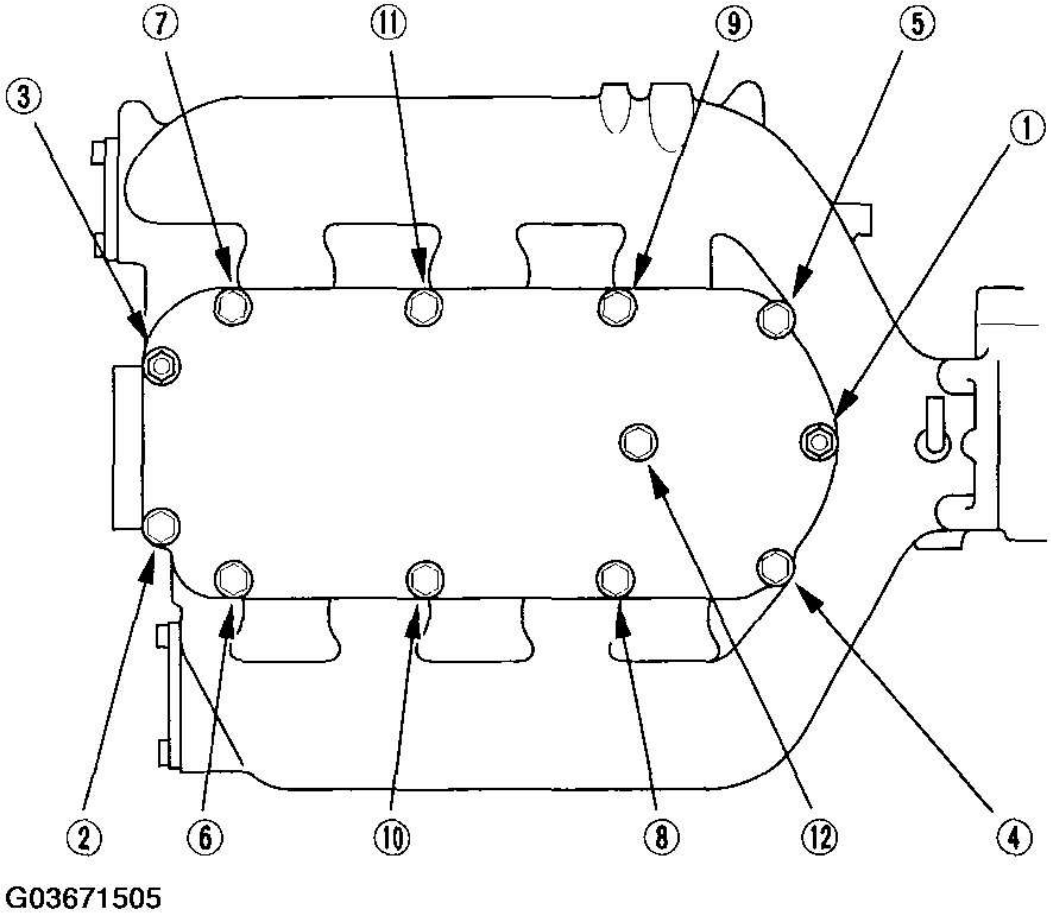


Fig. 4: Identifying Upper Cover Mounting Bolts And Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the intake manifold mounting bolts and nuts sequentially in two or three steps, then remove the intake manifold and spacer.

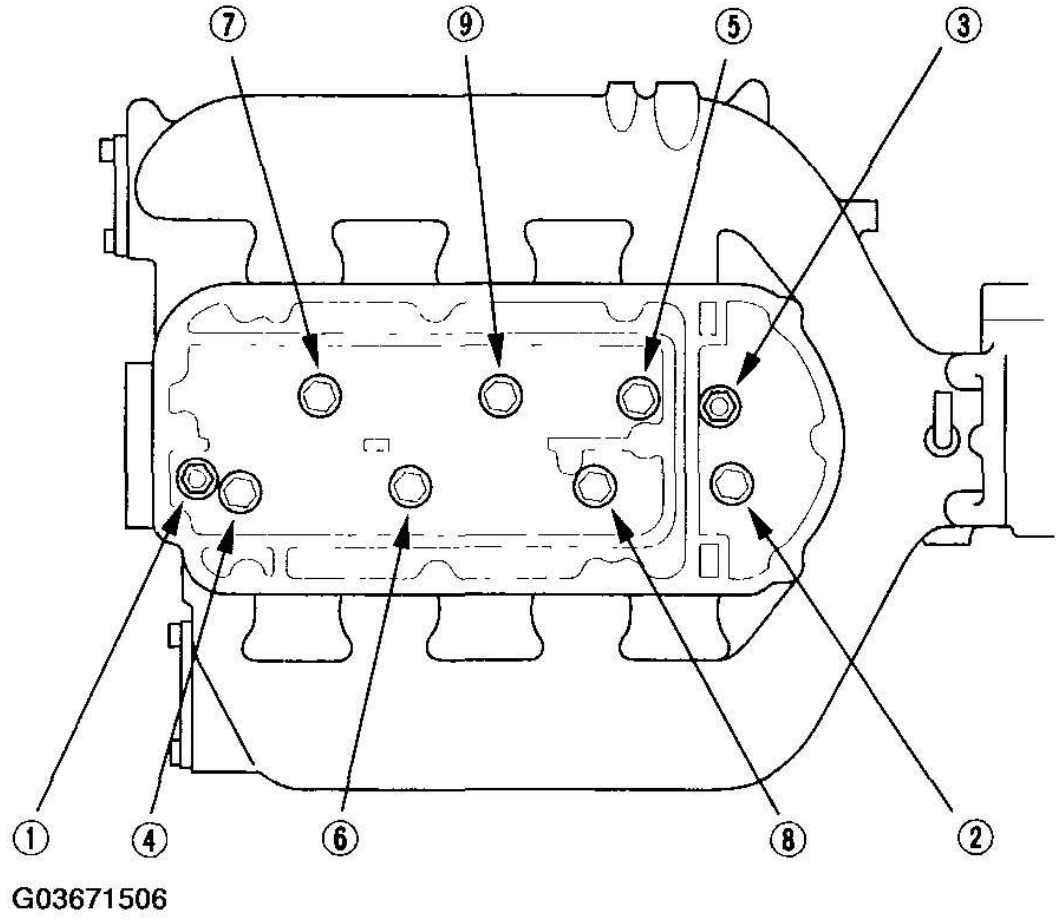


Fig. 5: Identifying Intake Manifold Mounting Bolts And Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the intake manifold.

INSTALLATION

1. Put a new gasket and the spacer on the injector base.
2. Install the intake manifold. Tighten the bolts and nuts sequentially in two or three steps. Always use a new intake manifold gasket.

Specified torque

8 x 1.25 mm: 22 N.m (2.2 kgf.m, 16 lbf.ft)

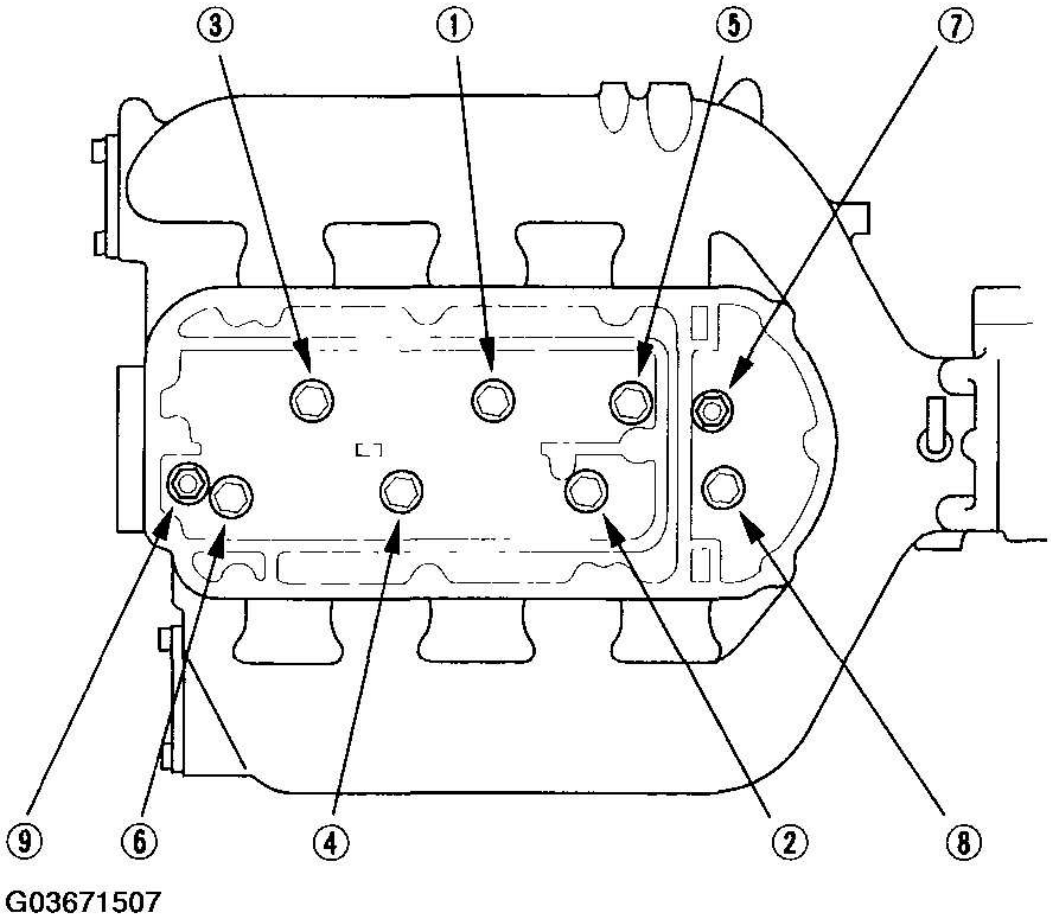


Fig. 6: Identifying Intake Manifold Bolts And Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the upper cover. Tighten the bolts and nuts sequentially in two or three steps. Always use a new gasket.

   Specified torque

   6 x 1.0 mm: 12 N.m (1.2 kgf.m, 8.7 lbf.ft)

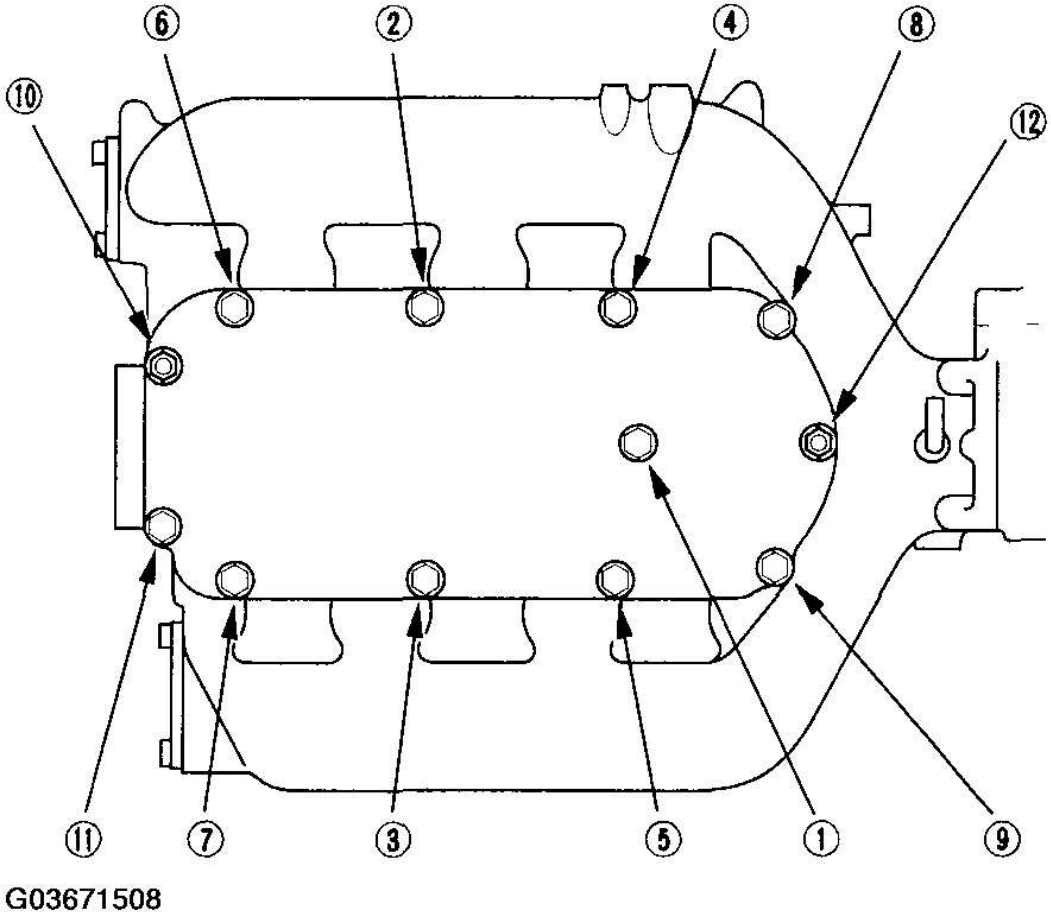


Fig. 7: Identifying Intake Manifold Upper Cover Bolts And Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the water bypass hoses (A).

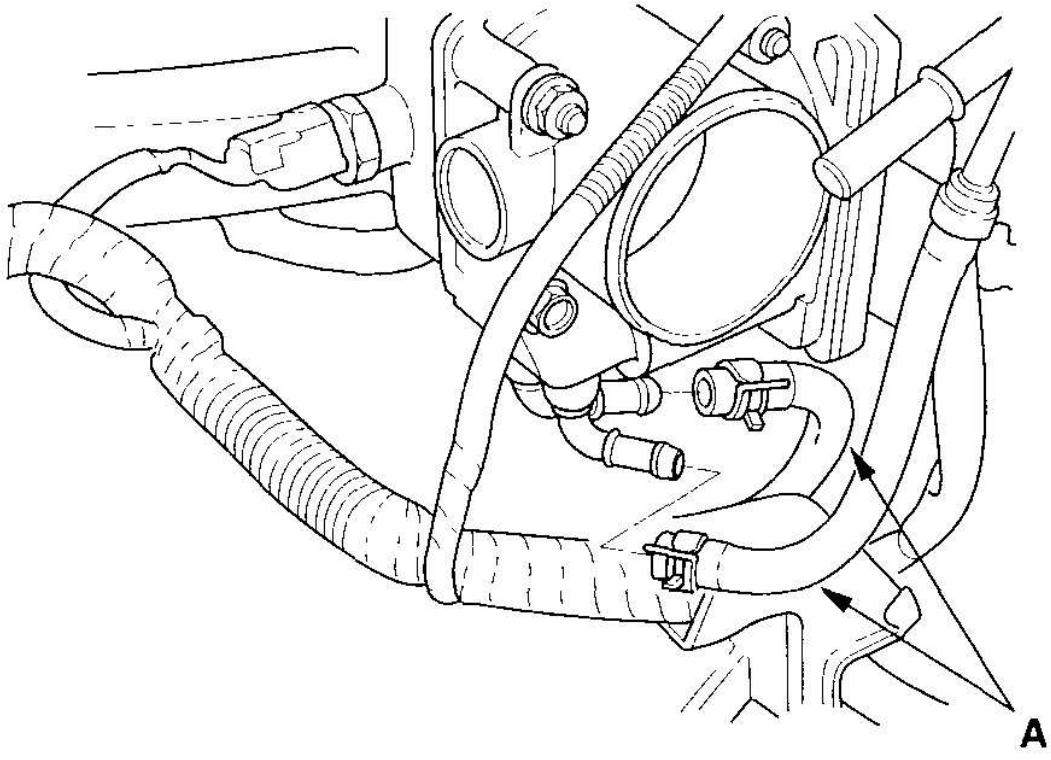


Fig. 8: Identifying Water Bypass Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Connect the engine wire harness connectors, and install the wire harness clamps to the intake manifold.
    - Intake air temperature (IAT) sensor connector
    - Throttle actuator connector
    - Manifold absolute pressure (MAP) sensor connector
    - Evaporative emission (EVAP) canister purge valve connector
    - Engine mount control solenoid valve connector
    - Intake manifold tuning (IMT) (Intake manifold runner control (IMRC)) actuator connector (M/T)
6. Install the positive crankcase ventilation (PCV) hose (A), brake booster vacuum hose (B), evaporative emission (EVAP) canister hose (C), and vacuum

hose (D).

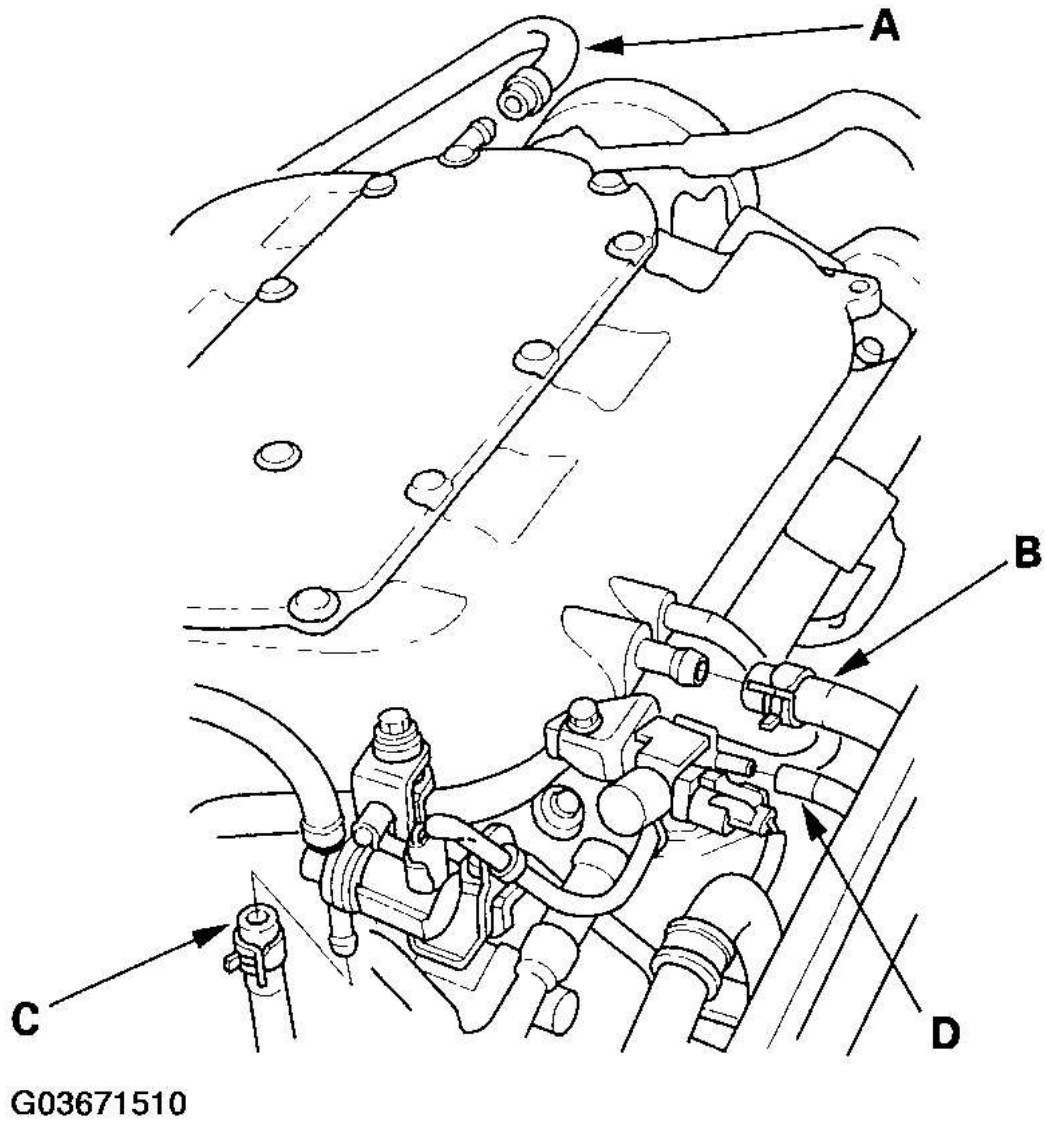


Fig. 9: Identifying PCV Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the air intake duct, then install the breather pipe.
8. Clean up any spilled engine coolant.
9. After installation, check that all tubes, hoses, and connectors are installed

correctly.

10. Install the ignition coil cover (see **IGNITION COIL REMOVAL/INSTALLATION**).
11. Refill the radiator with engine coolant, then bleed air from the cooling system with the heater valve open (see step 8 **COOLANT REPLACEMENT**).

EXHAUST PIPE AND MUFFLER REPLACEMENT

NOTE: Use new gaskets and self-locking nuts when reassembling.

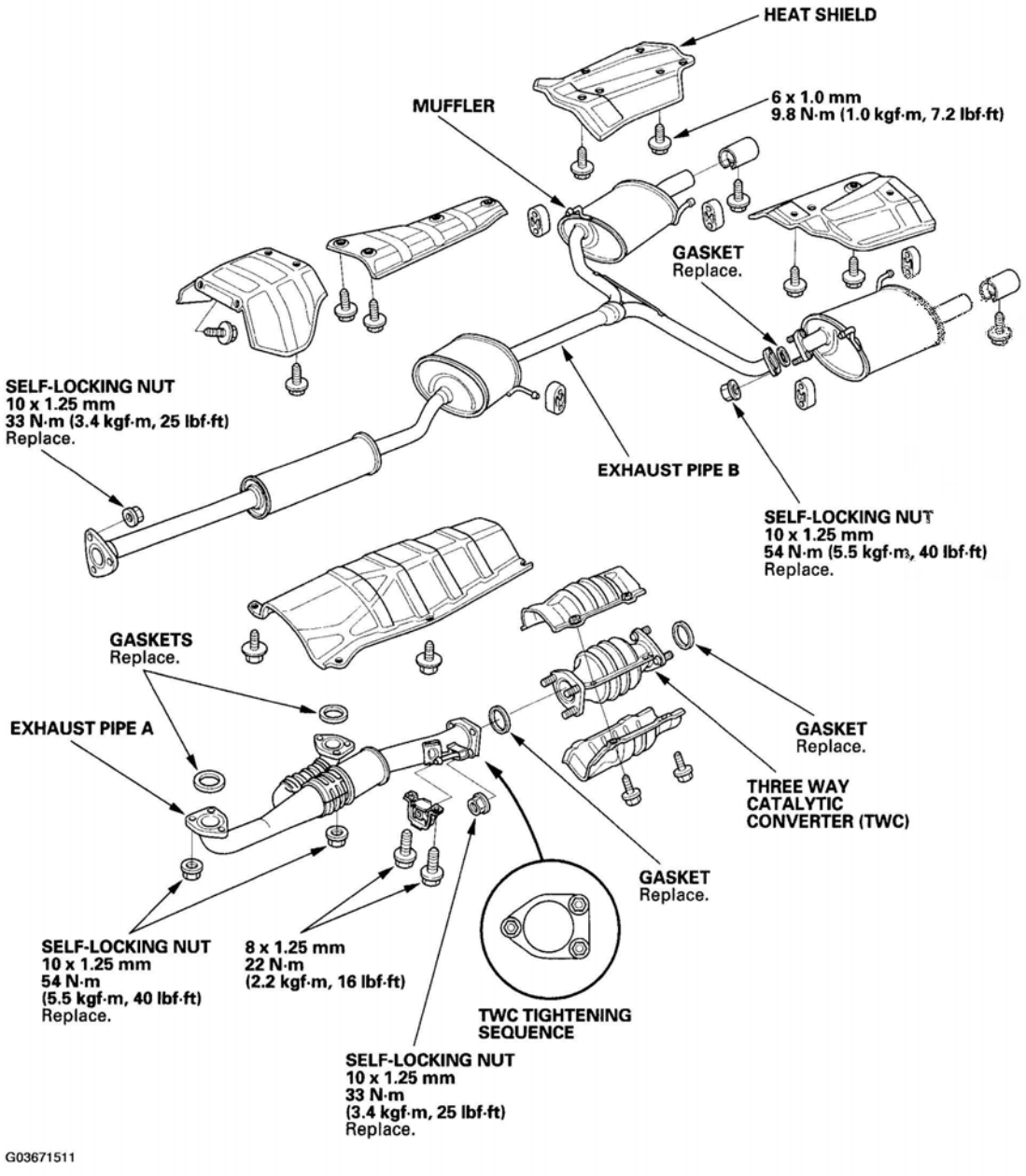


Fig. 10: Exploded View Of Exhaust Pipe And Muffler
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ENGINE

Intake Manifold And Exhaust System - Accord

INTAKE MANIFOLD REMOVAL AND INSTALLATION

EXPLODED VIEW

2003-2005 Models

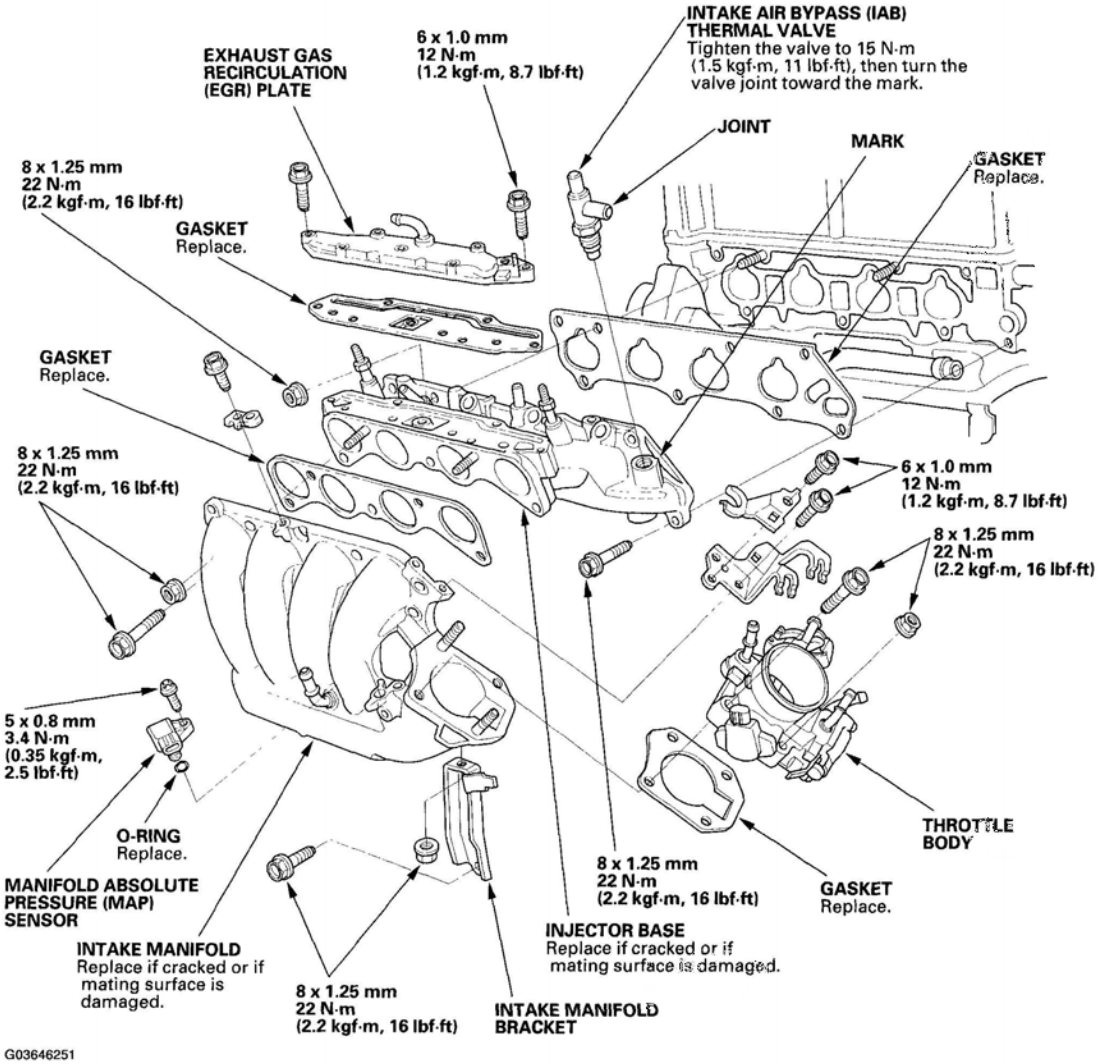


Fig. 1: Exploded View Of Intake Manifold '03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EXPLODED VIEW

2006 Model

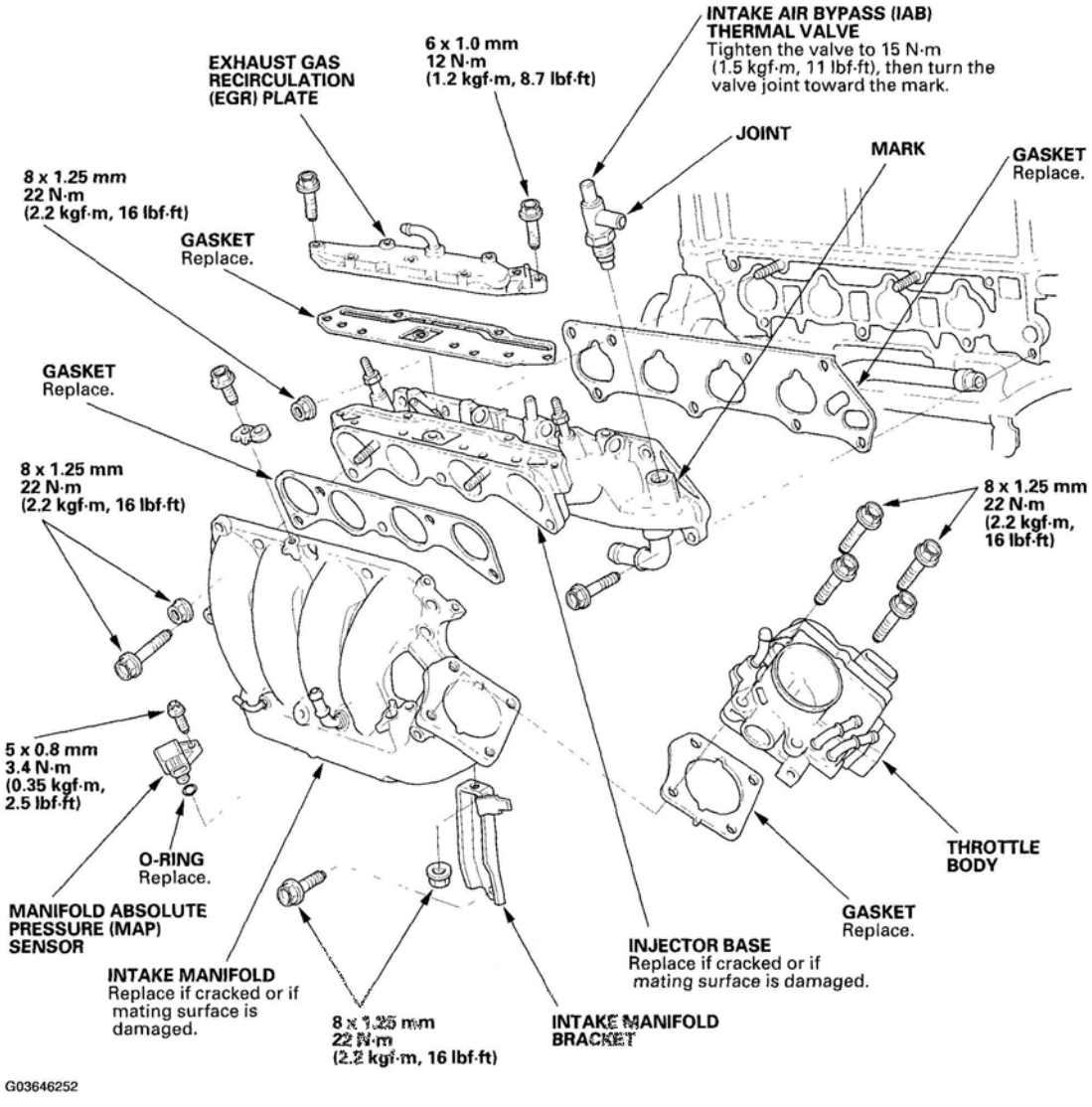


Fig. 2: Exploded View Of Intake Manifold ('06-07 Models) Courtesy of AMERICAN HONDA MOTOR CO., INC.

REMOVAL ('03-05 MODELS)

1. Disconnect the intake air temperature (IAT) sensor connector (A).

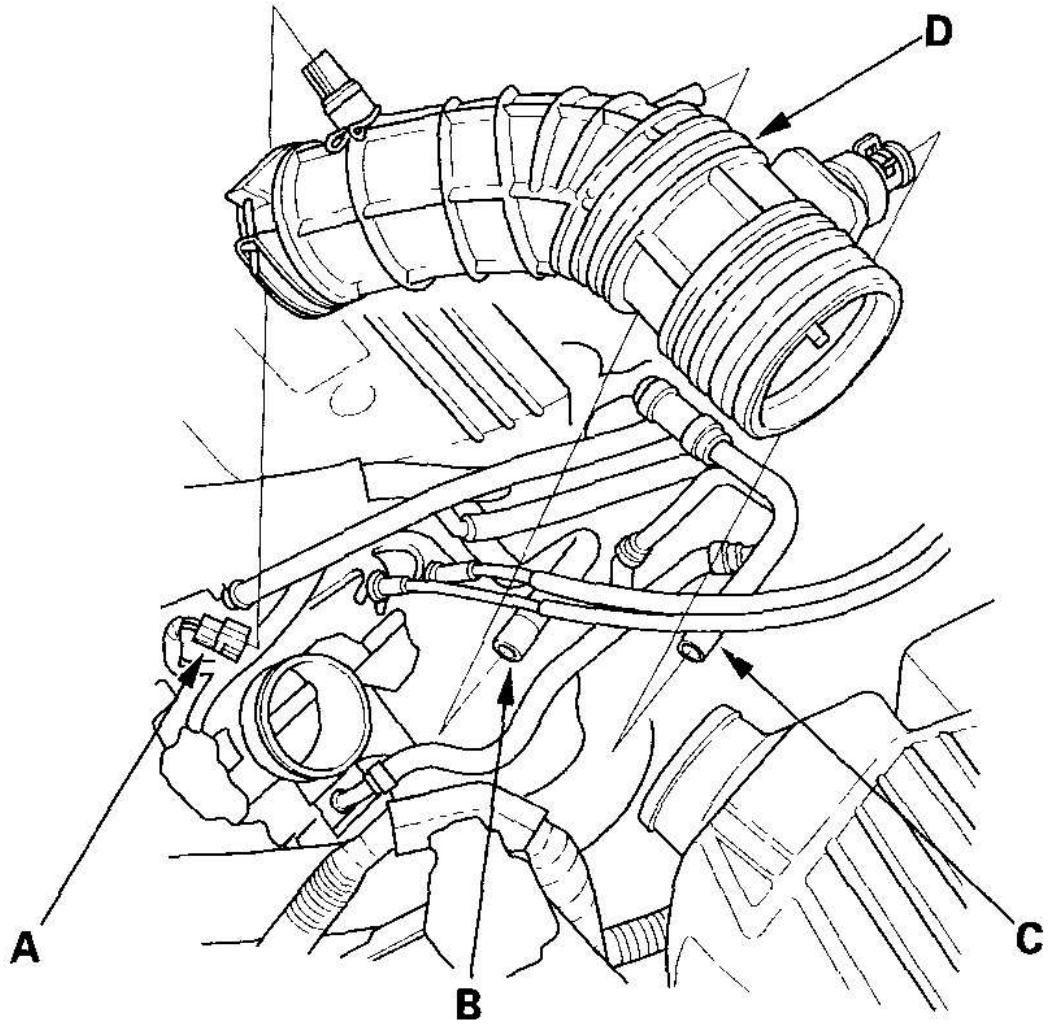
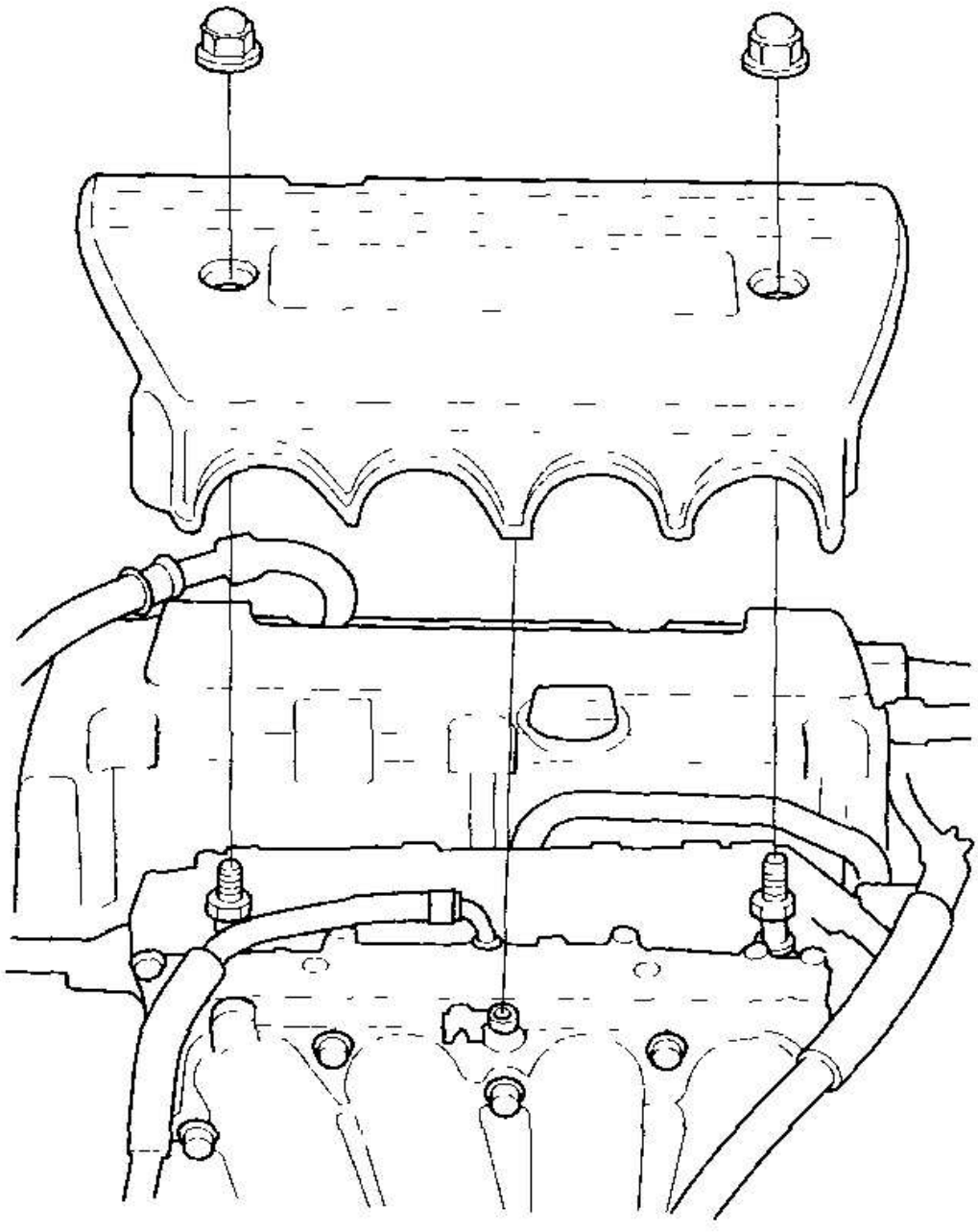


Fig. 3: Disconnecting Intake Air Temperature (IAT) Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the vacuum hose (B) and breather pipe (C), then remove the intake air duct (D).
3. Remove the engine cover.



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Fig. 4: Removing Intake Manifold Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the throttle cable (A) and cruise control actuator cable (B) by loosening the locknuts (C), then slipping the cable ends out of the accelerator linkage. Take care not to bend the cables when removing them. Always replace any kinked cable with a new one.

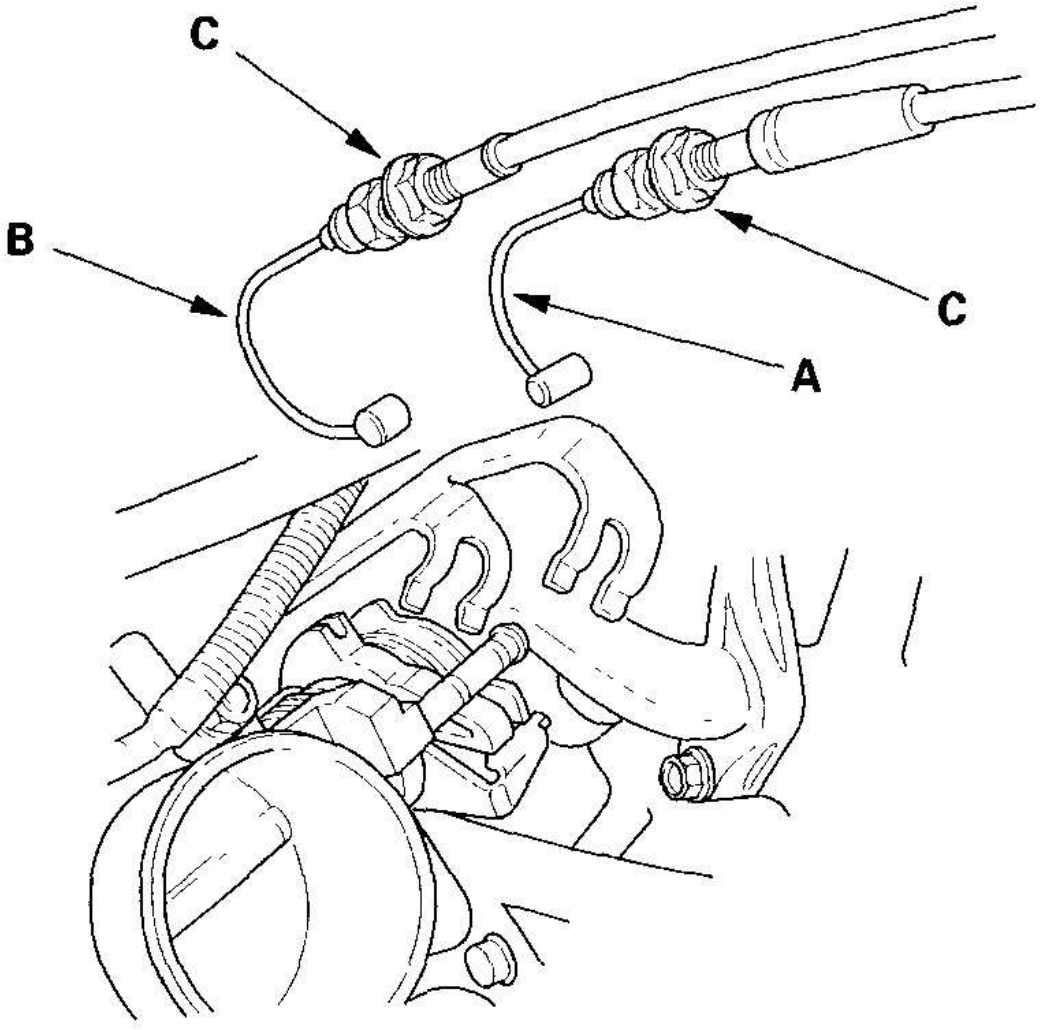


Fig. 5: Removing Throttle Cable And Cruise Control Actuator Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the evaporative emission (EVAP) canister hose (A) and brake booster

vacuum hose (B).

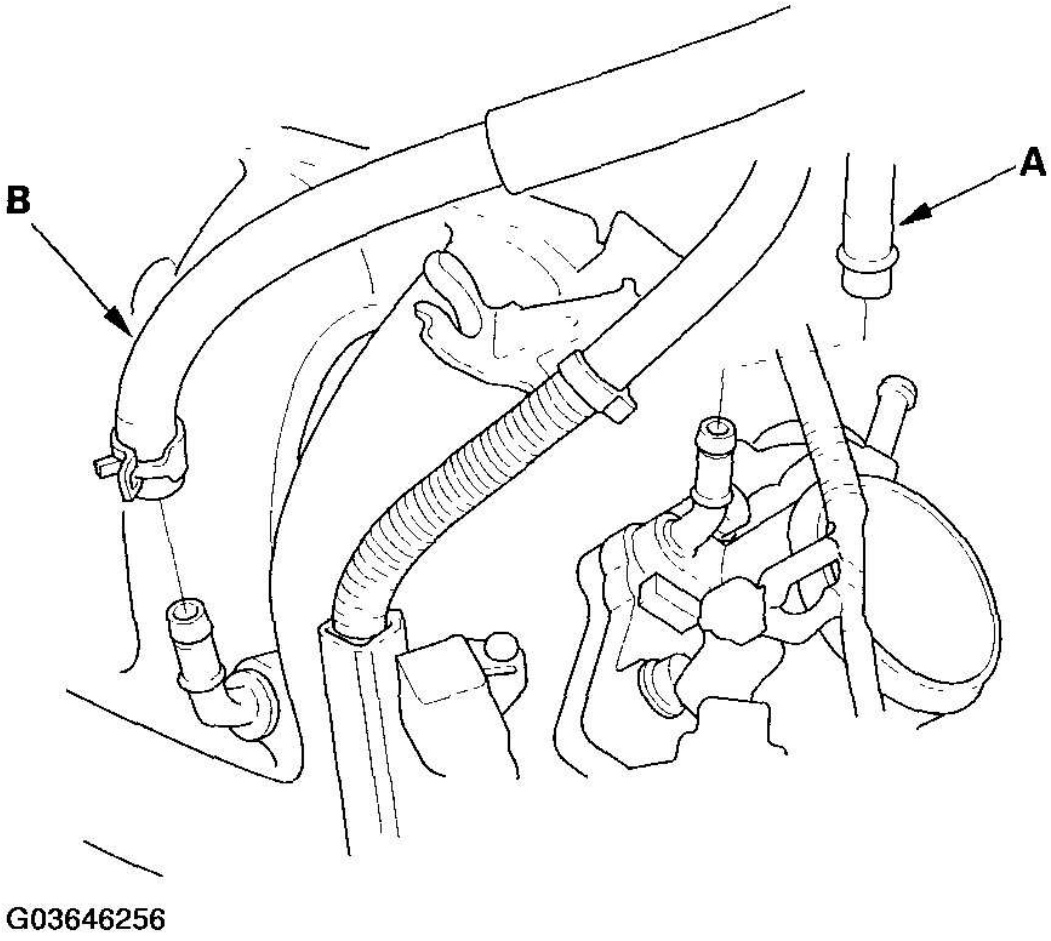


Fig. 6: Removing Evaporative Emission (EVAP) Canister Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the engine wire harness connectors and wire harness clamps from the intake manifold.
   - Idle air control (IAC) valve connector
   - Throttle position sensor connector
   - Manifold absolute pressure (MAP) sensor connector
7. Remove the bolt (A) securing the harness holder, and remove the harness clamps (B).

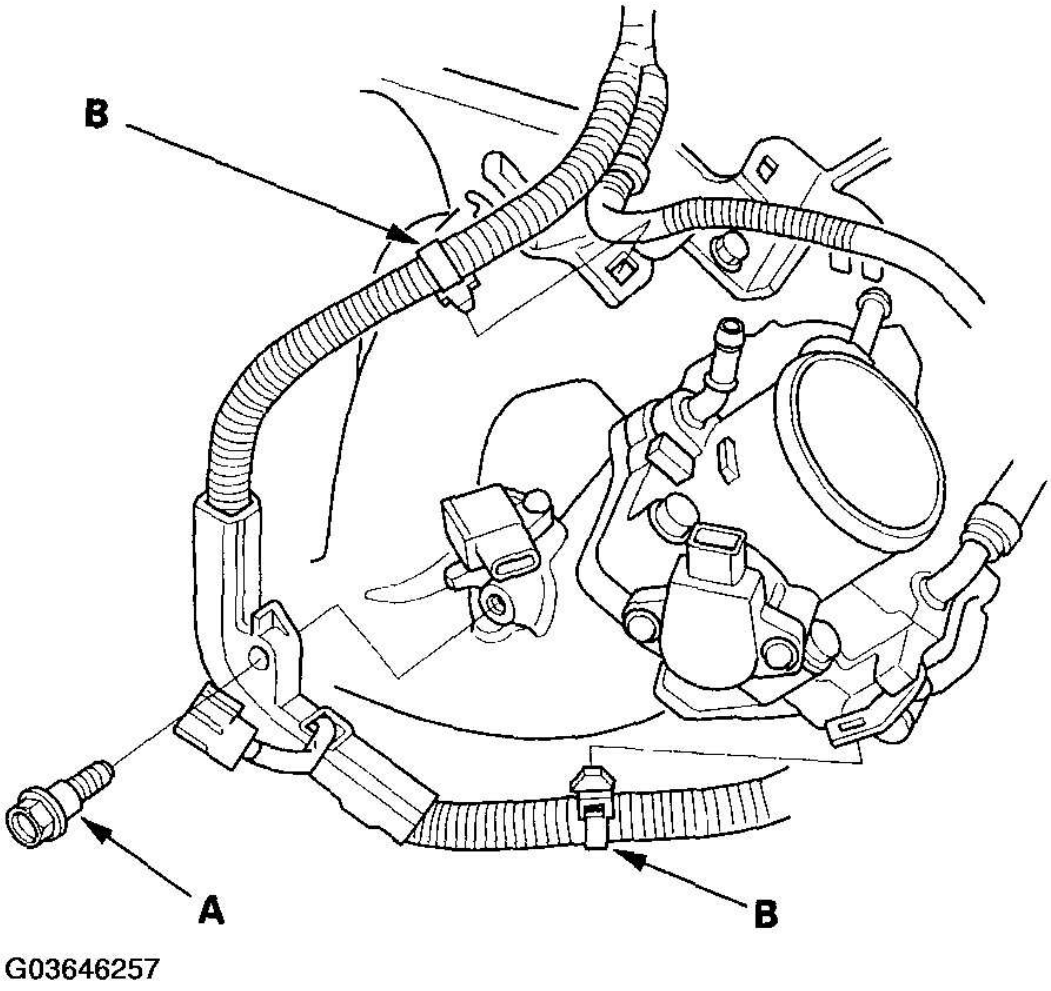
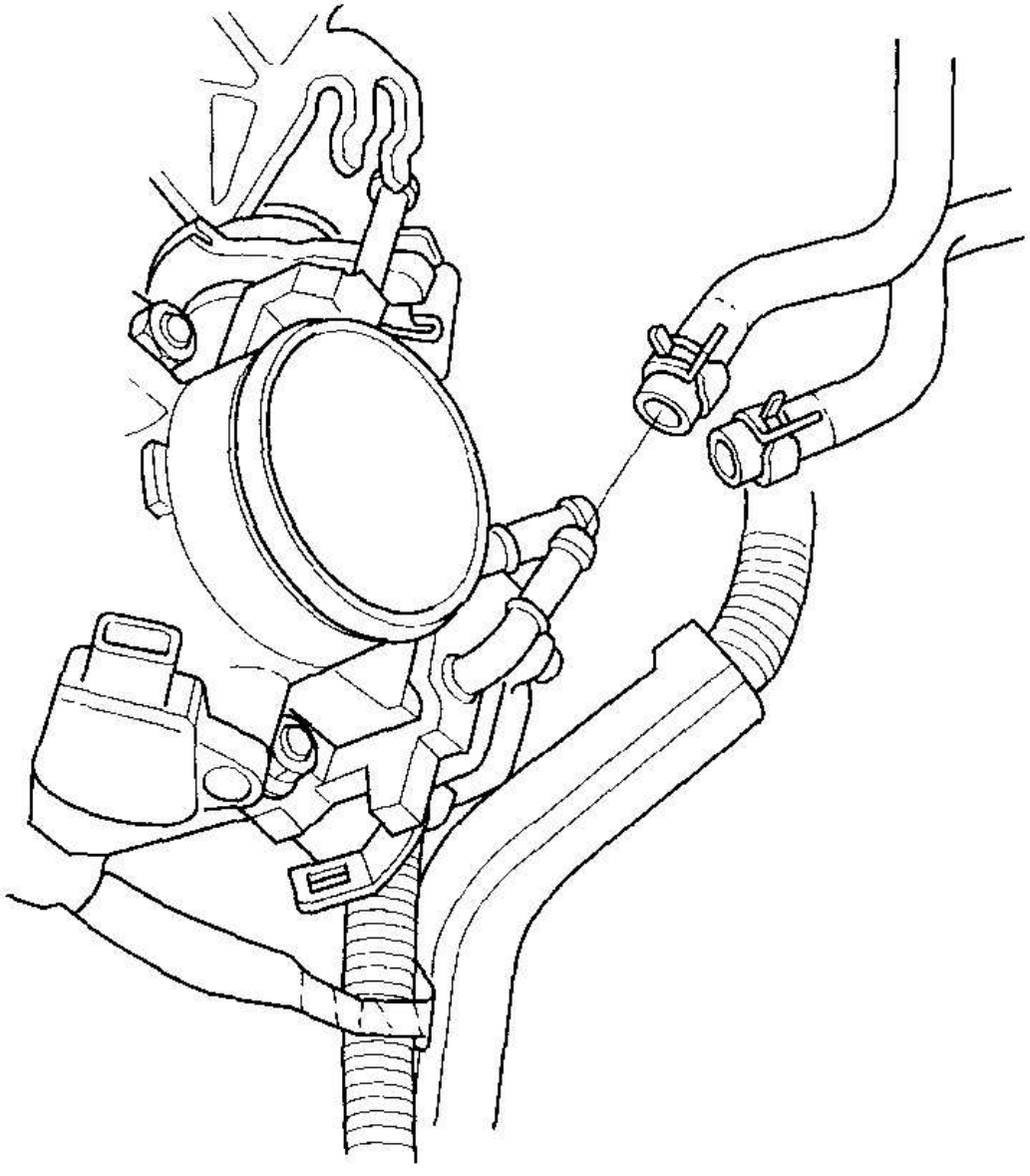


Fig. 7: Removing Bolt (A) Securing Harness Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove and plug the water bypass hoses.



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Fig. 8: Removing And Plug Water Bypass Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the harness clamp (A), and the harness connector (B) from the intake manifold bracket, then remove the intake manifold bracket (C).

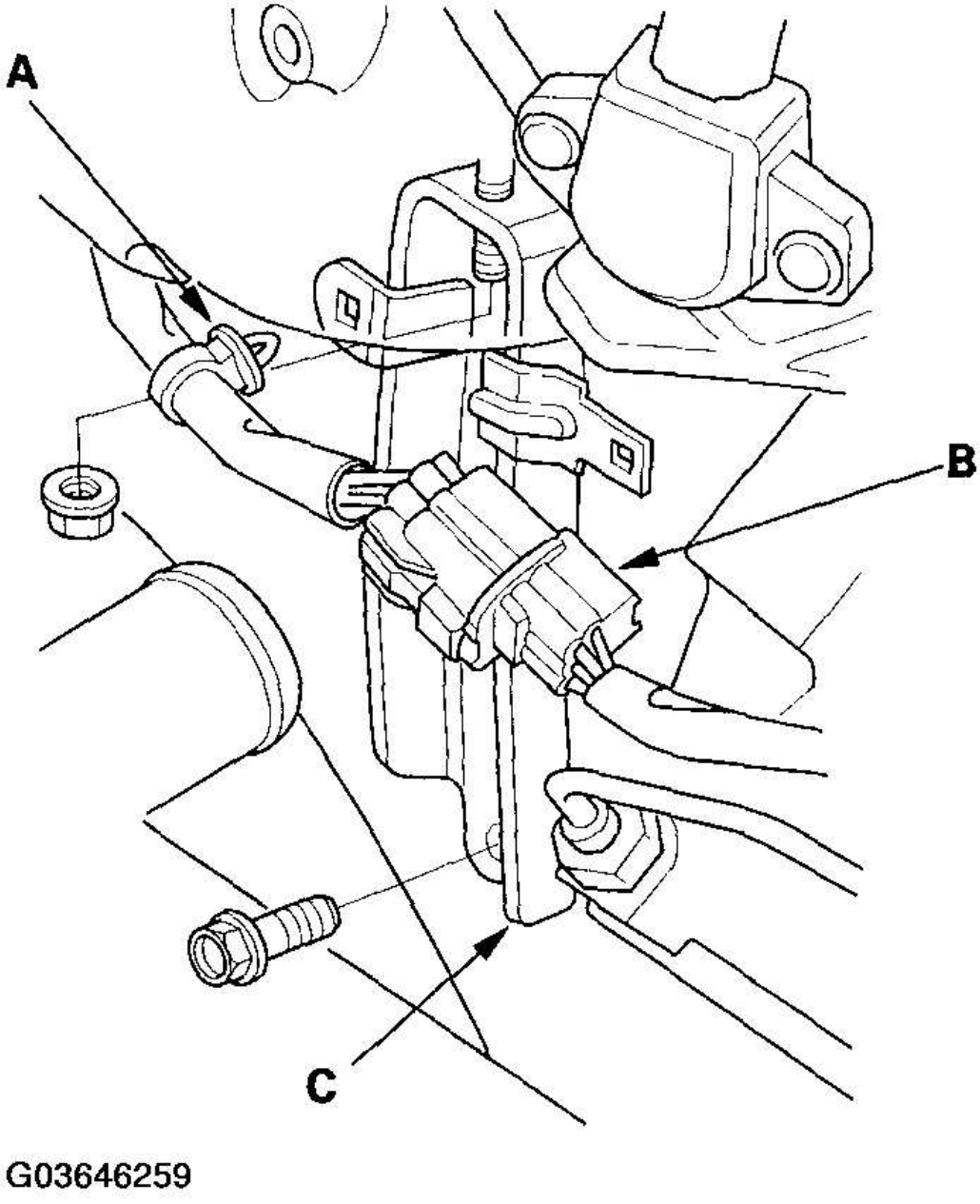
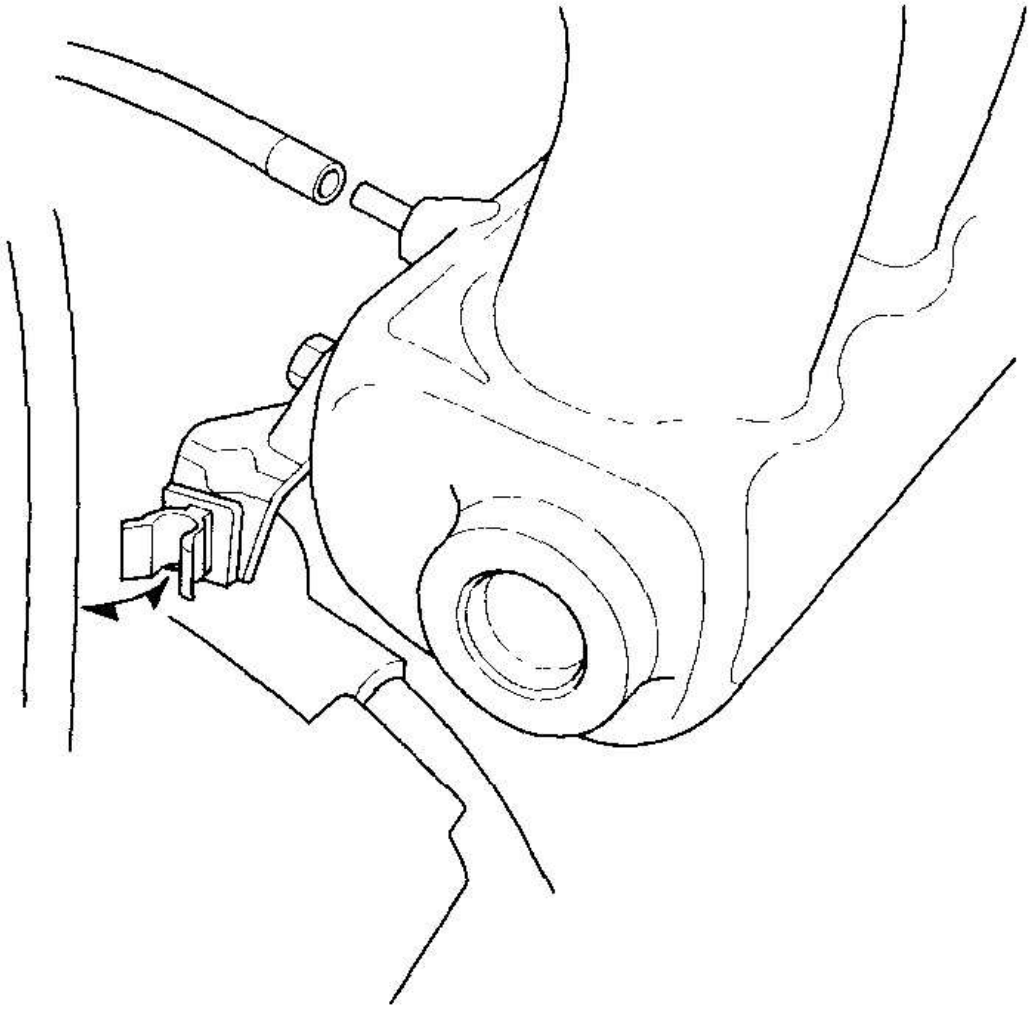


Fig. 9: Removing Harness Clamp (A), And Harness Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the vacuum hose (A/T).



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Fig. 10: Removing Vacuum Hose (A/T)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the intake manifold.

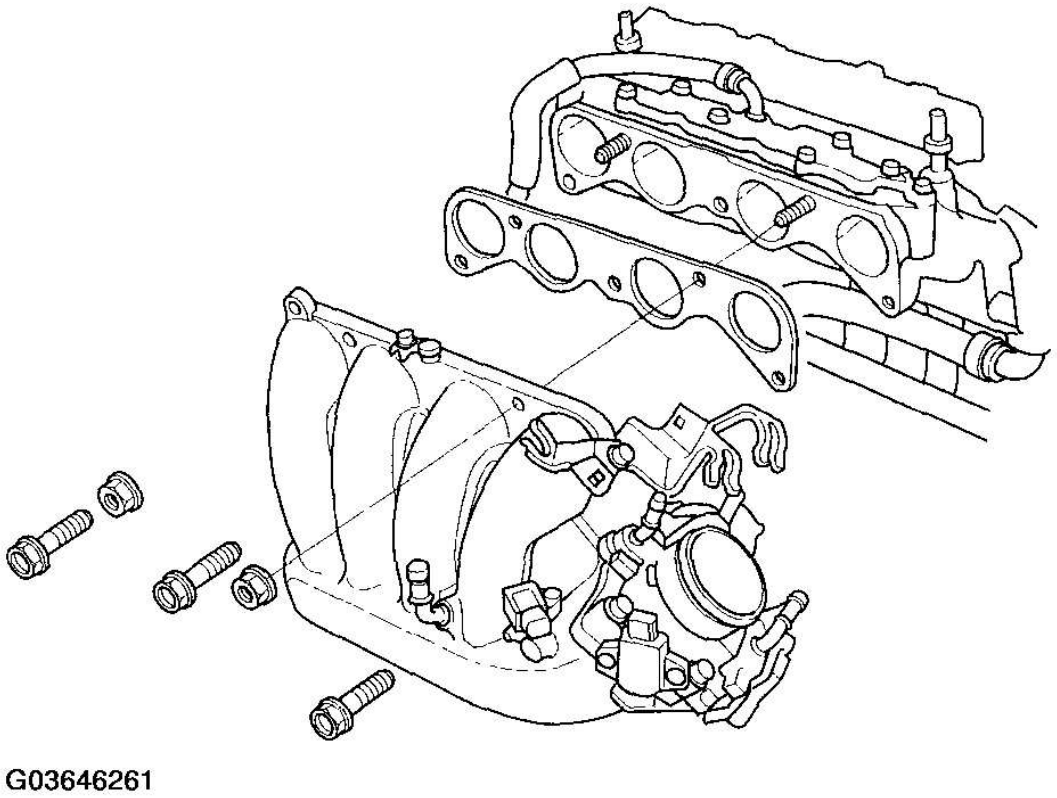


Fig. 11: Removing Intake Manifold
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INSTALLATION ('03-05 MODELS)

1. Install the intake manifold (A) with a new gasket (B), and tighten the bolts/nuts in a crisscross pattern in two or three steps, beginning with the inner bolt.

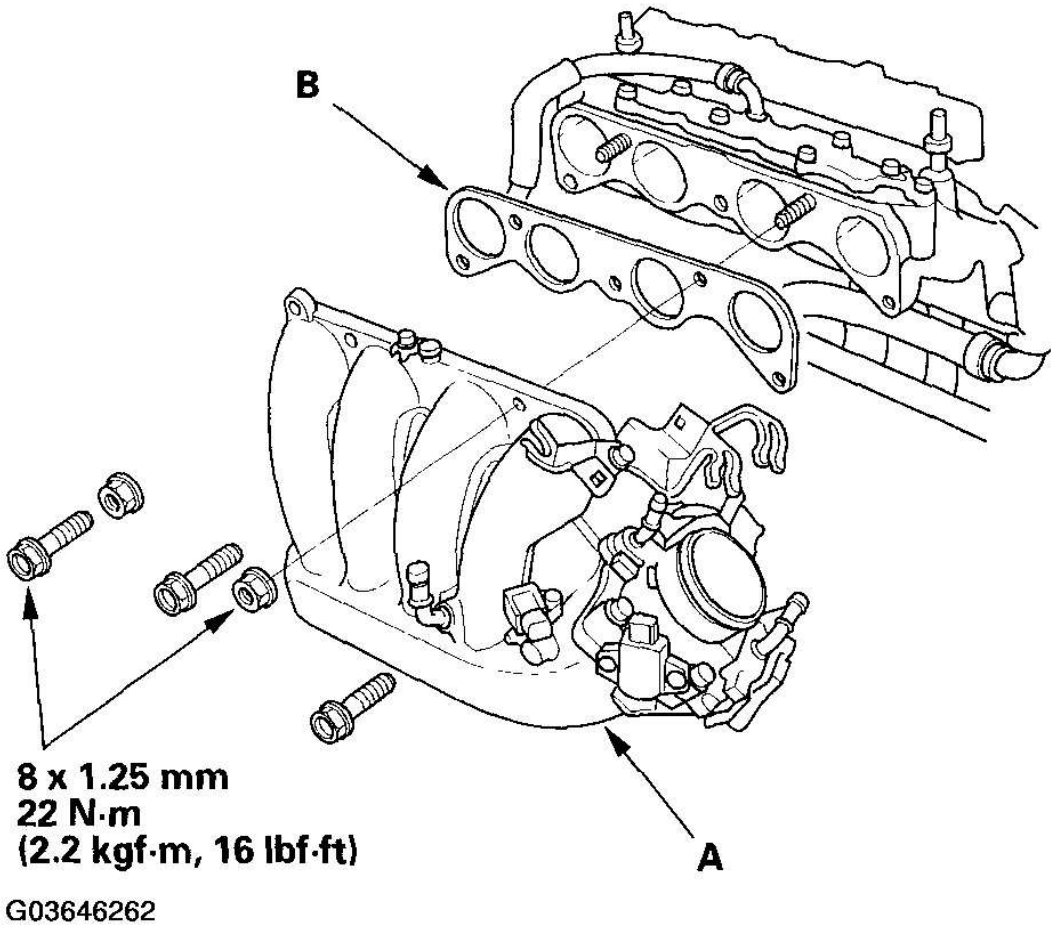
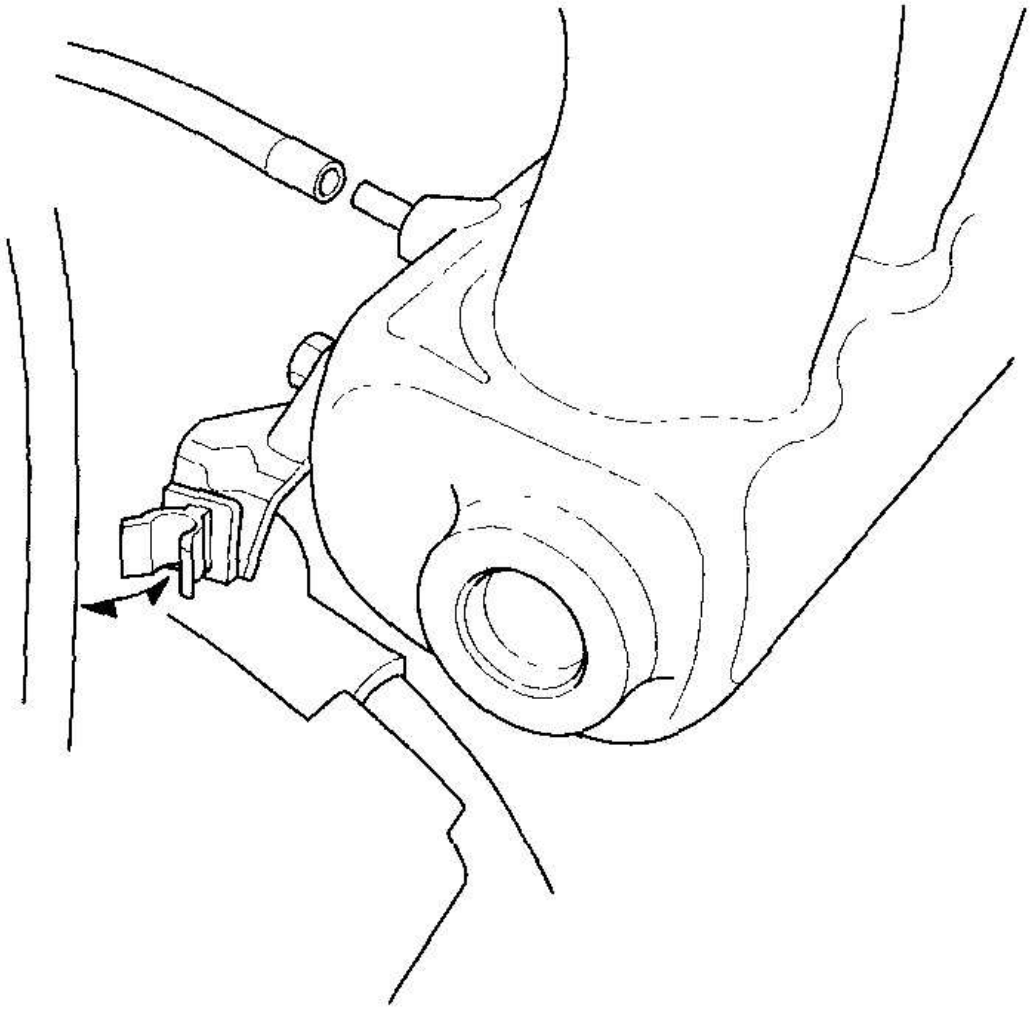


Fig. 12: Installing Intake Manifold With Gasket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the vacuum hose (A/T).



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Fig. 13: Installing Vacuum Hose (A/T)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the intake manifold bracket (A), then install the harness clamp (B), and harness connector (C) to the intake manifold bracket.

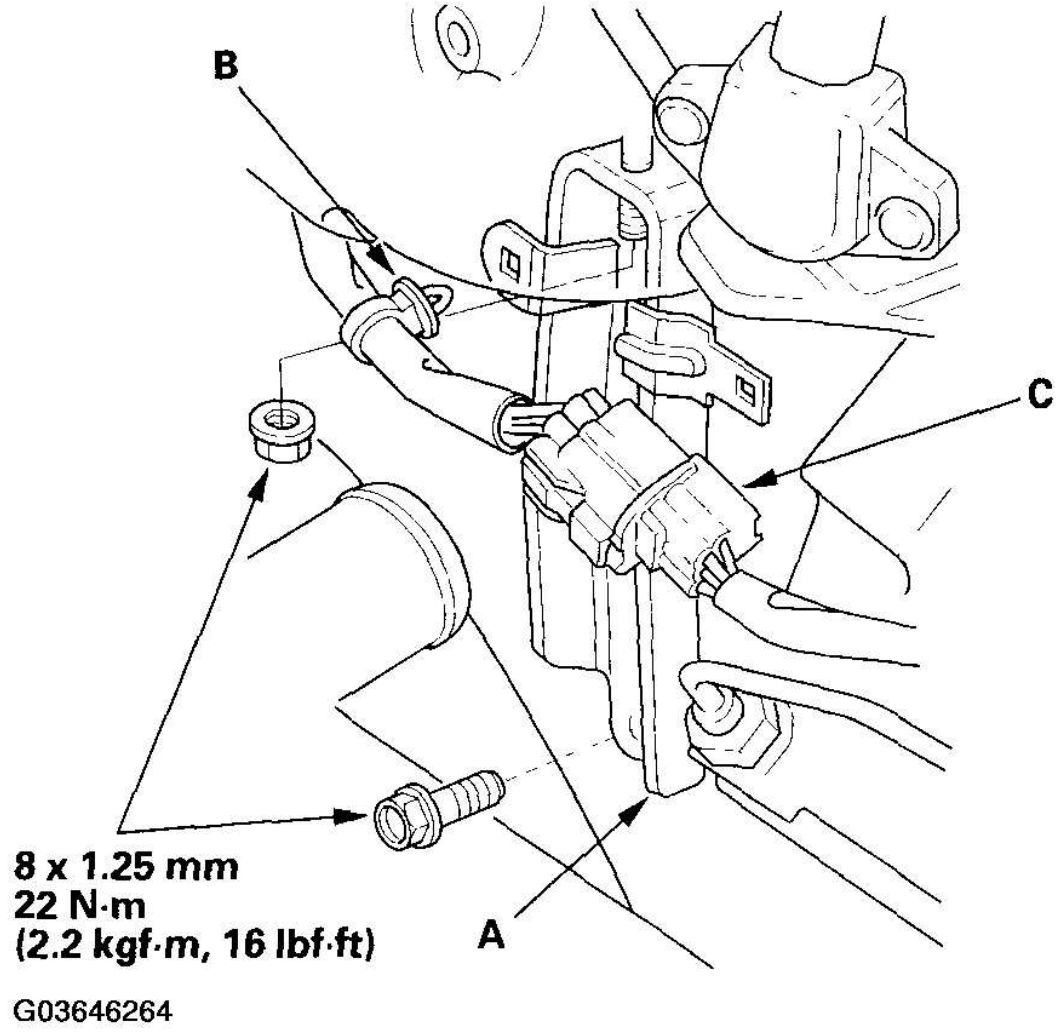
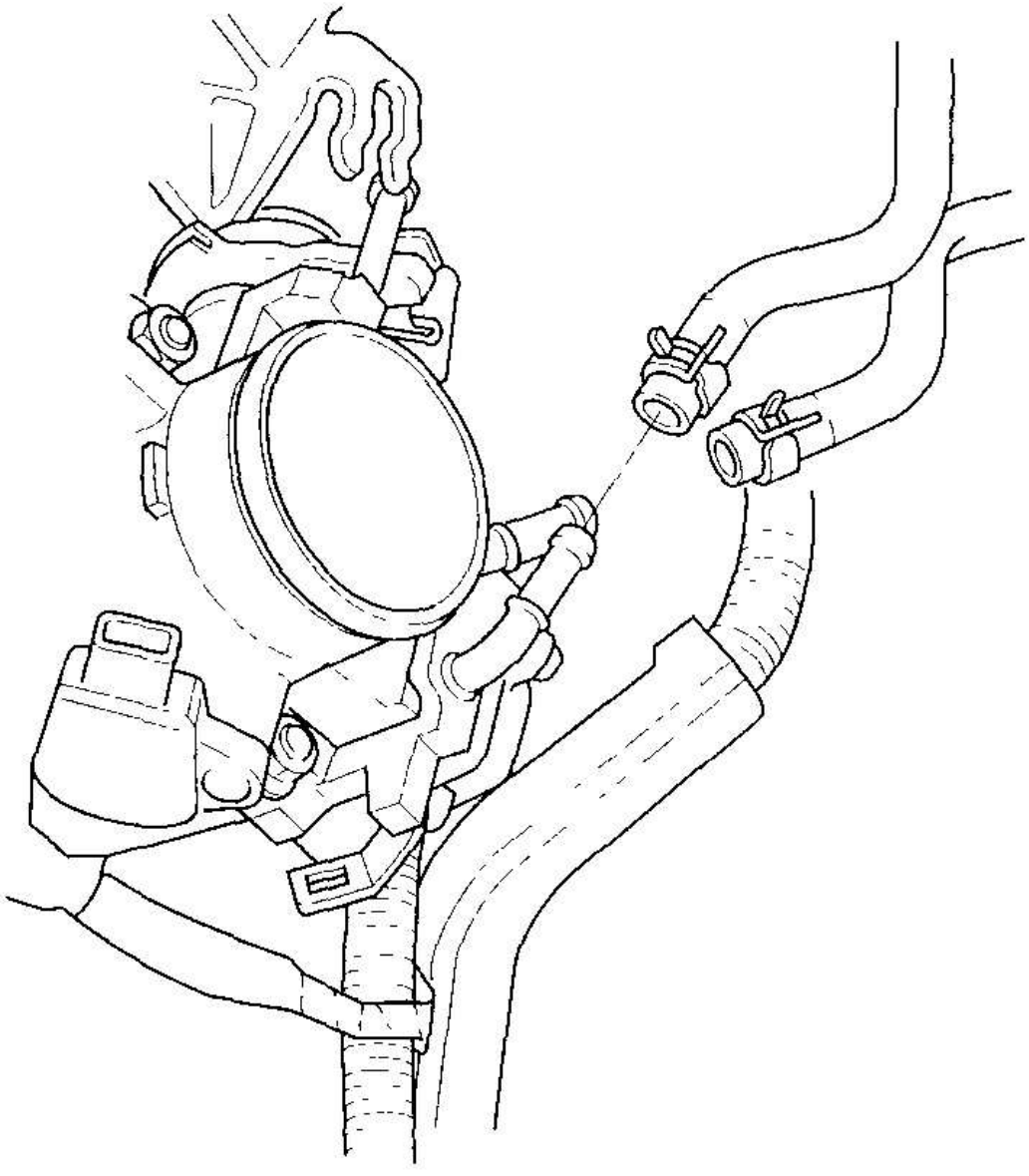


Fig. 14: Installing Intake Manifold Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the water bypass hoses.



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Fig. 15: Installing Water Bypass Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Tighten the bolt (A) securing the harness holder, and install the harness clamps (B).

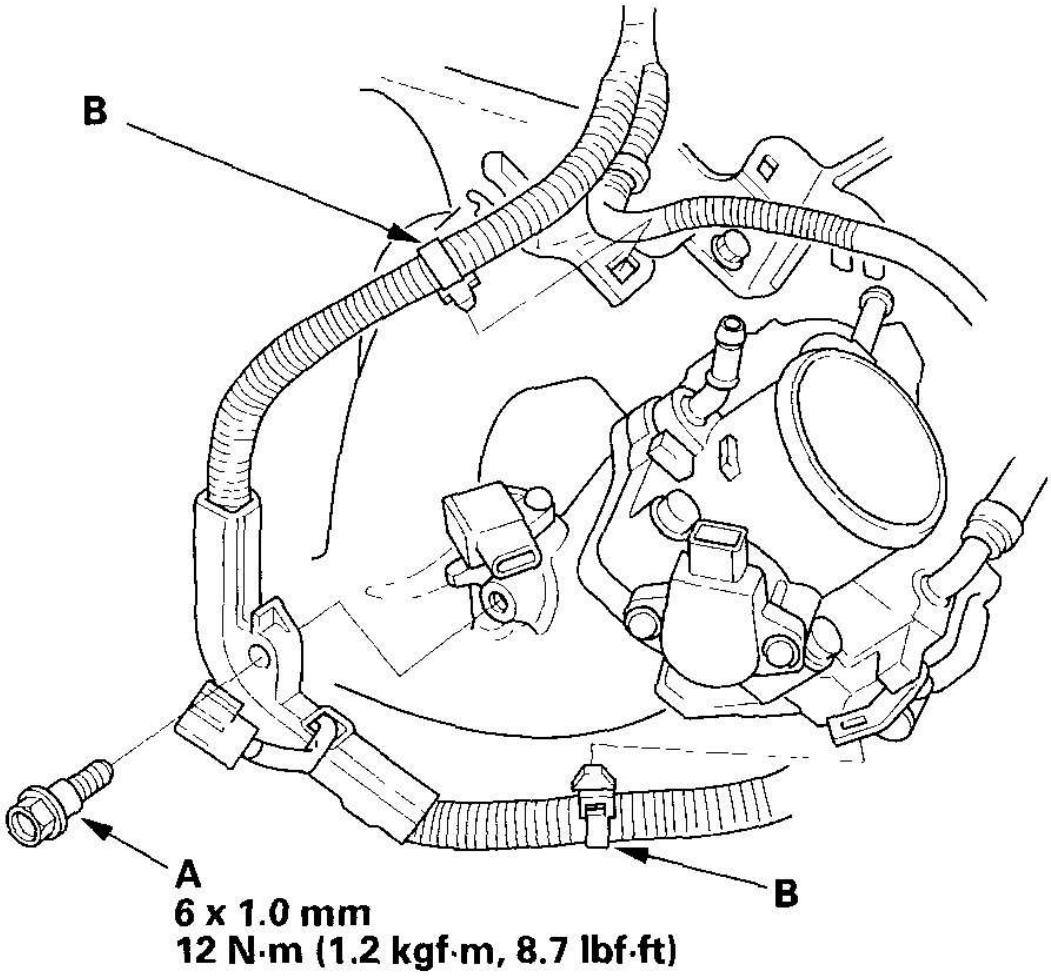


Fig. 16: Tightening Bolt Securing Harness Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the evaporative emission (EVAP) canister hose (A) and brake booster vacuum hose (B).

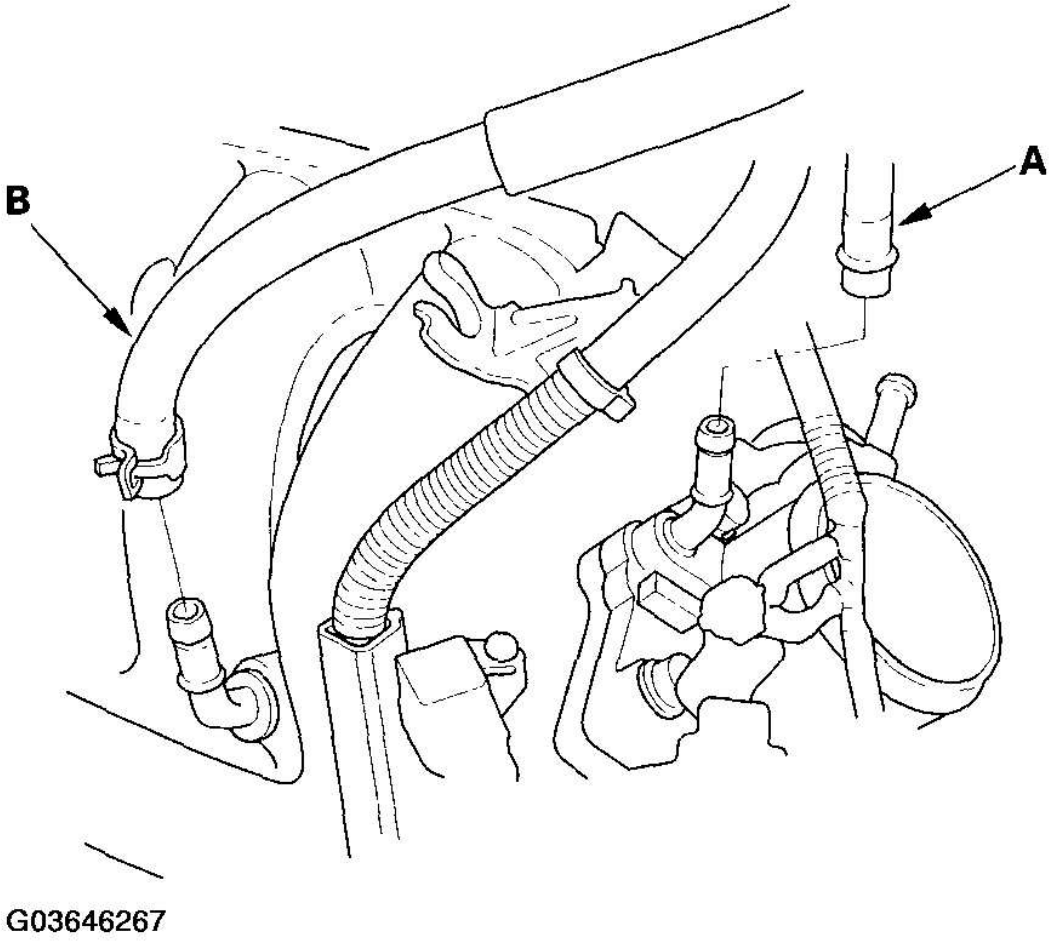


Fig. 17: Installing Evaporative Emission (EVAP) Canister Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the throttle cable (see **THROTTLE CABLE REMOVAL/INSTALLATION**), then adjust the cable (see **THROTTLE CABLE ADJUSTMENT**).
8. Install the cruise control actuator cable (see **CRUISE CONTROL ACTUATOR/CABLE REPLACEMENT**), then adjust the cable (see **CRUISE CONTROL ACTUATOR CABLE ADJUSTMENT**).
9. Install the engine cover.

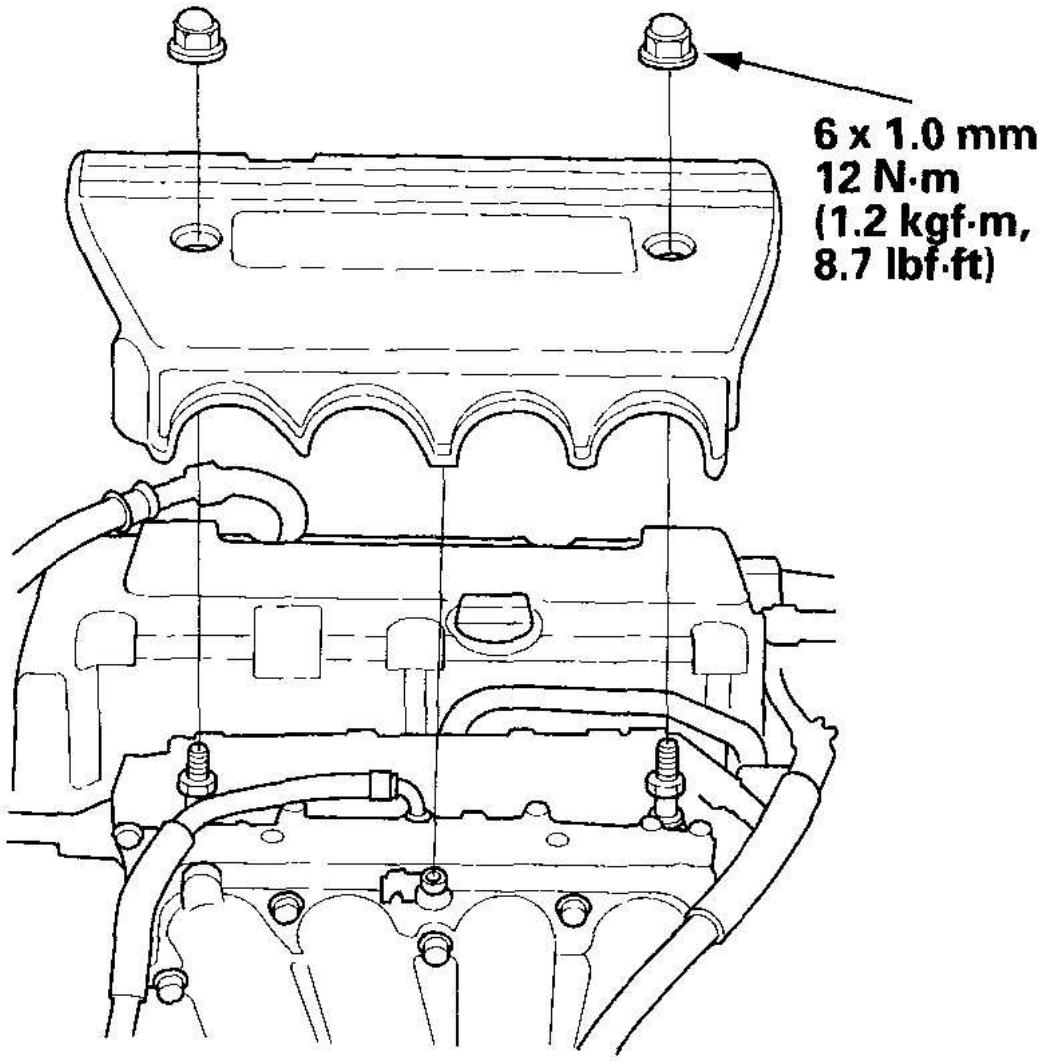


Fig. 18: Installing Intake Manifold Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Install the intake air duct (A), then connect the intake air temperature (IAT) sensor connector (B), and install the vacuum hose (C) and breather pipe (D).

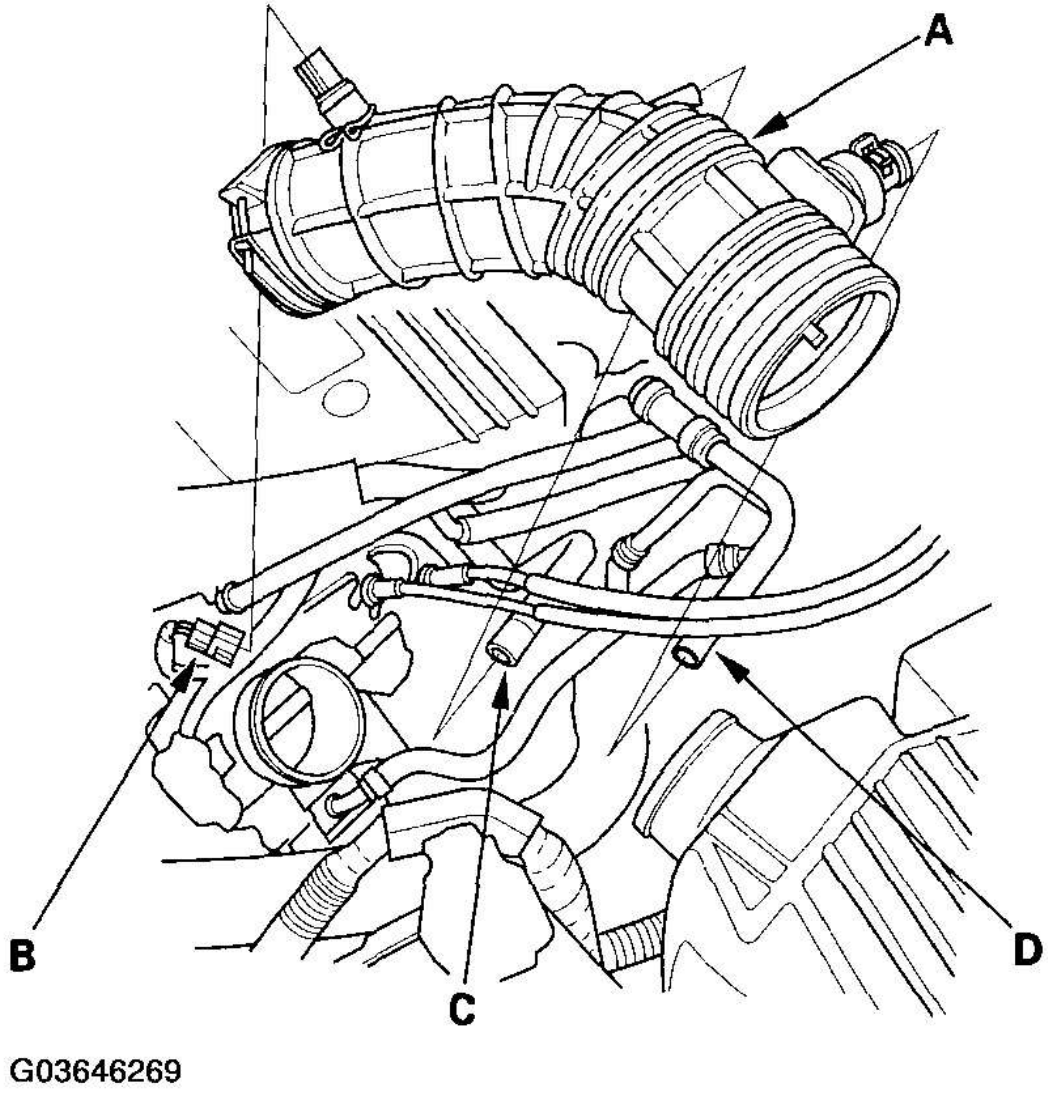


Fig. 19: Installing Vacuum Hose And Breather Pipe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Clean up any spilled engine coolant.
12. After installation, check that all tubes, hoses, and connectors are installed correctly.
13. Refill the radiator with engine coolant, and bleed air from the cooling system with the heater valve open (see step 7 on **COOLANT REPLACEMENT**).

REMOVAL ('06-07 MODELS)

1. Remove the vacuum hose (A) and breather pipe (B), then remove the intake air duct (C).

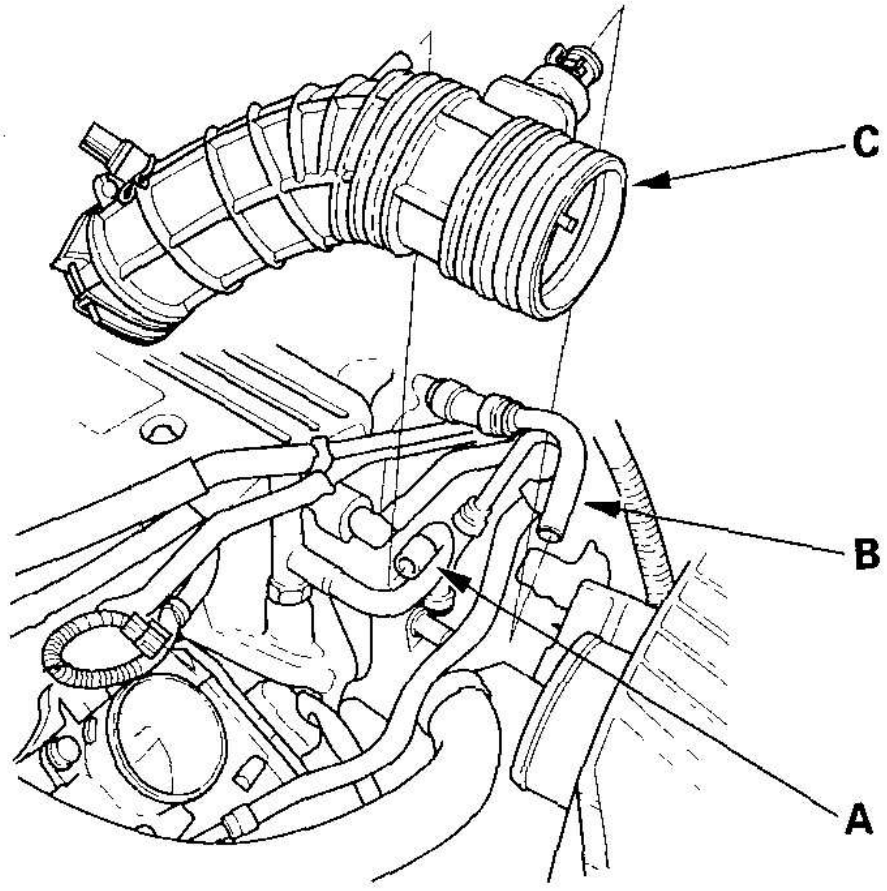


Fig. 20: Disconnecting Intake Air Temperature (IAT) Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the engine cover.

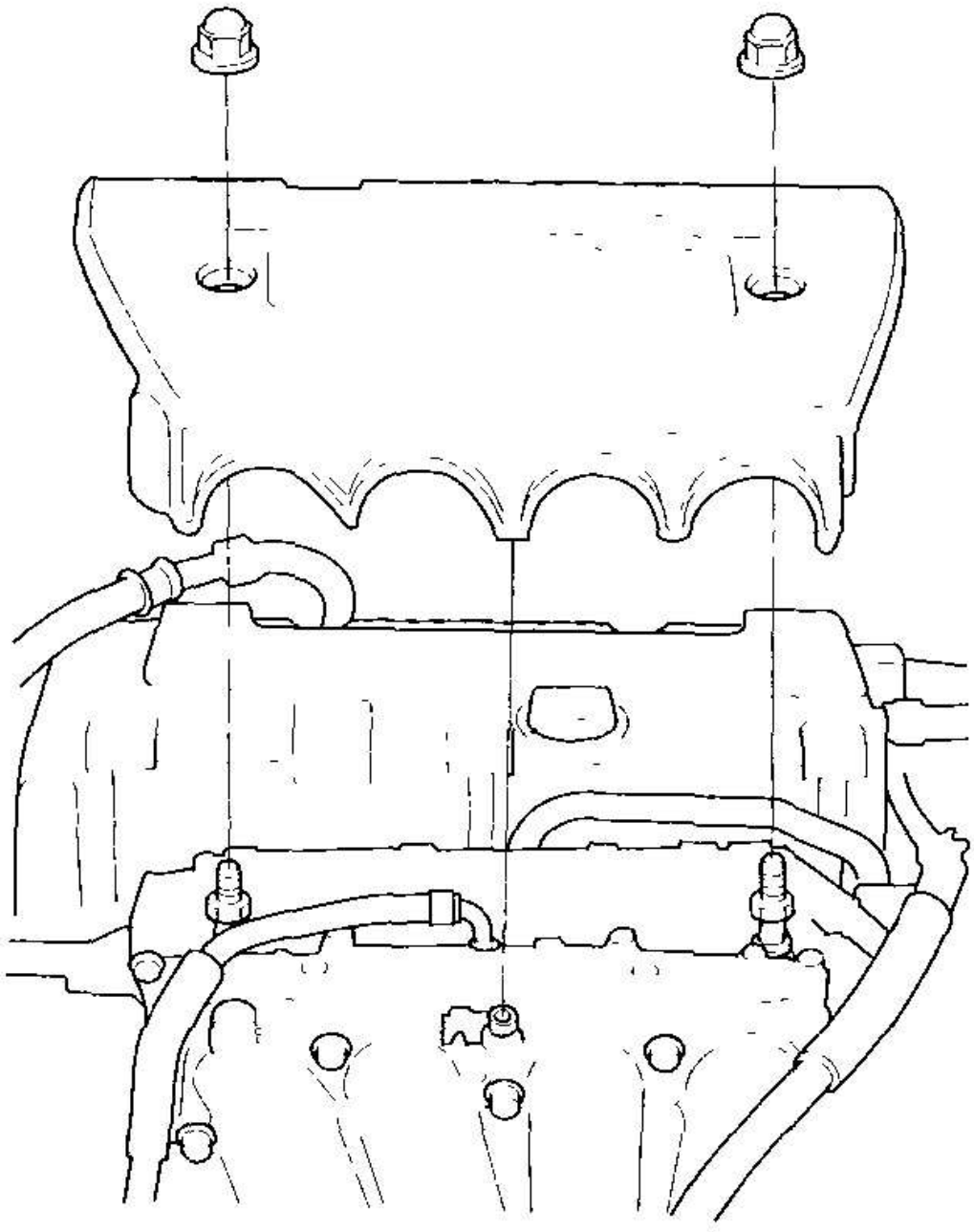


Fig. 21: Removing Intake Manifold Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the evaporative emission (EVAP) canister hose (A) and brake booster vacuum hose (B).

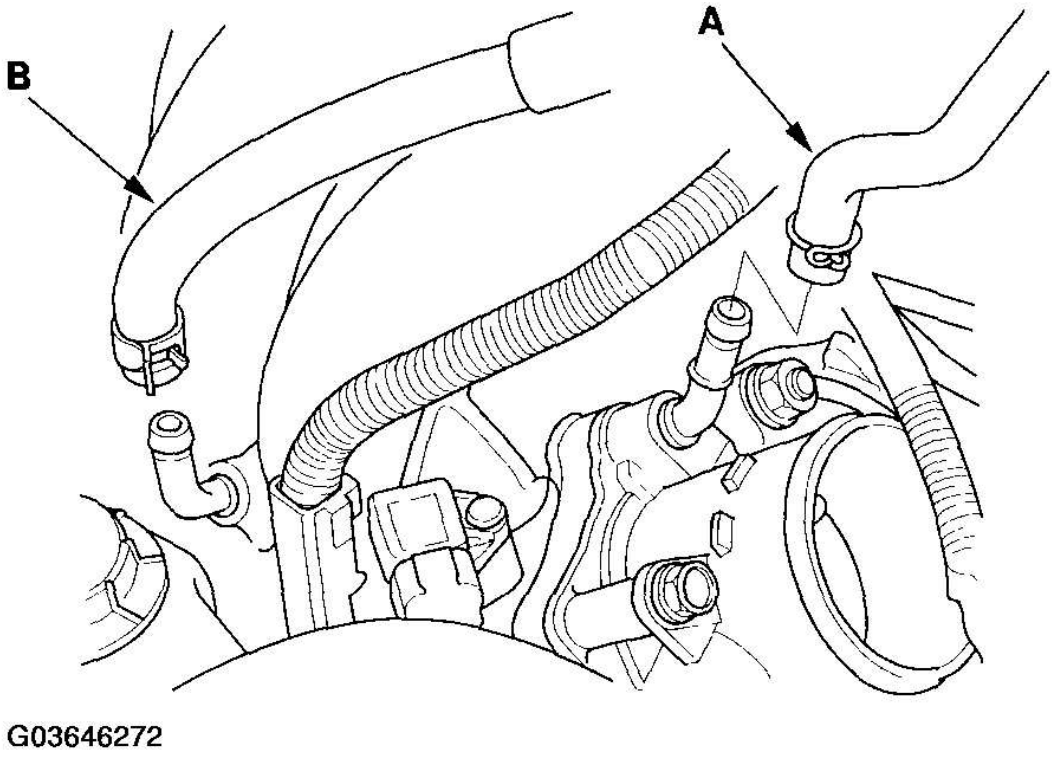


Fig. 22: Removing Evaporative Emission (EVAP) Canister Hose And Brake Booster Vacuum Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the engine wire harness connectors and wire harness clamps from the intake manifold.
5. Throttle actuator connector
6. Manifold absolute pressure (MAP) sensor connector
7. Remove the harness holder (A), and remove the harness clamp (B).

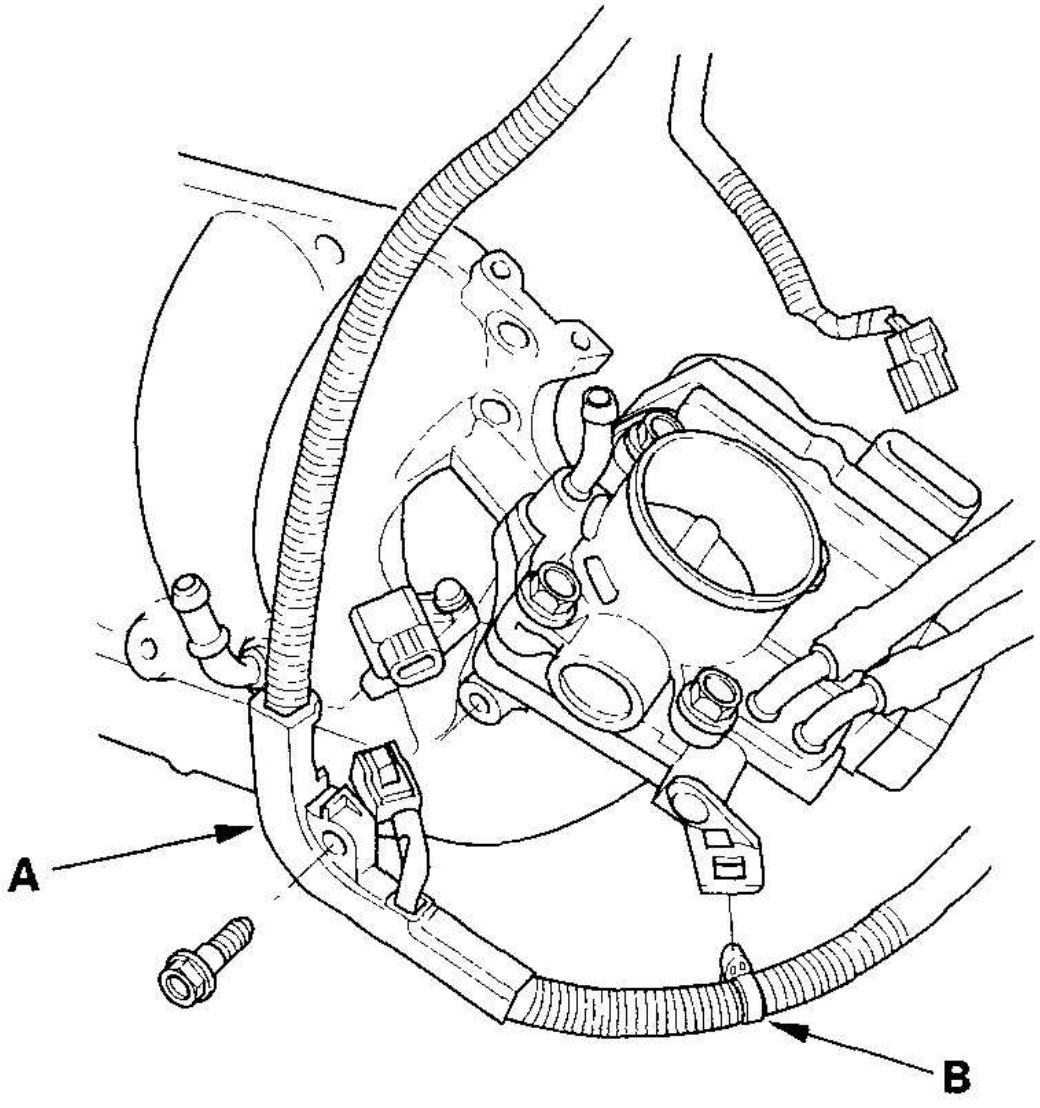
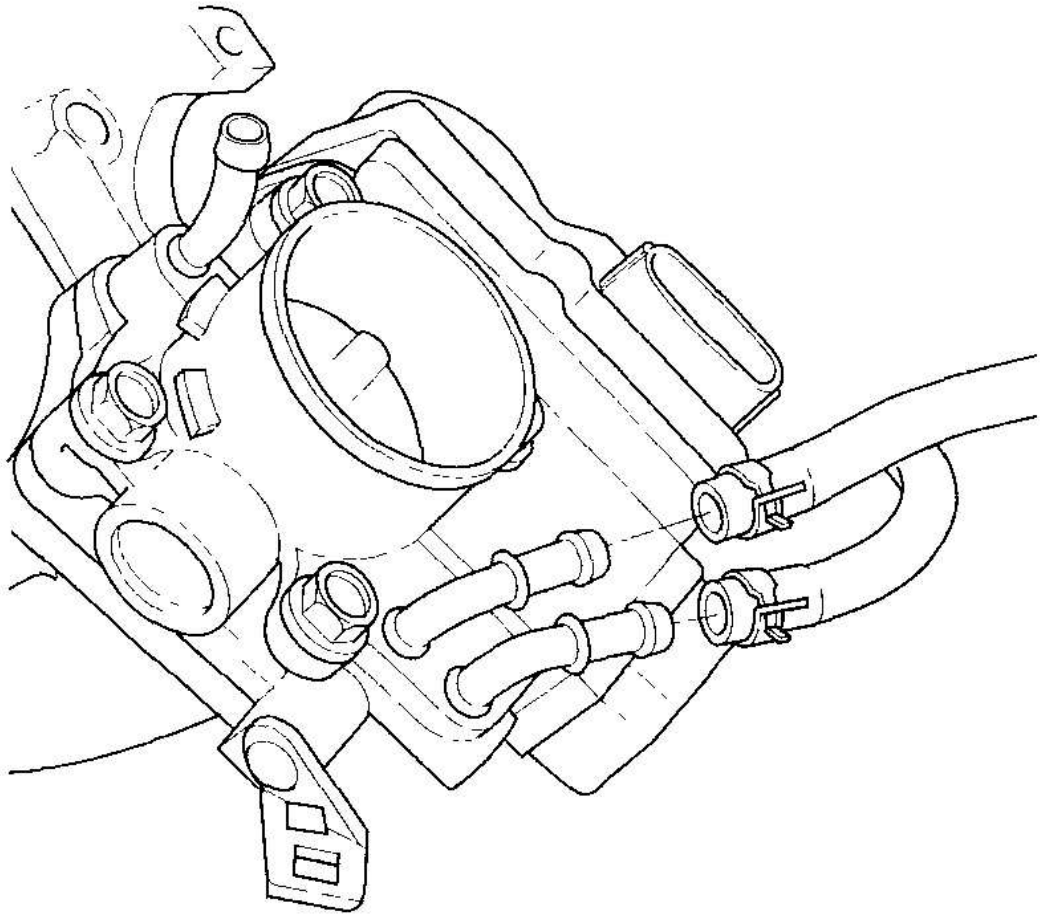


Fig. 23: Removing Harness Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove and plug the water bypass hoses.



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Fig. 24: Removing And Plug Water Bypass Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the harness clamp (A) and the harness connector (B) from the intake manifold bracket, then remove the intake manifold bracket (C).

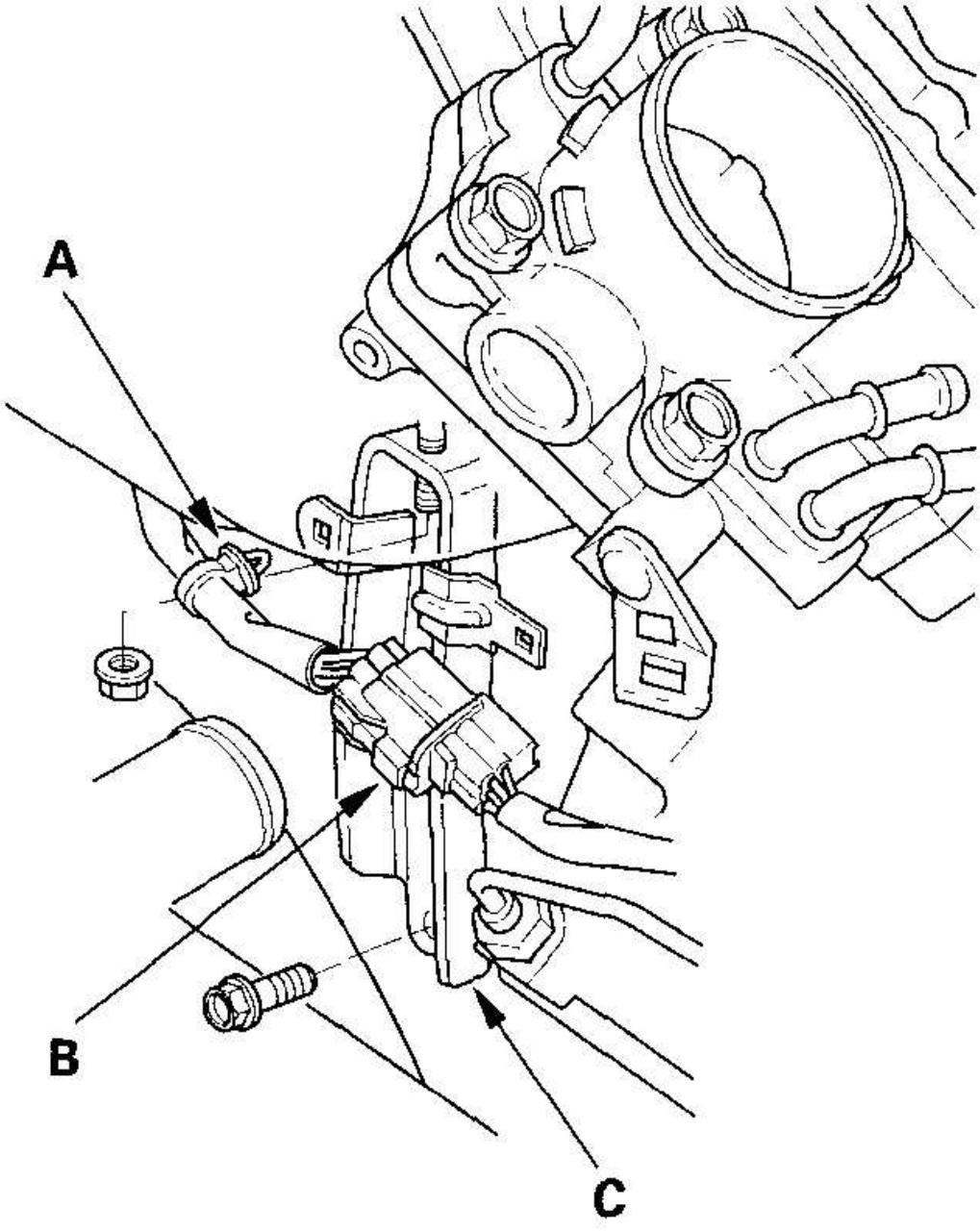
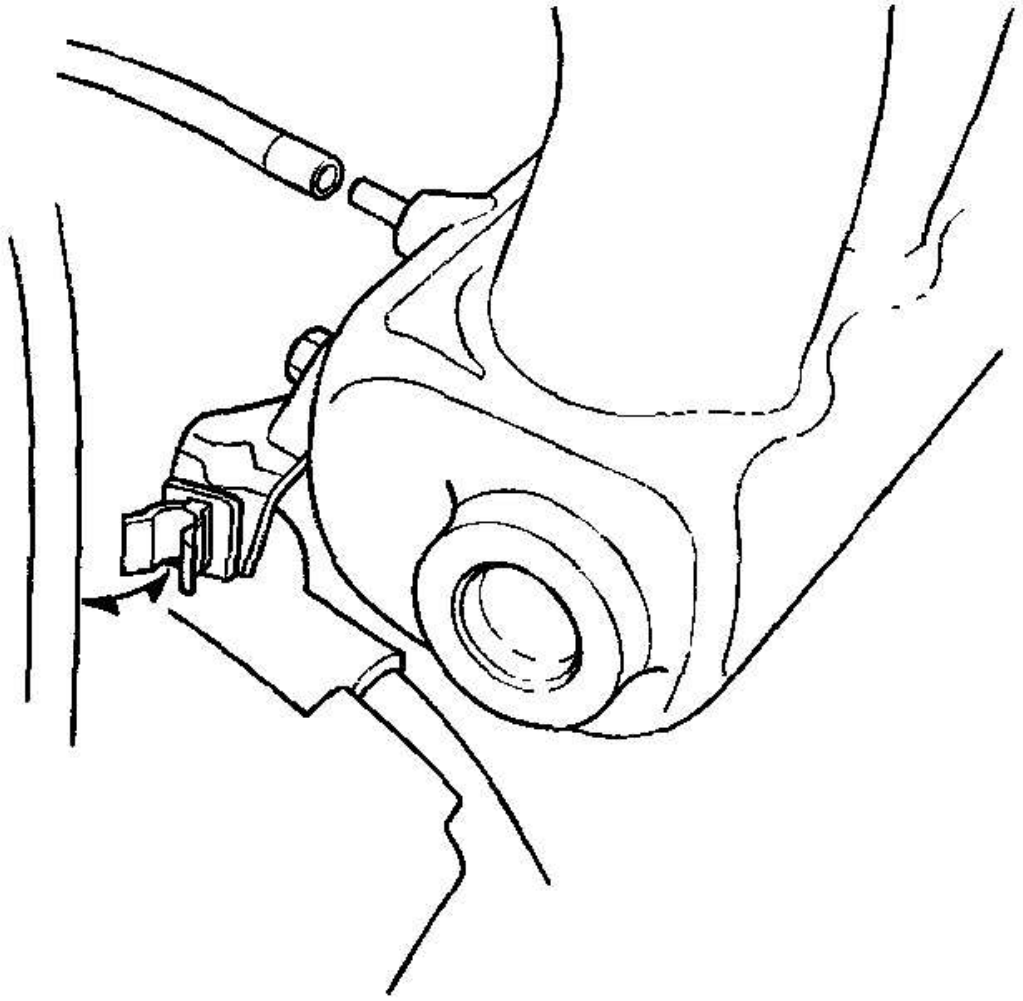


Fig. 25: Removing Harness Clamp And Harness Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the vacuum hose.

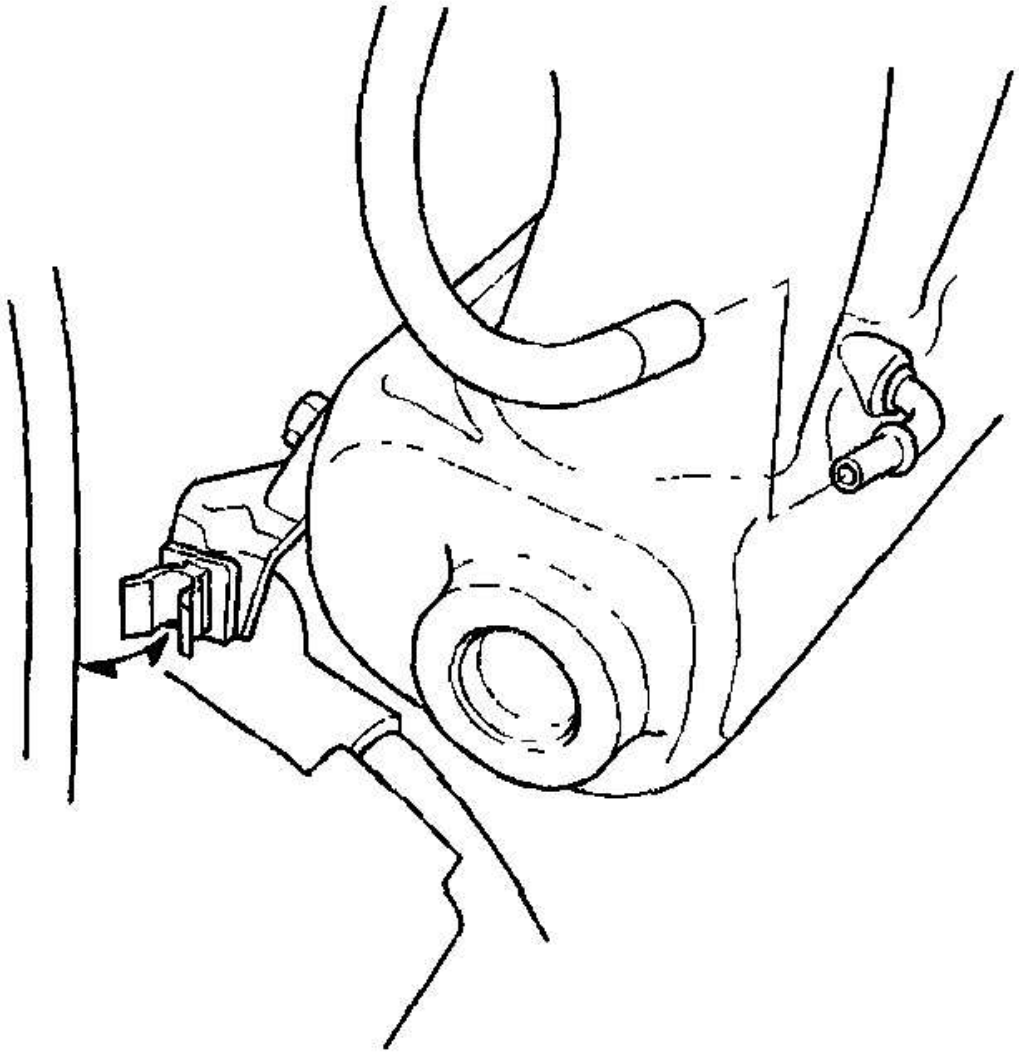
A/T model:



G03646276

Fig. 26: Removing Vacuum Hose - A/T Model
Courtesy of AMERICAN HONDA MOTOR CO., INC.

M/T model:



G03646277

Fig. 27: Removing Vacuum Hose - M/T Model
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the intake manifold.

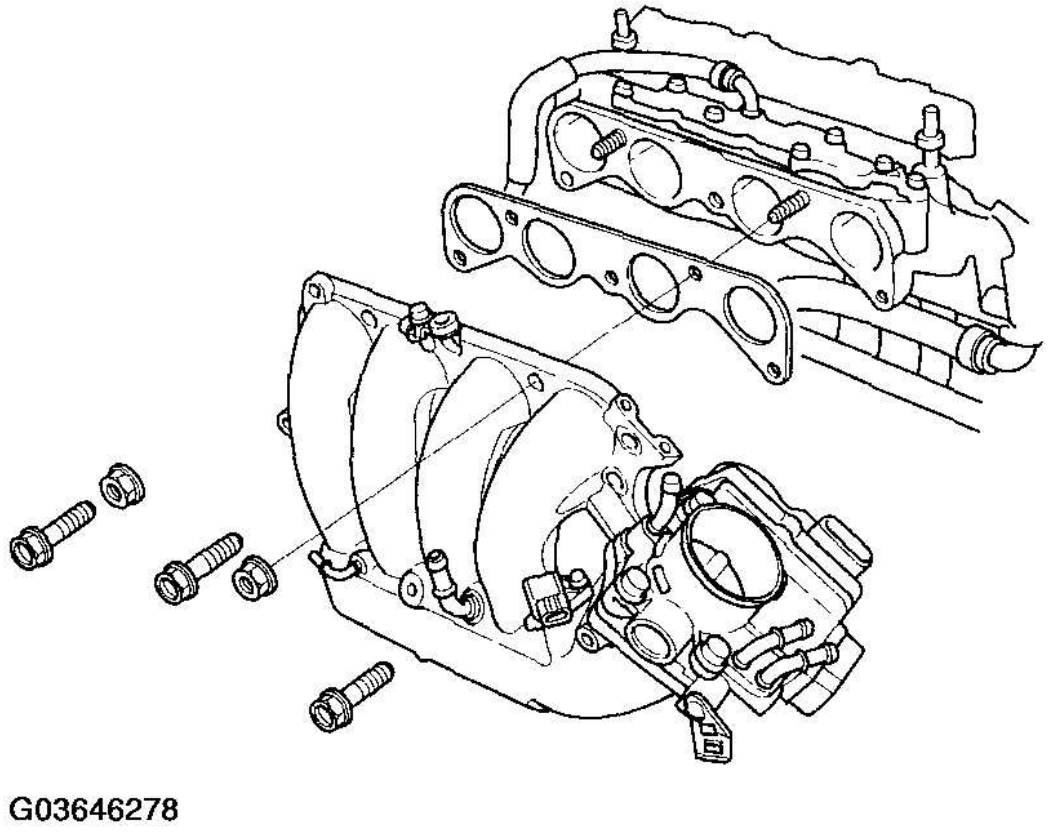


Fig. 28: Removing Intake Manifold
Courtesy of AMERICAN HONDA MOTOR CO., INC.

INSTALLATION '06-07 MODEL)

1. Install the intake manifold (A) with a new gasket (B), and tighten the bolts/nuts in a crisscross pattern in two or three steps, beginning with the inner bolt.

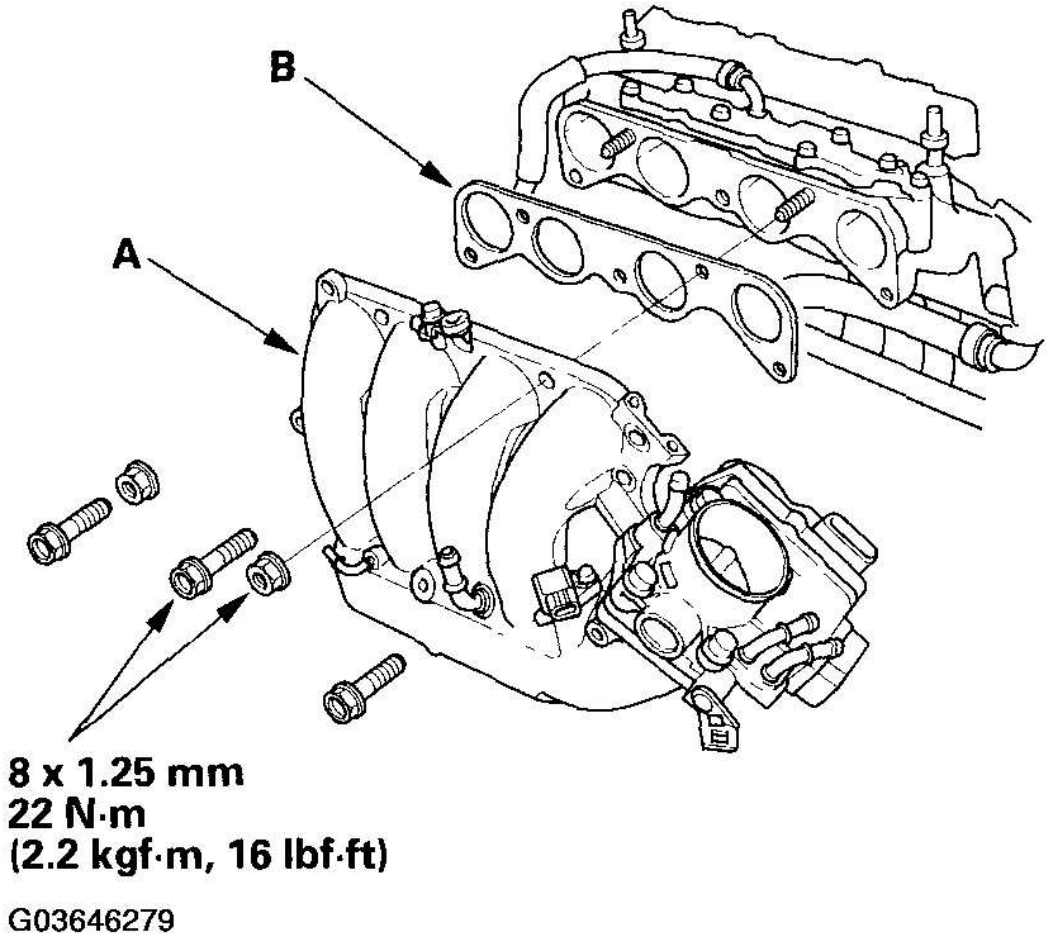
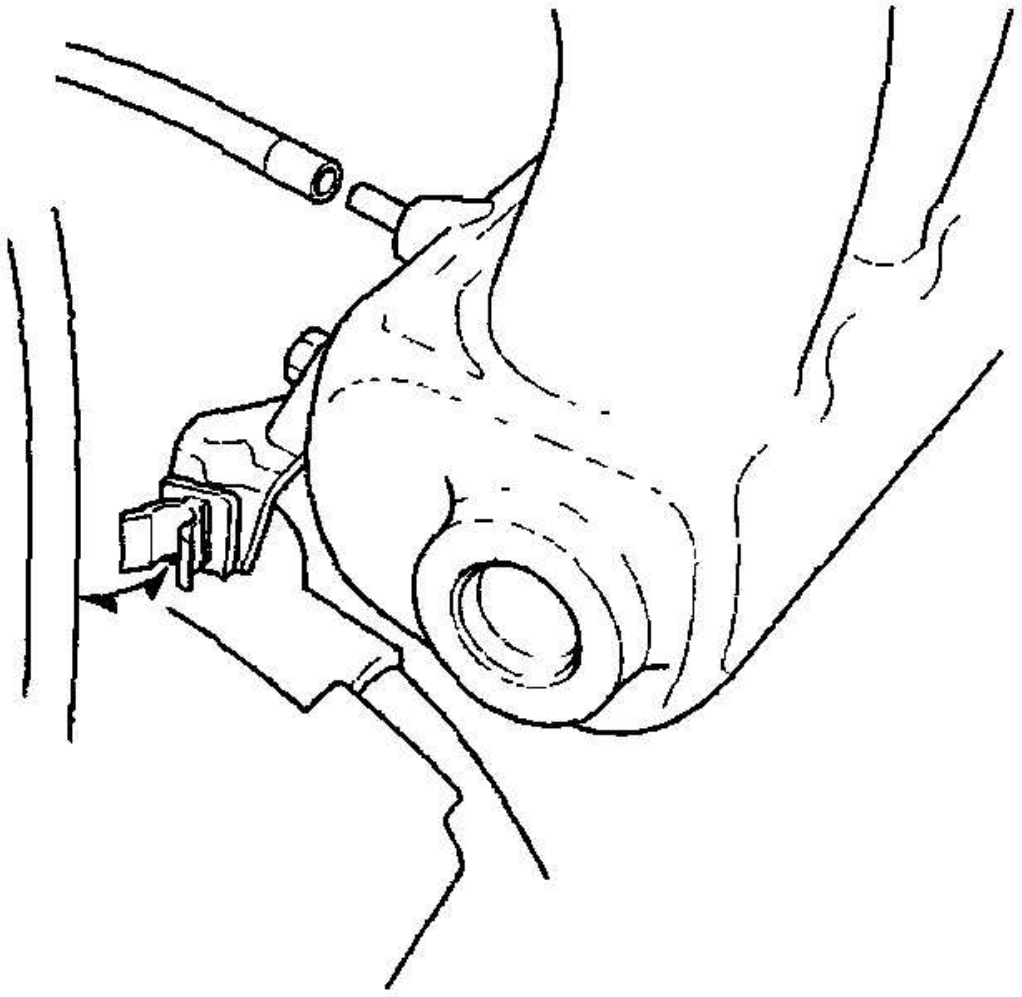


Fig. 29: Installing Intake Manifold
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the vacuum hose.

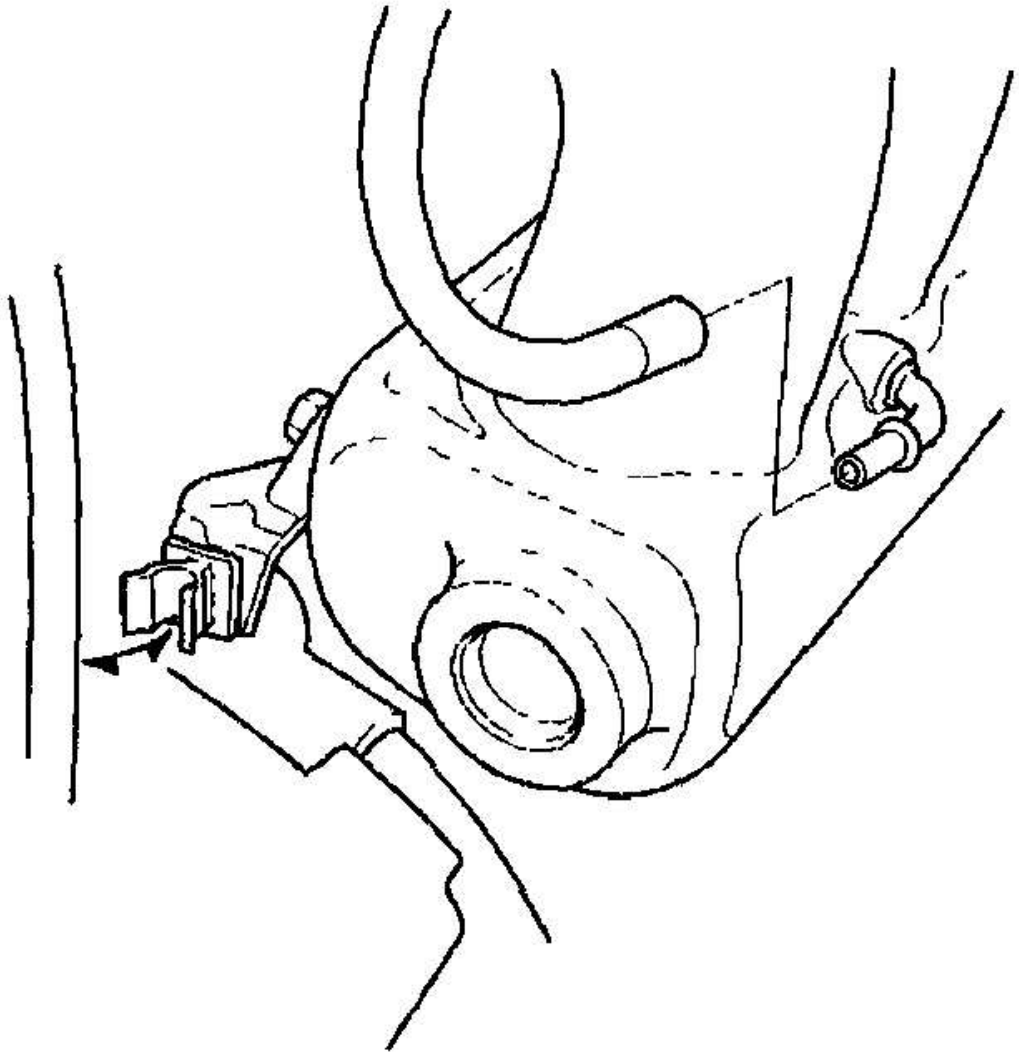
A/T model:



G03646280

Fig. 30: Installing Vacuum Hose A/T Model
Courtesy of AMERICAN HONDA MOTOR CO., INC.

M/T model:



G03646281

Fig. 31: Installing Vacuum Hose M/T Model
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the intake manifold bracket (A), then install the harness clamp (B), and harness connector (C) to the intake manifold bracket.

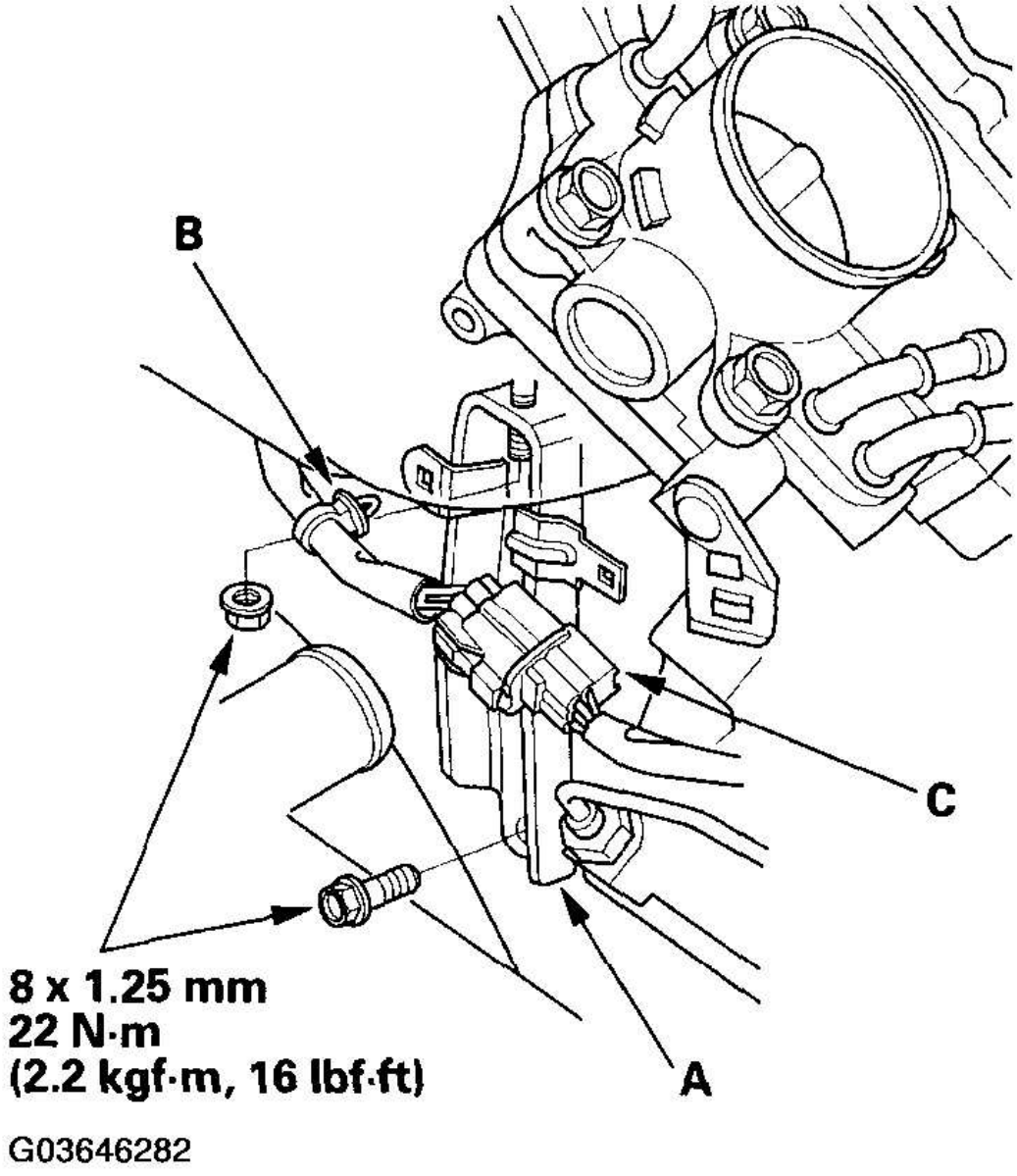
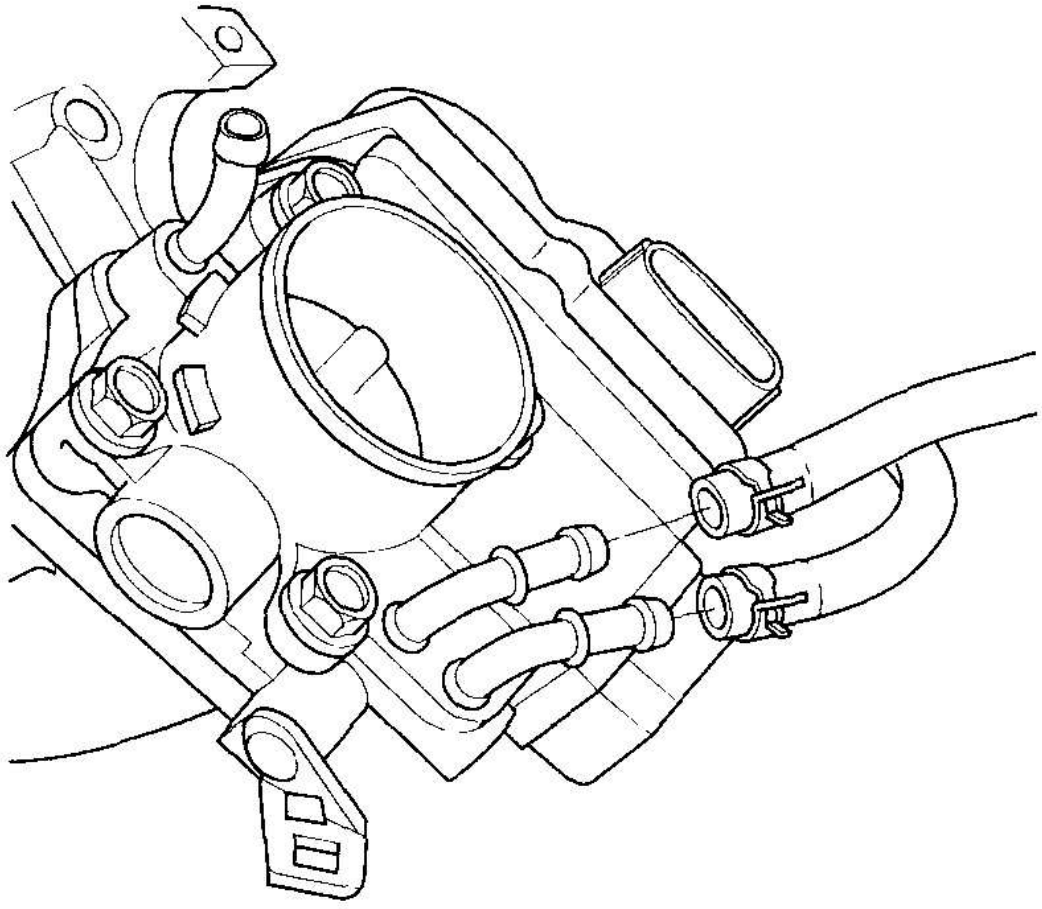


Fig. 32: Installing Harness Clamp, And Harness Connector To Intake Manifold Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the water bypass hoses.



G03646283

Fig. 33: Installing Water Bypass Hoses
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the harness holder (A), and install the harness clamp (B).

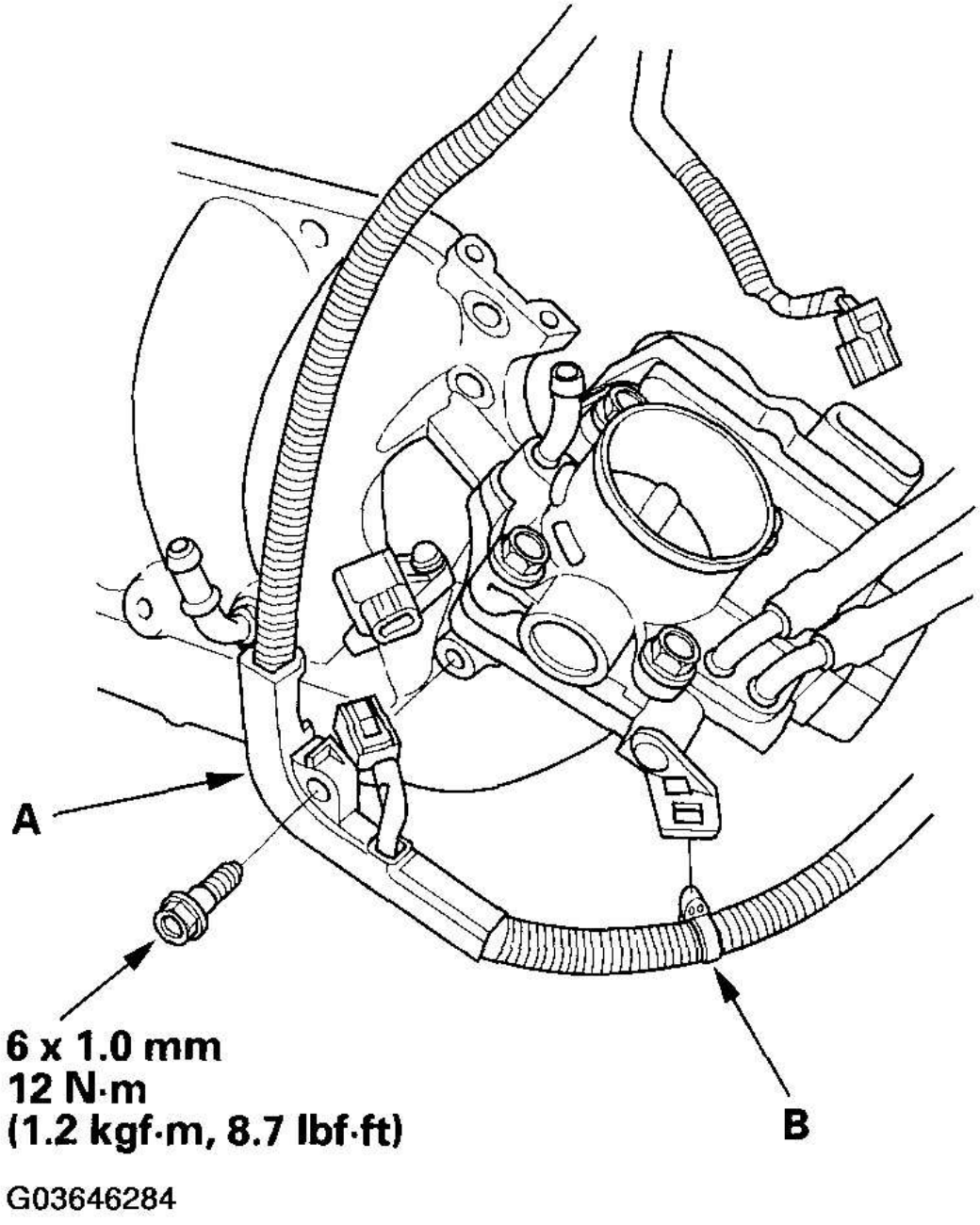


Fig. 34: Installing Harness Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Reconnect the MAP sensor and throttle actuator connectors.

7. Install the EVAP canister hose (A) and brake booster vacuum hose (B).

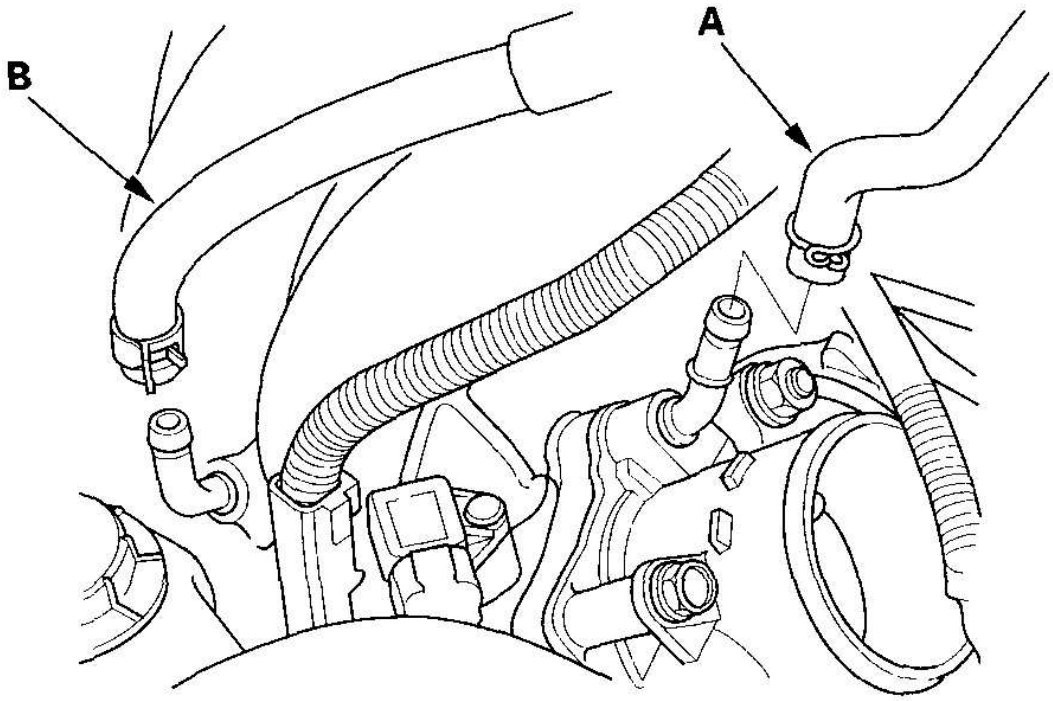


Fig. 35: Installing EVAP Canister Hose And Brake Booster Vacuum Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the Engine cover.

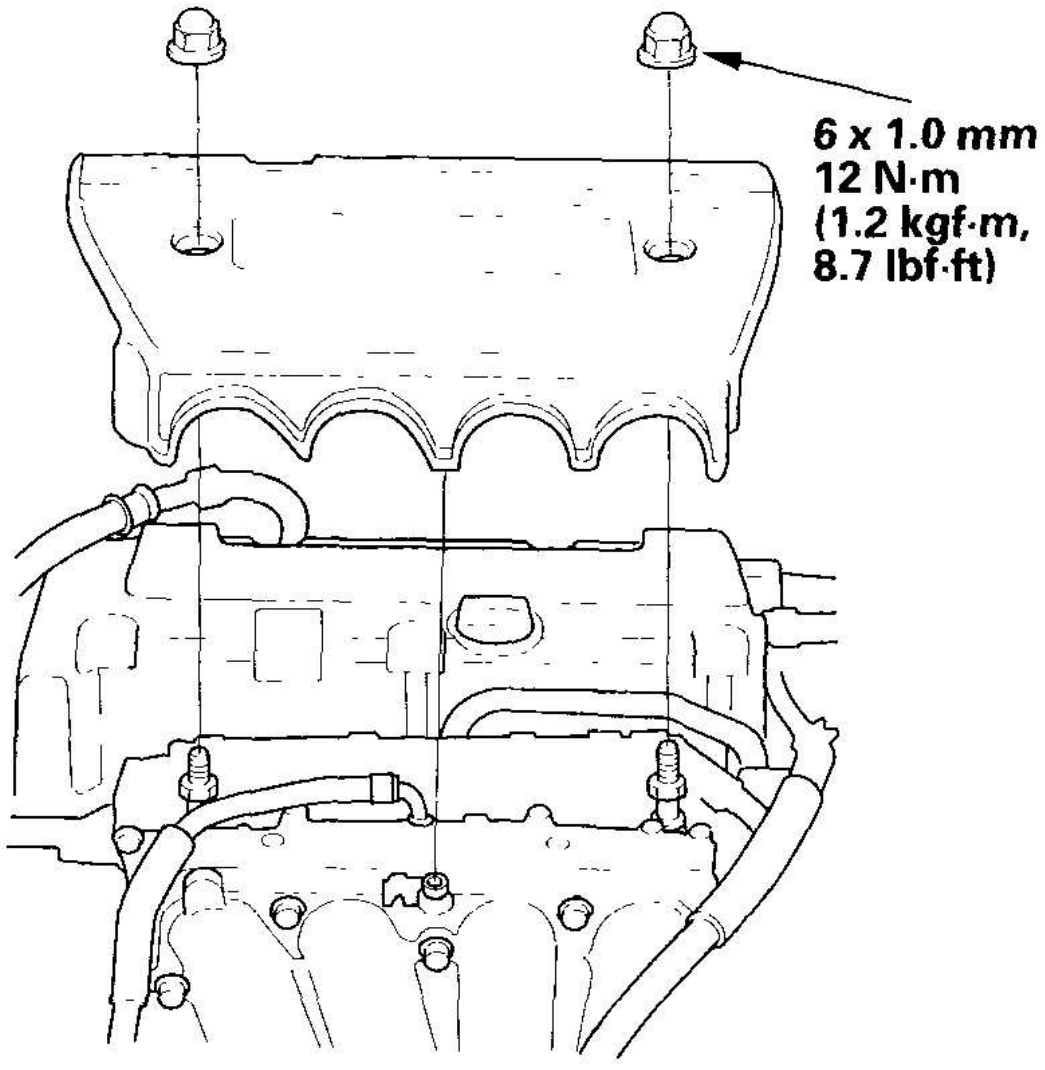
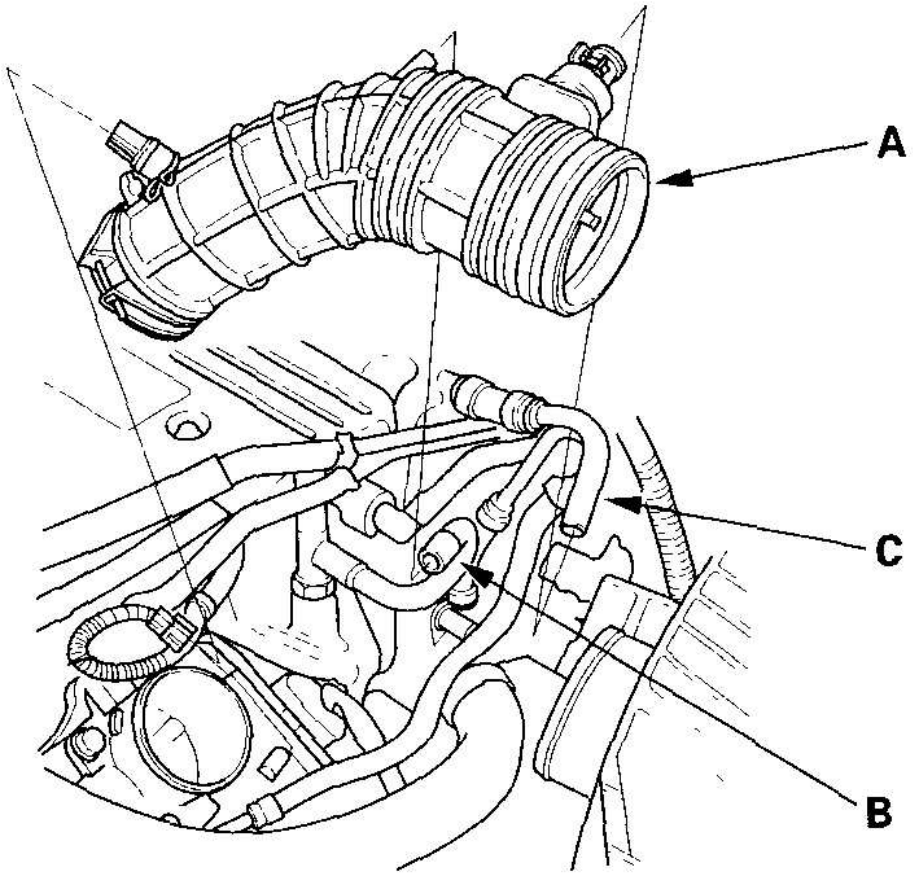


Fig. 36: Installing Intake Manifold Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the intake air duct (A), then connect the IAT sensor connector (B), and install the vacuum hose (C) and breather pipe (D).



G03646287

Fig. 37: Installing Intake Air Duct
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Clean up any spilled engine coolant.
11. After installation, check that all tubes, hoses, and connectors are installed correctly.
12. Refill the radiator with engine coolant, and bleed air from the cooling system with the heater valve open (see **COOLANT REPLACEMENT**).

EXHAUST MANIFOLD REMOVAL AND INSTALLATION

1. Remove the rocker arm oil control solenoid (VTEC solenoid valve) (see

ROCKER ARM OIL CONTROL SOLENOID (VTEC SOLENOID VALVE) ASSEMBLY REMOVAL/INSTALLATION).

2. Remove the driveshafts heat shield (A/T) (see step 11 on **DRIVESHAFT REMOVAL**).
3. Remove the cover and exhaust manifold bracket, then remove the exhaust manifold.

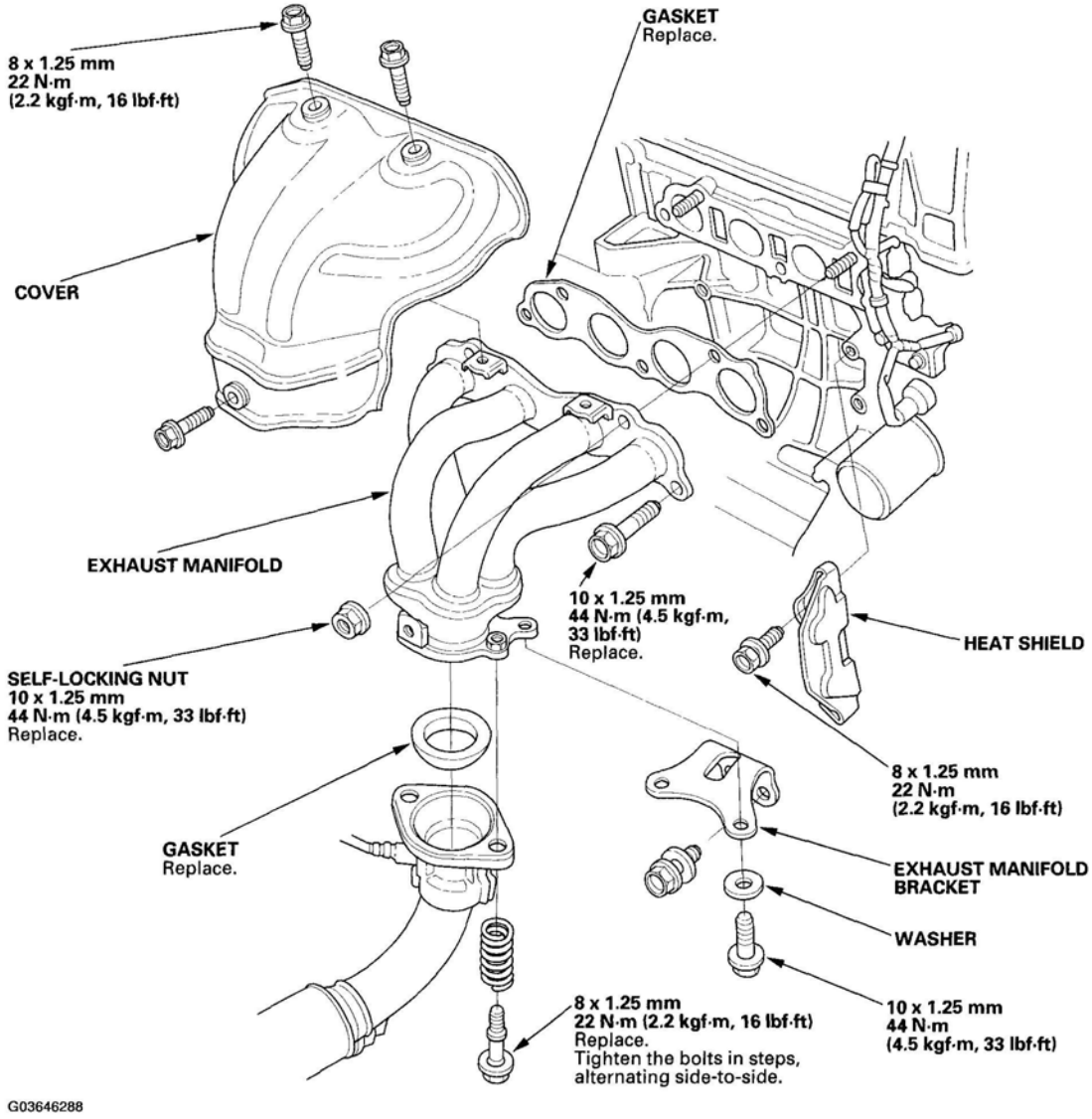


Fig. 38: Removing Cover And Exhaust Manifold Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the exhaust manifold and tighten the bolts/nuts in a crisscross pattern in two or three steps, beginning with the inner nut.
5. Install the other parts in the reverse order of removal.

EXHAUST PIPE AND MUFFLER REPLACEMENT

NOTE: Use new gaskets and self-locking nuts when reassembling.

'03-05 MODELS

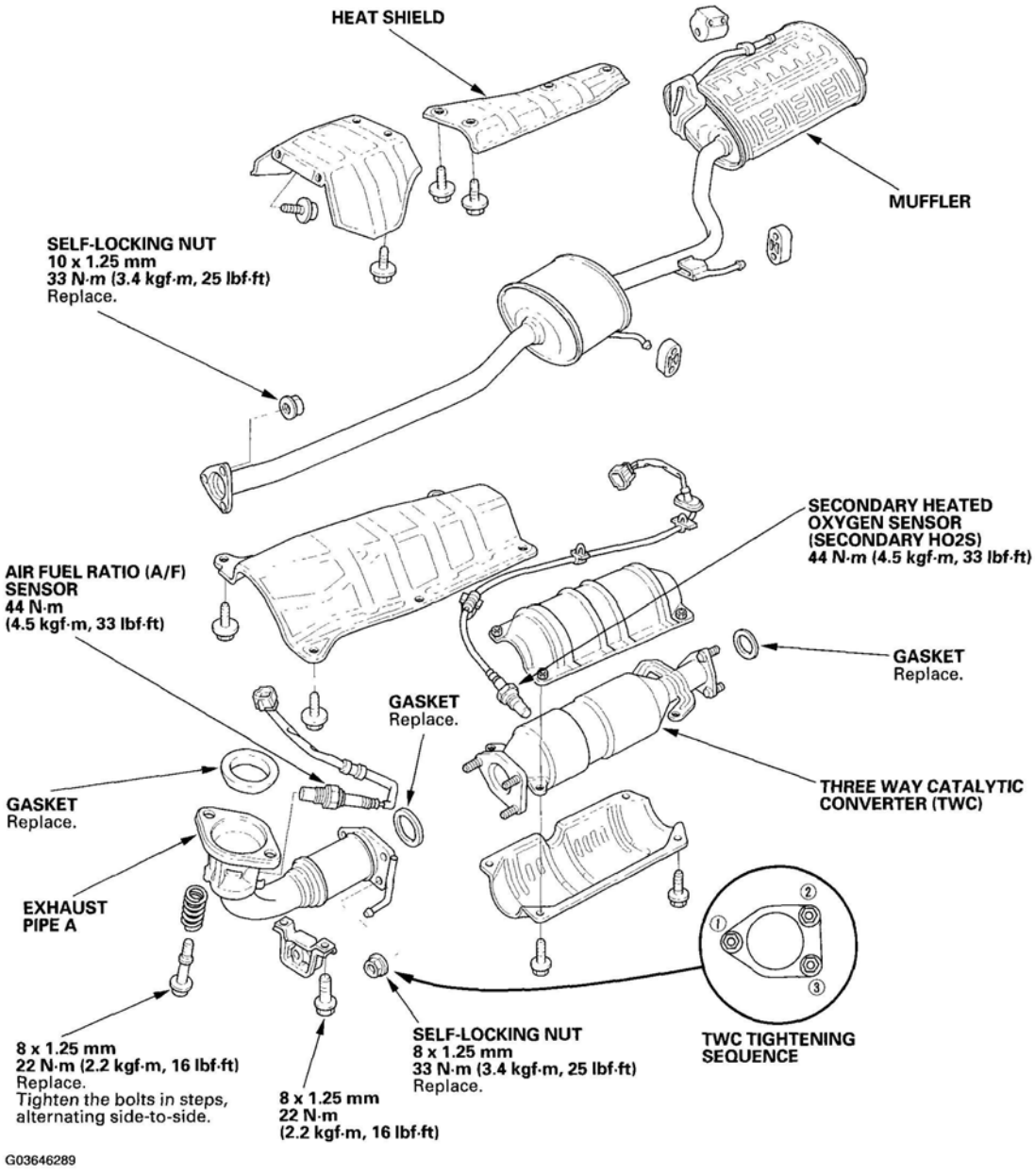


Fig. 39: Replacing Exhaust Pipe And Muffler (2003-2005 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NOTE: Use new gaskets and self-locking nuts when reassembling.

'06-07 MODELS

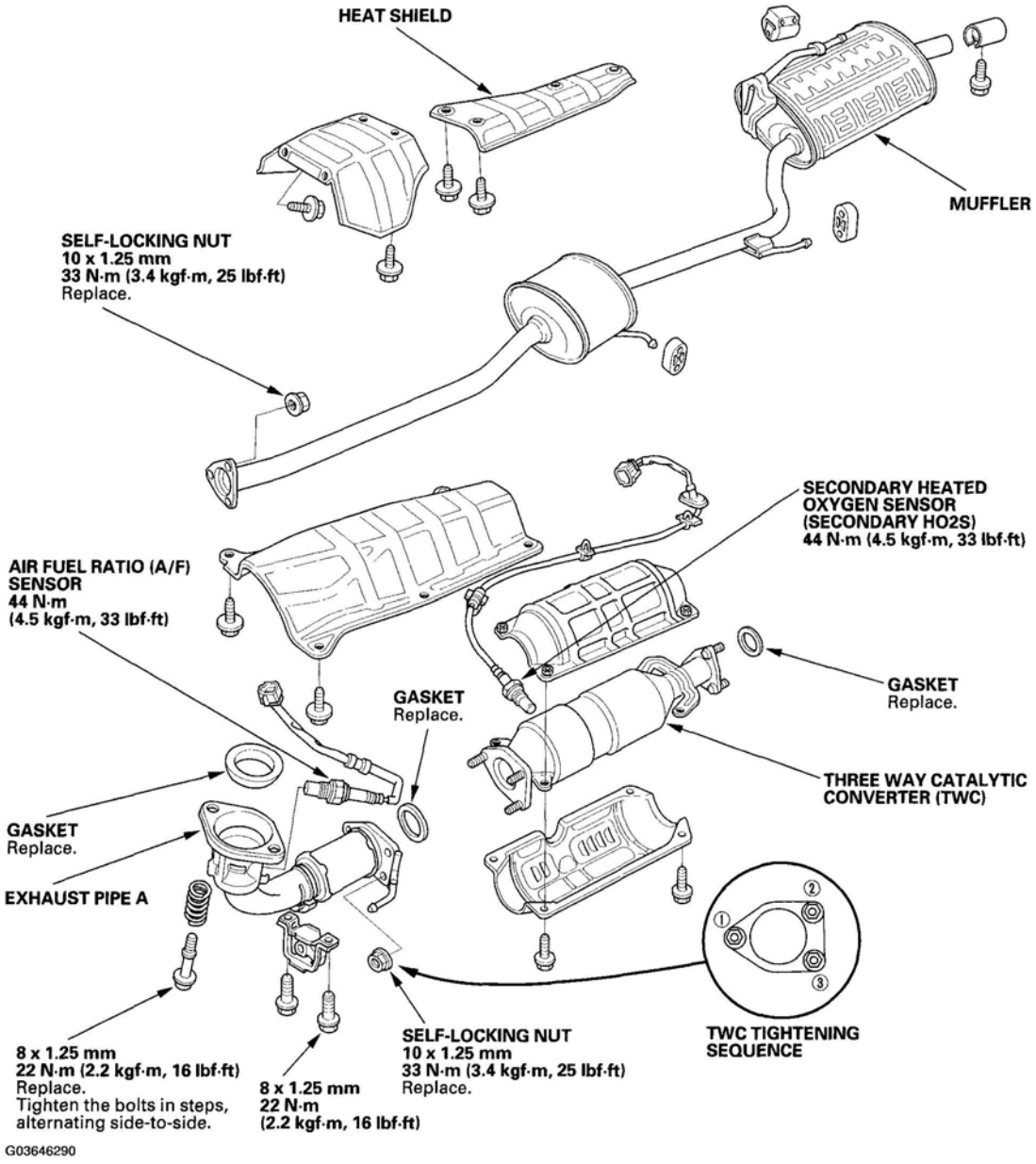


Fig. 40: Replacing Exhaust Pipe And Muffler (2006 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ACCESSORIES & EQUIPMENT

Interior Trim - Accord

COMPONENT LOCATION INDEX

2-DOOR

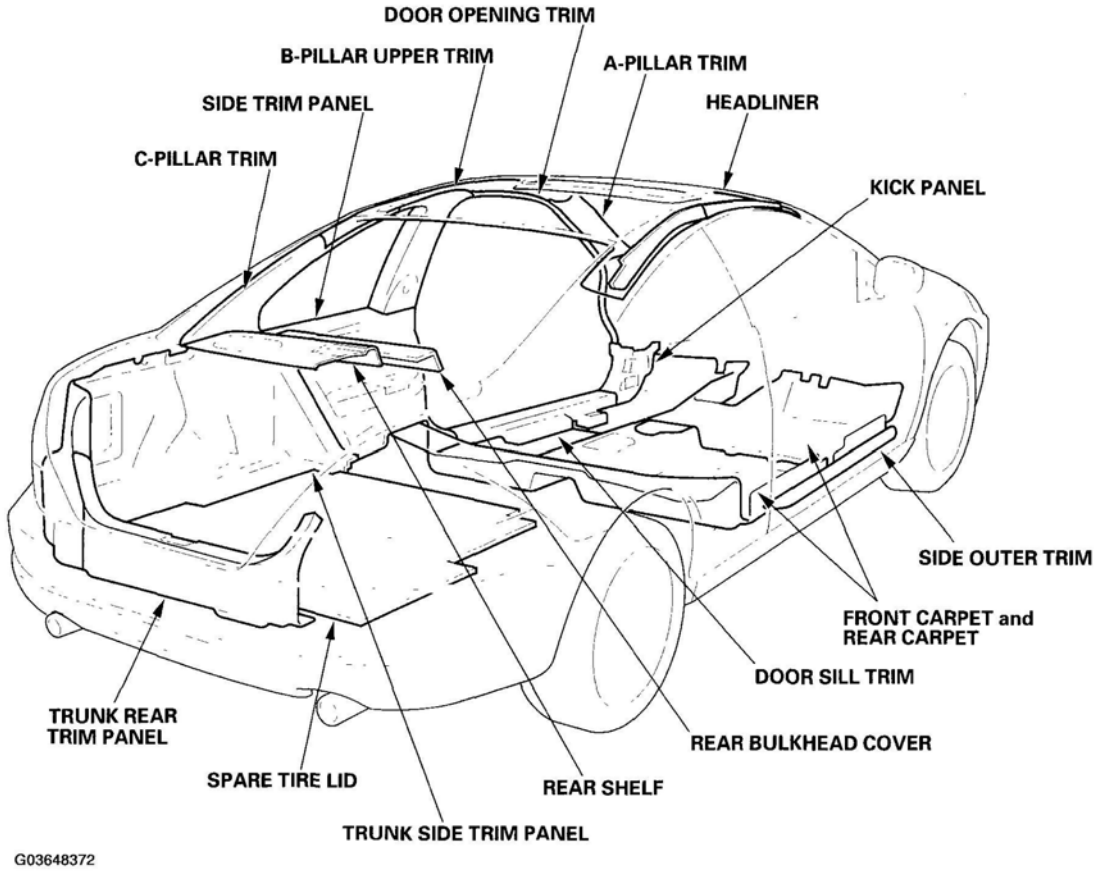


Fig. 1: Locating Components Of Interior Trim (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR

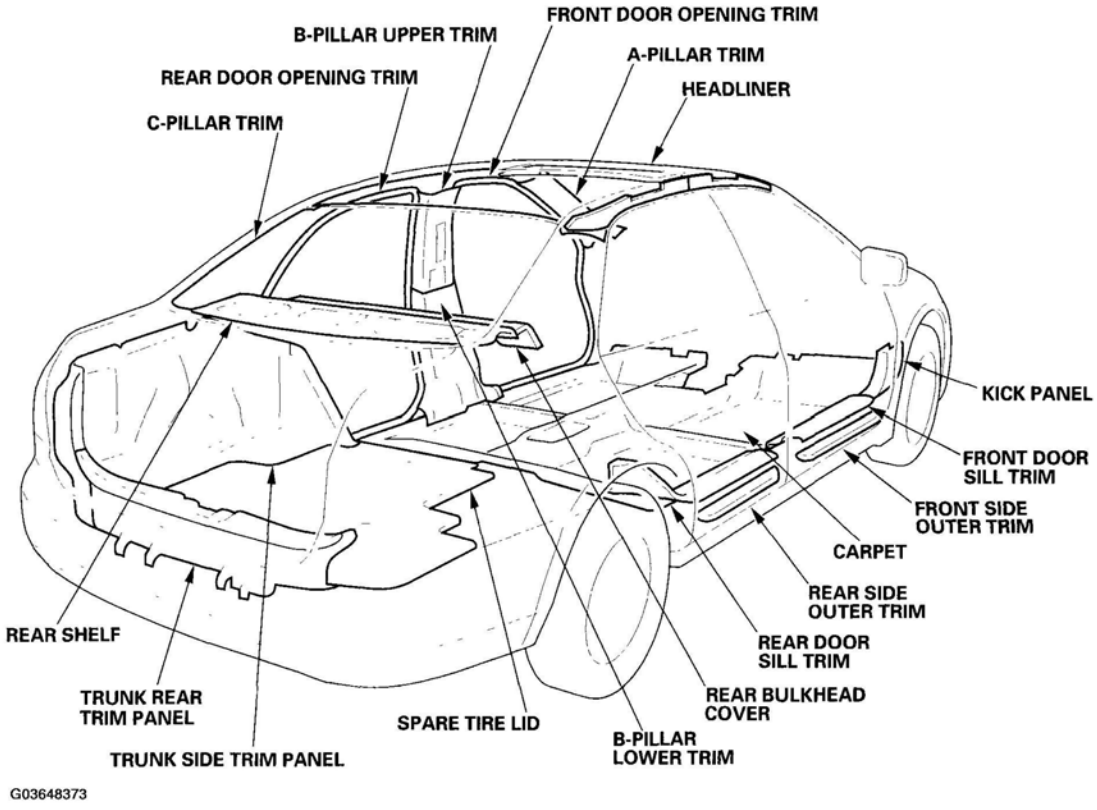


Fig. 2: Locating Components Of Interior Trim (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TRIM REMOVAL/INSTALLATION - DOOR AREA

Special Tools Required

KTC trim tool set SOJATP2014

2-DOOR - DOOR SILL AREA

NOTE:

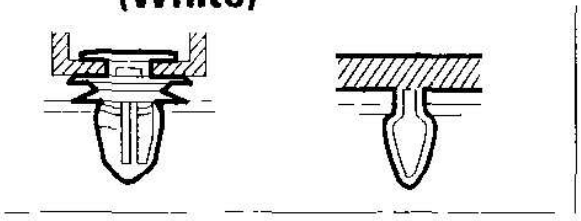
- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

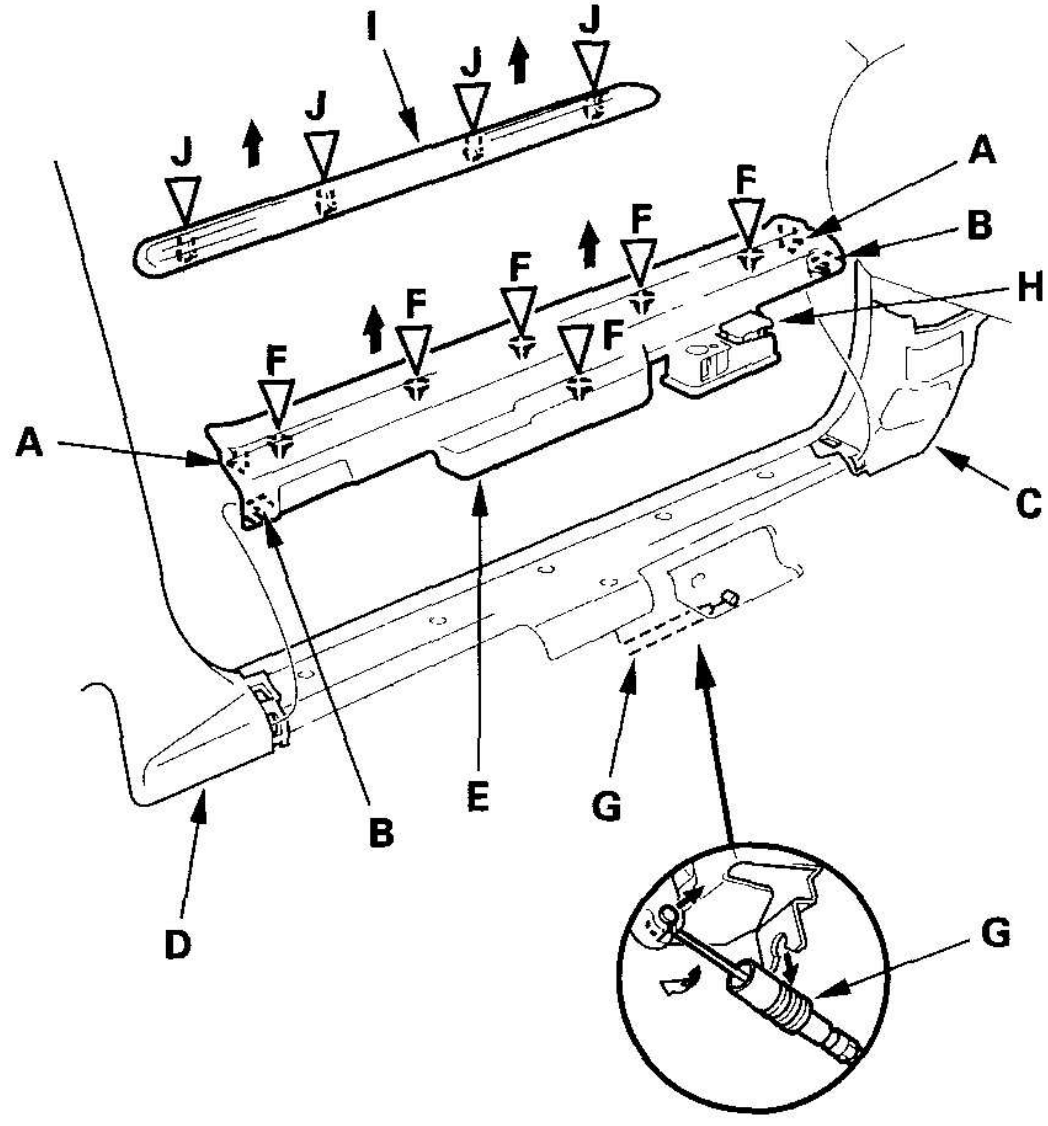
1. Left side: Remove the foot rest (see step 5 in **CARPET REPLACEMENT**).

2. Left side: Remove the front side cap from the door sill trim, and remove the opener lock cylinder and bolt (see **TRUNK LID OPENER/FUEL FILL DOOR OPENER REPLACEMENT**).
3. Detach the hooks (A) and tabs (B) from the kick panel (C) and side trim panel (D), and pull the door sill trim (E) up by hand to detach the clips (F), then remove it.

Fastener Locations

F ▷ : Clip, 6 (White) J ▷ : Clip, 4





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Fig. 3: Detaching Hooks & Tabs From Kick Panel And Side Trim Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Disconnect the trunk lid opener/fuel fill door opener cable (G) from the opener (H).
5. If necessary, pull the side outer trim (I) up to detach the clips (J), then remove the trim.
6. Remove the left kick panel (A) or the right kick panel (B).

   -1 Pull out the door opening trim (C) as needed from the kick panel hooks (D) and the door opening flange.

   -2 Left side: Pull the hood release handle, and hold it.

   -3 Pull the kick panel back by hand to detach the clips (E, F, G), then remove it.

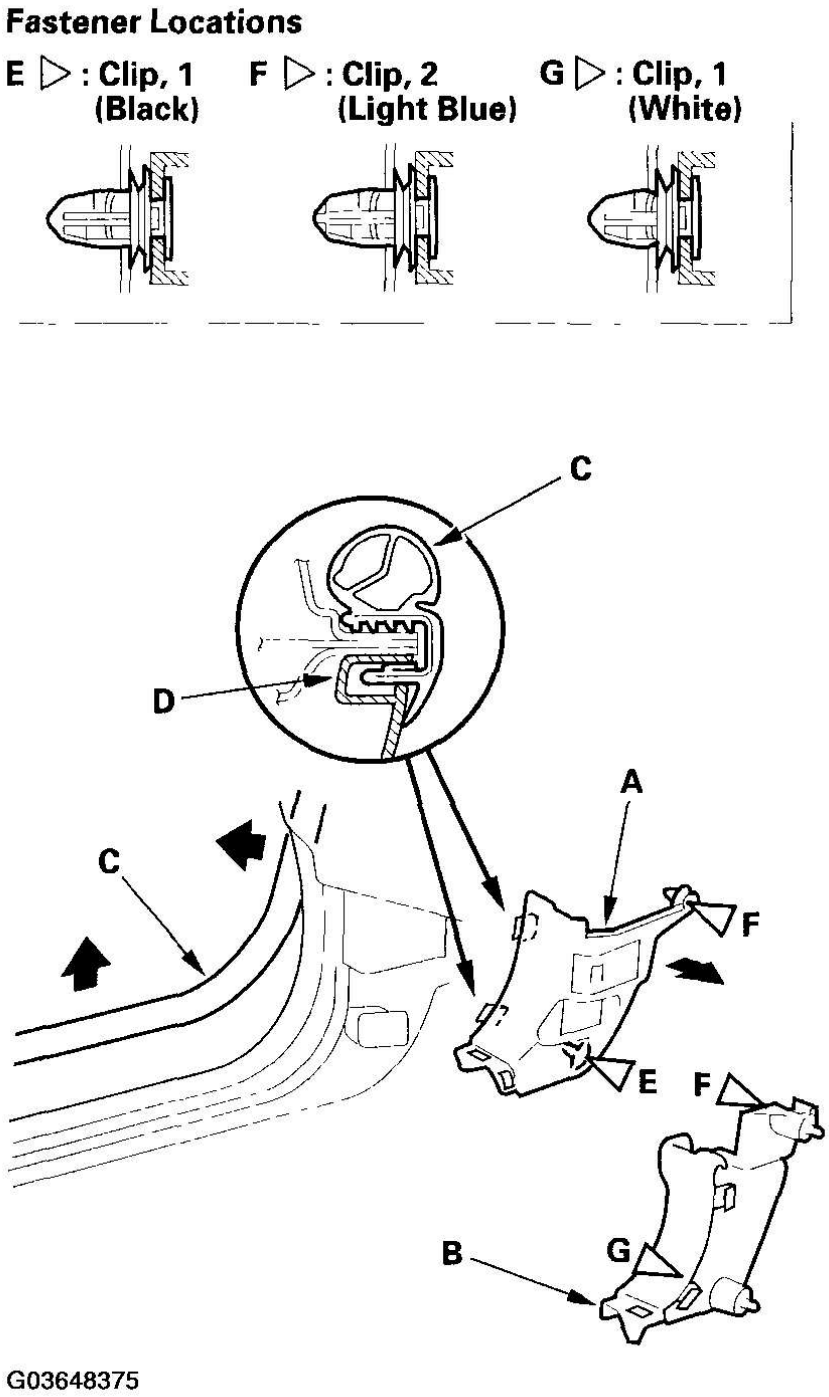


Fig. 4: Removing Left Kick Panel Or Right Kick Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Pull out the door opening trim (A) from the trim hooks (B) and around the door opening flange, then remove the trim.

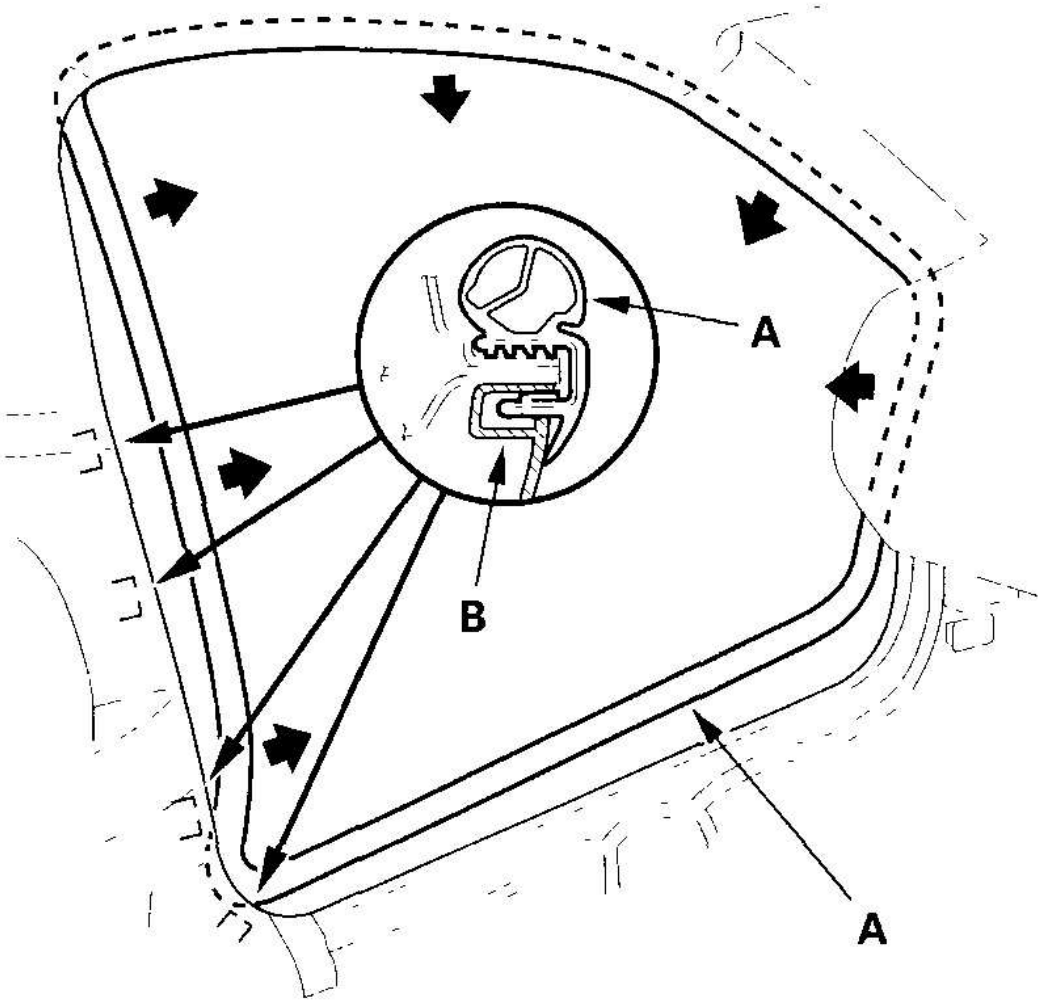


Fig. 5: Removing Door Opening Trim From Trim Hooks Around Door Opening Flange
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with

new ones.

- Push the clips and hooks into place securely.
- Make sure the trunk lid opener/fuel fill door opener cable is connected securely.

Special Tools Required

KTC trim tool set SOJATP2014

4-DOOR - FRONT DOOR SILL AREA

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Left side: Remove the footrest (see step 5 in **CARPET REPLACEMENT**).
2. Left side: Remove the front side cap from the front door sill trim, and remove the opener lock cylinder and bolt (see **TRUNK LID OPENER/FUEL FILL DOOR OPENER REPLACEMENT**).
3. Detach the hooks (A) and tabs (B) from the kick panel (C) and B-pillar lower trim (D), and pull the front door sill trim (E) up by hand to detach the clips (F) or (G), then remove it.

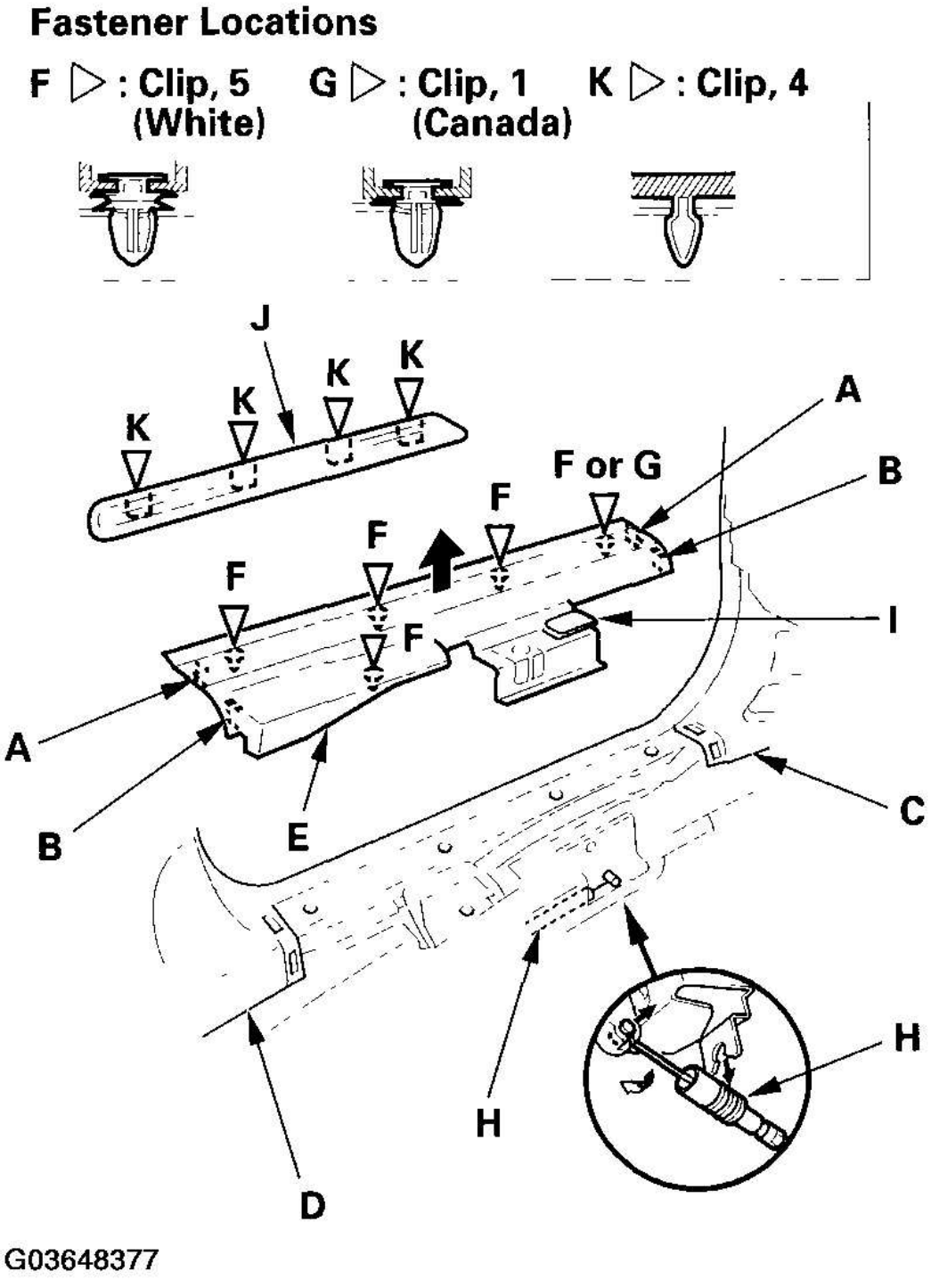


Fig. 6: Detaching Hooks & Tabs From Kick Panel And B-Pillar Lower

Trim

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Disconnect the trunk lid opener/fuel fill door opener cable (H) from the opener (I).
5. If necessary, pull the front side outer trim (J) up to detach the clips (K), then remove the trim.
6. Remove the left kick panel (A) or the right kick panel (B).

   -1 Pull out the door opening trim (C) as needed from the kick panel hooks (D) and the door opening flange.

   -2 Left side: Pull the hood release handle, and hold it.

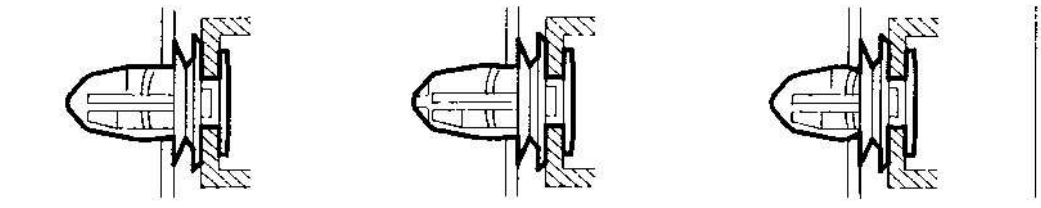
   -3 Pull the kick panel back by hand to detach the clips (E, F, G), then remove it.

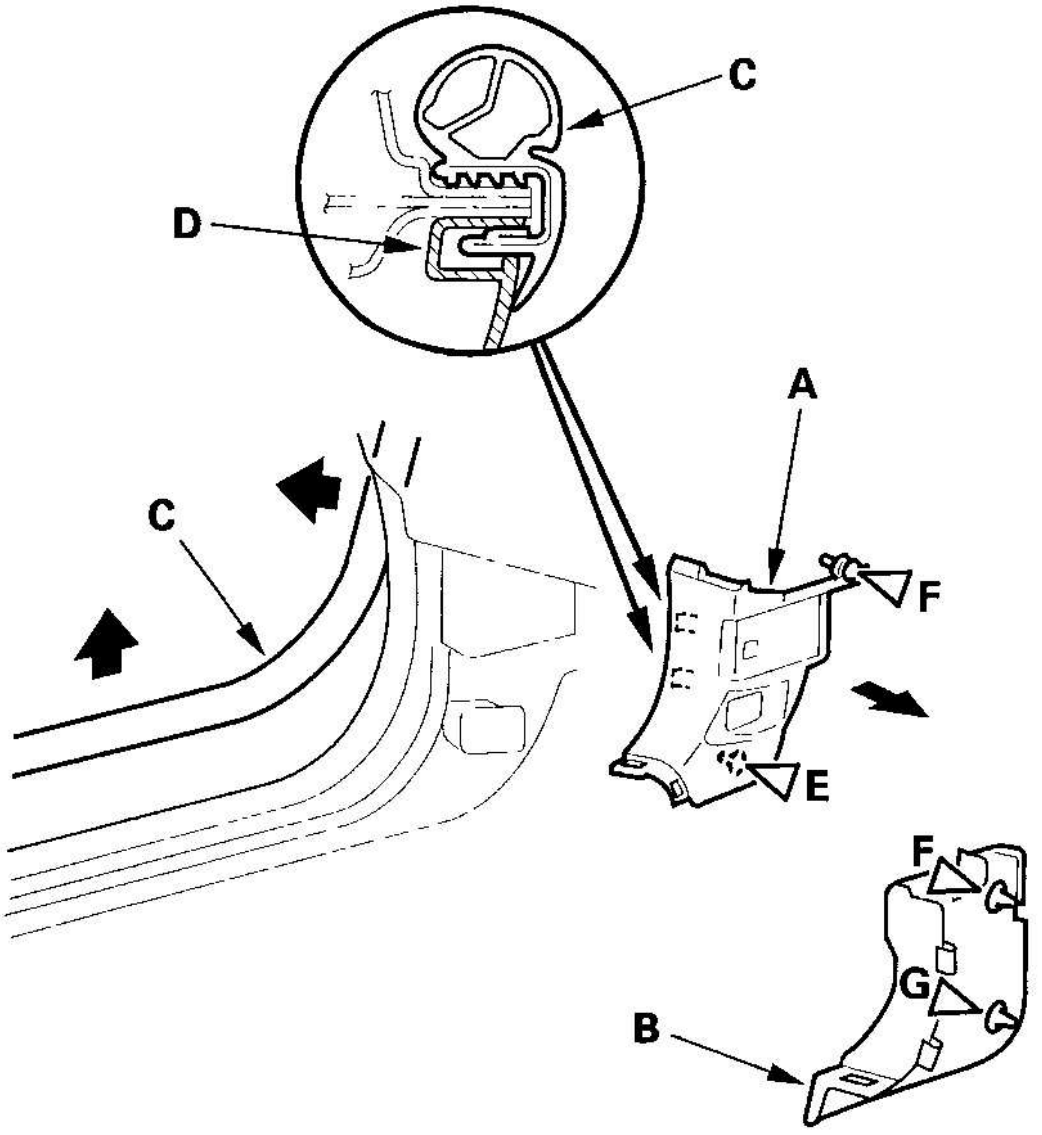
Fastener Locations

E ▷ : Clip, 1 (Black)

F ▷ : Clip, 2 (Light Blue)

G ▷ : Clip, 1 (White)





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Fig. 7: Removing Left Kick Panel Or Right Kick Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Pull out the front door opening trim (A) from the trim hooks (B) and around the front door opening flange, then remove the trim.

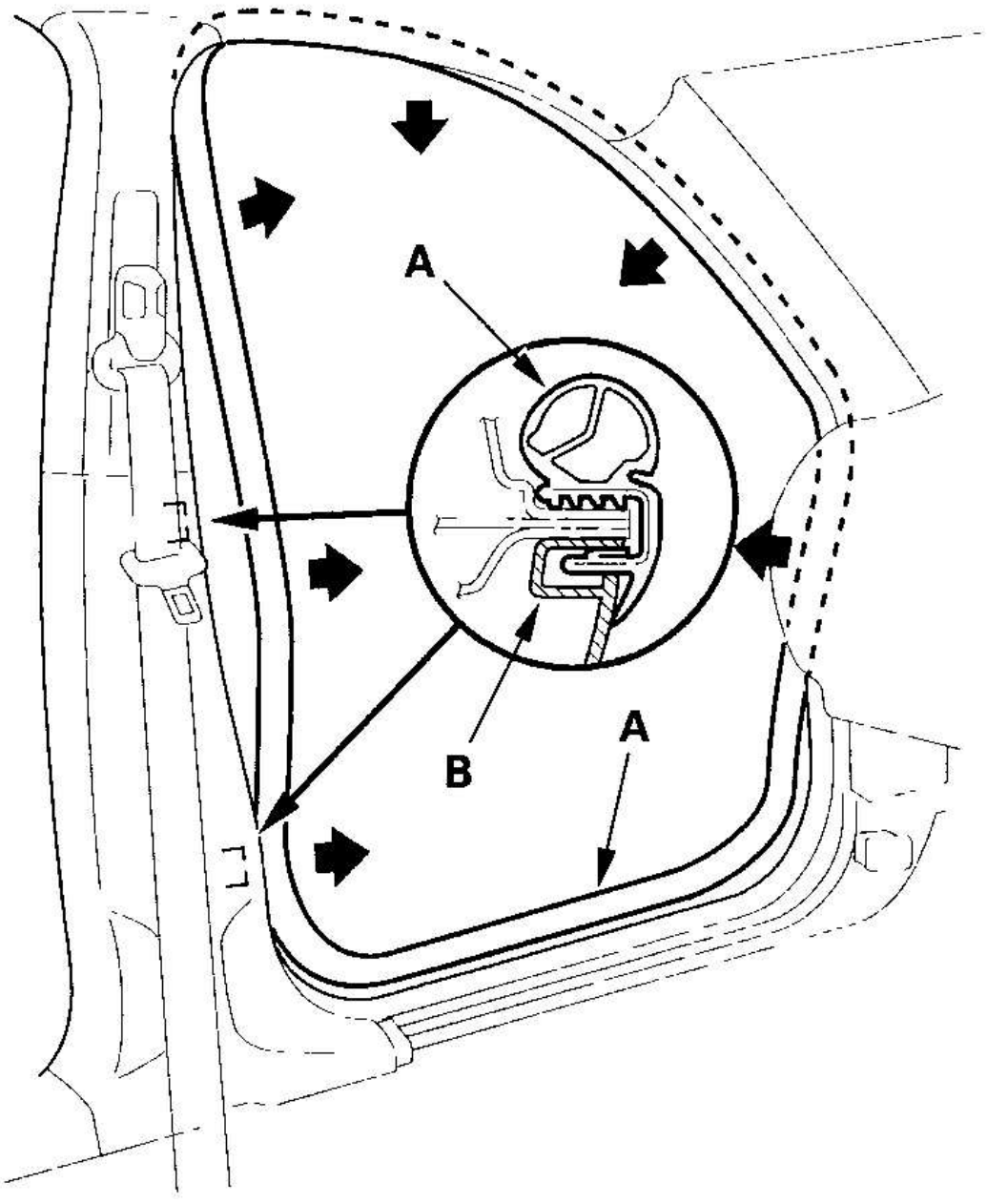


Fig. 8: Removing Front Door Opening Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the trim in the reverse order of removal, and note these items:

- Check the clips for damage or stress-whitening, and replace them with new ones.
- Push the clips and hooks into place securely.
- Make sure the trunk lid opener/fuel fill door opener cable is connected securely.

Special Tools Required

KTC trim tool set SOJATP2014

4-DOOR - REAR DOOR SILL AREA

NOTE:

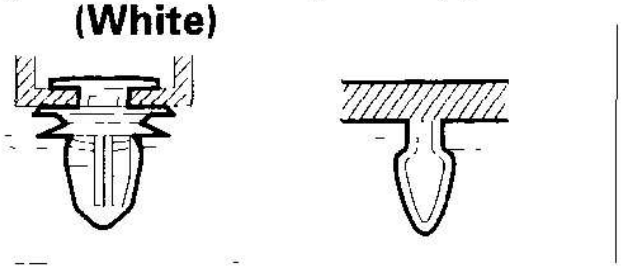
- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

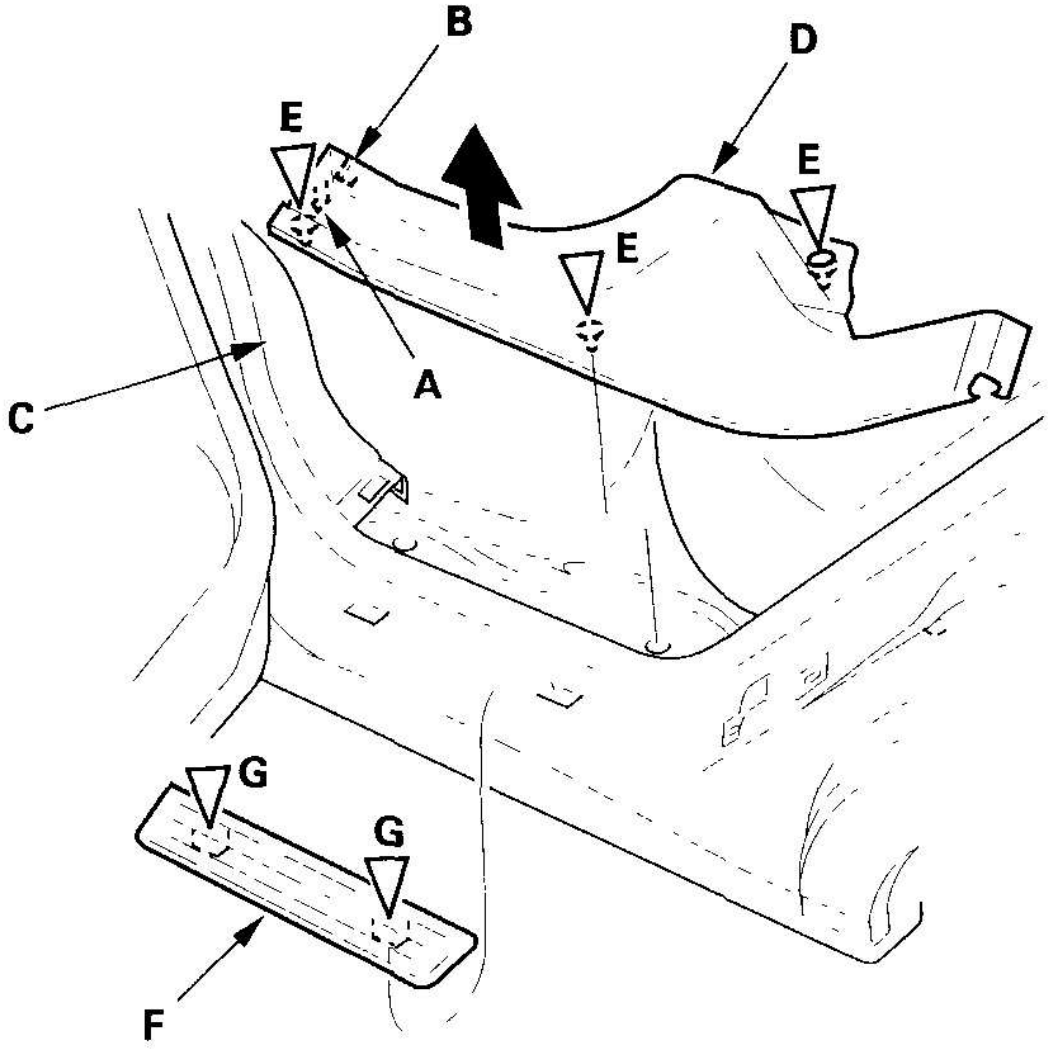
1. Detach the hook (A) and tab (B) from the B-pillar lower trim (C), and pull the rear door sill trim (D) up by hand to detach the clips (E), then remove it.

Fastener Locations

E ▷ : Clip, 3 (White)

G ▷ : Clip, 2

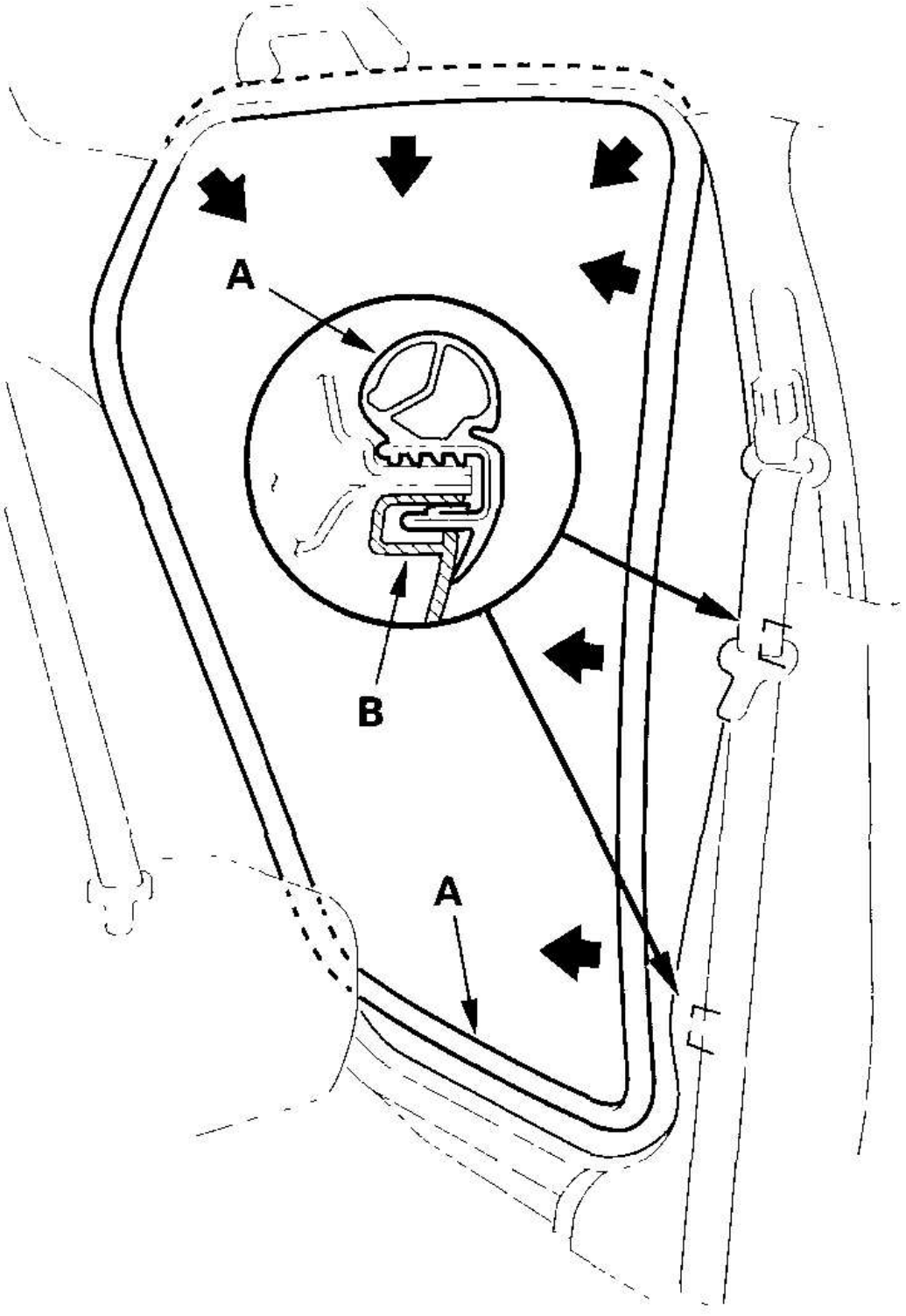




G03648380

Fig. 9: Detaching Hooks And Tabs From B-Pillar Lower Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. If necessary, pull the rear side outer trim (F) up to detach the clips (G), then remove the trim.
3. Pull out the rear door opening trim (A) from the trim hooks (B) and around the rear door opening flange, then remove the trim.



G03648381

Fig. 10: Removing Rear Door Opening Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Push the clips and hooks into place securely.

TRIM REMOVAL/INSTALLATION - PILLAR AREA

Special Tools Required

KTC trim tool set SOJATP2014

A-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)

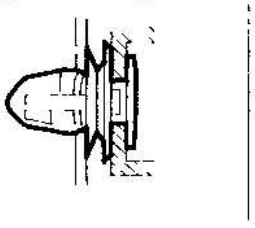
NOTE:
- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

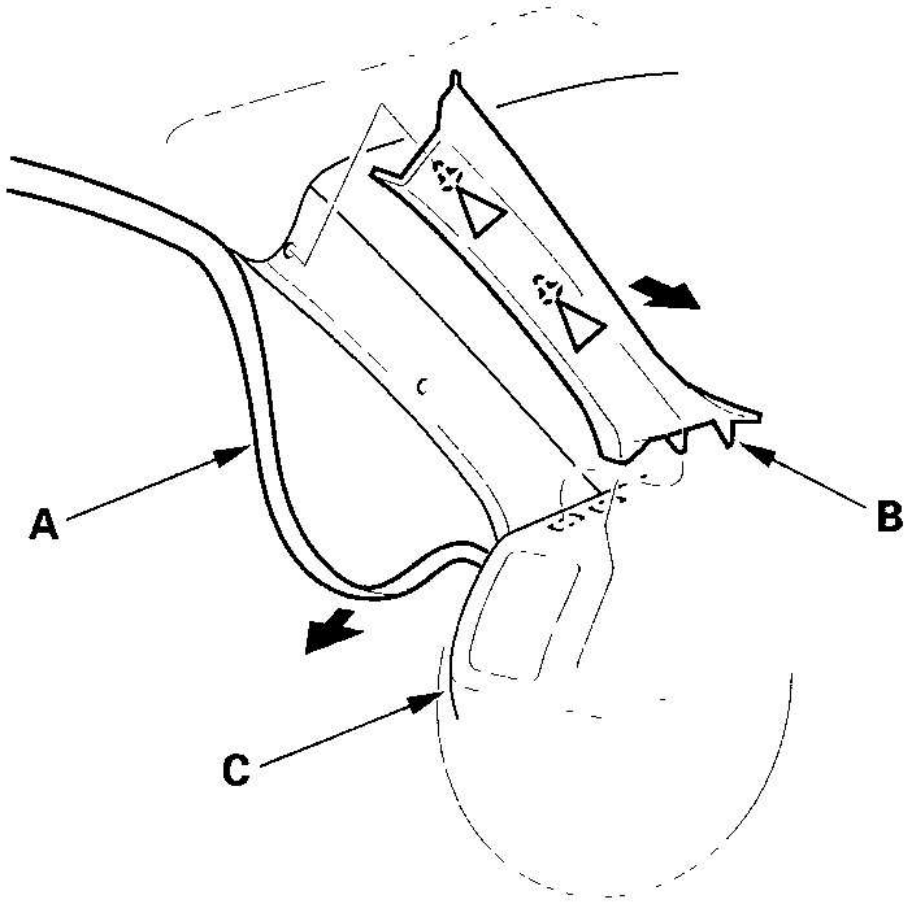
1. Pull out the door opening trim (A) as needed. Pull the upper portion of the A-pillar trim (B) back by hand to detach the clips, and pull the trim up, then remove it from the dashboard (C).

NOTE: The 2-door is shown, the 4-door is similar.

Fastener Locations

▷ : Clip, 2
(White)





G03648382

Fig. 11: Pulling Out Door Opening Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Push the clips into place securely.

Special Tools Required

KTC trim tool set SOJATP2014

2-DOOR-B-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)

NOTE:
- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove these items:
   - C-pillar trim, front portion as needed (see **2-DOOR-C-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**)
   - Side trim panel, upper portion as needed (see **TRIM REMOVAL/INSTALLATION - REAR SIDE AREA**)
   - Door opening trim, as needed (see step 7 in **2-DOOR - DOOR SILL AREA**)
2. Remove the front seat belt upper anchor bolt (see step 6 in **FRONT SEAT BELT - 2-DOOR**).
3. Remove the B-pillar upper trim (A).

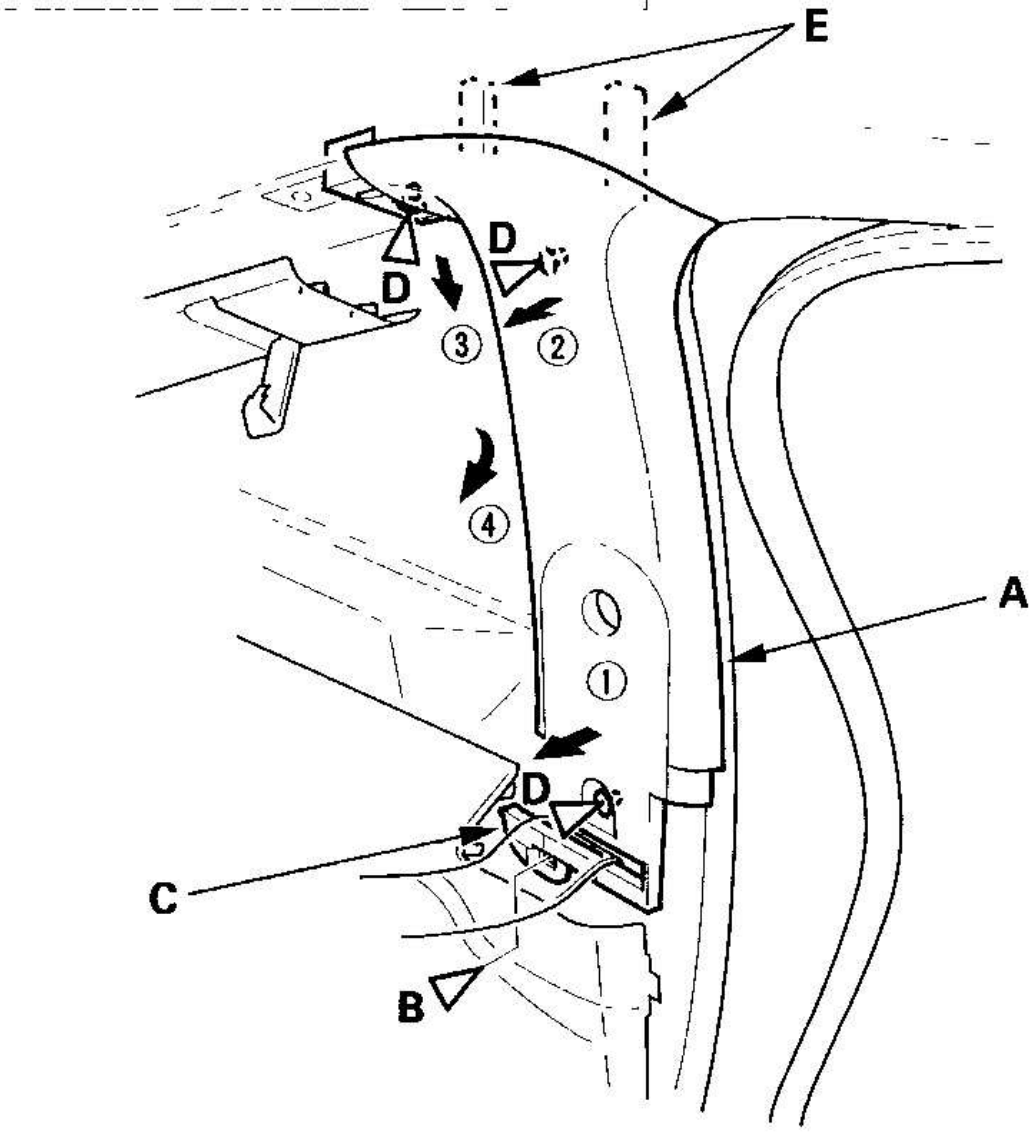
   -1 Remove the clip (B) from the seat belt guide (C).

   -2 Pull out the trim by hand to detach the clips (D), and to release the hooks (E) in the numbered sequence shown in **Fig. 12**.

Fastener Locations

B ▷ : Clip, 1 **D ▷ : Clip, 3 (White)**





G03648383

Fig. 12: Removing B-Pillar Upper Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Push the clips into place securely.
   - Apply medium strength liquid thread lock to the front seat belt upper anchor bolt before reinstallation (see step 9 in **FRONT SEAT BELT - 2-DOOR**).
   - Before installing the anchor bolt, make sure there are no twists or kinks in the seat belt.
   - When installing the side trim panel, make sure the seat belt is not pinched.

Special Tools Required

KTC trim tool set SOJATP2014

4-DOOR - B-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:
- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove these items:
   - Front door sill trim (see **4-DOOR - FRONT DOOR SILL AREA**)
   - Rear door sill trim (see **4-DOOR - REAR DOOR SILL AREA**)
   - Front door opening trim, as needed (see step 7 in **4-DOOR - FRONT DOOR SILL AREA**)

- Rear door opening trim, as needed (see step 3 in **4-DOOR - REAR DOOR SILL AREA**)

2. Remove the B-pillar lower trim (A).

   -1 Detach the lower clips by pulling the bottom of the trim back by hand.

   -2 Pull the trim down to release the upper hooks (B).

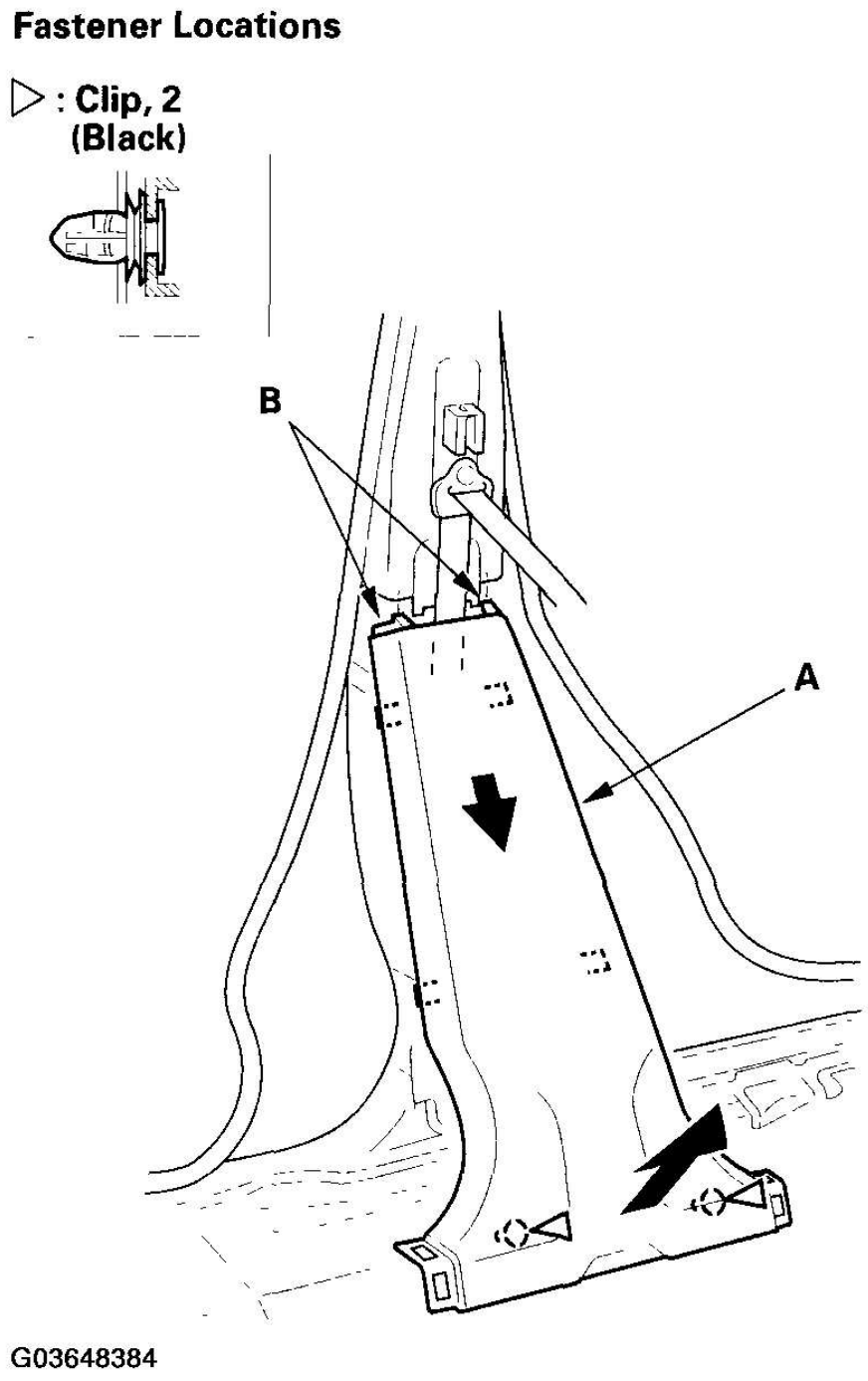
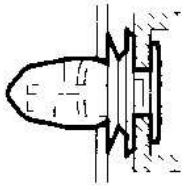


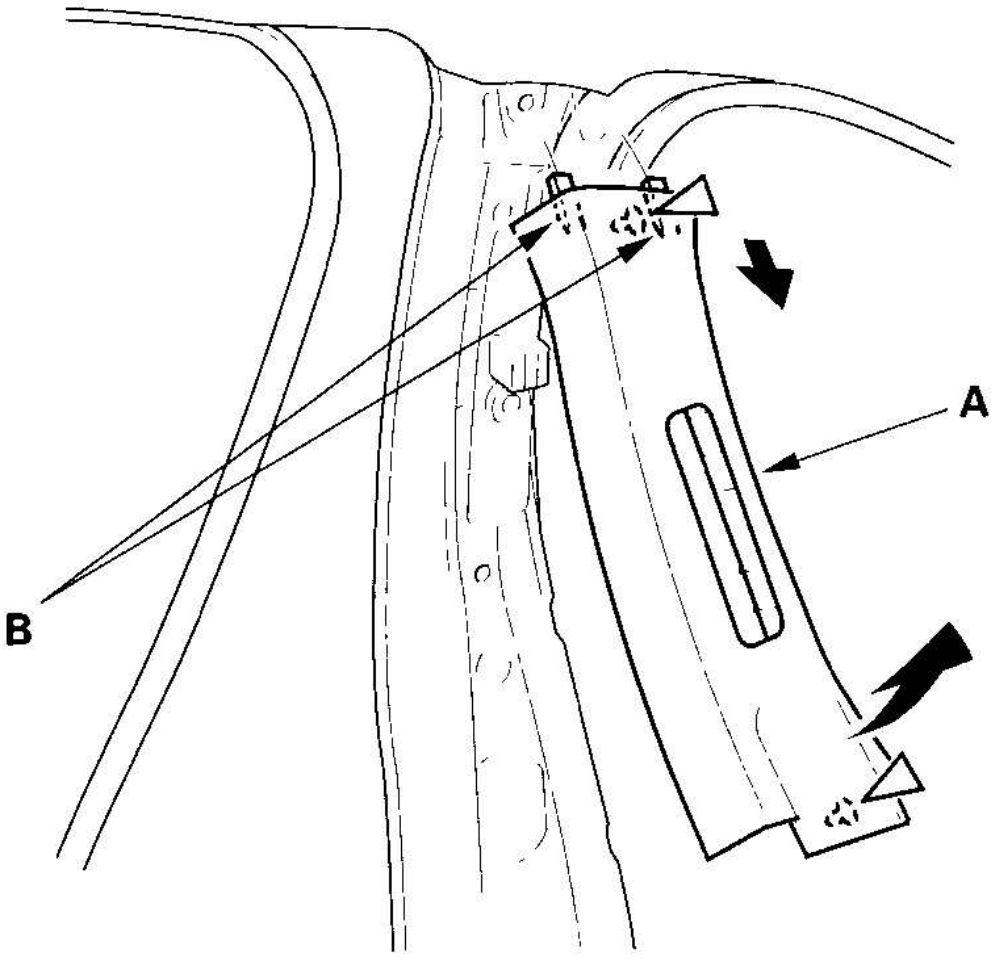
Fig. 13: Removing B-Pillar Lower Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the upper anchor cover, and remove the upper anchor bolt (see step 7 in **FRONT SEAT BELT - 4-DOOR**).
4. Remove the B-pillar upper trim (A).
    -1 Pull the bottom of the trim back by hand to detach the lower clip.
    -2 Detach the upper clip by pulling the top of the trim.
    -3 Pull the trim down to release the upper hooks (B).

Fastener Locations

▷ : Clip, 2 (Black)





G03648385

Fig. 14: Removing B-Pillar Upper Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Push the clips into place securely.
   - Apply medium strength liquid thread lock to the front seat belt upper anchor bolt before reinstallation (see step 12 on **FRONT SEAT BELT - 4-DOOR**).
   - Before installing the anchor bolt, make sure there are no twists or kinks in the seat belt.

Special Tools Required

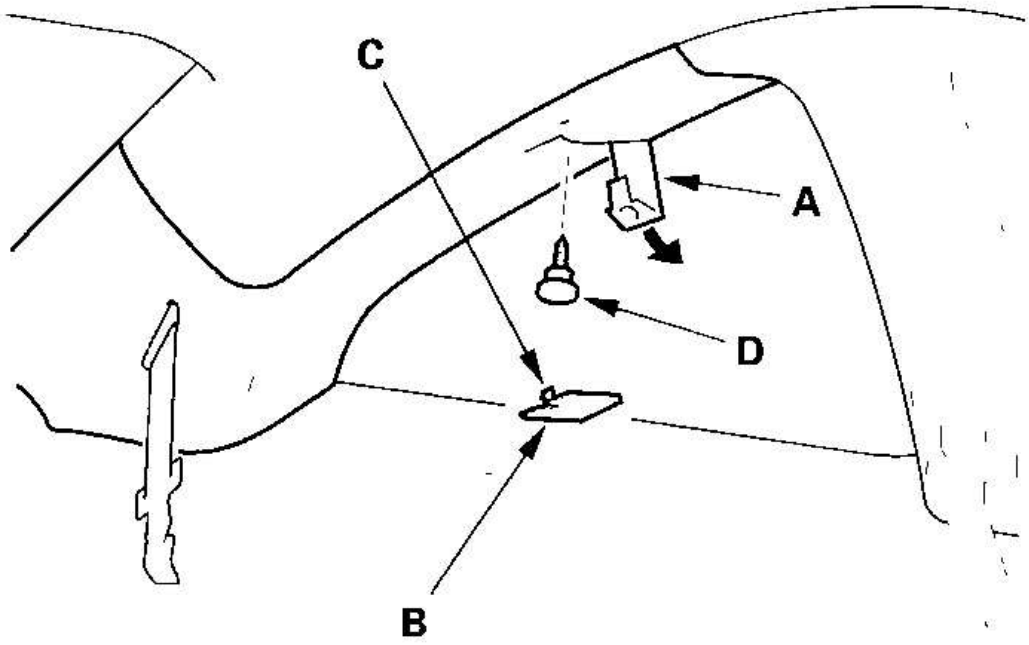
KTC trim tool set SOJATP2014

2-DOOR-C-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)

NOTE:
- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove the rear seat cushion (see **REAR SEAT REMOVAL/INSTALLATION**).
2. Remove the rear seat belt lower anchor bolt (see step 2 in **REAR SEAT BELT REPLACEMENT**).
3. Left side: Pull the coat hanger (A) down, and remove the coat hanger cover (B) by releasing the hook (C), then remove the screw (D).

   Right side: Remove the right C-pillar cap (E) by releasing the hooks (F), then remove the screw (G).



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Fig. 15: Pulling & Removing Coat Hanger Cover Releasing Hook (Left Side)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

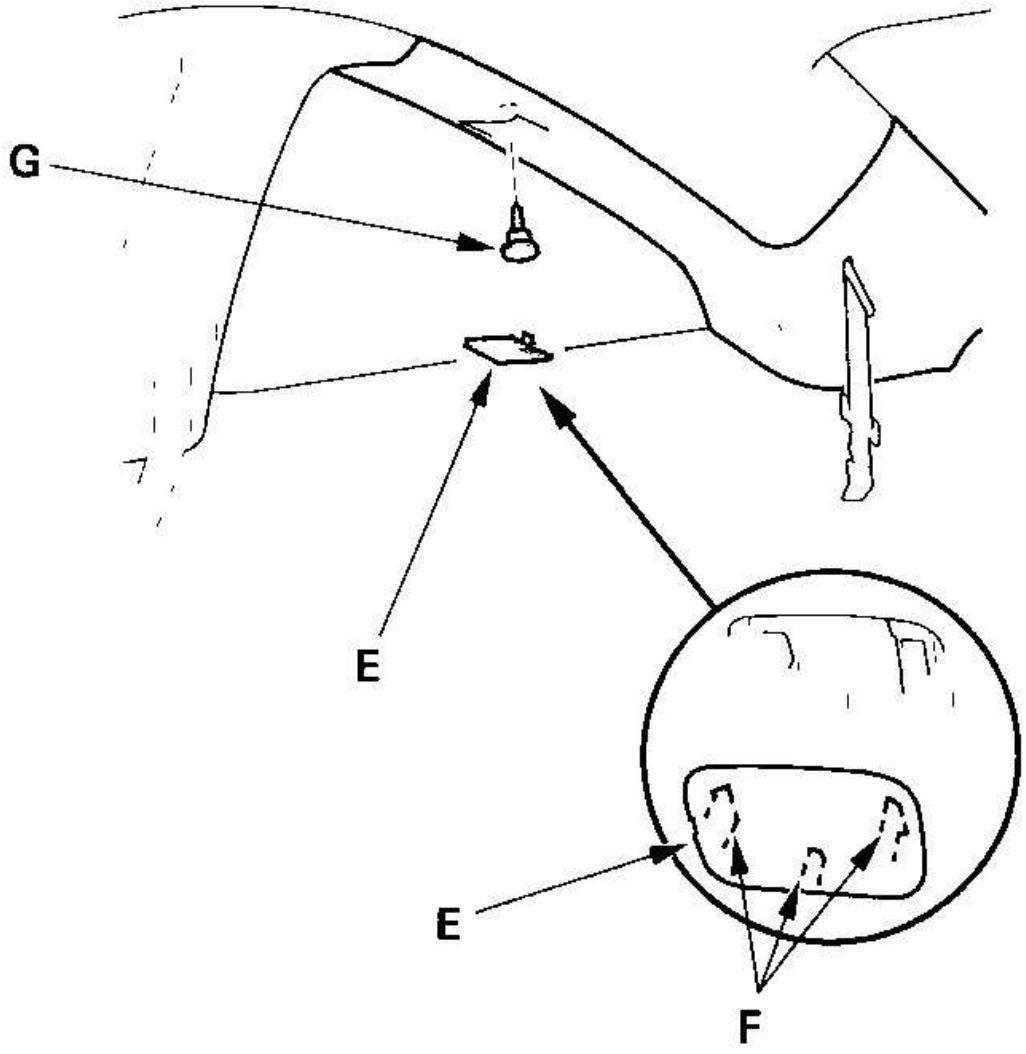


Fig. 16: Removing Right C-Pillar Cap Releasing Hooks (Right Side)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

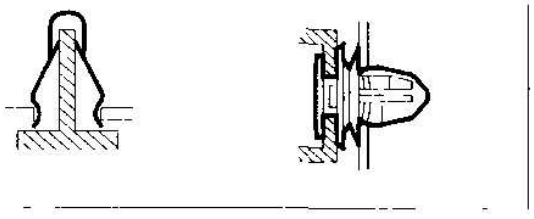
4. Remove the C-pillar trim (A).
   -1 Pull the front edge of the trim down to detach the hooks (B) and clips (C) from the B-pillar upper trim (D).
   -2 Pull out the trim to detach the clips (E).

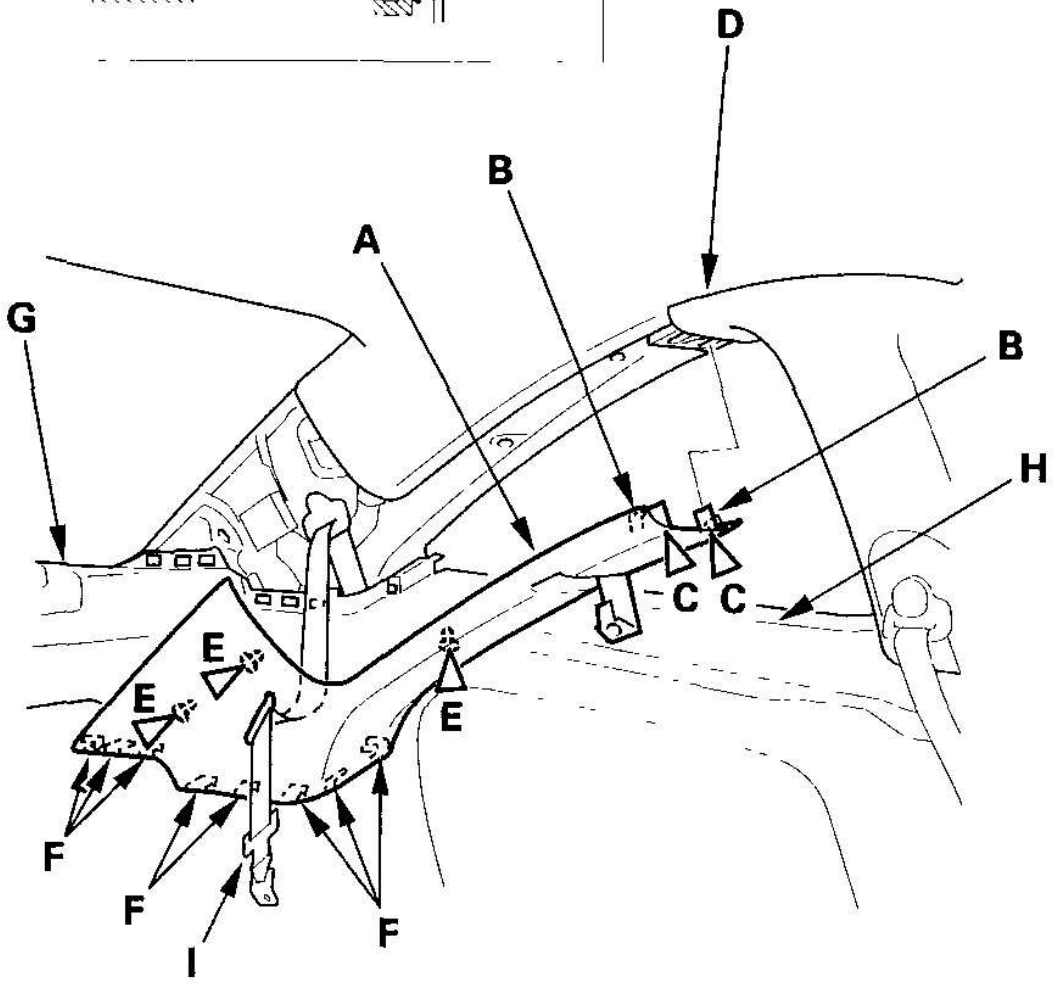
-3 Pull out the bottom portion of the trim to detach the hooks (F) from the rear shelf (G) and the side trim panel (H).

-4 Pass the rear seat belt (I) out through the slit in the trim.

Fastener Locations

C ▷ : Clip, 2 E ▷ : Clip, 3 (White)





G03648388

Fig. 17: Removing C-Pillar Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Push the clips and hooks into place securely.
   - Apply medium strength liquid thread lock to the anchor bolt before reinstallation (see step 6 in **REAR SEAT BELT REPLACEMENT**).
   - Before installing the anchor bolt, make sure there are no twists or kinks in the belt.

Special Tools Required

KTC trim tool set SOJATP2014

4-DOOR-C-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)

NOTE:
- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove these items:
   - Rear seat side bolster (see **4-DOOR**)
   - Rear door opening trim, as needed (see step 3 in **4-DOOR - REAR DOOR SILL AREA**)
2. Pull the C-pillar trim (A) back by hand to detach the clips, then remove it.

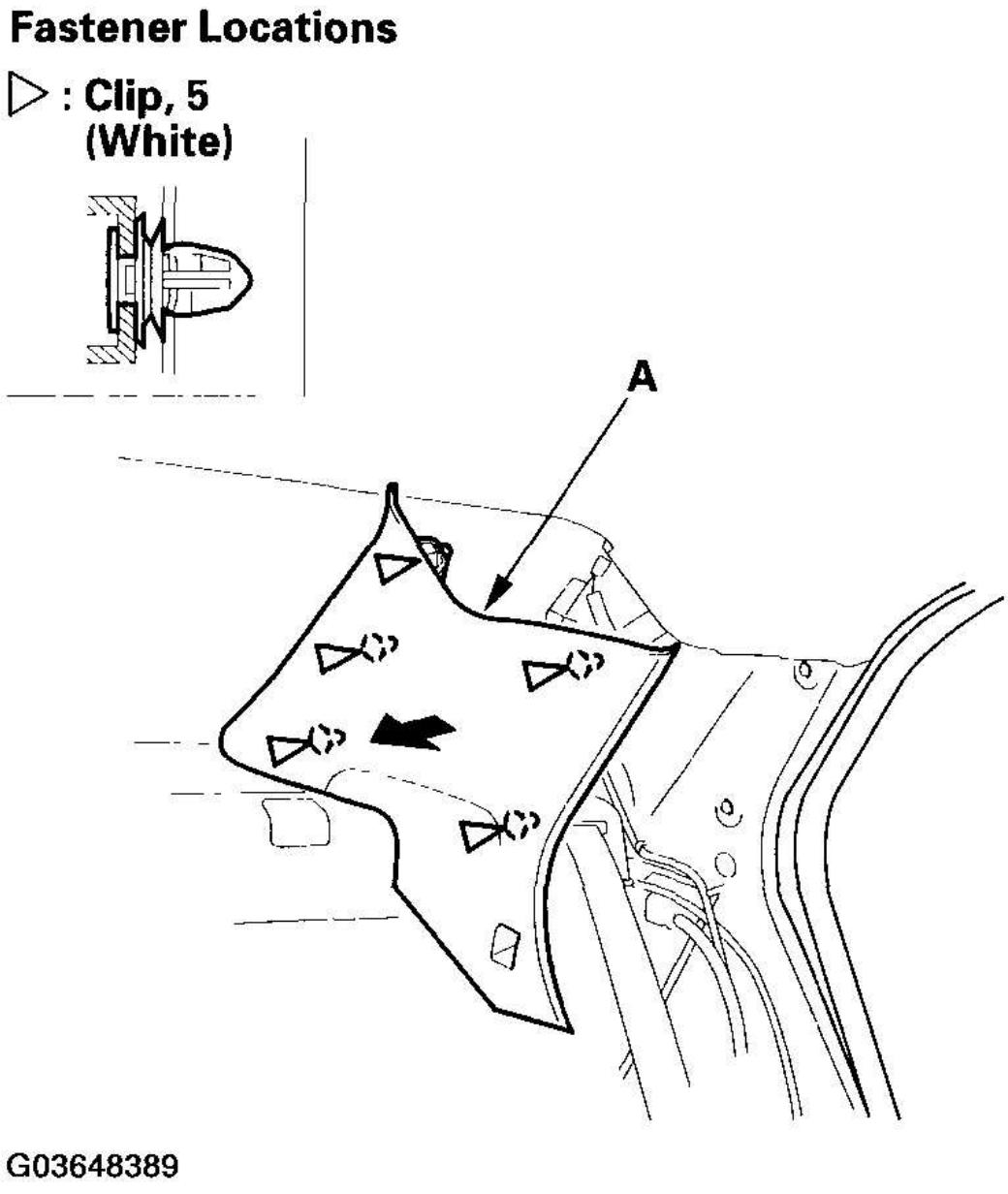


Fig. 18: Pulling C-Pillar Trim Back To Detach Clips
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the trim in the reverse order of removal, and note these items:
    - Check the clips for damage or stress-whitening, and replace them with new ones.

- Push the clips into place securely.

Special Tools Required

KTC trim tool set SOJATP2014

A-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove the A-pillar trim (A).

   -1 Pull out the door opening trim (B) as needed.

   -2 Pry the A-pillar cap (C) out until it is stopped by the hooks (D). Release the hooks and pull the cap out of the grommet (E). Discard the cap.

   -3 Pull the trim back by hand to detach the clip, then pull the trim up.

   NOTE: The 2-door is shown, the 4-door is similar.

Fastener Location

▷ : Clip, 1 (White)

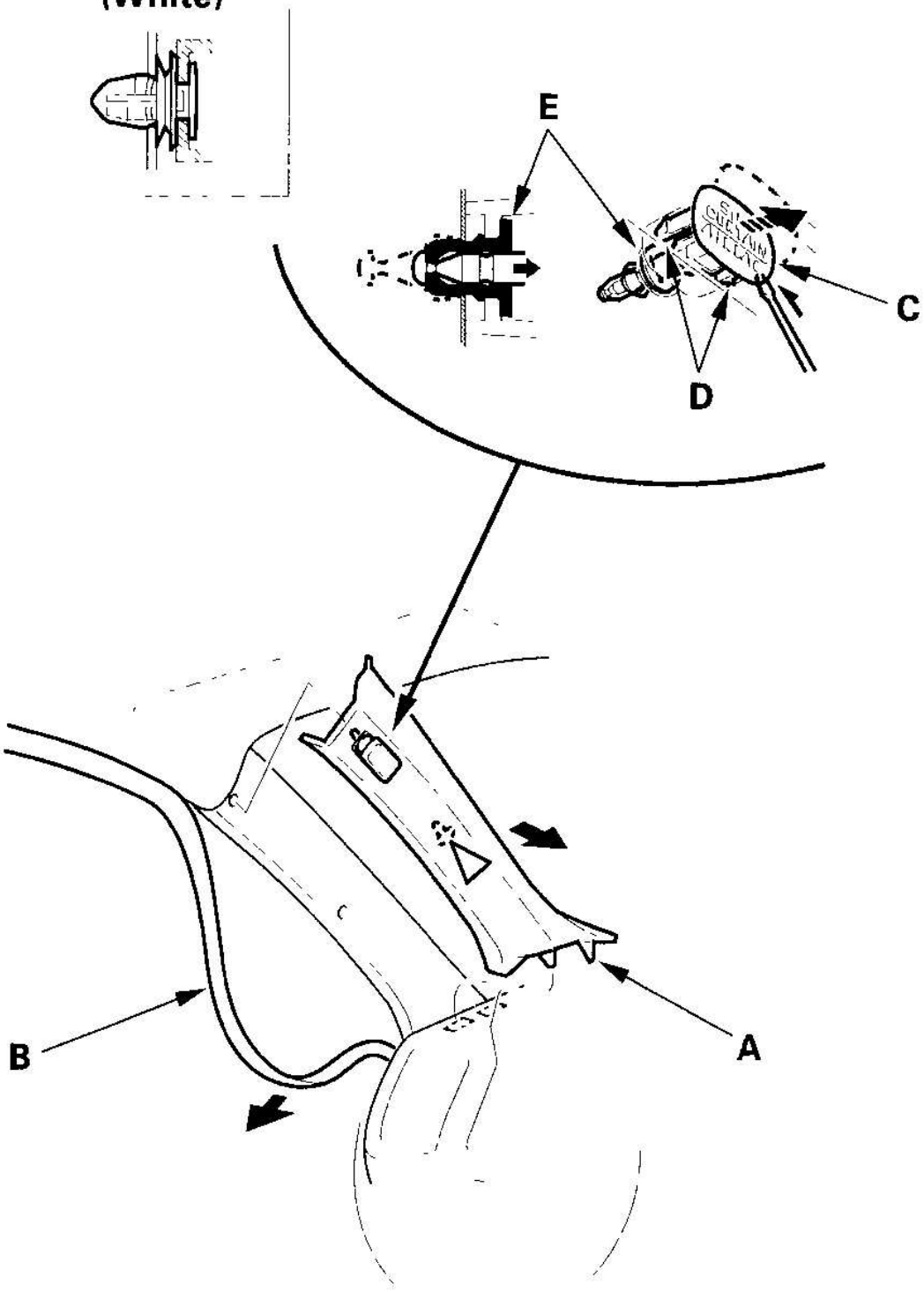


Fig. 19: Removing A-Pillar Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Do not reuse the A-pillar cap; always replace it.
   - If the side curtain airbag has deployed, replace the A-pillar trim with a new one.
   - To prevent the side curtain airbag from accidentally deploying, removed trim pieces should be checked for these types of damage:

     -Any cracks, deformations, or press-whitenings in the A-pillar trim (A)

     -Any cracks, or press-whitenings in the grommet and clip seating surfaces (B)

     -Bent or broken grommet (C)
   - Replace any damaged parts with new ones.
   - Make sure the top of the trim overlaps with the headliner correctly (see **CHECKING AND ADJUSTING THE HEADLINER/PILLAR TRIM OVERLAP**).
   - Push the clips into place securely.

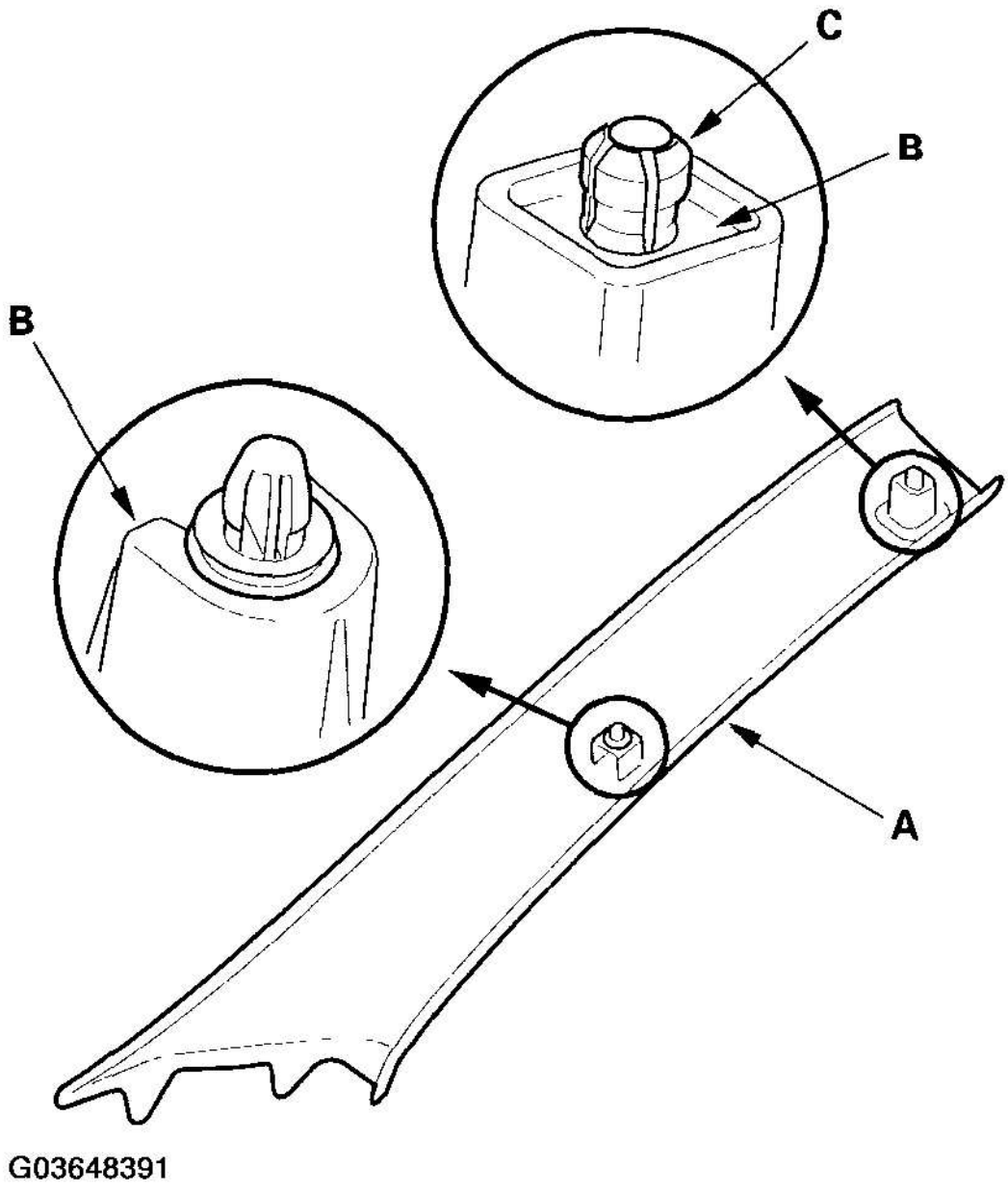


Fig. 20: Installing A-PILLAR - With Side Curtain Airbags ('04-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

KTC trim tool set SOJATP2014

2-DOOR - B-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove these items:
   - C-pillar trim, front portion as needed (see **2-DOOR -C-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)**)
   - Side trim panel, upper portion as needed (see **TRIM REMOVAL/INSTALLATION - REAR SIDE AREA**)
   - Door opening trim, as needed (see step 7 in **2-DOOR - DOOR SILL AREA**)
2. Remove the front seat belt upper anchor bolt (see step 6 in **FRONT SEAT BELT - 2-DOOR**).
3. Remove the B-pillar upper trim (A).

   -1 Remove the clip (B) from the seat belt guide (C).

   -2 Pull out the trim by hand to detach the clips (D), and to release the hooks (E) from the side curtain airbag B-pillar bracket (F) in the numbered sequence.

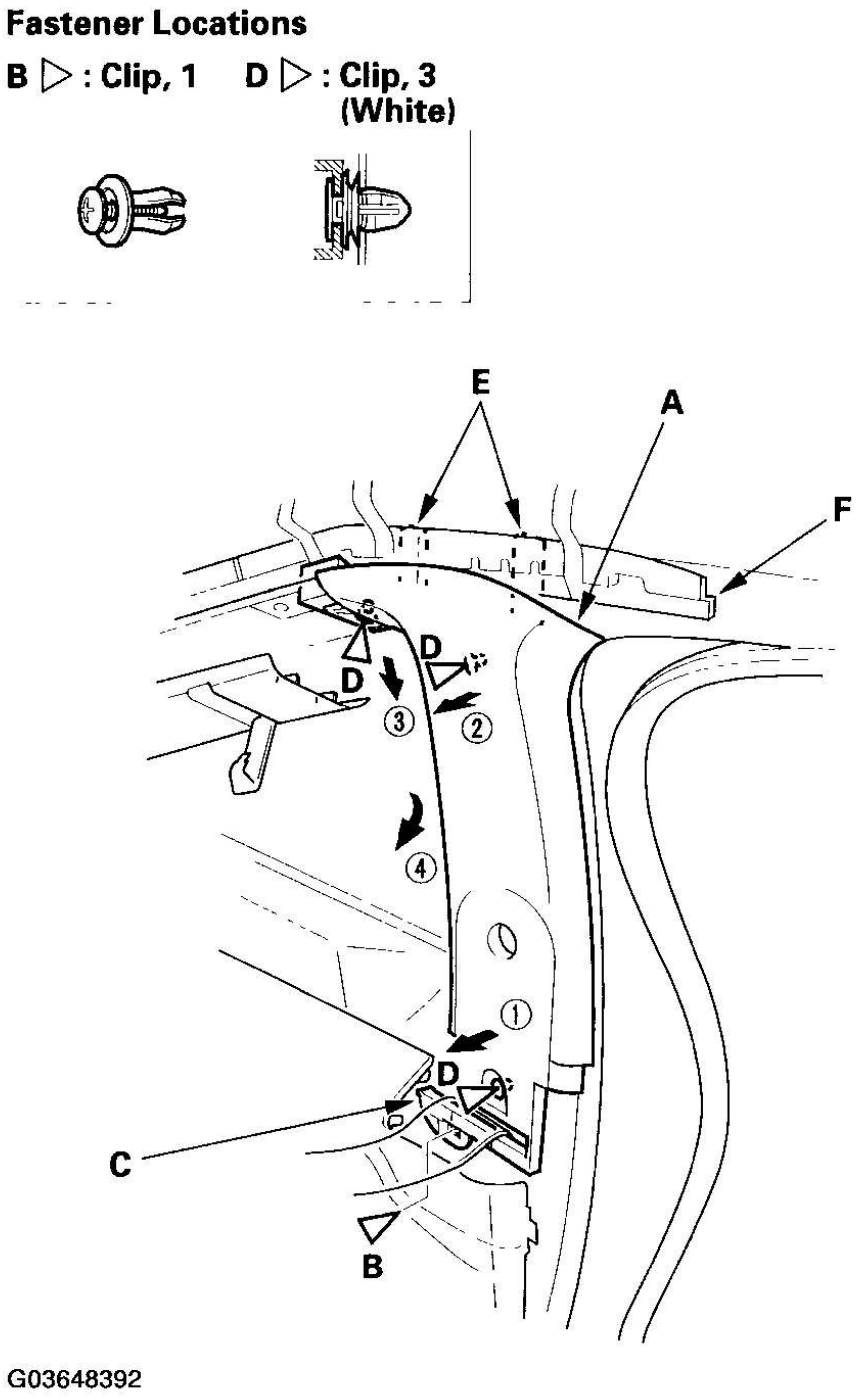
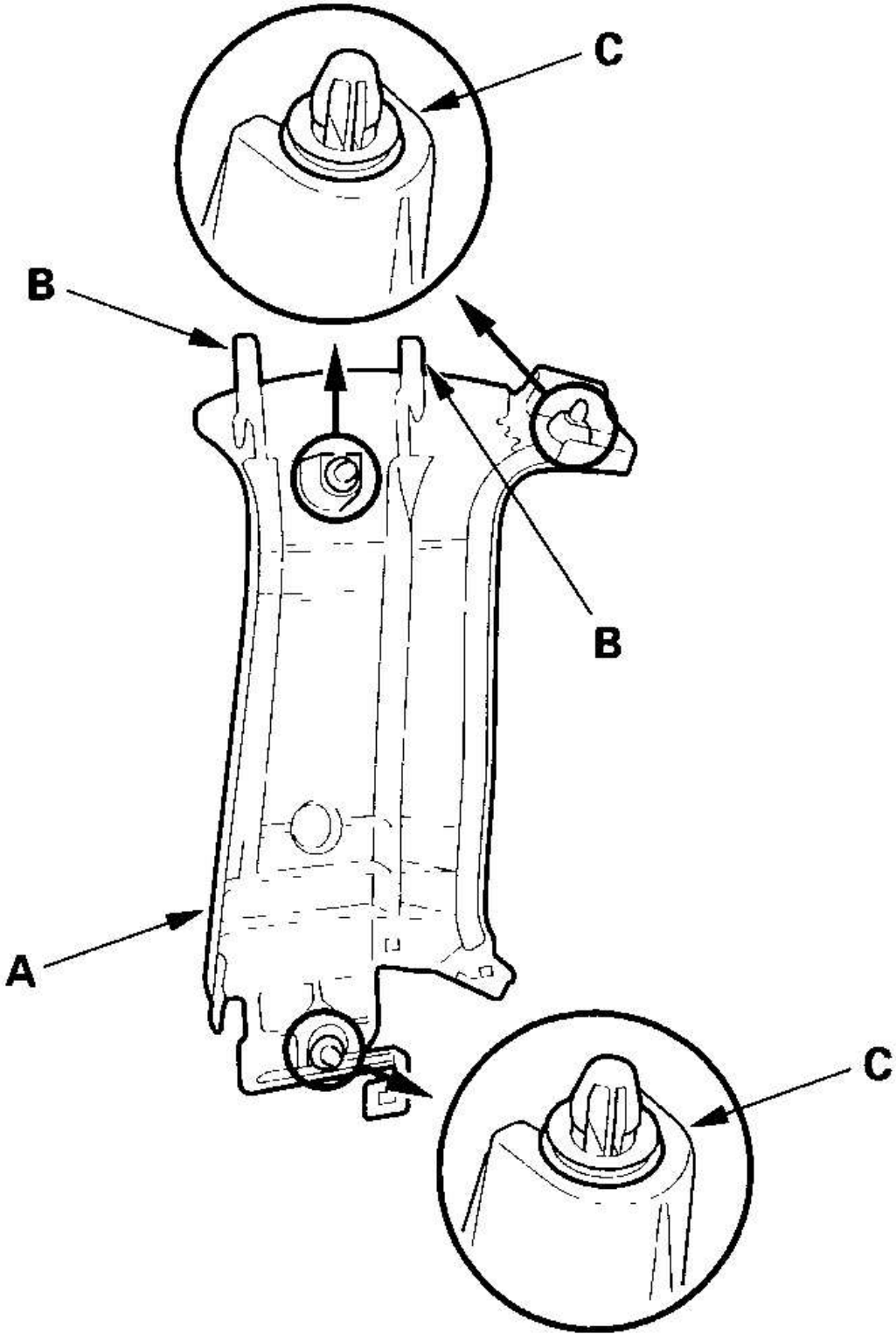


Fig. 21: Removing B-Pillar Upper Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - If the side curtain airbag has deployed, replace the B-pillar upper trim with new one.
   - To prevent the side curtain airbag from accidentally deploying, removed trim pieces should be checked for these types of damage:

     -Any cracks or deformations in the B-pillar upper trim (A) and the upper hooks (B), and any press-whitenings in the upper part of the trim

     -Any cracks or press-whitenings in the clip seating surface (C)
   - Replace any damaged parts with new ones.
   - Make sure the top of the trim overlaps with the headliner correctly (see **CHECKING AND ADJUSTING THE HEADLINER/PILLAR TRIM OVERLAP**).
   - Make sure the trim hooks are installed into the holes in the side curtain airbag B-pillar bracket securely.
   - Push the clips into place securely.
   - Apply medium strength liquid thread lock to the front seat belt upper anchor bolt before reinstallation (see step 9 in **FRONT SEAT BELT - 2-DOOR**).
   - Before installing the anchor bolt, make sure there are no twists or kinks in the seat belt.
   - When installing the side trim panel, make sure the seat belt is not pinched.



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Fig. 22: Installing B-Pillar Upper Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

KTC trim tool set SOJATP2014

4-DOOR - B-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

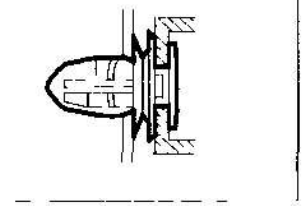
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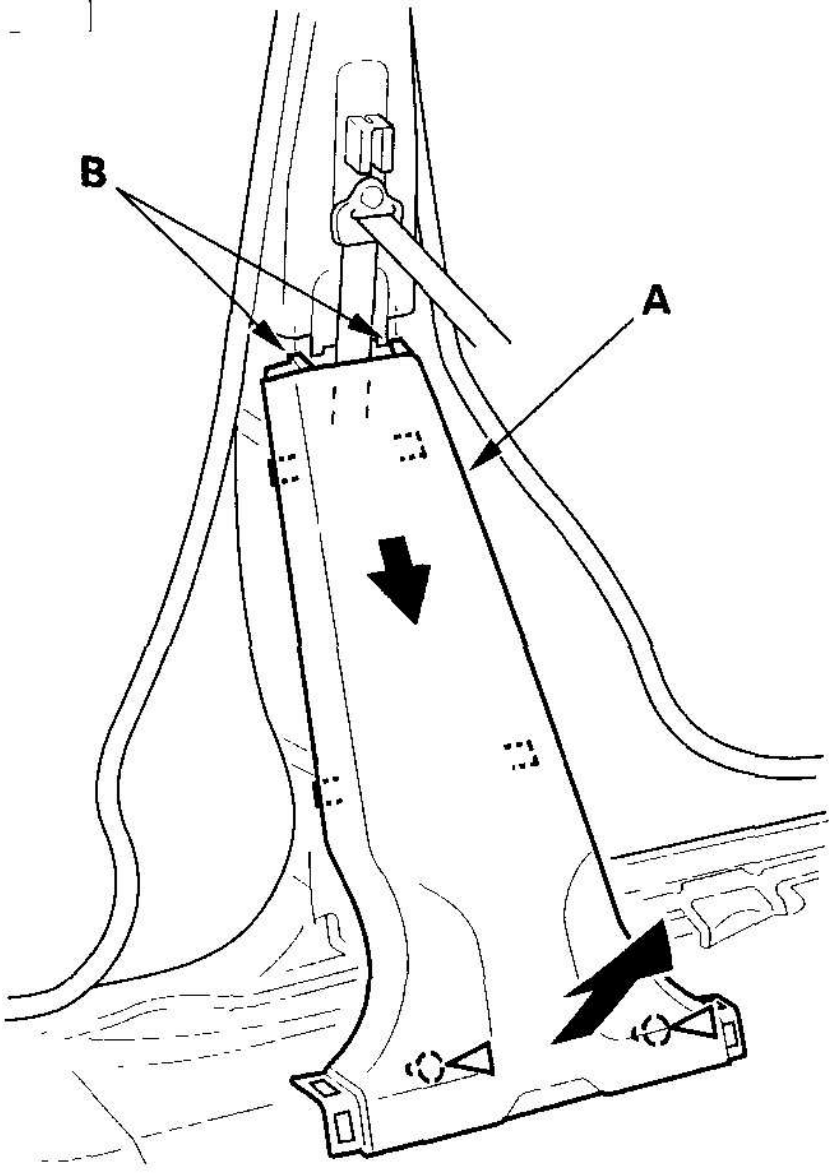
- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove these items:
   - Front door sill trim (see **4-DOOR - FRONT DOOR SILL AREA**)
   - Rear door sill trim (see **4-DOOR - REAR DOOR SILL AREA**)
   - Front door opening trim, as needed (see step 7 in **4-DOOR - FRONT DOOR SILL AREA**)
   - Rear door opening trim, as needed (see step 3 in **4-DOOR - REAR DOOR SILL AREA**)
2. Remove the B-pillar lower trim (A).
   -1 Detach the lower clips by pulling the bottom of the trim back by hand.
   -2 Pull the trim down to release the upper hooks (B).

Fastener Locations

▷ : Clip, 2 (Black)





G03648394

Fig. 23: Removing B-Pillar Lower Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the upper anchor cover, and remove the upper anchor bolt (see step 7 in **FRONT SEAT BELT - 4-DOOR**).
4. Remove the B-pillar upper trim (A).

   -1 Pull the bottom of the trim back by hand to detach the lower clip.

   -2 Detach the upper clip by pulling the top of the trim.

   -3 Pull the trim down to release the upper hooks (B) from the side curtain airbag B-pillar bracket (C).

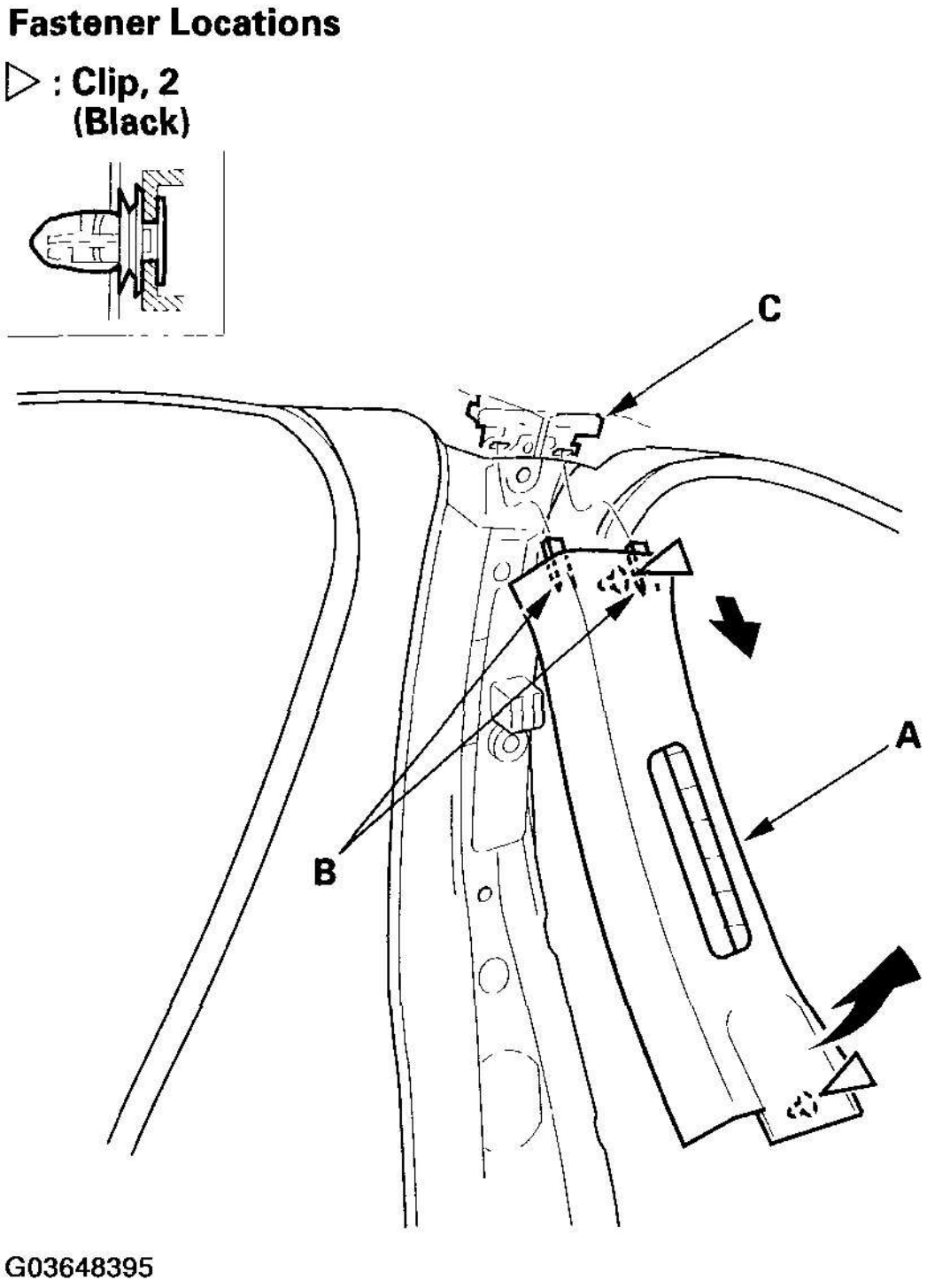


Fig. 24: Removing B-Pillar Upper Trim

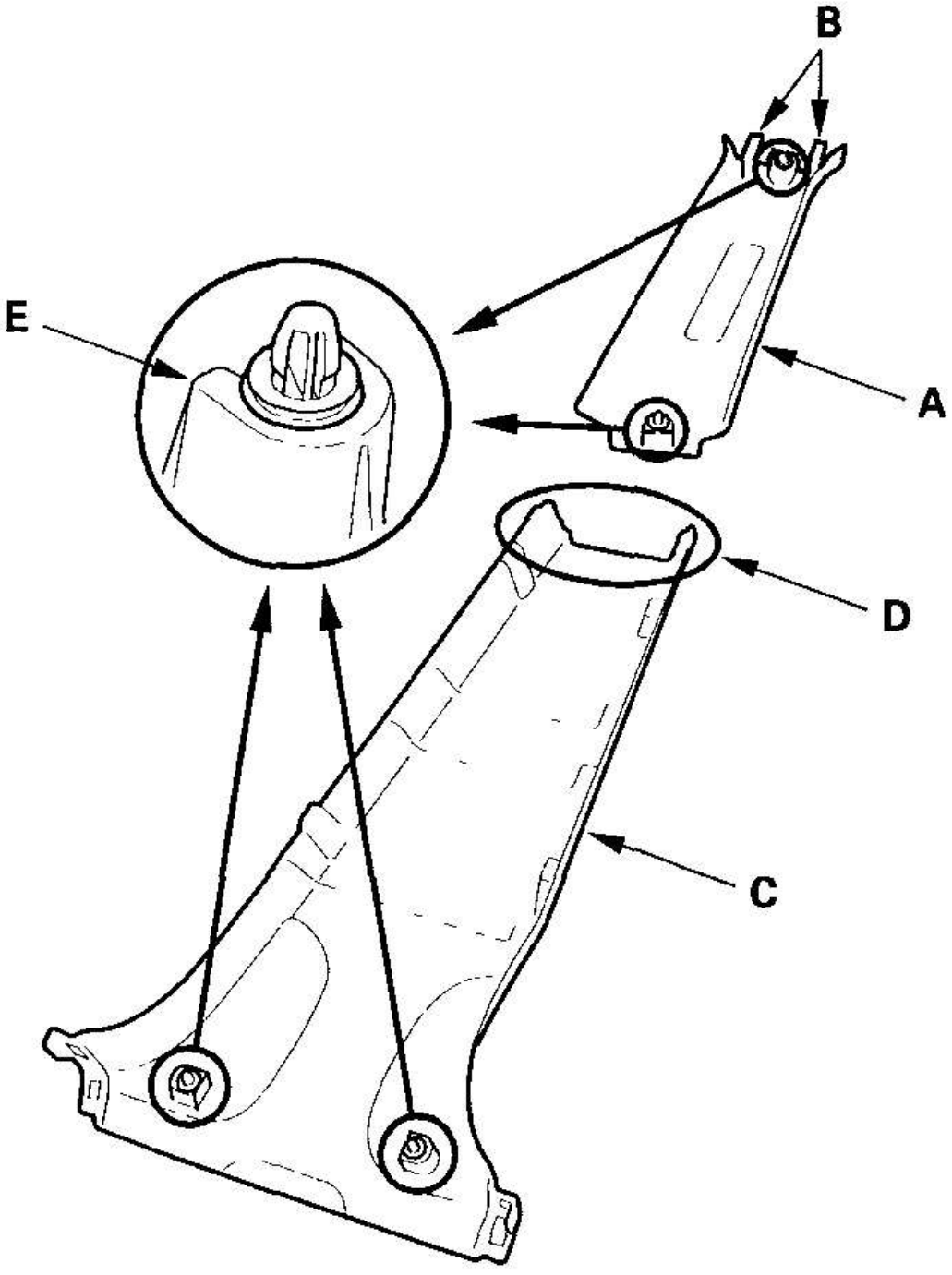
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - If the side curtain airbag has deployed, replace the B-pillar upper trim with a new one.
   - To prevent the side curtain airbag from accidentally deploying, removed trim pieces should be checked for these kinds of damage:

     -Any cracks or deformations in the B-pillar upper trim (A) and the upper hooks (B), and any press-whitenings in the upper part of the trim

     -Any cracks or deformations in the B-pillar lower trim (C), and any breakages in the part (D) fitted with the B-pillar upper trim

     -Any cracks or press-whitenings in the clip seating surfaces (E)
   - Check the clips for damage or stress-whitening, and if necessary, replace them with new ones.
   - Make sure the top of the trim overlaps with the headliner correctly (see **CHECKING AND ADJUSTING THE HEADLINER/PILLAR TRIM OVERLAP**).
   - Make sure the trim hooks are installed into the holes in the side curtain airbag B-pillar bracket securely.
   - Push the clips into place securely.
   - Apply medium strength liquid thread lock to the front seat belt upper anchor bolt before reinstallation (see step 12 in **FRONT SEAT BELT - 4-DOOR**).
   - Before installing the anchor bolt, make sure there are no twists or kinks in the seat belt.



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Fig. 25: Installing B-Pillar Upper Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

KTC trim tool set SOJATP2014

2-DOOR - C-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove the rear seat cushion (see **2-DOOR**).
2. Remove the rear seat belt lower anchor bolt (see step 2 in **REAR SEAT BELT - 2-DOOR**).
3. Left side: Pull the coat hanger (A) down, and remove the coat hanger cover (B) by releasing the hook (C), then remove the screw (D).

   Right side: Remove the right C-pillar cap (E) by releasing the hooks (F), then remove the screw (G).

   Left side

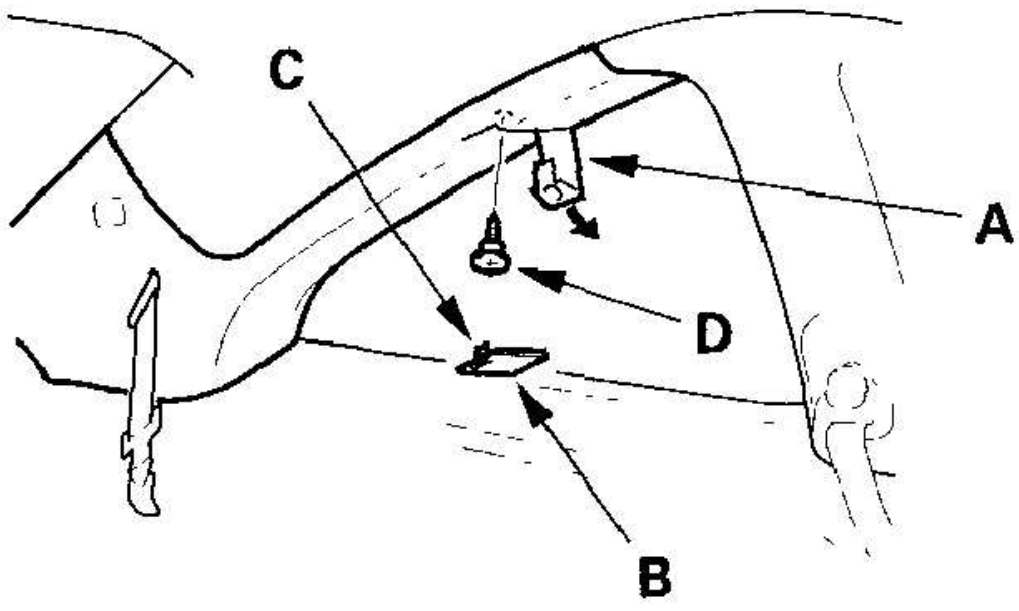


Fig. 26: Pulling Coat Hanger And Removing Coat Hanger Cover (Left Side)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Right side

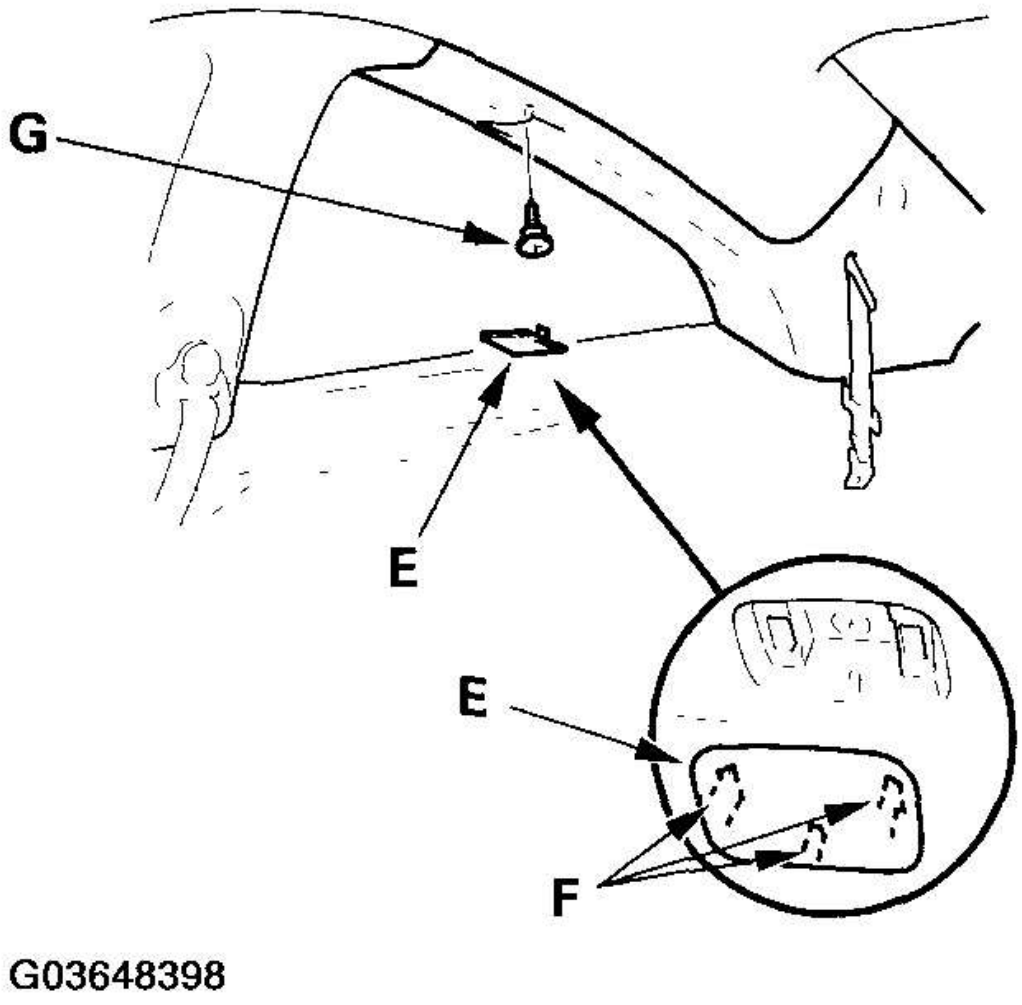


Fig. 27: Removing Right C-Pillar Cap Releasing Hooks (Right Side)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the C-pillar trim (A).

   -1 Pry the C-pillar cap (B) out until it is stopped by the hooks (C). Release the hooks and pull the cap out of the grommet (D). Discard the cap.

   -2 Pull the front edge of the trim down to detach the hooks (E) and clips (F) from the B-pillar upper trim (G).

   -3 Pull out the trim to detach the clips (H).

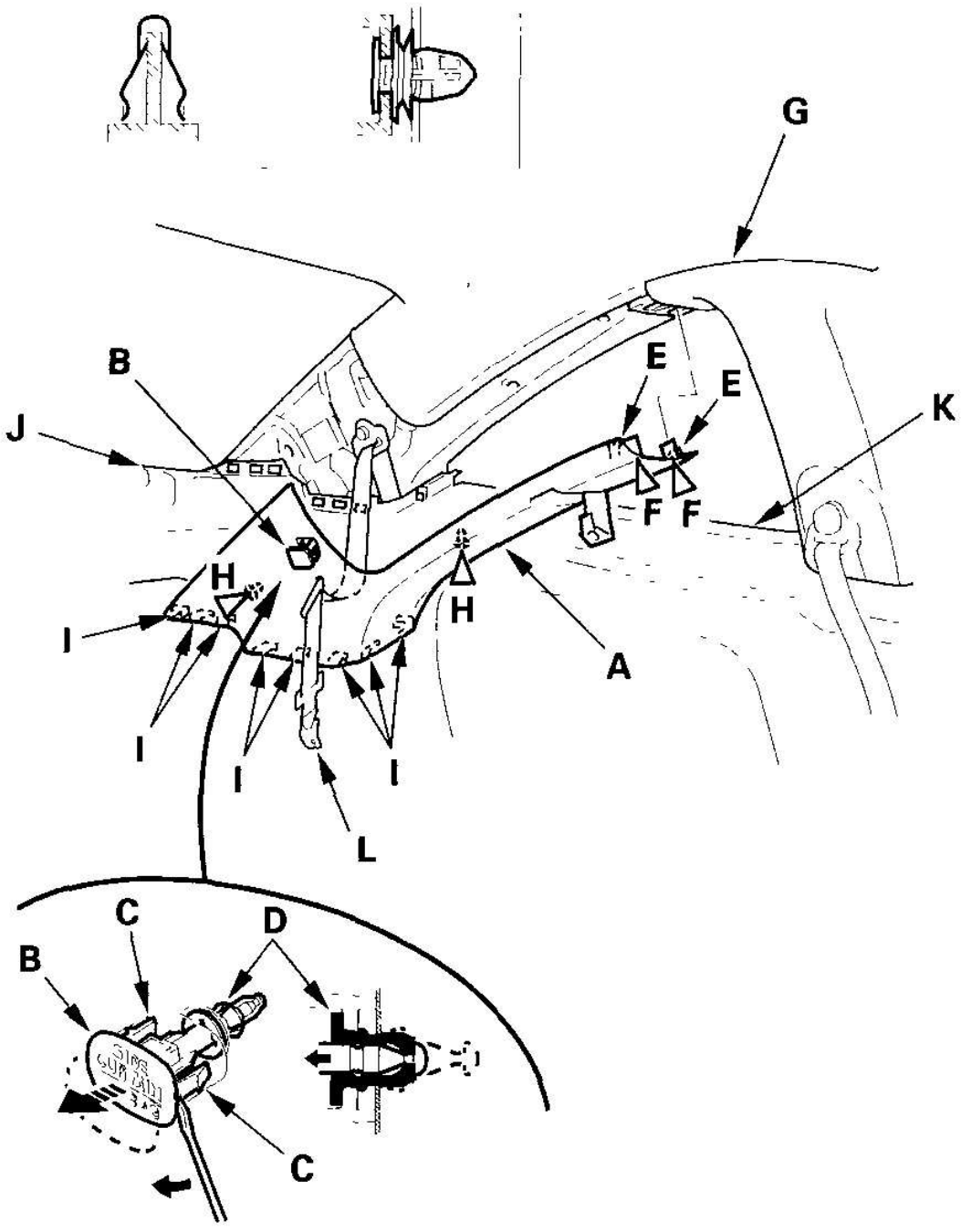
-4 Pull out the bottom portion of the trim to detach the hooks (I) from the rear shelf (J) and the side trim panel (K).

-5 Pass the rear seat belt (L) out though a slit in the trim.

Fastener Locations

F ▷ : Clip, 2

H ▷ : Clip, 2 (White)



G03648399

Fig. 28: Removing C-Pillar Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Do not reuse the C-pillar cap; always replace it.
   - If the side curtain airbag has deployed, replace the C-pillar trim with new one.
   - To prevent the side curtain airbag from accidentally deploying, removed trim pieces should be checked for these types of damage:

     -Any cracks, deformations, or press-whitenings in the C-pillar trim (A)

     -Any cracks, or press-whitenings in the grommet and clip seating surfaces (B)

     -Bent or broken grommet (C)
   - Replace any damaged parts with new ones.
   - Make sure the top of the trim overlaps with the headliner correctly (see **CHECKING AND ADJUSTING THE HEADLINER/PILLAR TRIM OVERLAP**).
   - Push the clips and hooks into place securely.
   - Apply medium strength liquid thread lock to the anchor bolt before reinstallation (see step 6 in **REAR SEAT BELT - 2-DOOR**).
   - Before installing the anchor bolt, make sure there are no twists or kinks in the seat belt.

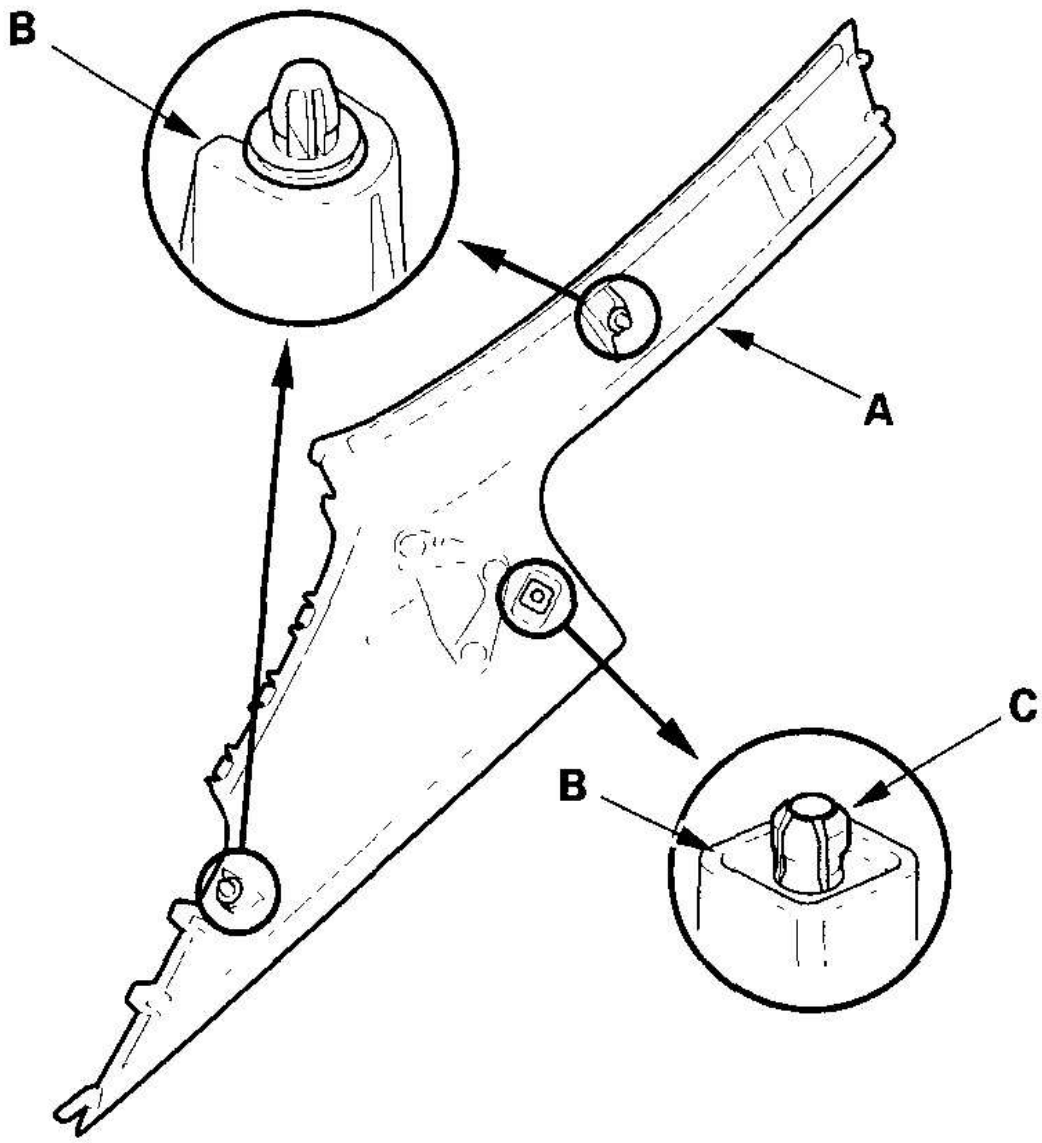


Fig. 29: Installing 2-Door - C-Pillar - With Side Curtain Airbags ('04-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

KTC trim tool set SOJATP2014

4-DOOR - C-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove these items:
   - Rear seat side bolster (see **4-DOOR**)
   - Rear door opening trim, as needed (see step 3 in **4-DOOR - REAR DOOR SILL AREA**)
2. Remove the C-pillar trim (A).

   -1 Pry the C-pillar cap (B) out until it is stopped by the hooks (C). Release the hooks and pull the cap out of the grommet (D). Discard the cap.

   -2 Pull the C-pillar trim back by hand to detach the clips, then remove the trim.

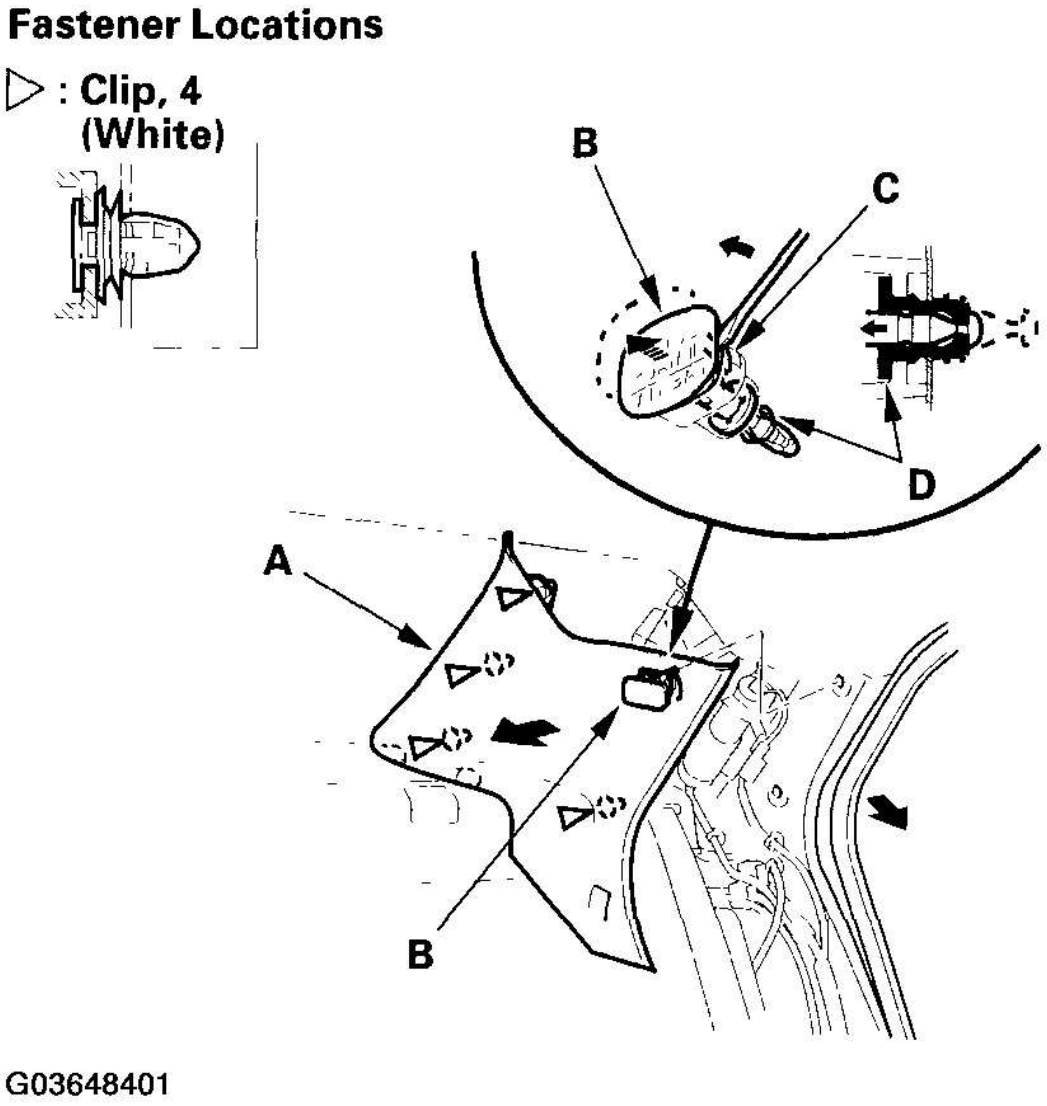


Fig. 30: Removing C-Pillar Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Do not reuse the C-pillar cap; always replace it.
   - If the side curtain airbag has deployed, replace the C-pillar trim with new

one.

- To prevent the side curtain airbag from accidentally deploying, removed trim pieces should be checked for these kinds of damage:
  - -Any cracks, deformations, or press-whitenings in the C-pillar trim (A)
  - -Any cracks, or press-whitenings in the grommet and clip seating surfaces (B)
  - -Bent or broken grommet (C)
- Replace any damaged parts with new ones.
- Make sure the top of the trim overlaps with the headliner correctly (see **CHECKING AND ADJUSTING THE HEADLINER/PILLAR TRIM OVERLAP**).
- Push the clips into place securely.

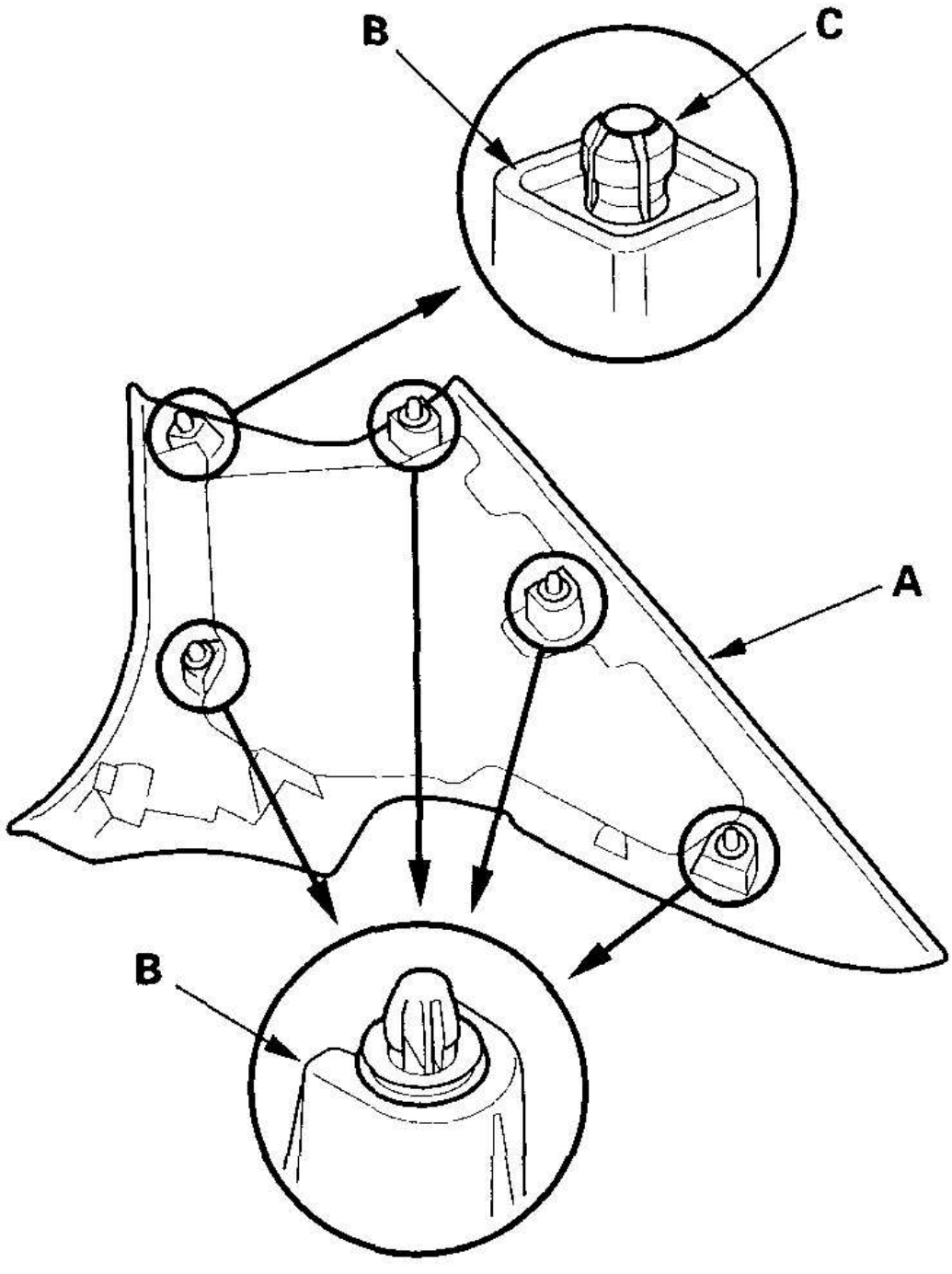


Fig. 31: Installing 4-Door - C-Pillar - With Side Curtain Airbags ('04-

07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TRIM REMOVAL/INSTALLATION - REAR SIDE AREA

Special Tools Required

KTC trim tool set SOJATP2014

2-DOOR

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove these items:
   - Rear seat-back and seat cushion (see **REAR SEAT REMOVAL/INSTALLATION**)
   - Door sill trim, as needed (see **TRIM REMOVAL/INSTALLATION - DOOR AREAS**)
   - C-pillar trim, without side curtain airbags (see **2-DOOR - C-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**), with side curtain airbags (see **2-DOOR - C-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)**)
   - Rear bulkhead cover (see step 2 in **2-DOOR**)
   - Rear speaker grille (see step 4 in **2-DOOR**)
   - Rear shelf, as needed (see step 5 in **2-DOOR**)
2. Remove the side trim panel (A).

   -1 Remove the clip (B).

   -2 Pull out the front upper edge of the trim panel by hand to release the hooks (C) from the B-pillar upper trim (D).

   -3 Pull the trim panel back by hand to detach the clips (E).

   -4 While pulling the rear shelf (F) up, pull the trim panel out and forward

to release it from the rear clip (G).

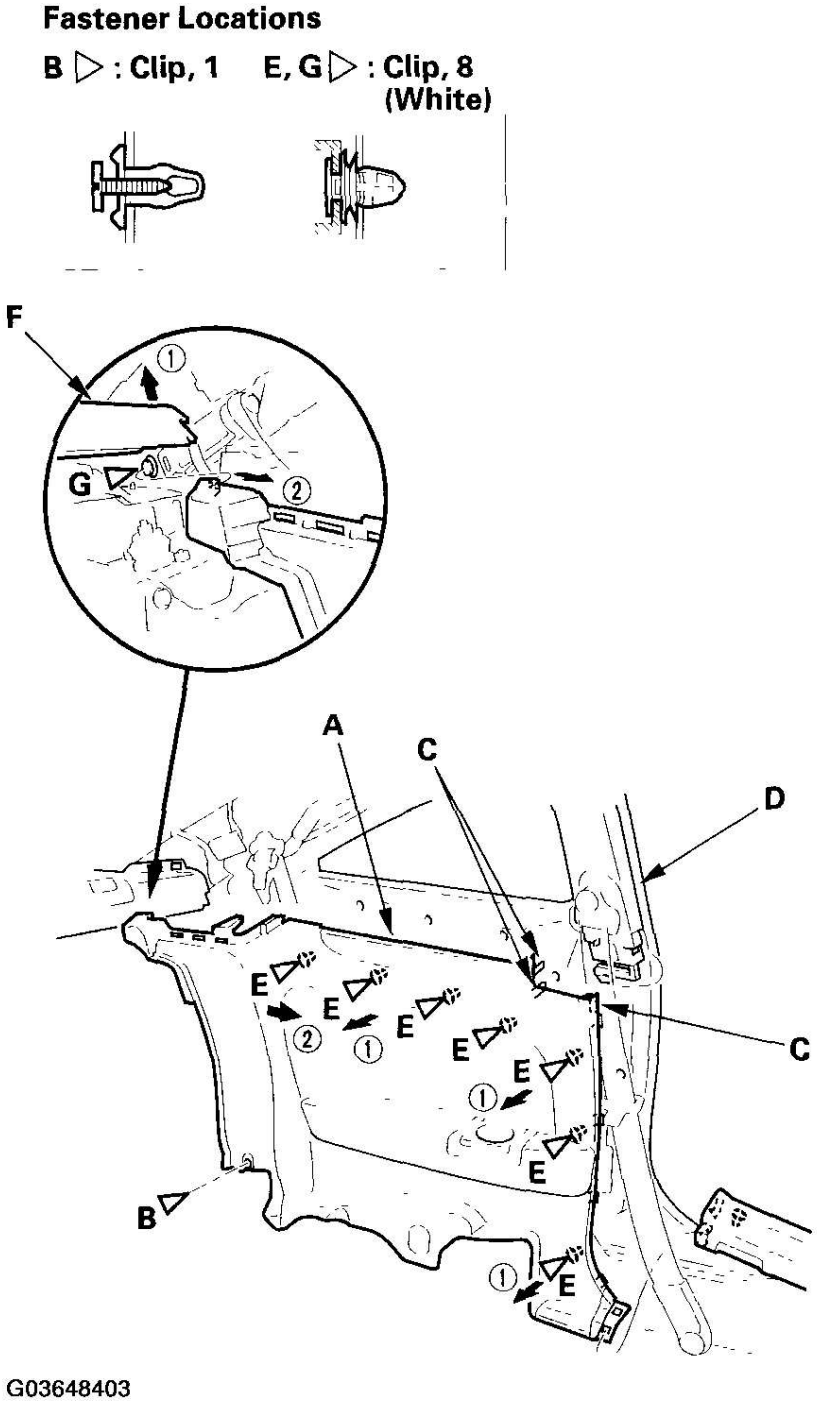


Fig. 32: Removing Side Trim Panel

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the panel in the reverse order of removal, and note these items:
   - Before reinstalling the side trim panel, remove the remaining rear clip from the body, and install in on the side trim panel.
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Make sure there are no twists or kinks in the seat belt and that it is not pinched by the side trim panel.
   - Push the clips and hooks into place securely.

TRIM REMOVAL/INSTALLATION - REAR SHELF AREA

Special Tools Required

KTC trim tool set SOJATP2014

2-DOOR

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:
- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove the C-pillar trim from both sides, without side curtain airbags (see **2-DOOR - C-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**), with side curtain airbags (see **2-DOOR - C-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)**).
2. Remove the rear bulkhead cover (A).
   -1 Pull the upper edge of the cover back to detach the hooks (B) and clips.
   -2 Pull the bottom edge of the cover back to detach the hooks (C) from the

body flange.

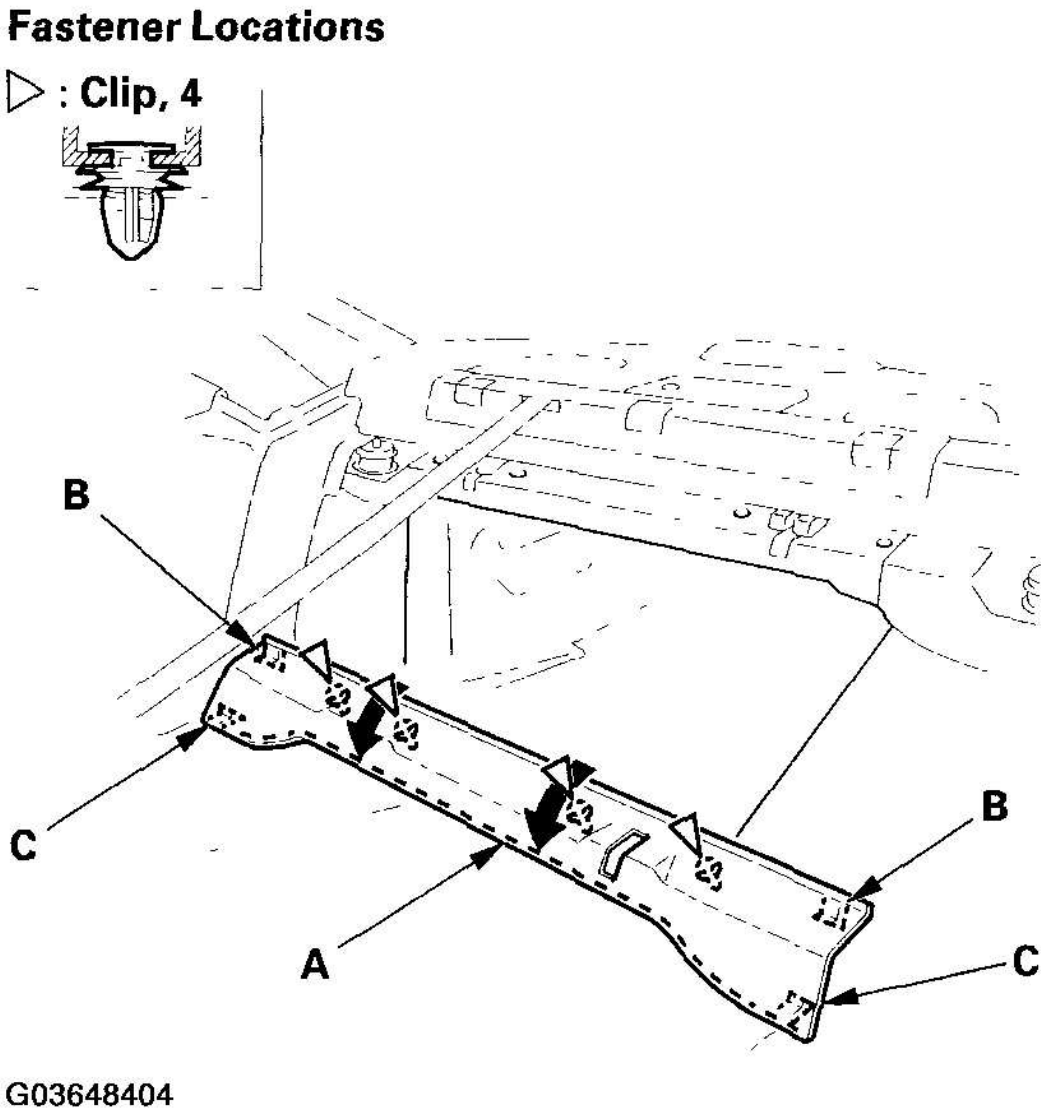


Fig. 33: Removing Rear Bulkhead Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. '03-05 models: Remove the high mount brake light (A).

   -1 From the trunk compartment, disconnect the high mount brake light bulb socket (B).

-2 Push the high mount brake light towards the rear window, and gently pry up at the back to release the front hooks (C).

-3 Release the rear hooks (D), then remove the high mount brake light.

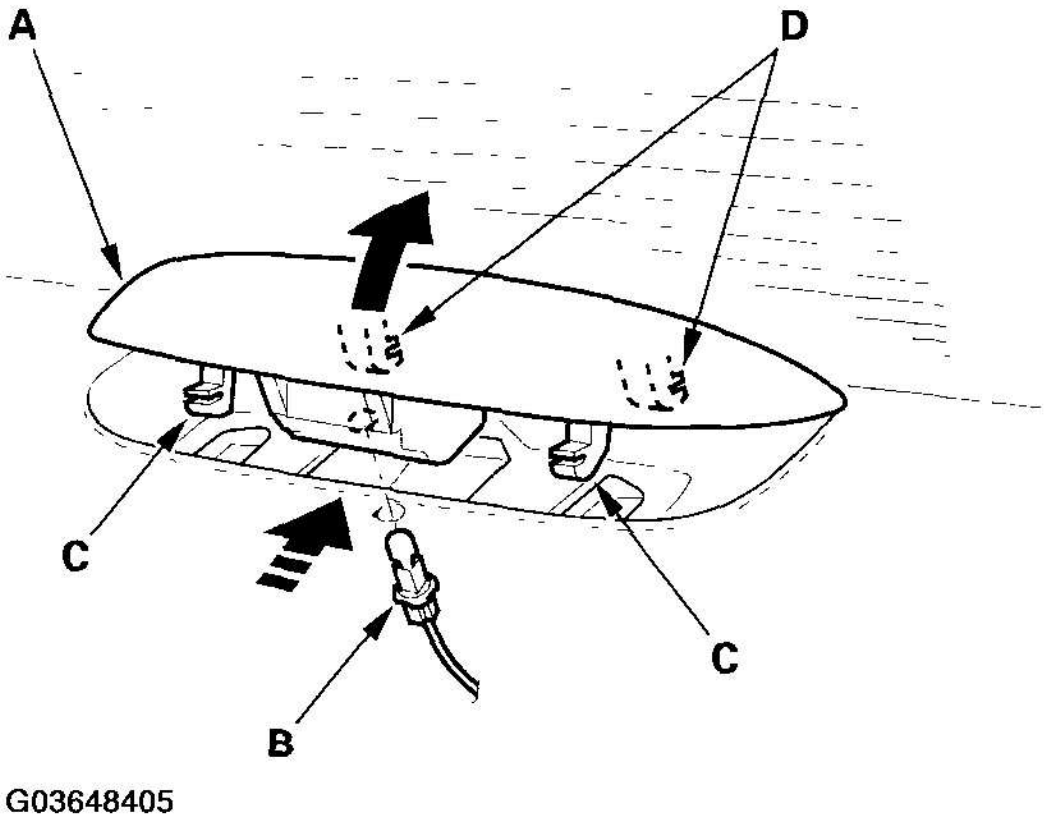


Fig. 34: Removing High Mount Brake Light ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. From both sides, pull the rear speaker grille (A) up to detach the clips, then remove the rear speaker grille.

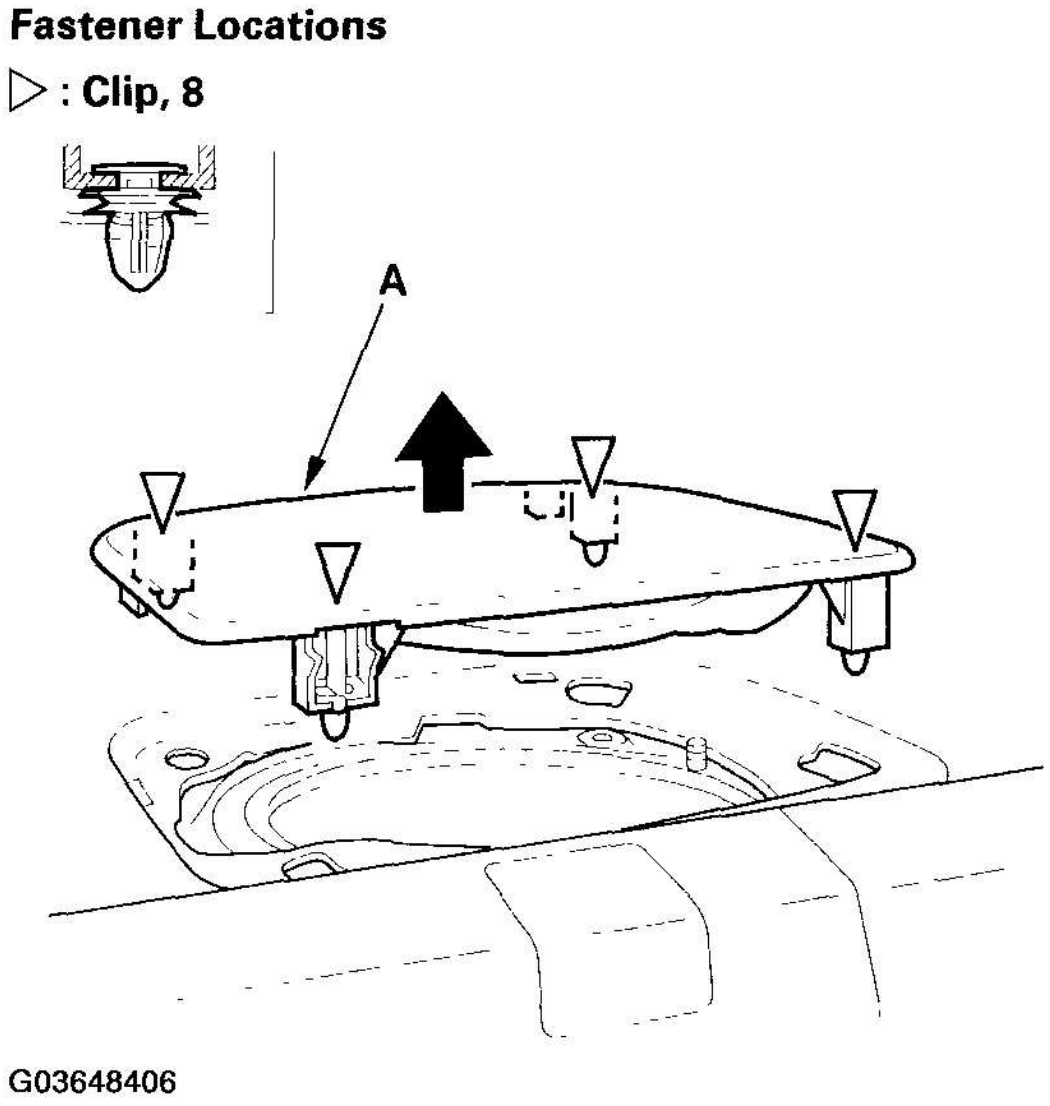


Fig. 35: Pulling Rear Speaker Grille Up
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the rear shelf (A).

   -1 From the trunk compartment, release the hooks (B) from the rear seat-back lock cylinder (C), then remove the lock cylinder trim (D).

   -2 Lift the rear shelf to detach the clips.

   -3 Release both rear corner edges (E) of the rear shelf from the rear

window opening flange (F), and pull the rear shelf toward the front of the vehicle.

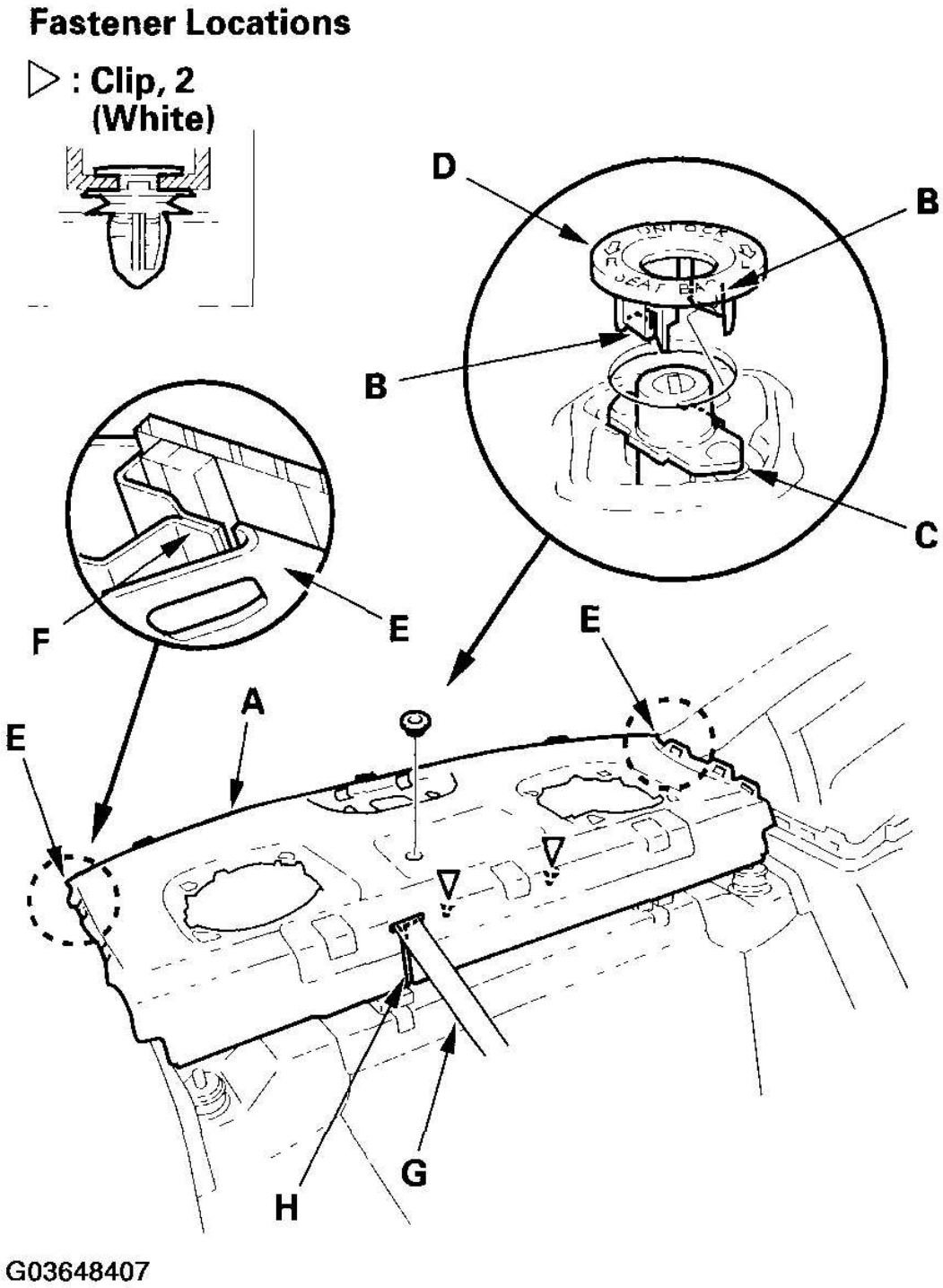
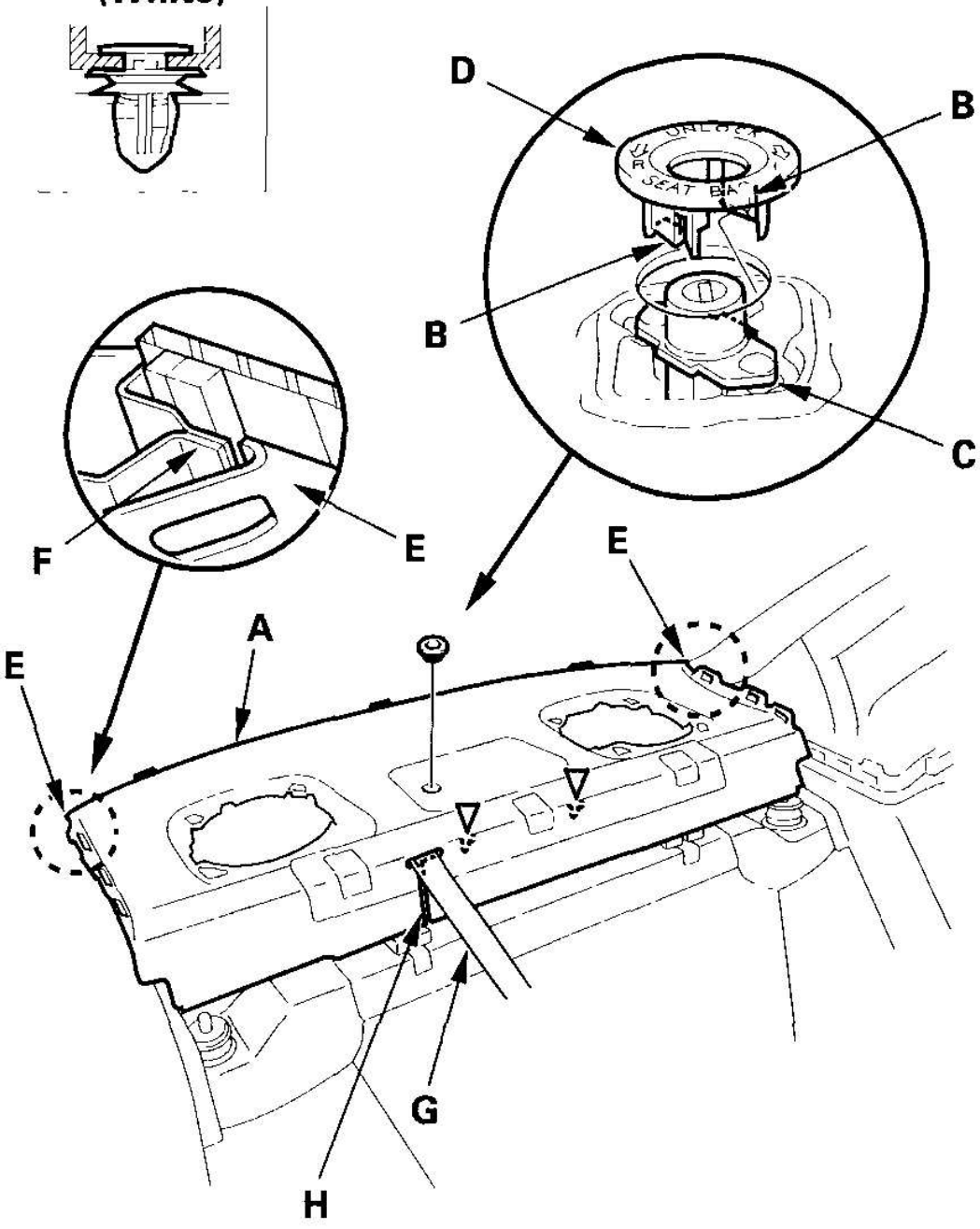


Fig. 36: Removing Rear Shelf ('03-05 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Fastener Locations

▷ : Clip, 2 (White)



G03648408

Fig. 37: Removing Rear Shelf ('06-07 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Pull the rear center seat belt (G) out through the slit (H) in the rear shelf.
7. Install the shelf in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - When installing the rear shelf, slip the rear center seat belt through the slit in the rear shelf.
   - Push the clips and hooks into place securely.
   - Make sure the high mount brake light bulb socket is connected securely.

Special Tools Required

KTC trim tool set SOJATP2014

4-DOOR

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:
- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove the C-pillar trim from both sides, without side curtain airbags (see **4-DOOR - C-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**), with side curtain airbags (see **4-DOOR - C-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)**).
2. Remove the rear bulkhead cover (A).

   -1 Pull the upper edge of the cover back to detach the hooks (B) and clips.

   -2 Pull the bottom edge of the cover back to release the cover from the body flange.

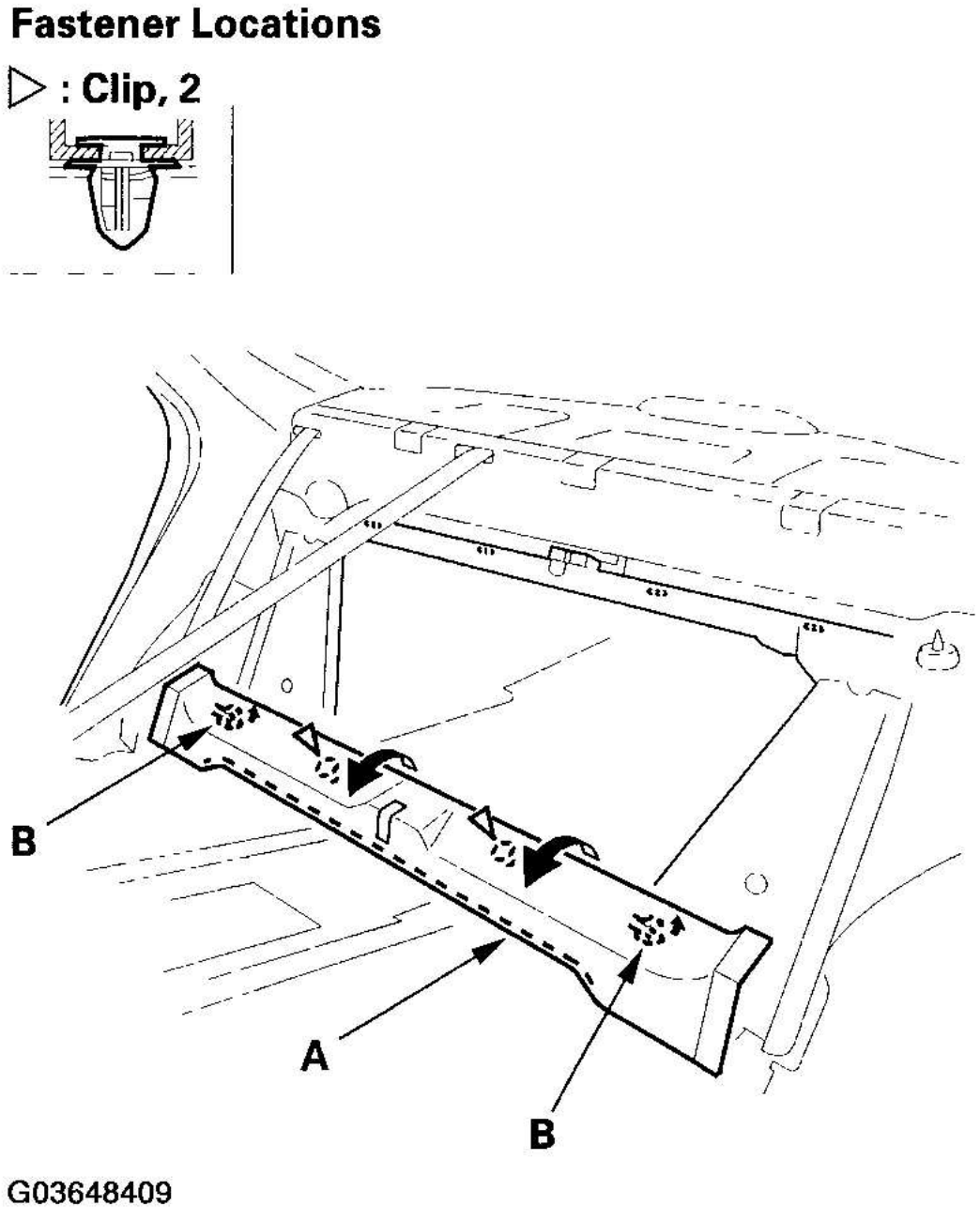


Fig. 38: Removing Rear Bulkhead Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. '03-05 models: Remove the high mount brake light (A).

-1 From the trunk compartment, disconnect the high mount brake light bulb socket (B).

-2 Push the high mount brake light towards the rear window, and gently pry up at the back to release the front hooks (C).

-3 Release the rear hooks (D), then remove the high mount brake light.

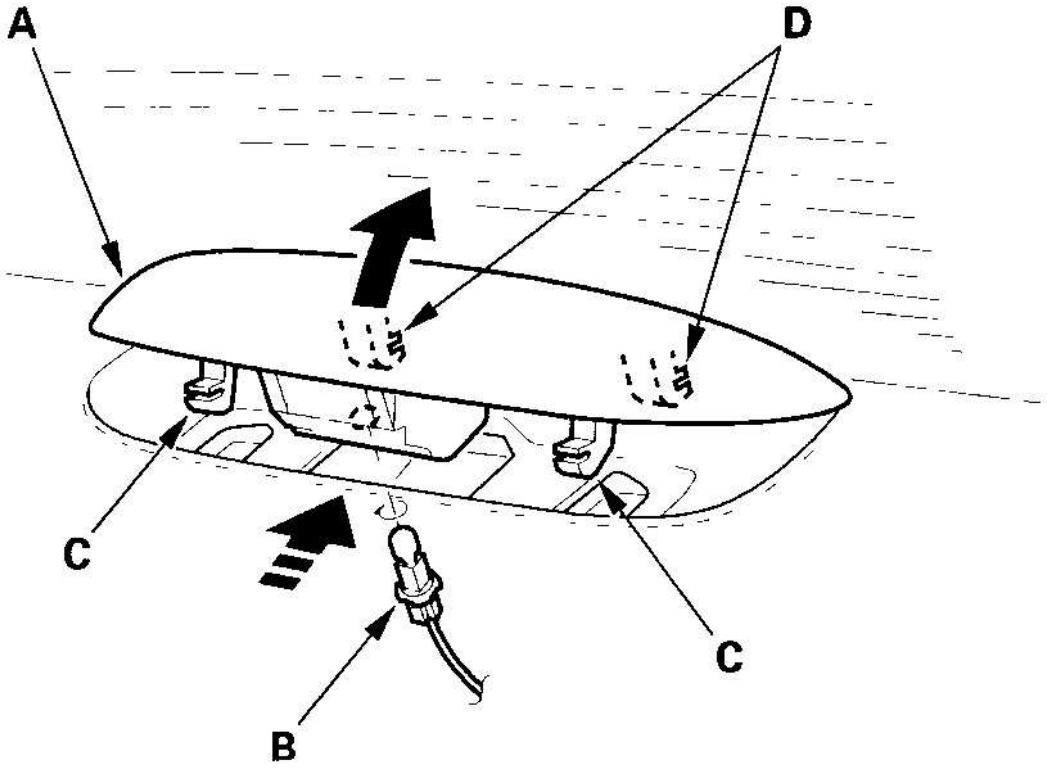


Fig. 39: Removing High Mount Brake Light ('03-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. From both sides, pull the rear speaker grille (A) up to detach the clips (B, C), then remove the rear speaker grille.

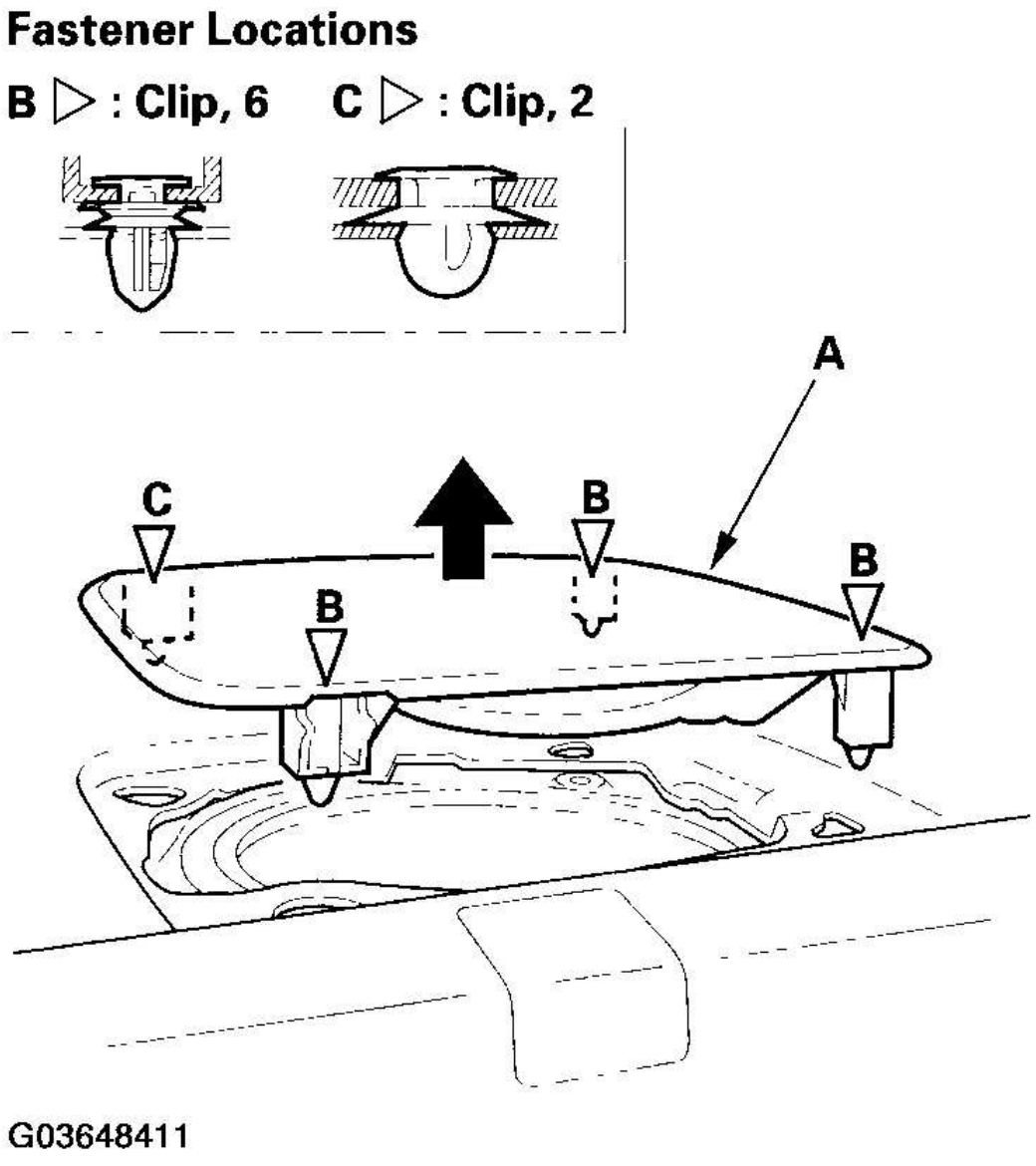


Fig. 40: Pulling Rear Speaker Grille Up
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the rear shelf (A).

   -1 Pull the lock cylinder trim (B) up to release the hooks (C), then remove the trim from the rear seat-back lock cylinder (D).

   -2 Lift the rear shelf to detach the clips.

-3 Pull the rear shelf toward the front of the vehicle.

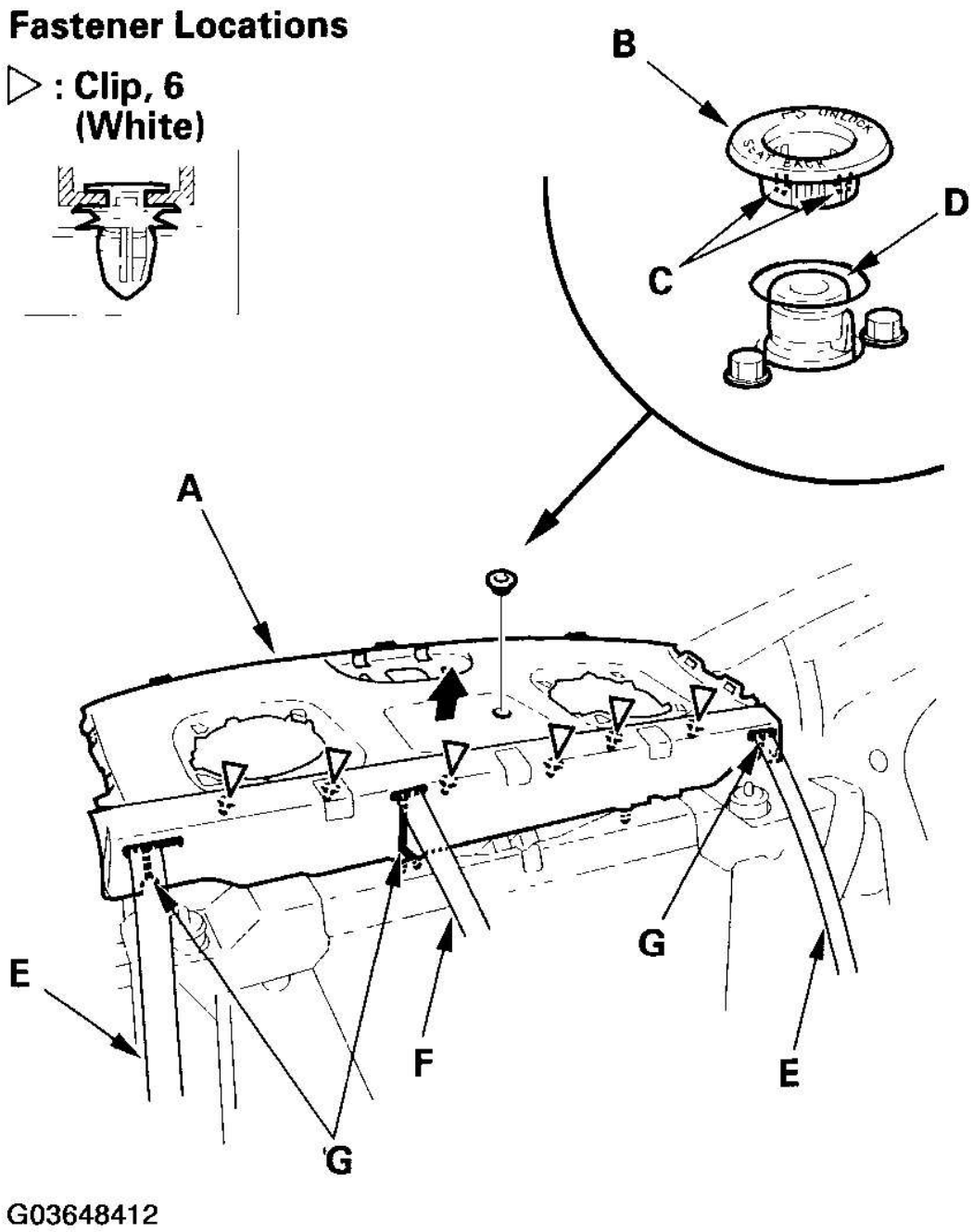


Fig. 41: Removing Rear Shelf ('03-5 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

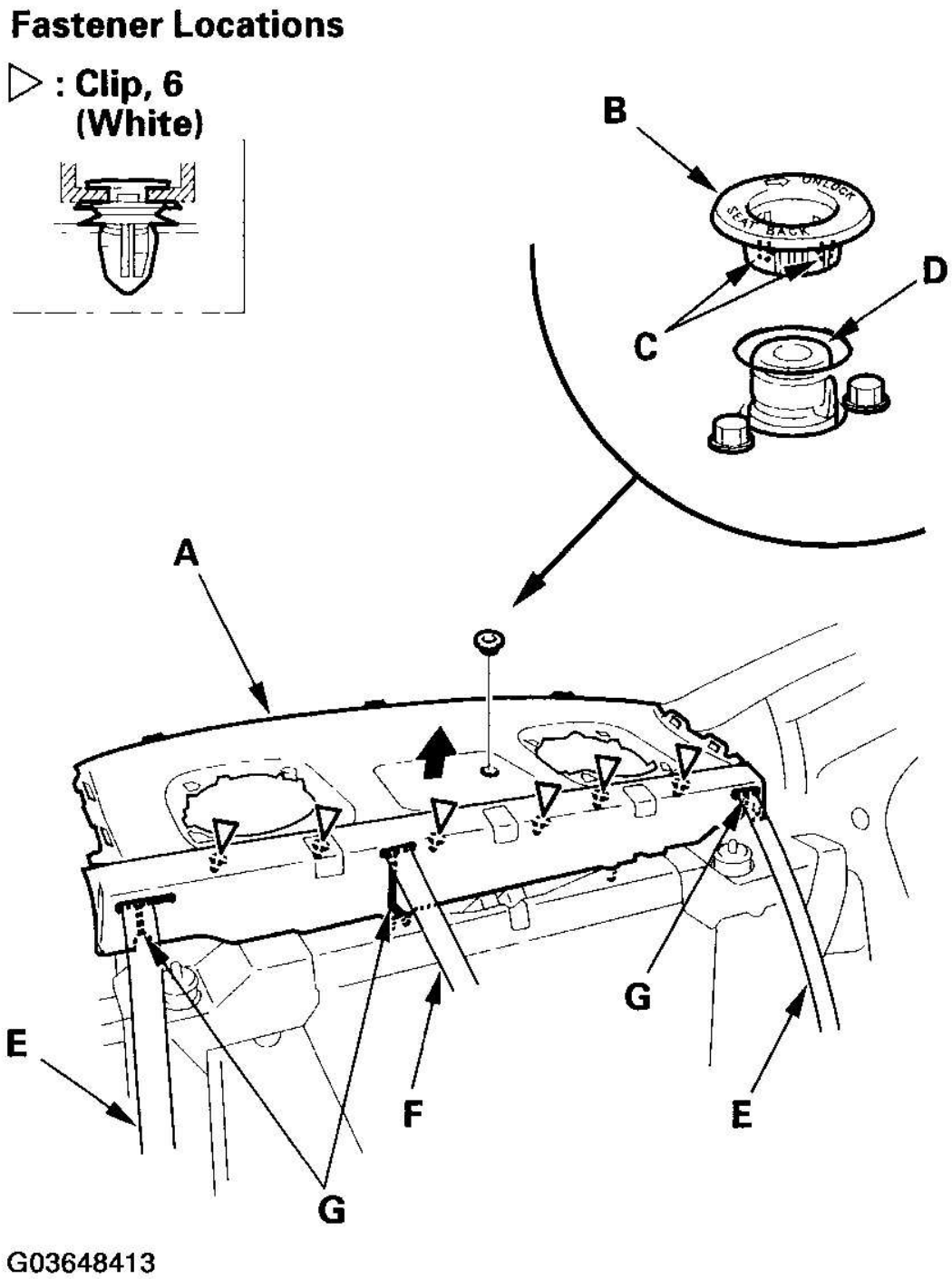


Fig. 42: Removing Rear Shelf ('06-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Pull both rear seat belts (E) and rear center seat belt (F) out through the slits (G) in the rear shelf.
7. Install the shelf in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - When installing the rear shelf, slip the rear seat belts and center seat belt through the slits in the rear shelf.
   - Push the clips and hooks into place securely.
   - Make sure the high mount brake light bulb socket is connected securely.

TRIM REMOVAL/INSTALLATION - TRUNK AREA

Special Tools Required

KTC trim tool set SOJATP2014

2-DOOR

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove the clip, then remove the spare tire lid (A).

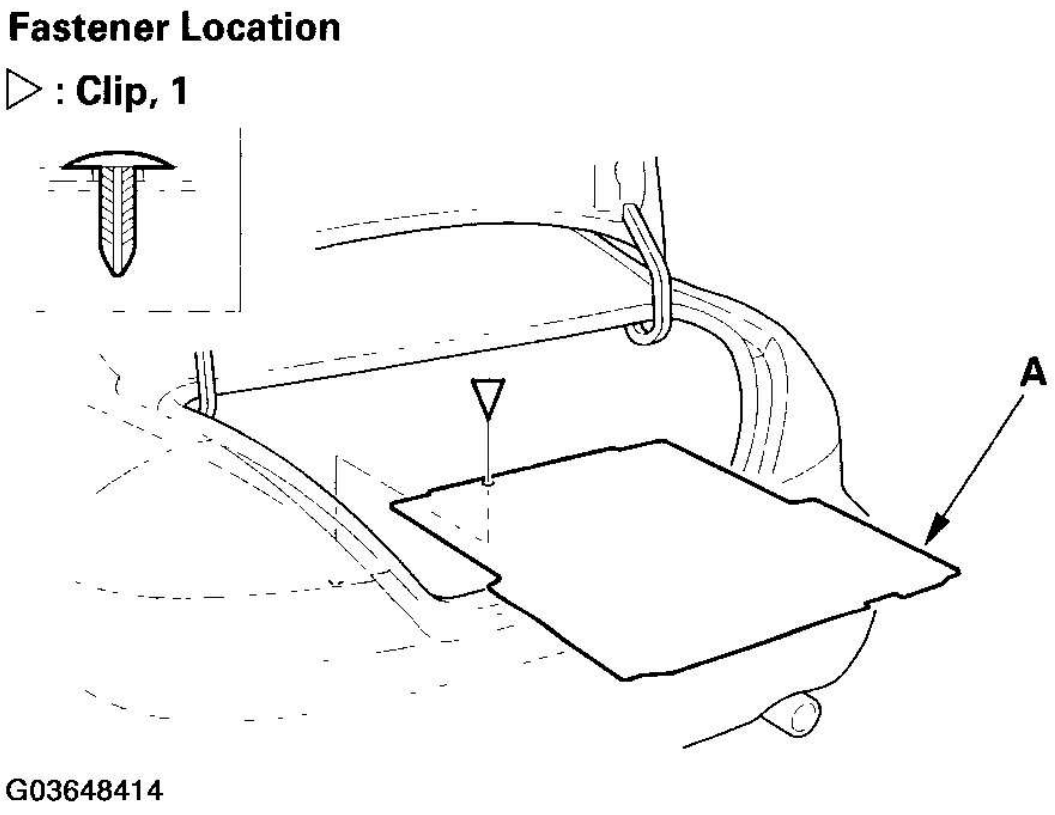


Fig. 43: Removing Spare Tire Lid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Detach the clips, and release the hooks (A) by pulling the trunk rear trim panel (B) up, then remove it.

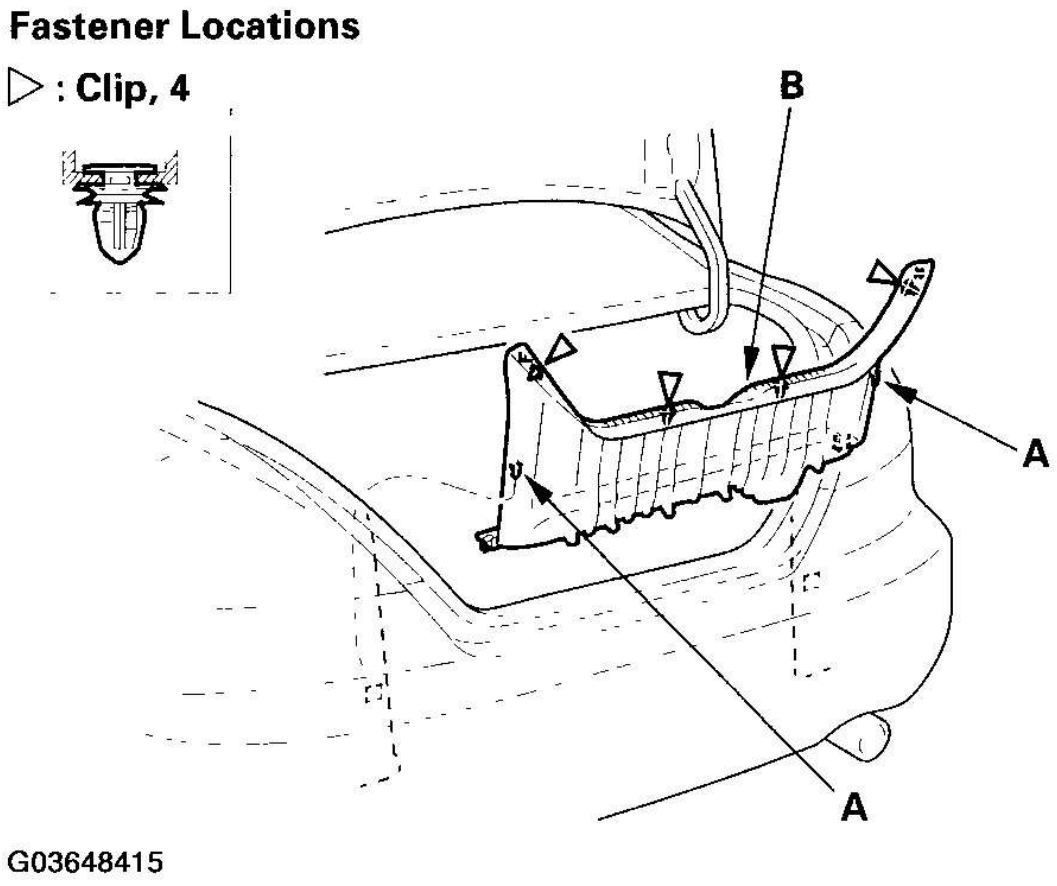


Fig. 44: Detaching Clips And Releasing Hooks Pulling Trunk Rear Trim Panel Up
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the left trunk side trim panel (A) and the right trunk side trim panel (B).

   -1 Right side: Remove the trunk hook (C), the jack cover (D), and the jack (E).

   -2 Remove the hook bolts (F) and clips.

   -3 Remove the trim panels from the trunk compartment. Left side: Release the trunk lid opener cable (G) from the slit (H) in the trim panel.

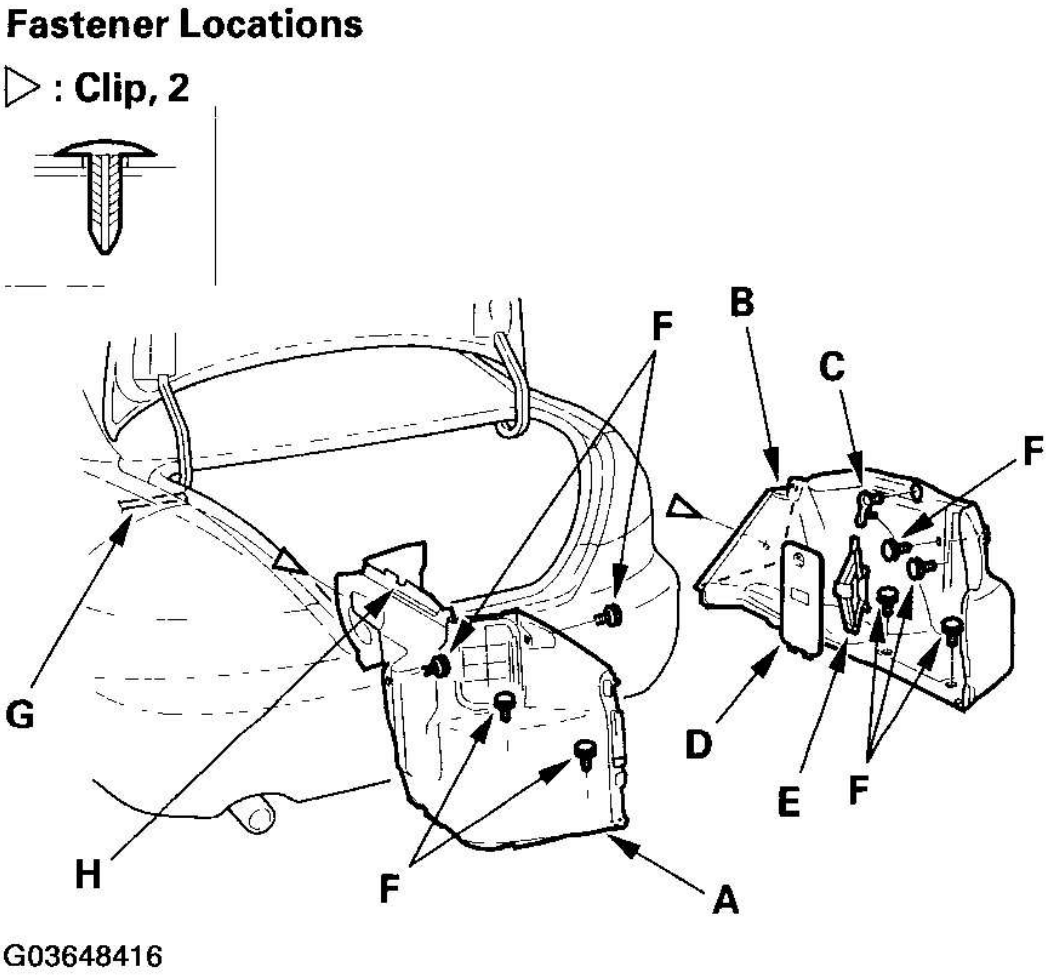


Fig. 45: Removing Left & Right Trunk Side Trim Panels
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Push the clips into place securely.

Special Tools Required

KTC trim tool set SOJATP2014

4-DOOR ('03-05 MODELS)

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove the clip, then remove the spare tire lid (A).

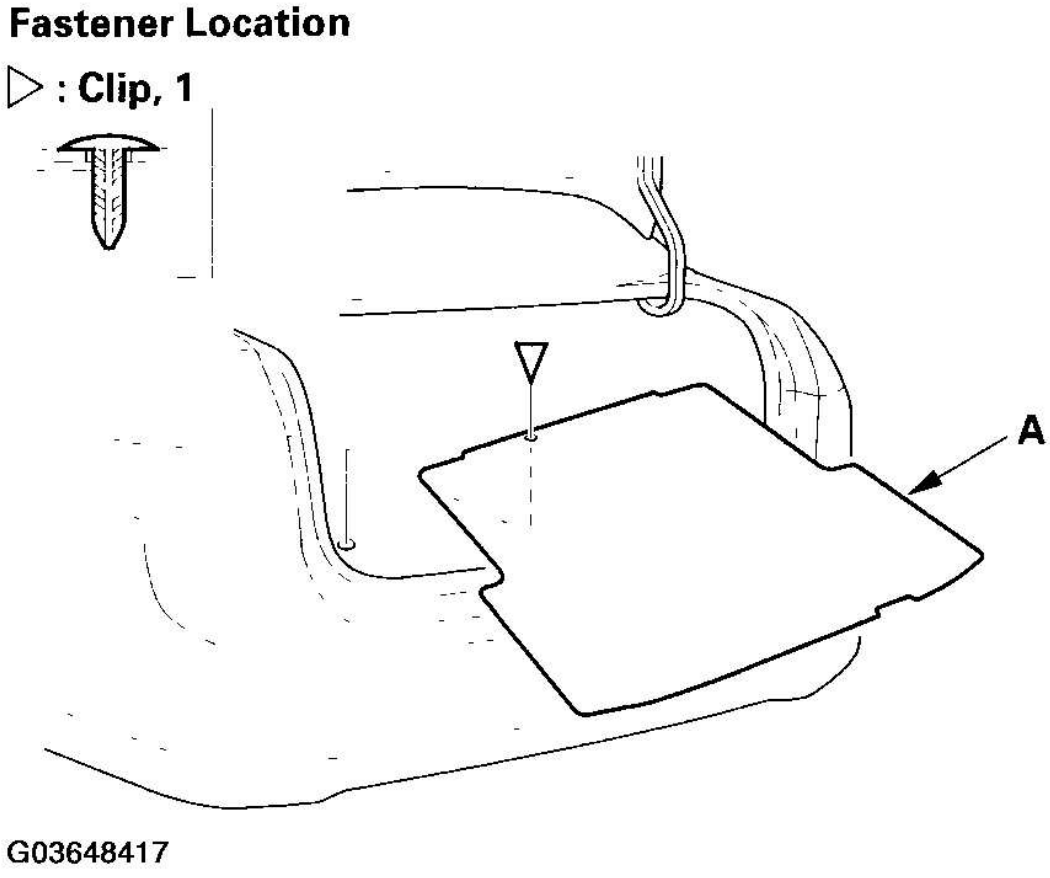


Fig. 46: Removing Spare Tire Lid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Detach the clips, and release the hooks (A) by pulling the trunk rear trim panel (B) up, then remove it.

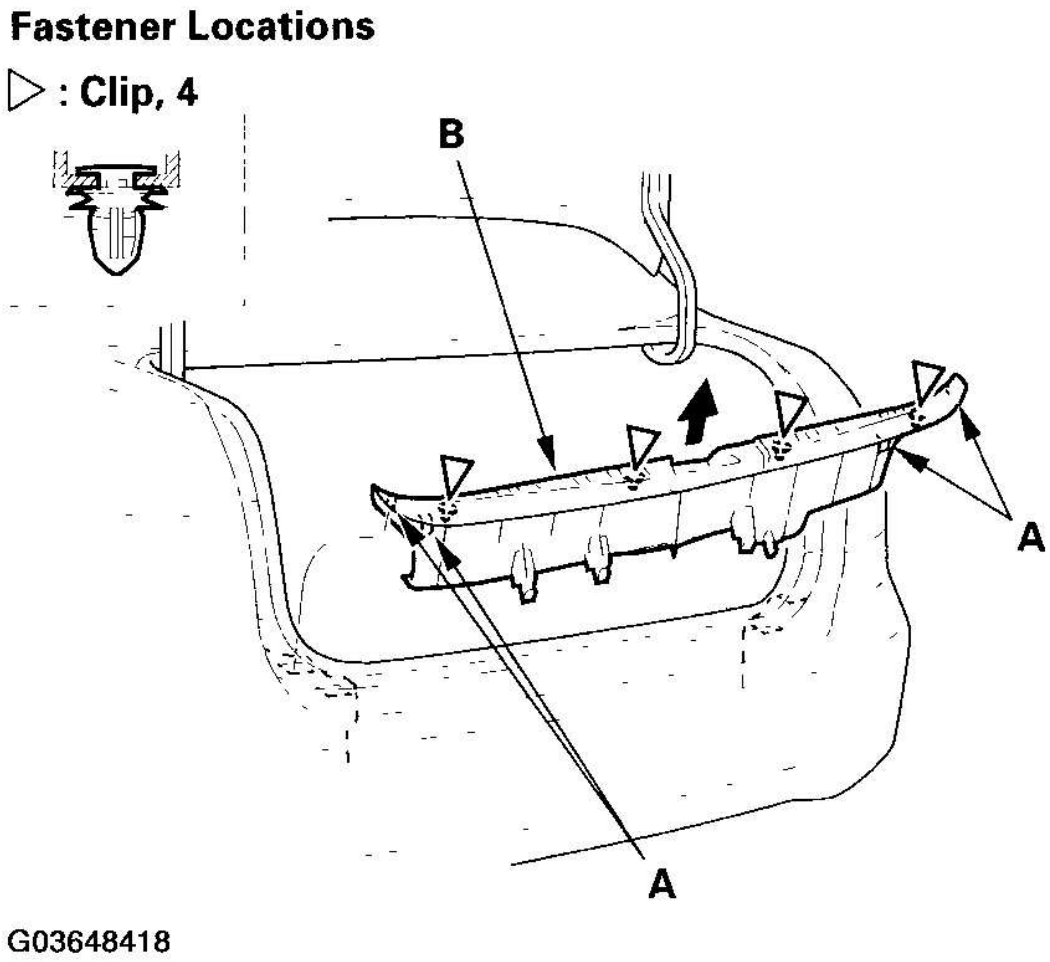


Fig. 47: Detaching Clips And Releasing Hooks Pulling Trunk Rear Trim Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the left trunk side trim panel (A) and the right trunk side trim panel (B).
   - -1 Right side: Remove the trunk hook (C), the jack cover (D), and the jack (E).
   - -2 Remove the clips.
   - -3 Remove the trim panels from the trunk compartment. Left side: Release the trunk lid opener cable (F) from the slit (G) in the trim panel.

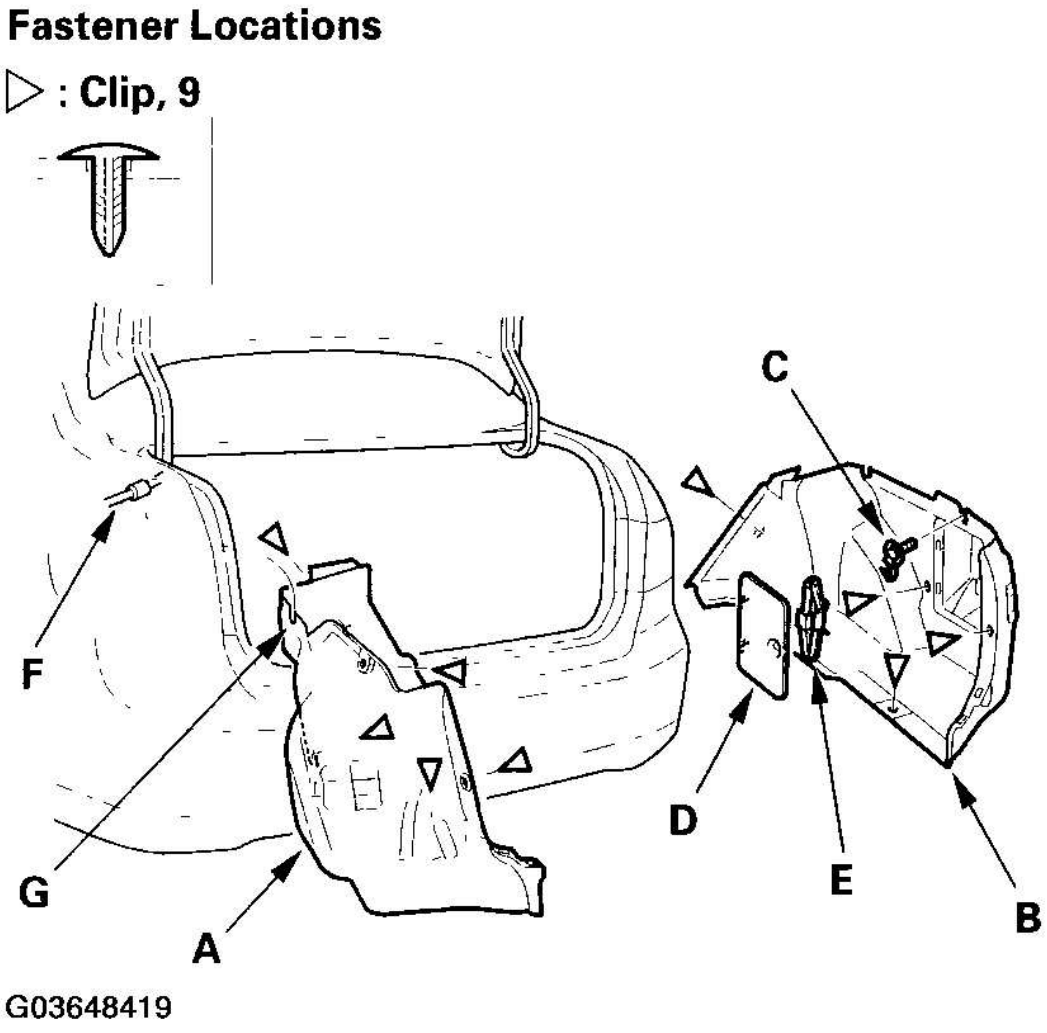


Fig. 48: Removing Left & Right Trunk Side Trim Panels
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Push the clips into place securely.

Special Tools Required

KTC trim tool set SOJATP2014

4-DOOR ('06-07 MODEL)

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim and panels.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Remove the clip, then remove the spare tire lid (A).

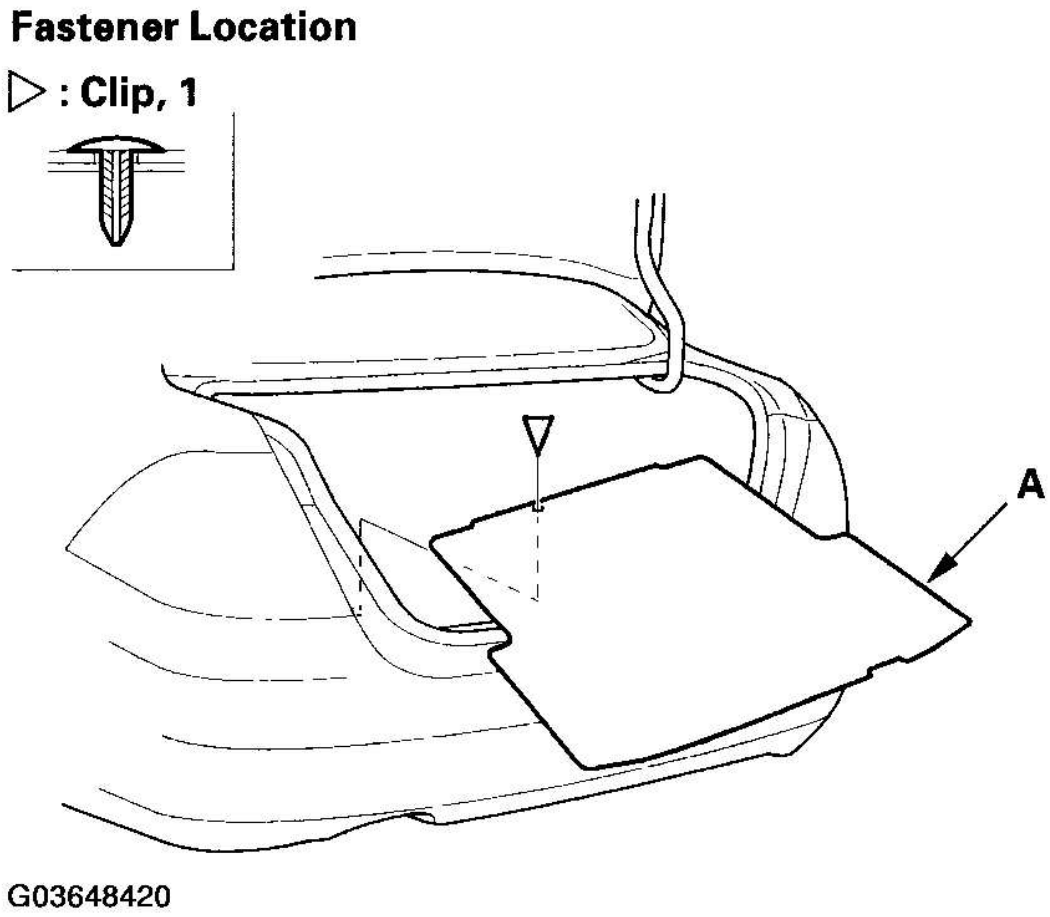


Fig. 49: Removing Spare Tire Lid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Detach the clips (A, B), and release the hooks (C) by pulling the trunk rear trim panel (D) up, then remove it.

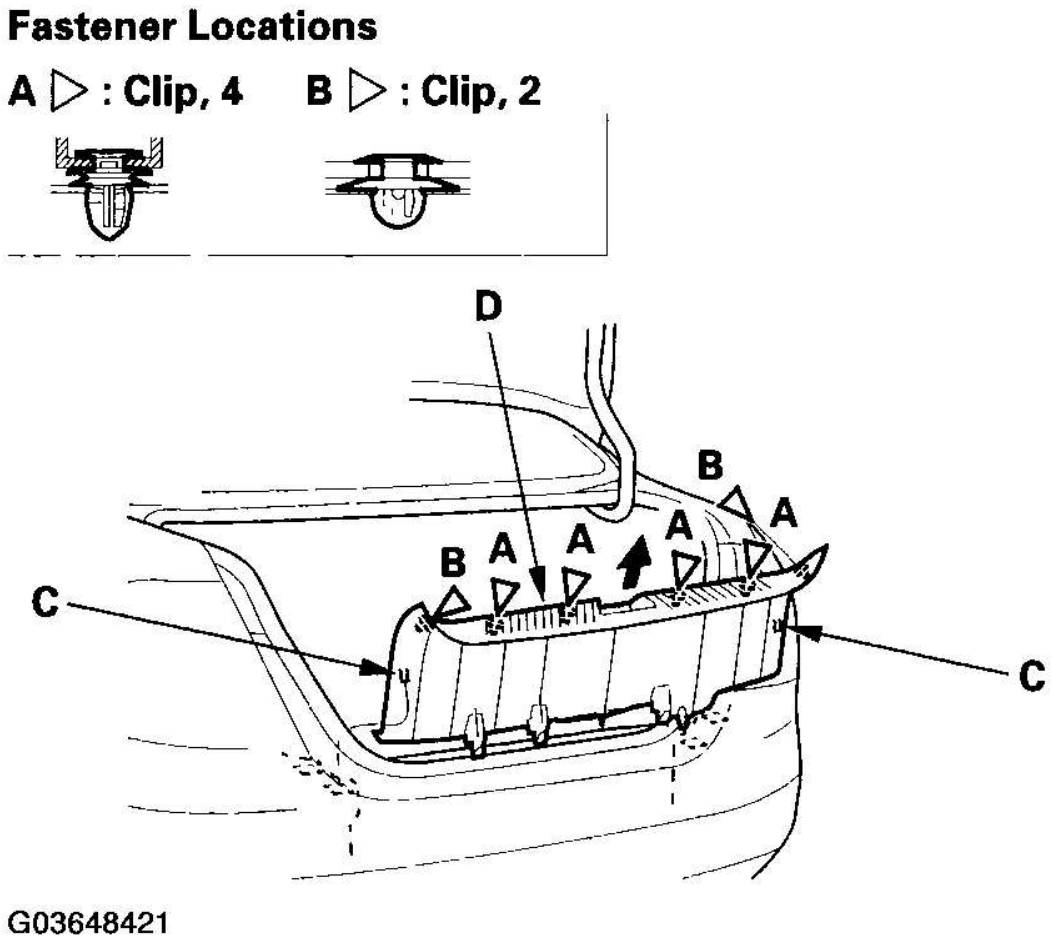


Fig. 50: Detaching Clips And Releasing Hooks Pulling Trunk Rear Trim Panel Up
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the left trunk side trim panel (A) and the right trunk side trim panel (B).

   -1 Right side: Remove the trunk hook (C), the jack cover (D), and the jack (E).

   -2 Remove the clips.

-3 Remove the trim panels from the trunk compartment. Left side: Release the trunk lid opener cable (F) from the slit (G) in the trim panel.

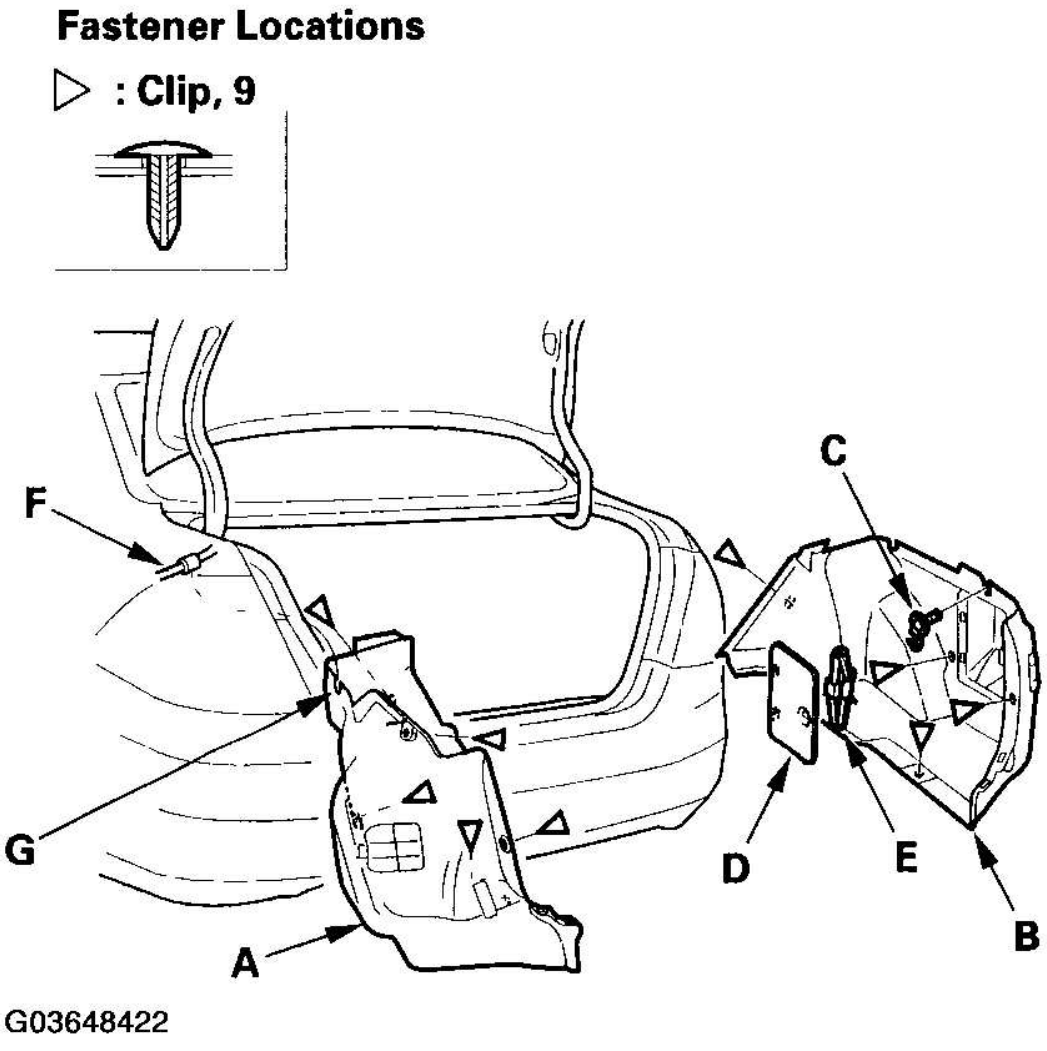


Fig. 51: Removing Left & Right Trunk Side Trim Panels
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.
   - Push the clips into place securely.

TRIM REMOVAL/INSTALLATION - TRUNK LID

2-DOOR

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim.**

1. Using the appropriate tool from the KTC tool set, detach the clips (A, B, C), then remove the trunk lid trim (D). Take care not to scratch the trunk lid.

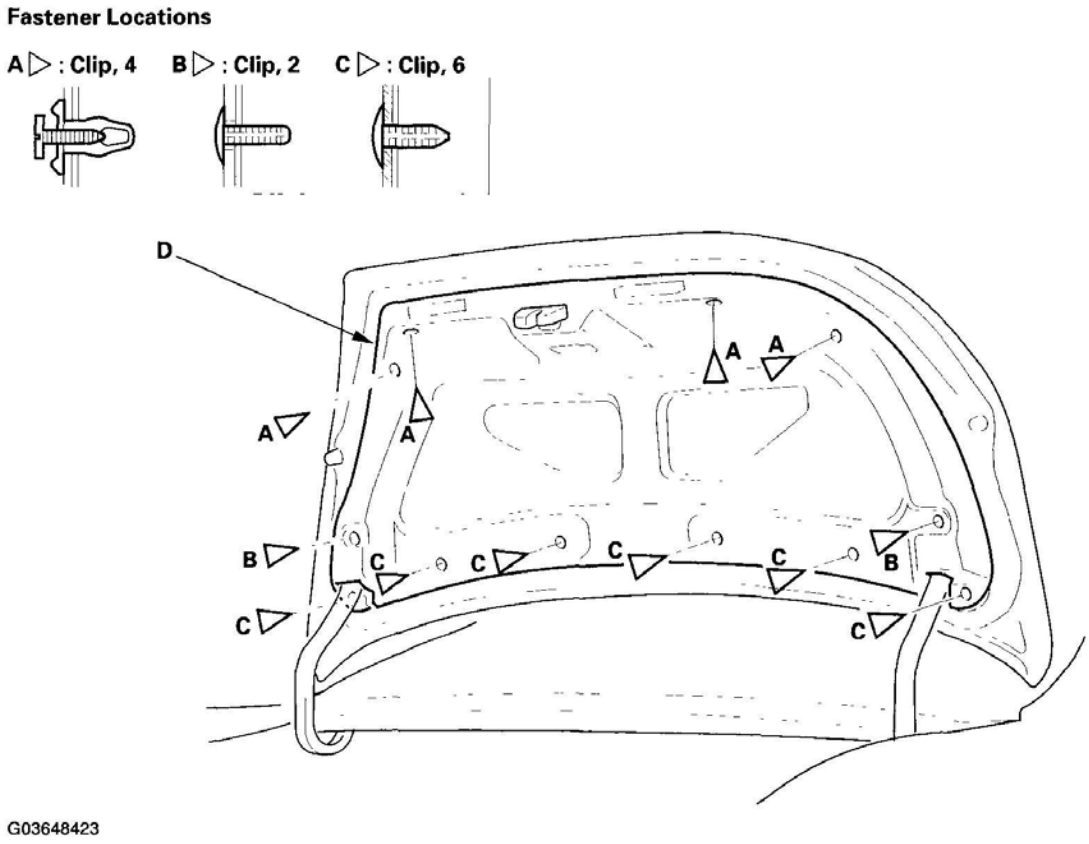


Fig. 52: Detaching Clips And Removing Trunk Lid Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.

- Push the clips into place securely.

4-DOOR

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to bend or scratch the trim.**

1. Using the appropriate tool from the KTC tool set, detach the clips (A, B, C), then remove the trunk lid trim (D). Take care not to scratch the trunk lid.

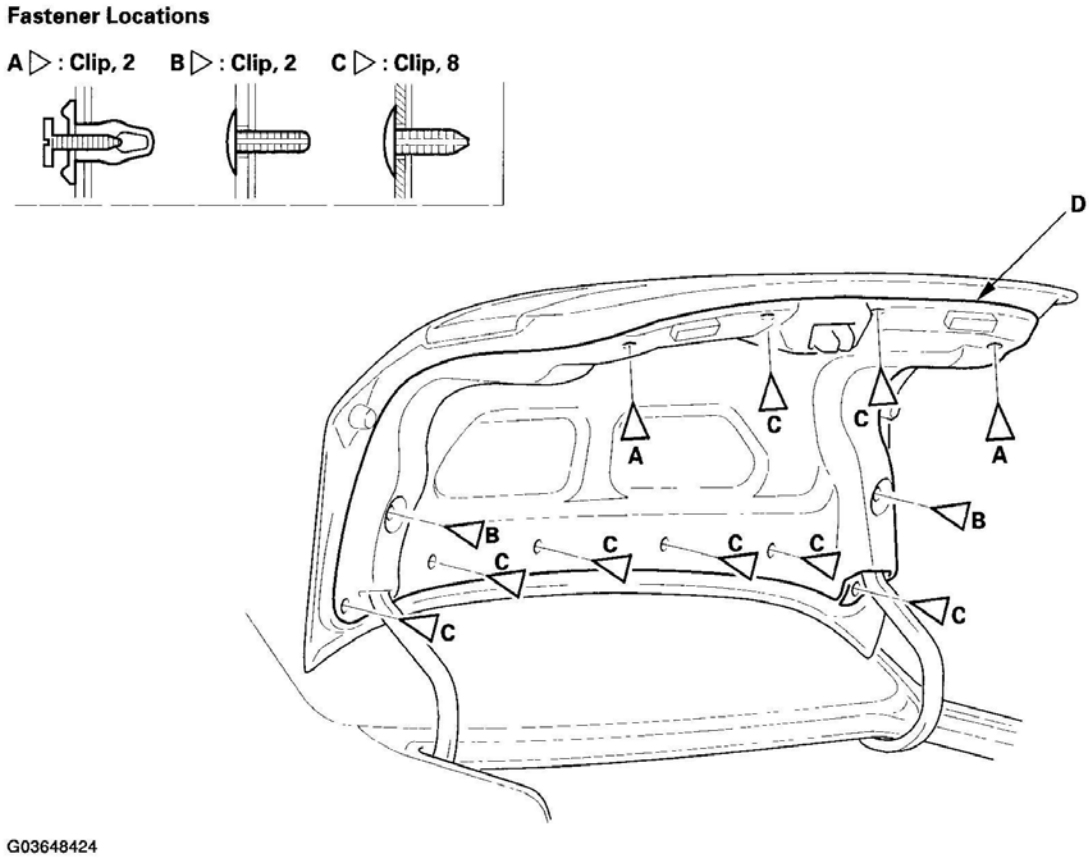


Fig. 53: Detaching Clips And Removing Trunk Lid Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the trim in the reverse order of removal, and note these items:
   - Check the clips for damage or stress-whitening, and replace them with new ones.

- Push the clips into place securely.

HEADLINER REMOVAL/INSTALLATION

Special Tools Required

KTC trim tool set SOJATP2014

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:

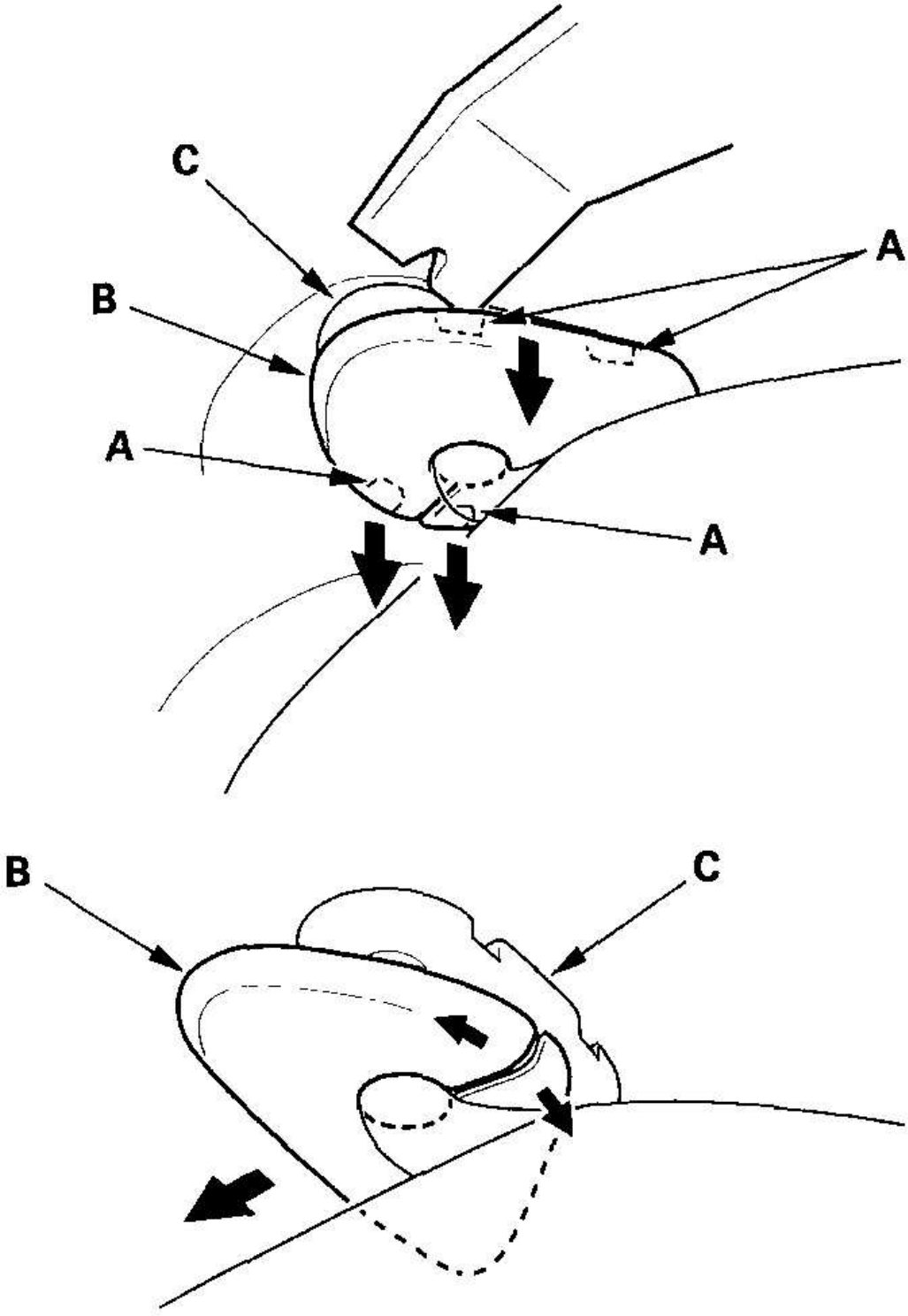
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **When prying with a flat-tip screwdriver, wrap it with protective tape to prevent damage.**
- **Take care not to bend or scratch the headliner.**
- **Be careful not to damage the dashboard and other interior trim.**

1. Remove these items:
   - A-pillar trim, both sides, 2-door without side curtain airbag (see **A-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**), 2-door with side curtain airbag (see **A-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)**), 4-door without side curtain airbag (see **A-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**) or 4-door with side curtain airbag (see **A-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)**)
   - Ceiling light (see **CEILING LIGHT REPLACEMENT**)
   - Front seat belt upper anchor, both sides, 2-door (see step 7 in **FRONT SEAT BELT - 2-DOOR**), 4-door (see step 7 in **FRONT SEAT BELT - 4-DOOR**)
   - B-pillar lower trim, 4-door without side curtain airbags (see **4-DOOR - B-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**), 4-door with side curtain airbags (see **4-DOOR - B-**

PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS))

- B-pillar upper trim, both sides, 2-door without side curtain airbags (see **2-DOOR - B-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**), 2-door with side curtain airbags (see **2-DOOR -B-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)**), 4-door without side curtain airbags (see **4-DOOR - B-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**) or 4-door with side curtain airbags (see **4-DOOR - B-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)**)
- C-pillar trim, both sides, 2-door without side curtain airbags (see **2-DOOR - C-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**), 2-door with side curtain airbags (see **2-DOOR - C-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)**), 4-door without side curtain airbags (see **4-DOOR - C-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**) or 4-door with side curtain airbags (see **4-DOOR - C-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)**)

2. From both sides, using a trim tool, release the tabs (A), then turn the sunvisor cap (B), and remove it from the bracket (C).



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Fig. 54: Releasing Tabs & Turning Sunvisor Cap
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. From both sides, remove the sunvisor (A) and holder (B).
   -1 Remove the self-tapping ET screws.
   -2 Remove the sunvisor from the body and holder.
   -3 If equipped, disconnect the vanity mirror light connector (C).
   -4 Using a flat-tip screwdriver, push the hook (D), turn the holder 90°, and then pull it out.

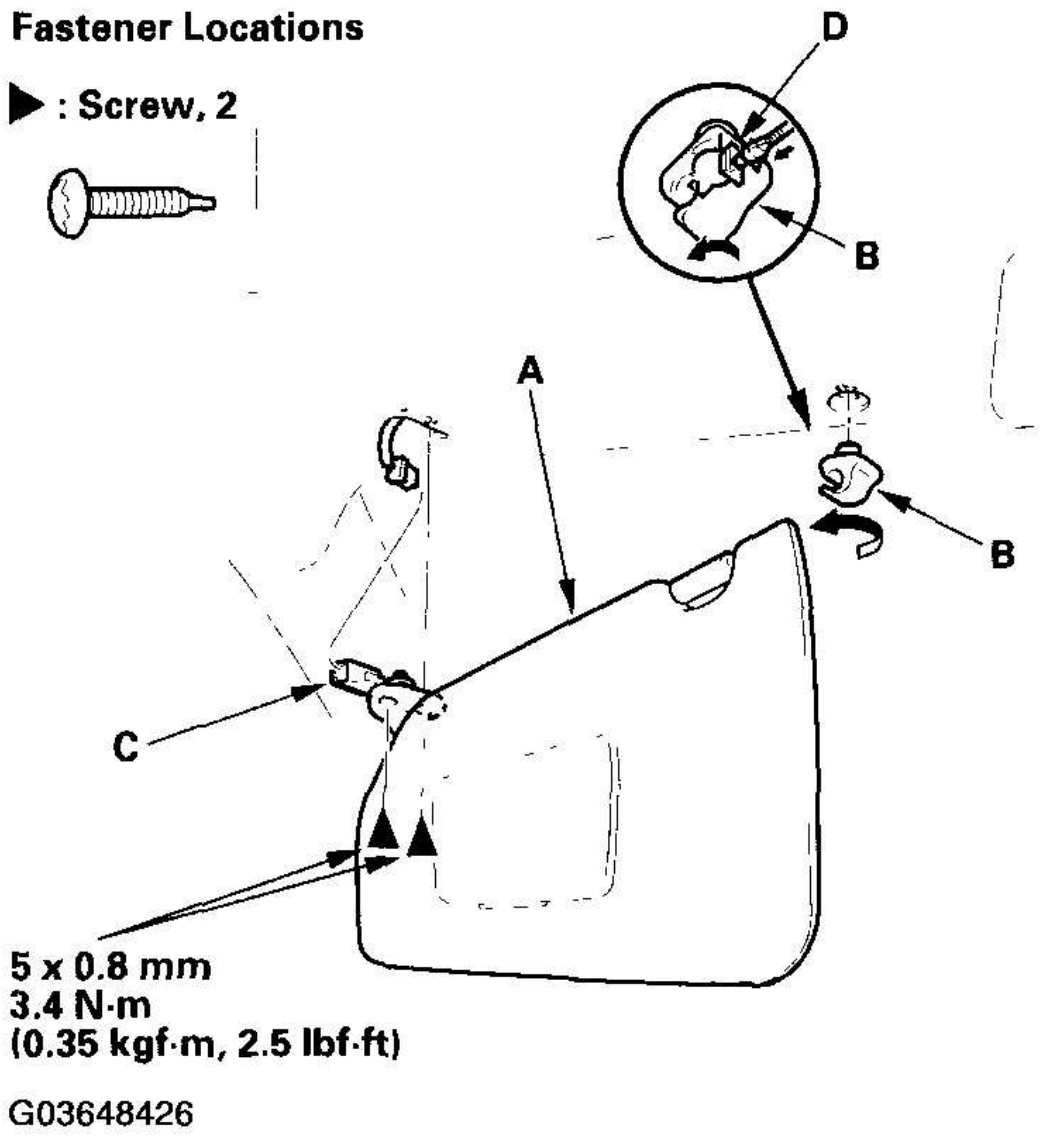
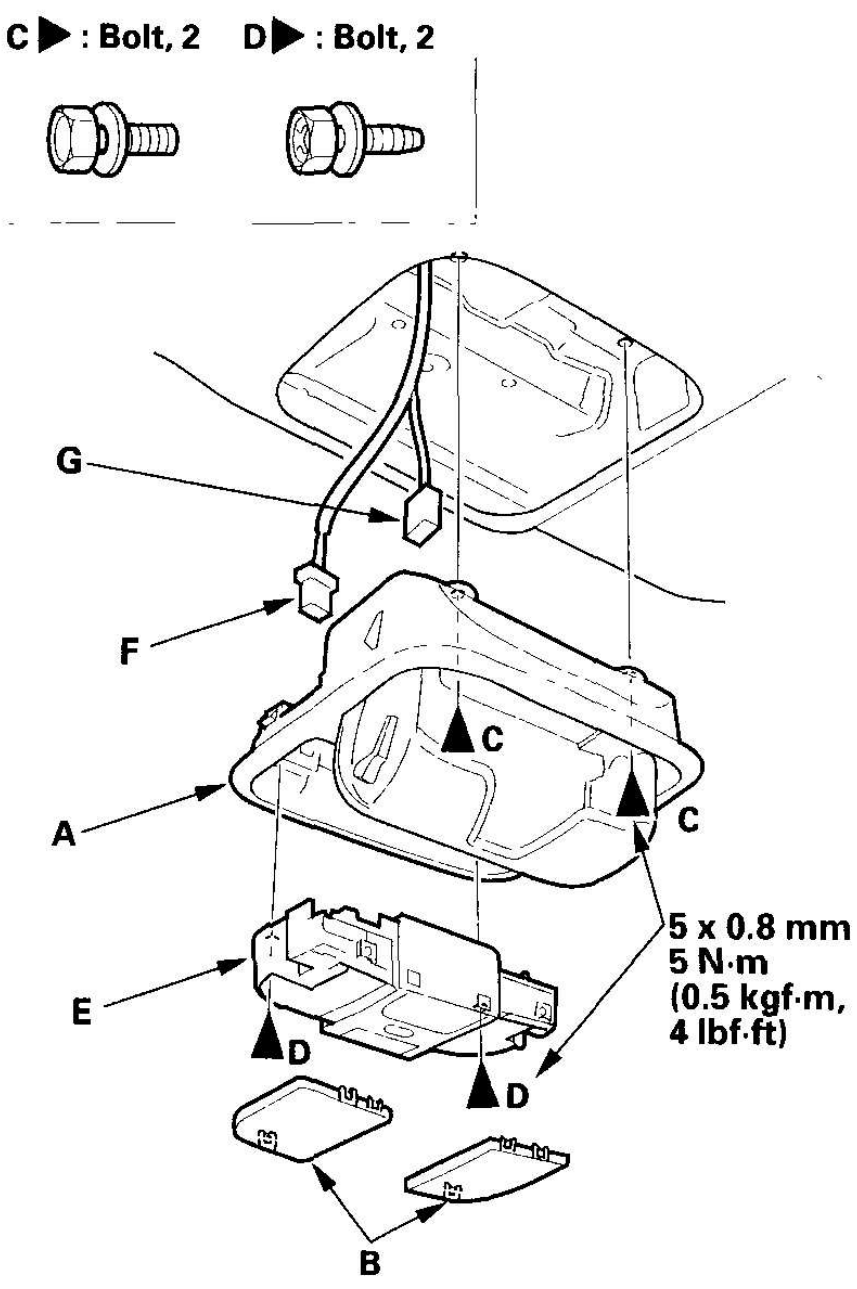


Fig. 55: Removing Sunvisor & Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the roof console (A).
   -1 Remove the lens (B).
   -2 Remove the bolts (C, D).
   -3 Pull out the roof console, and front individual map light (E). Disconnect

the front individual map light connector (F), and if equipped, ambient light connector (G).

Fastener Locations



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Fig. 56: Removing Roof Console
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. 4-door: Lower the grab handle, then pry out the lids (A). Remove the self-tapping ET screws, then remove the grab handle (B). Remove the remaining grab handles.

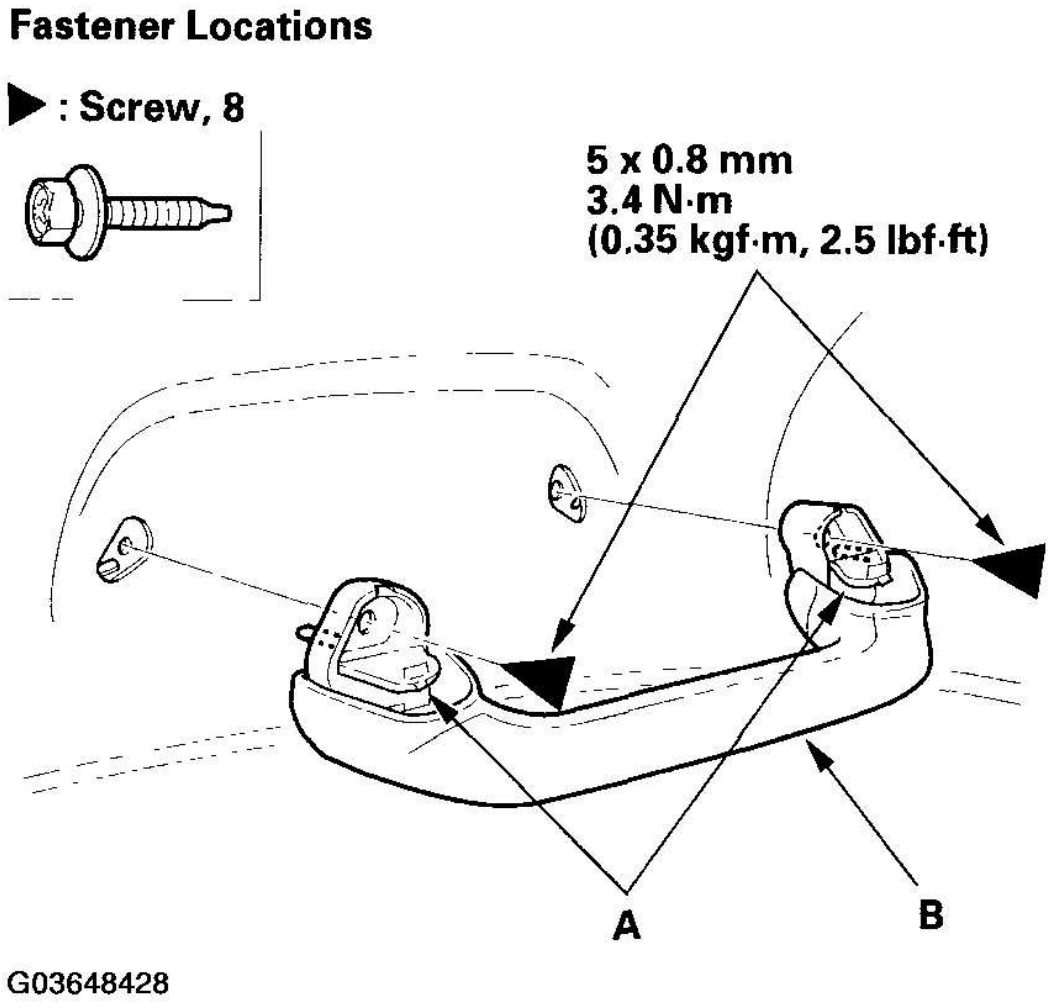


Fig. 57: Removing Grab Handle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. With moonroof: Remove the headliner.

-1 4-door: Remove the socket plug (A).

-2 Remove the front door opening trim (B) and rear door opening trim (C) from each roof portion.

-3 Detach the clip (D) (4-door), and release the fasteners (E) by pulling the front portion of the headliner (F) down.

-4 With the help of an assistant, detach the rear clips (G) by pulling the rear portion of the headliner down, and release the headliner from the moonroof frame (H) by sliding the headliner rearward, and lowering it.

-5 Remove the headliner through the front passenger's door opening.

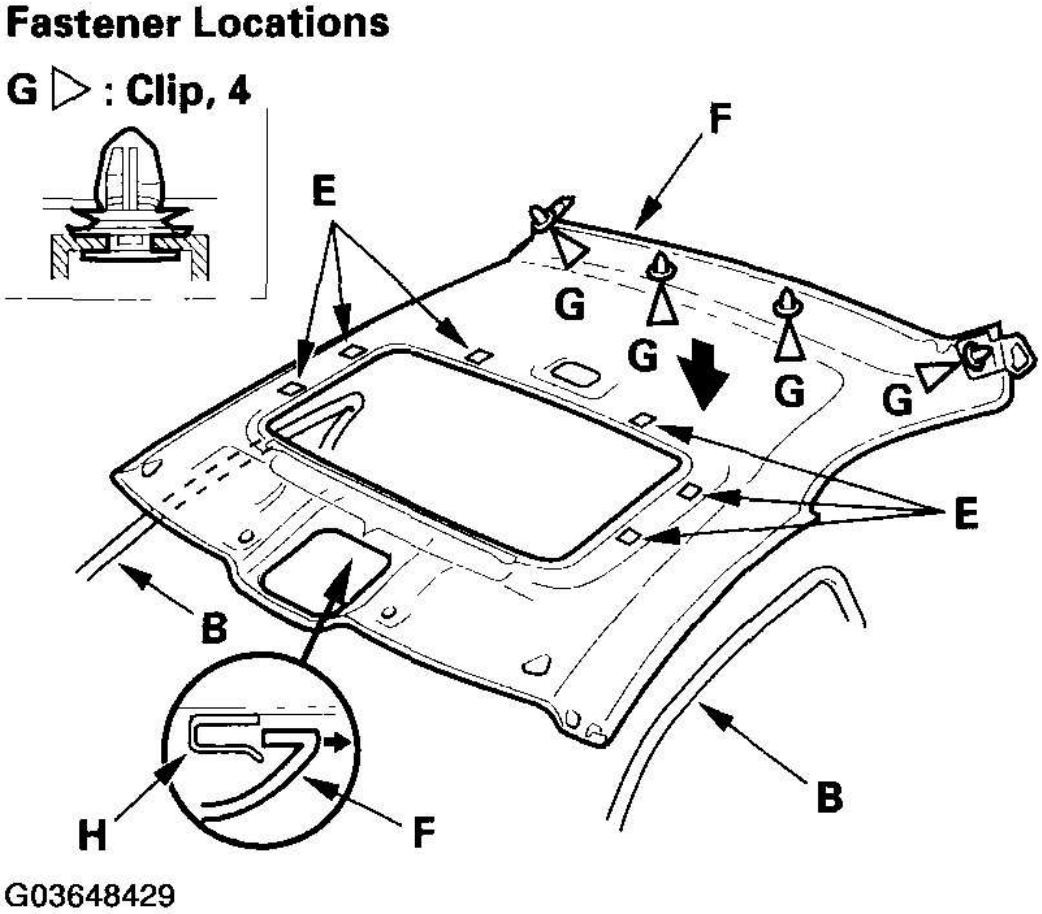


Fig. 58: Removing Headliner (With Moonroof - 2-Door)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

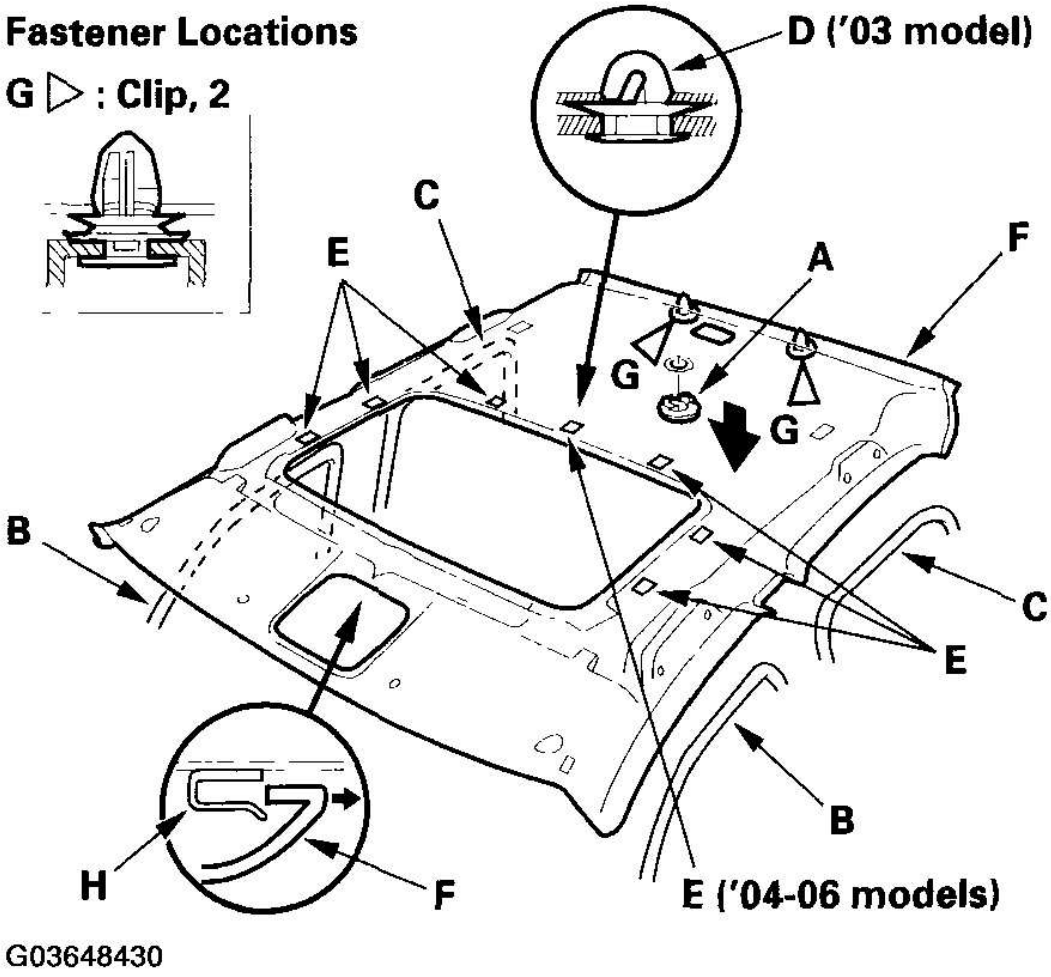


Fig. 59: Removing Headliner (With Moonroof - 4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Without moonroof: Remove the headliner.

   -1 Remove the front door opening trim (A) and rear door opening trim (B) from each roof portion.

   -2 With the help of an assistant, detach the rear clips (C) by pulling the rear portion of the headliner (D) down.

   -3 Remove the cushion tape (E), then remove the roof harness (F) from the

headliner.

-4 Remove the headliner through the front passenger's door opening.

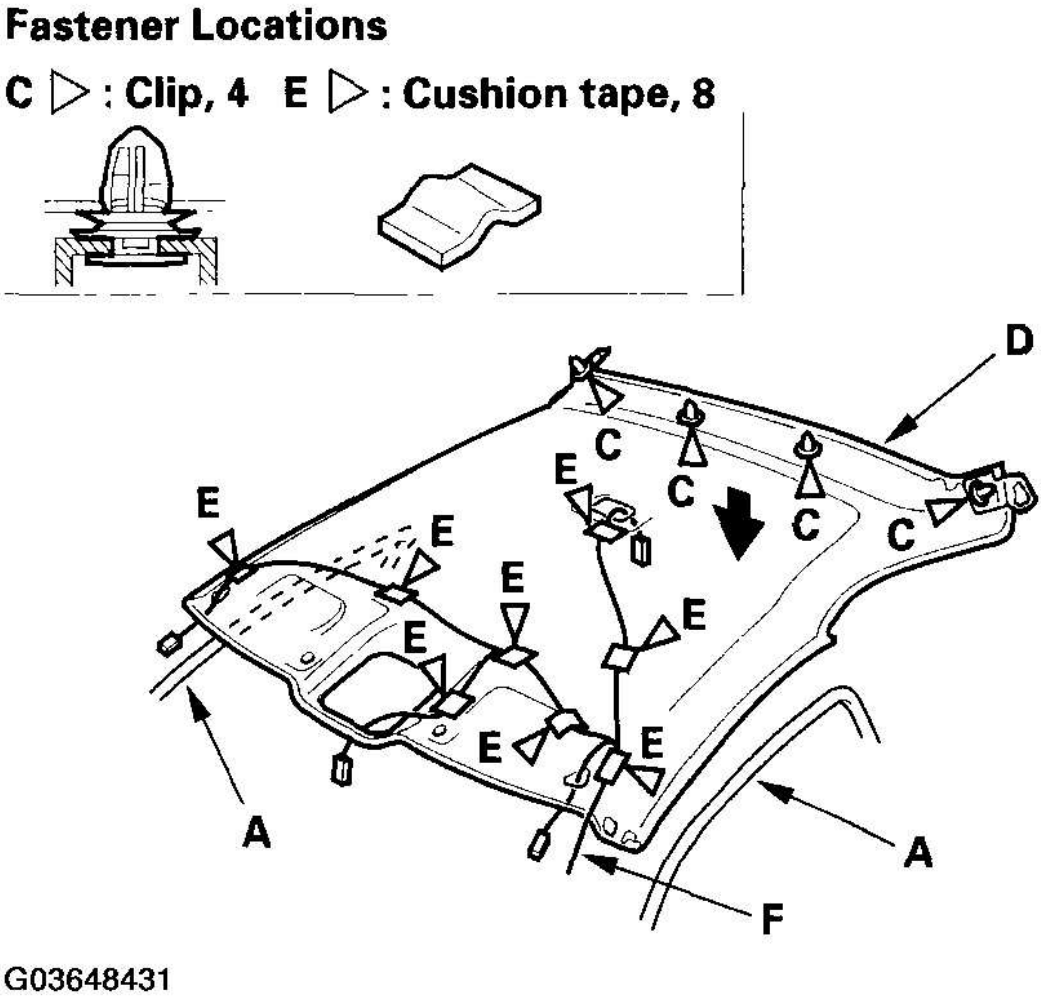


Fig. 60: Removing Headliner (Without Moonroof - 2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

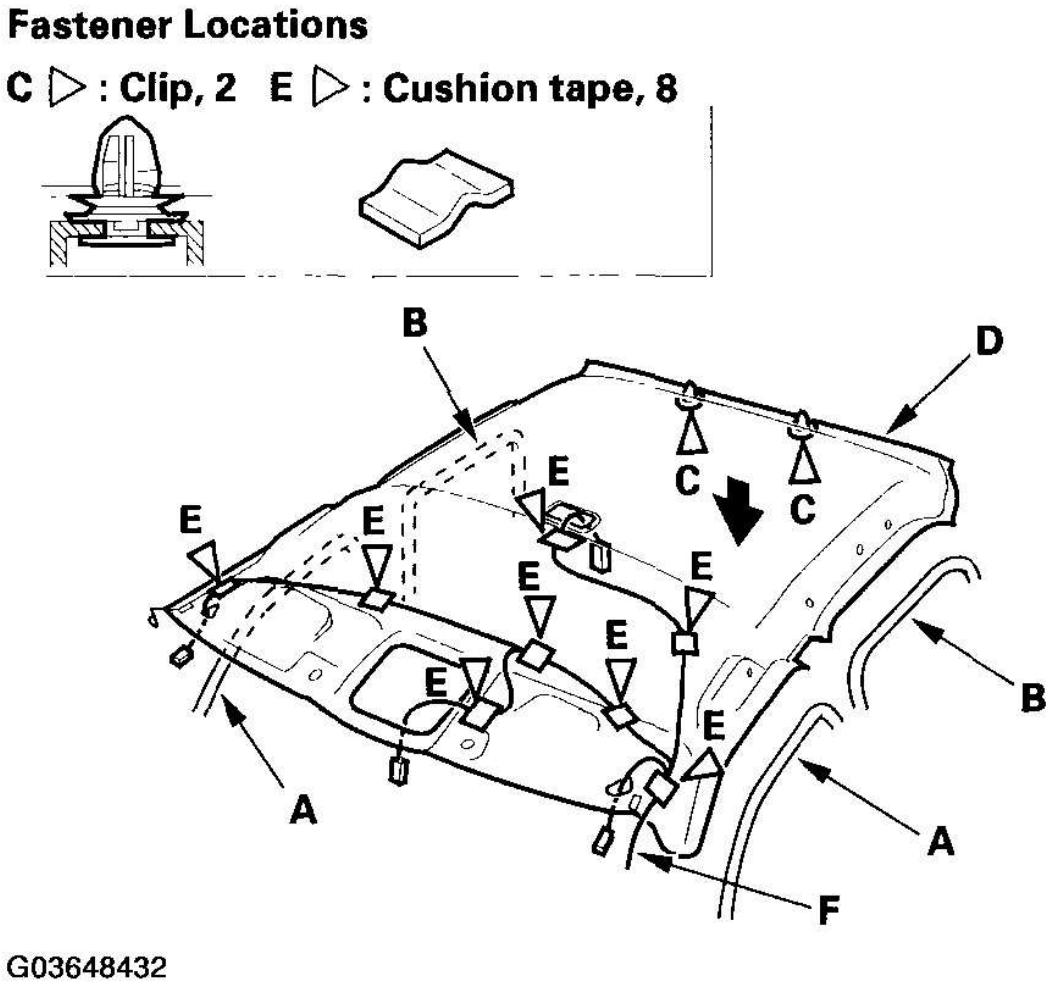


Fig. 61: Removing Headliner (Without Moonroof - 4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. 4-door without side curtain airbag: If necessary, remove the bolts, then remove the front grab handle bracket (A) and rear grab handle brackets (B) from both sides by releasing the hooks (C).

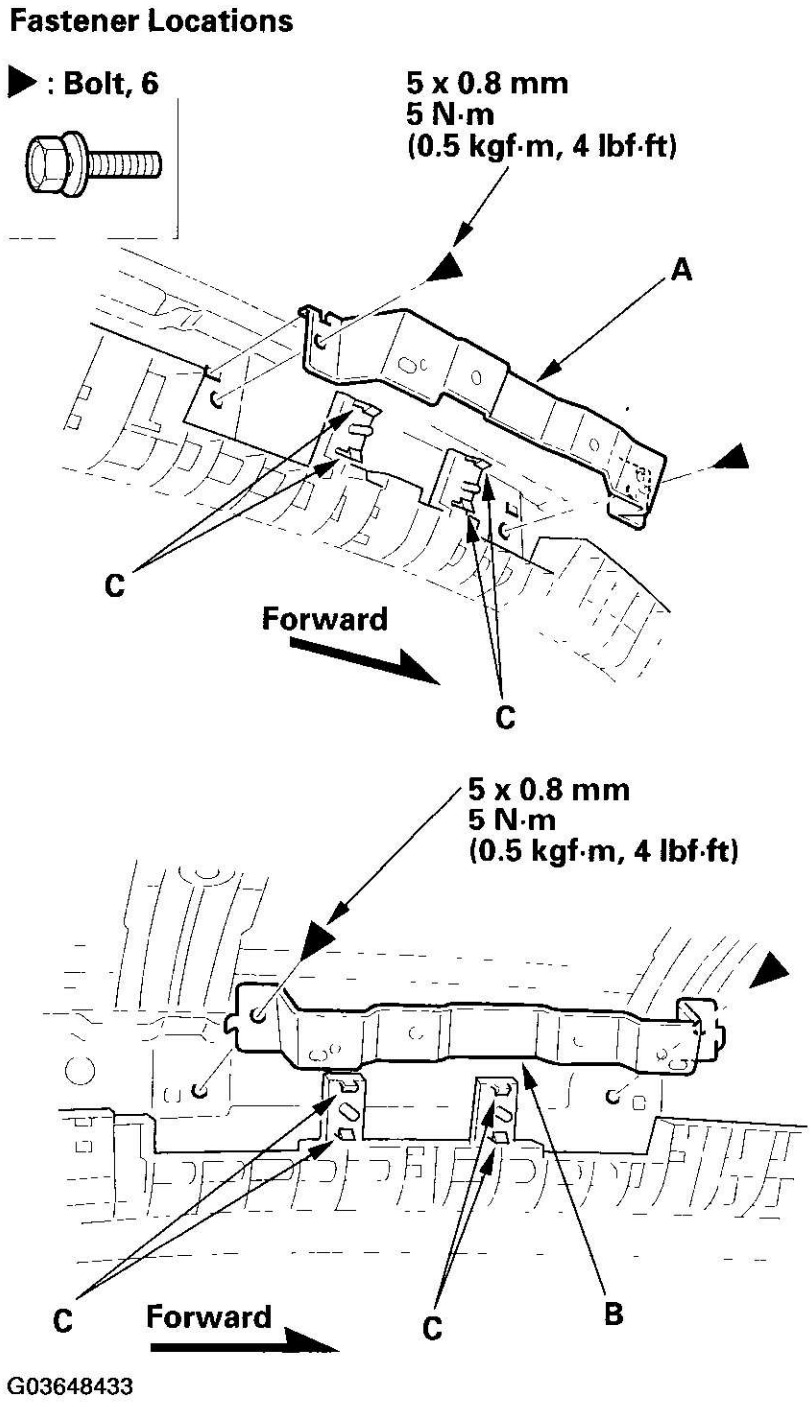
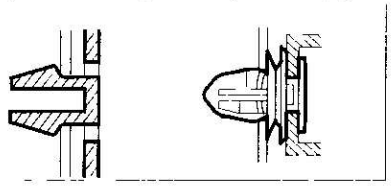


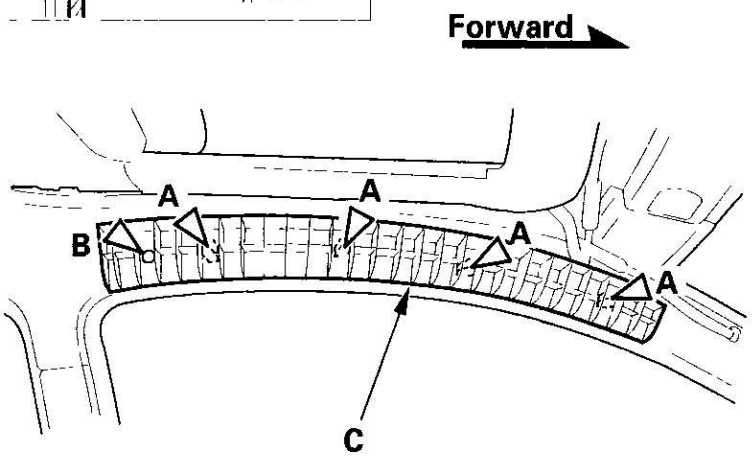
Fig. 62: Removing Front And Rear Grab Handle Brackets From Both Sides Releasing Hooks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

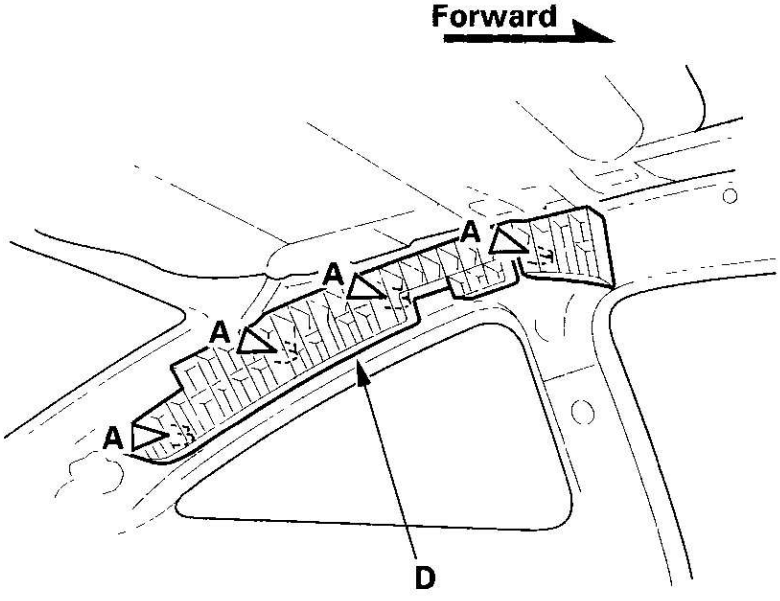
9. Without side curtain airbag: If necessary, detach the hooks (A) and the clip (B), then remove the front roof side pad (C) and rear roof side pad (D).

Fastener Locations

A▷ : Hook, 8 B▷ : Clip, 1





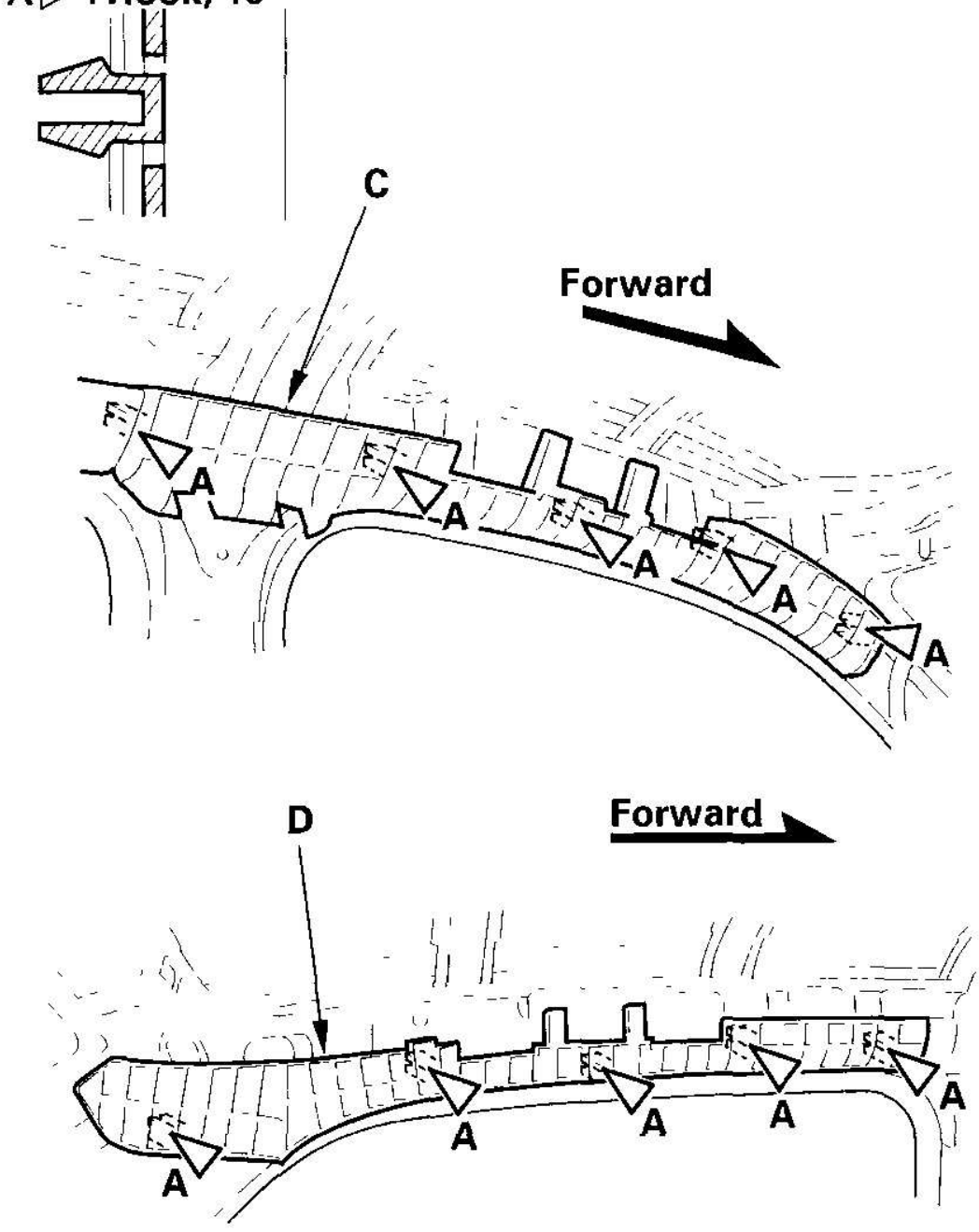


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Fig. 63: Removing Front And Rear Roof Side Pad (2-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Fastener Locations

A ▷ : Hook, 10



G03648435

Fig. 64: Removing Front And Rear Roof Side Pad (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. 4-door with moonroof: If necessary, pull down the roof console bracket (A) to release the clip.

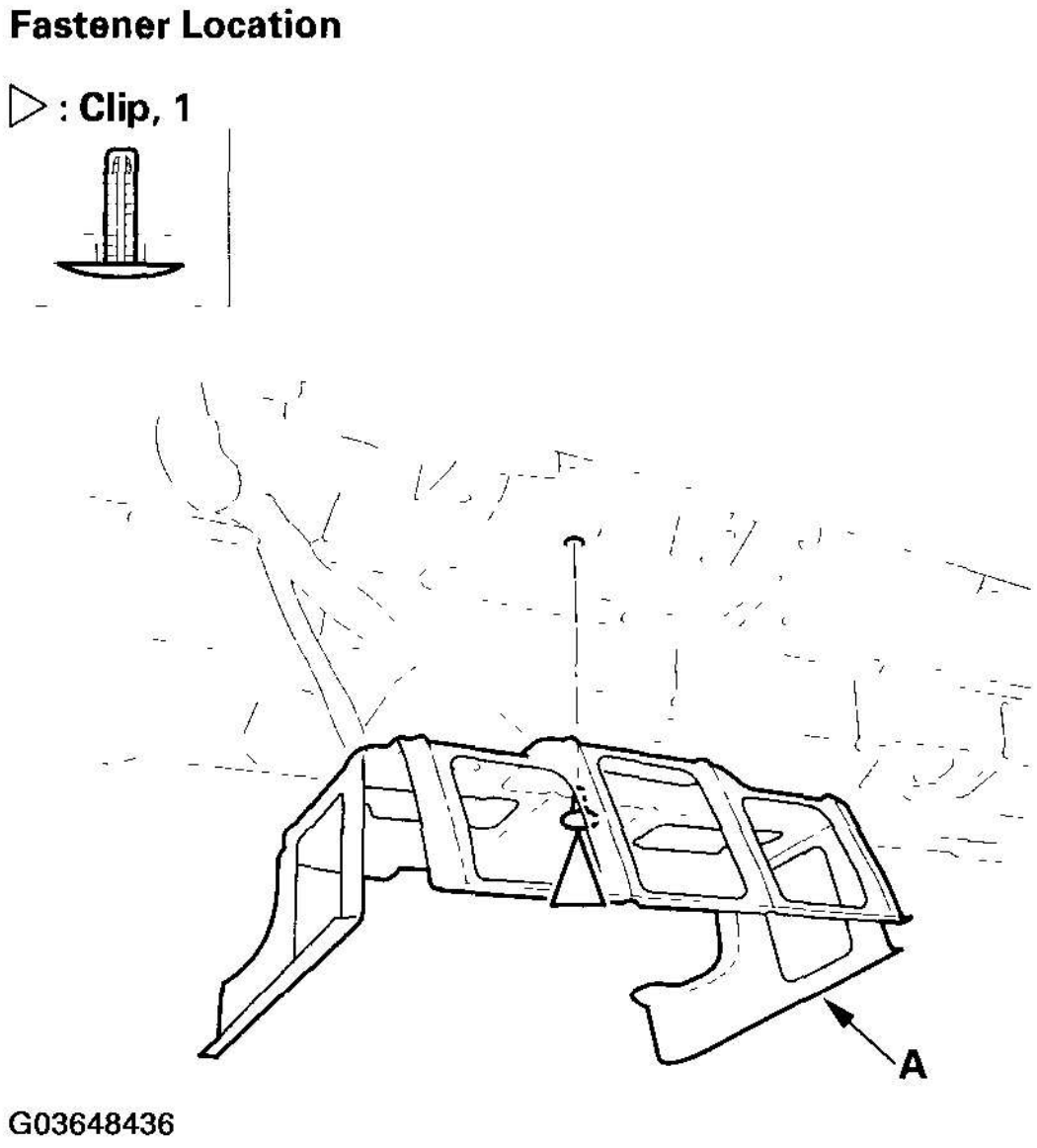


Fig. 65: Pulling Down Roof Console Bracket To Release Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the headliner in the reverse order of removal, and note these items:
    - If the side curtain airbag has been deployed, replace the headliner and front grab handle (4-door) on deployed side with new ones.
    - To prevent the side curtain airbag from accidentally deploying, being damaged when deploying, and injuring persons when deploying, removed trim pieces should be checked for these kinds of damage:

      -Any creases or tears in the headliner (A)

      -Any fasteners (B) or clip bases (C) which have come off the headliner

      -Any damage around the grab handle holes (D) (4-door) or sunvisor holes (E) in the headliner

      -Any deformations in the grab handle (F) (4-door)

      -Any cracks in the sunvisor stay base (G)

      -Any bends or cracks in the sunvisor stay shaft (H)

      -Any cracks in the sunvisor base (I)

      -Any cracks in the vanity mirror base (J)

      -Any deformations in the grab handle bracket (4-door)
    - Replace any damaged parts with new ones.
    - Make sure the top of the headliner overlaps with the trim pieces correctly (see **CHECKING AND ADJUSTING THE HEADLINER/PILLAR TRIM OVERLAP**).
    - When passing the headliner through the door opening, be careful not to fold or bend it. Also, be careful not to scratch the body.
    - 4-door: If the threads on a visor or grab handle screw are worn out, use an oversized self-tapping ET screw made specifically for this application:

      Visor: P/N 90137-S30-003

      Grab handle: P/N 90137-S0A-003
    - Check that both sides of the headliner are securely attached to the trim.

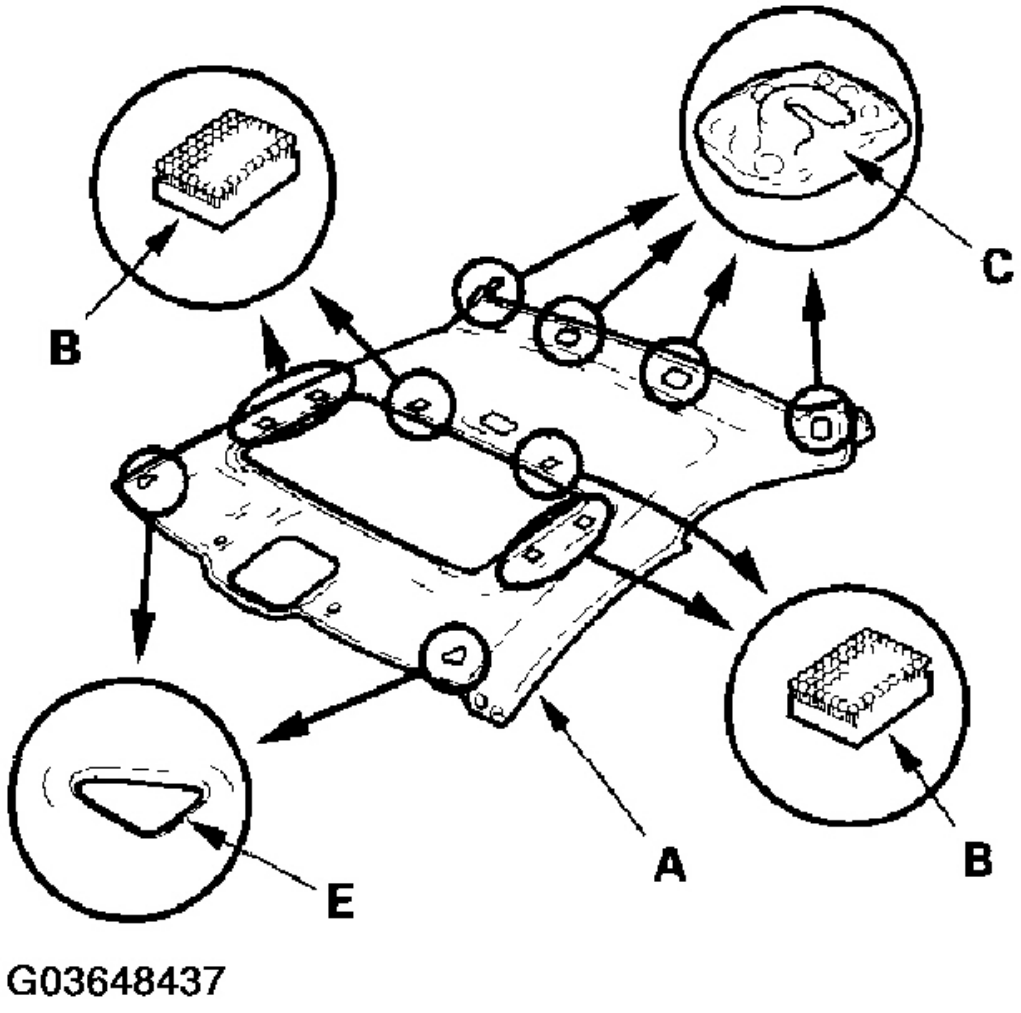


Fig. 66: Checking Headliner For Damage (2-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

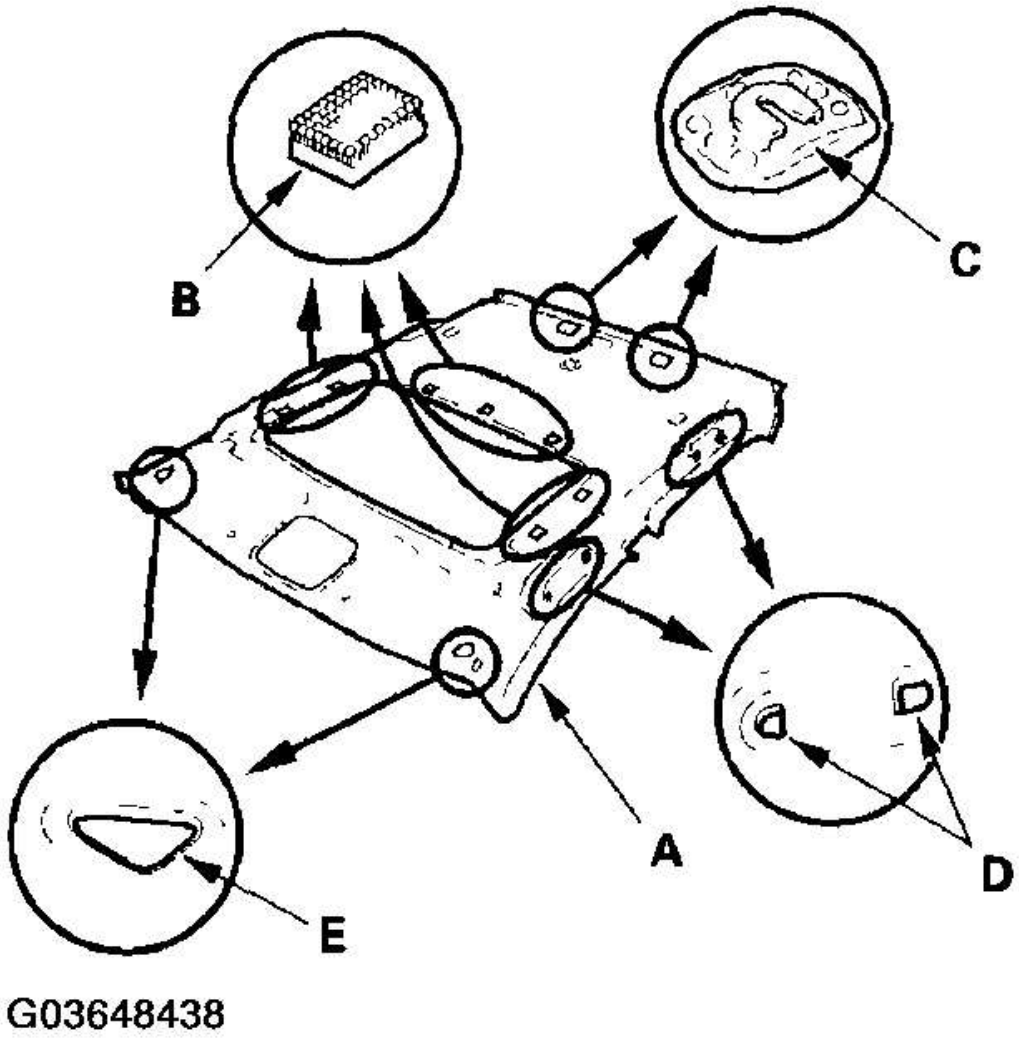


Fig. 67: Checking Headliner For Damage (4-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

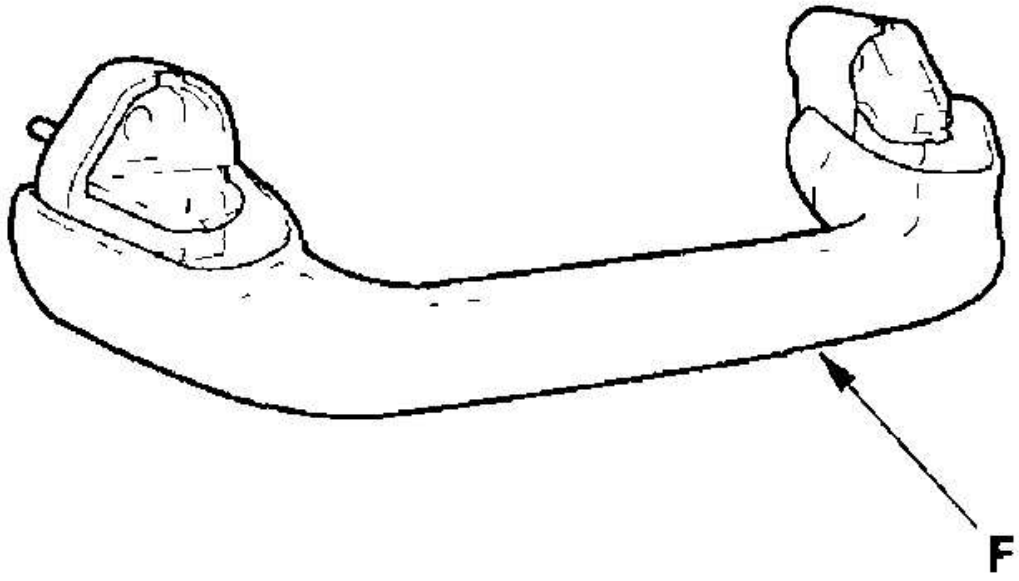


Fig. 68: Checking Grab Handle For Damage (4-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

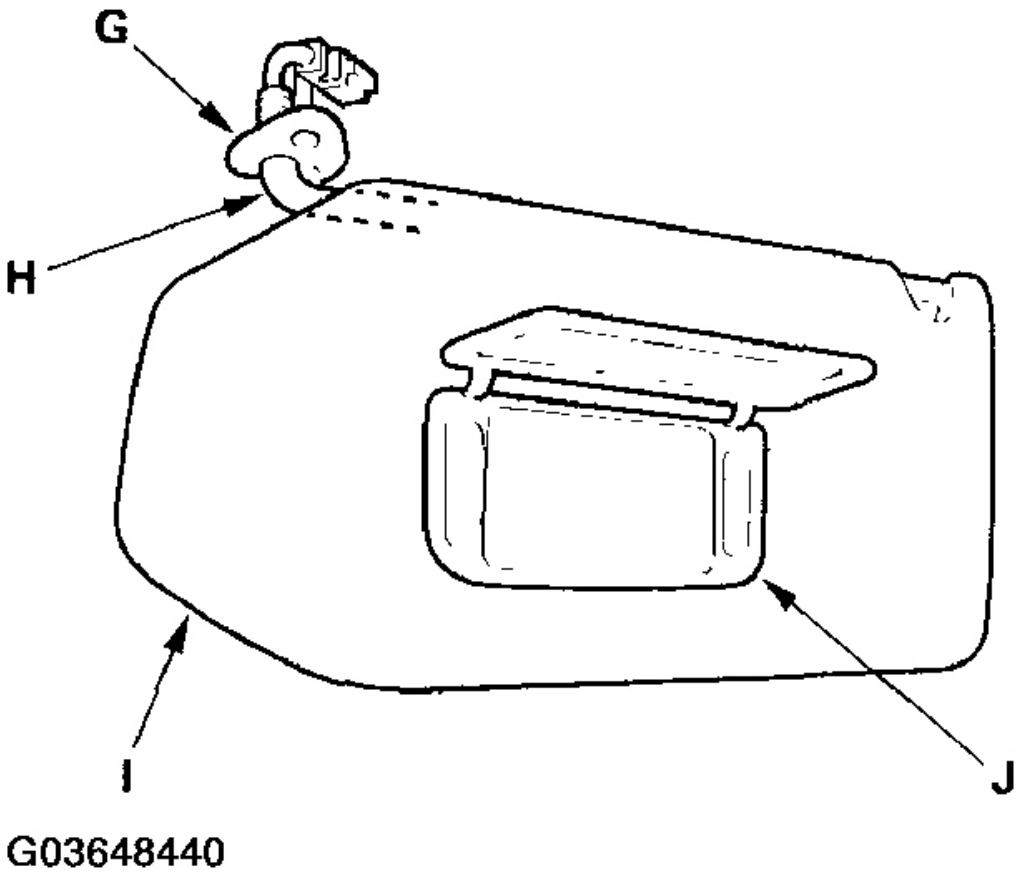


Fig. 69: Checking Sunvisor For Damage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CARPET REPLACEMENT

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to damage, wrinkle or twist the carpet.**
- **Be careful not to damage the dashboard or other**

interior trim pieces.

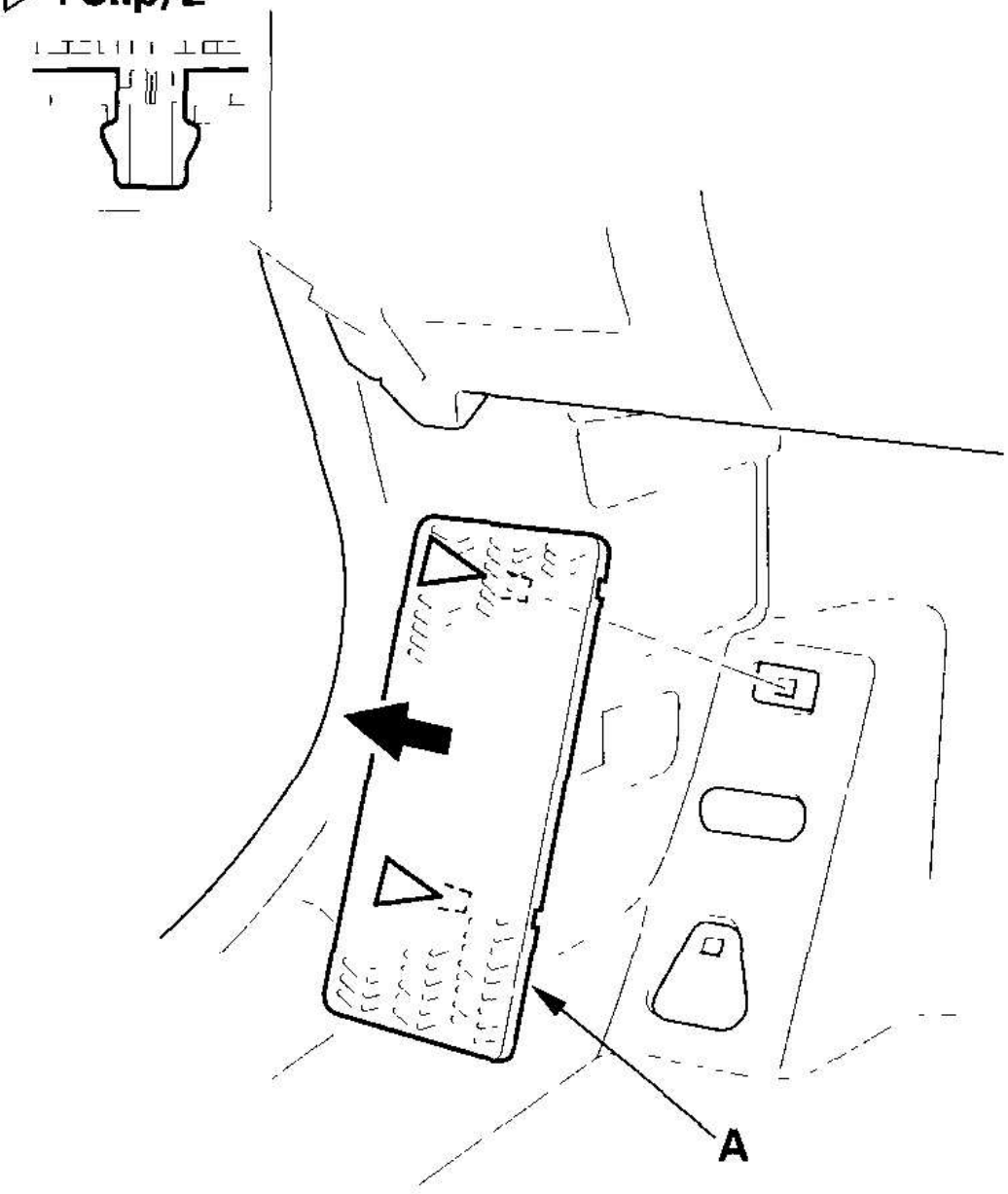
1. With side curtain airbag: Make sure you have the anti-theft codes for the radio and the navigation system, then write down the frequencies for the preset buttons.
2. With side curtain airbag: Disconnect the negative cable from the battery, and wait at least 3 minutes before beginning work.
3. Remove these items:
   - Front seats, both sides (see **FRONT SEAT REMOVAL/INSTALLATION**)
   - Rear seat cushion, 2-door (see **2-DOOR**), 4-door (see **4-DOOR**)
   - Rear seat side bolsters, both sides, 4-door (see **4-DOOR**)
   - Front door sill trim, both sides, 2-door (see **2-DOOR - DOOR SILL AREA**) or 4-door (see **4-DOOR - FRONT DOOR SILL AREA**)
   - Kick panels, both sides, 2-door (see **2-DOOR - DOOR SILL AREA**) or 4-door (see **4-DOOR - FRONT DOOR SILL AREA**)
   - Rear door sill trim, both sides, 4-door (see **4-DOOR - REAR DOOR SILL AREA**)
   - B-pillar lower trim, 4-door without side curtain airbags (see **4-DOOR - B-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**) or 4-door with side curtain airbags (see **4-DOOR - B-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-07 MODELS)**)
   - Center console (see **CENTER CONSOLE REMOVAL/INSTALLATION**)
   - Driver's dashboard center lower cover (see **DASHBOARD/STEERING HANGER BEAM REMOVAL/INSTALLATION**)
   - Passenger's dashboard center lower cover (see step 4 in **DASHBOARD/STEERING HANGER BEAM REMOVAL/INSTALLATION**)
   - '04-07 models: Driver's dashboard under cover (see **DRIVER'S DASHBOARD UNDER COVER REMOVAL/INSTALLATION**)
   - '04-07 models: Passenger's dashboard lower cover (see **PASSENGER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**)

- Parking brake lever (see **PARKING BRAKE CABLE REPLACEMENT**)

4. Remove the front seat belt lower anchor bolt, both sides ('03 model) or passenger's side ('04-07 models), 2-door (see step 4 in **FRONT SEAT BELT - 2-DOOR**) or 4-door (see step 4 in **FRONT SEAT BELT - 4-DOOR**).
5. Detach the clips, then remove the footrest (A).

Fastener Locations

▷ : Clip, 2



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Fig. 70: Removing Footrest
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. M/T model: Remove the bolts, then remove the center console bracket (A).

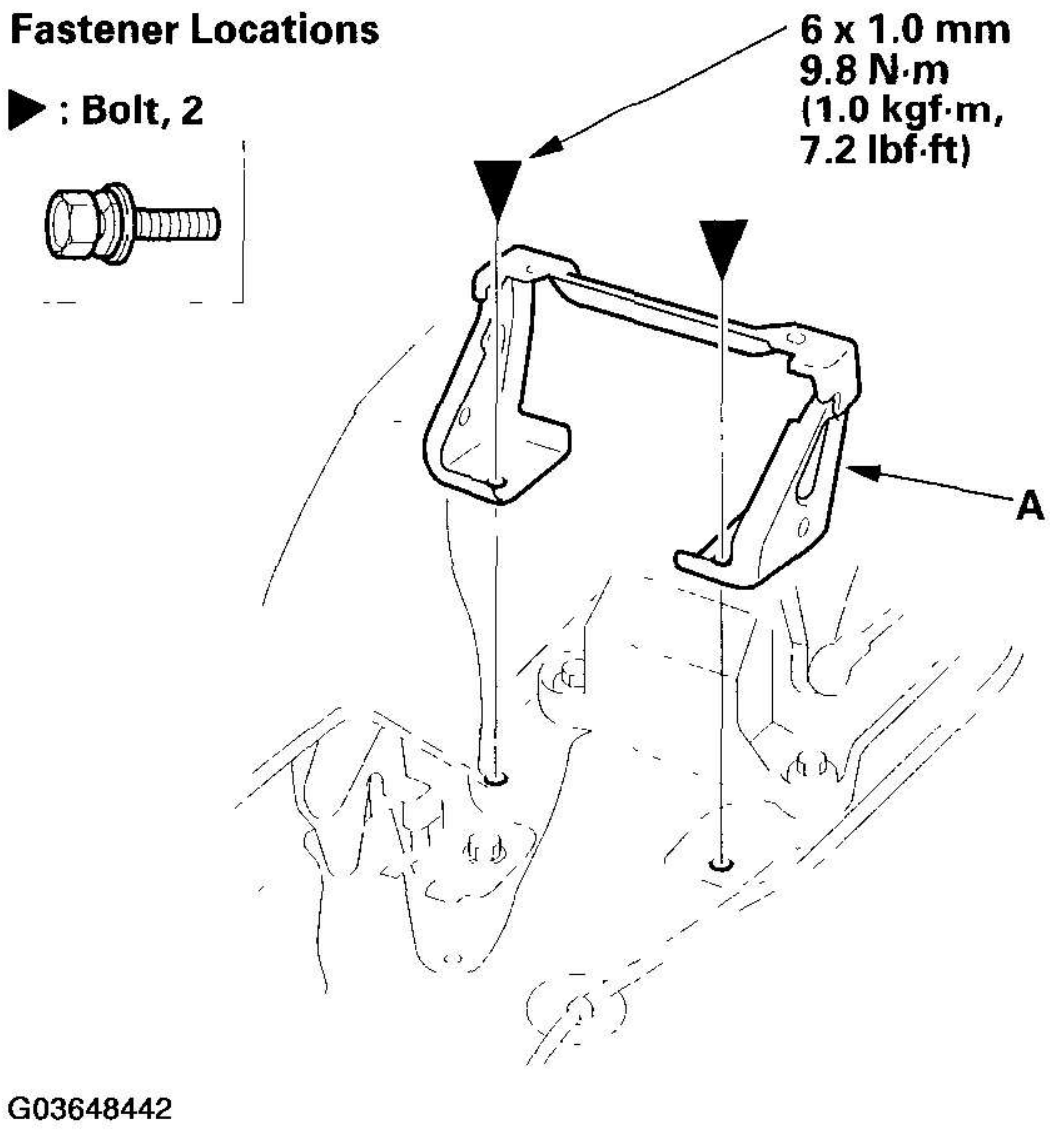


Fig. 71: Removing Center Console Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Disconnect the antenna lead (A) and antenna connector (B). If equipped, disconnect the side curtain airbag subharness connector (C). Detach the harness clips (D), and using a T30 Torx bit, remove the ground bolt (E).

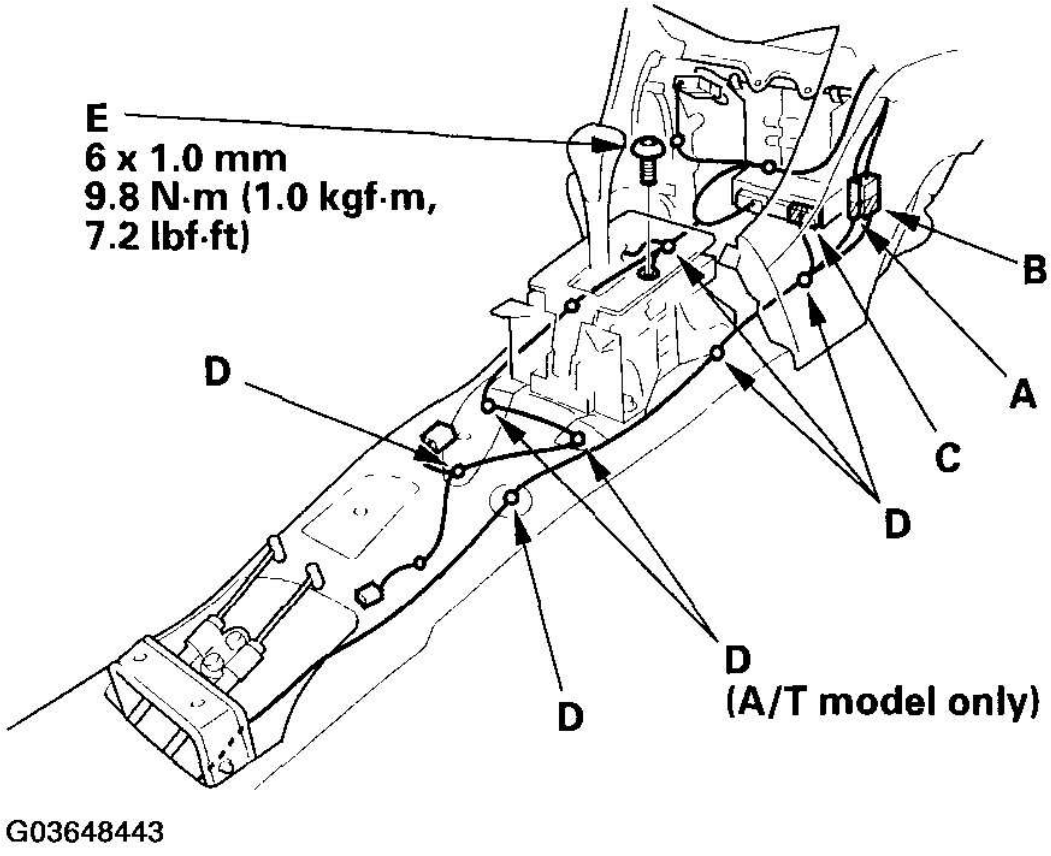


Fig. 72: Disconnecting Antenna Lead & Connector (A/T Model Only)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the bolts securing the change lever bracket or select lever bracket (A).

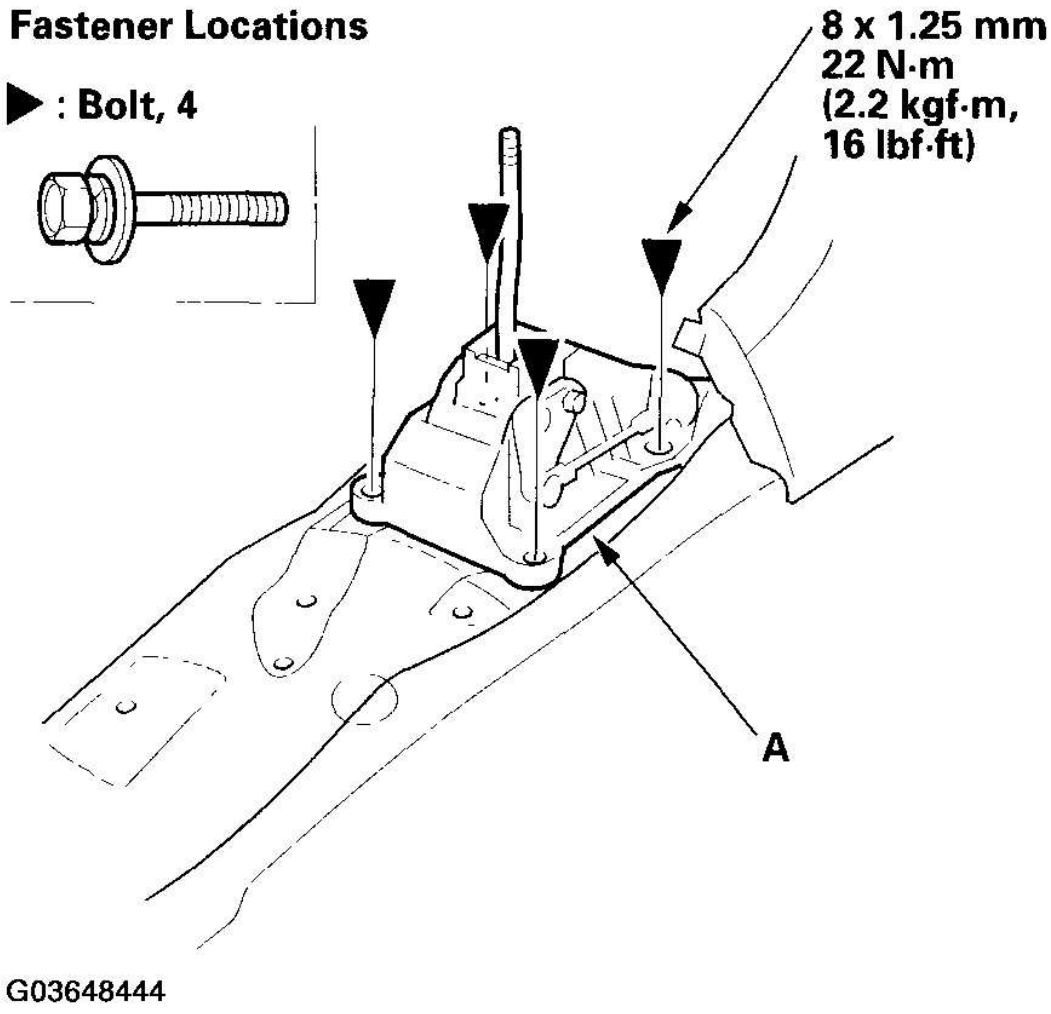


Fig. 73: Removing Change Lever Bracket Or Select Lever Bracket Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Two-piece type: Release the clips (A) fastening the front carpet (B) and rear carpet (C).

   One-piece type: Release the clip (A) from middle of the carpet (D).

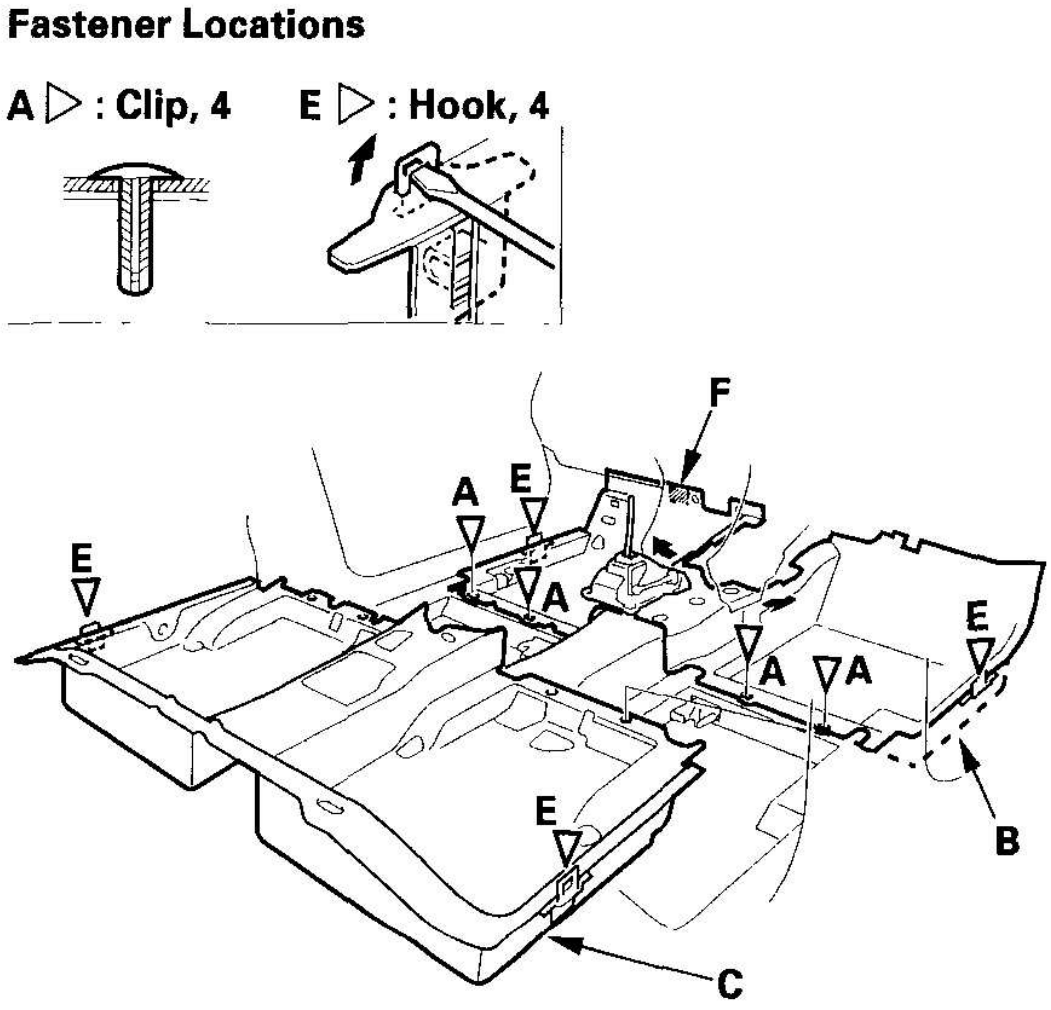


Fig. 74: Releasing Fastening Clips From Front And Rear Carpet (Two-Piece Type)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

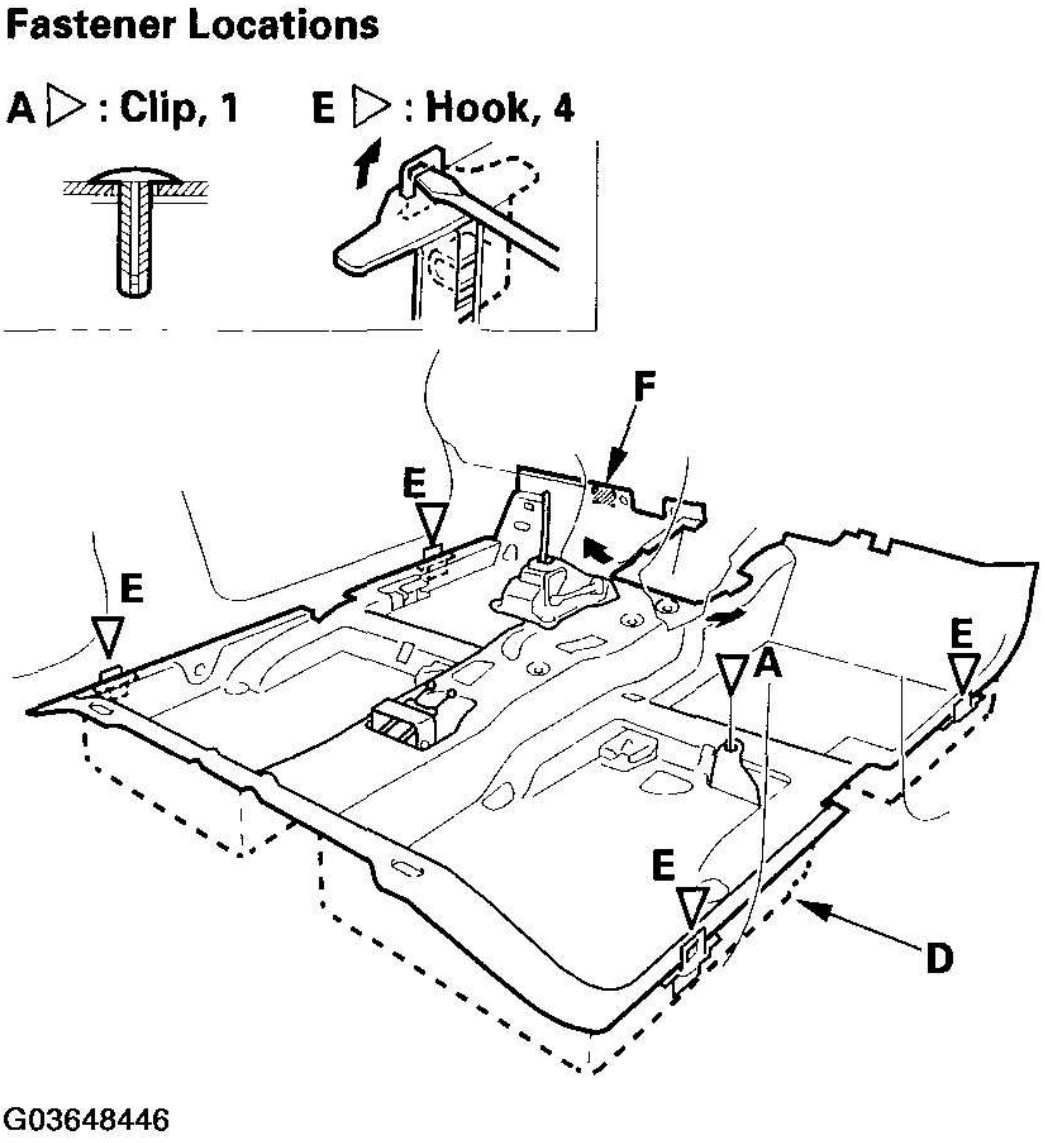


Fig. 75: Releasing Clip From Middle Of Carpet (One-Piece Type)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Release the hooks (E) with a flat-tip screwdriver; push the screwdriver toward the door, then lift upward. Remove the fastener (F), and then remove the carpet (one-piece type) or the front and rear carpets (two-piece type).
11. Install the carpet(s) in the reverse order of removal, and note these items:

- Take care not to damage, wrinkle or twist the carpet.
- Make sure the seat harnesses are routed correctly.
- Replace the clip if it is damaged.

With side curtain airbags:

- Reconnect the negative cable to the battery.
- Enter the anti-theft codes for the radio and the navigation system, then enter the customer's radio station presets.
- Reset the clock.

2003-07 TRANSMISSION

Manual Transmission - Accord (V6)

MANUAL TRANSMISSION

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
*①	07GAJ-PG20110	Mainshaft Holder	1
*②	07GAJ-PG20130	Mainshaft Base	1
③	07NAD-PX40100	Attachment, 78 x 80 mm	1
④	07NAD-P20A100	Oil Seal Driver Attachment	1
⑤	07PAF-0030100	Installer, 46 mm I.D.	1
⑥	07SAZ-001000A	Backprobe Set	2
⑦	07XAJ-S0KA100	Preload Inspection Tool	1
**⑧	07YAC-0010100	Adjustable Bearing Puller, 45—75 mm	1
⑨	070AD-PYZA100	Driver, 56 x 62 mm	1
⑩	07746-0010300	Attachment, 42 x 47 mm	1
⑪	07746-0010600	Attachment, 72 x 75 mm	1
⑫	07746-0030100	Driver, 40 mm I.D.	1
⑬	07749-0010000	Driver	1
⑭	07946-MB00000	Driver, 30 mm I.D.	1

* Part of Mainshaft Inspection Tool Set, 07GAJ-PG20102.
* * Must be used with commercially available 3/8''—16 Slide Hammer.

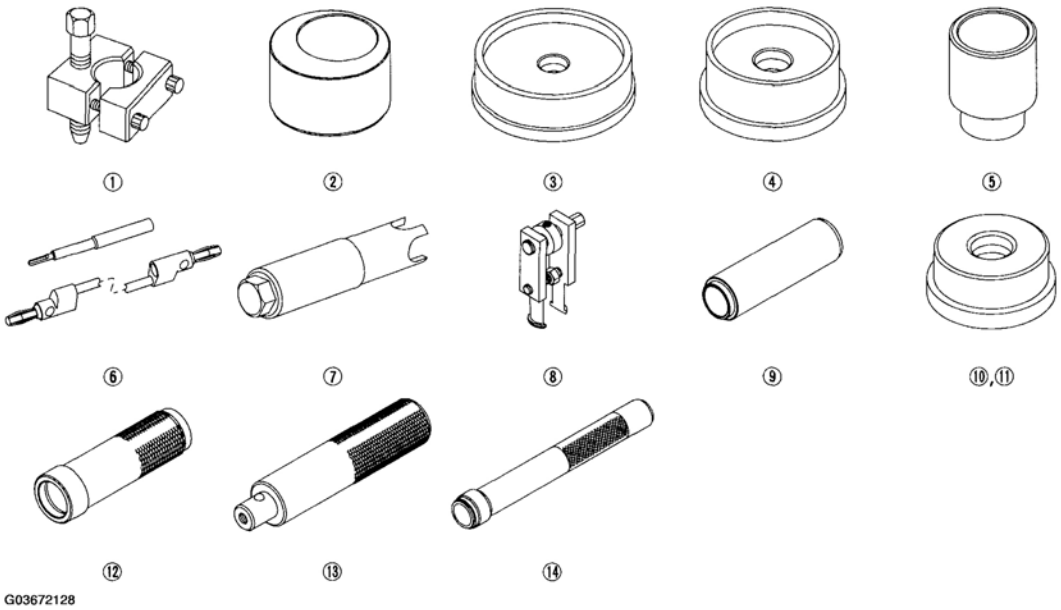


Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REVERSE LOCKOUT SYSTEM

GENERAL TROUBLESHOOTING INFORMATION

How to Troubleshoot Circuits at the ECM

Special Tools Required

Backprobe set 07SAZ-001000A (2 required)

1. Connect the backprobe adapters (A) to the stacking patch cords (B), and connect the cords to a digital multimeter (C).

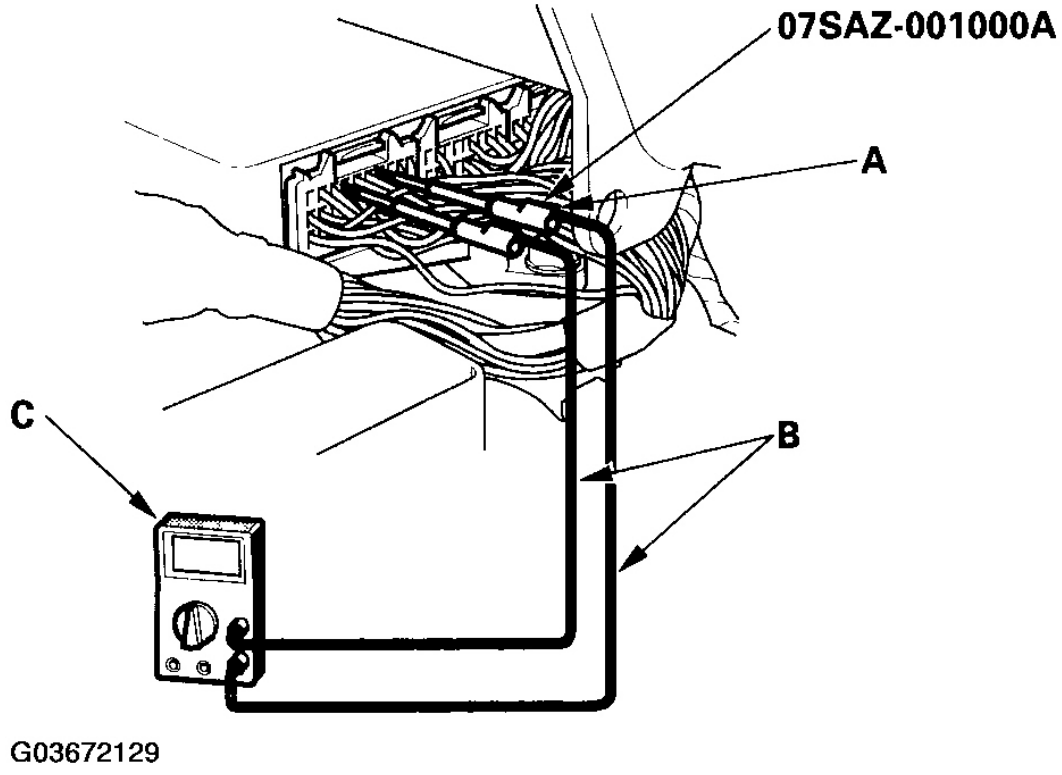


Fig. 2: Connecting Backprobe Adapters To Stacking Patch Cords
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Using the wire insulation as a guide for the contoured tip of the backprobe adapter, gently slide the tip into the connector from the wire side until it touches the end of the wire terminal.

COMPONENT LOCATION INDEX

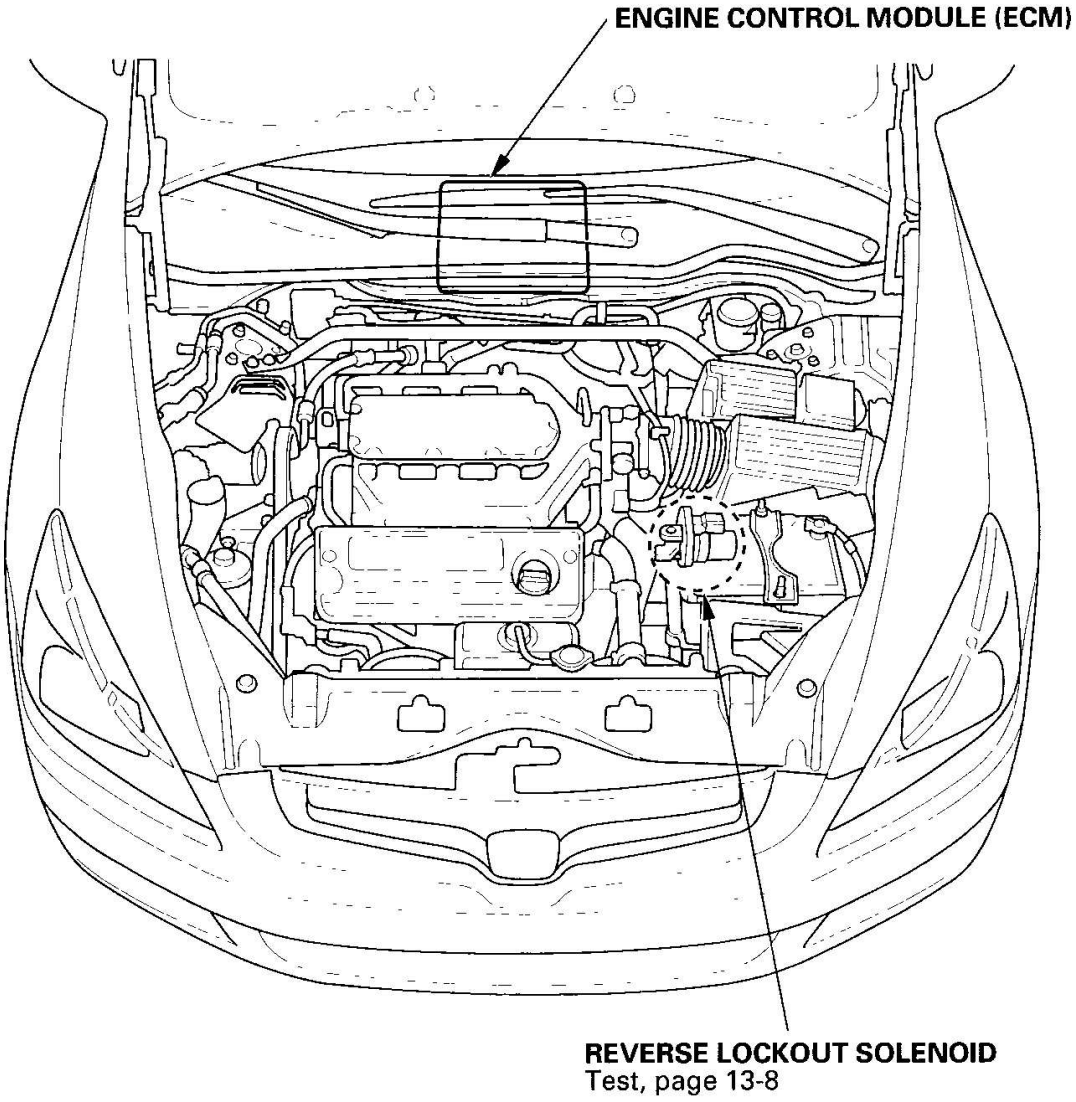


Fig. 3: Locating Reverse Lockout Component
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYSTEM DESCRIPTION

At a vehicle speed of 12 mph (20 km/h) or more, a signal from the ECM activates the reverse lockout solenoid, which pushes the select lock cam and select lock pin into the locked position. As a result, the interlock cannot rotate to the reverse select

position, making it impossible to engage reverse gear. At a vehicle speed of 9 mph (15 km/h) or less, the signal from the ECM is interrupted which turns off the reverse lockout solenoid. The return spring pulls back the select lock pin enabling the interlock to move freely so reverse gear can be selected.

REVERSE LOCKOUT SYSTEM DESCRIPTION

Vehicle speed	Inhibitor	Reverse selection
Above 12 mph (20 km/h)	ON	Not allowed
Below 9 mph(15km/h)	OFF	OK
IG-S/W OFF	OFF	OK

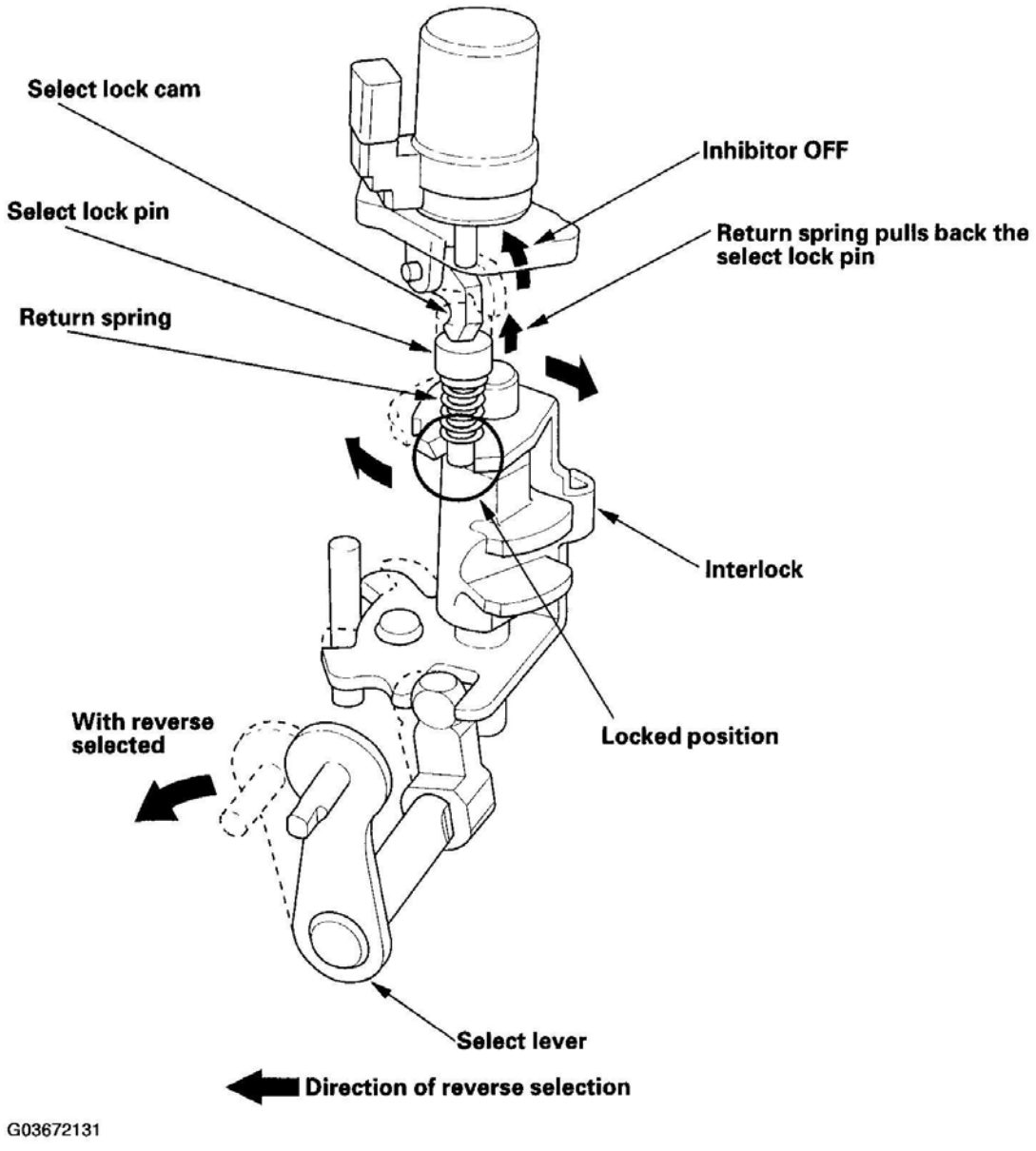


Fig. 4: Reverse Lockout System Description
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

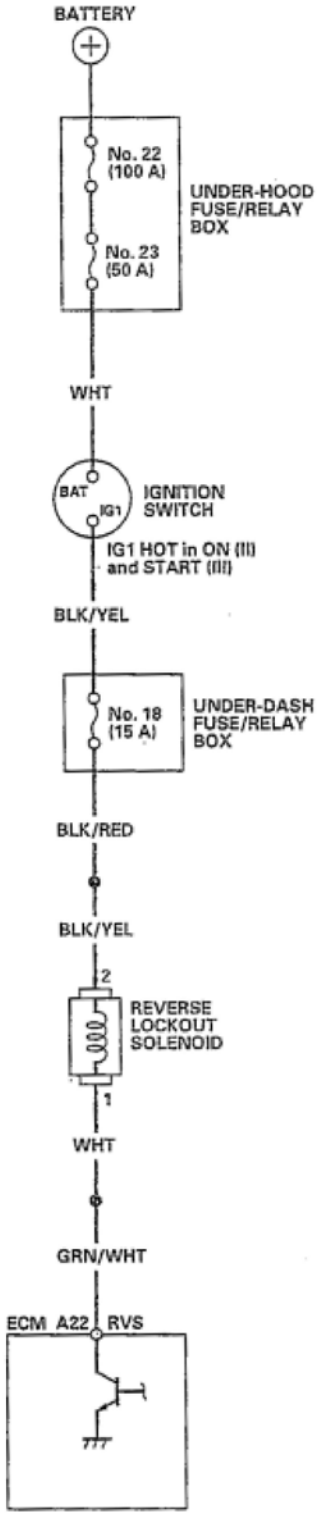


Fig. 5: Reverse Lockout System Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT TROUBLESHOOTING

1. Check the No. 18 (15 A) fuse in the under-dash fuse/relay box.

   Is the fuse OK?

   YES - Go to step 2.

   NO - Replace the fuse, and recheck.
2. Start the engine, and check the Malfunction Indicator Lamp (MIL).

   Does the MIL come on?

   YES - Troubleshoot the DTC (see **GENERAL TROUBLESHOOTING INFORMATION**), and recheck.

   NO - Go to step 3.
3. Turn the ignition switch OFF.
4. Shift into reverse gear.

   Can the transmission be shifted into reverse gear?

   YES - Go to step 5.

   NO - Repair the transmission, and recheck.
5. Turn the ignition switch ON (II). With the vehicle moving slowly (vehicle speed below 9 mph (15 km/h)), shift the transmission into reverse gear.

   Can the transmission be shifted into reverse gear?

   YES - Go to step 6.

   NO - Go to step .
6. Raise the vehicle on a lift, make sure it is securely supported, and allow the front wheels to rotate freely.
7. Start the engine and disable the TCS by pressing the TCS OFF switch (03-05 models) or disable the VSA by pressing VSA OFF switch (06-07 models). Put the transmission into first gear and increase the engine speed until the speedometer reads above 12 mph (20 km/h).

Can you shift the trandmission into reverse gear?

YES - Go to step 8

NO - Intermittent failure, system is OK at this time.

8. Turn the ignition switch OFF.
9. Disconnect the reverse lockout solenoid 2P connector.
10. Turn the ignition switch ON (II).
11. Measure the voltage between the reverse lockout solenoid 2P connector terminal No. 2 and body ground.

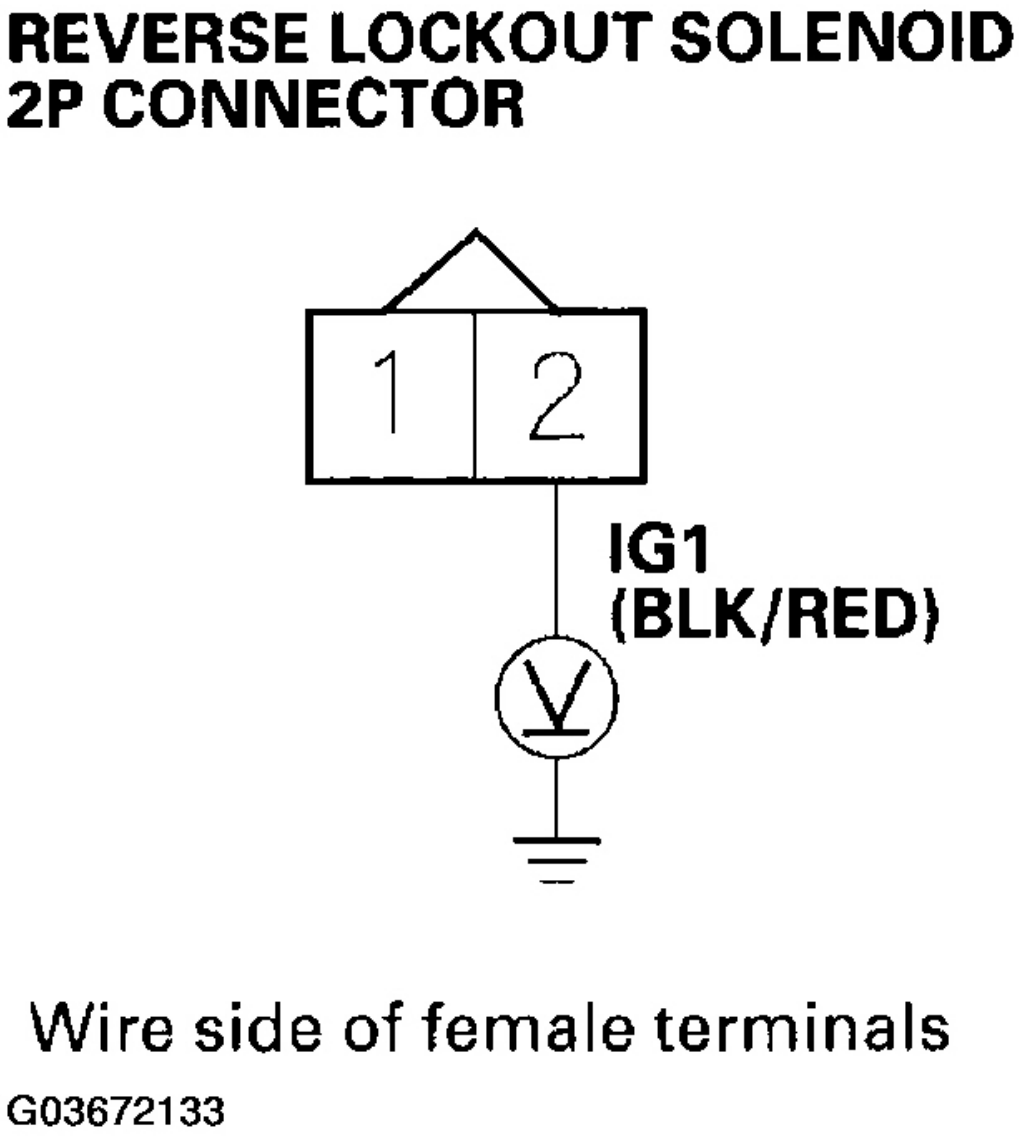


Fig. 6: Measuring Voltage Between Reverse Lockout Solenoid 2P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 12.

NO - Check for loose or poor connections at the connector. If the connections are OK, repair open in the wire between the No. 18 (15 A) fuse in the under-dash fuse/relay box and the reverse lockout solenoid.

12. Turn the ignition switch OFF.
13. Remove the reverse lockout solenoid (see **Reverse Lockout Solenoid Disassembly/Reassembly**).
14. Connect the No. 2 terminal of the reverse lockout solenoid to the battery positive terminal, and connect the No. 1 terminal to the battery negative terminal. Check that the reverse lockout solenoid operates.

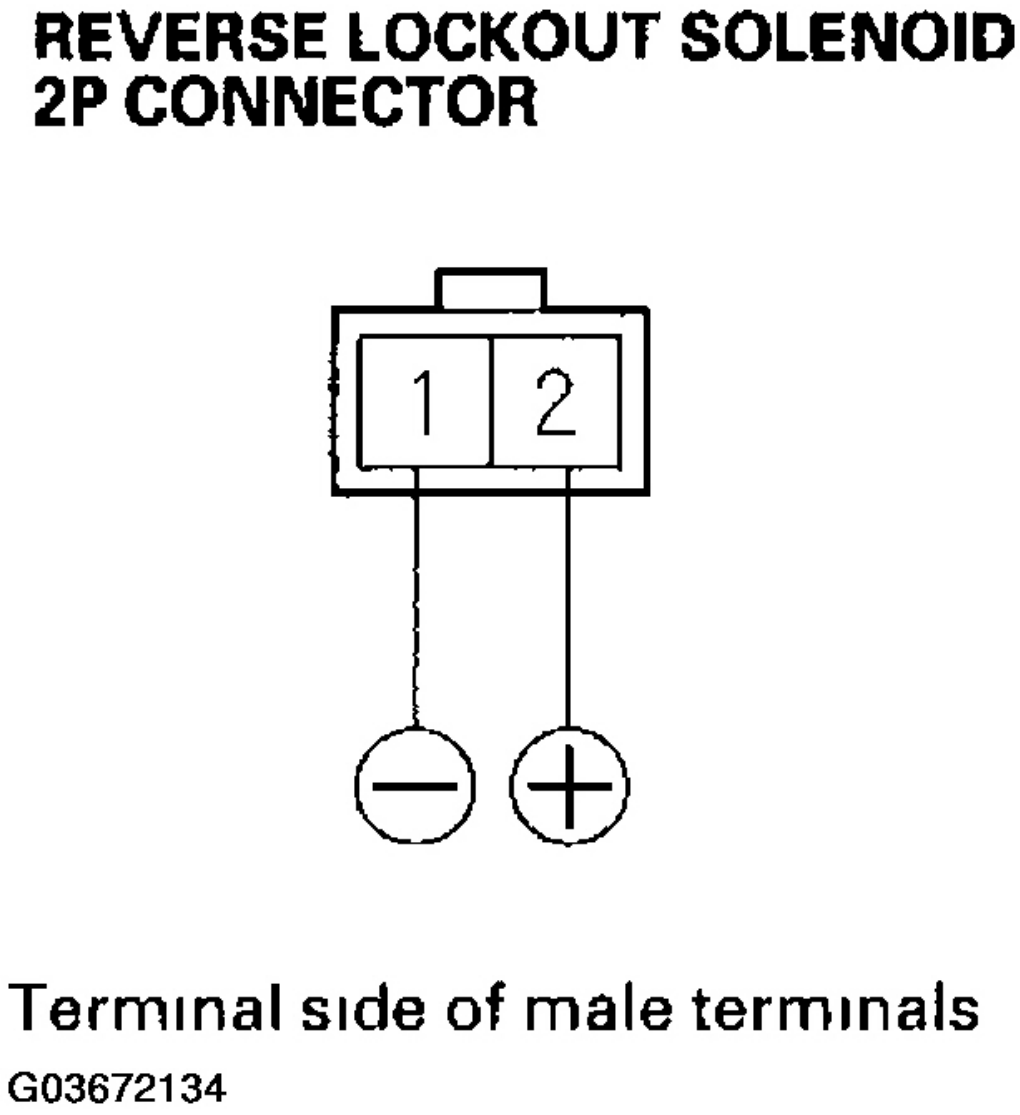


Fig. 7: Connecting Terminal Of Reverse Lockout Solenoid To Battery
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the reverse lockout solenoid operate properly?

YES - Go to step 15.
NO - Replace the reverse lockout solenoid.

15. Reinstall the reverse lockout solenoid, and reconnect the solenoid 2P connector.
16. Turn the ignition switch ON (II).
17. Using the back probe set, measure the voltage between ECM connector A22 and body ground.

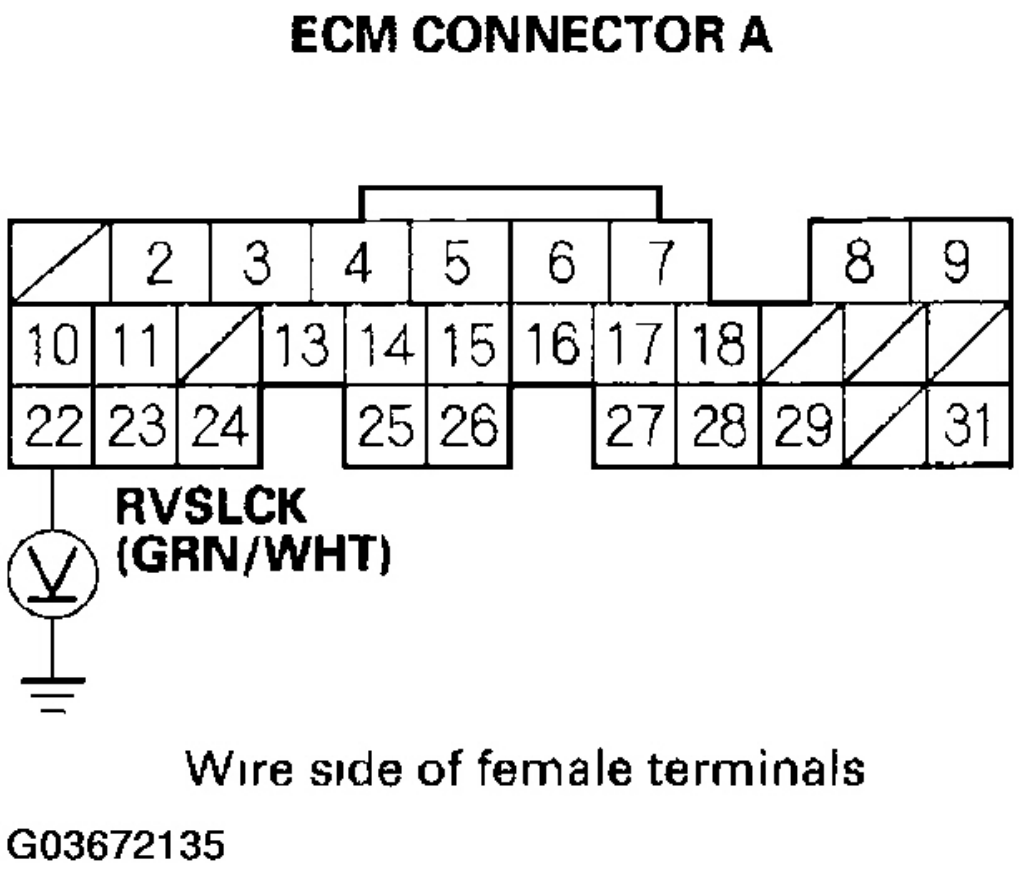


Fig. 8: Measuring Voltage Between ECM Connector A22 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Check for loose connectors at ECM connector A (31P). If necessary, update the ECM if it does not have the latest software, or substitute a known-good ECM, then recheck (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**). If the symptom/indication goes away with a known-good ECM, replace the original ECM.

NO - Repair open in the wire between the reverse lockout solenoid and the ECM (A22).

REVERSE LOCKOUT SOLENOID TEST

1. Remove the reverse lockout solenoid (see **Reverse Lockout Solenoid Disassembly/Reassembly**).
2. Connect the battery positive terminal to the No. 2 terminal of the reverse lockout solenoid 2P connector, and connect the battery negative terminal to the No. 1 terminal.

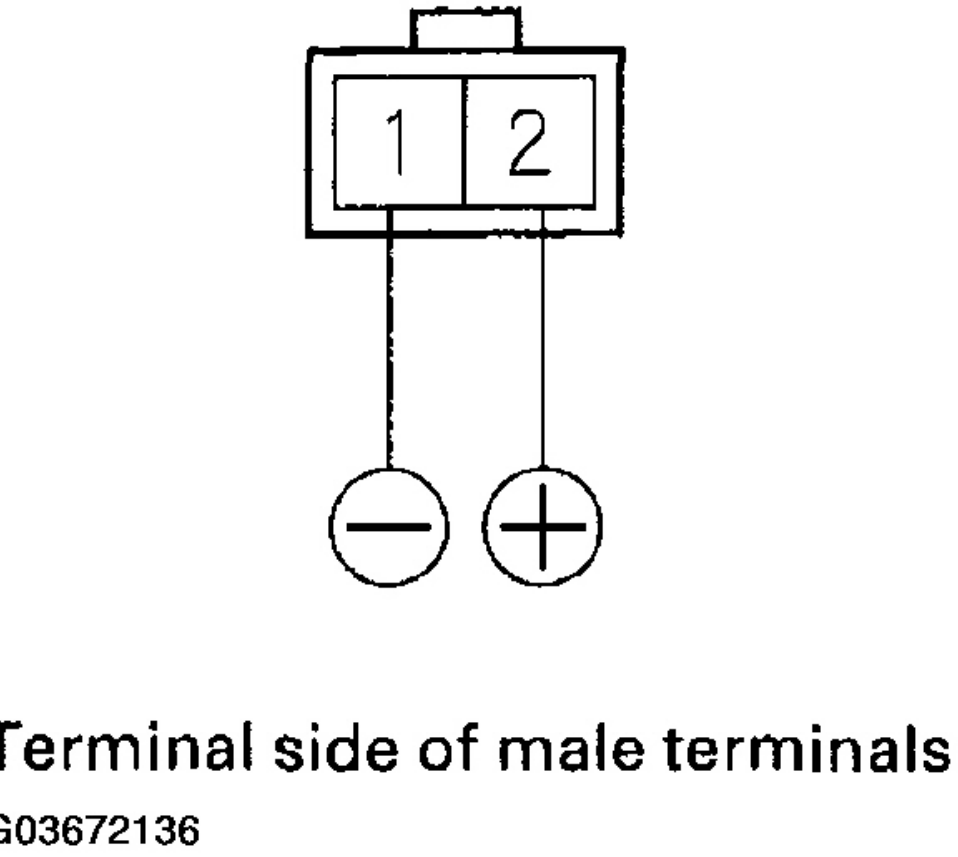
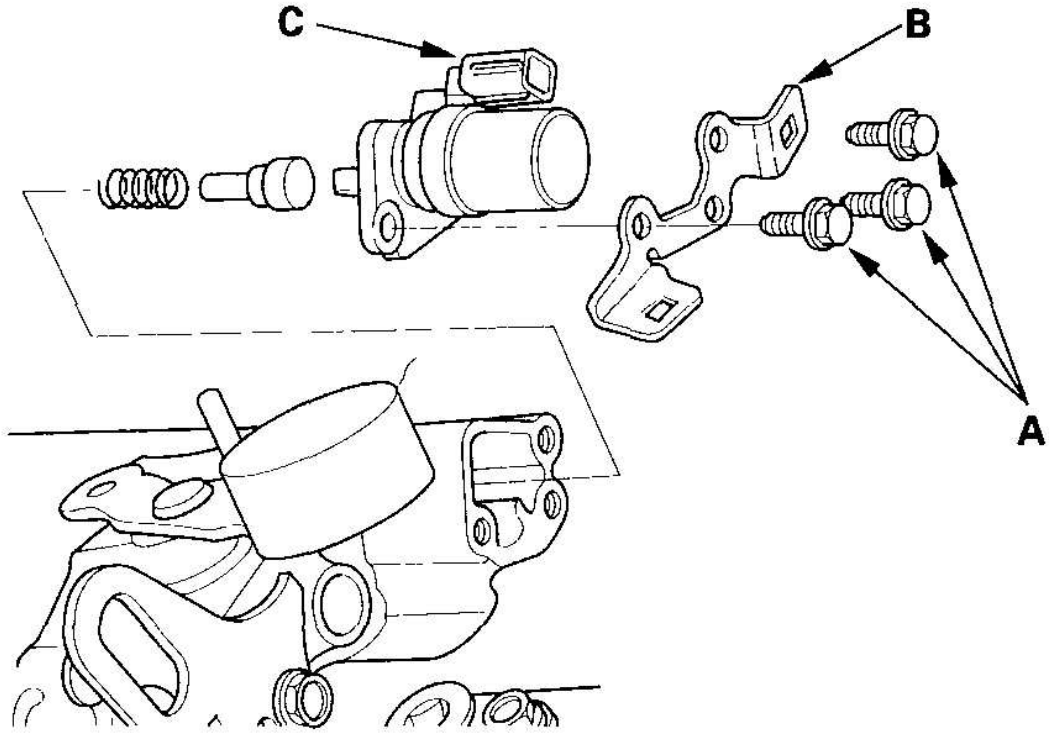


Fig. 9: Connecting Battery Positive Terminal To Terminal Of Reverse Lockout Solenoid 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check that the reverse lockout solenoid works.
4. If the reverse lockout solenoid does not work, replace it.

REVERSE LOCKOUT SOLENOID DISASSEMBLY/REASSEMBLY

1. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the customer's radio station and XM radio channel presets.
2. Disconnect the negative cable from the battery first, then disconnect the positive cable. Remove the battery.
3. Remove the air cleaner housing (see **AIR CLEANER ELEMENT INSPECTION/ REPLACEMENT**).
4. Remove the battery base (see step 6 in **Transmission Removal**).
5. Carefully remove the shift cable, select cable, and cable bracket together to avoid bending the cables (see step 13 in **Transmission Removal**).
6. Disconnect the reverse lockout solenoid connector.
7. Remove the bolts (A), transmission harness stay (B), and reverse lockout solenoid assembly (C).



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Fig. 10: Identifying Transmission Harness Stay And Reverse Lockout Solenoid Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the roller (A) and select lock cam (B).

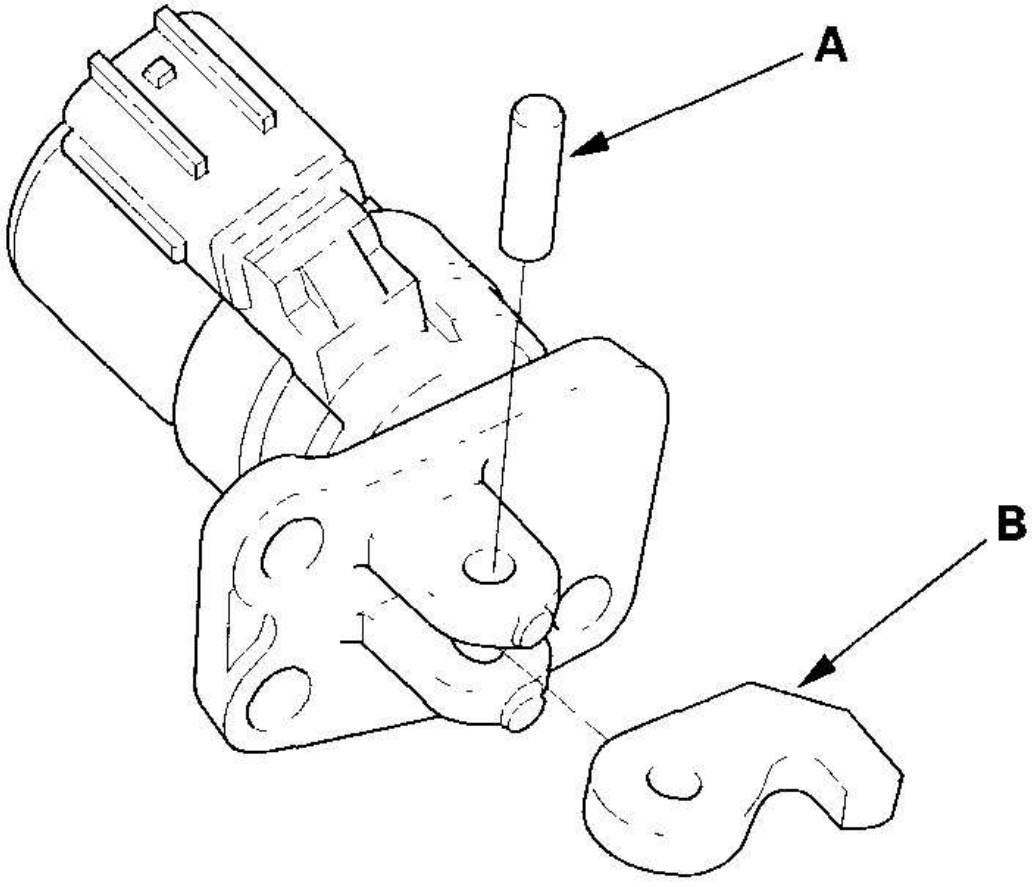


Fig. 11: Identifying Roller And Select Lock Cam
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install in the reverse order of removal.
10. Remove the dirt and oil from the sealing surface. Apply liquid gasket (P/N

08718-0002) to the sealing surface.

NOTE: Do not install components if 4 minutes or more have passed after applying the liquid gasket. Instead, remove the old residue and reapply the liquid gasket.

11. Install the reverse lockout solenoid assembly (A) and transmission harness stay (B).

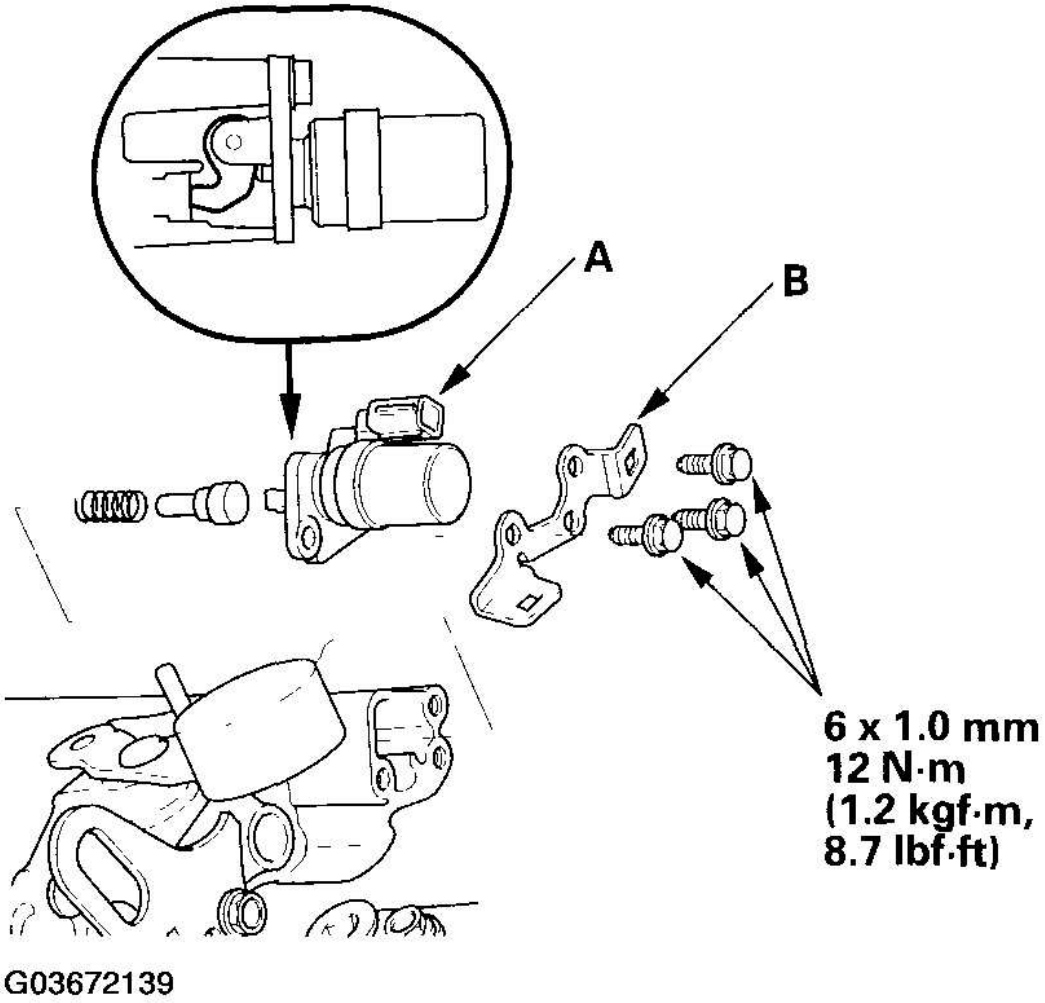


Fig. 12: Identifying Reverse Lockout Solenoid Assembly And Transmission Harness Stay

Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Connect the reverse lockout solenoid connector.
13. Install the cable bracket, select cable, and shift cable (see step 37 in **Transmission Installation**).
14. Install the battery base (see step 45 in **Transmission Installation**).
15. Install the air cleaner housing (see **AIR CLEANER ELEMENT INSPECTION/ REPLACEMENT**).
16. Install the battery. Connect the positive cable to the battery first, then connect the negative cable.
17. Enter the anti-theft codes for the radio and navigation system, then enter the customer's radio station and XM radio channel presets.
18. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

MANUAL TRANSMISSION

TRANSMISSION FLUID INSPECTION AND REPLACEMENT

1. Park the vehicle on level ground, and turn the ignition switch OFF.
2. Remove the splash shield (see step 28 in **Transmission Removal**).
3. Remove the oil check bolt (A) and washer (B). Check the condition of the fluid. If the fluid is dirty, remove the drain plug (C) and washer (D).

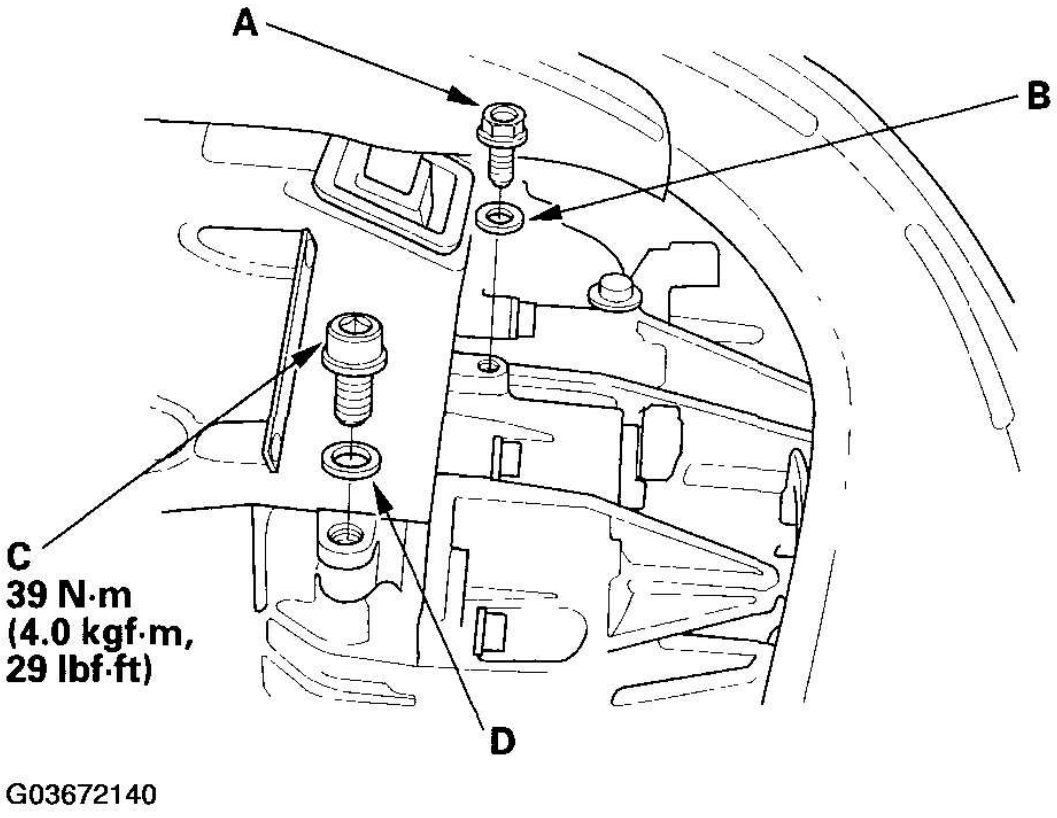
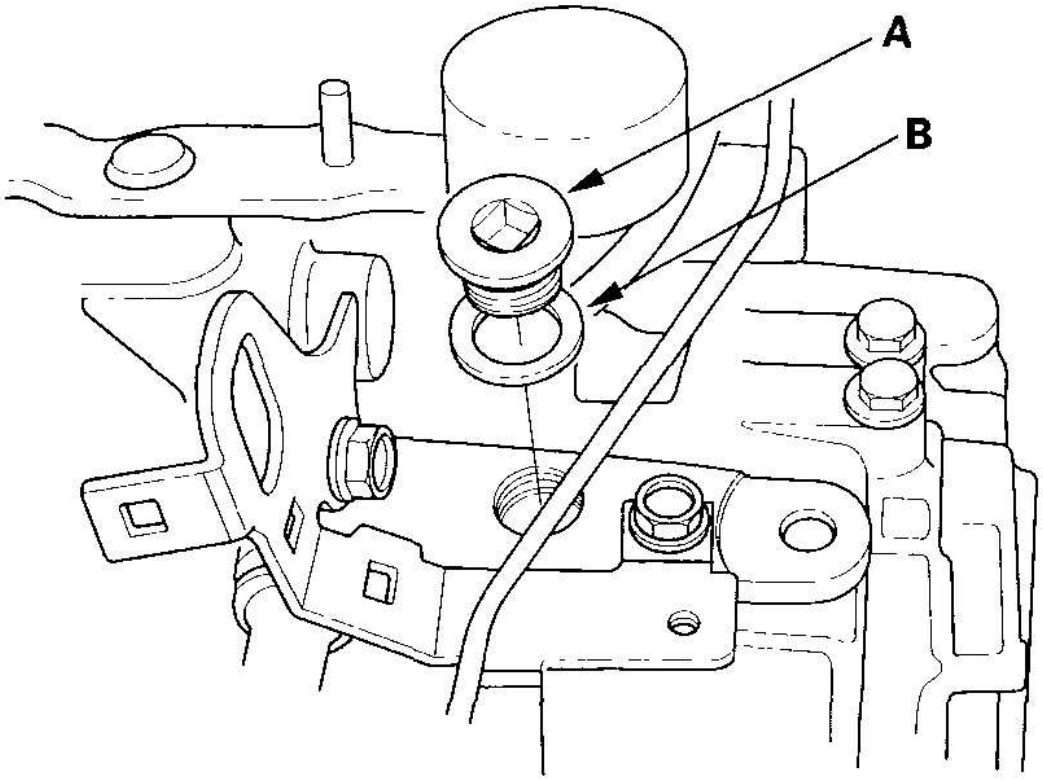


Fig. 13: Identifying Oil Check Bolt And Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the drain plug with a new washer.
5. Remove the oil filler plug (A) and washer (B)



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Fig. 14: Identifying Oil Filler Plug And Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Refill the transmission fluid from the oil filler plug hole, and until the transmission fluid overflows from the oil check bolt hole (A).
7. After the fluid stops overflowing, install the oil check bolt (B) with a new washer (C).

Fluid Capacity

2.2 L (2.3 US qt) at fluid change
2.5 L (2.6 US qt) at overhaul

Always use Honda Manual Transmission Fluid (MTF). Using engine oil can

cause stiffer shifting because it does not contain the proper additives.

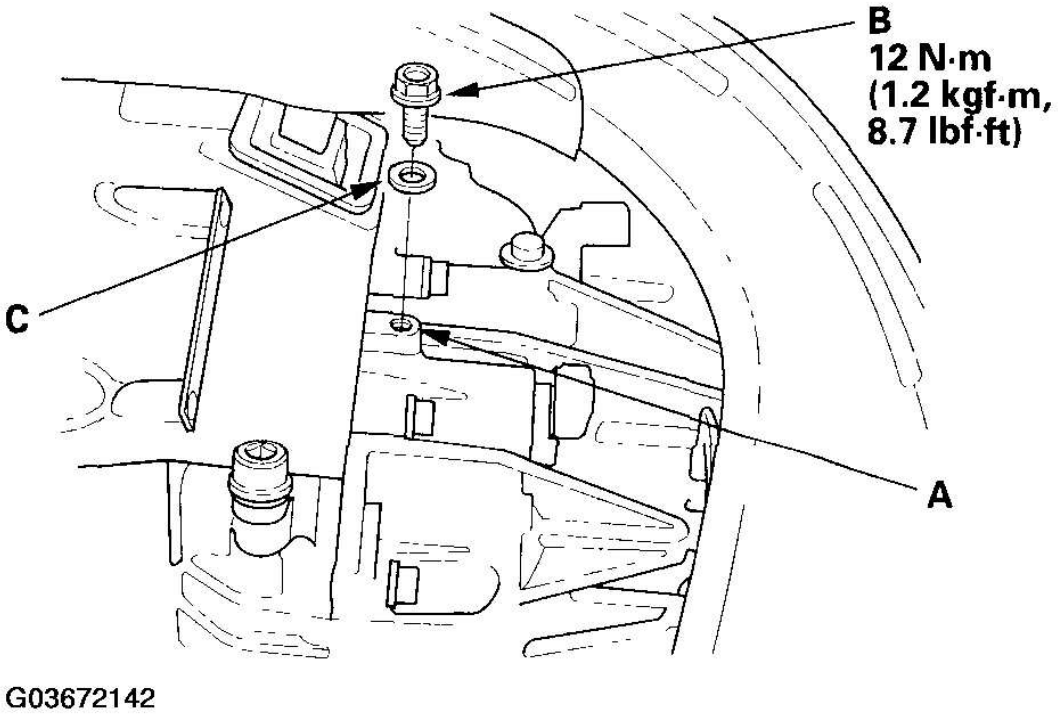


Fig. 15: Identifying Oil Check Bolts With Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the oil filler plug (A) with a new washer (B).

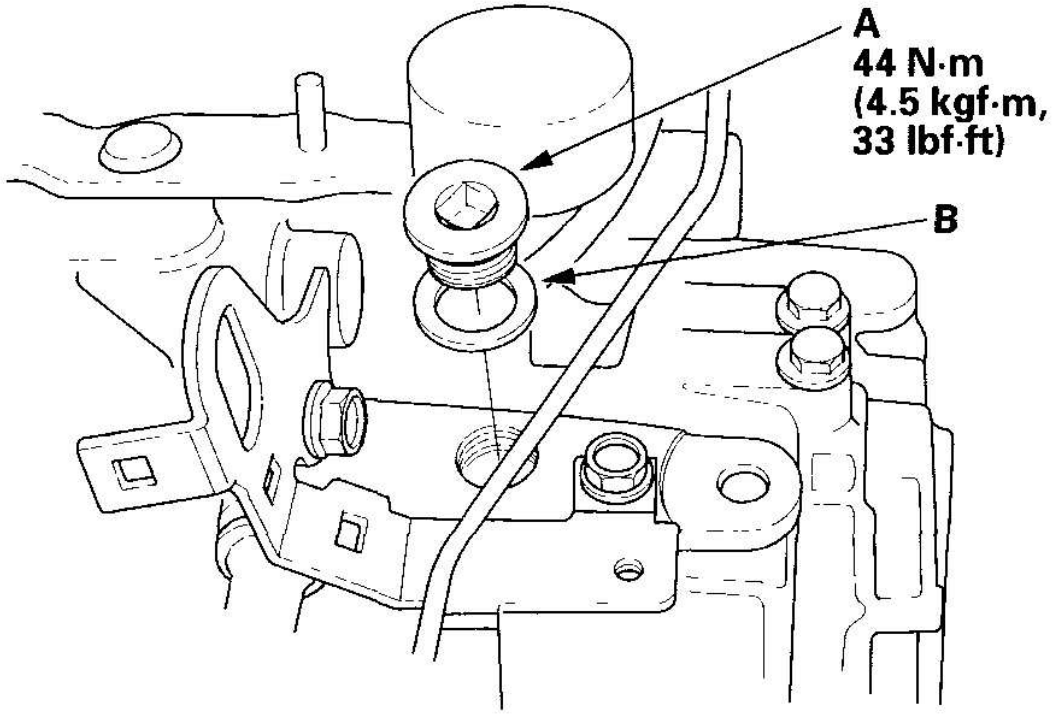


Fig. 16: Identifying Oil Filler Plug With Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BACK-UP LIGHT SWITCH TEST

1. Disconnect the back-up light switch connector (A).

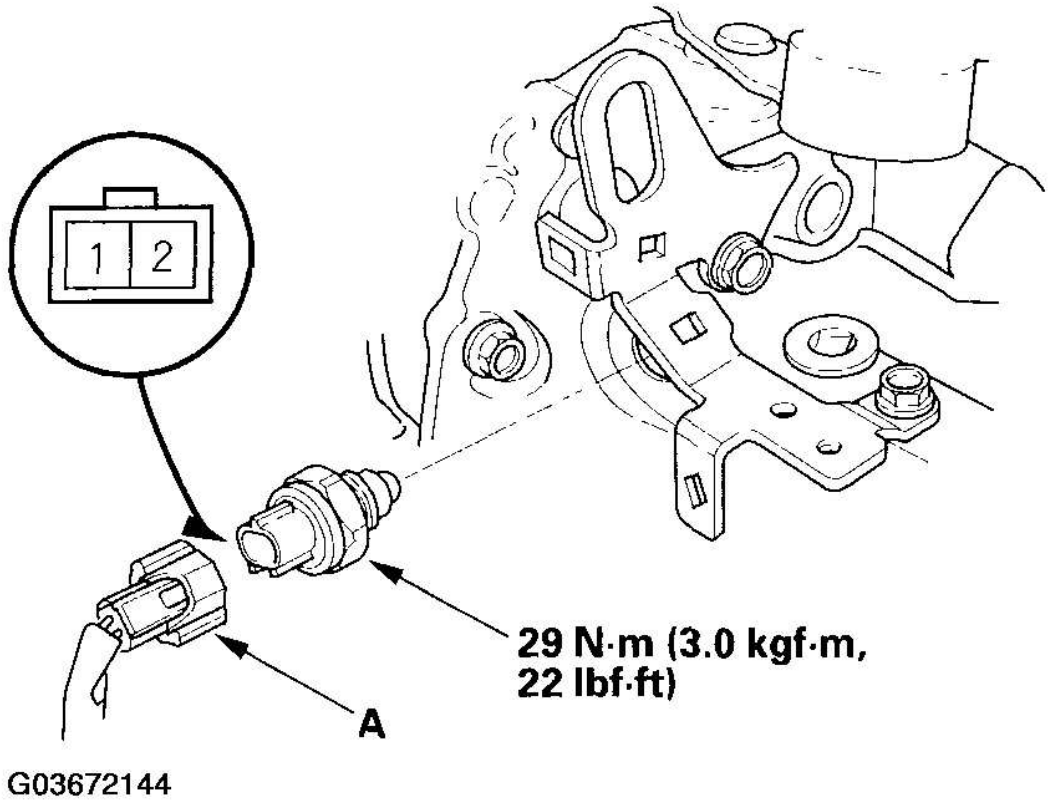


Fig. 17: Disconnecting Back-Up Light Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check for continuity between the No. 1 and No. 2 terminals of the back-up light switch. There should be continuity when the shift lever is in Reverse.
3. If necessary, replace the back-up light switch. Apply liquid gasket (P/N 08718-0001), and install it on the transmission housing. Tighten the back-up light switch to the specified torque.

TRANSMISSION REMOVAL

Special Tools Required

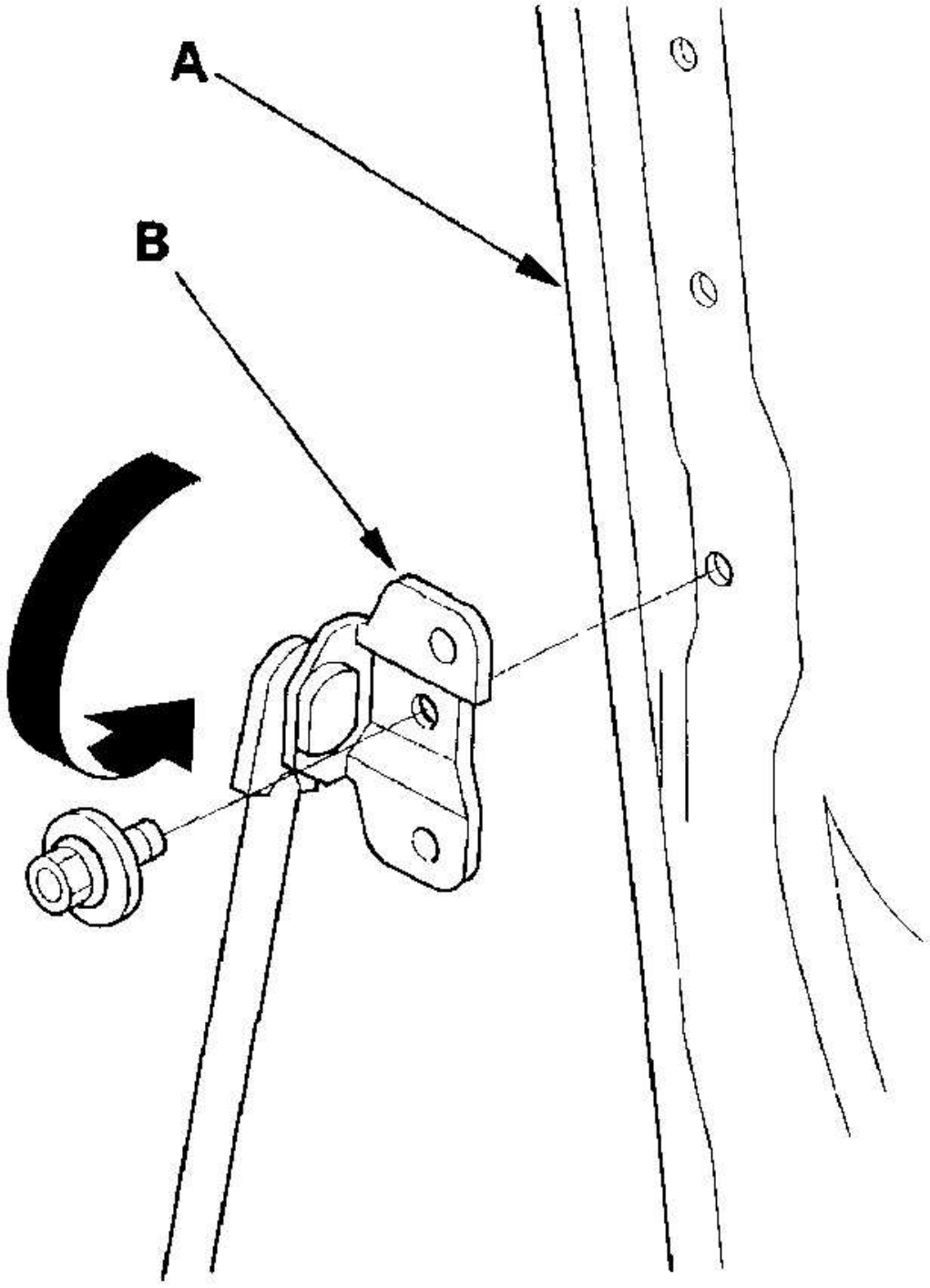
- Engine support hanger, A and Reds AAR-T-12566 (Available through the Honda Tool and Equipment Program 888-424-6857)

- Engine hanger balance bar VSB02C000019
- Front subframe adapter VSB02C000016

NOTE: Use fender covers to avoid damaging painted surfaces.

1. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the customer's radio station and XM radio channel presets.
2. Set the wheels in the straight ahead position.
3. Lock the steering wheel.
4. Disconnect the negative cable from the battery first, then disconnect the positive cable. Remove the battery.
5. Remove the bolts securing the support strut brackets on both sides of the hood. Secure the hood (A) in a vertical position, then install the right strut bracket (B) by turning it over with its bolt in the lower position.

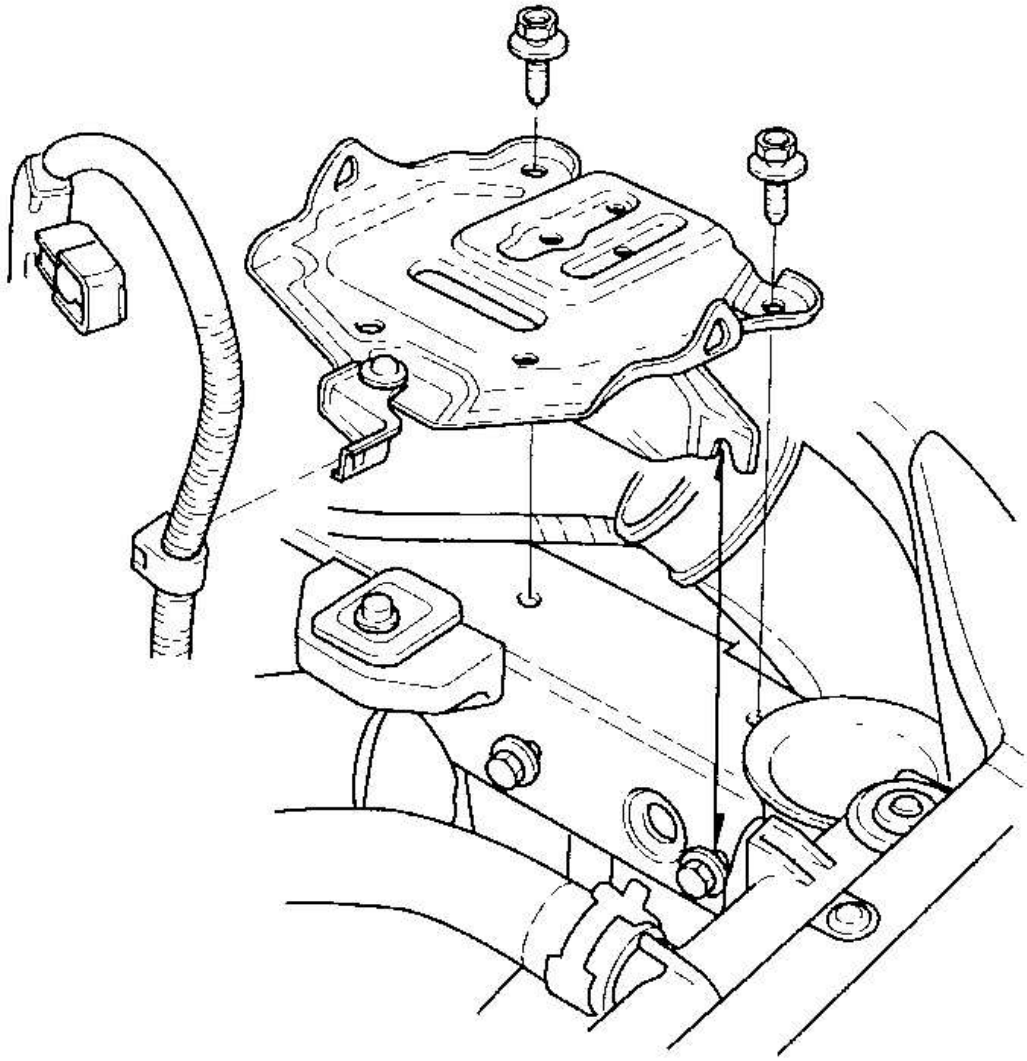
NOTE: Do not attempt to close the hood with the support strut in the vertical position; it will damage the support strut and hood.



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Fig. 18: Securing Hood In Vertical Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the battery base.



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Fig. 19: Identifying Battery Base
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the air cleaner housing (see **AIR CLEANER ELEMENT INSPECTION/ REPLACEMENT**).
8. Disconnect the back-up light switch connector (A) and reverse lockout solenoid connector (B).

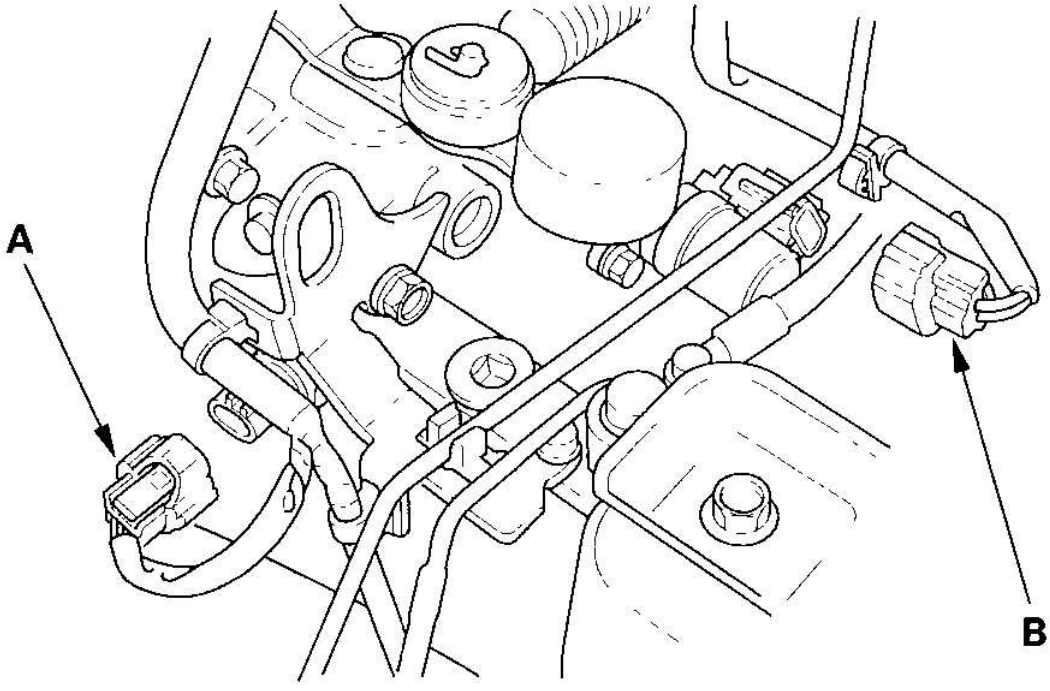


Fig. 20: Disconnecting Back-Up Light Switch Connector And Reverse Lockout Solenoid Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Disconnect the output shaft (countershaft) speed sensor connector (A) and input shaft (mainshaft) speed sensor connector (B).

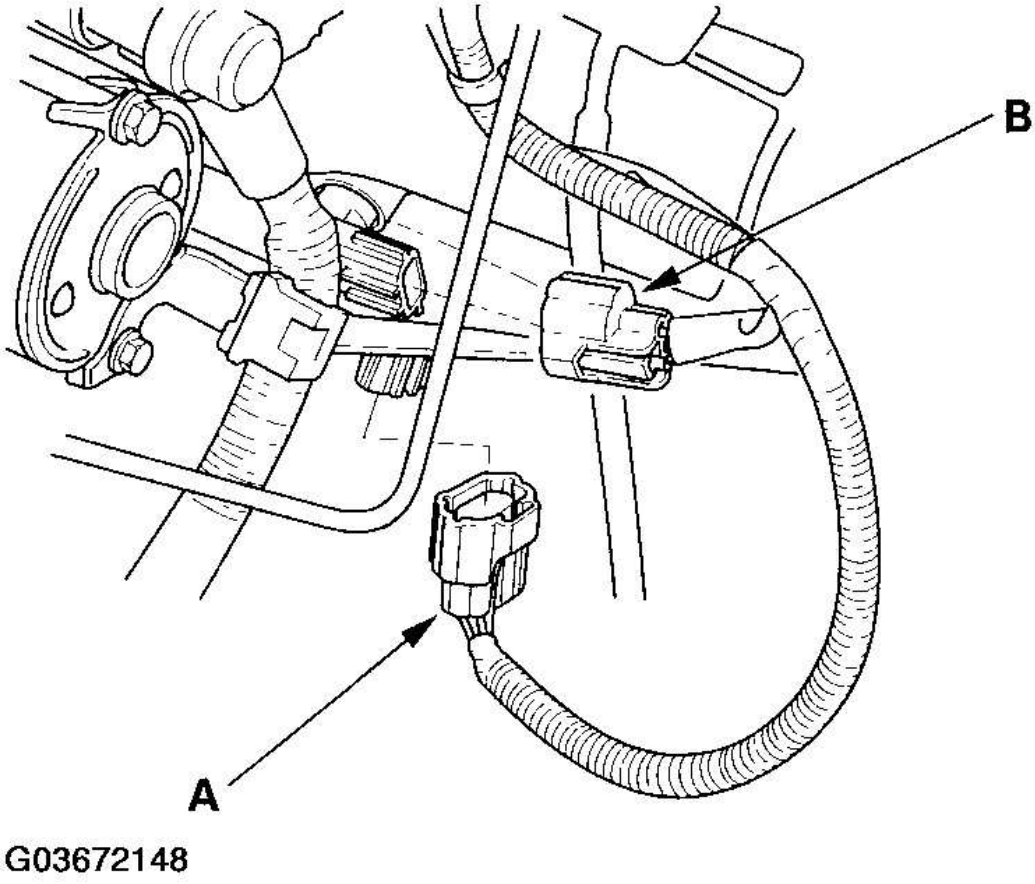
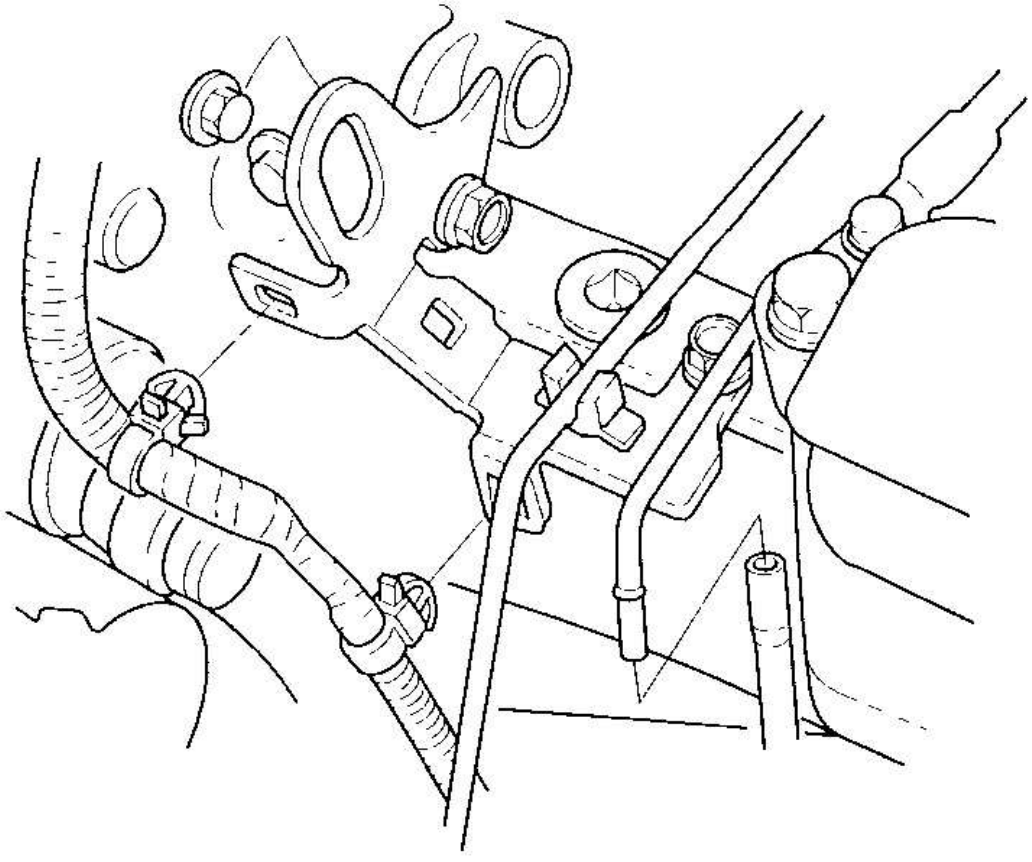


Fig. 21: Disconnecting Output Shaft (Countershaft) Speed Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the harness clips.



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Fig. 22: Identifying Harness Clips
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Disconnect the starter cable (A), then remove the starter motor (B).

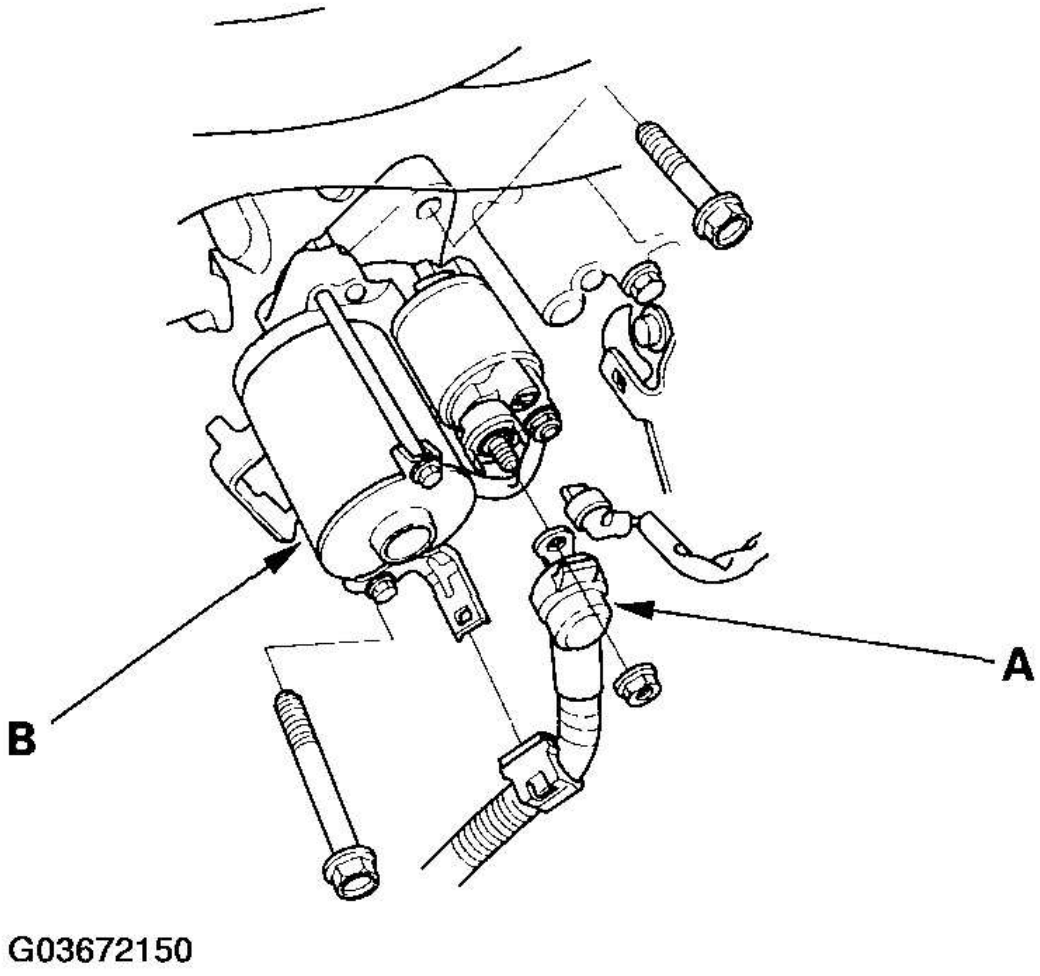
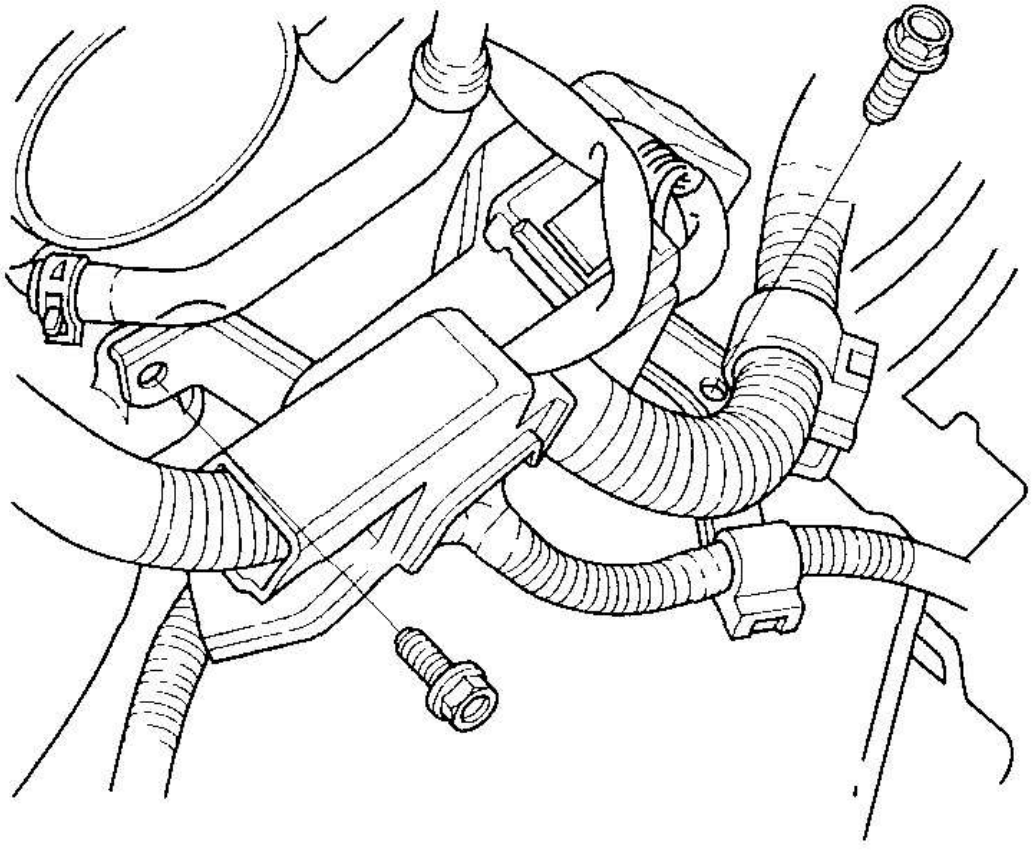


Fig. 23: Disconnecting Starter Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the harness bracket.



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Fig. 24: Identifying Harness Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Remove the cable bracket (A), then disconnect the cables (B) from the top of the transmission housing. Carefully remove both cables and the bracket together to avoid bending the cables.

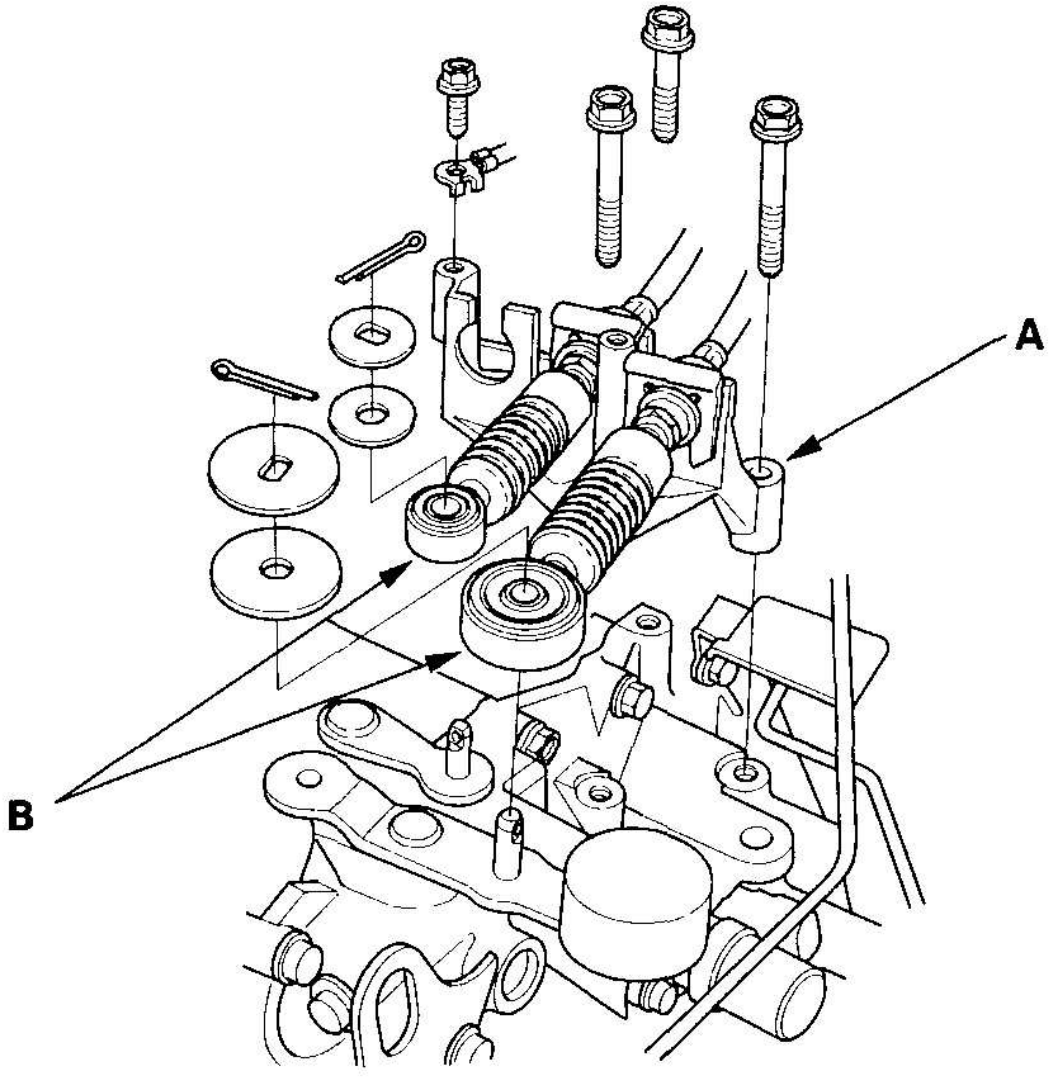
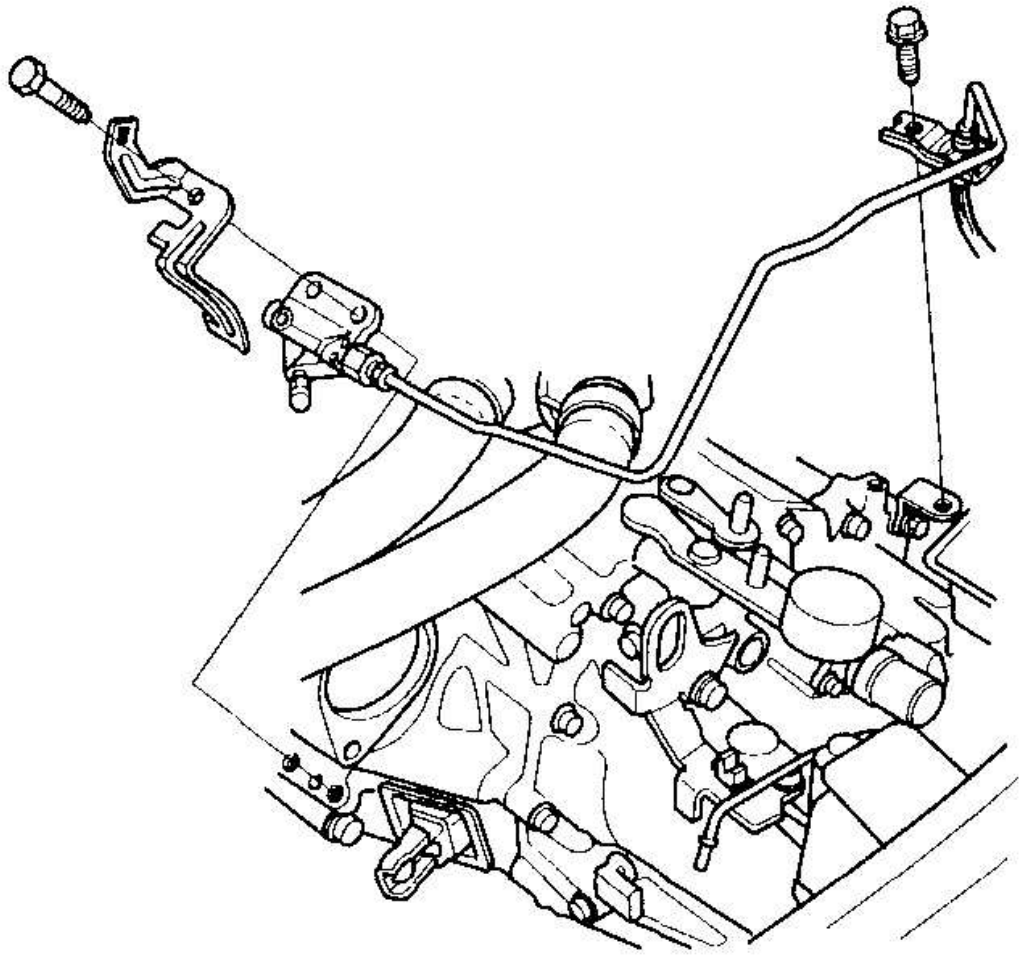


Fig. 25: Identifying Cable Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Carefully remove the slave cylinder without bending the clutch line. Do not press the clutch pedal once the slave cylinder has been removed.



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Fig. 26: Identifying Slave Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the front mount stop (A), then remove the front mount bolt (B).

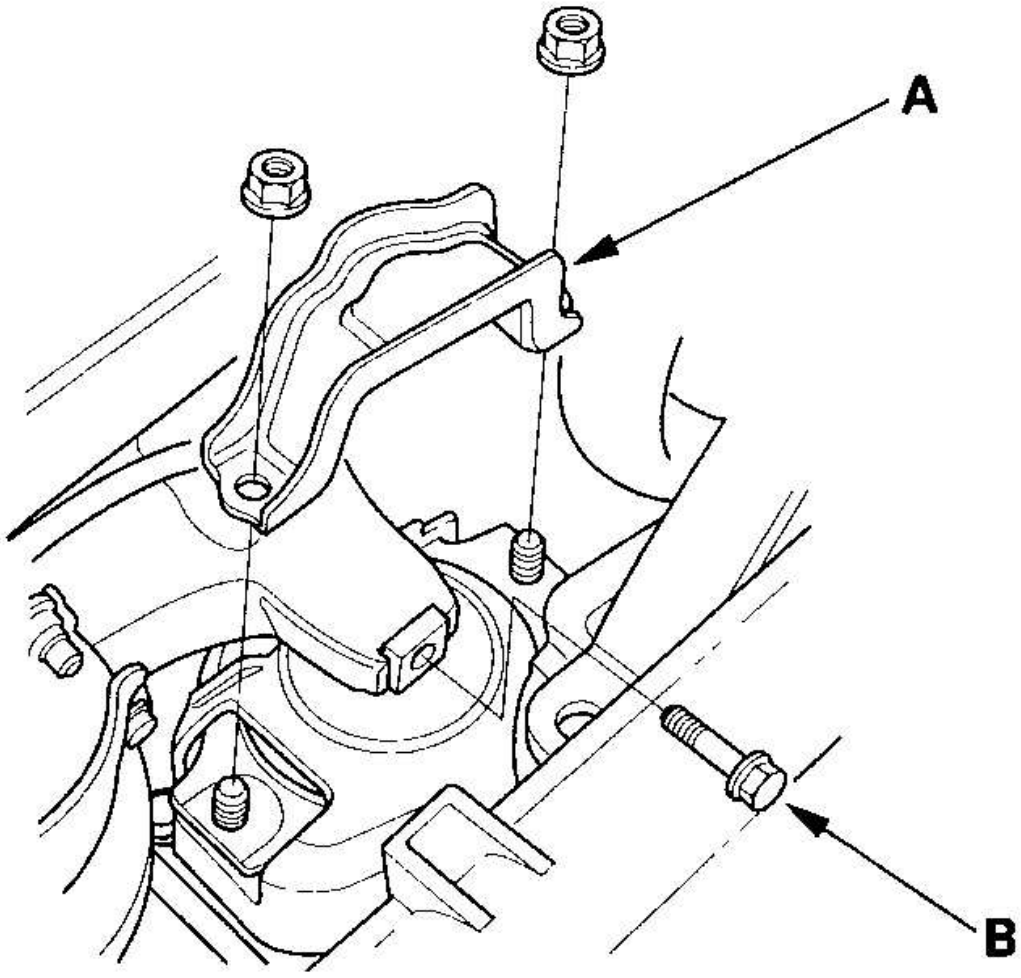


Fig. 27: Identifying Front Mount Stop
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Remove the rear mount stop.

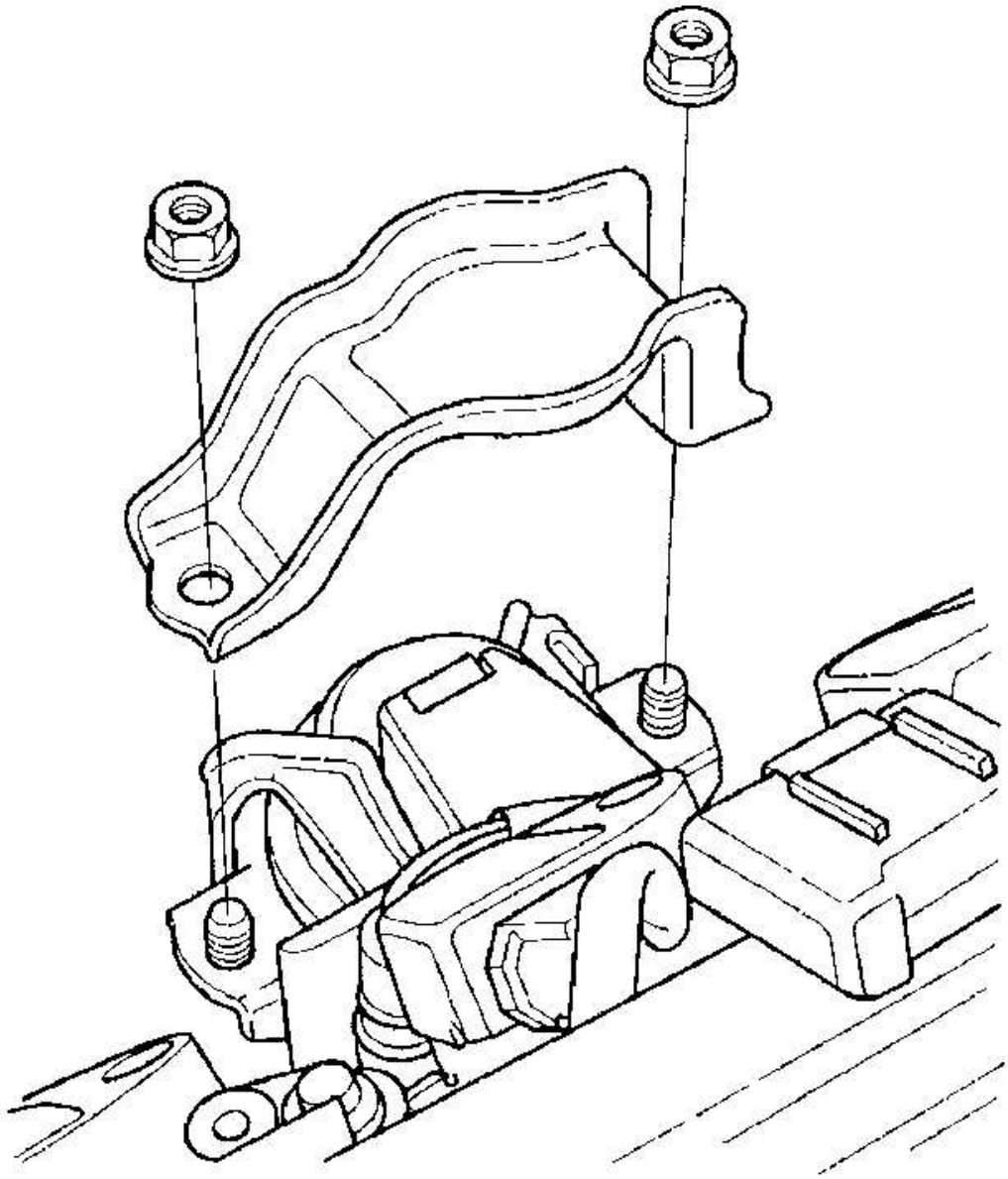


Fig. 28: Identifying Rear Mount Stop
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Remove the transmission upper mounting bolts.

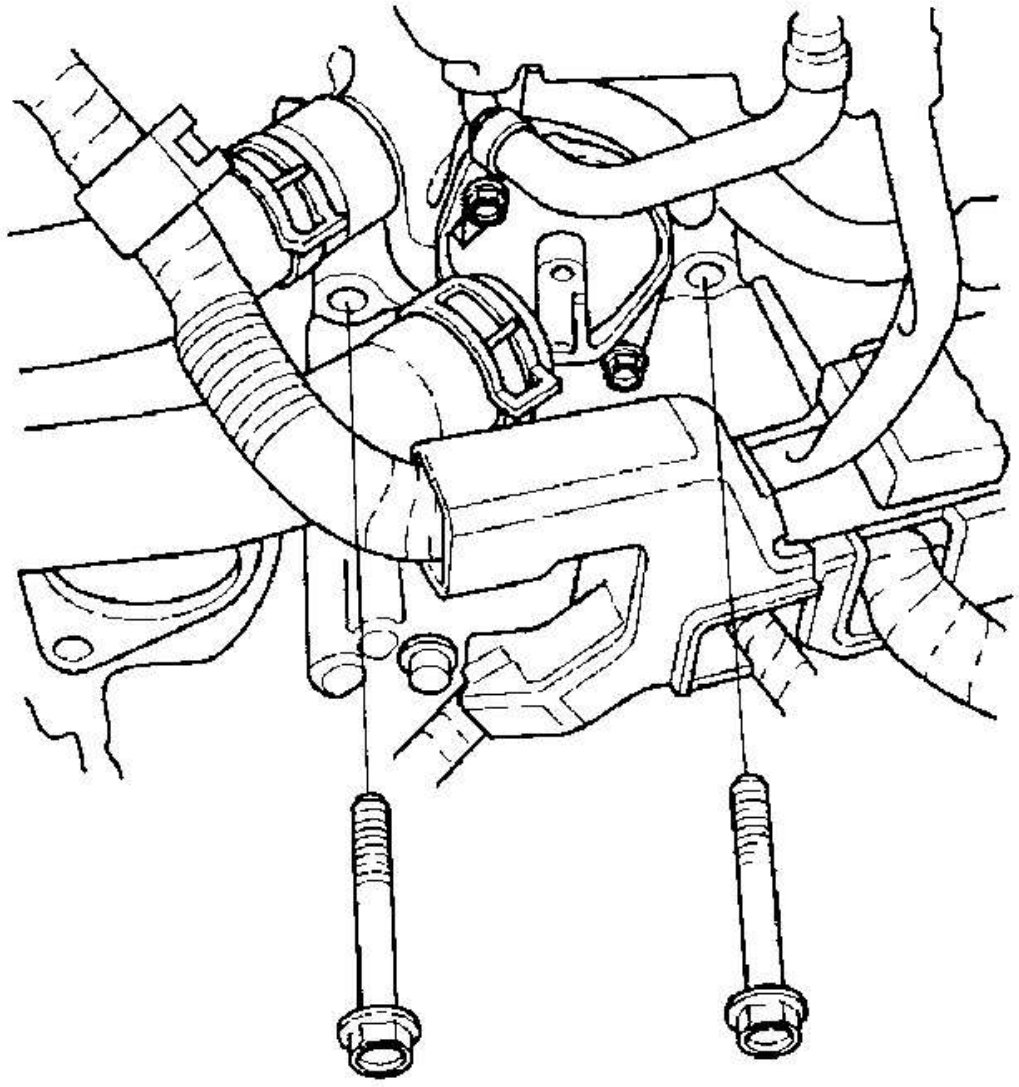


Fig. 29: Identifying Transmission Upper Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Remove and plug the return hose (A) from the power steering fluid reservoir (B). Wipe off any spilled fluid at once.

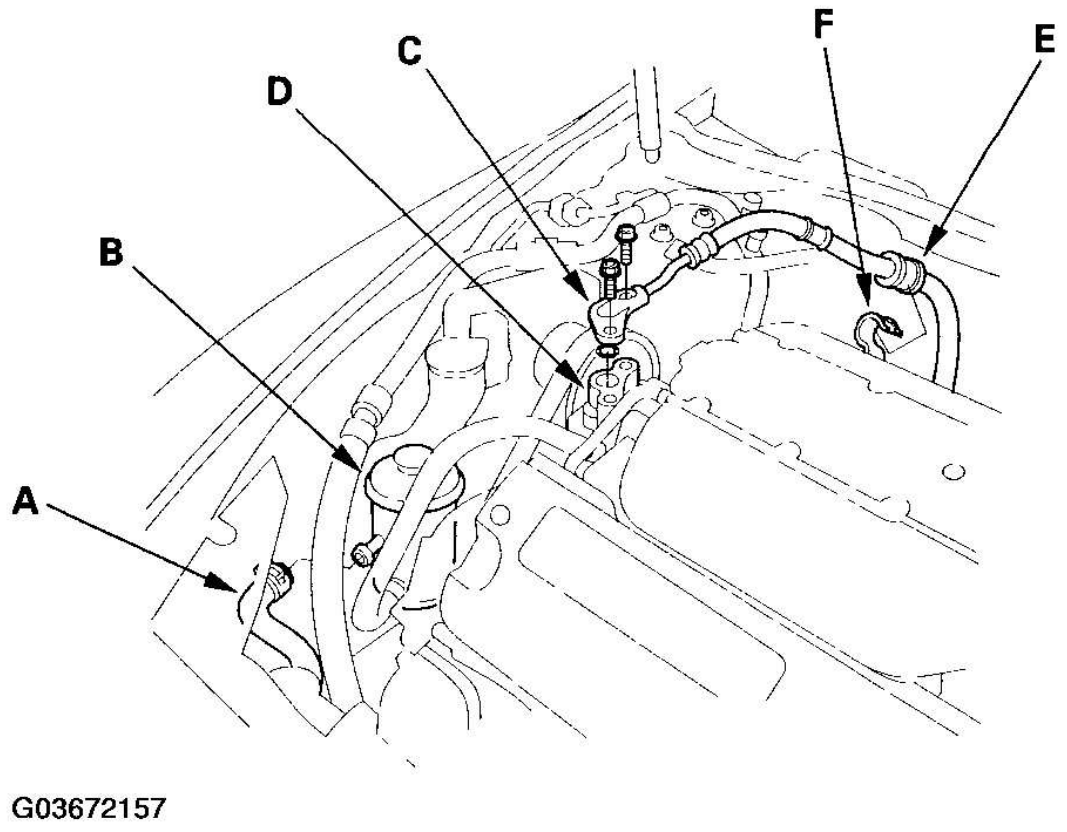


Fig. 30: Identifying And Plugging Return Hose From Power Steering Fluid Reservoir
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Remove the power steering pump outlet line (C) from the power steering pump (D), and remove the hose (E) from its clamp (F).
20. Remove the front bulkhead cover :
    - 2-door (see **2-DOOR**
    - 4-door **4-DOOR**
21. Lift and support the engine with the engine support hanger (A) and the engine balance bar (B). Attach the front arm (C) to the front cylinder head with a spacer (D) and the 10 x 1.25 mm bolt (E). Attach the rear arm (F) to the rear cylinder head with the 8 x 1.25 mm bolt (G).

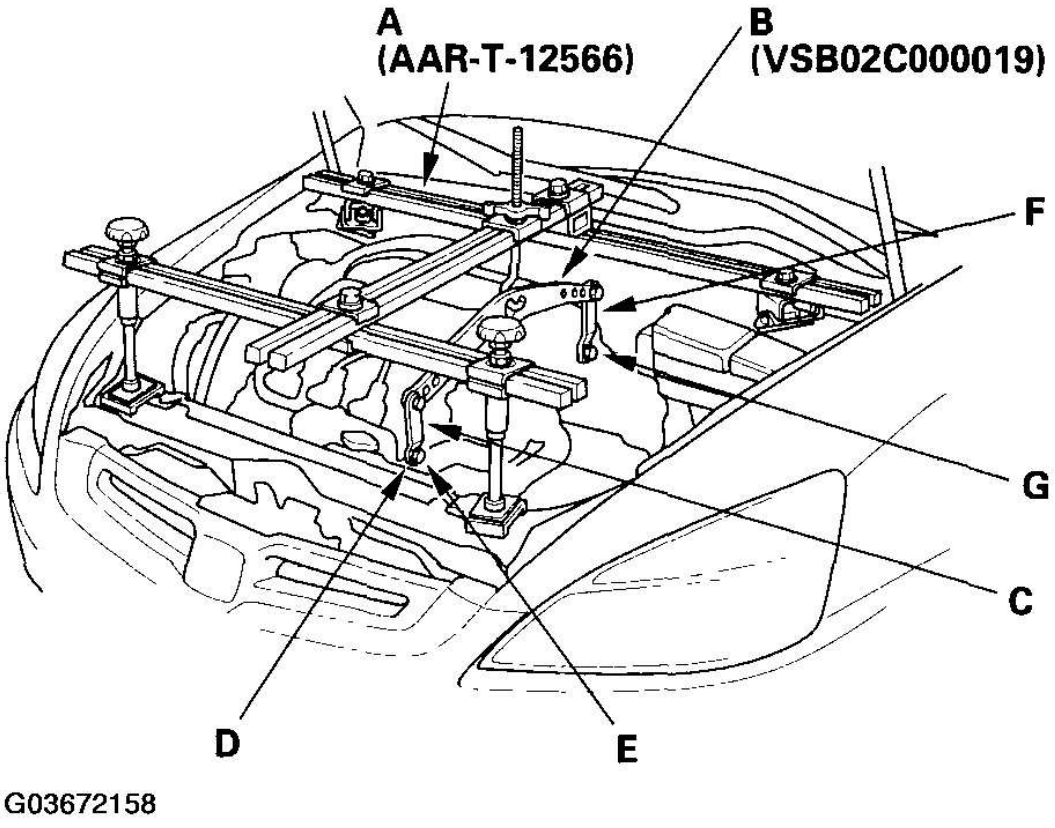


Fig. 31: Lifting And Supporting Engine With Support Hanger And Engine Balance Bar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Remove the transmission mount bracket (A) and ground cable (B).

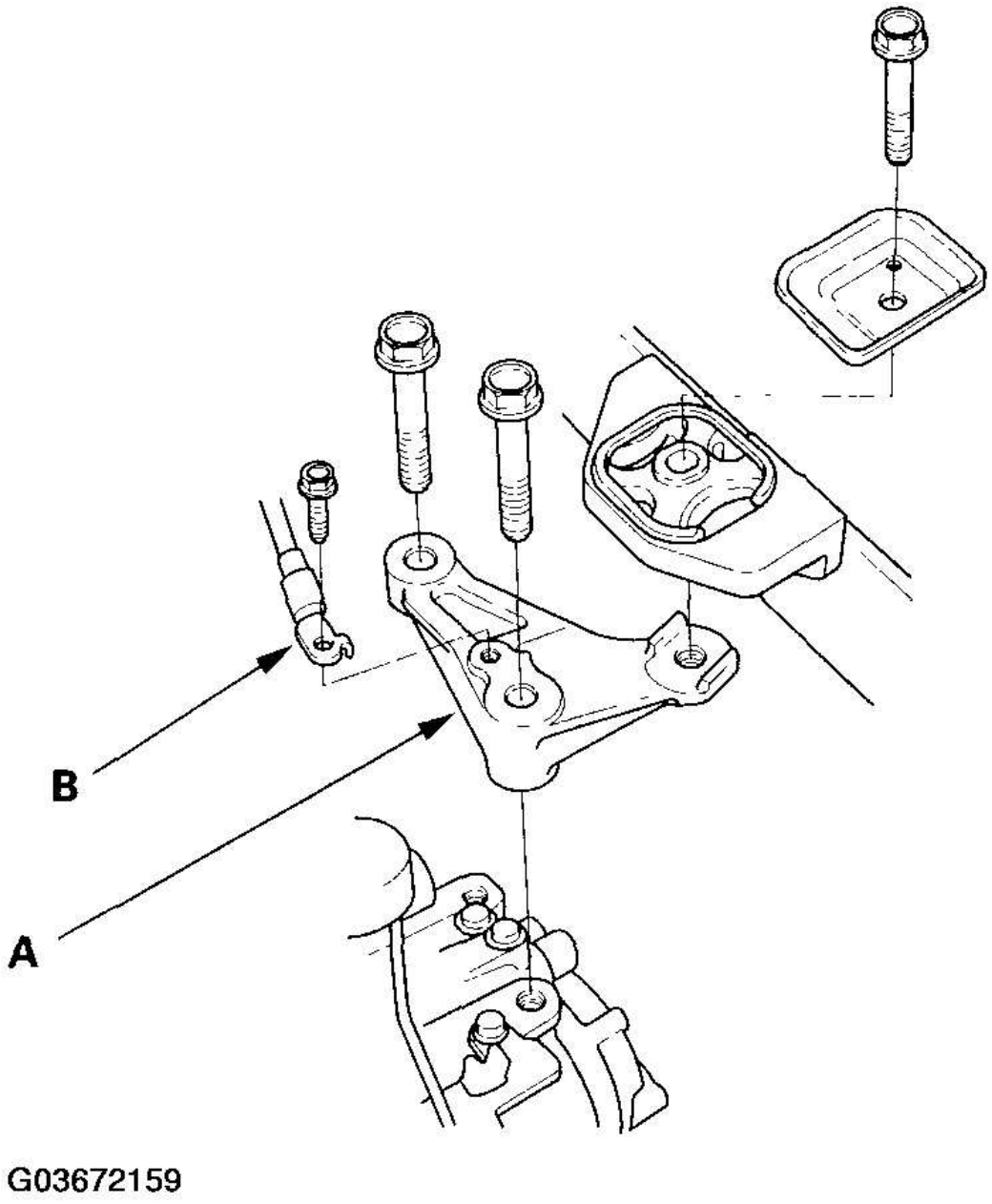


Fig. 32: Identifying Transmission Mount Bracket And Ground Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Remove the steering joint cover (A).

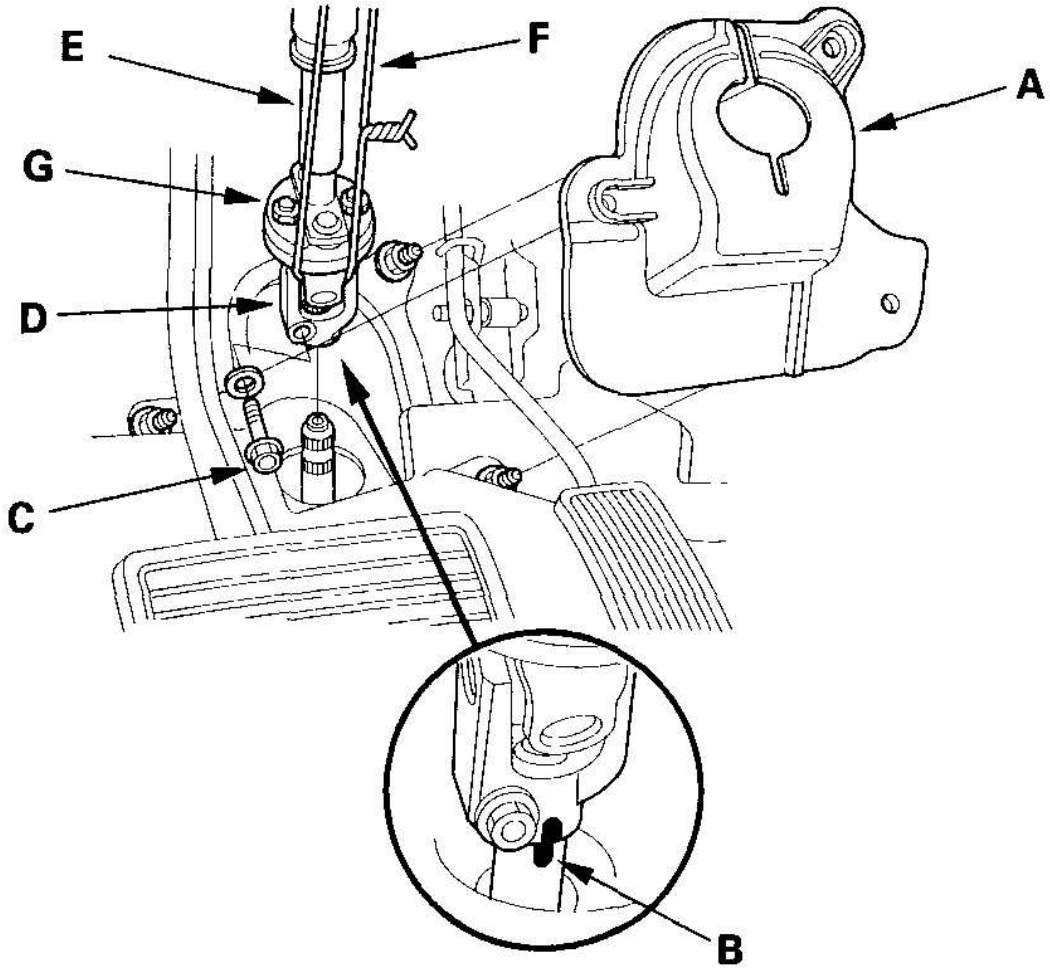


Fig. 33: Identifying Steering Joint Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Make a reference mark (B) across the steering joint and steering gearbox pinion shaft. Remove the steering joint bolt (C), and disconnect the steering joint (D) by removing the steering joint toward the steering column. Hold the slider shaft (E) on the column with a piece of wire (F) between the joint yoke (G) on the slider shaft and the joint yoke on the upper shaft, refer to **STEERING COLUMN REMOVAL AND INSTALLATION** .
25. Raise the vehicle, and make sure it is securely supported.

26. Remove the front wheels.
27. Drain the transmission fluid. Install the drain bolt with a new washer (see **TRANSMISSION FLUID INSPECTION AND REPLACEMENT**).
28. Remove the splash shield.

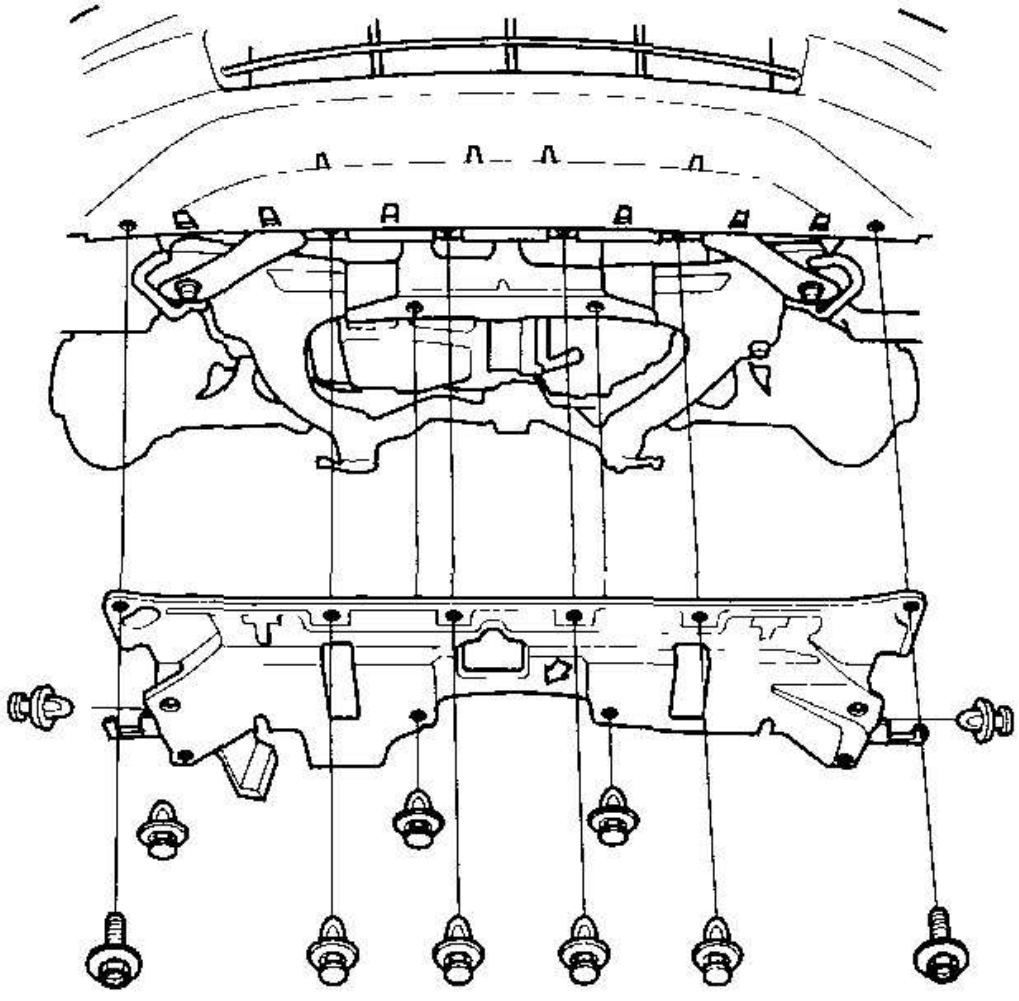


Fig. 34: Identifying Splash Shield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

29. Separate the tie-rod ball joint, refer to step 8 in **STEERING GEARBOX OVERHAUL** .
30. Remove the damper fork (see step 6 in **DRIVESHAFT REMOVAL**).
31. Separate the knuckle from the lower arm (see step 7 in **DRIVESHAFT REMOVAL**).
32. Disconnect the power steering pressure switch connector.

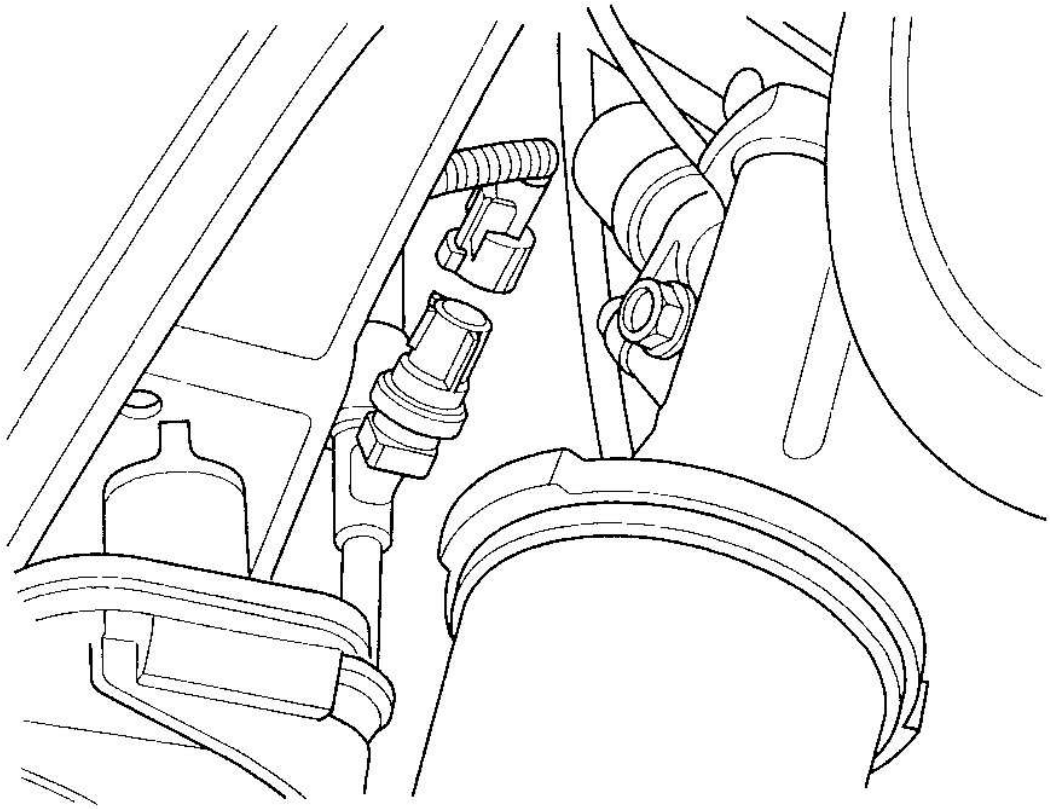


Fig. 35: Disconnecting Power Steering Pressure Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

33. Remove exhaust pipe A.

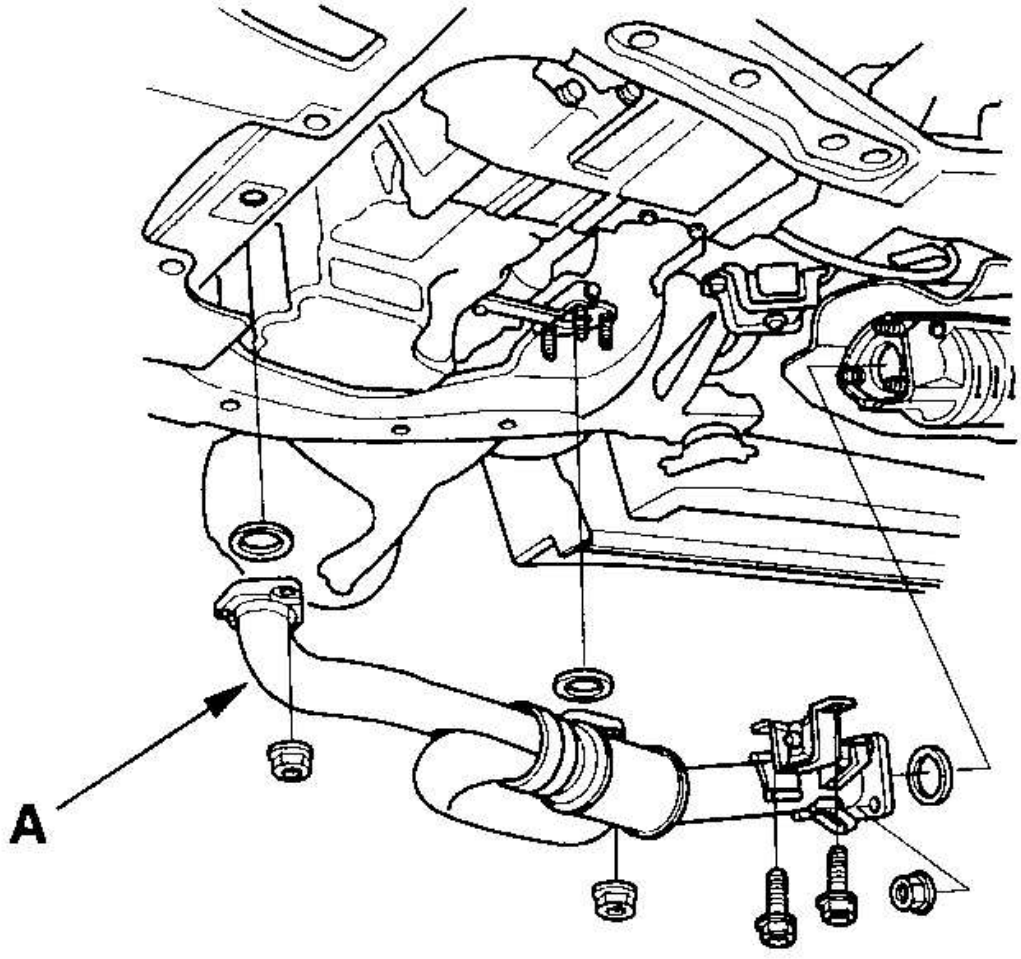


Fig. 36: Identifying Exhaust Pipe A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

34. Remove the left and right driveshaft inboard joints (see **DRIVESHAFT REMOVAL**).
35. Remove the intermediate shaft (see **INTERMEDIATE SHAFT REMOVAL**).
36. Remove the engine lower rear mount mounting bolts.

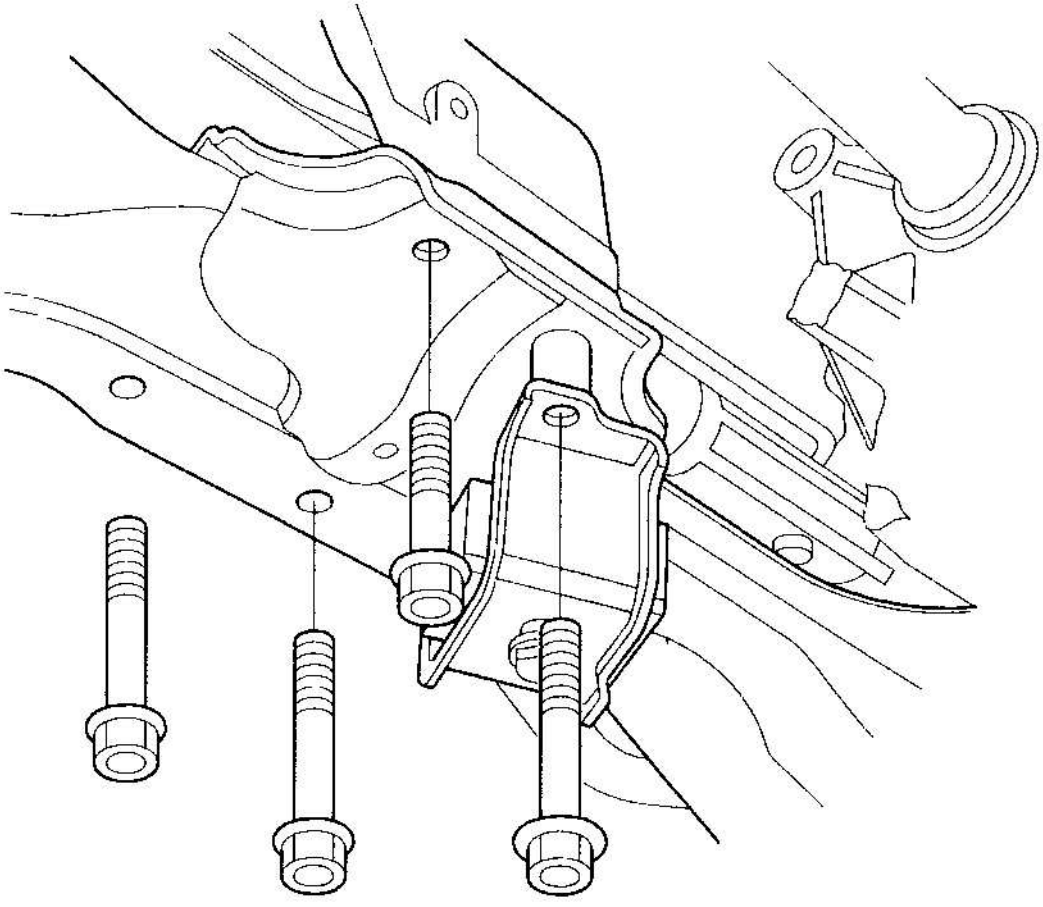


Fig. 37: Identifying Engine Lower Rear Mount Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

37. Remove the transmission lower mount mounting nuts.

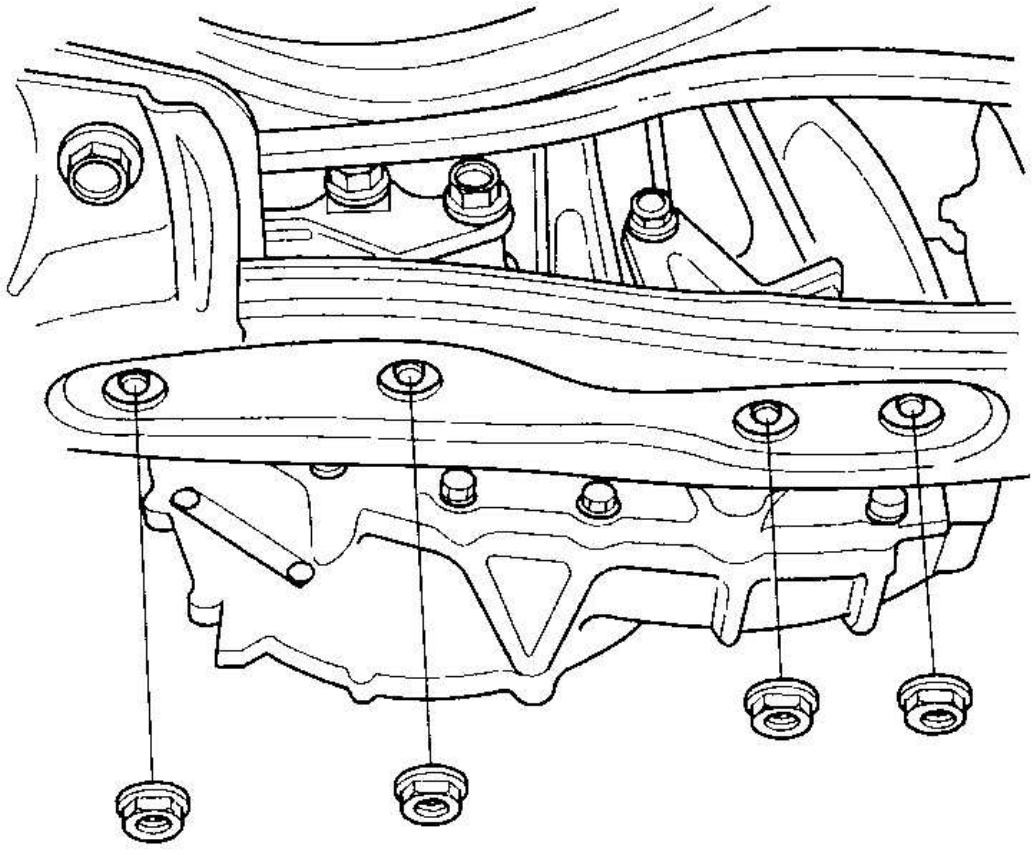


Fig. 38: Identifying Transmission Lower Mount Mounting Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

38. Remove the subframe mid mounts from both sides.

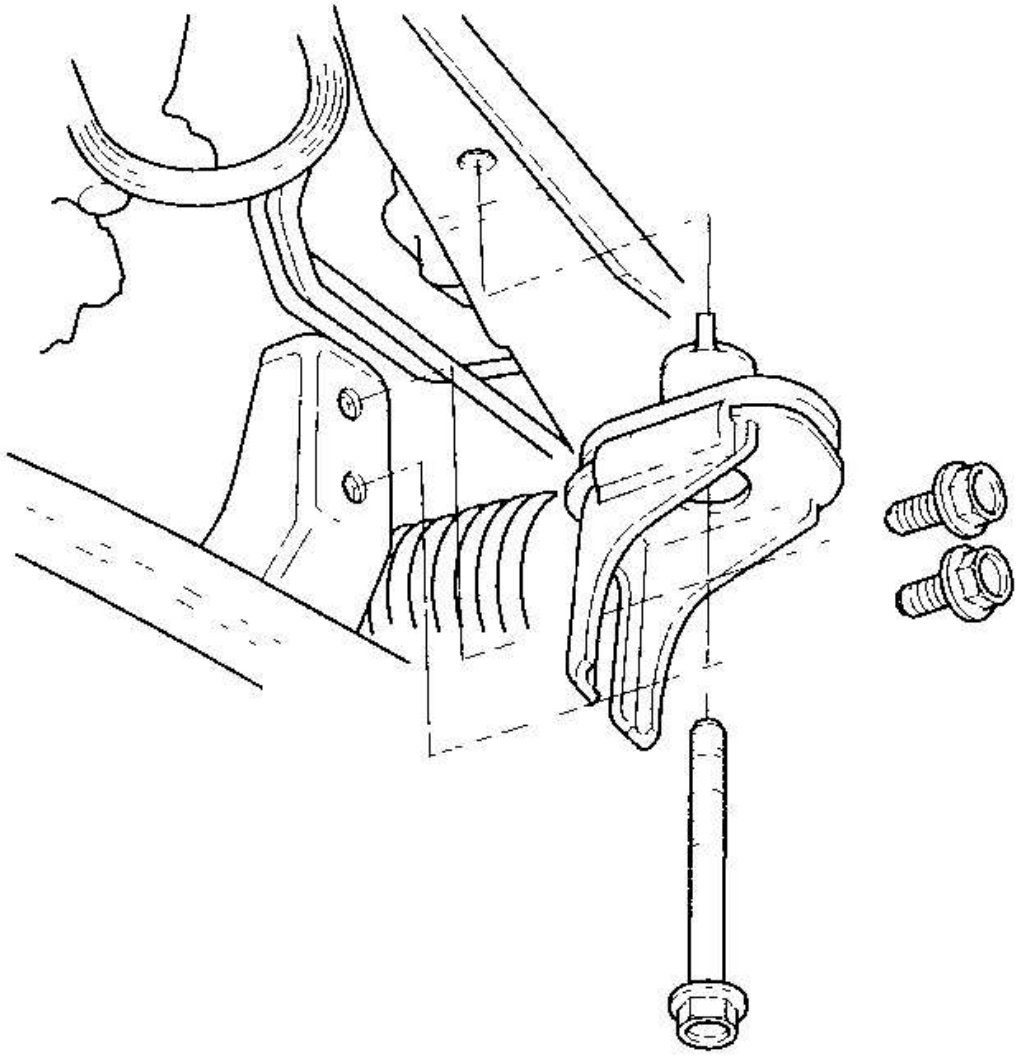


Fig. 39: Identifying Subframe Mid Mounts From Both Sides
Courtesy of AMERICAN HONDA MOTOR CO., INC.

39. Make the appropriate reference lines (A) at both ends of the subframe (B) that line up with the edge (C) of the stiffeners (D).

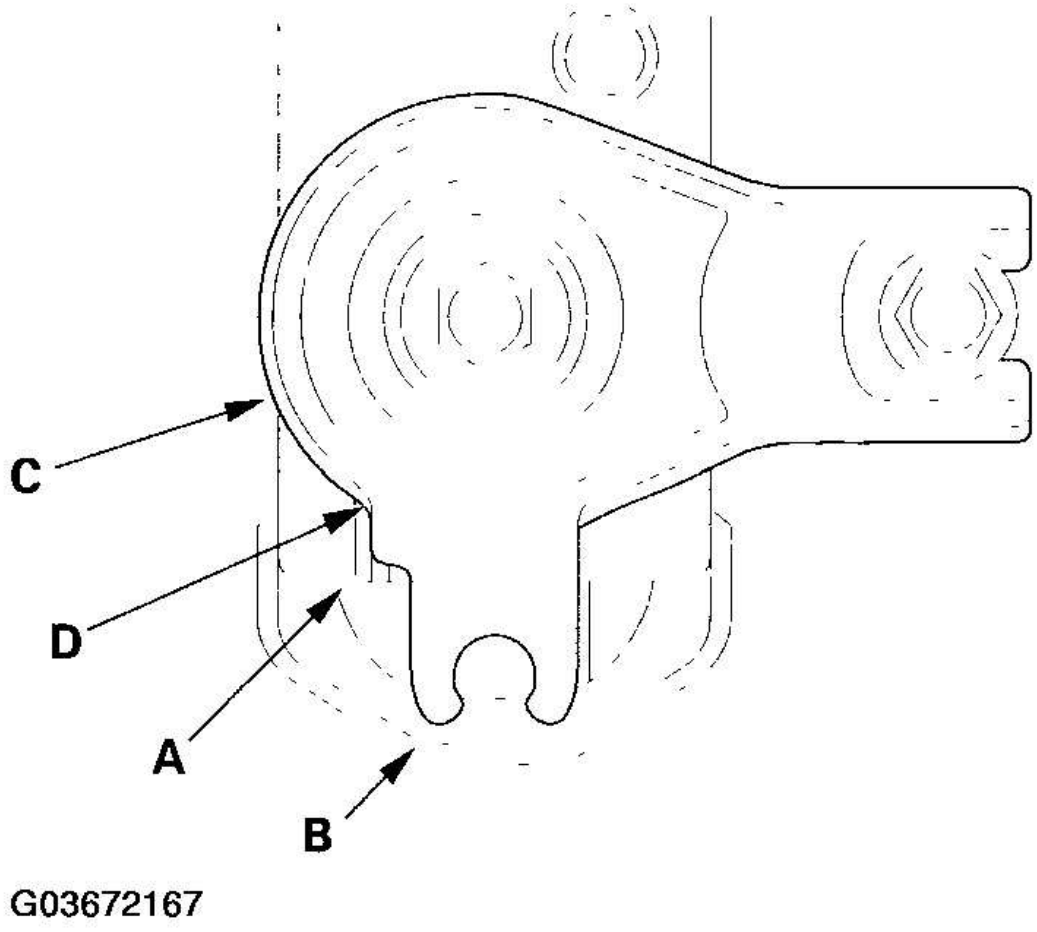


Fig. 40: Making Appropriate Reference Lines
Courtesy of AMERICAN HONDA MOTOR CO., INC.

40. Attach the special tool to the subframe by wrapping the band over the subframe and attaching the end of the band to the tool with a pin (A).

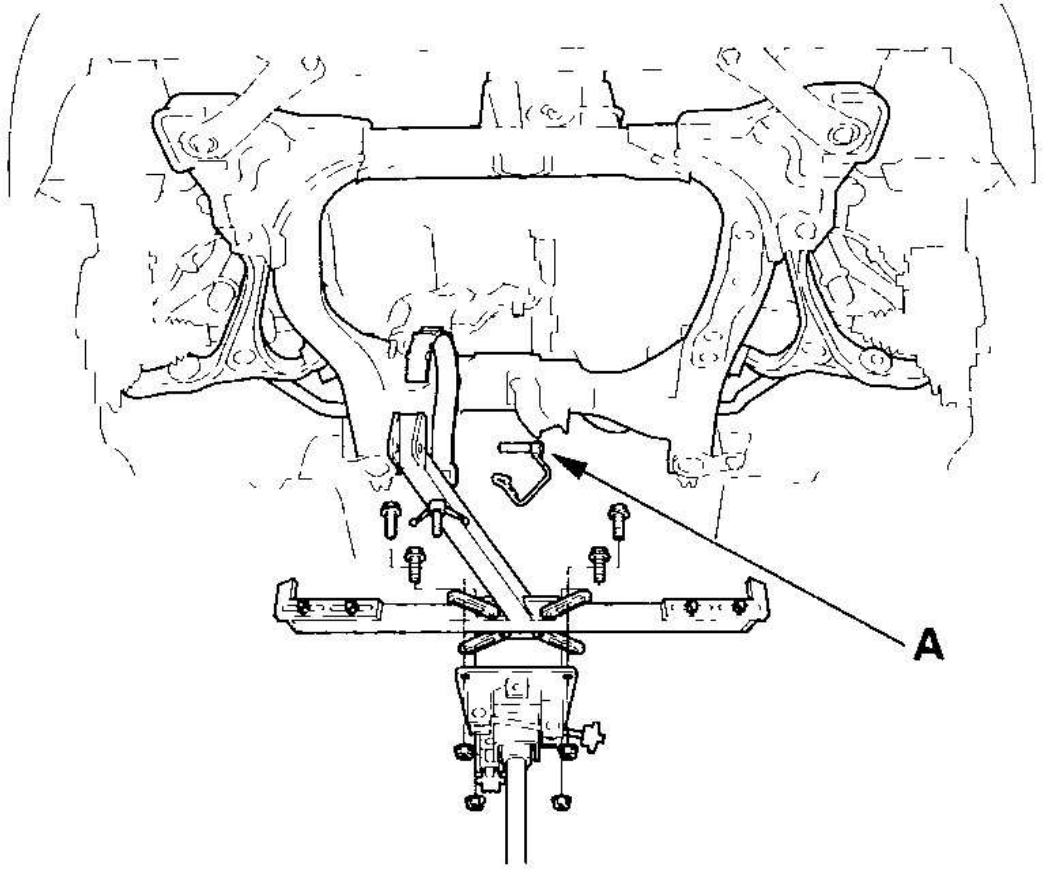


Fig. 41: Attaching End Of Band To Tool With Pin
Courtesy of AMERICAN HONDA MOTOR CO., INC.

41. Raise the jack, and line up the slots in the arms with the bolt holes on the corner of the jack base, then attach them securely.
42. Remove the front suspension subframe stays (A) and the front suspension subframe (B).

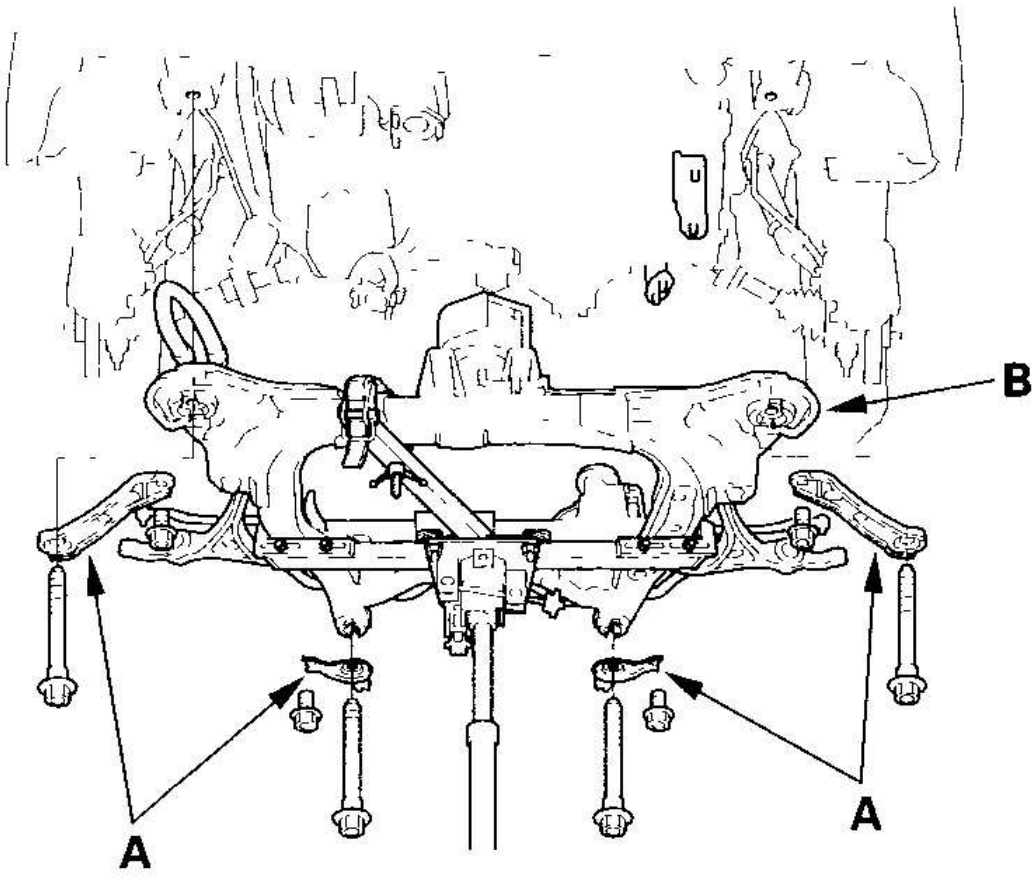
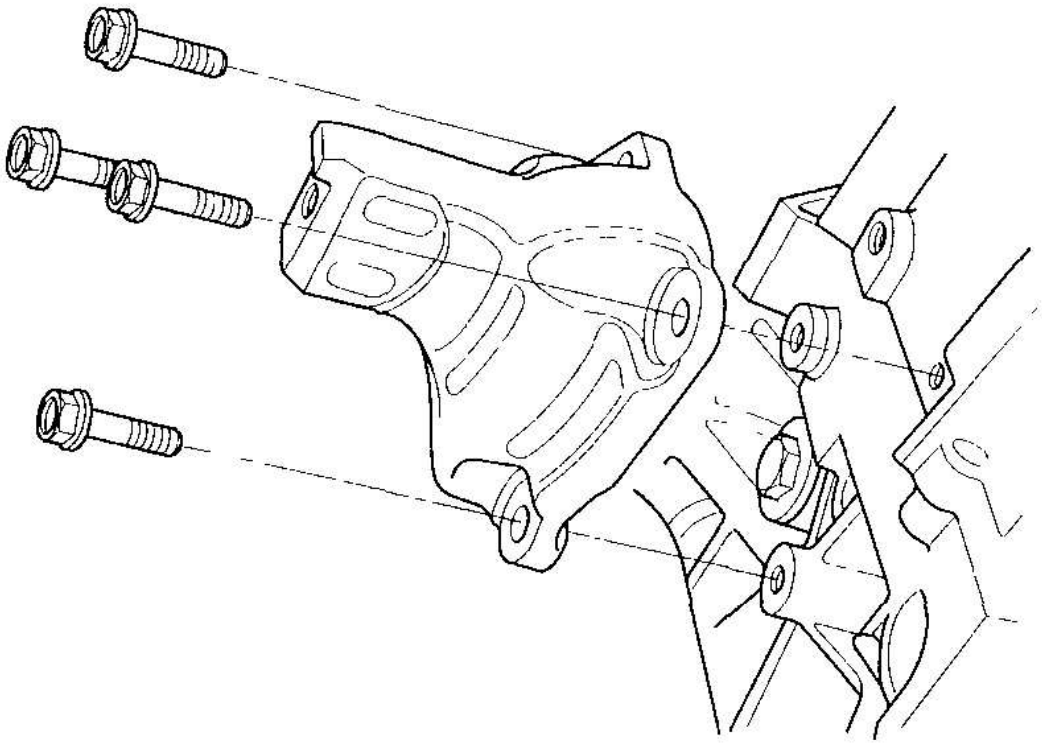


Fig. 42: Identifying Front Suspension Subframe Stays
Courtesy of AMERICAN HONDA MOTOR CO., INC.

43. Remove the front engine mount upper bracket.



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Fig. 43: Identifying Front Engine Mount Upper Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

44. Remove the clutch cover.

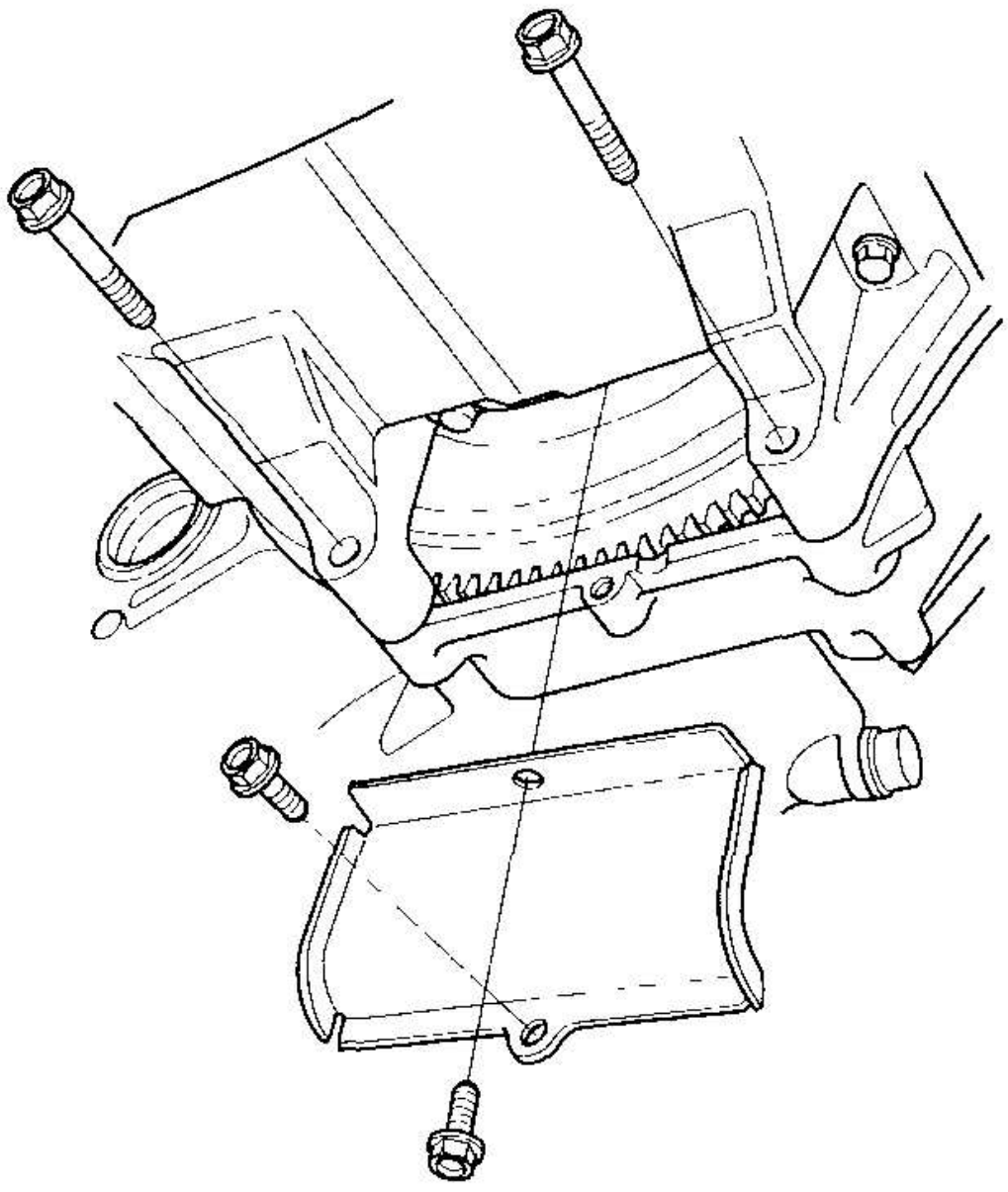
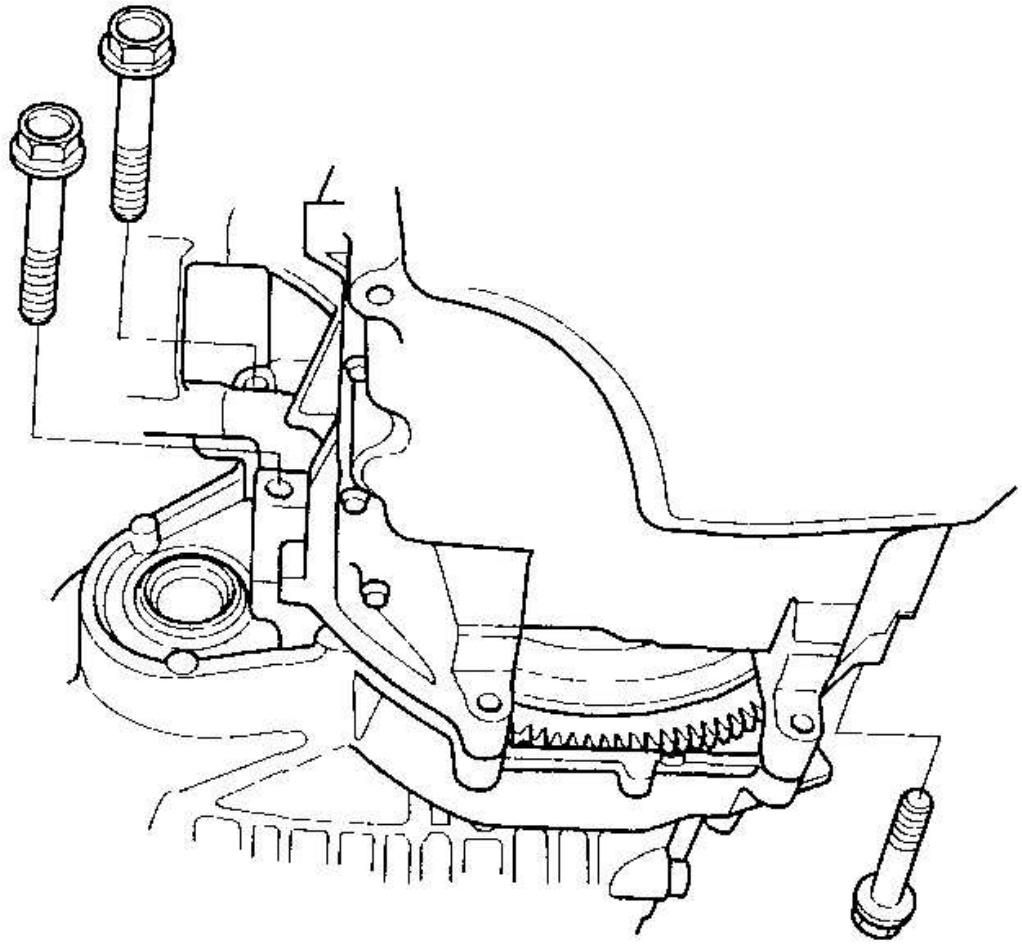


Fig. 44: Identifying Clutch Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

45. Place the transmission jack under the transmission, and remove the

transmission lower mounting bolts.



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Fig. 45: Identifying Transmission Lower Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

46. Pull the transmission away from the engine until the transmission mainshaft clears the clutch pressure plate, then lower the transmission on the transmission jack.
47. Remove the transmission front lower mount (A) and the transmission rear

lower mount (B).

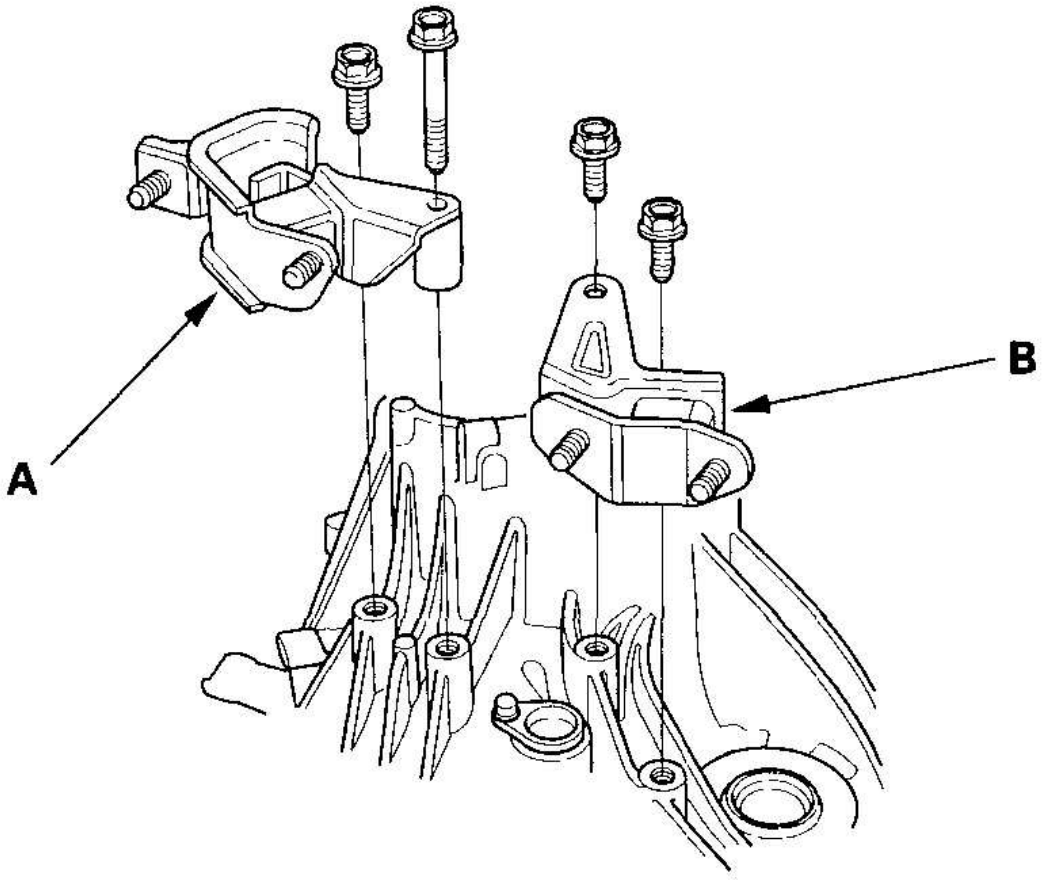


Fig. 46: Identifying Transmission Front Lower Mount
Courtesy of AMERICAN HONDA MOTOR CO., INC.

48. Remove the boot (A), release fork (B), and release bearing (C) from the transmission.

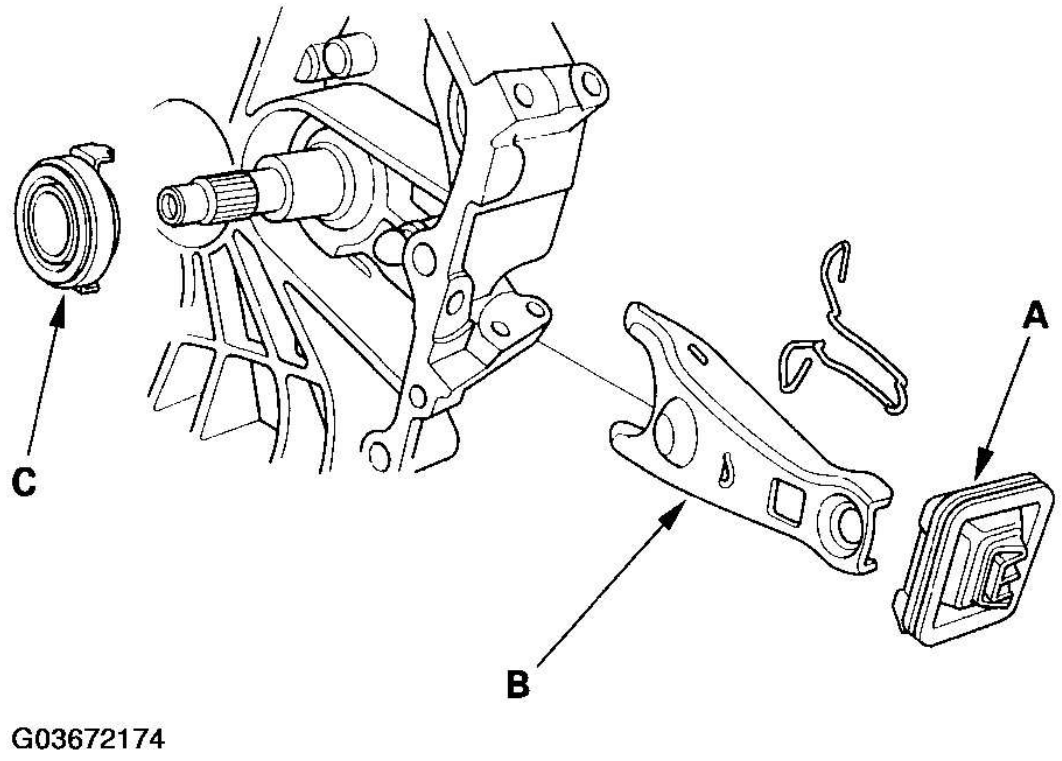


Fig. 47: Identifying Boot, Release Fork And Release Bearing From Transmission
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TRANSMISSION INSTALLATION

Special Tools Required

- Engine support hanger, A and Reds AAR-T-12566 (Available through the Honda Tool and Equipment Program 888-424-6857)
- Engine hanger balance bar VSB02C000019
- Front subframe adapter VSB02C000016

1. Make sure the two dowel pins are installed in the clutch housing.
2. Apply super high temp urea grease (P/N 08798-9002) to the release fork (A), the release bearing (B) and the mainshaft splines. Install the release fork, the

release bearing, and the boot (C).

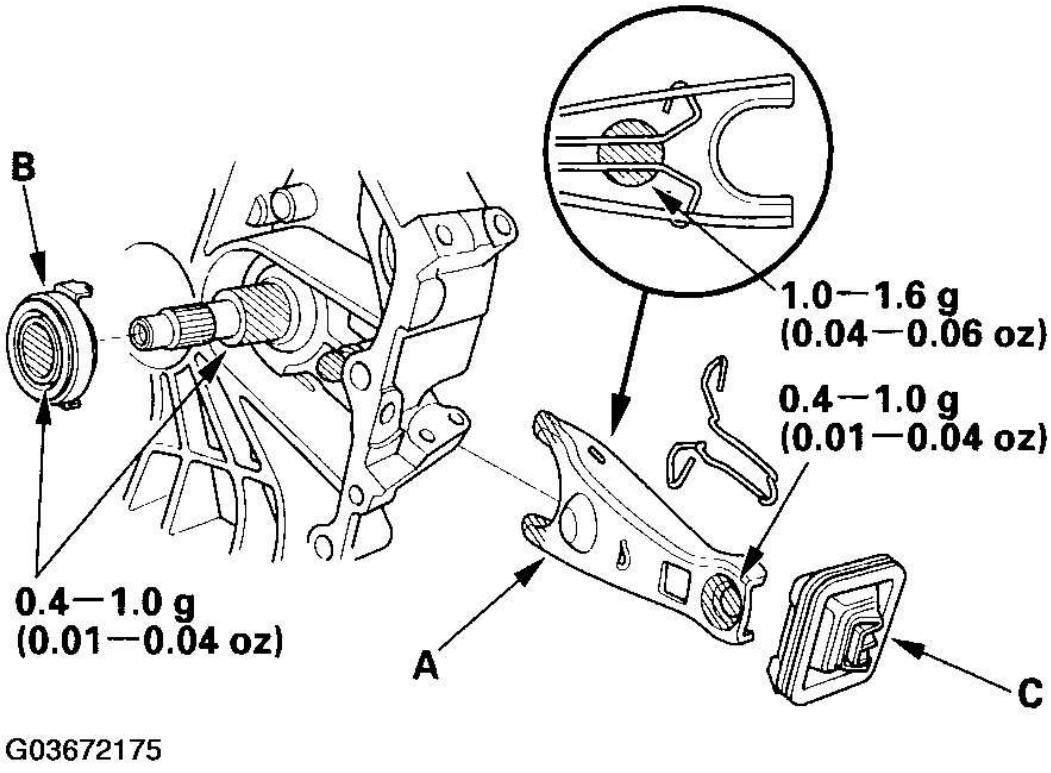


Fig. 48: Applying Super High Temp Urea Grease To Release Fork
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the transmission front lower mount (A) and the transmission rear lower mount (B).

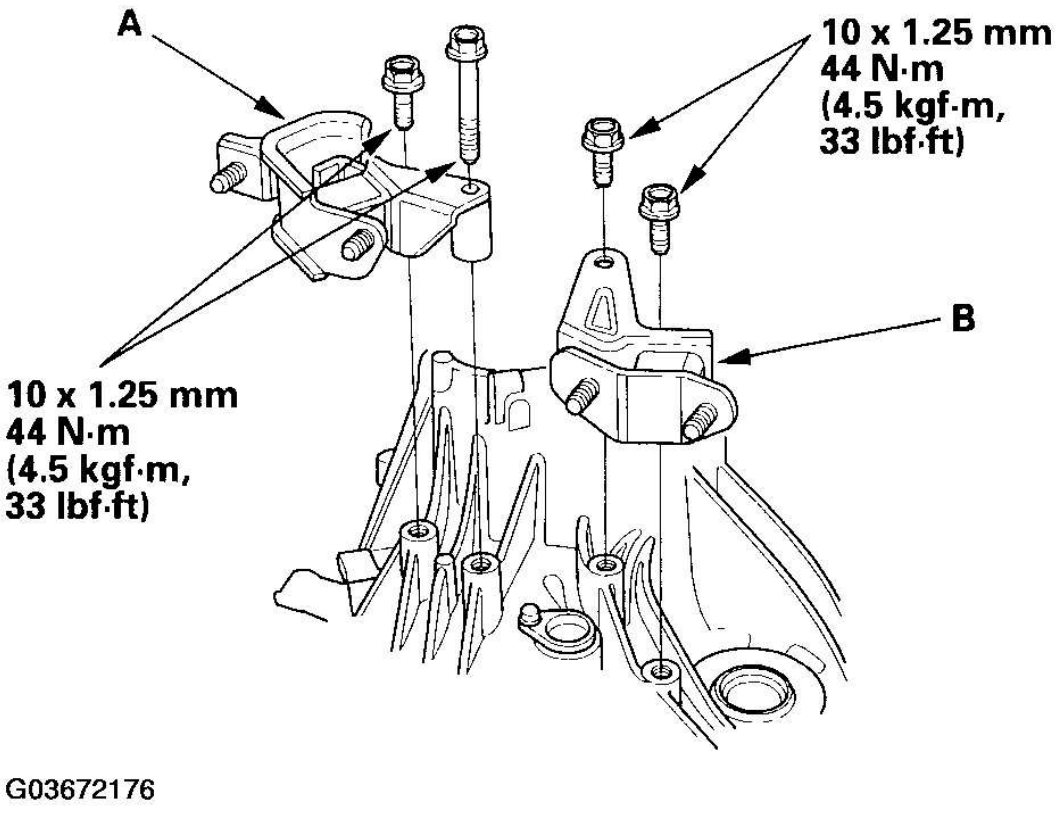


Fig. 49: Identifying Transmission Front Lower Mount
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Place the transmission on the transmission jack, and raise it to engine level.
5. Install the transmission lower mounting bolts.

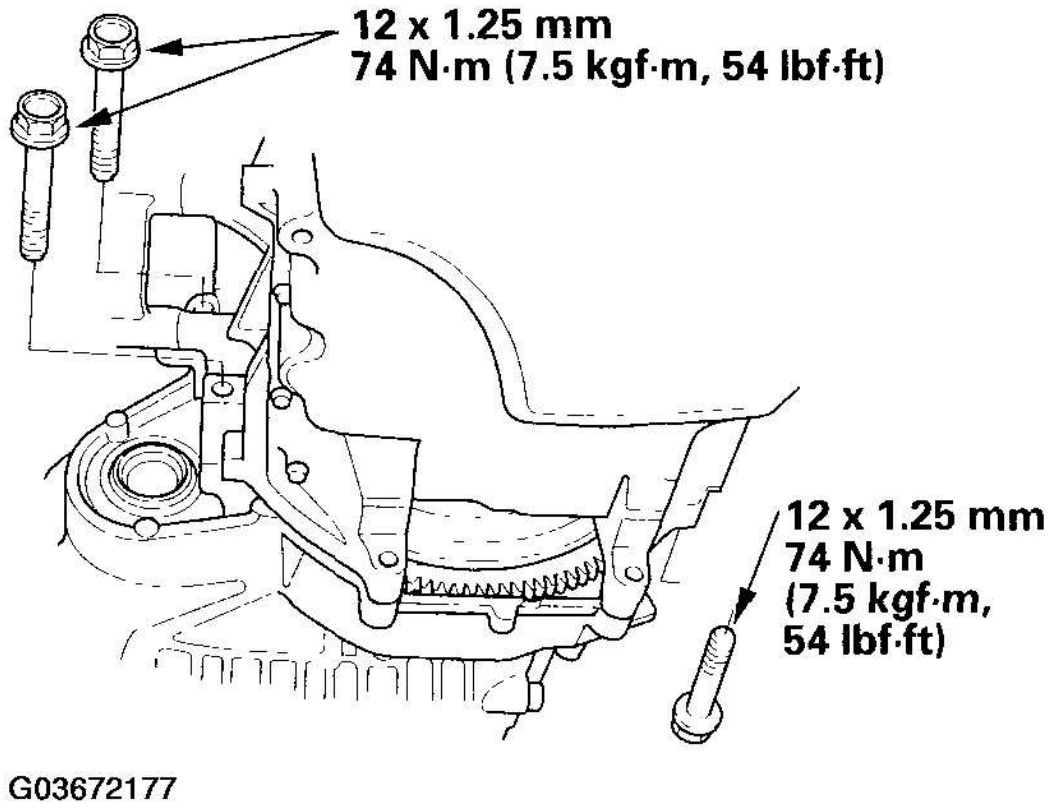


Fig. 50: Install Transmission Lower Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the clutch cover.

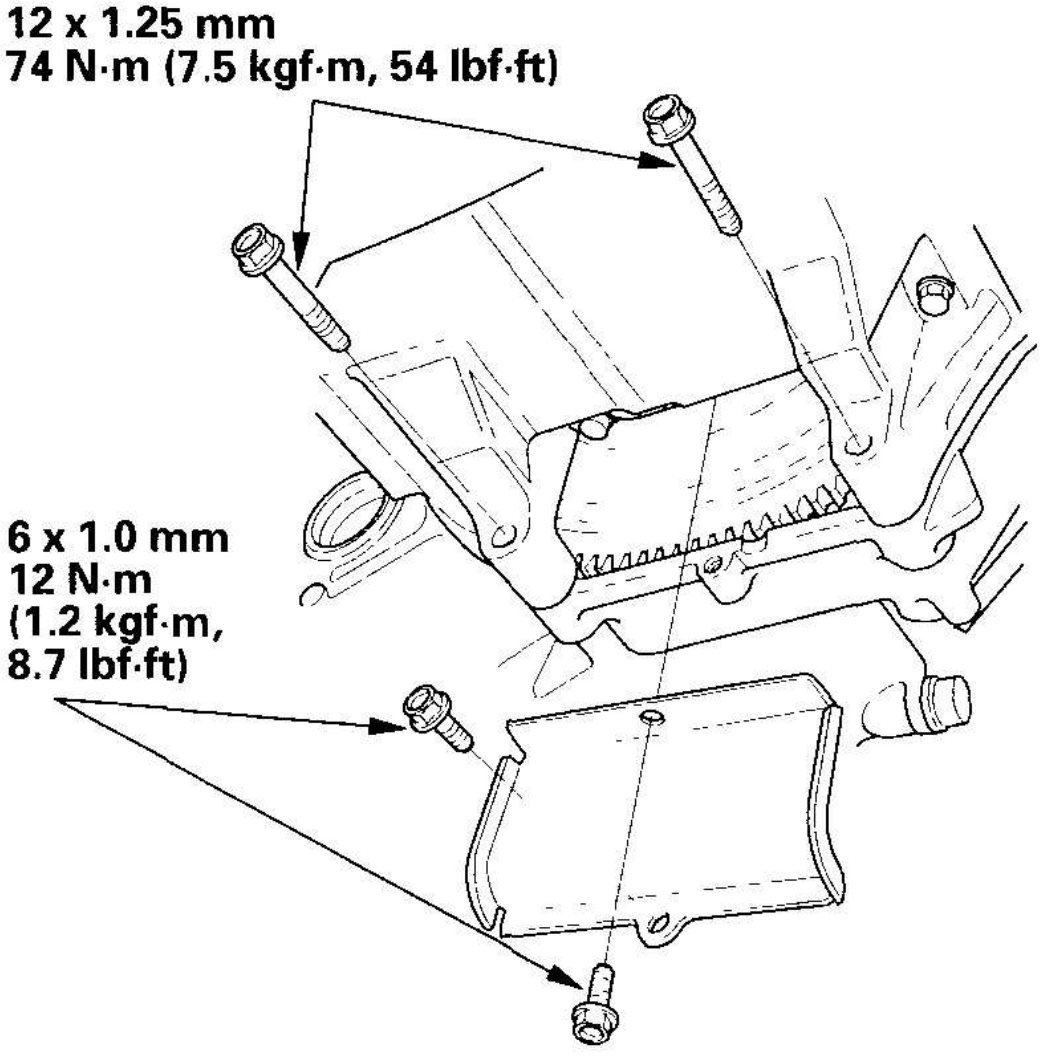


Fig. 51: Identifying Clutch Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the front engine mount upper bracket.

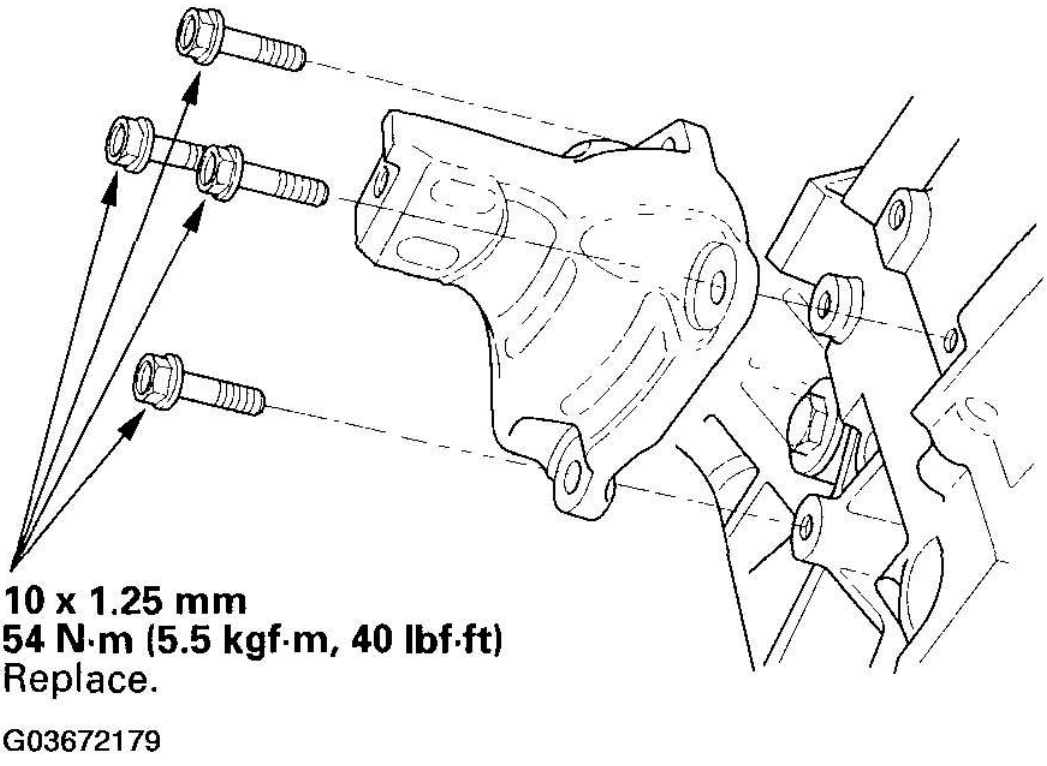


Fig. 52: Identifying Front Engine Mount Upper Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Support the subframe with the subframe adapter and a jack.

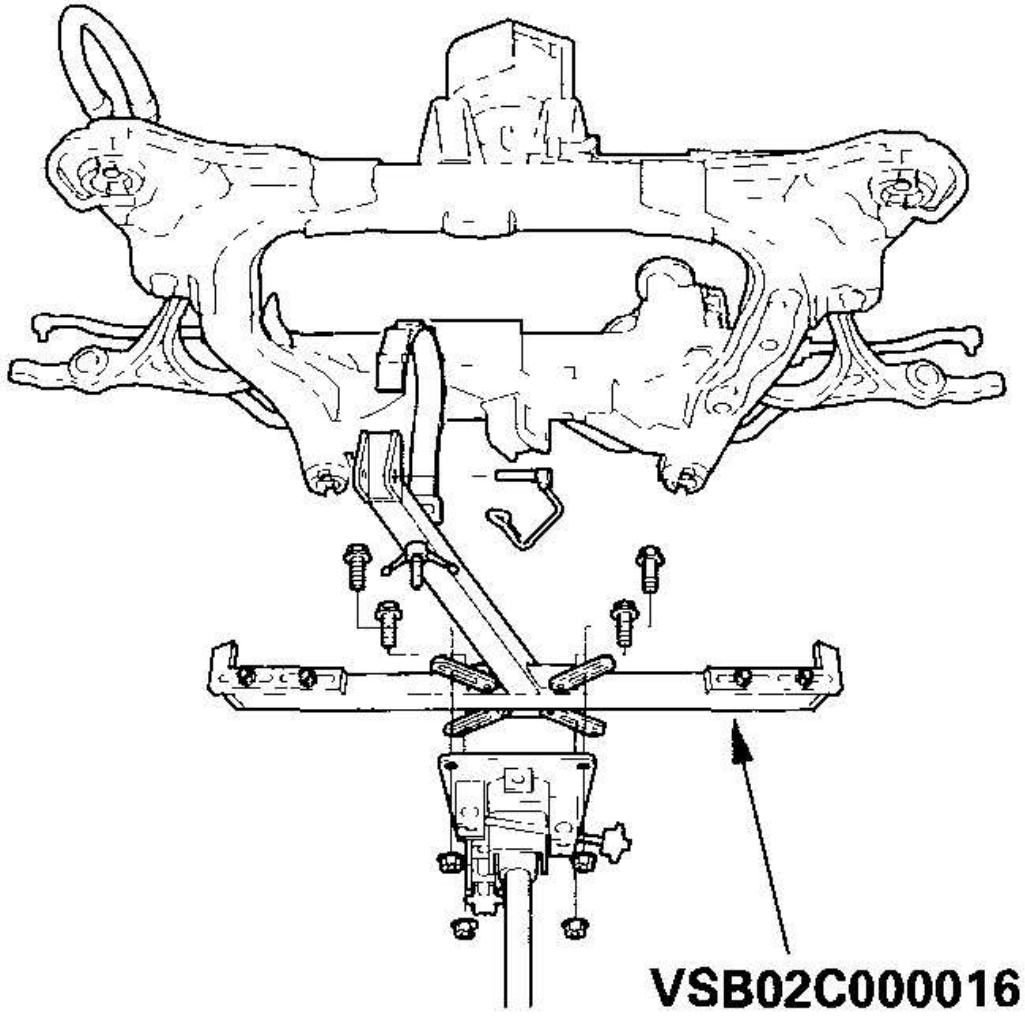


Fig. 53: Supporting Subframe With Subframe Adapter And Jack
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the front suspension subframe (A) and front suspension subframe stays (B).

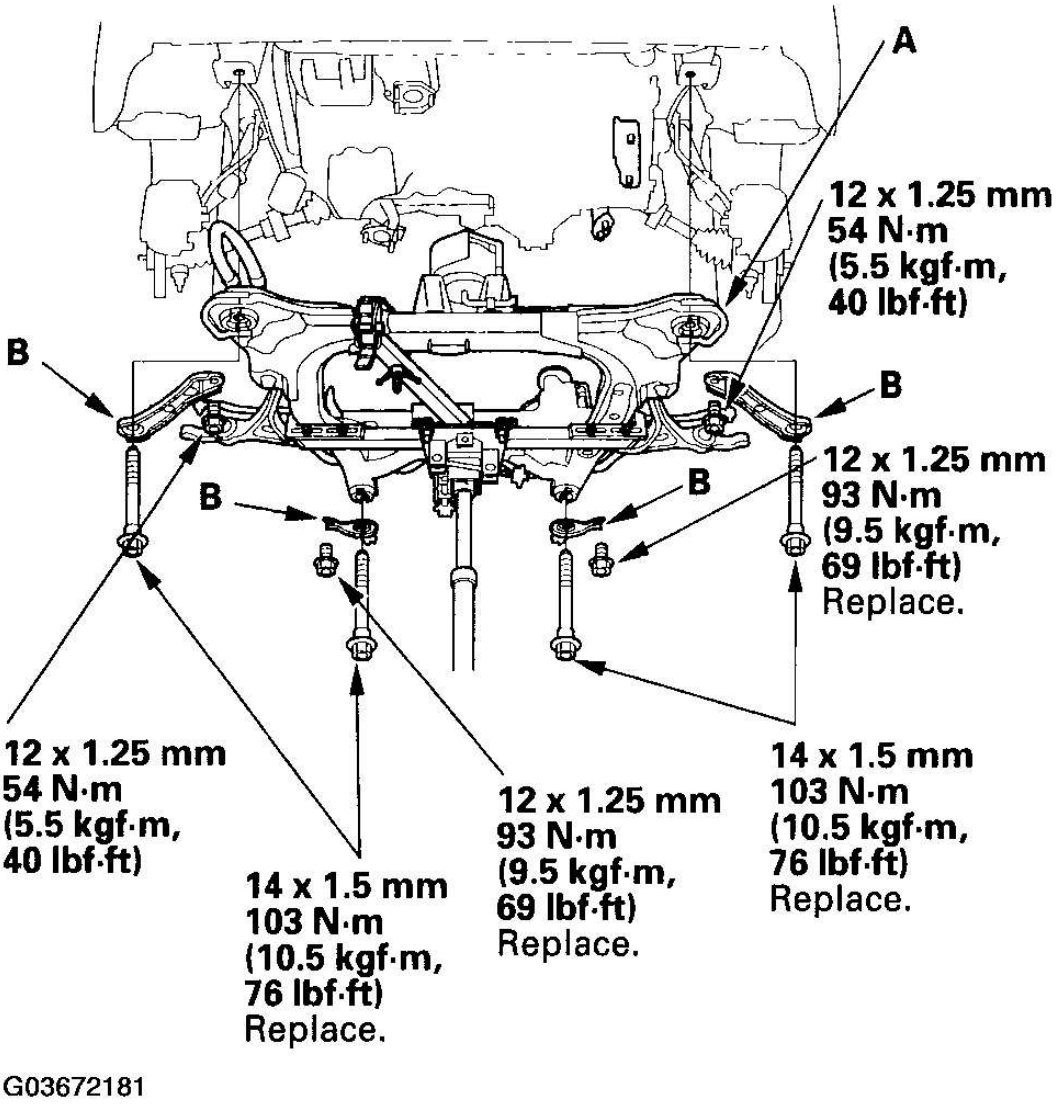


Fig. 54: Identifying Front Suspension Subframe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Align the reference marks (A) with the edge (B) of both rear stiffeners (C), then tighten the rear subframe mounting bolts, the front bolts, and the stiffener bolts to the specified torque.

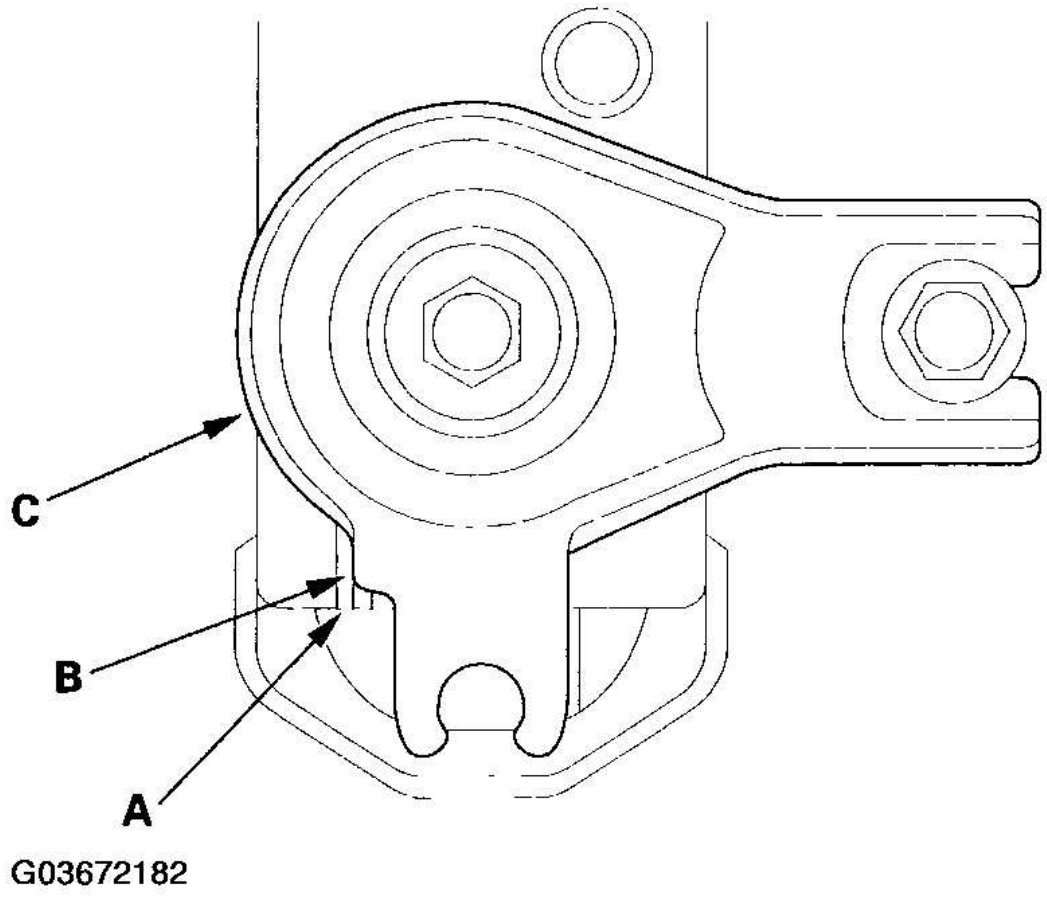


Fig. 55: Aligning Reference Marks With Edge Of Both Rear Stiffeners
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the subframe mid mounts on both sides.

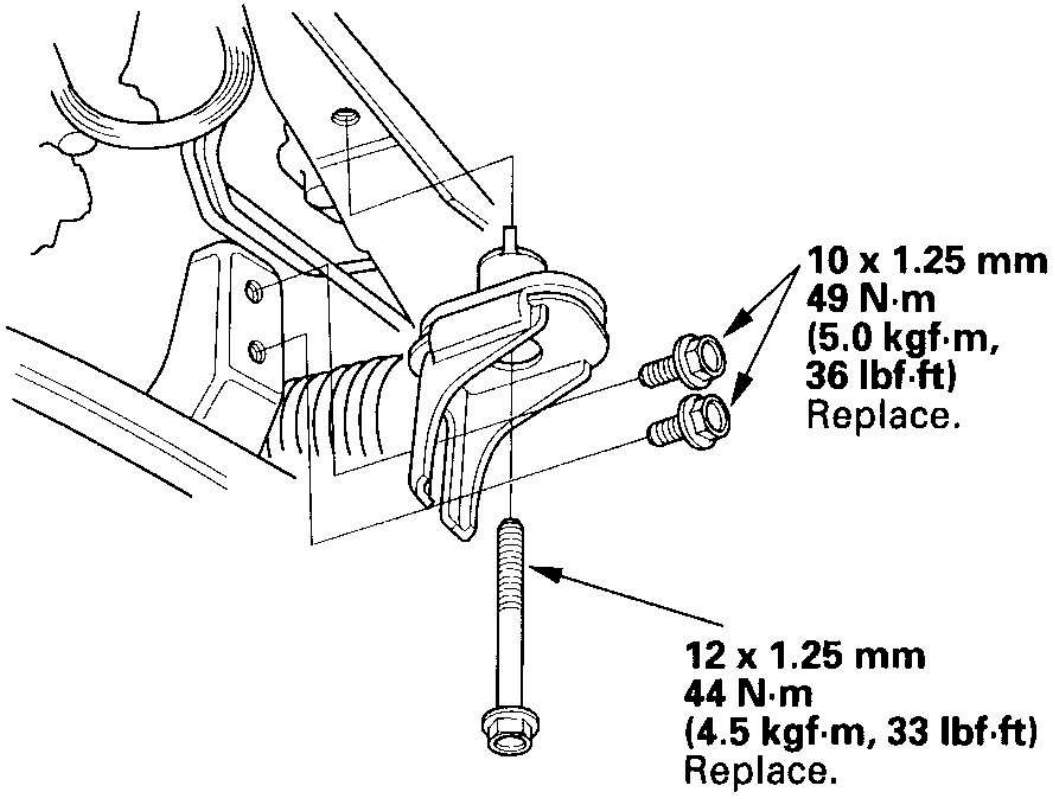


Fig. 56: Identifying Subframe Mid Mounts On Both Sides
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Install the transmission lower mount mounting nuts.

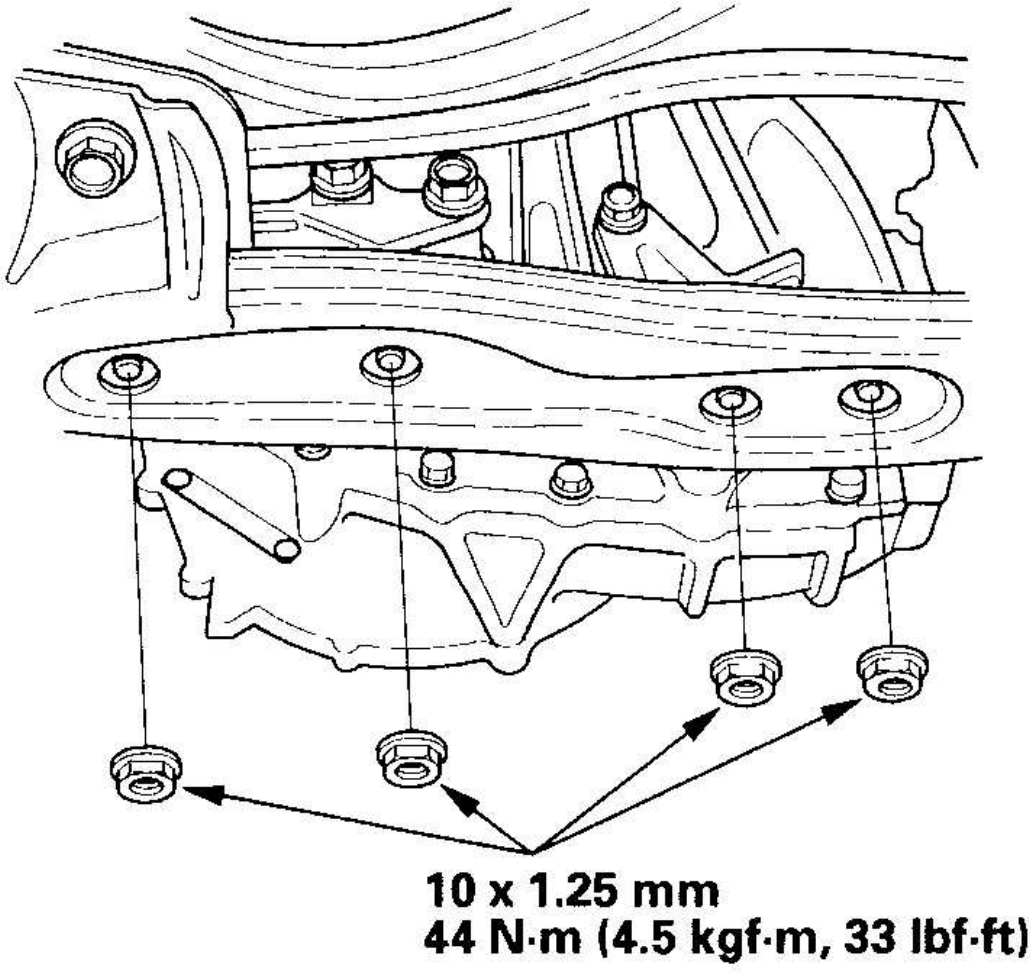


Fig. 57: Identifying Transmission Lower Mount Mounting Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install the engine lower rear mount mounting bolts.

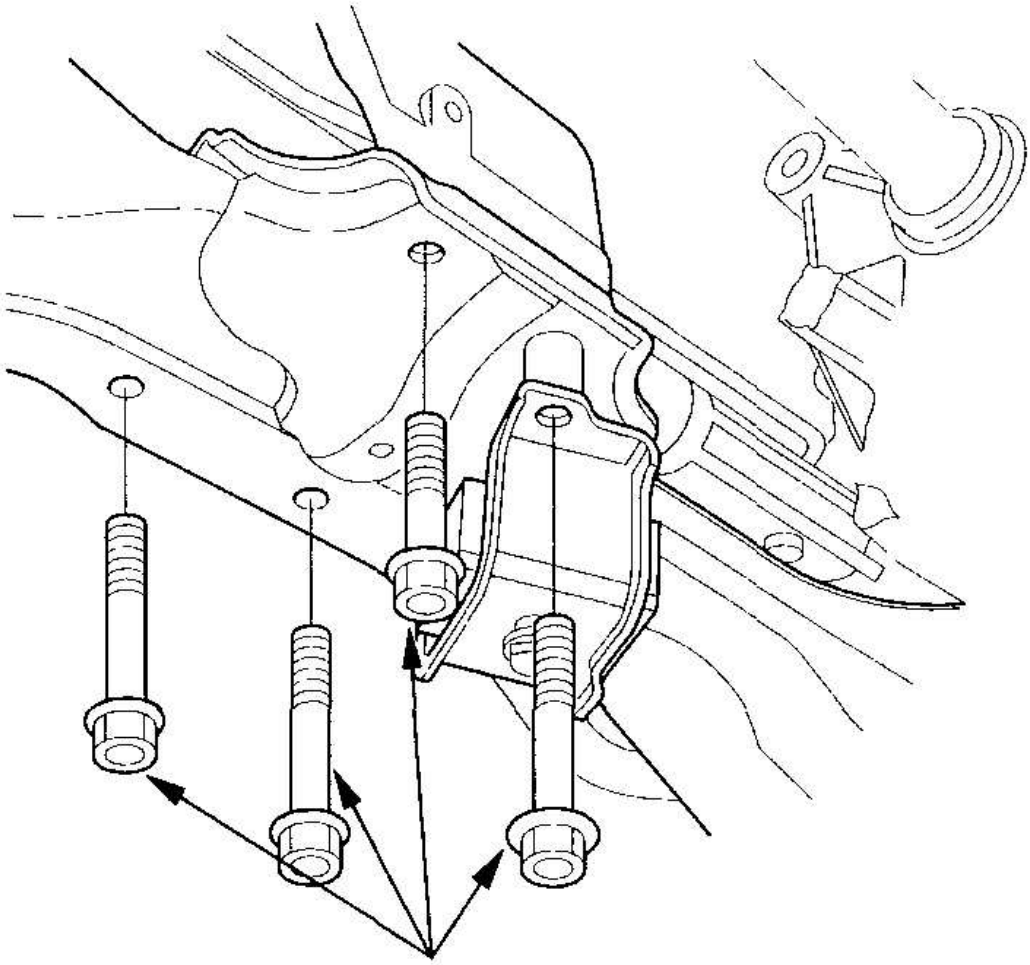


Fig. 58: Identifying Engine Lower Rear Mount Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Install the intermediate shaft (see **INTERMEDIATE SHAFT INSTALLATION**).
15. Install the left and right driveshaft inboard joints (see **DRIVESHAFT**

INSTALLATION).

16. Install the knuckle onto the lower arm (see step 5 in **DRIVESHAFT INSTALLATION**).
17. Install the damper fork (see step 7 in **DRIVESHAFT INSTALLATION**).
18. Install exhaust pipe A, the mount (B), and new gaskets (C).

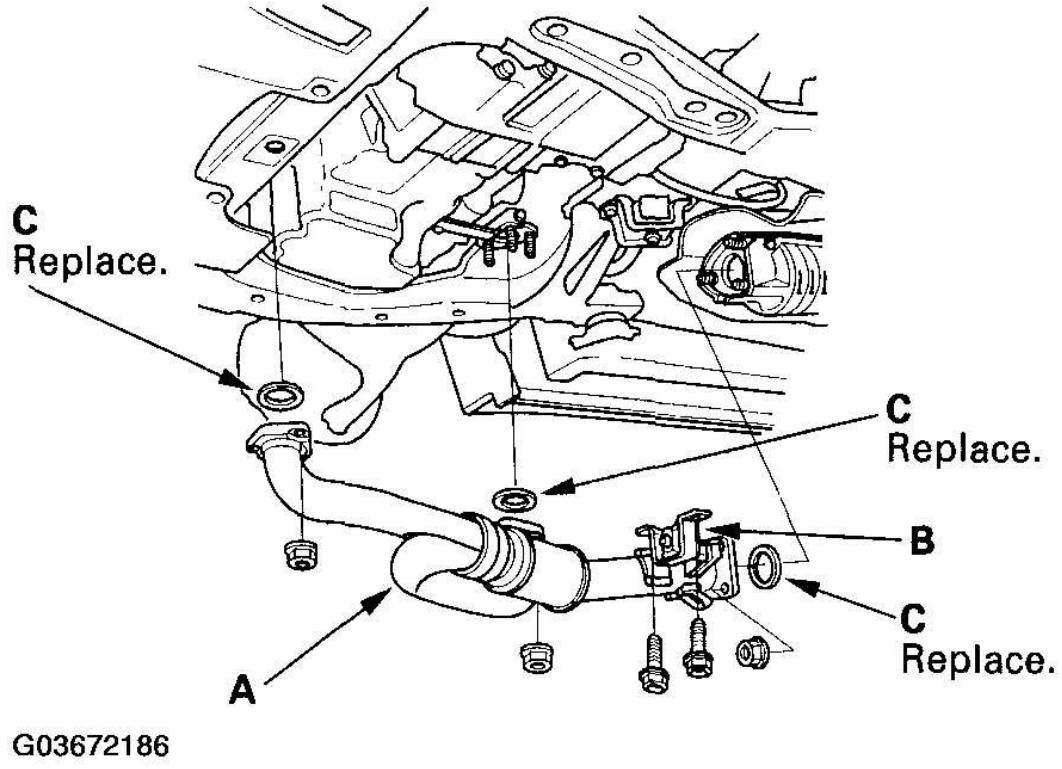
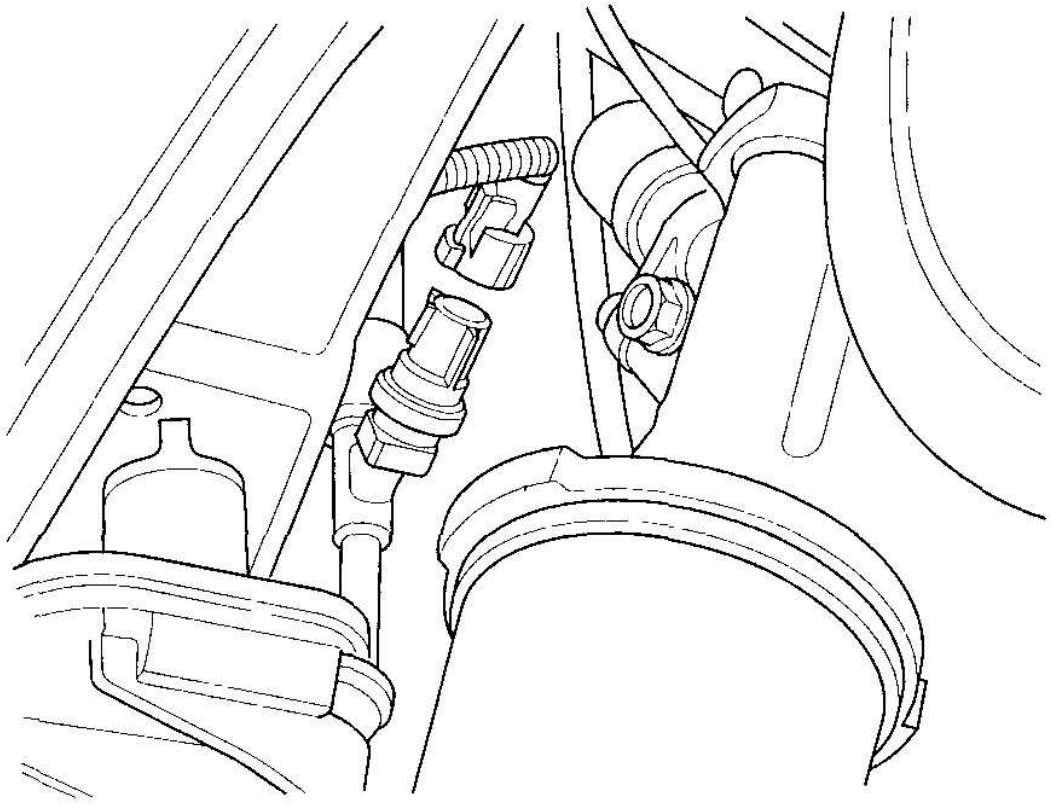


Fig. 59: Identifying Exhaust Pipe A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Connect the power steering pressure switch connector.



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Fig. 60: Connecting Power Steering Pressure Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Connect the return line to the power steering fluid reservoir.
21. Install the tie-rod ball joint, refer to step 23 in **STEERING GEARBOX INSTALLATION** .
22. Install the splash shield.

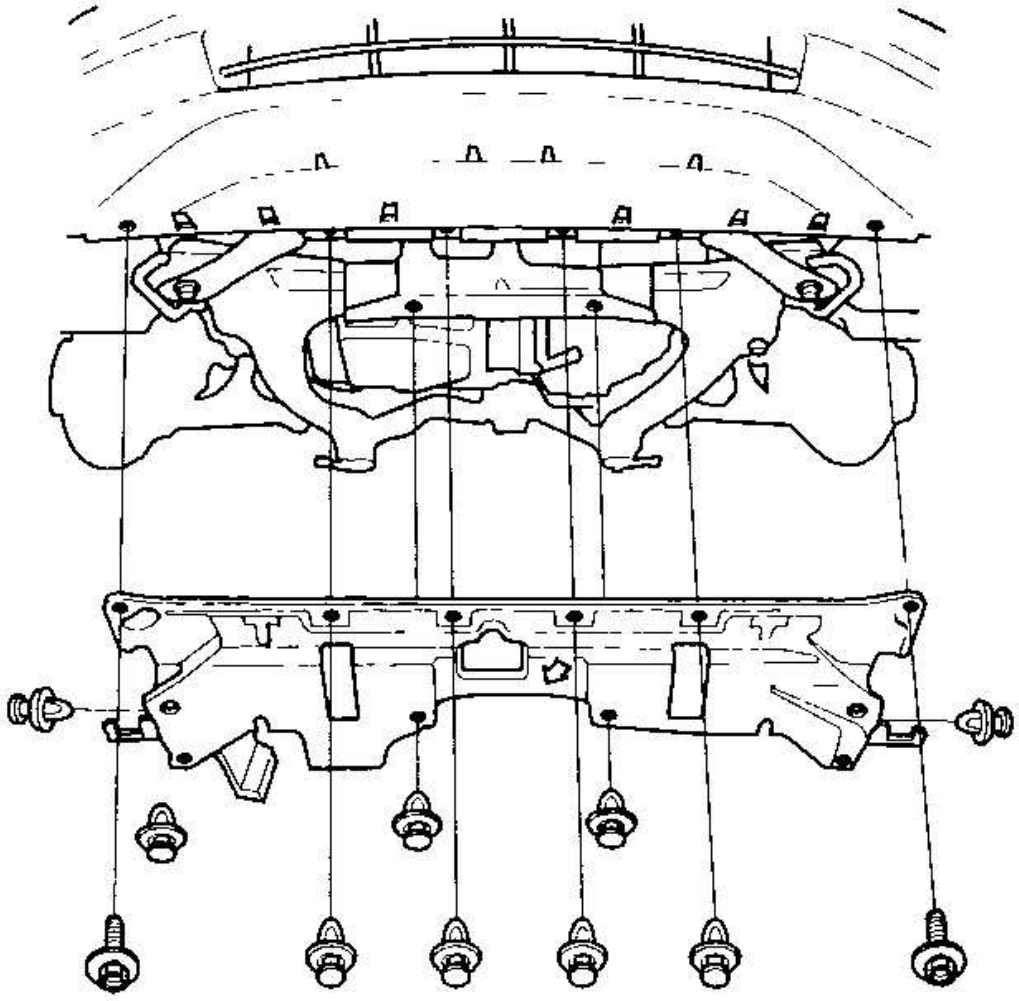


Fig. 61: Identifying Splash Shield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Refill the transmission with fluid.
24. Install the front wheels, and set them in the straight ahead position.
25. Lower the vehicle.
26. Unlock the steering wheel.

27. Connect the steering joint to the steering gearbox pinion shaft (A) by aligning the reference mark (B), and remove the wire (C) from the joint yoke (D).

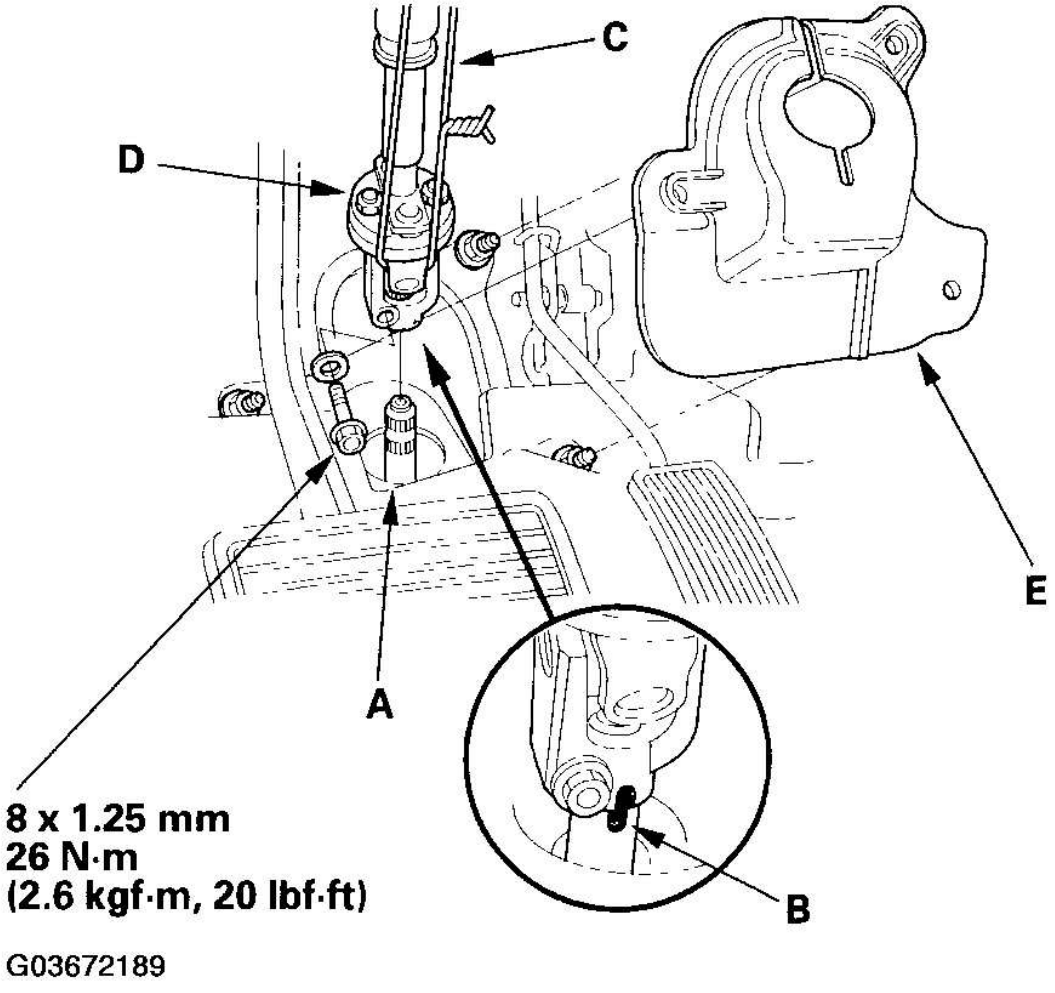


Fig. 62: Connecting Steering Joint To Steering Gearbox Pinion Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

28. Install the steering joint cover (E).
29. Install the transmission mount bracket (A) and ground cable (B).

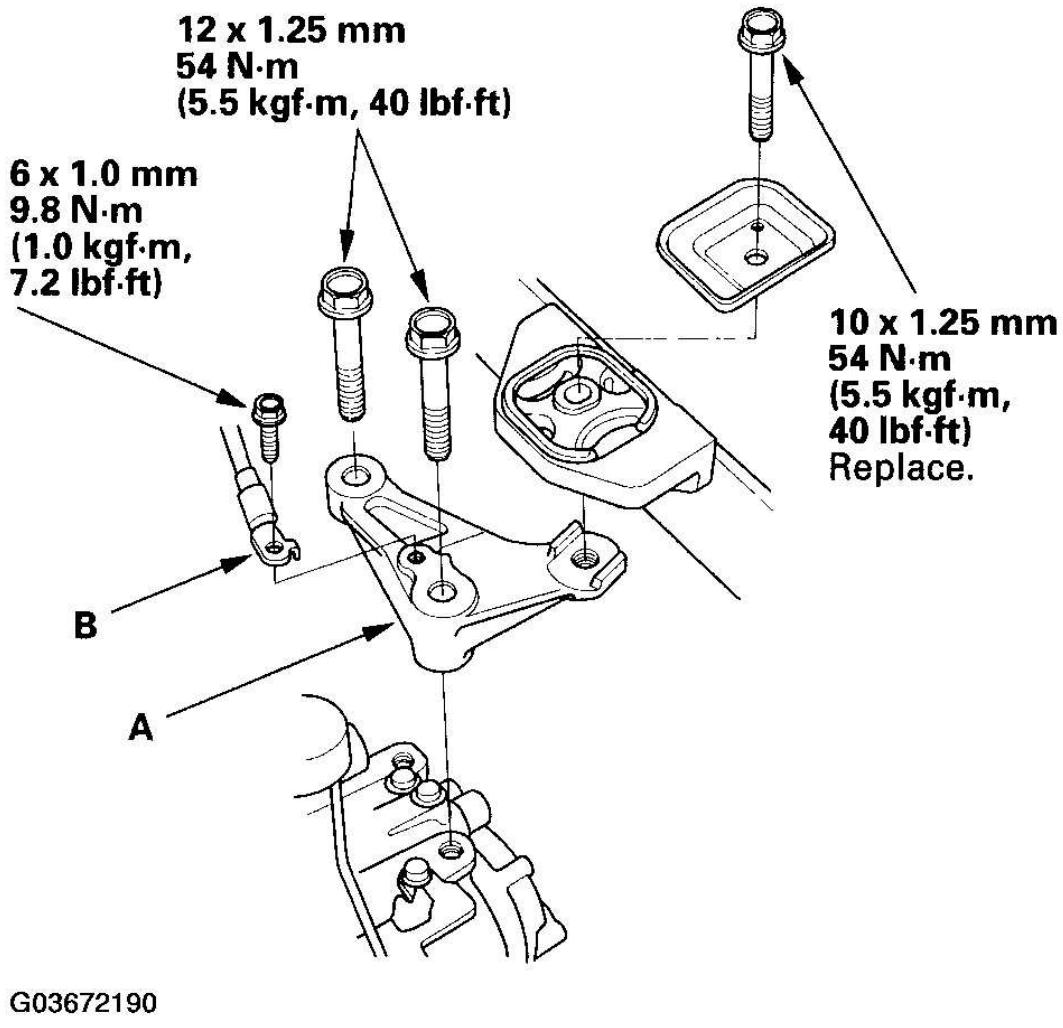


Fig. 63: Identifying Transmission Mount Bracket And Ground Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

30. Remove the engine hanger and special tool from the engine.
31. Install the power steering pump outlet line (A) with a new O-ring (B) to the pump (C), and install the hose (D) in its clamp (E).

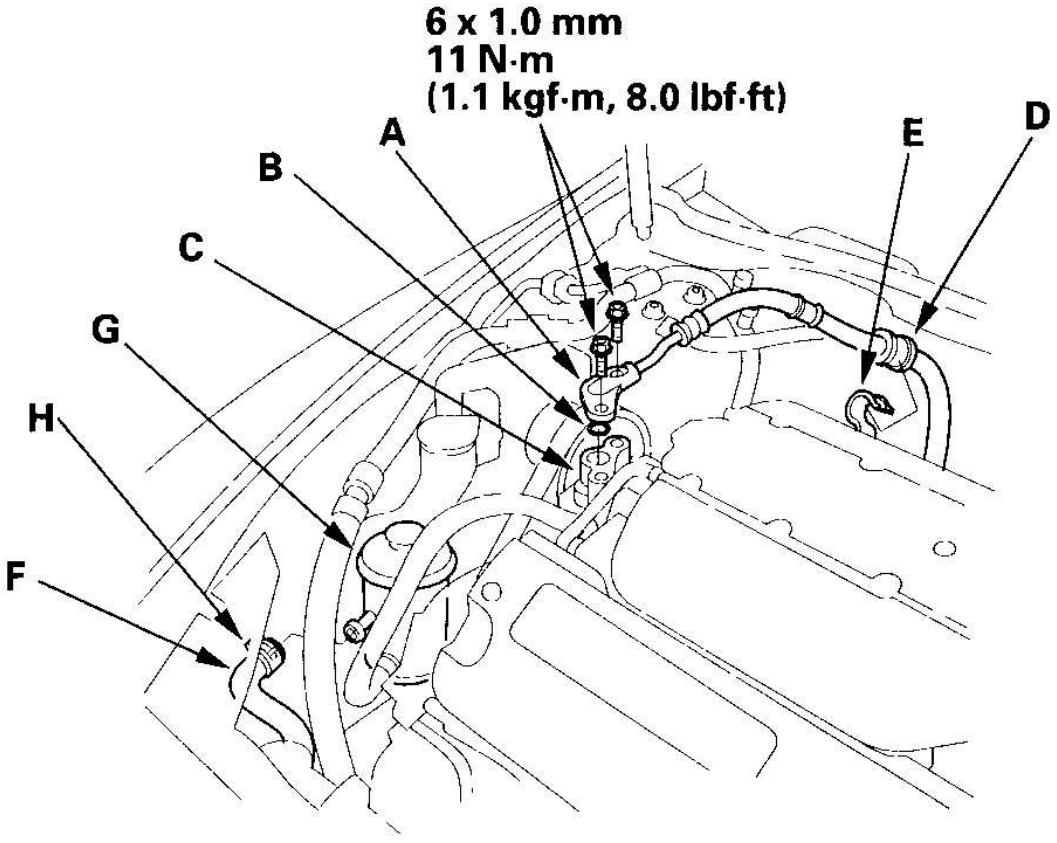


Fig. 64: Identifying Power Steering Pump Outlet Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

32. Connect the return the hose (F) to the power steering fluid reservoir (G), then secure the hose with its clamp (H).
33. Install the transmission upper mounting bolts.

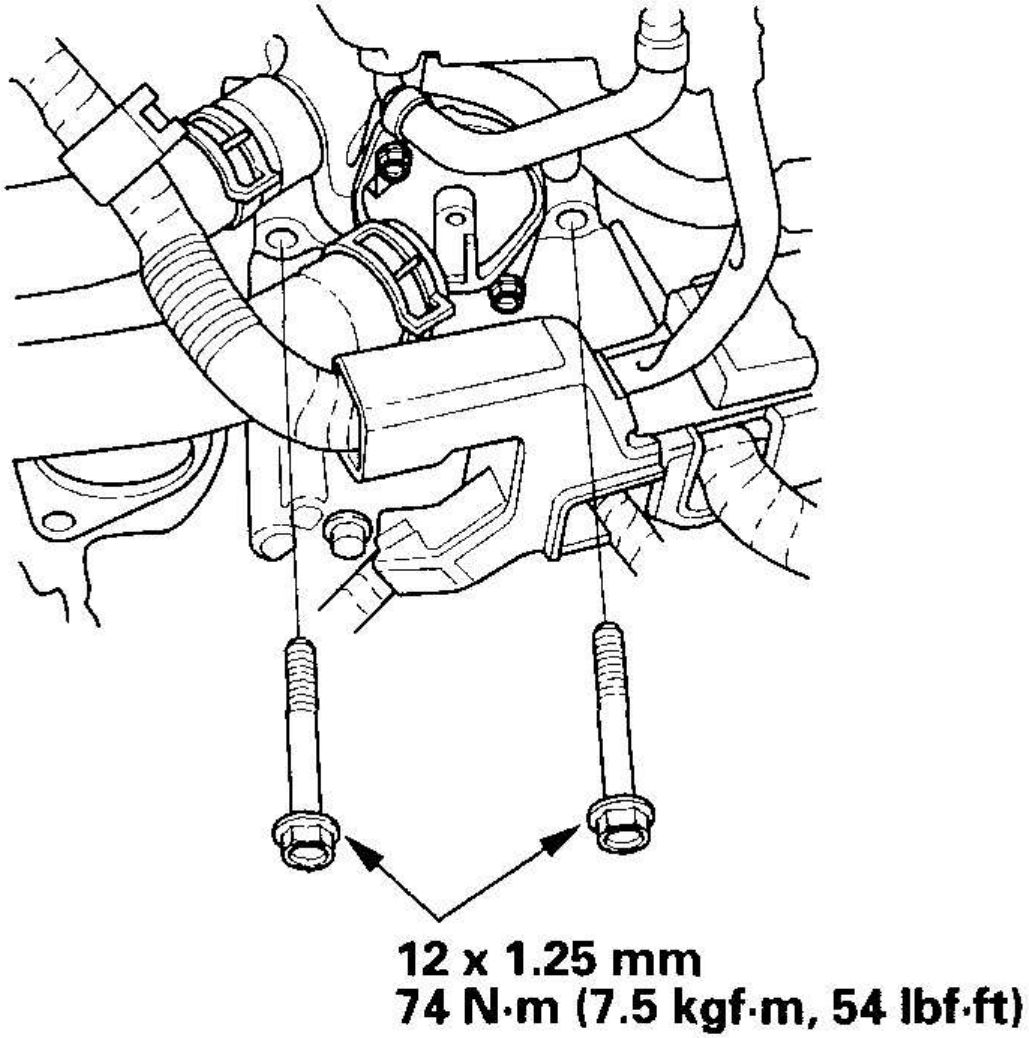


Fig. 65: Identifying Transmission Upper Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

34. Install the rear mount stop.

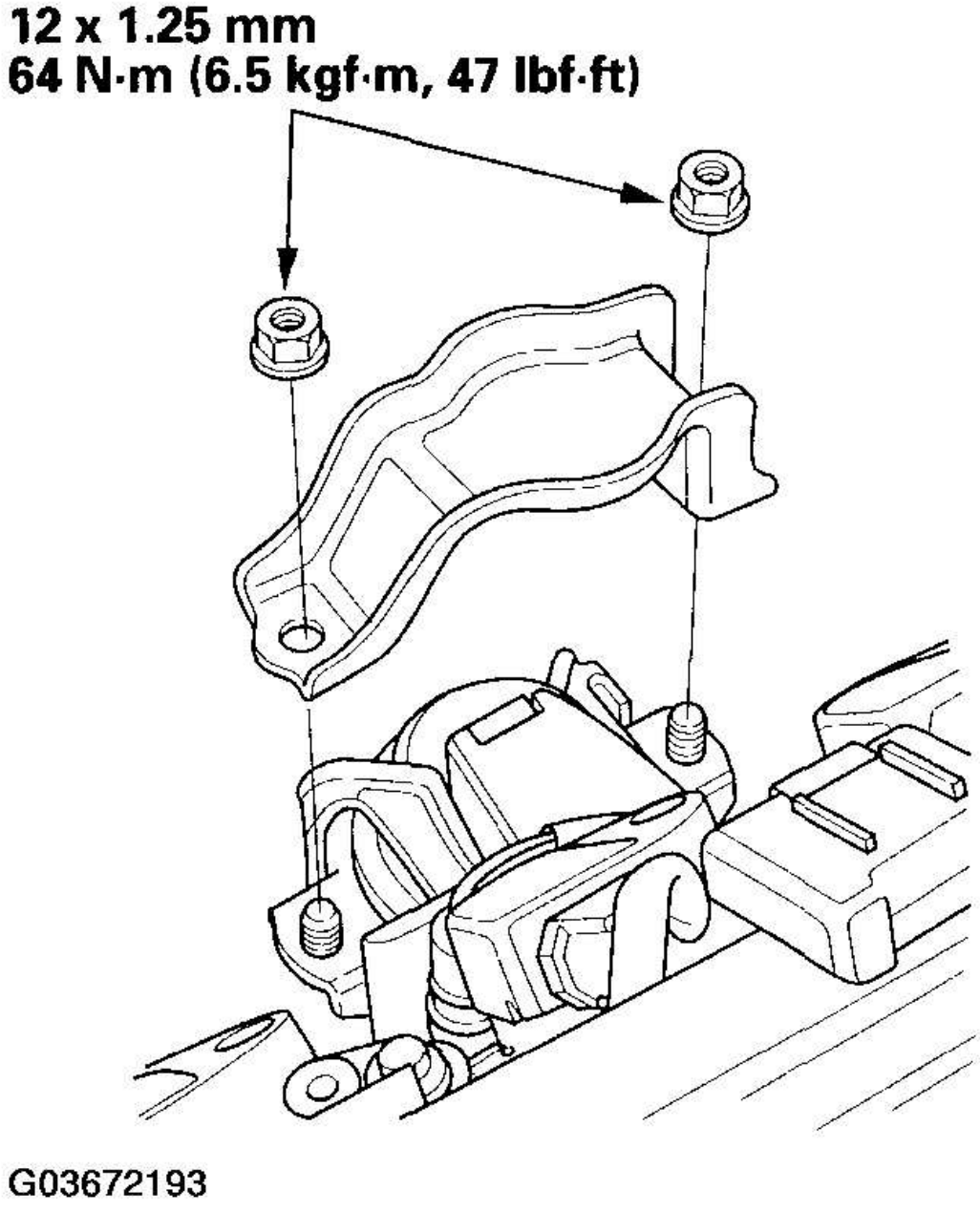


Fig. 66: Identifying Rear Mount Stop
Courtesy of AMERICAN HONDA MOTOR CO., INC.

35. Install the engine front mount mounting bolt (A) and the front mount stop (B).

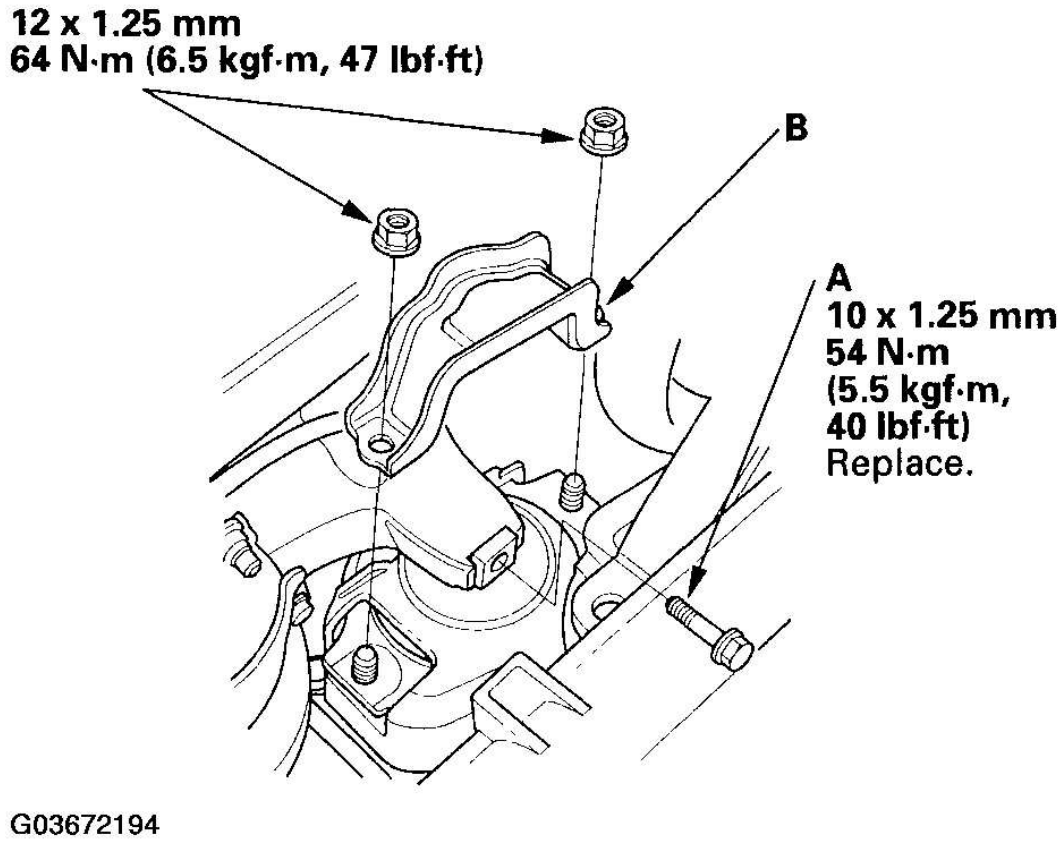


Fig. 67: Identifying Engine Front Mount Mounting Bolt And Front Mount Stop
Courtesy of AMERICAN HONDA MOTOR CO., INC.

36. Apply super high temp urea grease (P/N 08798-9002) to the end of the cylinder rod. Install the slave cylinder. Be careful not to bend the clutch line.

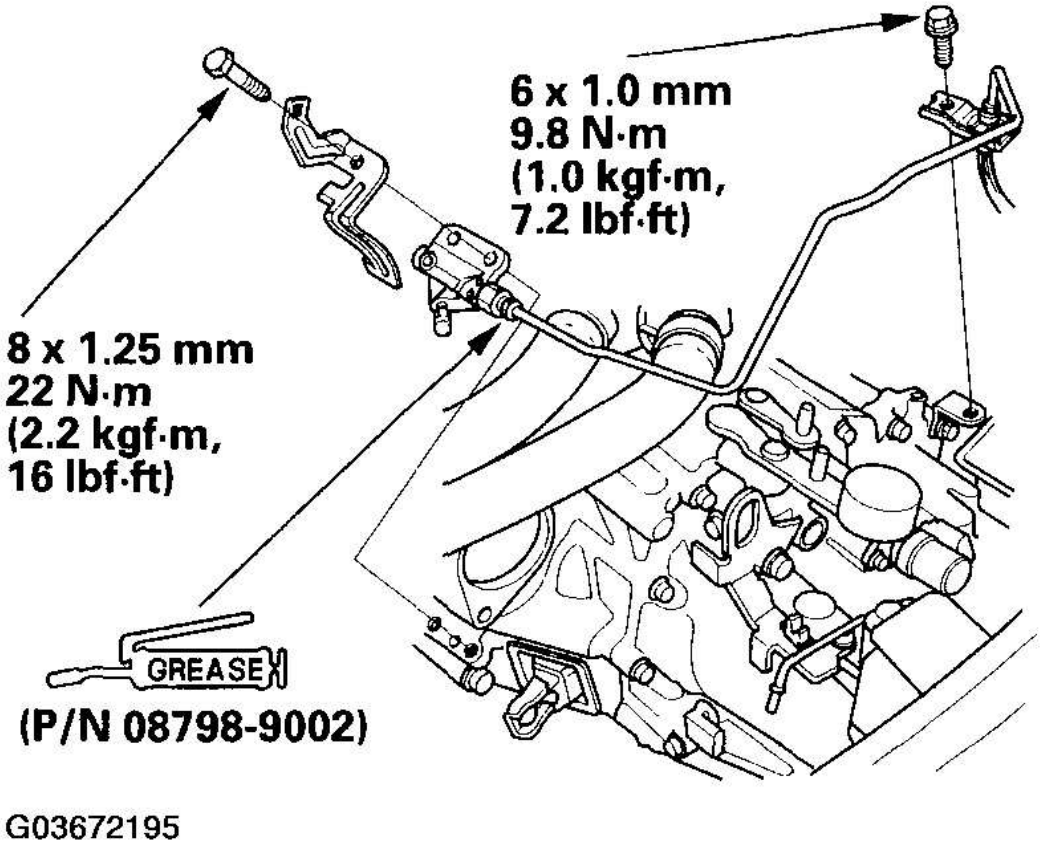


Fig. 68: Applying Super High Temp Urea Grease To End Of Cylinder Rod
Courtesy of AMERICAN HONDA MOTOR CO., INC.

37. Install the cable bracket (A) and cables (B).

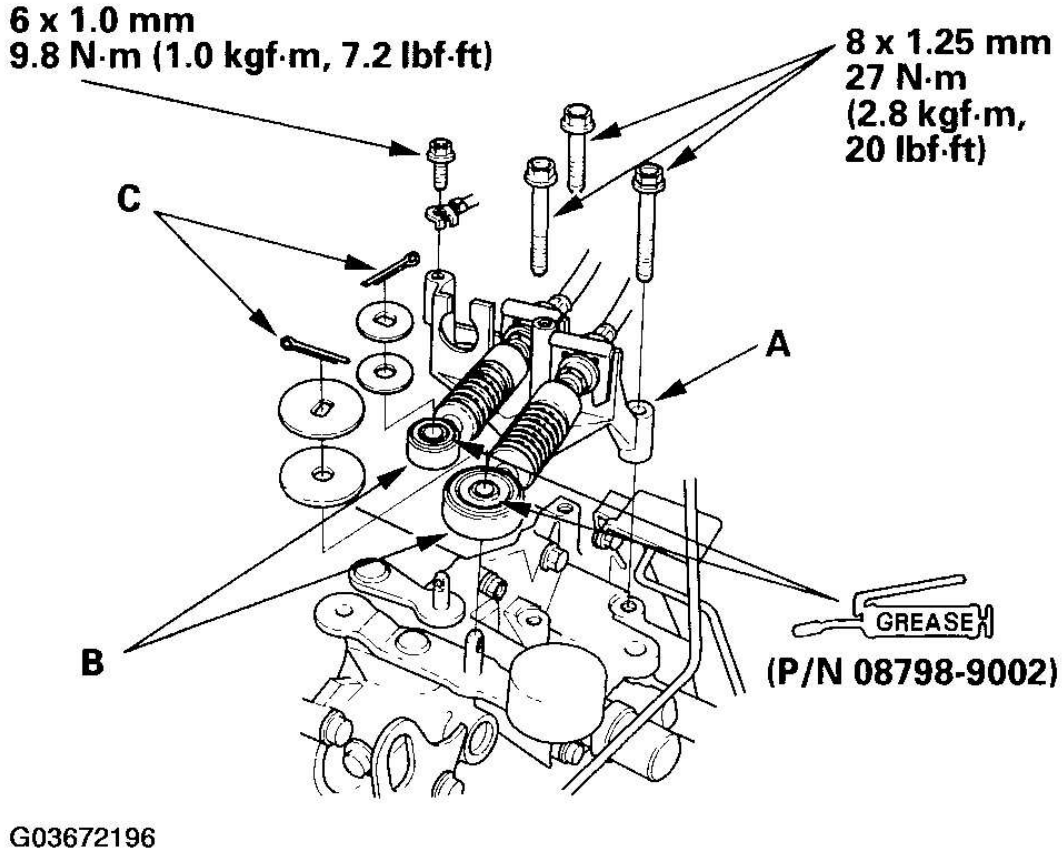


Fig. 69: Install Cable Bracket And Cables
Courtesy of AMERICAN HONDA MOTOR CO., INC.

38. Apply a light coat of super high temp urea grease (P/N 08798-9002) to the cable ends, and install new cotter pins (C).
39. Install the harness bracket.

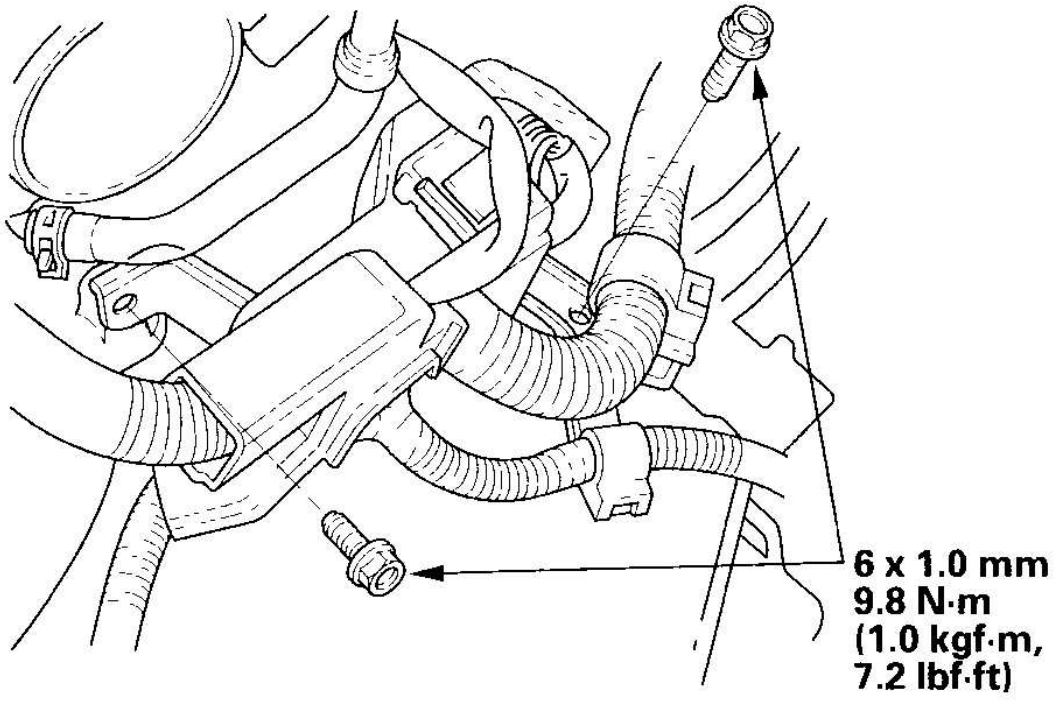


Fig. 70: Identifying Harness Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

40. Install the starter motor (A), then connect the starter cable (B).

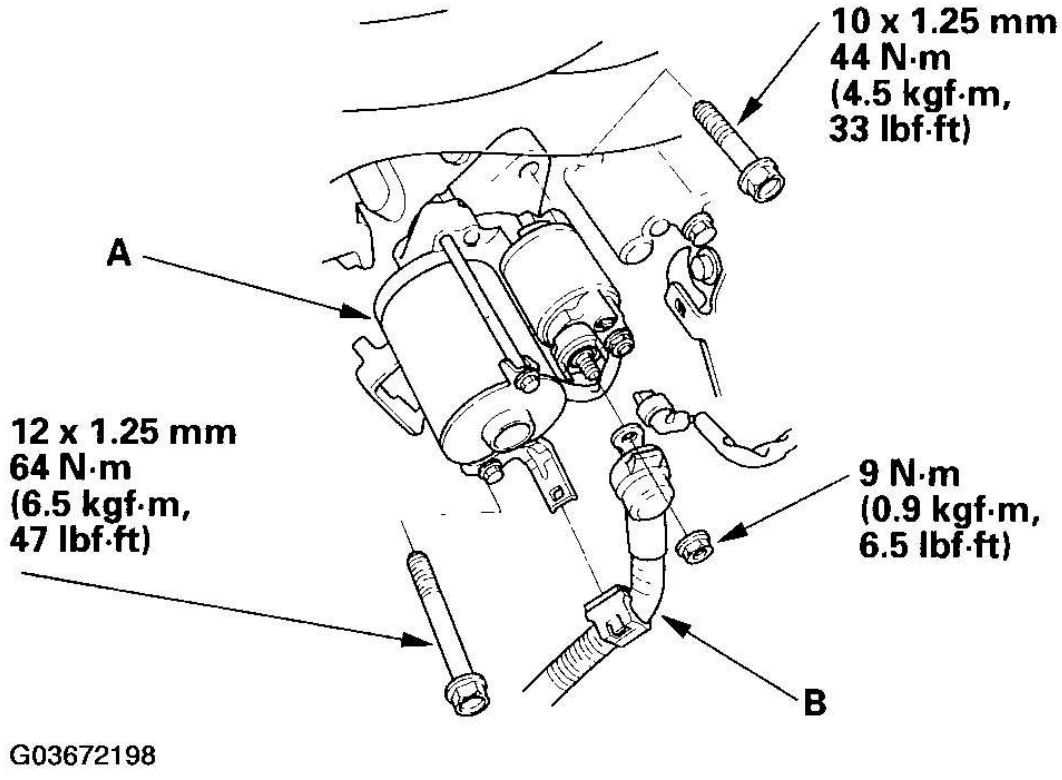
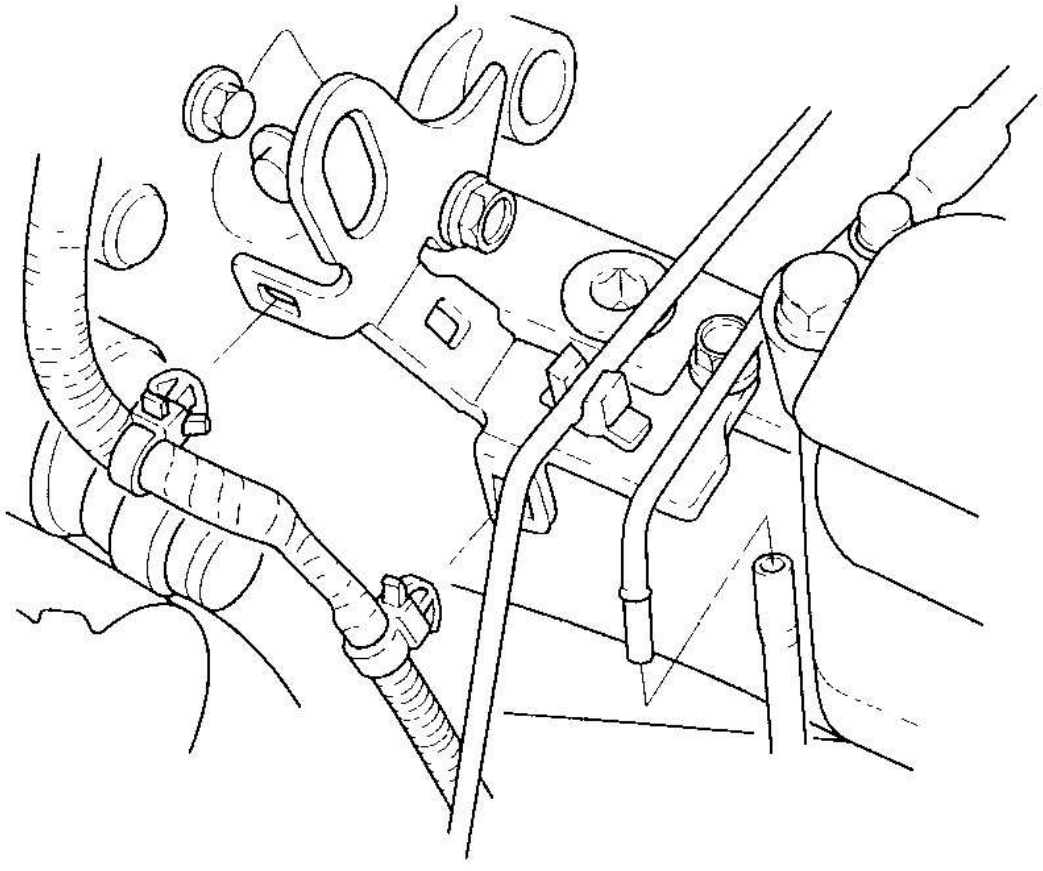


Fig. 71: Identifying Starter Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

41. Install the harness clips.



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Fig. 72: Identifying Harness Clips
Courtesy of AMERICAN HONDA MOTOR CO., INC.

42. Connect the output shaft (countershaft) speed sensor connector (A) and input shaft (mainshaft) speed sensor connector (B).

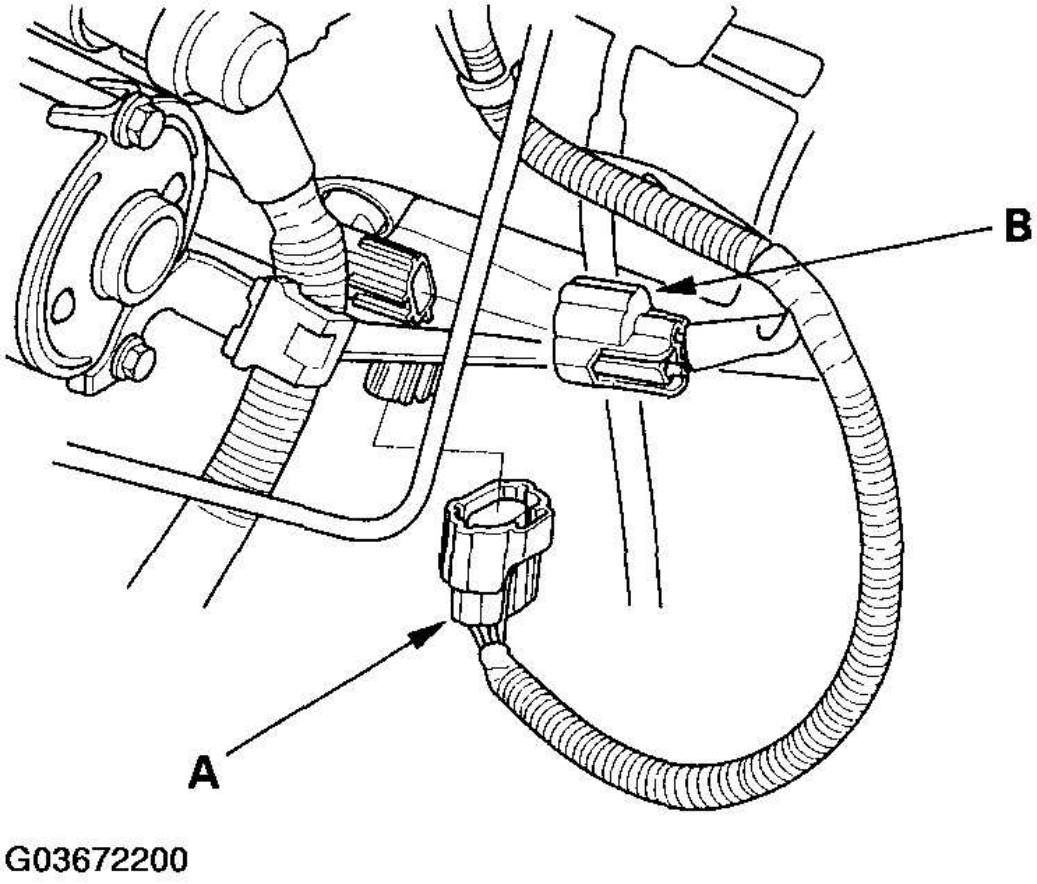


Fig. 73: Connecting Output Shaft Speed Sensor Connector And Input Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

43. Connect the back-up light switch connector (A) and reverse lockout solenoid connector (B).

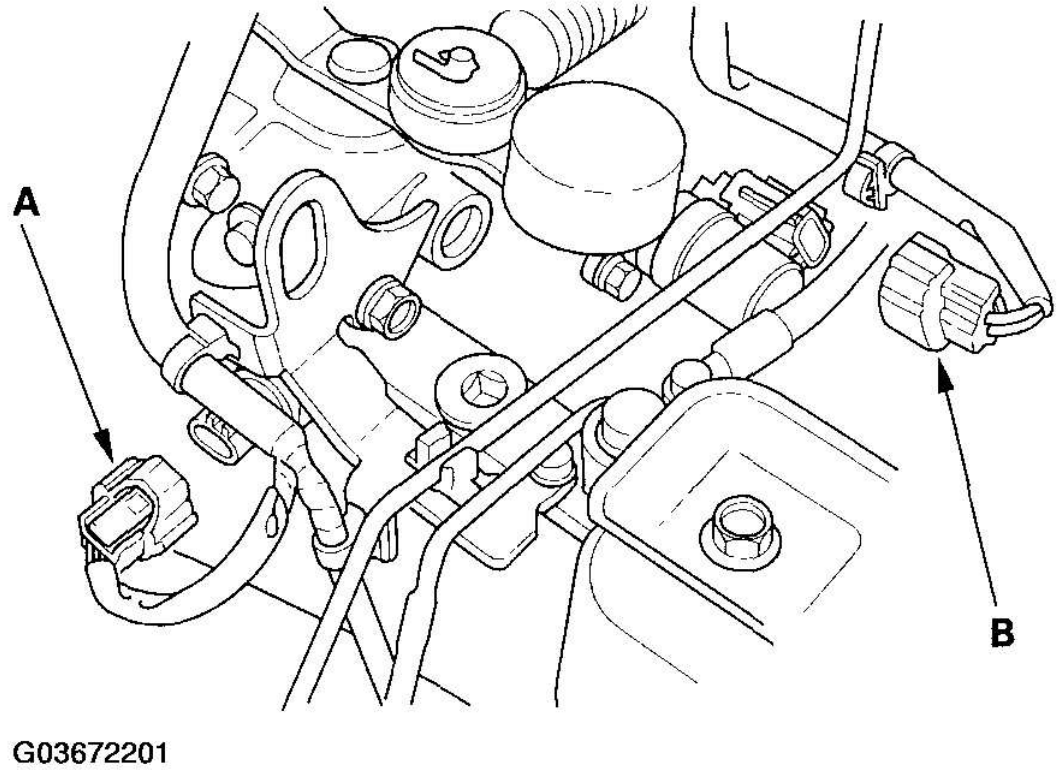


Fig. 74: Connecting Back-Up Light Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

44. Install the air cleaner housing (see **AIR CLEANER ELEMENT INSPECTION/ REPLACEMENT**).
45. Install the battery base.

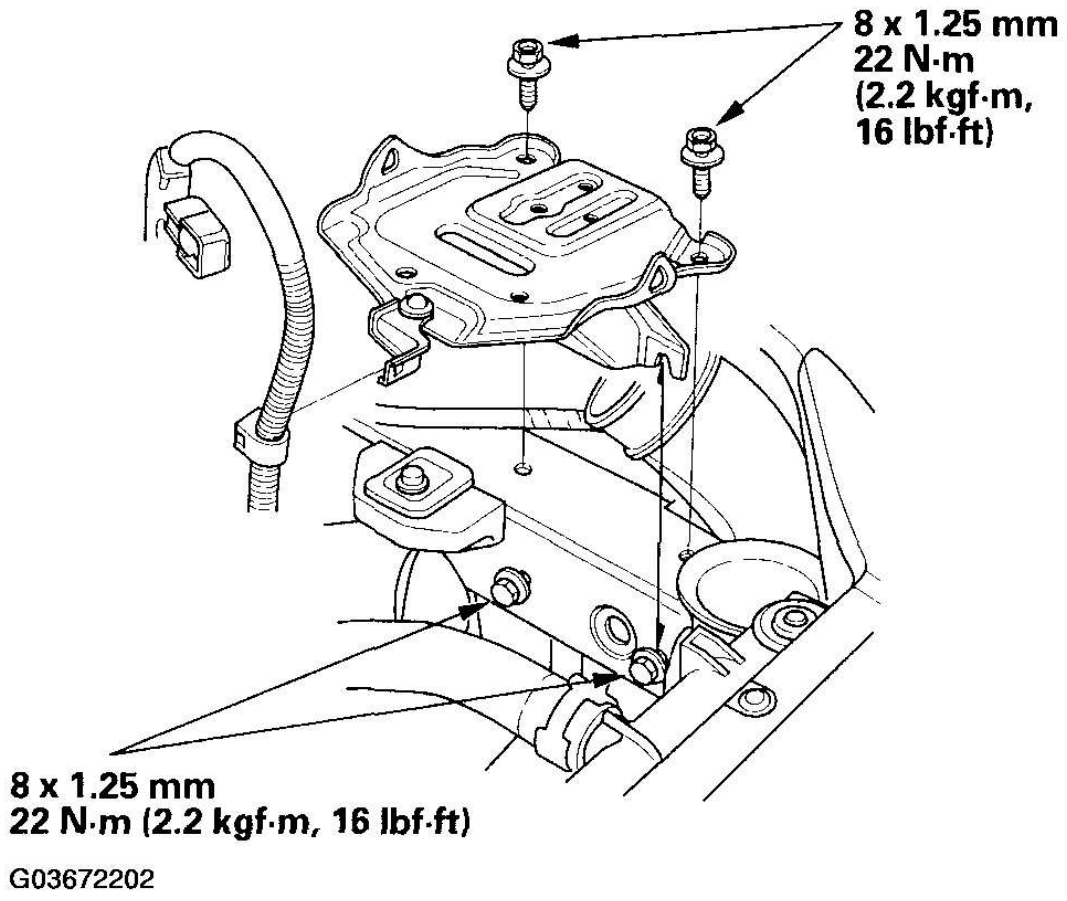


Fig. 75: Identifying Battery Base
Courtesy of AMERICAN HONDA MOTOR CO., INC.

46. Reinstall the support strut bracket with the bolts to the proper locations on both sides of the hood.

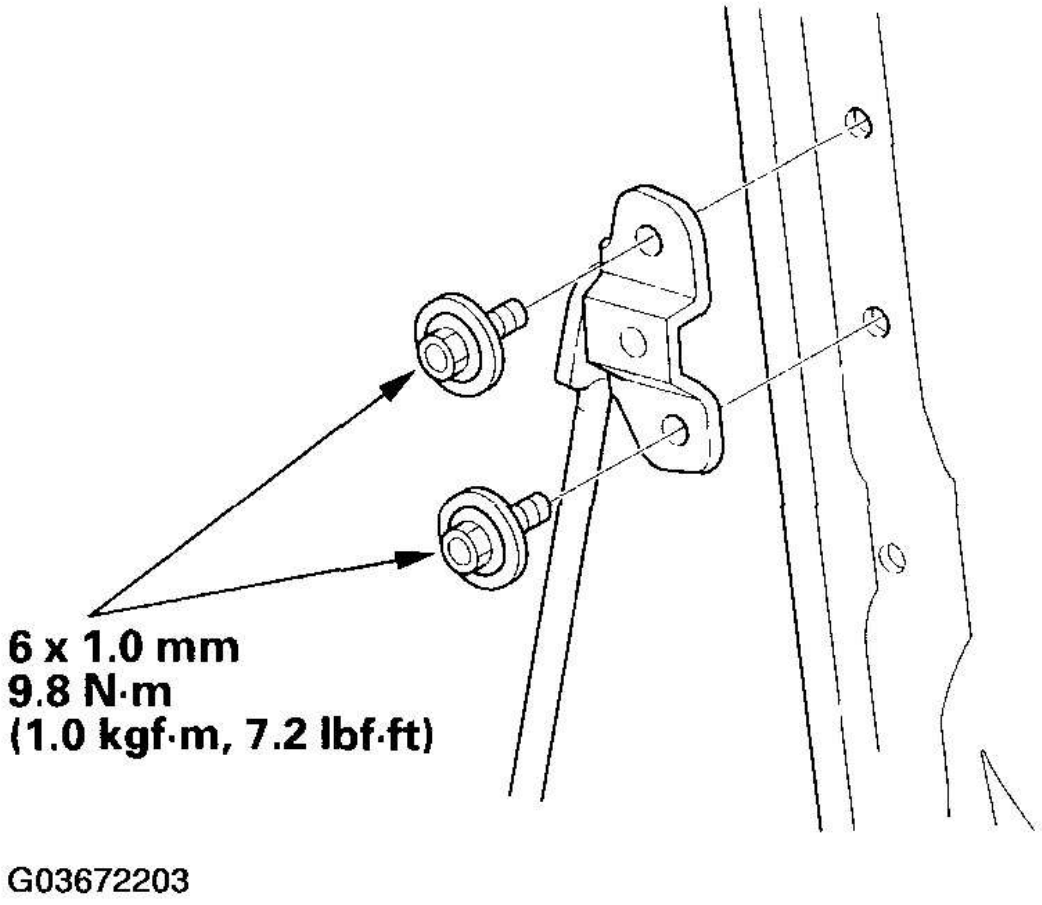


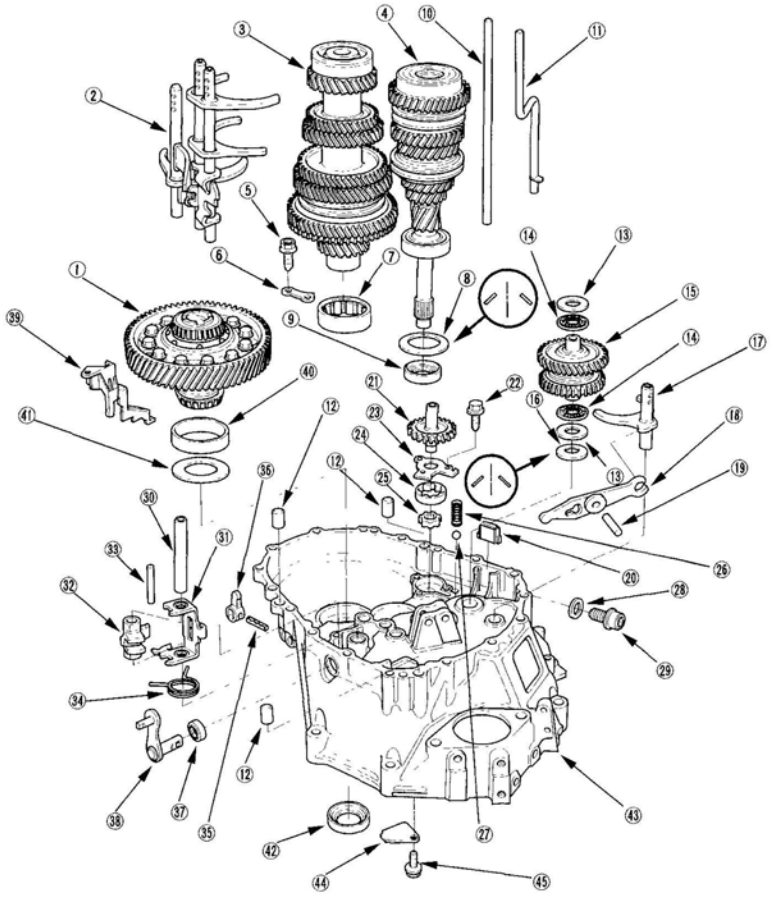
Fig. 76: Identifying Support Strut Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

47. Remove the steering wheel, refer to **STEERING WHEEL REMOVAL** .
48. Center the cable reel by first rotating it clockwise until it stops. Then rotate it counterclockwise (about three full turns) until the arrow mark on the label points straight up.
49. Reinstall the steering wheel, refer to **STEERING WHEEL INSTALLATION** .
50. Fill the power steering fluid reservoir with fluid to the upper level line.
51. Install the battery. Connect the positive cable to the battery first, then connect the negative cable.

52. Start the engine, and run it at fast idle, then turn the steering wheel from lock-to-lock several times to bleed air from the system.
53. Recheck the fluid level, and refill if necessary.
54. Check the front wheel alignment, refer to **WHEEL ALIGNMENT** .
55. Check the steering wheel spoke angle. If the steering spoke angles to the right and left are not equal (steering wheel and rack are not centered), correct the engagement of the joint/pinion shaft serrations, then adjust the front toe by turning the tie-rod ends if necessary. If you need to correct the engagement of the joint/pinion shaft, repeat steps 52 through 54.
56. Test-drive the vehicle.
57. Check the clutch operation.
58. Enter the anti-theft code for the radio and navigation system, then enter the customer's radio station and XM radio channel presets.
59. Do the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

TRANSMISSION DISASSEMBLY

Exploded View-Clutch Housing

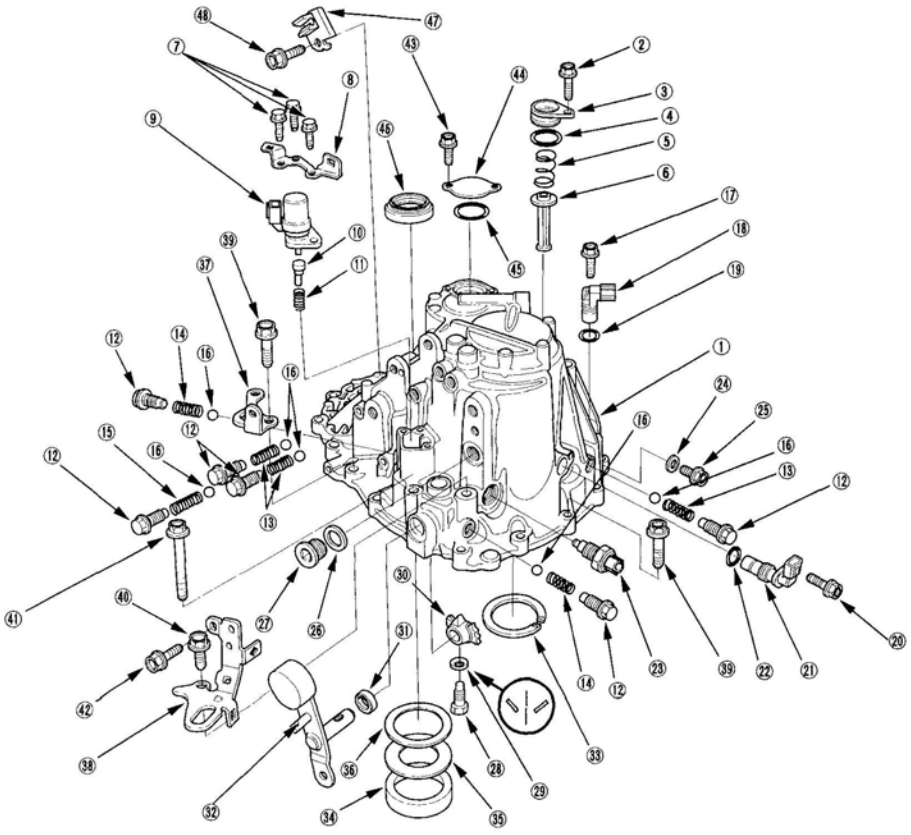


① DIFFERENTIAL ASSEMBLY
② SHIFT FORK ASSEMBLY
③ COUNTERSHAFT ASSEMBLY
④ MAINSHAFT ASSEMBLY
⑤ 6 mm FLANGE BOLT
12 N·m (1.2 kgf·m, 8.7 lbf·ft)
⑥ BEARING SET PLATE
⑦ NEEDLE BEARING
⑧ 64 mm SPRING WASHER
⑨ 28 x 43 x 7 mm OIL SEAL
Replace.
⑩ OIL GUIDE PIPE A
⑪ OIL GUIDE PIPE
⑫ 14 x 20 mm DOWEL PIN
⑬ 20 mm THRUST WASHER
⑭ 20 mm THRUST NEEDLE BEARING
⑮ REVERSE IDLER GEAR SHAFT ASSEMBLY
⑯ 33 mm SPRING WASHER
⑰ REVERSE SHIFT FORK
⑱ REVERSE SHIFT LEVER
⑲ 8 x 50 mm PIN
⑳ MAGNET
㉑ OIL PUMP SHAFT
㉒ 6 mm FLANGE BOLT
12 N·m (1.2 kgf·m, 8.7 lbf·ft)
㉓ OIL PUMP PLATE
㉔ OIL PUMP OUTER ROTOR
㉕ OIL PUMP INNER ROTOR
㉖ RELIEF VALVE SPRING
㉗ STEEL BALL
㉘ 14 mm WASHER
Replace.
㉙ DRAIN PLUG
39 N·m (4.0 kgf·m, 29 lbf·ft)
㉚ SHIFT PIECE SHAFT
㉛ INTERLOCK
㉜ SHIFT PIECE
㉝ 8 x 50 mm PIN
㉞ SELECT RETURN SPRING
㉟ 5 x 22 mm, 3 x 22 mm SPRING PIN
Replace.
㊱ SELECT ARM
㊲ 14 x 20 x 5 mm DUST SEAL
Replace.
㊳ SELECT LEVER
㊴ OIL GUTTER PLATE
㊵ 45 x 80 x 21 mm BEARING OUTER RACE
㊶ 46 x 80 x 1 mm SPACER
㊷ 35 x 54 x 8 mm OIL SEAL
Replace.
㊸ CLUTCH HOUSING
㊹ BREATHER PLATE
㊺ 6 mm FLANGE BOLT
12 N·m (1.2kgf·m, 8.7 lbf·ft)

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Fig. 77: Exploded View-Clutch Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Exploded View-Transmission Housing



① TRANSMISSION HOUSING
② 6 mm FLANGE BOLT
12 N·m (1.2kgf·m, 8.7 lbf·ft)
③ STRAINER COVER
④ O-RING
Replace.
⑤ STRAINER SET SPRING
⑥ OIL PUMP STRAINER
⑦ 6 mm FLANGE BOLT
12 N·m (1.2 kgf·m, 8.7 lbf·ft)
⑧ TRANSMISSION HARNESS STAY
⑨ REVERSE LOCKOUT SOLENOID
⑩ SELECT LOCK PIN
⑪ SELECT LOCK PIN RETURN SPRING
⑫ SET SCREW
22 N·m (2.2 kgf·m, 16 lbf·ft)
⑬ 27.4 mm SPRING (3)
⑭ 22.0 mm SPRING (2)
⑮ 26.1 mm SPRING (1)
⑯ STEEL BALL
⑰ 6 mm FLANGE BOLT
12 N·m (1.2 kgf·m, 8.7 lbf·ft)
⑱ OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR
⑲ O-RING
Replace.
⑳ 6 mm FLANGE BOLT
12 N·m (1.2 kgf·m, 8.7 lbf·ft)
㉑ INPUT SHAFT (MAINSHAFT) SPEED SENSOR
㉒ O-RING
Replace.
㉓ BACK-UP LIGHT SWITCH
29 N·m (3.0 kgf·m, 22 lbf·ft)
㉔ 6 mm WASHER
Replace.
㉕ OIL CHECK BOLT
12 N·m (1.2 kgf·m, 8.7 lbf·ft)
㉖ 20 mm WASHER
Replace.
㉗ FILLER PLUG
44 N·m (4.5 kgf·m, 33 lbf·ft)
㉘ 8 mm SPECIAL BOLT
29 N·m (3.0 kgf·m, 22 lbf·ft)
㉙ 8 mm SPRING WASHER
㉚ SHIFT ARM
㉛ DUST SEAL
Replace.
㉜ CHANGE LEVER
㉝ 82 mm SHIM
㉞ 45 x 81 x 18 mm BEARING OUTER RACE
㉟ 46 x 81 x 1 mm SPACER
㊱ 81 mm SHIM
㊲ TRANSMISSION HANGER B
㊳ TRANSMISSION HANGER A
㊴ 10 x 42 mm FLANGE BOLT
44 N·m (4.5 kgf·m, 33 lbf·ft)
㊵ 10 x 20 mm FLANGE BOLT
44 N·m (4.5 kgf·m, 33 lbf·ft)
㊶ 10 x 90 mm FLANGE BOLT
44 N·m (4.5 kgf·m, 33 lbf·ft)
㊷ 8 mm FLANGE BOLT
27 N·m (2.8 kgf·m, 20 lbf·ft)
㊸ 6 mm FLANGE BOLT
12 N·m (1.2 kgf·m, 8.7 lbf·ft)
㊹ TRANSMISSION CASE CAP
㊺ O-RING
Replace.
㊻ 40 x 56 x 9 mm OIL SEAL
Replace.
㊼ CLUTCH PIPE BRACKET
㊽ 8 mm FLANGE BOLT
27 N·m (2.8 kgf·m, 20 lbf·ft)

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Fig. 78: Exploded View-Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NOTE: Place the clutch housing on two pieces of wood thick enough to keep the mainshaft from hitting the workbench.

1. Remove the strainer cover (A), O-ring (B), strainer set spring (C), and oil pump strainer (D).

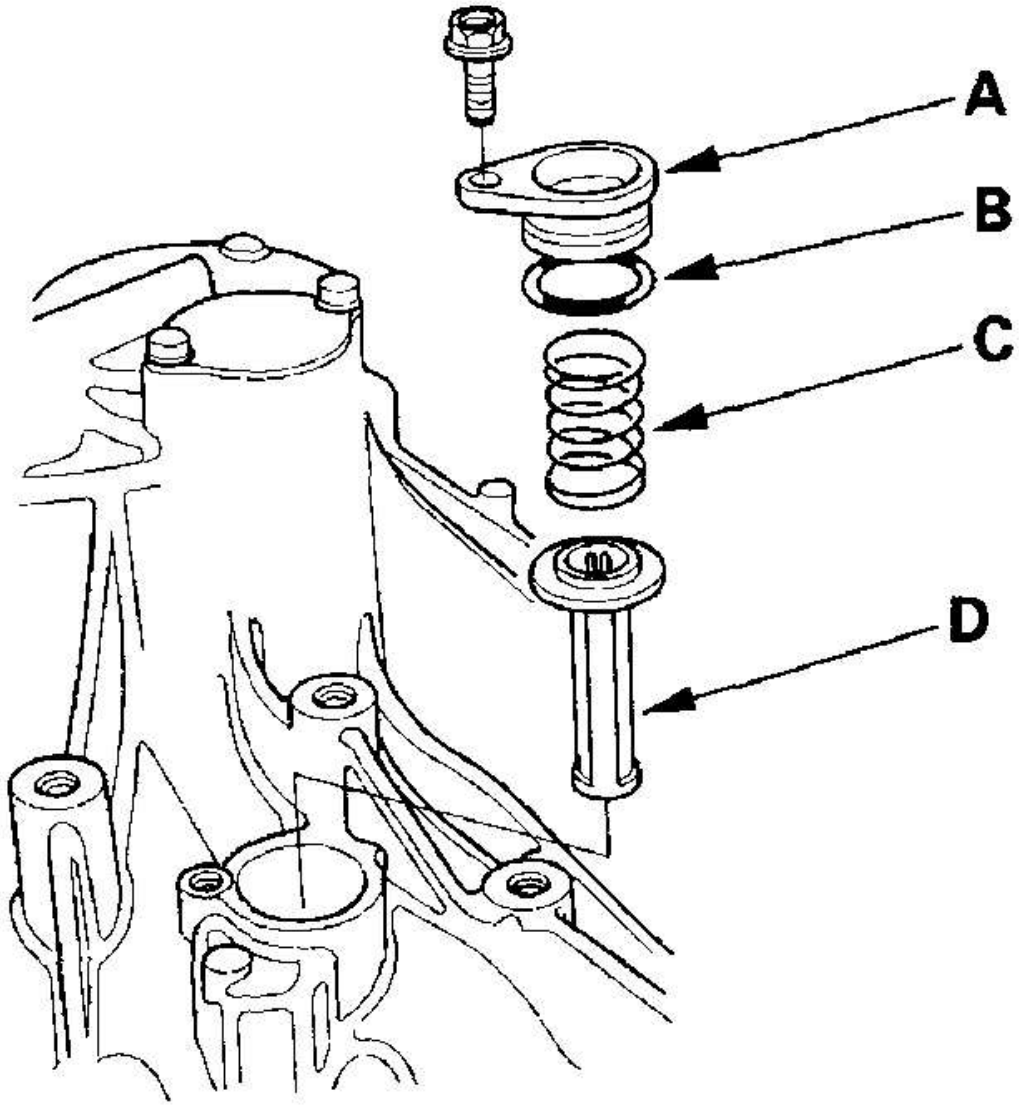


Fig. 79: Identifying Strainer Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the transmission harness stay (A), reverse lockout solenoid (B), and back-up light switch (C).

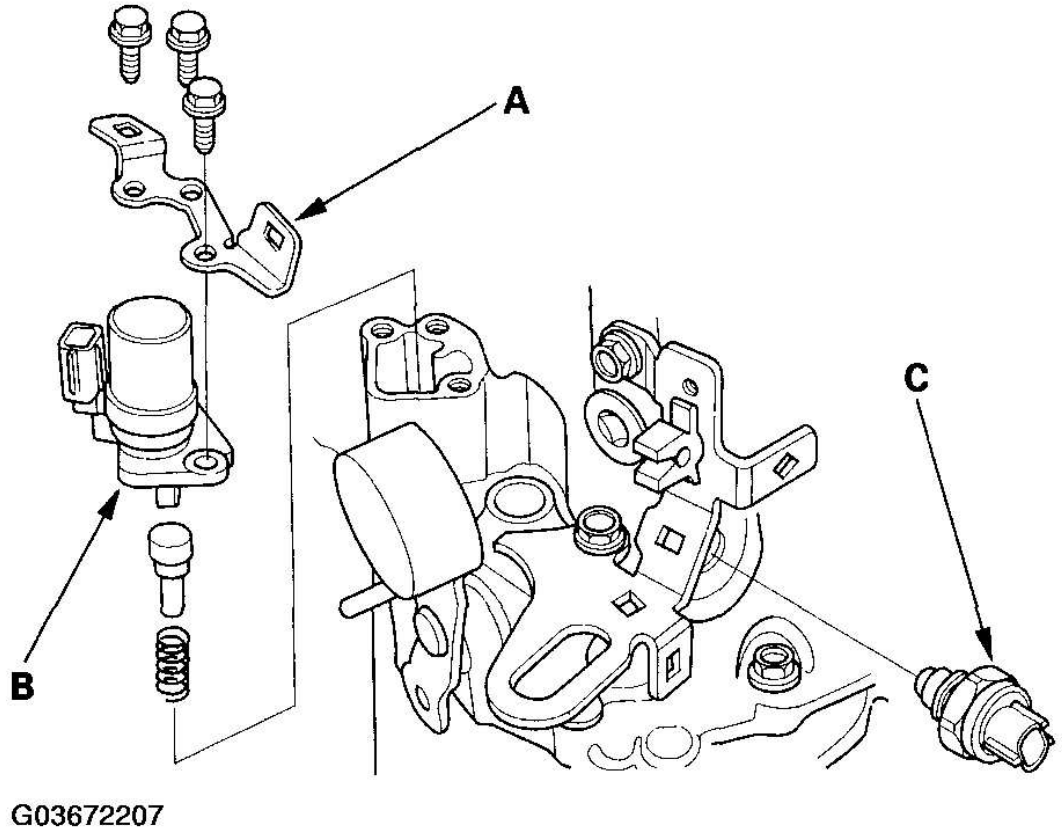


Fig. 80: Identifying Transmission Harness Stay
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the set screws (A), 22.0 mm spring (B), 26.1 mm spring (C), 27.4 mm springs (D), steel balls (E), oil filler plug (F), washer (G), and clutch line bracket (H).

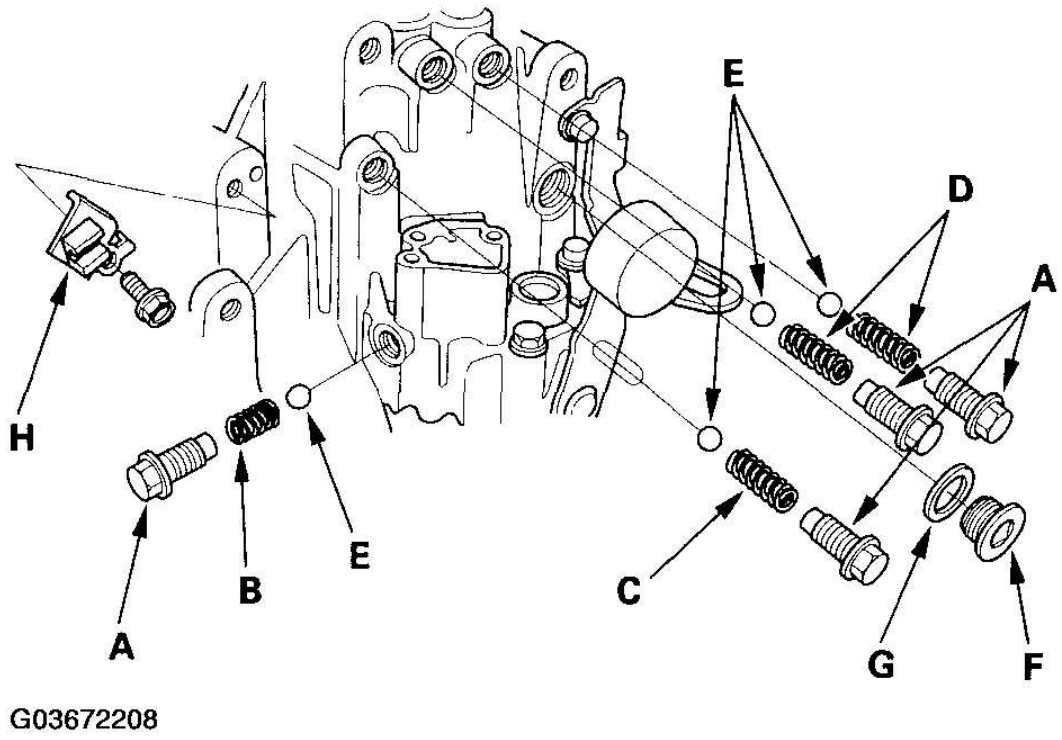


Fig. 81: Identifying Set Screws (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the set screws (A), 22.0 mm spring (B), 27.4 mm spring (C), steel balls (D), output shaft (countershaft) speed sensor (E), input shaft (mainshaft) speed sensor (F), and O-rings (G).

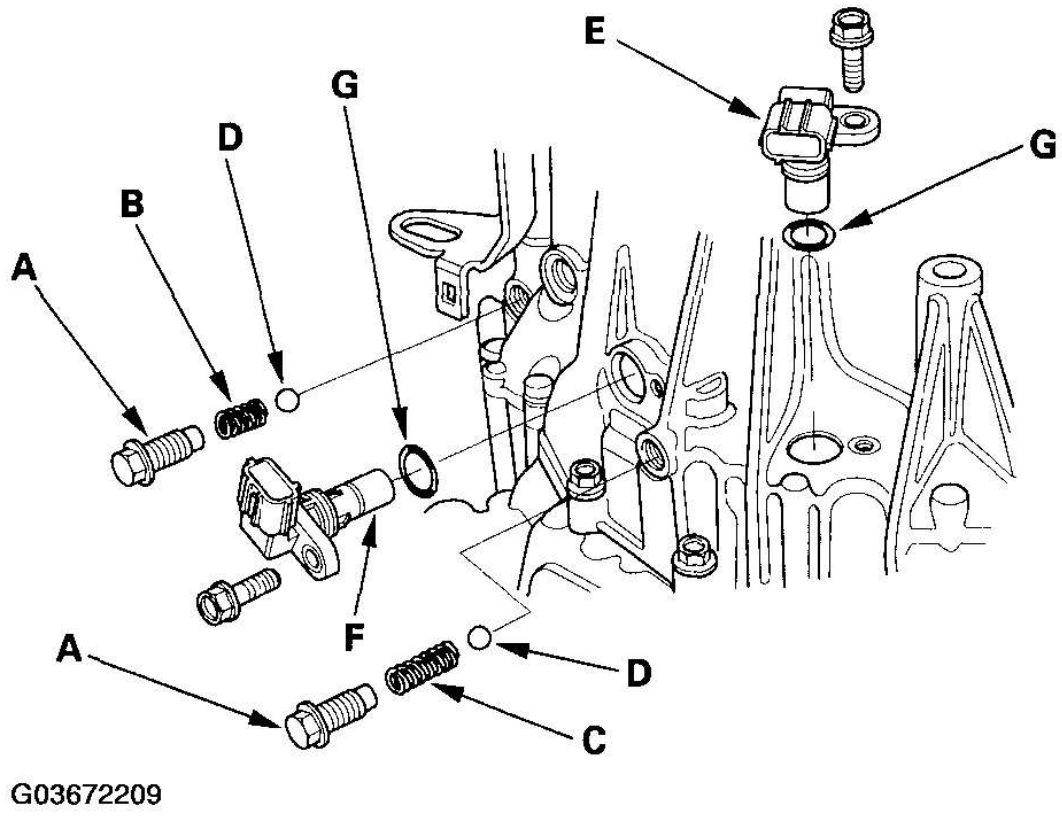


Fig. 82: Identifying Set Screws (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the oil check bolt (A), 6 mm washer (B), drain plug (C), and 14 mm washer (D).

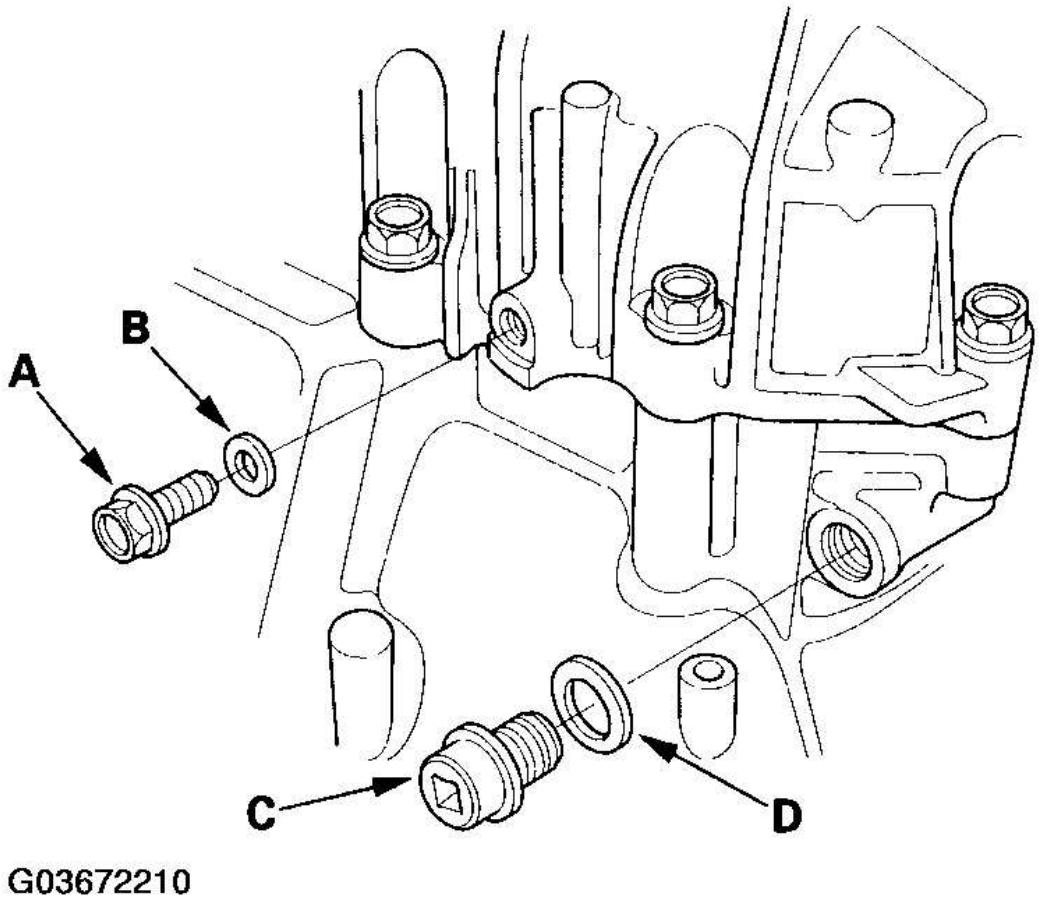


Fig. 83: Identifying Oil Check Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the transmission hanger (A), transmission hanger (B), and 8 mm flange bolt (C). Loosen the 10 mm flange bolts in a crisscross pattern in several steps, then remove them.

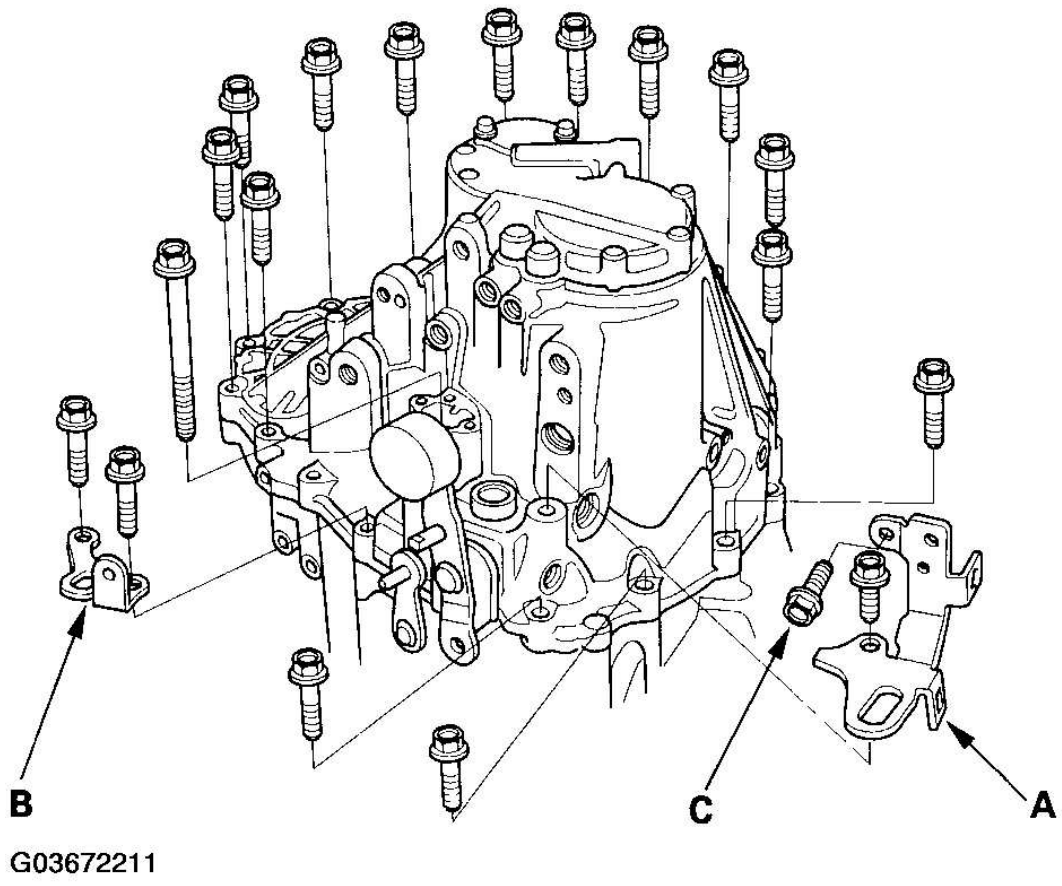


Fig. 84: Identifying Transmission Hanger
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the transmission case cap (A) and 37.7 mm O-ring (B).

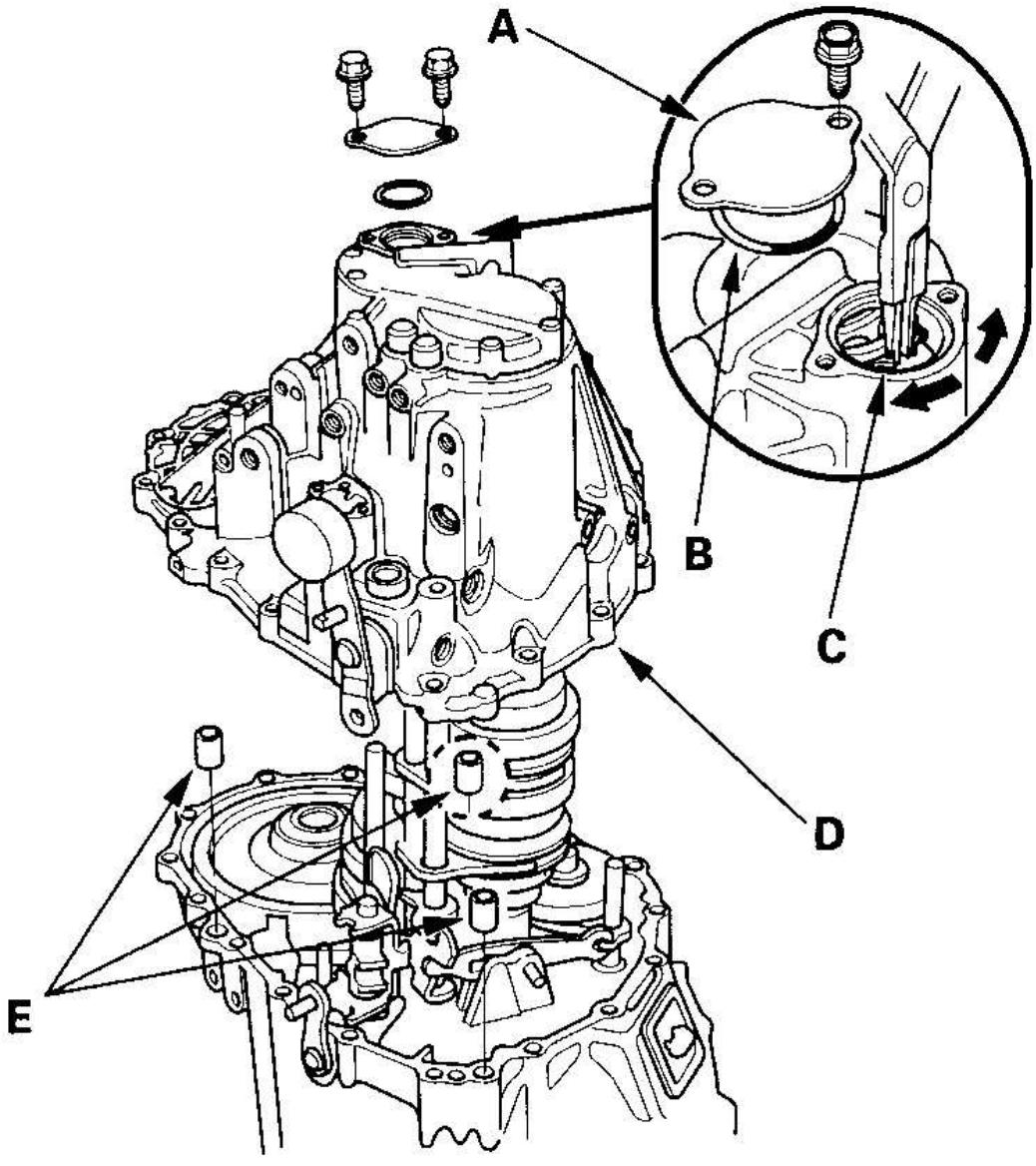


Fig. 85: Identifying Transmission Case Cap
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. While expanding the 75 mm snap ring (C) of the countershaft ball bearing with snap ring pliers, lift the transmission housing (D). Release the snap ring pliers, and remove the transmission housing and 14 x 20 mm dowel pins (E).

9. Remove the oil guide pipe A, oil guide pipe (B), and magnet (C).

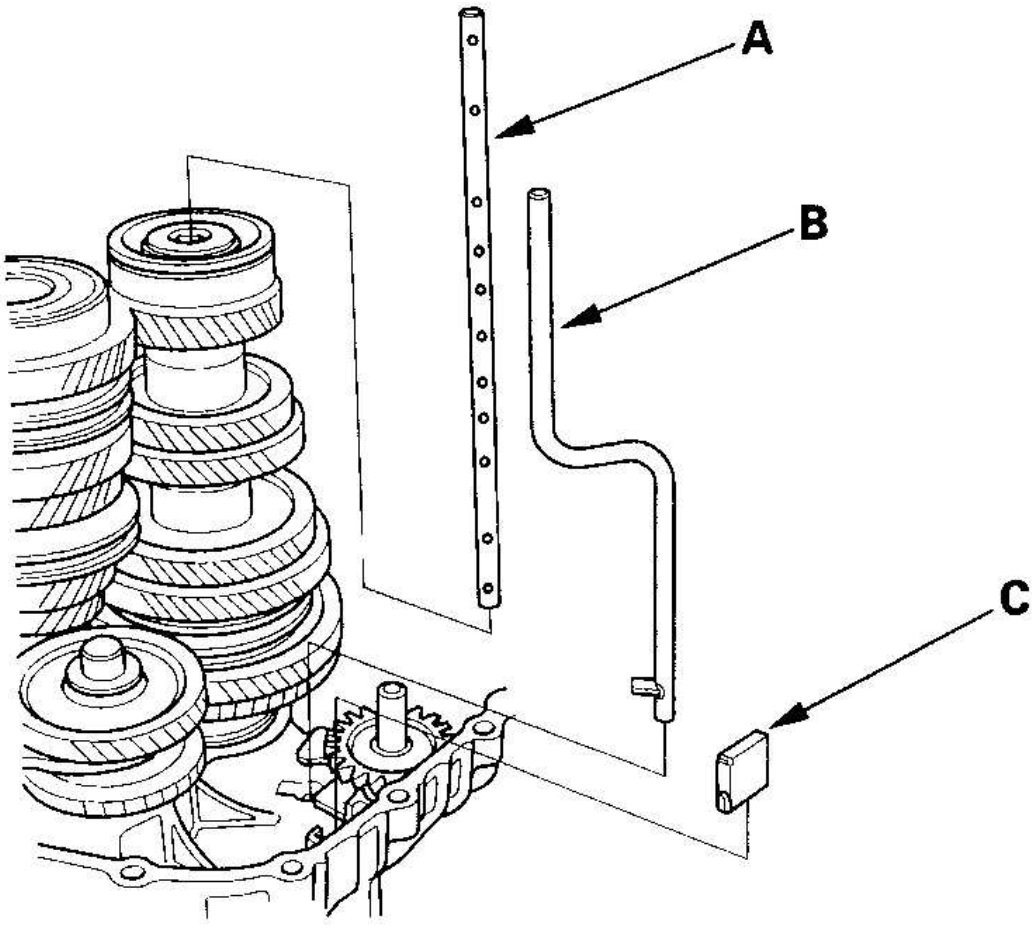


Fig. 86: Identifying Oil Guide Pipe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the pin (A) and reverse shift lever (B).

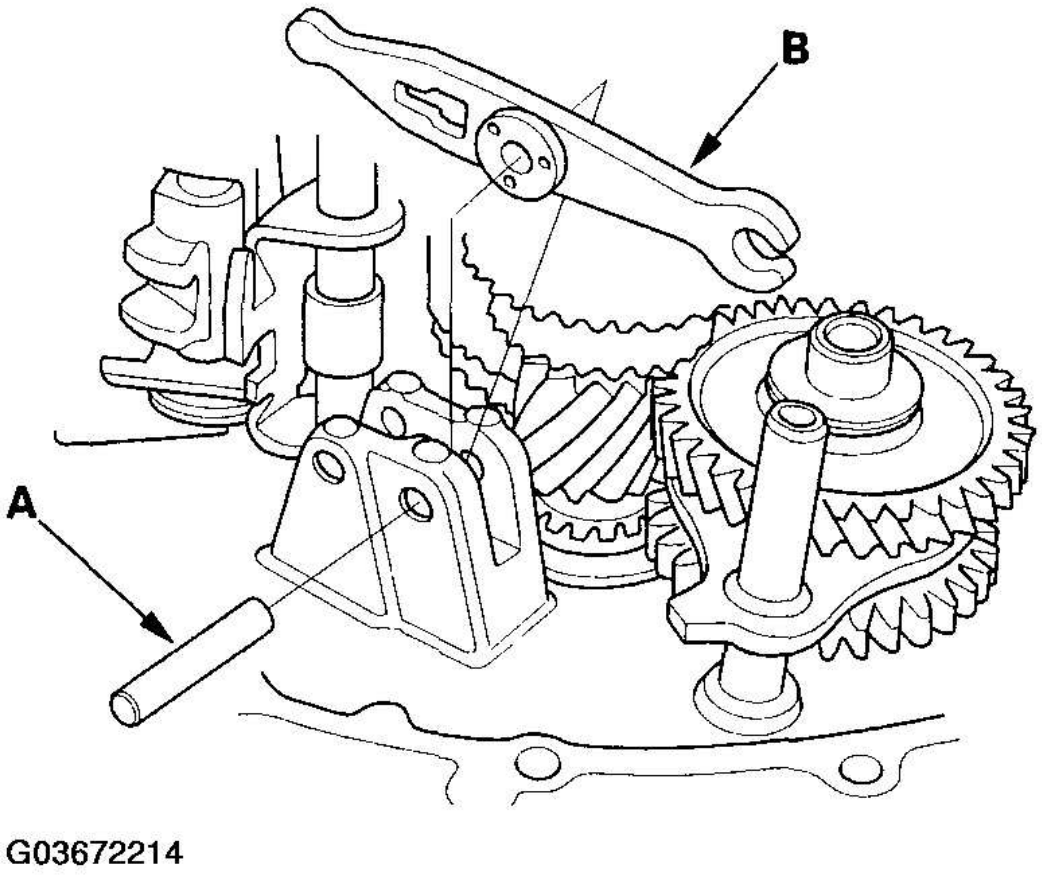


Fig. 87: Identifying Pin And Reverse Shift Lever
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the 20 mm thrust washers (A), 20 mm thrust needle bearings (B), reverse idler gear shaft assembly (C), 33 mm spring washer (D), and reverse shift fork (E) as an assembly.

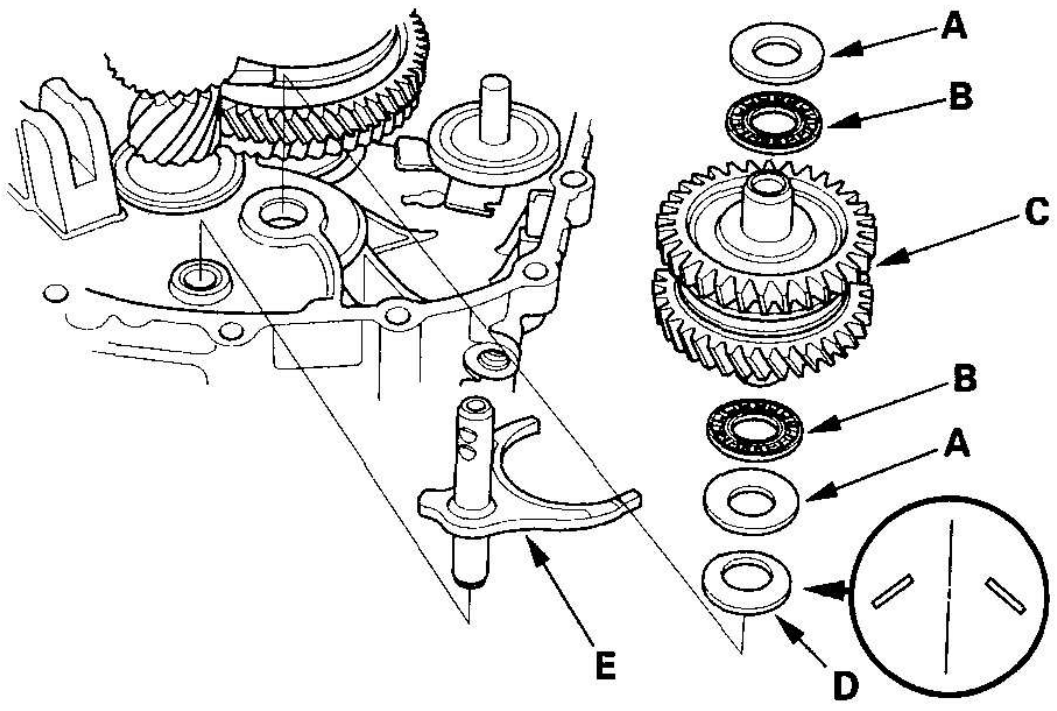


Fig. 88: Identifying Thrust Washers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the pin (A), select return spring (B), shift piece shaft (C), shift piece (D), and interlock (E).

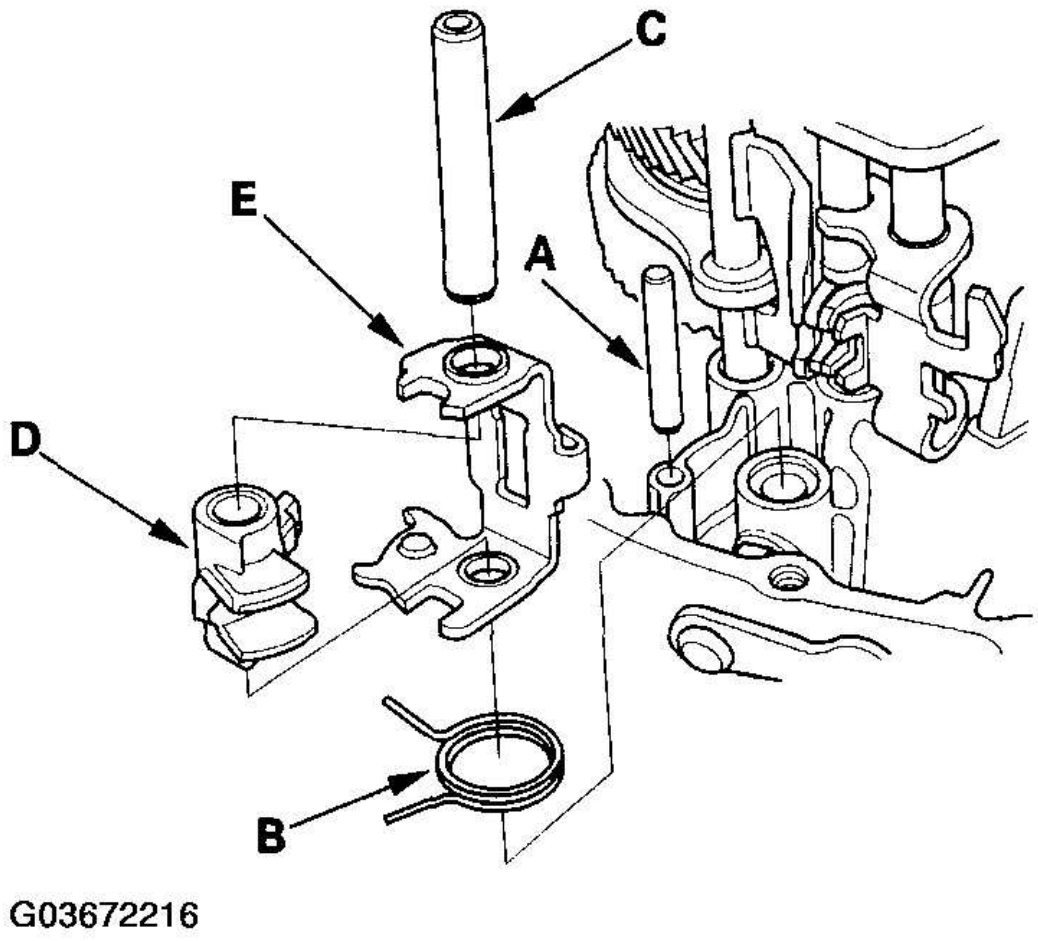


Fig. 89: Identifying Pin
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Remove the 5 mm spring pin, 3 mm spring pin (A), select arm (B), 14 x 20 x 5 mm dust seal (C), and select lever (D).

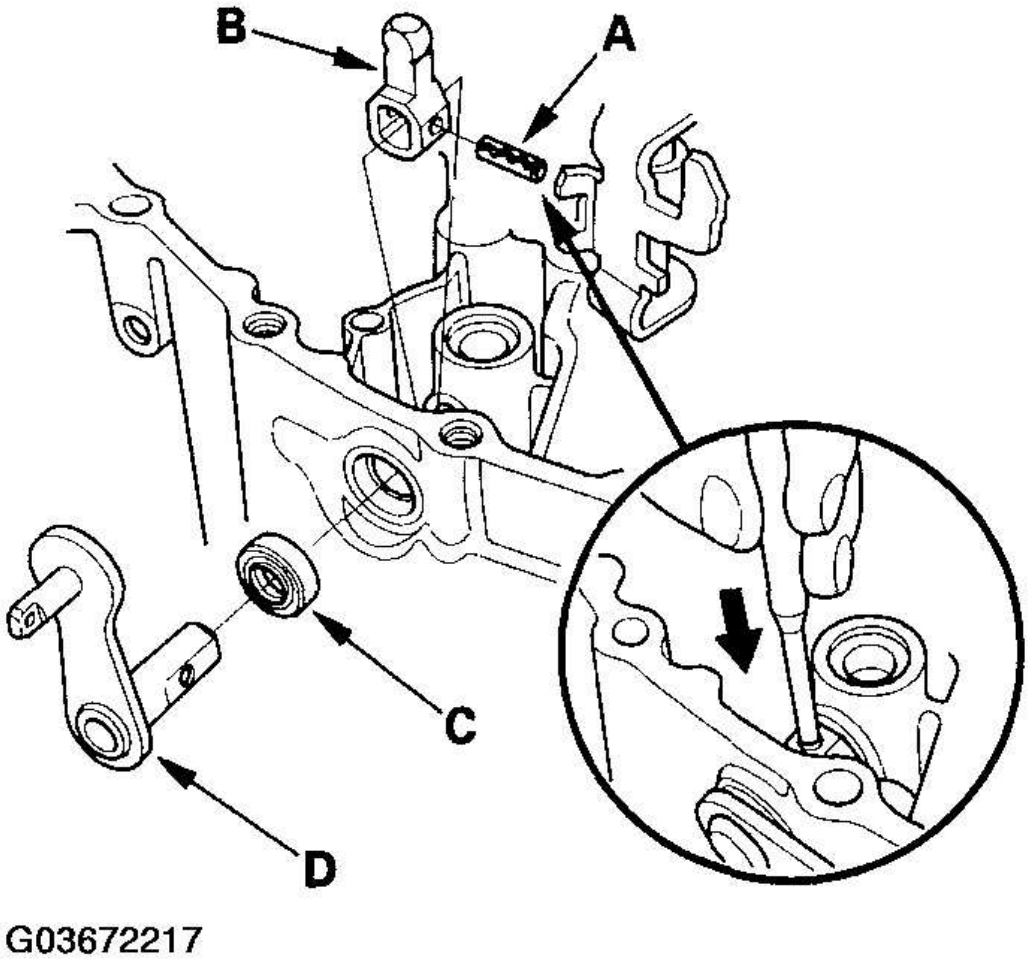


Fig. 90: Identifying Spring Pin
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Apply tape to the mainshaft splines to protect the seal, then remove the mainshaft assembly (A) and countershaft assembly (B) with the shift forks (C) from the clutch housing (D).

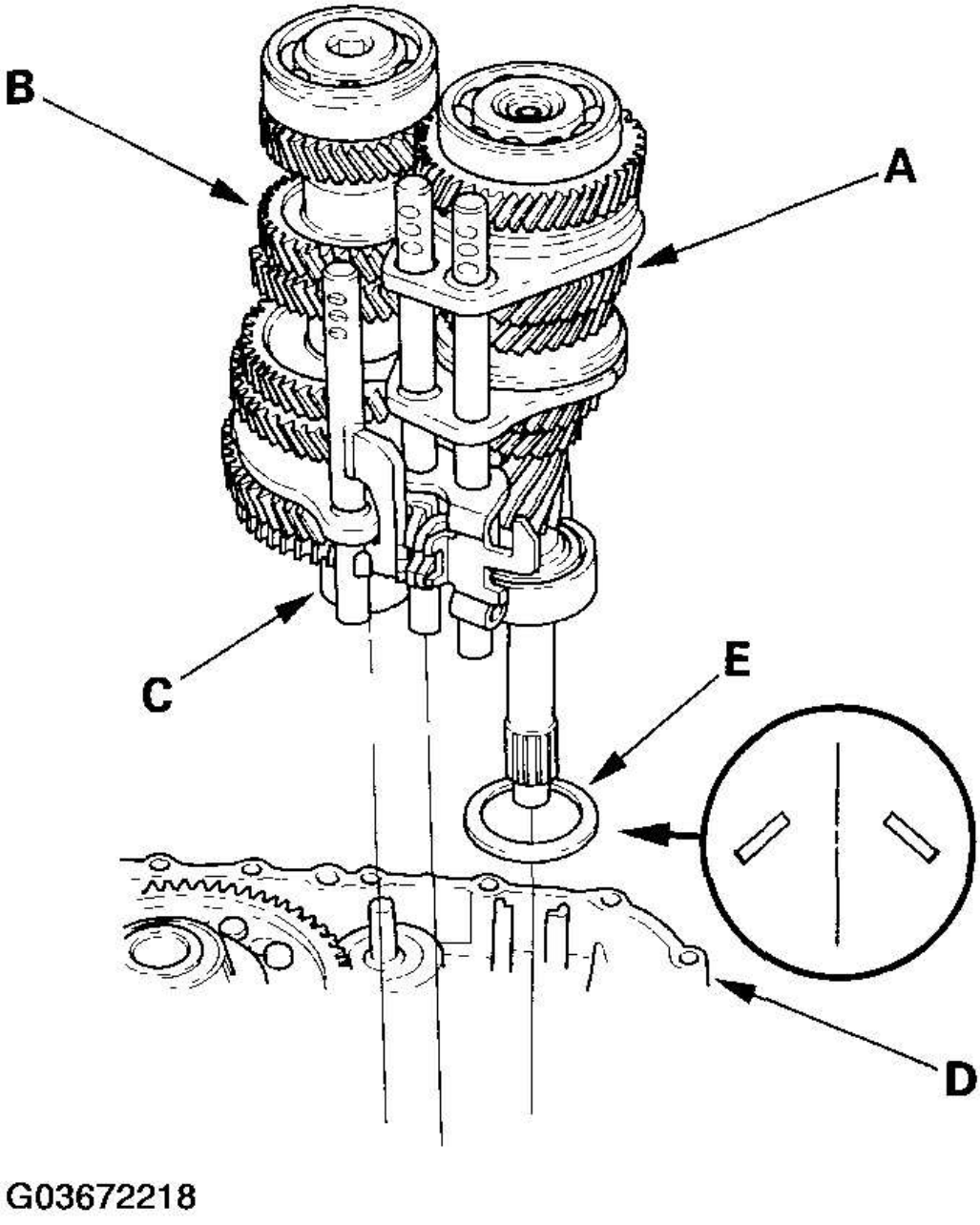


Fig. 91: Identifying Mainshaft And Countershaft Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the 64 mm spring washer (E).

16. Remove the oil pump shaft (A) and differential assembly (B).

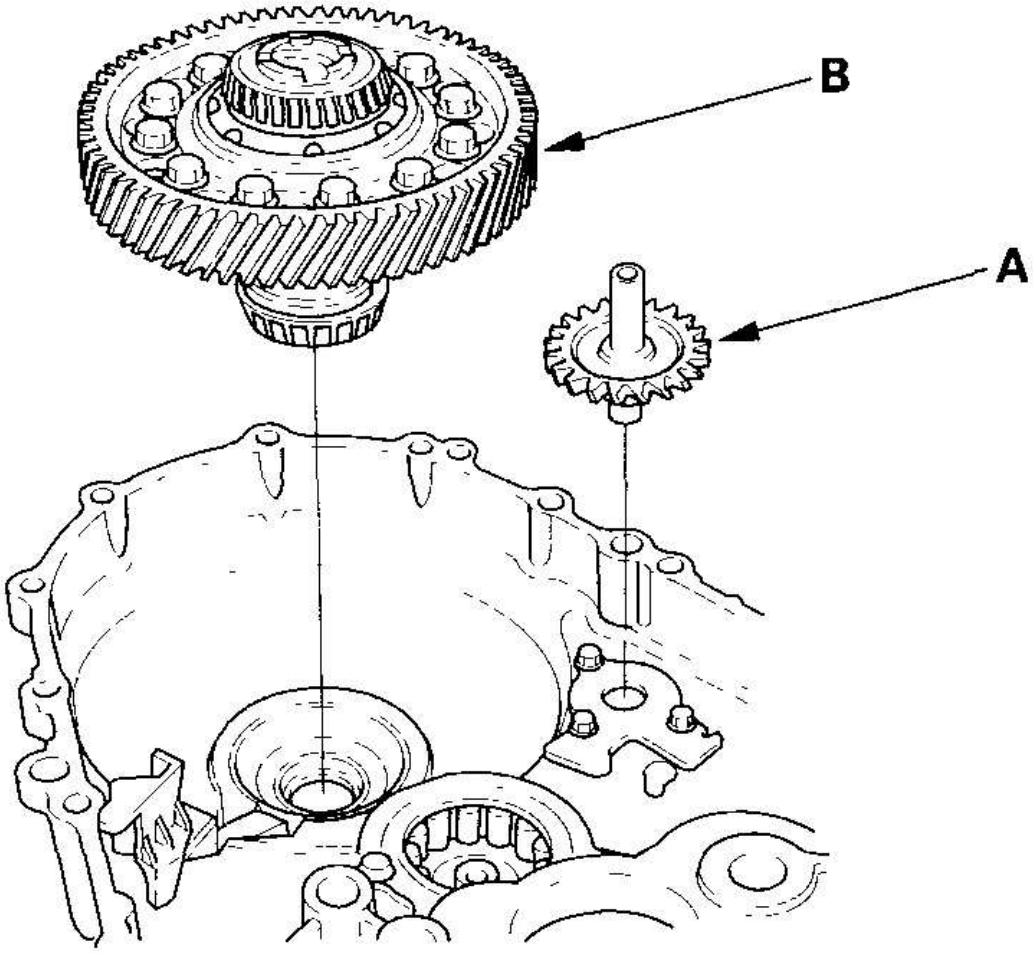


Fig. 92: Identifying Oil Pump Shaft And Differential Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Remove the oil pump plate (A), oil pump inner rotor (B), oil pump outer rotor (C), relief valve spring (D), and steel ball (E).

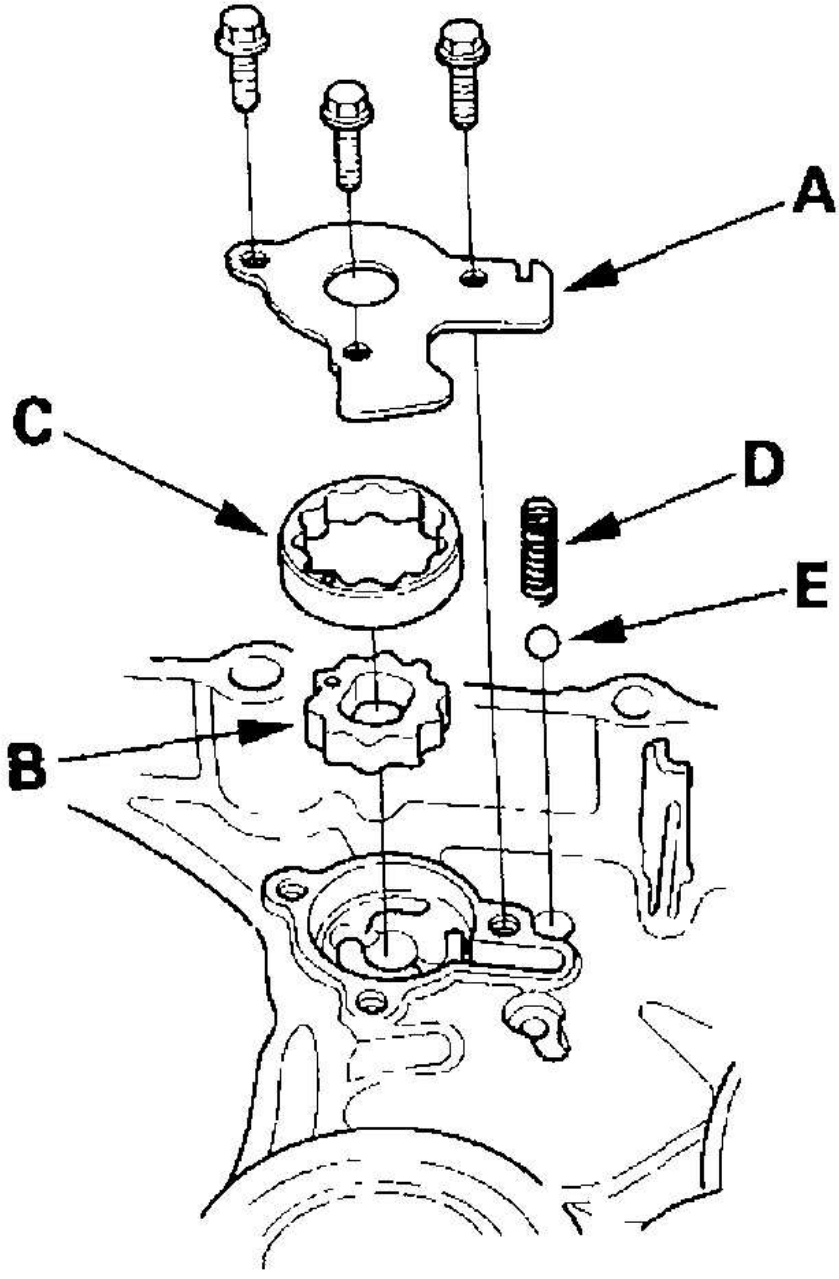


Fig. 93: Identifying Oil Pump Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Remove the 82 mm shim (A) from the transmission housing (B).

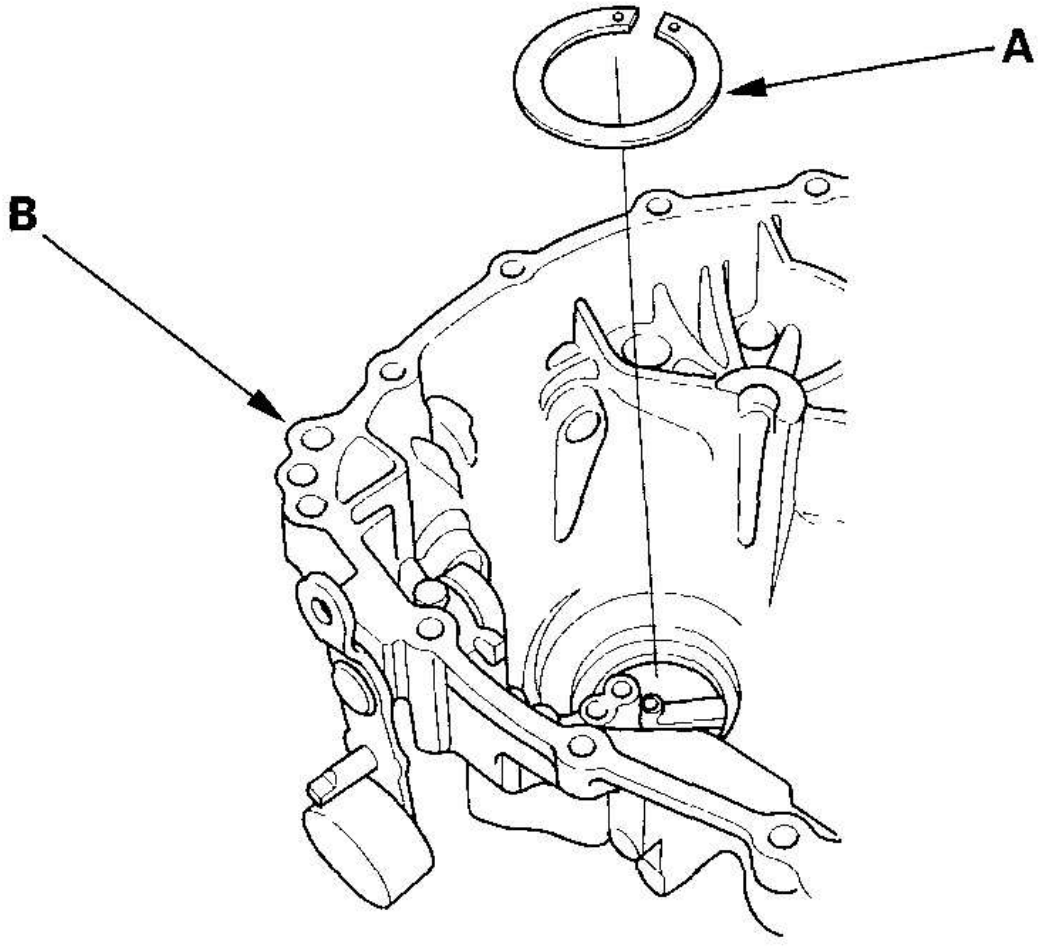


Fig. 94: Identifying Shim From Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Remove the 8 mm special bolt (A), 8 mm spring washer (B), shift arm (C), change lever (D), and 16 x 23 x 5 mm dust seal (E).

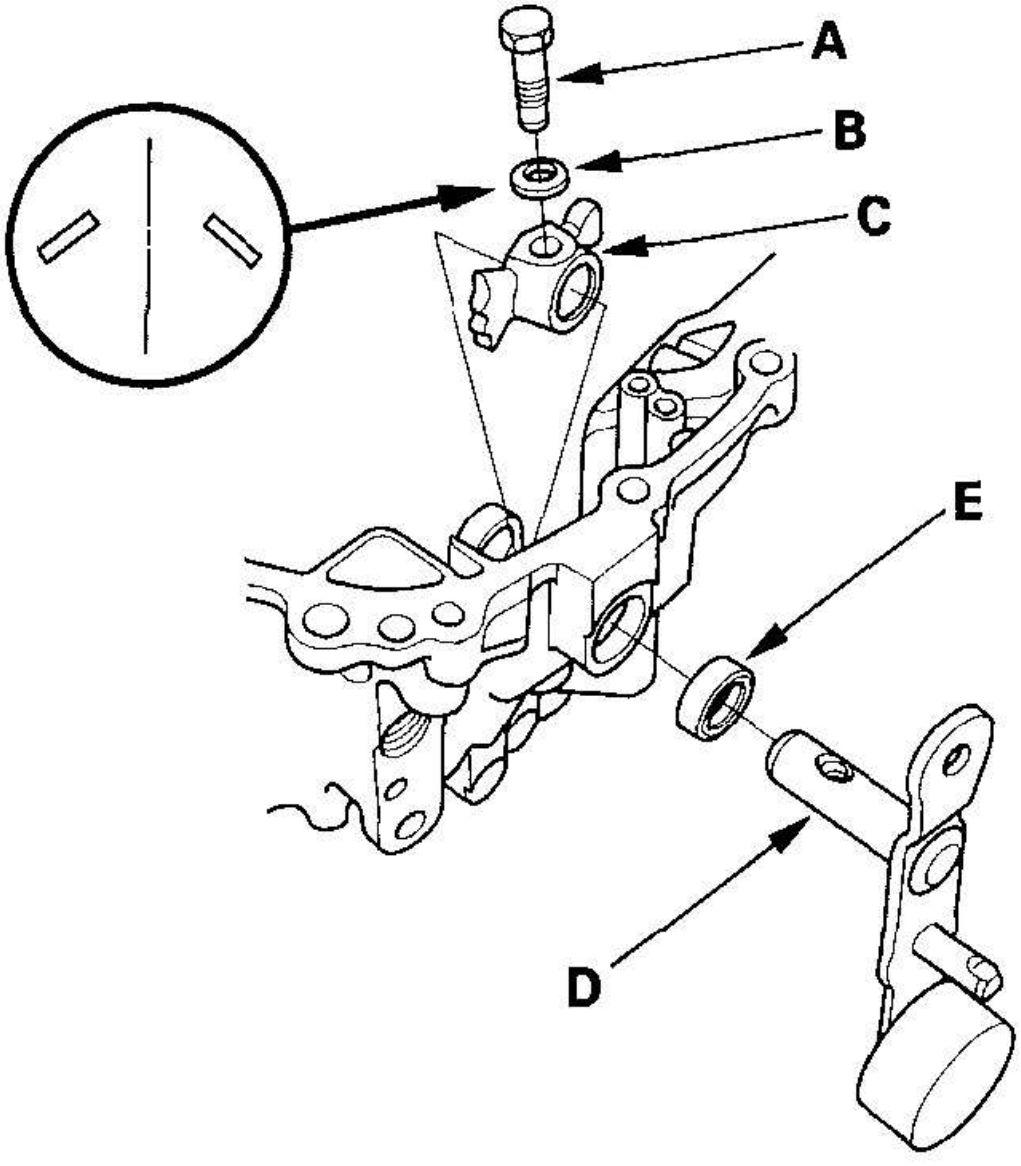


Fig. 95: Identifying Special Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REVERSE SHIFT LEVER CLEARANCE INSPECTION

1. Measure the clearance between the reverse shift lever (A) and reverse shift fork (B) with a feeler gauge (C). If the clearance is more than the service limit, go to step 2.

   Standard: 0.05-0.50 mm (0.002-0.020 in.)

   Service Limit: 0.6 mm (0.024 in.)

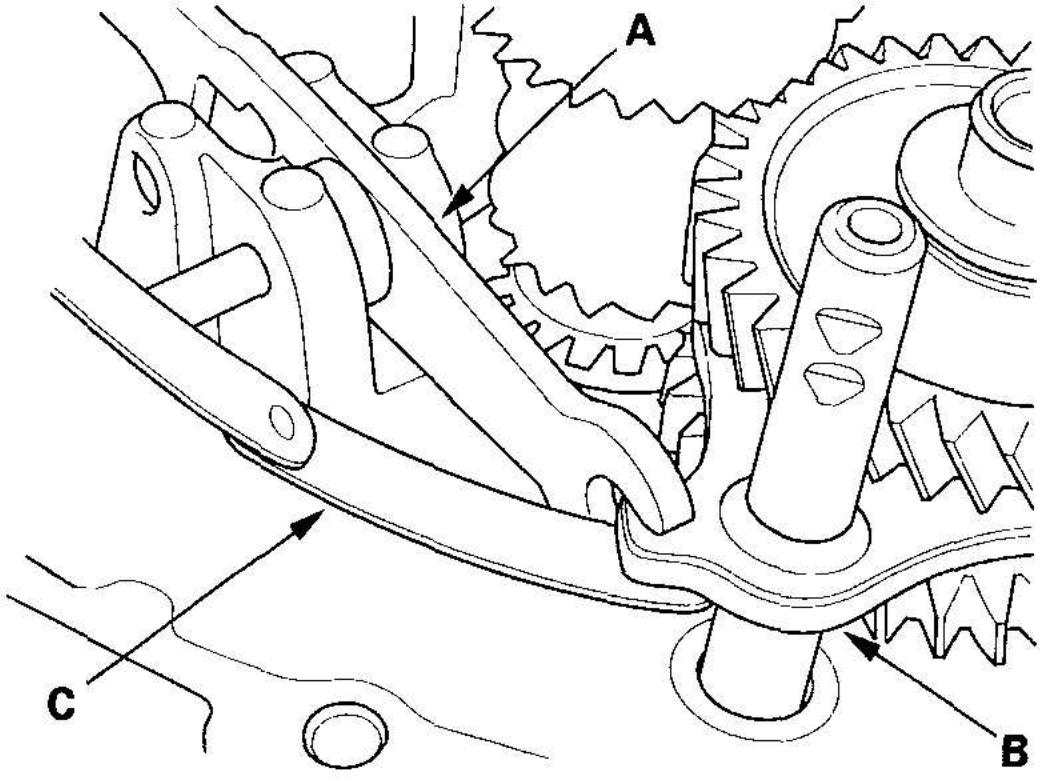
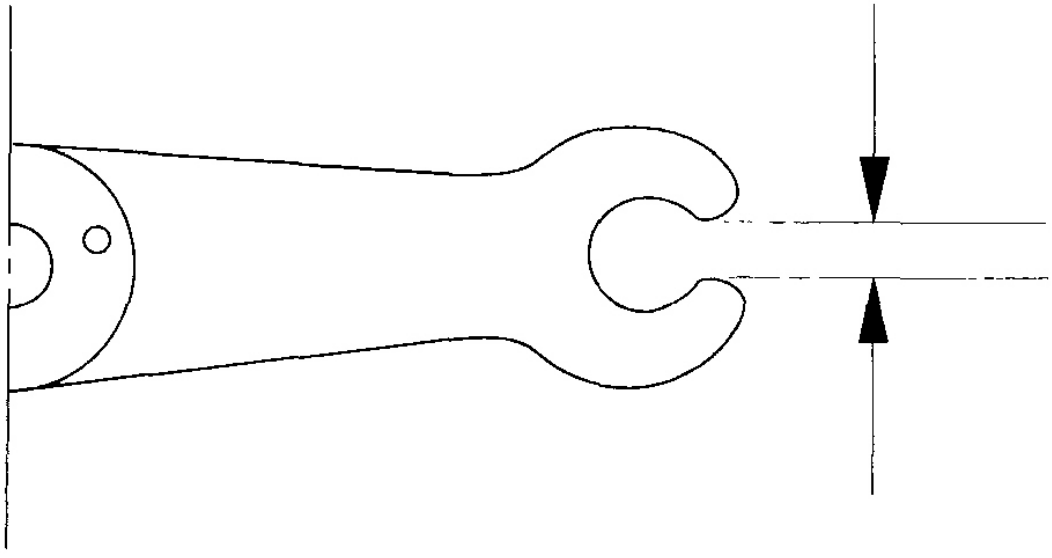


Fig. 96: Measuring Clearance Between Reverse Shift Lever And Reverse Shift Fork With Feeler Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the width of the reverse shift lever.
   - If the width is not within the standard, replace the reverse shift lever.

- If the width is within the standard, replace the reverse shift fork.

Standard: 6.400-6.650 mm (0.2520-0.2618 in.)



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Fig. 97: Measuring Width Of Reverse Shift Lever
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Measure the clearance between the reverse shift lever (A) and reverse shift piece (B) with a feeler gauge (C). If the clearance is more than the service limit, go to step 4.

   Standard: 0-0.4 mm (0-0.015 in.)

   Service Limit: 0.5 mm (0.020 in.)

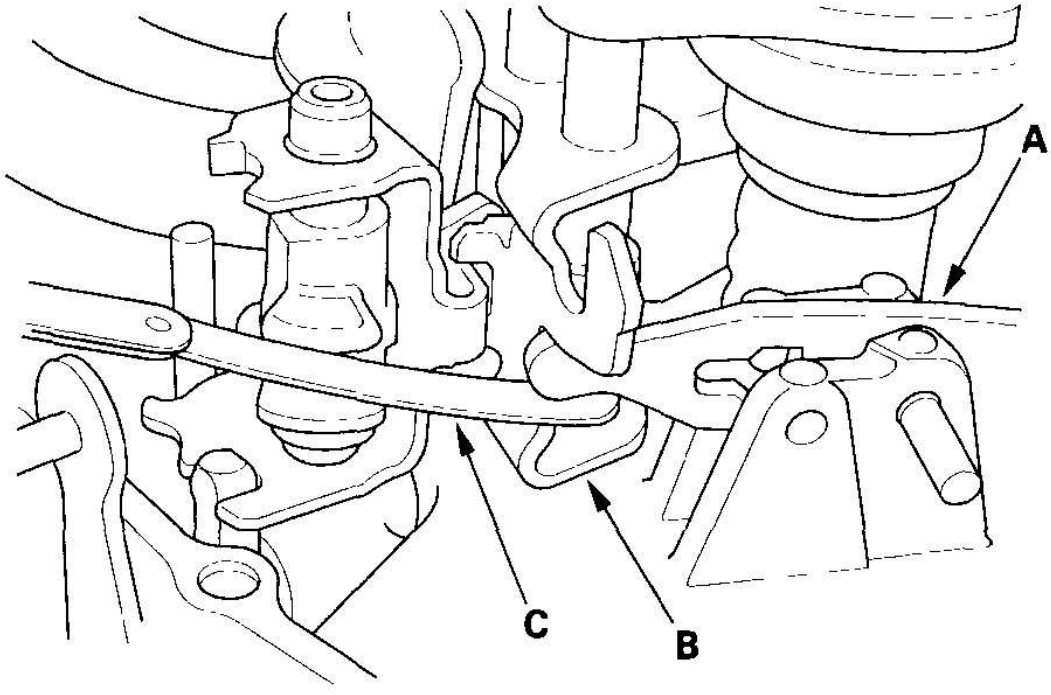


Fig. 98: Measuring Clearance Between Reverse Shift Lever And Reverse Shift Piece With Feeler Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the width of the reverse shift lever.
   - If the width is not within the standard, replace the reverse shift lever.
   - If the width is within the standard, replace the reverse shift piece.

Standard: 13.0-13.2 mm (0.51-0.52 in.)

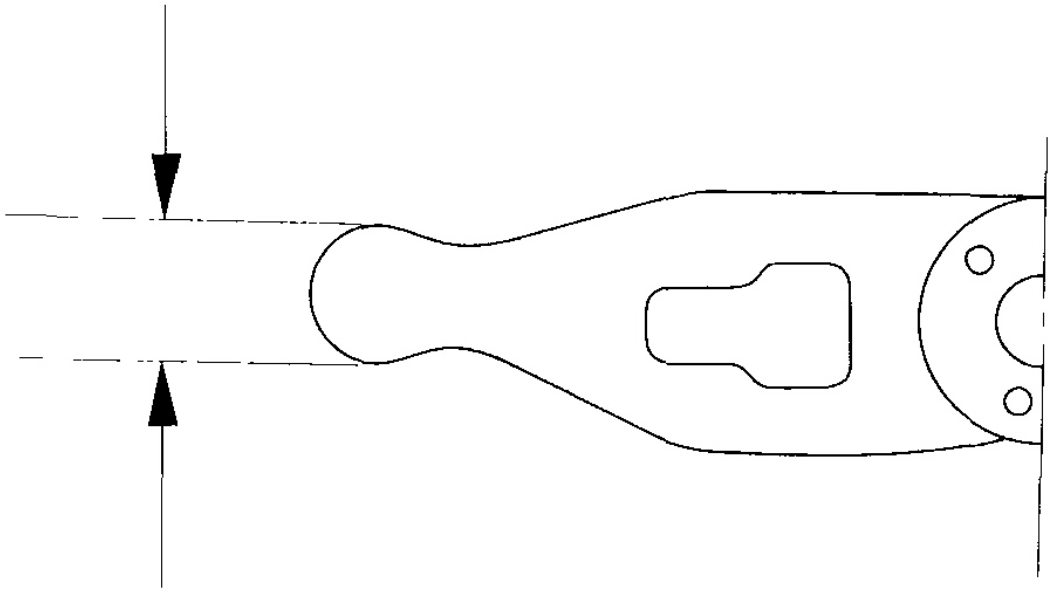


Fig. 99: Measuring Width Of Reverse Shift Lever
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SELECT ARM CLEARANCE INSPECTION

1. Measure the clearance between the select arm (A) and interlock (B) with a feeler gauge (C). If the clearance is more than the service limit, go to step 2.

   Standard: 0.05-0.25 mm (0.002-0.010 in.)

   Service Limit: 0.5 mm (0.020 in.)

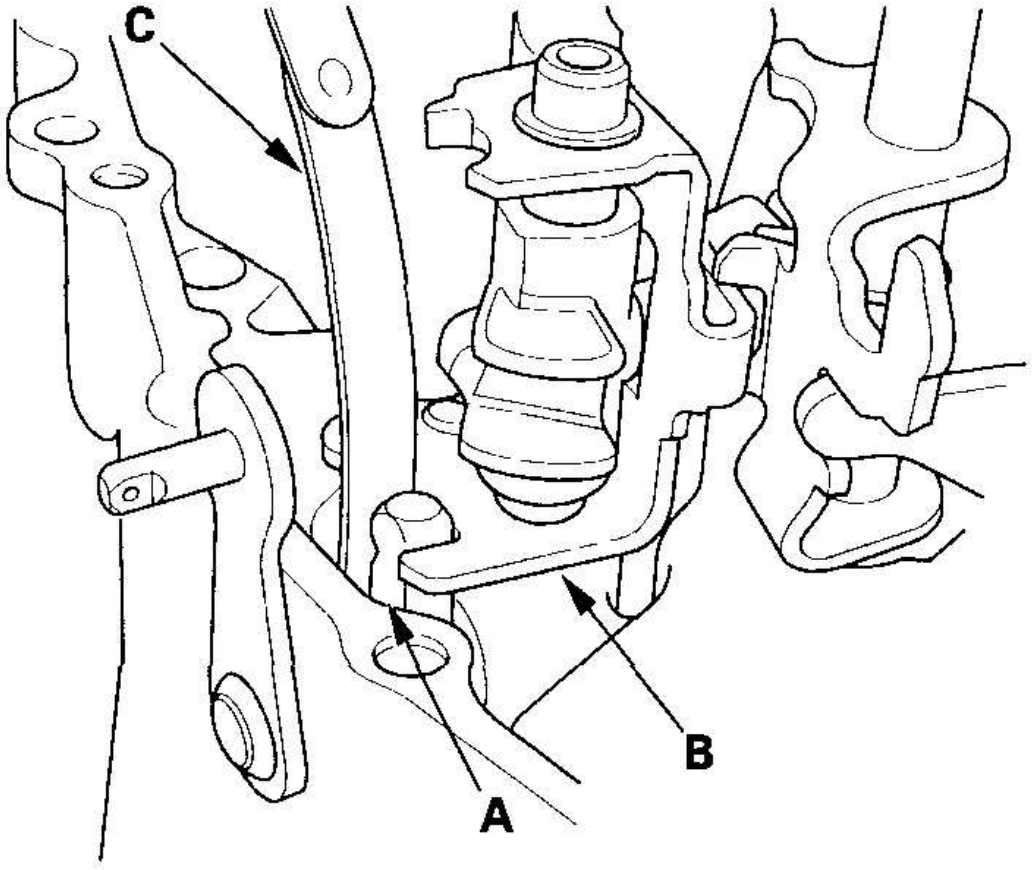
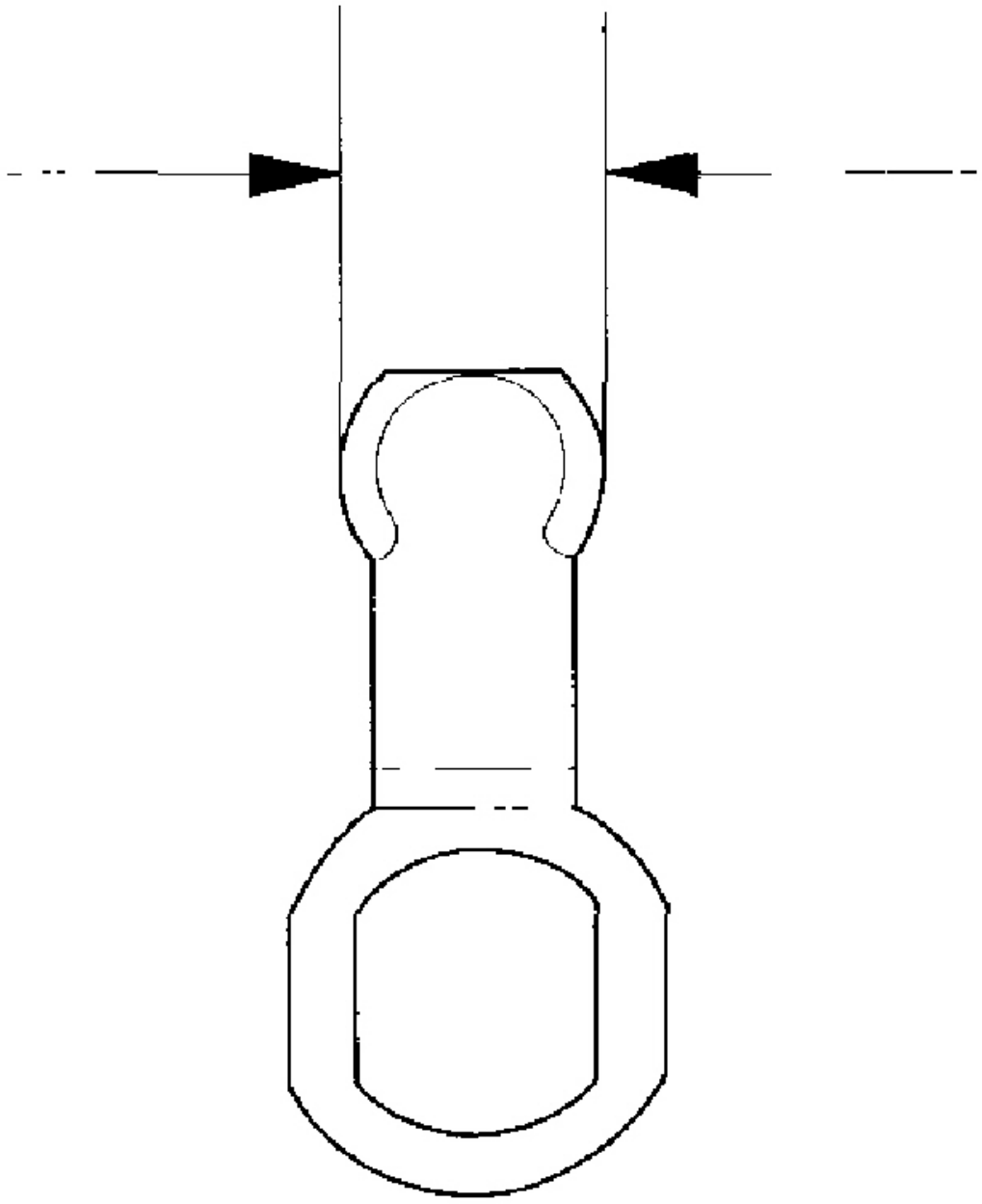


Fig. 100: Measuring Clearance Between Select Arm And Interlock With Feeler Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the width of the select arm.
   - If the width is not within the standard, replace the select arm.
   - If the width is within the standard, replace the interlock.

Standard: 12.9-13.0 mm (0.50-0.51 in.)



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Fig. 101: Measuring Width Of Select Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SHIFT ARM CLEARANCE INSPECTION

1. Measure the clearance between the shift arm (A) and shift piece (B) with a feeler gauge (C). If the clearance is more than the service limit, go to step 2.

   Standard: 0.05-0.25 mm (0.002-0.010 in.)

   Service Limit: 0.5 mm (0.020 in.)

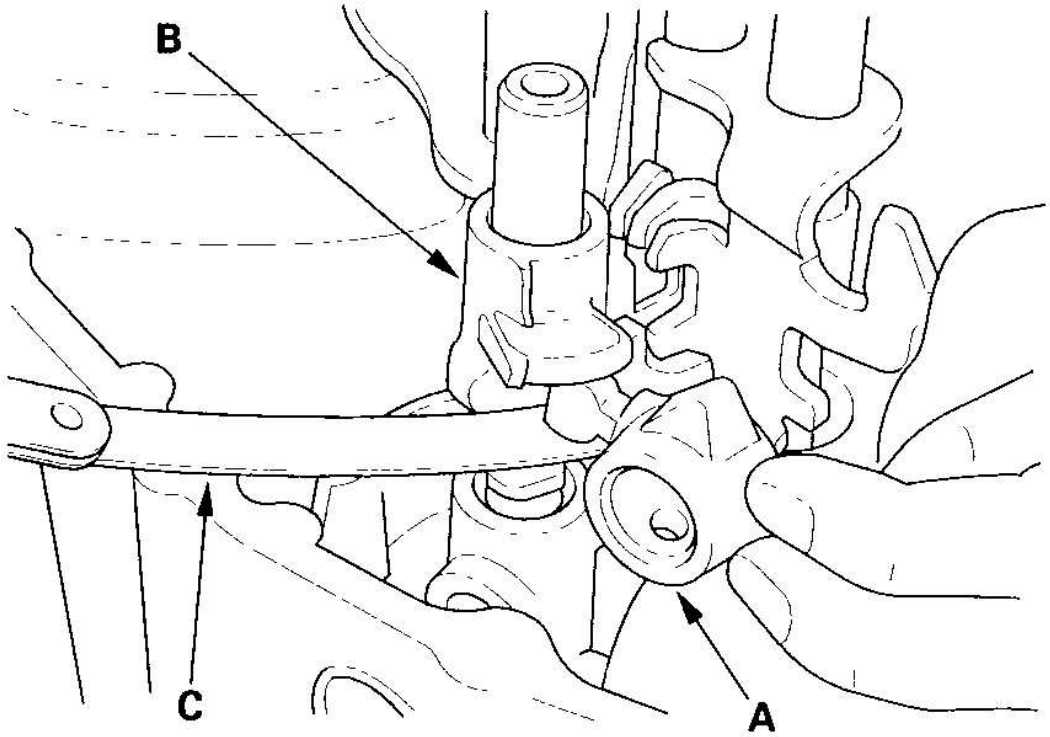


Fig. 102: Measuring Clearance Between Shift Arm And Shift Piece With Feeler Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the width of the shift arm.
   - If the width is not within the standard, replace the shift arm.
   - If the width is within the standard, replace the shift piece.

Standard: 13.9-14.0 mm (0.54-0.55 in.)

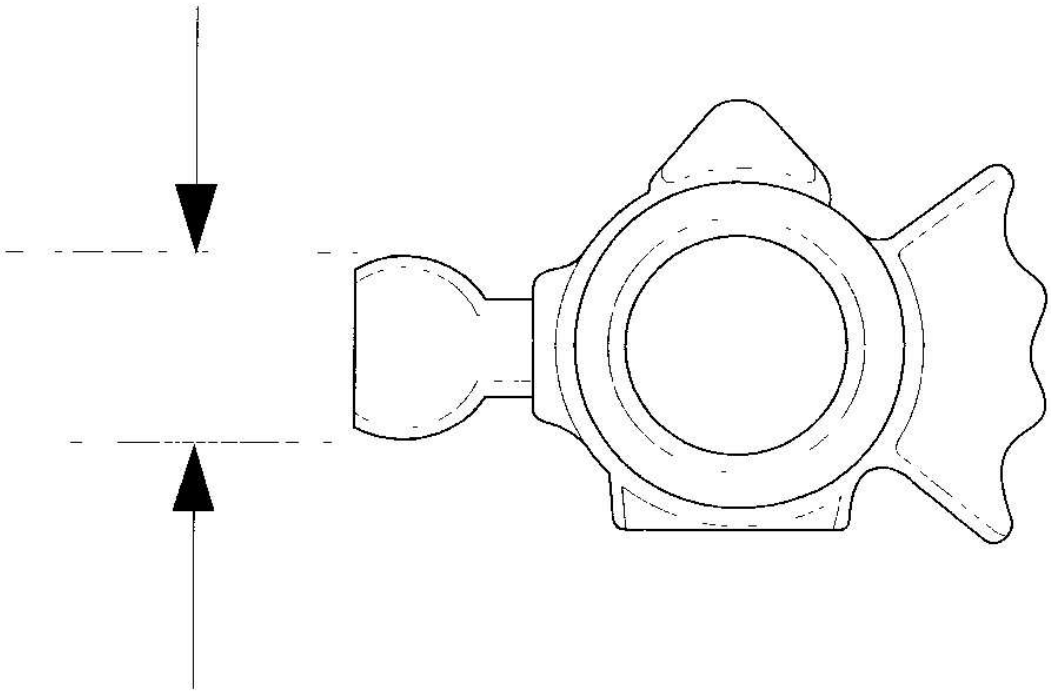


Fig. 103: Measuring Width Of Shift Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

OIL PUMP CLEARANCE INSPECTION

1. Measure the thrust clearance between the oil pump gears (A) and clutch housing (B) with a straight edge (C) and a feeler gauge (D).

   Standard (new): 0.03-0.13 mm (0.001-0.005 in.)

   Service Limit: 0.15 mm (0.006 in.)

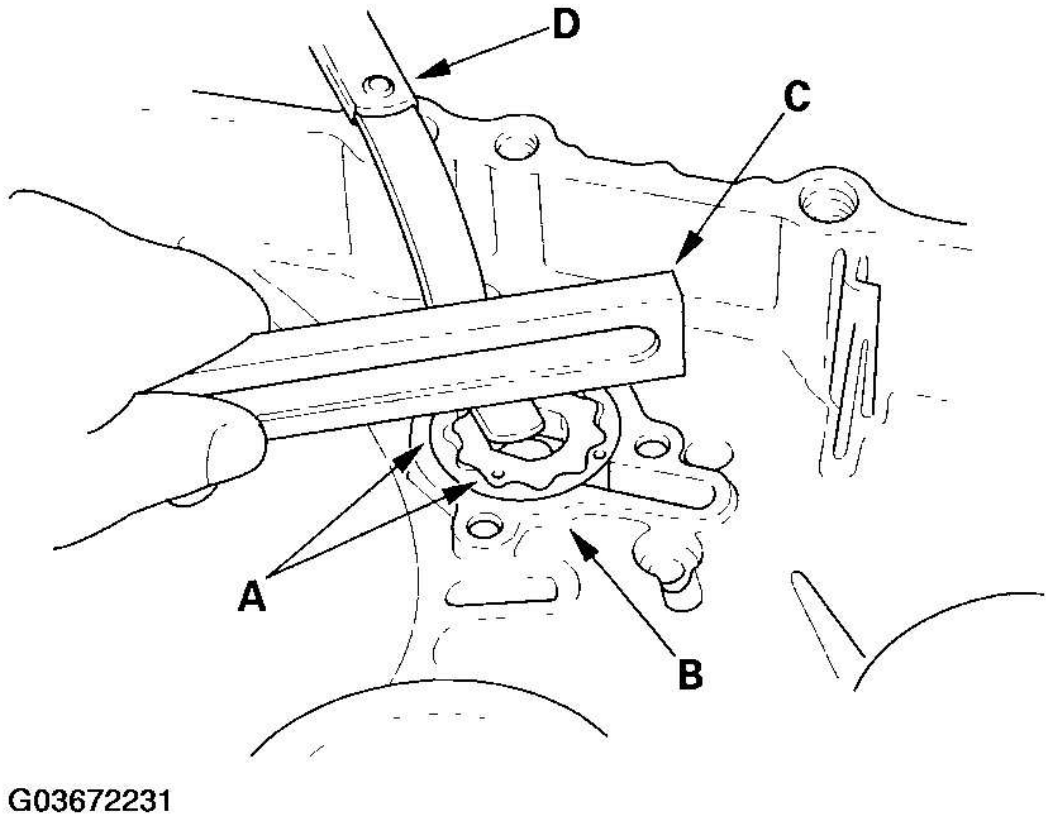


Fig. 104: Measuring Thrust Clearance Between Oil Pump Gears And Clutch Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the side clearance between the outer rotor (A) and clutch housing (B) with a feeler gauge (C).

   Standard (new): 0.1-0.2 mm (0.004-0.008 in.)

   Service Limit: 0.22 mm (0.009 in.)

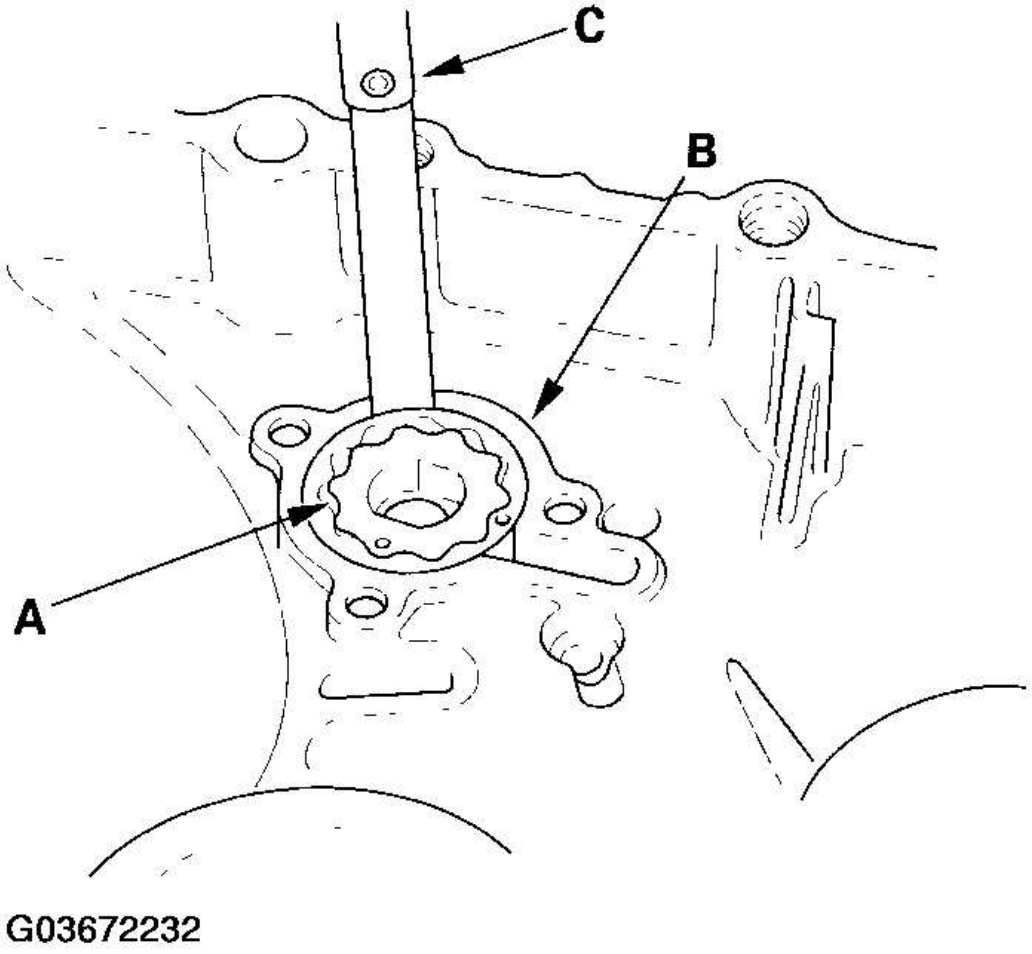


Fig. 105: Measuring Side Clearance Between Outer Rotor And Clutch Housing With Feeler Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Measure the side clearance between the outer rotor (A) and inner rotor (B) with a feeler gauge (C).

   Standard (new): 0.14 mm (0.006 in.)

   Service Limit: 0.2 mm (0.008 in.)

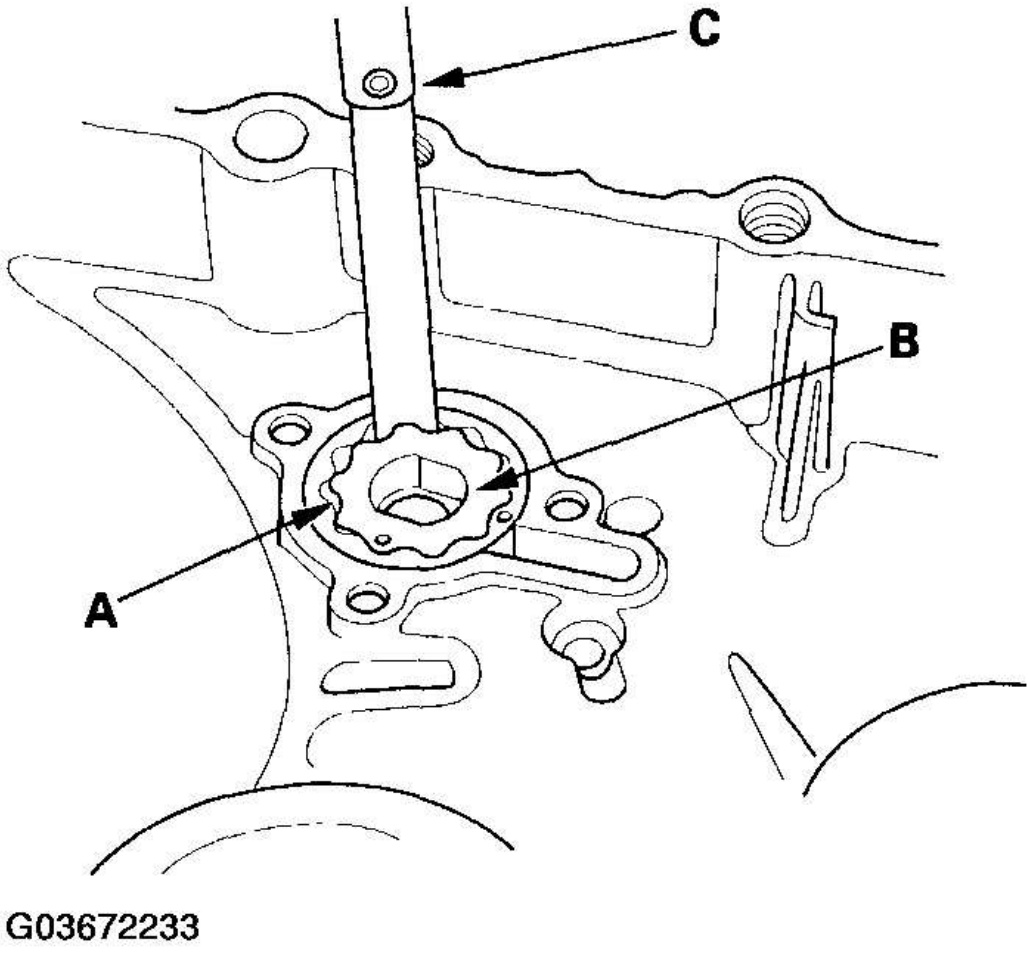


Fig. 106: Measuring Side Clearance Between Outer Rotor And Inner Rotor With Feeler Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the clearance is not within the standard, replace the oil pump outer and inner rotors.

SHIFT FORK CLEARANCE INSPECTION

NOTE: The synchro sleeve and synchro hub should be replaced as a set.

1. Measure the clearance between each shift fork (A) and its matching synchro sleeve (B). If the clearance exceeds the service limit, go to step 2.

   Standard: 0.35-0.65 mm (0.014-0.026 in.)

   Service Limit: 1.0 mm (0.039 in.)

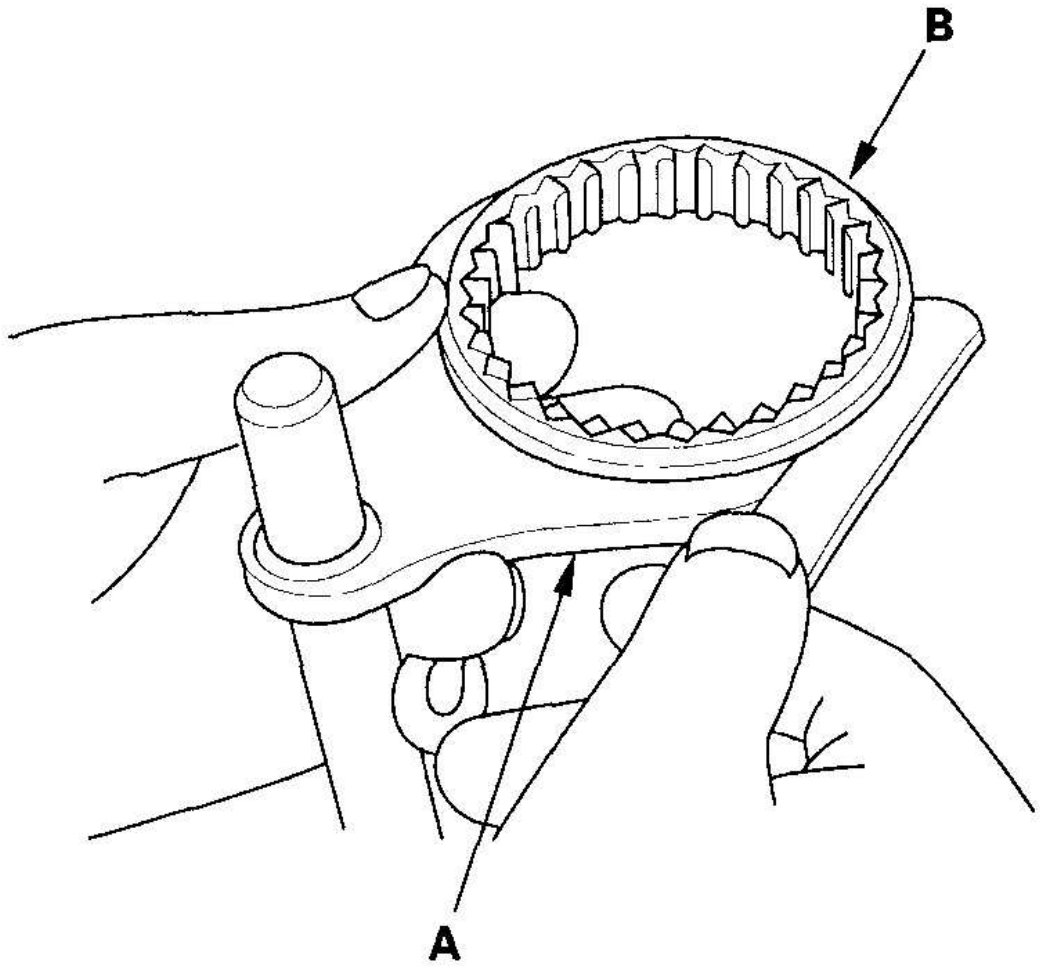


Fig. 107: Measuring Clearance Between Each Shift Fork (1ST/2ND, 3RD/4TH, 5TH/6TH)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

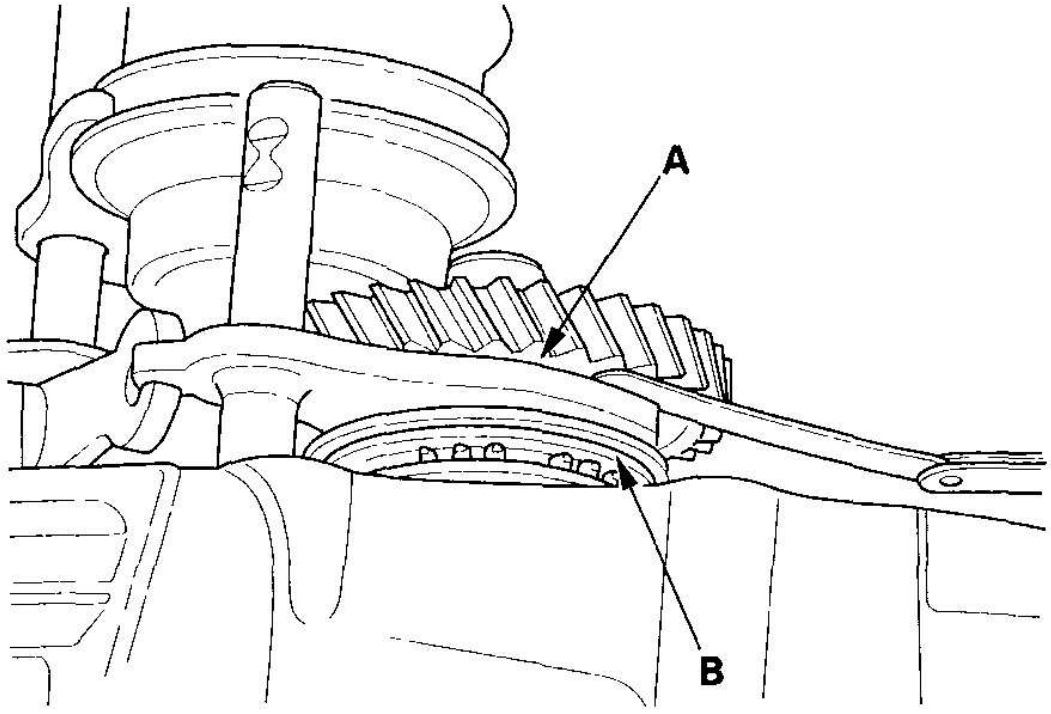
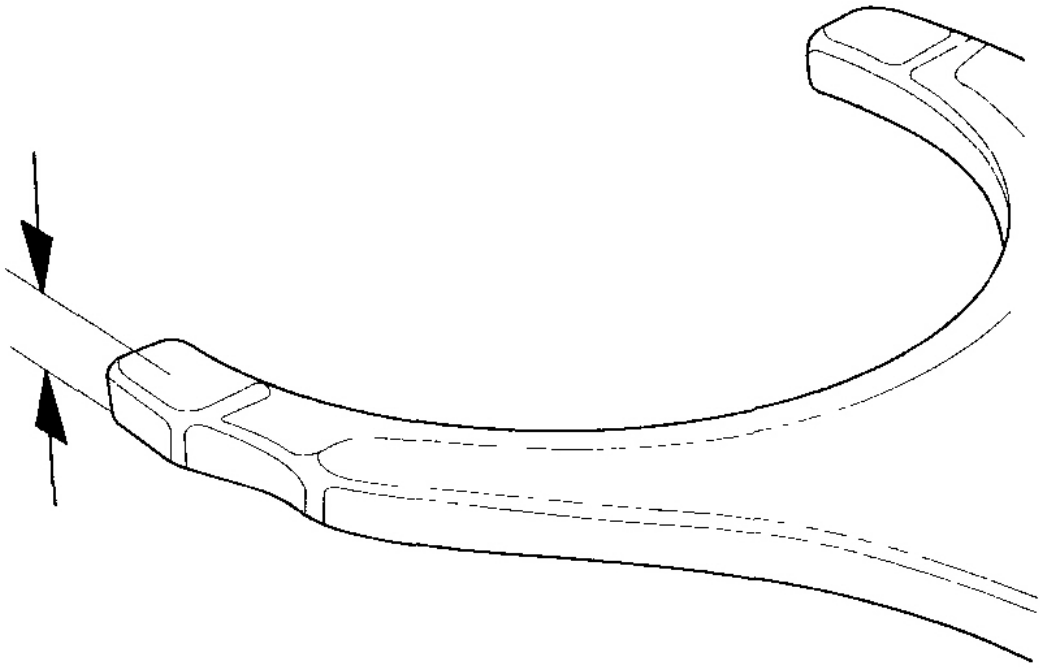


Fig. 108: Measuring Clearance Between Each Shift Fork (REVERSE)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the thickness of the shift fork fingers.
   - If the thickness is not within the standard, replace the shift fork.
   - If the thickness is within the standard, replace the synchro sleeve.
   - If one arm of the shift fork shows more wear than others, the fork may be bent and needs to be replaced.

Standard:

1st/2nd, 3rd/4th, 5th/6th: 7.4-7.6 mm (0.29-0.30 in.)
Reverse: 6.2-6.4 mm (0.24-0.25 in.)



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Fig. 109: Measuring Thickness Of Shift Fork Fingers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Measure the clearance between the shift fork (A) and shift piece (B). If the clearance exceeds the service limit, go to step 4.

   Standard: 0.2-0.6 mm (0.008-0.024 in.)

   Service Limit: 0.7 mm (0.028 in.)

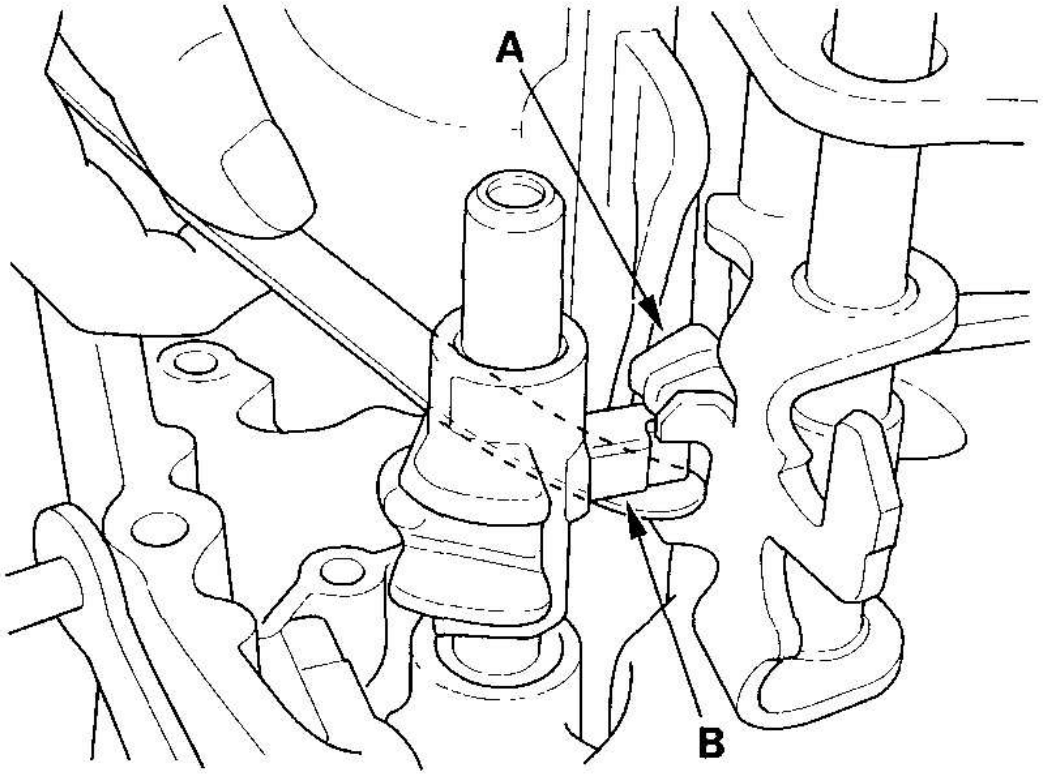
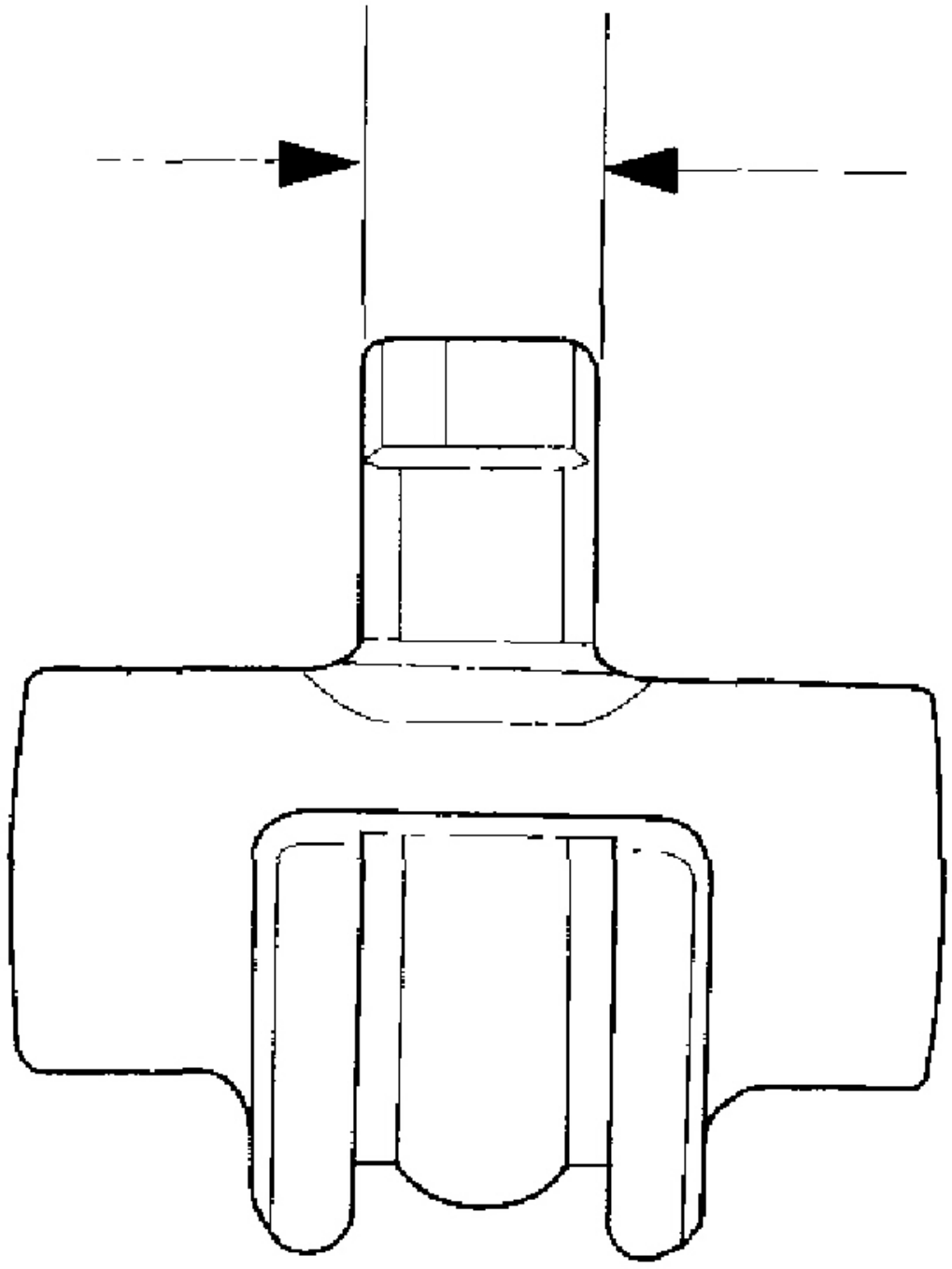


Fig. 110: Measuring Clearance Between Shift Fork And Shift Piece
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the width of the shift piece.
   - If the width is not within the standard, replace the shift piece.
   - If the width is within the standard, replace the shift fork.

Standard: 12.8- 13.0 mm (0.50-0.51 in.)



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Fig. 111: Measuring Width Of Shift Piece
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SHIFT FORK DISASSEMBLY/REASSEMBLY

Prior to reassembling, clean all parts in solvent, dry them, and apply lubricant to all contact surfaces.

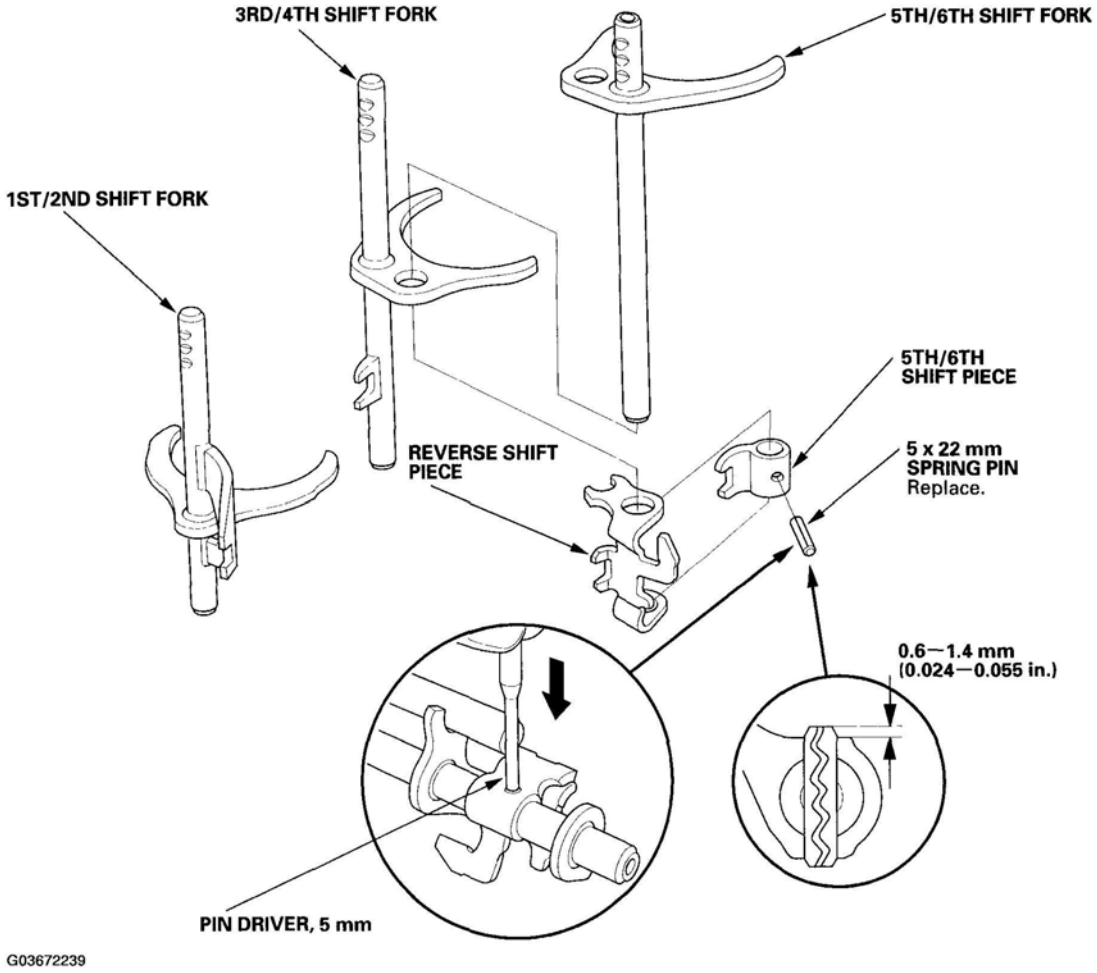


Fig. 112: Disassembling/Reassembling Shift Fork
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MAINSHAFT ASSEMBLY CLEARANCE INSPECTION

NOTE: If replacement is required, always replace the synchro

sleeve and hub as a set.

1. Support the bearing inner race with an appropriate sized socket (A), and push down on the mainshaft (B).

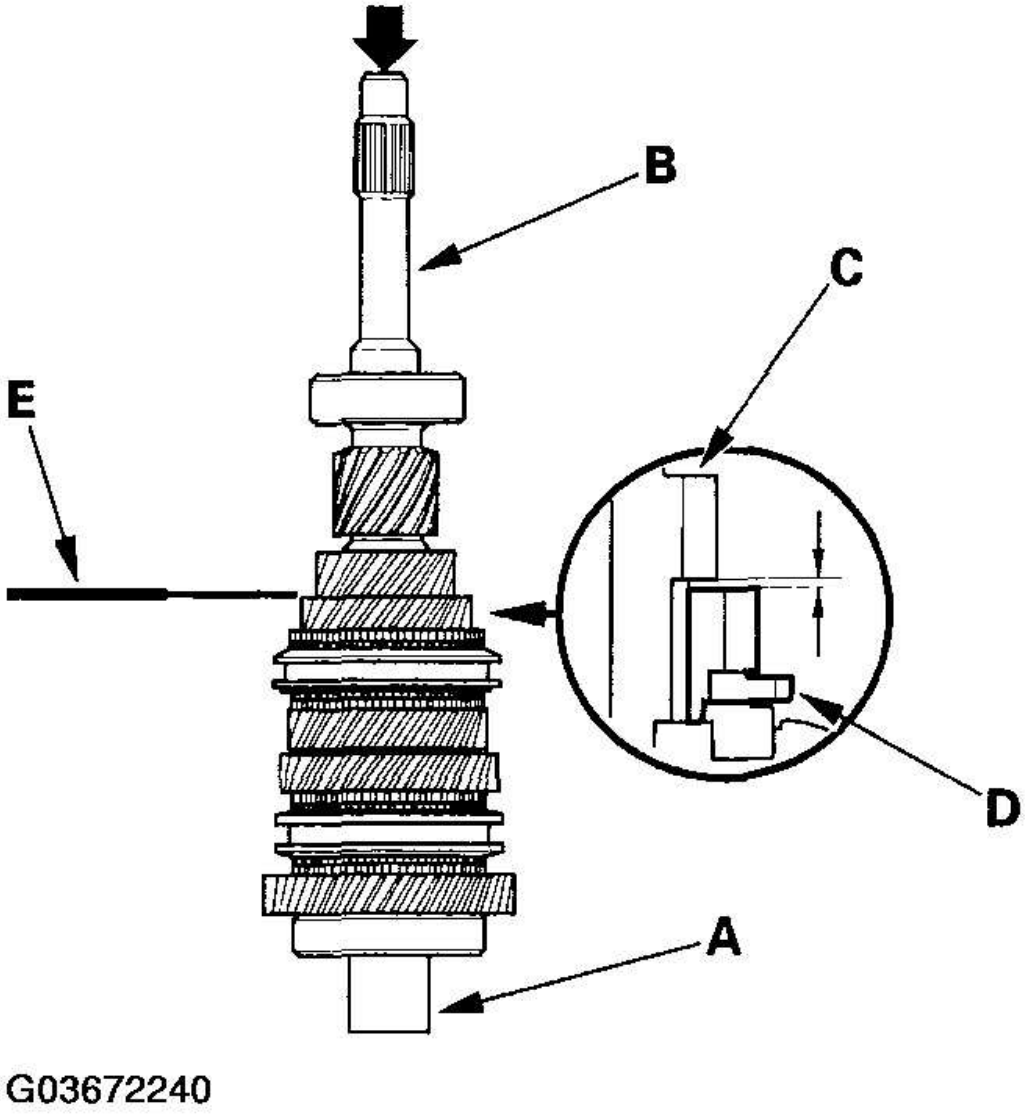


Fig. 113: Supporting Bearing Inner Race With An Appropriate Sized Socket

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the clearance between 2nd gear (C) and 3rd gear (D) with a feeler gauge (E).
   - If the clearance is more than the service limit, go to step 3.
   - If the clearance is within the service limit, go to step 4.

   Standard: 0.06-0.19 mm (0.002-0.007 in.)

   Service Limit: 0.3 mm (0.01 in.)

3. Measure the thickness of 3rd gear.
   - If the thickness is less than the service limit, replace 3rd gear.
   - If the thickness is within the service limit, replace the 3rd/4th synchro hub/sleeve.

   Standard: 23.89-23.97 mm (0.941-0.944 in.)

   Service Limit: 23.8 mm (0.94 in.)

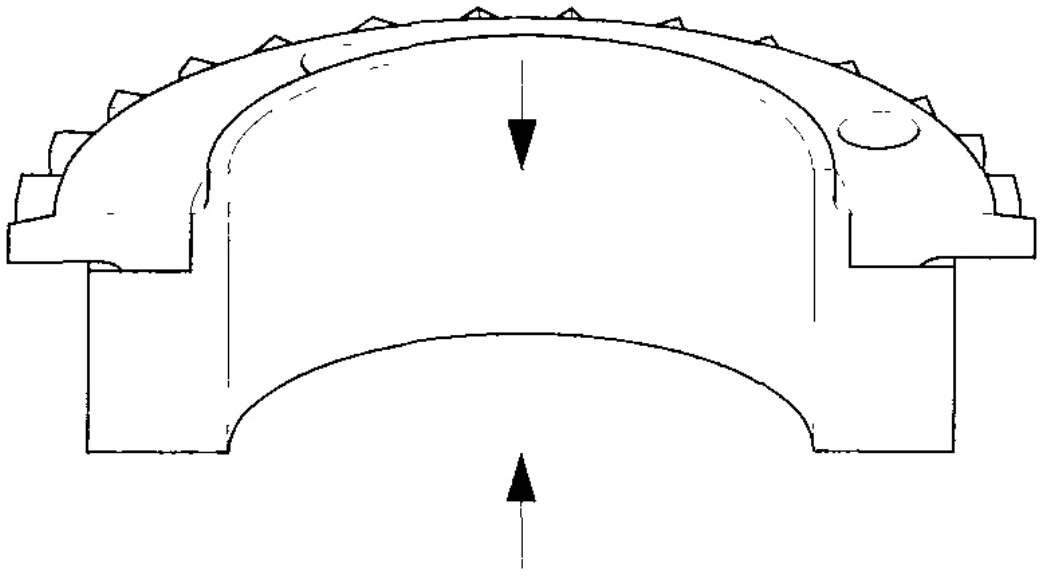


Fig. 114: Measuring Thickness Of 3rd Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the clearance between 4th gear (A) and the distance collar (B) with a dial indicator (C). If the clearance is more than the service limit, go to step 5.

   Standard: 0.06-0.19 mm (0.002-0.007 in.)

   Service Limit: 0.3 mm (0.01 in.)

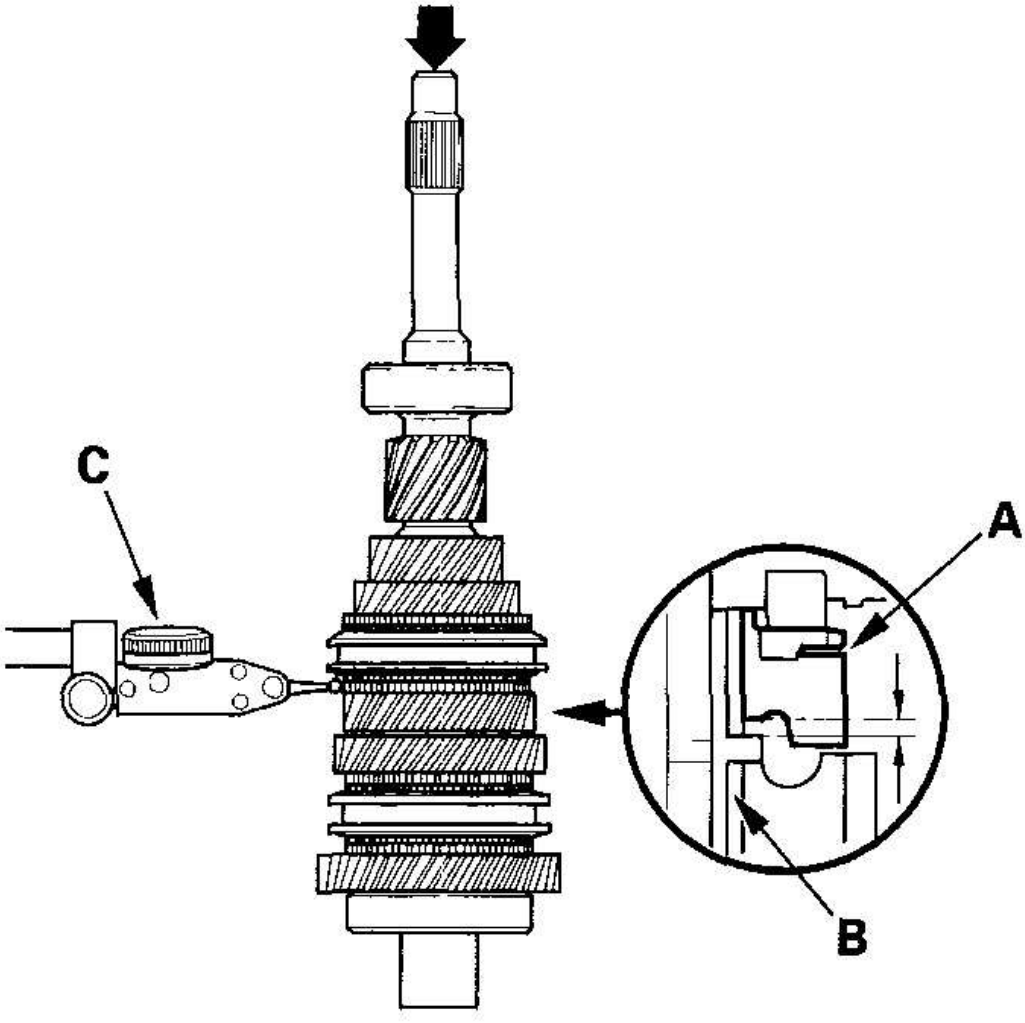


Fig. 115: Measuring Clearance Between 4th Gear And Distance Collar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Measure distance (1) on the 4th gear side distance collar.
   - If distance (1) is not within the standard, replace the distance collar.
   - If distance (1) is within the standard, go to step 6.

Standard: 22.53-22.58 mm (0.887-0.889 in.)

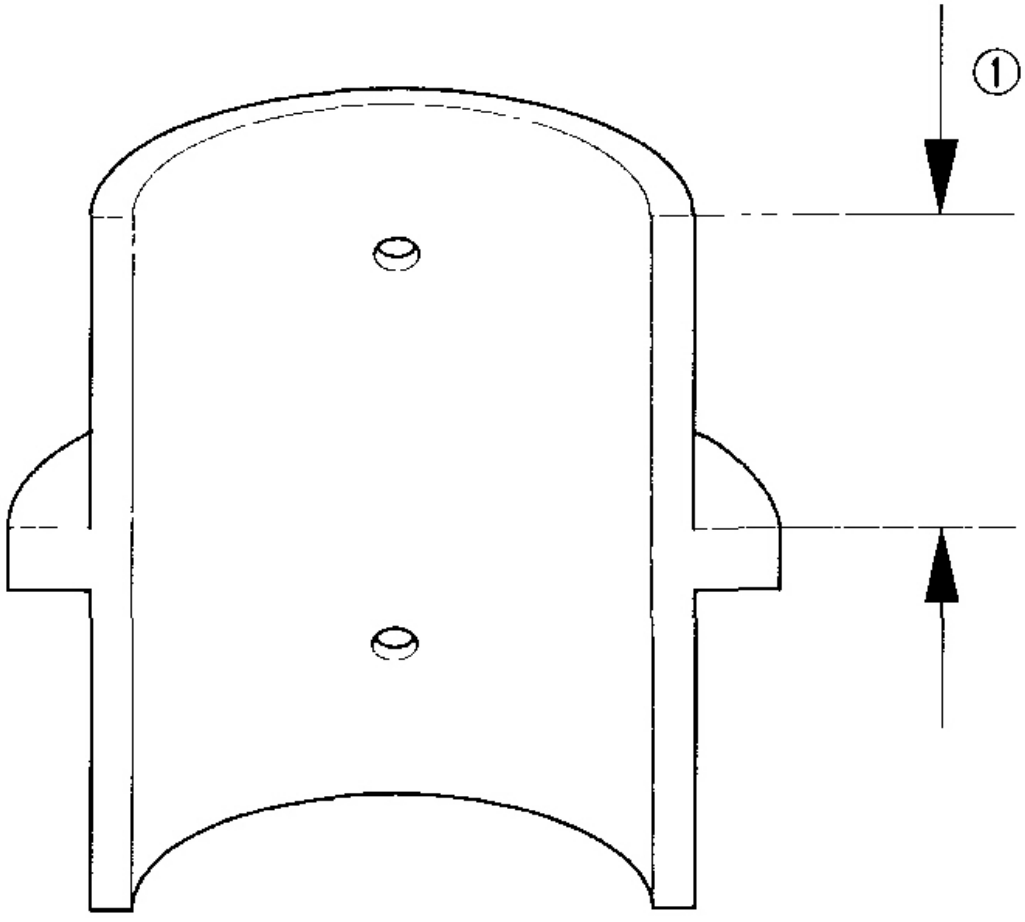
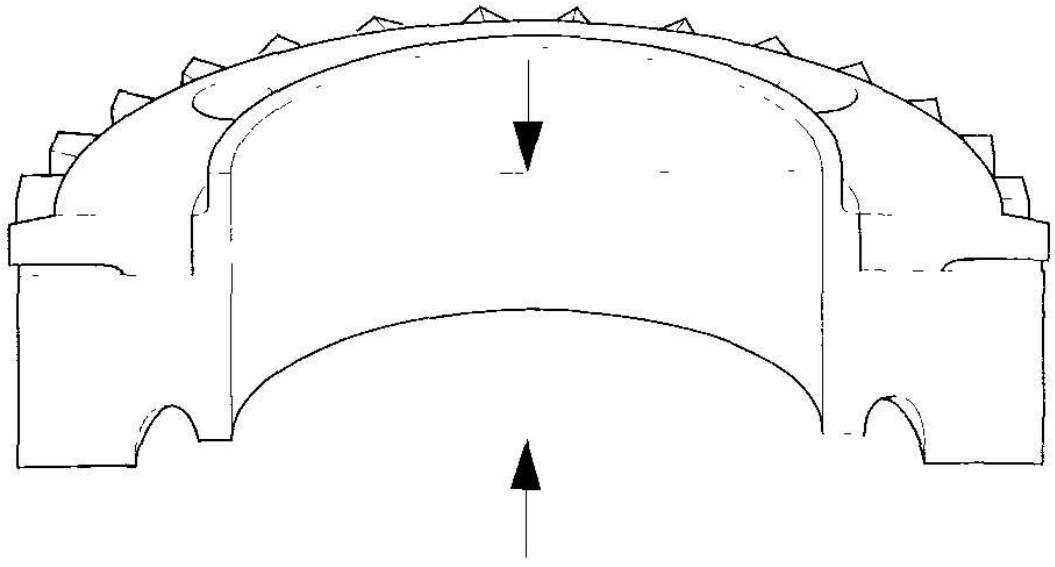


Fig. 116: Measuring Distance (1) On 4th Gear Side Distance Collar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Measure the thickness of 4th gear.
   - If the thickness is less than the service limit, replace 4th gear.
   - If the thickness is within the service limit, replace the 3rd/4th synchro hub/sleeve.

Standard: 22.39-22.47 mm (0.881 -0.885 in.)

Service Limit: 22.3 mm (0.88 in.)



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Fig. 117: Measuring Thickness Of 4th Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Measure the clearance between the distance collar (A) and 5th gear (B) with a dial indicator (C). If the clearance is more than the service limit, go to step 8.

   Standard: 0.06-0.19 mm (0.002-0.007 in.)

   Service Limit: 0.3 mm (0.01 in.)

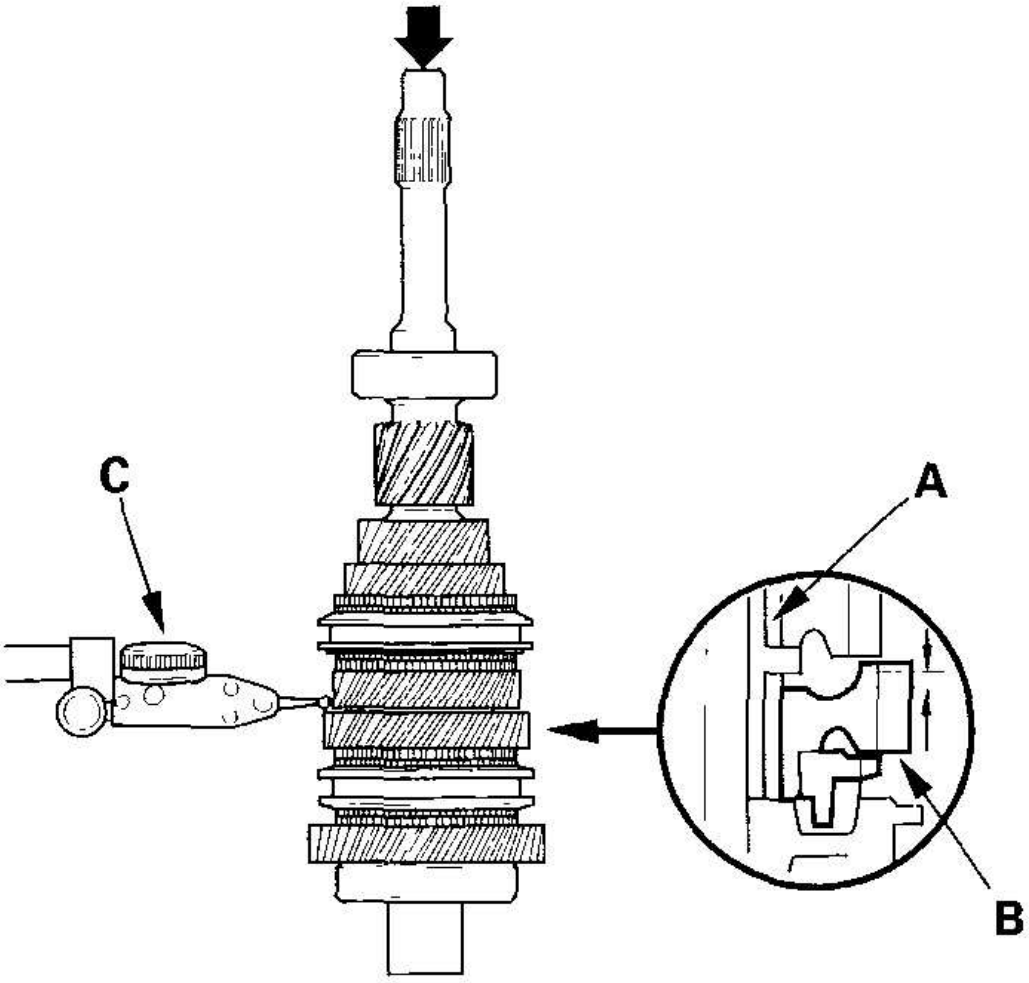


Fig. 118: Measuring Clearance Between Distance Collar And 5th Gear With Dial Indicator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Measure distance (2) on the 5th gear side distance collar.
   - If distance (2) is not within the standard, replace the distance collar.
   - If distance (2) is within the standard, go to step 9.

Standard: 22.53-22.58 mm (0.887-0.889 in.)

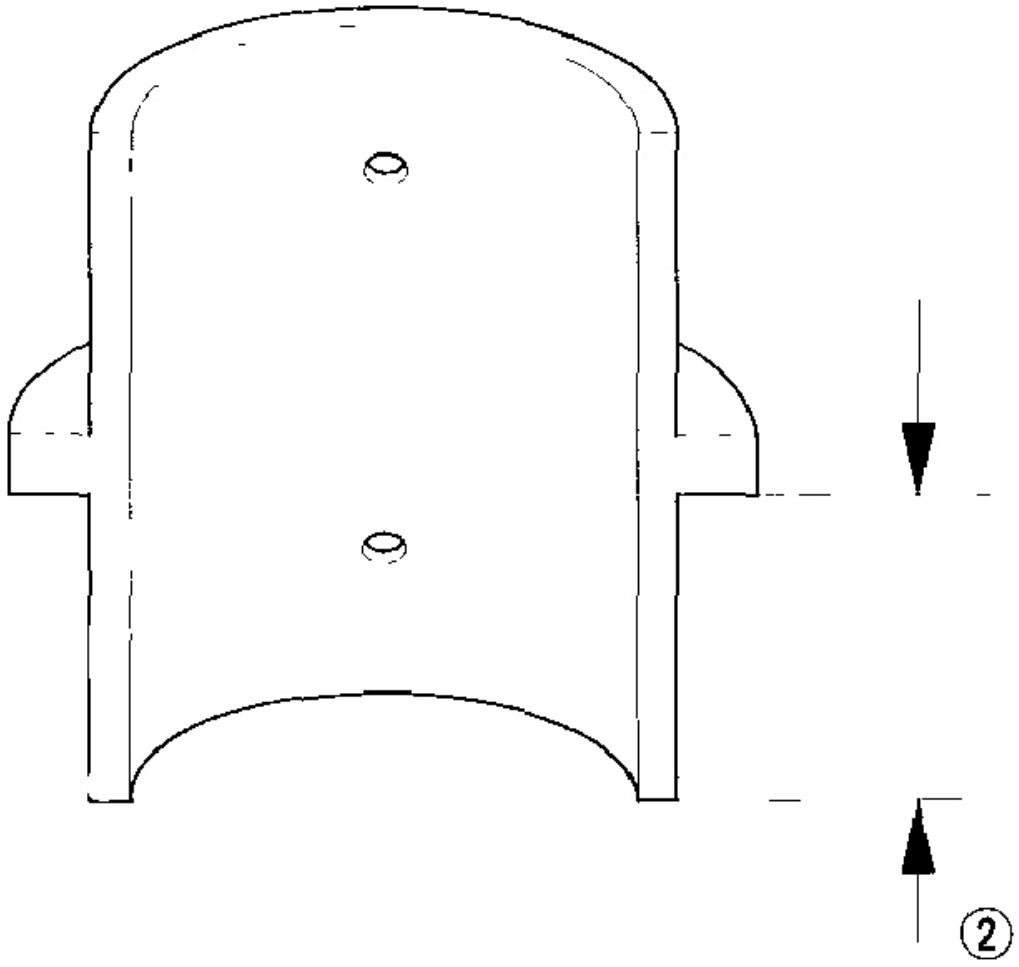
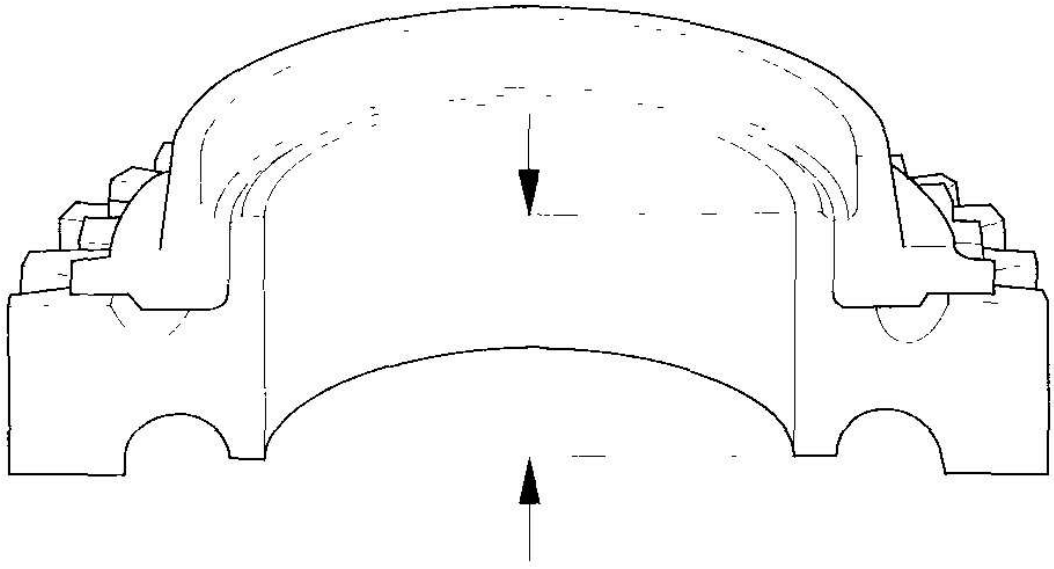


Fig. 119: Measuring Distance (2) On 5th Gear Side Distance Collar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Measure the thickness of 5th gear.
    - If the thickness is less than the service limit, replace 5th gear.
    - If the thickness is within the service limit, replace the 5th/6th synchro hub/sleeve.

Standard: 22.39-22.47 mm (0.881 -0.885 in.)

Service Limit: 22.3 mm (0.88 in.)



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Fig. 120: Measuring Thickness Of 5th Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Measure the clearance between 6th gear (A) and the angular ball bearing inner race (B) with a dial indicator (C). If the clearance is more than the service limit, go to step 11.

Standard: 0.06-0.19 mm (0.002-0.007 in.)

Service Limit: 0.3 mm (0.01 in.)

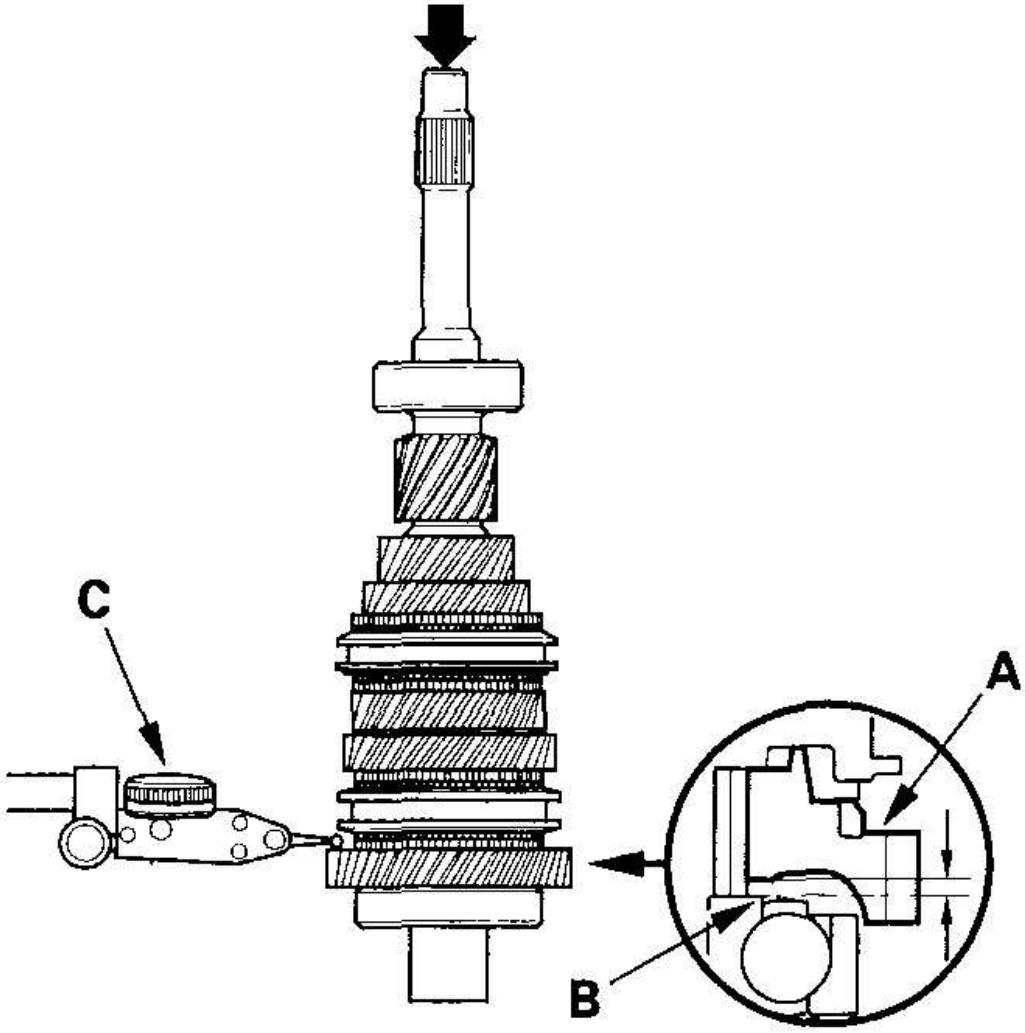
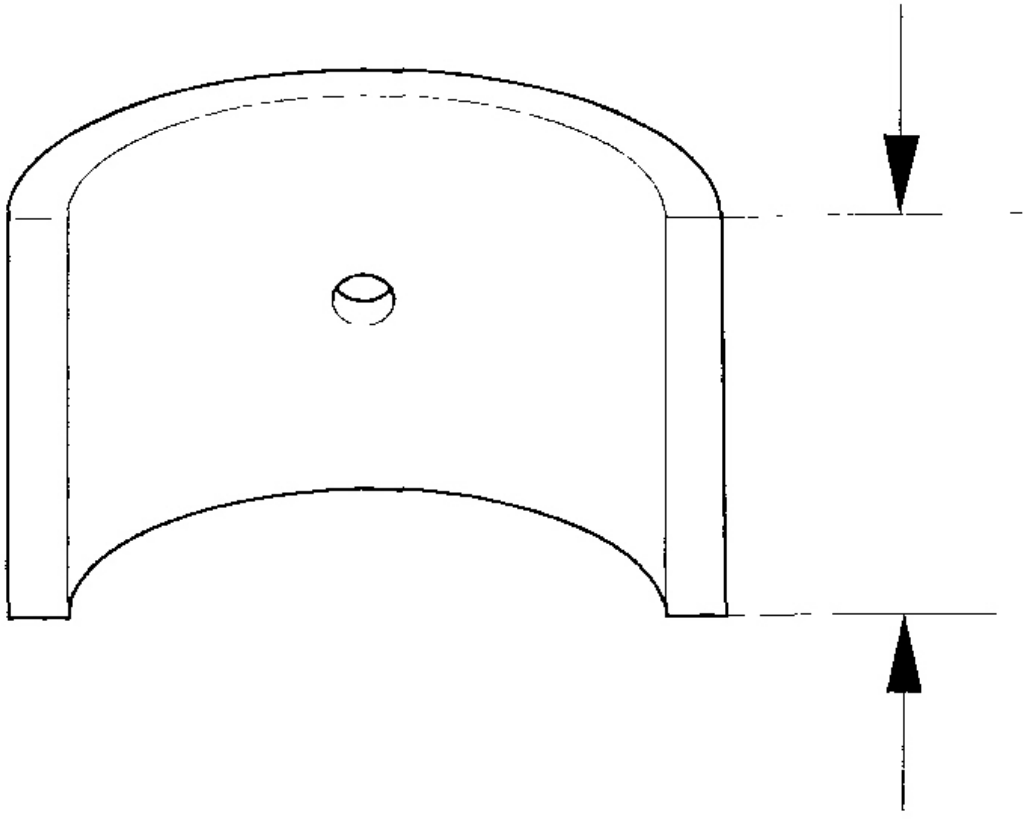


Fig. 121: Measuring Clearance Between 6th Gear And Angular Ball Bearing Inner Race
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Measure the thickness of the distance collar.
    - If the thickness is less than the standard, replace the distance collar.
    - If the thickness is within the standard, go to step 12.

Standard: 22.03-22.08 mm (0.867-0.869 in.)



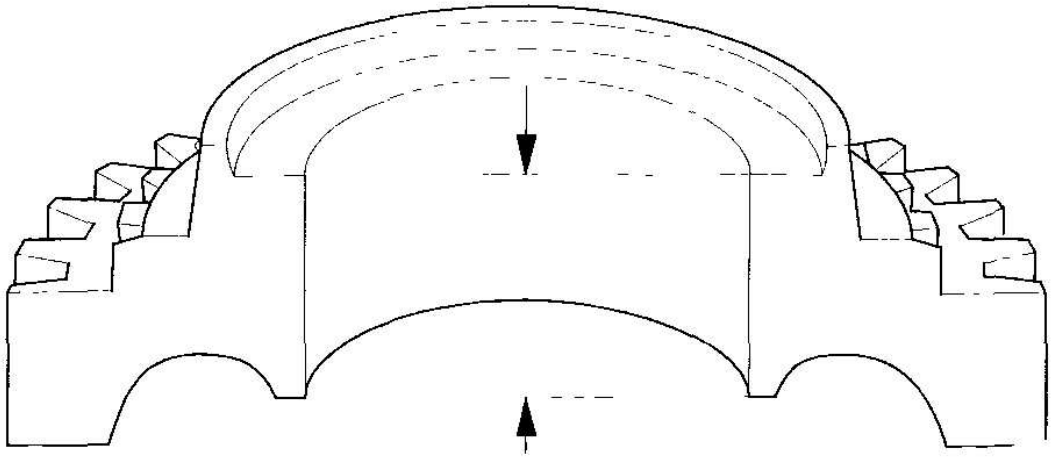
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Fig. 122: Measuring Thickness Of Distance Collar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Measure the thickness of 6th gear.
    - If the thickness is less than the service limit, replace 6th gear.
    - If the thickness is within the service limit, replace the 5th/6th synchro hub/sleeve.

Standard: 21.89-21.97 mm (0.862-0.865 in.)

Service Limit: 21.8 mm (0.86 in.)



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Fig. 123: Measuring Thickness Of 6th Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MAINSHAFT DISASSEMBLY

1. Support 6th gear (A) on the steel blocks, and press the mainshaft out of the ball bearing (B). Use of a jaw-type puller can damage the gear teeth.

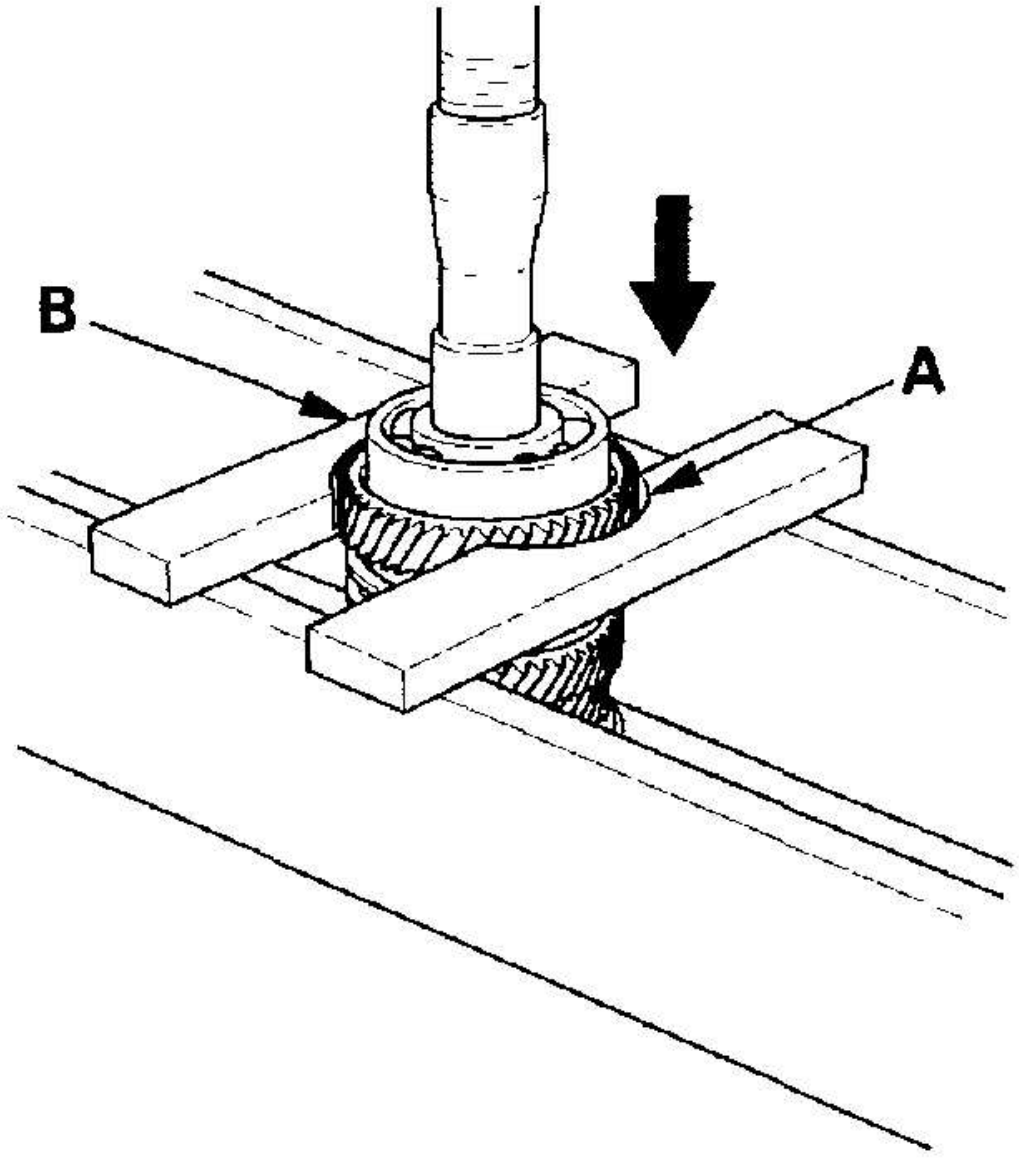


Fig. 124: Supporting 6th Gear On Steel Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Support 5th gear (A) on the steel blocks, and press the mainshaft out of the 5th/6th synchro hub (B). Use of a jaw-type puller can damage the gear teeth.

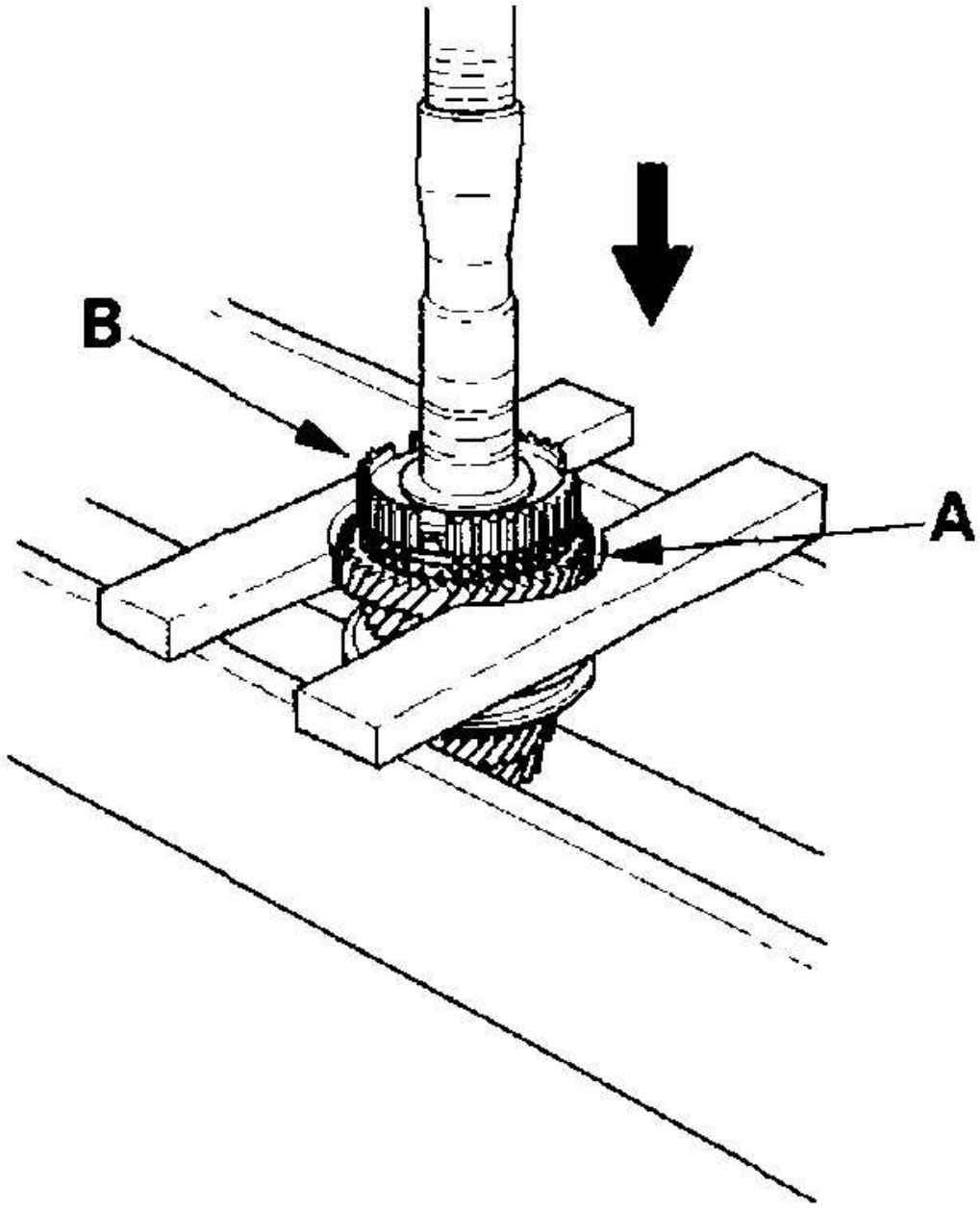
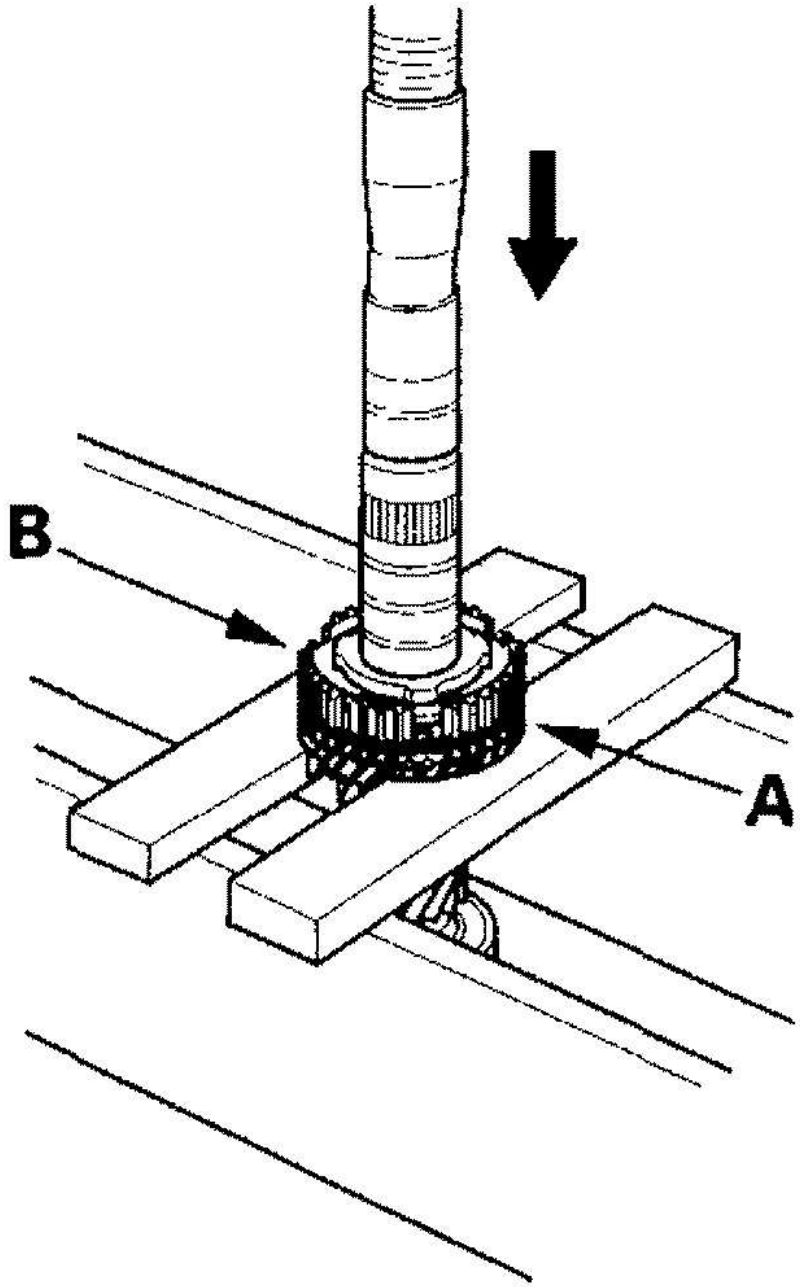


Fig. 125: Supporting 5th Gear On Steel Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Support 3rd gear (A) on the steel blocks, and press the mainshaft out of the 3rd/4th synchro hub (B). Use of a jaw-type puller can damage the gear teeth.



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Fig. 126: Supporting 3rd Gear On Steel Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Support the angular ball bearing on the steel blocks, and press out the mainshaft.

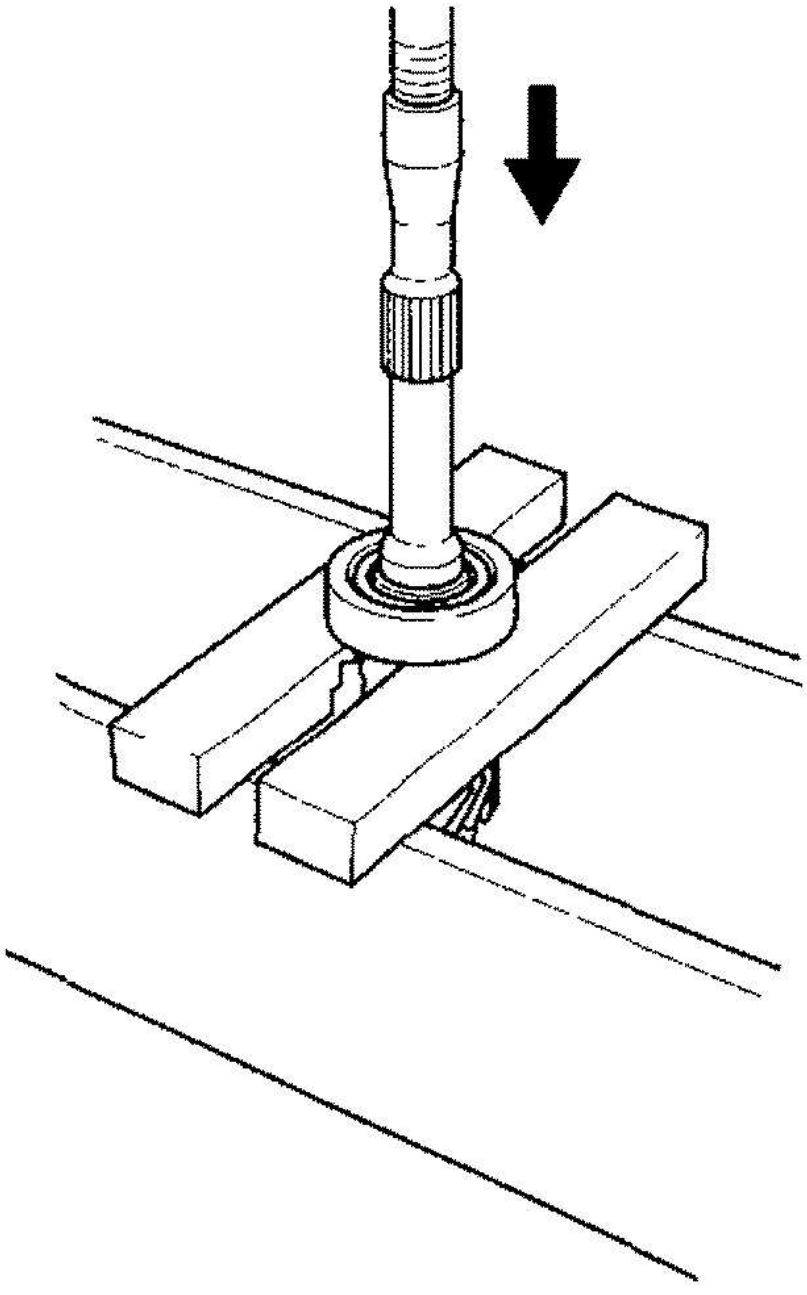


Fig. 127: Supporting Angular Ball Bearing On Steel Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MAINSHAFT INSPECTION

1. Inspect the oil passage, gear, and bearing surfaces for wear and damage, then measure the mainshaft at points A, B, C, D, E, and F. If any part of the mainshaft is less than the service limit, replace it.

   Standard:

   A Ball bearing surface (transmission housing side): 30.987-31.000 mm (1.2200-1.2205 in.)

   B 6th gear distance collar surface: 32.987-33.000 mm (1.2987-1.2992 in.)

   C 4th/5th gear distance collar surface: 35.987-36.000 mm (1.4168-1.4173 in.)

   D Needle bearing surface: 41.984-42.000 mm (1.6529-1.6535 in.)

   E Ball bearing surface (clutch housing side): 28.002-28.015 mm (1.1024-1.1030 in.)

   F Pilot bearing surface: 19.967-19.980 mm (0.7861-0.7866 in.)

   Service Limit:

   A: 30.93 mm (1.218 in.)

   B: 32.93 mm (1.296 in.)

   C: 35.93 mm (1.415 in.)

   D: 41.93 mm (1.651 in.)

   E: 27.95 mm (1.100 in.)

   F: 19.91 mm (0.784 in.)

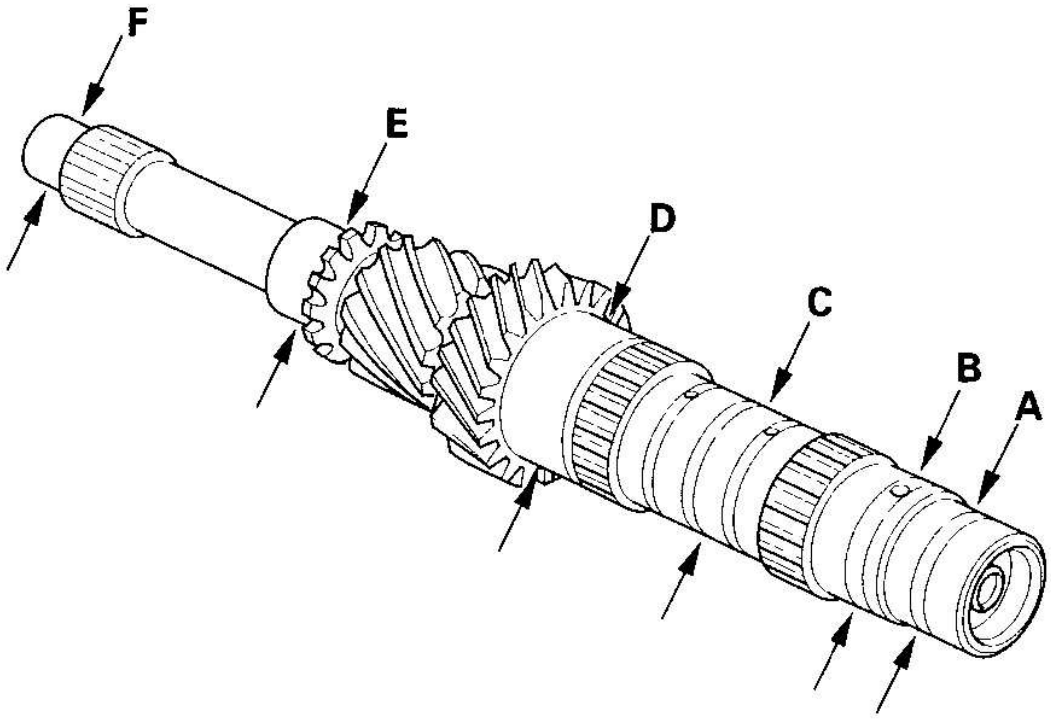
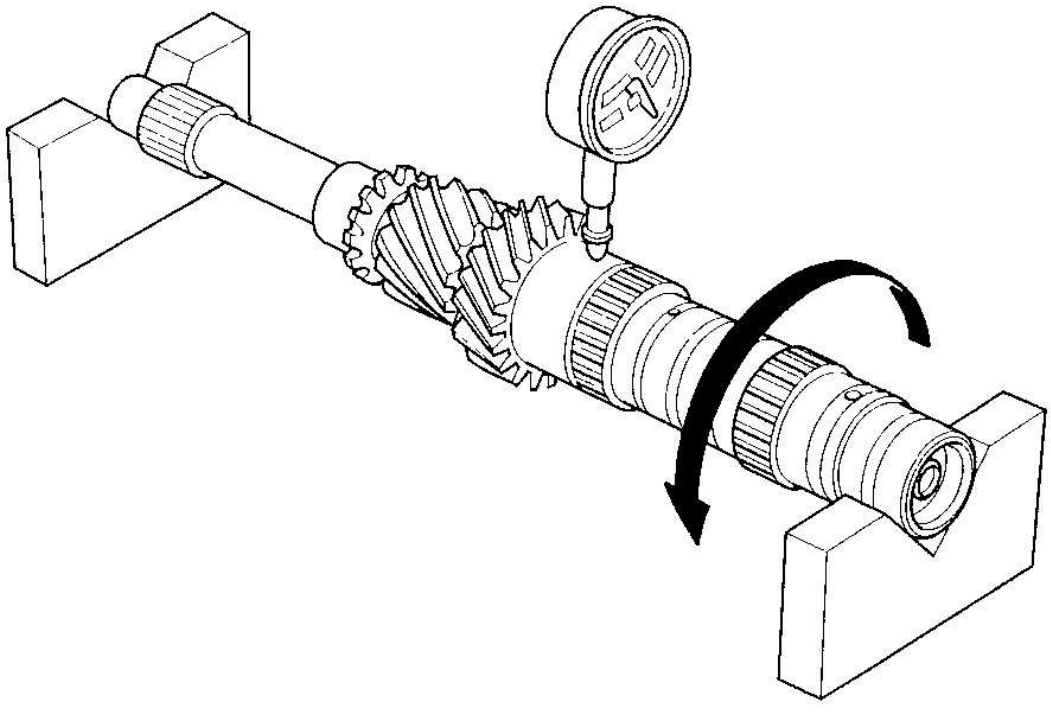


Fig. 128: Inspecting Oil Passage, Gear And Bearing Surfaces
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Inspect the runout by supporting both ends of the mainshaft. Then rotate the mainshaft two complete turns while measuring with a dial gauge. If the runout is more than the service limit, replace the mainshaft.

   Standard: 0.02 mm (0.001 in.)

   Service Limit: 0.05 mm (0.002 in.)



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Fig. 129: Inspecting Runout By Supporting Both Ends Of Mainshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MAINSHAFT REASSEMBLY

Exploded View

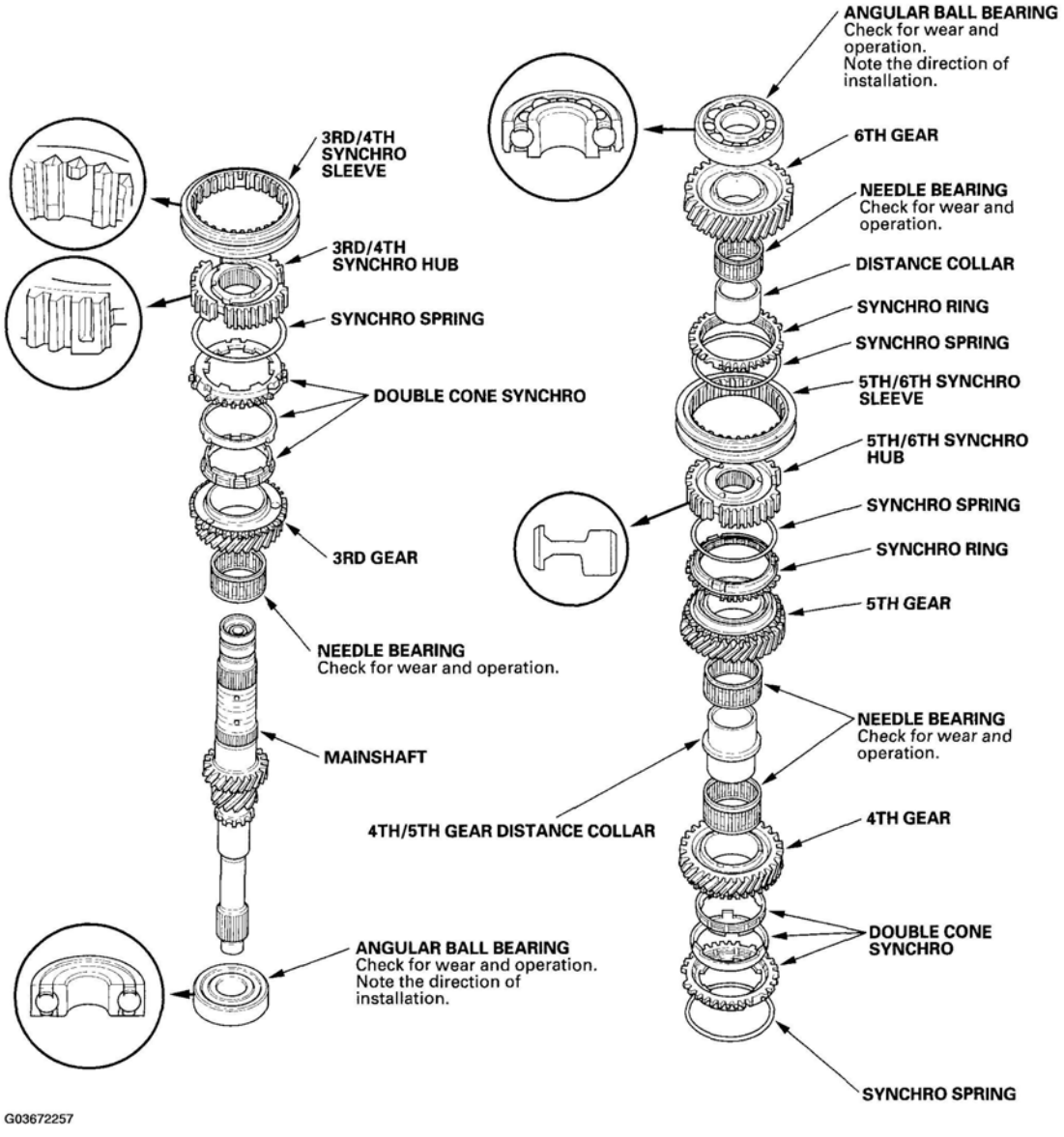


Fig. 130: Exploded View Of Mainshaft Reassembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

- Driver, 40 mm I.D. 07746-0030100
- Driver, 30 mm I.D. 07946-MB00000

NOTE: Refer to the Fig. 130 .

1. Clean all parts in solvent, dry them, and apply lubricant to all contact surfaces except the 3rd/4th and 5th/6th synchro hubs.
2. Install the new angular ball bearing (A) using the special tool and a press. Note the direction of installation.

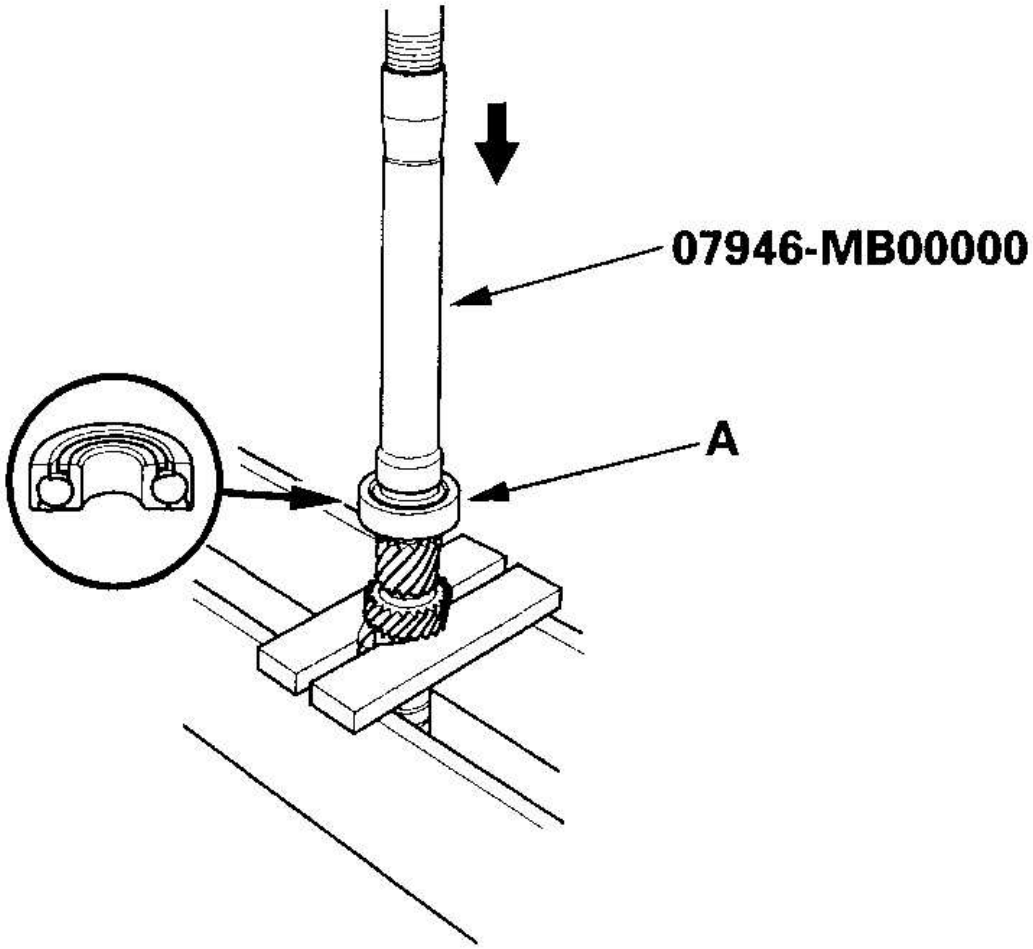


Fig. 131: Identifying New Angular Ball Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the needle bearing (A) and 3rd gear (B) on the mainshaft (C).

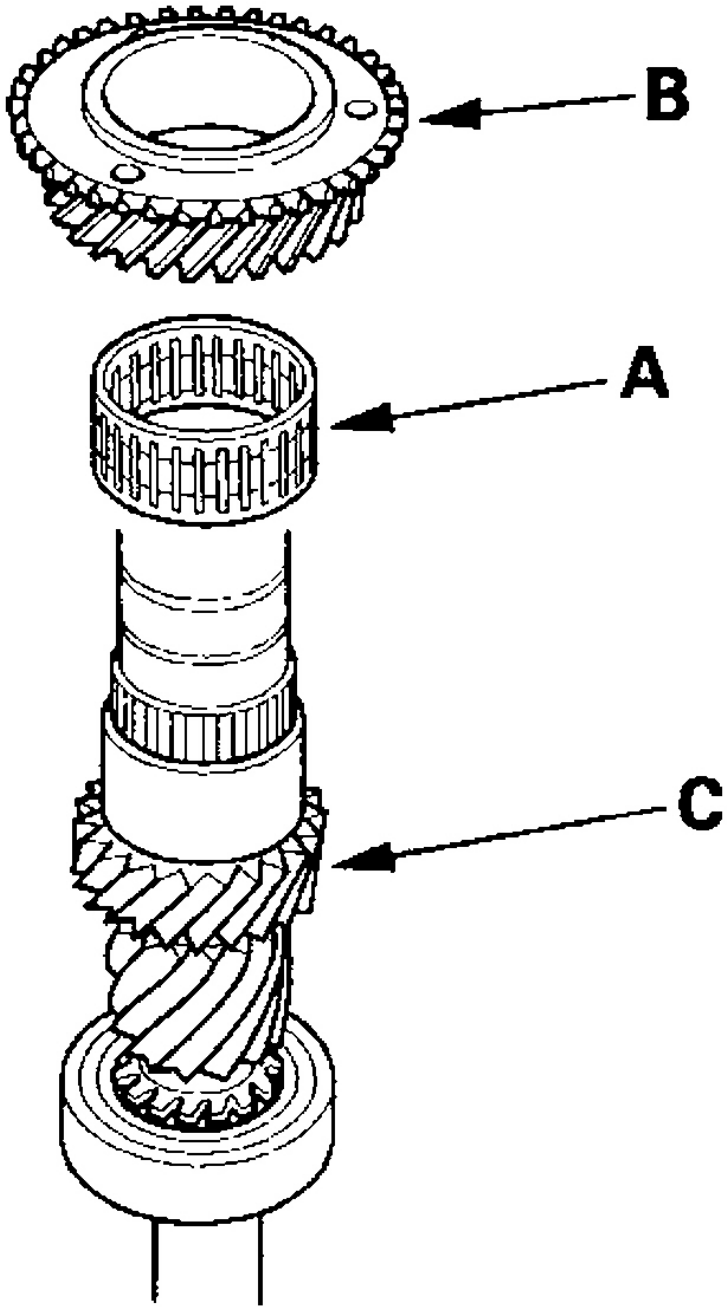
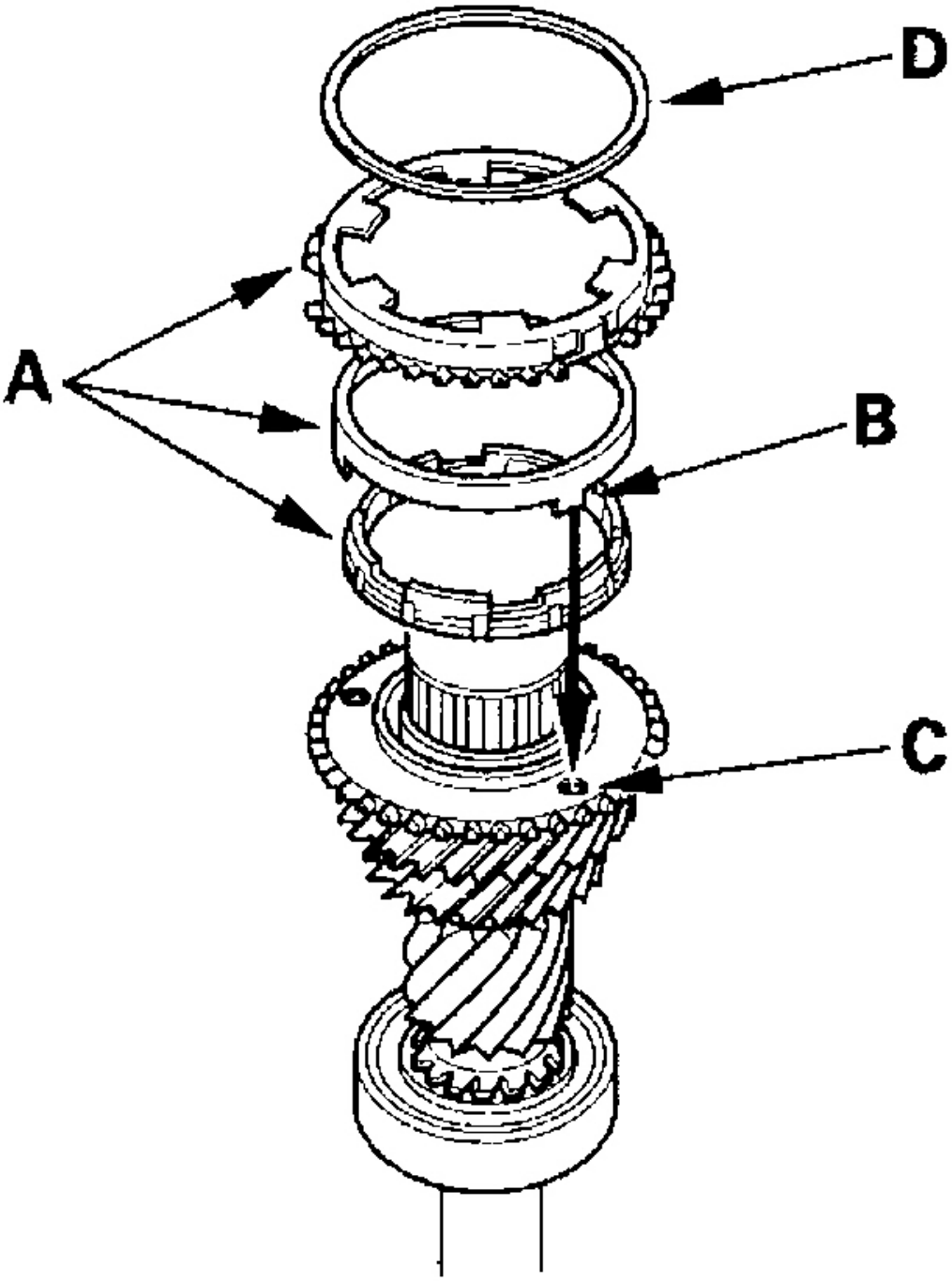


Fig. 132: Identifying Needle Bearing And 3rd Gear On Mainshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the double cone synchro assembly (A) by aligning the synchro cone fingers (B) with the holes in 3rd gear (C), then install the synchro spring (D).



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Fig. 133: Identifying Double Cone Synchro Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the 3rd/4th synchro hub (A) by aligning the outer synchro ring fingers (B) with the grooves in the 3rd/4th synchro hub (C).

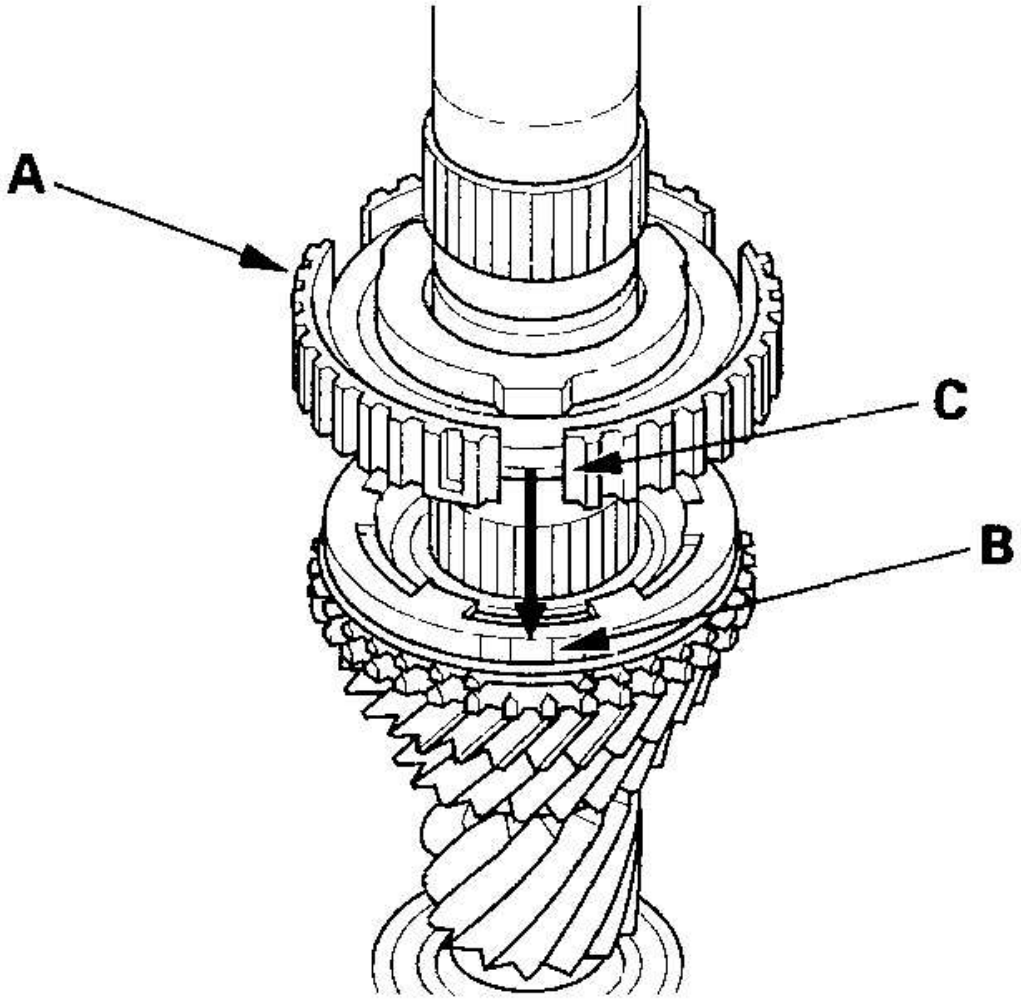


Fig. 134: Identifying 3rd/4th Synchro Hub
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the 3rd/4th synchro hub (A) using the special tool.

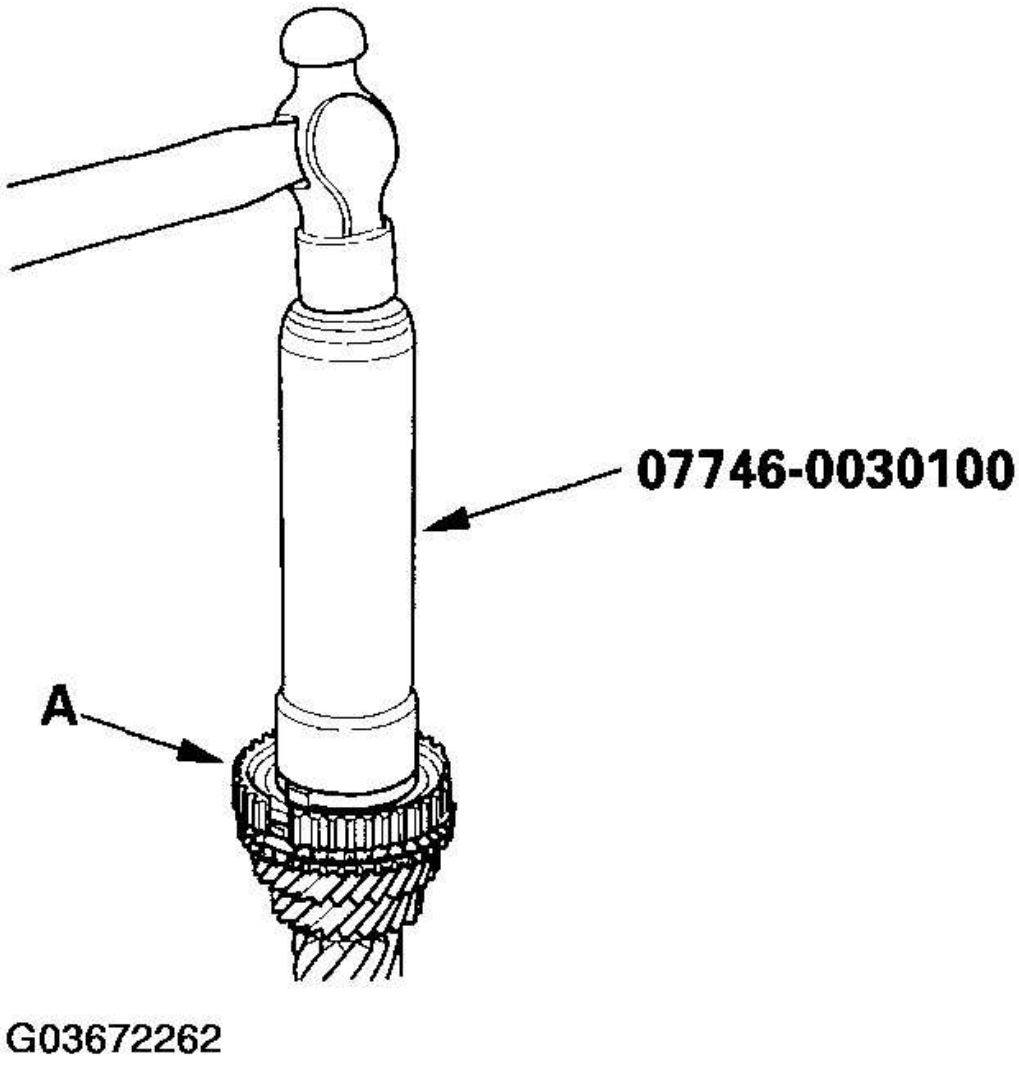


Fig. 135: Identifying 3rd/4th Synchro Hub
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the 3rd/4th synchro sleeve (A) by aligning the stops (B) with the 3rd/4th synchro sleeve and hub. After installing, check the operation of the 3rd/ 4th synchro hub set.

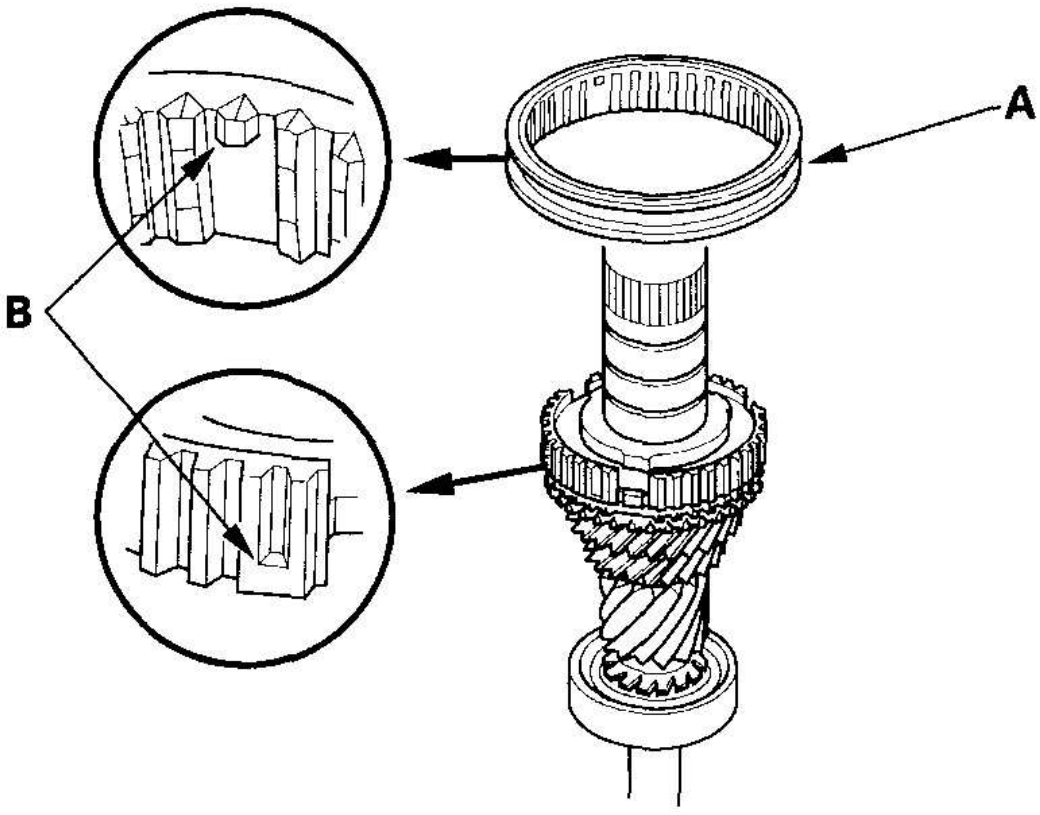


Fig. 136: Identifying 3rd/4th Synchro Sleeve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the synchro spring (A).

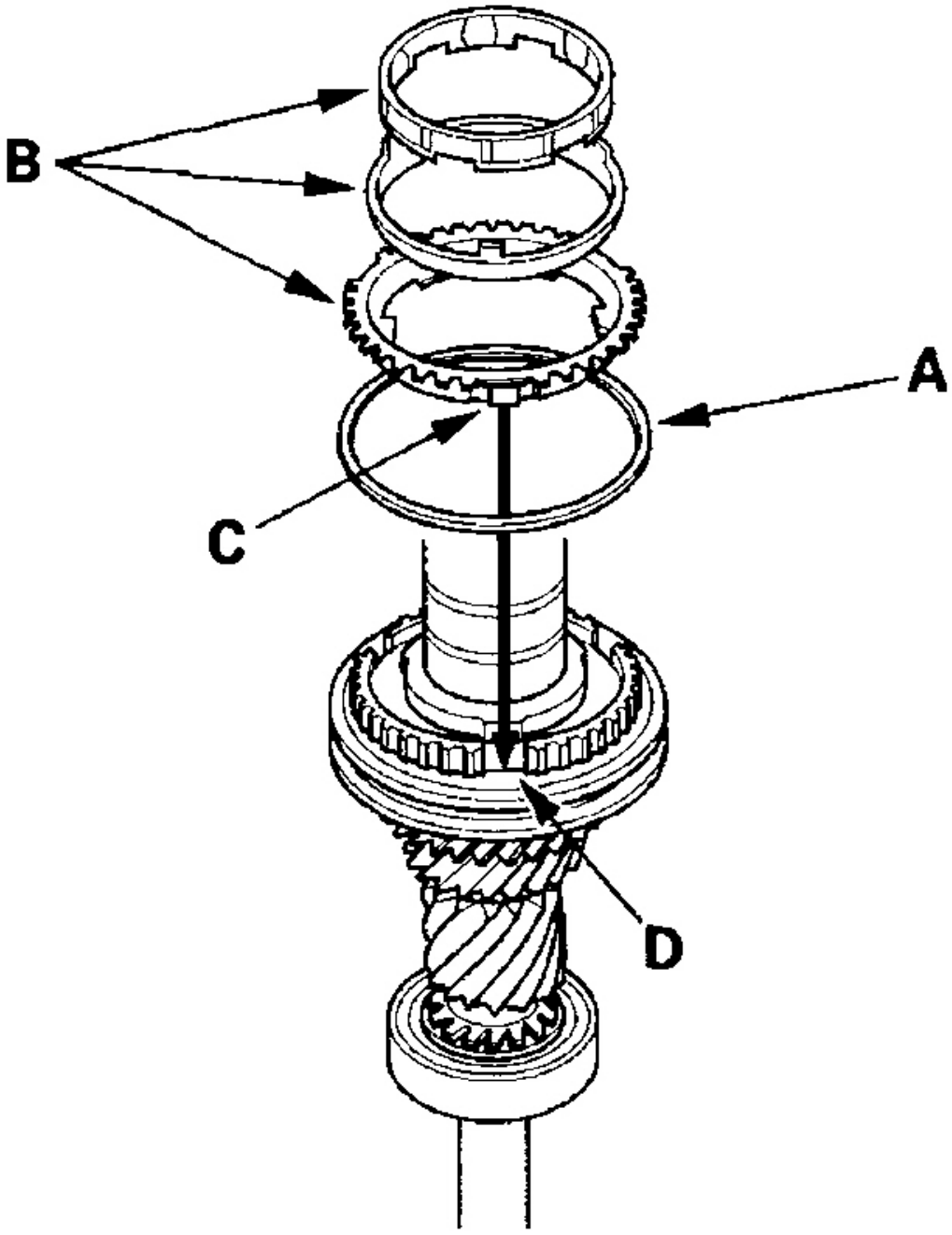


Fig. 137: Identifying Synchro Spring

Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the double cone synchro assembly (B) by aligning the outer synchro ring fingers (C) with the grooves in the 3rd/4th synchro hub (D).
10. Install 4th gear (A) by aligning the synchro cone fingers (B) with the holes in 4th gear (C).

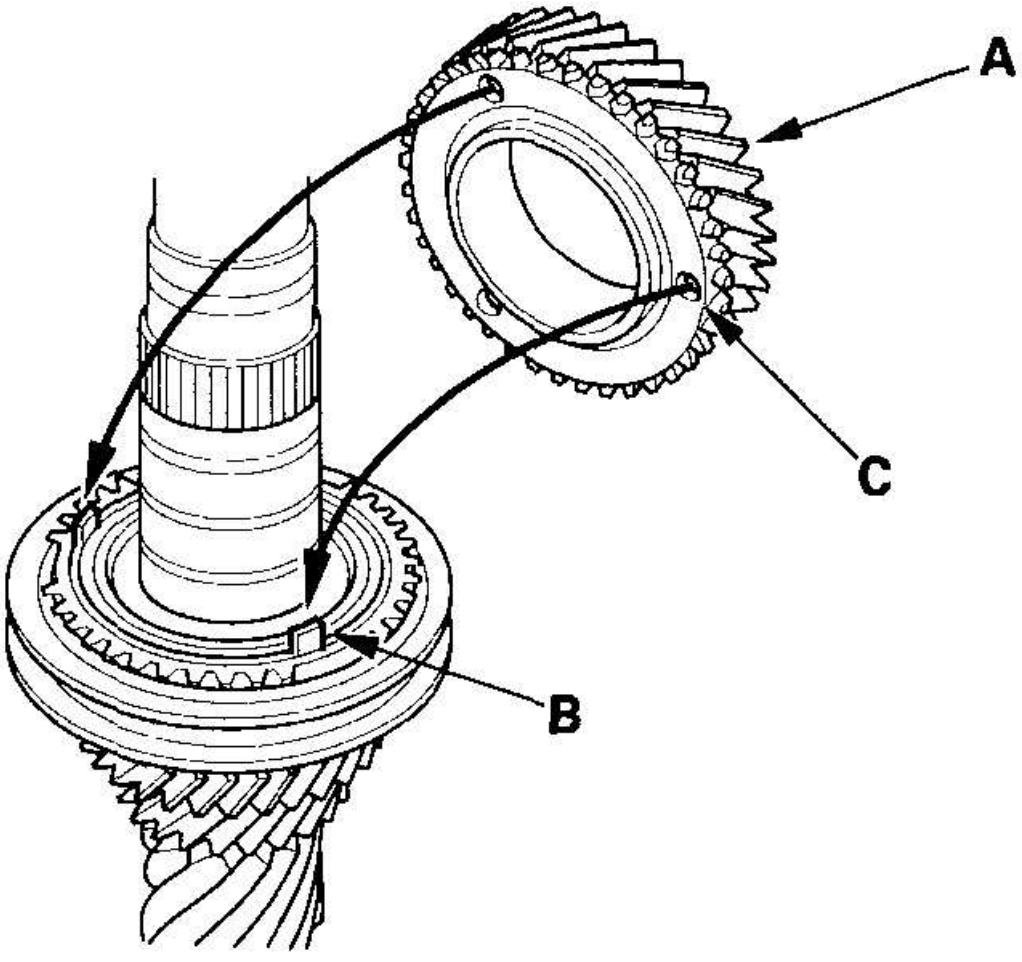


Fig. 138: Identifying 4th Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the needle bearings, distance collar, 5th gear, synchro ring, and synchro spring.
12. Install the 5th/6th synchro hub (A) by aligning the outer synchro ring fingers (B) with the grooves in the 5th/6th synchro hub (C).

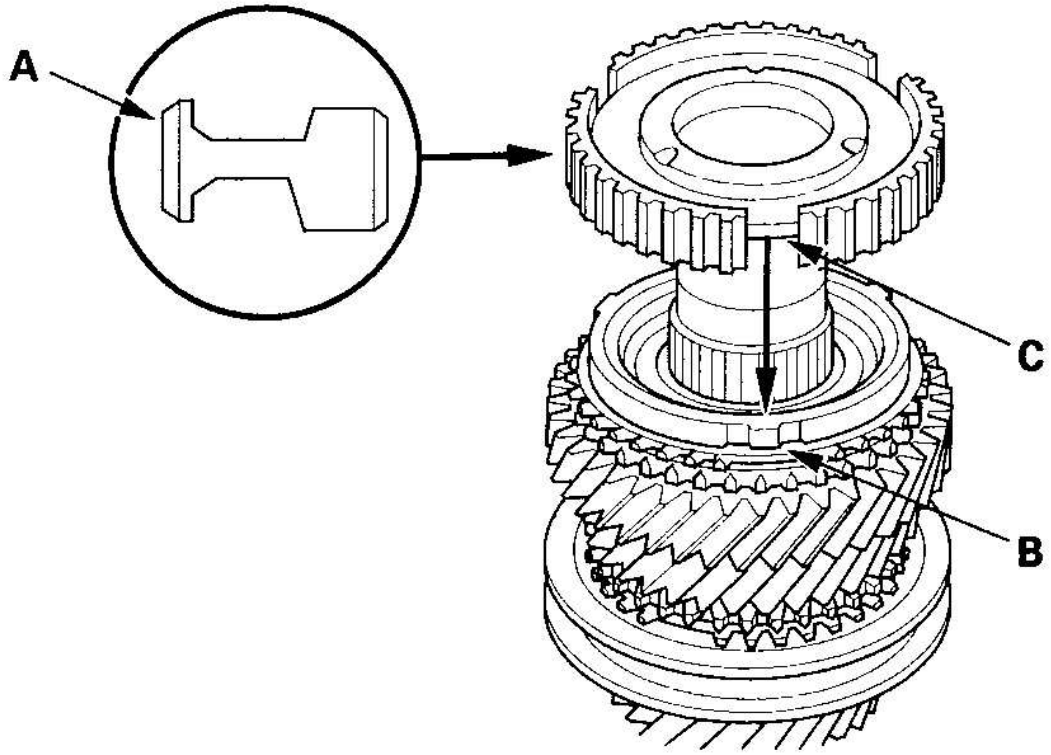


Fig. 139: Identifying 5th/6th Synchro Hub
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install the 5th/6th synchro hub (A) using the special tool.

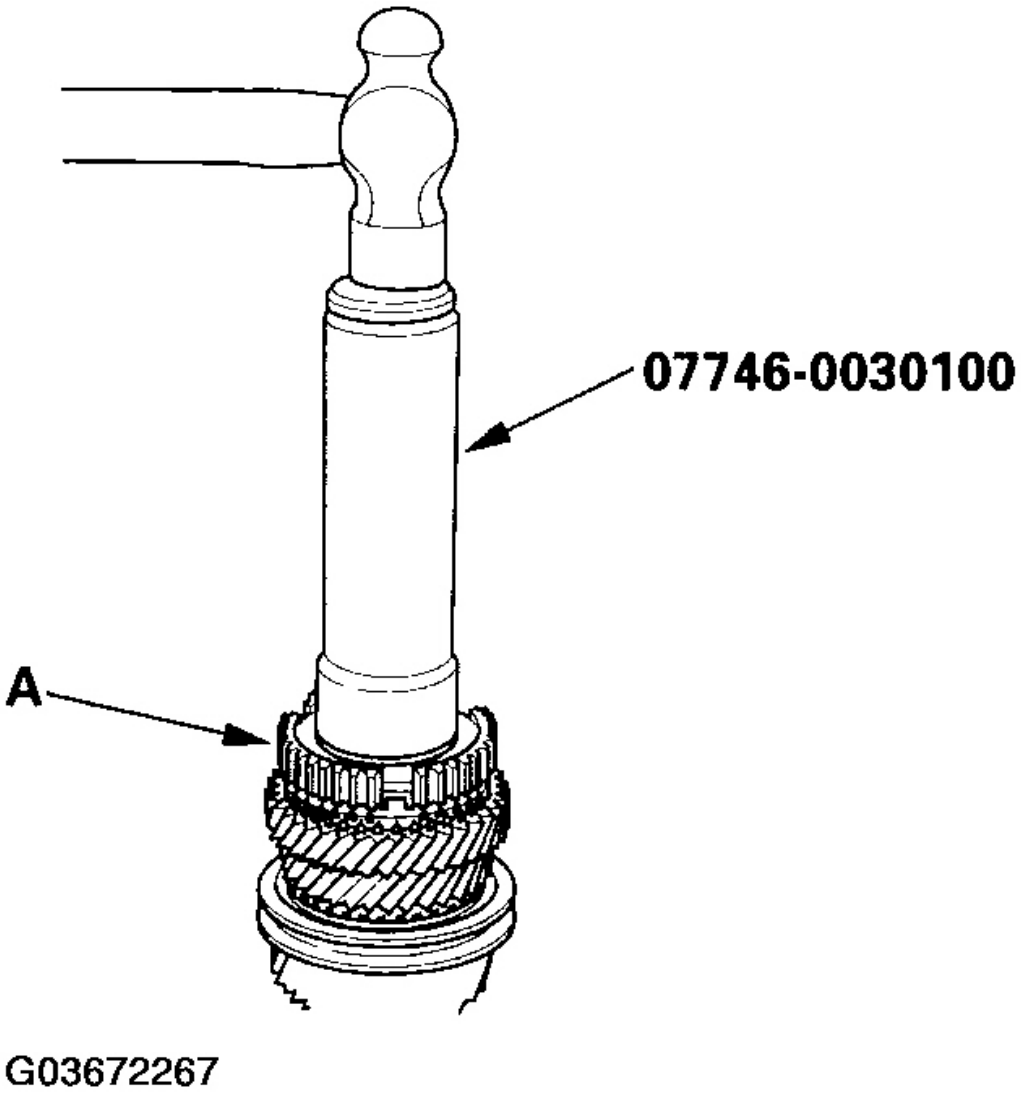


Fig. 140: Identifying 5th/6th Synchro Hub
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Install the 5th/6th synchro sleeve.

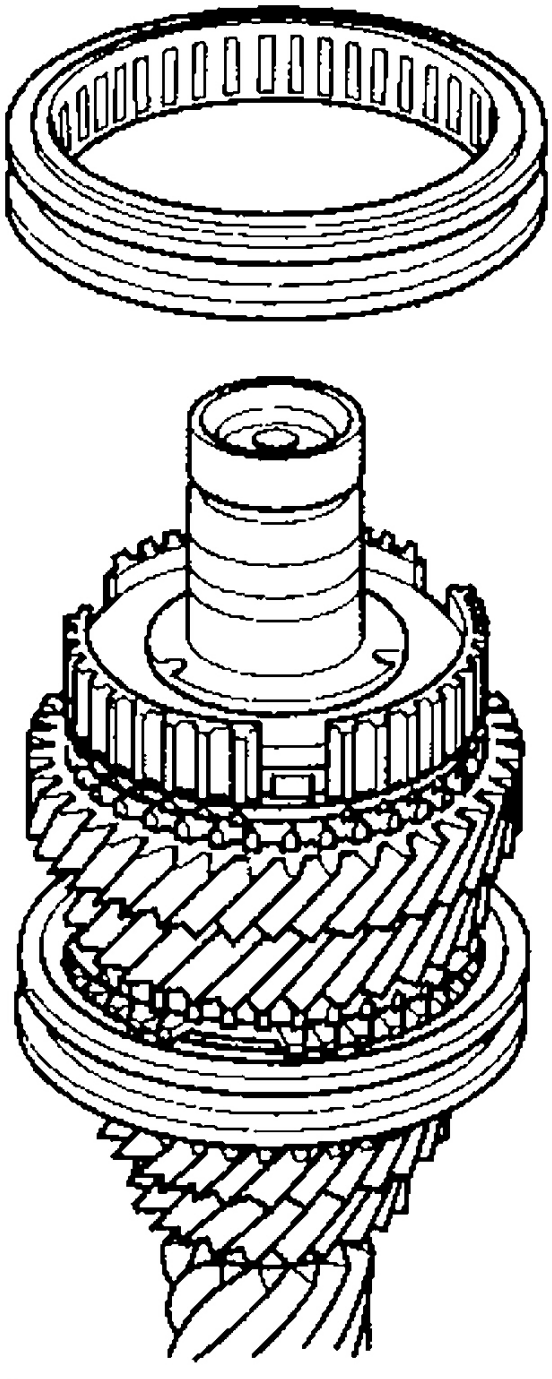


Fig. 141: Identifying 5th/6th Synchro Sleeve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Install the synchro spring and synchro ring.
16. Install the distance collar, needle bearing, and 6th gear.
17. Install the new angular ball bearing (A) using the special tool. Note the direction of installation.

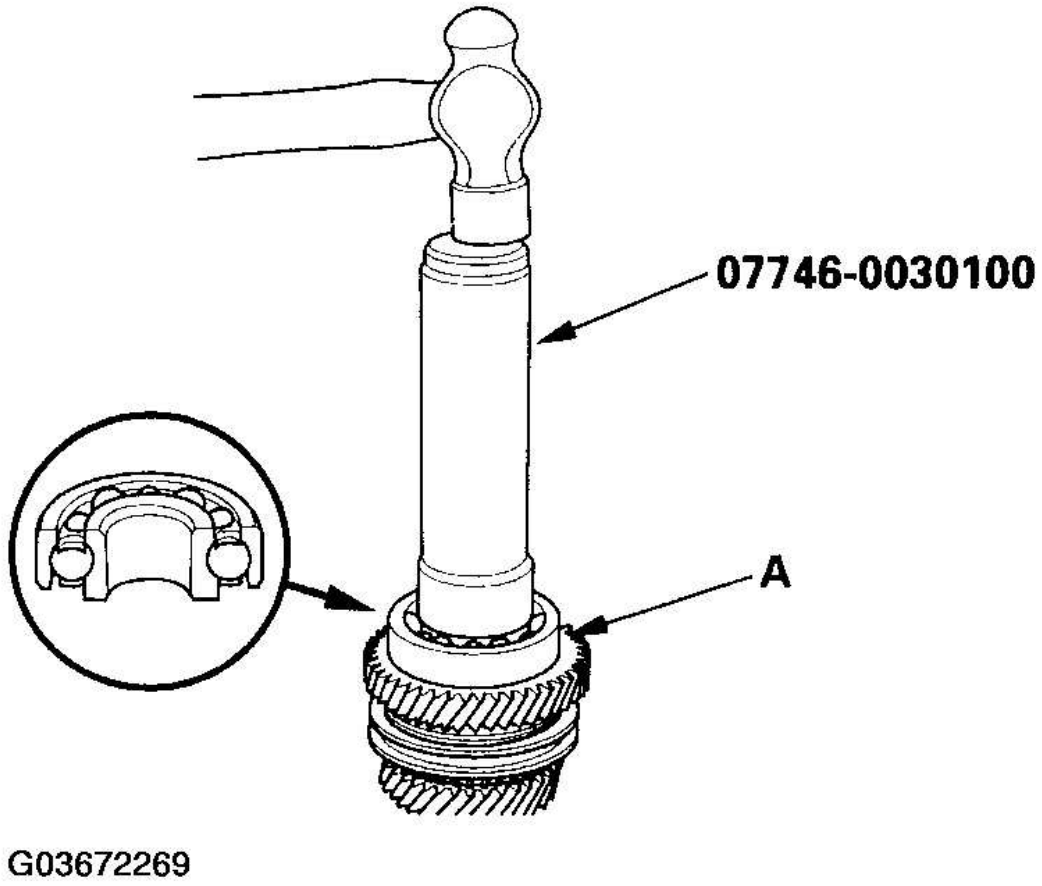


Fig. 142: Identifying New Angular Ball Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COUNTERSHAFT ASSEMBLY CLEARANCE INSPECTION

NOTE: Before inspection, make sure the 20 mm special bolt is tightened to the specified torque.

1. Measure the clearance between 1st gear (A) and the countershaft reverse gear (B) with a dial indicator (C). If the clearance is more than the service limit, go to step 2.

   Standard: 0.04-0.17 mm (0.002-0.007 in.)

   Service Limit: 0.28 mm (0.011 in.)

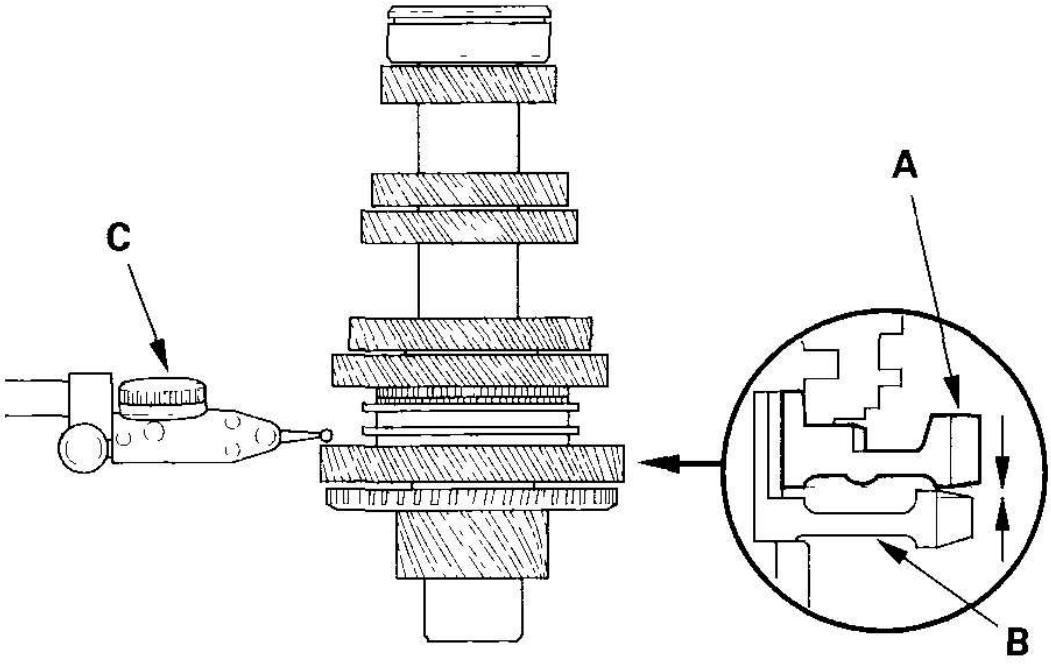
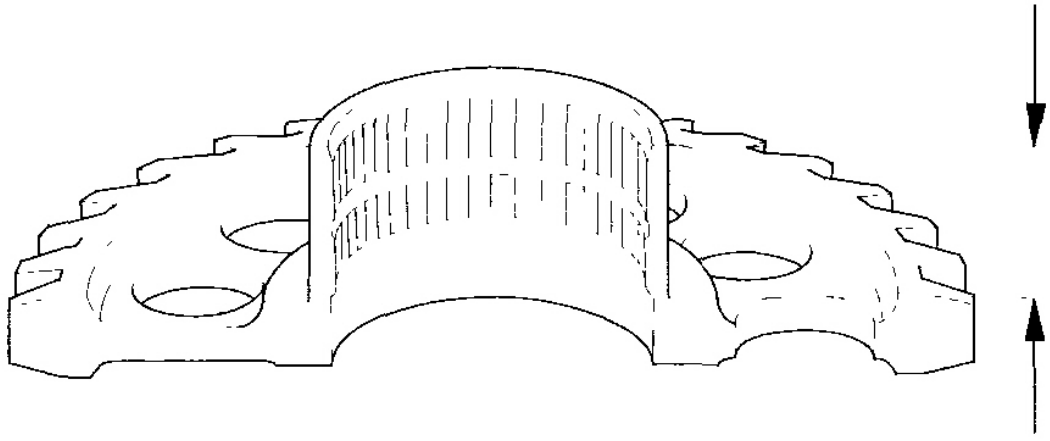


Fig. 143: Measuring Clearance Between 1st Gear And Countershaft Reverse Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the distance of the countershaft reverse gear.
   - If the distance is less than the standard, replace the countershaft reverse gear.
   - If the thickness is within the standard, go to step 3.

Standard: 23.03-23.08 mm (0.907-0.909 in.)



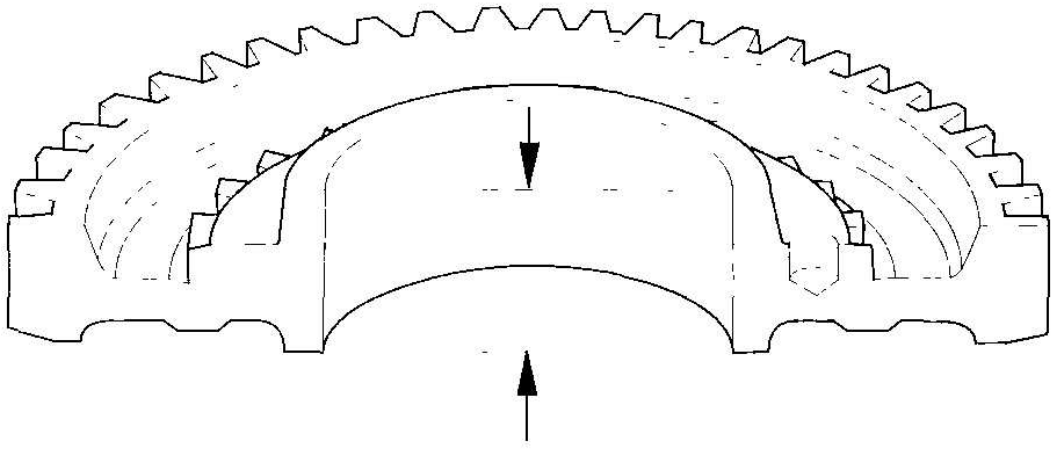
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Fig. 144: Measuring Distance Of Countershaft Reverse Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Measure the thickness of 1st gear.
   - If the thickness is less than the service limit, replace 1st gear.
   - If the thickness is within the service limit, replace the 1st/2nd synchro hub/sleeve.

Standard: 22.91-22.99 mm (0.902-0.905 in.)

Service Limit: 22.86 mm (0.900 in.)



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Fig. 145: Measuring Thickness Of 1st Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the clearance between 2nd gear (A) and 3rd gear (B) with a feeler gauge (C). If the clearance is more than the service limit, go to step 5.

   Standard: 0.04-0.17 mm (0.002-0.007 in.)

   Service Limit: 0.28 mm (0.011 in.)

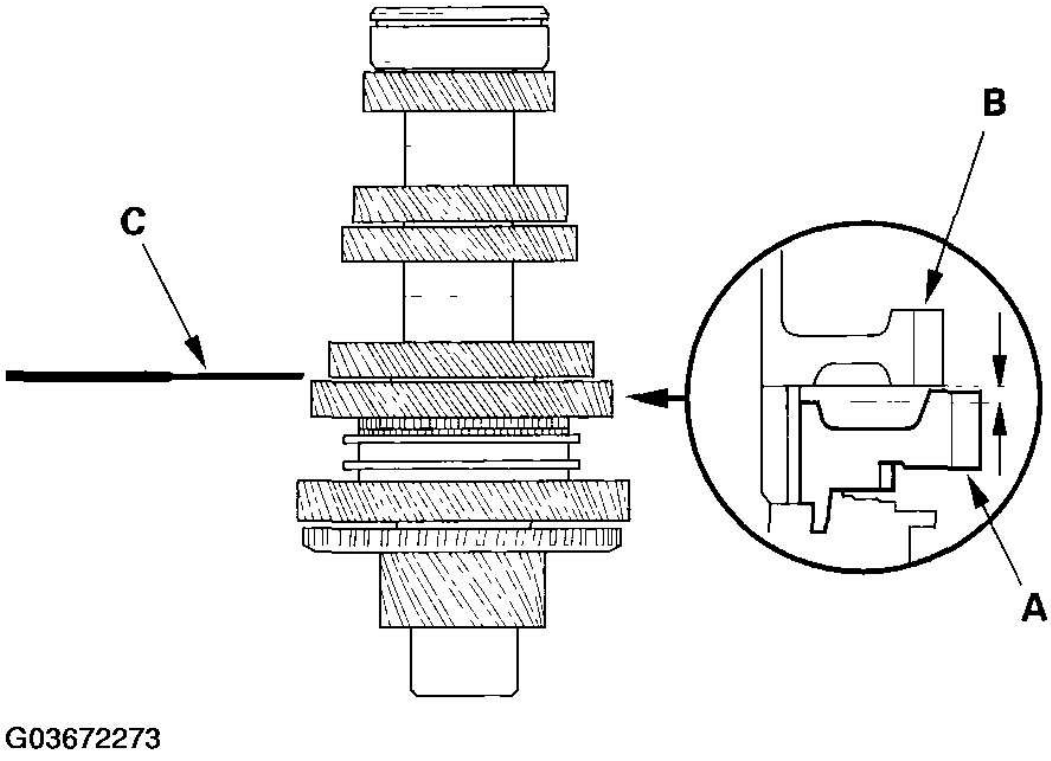
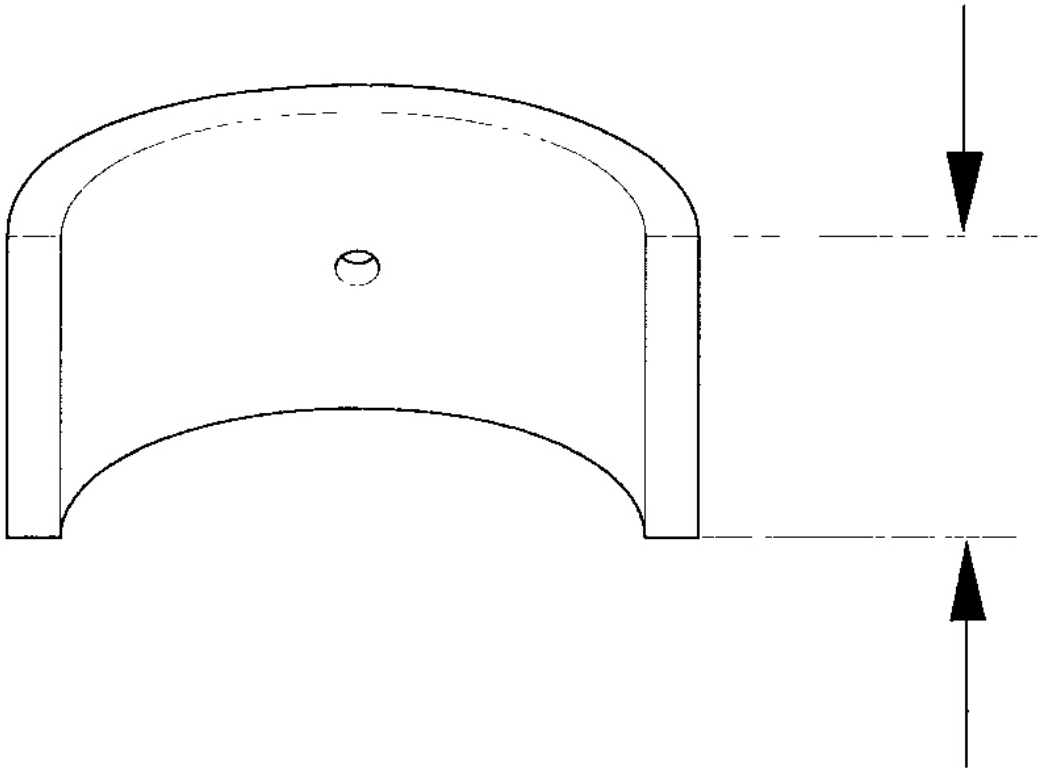


Fig. 146: Measuring Clearance Between 2nd Gear And 3rd Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Measure the thickness of the distance collar.
   - If the thickness is less than the standard, replace the distance collar.
   - If the thickness is within the standard, go to step 6.

Standard: 23.03-23.08 mm (0.907-0.909 in.)



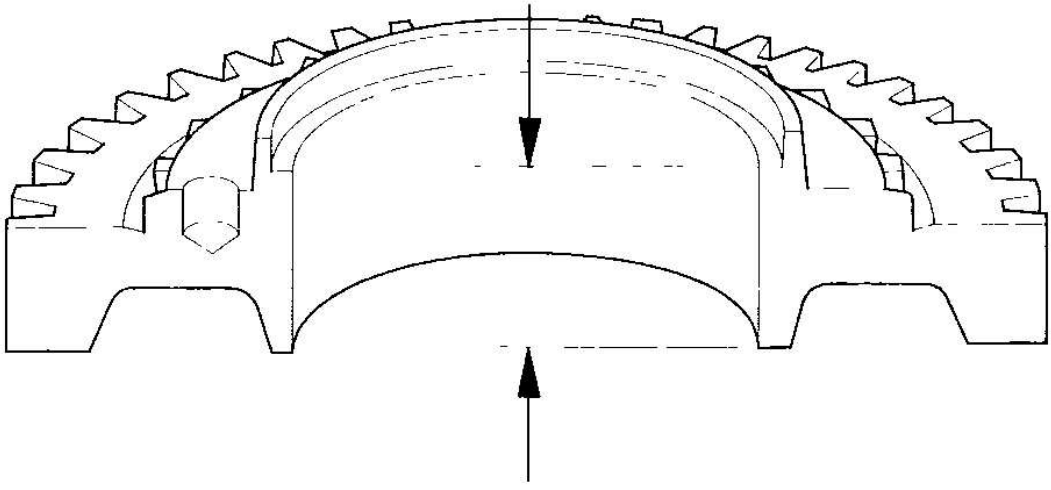
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Fig. 147: Measuring Thickness Of Distance Collar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Measure the thickness of 2nd gear.
   - If the thickness is less than the service limit, replace 2nd gear.
   - If the thickness is within the service limit, replace the 1st/2nd synchro hub.

Standard: 22.91 -22.99 mm (0.902-0.905 in.)

Service Limit: 22.86 mm (0.900 in.)

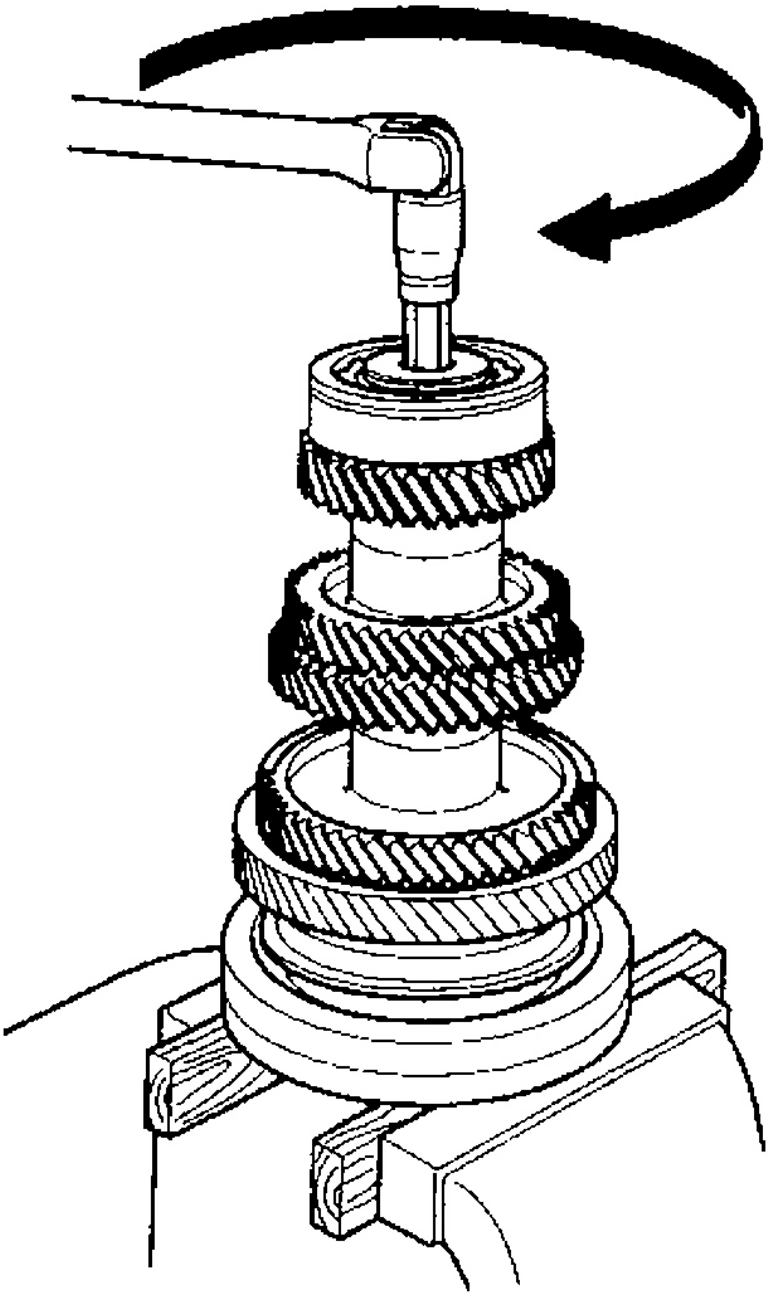


G03672275

Fig. 148: Measuring Thickness Of 2nd Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COUNTERSHAFT DISASSEMBLY

1. Securely clamp the countershaft assembly in a vise with wood blocks.



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Fig. 149: Securing Clamp Countershaft Assembly In Vise
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the 20 mm special bolt (left-hand threads).
3. Support 6th gear (A) on steel blocks (B), then use a press (C) and an attachment (D) to press the countershaft (E) out of the ball bearing.

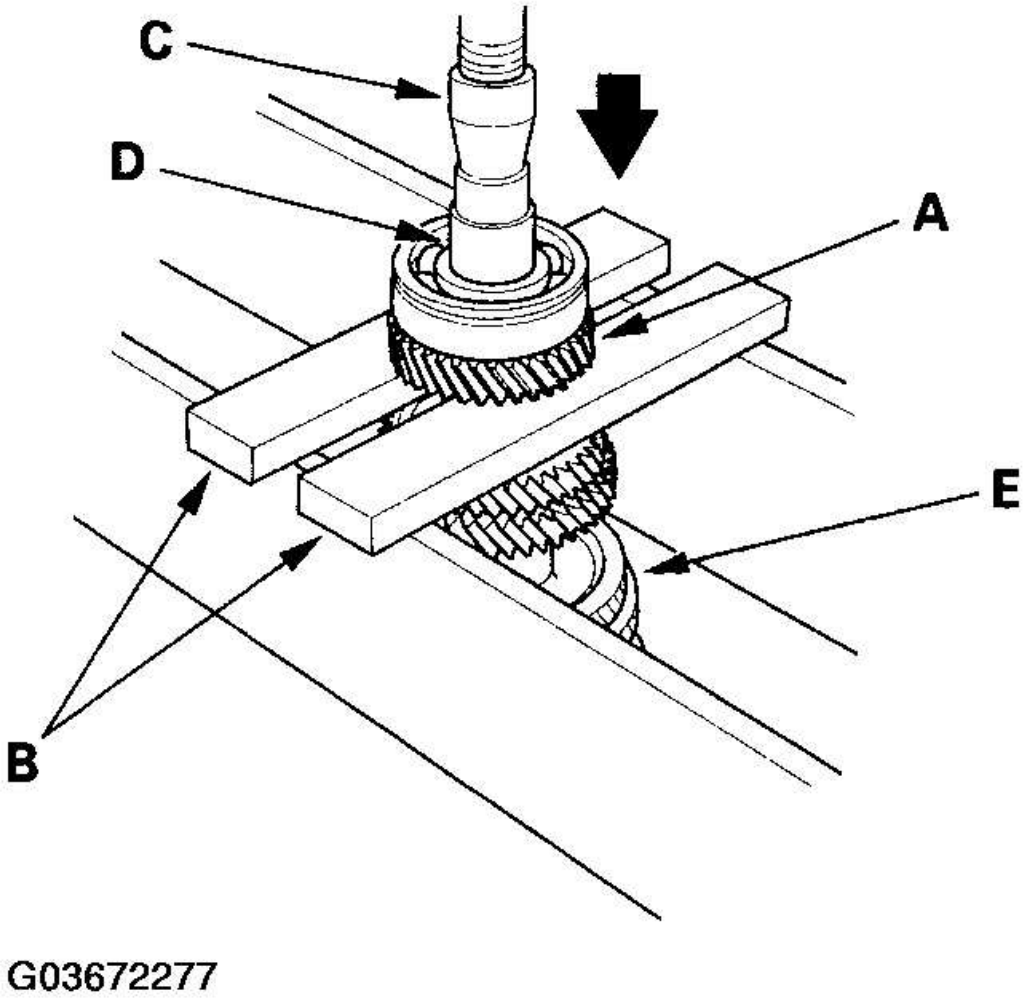


Fig. 150: Supporting 6th Gear On Steel Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the 35 mm shim and 6th gear.
5. Support 4th gear (A) on steel blocks (B), then use a press (C) and an

attachment (D) to press the countershaft (E) out of 4th and 5th gear.

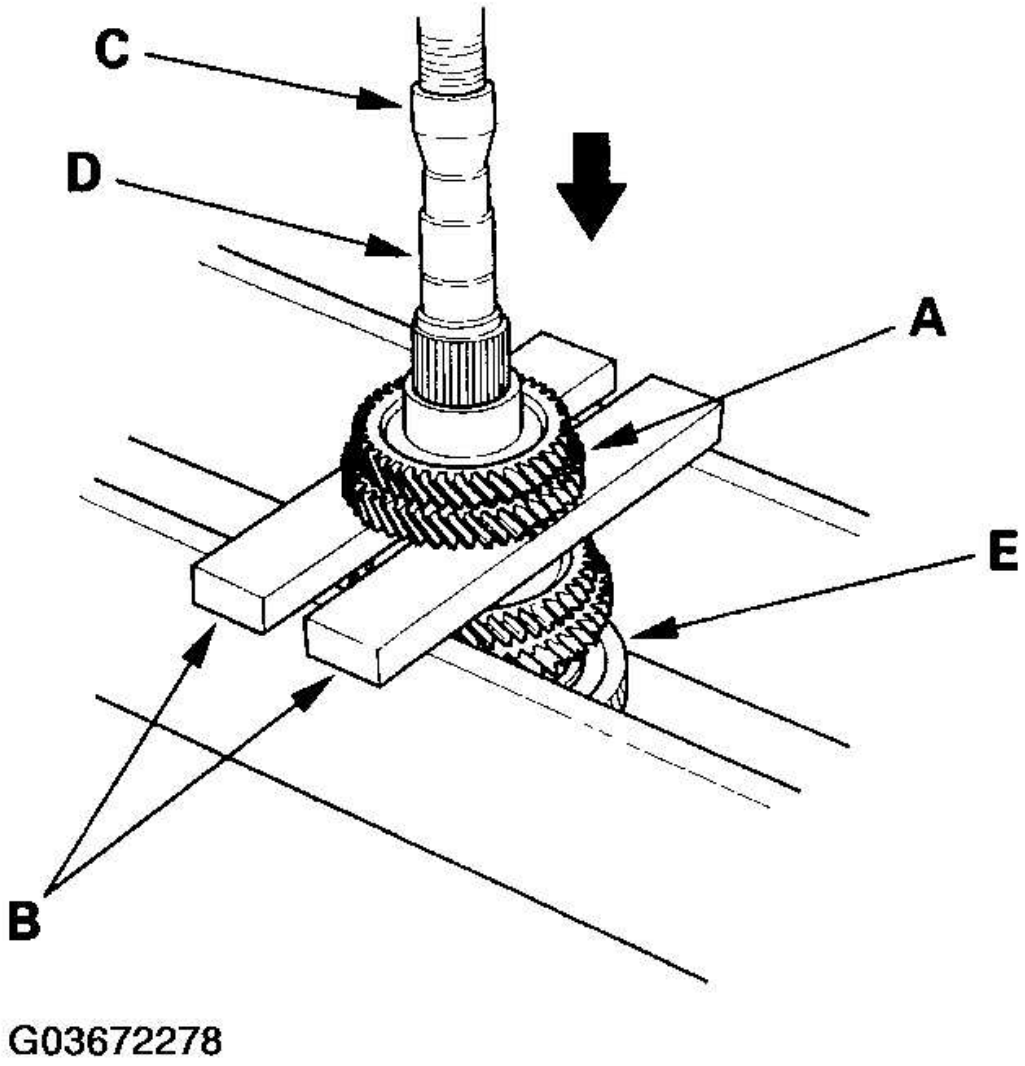


Fig. 151: Supporting 4th Gear On Steel Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Support 2nd gear (A) on steel blocks (B), then use a press (C) and an attachment (D) to press the countershaft (E) out of 2nd and 3rd gear.

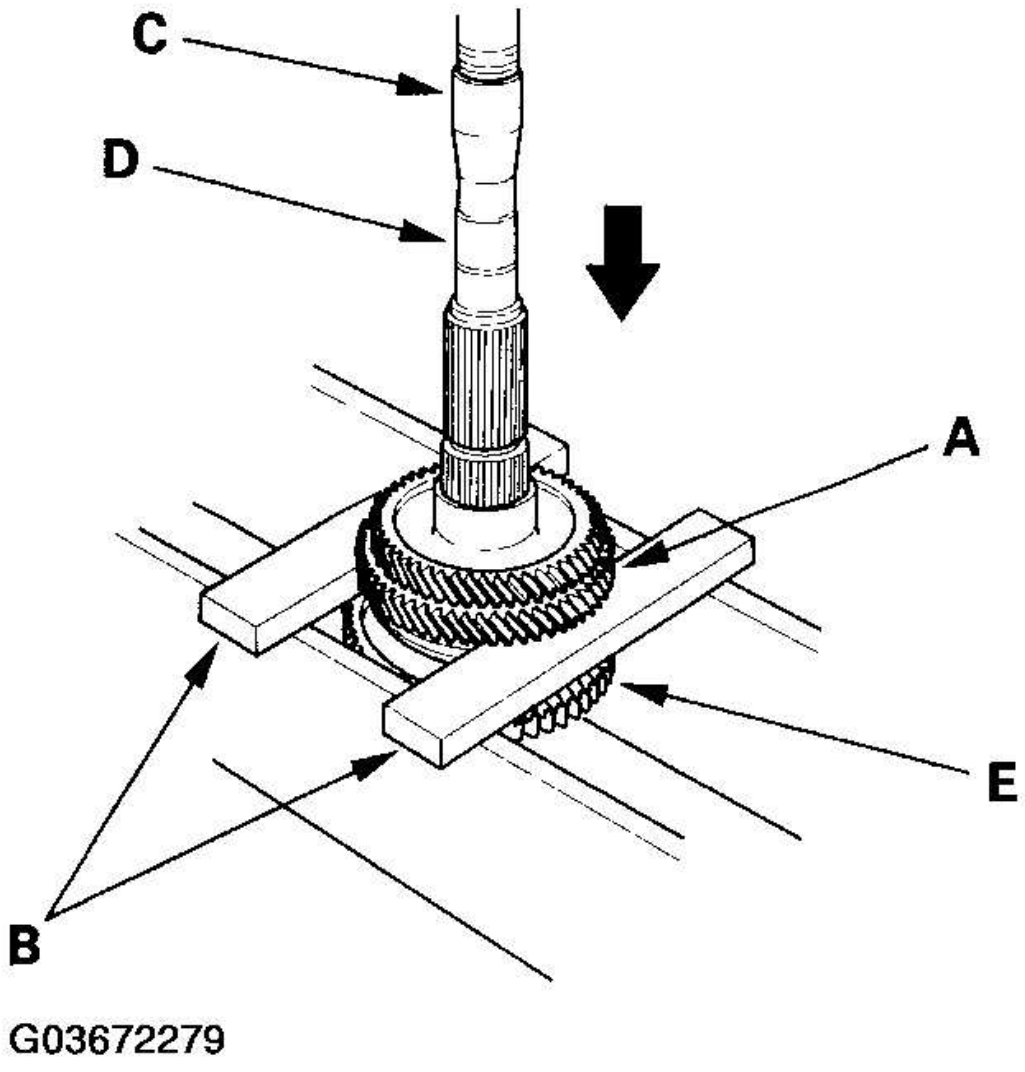


Fig. 152: Supporting 2nd Gear On Steel Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COUNTERSHAFT INSPECTION

1. Inspect the oil passage, gear, and bearing surfaces for wear and damage, then measure the countershaft at points A, B, C, and D. If any part of the countershaft is less than the service limit, replace it.

Standard:

A Ball bearing surface (transmission housing side): 30.002-30.015 mm (1.1812-1.1817 in.)

B Distance collar surface: 42.975-42.991 mm (1.6919-1.6926 in.)

C Countershaft reverse gear surface: 45.934-45.950 mm (1.8084-1.8091 in.)

D Needle bearing surface (clutch housing side): 43.974-43.990 mm (1.7313-1.7319 in.)

Service Limit:

A: 29.95 mm (1.179 in.)

B: 42.92 mm (1.690 in.)

C: 45.88 mm (1.806 in.)

D: 43.92 mm (1.729 in.)

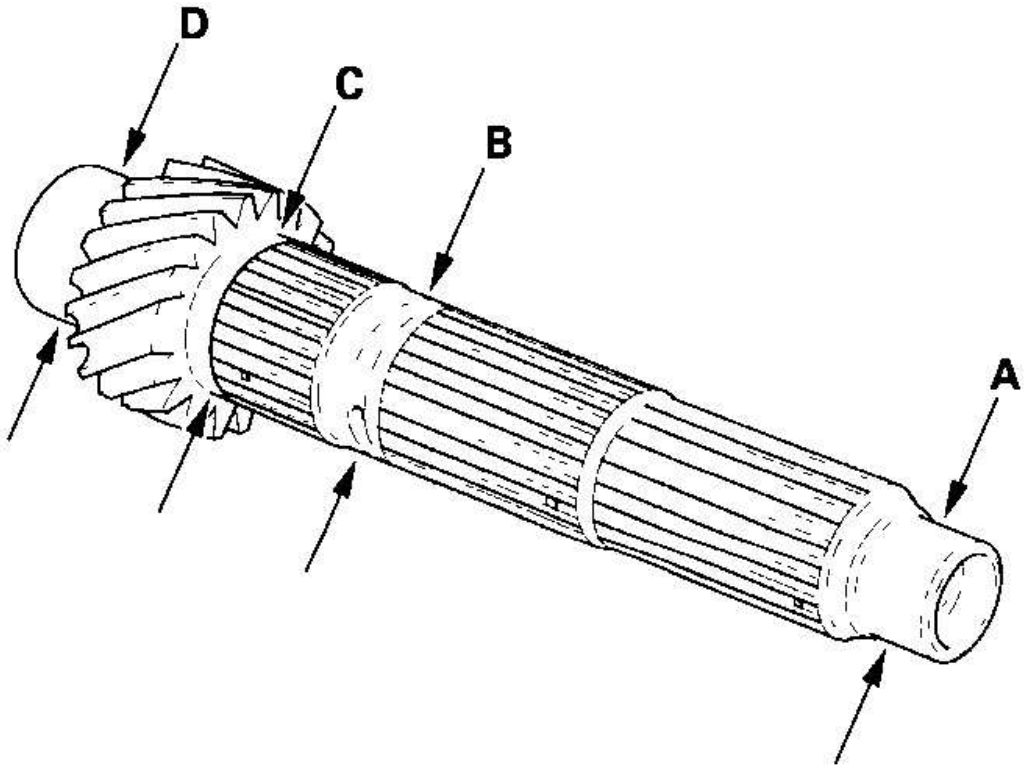
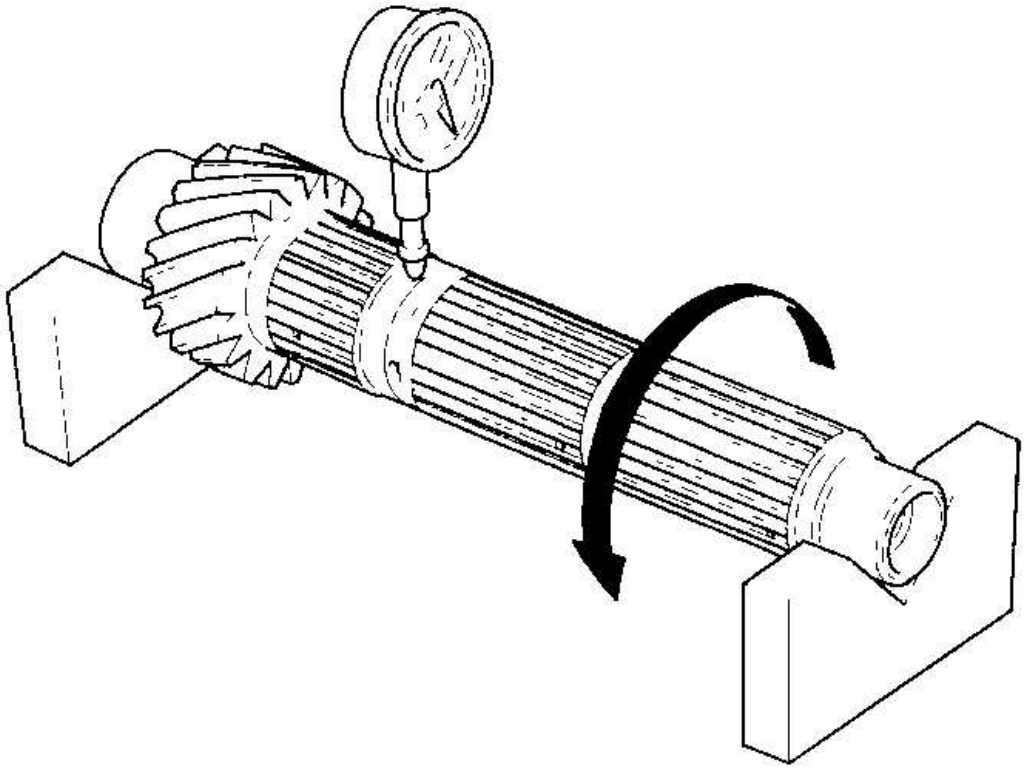


Fig. 153: Inspecting Oil Passage, Gear, And Bearing Surfaces For Wear And Damage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Inspect the runout by supporting both ends of the countershaft. Then rotate the countershaft two complete turns while measuring with a dial gauge. If the runout exceeds the service limit, replace the countershaft.

   Standard: 0.02 mm (0.001 in.) max.

   Service Limit: 0.05 mm (0.002 in.)



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Fig. 154: Inspecting Runout By Supporting Both Ends Of Countershaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COUNTERSHAFT REASSEMBLY

Exploded View

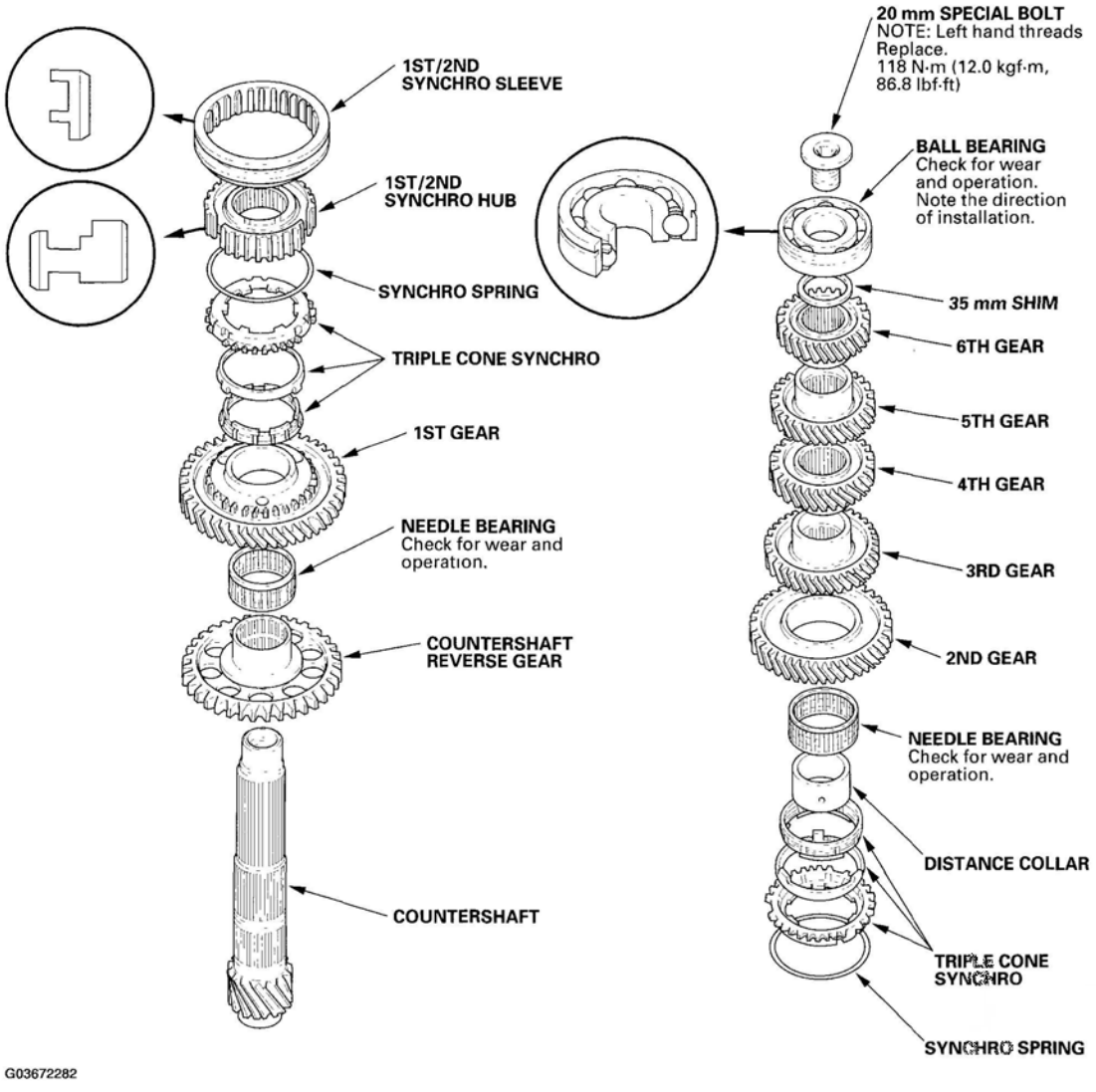


Fig. 155: Exploded View Of Countershaft Reassembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

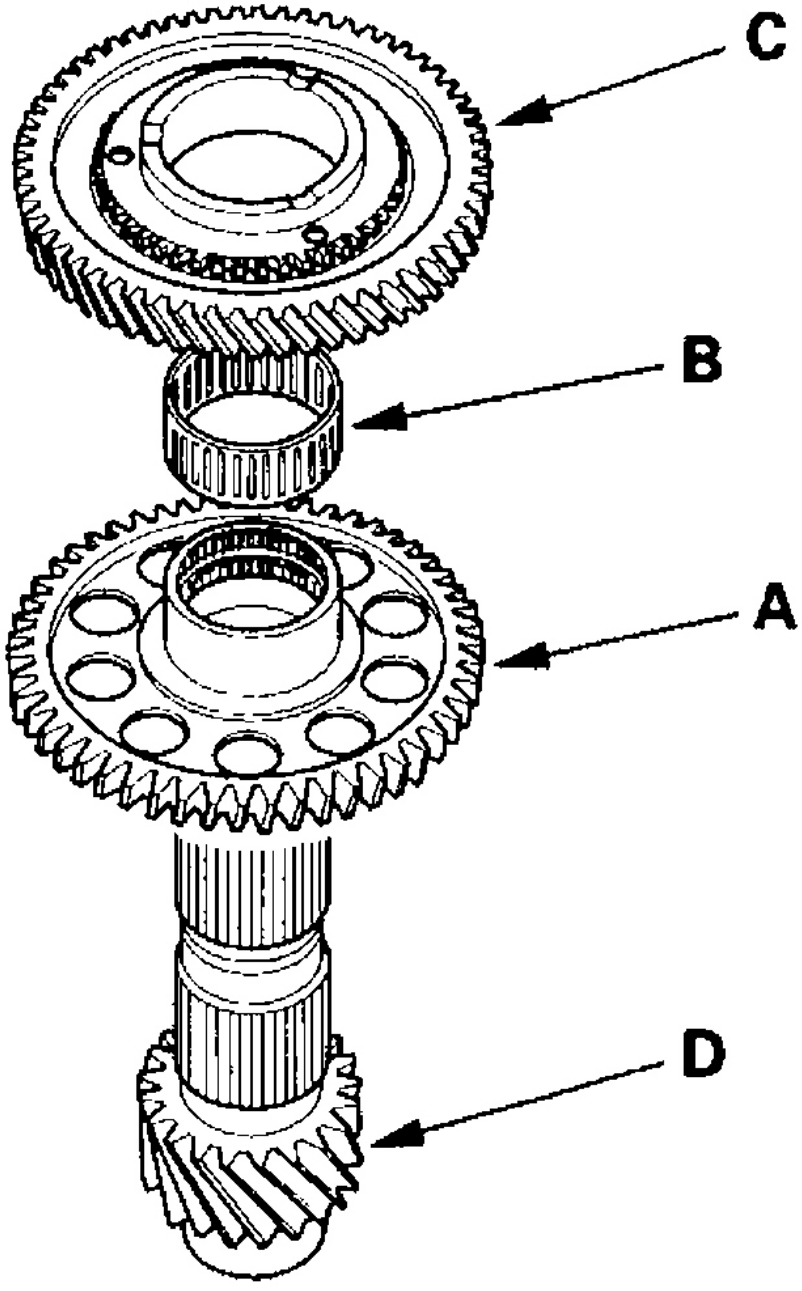
Special Tools Required

- Driver, 56 x 62 mm 070AD-PYZA100
- Driver, 40 mm I.D. 07746-0030100

NOTE: Refer to Fig. 155 as needed .

1. Clean all parts in solvent, dry them, and apply lubricant to all contact surfaces.

2. Install the countershaft reverse gear (A), needle bearing (B), and 1st gear (C) onto the countershaft (D).



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Fig. 156: Identifying Countershaft Reverse Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the triple cone synchro assembly (A) by aligning the synchro cone fingers (B) with the holes in 1st gear (C), then install the synchro spring (D).

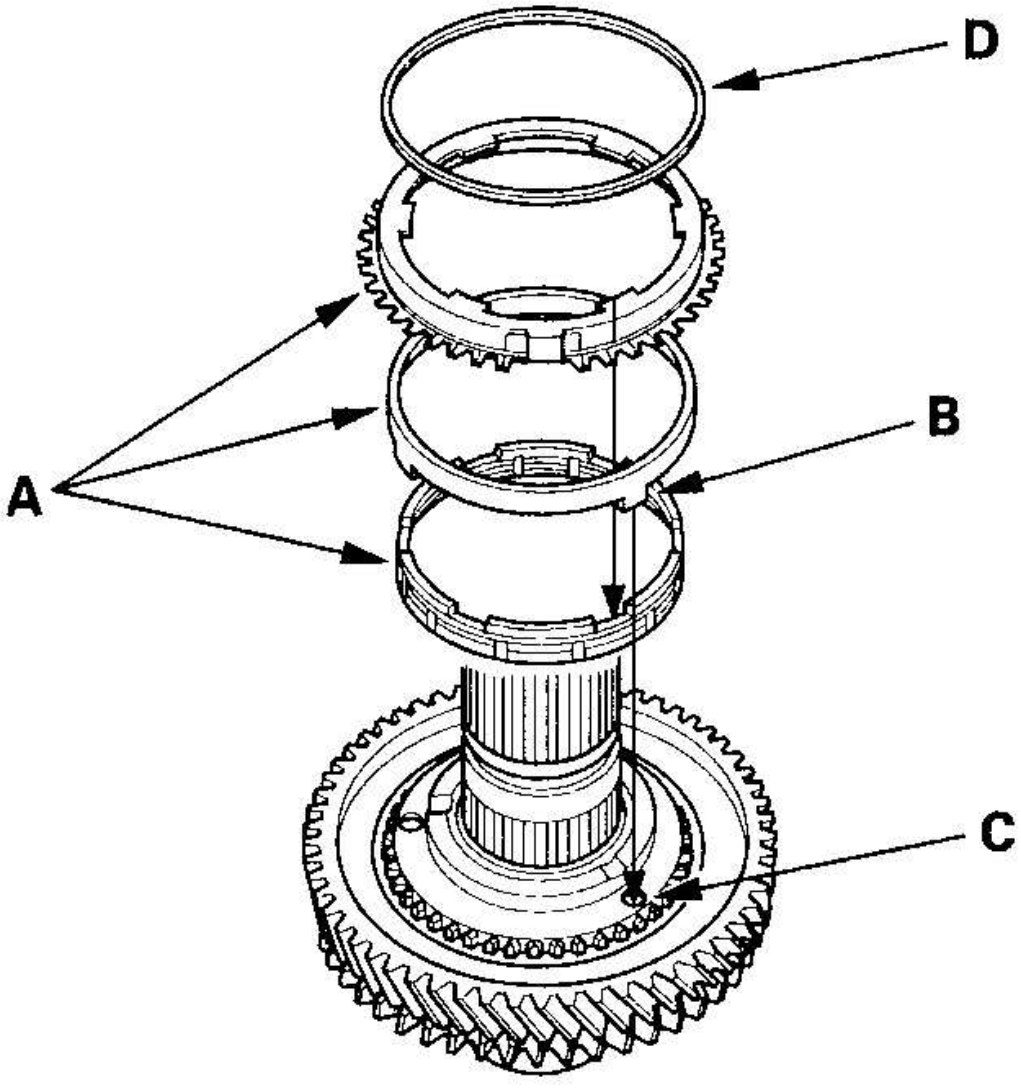


Fig. 157: Identifying Triple Cone Synchro Assembly

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the 1st/2nd synchro hub (A) by aligning the outer synchro ring fingers (B) with the grooves in the 1st/2nd synchro hub (C).

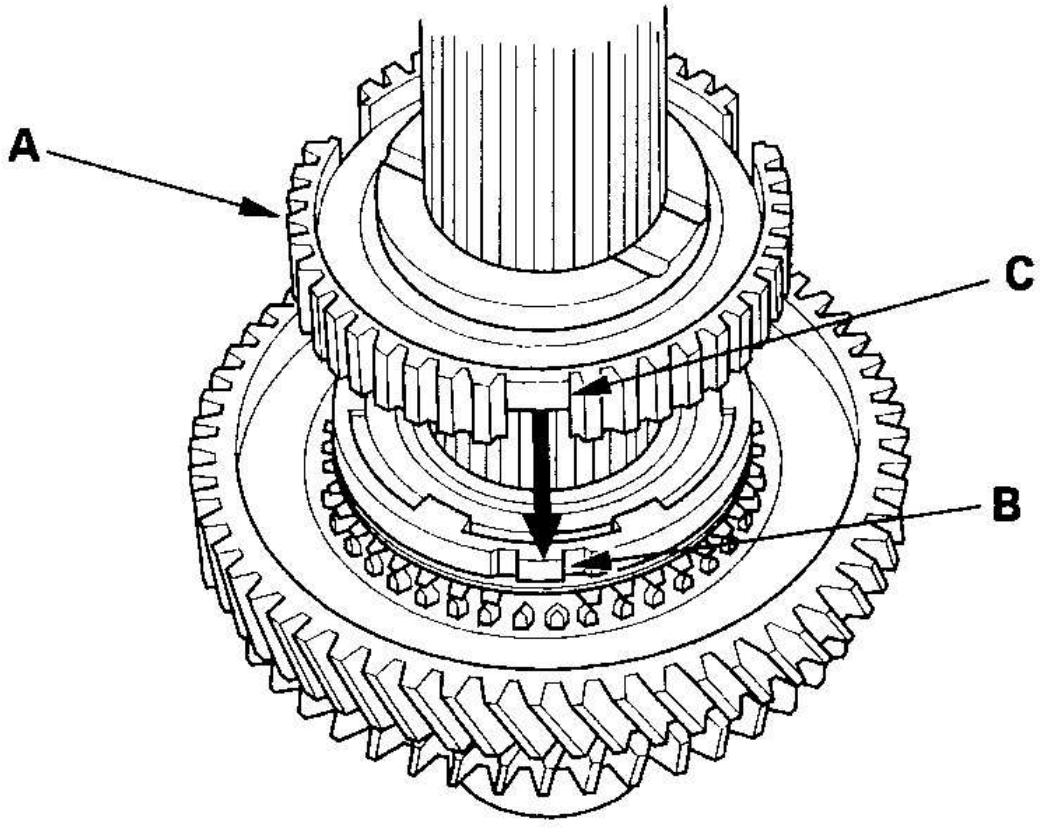


Fig. 158: Identifying 1st/2nd Synchro Hub
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the 1st/2nd synchro sleeve.
6. Install the synchro spring (A).

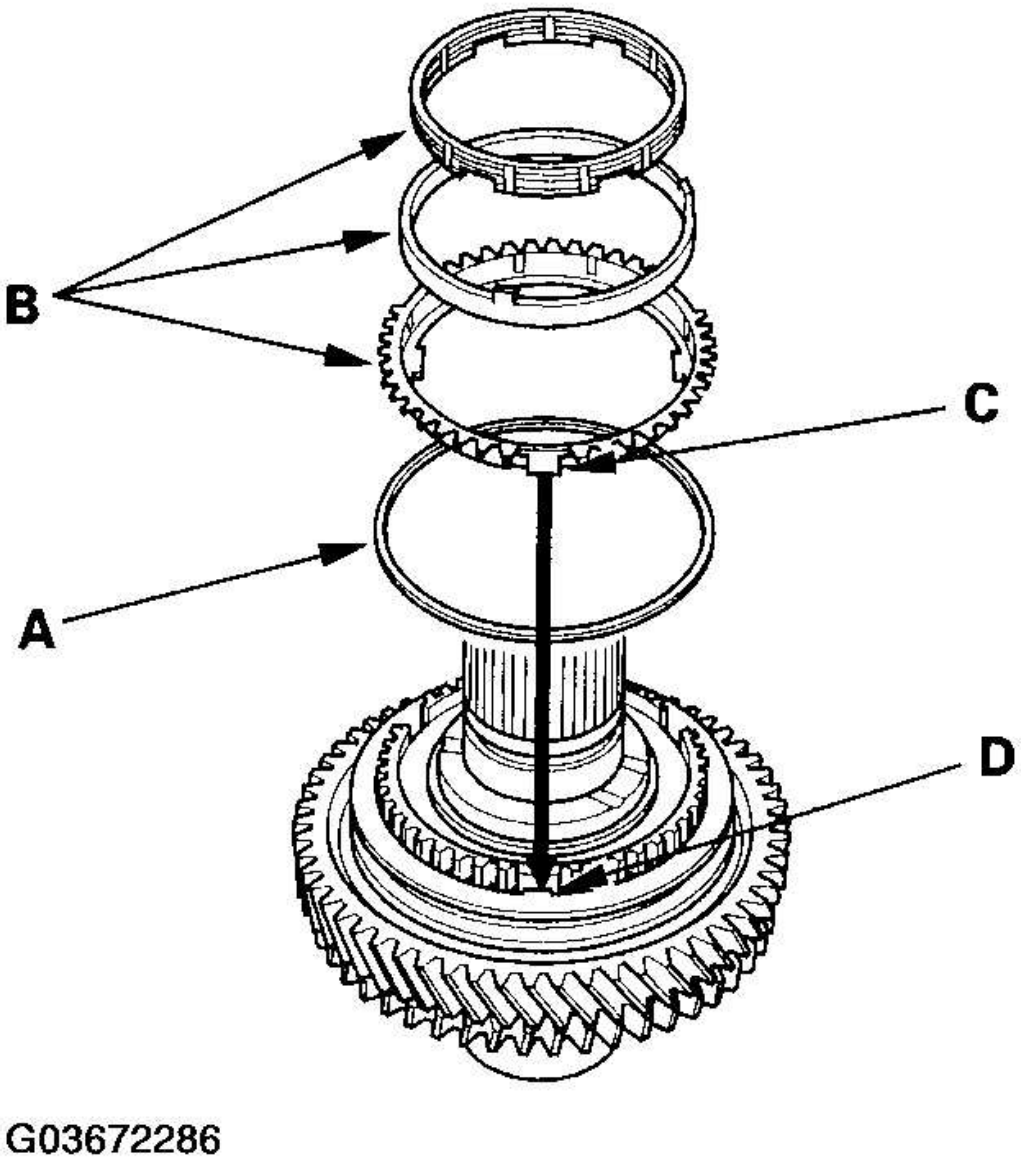


Fig. 159: Identifying Synchro Spring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the triple cone synchro assembly (B) by aligning the outer synchro ring fingers (C) with the grooves in the 1st/2nd synchro hub (D).
8. Install the distance collar and needle bearing.

9. Install 2nd gear (A) by aligning the synchro cone fingers (B) with the holes in 2nd gear (C).

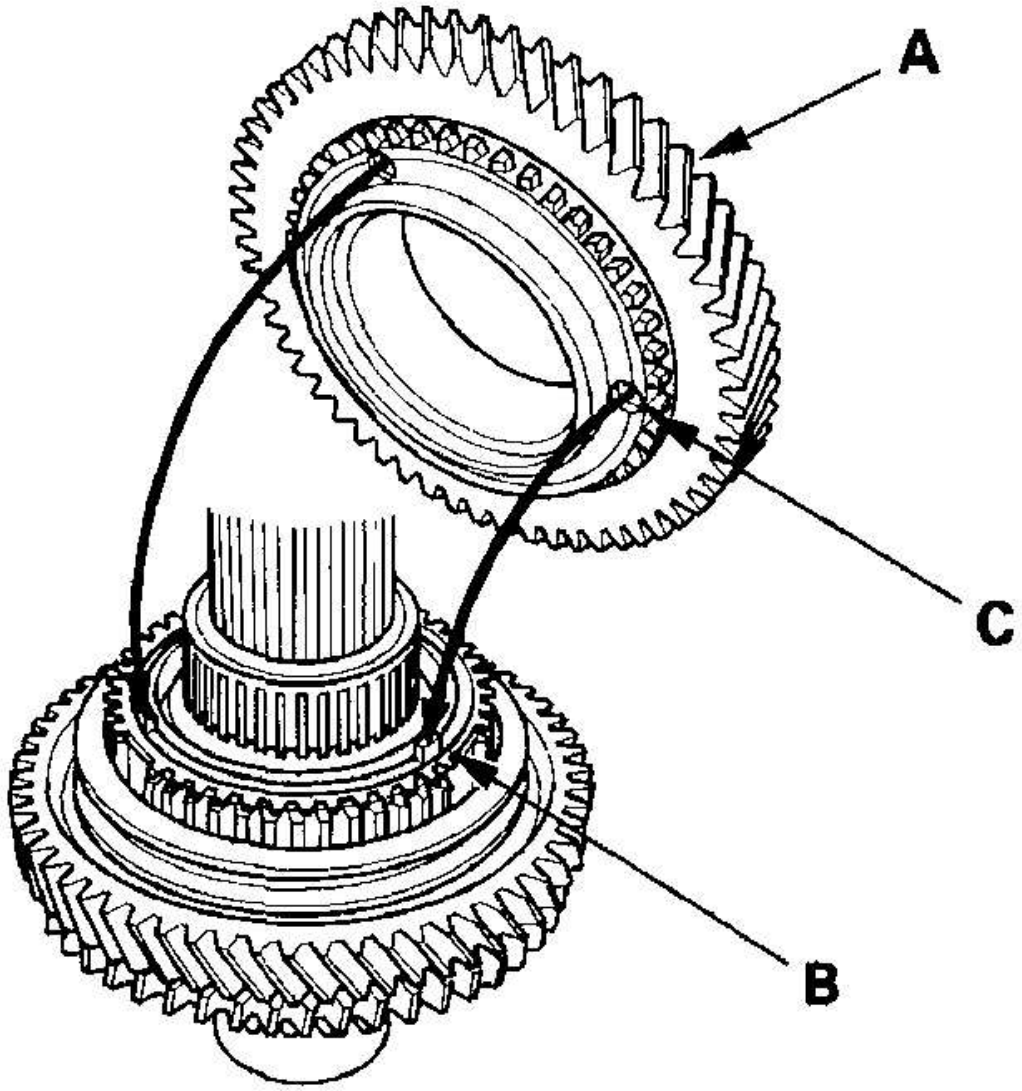


Fig. 160: Identifying 2nd Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Support the countershaft (A) on the steel blocks, then install 3rd gear (B) using the special tool and a press (C).

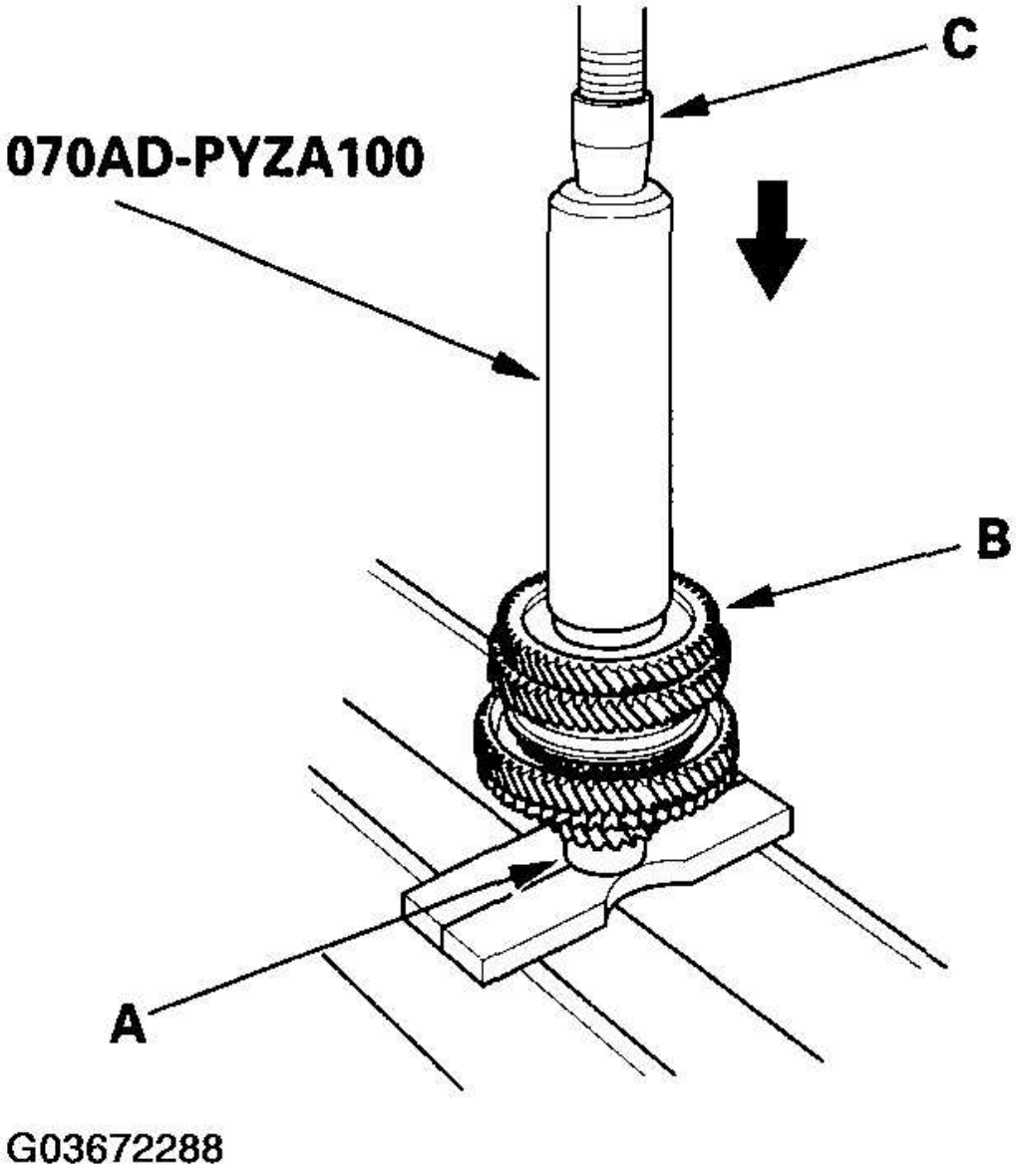


Fig. 161: Supporting Countershaft On Steel Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install 4th gear (A) using the special tool and a press (B).

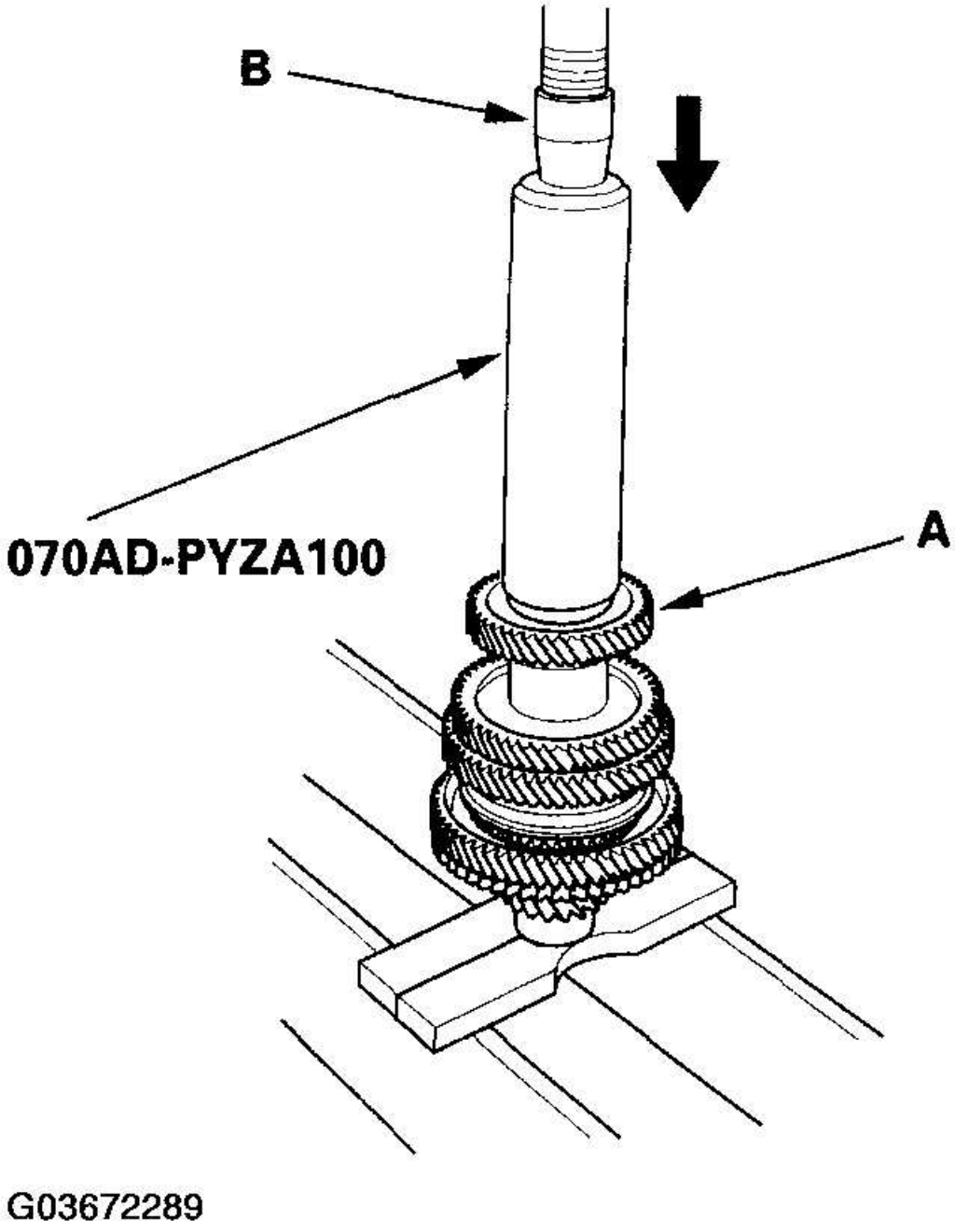


Fig. 162: Identifying 4th gear Using Special Tool And Press

Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Install 5th gear (A) using the special tool and a press (B).

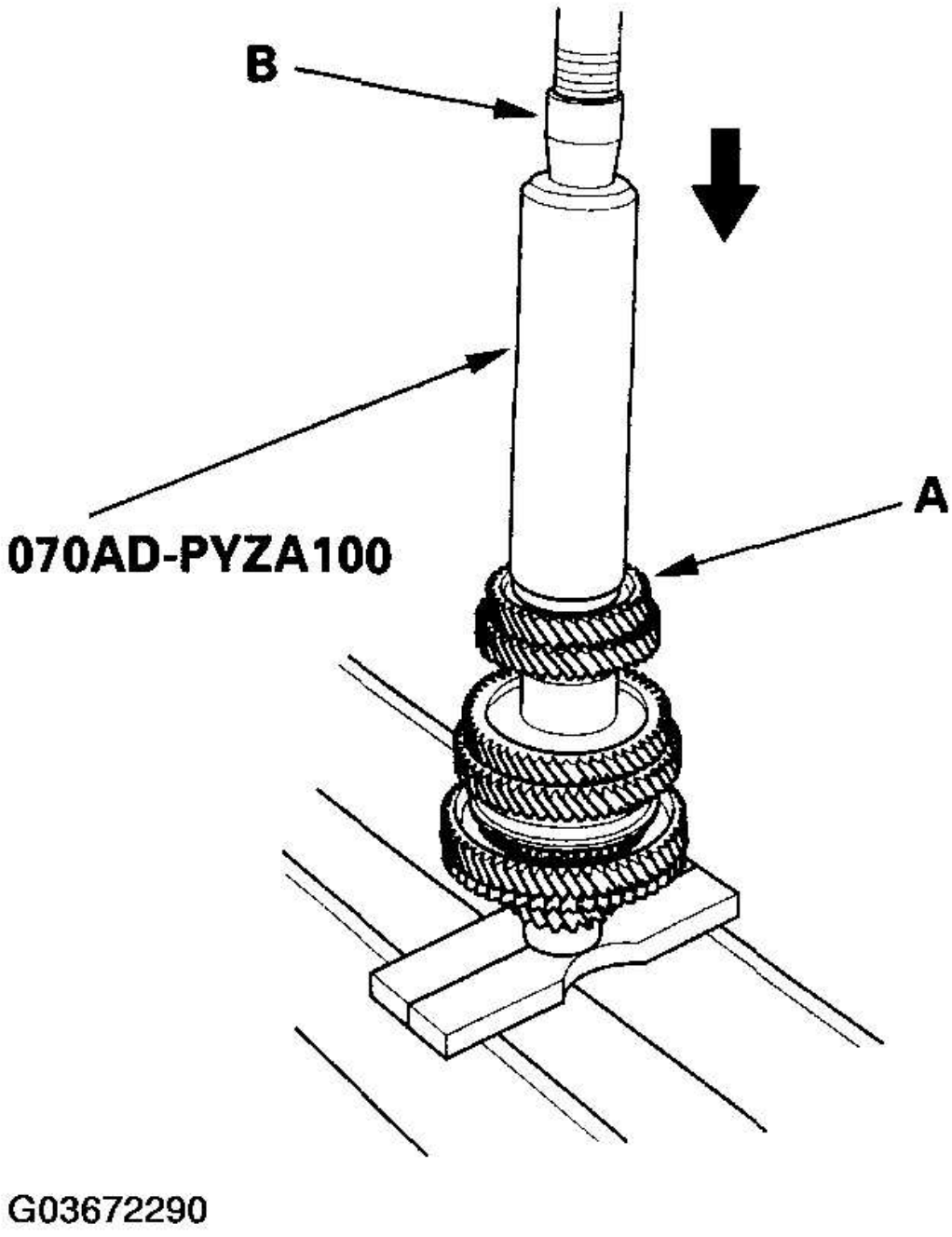


Fig. 163: Identifying 5th Gear Using Special Tool And Press
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install 6th gear (A) using the special tool and a press (B).

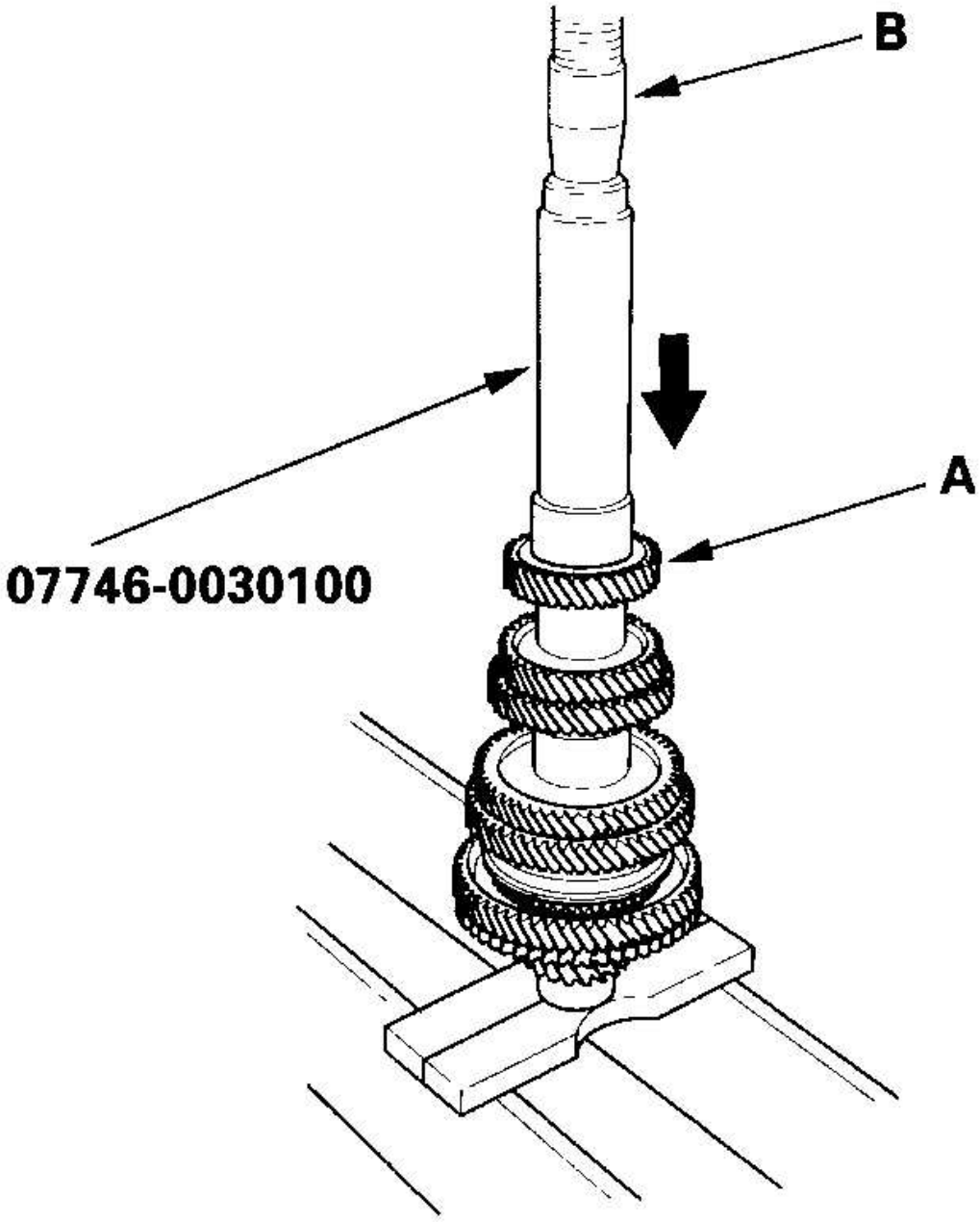


Fig. 164: Identifying 6th Gear Using Special Tool And Press
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Install the 35 mm shim (A) and the old ball bearing (B) using the special tool and a press (C).

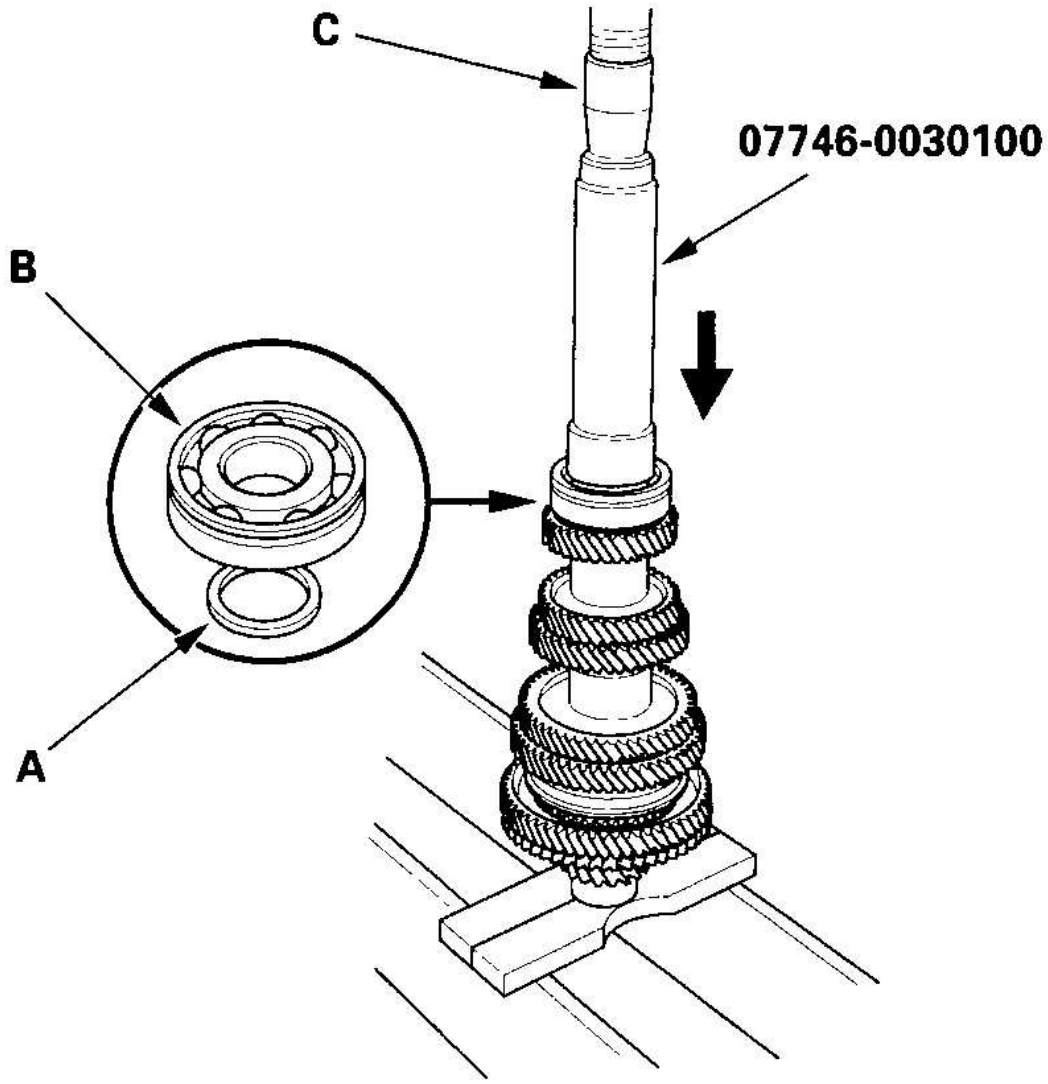


Fig. 165: Identifying 35 mm Shim And Old Ball Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Measure the clearance between the old ball bearing (A) and the 35 mm shim (B) with a feeler gauge (C).

    Standard: 0.04-0.10 mm (0.0016-0.0039 in.)

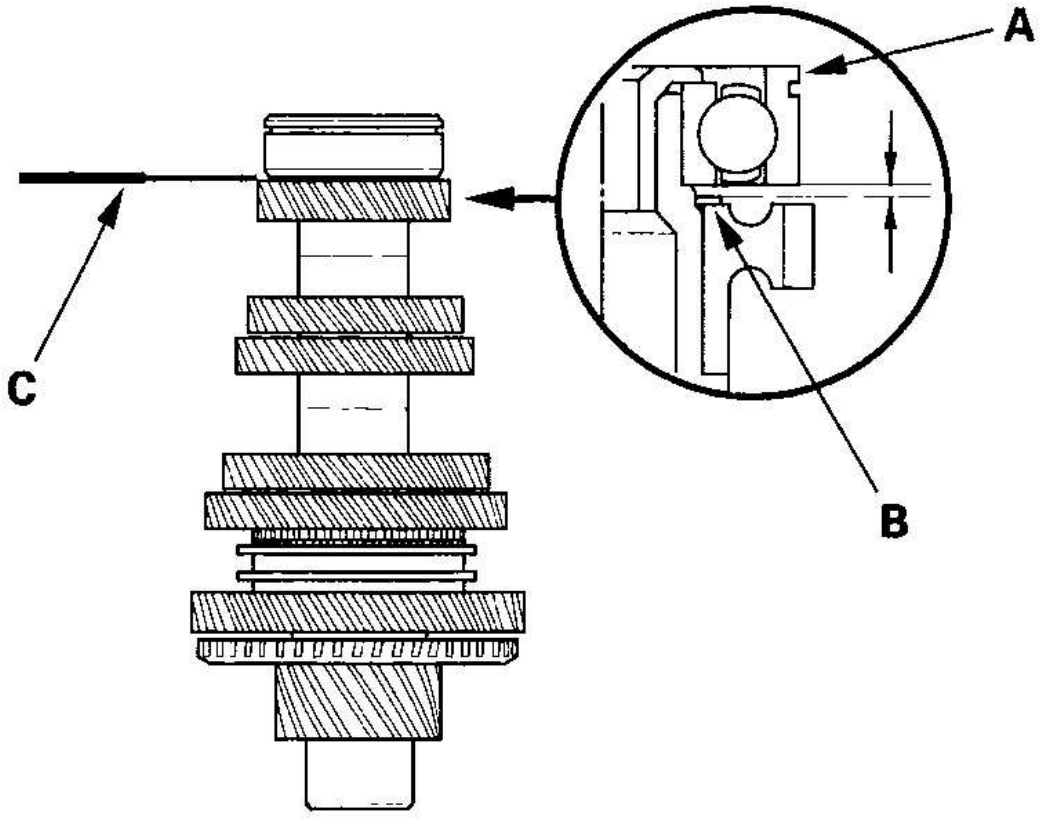


Fig. 166: Measuring Clearance Between Old Ball Bearing And Shim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. If the clearance is more than the standard, select a new shim from **PART NUMBER SPECIFICATION** . If the clearance measured in step 15 is within the standard, replace only the ball bearing.

35 MM SHIM THICKNESS CHART

	Part Number	Thickness
A	23981-PPP-000	0.87 mm (0.034 in.)
AA	23981-PPP-900	0.91 mm (0.036 in.)
B	23982-PPP-000	0.95 mm (0.037 in.)
AB	23982-PPP-900	0.99 mm (0.039 in.)
C	23983-PPP-000	1.03 mm (0.041 in.)
AC	23983-PPP-900	1.07 mm (0.042 in.)
D	23984-PPP-000	1.11 mm (0.044 in.)
AD	23984-PPP-900	1.15 mm (0.045 in.)
E	23985-PPP-000	1.19 mm (0.047 in.)
AE	23985-PPP-900	1.23 mm (0.048 in.)
F	23986-PPP-000	1.27 mm (0.050 in.)
AF	23986-PPP-900	1.31 mm (0.052 in.)
G	23987-PPP-000	1.35 mm (0.053 in.)
AG	23987-PPP-900	1.39 mm (0.055 in.)
H	23988-PPP-000	1.43 mm (0.056 in.)
AH	23988-PPP-900	1.47 mm (0.058 in.)
J	23989-PPP-000	1.51 mm (0.059 in.)
AJ	23989-PPP-900	1.55 mm (0.061 in.)
K	23990-PPP-000	1.59 mm (0.063 in.)
AK	23990-PPP-900	1.63 mm (0.064 in.)
L	23991-PPP-000	1.67 mm (0.066 in.)
AL	23991-PPP-900	1.71 mm (0.067 in.)
M	23992-PPP-000	1.75 mm (0.069 in.)
AM	23992-PPP-900	1.79 mm (0.070 in.)
N	23993-PPP-000	1.83 mm (0.072 in.)
AN	23993-PPP-900	1.87 mm (0.074 in.)
P	23994-PPP-000	1.91 mm (0.075 in.)
AP	23994-PPP-900	1.95 mm (0.077 in.)
Q	23995-PPP-000	1.99 mm (0.078 in.)

17. Support 6th gear (A) on steel blocks (B), then using a press (C) and an

attachment (D), press the countershaft out of the old ball bearing.

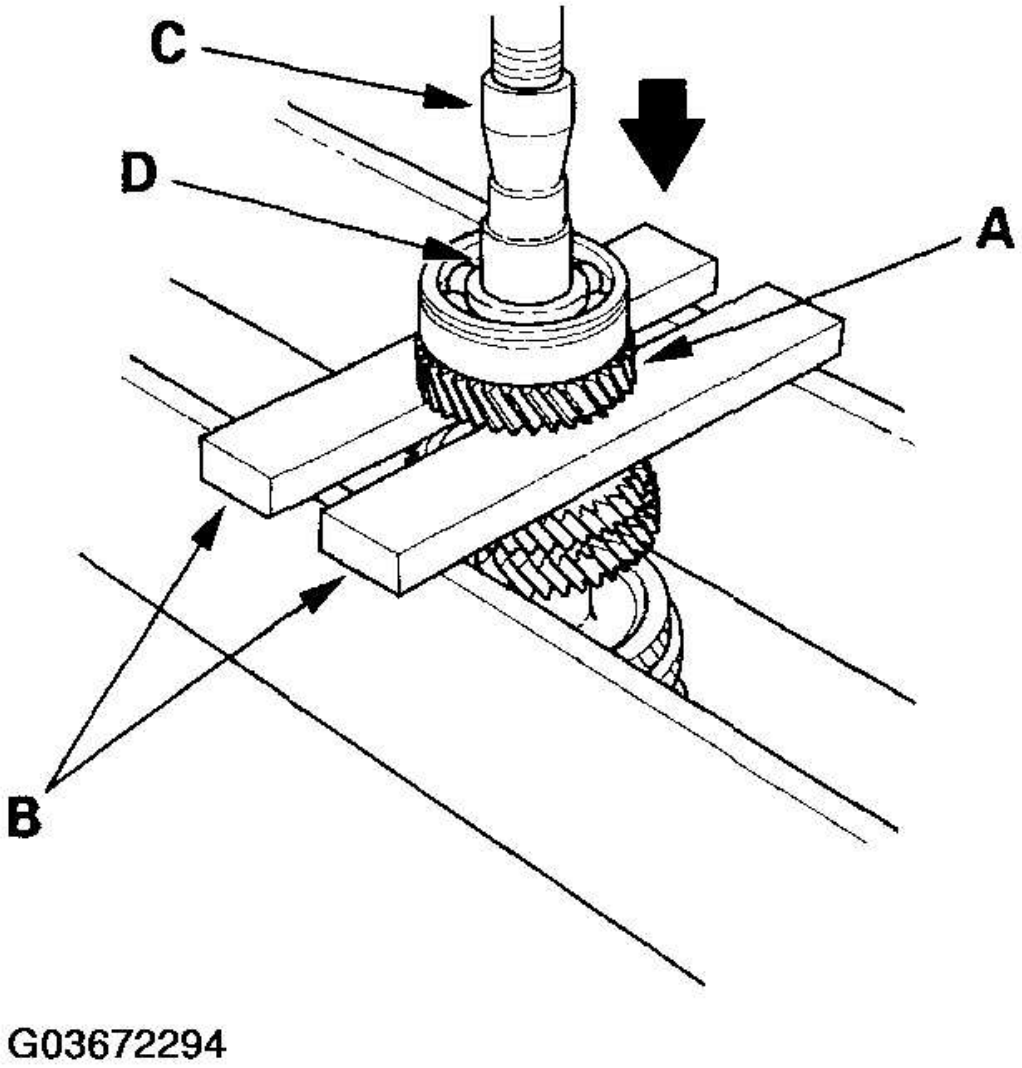


Fig. 167: Supporting 6th Gear On Steel Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. If necessary, install the 35 mm shim selected in step 16, then recheck the clearance.
19. Install 6th gear (A) using the special tool and a press (B).

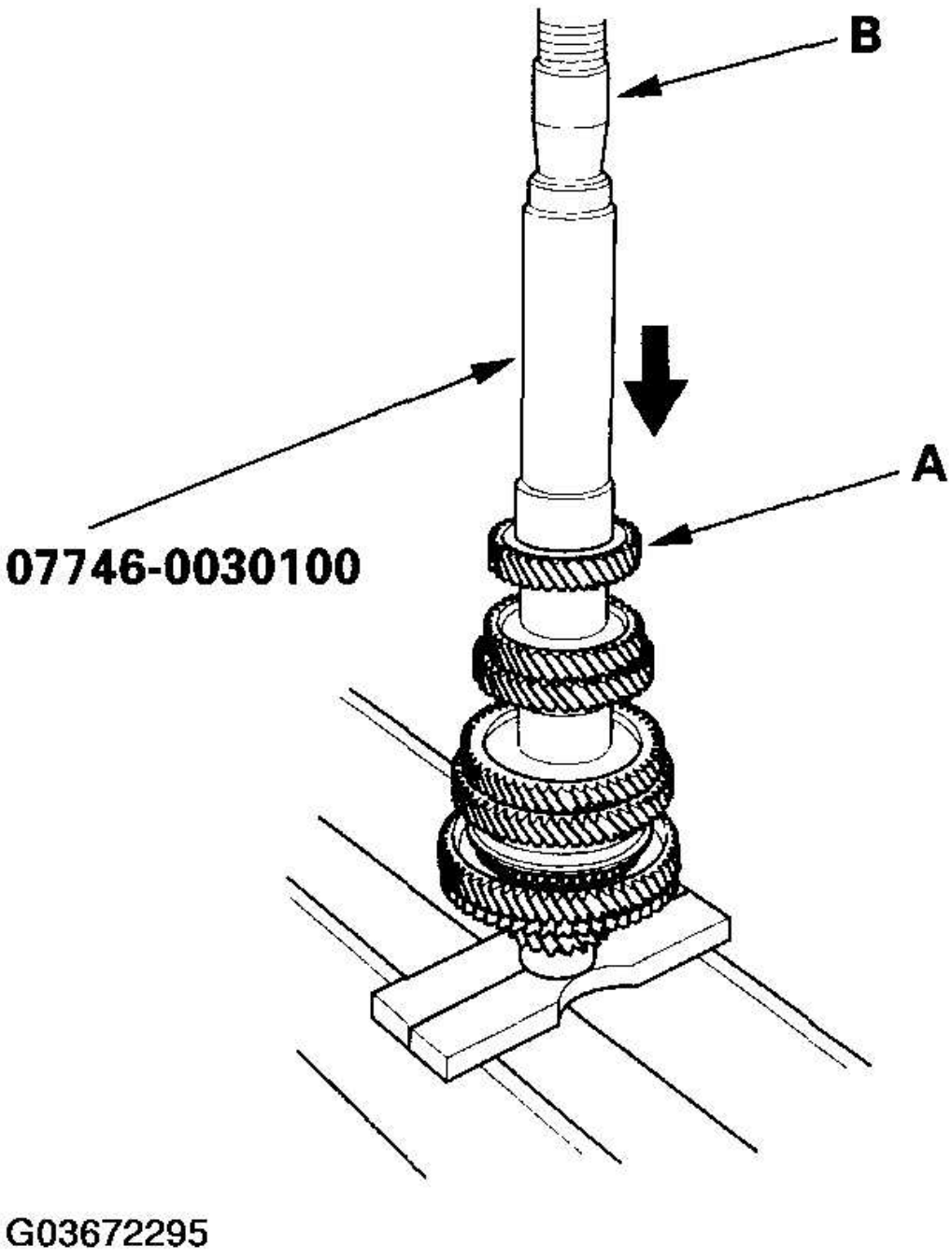


Fig. 168: Identifying 6th Gear Using Special Tool And Press
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Install the 35 mm shim (A) and new bearing (B) using the special tool and a press (C).

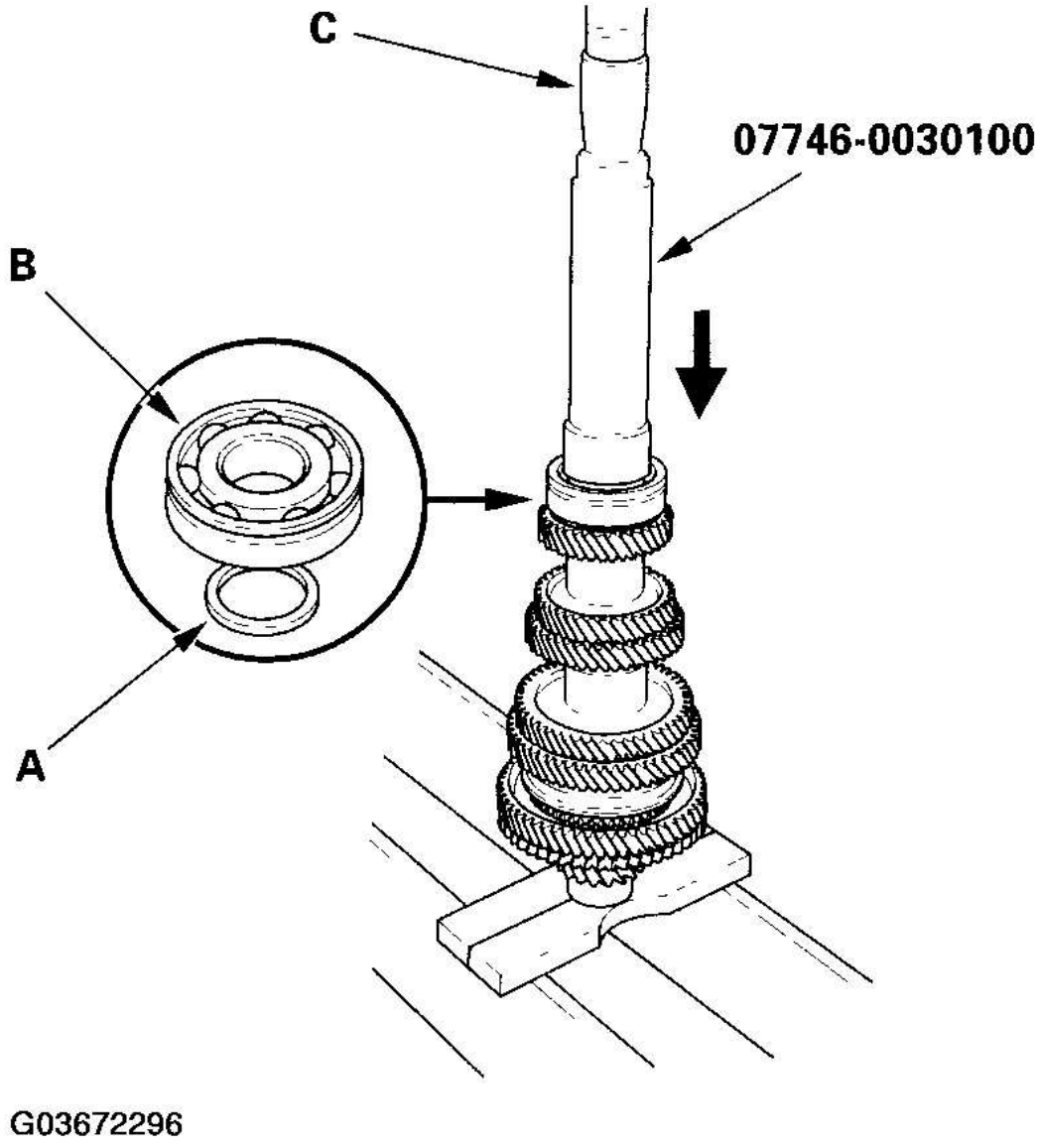


Fig. 169: Identifying 35 mm Shim And New Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Securely clamp the countershaft assembly in a vise with wood blocks (A).

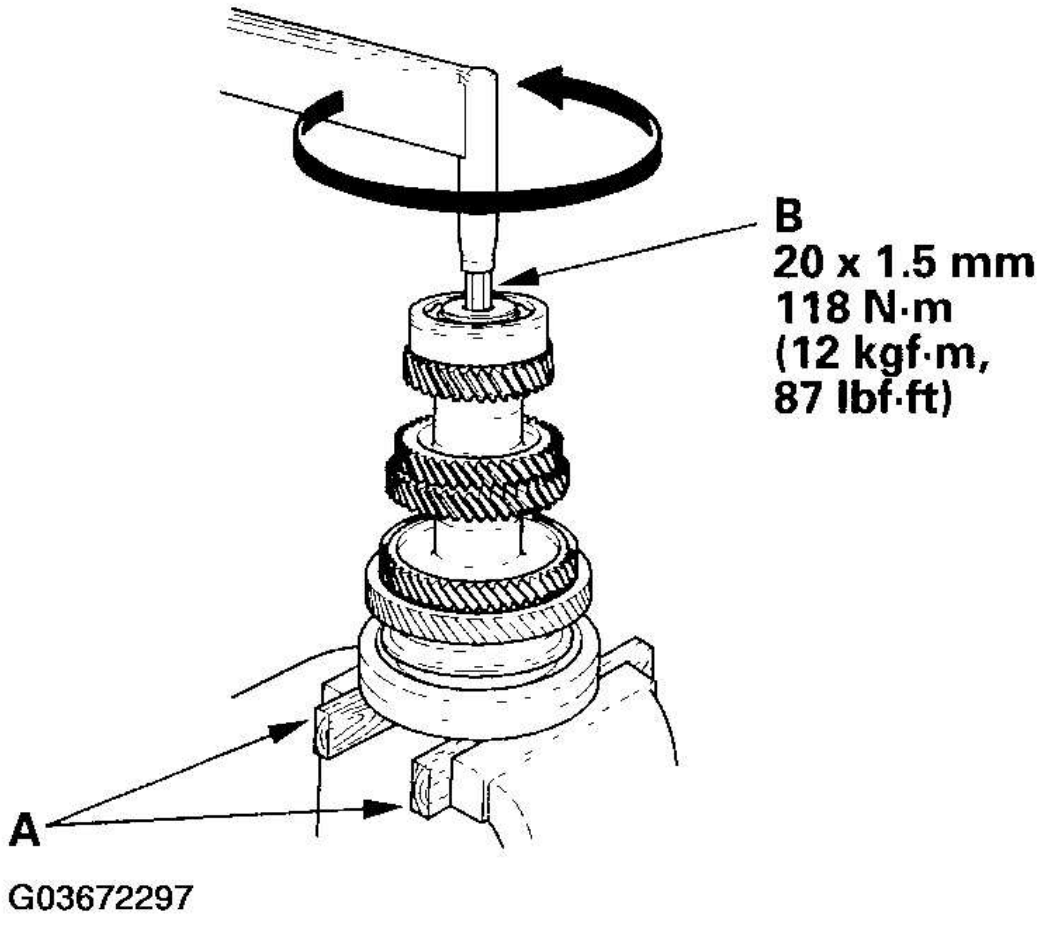


Fig. 170: Securing Clamp Countershaft Assembly In Vise
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Tighten the new 20 mm special bolt (B) (left-hand threads).

REVERSE IDLER GEAR SHAFT ASSEMBLY DISASSEMBLY/REASSEMBLY

Prior to reassembling, clean all the parts in solvent, dry them, and apply lubricant to any contact surface.

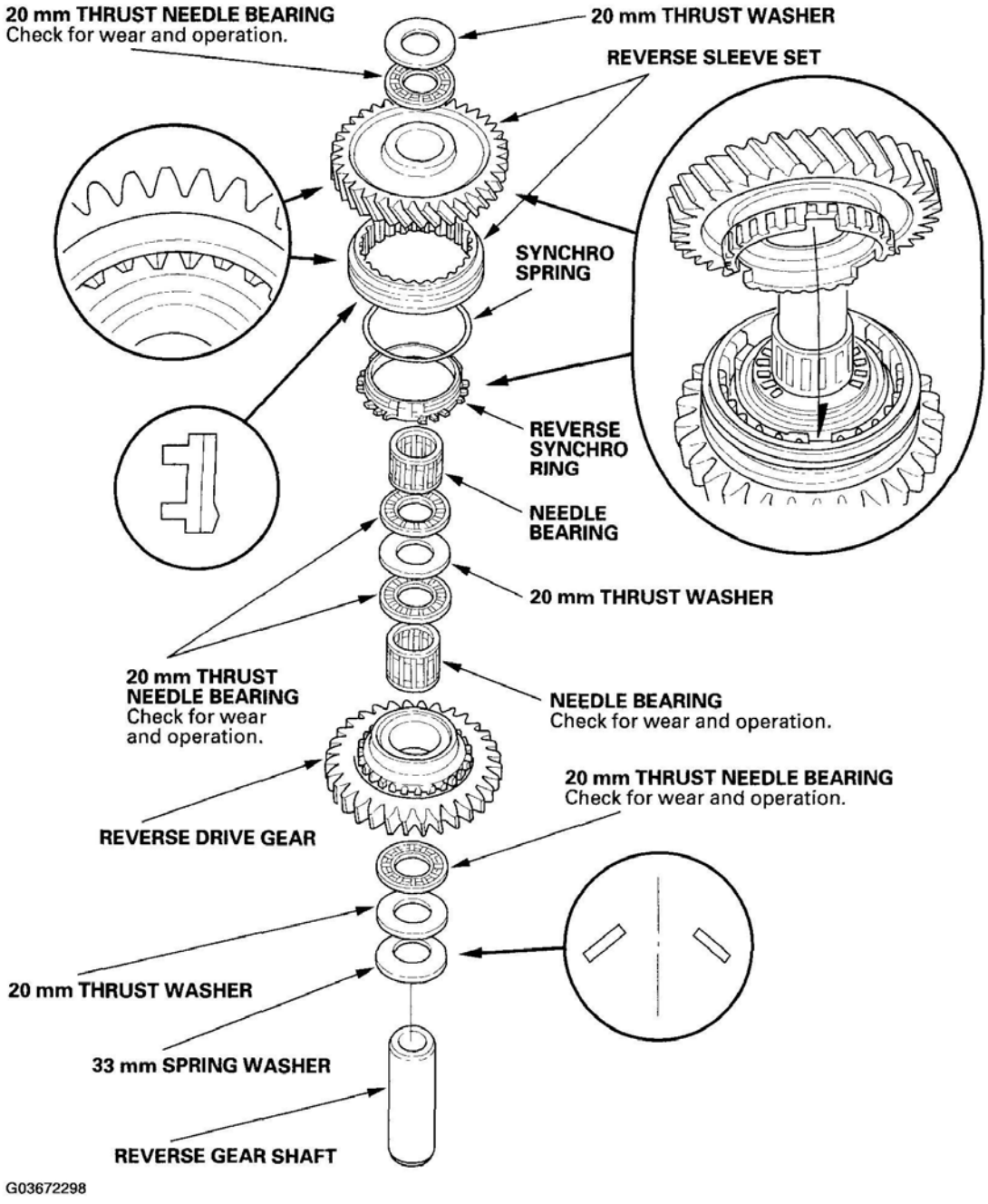


Fig. 171: Disassembling/Reassembling Reverse Idler Gear Shaft Assembly Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYNCHRO SLEEVE AND HUB INSPECTION AND REASSEMBLY

1. Inspect gear teeth on all synchro hubs and synchro sleeves for wear (rounded

off corners).

2. Install each synchro hub (A) in its mating synchro sleeve (B), and check for freedom of movement. Make sure you match the three sets of longer teeth (C) (120 degrees apart) on the synchro sleeve with the three sets of deeper grooves (D) in the synchro hub. Do not install the synchro sleeve with its longer teeth in the synchro hub slots (E) because it will damage the spring ring.

NOTE: If replacement is required, always replace the synchro sleeve and synchro hub as a set.

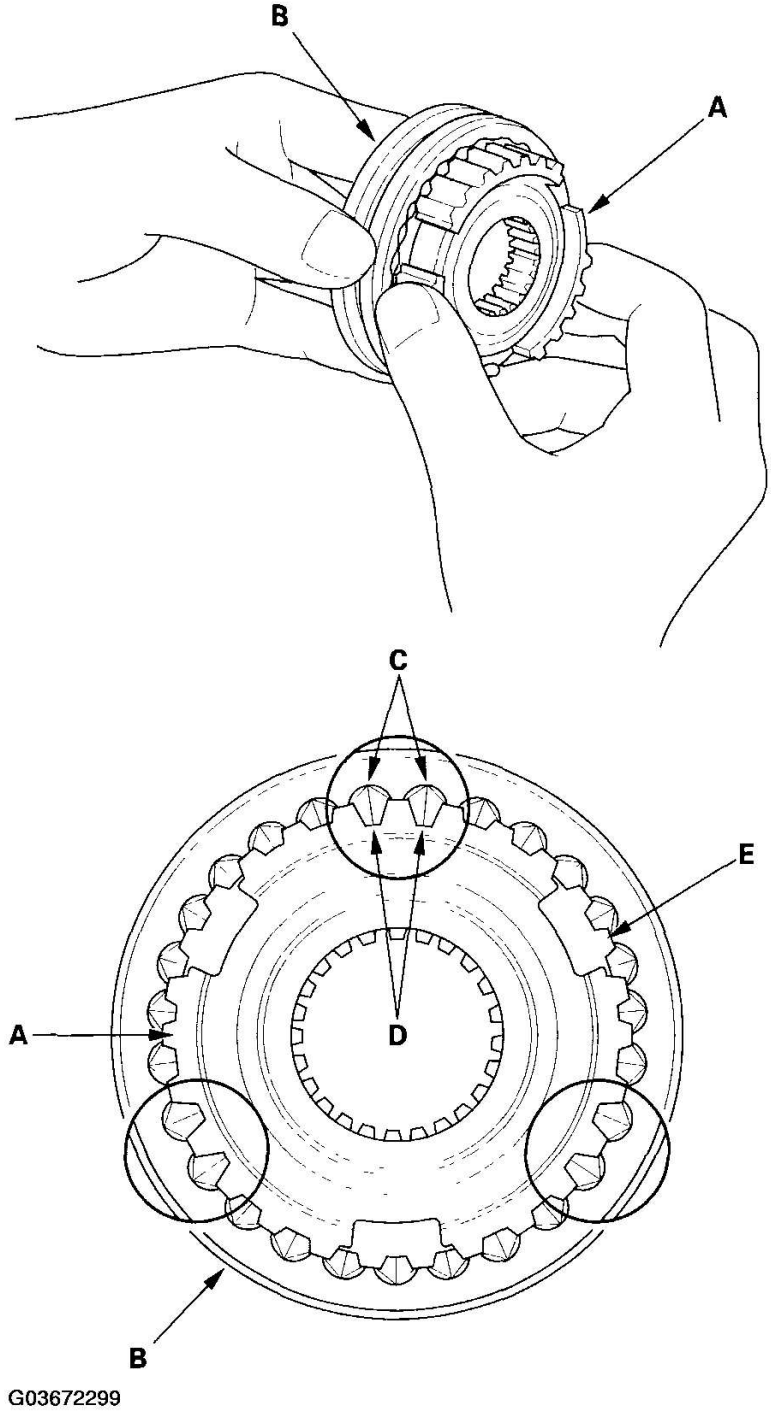
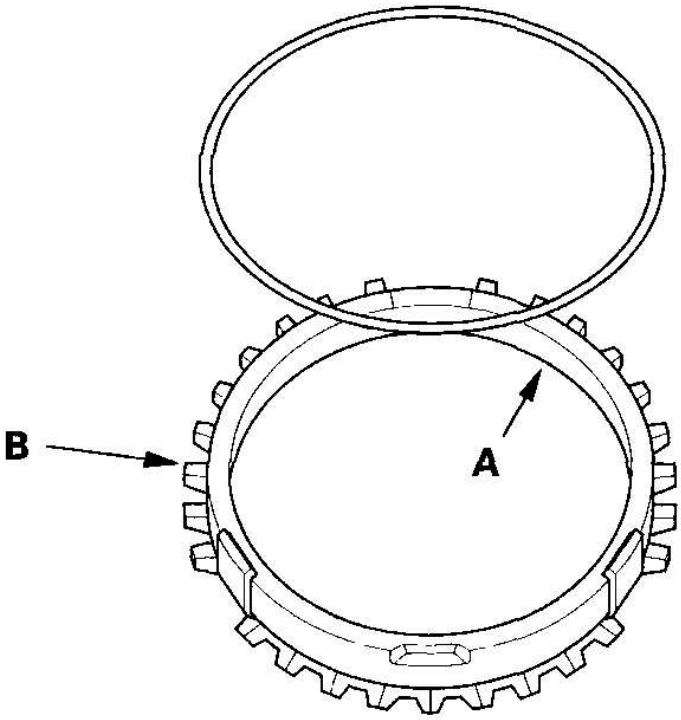


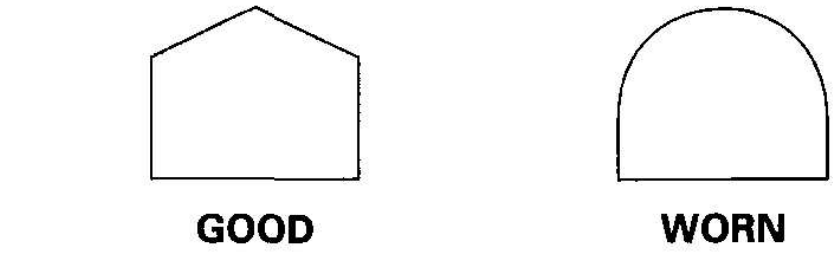
Fig. 172: Identifying Each Synchro Hub
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYNCHRO RING AND GEAR INSPECTION

1. Inspect the inside of each synchro ring (A) for wear. Inspect the teeth (B) on each synchro ring for wear (rounded off).



Example of synchro ring teeth



G03672300

Fig. 173: Inspecting Inside Of Each Synchro Ring For Wear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Inspect the teeth (C) on each synchro sleeve and matching teeth on each gear for wear (rounded off).

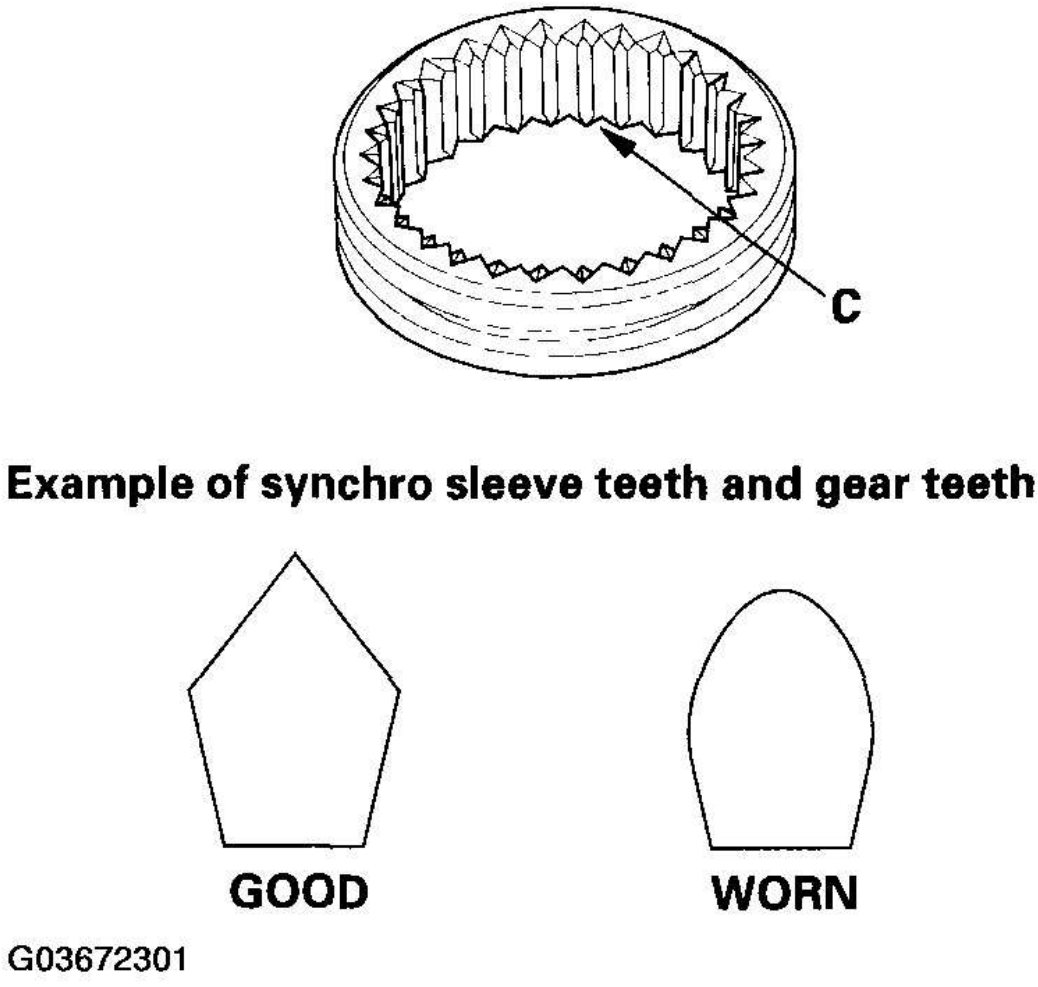


Fig. 174: Example Of Synchro Ring Teeth
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Inspect the thrust surface (D) on each gear hub for wear.

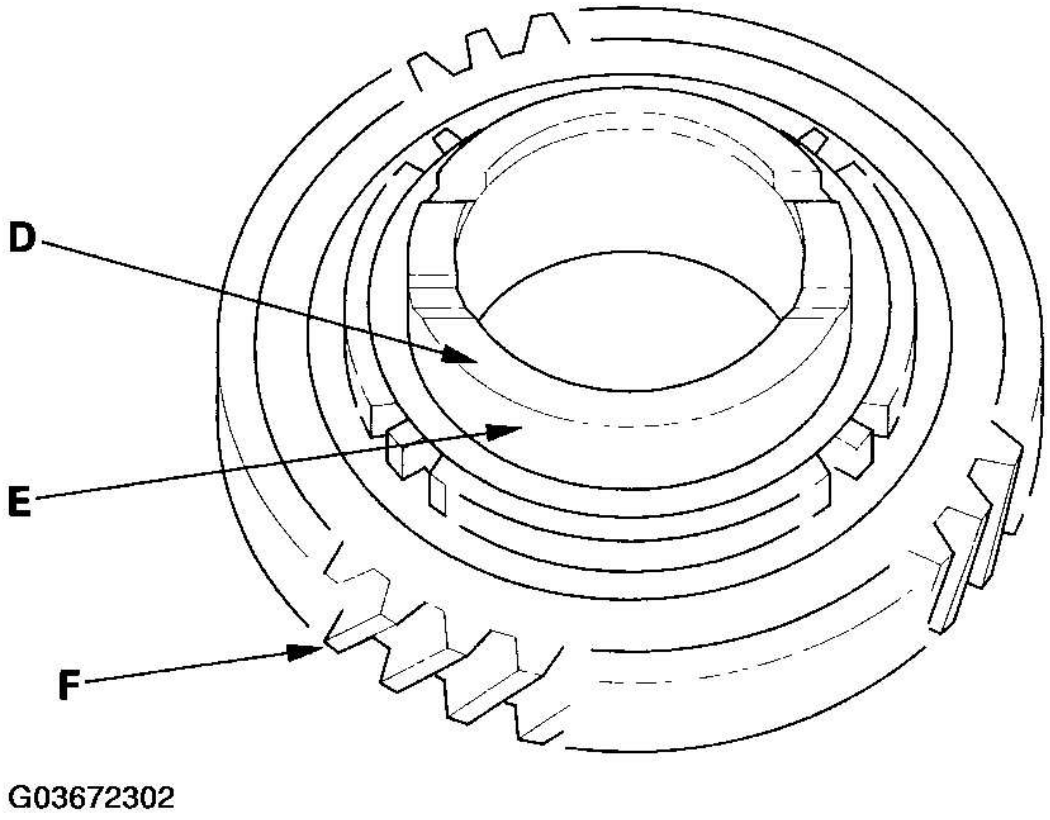


Fig. 175: Inspecting Thrust Surface On Each Gear Hub
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Inspect the cone surface (E) on each gear for wear and roughness.
5. Inspect the teeth on all gears (F) for uneven wear, scoring, galling, and cracks.
6. Coat the cone surface of each gear (E) with oil, and place its synchro ring on it. Rotate the synchro ring, making sure that it does not slip.
7. Measure the clearance between each gear (A) and its synchro ring (B) all around the gear. Hold the synchro ring against the gear evenly while measuring the clearance. If the clearance is less than the service limit, replace the synchro ring and gear.

Synchro Ring-to-Gear Clearance

Standard:

5th gear: 0.70-1.49 mm (0.028-0.059 in.)
6th gear: 0.73-1.44 mm (0.029-0.057 in.)

Service Limit: 0.4 mm (0.016 in.)

Double Cone Synchro-to-Gear Clearance

Standard:

(1): Outer Synchro Ring (B) to Synchro Cone (C): 0.70-1.19 mm (0.028-0.047 in.)
(2): Synchro Cone (C) to Gear (A): 0.50-1.04 mm (0.020-0.041 in.)
(3): Outer Synchro Ring (B) to Gear (A): 0.95-1.68 mm (0.037-0.066 in.)

Service Limit:

(1): 0.3 mm (0.012 in.)
(2): 0.3 mm (0.012 in.)
(3): 0.6 mm (0.024 in.)

Triple Cone Synchro-to-Gear Clearance

Standard:

(1): Outer Synchro Ring (B) to Synchro Cone (C)
1st gear: 0.70-1.19 mm (0.028-0.047 in.)
2nd gear: 0.70-1.19 mm (0.028-0.047 in.)
(2): Synchro Cone (C) to Gear (A)
1st gear: 0.45-1.14 mm (0.018-0.045 in.)
2nd gear: 0.60-1.88 mm (0.024-0.074 in.)
(3): Outer Synchro Ring (B) to Gear (A)
1st gear: 1.12-1.68 mm (0.044-0.066 in.)

2nd gear: 0.87-1.82 mm (0.034-0.072 in.)

Service Limit:

(1): 0.3 mm (0.012 in.)
(2): 0.3 mm (0.012 in.)
(3): 0.6 mm (0.024 in.)

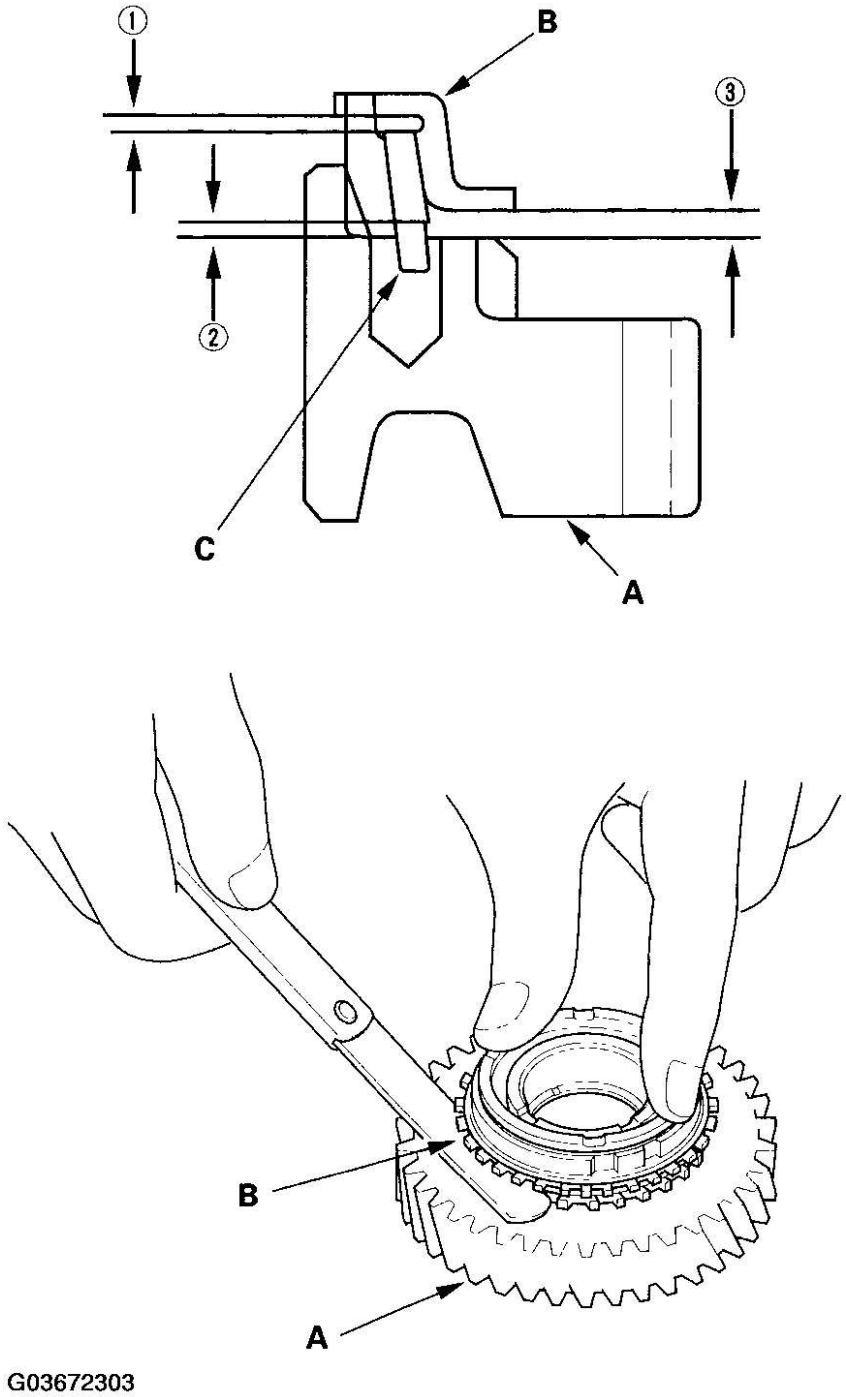


Fig. 176: Measuring Clearance Between Each Gear And Its Synchro Ring All Around Gear

Courtesy of AMERICAN HONDA MOTOR CO., INC.

MAINSHAFT OIL SEAL REPLACEMENT

Special Tools Required

- Attachment, 42 x 47 mm 07746-0010300
- Driver 07749-0010000

1. Remove the mainshaft assembly.
2. Remove the oil seal from the clutch housing. Be careful when removing the seal to avoid damaging the clutch housing.

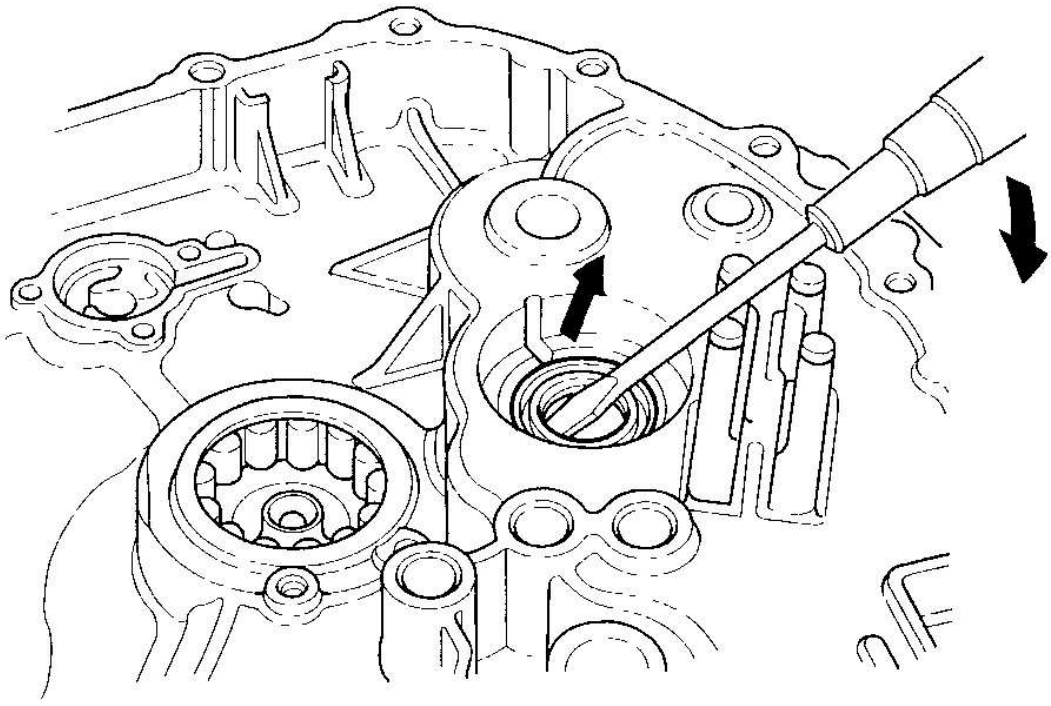


Fig. 177: Identifying Oil Seal From Clutch Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Drive in the new oil seal from the transmission side using the special tools.

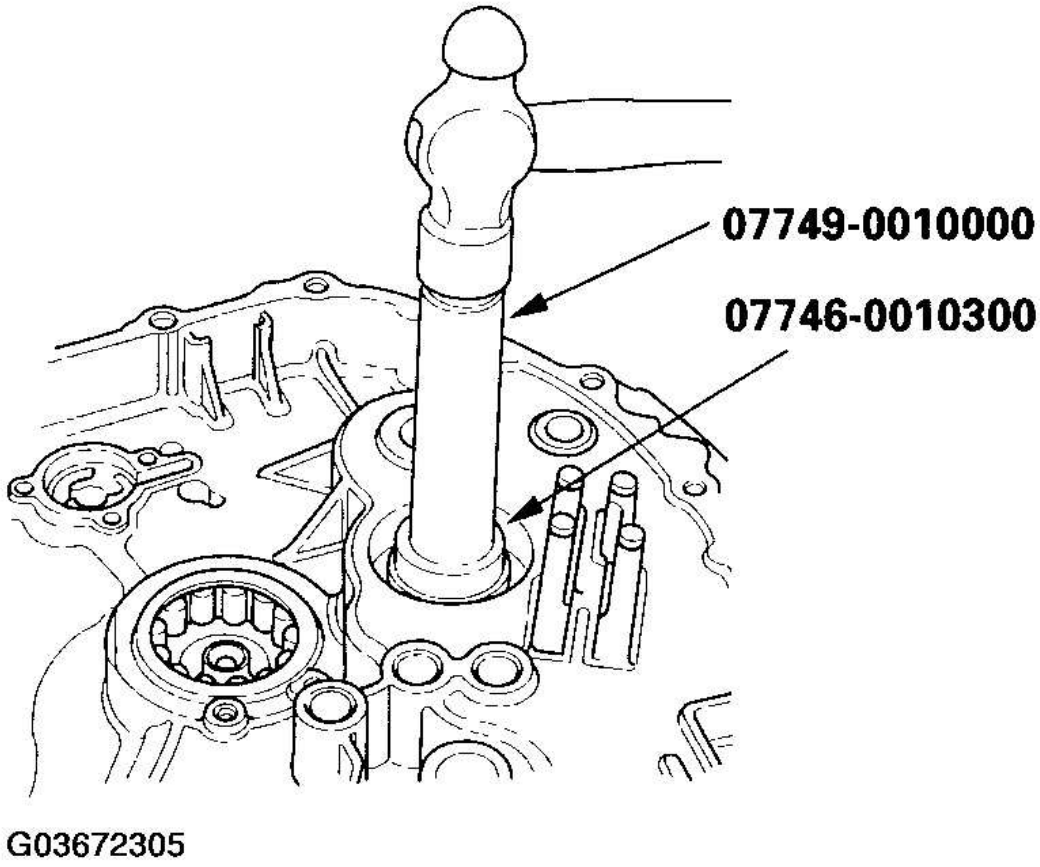


Fig. 178: Driving In New Oil Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COUNTERSHAFT BEARING REPLACEMENT

Special Tools Required

- Adjustable bearing puller, 45-75 mm 07YAC-0010100
- Attachment, 72 x 75 mm 07746-0010600
- Driver 07749-0010000

1. Remove the bearing set plate (A) from the clutch housing (B).

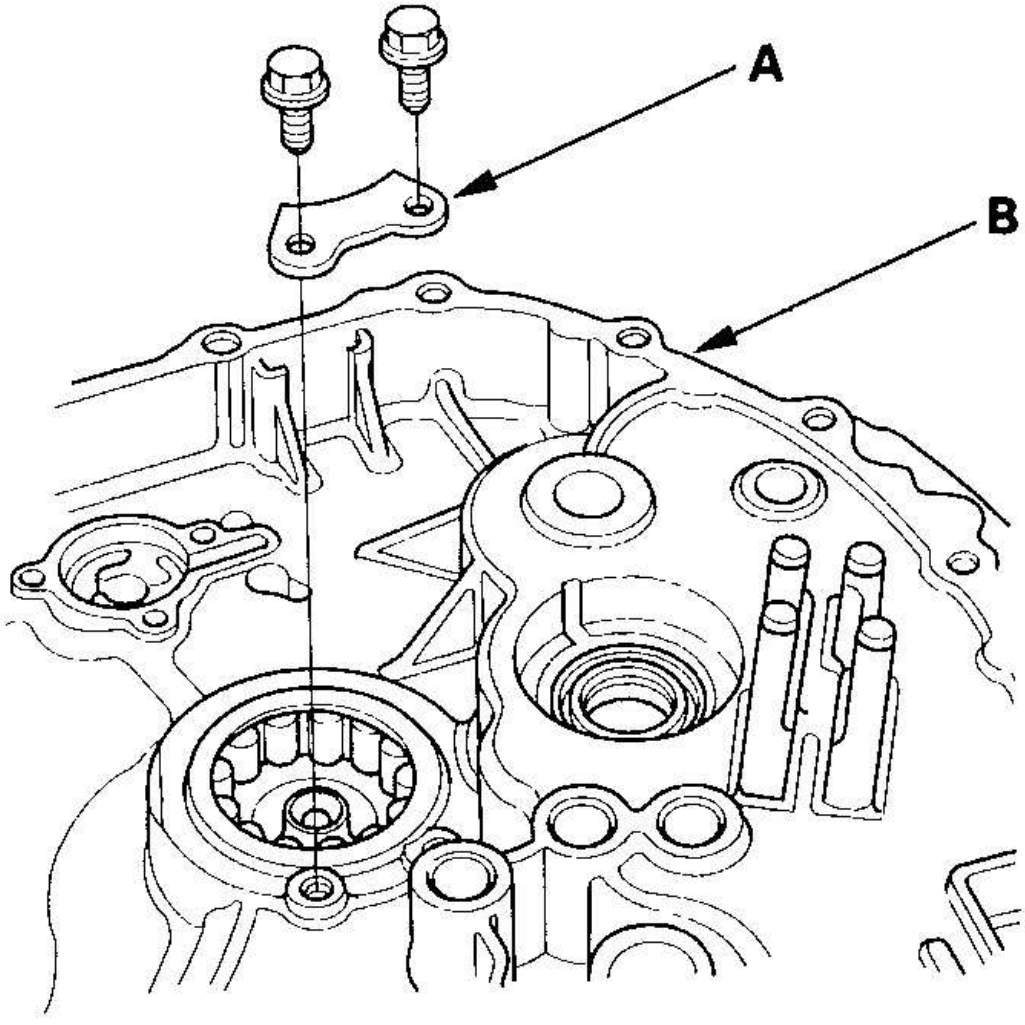


Fig. 179: Identifying Bearing Set Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the needle bearing (A) from the clutch housing (B) using the special tool and a commercially available 3/8"-16 slide hammer (C).

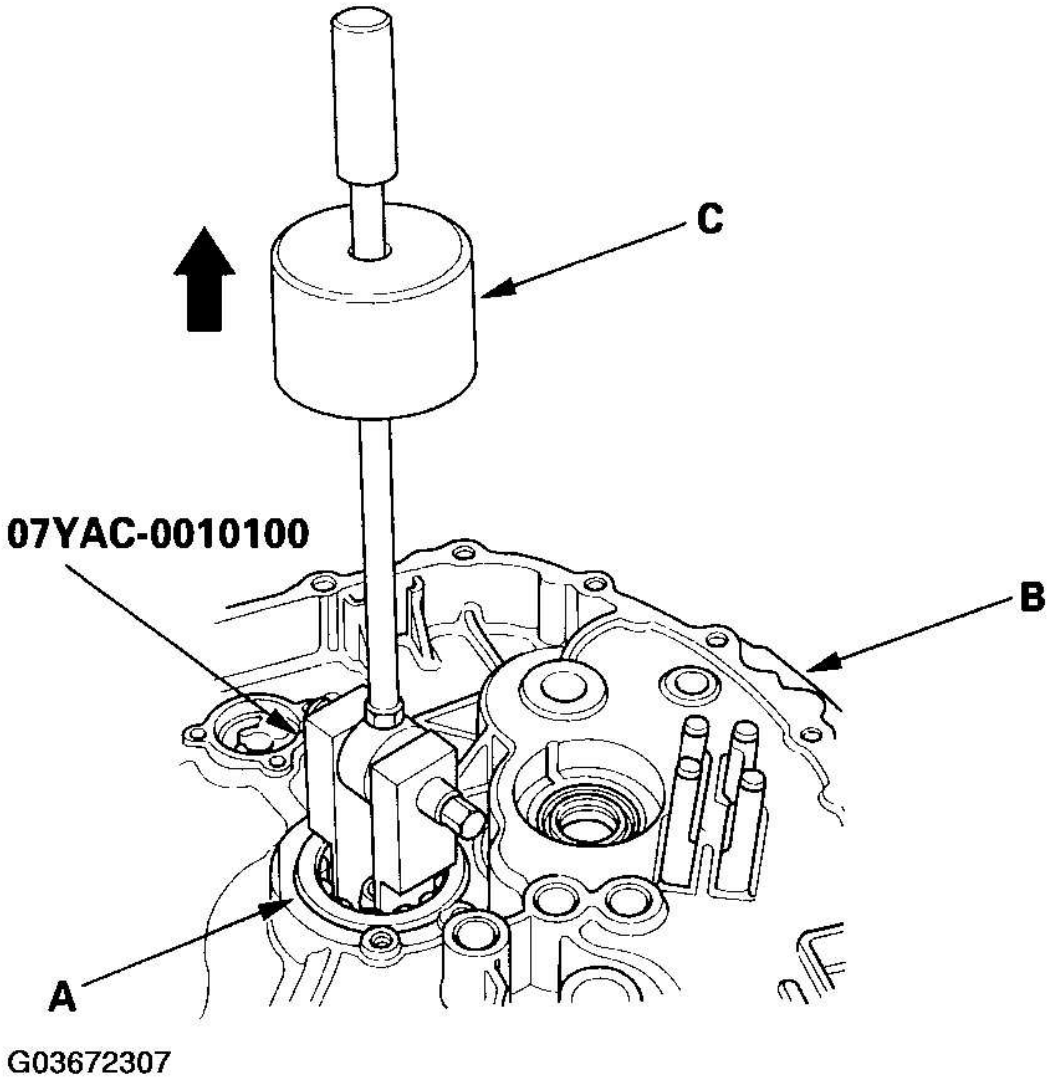


Fig. 180: Identifying Needle Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the new needle bearing using the special tool.

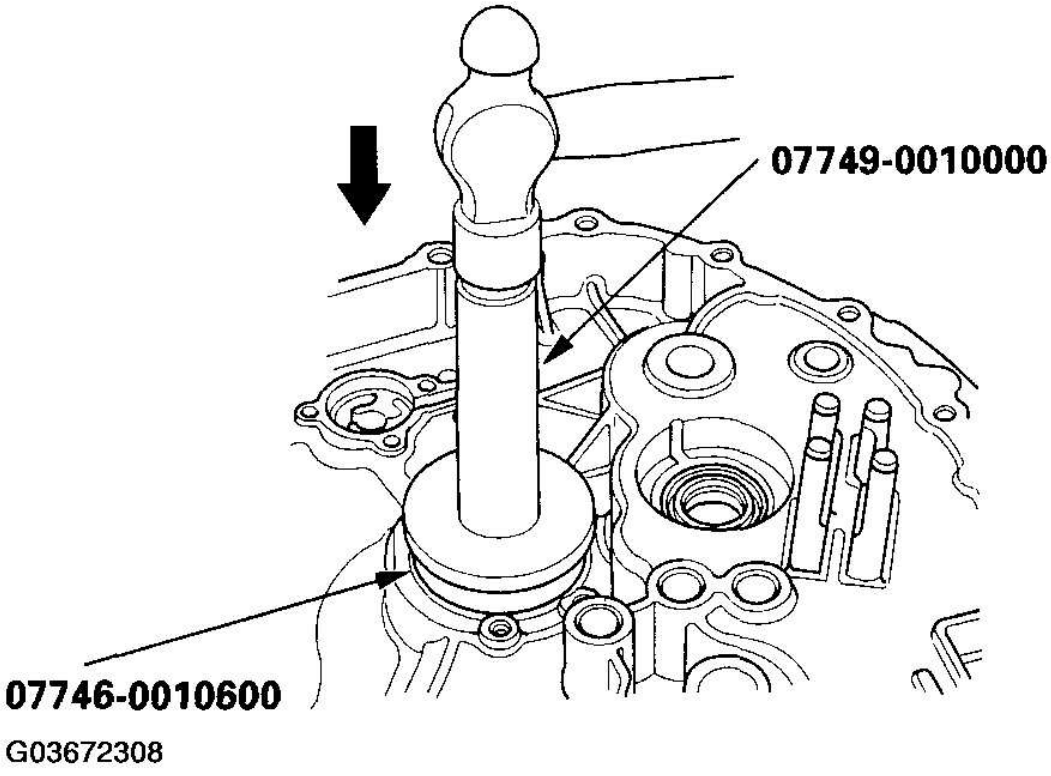


Fig. 181: Identifying New Needle Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the bearing set plate (A) with the bolts (B).

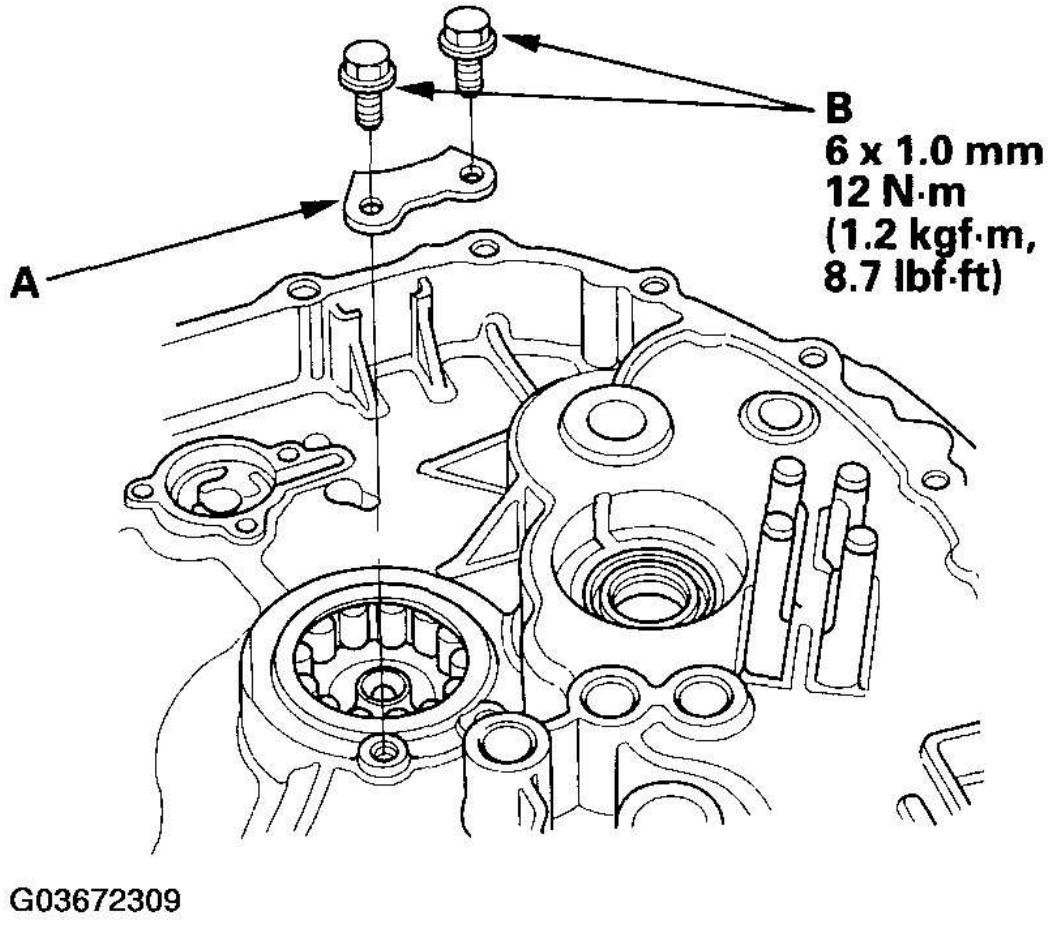


Fig. 182: Identifying Bearing Set Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MAINSHAFT THRUST CLEARANCE ADJUSTMENT

Special Tools Required

- Mainshaft holder 07GAJ-PG20110
- Mainshaft base 07GAJ-PG20130

NOTE:

- **Carry out the measurement at normal room temperature.**

- **Clean all the parts thoroughly before installation.**

1. Remove the 82 mm shim (A) from the transmission housing (B).

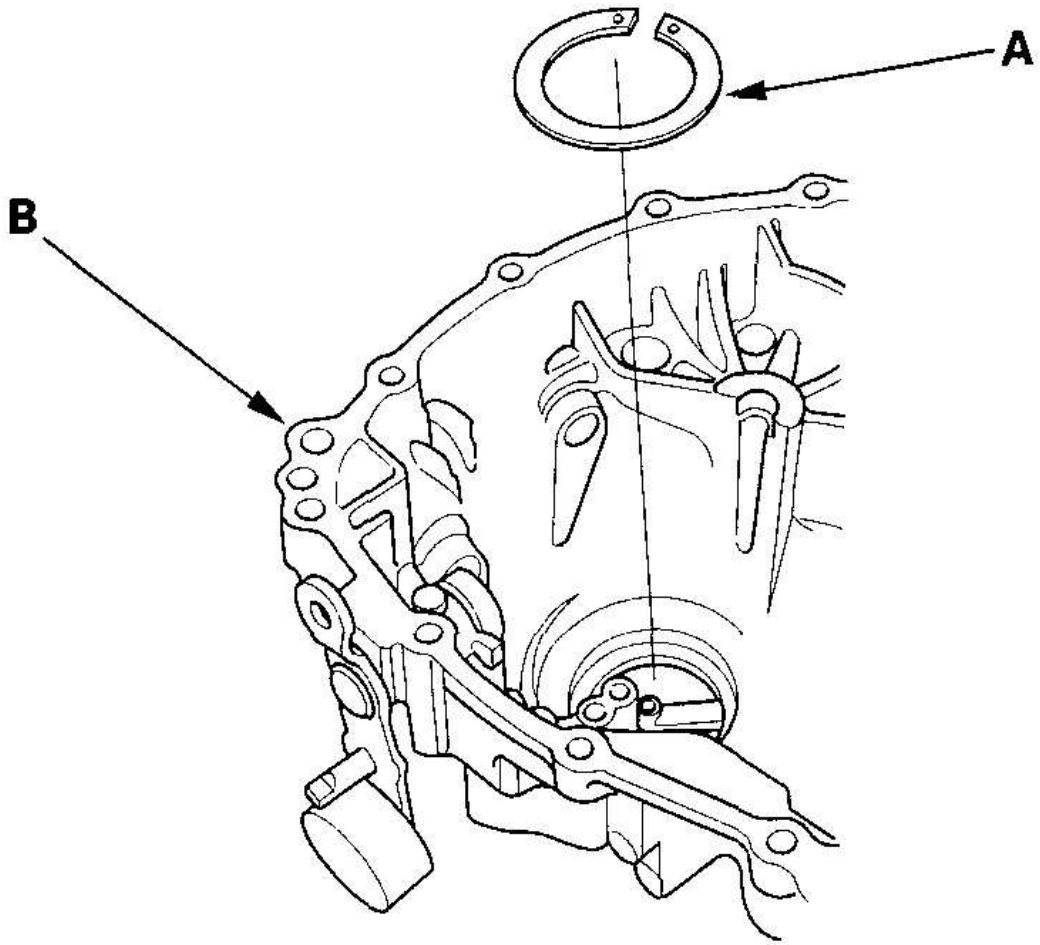


Fig. 183: Identifying 82 mm Shim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the ball bearing (A), 3rd/4th synchro hub (B), distance collar (C), 5th/6th synchro hub (D), distance collar (E), and ball bearing (F) on the mainshaft (G), then install the assembled mainshaft in the transmission housing

(H).

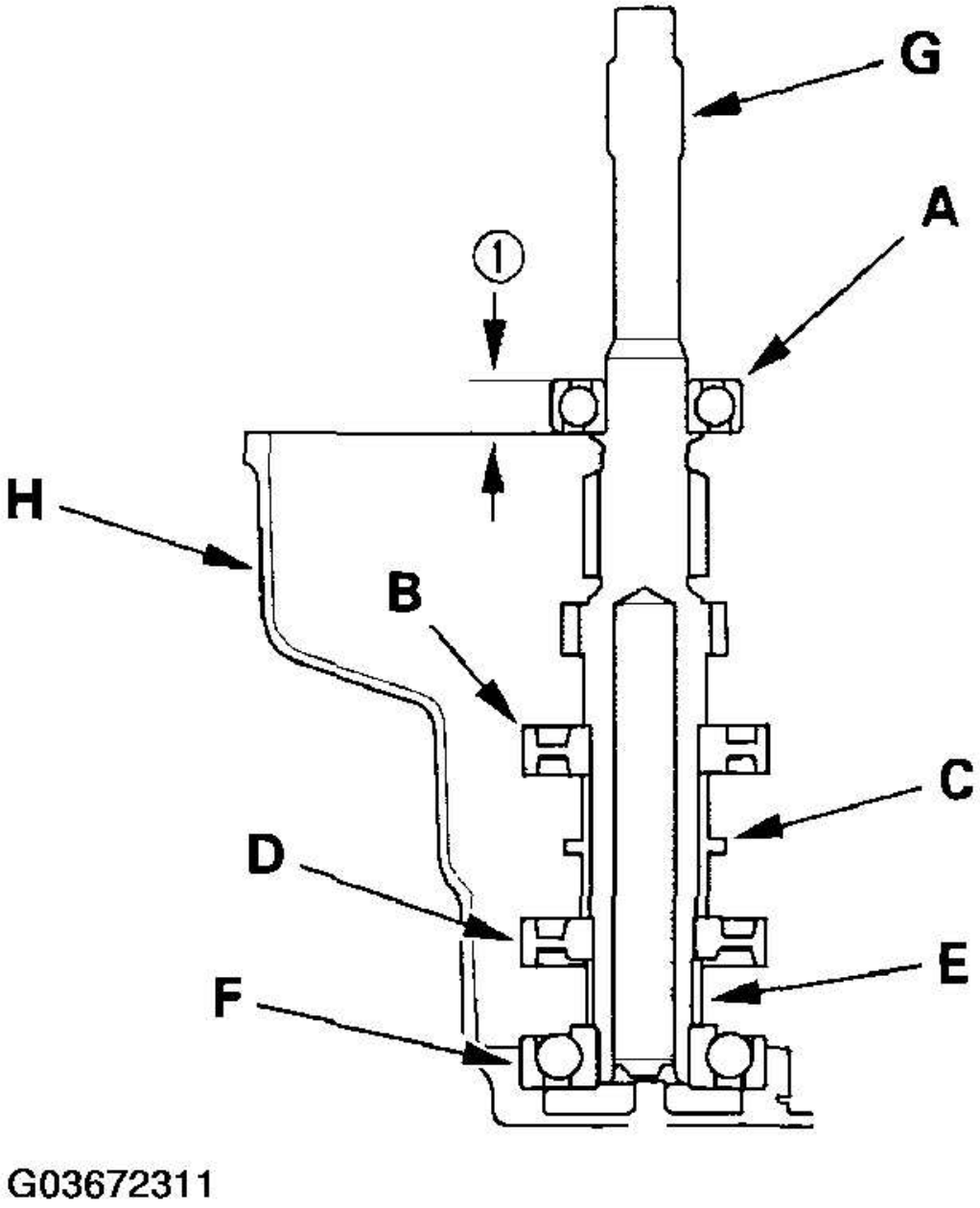


Fig. 184: Identifying Ball Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Measure distance (1) between the end of the transmission housing and ball bearing with a straight edge and a depth gauge. Measure at three locations, and average the reading.
4. Measure distance (2) (the depth of the clutch housing) with a straight edge and a depth gauge. Measure at three locations, and average the reading.

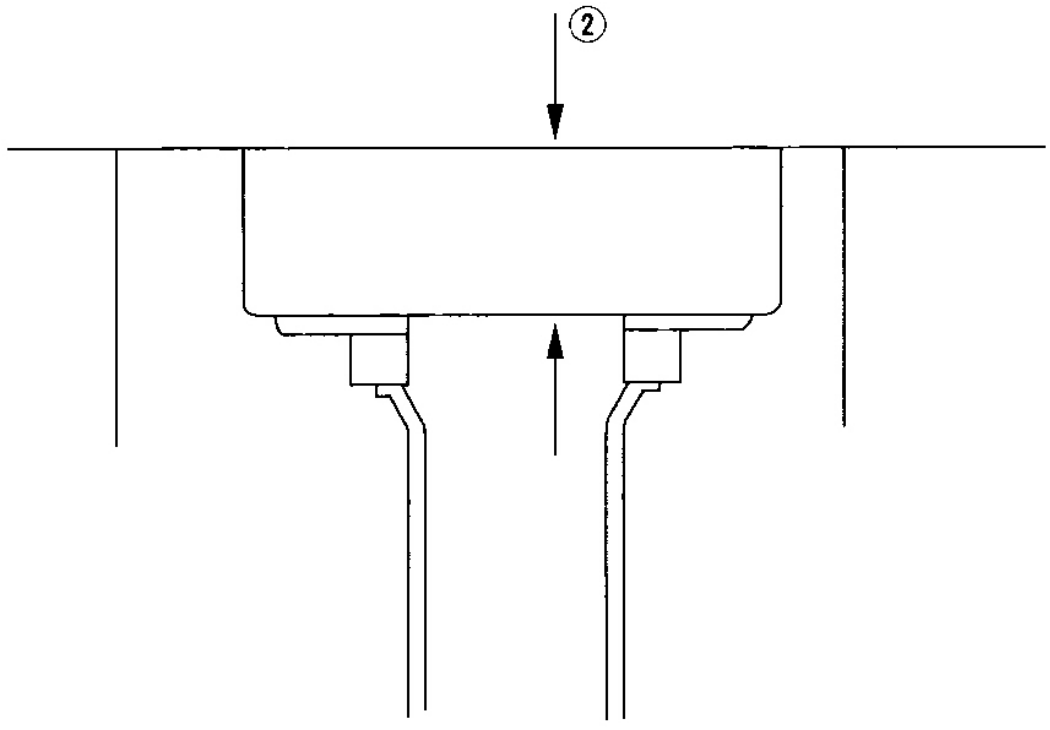


Fig. 185: Measuring Distance (2) (The Depth Of Clutch Housing) With Straight Edge and Depth Gauge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Shim Selection Formula

5. Select the proper 82 mm shim from the chart. Follow the example below, and use the measurements you made in steps 3 and 4.

(Basic Formula)

(2) - (1) - (0.85 + 0.14) = shim thickness (maximum)
(2) - (1) - (0.85 + 0.21) = shim thickness (minimum)

- Subtract distance (2) (step 4) from distance (1) (step 3).
- 0.85 mm (0.033 in.): Spring washer, a dimension in the installation.
- 0.14 mm (0.006 in.): Minimum thrust clearance.
- 0.21 mm (0.008 in.): Maximum thrust clearance.

(For example)

21.04 - 17.97 - (0.85 + 0.14) = 2.08 mm (0.082 in.)
21.04 - 17.97 - (0.85 + 0.21) = 2.01 mm (0.079 in.)

Take the middle value 2.04 mm (0.080 in.) of the minimum value and the maximum value, and select the 0.93 mm (0.037 in.) and 1.11 mm (0.044 in.) shims.

NOTE: You may need to select two thicknesses of the 82 mm shim from 82 MM SHIM THICKNESS CHART .

82 MM SHIM THICKNESS CHART

	Part Number	Thickness
A	23931-PR8-F00	0.60 mm (0.024 in.)
B	23932-PR8-F00	0.63 mm (0.025 in.)
C	23933-PR8-F00	0.66 mm (0.026 in.)
D	23934-PR8-F00	0.69 mm (0.027 in.)
E	23935-PR8-F00	0.72 mm (0.028 in.)
F	23936-PR8-F00	0.75 mm (0.030 in.)
G	23937-PR8-F00	0.78 mm (0.031 in.)
H	23938-PR8-F00	0.81 mm (0.032 in.)
I	23939-PR8-F00	0.84 mm (0.033 in.)
J	23940-PR8-F00	0.87 mm (0.034 in.)
K	23941-PR8-F00	0.90 mm (0.035 in.)
L	23942-PR8-F00	0.93 mm (0.037 in.)

M	23943-PR8-F00	0.96 mm (0.038 in.)
N	23944-PR8-F00	0.99 mm (0.039 in.)
0	23945-PR8-F00	1.02 mm (0.040 in.)
P	23946-PR8-F00	1.05 mm (0.041 in.)
Q	23947-PR8-F00	1.08 mm (0.043 in.)
R	23948-PR8-F00	1.11 mm (0.044 in.)
S	23949-PR8-F00	1.14 mm (0.045 in.)
T	23950-PR8-F00	1.17 mm (0.046 in.)
U	23951-PR8-F00	1.20 mm (0.047 in.)
W	23952-RAT-000	1.23 mm (0.048 in.)
X	23953-RAT-000	1.26 mm (0.050 in.)
Y	23954-RAT-000	1.29 mm (0.051 in.)
Z	23955-RAT-000	1.32 mm (0.052 in.)
AA	23956-RAT-000	1.35 mm (0.053 in.)
AB	23957-RAT-000	1.38 mm (0.054 in.)
AC	23958-RAT-000	1.41 mm (0.056 in.)
AD	23959-RAT-000	1.44 mm (0.057 in.)

6. Install the 82 mm shim (A) selected in the transmission housing (B).

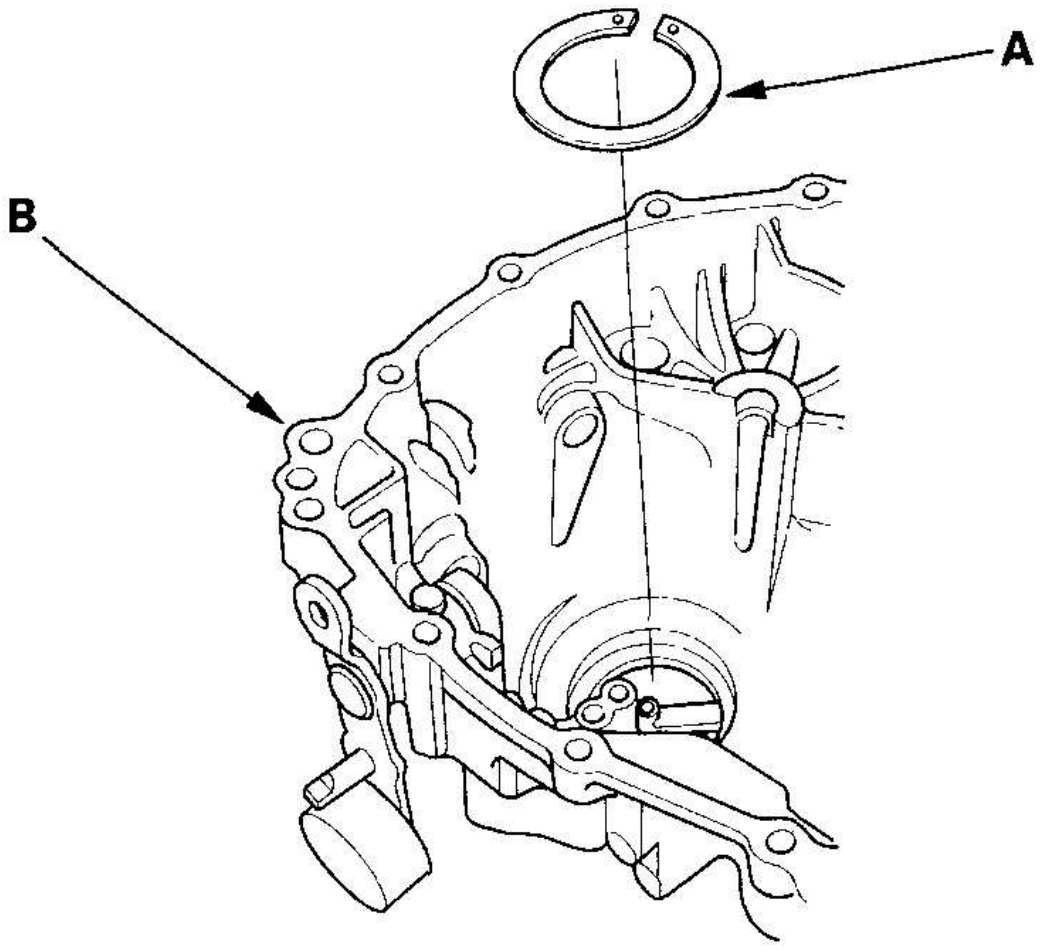


Fig. 186: Identifying 82 mm Shim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Thoroughly clean the spring washer (A) before installing it on the clutch housing (B). Note the installation direction of the spring washer (see **TRANSMISSION DISASSEMBLY**).
8. Install the mainshaft in the clutch housing.
9. Place the transmission housing over the mainshaft and onto the clutch housing.
10. Tighten the clutch and transmission housings with several 10 mm bolts.

NOTE: It is not necessary to use sealing agent between the housings.

11. Lightly tap on the mainshaft with a plastic hammer.
12. Attach the special tool to the mainshaft as follows:
    - Back-out the mainshaft holder bolt (A), and loosen the two hex bolts (B).
    - Fit the holder over the mainshaft so its lip is towards the transmission.
    - Align the mainshaft holder lip around the groove at the inside of the mainshaft splines, then tighten the hex bolts.

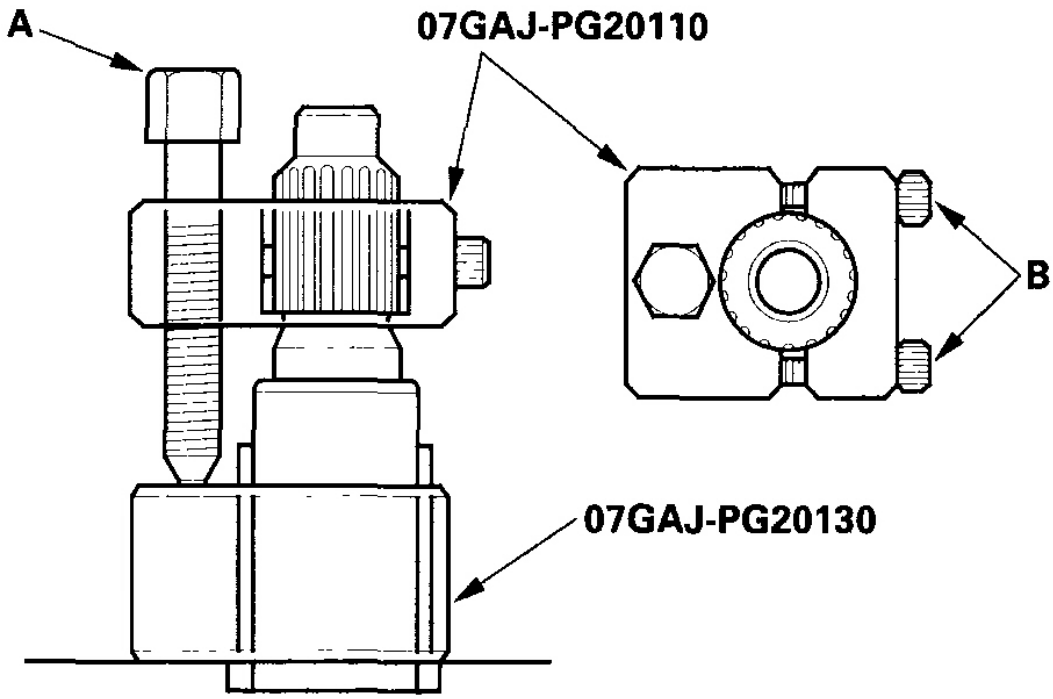
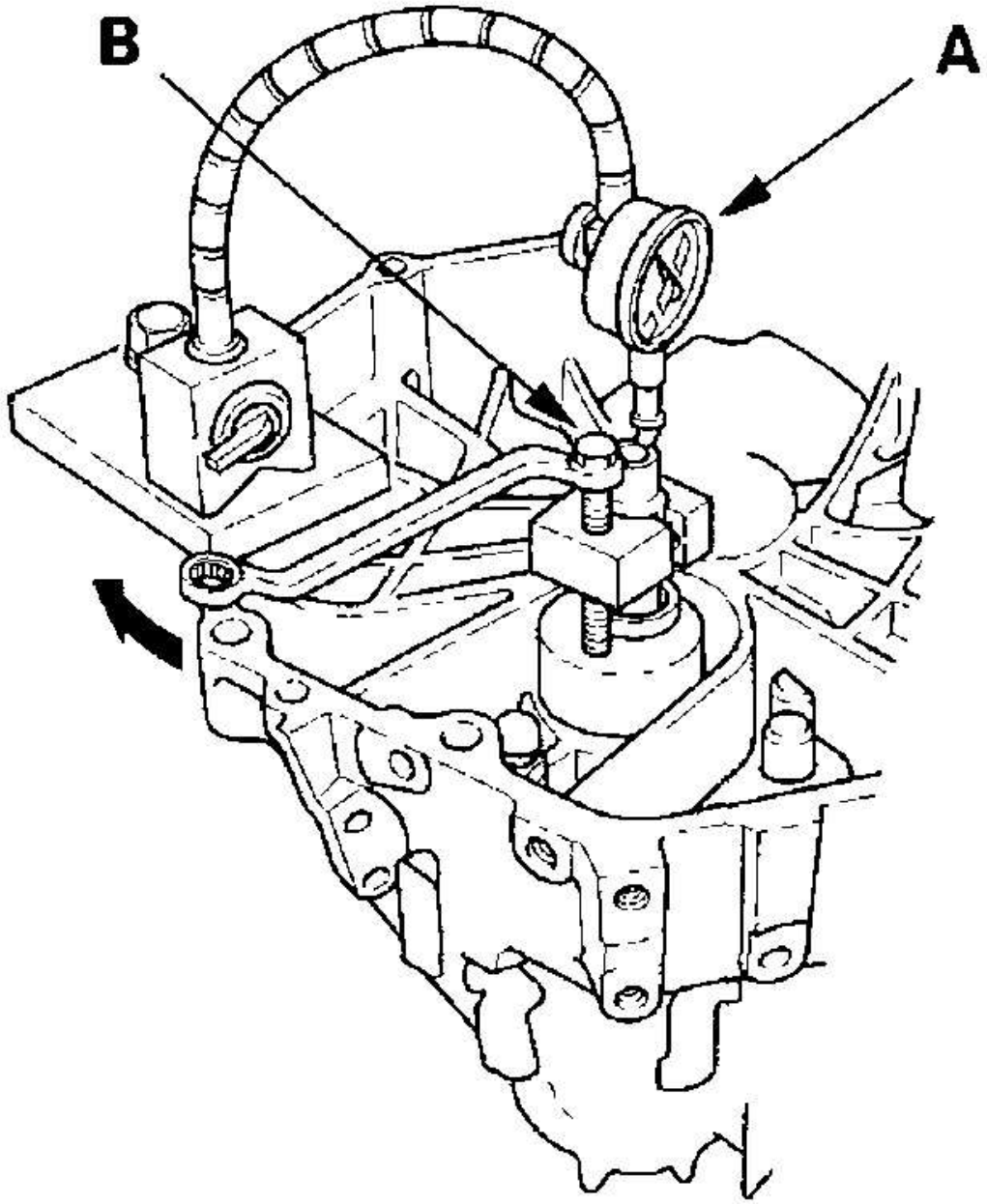


Fig. 187: Attaching Special Tool To Mainshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Fully seat the mainshaft by tapping on its end with a plastic hammer.
14. Thread in the mainshaft holder bolt until it just contacts the wide surface of the

mainshaft base.

15. Zero a dial gauge (A) on the end of the mainshaft.



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Fig. 188: Zeroing Dial Gauge On End Of Mainshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Turn the mainshaft holder bolt (B) clockwise; stop turning when the dial gauge has reached its maximum movement. The reading on the dial gauge is the amount of mainshaft end play.

NOTE: Do not turn the mainshaft holder bolt more than 60 degrees after the needle of the dial gauge stops moving. Applying more pressure with the mainshaft holder bolt may damage the transmission.

17. If the reading is within the standard, the clearance is correct. If the reading is not within the standard, recheck the shim thickness.

Standard: 0.14-0.21 mm (0.006-0.008 in.)

TRANSMISSION REASSEMBLY

NOTE: Prior to reassembling, clean all parts in solvent, dry them, and apply lubricant to all contact surfaces.

1. Press the new dust seal (A) into the transmission housing surface, then install the shift lever (B), shift arm (C), 8 mm spring washer (D), and 8 mm special bolt (E).

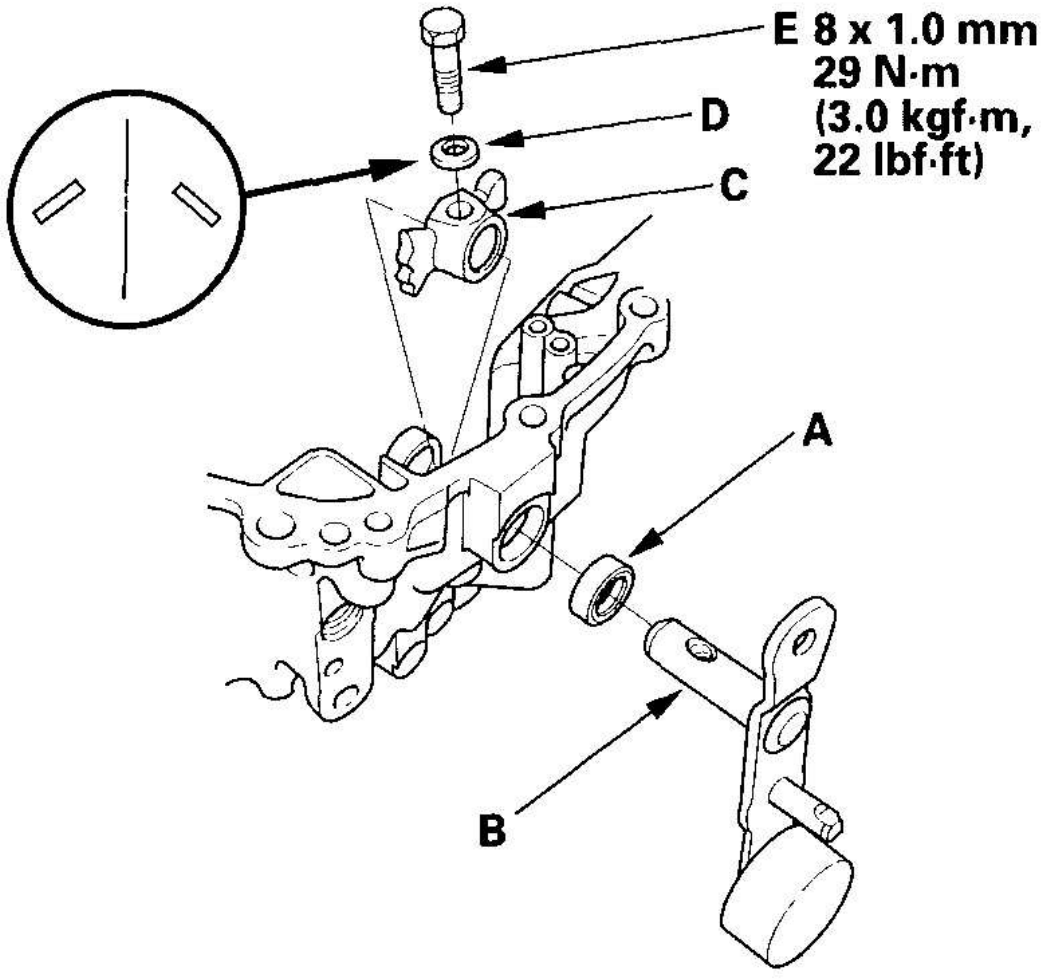


Fig. 189: Pressing New Dust Seal Into Transmission Housing Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Select the proper size 82 mm shim (A) according to the measurements made during the Mainshaft Thrust Clearance Adjustment (see **MAINSHAFT THRUST CLEARANCE ADJUSTMENT**). Install it into the transmission housing (B).

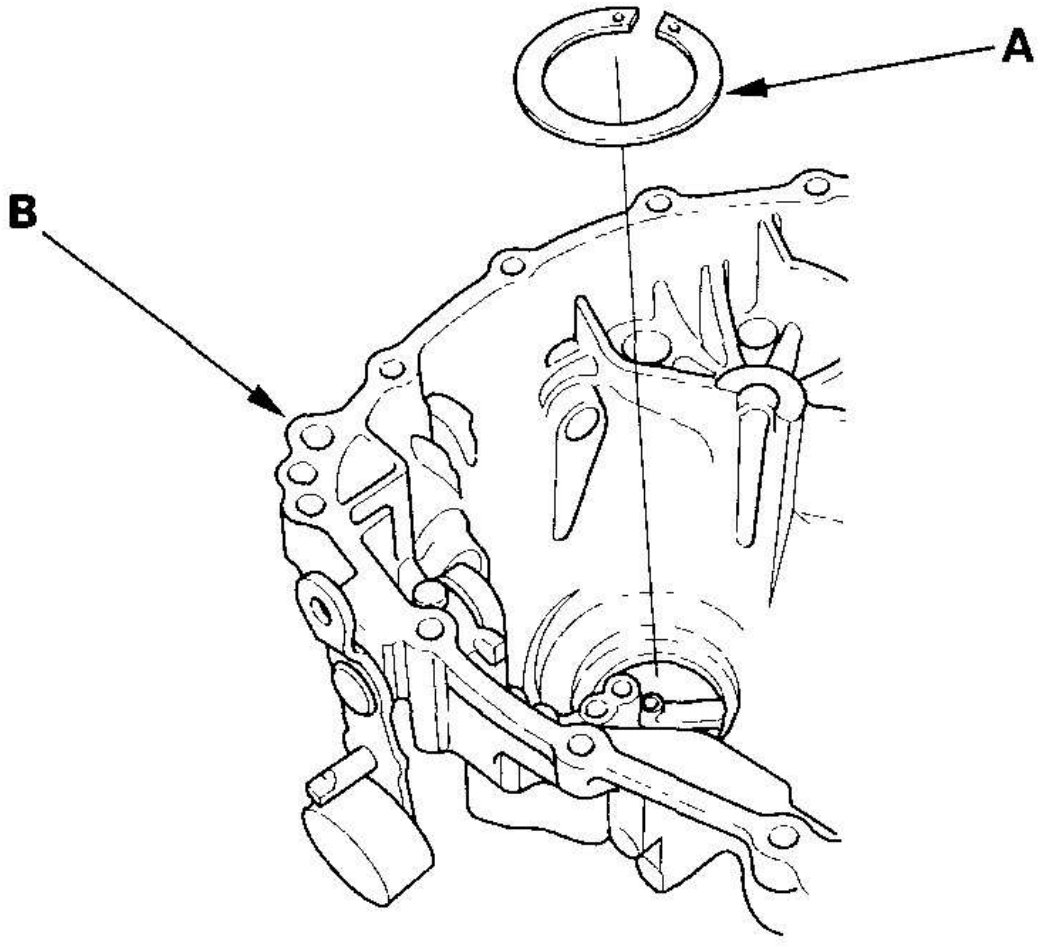


Fig. 190: Selecting Proper Size 82 mm Shim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the steel ball (A), relief valve spring (B), oil pump outer rotor (C), oil pump inner rotor (D), and oil pump plate (E).

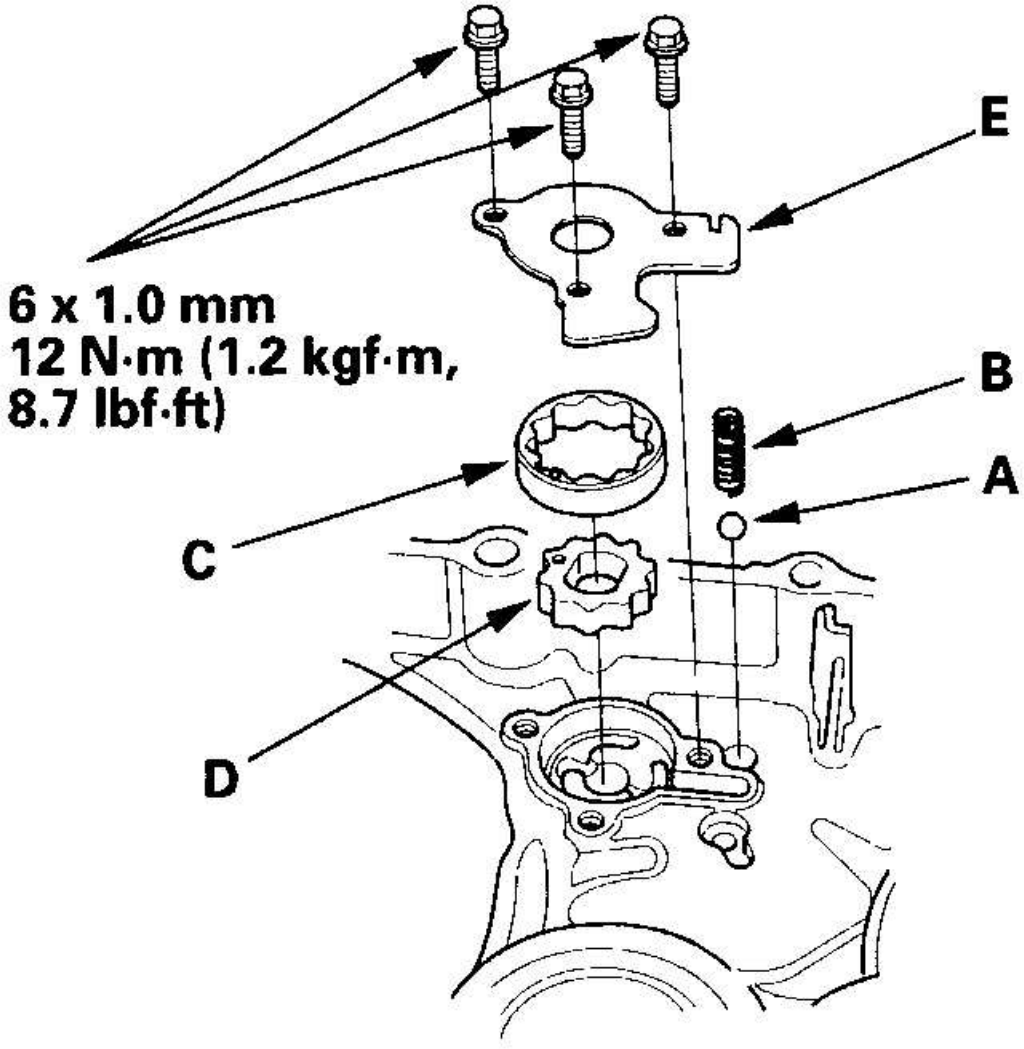


Fig. 191: Identifying Steel Ball
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the differential assembly (A) and oil pump shaft (B).

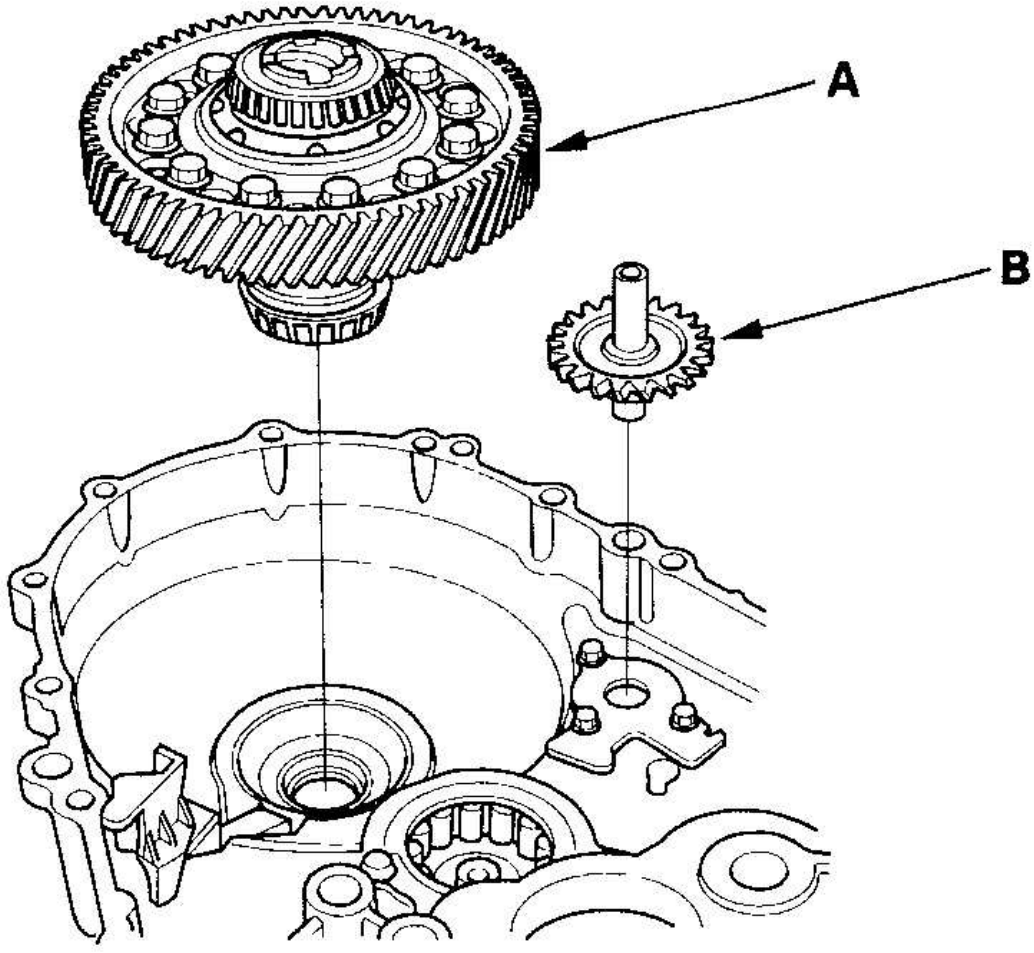


Fig. 192: Identifying Differential Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the 64 mm spring washer (A). Note the installation direction of the 64 mm spring washer.

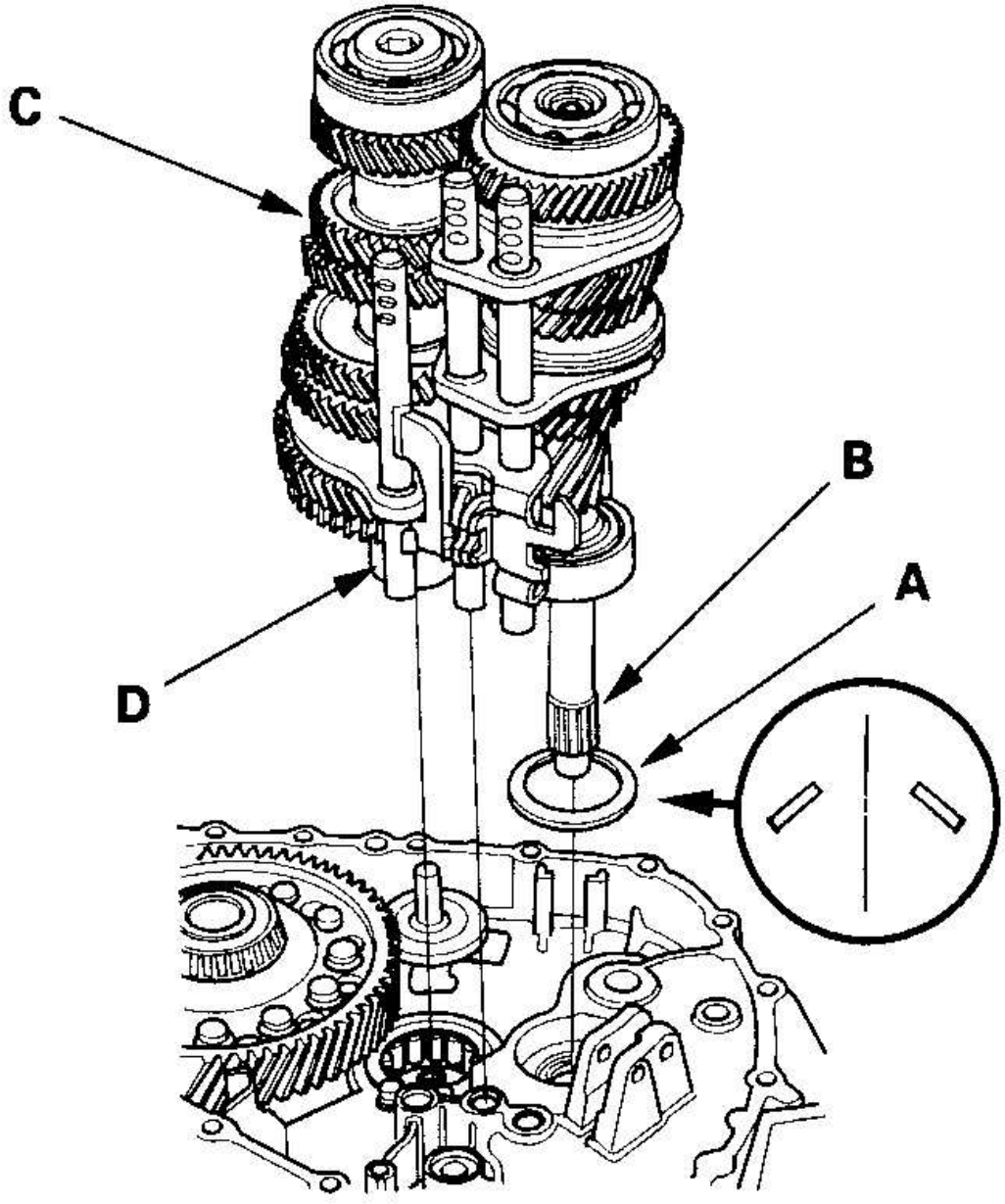


Fig. 193: Identifying 64 mm Spring Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Apply tape to the mainshaft splines (B) to protect the seal. Install the mainshaft and countershaft (C) into the shift forks (D) as an assembly.
7. Press the new dust seal (A) into the clutch housing surface, then install the select lever (B), select arm (C), new 5 mm spring pin (D), and new 3 mm spring pin (E).

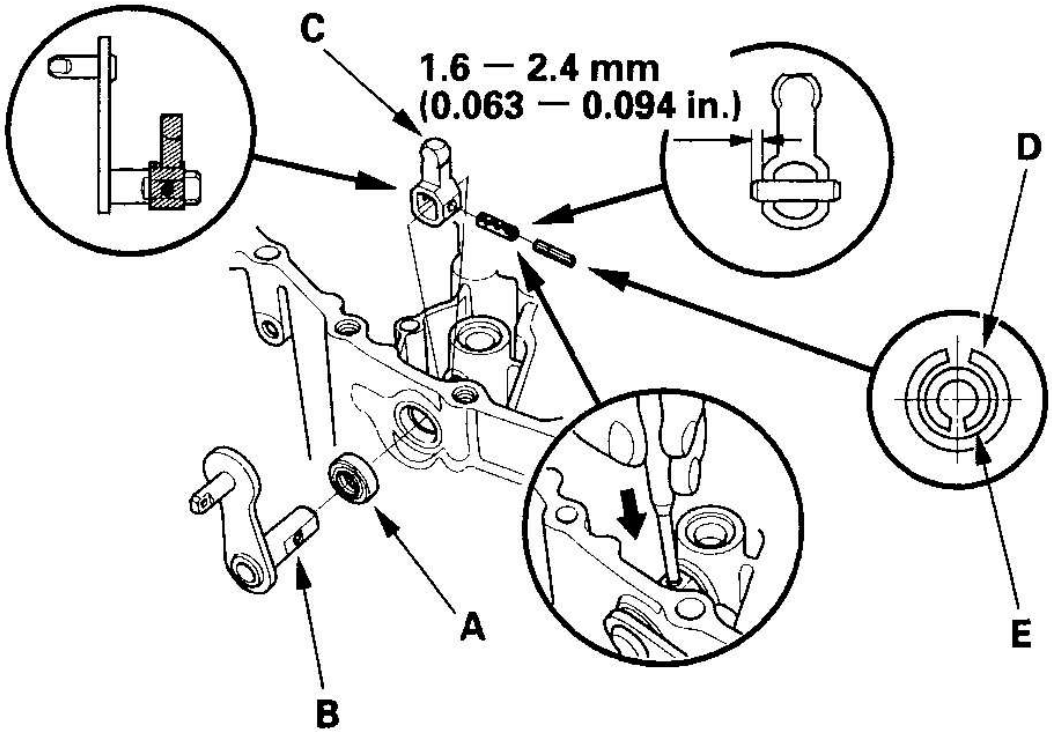


Fig. 194: Pressing New Dust Seal Into Clutch Housing Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Set the select return spring (A), pin (B), and interlock (C) as shown in **Fig. 195**.

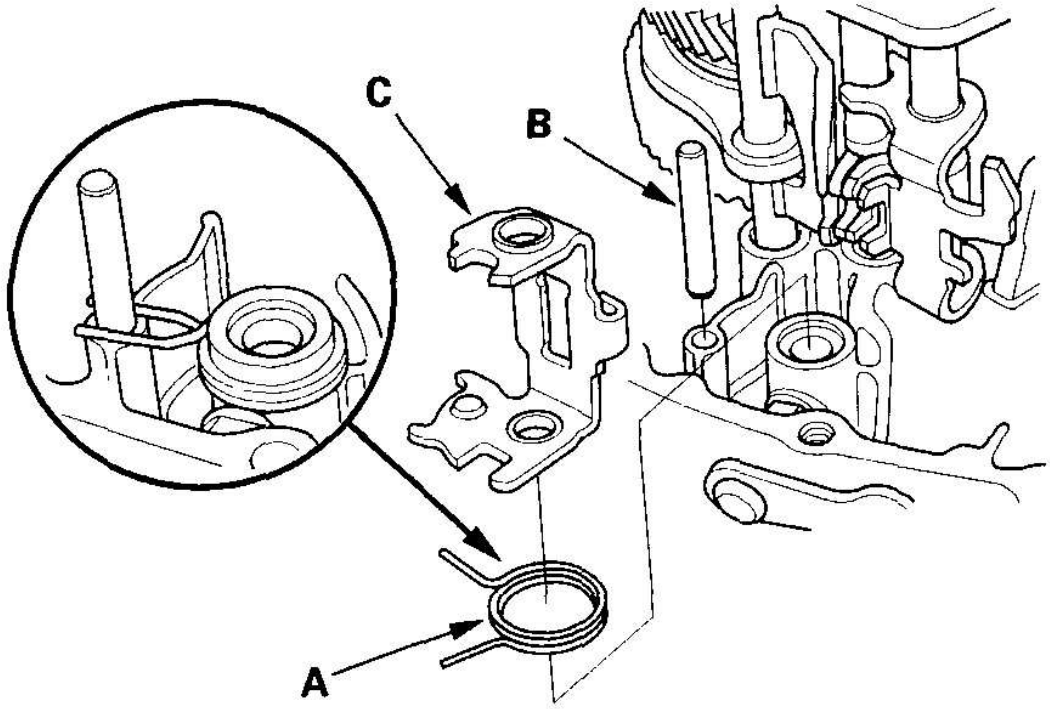


Fig. 195: Setting Select Return Spring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the shift piece (A) and shift piece shaft (B).

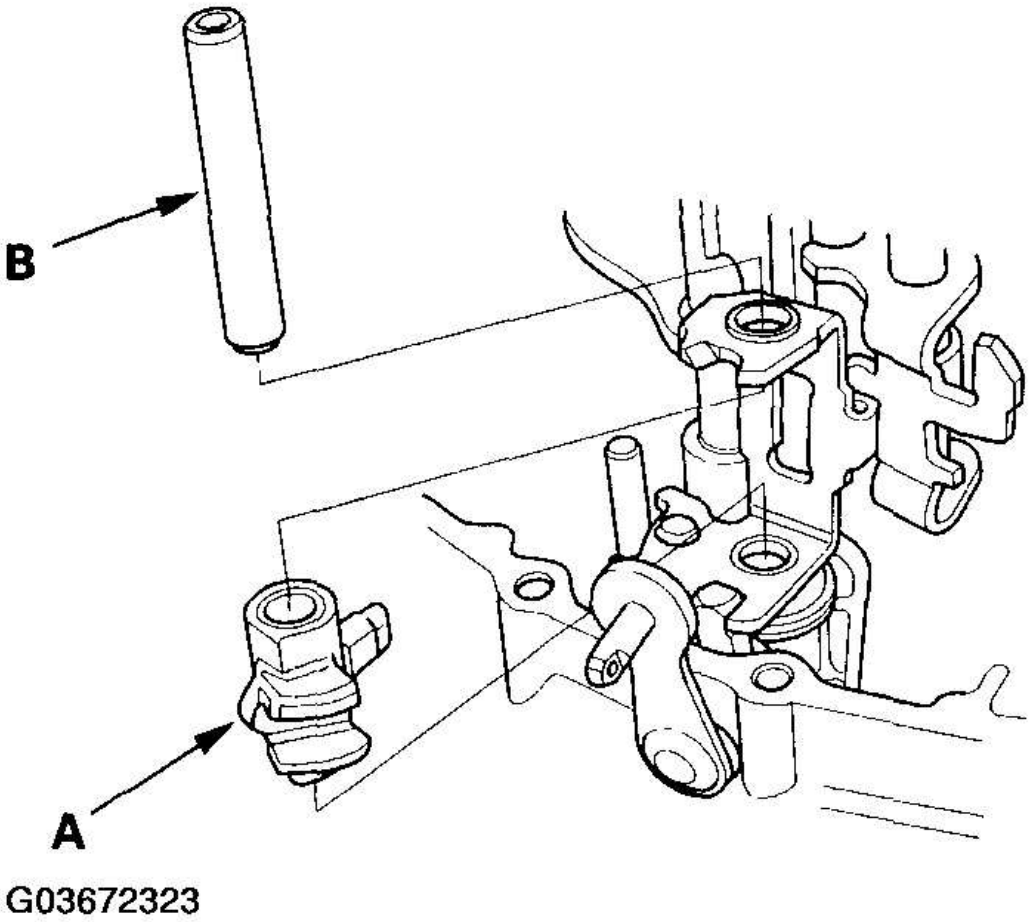


Fig. 196: Identifying Shift Piece And Shift Piece Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Install the 33 mm spring washer (A). Note the installation direction of the spring washer.

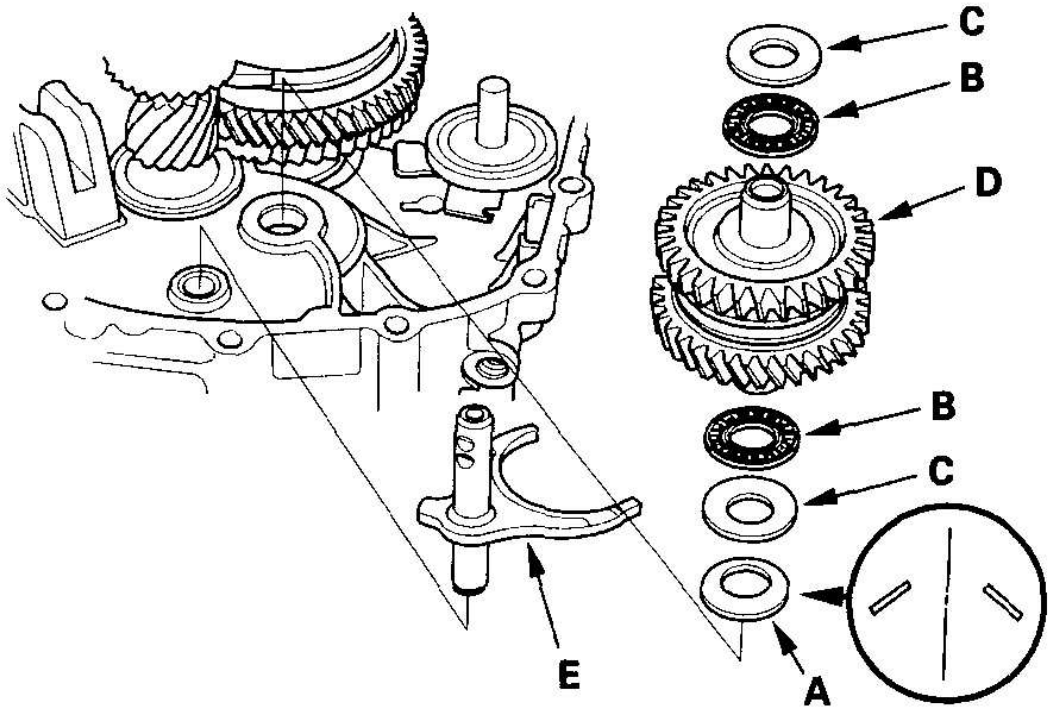


Fig. 197: Identifying 33 Mm Spring Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the 20 mm thrust needle bearing (B), 20 mm thrust washers (C), reverse idler gear shaft assembly (D), and reverse shift fork (E) as an assembly.
12. Slide the reverse idler gear shaft assembly (A) on the rib (B) of the clutch housing, then install it into the hole (C) of the clutch housing.

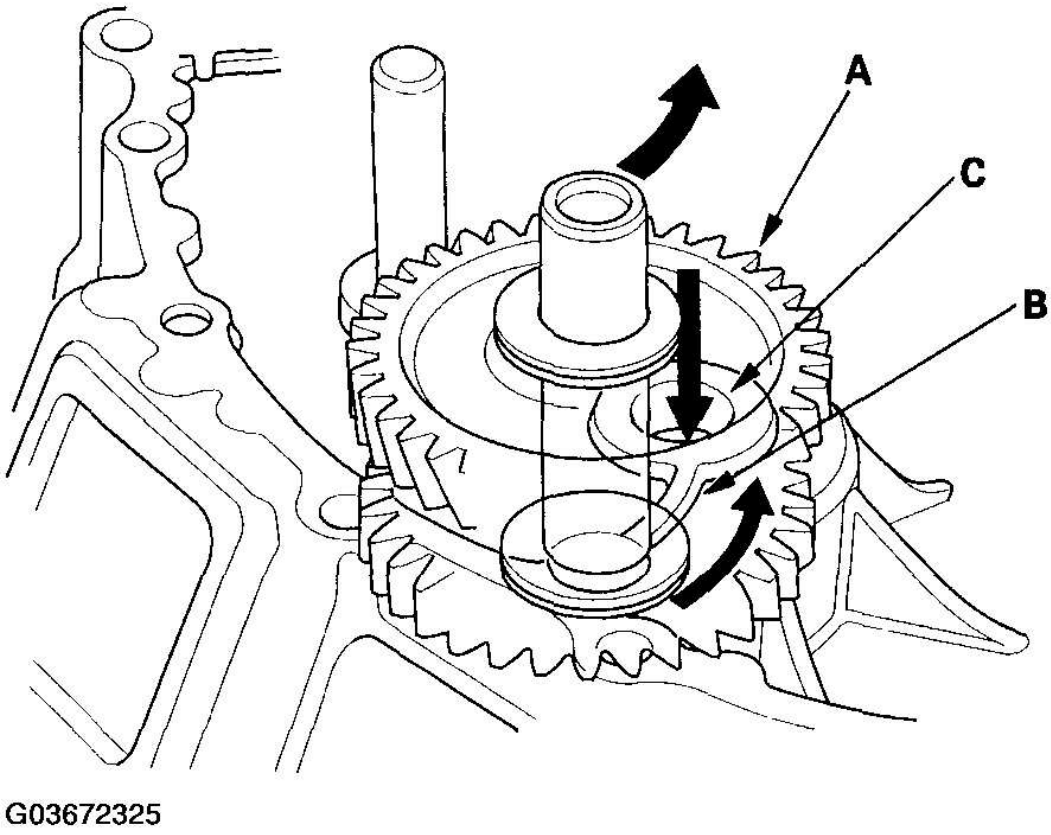


Fig. 198: Sliding Reverse Idler Gear Shaft Assembly On Rib Of Clutch Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install the reverse shift lever (A), and pin (B).

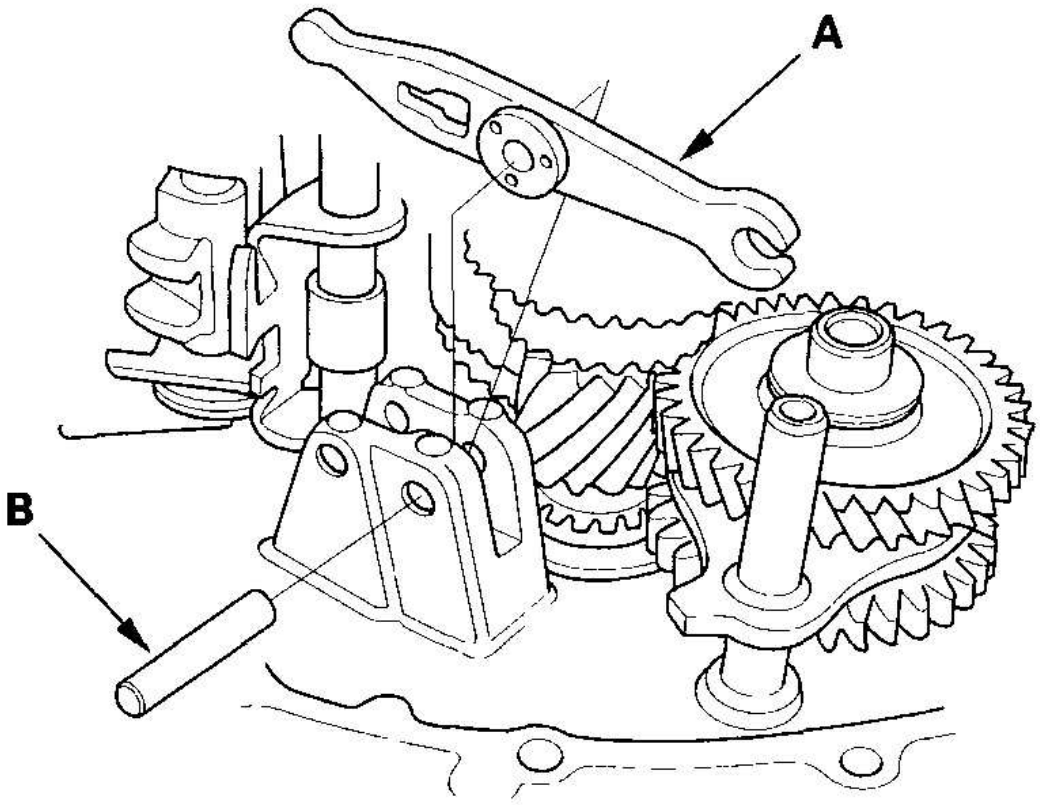


Fig. 199: Identifying Reverse Shift Lever
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Install the oil guide pipe A, oil guide pipe (B), and magnet (C).

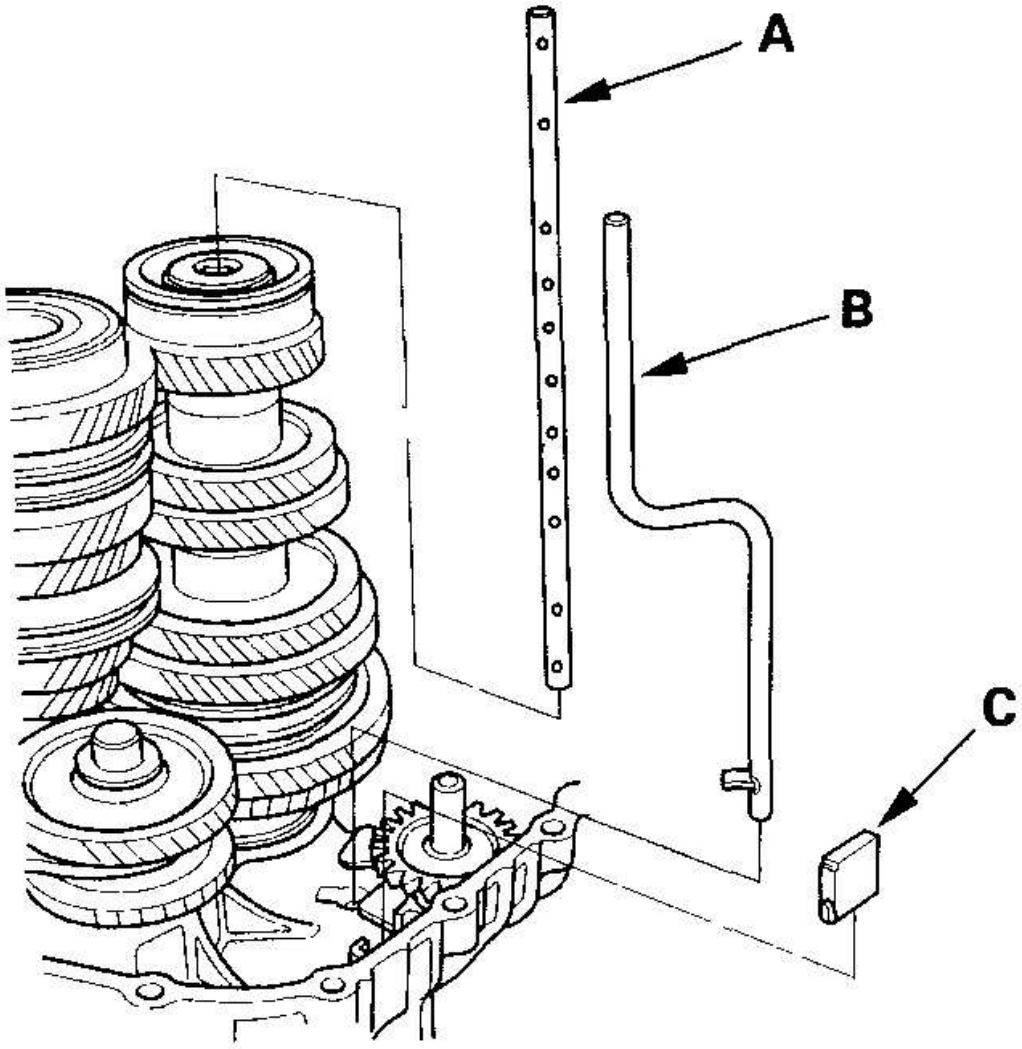
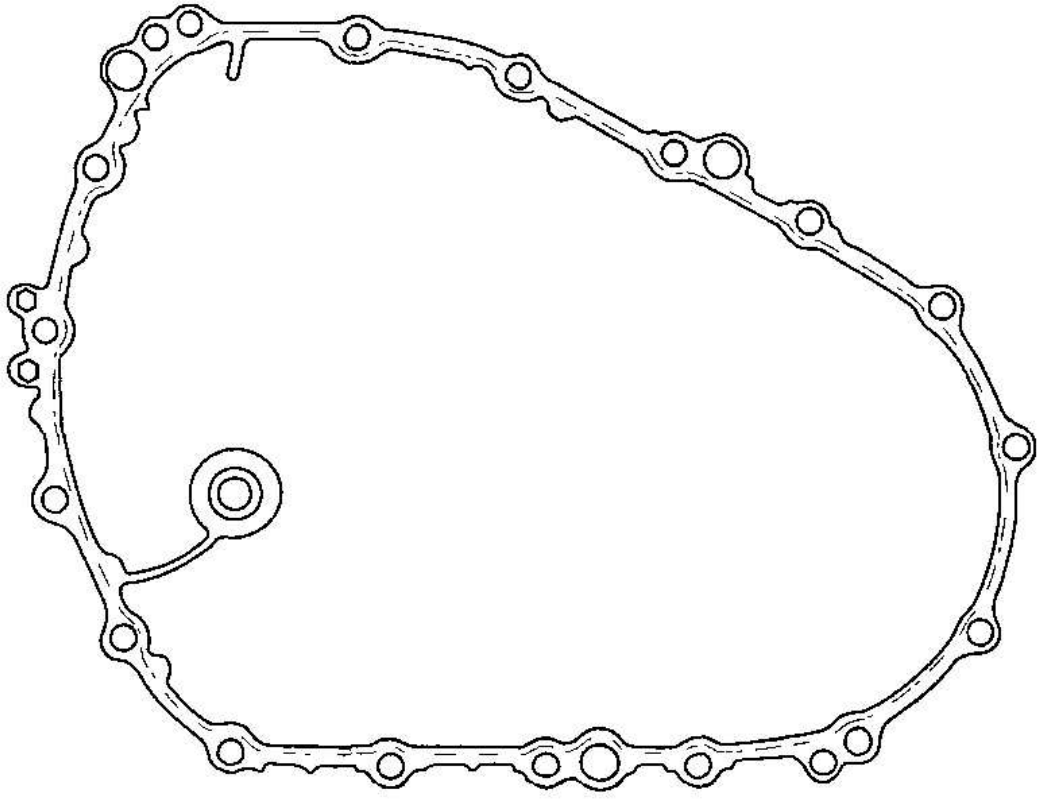


Fig. 200: Identifying Oil Guide Pipe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove any dirt or oil from the transmission housing sealing surface. Apply liquid gasket (P/N 08718-0002) to the sealing surface. Make sure you seal the entire circumference of the bolt holes to prevent oil leakage.

NOTE: Do not install components if 4 minutes or more have passed after applying the liquid gasket. Instead, remove the old residue and reapply the liquid gasket.



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Fig. 201: Applying Liquid Gasket To Sealing Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Install the 14 x 20 mm dowel pins (A).

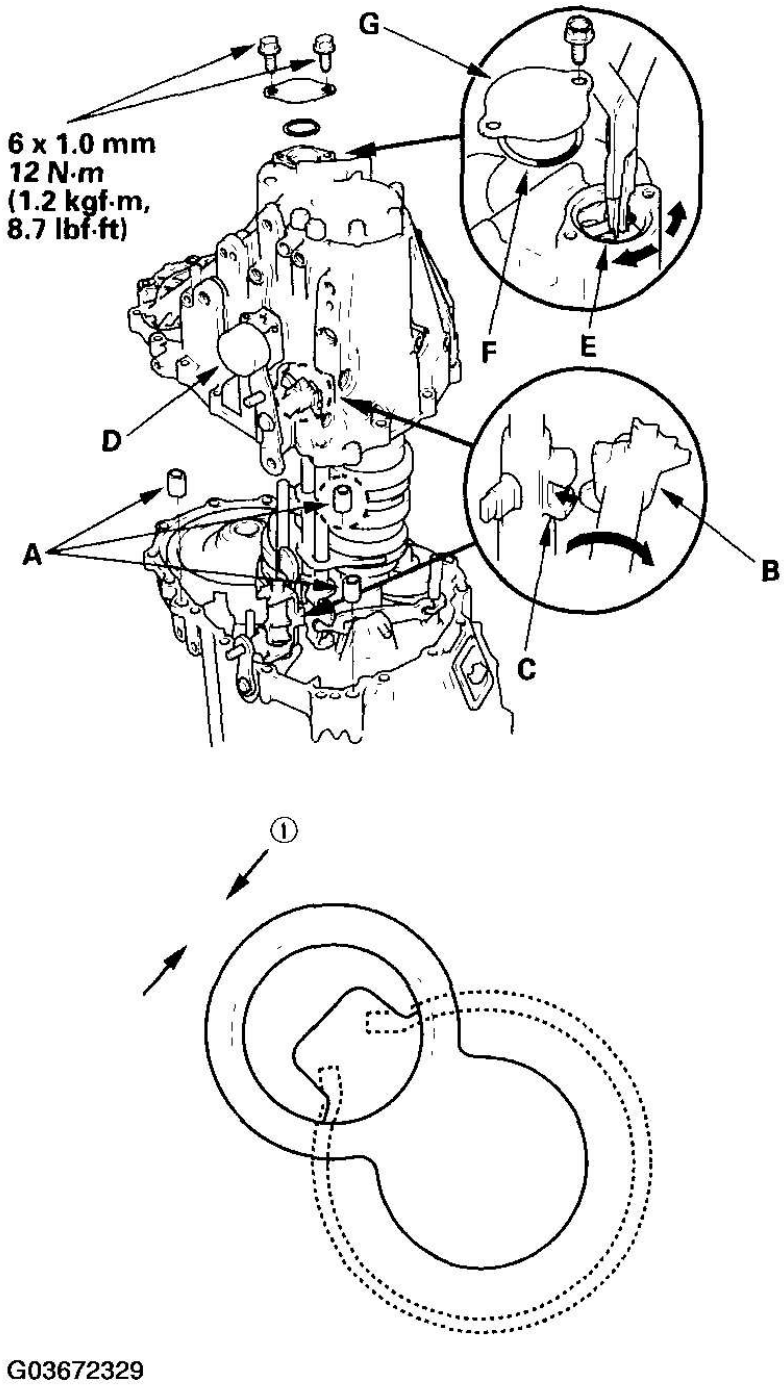


Fig. 202: Identifying 14 X 20 mm Dowel Pins
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Lower the transmission housing, then place the shift arm (B) in the groove of the shift piece (C) by turning the change lever (D).
18. While expanding the 75 mm snap ring (E) of the countershaft ball bearing with snap ring pliers, push the transmission housing down to start the countershaft ball bearing through the snap ring. Then release the pliers, and push down the housing until it bottoms and the snap ring snaps in place in the counter shaft ball bearing snap ring groove.
19. Make sure the 75 mm snap ring is securely seated in the groove of the countershaft bearing.

    Dimension (1) as installed: 9.91 - 11.52 mm (0.390-0.454 in.)

20. Install the new 37.7 mm O-ring (F) and transmission case cap (G).

    NOTE: Check the operation of the change lever.

21. Install the transmission hanger (A), transmission hanger (B), 8 mm flange bolt (C), and the 10 mm flange bolts, finger-tight.

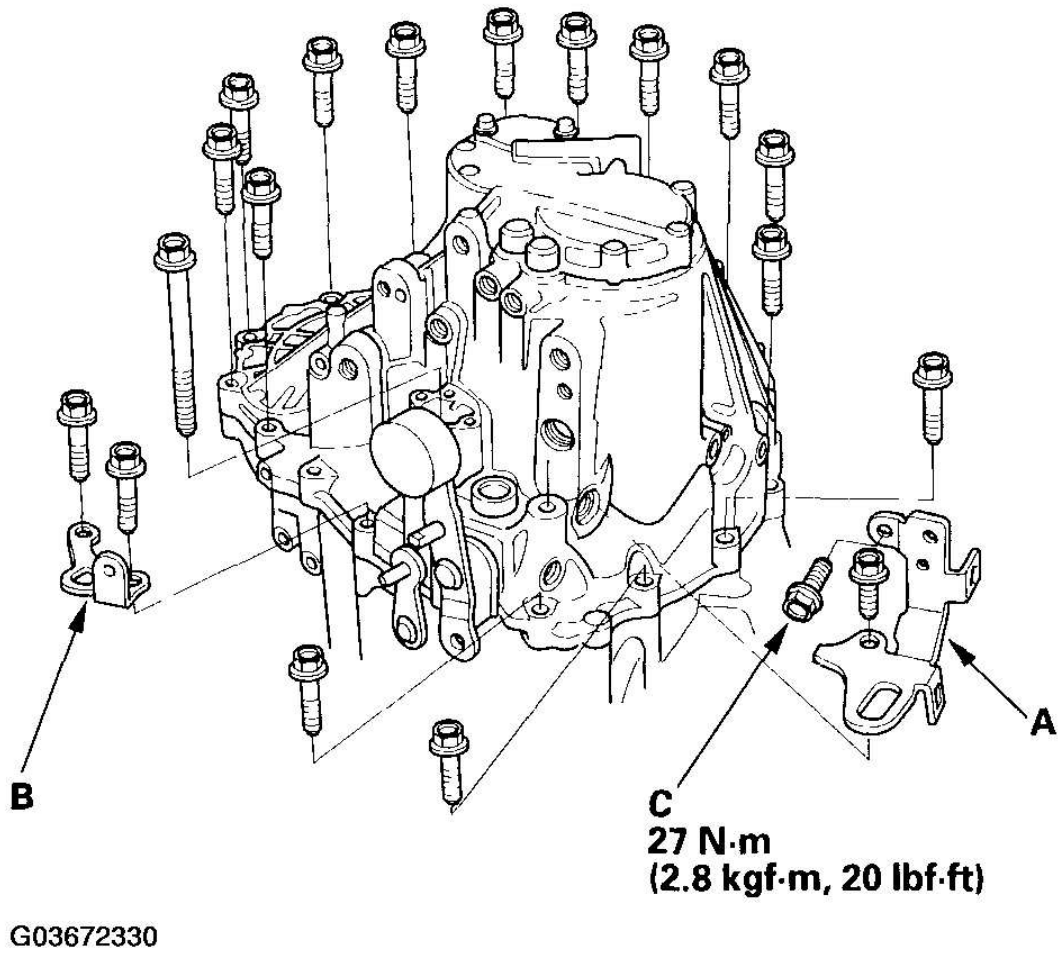
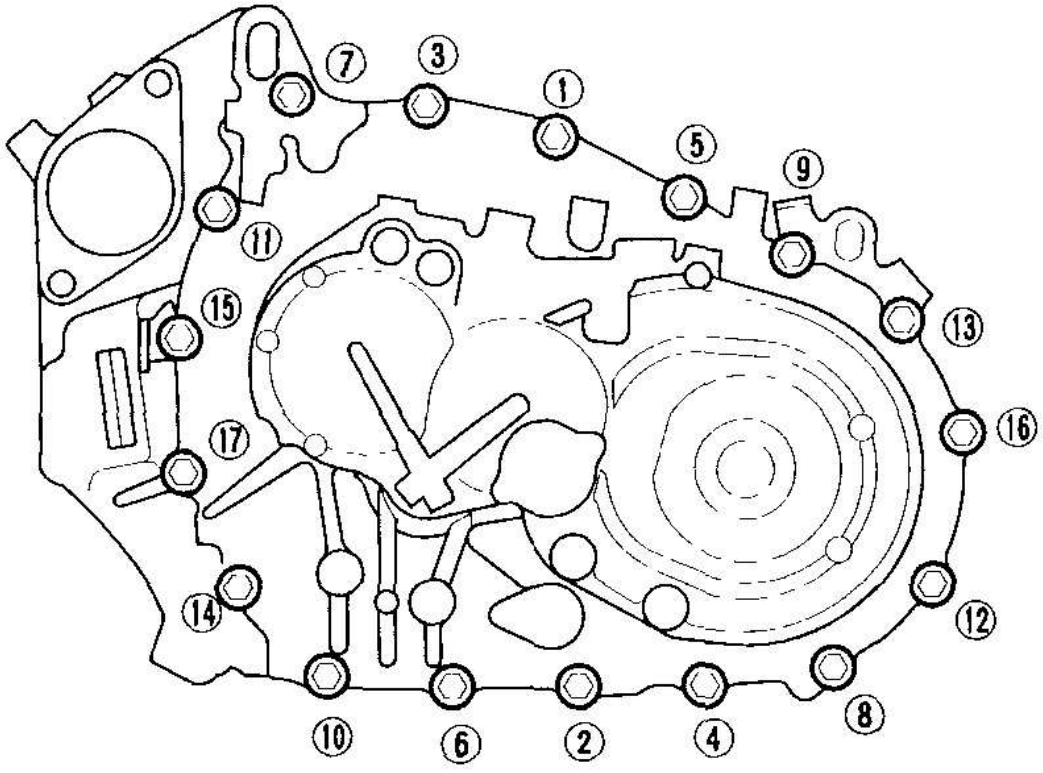


Fig. 203: Identifying Transmission Hanger
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Tighten the 10 mm flange bolts in a crisscross pattern in several steps.

    10 x 1.25 MM: 44 Nm (4.5 kgf.m, 33 lbf.ft)



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Fig. 204: Tightening 10 mm Flange Bolts In Crisscross Pattern
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Install the oil check bolt (A), new 6 mm washer (B), drain plug (C), and new 14 mm washer (D).

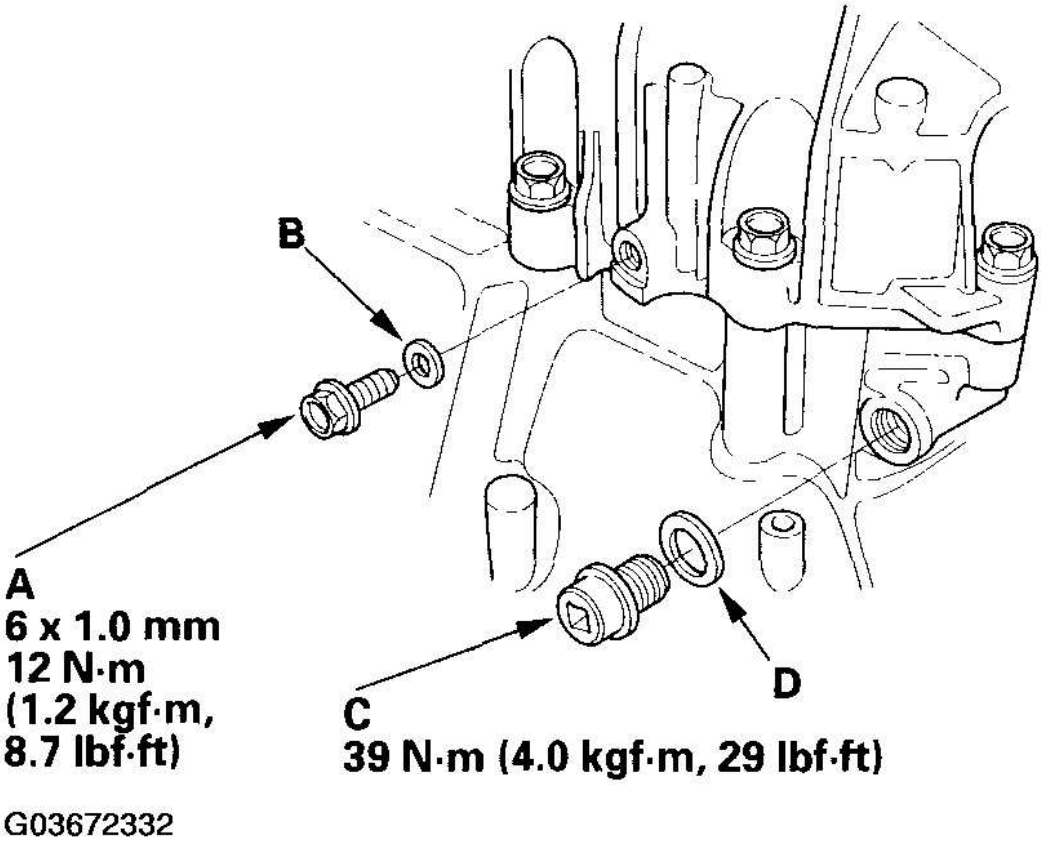


Fig. 205: Identifying Oil Check Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Apply liquid gasket (P/N 08718-0002) to the set screws (A), then install the set screws, 22 mm spring (B), 27.4 mm spring (C), steel balls (D), output shaft (countershaft) speed sensor (E), input shaft (mainshaft) speed sensor (F), and new O-rings (G).

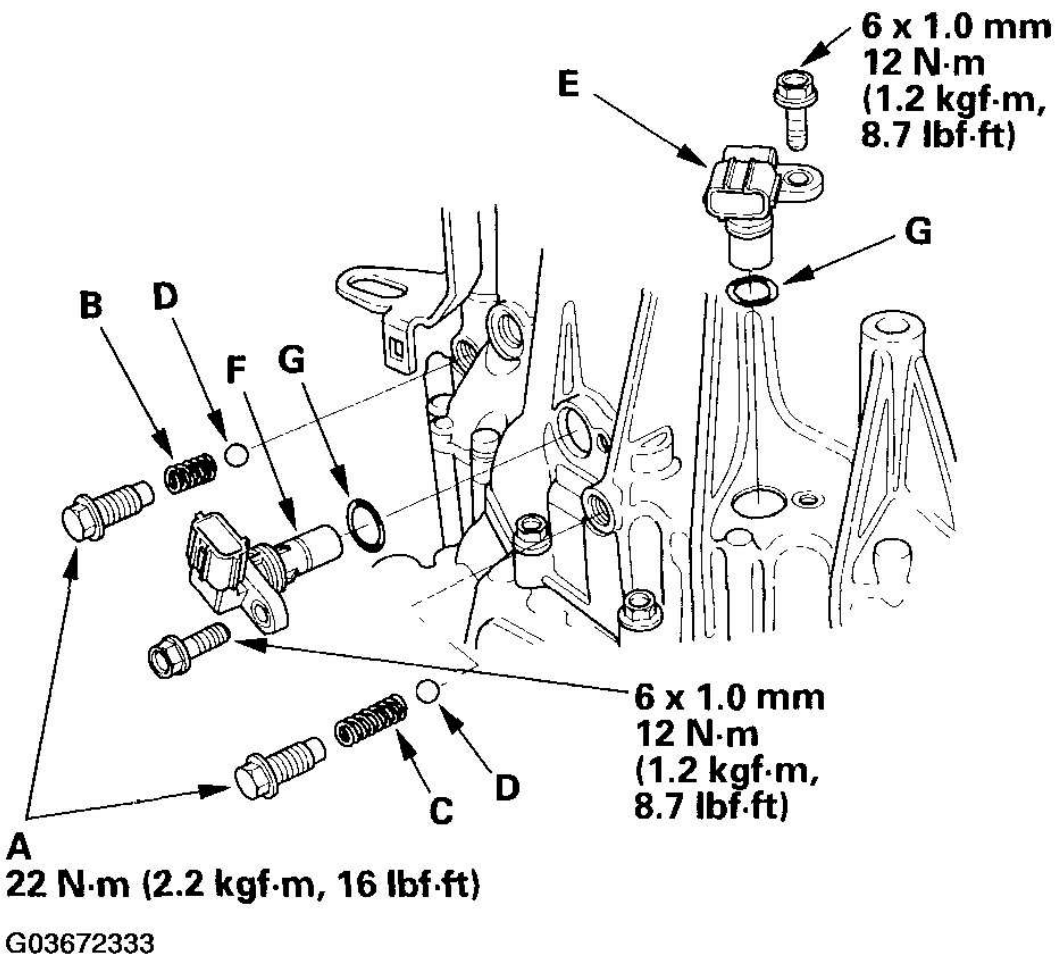


Fig. 206: Applying Liquid Gasket To Set Screws
Courtesy of AMERICAN HONDA MOTOR CO., INC.

25. Apply liquid gasket (P/N 08718-0002) to the set screws (A), then install the set screws, 22.0 mm spring (B), 26.1 mm spring (C), 27.4 mm springs (D), steel balls (E), oil filler plug (F), washer (G), and clutch line bracket (H).

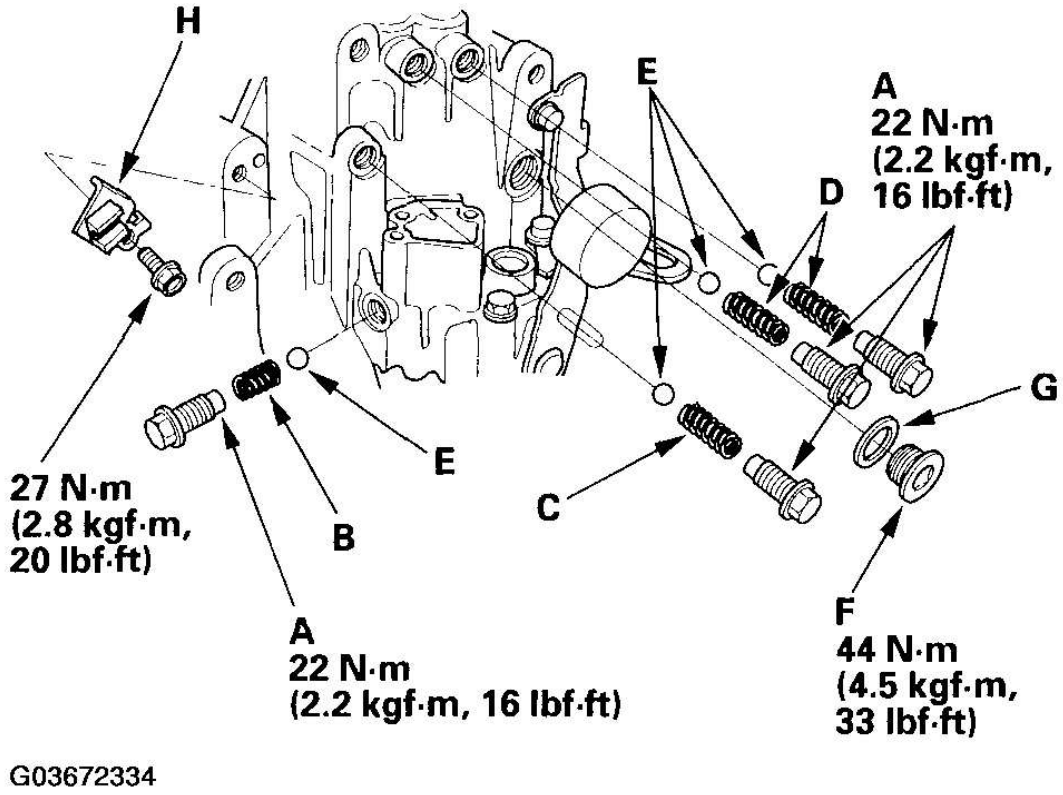


Fig. 207: Applying Liquid Gasket To Set Screws
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. Remove any dirt or oil from the reverse lockout solenoid sealing surface. Apply liquid gasket (P/N 08718-0002) to the sealing surface.

NOTE: Do not install components if 4 minutes or more have passed after applying the liquid gasket. Instead, remove the old residue and reapply the liquid gasket.

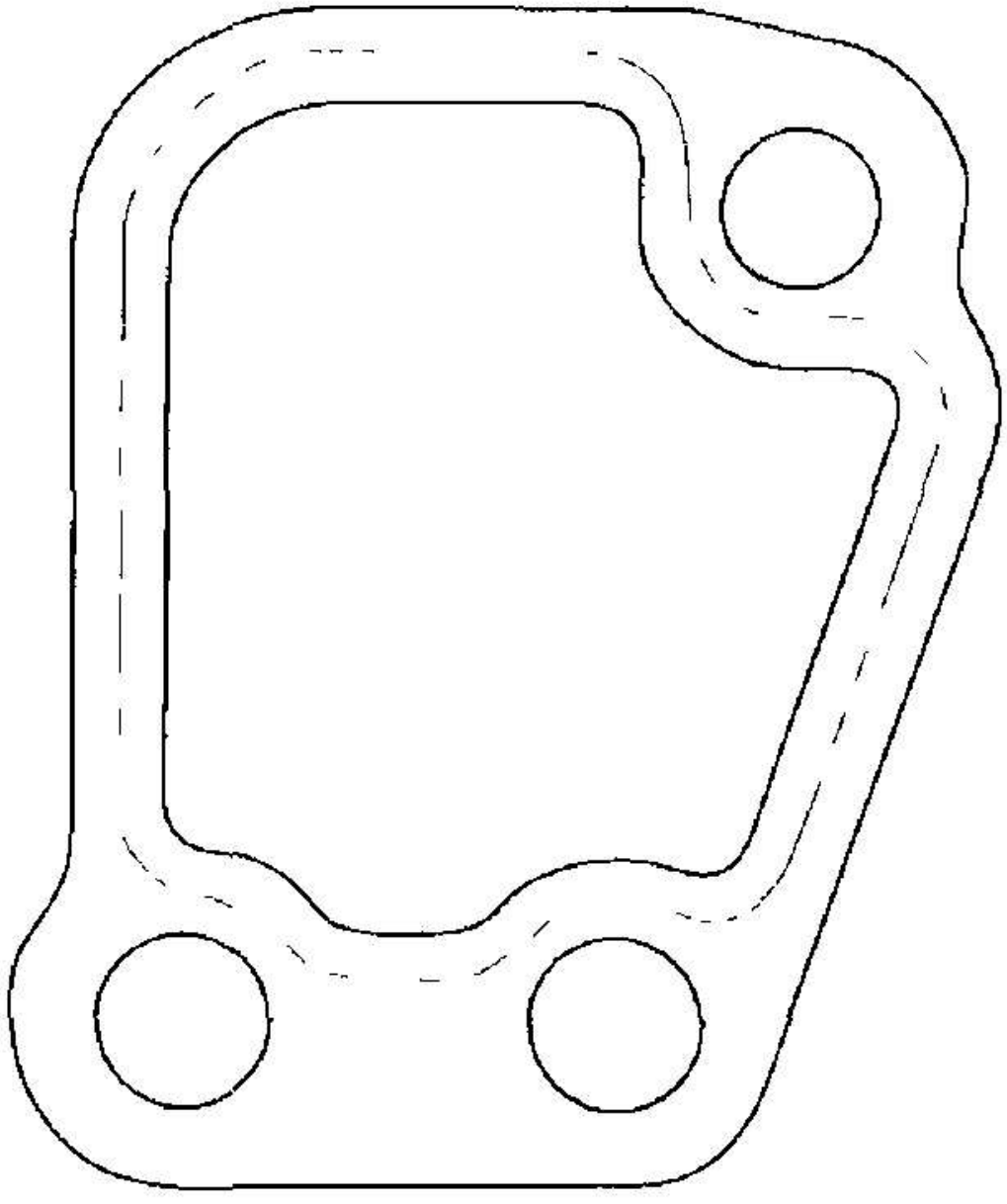


Fig. 208: Applying Liquid Gasket To Sealing Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

27. Install the transmission harness stay (A) and reverse lockout solenoid (B).

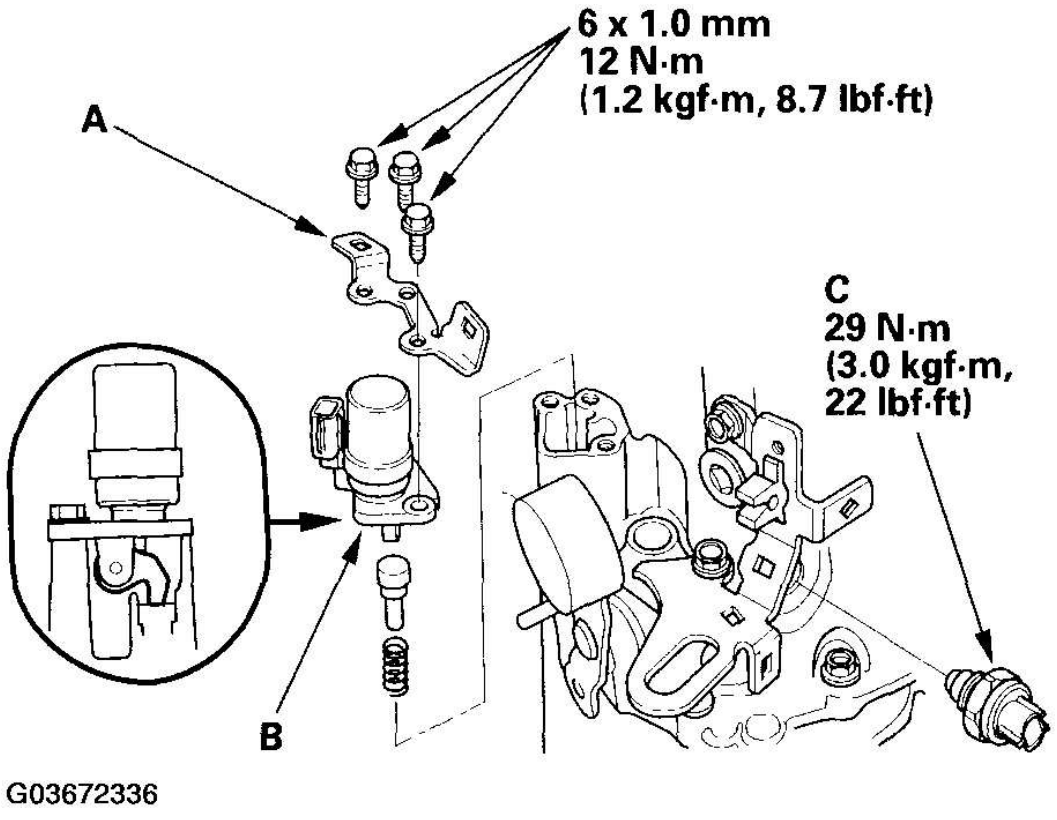


Fig. 209: Identifying Transmission Harness Stay
Courtesy of AMERICAN HONDA MOTOR CO., INC.

28. Apply liquid gasket (P/N 08718-0002) to the threads of the back-up light switch (C), and install the switch in the transmission housing.
29. Install the strainer cover (A), new O-ring (B), strainer set spring (C), and oil pump strainer (D).

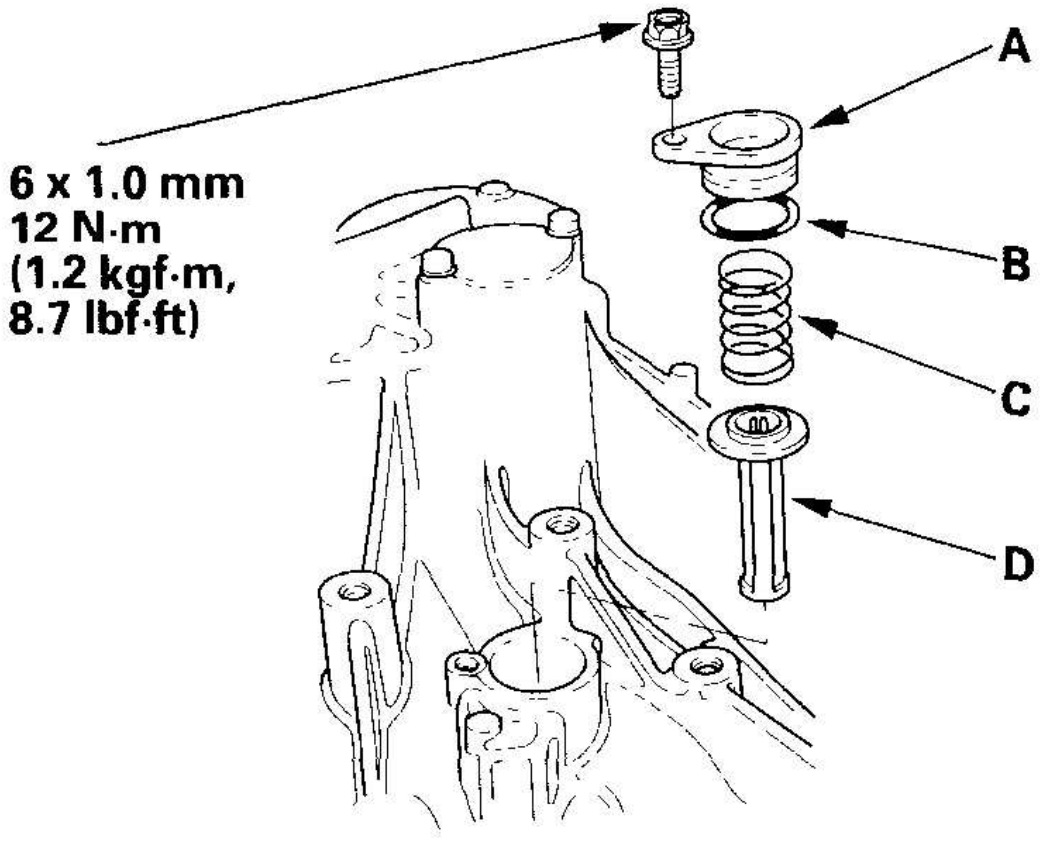


Fig. 210: Identifying Strainer Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GEARSHIFT MECHANISM REPLACEMENT

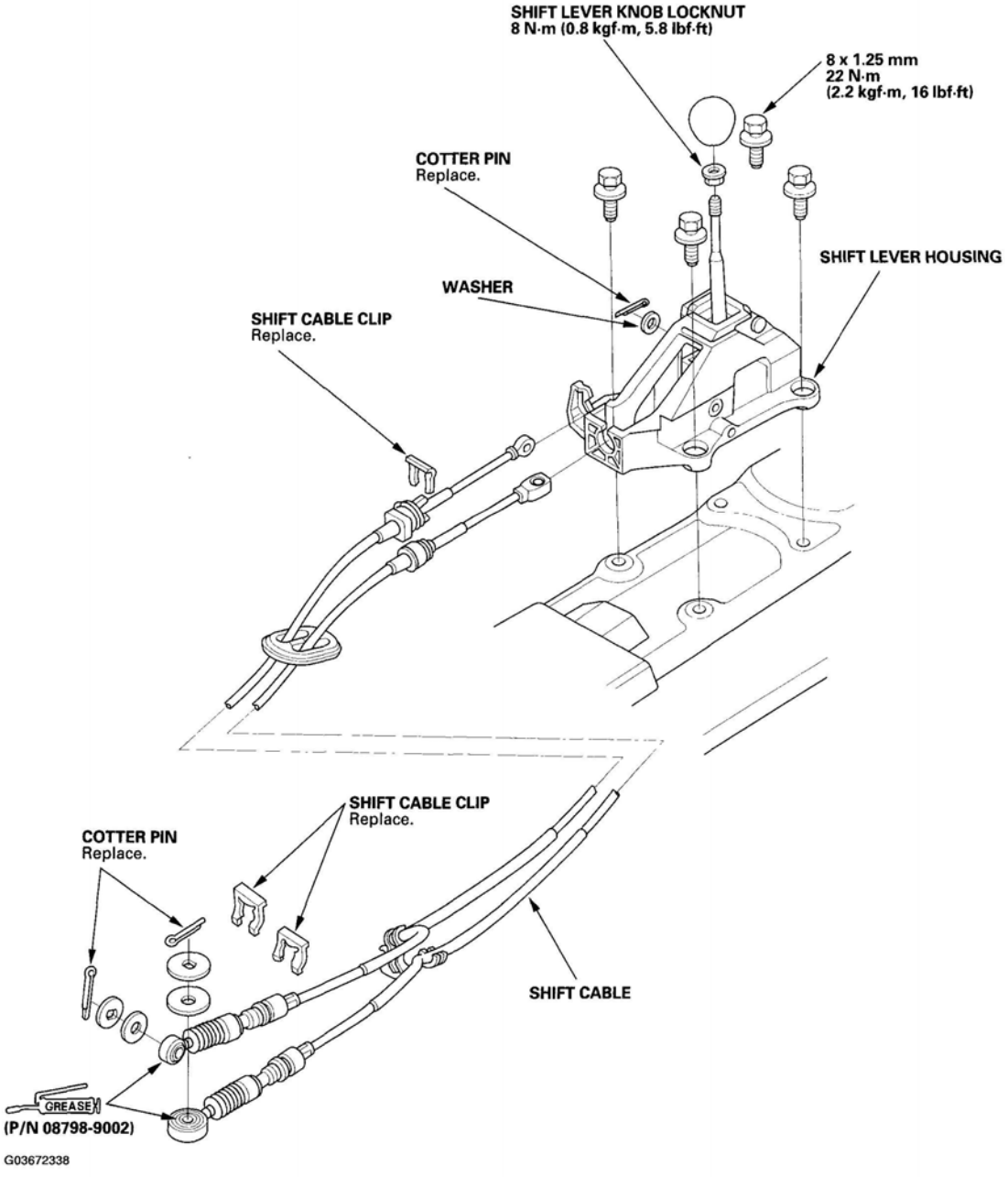


Fig. 211: Identifying Gearshift Mechanism Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

M/T DIFFERENTIAL

COMPONENT LOCATION INDEX

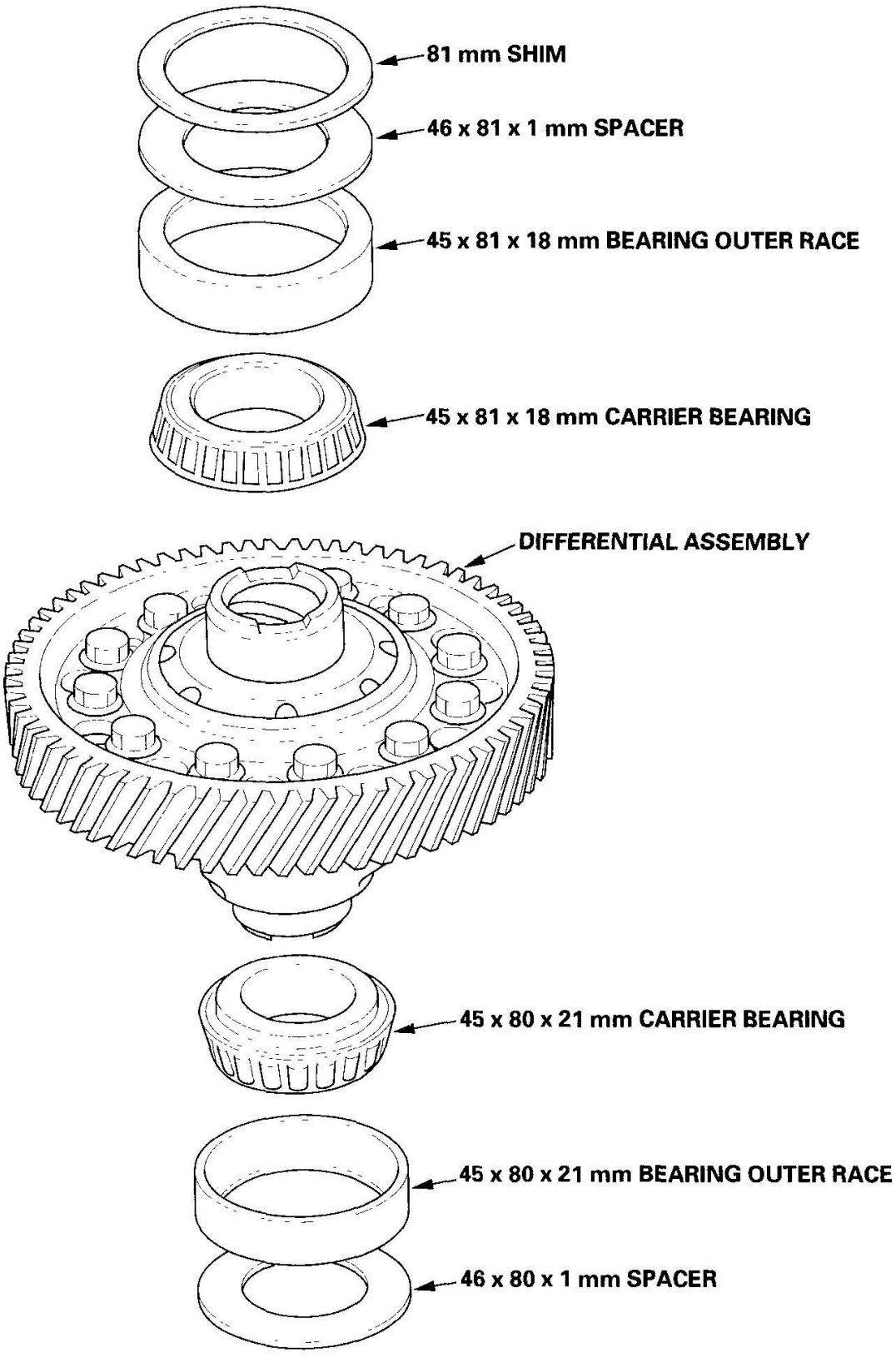

81 mm SHIM
46 x 81 x 1 mm SPACER
45 x 81 x 18 mm BEARING OUTER RACE
45 x 81 x 18 mm CARRIER BEARING
DIFFERENTIAL ASSEMBLY
45 x 80 x 21 mm CARRIER BEARING
45 x 80 x 21 mm BEARING OUTER RACE
46 x 80 x 1 mm SPACER

Fig. 212: Locating M/T Differential Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BACKLASH INSPECTION

1. Install the driveshaft and intermediate shaft into the differential assembly.
2. Carefully clamp the driveshaft (A) in a vise (B).

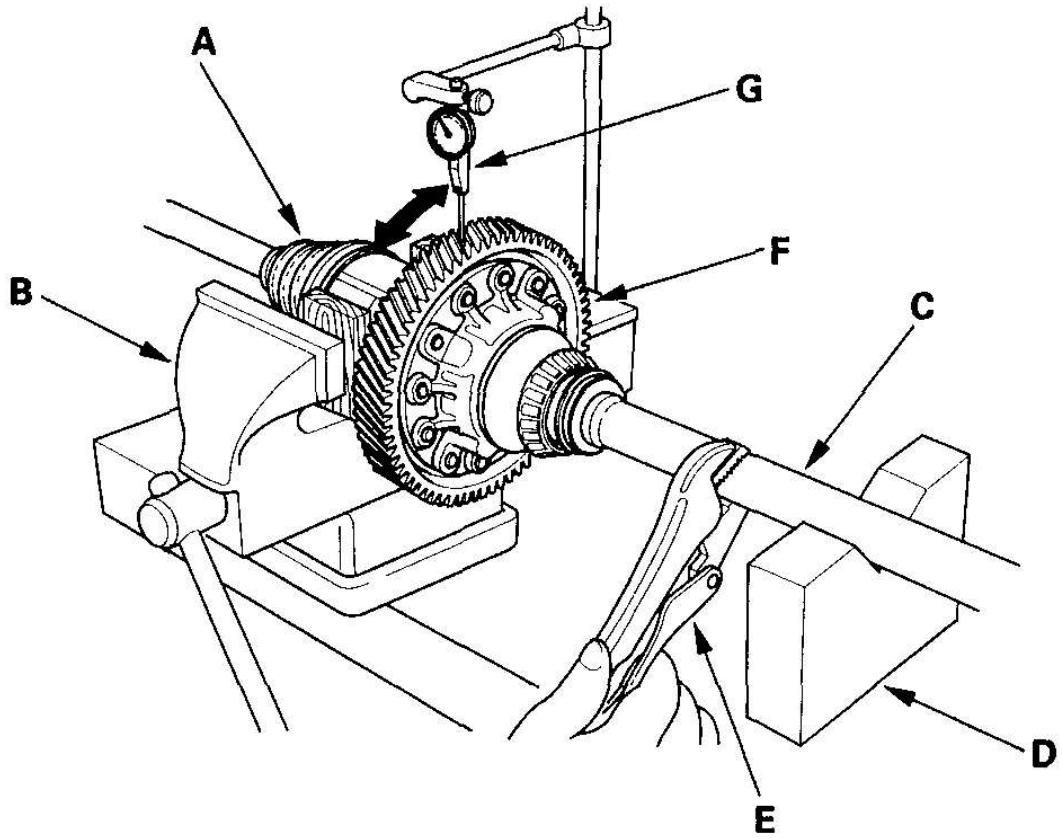


Fig. 213: Clamping Driveshaft In Vise
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Place the intermediate shaft (C) on a V-block (D), then fix the intermediate shaft using a vise or equivalent (E).
4. Measure the backlash of the final driven gear (F) with a dial indicator (G). If

the backlash is not within the standard, replace the differential carrier.

Standard (New): 0.4-1.3 mm (0.016-0.051 in.)

CARRIER BEARING REPLACEMENT

Special Tools Required

Installer, 46 mm I.D. 07PAF-0030100

1. Check the carrier bearings for wear and rough rotation. If they rotate smoothly and their rollers show no signs of wear, the bearings are OK.
2. Remove the carrier bearing (A) with a commercially-available bearing puller (B).

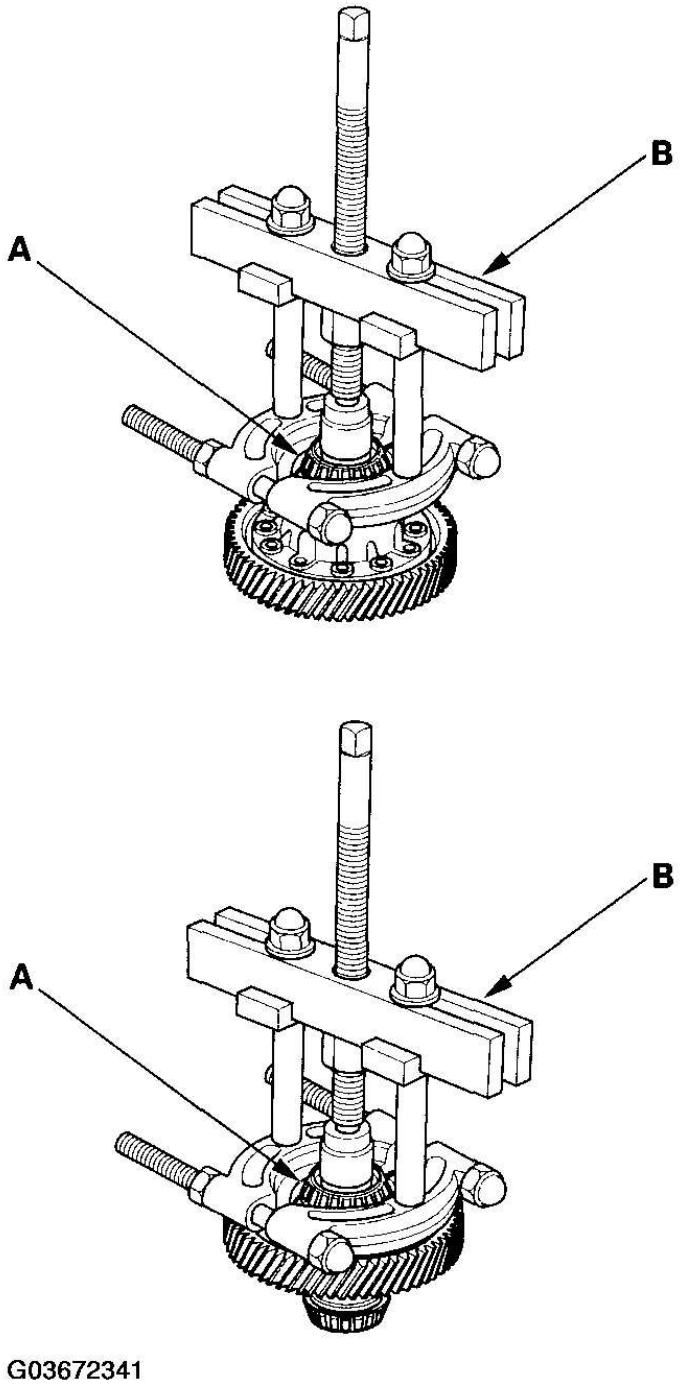


Fig. 214: Identifying Carrier Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the new bearings with the special tool and a press. Press each bearing on until it bottoms out. There should be no clearance between the bearings and the carrier.

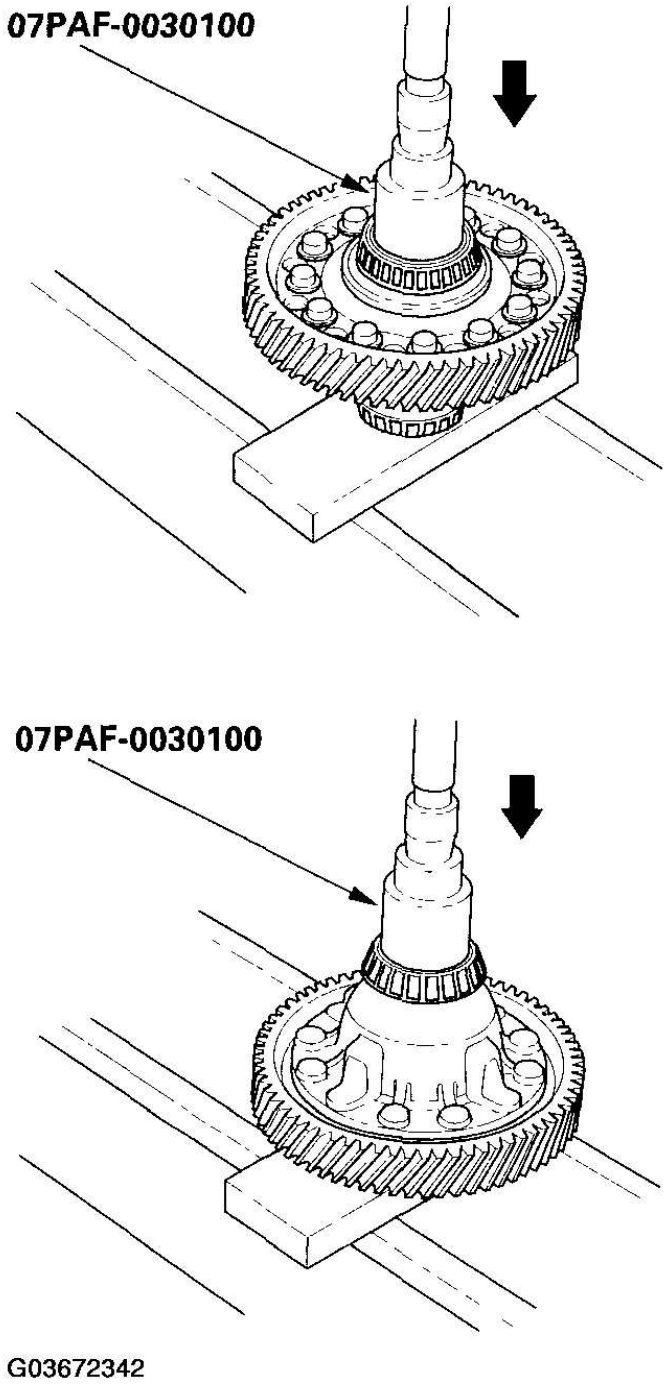


Fig. 215: Identifying New Bearings With Special Tool And Press
Courtesy of AMERICAN HONDA MOTOR CO., INC.

OIL SEAL REPLACEMENT

Special Tools Required

- Driver 07749-0010000
- Oil seal driver attachment 07NAD-P20A100

1. Ramove the oil seal (A) from the transmission housing (B). be careful when removing the seal to avoid damaging the transmission housing.

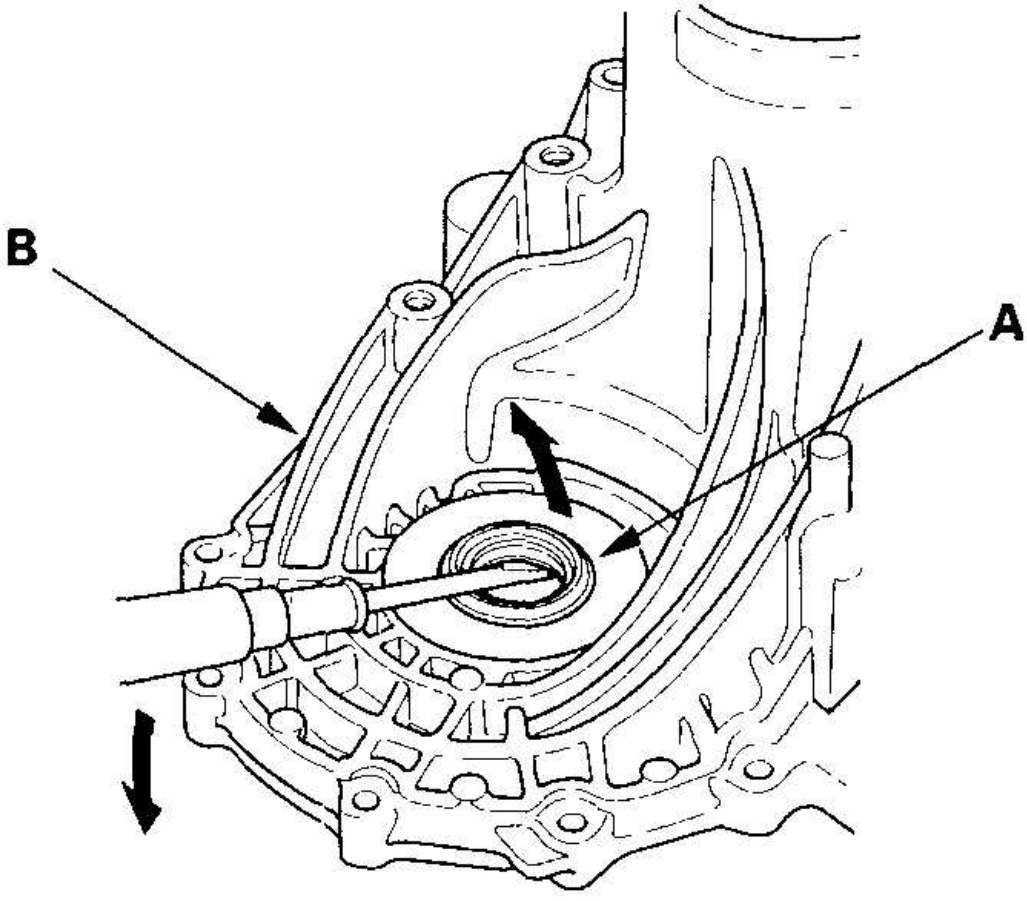


Fig. 216: Identifying Oil Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the oil seal (A) from the clutch housing (B). Be careful when removing the seal to avoid damaging the clutch housing.

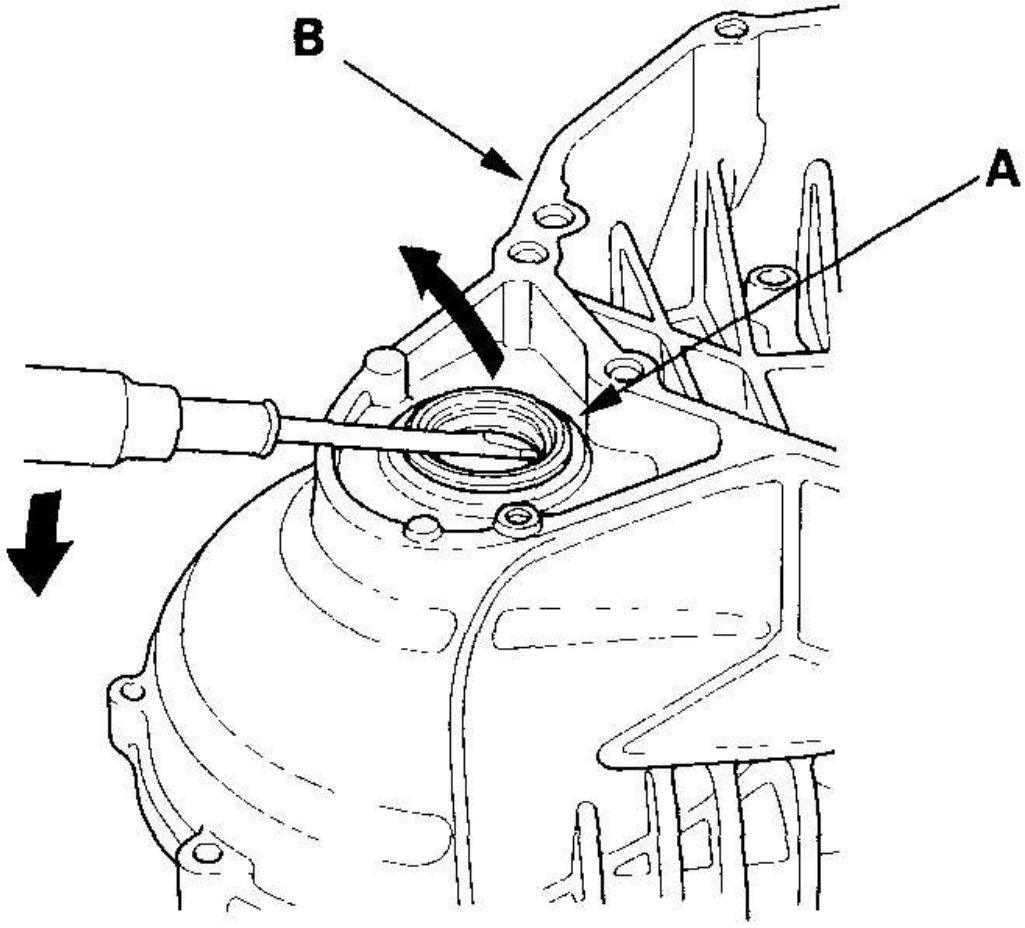


Fig. 217: Identifying Oil Seal From Clutch Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the new oil seal in the transmission housing with the driver (A) and oil seal driver attachment (B)..

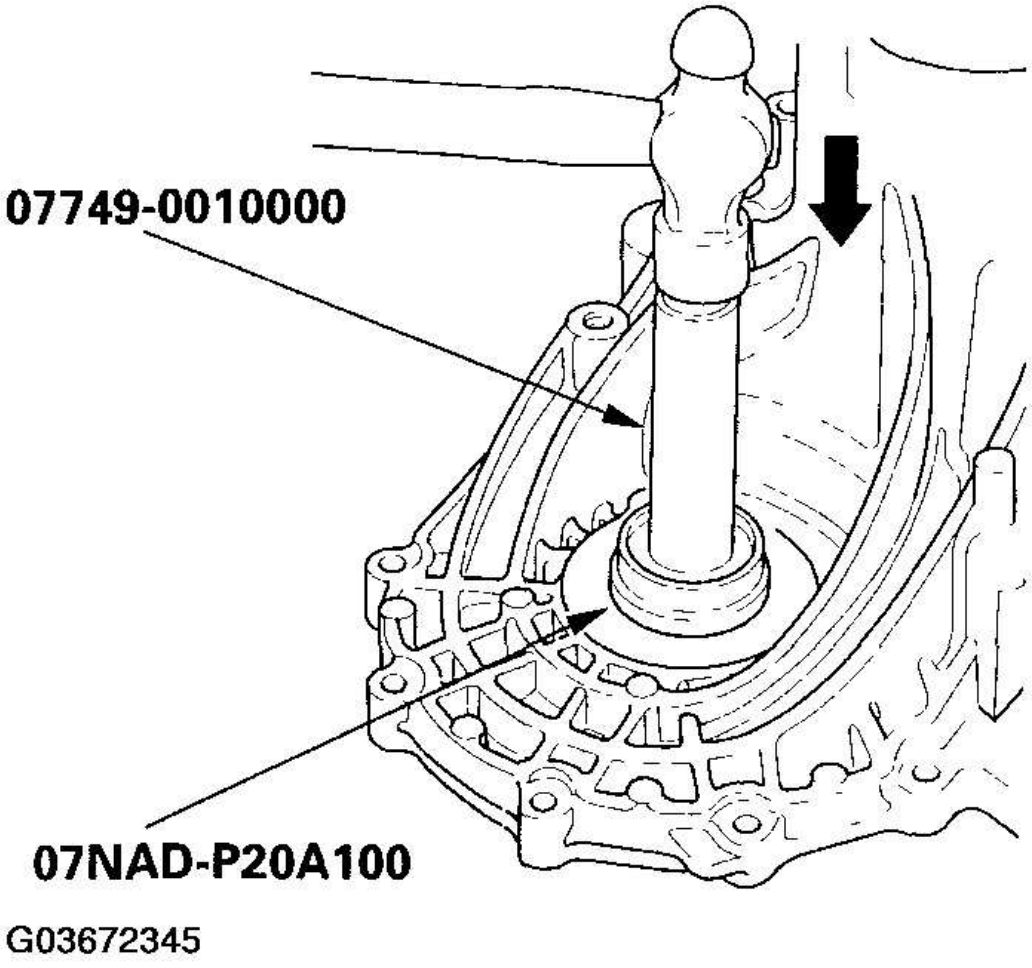


Fig. 218: Identifying New Oil Seal In Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the new oil seal in the clutch housing with the special tools.

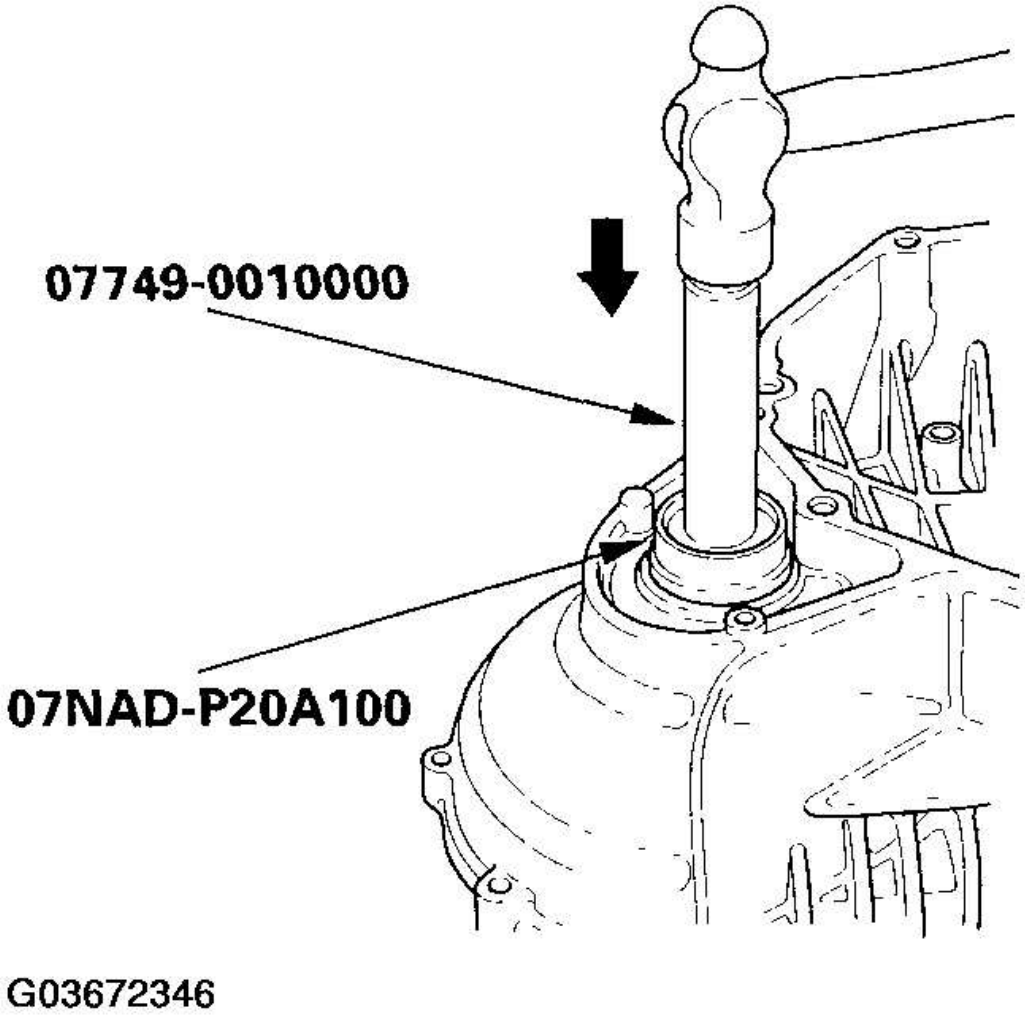


Fig. 219: Identifying New Oil Seal In Clutch Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BEARING OUTER RACE REPLACEMENT

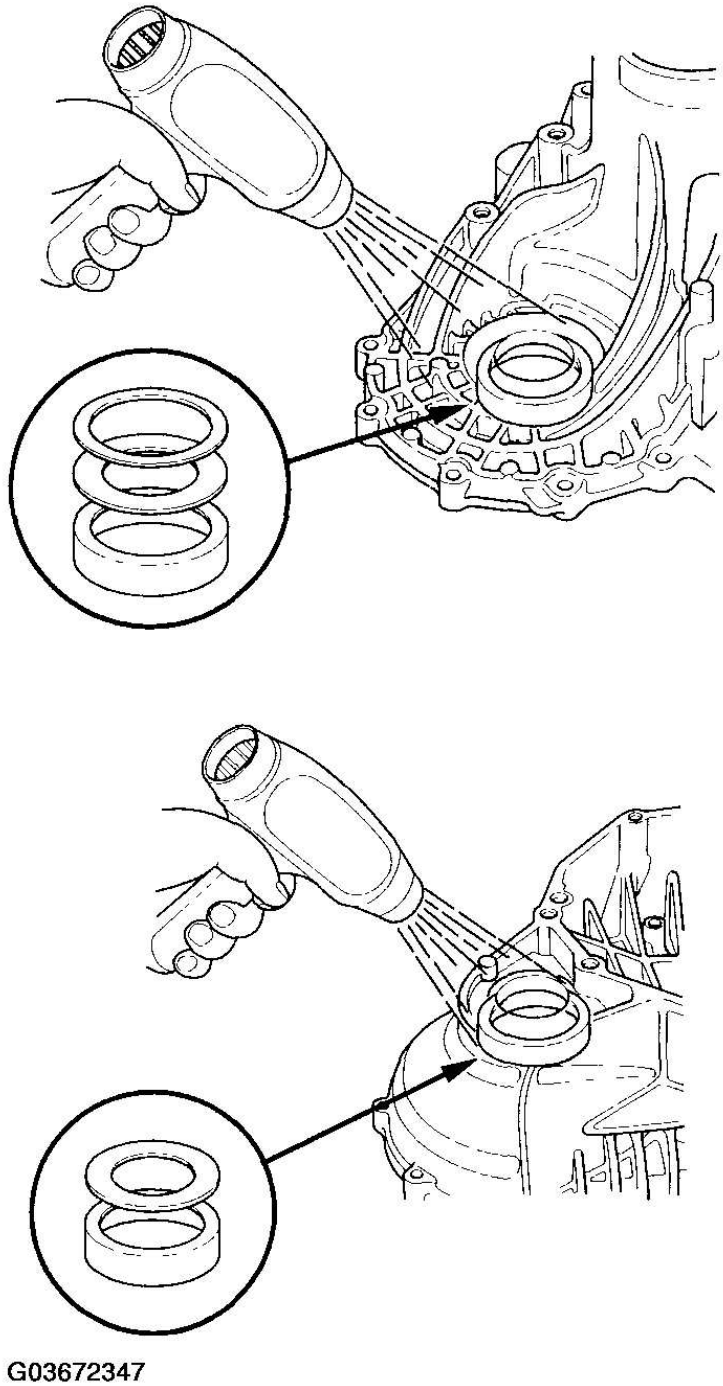
Special Tools Required

- Driver 07749-0010000
- Attachment, 78 x 80 mm 07NAD-PX40100

NOTE:

- **The bearing outer race and tapered roller bearing should be replaced as a set.**
- **Inspect and adjust the tapered roller bearing preload whenever the tapered roller bearing is replaced.**

1. Remove the oil seals from the transmission housing and clutch housing (see **OIL SEAL REPLACEMENT**).
2. Remove the bearing outer race, spacer, and 81 mm shim from the transmission housing and clutch housing by heating the housing to about 212°F (100°C) with a heat gun. Do not reuse the thrust shim if the outer race was driven out.



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Fig. 220: Heating Housing With Heat Gun
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the 81 mm shim (A), spacer (B), and bearing outer race (C) into the transmission housing (D) using the special tools.

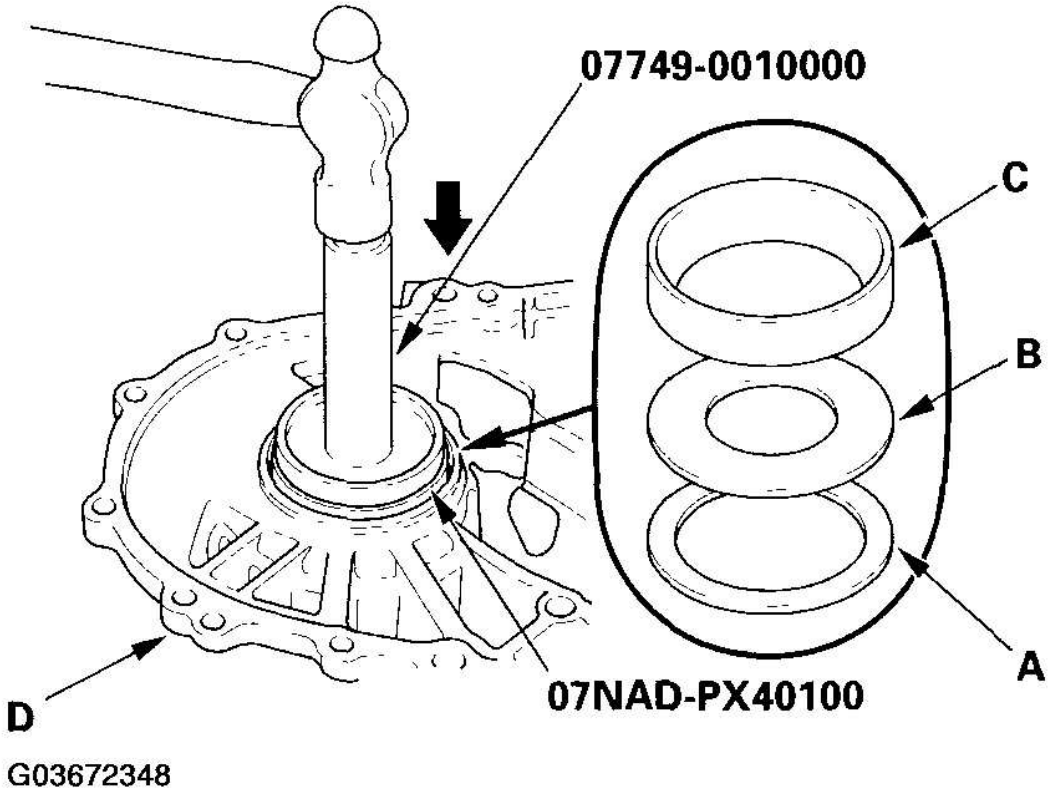


Fig. 221: Identifying 81 mm Shim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the spacer (A), and bearing outer race (B) into the clutch housing (C) using the special tools.

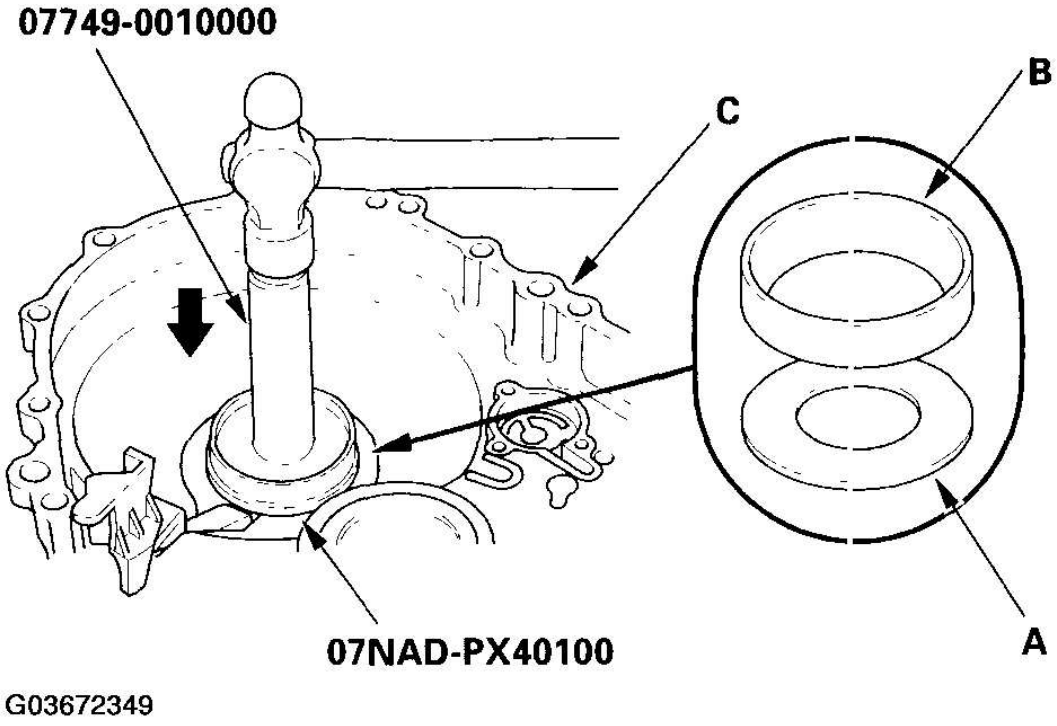


Fig. 222: Identifying Spacer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the oil seals into the transmission housing (see step 3) and clutch housing (see step 4).

CARRIER BEARING PRELOAD ADJUSTMENT

Special Tools Required

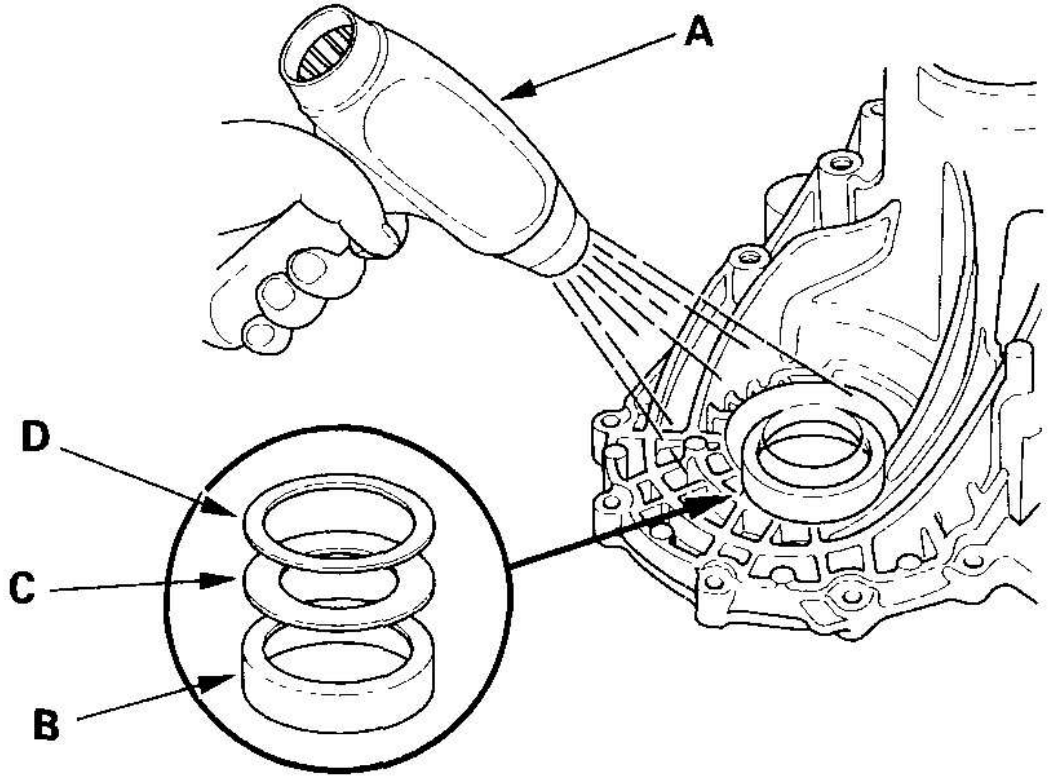
- Driver 07749-0010000
- Attachment, 78 x 80 mm 07NAD-PX40100
- Preload inspection tool 07XAJ-S0KA100

If any of the items listed were replaced, the carrier bearing preload must be adjusted.

- Transmission housing

- Clutch housing
- Differential carrier
- Spacer
- Carrier bearing and outer race

1. Remove the oil seals from the transmission housing and clutch housing (see **OIL SEAL REPLACEMENT**).
2. If you replaced the carrier bearing on the transmission housing side of the carrier, remove and discard the bearing outer race, Heat up the transmission housing to about 212°F (100°C) with a heat gun (A), then remove the bearing outer race (B), spacer (C), and 81 mm shim (D). Do not heat the housing in excess of 212°F (100°C).



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Fig. 223: Heating Up Transmission Housing With Heat Gun
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If you replaced the carrier bearing on the clutch housing side of the carrier, remove and discard the bearing outer race. Heat up the clutch housing to about 212°F (100°C) with a heat gun (A), then remove the bearing outer race (B) and spacer (C). Do not heat the housing in excess of 212°F (100°C).

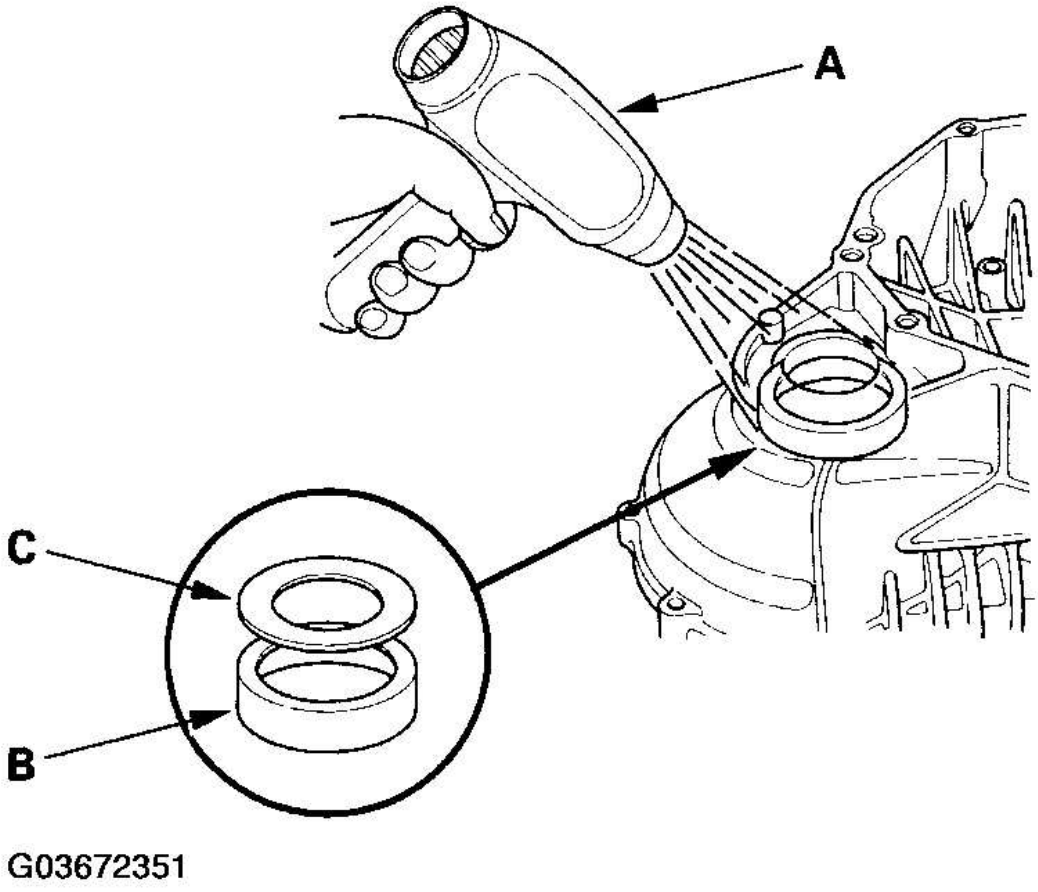


Fig. 224: Heating Up Clutch Housing With Heat Gun
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the 81 mm shim (A), spacer (B), and bearing outer race (C) in the transmission housing by using the special tools. (Use a new race if you

replaced the bearing.) There should be no space between the race, spacer, and housing.

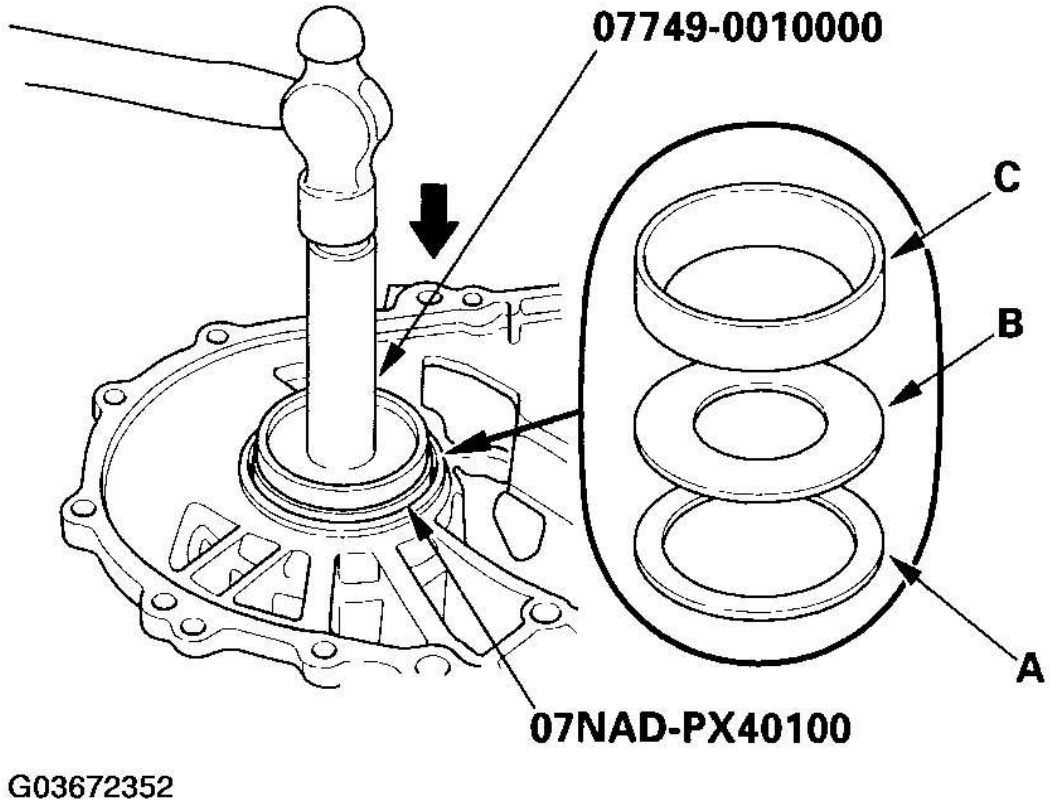


Fig. 225: Identifying 81 mm Shim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If you removed the bearing outer race from the clutch housing, use the special tools to install a new bearing outer race (A) and spacer (B). There should be no space between the race, spacer, and housing.

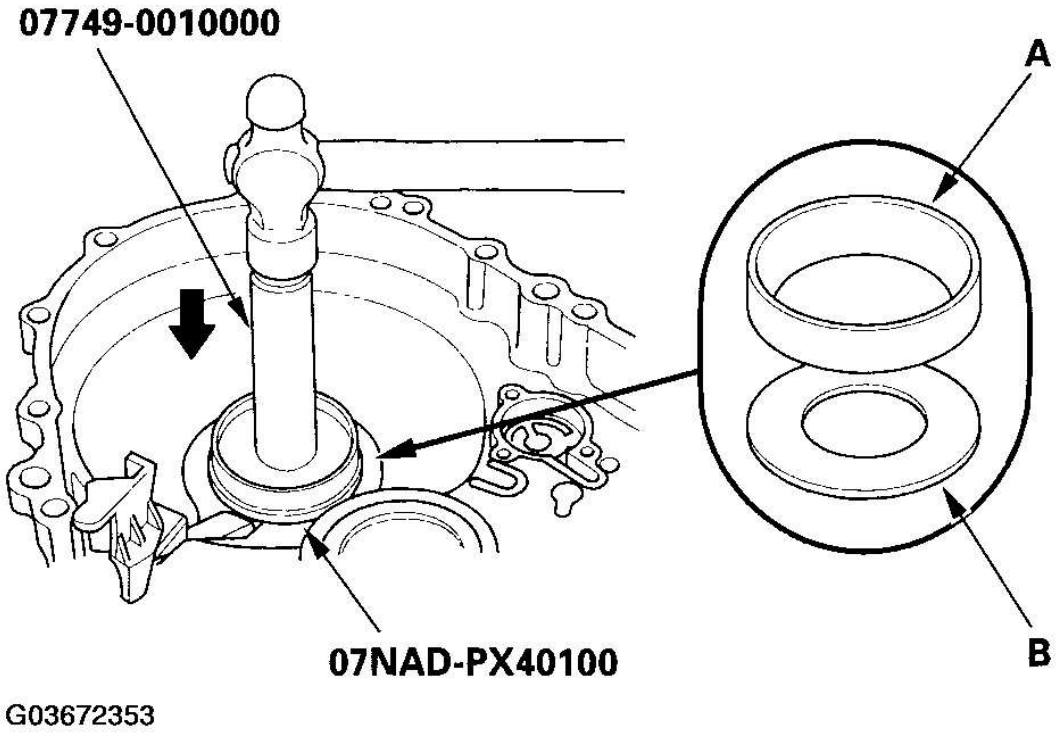


Fig. 226: Identifying New Bearing Outer Race And Spacer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. With the mainshaft and countershaft removed, install the differential assembly, and bolt the transmission and clutch housing together. Tighten the bolts to 44 N.m (4.5 kgf.m, 33 lbf.ft).

NOTE: It is not necessary to use sealing agent between the housings for this adjustment.

7. Rotate the differential assembly in both directions to seat the tapered roller bearings.
8. At normal room temperature, measure the starting torque of the differential assembly by rotating it in both directions with the special tool and a torque wrench (A).

Standard: 3.43-4.51 N.m (35-46 kgf.cm, 30-40 lbf.in.)

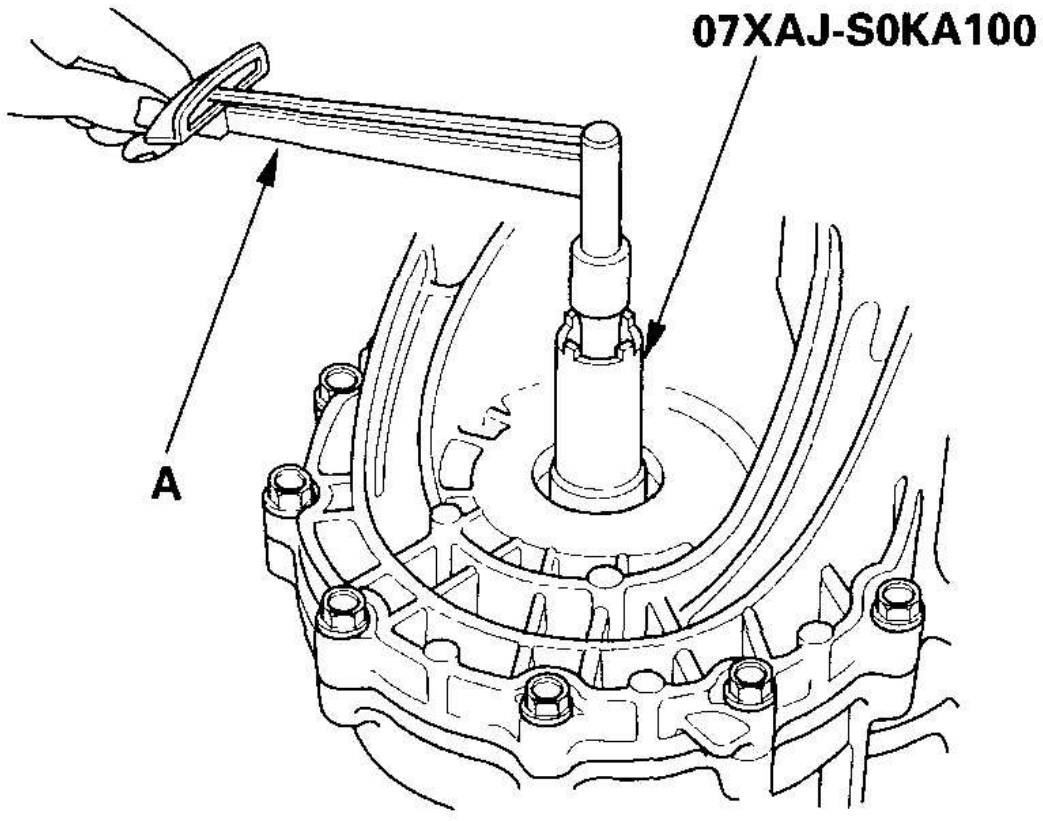


Fig. 227: Measuring Starting Torque Of Differential Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. If the carrier bearing preload is not within the standard, select a 81 mm thrust shim that will provide the correct preload:
   - Compare the bearing preload you got on the first try with the specified preload of 3.43-4.51 N.m (35-46 kgf.cm, 30-40 lbf.in.).
   - If the preload you measure was less than specified, subtract it from the specified preload.
   - If the preload you measure was more than specified, subtract it from the specified preload.

For example, with a 2.50 mm (0.098 in.) thrust shim:

① specified	4.51 N·m (46 kgf·cm, 40 lbf·in.)
— you got less	2.55 N·m (26 kgf·cm, 23 lbf·in.)
	1.96 N·m (20 kgf·cm, 17 lbf·in.) less

② you got more	5.29 N·m (54 kgf·cm, 47 lbf·in.)
— specified	4.51 N·m (46 kgf·cm, 40 lbf·in.)
	0.78 N·m (8 kgf·cm, 7 lbf·in.) more

NOTE: Each shim size up or down from the standard makes about 0.3—0.4 N·m (3—4 kgf·cm, 2.6—3.5 lbf·in.) difference in preload.

In example ①, your preload was 1.96 N·m (20 kgf·cm, 17 lbf·in.) less than the standard, so you need a thrust shim five sizes thicker than the standard (try the 2.65 mm (0.104 in.) 81 mm thrust shim, and recheck).

In example ②, your preload was 0.78 N·m (8 kgf·cm, 7 lbf·in.) more than the standard, so you need a thrust shim two sizes thinner (try the 2.44 mm (0.096 in.) 81 mm thrust shim, and recheck).

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Fig. 228: Example Of Thrust Shim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

81 MM SHIM THICKNESS CHART

	Part Number	Thickness
A	41438-PYZ-000	2.05 mm (0.081 in.)
B	41439-PYZ-000	2.08 mm (0.082 in.)
C	41440-PYZ-000	2.11 mm (0.083 in.)
D	41441-PYZ-000	2.14 mm (0.084 in.)
E	41442-PYZ-000	2.17 mm (0.085 in.)
F	41443-PYZ-000	2.20 mm (0.087 in.)
G	41444-PYZ-000	2.23 mm (0.088 in.)
H	41445-PYZ-000	2.26 mm (0.089 in.)
J	41446-PYZ-000	2.29 mm (0.090 in.)
K	41447-PYZ-000	2.32 mm (0.091 in.)
L	41448-PYZ-000	2.35 mm (0.093 in.)
M	41449-PYZ-000	2.38 mm (0.094 in.)
N	41450-PYZ-000	2.41 mm (0.095 in.)
P	41451-PYZ-000	2.44 mm (0.096 in.)
Q	41452-PYZ-000	2.47 mm (0.097 in.)
R	41453-PYZ-000	2.50 mm (0.098 in.)
S	41454-PYZ-000	2.53 mm (0.100 in.)
T	41455-PYZ-000	2.56 mm (0.101 in.)
U	41456-PYZ-000	2.59 mm (0.102 in.)
V	41457-PYZ-000	2.62 mm (0.103 in.)
W	41458-PYZ-000	2.65 mm (0.104 in.)
X	41459-PYZ-000	2.68 mm (0.106 in.)
Y	41460-PYZ-000	2.71 mm (0.107 in.)
Z	41461-PYZ-000	2.74 mm (0.108 in.)
AA	41462-PYZ-000	2.77 mm (0.109 in.)
AB	41463-PYZ-000	2.80 mm (0.110 in.)
AC	41464-PYZ-000	2.83 mm (0.111 in.)
AD	41465-PYZ-000	2.86 mm (0.113 in.)
AE	41466-PYZ-000	2.89 mm (0.114 in.)
AF	41467-PYZ-000	2.92 mm (0.115 in.)

AG	41468-PYZ-000	2.95 mm (0.116 in.)
AH	41469-PYZ-000	2.98 mm (0.117 in.)
AJ	41470-PYZ-000	3.01 mm (0.119 in.)
AK	41471-PYZ-000	3.04 mm (0.120 in.)
AL	41472-PYZ-000	3.07 mm (0.121 in.)
AM	41473-PYZ-000	3.10 mm (0.122 in.)
AN	41474-PYZ-000	3.13 mm (0.123 in.)
AP	41475-PYZ-000	3.16 mm (0.124 in.)

10. Once the carrier bearing preload is correct, disassemble the transmission housing, and install new oil seals in the differential (see step 4 in **Oil Seal Replacement**).
11. REASSEMBLE THE TRANSMISSION (see **TRANSMISSION REASSEMBLY**).
12. Reinstall the transmission (see **TRANSMISSION INSTALLATION**).

2003-07 TRANSMISSION

Manual Transmission - Accord

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
*①	07GAJ-PG20110	Mainshaft Holder	1
*②	07GAJ-PG20130	Mainshaft Base	1
③	07JAD-PL90100	Oil Seal Driver	1
④	07NAD-P20A100	Oil Seal Driver Attachment	1
**⑤	07736-A01000B	Adjustable Bearing Puller, 20—40 mm	1
⑥	07746-0010300	Attachment, 42 x 47 mm	1
⑦	07746-0030100	Driver, 40 mm I.D.	1
⑧	07746-0030300	Driver, 30 mm I.D.	1
⑨	07749-0010000	Driver	1

* Part of Mainshaft Inspection Tool Set, 07GAJ-PG20102.
** Must be used with commercially available 3/8"-16 Slide Hammer.

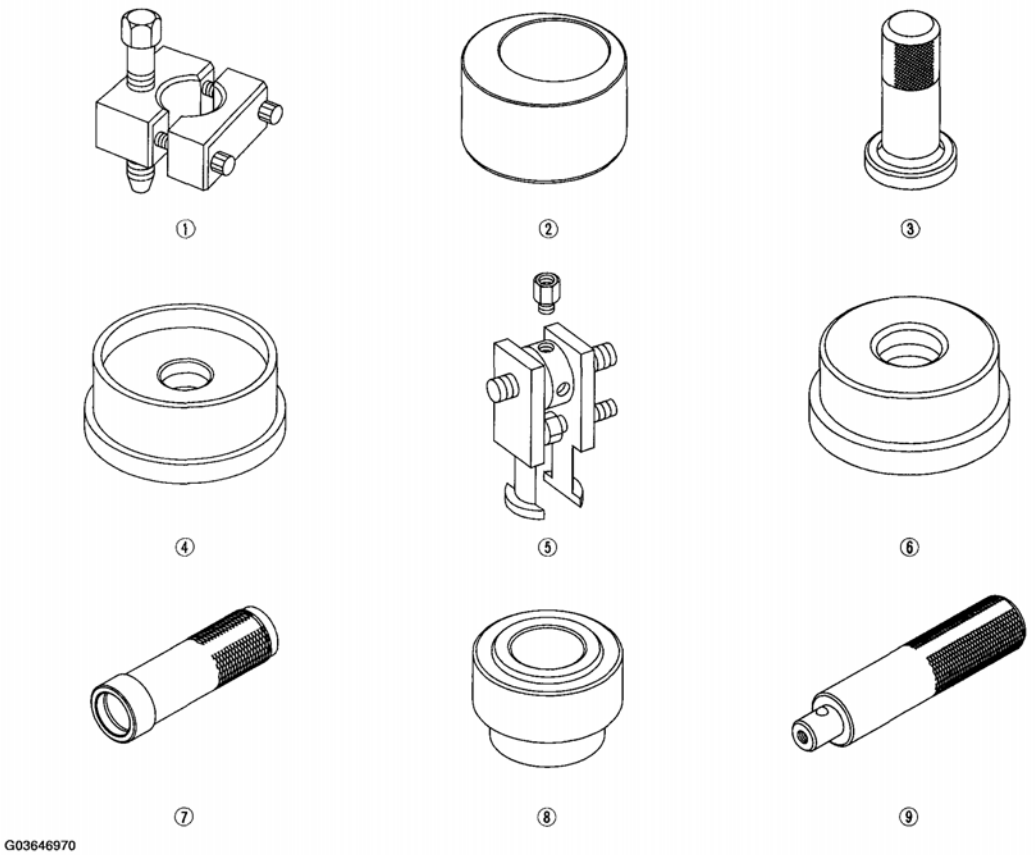


Fig. 1: View Of Special Service Tools And Description Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TRANSMISSION FLUID INSPECTION AND REPLACEMENT

1. Park the vehicle on level ground, and turn the ignition switch OFF.
2. Remove the oil filler plug (A) and washer (B), check the condition of the fluid, and make sure it is at the proper level (C).

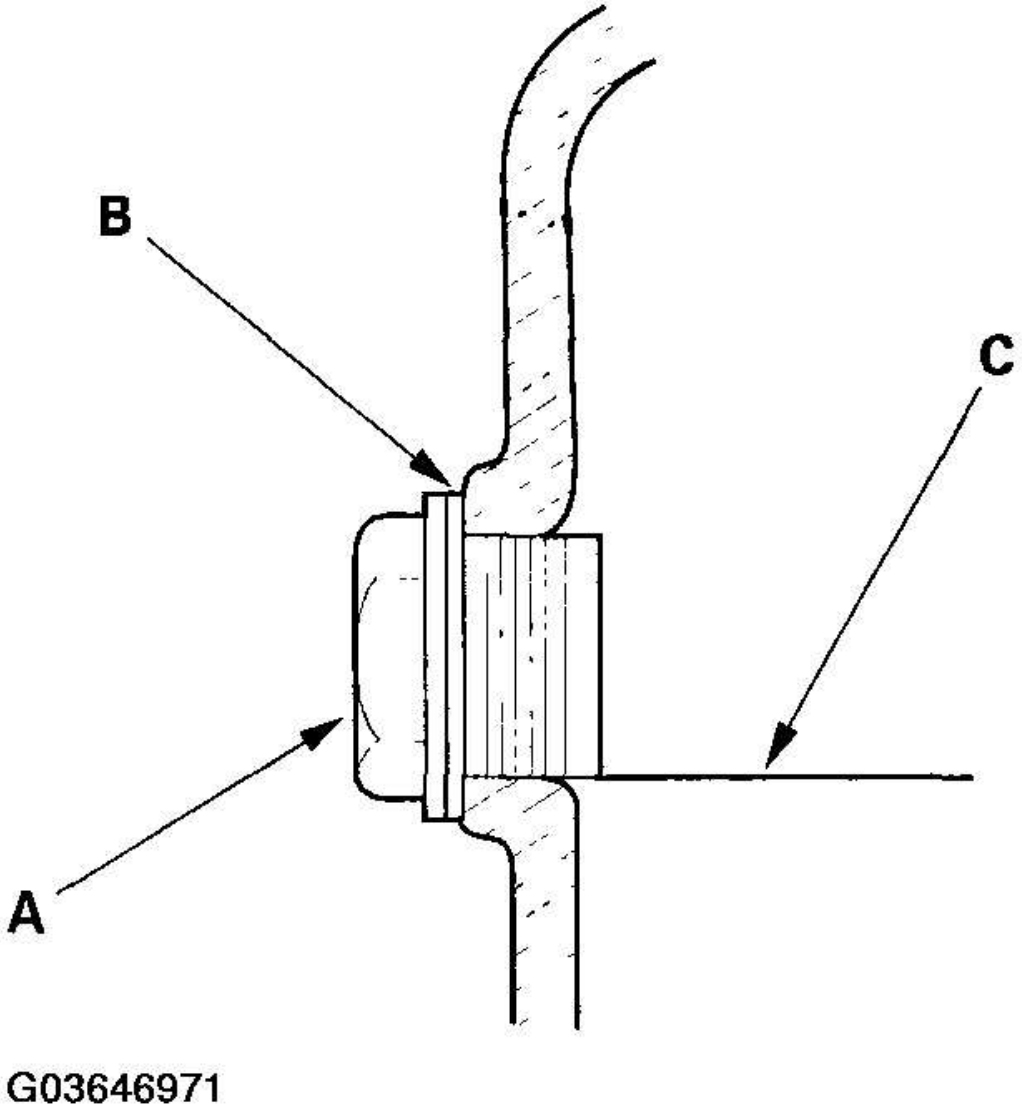


Fig. 2: Removing Oil Filler Plug And Washer

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the fluid is dirty, remove the drain plug (D) and drain the fluid.

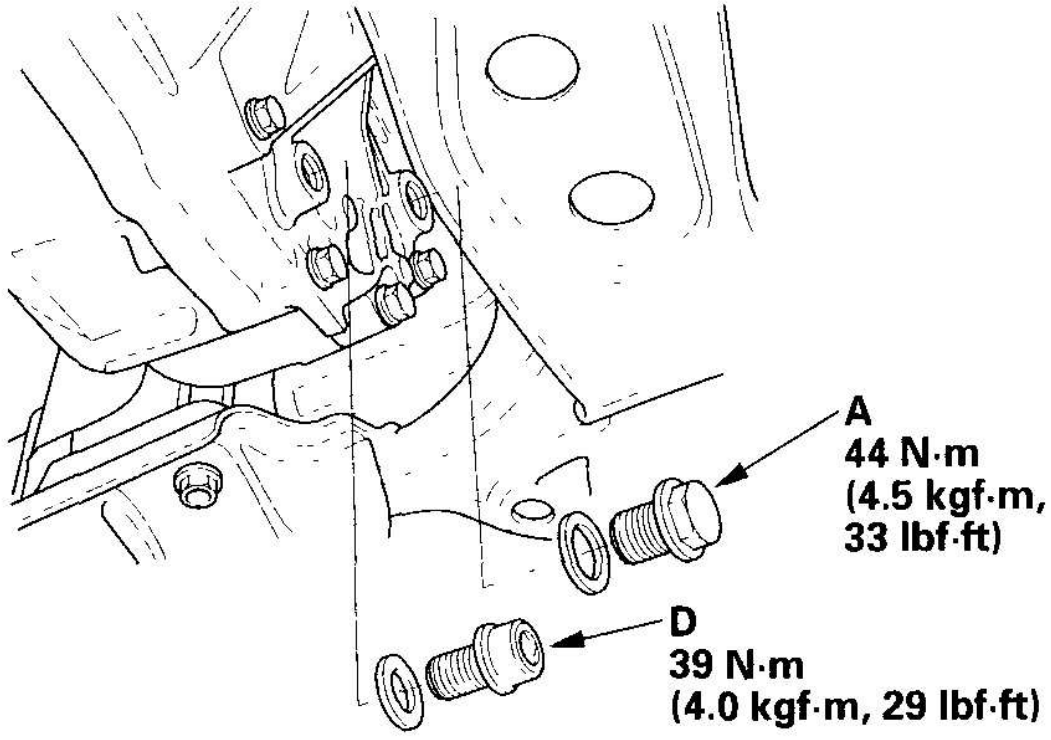


Fig. 3: Removing Drain Plug
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the drain plug with a new washer, and refill the transmission fluid to the proper level.

Fluid Capacity

1.9 L (2.0 US qt) at fluid change

2.1 L (2.2 US qt) at overhaul

Always use Honda Manual Transmission Fluid (MTF). Using engine oil can cause stiffer shifting because it does not contain the proper additives.

5. Install the oil filler plug with a new washer.

BACK-UP LIGHT SWITCH TEST

1. Disconnect the back-up light switch 2P connector (A).

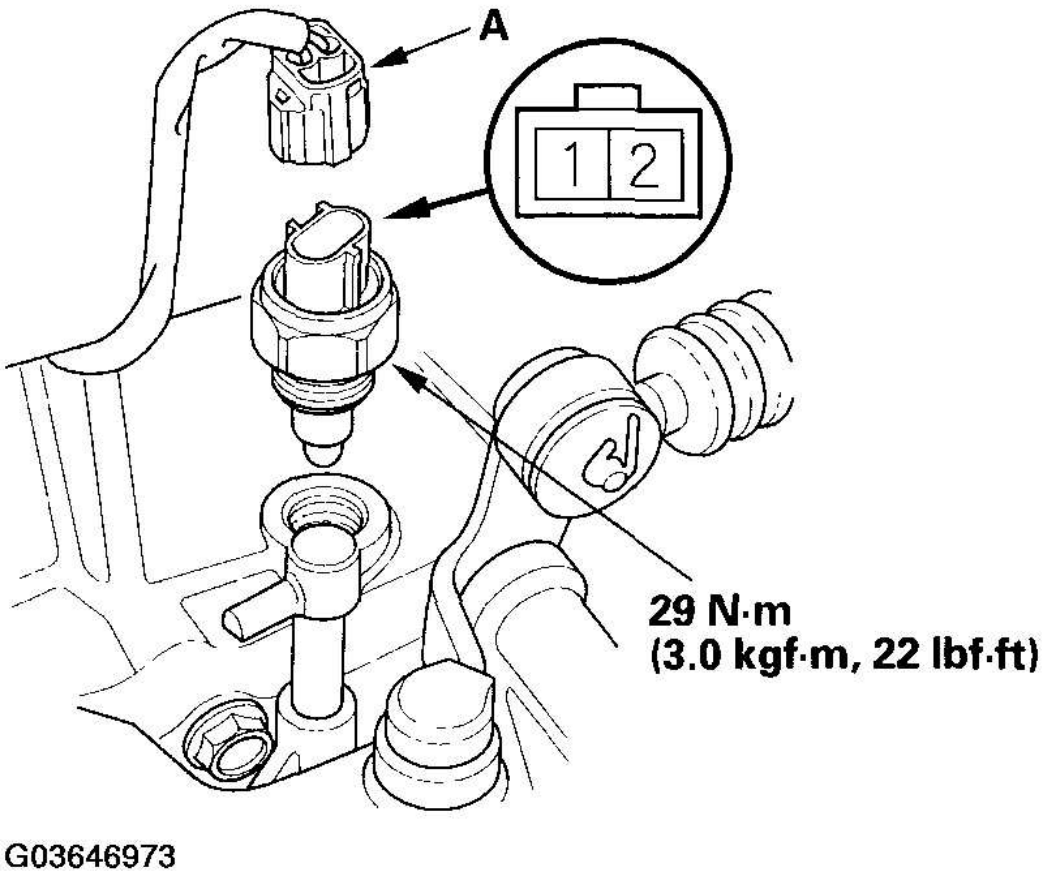


Fig. 4: Disconnecting Back-Up Light Switch 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check for continuity between the No. 1 and No. 2 terminals of the back-up light switch 2P connector. There should be continuity when the shift lever is in

Reverse.

3. If necessary, replace the back-up light switch. Apply liquid gasket (P/N 08718-0001), and install it on the transmission housing.

TRANSMISSION REMOVAL

Special Tools Required

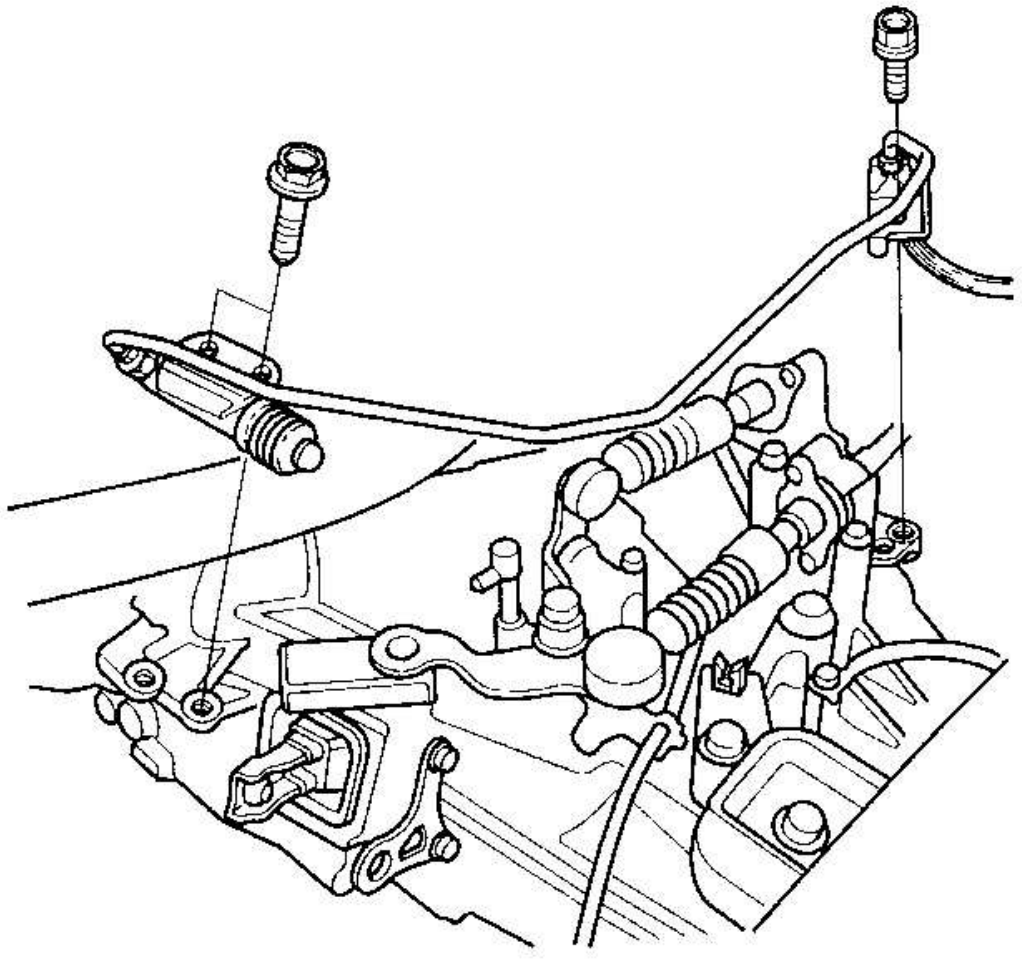
- Engine hanger/adapter VSB02C000015 *
- Engine support hanger, A & Reds AAR-T-12566 *
- Subframe adapter VSB02C000016 *

* Available through the Honda Tool and Equipment Program 888-424-6857.

NOTE: Use fender covers to avoid damaging painted surfaces.

1. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the customer's audio presets.
2. Set the wheels in the straight ahead position.
3. Lock the steering wheel.
4. Disconnect the negative cable from the battery first, then disconnect the positive cable. Remove the battery.
5. Remove the air cleaner housing (see **AIR CLEANER REMOVAL/INSTALLATION**).
6. Remove the battery base (see step 10 on **ENGINE REMOVAL**).
7. Carefully remove the slave cylinder without bending the clutch line. Do not press the clutch pedal once the slave cylinder has been removed.

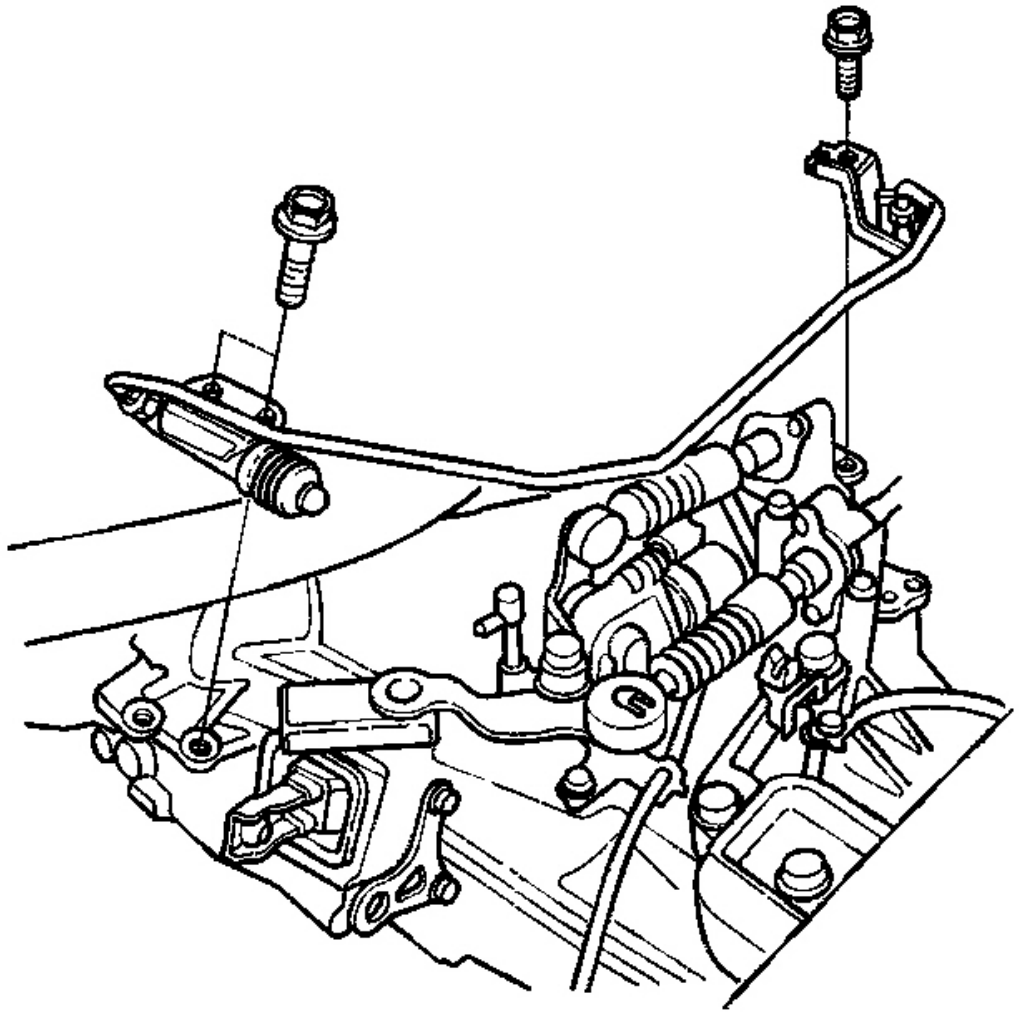
Type A:



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Fig. 5: Removing Slave Cylinder (Type A)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Type B:



G03646975

Fig. 6: Removing Slave Cylinder (Type B)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the cable bracket (A), then disconnect the cables (B) from the top of the transmission housing. Carefully remove both cables and the bracket together to avoid bending the cables.

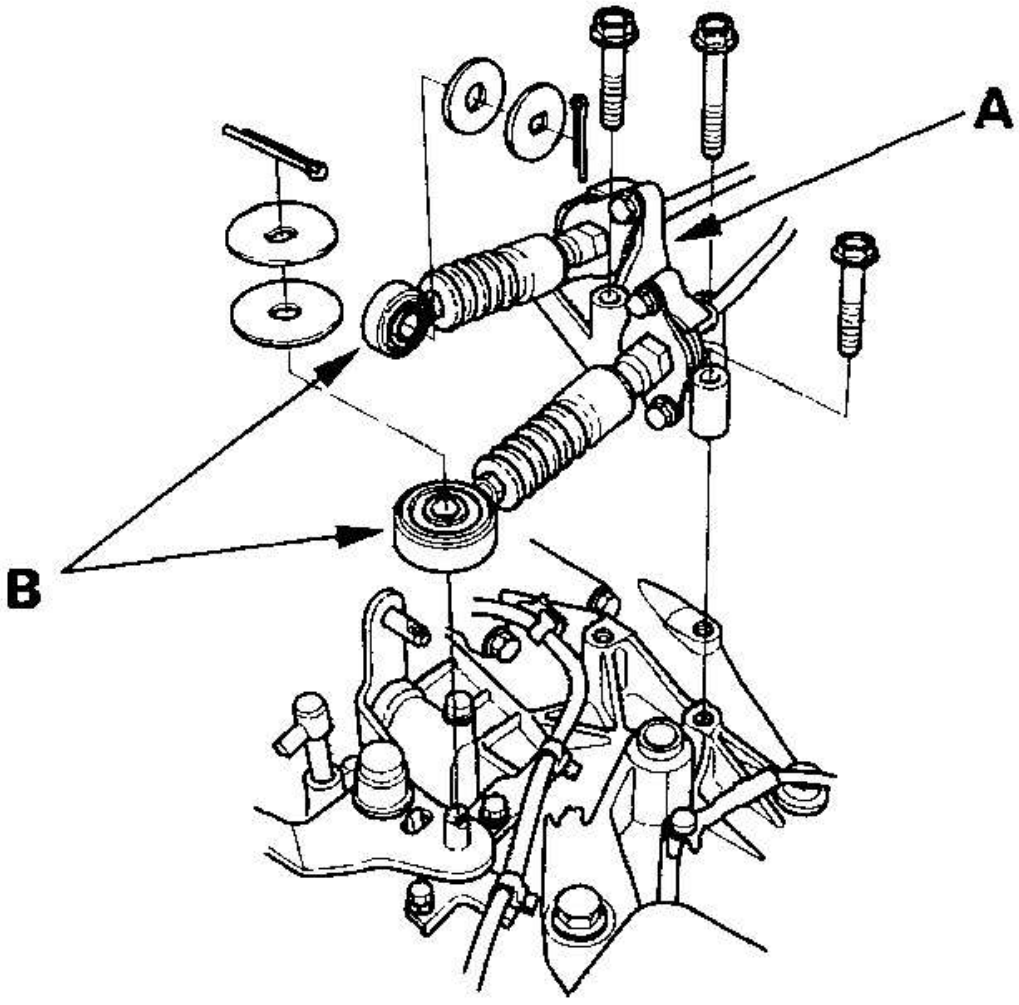


Fig. 7: Removing Cable Bracket And Disconnecting Cables From Transmission Housing Top
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Disconnect the output shaft (countershaft) speed sensor connector (A) and back-up light switch connector (B).

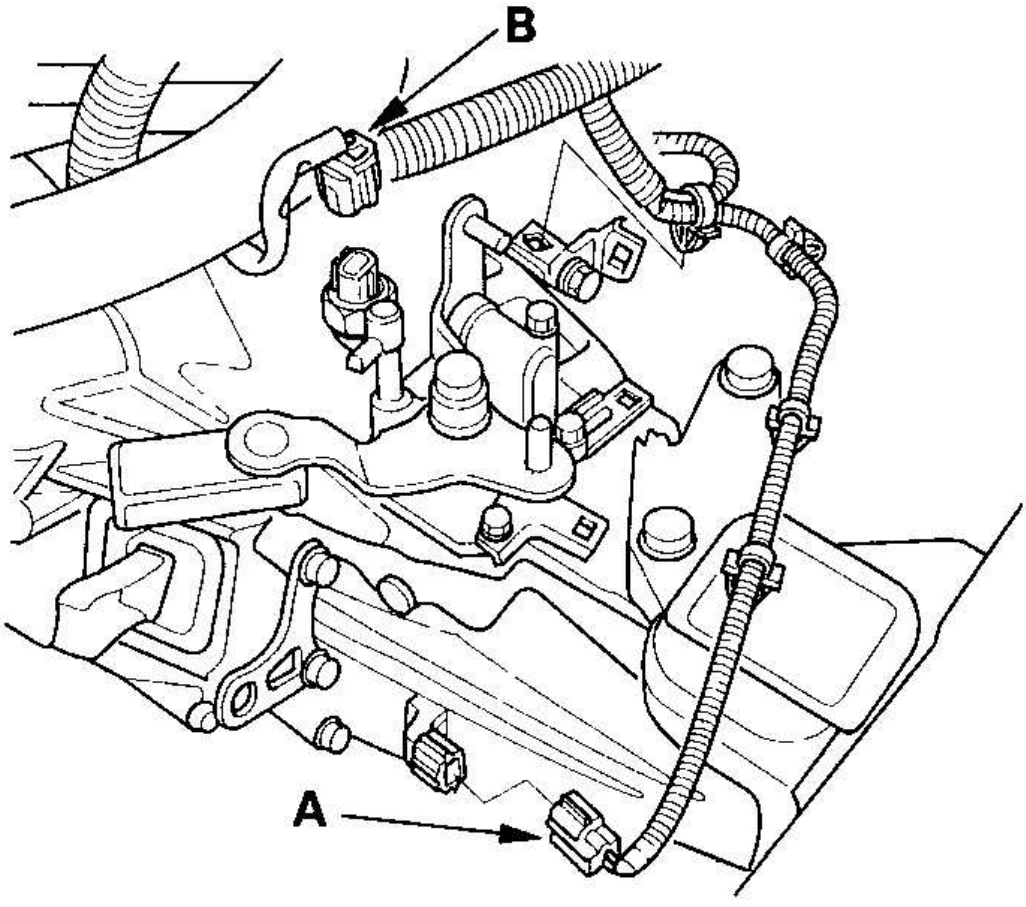


Fig. 8: Disconnecting Output Shaft Speed Sensor Connector And Back-Up Light Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Disconnect the secondary heated oxygen sensor (secondary HO2S) connector (A), then remove the bracket (B).

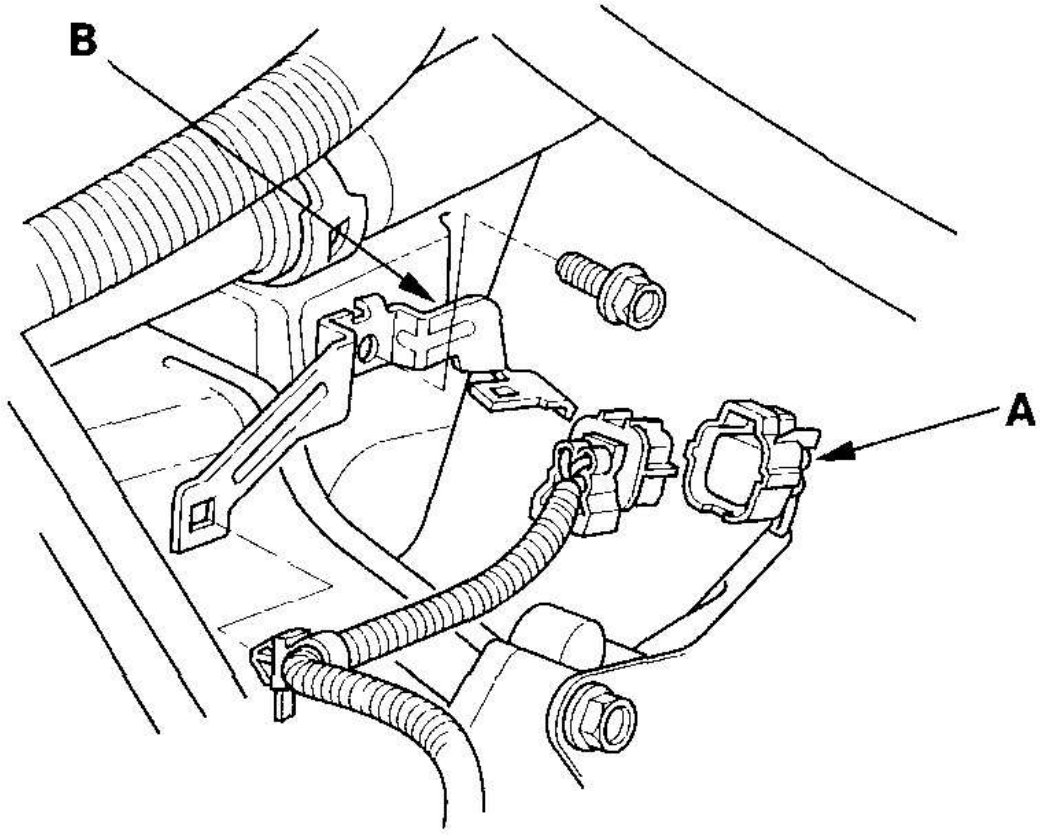


Fig. 9: Disconnecting Secondary Heated Oxygen Sensor Connector And Removing Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the front mount stop (A), then remove the front mount bolt (B).

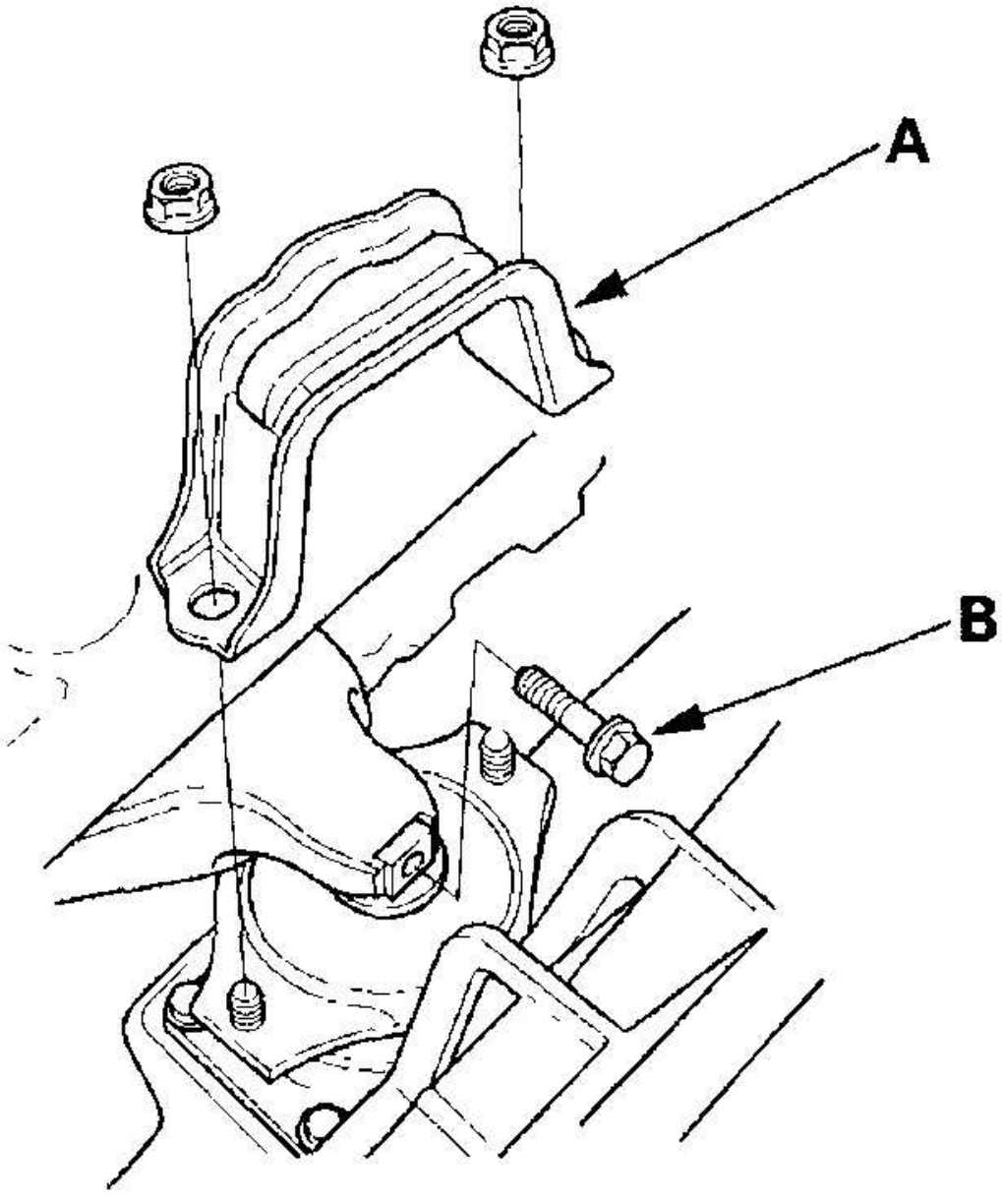
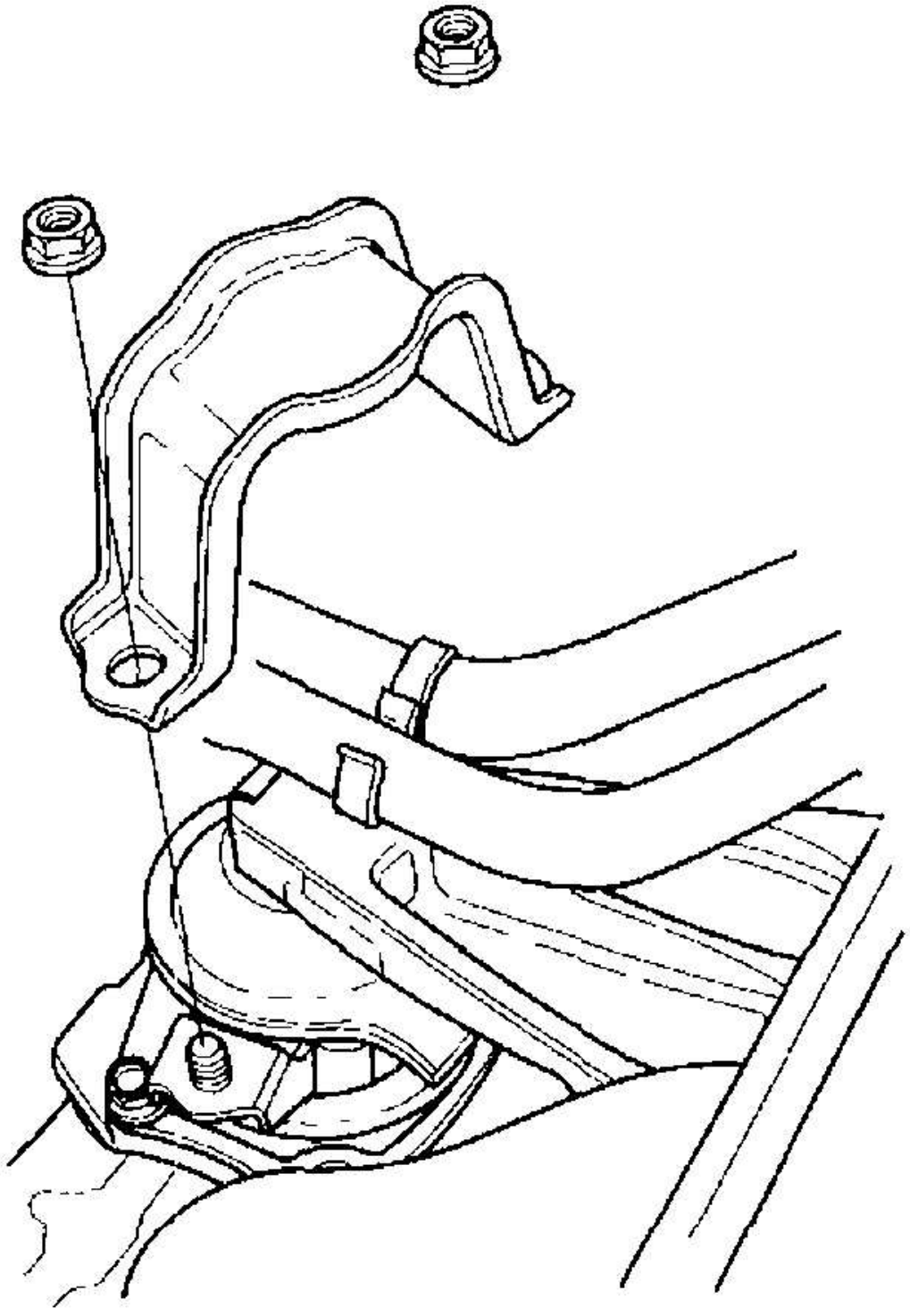


Fig. 10: Removing Front Mount Stop And Front Mount Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

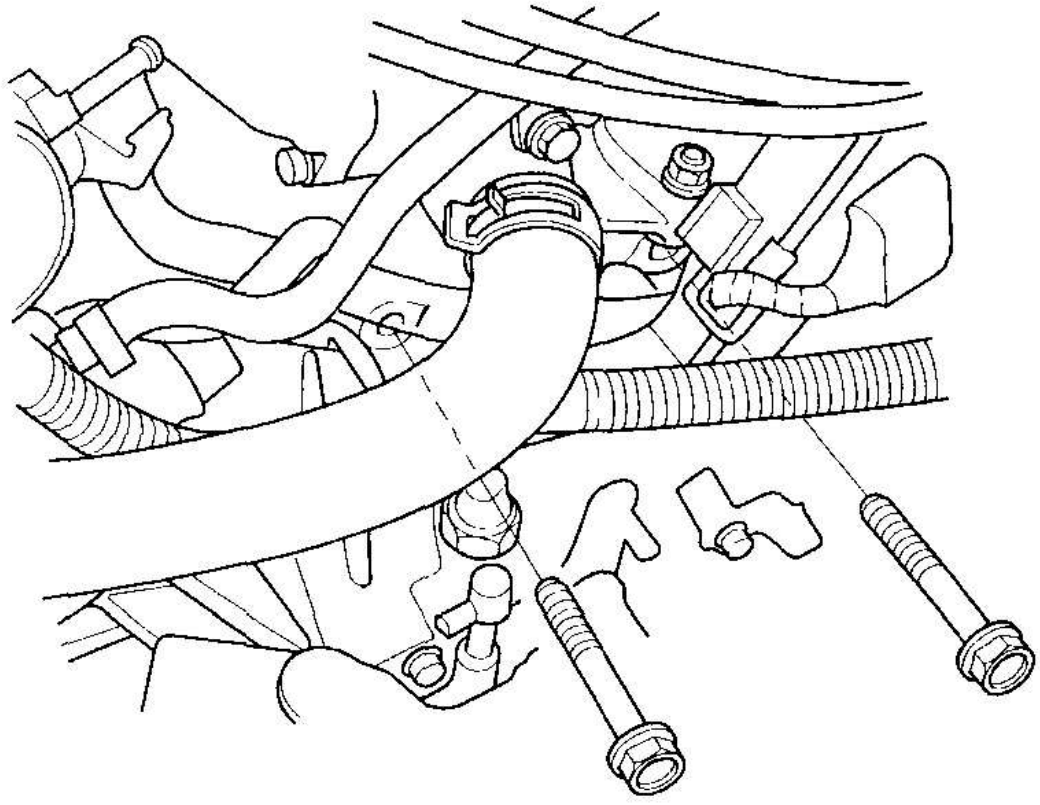
12. Remove the rear mount stop.



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Fig. 11: Removing Rear Mount Stop
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Remove the transmission upper mounting bolts.



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Fig. 12: Removing Transmission Upper Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Remove and plug the return hose (A) from the power steering fluid reservoir (B). Wipe off any spilled fluid at once.

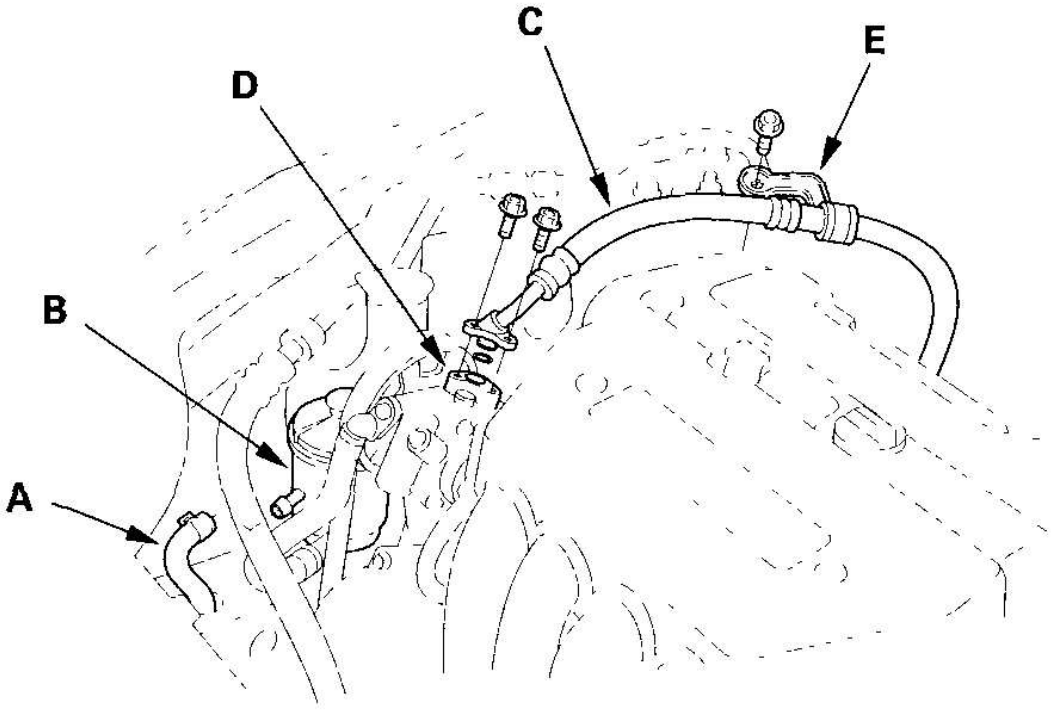


Fig. 13: Removing And Plug Return Hose From Power Steering Fluid Reservoir
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the power steering pump outlet line (C) from the power steering pump (D).
16. Remove the power steering pump outlet line bracket (E).
17. Attach the special tool to the threaded hole in the cylinder head.

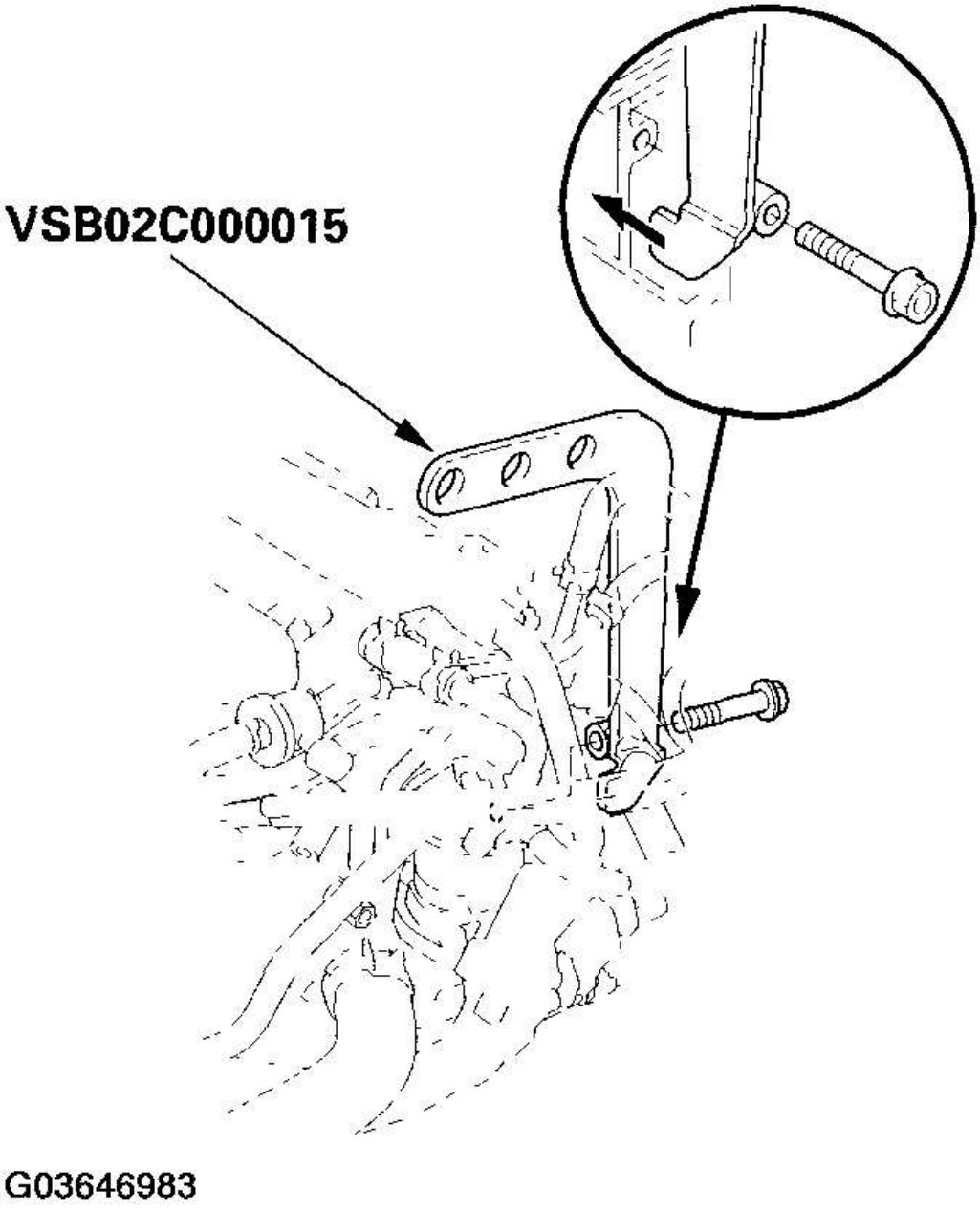


Fig. 14: Attaching Special Tool To Threaded Hole In Cylinder Head
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Install the engine support hanger (AAR-T-12566) to the vehicle, and attach the

hook (A) to the special tool adapter (B). Tighten the wing nut (C) by hand, and lift and support the engine.

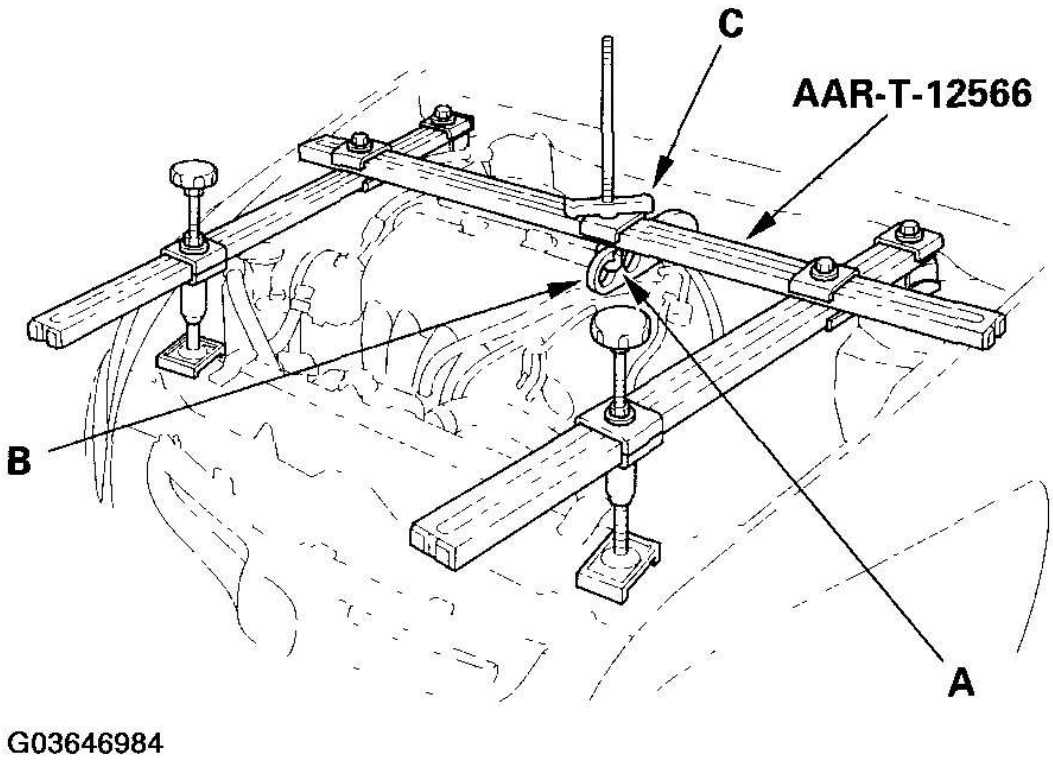


Fig. 15: Installing Engine Support Hanger To Vehicle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Remove the transmission mount bracket (A) and ground cable (B).

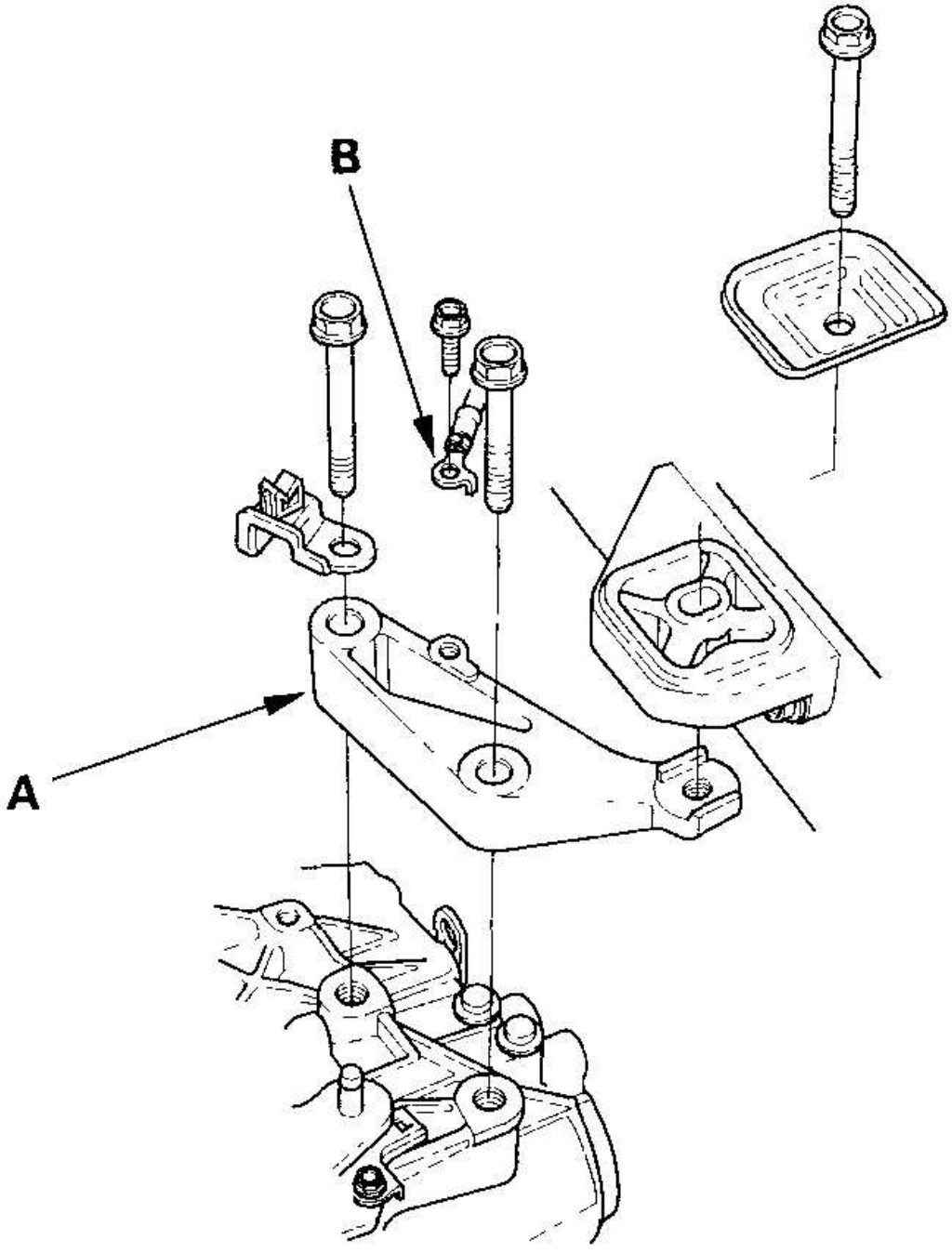


Fig. 16: Removing Transmission Mount Bracket And Ground Cable

Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Remove the steering joint cover (A).

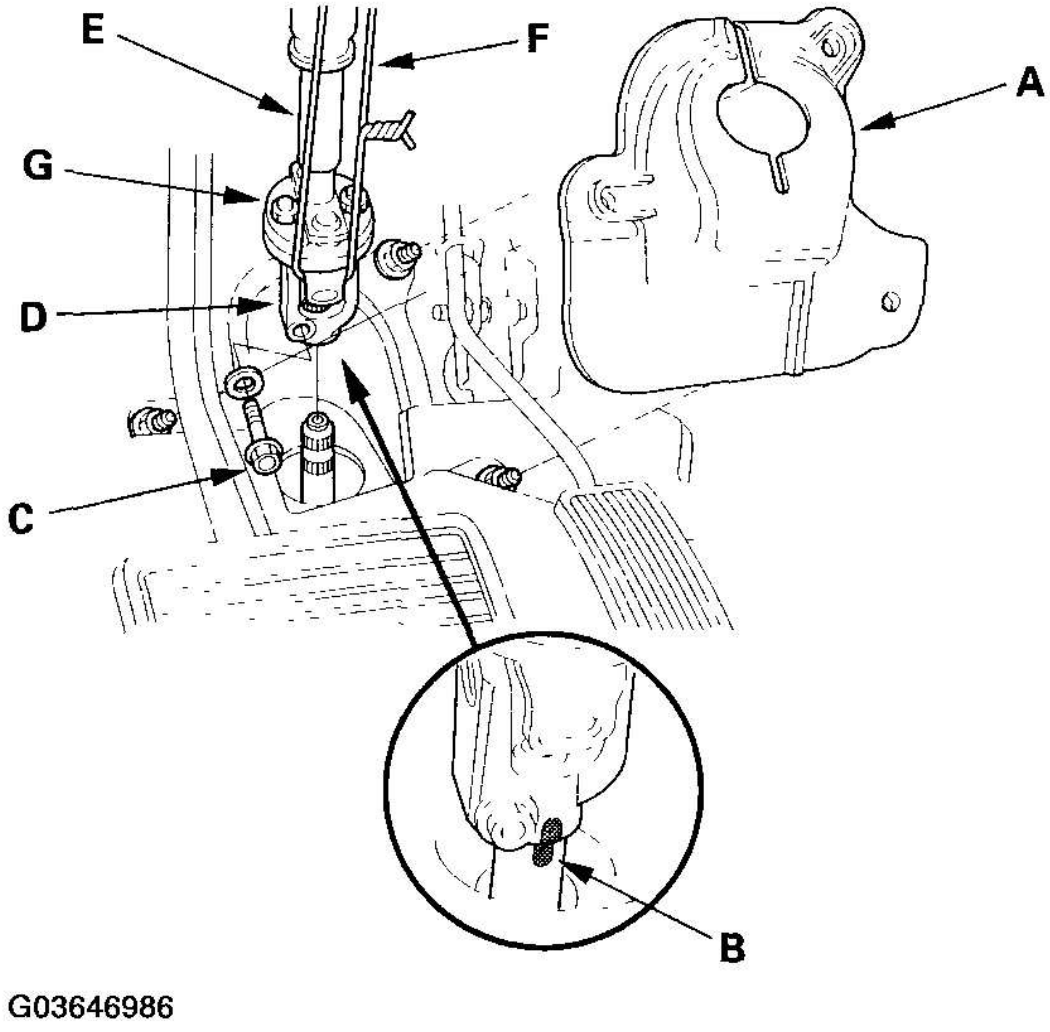


Fig. 17: Removing Steering Joint Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Make a reference mark (B) across the steering joint and steering gearbox pinion shaft. Remove the steering joint bolt (C), and disconnect the steering joint (D) by removing the steering joint toward the steering column. Hold the slider shaft (E) on the column with a piece of wire (F) between the joint yoke

(G) on the slider shaft and the joint yoke on the upper shaft (see **STEERING COLUMN REMOVAL AND INSTALLATION**).

22. Raise the vehicle, and make sure it is securely supported.
23. Remove the front wheels.
24. Drain the transmission fluid. Reinstall the drain bolt using a new washer (see **TRANSMISSION FLUID INSPECTION AND REPLACEMENT**).
25. Remove the splash shield.

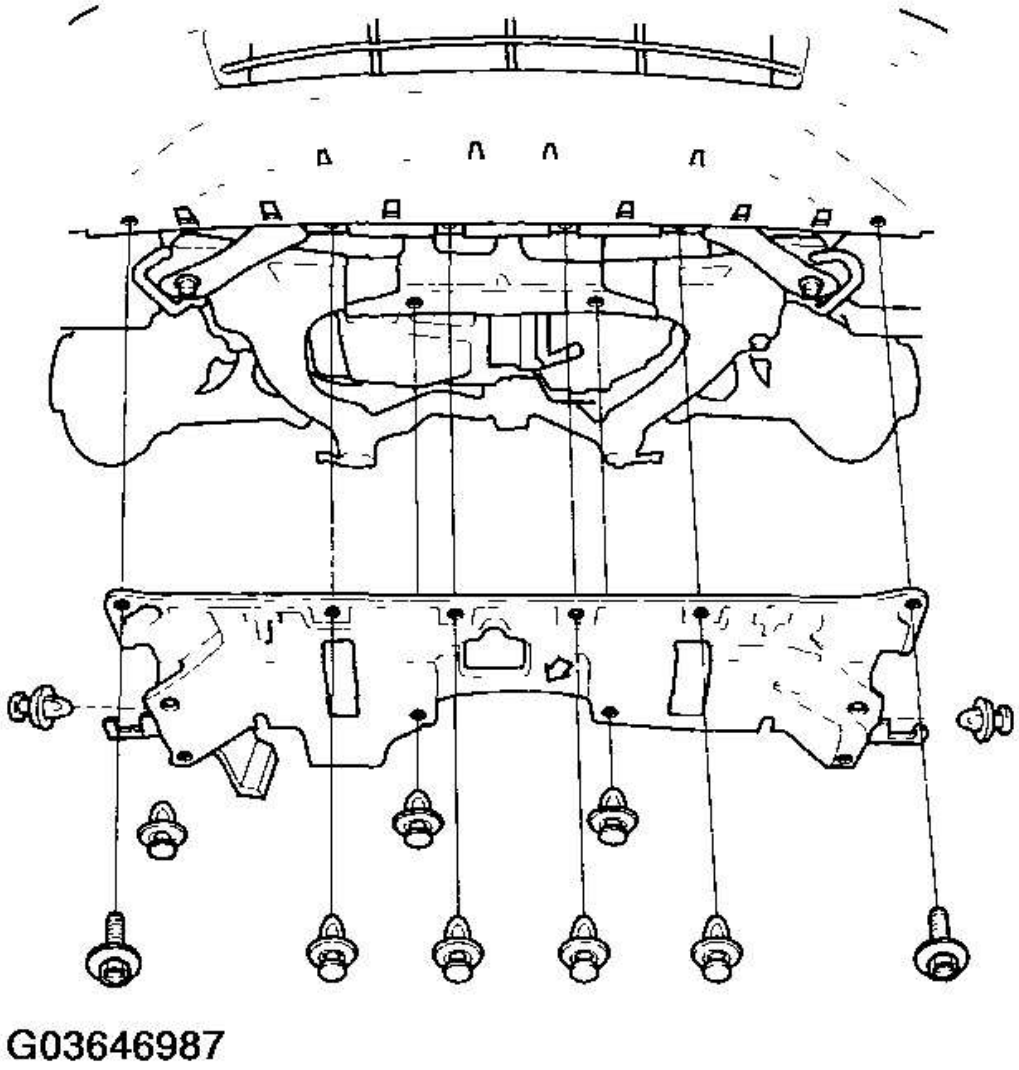


Fig. 18: Removing Splash Shield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. Separate the tie-rod ball joint (see step 8 on **STEERING GEARBOX OVERHAUL**).
27. Separate the front stabilizer link (see step 6 on **DRIVESHAFT INSPECTION**).
28. Remove the damper fork (see step 7 on **DRIVESHAFT REMOVAL**).

29. Separate the knuckle from the lower arm (see step 8 on **DRIVESHAFT REMOVAL**).
30. Disconnect the power steering pressure switch connector.

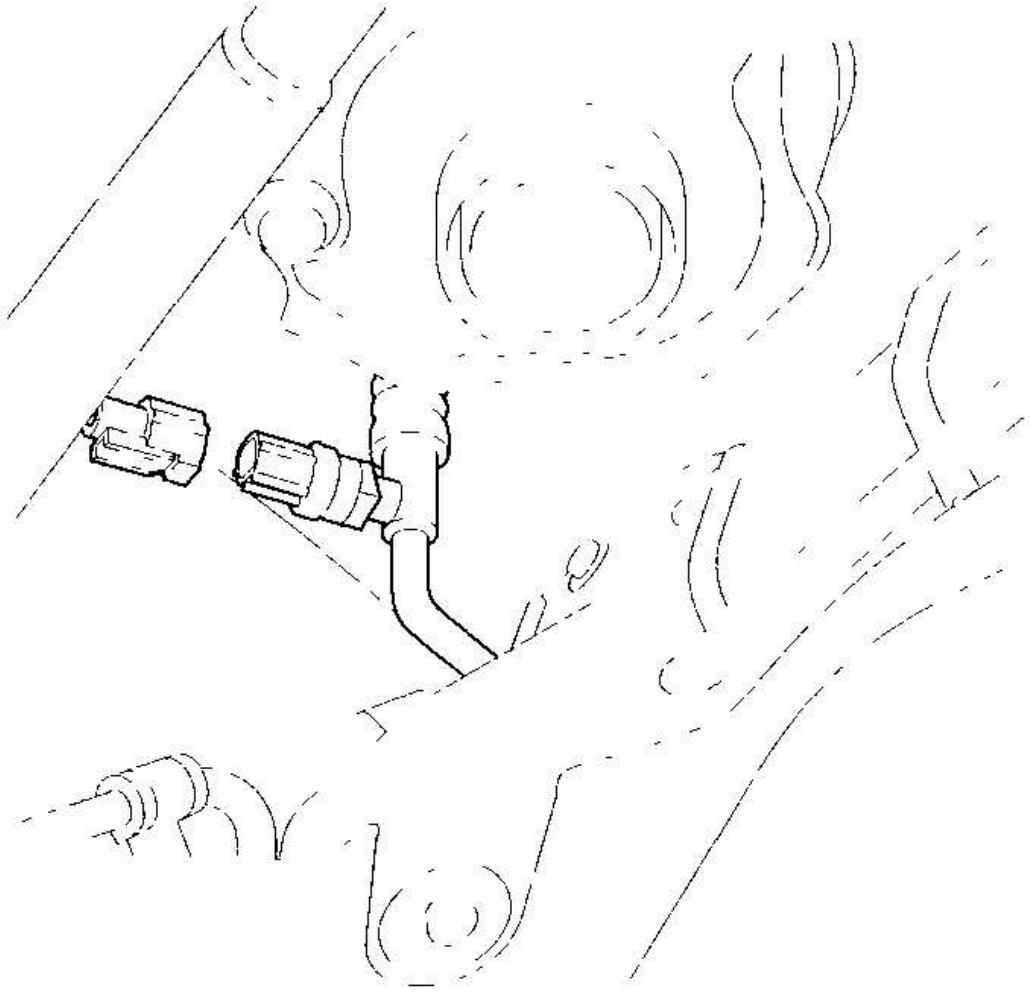


Fig. 19: Disconnecting Power Steering Pressure Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

31. Remove exhaust pipe A.

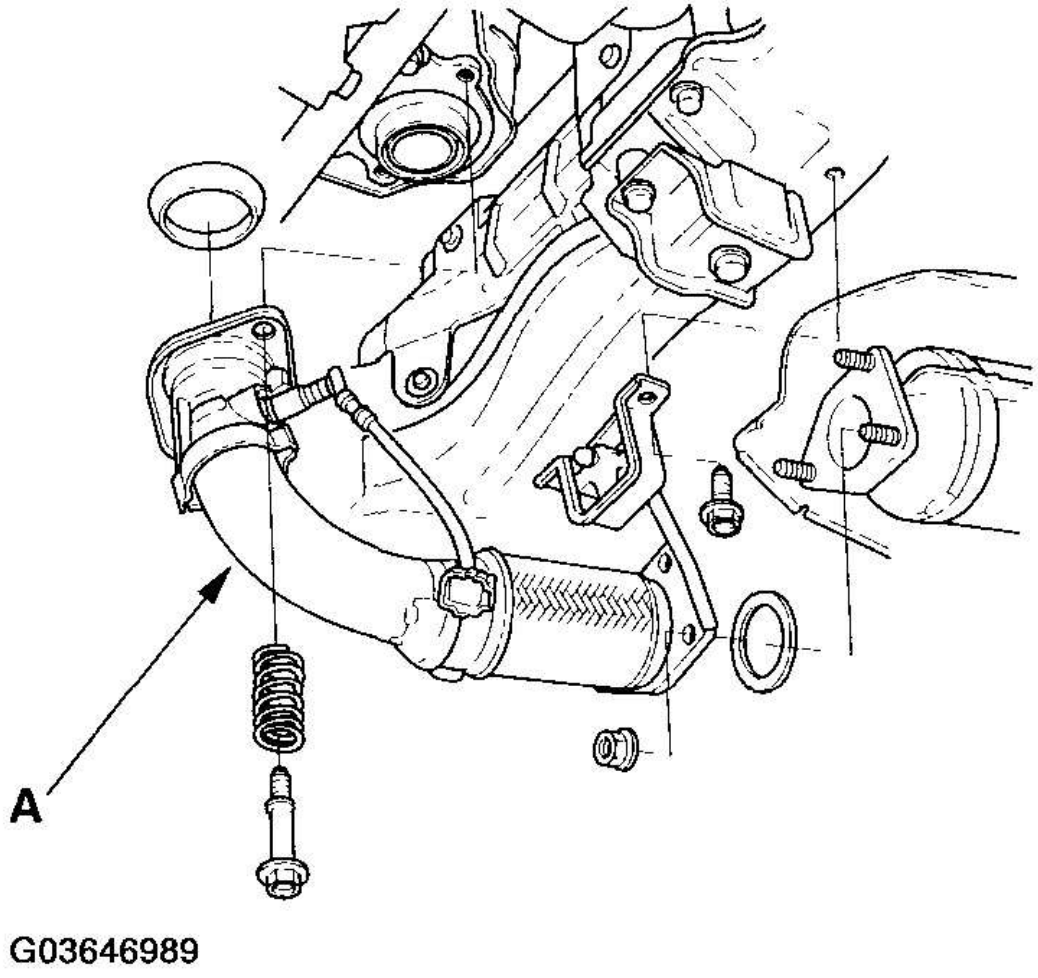


Fig. 20: Removing Exhaust Pipe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

32. Remove the left and right driveshaft inboard joints (see step 12 on **DRIVESHAFT DISASSEMBLY**)
33. Remove the intermediate shaft (see **INTERMEDIATE SHAFT REMOVAL**).
34. Remove the engine lower rear mount mounting bolts.

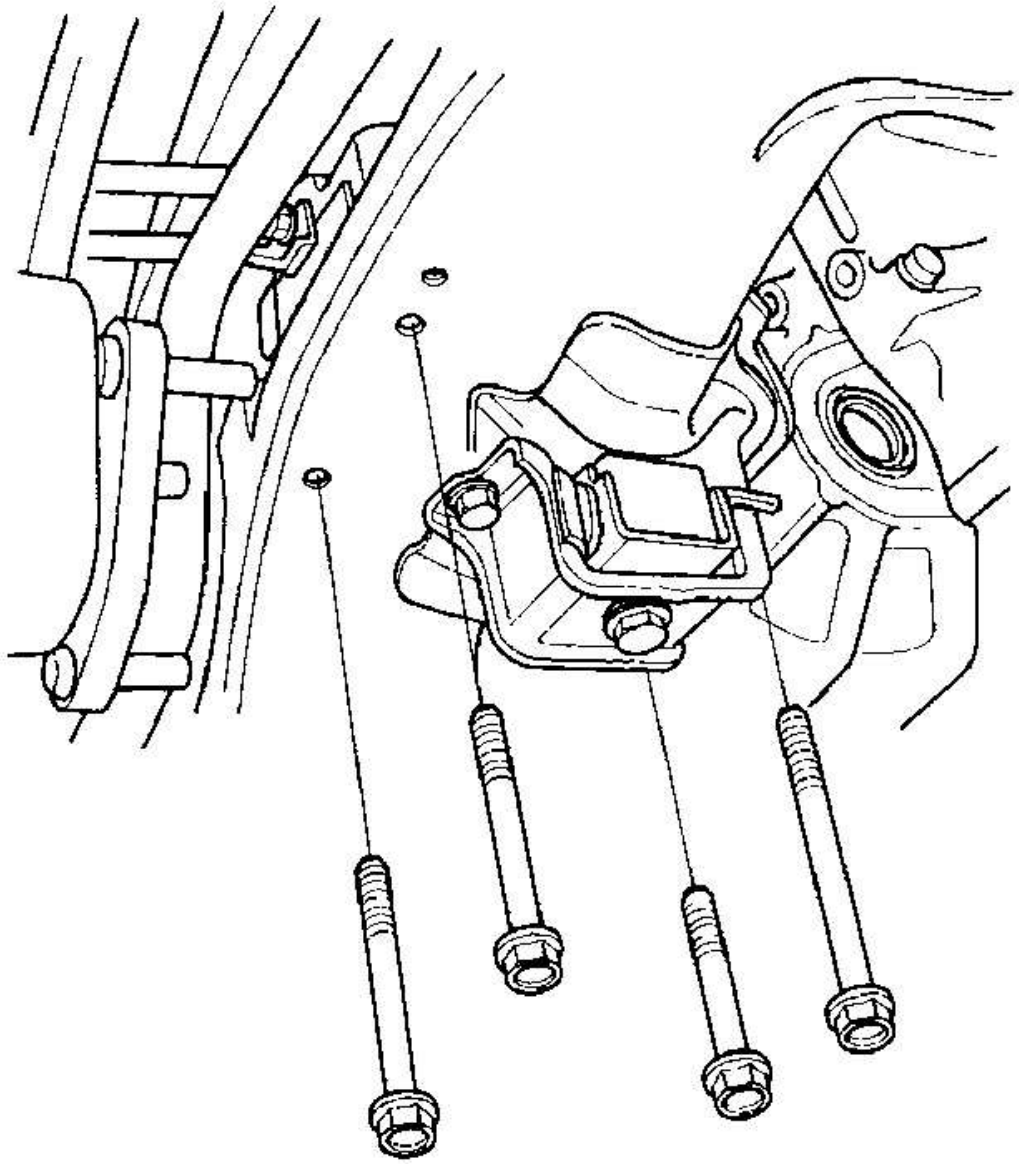


Fig. 21: Removing Engine Lower Rear Mount Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

35. Remove the transmission lower mount mounting nuts.

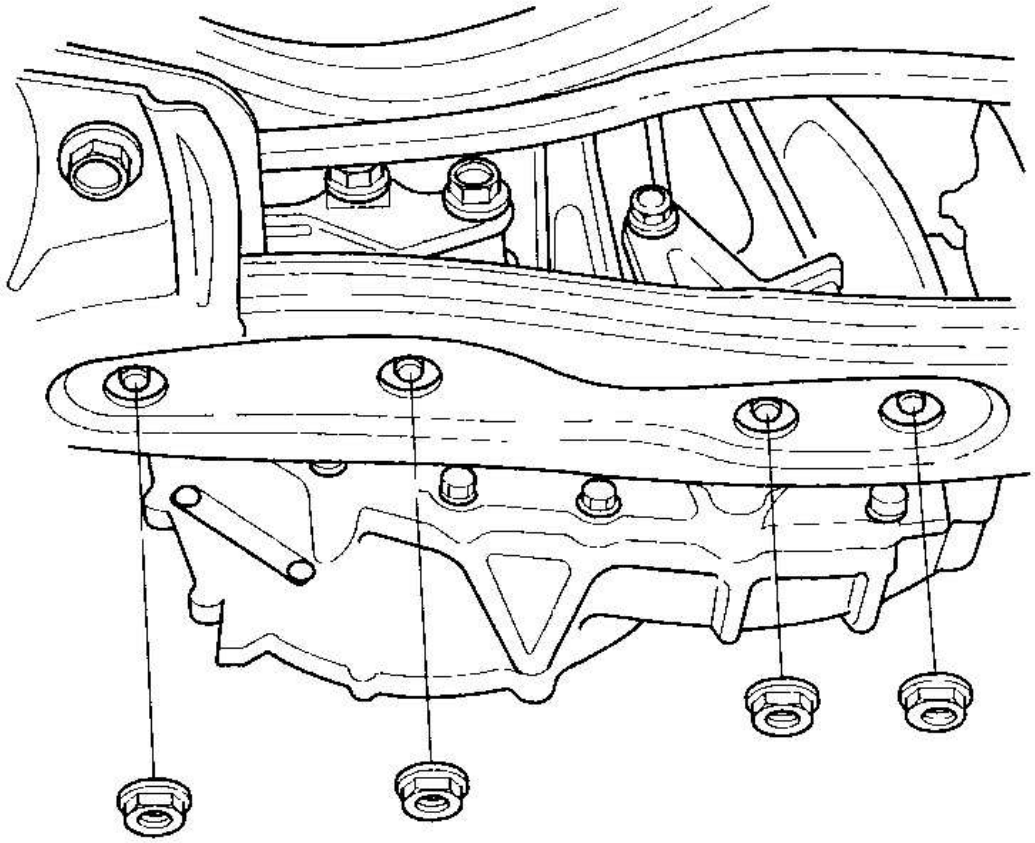


Fig. 22: Removing Transmission Lower Mount Mounting Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

36. Remove the subframe mid mounts from both sides.

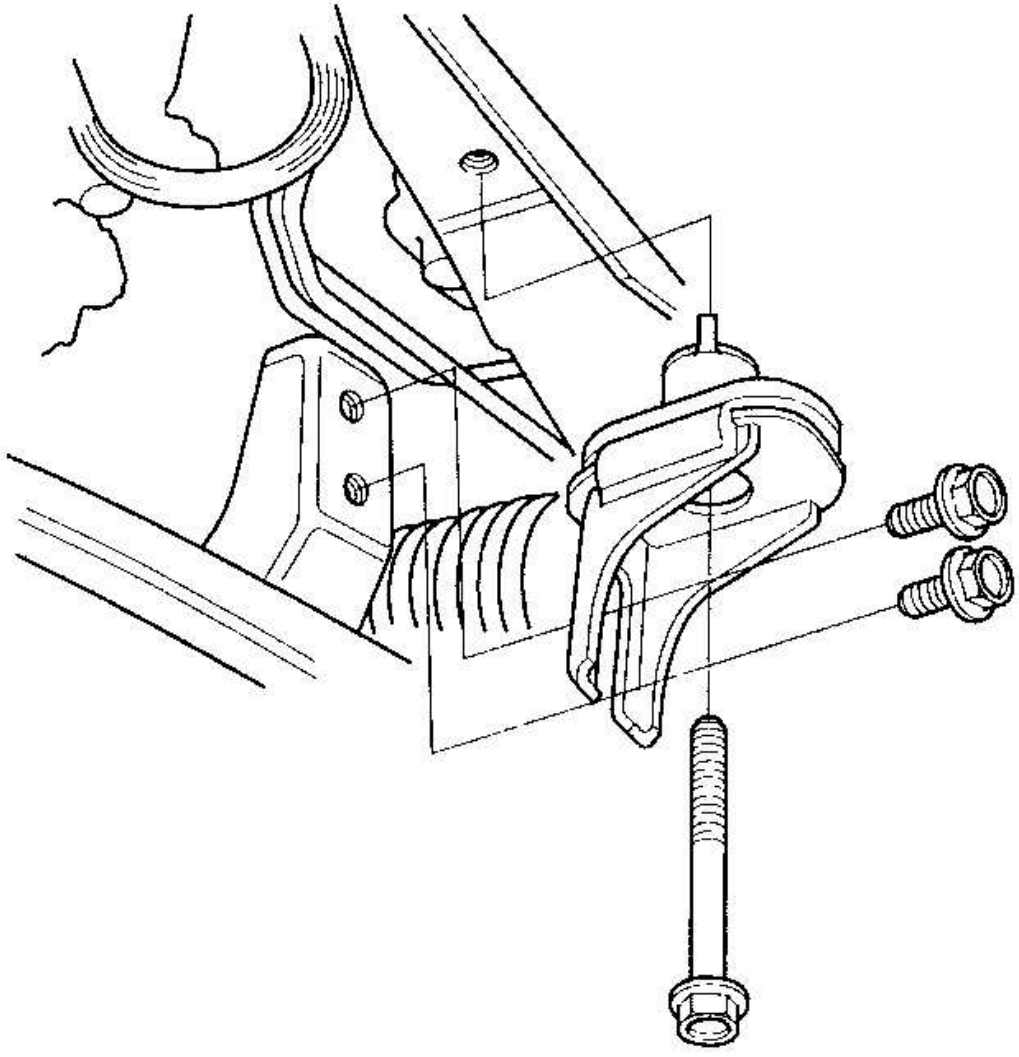


Fig. 23: Removing Subframe Mid Mounts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

37. Make the appropriate reference lines (A) at both ends of the subframe (B) that line up with the edge (C) of the stiffeners (D).

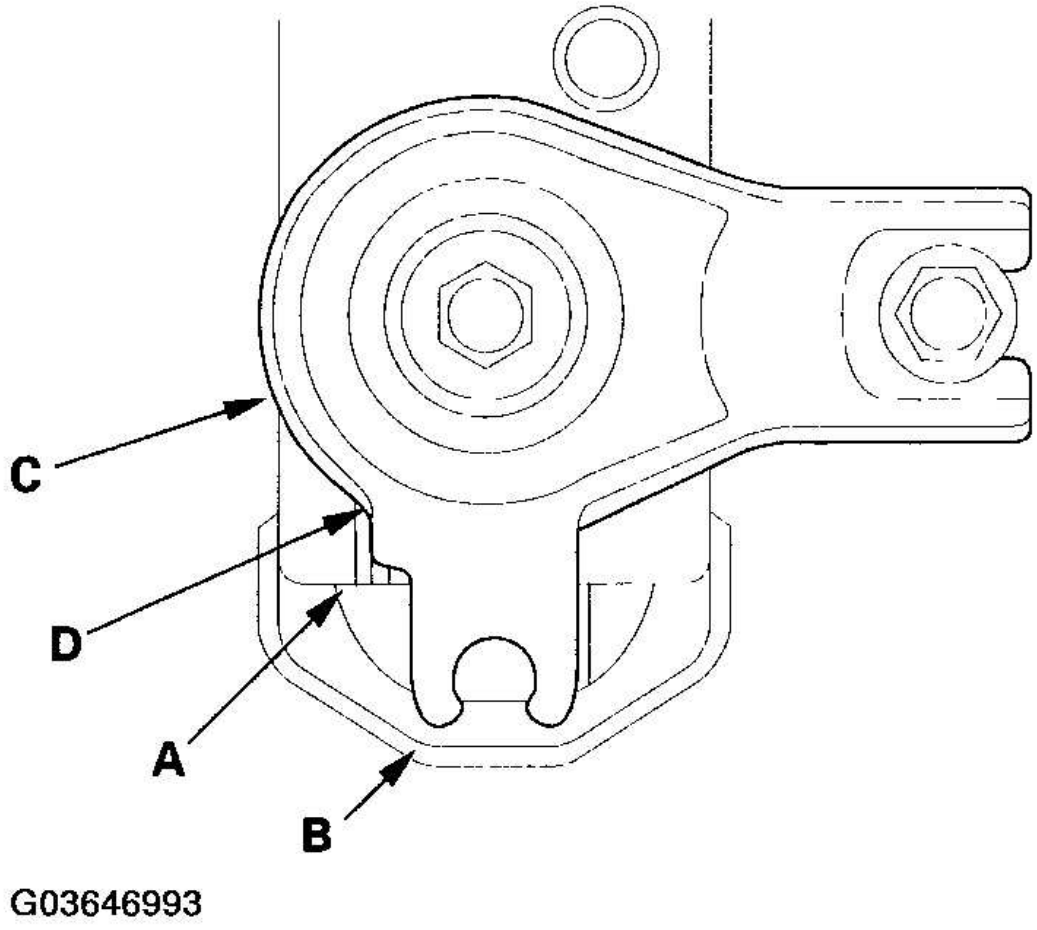
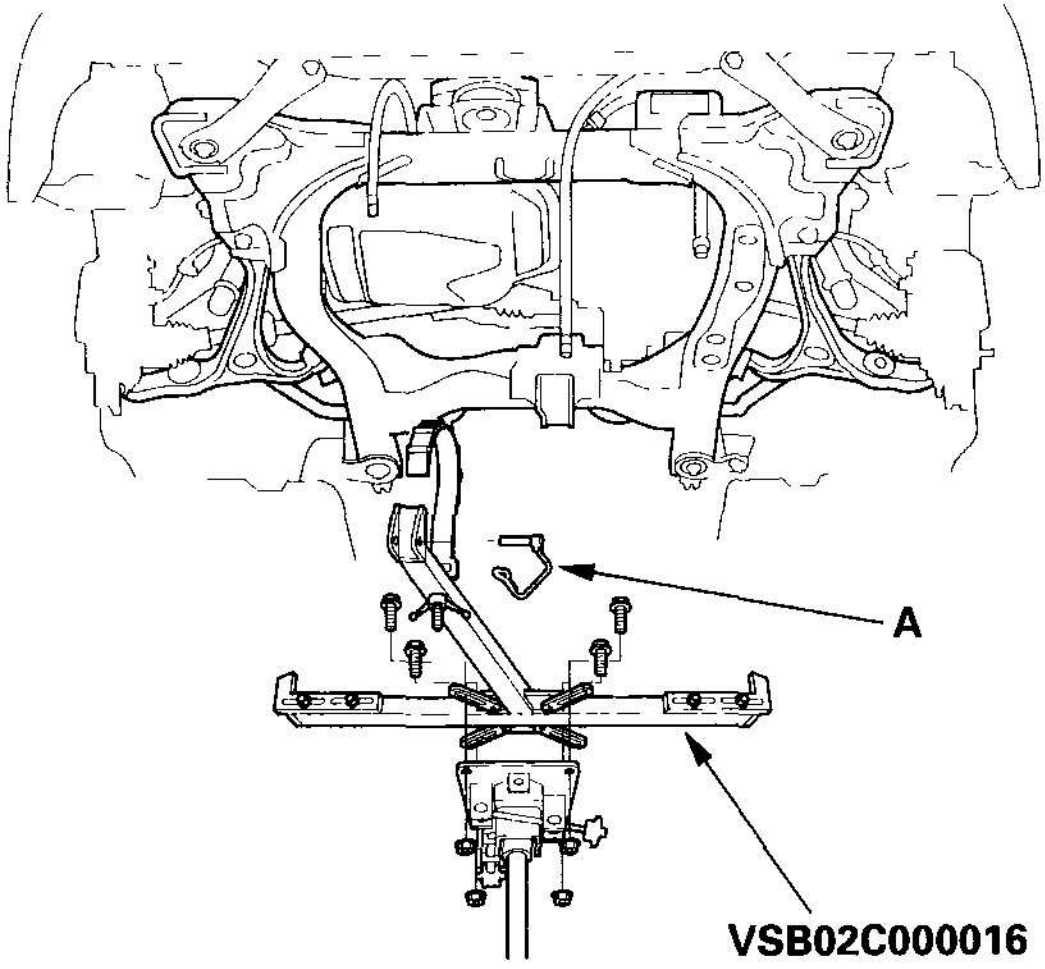


Fig. 24: Placing Reference Lines At Subframe Both Ends
Courtesy of AMERICAN HONDA MOTOR CO., INC.

38. Attach the special tool to the subframe by wrapping the band over the subframe and attaching the end of the band to the tool with a pin (A).



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Fig. 25: Attaching Band End To Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

39. Raise the jack, and line up the slots in the arms with the bolt holes on the corner of the jack base, then attach them securely.
40. Remove the front suspension subframe stays (A) and the front suspension subframe (B).

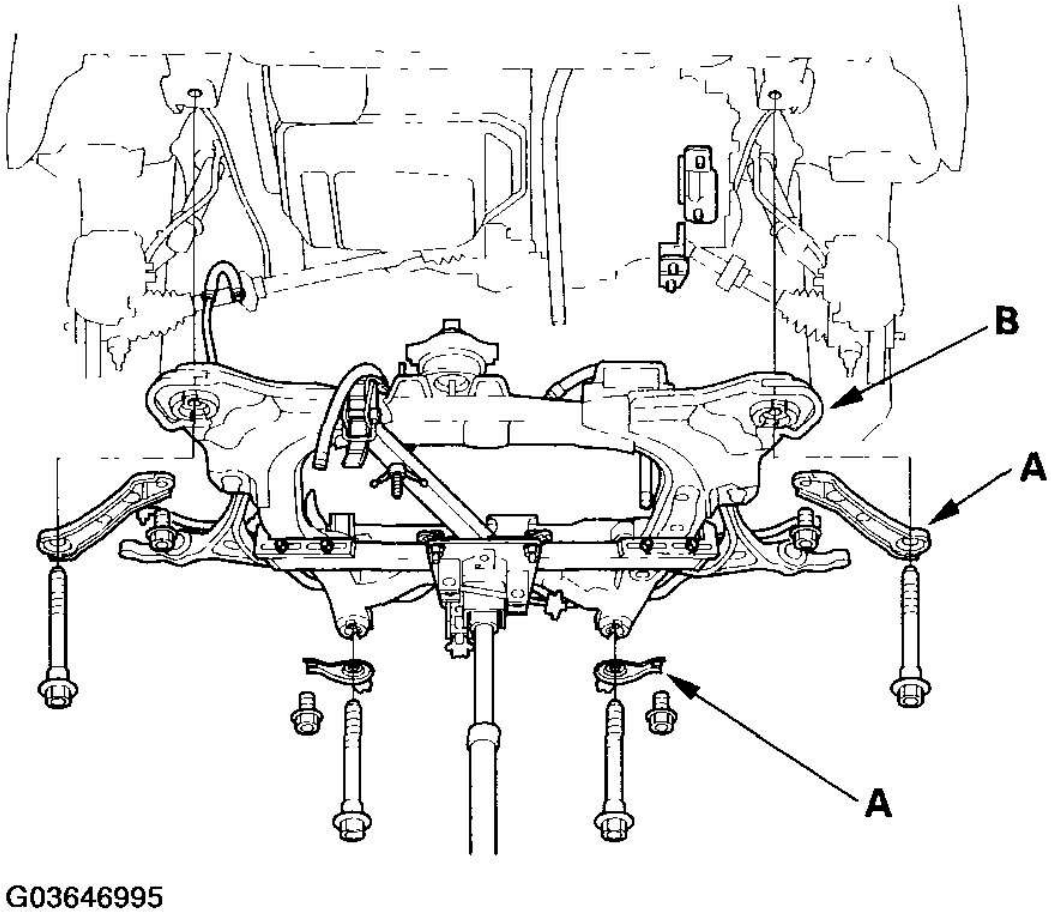
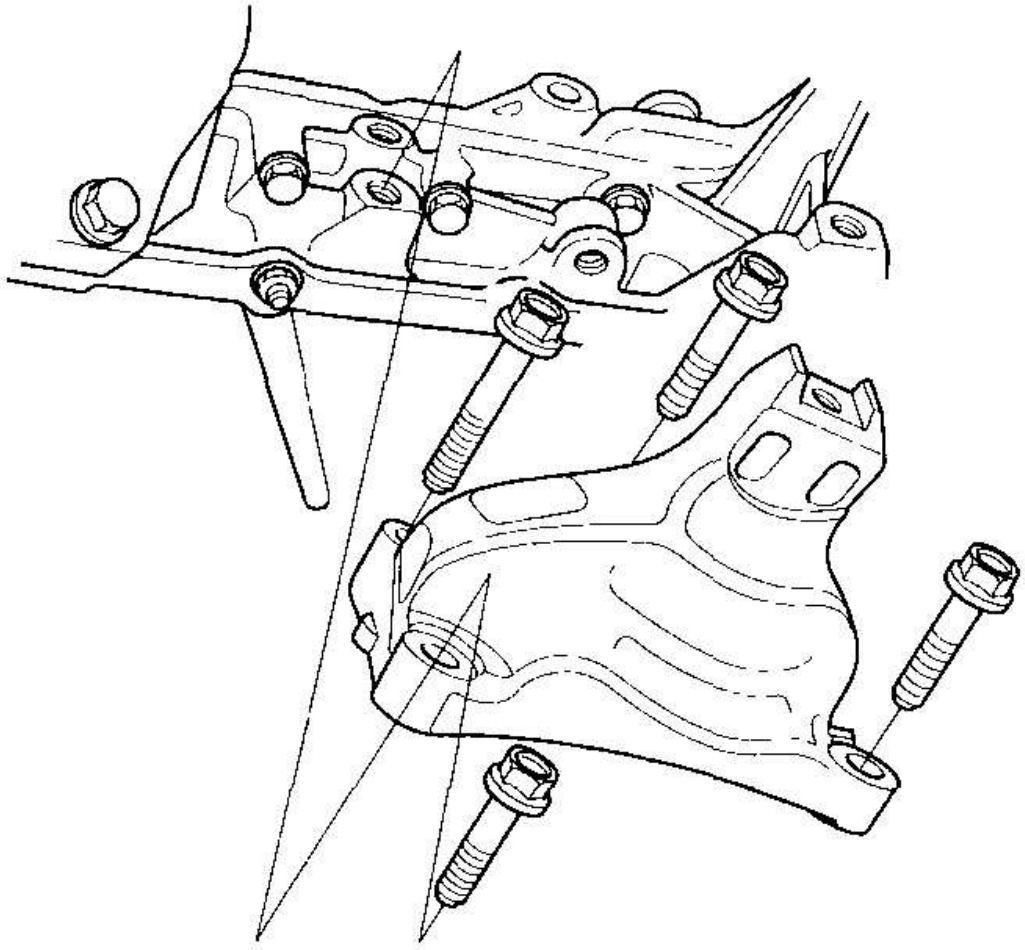


Fig. 26: Removing Front Suspension Subframe Stays And Front Suspension Subframe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

41. Remove the front engine mount upper bracket.



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Fig. 27: Removing Front Engine Mount Upper Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

42. Remove the shift cable bracket (A), rear engine mount upper mounting bolt (B), and rear engine mount (C).

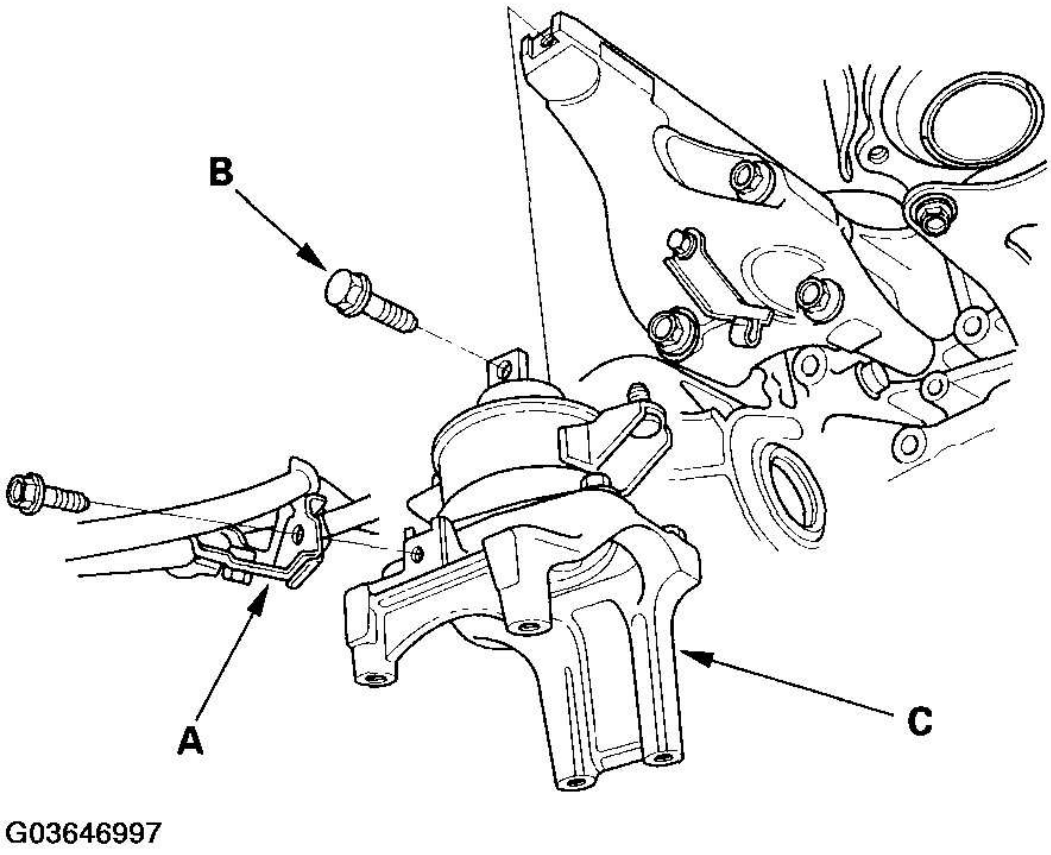


Fig. 28: Removing Shift Cable Bracket, Rear Engine Mount Upper Mounting Bolt And Rear Engine Mount
Courtesy of AMERICAN HONDA MOTOR CO., INC.

43. Remove the rear engine mount upper bracket.

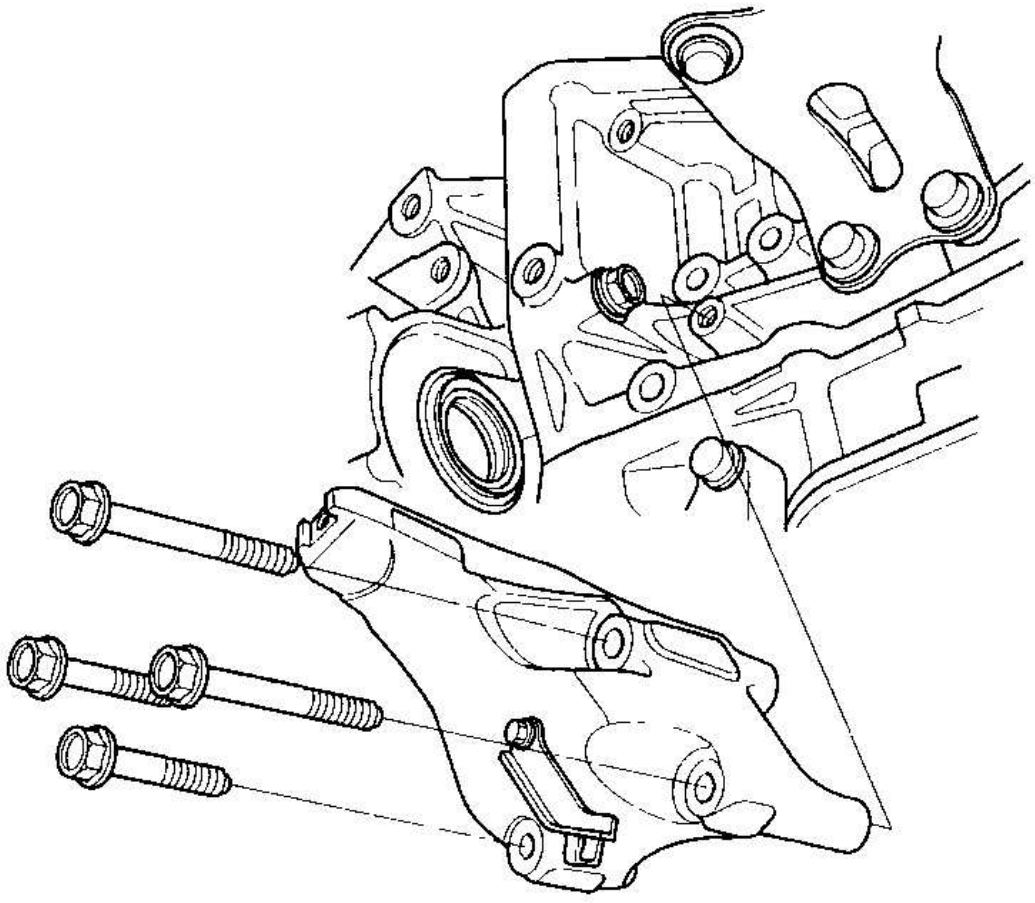


Fig. 29: Removing Rear Engine Mount Upper Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

44. Remove the clutch cover.

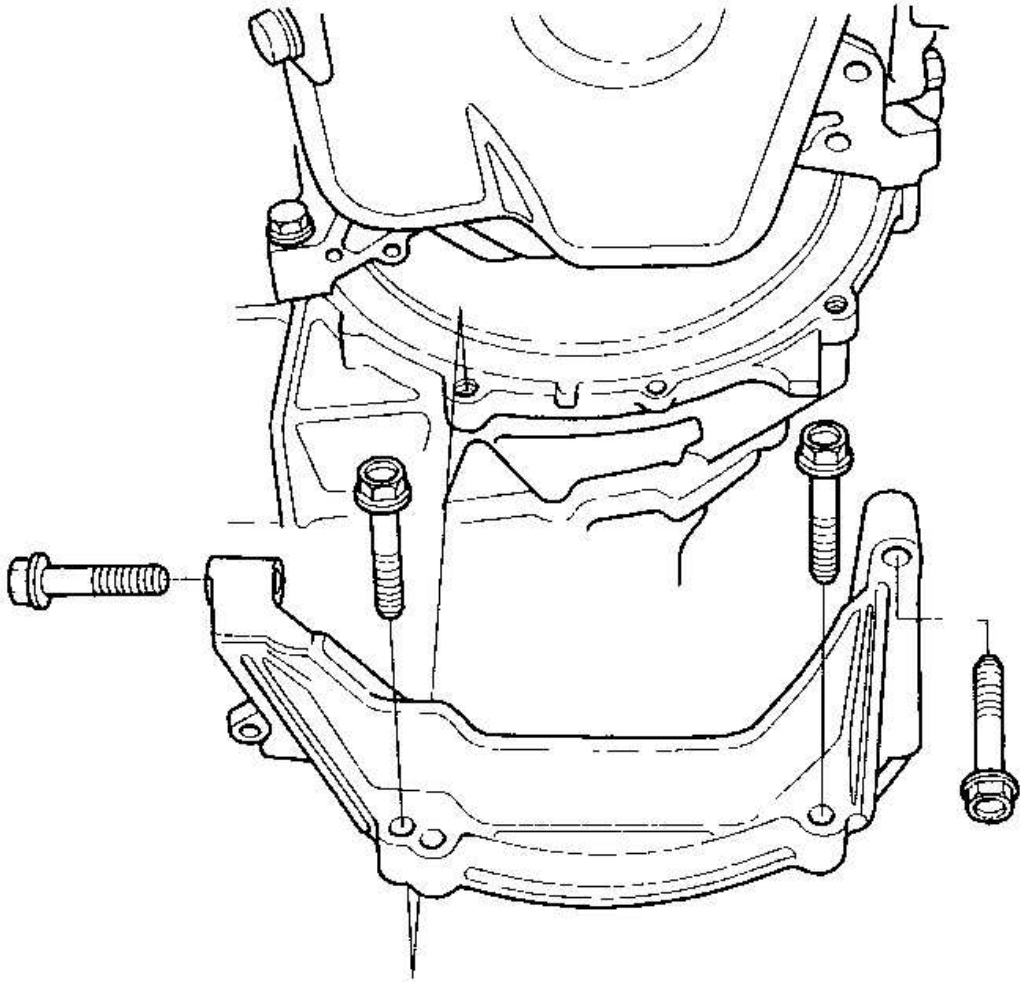


Fig. 30: Removing Clutch Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

45. Place the transmission jack under the transmission, and remove the transmission lower mounting bolts.

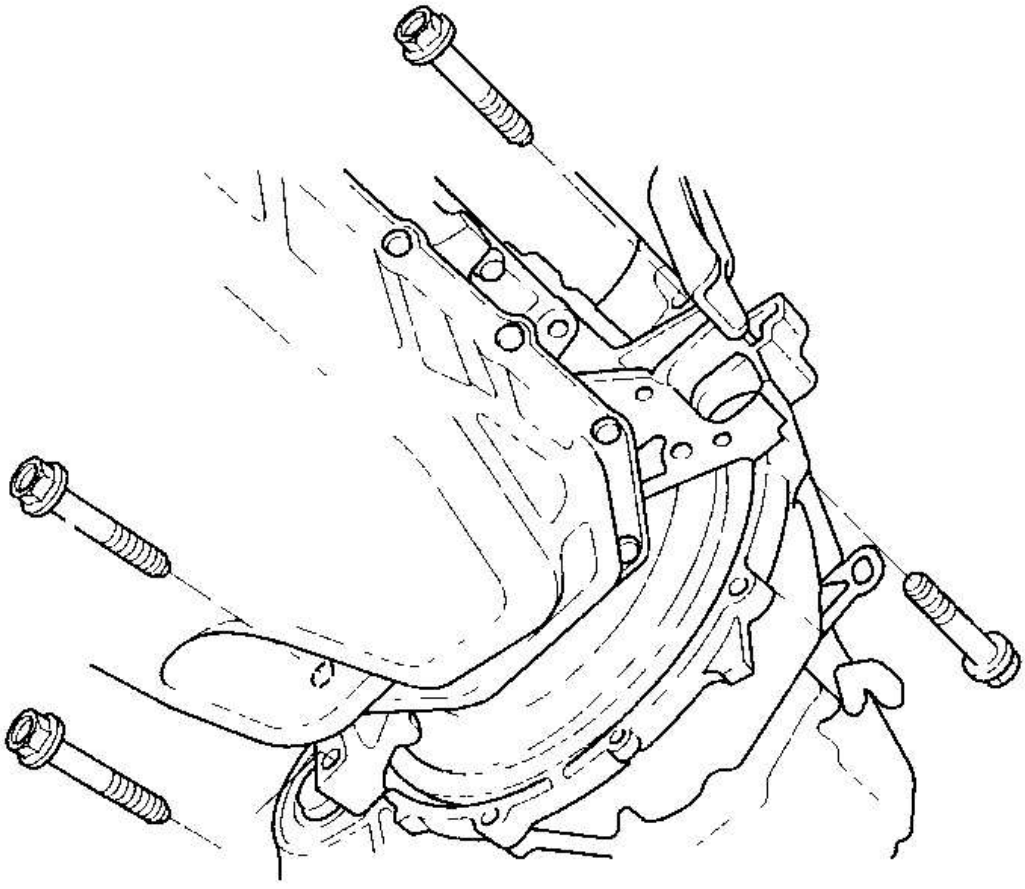


Fig. 31: Removing Transmission Lower Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

46. Pull the transmission away from the engine until the transmission mainshaft clears the clutch pressure plate, then lower the transmission on the transmission jack.
47. Remove the transmission lower front mount (A) and transmission lower rear mount (B).

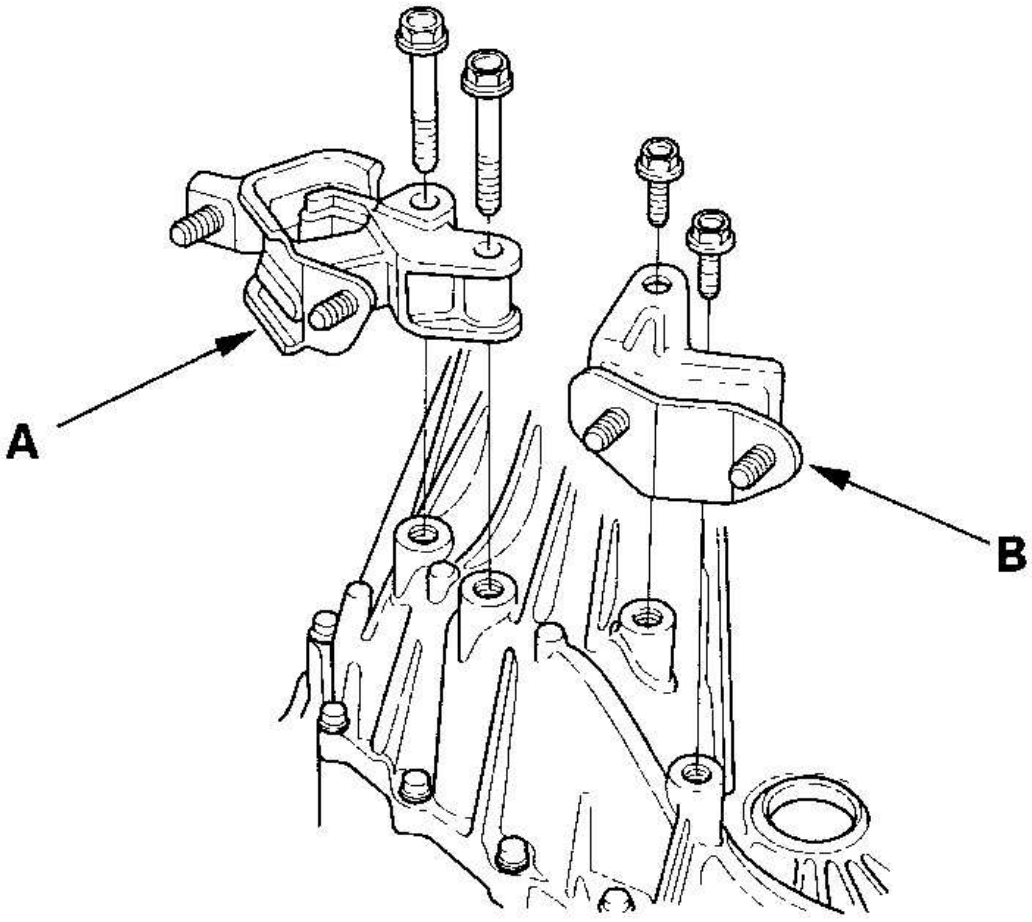


Fig. 32: Removing Transmission Lower Front Mount And Transmission Lower Rear Mount
Courtesy of AMERICAN HONDA MOTOR CO., INC.

48. Remove the release fork boot (A) from the clutch housing (B).

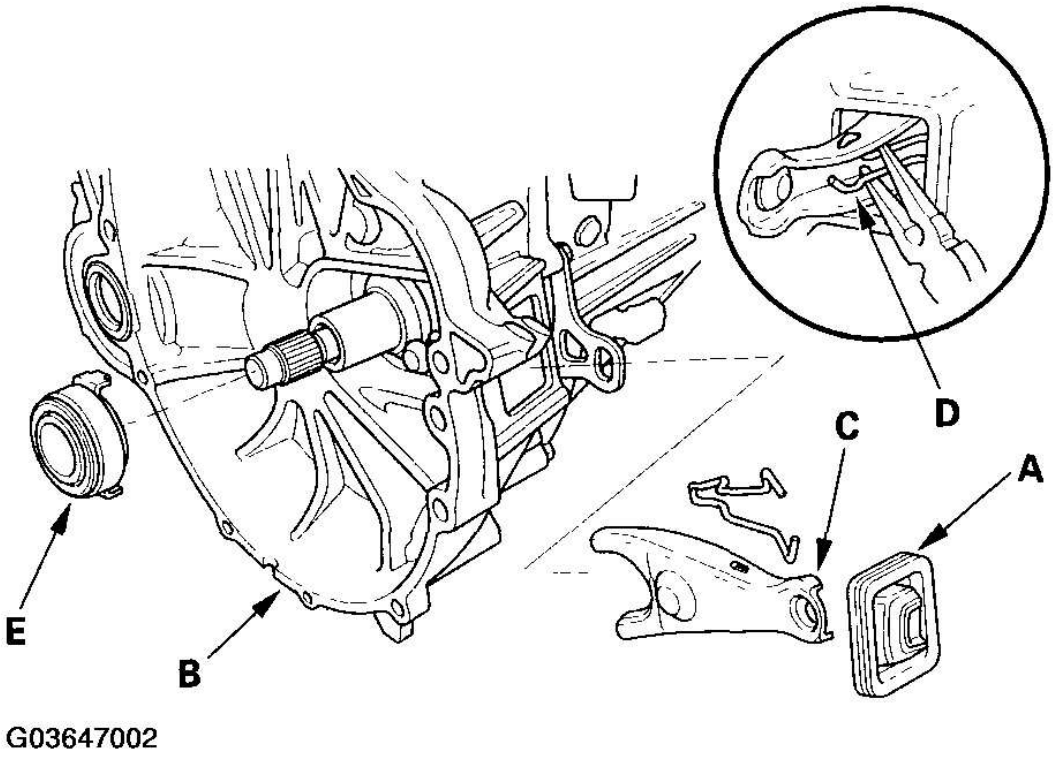


Fig. 33: Removing Release Fork Boot From Clutch Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

49. Remove the release fork (C) from the clutch housing by squeezing the release fork set spring (D) with pliers. Remove the release bearing (E).

TRANSMISSION INSTALLATION

Special Tools Required

- Engine hanger/adapter VSB02C000015 *
- Engine support hanger, A & Reds AAR-T-12566 *
- Subframe adapter VSB02C000016 *

* Available through the Honda Tool and Equipment Program 888-424-6857.

1. Make sure the two dowel pins are installed in the clutch housing.

2. Apply super high temp urea grease (P/N 08798-9002) to the release fork (A), the release bearing (B) and the mainshaft splines. Install the release fork, the release bearing, and the boot (C).

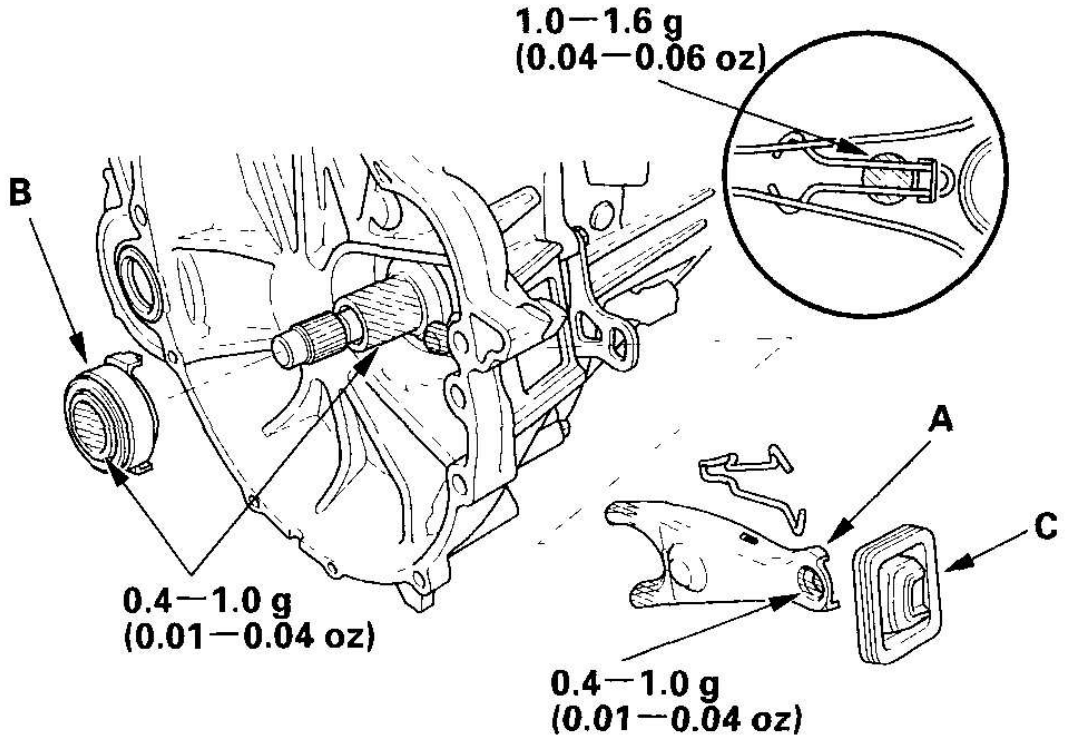


Fig. 34: Locating Grease Applying Point
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the transmission lower front mount (A) and transmission lower rear mount (B).

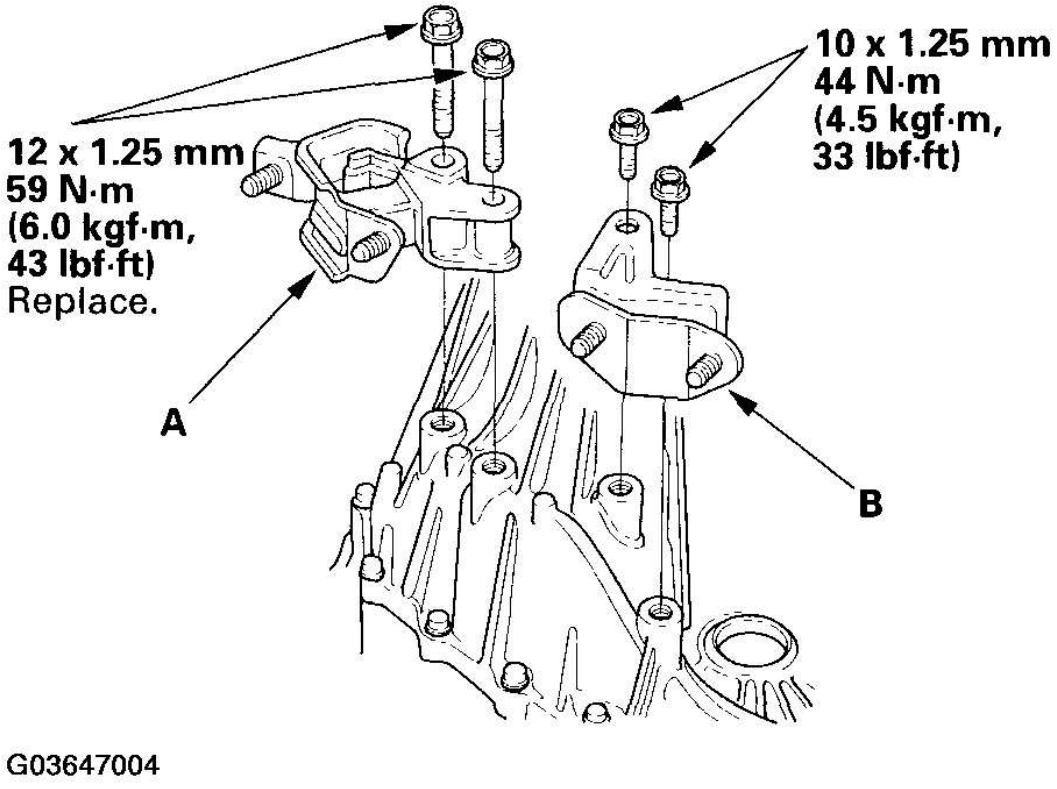


Fig. 35: Installing Transmission Lower Front Mount And Transmission Lower Rear Mount
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Place the transmission on the transmission jack, and raise it to engine level.
5. Install the transmission mounting lower bolts.

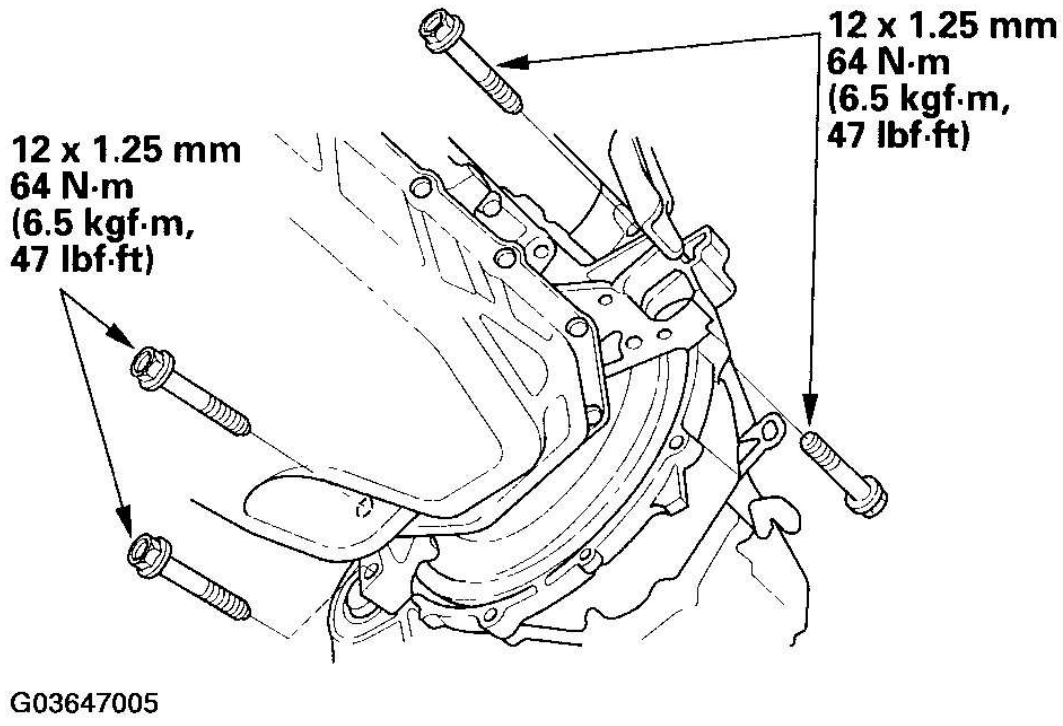


Fig. 36: Installing Transmission Mounting Lower Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the clutch cover.

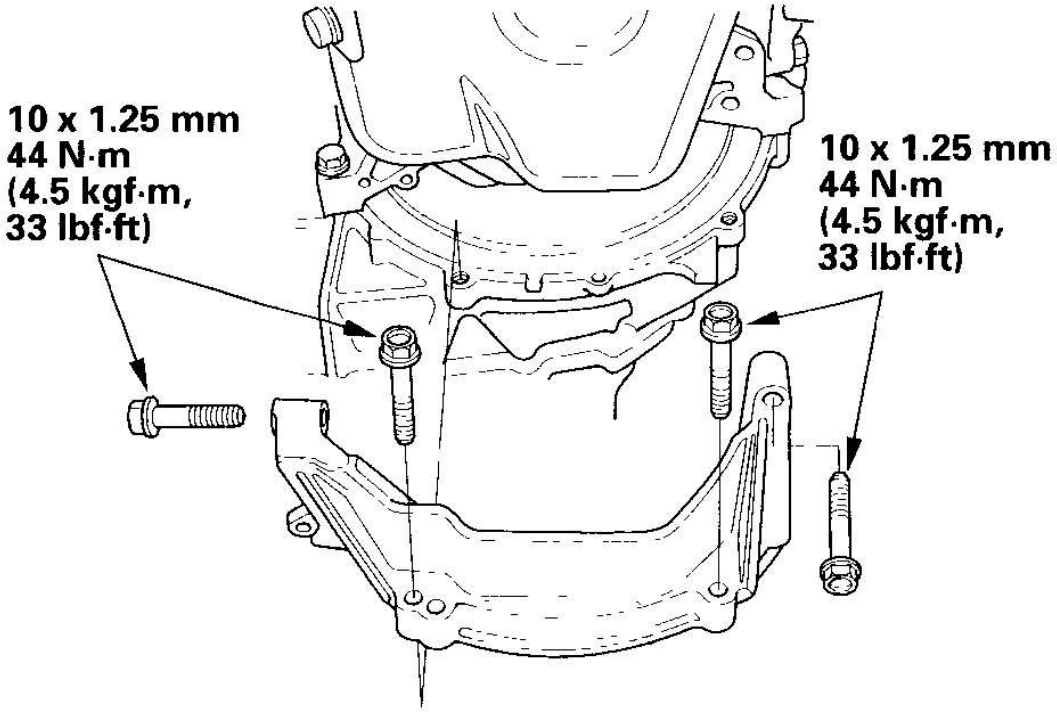


Fig. 37: Installing Clutch Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the rear engine mount upper bracket.

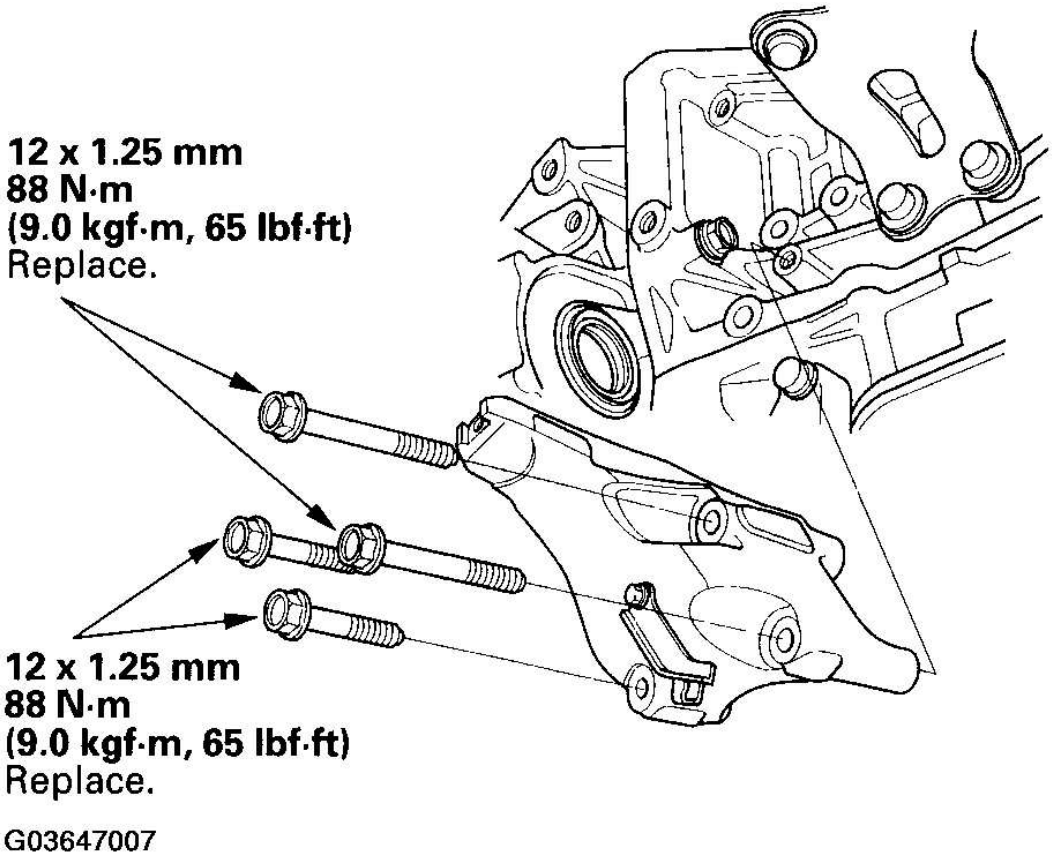


Fig. 38: Installing Rear Engine Mount Upper Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the rear engine mount (A), rear engine mount upper mounting bolt (B), and shift cable bracket (C).

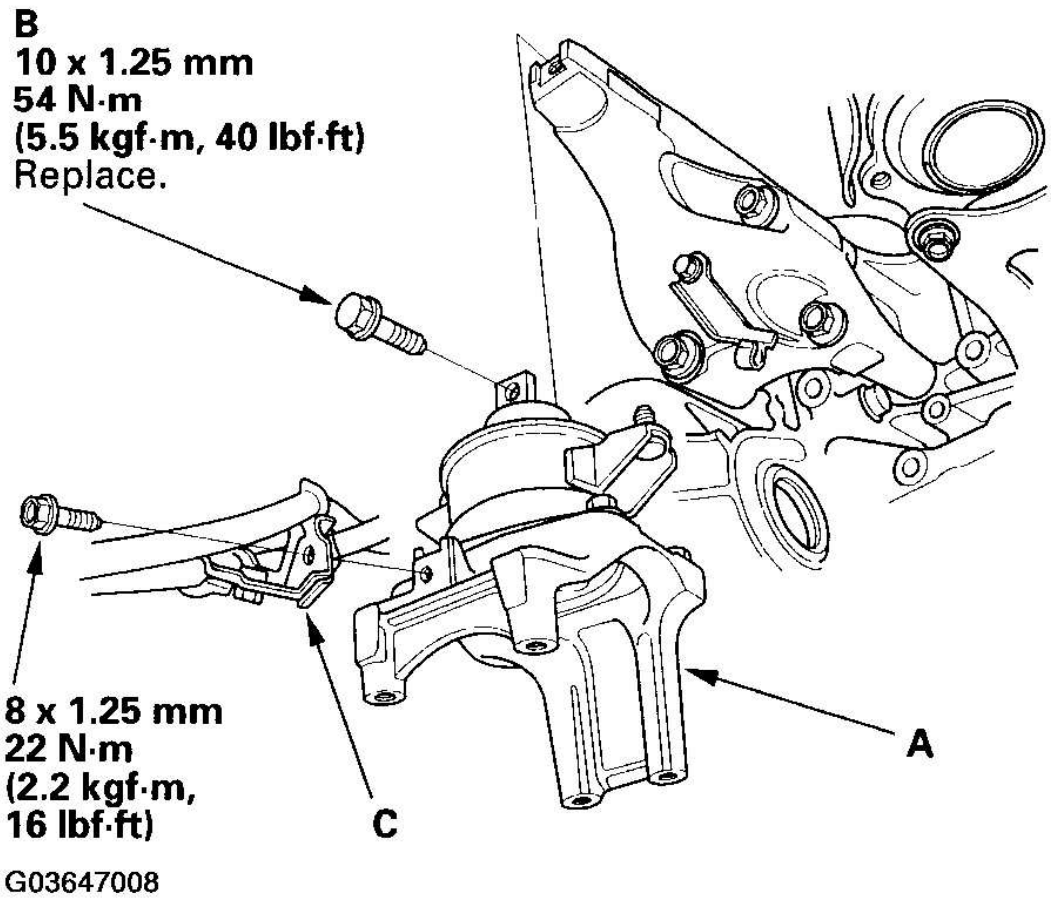


Fig. 39: Installing Rear Engine Mount, Rear Engine Mount Upper Mounting Bolt And Shift Cable Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the front engine mount upper bracket.

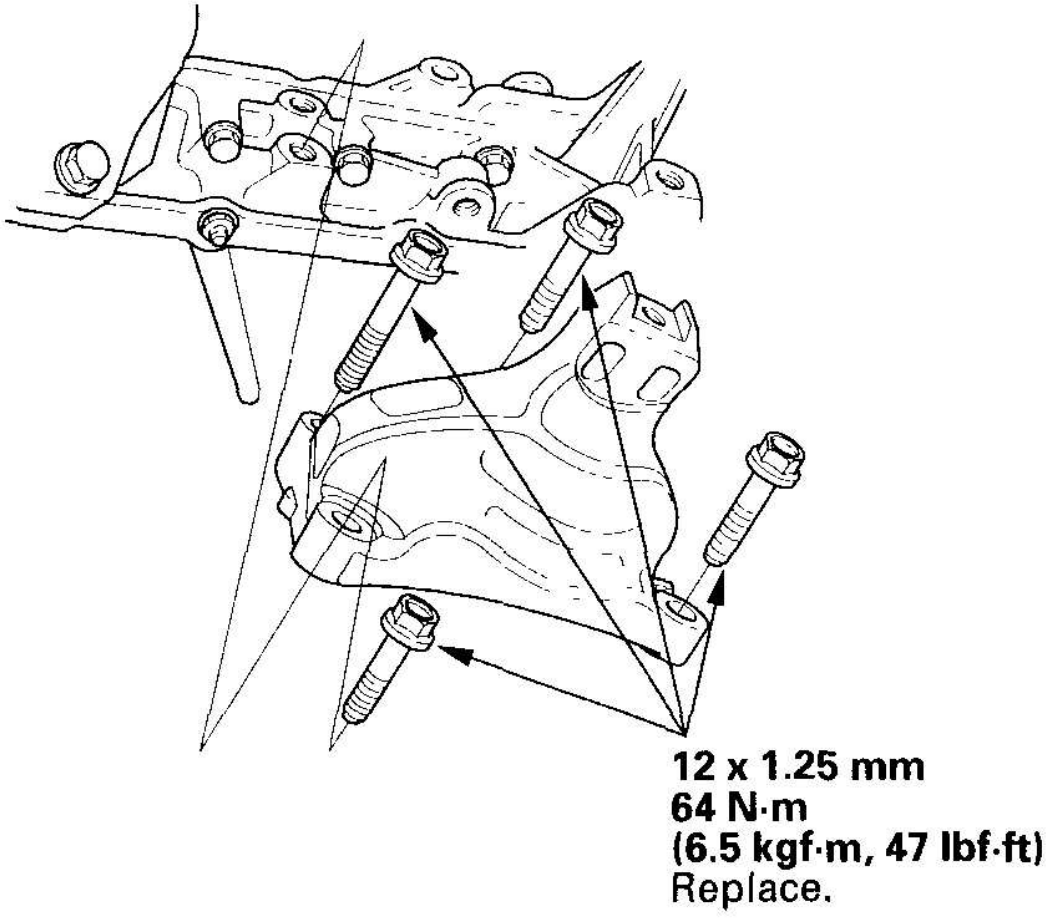


Fig. 40: Installing Front Engine Mount Upper Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Support the subframe with the subframe adapter and a jack.

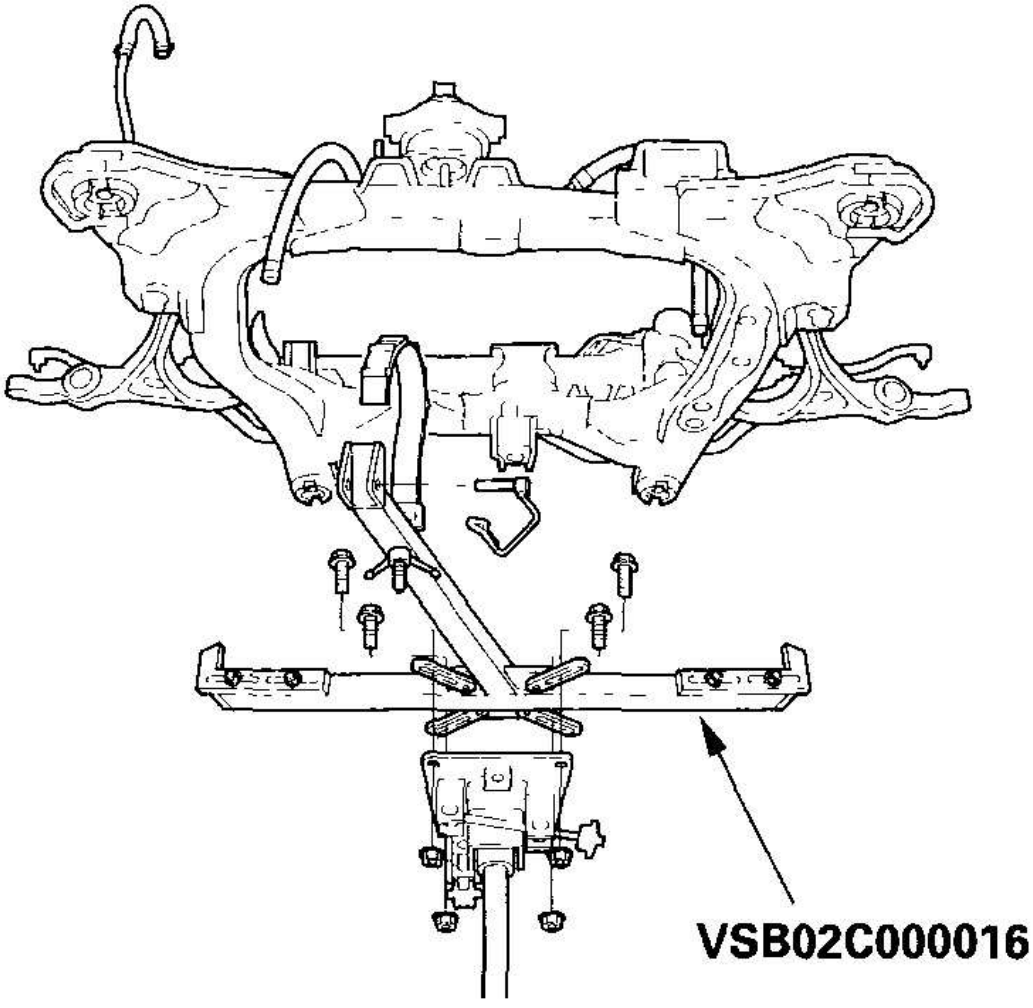


Fig. 41: Supporting Subframe With Subframe Adapter And Jack
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the front suspension subframe (A) and front suspension subframe stays (B).

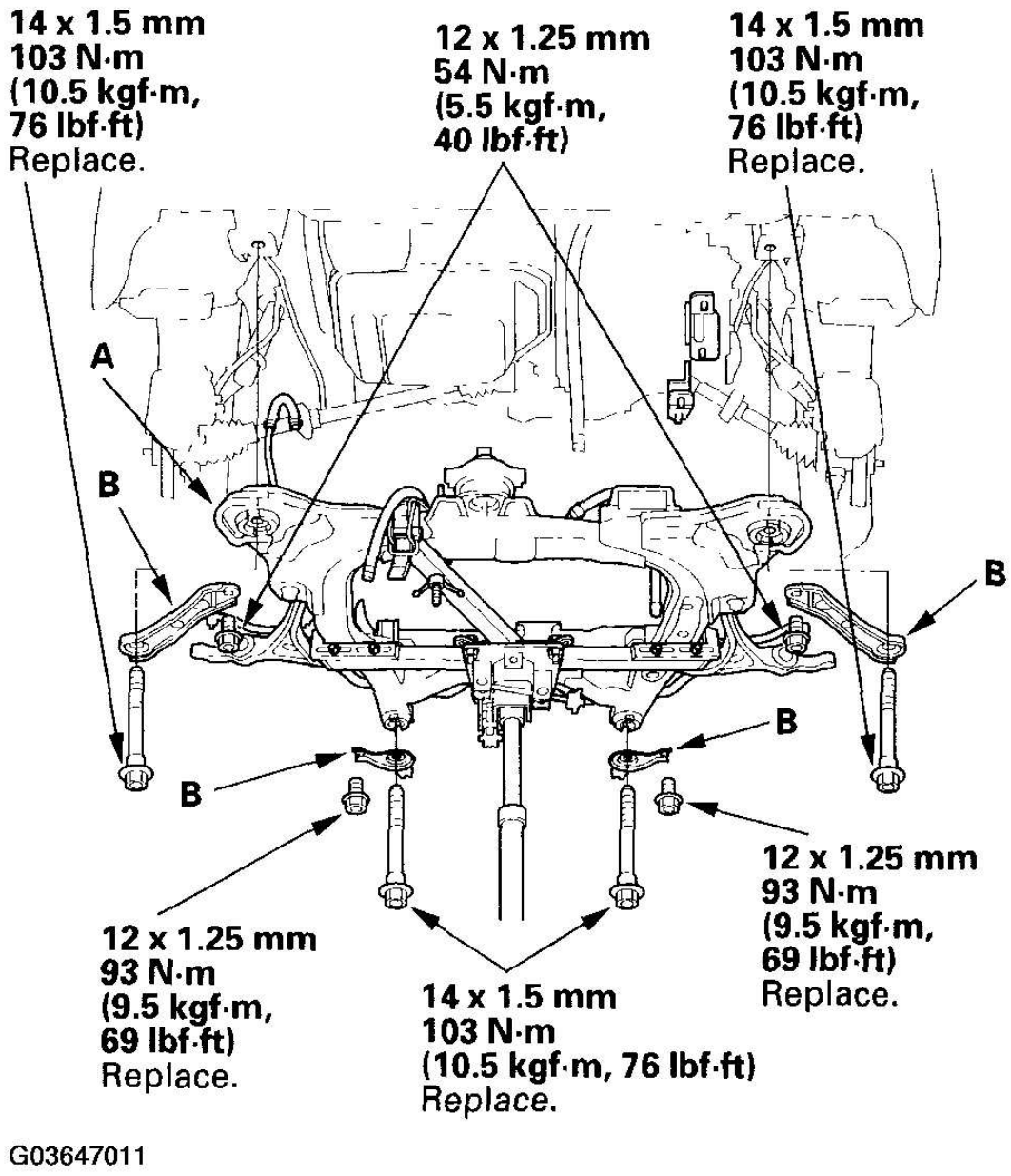


Fig. 42: Installing Front Suspension Subframe And Front Suspension Subframe Stays
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Align the reference marks (A) with the edge (B) of both rear stiffeners (C), then tighten the rear subframe mounting bolts, the front bolts, and the stiffener

bolts to the specified torque.

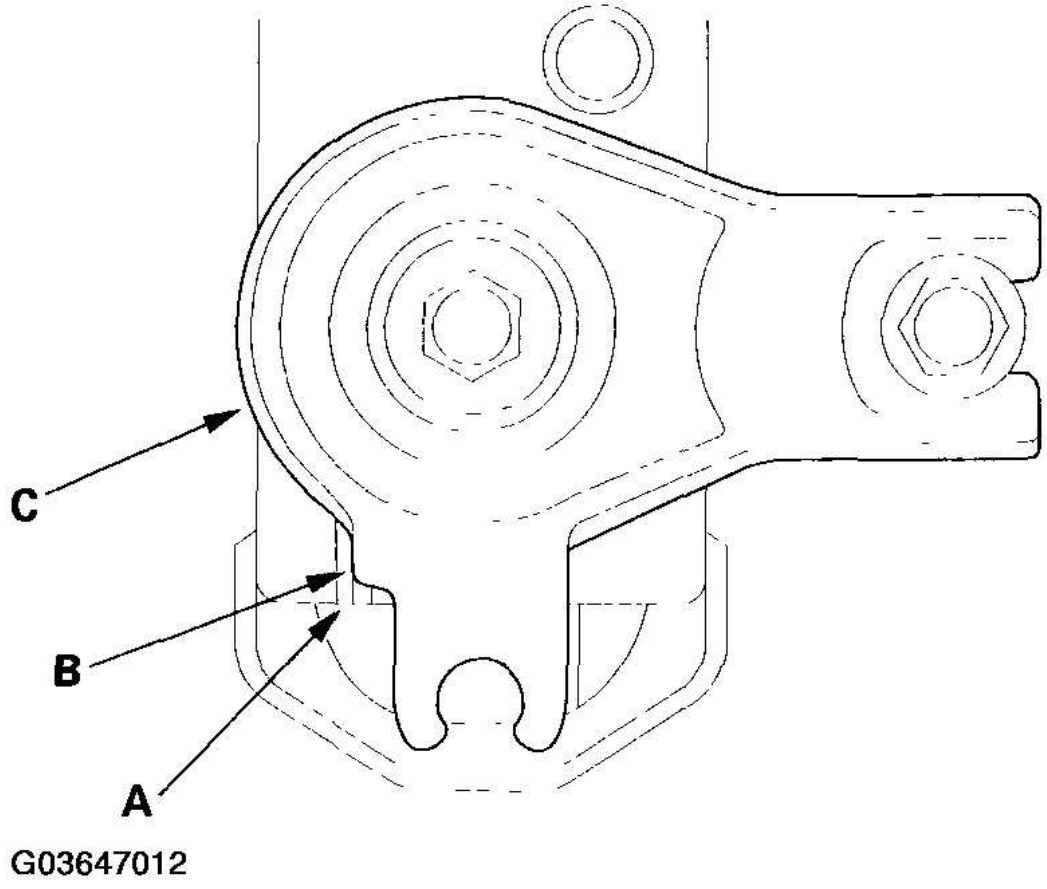


Fig. 43: Aligning Reference Marks With Rear Stiffeners Edge
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install the subframe mid mounts on both sides.

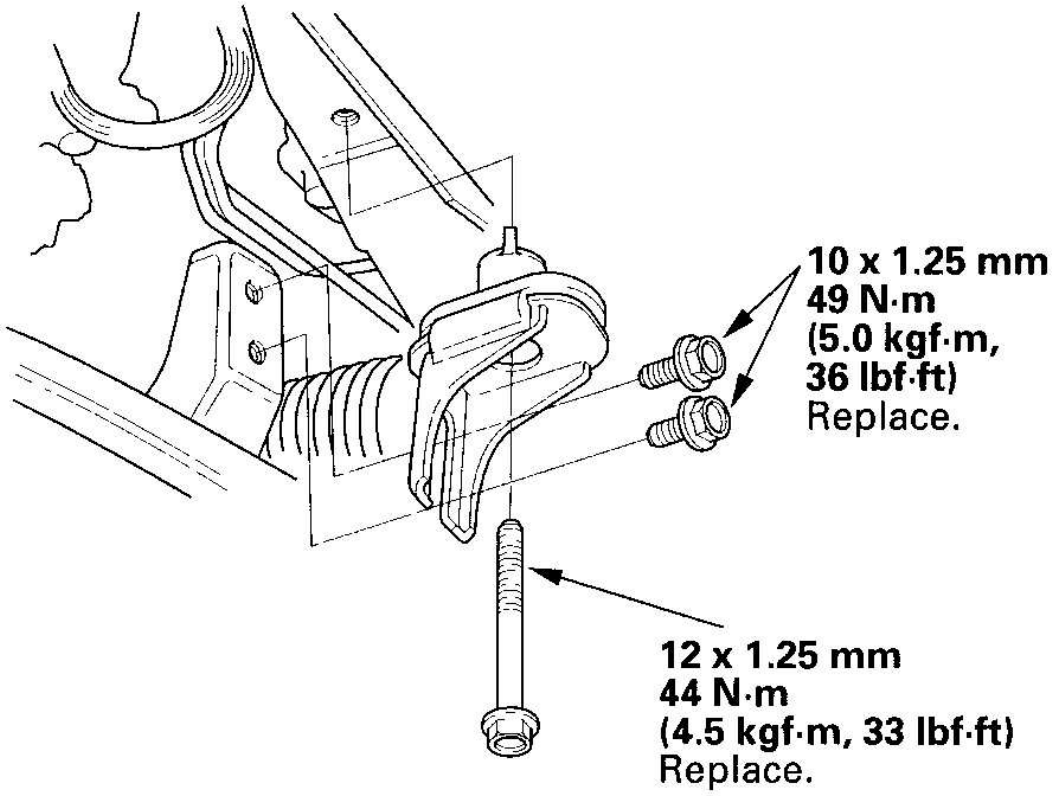


Fig. 44: Installing Subframe Mid Mounts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Install the transmission lower mount mounting nuts.

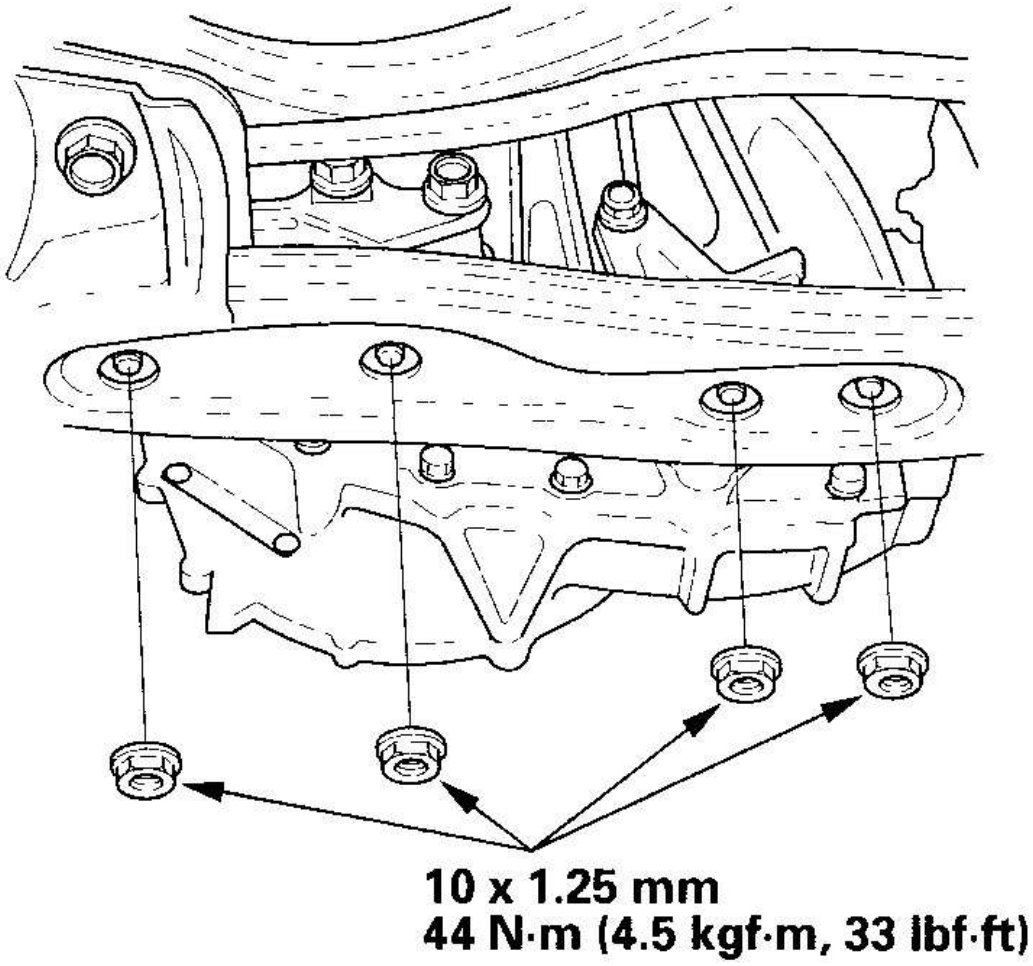


Fig. 45: Installing Transmission Lower Mount Mounting Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Install the engine lower rear mount mounting bolts.

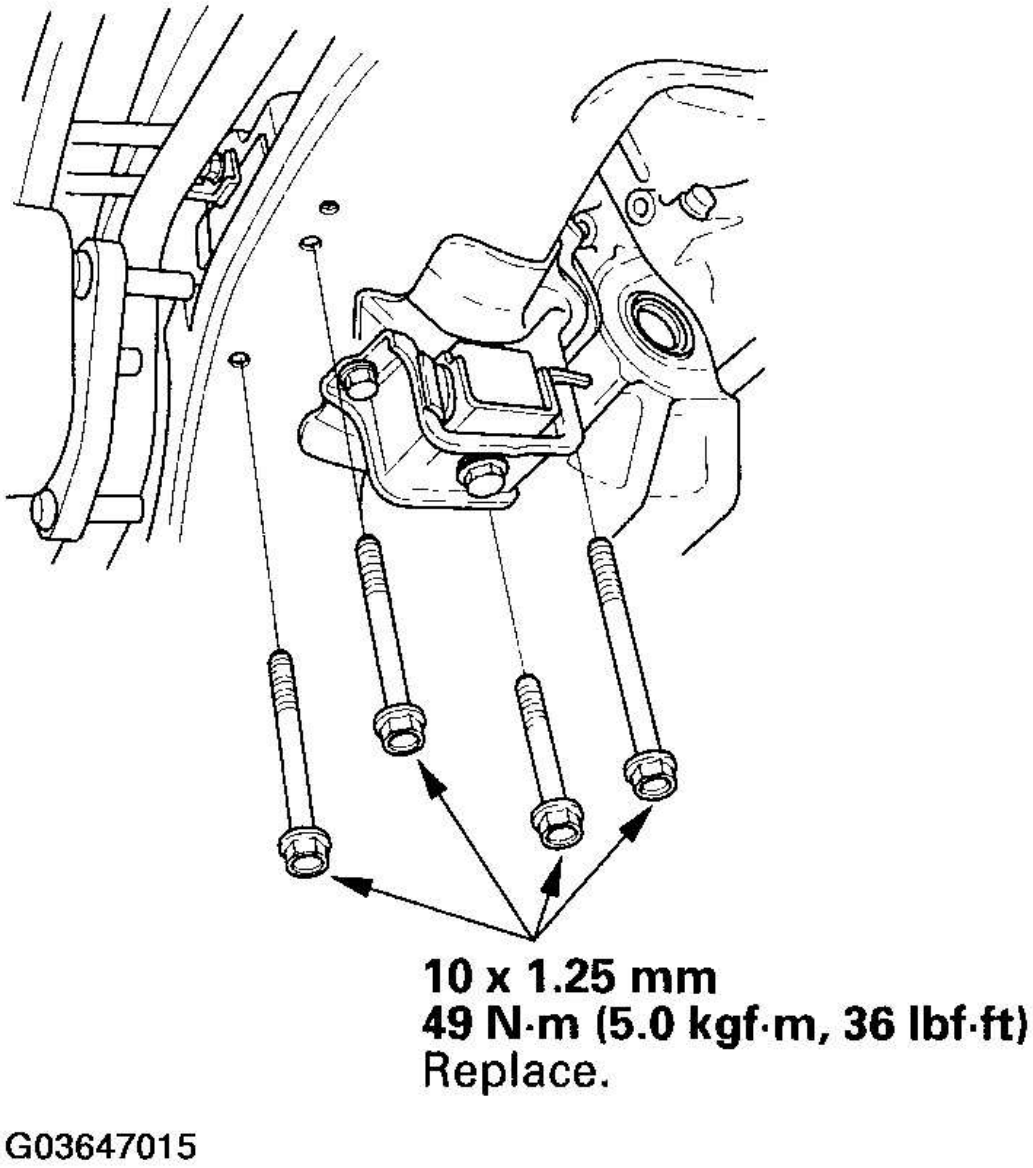


Fig. 46: Installing Engine Lower Rear Mount Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Install the intermediate shaft (see **INTERMEDIATE SHAFT INSTALLATION**).
17. Install the left and right inboard joints (see **DRIVESHAFT**

INSTALLATION).

18. Install the knuckle onto the lower arm (see step 6 on **DRIVESHAFT INSTALLATION**).
19. Install the damper fork (see step 8 on **DRIVESHAFT INSTALLATION**).
20. Connect the front stabilizer links (see step 10 on **DRIVESHAFT INSTALLATION**).
21. Install exhaust pipe A, the mount (B), and new gaskets (C).

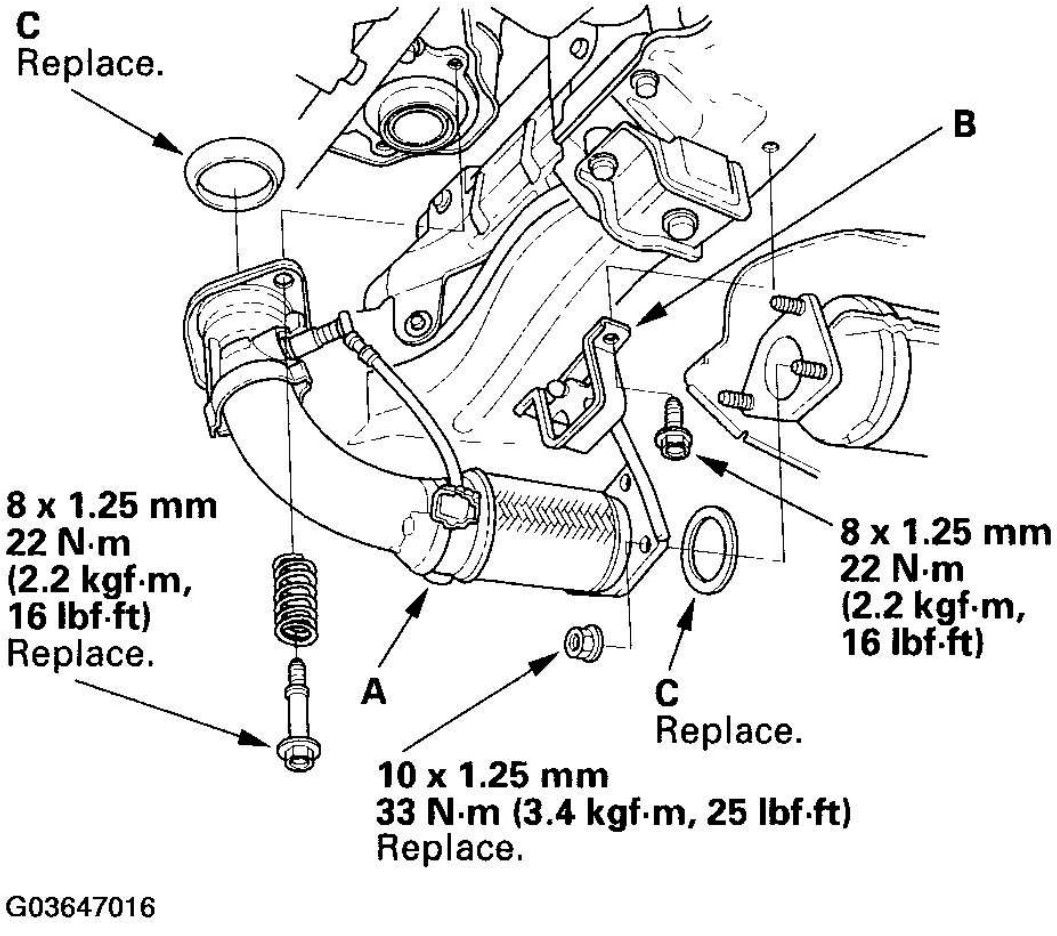
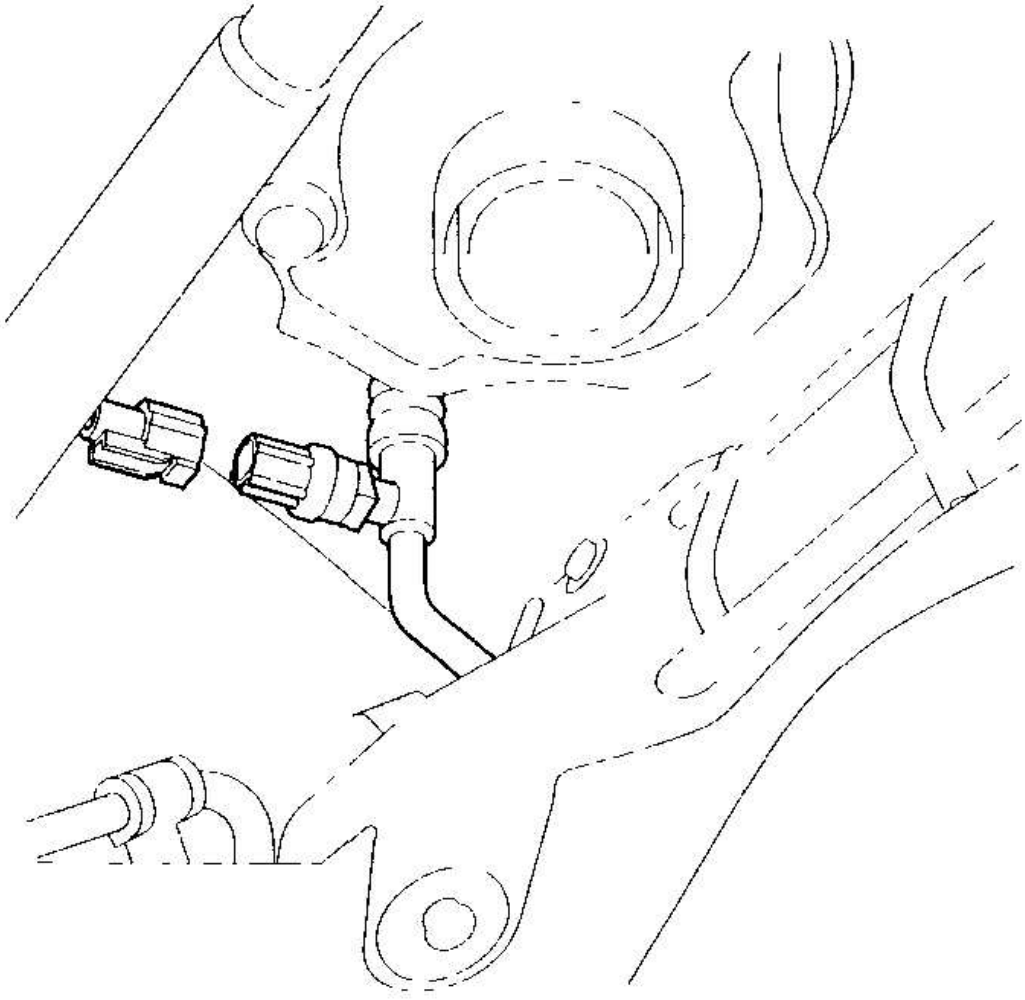


Fig. 47: Installing Exhaust Pipe, Mount And Gasket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Connect the power steering pressure switch connector.



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Fig. 48: Connecting Power Steering Pressure Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Connect the return line to the power steering fluid reservoir.
24. Install the tie-rod ball joint (see step 23 on **STEERING GEARBOX INSTALLATION**).
25. Install the splash shield.

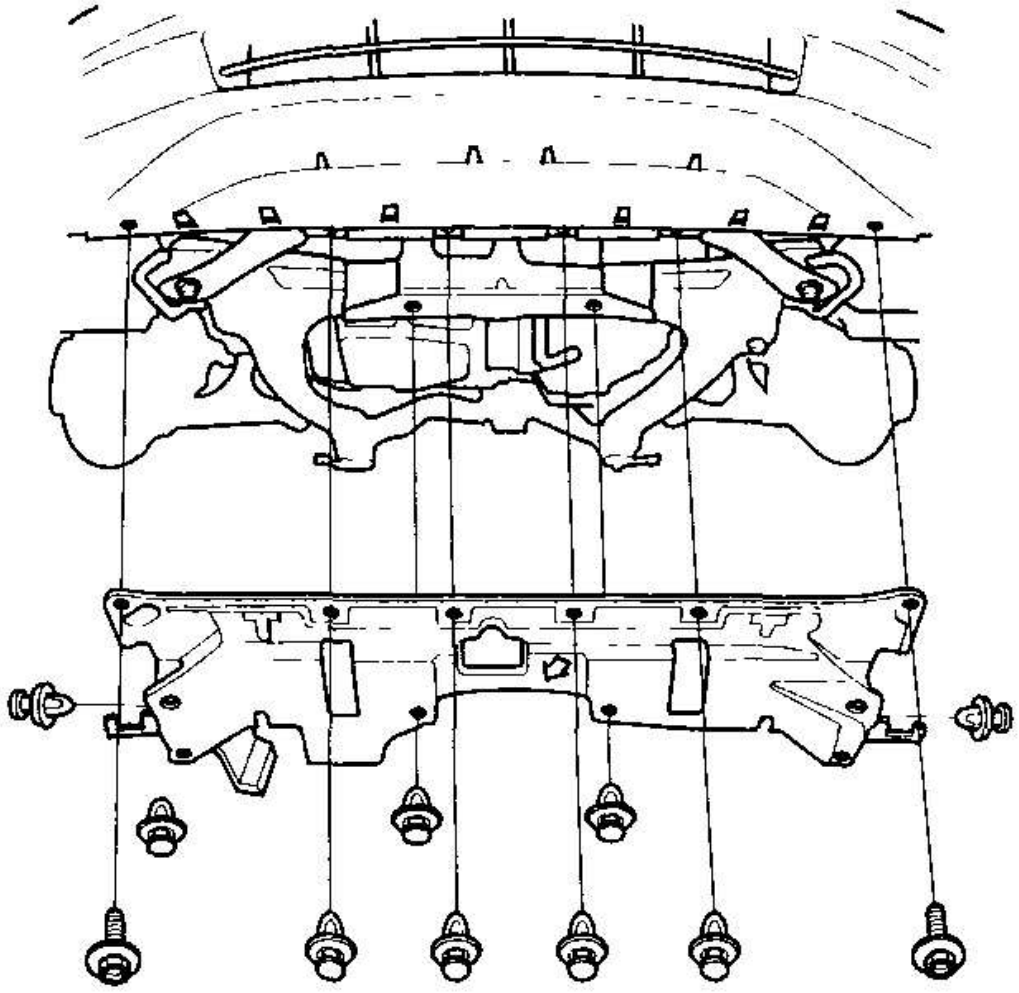


Fig. 49: Installing Splash Shield
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. Refill the transmission with fluid.
27. Install the front wheels, and set them in the straight ahead position.
28. Lower the vehicle.
29. Unlock the steering wheel.

30. Connect the steering joint to the steering gearbox pinion shaft (A) by aligning the reference mark (B), and remove the wire (C) from the joint yoke (D).

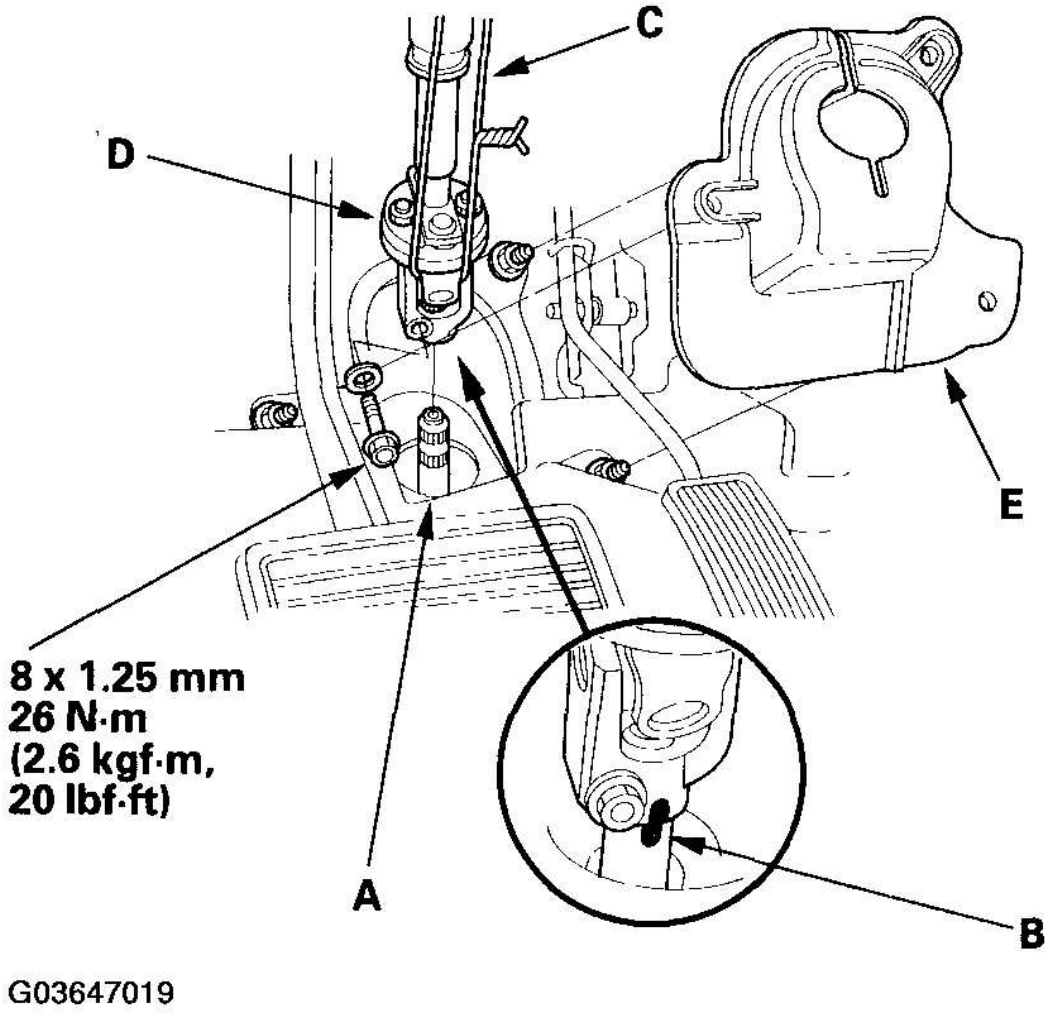


Fig. 50: Connecting Steering Joint To Steering Gearbox Pinion Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

31. Install the steering joint cover (E).
32. Install the transmission mount bracket (A) and ground cable (B).

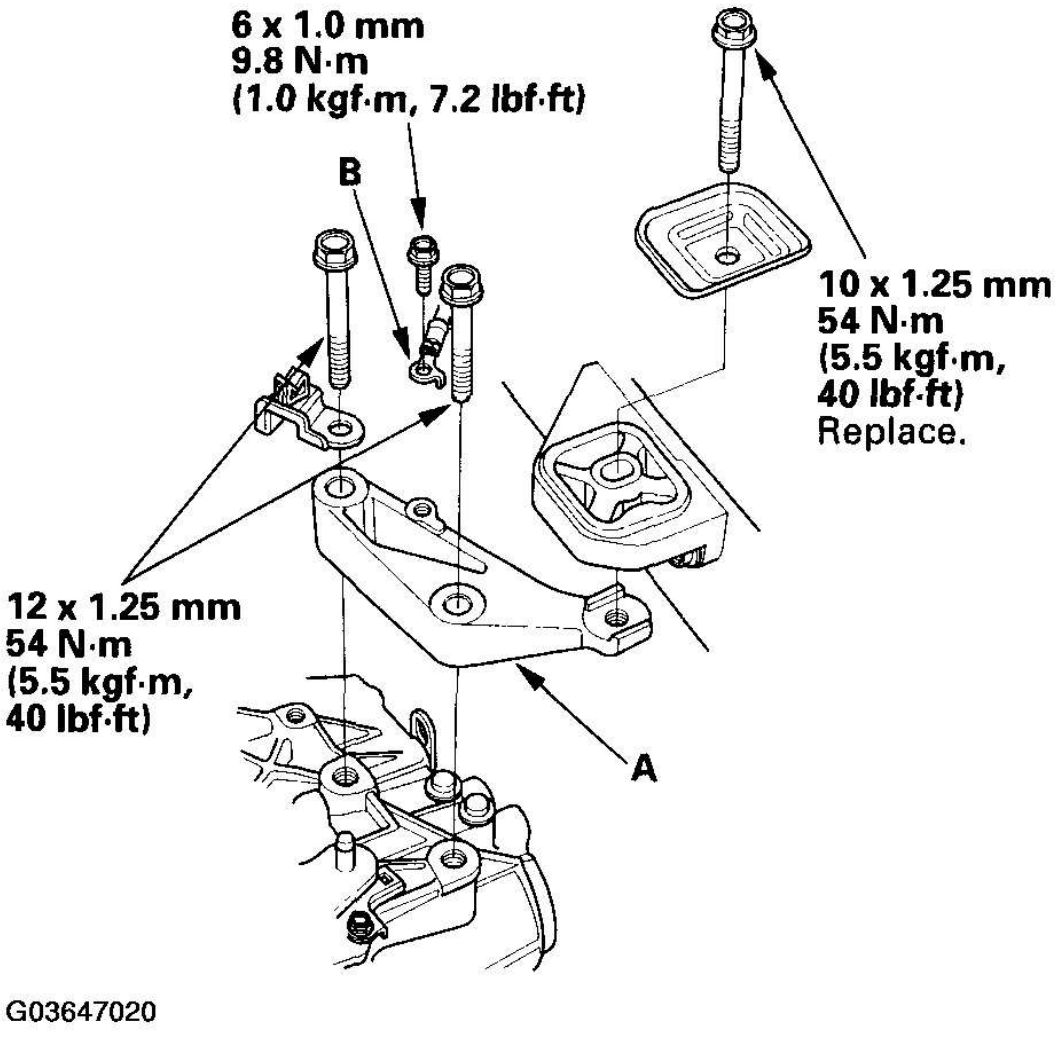


Fig. 51: Installing Transmission Mount Bracket And Ground Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

33. Remove the engine hanger and the special tool from the engine.
34. Install the power steering pump outlet line (A) with a new O-ring (B) to the pump (C), and secure the hose clamp (D) with the bolt.

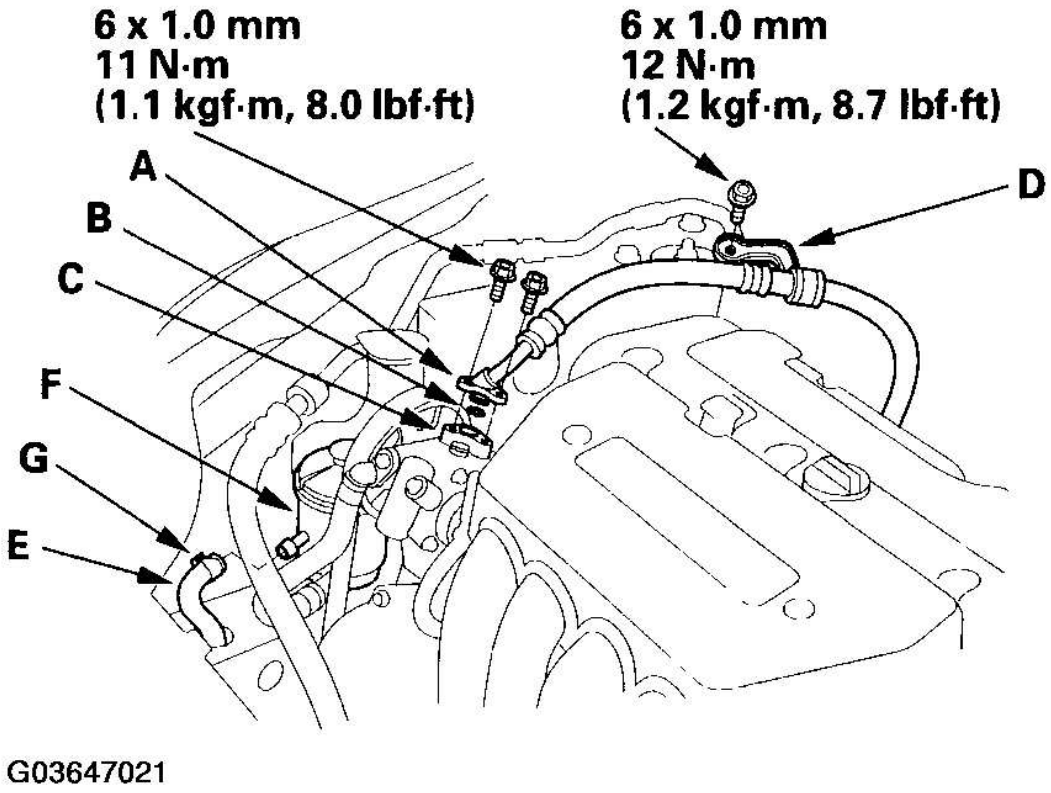


Fig. 52: Installing Power Steering Pump Outlet Line With O-Ring To Pump
Courtesy of AMERICAN HONDA MOTOR CO., INC.

35. Connect the return hose (E) to the power steering fluid reservoir (F), then secure the hose with the clamp (G).
36. Install the transmission upper mounting bolts.

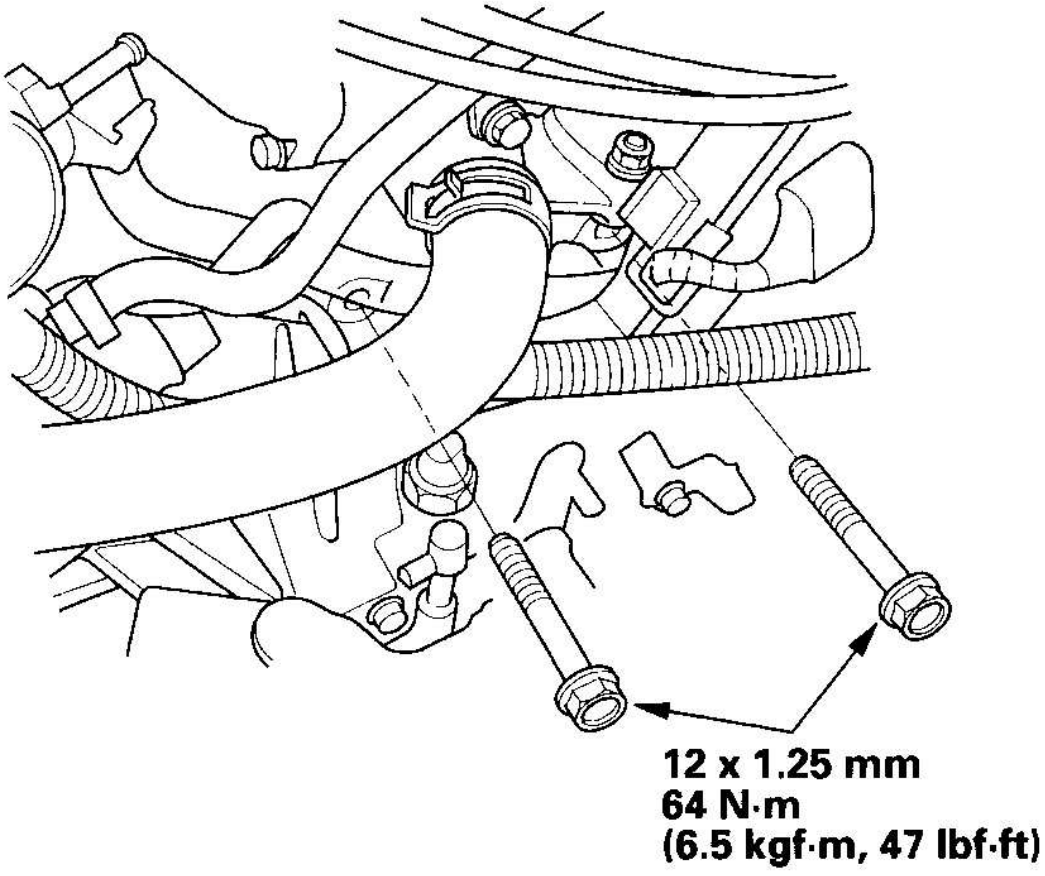


Fig. 53: Installing Transmission Upper Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

37. Install the engine rear mount stop.

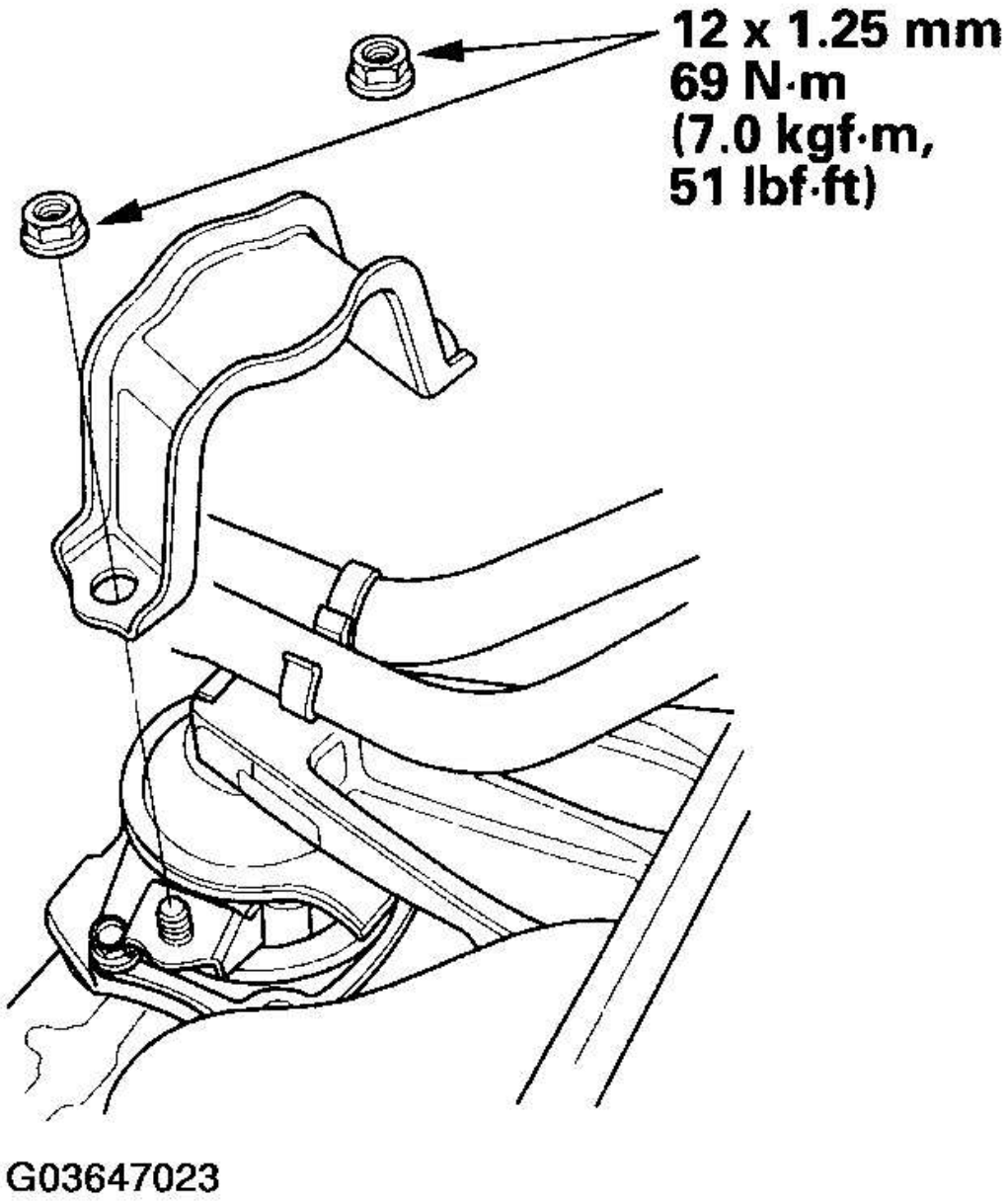


Fig. 54: Installing Engine Rear Mount Stop
Courtesy of AMERICAN HONDA MOTOR CO., INC.

38. Install the engine front mount mounting bolt (A) and front mount stop (B).

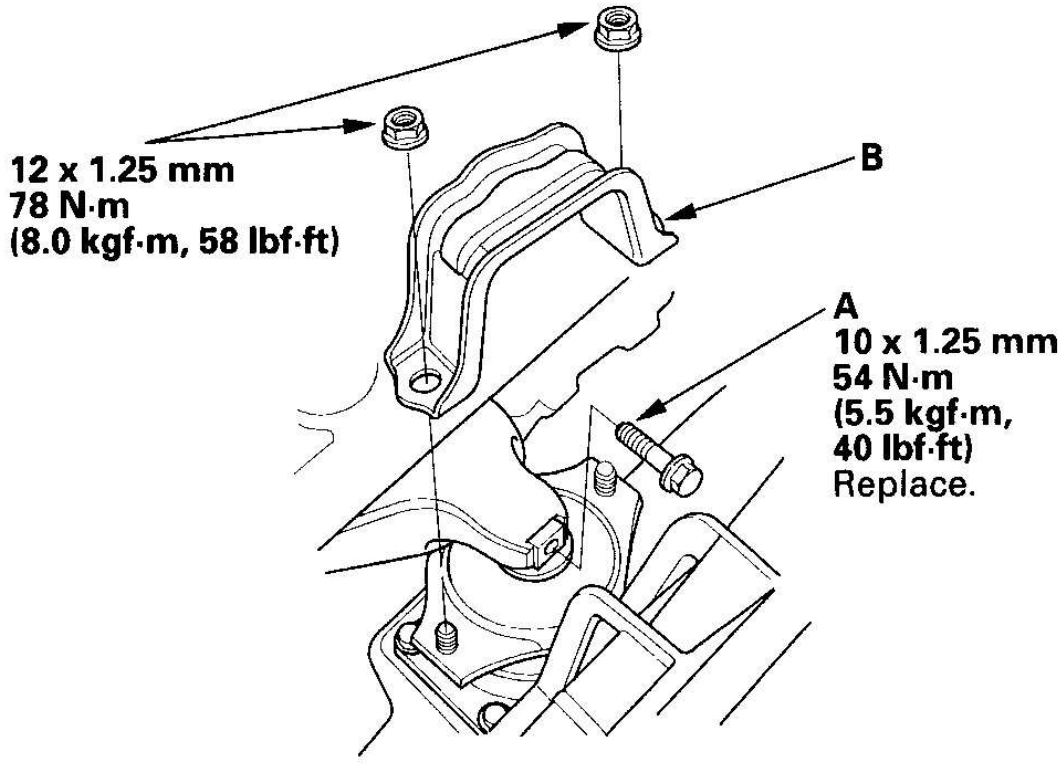


Fig. 55: Installing Engine Front Mount Mounting Bolt And Front Mount Stop
Courtesy of AMERICAN HONDA MOTOR CO., INC.

39. Install the bracket (A), then connect the secondary heated oxygen sensor (secondary HO2S) connector (B).

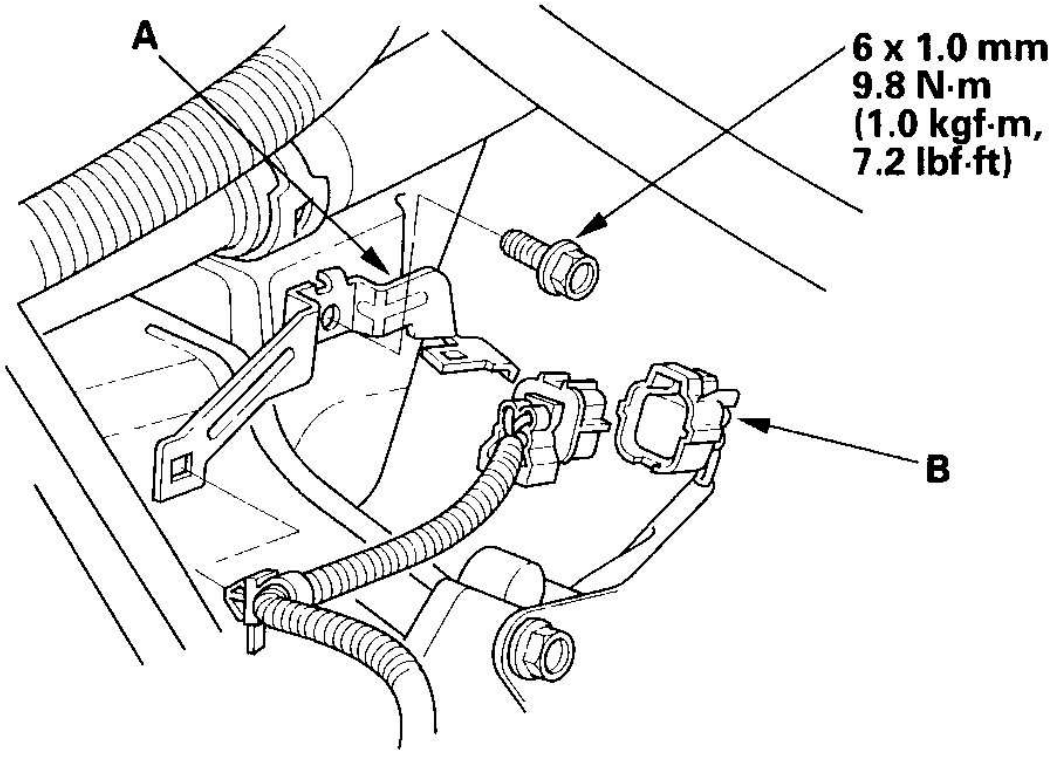


Fig. 56: Connecting Secondary Heated Oxygen Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

40. Connect the back-up light switch connector (A) and output shaft (countershaft) speed sensor connector (B).

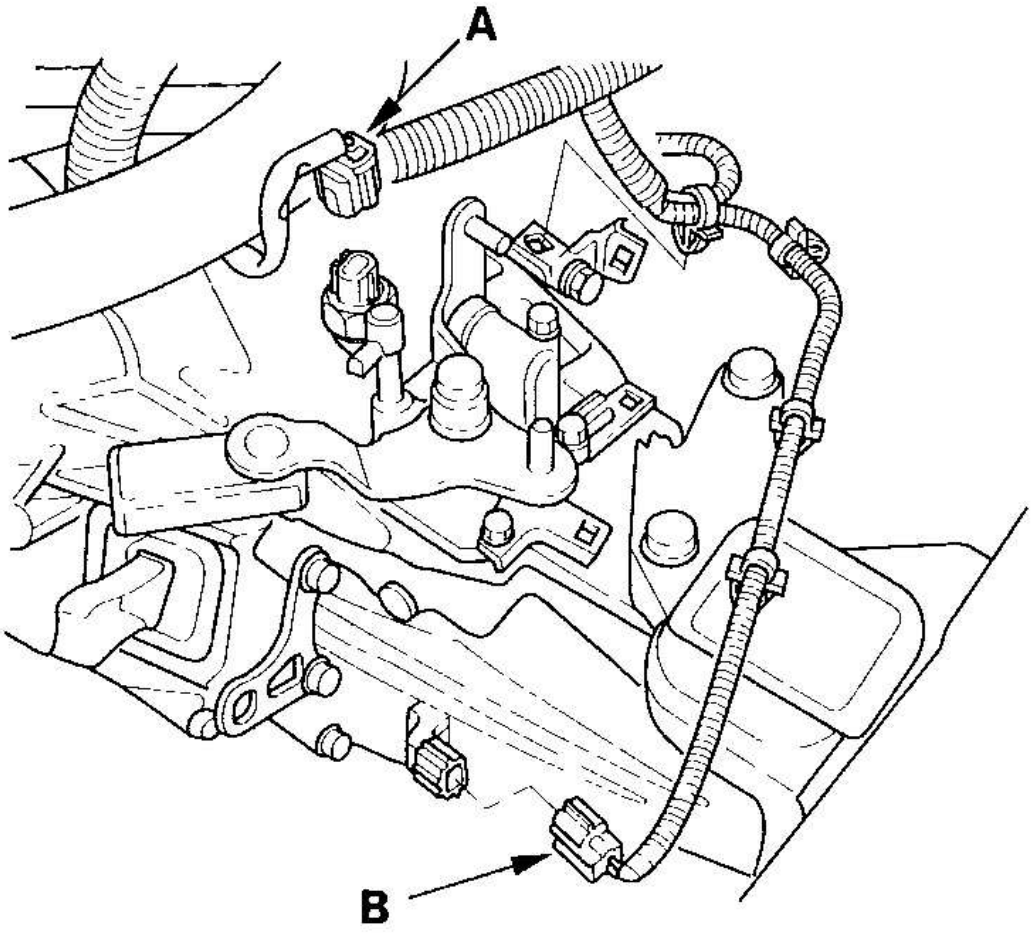


Fig. 57: Connecting Back-Up Light Switch Connector And Output Shaft Speed Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

41. Install the cable bracket (A) and cables (B).

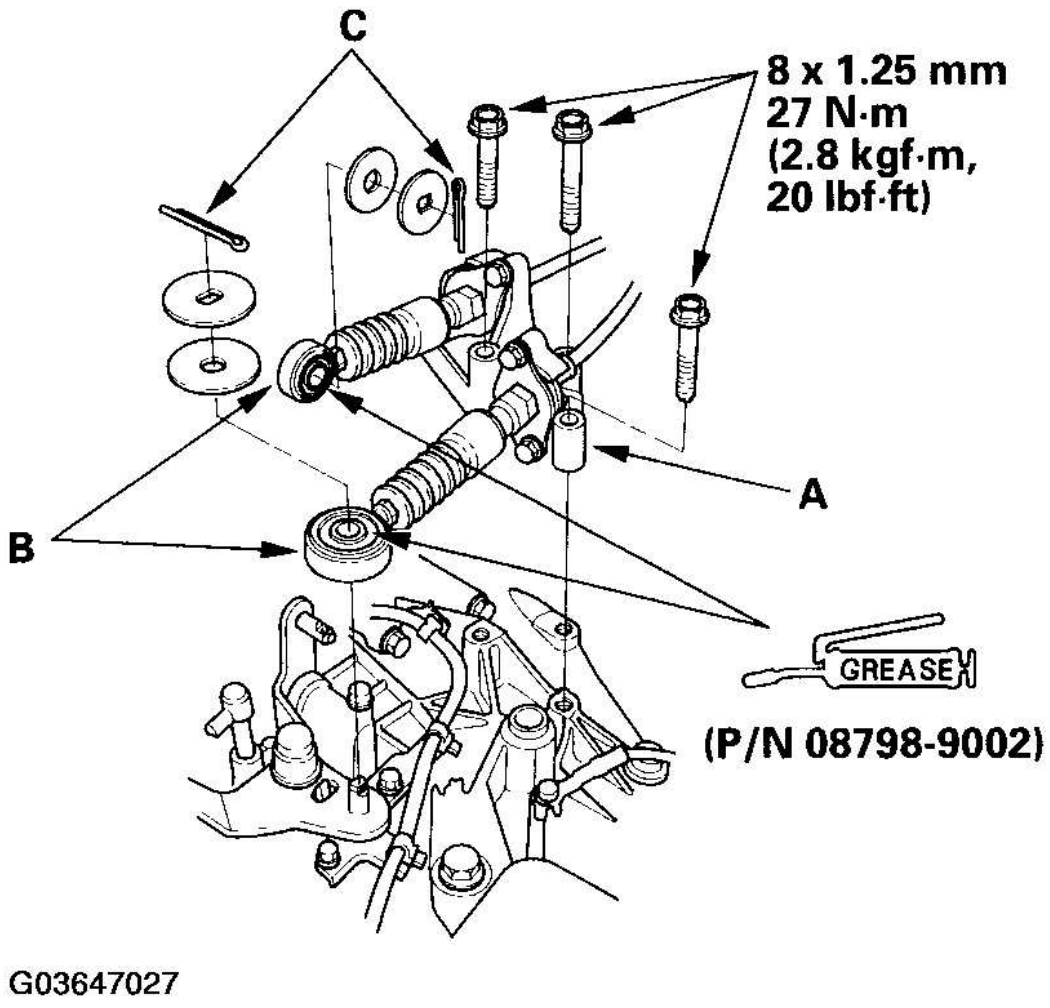


Fig. 58: Installing Cable Bracket And Cables
Courtesy of AMERICAN HONDA MOTOR CO., INC.

42. Apply a light coat of super high temp urea grease (P/N 08798-9002) to the cable ends, and install new cotter pins (C).
43. Apply super high temp urea grease (P/N 08798-9002) to the end of the cylinder rod. Install the slave cylinder. Be careful not to bend the clutch line.

Type A:

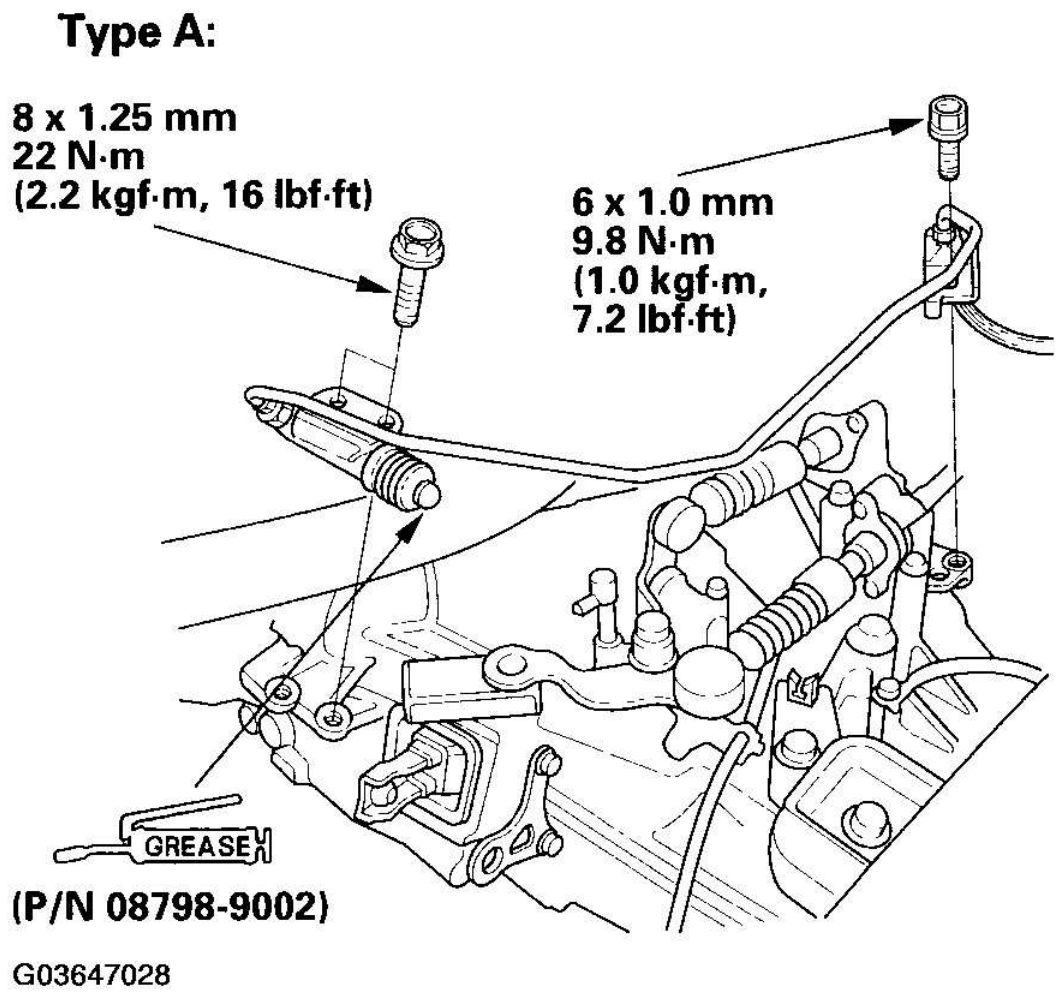


Fig. 59: Installing Slave Cylinder (Type A)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Type B:

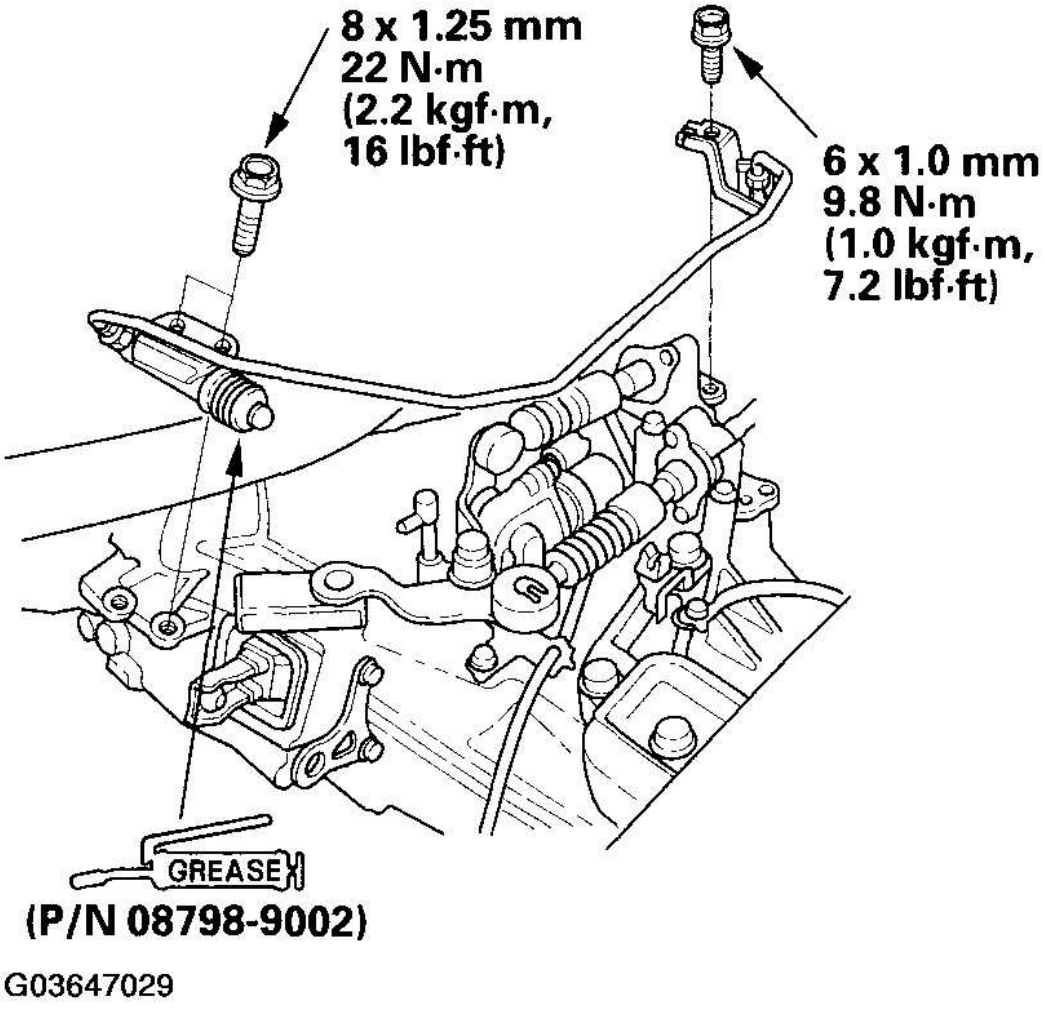


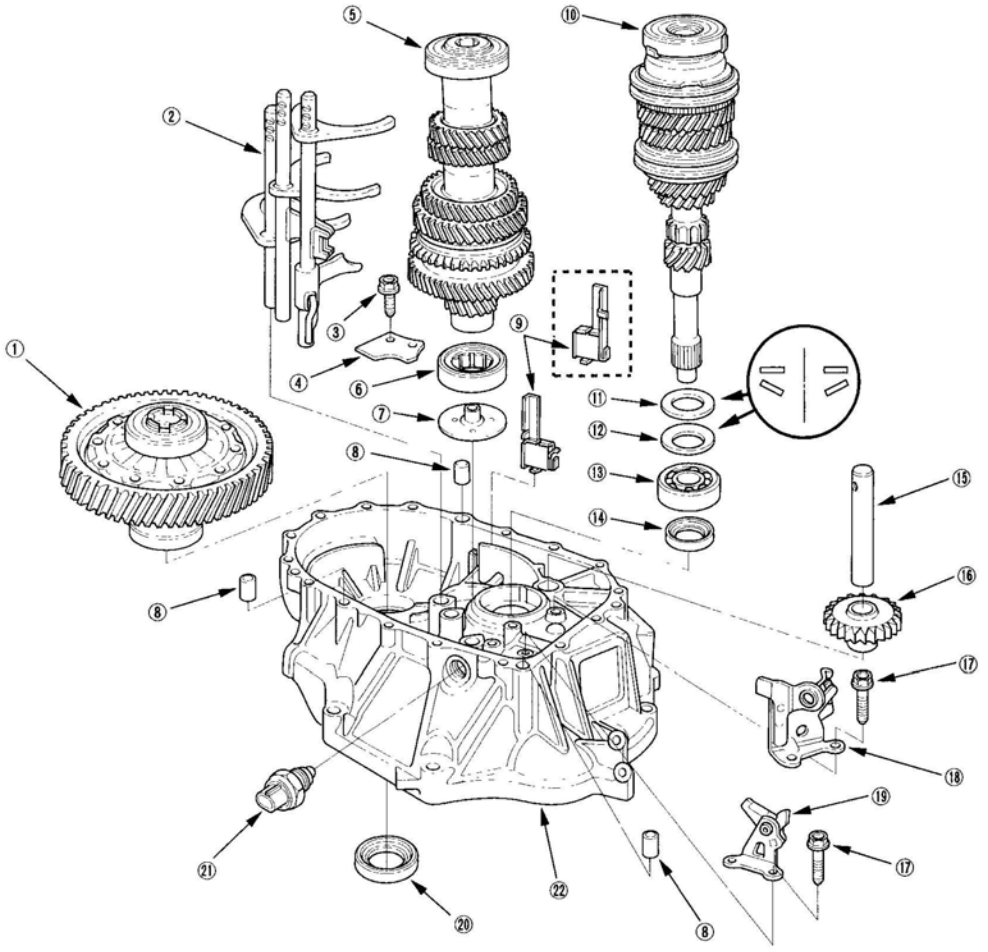
Fig. 60: Installing Slave Cylinder (Type B)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

44. Install the battery base (see step 47 on **ENGINE INSTALLATION**).
45. Install the air cleaner housing (see **AIR CLEANER REMOVAL/INSTALLATION**).
46. Remove the steering wheel (see **STEERING WHEEL REMOVAL**).
47. Center the cable reel by first rotating it clockwise until it stops. Then rotate it counterclockwise (about three full turns) until the arrow mark on the label points straight up.

48. Reinstall the steering wheel (see **STEERING WHEEL INSTALLATION**).
49. Install the battery. Connect the positive cable to the battery first, then connect the negative cable.
50. Fill the power steering fluid reservoir with fluid to the upper level line.
51. Start the engine, and run it at fast idle, then turn the steering wheel from lock-to-lock several times to bleed air from the system.
52. Recheck the fluid level, and refill if necessary.
53. Check the front wheel alignment (see **WHEEL ALIGNMENT**).
54. Check the steering wheel spoke angle. If the steering spoke angles to the right and left are not equal (steering wheel and rack are not centered), correct the engagement of the joint/pinion shaft serrations, then adjust the front toe by turning the tie-rod ends if necessary. If you need to correct the engagement of the joint/pinion shaft, repeat steps 46-48 after disconnecting the battery and waiting 3 minutes.
55. Test-drive the vehicle.
56. Check the clutch operation.
57. Enter the anti-theft code for the radio and navigation system, then enter the customer's audio presets.
58. Do the power window control unit reset procedure (see **RESETTING THE POWER WINDOW CONTROL UNIT**).

TRANSMISSION DISASSEMBLY

EXPLODED VIEW-CLUTCH HOUSING

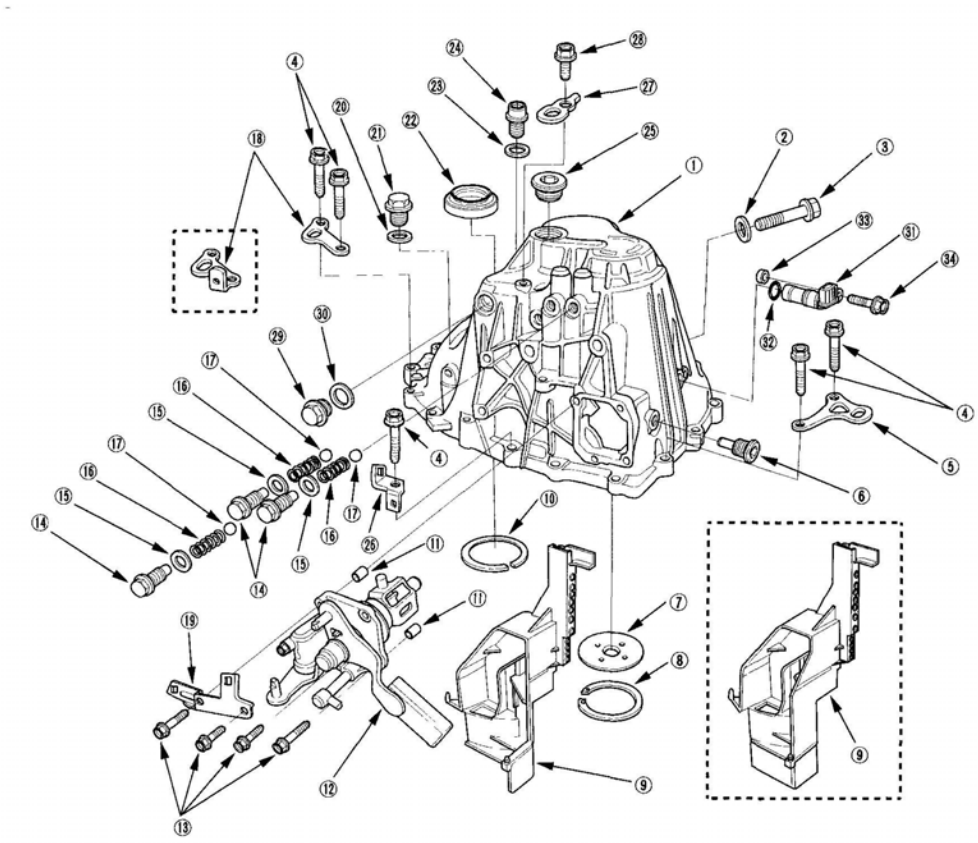


① DIFFERENTIAL ASSEMBLY
② SHIFT FORK ASSEMBLY
③ 6 mm FLANGE BOLT
12 N·m (1.2 kgf·m, 9 lbf·ft)
④ BEARING SET PLATE
⑤ COUNTERSHAFT ASSEMBLY
⑥ NEEDLE BEARING
⑦ OIL GUIDE PLATE C
⑧ 14 x 20 mm DOWEL PIN
⑨ MAGNET
⑩ MAINSHAFT ASSEMBLY
⑪ 28 mm WASHER
⑫ 28 mm SPRING WASHER
⑬ BALL BEARING
⑭ 28 x 43 x 7 mm OIL SEAL
Replace.
⑮ REVERSE GEAR SHAFT
⑯ REVERSE IDLER GEAR
⑰ 6 mm SPECIAL BOLT
15 N·m (1.5 kgf·m, 11 lbf·ft)
⑱ REVERSE SHIFT FORK ASSEMBLY
⑲ REVERSE LOCK CAM
⑳ 35 x 58 x 8 mm OIL SEAL
Replace.
㉑ BACK-UP LIGHT SWITCH
29 N·m (3.0 kgf·m, 22 lbf·ft)
㉒ CLUTCH HOUSING

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Fig. 61: Exploded View Of Clutch Housing Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EXPLODED VIEW-TRANSMISSION HOUSING



① TRANSMISSION HOUSING
② 10 mm WASHER
Replace.
③ 10 mm FLANGE BOLT
44 N·m (4.5 kgf·m, 33 lbf·ft)
④ 8 mm FLANGE BOLT
27 N·m (2.8 kgf·m, 20 lbf·ft)
⑤ TRANSMISSION HANGER A
⑥ INTERLOCK BOLT
39 N·m (4.0 kgf·m, 29 lbf·ft)
⑦ OIL GUIDE PLATE M
⑧ 72 mm SHIM
⑨ OIL GUTTER PLATE
⑩ 80 mm SHIM
⑪ 8 x 14 mm DOWEL PIN
⑫ CHANGE LEVER ASSEMBLY
⑬ 6 mm FLANGE BOLT
12 N·m (1.2 kgf·m, 9 lbf·ft)
⑭ DETENT BOLT
22 N·m (2.2 kgf·m, 16 lbf·ft)
⑮ 12 mm WASHER
Replace.
⑯ SPRING
⑰ STEEL BALL
⑱ TRANSMISSION HANGER B
⑲ HARNESS BRACKET A
⑳ 20 mm WASHER
Replace.
㉑ FILLER PLUG
44 N·m (4.5 kgf·m, 33 lbf·ft)
㉒ 40 x 56 x 8 mm OIL SEAL
Replace.
㉓ 14 mm WASHER
Replace.
㉔ DRAIN PLUG
39 N·m (4.0 kgf·m, 29 lbf·ft)
㉕ 32 mm SEALING CAP
34 N·m (3.5 kgf·m, 25 lbf·ft)
㉖ HARNESS BRACKET B
㉗ TRANSMISSION HANGER
㉘ 10 mm FLANGE BOLT
44 N·m (4.5 kgf·m, 33 lbf·ft)
㉙ 20 mm BOLT
44 N·m (4.5 kgf·m, 33 lbf·ft)
㉚ 20 mm WASHER
Replace.
㉛ OUTPUT SHAFT (COUNTERSHAFT)
SPEED SENSOR
㉜ O-RING
Replace.
㉝ PLAIN WASHER
㉞ 6 mm FLANGE BOLT
12 N·m (1.2 kgf·m, 9 lbf·ft)

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Fig. 62: Exploded View Of Transmission Housing Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NOTE: Place the clutch housing on two pieces of wood thick enough to keep the mainshaft from hitting the workbench.

1. Remove the detent bolts (A), springs, steel balls, and back-up light switch (B).

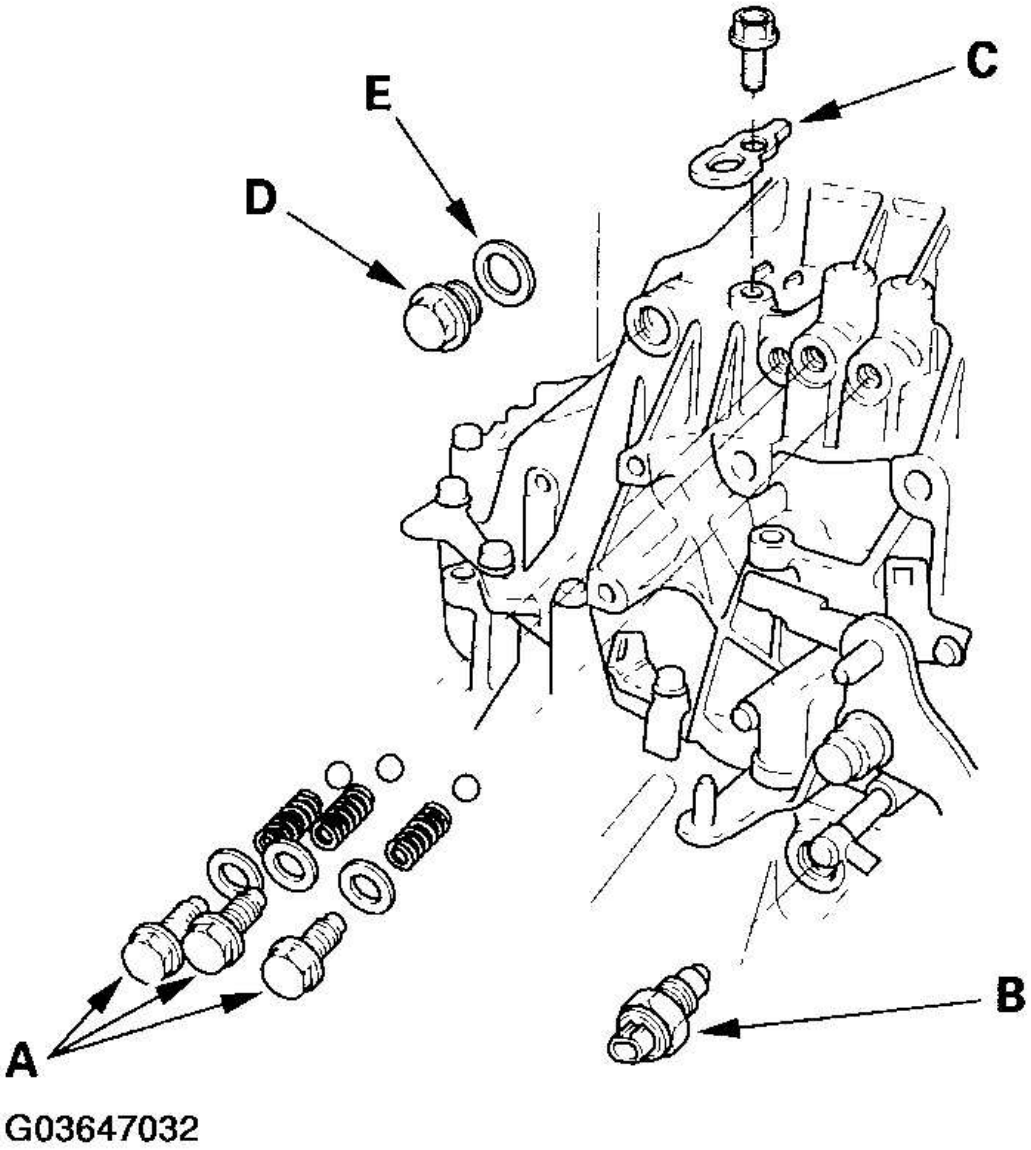


Fig. 63: Removing Detent Bolts, Springs, Steel Balls, And Back-Up Light Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the transmission hanger (C), 20 mm bolt (D), and 20 mm washer (E).

3. Remove the interlock bolt (B), change lever assembly (C), 8 x 14 mm dowel pins (D), and harness bracket A.

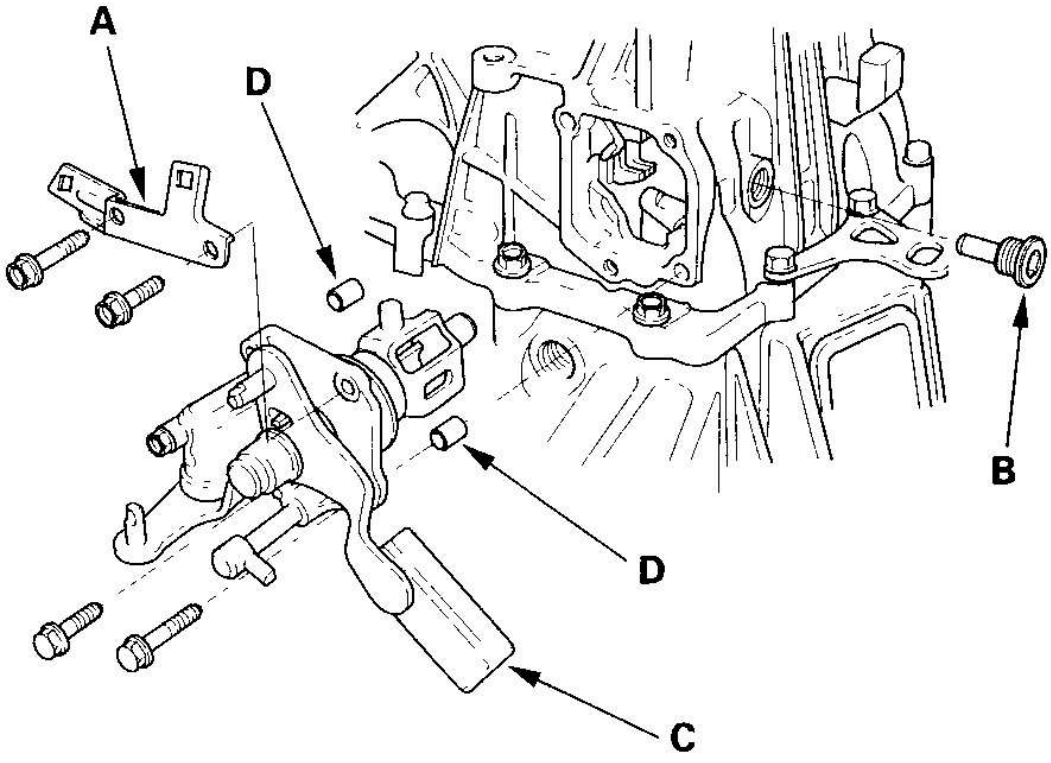


Fig. 64: Removing Interlock Bolt, Change Lever Assembly And Harness Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the drain plug (A), filler plug (B), and 10 mm flange bolt(C).

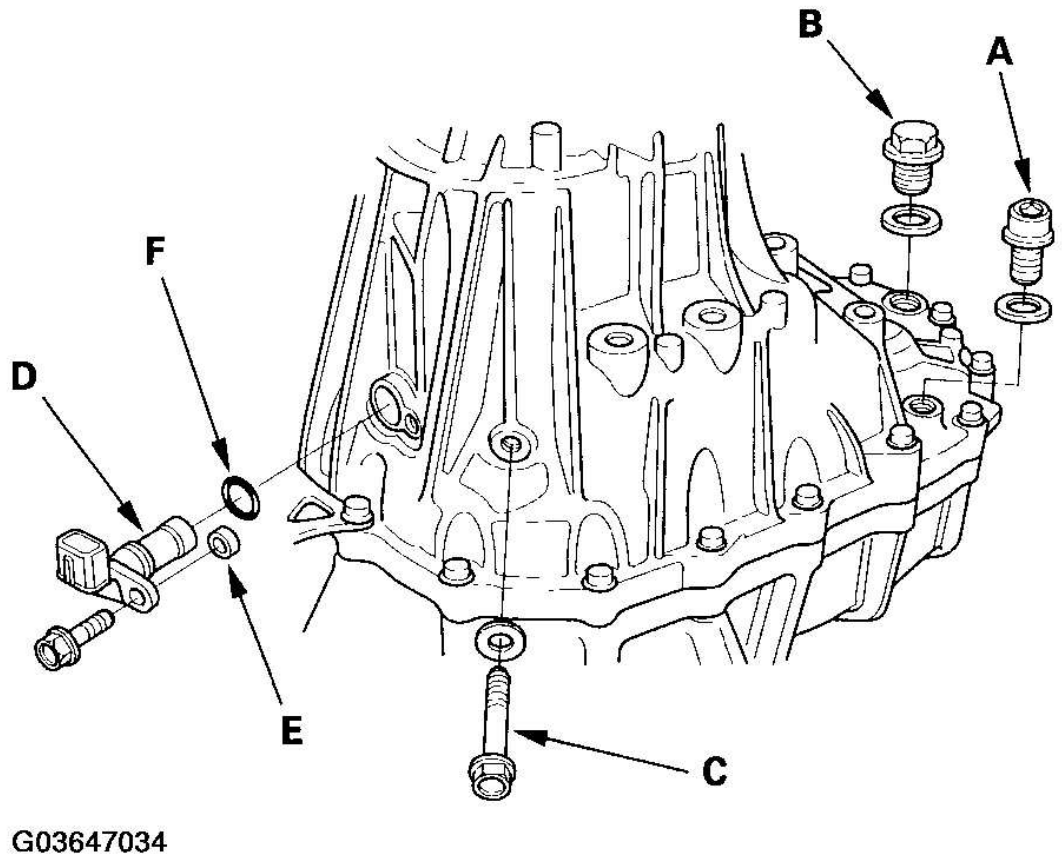


Fig. 65: Removing Drain Plug And Filler Plug
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the output shaft (countershaft) speed sensor (D), plain washer (E), and O-ring (F).
6. Loosen the 8 mm flange bolts in a crisscross pattern in several steps, then remove them.
7. Remove the transmission hanger A, transmission hanger B, and harness bracket B (C).

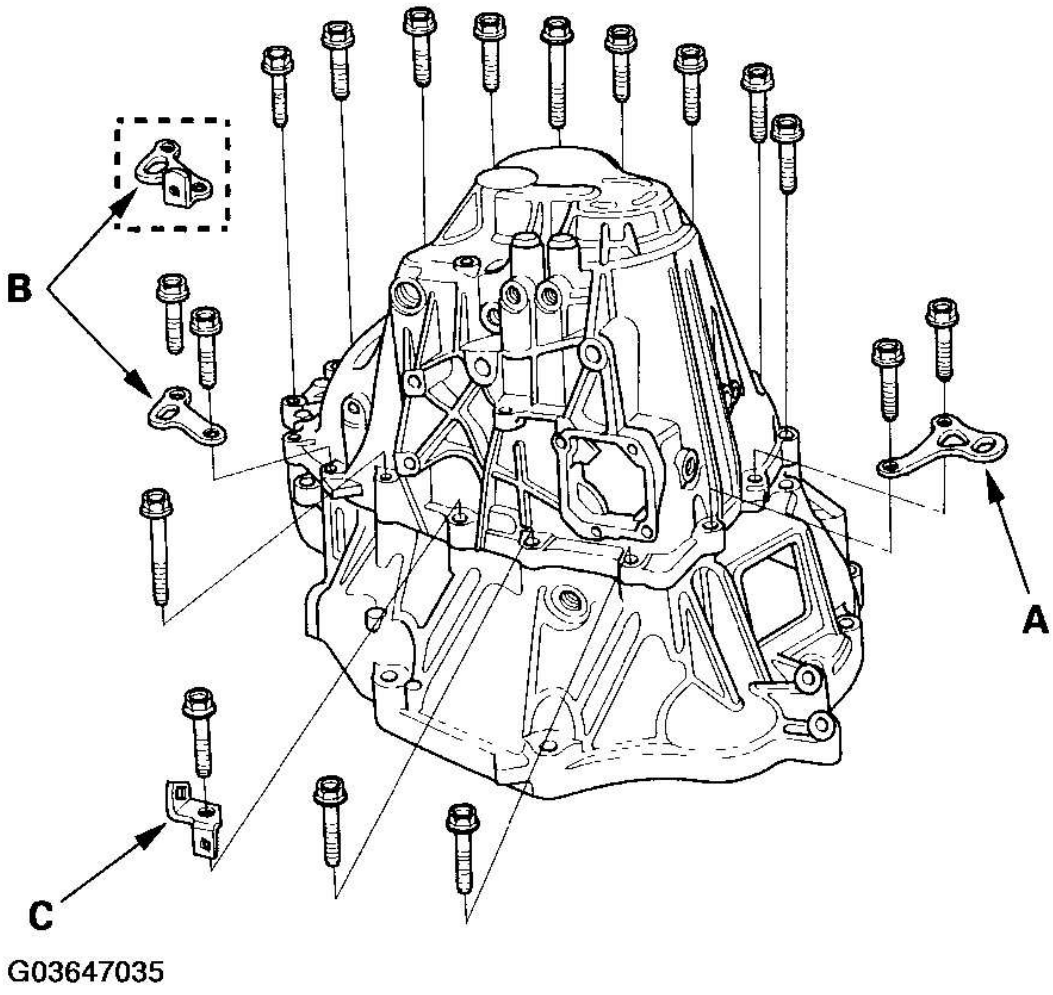


Fig. 66: Removing Transmission Hangers And Harness Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the 32 mm sealing cap (A).

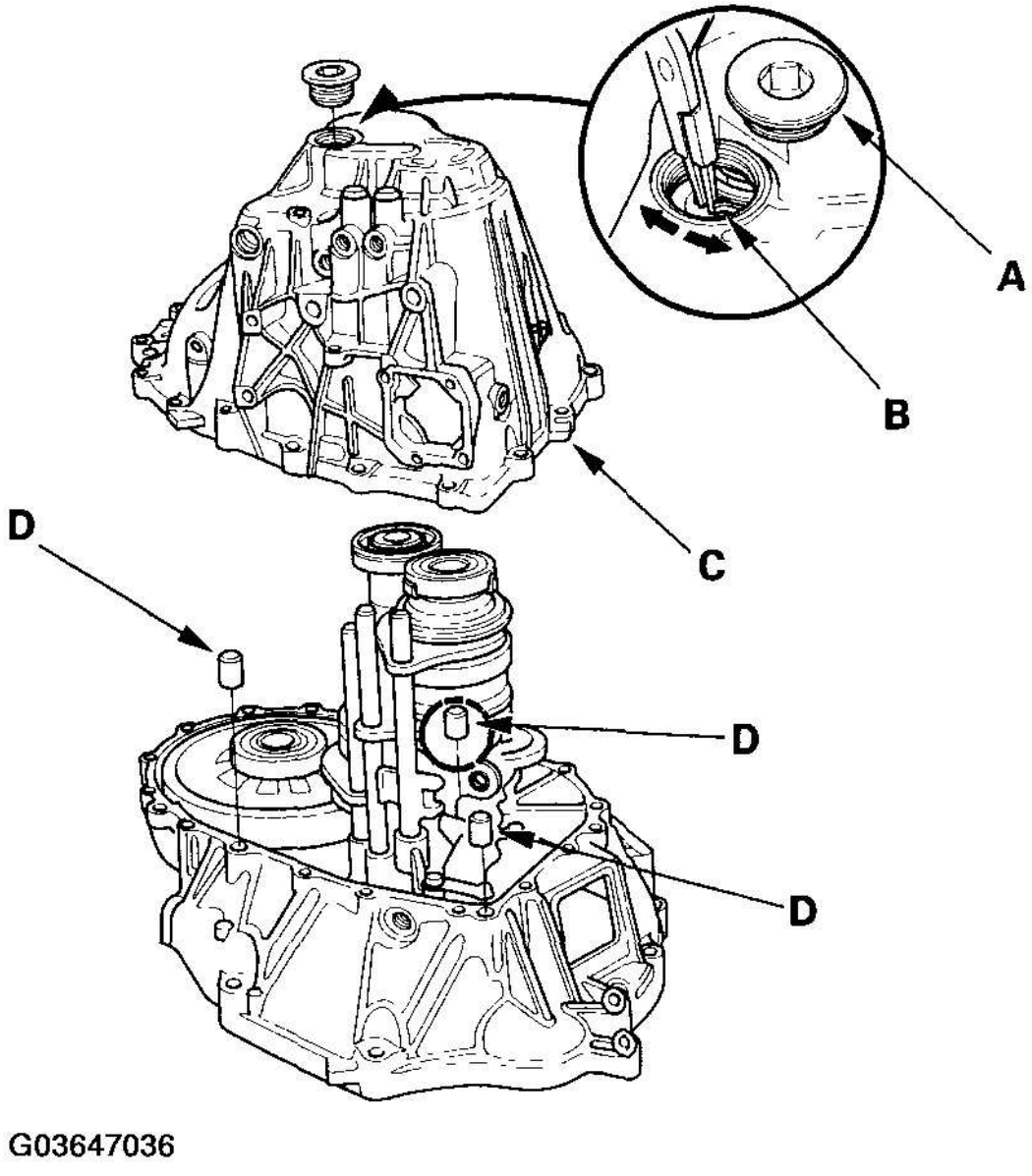
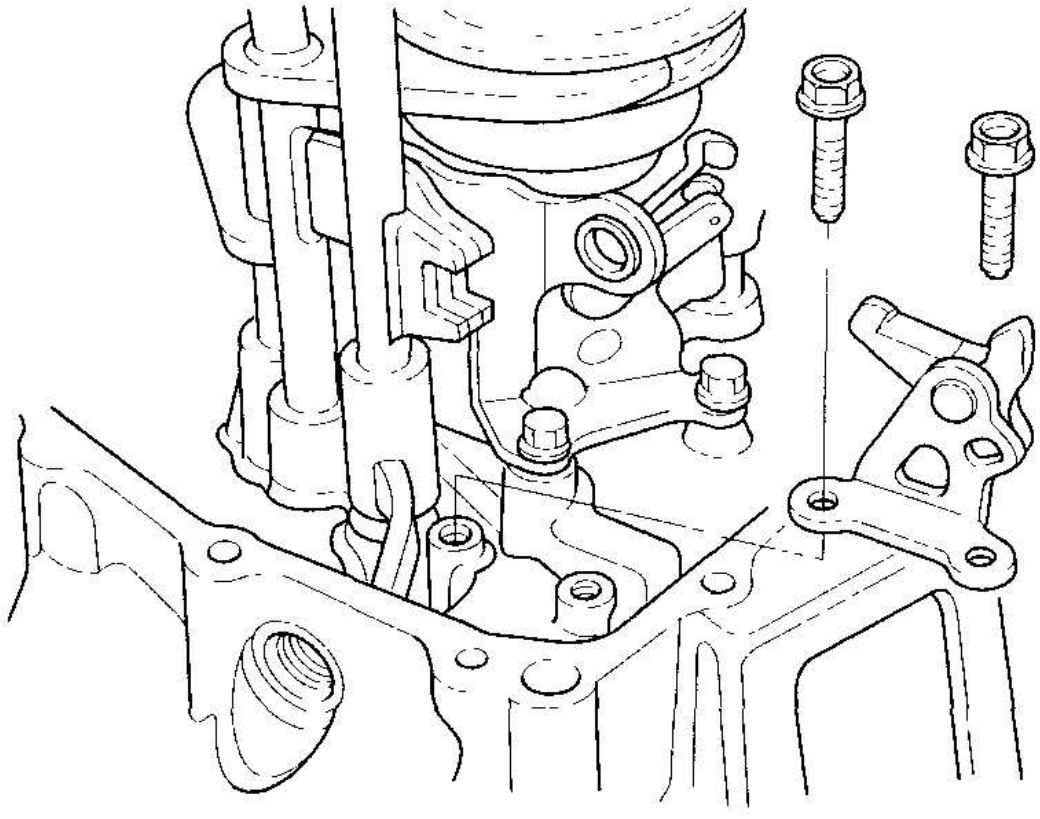


Fig. 67: Removing Sealing Cap
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. While expanding the 72 mm snap ring (B) of the countershaft ball bearing with snap ring pliers, lift the transmission housing (C). Release the snap ring pliers, and remove the transmission housing and 14 x 20 mm dowel pins (D).
10. Remove the reverse lock cam.



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Fig. 68: Removing Reverse Lock Cam
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the reverse idler gear (A) and reverse gear shaft (B).

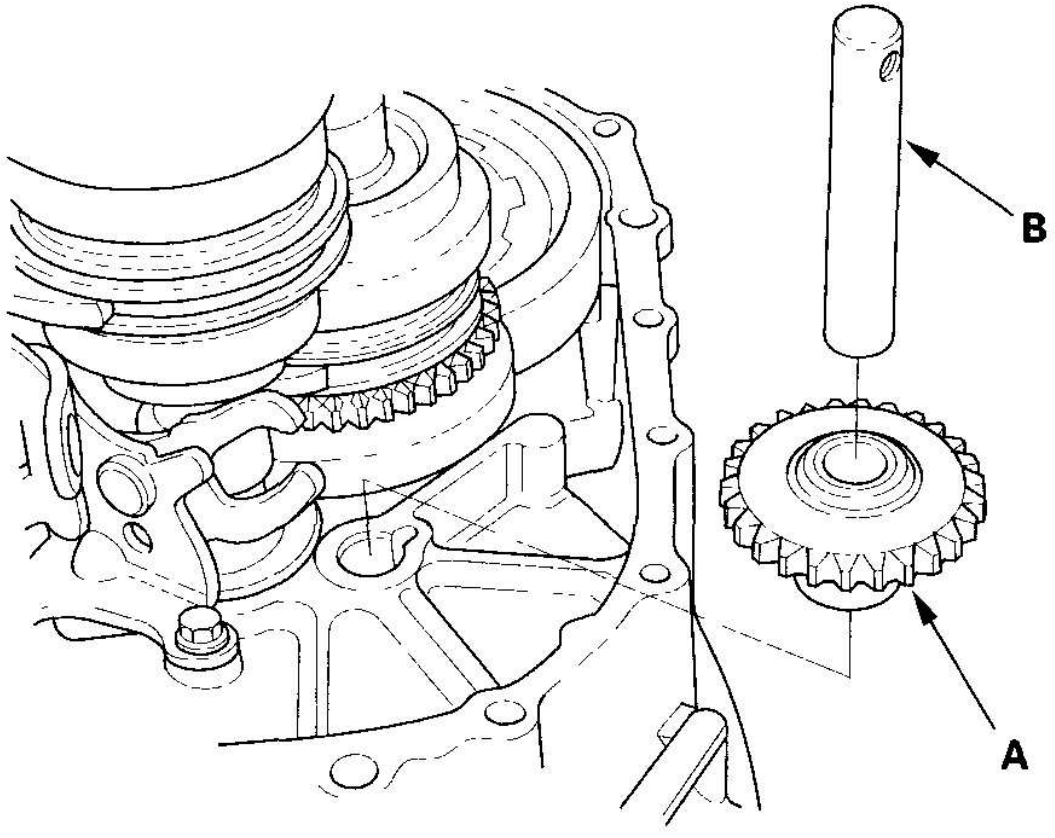


Fig. 69: Removing Reverse Idler Gear And Reverse Gear Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the reverse shift fork.

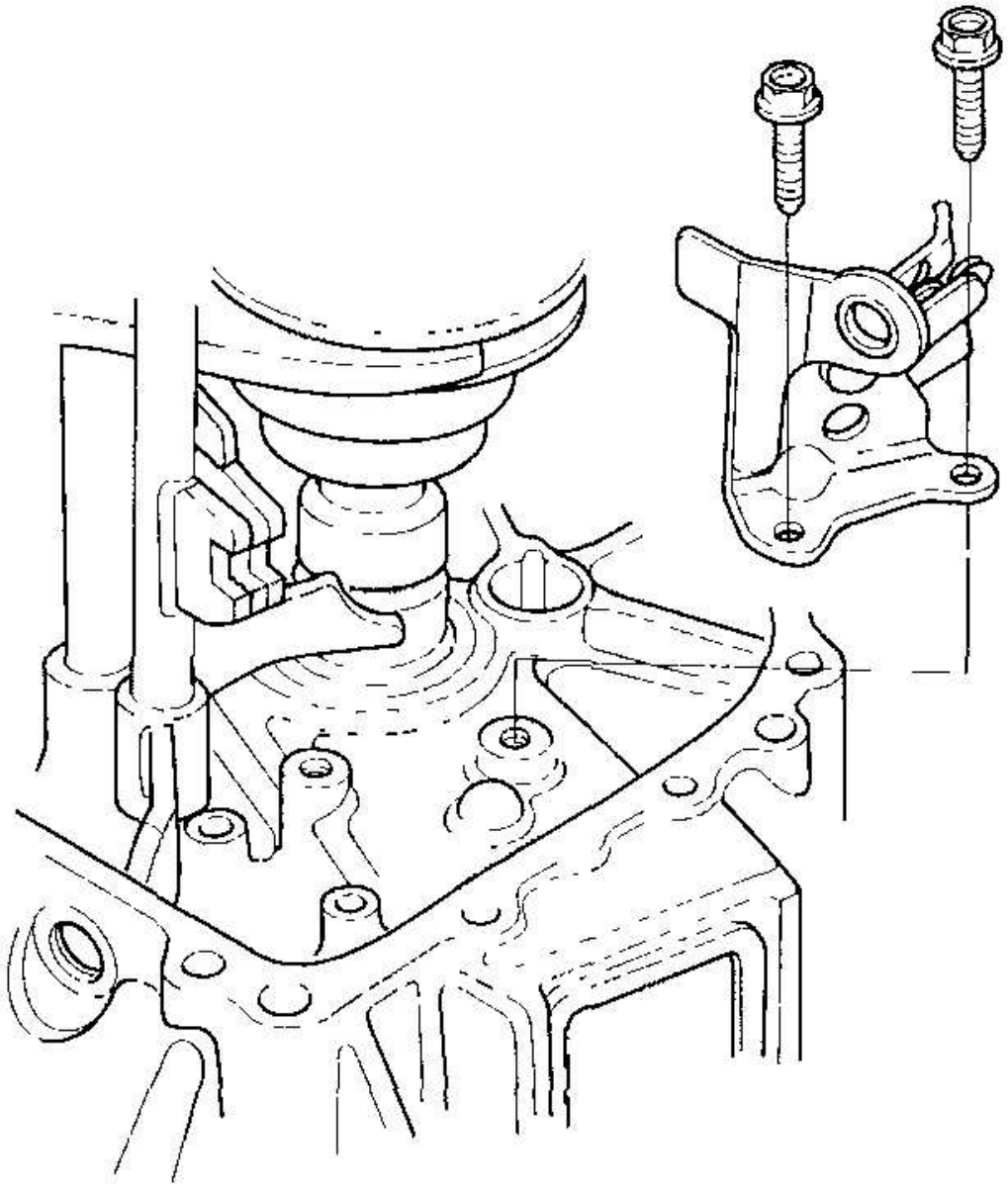


Fig. 70: Removing Reverse Shift Fork
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Apply tape to the mainshaft splines to protect the seal, then remove the

mainshaft assembly (A) and the countershaft assembly (B) with the shift forks (C) from the clutch housing (D).

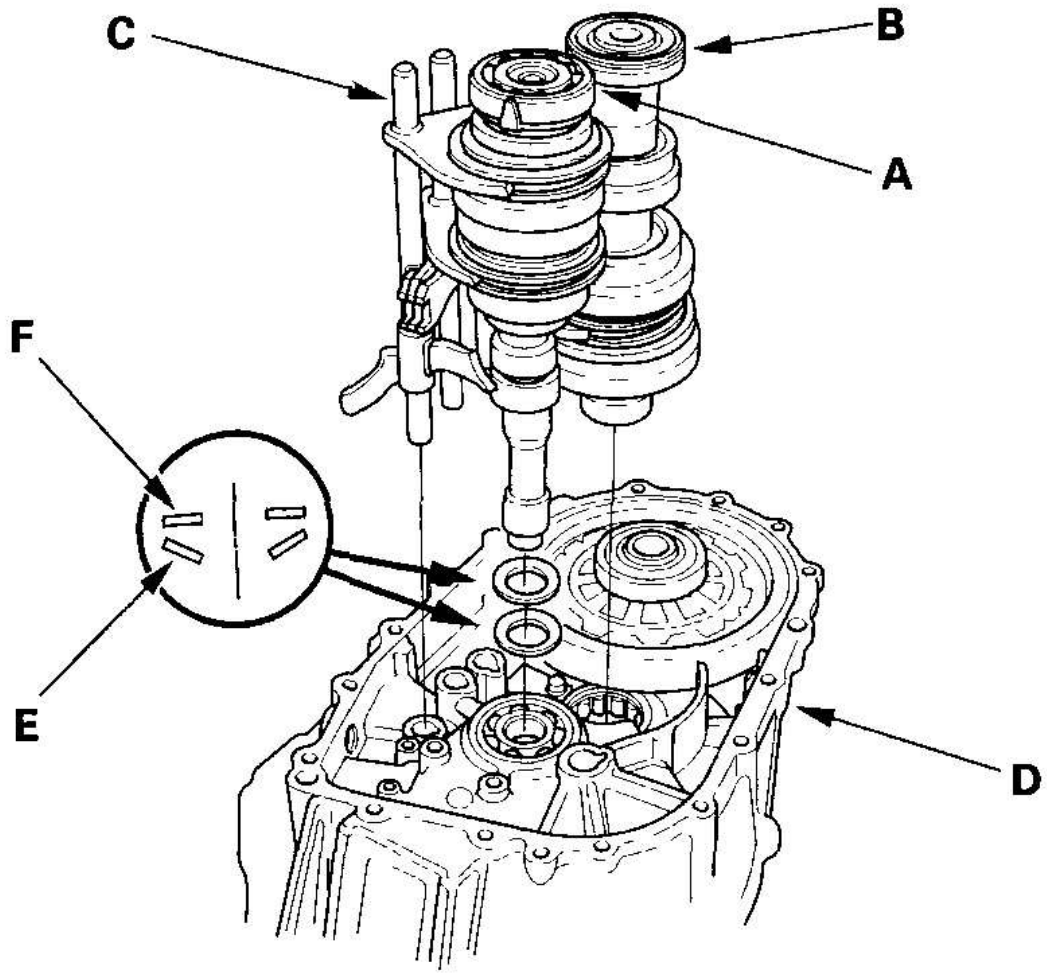


Fig. 71: Removing Spring Washer And Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Remove the 28 mm spring washer (E) and the 28 mm washer (F).
15. Remove the differential assembly (A) and magnet (B).

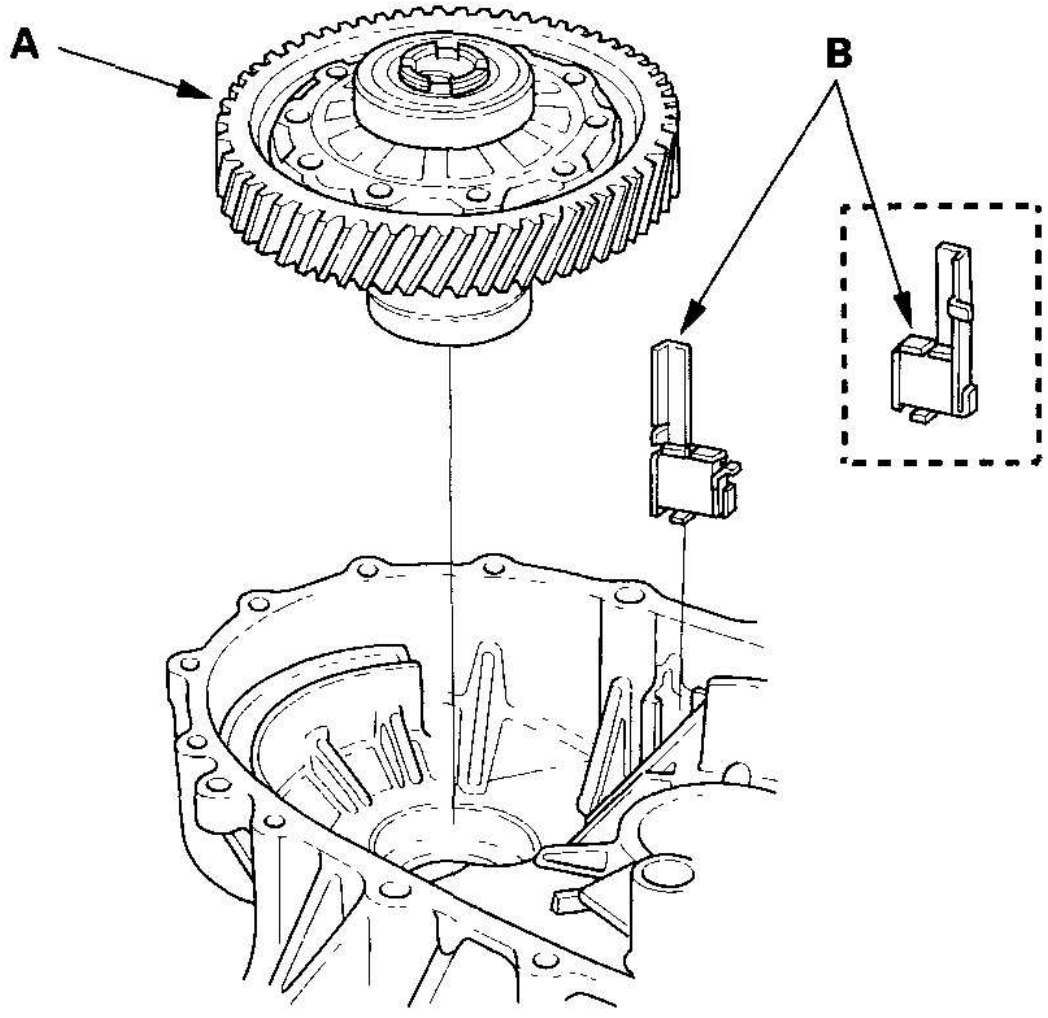
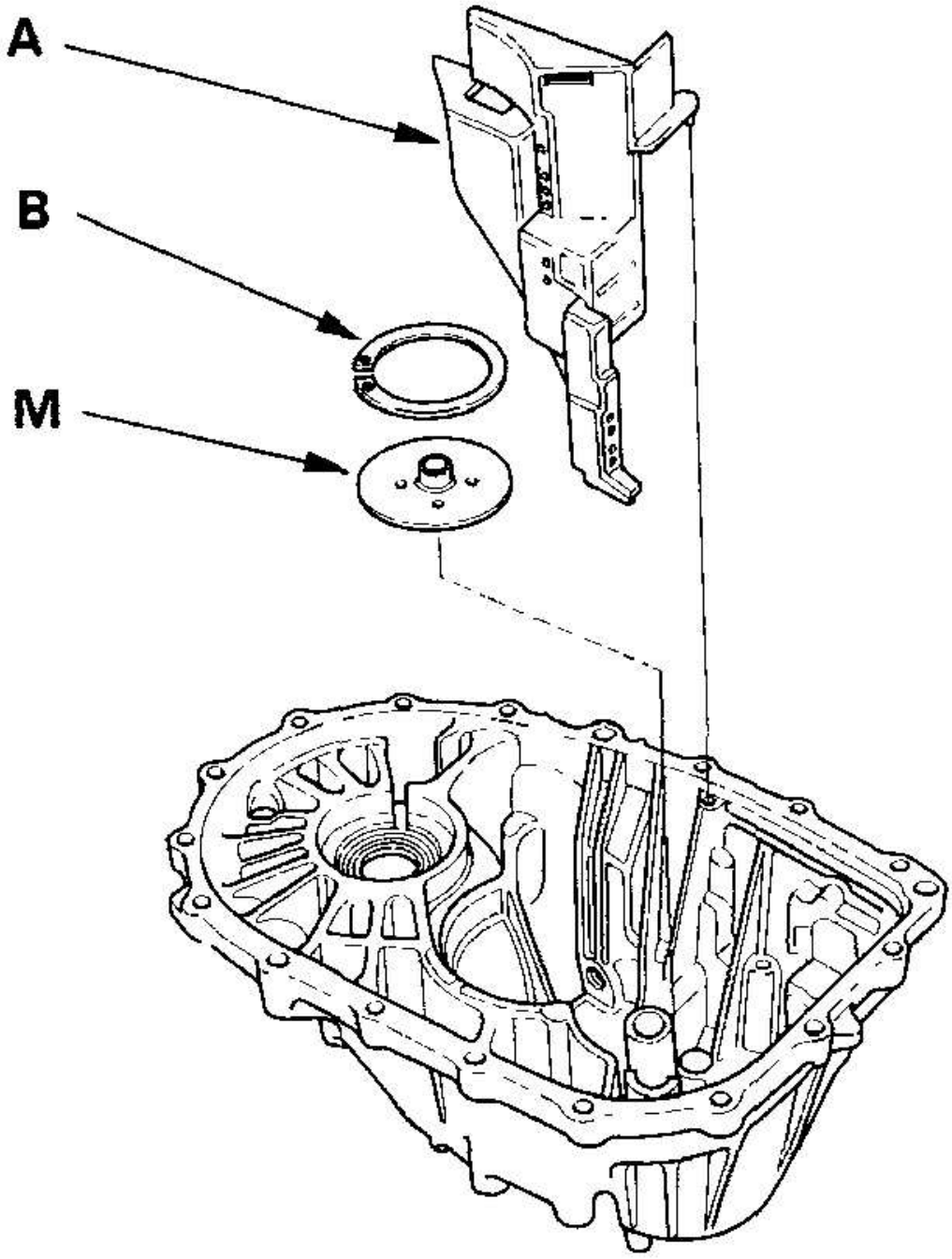


Fig. 72: Removing Differential Assembly And Magnet
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Remove the oil gutter plate (A), 72 mm shim (B), and oil guide plate M.



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Fig. 73: Removing Oil Gutter Plate And Oil Guide Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REVERSE SHIFT FORK CLEARANCE INSPECTION

1. Measure the clearance between the reverse idler gear (A) and the reverse shift fork (B) with a feeler gauge (C). If the clearance is more than the service limit, go to step 2.

   Standard: 0.20-0.59 mm (0.007-0.024 in.)

   Service Limit: 1.2 mm (0.047 in.)

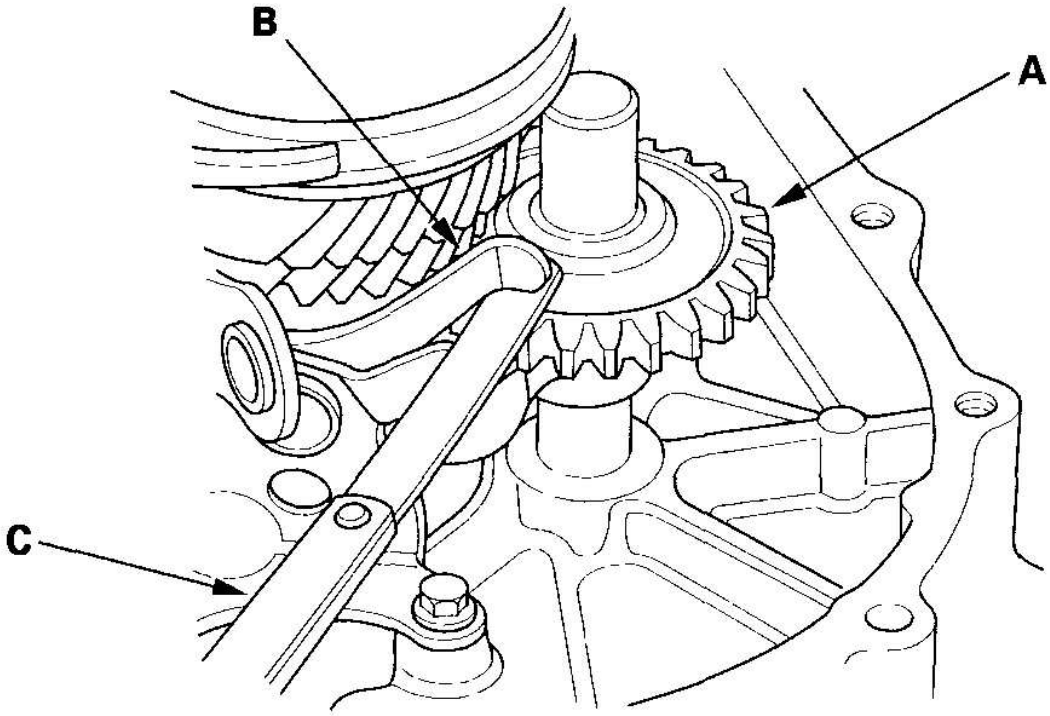


Fig. 74: Measuring Clearance Between Reverse Idler Gear And Reverse Shift Fork
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the width of the reverse shift fork.
   - If the width is not within the standard, replace the reverse shift fork.
   - If the width is within the standard, replace the reverse gear.

   Standard: 13.4-13.7 mm (0.527-0.539 in.)

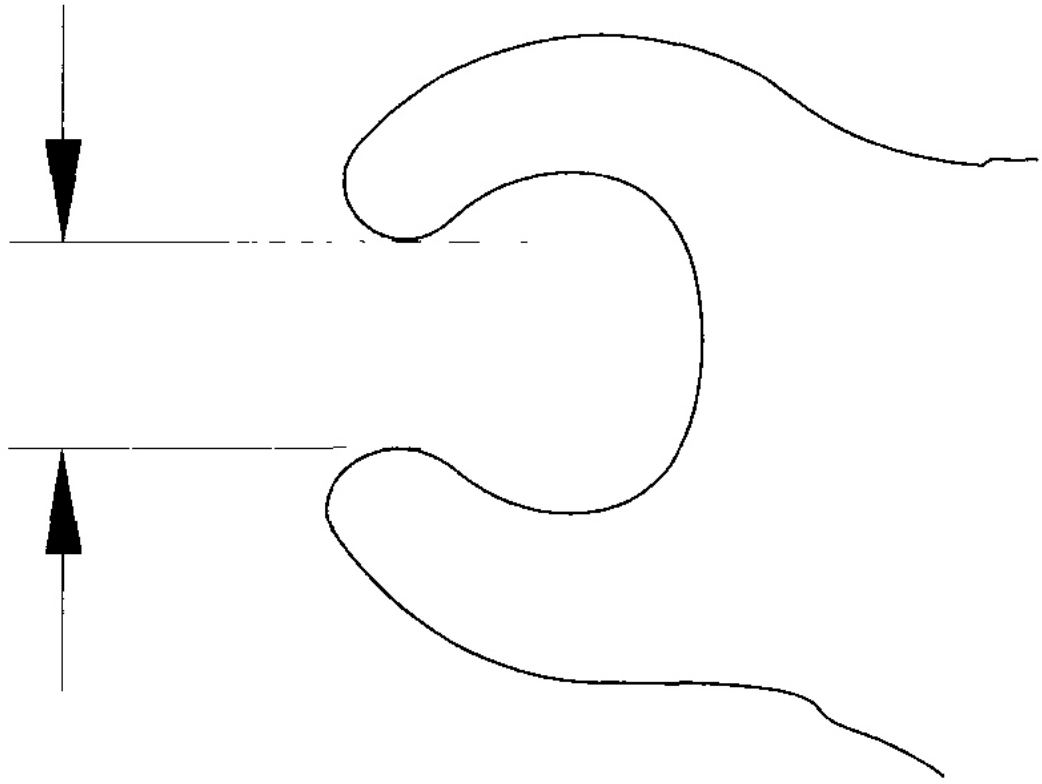


Fig. 75: Identifying Reverse Shift Fork Width
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CHANGE LEVER CLEARANCE INSPECTION

1. Measure the clearance between change lever (A) and the select lever (B) with a feeler gauge (C). If the clearance is more than the service limit, go to step 2.

Standard: 0.05-0.25 mm (0.002-0.010 in.)

Service Limit: 0.5 mm (0.020 in.)

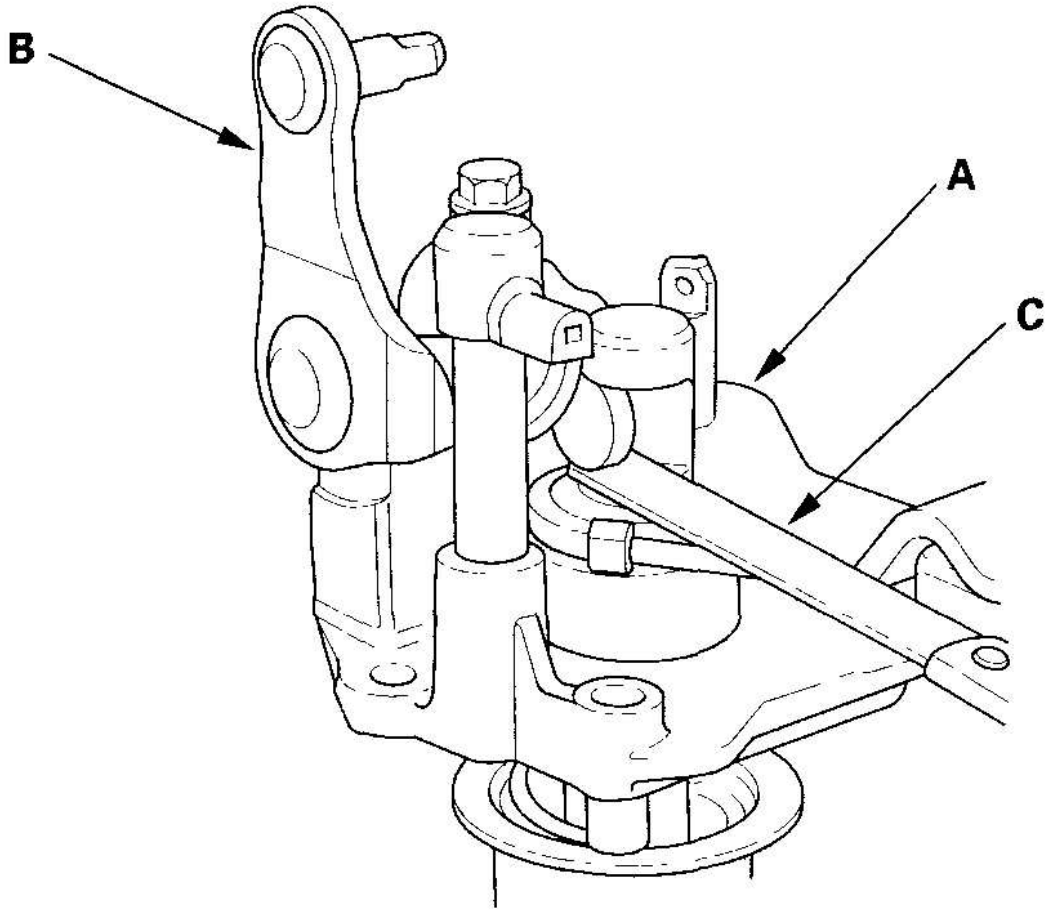


Fig. 76: Measuring Clearance Between Change Lever And Select Lever
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the groove width of the change lever.
   - If the groove width is not within the standard, replace the change lever.
   - If the groove width is within the standard, replace the select lever.

Standard: 15.00-15.10 mm (0.591-0.594 in.)

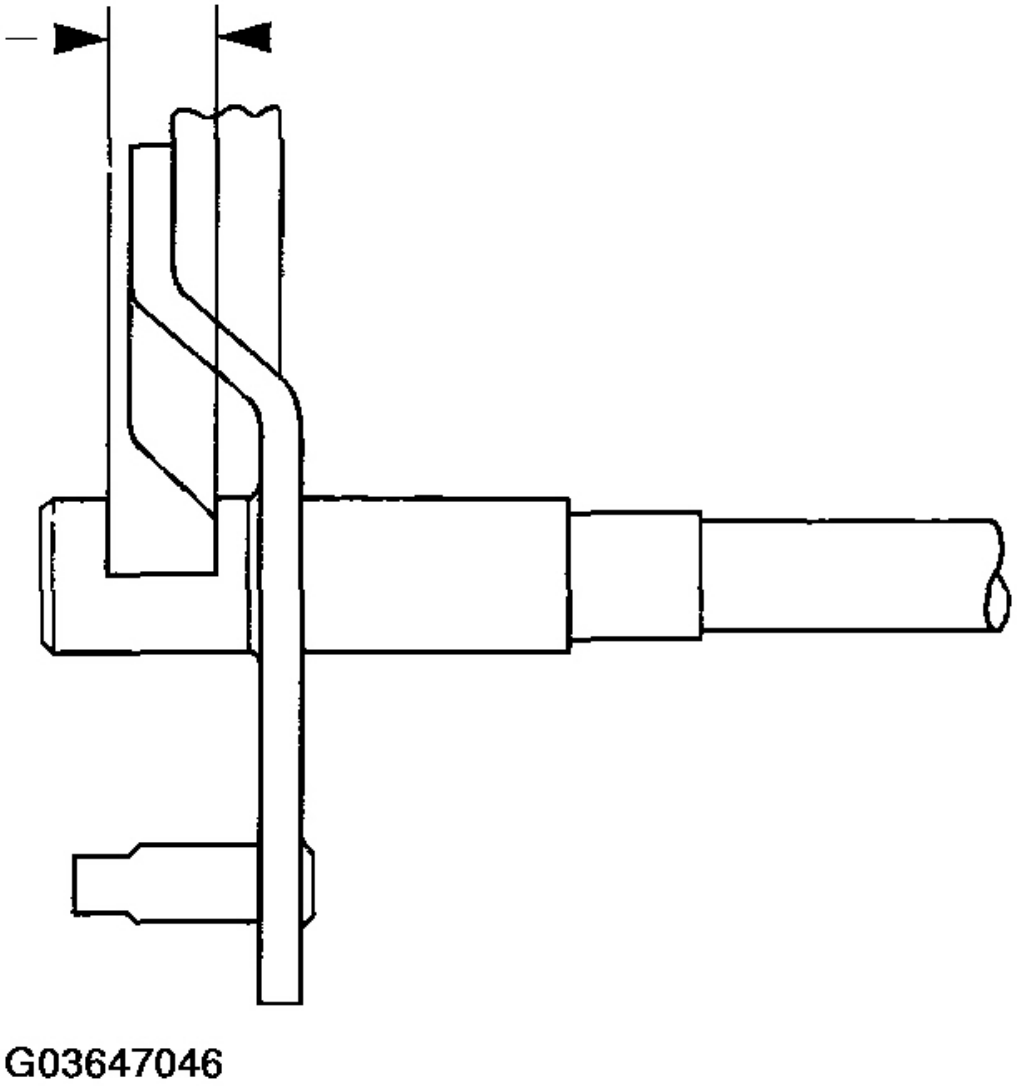


Fig. 77: Identifying Change Lever Groove Width
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CHANGE LEVER ASSEMBLY DISASSEMBLY/REASSEMBLY

Prior to reassembling, clean all the parts in solvent, dry them, and apply grease to

contact surfaces as shown in **Fig. 78**.

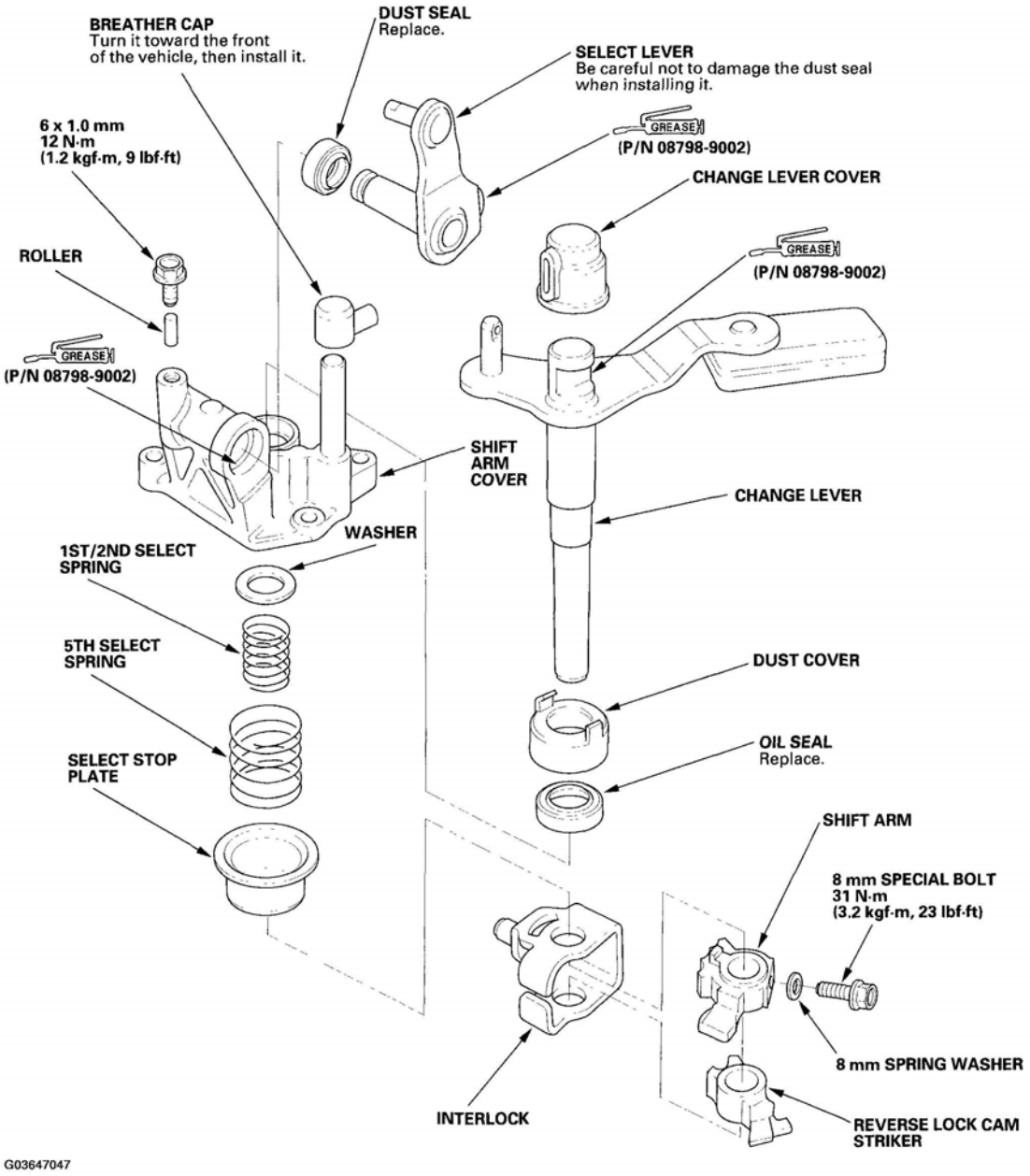


Fig. 78: Exploded View Of Change Lever And Related Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SHIFT FORK CLEARANCE INSPECTION

NOTE: The synchro sleeve and synchro hub should be replaced as

a set.

1. Measure the clearance between each shift fork (A) and its matching synchro sleeve (B). If the clearance exceeds the service limit, go to step 2.

   Standard: 0.35-0.65 mm (0.014-0.026 in.)

   Service Limit: 1.0 mm (0.039 in.)

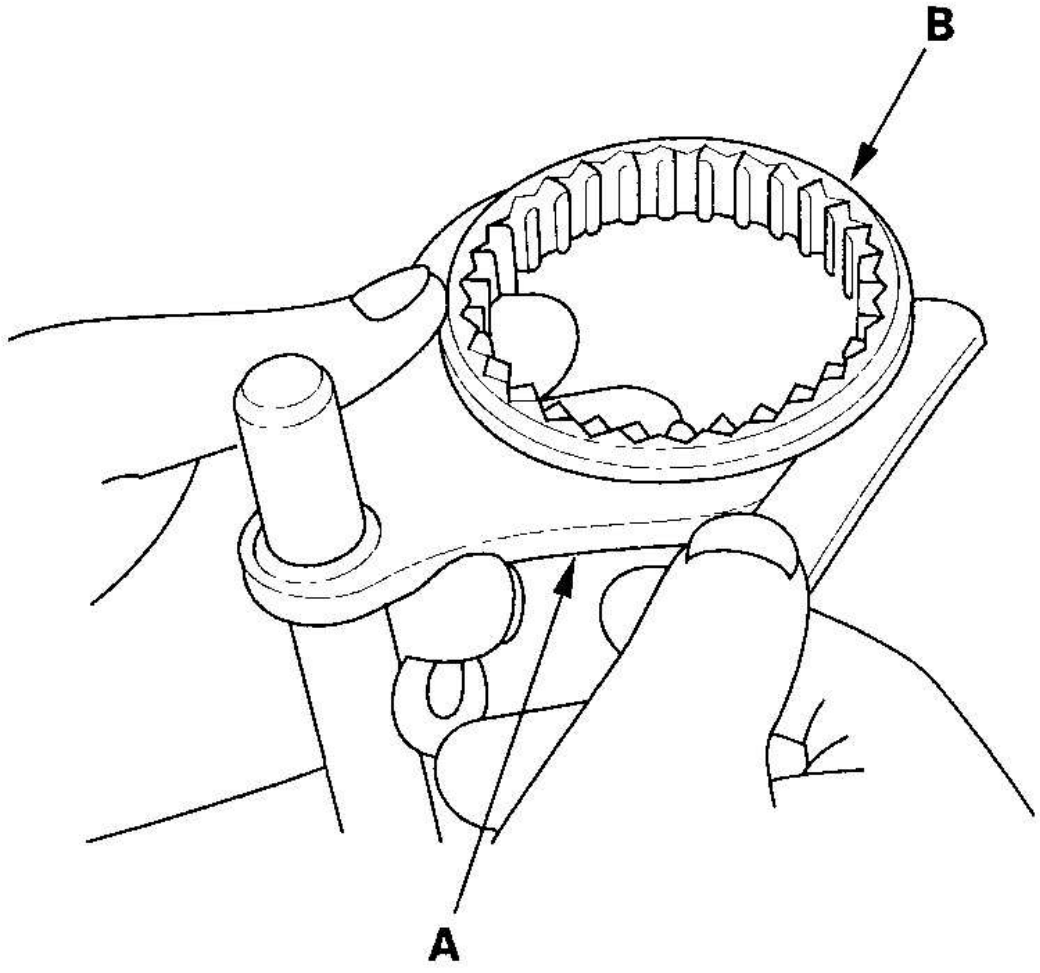


Fig. 79: Measuring Clearance Between Shift Fork And Synchro Sleeve

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the thickness of the shift fork fingers.
   - If the thickness is not within the standard, replace the shift fork.
   - If the thickness is within the standard, replace the synchro sleeve.
   - If one arm of the shift fork shows more wear than others, the fork may be bent and needs to be replaced.

   Standard: 7.4-7.6 mm (0.29-0.30 in.)

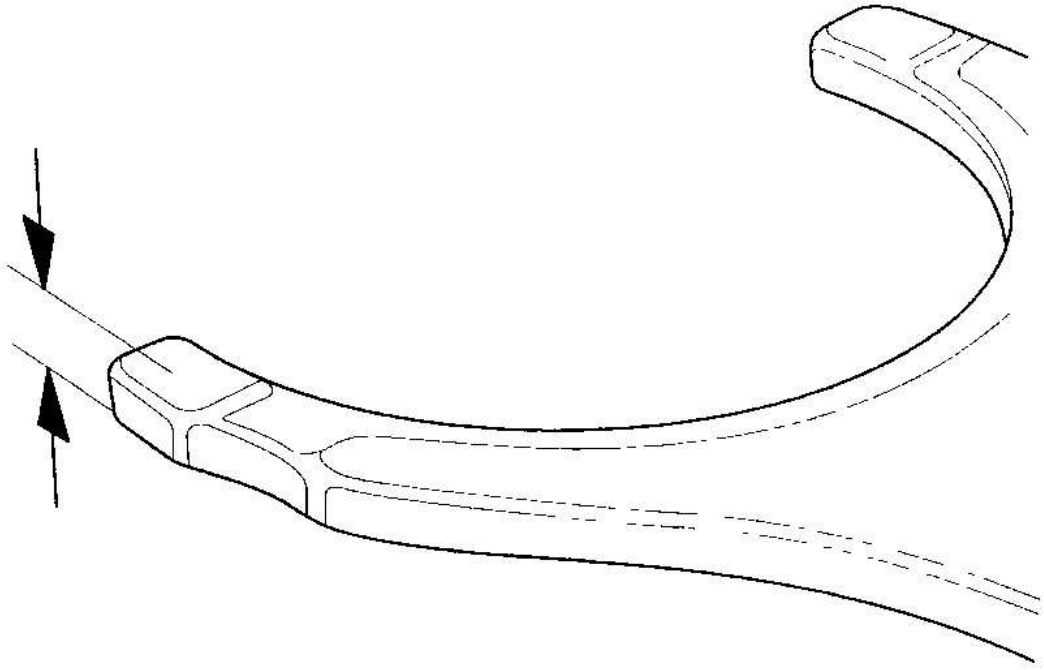


Fig. 80: Identifying Shift Fork Fingers Thickness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Measure the clearance between the shift fork (A) and the shift arm (B). If the clearance exceeds the service limit, go to step 4.

   Standard: 0.2-0.5 mm (0.008-0.020 in.)

Service Limit: 0.6 mm (0.023 in.)

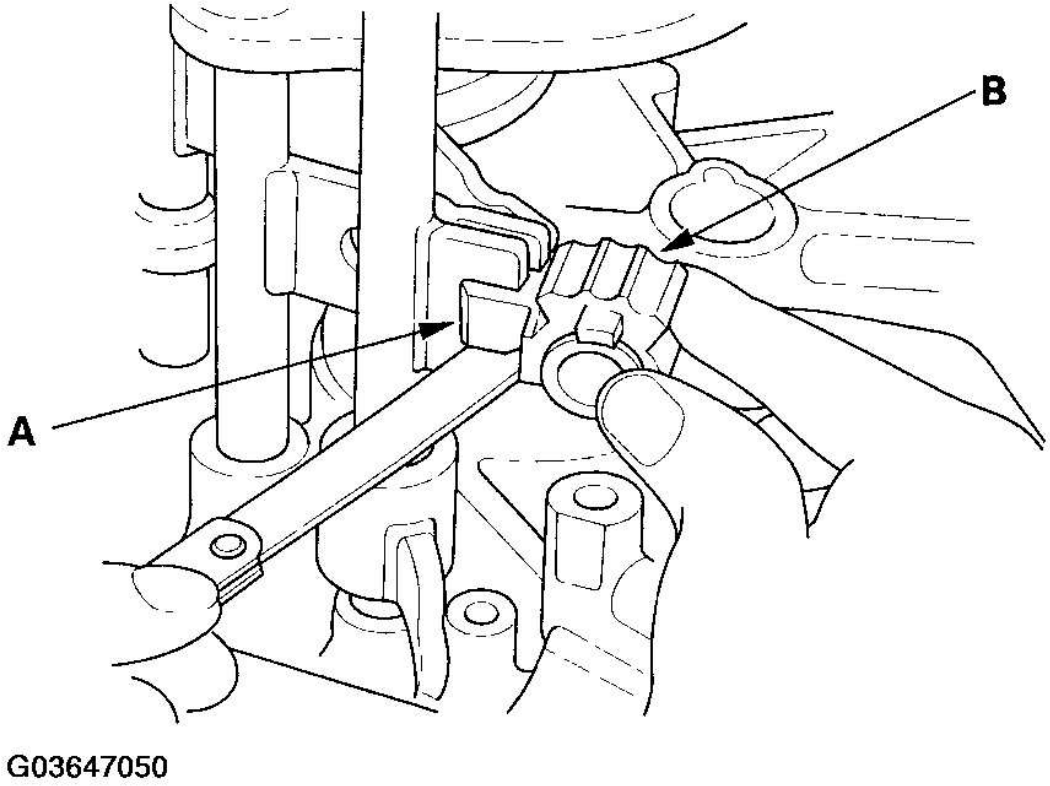


Fig. 81: Measuring Clearance Between Shift Fork And Shift Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the width of the shift arm.
   - If the width is not within the standard, replace the shift arm.
   - If the width is within the standard, replace the shift fork.

   Standard: 16.9-17.0 mm (0.665-0.669 in.)

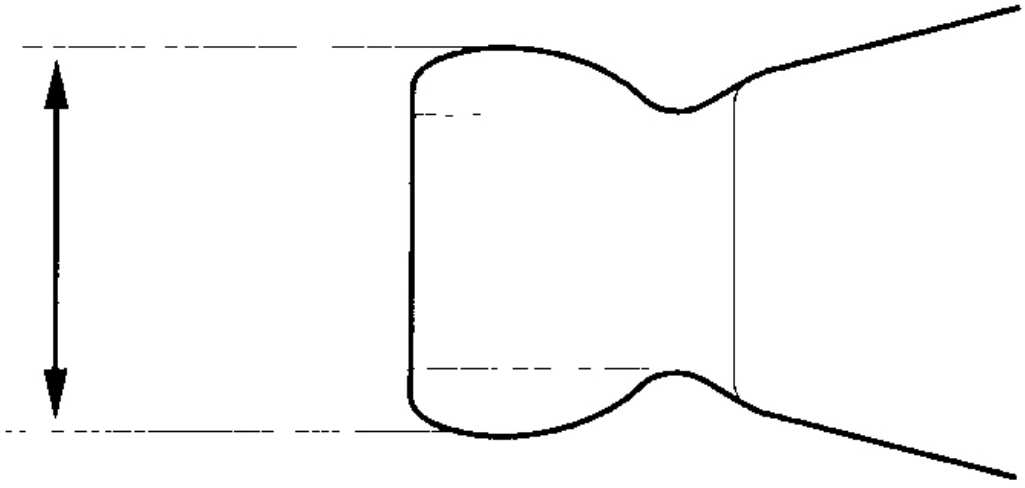


Fig. 82: Identifying Shift Arm Width
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SHIFT FORK DISASSEMBLY/REASSEMBLY

Prior to reassembling, clean all the parts in solvent, dry them, and apply lubricant to all contact surfaces.

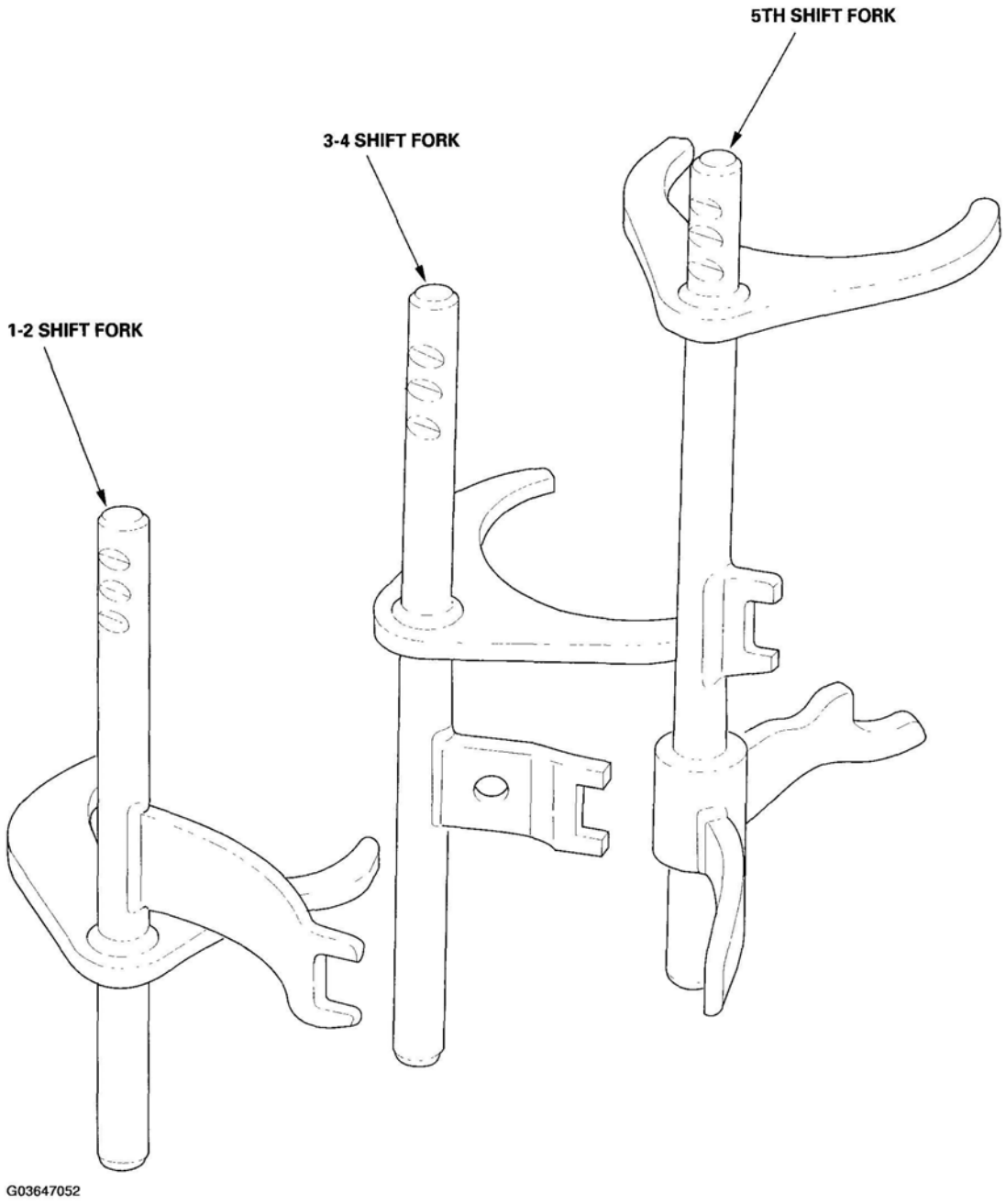


Fig. 83: View Of Shift Forks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MAINSHAFT ASSEMBLY CLEARANCE INSPECTION

NOTE: If replacement is required, always replace the synchro

sleeve and hub as a set.

1. Support the bearing inner race with an appropriate sized socket (A), and push down on the mainshaft (B).

   Standard: 0.06-0.16 mm (0.002-0.006 in.)

   Service Limit: 0.25 mm (0.010 in.)

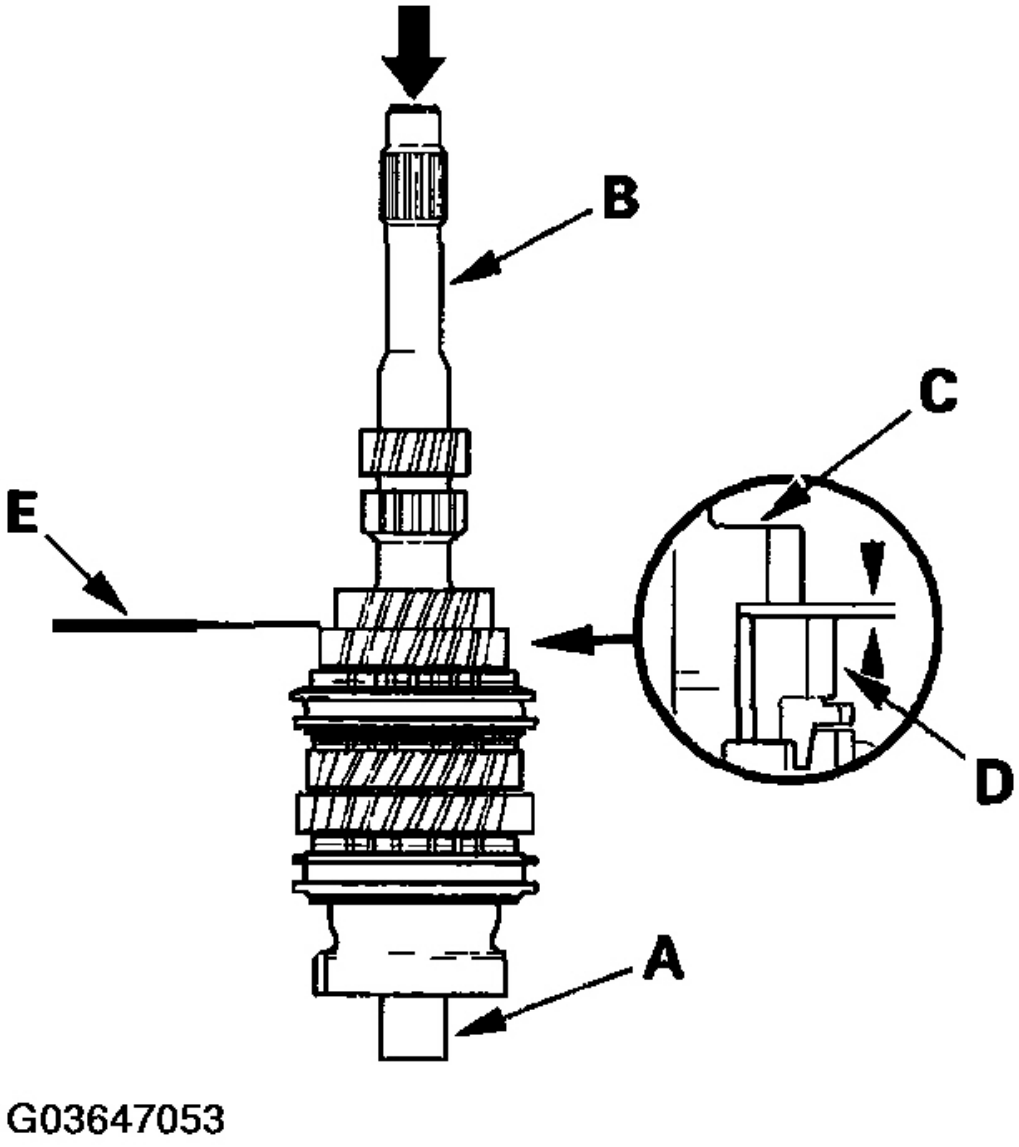


Fig. 84: Supporting And Pushing Inner Race
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the clearance between 2nd gear (C) and 3rd gear (D) with a feeler gauge (E).
   - If the clearance is more than the service limit, go to step 3.

- If the clearance is within the service limit, go to step 4.

3. Measure the thickness of 3rd gear.
   - If the thickness is less than the service limit, replace 3rd gear.
   - If the thickness is within the service limit, replace the 3rd/4th synchro hub.

   Standard: 23.92-23.97 mm (0.941-0.944 in.)

   Service Limit: 23.80 mm (0.937 in.)

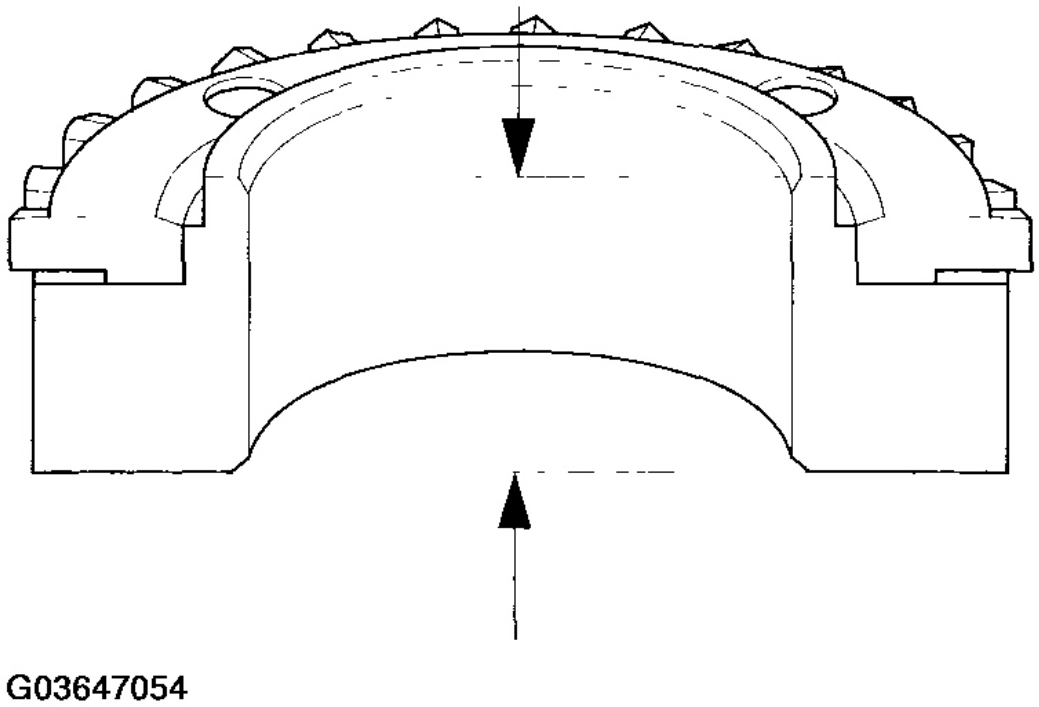


Fig. 85: Identifying 3rd Gear Thickness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the clearance between 4th gear (A) and the distance collar (B) with a dial indicator (C). If the clearance is more than the service limit, go to step 5.

   Standard: 0.06-0.16 mm (0.002-0.006 in.)

Service Limit: 0.25 mm (0.010 in.)

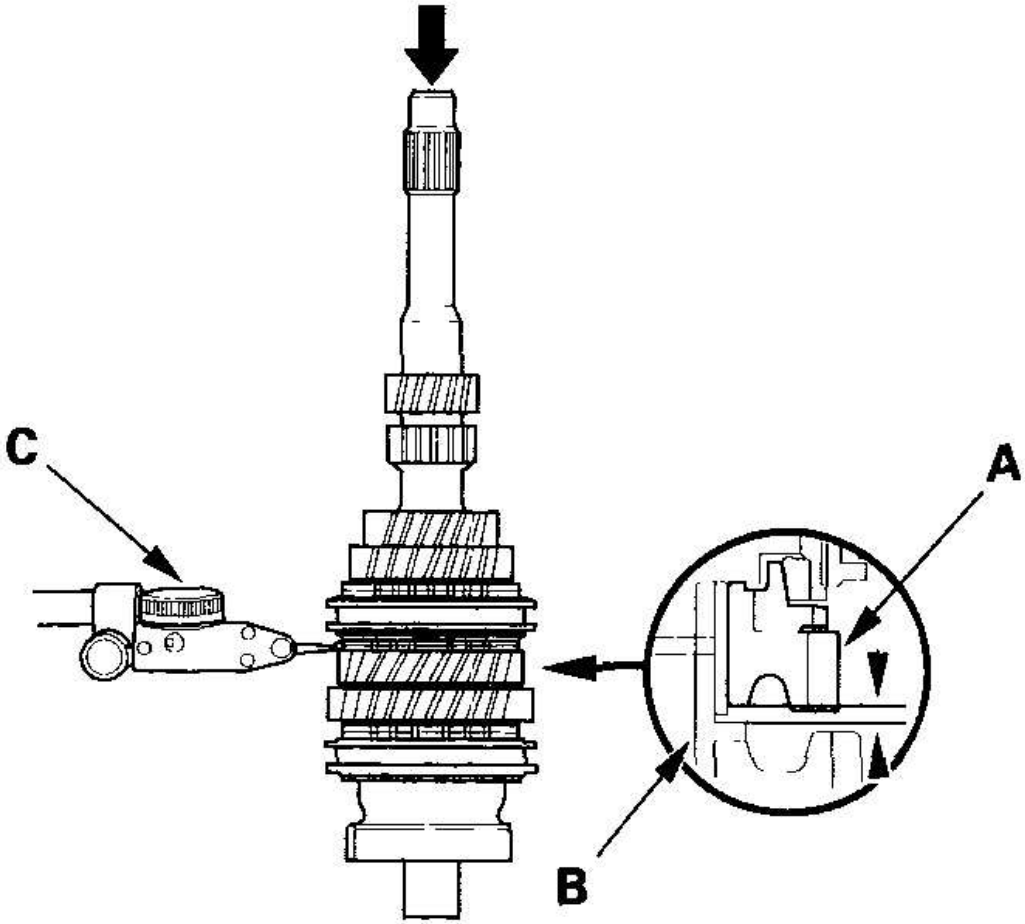


Fig. 86: Measuring Clearance Between 4th Gear And Distance Collar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Measure distance (1)on the distance collar shown in **Fig. 87**.
   - If distance (1) is not within the standard, replace the distance collar.
   - If distance (1) is within the standard, go to step 6.

   Standard: 24.03-24.08 mm (0.946-0.947 in.)

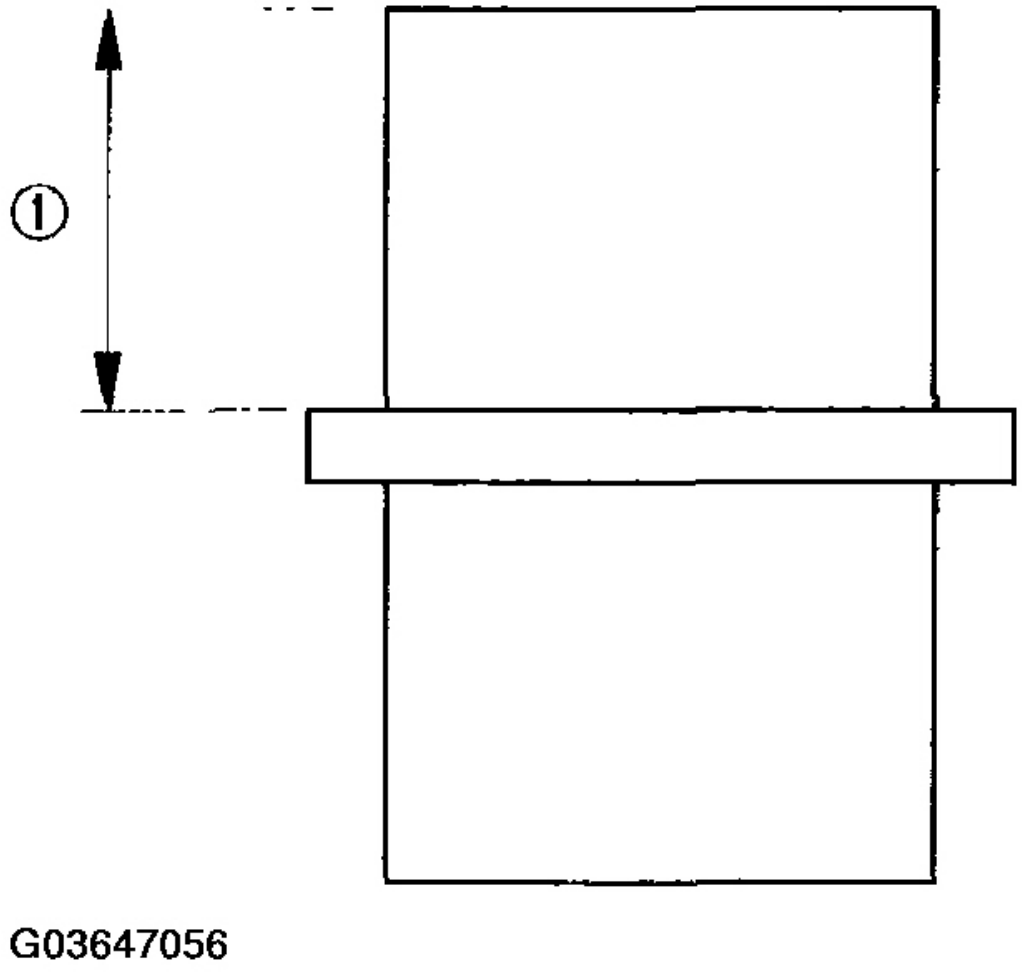
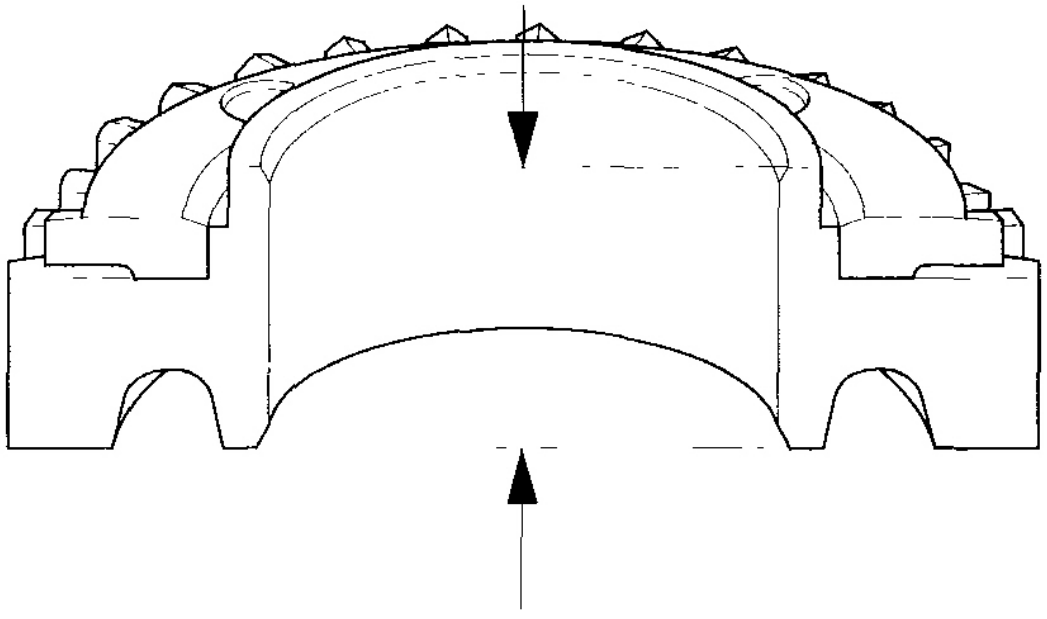


Fig. 87: Identifying Distance On Distance Collar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Measure the thickness of 4th gear.
   - If the thickness is less than the service limit, replace 4th gear.
   - If the thickness is within the service limit, replace the 3rd/4th synchro hub.

   Standard: 23.92-23.97 mm (0.941-0.944 in.)

   Service Limit: 23.80 mm (0.937 in.)



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Fig. 88: Identifying 4th Gear Thickness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Measure the clearance between the distance collar (A) and 5th gear (B) with a dial indicator (C). If the clearance is more than the service limit, go to step 8.

   Standard: 0.06-0.16 mm (0.002-0.006 in.)

   Service Limit: 0.25 mm (0.010 in.)

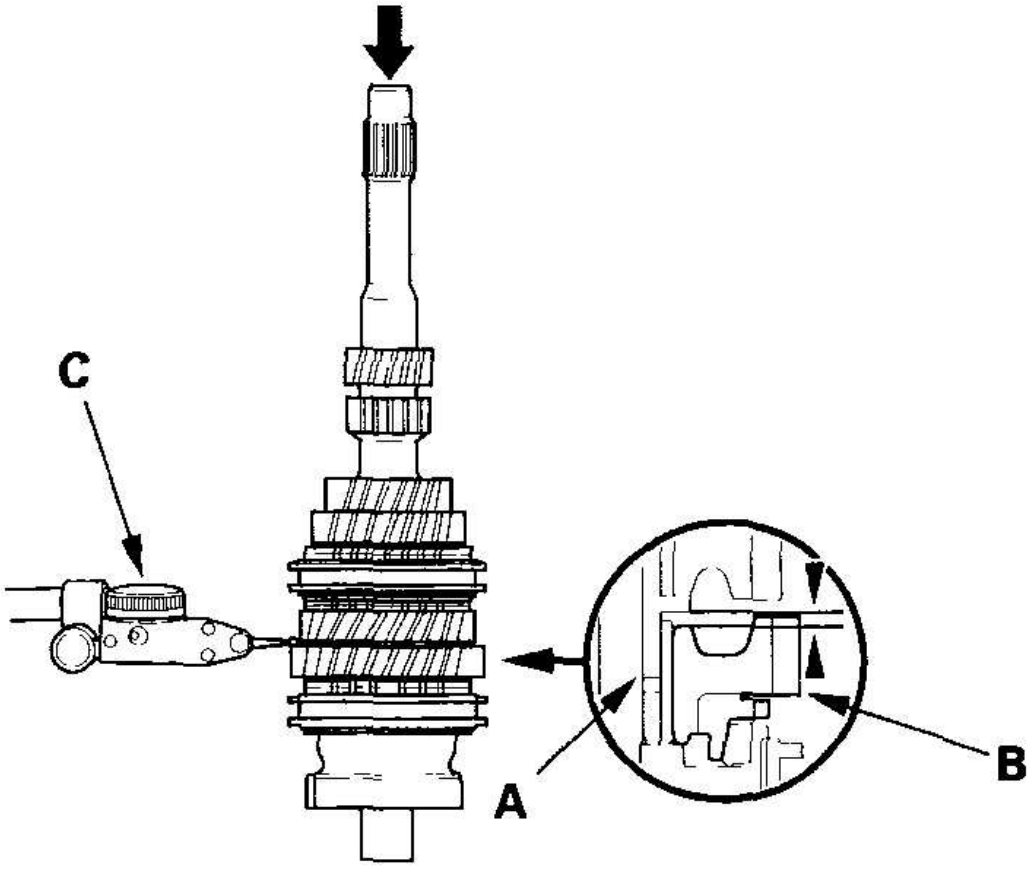


Fig. 89: Measuring Clearance Between Distance Collar And 5th Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Measure distance (2) on the distance collar shown in **Fig. 90**.
   - If distance (2) is not within the standard, replace the distance collar.
   - If distance (2) is within the standard, go to step 9.

   Standard: 24.03-24.08 mm (0.946-0.947 in.)

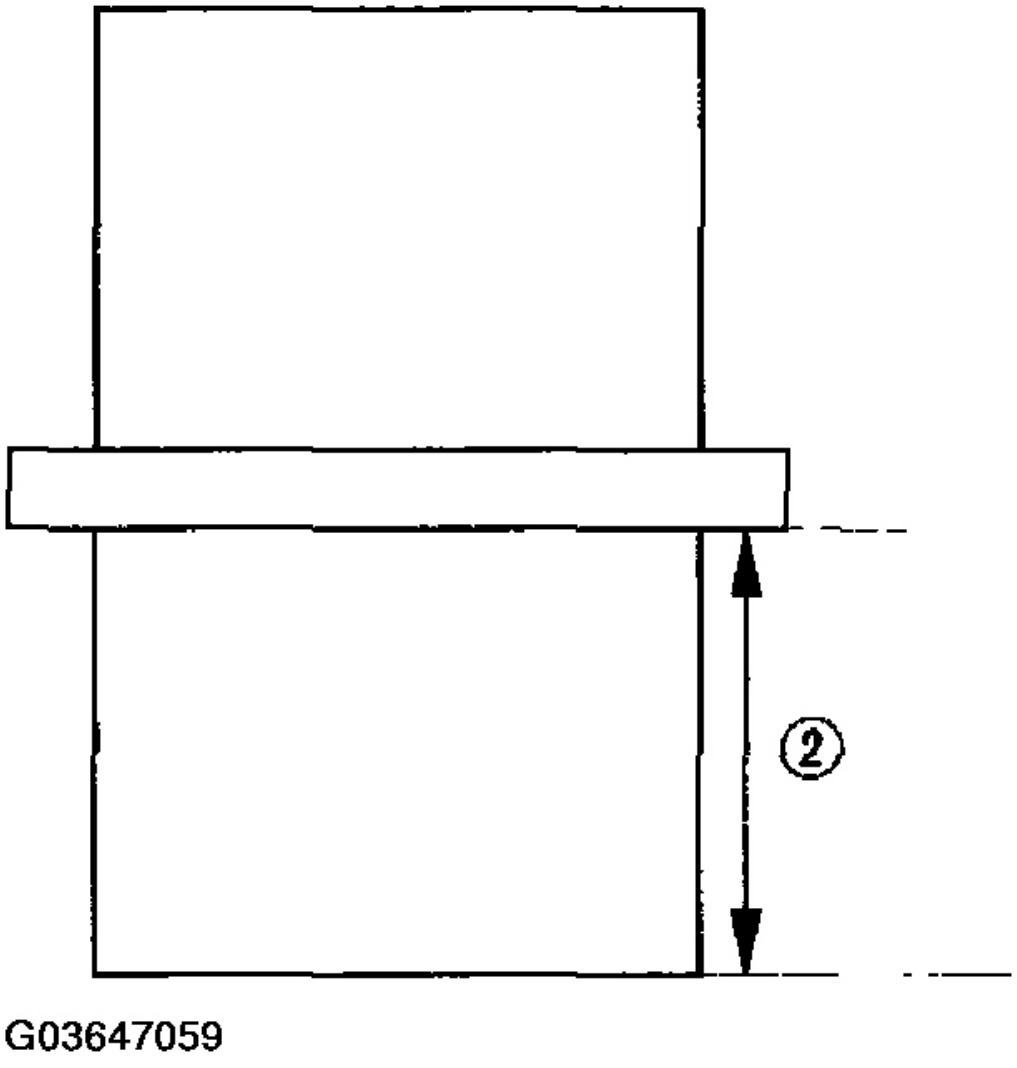
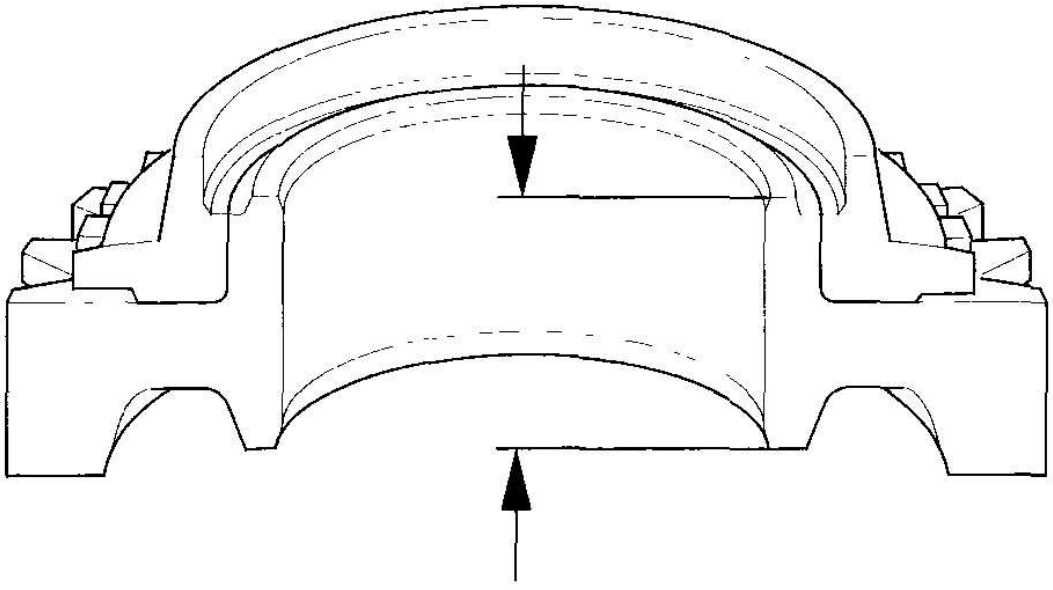


Fig. 90: Identifying Distance On Distance Collar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Measure the thickness of 5th gear.
   - If the thickness is less than the service limit, replace 5th gear.
   - If the thickness is within the service limit, replace the 5th synchro hub.

   Standard: 23.92-23.97 mm (0.941-0.944 in.)

Service Limit: 23.80 mm (0.937 in.)



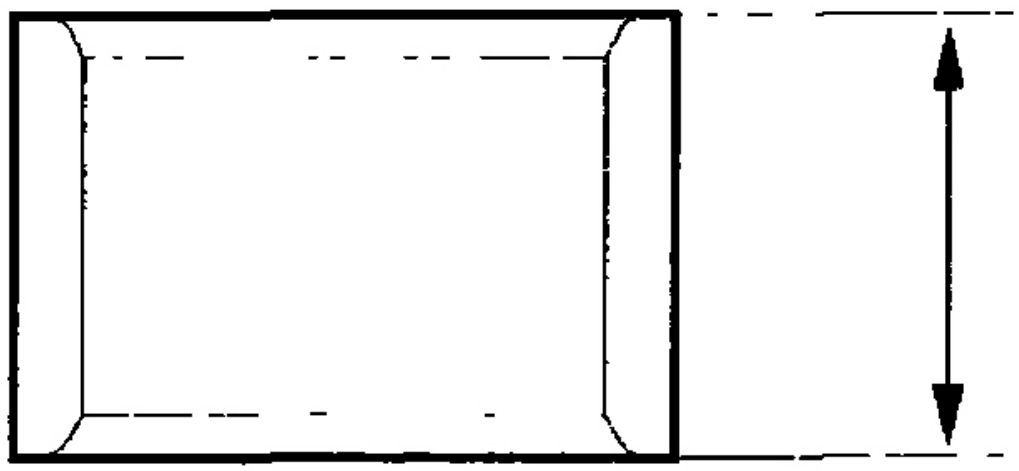
G03647060

Fig. 91: Identifying 5th Gear Thickness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Measure the thickness of the MBS distance collar.

    If the thickness is not within standard, replace the MBS distance collar.

    Standard: 23.95-24.05 mm (0.943-0.947 in.)

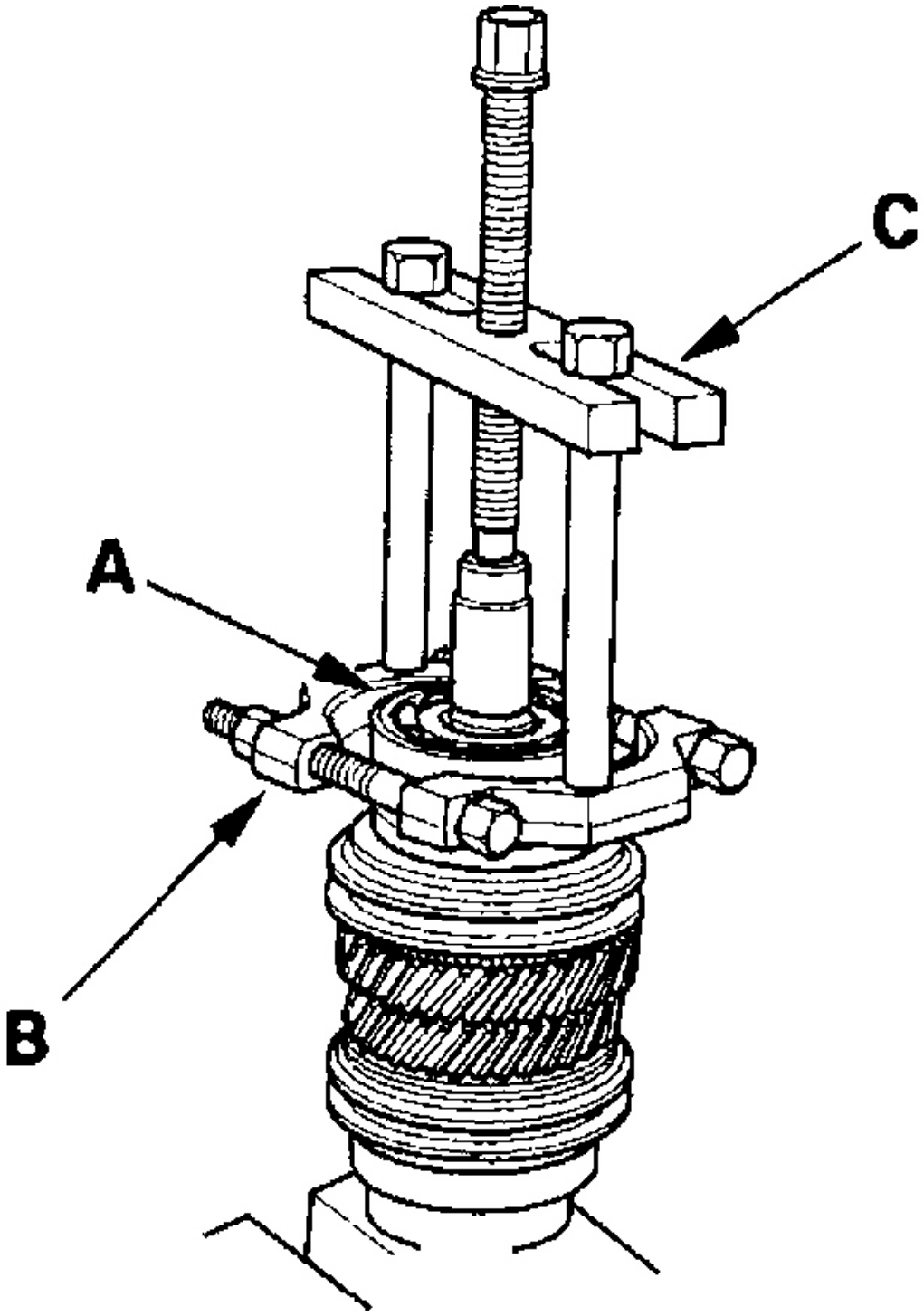


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Fig. 92: Identifying MBS Distance Collar Thickness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MAINSHAFT DISASSEMBLY

1. Remove the angular ball bearing (A) and the tapered cone ring using a commercially available bearing separator (B) and a commercially available bearing puller (C). Make sure the bearing separator is under the tapered cone ring.



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Fig. 93: Removing Angular Ball Bearing And Tapered Cone Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Support 5th gear (A) on steel blocks, and press the mainshaft out of the 5th synchro hub (B). Use of a jaw-type puller can damage the gear teeth.

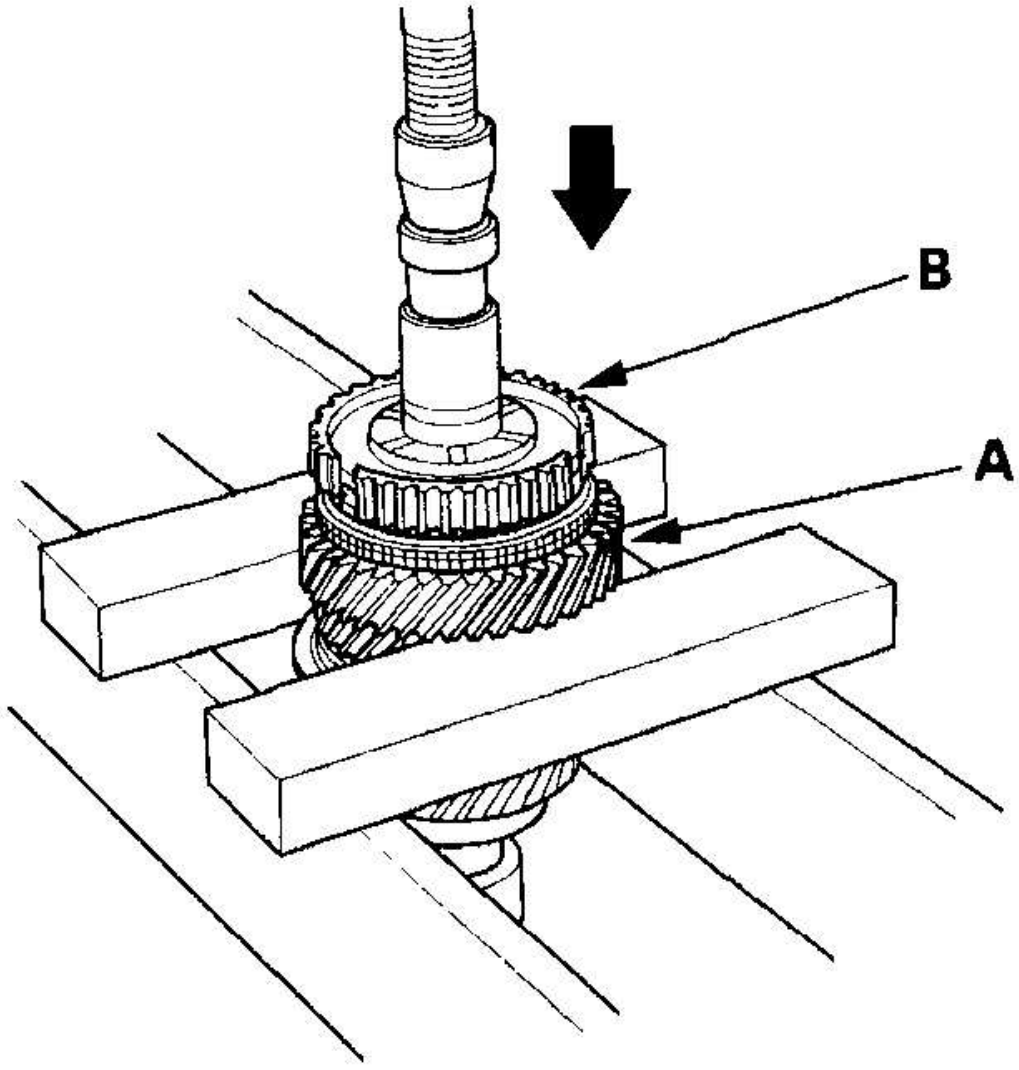


Fig. 94: Supporting 5th Gear On Steel Blocks

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Support 3rd gear (A) on steel blocks, and press the mainshaft out of the 3rd/4th synchro hub (B). Use of a jaw-type puller can damage the gear teeth.

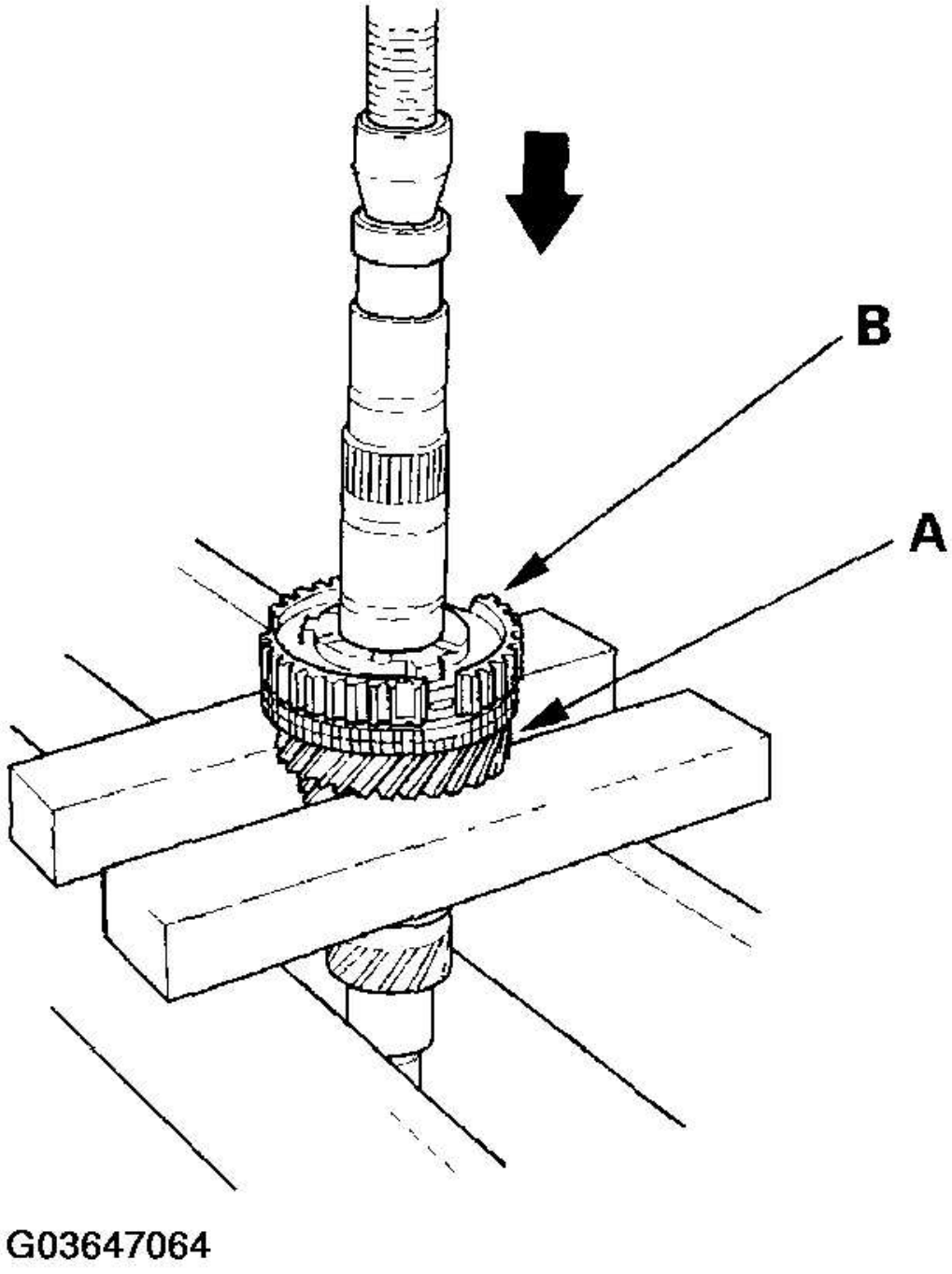


Fig. 95: Supporting 3rd Gear On Steel Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MAINSHAFT INSPECTION

1. Inspect the gear and bearing surfaces for wear and damage, then measure the mainshaft at points A, B, C, D, and E. If any part of the mainshaft is less than the service limit, replace it.

   Standard:

   A Ball bearing surface (transmission housing side):

   27.987-28.000 mm (1.1019-1.1024 in.)

   B Distance collar surface:

   31.984-32.000 mm (1.2594-1.2598 in.)

   C Needle bearing surface:

   38.984-39.000 mm (1.5348-1.5354 in.)

   D Ball bearing surface (clutch housing side):

   27.977-27.990 mm (1.1015-1.1020 in.)

   E Bushing surface:

   20.80-20.85 mm (0.8189-0.8209 in.)

   Service Limit:

   A: 27.94 mm (1.100 in.)

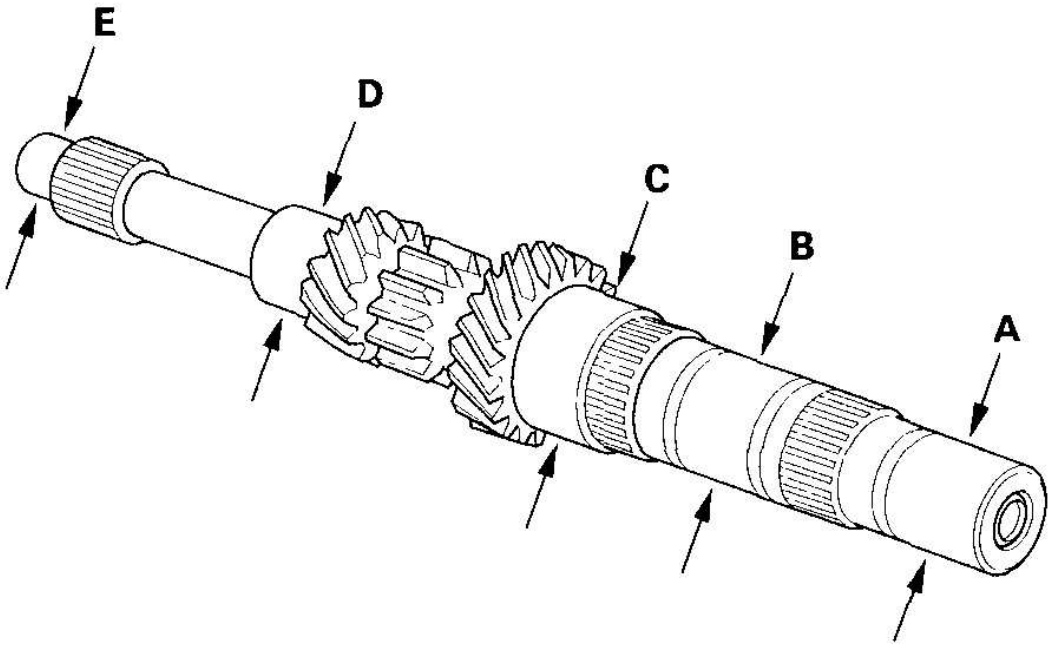
   B: 31.93 mm (1.257 in.)

   C: 38.93 mm (1.533 in.)

   D: 27.94 mm (1.100 in.)

   E: 20.75 mm (0.817 in.)

A: 27.94 mm (1.100 in.)
B: 31.93 mm (1.257 in.)
C: 38.93 mm (1.533 in.)
D: 27.94 mm (1.100 in.)
E: 20.75 mm (0.817 in.)



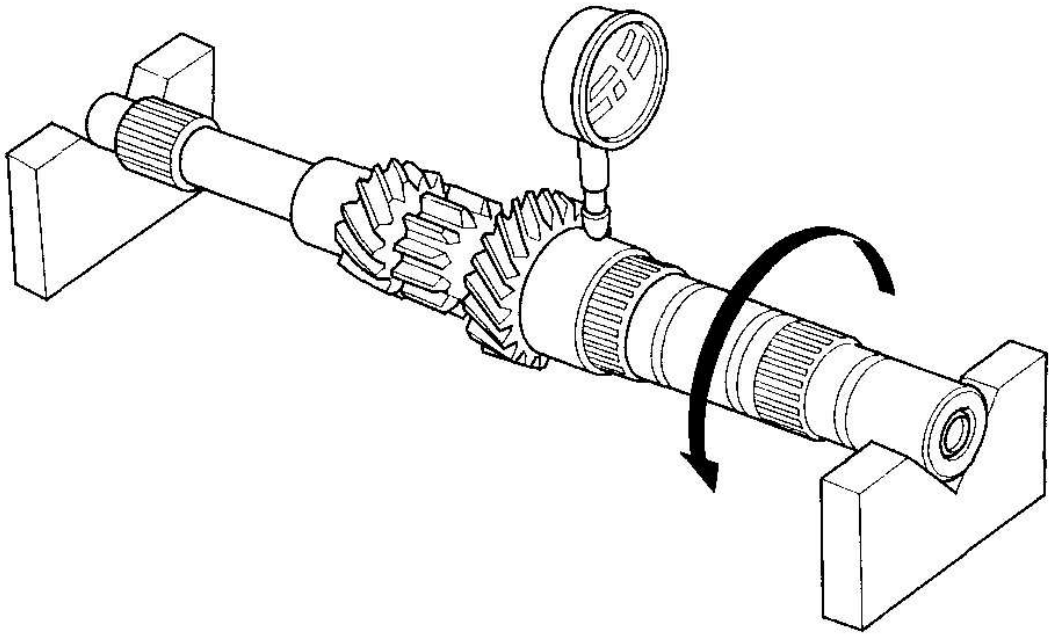
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Fig. 96: View Of Mainshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Inspect the runout by supporting both ends of the mainshaft. Then rotate the mainshaft two complete turns while measuring with a dial gauge. If the runout is more than the service limit, replace the mainshaft.

   Standard: 0.02 mm (0.001 in.) max.

   Service Limit: 0.05 mm (0.002 in.)



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Fig. 97: Inspecting Mainshaft Runout
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MAINSHAFT REASSEMBLY

EXPLODED VIEW

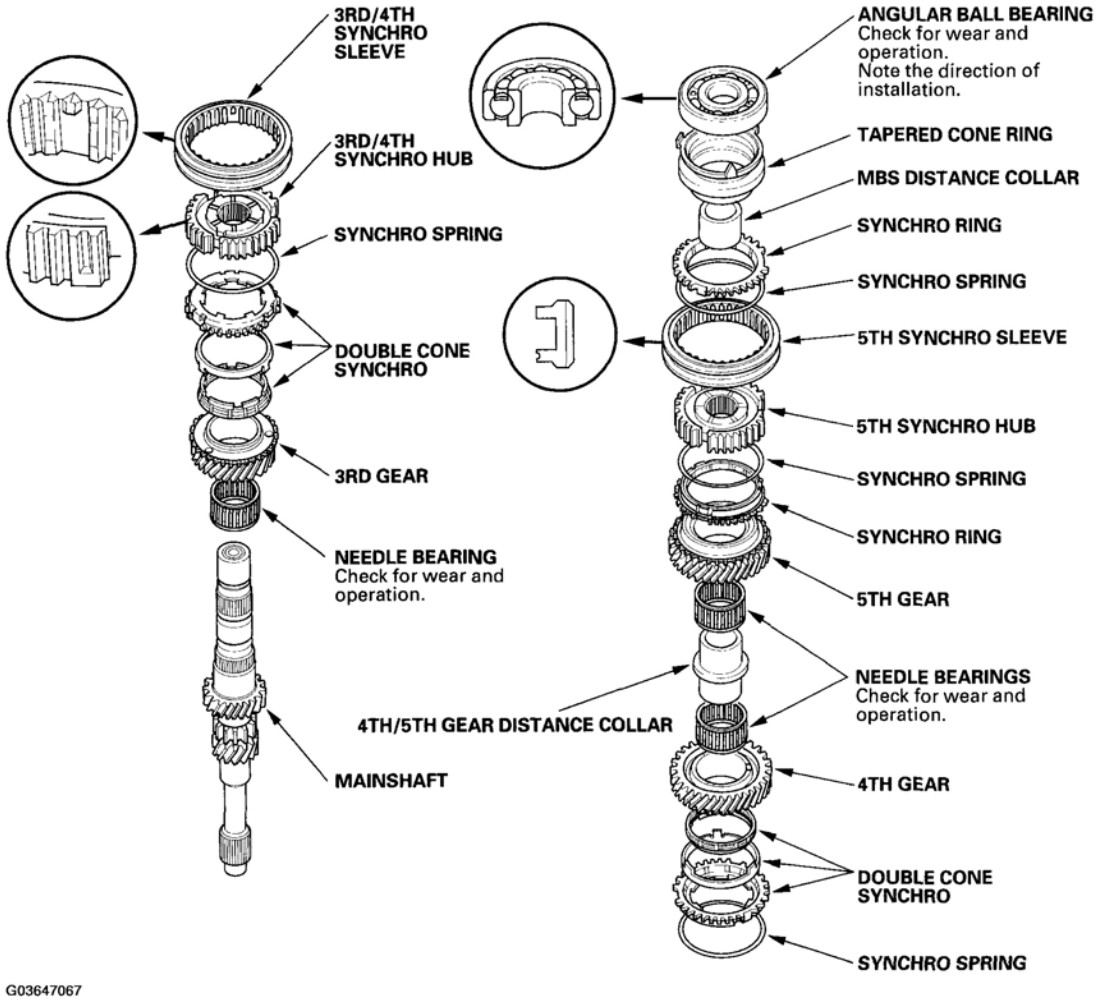


Fig. 98: Exploded View Of Mainshaft Assembly Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

- Driver, 40 mm I.D. 07746-0030100
- Attachment, 30 mm I.D. 07746-0030300

NOTE: Refer to the EXPLODED VIEW as needed during this procedure.

1. Clean all the parts in solvent, dry them, and apply lubricant to all contact surfaces except the 3rd/4th and 5th synchro hubs.

2. Install the needle bearing and 3rd gear on the mainshaft.
3. Install the double cone synchro assembly (A) by aligning the synchro cone fingers (B) with the holes in 3rd gear (C), then install the synchro spring (D).

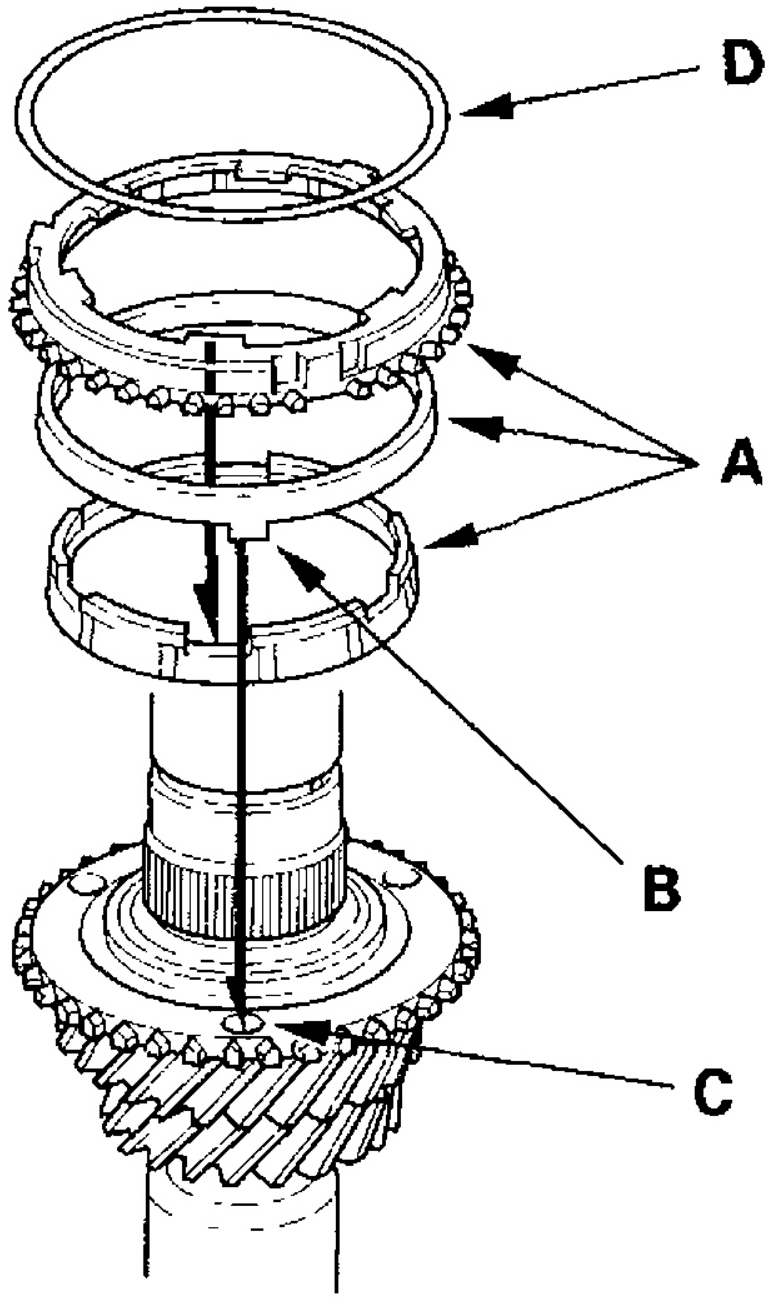
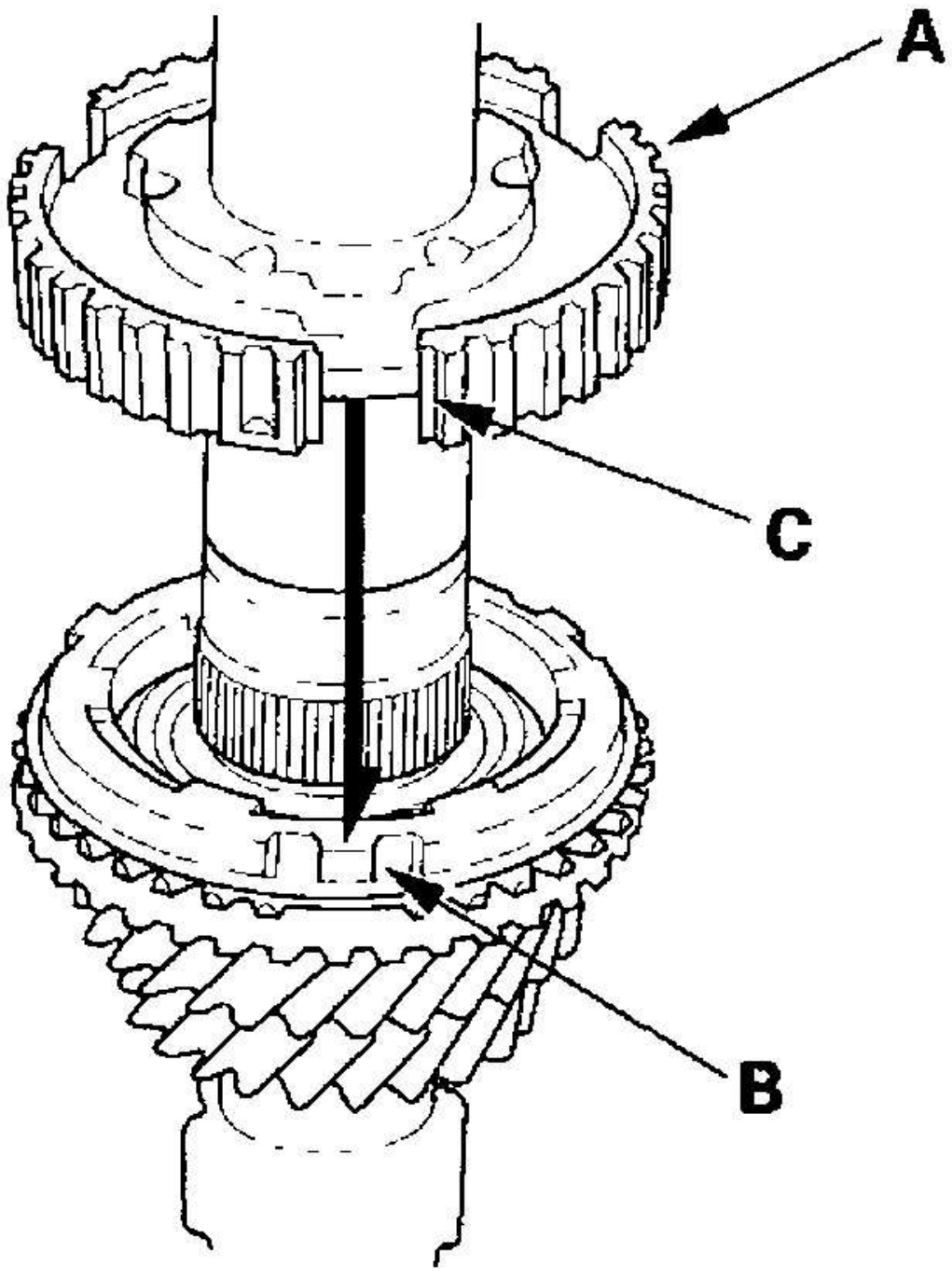


Fig. 99: Installing Double Cone Synchro Assembly In 3rd Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the 3rd/4th synchro hub (A) by aligning the synchro cone fingers (B) with the grooves in the 3rd/4th synchro hub (C).



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Fig. 100: Installing 3rd/4th Synchro Hub
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the 3rd/4th synchro hub (A) using the special tool.

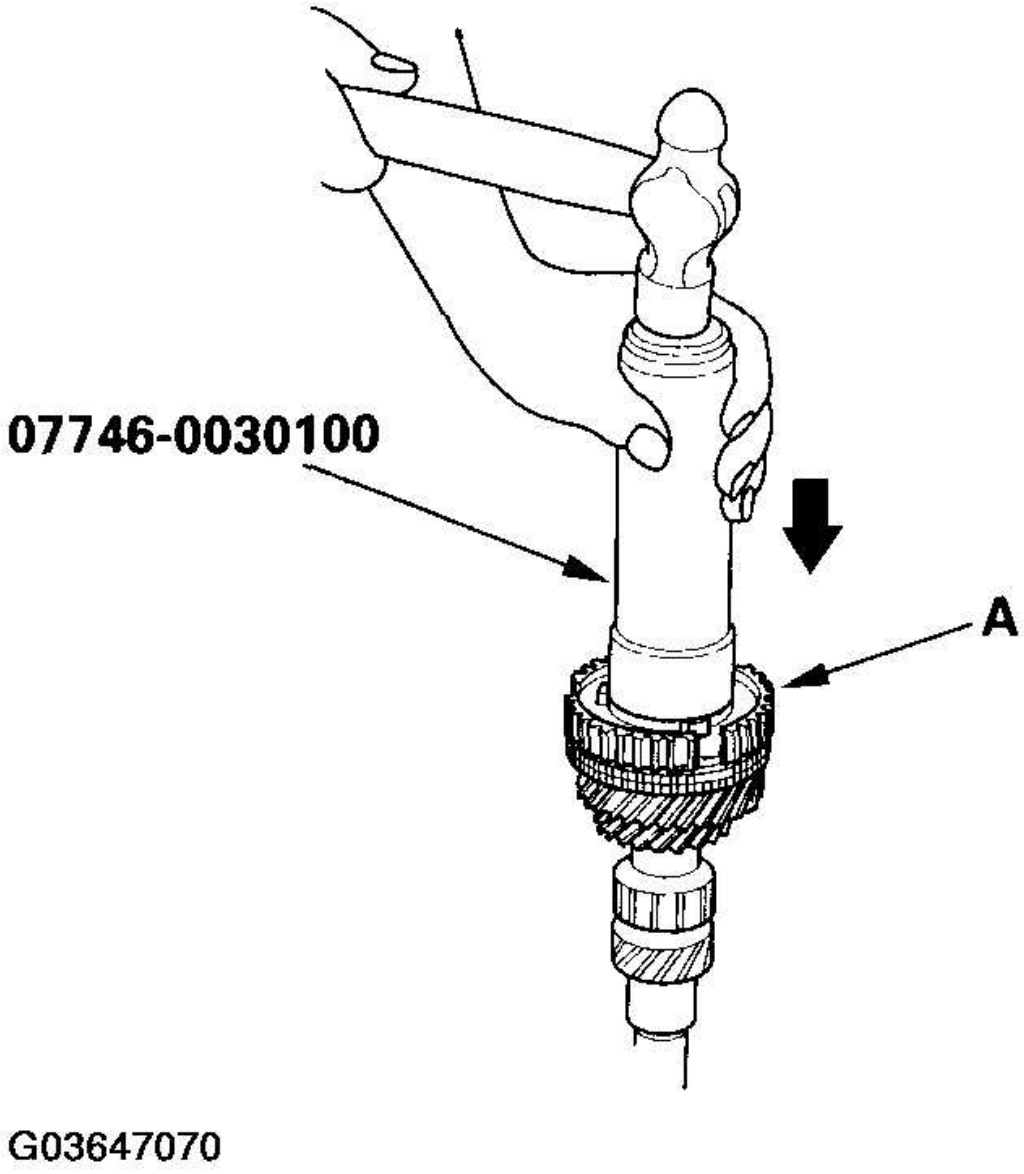


Fig. 101: Installing 3rd/4th Synchro Hub

Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the 3rd/4th synchro sleeve (A) by aligning the stops (B) with the 3rd/4th synchro sleeve and hub. After installing, check the operation of the 3rd/ 4th synchro hub set.

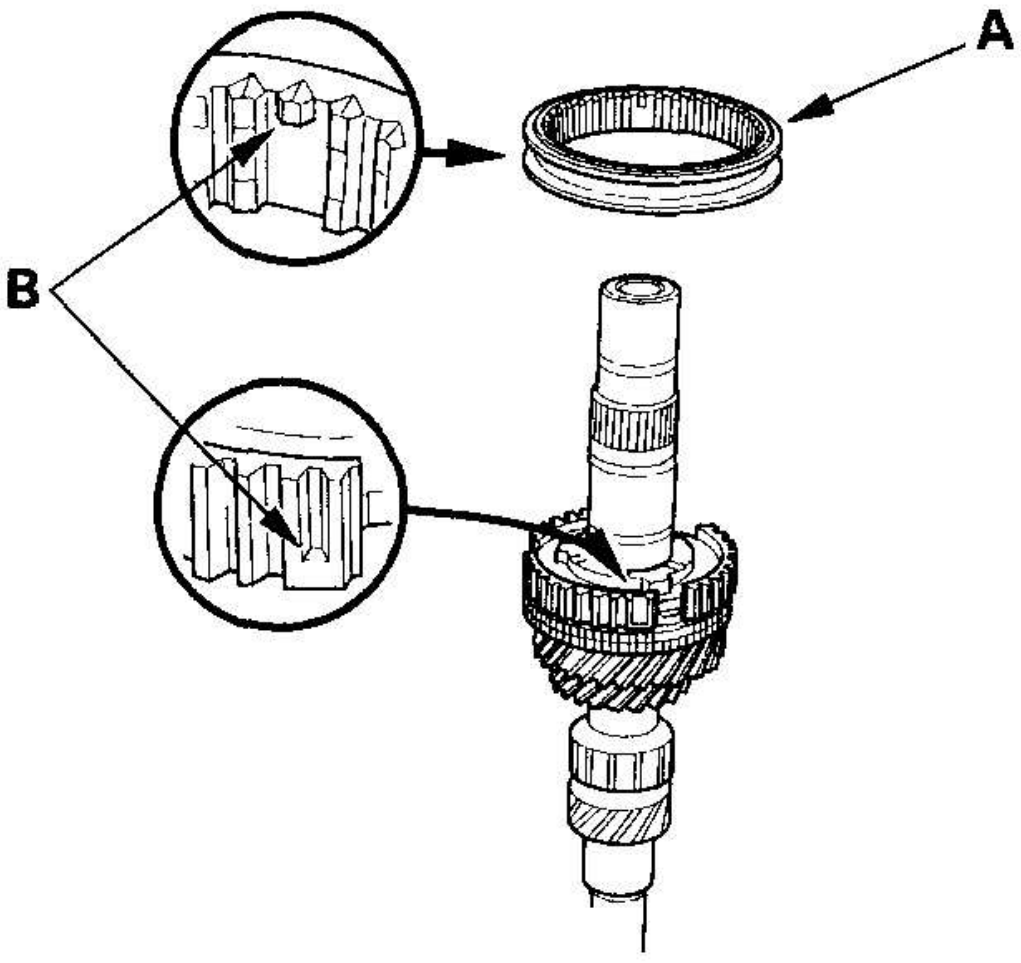


Fig. 102: Installing 3rd/4th Synchro Sleeve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the synchro spring (A).

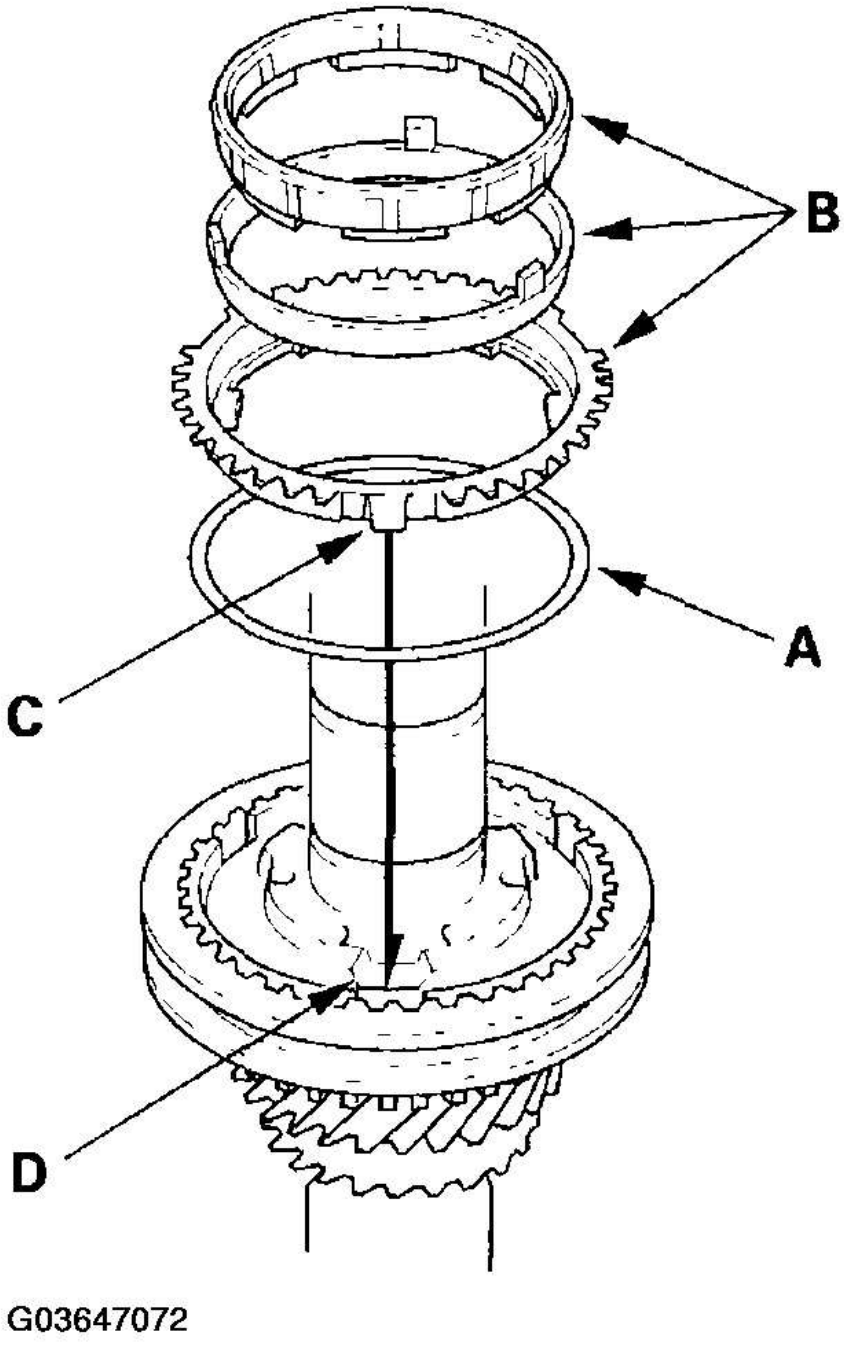


Fig. 103: Installing Synchro Spring

Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the double cone synchro assembly (B) by aligning the synchro cone fingers (C) with the grooves in the 3rd/4th synchro hub (D).
9. Install 4th gear (A) by aligning the synchro cone fingers (B) with holes in 4th gear (C).

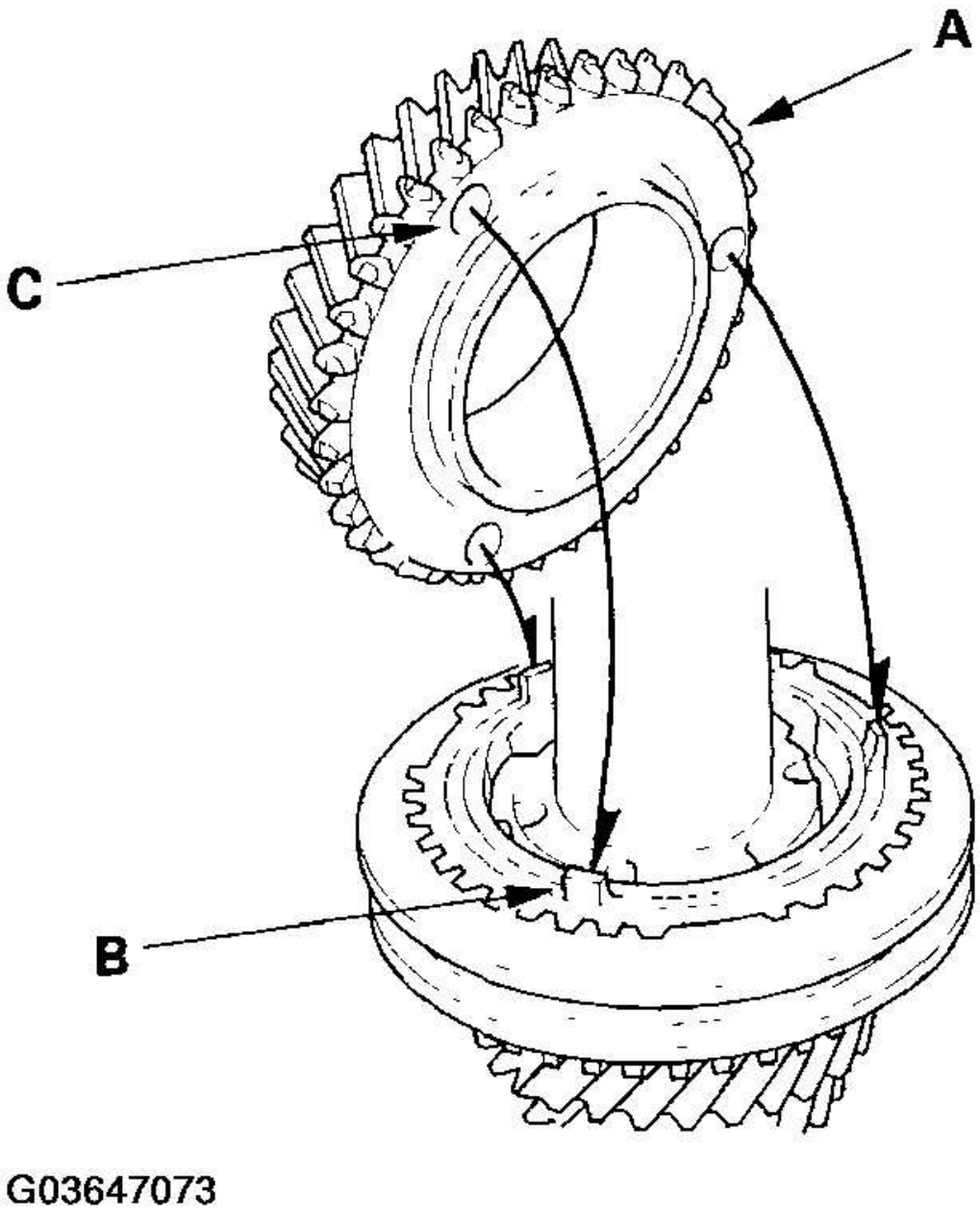
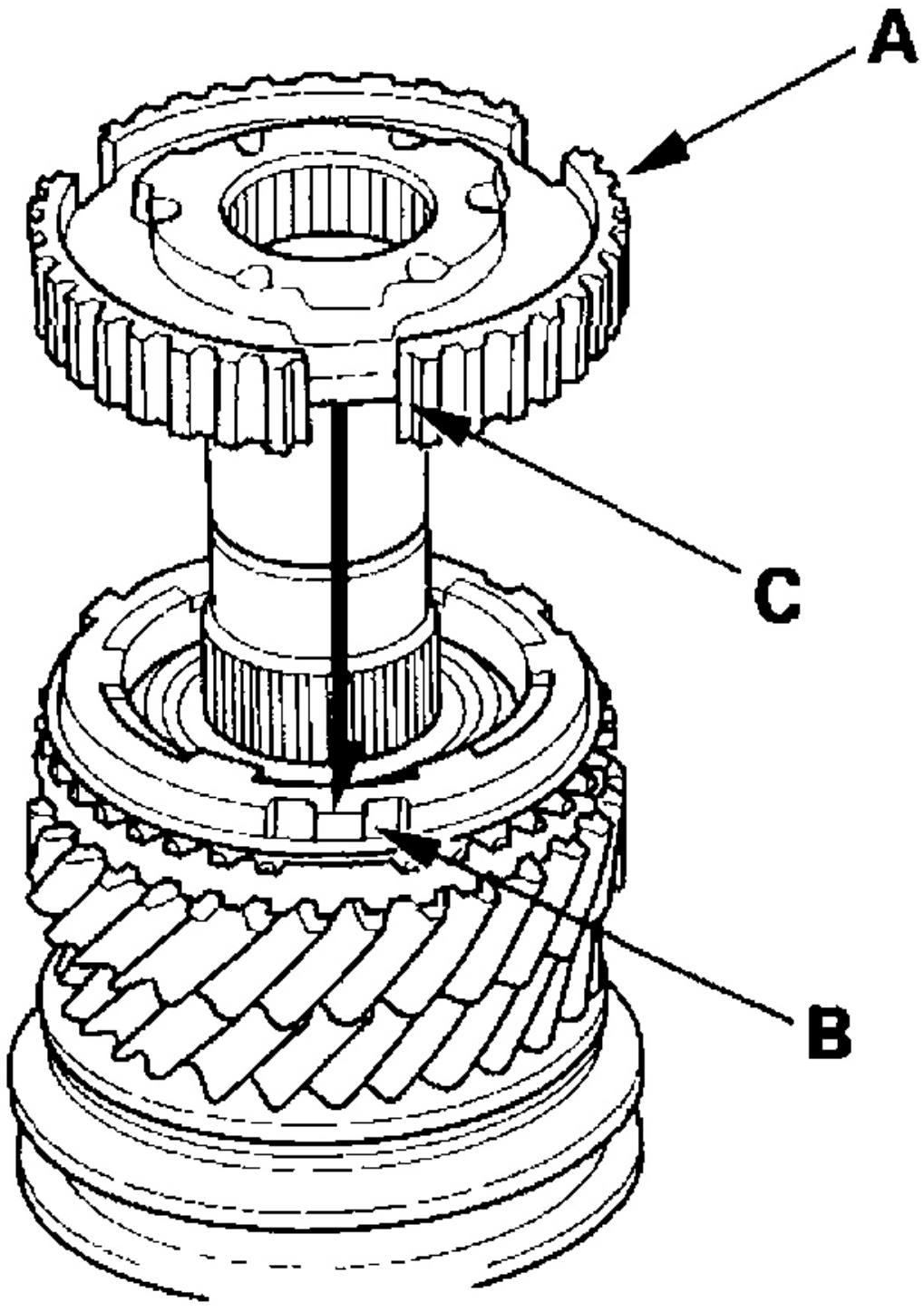


Fig. 104: Installing 4th Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Install the needle bearings, distance collar, 5th gear, and 5th gear synchro

spring and ring.

11. Install the 5th synchro hub (A) by aligning the synchro cone fingers (B) with the grooves in the 5th synchro hub (C).



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Fig. 105: Installing 5th Synchro Hub
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Install the 5th synchro hub (A) using the special tools.

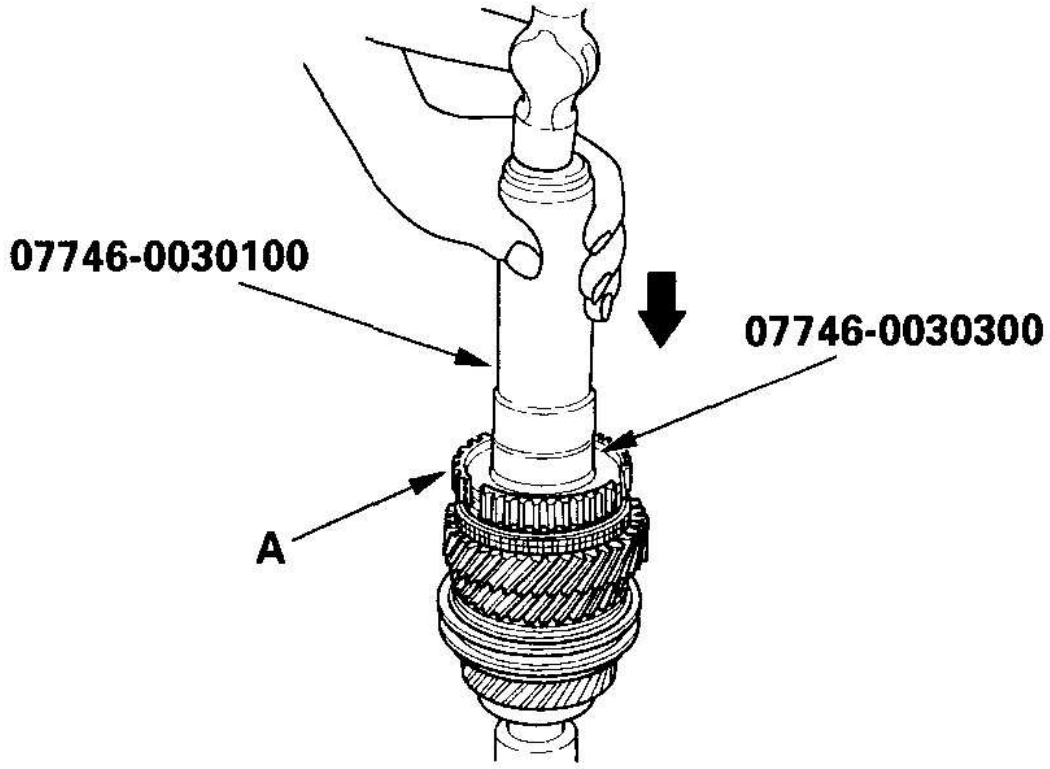


Fig. 106: Installing 5th Synchro Hub
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install the 5th synchro sleeve.
14. Install the synchro spring (A).

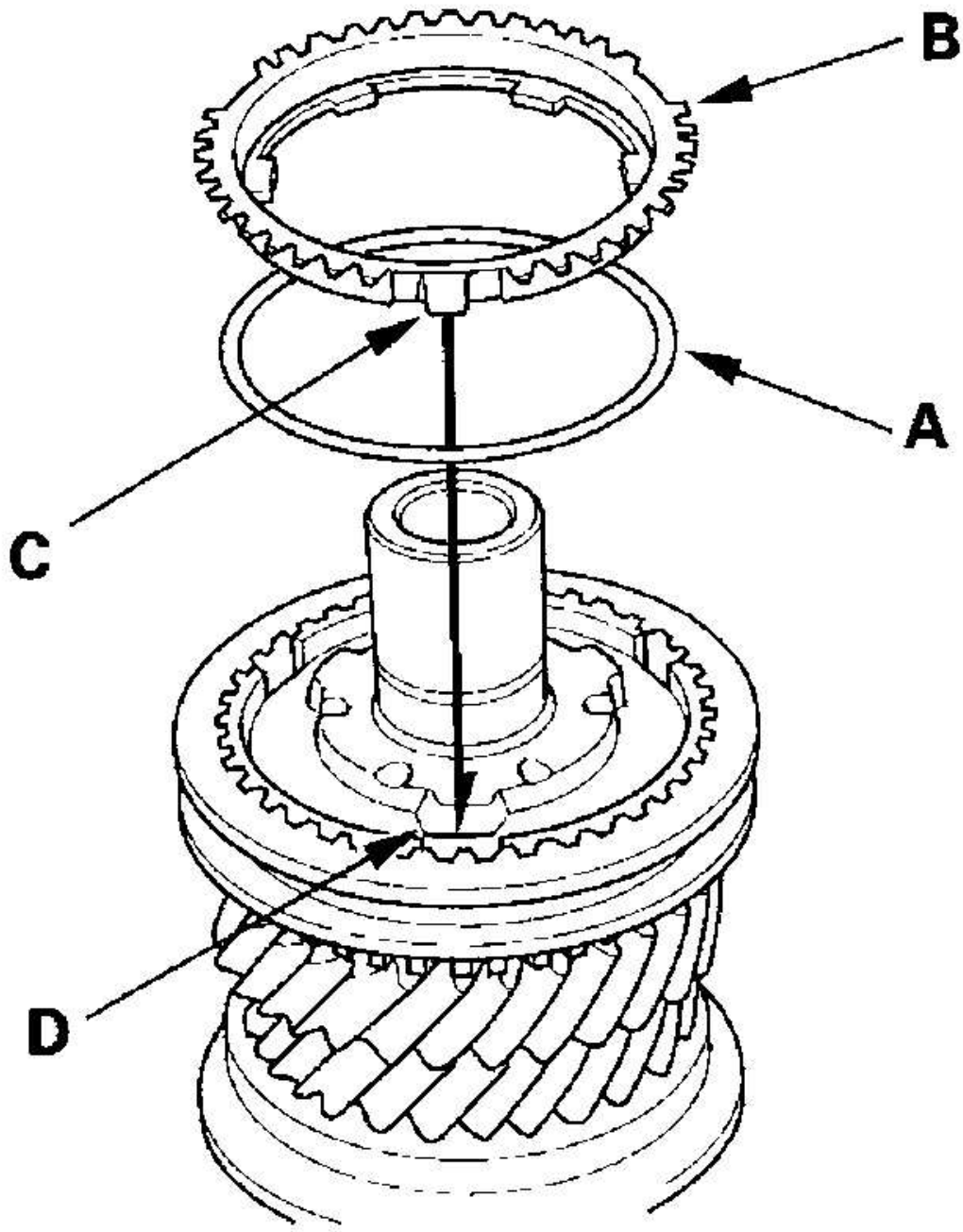


Fig. 107: Installing Synchro Spring

Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Install the synchro ring (B) by aligning the synchro cone fingers (C) with the grooves in the 5th synchro hub(D).
16. Install the new ball bearing (A) using the special tools and a press (B).

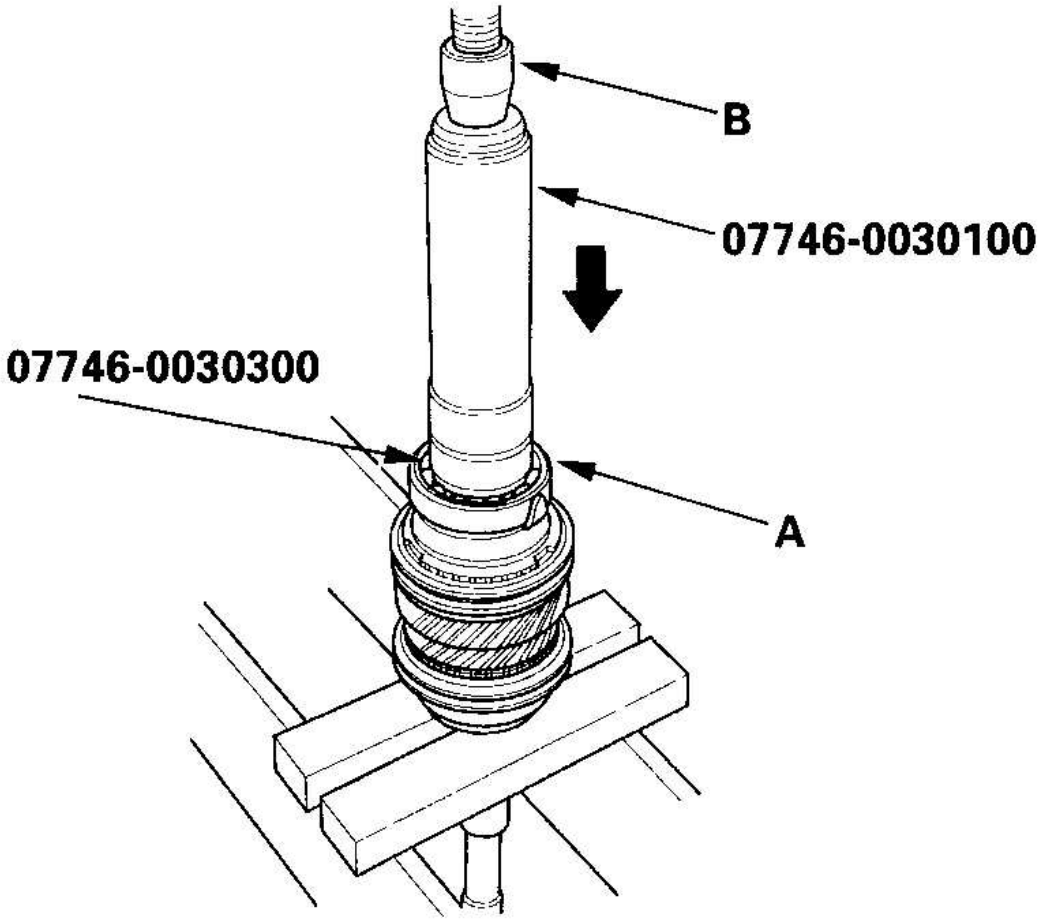


Fig. 108: Installing Ball Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COUNTERSHAFT ASSEMBLY CLEARANCE INSPECTION

1. Measure the clearance between 1st gear (A) and the distance collar (B) with a feeler gauge (C). If the clearance is more than the service limit, go to step 2.

   Standard: 0.06-0.16 mm (0.002-0.006 in.)

   Service Limit: 0.25 mm (0.010 in.)

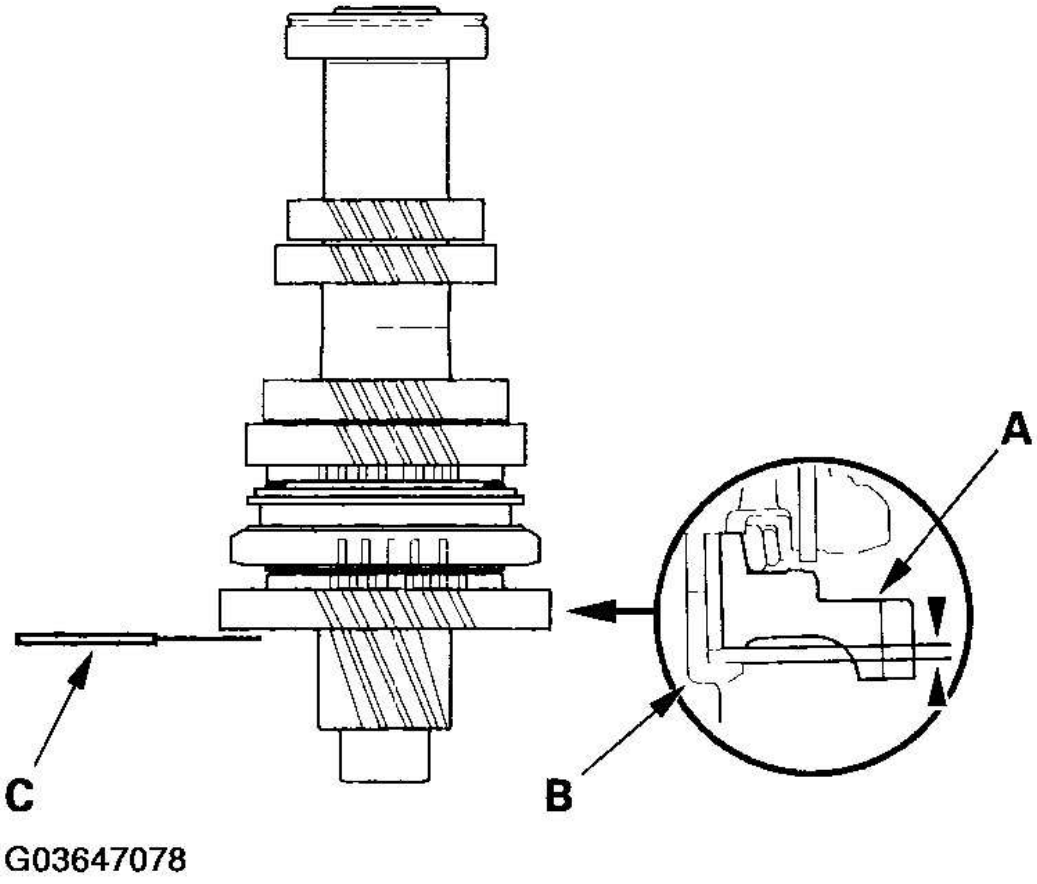
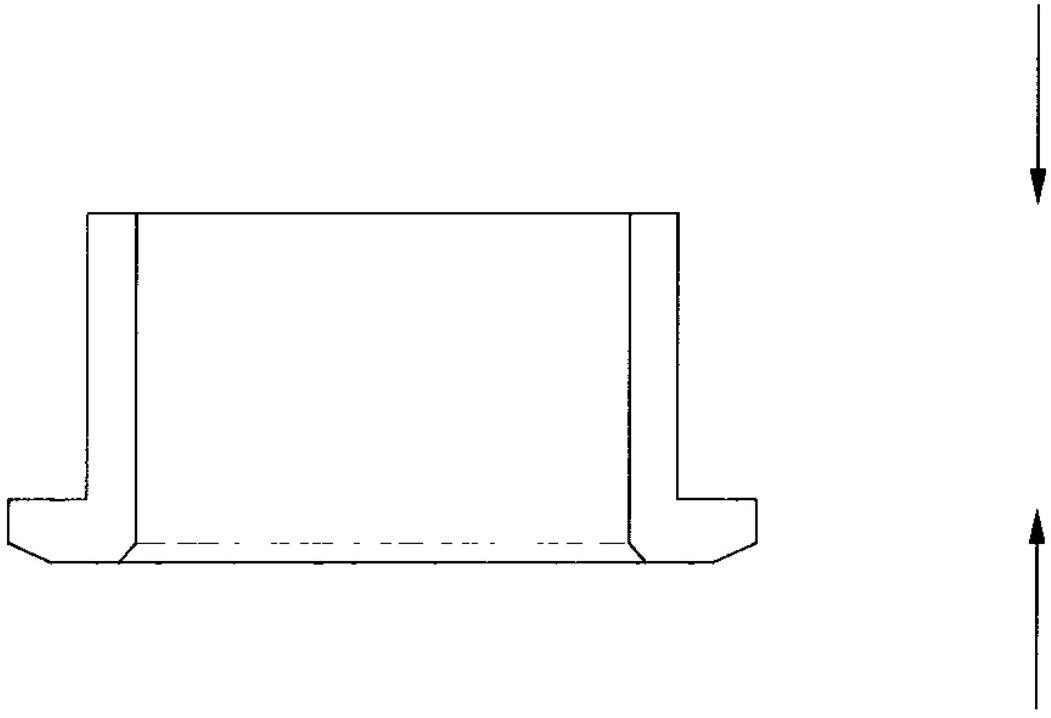


Fig. 109: Measuring Clearance Between 1st Gear And Distance Collar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the thickness of the distance collar.
   - If the thickness is not within the standard, replace the distance collar.
   - If the thickness is within the standard, go to step 3.

Standard: 23.03-23.08 mm (0.907-0.909 in.)



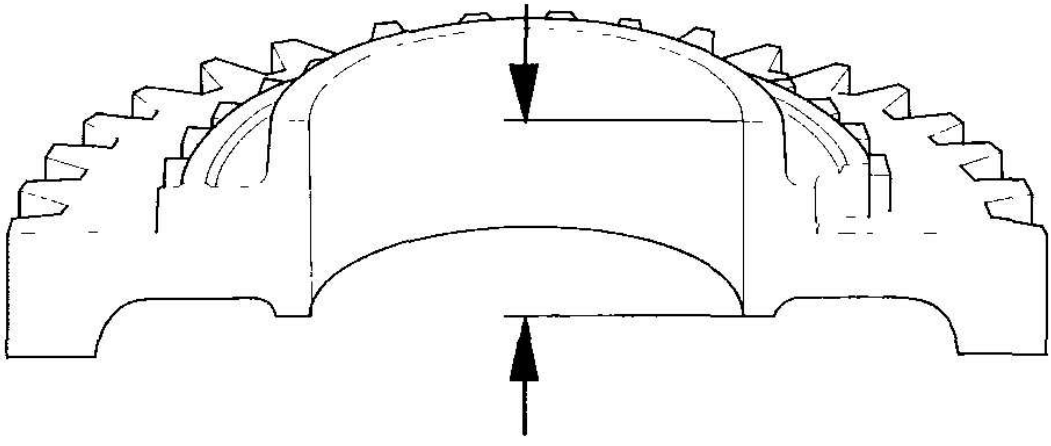
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Fig. 110: Identifying Distance Collar Thickness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Measure the thickness of 1st gear.
   - If the thickness is less than the service limit, replace 1st gear.
   - If the thickness is within the service limit, replace the 1st/2nd synchro hub.

   Standard: 22.92-22.97 mm (0.902-0.904 in.)

   Service Limit: 22.87 mm (0.900 in.)



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Fig. 111: Identifying 1st Gear Thickness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the clearance between 2nd gear (A) and 3rd gear (B) with a feeler gauge (C). If the clearance is more than the service limit, go to step 5.

   Standard: 0.06-0.16 mm (0.002-0.006 in.)

   Service Limit: 0.25 mm (0.010 in.)

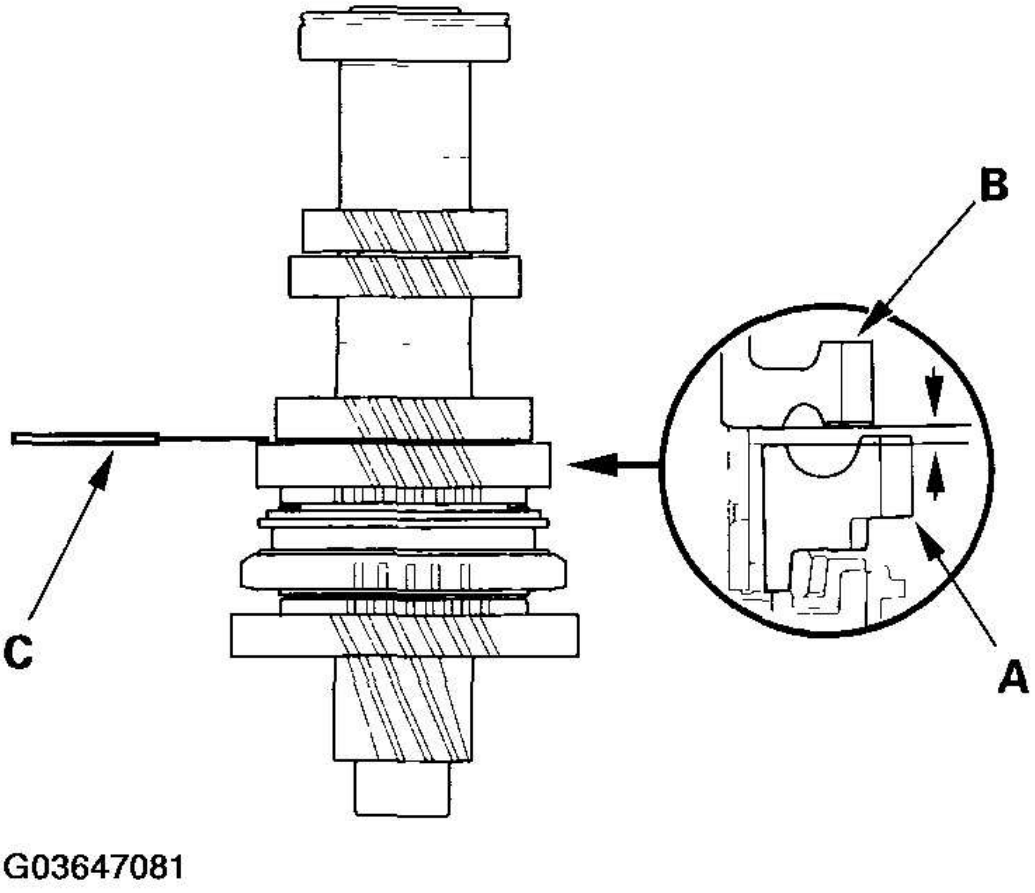


Fig. 112: Measuring Clearance Between 2nd Gear And 3rd Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Measure the thickness of the distance collar.
   - If the thickness is not within the standard, replace the distance collar.
   - If the thickness is within the standard, go to step 6.

   Standard: 28.03-28.08 mm (1.104-1.106 in.)

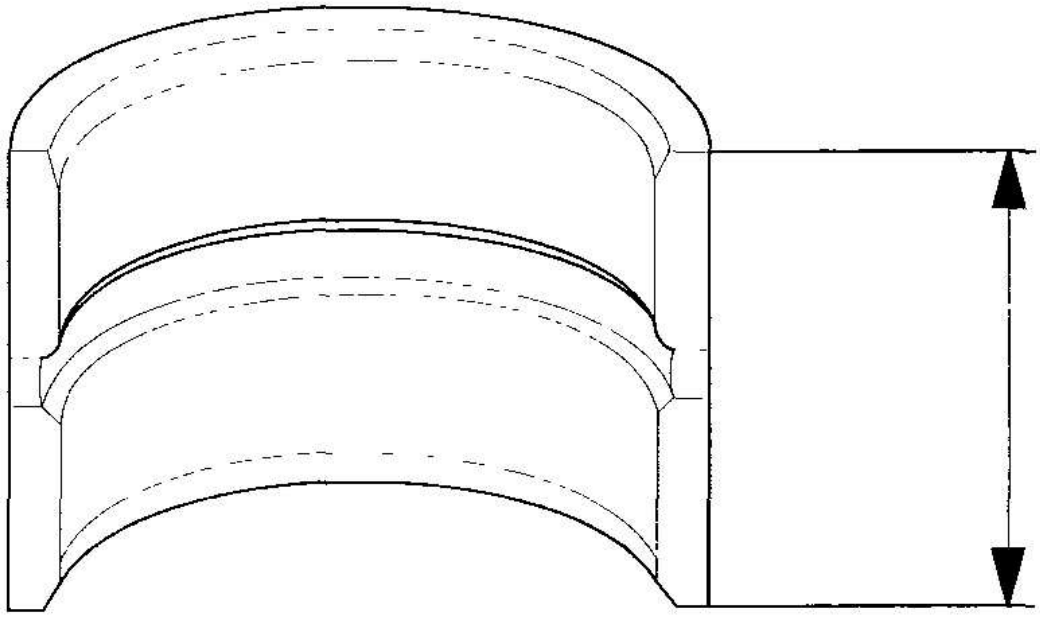


Fig. 113: Identifying Distance Collar Thickness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Measure the thickness of 2nd gear.
   - If the thickness is less than the service limit, replace 2nd gear.
   - If the thickness is within the service limit, replace the 1st/2nd synchro hub.

   Standard: 27.92-27.97 mm (1.099-1.101 in.)

   Service Limit: 27.87 mm (1.097 in.)

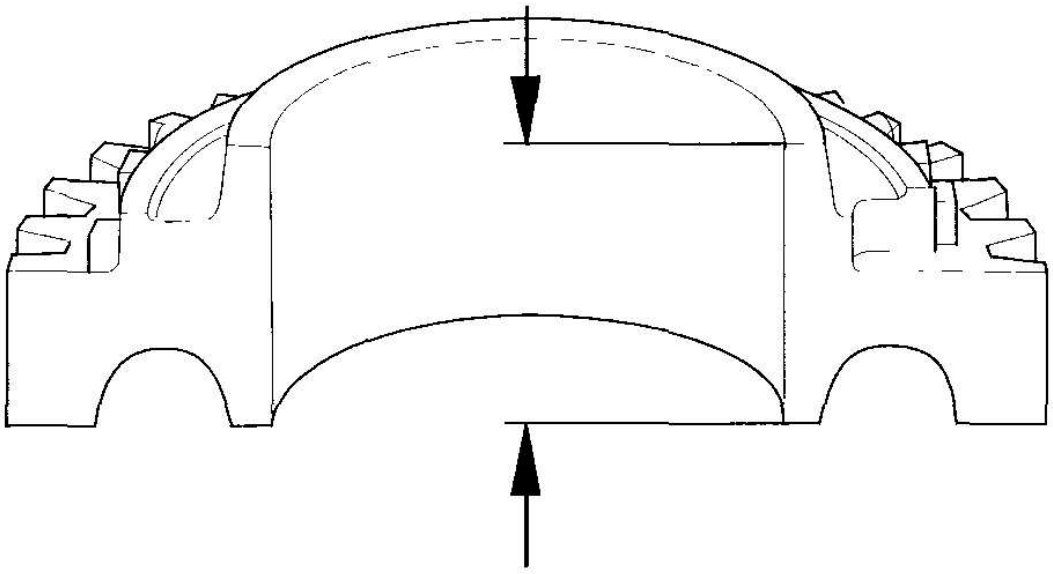
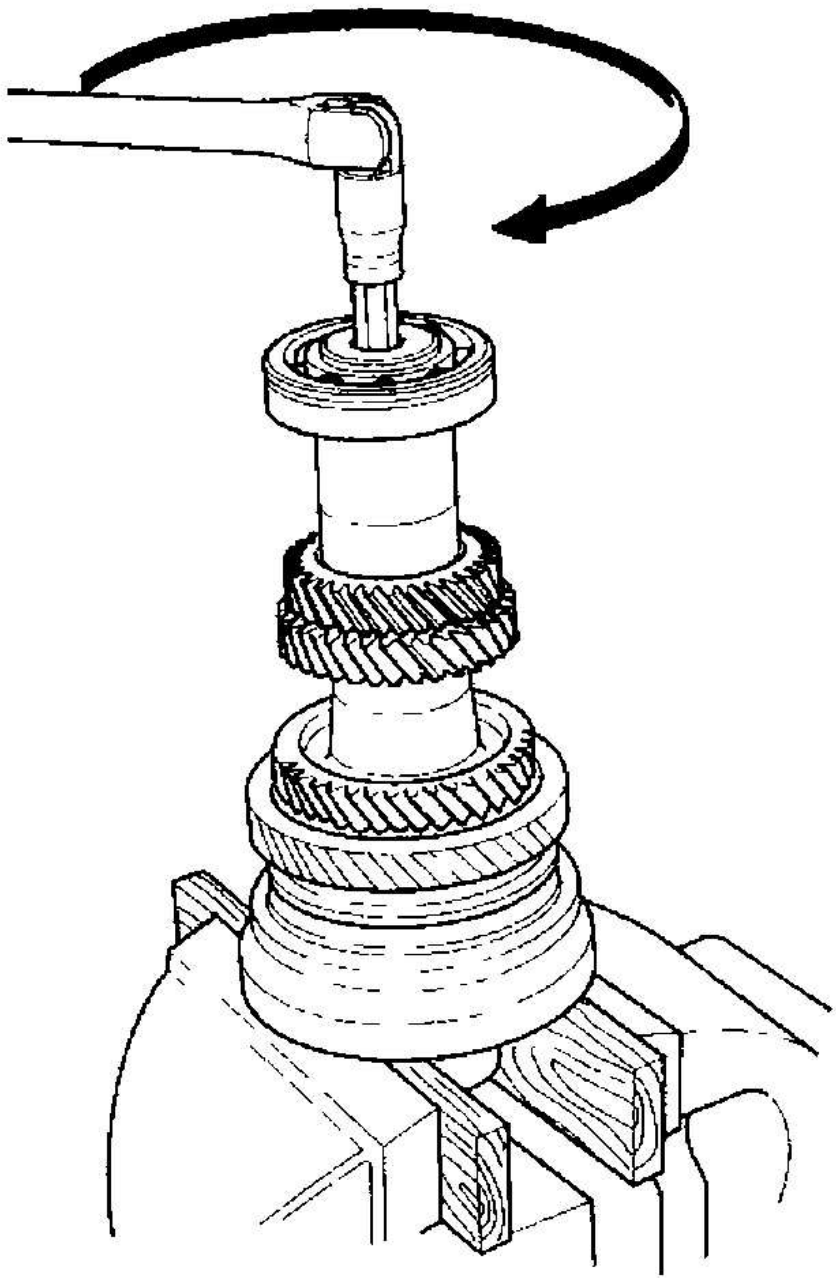


Fig. 114: Identifying 2nd Gear Thickness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COUNTERSHAFT DISASSEMBLY

1. Securely clamp the countershaft assembly in a vise with wood blocks.



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Fig. 115: Clamping Countershaft Assembly In Vise With Wood Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the special bolt (left-hand threads).
3. Support the ball bearing (A) on steel blocks (B), then use a press (C) and an attachment (D) to press the countershaft out of the ball bearing.

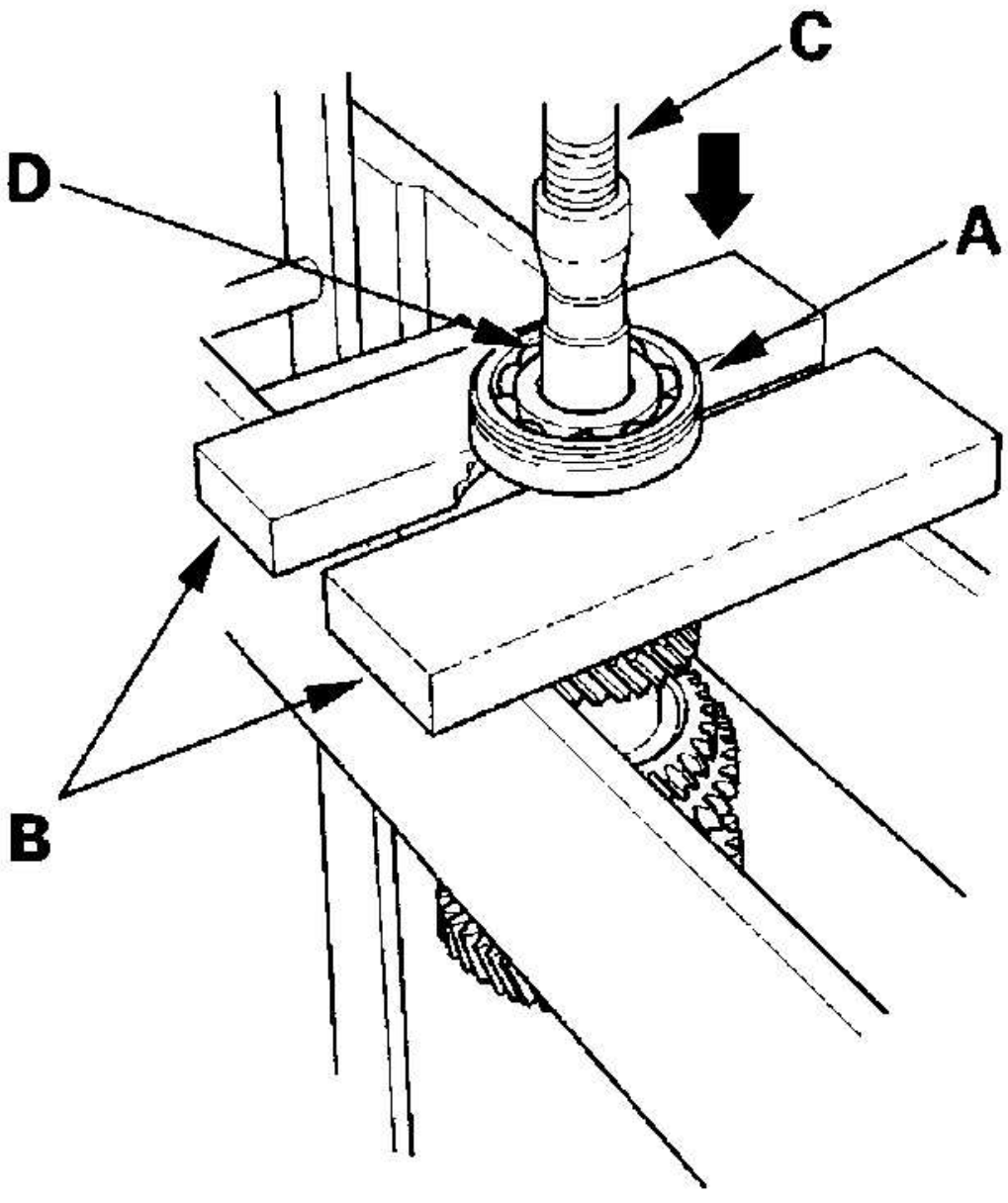


Fig. 116: Removing Countershaft From Ball Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the 35 mm shim and distance collar.

5. Support 4th gear (A) on steel blocks (B), then use a press (C) and an attachment (D) to press the countershaft (E) out of 5th gear.

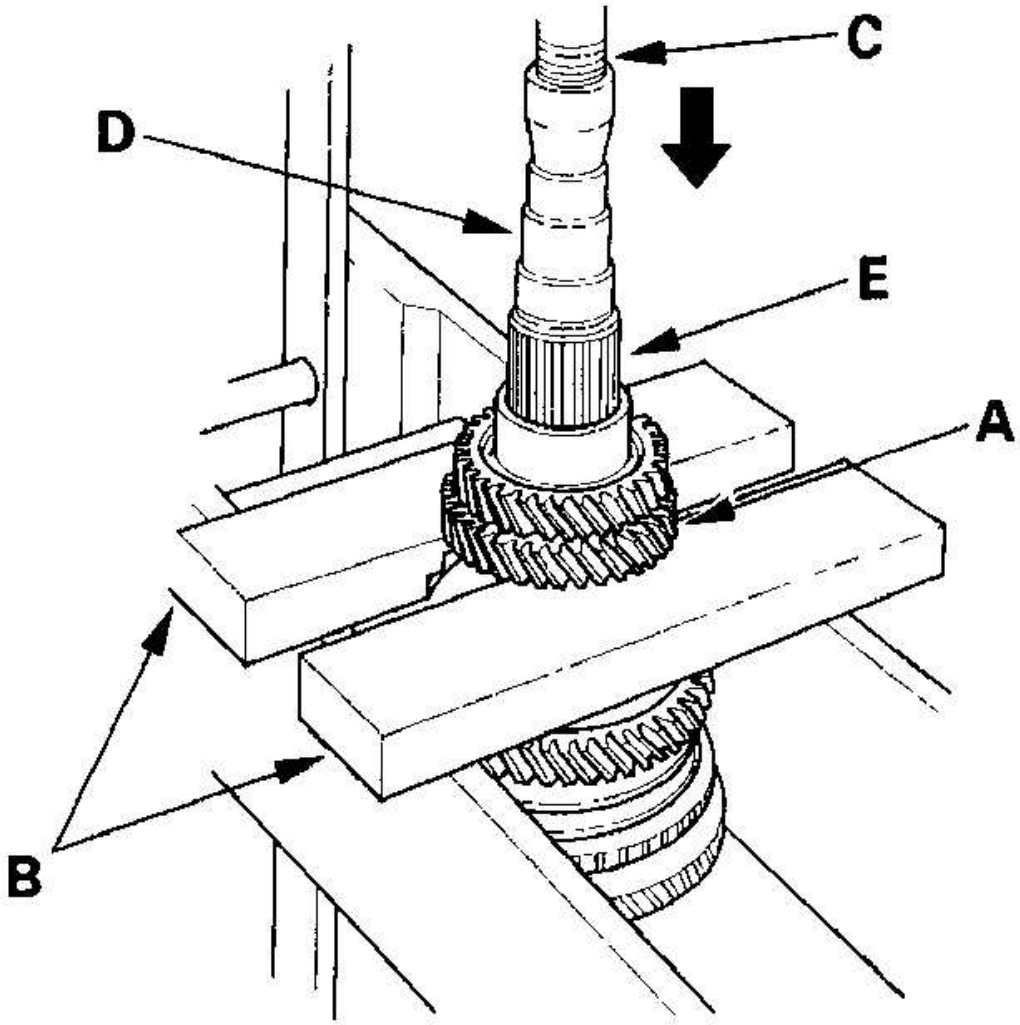


Fig. 117: Removing Countershaft From 5th Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Support 2nd gear (A) on steel blocks (B), then use a press (C) and an

attachment (D) to press the countershaft (E) out of 3rd gear.

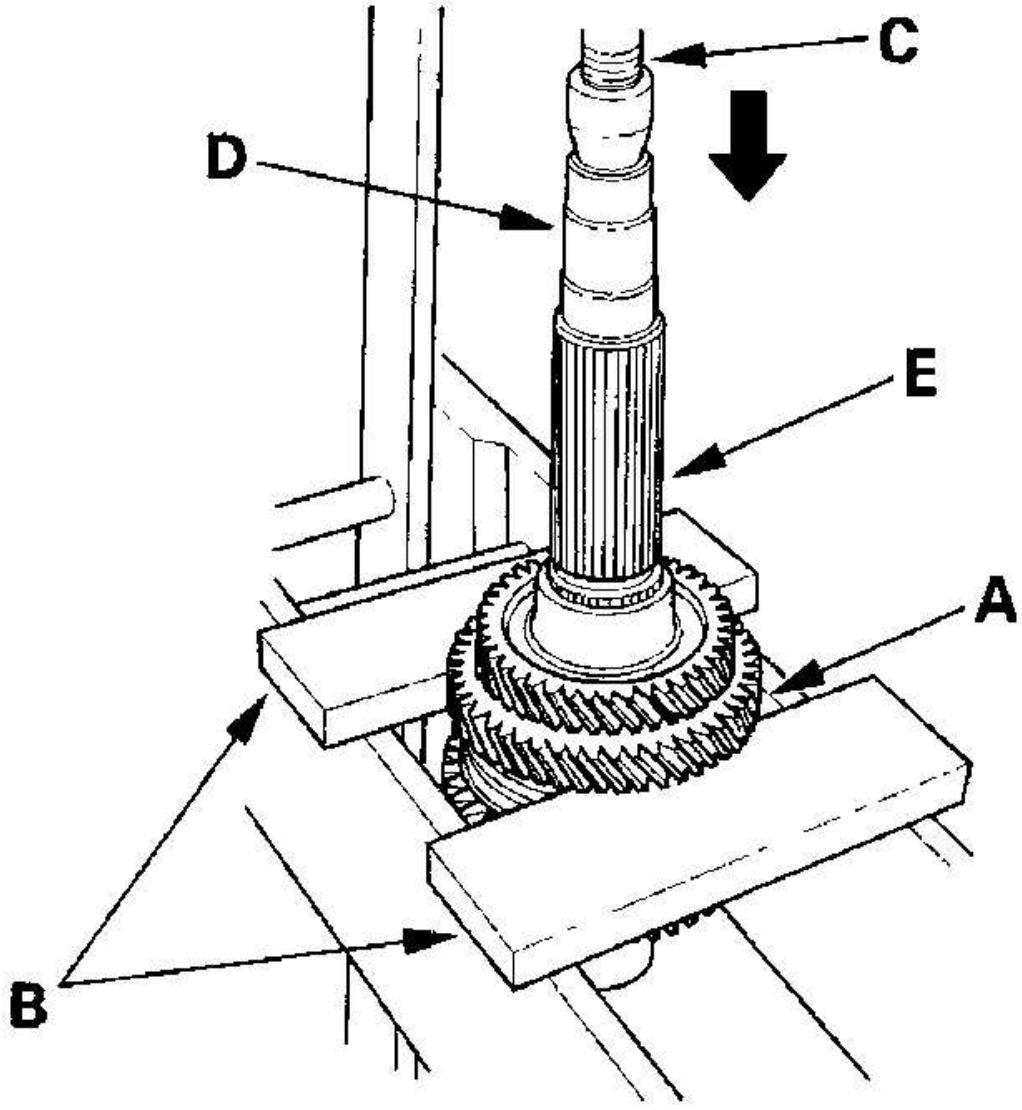


Fig. 118: Removing Countershaft From 3rd Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COUNTERSHAFT INSPECTION

1. Inspect the gear and bearing surfaces for wear and damage, then measure the countershaft at points A, B, and C. If any part of the countershaft is less than the service limit, replace it.

   Standard:

   A. **Ball bearing surface (transmission housing side): 30.020-30.033 mm (1.1819-1.1824 in.)**
   B. **Distance collar surface: 39.937-39.950 mm (1.5723-1.5728 in.)**
   C. **Needle bearing surface (clutch housing side): 40.000-40.015 mm (1.5748-1.5754 in.)**

   Service Limit:

   A. **A: 29.97 mm (1.180 in.)**
   B. **B: 39.88 mm (1.570 in.)**
   C. **C: 39.95 mm (1.573 in.)**

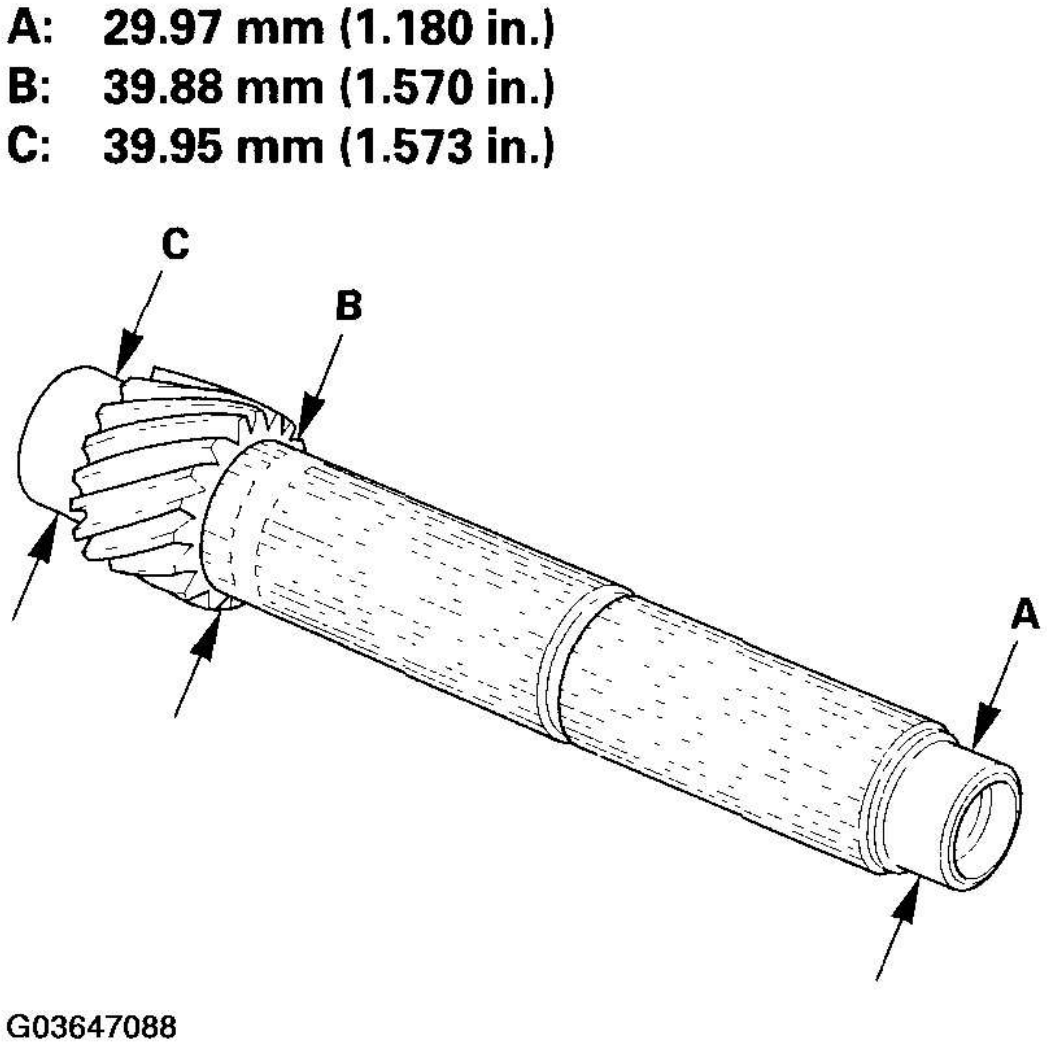
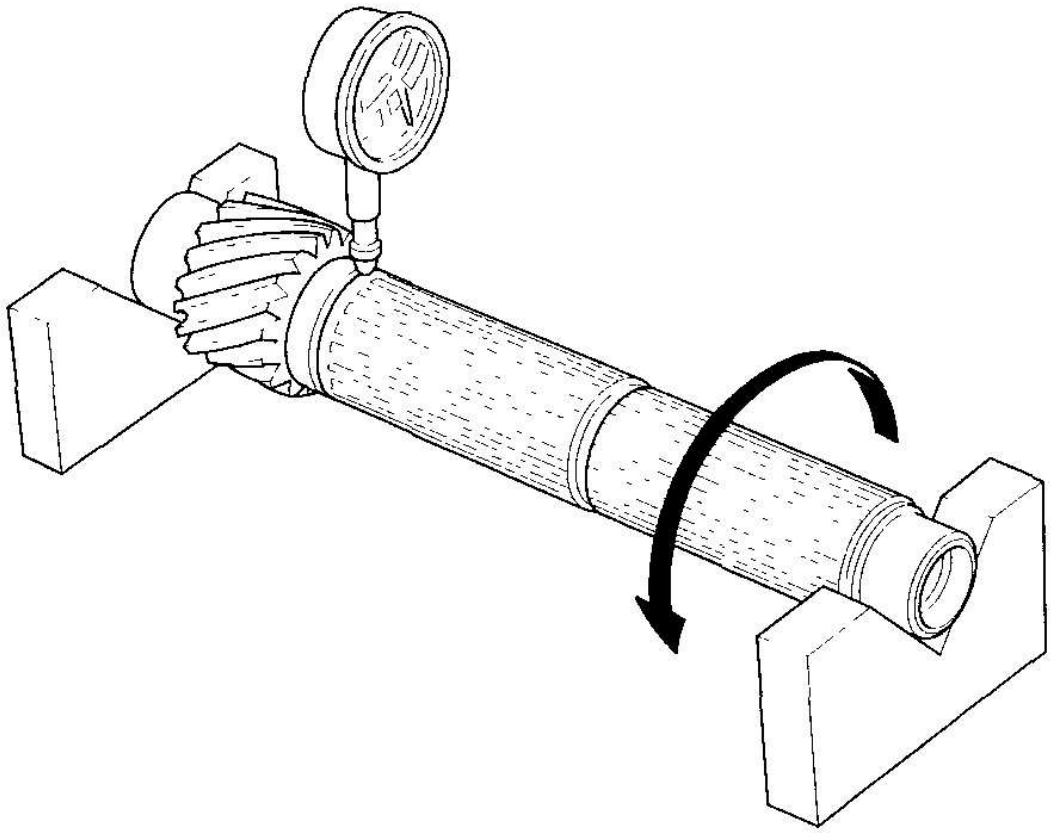


Fig. 119: View Of Countershaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Inspect the runout by supporting both ends of the countershaft. Then rotate the countershaft two complete turns while measuring with a dial gauge. If the runout exceeds the service limit, replace the countershaft.

   Standard: 0.02 mm (0.001 in.) max.

   Service Limit: 0.05 mm (0.002 in.)



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Fig. 120: Inspecting Countershaft Runout
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COUNTERSHAFT REASSEMBLY

EXPLODED VIEW

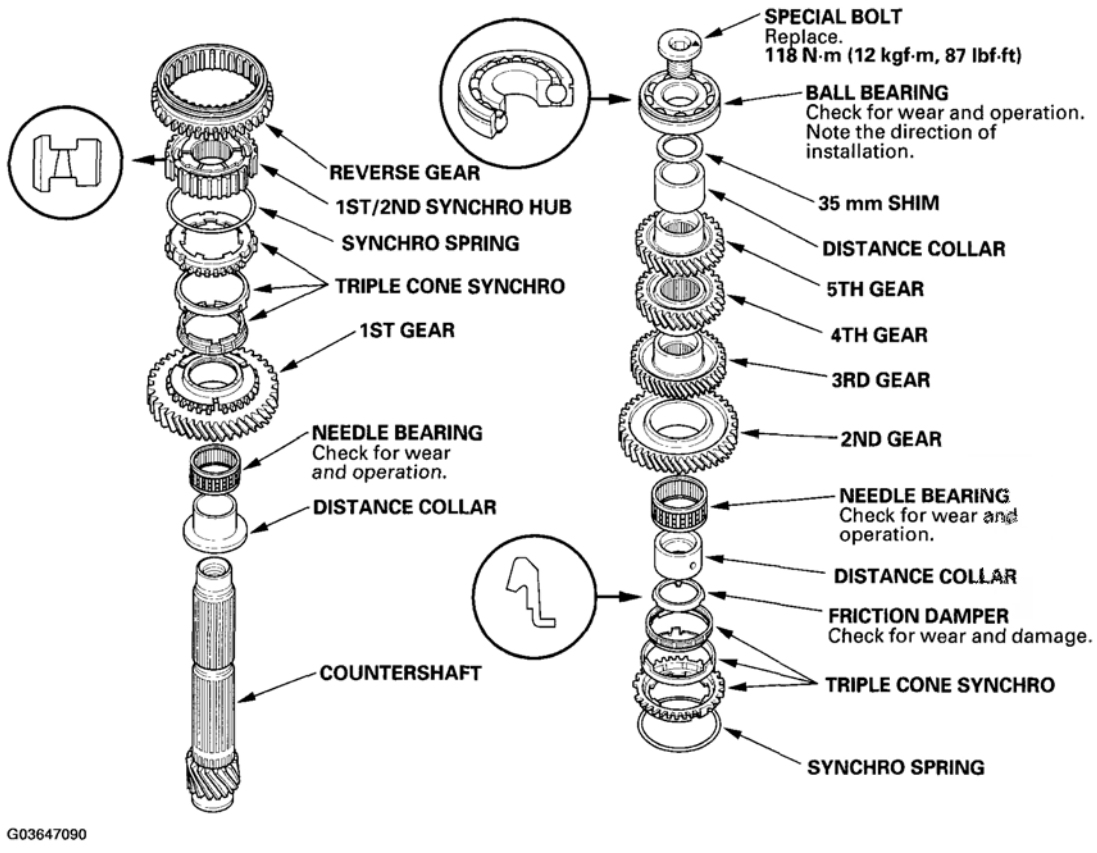


Fig. 121: Exploded View Of Countershaft Assembly Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

- Driver, 40 mm I.D. 07746-0030100
- Attachment, 30 mm 07746-0030300

NOTE: Refer to the EXPLODED VIEW as needed during this procedure.

1. Clean all parts in solvent, dry them, and apply lubricant to all contact surfaces.
2. Install the distance collar and needle bearing onto the countershaft.
3. Install the triple cone synchro assembly (A) by aligning the synchro cone fingers (B) with the 1st gear grooves (C), then install the synchro spring (D).

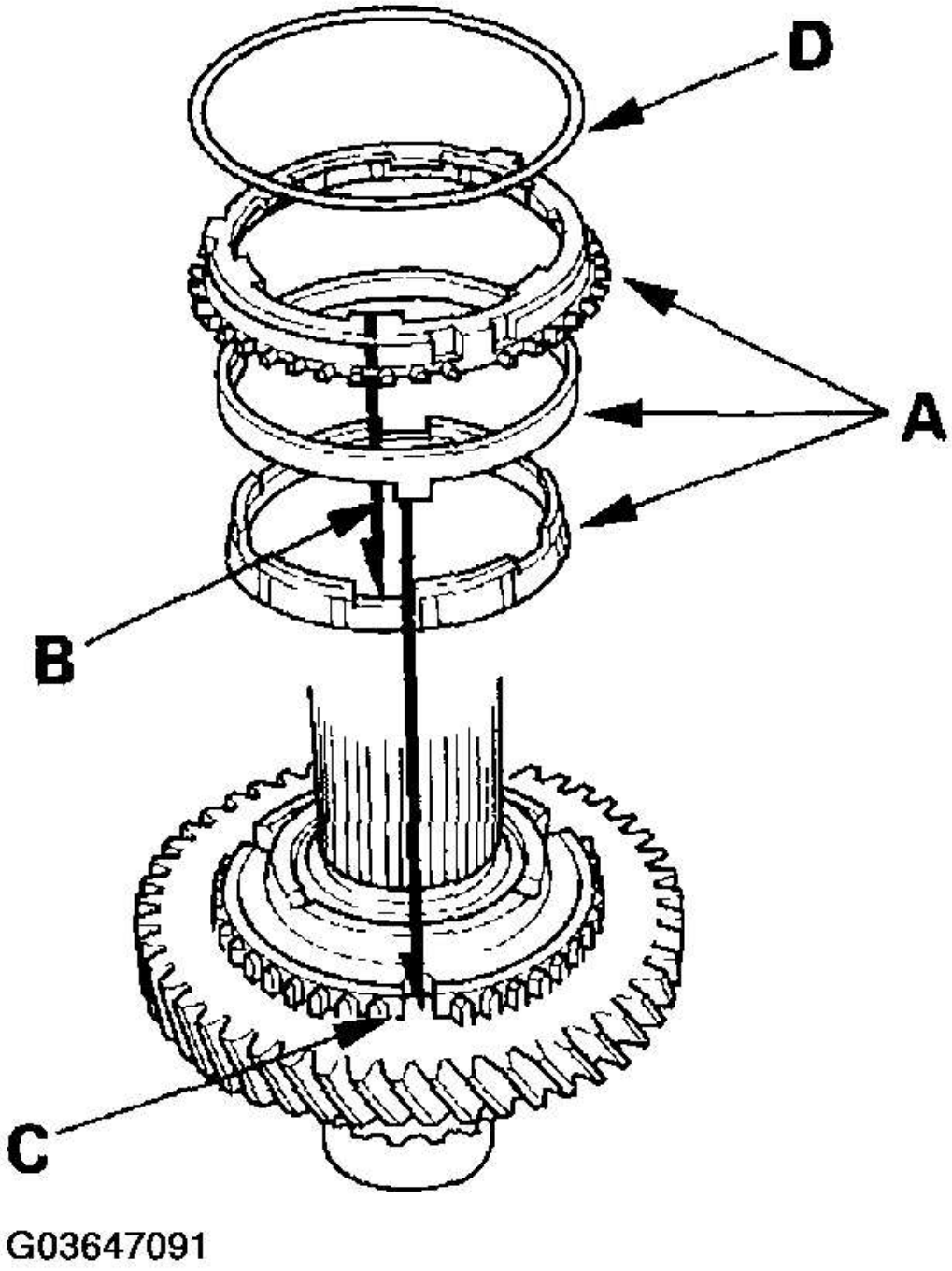
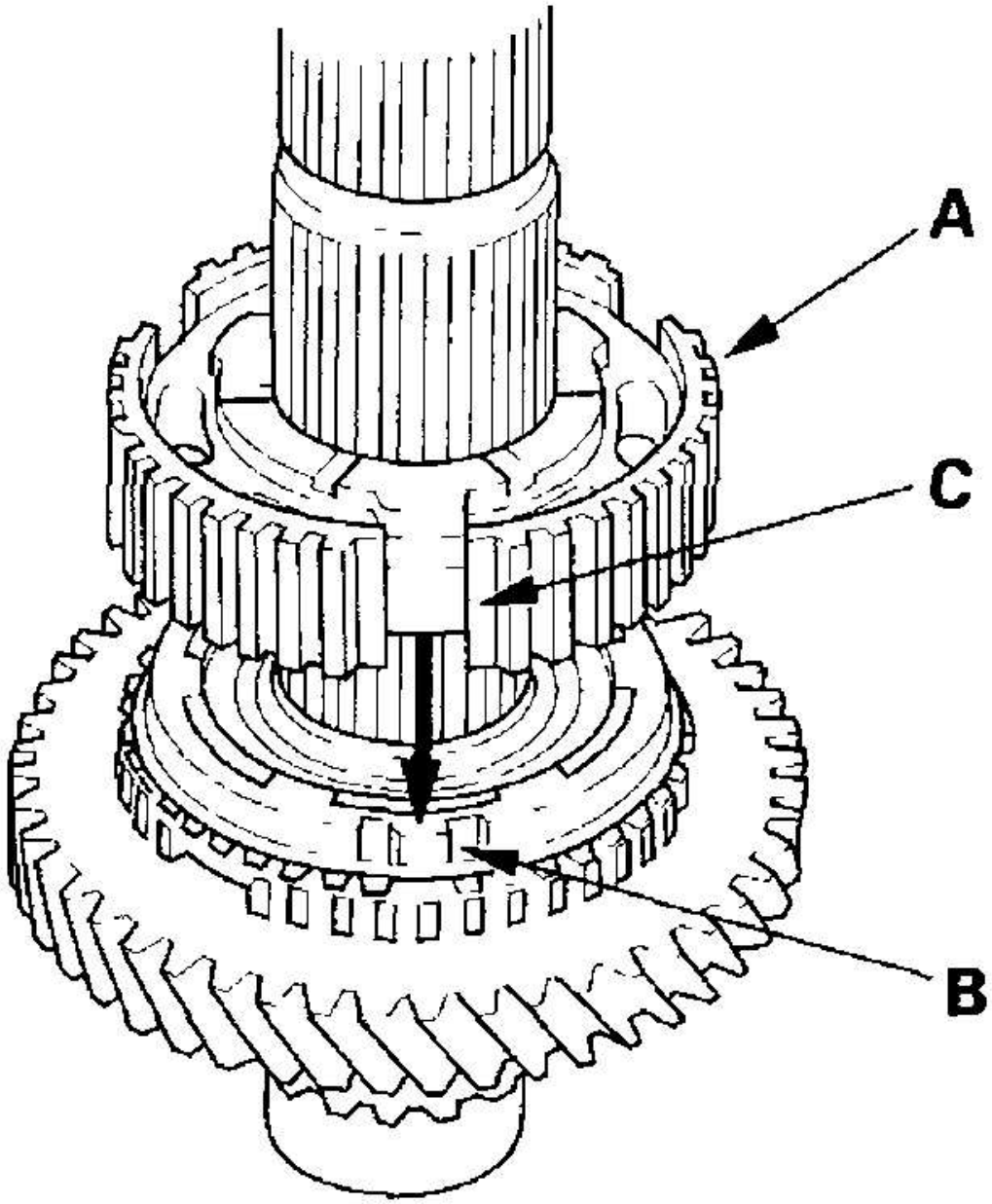


Fig. 122: Installing Triple Cone Synchro Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

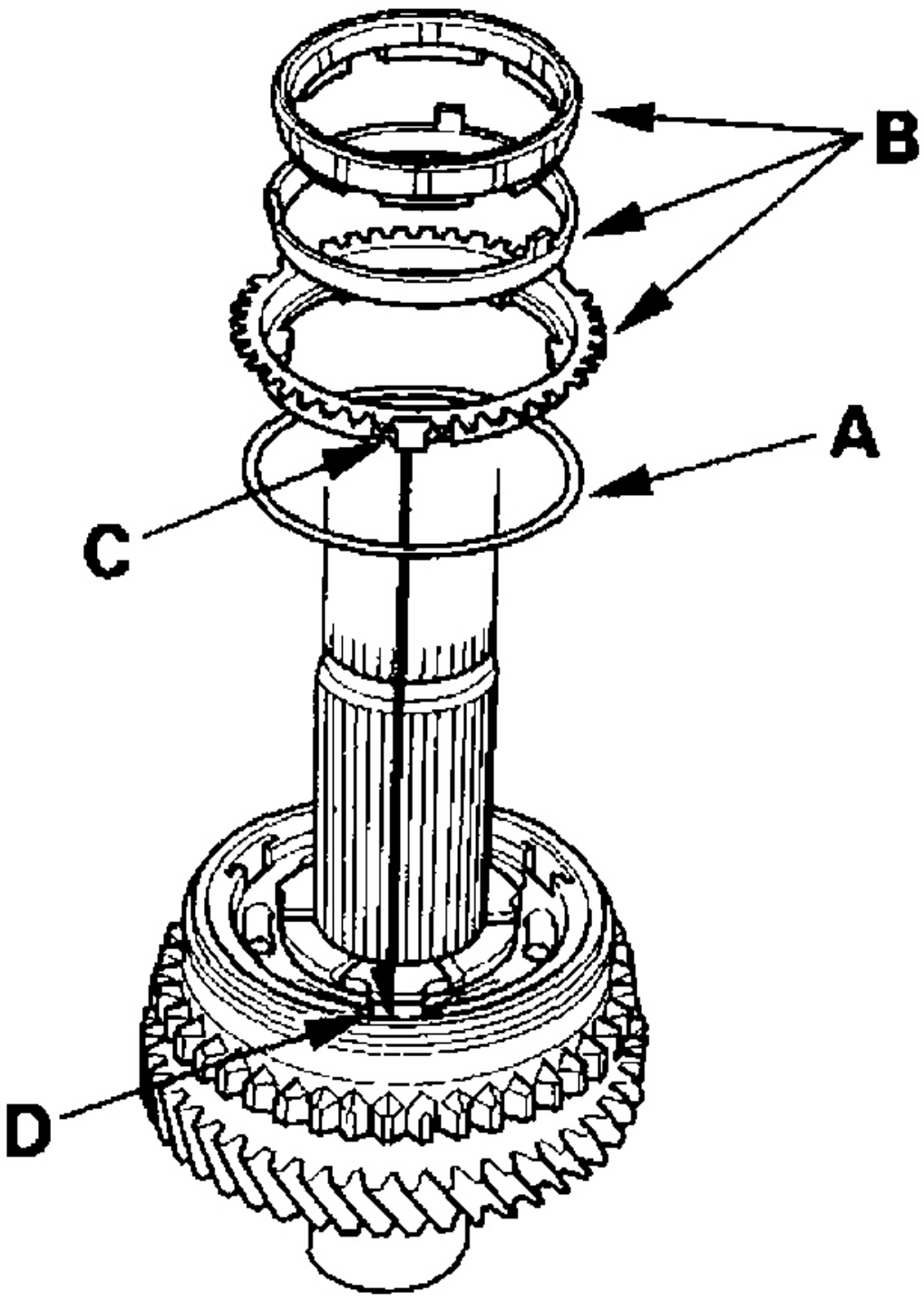
4. Install the 1st/2nd synchro hub (A) by aligning the synchro cone fingers (B) with the 1st/2nd synchro hub grooves (C).



G03647092

Fig. 123: Installing 1st/2nd Synchro Hub
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the reverse gear.
6. Install the synchro spring (A).



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Fig. 124: Installing Synchro Spring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the triple cone synchro assembly (B) by aligning the synchro cone fingers (C) with the 1st/2nd synchro hub grooves (D).
8. Install the distance collar (A) and friction damper (B) by aligning the friction damper fingers (C) with the 1st/2nd synchro hub grooves (D).

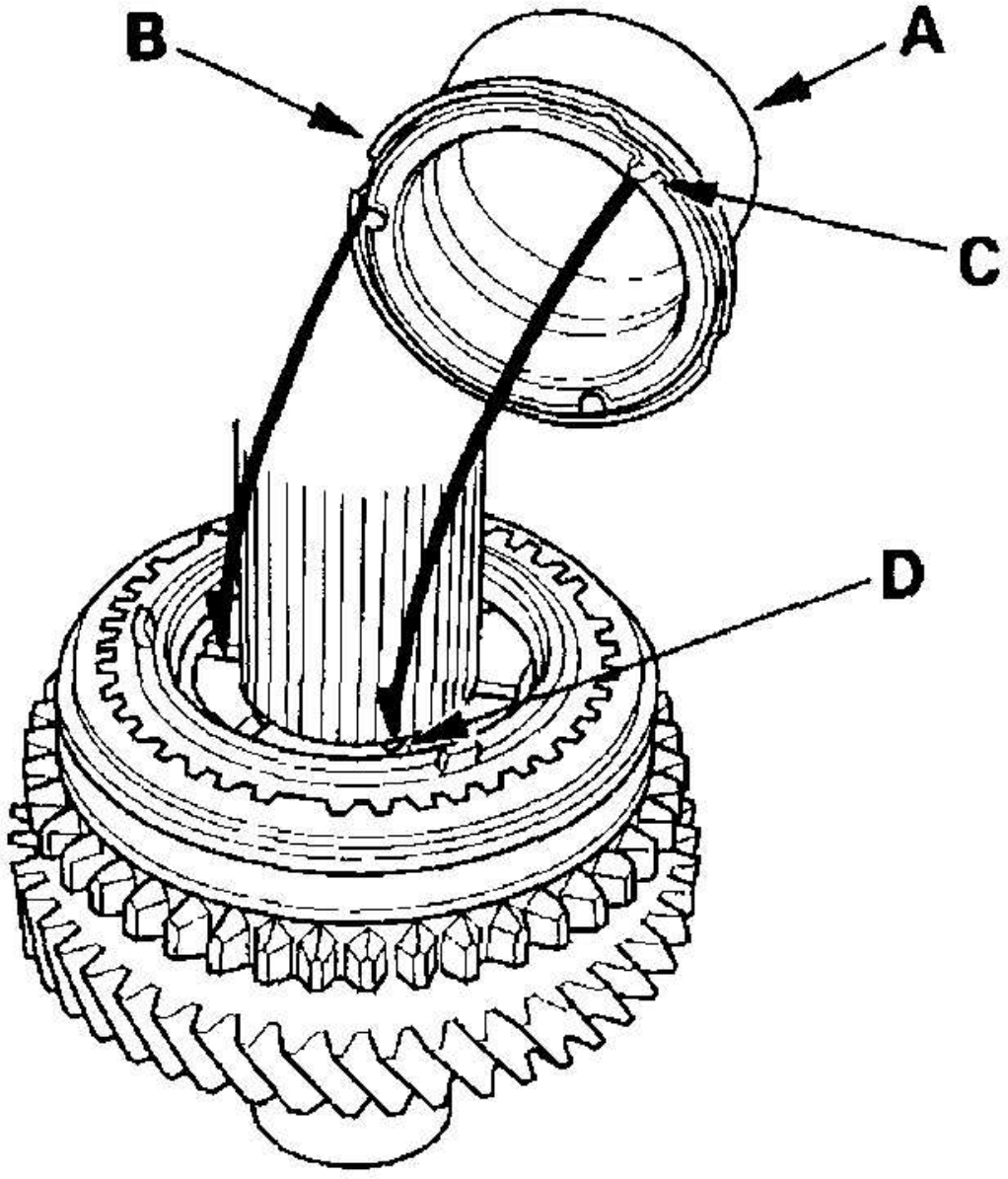


Fig. 125: Installing Distance Collar And Friction Damper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the needle bearing.

10. Install 2nd gear (A) by aligning the synchro cone fingers (B) with the 2nd gear grooves (C).

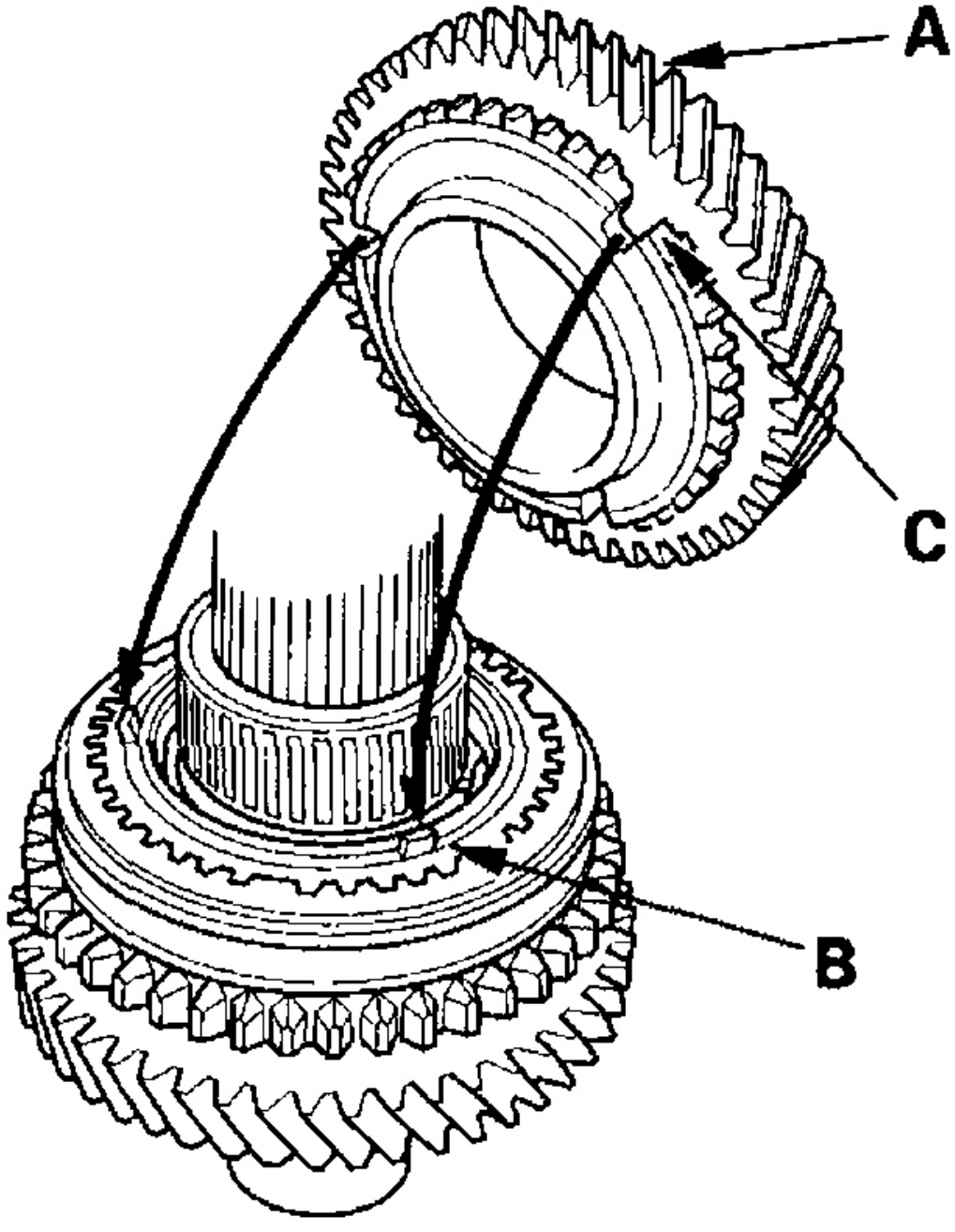


Fig. 126: Installing 2nd Gear

Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Support the countershaft (A) on steel blocks, then install 3rd gear (B) using the special tool and a press (C). Do not exceed the maximum pressure.

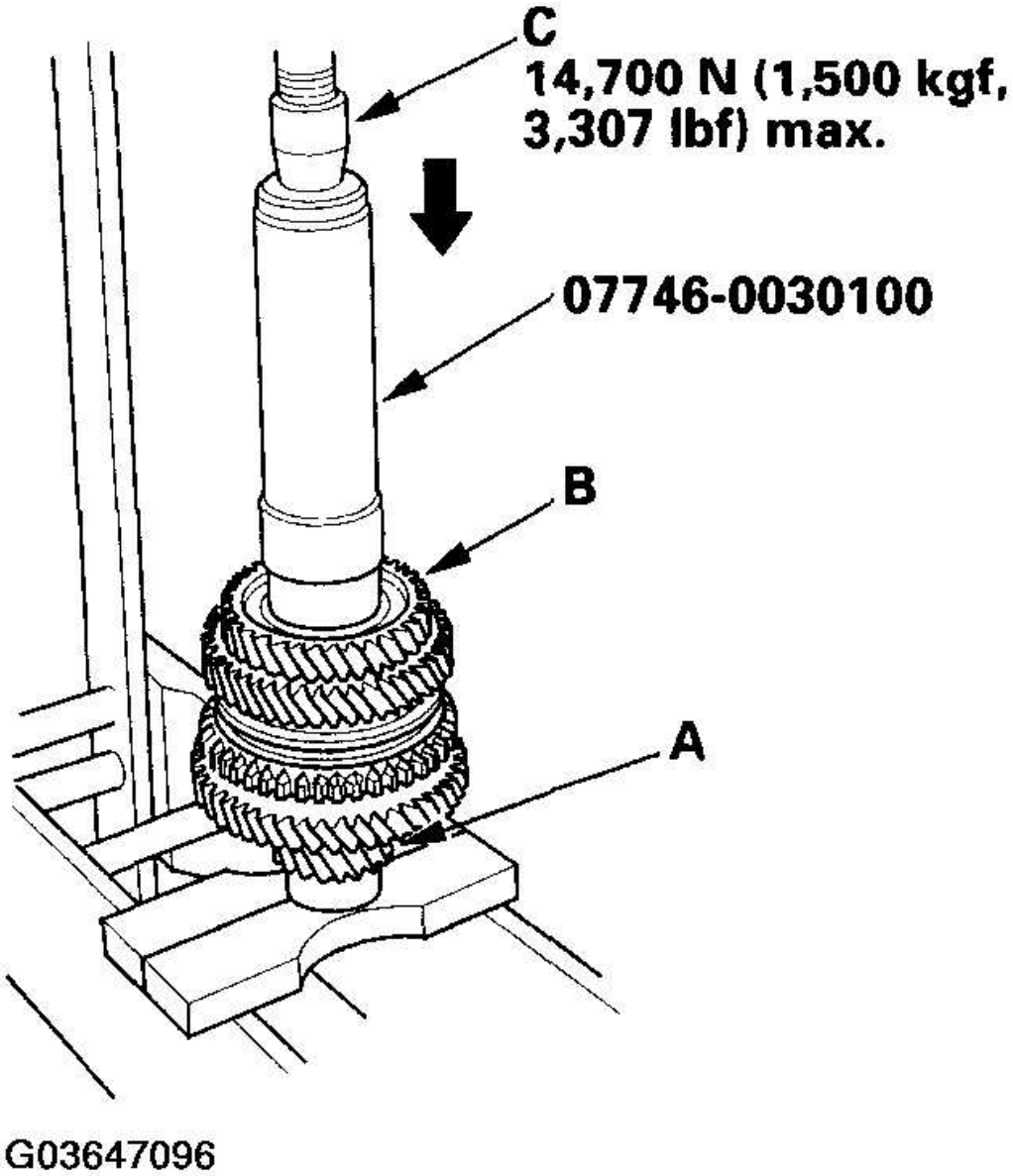


Fig. 127: Installing 3rd Gear

Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Install 4th gear (A) using the special tool and a press (B). Do not exceed the maximum pressure.

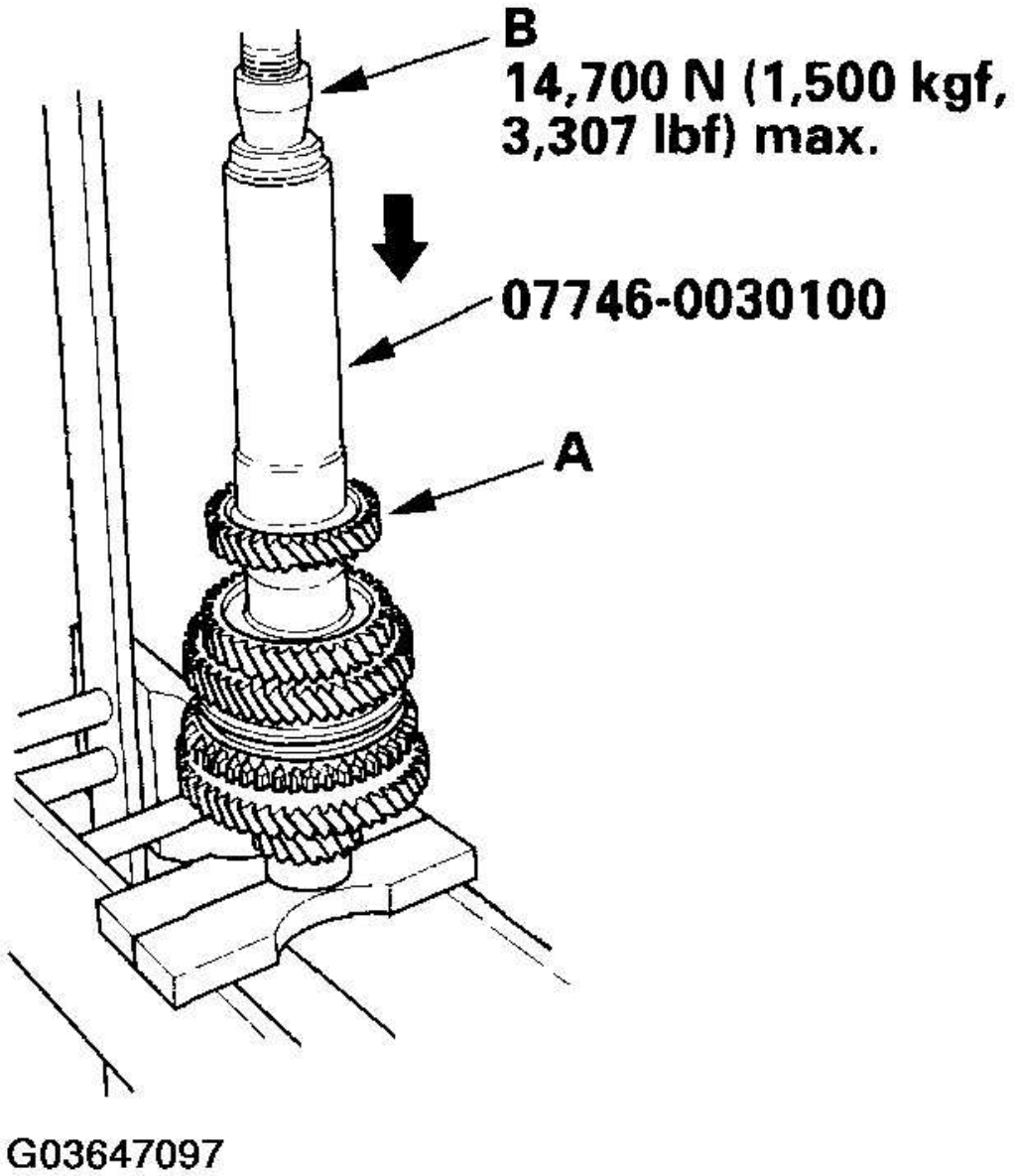


Fig. 128: Installing 4th Gear

Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install 5th gear (A) using the special tool and a press (B). Do not exceed the maximum pressure.

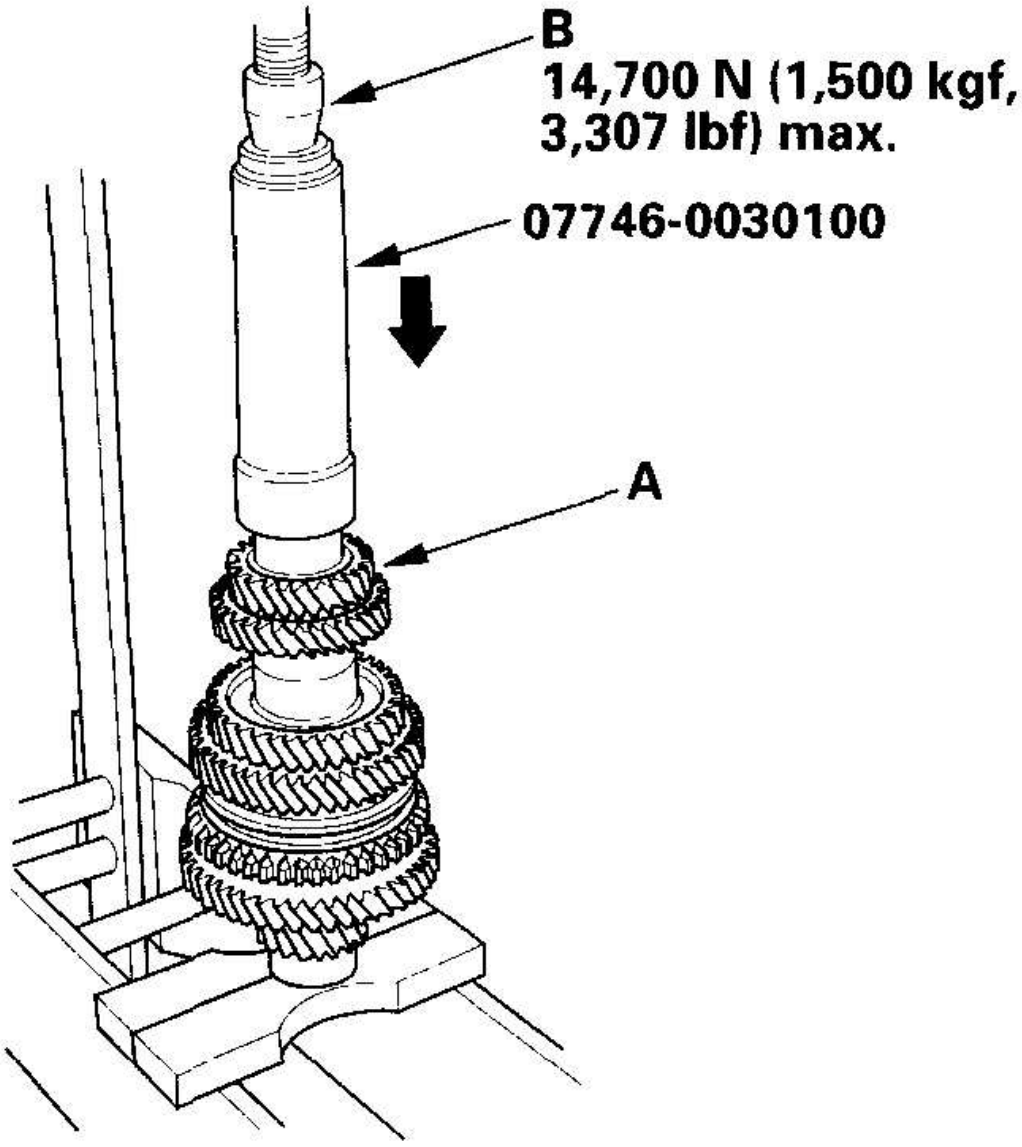


Fig. 129: Installing 5th Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Install the distance collar (A), 35 mm shim, and old ball bearing (B) using the special tools and a press (C).

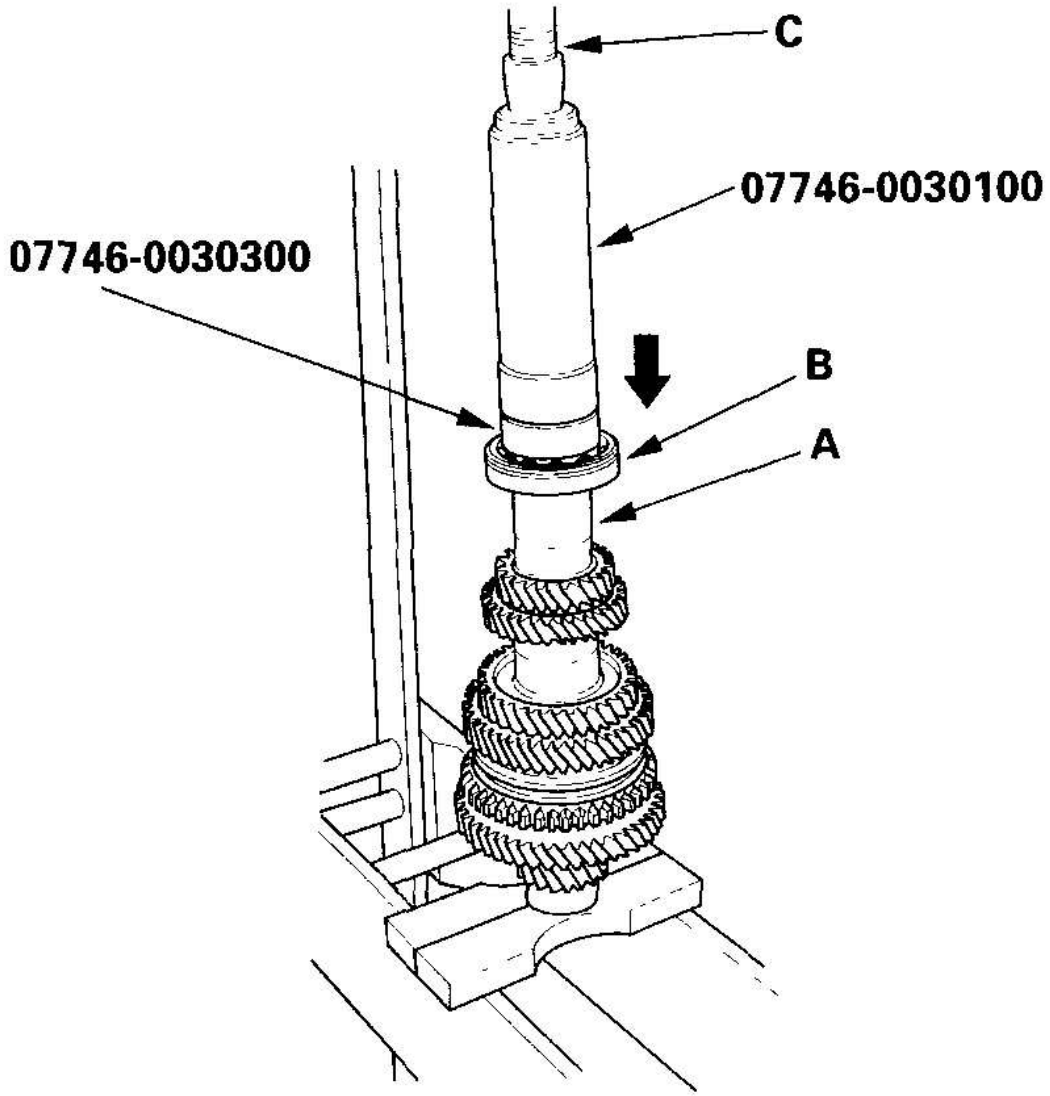


Fig. 130: Installing Distance Collar And Ball Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Measure the clearance between the old bearing (A) and the 35 mm shim (B) with a feeler gauge (C).

    Standard: 0.04-0.10 mm (0.0016-0.0039 in.)

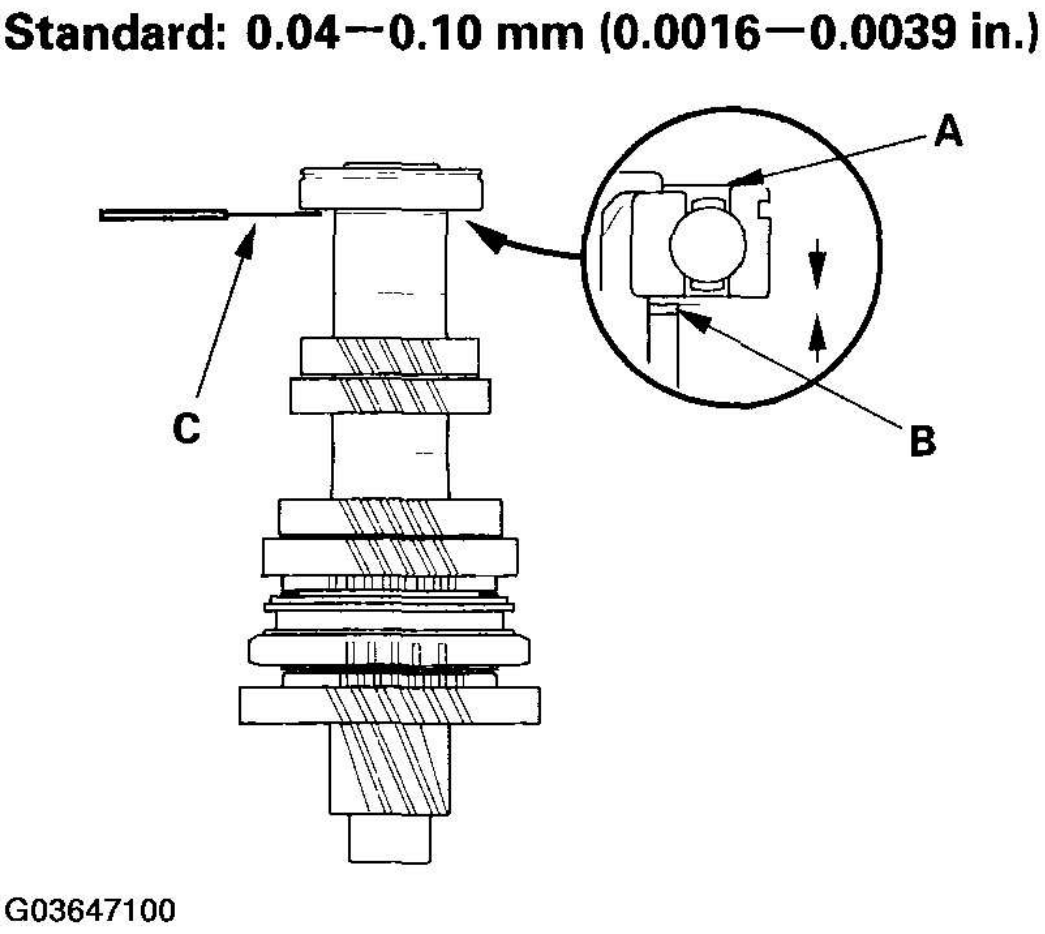


Fig. 131: Measuring Clearance Between Old Bearing And Shim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. If the clearance is more than the standard, select a new shim from the following table. If the clearance measured in step 15 is within the standard, replace only the ball bearing.

    35 mm Shim

SHIM THICKNESS SPECIFICATIONS (35MM)

	Part Number	Thickness
A	23981-PPP-000	0.87 mm (0.034 in.)
AA	23981-PPP-900	0.91 mm (0.036 in.)
B	23982-PPP-000	0.95 mm (0.037 in.)
AB	23982-PPP-900	0.99 mm (0.039 in.)
C	23983-PPP-000	1.03 mm (0.041 in.)
AC	23983-PPP-900	1.07 mm (0.042 in.)
D	23984-PPP-000	1.11 mm (0.044 in.)
AD	23984-PPP-900	1.15 mm (0.045 in.)
E	23985-PPP-000	1.19 mm (0.047 in.)
AE	23985-PPP-900	1.23 mm (0.048 in.)
F	23986-PPP-000	1.27 mm (0.050 in.)
AF	23986-PPP-900	1.31 mm (0.052 in.)
G	23987-PPP-000	1.35 mm (0.053 in.)
AG	23987-PPP-900	1.39 mm (0.055 in.)
H	23988-PPP-000	1.43 mm (0.056 in.)
AH	23988-PPP-	1.47 mm

	900	(0.058 in.)
J	23989-PPP-000	1.51 mm (0.060 in.)
AJ	23989-PPP-900	1.55 mm (0.061 in.)
K	23990-PPP-000	1.59 mm (0.063 in.)
AK	23990-PPP-900	1.63 mm (0.064 in.)
L	23991-PPP-000	1.67 mm (0.066 in.)
AL	23991-PPP-900	1.71 mm (0.067 in.)
M	23992-PPP-000	1.75 mm (0.069 in.)
AM	23992-PPP-900	1.79 mm (0.070 in.)
N	23993-PPP-000	1.83 mm (0.072 in.)
AN	23993-PPP-900	1.87 mm (0.074 in.)
P	23994-PPP-000	1.91 mm (0.075 in.)
AP	23994-PPP-900	1.95 mm (0.077 in.)
O	23995-PPP-000	1.99 mm (0.078 in.)

17. Support the ball bearing (A) on steel blocks (B), then use a press (C) and an attachment (D) to press the countershaft (E) out of the ball bearing.

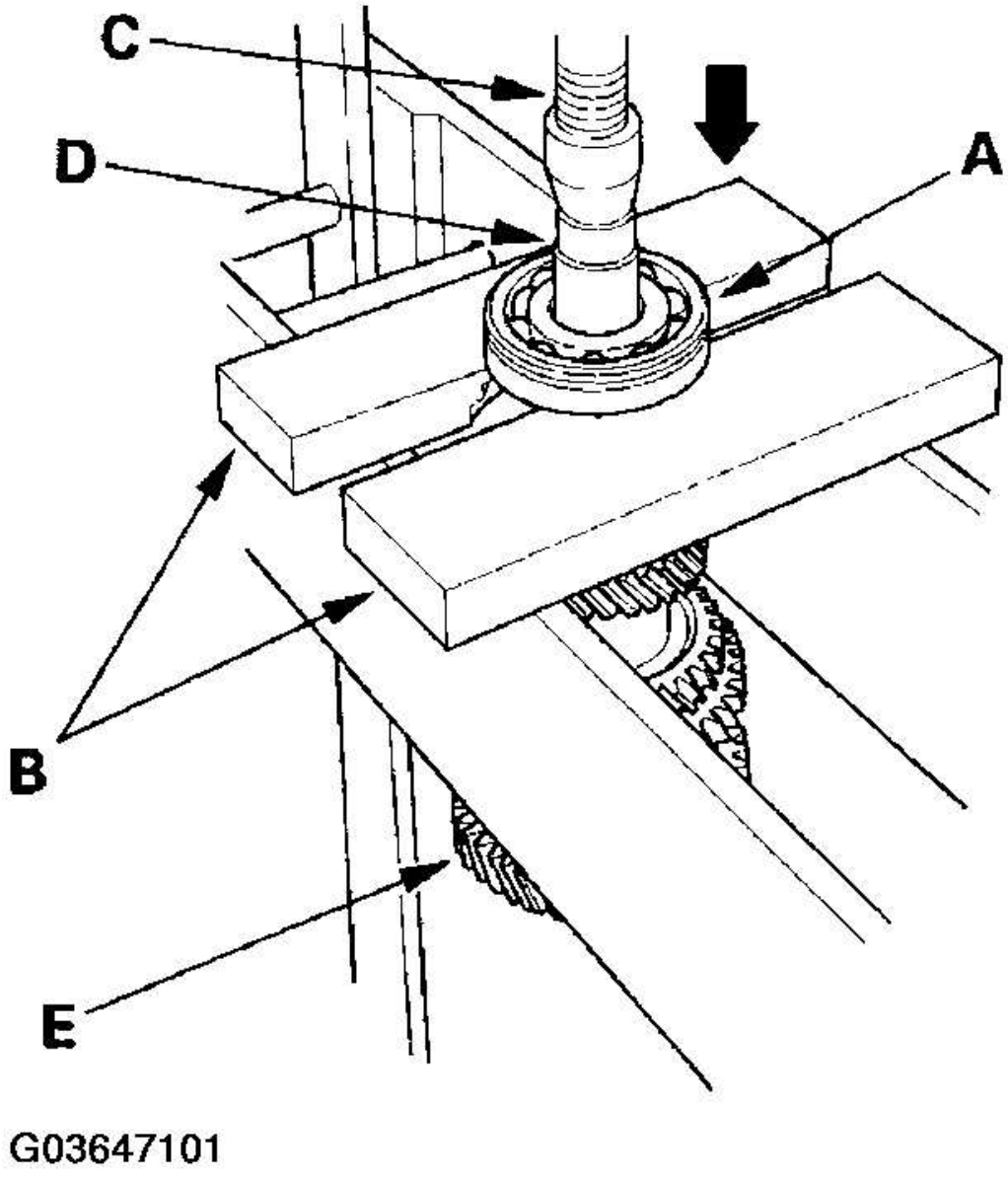


Fig. 132: Removing Countershaft From Ball Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. If necessary, install the 35 mm shim selected in step 16, then recheck the clearance.

19. Install the distance collar (A), 35 mm shim, and new ball bearing (B) using the special tools and a press (C).

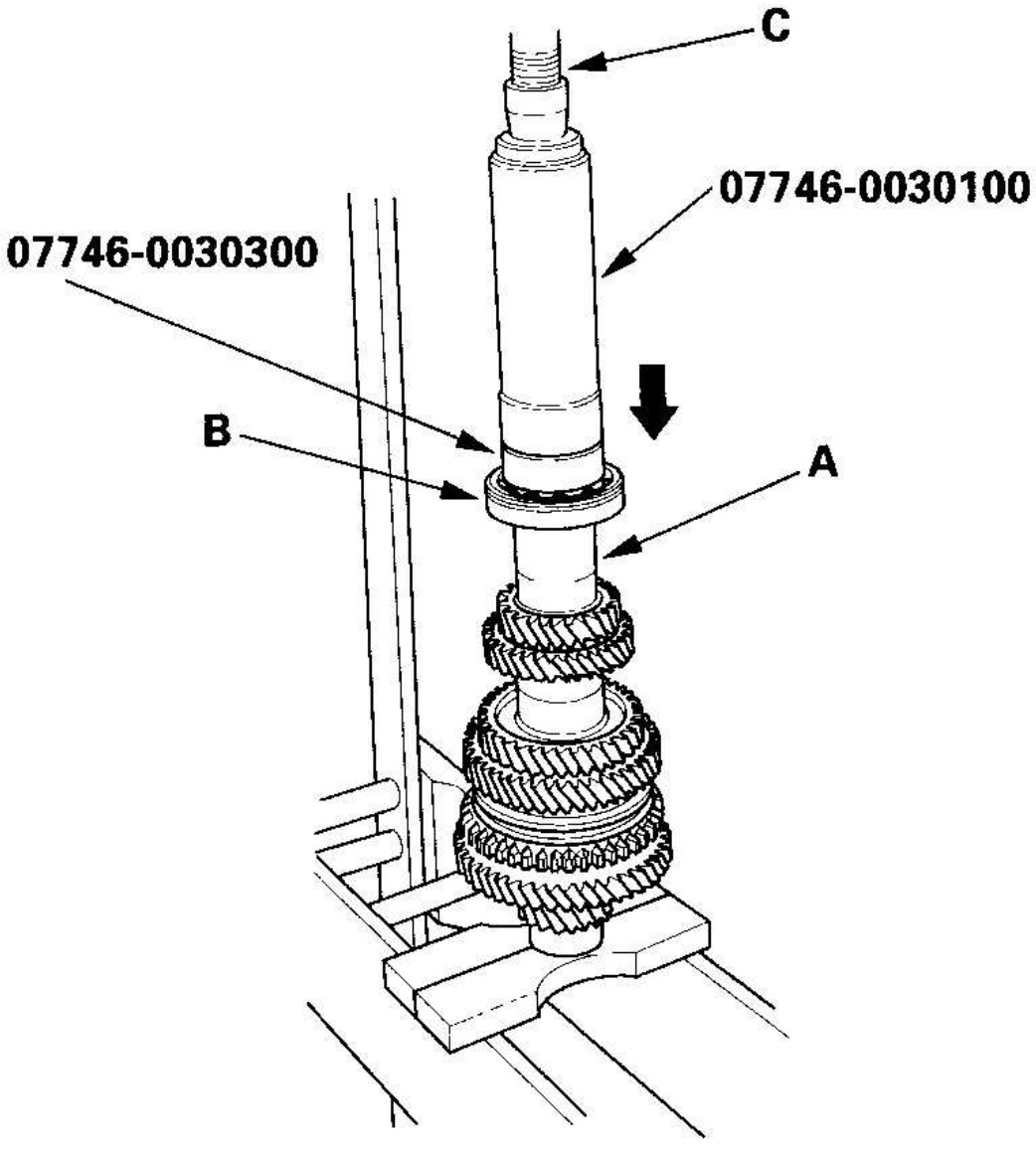


Fig. 133: Installing Distance Collar, Shim And Ball Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Securely clamp the countershaft assembly in a bench vise with wood blocks (A).

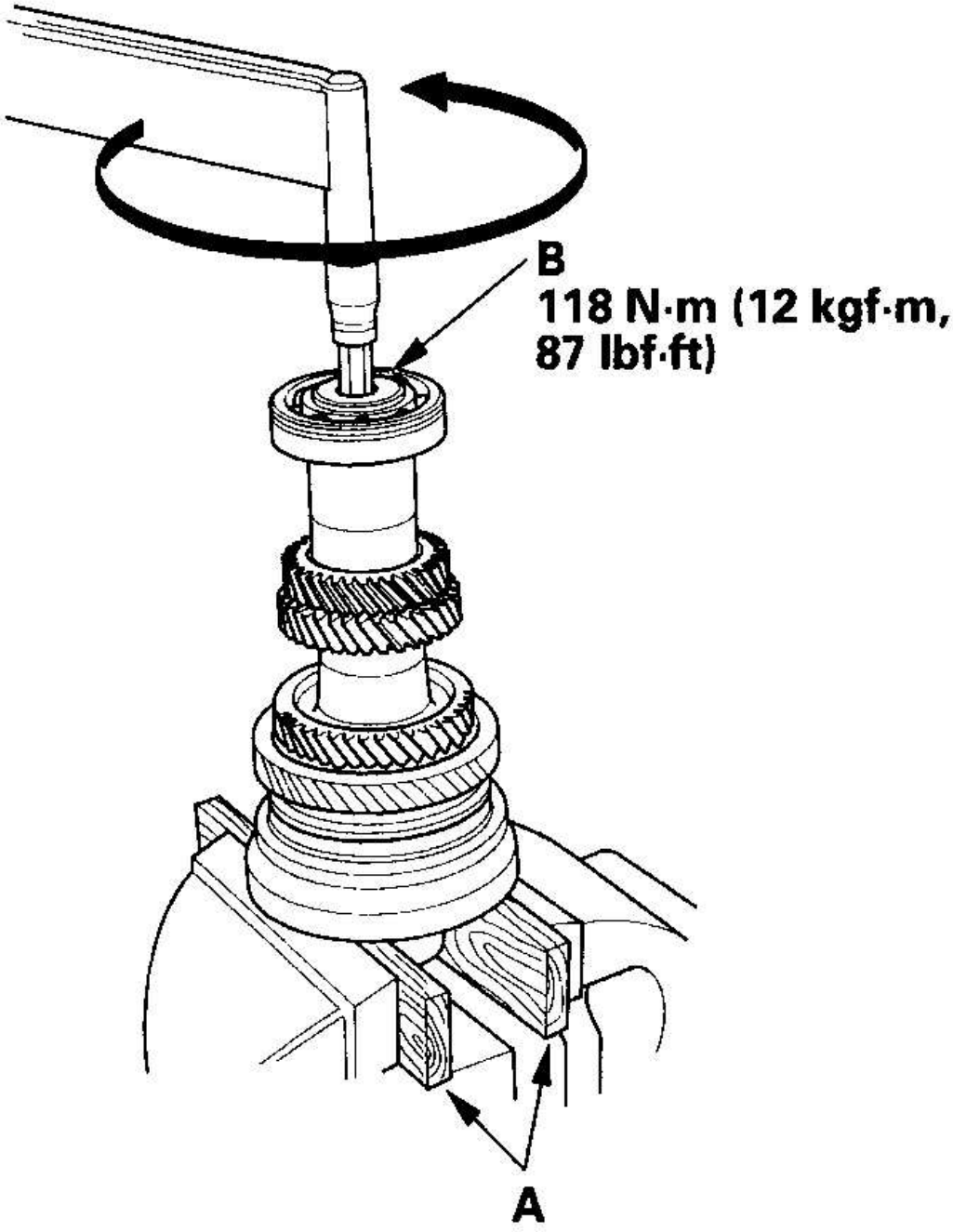


Fig. 134: Clamping Countershaft Assembly In Bench Vise And Tightening

Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Tighten the new special bolt (B) (left-hand threads).

SYNCHRO SLEEVE AND HUB INSPECTION AND REASSEMBLY

1. Inspect gear teeth on all synchro hubs and synchro sleeves for wear (rounded off corners).
2. Install each synchro hub (A) in its mating synchro sleeve (B), and check for free movement. Make sure you match the three sets of longer teeth (C) (120 degrees apart) on the synchro sleeve with the three sets of deeper grooves (D) in the synchro hub. Do not install the synchro sleeve with its longer teeth in the 1st/2nd synchro hub slots (E) because it will damage the spring ring.

NOTE: If replacement is required, always replace the synchro sleeve and synchro hub as a set.

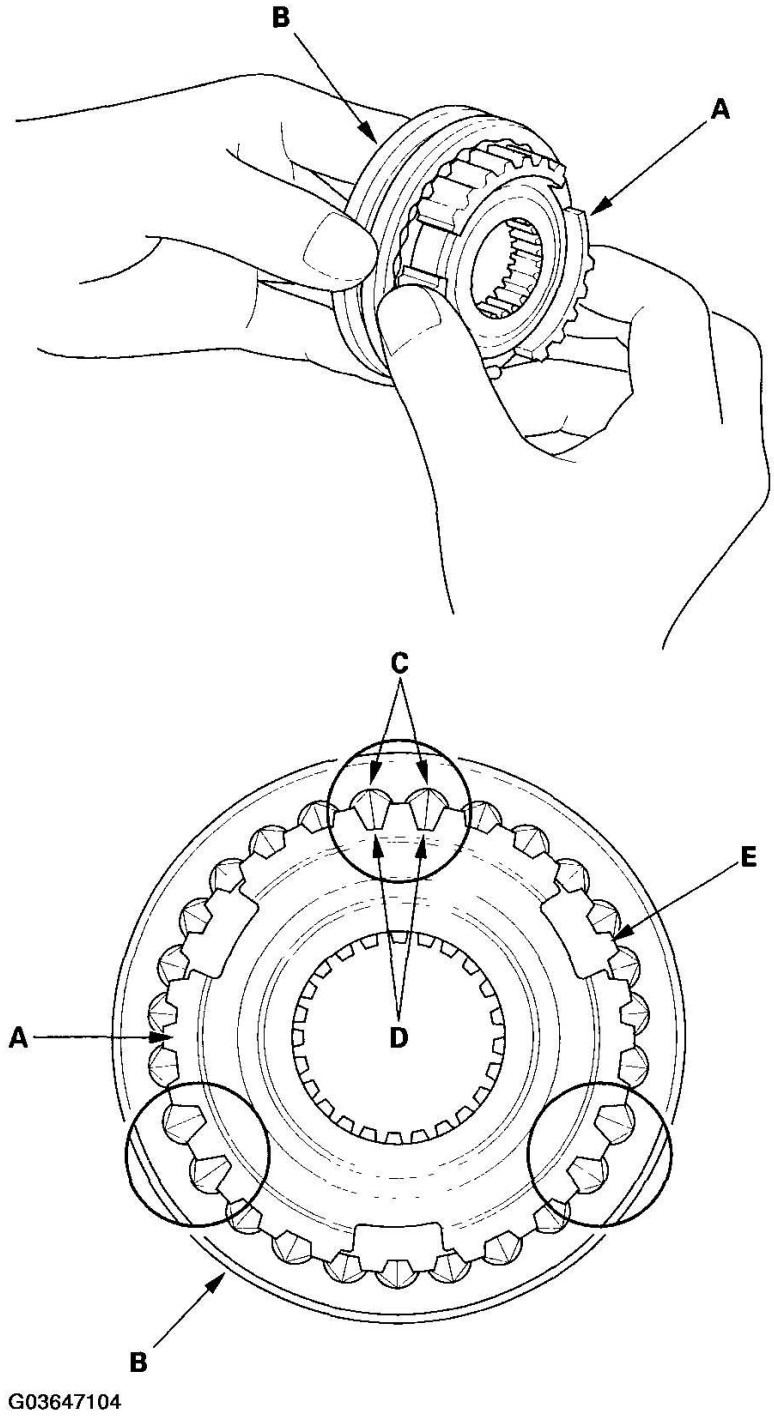


Fig. 135: Installing Synchro Hub In Mating Synchro Sleeve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYNCHRO RING AND GEAR INSPECTION

1. Inspect the inside of each synchro ring (A) for wear. Inspect the teeth (B) on each synchro ring for wear (rounded off).

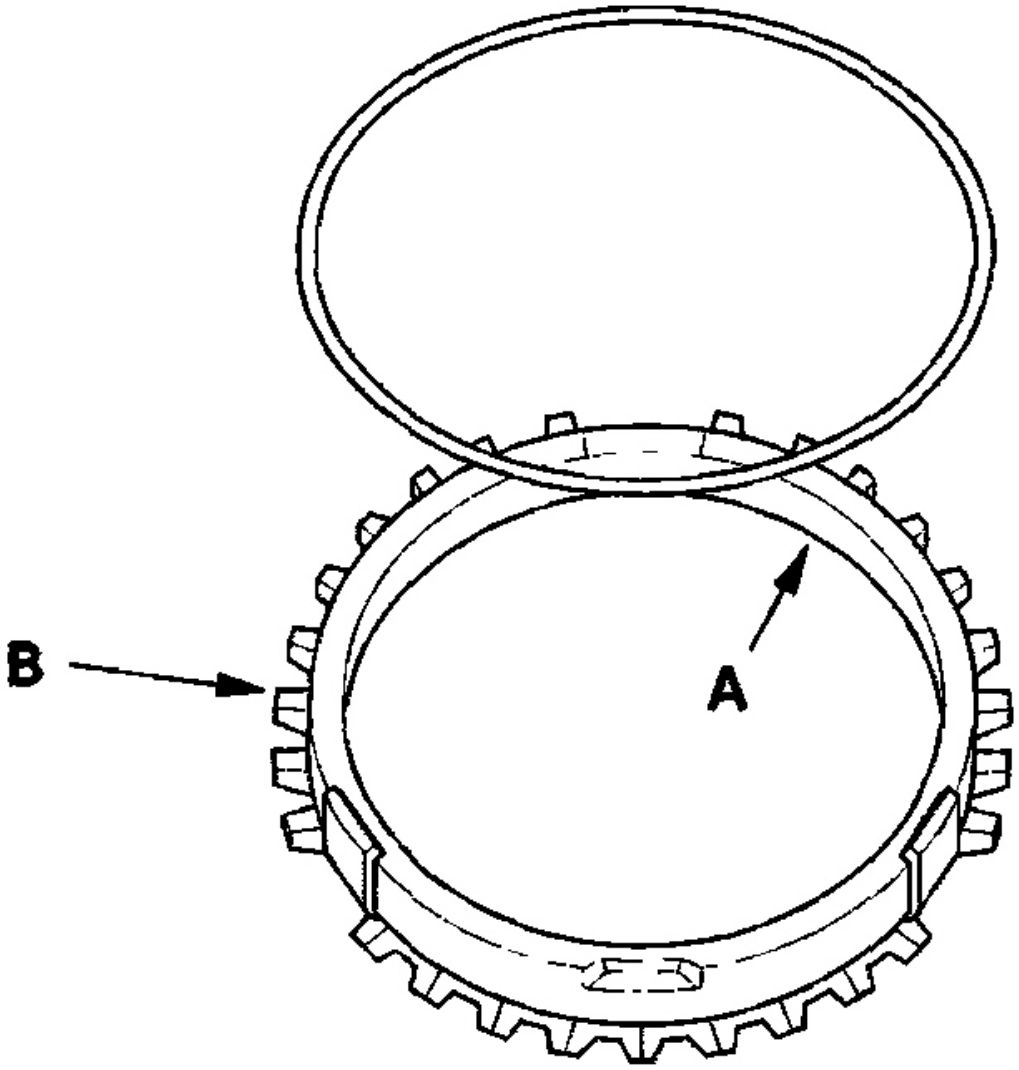


Fig. 136: Inspecting Synchro Ring Inside For Wear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Example of synchro ring teeth

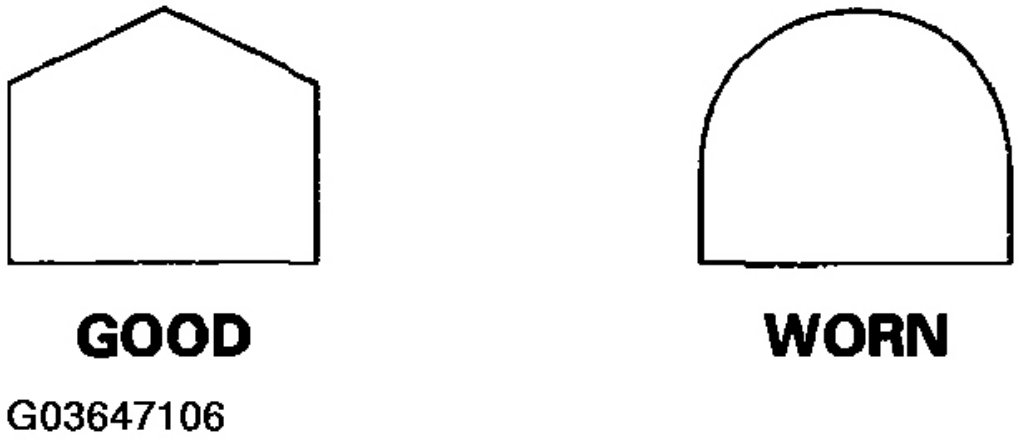


Fig. 137: View Of Synchro Ring Teeth
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Inspect the teeth (C) on each synchro sleeve and matching teeth on each gear for wear (rounded off).

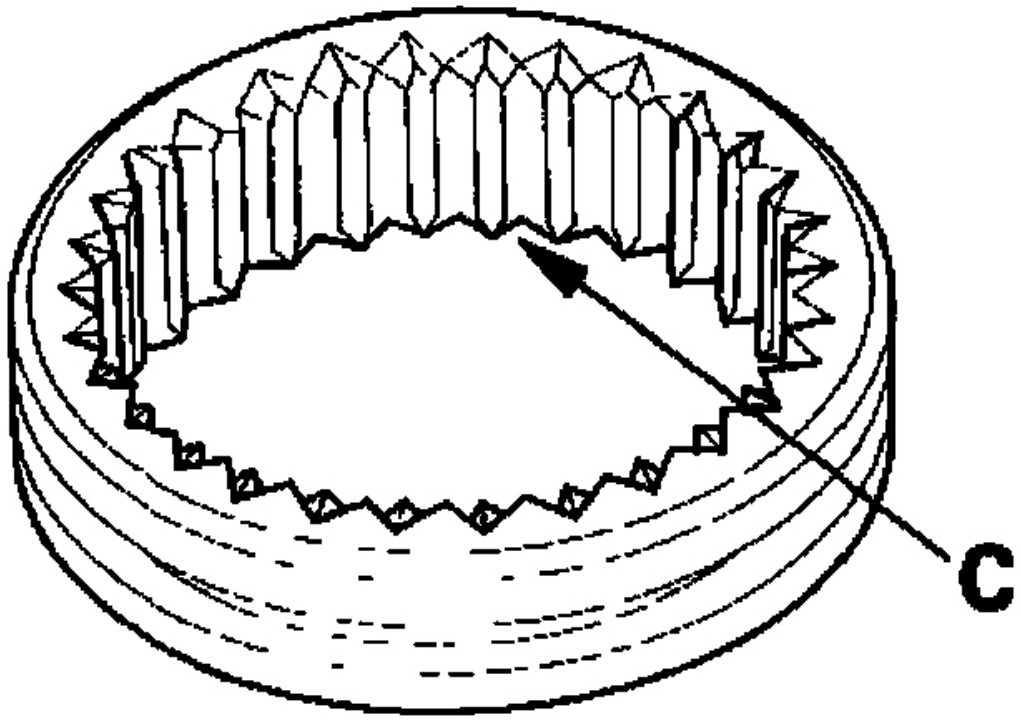


Fig. 138: Inspecting Teeth On Synchro Sleeve And Matching Teeth On Gear For Wear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Example of synchro sleeve teeth and gear teeth

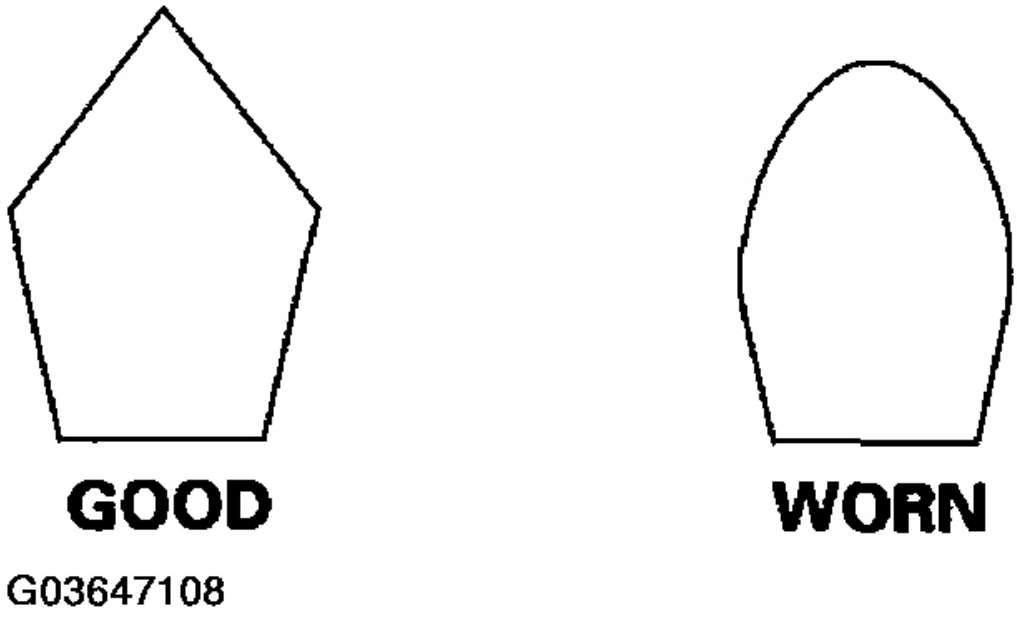


Fig. 139: View Of Synchro Sleeve Teeth And Gear Teeth
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Inspect the thrust surface (D) on each gear hub for wear.

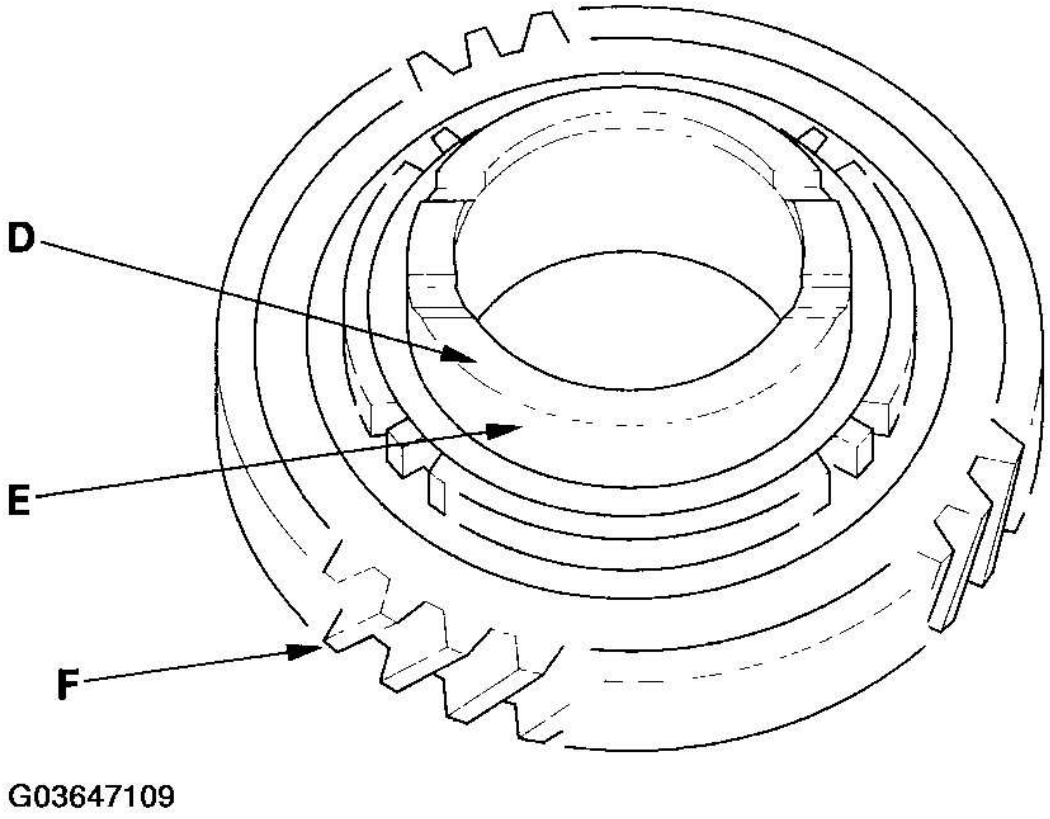


Fig. 140: Inspecting Thrust Surface On Gear Hub For Wear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Inspect the cone surface (E) on each gear hub for wear and roughness.
5. Inspect the teeth on all gears (F) for uneven wear, scoring, galling, and cracks.
6. Coat the cone surface of each gear (E) with oil, and place its synchro ring on it. Rotate the synchro ring, making sure that it does not slip.
7. Measure the clearance between each gear (A) and its synchro ring (B) all around the gear. Hold the synchro ring against the gear evenly while measuring the clearance. If the clearance is less than the service limit, replace the synchro ring and gear.

Synchro Ring-to-Gear Clearance

Standard: 0.70-1.49 mm (0.028-0.059 in.)

Service Limit: 0.4 mm (0.016 in.)

Double Cone Synchro and Triple Cone Synchro-to-Gear Clearance

Standard:

①: Outer Synchro Ring (B) to Synchro Cone (C)
0.70—1.19 mm (0.028—0.047 in.)
②: Synchro Cone (C) to Gear (A)
0.50—1.04 mm (0.020—0.041 in.)
③: Outer Synchro Ring (B) to Gear (A)
0.95—1.68 mm (0.037—0.066 in.)

Service Limit:

①: 0.3 mm (0.012 in.)
②: 0.3 mm (0.012 in.)
③: 0.6 mm (0.024 in.)

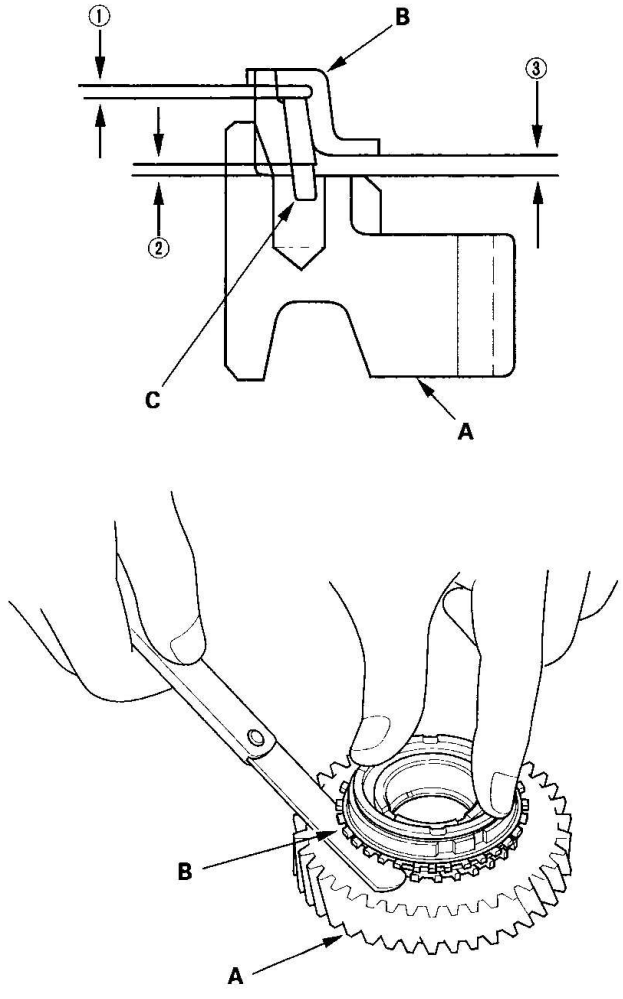


Fig. 141: Identifying Clearance Between Gear And Synchro Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MAINSHAFT BEARING AND OIL SEAL REPLACEMENT

Special Tools Required

- Oil seal driver 07JAD-PL90100
- Adjustable bearing puller, 20-40 mm 07736-A01000B
- Attachment, 42 x 47 mm 07746-0010300
- Driver 07749-0010000

1. Remove the differential assembly.
2. Remove the ball bearing (A) from the clutch housing (B) using the special tool and a commercially available 3/8"-16 slide hammer (C).

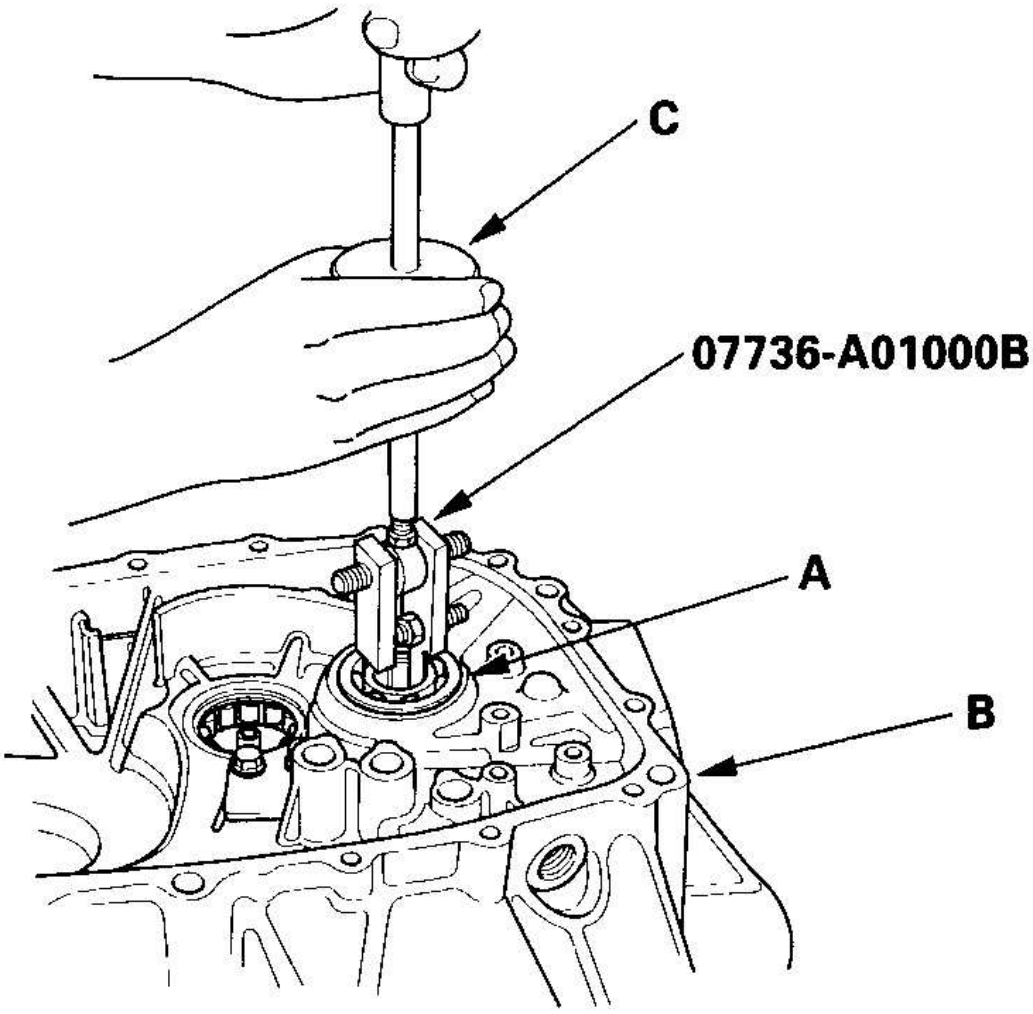


Fig. 142: Removing Ball Bearing From Clutch Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the oil seal (A) from the clutch housing. Be careful when removing the seal so the clutch housing is not damaged.

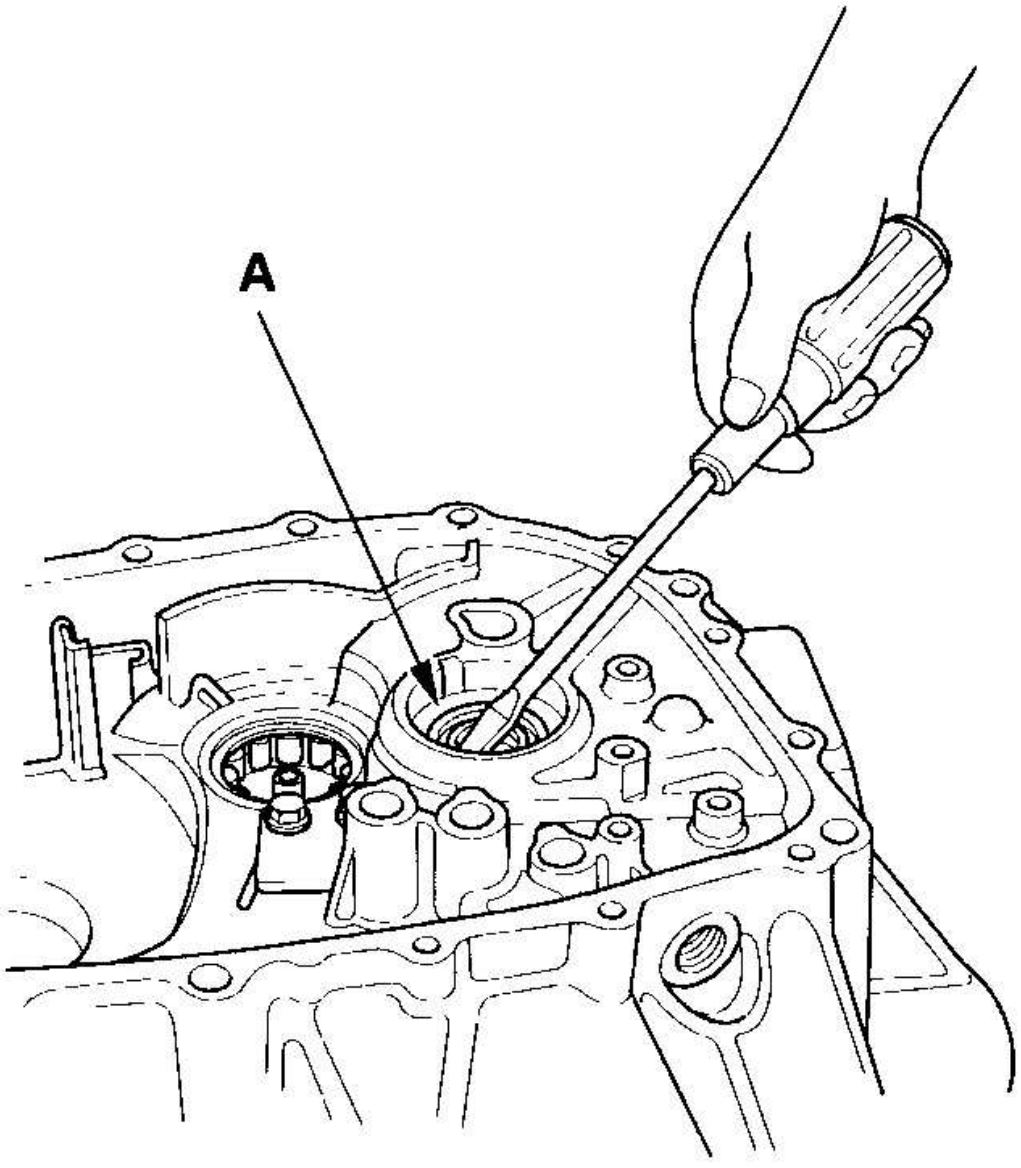


Fig. 143: Removing Oil Seal From Clutch Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Drive in the new oil seal from the transmission side using the special tools.

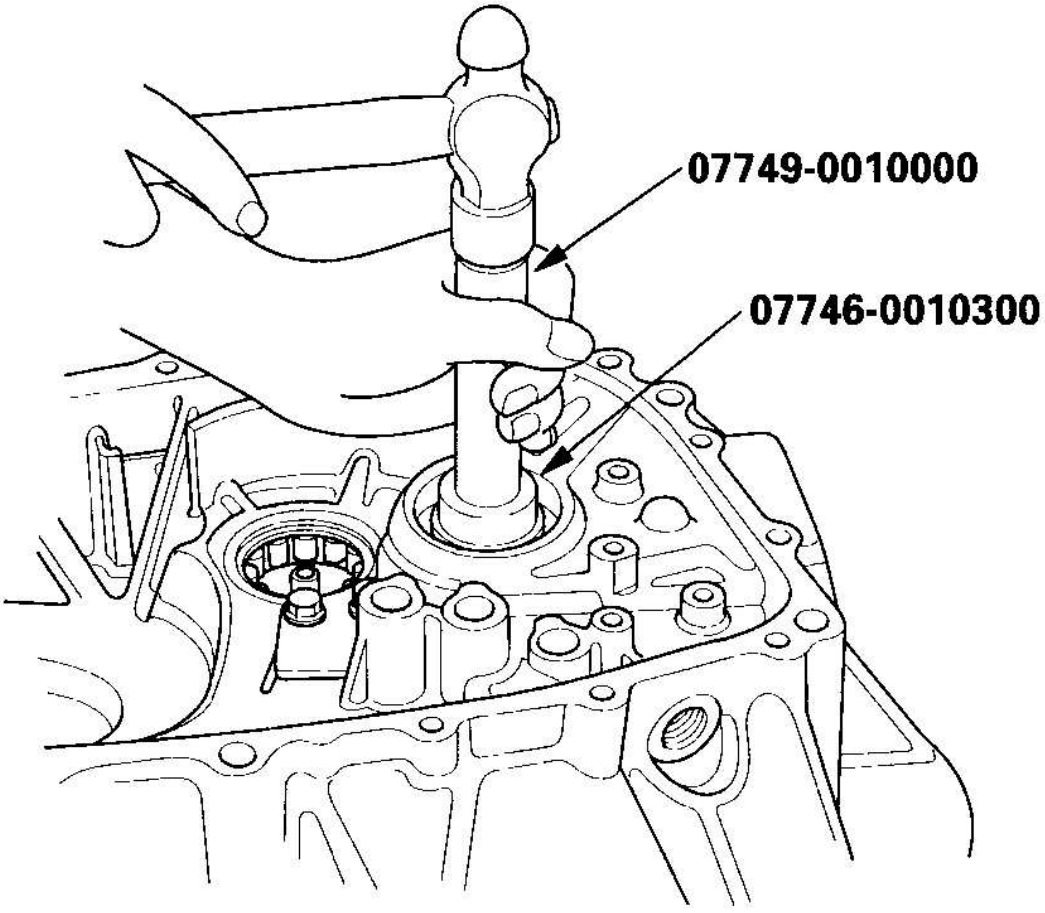


Fig. 144: Installing Oil Seal From Transmission Side
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Drive in the new ball bearing (A) from the transmission side using the special tools.

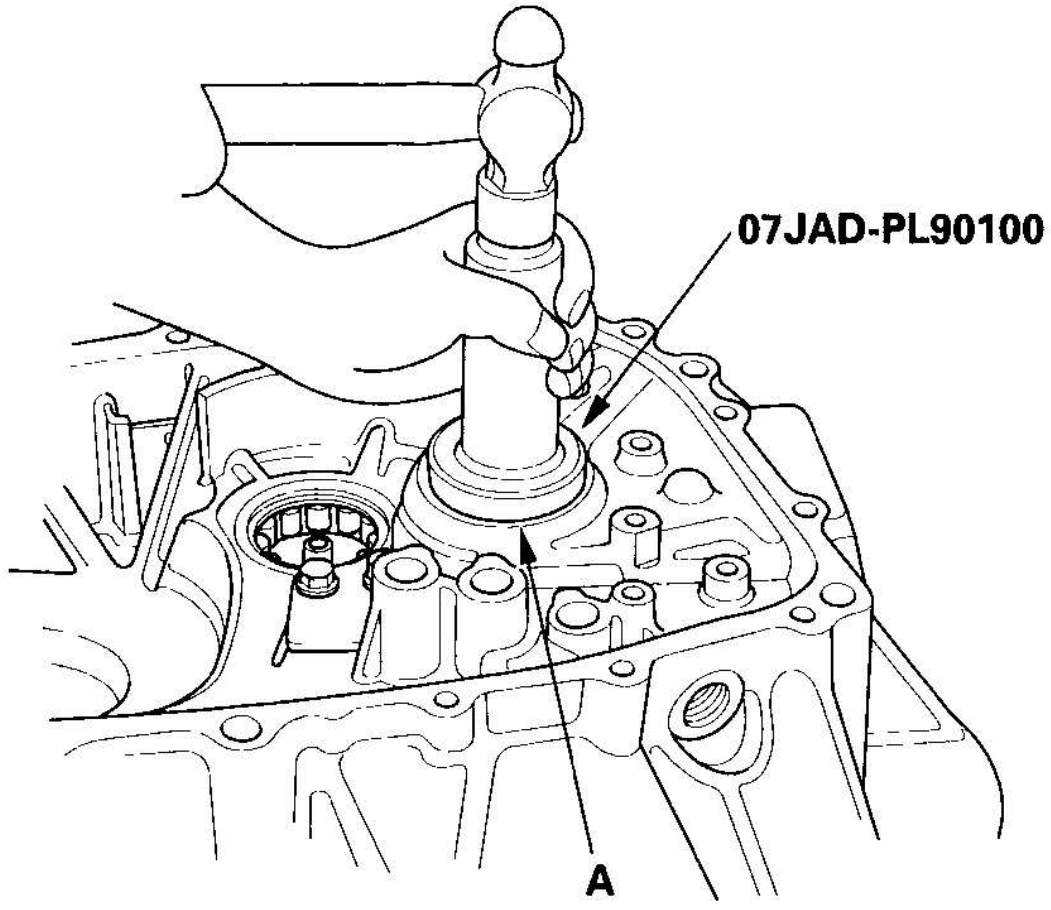


Fig. 145: Installing Oil Seal From Transmission Side
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COUNTERSHAFT BEARING REPLACEMENT

Special Tools Required

- Oil seal driver 07JAD-PL90100
- Adjustable bearing puller, 20-40 mm 07736-A01000B
- Slide hammer, commercially available

1. Remove the bearing set plate (A) from the clutch housing (B).

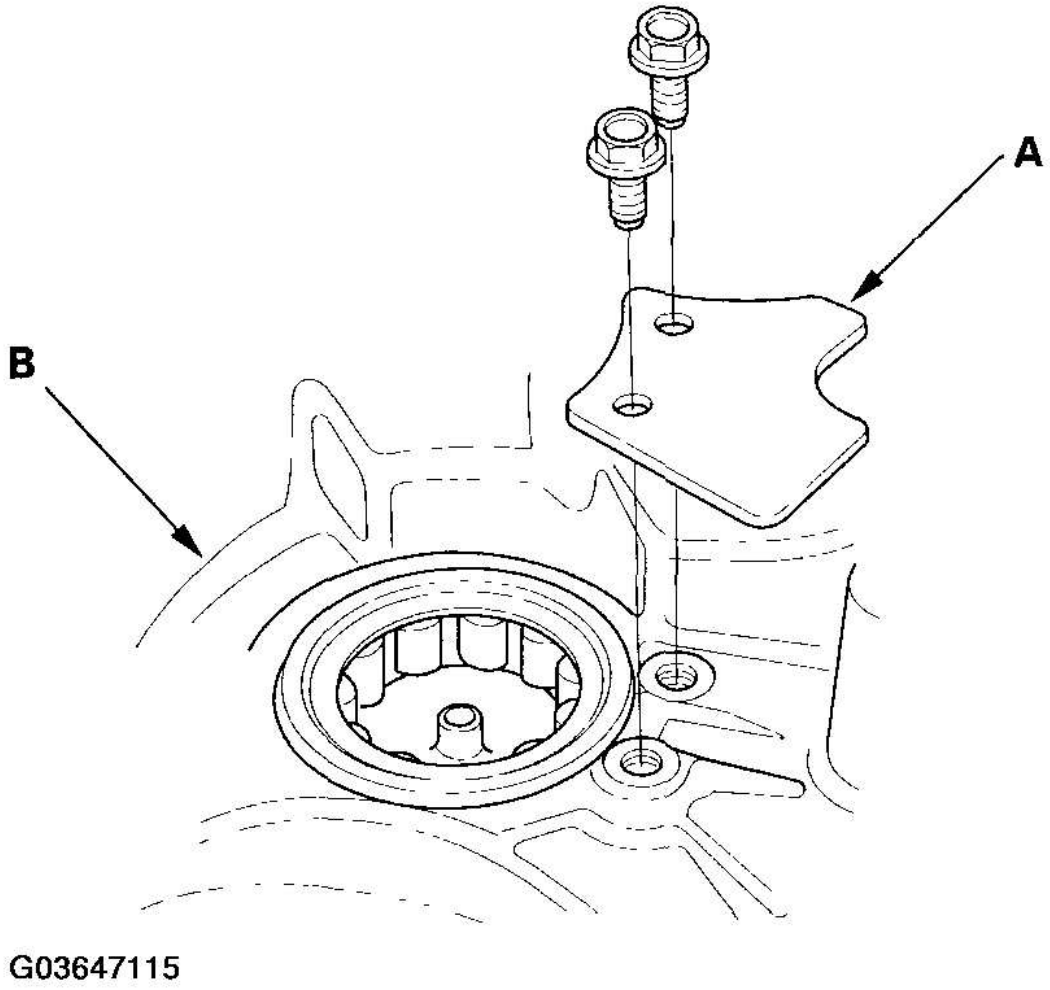


Fig. 146: Removing Bearing Set Plate From Clutch Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the needle bearing (A) using the special tool and a commercially available 3/8"-16 slide hammer (B), then remove the oil guide plate C.

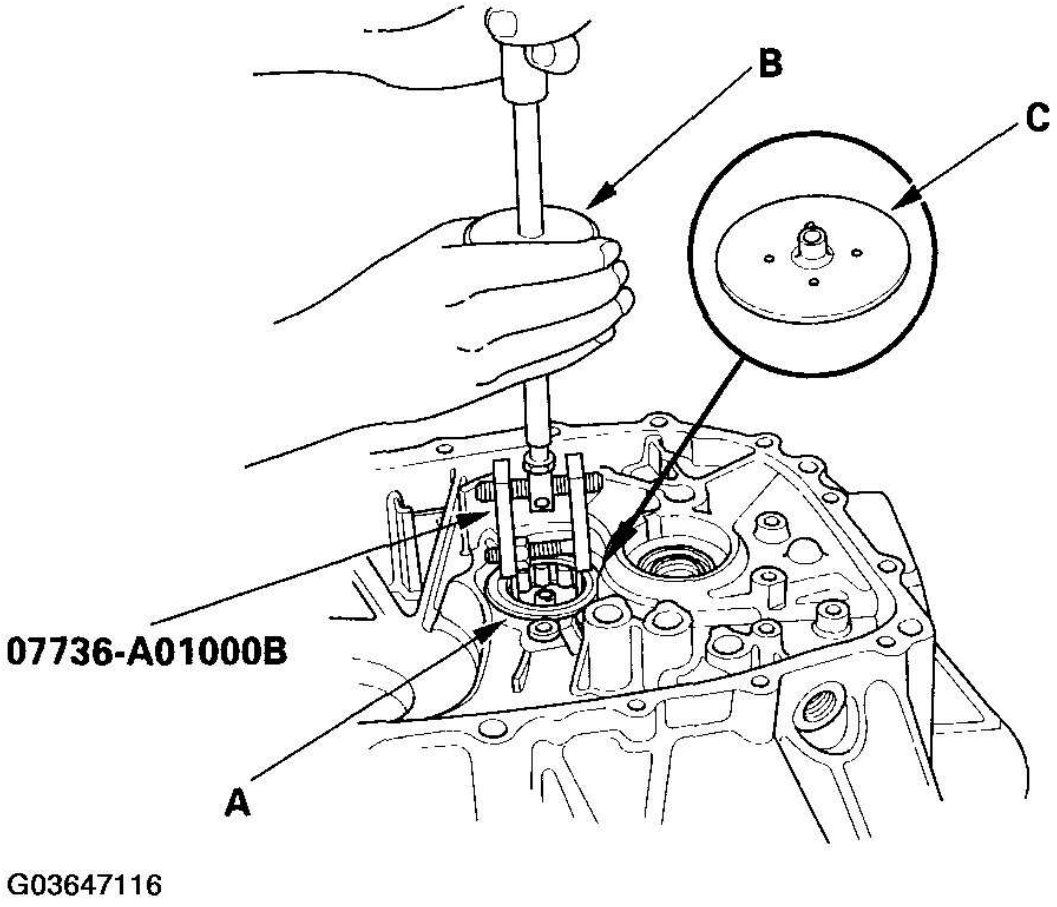


Fig. 147: Removing Oil Guide Plate And Needle Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Position the oil guide plate C and new needle bearing (A) in the bore of the clutch housing (B).

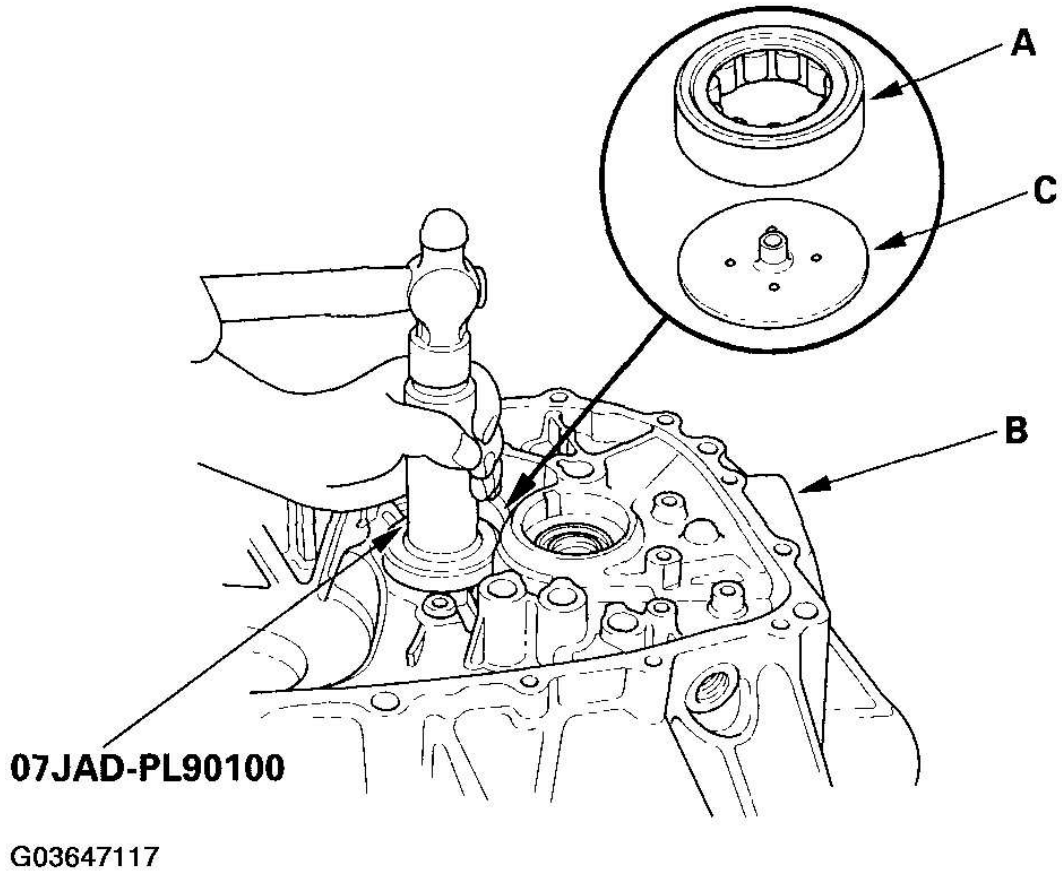


Fig. 148: Positioning Oil Guide Plate And Needle Bearing In Clutch Housing Bore
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the needle bearing using the special tools.
5. Install the bearing set plate (A) with bolts (B).

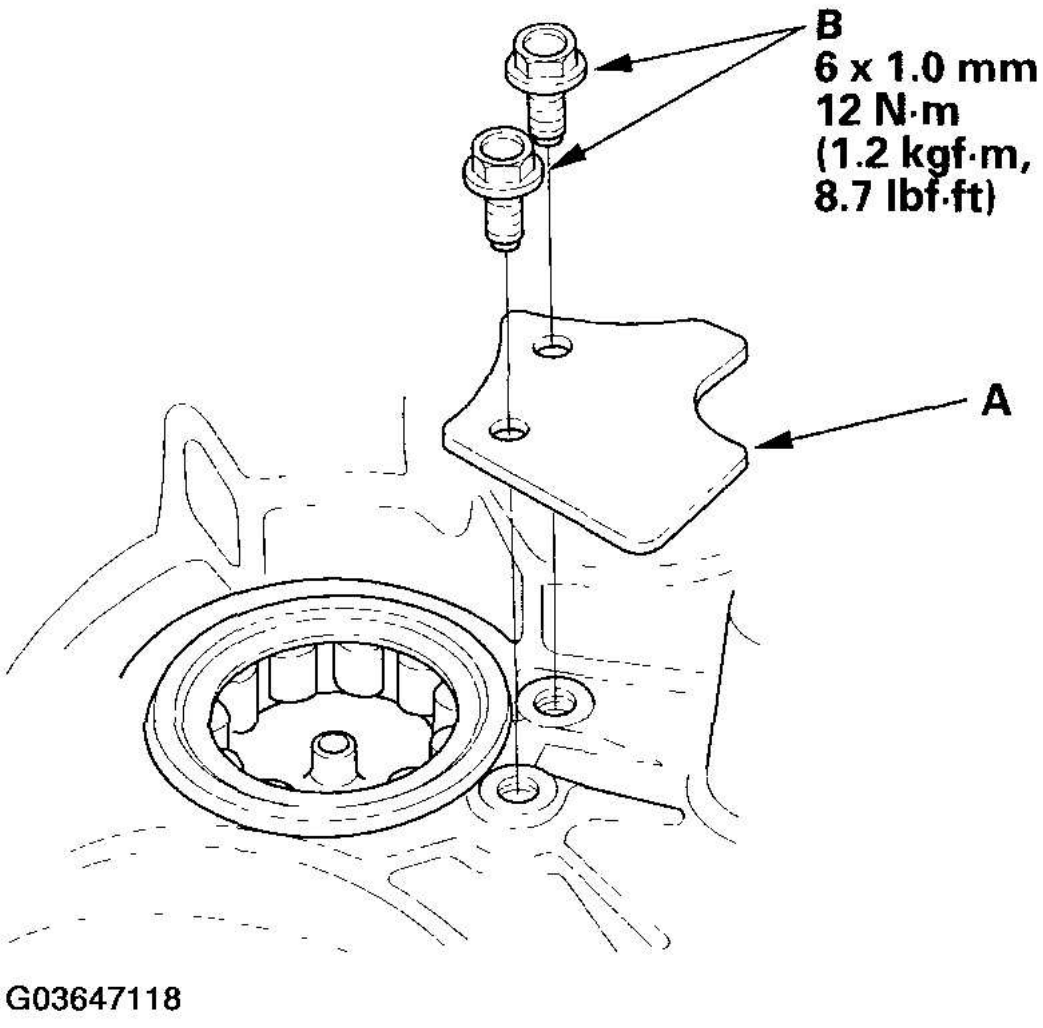


Fig. 149: Installing Bearing Set Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MAINSHAFT THRUST CLEARANCE ADJUSTMENT

Special Tools Required

- Mainshaft base 07GAJ-PG20130
- Mainshaft holder 07GAJ-PG20110

1. Remove the 72 mm shim (A) and oil guide plate M from the transmission

housing (B).

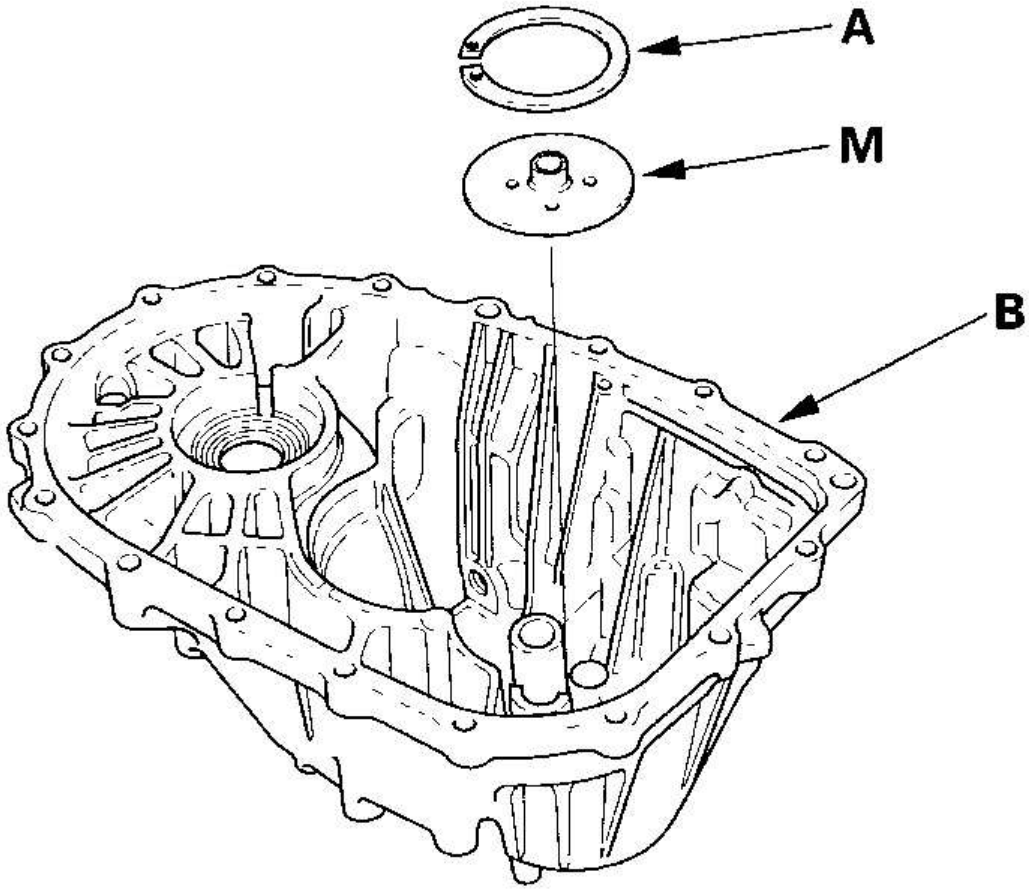


Fig. 150: Removing Shim And Oil Guide Plate From Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Thoroughly clean the spring washer (A) and washer (B) before installing them on the clutch housing side ball bearing (C). Note the installation direction of the spring washer.

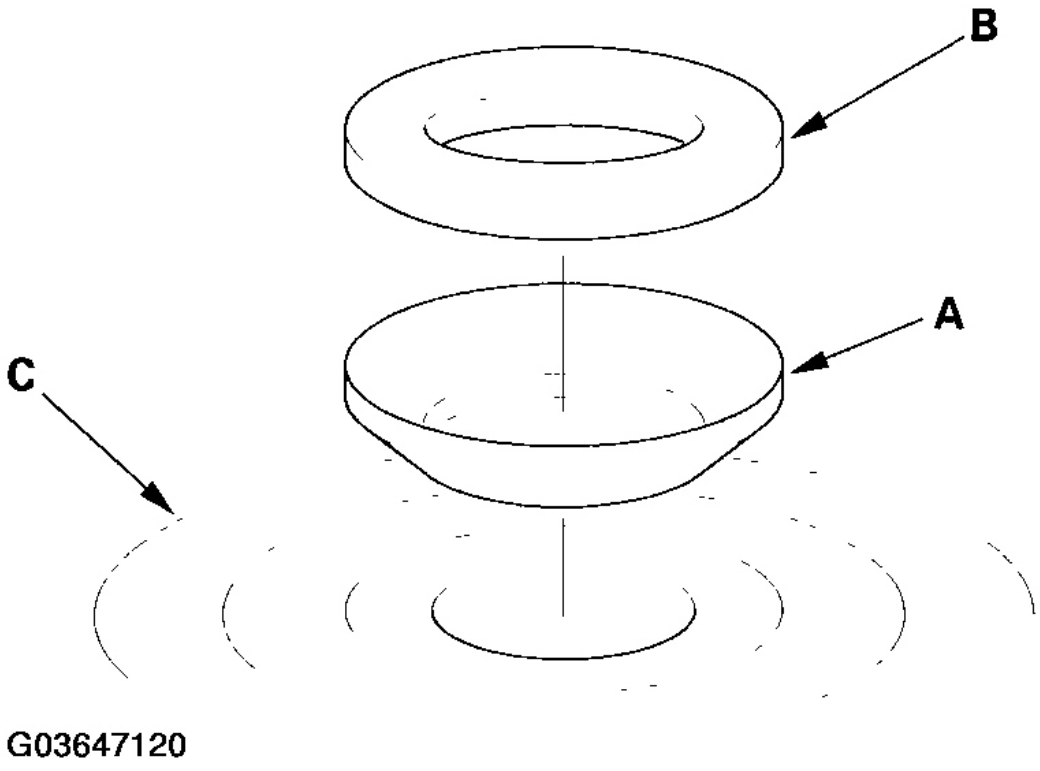


Fig. 151: Installing Spring Washer And Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the 3rd/4th synchro hub, the distance collar, the 5th synchro hub, the distance collar, and the ball bearing on the mainshaft.

NOTE: Refer to the mainshaft reassembly EXPLODED VIEW (see MAINSHAFT REASSEMBLY).

4. Install the mainshaft in the clutch housing.
5. Place the transmission housing over the mainshaft and onto the clutch housing.
6. Secure the clutch and transmission housings with several 8 mm bolts.

NOTE: It is not necessary to use sealing agent between the housing for this procedure.

7. Lightly tap on the mainshaft with a plastic hammer.
8. Attach the special tool to the mainshaft as follows:
   - Back-out the mainshaft holder bolt (A), and loosen the two hex bolts (B).
   - Fit the holder over the mainshaft so its lip is towards the transmission.
   - Align the mainshaft holder lip around the groove at the inside of the mainshaft splines, then tighten the hex bolts.

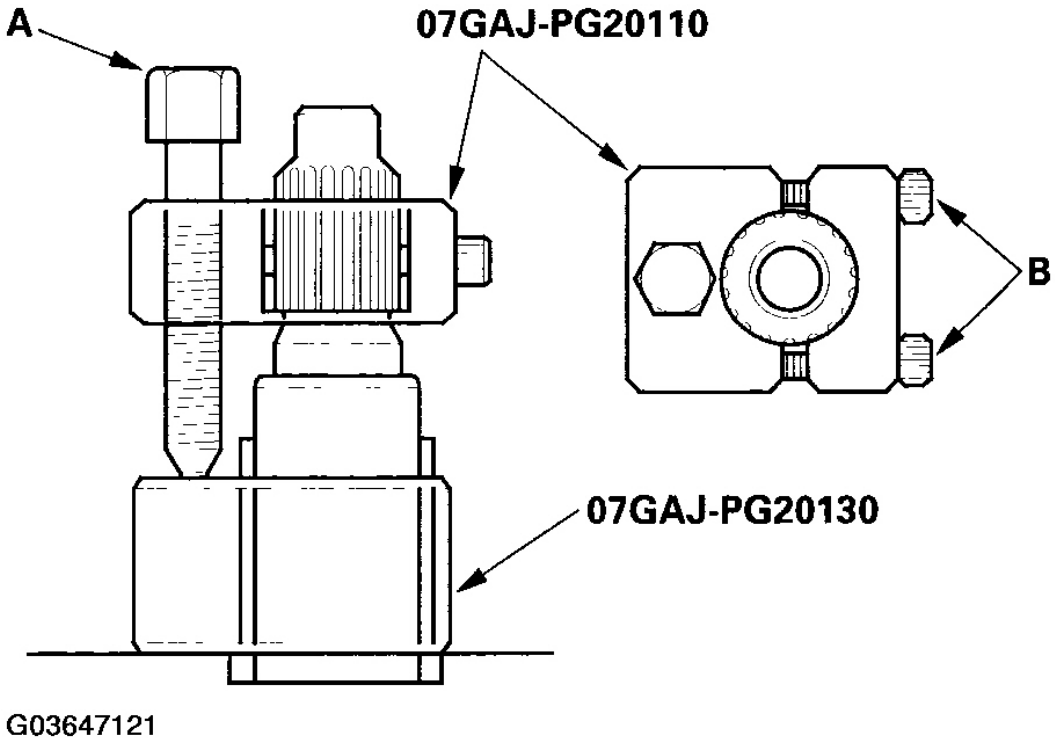


Fig. 152: Attaching Special Tool To Mainshaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Fully seat the mainshaft by tapping its end with a plastic hammer.
10. Thread the mainshaft holder bolt in until it just contacts the wide surface of the mainshaft base.
11. Zero a dial gauge (A) on the end of the mainshaft.

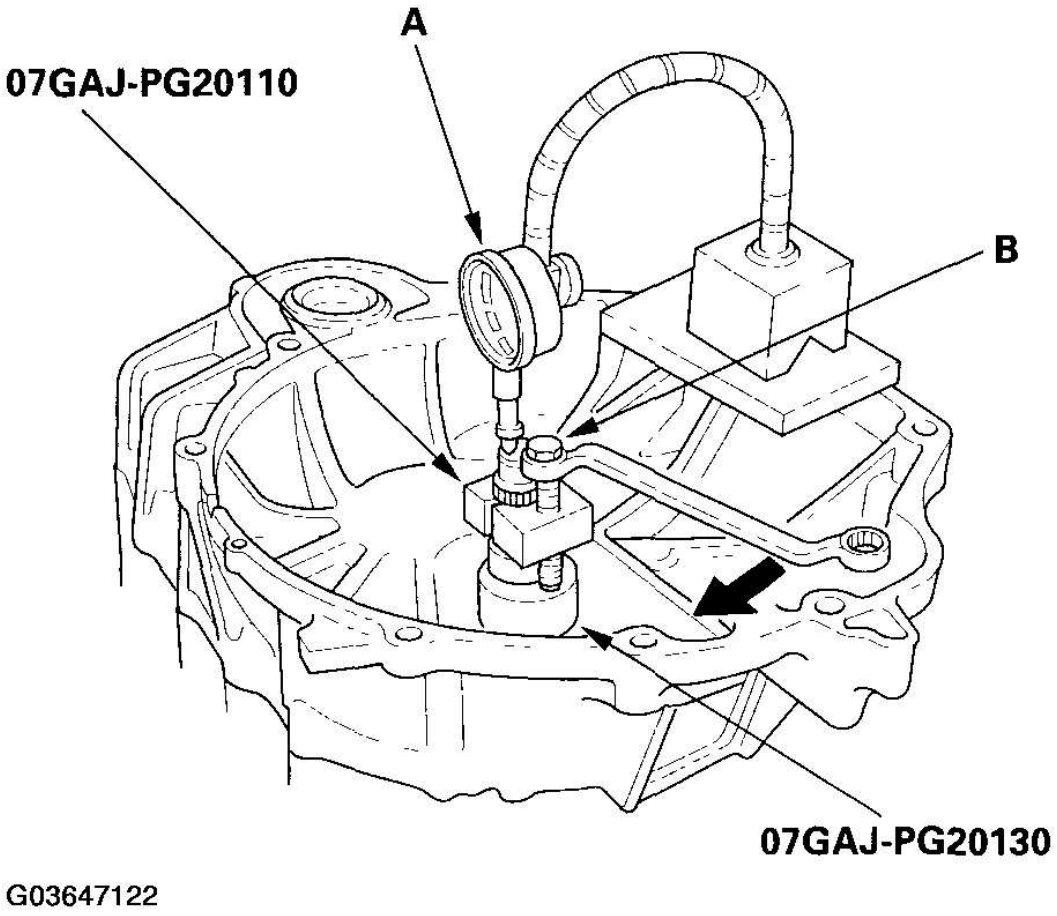


Fig. 153: Attaching Dial Gauge On Mainshaft End
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Turn the mainshaft holder bolt (B) clockwise; stop turning when the dial gauge has reached its maximum movement. The reading on the dial gauge is the amount of mainshaft thrust clearance.

NOTE: Do not turn the mainshaft holder bolt more than 60 degrees after the needle of the dial gauge stops moving. Applying more pressure with the mainshaft holder bolt could damage the transmission.

13. If the reading is with in the standard, the clearance is correct. If the reading is

not within the standard, select the appropriate shim needed from the table, and recheck the thrust clearance.

Standard. 0.11-0.17 mm (0.004-0.007 in.)

(Example)

Measure reading: 1.93 mm (0.0759 in.)

Subtract the total clearance measurement from the middle of the clearance standard 0.14 mm (0.0056 in.)

1.93-0.14=1.79 mm (0.0704 in.)

Select the shim closest to the amount calculated, for example the 1.80 mm (0.0709 in.) shim.

14. With oil guide plate M and the appropriate size shim installed in the transmission housing, check the thrust clearance again to verify the clearance is within the standard.

72 mm Shim

SHIM THICKNESS SPECIFICATIONS (72MM)

	Part Number	Thickness
A	23931-P21-000	0.60 mm (0.024 in.)
B	23932-P21-000	0.63 mm (0.025 in.)
C	23933-P21-000	0.66 mm (0.026 in.)
D	23934-P21-000	0.69 mm (0.027 in.)
E	23935-P21-000	0.72 mm (0.028 in.)
F	23936-P21-	0.75 mm

	000	(0.030 in.)
G	23937-P21-000	0.78 mm (0.031 in.)
H	23938-P21-000	0.81 mm (0.032 in.)
I	23939-P21-000	0.84 mm (0.033 in.)
J	23940-P21-000	0.87 mm (0.034 in.)
K	23941-P21-000	0.90 mm (0.035 in.)
L	23942-P21-000	0.93 mm (0.037 in.)
M	23943-P21-000	0.96 mm (0.038 in.)
N	23944-P21-000	0.99 mm (0.039 in.)
O	23945-P21-000	1.02 mm (0.040 in.)
P	23946-P21-000	1.05 mm (0.041 in.)
Q	23947-P21-000	1.08 mm (0.043 in.)
R	23948-P21-000	1.11 mm (0.044 in.)
S	23949-P21-000	1.14 mm (0.045 in.)
T	23950-P21-000	1.17 mm (0.046 in.)
U	23951-P21-000	1.20 mm (0.047 in.)
V	23952-P21-000	1.23 mm (0.048 in.)

W	23953-P21-000	1.26 mm (0.050 in.)
X	23954-P21-000	1.29 mm (0.051 in.)
Y	23955-P21-000	1.32 mm (0.052 in.)
Z	23956-P21-000	1.35 mm (0.053 in.)
AA	23957-P21-000	1.38 mm (0.054 in.)
AB	23958-P21-000	1.41 mm (0.056 in.)
AC	23959-P21-000	1.44 mm (0.057 in.)
AD	23960-P21-000	1.47 mm (0.058 in.)
AE	23961-P21-000	1.50 mm (0.059 in.)
AF	23962-P21-000	1.53 mm (0.060 in.)
AG	23963-P21-000	1.56 mm (0.061 in.)
AH	23964-P21-000	1.59 mm (0.063 in.)
Al	23965-P21-000	1.62 mm (0.064 in.)
AJ	23966-P21-000	1.65 mm (0.065 in.)
AK	23967-P21-000	1.68 mm (0.066 in.)
AL	23968-P21-000	1.71 mm (0.067 in.)
AM	23969-P21-	1.74 mm

	000	(0.069 in.)
AN	23970-P21-000	1.77 mm (0.070 in.)
AO	23971-P21-000	1.80 mm (0.071 in.)

TRANSMISSION REASSEMBLY

NOTE: Prior to reassembling, clean all parts in solvent, dry them, and apply lubricant to any contact surfaces.

1. Install the magnet (A) and differential assembly (B).

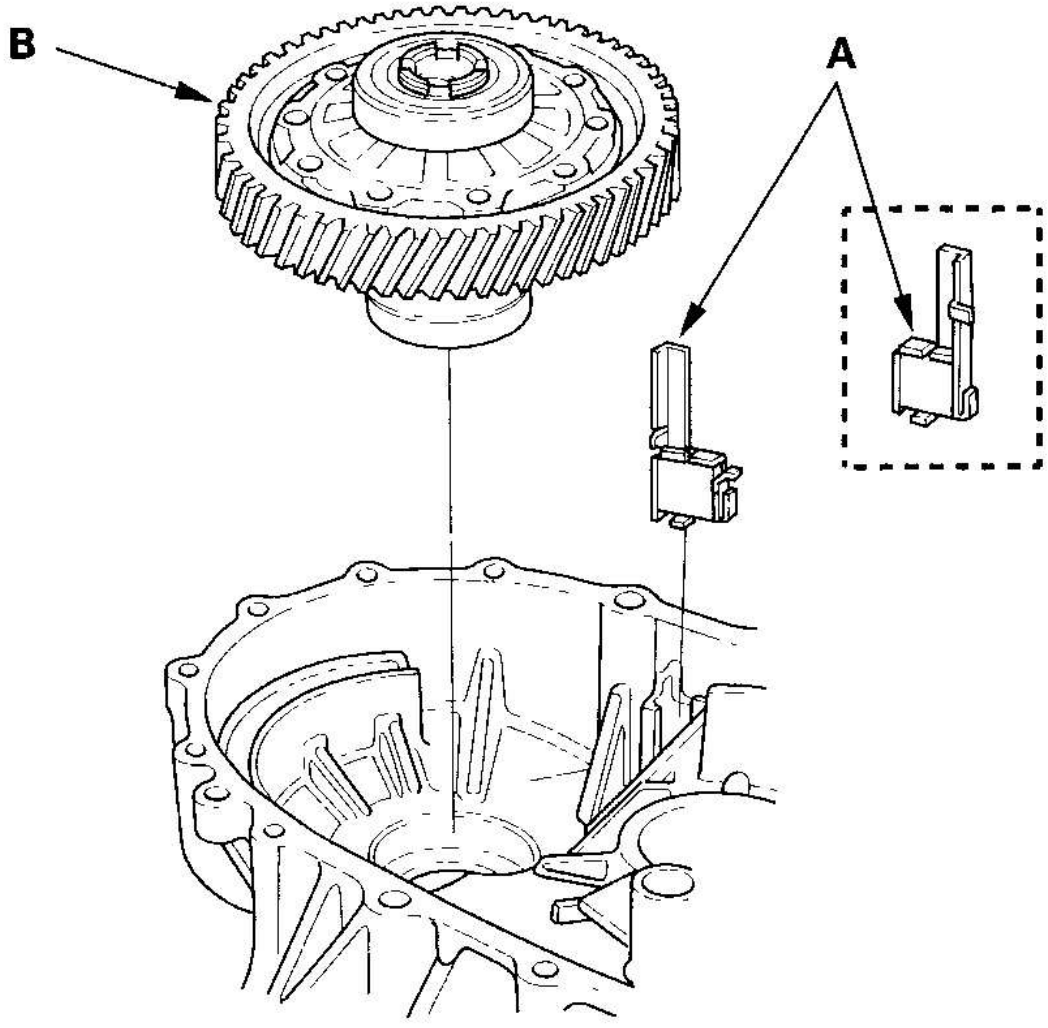


Fig. 154: Installing Magnet And Differential Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the 28 mm spring washer (A) and the 28 mm washer (B) over the ball bearing (C). Note the installation direction of the spring washer.

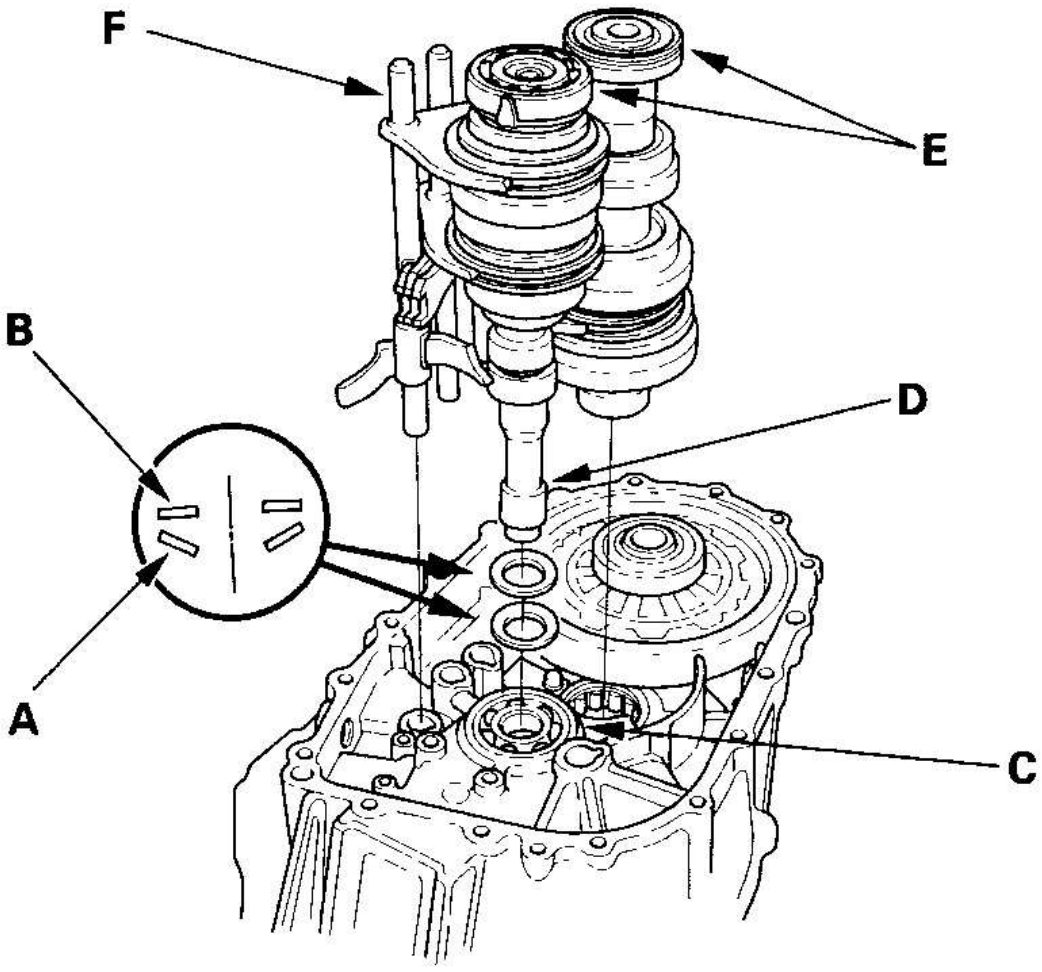


Fig. 155: Installing Spring Washer And Washer Over Ball Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Apply vinyl tape to the mainshaft splines (D) to protect the seal. Install the mainshaft and the countershaft (E) with the shift forks (F), as an assembly.
4. Install the reverse shift fork.

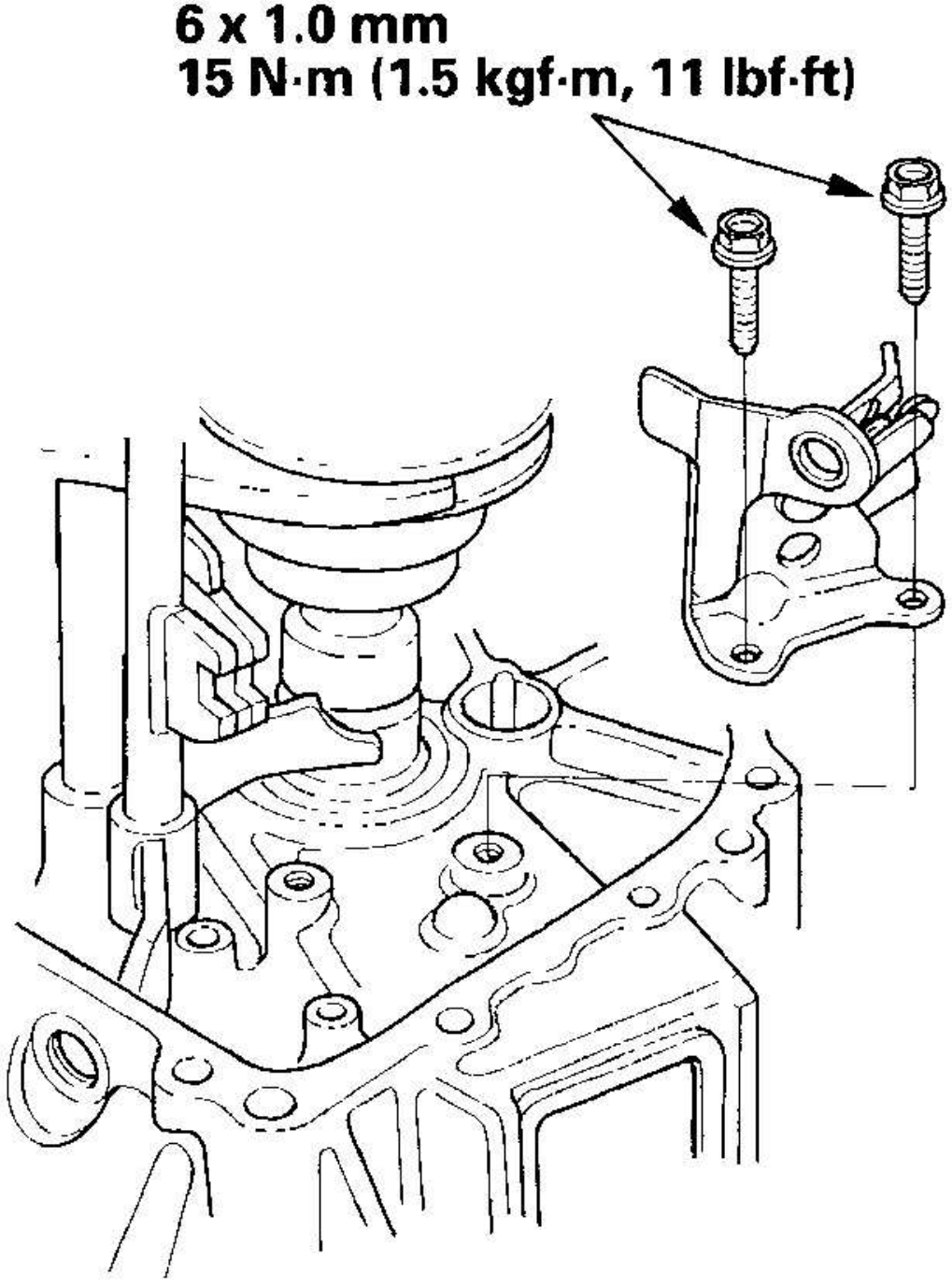

6 x 1.0 mm
15 N·m (1.5 kgf·m, 11 lbf·ft)
G03647125

Fig. 156: Installing Reverse Shift Fork
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the reverse idler gear (A) and reverse gear shaft (B) by aligning the mark (C) with the reverse gear shaft hole (D).

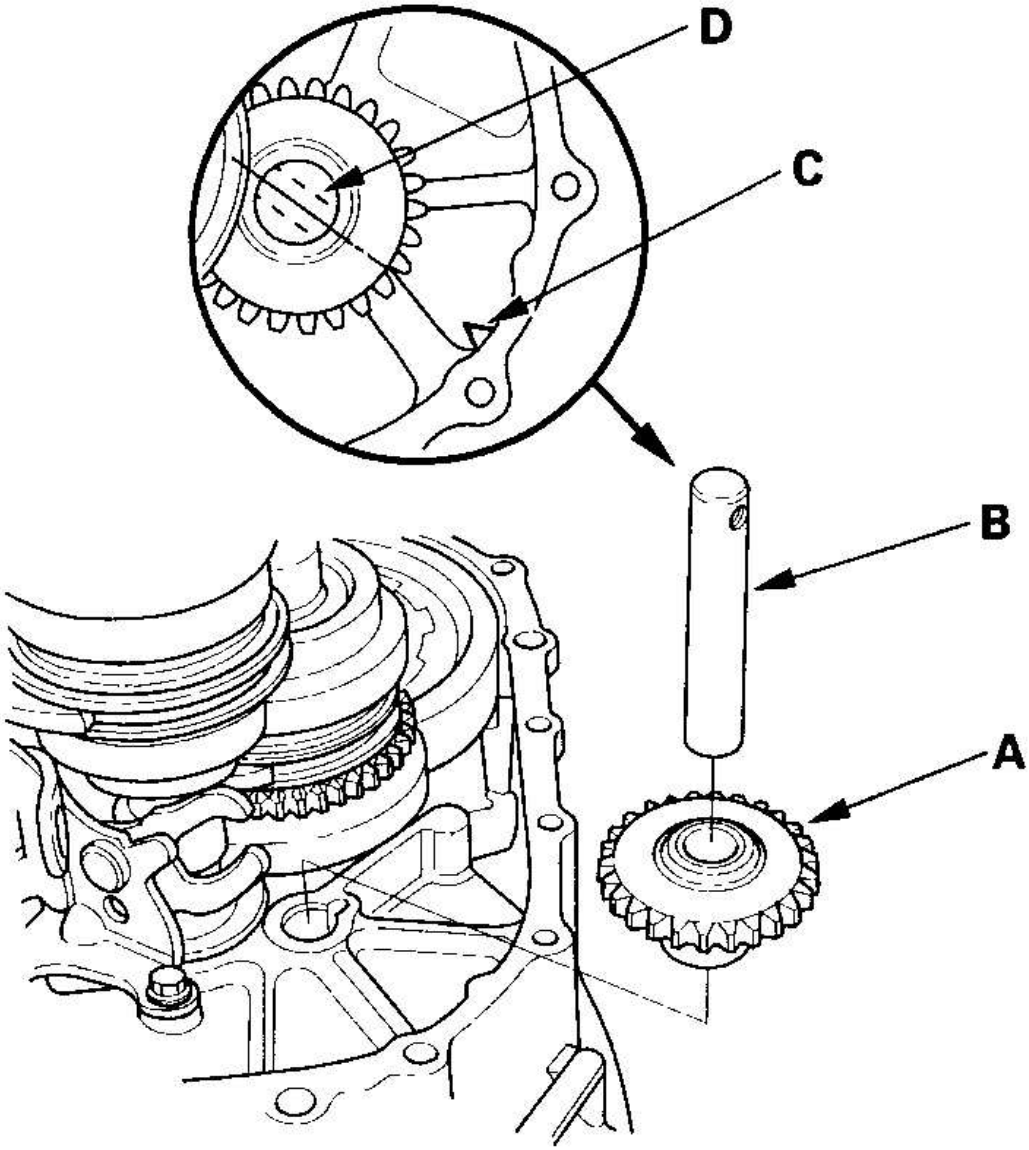


Fig. 157: Installing Reverse Idler Gear And Reverse Gear Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the reverse lock cam.

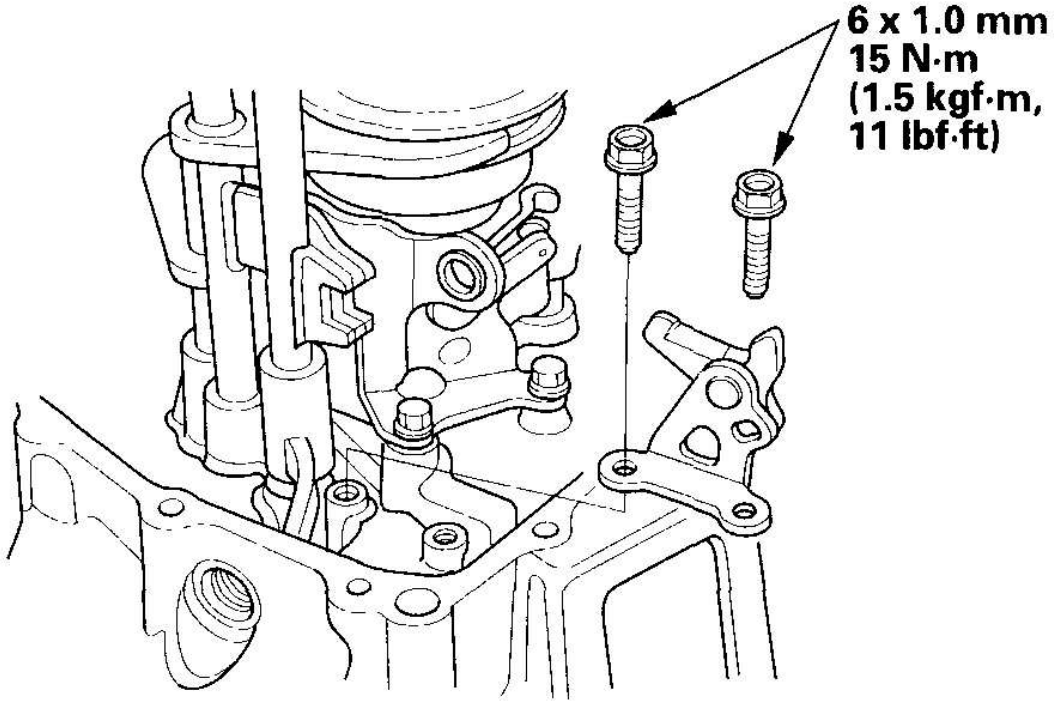


Fig. 158: Installing Reverse Lock Cam
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Select the proper size 72 mm shim (A) according to the measurements made during the Mainshaft Thrust Clearance Adjustment (see **MAINSHAFT THRUST CLEARANCE ADJUSTMENT**). Install the oil gutter plate (B), oil guide plate M, and 72 mm shim into the transmission housing (C).

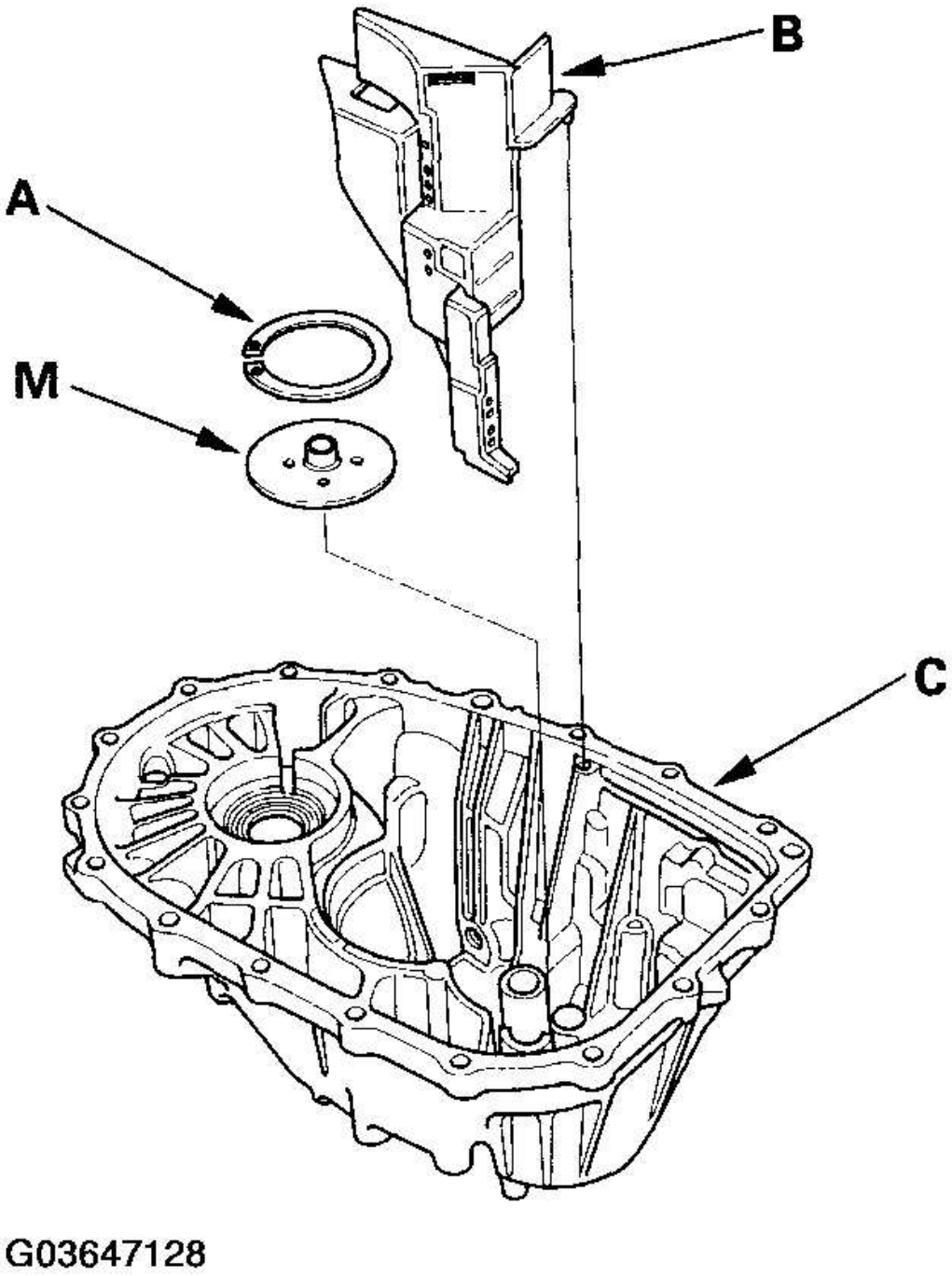


Fig. 159: Installing Oil Gutter Plate, Oil Guide Plate, And Shim Into Transmission Housing

Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove any dirt or oil from the transmission housing sealing surface. Apply liquid gasket (P/N 08718-0002) to the sealing surface. Make sure you seal the entire circumference of the bolt holes to prevent oil leakage.

NOTE: Do not install components if 4 minutes or more have passed after applying the liquid gasket. Instead, remove the old residue and reapply the liquid gasket.

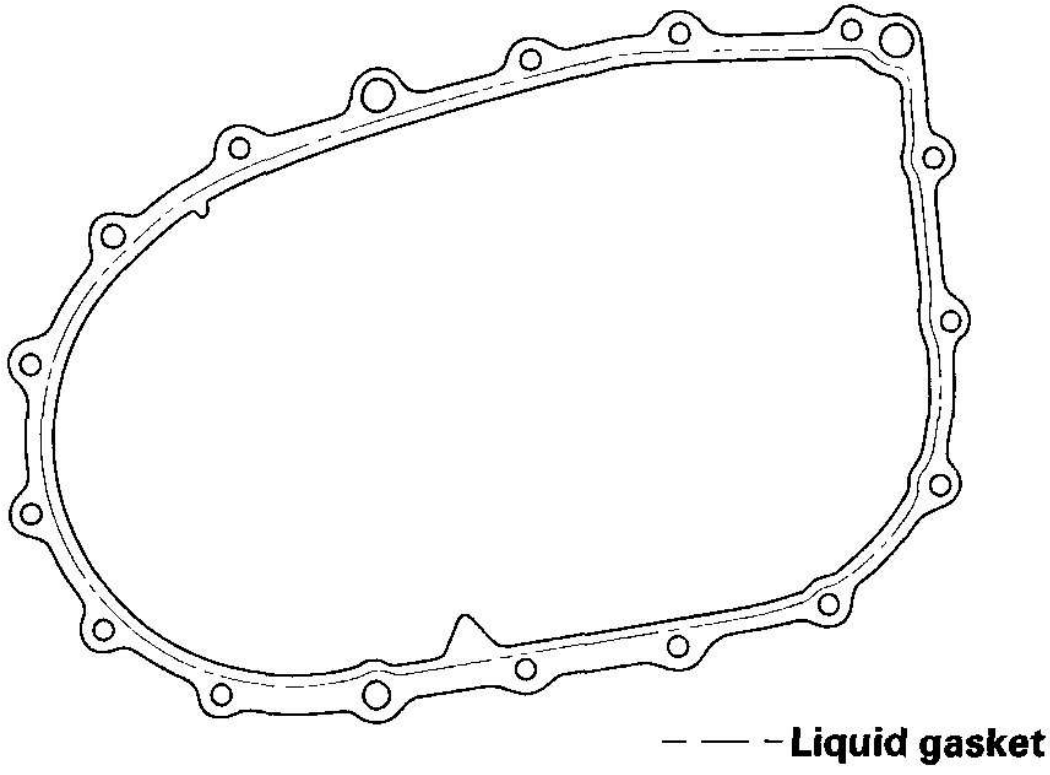


Fig. 160: View Of Liquid Gasket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the 14 x 20 mm dowel pins (A).

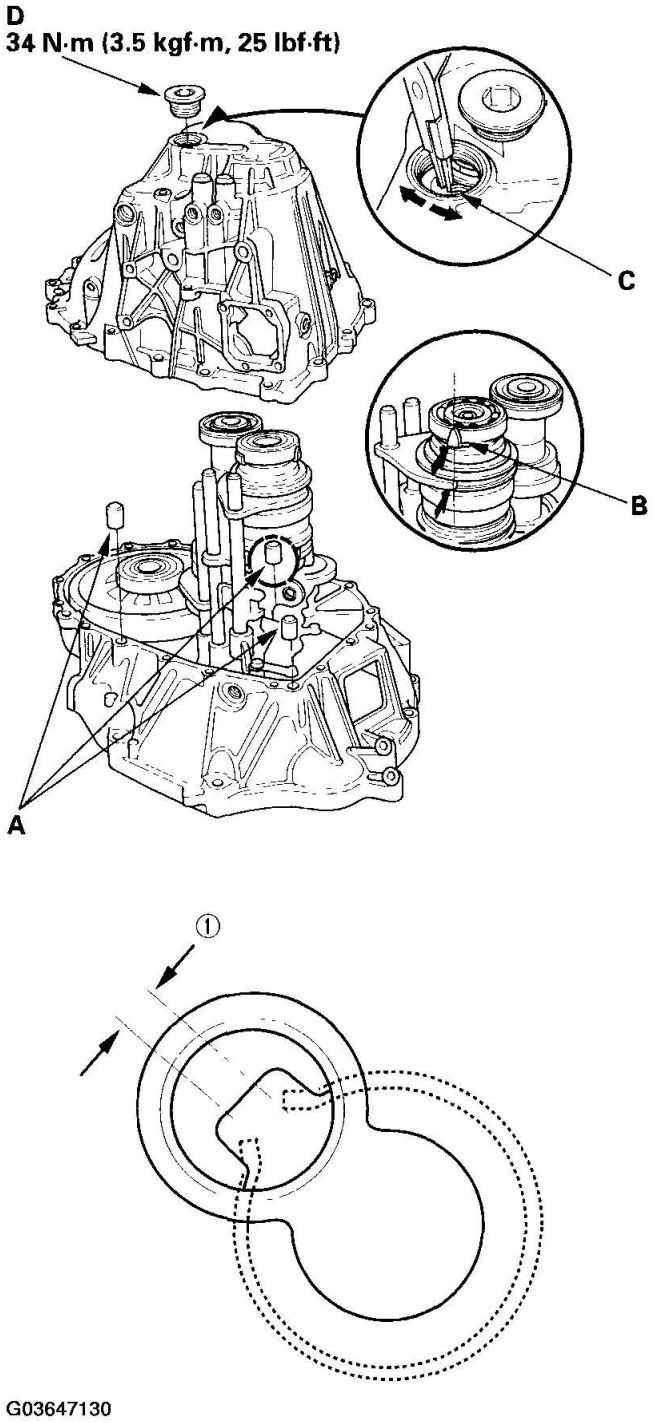


Fig. 161: Installing Dowel Pins
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Set the tapered cone ring (B) as shown in **Fig. 161**. Place the transmission housing on the clutch housing, being careful to line up the shafts.
11. While expanding the 72 mm snap ring (C) of the countershaft ball bearing using the snap ring pliers, push the transmission housing down to start the countershaft ball bearing through the snap ring. Then release the pliers, and push down the housing until it bottoms and the snap ring snaps in place in the countershaft ball bearing snap ring groove.
12. Make sure the 72 mm snap ring is securely seated in the groove of the countershaft bearing. See **Fig. 161**.

    Dimension 1 as installed: 3.3-6.0 mm (0.13-0.24 in.)

13. Apply liquid gasket (P/N 08718-0001) to the threads of the 32 mm sealing cap (D), and install it on the transmission housing.
14. Install the transmission hangers A and B, harness bracket B (C), and the 8 mm flange bolts, finger-tight.

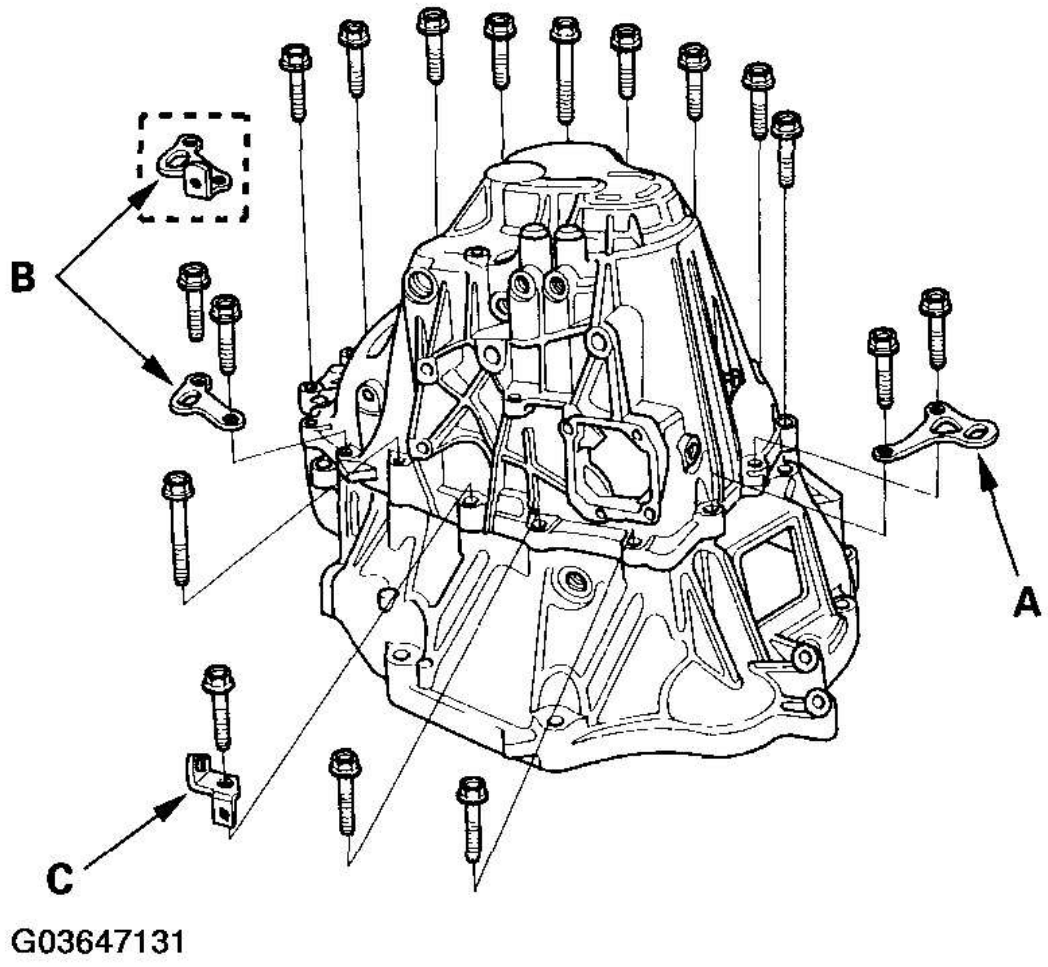


Fig. 162: Installing Transmission Hangers, Harness Bracket And Flange Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Tighten the 8 mm flange bolts in a crisscross pattern in several steps.

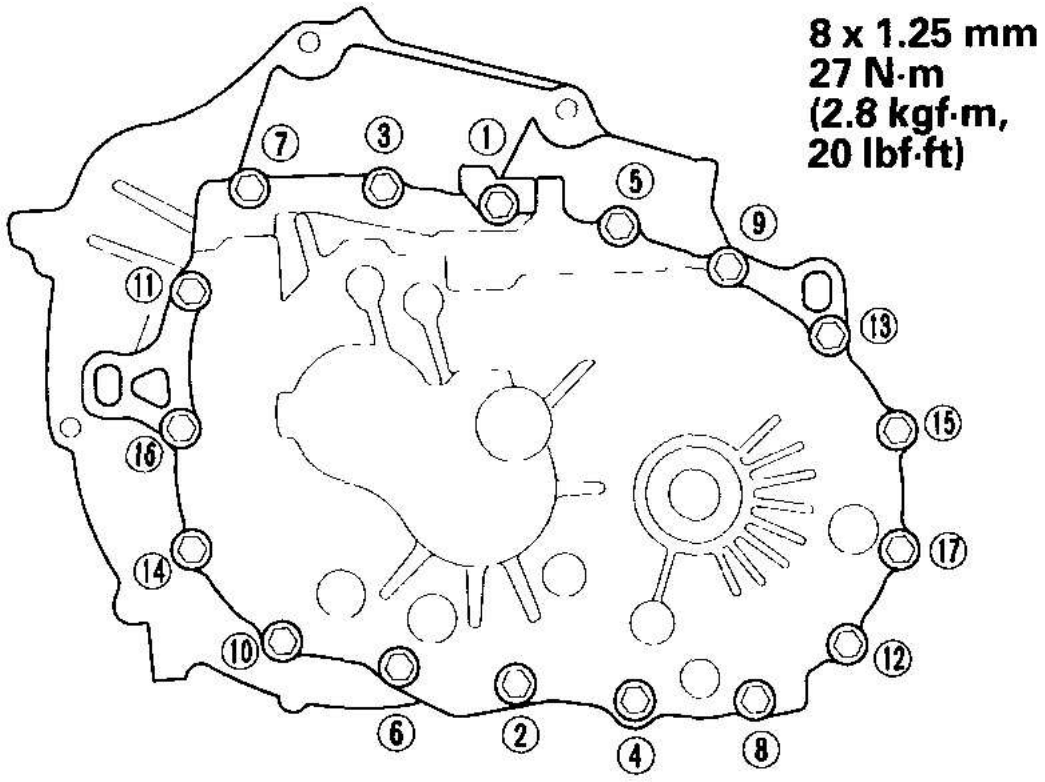


Fig. 163: Tightening Flange Bolts In Crisscross Pattern
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Remove any dirt or oil from the shift lever cover sealing surface. Apply liquid gasket (P/N 08718-0002) to the sealing surface.

NOTE: Do not install components if 4 minutes or more have passed after applying the liquid gasket. Instead, remove the old residue and reapply the liquid gasket.

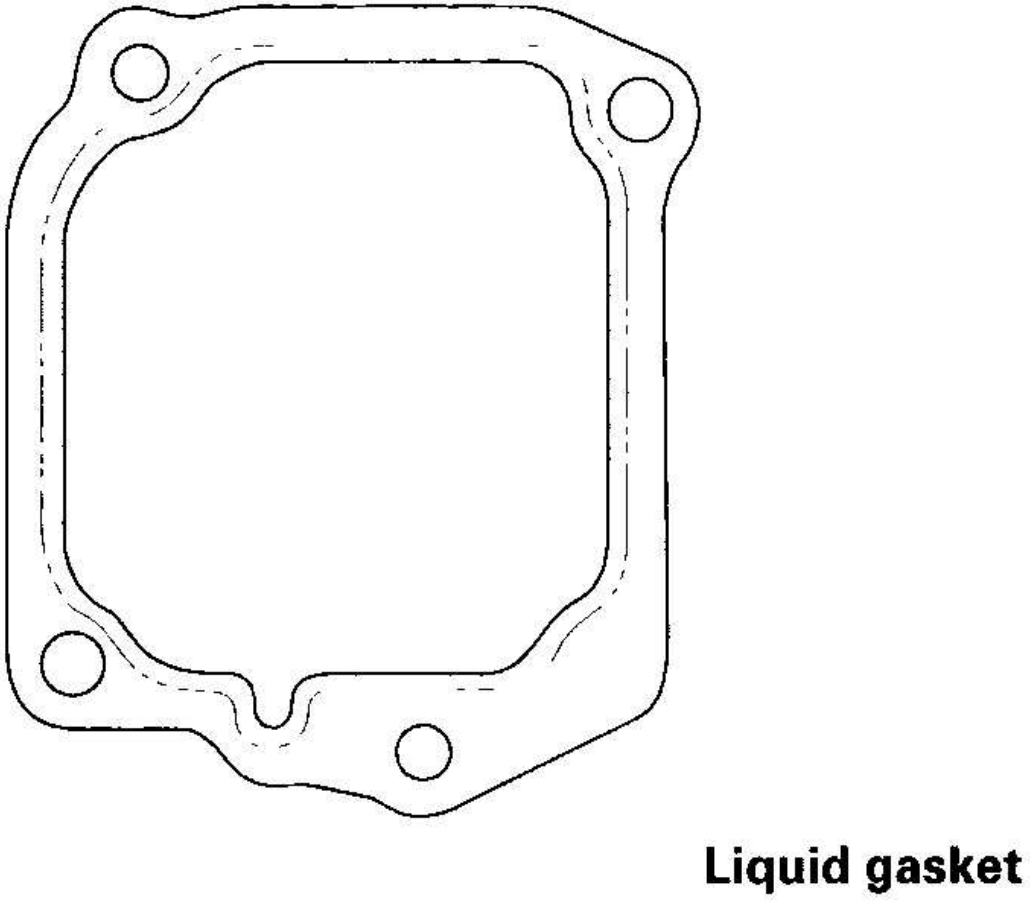


Fig. 164: View Of Liquid Gasket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Install the 8 x 14 mm dowel pins (B), change lever assembly (C), and harness bracket A.

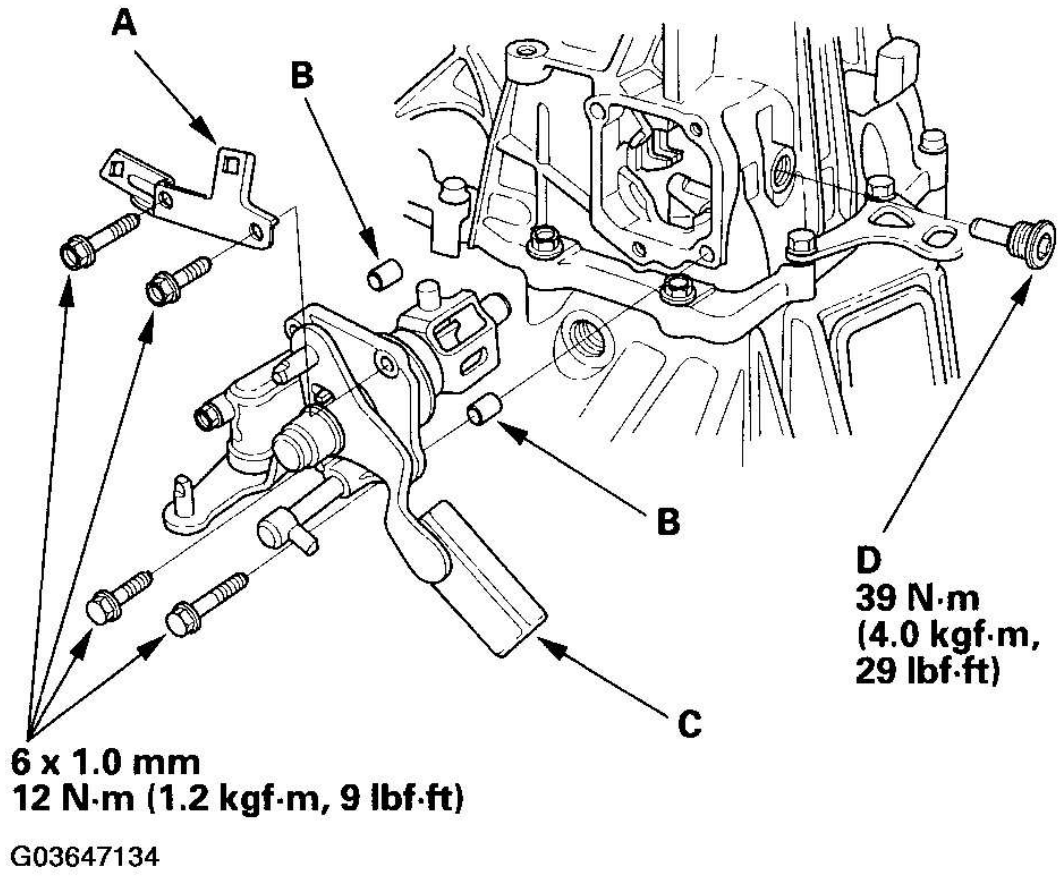


Fig. 165: Installing Dowel Pins, Change Lever Assembly And Harness Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Apply liquid gasket (P/N 08718-0002) to the threads of the interlock bolt (D), and install it on the transmission housing.
19. Install the drain plug (A), filler plug (B), and 10 mm flange bolt (C) with new washers.

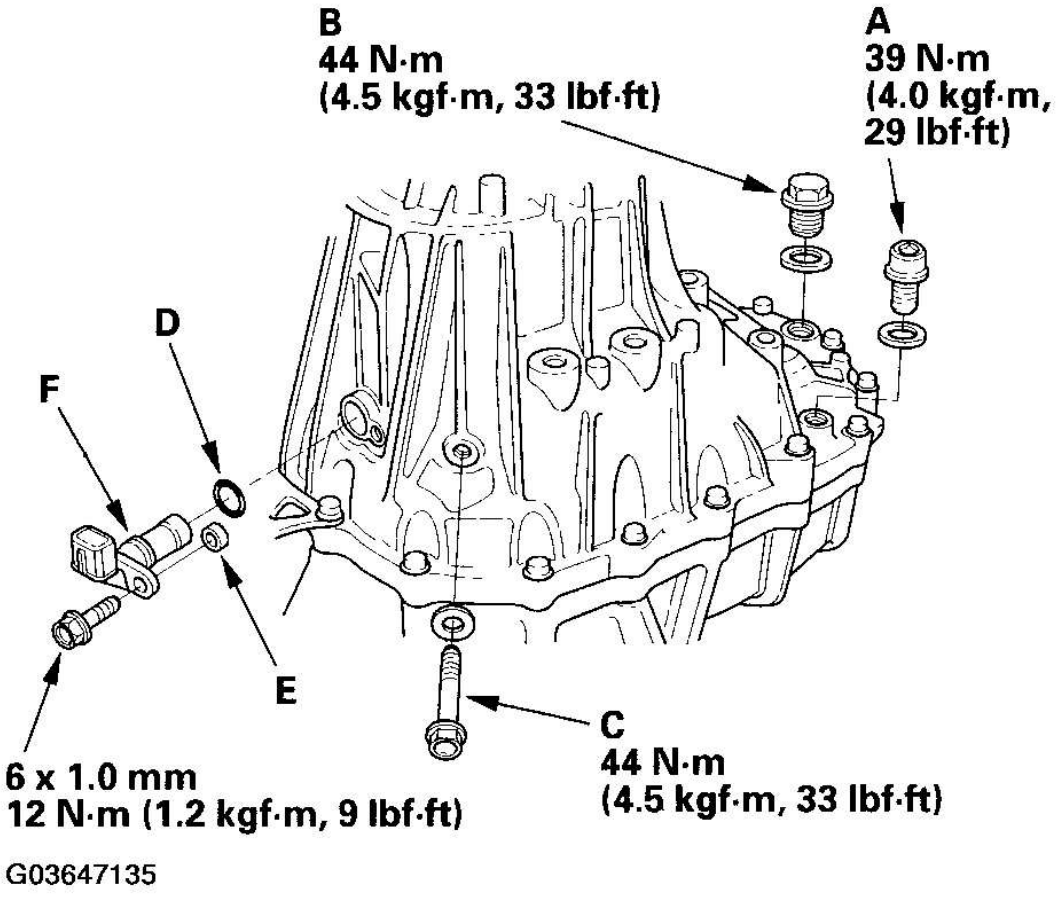


Fig. 166: Installing Drain Plug, Filler Plug And Flange Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Install the new O-ring (D), plain washer (E), and output shaft (countershaft) speed sensor (F).
21. Install the detent bolts (A), spring, and steel balls with new washers.

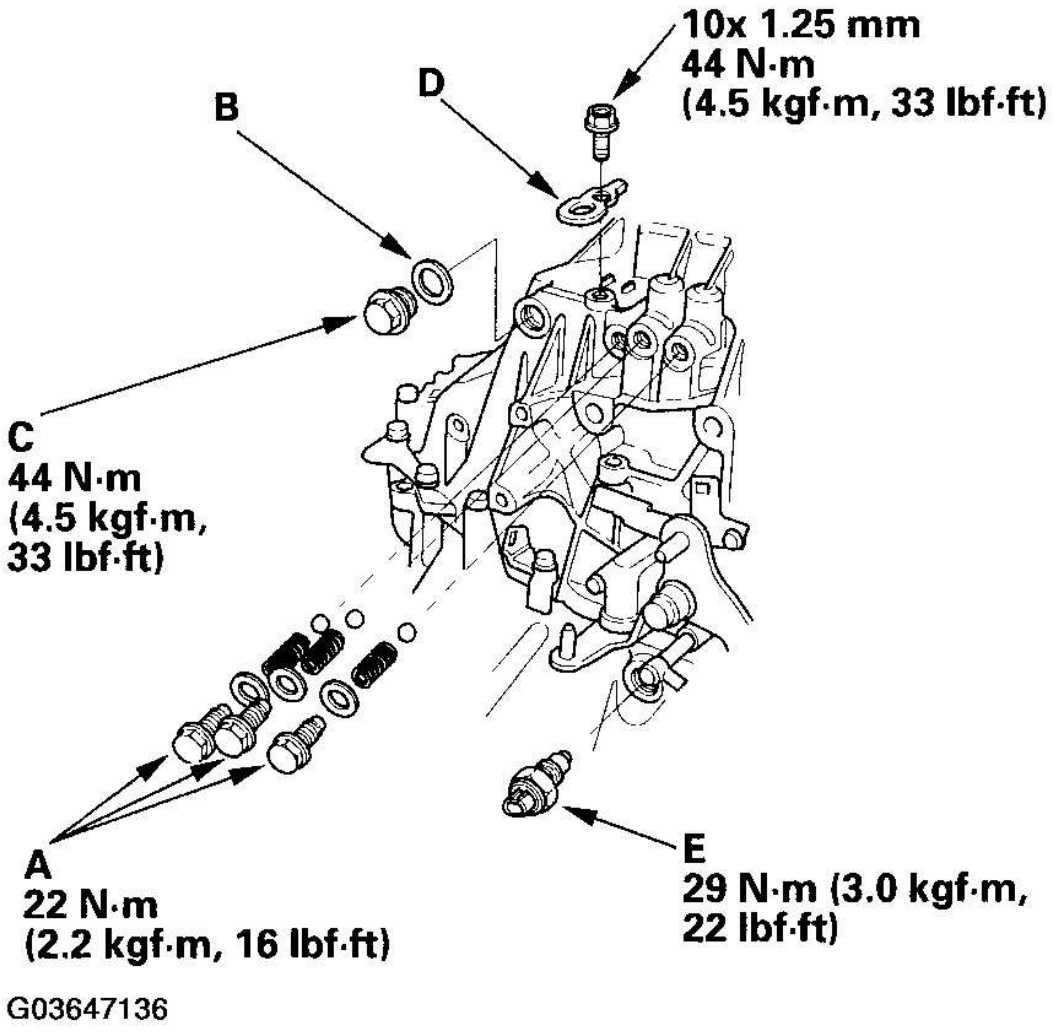


Fig. 167: Installing Detent Bolts, Spring And Steel Balls
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Install the new 20 mm washer (B), 20 mm bolt (C), and transmission hanger (D).
23. Apply liquid gasket (P/N 08718-0002) to the threads of the back-up light switch (E), and install it in the transmission housing.

GEARSHIFT MECHANISM REPLACEMENT

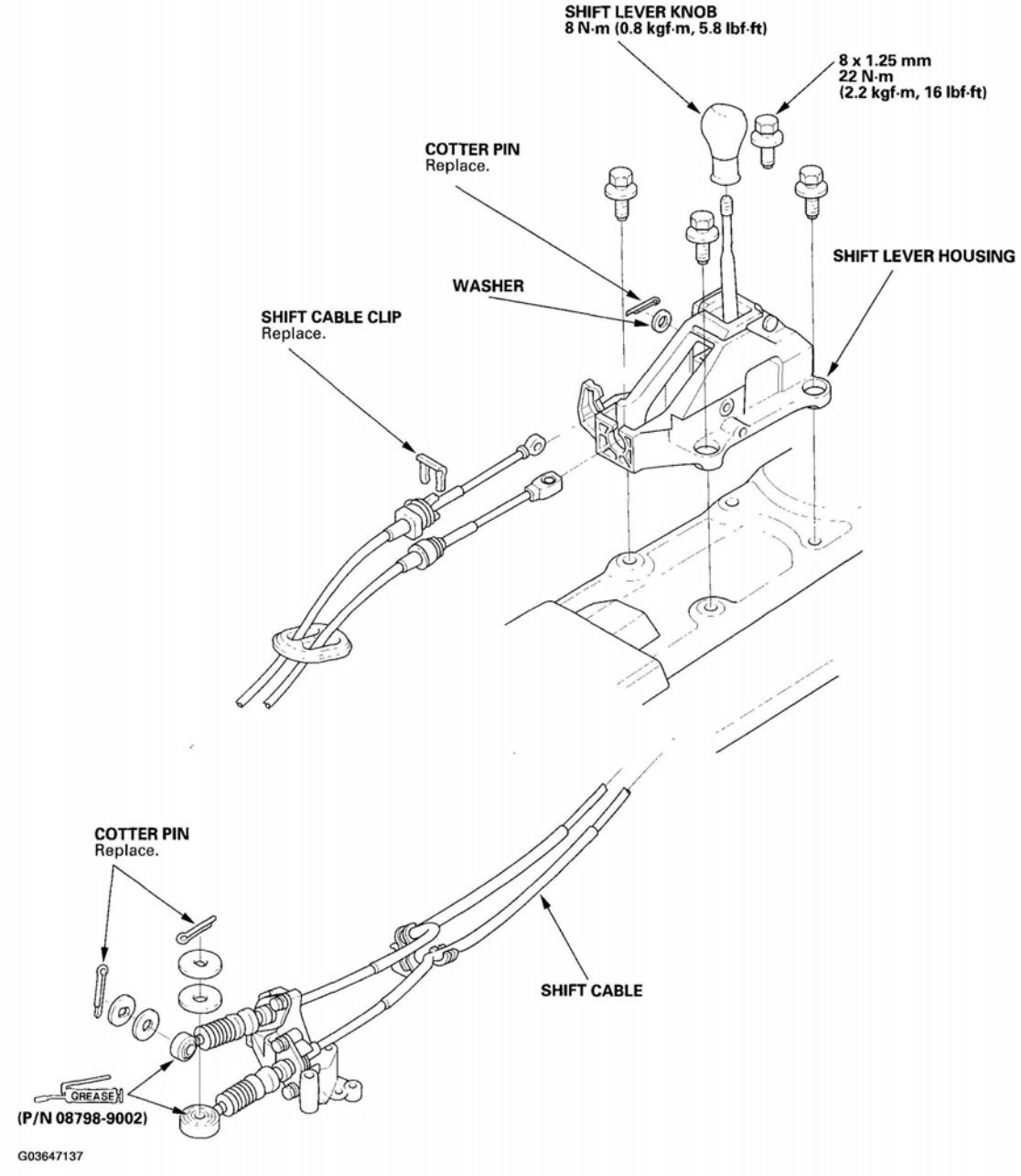


Fig. 168: Removing Gearshift Mechanism Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

M/T-DIFFERENTIAL

COMPONENT LOCATION INDEX

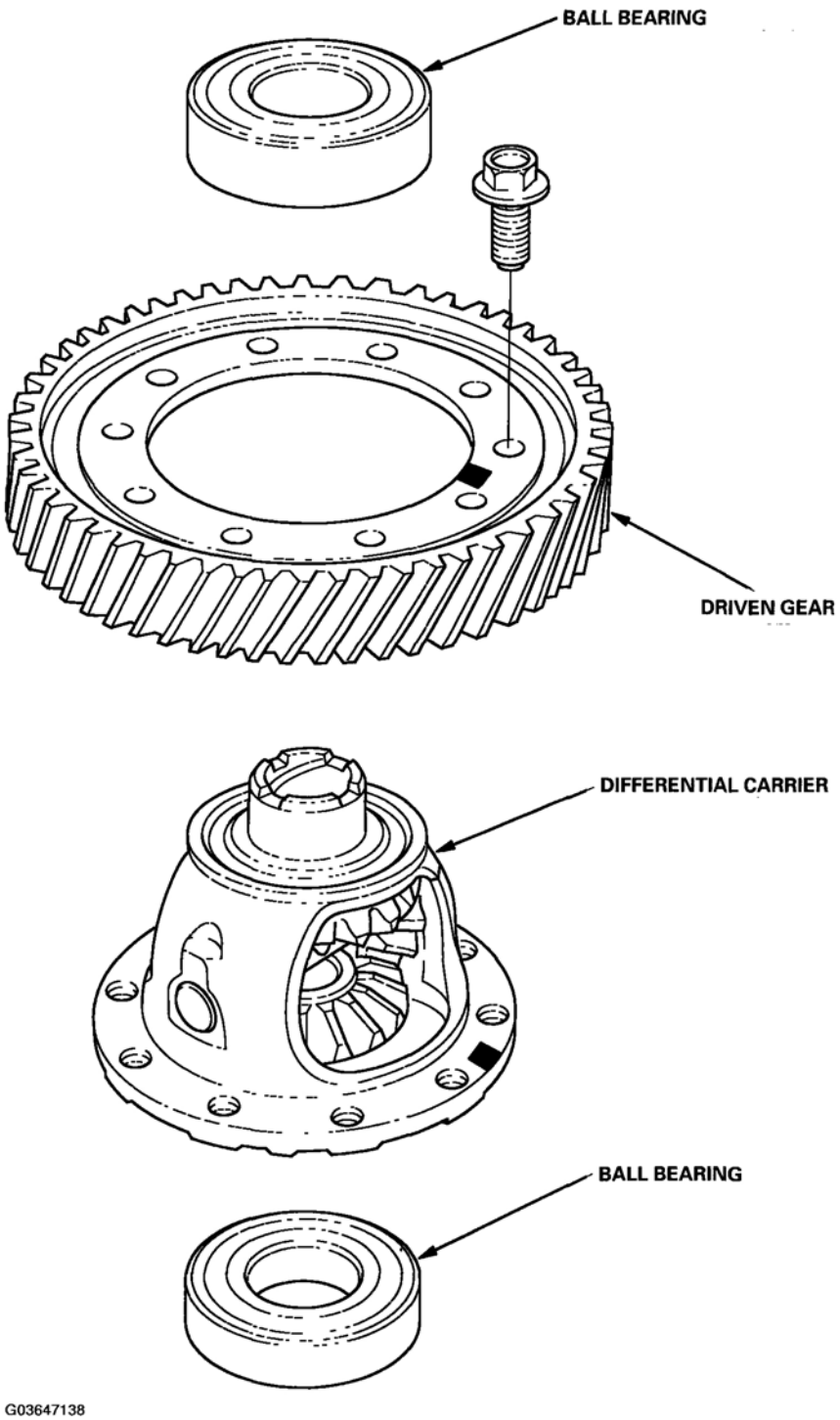


Fig. 169: Removing Differential Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BACKLASH INSPECTION

1. Place the differential assembly on V-blocks (A), and install both axles.

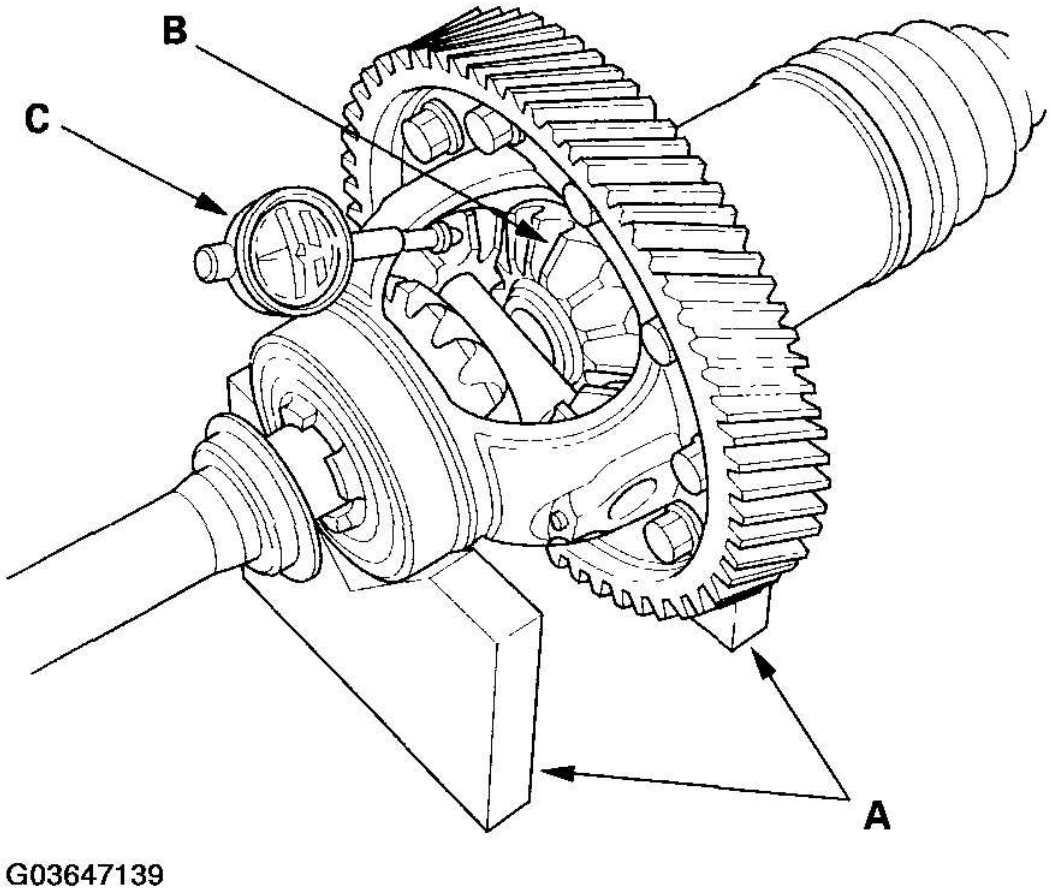


Fig. 170: Placing Differential Assembly On V-Blocks And Installing Axles
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the backlash of both pinion gears (B) with a dial indicator (C). If the backlash is not within the standard, replace the differential carrier.

Standard (New): 0.05-0.15 mm (0.002-0.006 in.)

DIFFERENTIAL CARRIER, FINAL DRIVEN GEAR REPLACEMENT

1. Loosen the bolts (left-hand threads) in a crisscross pattern in several steps, then remove the bolts and the final driven gear (A) from the differential carrier (B).

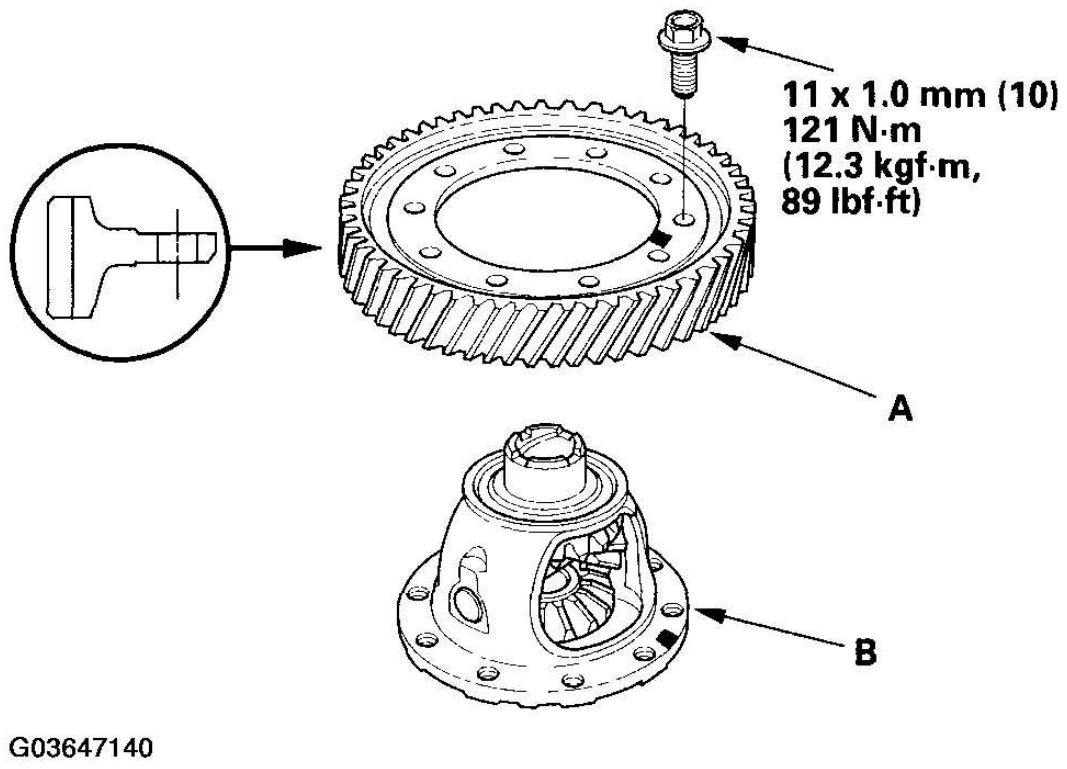


Fig. 171: Removing Bolts And Final Driven Gear From Differential Carrier
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the final driven gear with the chamfer on the inside diameter facing the carrier. Tighten the bolts in a crisscross pattern in several steps.

CARRIER BEARING REPLACEMENT

Special Tools Required

Driver, 40 mm I.D. 07746-0030100

1. Check the carrier bearings for wear and rough rotation. If they rotate smoothly and their rollers show no signs of wear, the bearings are OK.
2. Remove the carrier bearing (A) with a commercially available bearing puller (B).

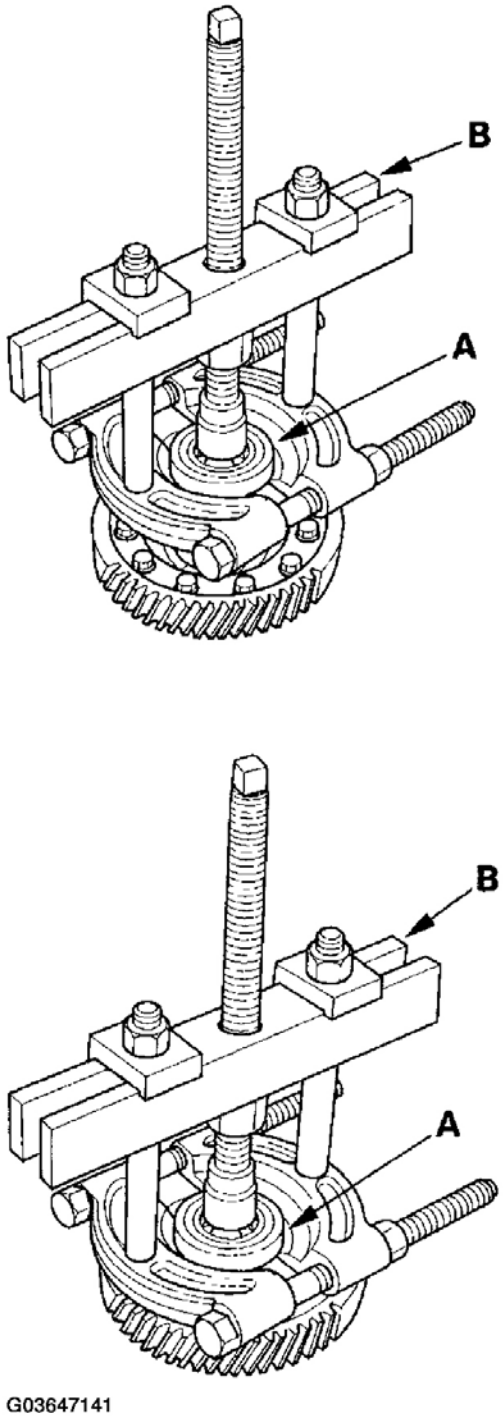


Fig. 172: Removing Carrier Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the new bearings (A) with the special tool and a press. Press each bearing on until it bottoms. There should be no clearance between the bearings and the carrier.

NOTE: Place the seal part of the bearing (B) towards the outside of the differential, then install it.

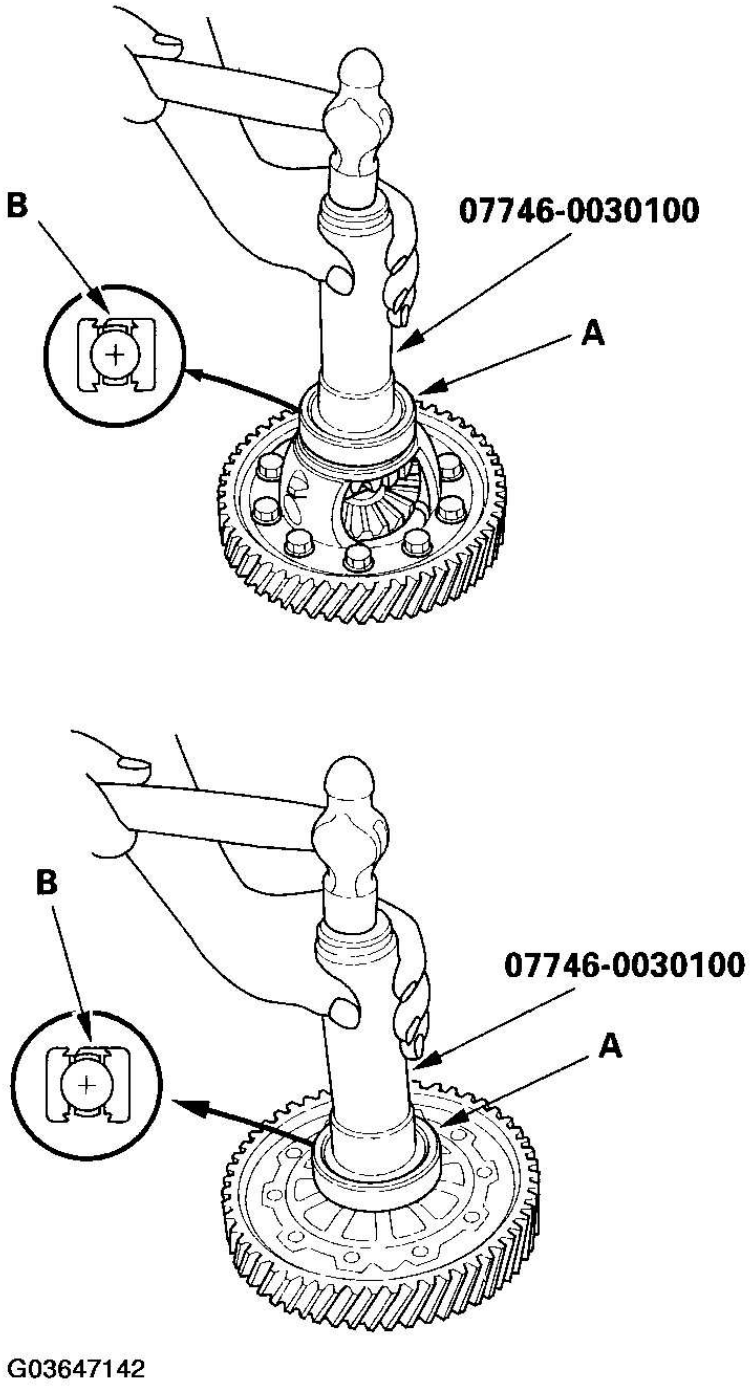


Fig. 173: Installing Carrier Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

OIL SEAL REPLACEMENT

Special Tools Required

- Driver 07749-0010000
- Oil seal driver attachment 07NAD-P20A100

1. Remove the differential assembly.
2. Remove the oil seal (A) from the transmission housing (B).

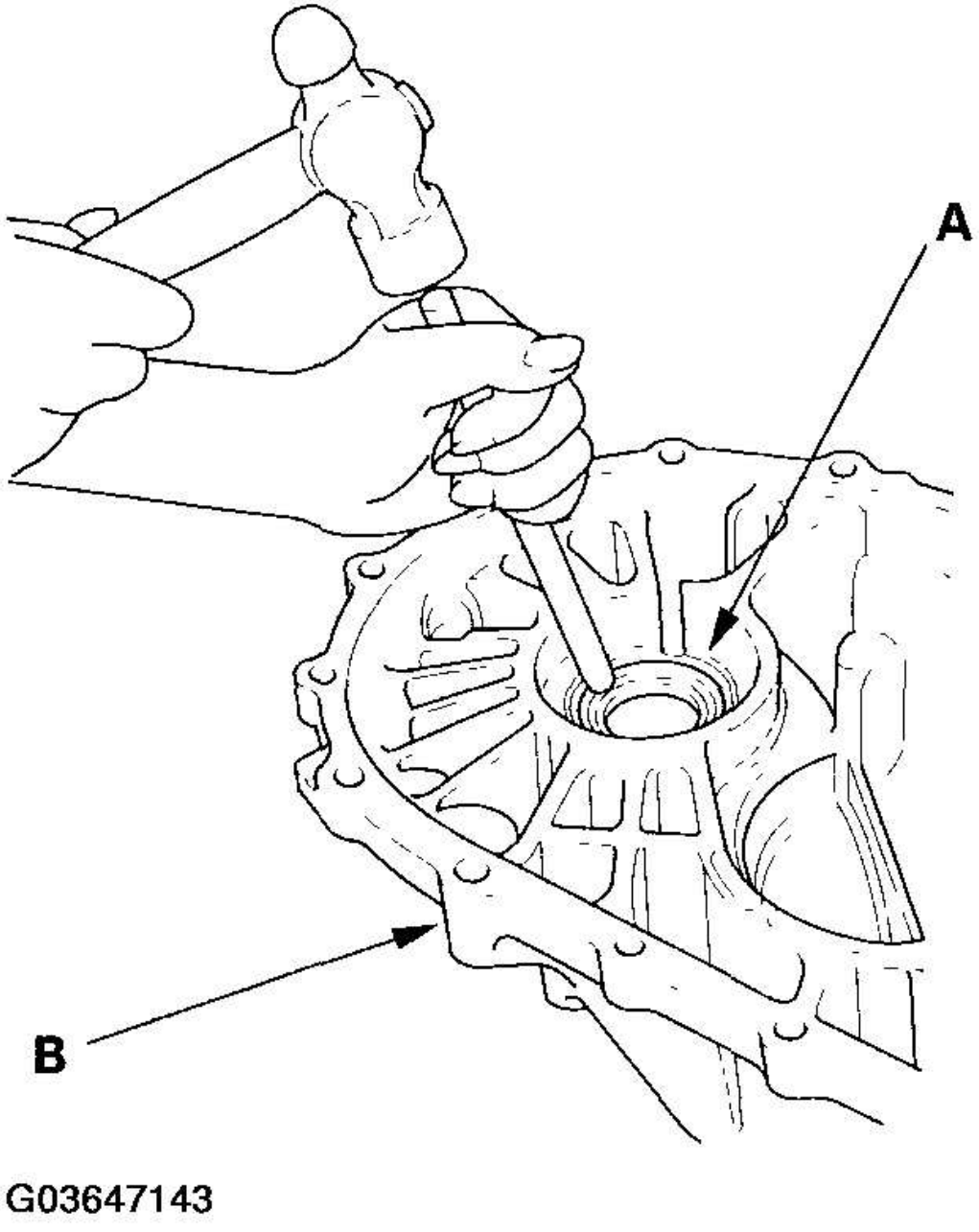


Fig. 174: Removing Transmission Housing Oil Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the oil seal (A) from the clutch housing (B).

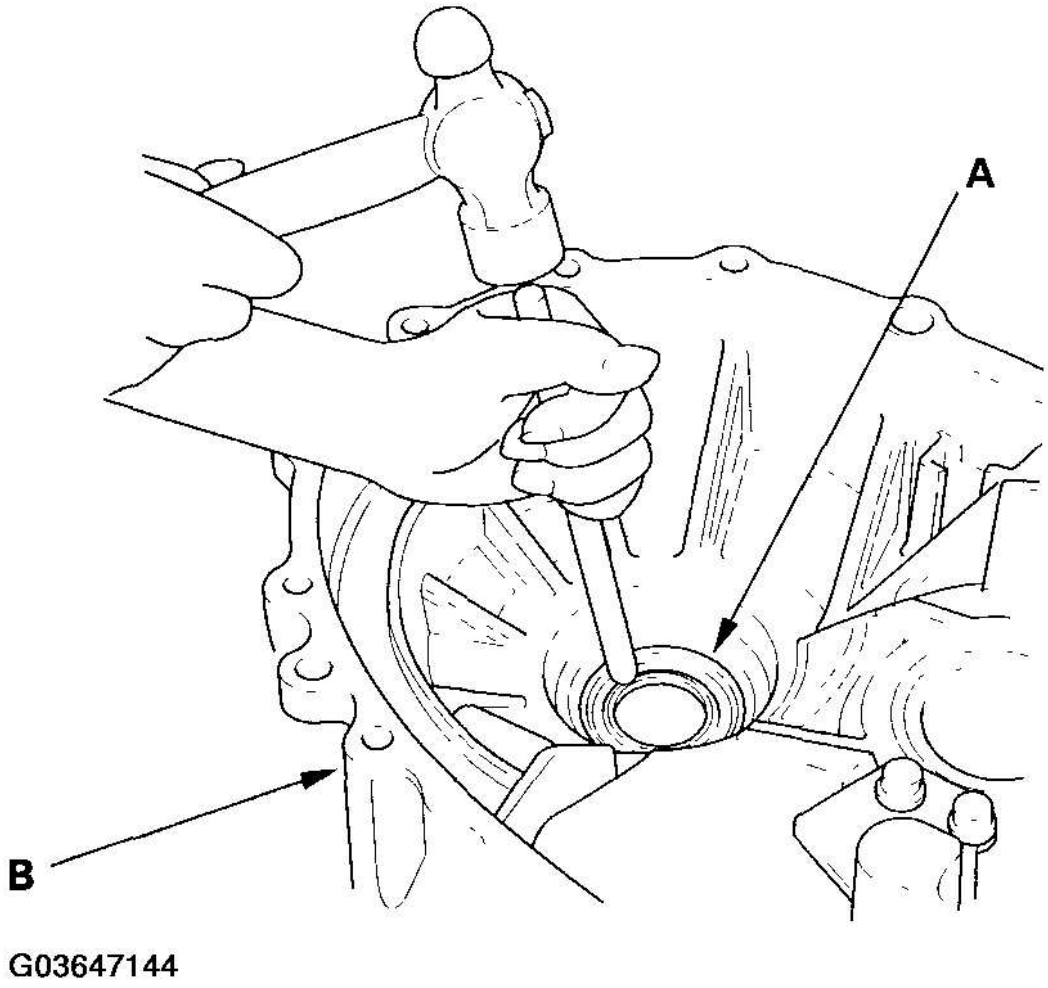


Fig. 175: Removing Clutch Housing Oil Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the new oil seal in the transmission housing with the special tools.

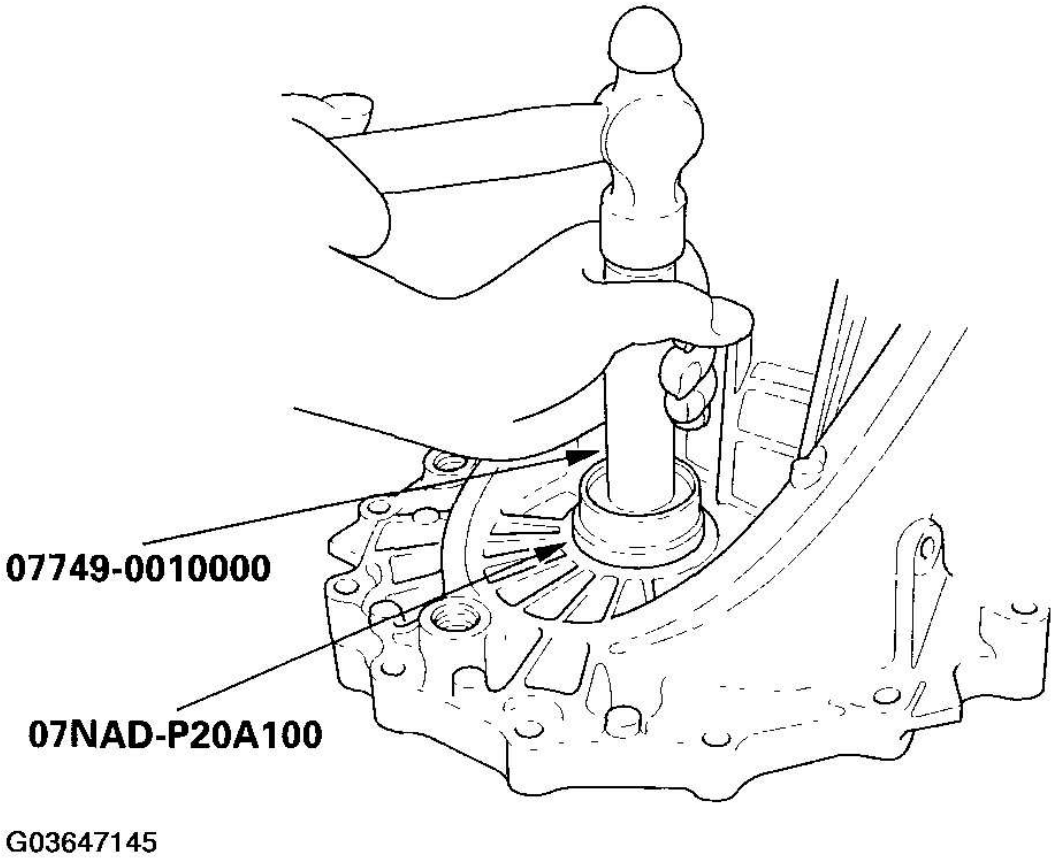


Fig. 176: Installing Clutch Housing Oil Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the new oil seal in the clutch housing with the special tools.

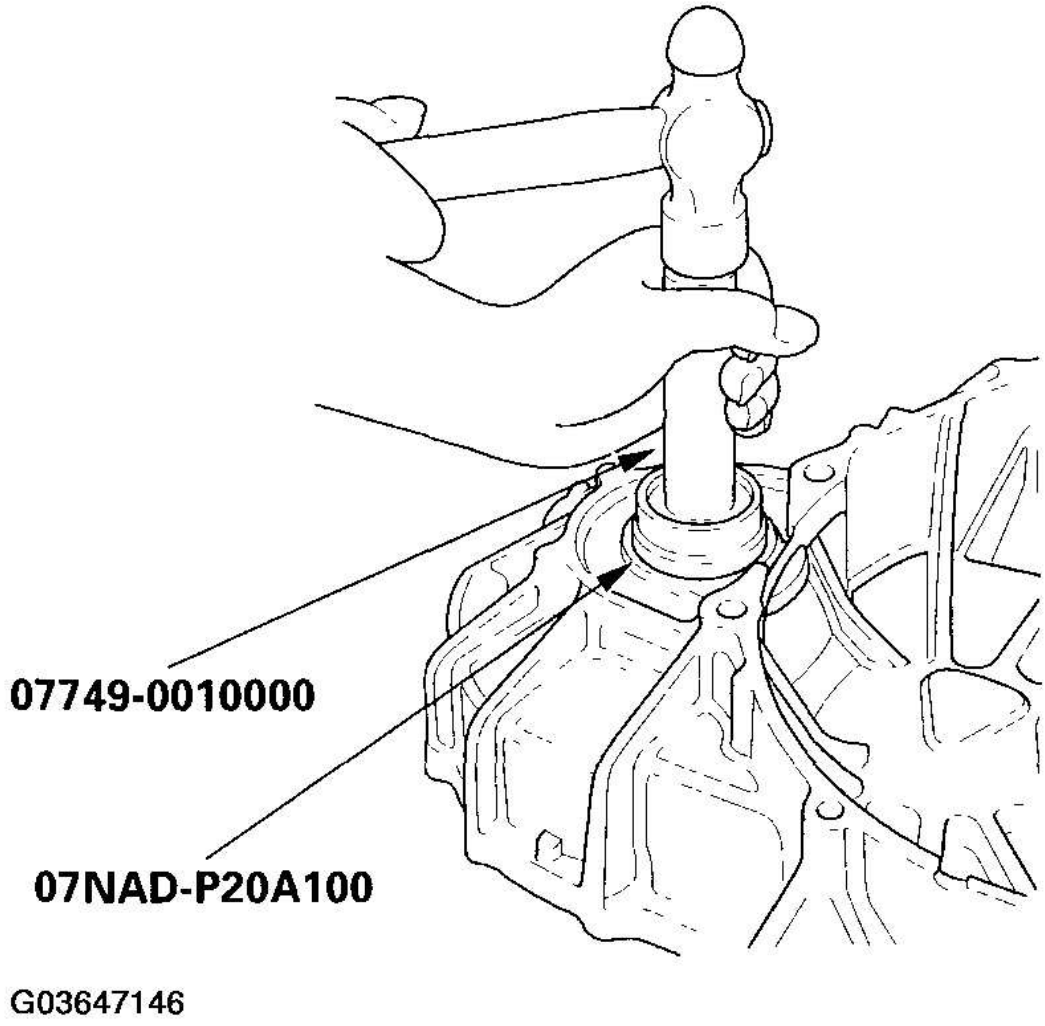


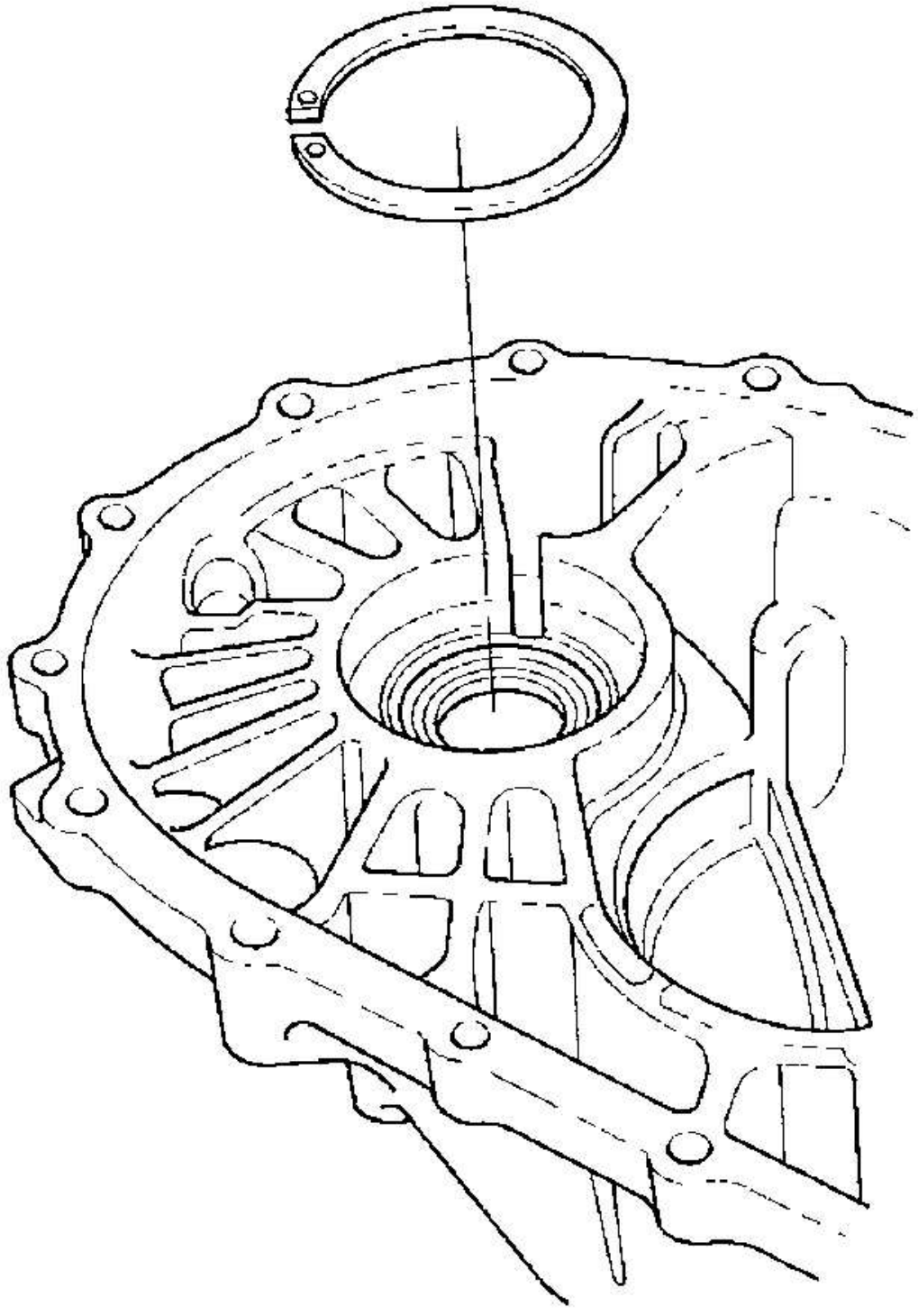
Fig. 177: Installing Transmission Housing Oil Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DIFFERENTIAL THRUST CLEARANCE ADJUSTMENT

Special Tools Required

Driver, 40 mm I.D. 07746-0030100

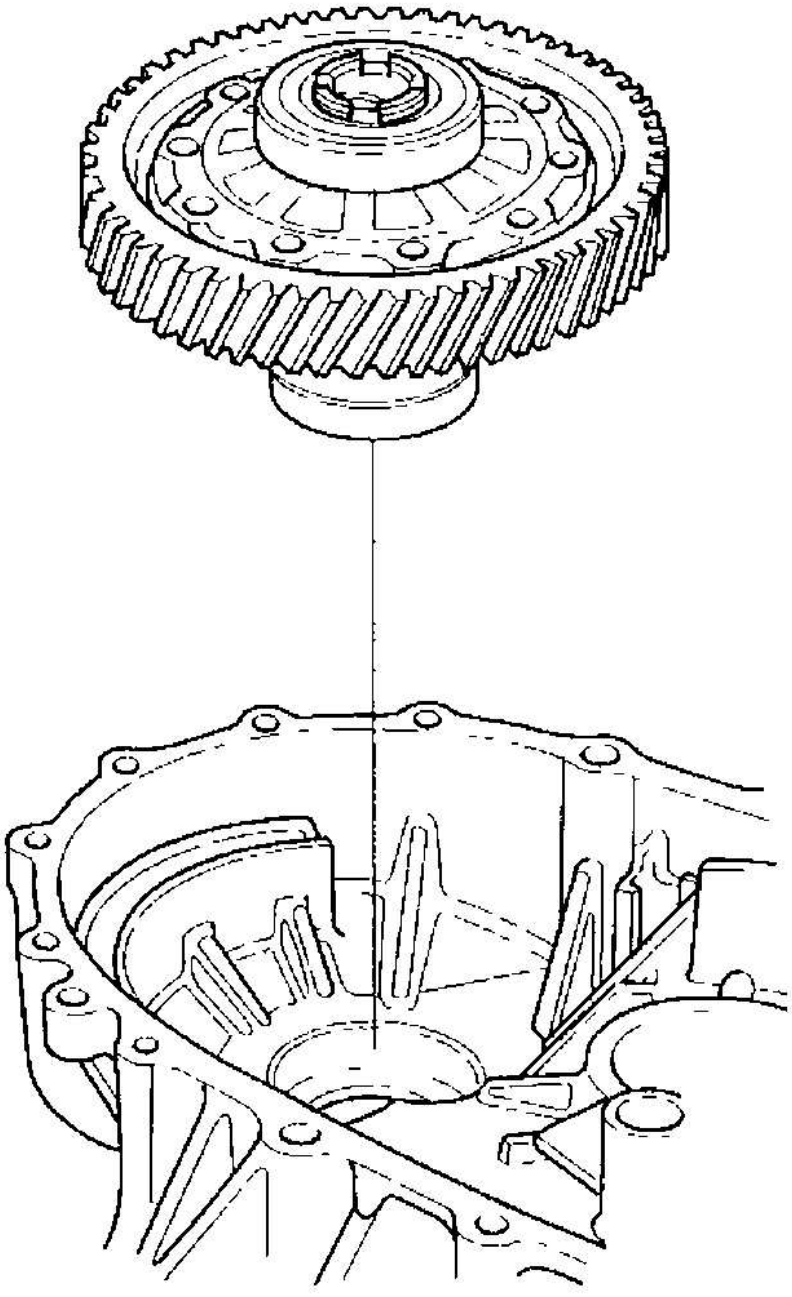
1. If you removed the 80 mm shim from the clutch housing, reinstall the same sized shim.



G03647147

Fig. 178: Installing Shim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the differential assembly into the clutch housing.



G03647148

Fig. 179: Installing Differential Assembly Into Clutch Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the transmission housing onto the clutch housing, then tighten the 8 mm flange bolts in a crisscross pattern in several steps (see step 15).

   8 x 1.25 mm

   27 N.m (2.8 kgf.m, 20 lbf.ft)

4. Use the special tool to bottom the differential assembly in the clutch housing.

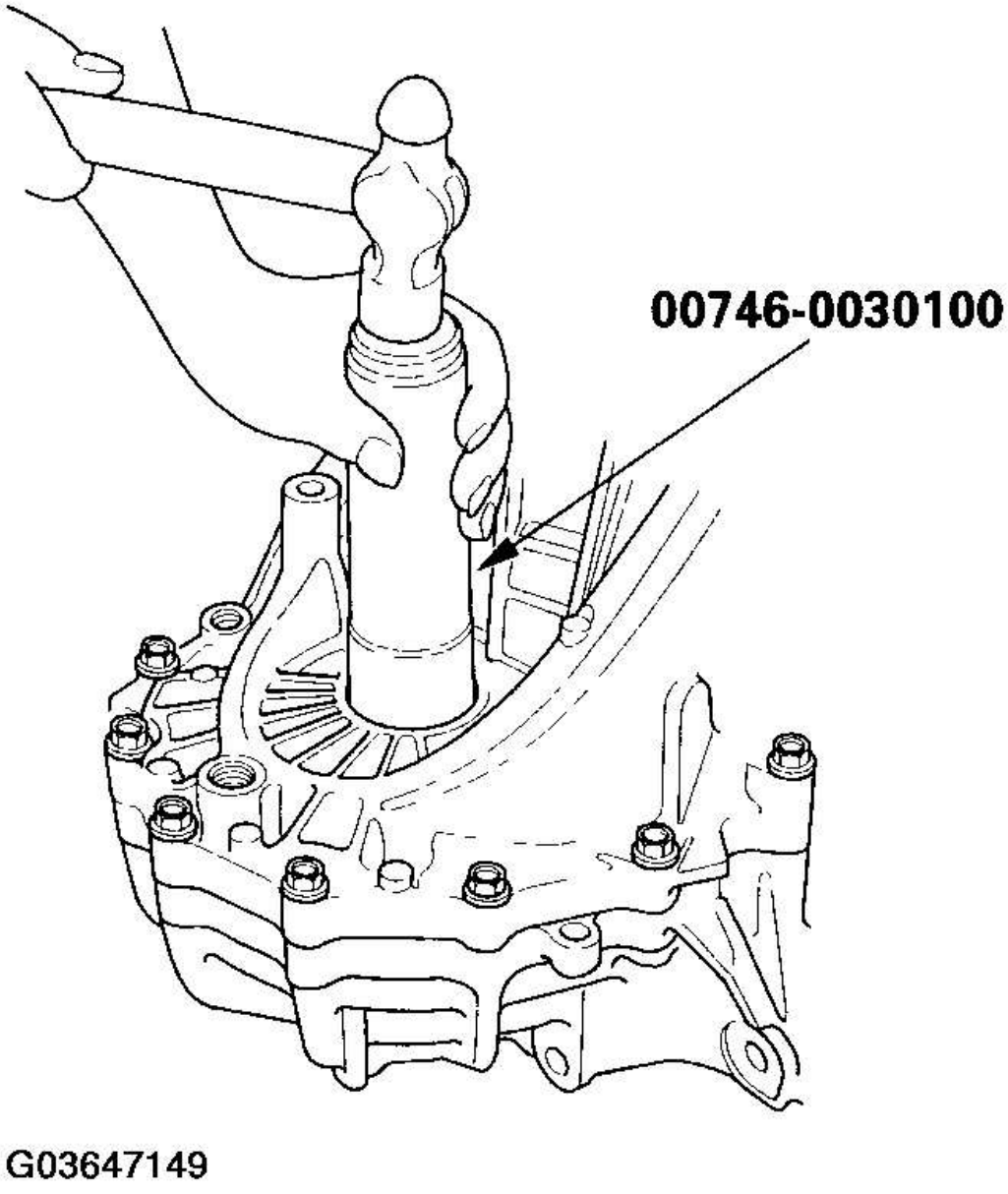


Fig. 180: Inserting Differential Assembly Into Clutch Housing Properly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Measure clearance between 80 mm shim and the bearing outer race in the transmission housing.

Standard: 0-0.10 mm (0-0.0039 in.)

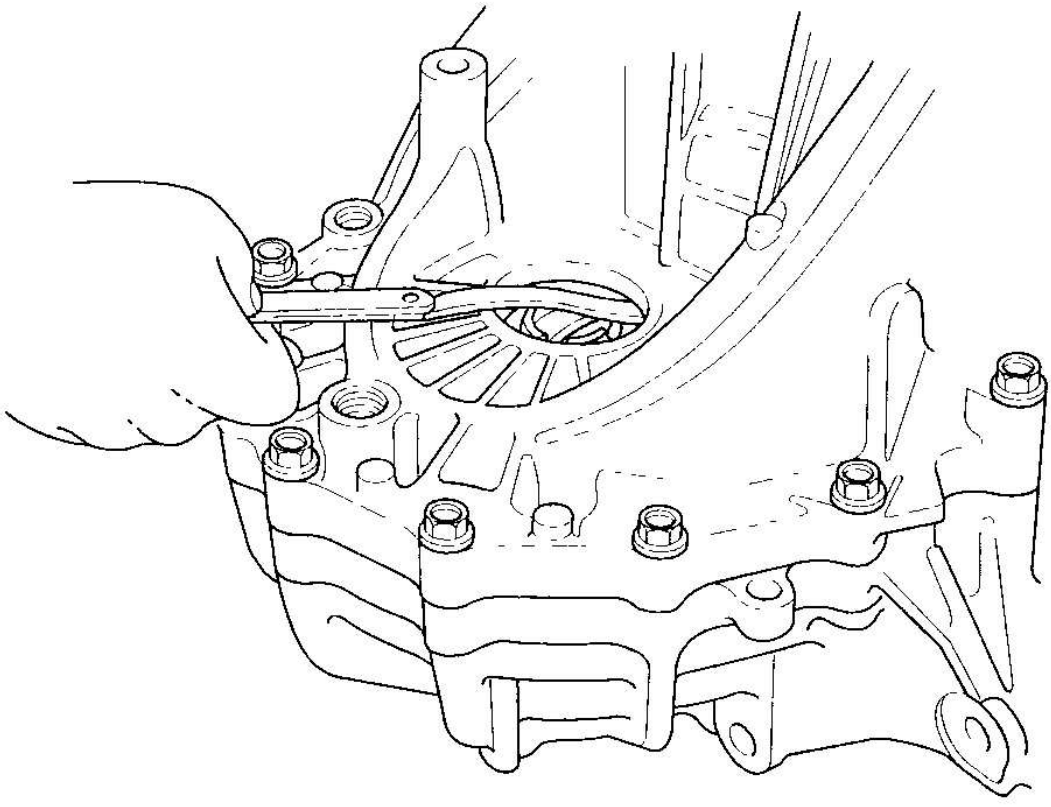


Fig. 181: Measuring Clearance Between Shim And Bearing Outer Race In Transmission Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. If the clearance is more than the standard, select a new shim from the following table. If the clearance measured in step 5 is within the standard, go to step 9.

80 mm Shim

SHIM THICKNESS SPECIFICATIONS (80MM)

	Part Number	Thickness
A	41441-PL3-	1.0 mm (0.039

	B00	in.)
B	41442-PL3-B00	1.1 mm (0.043 in.)
C	41443-PL3-B00	1.2 mm (0.047 in.)
D	41444-PL3-B00	1.3 mm (0.051 in.)
E	41445-PL3-B00	1.4 mm (0.055 in.)
F	41446-PL3-B00	1.5 mm (0.059 in.)
G	41447-PL3-B00	1.6 mm (0.063 in.)
H	41448-PL3-B00	1.7 mm (0.067 in.)
J	41449-PL3-B00	1.8 mm (0.071 in.)
K	41450-PL3-B00	1.05 mm (0.041 in.)
L	41451-PL3-B00	1.15 mm (0.045 in.)
M	41452-PL3-B00	1.25 mm (0.049 in.)
N	41453-PL3-B00	1.35 mm (0.053 in.)
P	41454-PL3-B00	1.45 mm (0.057 in.)
Q	41455-PL3-B00	1.55 mm (0.061 in.)
R	41456-PL3-B00	1.65 mm (0.065 in.)
S	41457-PL3-B00	1.75 mm (0.069 in.)

7. Remove the bolts and transmission housing.
8. Replace the thrust shim selected in step 6, then recheck the clearance.
9. Reinstall the transmission.

2003-07 ACCESSORIES & EQUIPMENT

Moonroof - Accord

COMPONENT LOCATION INDEX

2-DOOR

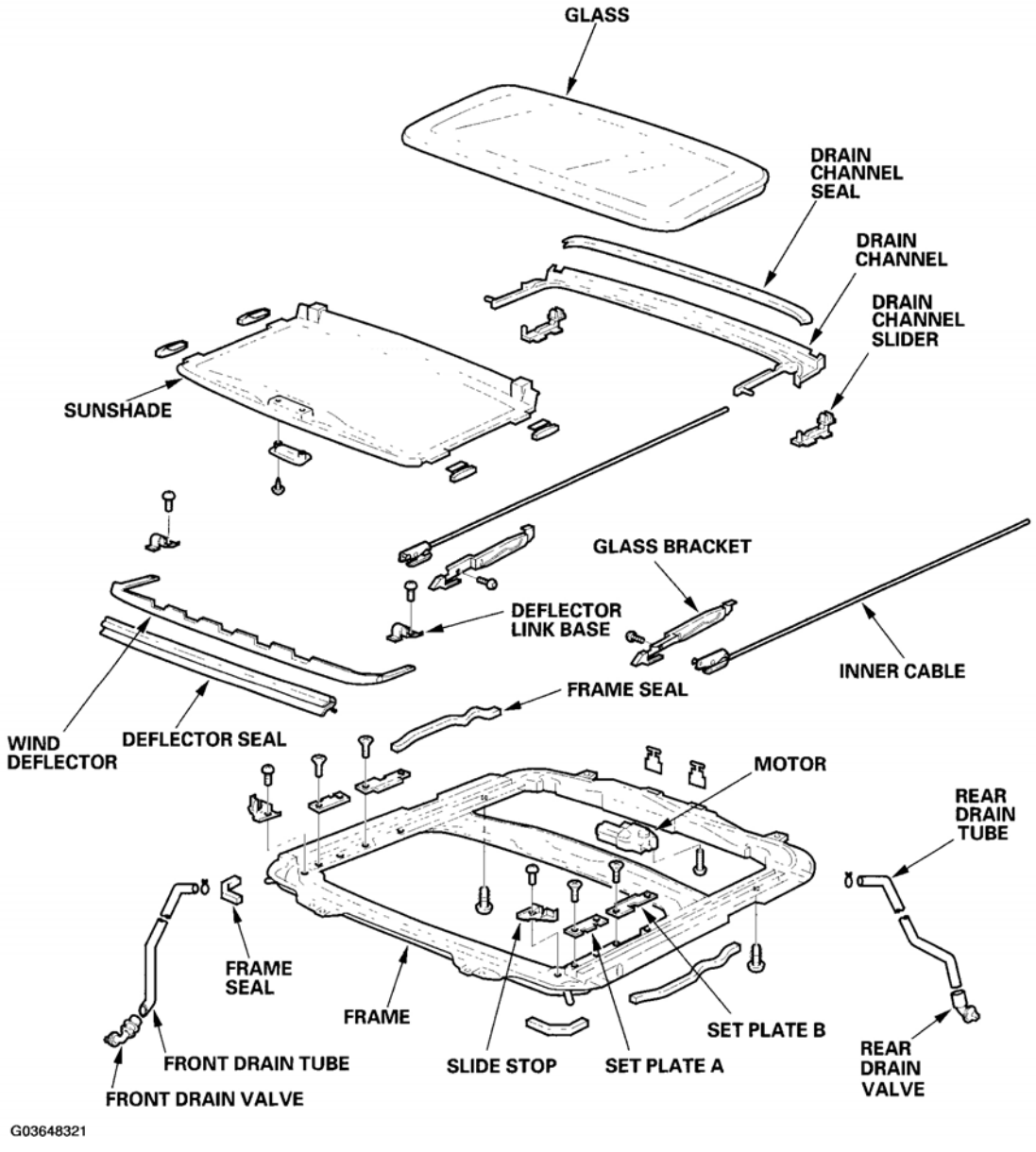


Fig. 1: Identifying Moonroof Component Location (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR

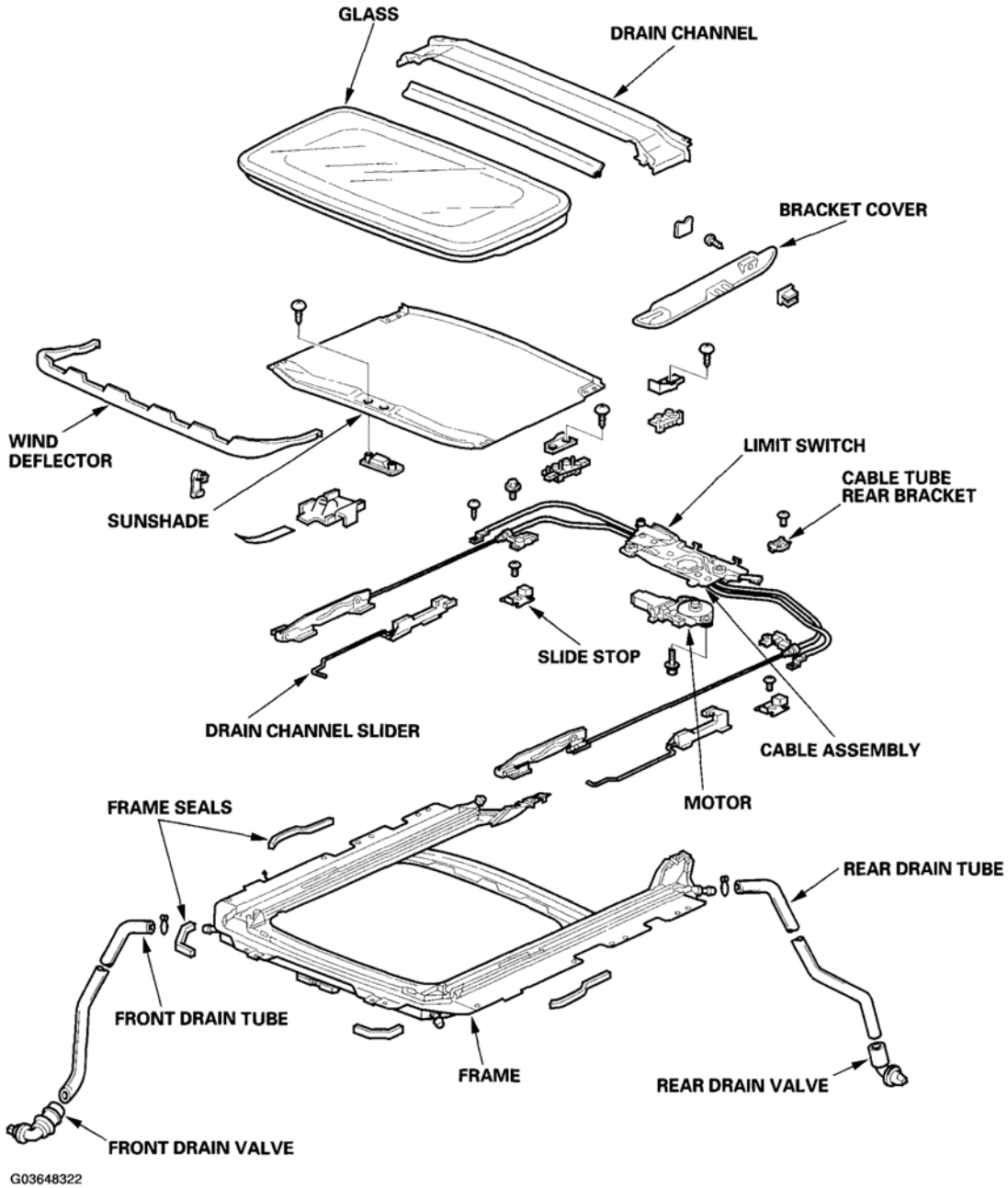


Fig. 2: Identifying Moonroof Component Location (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

2-DOOR

SYMPTOM TROUBLESHOOTING INDEX (2-DOOR)

Symptom	Diagnostic procedure
Water leaks from moonroof	1. Check for a clogged drain tube. 2. Check for a gap between the glass weatherstrip and the roof panel. 3. Check for a defective or an improperly installed glass weatherstrip or drain channel. 4. Check for a gap between the drain seal and the roof panel.
Wind noise from moonroof	Check for excessive clearance between the glass weatherstrip and the roof panel.
Motor noise from moonroof	1. Check for a loose motor. 2. Check for a worn gear or bearing. 3. Check for a deformed cable assembly.
Moonroof glass does not move, but motor turns	1. Check for a defective gear or inner cable. 2. Check for foreign matter stuck between the guide rail and the slider. 3. Check for a loose inner cable. 4. Make sure the cable assembly is attached properly.
Moonroof glass does not move and motor does not turn (glass can be moved with moonroof wrench)	1. Check for a blown fuse. 2. Check for a faulty moonroof switch. 3. Check for a run down battery. 4. Check for a defective motor control unit.
Moonroof glass does not stop at proper flush closed position	1. Perform moonroof calibration. 2. Check glass height adjustment.

Moonroof glass moves in a jerking motion (moves 40 mm, stops for 0.4 seconds, and repeats)	Perform moonroof calibration.
During auto close operation, moonroof glass reverses when no object is trapped	Check for dirt and debris in the track. Perform moonroof calibration.
Moonroof glass moves, but there is no Auto function	Reprogram moonroof motor (see **MOONROOF CALIBRATION**).

4-DOOR

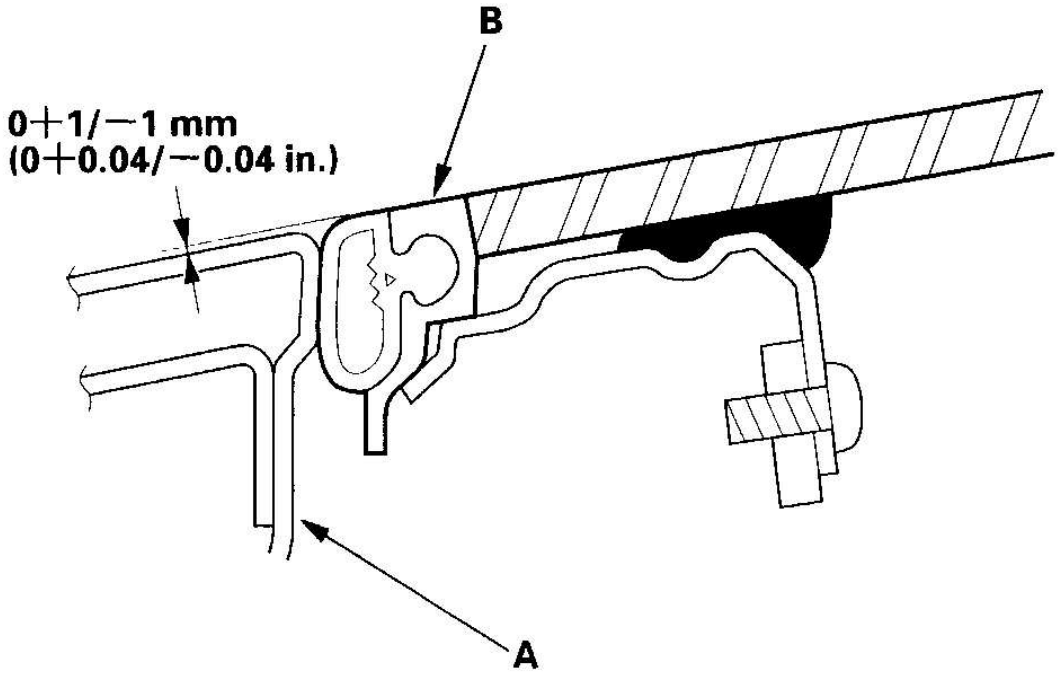
SYMPTOM TROUBLESHOOTING INDEX (4-DOOR)

Symptom	Diagnostic procedure
Water leaks from moonroof	1. Check for a clogged drain tube. 2. Check for a gap between the glass weatherstrip and the roof panel. 3. Check for a defective or an improperly installed glass weatherstrip or drain channel. 4. Check for a gap between the drain seal and the roof panel.
Wind noise from moonroof	Check for excessive clearance between the glass weatherstrip and the roof panel.
Motor noise from moonroof	1. Check for a loose motor. 2. Check for a worn gear or bearing. 3. Check for a deformed cable assembly.
Moonroof glass does not move, but motor turns	1. Check for a defective gear or inner cable. 2. Check for foreign matter stuck between the guide rail and the slider.

	3. Check for a loose inner cable. 4. Make sure the cable assembly is attached properly.
Moonroof glass does not move and motor does not turn (glass can be moved with moonroof wrench)	1. Check for a blown fuse. 2. Check for a faulty moonroof switch. 3. Check the limit switch. 4. Check for a run down battery. 5. Check for a defective motor. 6. Check for a faulty relay.

GLASS HEIGHT ADJUSTMENT

The roof panel (A) should be even with the glass weatherstrip (B), to within 0+1/-1 mm (0+0.04/-0.04 in.) all the way around. If not, make the following adjustment:



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Fig. 3: Adjusting Glass Height (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

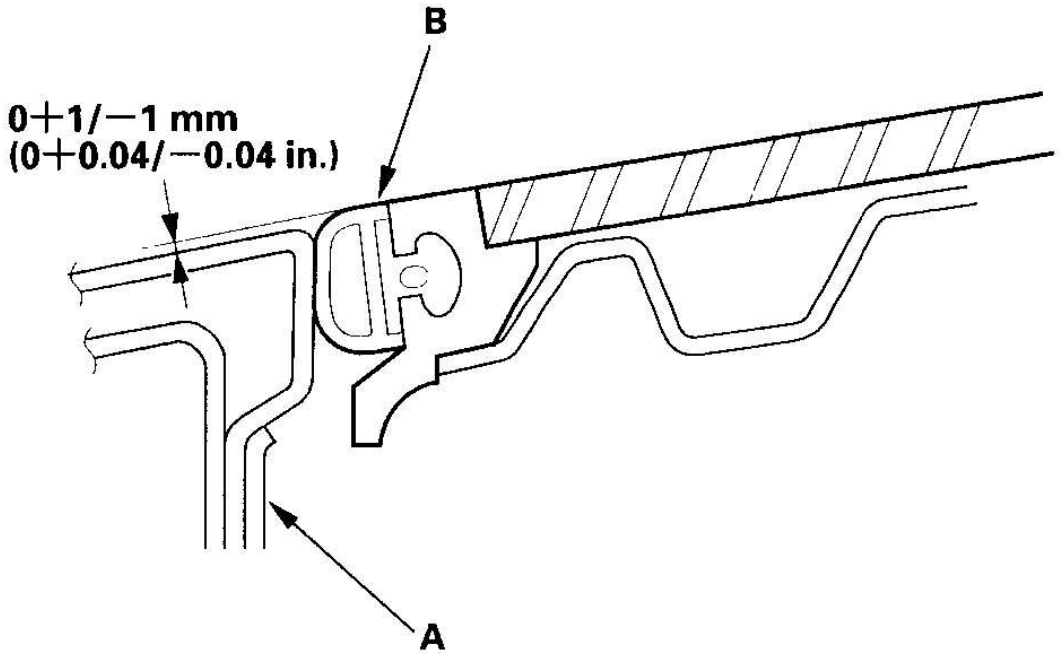


Fig. 4: Adjusting Glass Height (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

1. 4-door: Remove the bracket cover from each side (see step 3 in **Glass Replacement**).
2. Using a T25 Torx bit, loosen the bolts on each side, and adjust the glass (A).

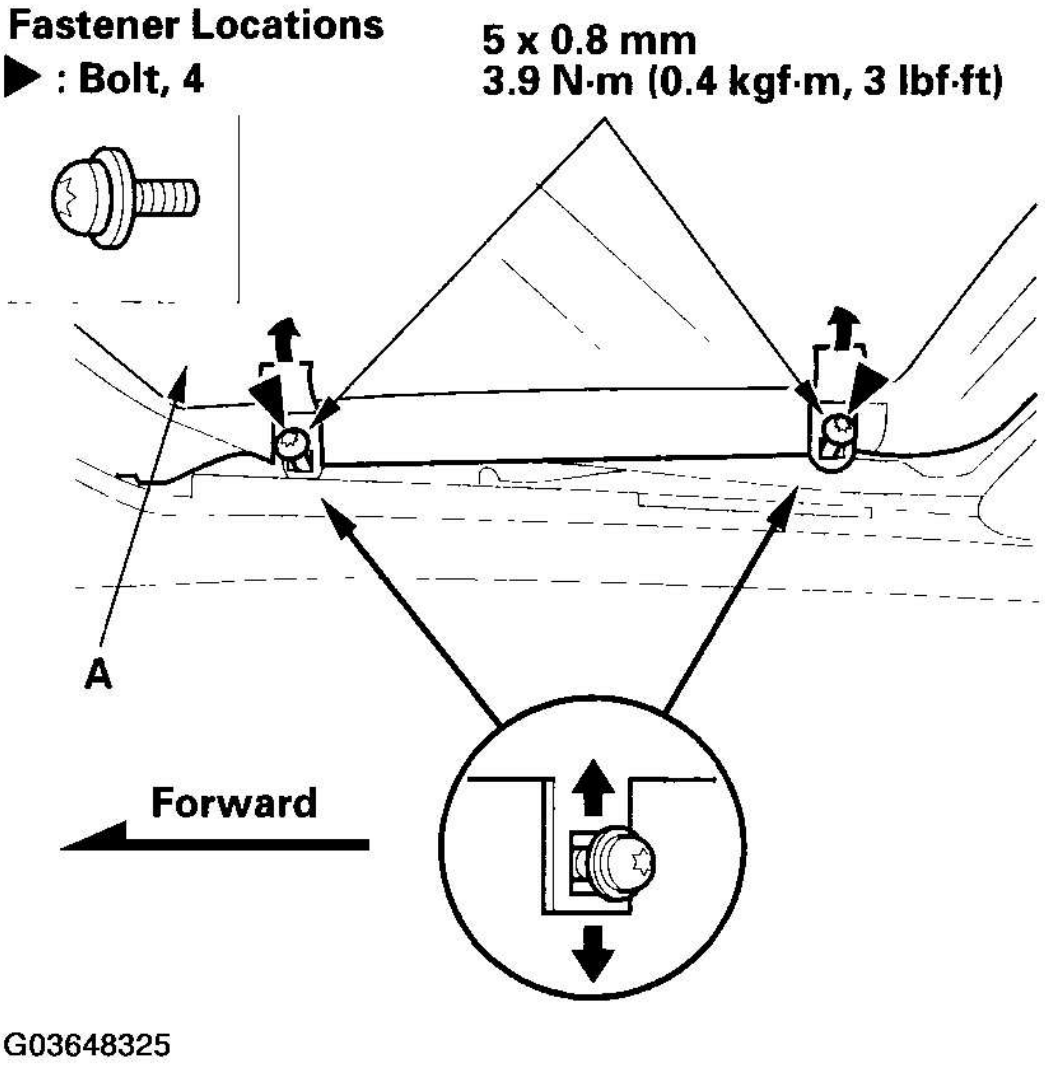


Fig. 5: Loosening Bolts On Each Side And Adjust Glass (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

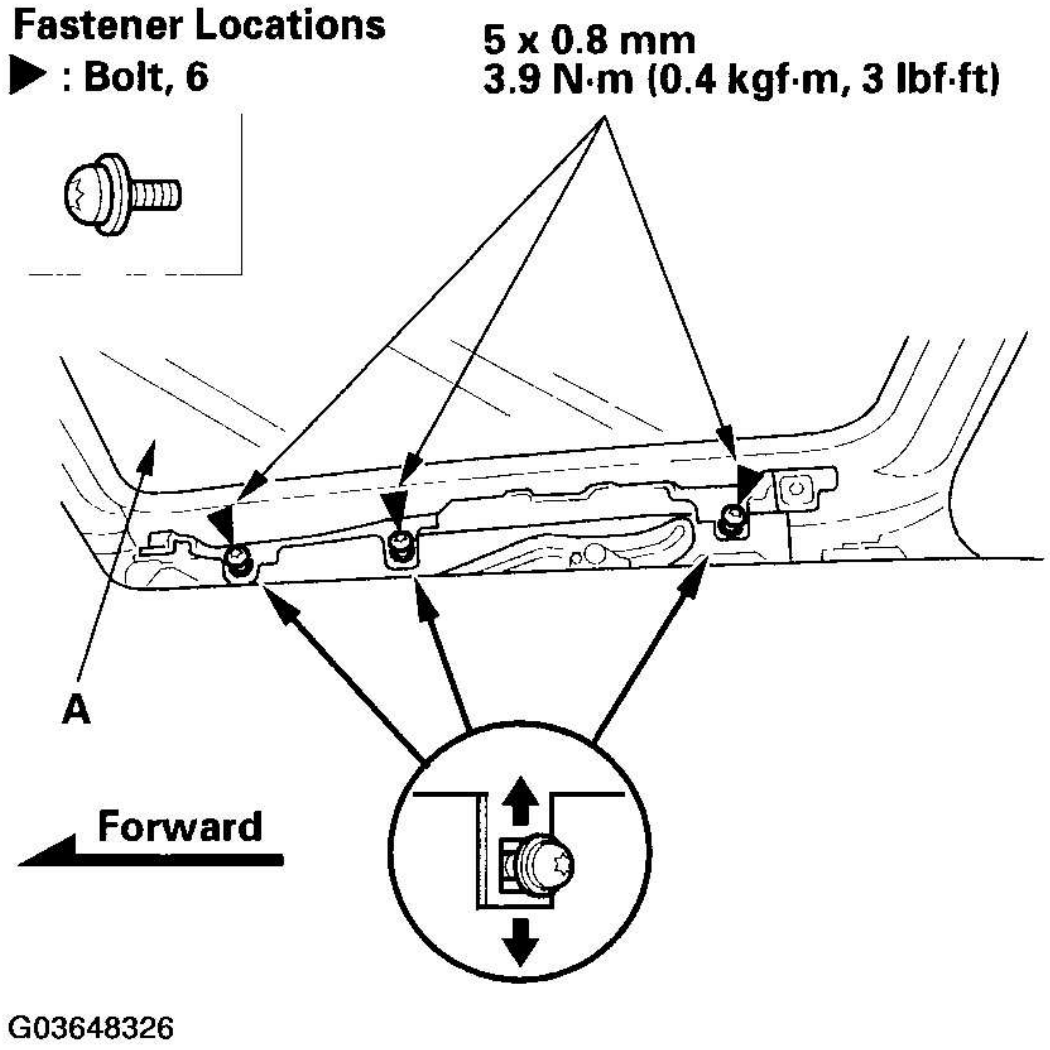


Fig. 6: Loosening Bolts On Each Side And Adjust Glass (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If necessary, repeat on the opposite side.

GLASS REPLACEMENT

1. Close the glass fully.
2. Slide the sunshade all the way back.
3. 2-door: Turn the slit portions of the molding (A) up. 4-door: Pry out the lid (B),

remove the screws (C), and release the hooks (D), then remove both bracket covers (E).

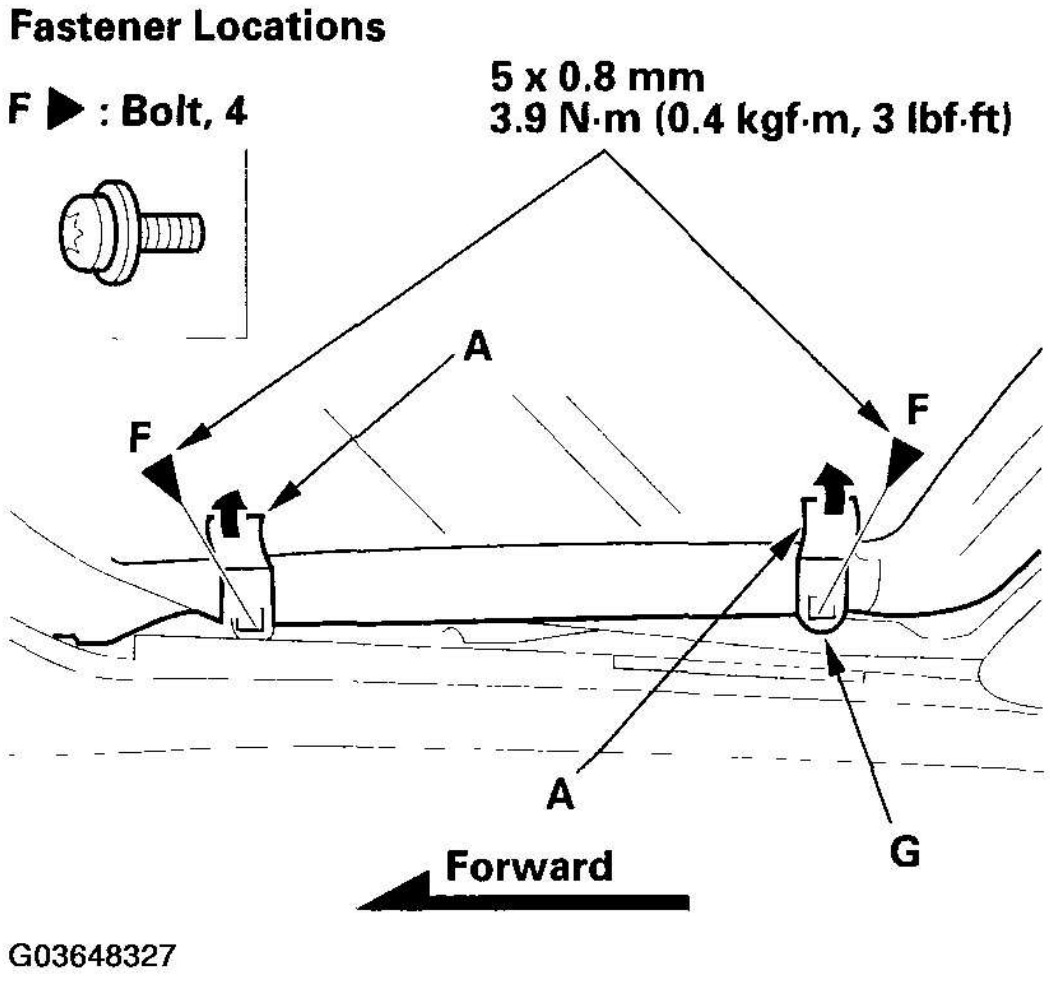


Fig. 7: Turning Slit Portions Of Molding Up (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

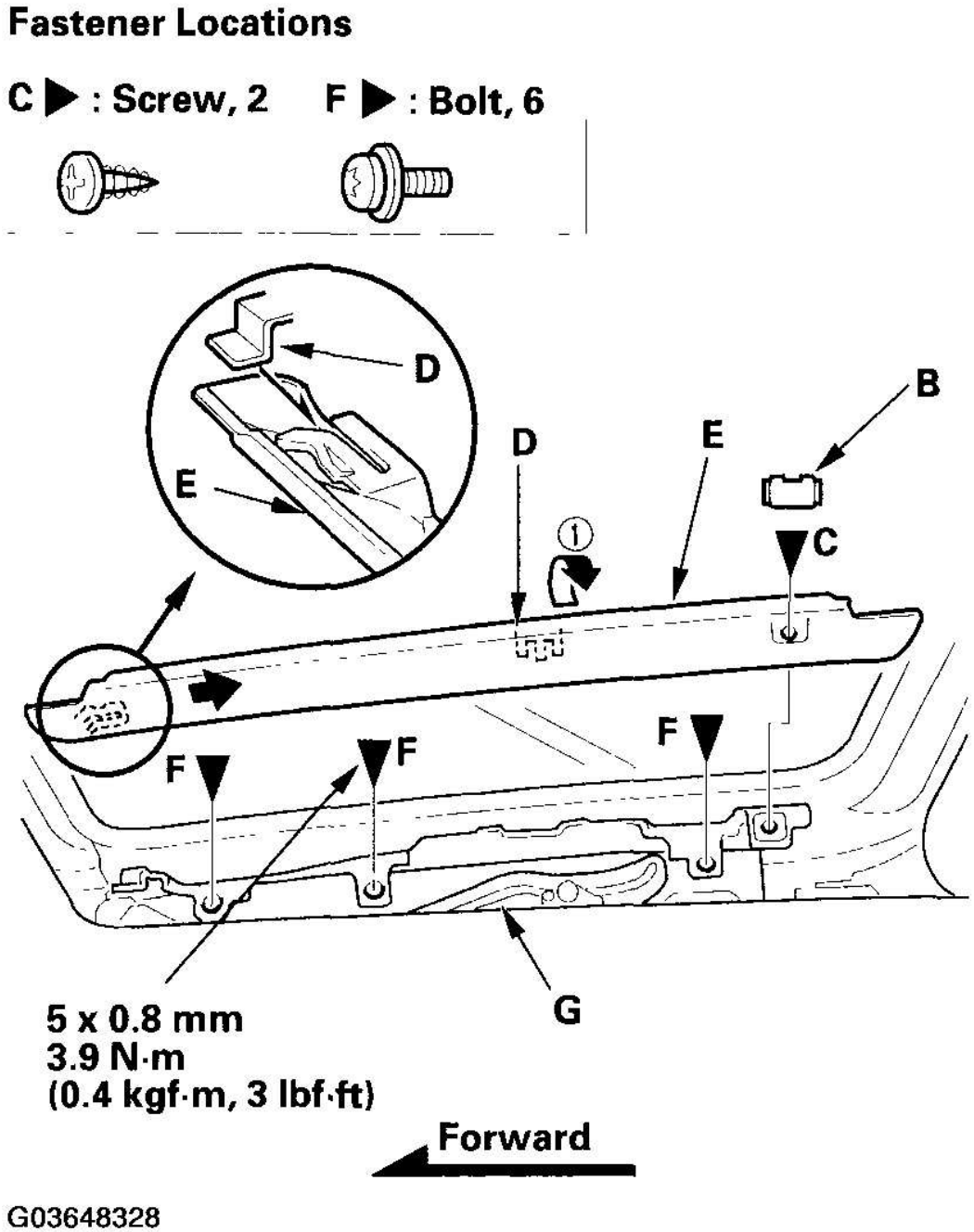


Fig. 8: Prying Out Lid Removing Screws And Releasing Hooks (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Using a T25 Torx bit, remove the bolts (F) from both glass brackets (G).

5. Remove the glass (A) by lifting it up. Do not damage the roof panel.

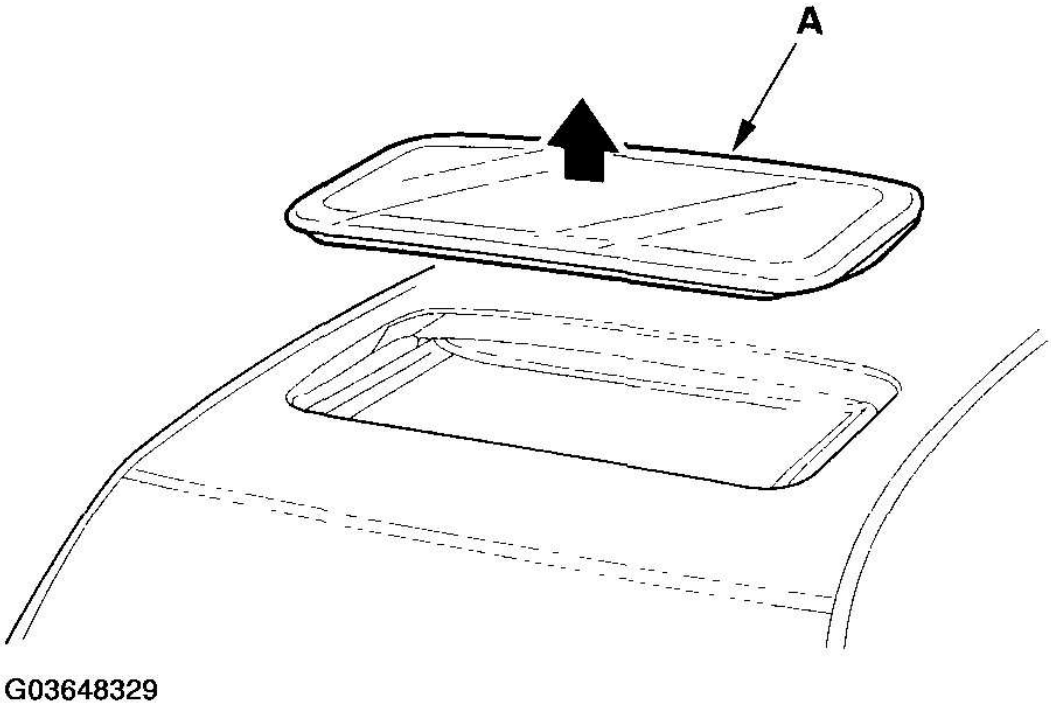


Fig. 9: Removing Glass By Lifting Up
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the glass in the reverse order of the removal, and note these items:
   - 2-door: Apply medium strength liquid thread lock to the glass mounting bolts before reinstallation.
   - Adjust the glass height alignment.
7. Check for water leaks. Use free-flowing water from a hose without a nozzle. Do not use high-pressure water.

NOTE: It is normal for some water to seep past the moonroof into the moonroof frame, and exit out through the drains.

WIND DEFLECTOR REPLACEMENT

2-DOOR

1. Open the glass fully.
2. Remove the screws securing the wind deflector (A).

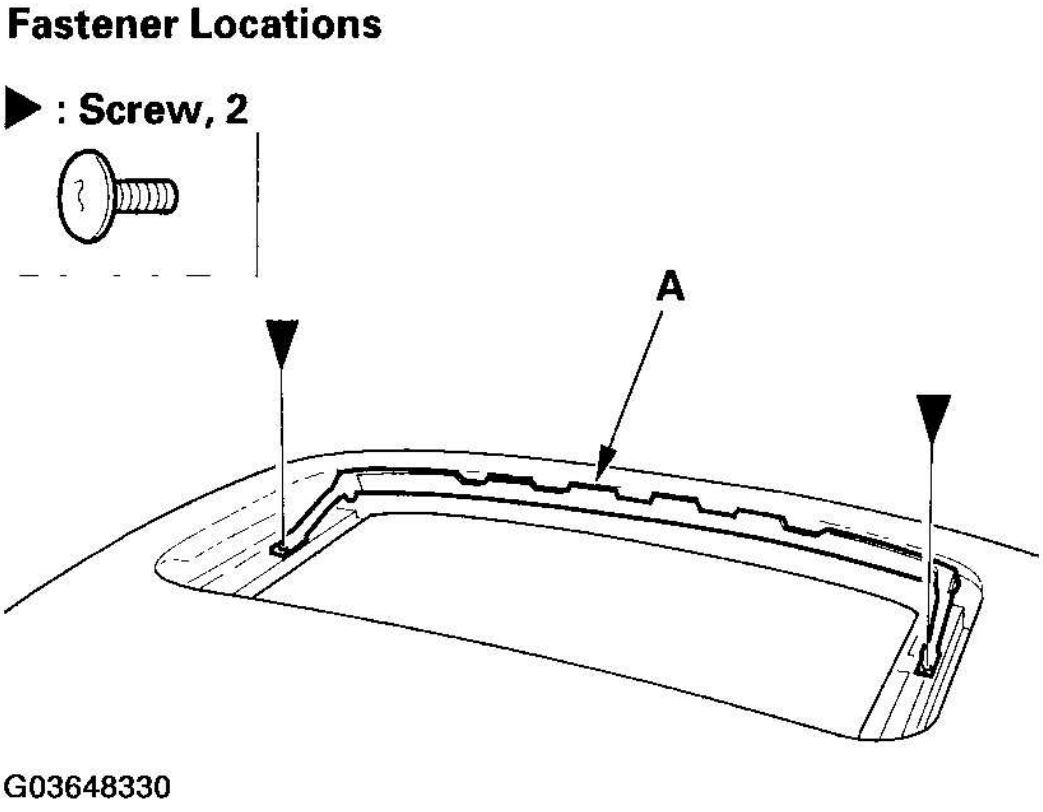


Fig. 10: Removing Wind Deflector Screws
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the deflector link bases (A) from each side. Twist the wind deflector (B) forward and push it down, and pass the deflector spring (C) out through the slot of the slide stop (D) on each side, then remove the wind deflector.

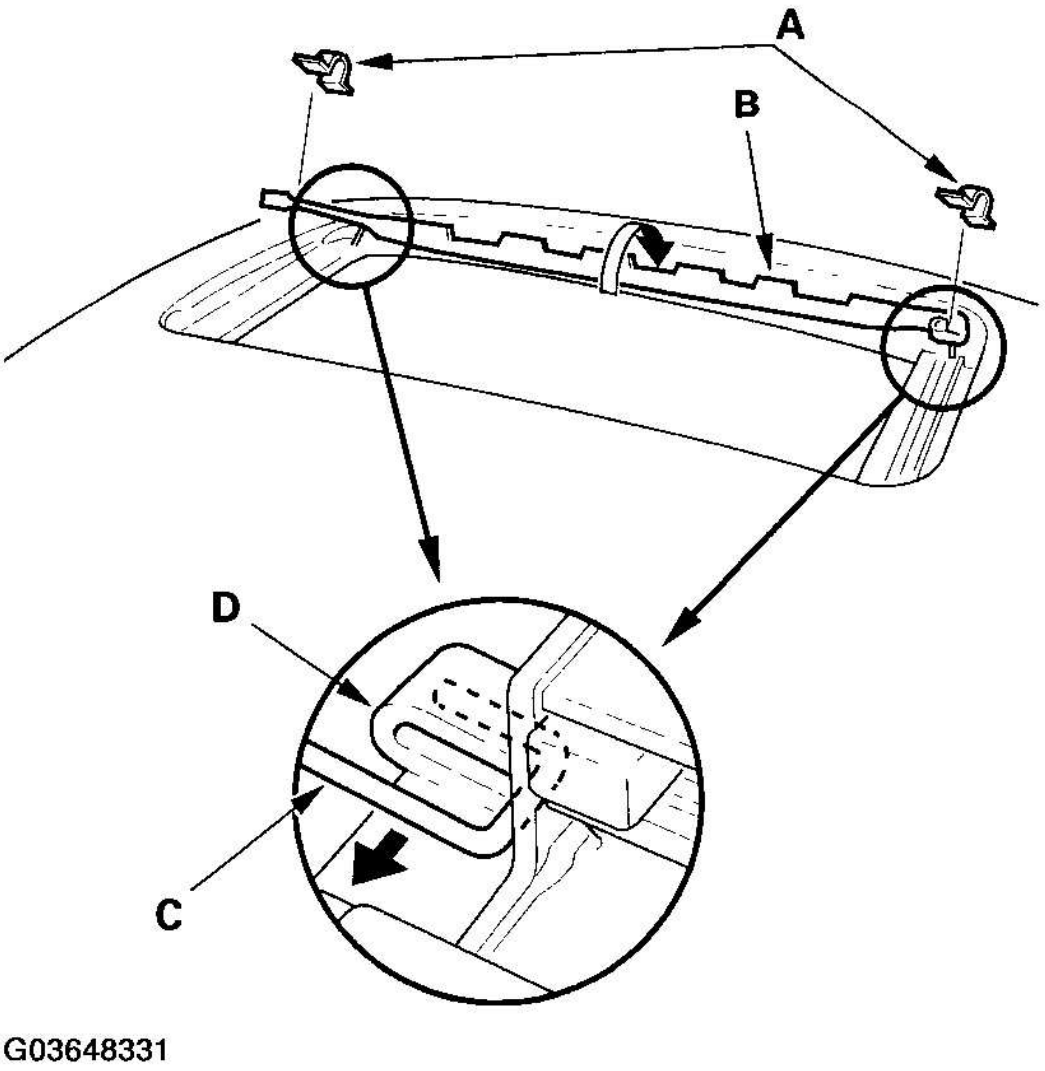


Fig. 11: Removing Deflector Link Bases From Each Side
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the deflector in the reverse order of removal, and apply multipurpose grease to both slots where the deflector springs are installed.

4-DOOR

1. Open the glass fully.
2. Remove the links (A) from both sides.

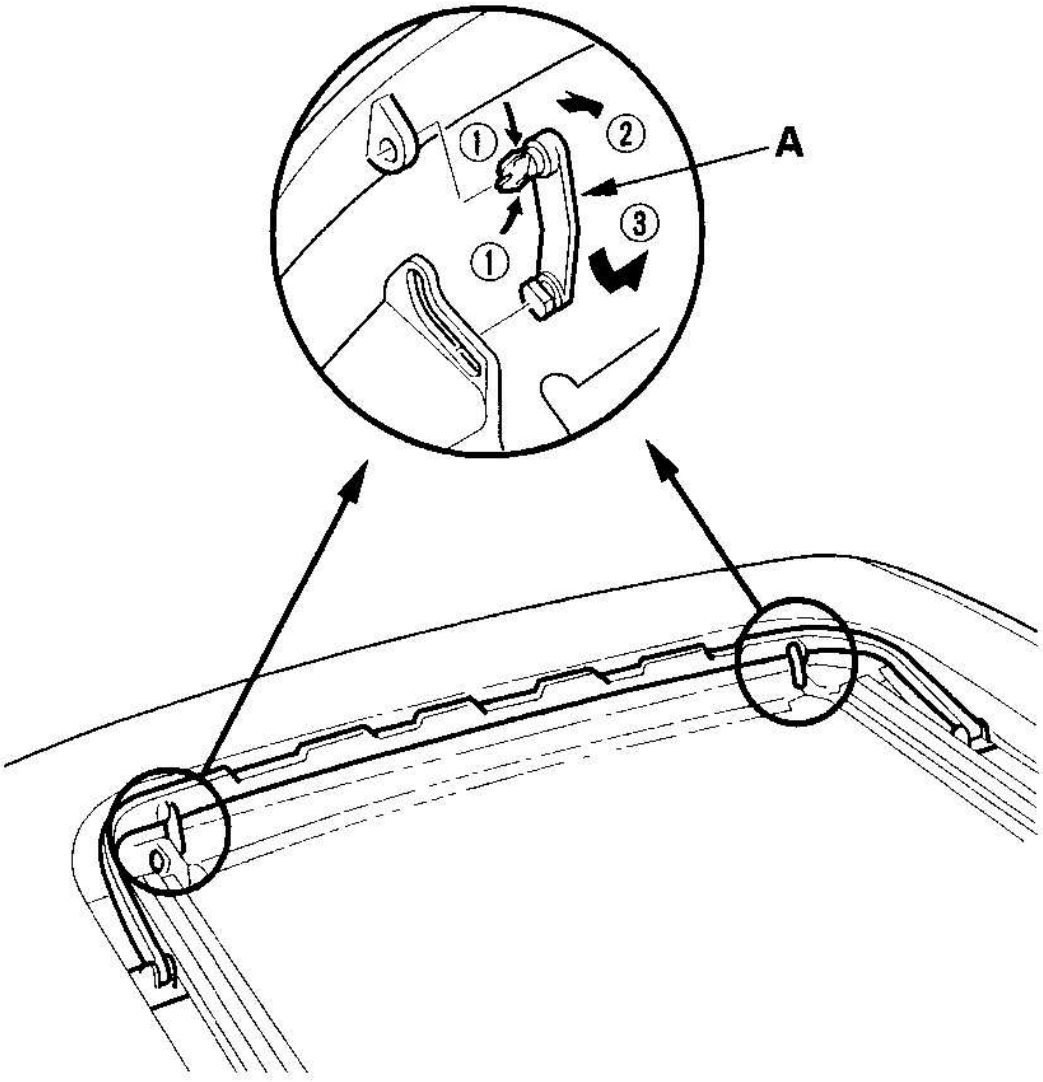


Fig. 12: Removing Links From Both Sides
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the wind deflector (A).

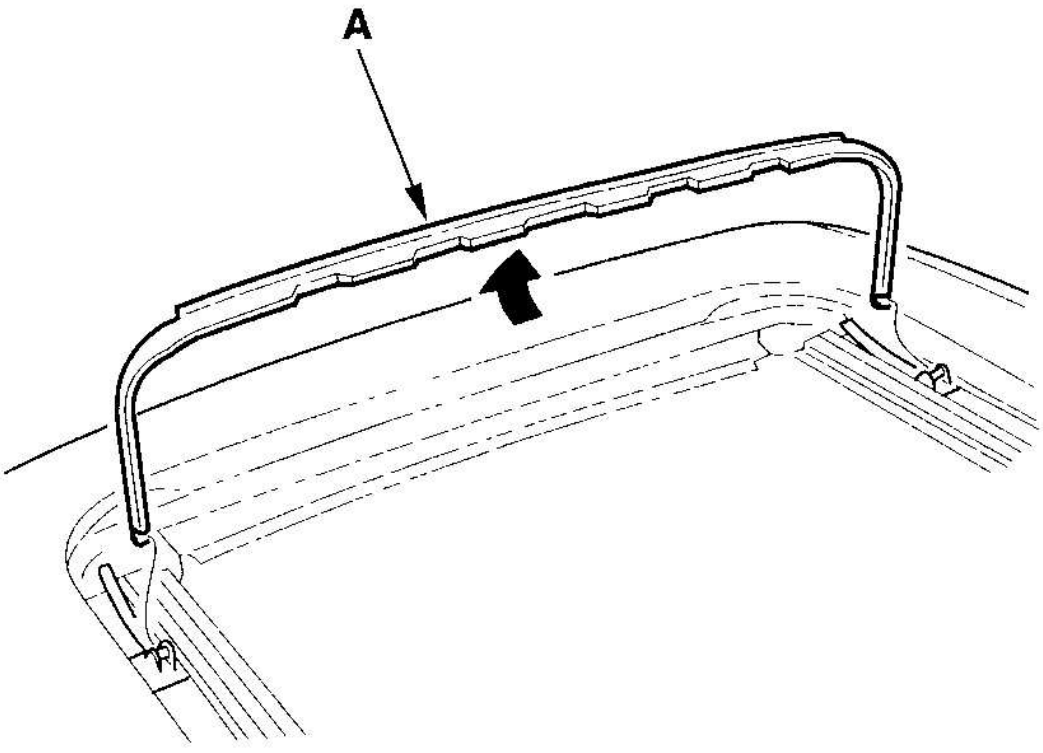


Fig. 13: Removing Wind Deflector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Pry up on the deflector bases (A) and release the hooks (B), then remove the bases with springs (C) from both sides.

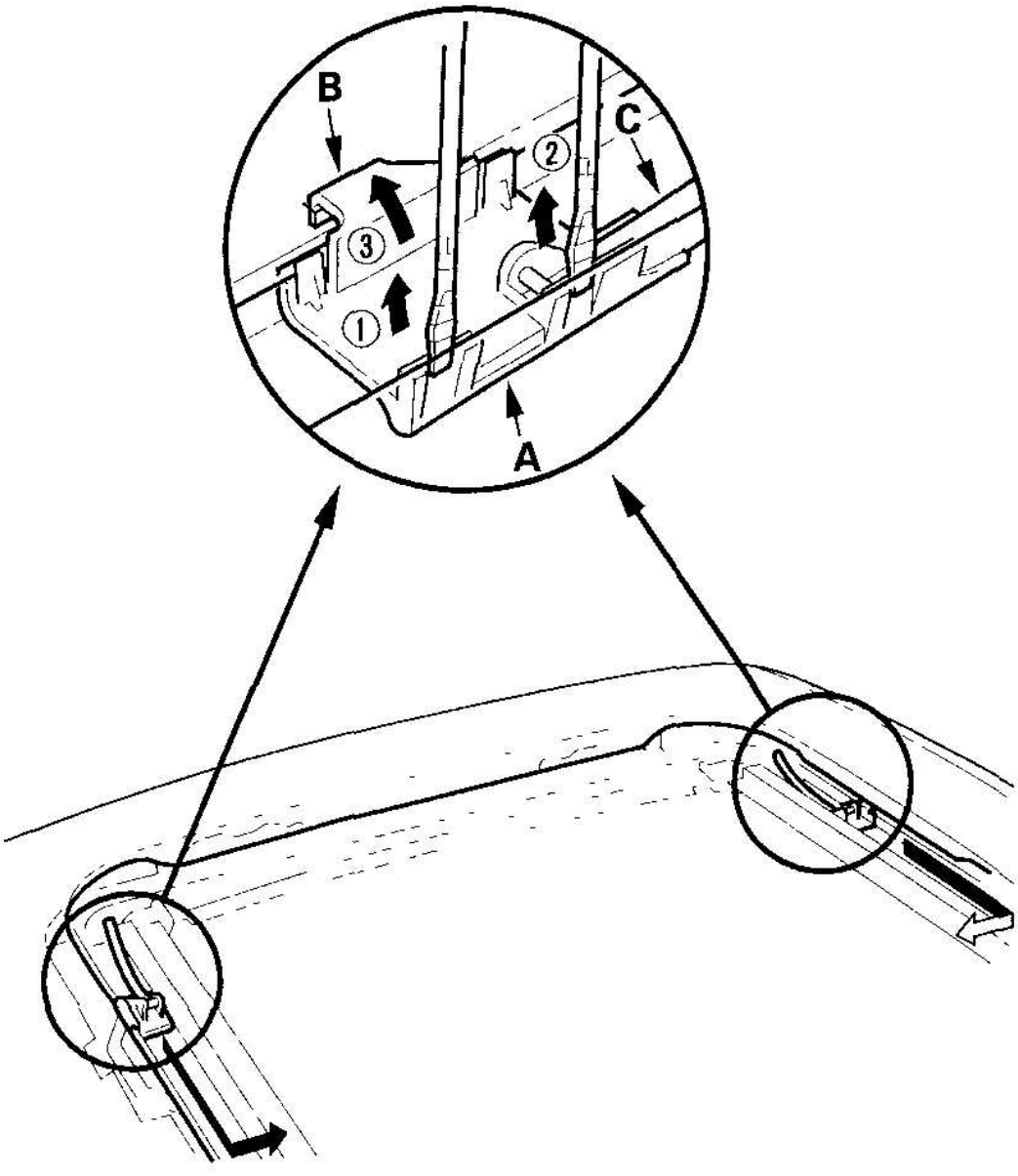


Fig. 14: Removing Bases With Springs From Both Sides
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the deflector in the reverse order of removal.

DRAIN CHANNEL REPLACEMENT

2-DOOR

1. Remove the glass (see **GLASS REPLACEMENT**).
2. Move both glass brackets (A) to detach the pins (B) inside from both glass brackets.

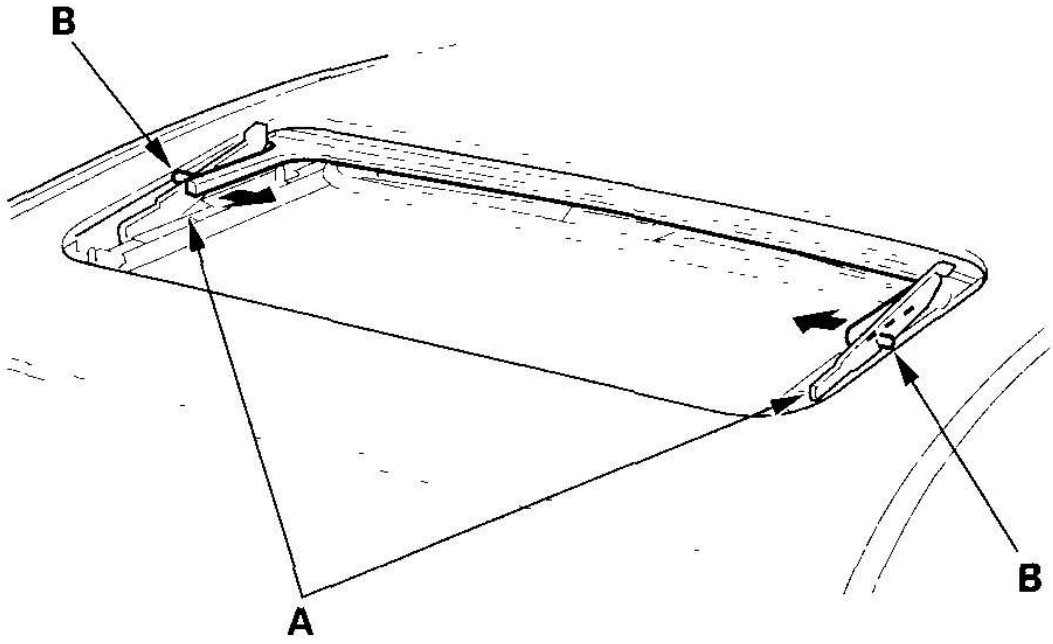


Fig. 15: Moving Both Glass Brackets To Detach Pins
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the drain channel (A) up while sliding it forward to release it from the pins (B) on both drain channel sliders (C).

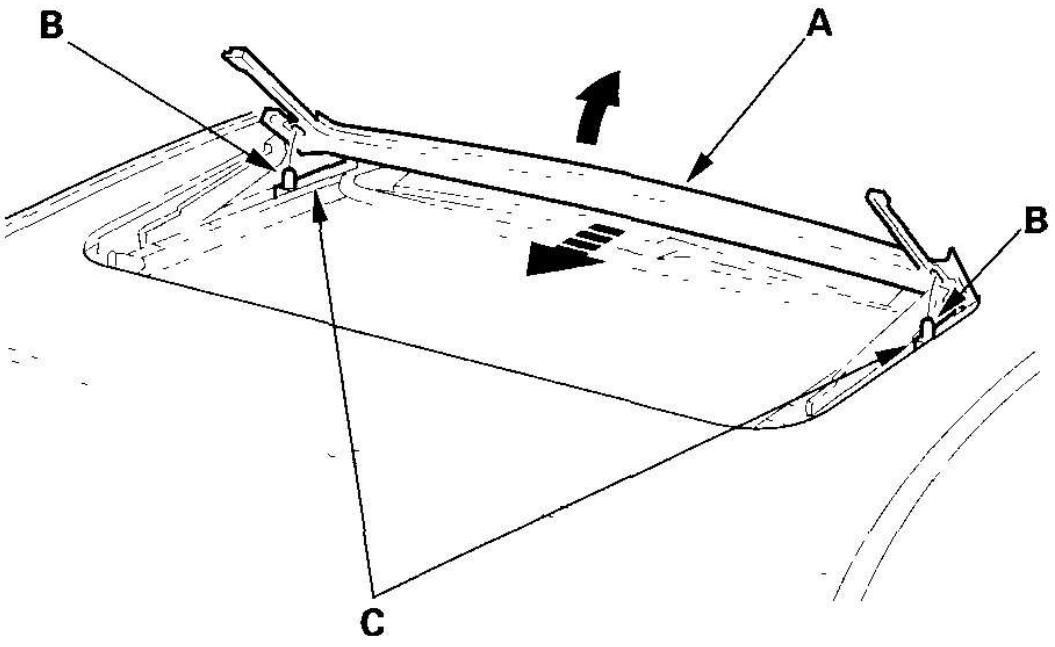


Fig. 16: Turning Drain Channel Up Sliding Forward To Release From Pins
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Stand the drain channel (A) upright, and pull up the channel to remove it from both drain channel sliders (B).

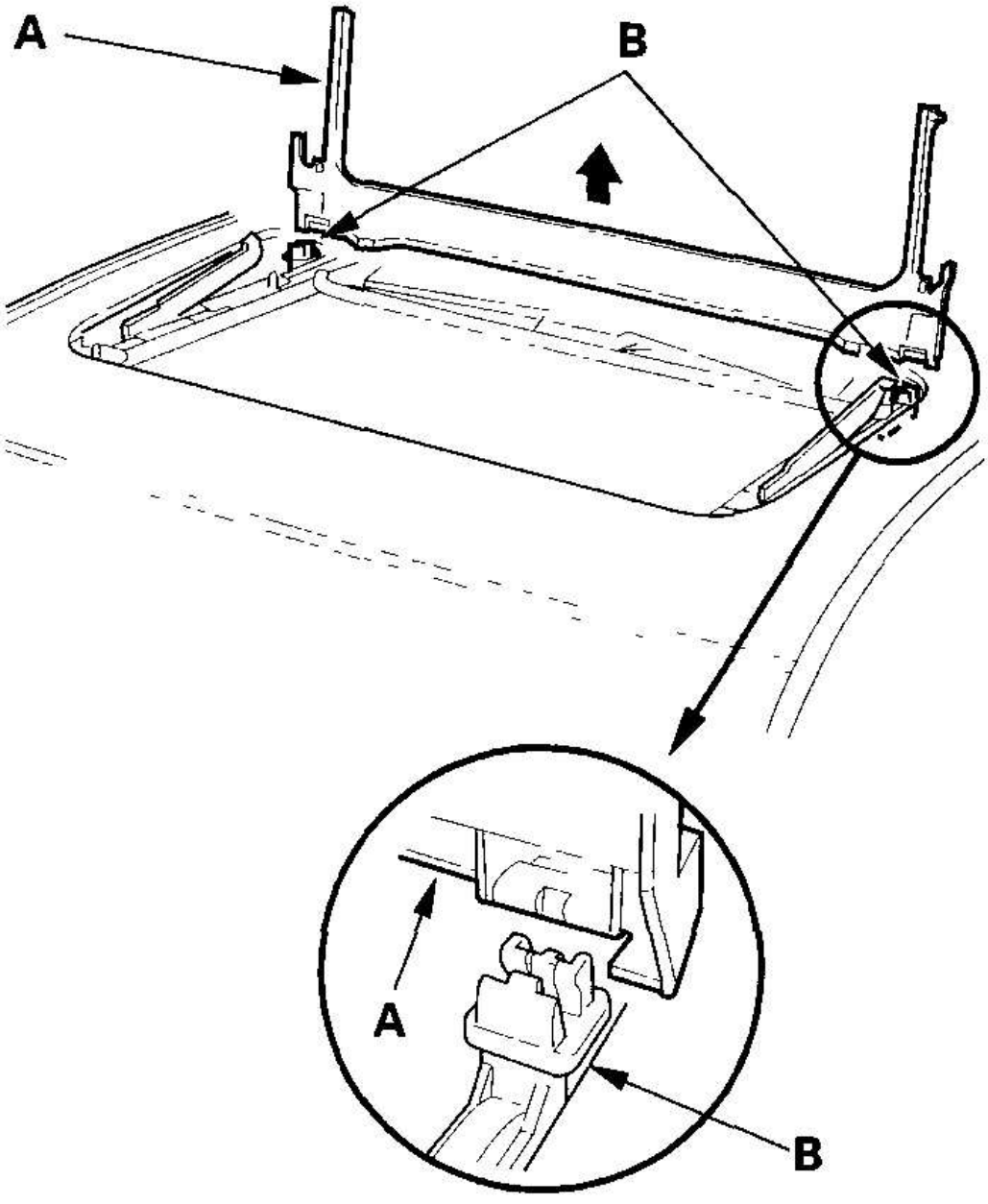
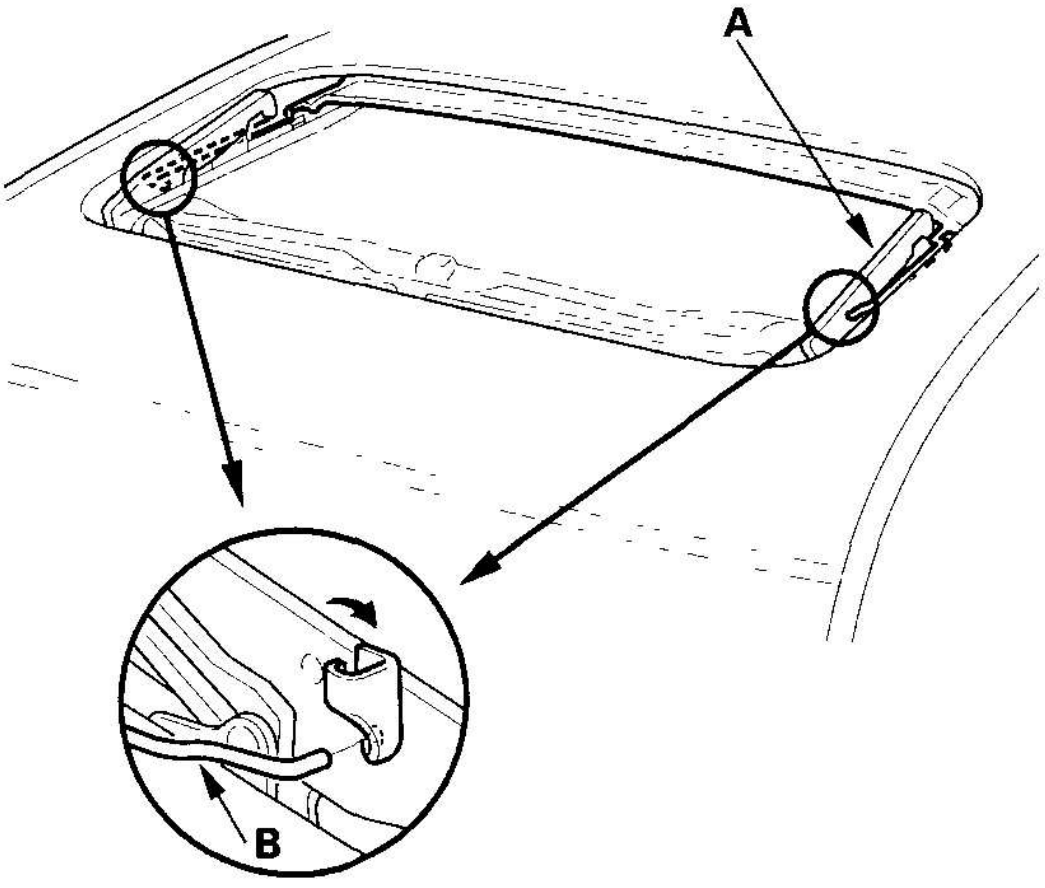


Fig. 17: Pulling Up Channel To Remove From Drain Channel Sliders
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the channel in the reverse order of removal, and check the glass height adjustment (see **GLASS HEIGHT ADJUSTMENT**).
6. Check for water leaks. Let the water run freely from a hose without a nozzle. Do not use a high-pressure spray.

4-DOOR

1. Remove the glass (see **GLASS REPLACEMENT**).
2. With the moonroof wrench, move both glass brackets (A) to the position where the moonroof normally tilts up and disconnect the drain channel rods (B) on both sides.



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Fig. 18: Disconnecting Drain Channel Rods On Both Sides
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Slide the drain channel (A) forward.

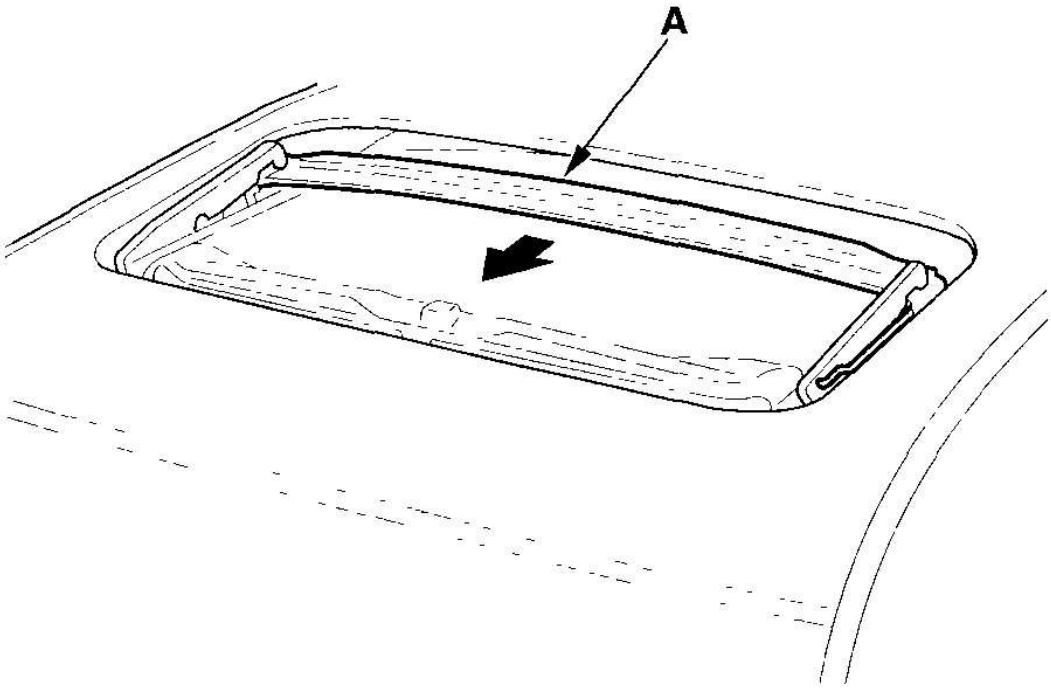


Fig. 19: Sliding Drain Channel Forward
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Pull the rear edge of the drain channel (A) up while pushing both clips (B), and release the channel from both hooks (C) of the drain channel slider by pulling it rearward.

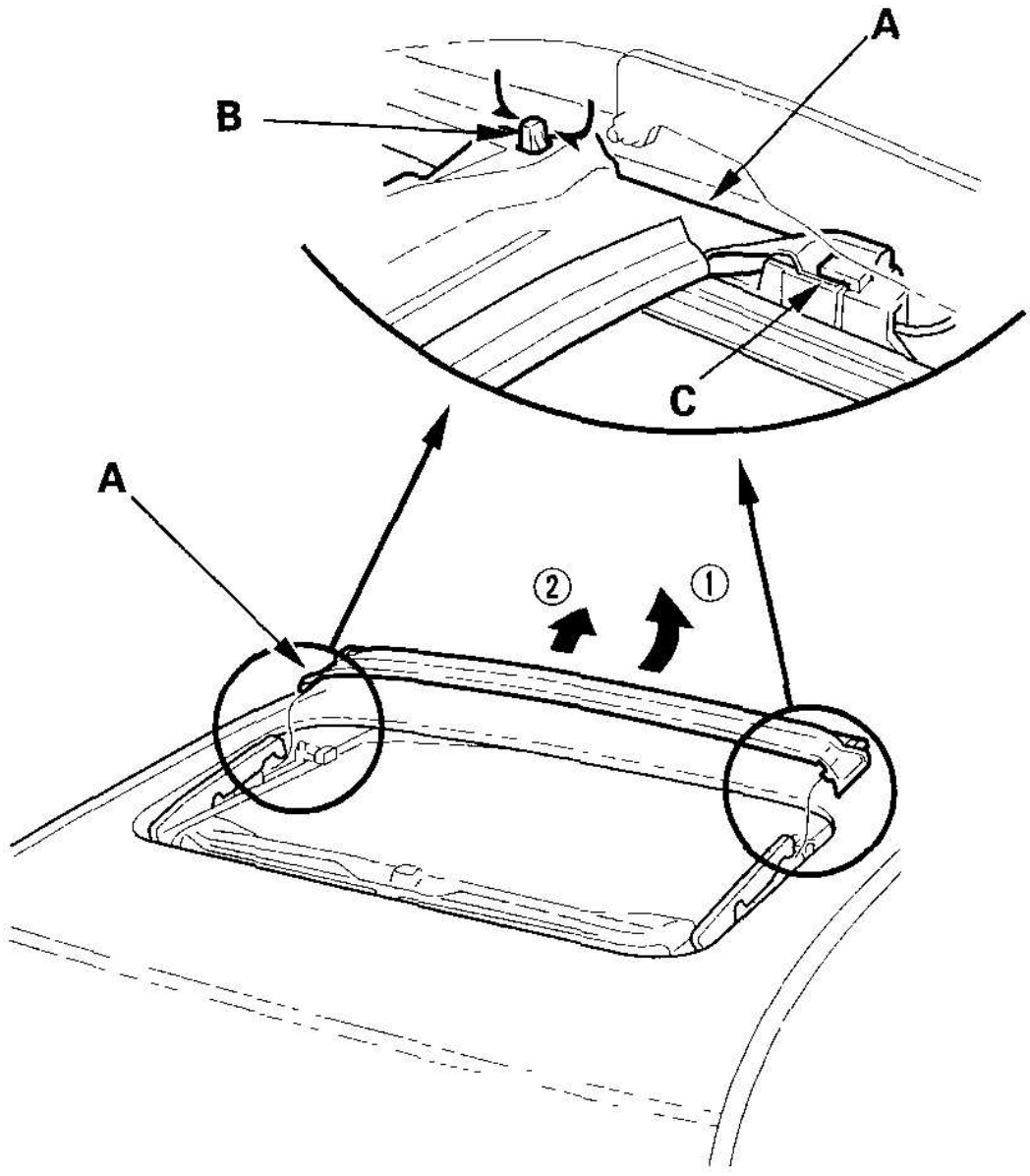


Fig. 20: Pulling Rear Edge Of Drain Channel Up Pushing Both Clips
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the drain channel.
6. Install the channel in the reverse order of removal, and note these items:

- Push the clip portions into place securely.
- Check the glass height adjustment (see **GLASS HEIGHT ADJUSTMENT**).

7. Check for water leaks. Let the water run freely from a hose without a nozzle. Do not use a high-pressure spray.

SUNSHADE REPLACEMENT

2-DOOR

1. Remove the drain channel (see **2-door**).
2. Remove the screws, then remove the set plate (A) from each side.

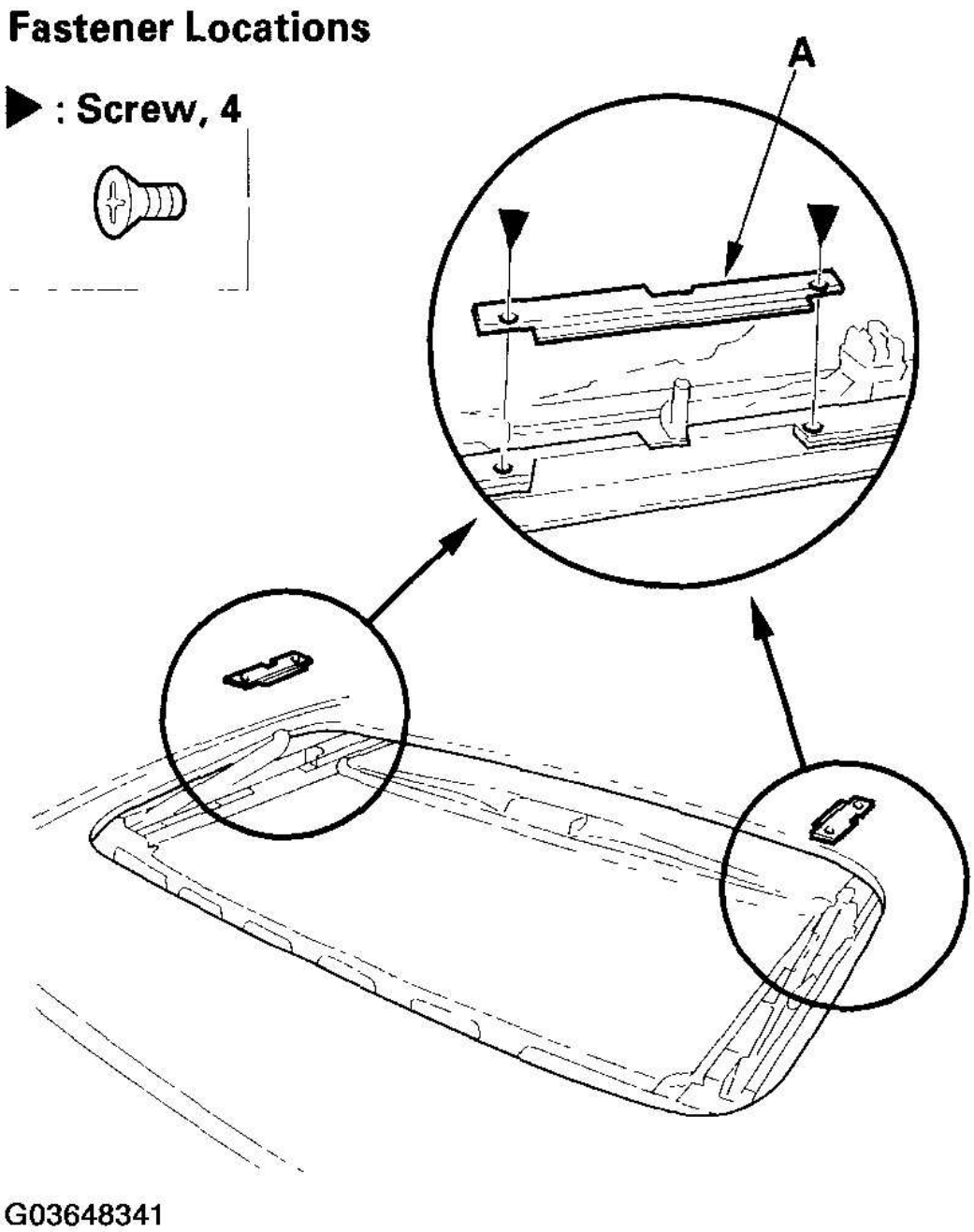


Fig. 21: Removing Set Plate From Each Side
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Slide the sunshade (A) until you can see both front sunshade base sliders (B).

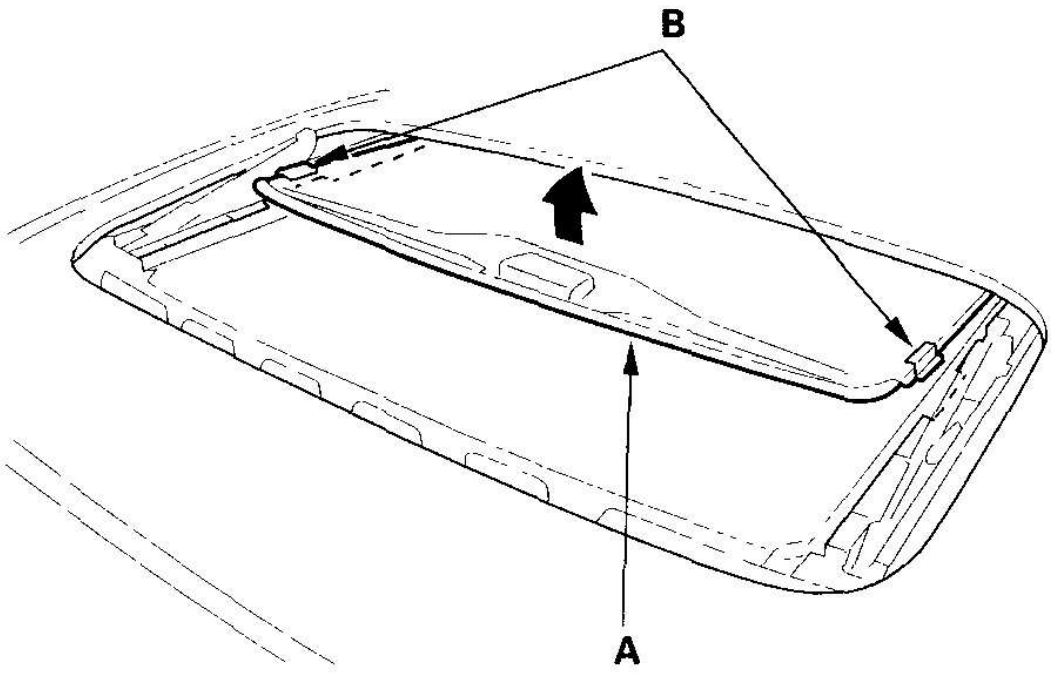


Fig. 22: Sliding Sunshade
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. While lifting the front portion of the sunshade (A), move the sunshade forward until you can see both rear sunshade base sliders (B). Do not damage the sunshade.

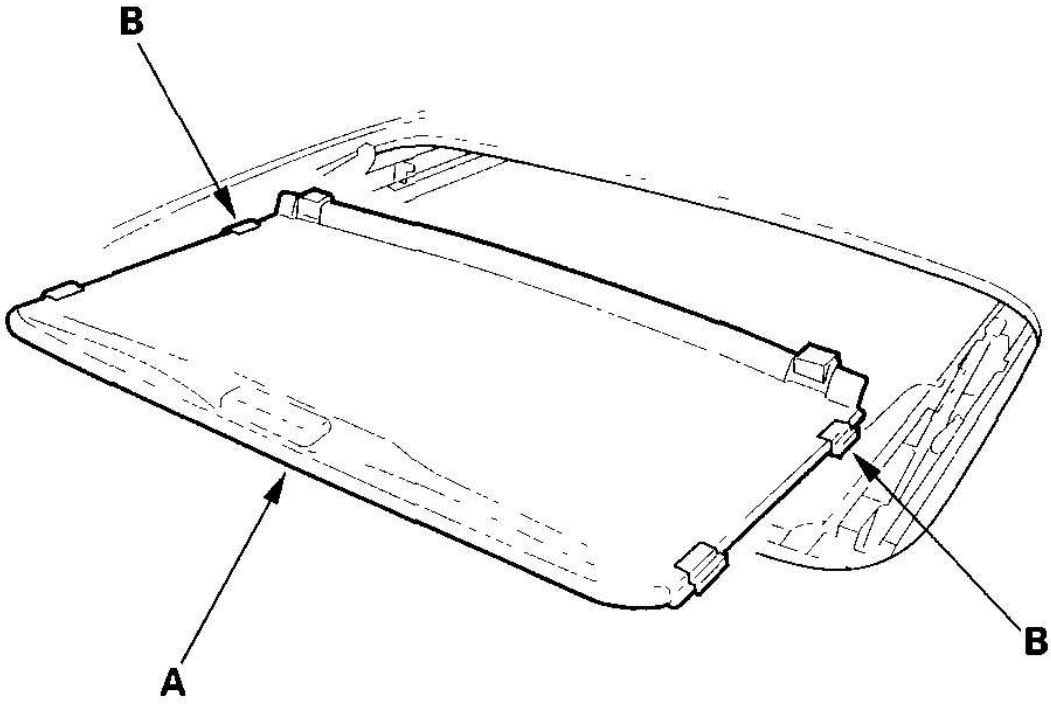


Fig. 23: Lifting Front Portion Of Sunshade
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Release both rear sunshade base sliders from the guide rail portions of the frame, then remove the sunshade.
6. Install the sunshade in the reverse order of removal, and note these items:
   - Apply medium strength liquid thread lock to the set plate mounting screws before reinstallation.
   - Check the glass height adjustment (see **GLASS HEIGHT ADJUSTMENT**).
7. Check for water leaks. Let the water run freely from a hose without a nozzle. Do not use a high-pressure spray.

4-DOOR

1. Remove the drain channel (see **4-DOOR**).

2. Slide the sunshade (A) until you can see both sunshade slider spacers (B).

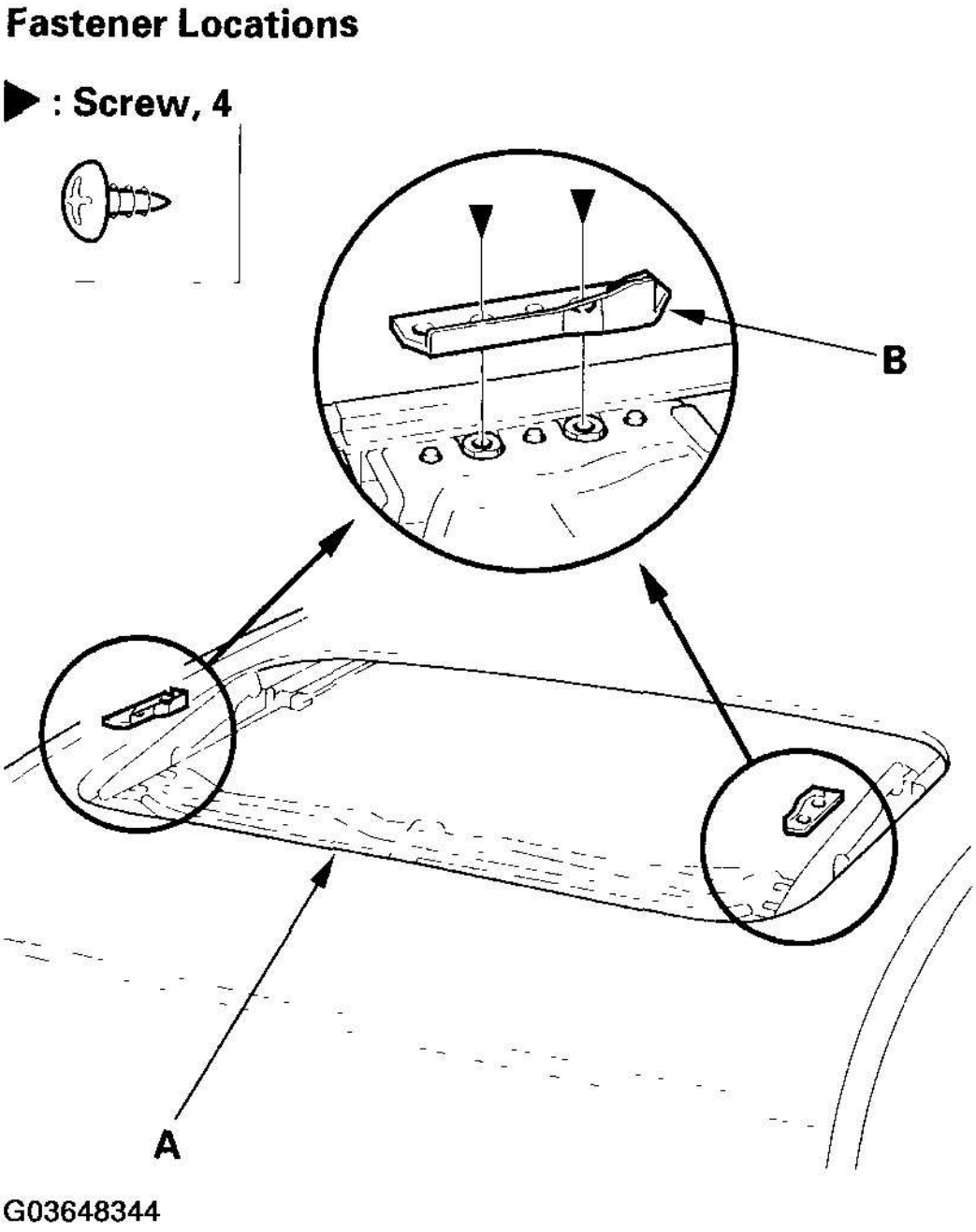


Fig. 24: Sliding Sunshade
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the screws, then remove both spacers.
4. While lifting the front portion of the sunshade (A), move the sunshade forward until you can see both sunshade rear hooks (B). Do not damage the sunshade and hooks.

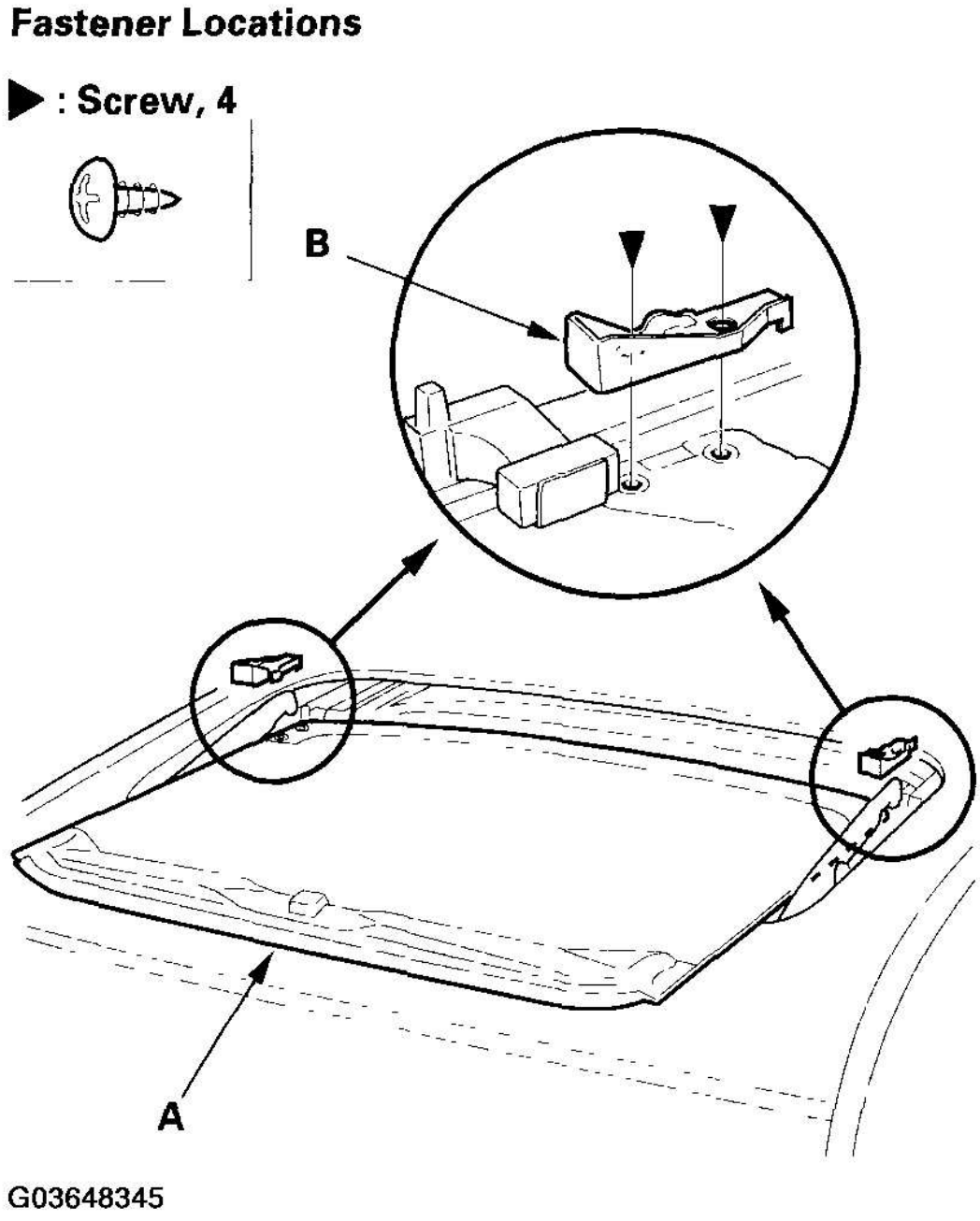


Fig. 25: Lifting Front Portion Of Sunshade
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the screws, then remove both hooks.

6. Remove the sunshade (A).

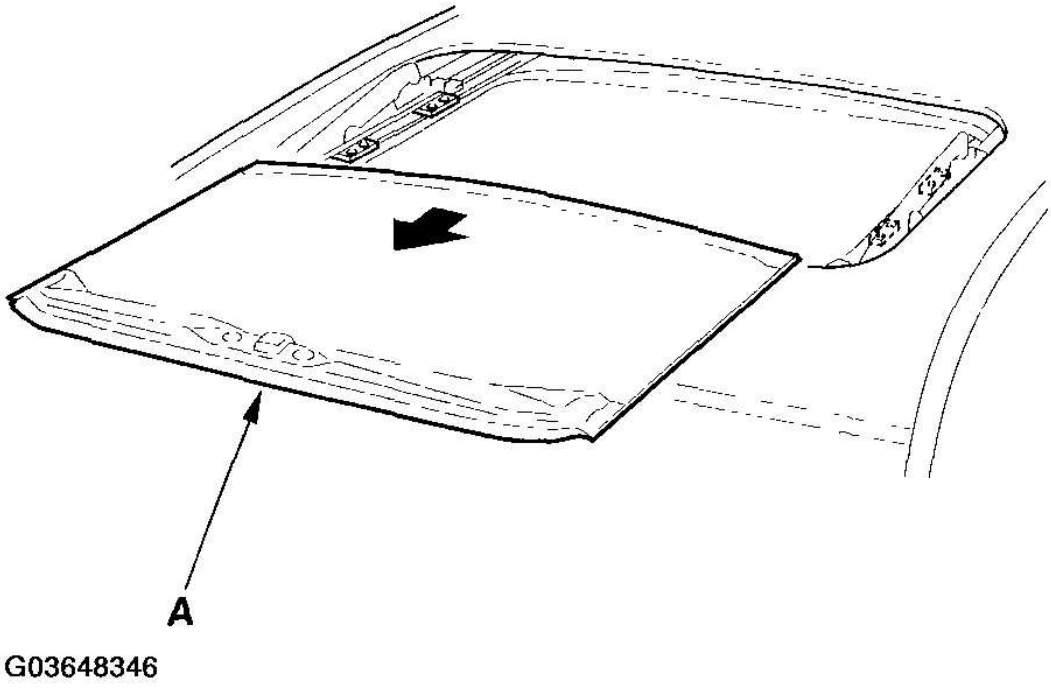


Fig. 26: Removing Sunshade
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove both front sunshade base sliders (A) and both rear sunshade base sliders (B).

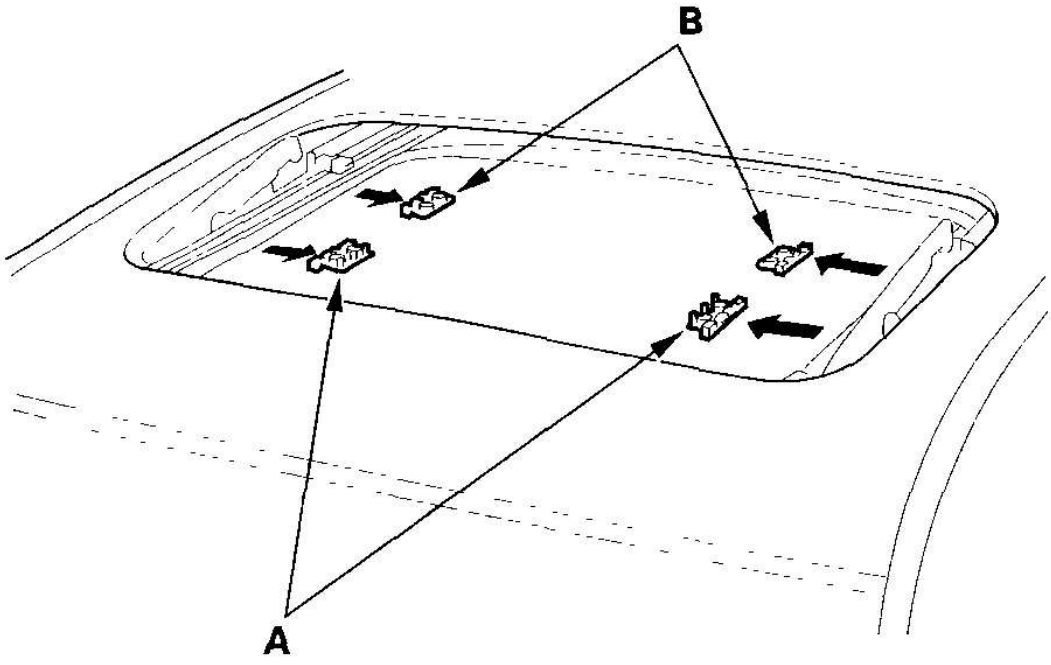


Fig. 27: Removing Front & Rear Sunshade Base Sliders
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the sunshade in the reverse order of removal, and check the glass height adjustment (see **GLASS HEIGHT ADJUSTMENT**).
9. Check for water leaks. Let the water run freely from a hose without a nozzle. Do not use a high-pressure spray.

MOTOR REPLACEMENT

2-DOOR

1. Remove the headliner (see **HEADLINER REMOVAL/INSTALLATION**).
2. Put on gloves to protect your hands. Disconnect the connector (A), and using a T25 Torx bit, remove the bolts, then remove the motor (B). Do not operate the motor before reinstallation.

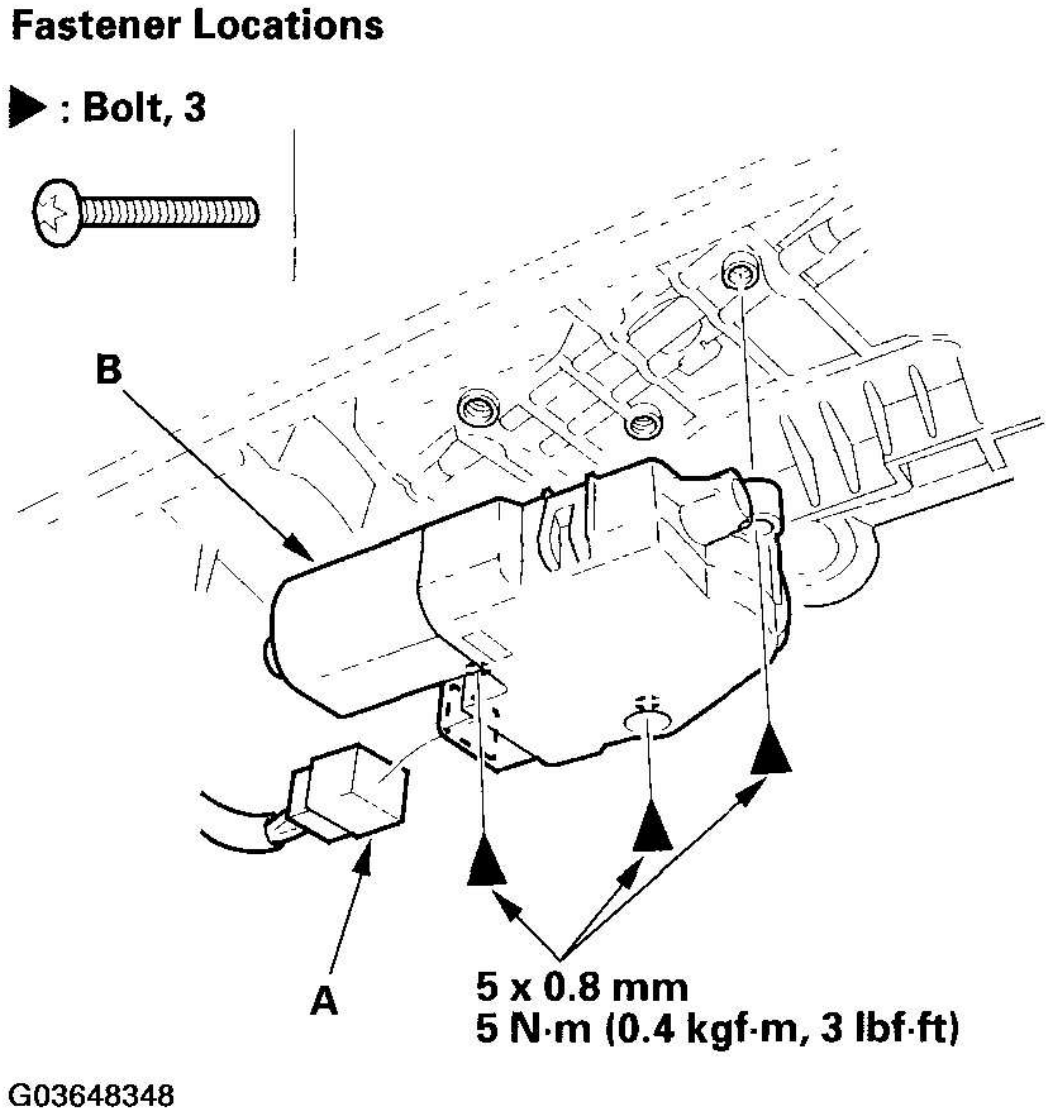


Fig. 28: Disconnecting Connector Using T25 Torx Bit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal, and note these items:
   - Apply medium strength liquid thread lock to the motor mounting bolts before reinstallation.
   - Make sure the connector is plugged in properly.
   - Do the moonroof motor reprogram procedure (see **MOONROOF**

CALIBRATION).

- Check the motor operation.

4-DOOR

1. Remove the headliner (see **HEADLINER REMOVAL/INSTALLATION**).
2. Put on gloves to protect your hands. Disconnect the connector (A), and remove the bolts, then remove the motor (B).

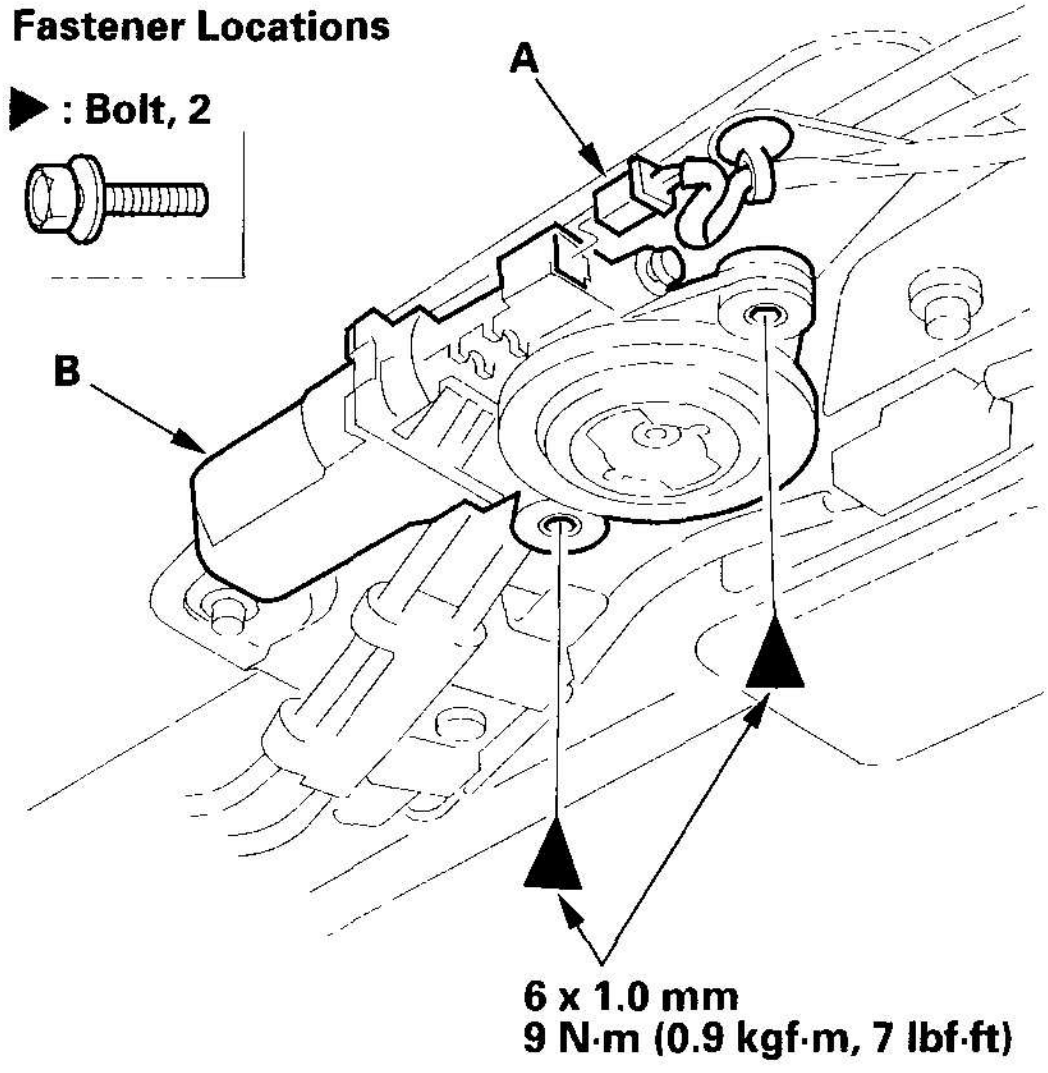


Fig. 29: Disconnecting Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal, and note these items:
   - Make sure the connector is plugged in properly.
   - Check the motor operation.

FRAME AND DRAIN TUBE REPLACEMENT

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

1. Remove these items:
   - Headliner (see **HEADLINER REMOVAL/INSTALLATION**)
   - Moonroof glass (see **GLASS REPLACEMENT**)
2. 2-door: Remove the moonroof frame (A). Put on gloves to protect your hands.

   -Disconnect the motor connector (B), and the drain tubes (C).

   -Remove the interior harness (D) by detaching the harness clips (E) and removing the cushion tape (F).

   -With an assistant holding the frame, remove the bolts (G, H) starting at the rear, and release the rear hooks (I) by moving the frame forward, then remove the frame.

   -With the help of an assistant, carefully remove the frame through the door opening. Take care not to damage the interior trim, body, or seat covers.

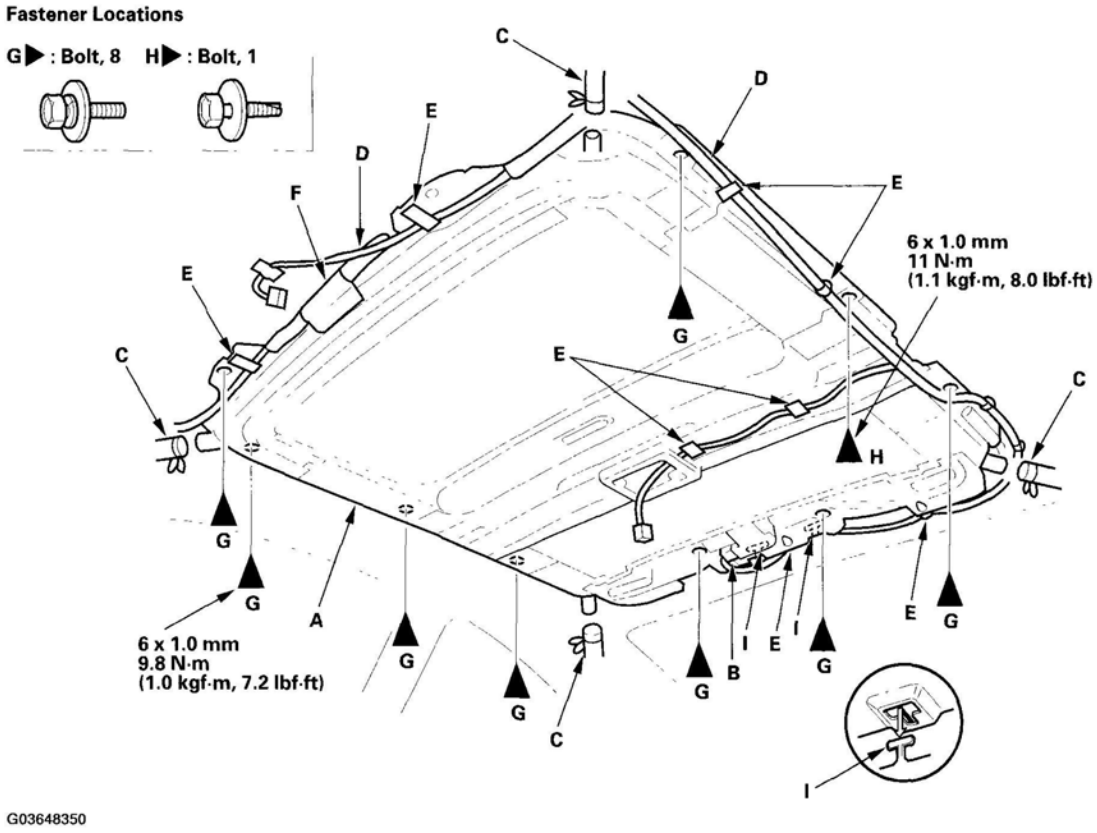


Fig. 30: Removing Moonroof Frame (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. 4-door: Remove the moonroof frame (A). Put on gloves to protect your hands.

   -Disconnect the motor connector (B), open/close-tilt/close switch connector (C), and the drain tubes (D), and remove the moonroof relays (E).

   -Remove the interior harness (F) by detaching the harness clips (G) and removing the tapes (H).

   -With an assistant holding the frame, remove the bolts starting at the rear, and release the rear hooks (I) by moving the frame forward, then remove the frame.

   -With the help of an assistant, carefully remove the frame through the front door opening. Take care not to damage the interior trim, body, or seat covers.

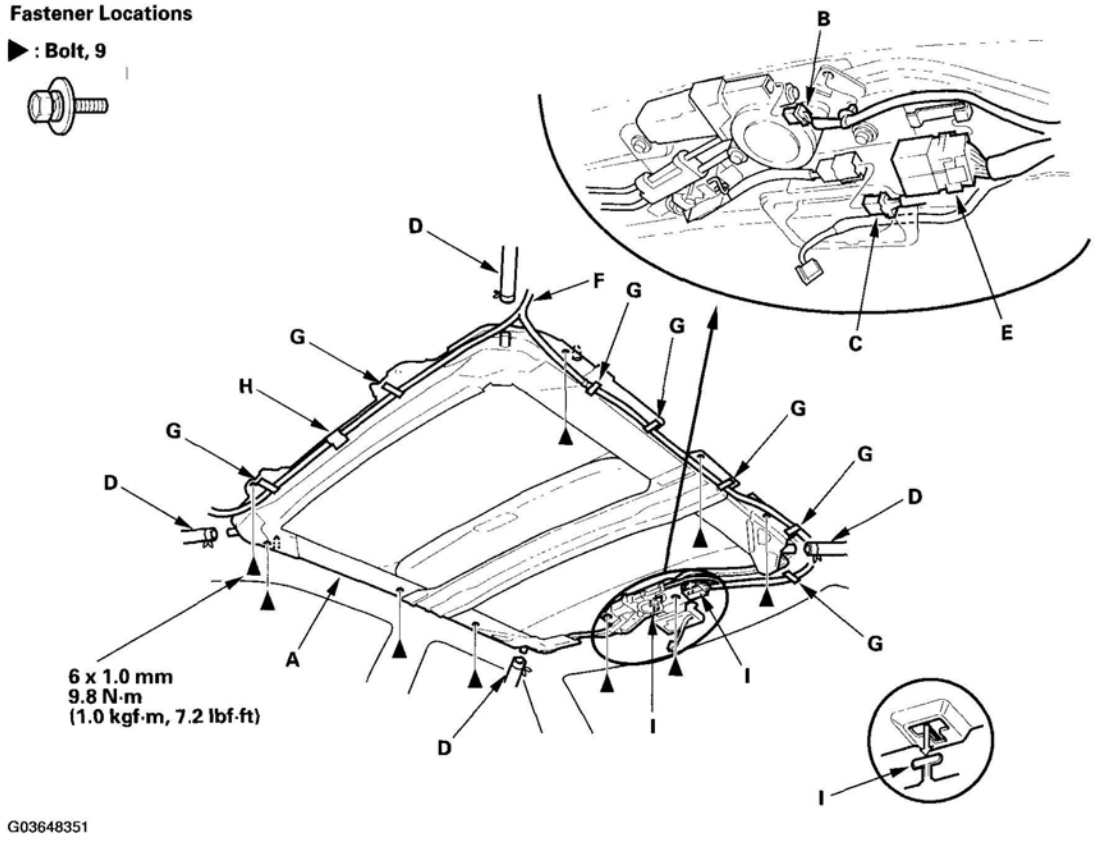


Fig. 31: Removing Moonroof Frame (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. To remove a front drain valve (A) from the body, remove the kick panel, left or right, 2-door (see **2-DOOR - DOOR SILL AREA**), 4-door (see **4-DOOR - FRONT DOOR SILL AREA**). Tie a string to the top end of the drain tube, then pull the front drain tube (B) down out of the front pillar.

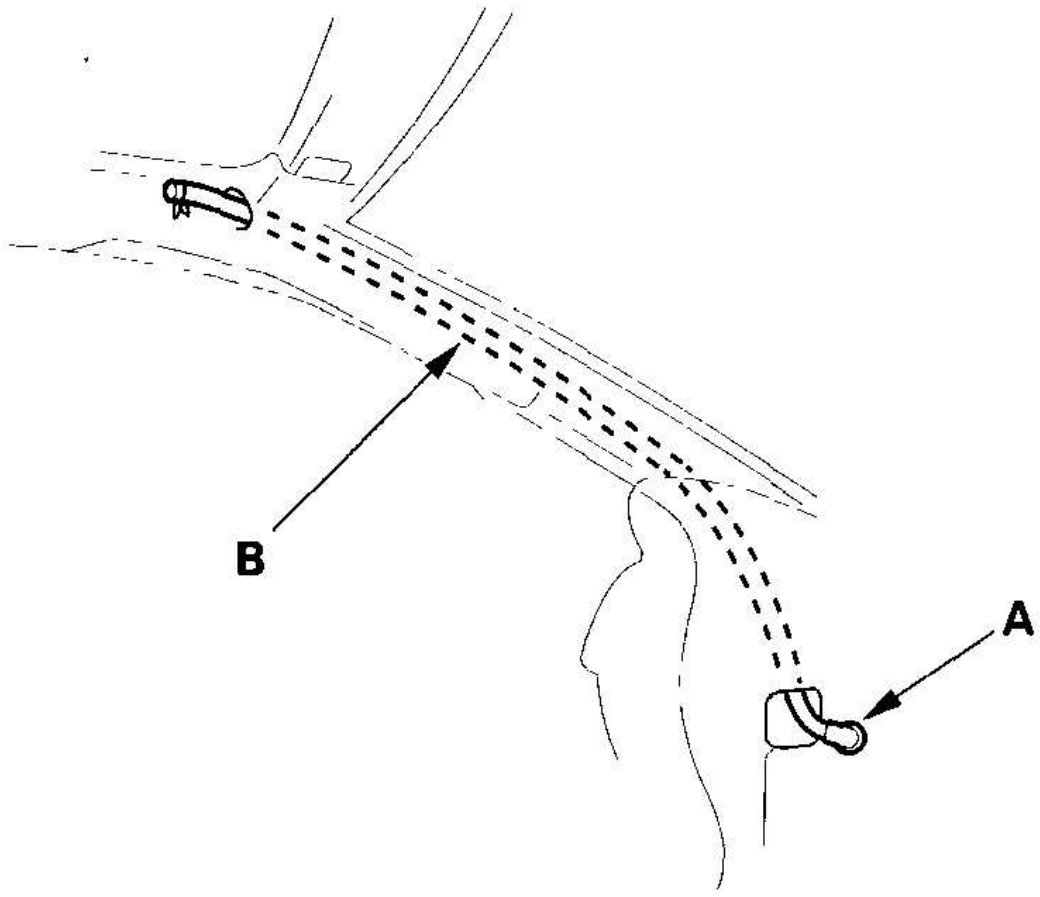


Fig. 32: Removing Front Drain Valve From Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. To remove a rear drain valve (A) from the body, remove these parts, 2-door (see **2-DOOR**), 4-door (see **'03-05 MODELS 4-DOOR**):
   - Spare tire lid
   - Trunk rear trim panel
   - Jack lid

   Tie a string to the top end of the rear drain tube (B), then pull back the trunk side trim panel and pull the drain tube down out of the pillar.

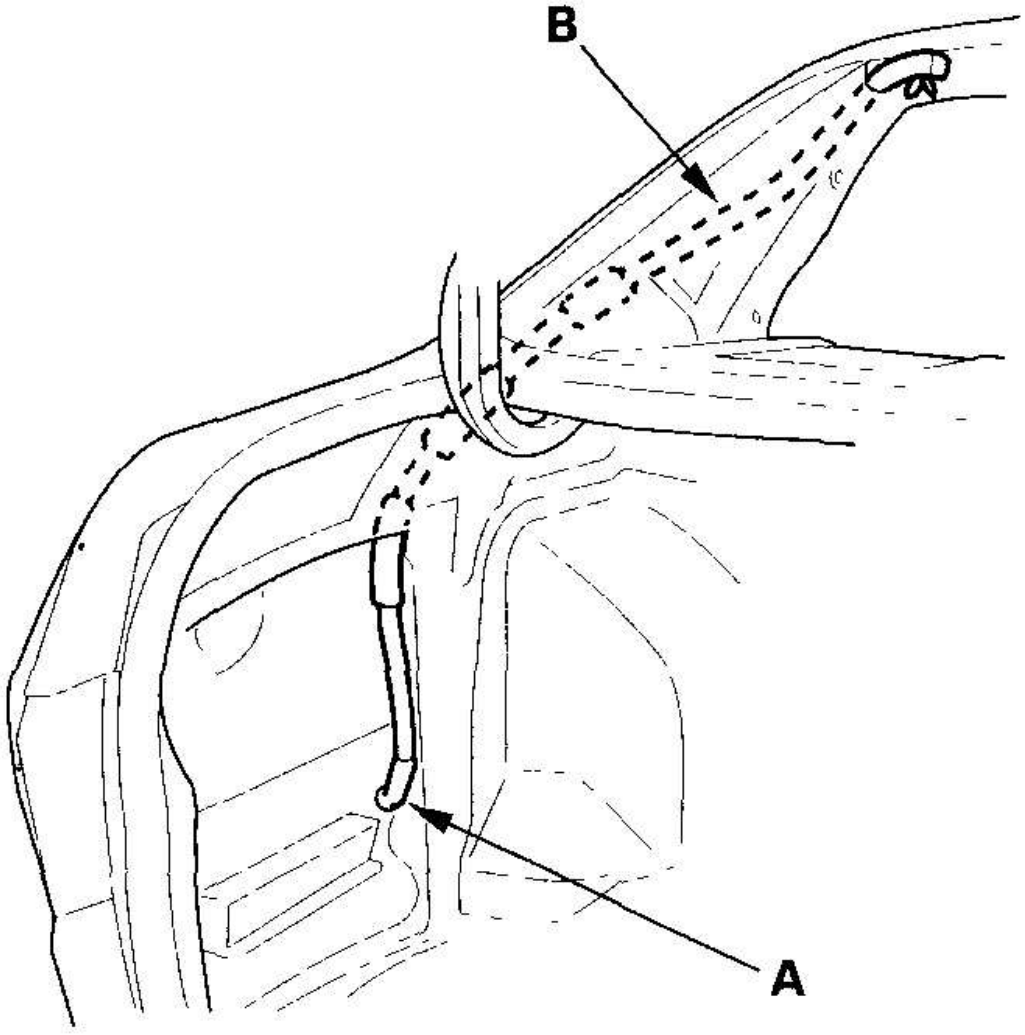


Fig. 33: Removing Rear Drain Valve From Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the frame and drain tube in the reverse order of removal, and note these items:
    - Before installing the frame, clear the drain tubes and drain valves using compressed air.

- Check the frame seal.
- Clean the surface of the frame.
- To install a drain tube, tie the top of the tube to the string that was pulled through when the tube was removed. Use the string to pull the tube up into the roof.
- When installing the frame, first attach the rear hooks into the body holes.
- Make sure the connectors are plugged in properly.
- When installing the rear drain tube at the rear pillar, make sure the cushion on the tube aligns with the hole in the body, and that the alignment mark on the tube aligns with the upper clip.
- When connecting the drain tube, slide it over the frame nozzle at least 10 mm (0.39 in.).
- Install the tube clip (A) on the drain tube (B) as shown in **Fig. 34**.

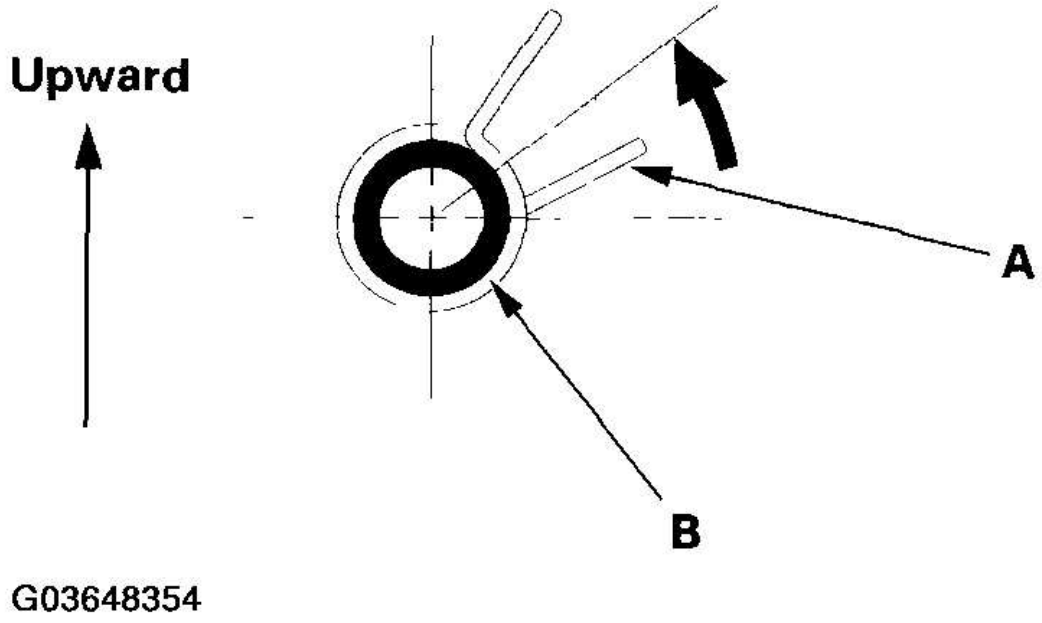


Fig. 34: Installing Frame And Drain Tube
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Check for water leaks. Let the water run freely from a hose without a nozzle. Do not use a high-pressure spray.

INNER CABLE REPLACEMENT

2-DOOR

1. Remove the frame (see **FRAME AND DRAIN TUBE REPLACEMENT**).
2. Remove these items:
   - Wind deflector (see **WIND DEFLECTOR REPLACEMENT**)
   - Moonroof motor (see **MOTOR REPLACEMENT**)
3. Tilt the glass bracket (A) up by sliding the link lifter (B) forward fully.

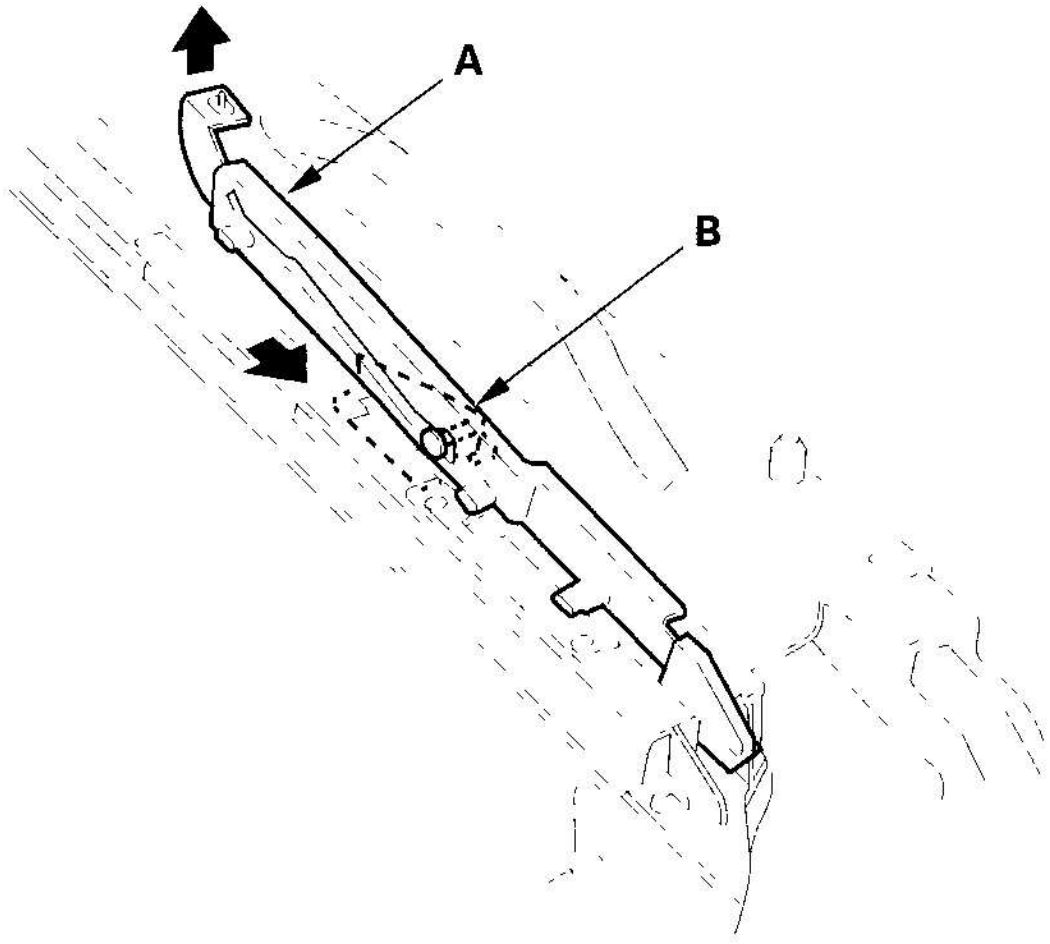


Fig. 35: Tilting Glass Bracket Up Sliding Link Lifter Forward
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the screws (A, B), then remove the slide stop (C) and the plate (D).

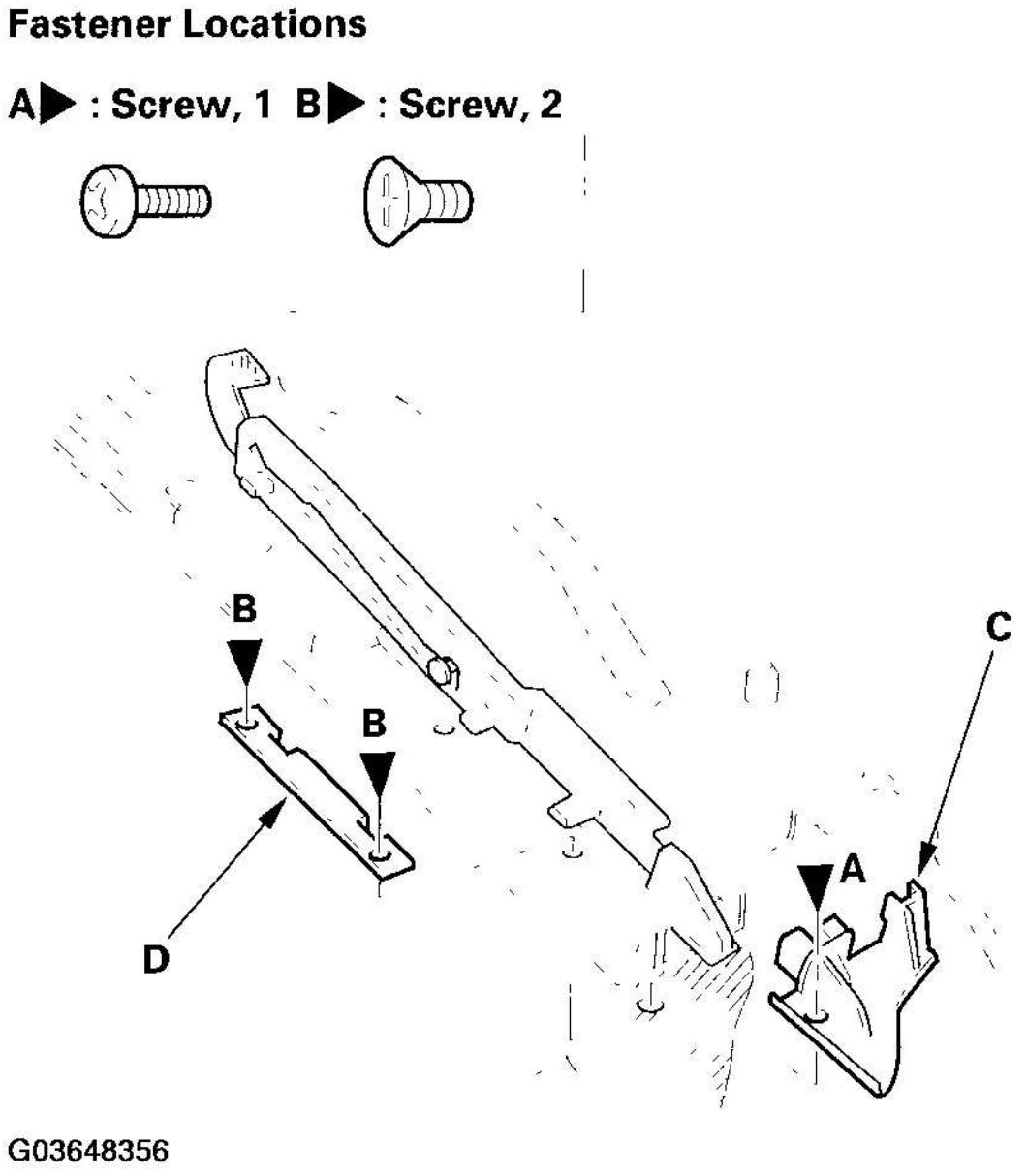


Fig. 36: Removing Slide Stop & Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Slide the glass bracket (A) forward to remove the front slider portion (B) of the bracket out of the guide rail (C).

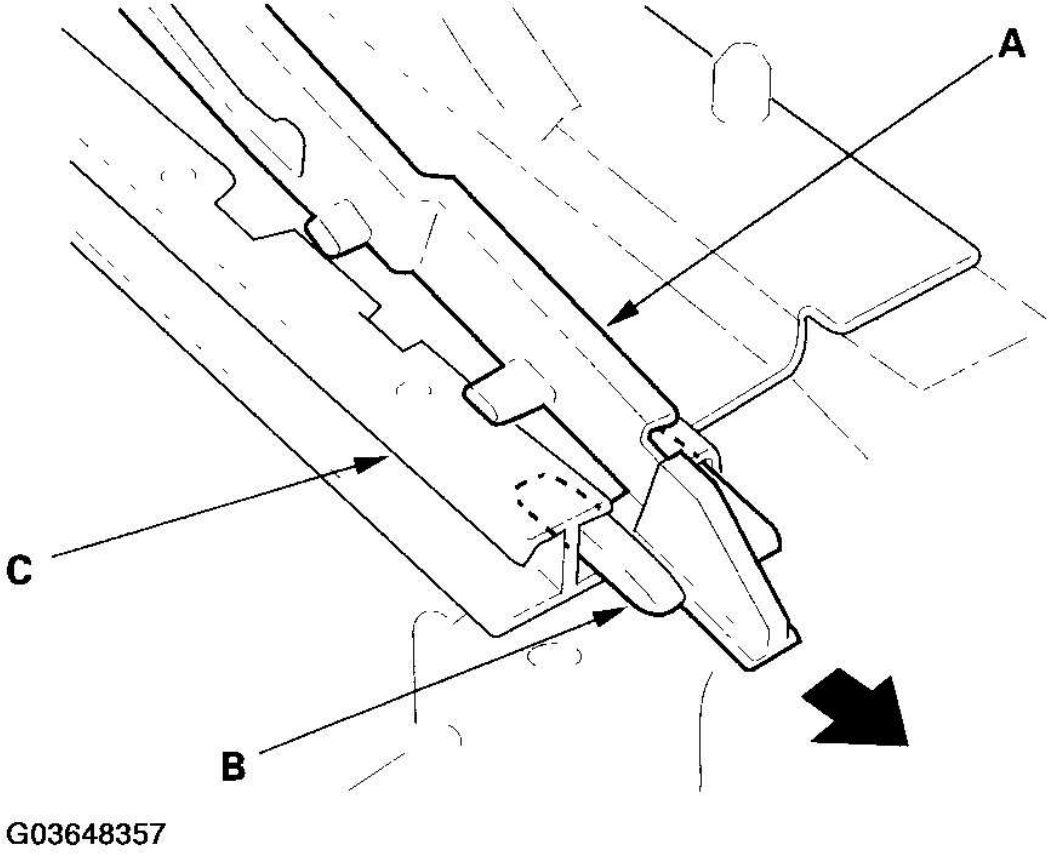


Fig. 37: Sliding Glass Bracket Forward To Remove Front Slider Portion
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the glass bracket (A) from the link lifter (B).

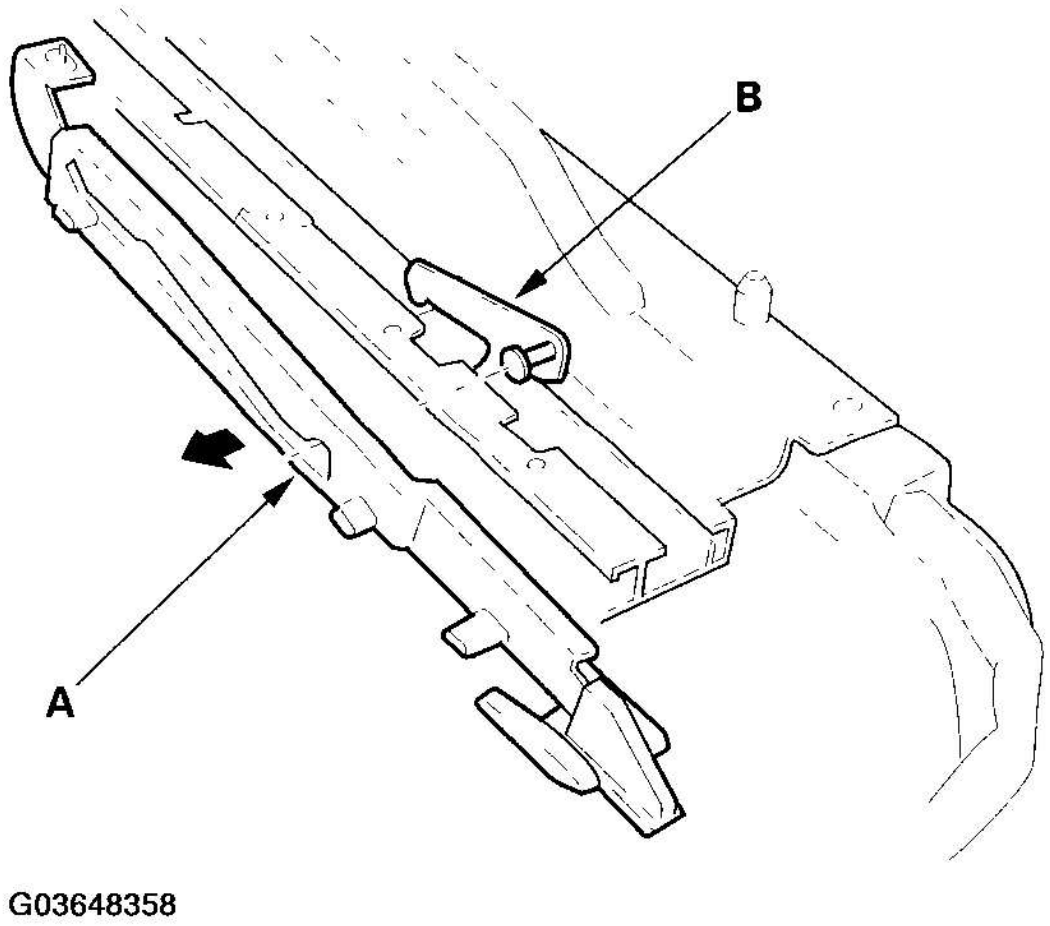


Fig. 38: Removing Glass Bracket From Link Lifter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Pull the slider portion (A) of the inner cable (B) out of the slide rail (C), then remove the inner cable.

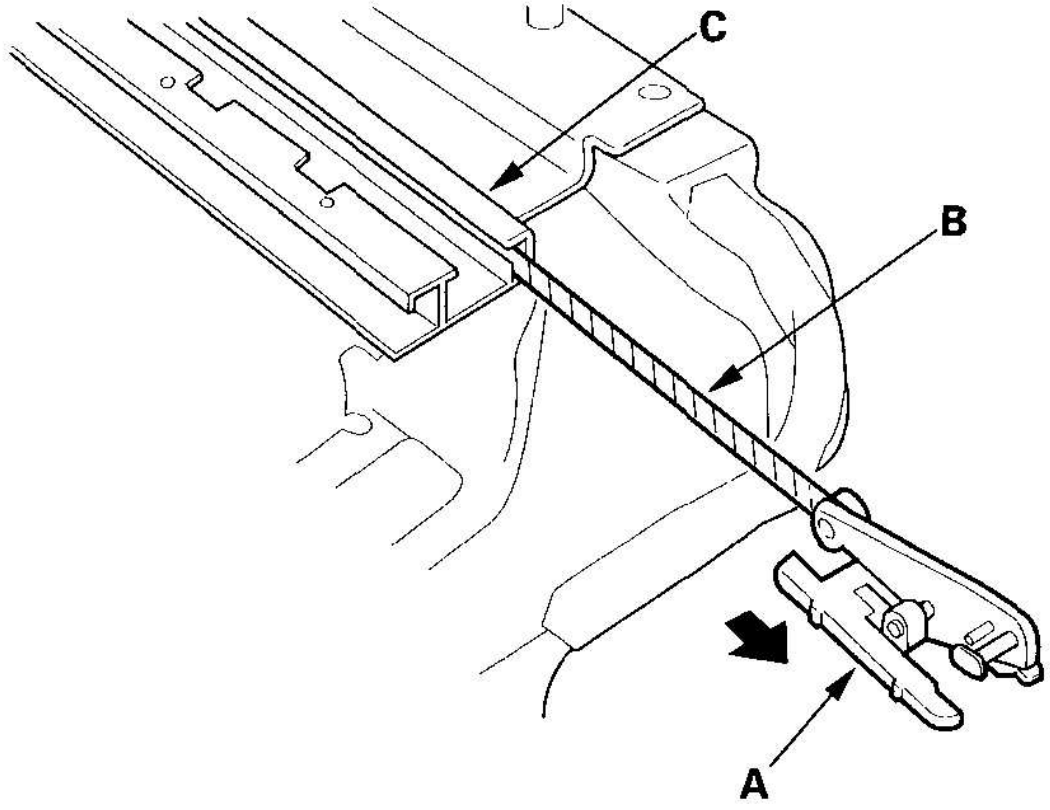


Fig. 39: Pulling Slider Portion Of Inner Cable Out Of Slide Rail
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. If necessary, remove the drain channel slider (A) by sliding it forward.

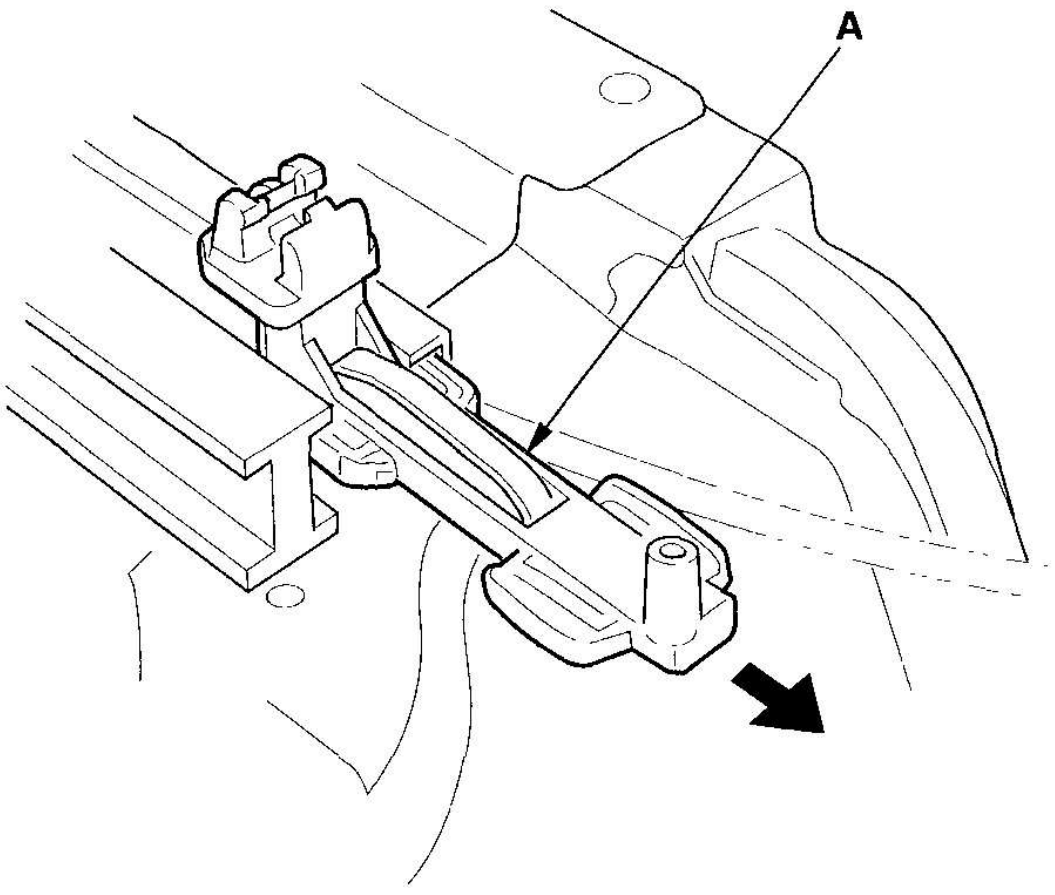


Fig. 40: Removing Drain Channel Slider
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the slider and cable in the reverse order of removal, and note these items:
    - Damaged parts should be replaced.
    - Apply multipurpose grease to the glass bracket (A) and guide rail portion of the frame (B) indicated by the arrows shown in **Fig. 41**.
    - Apply butyl sealant (C) to the frame (D) where the slide stops (E) will be reinstalled with screws (F).
    - Apply medium strength liquid thread lock to the set plate (G) mounting

screws (H) before reinstallation.

- Before reinstalling the motor, slide both glass brackets rearward fully until the slider portions (I) of the inner cable contact with the screws (J) on the guide rail to align both glass brackets.
- Before reinstalling the motor, install the frame and glass, then check the opening drag (see **CLOSING FORCE AND OPENING DRAG CHECK**).
- After reinstalling the motor, do the moonroof motor reprogram procedure (see **MOONROOF CALIBRATION**).

Grease application

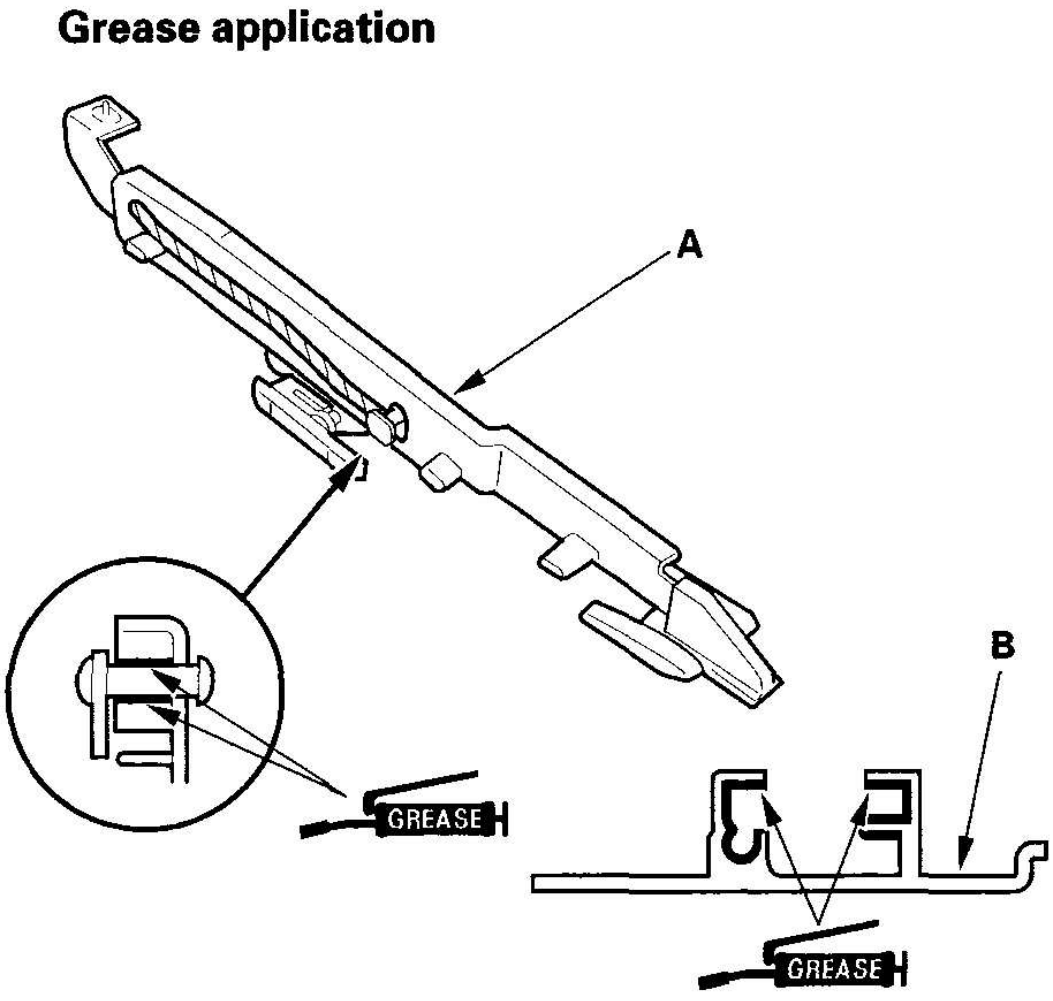


Fig. 41: Installing Slider And Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Butyl sealant application

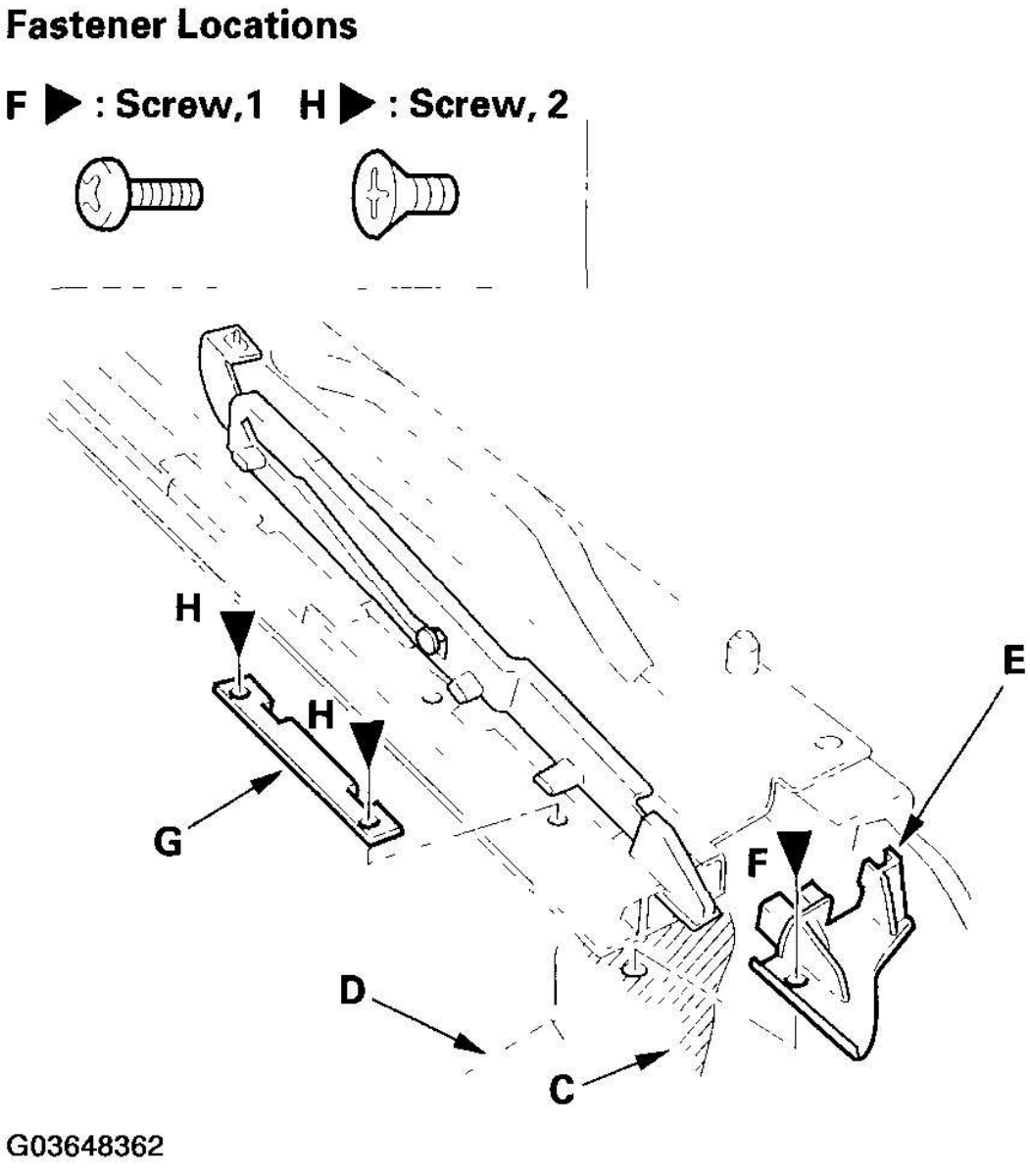


Fig. 42: Identifying Butyl Sealant Application Surface And Fastener Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Glass bracket alignment

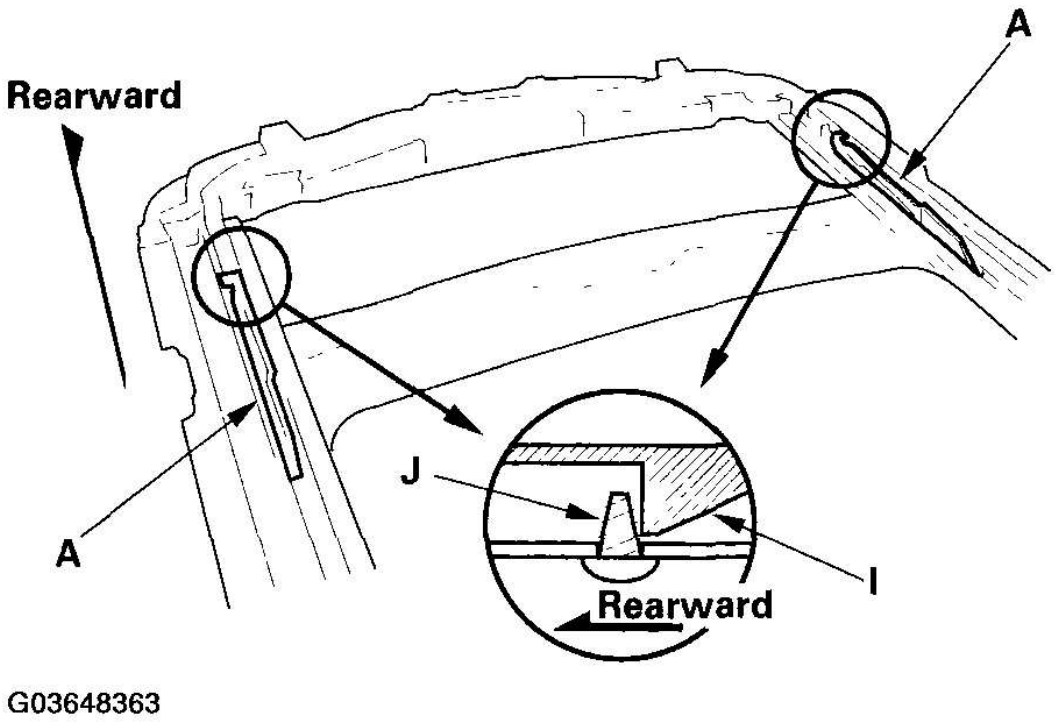


Fig. 43: Identifying Glass Bracket Alignment
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DRAIN CHANNEL SLIDER AND CABLE ASSEMBLY REPLACEMENT

4-DOOR

1. Remove the frame (see **FRAME AND DRAIN TUBE REPLACEMENT**).
2. Remove these parts from the frame:
   - Sunshade (see **4-DOOR**)
   - Moonroof motor (see **MOTOR REPLACEMENT**)
3. Put on gloves to protect your hands. Remove the screws (A, B) securing the slide stops (C), and cable tube rear brackets (D), cable tube side bracket mounting bolts (E) and the cable tube mounting screws (F) from both sides of the frame (G).

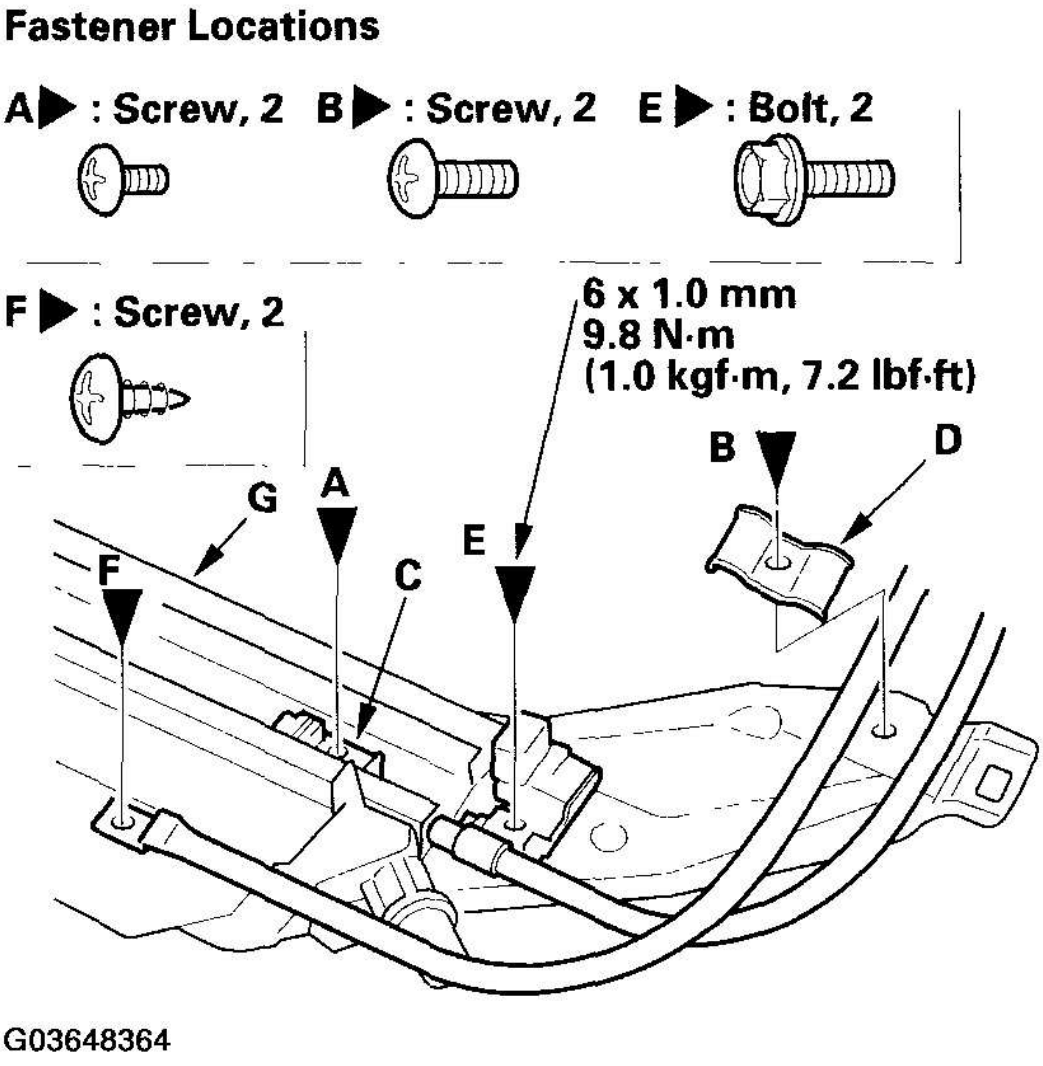


Fig. 44: Removing Screws Securing Slide Stops
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Turn both cable tube side brackets (A) up to release the hooks (B) from the holes in both sides of the frame.

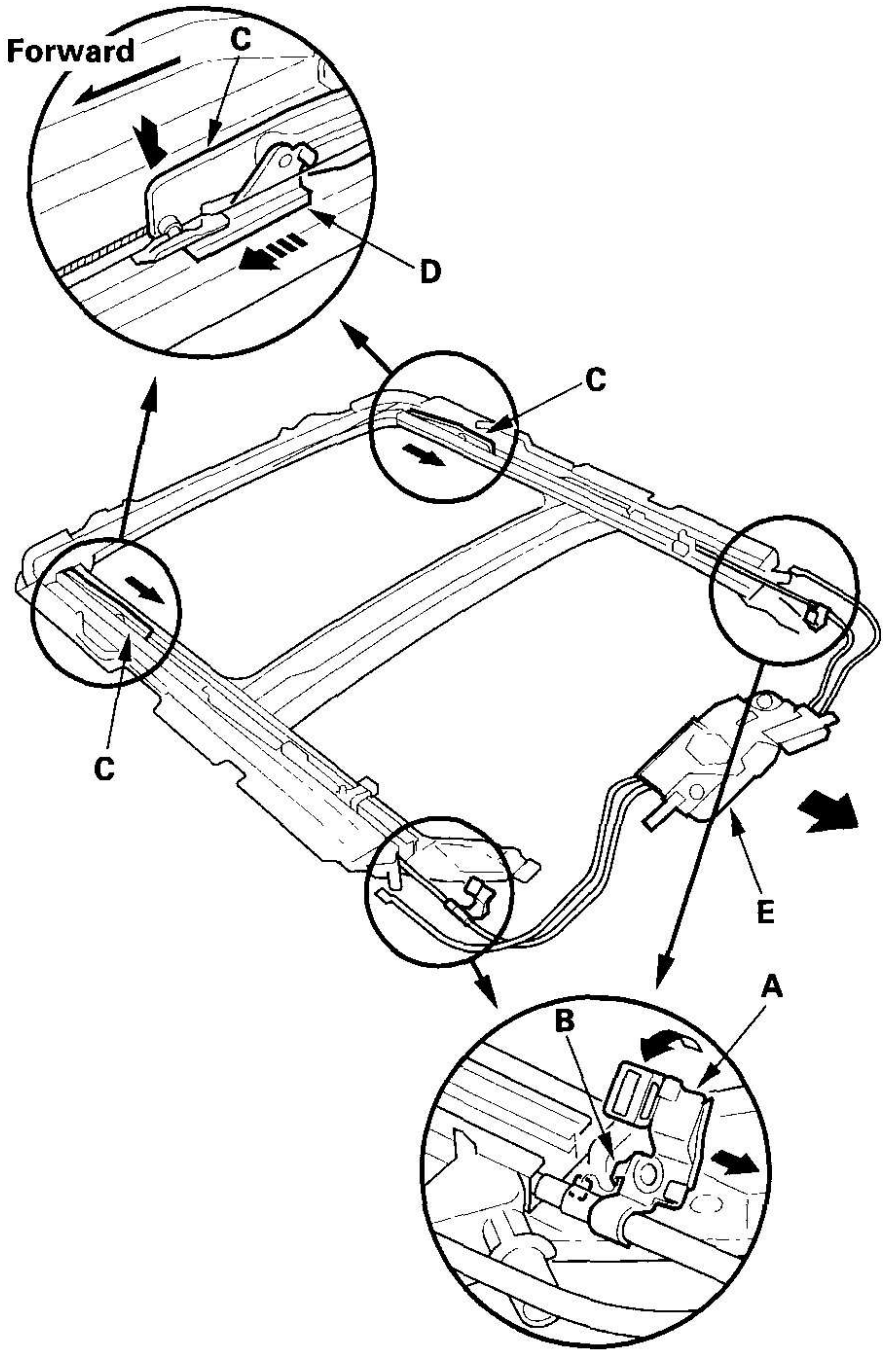


Fig. 45: Turning Both Cable Tube Side Brackets To Release Hooks From Holes

Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Pivot the glass brackets (C) down by sliding the lift up sliders (D) back, then slide both glass brackets back with the lift up sliders.
6. Slide the cable assembly (E) half-way.
7. Remove the slide stops (A) and the drain channel sliders (B) from both sides.

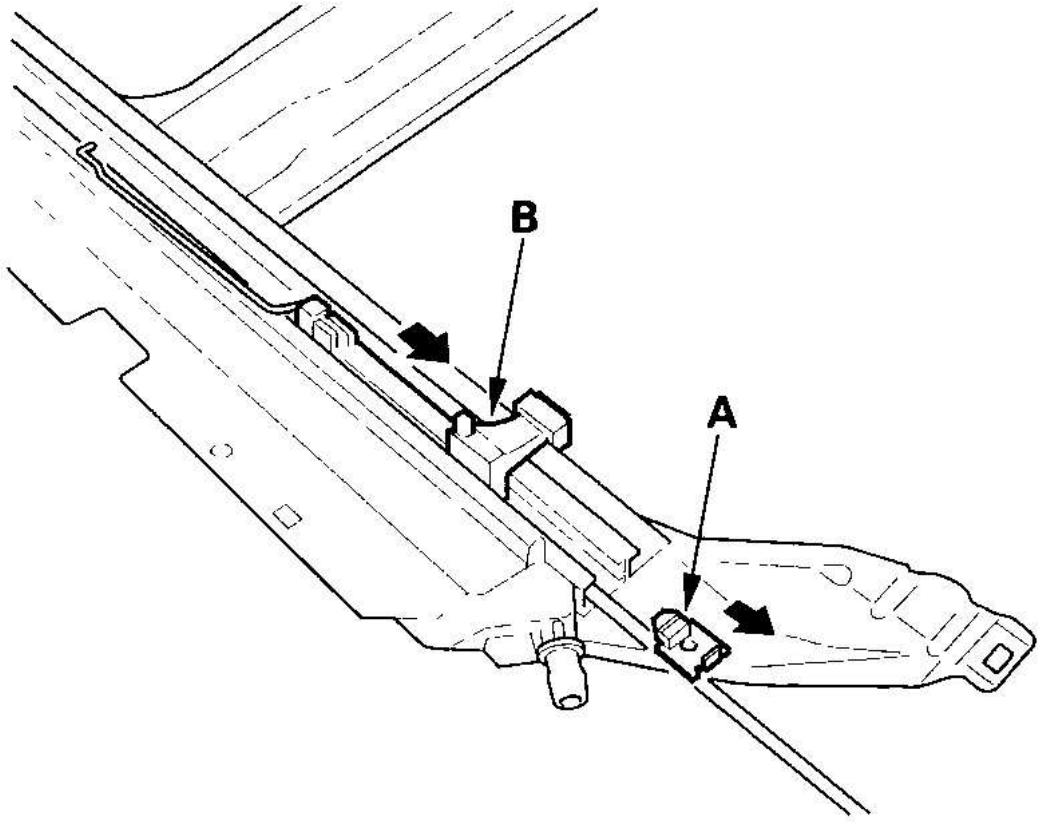


Fig. 46: Removing Slide Stops And Draining Channel Sliders
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Slide the cable assembly (A) and both glass brackets (B) back, remove the deflector sliders (C) from both glass brackets, then remove them from the frame (D).

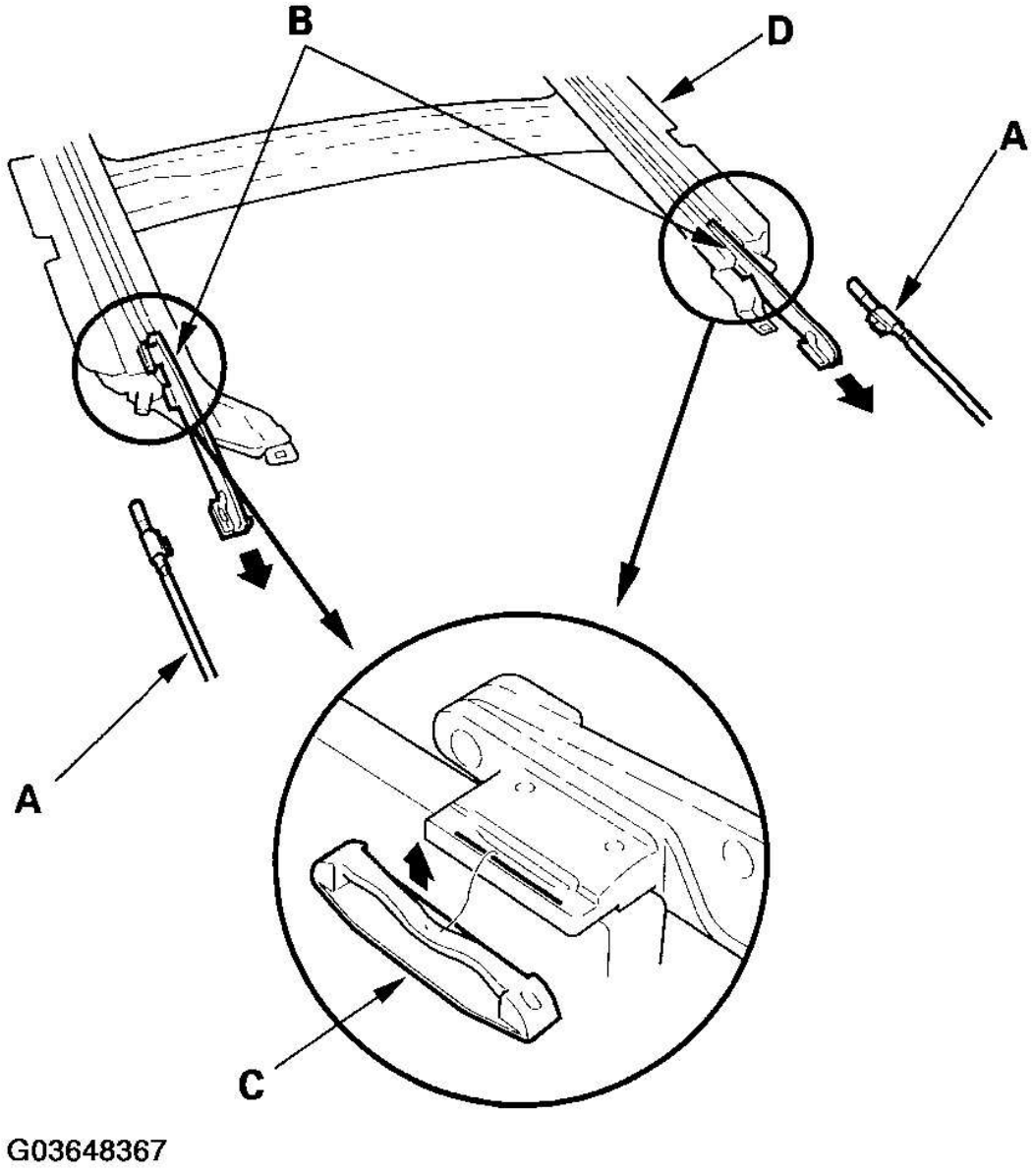


Fig. 47: Sliding Cable Assembly And Glass Brackets Back
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the slider and cable assembly in the reverse order of removal, and note these items:
   - Damaged parts should be replaced.

- Apply multipurpose grease to the glass bracket (A) and guide rail portion of the frame (B) indicated by the arrows shown in **Fig. 48**.
- Before reinstalling the motor, make sure both link lifters are parallel, and in the fully closed position.
- Before reinstalling the motor, install the frame and glass, then check the opening drag (see **CLOSING FORCE AND OPENING DRAG CHECK**).

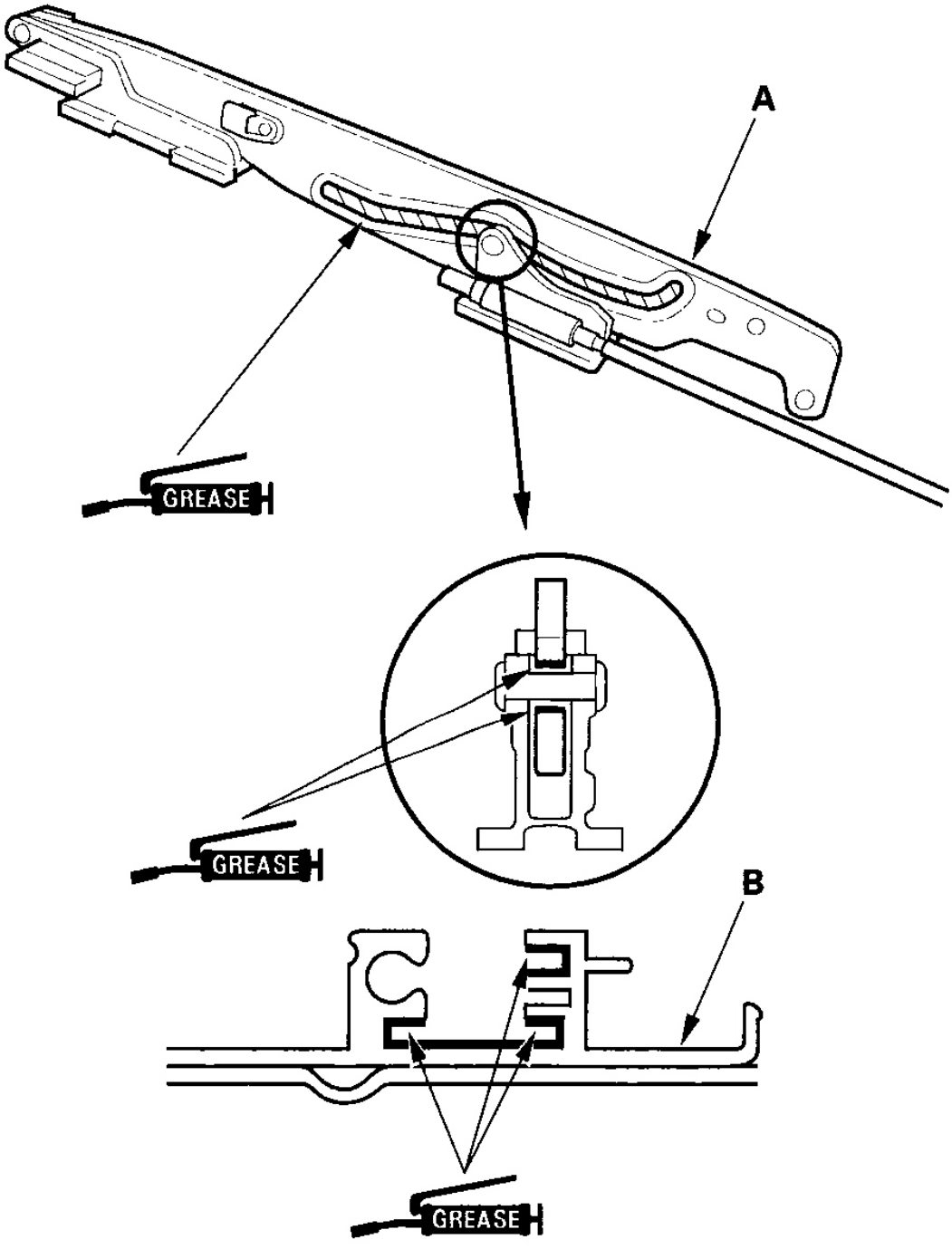


Fig. 48: Installing Slider And Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

LIMIT SWITCH ADJUSTMENT

4-DOOR

1. Remove the headliner (see **HEADLINER REMOVAL/INSTALLATION**).
2. With the moonroof wrench, close the glass (A) fully:
   - Make sure both link lifters (B) are parallel, and in the position shown in **Fig. 49**.
   - Check the glass fit to the roof panel and the glass height (see **GLASS HEIGHT ADJUSTMENT**).

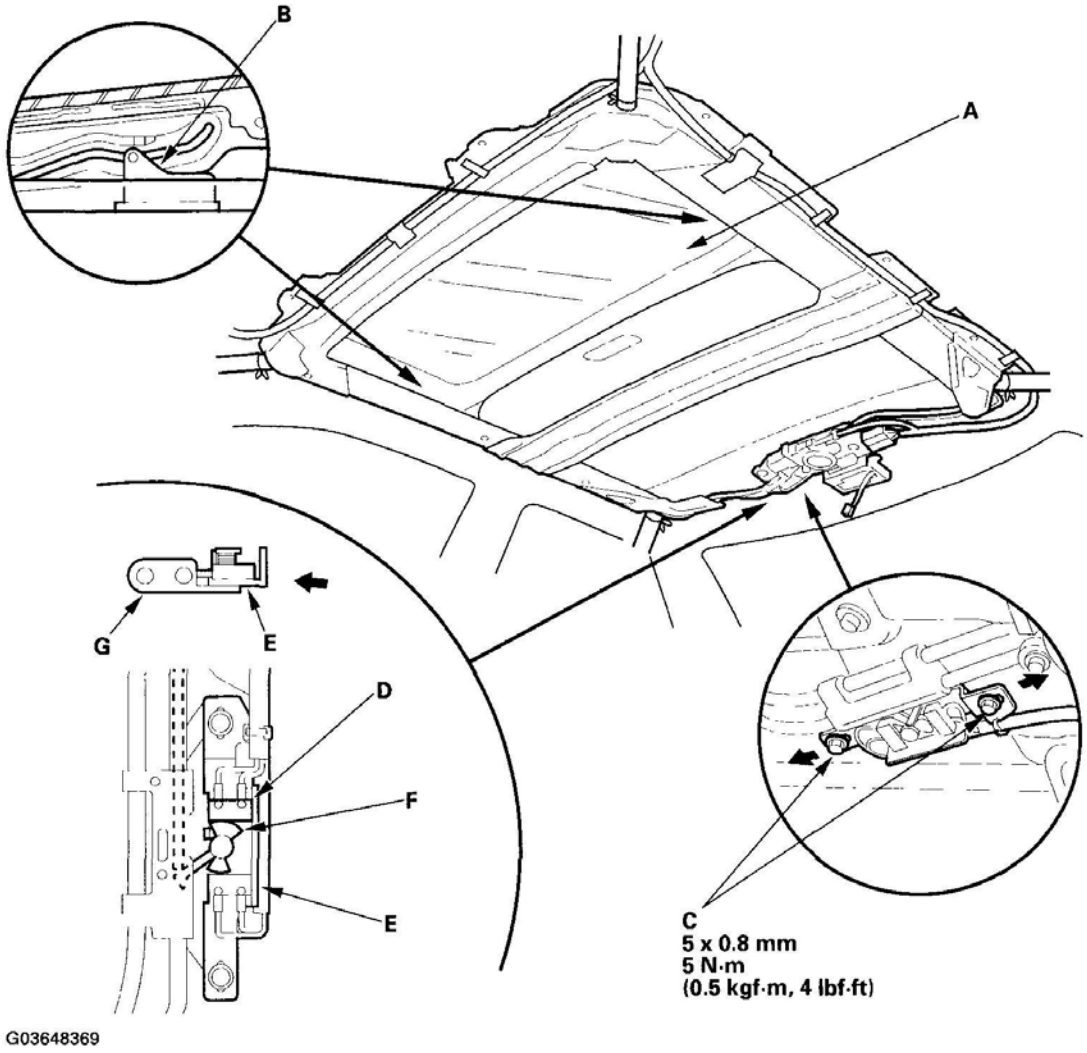


Fig. 49: Closing Glass With Moonroof Wrench
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. With an open-end wrench, loosen the limit switch mounting bolts (C).
4. Adjust the limit switch (D):
   - Move the switch plate (E) a little at a time, then secure it at the position where you hear a faint click when the switch cam (F) pushes the limit switch (open/close).
   - Check that the switch plate contacts the switch bracket (G).
5. Check the operation of the glass (from the tilt-up position to fully closed position, from the fully open position to the fully closed position) by operating the moonroof switch: Adjust the switch plate until the glass opens and closes correctly.
6. Reinstall all remaining parts in the reverse order of removal.

CLOSING FORCE AND OPENING DRAG CHECK

1. Remove the headliner (see **HEADLINER REMOVAL/INSTALLATION**).
2. Closing force check:
   - With a shop towel (A) on the leading edge of the glass (B), attach a spring scale (C) as shown in **Fig. 50**.
   - Have an assistant hold the switch to close the glass while you measure the force required to stop it.
   - Read the force as soon as the glass stops moving, then immediately release the switch and spring scale.

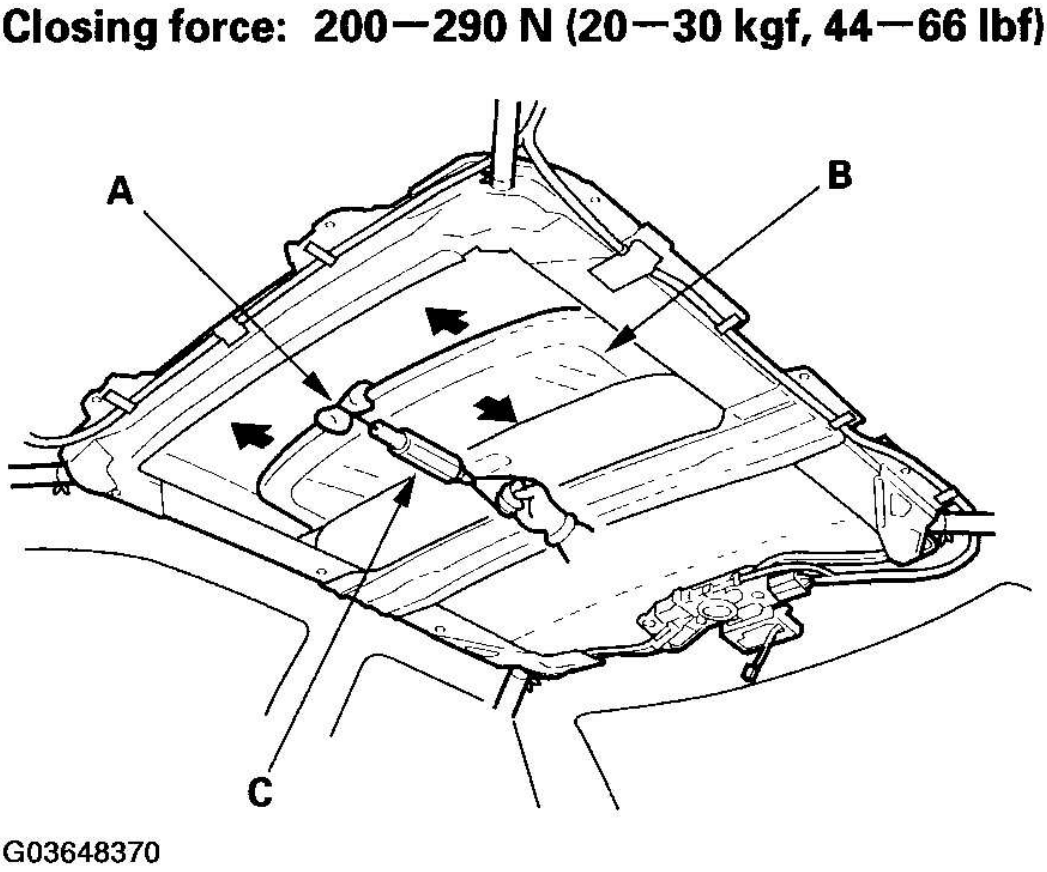


Fig. 50: Closing Force Check
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the force in not within specification, remove the moonroof motor, 2-door (see **MOTOR REPLACEMENT**), 4-door (see **MOTOR REPLACEMENT**), then check:
   - The gear portion and the inner cable for breakage and damage. If the gear portion is broken, replace the motor. If the inner cable is damaged, remove the frame (see **FRAME AND DRAIN TUBE REPLACEMENT**), and replace the cable, 2-door (see **INNER CABLE REPLACEMENT**), 4-door (see **DRAIN CHANNEL SLIDER AND CABLE ASSEMBLY REPLACEMENT**).
   - The moonroof motor, 2-door (see **MOONROOF CONTROL UNIT**

INPUT TEST), 4-door (see **MOTOR TEST**). If the motor fails to run or doesn't turn smoothly, replace it.

- The opening drag. Go to step 4.

4. Opening drag check: Protect the leading edge of the glass with a shop towel (A). Measure the effort required to open the glass using a spring scale (B) as shown in **Fig. 51**.

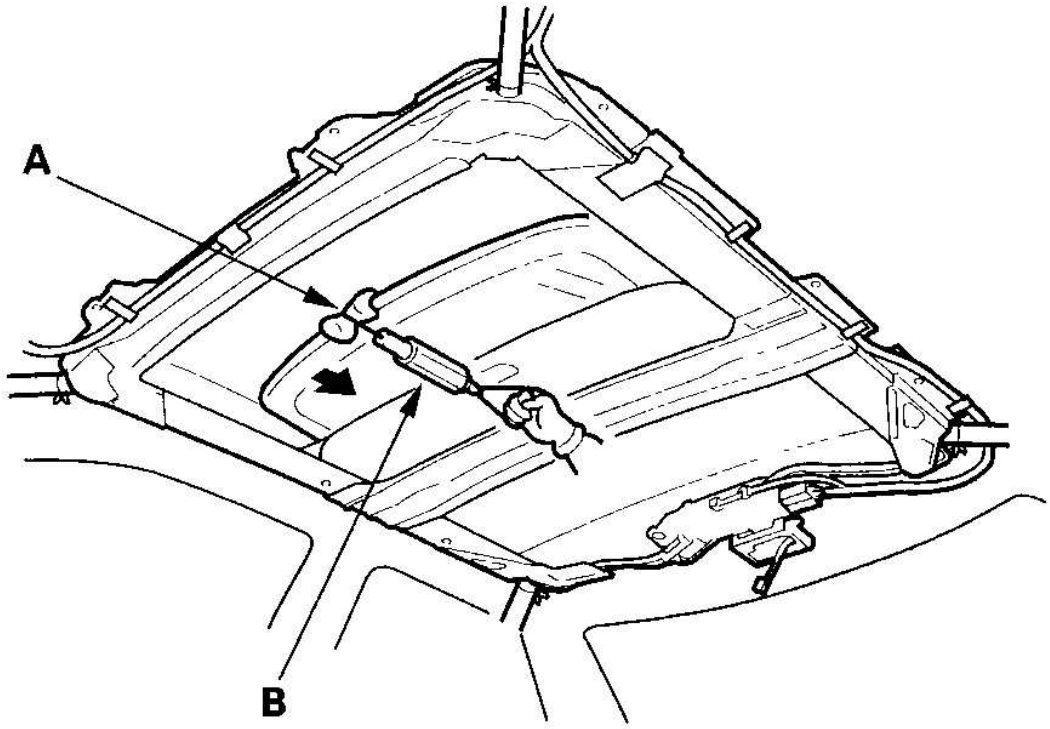


Fig. 51: Protecting Leading Edge Of Glass With Shop Towel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If the load is over 40 N (4 kgf, 9 lbf), check:
   - The side clearance and glass height adjustment (see **GLASS HEIGHT ADJUSTMENT**).
   - For broken or damaged sliding parts. If any sliding parts are damaged, replace them.

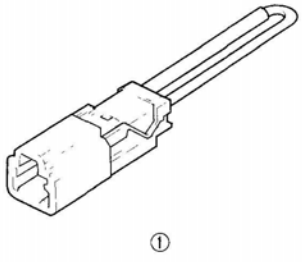
6. 2-door: Do the moonroof motor reprogram procedure (see **2-DOOR**) after reinstalling the moonroof motor.

2006-07 ACCESSORIES & EQUIPMENT

Navigation System - Accord

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07PAZ-0010100	SCS Service Connector	1



G03649420

Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

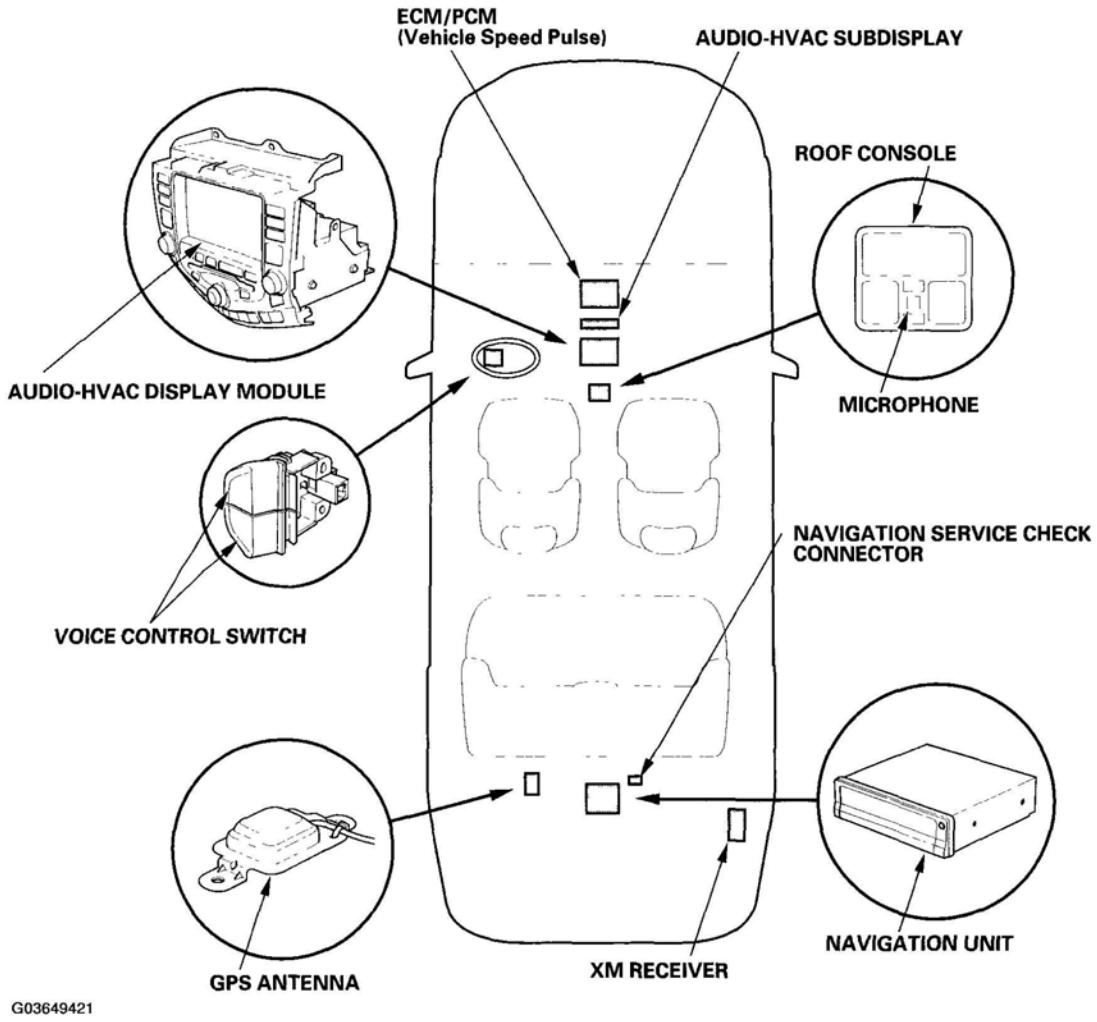


Fig. 2: Locating Navigation System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

GENERAL OPERATION

Refer to the Navigation System Manual for the navigation system operating procedures.

ANTI-THEFT FEATURE

The navigation system and audio unit have a coded theft protection circuit. Be sure to get the customer's anti-theft security codes number before;

- disconnecting the battery.
- disconnecting the navigation unit 8P connector.
- removing the No. 7 (10 A) fuse from the under-dash fuse/relay box.

After service, reconnect power to the navigation unit, and turn the ignition switch ON (II). Enter the 4-digit anti-theft security code, then select "Done".

If the code cannot be found, use the interactive Network (IN) to look it up. You will need the serial number from the navigation unit in the trunk. It is on a label on the underside of the unit. Alternatively, you can view the serial number in the Navi ECU diagnostic screen (see **UNIT CHECK**).

When replacing the navigation unit, be sure to give the customer the new anti-theft security code.

SYMPTOM DIAGNOSIS

Certain circumstances and system limitations will result in occasional vehicle positioning errors. Some customers may think this indicates a problem with the navigation system when, in fact, the system is normal. Keep the following items in mind when interviewing customers about symptoms of the navigation system.

SELF-INERTIAL NAVIGATION LIMITATIONS

The limitations of the self-inertial portion of the navigation system (the yaw rate sensor and the vehicle speed signal) can cause some discrepancies between the vehicle's actual position and the indicated vehicle position (GPS vehicle position).

The following circumstances may cause vehicle positioning errors:

- Moving the vehicle with the engine stopped and the vehicle stopped, such as by ferry or tow truck, or if the vehicle is spun on a turn table.
- Tire slippage, changes in tire rolling diameters, and some driving situations may cause discrepancies in travel distances. Examples of this include:
    - Continuous tire slippage on a slippery surface
    - Driving with snow chains mounted

- Abnormal tire pressure
- Incorrect tire size
- Frequent lane changes across a wide highway
- Continuous driving on a straight or gently curving highway
- Very bumpy roads

- Tolerances in the system and map inaccuracies sometimes limit how precisely the vehicle position is indicated. Examples of this include:
  - Driving on roads not shown on the map (map matching is not possible)
  - Driving on a road that winds in one direction, such as a loop bridge, an interchange, or a spiral parking garage
  - Driving on a road with a series of sharp hair-pin turns
  - Driving near a gradual highway exit or transition
  - Driving on one of two close parallel roads
  - Making many 90 degree turns

GLOBAL POSITIONING SYSTEM (GPS) LIMITATIONS

The GPS cannot detect the vehicle's position during the following instances:

- For the first 5 to 10 minutes after reconnecting the battery (This can take as long as 45 minutes).
- When the satellite signals are blocked by tall buildings, mountains, tunnels, large trees, inside parking structures or large trucks.
- When the GPS antenna is blocked by metallic window tinting or by an object placed above it in the vehicle. The GPS antenna requires a clear unobstructed view of the sky.
- When there is no satellite signal output (Signal output is sometimes stopped for satellite servicing).
- When the satellite signals are blocked by the operation of some electronic aftermarket accessories including, but not limited to non-OEM in-dash entertainment units (radio, CD players/changers, radar detectors and theft recovery systems), and cellphones placed near the navigation system.

The accuracy of GPS is reduced during these instances:

- Metallic window tinting above the GPS antenna.
- When only two satellite signals can be received (Three satellite signals are required for accurate positioning).
- When the satellite control centers are experiencing problems.
- When driving near high tension power lines.
- When the satellite signals are blocked by the operation of some electronic aftermarket accessories including, but not limited to non-OEM in-dash entertainment units (radio, CD players/changers, radar detectors and theft recovery systems), and cellphones placed near the navigation system.

MUTING LOGIC

Whenever the navigation system is giving guidance all the front speakers are muted. When the voice control system is being used, all of the speakers are muted.

LCD DISPLAY UNIT LIMITATIONS

- In cold temperatures, the display may stay dark for the first 2 or 3 minutes until it warms up.
- When the display is too hot because of direct summer sunlight, it will remain dark until the temperature drops (You may see an error message displayed stating this fact).
- When the humidity is high and the interior temperature is low, the display may appear cloudy. The display will clear up after some use.
- Fingerprints on the touch panel may sometimes be noticeable because of the panel's low-reflection coating. Clean the screen with a soft, damp cloth. You may use a mild cleaner intended for eye glasses or computer screens. To avoid scratching the panel, do not rub too hard, or use abrasive cleaners or shop towels.
- The touch panel consists of a touch sensitive resistive memberance covering the display. Unlike previous systems, you must actually "touch" the display to activate it. Never use hard or sharp implements to operate the screen because you risk damaging the sensing membrane. If a touch "switch" does not function

immediately, shift your finger slightly, and touch it again.

NOTE: The display is unaffected by sunlight, as in previous displays.

SYMPTOM DUPLICATION

- When the symptom can be duplicated, verify that it is not a characteristic of the system. Review the navigation manual and compare it to a known-good vehicle (with the same software and database), under the same conditions. If not the same, follow the self-diagnostic procedures and the appropriate troubleshooting procedures.
- When the symptom does not reappear or only reappears intermittently, ask the customer about the conditions when the symptom occurred.

  - Ask the customer to demonstrate the problem.

  - Try to establish possible user error or misunderstanding of the system.

  - Try to establish if outside interference may have been the cause.

  - Try to duplication the symptom under the same conditions the customer was experiencing.

  - Vibration, temperature extremes, and moisture (dew, humidity) are factors that are difficult to duplicate.

  - Inspect the vehicle for after-market electronic devices (vehicle locators, amps, radar detectors, etc) that may be hidden.

SERVICE PRECAUTIONS

- If the navigation unit needs to be replaced, inform the customer that personal information in the navigation system will be lost. If possible, have the customer record their personal information before the unit is replaced.
- Before disconnecting the battery, make sure you have the anti-theft codes for the radio and the navigation system, and write down the XM radio channel presets. Also obtain any PGM-FI or transmission DTCs and freeze frame date (which will be lost when the PCM loses power).
- When the battery is disconnected, the internal GPS clock is reset to "0:00". The clock will reset to the correct time after the system finishes GPS initialization.

- After reconnecting the battery, you have to wait to get the initial signal from the satellite. It will take from 10 to 45 minutes.
- Verify map matching
- Before returning the vehicle to the customer, enter the radio and navigation anti-theft security code, then enter the customer's XM radio channel presets, adjust the setup clock settings in the navigation system.

SYSTEM INITIALIZATION

If for any reason, you lose power to the navigation system (like the battery was disconnected). The navigation system will require initialization. Once completed, the system will be ready to use.

This initialization requires the following:

- Entry of the 4-digit anti-theft security code to "unlock" the system
- GPS initialization (may not be needed depending of the length of time the system was without power)
- Map matching to align the GPS to a location on the map

ENTERING SECURITY CODE

The navigation system and audio unit have a coded theft protection circuit. Be sure to get the customer's anti-theft security codes number before;

- disconnecting the battery
- disconnecting the navigation unit 8P connector
- removing the No. 7 (10 A) fuse from the under-dash fuse/relay box

After service, reconnect power to the navigation unit, and turn the ignition switch ON (II). Enter the 4-digit anti-theft security code, then select "Done".

When replacing the navigation unit or audio unit, be sure to give the customer the new anti-theft security code.

GPS INITIALIZATION

Depending on the length of time the battery was disconnected, your system may require GPS initialization. If it does, the following screen appears:

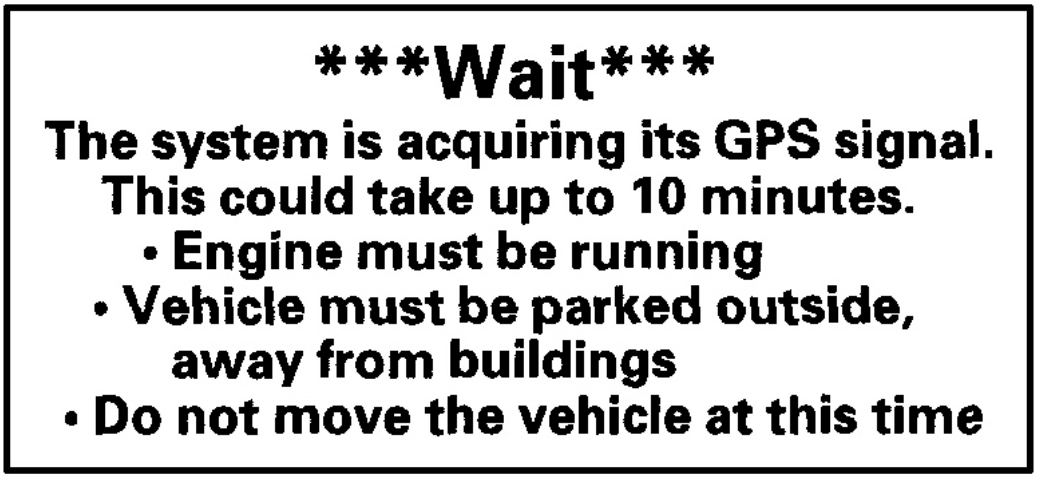


Fig. 3: Identifying GPS Initialization (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

If this procedure is not necessary the system proceeds directly to the Disclaimer screen. During initialization, the system searches for all available GPS satellites, and obtains their orbital information. During this procedure the vehicle should be out in the open with a clear view of the sky.

If the navigation system finds the satellites properly, this box clears, and changes to the Disclaimer screen. If within 10 minutes the system fails to locate a sufficient number of satellites to locate your position, the following screen appears.

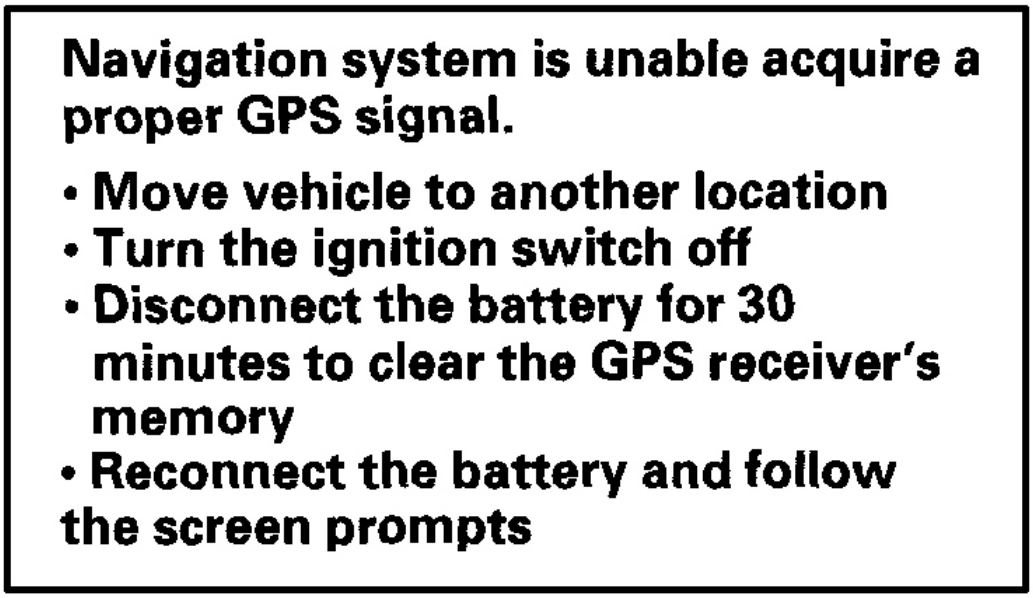


Fig. 4: Identifying GPS Initialization (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

If this is displayed, turn off the engine, then restart the vehicle. If you now see the Disclaimer screen, the GPS initialization is complete.

NOTE:

- **The average acquiring time is less than 10 minutes, but it can take as long as 45 minutes.**
- **If the system is still unable to acquire a signal, follow the instructions on the screen. If this screen appears again, go to troubleshooting for the No GPS icon is shown (see GPS icon is white, or not shown).**

MAP MATCHING

This part of the initialization matches the GPS coordinates with a road on the map screen. To perform this part of the procedure, ensure that the navigation system is displaying a map. Check the "GPS" icon in the upper left corner of the screen, it

should be "Green" when the vehicle is parked outside, with the correct color labeled DVD installed in the navigation unit. Drive the vehicle on a mapped road shown on the map screen. Do not enter a destination at this time. When the name of the current road you are driving on, appears at the bottom of the screen, the entire procedure is complete. Your system is now ready to use.

OBTAINING A NAVIGATION DVD

If the Navigation DVD is lost or damaged, or you need a yearly updated DVD, you have 2 ways to purchase one. You can either call (888) 291-4675, or order on-line at www.honda.com.

Both methods require a credit card. The DVD for this model has a white label, and cannot be ordered through the parts system. The following DVDs will not work in this navigation system:

- Navigation DVDs with labels other than white
- Map software programs manufactured by other companies
- DVD movies, or DVDs containing audio recordings

Update DVDs are available for purchase usually in the fall of each year. They may contain the following:

- Enhanced maps and points of interest (POI) coverage
- Fixes for minor software bugs
- Additional features

NOTE: Updating is optional, and there is no program to provide free DVDs containing yearly mapping updates.

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING CHART

Symptom	Diagnostic procedure	Also check for
Navigation system	System Initialization (see	• Navigation unit • Wrong colored disc

stays on the GPS initialization screen	**SYSTEM INITIALIZATION**)	installed • GPS antenna/cable • Harness/fuses/switches
No picture is displayed	Troubleshooting (see **SYMPTOM TROUBLESHOOTING**)	• Navigation unit • Aftermarket accessories connected to the system • Display unit • Harness/fuses/switches
Address cannot be found or system gives poor routing	Verify proper operation using the owner's manual	Wrong colored disc installed
Vehicle position icon constantly leaves road or is very far from actual position	Troubleshooting (see **VEHICLE POSITION ICON CONSTANTLY LEAVES ROAD OR IS VERY FAR FROM ACTUAL POSITION**)	• Navigation unit • GPS antenna/cable • PCM (speed pulse missing) • Harness/fuses/switches
Picture is missing a color or tone	Troubleshooting (see **PICTURE IS MISSING A COLOR OR TONE**)	• Navigation unit • Wrong colored disc installed • Harness/fuses/switches • Aftermarket accessories connected to the system
Picture has lines/rolls/other issues	Troubleshooting (see **PICTURE HAS LINES/ROLLS/OTHER ISSUES**)	• Navigation unit • Display unit • Harness/fuses/switches
Display unit buttons or touch screen buttons do not work or respond properly	Troubleshooting (see **DISPLAY UNIT BUTTONS OR TOUCH SCREEN BUTTONS DO NOT WORK OR RESPOND PROPERLY**)	• Display unit • Wrong colored disc installed • Harness/fuses/switches

GPS icon is white, or not shown	Troubleshooting (see **GPS icon is white, or not shown**)	• Navigation unit • Aftermarket accessories connected to the system • GPS antenna/cable • Harness/fuses/switches
Voice guidance cannot be heard	Troubleshooting (see **VOICE GUIDANCE CANNOT BE HEARD**)	• Navigation unit • Audio unit/amplifier • Volume or Voice feedback settings (see Owner's manual for details) • Harness/fuses/switches
Voice control does not work/respond	Troubleshooting (see **VOICE CONTROL DOES NOT WORK/RESPOND**)	• Navigation unit • Volume or Voice feedback settings (see Owner's manual for details) • Microphone/steering buttons • Harness/fuses/switches
DVD screen error messages	Troubleshooting (see **DVD screen error messages**)	• Navigation unit • Wrong colored disc installed • Display unit • Damaged DVD disc
Trip computer-no distance	Troubleshooting (see **TRIP COMPUTER-NO DISTANCE**)	• PCM (speed and fuel pulses) • Wrong colored disc installed • Wrong unit (model code)

		• Harness/fuses/switches
Trip computer-no fuel information	Troubleshooting (see **TRIP COMPUTER-NO FUEL INFORMATION**)	• Gauge assembly (CAN) • Wrong colored disc installed • Wrong unit (model code) • Harness/fuses/switches
Navigation cannot control A/C	Troubleshooting (see **NAVIGATION CANNOT CONTROL A/C**)	• Display unit • Wrong colored disc installed • Wrong unit (model code) • Harness/fuses/switches
Display day/night mode does not work	Troubleshooting (see **DISPLAY DAY/NIGHT MODE DOES NOT WORK**)	• Display unit • Display brightness set to "High" • Gauge assembly (CAN) • Harness/fuses/switches
System locks up constantly	Troubleshooting (see **SYSTEM LOCKS UP CONSTANTLY**)	• Navigation unit • Harness/fuses/switches • Wrong colored disc installed • Damaged DVD disc
Vehicle icon wanders across the map when driving (does not follow a displayed road) or spins when driving	Troubleshooting (see **VEHICLE ICON WANDERS ACROSS THE MAP WHEN DRIVING (DOES NOT FOLLOW A DISPLAYED ROAD) OR SPINS WHEN DRIVING**)	• Navigation unit • Wrong colored disc installed • Damaged DVD disc

Navigation drives by itself when parked	Troubleshooting (see **NAVIGATION DRIVES BY ITSELF WHEN PARKED**)	
Navigation stays on with ignition switch off	Troubleshooting (see **NAVIGATION STAYS ON WITH IGNITION SWITCH OFF**)	• Harness/fuses/switches • Aftermarket accessories connected to the system
Navigation cannot control audio/CD	Troubleshooting (see **NAVIGATION CANNOT CONTROL AUDIO/CD**)	• Display unit • Wrong colored disc installed • Audio unit/amplifier
Navigation cannot control XM radio	Troubleshooting (see **NAVIGATION CANNOT CONTROL XM RADIO**)	• Display unit • Wrong colored disc installed • Harness
Audio-HVAC subdisplay does not work properly	Troubleshooting (see **AUDIO-HVAC SUBDISPLAY DOES NOT WORK PROPERLY**)	• Navigation unit • Subdisplay unit • Harness/fuses/switches
Time is not correct	Reset Time Adjustment in set-up	
Navigation frequently asks for code and needs GPS initialization	Troubleshooting (see **NAVIGATION FREQUENTLY ASKS FOR CODE AND NEEDS GPS INITIALIZATION**)	• Navigation unit • Low battery • Harness/fuses/switches
Some set-up and information functions of the navigation system are "grayed out"	Customer did not select "OK" from Disclaimer screen. Refer to System Function Diagram (see **SYSTEM FUNCTION**	

and do not work	**DIAGRAM**)	
Previous Destinations button is dim and not selectable in the Enter destination by screen	The vehicle may be new, or the customer deleted the destination. Enter a destination, and allow the system to route to it. After the trip, the Previous Destinations button will be selectable.	Owner's manual for details
Today's Destinations button is dim and not selectable in the Enter destination by screen	The customer has not entered a group of locations for Today's Destinations. This is normal. The button is only selectable if the customer is using this function.	Owner's manual for details
The navigation system will not Map Match	Refer to troubleshooting for Vehicle icon wanders across the map when driving (see **VEHICLE ICON WANDERS ACROSS THE MAP WHEN DRIVING (DOES NOT FOLLOW A DISPLAYED ROAD) OR SPINS WHEN DRIVING**)	

SYSTEM DESCRIPTION

OVERVIEW

The navigation system is a highly-sophisticated, hybrid locating system that uses satellites and a map database to show you where you are and to help guide you to a desired destination.

The navigation system receives signals from the global positioning system (GPS), a

network of 24 satellites in orbit around the earth. By receiving signals from several of these satellites, the navigation system can determine the latitude, longitude elevation of the vehicle. In addition, signals from the system's yaw rate sensor and the ECM/PCM (vehicle speed pulse) enable the system to keep track of the vehicle's direction and speed of travel.

This hybrid system has advantages over a system that is either entirely self-contained or one that relies totally on the GPS. For example, the self-contained portion of the system can keep track of vehicle position even when satellite signals cannot be received. When the navigation system is on, the GPS can keep track of the vehicle position even when the vehicle is transported by ferry.

The navigation system applies all location, direction, and speed information to maps and calculates a route to the destination entered. As you drive to that destination, the system provides both visual and audio guidance.

This navigation system also has voice recognition that allows voice control of most of the navigation functions. The Talk and BACK buttons on the steering wheel activate the voice control. The voice control also allows control of the audio and climate control.

The navigation system provides a trip computer function. The fuel economy display is calculated by data provided by the ECM/PCM. The ECM/PCM provides fuel use and level data via the F-CAN bus, and a dedicated speed signal.

The illumination signal is used by the navigation unit to automatically switch the display between Night and Day brightness modes when Display is set to Auto. When the instrument panel brightness control is set to full brightness, the navigation system stays in the Day mode, even with the headlights on. Display unit button illumination is supplied through the audio unit.

The GA-NET bus provides communication between the navigation unit and the display unit. This bus also links the components in the audio-HVAC display module. The bus is used to pass button and touch-screen commands to the navigation unit. In addition, muting and voice control commands are sent to the display unit and the audio and climate control systems for processing. The audio unit uses the bus to control the XM-receiver or other accessories.

SYSTEM DIAGRAM

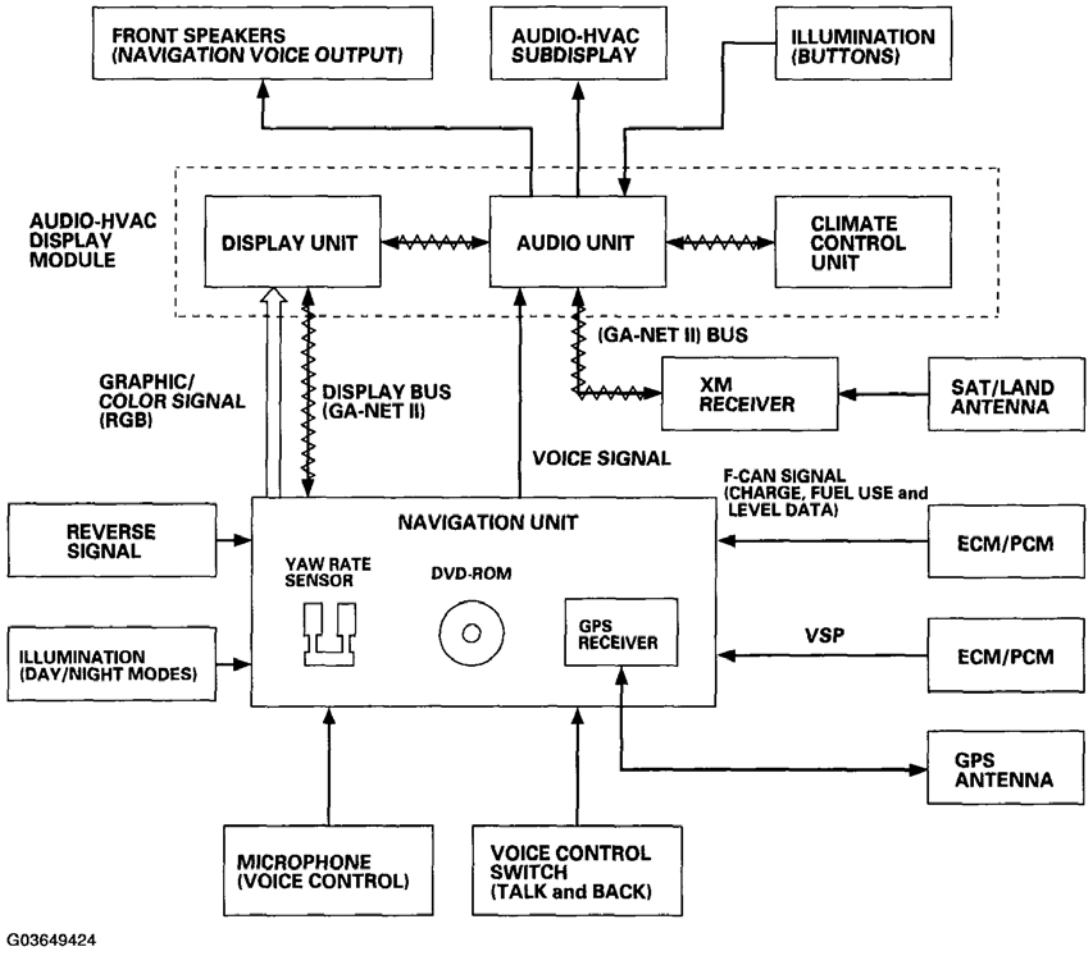


Fig. 5: Identifying Navigation System Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NAVIGATION FUNCTION

The navigation system is composed of the navigation unit, the ECM/PCM (vehicle speed signal), the GPS antenna, microphone, voice control switch, audio unit, climate control unit, and the display unit.

Function Diagram

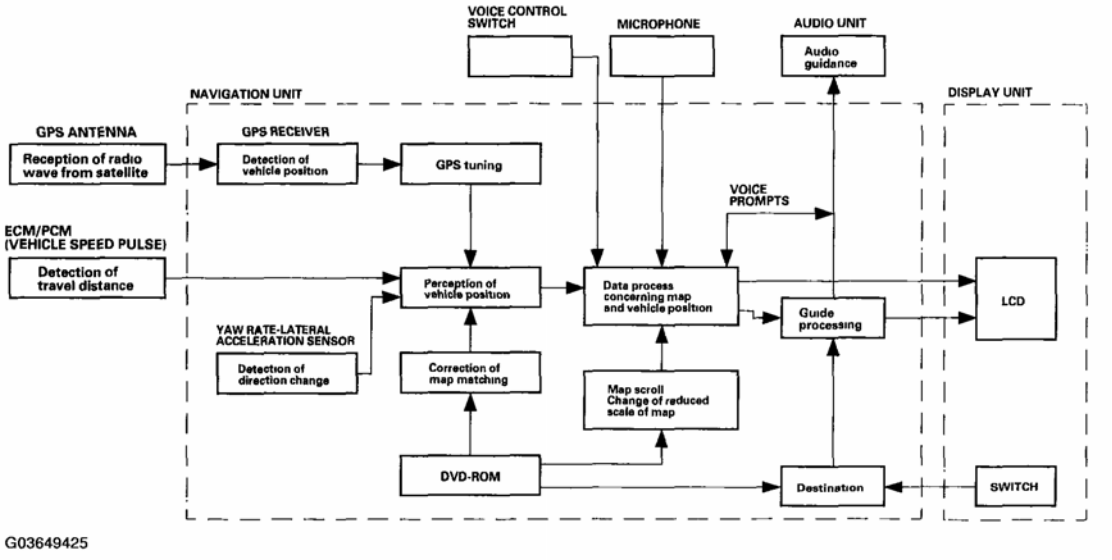


Fig. 6: Identifying Navigation System Function Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Vehicle Speed Pulse

The vehicle speed pulse is sent by the ECM/PCM. The ECM/PCM receives a signal from the countershaft speed sensor, then it processes the signal and transmits it to the speedometer and other systems.

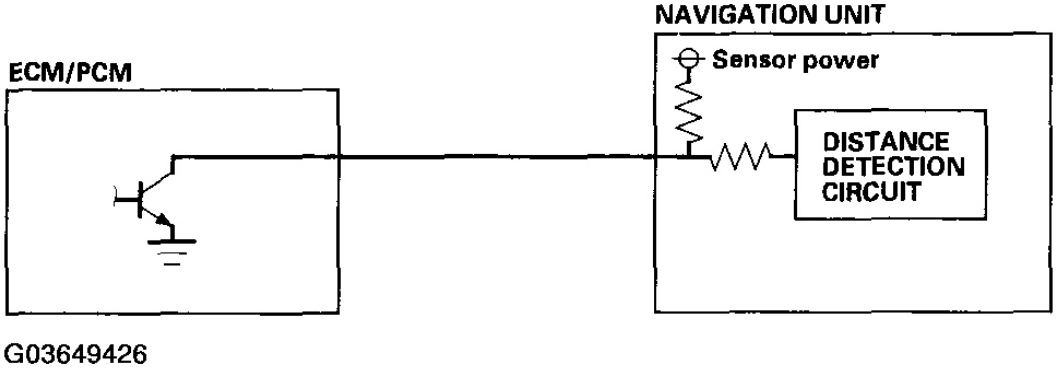


Fig. 7: Identifying Navigation System Vehicle Speed Pulse
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Charge Signal

The PCM sends a charge signal to the navigation unit via F-CAN. A thermister inside the navigation unit monitors the units internal temperature. This information combined with charge signal determines the control units internal cooling fan operation.

Fuel Use Level Data

The navigation unit monitors the ECM/PCM fuel usage and tank level data via the F-CAN bus. The navigation system combines this information, the vehicle speed signal, GPS, and the map data for trip computer calculations.

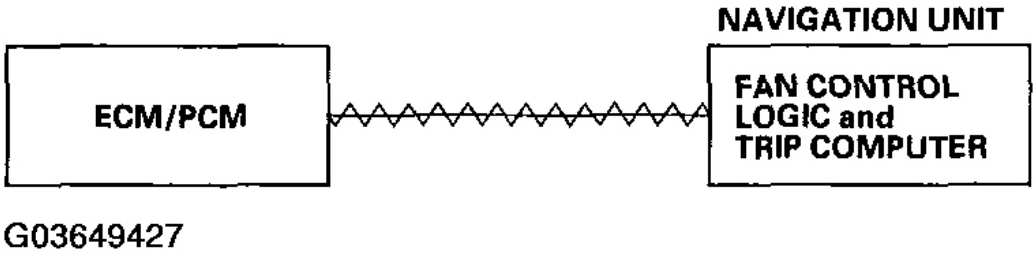


Fig. 8: Identifying Navigation System Fuel Use Level Data
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Yaw Rate Sensor

The yaw rate sensor (located in the navigation unit) detects the direction change (angular speed) of the vehicle. The sensor is an oscillation gyro built into the navigation unit.

Sensor Element Structure

The sensor element is shaped like a tuning fork, and it consists of the piezoelectric parts, the metal block, and the support pin. There are four piezoelectric parts: one to drive the oscillators, one to monitor and maintain the oscillation at a regular frequency, and two to detect angular velocity. The two oscillators, which have a 90-degree twist in the center, are connected at the bottom by the metal block and

supported by the support pin. A detection piezoelectric part is attached to the top of each oscillator. The driving piezoelectric part is attached to the bottom of one oscillator, and the monitoring piezoelectric part is attached to the bottom of the other oscillator.

Oscillation Gyro Principles

The piezoelectric parts have "electric/mechanical transfer characteristics." They bend vertically when voltage is applied to both sides of the parts, and voltage is generated between both sides of the piezoelectoric parts when they are bent by an external force. The oscillation gyro functions by utilizing this characteristic of the piezoelectric parts and "Coriolis force." (Coriolis force deflects moving objects as a result of the earth's rotation.) In the oscillation gyro, this force moves the sensor element when angular velocity is applied.

Operation

1. The driving piezoelectric part oscillates the oscillator by repeatedly bending and returning when an AC voltage of 6 kHz is applied to the part. The monitoring-side oscillator resonates because it is connected to the driving-side oscillator by the metal block.
2. The monitoring piezoelectric part bends in proportion to the oscillation and outputs voltage (the monitor signal). The navigation unit control circuit controls the drive signal to stabilize the monitor signal.
3. When the vehicle is stopped, the detecting piezoelectric parts oscillate right and left with the oscillators, but no signal is output because the parts are not bent (no angular force).
4. When the vehicle turns to the right, the sensor element moves in a circular motion with the right oscillator bending forward and the left oscillator bending rearward. The amount of forward/rearward bend varies according to the angular velocity of the vehicle.
5. The detecting piezoelectric parts output voltage (the yaw rate signal) according to the amount of bend. The amount of vehicle direction change is determined by measuring this voltage.

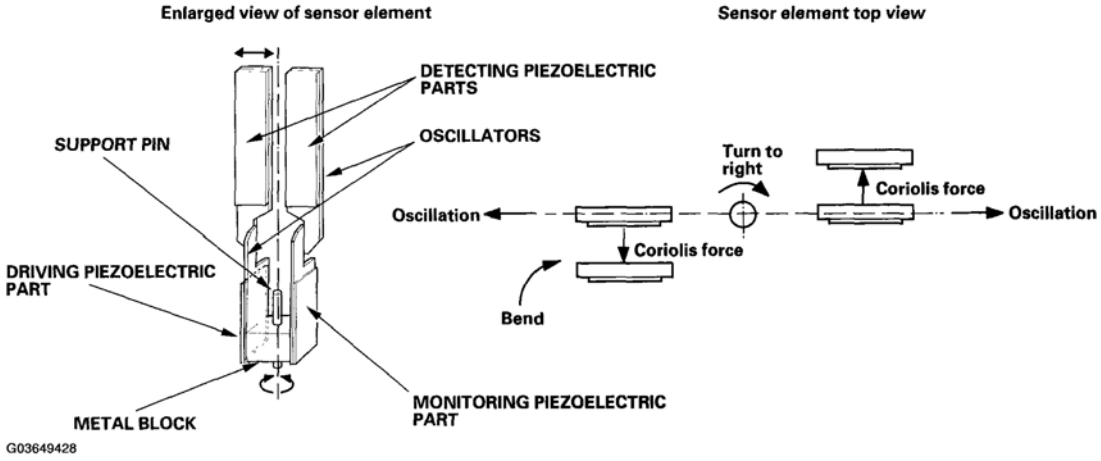


Fig. 9: Operation Of Sensor Element
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Global Positioning System (GPS)

The global positioning system (GPS) enables the navigation system to determine the current position of the vehicle by utilizing the signals transmitted from the satellites in orbit around the earth. The satellites transmit the satellite identification signal, orbit information, transmission time signal, and other information. When the GPS receiver receives a signal from three or more satellites simultaneously, it calculates the current position of the vehicle based on the distance to each satellite and the satellite is position in its respective orbit.

Position detection Image with GPS satellite

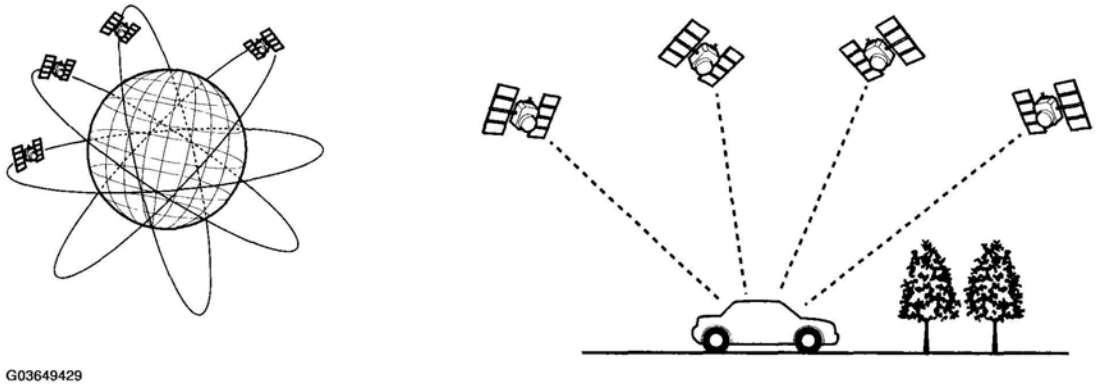


Fig. 10: Identifying Position Detection Image With GPS Satellite

Courtesy of AMERICAN HONDA MOTOR CO., INC.

NOTE: Four satellites on each of 6 orbits.

Precision of GPS

The precision of the GPS varies according to the number of satellites from which signals are received and the view of the sky. The precision is indicated by the color of the GPS icon shown on the display.

GPS ICON REFERENCE

GPS	ICON NUMBER OF SATELLITES	CONDITION	DESCRIPTION
No GPS icon shown	2 or less	Impossible to detect vehicle position	GPS function is normal. The satellite signals received by the GPS are too few to detect the vehicle position.
Square GPS icon shown with white "GPS"	3	Vehicle position detectable in 2 dimensions	The longitude and latitude of the vehicle position can be detected. (Less precise than detection in three dimensions)
Cube GPS icon shown with green "GPS"	4 or more	Vehicle position detectable in 3 dimensions	The longitude, latitude and the altitude of the vehicle position can be detected. (More precise than detection in two dimensions)

GPS Antenna

The GPS antenna amplifies and transmits the signals received from the satellites to the GPS receiver.

GPS Receiver

The GPS receiver is built in the navigation unit. It calculates the vehicle position by

receiving the signal from the GPS antenna. The vehicle position and signal reception condition is transmitted from the GPS receiver to the navigation control unit to adjust vehicle position.

Navigation Unit

The navigation unit calculates the vehicle position and guides you to the destination. The unit performs map matching correction, GPS correction, and distance tuning. It also controls the menu functions and the DVD-ROM drive, and interprets voice commands. With control of all these items, the navigation unit makes the navigation picture signal, then it transmits the signal to the display unit and audio driving instructions to the audio unit.

Calculation of Vehicle Position

The navigation unit calculates the vehicle position (the driving direction and the current position) by receiving the directional change signals from the yaw rate sensor and the travel distance signals from the PCMs vehicle speed pulse (VSP) signal.

Map Matching Tuning

The map matching tuning is accomplished by indicating the vehicle position on the roads on the map. The map data transmitted from the DVD-ROM is checked against the vehicle position data, and the vehicle position is indicated on the nearest road. Map matching tuning does not occur when the vehicle travels on a road not shown on the map, or when the vehicle position is far away from a road on the map.

GPS Tuning

The GPS tuning is accomplished by indicating the vehicle position as the GPS's vehicle position. The navigation unit compares its calculated vehicle position data with the GPS vehicle position data. If there is large difference between the two, the indicated vehicle position is adjusted to the GPS vehicle position.

Distance Tuning

The distance tuning reduces the difference between the travel distance signal from the VSP and the distance data on the map. The navigation unit compares its

calculated vehicle position data with the GPS vehicle position data. The navigation unit then decreases the tuning value when the vehicle position is always ahead of the GPS vehicle position, and it increases the tuning value when the vehicle position is always behind the GPS vehicle position.

Route Guidance

The navigation unit can calculate different routes to a selected destination. You have five options:

- Direct Route - Calculate a route that is the most direct.
- Easy Route - Calculate a route that minimizes the number of turns needed.
- Minimize Freeways - Calculate a route that avoids freeway travel. If that is not possible, keep the amount of freeway travel to a minimum.
- Minimize Toll Roads - Calculate a route that avoids, or minimizes travel on toll roads.
- Maximize Freeways - Calculate a route that uses freeways as much as possible.

Audio Guidance

The navigation unit transmits audio driving instructions before entering an intersection or passing a junction. The audio instructions come through the audio unit to the front speakers.

NOTE: The front speakers are muted whenever the navigation system is giving guidance commands, and all of the speakers when the voice control system is being used.

DVD-ROM

The map data (including all scale rates) is stored in the DVD-ROM. The map data includes:

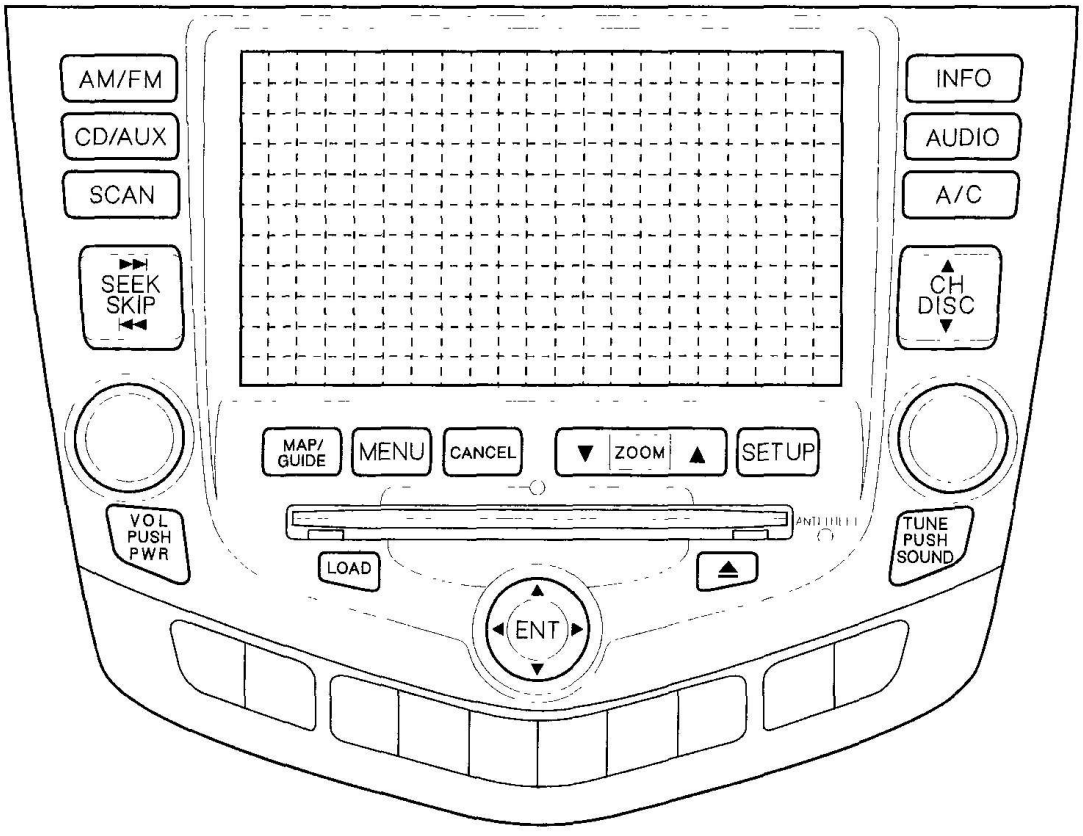
- Road distances, road widths, speed limits, traffic regulations, passing time at junction, distances to junctions, and the driving instructions for audio guidance.
- Latitude and longitude GPS.

Audio Unit

The audio unit receives the audio driving instructions from the navigation unit and transmits the instructions through the front speakers even when the audio system is in use. The audio unit is also a termination point in the GA-Net bus.

Display Unit

The display unit uses liquid crystal display (LCD). The LCD is a 7-inch-diagonal, thin film transistor (TFT), stripe type with 330,960 picture elements, The color film and fluorescent light are laid out on the back of the liquid crystal film. The touch sensor on the front of the LCD consists of a touch sensitive resistive membrane with an infinite number of possible touch locations. To maintain compatibility with earlier display units the sensing locations are confined to a grid of 20 vertical and 10 horizontal touch locations. This produces 200 total sensing zones. The display unit transmits the signal from each operation key and the touch switches to the navigation unit over the GA-Net bus.



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Fig. 11: View Of Display Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Microphone

The microphone (on the ceiling, near the front map light) receives voice commands and transmits them to the navigation unit for interpretation.

Talk Button

Activates the voice control system in the navigation unit to accept voice commands.

Back Button

Returns the display to the previous screen (similar function as the CANCEL button).

Glossary

The following is a glossary of terms pertaining to the Voice Recognition Navigation System.

ITEM DEFINITION

Item	Definition
Audio-HVAC subdisplay	The upper display that shows the time and current status of the audio and climate control systems.
Breadcrumbs	Off road tracking dots that can be followed on the map to retrace your route back to a mapped (digitized) road. This function can be turned on/off in Setup screen 1.
CAN	Controller Area Network. This communication network allows processors in the vehicle to send/receive information. The fuel pulses used by the trip computer are received from the PCM using the F-CAN (Fast Controller Area Network) bus.
B-CAN	Body CAN Bus (see CAN)
CPU	Central Processing Unit. The main device within the navigation unit that coordinates the rest of the electronic functions.

Database	This consists of the Map data, and the POI (Points Of Interest) data stored on the DVD
DBW	Drive By Wire. Allows electrical control of the throttle without the need of a mechanical linkage.
DCA	Detailed Coverage Area. Main metropolitan areas in the Lower 48 states, and Southern Canada are mapped to this level. See the Navigation Owner's manual for a list of these areas.
DTC	Diagnostic Trouble Codes. Use the Honda PGM Tester, or HDS tablet to obtain, and troubleshoot the cause of these codes.
Dead Reckoning	The use of the speed signal, and yaw rate sensor to position the vehicle on the map even when the GPS signal is obscured by tall buildings, or while driving in a tunnel.
Digitized Road	A road that appears on the navigation screen. The road name will appear at the bottom of the navigation screen. If the user drives "off road", the navigation system will display "Not on a digitized road", and if 1/2 mile, then "breadcrumbs" will appear.
Disclaimer Screen	Screen containing cautionary information. It is meant to be read carefully and acknowledged by the customer when using the navigation system.
DVD or DVD-ROM	Digital Versatile Disk. The navigation program and database resides on this disk. See the Navigation Owner's Manual for information on how to order a replacement or update DVD.
ECM	Engine Control Module. Typically referred to as the PCM.
E/T	Elapsed Time for the current trip as displayed by the trip computer screen.
FAQ	Frequently Asked Question. See the Navigation Owner's Manual for a list of the customer FAQs, and troubleshooting information.
F-CAN	Fast CAN Bus (see CAN)
FE	Fuel Economy value as displayed on the trip computer screen.

Fuel Pulses	This signal is transmitted on the CAN bus, and is used by the Trip Computer to calculate the fuel economy.
GA-Net bus	Units communication line.
GPS	Global Positioning System. A network of 24 satellites in orbit around the earth. The navigation system can simultaneously receive signals from up to 12 satellites to accurately position the vehicle on the map.
HDS	Honda Diagnostic System. A hand held tablet PC for use in diagnosing vehicle problems. This device can be used to obtain DTC codes for diagnosis of navigation system CAN related problems.
H/U	Head Unit. The navigation system display unit assembly in the dash.
Initialization	This refers to the period needed to re-acquire the GPS satellite orbital information whenever the navigation system power has been disconnected. This can take from 10 to 45 minutes.
LCD	Liquid Crystal Display (the navigation screen)
Map Matching	The received GPS information allows the navigation system to position the vehicle on the map. Map matching has occurred if the map screen is displaying the current street name in the bottom-shaded area.
Mic	Abbreviation for the microphone used for receiving voice commands. It is located near the map light in the ceiling.
Model (in the diagnosis Version screen)	A "model code" stored on an internal "chip" in the navigation unit. The model code tells the navigation unit what software to load. Every navigation unit "model" has a unique part number for the navigation unit.
MW	Maneuver Window. While on-route to a destination, this window displays information about the next maneuver.
Navi	Abbreviation for the Navigation System
Off Route	This occurs when the user leaves mapped roads. Off road tracking dots ("breadcrumbs") are displayed if the option is enabled in Setup. The user can use them to return to a

	mapped road. The bottom of the navigation screen will say "Not on a digitized road".
Outlying Areas	These are rural areas that typically have only their main roads mapped. All other roads are shown in light brown for reference only, since they have not been verified.
PC Card Slot	The PC Card (PCMCIA, type II) slot is for factory use only.
PCM	Powertrain Control Module. This unit supplies the navigation system speed signal, and sends fuel pulses for the trip computer function via the F-CAN network.
PCMCIA	A computer industry defined term referring to the PC Card slot standard.
PIN	Personal Identification Number. A random 4 digit number created by the customer to protect personal information.
POI	Point Of Interest. These are the businesses, schools etc. found under the "places" option on the main menu.
Polygon	Colored areas on the map screen denoting parks, schools etc. See the Navigation Owner's Manual "Traveling to Your Destination" for a list of the assigned colors.
QWERTY	Keyboard layout resembling the typewriter keys. The keyboard layout can be changed to an alphabetical layout in the Setup mode.
SCS connector	The 2-pin connector used to put the navigation system into the diagnostic mode.
Security Code	Code needed to activate the navigation system. The security code can be obtained from the "iN" by entering the navigation system control serial number. The serial number can be found from the diagnostic screens (Unit Check, Navi ECU), or from the under side of the control unit.
Touch Switches or Touch Sensor	The navigation screen has 2 clear films on the screen panel. When you touch the screen panel, the films engaged and the display unit detects the touch point.
Tuning	A continual update of internal navigation system scaling factors. See the individual sensor tuning discussions under either "System Description", or "System Diagnosis

	Mode" (see **SYSTEM DIAGNOSIS MODE**)
Unverified Streets	These streets have not been verified for turn restrictions, one-way, etc. They are shown in light brown on the map. You can enter address destinations in these areas, but voice guidance ends at the last verified street closest to your destination.
Verified Streets	These streets consist of the detailed metropolitan coverage areas, and all other inter-town connection roads. These roads are shown in black on the map.
VP	Vehicle Position. When in map mode, this circular icon shows the vehicle position on the map. Touch this icon to show the latitude, longitude, and elevation of your current position.
VR	Voice Recognition. This allows voice control of many of the navigation functions. The hardware consists of the microphone, steering wheel (Talk/Back) buttons, and the front speakers. See the overview for more information.
VSP	Vehicle Speed Pulse. This pulse signal coming from the PCM is used to update the Vehicle position on the map, and to calculate the trip computer fuel economy. These pulses do not indicate direction (forward or backward). When in reverse, the navigation receives a signal from the MICU and directs the VP to move backwards on the map.
VSS	Vehicle Speed Sensor. This sensor reads the output shaft speed at the transmission and, provides a speed pulse to the PCM. The PCM sends this pulse to the navigation system and speedometer.
XM Satellite Radio	A satellite band radio system where signals are received from either a satellite or land based transmitters.
Yaw Sensor	This device is located in the navigation system control unit and senses the side-to-side twisting force generated when the vehicle turns.

System Function Diagram

This diagram shows the features of the navigation system starting at the center and

working outward in layers. The navigation program starts at "Key ON", and then displays the globe screen. Once the disclaimer screen is acknowledged, the next shaded portions of the diagram become active. However, some functions of the INFO and SET UP buttons, and all functions of the AUDIO and A/C buttons can be accessed immediately after the globe screen (white).

These items above the map screen show various methods to begin a destination, such as "Go Home". Once you begin driving to your destination, you are provided with map/voice guidance, routing cautions (in unverified areas), and a directions list. While driving to your destination, use the voice control system as much as possible to interact with the navigation, audio, and climate control systems.

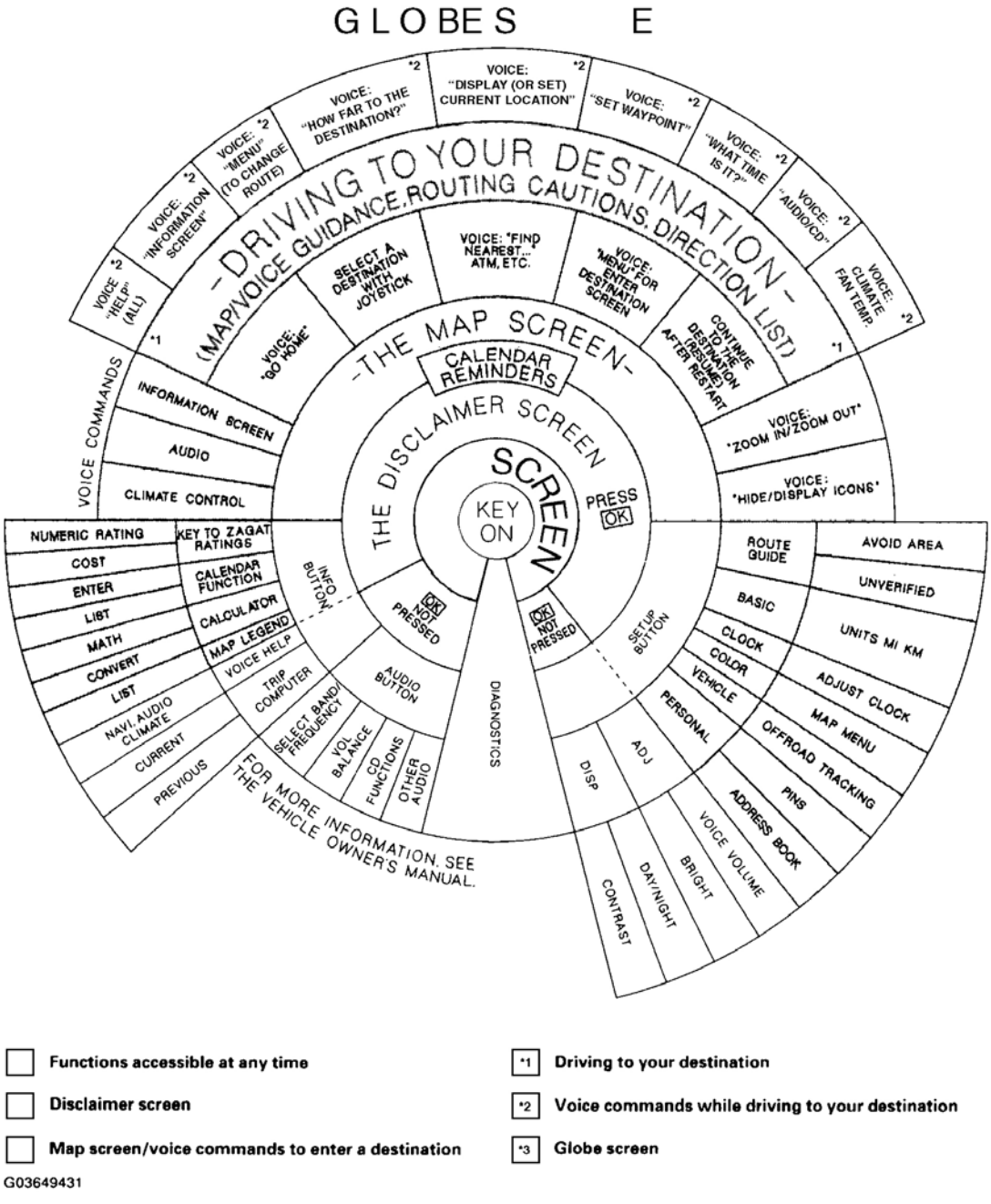


Fig. 12: Identifying System Function Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Diagnostic Function Diagram

This diagram shows the diagnostic slice of the System Function Diagram. It has the diagnostic features of the navigation system starting at the center and working

outward in layers. The diagnostic starts at "Key ON," and then displays the Diagnostic Main Menu (Select Diagnosis items) after:

The diagram shows the available menu choices starting at the bottom left and moving clockwise.

In most cases, do not clear or change settings in any diagnostic screen unless instructed to do so in the explanation or by the factory. If the factory supplies you with a PCMCIA card to place in the PC slot, then the features specified in the diagram with "Card" are available.

- Starting the vehicle with the SCS connector plugged in to the navigation service check connector (see **FORCED STARTING OF DISPLAY**) to get to the System Links screen, then selecting Return.
- Simultaneously pressing and holding the MENU, MAP/GUIDE, and CANCEL buttons.

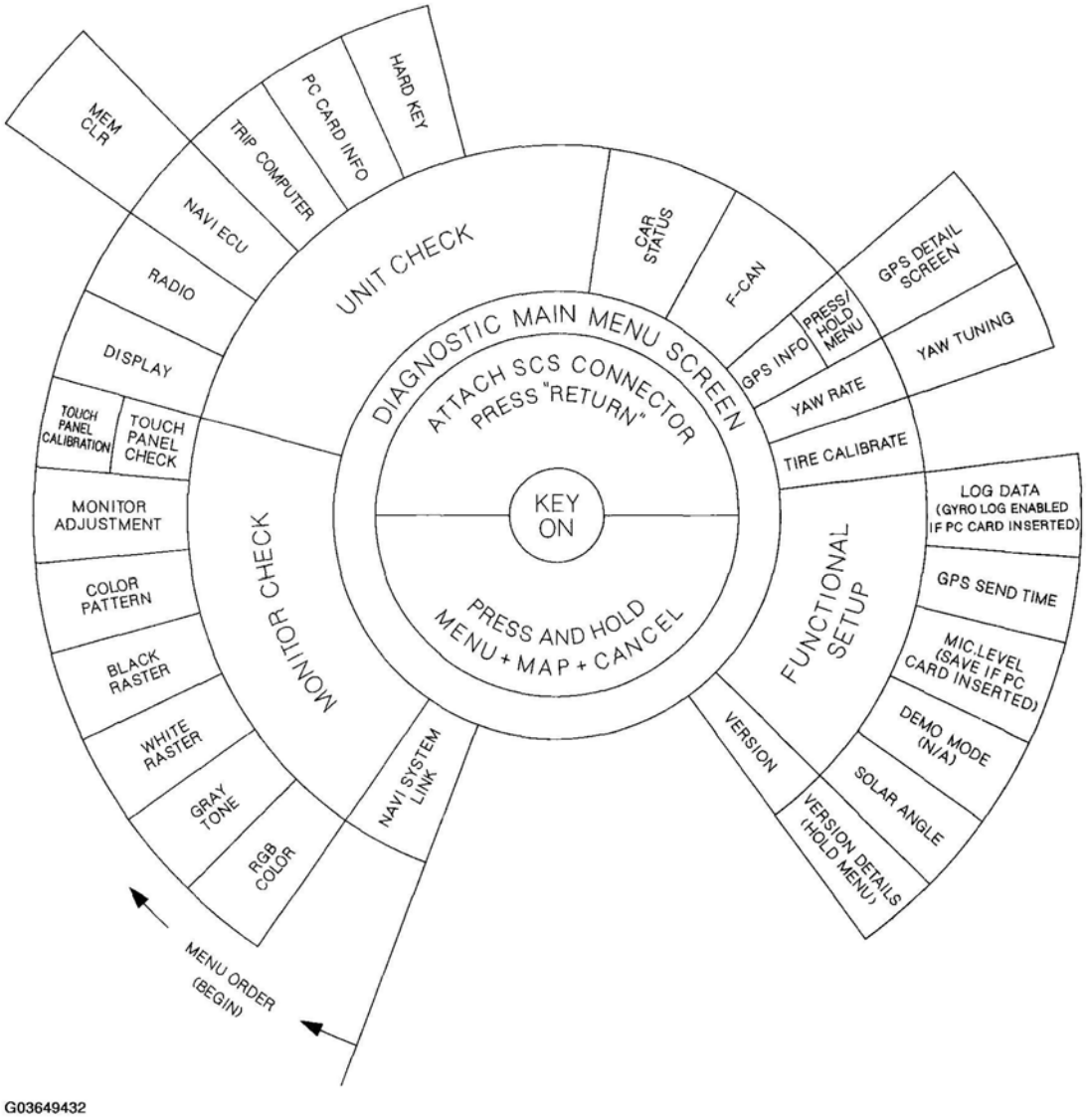
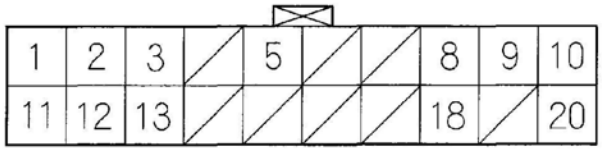


Fig. 13: Identifying Diagnostic Function Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NAVIGATION UNIT INPUTS AND OUTPUTS FOR CONNECTOR A (20P)



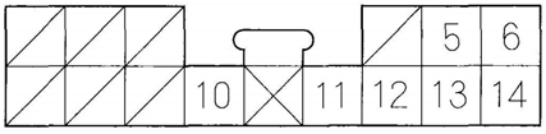
Wire side of female terminals

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
1	WHT	R SIG (Red signal)	Red color signal	0—1 V AC	If open: Red color missing (see "RGB Color" diagnostic). If short to ground: Red color missing (see "RGB Color" diagnostic).
2	RED	G SIG (Green signal)	Green color signal	0—1 V AC	If open: Green color missing (see "RGB Color" diagnostic). If short to ground: Green color missing (see "RGB Color" diagnostic).
3	GRY	SH SIG (Shield signal)	Shield for terminal No. 1, 2, 11, 12, 13	0 V	If open: No change to display. If short to ground: No change to display.
5	RED/BLK	ILL (+) (Illumination positive)	Parking light on signal from dash and console lights, under-hood "Relay fuse box"	Lights on= battery voltage, Lights off=0 V	If open: When brightness="Auto", night mode for the display is inoperative when lights on. If short to ground: Blows fuse 4 in under-hood fuse/relay box.
8	WHT	CAN-H (CAN high)	F-CAN bus communication with the "gauge control module"	Pulses 2.5—6 V average 3 V	If open: 1) System Links FI-ECU, and Meter both show "NG". 2) F-CAN diagnostic="NG". 3) B-CAN diagnostic="NG". 4) Car status CHG (CAN)=0. 5) Functional Setup, Trip into, FUP & Sampled FL=0. If short to ground: Same diagnostic conditions as when open, and also sets the following DTCs. • B1168 Gauge Control Module loss of Comm. (Engine) • B1169 Gauge Control Module loss of Comm. (A/T) • B1178 F-CAN communication Circuit error. • U0073 (F-CAN Bus off) • U0155 (F-CAN Gauge control) • U0121 (F-CAN TCS control)
9	GRY	SH DISP BUS (Shield display bus)	Shield for display bus terminal No. 10, 20	0 V	If open: No change to display. If short to ground: No change to display.
10	RED/WHT	DISP BUS (+) (Display bus positive)	Date bus (+) GA-Net	0 V—5 V pulses average 2.5 V depends on bus traffic	If open: Navigation buttons and touch screen do not work. If short to ground: Navigation buttons and touch screen do not work.
11	YEL	B SIG (Blue signal)	Blue color signal	0—1 V AC	If open: Blue color missing (see "RGB Color" diagnostic). If short to ground: Blue color missing (see "RGB Color" diagnostic).
12	BRN	C SIG (Composite signal)	Composite video (vertical/horizontal) Synchronizing signal	0.3 V AC	If open: Picture rolls horizontally, colors still visible. If short to ground: Picture rolls horizontally, colors still visible.
13	BLU	GND SIG (Ground signal)	Ground for color signal	0 V	If open: No change to display. If short to ground: No change to display.
18	RED	CAN-L (CAN low)	F-CAN bus communication with the "gauge control module"	Pulses 2.5—6 V average 3 V	If open: 1) System Links FI-ECU, and Meter both show "NG". 2) F-CAN diagnostic="NG". 3) B-CAN diagnostic="NG". 4) Car status CHG (CAN)=0. 5) Functional Setup, Trip into, FUP & Sampled FL=0. If short to ground: Same diagnostic conditions as when open, and also sets the following DTCs. • B1168 Gauge Control Module loss of Comm. (Engine) • B1169 Gauge Control Module loss of Comm. (A/T) • B1178 F-CAN communication Circuit error. • U0073 (F-CAN Bus off) • U0155 (F-CAN Gauge control) • U0121 (F-CAN TCS control)
20	RED/BLU	DISP BUS (−) (Display bus negative)	Date bus (−) GA-Net	0 V—5 V pulses nominally 2.5 V	If open: Navigation buttons and touch screen do not work. If short to ground: Hard and touch buttons work OK.

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Fig. 14: Identifying Navigation Unit Inputs And Outputs For Connector A (20P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NAVIGATION UNIT INPUTS AND OUTPUTS FOR CONNECTOR B (14P)



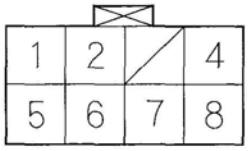
Wire side of female terminals

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
5	WHT/GRN	RG L (+) (Route guidance voice left positive)	Left audio signal of voice guidance, and Voice Recognition (VR) prompts	Audio signal 0.004—0.04 V	If open: If voice activated, radio speakers buzz; if voice off, no effect. If short to ground. If voice activated, radio speakers buzz; if voice off, no effect.
6	BLU	MIC SIG (+) (Mic signal positive)	Microphone output signal positive	4—5 V (with Talk button pressed)	If open: No microphone signal shown in diagnostic screens: "Navi System Link" and Functional Setup "Mic Level". If short to ground: No microphone signal shown in diagnostic screens: "Navi System Link" and Functional Setup "Mic Level".
10	GRY	STRG SW (Steering switches)	Steering switch output	4—5 V (Talk button depressed) 2.5—3 V (Back button depressed)	If open: Steering wheel "Talk", and "Back" switch/ buttons do not work. If short to ground: Steering wheel "Talk", and "Back" switch/buttons do not work.
11	LT GRN	SH RG (Shield route guidance)	Shield for terminal No. 5, 12	0 V	If open: No effect on voice output. If short to ground: No effect on voice output.
12	GRN	GND RG (Ground routs guidance)	Ground for voice guidance, and Voice Recognition (VR) prompts	0 V	If open: No effect on voice output. If short to ground: No effect on voice output.
13	LT BLU	SH MIC (Shield mic)	Shield for terminal No. 6, 14	0 V	If open: No effect on voice recognition. If short to ground: No effect on voice recognition
14	PNK	GND MIC (Ground mic)	Ground for microphone signal	0 V	If open: No microphone signal shown in diagnostics: "Navi System Link" and Functional Setup "Mic Level". If short to ground: No effect on voice recognition.

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Fig. 15: Identifying Navigation Unit Inputs And Outputs For Connector B (14P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NAVIGATION UNIT INPUTS AND OUTPUTS FOR CONNECTOR C (8P)



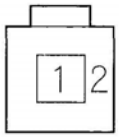
Wire side of female terminals

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
1	WHT/RED	+B (+B Power source)	Continuous power source	Battery voltage	If open: Display picture goes out (display back light still on). NOTE: System will reboot to "enter code" screen. If short to ground: Blows fuse No. 7 (10 A) in the under-dash fuse/relay box.
2	YEL/RED	ACC (Accessory)	Power source for accessories	Battery voltage at ACC (I)	If open: Display picture goes out (display back light still on). NOTE: When re-connected the system will reboot to "enter code" screen. If short to ground: Blows fuse No. 32 (7.5 A) in the under-dash fuse/relay box.
4	BLK	GND (Ground)	Ground for navigation unit	0 V	If open: No effect on system. If short to ground: No effect on system.
5	GRN	BACK LT (Back light)	Reverse signal of select laver from "Multiplex Integrated Control Unit" (A/T) or backup light switch (M/T)	In reverse, battery voltage: Otherwise 0 V	If open: Navigation never sees reverse. Diagnostic screen "Car Status", "Back"=0. If short to ground: Blows fuse No. 21 (7.5 A) in the under-dash fuse/relay box.
6	BLU/WHT	VSP (Vehicle speed pulse)	Vehicle speed pulse signal from PCM	Pulses 0—5 V: Average 2.5 V, when moving	If open: No vehicle speed pulses. Diagnostic screen "Car Status", VSP Navi=0. If short to ground: No vehicle speed pulses. Diagnostic screen "Car Status", VSP Navi=0.
7	GRN/RED	DIAG P (Diagnostic positive)	Service check signal for navigation system	5—6 V	If open: No effect on system. If short to ground: System goes into diagnostic mode.
8	GRN/YEL	DIAG N (Diagnostic negative)	Ground for service check signal	0 V	If open: No effect on system. If short to ground: No effect on system.

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Fig. 16: Identifying Navigation Unit Inputs And Outputs For Connector C (8P) Courtesy of AMERICAN HONDA MOTOR CO., INC.

NAVIGATION UNIT INPUTS AND OUTPUTS FOR CONNECTOR E (2P)



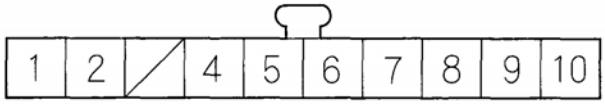
Wire side of female terminals

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
1	——	GPS	GPS signal (5 V in, GPS signal out)	5 V	If open: GPS icon on screen is white, system links screen ANT shows "NG." If short to ground: Same as open.
2	——	GND GPS	Ground for GPS signal	0 V	If open: GPS icon on screen is white, system links screen ANT shows "NG." If short to ground: No effect on system.

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Fig. 17: Identifying Navigation Unit Inputs And Outputs For Connector E (2P) Courtesy of AMERICAN HONDA MOTOR CO., INC.

DISPLAY UNIT INPUTS AND OUTPUTS FOR CONNECTOR A (10P)



Wire side of female terminals

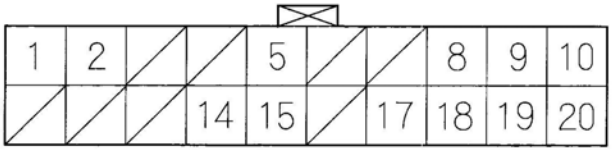
Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
1	BLK	GND SIG		0 V	If open: Display visible, but very dim. If short to ground: Display unaffected.
2	BLU/ORN	5 V		5 V	If open: All display segments show briefly at key on. If short to ground: All LCD segments do not work, display backlight on.
4	YEL/RED	RESET	Time set sync signal	5 V	If open: Clock display will not set to navigation time (when time offset is applied or when "Reset" touched in Setup "Clock Adjustment" screen). If short to ground: All LCD segments do not work, display backlight on.
5	YEL	CLOCK		0—0.04 V	If open: Randomly displays some characters, display backlight on. If short to ground: Randomly displayed characters, display backlight on.
6	BLU/RED	DATA		0—0.04 V	If open: All LCD segments on, backlight on. If short to ground: All LCD segments on, backlight on.
7	BLU	CE		0 V	If open: All LCD segments on, backlight on. If short to ground: All LCD segments on, backlight on.
8	GRY	SH SIG	Shield for terminal No. 4, 5, 6, 7	0 V	If open: No effect on display. If short to ground: No effect on display.
9	RED	LCD BL— (LCD backlight—)	Power for LCD backlight—	0—0.2 V	If open: Display functions normal, but display is very dim. If short to ground: Display functions normally.
10	GRN	LCD BL+ (LCD backlight+)	Power for LCD backlight+	9.2 V	If open: Display completely blank. If short to ground: Display completely blank.

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Fig. 18: Displaying Unit Inputs And Outputs For Connector A (10P)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

DISPLAY UNIT INPUTS AND OUTPUTS FOR CONNECTOR B (20P)



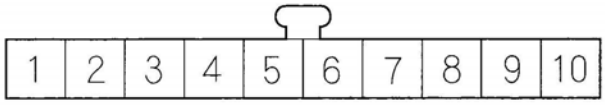
Wire side of female terminals

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
1	WHT/RED	+B (+B power source)	Continuous power source	Battery voltage	If open: Screen completely off (no backlight visible). If short to ground: Blows fuse No. 7 (10 A) in the under-dash fuse/relay box.
2	YEL/RED	ACC (Accessory)	Power source for accessory	Battery voltage at ACC (I)	If open: Display and buttons do not work. If short to ground: Blows fuse No. 32 (7.5 A) in the under-dash fuse/relay box.
5	RED/WHT	DISP BUS (+) (Display bus positive)	Data bus (+) GA-Net	0 V—5 V pulses average 2.5 V depends on bus traffic	If open: Navigation buttons and touch screen do not work. If short to ground: Navigation buttons and touch screen do not work.
8	WHT	R SIG (Red signal)	Red color signal	0—1 V AC	If open: Red color missing (see "RGB Color" diagnostic). If short to ground: Red color missing (see "RGB Color" diagnostic).
9	RED	G SIG (Green signal)	Green color signal	0—1 V AC	If open: Green color missing (see "RGB Color" diagnostic). If short to ground: Green color missing (see "RGB Color" diagnostic).
10	BLK	GND (Ground)	Ground for display unit	0 V	If open: No change to display. If short to ground: No change to display.
14	GRY	SH DISP BUS (Shield display bus)	Shield for display bus terminal No. 5, 15	0 V	If open: No change to display. If short to ground: No change to display.
15	RED/BLU	DISP BUS (—) (Display bus negative)	Date bus (—) GA-Net	0 V—5 V pulses average 2.5 V depends on bus traffic	If open: Navigation buttons and touch screen do not work. If short to ground: Hard and touch buttons work OK.
17	BLU	GND SIG (Ground signal)	Ground for color signal	0 V	If open: No change to display. If short to ground: No change to display.
18	YEL	B SIG (Blue signal)	Blue color signal	0—1 V AC	If open: Blue color missing (see "RGB Color" diagnostic). If short to ground: Blue color missing (see "RGB Color" diagnostic).
19	BRN	C SIG (Composite signal)	Composite video (vertical/horizontal) synchronizing signal	0.3 V AC	If open: Picture rolls horizontally, colors still visible. If short to ground: Picture rolls horizontally, colors still visible.
20	GRY	SH SIG (Shield signal)	Shield for terminal No. 8, 9, 17, 18, 19	0 V	If open: No change to display. If short to ground: No change to display.

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Fig. 19: Displaying Unit Inputs And Outputs For Connector B (20P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUDIO-HVAC SUBDISPLAY UNIT INPUTS AND OUTPUTS FOR 10P CONNECTOR



Wire side of female terminals

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
1	BLK	GND SIG	—	0 V	If open: Display visible, but very dim. If short to ground: Display unaffected.
2	BLU/ORN	5 V	—	5 V	If open: All display segments show briefly at key on. If short to ground: All LCD segments do not work, display backlight on.
3	BLK	GND	—	0 V	—
4	YEL/RED	RESET	Time set sync signal	5 V	If open: Clock display will not set to navigation time (when time offset is applied or when "Reset" touched in Setup "Clock Adjustment" screen). If short to ground: All LCD segments do not work display backlight on.
5	YEL	CLOCK	—	0—0.04 V	If open: Randomly displays some characters, display backlight on. If short to ground: Randomly displayed characters, display backlight on.
6	BLU/RED	DATA	—	0—0.04 V	If open: All LCD segments on, backlight on. If short to ground: All LCD segments on, backlight on.
7	BLU	CE	—	0 V	If open: All LCD segments on, backlight on. If short to ground: All LCD segments on, backlight on.
8	GRY	SH SIG	Shield for terminal No. 4, 5, 6, 7	0 V	If open: No effect on display. If short to ground: No effect on display.
9	RED	LCD BL— (LCD backlight—)	Power for LCD backlight—	0—0.2 V	If open: Display function normal, but display is very dim. If short to ground: Display functions normally.
10	GRN	LCD BL+ (LCD backlight+)	Power for LCD backlight+	9.2 V	If open: Display completely blank. If short to ground: Display completely blank.

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Fig. 20: Identifying Audio-HVAC Subdisplay Unit Inputs And Outputs For 10P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

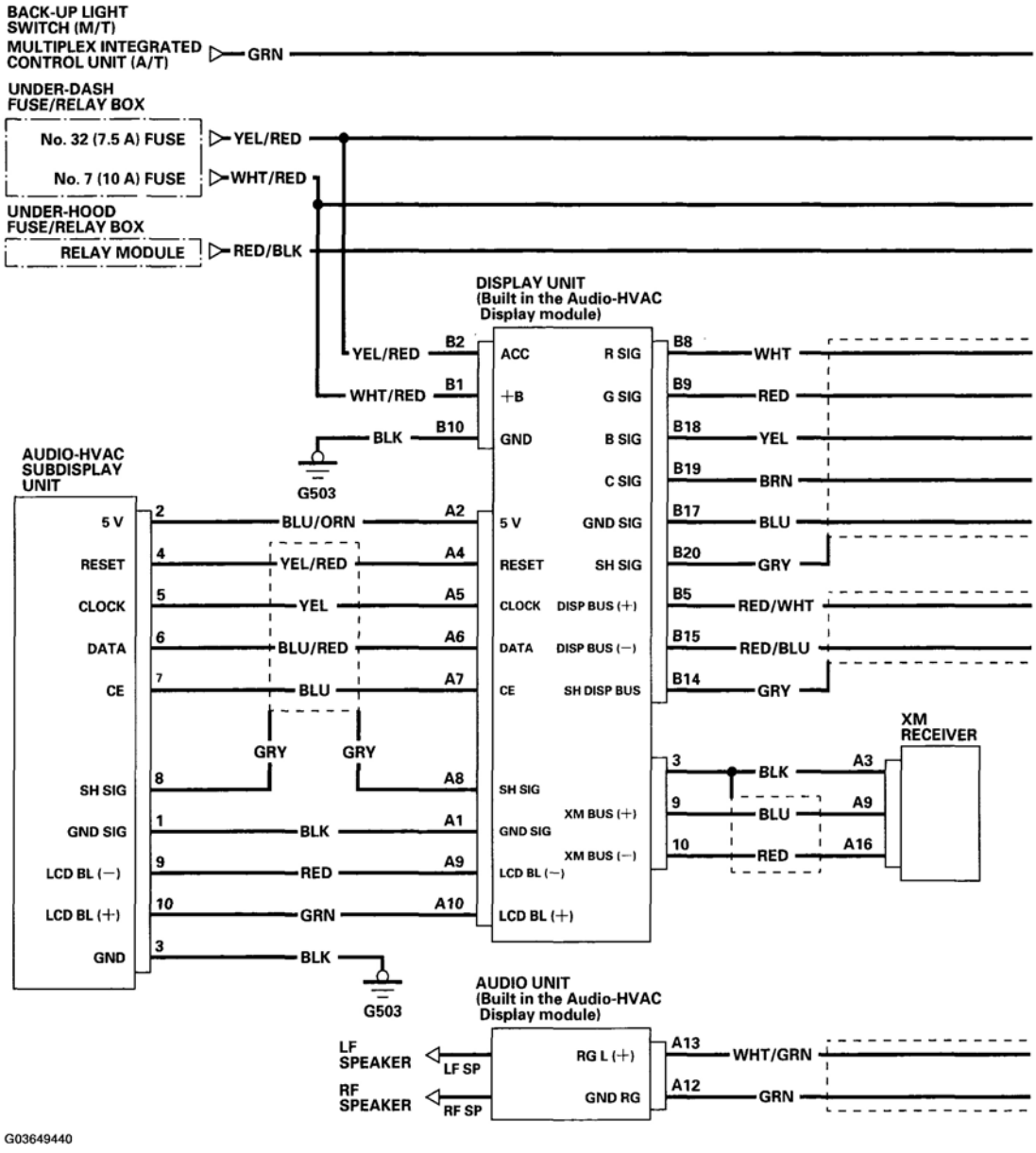
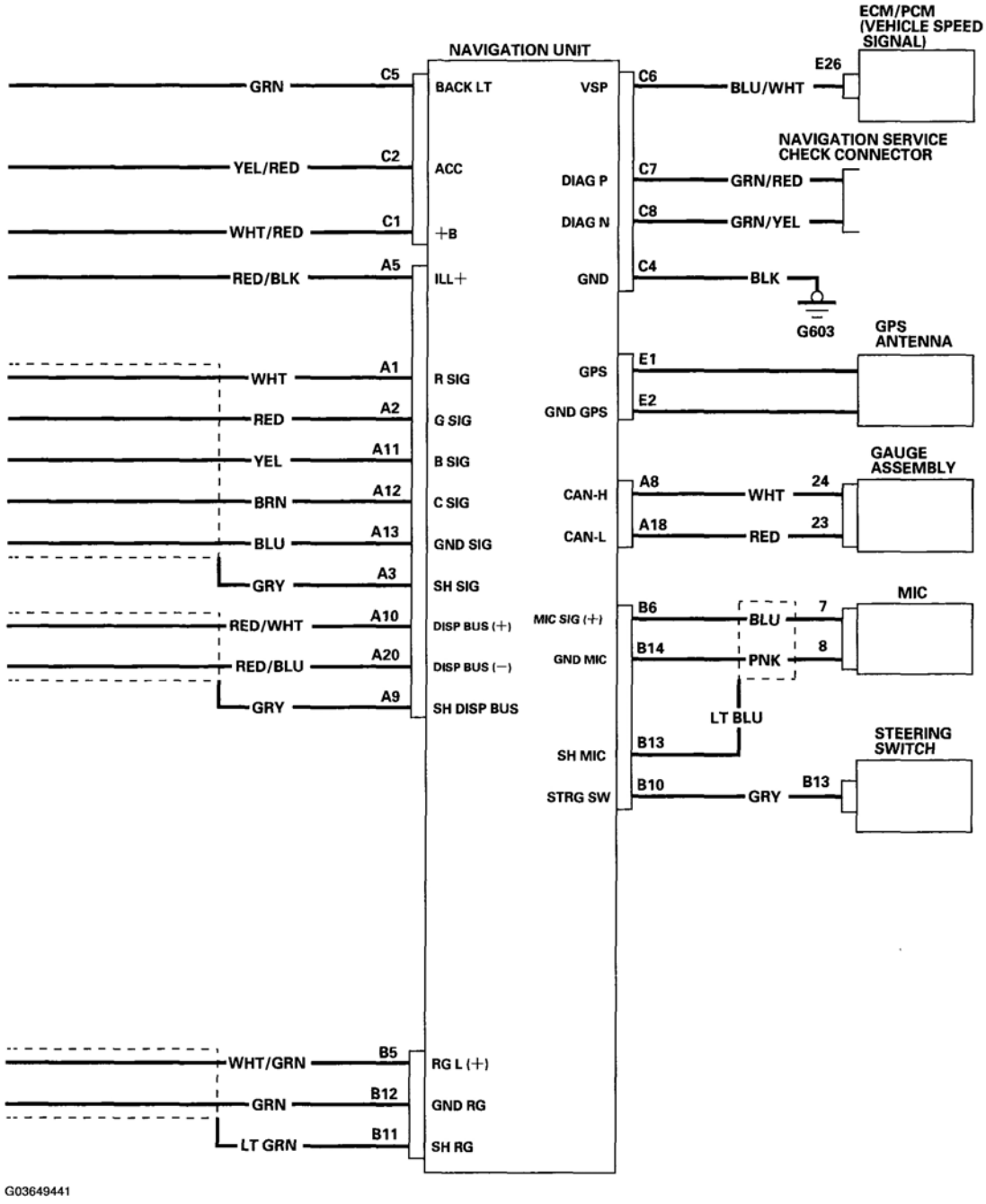


Fig. 21: Identifying Navigation System Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



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Fig. 22: Identifying Navigation System Circuit Diagram (2 Of 2) Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUDIO-HVAC SUBDISPLAY UNIT 10P CONNECTOR

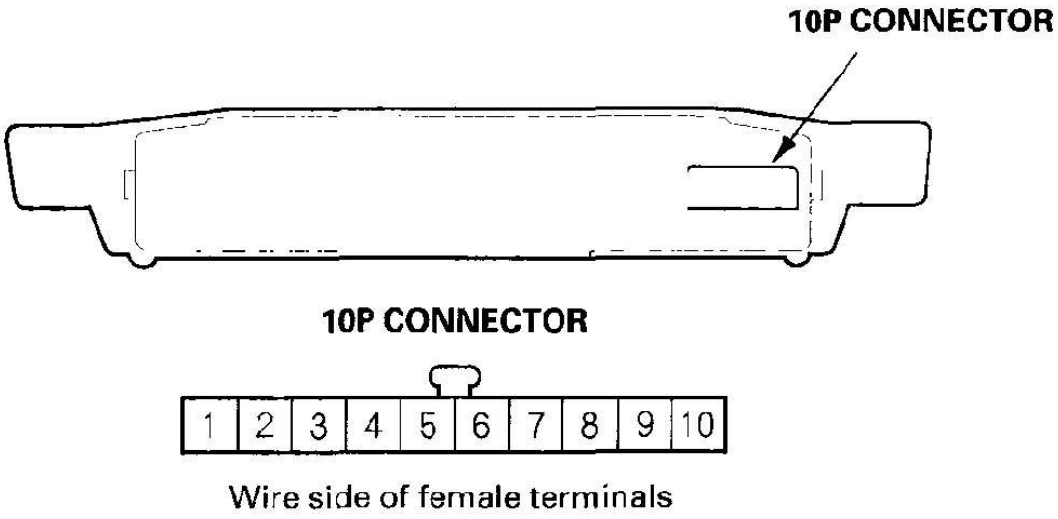


Fig. 23: Identifying Audio-HVAC Subdisplay Unit 10P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DISPLAY UNIT CONNECTORS

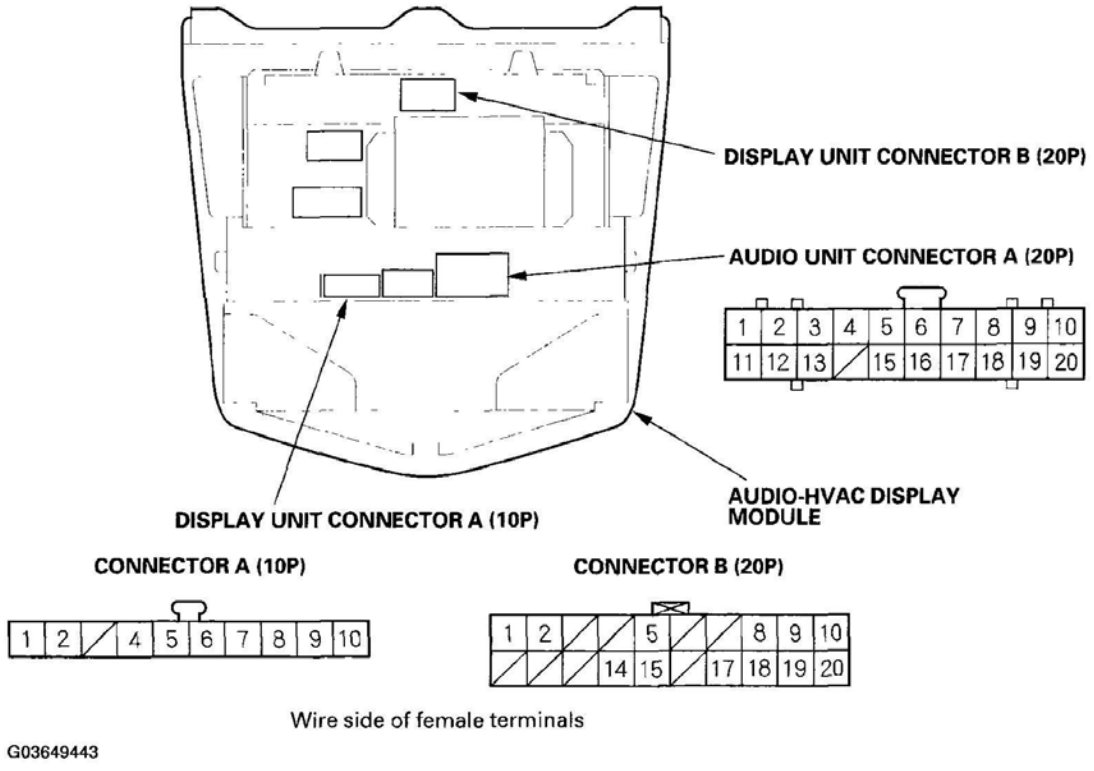


Fig. 24: Identifying Display Unit Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NAVIGATION UNIT CONNECTORS

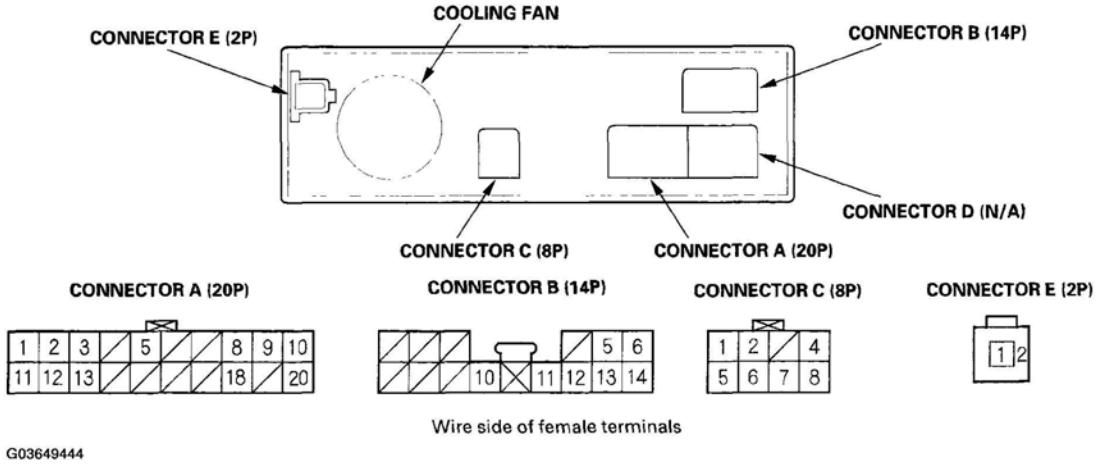


Fig. 25: Identifying Navigation Unit Connectors

Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING

NO PICTURE IS DISPLAYED

NOTE:

- **Always check the connectors for poor connections or loose terminals.**
- **Diagnostic Test: Navi System Link**
- **Confirm the correct DVD disc is installed in the navigation unit (see MAP MATCHING)**

1. Check the No. 7 (10 A) fuse and No. 32 (7.5 A) fuse in the under-dash fuse/relay box, and reinstall the fuse if it is OK.

   Is the fuse OK?

   YES - Go to step 2.

   NO - Replace the fuse and recheck.
2. Turn the ignition switch to ACC (I).
3. Operate the radio and listen to the audio.

   Can audio be heard?

   YES - Go to step 4.

   NO - Check the ACC circuit.
4. Turn the ignition switch ON (II).
5. Measure the voltage between body ground and navigation unit connector C (8P) terminals No. 1 and No. 2 individually.

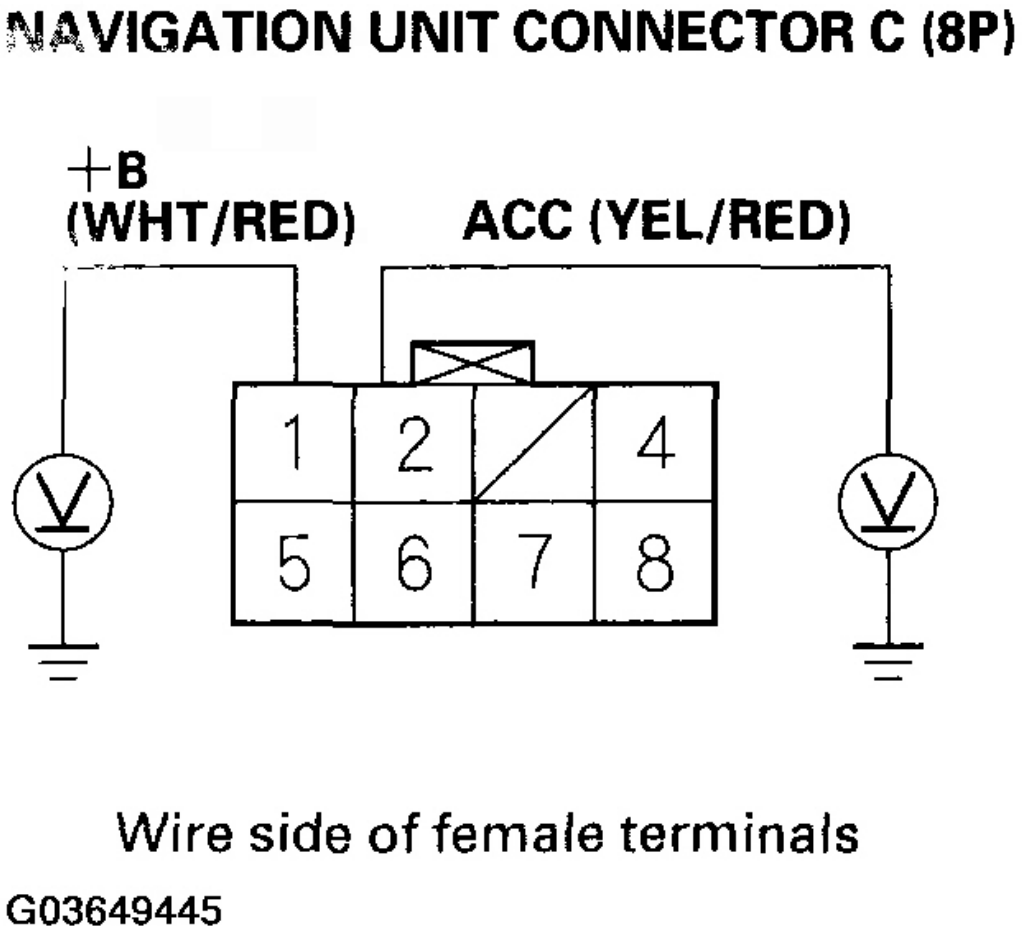


Fig. 26: Measuring Voltage Between Body Ground & Navigation Unit Connector C (8P) Terminals No. 1 And No. 2 Individually
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 6.

NO - If the +B wire does not have voltage, repair open in the wire between the under-dash fuse/relay box and the navigation unit.

If the ACC wire does not have voltage, repair open in the wire between

the under-dash fuse/relay box and the navigation unit.

6. Turn the ignition switch OFF.
7. Disconnect the navigation unit connector C (8P).
8. Check for continuity between navigation unit connector C (8P) terminal No. 4 and body ground.

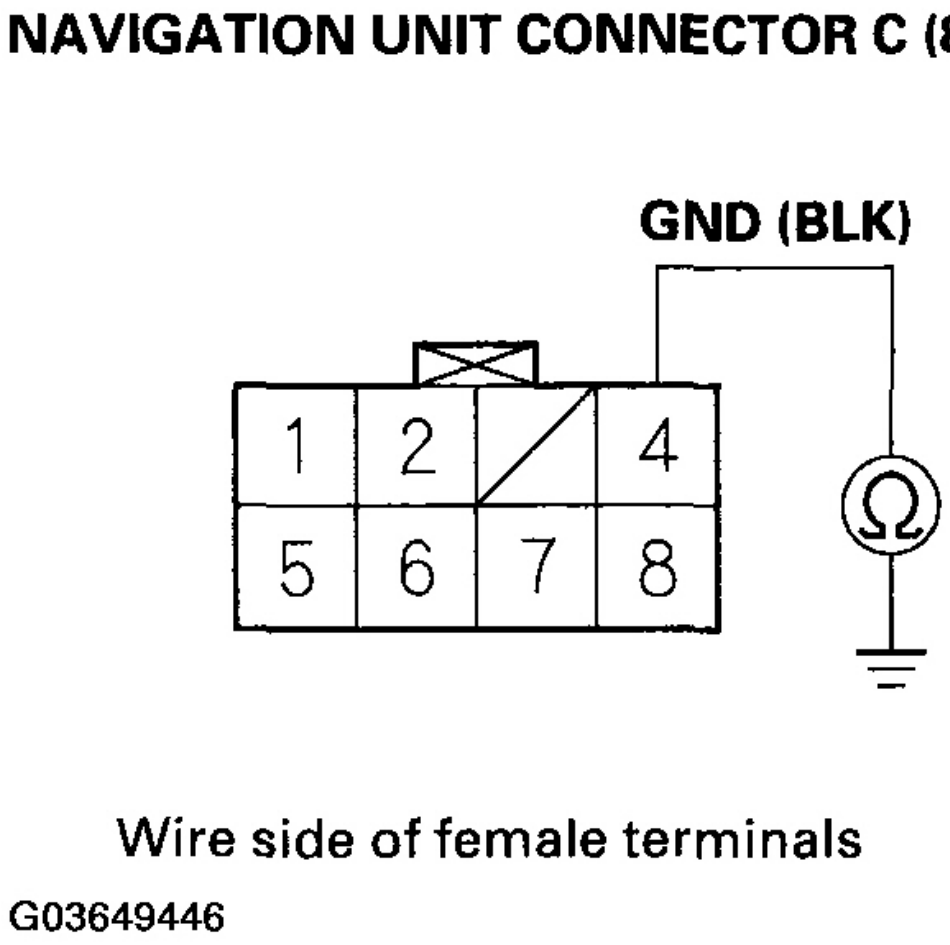


Fig. 27: Checking Continuity Between Navigation Unit Connector C (8P) Terminal No. 4 & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 9.

NO - Repair open in the wire between the navigation unit and body ground (G603).

9. Reconnect the navigation unit connector C (8P).
10. Perform the forced starting of the display (see **FORCED STARTING OF DISPLAY**).

Is the diagnosis menu of the picture diagnosis displayed?

YES - Go into the Diagnostic mode and use the "Navi System Link" diagnostic (see **NAVI SYSTEM LINK**) to check the links.

NO - Go to step 11.

11. Shield the display unit from the sun with your hand, and check that the display is back lit (only back light is ON.)

Can you see the back light?

YES - Replace the navigation unit (see **NAVIGATION UNIT REMOVAL/INSTALLATION**).

NO - Go to step 12.

12. Turn the ignition switch ON (II).
13. Measure the voltage between body ground and display unit connector B (20P) terminal No. 1 and No. 2 individually.

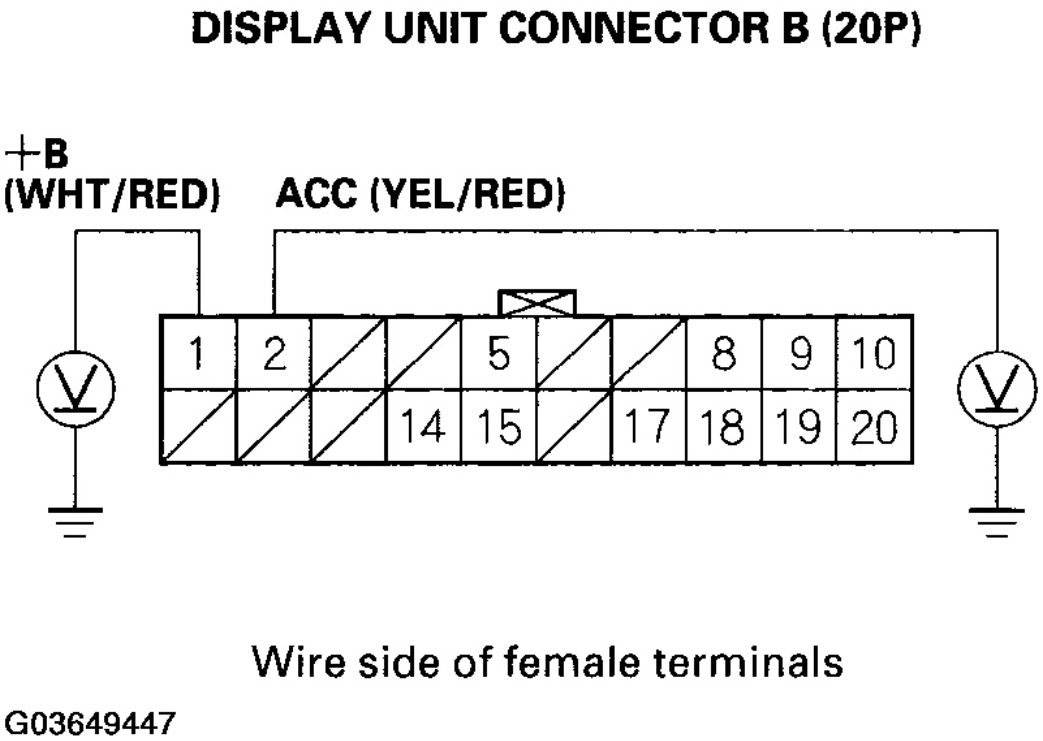


Fig. 28: Measuring Voltage Between Body Ground & Display Unit Connector B (20P) Terminal No. 1 And No. 2 Individually
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Replace the display unit.

NO - If the +B wire does not have voltage, repair open in the wire between the under-dash fuse/relay box and the navigation unit.

If the ACC wire does not have voltage, repair open in the wire between the under-dash fuse/relay box and the navigation unit.

PICTURE IS MISSING A COLOR OR TONE

NOTE:

- **Always check the connectors for poor connections or loose terminals.**

- **Before troubleshooting, get the navigation system anti-theft codes.**
- **After troubleshooting, enter the navigation system anti-theft codes.**
- **Confirm the correct DVD disc is installed in the navigation unit (see MAP MATCHING)**

1. Go into the Diagnostic Menu and use "RGB Color" test under Monitor Check (see **MONITOR CHECK**).

   Are the red, green, and blue colored circles shown?

   YES - The system is OK at this time.

   NO - Go to step 2.
2. Turn the ignition switch to OFF.
3. Disconnect the navigation unit connector A (20P) and display unit 20P connector.
4. Check for loose terminals at navigation unit connector A (20P) and display unit 20P connector.

   Are there loose terminals?

   YES - Repair the terminal.

   NO - Go to step 5.
5. Check for continuity between the appropriate terminals of navigation unit connector A (20P) to display unit connector B (20P) based on the missing color (s).

WIRING CONDITION SPECIFICATION

Missing color	Navigation unit connector A (20P)	Display unit connector B (20P)	Wire color
Blue	A11	B18	YEL
Green	A2	B9	RED
Red	A1	B8	WHT

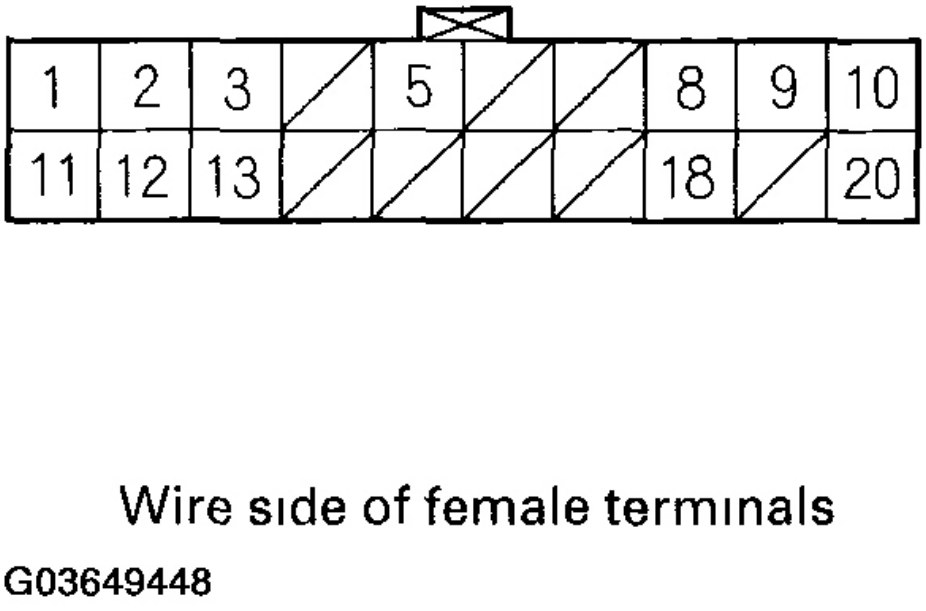


Fig. 29: Checking Continuity Between Appropriate Terminals Of Navigation Unit Connector A (20P) To Display Unit Connector B (20P) (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

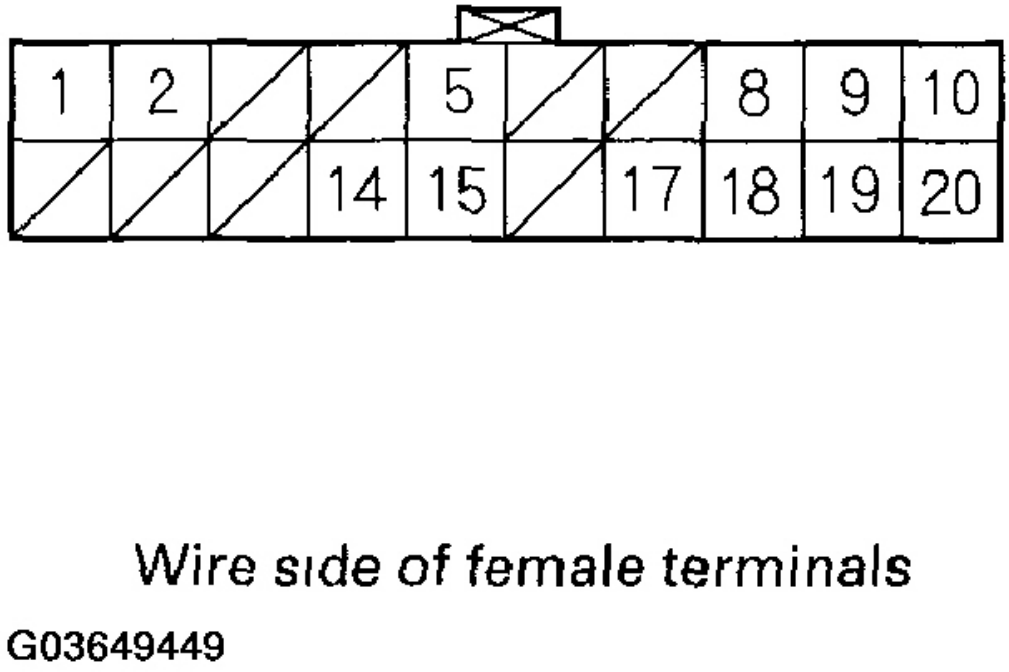


Fig. 30: Checking Continuity Between Appropriate Terminals Of Navigation Unit Connector A (20P) To Display Unit Connector B (20P) (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 6.

NO - There is an open in the circuit between the display unit and the navigation unit. Check for poor connections or loose terminals at the

display and navigation units. If a poor connection or loose terminal is found, replace the affected shielded harness.

6. Check for continuity between the appropriate terminals of navigation unit connector A (20P) and display unit connector B (20P) based on the missing color(s).

WIRING CONDITION SPECIFICATION

Missing color	Navigation unit connector A (12P)	Display unit connector B (20P)
Blue	A11	B10, B20
Green	A2	B10, B20
Red	A1	B10, B20

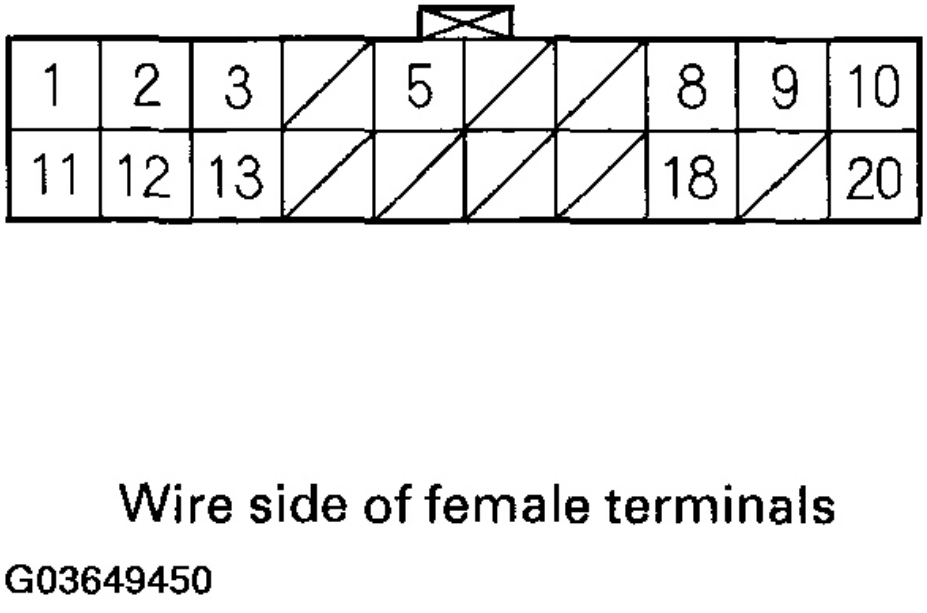


Fig. 31: Checking Continuity Between Appropriate Terminals Of Navigation Unit Connector A (20P) And Display Unit Connector B (20P) (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

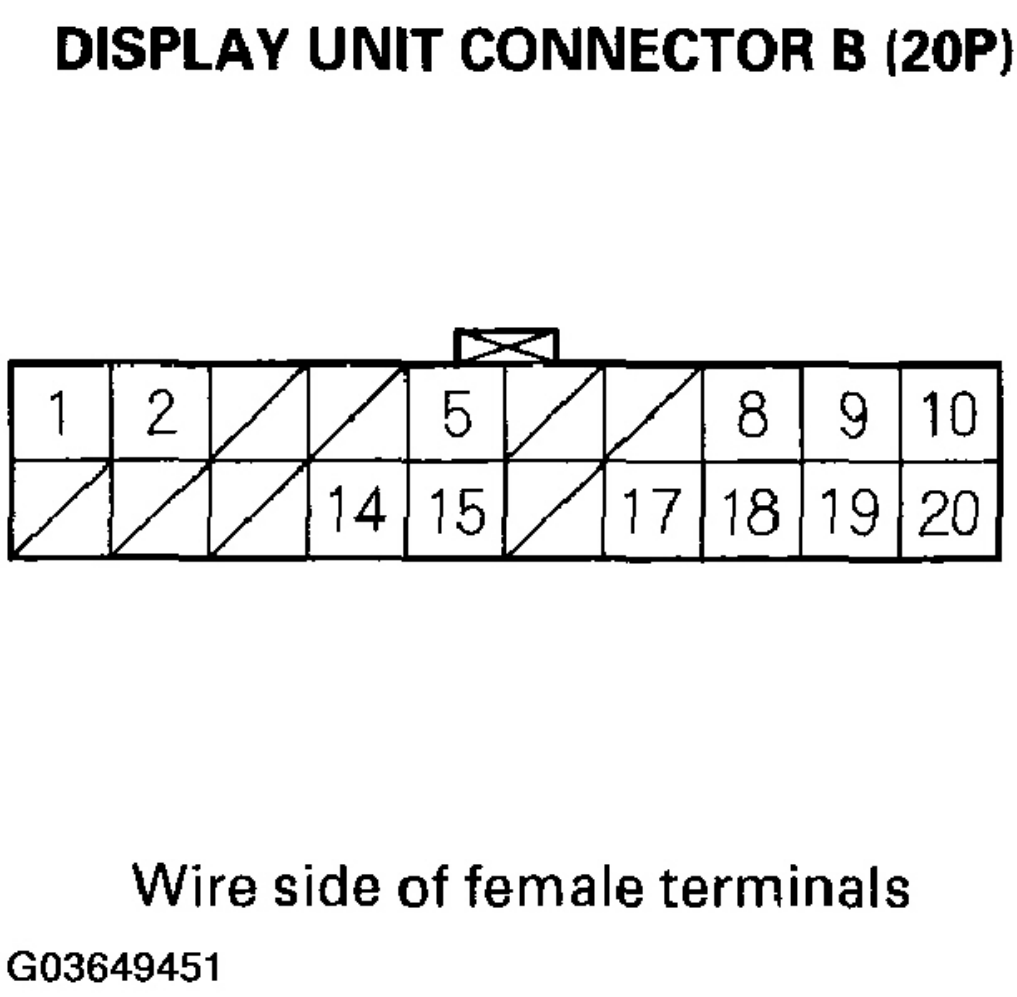


Fig. 32: Checking Continuity Between Appropriate Terminals Of Navigation Unit Connector A (20P) And Display Unit Connector B (20P) (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - There is a short to body ground in the circuit between the display unit and the navigation unit. Replace the affected shielded harness.

NO - Replace the navigation unit. If the problem is still unresolved,

replace the display unit.

PICTURE HAS LINES/ROLLS/OTHER ISSUES

NOTE:

- **Always check the connectors for poor connections or loose terminals.**
- **Before troubleshooting, get the navigation system anti-theft codes.**
- **After troubleshooting, enter the navigation system anti-theft codes.**
- **Confirm the correct DVD disc is installed in the navigation unit (see MAP MATCHING)**

1. Check for electronic aftermarket accessories (possibly hidden) mounted near the display unit or the navigation unit.

   Are there any electronic accessories?

   YES - Disable the accessories, and recheck.

   NO - Go to step 2.
2. Start up the navigation picture.

   Is the picture scrolling horizontally (left to right or right to left)?

   YES - Check for an open or short to ground in the C SIG wire from navigation unit connector A (20P) terminal No. 12 to display unit connector B (20P) terminal No. 19. Also check for a short to ground between display unit connector B terminal No. 19 and terminal No. 20.

   NO - Go to step 3.
3. Go into the Diagnostic mode and use "RGB Color" test under Monitor Check (see **MONITOR CHECK**).

   Is the picture missing a red, green or blue color?

   YES - Do the troubleshooting for the picture is missing a color or tone (see **PICTURE IS MISSING A COLOR OR TONE**).

NO - Go to step 4.

4. Turn the ignition switch OFF.
5. Substitute a known-good display unit, and recheck.

Is the picture OK?

YES - Replace the original display unit.

NO - Replace the navigation unit (see **NAVIGATION UNIT REMOVAL/INSTALLATION**).

DISPLAY UNIT BUTTONS OR TOUCH SCREEN BUTTONS DO NOT WORK OR RESPOND PROPERLY

NOTE:

- **If the audio system is malfunctioning, repair the audio system first. Refer to the appropriate audio system troubleshooting (See SYMPTOM TROUBLESHOOTING .**
- **Always check the connectors for poor connections or loose terminals.**
- **Before troubleshooting, get the navigation system anti-theft codes.**
- **After troubleshooting, enter the navigation system anti-theft codes.**

1. Turn the ignition switch to ACC (I).
2. Go into the Diagnostic mode and use the "Touch Panel" test under Monitor Check (see **MONITOR CHECK**) and, if necessary, the "Display" test under Unit Check (see **UNIT CHECK**).

Do the buttons work properly?

YES - System is OK.

NO - Go to step 3.

3. Try all the buttons on the navigation system.

Is there a specific row or columns of buttons, set of button, or a certain

button that does not respond properly (i.e. pressing a button in the lower left corner causes a button in the right lower corner to respond.)?

YES - Replace the display unit.

NO - Go to step 4.

4. Measure the voltage between body ground and, display unit connector B (20P) terminal No. 1 and No. 2 individually.

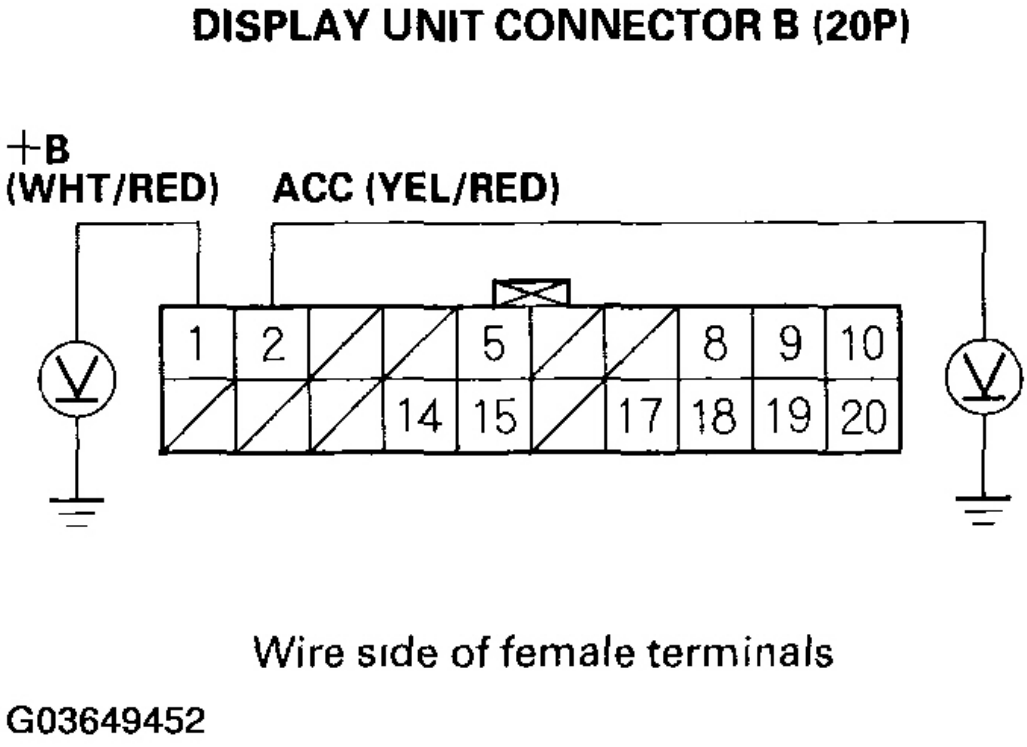


Fig. 33: Measuring Voltage Between Body Ground & Display Unit Connector B (20P) Terminal No 1 And No 2 Individually
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 5.

NO - If the +B wire does not have voltage, repair the open in the wire between the under-dash fuse/relay box and the display unit. If the ACC wire does not have voltage, repair the open in the wire between the under-dash fuse/relay box and the display unit.

5. Turn the ignition switch OFF.
6. Disconnect the display unit connector B (20P).
7. Check for continuity between display unit connector B (20P) terminal No. 10 and body ground.

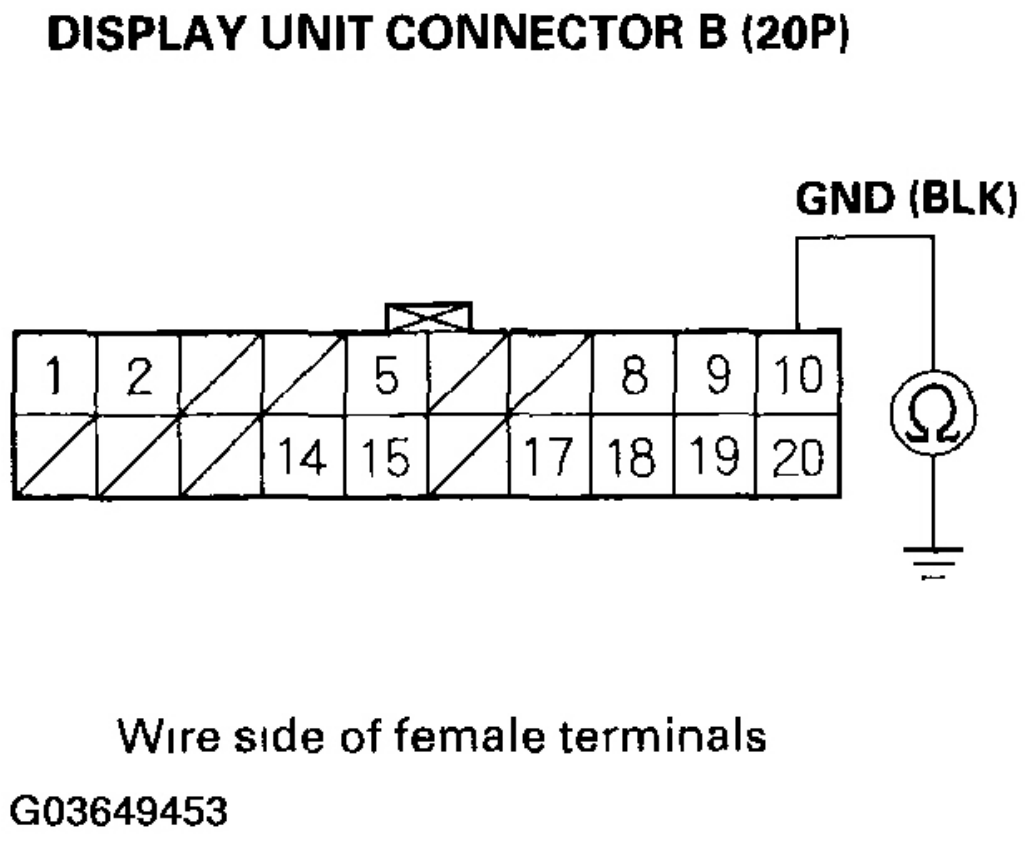


Fig. 34: Checking Continuity Between Display Unit Connector B (20P) Terminal No. 10 & Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 8.

NO - Repair the open in the wire between the display unit and body ground (G503).

8. Disconnect the navigation unit connector A (20P).
9. Check for continuity between body ground and display unit connector B (20P) terminal No. 5 and No. 15 individually.

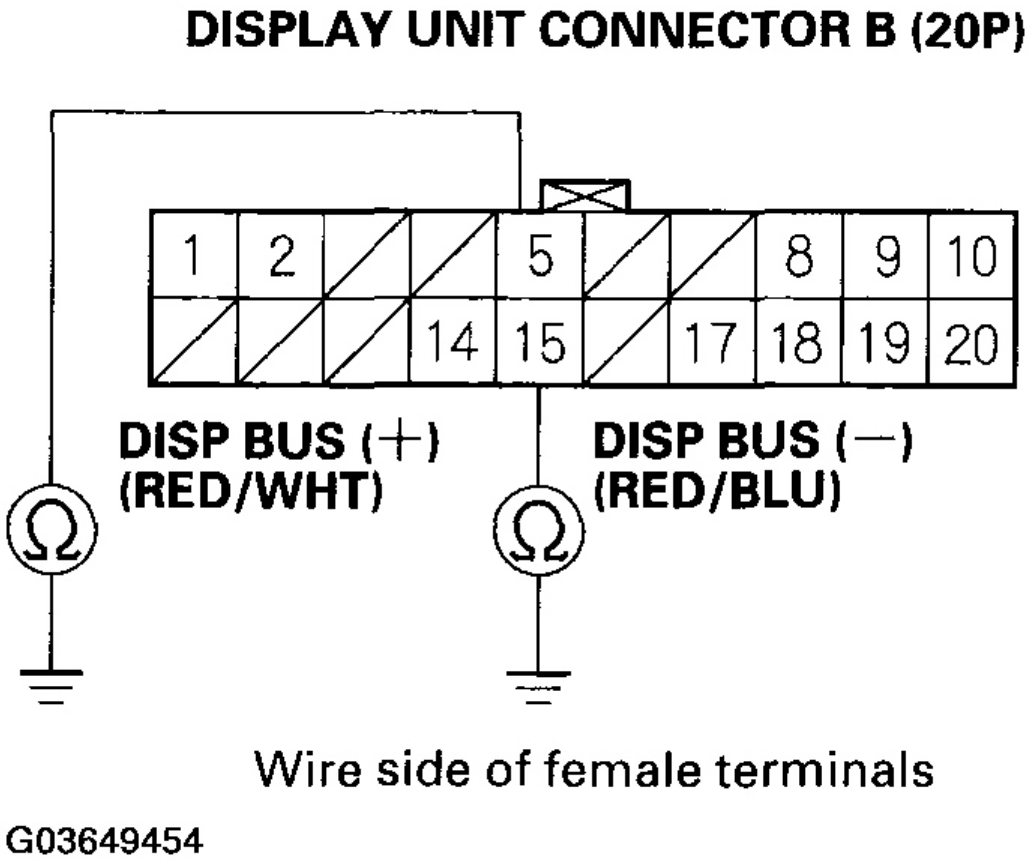


Fig. 35: Checking Continuity Between Body Ground & Display Unit Connector B (20P) Terminal No. 5 And No. 15 Individually
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - There is a short to body ground in the circuit between the display unit and the navigation unit. Replace the affected shielded harness.

NO - Go to step 10.

10. Check for continuity between display unit connector B (20P) terminal No. 5 and navigation unit connector A (20P) terminal No. 10.

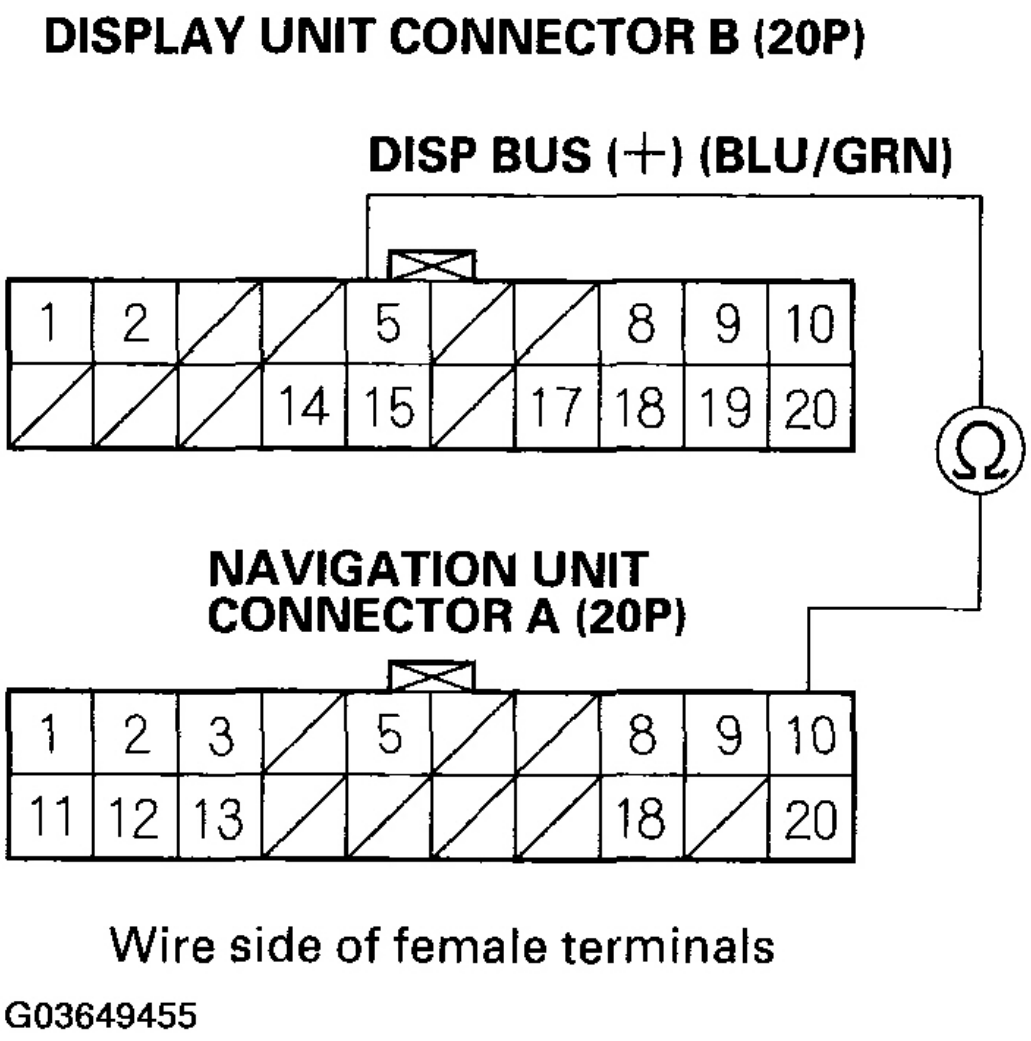


Fig. 36: Checking Continuity Between Display Unit Connector B (20P)

Terminal No. 5 & Navigation Unit Connector A (20P) Terminal No. 10
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 11.

NO - There is an open in the circuit between the display unit and the navigation unit. Check for poor connections or loose terminals at the display and navigation units. If a poor connection or loose terminal is found, replace the affected shielded harness.

11. Check for continuity between display unit connector B (20P) terminal No. 15 and navigation unit connector A (20P) terminal No. 20.

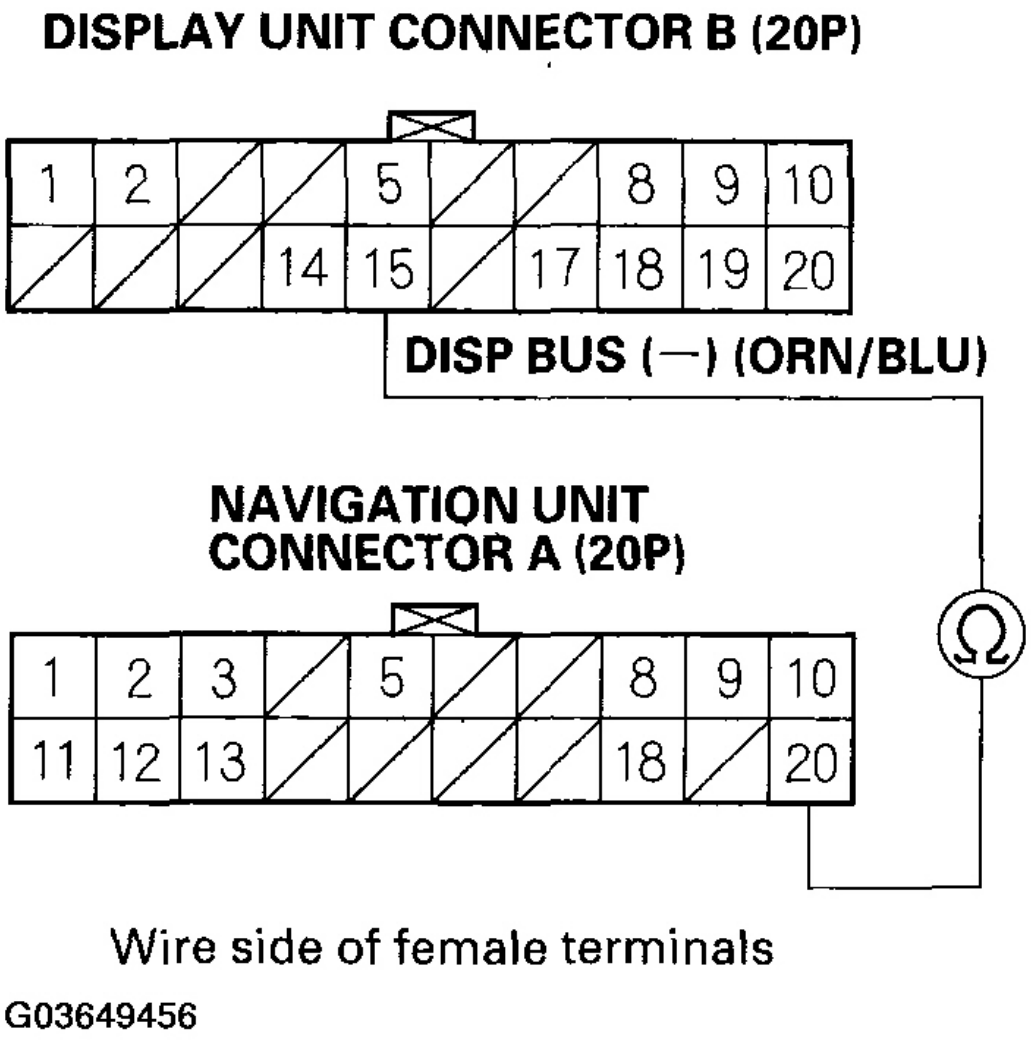


Fig. 37: Checking Continuity Between Display Unit Connector B (20P) Terminal No. 15 & Navigation Unit Connector A (20P) Terminal No. 20
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the display unit.

NO - There is an open in the circuit between the display unit and the navigation unit. Check for poor connections or loose terminals at the

display and navigation units. If a poor connection or loose terminal is found, replace the affected shielded harness.

GPS ICON IS WHITE, OR NOT SHOWN

NOTE:

- **Make sure the vehicle is parked outside and away from buildings.**
- **Refer to GPS Information (see GPS INFORMATION) for realtime satellite reception display.**

1. Check for metallic window tint on the windshield and electronic aftermarket accessories (possibly hidden) mounted near the GPS antenna or the navigation unit.

   Is there metallic window tint or electronic accessories?

   YES - Remove tint or the accessories and recheck.

   NO - Go to step 2.
2. Go into the Diagnostic Menu and use the "Navi System Link" test (see **NAVI SYSTEM LINK**) to check the GPS antenna.

   Is "GPS Ant" icon red?

   YES - Use the "Navi ECU" test under Unit Check (see **UNIT CHECK**) to check for a kinked, crushed, or disconnected GPS antenna wire. If necessary, try a known-good GPS antenna. If icon is still red, replace the navigation unit.

   NO - Check that nothing is blocking the GPS antenna located under the rear shelf and recheck. Substitute a known-good navigation unit, and recheck.

VOICE GUIDANCE CANNOT BE HEARD

NOTE:

- **Always check the connectors for poor connections or loose terminals.**
- **Before troubleshooting, write down the customer's**

radio station presets, and get the radio and navigation system anti-theft codes.

- **After troubleshooting, enter the radio and navigation system anti-theft codes, and the radio station presets.**

1. Press the display unit SET-UP button.
2. Check the volume setting for the navigation system.

   Is it set to OFF?

   YES - Set the volume to an audible level.

   NO - Go to step 3.
3. Check the radio operation.

   Can you hear the radio?

   YES - Go to step 4.

   NO - Troubleshoot the audio system.
4. Go into the Diagnostic Menu and use the "Navi System Link" test (see **NAVI SYSTEM LINK**) to check the radio.

   Is "Radio" icon red?

   YES - Troubleshoot the audio system.

   NO - Go to step 5.
5. Turn the ignition switch OFF.
6. Disconnect the navigation unit connector B (14P) and the audio unit connector A (20P).
7. Check for continuity between body ground and navigation unit connector B (14P) terminals No. 5, No. 12 individually.

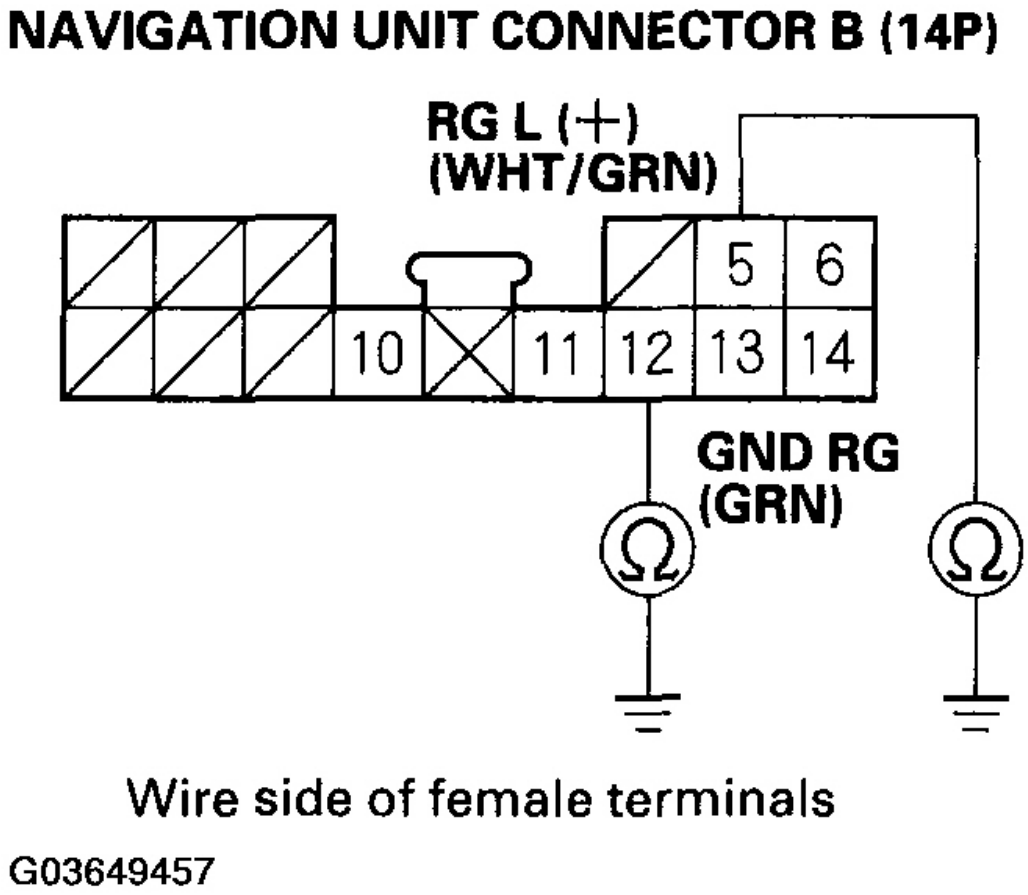


Fig. 38: Checking Continuity Between Body Ground & Navigation Unit Connector B (14P) Terminals No. 5 And No. 12 Individually
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the affected shielded harness.

NO - Go to step 8.

8. Check for continuity between navigation unit connector B (14P) terminal No. 5 and the audio unit connector A (20P) terminal No. 13.

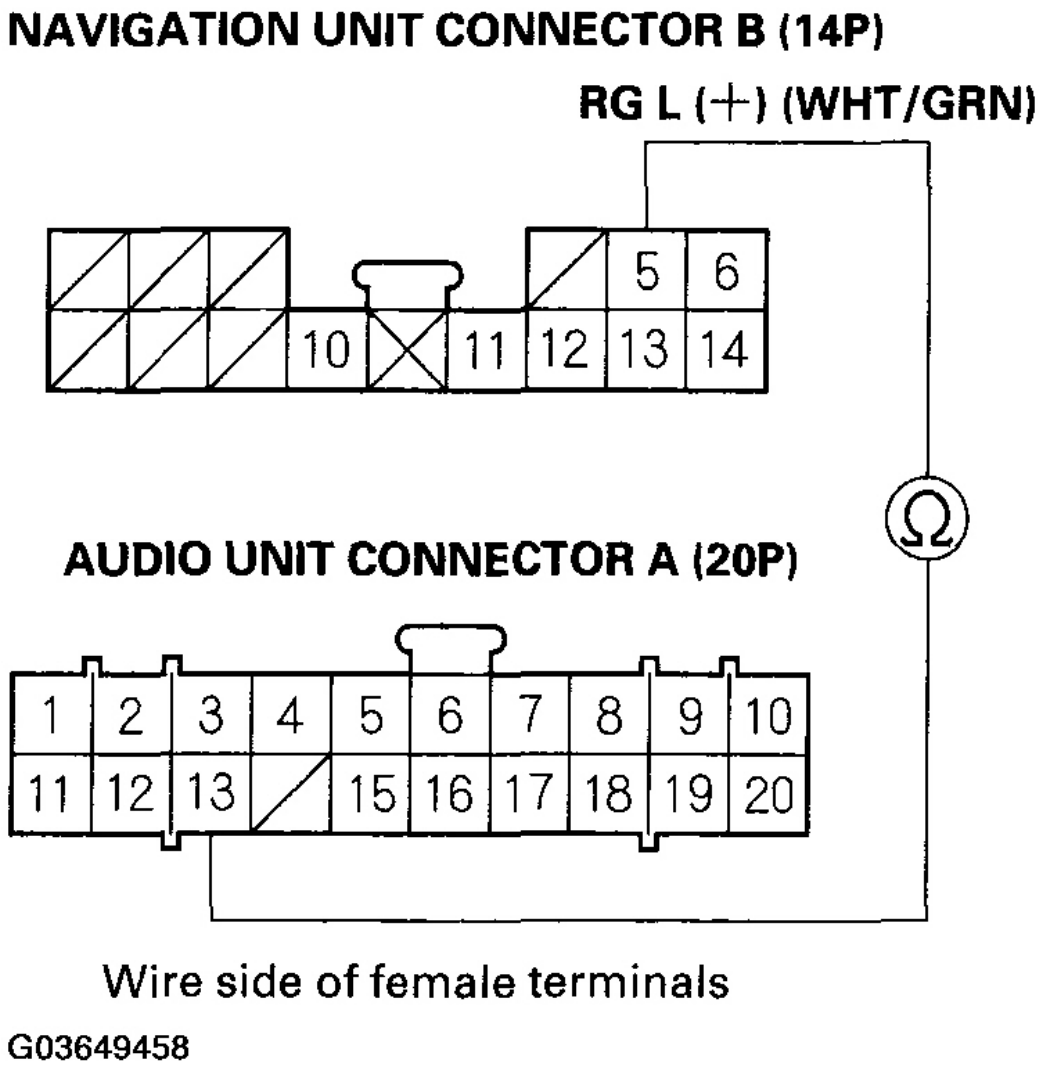


Fig. 39: Checking Continuity Between Navigation Unit Connector B (14P) Terminal No. 5 & Audio Unit Connector A (20P) Terminal No. 13
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 9.

NO - There is an open in the circuit between the navigation unit and audio unit. Check for poor connections or loose terminals at the audio and

navigation units. If a poor connection or loose terminal is found, replace the affected shielded harness.

9. Check for continuity between navigation unit connector B (14P) terminal No. 12 and the audio unit connector A (20P) terminal No. 12.

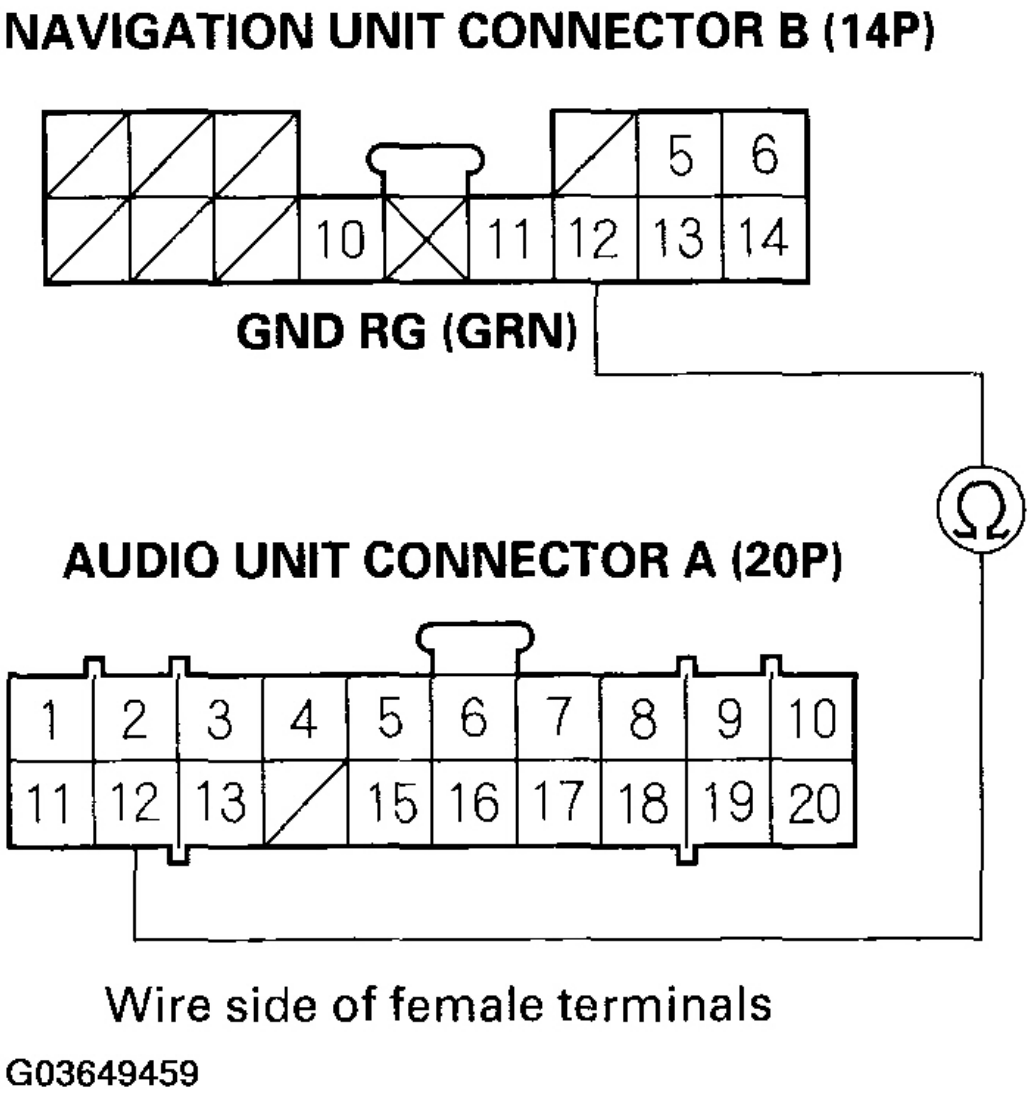


Fig. 40: Checking Continuity Between Navigation Unit Connector B (14P) Terminal No. 12 & Audio Unit Connector A (20P) Terminal No. 12
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10.

NO - There is an open in the circuit between the navigation unit and audio unit. Check for poor connections or loose terminals at the audio and navigation units. If a poor connection or loose terminal is found, replace the affected shielded harness.

10. Substitute a known-good audio unit, and recheck.

Is the system OK?

YES - Replace the original audio unit.

NO - Replace the navigation unit (see **NAVIGATION UNIT REMOVAL/INSTALLATION**).

VOICE CONTROL DOES NOT WORK/RESPOND

NOTE:

- **Always check the connectors for poor connections or loose terminals.**
- **Before troubleshooting, write down the customer's radio station presets, and get the radio and navigation system anti-theft codes.**
- **After troubleshooting, enter the radio and navigation system anti-theft codes, and the radio station presets.**

Before assuming that a voice complaint is hardware related, ensure that the voice control system is being operated correctly.

- Make sure you are on the correct screen when trying to issue a voice command. For instance, the command "Find the nearest Italian Restaurant" only works on a Map screen.

  (See the Navigation System Manual for a complete list of allowed voice commands for the information being displayed.)

- Close the windows and moonroof.

- Set the fan speed to low (1 or 2).
- Adjust the air flow from the air conditioning vents so that they do not blow against the microphone on the ceiling.
- Pause after pressing the TALK button, then give a voice command clearly in a natural speaking voice. If the system cannot recognize your command, speak louder.
- If the microphone picks up voices other than yours, the system may not interpret your voice commands correctly.
- If you speak a command with something in your mouth, or your voice is too husky, the system may misunderstand your command.

1. Go into the Diagnostic Menu and use the "Mic Level" test the under Functional Setup (see **FUNCTIONAL SETUP**) to check the operation of the TALK and BACK buttons.

   Are the TALK and BACK buttons operational?

   YES - Go to step 2.

   NO - Check for an open or short to ground on navigation unit connector B (14P) terminal No. 10.
2. Use the "Mic Level" diagnostic under Functional Setup (see **FUNCTIONAL SETUP**) to check the operation of the microphone.

   Is the microphone operational?

   YES - Check the operation of the voice control system (see the Navigation System Manual).

   NO - Check for a loose front map light (microphone) assembly. If OK, check for an open or short to ground on navigation unit connector B (14P) terminals No. 6 and No. 14.

VEHICLE POSITION ICON CONSTANTLY LEAVES ROAD OR IS VERY FAR FROM ACTUAL POSITION

1. Check the GPS icon on the navigation picture.

Is No GPS icon shown?

YES - Do the troubleshooting for GPS icon is white, or not shown (see **GPS icon is white, or not shown**).

NO - Go to step 2.

2. Go into the Diagnostic Menu and use the "Yaw Rate" test (see **YAW RATE**) to check the yaw rate sensor.
3. Go into the Diagnostic Menu and use the "Car Status" test (see **CAR STATUS**) to check the vehicle speed pulse.

Are the yaw rate sensor and vehicle speed pulse OK?

YES - The problem may be normal. Check to see if the problem occurs in the same place. If it does, the problem could be in the database. Go to step 4.

NO - If the problem is the yaw rate sensor, replace the navigation unit (see **NAVIGATION UNIT REMOVAL/INSTALLATION**). If the problem is the vehicle speed pulse, troubleshoot the vehicle speed signal circuit.

4. Substitute a known-good navigation unit and check to see if the problem occurs in the same place.

Does the problem occur in the same place?

YES - The problem is in the database. Report the problem according to the Navigation System Manual under "Reporting Errors".

NO - Replace the original navigation unit (see **NAVIGATION UNIT REMOVAL/INSTALLATION**).

DVD SCREEN ERROR MESSAGES

NOTE:

- **Check the Navigation System Manual for a list of common DVD screen error messages and the probable cause.**
- **Go into the Diagnostic Menu and use the "Car Status" test (see CAR STATUS) to check the status of the DVD**

lid.

1. Check the DVD-ROM reading surface for scratches.

   Are there scratches?

   YES - Replace the DVD-ROM (see **FORCED STARTING OF DISPLAY**).

   NO - If the problem occurs occasionally when the system is cold, this is normal. If the problem occurs frequently when driving, replace the navigation unit (see **NAVIGATION UNIT REMOVAL/INSTALLATION**).

TRIP COMPUTER-NO DISTANCE

NOTE:

- **Always check the connectors for poor connections or loose terminals.**
- **Before troubleshooting, get the navigation system anti-theft codes.**
- **After troubleshooting, enter the navigation system anti-theft codes.**
- **If the Previous button on the Trip Computer screen is not active, make sure to answer OK to the Disclaimer screen.**
- **Verify that the correct navigation unit is installed for this model. Go into the Diagnostic Menu and use "Version" (see VERSION).**

1. Go into the Diagnostic Menu and use the "Car Status" test (see **CAR STATUS**) to check for a vehicle speed pulse (VSP).

   Is there a VSP when the vehicle is moving?

   YES - Check the CAN system for DTCs. If OK, replace the navigation unit.

NO - Check the VSP wire for an open or short to power or ground.

TRIP COMPUTER-NO FUEL INFORMATION

NOTE:

- **Always check the connectors for poor connections or loose terminals.**
- **Before troubleshooting, get the navigation system anti-theft codes.**
- **After troubleshooting, enter the navigation system anti-theft codes.**
- **If the Previous button on the Trip Computer screen is not active, make sure to answer OK to the Disclaimer screen.**
- **Verify that the correct navigation unit is installed for this model. Go into the Diagnostic Menu and use "Version" (see VERSION).**

Do the "Navi System Link" test (see **NAVI SYSTEM LINK**) to check the communication line between the ECM/PCM (FI-ECU) and the navigation unit.

1. Go into the Diagnostic Menu and use "Trip Computer" test under Unit Check (see **UNIT CHECK**) with the engine running.

   Are the values greater than zero?

   YES - The system is OK.

   NO - Check the CAN system for DTCs. If OK, replace the navigation unit.

NAVIGATION CANNOT CONTROL A/C

NOTE:

- **Always check the connectors for poor connections or loose terminals.**
- **Before troubleshooting get the navigation system anti-theft codes.**

- **After troubleshooting, enter the navigation system anti-theft codes.**
- **Verify that the correct navigation unit is installed for this model. Go into the Diagnostic Menu and use "Version" (see VERSION).**

1. Go into the Diagnostic Menu and use the "Navi System Link" test (see **NAVI SYSTEM LINK**).

   Is "Air-con" icon red?

   YES - Do the climate control system troubleshooting.

   NO - Check for an open or short to ground between display unit connector A (5P) terminals No. 2, No. 3 No. 4 and climate control unit connector A (16P) terminals No. 16, No. 15, No. 8. If OK, check the climate control system for normal operation. If the climate control system works properly, substitute a known-good display unit and recheck.

DISPLAY DAY/NIGHT MODE DOES NOT WORK

NOTE:

- **Always check the connectors for poor connections or loose terminals.**
- **Before troubleshooting get the navigation system anti-theft codes.**
- **After troubleshooting, enter the navigation system anti-theft codes.**
- **Full brightness on the instrument panel brightness control causes the system to stay in the day mode, even when the lights are on.**

1. Make sure the instrument panel brightness control is not on full brightness.
2. Change the day/night mode to AUTO under Set-up and recheck.

   Does the display change to day and night modes using the headlights?

YES - The system is OK at this time.

NO - Go to step 3.

3. Go into the Diagnostic Menu and use the "Car Status" test to check for an ILL signal (see **Car Status**).

Is "ILL" signal OK?

YES - The system is OK.

NO - Check the ILL+ circuit between the navigation unit and relay module.

SYSTEM LOCKS UP CONSTANTLY

1. Start the engine and turn the ignition switch OFF, then turn the ignition switch ON (II).

Does the system reboot?

YES - The system is OK at this time.

NO - Check the DVD for scratches or damage and the navigation unit for water damage. If OK, go into the Diagnostic Menu and do all of the "Unit Check" tests (see **UNIT CHECK**).

VEHICLE ICON WANDERS ACROSS THE MAP WHEN DRIVING (DOES NOT FOLLOW A DISPLAYED ROAD) OR SPINS WHEN DRIVING

NOTE: This symptom is caused by a defective yaw rate sensor. Perform this diagnostic when the vehicle is cold and warm.

1. Go into the Diagnostic Menu and use the "Yaw Rate" test (see **YAW RATE**).

Are the values correct?

YES - The system is OK.

NO - Replace the navigation unit (see **NAVIGATION UNIT REMOVAL/INSTALLATION**).

NAVIGATION DRIVES BY ITSELF WHEN PARKED

NOTE:

- **Always check the connectors for poor connections or loose terminals.**
- **Before troubleshooting, get the navigation system anti-theft code.**
- **After troubleshooting, re-enter the anti-theft code, and re-initialize the navigation system.**

1. Start the engine.
2. From the main menu, select places, then select any destination, and begin the trip.
3. With the vehicle parked, watch the vehicle icon on the display.

   Does the vehicle position icon move by itself?

   YES - Go to step 4.

   NO - The system is OK at this time.
4. Go into the Diagnostic Menu and select "DEMO MODE" test (see **DEMO MODE**) under Functional Setup.

   Is "DEMO MODE" set to "YES"?

   YES - Set the Demonstration mode to "NO".

   NO - Replace the navigation unit (see **NAVIGATION UNIT REMOVAL/INSTALLATION**).

NAVIGATION STAYS ON WITH IGNITION SWITCH OFF

NOTE:

- **Always check the connectors for poor connections or loose terminals.**
- **Before troubleshooting, get the navigation system anti-theft code.**
- **After troubleshooting, re-enter the anti-theft code, and re-initialize the navigation system.**

1. With the key out of the ignition.

   Does the navigation screen stay on?

   YES - Go to step 2.

   NO - The system is OK at this time.
2. The vehicle may have been used as a demonstration vehicle at an event like an auto show. In these events, power is often jumpered to the navigation system so that the ignition key is not needed in the vehicle. At the end of the show, the jumper wire may not have been removed. Check the navigation unit "C" connector (8P) for a "non-factory" jumper wire in series with the factory cable.

   Is there a jumper wire?

   YES - Remove the jumper wire, and re-test.

   NO - Go to step 3.
3. The display or audio unit may have been jumpered behind the dash to allow the navigation system to run without the ignition key.

   Does the radio function with the ignition switch off?

   YES - Go to step 4.

   NO - Go to step 5.
4. Remove the display unit and check to see if the audio 20P connector has a non-factory jumper wire in series with the factory connector.

   Is there a jumper wire?

   YES - Remove the jumper wire, and re-test.

   NO - Go to step 5.
5. Check the interior lights with the ignition switch off.

   Can you turn on the interior lights with the ignition switch off?

   YES - Troubleshooting the ACC circuit.

NO - Replace the navigation unit (see **NAVIGATION UNIT REMOVAL/INSTALLATION**).

NAVIGATION CANNOT CONTROL AUDIO/CD

1. Make sure the anti-theft code for the audio system is entered.
2. Go into the Diagnostic Menu and use the "Navi System Link" test (see **NAVI SYSTEM LINK**).

   Is for "Radio" icon red?

   YES - Do the troubleshooting for the voice guidance cannot be heard (see **GPS icon is white, or not shown**).

   NO - Go to step 3.
3. Substitute a known-good navigation unit (see **NAVIGATION UNIT REMOVAL/INSTALLATION**), and recheck.

   Can the navigation control audio/CD?

   YES - Replace the original navigation unit (see **NAVIGATION UNIT REMOVAL/INSTALLATION**).

   NO - Do the audio system troubleshooting.

NAVIGATION CANNOT CONTROL XM RADIO

1. Go into the Diagnostic Menu and use the "Navi System Link" test (see **NAVI SYSTEM LINK**).

   Is the "XM" icon red?

   YES - Check the connector at the XM receiver.

   NO - Go to step 2.
2. Substitute a known-good navigation unit (see **NAVIGATION UNIT REMOVAL/INSTALLATION**), and recheck.

   Can the navigation control the XM radio?

YES - Replace the original navigation unit (see **NAVIGATION UNIT REMOVAL/INSTALLATION**).

NO - Do the audio system troubleshooting.

AUDIO-HVAC SUBDISPLAY DOES NOT WORK PROPERLY

1. Check the clock. Reset if necessary.

   Does the clock reset?

   YES - The system is OK at this time.

   NO - Go to step 2.
2. Check for an open or short to body ground between subdisplay unit 10P connector terminal No. 4, No. 5, No. 6, No. 7 and navigation unit connector A (10P) terminal No. 4, No. 5, No. 6, No. 7.

   Are the circuits OK?

   YES - Replace the navigation unit.

   NO - Repair the circuits.

NAVIGATION FREQUENTLY ASKS FOR CODE AND NEEDS GPS INITIALIZATION

1. Check for an open on navigation unit connector C (8P) terminals No. 1 and No. 2.

   Are the circuits OK?

   YES - Replace the navigation unit.

   NO - Repair the circuits.

SYSTEM DIAGNOSIS MODE

START-UP PROCEDURE AND DIAGNOSIS MENU

There are two ways to enter the diagnostic mode:

1. Connect the SCS connector (see **FORCED STARTING OF DISPLAY**) to

the navigation service connector located in the trunk. Turn the ignition switch to the ON (II) position. The display will go directly to the diagnostic menu screen shown in **Fig. 41**.

NOTE: When finished troubleshooting, make sure to remove the SCS connector.

2. Turn the ignition switch ON (II). Use the navigation display hard buttons as described below:

   Press and hold the 3 buttons (Menu, Map/Guide, and Cancel), and keep them pressed for about 5 seconds. The display screen will go directly to the "Select Diagnosis Items" menu shown in **Fig. 41**.

NOTE: This only allows access to the diagnostic screens. All other navigation functions are disabled.

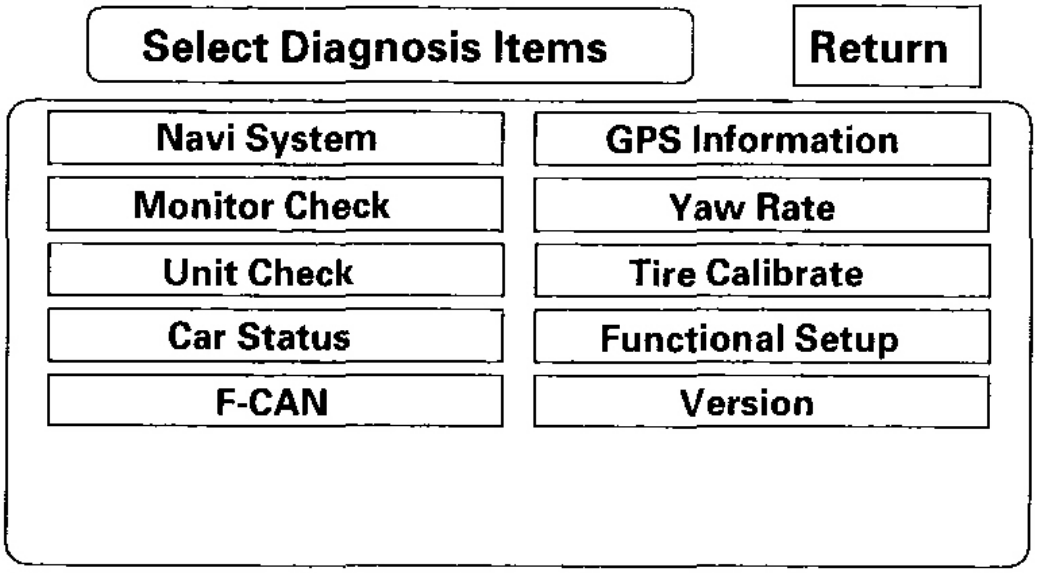


Fig. 41: Identifying System Diagnosis Mode

Courtesy of AMERICAN HONDA MOTOR CO., INC.

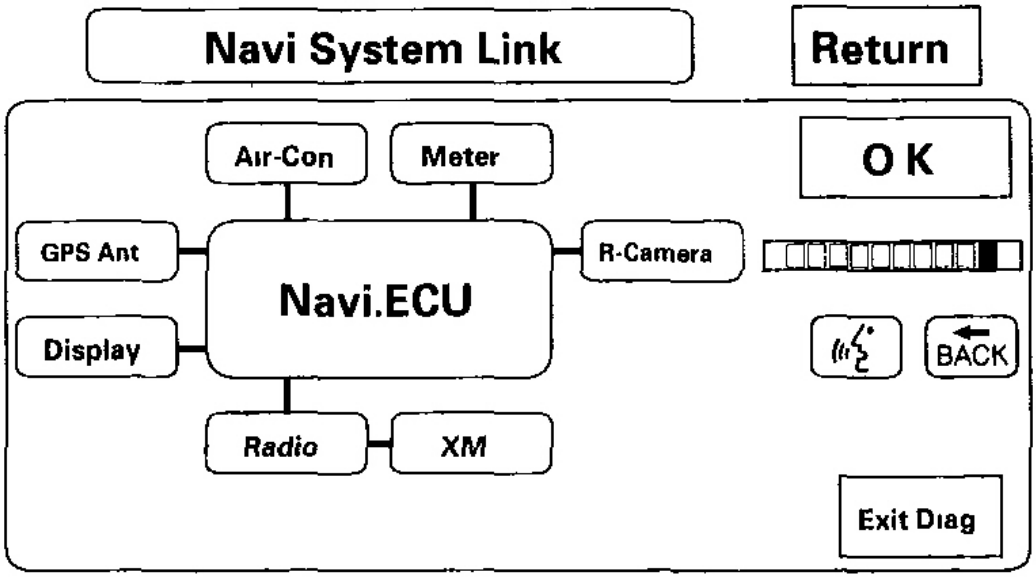
3. After the display changes to the Select Diagnosis Items menu, select the item you want to check and the diagnostic will start. To return to the previous screen, select "RETURN".
    - Navi System (Link)
    - Monitor Check
    - Unit Check
    - Car Status
    - F-CAN
    - GPS Information
    - Yaw Rate
    - Tire Calibrate
    - Functional Setup
    - Version

NAVI SYSTEM LINK

- This diagnostic tests the cables connecting the navigation components. Ensure that the ignition switch is in the ON (II) position. When the diagnostic begins, a "bong" sound is heard. The system is in a "Detecting" mode, and is waiting for all items in white to be tested. This includes the voice control (Talk/Back) buttons, and microphone. Press the TALK button on the steering wheel, and in a normal voice, say "testing". The Talk indicator on the screen should become green, and the voice level indicator should move to at least the 6th bar to pass. Next, press the Back button. This should cause the "Cancel" indicator to go green.
- If all of the communication lines connecting the system components, and the Talk/Back switch buttons/microphone check out OK (all block diagram items green), then the "OK" indicator will become green.
- If there is a problem with the system, the faulty system component item will change to red, and the screen will show "NG" in red. Use the troubleshooting index, and other diagnostic screens to help locate the problem.
- The indication on the screen may not change until the ignition switch is cycled.

After repairing the affected cable or system, repeat this diagnostic.

NOTE: Green boxes and green "OK" indicate that the communications lines (cables) are intact. This diagnostic does not necessarily imply that the individual components are functioning properly. For instance, the GPS antenna wire may be crushed, but still show as "green". A road test, or other diagnostic may be necessary to fully test each component.



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Fig. 42: Identifying Navi System Link
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NOTE: The mic level indicator must reach the 6th bar or greater to pass the test.

FACTORY DIAGNOSTIC SCREEN "IN LINE DIAG"

When a navigation control unit is powered up for the first time at the factory, the

"factory diagnosis" screen (In Line Diag) shows up. Normally the factory performs the steps necessary to verify proper operation and terminate the "factory diagnostic". Until the proper confirmation sequence is performed, the screen will show up every time the vehicle is started.

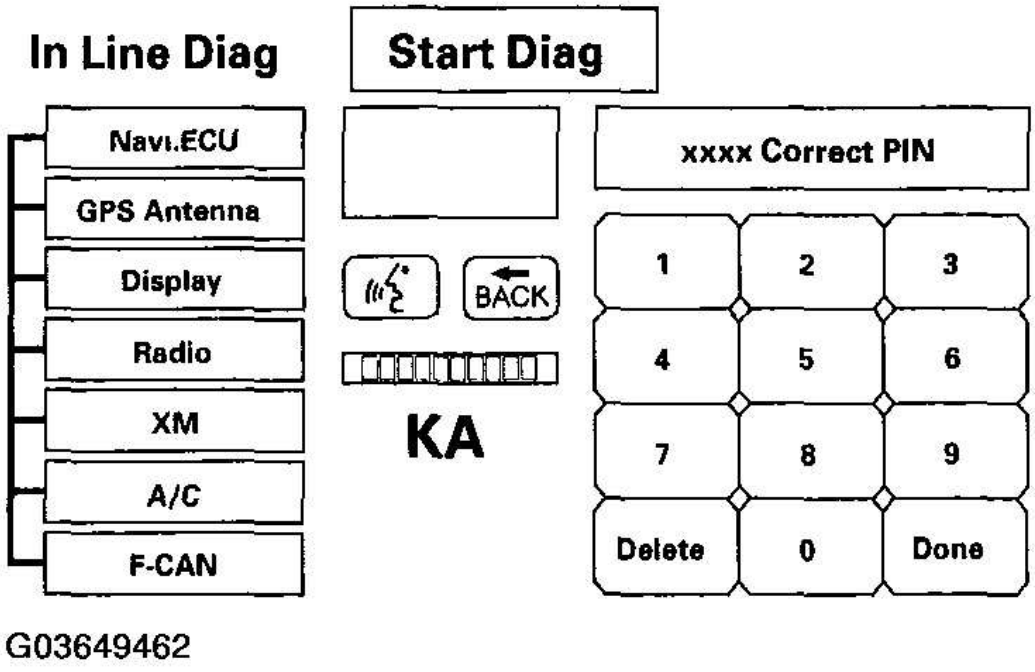


Fig. 43: Identifying Diagnostic Screen
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Follow the steps below to prevent the screen from showing up in the future:

- Hold down the buttons (Menu + Map/Guide + Cancel) for about 5 seconds (the "Select Diagnosis Items" screen will appear)
- Hold down the Map/ Guide button for 5-10 seconds (A screen with a "Complete" button, will appear)
- Touch "Complete", and then the "Return" button (the system may re-boot)
- Restart the vehicle, and confirm normal operation by completing the "PDI of the navigation system" Service Bulletin.

MONITOR CHECK

Overview of display unit

- The display unit communicates with the navigation unit over its own GA-Net bus. Information is sent to the navigation unit whenever the user activates the touch screen, or buttons. Information sent by the navigation unit to the display unit includes commands to control the LCD back light.
- The navigation unit also sends navigation and rear camera video information to the screen using the Red, Green, Blue, and Composite Video signals.
- The display unit is protected by the security system by daisy-chaining the security signal through it, and then passing the signal to the audio unit.
- The illumination input from the gauge brightness control provides back lighting for the buttons surrounding the screen.

These screens allow troubleshooting of the display unit. Select the item you want to troubleshoot, and follow the diagnostic instructions.

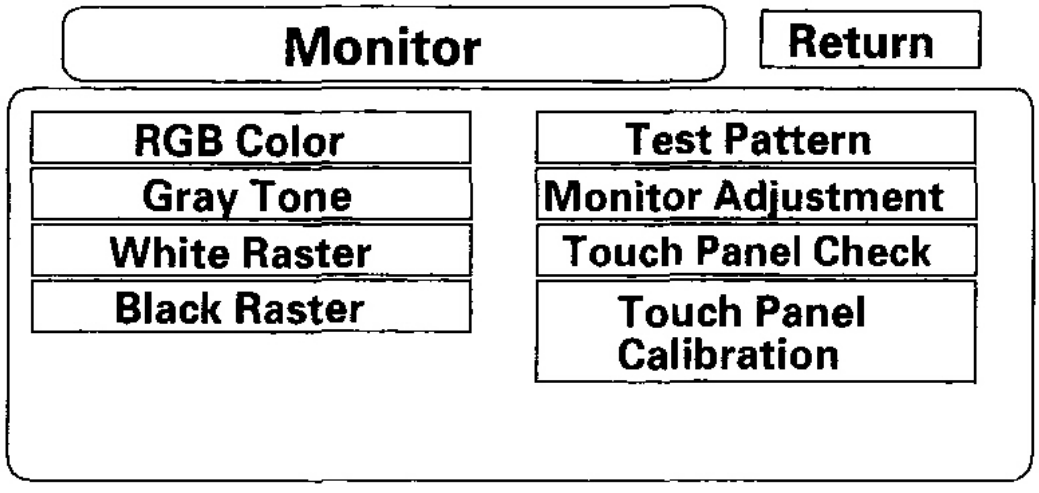


Fig. 44: Identifying Overview Of Display Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

RGB Color

This screen verifies that the display unit is receiving the video (R, G, B and Composite sync) signals properly. The three primary colors should all be shown without distortion. The combination of all three should produce a central white section. If any of the colors are missing, troubleshoot for the color signal (see **PICTURE IS MISSING A COLOR OR TONE**). If the picture has lines in it or scrolls horizontally, or vertically, troubleshoot for a Composite sync problem (see **PICTURE HAS LINES/ROLLS/OTHER ISSUES**).

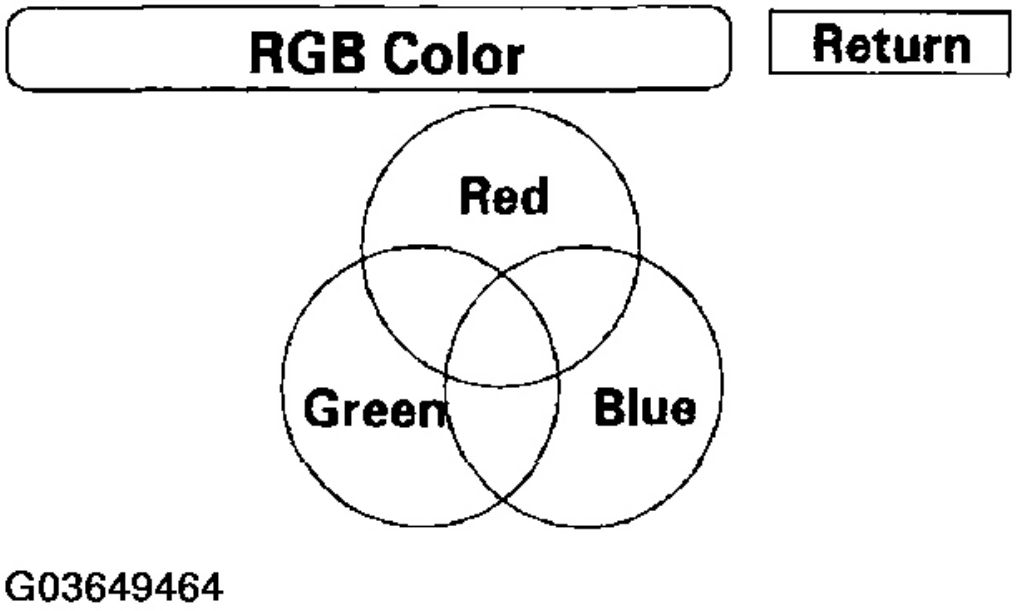


Fig. 45: Identifying RGB Color
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Gray Tone

This screen looks for problems with contrast. You should be able to see the changes from bar to bar across the scale. It is normal for the 2 bars on either side to appear the same.

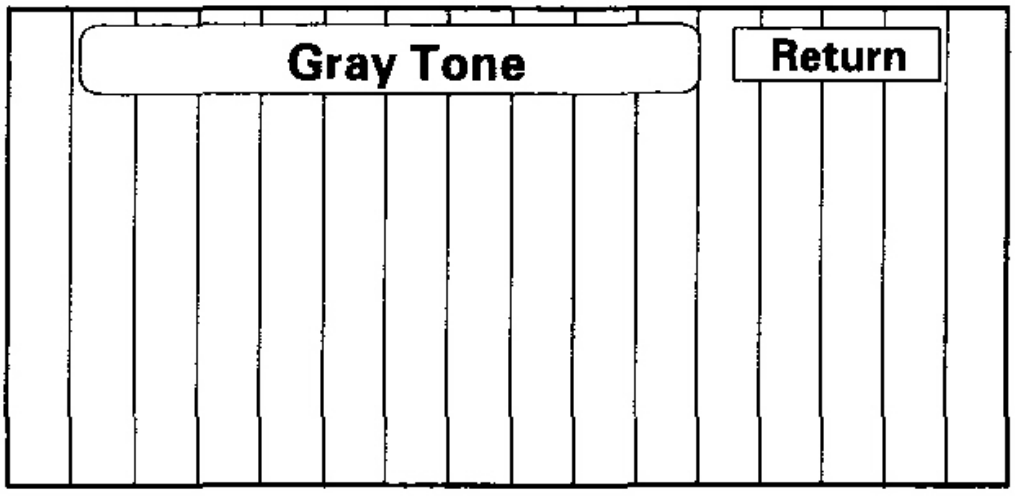


Fig. 46: Identifying Gray Tone
Courtesy of AMERICAN HONDA MOTOR CO., INC.

White Raster

The entire display must be shown in white.



Fig. 47: Identifying White Raster
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Black Raster

The entire display must be shown in black.

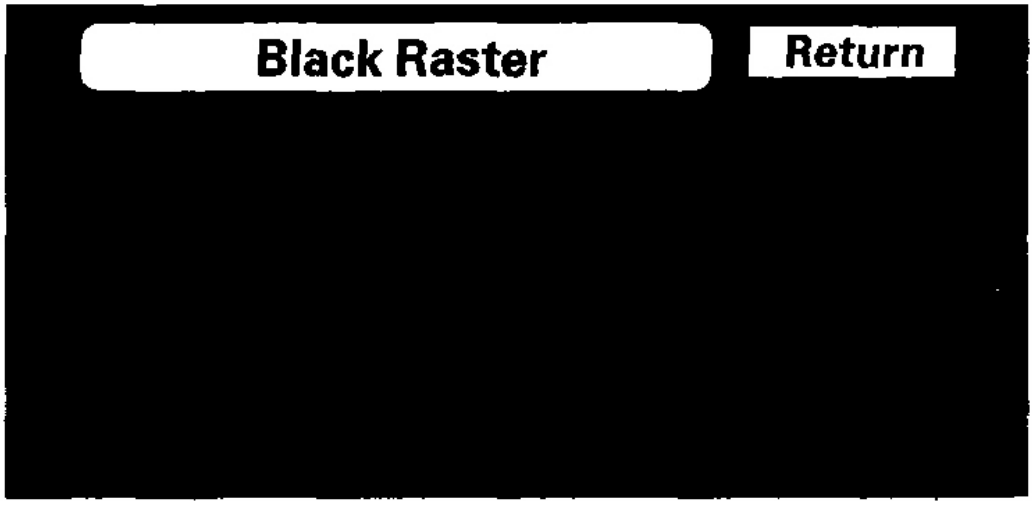


Fig. 48: Identifying Black Raster
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Color Pattern

The chart below shows the colors being used for the map and menu screens. This is for factory use only. To check the color signal use the "RGB Color" diagnostic found under the Monitor Check.

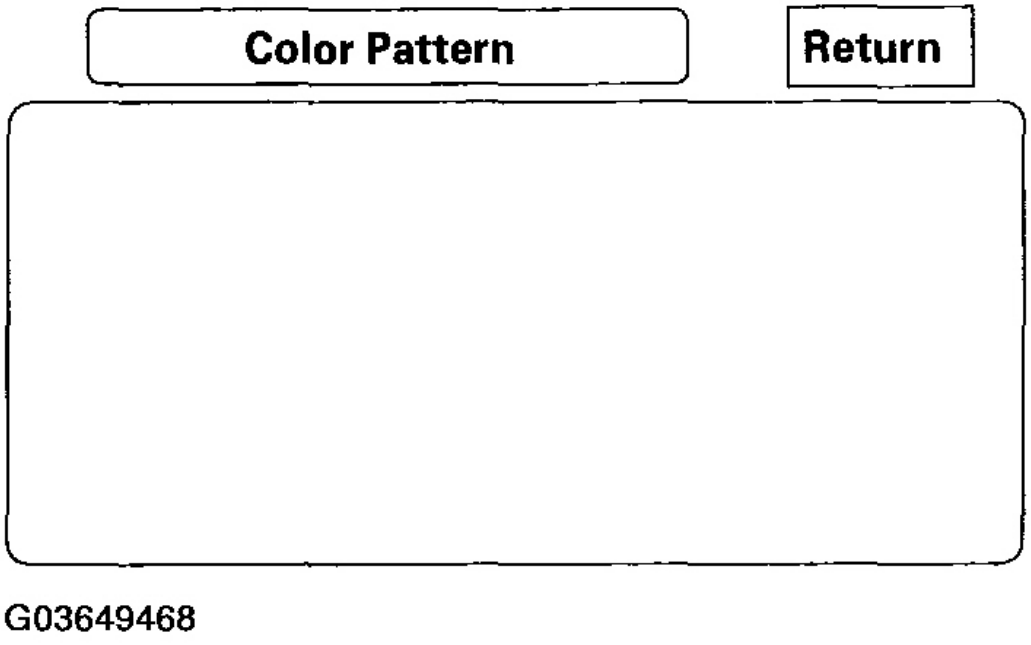


Fig. 49: Identifying Color Pattern
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Monitor Adjustment

This allows the navigation display to be centered. Use the joystick to move the picture up/down or left/right. It is unlikely that you will ever need to adjust the monitor position. The "Default" button will reset the display position to factory specifications.

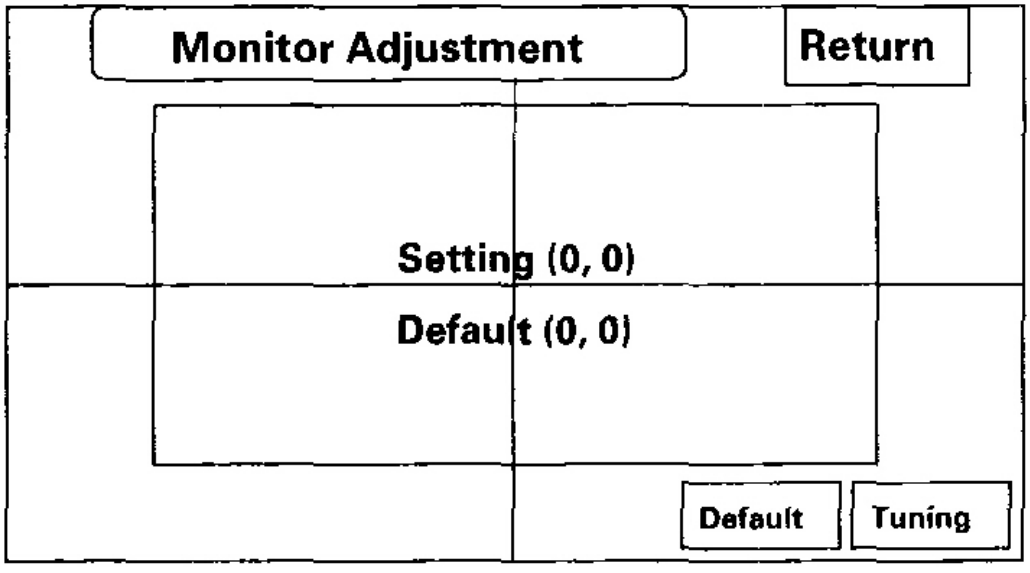
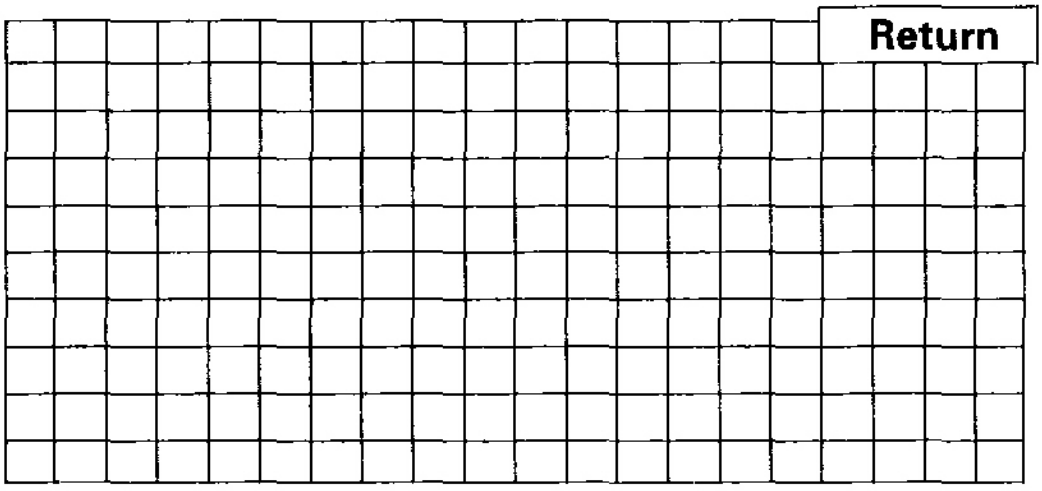


Fig. 50: Identifying Monitor Adjustment
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Touch Panel

The panel touch sensing system consists of a touch sensitive resistive membrane covering the display. Contrarily to other systems using infrared beams, the screen has to be physically "touched" to make it work. The display has capability of an almost infinite number of touch locations. However, to be compatible with earlier systems, the software only senses the locations shown on the diagram screen in **Fig. 51**. Every possible touch button position is shown on this diagram screen. Touching one of these should cause its color to reverse, and sound a "beep." If the touch locations are off slightly (by less than one touch location), use the "Touch Panel Calibration" diagnostic to re-align the touch "zones" with the screen image. If any areas of the screen either don't respond, or respond at some other location when touched, the replace the display unit.



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Fig. 51: Identifying Touch Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Touch Panel Calibration

Touch the "+" item on the screen. If the screen respond at some other location when touched, adjust responded point to touched point using the joy stick.

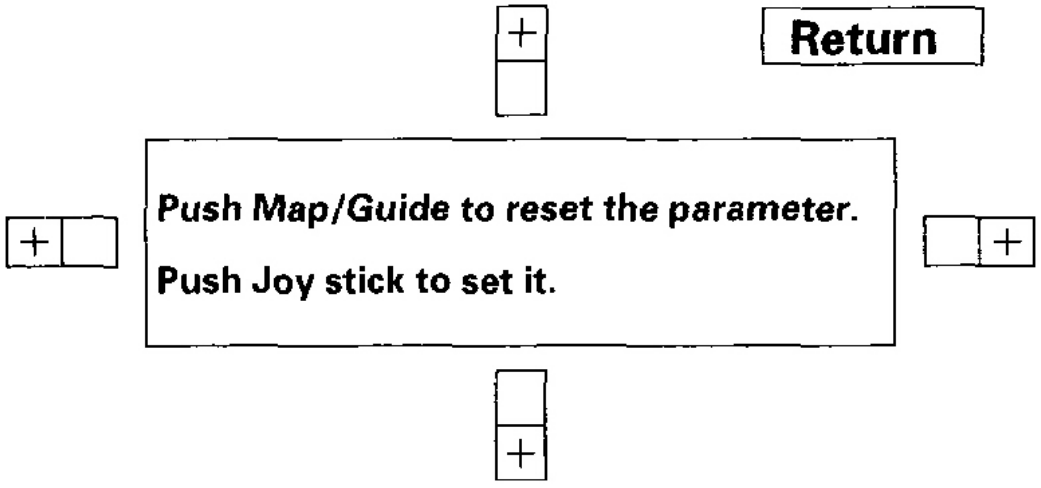


Fig. 52: Identifying Touch Panel Calibration
Courtesy of AMERICAN HONDA MOTOR CO., INC.

UNIT CHECK

Select the item you want to check and the diagnostic starts.

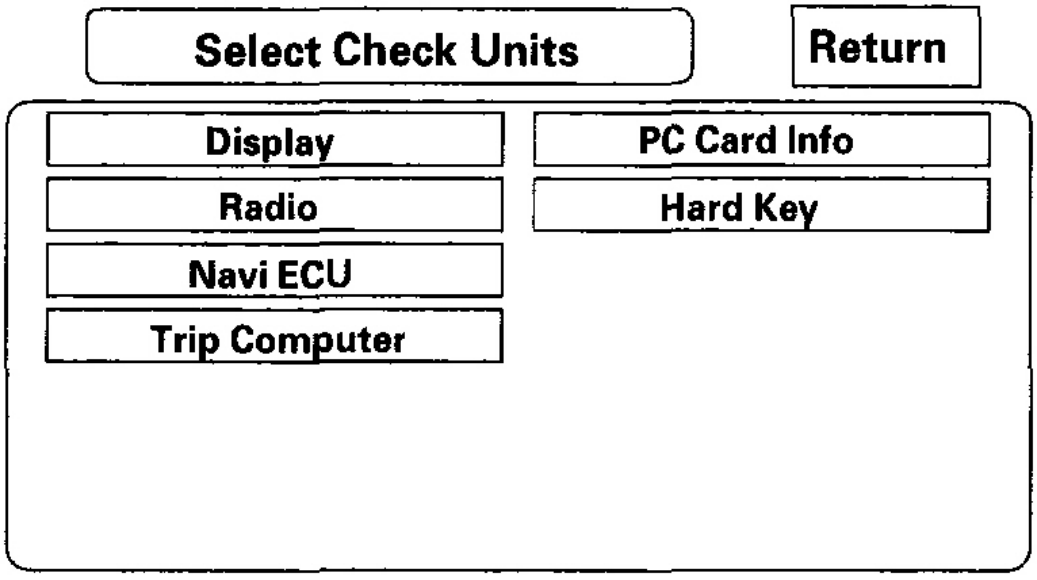


Fig. 53: Identifying Unit Check
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Display

This diagnostic performs additional checks on the communication bus between the control unit and the display. In addition, the internal electronics and touch screen functionality are confirmed.

- When the connection is NG, first check for loose terminals at the navigation unit and the display unit connections. Next check for an open or short in the communication line between the navigation unit and the display unit. If the line is found to have an open or short, replace the affected shielded harness.
- If the ROM or RAM is NG, replace the display unit.
- The version represents the software version in the display.

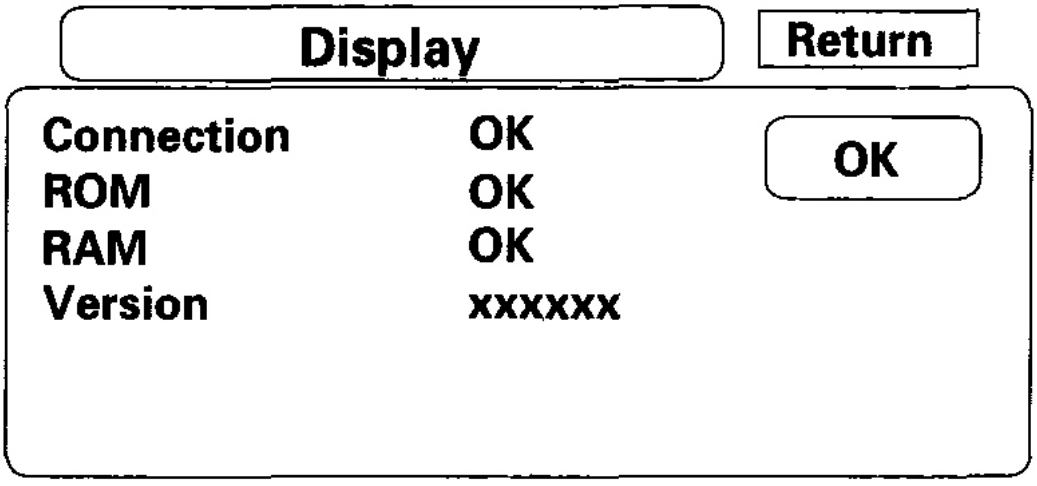


Fig. 54: Identifying Display
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Radio

This diagnostic checks the audio connections. If not OK, do the troubleshooting for audio system.

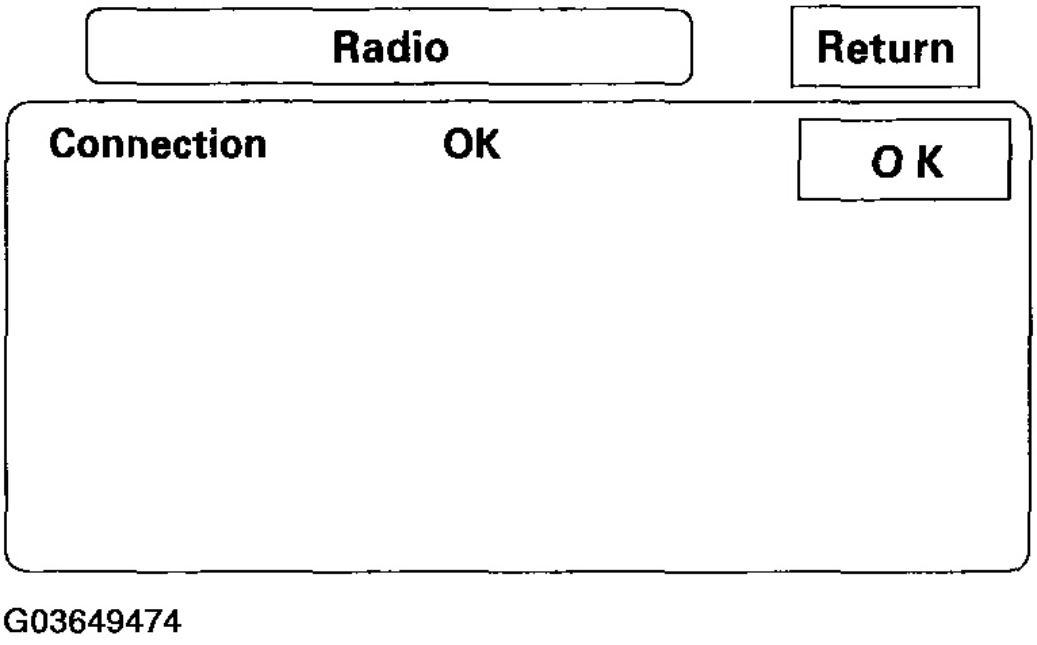


Fig. 55: Identifying Radio
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Navi ECU

This screen looks for problems the navigation unit. When this diagnostic is initiated, there is a delay of up to a minute while it runs.

NOTE: This diagnostic cannot be canceled when running.

- If "V-RAM" or "D-RAM" is NG, then replace the navigation unit.
- If "GPS" indicates "NG (ANT)", then check the entire GPS antenna wire from the navigation unit to the antenna. If the wire is crushed or damaged, try a known good antenna. If this diagnostic reads OK, then order a new GPS antenna. If the diagnostic still reads NG (ANT), then replace the navigation unit.
- "DVD ROM" represents the database version on the DVD. This information can also be found in Setup Screen 4 by selecting System Information.

- "Serial No." should be the same as the serial number found on the underside of the navigation unit. This number is needed to obtain the security code from the Interactive Network (IN) system.
- The Mem Clr is for factory use and should not be used unless instructed by the factory. Selecting this will erase the customer's settings, personal information, and anything else stored in memory.

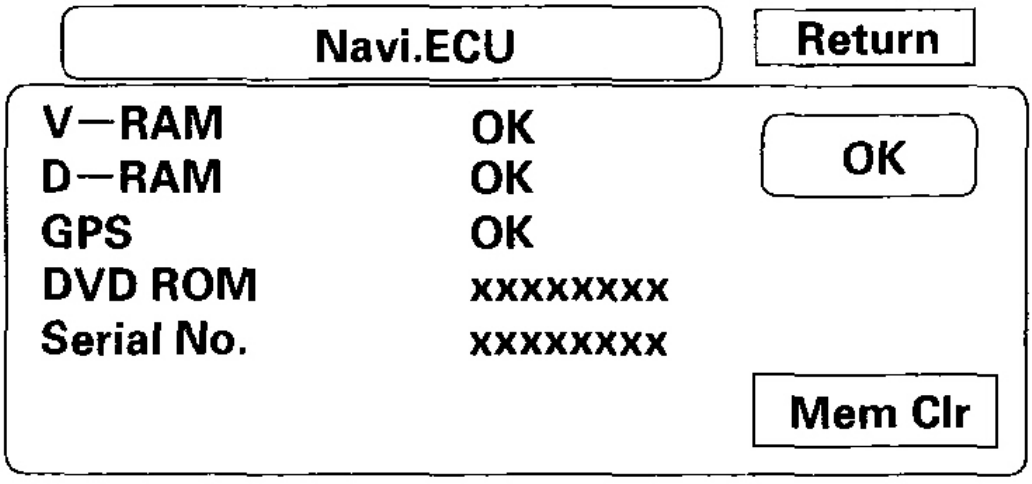
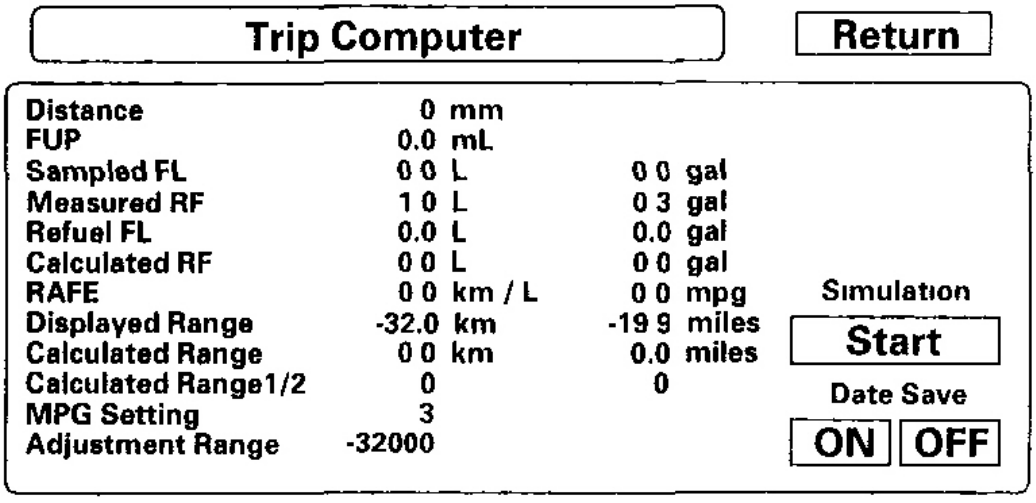


Fig. 56: Identifying Navi ECU
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Trip Computer

This screen shows current internal values used for trip computer calculations. They are for factory use only.

- Simulation "Start" is for factory use.
- "Data Save" should always be OFF. It is for factory use only.



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Fig. 57: Identifying Trip Computer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Trip Calibrate

By holding down the MENU button while on the "Trip Information" screen, you will see the screen below. This screen allows you to adjust the vehicle range (distance to empty).

- "Calc. RANGE" is the calculated value.
- "Disp. RANGE" is the distance displayed on the trip computer "Range" field. If it reads "0", the vehicle will have enough fuel to travel approximately 20 miles.
- Range Tuning can be adjusted "+" or "-" to adjust the range to empty. It is recommended that this value not be changed.

NOTE: Setting the range offset too low (+10) could result in the vehicle running out of gas before the display reads "0". Make changes slowly when changing this value.

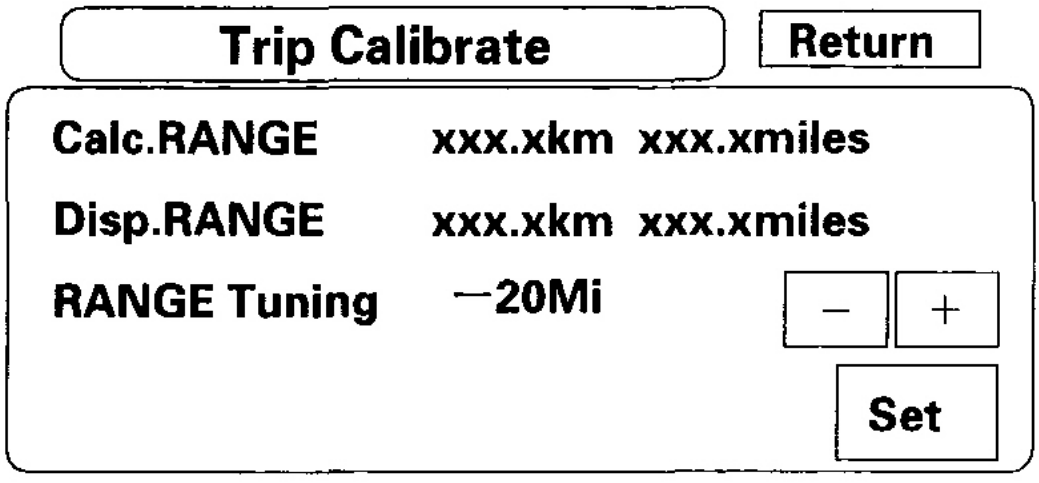


Fig. 58: Identifying Trip Calibrate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PC Card info.

There is no PC Card in the PC slot, and the screen should say, "PC Card is not inserted."

NOTE: Do not insert any card or object into the slot.

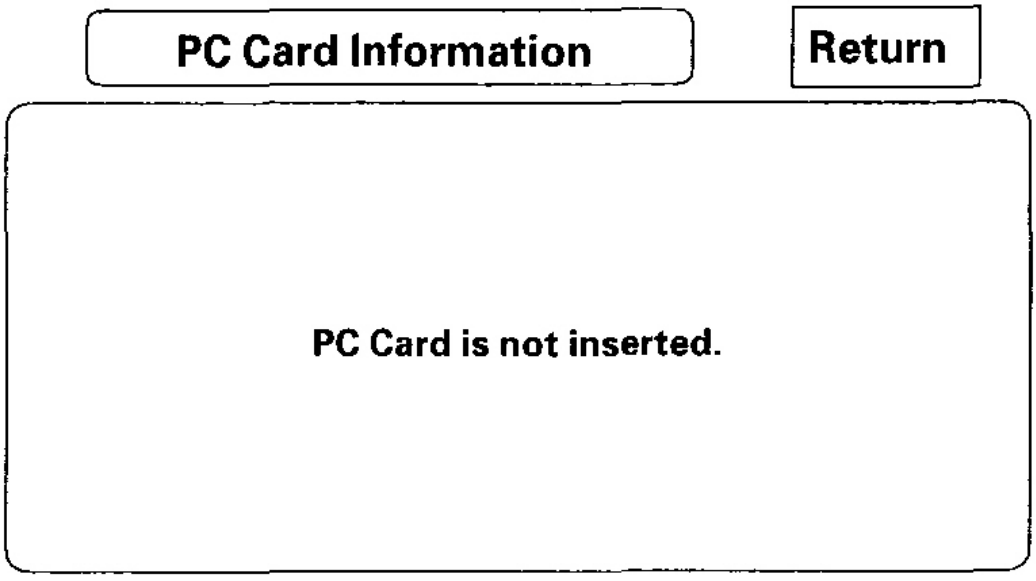


Fig. 59: Identifying PC Card (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

If the factory provides a PC card and instructs you to insert a card, then the screen displays the Manufacturer, and Product Name as shown in **Fig. 60** .

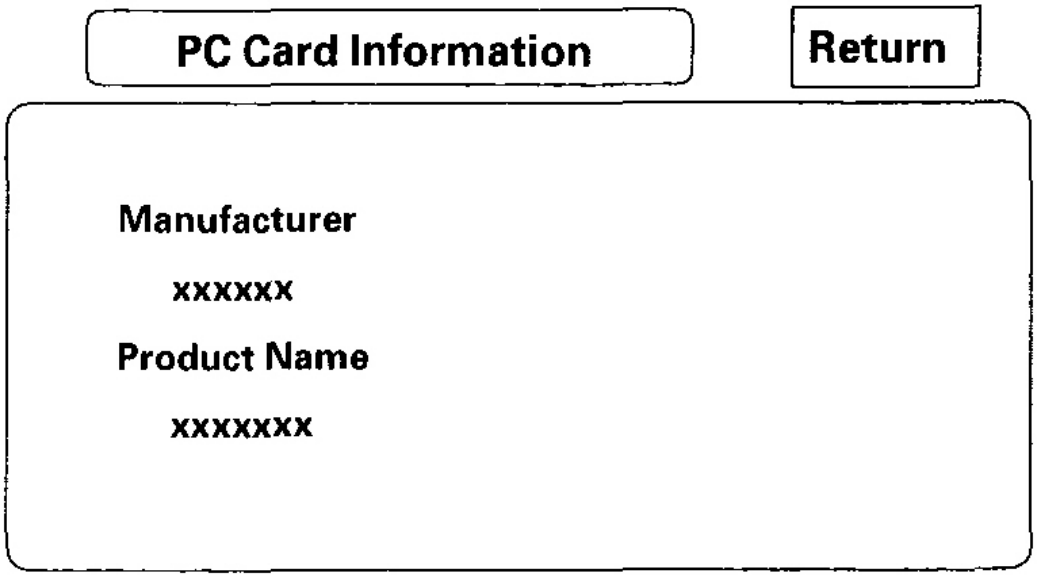


Fig. 60: Identifying PC Card (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Hard Key

This diagnostic tests the joystick, and the buttons that surround it. For this model, the joystick and buttons utilize the GA-Net bus for communication to the navigation control unit.

To complete the test, touch each button, and move the joystick to each indicated position. As each function is tested, the corresponding button on the display should highlight. To exit, push in and hold the joystick.

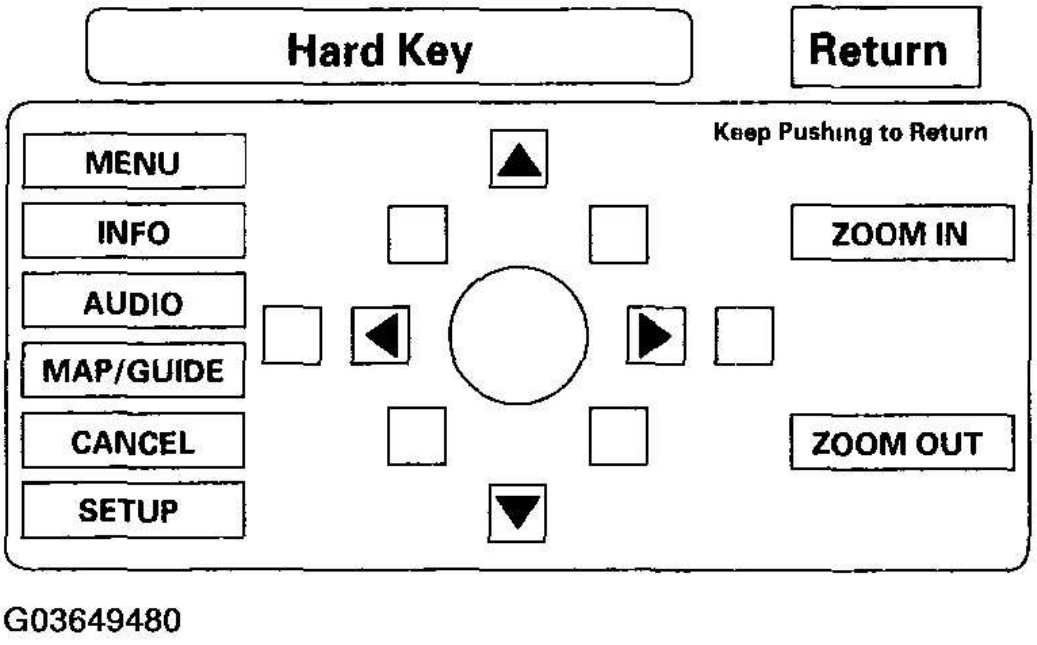


Fig. 61: Identifying Hard Key
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CAR STATUS

This screen is used to confirm that navigation unit is properly receiving input signals. Signals equal to (0) are OFF, and signals equal to (1) are ON. If the value on the display does not match the actual vehicle status, then check the wire carrying the signal.

- VSP-Vehicle Speed Pulse from PCM (Pin 6 of C-connector)
  a. OFF (0) when vehicle is not moving
  b. ON (1) when vehicle is moving

The VSP comes from the PCM as a dedicated signal. Internally, the navigation unit compares the actual VP on the map against street data to adjust the pulse to speed scaling factor. As this scaling factor becomes more accurate, the "Level" gradually increases from 0 to 10 (see the Tire Calibrate diagnostic screen).

- BACK-Reverse indication from taillight relay (Pin 5 of C-connector)
  a. OFF (0) when shift lever is in any position other than reverse
  b. ON (1) when shift lever is in reverse

The Back signal is used by the navigation unit to allow the map screen to show the VP moving backwards when in reverse and to activate the rearview camera. This signal is needed because the Speed Pulse has no direction indication.

This signal is obtained off of the F-CAN bus. For problems, perform F-CAN troubleshooting. Diagnostic trouble codes (DTCs) for the F-CAN can be retrieved with the HDS (Honda Diagnostic System).

- ILL-Illumination Indication (Pin 5 of navigation unit A-connector)
  a. OFF (0) when parking lights, or headlights are off
  b. ON (1) when parking lights, or headlights are off

This signal is used by the navigation unit to determine whether to put the navigation screen into the Day or Night brightness mode. (Setup screen 1)

- DVD Lid-senses if DVD door is open
  a. (Close) when door is closed
  b. (Open) when door is open

The navigation unit has a micro switch to detect this. If open is indicated when the door is closed, replace the navigation unit.

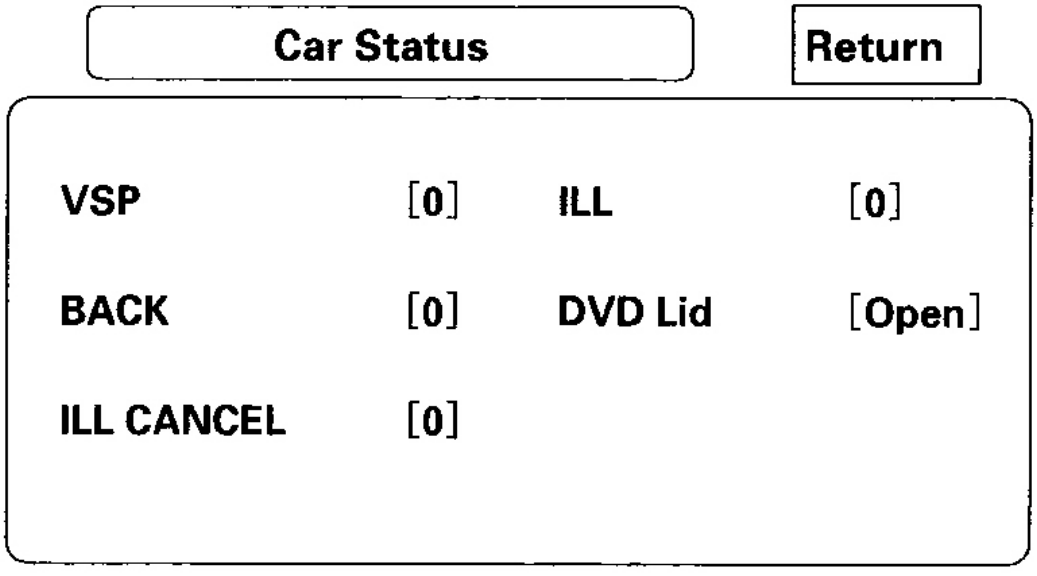


Fig. 62: Identifying Car Status
Courtesy of AMERICAN HONDA MOTOR CO., INC.

F-CAN SYSTEM LINK

F-CAN (Fast Controller Area Network) passes information between processors on the network. For example, the F-CAN network is used to pass fuel pulses between the PCM and the navigation unit for the trip computer function. The F-CAN network uses a communication protocol that transmits data at 500 Kbps.

- If the diagnostic screen below reads NG with the ignition switch ON (II), then diagnostic trouble codes (DTCs) for the F-CAN can be retrieved with the HDS (Honda Diagnostic System). The data displayed in the ID boxes is irrelevant.
- For more details on troubleshooting the F-CAN, refer to the **DTC TROUBLESHOOTING INDEX** .

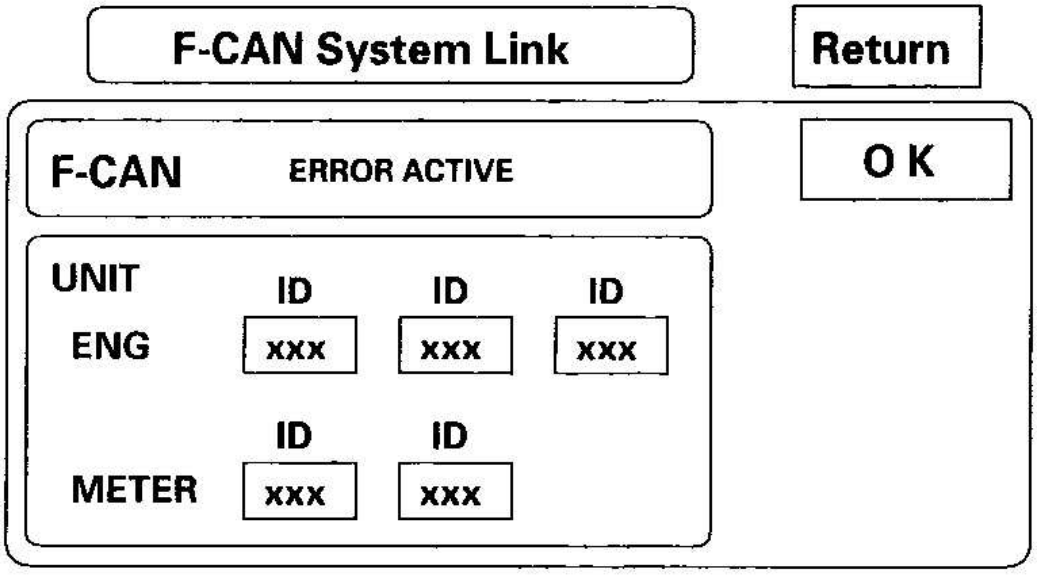


Fig. 63: Identifying F-CAN System Link
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GPS INFORMATION

This screen shows the current status of GPS reception.

The circular diagram shows the current location of the GPS satellites (yellow dots) as they would appear in the sky. The outer circle represents the horizon (0 degrees elevation). The middle and inner circles represents 30 and 60 degrees respectively. The very center of the diagram (90 degrees elevation) is directly overhead. Naturally, nearby obstructions, like tall buildings will block satellites in that direction. That is why it is necessary to be in an open area to effectively troubleshoot GPS reception issues. There are always 24 "active" GPS satellites in orbit. Because satellites fail, and have to be removed from service, spares always parked in orbit, ready to be activated. This is why the PRN (satellite ID number) can be greater than 24.

NOTE: To use this screen for troubleshooting, the vehicle should

be out side away from buildings, tall trees, and high-tension wires for at least 10 minutes with the engine running.

- The "Number of Satellites" box shows the number of acquired satellites (maximum of 12). It should contain 3 or more icons. If not troubleshoot for "GPS icon is white, or not shown" (see **GPS icon is white, or not shown**).
- The "Current Position" shows latitude, longitude, and elevation (in meters). If there are less than 3 satellites, the elevation can be grossly inaccurate.
- The Date/Time field shows the current date, and also a time that includes daylight savings and other offsets entered by the customer in Setup screen 2 "Adjust Time Zone/Clock".

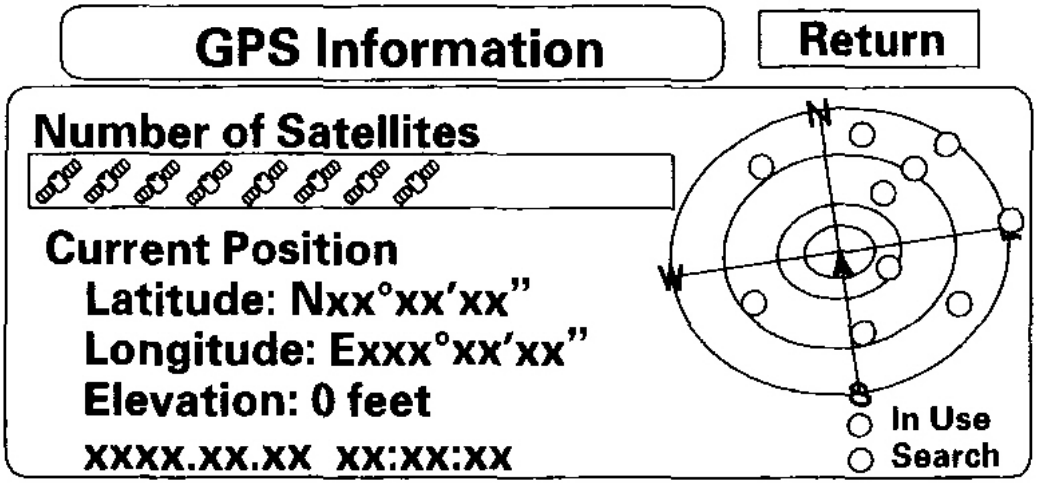


Fig. 64: Identifying GPS Information
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GPS DETAIL

By pressing and holding the MENU button for 10 seconds, a GPS Detail screen is displayed. This screen displays real time incoming satellite positional data. Most of the information shown on this screen is for factory use, however some of the data

can indicate partial GPS signal interference.

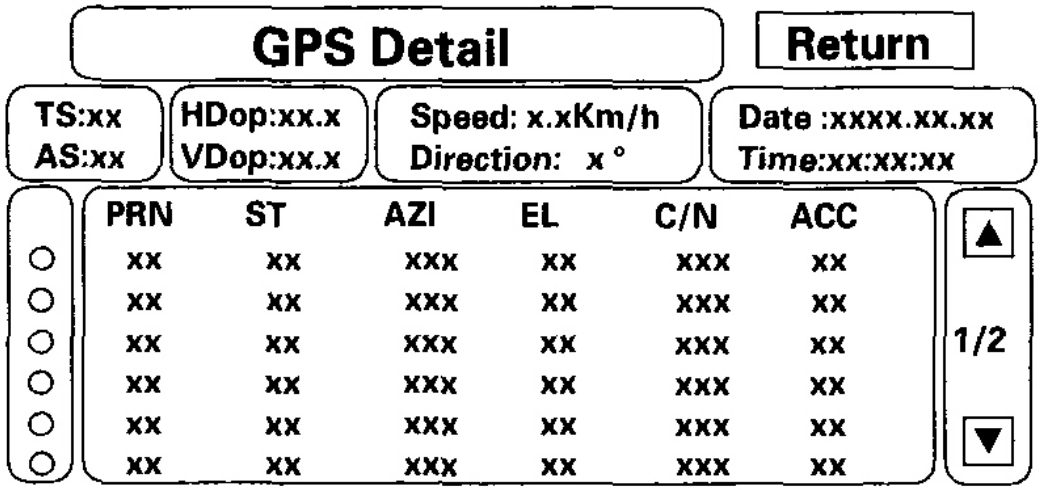


Fig. 65: Identifying GPS Detail
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- The box TS/AS and HDop/VDop is for factory use.
- The Speed and Direction information is updated in real time when driving, and can be used to detect intermittent speed sensor problems.
- The Date/Time Information is the same as in Setup screen "Adjust Time Zone/Clock".
- If the "3D" icon is shown above the yellow dots, this implies that at least 4 satellites are available for map positioning, and the "GPS" indicator on the map screen will be green. See the "Global Positioning System" detailed explanation in the "System Description".
- If the row of data in the table below begins with a "yellow dot", the AZI and EL fields can be used to locate each satellite on the circular GPS diagram (see prior screen).

NOTE: The data shown in the GPS Detail screen is an example

only.

The table of values shown on the screen below has the following columns:

EXAMPLE OF GPS DETAIL SCREEN

Column	Description	Problem indication
Active	Active satellites (Yellow Dot)	If "3D" is missing, follow GPS icon is white, or not shown troubleshooting (see **GPS icon is white, or not shown**).
PRN	The satellite ID number	
ST	The status: 0=cannot view or searching, 2=acquiring	If all 0, then, follow GPS icon is white, or not shown troubleshooting (see **GPS icon is white, or not shown**).
AZI	Azimuth, the angle (0-360) clockwise from north	
EL	Elevation from the horizon (90 deg is overhead)	
C/N	N/A	Healthy signal is 49-52, no signal: 27-33
ACC	N/A	

YAW RATE

This diagnostic checks the yaw rate sensor in the control unit. This device detects when the vehicle turns, and repositions the vehicle position icon on the map screen. For more detailed information, see the yaw rate sensor theory of operation under "System Description"

- "Sensor" indicates the voltage output from the yaw rate sensor. It should

indicate about 2.500 volts when stopped.

- "Offset" is the reference voltage or standard within the yaw rate sensor. It also should indicate about 2.500 volts when stopped.
- A "sensor" output voltage HIGHER than the "Offset" voltage indicates that the vehicle is turning to the right.

  A "sensor" output voltage LOWER than the "Offset" voltage indicates that the vehicle is turning to the left.

- The yaw rate offset, and sensor should both indicate about 2.500 volts when stopped. If either reads zero, or 5.000 volts, replace the navigation unit.
- The yaw rate offset and sensor should be within +/00.01 V of each other when stopped. The sensor value should change relative to the offset as the car is turned while driving. If not, replace the navigation unit.

Example: Car stopped

NORMAL ABNORMAL REFERENCE

Normal		**Abnormal**	
Offset	2.526 V	Offset	2.526 V
Sensor	2.516-2.536 V	Sensor	2.623 V

Example: Car turning

NORMAL ABNORMAL REFERENCE

Normal		**Abnormal**	
Offset	2.526 V	Offset	2.526 V
Sensor	2.678 V (right turn) 2.478 V (left turn)	Sensor	2.623 V (no change on turns)

- The settings "CCW Cal Factor", "CW Cal Factor", and "Set" are for factory use only. THIS SHOULD NEVER BE USED.
- Touch "Tuning" to view small but gradual yaw rate problems.

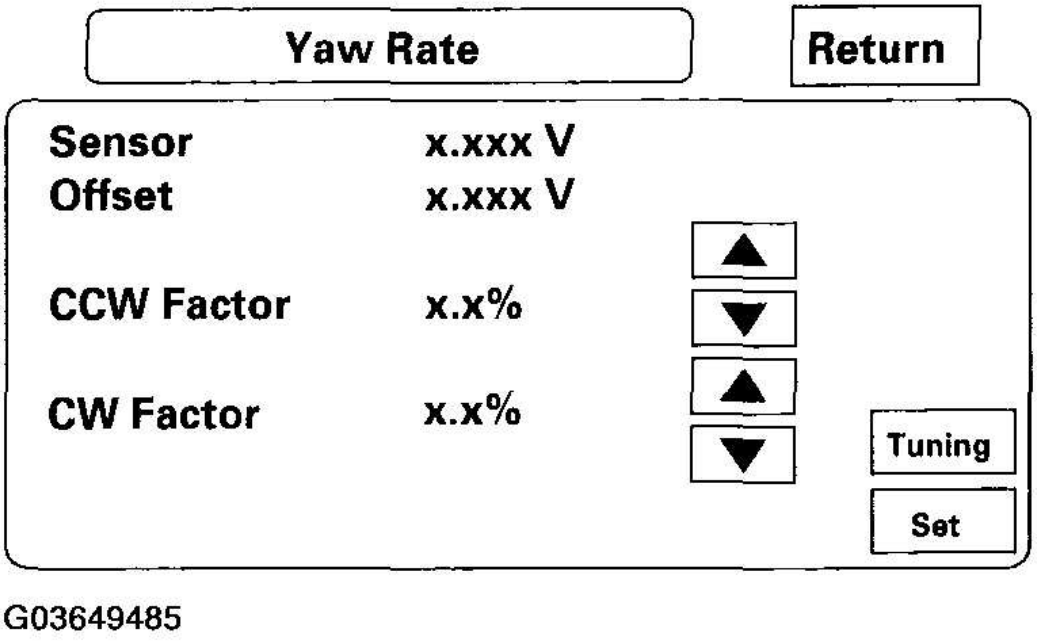


Fig. 66: Identifying Yaw Rate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Yaw Rate Tuning

This diagnostic allows you to graphically display problems with the yaw rate sensor.

- The "ANG-Disp" value accumulates any differences between the "offset", and "sensor" voltages (see Yaw Rate diagnostic). When the sensor is healthy, the random changes in these two voltages generally cancels out, so the value is 0. However if one voltage is consistently higher than the other, then the "ANG-Disp" value accumulates the constant change.
- The "Reset" button temporarily clears the angular accumulation (ANG-Disp), and clears the display dots.
- Do not touch the "CCW" or "CW", or "Set" buttons. These are used for factory setup only.

Two tests are explained below. For gross problems with the sensor, the stationary

test usually confirms whether the sensor is defective. For yaw rate issues related to driving, perform the road test described below.

1. Stationary test: If the "VP" icon spins in place and the "ANG-Disp" value slowly increases or decreases in value, the yaw rate sensor is defective. Replace the Navigation control unit.
2. Road test: Drive the vehicle on a very straight road. Enter the diagnostic mode, select "Yaw rate", and touch the "Tuning" button. While driving down a straight road, the white "dots" should trace a straight line across the screen. However, if you are driving on a straight road, and you notice the dots constantly dropping down or heading up as you drive, the navigation control unit's yaw sensor is defective. You can touch "Reset" to clear "ANG-Disp", and dotted line.
3. If either test above fails, please enter "Yaw rate sensor defective" for the problem description, on the "Navigation core return form".

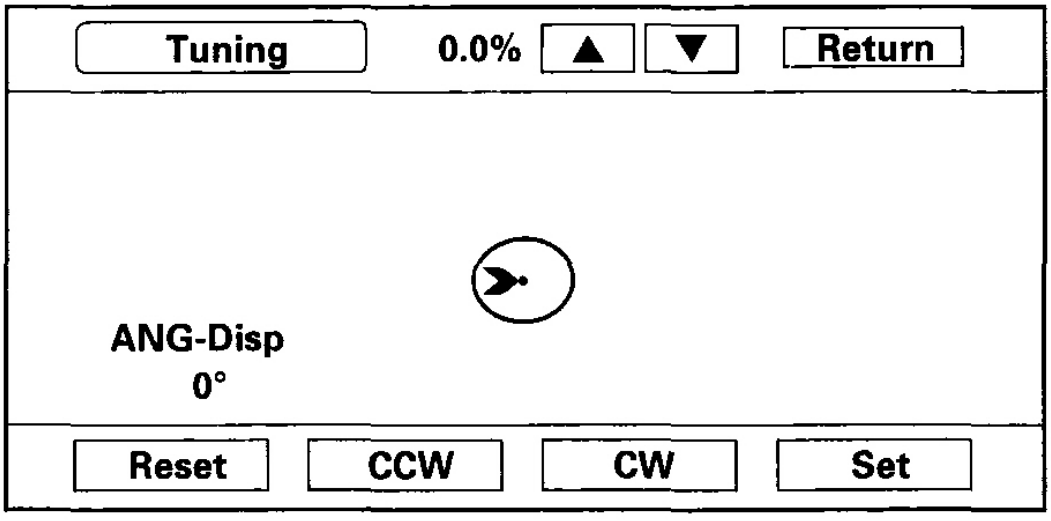


Fig. 67: Identifying Yaw Rate Tuning
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TIRE CALIBRATE

As the vehicle moves, the navigation system receives speed pulses from the PCM. These pulses are converted using a conversion factor to a mph speed that moves the vehicle position (VP) on the map. The navigation system has an internal tuning function that generates and refines this factor based on actual driving. The "Level" indicates the status of the tuning. At initialization, it begins at 0, and increases to 10 as the navigation system is used.

- The "Auto Tuning" is factory set to "ON", and should remain on.
- The "LEVEL" indicates the tuning status. If it is less than 10, the unit is still calibrating.
- The "Tire-Cal. Tuning" and Set should not be used. It is for factory use only.

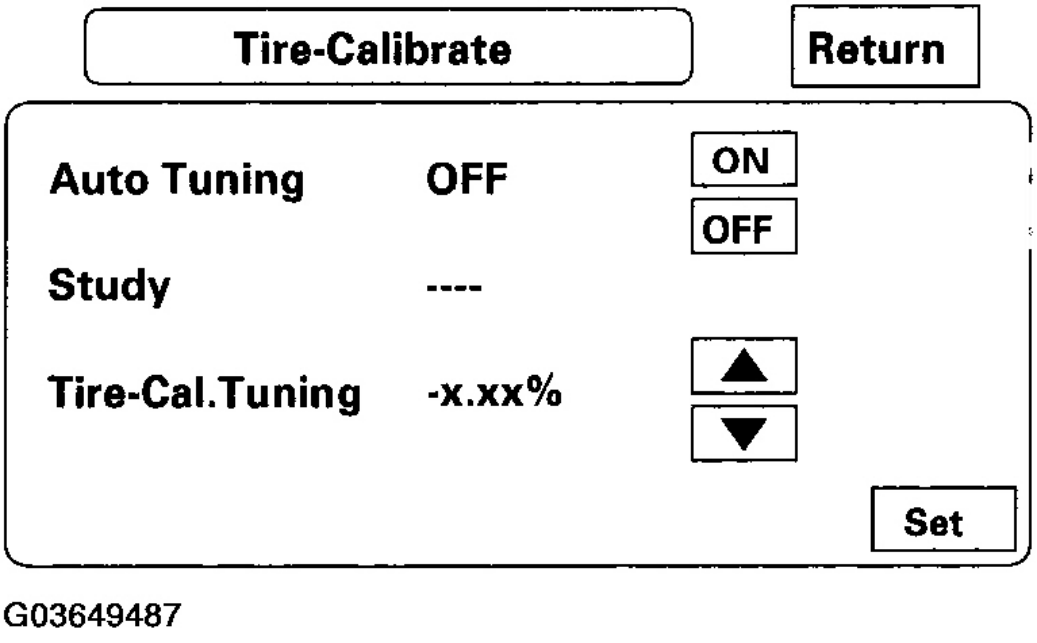


Fig. 68: Identifying Tire Calibrate Display
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FUNCTIONAL SETUP

Select the item you want to check.

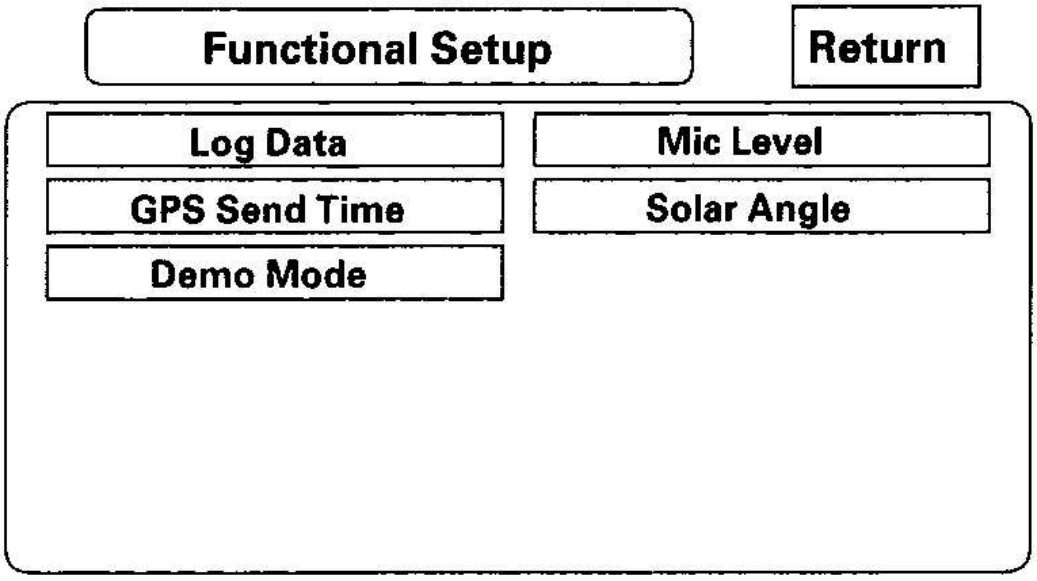


Fig. 69: Functional Setup Display
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Log Data

This screen allows the factory to collect log data to troubleshoot navigation system issues.

- Normally there is no card in the "PC Card slot", and the PC slot door should always be closed.

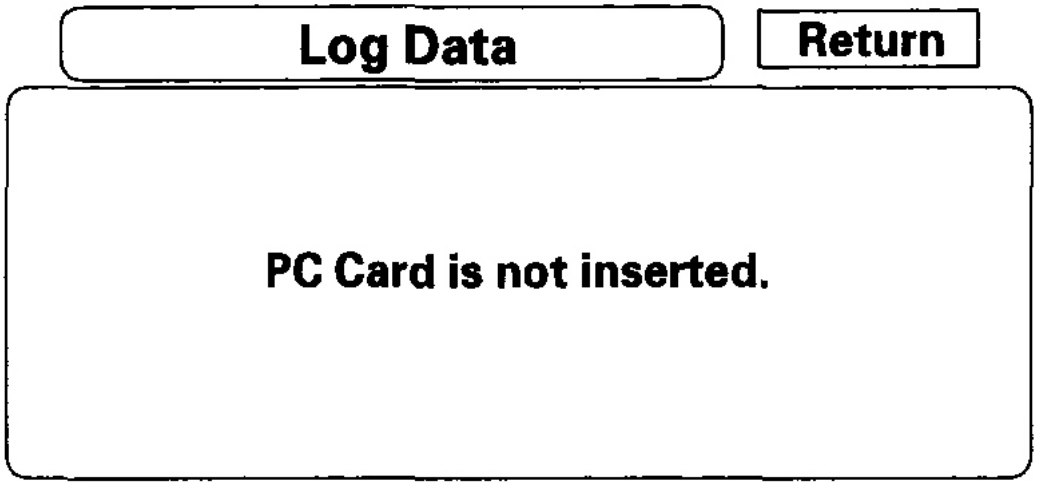


Fig. 70: Display Log Data
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- However, if the factory provides a PC card and instructs you to insert it into the card slot (label side up), and then slide the PC Card door shut. If instructed by the factory, select "Gyro. Sensor Logs ON". Follow the factory procedure for gathering test data, and properly ending the test.

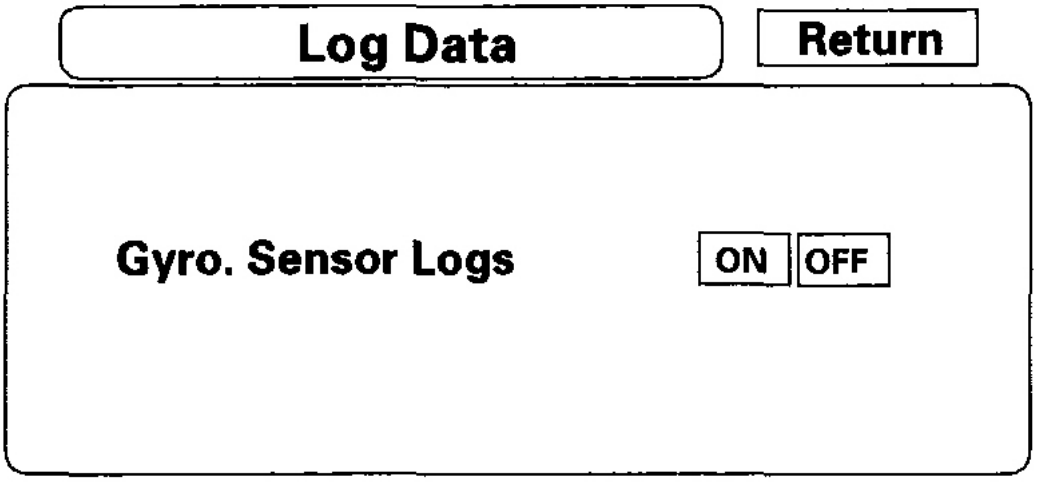


Fig. 71: Identifying PC Card
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GPS Send Time

This screen is for factory use only, do not adjust. It allows adjustment of the GPS time. This display updates in real time.

- "GPS Time" is the time as received from the GPS satellites. It is in Greenwich Mean Time (GMT).
- "System Time" is the internal time used by the navigation unit to calculate your position on the map. It is also in Greenwich Mean Time (GMT).
- "Display Time" is the time shown on Setup screen 2 "Adjust Time Zone/Clock", and reflects any changes due to daylight savings time or time adjustments entered by the customer.
- Date, Hour, Minute, and "Set" should not be used.

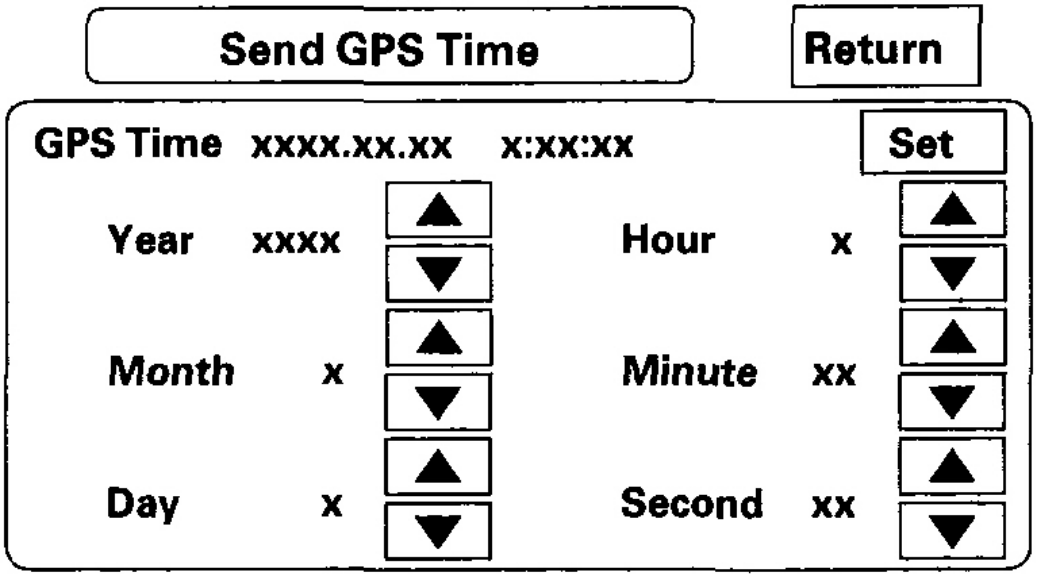


Fig. 72: Identifying GPS Send Time
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Demo Mode

This screen is for factory use only, and should always be set to "OFF". Occasionally this setting is turned "ON" when vehicles are being used at Auto Shows or similar events. Turning this feature on, allows the navigation system to automatically follow a route to a destination when the vehicle is stationary.

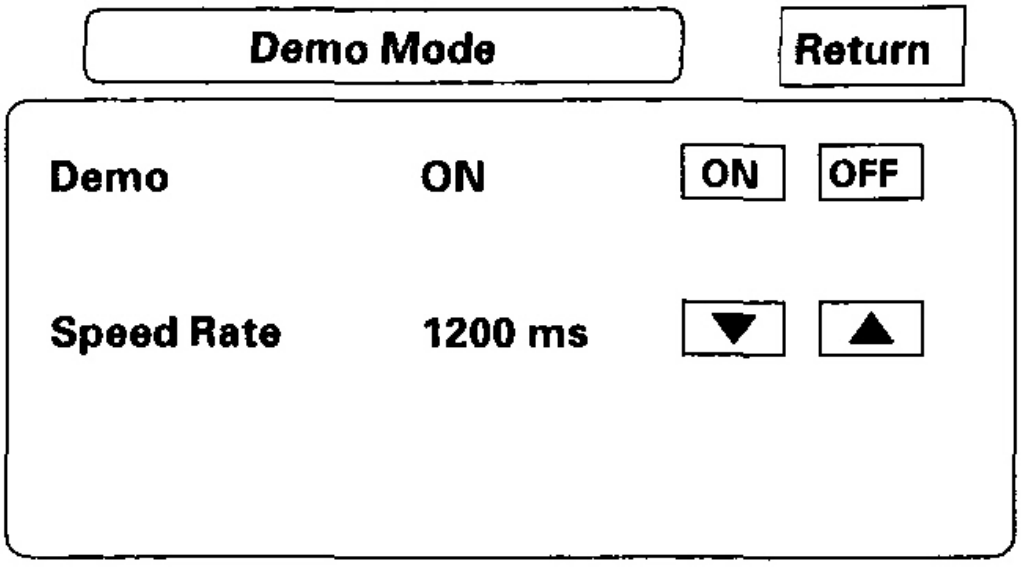


Fig. 73: Identifying Demo Mode
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Mic Level

This diagnostic allows you to independently test the microphone and the Talk/Back buttons. They are used to activate the voice control system. The microphone is located near the map light in the ceiling. It is directional, and works best if the voice is coming from the drivers seat.

- Press the Talk button on the steering wheel, and in a normal voice say "testing". The TALK indicator on the screen should momentarily become green, and the text "Now Recording..." should appear in yellow. In addition, the Mic Level indicator should move at least to the 6th bar. If the Talk indicator on the screen does not briefly become green, then check the wiring from the Talk button to the navigation unit. If there is no "Mic Level" movement when you speak, then you should check the wire running from the microphone to the control unit.

- Press the Back button on the steering wheel. This should cause the Cancel indicator on the screen to momentarily become green. If it does not briefly change to green, then check the wiring from the steering wheel Back button to the navigation unit.

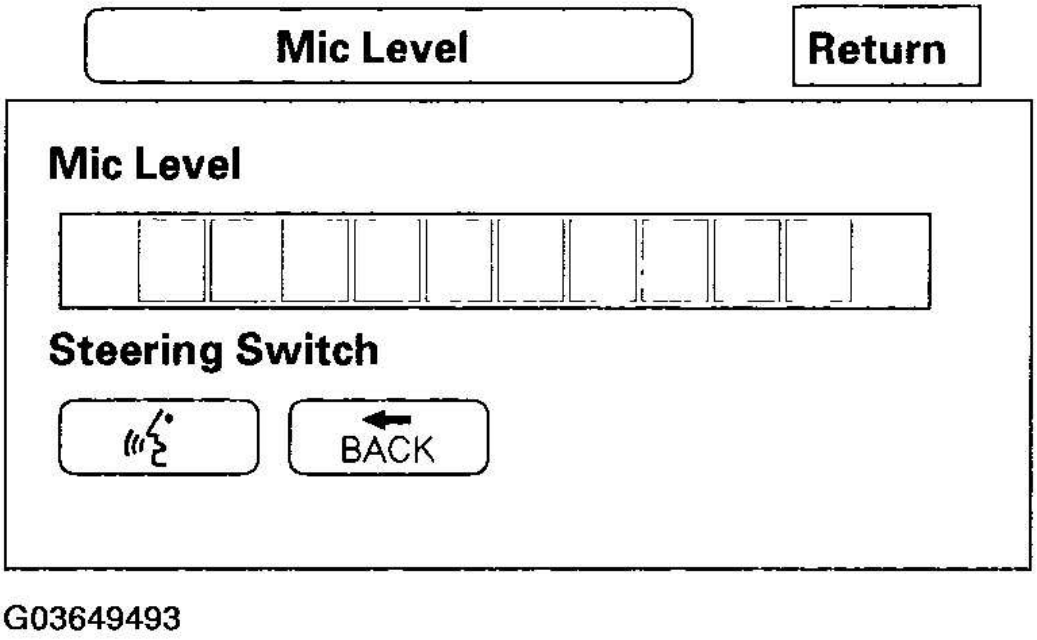


Fig. 74: Identifying Mic Level
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Solar Angle

This screen is used to graphically display the sun's position as determined by GPS. The navigation system uses the sun's angle, along with the sunlight sensor to control the driver/passenger A/C air flow. The heat that must be removed by the A/C unit varies, depending on the angle of the sun entering the vehicle. This screen is for factory use only, and should not be adjusted.

- The screen shows a circular diagram of the sky oriented in the direction that the vehicle is pointing. During daylight hours a red dot is shown, representing the direction and elevation of the sun. The outer circle represents the horizon (0

degrees elevation). The middle circle is 30 degrees, the center circle is 60 degrees, and the very center is directly overhead (90 degrees).

- "Auto" should always be on (yellow).
- The "Angle", "Dir", and "Reliability" settings are used by the factory to simulate the sun's position for debugging this function.

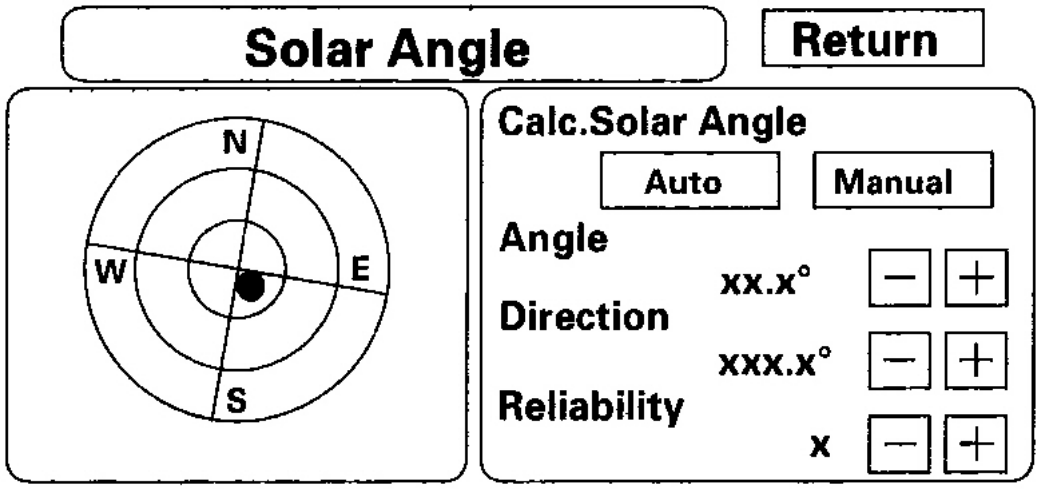


Fig. 75: Identifying Solar Angle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VERSION

This screen displays the current version of the program, and allows the loading of a new version of the program either from a CD/DVD or from a PC card.

- Program Flash is the version of the navigation program in memory.
- Program Disc is the version of the program on the DVD.
- The Values "IPL", "APL", "DBOOT", and "System uCom" are for factory use.
- The value for "Models" should begin with the letters "SDA", and indicates that the navigation unit is for an ACCORD. If any other letters appear after "Models", then verify the part number on the underside of the navigation unit,

and replace the navigation unit if necessary.

- "Download" should never be touched unless instructed by the factory. Touching download overwrites the navigation software version in memory, with the software version on the DVD.

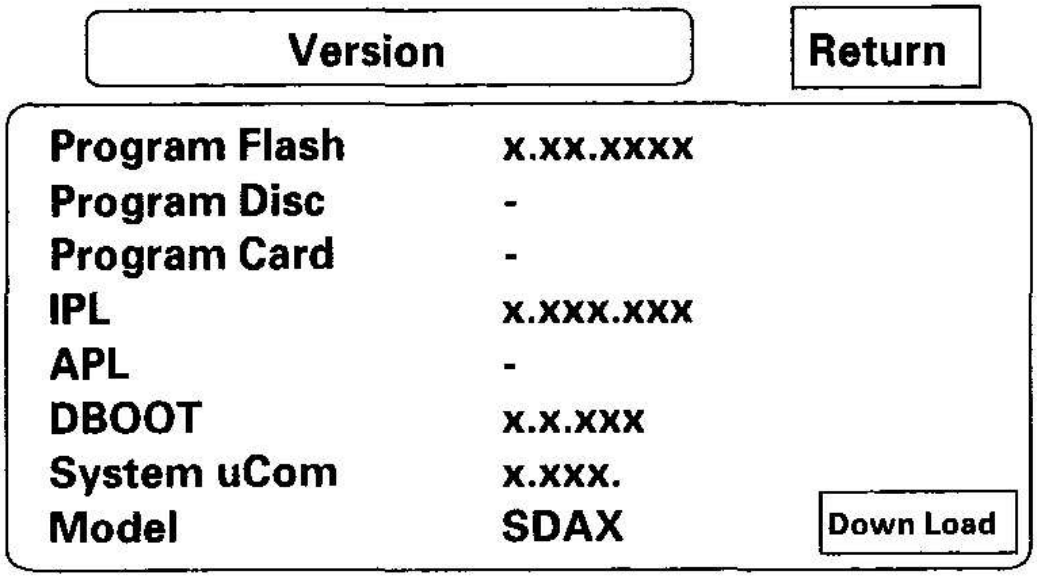


Fig. 76: Identifying Version
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NOTE: If any model number other than SDAX is displayed, replace the navigation unit with the correct part. The model code tells the navigation unit what software to load off the DVD.

ERROR MESSAGE TABLE

Screen Error Message	Solution
Navigation system is unable to acquire a proper GPS signal.	Make sure there is nothing on the rear package tray blocking the GOS antenna. If not, move the vehicle to an open space away from tall buildings, trees, etc. Rear window tinting and after-market devices can

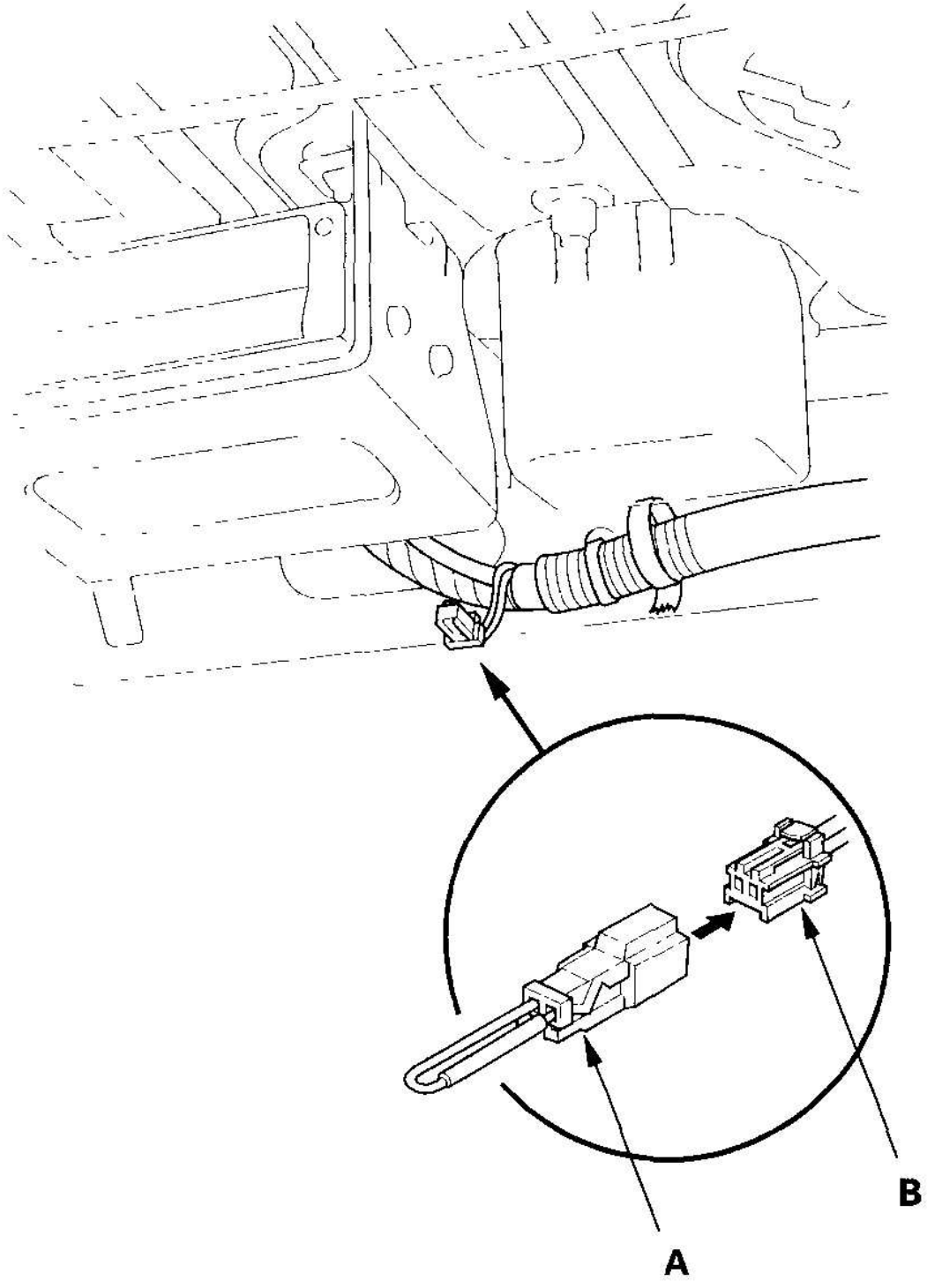
	affect the GPS reception.
Navigation unit door is open or No DVD disc installed. Please check system.	Make sure the navigation DVD is installed with the label side up and the navigation unit door is fully snapped closed.
PC card slot door is open. Please check system.	Make sure that the sliding door for the PC card is fully closed.
No DVD disc, please check system.	Check that the navigation DVD is installed with the label side up.
Display temp is too high. System will shut down until display cools down.	This message will appear briefly when the display temperature is too high, and then the display will turn off until the temperature cools down. The system will turn back on when the display cools down.
Outside temperature is low, system will take a while to start up.	The temperature is below -30°C and the navigation ECU has difficulties reading the DVD. The system will start up when the temperate warms up.
DVD disc reading error (unformatted), please consult your dealer.	Check the DVD source for deep scratches or other damage. Make sure you are using an official Honda navigation DVD (white in color). The system cannot read other mapping databases or video DVDs. If the problem persists, see your dealer.
Route has not been completed. Please try again from a different location.	Routing to or from a place (new area) that is not in the database. Try planning a different route to or from a different location.
No alternate route found. Original route will be guided.	No alternate route method was found. The original route will be used.
This destination cannot be found in database.	The destination was not found in the database. Try another destination nearby, or select the destination with the joystick.

FORCED STARTING OF DISPLAY

Special Tools Required

SCS service connector 07PAZ-0010100

1. Connect the SCS service connector (A) to the navigation service check connector (B) located behind the navigation unit.



G03649496

Fig. 77: Connecting SCS Service Connector To Navigation Service Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Turn the ignition switch ON (II).
3. Check that the system starts up and then changes to the "Navi System Link" screen.
4. Remove the SCS connector.

NOTE: If the system fails to display the "Navi System Link" screen, refer to no picture is displayed (see SYMPTOM TROUBLESHOOTING).

DVD-ROM REPLACEMENT

NOTE: When the DVD-ROM is re-inserted or replaced, a map match must be done (see MAP MATCHING).

1. Turn the ignition switch ON (II).
2. Push the open button (A) of the navigation unit (B) located in the trunk area.

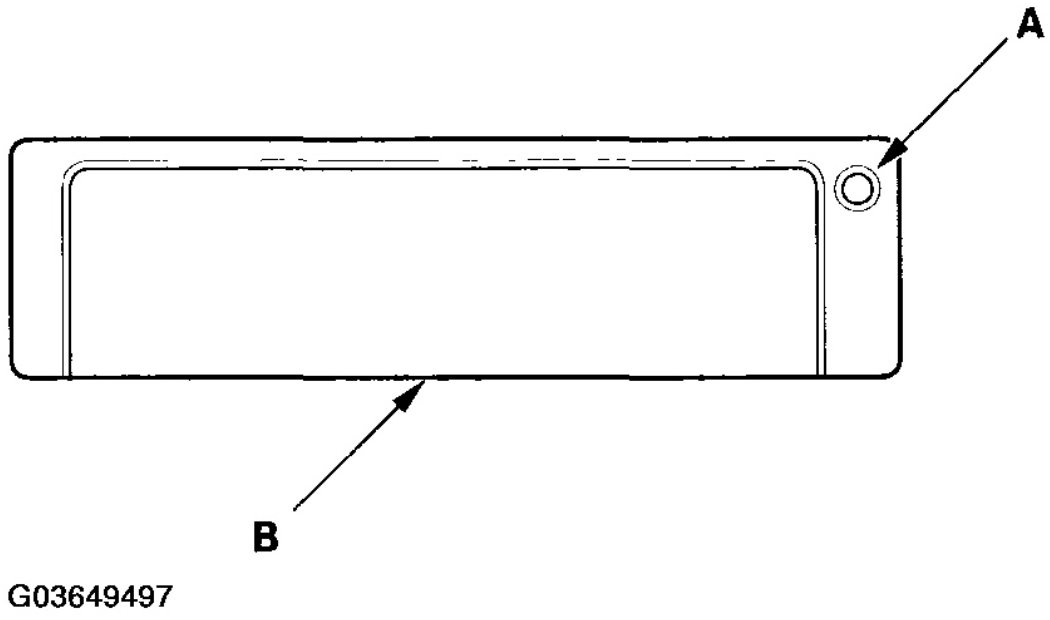


Fig. 78: Pushing Open Button Of Navigation Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Press the EJECT button.
4. Remove the DVD-ROM.
5. Insert the new DVD-ROM.
6. Push the open button. Do not turn the ignition switch OFF, until data is down loaded to navigation unit.

NOTE: After servicing, the front cover must be closed. If you start up the navigation system with the front cover open, the display will indicate. "Navigation unit door is open or No DVD Disk installed. Please check system".

NAVIGATION UNIT REMOVAL/INSTALLATION

NOTE: If the navigation unit is replaced or disconnected, a map match must be done (see MAP MATCHING).

1. Remove the navigation unit from the trunk area.

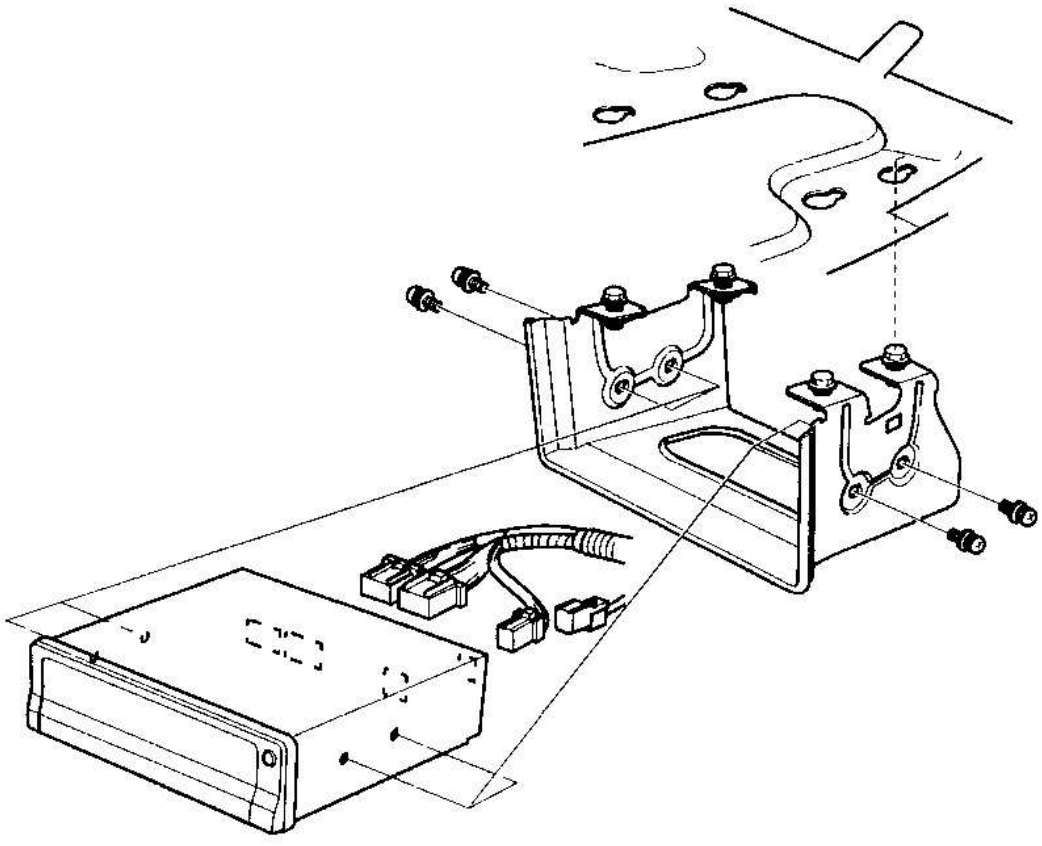


Fig. 79: Removing Navigation Unit From Trunk Area
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the navigation unit bracket (B) from the passenger's seat.
3. Remove the bracket from the navigation unit (C).
4. Install in the reverse order of removal.

GPS ANTENNA REMOVAL/INSTALLATION

1. Remove the rear shelf (see **TRIM REMOVAL/INSTALLATION - REAR SHELF AREA**).

2. Remove the GPS antenna (A).

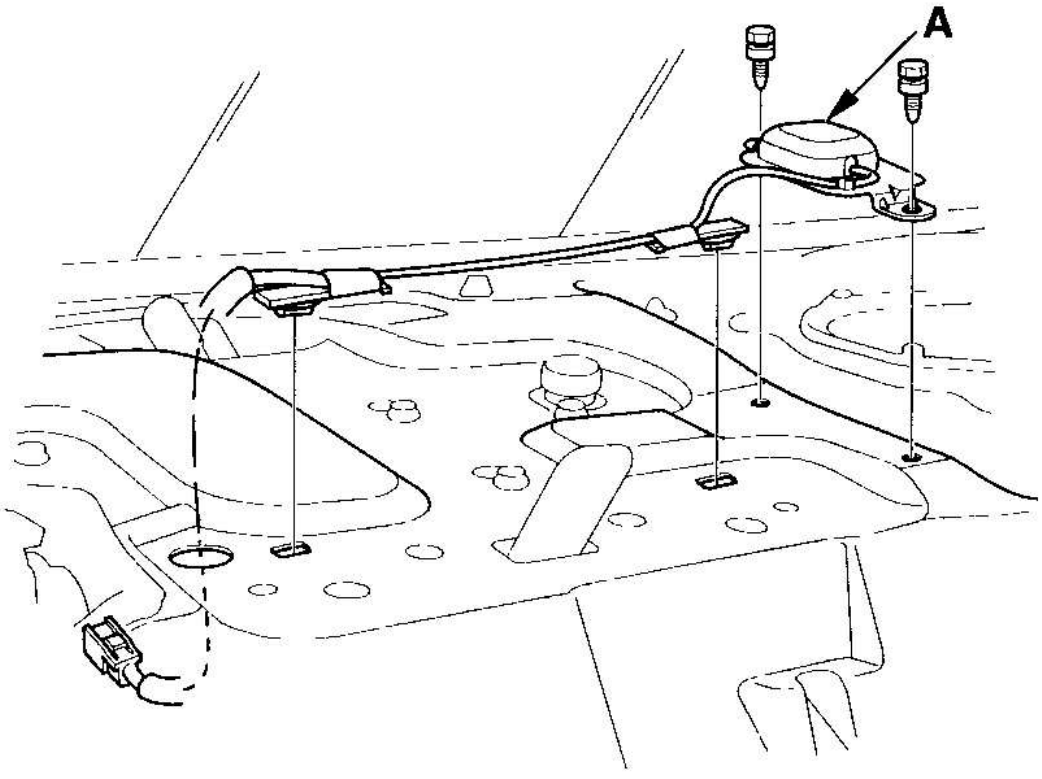


Fig. 80: Removing GPS Antenna
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install in the reverse order of removal.

VOICE CONTROL SWITCH REMOVAL/INSTALLATION

1. For 4 door, remove the driver's airbag (see **DRIVER'S AIRBAG REPLACEMENT**), then remove the voice control switch (see **STEERING WHEEL DISASSEMBLY/REASSEMBLY**).

   For 2 door, remove the voice control switch cover (A) from left side of the steering wheel.

Illustration in **Fig. 81** shows 2 door models

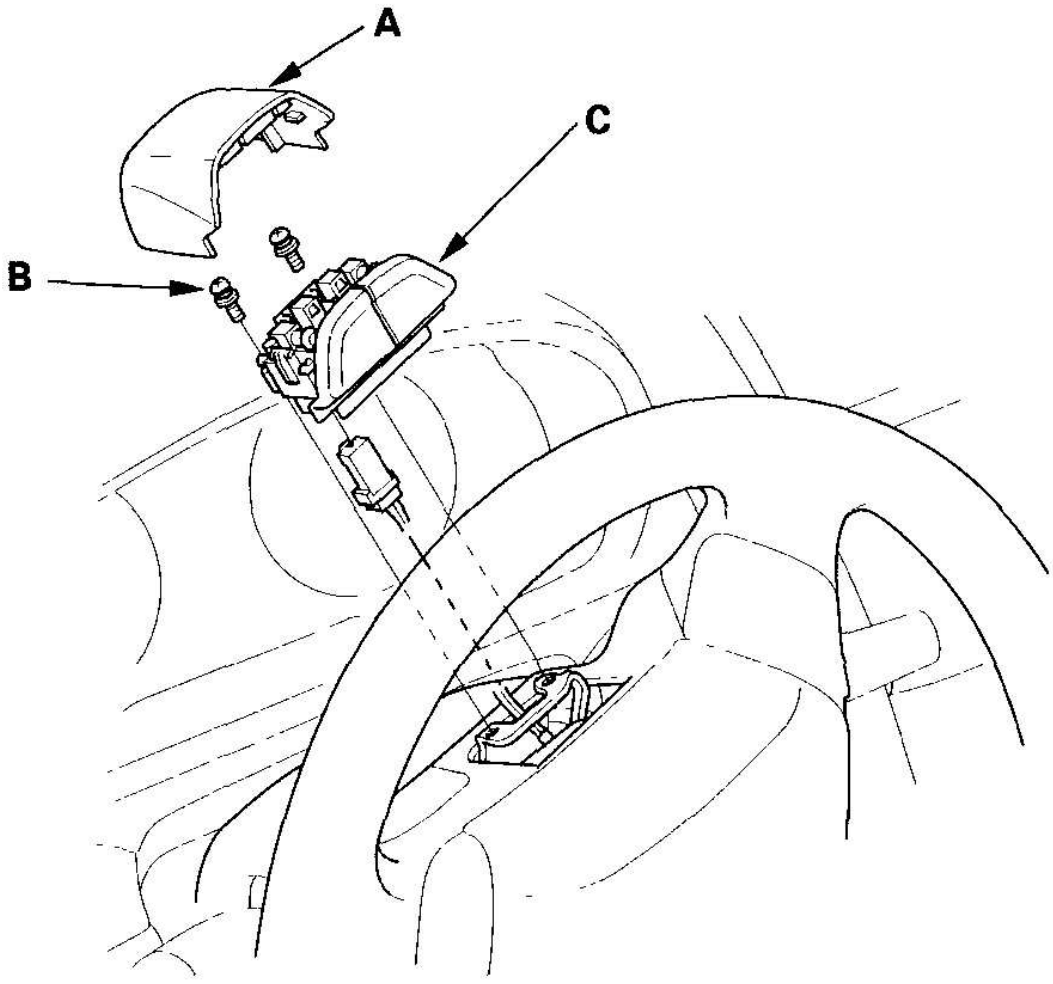


Fig. 81: Removing Voice Control Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the two screws (B) from the voice control switch (C), then remove the voice control switch.
3. Disconnect the voice control switch connector.
4. Install in the reverse order of removal.

DISPLAY UNIT REMOVAL/INSTALLATION

For removal of Display Unit (See **AUDIO-HVAC DISPLAY MODULE REMOVAL/INSTALLATION**

2003-07 ACCESSORIES & EQUIPMENT

Openers - Accord

COMPONENT LOCATION INDEX

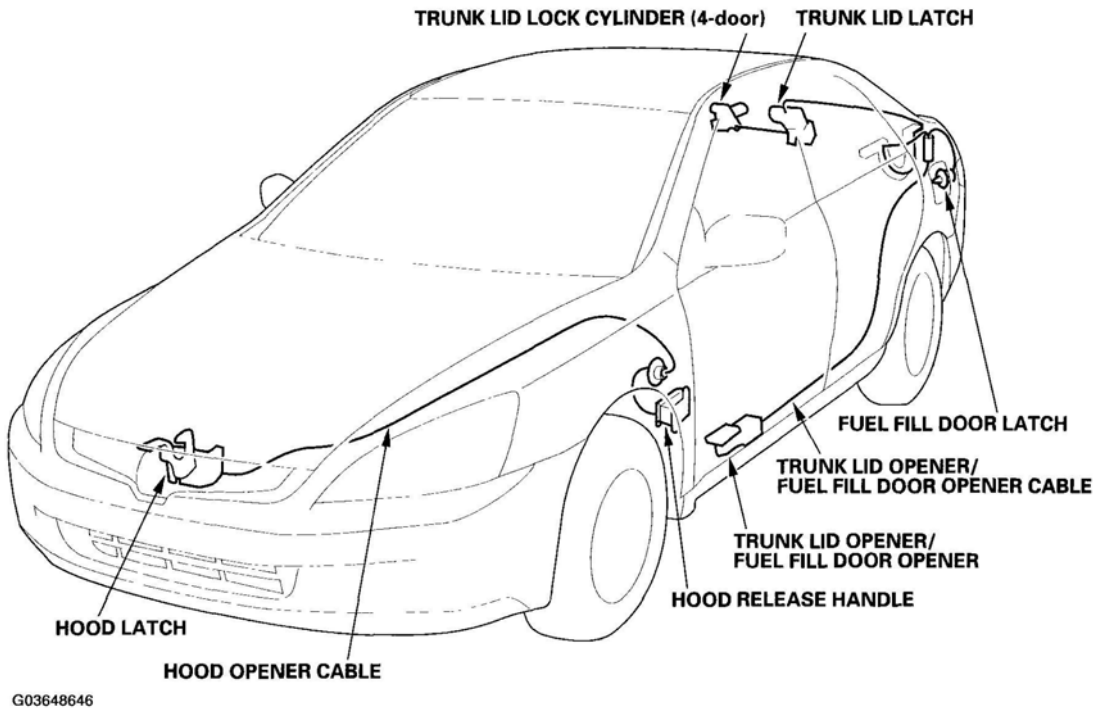


Fig. 1: Locating Openers Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

HOOD OPENER CABLE REPLACEMENT

NOTE:
- **Put on gloves to protect your hands.**
- **Take care not to scratch the body and related parts.**

1. Remove these items:
   - Front bumper, 2-door (see **2-DOOR**)
   - Front grille, 4-door (see **4-DOOR**)
   - Inner fender (see **FRONT INNER FENDER REPLACEMENT**)
   - Kick panel, 2-door (see **2-DOOR - DOOR SILL AREA**), 4-door (see **4-**

DOOR - FRONT DOOR SILL AREA)

2. Remove the bolts (A) then remove the radiator upper brackets (B).

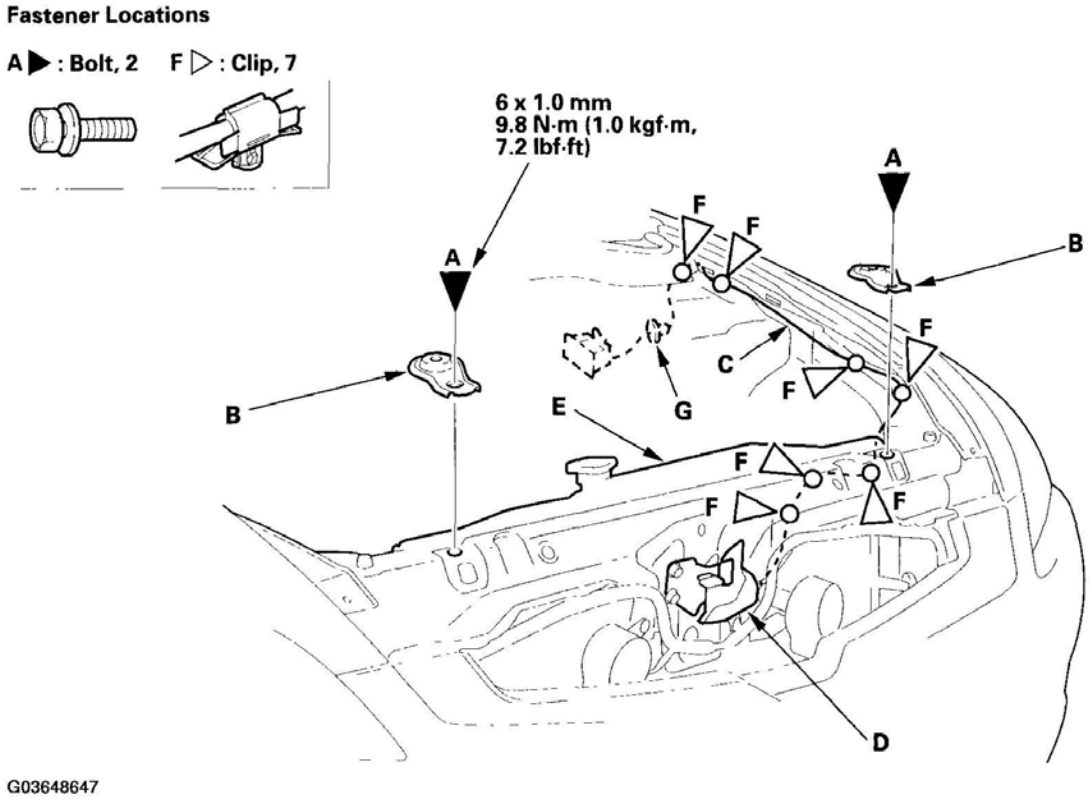


Fig. 2: Removing Radiator Upper Brackets
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the hood opener cable (C) from the hood latch (D) (see **HOOD LATCH REPLACEMENT**).
4. Move the radiator (E) as necessary. Using a clip remover, detach the clips (F), and remove the grommet (G) from the body, then remove the hood opener cable from the vehicle. Take care not to bend the cable.
5. Install the cable in the reverse order of removal, and check the clip is damaged or stress-whitened, and if necessary, replace it with new one.

TRUNK LID OPENER CABLE/FUEL FILL DOOR OPENER CABLE REPLACEMENT

2-DOOR

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to scratch the body and related parts.**

1. Remove these items from the left side of the vehicle:
   - Door sill trim (see **TRIM REMOVAL/INSTALLATION - DOOR AREA**)
   - Side trim panel (see **TRIM REMOVAL/INSTALLATION - REAR SIDE AREA**)
   - Trunk rear trim panel (see **TRIM REMOVAL/INSTALLATION - TRUNK AREA**)
   - Trunk side trim panel, left side (see **TRIM REMOVAL/INSTALLATION - TRUNK AREA**)
2. Pull the carpet back as necessary.
3. Detach the clip (A) with a clip remover, and release the opener cable (B) from the clip (C).

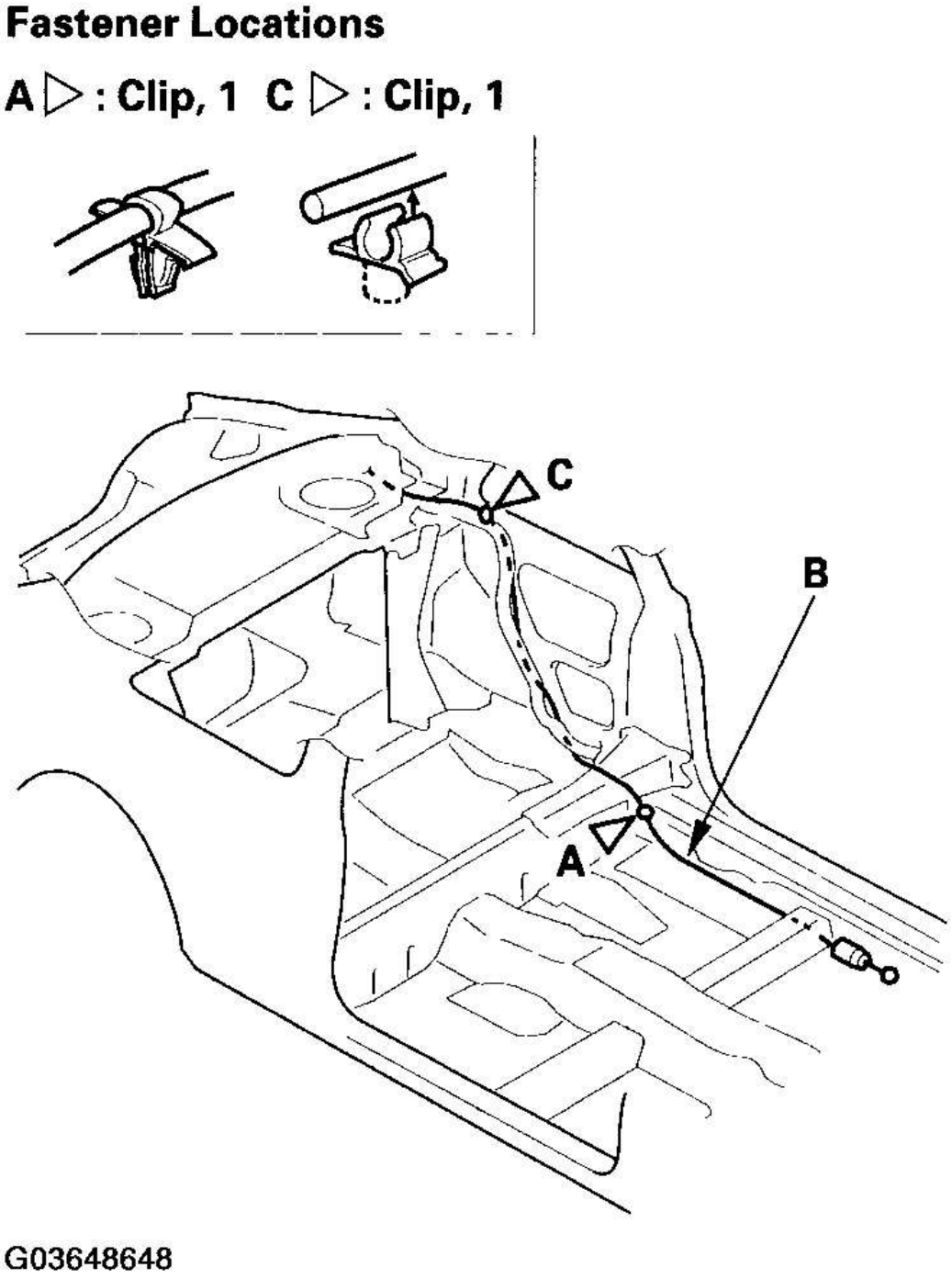


Fig. 3: Detaching Clip & Releasing Opener Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Release the fuel fill door/trunk lid opener cable (A) from the clip (B). Remove the fuel fill door latch (C) by turning it 90°, and detach the opener cable junction box (D) from the body.

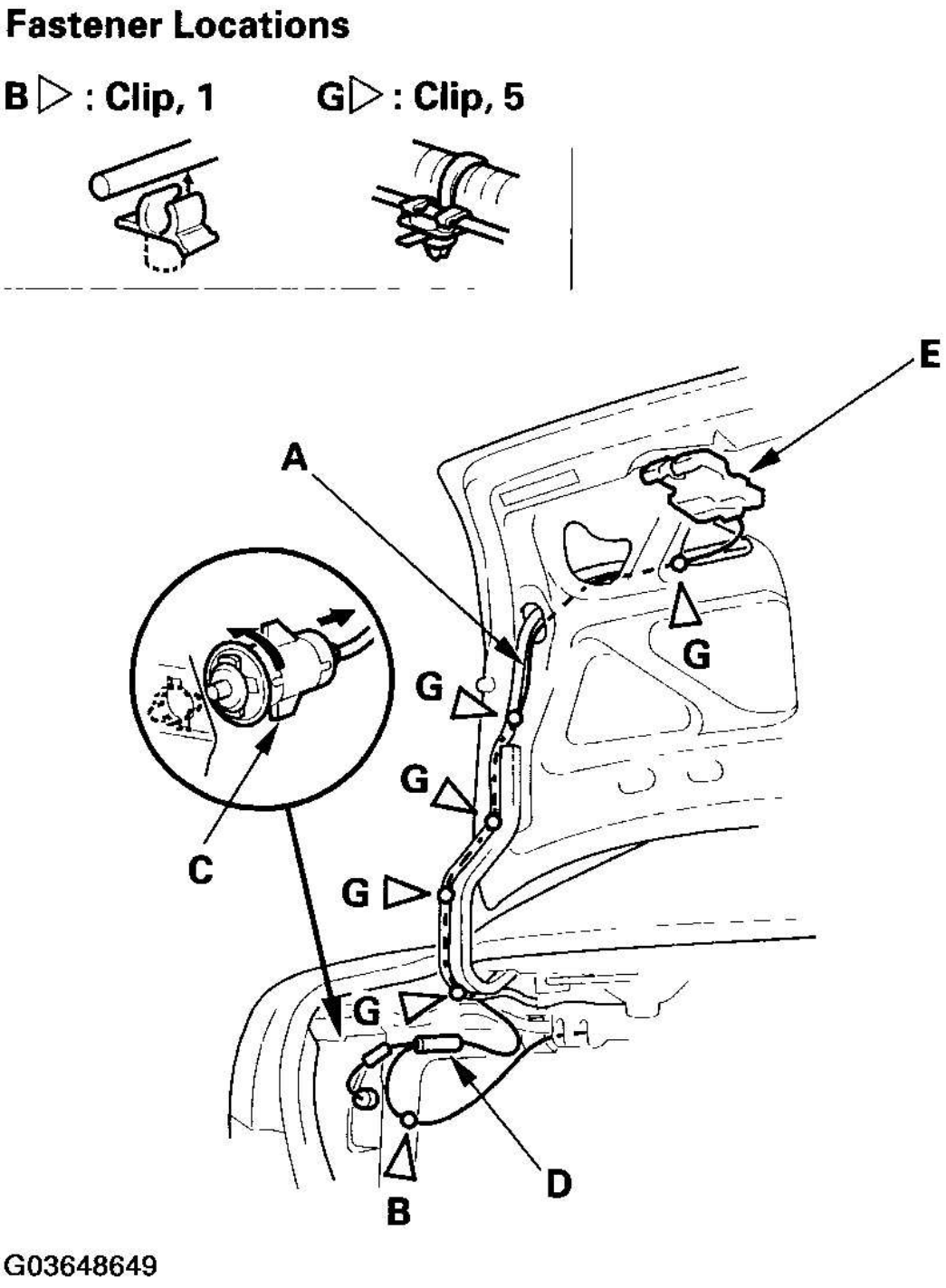


Fig. 4: Releasing Fuel Fill Door/Trunk Lid Opener Cable From Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the trunk lid opener cable from the trunk lid latch (E) (see **TRUNK LID LATCH REPLACEMENT**).
6. Release the fuel fill door opener cable/trunk lid opener cable from the clips (G).
7. Remove the trunk lid opener/fuel fill door opener cable from the vehicle. Take care not to bend or kink the cable.
8. Install the opener cable in the reverse order of removal, and note these items:
   - Route the opener cable (A) beside the floor wire harness clips (B) correctly.
   - Align the marks (C) on the cable with the cable clips (D) as shown below.
   - Check if the clip is damaged or stress-whitened, and if necessary, replace it with new one.

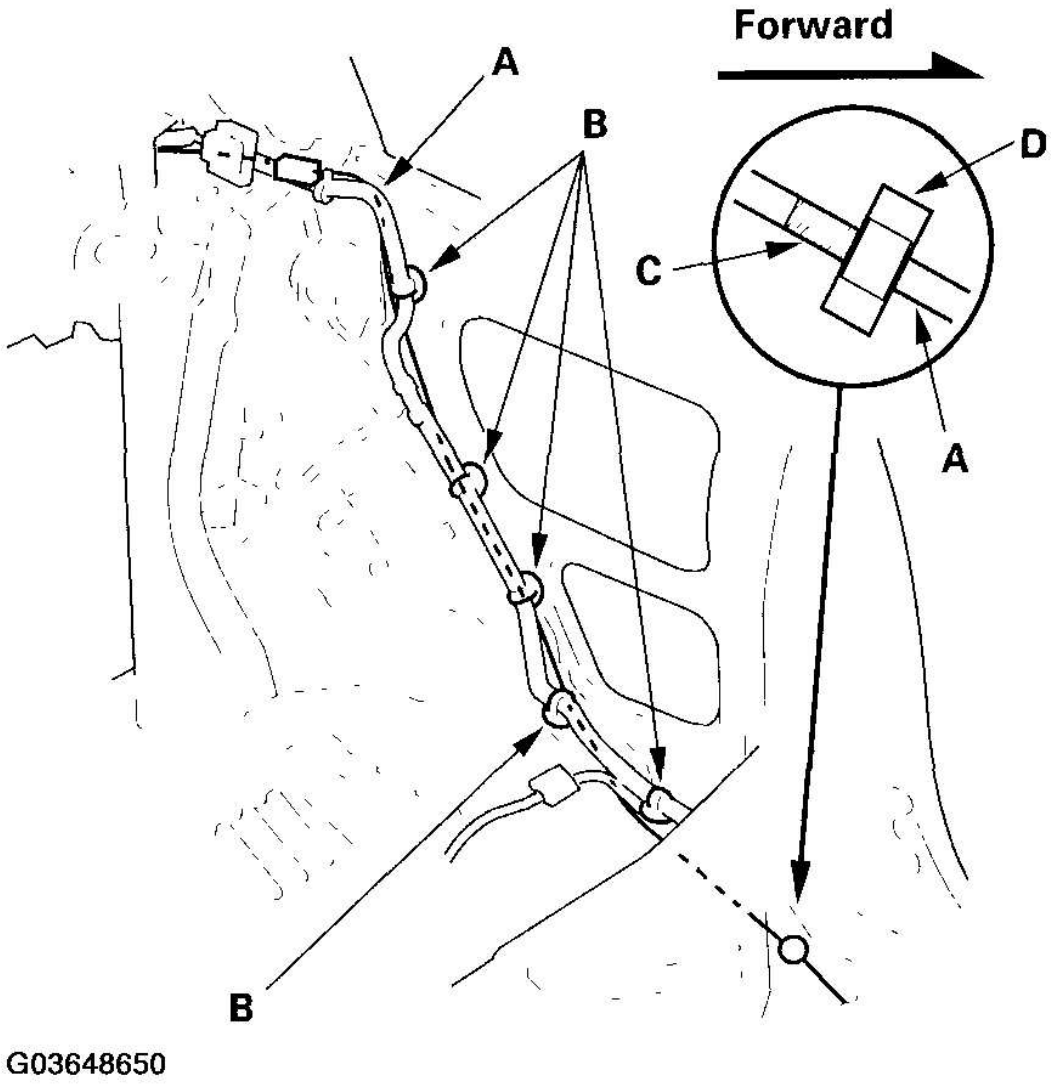


Fig. 5: Identifying Align Marks On Cable With Cable Clips (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

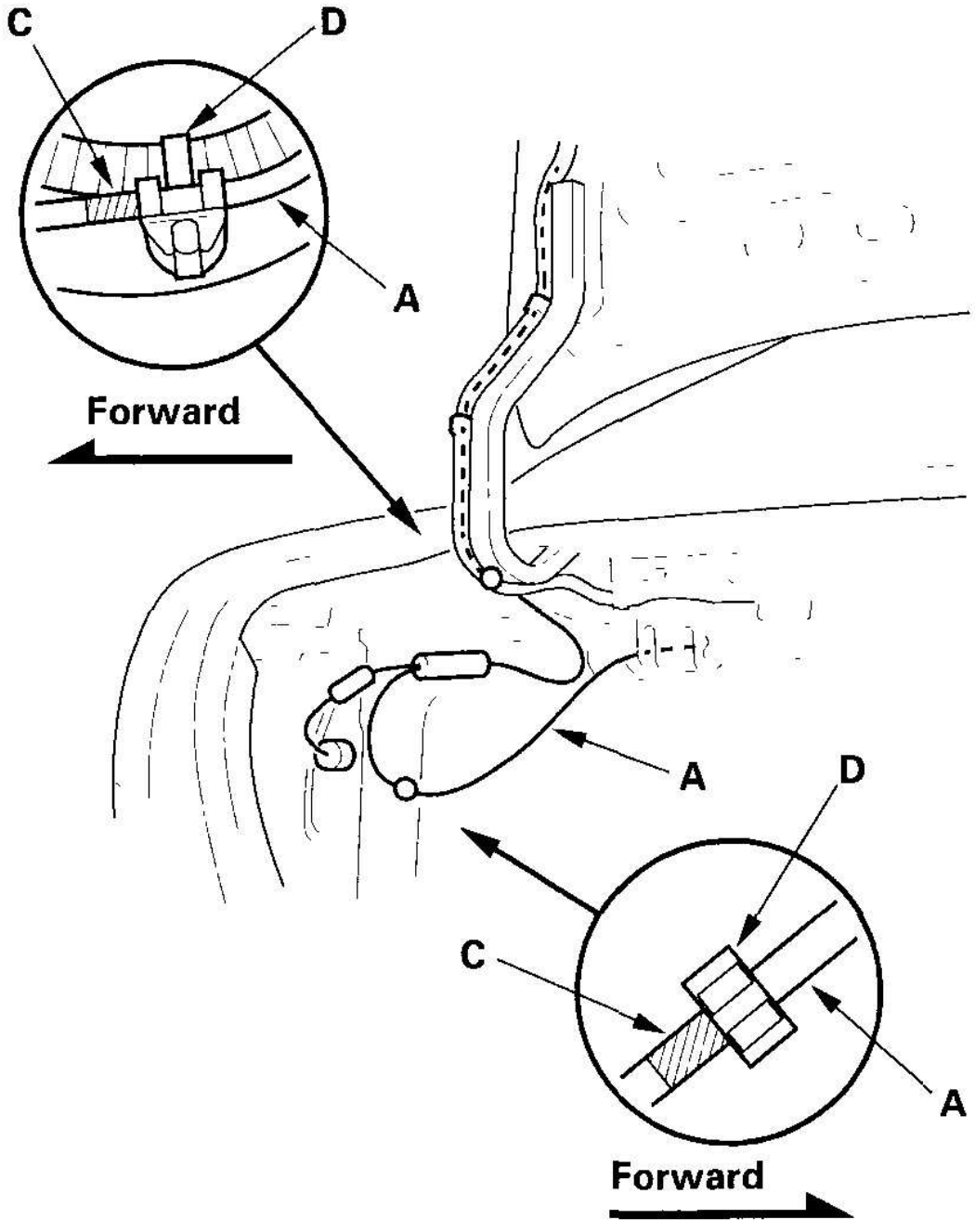


Fig. 6: Identifying Align Marks On Cable With Cable Clips (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:

- **Put on gloves to protect your hands.**
- **Take care not to scratch the body and related parts.**

1. Remove these items form the left side of the vehicle:
   - Front door sill trim (see **4-DOOR - FRONT DOOR SILL AREA**)
   - Rear door sill trim (see **4-DOOR - REAR DOOR SILL AREA**)
   - B-pillar lower trim, without side curtain airbags (see **4-DOOR-B-PILLAR - WITHOUT SIDE CURTAIN AIRBAGS ('03-04 MODELS)**), with side curtain airbags (see **4-DOOR-C-PILLAR - WITH SIDE CURTAIN AIRBAGS ('04-06 MODELS)**)
   - Left rear seat side bolster (see **4-DOOR**)
   - Trunk rear trim panel (see **4-DOOR ('03-05 MODELS)**)
   - Trunk side trim panel, left side (see **4-DOOR ('03-05 MODELS)**)
2. Pull back the carpet as necessary.
3. Release the trunk lid opener/fuel fill door opener cable (A) from the clip (B). Remove the cushion tape (C).

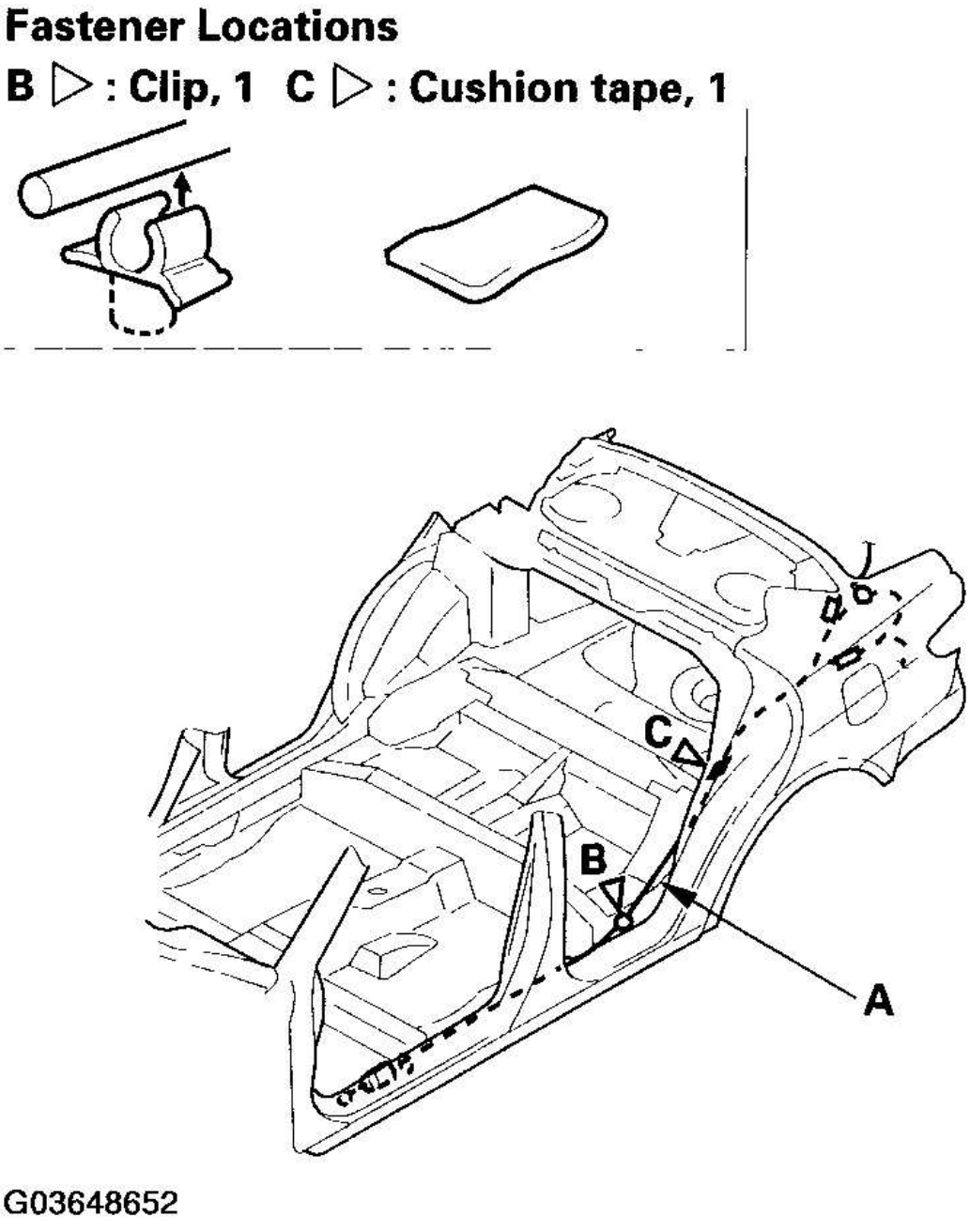


Fig. 7: Removing Cushion Tape
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the fuel fill door latch (A) by turning it 90°, and detach the opener

cable junction box (B) from the body.

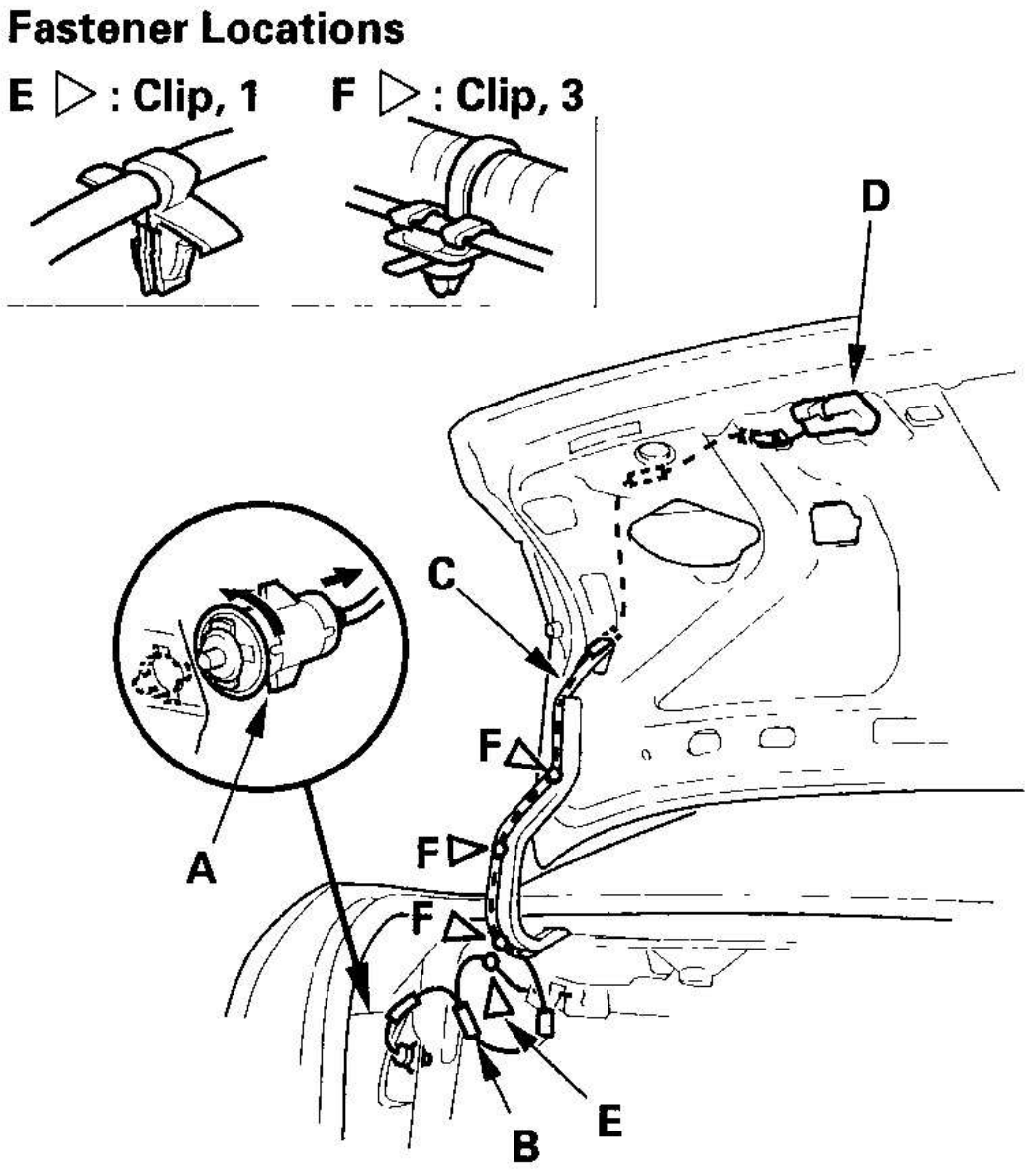


Fig. 8: Removing Fuel Fill Door Latch (Without Power Trunk Lid Latch)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

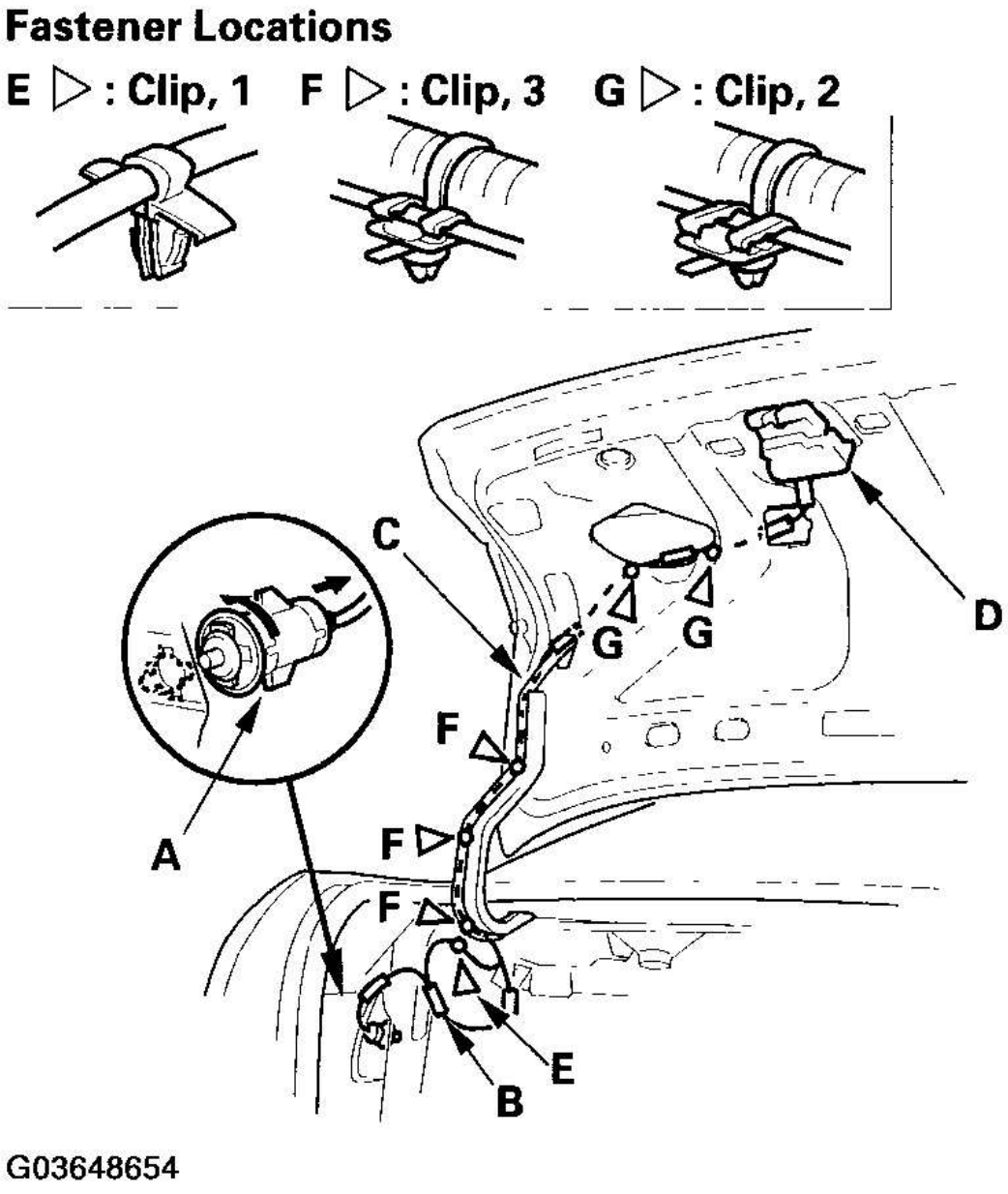


Fig. 9: Removing Fuel Fill Door Latch (With Power Trunk Lid Latch)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the trunk lid opener cable (C) from the trunk lid latch (D) (see **TRUNK LID LATCH REPLACEMENT**).
6. Using a clip remover, detach clip (E). Release the trunk lid opener/fuel fill door

opener cable from the clips (F, G).

7. Remove the trunk lid opener/fuel fill door opener cable from the vehicle. Take care not to bend or kink the cable.
8. Install the opener cable in the reverse order of removal, and note these items:
   - Align the marks (A) on the opener cable (B) with the cable clips (C) as shown below.
   - Check the clip is damage or stress-whitening, and if necessary, replace it with new one.

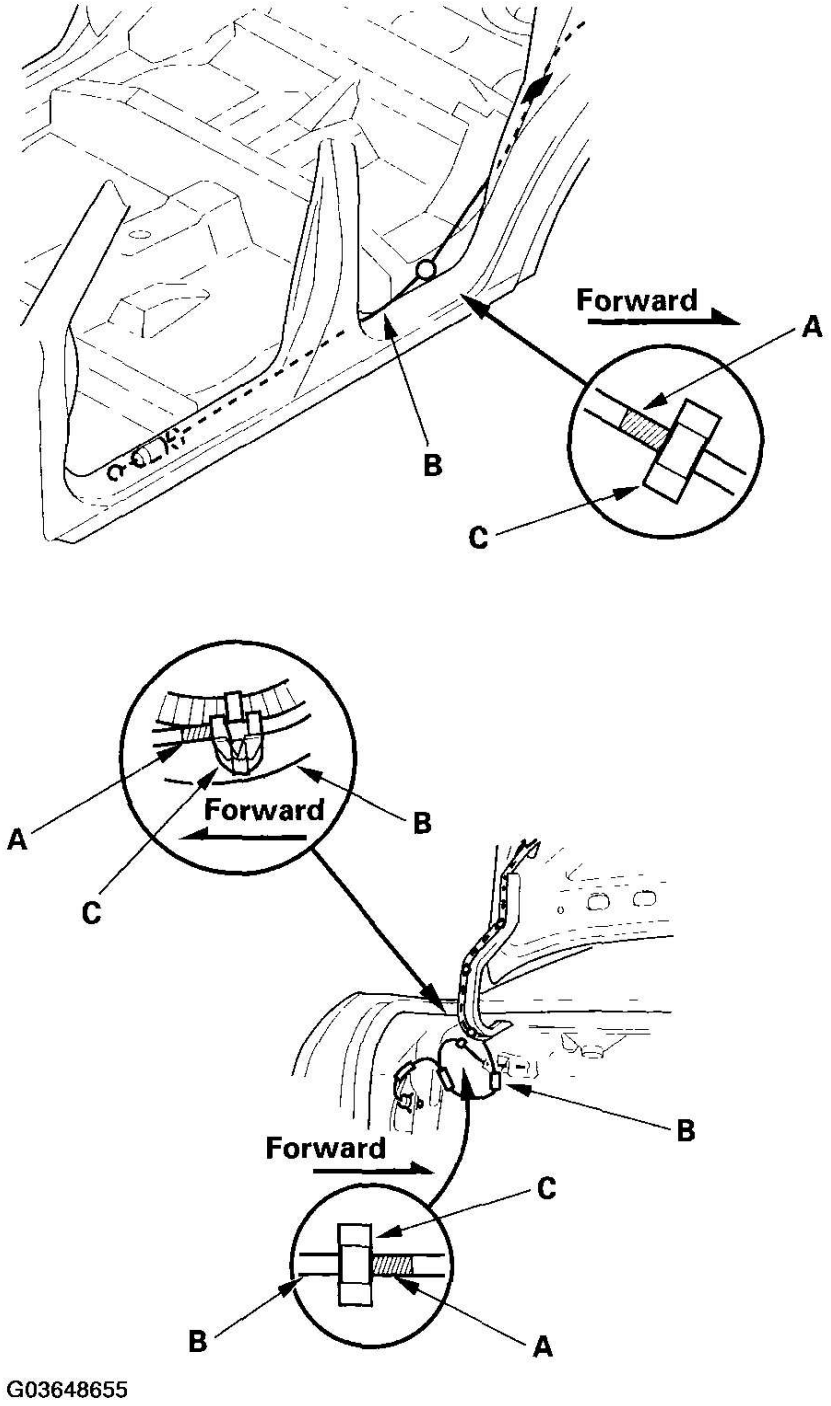


Fig. 10: Installing Opener Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

HOOD LATCH REPLACEMENT

1. Remove these items:
   - Front bumper, 2-door (see **2-DOOR**)
   - Front grille, 4-door (see **4-DOOR**)
2. Remove the cover (A) from the hood latch (B).

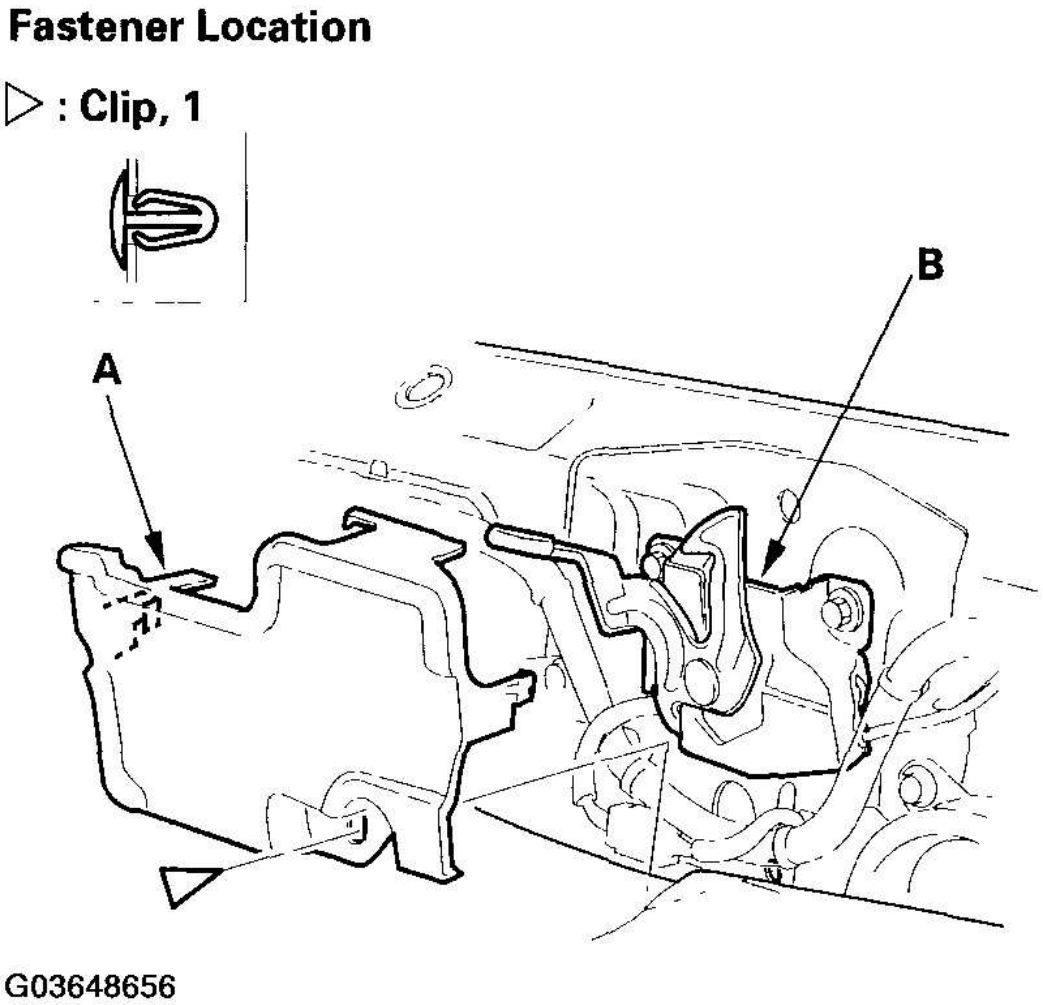


Fig. 11: Removing Cover From Hood Latch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If equipped, disconnect the hood latch switch connector (A).

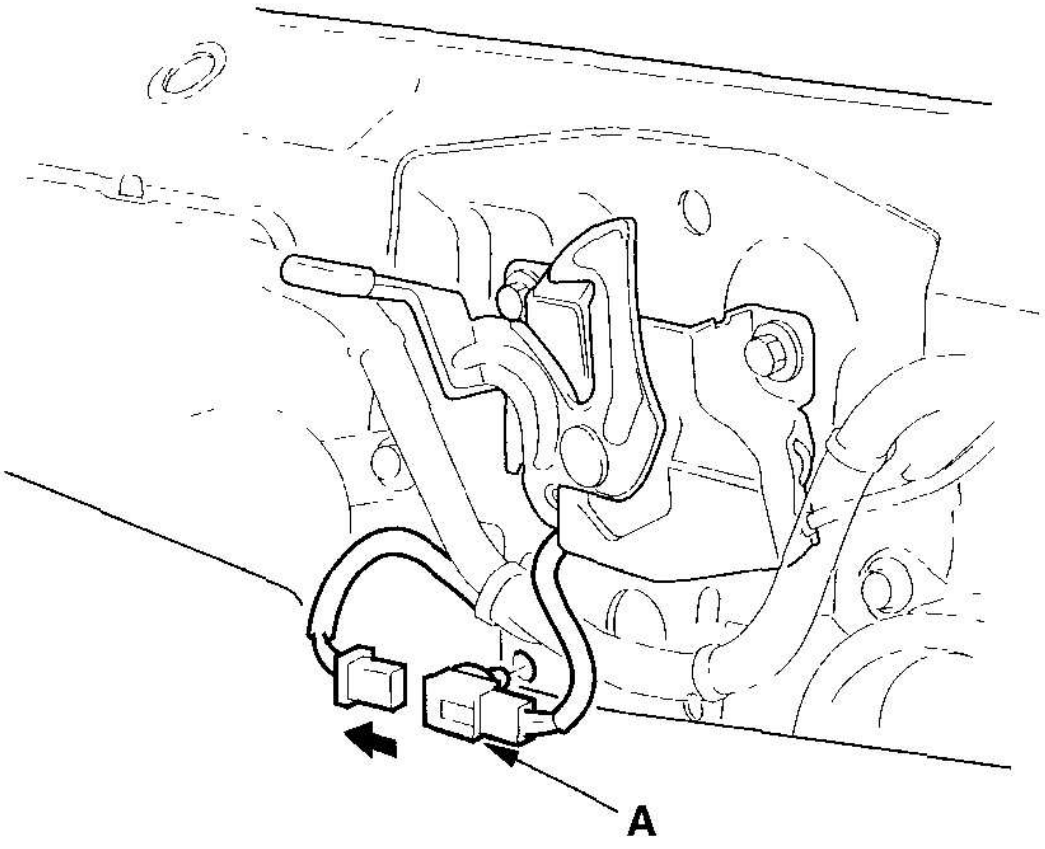


Fig. 12: Disconnecting Hood Latch Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the bolts, then remove the hood latch (A) from the body.

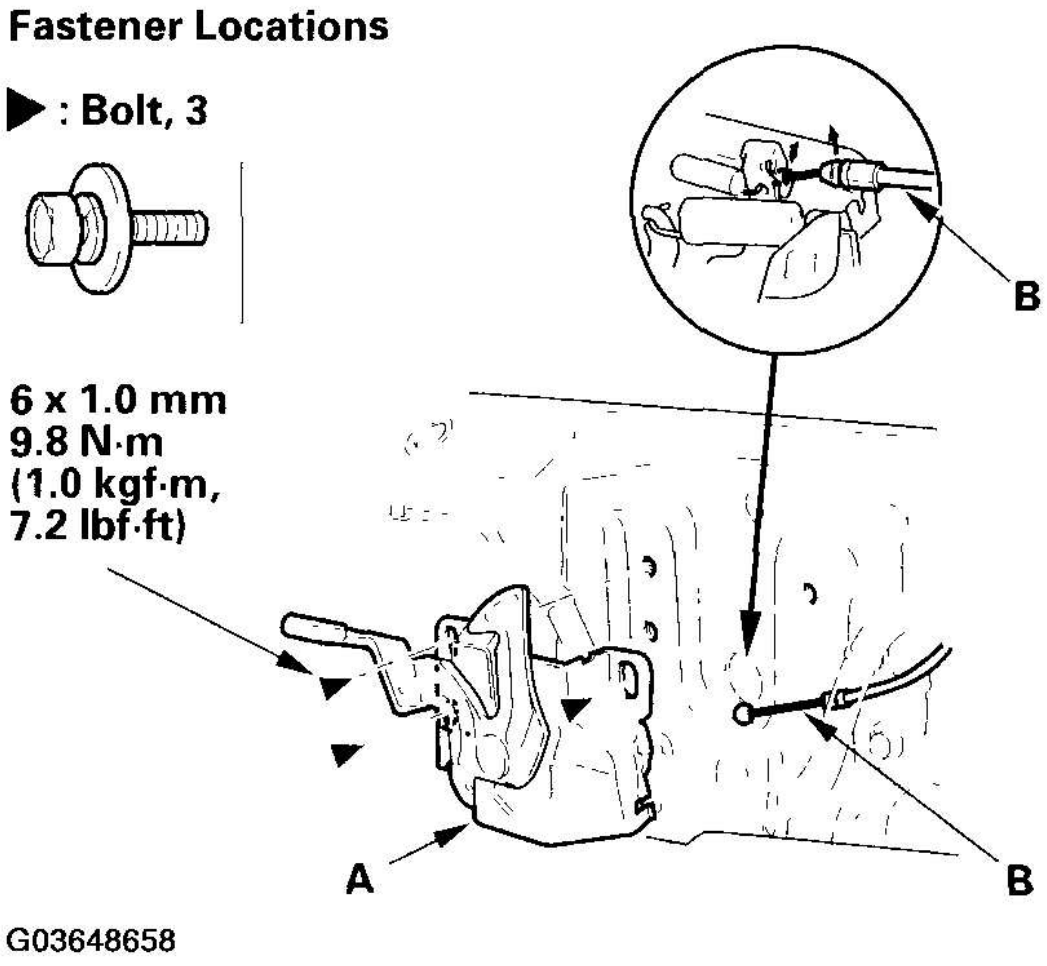


Fig. 13: Removing Hood Latch From Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the hood opener cable (B) from the hood latch. Take care not to bend the cable.
6. Install the latch in the reverse order of removal, and note these items:
   - Apply multipurpose grease to each location indicated by the arrows shown in **Fig. 14**.
   - Make sure the hood opener cable is connected properly and hood latch switch connector is plugged in properly (for some models).
   - Adjust the hood latch alignment (see step 3 in **ADJUSTMENT**).

- Make sure the hood opens properly and locks securely.

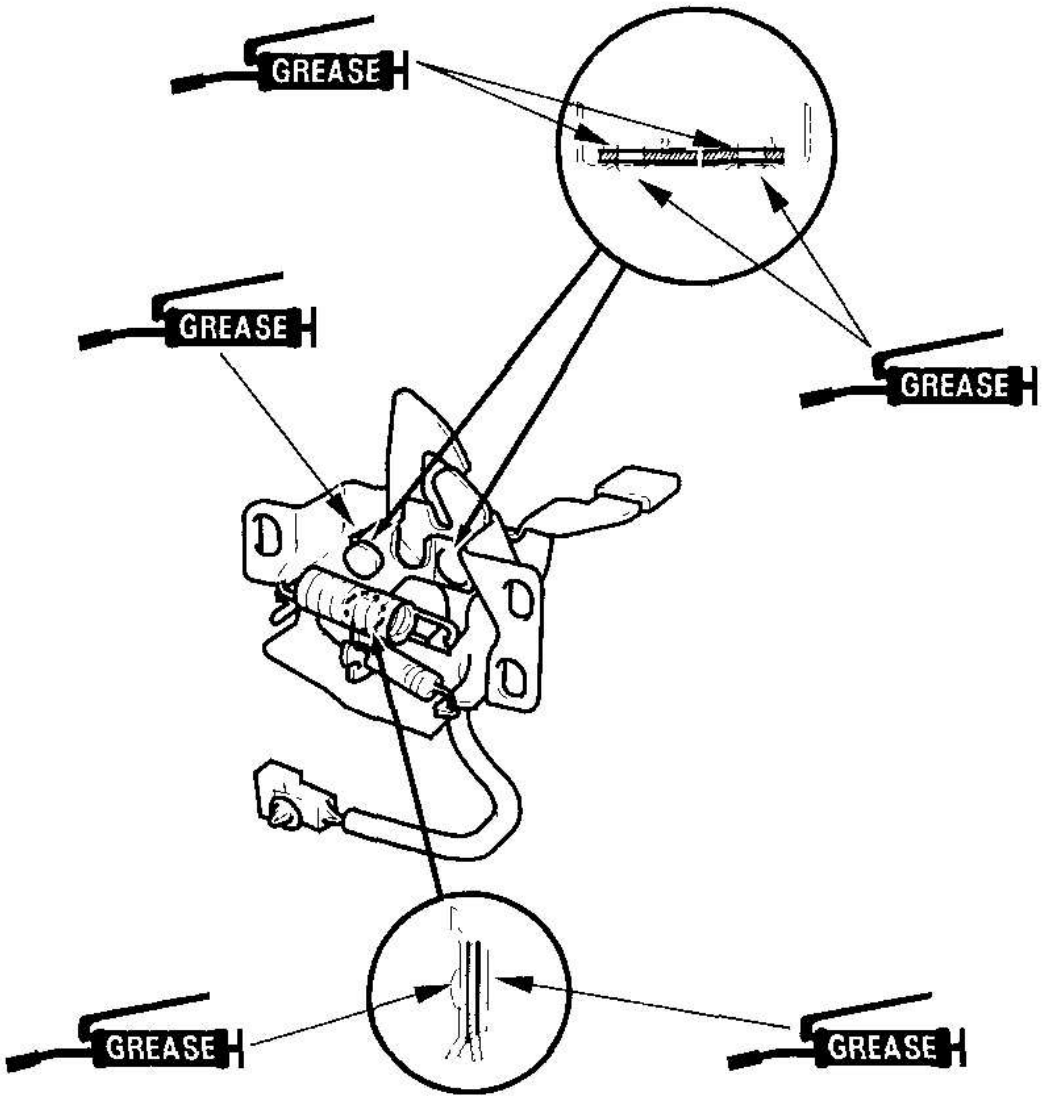


Fig. 14: Applying Multipurpose Grease
Courtesy of AMERICAN HONDA MOTOR CO., INC.

HOOD RELEASE HANDLE REPLACEMENT

1. Remove the kick panel, 2-door (see **2-DOOR - DOOR SILL AREA**), 4-door (see **4-DOOR - FRONT DOOR SILL AREA**).
2. Remove the bolts, then remove the hood release handle (A).

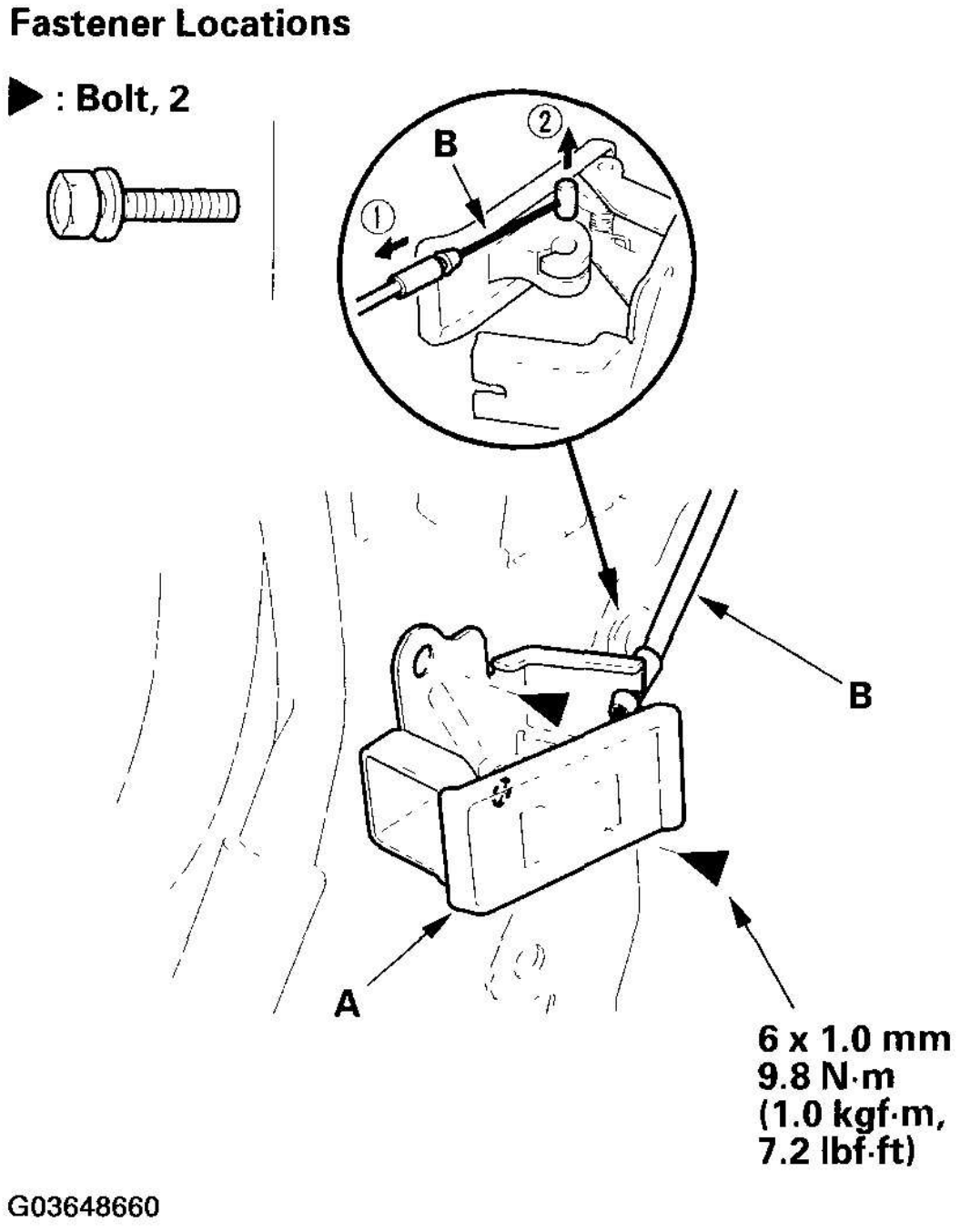


Fig. 15: Removing Hood Release Handle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the hood opener cable (B) from the hood release handle. Take care

not to bend the cable.

4. Install the hood release handle in the reverse order of removal, and note these items:
   - Make sure the hood opener cable is connected properly.
   - Make sure the hood opens properly.

TRUNK LID OPENER/FUEL FILL DOOR OPENER REPLACEMENT

Special Tools Required

KTC trim tool set SOJATP2014

NOTE: Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.

1. Using a trim tool, detach the hooks (A) by prying the front side cap (B), then remove it from the front door sill trim (C), and if equipped, remove the opener lock cylinder (D).

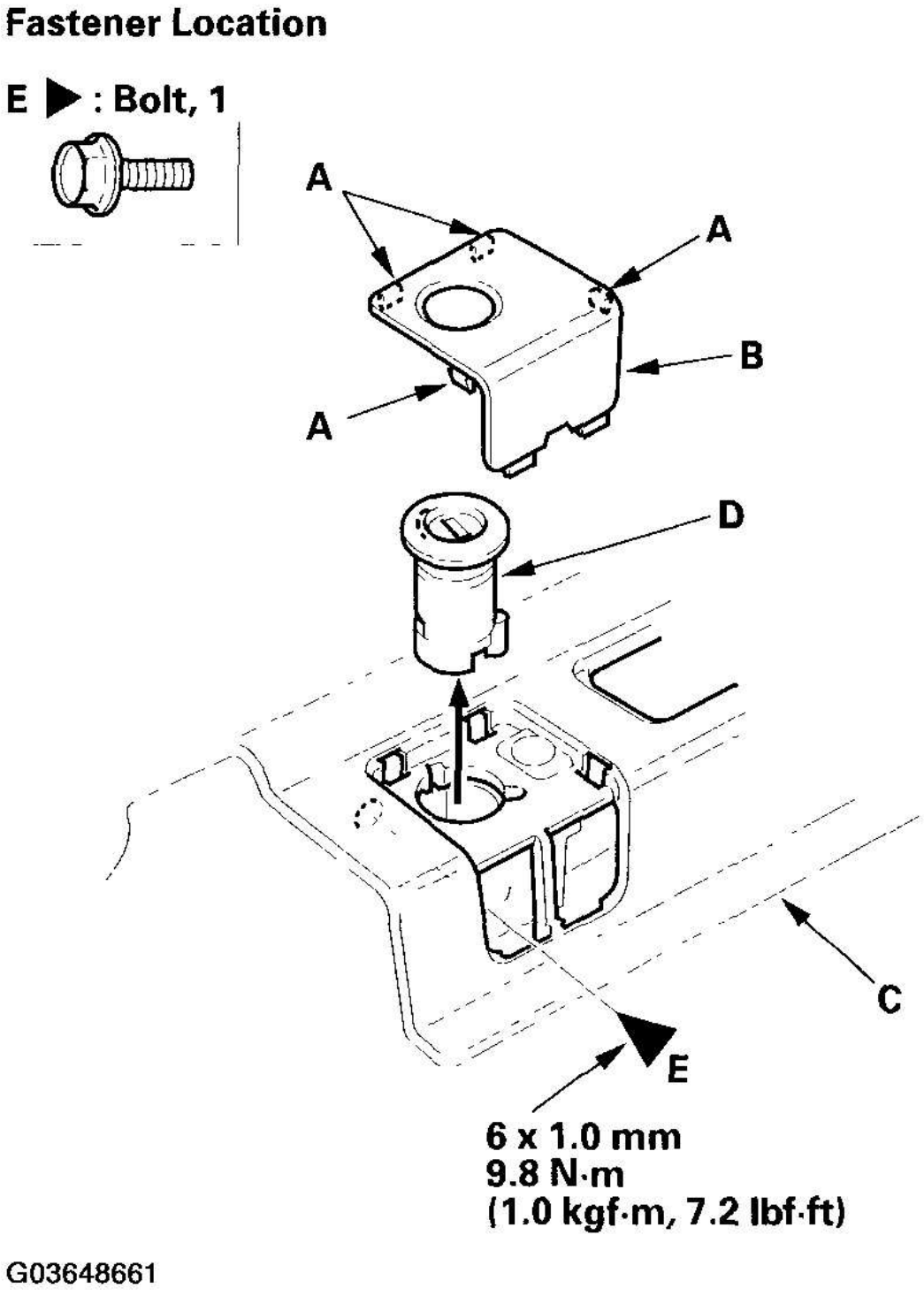


Fig. 16: Detaching Hooks Prying Front Side Cap

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the bolt (E).
3. Remove the front door sill trim, 2-door (see **2-DOOR - DOOR SILL AREA**), 4-door (see **4-DOOR - FRONT DOOR SILL AREA**).
4. Remove the screw, then remove the trunk lid opener/fuel fill door opener (A) from the front door sill trim (B).

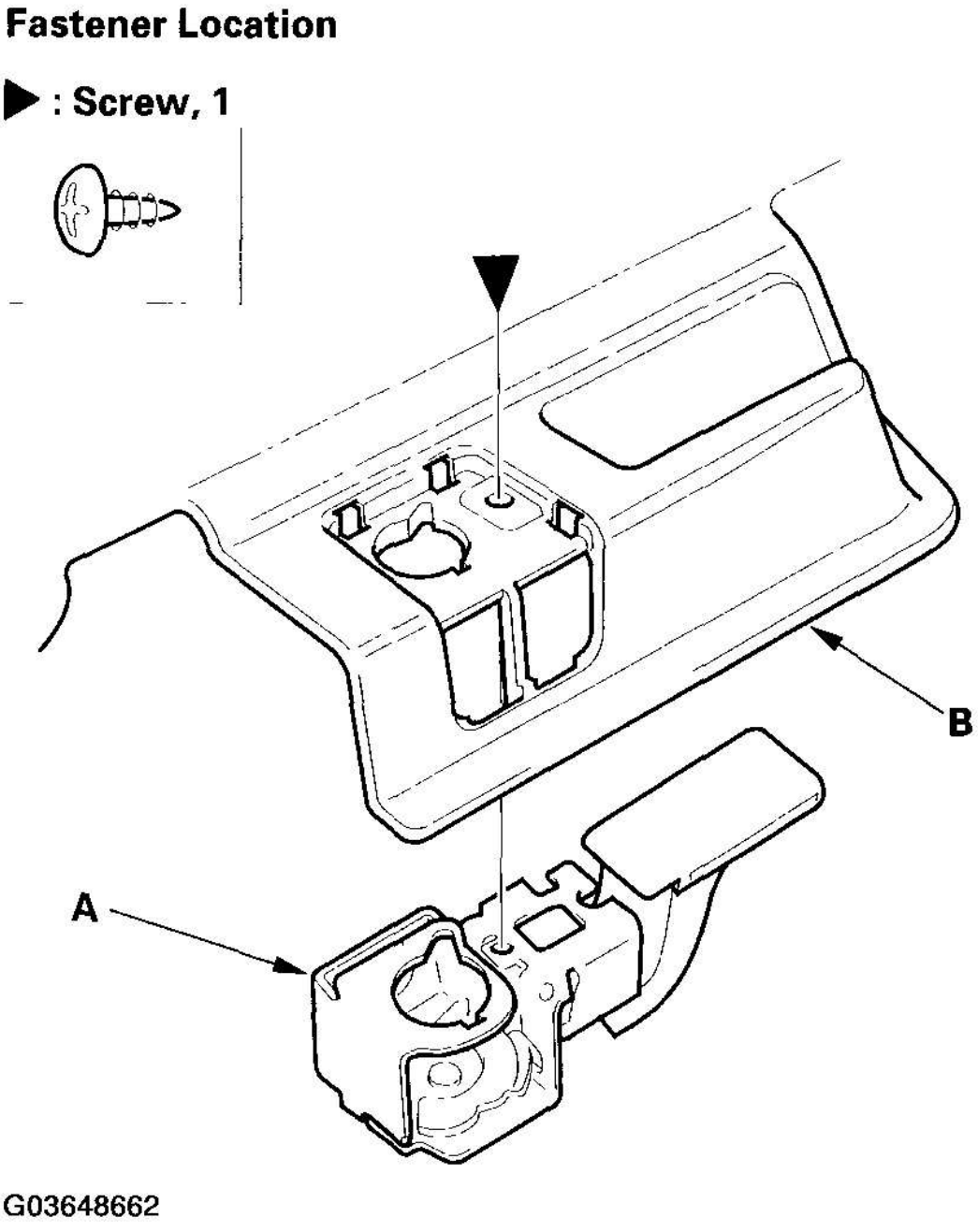


Fig. 17: Removing Trunk Lid Opener/Fuel Fill Door Opener From Front Door Sill Trim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the opener in the reverse order of removal, and note these items:
   - Make sure the opener cable is connected properly.
   - Make sure the trunk lid and fuel fill door open properly and lock securely.

TRUNK LID LATCH REPLACEMENT

1. 4-door: Disconnect the cylinder rod from the lock cylinder (see **TRUNK LID LOCK CYLINDER REPLACEMENT**).
2. Disconnect the trunk lid opener cable (A) and trunk lid latch switch connector (B). If equipped with a power trunk lid latch, detach the trunk lid latch switch connector from the trunk lid. Take care not to bend the opener cable.

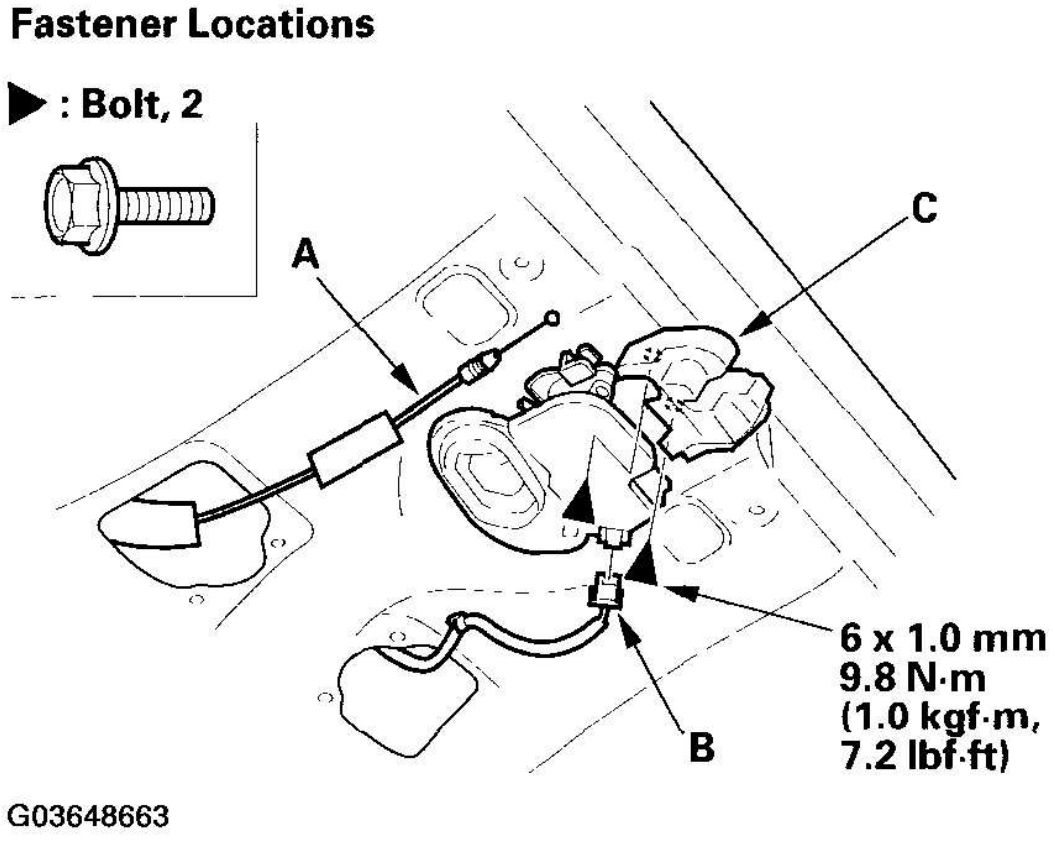


Fig. 18: Disconnecting Trunk Lid Opener Cable (With Power Trunk Lid Latch)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

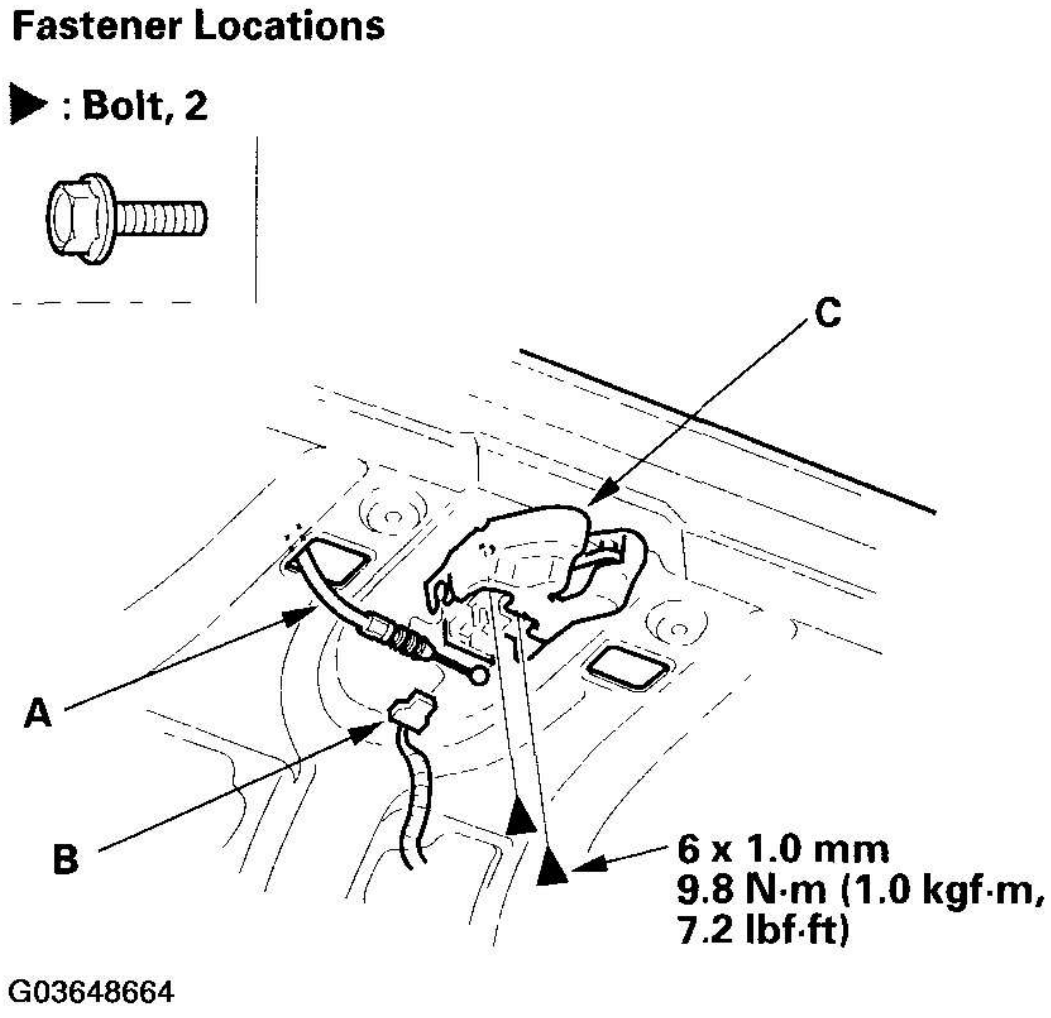


Fig. 19: Disconnecting Trunk Lid Opener Cable (Without Power Trunk Lid Latch)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the bolts from the trunk lid latch (C).
4. Pull the trunk lid latch (A) out, and on 4-door, disconnect the cylinder rod (B) from the trunk lid latch. Take care not to bend the cylinder rod.

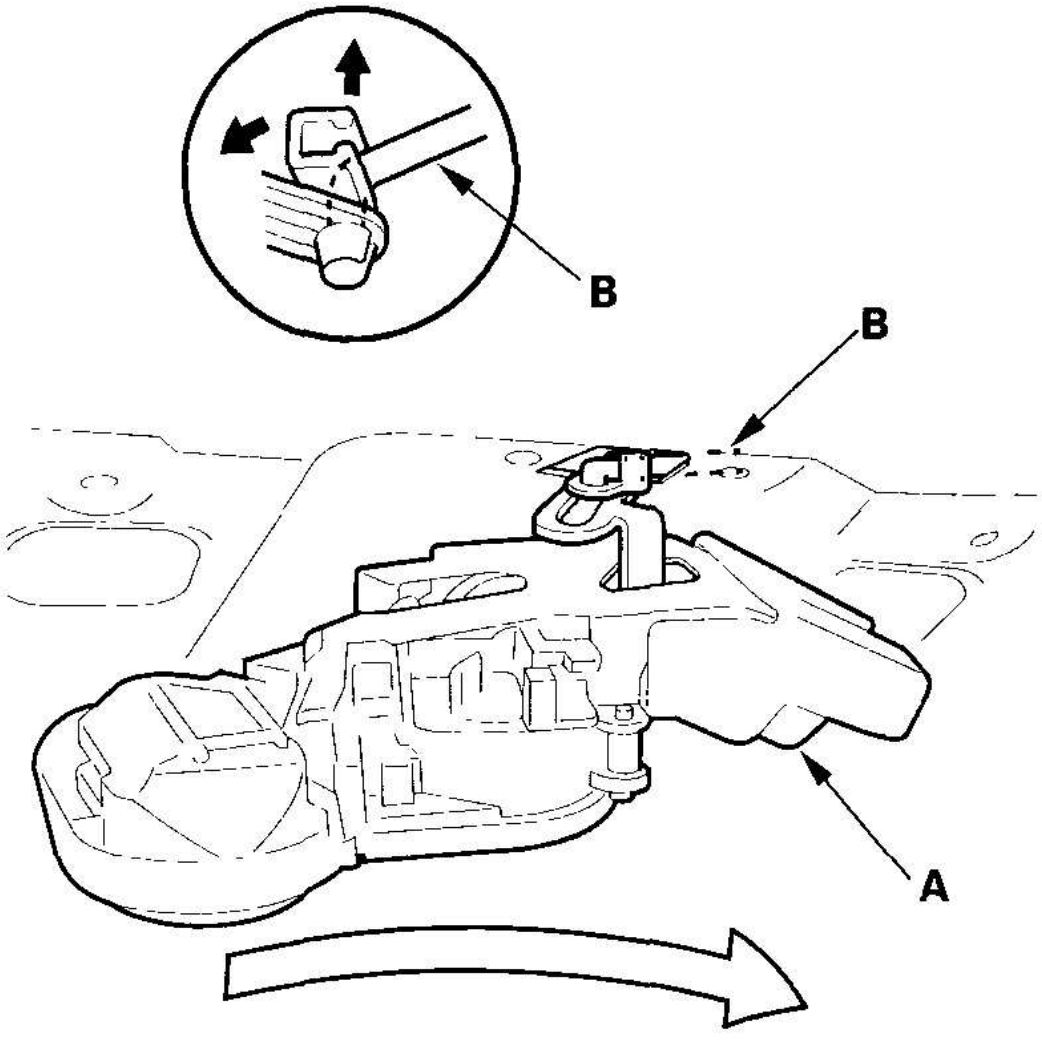


Fig. 20: Pulling Trunk Lid Latch Out
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the latch in the reverse order of removal, and note these items:
   - Make sure the connector is plugged in properly and the opener cable is connected properly.
   - Make sure the trunk lid opens properly and locks securely.

TRUNK LID LOCK CYLINDER REPLACEMENT

4-DOOR

1. Disconnect the cylinder rod (A), and if equipped, disconnect the cylinder switch connector (B).

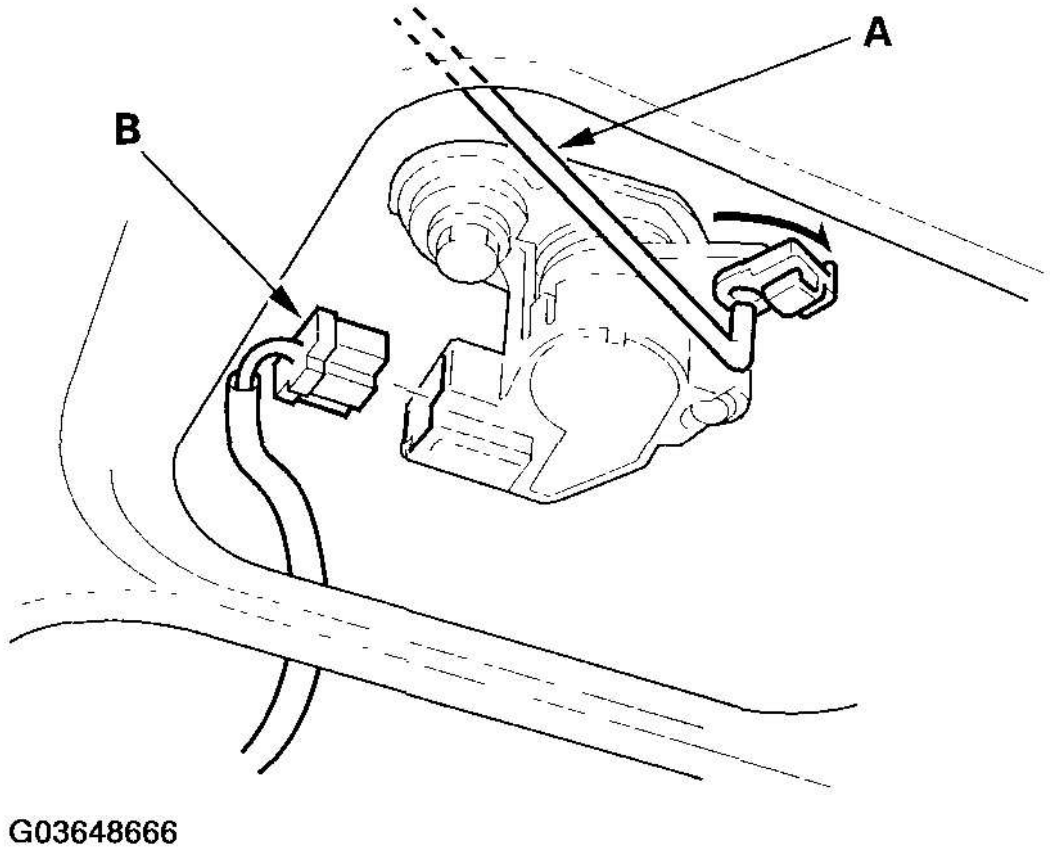


Fig. 21: Disconnecting Cylinder Rod & Cylinder Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the bolt securing the lock cylinder (A). Then turn the trunk lid lock cylinder clockwise, and remove it.

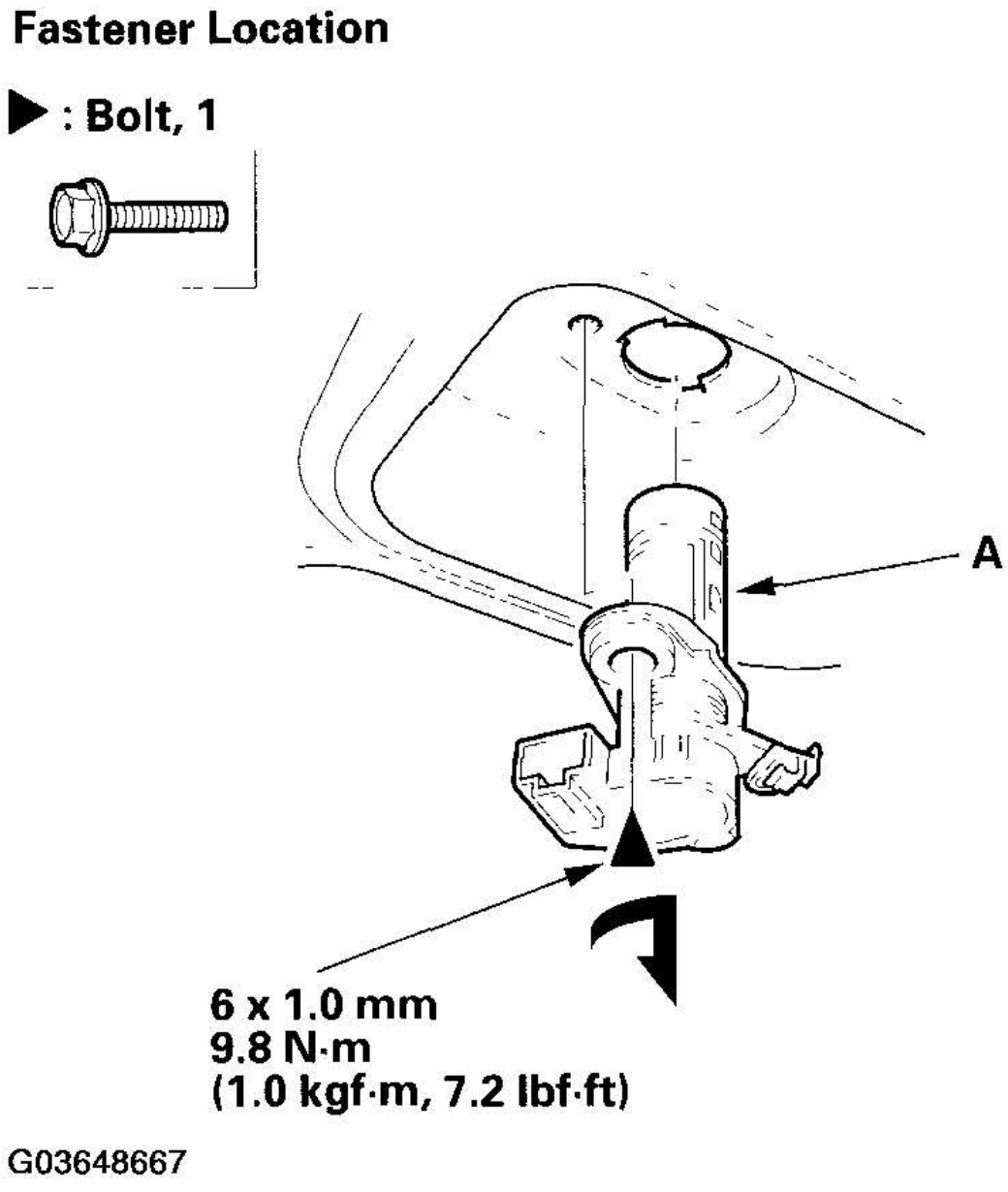


Fig. 22: Removing Lock Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the lock cylinder in the reverse order of removal, and note these items:
   - Make sure the cylinder switch connector is plugged in properly (if equipped) and the cylinder rod is connected properly.

- Make sure the trunk lid opens properly and locks securely.

HONDA OWNERS MANUALS

GO TO:
https://techinfo.honda.com/rjanisis/RJAAI001_OMANUAL.asp

2003-07 ACCESSORIES & EQUIPMENT

Keyless/Power Door Locks/Security System - Accord

COMPONENT LOCATION INDEX

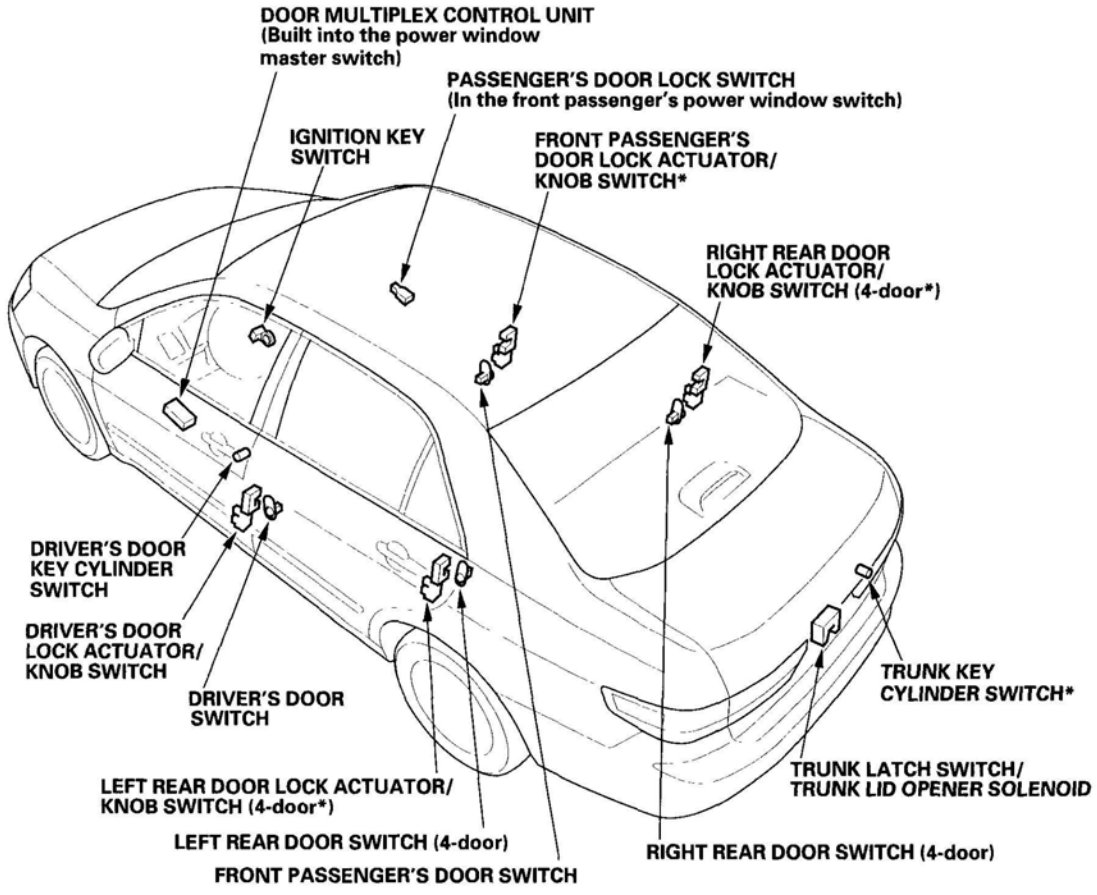


Fig. 1: Locating Keyless/Power Door Locks/Security System Components (1 Of 2)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

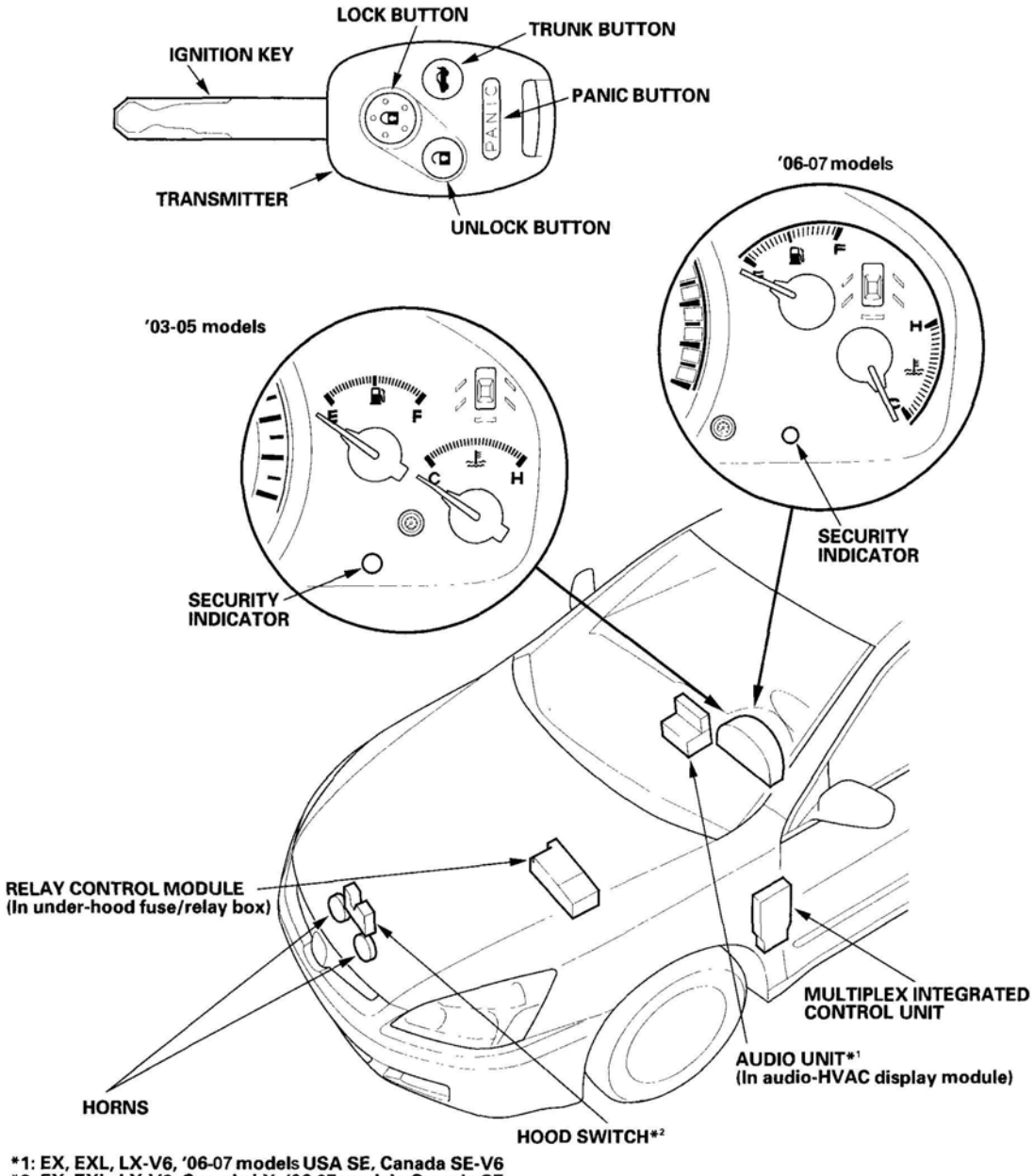


Fig. 2: Locating Keyless/Power Door Locks/Security System Components (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYSTEM DESCRIPTION

SECURITY ALARM SYSTEM

The security alarm system is armed automatically after the doors, hood, and trunk are closed and locked. For the system to arm, the ignition switch must be off, the key must be removed, and the MICU must receive signals that the doors, hood, trunk are closed and locked. The alarm can be disarmed at any time by unlocking the driver's door with the key or pressing the UNLOCK button on the remote transmitter.

When everything is closed and locked, the only inputs that are grounded, and have 0 volts, are the driver's door lock knob switch (LOCK position), and the integrated audio-HVAC display module. In other words, all of the other switches are open, and have about 5 volts with system awake and 1 volts in sleep mode, including the key cylinder switches. The security indicator in the gauge control module begins to flash immediately after the vehicle is completely closed and locked, and 15 seconds later, the security system arms and the security indicator flashes on for a shorter amount of time than before. If the security indicator does not flash, the system is not arming. A beep sounds and parking lights flash to confirm the security alarm system is armed if the LOCK button is pressed a second time within 5 seconds.

If one of the switches is misadjusted or shorted internally, or there is a short in the circuit, the security system will not arm. As long as the control unit continues to receive a ground signal (0 volts), it senses that the vehicle is not closed and locked, and the system will not arm. A switch that is slightly misadjusted can cause the alarm to sound for no apparent reason. In this case, a significant change in outside air temperature, the vibration of a passing truck, or someone bumping into the vehicle could cause the alarm to sound. There is no glass breakage or motion detector feature.

If anything is opened or improperly unlocked after the system is armed, the control unit receives a ground signal from that switch, and the 1-5 volts reference drops to 0 volts. If the integrated audio-HVAC display module is disconnected, the input loses its ground, and the input voltage goes to 1-5 volts. The system sounds the alarm when any of these occur:

- A door or the trunk is forced open
- A door is unlocked without using the key or the remote transmitter
- The hood is opened (EX, EXL, LX-V6, Canada LX, '06-07 models Canada SE)

- The audio-HVAC display module is disconnected (EX, EXL, LX-V6, '06-07 models USA SE, Canada SE-V6)
- The remote panic is operated

When the system sounds the alarm, the horns sound and the exterior lights flash for 2 minutes. The alarm can be stopped at any time by unlocking the driver's door with the key or by pressing any button on the remote transmitter.

PANIC MODE

The panic mode sounds the alarm in order to attract attention. When the PANIC button on the remote transmitter is pressed and held for 2 seconds, the alarm sounds and the exterior lights flash for about 20 seconds.

The panic mode can be cancelled at anytime by pressing any button on the remote transmitter or by turning the ignition switch ON (II). The panic mode will not function if the ignition switch is ON (II).

KEYLESS ENTRY SYSTEM

The keyless entry system is integrated with the multiplex integrated control unit. The MICS receives LOCK, UNLOCK and PANIC signals from the door multiplex control unit (keyless receiver).

The keyless entry system allows you to lock and unlock the vehicle with the remote transmitter. When you press the LOCK button, all doors lock. When you press the UNLOCK button once, only the driver's door unlocks. The other doors will unlock when you press the button a second time. The doors will not lock with the remote transmitter if a door is not fully closed, or if the key is in the ignition switch.

If the UNLOCK button is pressed, released, then pressed and held, the windows will begin to open. The windows stop if the button is released. See power windows for more information and troubleshooting.

When the switch for the ceiling light is in the center position, it will come on when the UNLOCK button is pressed. If a door is not opened, the light will go off in about 30 seconds, and the doors will relock. If the doors are locked with the remote

transmitter within 30 seconds, the light will go off immediately.

CIRCUIT DIAGRAM

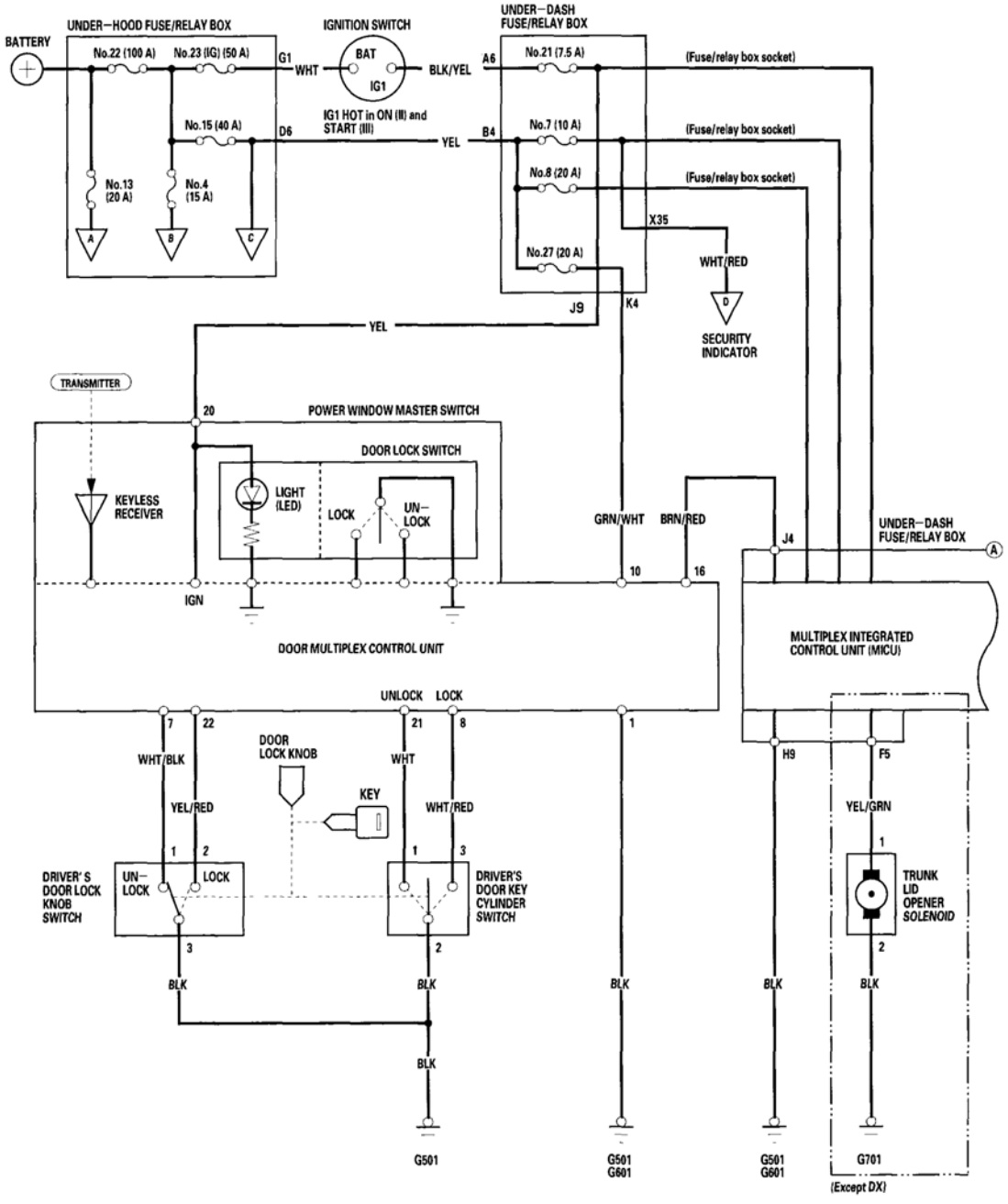


Fig. 3: Circuit Diagram - Keyless/Power Door Locks/Security System (1 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

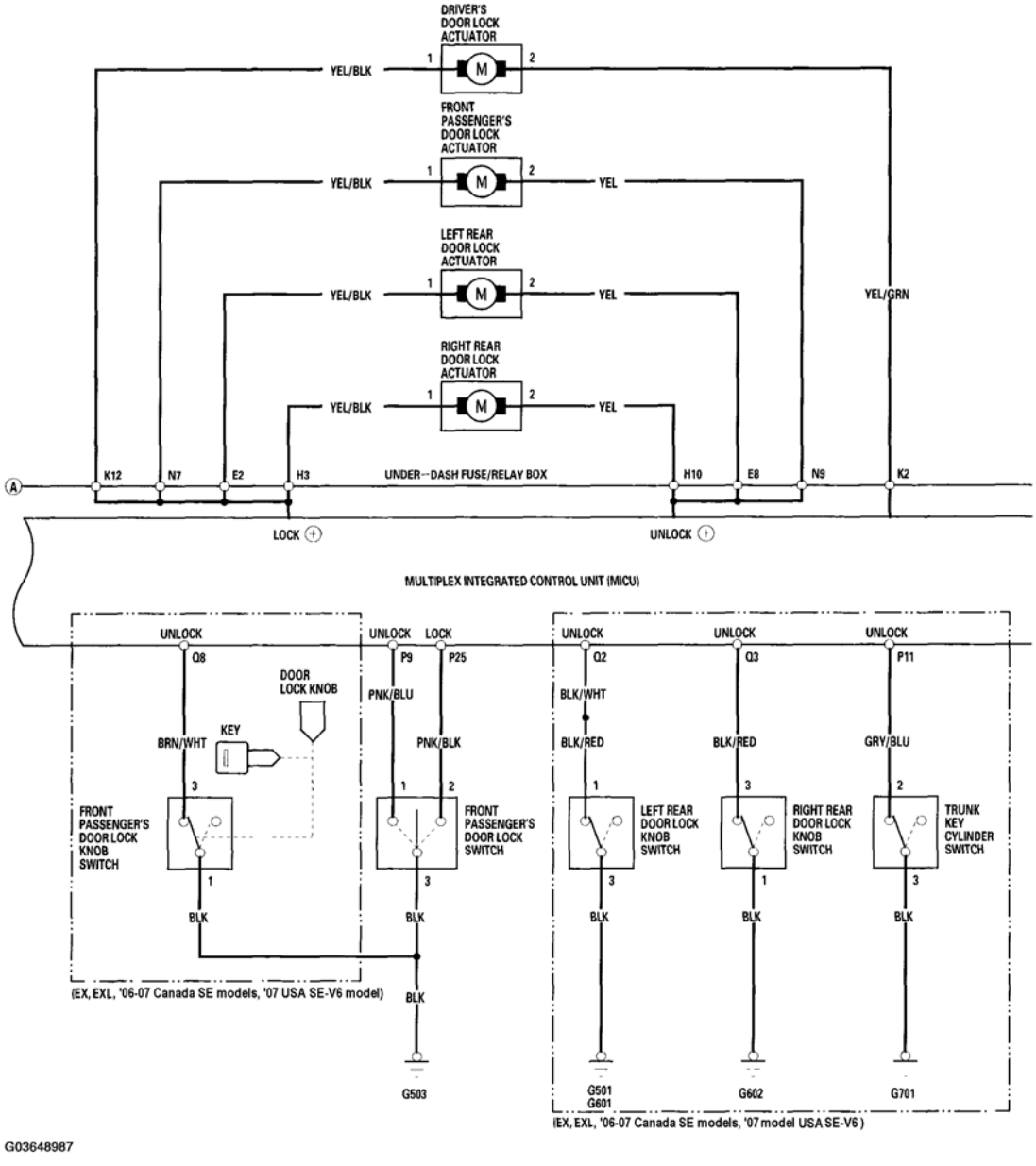


Fig. 4: Circuit Diagram - Keyless/Power Door Locks/Security System (2 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

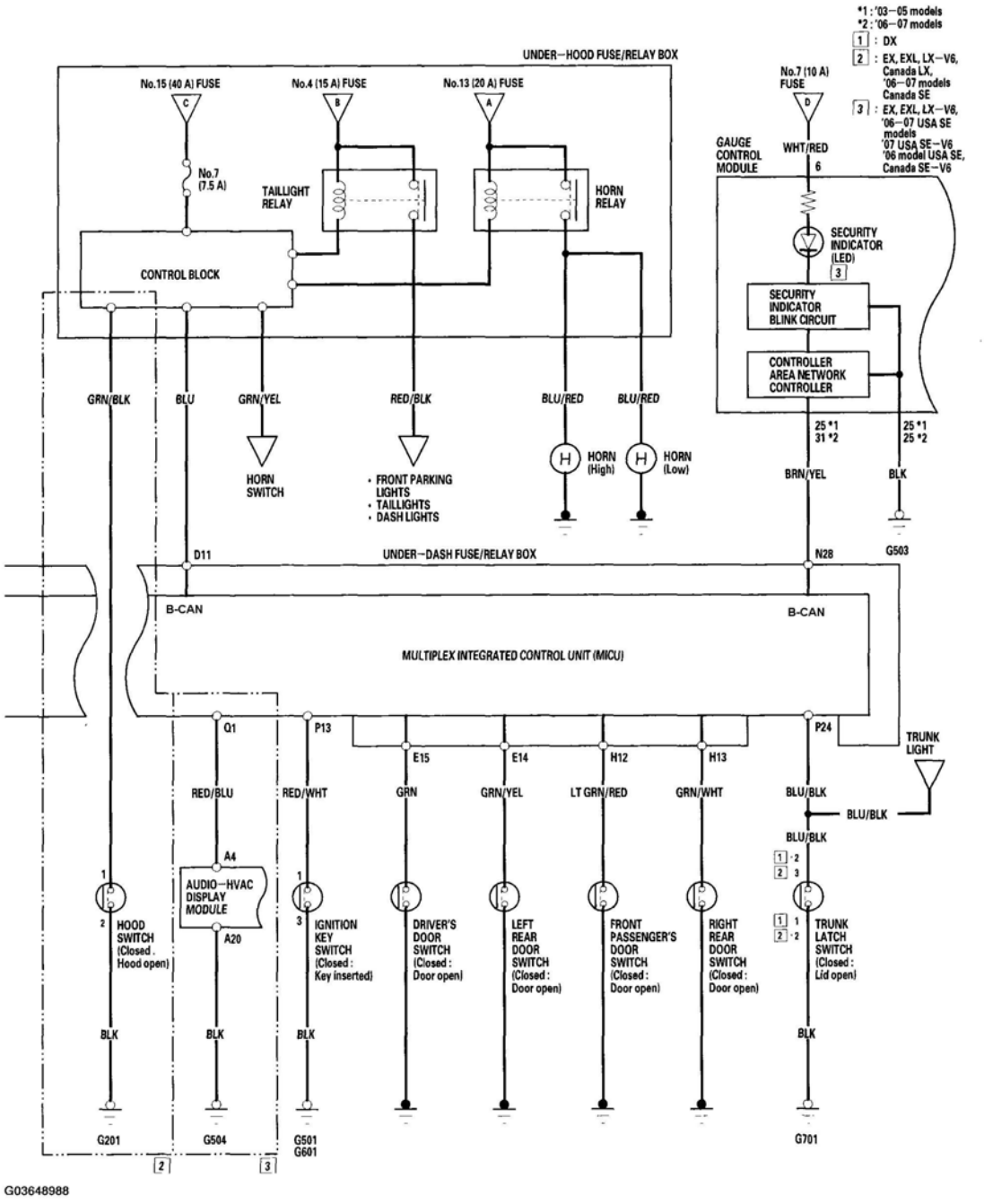


Fig. 5: Circuit Diagram - Keyless/Power Door Locks/Security System (3 Of 3) Courtesy of AMERICAN HONDA MOTOR CO., INC.

DOOR LOCK ACTUATOR TEST

DRIVER'S DOOR

1. Remove the driver's door panel.
    - 2-door (see **2-DOOR**)
    - 4-door (see **4-DOOR**)
2. Disconnect the 2P connector from the actuator.

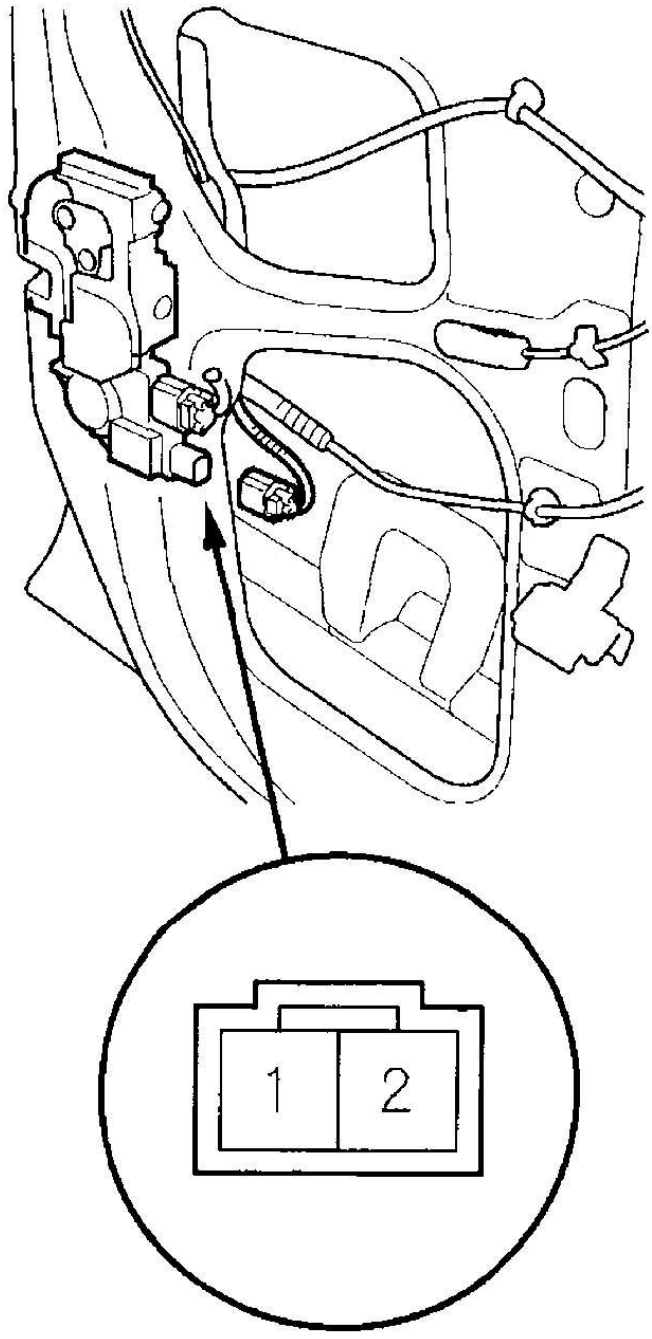


Fig. 6: Disconnecting 2P Connector From Actuator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check actuator operation by connecting power and ground according to table figure below. To prevent damage to the actuator, apply battery voltage only momentarily.

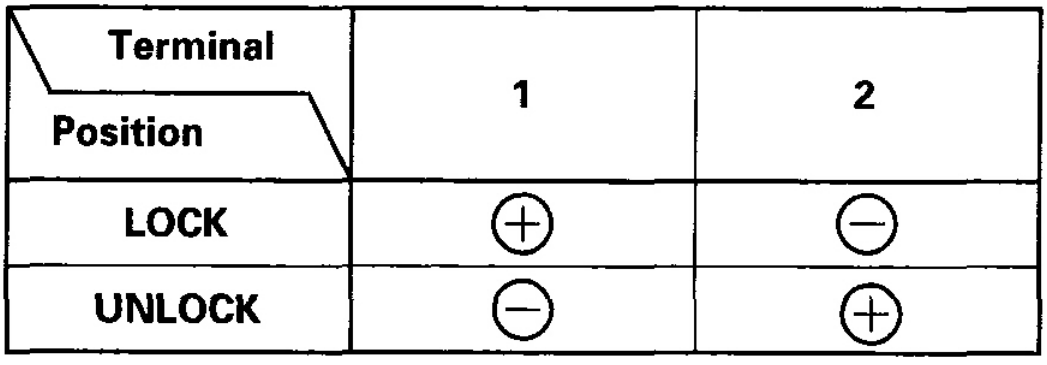


Fig. 7: Checking Actuator Operation By Connecting Power & Ground Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the actuator does not operate as specified, replace it.

PASSENGER'S DOOR

1. Remove the passenger's door panel.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
2. Disconnect the 2P connector from the actuator.

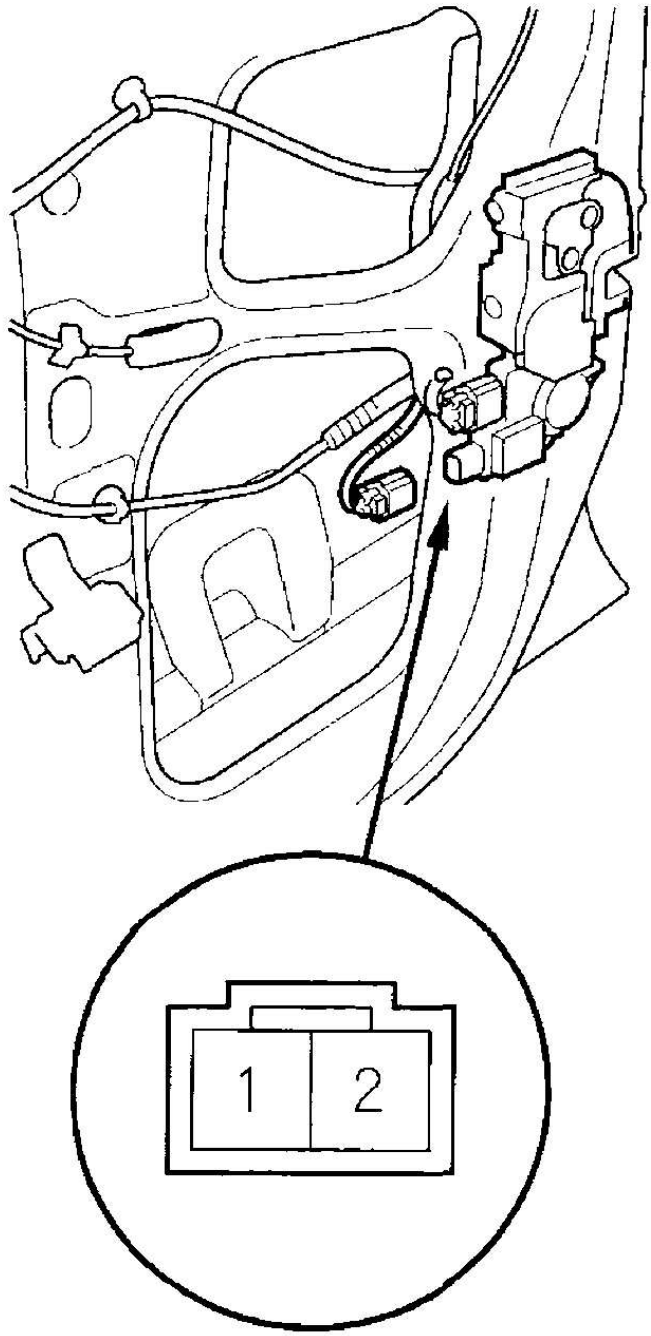
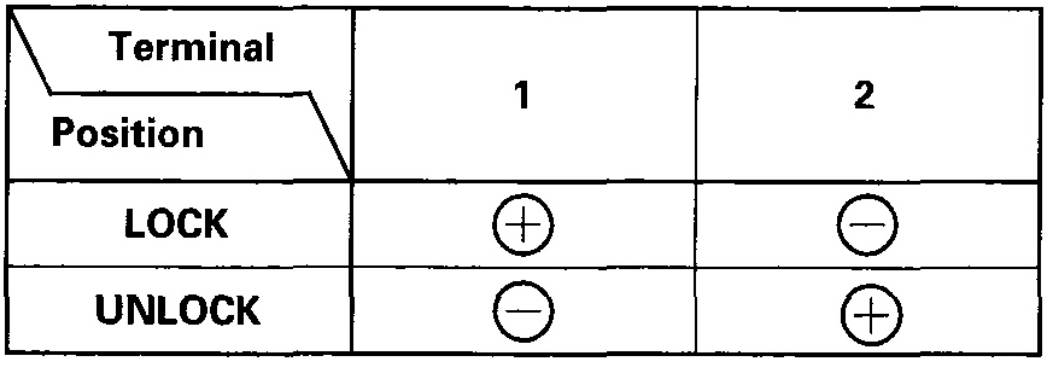


Fig. 8: Disconnecting 2P Connector From Actuator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check actuator operation by connecting power and ground according to figure table below. To prevent damage to the actuator, apply battery voltage only momentarily.



G03648992

Fig. 9: Checking Actuator Operation By Connecting Power & Ground Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the actuator does not operate as specified, replace it.

DOOR LOCK KNOB SWITCH TEST

DRIVER'S DOOR

1. Remove the driver's door panel.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
2. Disconnect the 3P connector from the actuator.

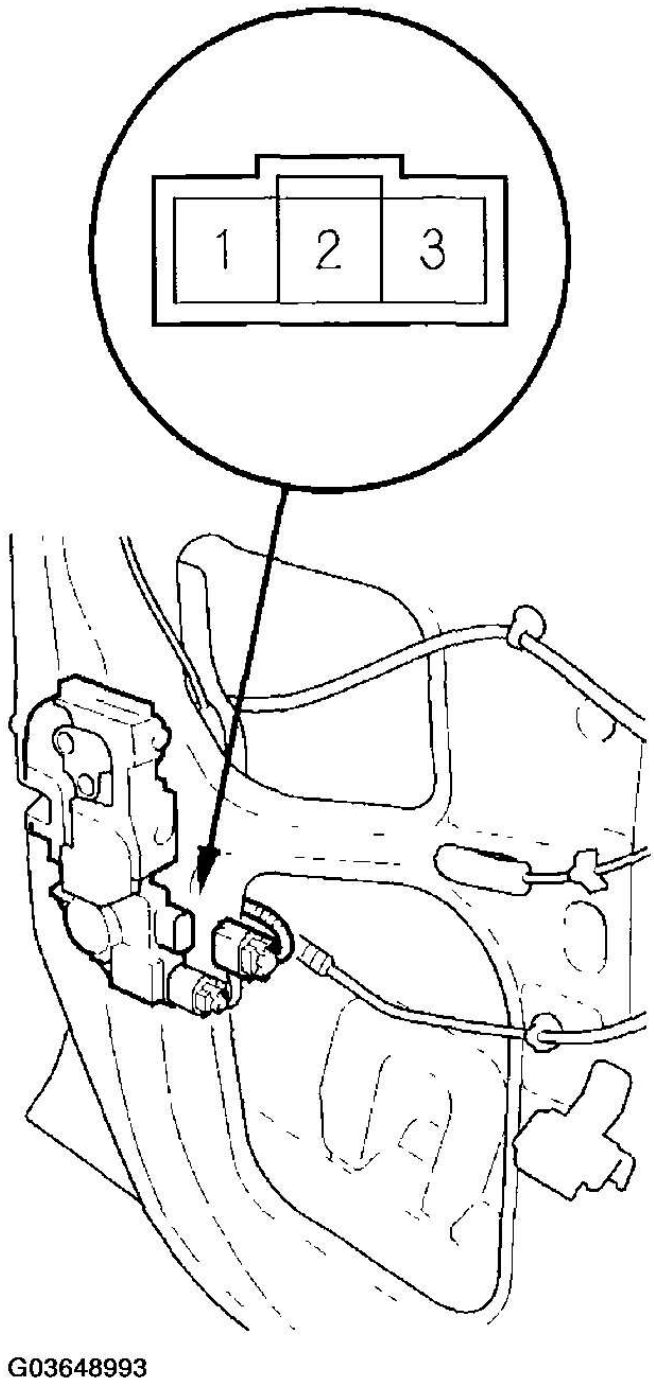


Fig. 10: Disconnecting 3P Connector From Actuator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the terminals.
   - There should be continuity between the No. 2 and No. 3 terminals when the door lock knob switch is in the LOCK position and no continuity when the switch is in the UNLOCK position.
   - There should be continuity between the No. 1 and No. 3 terminals when the door lock knob switch is in the UNLOCK position and no continuity when the switch is in the LOCK position.
4. If the continuity is not as specified, replace the door lock actuator.

FRONT PASSENGER'S DOOR (EX, EXL, '06-07 MODELS CANADA SE)

1. Remove the front passenger's door panel.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
2. Disconnect the 3P connector from the actuator.

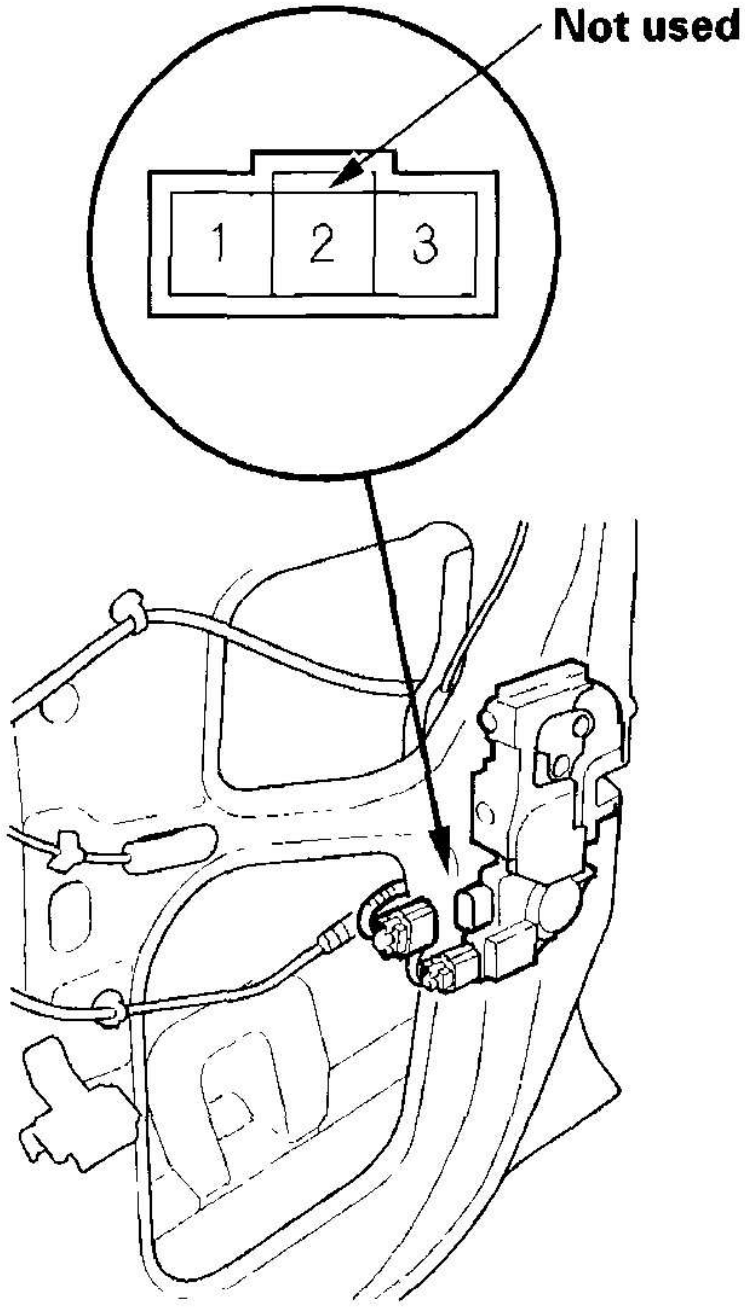


Fig. 11: Disconnecting 3P Connector From Actuator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the terminals. There should be continuity between the No. 1 and No. 3 terminals when the door lock knob switch in the UNLOCK position and no continuity when the switch is in the LOCK position.
4. If the continuity is not as specified, replace the door lock actuator.

REAR DOOR (EX, EXL, '06-07 MODELS CANADA SE)

1. Remove the left or right rear door panel (see **REAR DOOR PANEL REMOVAL/INSTALLATION**).
2. Disconnect the 3P connector from the actuator.

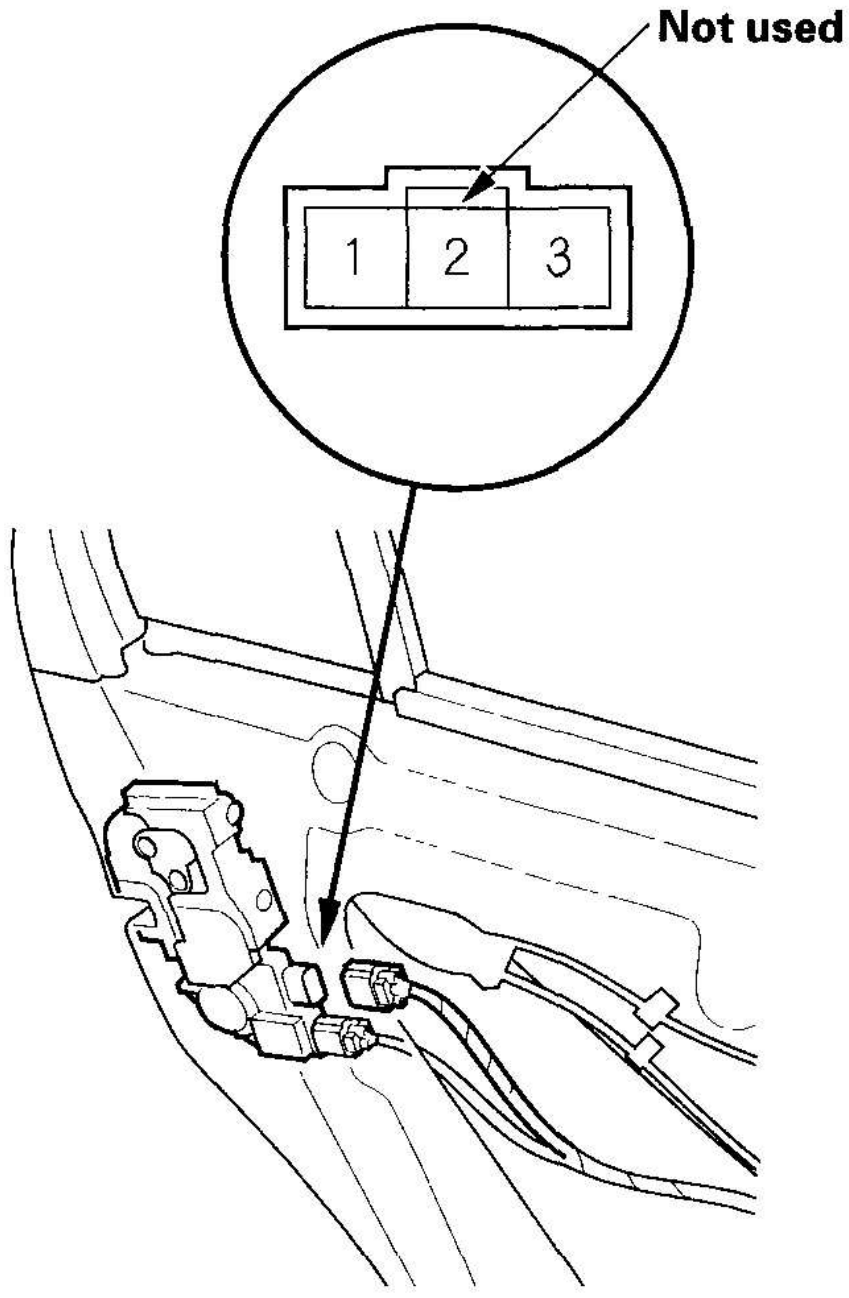


Fig. 12: Disconnecting 3P Connector From Actuator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the terminals. There should be continuity between the No. 1 and No. 3 terminals when the door lock knob switch is UNLOCK position and no continuity when the switch is in the LOCK position.
4. If the continuity is not as specified, replace the door lock actuator.

DOOR KEY CYLINDER SWITCH TEST

1. Remove the driver's door panel.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
2. Disconnect the 3P connector from the key cylinder switch.

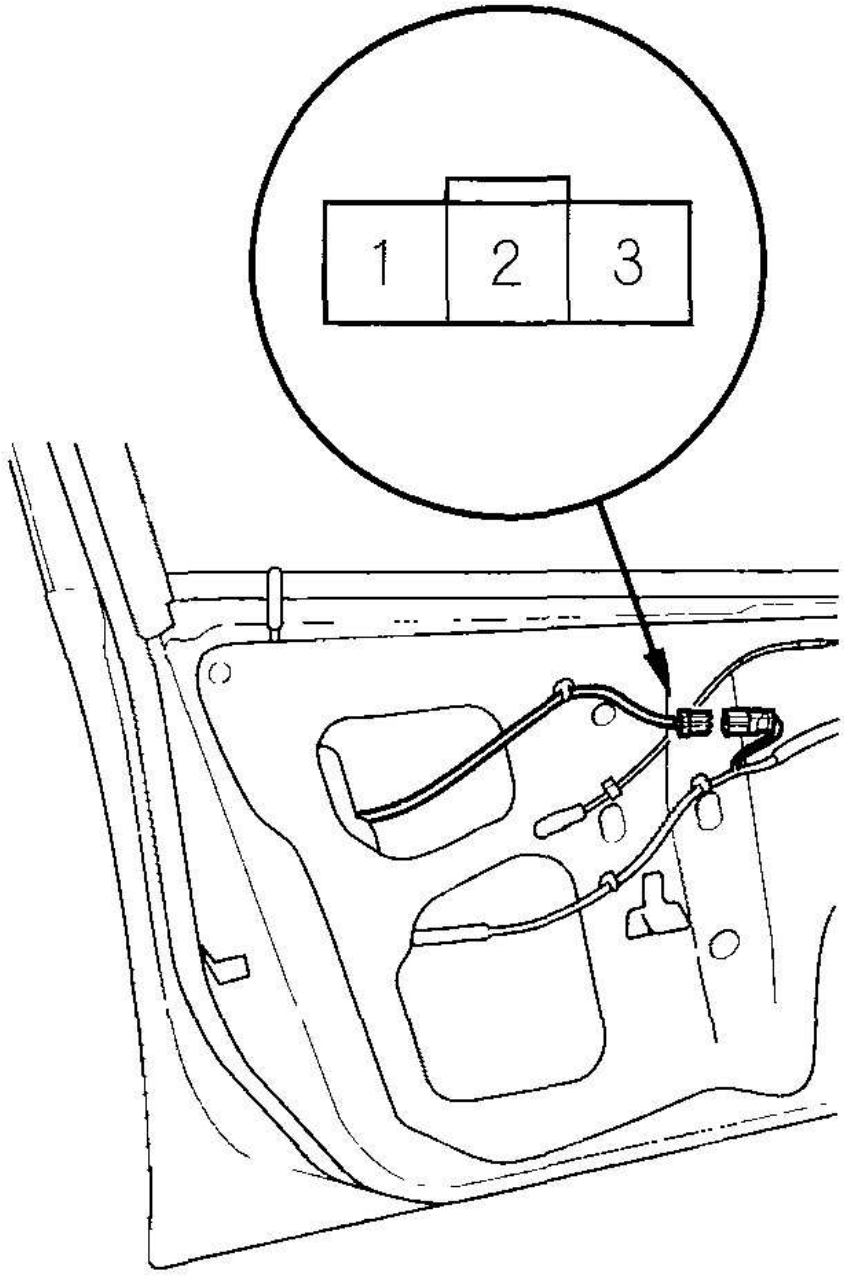


Fig. 13: Disconnecting 3P Connector From Key Cylinder Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the terminals.
   - There should be continuity between the No. 2 and No. 3 terminals when the door key cylinder switch is in LOCK position.
   - There should be no continuity between the No. 2 and No. 3 terminals when the door key cylinder switch is in the neutral or UNLOCK position.
   - There should be continuity between the No. 1 and No. 2 terminals when the door key cylinder switch is in UNLOCK position.
   - There should be no continuity between the No. 1 and No. 2 terminals when the door key cylinder switch is in the neutral or LOCK position.
4. If the continuity is not as specified, replace the door key cylinder assembly.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)

CONTROL UNIT INPUT TEST

1. Before testing the keyless entry/security control functions, troubleshoot the multiplex integrated control system. (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

   Multiplex Integrated Control Unit

2. Remove the left kick panel.
   - 2-door (see **2-DOOR - DOOR SILL AREA**)
   - 4-door (see **4-DOOR - FRONT DOOR SILL AREA**)
3. Disconnect the under-dash fuse/relay box connectors.

NOTE: All connectors are wire side of female terminals.

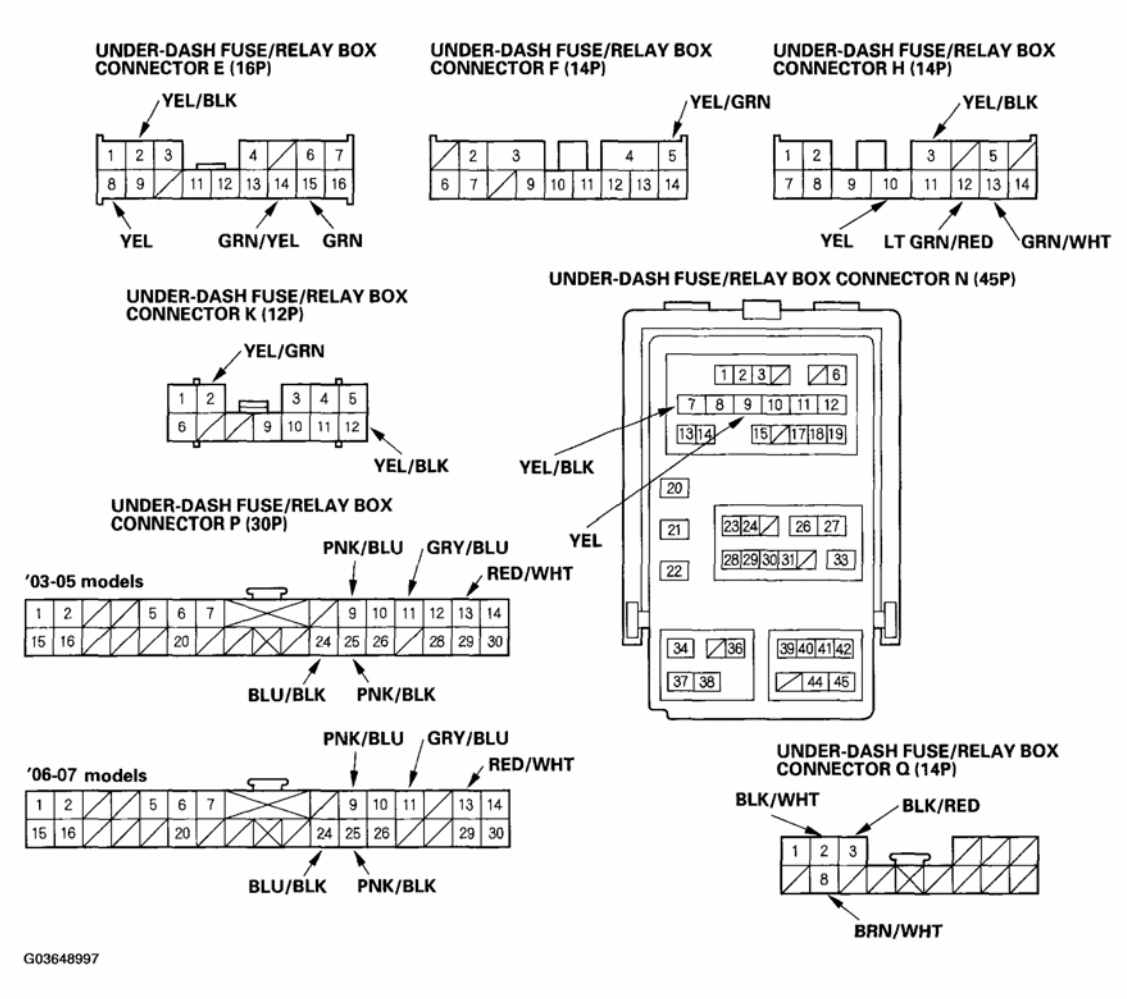


Fig. 14: Disconnecting Under-Dash Fuse/Relay Box Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Inspect the connector and socket terminals to be sure they are all making good contact.
   - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
   - If the terminals look OK, go to step 5.
5. With the connectors still disconnected, make these input tests at the connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If the input tests prove OK, go to step 6.

CONTROL UNIT INPUT TEST (CONNECTORS

DISCONNECTED)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
H9	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G501, G601) • An open in the wire
F5	YEL/GRN	Connect the F5 terminal to the battery positive terminal momentarily.	Check trunk opener operation: Trunk lid should open.	• Poor ground (G701) • Faulty trunk opener solenoid • An open in the wire
K2	YEL/GRN	Connect the battery positive terminal to K12 (K2) terminal, and K2 (K12) terminal to H9 terminal.	Check actuator operation: The driver's door lock actuator should lock (unlock).	• Faulty driver's door lock actuator • An open in the wire
K12	YEL/BLK			
N7	YEL/BLK	Connect the battery positive terminal to N7 (N9) terminal, and N9 (N7) terminal to H9 terminal.	Check actuator operation: The front passenger's door lock actuator should lock (unlock).	• Faulty front passenger's door lock actuator • An open in the wire
N9	YEL			
			Check	

E2	YEL/BLK	Connect the battery positive terminal to E2 (E8) terminal, and E8 (E2) terminal to H9 terminal.	actuator operation: The left rear door lock actuator should lock (unlock).	• Faulty left rear door lock actuator • An open in the wire
E8	YEL			
H3	YEL/BLK	Connect the battery positive terminal to H3 (H10) terminal, and H10 (H3) terminal to H9 terminal.	Check actuator operation: The right rear door lock actuator should lock (unlock).	• Faulty right rear door lock actuator • An open in the wire
H10	YEL			

6. Reconnect all connectors to the under-dash fuse/relay box.
7. Turn ignition switch to ON (II) to keep the system awake and make these input tests at the appropriate connectors on the under-dash fuse/relay box.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 8.

CONTROL UNIT INPUT TEST (CONNECTORS RECONNECTED - 1 OF 2)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
		Front passenger's door lock knob switch unlocked	Check for voltage to ground: There should be less than 1	• Poor ground (G503) • Faulty front passenger's door lock knob switch

Q8[(2)]	BRN/WHT		V.	• An open in the wire
		Front passenger's door lock knob switch locked	Check for voltage to ground: There should be 5 V or more.	• Faulty front passenger's door lock knob switch • Short to ground
P9	PNK/BLU	Front passenger's door lock switch unlocked	Check for voltage to ground: There should be less than 1 V.	• Poor ground (G503) • Faulty front passenger's door lock switch • An open in the wire
		Front passenger's door lock switch in neutral	Check for voltage to ground: There should be 5 V or more.	• Faulty front passenger's door lock switch • Short to ground
P25	PNK/BLK	Front passenger's door lock switch locked	Check for voltage to ground: There should be less than 1 V.	• Poor ground (G503) • Faulty front passenger's door lock switch • An open in the wire
		Front passenger's	Check for voltage to	• Faulty front passenger's

		door lock switch in neutral	ground: There should be 5 V or more.	door lock switch • Short to ground
Q2(2)	BLK/WHT	Left rear door lock knob switch unlocked	Check for voltage to ground: There should be less than 1 V.	• Poor ground (G501, G601) • Faulty left rear door lock knob switch • An open in the wire
		Left rear door lock knob switch locked	Check for voltage to ground: There should be 5 V or more.	• Faulty left rear door lock knob switch • Short to ground
Q3(2)	BLK/RED	Right rear door lock knob switch unlocked	Check for voltage to ground: There should be less than 1 V.	• Poor ground (G602) • Faulty right rear door lock knob switch • An open in the wire
		Right rear door lock knob switch locked	Check for voltage to ground: There should be 5 V or more.	• Faulty right rear door lock knob switch • Short to ground

P11(1)	GRY/BLU	Trunk key cylinder switch unlocked	Check for voltage to ground: There should be less than 1 V.	• Poor ground (G701) • Faulty trunk key cylinder switch • An open in the wire
		Trunk key cylinder switch in neutral	Check for voltage to ground: There should be 5 V or more.	• Faulty trunk key cylinder switch • Short to ground
(1) with security ('03-05 models) (2) EX, EXL,'06 model Canada SE				

CONTROL UNIT INPUT TEST (CONNECTORS RECONNECTED - 1 OF 2)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
Q1	RED/BLU	Under all conditions	Check for voltage to ground: There should be less than 1 V.	• Poor ground (G504) • Faulty connections at the audio unit • Faulty audio unit • An open in the wire
				• Poor ground

P13	RED/WHT	Ignition key inserted into the ignition switch.	Check for voltage to ground: There should be less than 1 V.	(G501, G601) • Faulty ignition key switch • An open in the wire
		Ignition key removed from the ignition switch.	Check for voltage to ground: There should be 5 V or more.	• Faulty ignition key switch • Short to ground
E15	GRN	Driver's door open	Check for voltage to ground: There should be less than 1 V.	• Faulty driver's door switch • An open in the wire
		Driver's door closed	Check for voltage to ground: There should be 5 V or more.	• Faulty driver's door switch • Short to ground
H12	LT GRN/RED	Front passenger's door open	Check for voltage to ground: There should be less than 1 V.	• Faulty front passenger's door switch • An open in the wire
			Check for	• Faulty front

		Front passenger's door closed	voltage to ground: There should be 5 V or more.	passenger's door switch • Short to ground
E14	GRN/YEL	Left rear door open	Check for voltage to ground: There should be less than 1 V.	• Faulty left rear door switch • An open in the wire
		Left rear door closed	Check for voltage to ground: There should be 5 V or more.	• Faulty left rear door switch • Short to ground
H13	GRN/WHT	Right rear door open	Check for voltage to ground: There should be less than 1 V.	• Faulty right rear door switch • An open in the wire
		Right rear door closed	Check for voltage to ground: There should be 5 V or more.	• Faulty right rear door switch • Short to ground
		Trunk lid	Check for voltage to ground: There	• Poor ground (G701) • Faulty trunk

P24	BLU/BLK	open	should be less than 1 V.	latch switch • An open in the wire
		Trunk lid closed	Check for voltage to ground: There should be 5 V or more.	• Faulty trunk latch switch • Short to ground

Door Multiplex Control Unit

8. Remove the driver's power window switch panel (see **DOOR PANEL REMOVAL/INSTALLATION**).
9. Disconnect the 23P connector from the power window master switch.

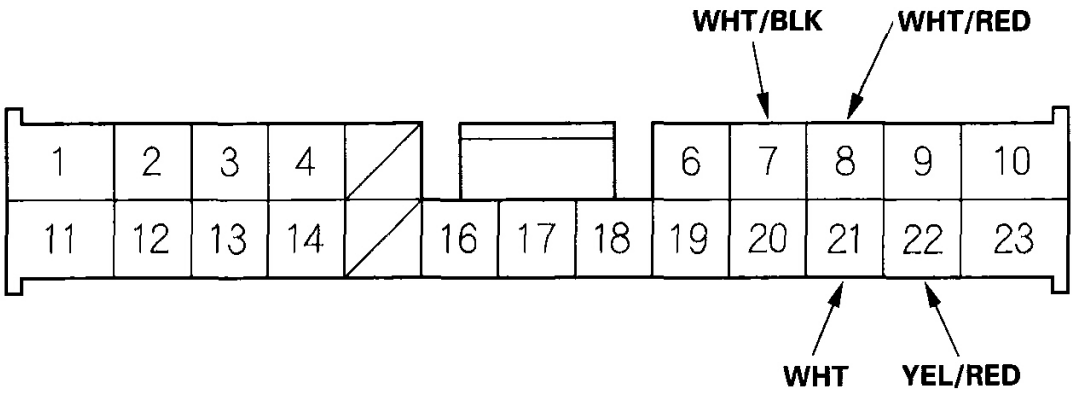


Fig. 15: Disconnecting 23P Connector From Power Window Master Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Inspect the connector and socket terminals to be sure they are all making good contact.

- If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
- If the terminals look OK, go to step 11.

11. Reconnect the connector to the door multiplex control unit, and make these input tests at the connectors.
    - If any test indicates a problem, find and correct the cause, then recheck the system.
    - If all the input tests prove OK, go to step 12.

DIAGNOSTIC CHART

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
7	WHT/BLK	Driver's door lock knob switch unlocked	Check for voltage to ground: There should be less than 1 V.	• Poor ground (G501) • Faulty driver's door lock knob switch • An open in the wire
		Driver's door lock knob switch locked	Check for voltage to ground: There should be 5 V or more.	• Faulty driver's door lock knob switch • Short to ground
			Check for	• Poor ground (G501)

22	YEL/RED	Driver's door lock knob switch locked	voltage to ground: There should be less than 1 V.	• Faulty driver's door lock knob switch • An open in the wire
		Driver's door lock knob switch unlocked	Check for voltage to ground: There should be 5 V or more.	• Faulty driver's door lock knob switch • Short to ground
21	WHT	Driver's door key cylinder switch in UNLOCK	Check for voltage to ground: There should be less than 1 V.	• Faulty driver's door key cylinder switch • Poor ground (G501) • An open in the wire • Short to ground
		Driver's door key cylinder switch in neutral	Check for voltage to ground: There should be 5 V or more.	
		Driver's door key cylinder switch in LOCK	Check for voltage to ground: There should be 5 V or more.	
		Driver's door	Check for voltage to	

8	WHT/RED	key cylinder switch in LOCK	ground: There should be less than 1 V.	• Faulty driver's door key cylinder switch • Poor ground (G501) • An open in the wire • Short to ground
		Driver's door key cylinder switch in neutral	Check for voltage to ground: There should be 5 V or more.	
		Driver's door key cylinder switch in UNLOCK	Check for voltage to ground: There should be 5 V or more.	

12. If all the input tests prove OK, and no DTCs were found during MICU troubleshooting (B-CAN system diagnosis test mode A), go to the B-CAN system input and output index. If multiple failures are found on more than one control unit, replace the under-dash fuse/relay box (includes the MICU). If input failures are related to a particular control unit, replace that control unit.

DTC TROUBLESHOOTING

DTC INDEX

DTC CHART

DTC	Description
DTC B1026: Passenger's Door Lock Switch Signal Error	Passenger's Door Lock Switch Signal Error
DTC B1027: Trunk Key Cylinder Switch Signal Error	Trunk Key Cylinder Switch Signal Error
DTC B1127: Driver's Door Key Cylinder Switch Signal Error	Driver's Door Key Cylinder Switch Signal Error

DTC B1128: Driver's Door Lock Switch Signal Error	Driver's Door Lock Switch Signal Error
DTC B1129: Driver's Door Lock Knob Switch Signal Error	Driver's Door Lock Knob Switch Signal Error

DTC B1026: PASSENGER'S DOOR LOCK SWITCH SIGNAL ERROR

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Operate the passenger's door lock switch in the LOCK and UNLOCK positions for 2 seconds.
4. Check for DTCs using the HDS.

   Is DTC B1026 indicated?

   YES - Go to step 5.

   NO - Intermittent failure. The passenger's door lock system is OK at this time. Check pinfits and connections.
5. With the door lock in UNLOCK position, select SECURITY from the HDS and enter the DATA LIST.
6. Check the ON/OFF information of the Front Psnger's Door Lock Sw. (LOCK) and Front Psnger's Door Lock Sw. (UNLOCK) in the DATA LIST.

   Are both information indicators OFF?

   YES - Go to step 7.

   NO - Go to step 9.
7. Make sure the ON/OFF information of the Front Psnger's Door Lock Sw. (LOCK) and Front Psnger's Door Lock Sw. (UNLOCK) are changed when the passenger's door lock switch is in the LOCK and UNLOCK positions.

   Does the information show the correct ON and OFF indications when the door lock switch in the LOCK and UNLOCK positions?

   YES - Faulty MICU; replace it.

NO - Go to step 8.

8. Check for a short between the door lock switch LOCK and UNLOCK wires.

Are the wire harnesses OK?

YES - Faulty passenger's door lock switch; replace it.

NO - A short in the wire, repair and recheck.

9. Remove the passenger's inner handle (see **DOOR PANEL REMOVAL/INSTALLATION**).
10. Disconnect the 3P connector from the passenger's door lock switch.
11. Check the ON/OFF information of the Front Psnger's Door Lock Sw. (LOCK) and Front Psnger's Door Lock Sw. (UNLOCK) in the DATA LIST.

Are both information indicators OFF?

YES - Faulty passenger's door lock switch; replace it.

NO - Go to step 12.

12. Check for a short in the wire between the MICU and passenger's door lock switch at the security alarm/keyless door lock system control unit input test (see **CONTROL UNIT INPUT TEST**).

Are the wire harnesses OK?

YES - Faulty MICU; replace it.

NO - A short in the wire, repair and recheck.

DTC B1027: TRUNK KEY CYLINDER SWITCH SIGNAL ERROR

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Operate the trunk key cylinder switch for 2 seconds.
4. Check the DTCs using the HDS.

Is DTC B1027 indicated?

YES - Go to step 5.

NO - Intermittent failure. The trunk key cylinder system is OK at this time.

5. With the trunk key cylinder switch in the off (neutral) position, select the TEST MODE MENU from the HDS and enter the DATA LIST.
6. Check the ON/OFF information of the Trunk Key Cylinder Switch (UNLOCK) in the DATA LIST.

Is the information indicator OFF?

YES - Go to step 7.

NO - Go to step 9.

7. Make sure the ON/OFF information of the Trunk Key Cylinder Switch (UNLOCK) are changed when the trunk key cylinder switch is turned to UNLOCK position with the key.

Does the information show ON when the trunk key cylinder switch is turned to UNLOCK position, and show OFF when the trunk key cylinder switch is returned to the off (neutral) position?

YES - Faulty MICU; replace it.

NO - Go to step 8.

8. Check for an open in the wire between the MICU and trunk key cylinder switch.

Are the wire harnesses OK?

YES - Faulty trunk key cylinder switch; replace it.

NO - An open in the wire, repair and recheck.

9. Disconnect the 3P connector from the trunk key cylinder switch.
10. Check the ON/OFF information of the Trunk Key Cylinder Switch (UNLOCK) in the DATA LIST.

Is the information indicator OFF?

YES - Faulty trunk key cylinder switch; replace it.

NO - Go to step 11.

11. Check for a short in the wire between the MICU and trunk key cylinder switch.

Are the wire harnesses OK?

YES - Faulty MICU; replace it.

NO - A short in the wire, repair and recheck.

DTC B1127: DRIVER'S DOOR KEY CYLINDER SWITCH SIGNAL ERROR

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Operate the driver's door key cylinder in the LOCK and UNLOCK positions for 2 seconds.
4. Check for DTCs using the HDS.

Is DTC B1127 indicated?

YES - Go to step 5.

NO - Intermittent failure. The driver's door key cylinder system is OK at this time. Check pinfits and connections.

5. With no driver's door key cylinder operation, select SECURITY from the HDS, and enter the DATA LIST.
6. Check the ON/OFF information of the Driver's Door Key Cylinder Switch (LOCK) and Driver's Door Key Cylinder Switch (UNLOCK) in the DATA LIST.

Are both information indicators OFF?

YES - Go to step 7.

NO - Go to step 10.

7. Turn the driver's door key cylinder to the LOCK and UNLOCK positions with the ignition key and check the ON/OFF information of the Driver's Door Key Cylinder Switch (LOCK) and Driver's Door Key Cylinder Switch (UNLOCK)

in the DATA LIST.

Is the Driver's Door Key Cylinder Switch (LOCK) (Driver's Door Key Cylinder Switch (UNLOCK)) information indicator ON when the key cylinder is in the LOCK (UNLOCK) position, and OFF when the key is returned to the neutral position?

YES - Faulty door multiplex control unit; replace the power window master switch.

NO - Go to step 8.

8. Disconnect the driver's door key cylinder switch 3P connector.
9. Check for continuity between the No. 3 (LOCK) and No. 1 (UNLOCK) terminals of the driver's door key cylinder switch 3P connector and the No. 8 (LOCK) and No. 21 (UNLOCK) terminals of the power window master switch 23P connector.

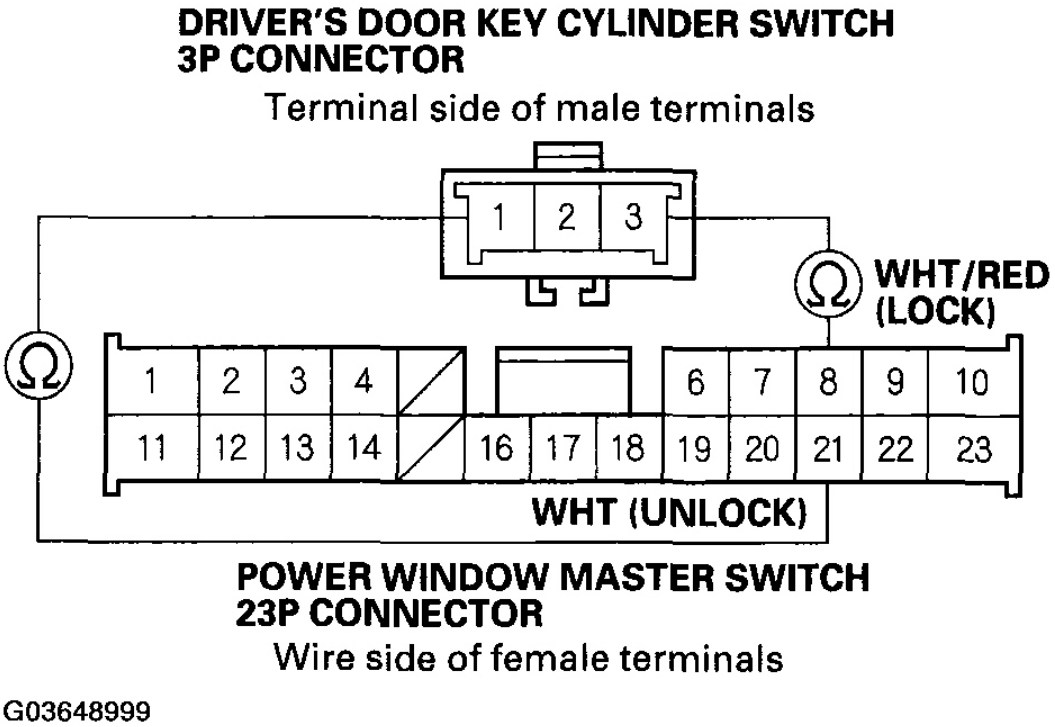


Fig. 16: Checking For Continuity Between No.3 & No.1 Terminals Of

Driver's Door Key Cylinder Switch Connector And No.8 & No.21 Terminals Of Power Window Master Switch Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Faulty driver's door key cylinder switch.

NO - Repair an open in the WHT/RED (LOCK) or WHT (UNLOCK) wire.

10. Disconnect the driver's door key cylinder switch 3P connector.
11. Check the ON/OFF information of the Driver's Door Key Cylinder Switch (LOCK) and Driver's Door Key Cylinder Switch (UNLOCK) in the DATA LIST.

Are both information indicators OFF?

YES - Faulty driver's door key cylinder switch.

NO - Go to step 12.

12. Check for continuity between the No. 3 (LOCK) and No. 1 (UNLOCK) terminals of the driver's door key cylinder switch 3P connector and body ground.

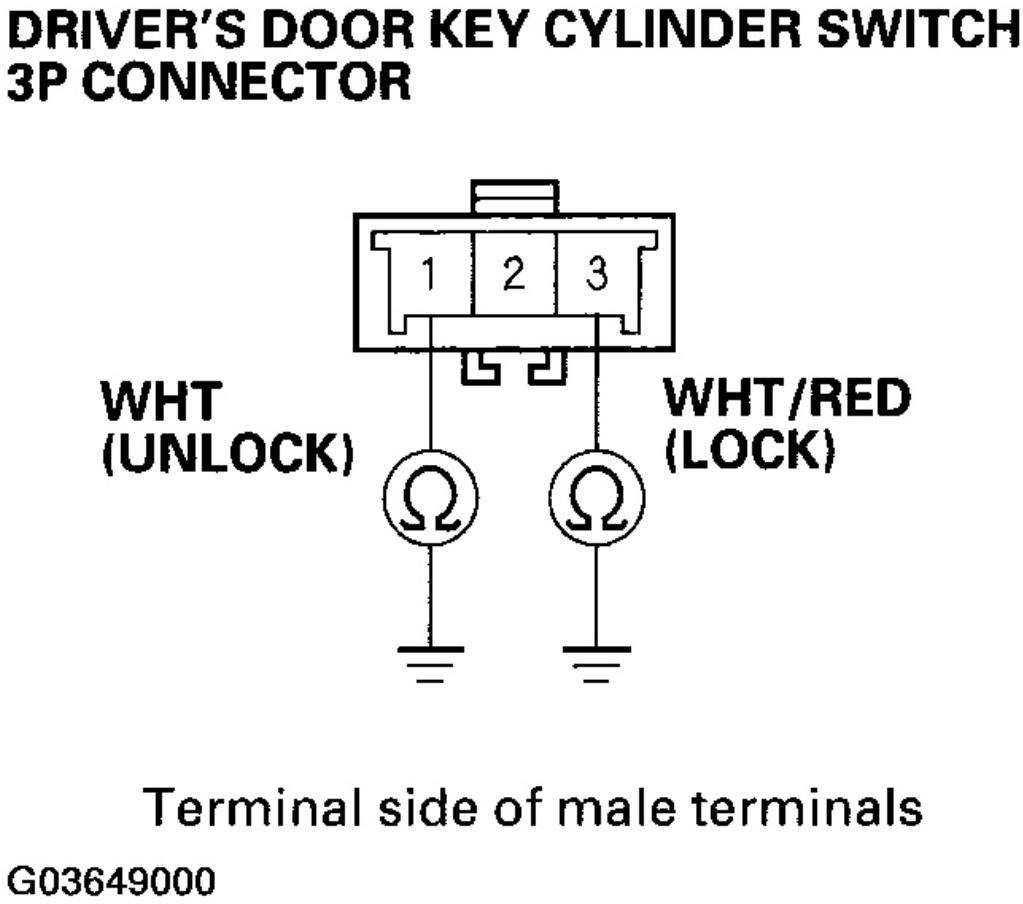


Fig. 17: Checking For Continuity Between No.3 & No.1 Terminals Of Driver's Door Key Cylinder Switch And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair a short in the WHT/RED (LOCK) or WHT (UNLOCK) wire.

NO - Faulty door multiplex control unit; replace the power window master switch.

DTC B1128: DRIVER'S DOOR LOCK SWITCH SIGNAL ERROR

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Operate the driver's door lock switch in the LOCK and UNLOCK positions for 2 seconds.
4. Check for DTCs using the HDS.

   Is DTC B1128 indicated?

   YES - Go to step 5.

   NO - Intermittent failure. The driver's door lock switch system is OK at this time. Check pinfits and connections.
5. With no driver's door lock switch operation, select SECURITY from the HDS, and enter the DATA LIST.
6. Check the ON/OFF information of the Driver's Door Lock Switch (LOCK) and Driver's Door Lock Switch (UNLOCK) in the DATA LIST.

   Are both information indicators OFF?

   YES - Go to step 7.

   NO - Check the door lock switch. If the driver's door lock switch is OK, faulty door multiplex control unit; replace the power window master switch.
7. Push the driver's door lock switch in LOCK and UNLOCK positions, and check the ON/OFF information of the Driver's Door Lock Switch (LOCK) and Driver's Door Lock Switch (UNLOCK) in the DATA LIST.

   Is the Driver's Door Lock Switch (LOCK) (Driver's Door Lock Switch (UNLOCK)) information indicator ON when the door lock switch is pushed in each switch position, and OFF when the door lock switch is released?

   YES - Substitute a known-good power window master switch. If the code is still present, replace the MICU.

   NO - Faulty door multiplex control unit; replace the power window master switch.

DTC B1129: DRIVER'S DOOR LOCK KNOB SWITCH SIGNAL ERROR

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON.
3. Operate the driver's door lock knob switch in the LOCK and UNLOCK positions for 2 seconds.
4. Check for DTCs using the HDS.

   Is DTC B1129 indicated?

   YES - Go to step 5.

   NO - Intermittent failure. The driver's door lock knob switch system is OK at this time. Check pinfits and connections.
5. Select SECURITY from the HDS, and enter the DATA LIST.

   Check the ON/OFF information of the Driver's Door Lock knob Switch (LOCK) and Driver's Door Lock knob Switch (UNLOCK) in the DATA LIST.

   Is the Driver's Door Lock knob Switch (LOCK) information indicator ON and Driver's Door Lock knob Switch (UNLOCK) information indicator OFF with the door lock knob switch in LOCK position, and is the Driver's Door Lock knob Switch (LOCK) information indicator OFF and Driver's Door Lock knob Switch (UNLOCK) information indicator ON with the door lock knob switch in UNLOCK position?

   YES - Substitute a known-good power window master switch. If the code is still present, replace the MICU.

   NO - Go to step 6.
6. Disconnect the driver's door lock knob switch 3P connector.
7. Check the ON/OFF information of the Driver's Door Lock knob Switch (LOCK) and Driver's Door Lock knob Switch (UNLOCK) in the DATA LIST.

   Are both information indicators OFF?

   YES - Faulty driver's door lock knob switch.

   NO - Go to step 8.

8. Check for continuity between the No. 2 (LOCK) and No. 1 (UNLOCK) terminals of the driver's door lock knob switch 3P connector and body ground.

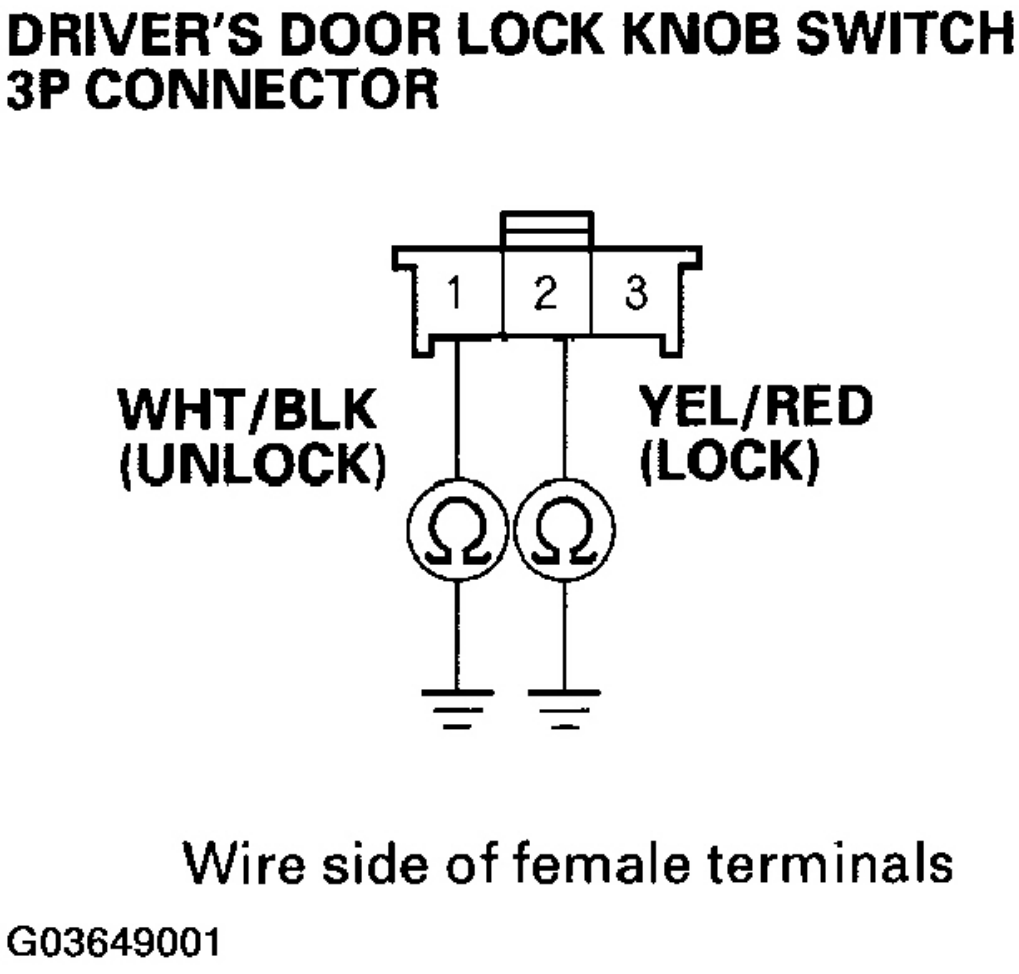


Fig. 18: Checking For Continuity Between No.2 & No.1 Terminals Of Driver's Door Lock Knob Switch And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair a short in the YEL/RED (LOCK) or WHT/BLK (UNLOCK) wire.

NO - Go to driver's door lock knob switch test (see **DOOR LOCK KNOB SWITCH TEST**). If the driver's door lock knob switch is OK, the door multiplex control unit is faulty; replace the power window master switch.

TRIPPED SENSOR HISTORY

The security system stores information on the last tripped sensor if the security system has been violated.

The information can be retrieved using the HDS.

To retrieve the last tripped sensor data:

1. Select HISTORY DATA from the security system test mode menu.
2. Select CURRENT DATA.
3. Confirm that the VIN matches the Vehicle then press the enter button.
4. Scroll through the data list.
    - Sensors that were violated will indicate DETECT.
    - Sensors that were not violated will indicate NONE.
5. Inspect the DETECT circuit for:
    - Misadjusted or damaged switch.
    - Loose or corroded connections.
    - Intermittent short to ground.

TRUNK LID OPENER SOLENOID TEST

1. Disconnect the 3P connector from the trunk latch switch/trunk lid opener solenoid.

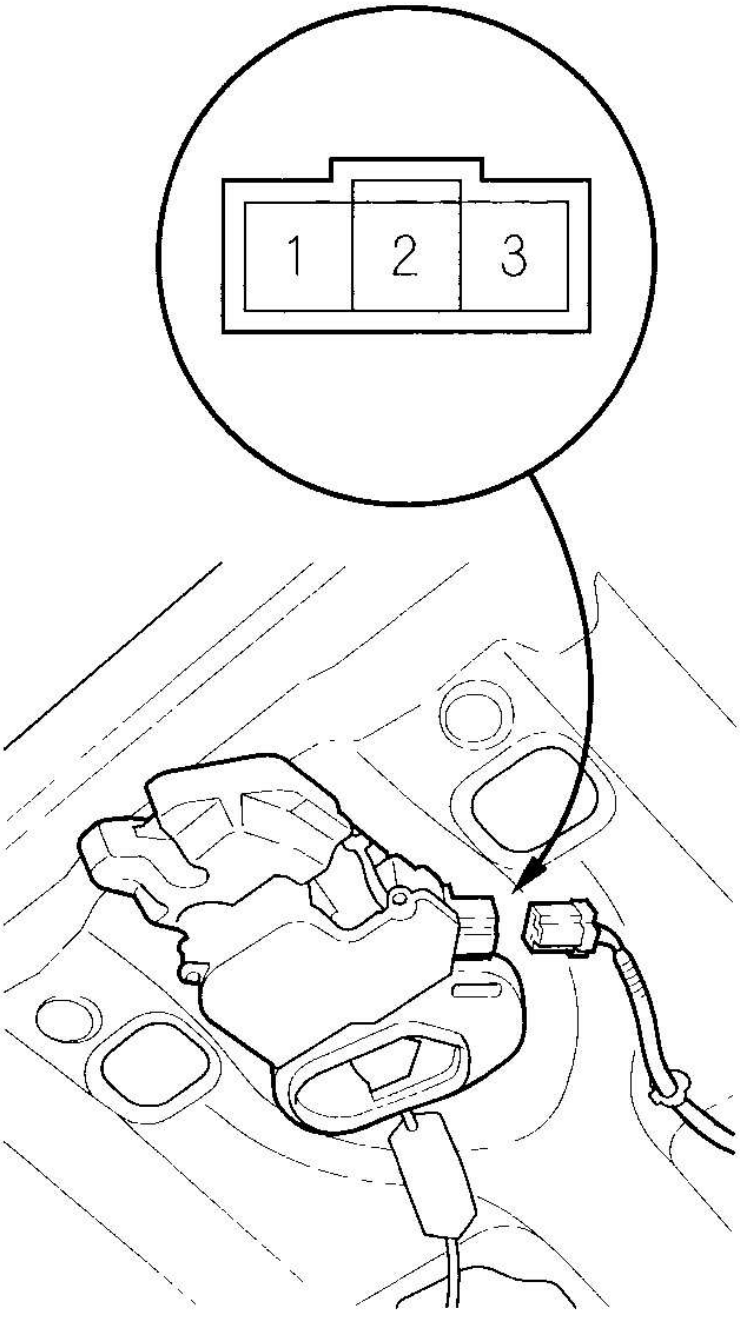


Fig. 19: Disconnecting 3P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check trunk lid opener solenoid operation by connecting power and ground according to table graphic below. To prevent damage to the trunk lid opener solenoid, apply battery voltage only momentarily.

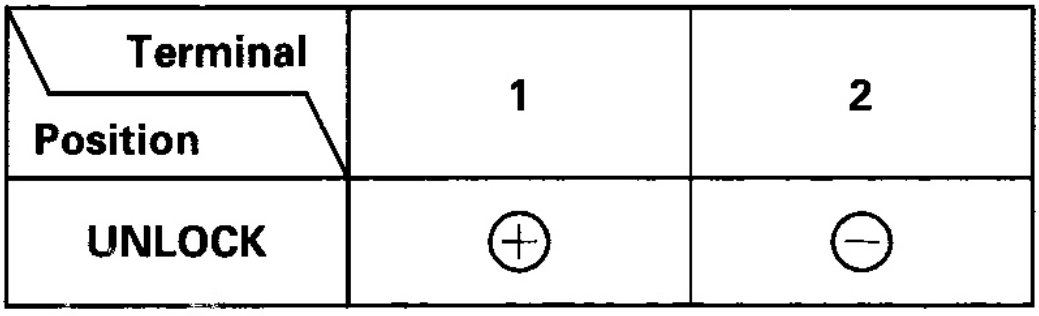


Fig. 20: Checking Trunk Lid Opener Solenoid Operation By Connecting Power And Ground Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the trunk lid opener solenoid does not work as specified, replace it.

TRUNK KEY CYLINDER SWITCH TEST

4-DOOR EX, EXL, LX-V6, '06-07 MODELS CANADA SE

1. Remove the trunk lid trim (see **TRIM REMOVAL/INSTALLATION - TRUNK LID**).
2. Disconnect the 3P connector from the key cylinder switch.

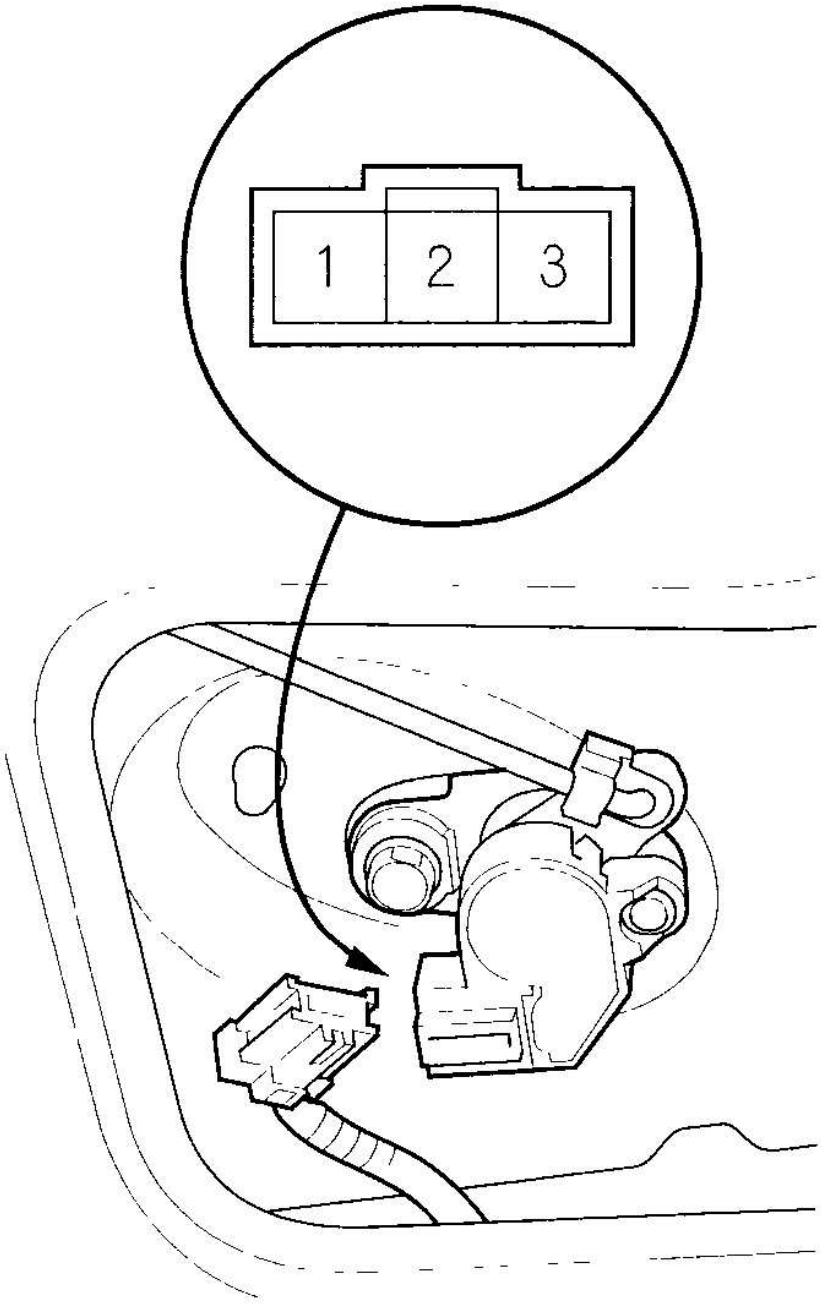


Fig. 21: Disconnecting 3P Connector From Key Cylinder Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the terminals. There should be continuity between the No. 2 and No. 3 terminals when the trunk key cylinder switch is in UNLOCK position. There should be no continuity between the No. 2 and No. 3 terminals when the trunk key cylinder switch is in the released (neutral) position.
4. If the continuity is not as specified, replace the trunk key cylinder switch.

DOOR LOCK SWITCH TEST

PASSENGER'S DOOR LOCK SWITCH

1. Remove the front passenger's switch panel.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
2. Disconnect the 10P connector from the front passenger's power window switch.

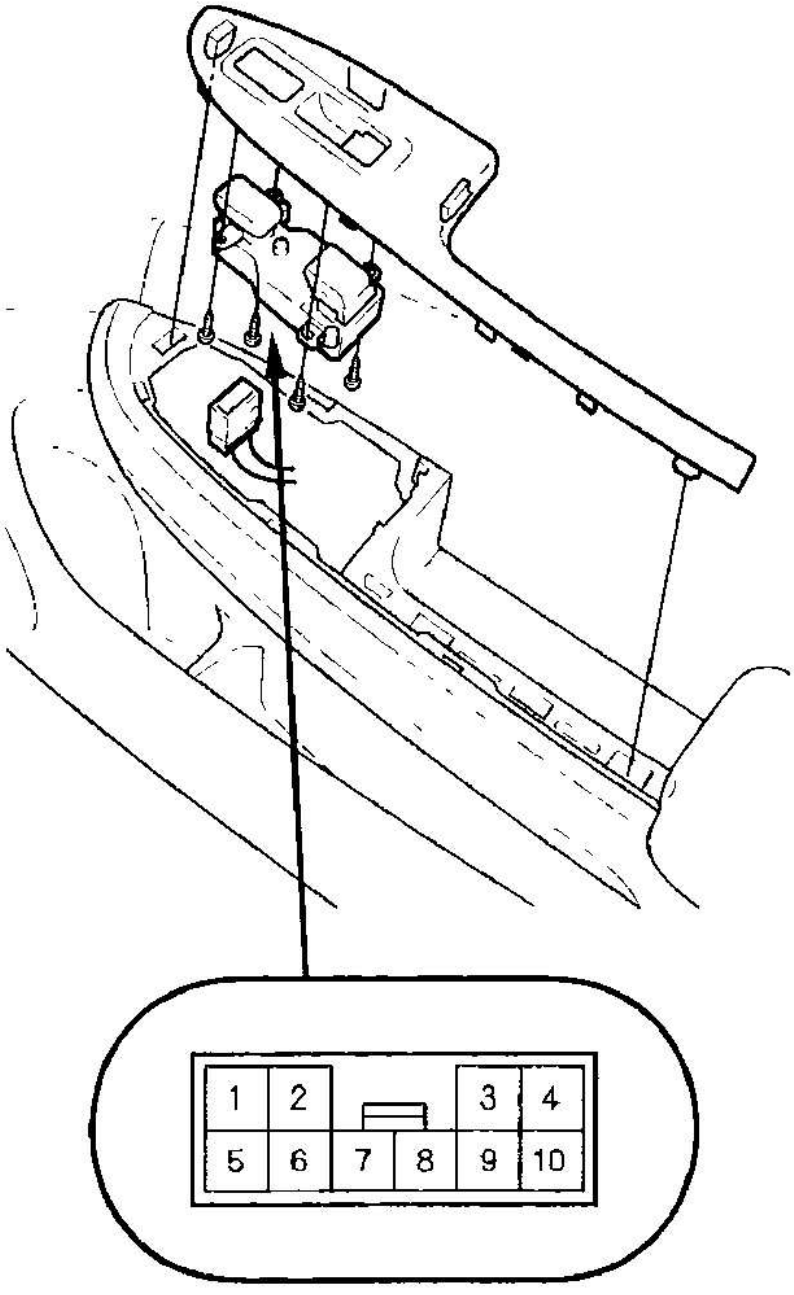


Fig. 22: Disconnecting 10P Connector From Front Passenger's Power Window Switch

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the terminals.
   - There should be continuity between the No. 2 and No. 9 terminals when the door lock switch is in LOCK position. There should be no continuity between the No. 2 and No. 9 terminals when the door lock switch is in the neutral position.
   - There should be continuity between the No. 1 and No. 9 terminals when the door lock switch is in UNLOCK position. There should be no continuity between the No. 1 and No. 9 terminals when the door lock switch is in the neutral position.
4. If the continuity is not as specified, replace the door lock switch.

HOOD SWITCH TEST

EX, EXL, LX-V6, CANADA LX, '06-07 MODELS CANADA SE

1. Open the hood.
2. Disconnect the 2P connector from the hood switch.

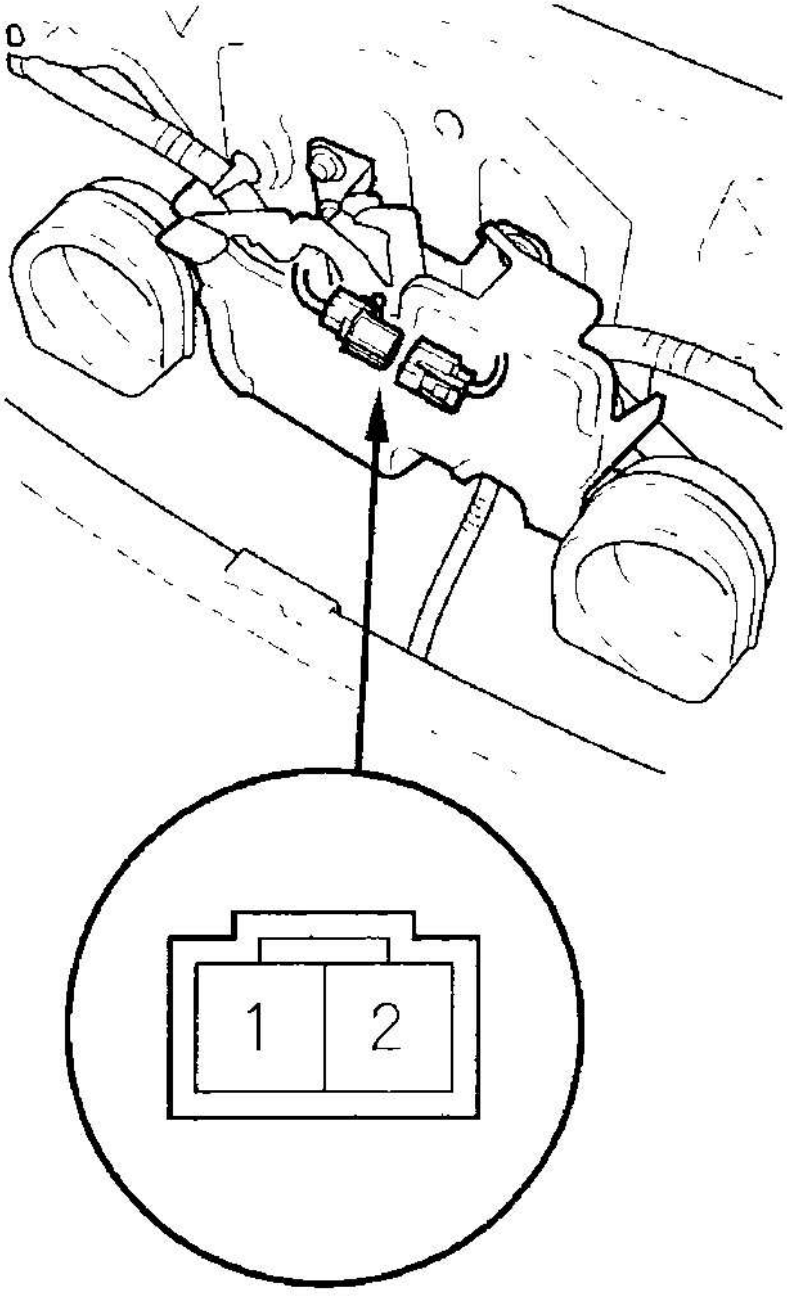


Fig. 23: Disconnecting 2P Connector From Hood Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

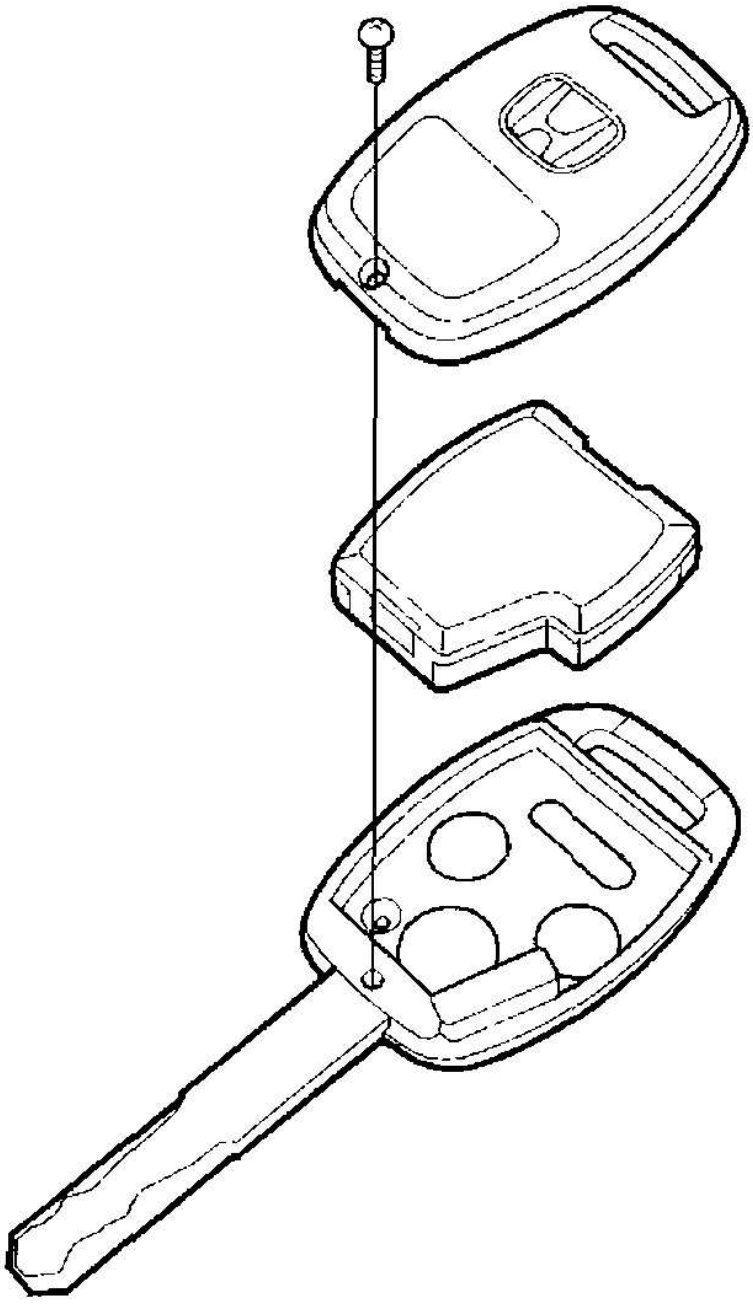
3. Check for continuity between the terminals. There should be continuity between the No. 1 and No. 2 terminals when the hood is opened (lever released). There should be no continuity between the No. 1 and No. 2 terminals when the hood is closed (lever pushed down).
4. If the continuity is not as specified, replace the hood switch.

TRANSMITTER TEST

NOTE:

- **If the doors unlock or lock with the transmitter, but the LED on the transmitter does not come on, the LED is faulty; replace the transmitter.**
- **If any door is open, you cannot lock the doors with the transmitter.**
- **If you unlocked the doors with the transmitter, but do not open any of the doors within 30 seconds, the doors relock automatically.**
- **The doors do not lock or unlock with the transmitter if the ignition key is inserted in the ignition switch.**

1. Press the lock or unlock button five or six times to reset the transmitter.
   - If the locks work, the transmitter is OK.
   - If the locks don't work, go to step 2.
2. Open the transmitter and check for water damage.
   - If you find any water damage, replace the transmitter.
   - If there is no water damage, go to step 3.



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Fig. 24: Opening Transmitter To Check For Water Damage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Replace the transmitter battery (A) with a new one, and try to lock and unlock the doors with the transmitter by pressing the lock or unlock button five or six times.
    - If the doors lock and unlock, the transmitter is OK.
    - If the doors don't lock and unlock, go to step 4.

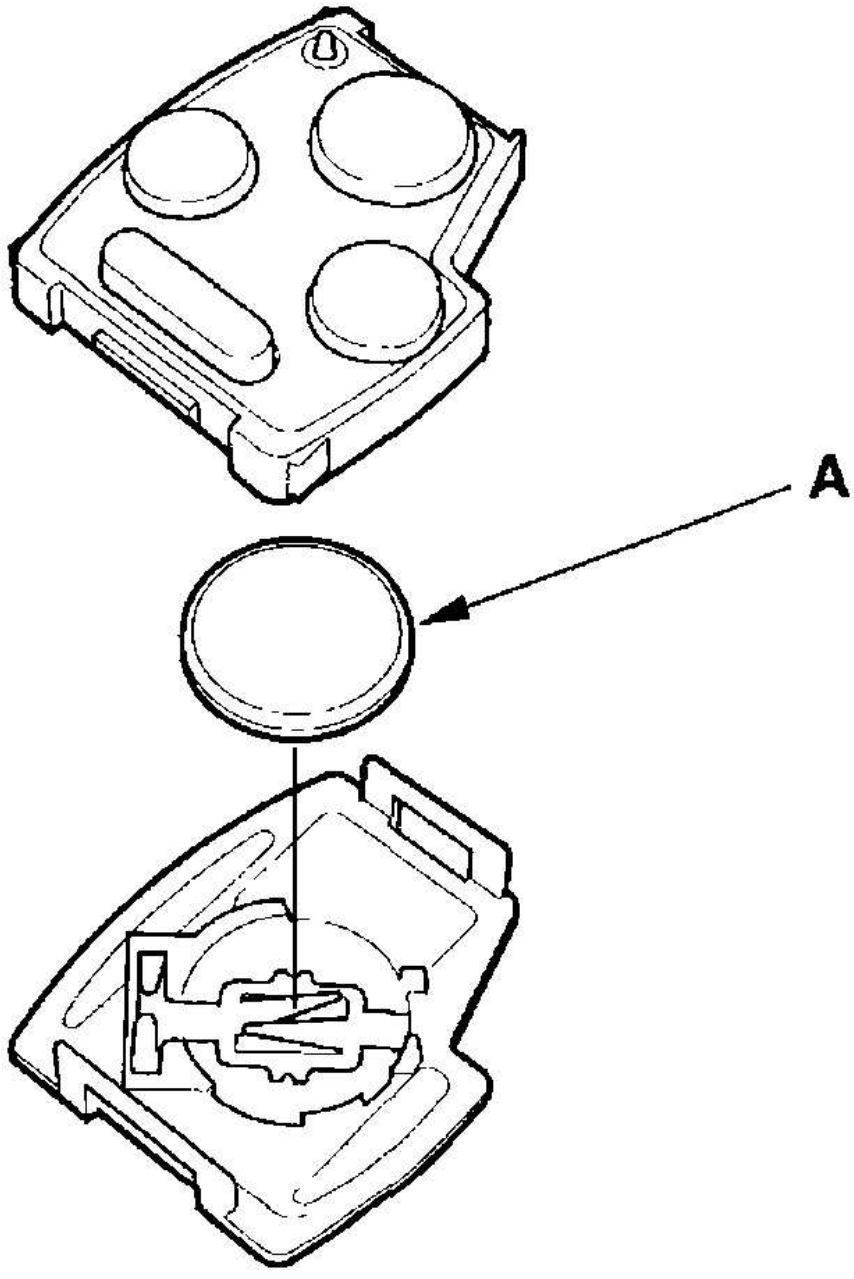


Fig. 25: Replacing Transmitter Battery
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Reprogram and register the transmitter, then try to lock and unlock the doors.
   - If the doors lock and unlock, the transmitter is OK.
   - If the doors don't lock and unlock, try and program to another vehicle. If still not operating, replace the transmitter.

TRANSMITTER PROGRAMMING

Storing transmitter codes:

The codes of up to three transmitters can be stored into the keyless receiver unit memory. (If a fourth code is stored, the code which was input first will be erased.)

NOTE: It is important to maintain the time limits between the steps. Make sure the doors, the hood and the tailgate are closed.

1. Turn the ignition switch ON (II).
2. Within 1 to 4 sec, press the transmitter lock or unlock button with the transmitter aimed at the keyless receiver in the power window master switch.
3. Within 1 to 4 sec, turn the ignition switch OFF.
4. Within 1 to 4 sec, turn the ignition switch ON (II).
5. Within 1 to 4 sec, press the transmitter lock or unlock button with the transmitter aimed at the keyless receiver in the power window master switch.
6. Within 1 to 4 sec, turn the ignition switch OFF.
7. Within 1 to 4 sec, turn the ignition switch ON (II).
8. Within 1 to 4 sec, press the transmitter lock or unlock button with the transmitter aimed at the keyless receiver in the power window master switch.
9. Within 1 to 4 sec, turn the ignition switch OFF.
10. Within 4 sec, turn the ignition switch ON (II).
11. Within 1 to 4 sec, press the transmitter lock or unlock button with the transmitter aimed at the keyless receiver in the power window master switch.
12. Confirm you can hear the sound of the door lock actuators within 1 to 4 sec, then push the transmitter lock or unlock button again, or the code will not be stored.

13. Within 10 sec, aim the transmitters (up to two additional ones) whose codes you want to store at the keyless receiver, and press the transmitter lock or unlock buttons.

    Confirm that you can hear the sound of the door lock actuators after each transmitter code is stored.

14. Turn the ignition switch OFF, and pull out the key.
15. Confirm proper operation with the transmitters.

2003-07 ACCESSORIES & EQUIPMENT

Power Mirrors - Accord

COMPONENT LOCATION INDEX

Fig. 1: Identifying Power Mirrors Components Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

Fig. 2: Power Mirrors Circuit Diagram

Courtesy of AMERICAN HONDA MOTOR CO., INC.

FUNCTION TEST

1. Remove the driver's door switch trim.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)

NOTE: The illustration below shows 4-door.

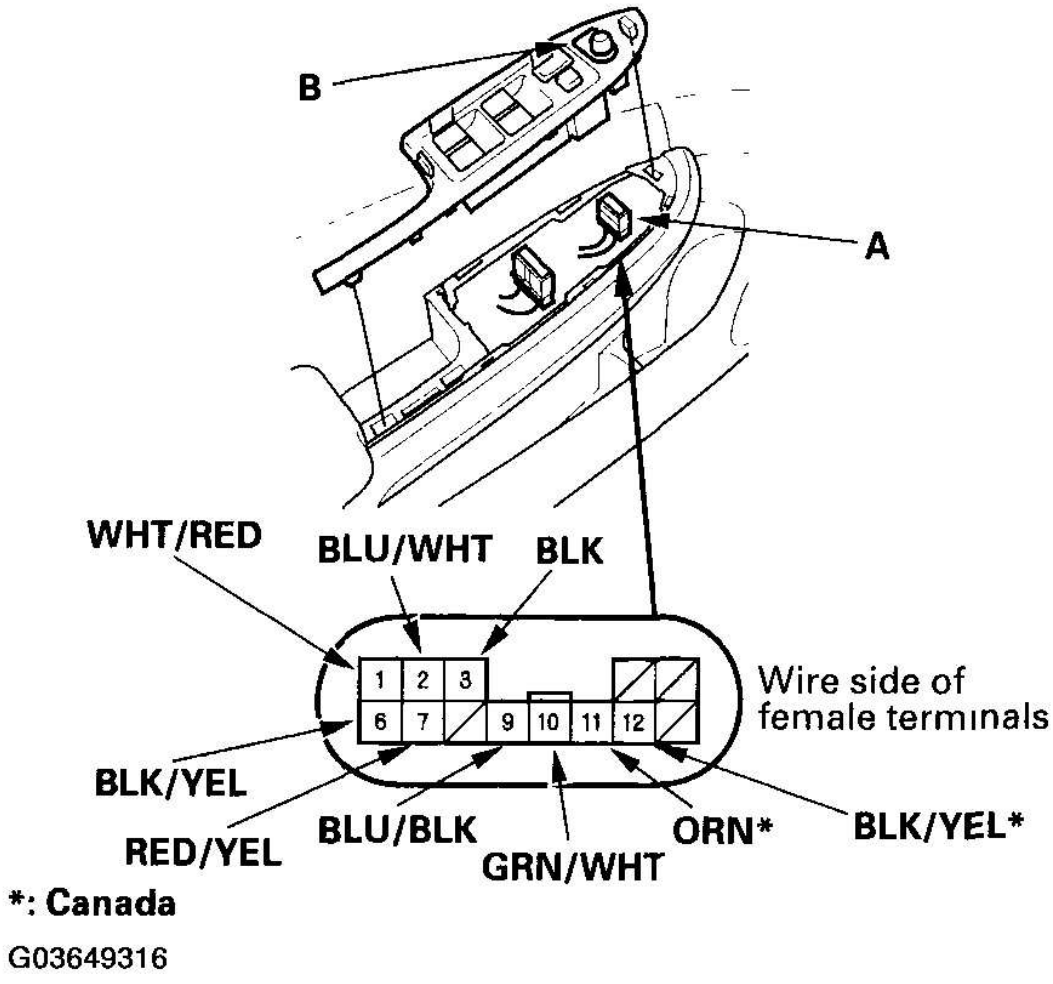


Fig. 3: Removing Driver's Door Switch Trim (4-Door)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Disconnect the 13P connector (A) from the power mirror switch (B), and inspect the terminals. If OK, go to step 3.
3. Choose the appropriate test based on the symptom:
   - Both mirrors don't work, go to step 4.
   - Left mirror doesn't work, go to step 6.
   - Right mirror doesn't work, go to step 7.
   - Defogger doesn't work (Canada), go to step 8.

Both mirrors

4. Check for voltage between the No. 6 terminal and body ground with the ignition switch ON (II).

   There should be battery voltage.

   - If there is no battery voltage, check for:
     - Blown No. 30 (7.5 A) fuse in the under-dash fuse/relay box.
     - An open in the BLK/YEL wire.
   - If there is battery voltage, go to step 5.
5. Check for continuity between the No. 3 terminal and body ground.

   There should be continuity.

   - If there is no continuity, check for:
     - An open in the BLK wire.
     - Poor ground (G501, G601).
   - If there is continuity, check both mirrors individually as described in steps 6 & 7 .

Left mirror

6. Connect the No. 6 terminal to the No. 9 terminal, and the No. 2 (or No. 10) terminal to the No. 3 terminal with jumper wires. The left mirror should tilt

down (or swing left) with the ignition switch ON (II).

- If the mirror does not tilt down (or does not swing left), check for an open in the BLU/WHT (or GRN/WHT) wire between the left mirror and the 13P connector. If the wire is OK, check the left mirror actuator.
- If the mirror neither tilts down nor swings left, repair the BLU/BLK wire.
- If the mirror works properly, check the mirror switch.

Right mirror

7. Connect the No. 6 terminal to the No. 7 terminal, and the No. 1 (or No. 10) terminal to the No. 3 terminal with jumper wires. The right mirror should tilt down (or swing left) with the ignition switch ON (II).
   - If the mirror does not tilt down (or does not swing left), check for an open in the WHT/RED (or GRN/WHT) wire between the right mirror and the 13P connector.

     If the wire is OK, check the right mirror actuator.

   - If the mirror neither tilts down nor swings left, repair the RED/YEL wire.
   - If the mirror works properly, check the mirror switch.

Defogger (Canada)

8. Connect the No. 12 and No. 11 terminals with a jumper wire, and check for voltage between the No. 4 terminal of the mirror connectors and body ground. There should be battery voltage and both mirrors should warm up with the ignition switch ON (II).
   - If there is no voltage or neither warms up, check for:
     - An open in the BLK/YEL or ORN wire.
     - Blown No. 30 (7.5 A) fuse in the under-dash fuse/relay box.
   - If only one fails to warm up, check:
     - Its defogger.
     - Poor ground (G501, G601).
   - If both warm up, check the defogger switch.

POWER MIRROR SWITCH TEST/REPLACEMENT

1. Remove the driver's door switch trim.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
2. Disconnect the 13P connector (A) from the power mirror switch (B).

NOTE: The illustration below shows 4-door.

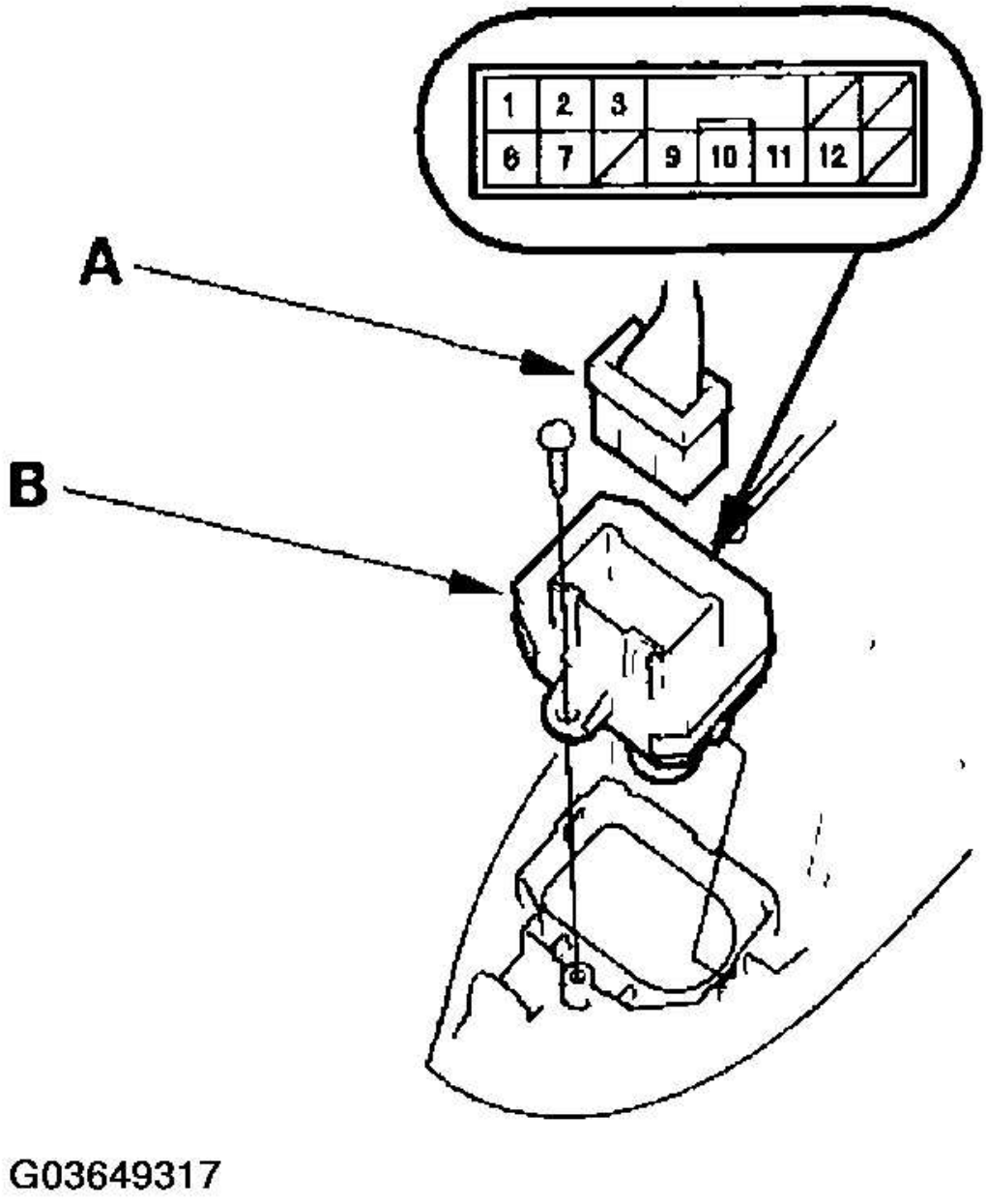


Fig. 4: Disconnecting 13P Connector From Power Mirror Switch (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the terminals in each switch position according

to the tables shown below.

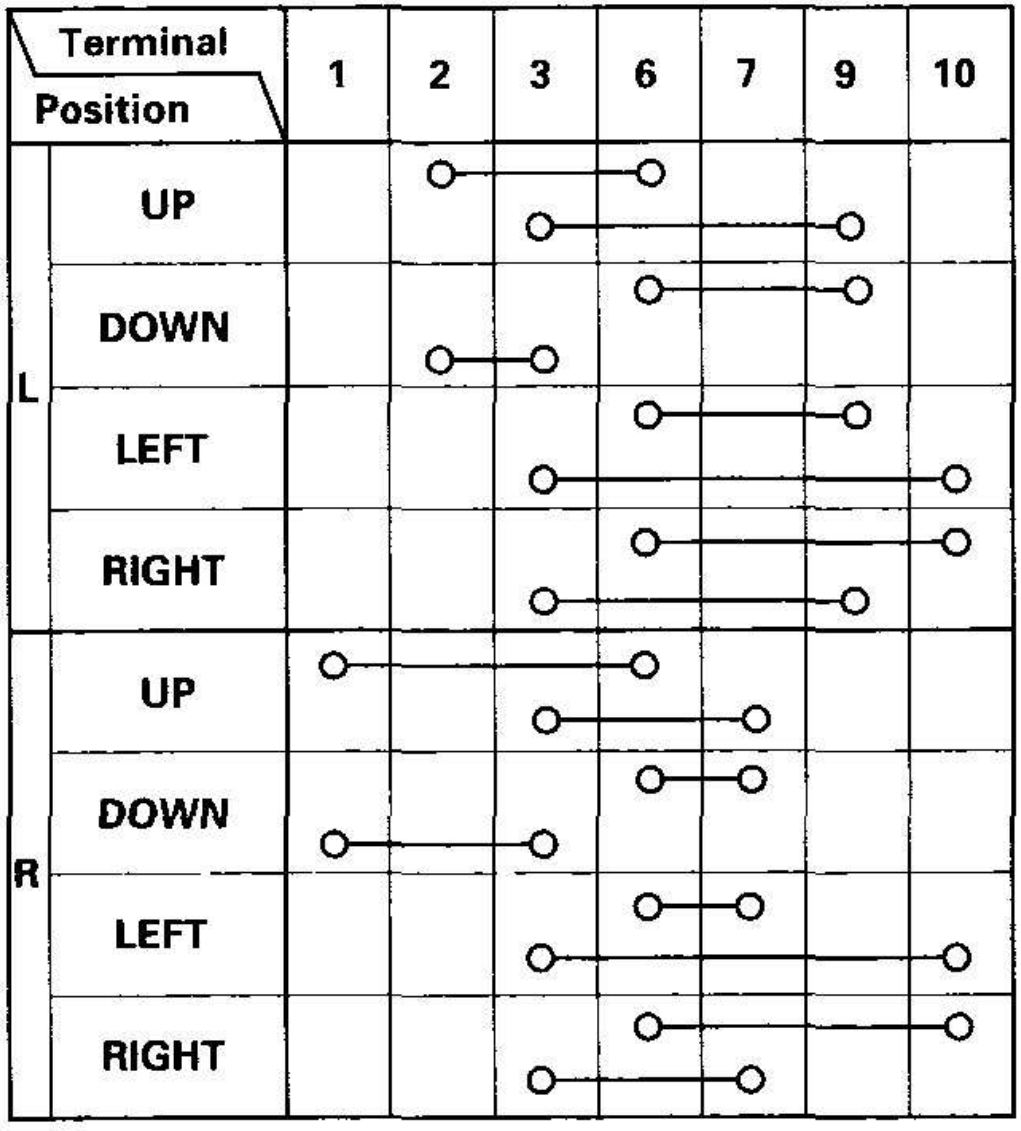


Fig. 5: Checking Continuity Between Terminals In Each Switch Position (Mirror Switch)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

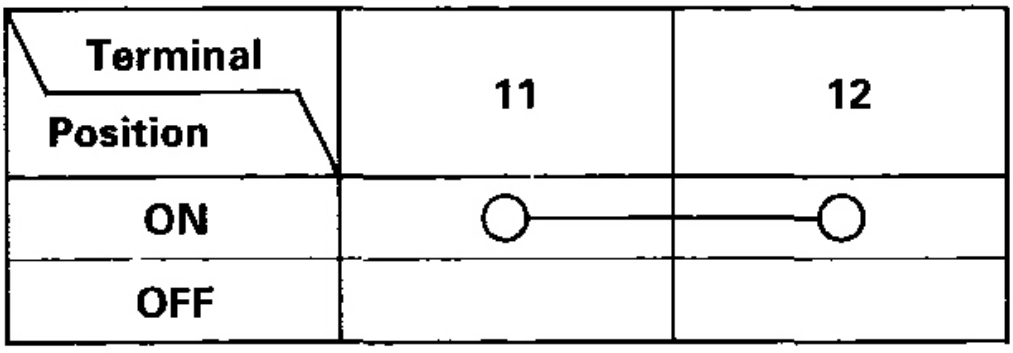


Fig. 6: Checking Continuity Between Terminals In Each Switch Position (Defogger Switch)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the continuity is not as specified, replace the power mirror switch.

POWER MIRROR ACTUATOR TEST

1. Remove the door panel.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
2. Disconnect the 8P connector (A) from the power mirror actuator (B).

NOTE: The illustration below shows 4-door.

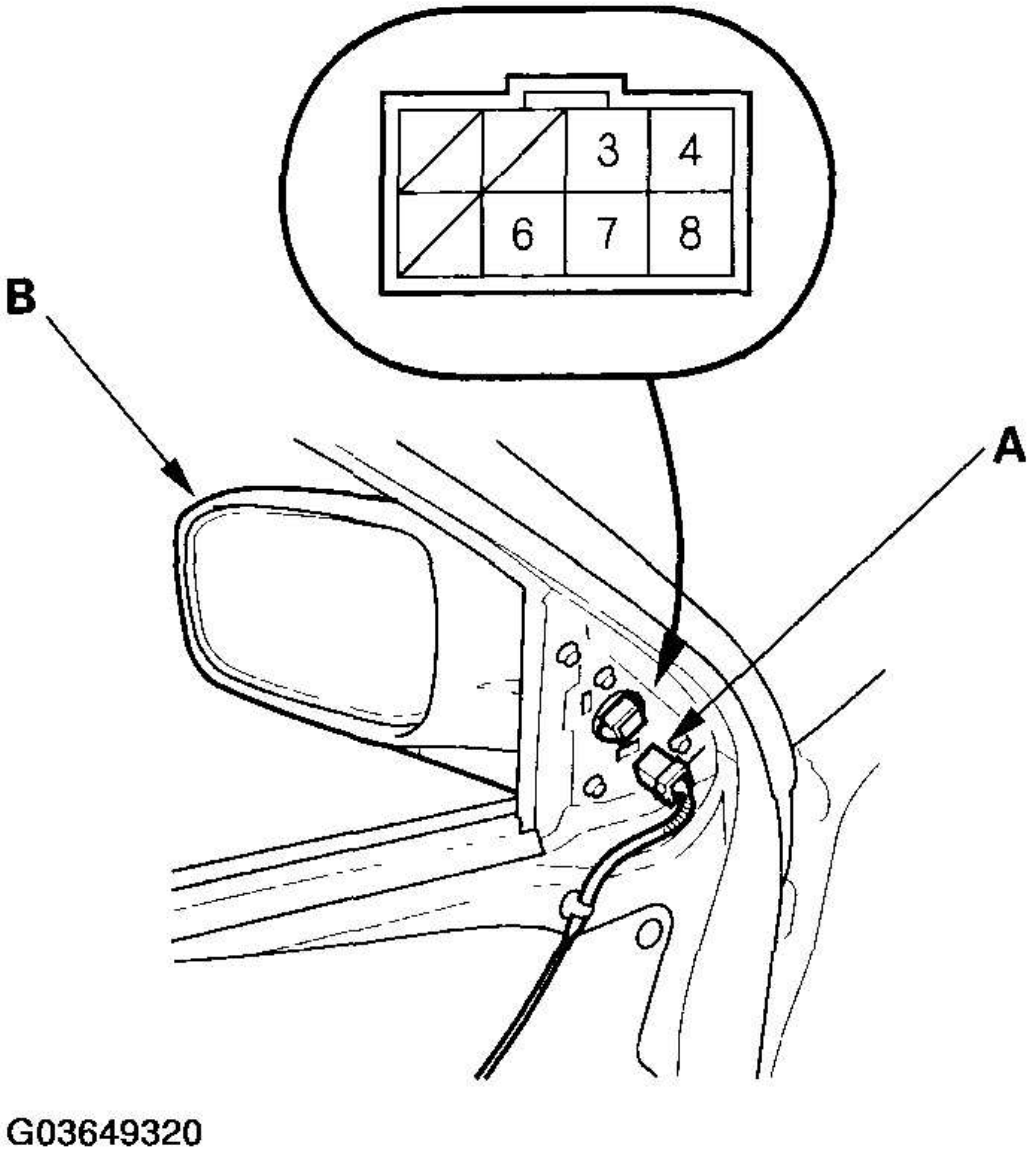


Fig. 7: Disconnecting 8P Connector From Power Mirror Actuator (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check actuator operation by connecting power and ground according to the table shown below.

Terminal / Position	6	7	8
TILT UP		⊖	⊕
TILT DOWN		⊕	⊖
SWING LEFT	⊖	⊕	
SWING RIGHT	⊕	⊖	

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Fig. 8: Checking Actuator Operation By Connecting Power & Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the mirror fails to work properly, replace the mirror actuator.

Defogger Test (Canada)

5. Check for continuity between the No. 3 and No. 4 terminals of the 8P connector. There should be continuity with the defogger switch ON. If there is no continuity, check for an open circuit.

POWER MIRROR ACTUATOR REPLACEMENT

1. Remove the power mirror (see **POWER MIRROR/MANUAL MIRROR REPLACEMENT**).
2. Disconnect the 8P connector.
3. Carefully remove the mirror holder from the mirror housing. Gently pull it out by hand (see **MIRROR HOUSING COVER REPLACEMENT**).
4. Remove the cover (A), then remove the two screws from the mirror connector (B).

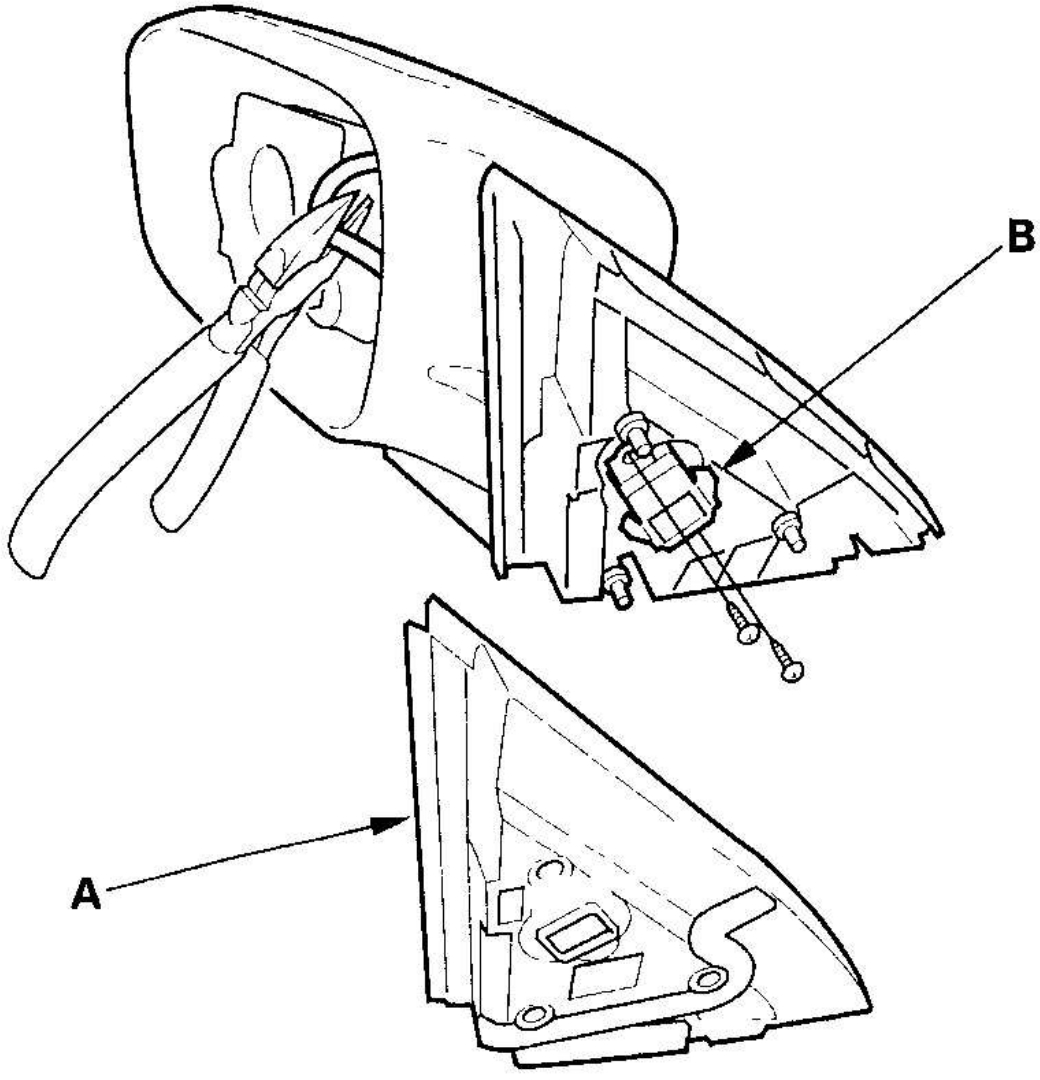


Fig. 9: Removing Power Mirror Cover & Screws From Mirror Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Record the terminal locations and wire colors.
6. Cut the wire harness with the wire cutter.
7. Remove the three screws, and separate the mirror housing (A) from the bracket (B).

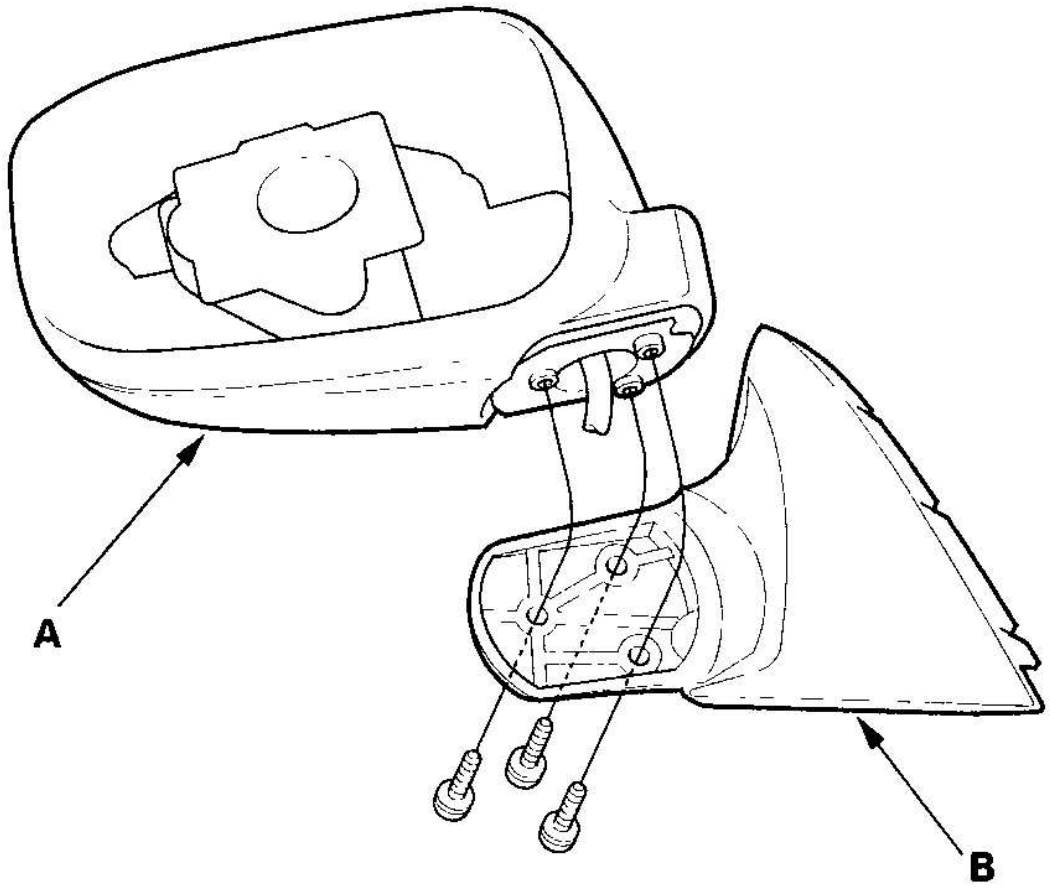


Fig. 10: Separating Mirror Housing From Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the three screws and separate the actuator (A) from the housing (B).

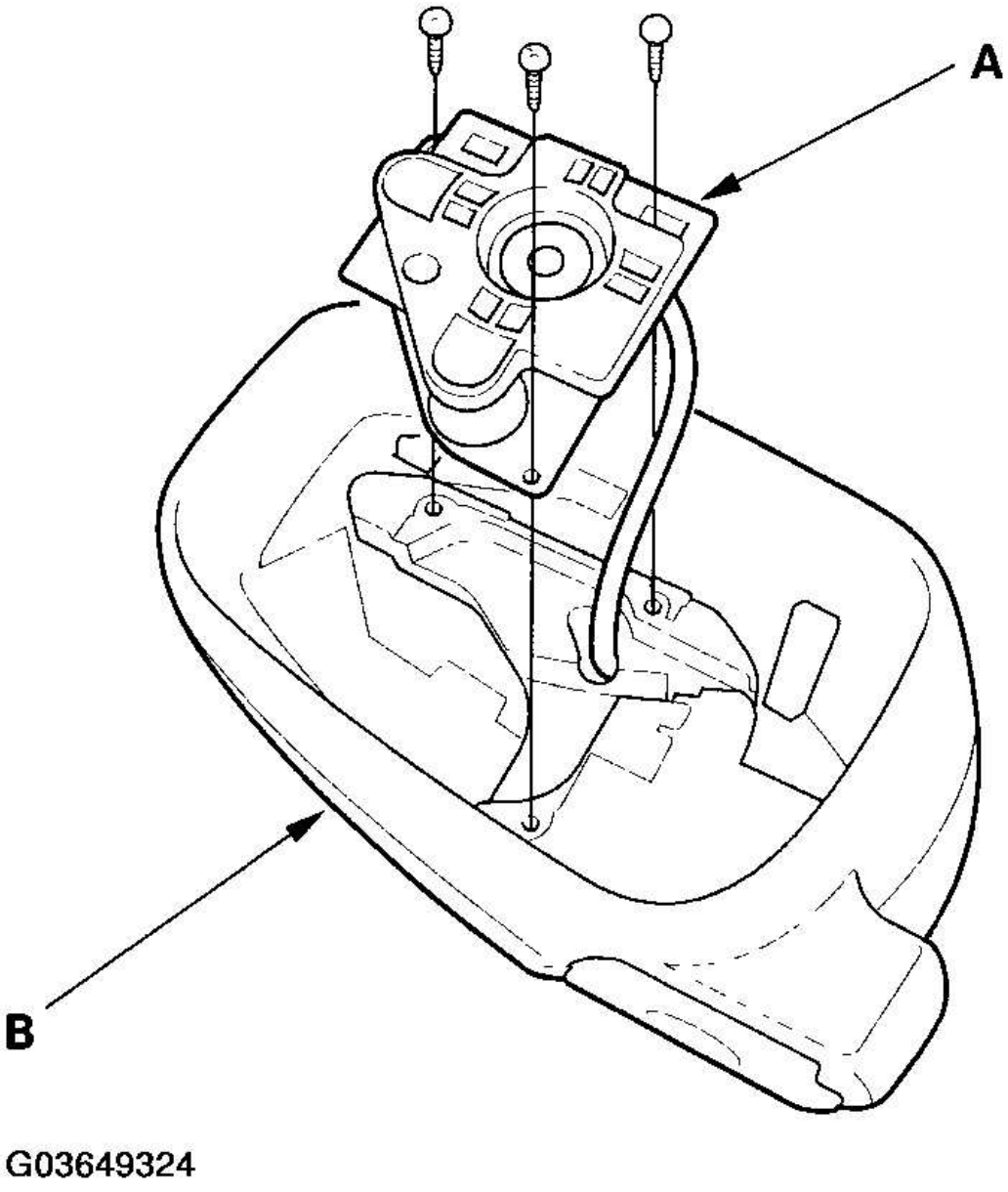


Fig. 11: Separating Actuator From Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Route the wire harness (A) of the new actuator (B) through the hole in the bracket (C).

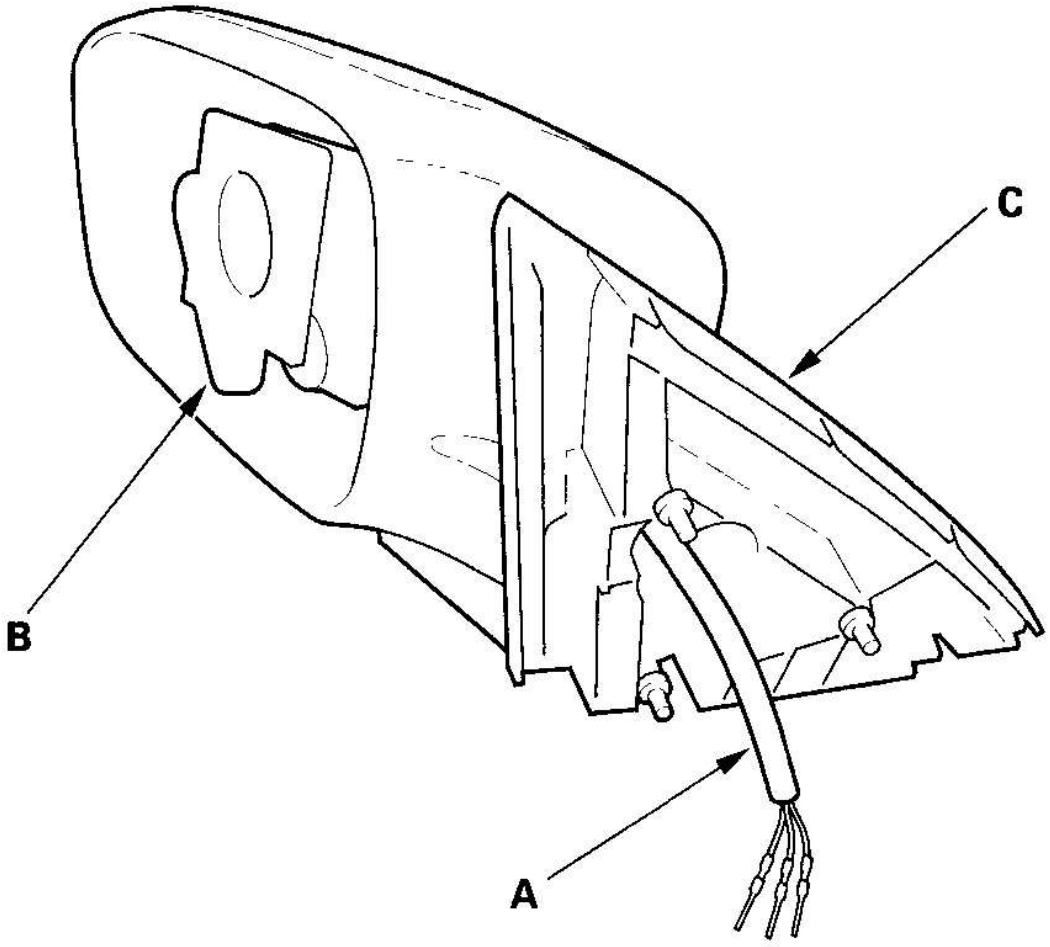


Fig. 12: Routing Wire Harness Of New Actuator Through Hole In Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Install the new actuator in the reverse order of removal.
11. Insert the terminals into the connector in the original arrangement as shown below.

Terminal View:

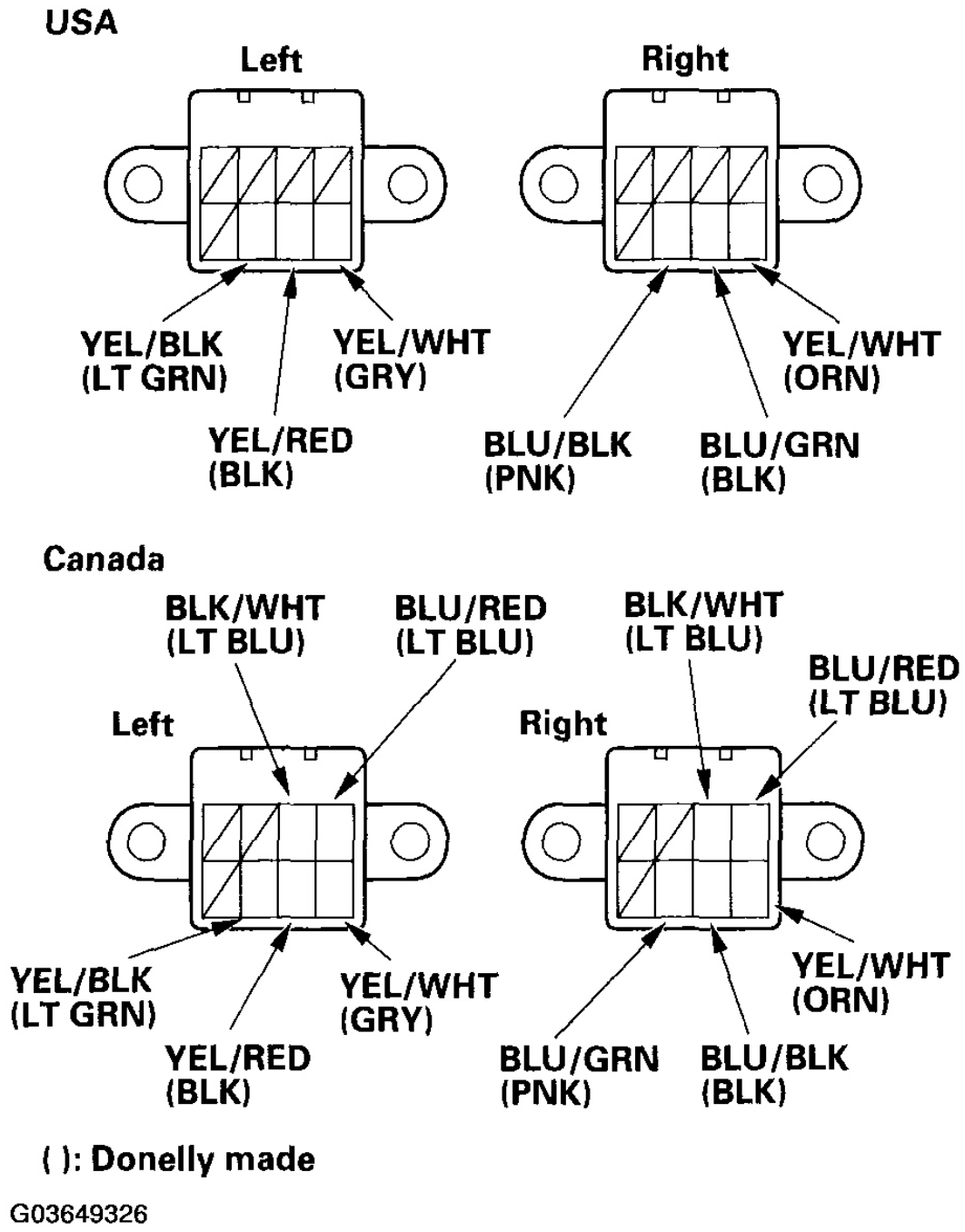


Fig. 13: Inserting Terminals Into Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Reassemble in the reverse order of disassembly. Be careful not to break the

mirror holder when reinstalling it to the actuator.

13. Reinstall the mirror assembly to the door.
14. Operate the power mirror to ensure smooth operation.

2003-07 ACCESSORIES & EQUIPMENT

Power Moonroof - Accord

COMPONENT LOCATION INDEX

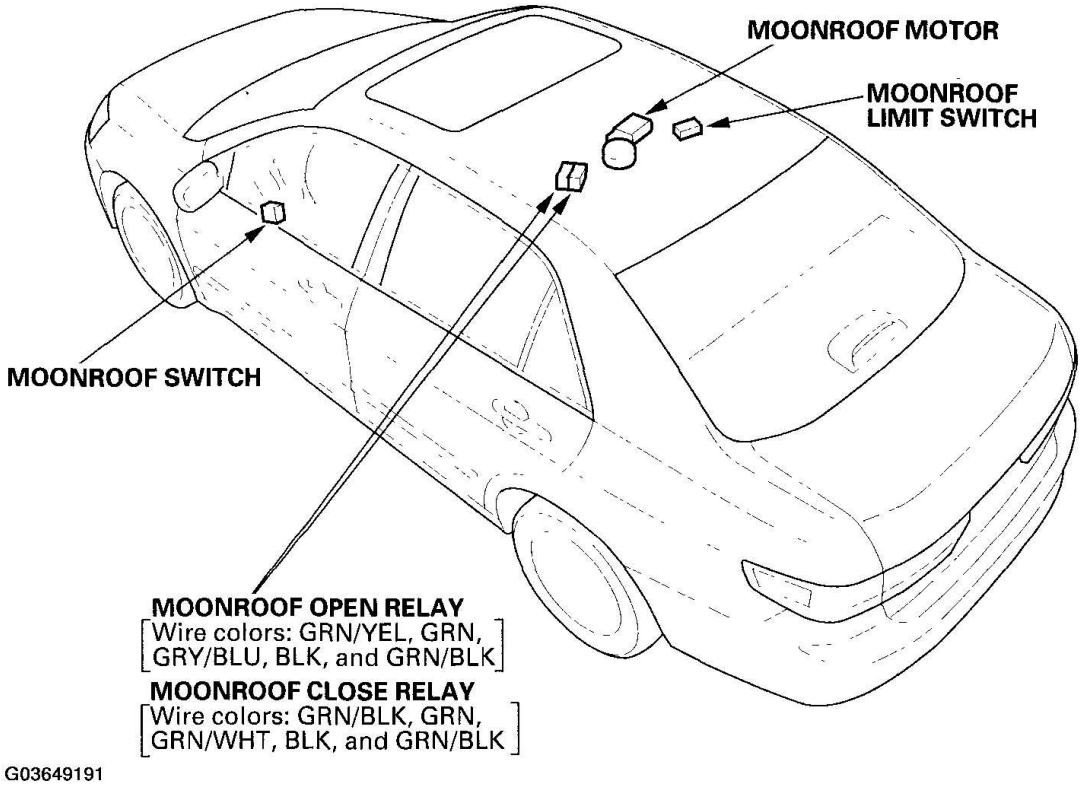


Fig. 1: Identifying Moonroof Components Location (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

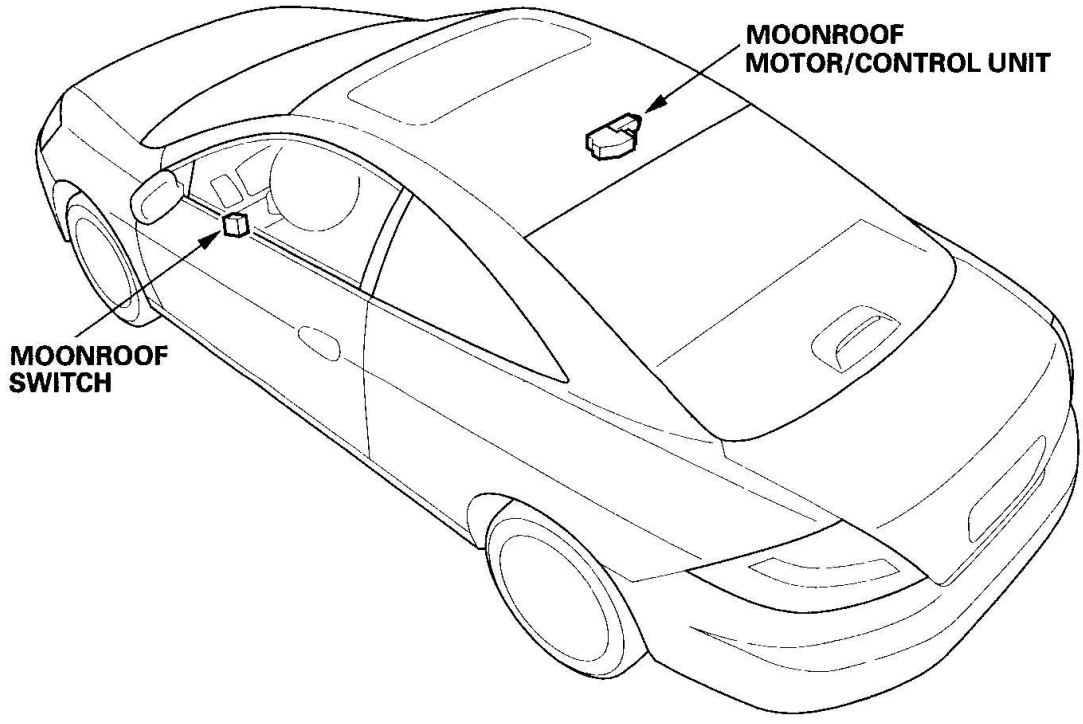
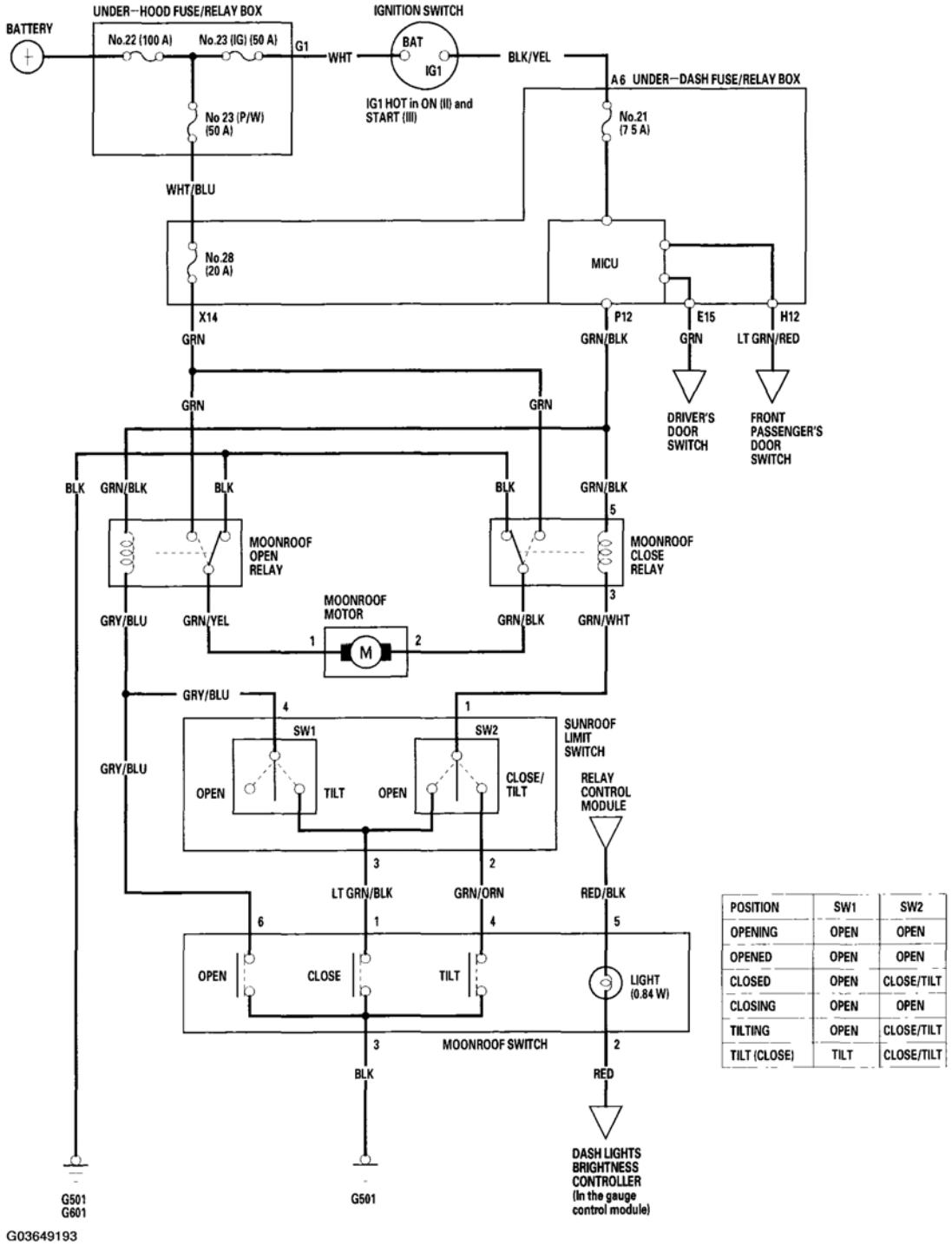


Fig. 2: Identifying Moonroof Components Location (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM



POSITION	SW1	SW2
OPENING	OPEN	OPEN
OPENED	OPEN	OPEN
CLOSED	OPEN	CLOSE/TILT
CLOSING	OPEN	OPEN
TILTING	OPEN	CLOSE/TILT
TILT (CLOSE)	TILT	CLOSE/TILT

Fig. 3: Moonroof Circuit Diagram (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

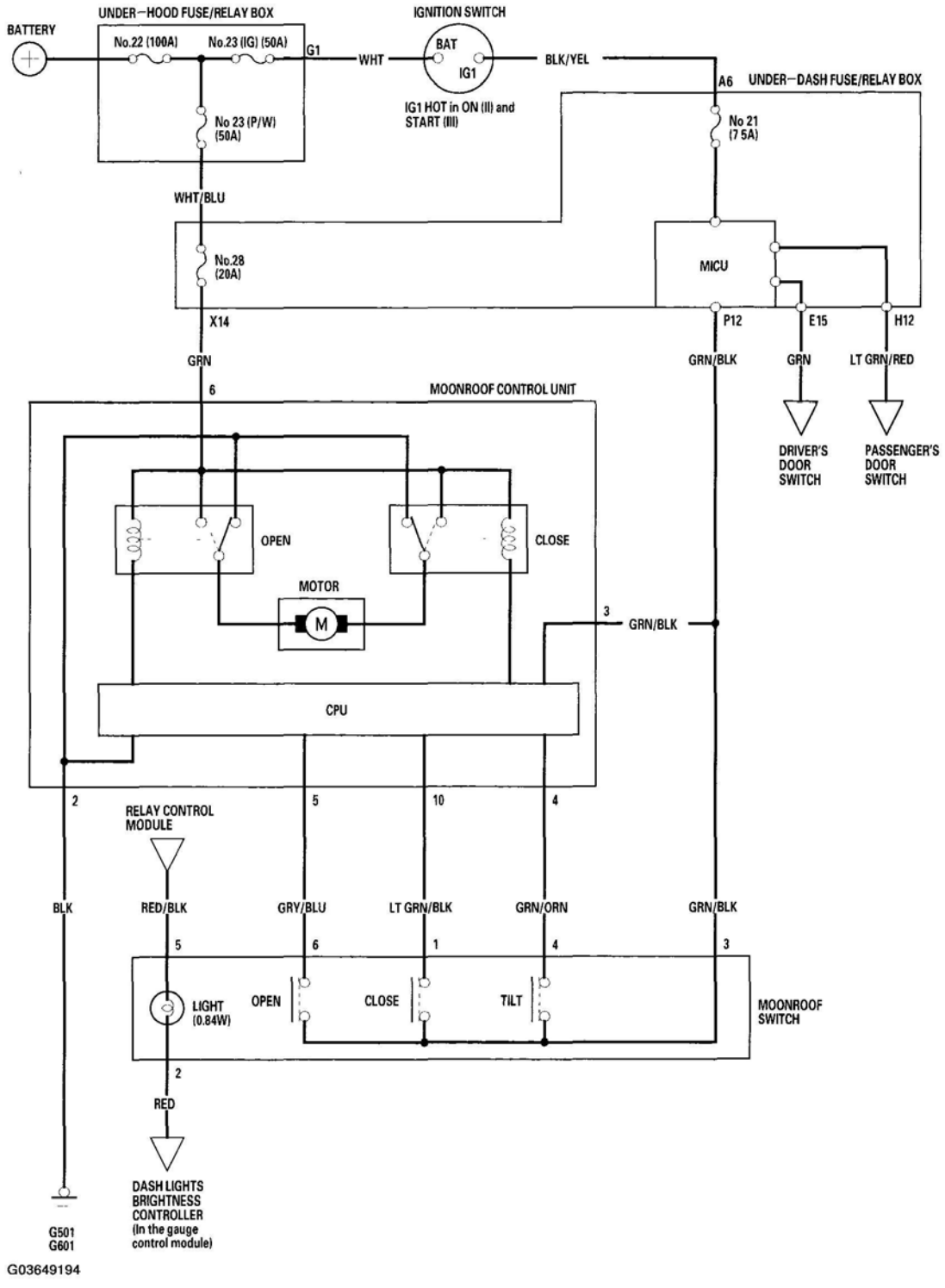


Fig. 4: Moonroof Circuit Diagram (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

LIMIT SWITCH TEST

4-DOOR

1. Remove the headliner (see **HEADLINER REMOVAL/INSTALLATION**).
2. Disconnect the 4P connector (A) from the moonroof limit switch (B).

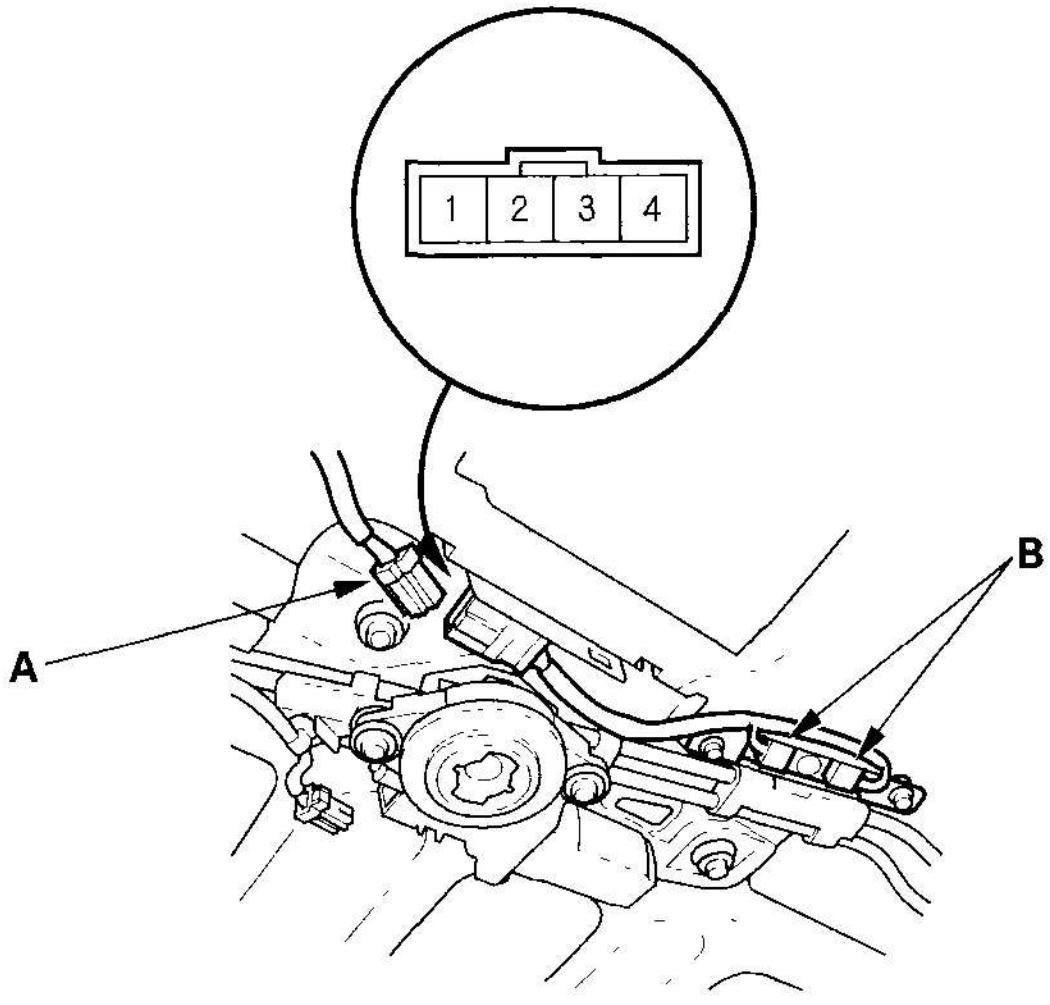
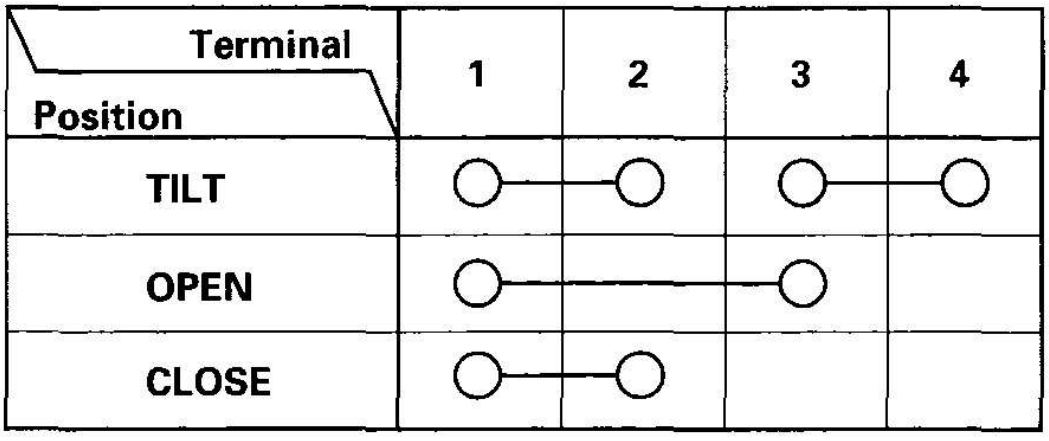


Fig. 5: Disconnecting 4P Connector From Moonroof Limit Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the terminals in each switch position according to the table shown below.



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Fig. 6: Checking Continuity Between Terminals In Switch Position Table
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the continuity is not as specified, adjust the moonroof limit switch (see **LIMIT SWITCH ADJUSTMENT**). If the continuity is still not as specified, replace the moonroof limit switch.

LIMIT SWITCH REPLACEMENT

4-DOOR

1. Remove the headliner (see **HEADLINER REMOVAL/INSTALLATION**).
2. Mark the position of the moonroof limit switch (A) on the moonroof frame (B).

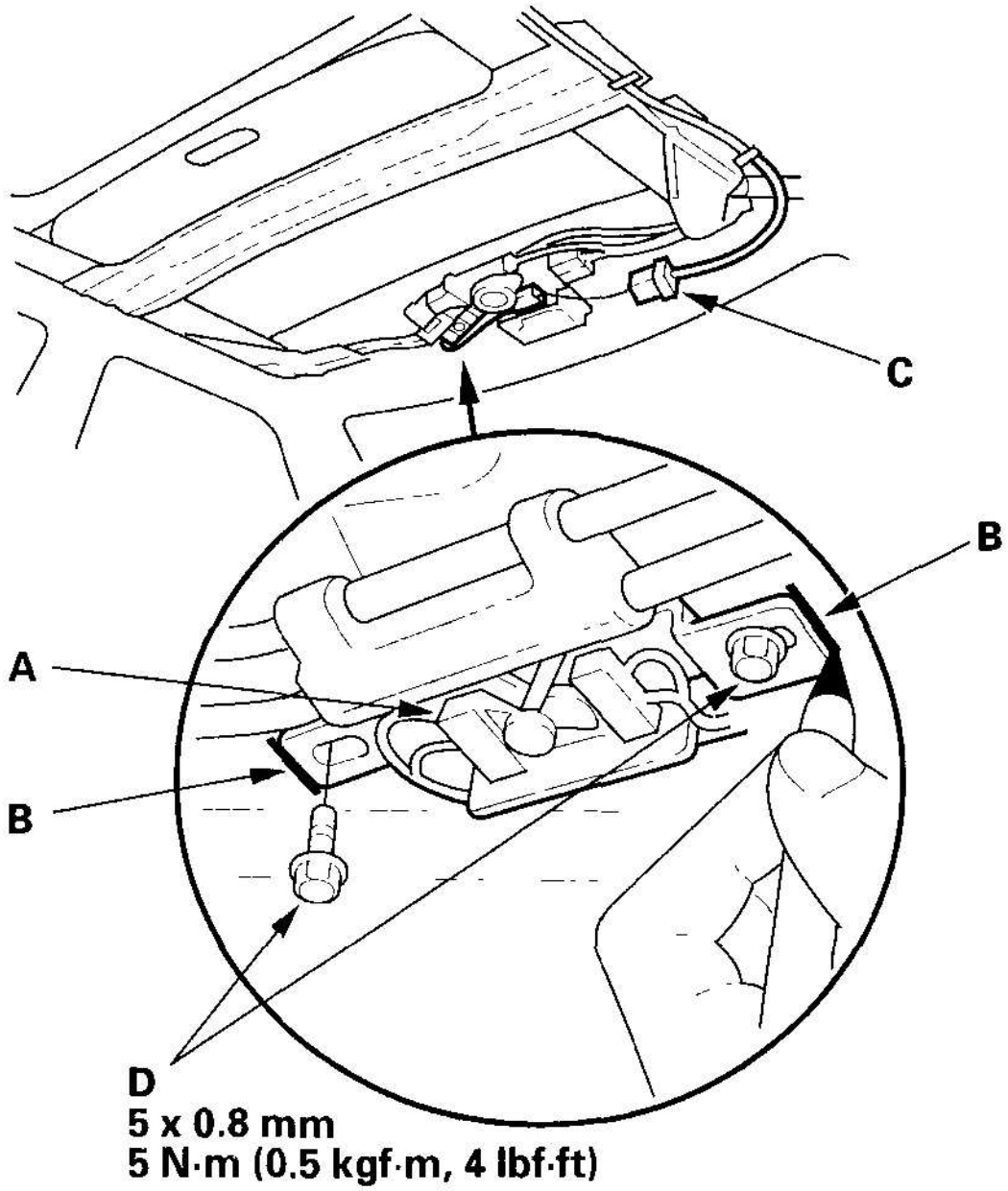


Fig. 7: Marking Position Of Moonroof Limit Switch On Moonroof Frame
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the 4P connector (C) from the moonroof limit switch.

4. Remove the two mounting bolts (D).
5. Install the switch in the reverse order of removal.
6. Adjust the moonroof limit switch as needed (see **LIMIT SWITCH ADJUSTMENT**).

SWITCH TEST

NOTE: The moonroof can still be operated for about 10 minutes after the ignition switch is turned from the "II" to the "I" or "0" positions, as long as none of the doors are opened. This provides a convenience to parked occupants while offering a degree of security against unwanted or accidental moonroof operation.

1. Carefully push out the moonroof switch (A) from behind the dashboard lower cover, then disconnect the 6P connector (B) from the switch.

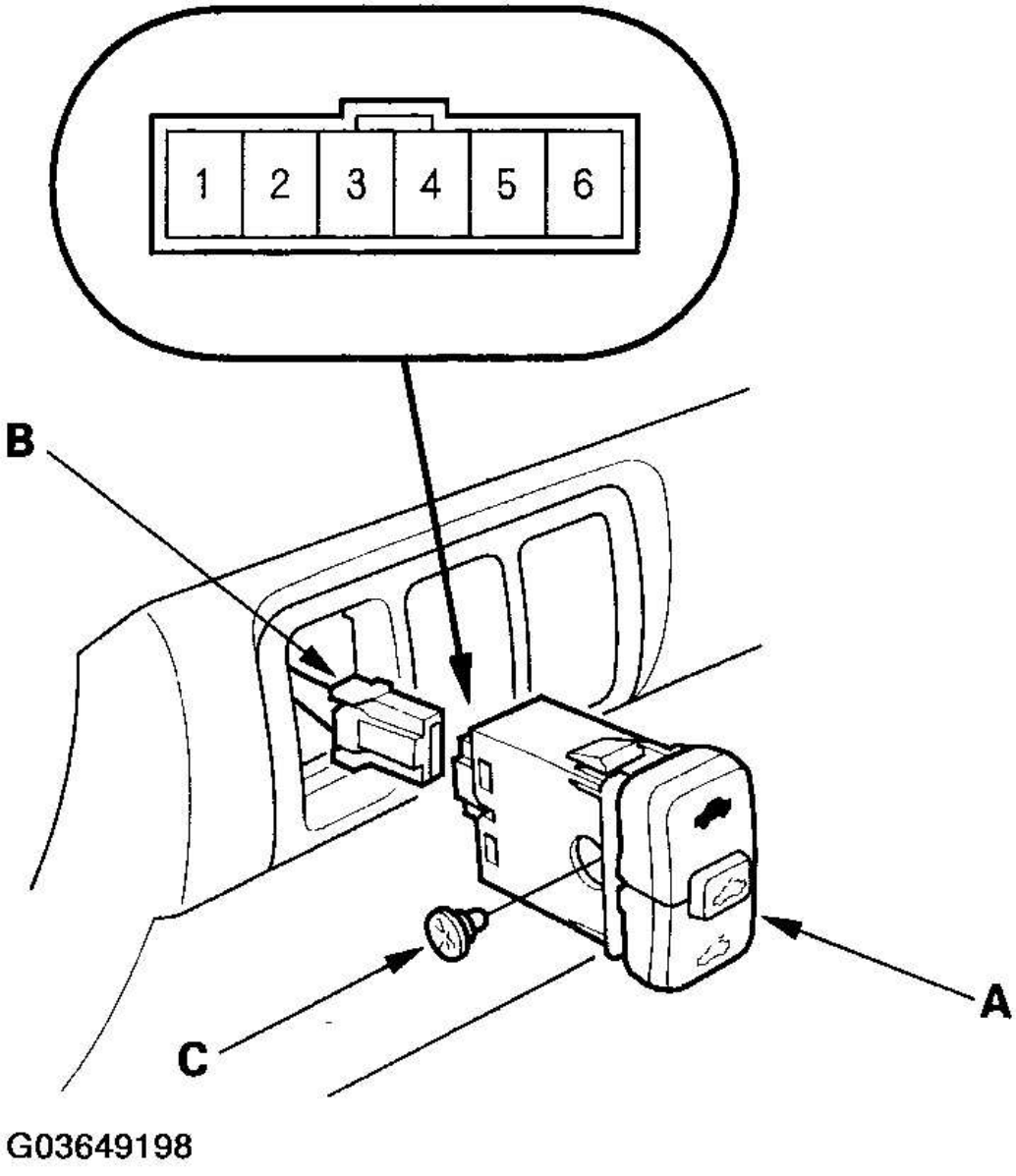
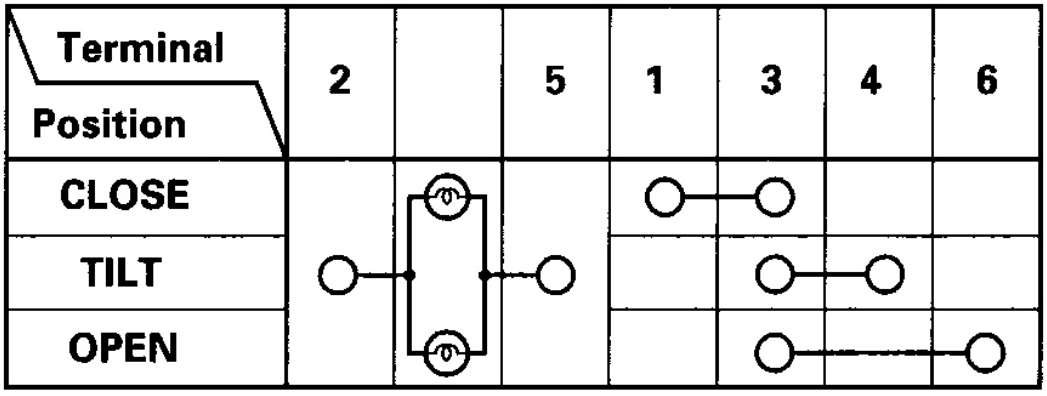


Fig. 8: Disconnecting 6P Connector From Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check for continuity between the terminals in each switch position according to the table shown below.



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Fig. 9: Checking Continuity Between Terminals In Each Switch Position Table
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the continuity is not as specified, replace the bulb (C) or the switch.

MOTOR TEST

4-DOOR

1. Remove the headliner (see **HEADLINER REMOVAL/INSTALLATION**).
2. Disconnect the 2P connector from the moonroof motor.

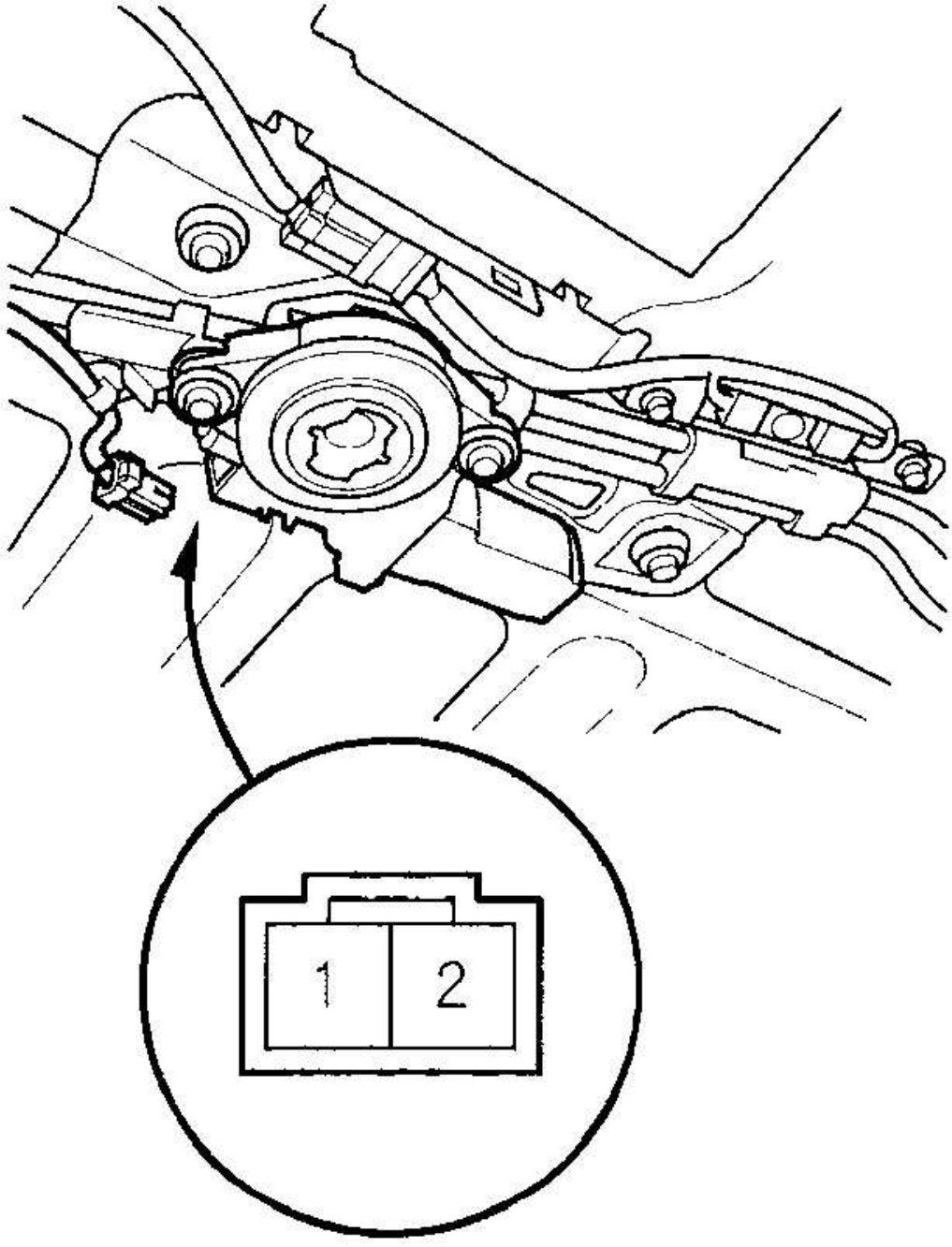
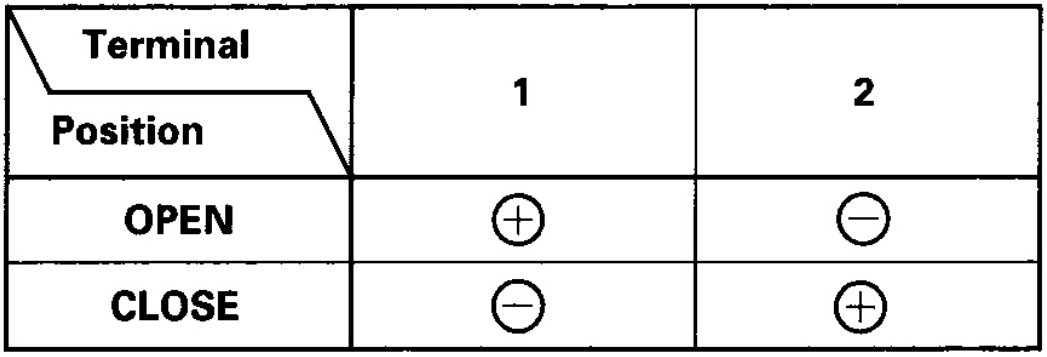


Fig. 10: Disconnecting 2P Connector From Moonroof Motor

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check the motor by connecting power and ground according to the table shown below.



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Fig. 11: Checking Motor Connecting Power And Ground Table
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the motor does not run, replace it.

NOTE: See closing force check (see CLOSING FORCE AND OPENING DRAG CHECK) for motor clutch test.

MOONROOF CALIBRATION

2-DOOR

NOTE: Moonroof calibration is required if any of the conditions listed below occur:

- The ignition switch is turned OFF while operating the moonroof (pressing the open/close switch). As a countermeasure, if the ignition switch is returned to the ON (II) position within 10 minutes, and moonroof operation is continued, calibration will not necessary.

NOTE: If a door is opened during the 10 minutes period, the calibration will be required.

- The moonroof is manually operated using the moonroof wrench with the battery dead or disconnected.
- The moonroof motor is replaced with a new one.
- The moonroof motor is removed from the moonroof assembly and operated before it is reinstalled.

MOONROOF GLASS IS POSITIONED IN THE OPEN POSITION (OR PARTIALLY OPEN)

1. Press the moonroof OPEN switch until the moonroof stops in its fully open position.
2. Release the moonroof OPEN switch.
3. Press the moonroof OPEN switch again for about 13 seconds.

NOTE: Keep pressing the switch even through the moonroof motor continues to function.

4. Calibration is complete. The moonroof will automatically move to the regular preset fully open position and come to stop.

MOONROOF GLASS IS POSITIONED IN THE TILT POSITION

1. Press the moonroof OPEN switch until the moonroof glass stops in its fully open position.
2. Release the moonroof OPEN switch.
3. Press the moonroof OPEN switch for about 13 seconds.

NOTE: Keep pressing the switch even through the moonroof glass will repeat an inching behavior (moving 40 mm, then stopping for 0.4 seconds)

4. Calibration is complete. The moonroof will automatically move to the regular preset fully open position and come to stop.

MOONROOF MOTOR IS REPLACED

1. Open the moonroof to its fully open position manually with the moonroof wrench.
2. Remove the moonroof motor (see **MOTOR REPLACEMENT**).

NOTE: If you have accidentally moved the moonroof glass after the removal of the moonroof motor, return the moonroof to its fully open position.

3. Install the new moonroof motor (see **MOTOR REPLACEMENT**).
4. Perform the moonroof OPEN position calibration procedure.
5. Within 5 seconds after completion of the moonroof calibration, press the moonroof OPEN switch again. After 3 seconds the moonroof glass will move toward the fully closed position.
6. Release the moonroof OPEN switch.

NOTE: The moonroof glass will move toward the fully closed position even though the open switch is being pressed. Allow it to move until it reaches the fully closed position.

NOTE: Step 5 is only applicable if a new motor is installed, and must not be applied to the original motor. The original motor memorized the initial position data and does not require recalibration.

MOONROOF CONTROL UNIT INPUT TEST

2-DOOR

1. Remove the headliner (see **HEADLINER REMOVAL/INSTALLATION**).
2. Disconnect the 10P connector (A) from the moonroof control unit (B).

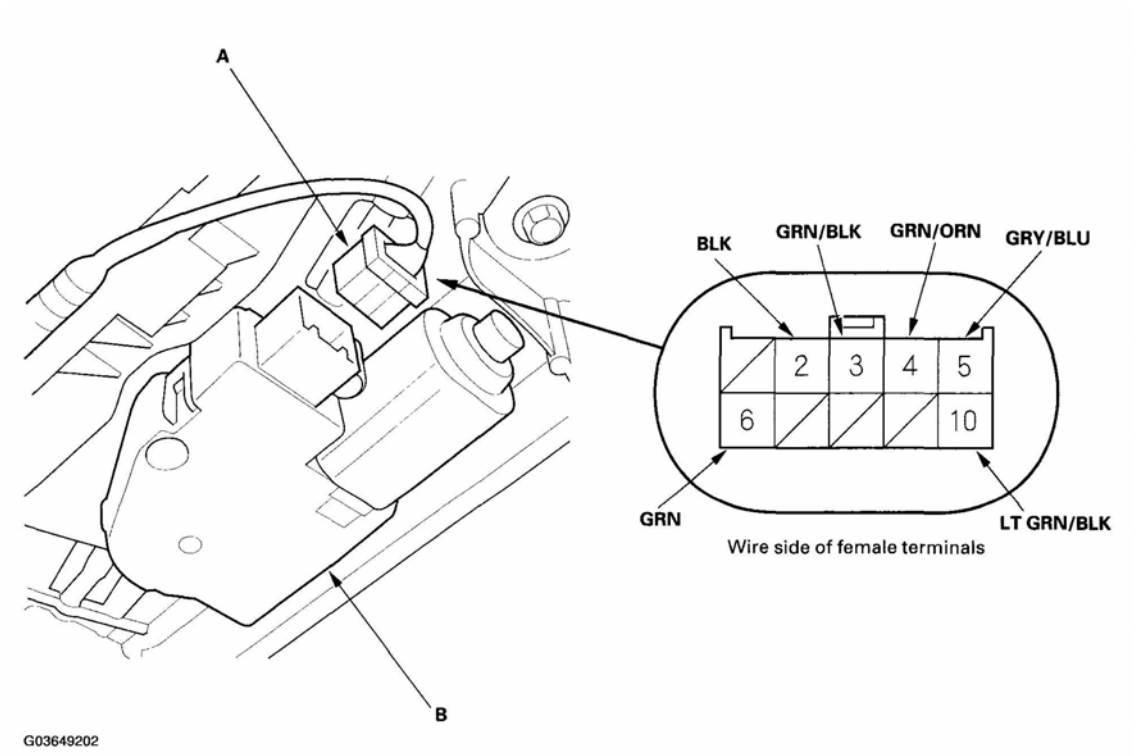


Fig. 12: Disconnecting 10P Connector From Moonroof Control Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Inspect the connector and socket terminals to be sure they are all making good contact.
   - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
   - If the terminals look OK, go to step 4.
4. Reconnect the connector, and make these input tests at the connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

MOONROOF CONTROL UNIT INPUT TEST (RECONNECT CONNECTOR)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained

6	GRN	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No. 28 (20 A) fuse in the under-dash fuse/relay box • Faulty under-dash fuse/relay box • An open in the wire
2	BLK	Under all conditions	Check for voltage to ground: There should be less than 1 V.	• Poor ground (G501, G601) • An open in the wire

5. Disconnect the connector from the moonroof control unit, and make these input tests at the connector
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the inputs prove OK, the control unit must be faulty; replace it.

MOONROOF CONTROL UNIT INPUT TEST (DISCONNECT CONNECTOR)

Cavity	Wire	Test Condition	Test: Desired Result	Possible cause if result is not obtained
			Check for continuity between the No. 3 terminal	

3	GRN/BLK	Under all conditions	and the multiplex integrated control unit P12 terminal: There should be continuity.	An open in the wire
4	GRN/ORN	Moonroof switch in TILT position	Check for continuity between the No. 3 and No. 4 terminals: There should be continuity.	• Faulty moonroof switch • An open in the wire
5	GRY/BLU	Moonroof switch in OPEN position	Check for continuity between the No. 3 and No. 5 terminals: There should be continuity.	• Faulty moonroof switch • An open in the wire
10	LT GRN/BLK	Moonroof switch in CLOSE position	Check for continuity between the No. 3 and No. 10 terminals: There should be continuity.	• Faulty moonroof switch • An open in the wire

2003-07 ACCESSORIES & EQUIPMENT

Power Seats - Accord (V6)

COMPONENT LOCATION INDEX

8-WAY ADJUSTABLE:

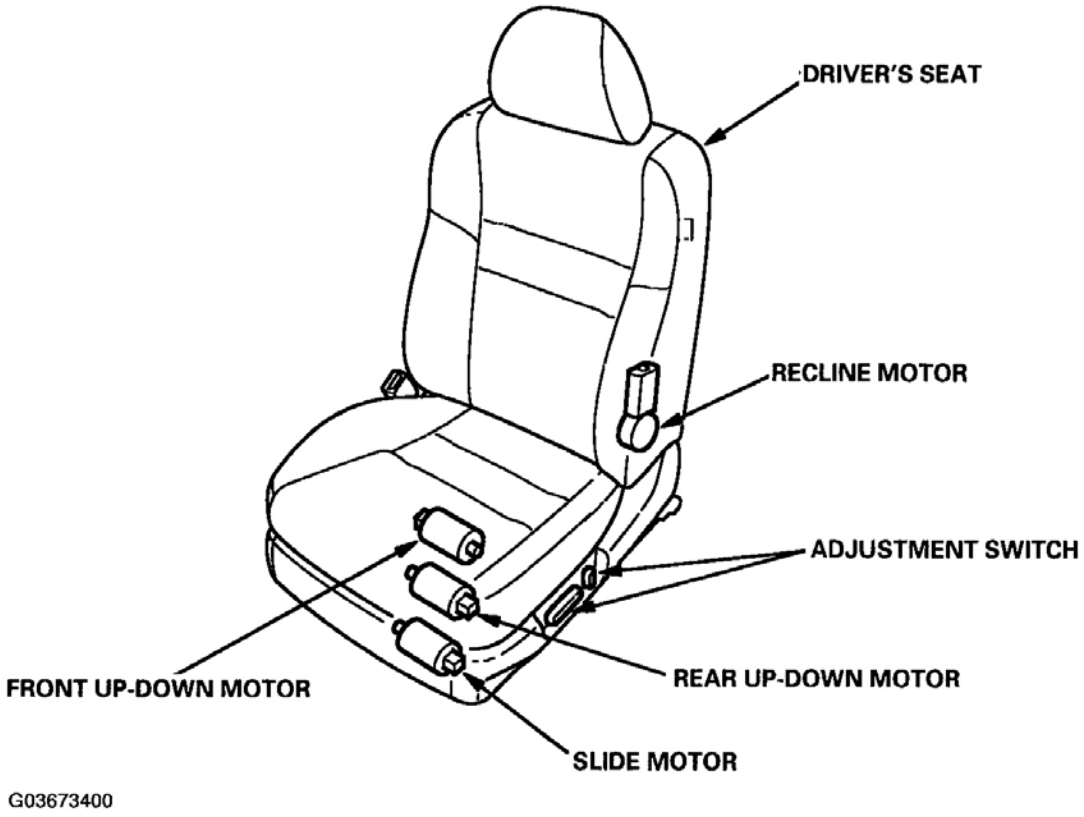


Fig. 1: Locating 8-Way Adjustable Power Seat Components Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-WAY ADJUSTABLE:

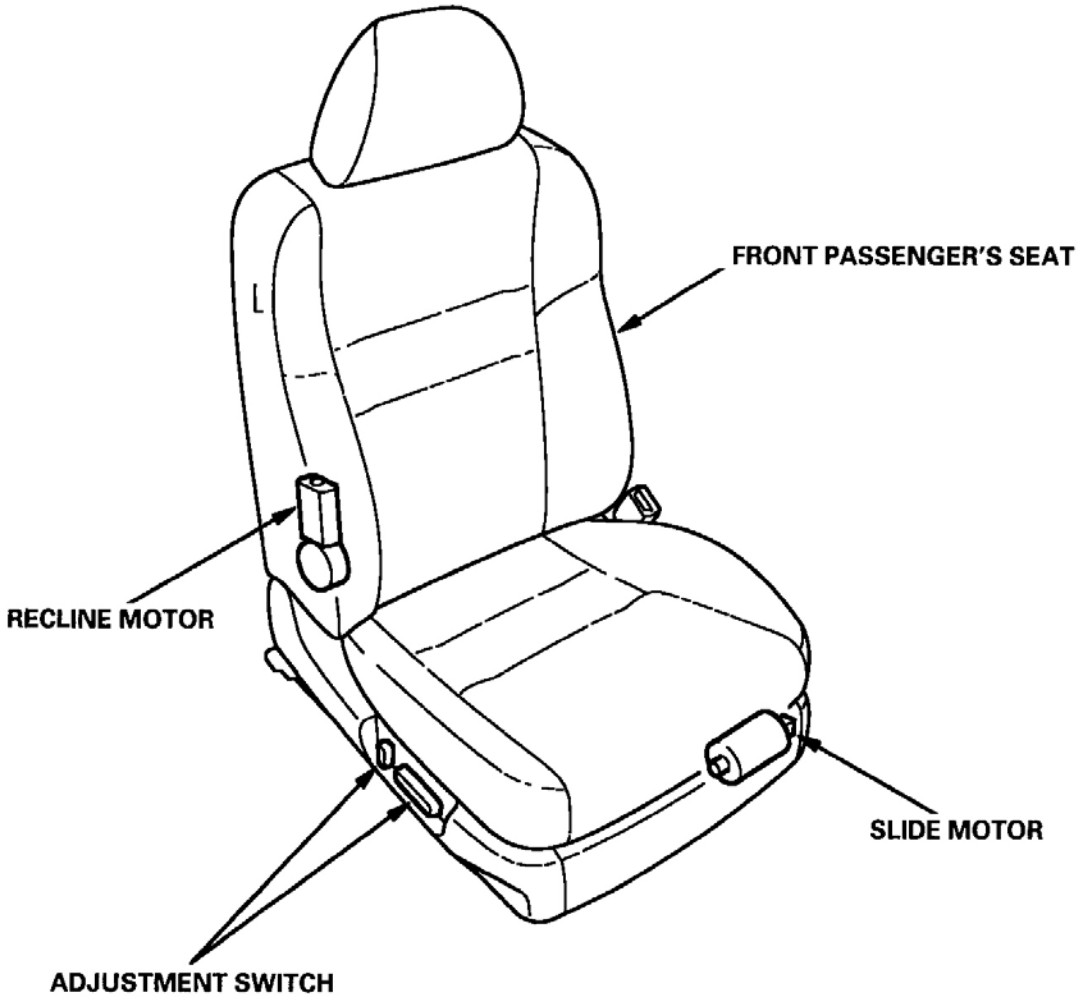


Fig. 2: Locating 4-Way Adjustable Power Seat Components Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

4-WAY ADJUSTABLE

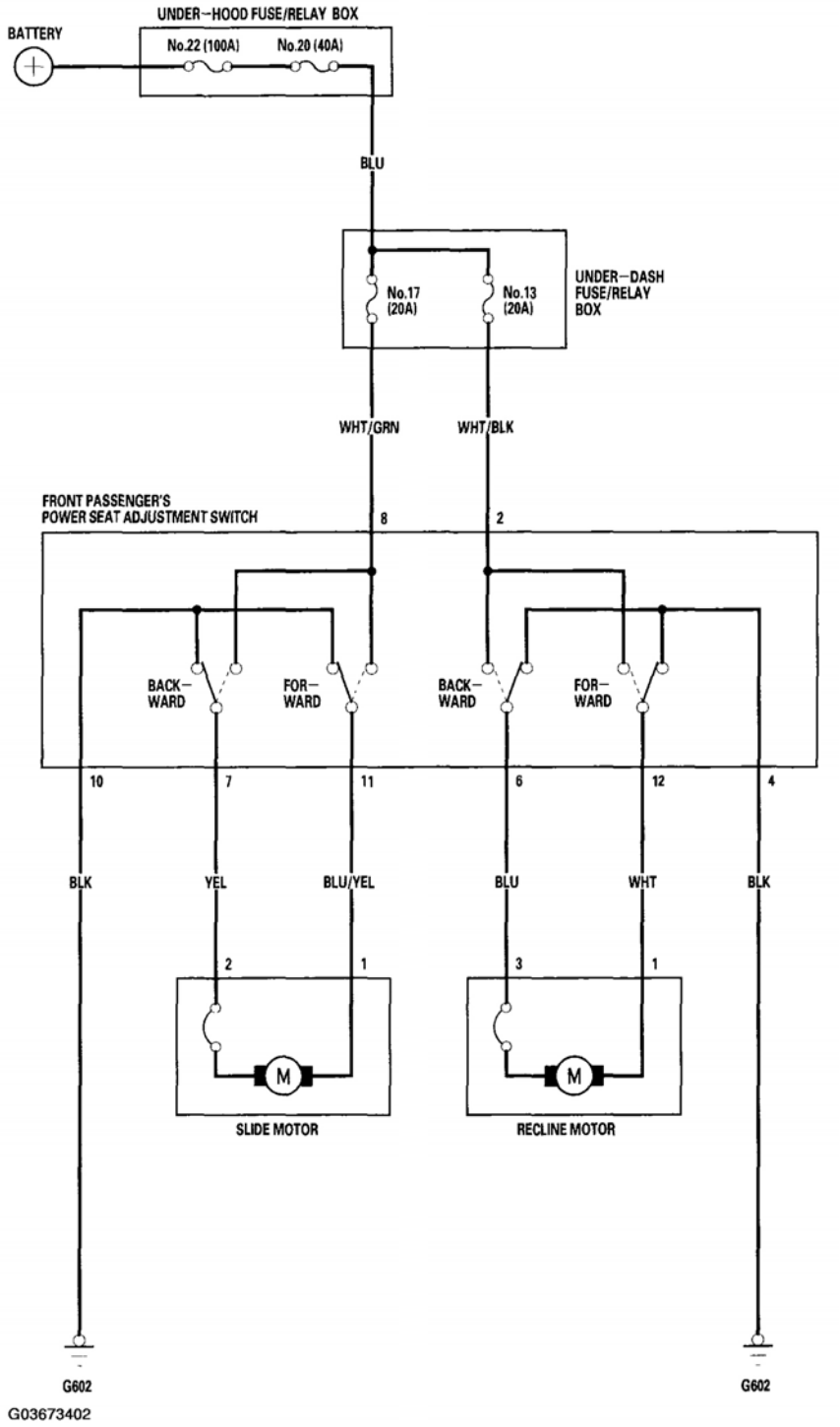


Fig. 3: 4-Way Adjustable Power Seat Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SWITCH TEST/REPLACEMENT

FRONT PASSENGER'S POWER SEAT (4-WAY ADJUSTABLE)

1. Remove the power seat adjustment switch knobs (A).

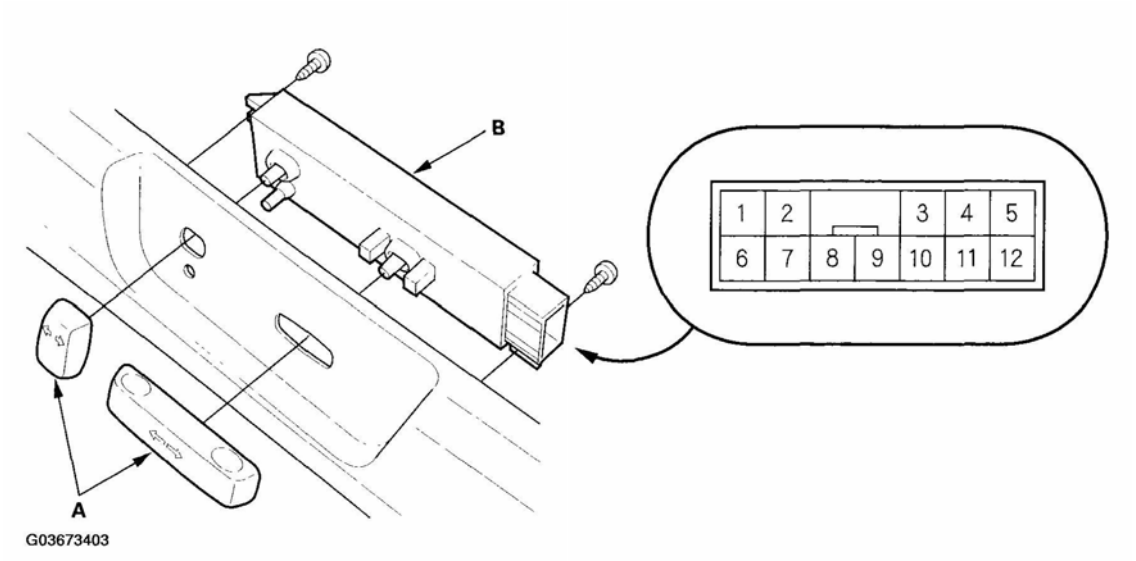


Fig. 4: Identifying Power Seat Adjustment Switch Knobs (4-Way Adjustable)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the recline cover from the front passenger's power seat.
   - '03 model (see **'03 MODEL 4-DOOR**)
   - '04-07 models (see **'04-07 MODELS 4-DOOR**)
3. Remove the two screws and the power seat switch (B).
4. Disconnect the 12P connector from the power seat adjustment switch (A).
5. Reinstall the adjustment switch knobs to the switch.
6. Check for continuity between the terminals in each switch position according to **Fig. 5** .

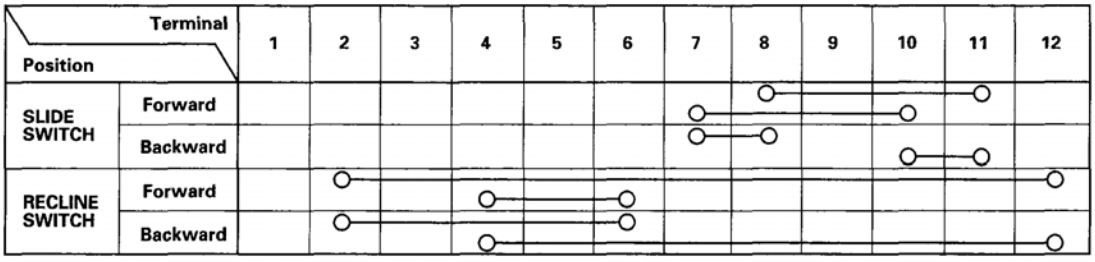


Fig. 5: Checking Continuity Between Terminals In Each Switch Position (4-Way Adjustable)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. If the continuity is not as specified, replace the switch.

MOTOR TEST

FRONT PASSENGER'S 4-WAY ADJUSTABLE POWER SEAT

1. Remove the front passenger's seat (see **FRONT SEAT REMOVAL/INSTALLATION**).
2. Disconnect the 12P connector (A) from the power seat adjustment switch.

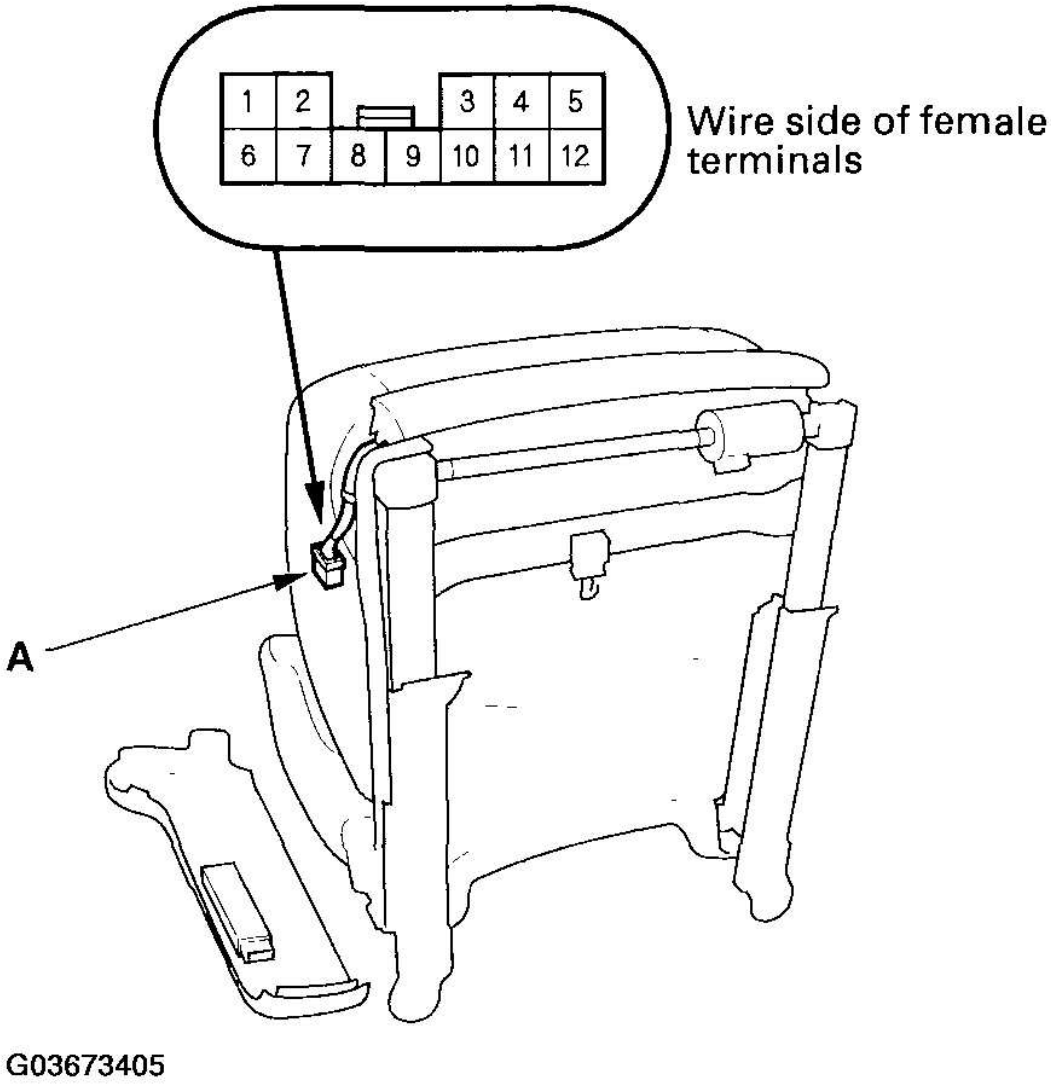


Fig. 6: Disconnecting 12P Connector From Power Seat Adjustment Switch (4-Way Adjustable)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Test each motor by applying battery voltage and body ground to the terminals.

Terminal / Position	7	11
Forward	⊖	⊕
Backward	⊕	⊖

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Fig. 7: Applying Battery Voltage & Body Ground To Terminals Chart (Slide Motor)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Terminal / Position	6	12
Forward	⊖	⊕
Backward	⊕	⊖

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Fig. 8: Applying Battery Voltage & Body Ground To Terminals Chart (Recline Motor)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the motor does not run or fails to run smoothly, check for an open in the passenger's seat wire harness between the 12P connector and each motor

connector. If the harness is OK, replace the motor (see **FRONT SEAT DISASSEMBLY/REASSEMBLY - 4-WAY POWER**).

2003-07 ACCESSORIES & EQUIPMENT

Power Seats - Accord

COMPONENT LOCATION INDEX

8-WAY ADJUSTABLE:

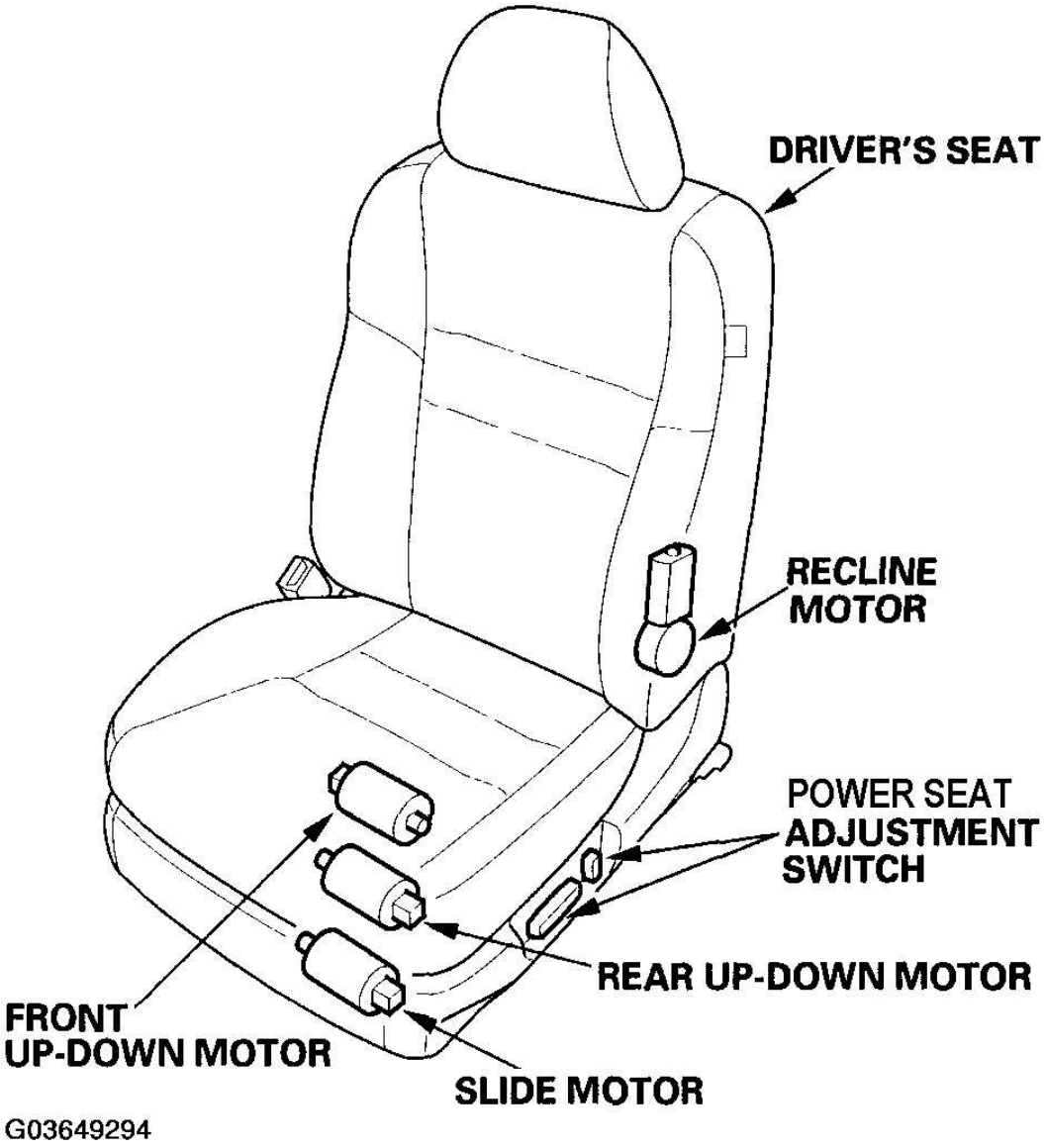


Fig. 1: Locating Power Seats Components (8-Way Adjustable)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2-WAY ADJUSTABLE:

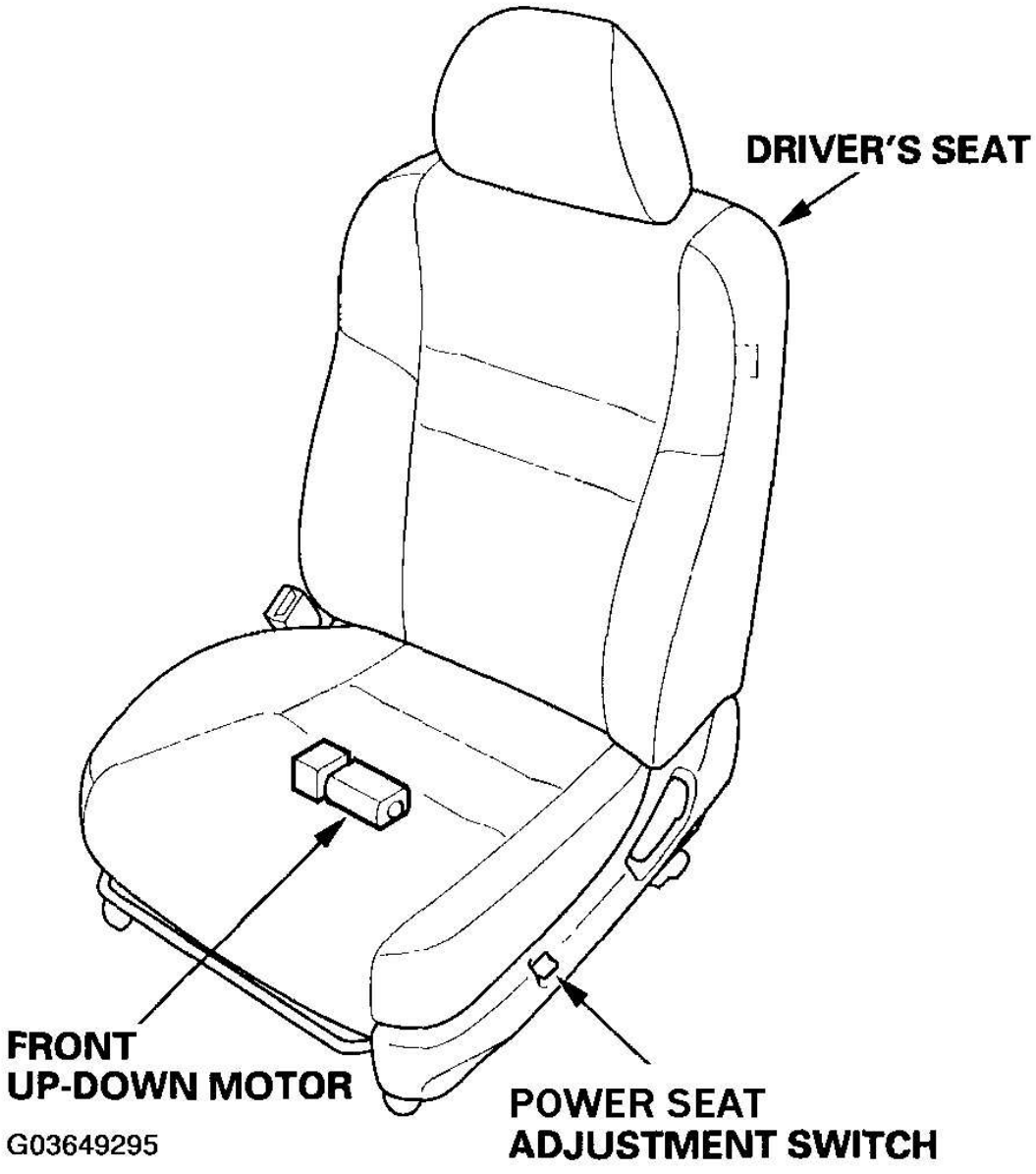


Fig. 2: Locating Power Seats Components (2-Way Adjustable)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

8-WAY ADJUSTABLE

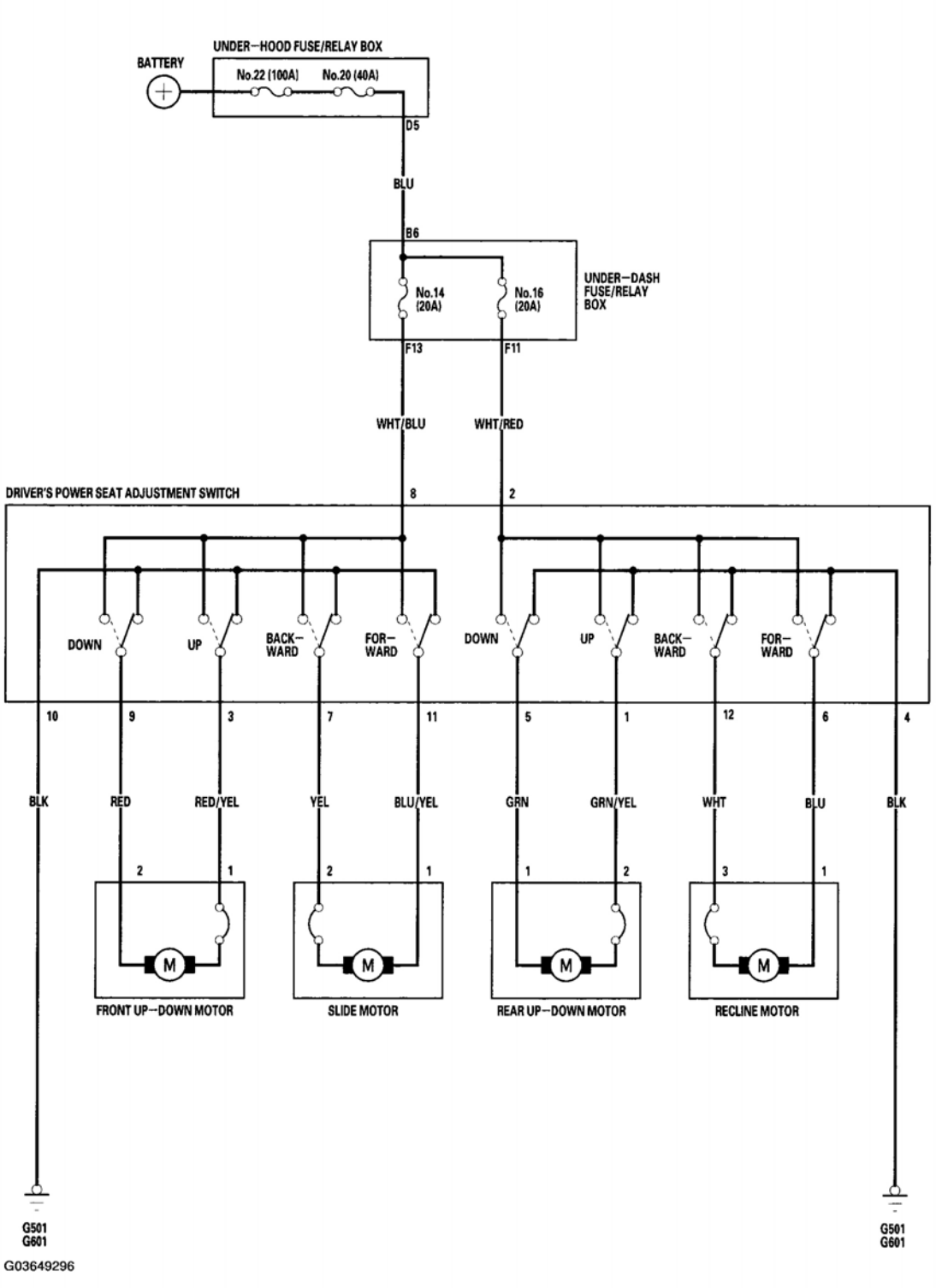


Fig. 3: Power Seats Circuit Diagram (8-Way Adjustable)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2-WAY ADJUSTABLE

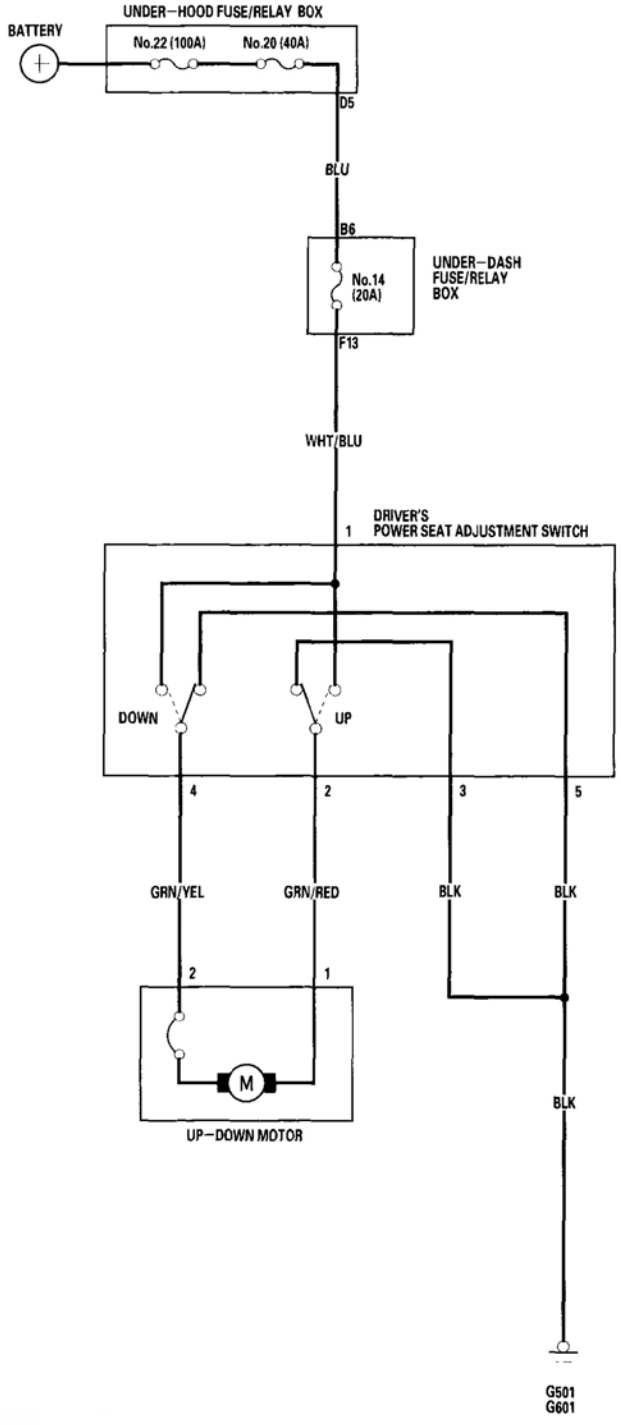


Fig. 4: Power Seats Circuit Diagram (2-Way Adjustable)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

POWER SEAT ADJUSTMENT SWITCH TEST/REPLACEMENT

DRIVER'S POWER SEAT (2-WAY ADJUSTABLE)

1. Remove the recline cover (see **FRONT SEAT DISASSEMBLY/REASSEMBLY - 2-WAY POWER**) from the driver's power seat, then remove the two screws and the power seat adjustment switch.
2. Disconnect the 5P connector from the power seat adjustment switch (A).

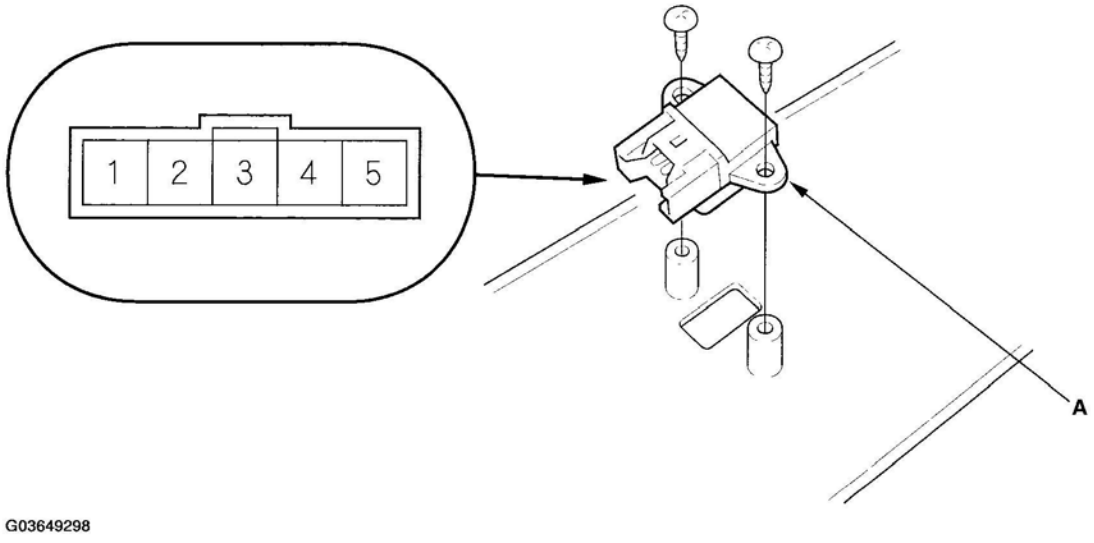


Fig. 5: Disconnecting 5P Connector From Power Seat Adjustment Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the terminals in each switch position according to the table shown below.

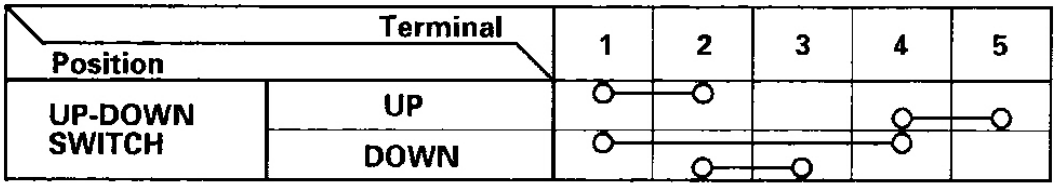


Fig. 6: Checking Continuity Between Terminals In Each Switch Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the continuity is not as specified, replace the switch.

DRIVER'S POWER SEAT (8-WAY ADJUSTABLE)

1. Remove the power seat adjustment switch knobs (A) and recline cover (see **FRONT SEAT DISASSEMBLY/REASSEMBLY - 8-WAY POWER**) from the driver's power seat, then remove the two screws and the power seat switch.

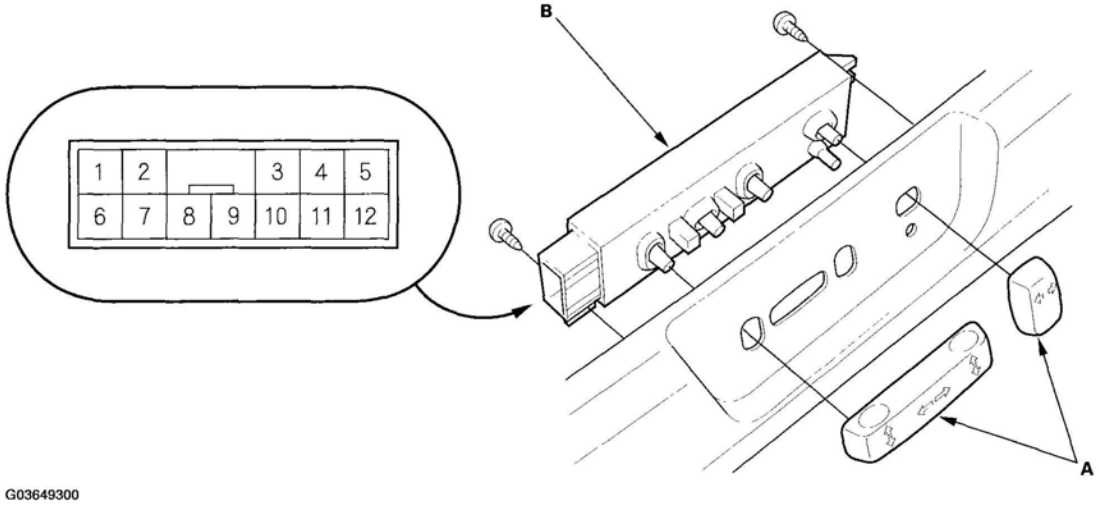


Fig. 7: Removing Power Seat Adjustment Switch Knobs And Recline Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Disconnect the 12P connector from the power seat adjustment switch (B).

3. Reinstall the adjustment switch knobs to the switch.
4. Check for continuity between the terminals in each switch position according to the table shown below.

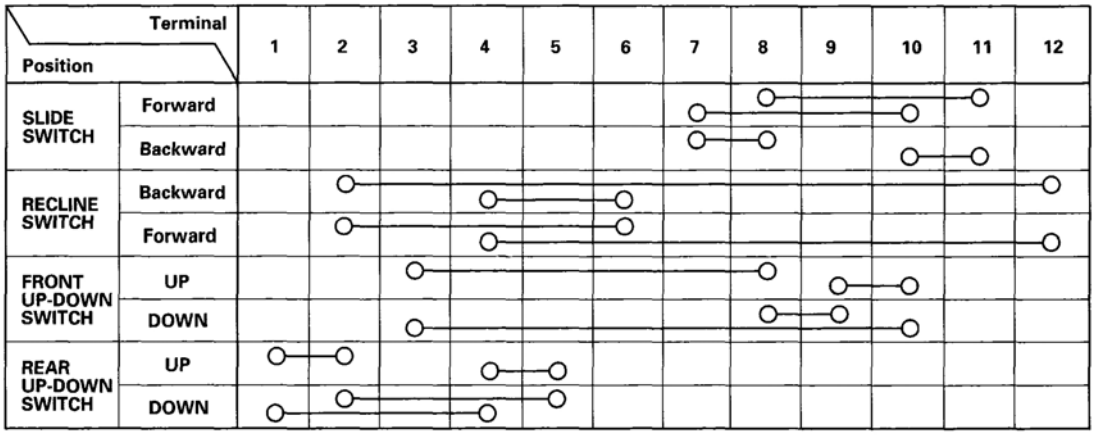


Fig. 8: Checking Continuity Between Terminals In Each Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If the continuity is not as specified, replace the switch.

MOTOR TEST

DRIVER'S 8-WAY ADJUSTABLE POWER SEAT

1. Remove the driver's seat (see **FRONT SEAT REMOVAL/INSTALLATION**).
2. Disconnect the 12P connector (A) from the power seat adjustment switch (B).

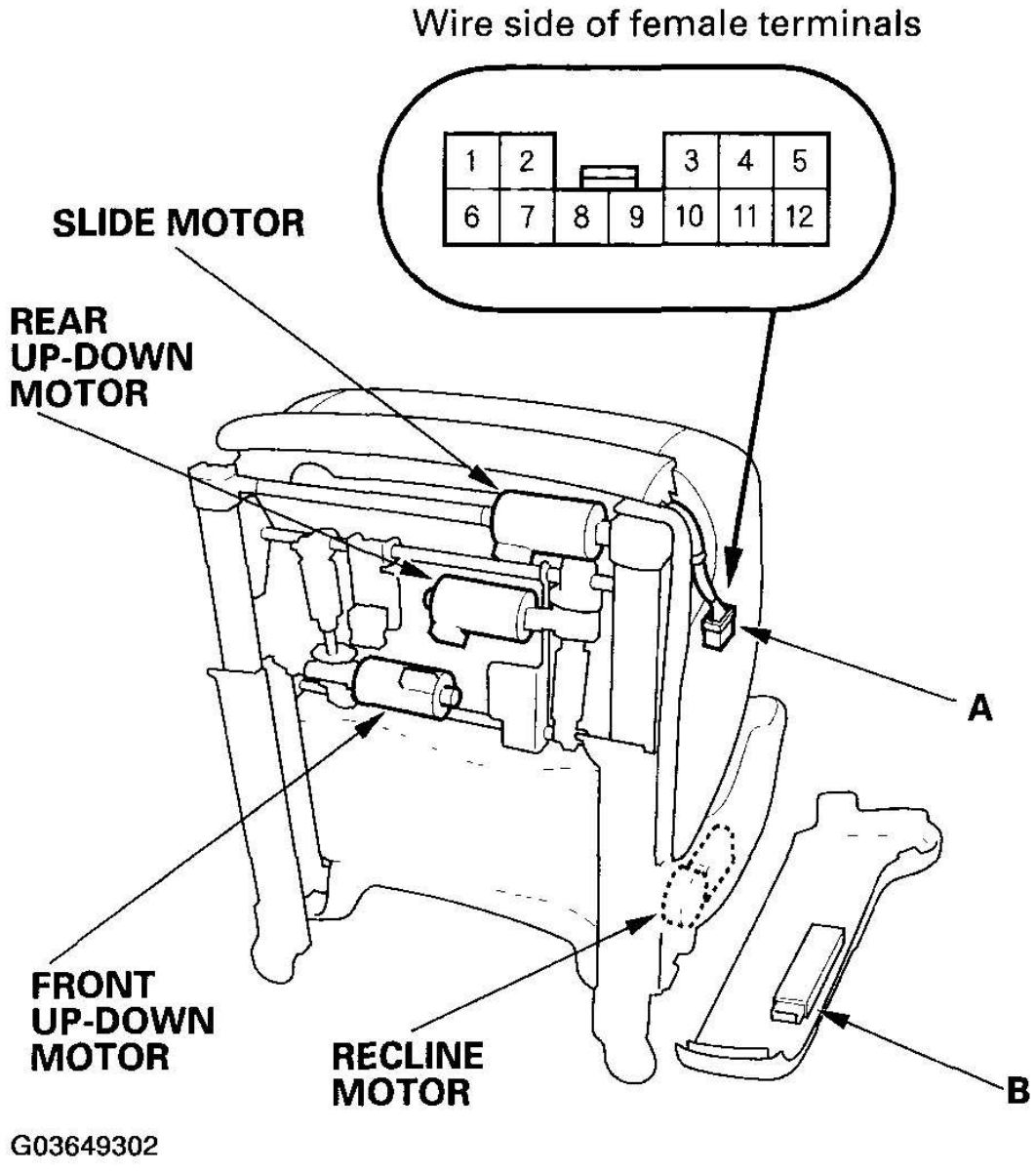


Fig. 9: Disconnecting 12P Connector From Power Seat Adjustment Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Test each motor by applying battery voltage and body ground to the terminals.

Terminal / Position	7	11
Forward	⊖	⊕
Backward	⊕	⊖

G03649303

Fig. 10: Testing Motor By Applying Battery Voltage & Body Ground To Terminals (Slide Motor)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Terminal / Position	6	12
Forward	⊖	⊕
Backward	⊕	⊖

G03649304

Fig. 11: Testing Motor By Applying Battery Voltage & Body Ground To Terminals (Recline Motor)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Terminal / Position	3	9
UP	⊕	⊖
DOWN	⊖	⊕

G03649305

Fig. 12: Testing Motor By Applying Battery Voltage & Body Ground To Terminals (Front Up-Down Motor)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Terminal / Position	1	5
UP	⊕	⊖
DOWN	⊖	⊕

G03649306

Fig. 13: Testing Motor By Applying Battery Voltage & Body Ground To Terminals (Rear Up-Down Motor)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the motor does not run or fails to run smoothly, check for an open in the driver's seat wire harness between the 12P connector and each motor connector. If the harness is OK, replace the motor (see **FRONT SEAT**

RECLINE MOTOR REPLACEMENT).

DRIVER'S 2-WAY ADJUSTABLE POWER SEAT

1. Remove the driver's seat (see **FRONT SEAT REMOVAL/INSTALLATION**).
2. Disconnect the 5P connector (A) from the power seat adjustment switch (B).

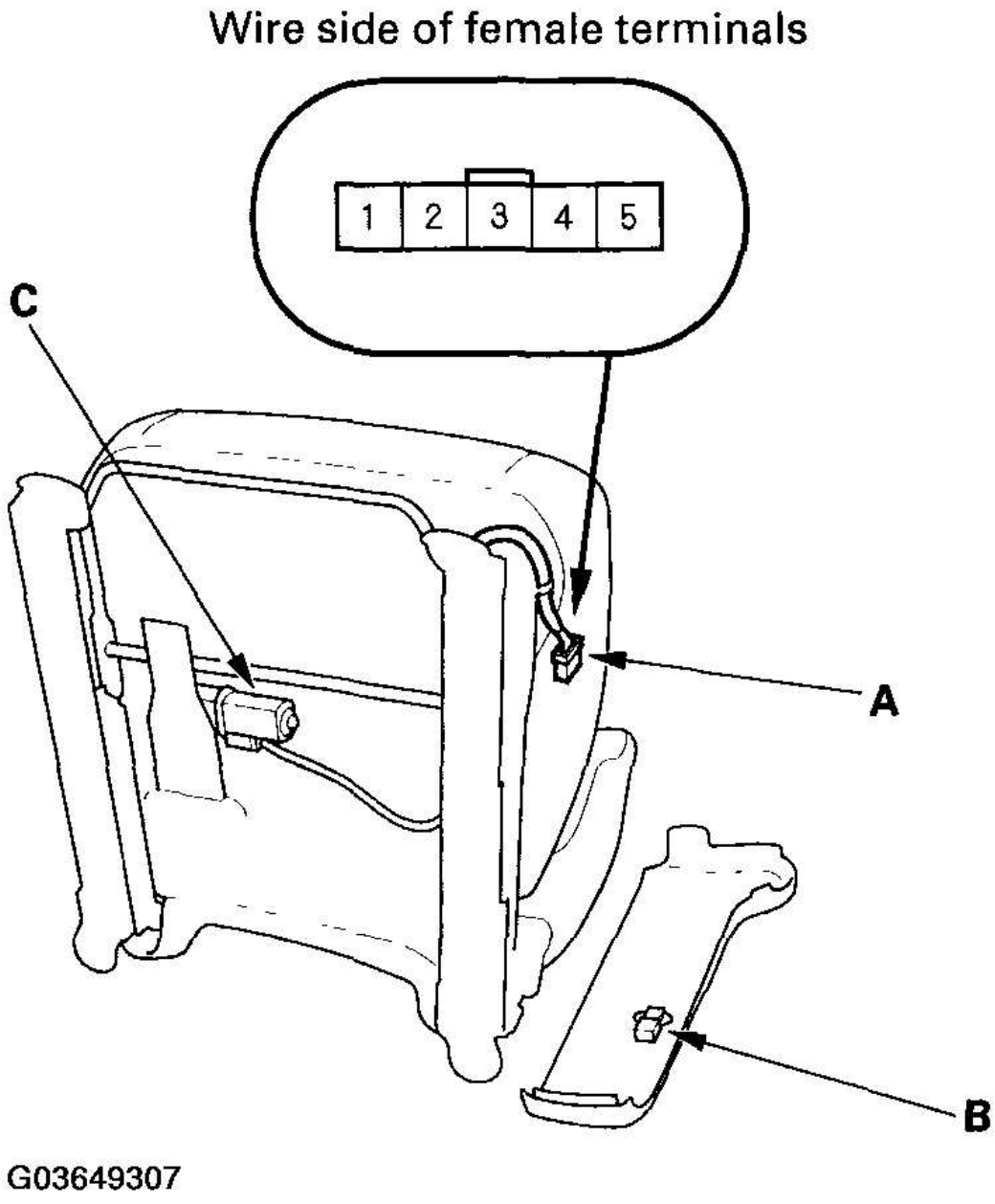


Fig. 14: Disconnecting 5P Connector From Power Seat Adjustment Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Test the motor (C) by applying battery voltage to the 5P connector No. 2 (or No. 4) and ground to the No. 4 (or No. 2) terminals. The motor should run.

4. If the motor does not run or fails to run smoothly, check for an open in the wire between the 5P connector and the motor 2P connector. If the harness is OK, replace the motor (see **FRONT SEAT RECLINE MOTOR REPLACEMENT**).

2003-07 STEERING

Power Steering - Accord (V6)

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07MAC-SL0A202	Ball Joint Remover, 28 mm	1
②	07RAK-S040122	P/S Joint Adapter (Hose)	1
③	07VAK-P8A011A	P/S Joint Adapter (Pump)	1
④	07VAK-P8A012B	P/S Joint Adapter Plate (Pump)	1
⑤	07ZAB-S5A0100	Pulley Holder	1
⑥	07ZAG-S7A0100	Piston Seal Ring Guide	1
⑦	07ZAG-S7A0200	Piston Seal Ring Sizing Tool	1
⑧	070GD-0010100	Driver Handle, 480 mm	1
⑨	07406-0010001 or 07406-001000A	P/S Pressure Gauge	1
⑩	07746-0010300	Attachment, 42 x 47 mm	1
⑪	07746-0010700	Attachment, 24 x 26 mm	1
⑫	07746-0041000	Pilot, 22 mm	1
⑬	07749-0010000	Driver	1
⑭	07916-SA50001	Locknut Wrench, 40 mm	1

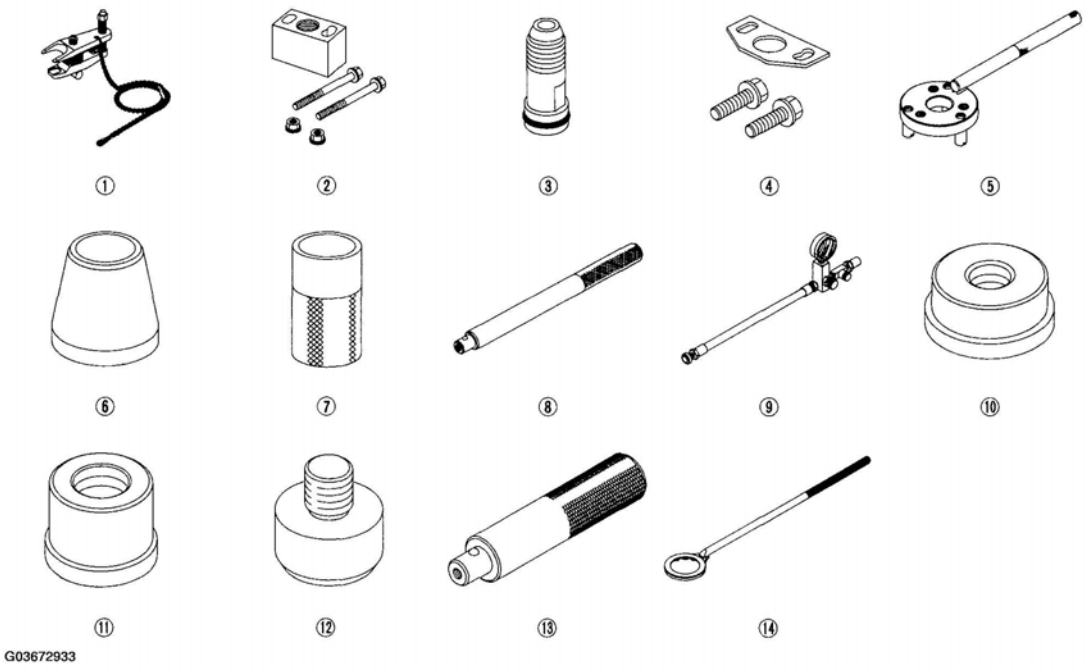


Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

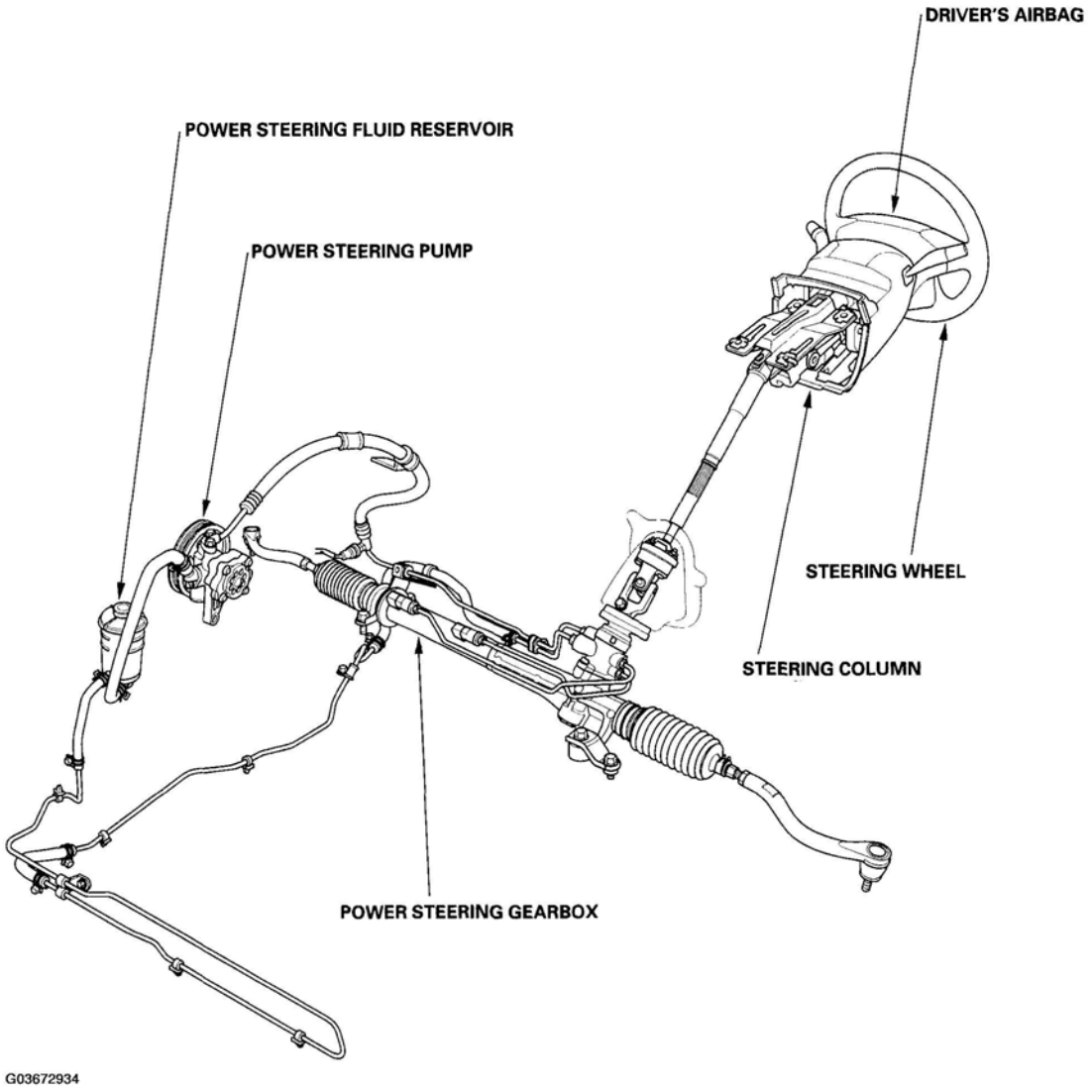


Fig. 2: Locating Components Of Steering Power Steering
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

Find the symptom in the chart below, and do the related procedures in the order listed until you find the cause.

SYMPTOM TROUBLESHOOTING CHART

Symptom	Procedure(s)	Also check for:
		• Modified

Hard steering	Troubleshoot the system (see **SYMPTOM TROUBLESHOOTING**).	suspension • Damaged suspension • Tire sizes, tire varieties, and air pressure
Assist (excessively light steering at high speed)	Check the rack guide adjustment (see **RACK GUIDE ADJUSTMENT**).	Front wheel alignment, refer to **WHEEL ALIGNMENT** .
Shock or vibration when the steering wheel is turned to full lock	1. Check the rack guide adjustment (see **RACK GUIDE ADJUSTMENT**). 2. Check the drive belt for slippage (see **DRIVE BELT INSPECTION**). 3. Replace the steering gearbox (see **STEERING GEARBOX REMOVAL**).	
Steering wheel will not return smoothly	1. Check cylinder lines A and B for deformation. 2. Check wheel alignment, refer to **WHEEL ALIGNMENT** . 3. Replace the steering gearbox (see **STEERING GEARBOX REMOVAL**).	
	1. Check the rack guide adjustment (see **RACK GUIDE ADJUSTMENT**).	

Uneven or rough steering	2. Check the drive belt (see **DRIVE BELT INSPECTION**). 3. Check for low or erratic engine idle speed (see **IDLE SPEED INSPECTION**). 4. Check for air in the power steering system due to low fluid level or an air leak at the pump inlet hose. 5. Check for low fluid level in the power steering reservoir due to possible leaks in system. 6. Replace the steering gearbox (see **STEERING GEARBOX REMOVAL**).	
Steering wheel kicks back during wide turns	1. Check the drive belt (see **DRIVE BELT INSPECTION**). 2. Check the power steering pump fluid pressure with (see **PUMP PRESSURE TEST WITH T/N 07406-0010001**) or (see **PUMP PRESSURE TEST WITH T/N 07406-001000A**).	
	1. Check when the noise occurs:	

Humming noise from the power steering system	• If the noise is heard 2-3 minutes after starting the engine in cold weather, this is normal. • If the noise is heard when the wheel is turned with the vehicle stopped, this is normal due to the fluid pulsation. 2. Check for the high-pressure hose touching the subframe or body. 3. Check for automatic transmission converter noise. 4. Check for air bubbles in the power steering fluid.	Pump pressure
Power steering rack	1. Check for loose steering components (tie-rod and ball joints). Tighten or replace as necessary. 2. Check the steering column shaft for wobbling. If the steering column wobbles, replace the steering column assembly, refer to **STEERING COLUMN REMOVAL AND**	

rattle or chattering	**INSTALLATION** . 3. Check the rack guide adjustment (see **RACK GUIDE ADJUSTMENT**). 4. Check the power steering pump pulley. • If the pulley is loose, tighten it (see step 33). • If the pump shaft is loose, replace the pump (see **PUMP REPLACEMENT**).	
Hissing noise/foaming fluid in reservoir	• Check the fluid level. If low, fill the reservoir to the proper level and check for leaks. • Check the reservoir for leaks. • Check for crushed inlet hose or loose hose clamp allowing air into the suction side of the system. • Check the power steering pump shaft oil seal for leaks.	Air in the P/S fluid
Noise from the power steering pump	• Compare the pump noise at normal operating temperature to another alike vehicle (pump noise up to 2-3 minutes after starting the engine in cold	• P/S pump pressure • Air in the P/S fluid

	weather is normal). • Remove and inspect the pump for wear and damage (see **PUMP OVERHAUL**).	
Squeaking from the power steering pump	Check the drive belt (see **DRIVE BELT INSPECTION**).	
Fluid leaks from the steering gearbox	• Fluid leaks from the top of the valve body unit: Replace the valve body unit. • Fluid leaks from the left tie-rod boot: Replace the valve body unit. Replace the cylinder end seal on the gearbox side. • Fluid leaks from the right tie-rod boot: Replace the cylinder end seal. • Fluid leaks from pinion shaft near the lower steering joint bolt: Replace the valve body unit. • Fluid leaks from the steering damping valve covers on the valve body unit (SHOWA-steering gearbox): Replace the valve housing. • Fluid leaks from the steering damping valve connector A and B on the	

	cylinder, or the connectors are loosening (TKS-steering gearbox): Replace the cylinder housing.	
Fluid leaks from the power steering line	• Fluid leaks from the cylinder line A or B connections (flare nuts): Tighten the connection and retest. If it still leaks, replace the fitting O-rings. • Fluid leaks from a damaged cylinder line A or B: Replace the cylinder line. • Fluid leaks from the pump outlet hose or return line fitting on the valve body unit (flare nuts): Tighten the fitting and retest. If it still leaks, replace the hose, the line, or valve body unit as necessary.	
Fluid leaks from the power steering pump	• Fluid leaks from the front oil seal: Replace the front oil seal. • Fluid leaks from the power steering pump housing: Replace the leaking O-rings or seals (see **PUMP OVERHAUL**), and if necessary replace the power steering pump.	

Fluid leaks from the power steering reservoir	• Fluid leaks from around the reservoir cap: Fluid level is too high: drain the reservoir to the proper level. Aerated fluid: Check for on air leak on the inlet side of pump. • Fluid leaks from reservoir: Check the reservoir for cracks and replace as necessary.	
Fluid leaks from the power steering pump outlet hose (high-pressure)	• Check the fitting for loose bolts. If the bolts are tight, replace the fitting O-ring. • Fluid leaks at the swagged joint: Replace the outlet hose.	
Fluid leaks from the power steering pump inlet hose (low-pressure)	Check the hose for damage, deterioration, or improper assembly. Replace or repair as necessary.	

SYMPTOM TROUBLESHOOTING

HARD STEERING

1. Check the power assist, (see **PUMP PRESSURE TEST WITH T/N 07406-0010001**).

   Is the power assist more than 29 N (3.0 kgf, 6.6 lbf)?

   YES - Go to step 2.
   NO - Power assist is OK.
2. Measure steady-state fluid pressure from the pump at idle with T/N 07406-0010001 (see **PUMP PRESSURE TEST WITH T/N 07406-0010001**) or

T/N 07406-001000A (see **PUMP PRESSURE TEST WITH T/N 07406-001000A**).

Is the pressure 1,470 kPa (15 kgf/cm^2 , 213 psi) or less?

YES - Go to step 3.

NO - Go to step 7.

3. Measure the pump relief pressure at idle with T/N 07406-0010001 (see **PUMP PRESSURE TEST WITH T/N 07406-0010001**) or T/N 07406-001000A (see **PUMP PRESSURE TEST WITH T/N 07406-001000A**).

   Is the pressure 7,940-8,630 kPa (81-88 kgf/cm^2 , 1,150-1,250 psi) or less?

   YES - Go to step 4.

   NO - Go to step 8.

4. With a spring scale, measure the power assist in both directions, to the left and to the right.

   Are the two measurements within 5.0 N (0.51 kgf, 1.12 lbf) of each other?

   YES - Go to step 5.

   NO - Go to step 9.

5. Measure the fluid pressure with T/N 07406-0010001 (see step 11 in **PUMP PRESSURE TEST WITH T/N 07406-0010001**) or T/N 07406-001000A (see step 10 in **PUMP PRESSURE TEST WITH T/N 07406-001000A**) with both pressure gauge valves open (if so equipped), while turning the steering wheel fully to the left and fully to the right.

   Is the pressure 7,940-8,630 kPa (81-88 kgf/cm^2 , 1,150-1,250 psi) or less?

   YES - Go to step 6.

   NO - Faulty gearbox.

6. Adjust the rack guide (see **RACK GUIDE ADJUSTMENT**), and retest.

Is the steering OK?

YES - Repair is completed.

NO - Faulty gearbox.

7. Check for feed and return lines between the pump and the gearbox for clogging and deformation.

Are the lines clogged or deformed?

YES - Repair or replace the lines.

NO - Faulty valve body unit.

8. Check the flow control valve (see step 11 in **Pump Overhaul**) for smooth movement and leaks.

Is the flow control valve OK?

YES - Faulty pump assembly.

NO - Faulty flow control valve.

9. Check the cylinder lines A and B for deformation (see **POWER STEERING HOSE, LINE, AND PRESSURE SWITCH REPLACEMENT**).

Are the A or B lines deformed?

YES - Replace the lines.

NO - Go to step 10.

10. Check for a bent rack shaft or misadjusted rack guide (too tight).

Is the rack shaft bent or the rack guide adjusted too tight?

YES - Replace the rack shaft or readjust the rack guide.

NO - Faulty valve body unit.

PUMP PRESSURE TEST WITH T/N 07406-0010001

Special Tools Required

- P/S joint adapter (pump) 07VAK-P8A011A
- P/S joint adapter plate (pump) 07VAK-P8A012B
- P/S joint adapter (hose) 07RAK-S040122
- P/S pressure gauge 07406-0010001

Check the fluid pressure as follows to determine whether the trouble is in the pump or gearbox.

1. Check the power steering fluid level (see **FLUID REPLACEMENT**).
2. Disconnect the pump outlet hose (A) from the pump outlet with care so as not to spill the power steering fluid on the frame and other parts, then install the P/S joint adapter (pump) on the pump outlet (B) with the P/S joint outlet plate.

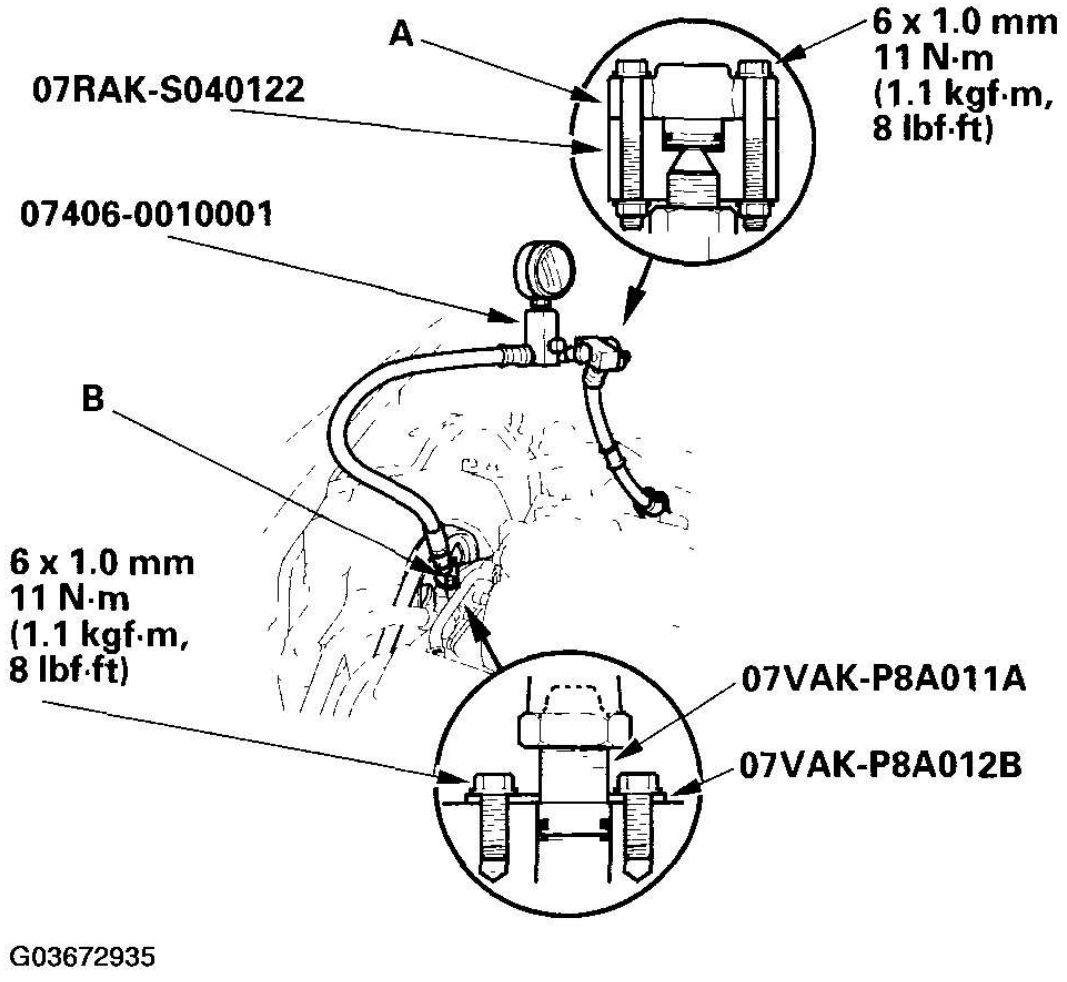


Fig. 3: Disconnecting Pump Outlet Hose From Pump Outlet
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Connect the P/S joint adapter (hose) to the P/S pressure gauge, then connect the pump outlet hose to the P/S joint adapter (hose).
4. Install the P/S pressure gauge to the P/S joint adapter (pump).
5. Fully open the shut-off valve (A).

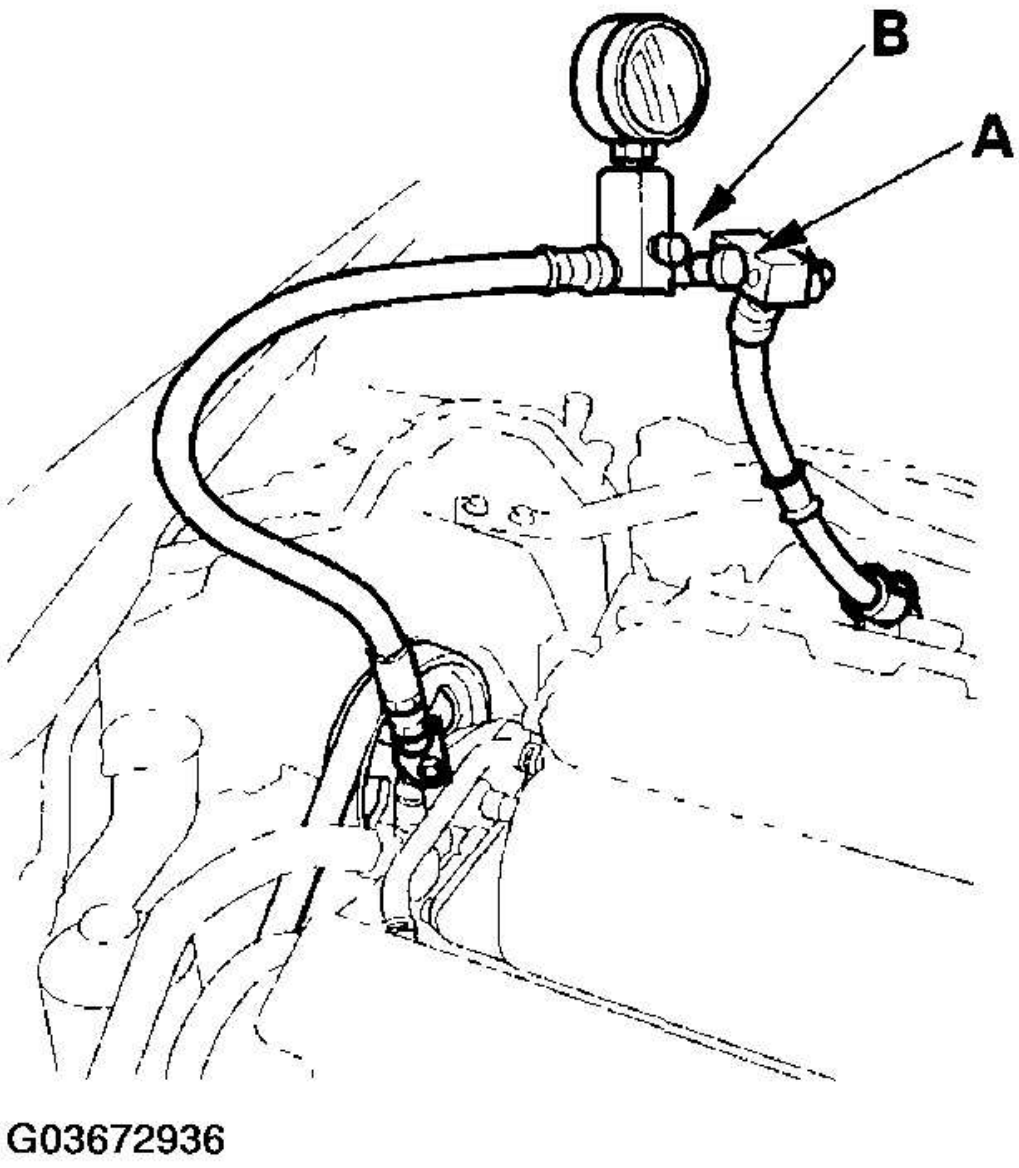


Fig. 4: Opening Shut-Off Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Fully open the pressure control valve (B).
7. Start the engine and let it idle.
8. Turn the steering wheel from lock-to-lock several times to warm the fluid to

operating temperature.

9. Measure steady-state fluid pressure while the engine is idling. If the pump is in good condition, the gauge should read no more than 1,470 kPa (15kgf/cm^2 , 213 psi).

   If it reads high, check for:

   - Clogged or deformed feed or return line between the pump and gearbox.
   - Clogged valve body unit.

10. Close the shut-off valve, then close the pressure control valve gradually until the pressure gauge needle is stable. Read the pressure.

    NOTE: Do not keep the shut-off valve closed more than 5 seconds or the pump could be damaged by over-heating.

11. Immediately open the shut-off valve fully.

    If the pump is in good condition, the gauge should read at least 7,940-8,630 kPa (81-88 kgf/cm^2 , 1,150-1,250 psi). A low reading means pump output is too low for full assist. Repair or replace the pump.

PUMP PRESSURE TEST WITH T/N 07406-001000A

Special Tools Required

- P/S joint adapter (pump) 07VAK-P8A011A
- P/S joint adapter plate (pump) 07VAK-P8A012B
- P/S joint adapter (hose) 07RAK-S040122
- P/S pressure gauge 07406-001000A

Check the fluid pressure as follows to determine whether the trouble is in the pump or gearbox.

1. Check the power steering fluid level (see **FLUID REPLACEMENT**).

2. Disconnect the pump outlet hose (A) from the pump outlet with care so as not to spill the power steering fluid on the frame and other parts, then install the P/S joint adapter (pump) on the pump outlet (B) with the P/S joint outlet plate.

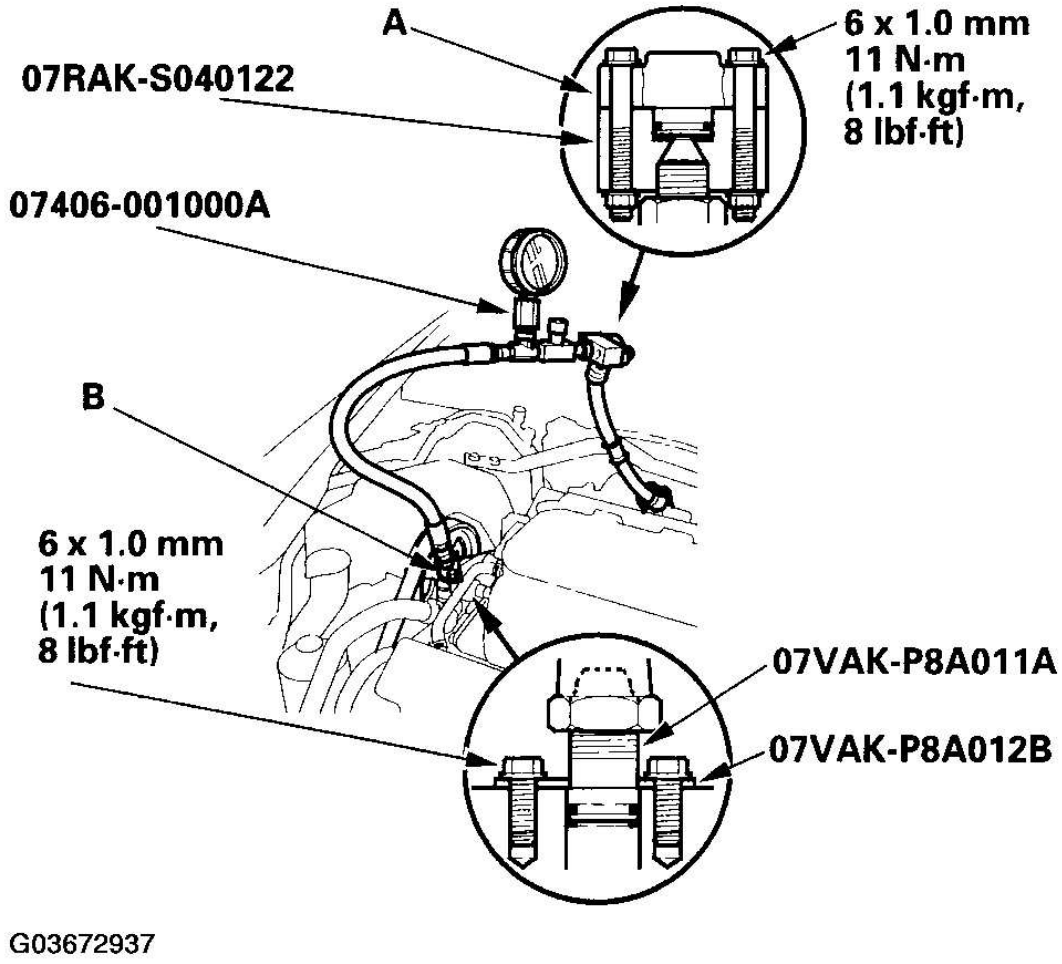


Fig. 5: Disconnecting Pump Outlet Hose From Pump Outlet
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Connect the P/S joint adapter (hose) to the P/S pressure gauge, then connect the pump outlet hose to the P/S joint adapter (hose).
4. Install the P/S pressure gauge to the P/S joint adapter (pump).
5. Open the pressure control valve (A) fully.

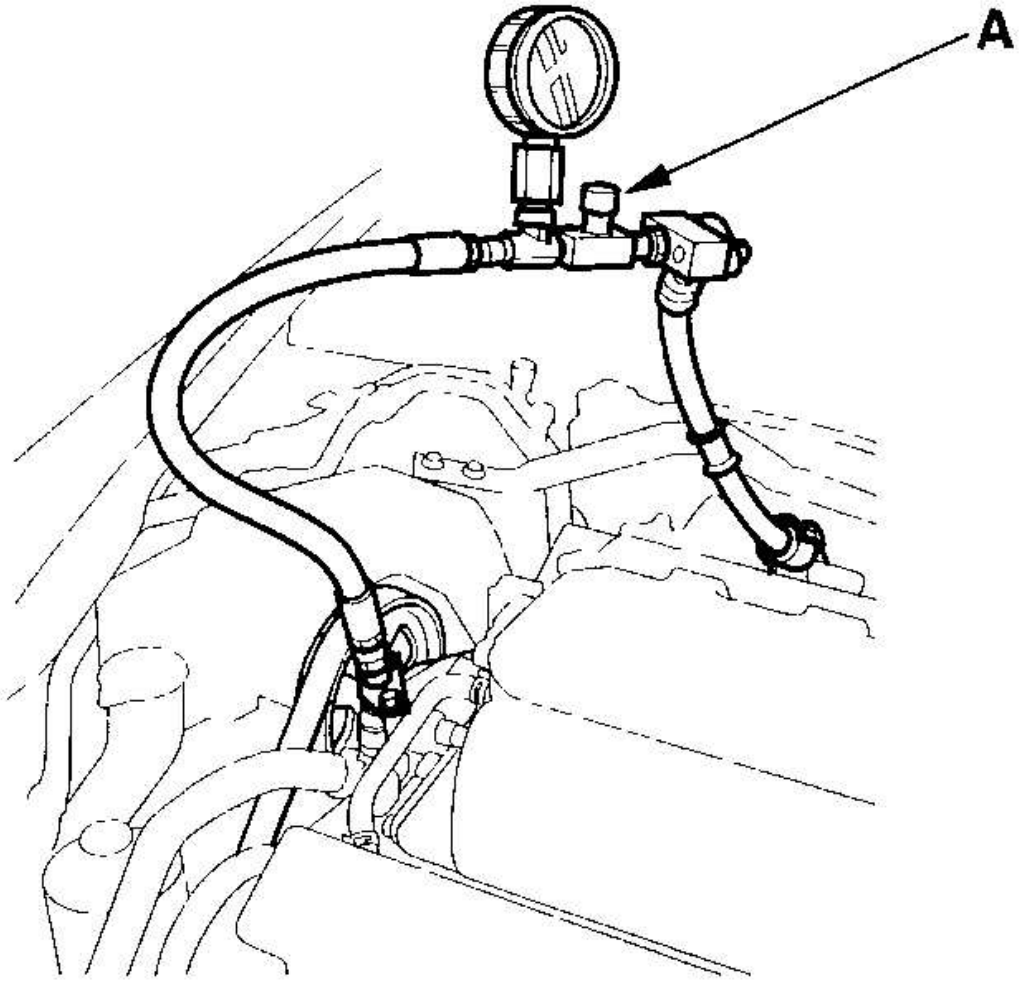


Fig. 6: Opening Pressure Control Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Start the engine and let it idle.
7. Turn the steering wheel from lock-to-lock several times to warm the fluid to operating temperature.
8. Measure steady-state fluid pressure while the engine is idling. If the pump is in good condition, the gauge should read no more than 1,470 kPa (15kgf/cm^2 ,

213 psi).

If it reads high, check for:

- Clogged or deformed feed or return line between the pump and gearbox.
- Clogged valve body unit.

9. Lower the engine speed and let it idle. Gradually close the pressure control valve and immediately read the pressure.

NOTE: Do not keep the pressure control valve closed more than 5 seconds or the pump could be damaged by over-heating.

10. Immediately open the pressure control valve fully.

If the pump is in good condition, the gauge should read at least 7,940-8,630 kPa (81-88 kgf/cm^2 , 1,150-1,250 psi). A low reading means pump output is too low for full assist. Repair or replace the pump.

FLUID LEAKAGE INSPECTION

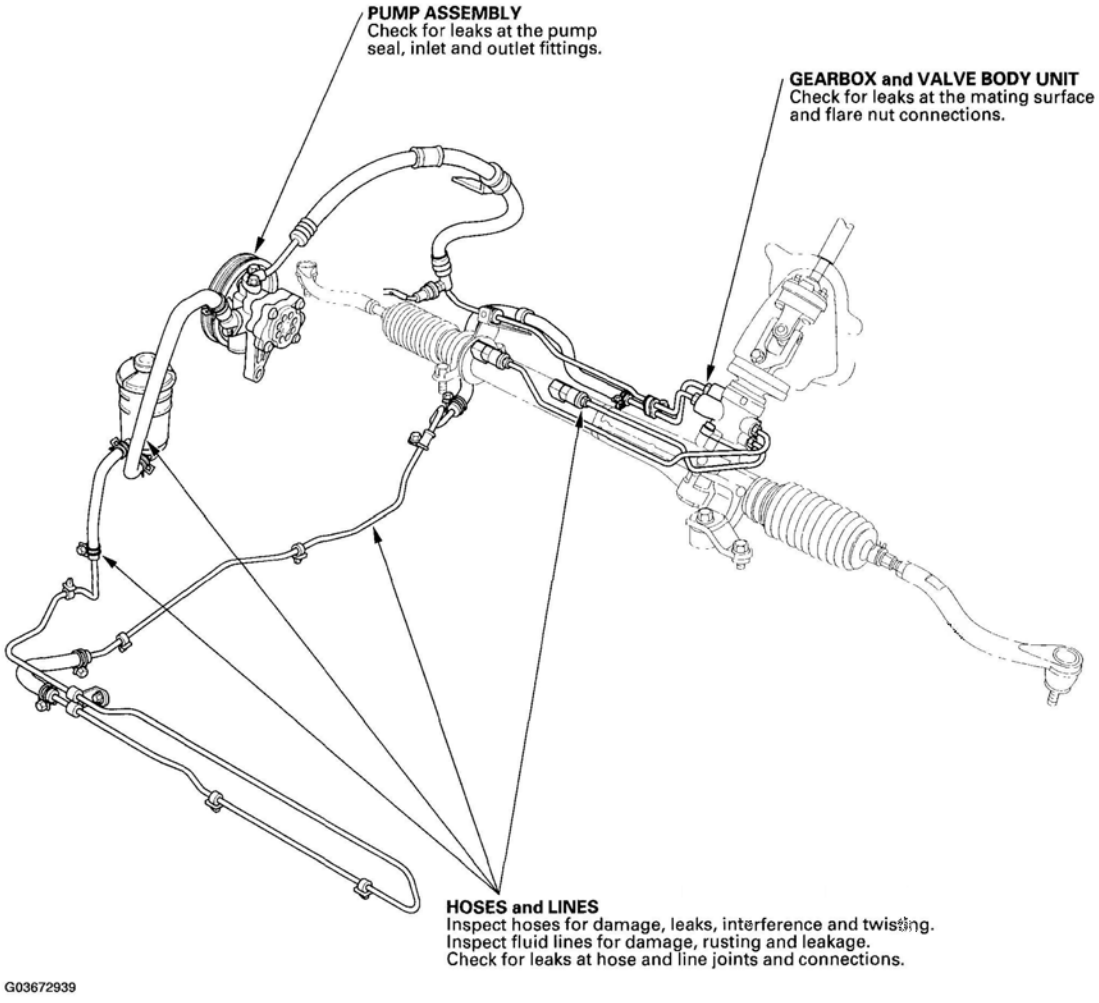


Fig. 7: Locating Fluid Leakage Inspection Point
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FLUID REPLACEMENT

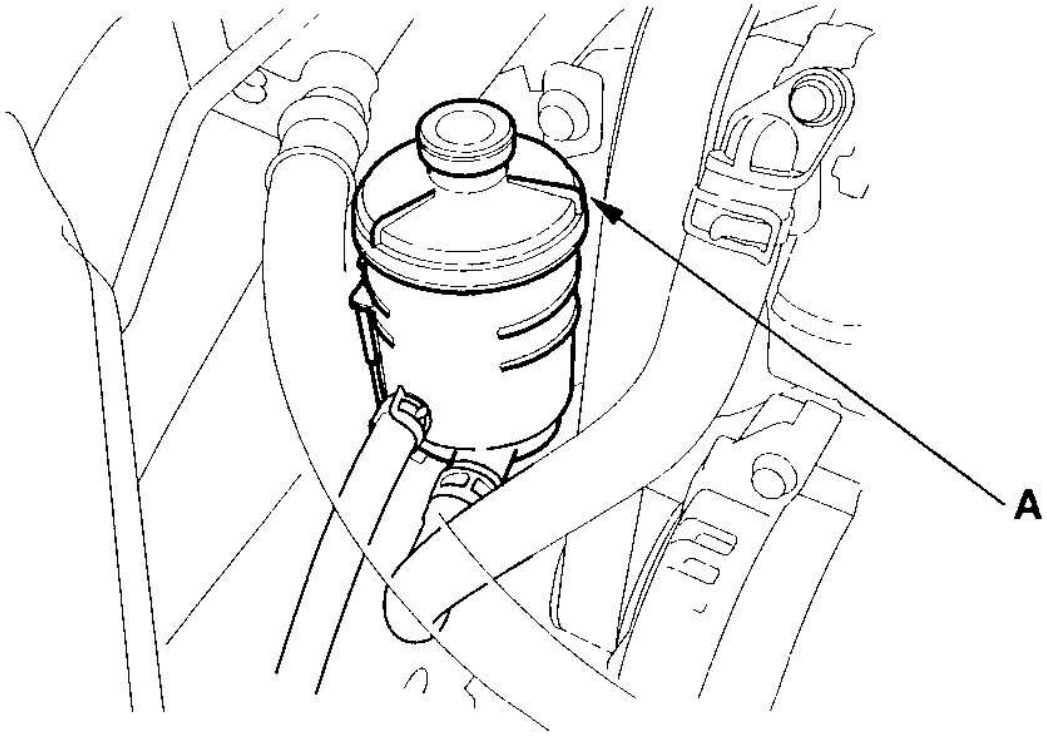
Check the reservoir (A) at regular intervals, and add the recommended fluid as necessary. Always use Honda Power Steering Fluid. Using any other type of power steering fluid or automatic transmission fluid can cause increased wear and poor steering in cold weather.

System capacity:

1.1 L (1.16 US.qt) at disassembly

Reservoir capacity:

0.4 L (0.42 US.qt)



G03672940

Fig. 8: Identifying Reservoir
Courtesy of AMERICAN HONDA MOTOR CO., INC.

1. Raise the reservoir, then disconnect the return hose (A) to drain the reservoir. Take care not to spill the fluid on the body and parts. Wipe off any spilled fluid at once.

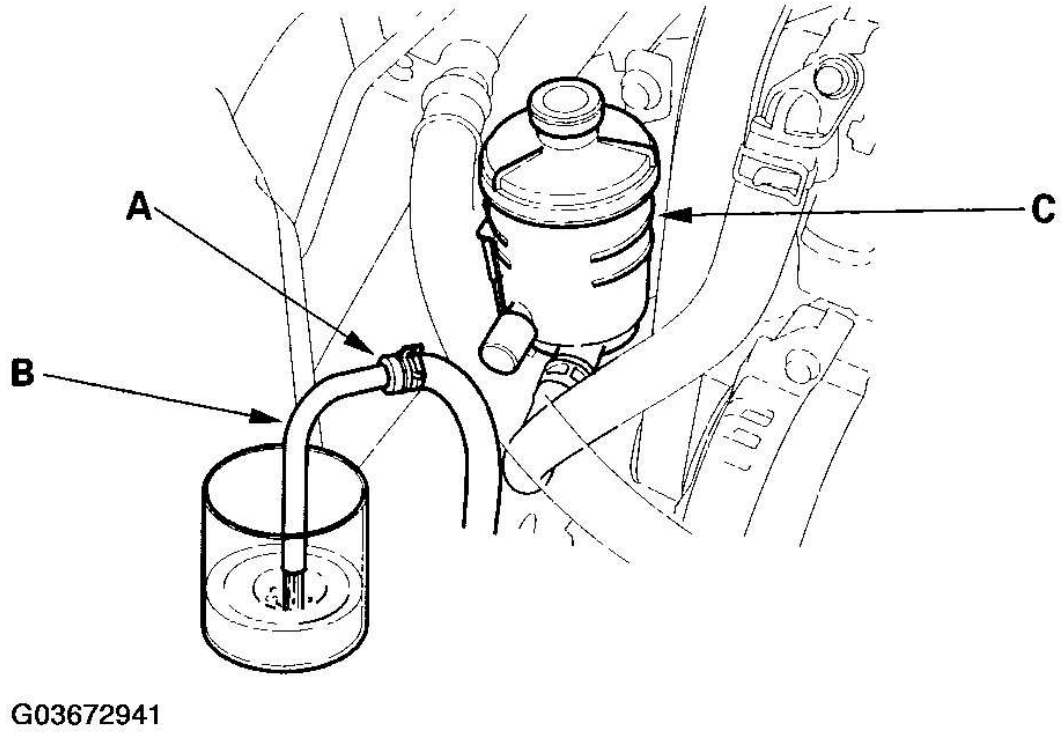


Fig. 9: Disconnecting Return Hose To Drain Reservoir
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Connect a hose (B) of suitable diameter to the disconnected return hose, and put the hose end in a suitable container.
3. Start the engine, let it run at idle, and turn the steering wheel from lock-to-lock several times.

   When fluid stops running out of the hose, shut off the engine. Discard the fluid.

4. Reinstall the return hose on the reservoir.
5. Fill the reservoir to the upper level line (C).
6. Start the engine and run it at fast idle, then turn the steering wheel from lock-to-lock several times to bleed air from the system.
7. Recheck the fluid level and add some if necessary. Do not fill the reservoir beyond the upper level line.

8. If the fluid is contaminated, dark, or discolored, repeat procedure as necessary.

POWER STEERING HOSE, LINE, AND PRESSURE SWITCH REPLACEMENT

Note these items during installation:

- Connect each hose to the corresponding line securely until it contacts the stop on the line. Install the clamp or adjustable clamp at the specified distance from the hose end as shown.
- Check all clamps for deterioration or deformation; replace the clamps with new ones if necessary.
- Add the recommended power steering fluid to the specified level on the reservoir and check for leaks.

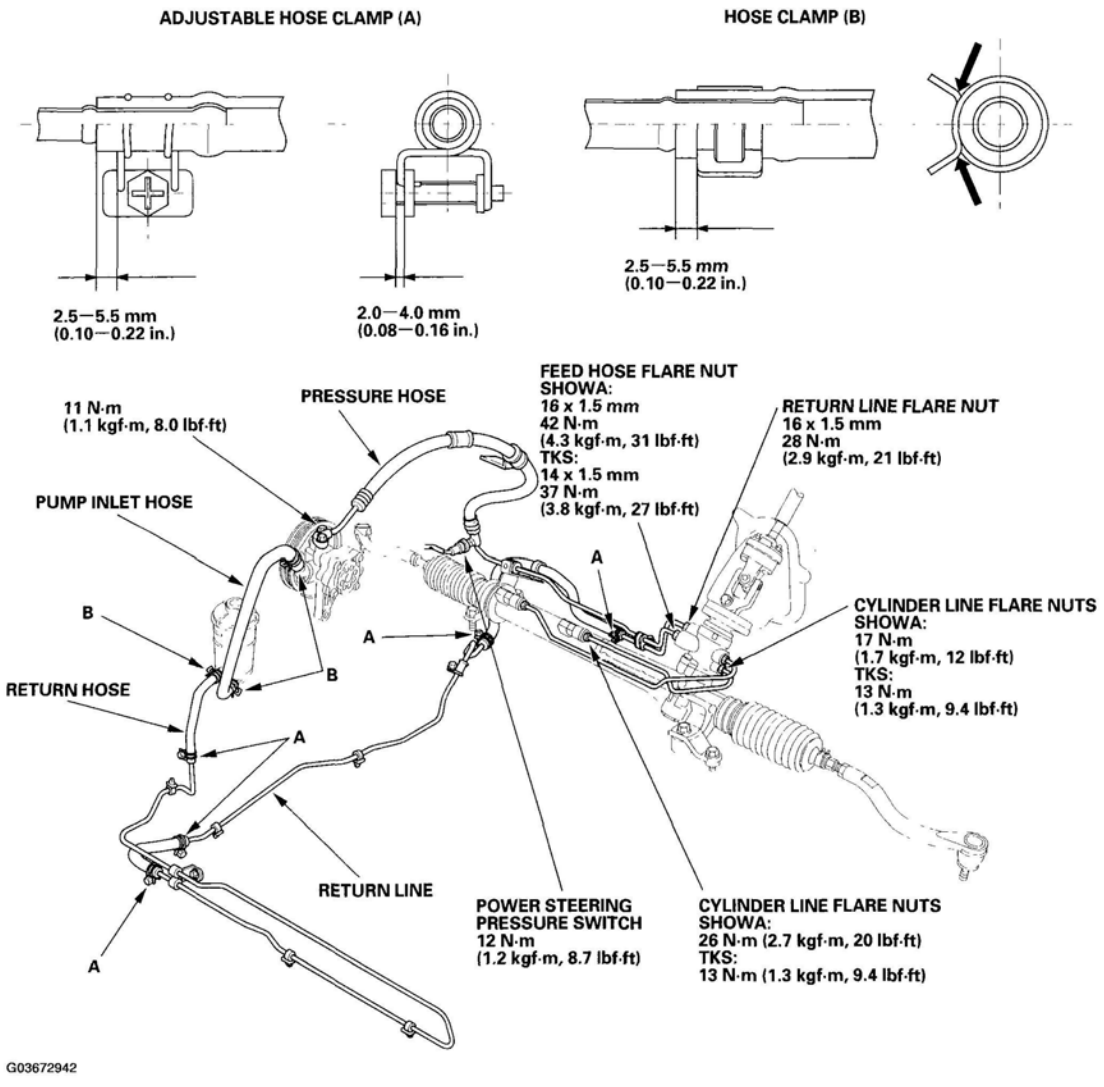


Fig. 10: Identifying Dimension Of Power Steering Hose, Line, And Pressure Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PUMP REPLACEMENT

1. Place a suitable container under the vehicle.
2. Drain the power steering fluid from the reservoir.
3. Remove the side engine mount bracket (A).

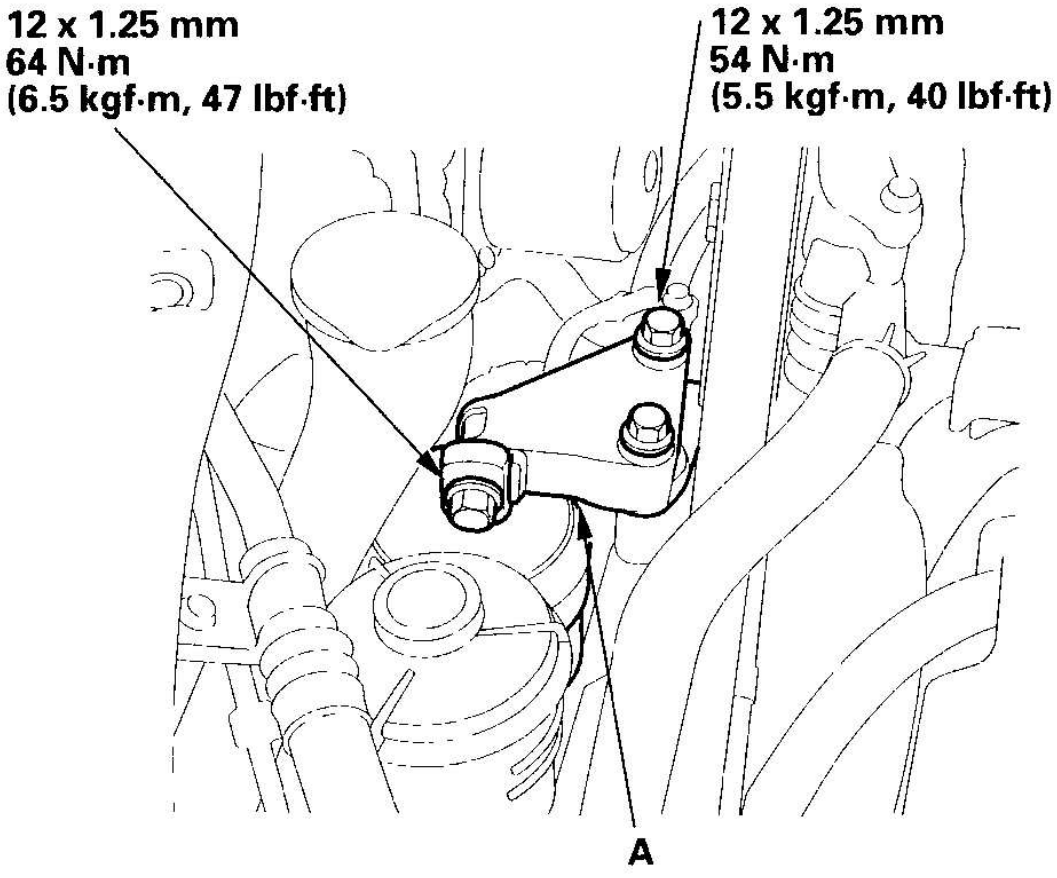


Fig. 11: Identifying Side Engine Mount Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the drive belt (A) from the pump pulley (see **DRIVE BELT REPLACEMENT**).

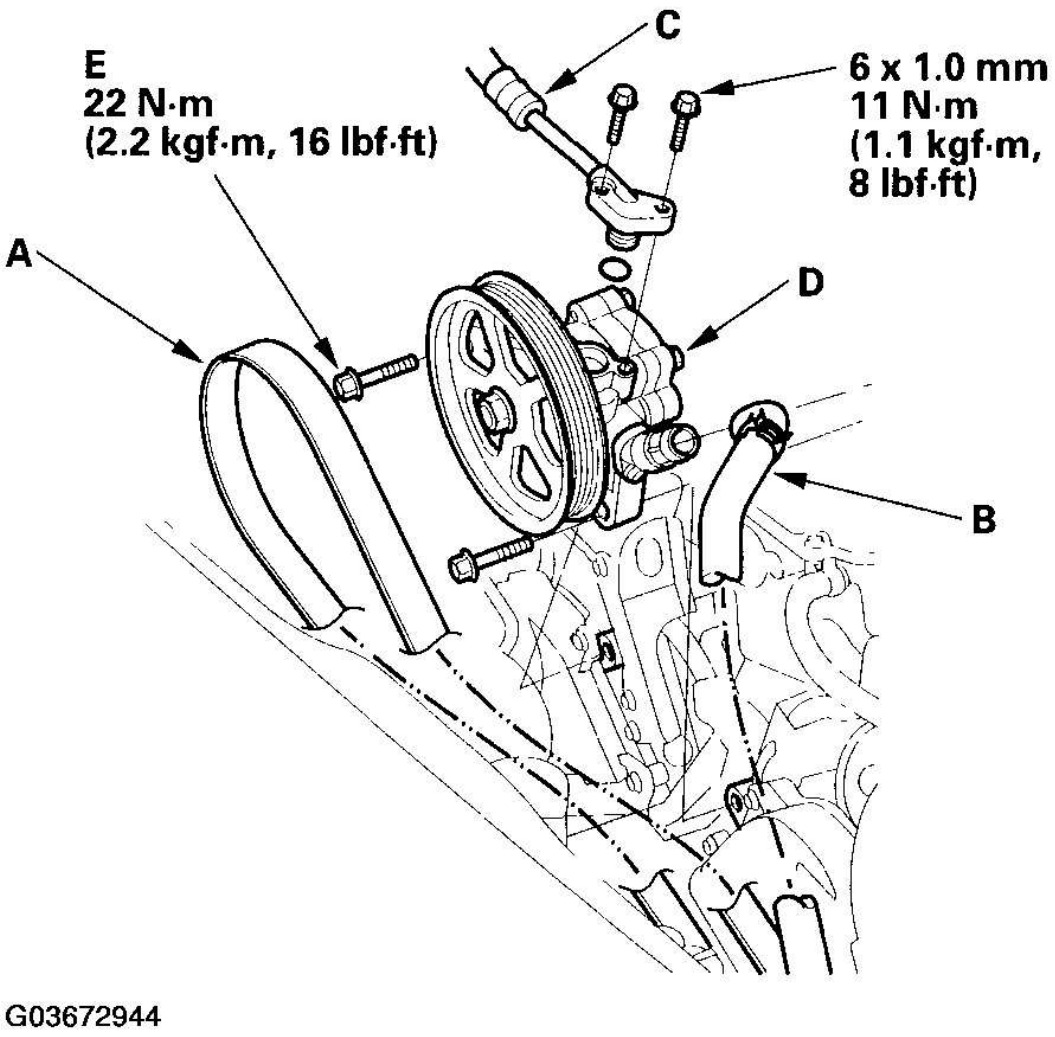


Fig. 12: Removing Drive Belt From Pump Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Cover the auto-tensioner, alternator, and A/C compressor with several shop towels to protect them from spilled power steering fluid. Disconnect the pump inlet hose (B) and pump outlet hose (C) from the pump (D), and plug them. Take care not to spill the fluid on the body or parts. Wipe off any spilled fluid at once. Do not turn the steering wheel with the pump removed.
6. Remove the pump mounting bolts (E).
7. Cover the opening of the pump with a piece of tape to prevent foreign material

from entering the pump.

8. Connect the pump inlet hose and pump outlet hose onto the new pump.
9. Loosely install the pump in the pump bracket with the mounting bolts, then tighten the pump fittings securely.
10. Tighten the pump mounting bolts to the specified torque.
11. Install the drive belt (A).

    Note these items during belt installation:

    - Make sure that the belt is properly positioned on the pulleys (B).
    - Do not get power steering fluid or grease on the auto-tensioner, alternator, A/C compressor, and drive belt or pulley faces. Clean off any fluid or grease before installation.

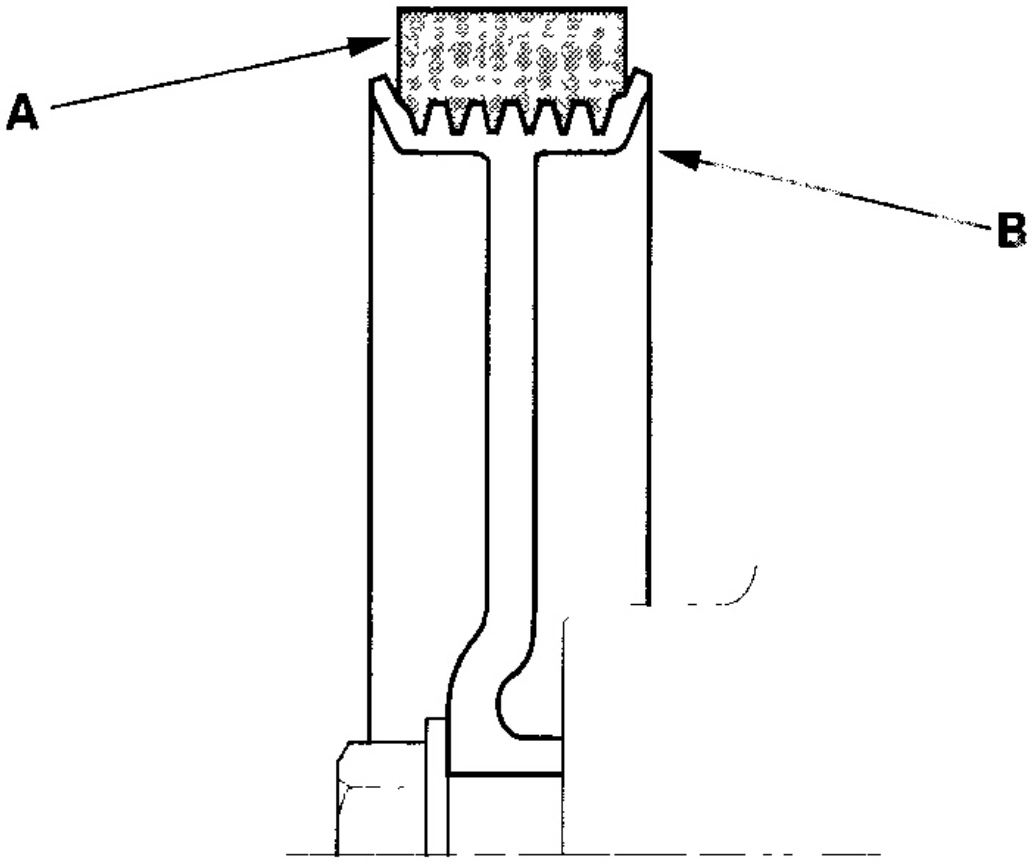


Fig. 13: Installing Drive Belt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Install the side engine mount bracket. Tighten the bolts to the specified torque.
13. Fill the reservoir to the upper level line (see **FLUID REPLACEMENT**).

PUMP OVERHAUL

Replace the pump as an assembly if the parts indicated with asterisk (*) are worn or damaged.

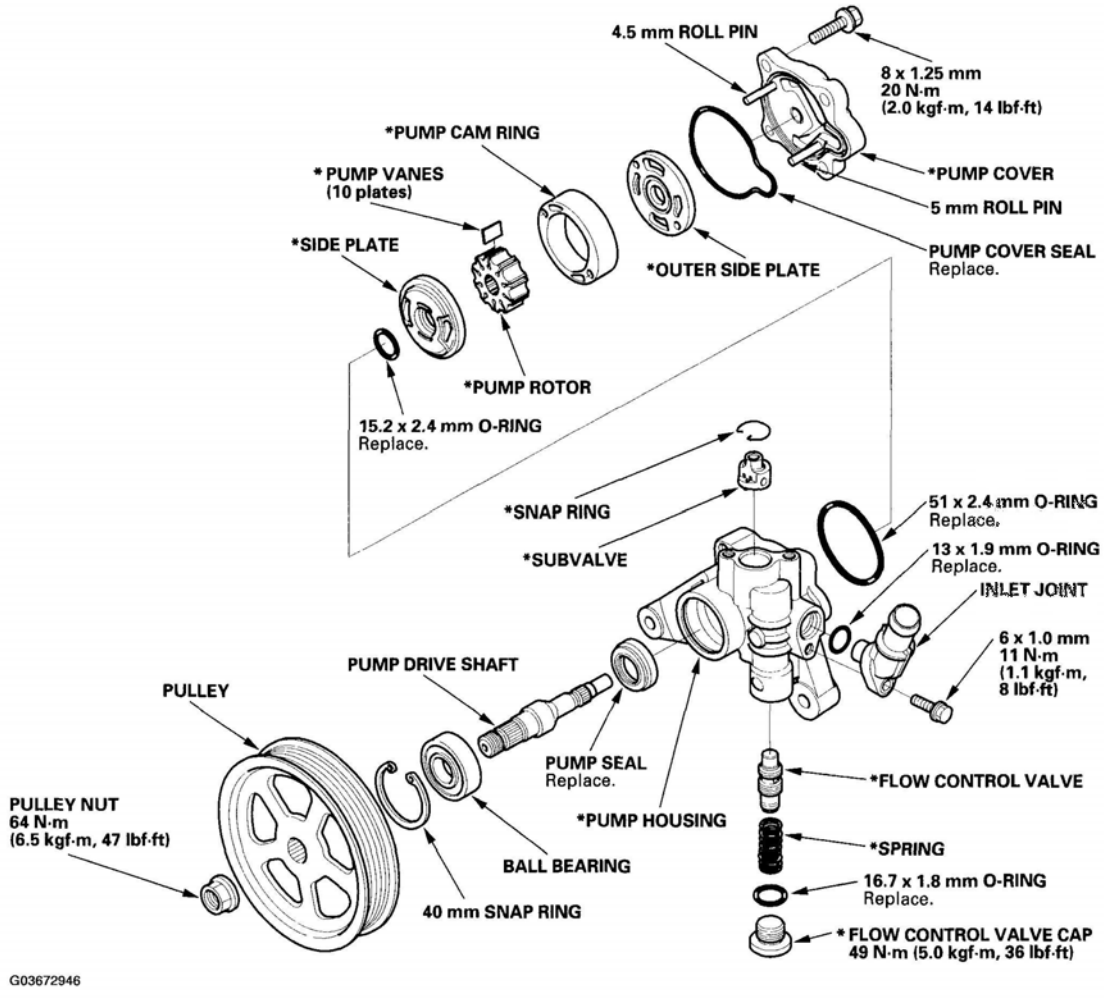


Fig. 14: Exploded View Of Pump Overhaul
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

Pulley holder 07ZAB-S5A0100

Disassembly

NOTE: Refer to Fig. 14 as needed.

1. Drain the fluid from the pump (see step 1 in **Fluid Replacement**).
2. Remove the power steering pump (see **PUMP REPLACEMENT**).

3. Hold the power steering pump (A) in a vise with soft jaws (B), hold the pulley (C) with the special tool (D), and remove the pulley nut (E) and pulley.

   Be careful not to damage the pump housing with the jaws of the vise.

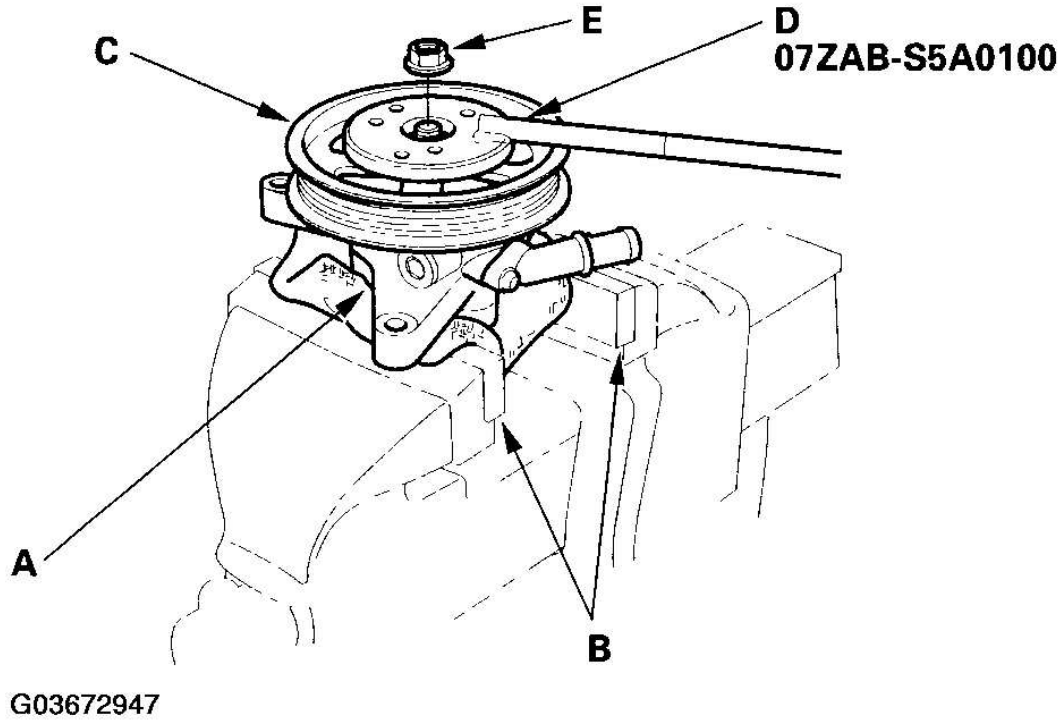


Fig. 15: Holding Power Steering Pump In Vise
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the inlet joint and O-ring.
5. Loosen the flow control valve cap with a hex wrench, and remove it and the O-ring, flow control valve and spring.
6. Remove the pump cover and pump cover seal.
7. Remove the outer side plate, cam ring, rotor, vanes, side plate and O-rings.
8. Remove the snap ring, then remove the sub-valve from the pump housing.
9. Remove the snap ring, then remove the pump drive shaft by tapping the shaft end with the plastic hammer.

10. Remove the seal from the pump housing.

Inspection

11. Check the flow control valve for wear, burrs, and other damage to the edges of the grooves in the valve.

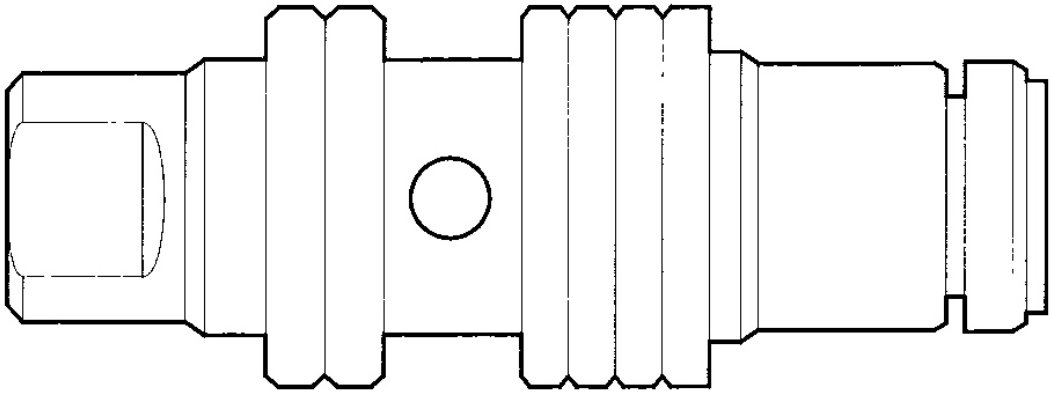


Fig. 16: Checking Flow Control Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Inspect the bore of the flow control valve on the pump housing for scratches and wear.
13. Slip the flow control valve back in the pump housing, and check that it moves in and out smoothly. If OK, go to step 14; if not, replace the pump as an assembly. The flow control valve (A) is not available separately.

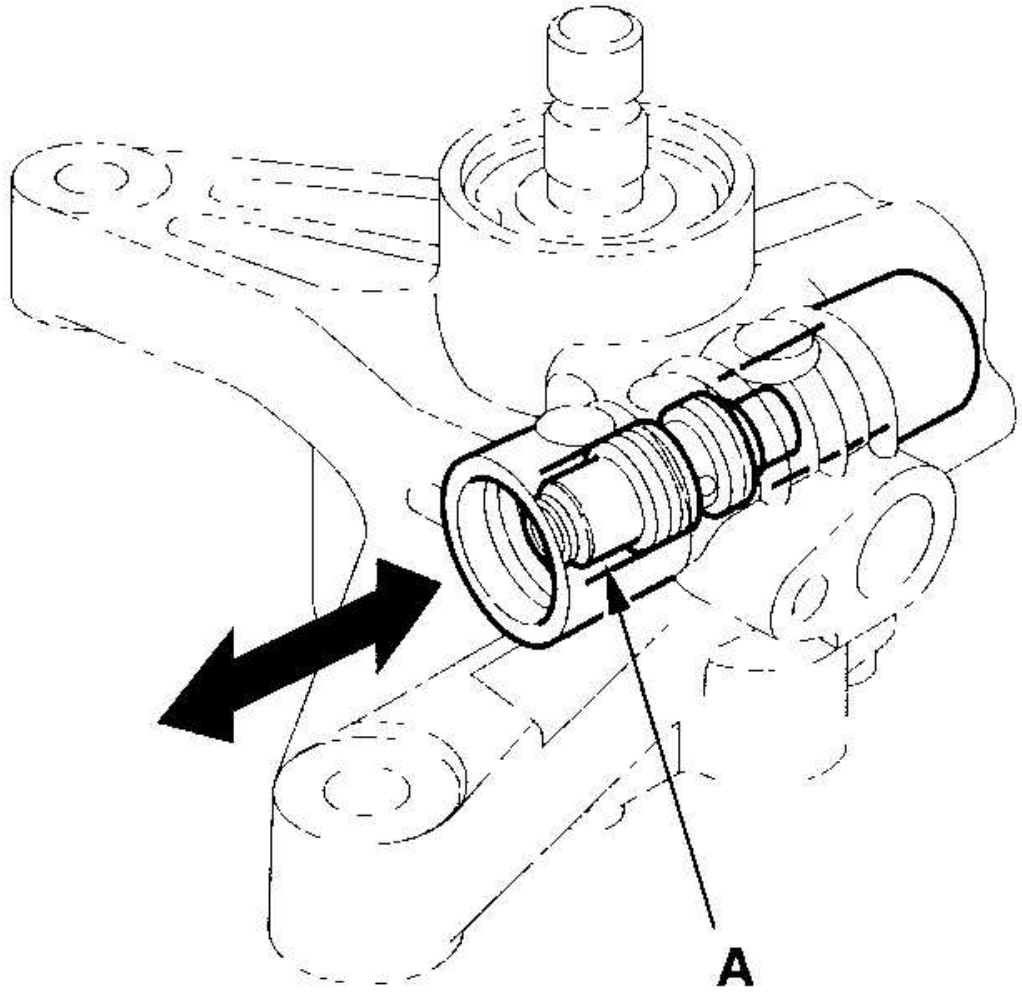


Fig. 17: Identifying Flow Control Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Attach a hose (A) to the end of the flow control valve (B) as shown in **Fig. 18**. Then submerge the flow control valve in a container of power steering fluid or solvent (C), and blow in the hose.
    - If air bubbles leak through the valve at less than 98 kPa (1.0 kgf/cm^2 ,

14.2 psi), replace the pump as an assembly. The flow control valve is not available separately.

- If the flow control valve OK, set it aside for reassembly later.

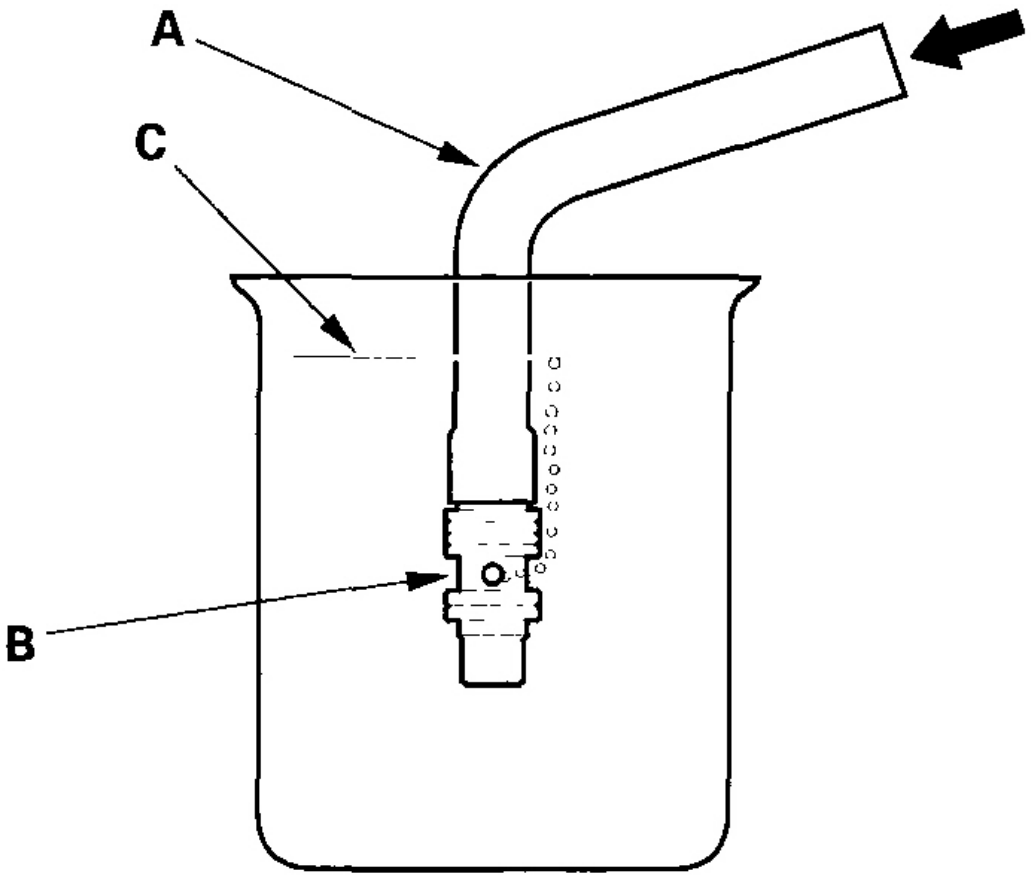


Fig. 18: Attaching Hose To End Of Flow Control Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Inspect the ball bearing by rotating the outer race slowly. If you feel any play (axial or radial) or roughness remove the faulty ball bearing (A), and install a new one (B).

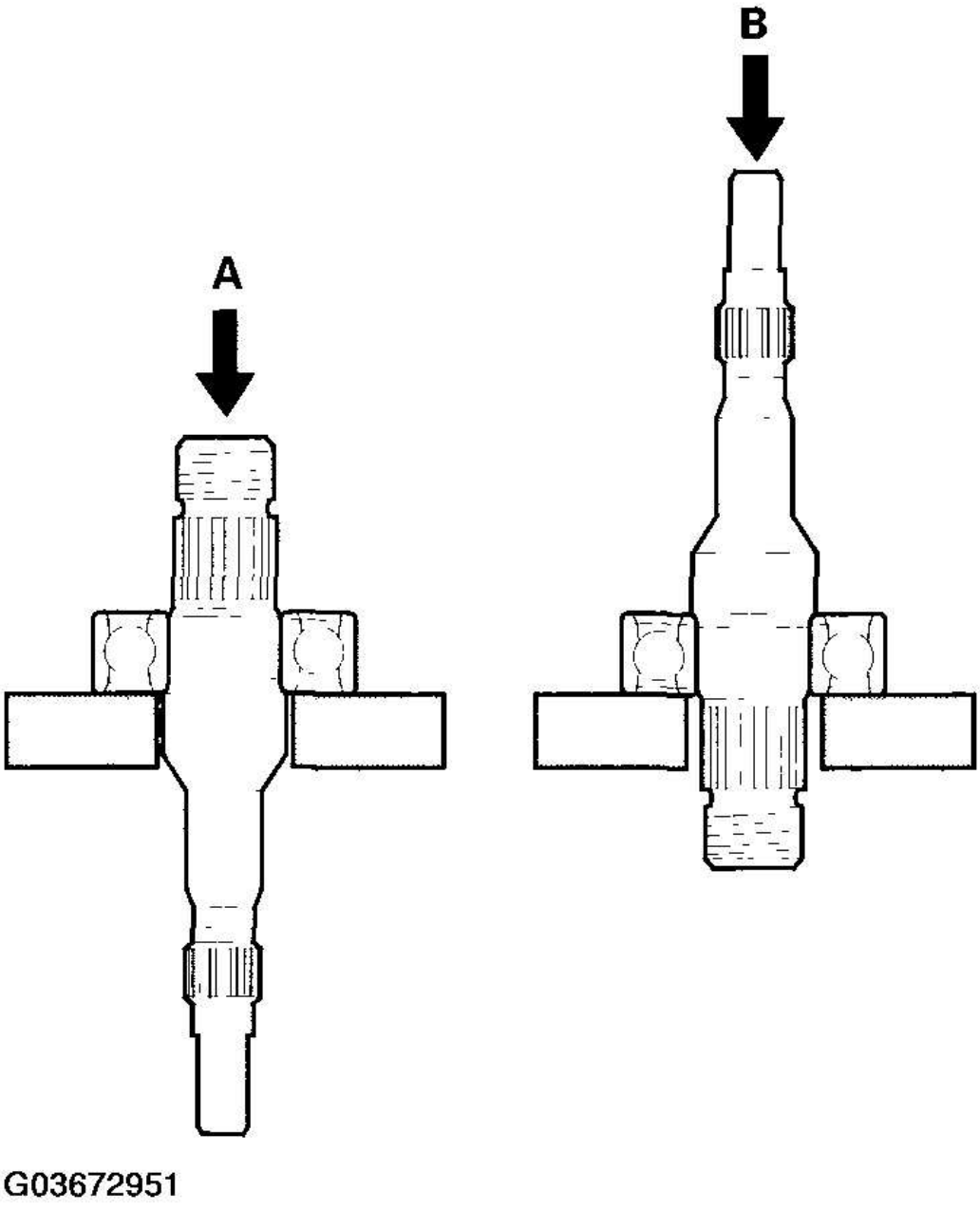


Fig. 19: Inspecting Ball Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Inspect each part shown with an asterisk in the Exploded View; if any of them are worn or damaged, replace the pump as an assembly.

Reassembly

17. Align the pin (A) of the sub-valve (B) with the oil passage (C) in the pump housing, and push the subvalve into place, then install the snap ring (D).

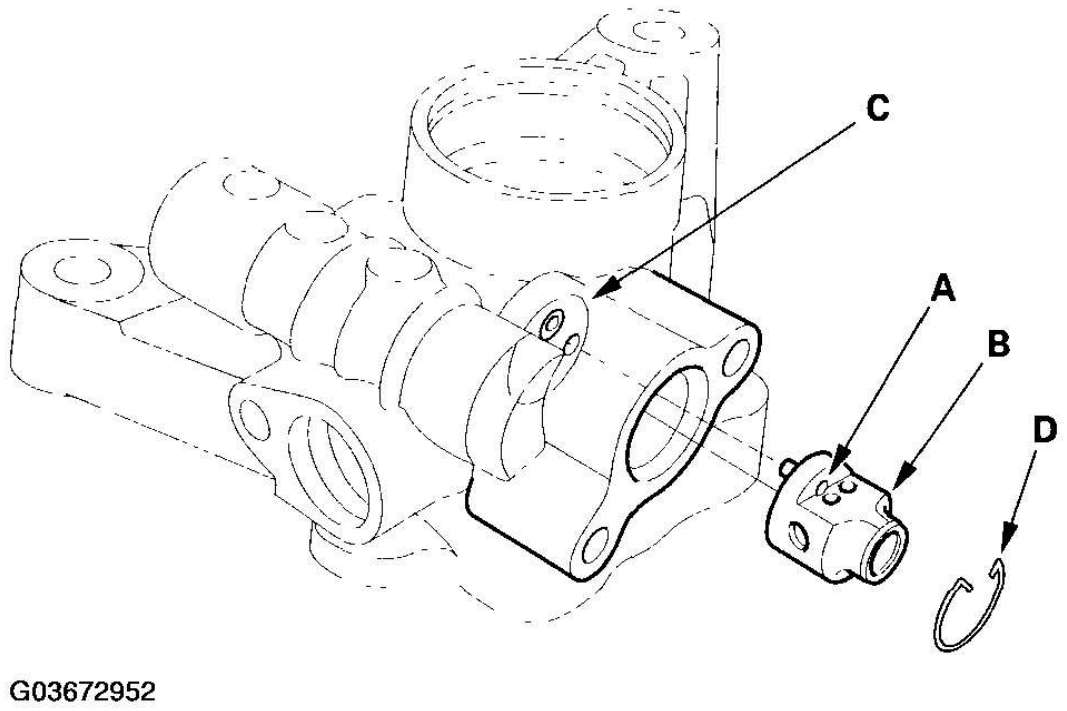


Fig. 20: Aligning Pin Of Sub-Valve With Oil Passage In Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Install the new pump seal (A) (with its grooved side facing in) into the pump housing by hand first then position the pump drive shaft (B) in the pump housing. Press the pump drive shaft and pump seal with the appropriate size socket wrench (C) as shown in **Fig. 21**.

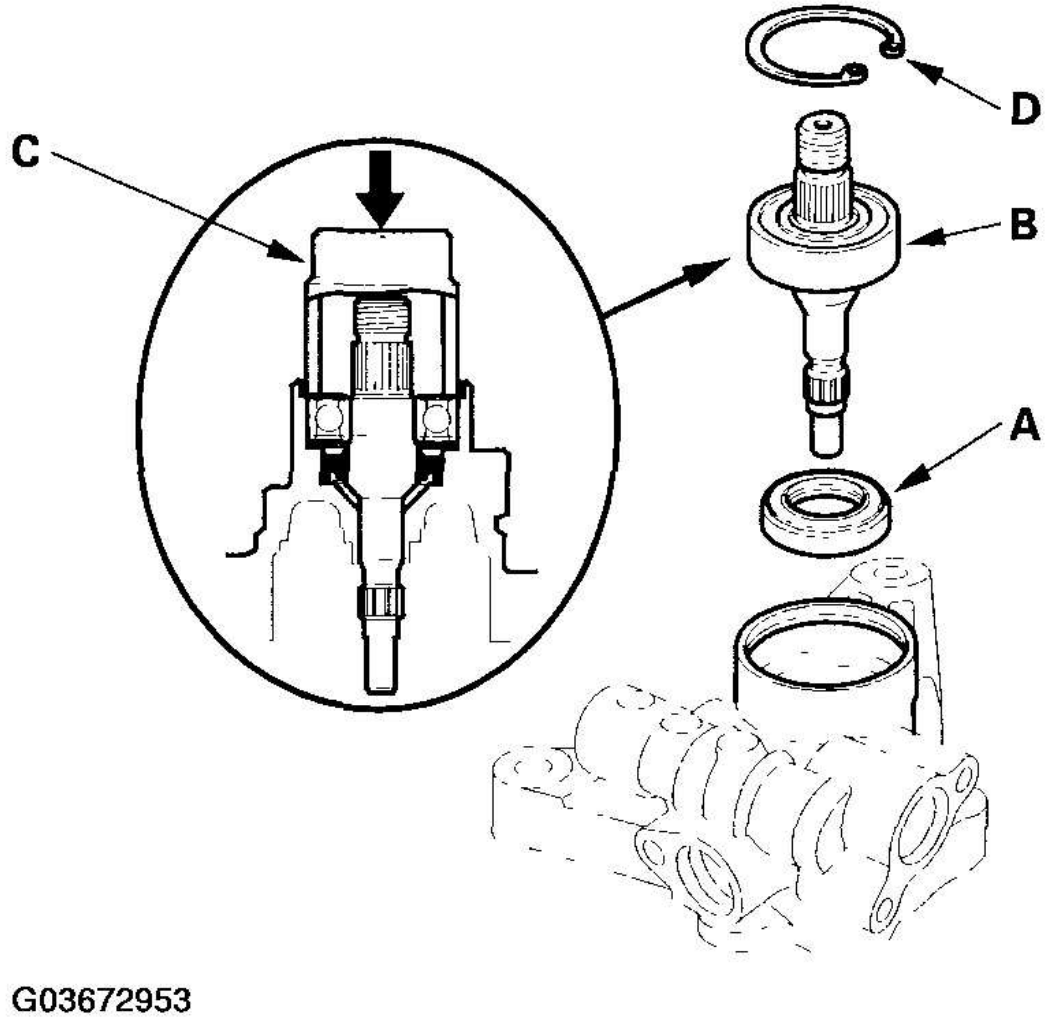


Fig. 21: Installing New Pump Seal Into Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Install the 40 mm snap ring (D) with its radiused edge facing out.
20. Coat the new pump cover seal (A) with power steering fluid, and install it into the groove in the pump cover (B).

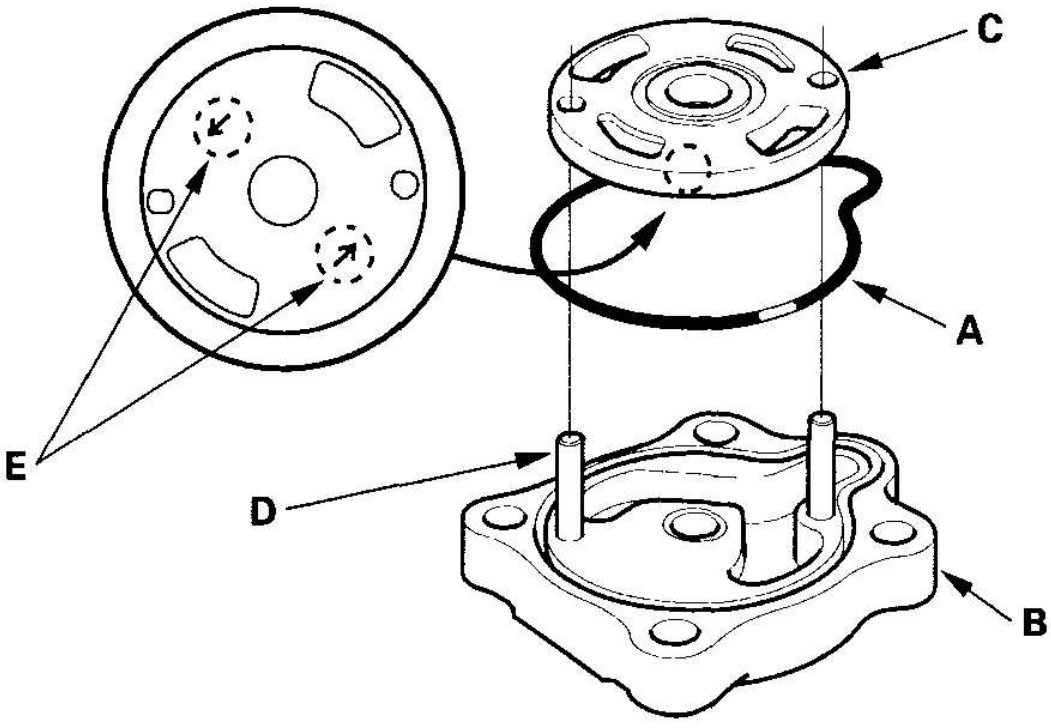


Fig. 22: Coating Pump Cover Seal With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Install the outer side plate (C) over the two roll pins (D) with its arrow marks stamped (E) facing down.
22. Set the pump cam ring (A) over the two roll pins with its mark (B) facing down.

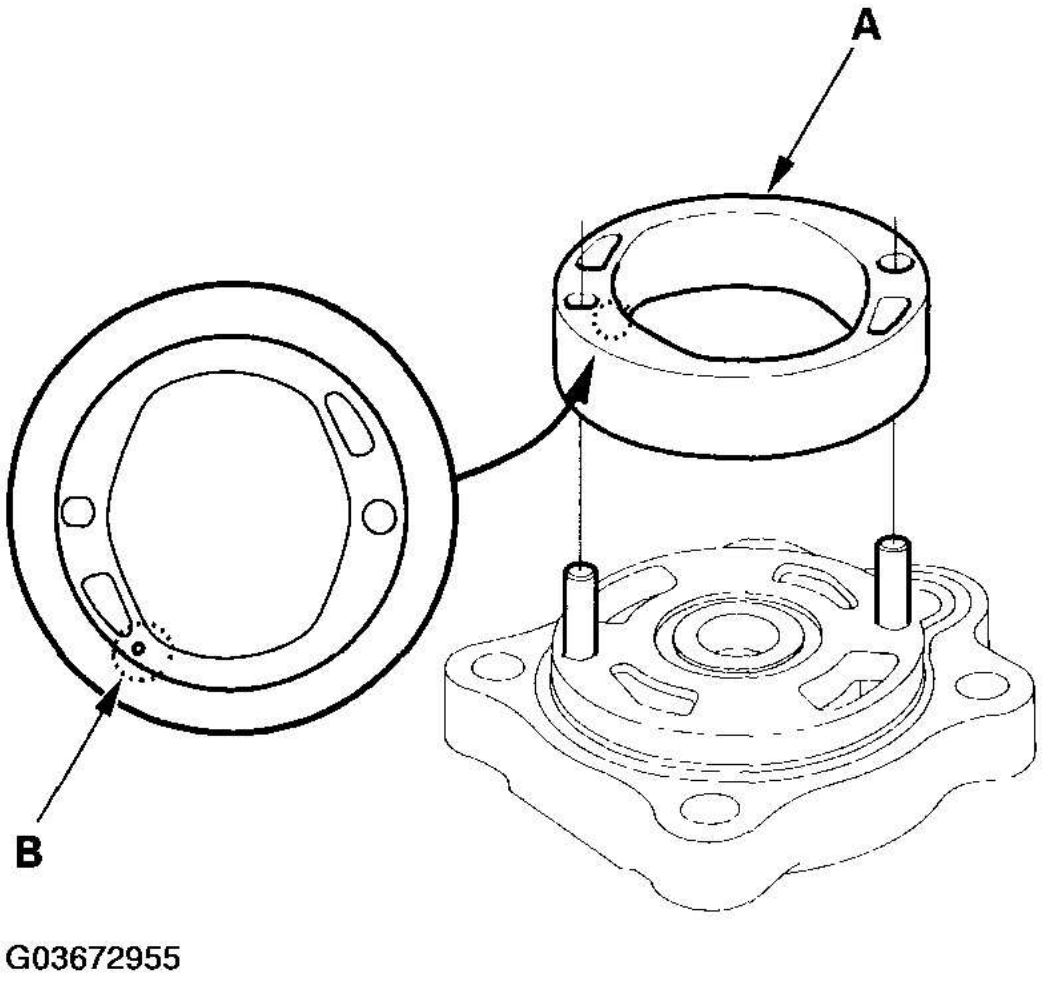


Fig. 23: Setting Pump Cam Ring Over Two Roll Pins With Mark Facing Down
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Assemble pump rotor (A) to the pump cover (B) with its mark (C) facing up.

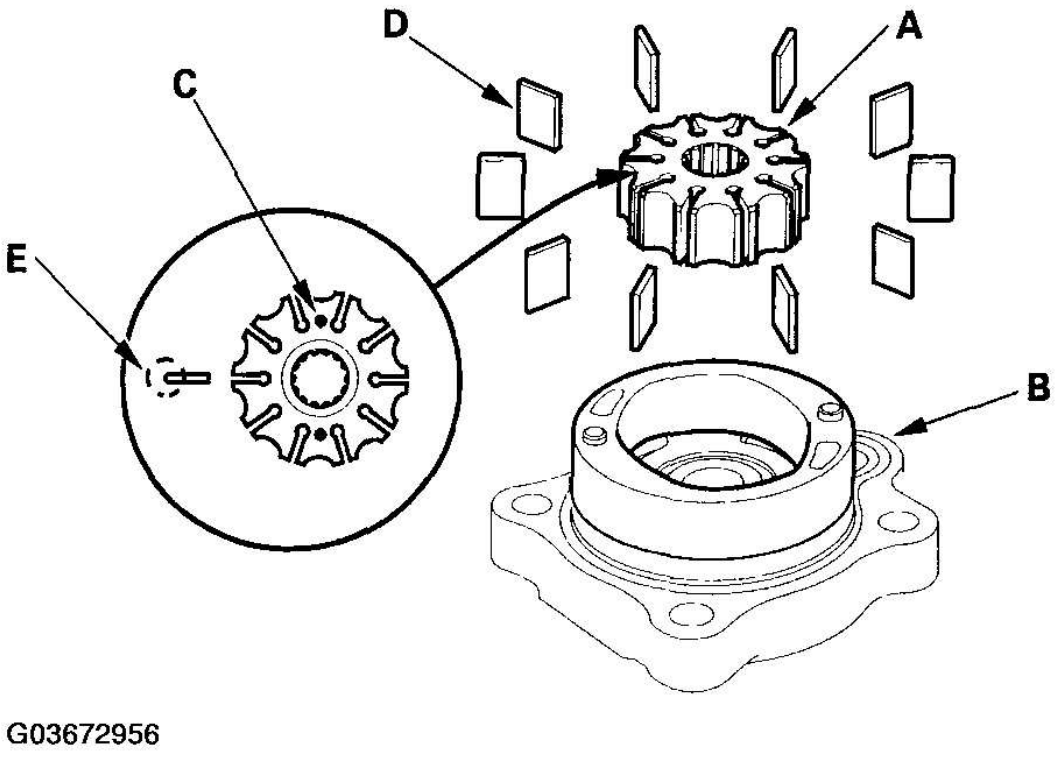


Fig. 24: Assembling Pump Rotor To Pump Cover With Mark Facing Up
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Set the 10 vanes (D) in the grooves in the rotor.

    Make sure that the round ends (E) of the vanes are in contact with the sliding surface of the cam ring.

25. Coat the new O-ring (A) with power steering fluid, and install it into the groove in the side plate (B).

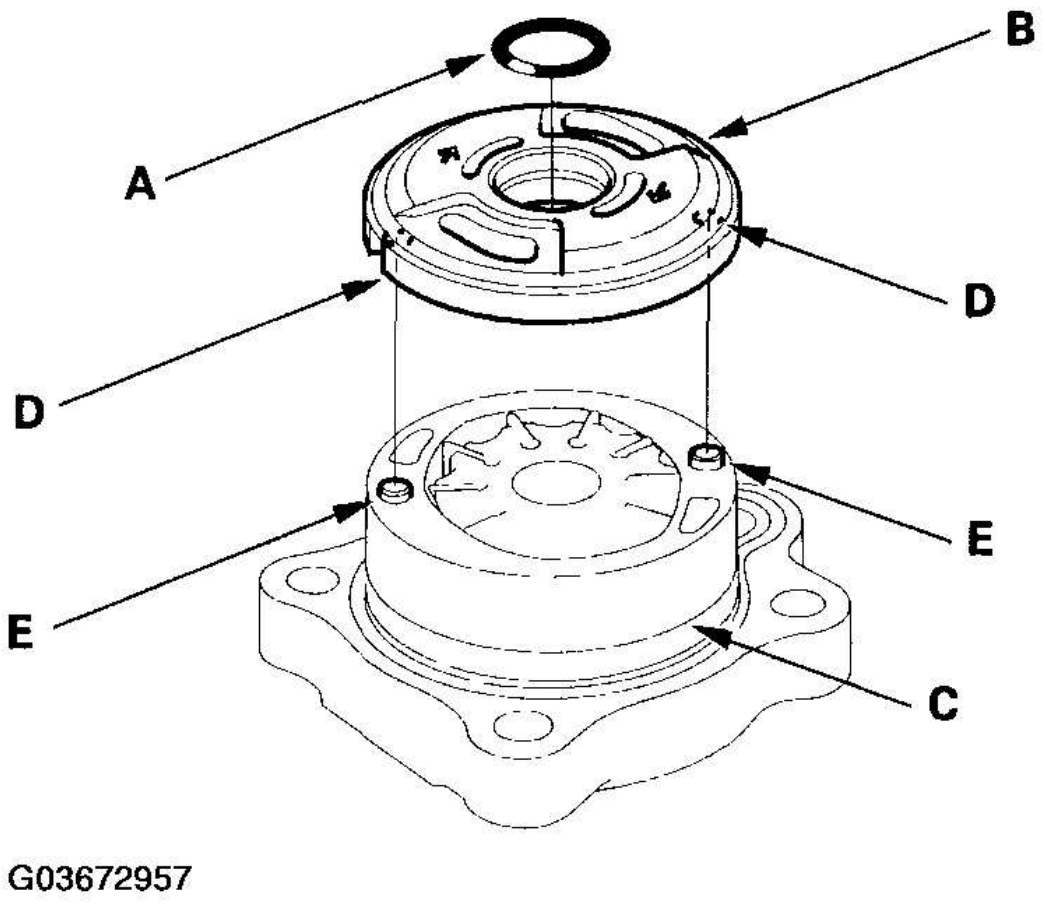


Fig. 25: Coating O-Ring With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. Install the side plate on the cam ring (C) by aligning the roll pins set holes (D) in the side plate with the roll pins (E).
27. Coat the new O-ring (A) with power steering fluid, and position it in the bottom of the pump housing.

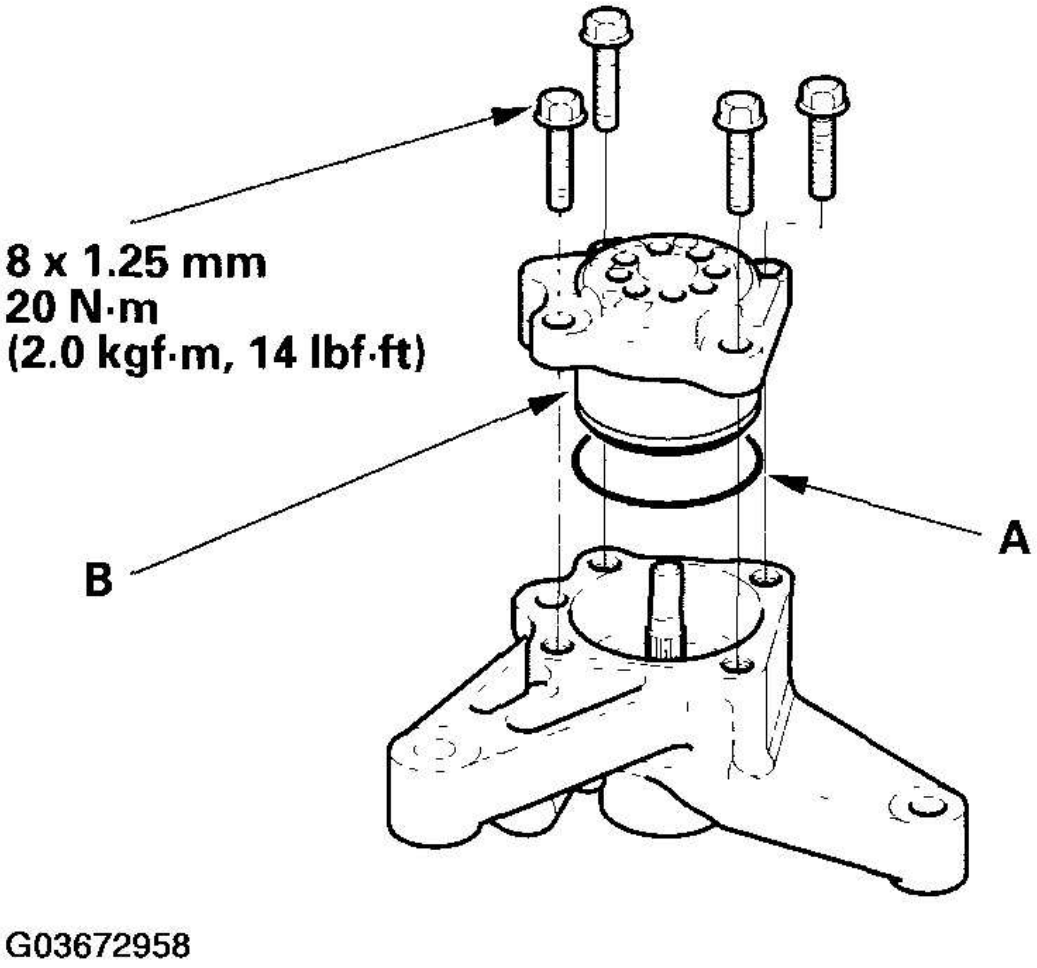


Fig. 26: Positioning O-Ring In Bottom Of Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

28. Install the pump cover assembly (B) in the pump housing. Tighten the bolts to the specified torque.
29. Coat the flow control valve (A) with power steering fluid, then install it and the spring (B) in the pump housing.

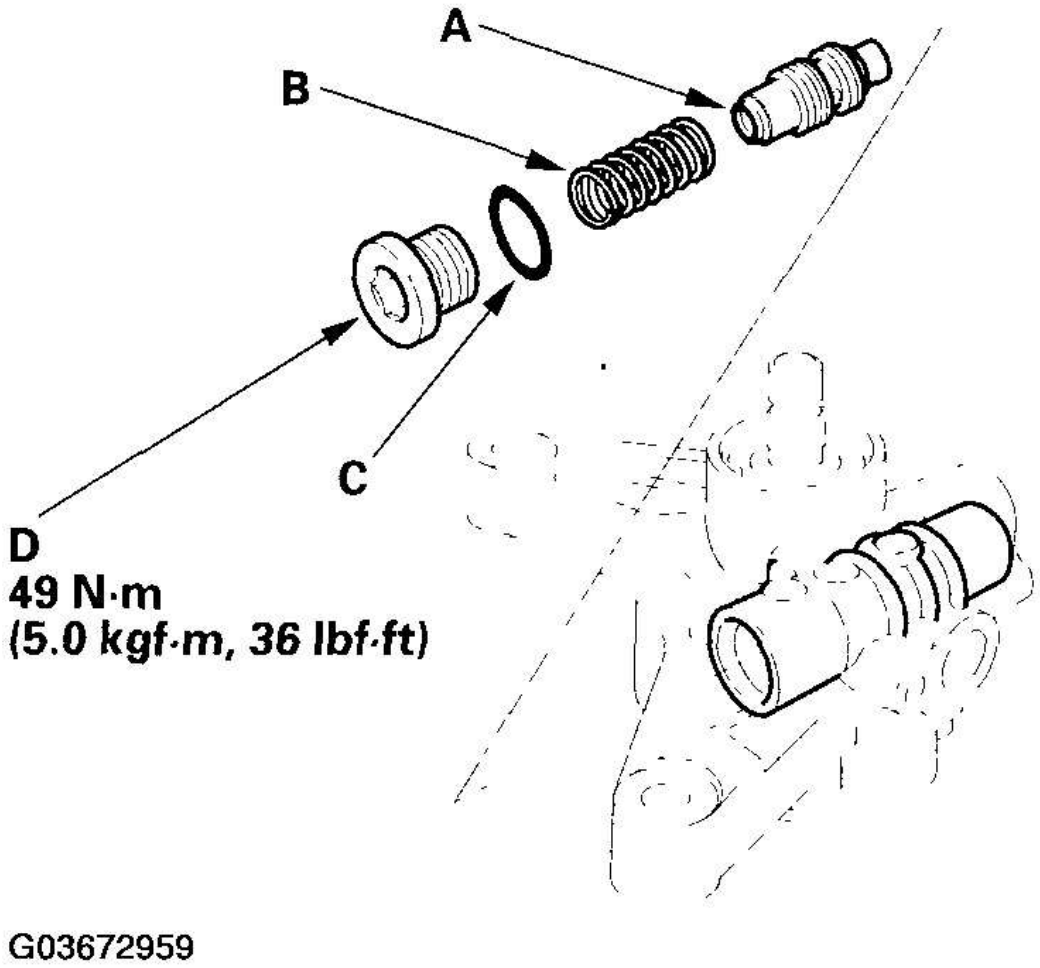


Fig. 27: Coating Flow Control Valve With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

30. Coat the new O-ring (C) with power steering fluid, and install it on the flow control valve cap (D), then install the cap on the pump housing, and tighten it to the specified torque.
31. Coat the new O-ring (A) with power steering fluid, and install it on the inlet joint (B). Install the inlet joint on the pump housing.

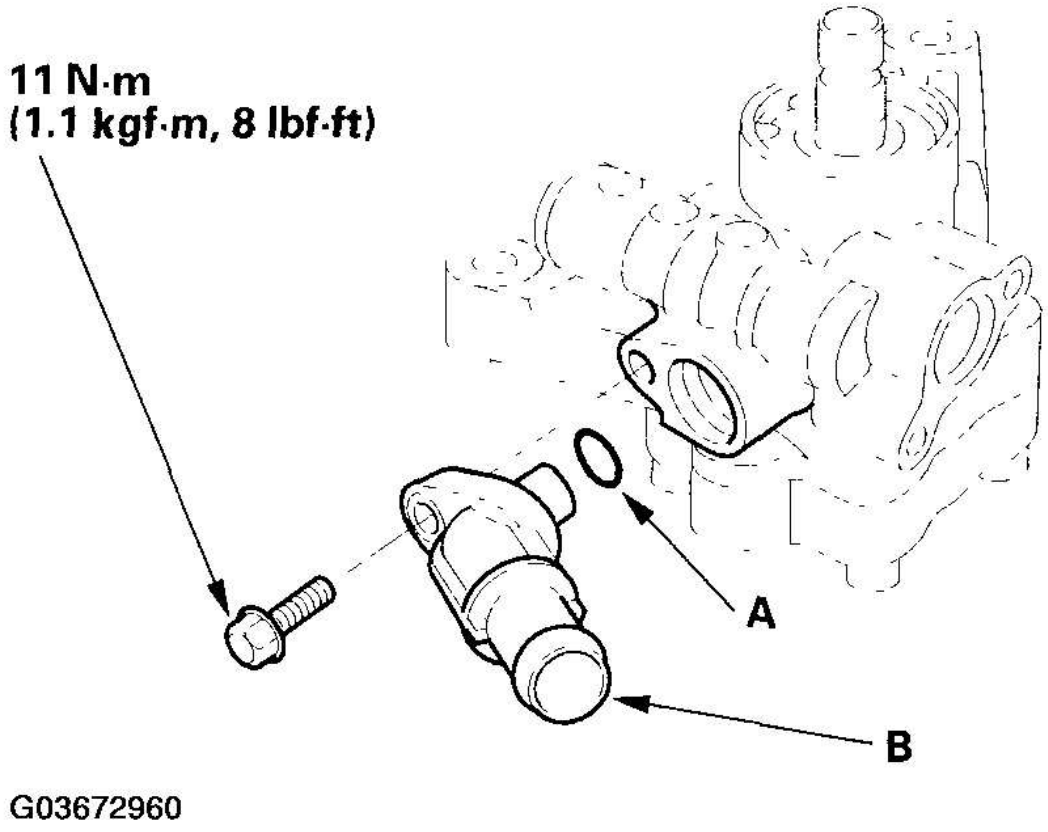


Fig. 28: Installing O-Ring On Inlet Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

32. Install the pulley (A), then loosely install the pulley nut (B). Hold the steering pump in a vise with soft jaws. Be careful not to damage the pump housing with the jaws of the vise.

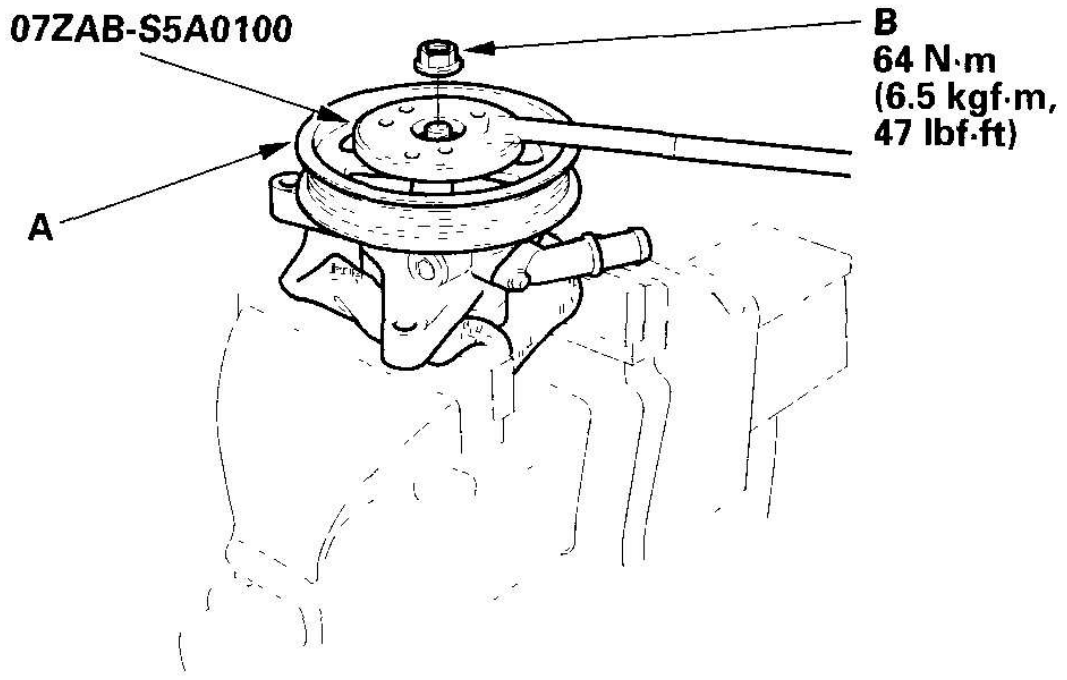


Fig. 29: Loosening Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

33. Hold the pulley with the special tool, and tighten the pulley nut to the specified torque.
34. Check that the pump turns smoothly by turning the pulley by hand. If it turns hard, loosen the four flange bolts on the cover, then retighten them in same manner as in step 28. Turn the pump again by hand.

RACK GUIDE ADJUSTMENT

Special Tools Required

Locknut wrench, 40 mm 07916-SA50001

SHOWA-STEERING GEARBOX

1. Set the wheels in the straight ahead position.

2. Loosen the rack guide screw locknut (A) with the special tool, then remove the rack guide screw (B).

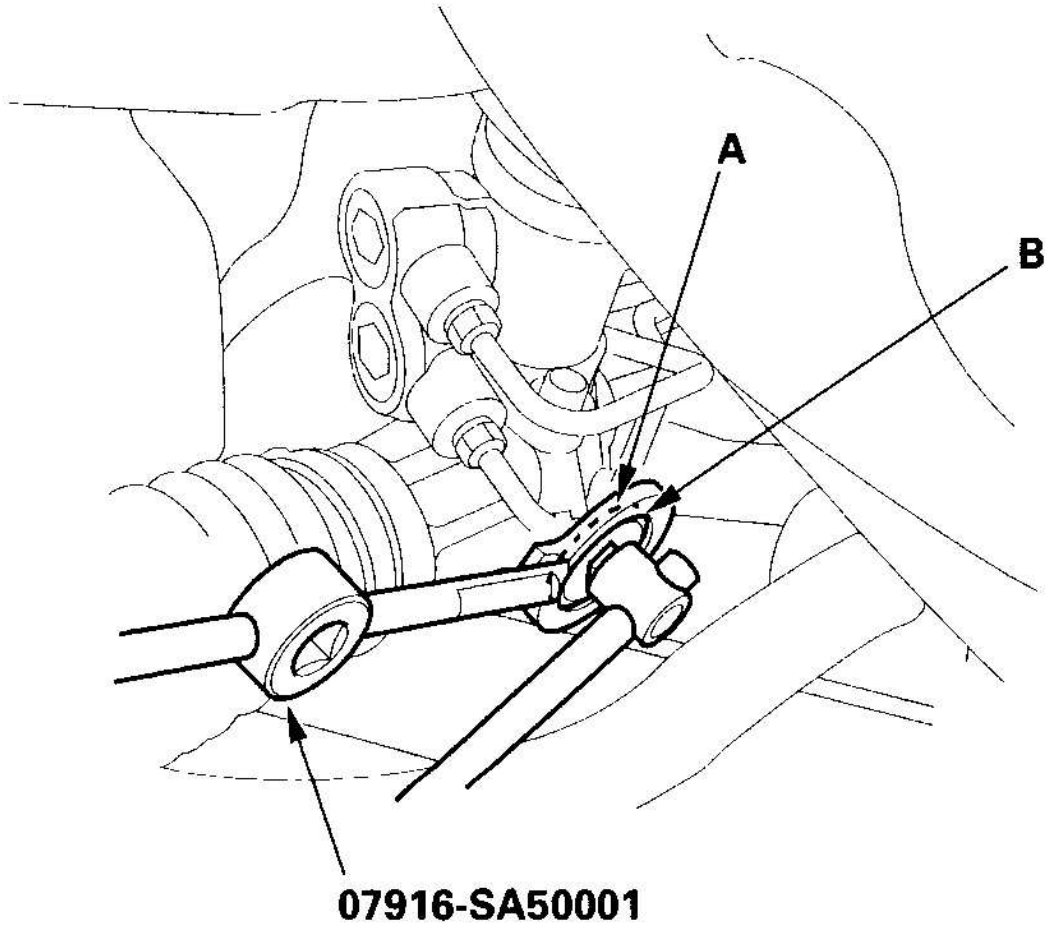


Fig. 30: Loosening Rack Guide Screw Locknut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the old sealant from the rack guide screw (A), and apply new sealant (Three Bond 1215 or Loctite 5699) all around the threads (B). Loosely install the rack guide screw on the steering gearbox.

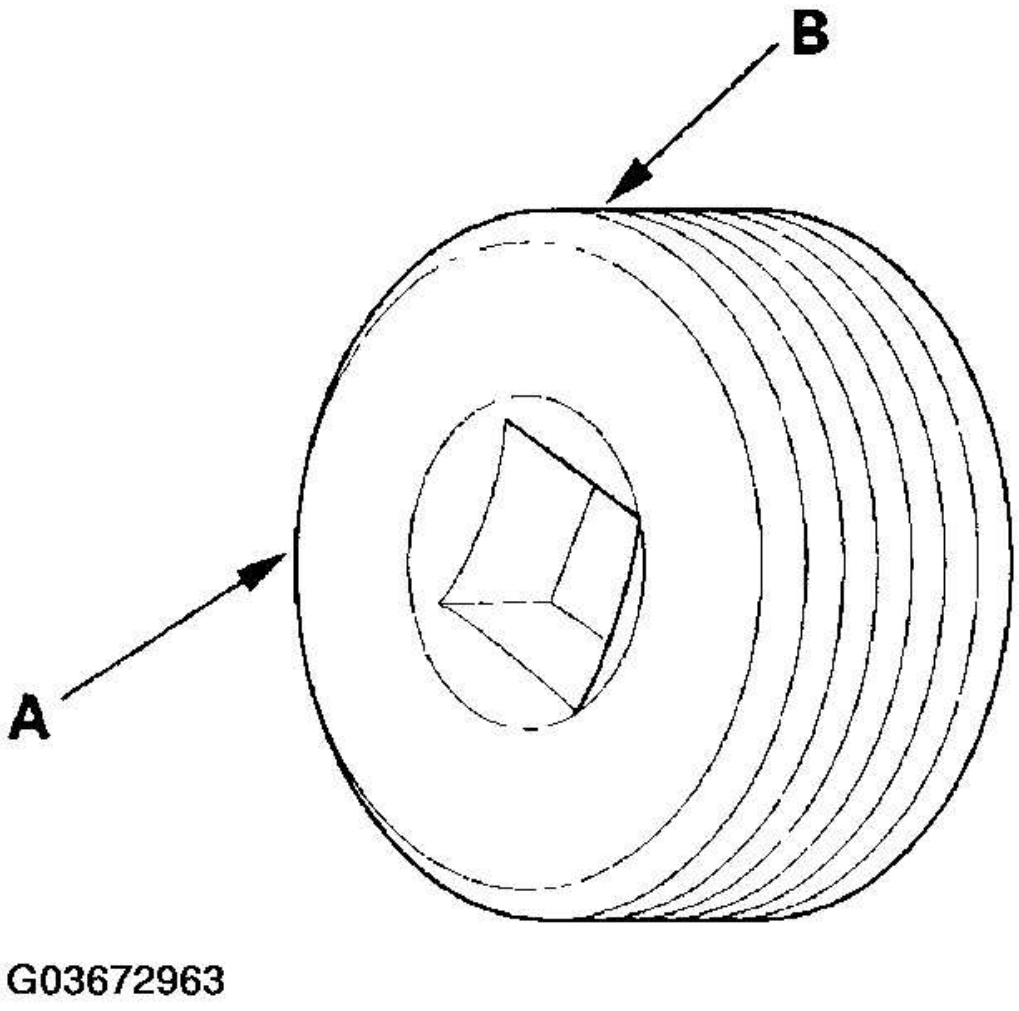


Fig. 31: Identifying Sealant From Rack Guide Screw
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Tighten the rack guide screw (A) to 25 N.m (2.5 kgf.m, 18 lbf.ft), then loosen it.

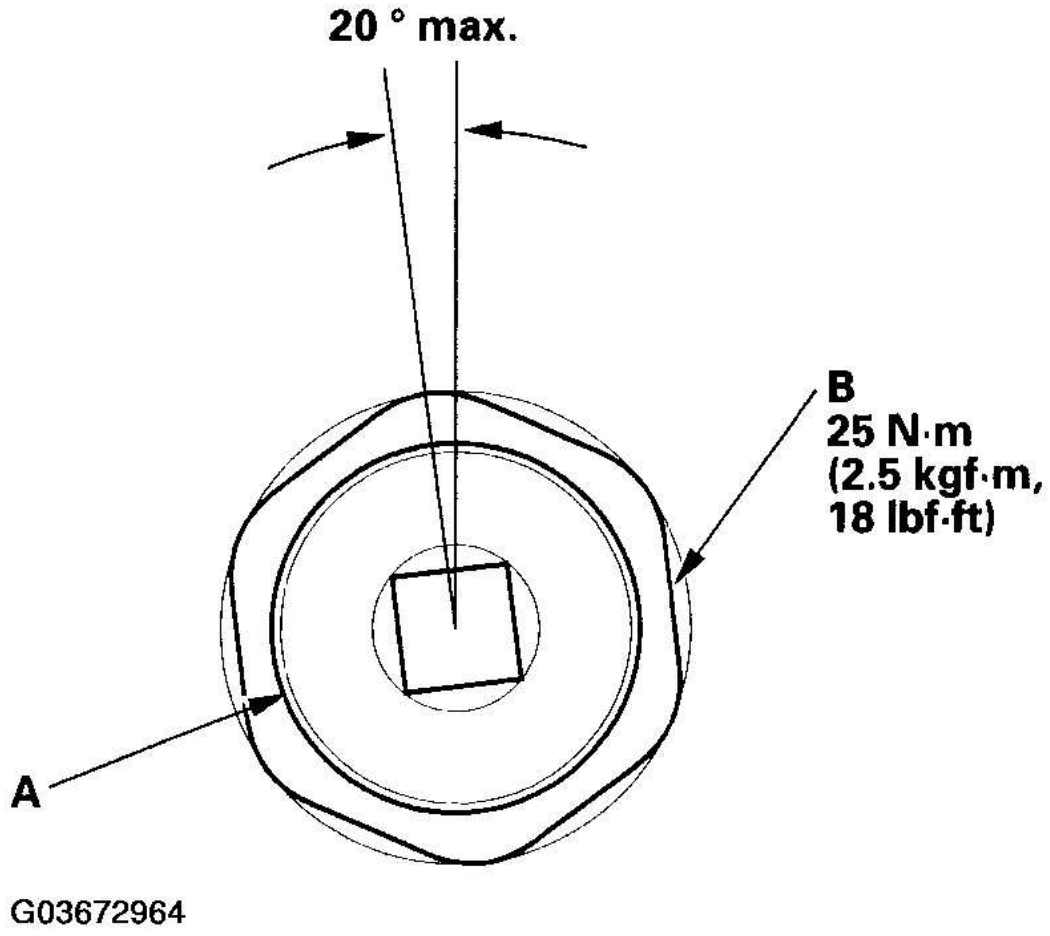


Fig. 32: Tightening Rack Guide Screw
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Retighten the rack guide screw to 3.9 N.m (0.4 kgf.m, 3 lbf.ft), then back it off to the specified angle.

   Specified return angle: 20° max.

6. Hold the rack guide screw stationary with a wrench, and tighten the locknut by hand until it's fully seated.
7. Install the special tool on the locknut (B), and hold the rack guide screw stationary with a wrench.

Tighten the locknut to the specified torque with the special tool.

8. Check for unusual steering effort through the complete turning travel.
9. Check the steering wheel rotation play and the power assist, see **PUMP PRESSURE TEST WITH T/N 07406-0010001** .

TKS-STEERING GEARBOX

1. Set the wheels in the straight ahead position.
2. Loosen the rack guide screw locknut (A) with the special tool, then remove the rack guide screw (B).

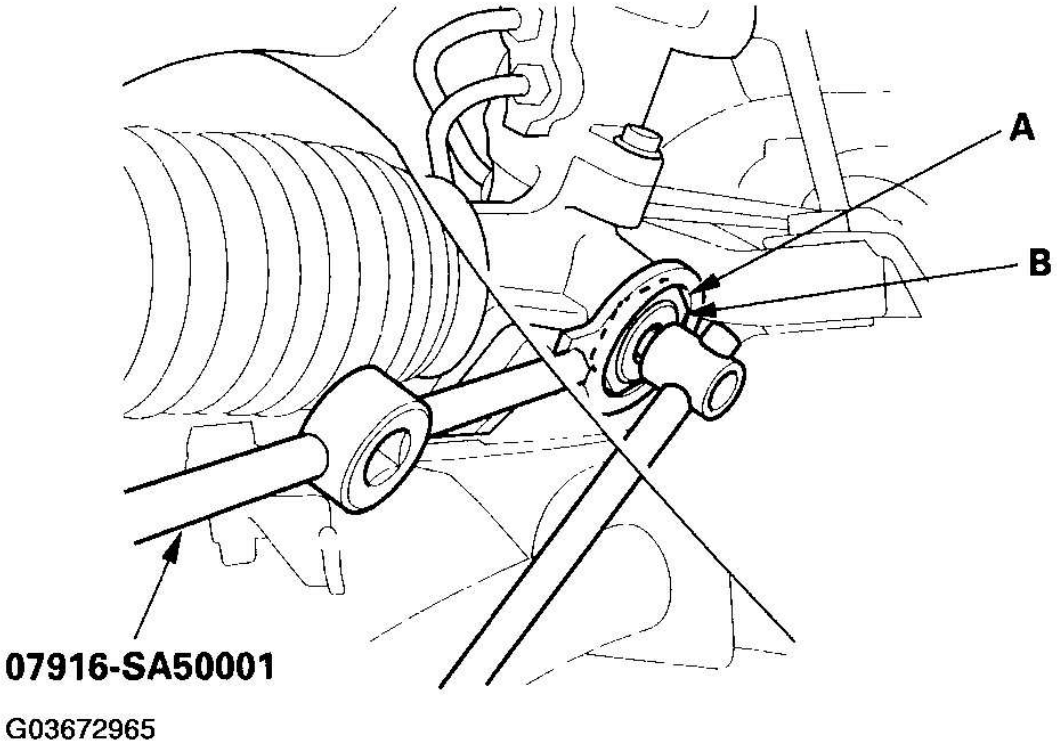


Fig. 33: Loosening Rack Guide Screw Locknut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the old sealant from rack guide screw (A) threaded section, and apply new sealant (Loctite 565) all around the first three threads (B). Loosely install

the rack guide screw on the steering gearbox.

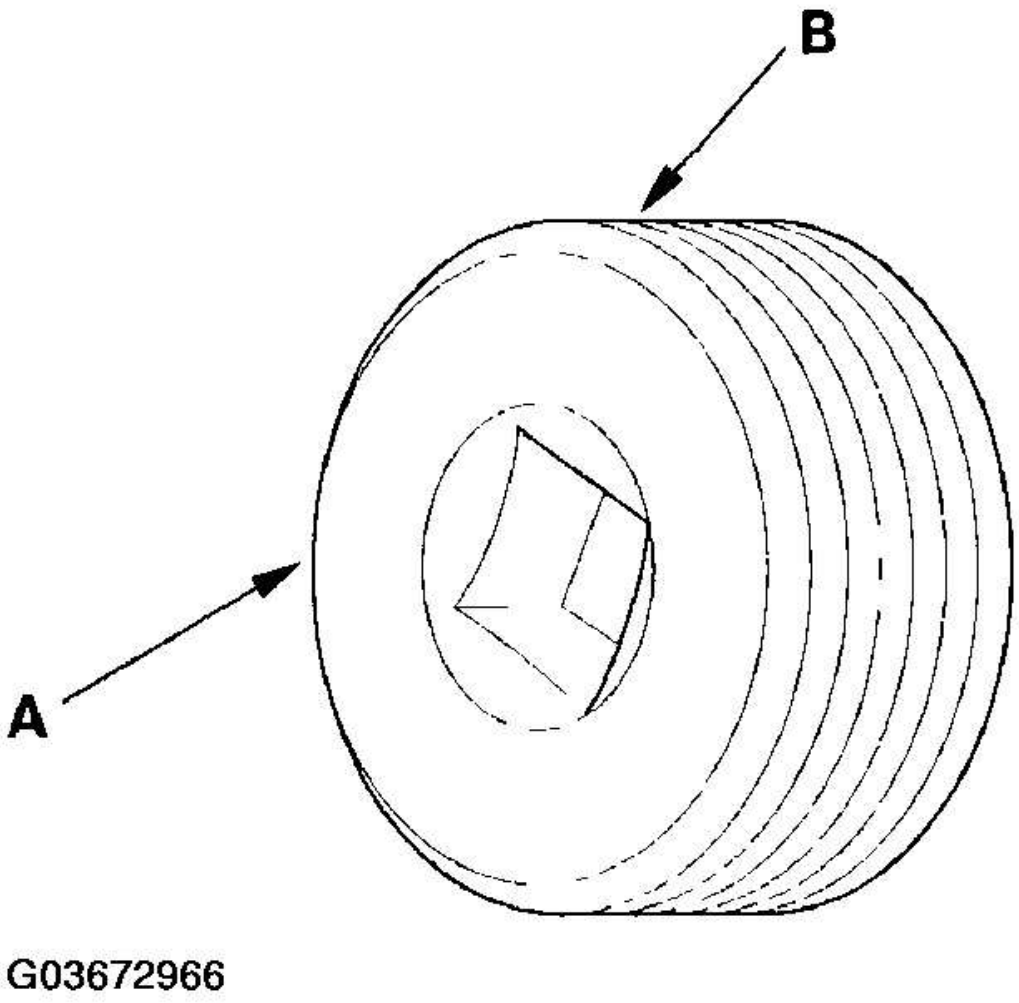


Fig. 34: Removing Sealant From Rack Guide Screw
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Tighten the rack guide screw (A) to 22 N.m (2.2 kgf.m, 16 lbf.ft), then loosen it.

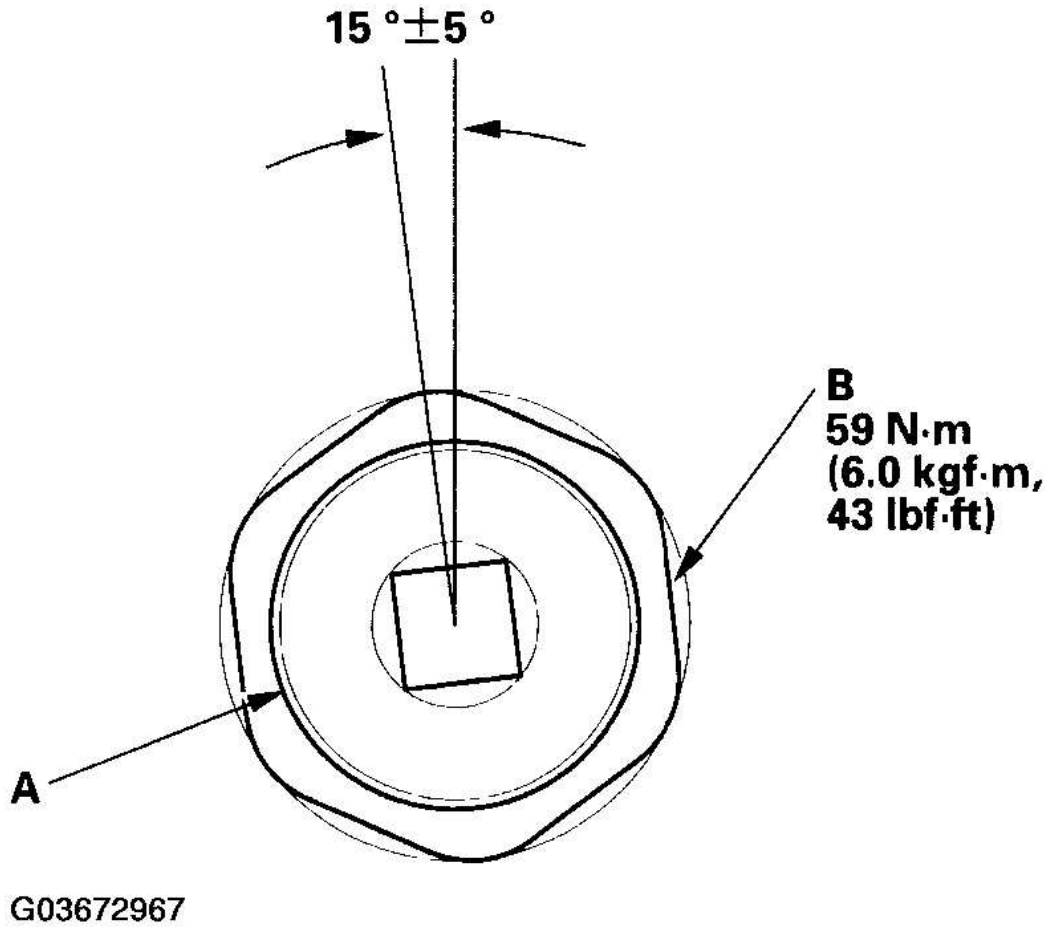


Fig. 35: Tightening Rack Guide Screw
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Retighten the rack guide screw to 3.9 N.m (0.4 kgf.m, 3 lbf.ft), then back it off to the specified angle.

   Specified return angle: 15°+/-5°

6. Hold the rack guide screw stationary with a wrench, and tighten the locknut by hand until it's fully seated.
7. Install the special tool on the locknut (B), and hold the rack guide screw stationary with a wrench.

Tighten the locknut to the specified torque with the special tool.

8. Check for unusual steering effort through the complete turning travel.
9. Check the steering wheel rotation play and the power assist, (see **PUMP PRESSURE TEST WITH T/N 07406-0010001**).

STEERING GEARBOX REMOVAL

Special Tools Required

- Ball joint remover, 28 mm 07MAC-SL0A202
- Subframe adaptor EQS02C000016

(Available through the Honda Tool and Equipment program 888-424-6857)

Note these items during removal:

- Using solvent and a brush, wash any oil and dirt off the valve body unit, its lines, and the end of the gearbox. Blow dry with compressed air.
- Make sure to remove the steering wheel before disconnecting the steering joint. Damage to the cable reel can occur.

1. Drain the power steering fluid (see step 1 in **Fluid Replacement**).
2. Raise the front of vehicle, and support it with safety stands in the proper locations, refer to **LIFT AND SUPPORT POINTS** .
3. Remove the front wheels.
4. Remove the steering wheel, refer to **STEERING WHEEL REMOVAL** .
5. Remove the steering joint cover A.

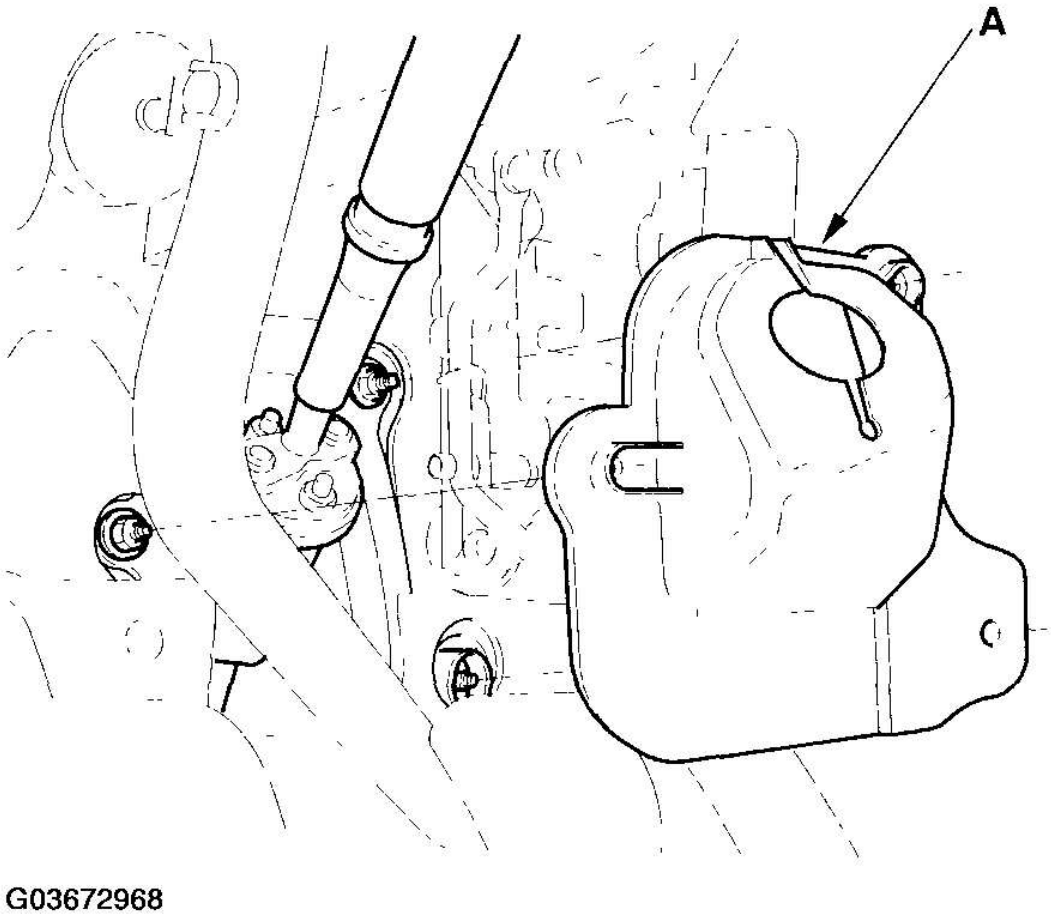


Fig. 36: Identifying Steering Joint Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the steering joint bolt (A), and disconnect the steering joint by moving the steering joint (B) toward the column. Hold the slider shaft (C) on the column with a piece of wire (D) between the joint yoke (E) on the slider shaft to the joint yoke on the upper shaft, refer to **STEERING COLUMN REMOVAL AND INSTALLATION** .

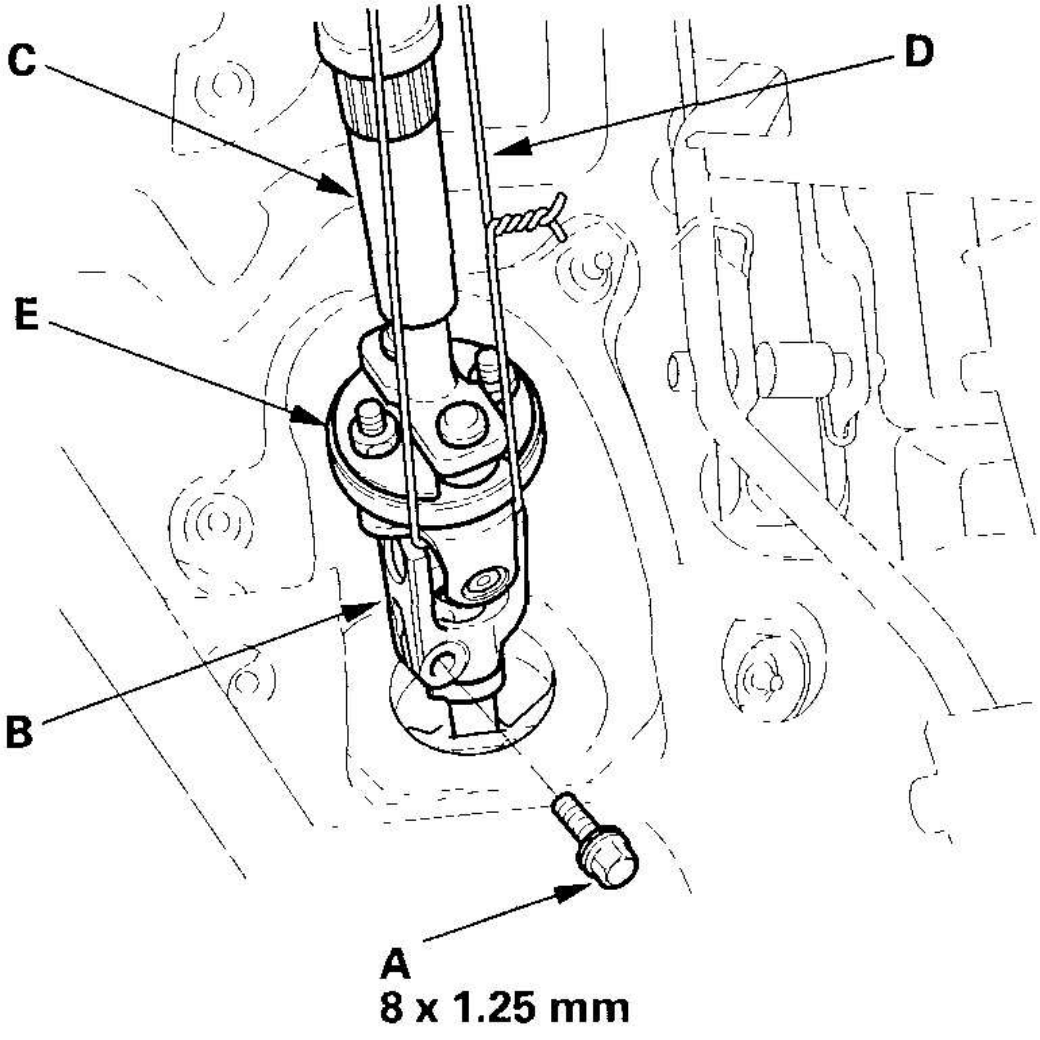


Fig. 37: Identifying Steering Joint Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the steering joint cover B. Be careful not to damage the mating surface on the joint cover B and pinion shaft grommet. Replace the cover seal (A) if necessary.

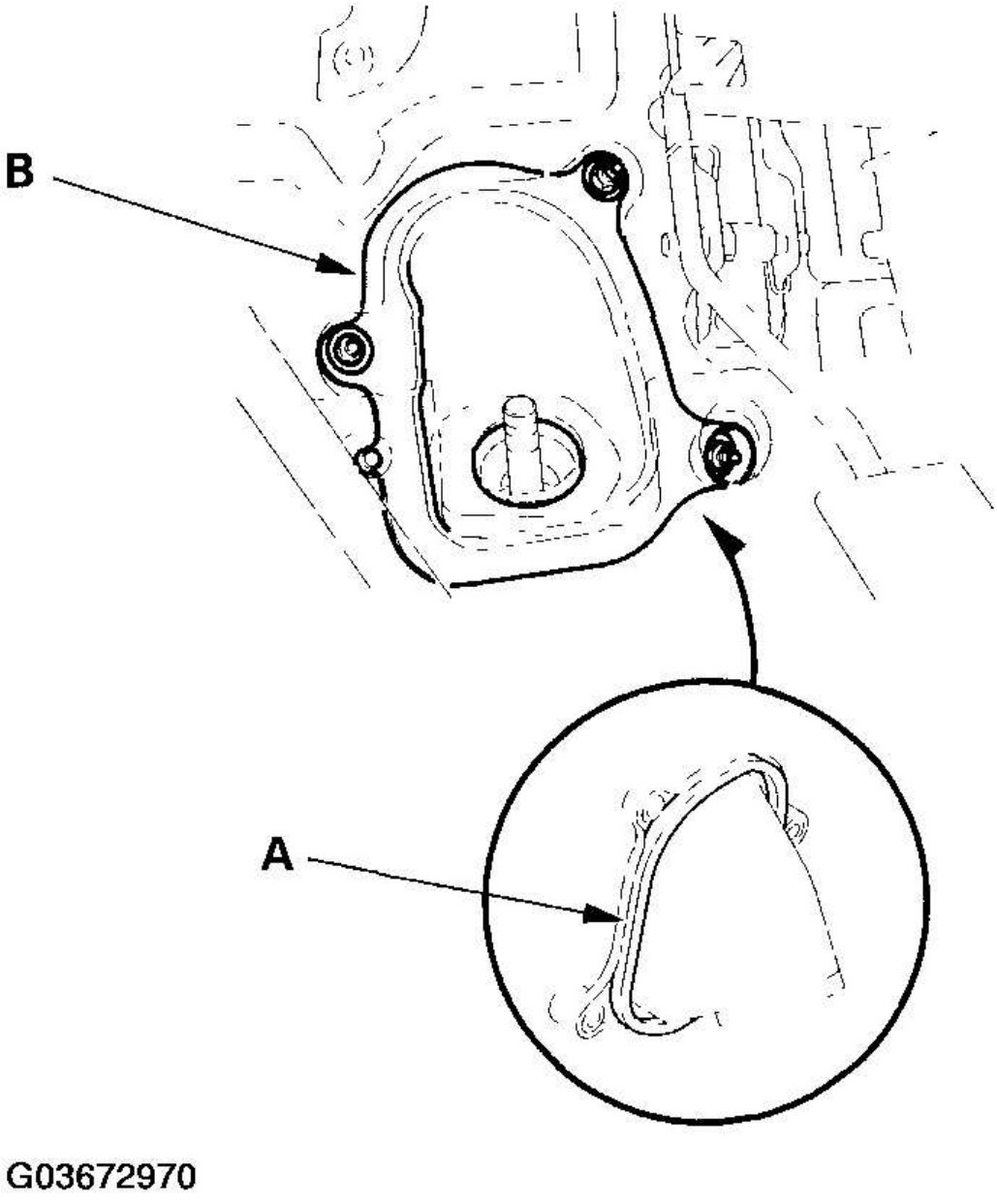


Fig. 38: Identifying Steering Joint Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove and discard the cotter pin (A) from the tie-rod ball joint nut (B), then loosen the nut.

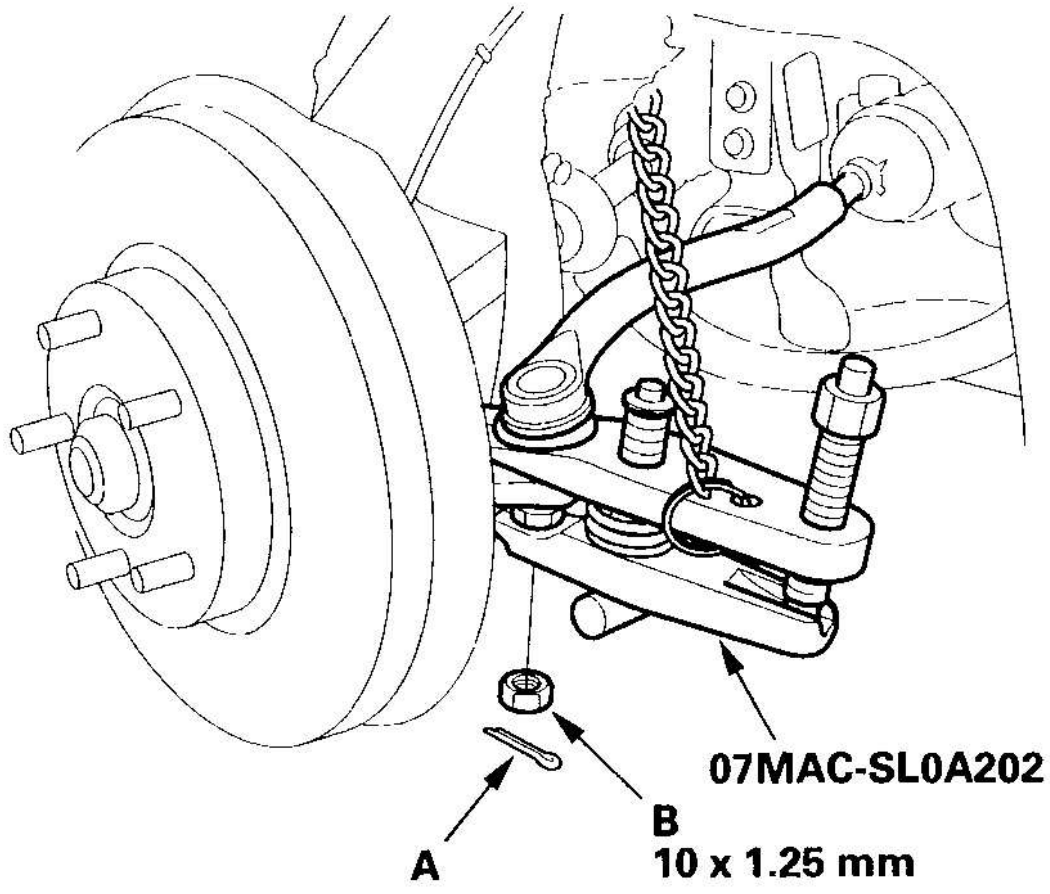


Fig. 39: Removing And Discarding Cotter Pin From Tie-Rod Ball Joint Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Separate the tie-rod ball joint and knuckle using the special tool, refer to **BALL JOINT REMOVAL** .
10. Remove the P/S heat baffle plate (A).

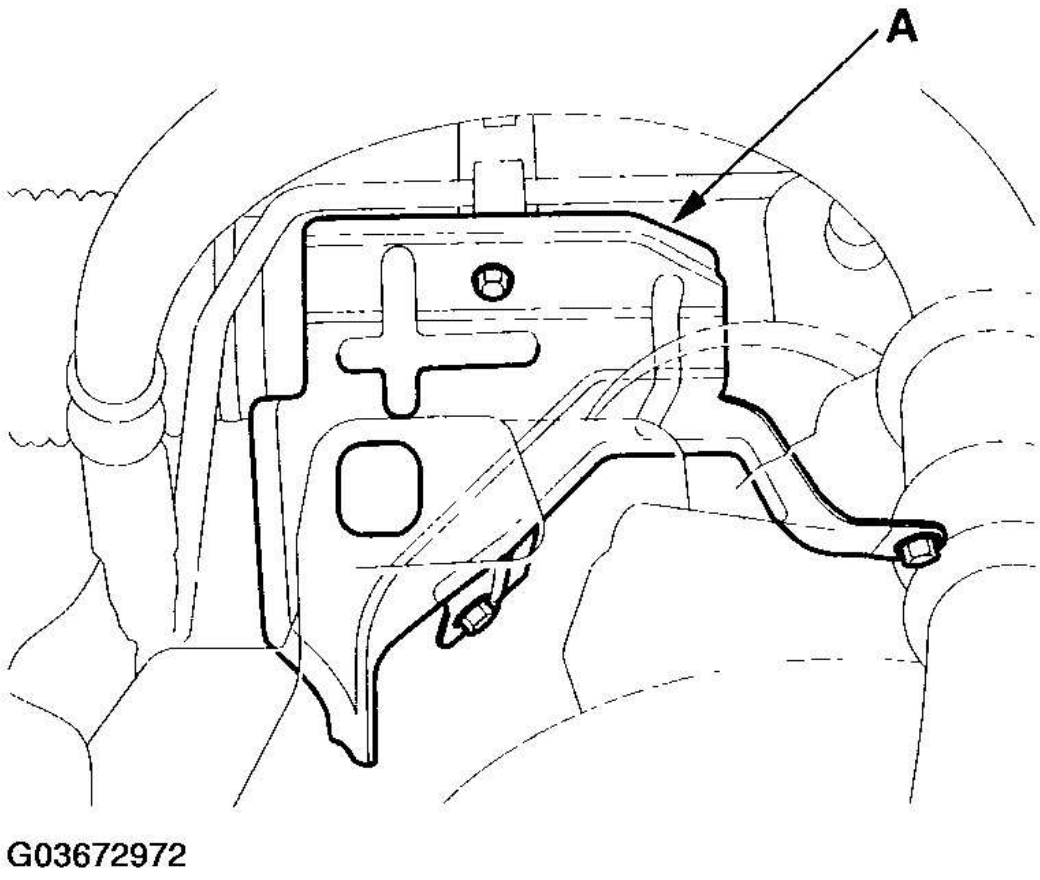


Fig. 40: Identifying P/S Heat Baffle Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the feed line holder mounting bolt (A) on the front suspension subframe.

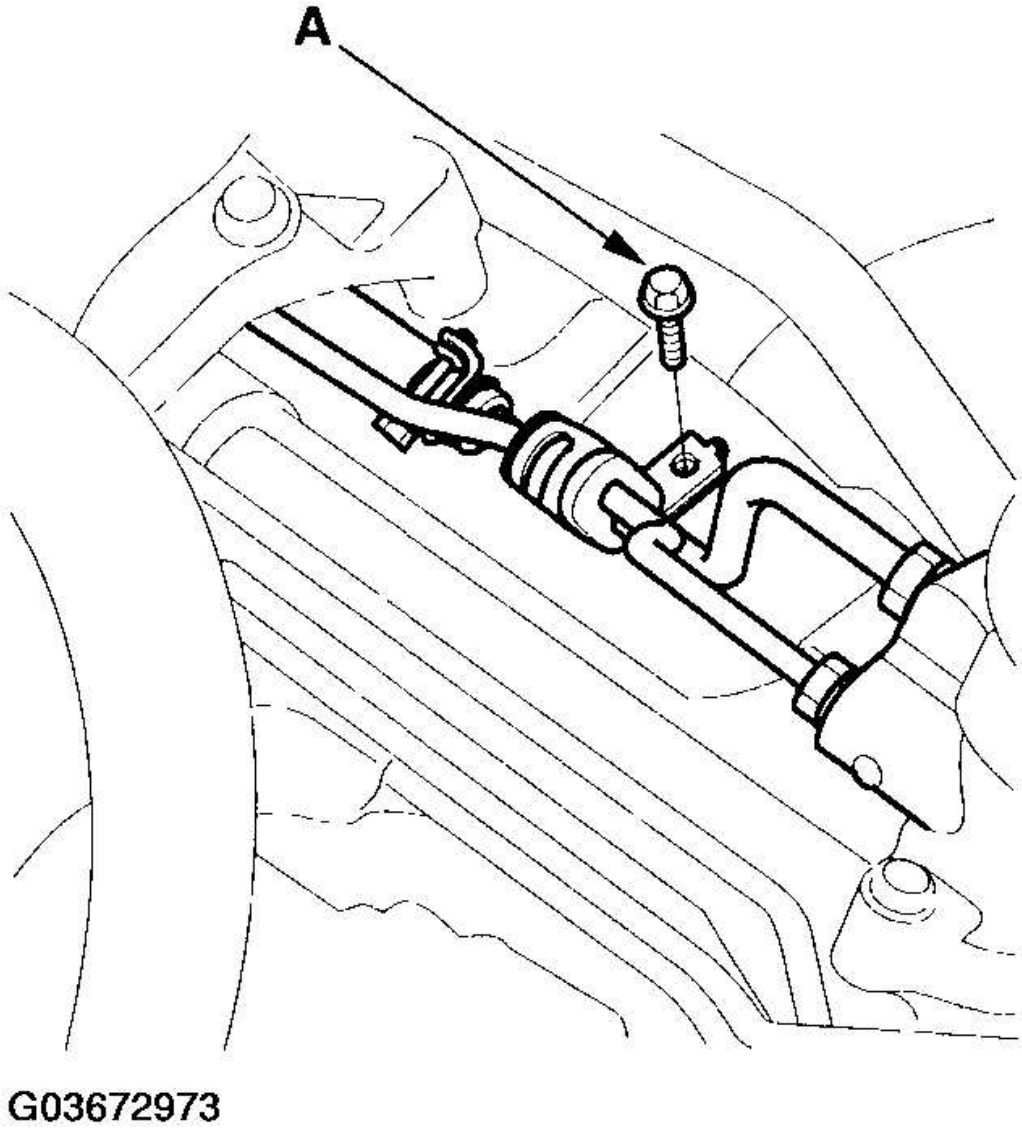


Fig. 41: Removing Feed Line Holder Mounting Bolt On Front Suspension Subframe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the feed line holder mounting bolt (A) and return hose (B) from the gearbox mounting bracket (C).

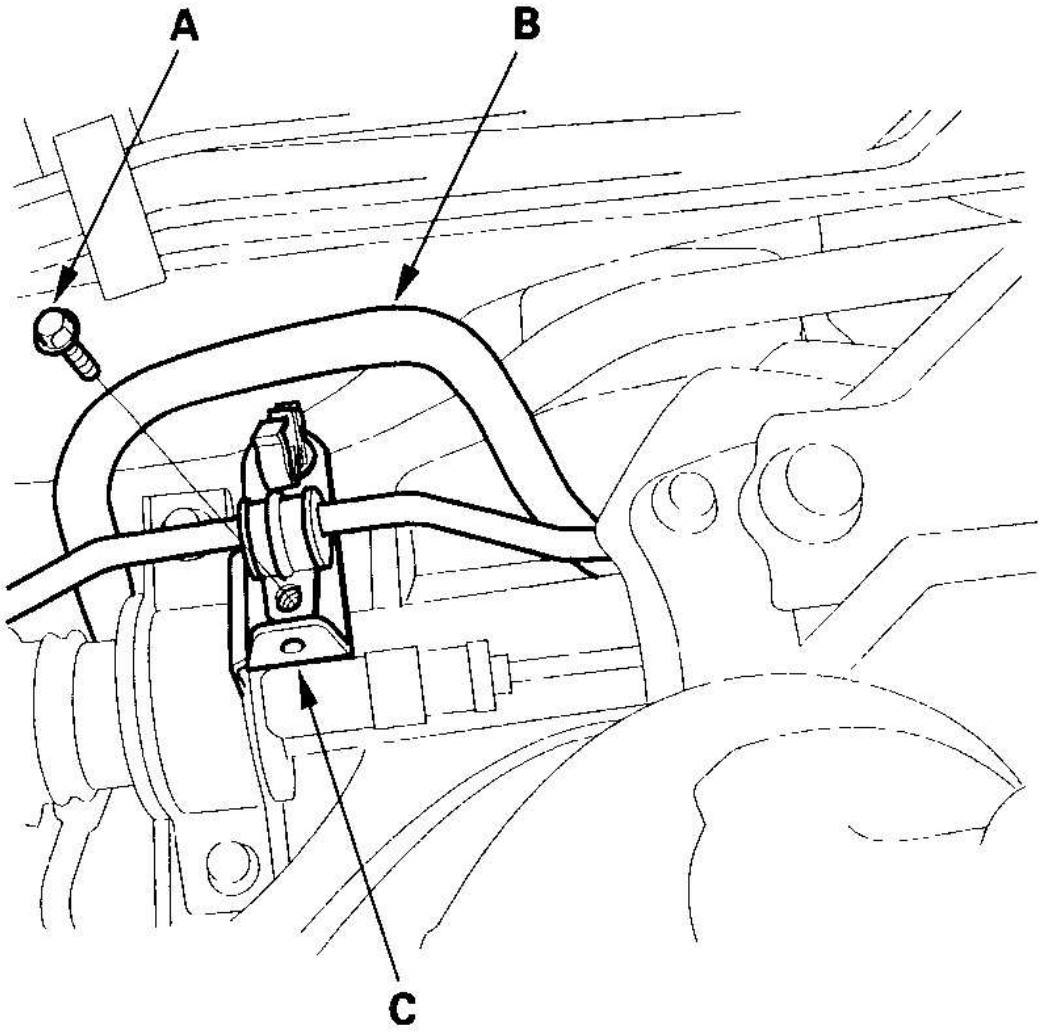


Fig. 42: Identifying Feed Line Holder Mounting Bolt And Return Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Place several shop towels under the line connections, and cover the gearbox mounting part to protect it from the power steering fluid. Loosen the flare nut (A), and disconnect the feed line (B).

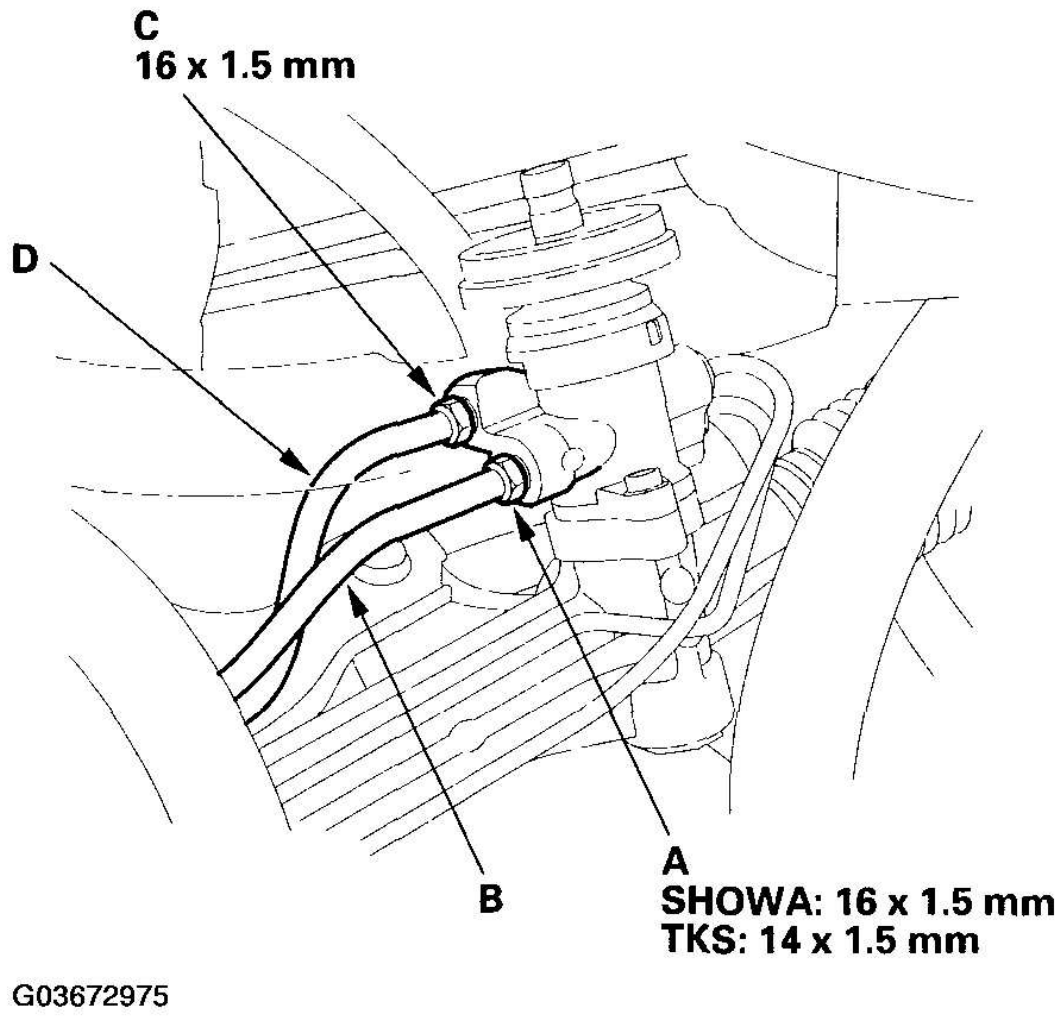


Fig. 43: Disconnecting Feed Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Loosen the flare nut (C), and disconnect the return line (D).
15. After disconnecting the lines, plug or seal them with a piece of tape or equivalent to prevent foreign materials from entering.

NOTE: Do not loosen the cylinder line A and B between the valve body unit and the cylinder.

16. Attach the special tool to the front suspension subframe (A) with hanging the

hook of the special tool over the front of the subframe, then tighten the special tool screw.

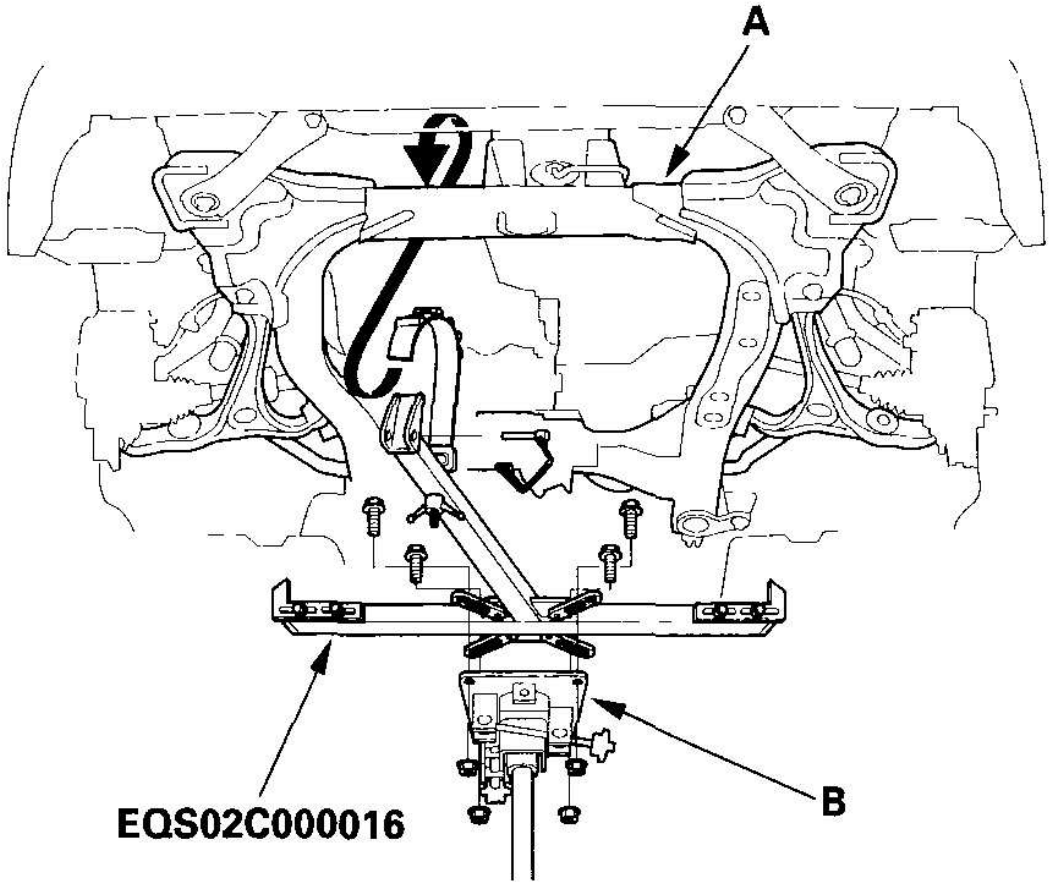


Fig. 44: Attaching Special Tool To Front Suspension Subframe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Raise the jack (B) and line up the slots in the arms with the bolt holes on the corner of the jack base, then attach them with bolts securely.
18. Remove the front suspension subframe right middle mount bolts (A).

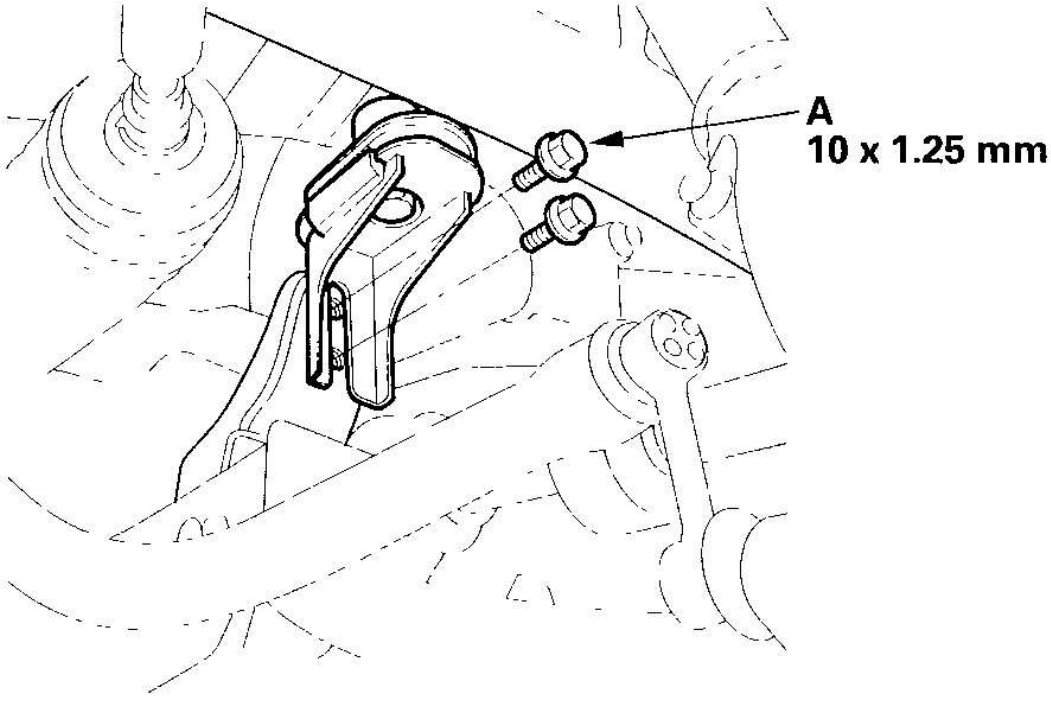


Fig. 45: Identifying Front Suspension Subframe Right Middle Mount Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Remove the front suspension subframe left middle mount (A).

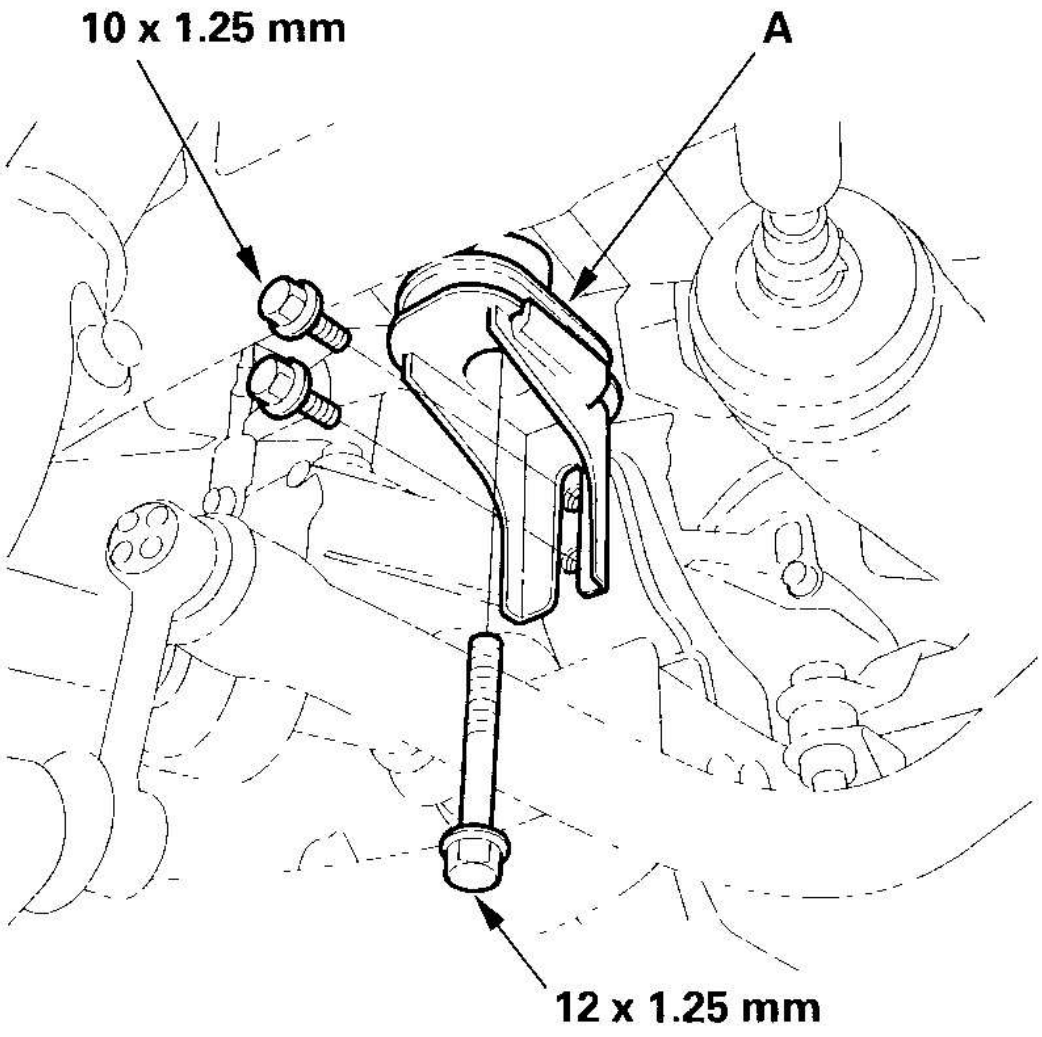


Fig. 46: Identifying Front Suspension Subframe Left Middle Mount
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Remove the steering gearbox mounting bolts on the left gearbox mount, and remove the steering stiffener plate (A).

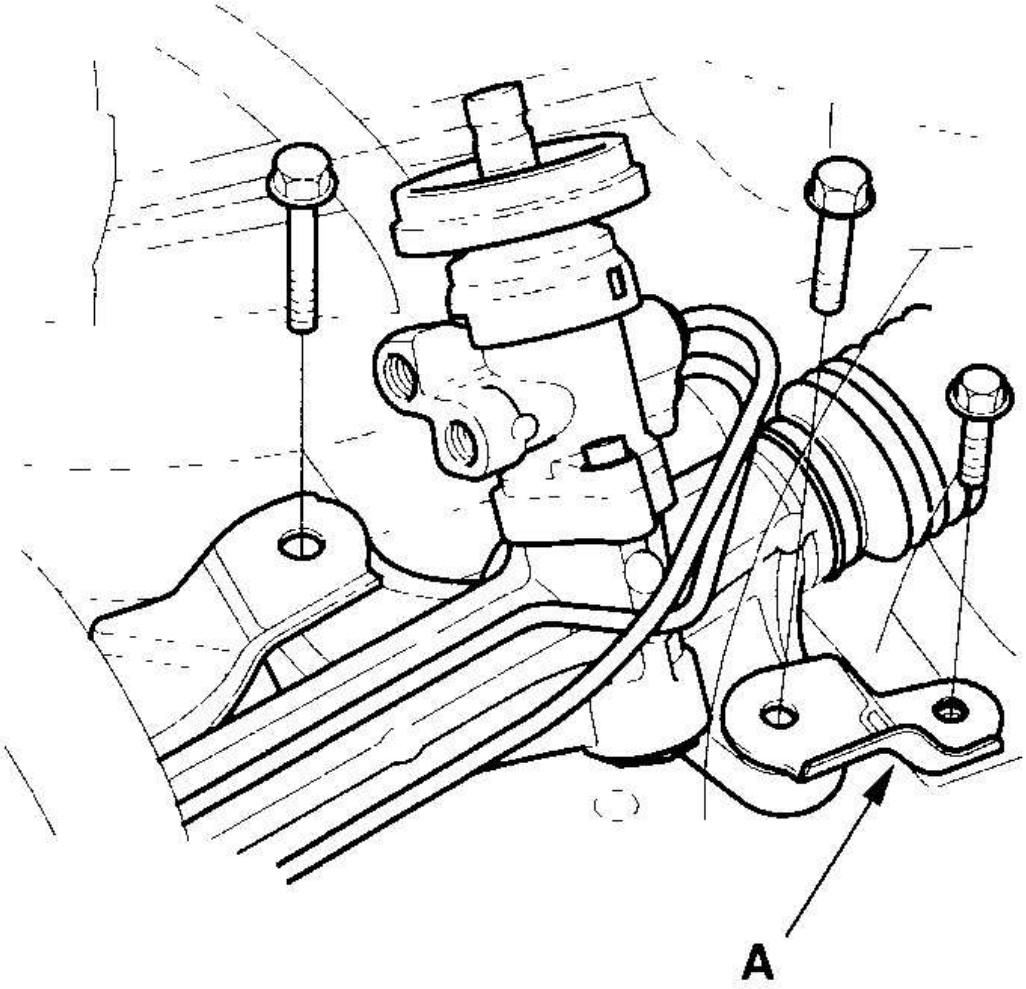


Fig. 47: Identifying Steering Stiffener Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Remove the front suspension subframe rear bracket (A) mounting bolt (B).

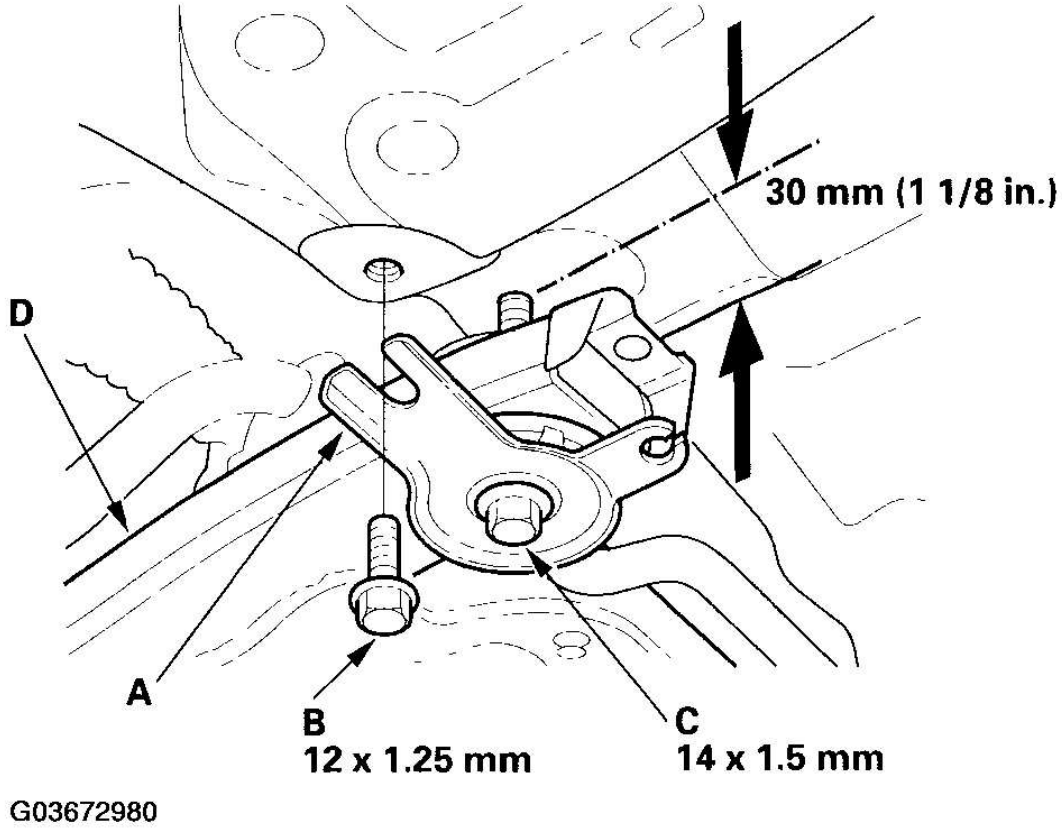


Fig. 48: Identifying Front Suspension Subframe Rear Bracket Mounting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Loosen the two front suspension subframe mounting bolts (C) on right and left, and slowly lower the jack supporting subframe (D) with special tool until the subframe has dropped 30 mm (1 1/8 in.) total.
23. Remove the two flange bolts from the right side of the gearbox, then remove the gearbox mounting bracket (A) and cushion (B).

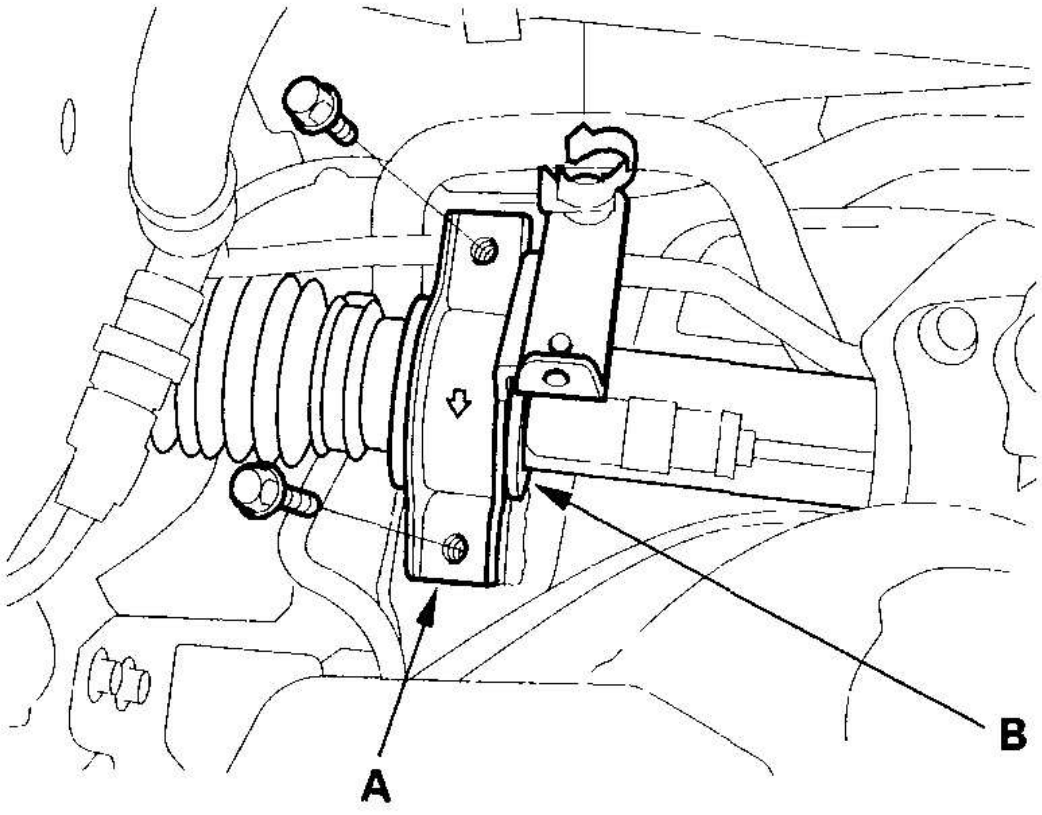


Fig. 49: Identifying Gearbox Mounting Bracket And Cushion
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Move the steering gearbox toward the front, and remove the pinion shaft grommet (A) from the top of the valve body unit.

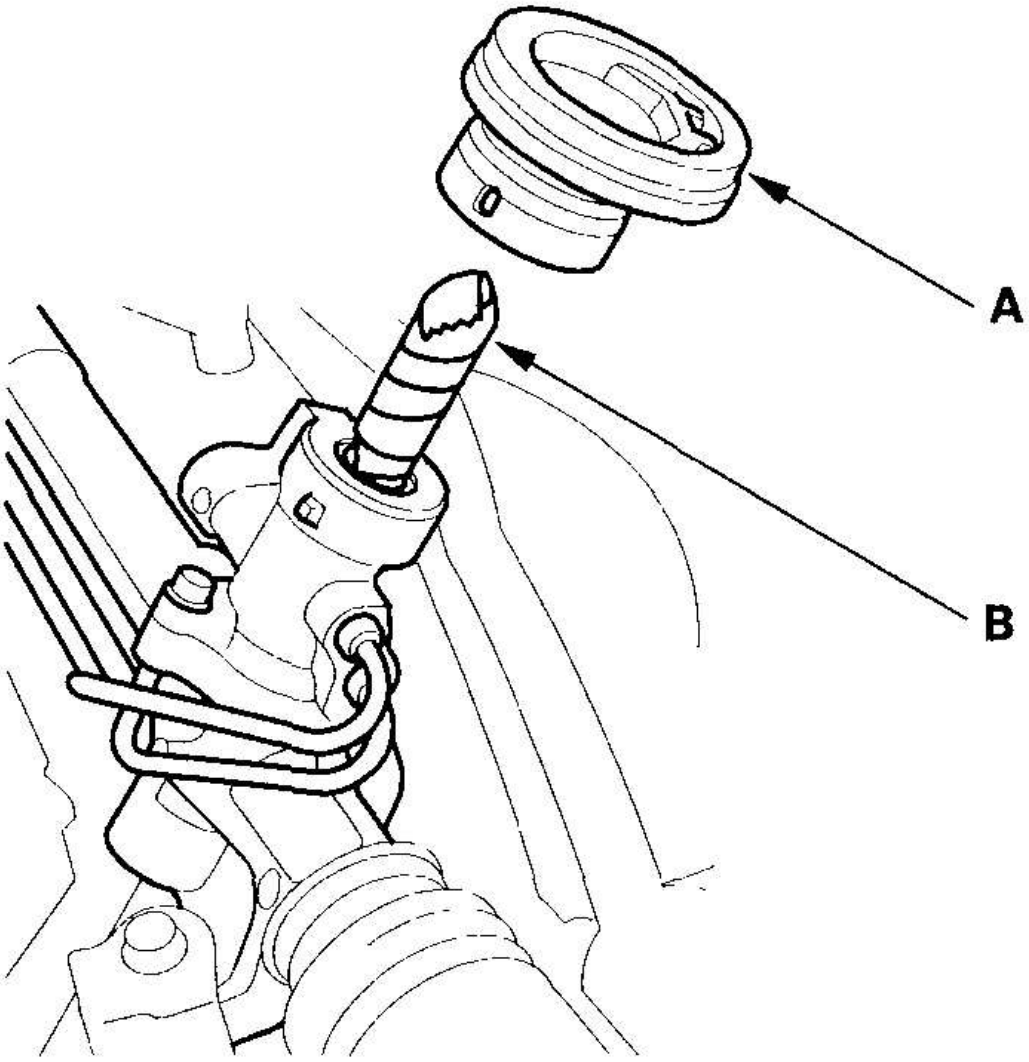


Fig. 50: Identifying Pinion Shaft Grommet From Top Of Valve Body Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

25. Apply vinyl tape (B) to the splines on the pinion shaft.
26. Apply vinyl tape or equivalent material (A) to brake lines (B) to protect it from the pinion shaft.

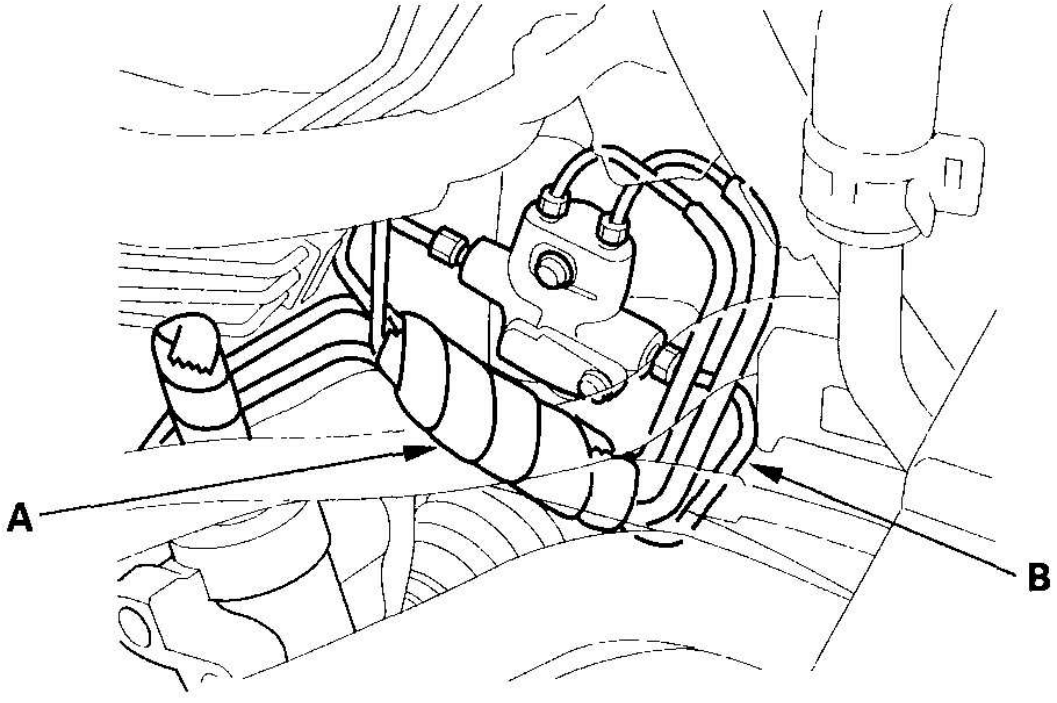
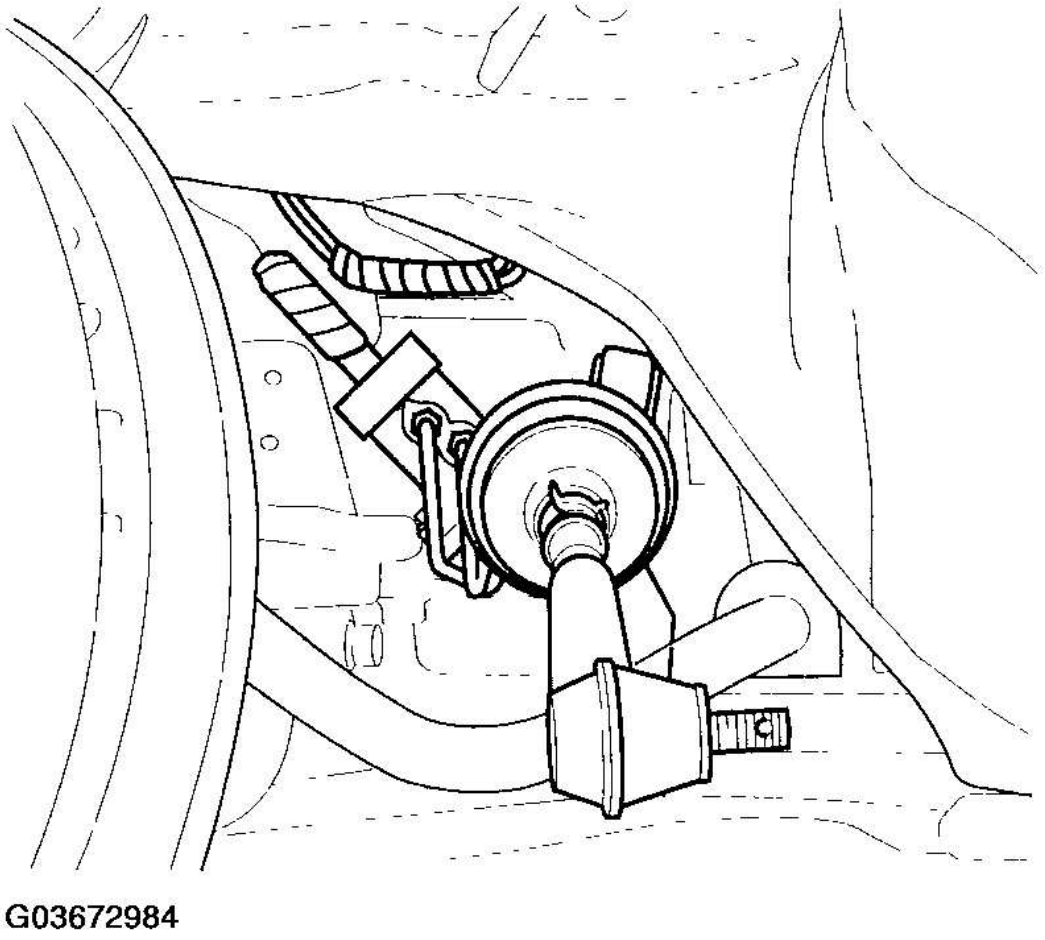


Fig. 51: Applying Vinyl Tape To Brake Lines
Courtesy of AMERICAN HONDA MOTOR CO., INC.

27. Move the steering gearbox to the driver's side, and rotate it so the pinion shaft points toward the front of the vehicle.



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Fig. 52: Moving Steering Gearbox To Driver's Side
Courtesy of AMERICAN HONDA MOTOR CO., INC.

28. Carefully move the steering gearbox as an assembly toward the driver's side of the vehicle until the pinion shaft clears the wheelwell opening.

    Be careful not to damage the brake lines with the pinion shaft.

29. Remove the steering gearbox through the wheelwell opening on the driver's side.

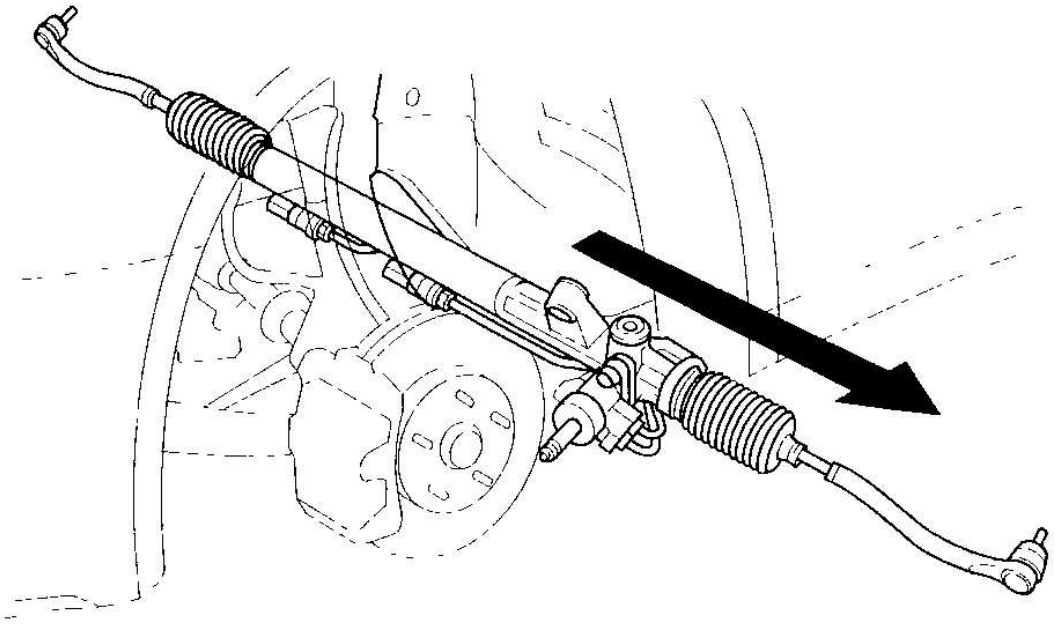


Fig. 53: Identifying Steering Gearbox
Courtesy of AMERICAN HONDA MOTOR CO., INC.

30. After removing the steering gearbox, make sure that no power steering fluid gets on the gearbox mount cushions, gearbox housing, surface of the subframe and stiffener. Wipe off any spilled fluid at once.

STEERING GEARBOX OVERHAUL

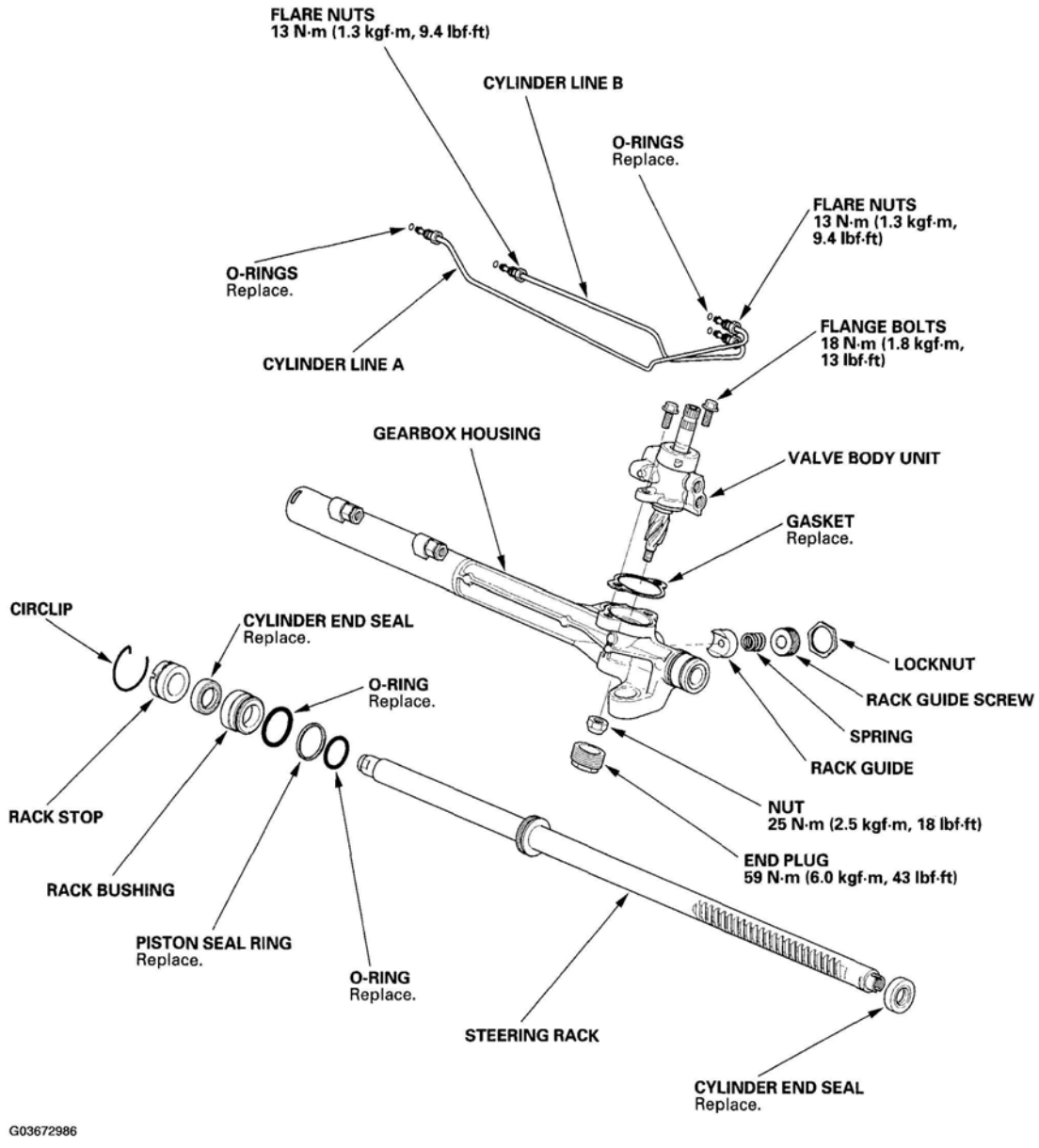


Fig. 54: Exploded View Of TKS-Steering Gearbox (Manufactured In U.S.A. And Mexico Plants Only)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

- Driver handle, 480 mm 070GD-0010100
- Attachment, 24 x 26 mm 07746-0010700

- Pilot, 22 mm 07746-0041000
- Driver 07749-0010000
- Attachment, 42 x 47 mm 07746-0010300
- Piston seal ring guide 07ZAG-S7A0100
- Piston seal ring sizing tool 07ZAG-S7A0200
- Pincer Oetiker 1098, or equivalent, commercially available

NOTE:

- **Refer to Fig. 54 as needed .**
- **For the Showa-made steering gearbox overhaul procedures, see STEERING GEARBOX OVERHAUL .**

Removal

1. Remove the steering gearbox (see **STEERING GEARBOX REMOVAL**).

   Disassembly: TKS-Made Steering Gearbox

2. Remove the boot bands (A) and tie-rod clips (B).

   Pull the boots away from the ends of the steering gearbox.

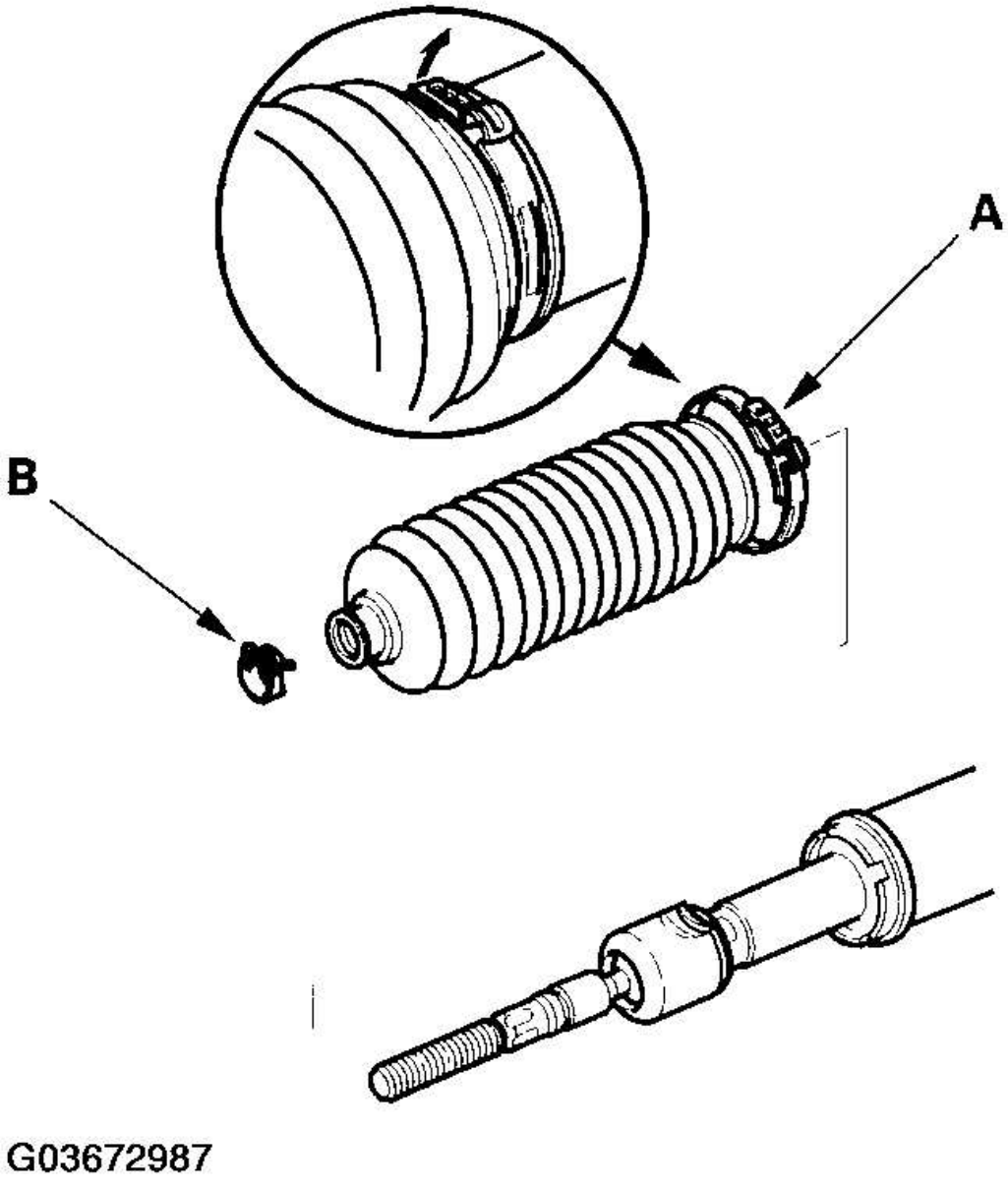


Fig. 55: Identifying Boot Bands And Tie-Rod Clips
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Unbend the lock washer (A).

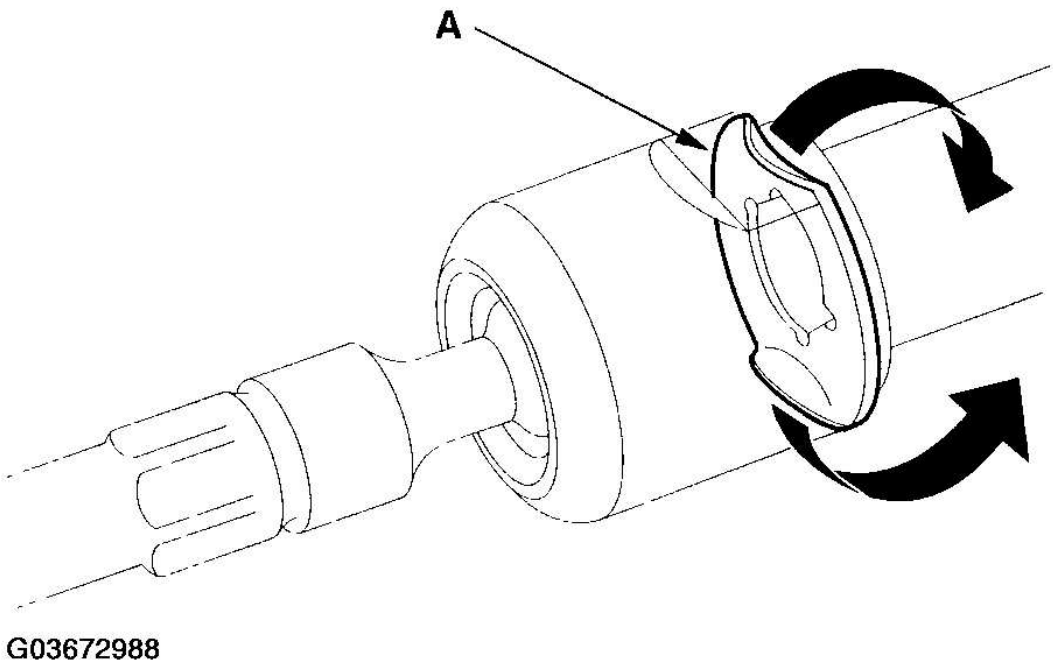


Fig. 56: Unbending Lock Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Hold the flat surface sections (A) of the steering rack (B) with a wrench, and unscrew both rack ends (C) with a wrench. Be careful not to damage the rack surface with the wrench.

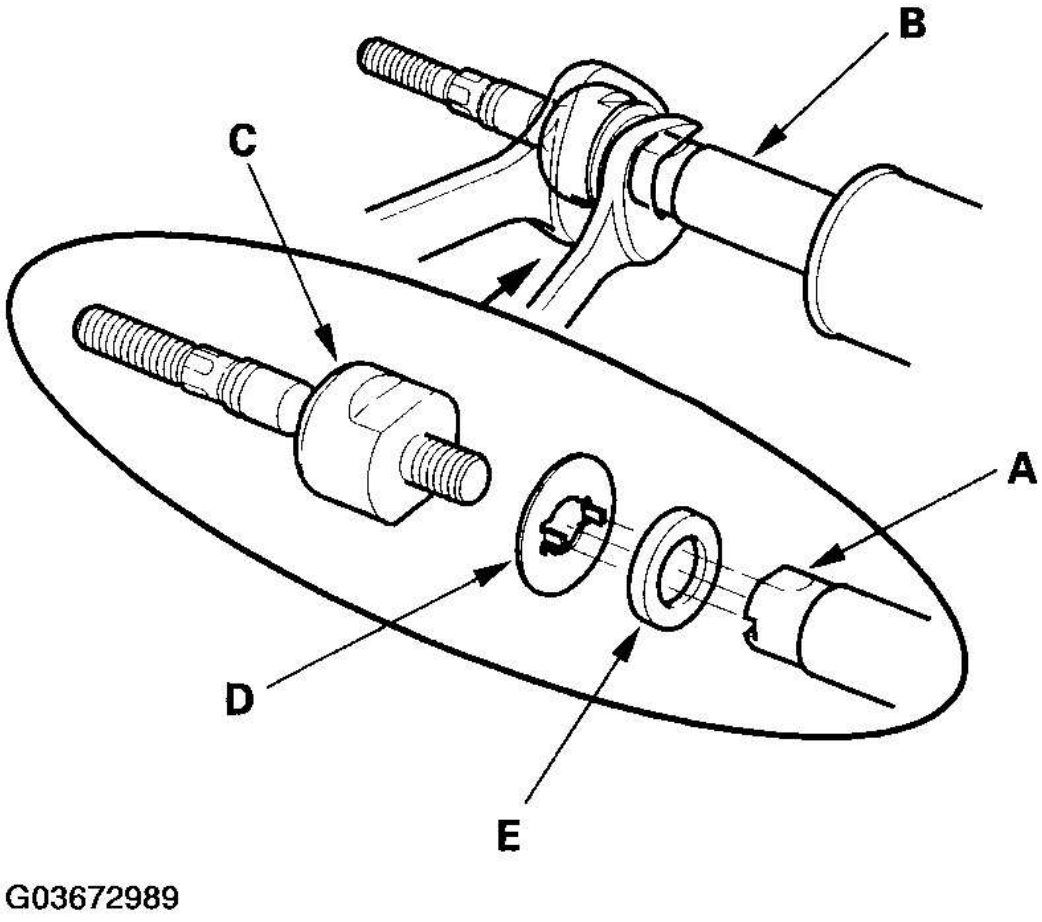


Fig. 57: Holding Flat Surface Sections Of Steering Rack With Wrench
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the lock washer (D) and stop washer (E).
6. Loosen the locknut (A), then remove the rack guide screw (B).

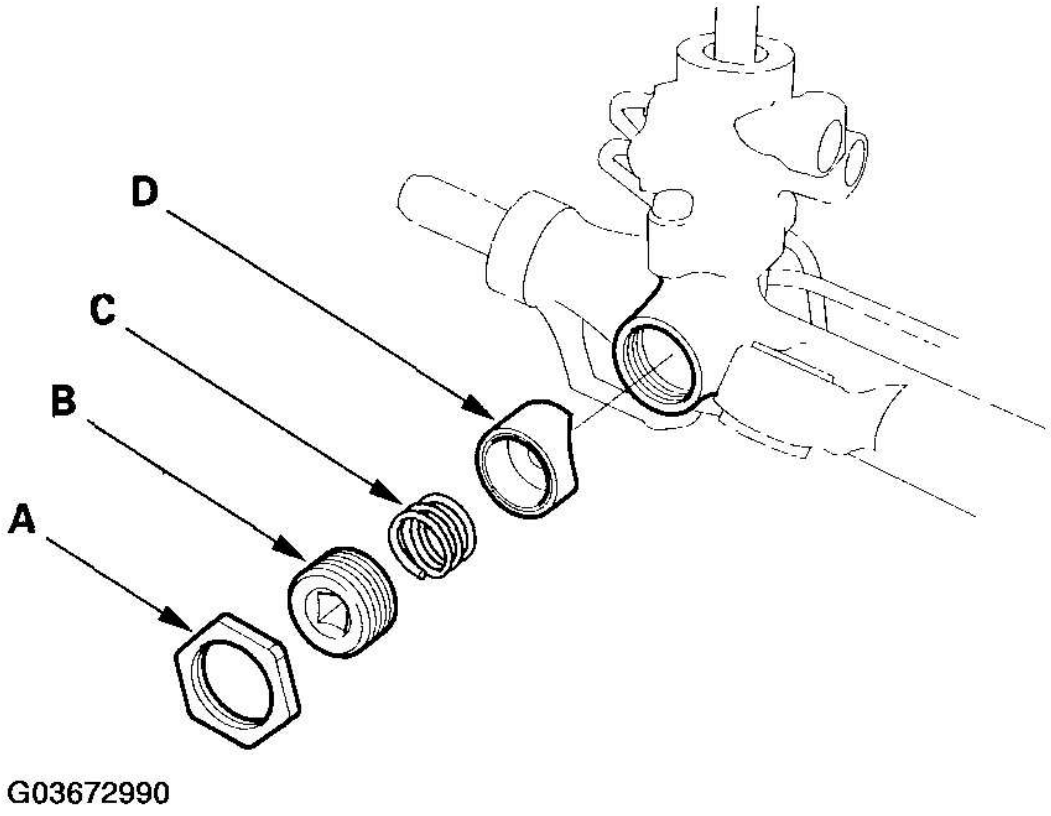


Fig. 58: Loosening Locknut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the spring (C) and the rack guide (D) from the gearbox housing.
8. Remove the cylinder lines from the gearbox.

NOTE: Use a second wrench when loosening the cylinder lines to avoid damage to the fittings on the steering gearbox. Do not loosen the A and B connectors.

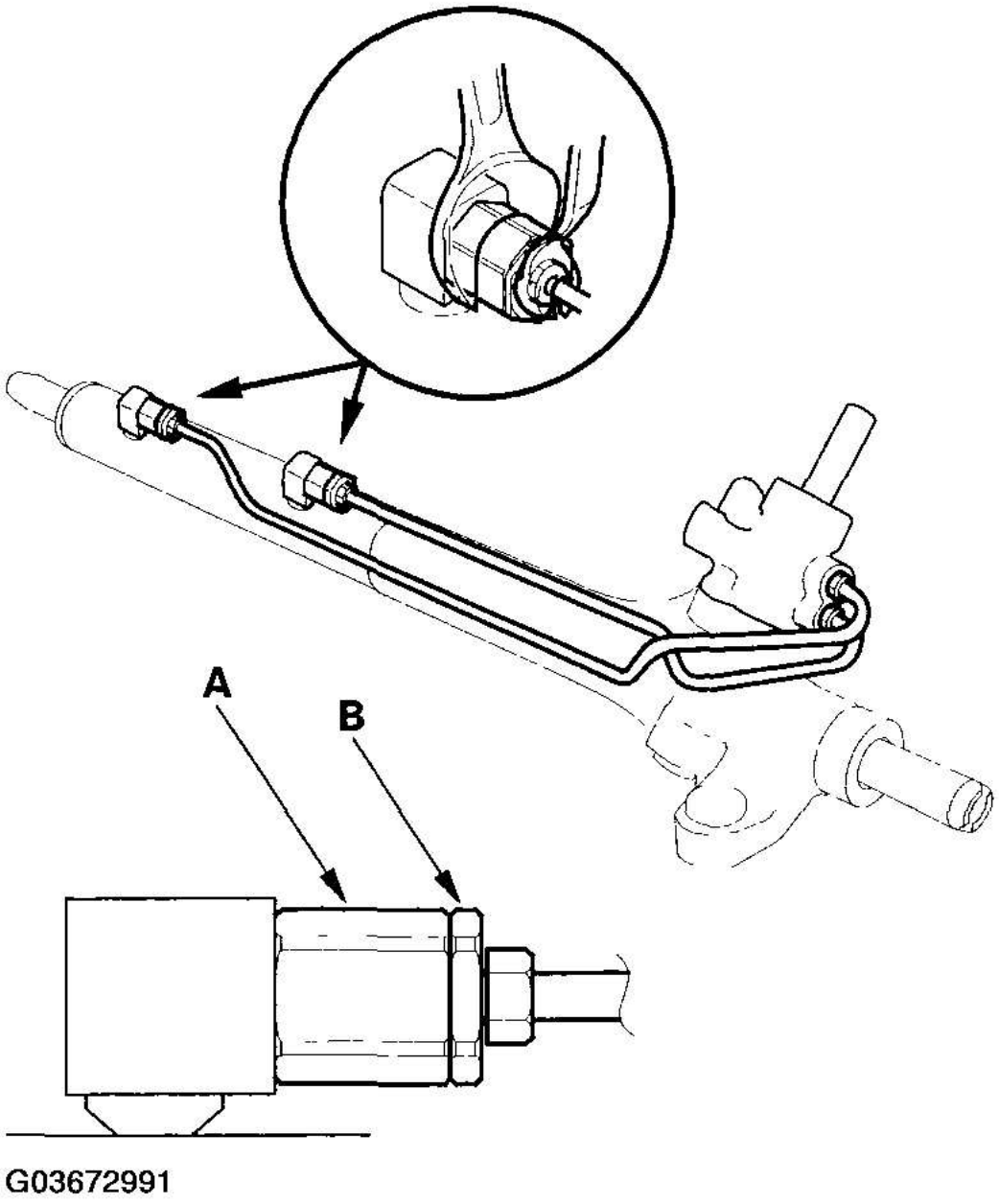
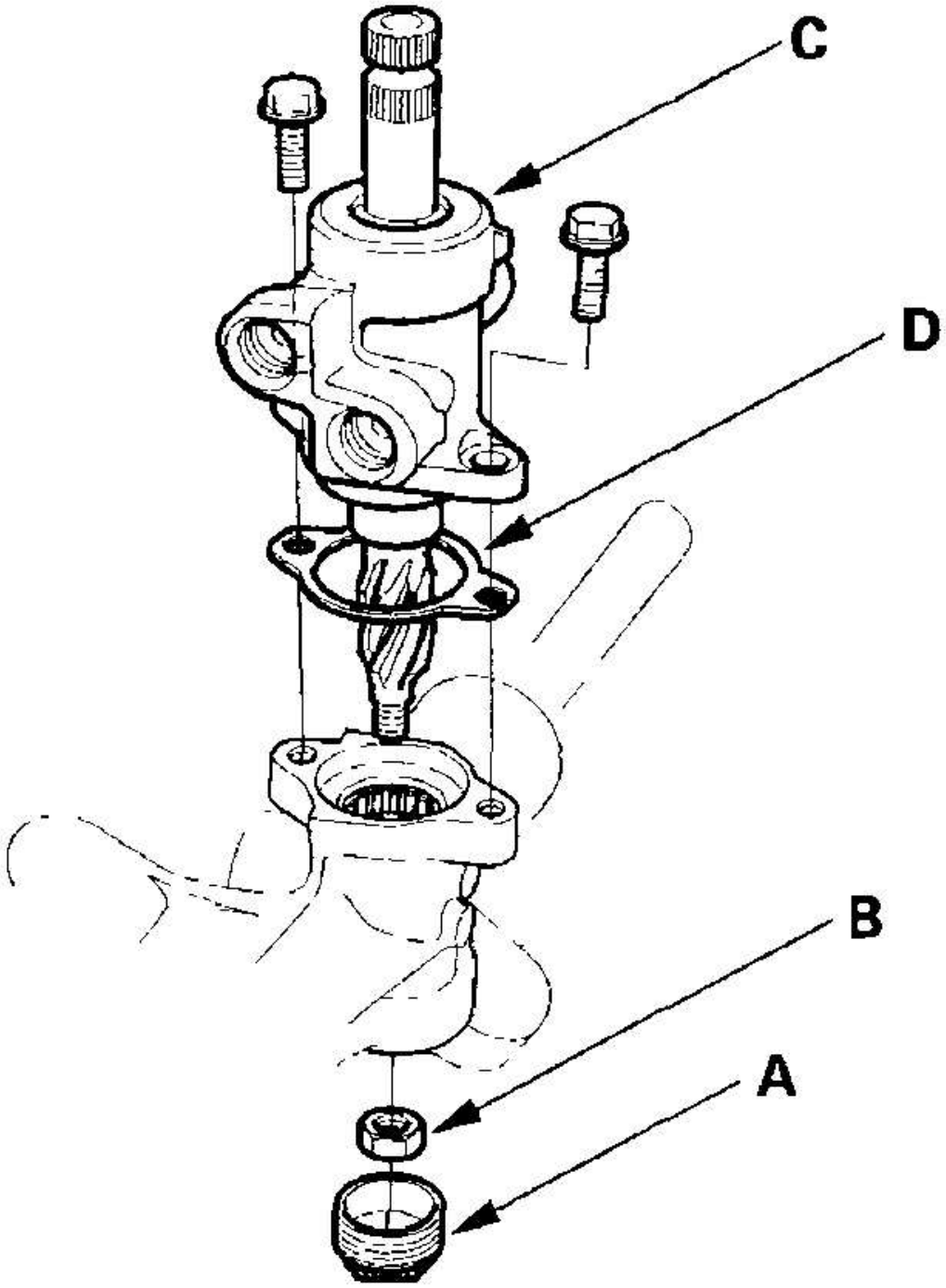


Fig. 59: Removing Cylinder Lines From Gearbox
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Drain the fluid from the cylinder fittings by slowly moving the steering rack back and forth.

10. Remove the end plug (A) from the gearbox housing, then remove the nut (B) from the pinion shaft end.



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Fig. 60: Identifying End Plug From Gearbox Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the two flange bolts, the valve body unit (C), and gasket (D) from the gearbox. Check that the valve turns smoothly by turning the pinion shaft. If any play or roughness is felt, replace the valve body unit with a new part. Do not try to disassemble the valve body unit.
12. Slide the steering rack all the way to the left.
13. Turn the rack stop (A) counterclockwise until the end (B) of the circlip (C) sticks out from the hole (D) in the cylinder housing. Then turn it clockwise to remove the circlip.

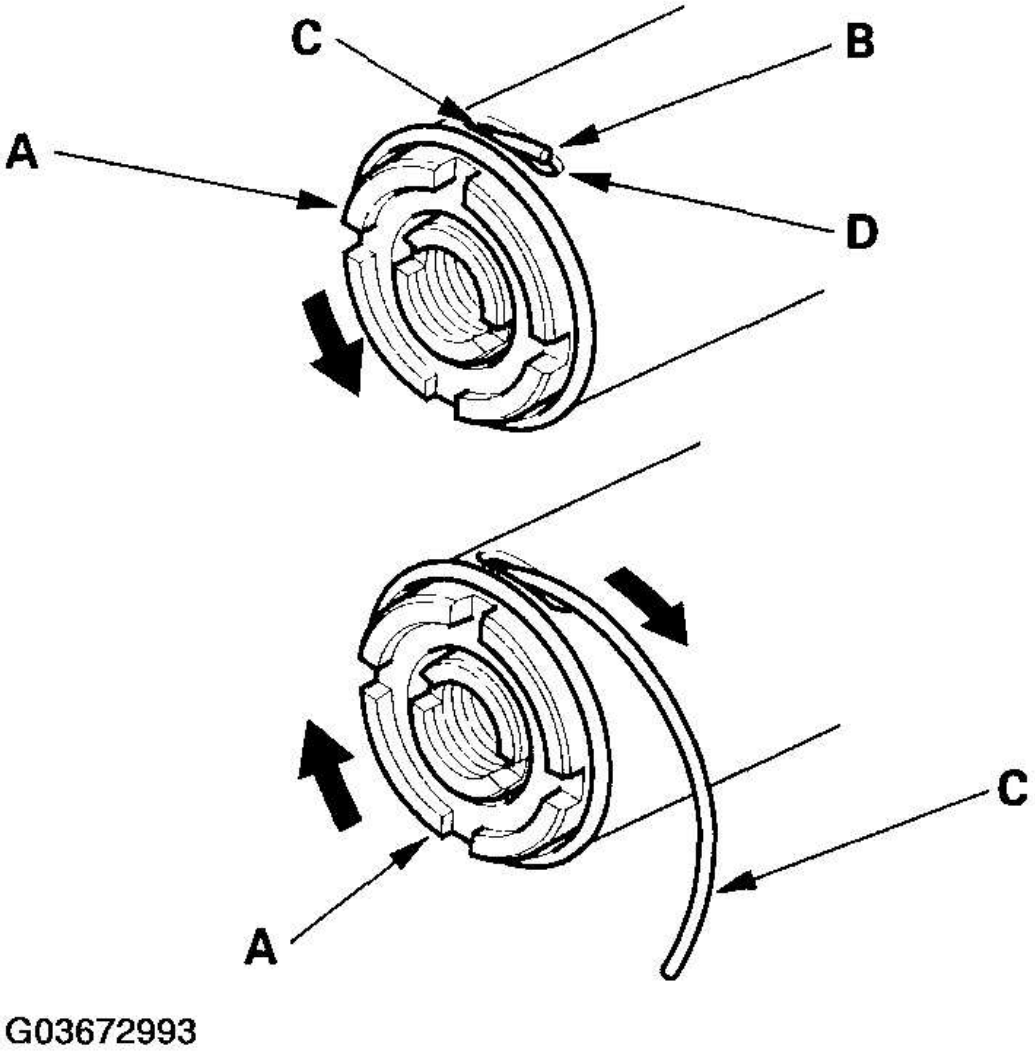


Fig. 61: Turning Rack Stop Counterclockwise
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Remove the rack stop (A), rack bushing (B), and steering rack (C) from the steering gearbox.

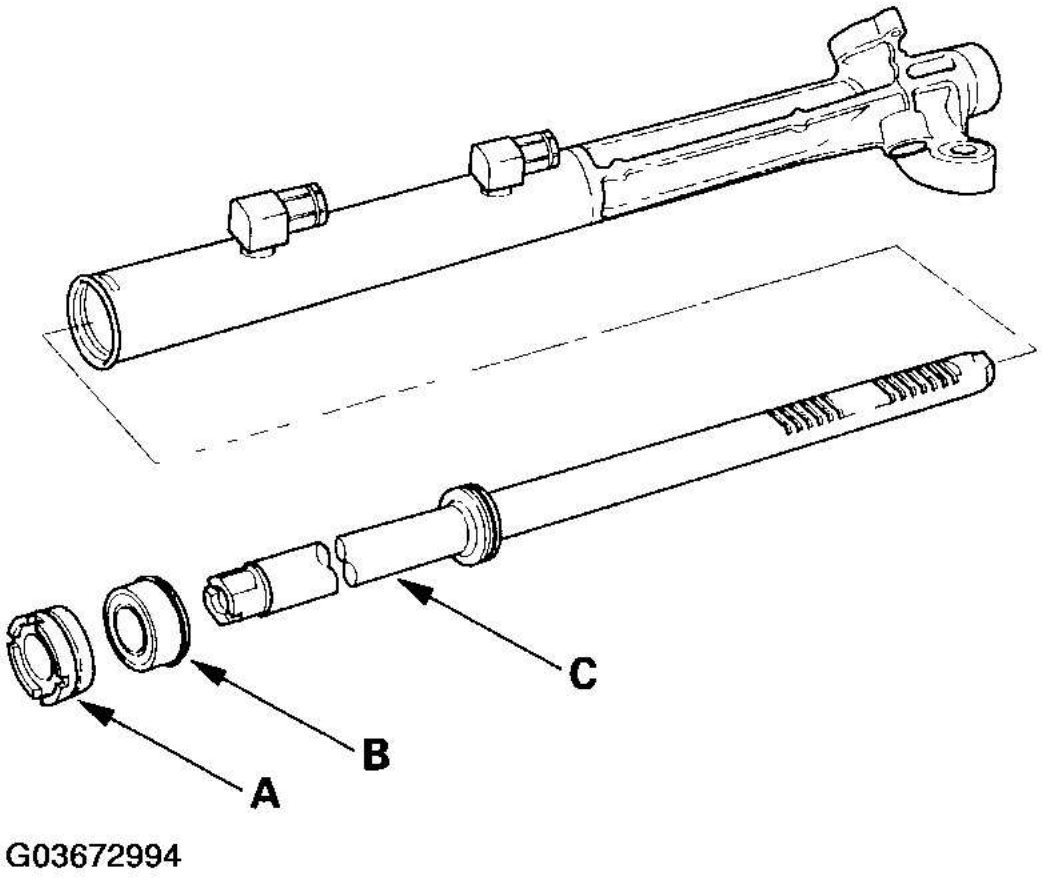
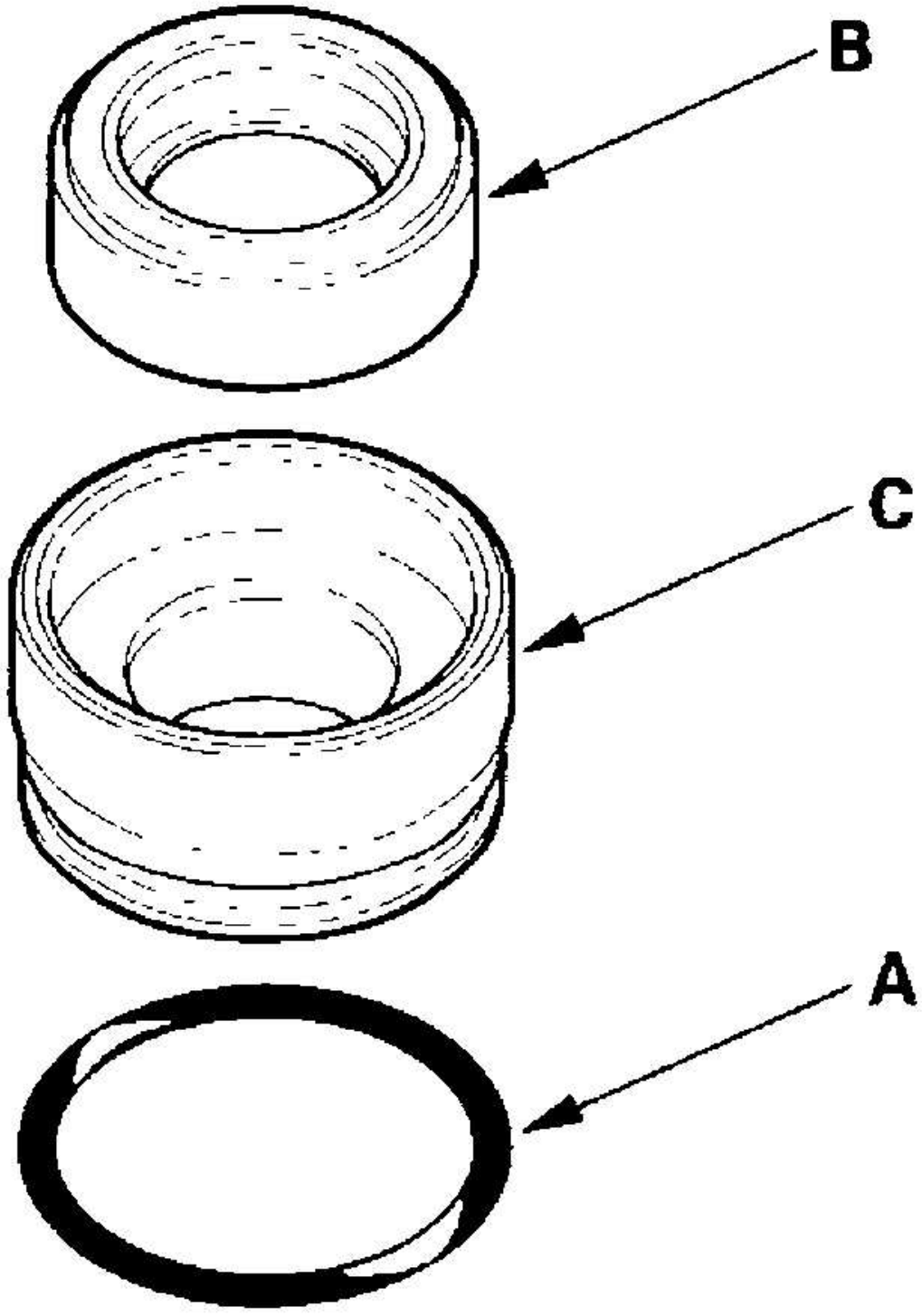


Fig. 62: Removing Rack Stop, Rack Bushing And Steering Rack From Steering Gearbox
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Remove the O-ring (A) and cylinder end seal (B) from the rack bushing (C).



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Fig. 63: Removing O-Ring And Cylinder End Seal From Rack Bushing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Carefully pry the piston seal ring (A) and O-ring (B) off the rack piston. Be careful not to damage the inside of seal ring groove and piston edges when removing the seal ring.

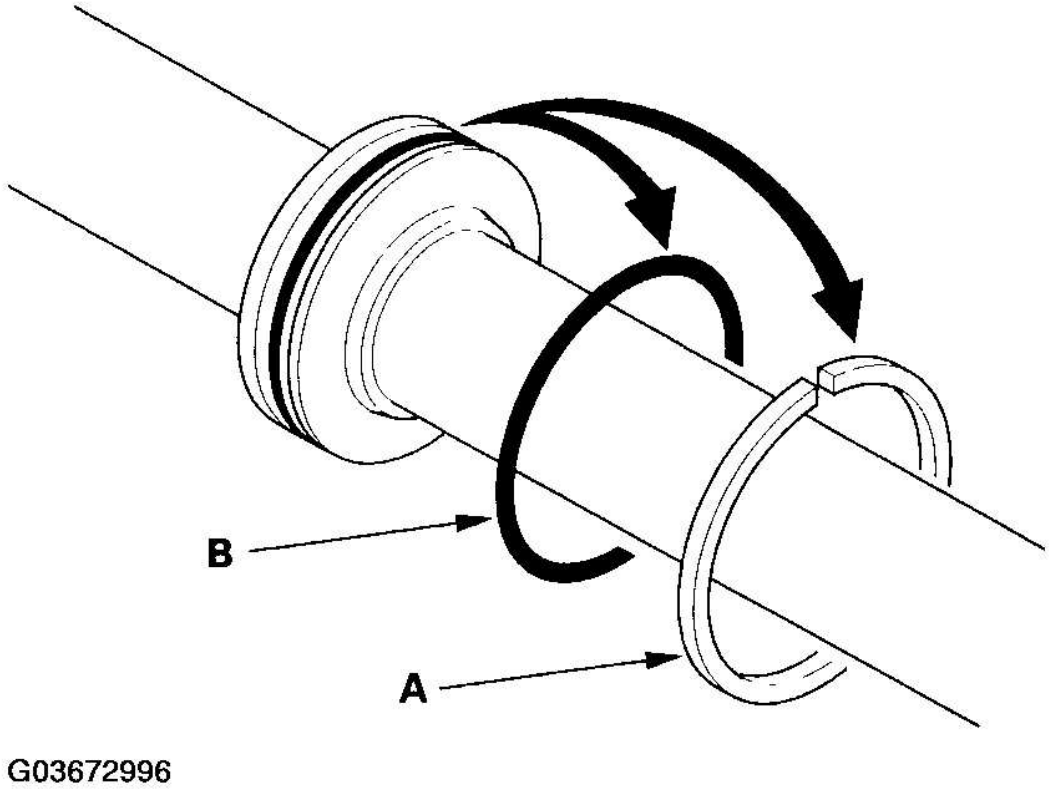
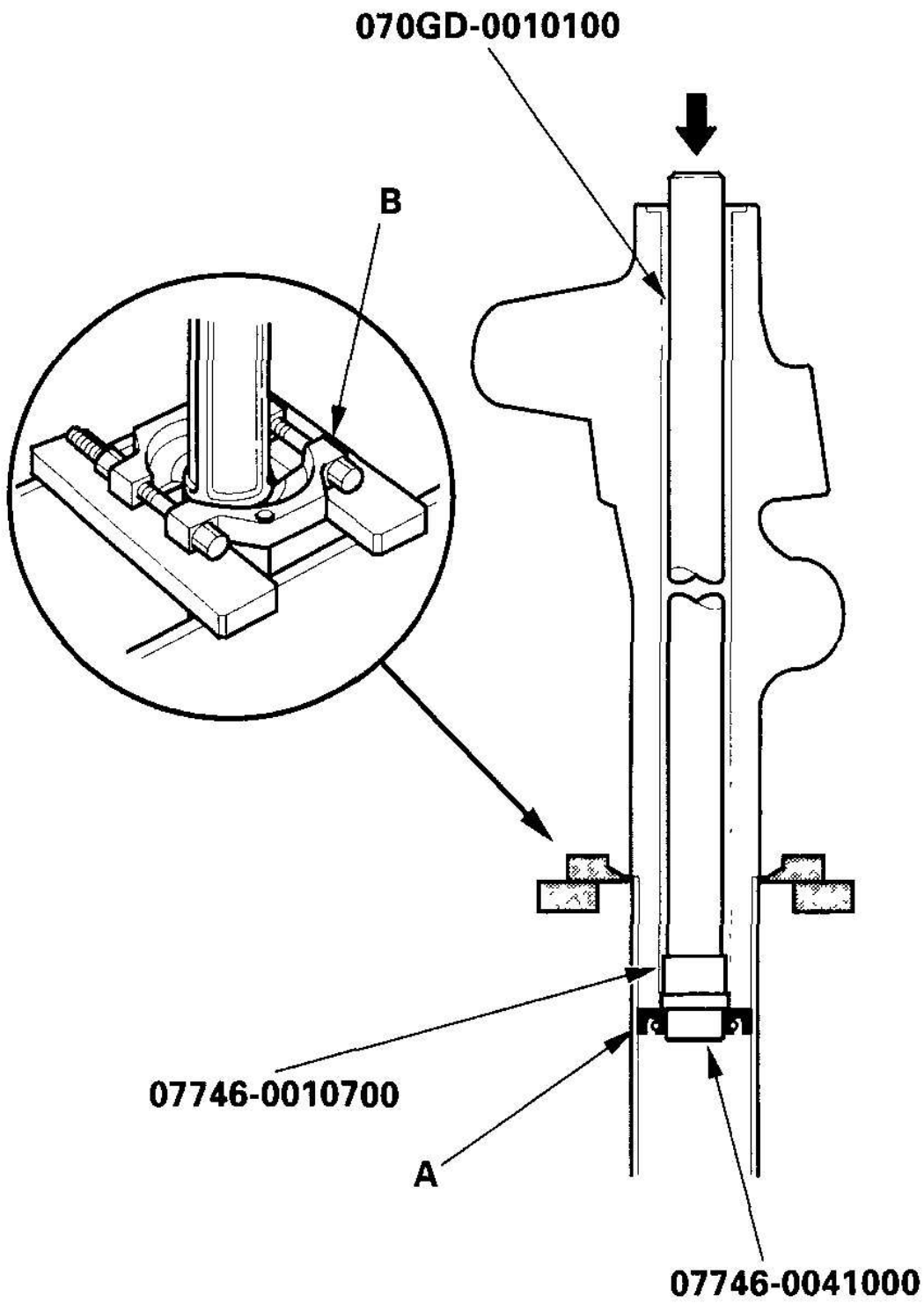


Fig. 64: Prying Piston Seal Ring And O-Ring Off Rack Piston
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Insert the special tools, and carefully place it on the cylinder end seal (A) as shown in **Fig. 65**. Make sure that the special tool is securely positioned on the cylinder end seal.



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Fig. 65: Placing Special Tools On Cylinder End Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Install the bearing separator (B) on the gearbox housing. Set the steering gearbox in a press so the gearbox housing points upward, then push out the cylinder end seal by pressing on the end of the special tool.
19. Remove the steering gearbox from the press, and set a driver extension (A) on the special tool (driver handle). Place the steering gearbox in a press, then remove the cylinder end seal (B) from the gearbox by pressing on the end of the extension.

    Note these items when pressing the cylinder end seal:

    - Keep the tool straight to avoid damaging the cylinder wall. Check the tool angle, and correct it if necessary, when removing the cylinder end seal.
    - Use a press to remove the cylinder end seal. Do not try to remove the seal by striking the tool; striking the tool would break the cylinder end seal, and the seal would remain in the gearbox.

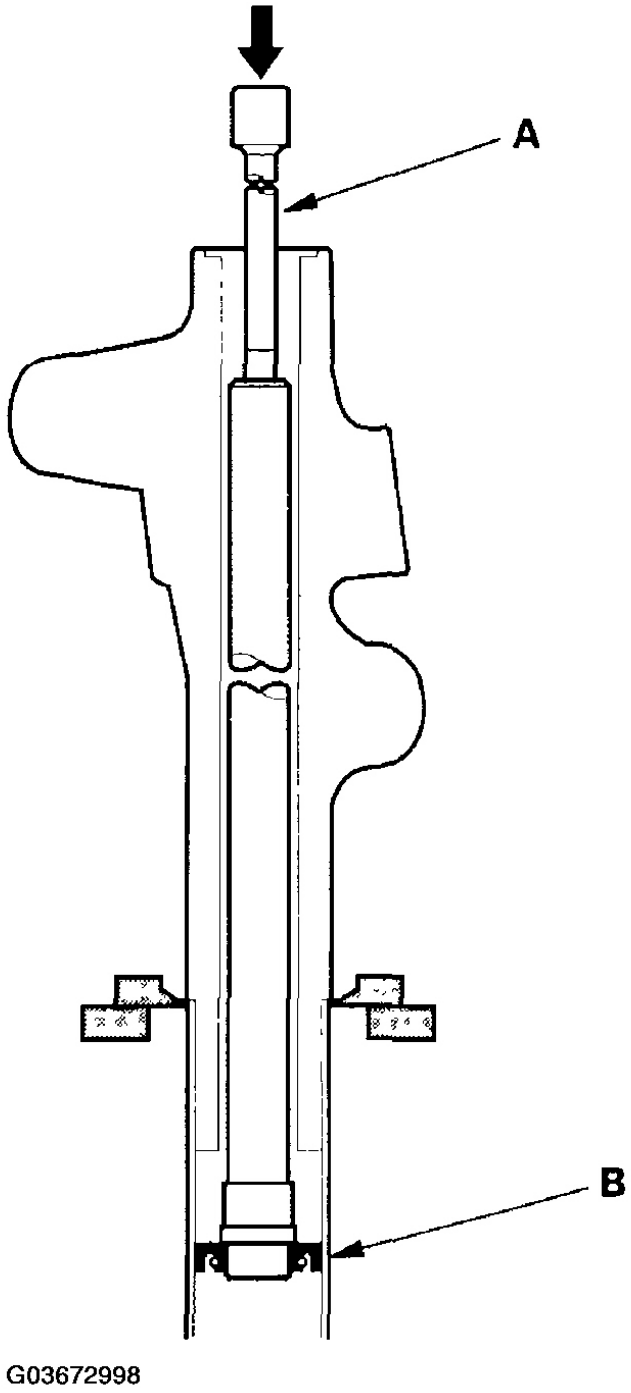


Fig. 66: Setting Driver Extension On Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Reassembly

20. Coat the special tool with power steering fluid, then slide it onto the rack, big end first.
21. Position the new O-ring (A) and new piston seal ring (B) on the special tool, then slide them down toward the big end of the tool.

    Note these items during reassembly:

    - Do not over expand the resin seal rings. Install the resin seal rings with care so as not to damage them. After installation, make sure you contract the seal ring using the special tool (sizing tool).
    - Replace the piston's O-ring and seal ring as a set.

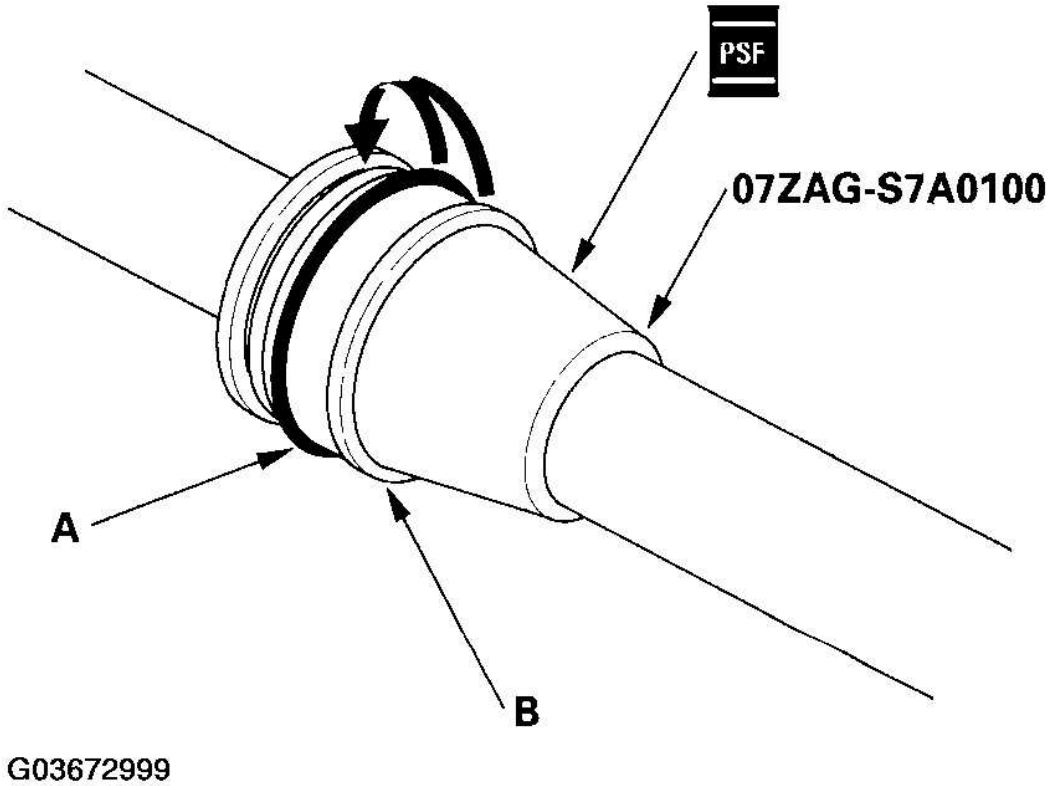


Fig. 67: Positioning O-Ring And Piston Seal Ring On Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Pull the O-ring off into the piston groove, then pull the piston seal ring off into the piston groove on top of the O-ring.
23. Coat the piston seal ring (A) and the inside of the special tool with power steering fluid, then carefully slide the tool onto the rack and over the piston seal ring.

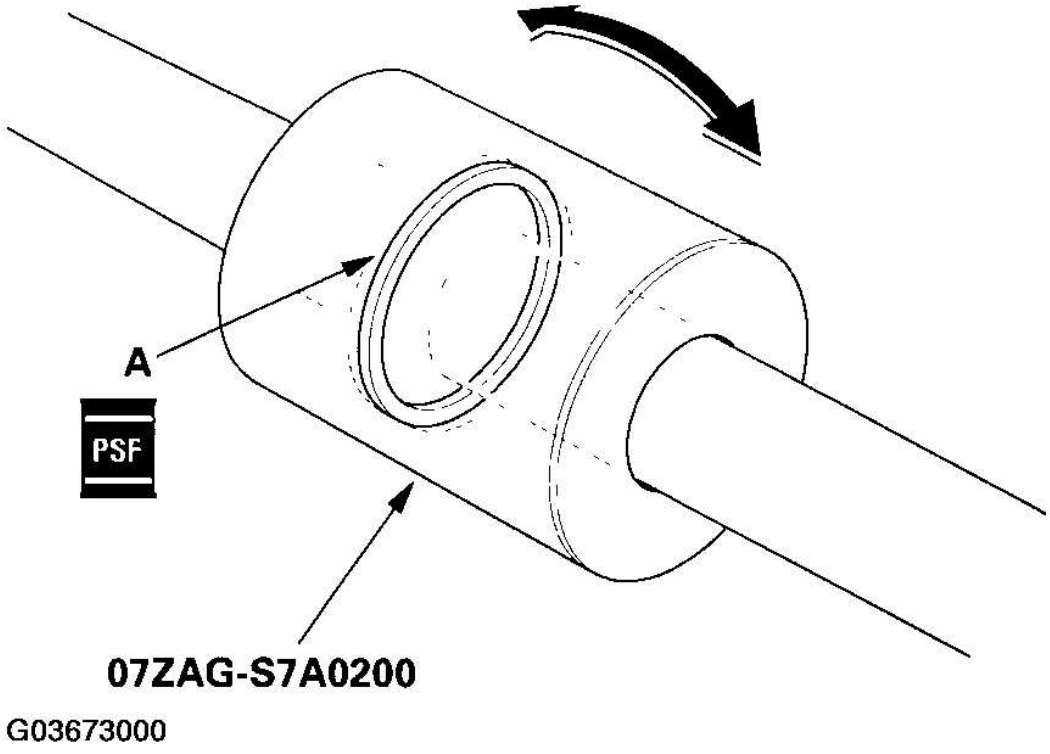


Fig. 68: Coating Piston Seal Ring And Inside Of Special With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Move the special tool back and forth several times to make sure the piston seal ring fits snugly in the piston.
25. Wrap vinyl tape around the rack teeth and rack end edges, then coat the surface of the tape with power steering fluid. Make sure that the vinyl tape is wrapped carefully so that there is no stepped portion.

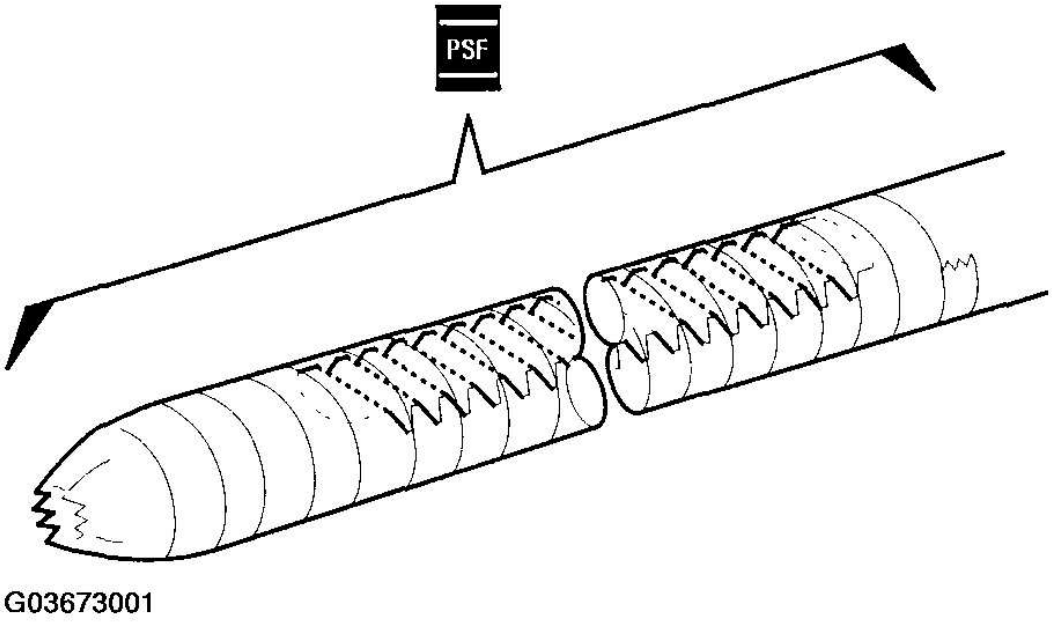
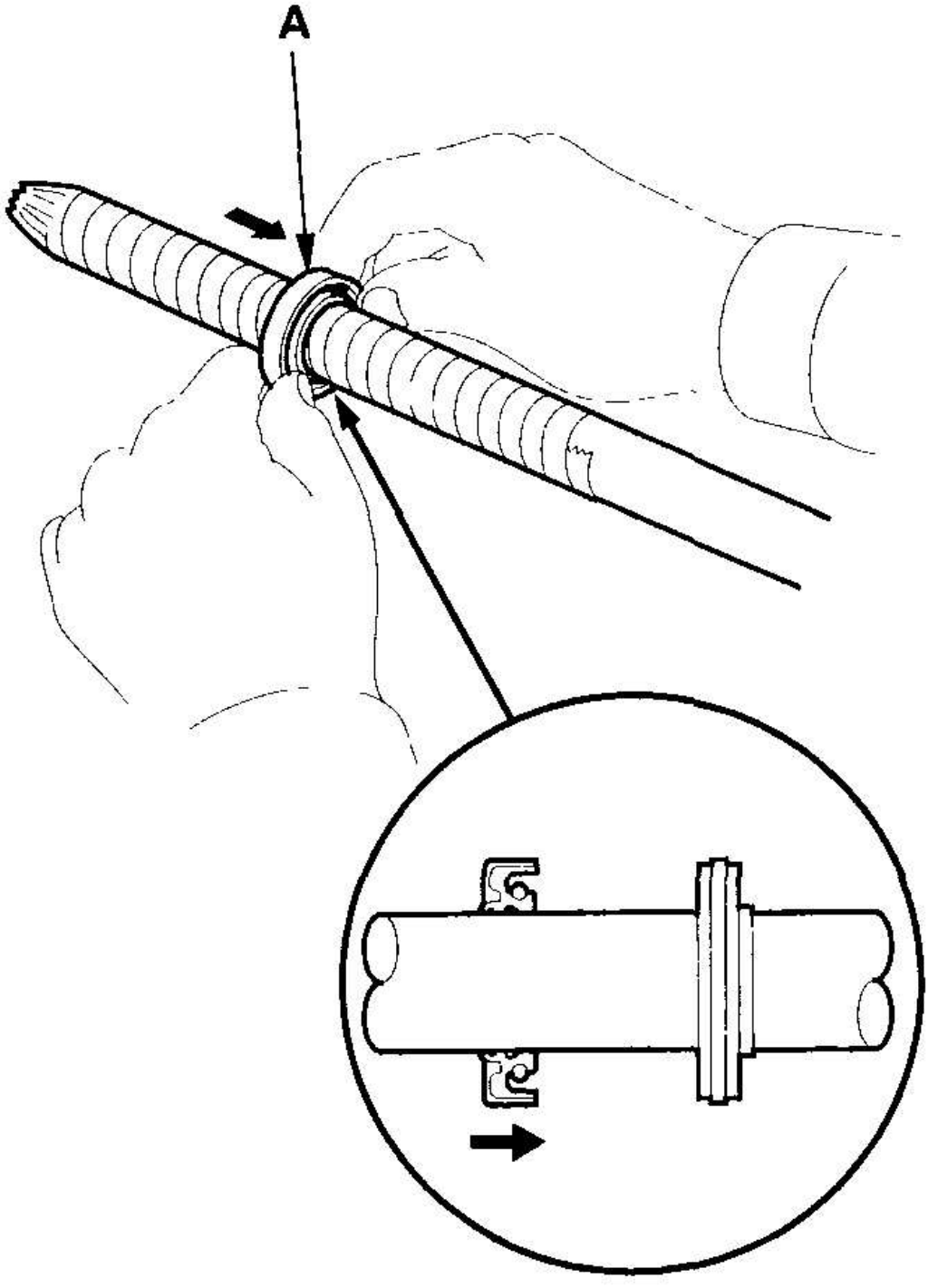


Fig. 69: Wrapping Vinyl Tape Around Rack Teeth And Rack End Edges
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. Coat the inside surface of the new cylinder end seal (A) with power steering fluid, then install it onto the steering rack with its grooved side toward the piston. When installing the cylinder end seal, be careful not to damage the lip of the seal with the edges or teeth of the steering rack.



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Fig. 70: Coating Inside Surface Of Cylinder Head Seal With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

27. Remove the vinyl tape from the steering rack, then remove any adhesive residue.
28. Apply multipurpose grease to the steering rack teeth, then insert the steering rack into the gearbox housing. Be careful not to damage the inner surface of the cylinder wall with the rack edges.

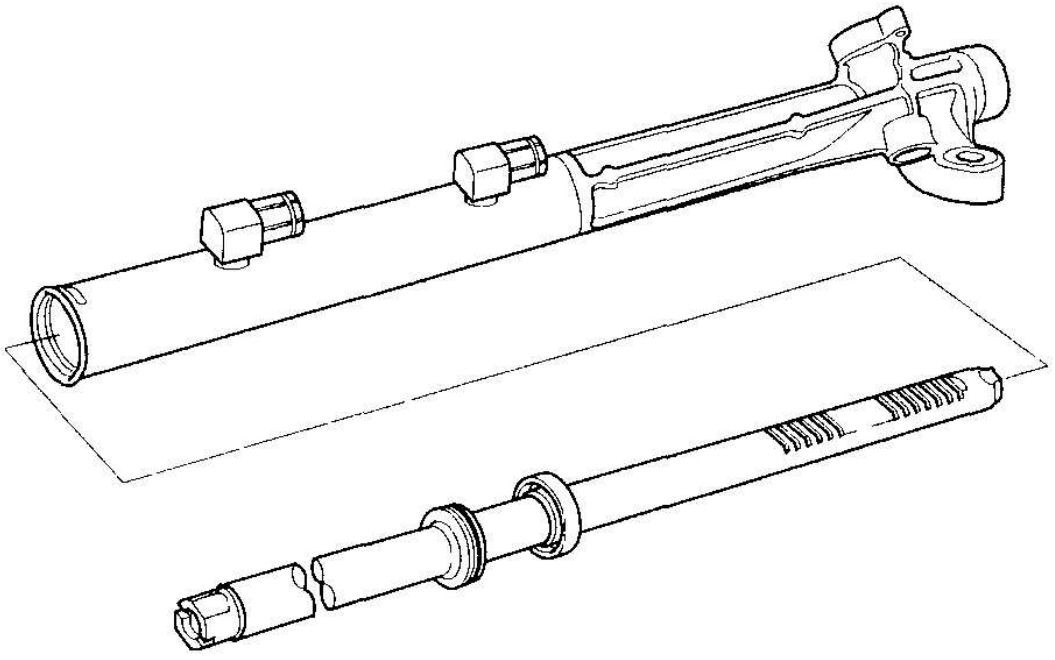


Fig. 71: Inserting Steering Rack Into Gearbox Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

29. Insert a deep socket (A) onto the steering rack as shown.

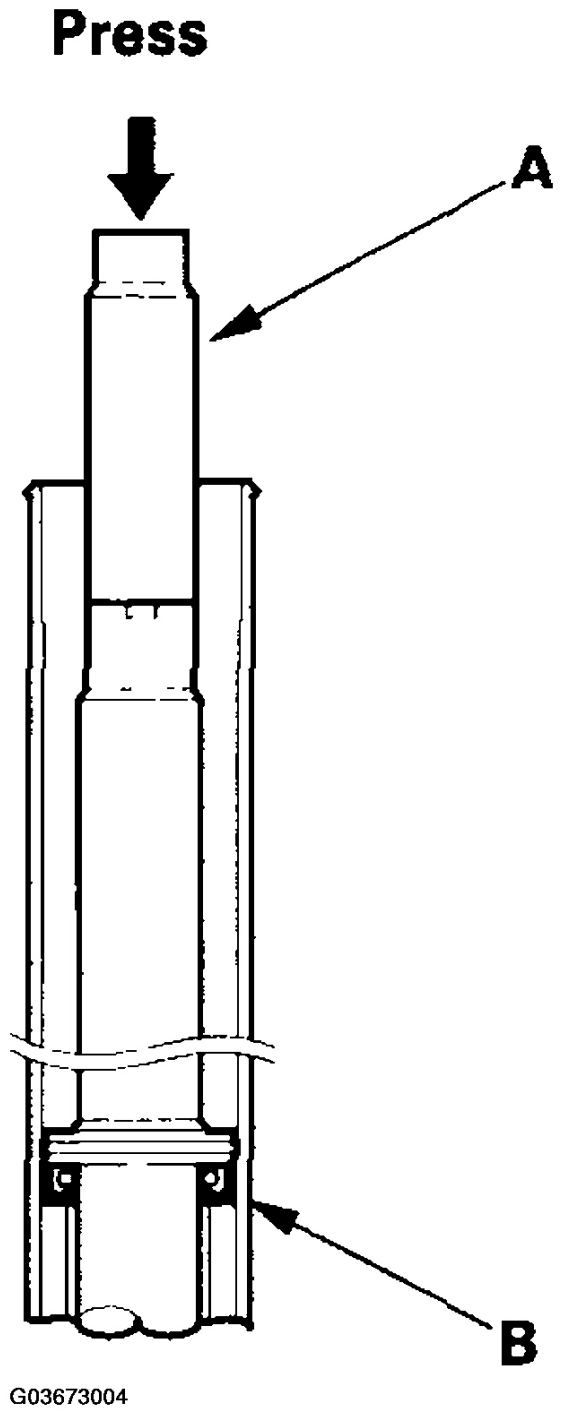


Fig. 72: Inserting Deep Socket Onto Steering Rack
Courtesy of AMERICAN HONDA MOTOR CO., INC.

30. Install the cylinder and seal (B) into the bottom of the cylinder by pressing on the tool with a press.

    Do not push on the tool with excessive force as it may damage the cylinder end seal.

31. Remove the tool, and center the steering rack.
32. Wrap vinyl tape around the rack end edges, and coat the surface of the tape with power steering fluid. Make sure that the vinyl tape is wrapped carefully so there is no stepped portion.

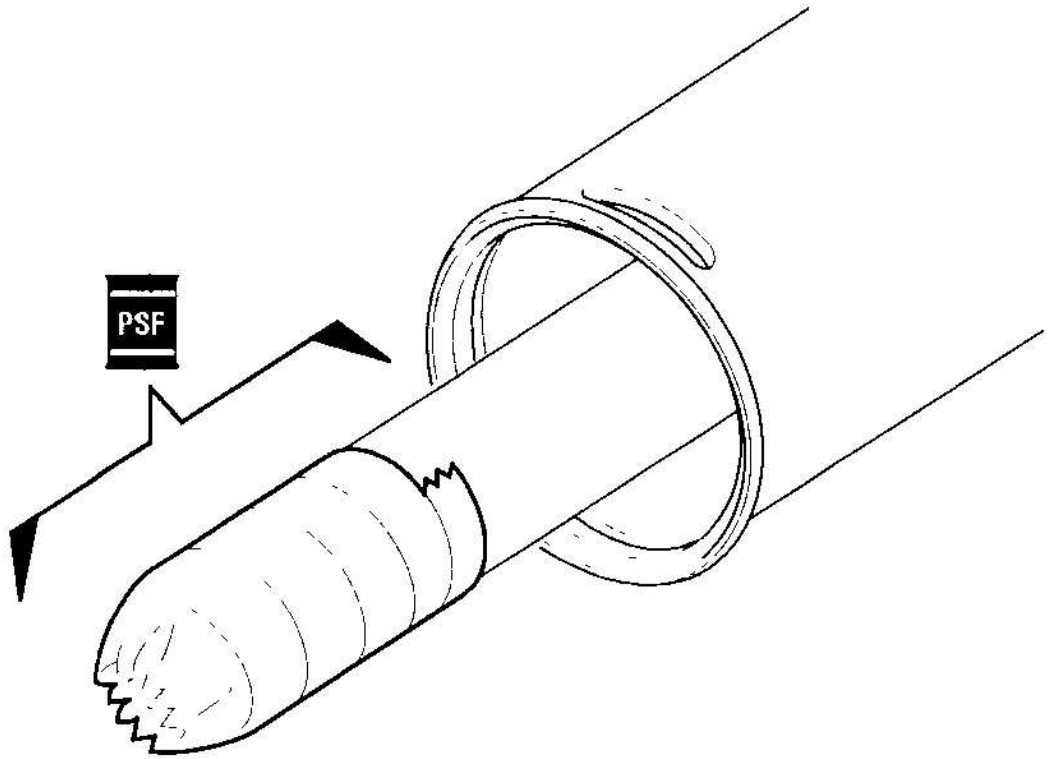


Fig. 73: Wrapping Vinyl Tape Around Rack End Edges
Courtesy of AMERICAN HONDA MOTOR CO., INC.

33. Coat the inside surface of the new cylinder end seal (A) with power steering

fluid, then press it into the rack bushing (B) using the special tools.

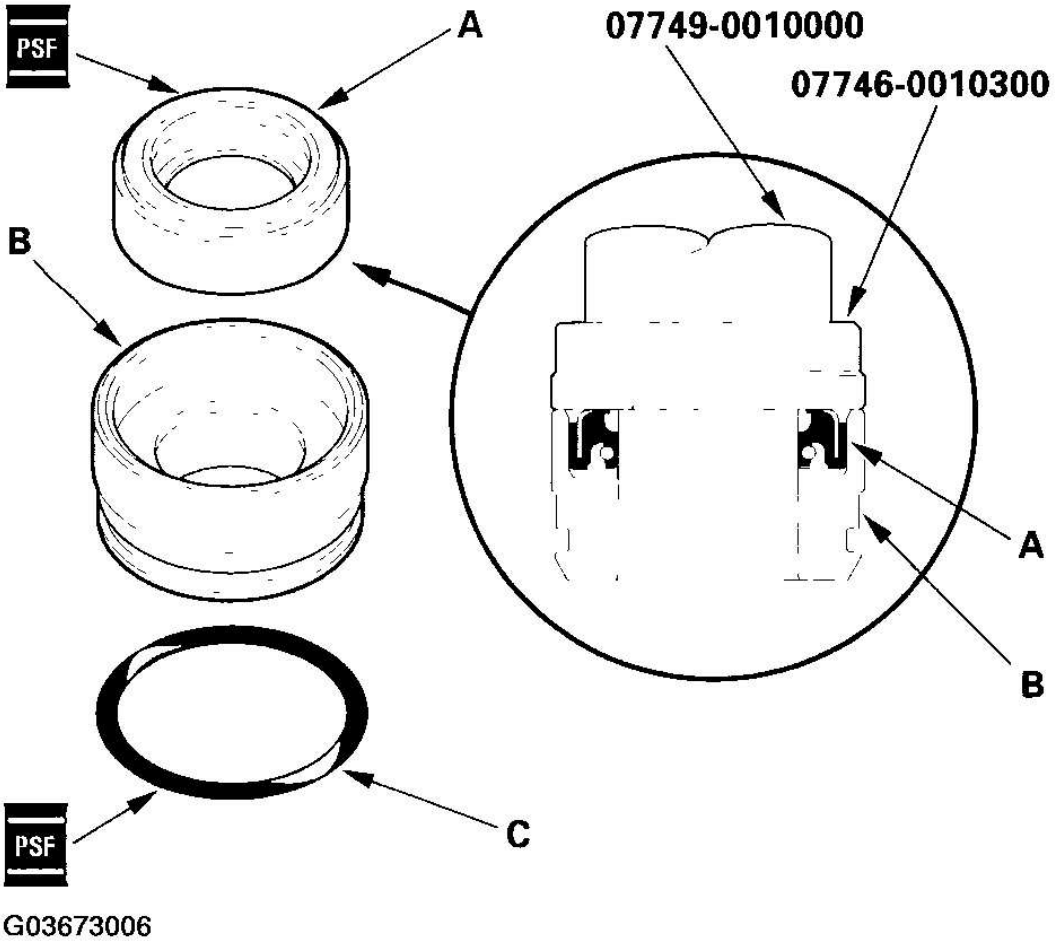


Fig. 74: Coating Inside Surface Of New Cylinder End Seal With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

34. Coat the new O-ring (C) with power steering fluid, and carefully fit it in the groove of the rack bushing.
35. Install the rack bushing onto the steering rack with the cylinder end seal grooved side toward the piston. Push in the rack bushing with your finger.

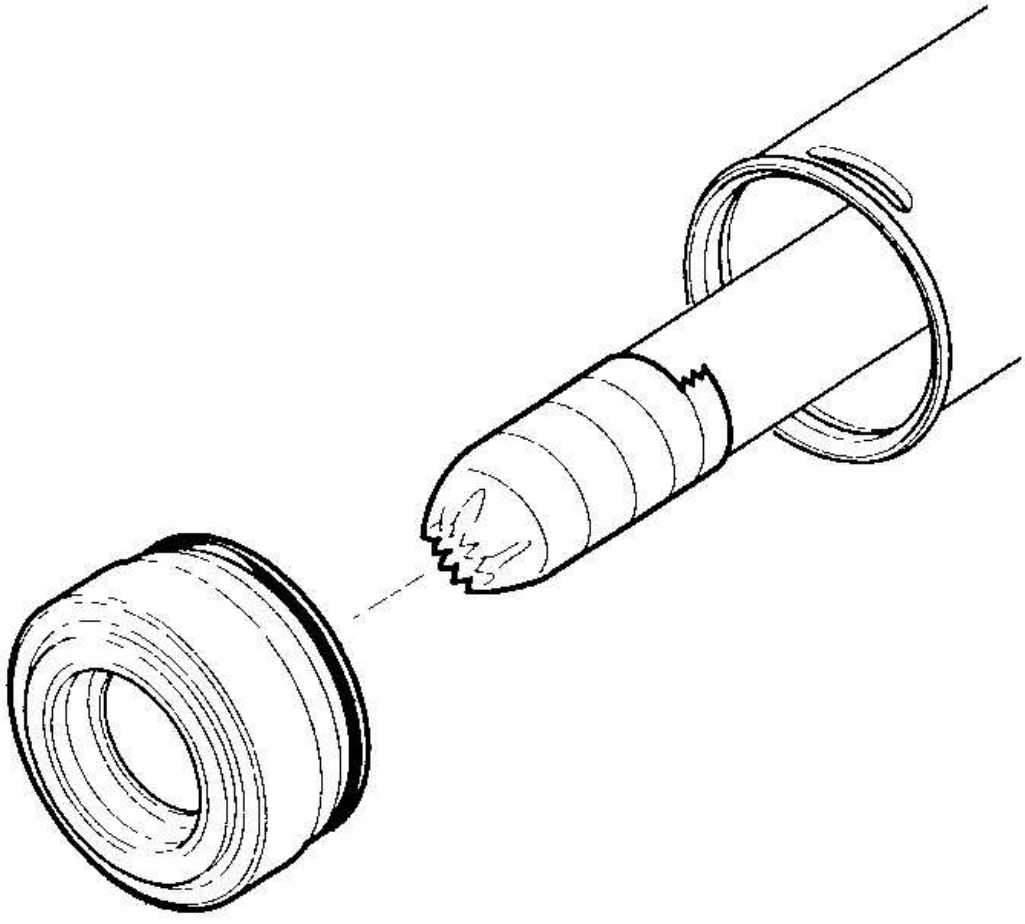


Fig. 75: Installing Rack Bushing Onto Steering Rack
Courtesy of AMERICAN HONDA MOTOR CO., INC.

36. Remove the vinyl tape from the steering rack, then remove any adhesive residue.
37. Install the rack stop (A) onto the steering rack so the hole (B) is aligned with the slot (C) on the cylinder housing.

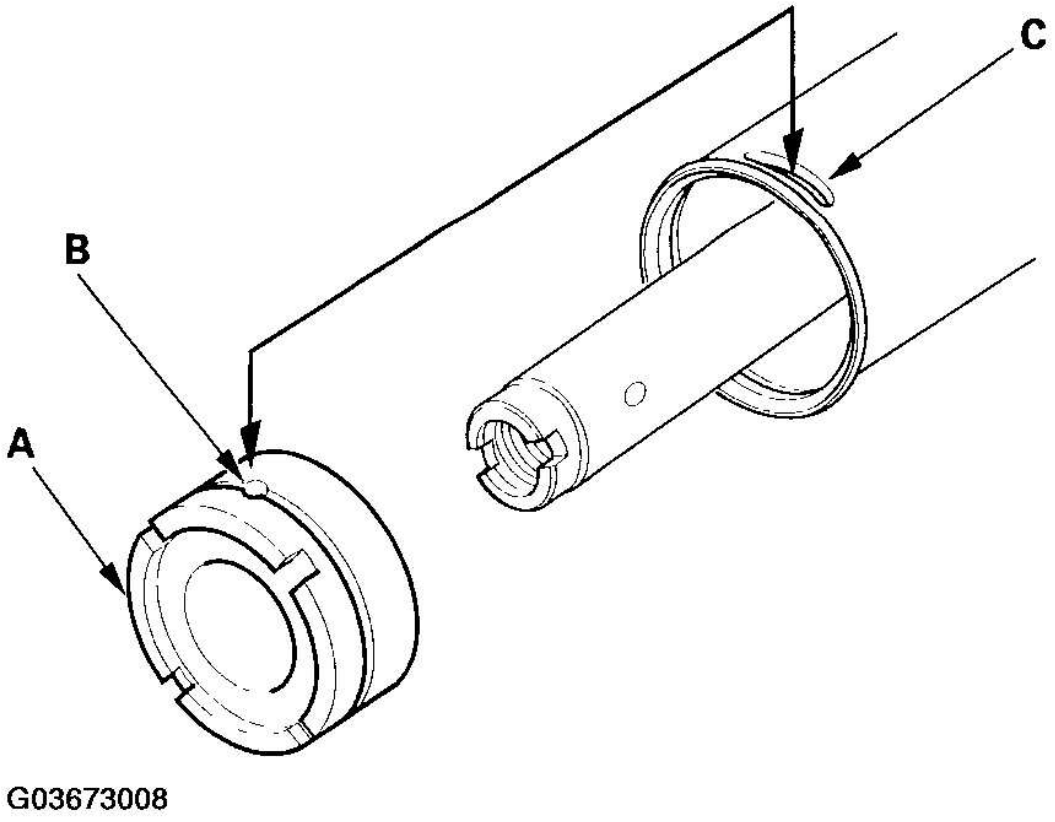


Fig. 76: Installing Rack Stop Onto Steering Rack
Courtesy of AMERICAN HONDA MOTOR CO., INC.

38. Insert the end of the circlip (A) into the hole (B) of the rack stop (C). Turn the rack stop counterclockwise until the circlip is fully seated in the rack stop.

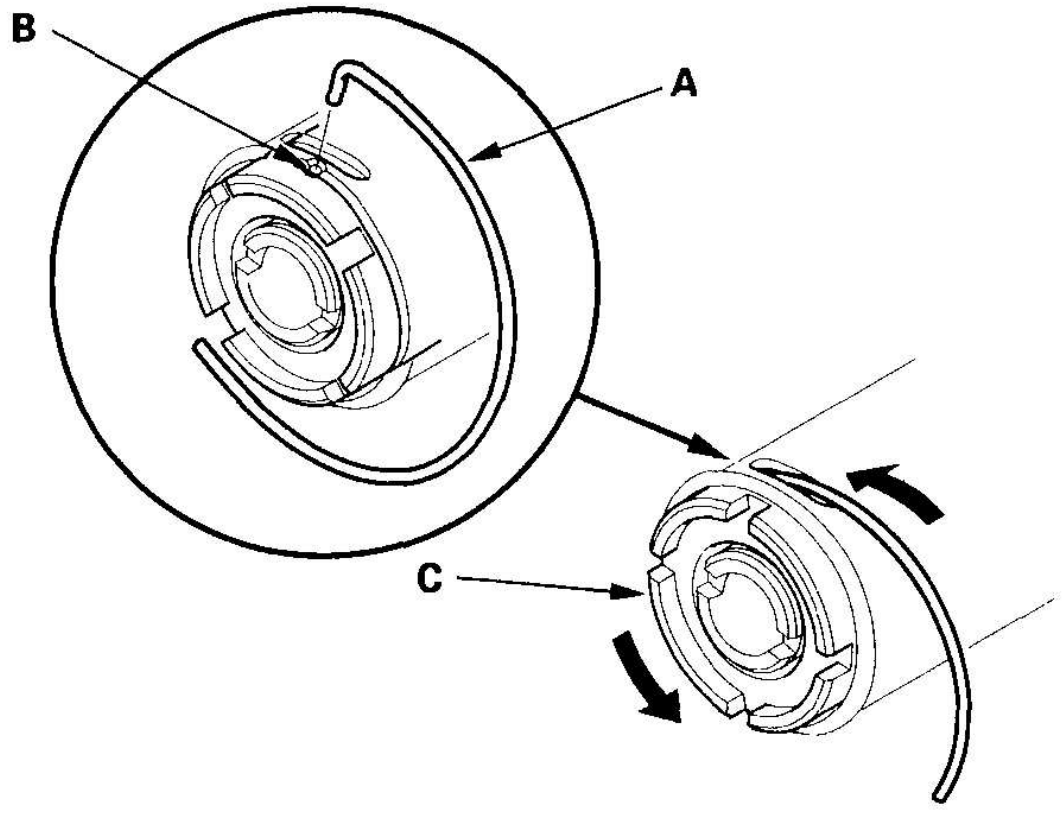


Fig. 77: Inserting End Of Circlip Into Hole Of Rack Stop
Courtesy of AMERICAN HONDA MOTOR CO., INC.

39. Apply multipurpose grease to the bearings (A) in the gearbox housing, and install the valve body unit (B) and new gasket (C) by engaging the gears.

    Note the valve body unit installation position (direction of line connections). Then loosely install the two flange bolts.

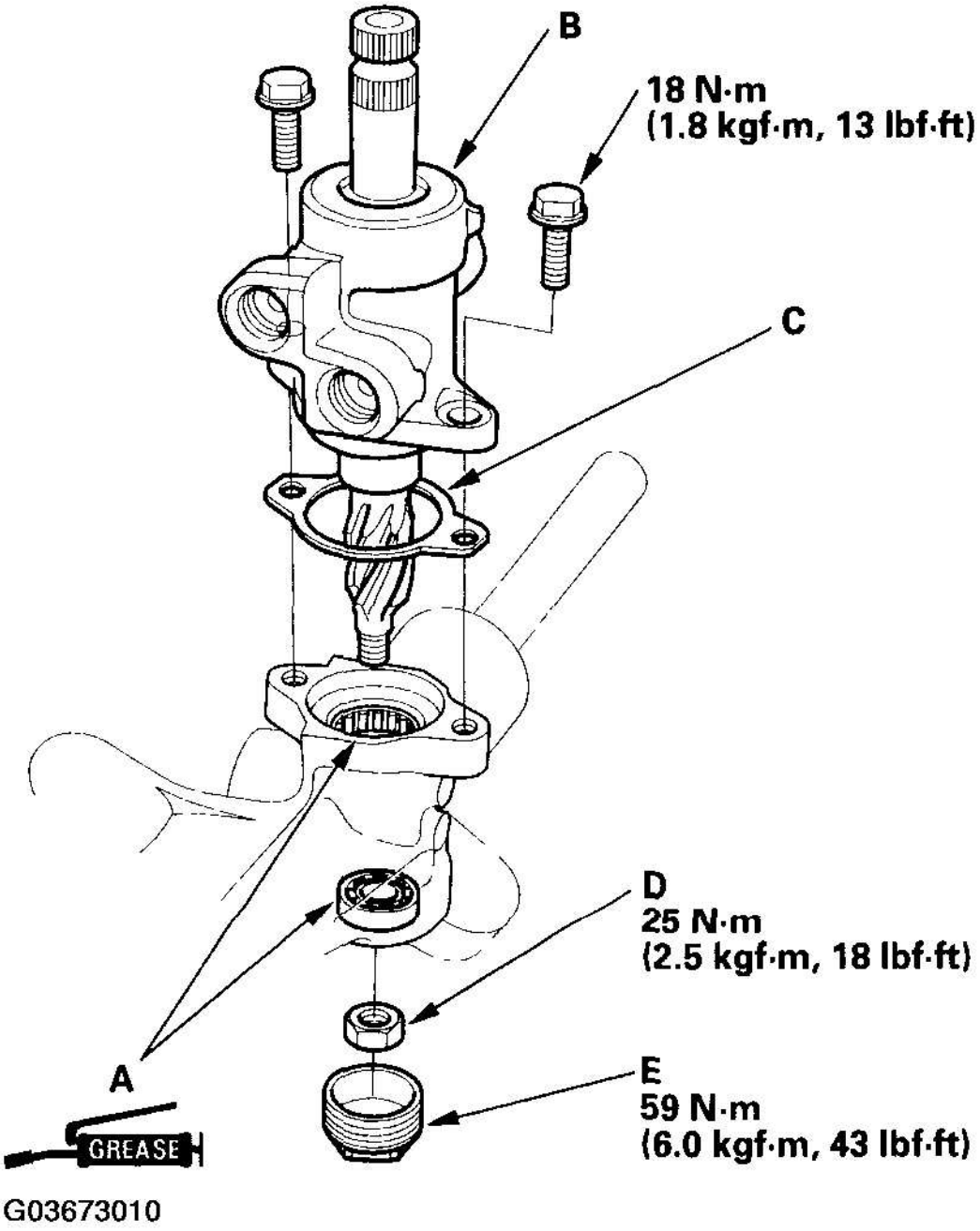


Fig. 78: Installing Valve Body Unit And Gasket By Engaging Gears
Courtesy of AMERICAN HONDA MOTOR CO., INC.

40. Install the new self-locking nut (D) onto the pinion shaft end, and tighten to the

specified torque.

41. Tighten the flange bolts to the specified torque.
42. Apply new sealant (Loctite 565) all the way around the threads on the end plug (E), install the end plug onto the gearbox housing, and tighten it to the specified torque.
43. After tightening, use a drift to stake (A) the end plug shoulder against the gearbox housing.

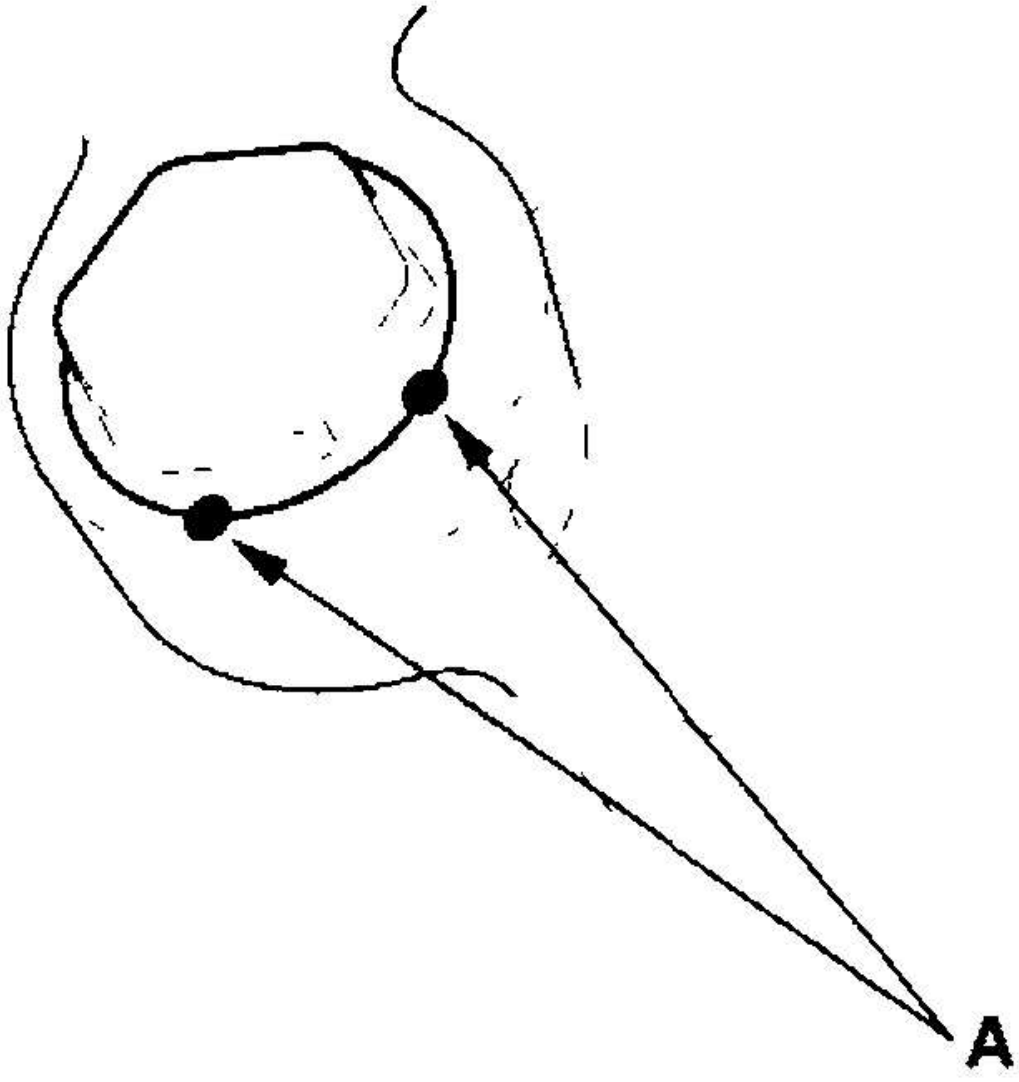


Fig. 79: Using Drift To Stake End Plug Shoulder Against Gearbox Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

44. Before installing the cylinder lines, coat the new O-rings with power steering fluid, then install the lines.

Note these items during reassembly:

- Thoroughly clean the joints of the cylinder lines.

  The joints must be free of foreign material.

- Install the cylinder lines by tightening the flare nuts by hand first, then tighten the flare nuts to the specified torque.

NOTE: Use a second wrench when tightening the cylinder lines to avoid damaging the fittings on the steering gearbox.

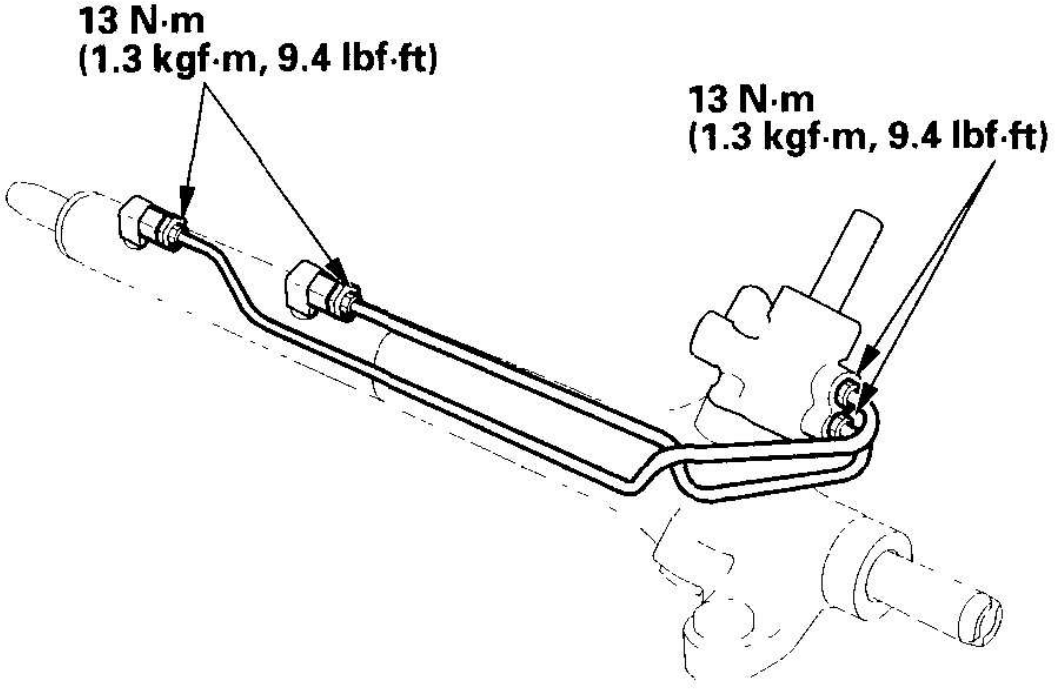


Fig. 80: Identifying Lines
Courtesy of AMERICAN HONDA MOTOR CO., INC.

45. Apply multipurpose grease to the sliding surface of the rack guide (A), and install it onto the gearbox housing.

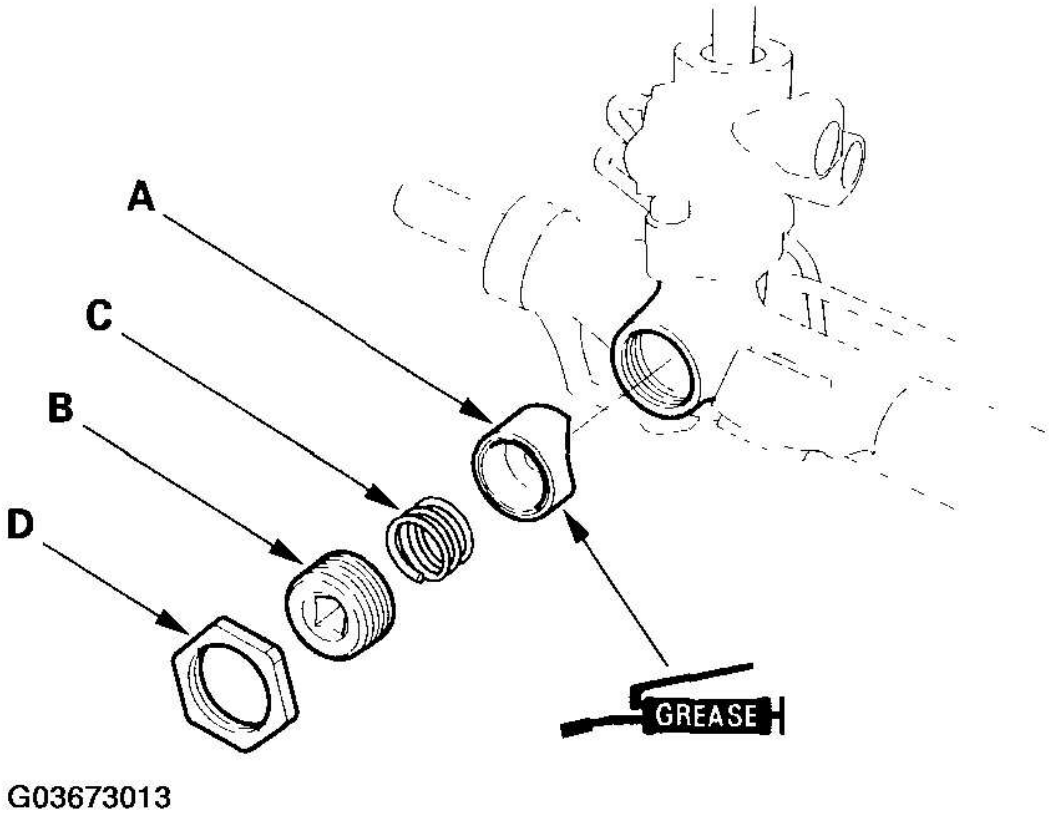


Fig. 81: Applying Multipurpose Grease To Sliding Surface Of Rack Guide
Courtesy of AMERICAN HONDA MOTOR CO., INC.

46. Apply new sealant (Loctite 565) all the way around the first three threads of the rack guide screw (B), then install the spring (C), rack guide screw, and locknut (D).
47. Adjust the rack guide screw (see **TKS-STEERING GEARBOX**). After adjusting, check that the rack moves smoothly by sliding it right and left.
48. Install the new stop washer (A) and lock washer (B). Align the lock washer tabs (C) with the slots (D). Install the rack end (E) while holding the lock washer in place. Repeat this step for the other side of the rack.

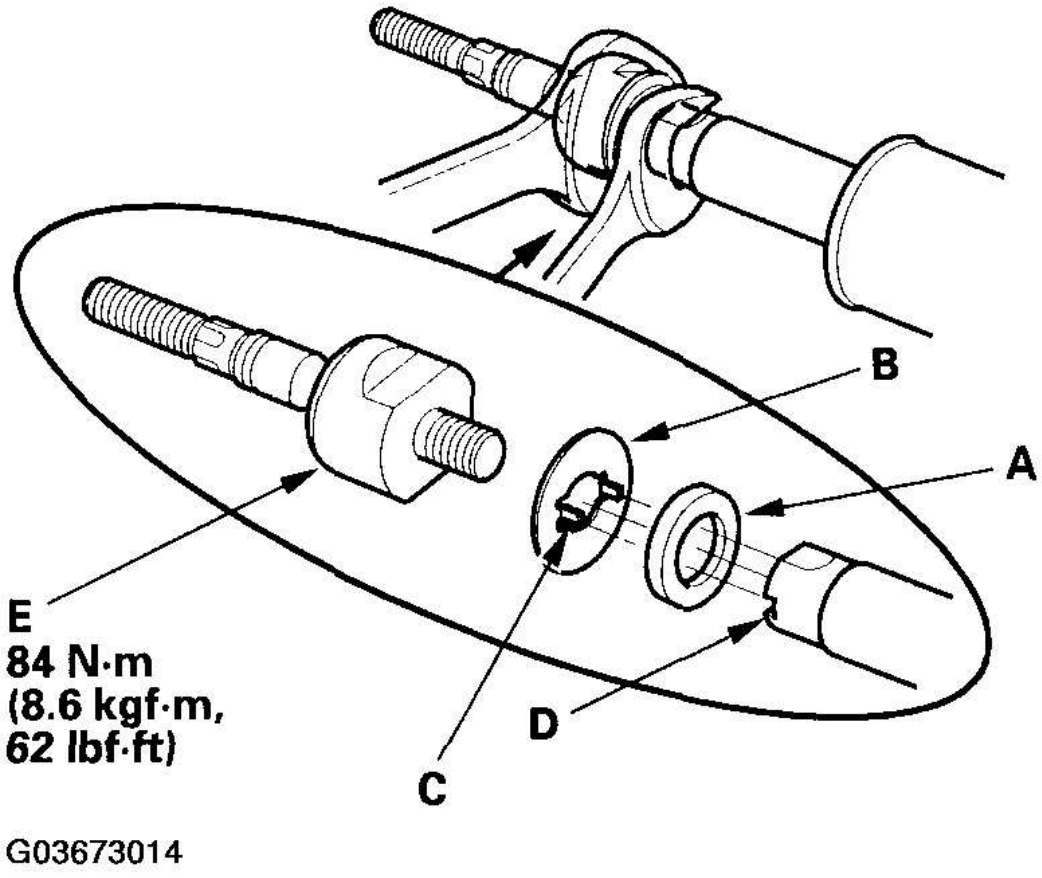


Fig. 82: Identifying Stop Washer And Lock Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

49. Hold the flat surface sections of the steering rack with a wrench, and tighten both rack ends. Be careful not to damage the rack surface with the wrench.
50. Bend the lock washer (A) back against the flat spots on the rack end joint housing.

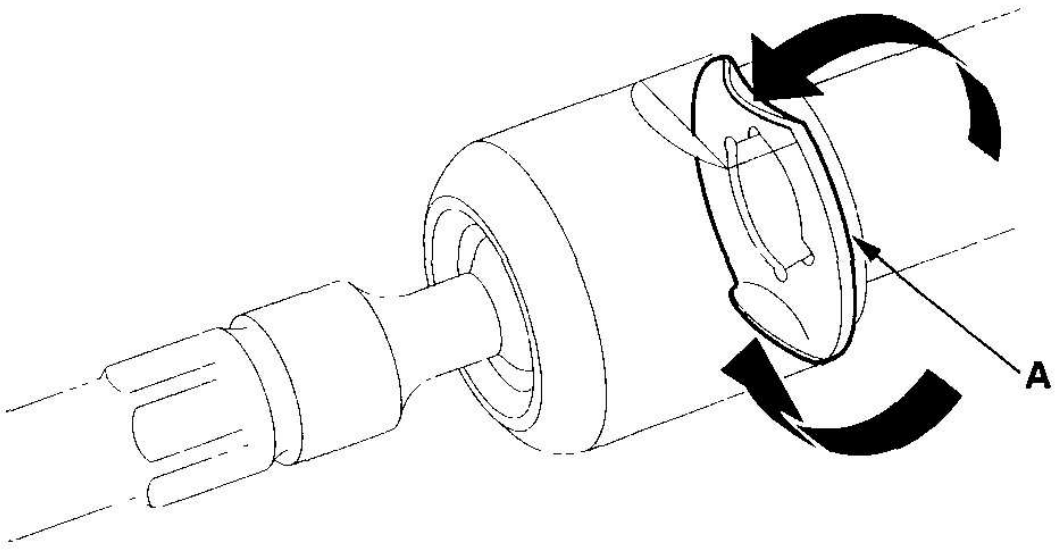


Fig. 83: Bending Lock Washer Back Against Flat Spots On Rack End Joint Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

51. Apply multipurpose grease to the circumference of the rack end joint housing (A).

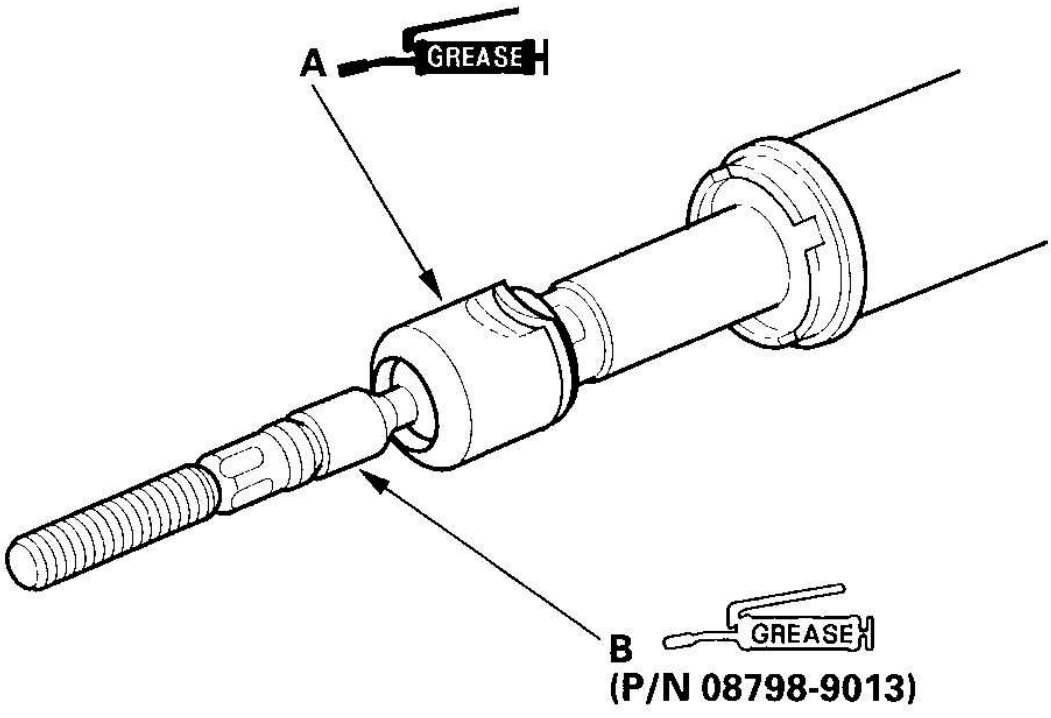


Fig. 84: Applying Multipurpose Grease To Circumference Of Rack End Joint Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

52. Apply a light coat of silicone grease to the boot grooves (B) on the rack ends.
53. Center the steering rack within its stroke.
54. Clean off any grease or contamination from the boot installation surfaces (A) on the gearbox housing. Install the boots (B) on the rack ends with the tie-rod clips (C), and fit the boot end on the housing properly.

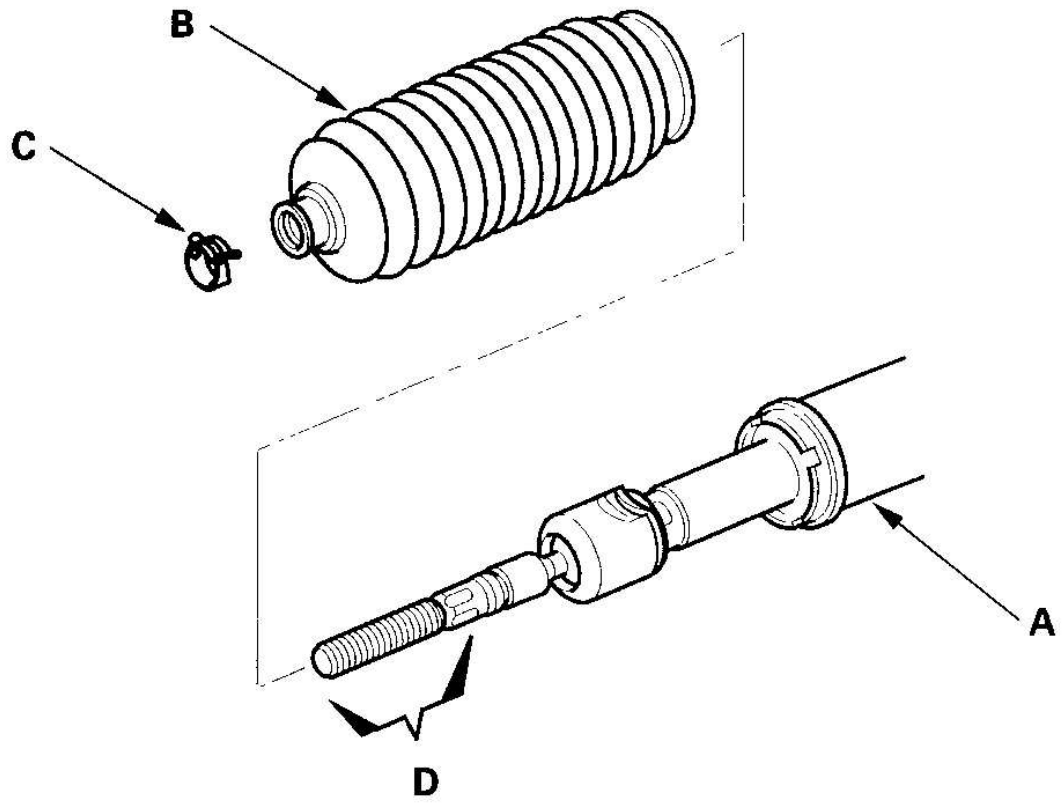


Fig. 85: Installing Boots On Rack Ends With Tie-Rod Clips
Courtesy of AMERICAN HONDA MOTOR CO., INC.

55. After installing the boots, wipe the grease off the threaded section (D) of the rack end.
56. Install the new boot bands by aligning the tabs (A) with the holes (B) of the band.

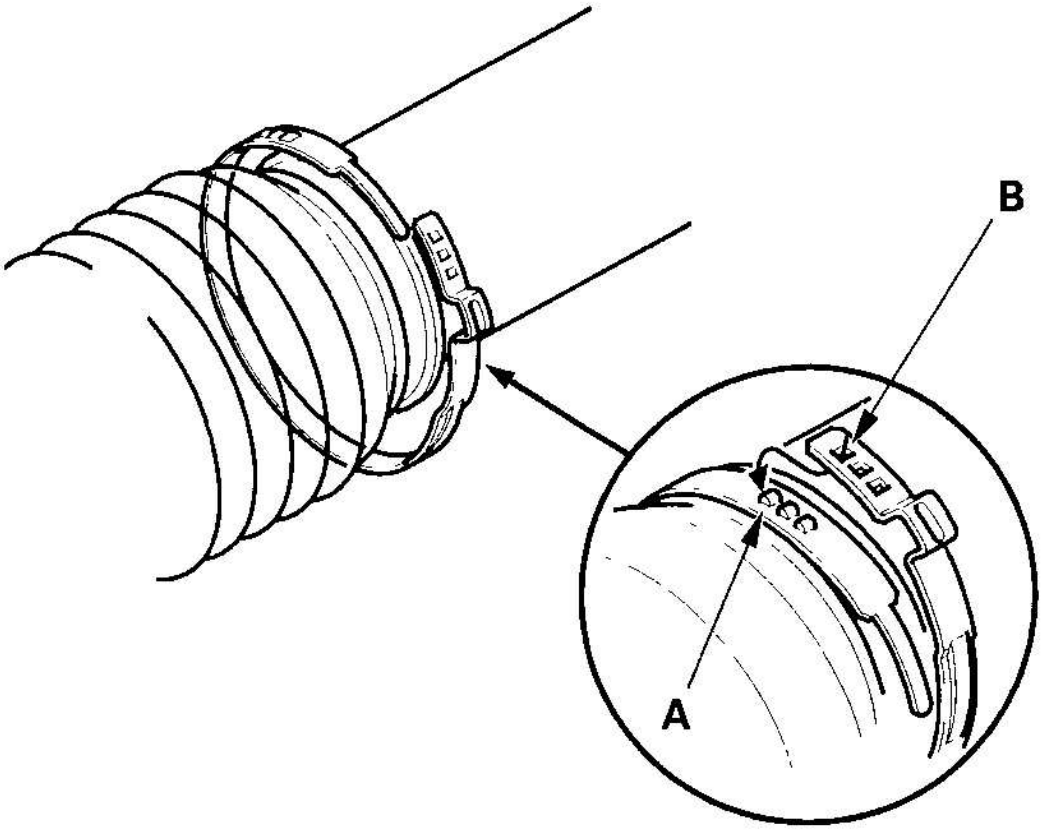


Fig. 86: Installing Boot Bands By Aligning Tabs With Holes Of Band
Courtesy of AMERICAN HONDA MOTOR CO., INC.

57. Close the ear portion (A) of the band with a commercially available Oetiker 1098 pincer or equivalent (B).

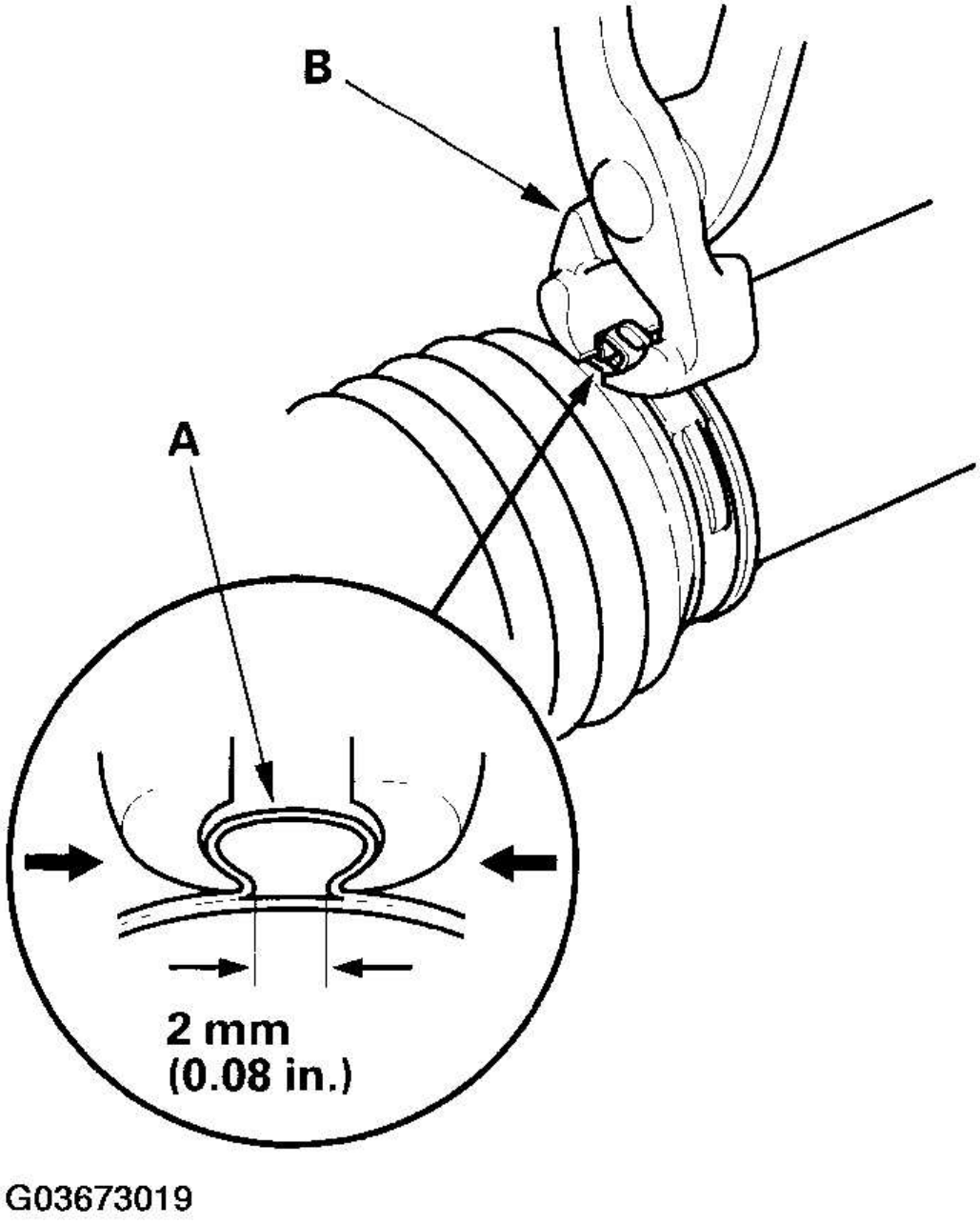


Fig. 87: Closing Ear Portion Of Band
Courtesy of AMERICAN HONDA MOTOR CO., INC.

58. Slide the rack right and left to be certain that the boots are not deformed or

twisted.

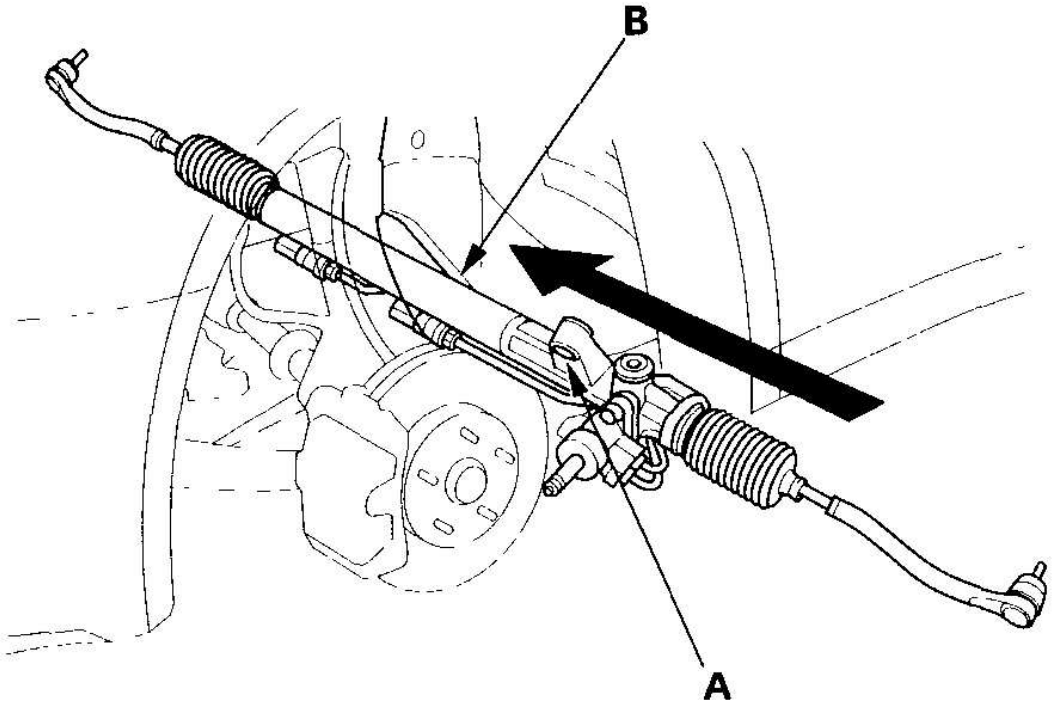
STEERING GEARBOX INSTALLATION

Special Tools Required

Subframe adaptor EQS02C000016

(Available through the Honda Tool and Equipment program 888-424-6857)

1. Before installing the steering gearbox, make sure that no power steering fluid is on the mating surface of the gearbox and the front suspension subframe. To prevent the gearbox mounting bolts from loosening after the installation, remove the power steering fluid from the mount cushions and bolt holes.
2. Apply a mild soap and water solution to both sides of the mount cushion mating surfaces (A).



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Fig. 88: Applying Mild Soap And Water Solution To Both Sides Of Mount Cushion Mating Surfaces
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Pass the cylinder of the steering gearbox (B) through the wheelwell opening on the driver's side.
4. Carefully move the steering gearbox toward the passenger's side until the pinion shaft clears the wheelwell opening on the body.
5. Rotate the steering gearbox so the pinion shaft (A) points upward.

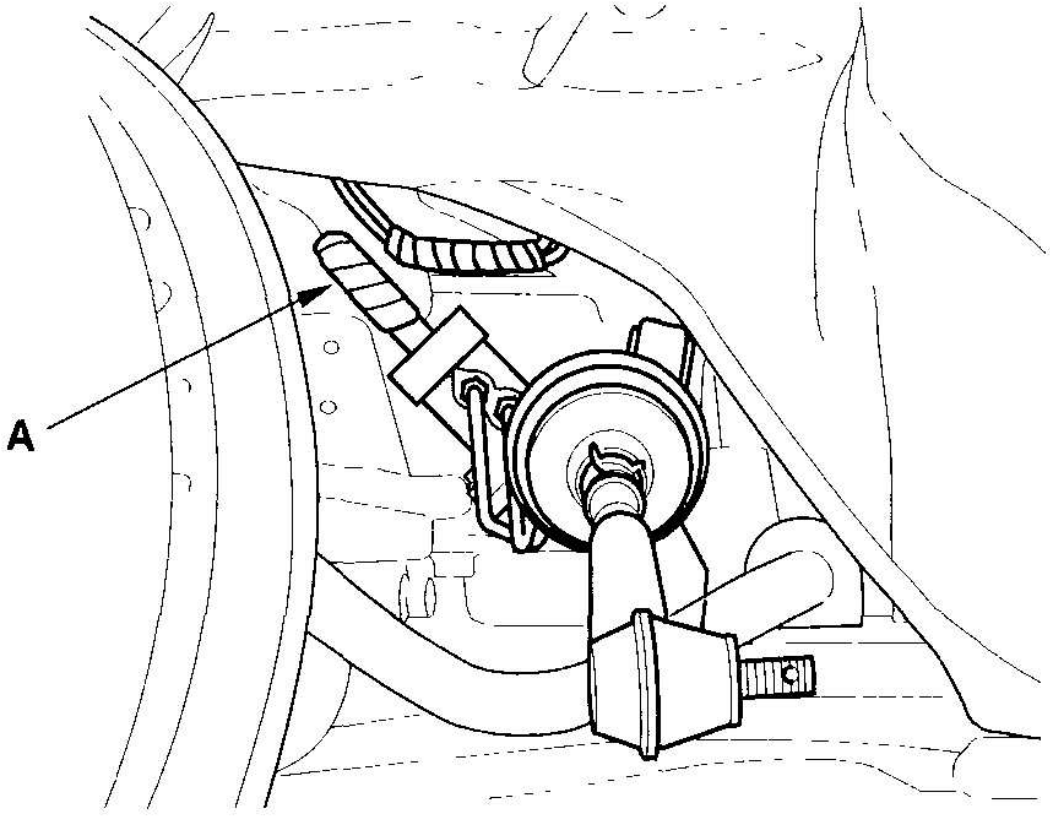


Fig. 89: Rotating Steering Gearbox
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Continue moving the gearbox toward the passenger's side until the steering

gearbox is in position. Make sure the power steering return line and feed line are routed above the gearbox.

7. Remove the vinyl tape from the pinion shaft, and install the pinion shaft grommet (A). Align the slot in the pinion shaft grommet with the lug portion (B) on the valve housing.

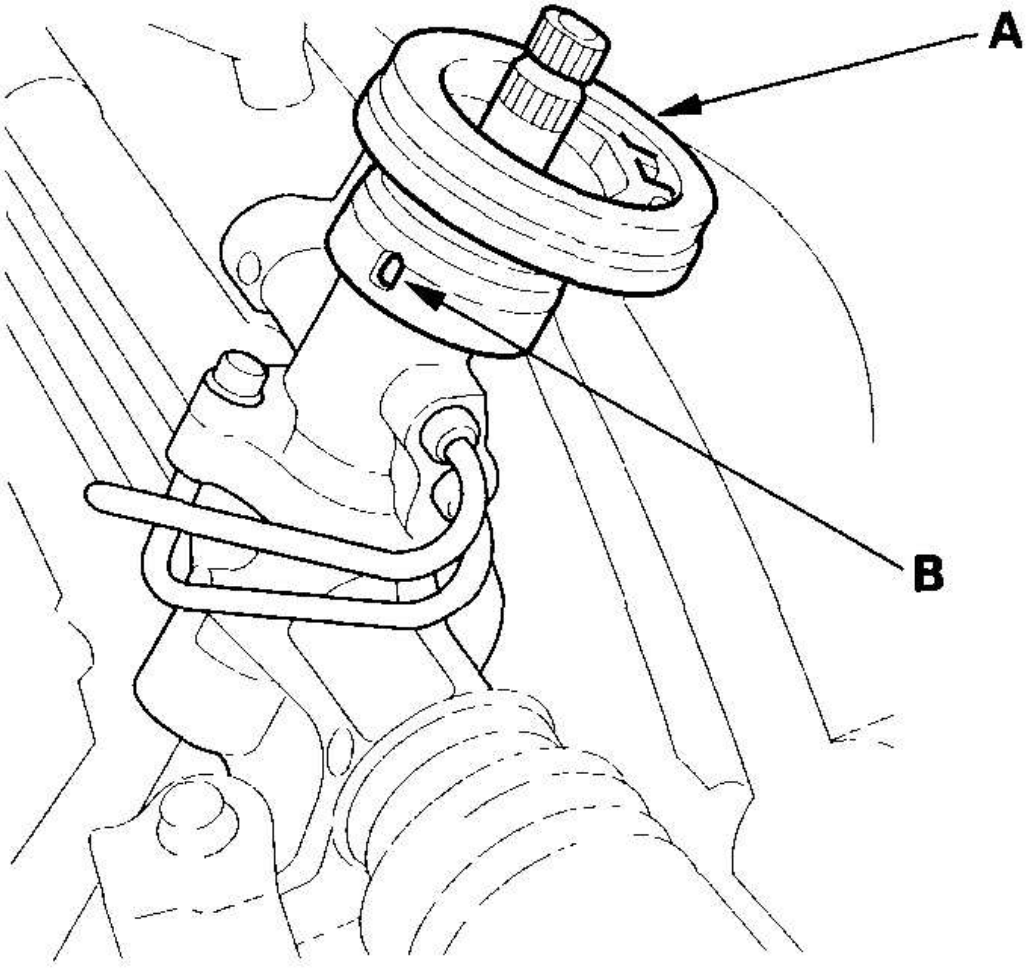


Fig. 90: Identifying Pinion Shaft Grommet
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Position the cutout (A) on the mounting cushion (B) as shown in **Fig. 91**, and install it on the cylinder of the gearbox securely.

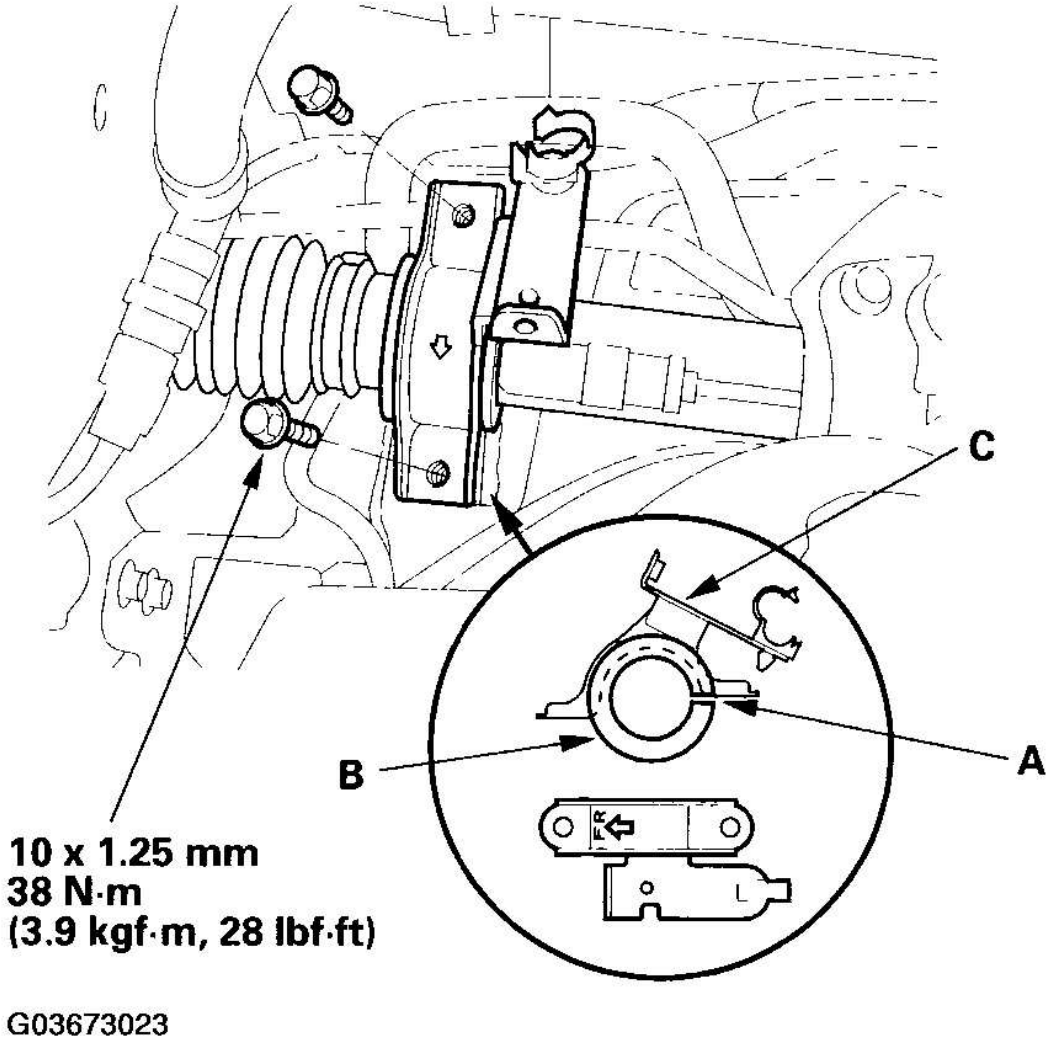


Fig. 91: Positioning Cutout On Mounting Cushion
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the gearbox mounting bracket (C) over the mounting cushion, and loosely install the two flange bolts.
10. Install the steering stiffener plate (A) and gearbox mounting bolts on the left side of the gearbox, then tighten them to the specified torque.

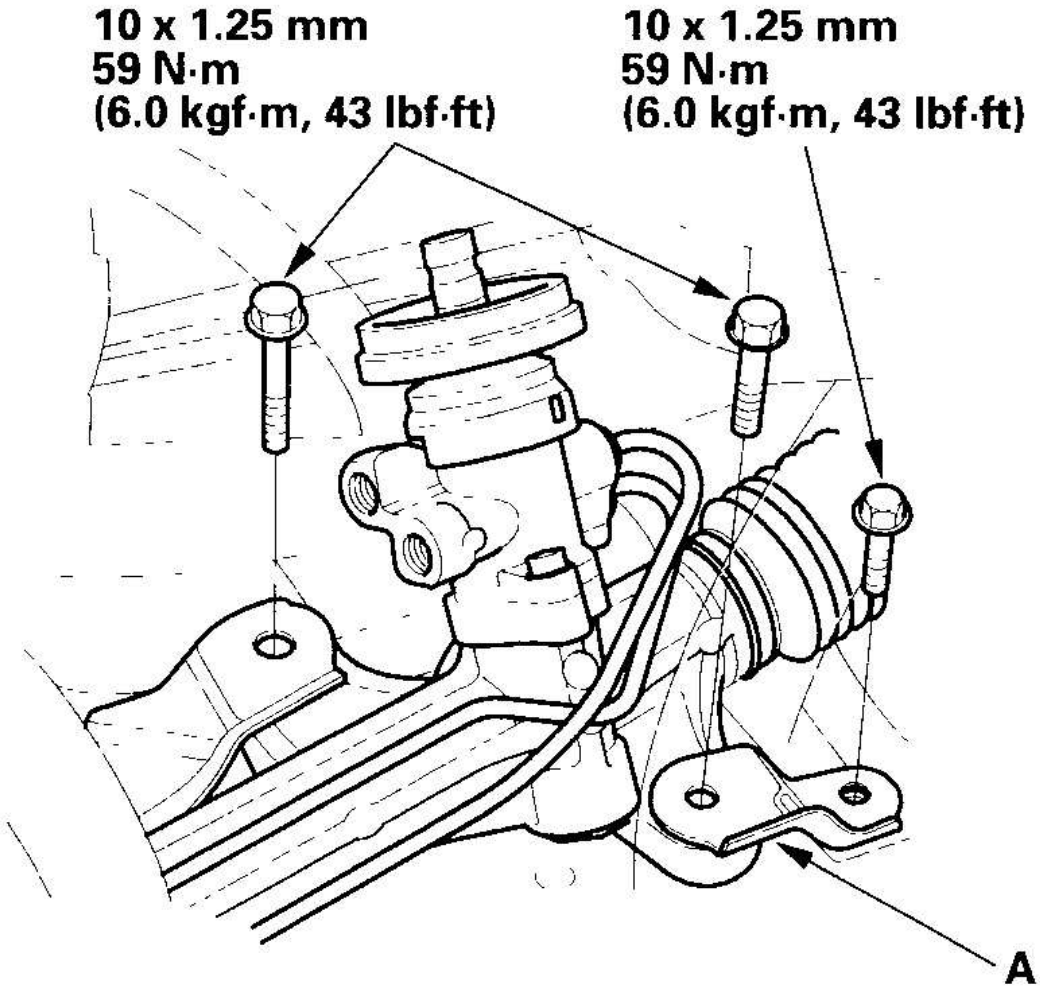


Fig. 92: Identifying Steering Stiffener Plate And Gearbox Mounting Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Tighten the flange bolts on the right side of the gearbox alternately in two or more steps to the specified torque.
12. Connect the return line (A) securely, and tighten the flare nut to the specified torque.

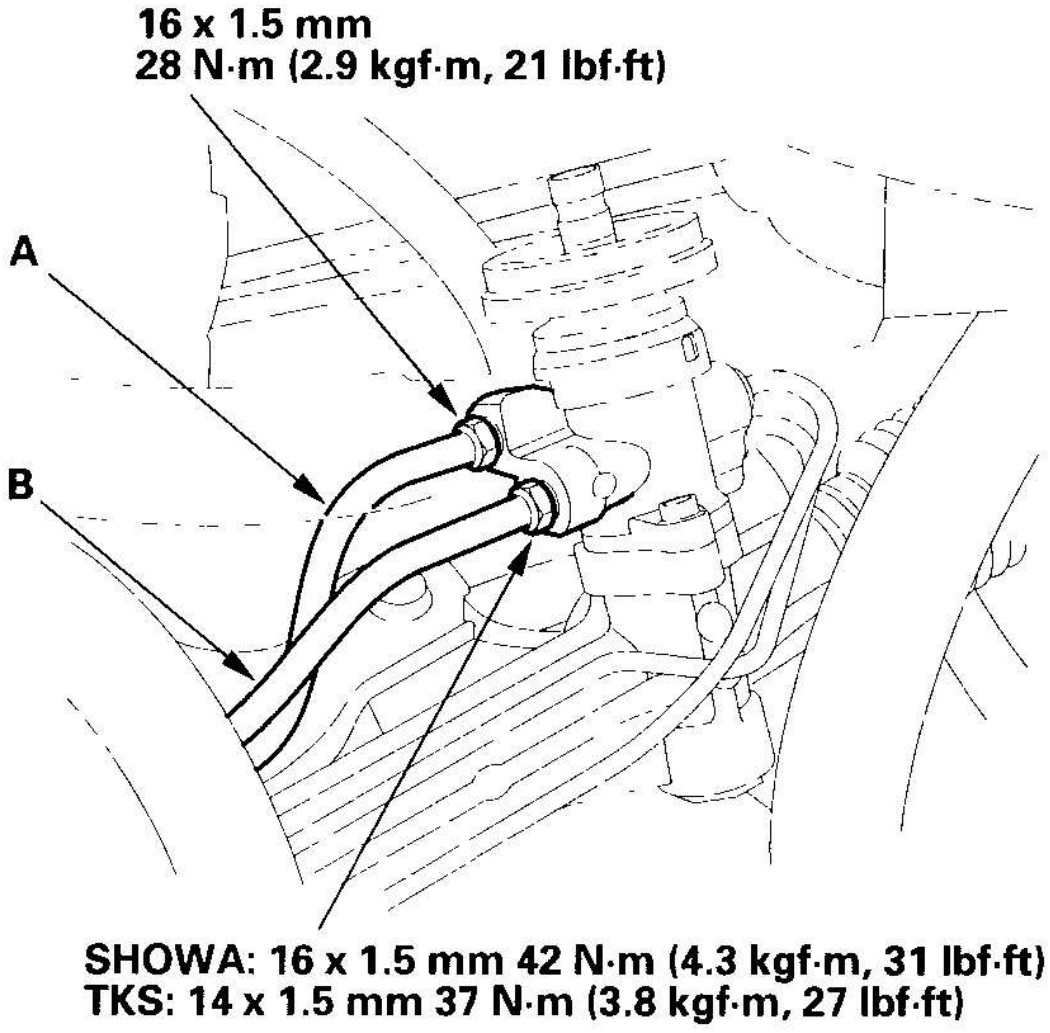


Fig. 93: Connecting Return Line Securely
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Connect the feed line (B) securely, and tighten the flare nut to the specified torque.
14. Install the feed line holder (A) and return hose (B) on the gearbox mounting bracket (C).

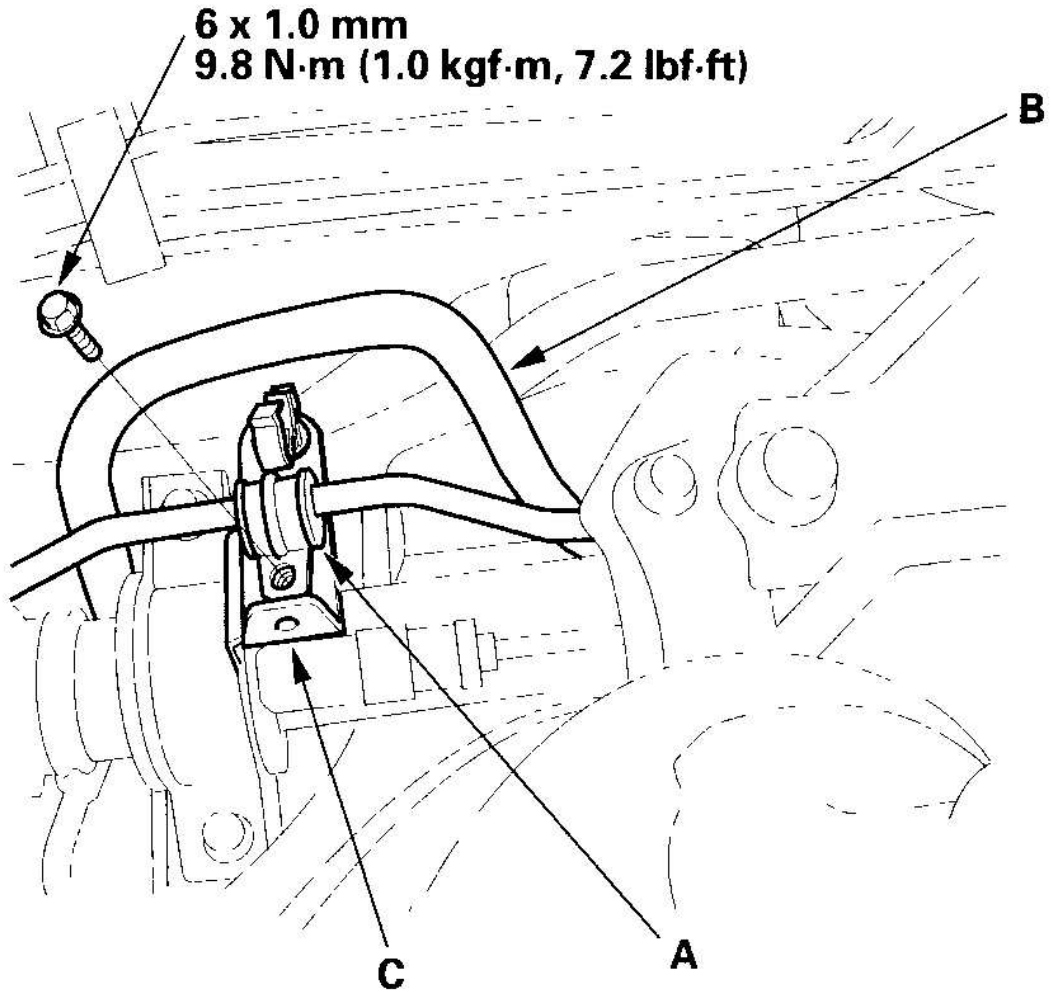


Fig. 94: Installing Feed Line Holder And Return Hose On Gearbox Mounting Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Install the feed line holder (A) on the subframe.

    Make sure that there is no interference between the feed and return lines any other parts.

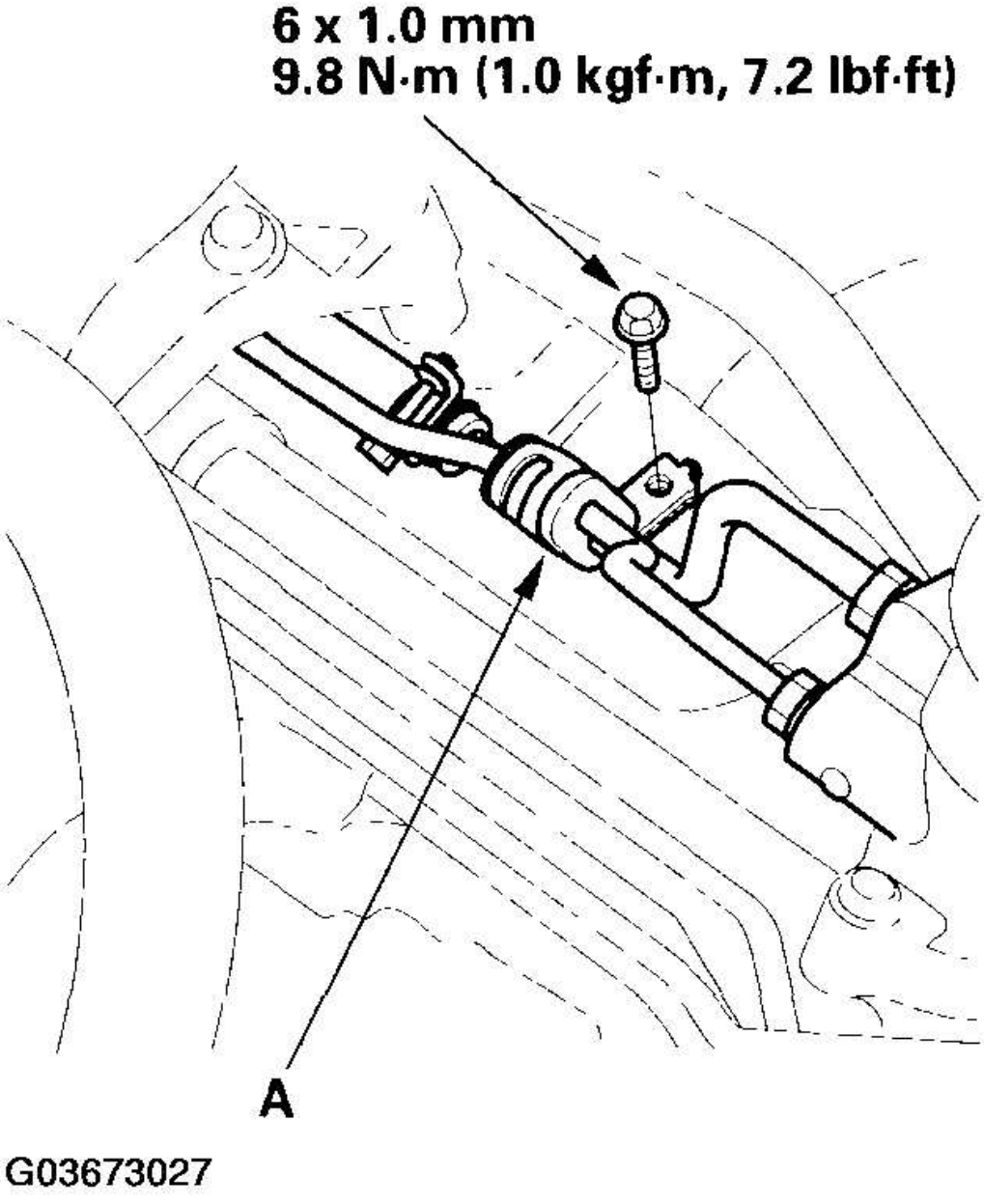


Fig. 95: Installing Feed Line Holder On Subframe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Install the P/S heat baffle plate (A).

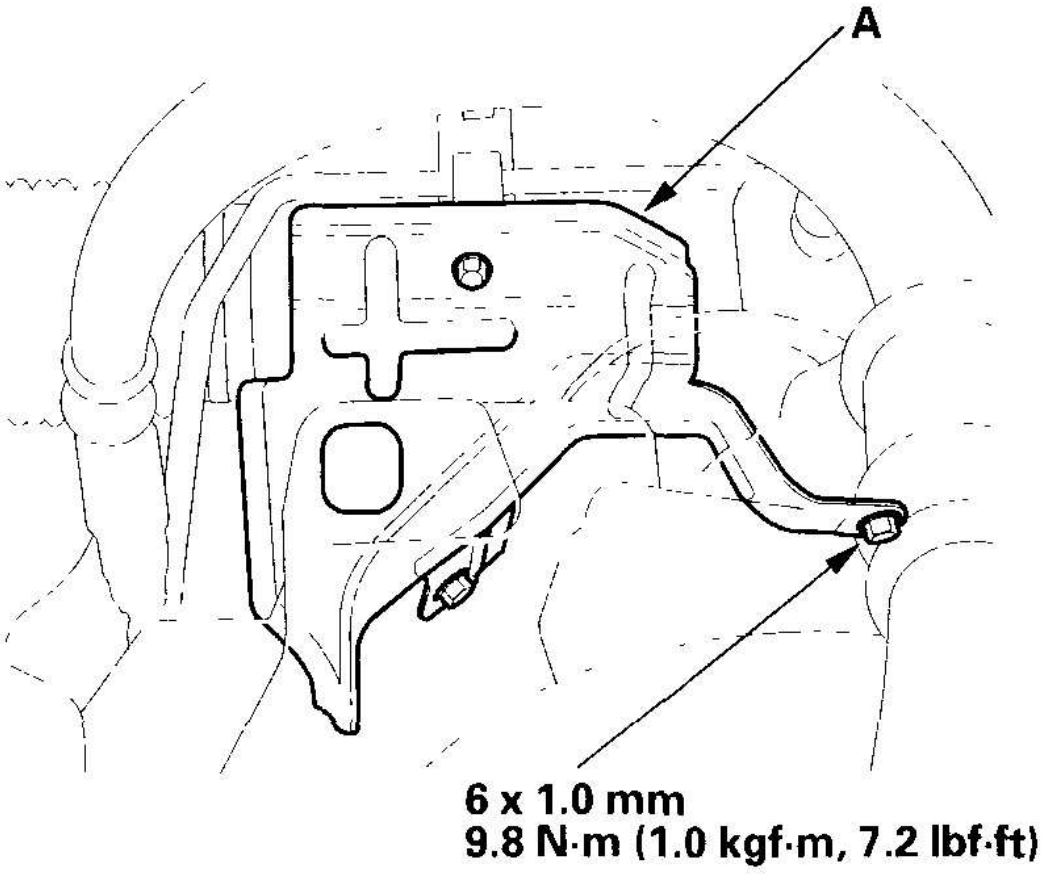


Fig. 96: Identifying P/S Heat Baffle Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Raise the jack supporting front suspension subframe (A) with the special tool until the subframe is in position, refer to **SUBFRAME REPLACEMENT** .

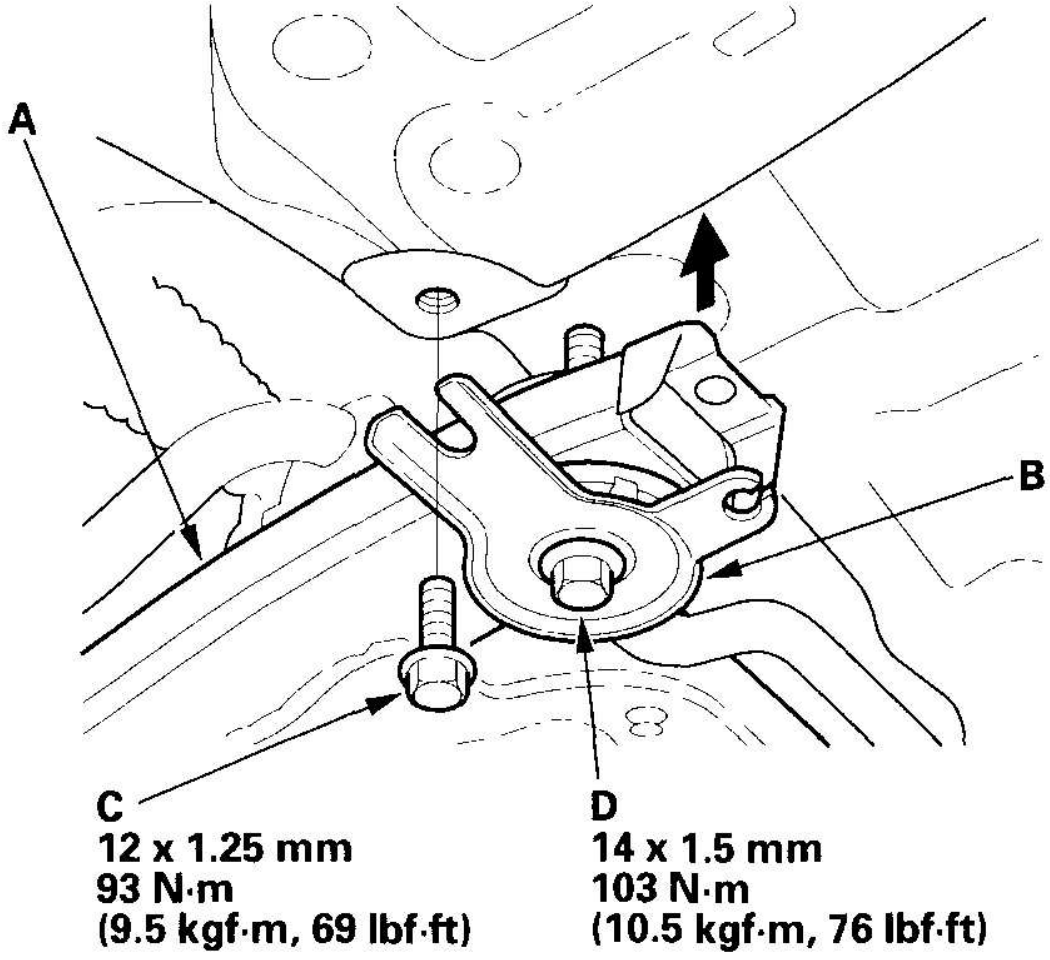


Fig. 97: Raising Jack Support Front Suspension Subframe With Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Install the front suspension subframe rear bracket (B) mounting bolt (C), then tighten the new subframe mounting bolt (D) to the specified torque.
19. Install the front suspension subframe left middle mount (A).

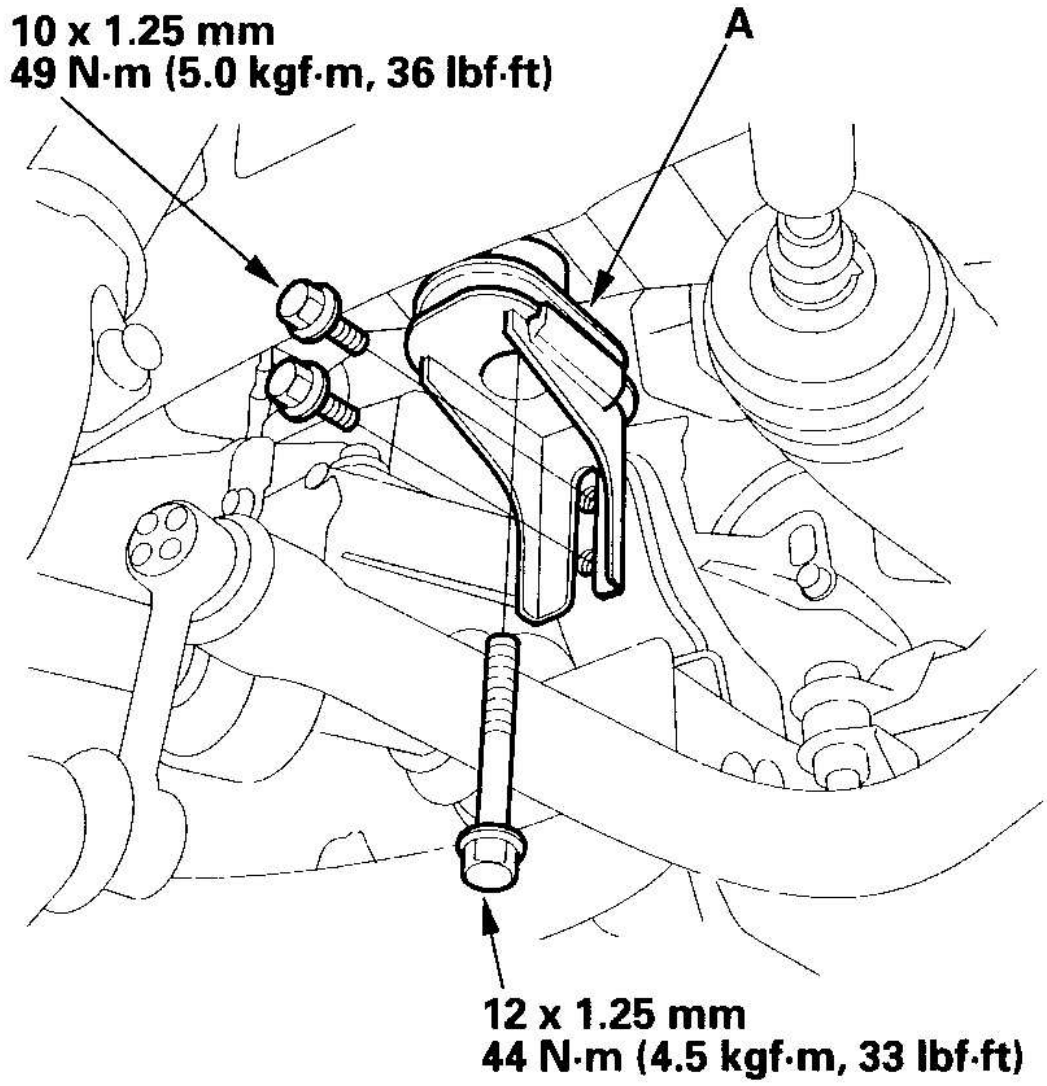


Fig. 98: Installing Front Suspension Subframe Left Middle Mount
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Install the front suspension subframe right middle mount bolts (A).

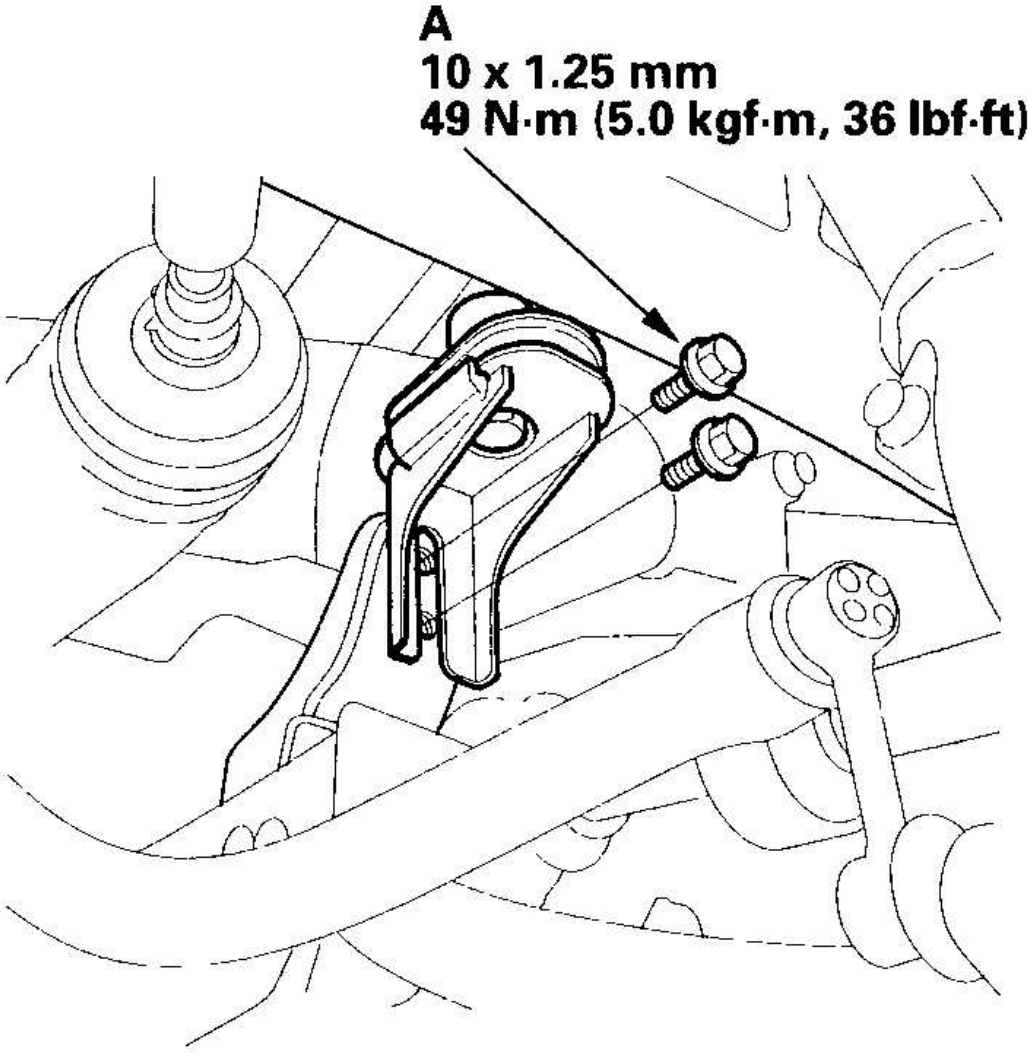


Fig. 99: Identifying Front Suspension Subframe Right Middle Mount Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Wipe off any grease contamination from the ball joint tapered section and threads. Then reconnect the tie-rod end (A) to the knuckle arms.

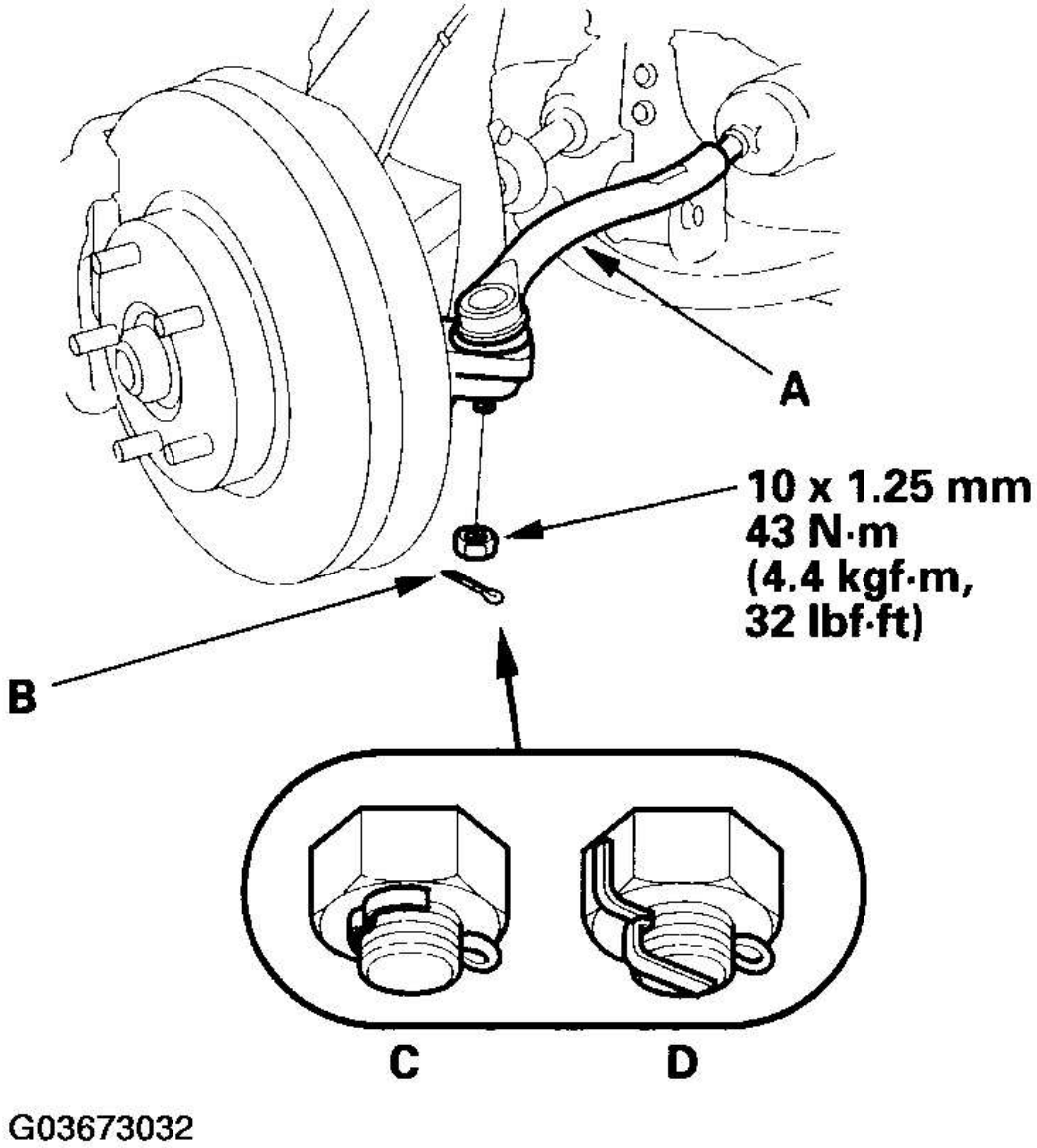


Fig. 100: Reconnecting Tie-Rod End To Knuckle Arms
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Install the tie-rod end ball joint nut, and tighten it to the specified torque. Then install the new cotter pin (B), and bend it as shown (C) or (D).
23. Install the new cover seal (A) all the way around in the steering joint cover B. Make sure there are no wrinkles in the seal, then install the steering joint cover

B.

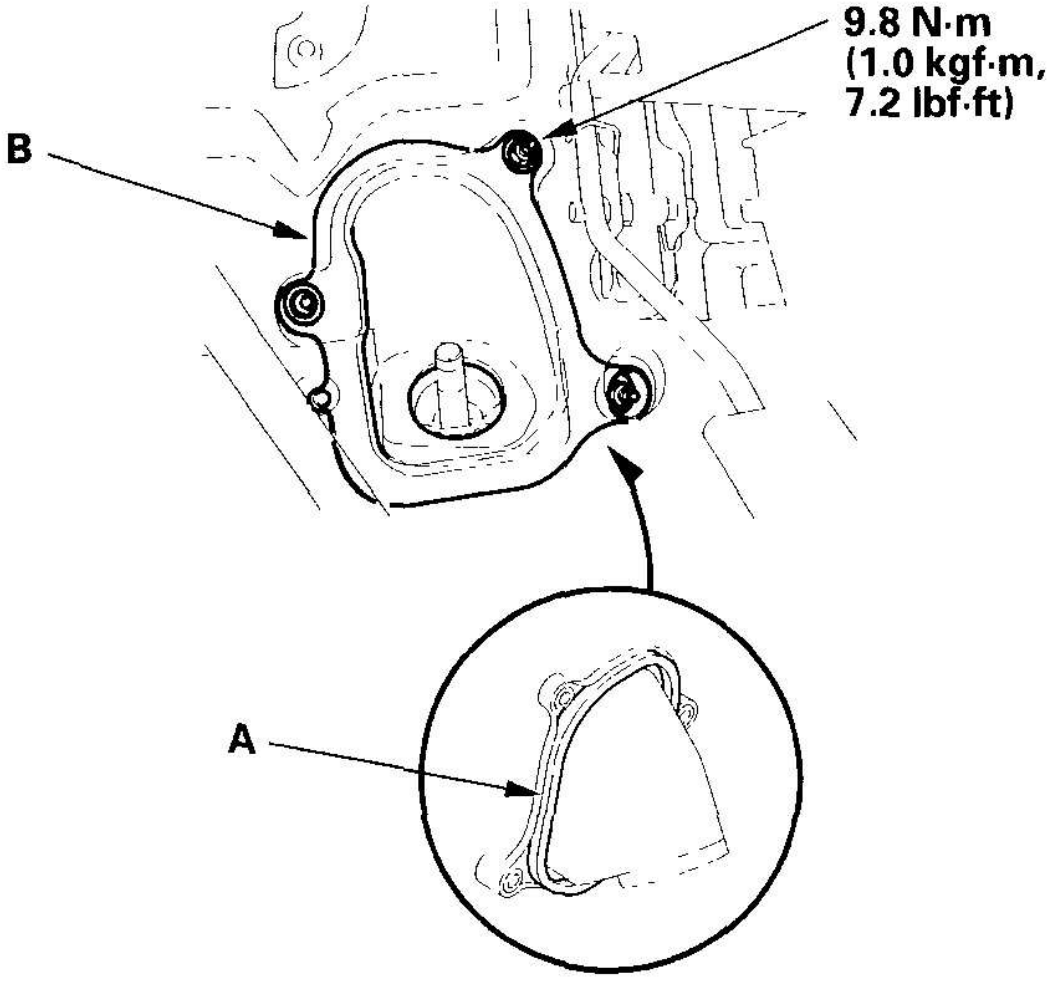


Fig. 101: Identifying Cover Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Center the steering rack within its stroke.
25. Position the steering column joint (A) so the bolt (B) opposite to the notch (C) is within the range shown.

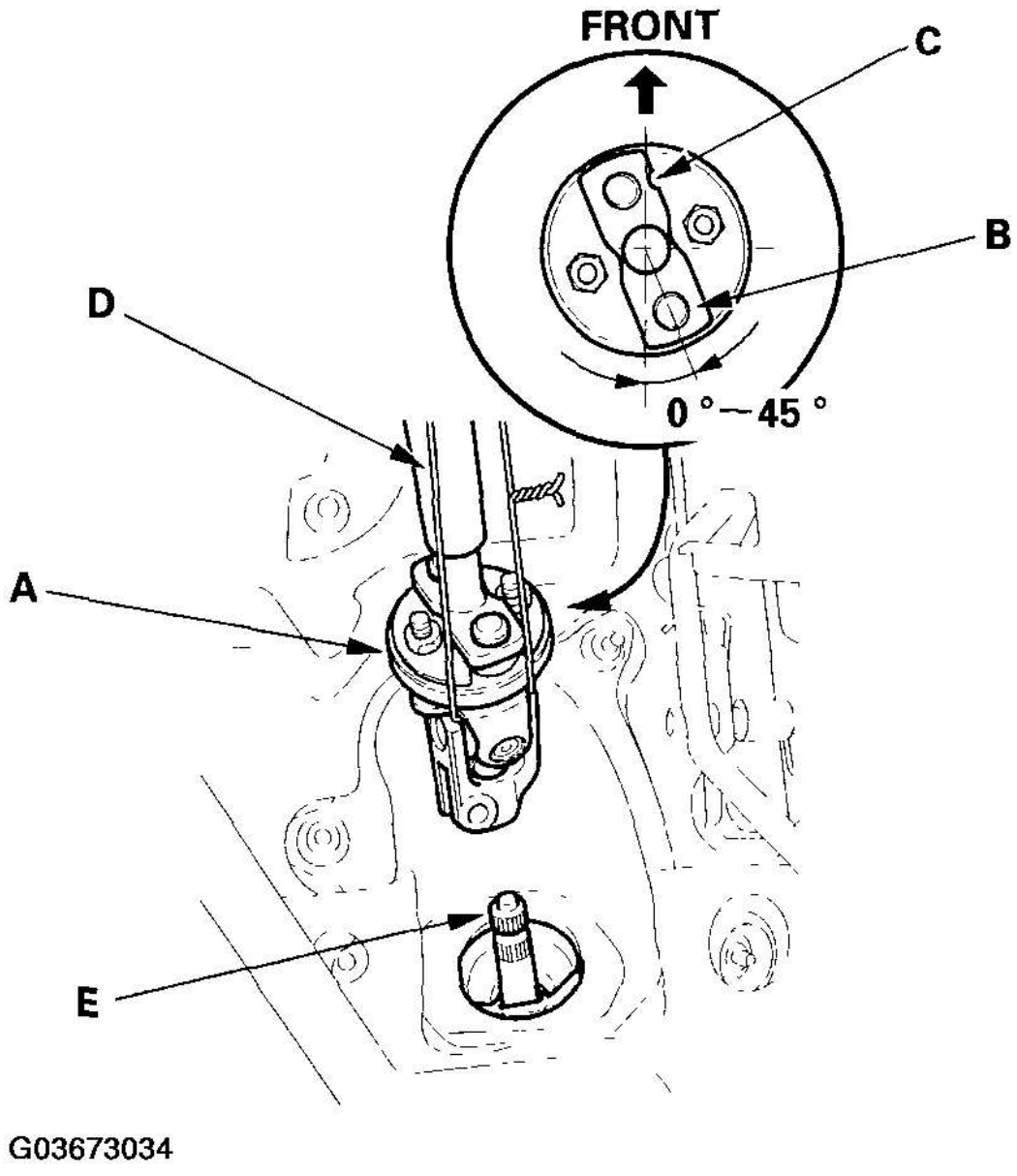


Fig. 102: Positioning Steering Column Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. With the rack in the straight ahead driving position, cut the wire (D) and slip the lower end of the steering joint on to the pinion shaft (E).
27. Align the bolt hole (A) on the steering joint with the groove (B) around the

pinion shaft, and loosely install the joint bolt (C). Make sure that the joint bolt is securely in the groove of the pinion shaft. Pull on the steering joint to make sure that the steering joint is fully seated.

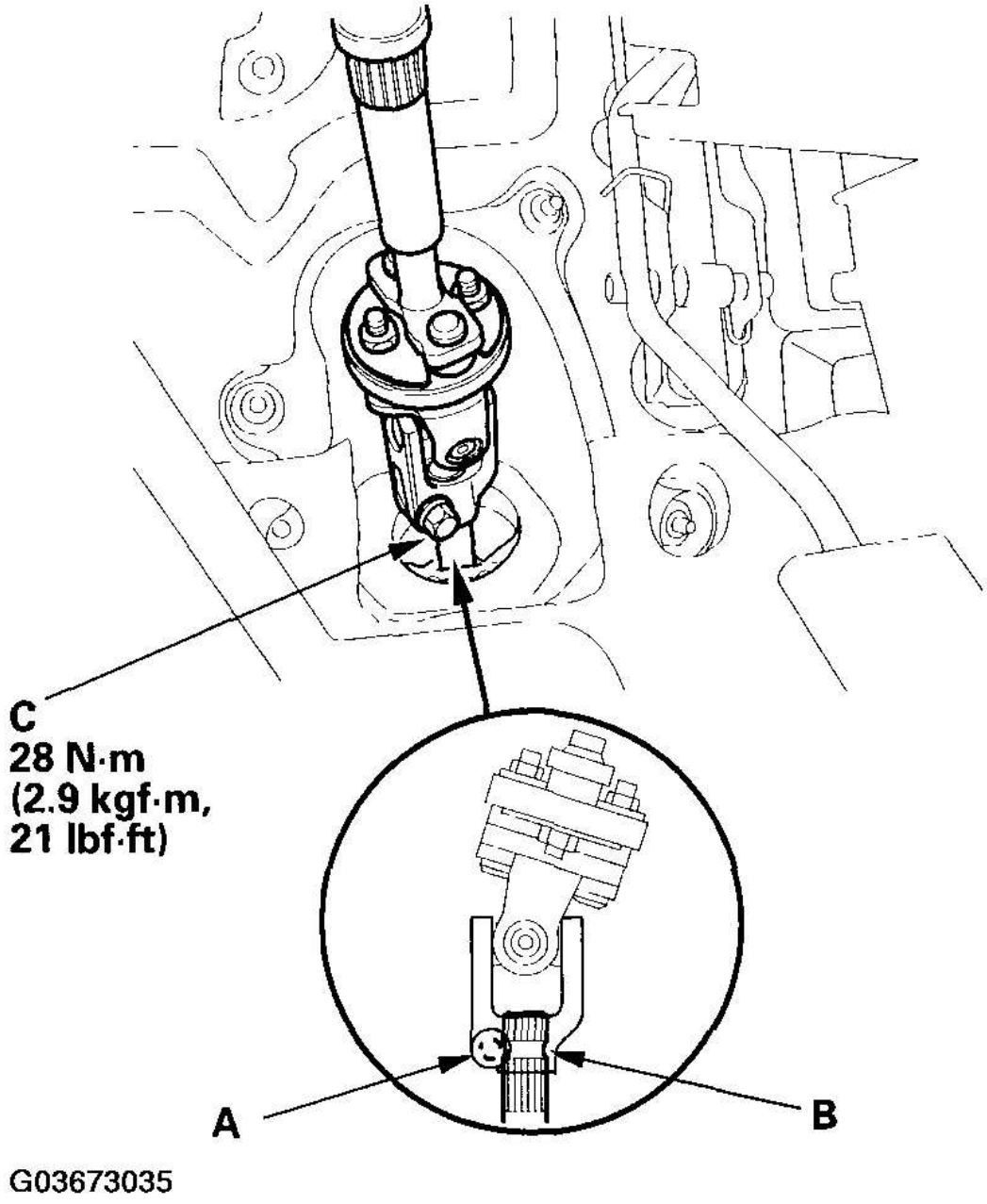


Fig. 103: Aligning Bolt Hole On Steering Joint With Groove Around

Pinion Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

28. Tighten the steering joint bolt to the specified torque.
29. Install the steering joint cover A until it contacts the mating surfaces on the cover B evenly around.

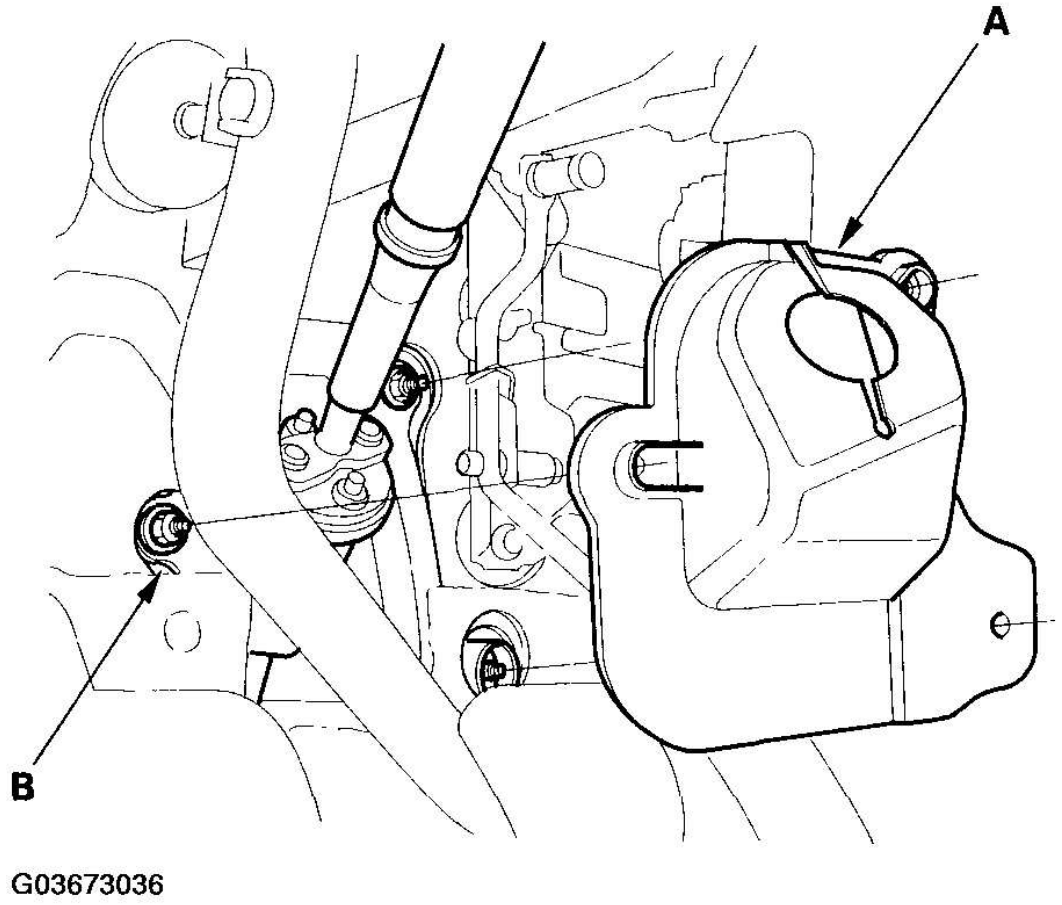


Fig. 104: Identifying Steering Joint Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

30. Install the front wheel, then set the wheels in the straight ahead position.
31. Center the cable reel by first rotating it clockwise until it stops. Then rotate it counterclockwise (about three full turns) until the arrow mark on the label

points straight up. Reinstall the steering wheel, refer to **STEERING WHEEL INSTALLATION** .

32. Fill the system with power steering fluid, and bleed air from the system (see **FLUID REPLACEMENT**).
33. After installation, do the following checks.
    - Start the engine, allow it to idle, and turn the steering wheel from lock-to-lock several times to warm up the fluid. Check the gearbox for leaks (see **FLUID LEAKAGE INSPECTION**).
    - Do the front toe inspection, refer to **FRONT TOE INSPECTION/ADJUSTMENT** .
    - Check the steering wheel spoke angle. If steering spoke angles to the right and left are not equal (steering wheel and rack are not centered), correct the engagement of the joint/pinion shaft serrations, and repeat step 31. Then adjust the front toe by turning the tie-rod ends, if necessary.

2003-07 STEERING

Power Steering - Accord

SPECIAL TOOLS

Ref. No.	Tool Number	Description	Qty
①	07GAF-PH70100	Pilot Collar	1
②	07HAG-SF10100	Piston Seal Ring Guide	1
③	07HAG-SF1020A or 07HAG-SF10200	Piston Seal Ring Sizing Tool	1
④	07MAC-SL0A202	Ball Joint Remover, 28 mm	1
⑤	07NAD-SR3020A	Cylinder End Seal Remover Attachment	1
⑥	07NAG-SR3090A	Valve Seal Ring Sizing Tool	1
⑦	07ZAB-S5A0100	Pulley Holder	1
⑧	07VAK-P8A011A	P/S Joint Adapter (Pump)	1
⑨	07ZAK-S7CA100	P/S Joint Adapter Plate (Pump)	1
⑩	07ZAK-S7CA200	P/S Joint Adapter (Hose)	1
⑪	07ZAG-S5A0300	Cylinder End Seal Slider	1
⑫	07406-0010001 or 07406-001000A	P/S Pressure Gauge	1
⑬	07746-0010100	Attachment, 32 x 35 mm	1
⑭	07749-0010000	Driver	1
⑮	07916-SA50001	Locknut Wrench, 40 mm	1
⑯	07965-SA50500	Front Hub Dis/Assembly Tool	1
⑰	07974-SA5020A or 07974-SA50200	Sleeve Seal Ring Sizing Tool	1
⑱	07974-SA50800	Ball Joint Boot Clip Guide	1

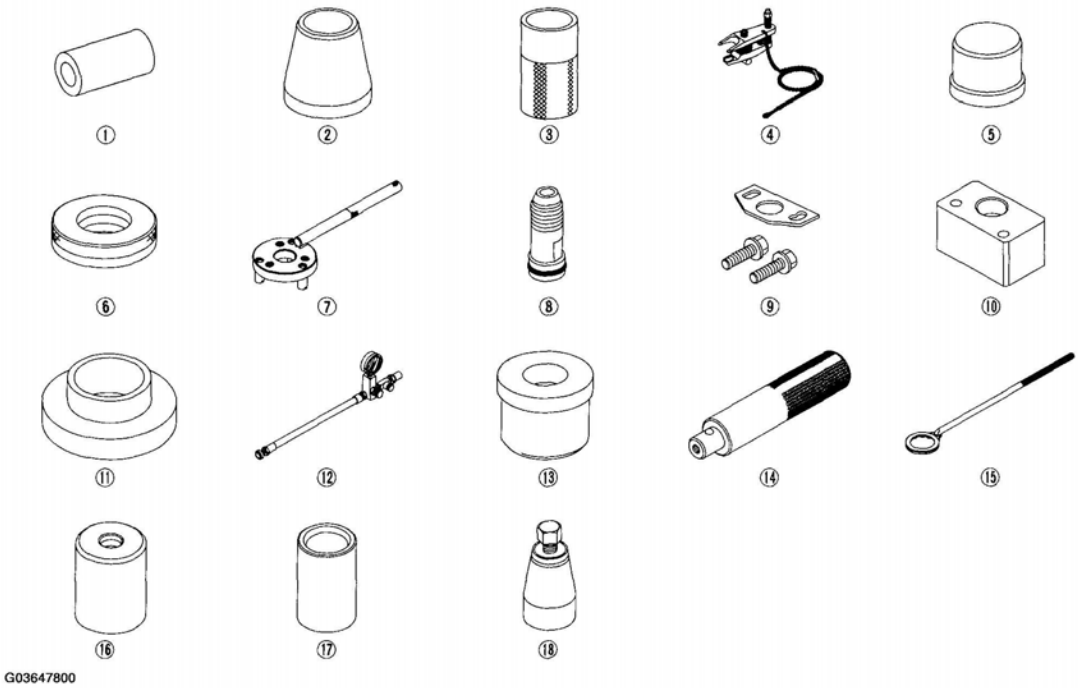


Fig. 1: Identifying Special Tools
Courtesy of AMERICAN HONDA MOTOR CO., INC.

COMPONENT LOCATION INDEX

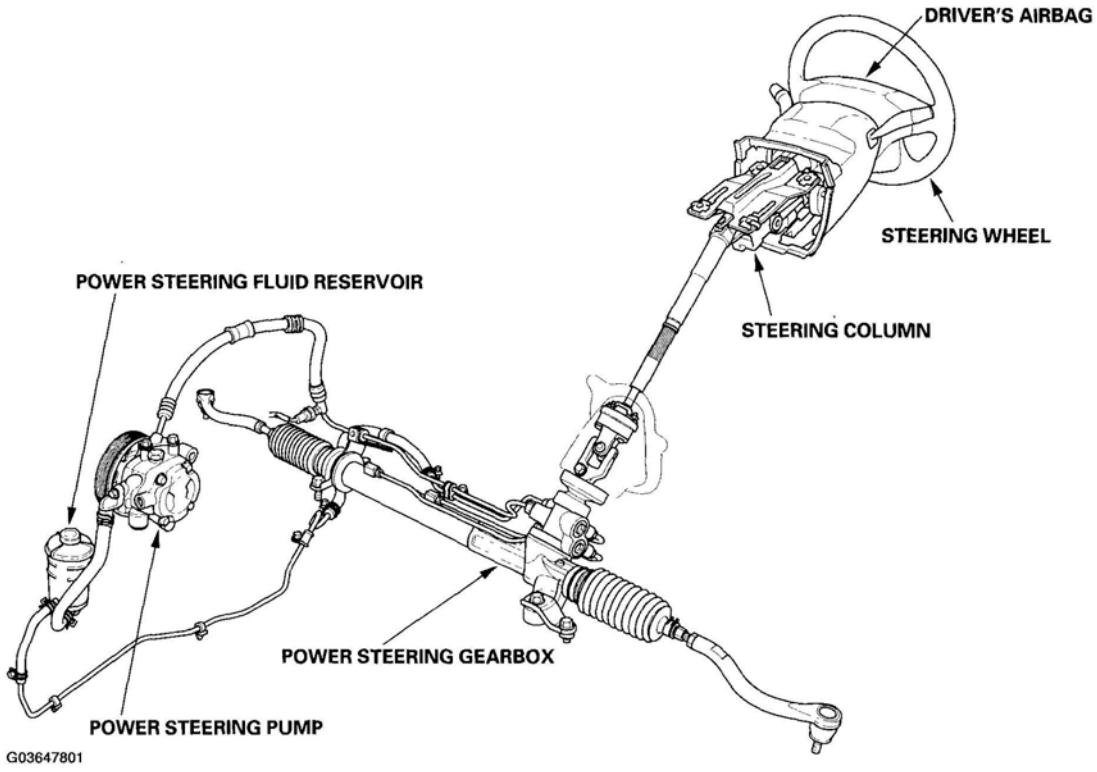


Fig. 2: Identifying Power Steering Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

Find the symptom in **SYMPTOM TROUBLESHOOTING INDEX** , and do the related procedures in the order listed until you find the cause.

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Procedure(s)	Also check for:
Hard steering	Troubleshoot the system (see **SYMPTOM TROUBLESHOOTING**).	• Modified suspension • Damaged suspension • Tire sizes, tire varieties, and air pressure

Assist (excessively light steering at high speed)	Check the rack guide adjustment (see **RACK GUIDE ADJUSTMENT**).	Front wheel alignment (see **WHEEL ALIGNMENT**).
Shock or vibration when the steering wheel is turned to full lock	1. Check the rack guide adjustment (see **RACK GUIDE ADJUSTMENT**). 2. Check the drive belt for slippage (see **DRIVE BELT INSPECTION**). 3. Check the power steering pump fluid pressure with T/N 07406-0010001 (see **PUMP PRESSURE TEST WITH T/N 07406-0010001**) or T/N 07406-001000A (see **PUMP PRESSURE TEST WITH T/N 07406-001000A**). 4. Overhaul the steering gearbox (see **STEERING GEARBOX OVERHAUL**).	
Steering wheel will not return smoothly	1. Check cylinder lines for deformation. 2. Check upper and lower ball joints for binding. 3. Check wheel alignment (see **WHEEL ALIGNMENT**). 4. Overhaul the steering gearbox (see **STEERING**	

	GEARBOX OVERHAUL).	
Uneven or rough steering	1. Check the rack guide adjustment (see **RACK GUIDE ADJUSTMENT**). 2. Check the drive belt (see **DRIVE BELT INSPECTION**). 3. Check low or erratic engine idle speed (see **IDLE SPEED INSPECTION**). 4. Check for air in the power steering system due to air entering inlet side of pump. 5. Check for low fluid level in the power steering reservoir due to possible leaks in system. 6. Overhaul the steering gearbox (see **STEERING GEARBOX OVERHAUL**).	
Steering wheel kicks back during wide turns.	1. Check the drive belt (see **DRIVE BELT INSPECTION**). 2. Check the power steering pump fluid pressure with T/N 07406-0010001 (see **PUMP PRESSURE TEST WITH T/N 07406-**	

	0010001) or T/N 07406-001000A (see **PUMP PRESSURE TEST WITH T/N 07406-001000A**).	
Humming noise from the power steering system	1. Check when the noise occurs: • If the noise is heard 2-3 minutes after starting the engine in cold weather, this is normal. • If the noise is heard when the wheel is turned with the vehicle stopped, this is normal due to the fluid pulsation. 2. Check for the high-pressure hose touching the subframe or body. 3. Check for automatic transmission converter noise. 4. Check for air bubbles in the power steering fluid, leak on inlet side of pump. 5. Check for particle contamination of fluid and restricted filter in the reservoir.	Pump pressure
	1. Check for loose steering components (tie-rod and	

Power steering rack rattle or chattering	ball joints). Tighten or replace as necessary. 2. Check the steering column shaft for wobbling. If the steering column wobbles, replace the steering column assembly (see **STEERING COLUMN REMOVAL AND INSTALLATION**). 3. Check the rack guide adjustment (see **RACK GUIDE ADJUSTMENT**). 4. Check the power steering pump pulley. • If the pulley is loose, tighten it (see step 47 in **Pump Overhaul**). • If the pump shaft is loose, replace the pump (see **PUMP REPLACEMENT**).	
Hissing from the power steering system	• Check the fluid level. If low, fill the reservoir to the proper level and check for leaks. • Check the reservoir for leaks. • Check for crushed inlet hose or loose hose clamp	Air in the P/S fluid

	allowing air into the suction side of the system. • Check the power steering pump shaft oil seal for leaks.	
Noise from the power steering pump	• Compare the pump noise at normal operating temperature to another like vehicle (pump noise up to 2-3 minutes after starting the engine in cold weather is normal). • Remove and inspect the pump for wear and damage (see **PUMP OVERHAUL**).	• P/S pump pressure • Air in the P/S fluid
Squeaking from the power steering pump	Check the drive belt (see **DRIVE BELT INSPECTION**).	
Fluid leaks from the steering gearbox	• Fluid leaks from the top of the valve body unit: Overhaul the valve body unit (see **STEERING GEARBOX OVERHAUL**). • Fluid leaks from the left boot: Replace the valve oil seal on the pinion shaft. Replace the cylinder end seal on the gearbox side. • Fluid leaks from the right boot: Replace the right cylinder end seal. • Fluid leaks from pinion	

	shaft near the lower steering joint bolt: Overhaul the valve body unit. • Fluid leaks from the steering damping valve covers on the valve body unit: Replace the valve housing.	
Fluid leaks from the power steering line	• Fluid leaks from the cylinder line connections (flare nuts): Tighten the connection and retest. • Fluid leaks from damaged cylinder lines: Replace the cylinder line. • Fluid leaks from the pump outlet hose or return line fitting on the valve body unit (flare nuts): Tighten the fitting and retest. If it still leaks, replace the hose, the line, or valve body unit as necessary.	
Fluid leaks from the power steering pump	• Fluid leaks from the front oil seal: Replace the front oil seal. • Fluid leaks from the power steering pump housing: Replace the leaking O-rings or seals (see **PUMP OVERHAUL**), and if necessary replace the power steering pump (see	

	PUMP REPLACEMENT).	
Fluid leaks from the power steering reservoir	• Fluid leaks from around the reservoir cap: Fluid level is too high; drain the reservoir to the proper level. Aerated fluid: check for an air leak on the inlet side of pump. • Fluid leaks from reservoir: Check the reservoir for cracks and replace as necessary.	
Fluid leaks from the power steering pump outlet hose (high-pressure)	• Check the fitting for loose bolts. If the bolts are tight, replace the fitting O-ring. • Fluid leaks at the swagged joint: Replace the outlet hose.	
Fluid leaks from the power steering pump inlet hose (low-pressure)	Check the hose for damage, deterioration, or improper assembly. Replace or repair as necessary.	

SYMPTOM TROUBLESHOOTING

HARD STEERING

1. Check the power assist (see **Power Assist Check**).

   Is the starting load more than 29 N (3.0 kgf, 6.6 lbf)?

   YES - Go to step 2.
   NO - Power assist is OK.
2. Measure steady-state fluid pressure from the pump at idle with T/N 07406-

0010001 (see **PUMP PRESSURE TEST WITH T/N 07406-0010001**) or T/N 07406-001000A (see **PUMP PRESSURE TEST WITH T/N 07406-001000A**).

Is the pressure 1,470 kPa (15 kgf/cm^2 , 213 psi) or less?

YES - Go to step 3.

NO - Go to step 7.

3. Measure the pump relief pressure at idle with T/N 07406-0010001 (see step 10 in **Pump Pressure Test with T/N 07406-0010001**) or T/N 07406-001000A (see step 9 **Pump Pressure Test with T/N 07406-001000A**).

   Is the pressure 7,160-7,850 kPa (73-80 kgf/cm^2 , 1,040- 1,140 psi) or less?

   YES - Go to step 4.

   NO - Faulty pump assembly.

4. With a spring scale, measure the power assist in both directions, to the left and to the right.

   Are the two measurements within 2.9 N (0.3 kgf, 0.66 lbf) of each other?

   YES - Go to step 5.

   NO - Go to step 8.

5. Measure the fluid pressure with both pressure gauge valves open (if so equipped), while turning the steering wheel fully to the left and fully to the right.

   Is the pressure 7,160- 7,850 kPa (73- 80 kgf/cm^2 , 1,040- 1,140 psi) or less?

   YES - Go to step 6.

   NO - Faulty gearbox.

6. Adjust the rack guide (see **RACK GUIDE ADJUSTMENT**), and retest.

   Is the steering OK?

YES - Repair is completed.

NO - Faulty gearbox.

7. Check the feed and return lines between the pump and the gearbox for clogging and deformation.

   Are the lines clogged or deformed?

   YES - Repair or replace the lines.

   NO - Faulty valve body unit or pump.

8. Check the cylinder lines for deformation (see **FLUID LEAKAGE INSPECTION**).

   Are the lines deformed?

   YES - Replace the lines.

   NO - Go to step 9.

9. Check for a bent rack shaft or misadjusted rack guide (too tight).

   Is the rack shaft bent or the rack guide adjusted too tight?

   YES - Replace the rack shaft or readjust the rack guide.

   NO - Faulty valve body unit.

STEERING WHEEL ROTATIONAL PLAY CHECK

1. Turn the front wheels to the straight ahead position.
2. Measure how far you can turn the steering wheel left and right without moving the front wheels.
   - If the play is within the limit, the gearbox and linkages are OK.
   - If the play exceeds the limit, adjust the rack guide (see **RACK GUIDE ADJUSTMENT**). If the play is still excessive after rack guide adjustment, inspect the steering linkage and gearbox (see **STEERING LINKAGE AND GEARBOX INSPECTION**).

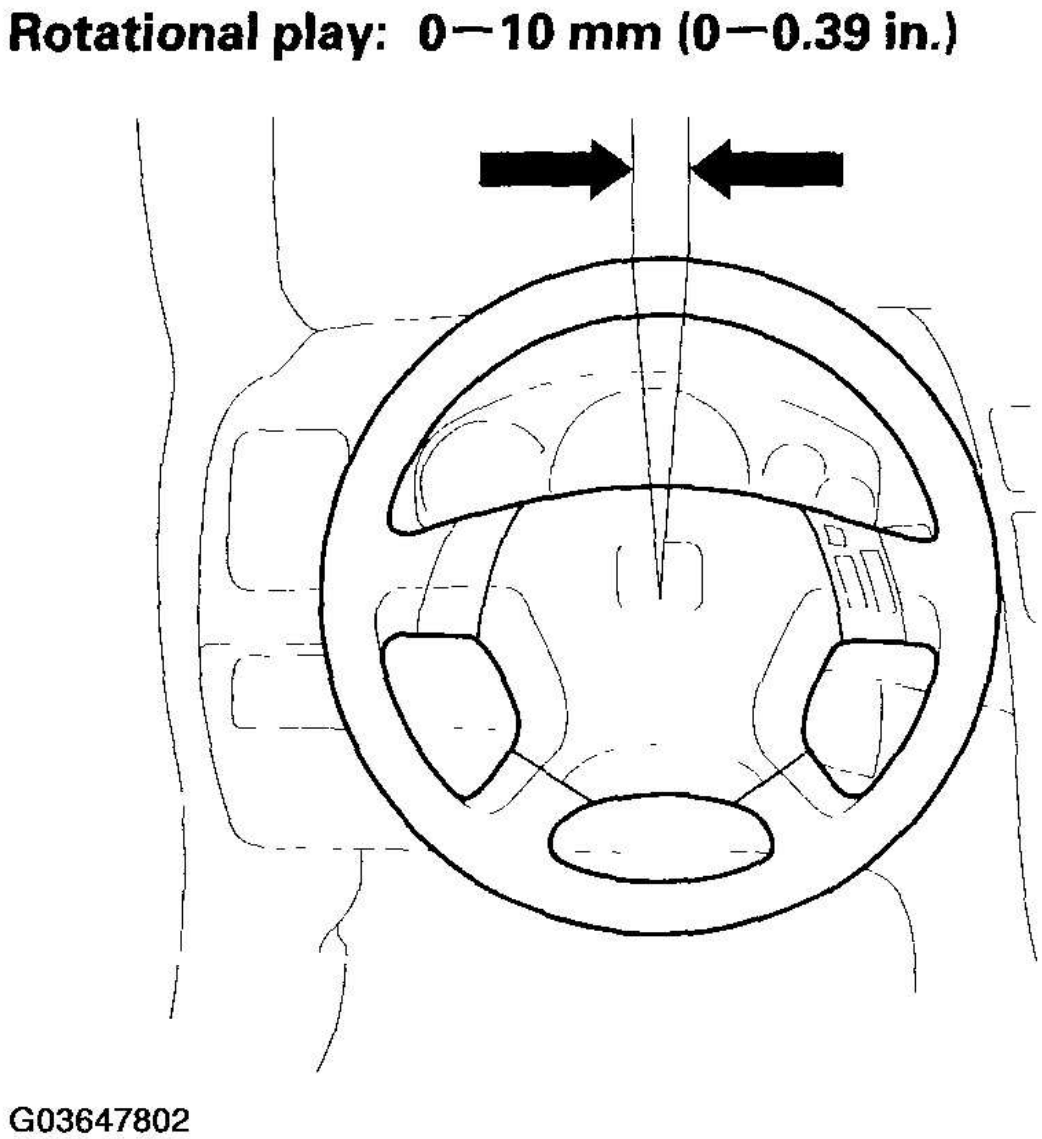


Fig. 3: Measuring Steering Wheel Left And Right Without Moving Front Wheels
Courtesy of AMERICAN HONDA MOTOR CO., INC.

POWER ASSIST CHECK

NOTE: This test should be done with original equipment tires and wheels at the correct tire pressure.

1. Check the power steering fluid level (see **FLUID REPLACEMENT**).
2. Start the engine, let it idle, and turn the steering wheel from lock-to-lock several times to warm up the fluid.
3. Attach commercially available spring scale to the steering wheel. With the engine idling and the vehicle on a clean, dry floor, pull the scale as shown and read it as soon as the tires begin to turn.
   - If the scale reads no more than the specifications, the gearbox and pump are OK.
   - If the scale reads more than specifications, troubleshoot the steering system (see **SYMPTOM TROUBLESHOOTING**).

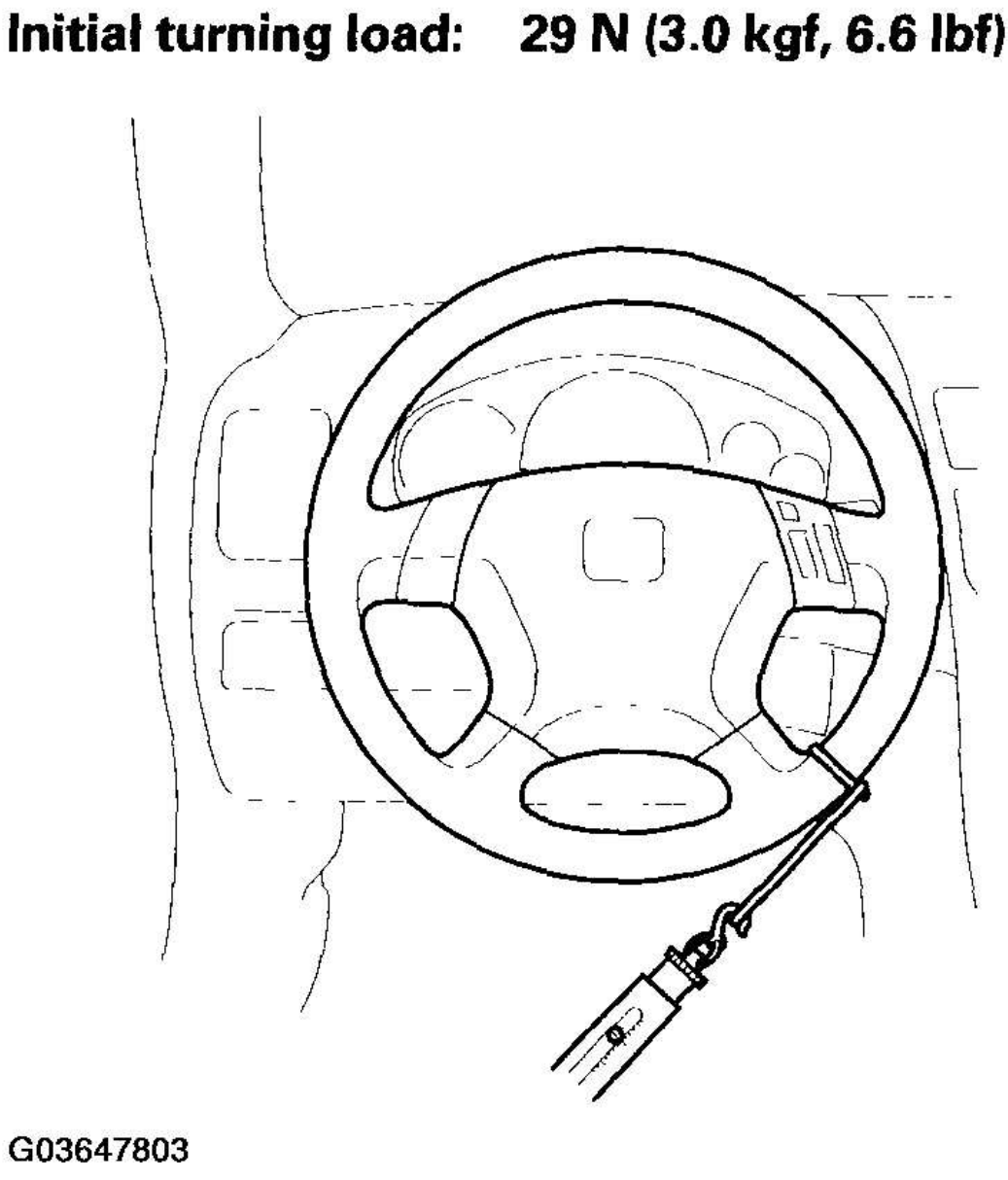


Fig. 4: Attaching Commercially Available Spring Scale To Steering Wheel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

STEERING LINKAGE AND GEARBOX INSPECTION

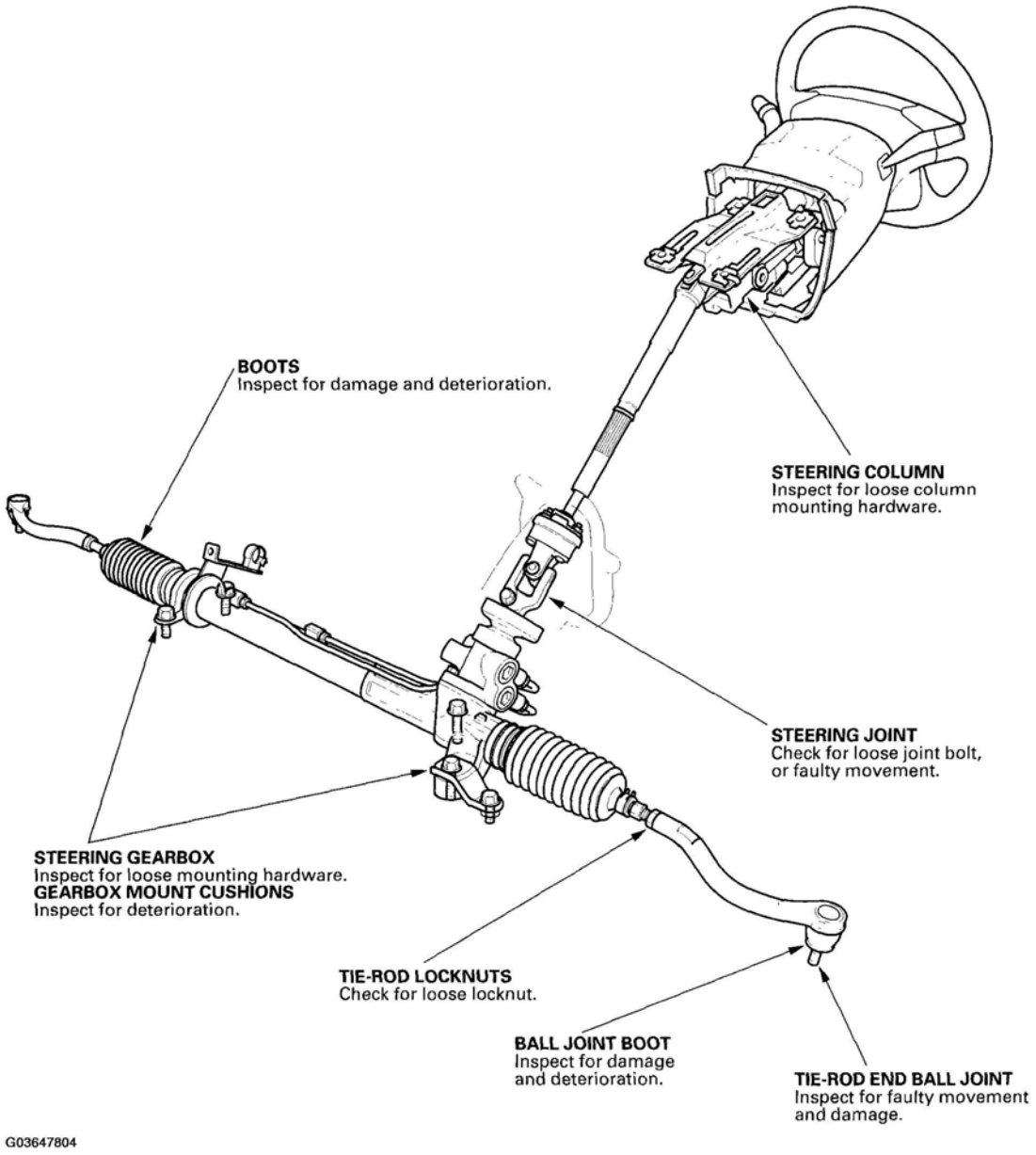


Fig. 5: Identifying Steering Linkage And Gearbox Inspection Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PUMP PRESSURE TEST WITH T/N 07406-0010001

Special Tools Required

- P/S joint adapter (pump) 07VAK-P8A011A

- P/S joint adapter plate (pump) 07ZAK-S7CA100
- P/S joint adapter (hose) 07ZAK-S7CA200
- P/S pressure gauge 07406-0010001

Check the fluid pressure as follows to determine whether the trouble is in the pump or gearbox.

1. Check the power steering fluid level (see **FLUID REPLACEMENT**).
2. Disconnect the pump outlet hose (A) from the pump outlet with care so as not to spill the power steering fluid on the frame and other parts. Install the P/S joint adapter (pump) on the pump outlet (B).

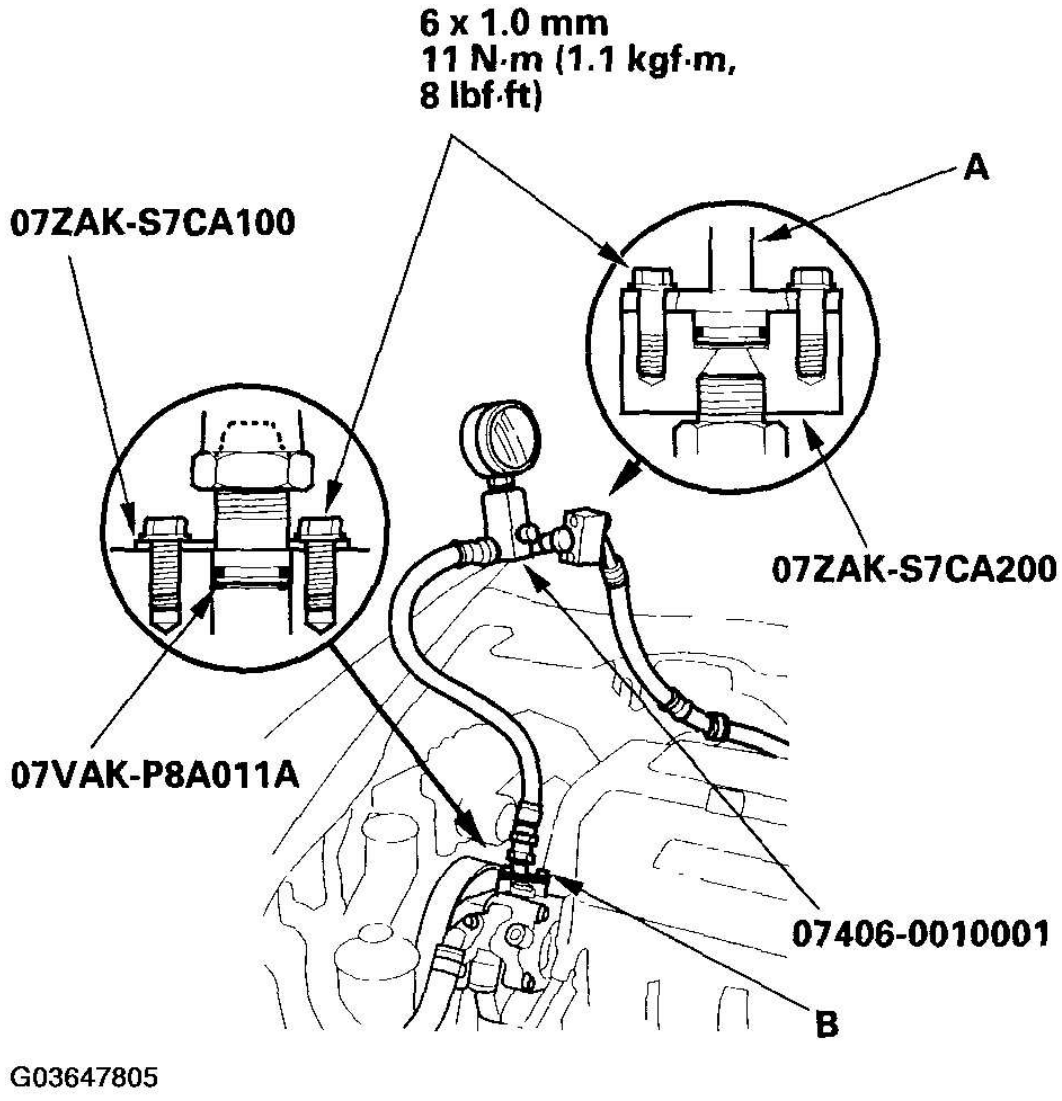


Fig. 6: Installing P/S Joint Adapter (Pump) On Pump Outlet
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Connect the P/S joint adapter (hose) to the P/S pressure gauge, then connect the pump outlet hose to the P/S joint adapter (hose).
4. Install the P/S pressure gauge to the P/S joint adapter (pump).
5. Fully open the shut-off valve (A).

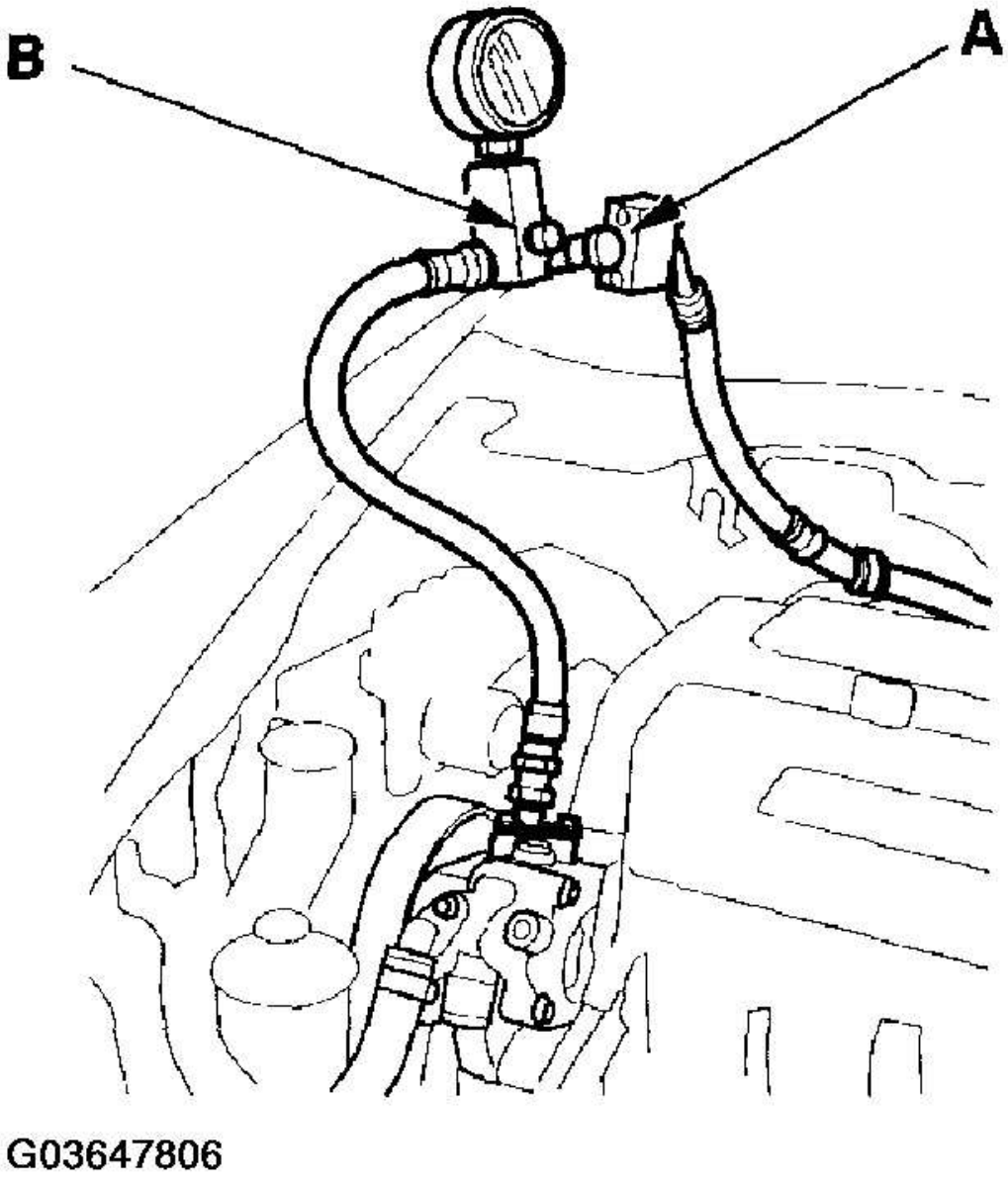


Fig. 7: Opening Shut-Off Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Fully open the pressure control valve (B).
7. Start the engine and let it idle.

8. Turn the steering wheel from lock-to-lock several times to warm the fluid to operating temperature at 158°F (70°C).
9. Measure steady-state fluid pressure while the engine is idling. If the pump is in good condition, the pressure should be no more than 1,470 kPa (15 kgf/cm^2 , 214 psi). If the pressure is too high, check the outlet hose or valve body unit (see **Symptom Troubleshooting**).

   Raise the engine speed to 3,000 rpm, and measure the fluid pressure. If the pump is in good condition, the pressure should be at least 1,470 kPa (15 kgf/cm^2 , 214 psi). If the pressure is too high, repair or replace the pump.

10. Lower the engine speed and let it idle. Close the shut-off valve, then close the pressure control valve gradually until the pressure gauge needle is stable. Read the pressure.

    NOTE: Do not keep the shut-off valve closed more than 5 seconds or the pump could be damaged by over-heating.

11. Immediately open the shut-off valve fully. If the pump is in good condition, the gauge should read at least 7,160-7,850 kPa (73-80 kgf/cm^2 ,1,040-1,140 psi). A low reading means pump output is too low for full assist. Repair or replace the pump.

PUMP PRESSURE TEST WITH T/N 07406-001000A

Special Tools Required

- P/S joint adapter (pump) 07VAK-P8A011A
- P/S joint adapter plate (pump) 07ZAK-S7CA100
- P/S joint adapter (hose) 07ZAK-S7CA200
- P/S pressure gauge 07406-001000A

Check the fluid pressure as follows to determine whether the trouble is in the pump or gearbox.

1. Check the power steering fluid level (see **FLUID REPLACEMENT**).
2. Disconnect the pump outlet hose (A) from the pump outlet with care so as not to spill the power steering fluid on the frame and other parts. Install the P/S joint adapter (pump) on the pump outlet (B).

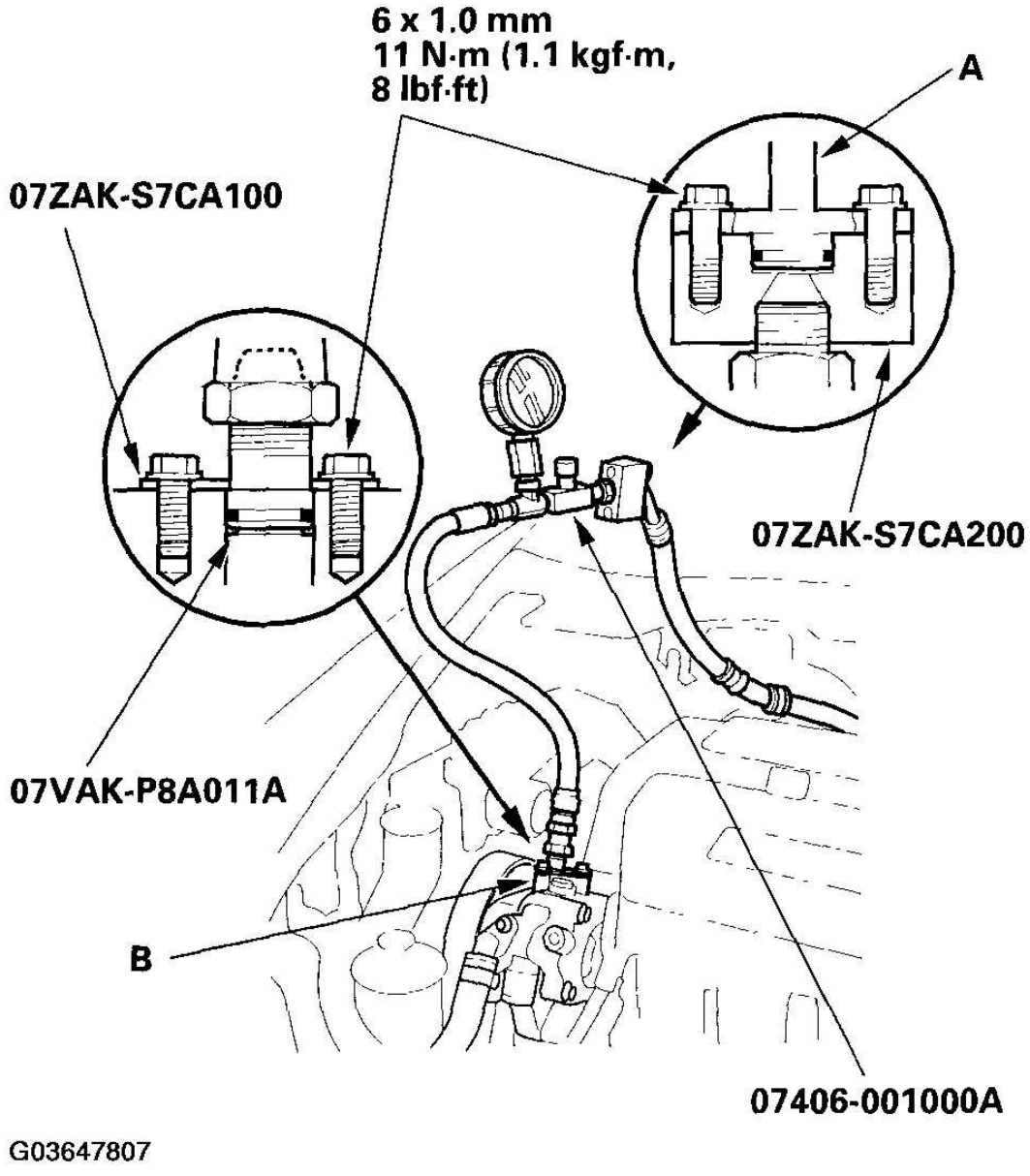


Fig. 8: Installing P/S Joint Adapter (Pump) On Pump Outlet
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Connect the P/S joint adapter (hose) to the P/S pressure gauge, then connect the pump outlet hose to the P/S joint adapter (hose).
4. Install the P/S pressure gauge to the P/S joint adapter (pump).
5. Open the pressure control valve (A) fully.

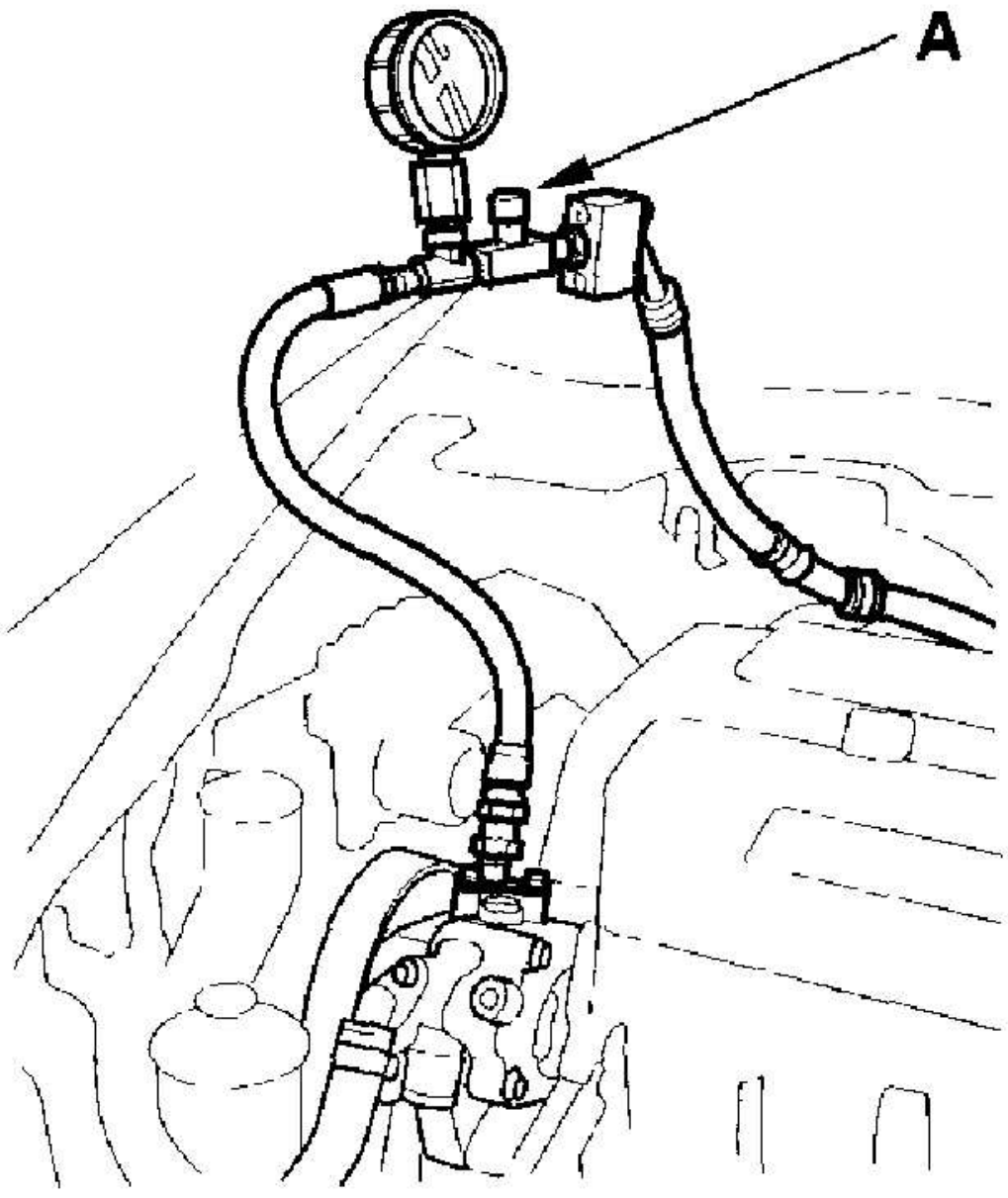


Fig. 9: Opening Pressure Control Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Start the engine and let it idle.

7. Turn the steering wheel from lock-to-lock several times to warm the fluid to operating temperature at 158°F (70°C).
8. Measure steady-state fluid pressure while the engine is idling. If the pump is in good condition, the pressure should be no more than 1,470 kPa (15 kgf/cm^2 , 213 psi). If the pressure is too high, check the outlet hose or valve body unit (see **Symptom Troubleshooting**).
9. Raise the engine speed to 3,000 rpm, and measure the fluid pressure. If the pump is in good condition, the pressure should be at least 1,470 kPa (15 kgf/cm^2 ,213 psi). If the pressure is too high, repair or replace the pump.
10. Lower the engine speed and let it idle. Gradually close the pressure control valve and immediately read the pressure.

NOTE: Do not keep the pressure control valve closed more than 5 seconds or the pump could be damaged by over-heating.

11. Immediately open the pressure control valve fully. If the pump is in good condition, the gauge should read at least 7,160-7,850 kPa (73-80 kgf/cm^2 , 1,040-1,140 psi). A low reading means pump output is too low for full assist. Repair or replace the pump.

FLUID LEAKAGE INSPECTION

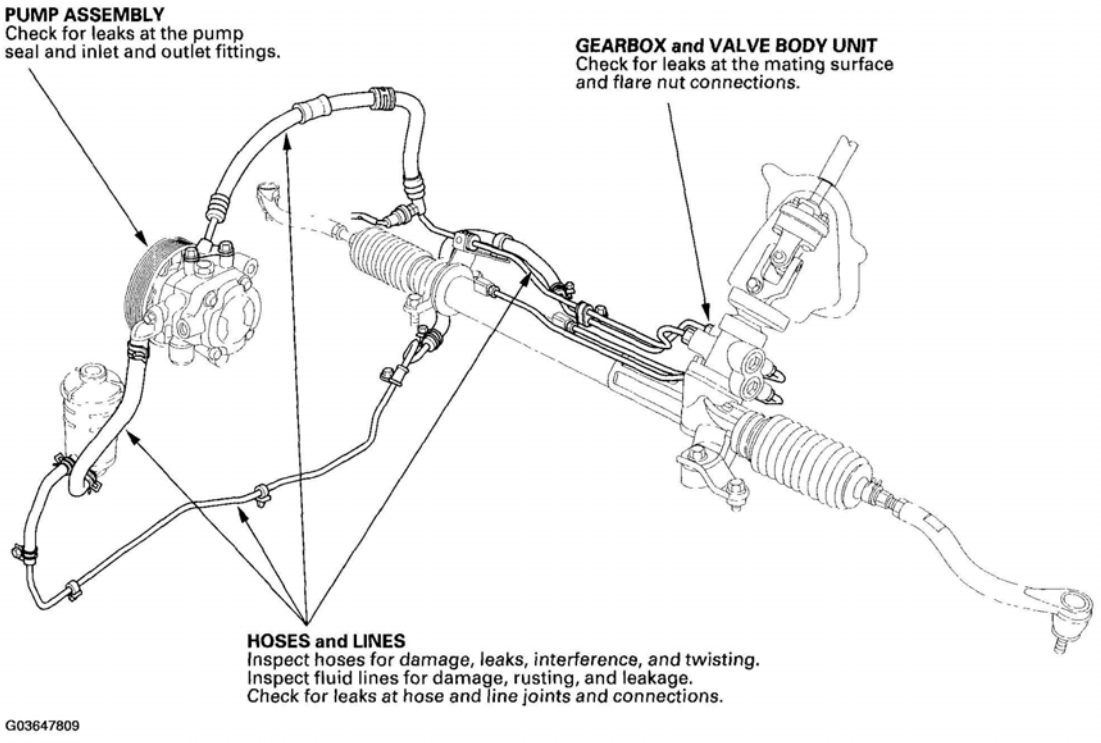


Fig. 10: Inspecting Fluid Leakage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FLUID REPLACEMENT

Check the reservoir (A) at regular intervals, and add the recommended fluid as necessary. Always use Honda Power Steering Fluid. Using any other type of power steering fluid or automatic transmission fluid can cause increased wear and poor steering in cold weather.

System capacity:
1.1 L (1.16 US. qt) at disassembly
Reservoir capacity:
0.4 L (0.42 US. qt)

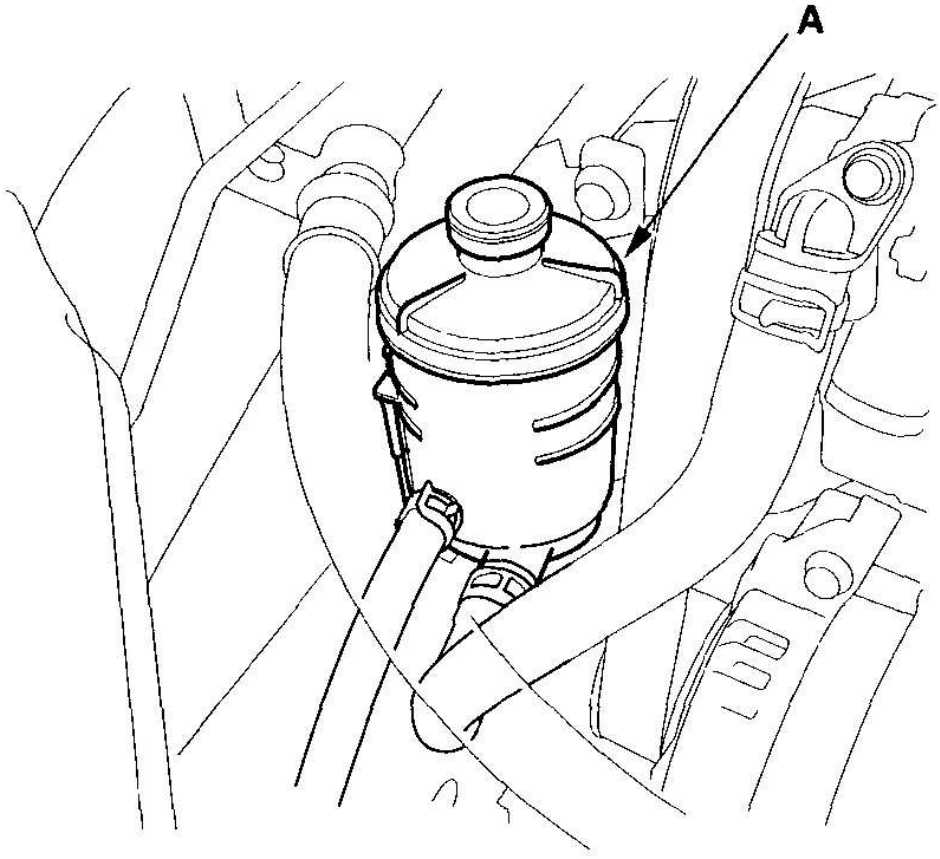


Fig. 11: Checking Reservoir At Regular Intervals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

1. Raise the reservoir, then disconnect the return hose (A) to drain the reservoir. Take care not to spill the fluid on the body and parts. Wipe off any spilled fluid at once.

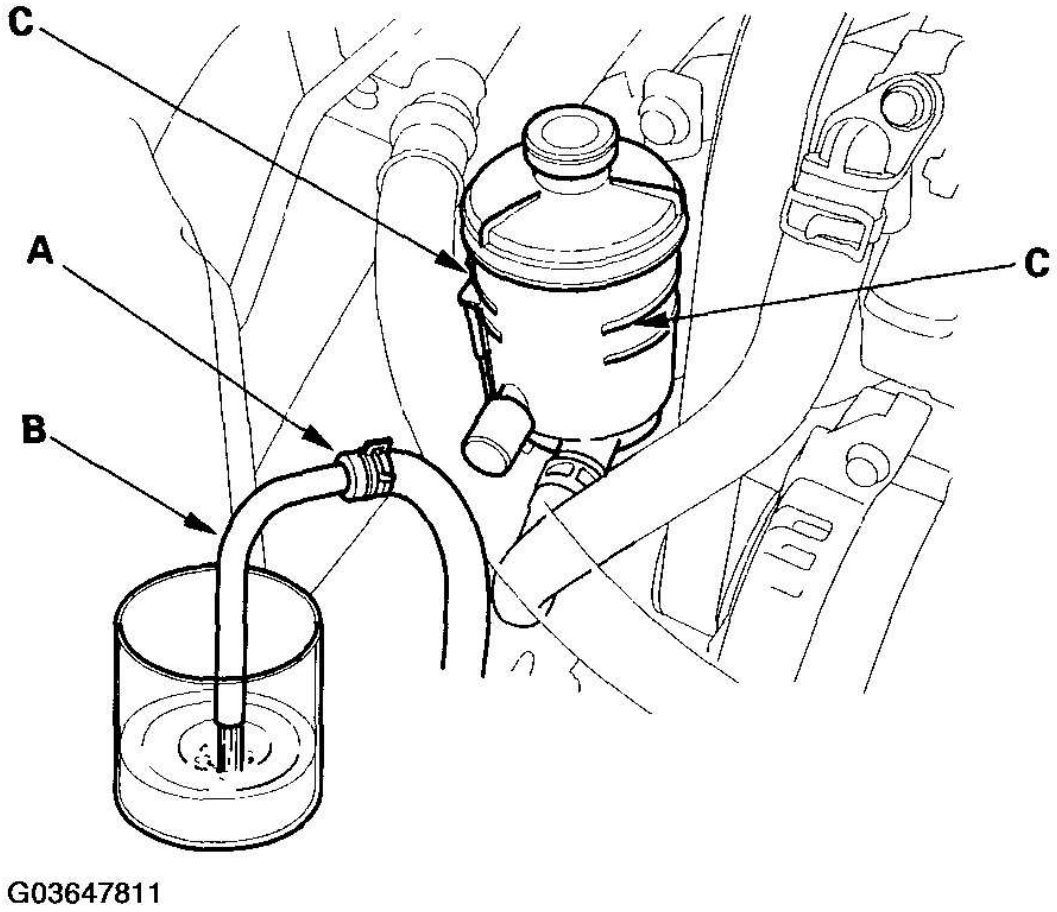


Fig. 12: Disconnecting Return Hose To Drain Reservoir
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Connect a hose (B) of suitable diameter to the disconnected return hose, and put the hose end in a suitable container.
3. Start the engine, let it run at idle, and turn the steering wheel from lock-to-lock several times. When fluid stops running out of the hose, shut off the engine. Discard the fluid.
4. Reinstall the return hose on the reservoir.
5. Fill the reservoir to the upper level line (C).
6. Start the engine and run it at fast idle, then turn the steering wheel from lock-to-lock several times to bleed air from the system.

7. Recheck the fluid level and add more if necessary. Do not fill the reservoir beyond the upper level line.
8. If the fluid is contaminated, dark, or discolored, repeat procedure as necessary.

POWER STEERING HOSE, LINE, AND PRESSURE SWITCH REPLACEMENT

Note these items during installation:

- Connect each hose to the corresponding line securely until it contacts the stop on the line. Install the clamp or adjustable clamp at the specified distance from the hose end as shown in **Fig. 13**.
- Check all clamps for deterioration or deformation; replace the clamps with new ones if necessary.
- Add the recommended power steering fluid to the specified level on the reservoir and check for leaks.

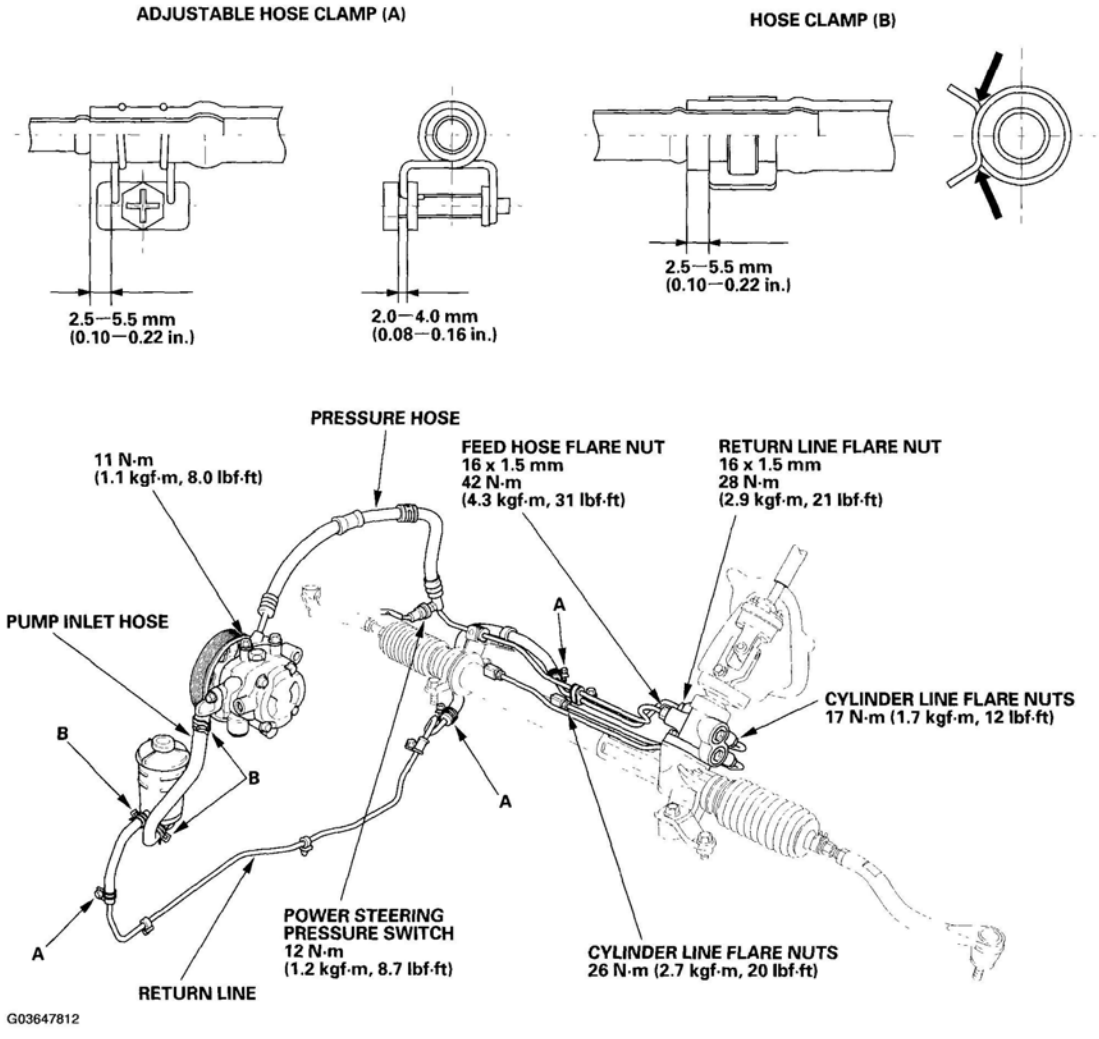


Fig. 13: Replacing Power Steering Hose, Line And Pressure Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PUMP REPLACEMENT

1. Place a suitable container under the vehicle.
2. Drain the power steering fluid from the reservoir.
3. Remove the drive belt (A) from the pump pulley (see **DRIVE BELT INSPECTION**).

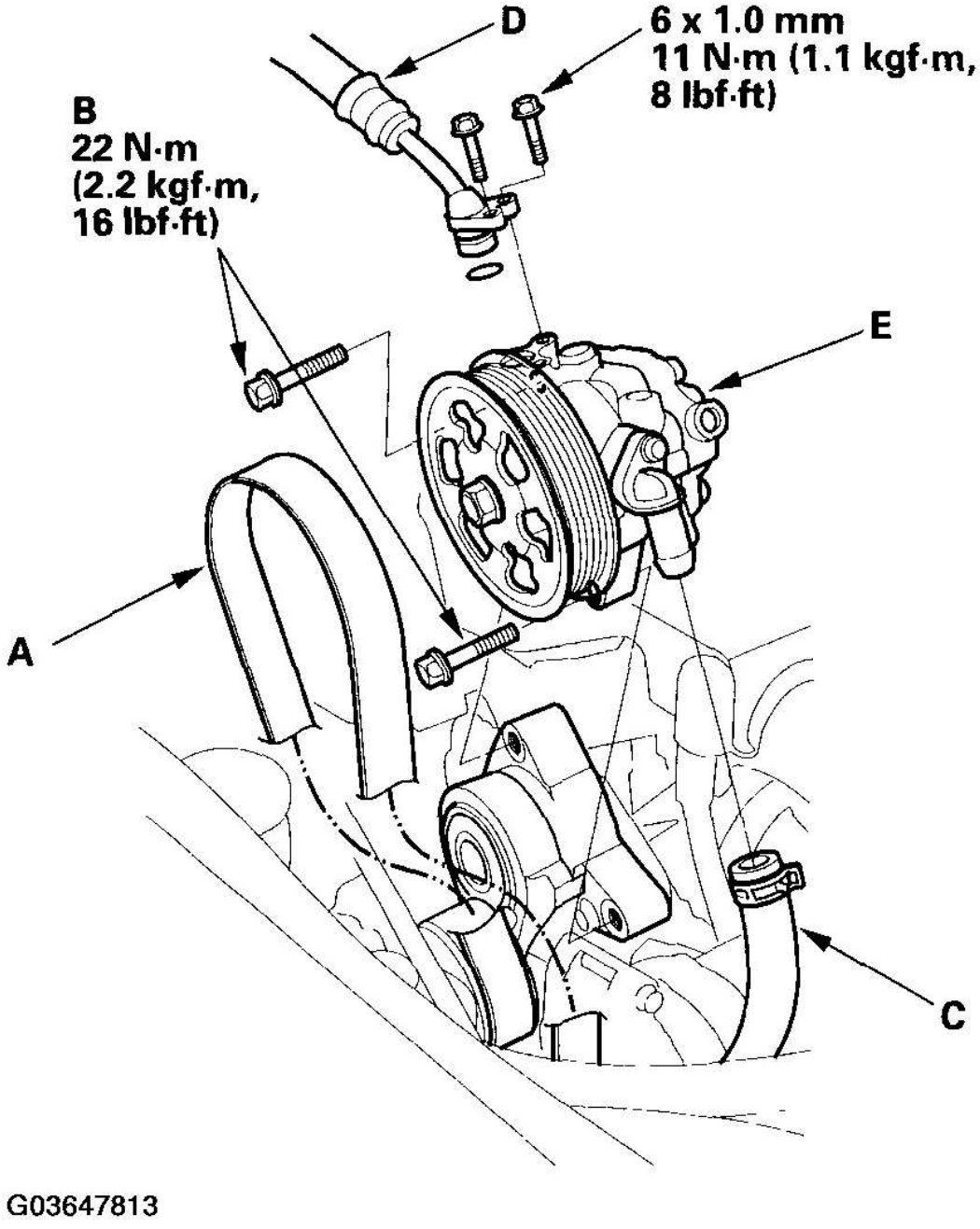


Fig. 14: Removing Drive Belt From Pump Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the pump mounting bolts (B).

5. Cover the auto-tensioner, alternator, and A/C compressor with several shop towels to protect them from spilled power steering fluid. Disconnect the pump inlet hose (C) and pump outlet hose (D) from the pump (E), and plug them. Take care not to spill the fluid on the body or parts. Wipe off any spilled fluid at once. Do not turn the steering wheel with the pump removed.
6. Cover the opening of the pump with a piece of tape to prevent foreign material from entering the pump.
7. Connect the pump inlet hose and pump outlet hose.
8. Loosely install the pump in the pump bracket with the mounting bolts, then tighten the pump fittings securely.
9. Install the drive belt (A).

   Note these items during belt installation:

   - Make sure that the belt is properly positioned on the pulleys (B).
   - Do not get power steering fluid or grease on the auto-tensioner, alternator, A/C compressor, and drive belt or pulley faces. Clean off any fluid or grease before installation.

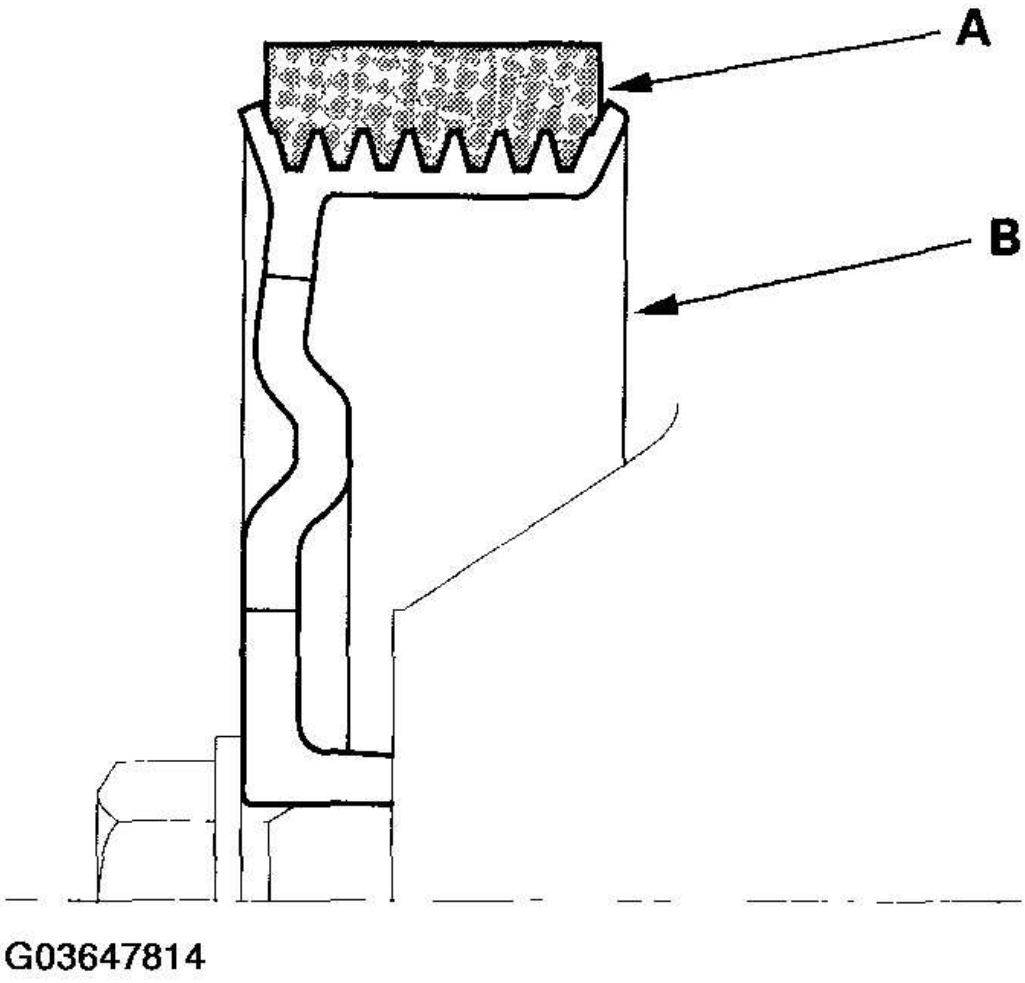


Fig. 15: Installing Drive Belt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Tighten the pump mounting bolts to the specified torque.
11. Fill the reservoir to the upper level line (see **FLUID REPLACEMENT**).

PUMP OVERHAUL

Replace the pump as an assembly if the parts indicated with asterisk (*) are worn or damaged.

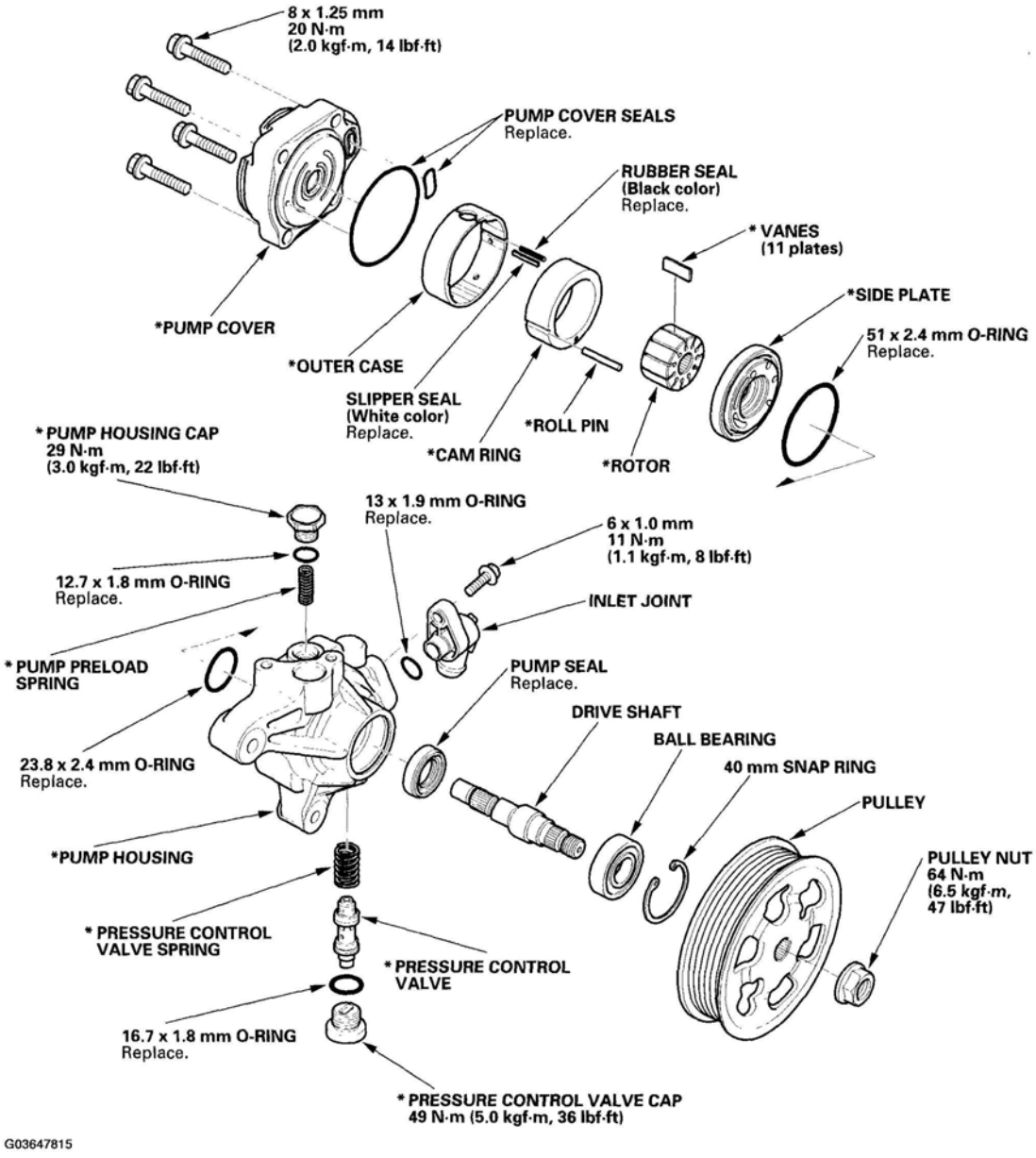


Fig. 16: Exploded View Of Pump Overhaul
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

- Attachment, 32 x 35 mm 07746-0010100
- Driver 07749-0010000
- Pulley holder 07ZAB-S5A0100

Disassembly

NOTE: Refer to the Fig. 16 as needed .

1. Drain the fluid from the pump (see **FLUID REPLACEMENT**).
2. Remove the power steering pump (see **PUMP REPLACEMENT**).
3. Hold the power steering pump (A) in a vise with soft jaws (B), hold the pulley (C) with the special tool (D), and remove the pulley nut (E) and pulley. Be careful not to damage the pump housing with the jaws of the vise.

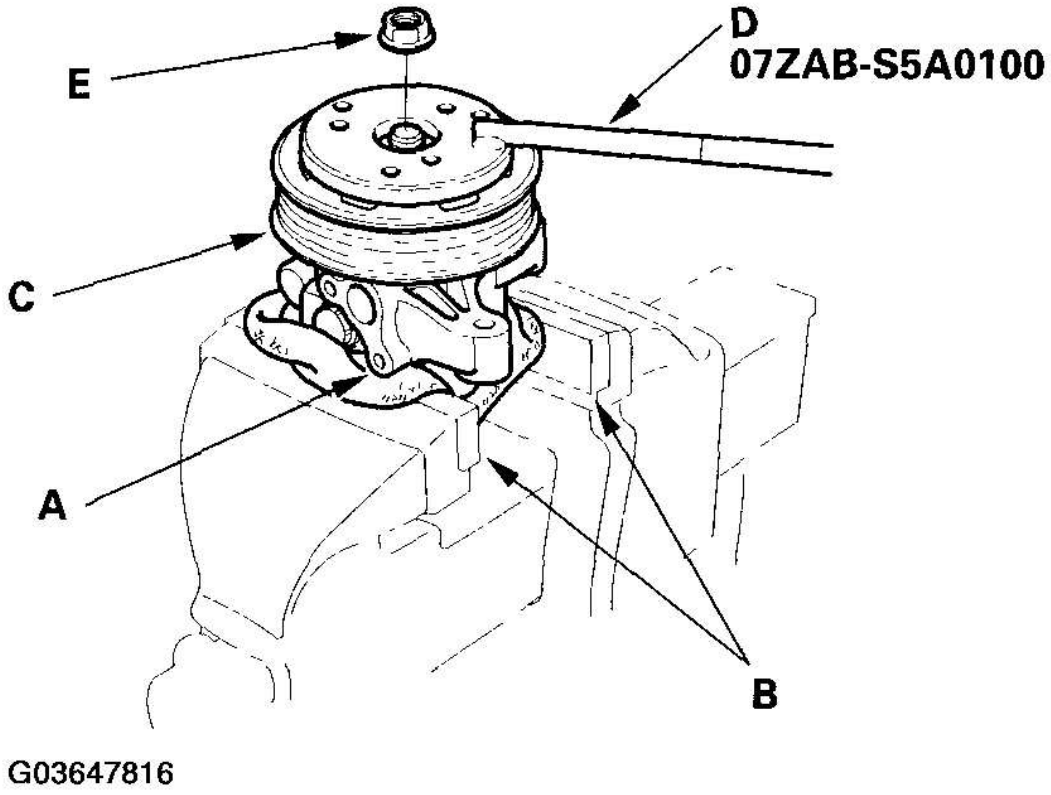


Fig. 17: Holding Power Steering Pump In Vise With Soft Jaws
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the inlet joint and O-ring.
5. Remove the pressure control valve cap, O-ring, valve spring, and pressure

control valve.

6. Remove the pump housing cap, O-ring, and pump preload spring.
7. Remove the pump cover and pump cover seals.
8. Pull out the roll pin.
9. Remove the outer case, cam ring, rotor, vanes, and side plate.
10. Remove the rubber seal and slipper seal from the outer case.
11. Remove the O-rings from the bottom of the housing.
12. Remove the snap ring, then remove the drive shaft by tapping the shaft end with the plastic hammer.
13. Remove the seal from the pump housing.

Inspection

14. Check the pressure control valve for wear, burrs, and other damage to the edges of the grooves in the valve.

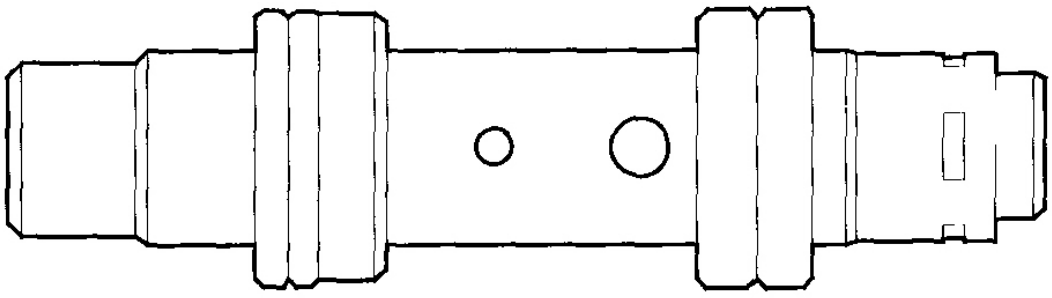


Fig. 18: Checking Pressure Control Valve For Wear, Burrs And Damage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Inspect the bore of the pressure control valve on the pump housing for scratches and wear.
16. Slip the pressure control valve back in the pump housing, and check that it moves in and out smoothly. If OK, go to step 17; if not, replace the pump as an assembly. The pressure control valve is not available separately.

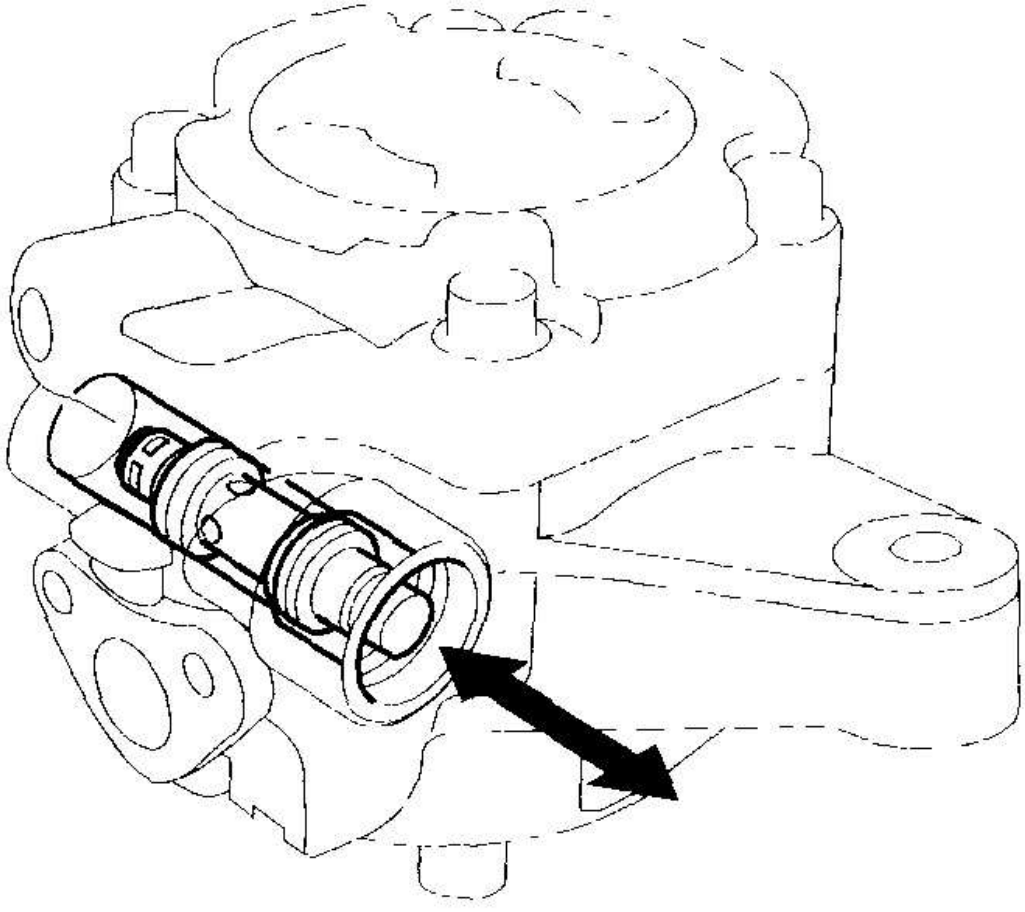


Fig. 19: Slipping Pressure Control Valve Back In Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Attach a hose (A) to the end of the pressure control valve (B) as shown in **Fig. 20**. Then submerge the pressure control valve in a container of power steering fluid or solvent (C), and blow in the hose.
    - If air bubbles leak through the valve at less than 98 kPa (1.0 kgf/cm^2 ,14.2 psi), replace the pump as an assembly. The pressure control valve is not available separately.
    - If the pressure control valve is OK, set it aside for reassembly later.

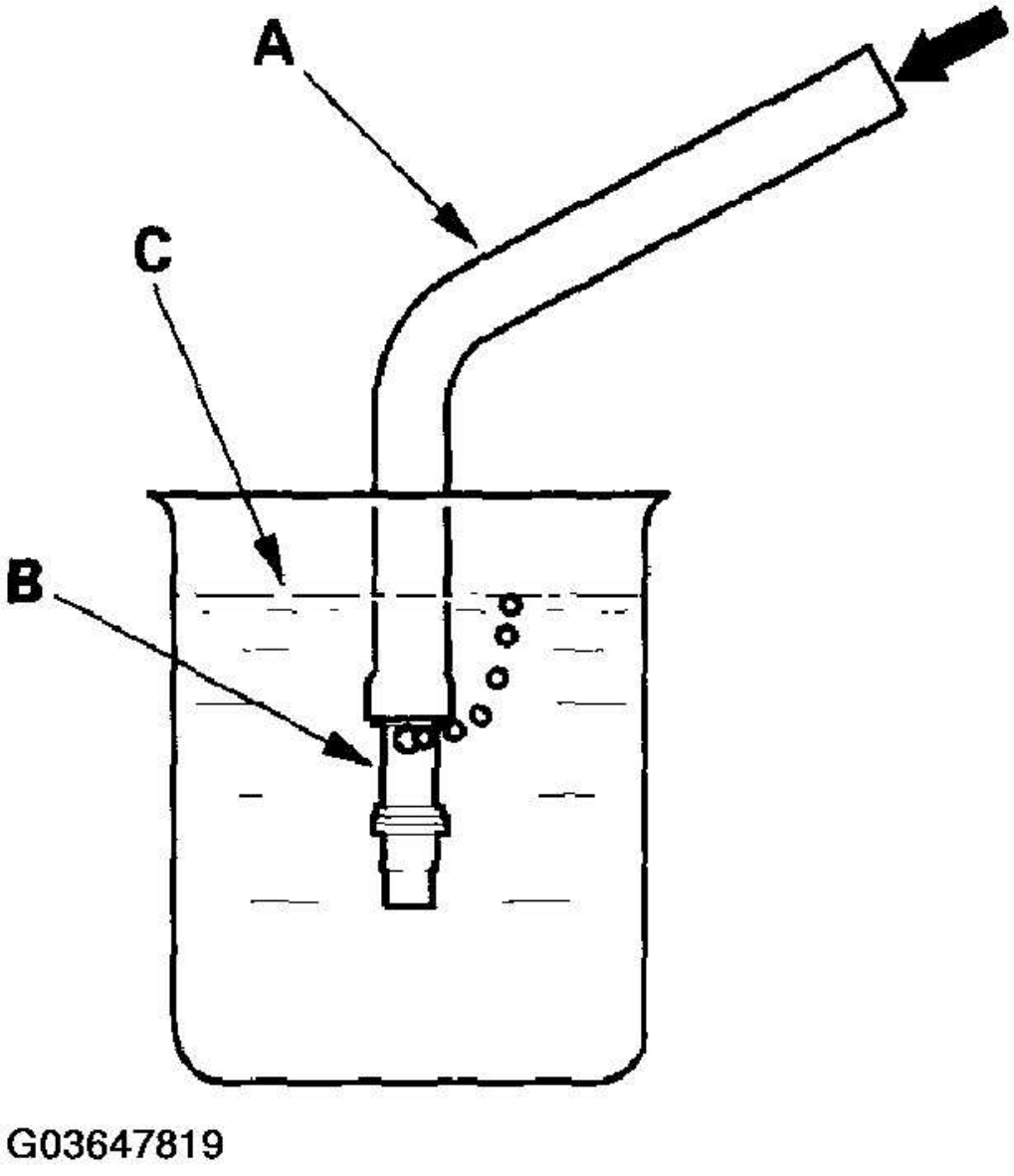


Fig. 20: Attaching Hose To End Of Pressure Control Valve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Inspect the ball bearing by rotating the outer race slowly. If you feel any play (axial or radial) or roughness, remove the faulty ball bearing (A), and install a new one (B).

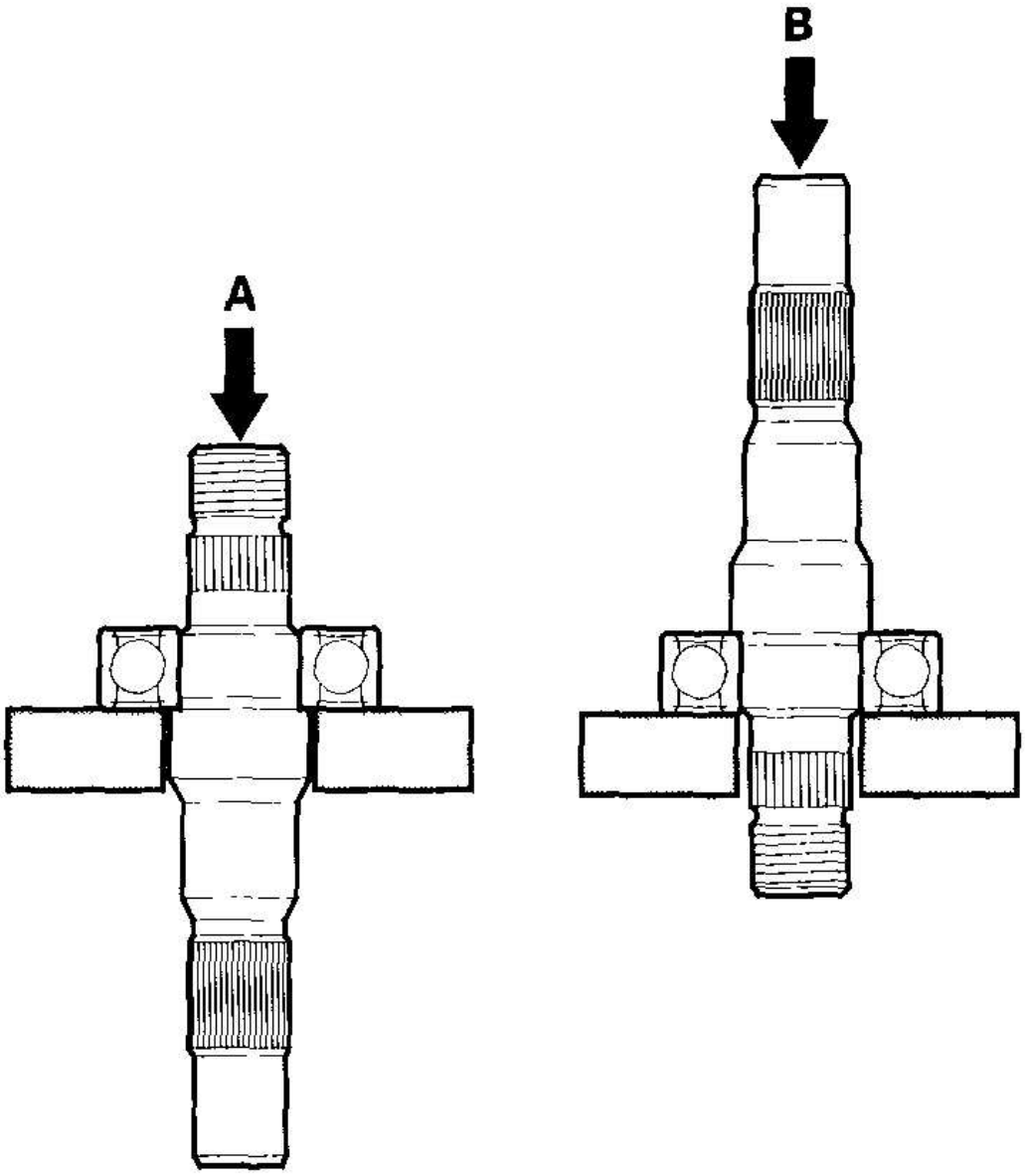


Fig. 21: Removing Faulty Ball Bearing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Inspect each part shown with an asterisk in **Fig. 16** ; if any of them are worn or damaged, replace the pump as an assembly.

Reassembly

20. Install the new pump seal (A) (with its grooved side facing in) into the pump housing (B) by hand first, then drive it in using the special tools until there is no step at the top of the pump seal, and the seal is fully seated in the pump housing.

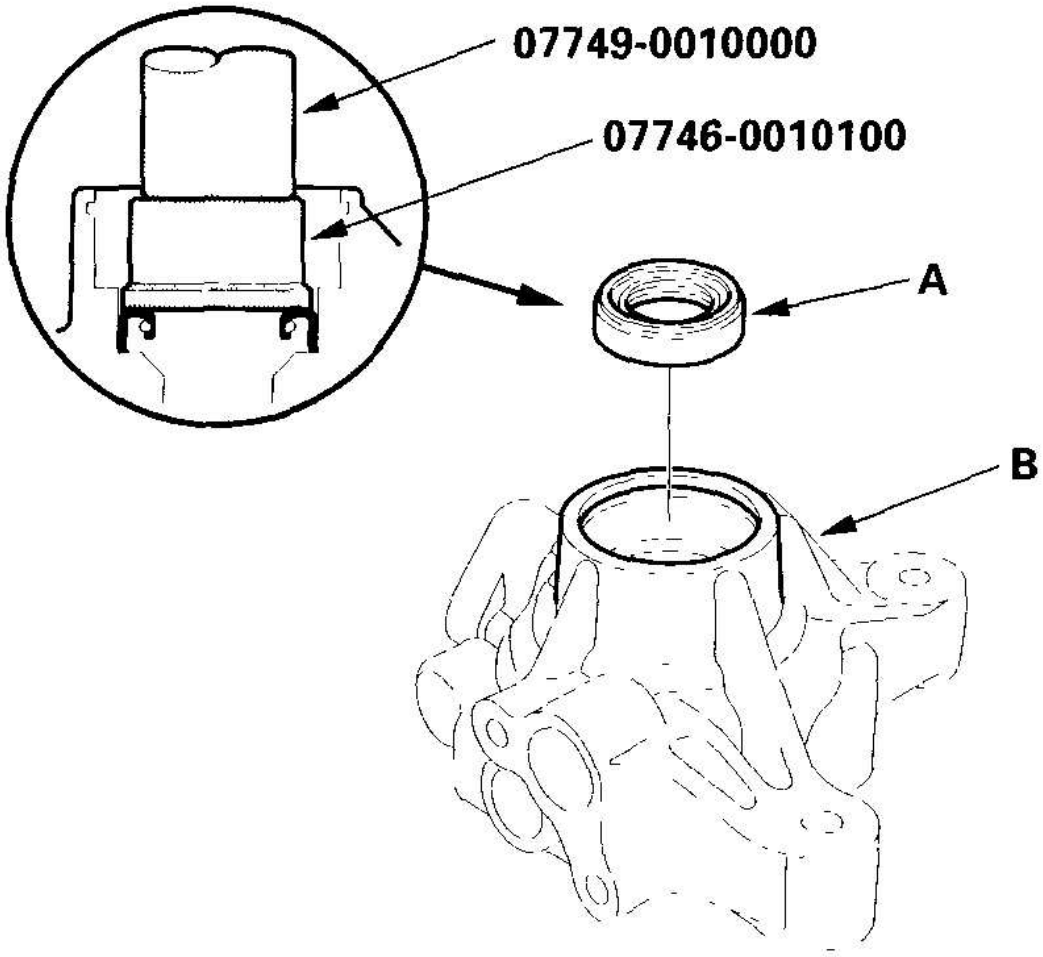


Fig. 22: Installing Pump Seal Into Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Position the pump drive shaft (A) in the pump housing, then press it in with the

appropriate size socket wrench (B) as shown in **Fig. 23**. Do not apply more than 1,370 N (140 kgf, 308 lbf) of pressure.

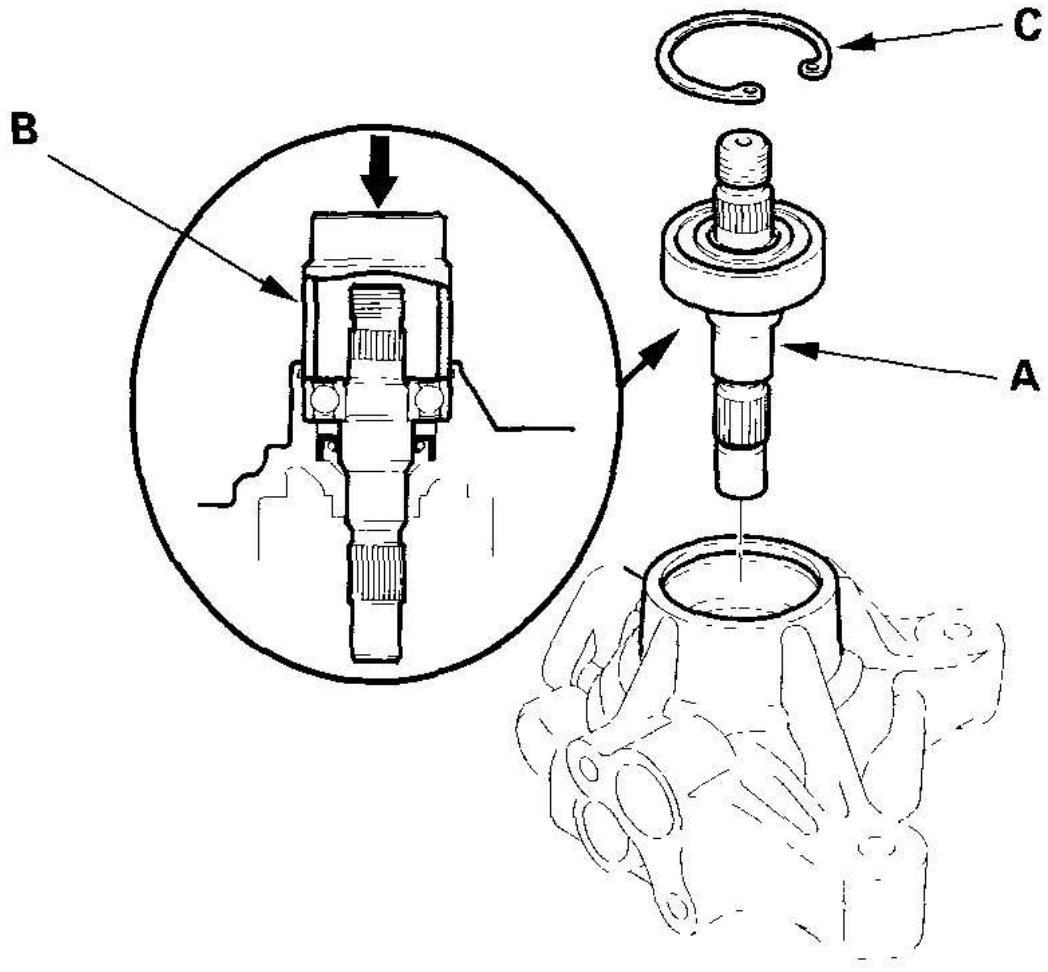


Fig. 23: Positioning Pump Drive Shaft In Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Install the 40 mm snap ring (C) with its radiused edge facing out.
23. Coat the new 23.8 mm O-ring (A) with power steering fluid, then position it on the bottom (B) of the pump housing.

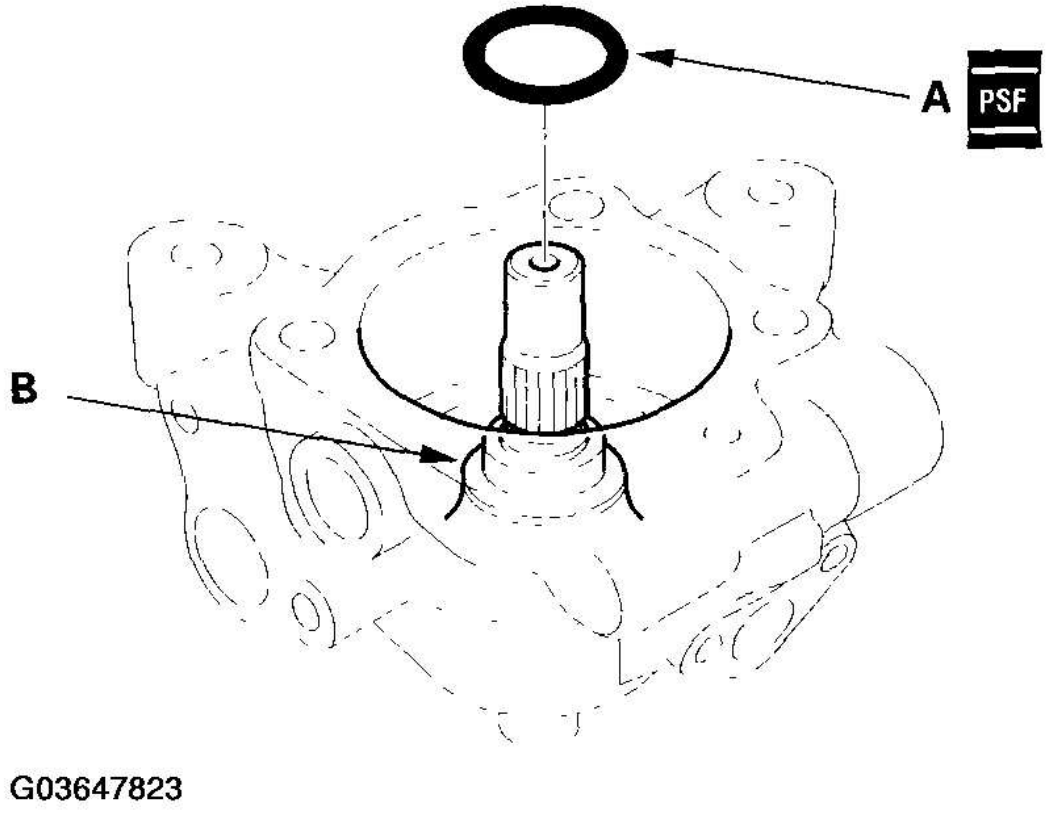


Fig. 24: Coating O-Ring With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Coat the new cover seals (A) and (B) with power steering fluid, then position them into the grooves on the cover (C).

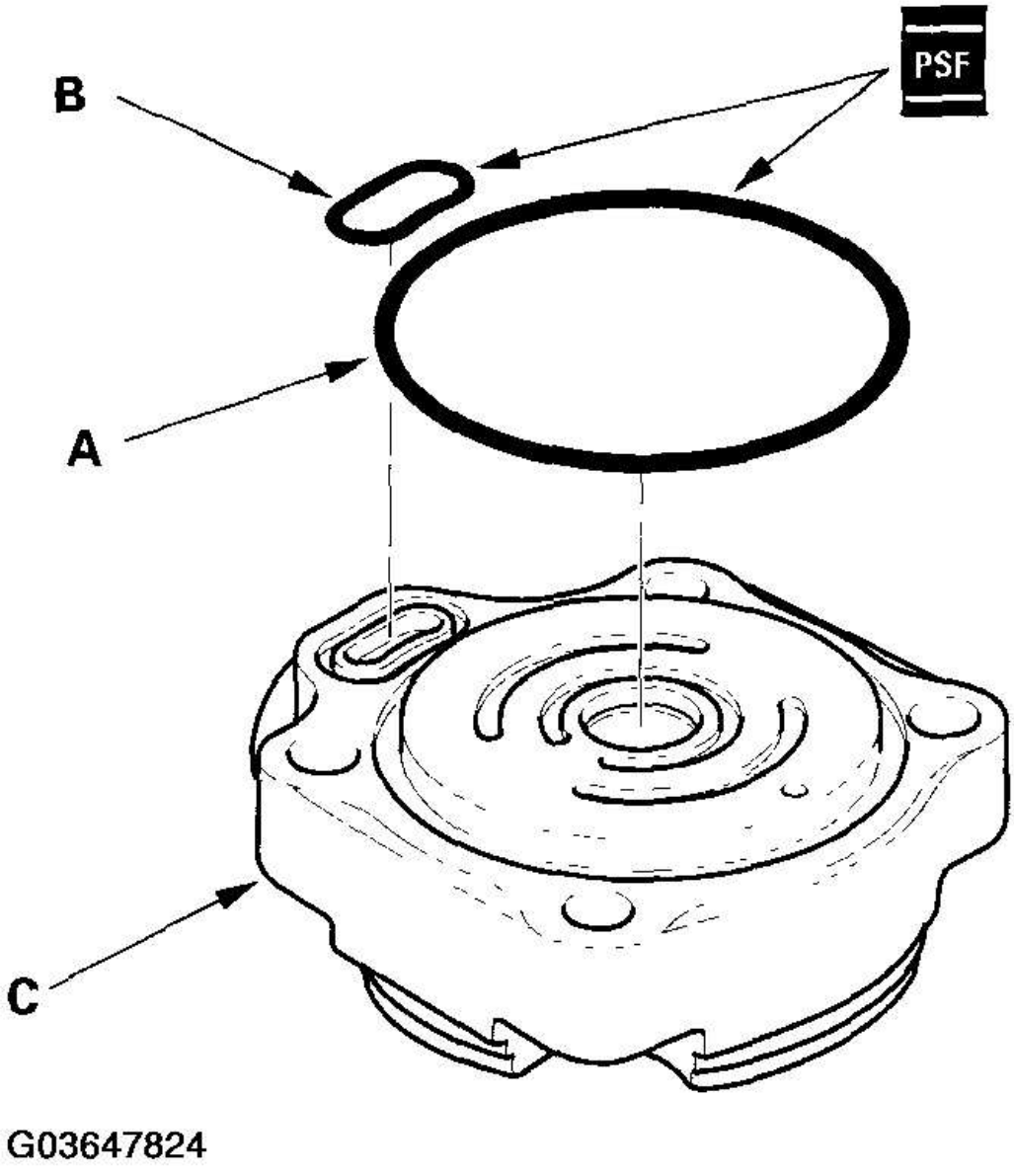


Fig. 25: Coating Cover Seals With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

25. Install the outer case (A) by aligning the slot (B) with the cover roll pin hole (C). Be sure that the slit (D) on the outer case is positioned as shown in **Fig. 26**.

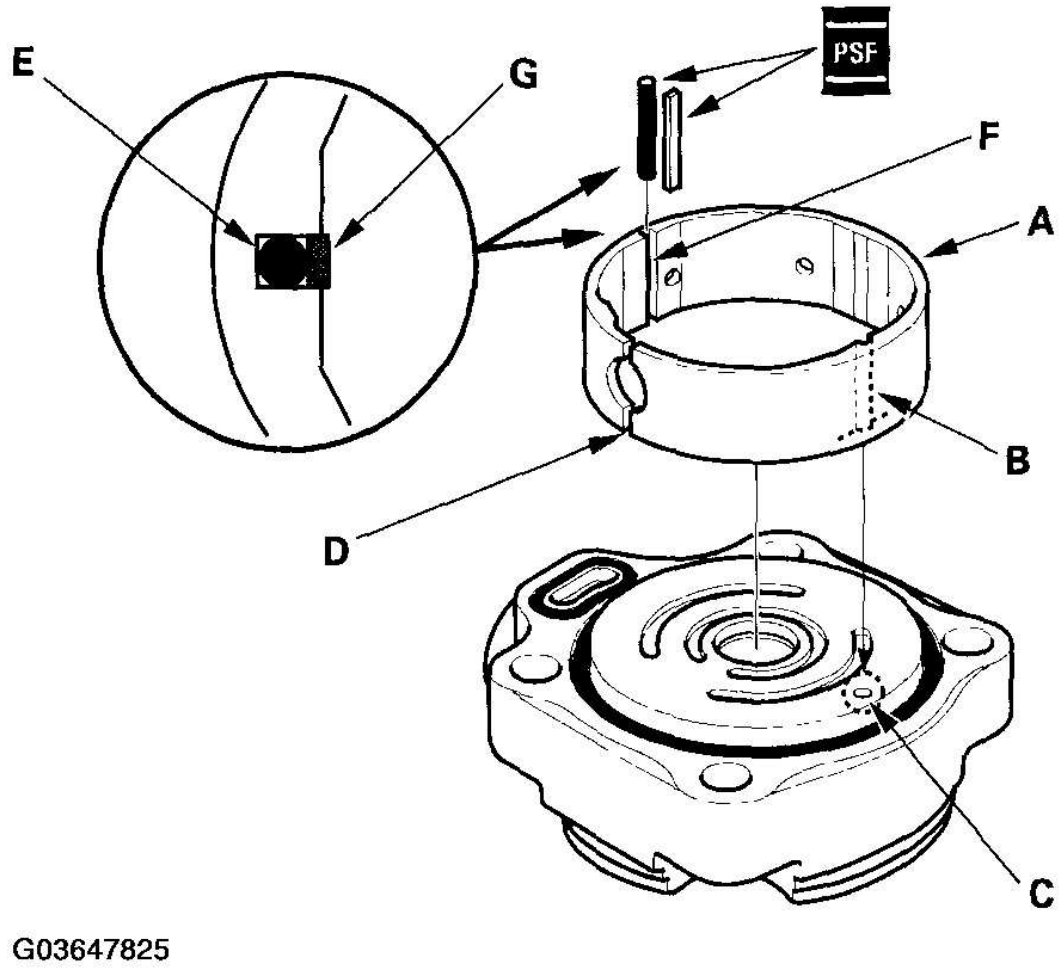


Fig. 26: Installing Outer Case Aligning Slot With Cover Roll Pin Hole
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. Apply the power steering fluid to the rubber seal (E) (black), and install it in the slot (F) of the outer case.
27. Apply power steering fluid to the slipper seal (G) (white), and install it on top of the rubber seal you just installed.
28. Install the cam ring (A) with the "." mark (B) facing up. Align the slot (C) with the slot (D) in the outer case.

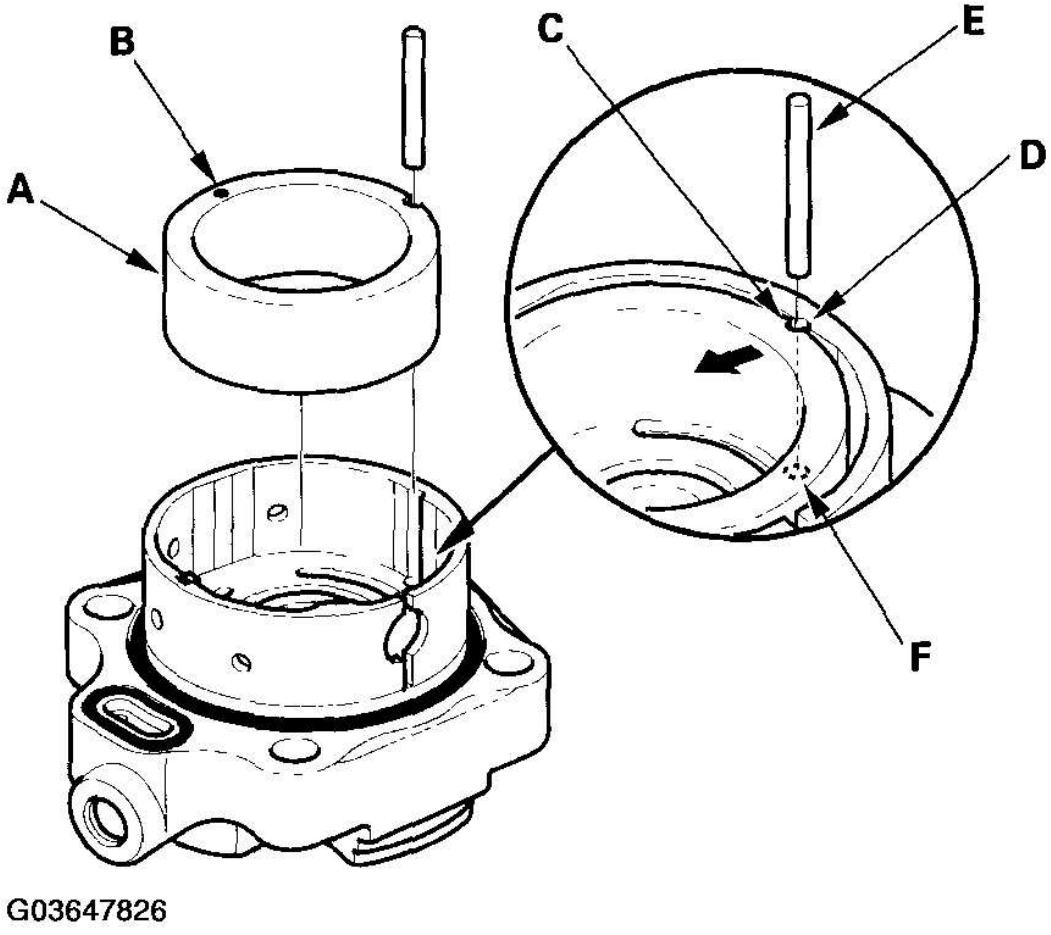


Fig. 27: Installing Cam Ring With Mark
Courtesy of AMERICAN HONDA MOTOR CO., INC.

29. Insert the roll pin (E) into the slots between the cam ring and outer case, then push roll pin into the set hole (F).
30. Install the rotor (A) in the cam ring (B).

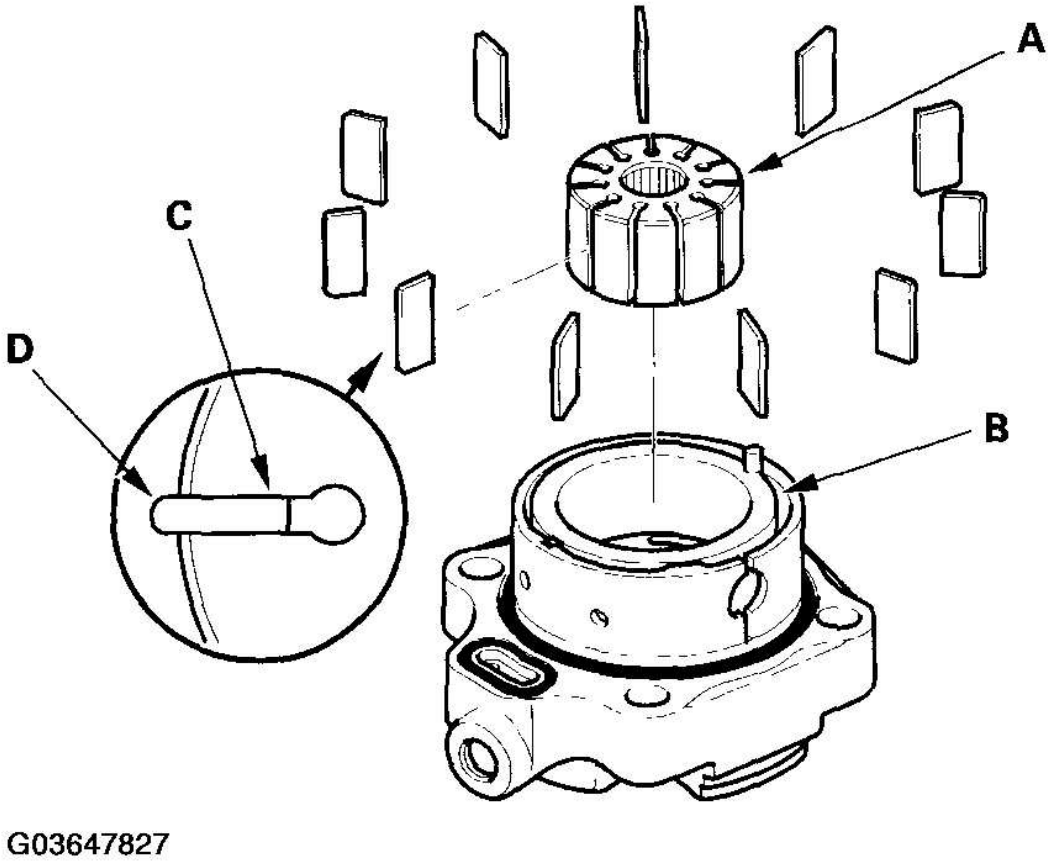


Fig. 28: Installing Rotor In Cam Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

31. Set the 11 vanes (C) in the grooves in the rotor.

    Make sure that the round ends (D) of the vanes are in contact with the sliding surface of the cam ring.

32. Place the side plate (A) on the cam ring, and aligning the roll pin set hole (B) in the side plate with the roll pin end (C).

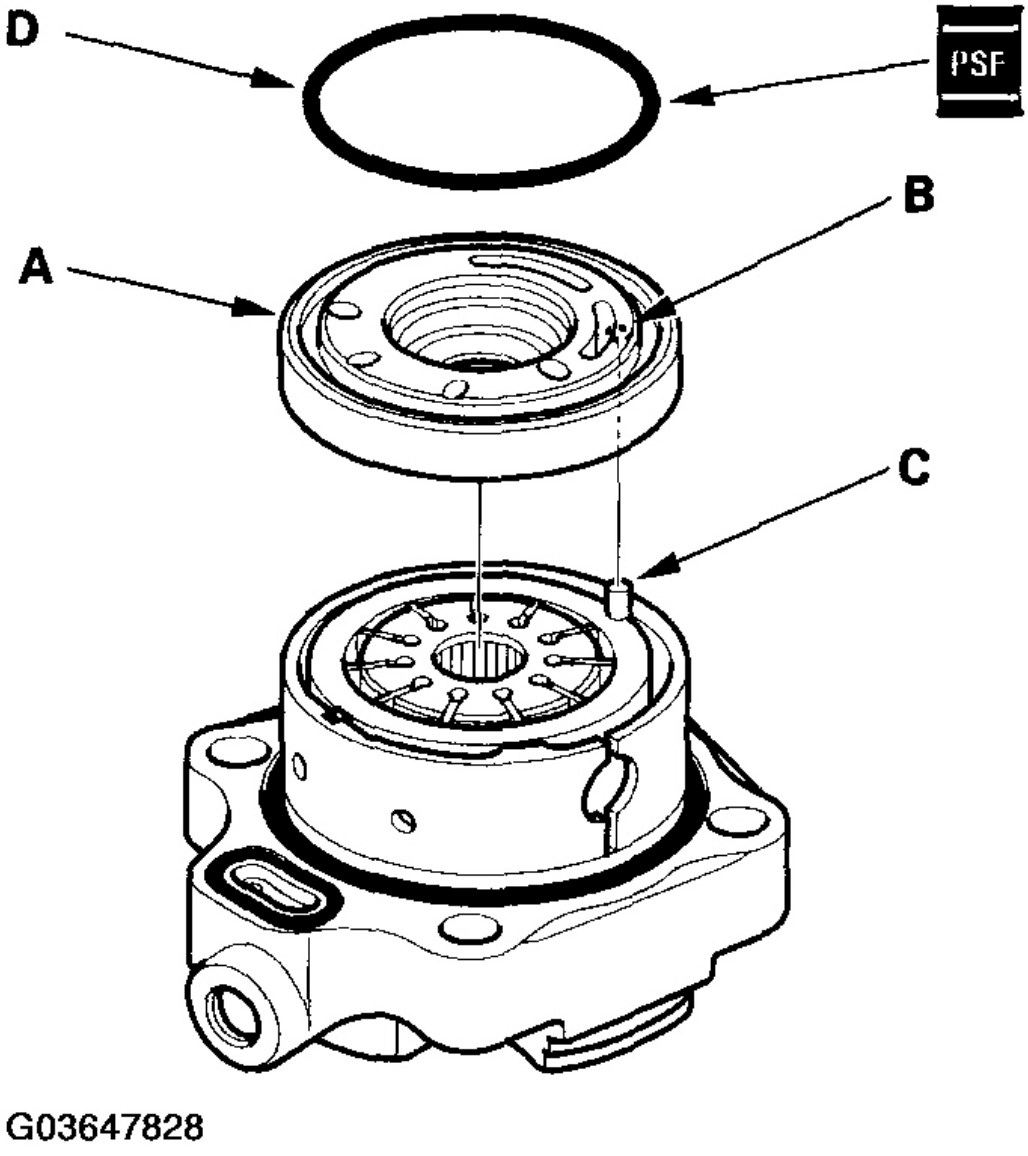


Fig. 29: Aligning Roll Pin Set Hole In Side Plate With Roll Pin End
Courtesy of AMERICAN HONDA MOTOR CO., INC.

33. Coat the new O-ring (D) with the power steering fluid, then position it into the groove on the side plate.
34. Install the pump housing (A) over the cover assembly (B).

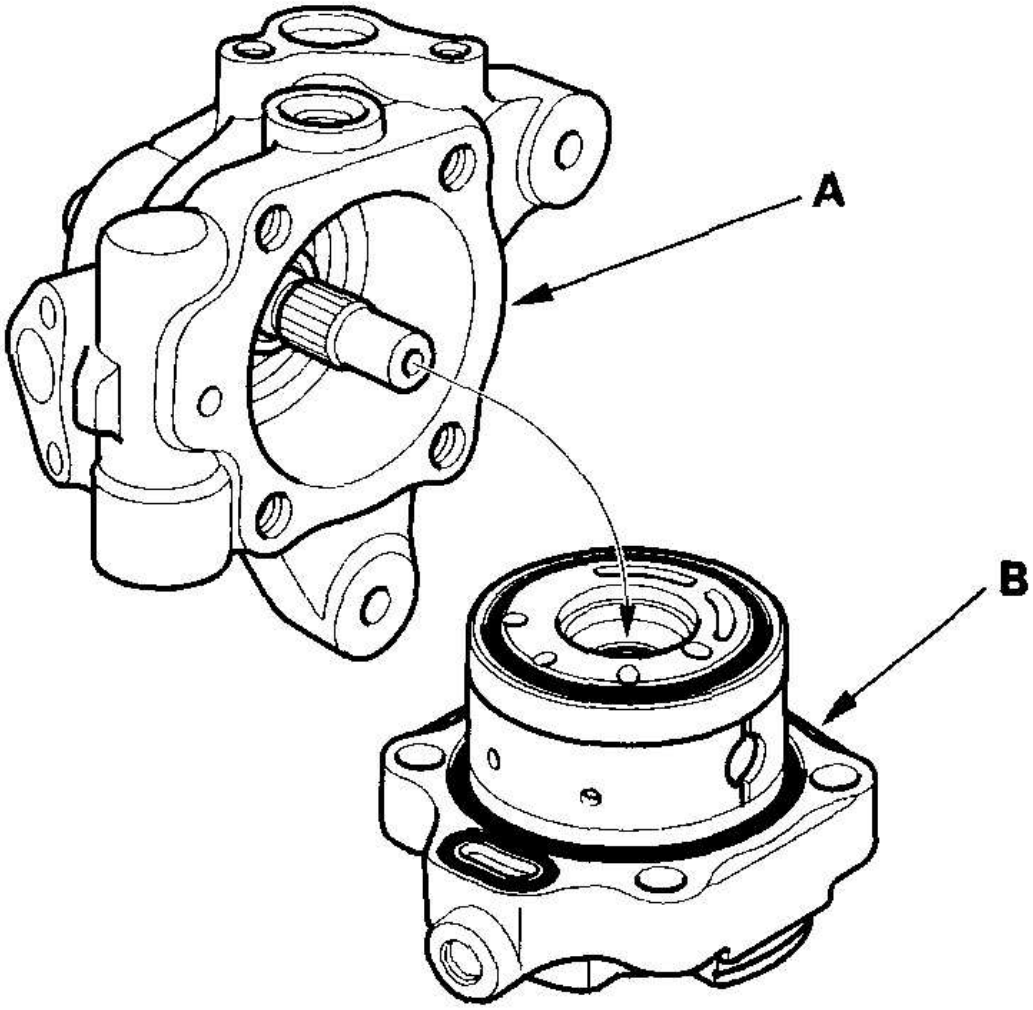


Fig. 30: Installing Pump Housing Over Cover Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

35. Align the bolt holes in the cover (A) with the threaded holes in the pump housing. Install the flange bolts loosely first, then torque the flange bolts in a criss cross pattern in two or more steps.

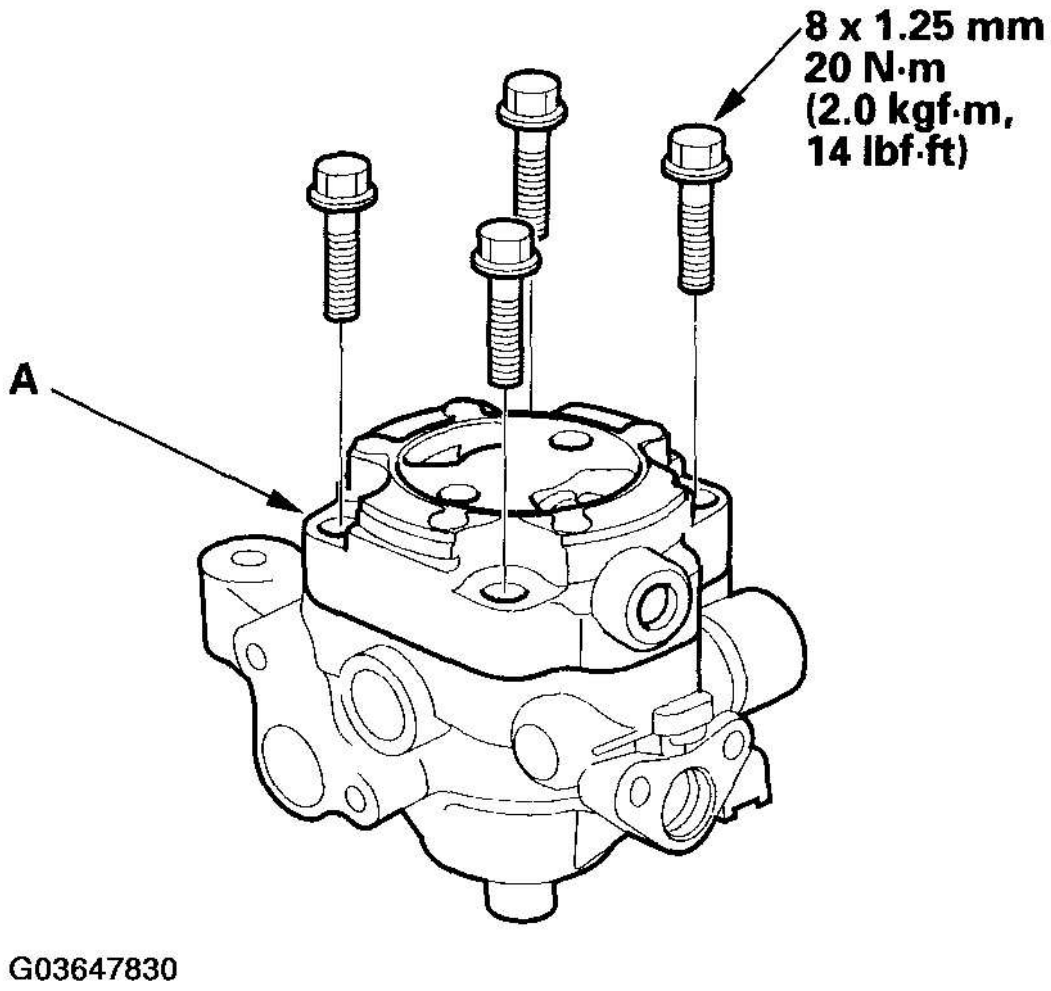


Fig. 31: Aligning Bolt Holes In Cover With Threaded Holes In Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

36. Push in the cam ring (A) from the pump housing cap hole (B) with a flat blade screwdriver, to make sure the cam ring is fully seated against the outer case.

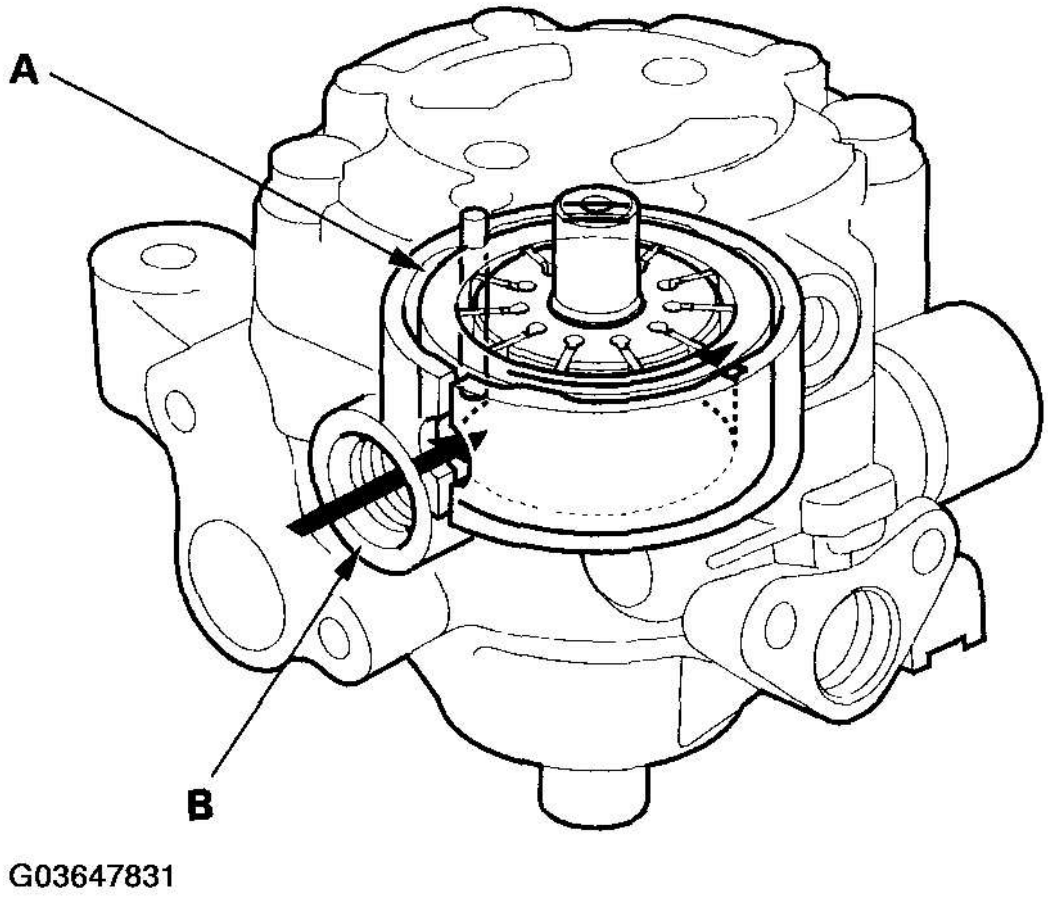


Fig. 32: Pushing In Cam Ring From Pump Housing Cap Hole
Courtesy of AMERICAN HONDA MOTOR CO., INC.

37. Install the pump preload spring (A) in the pump housing.

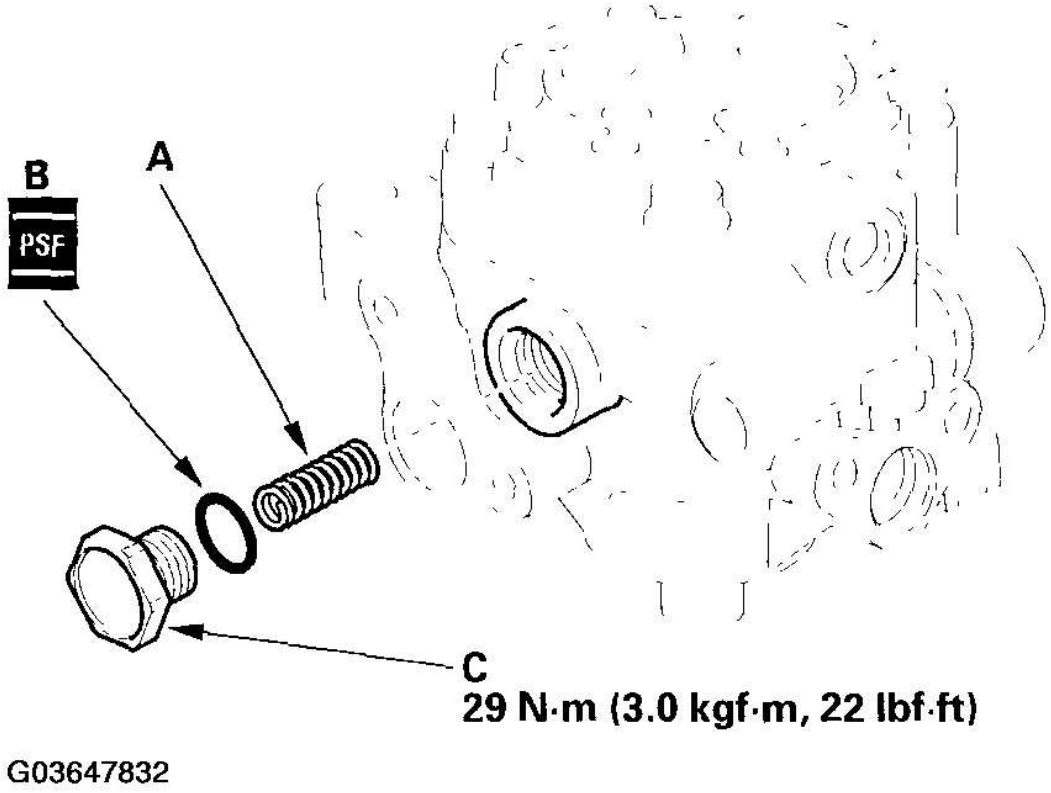


Fig. 33: Installing Pump Preload Spring In Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

38. Coat the new 12.7 mm O-ring (B) with power steering fluid, and install it on the pump housing cap (C).
39. Install the pump housing cap on the pump housing, and tighten it to specified torque.
40. Install the pressure control valve spring (A) in the pump housing.

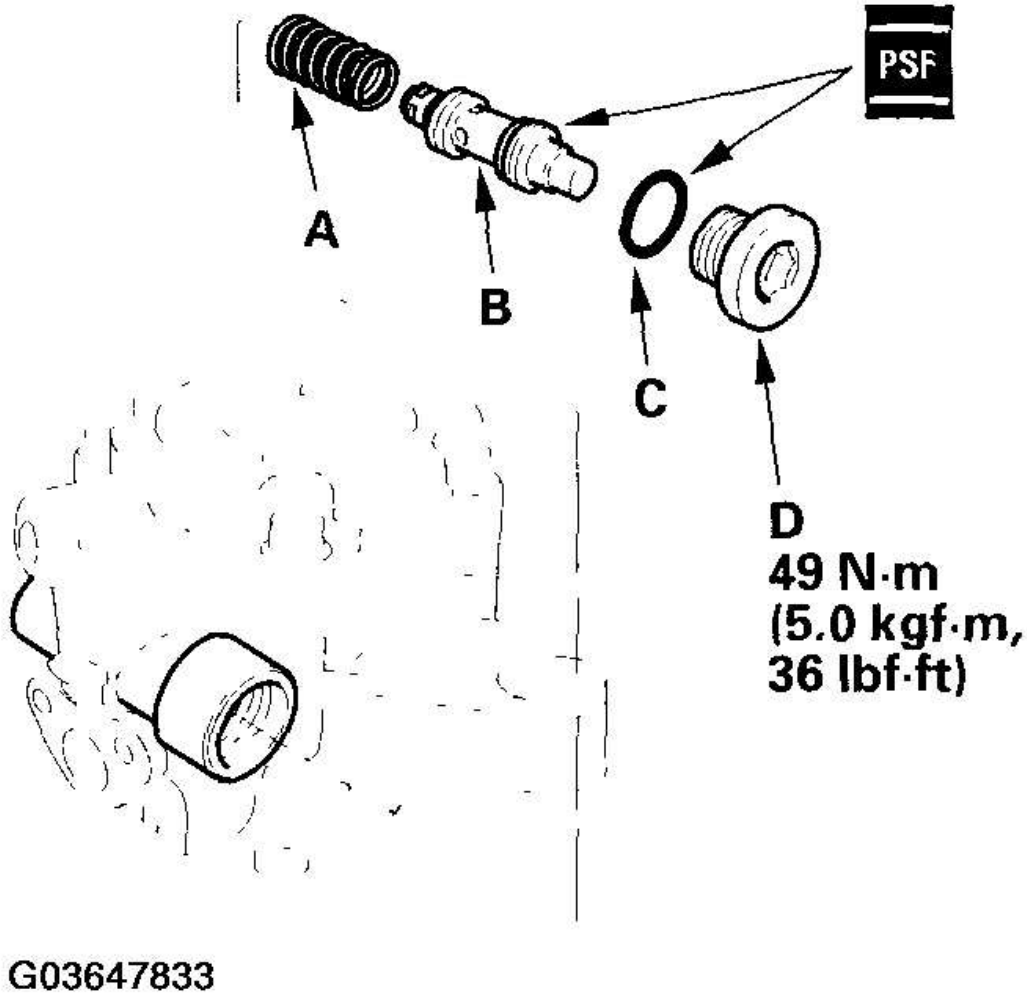


Fig. 34: Installing Pressure Control Valve Spring In Pump Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

41. Coat the pressure control valve (B) with power steering fluid, and install it on the pump housing.
42. Coat the new 16.7 mm O-ring (C) with power steering fluid, and install it on the pressure control valve cap (D).
43. Install the pressure control valve cap on the pump housing, and tighten it to the specified torque.

44. Coat the new 13 mm O-ring (A) with power steering fluid, and install it on the inlet joint (B).

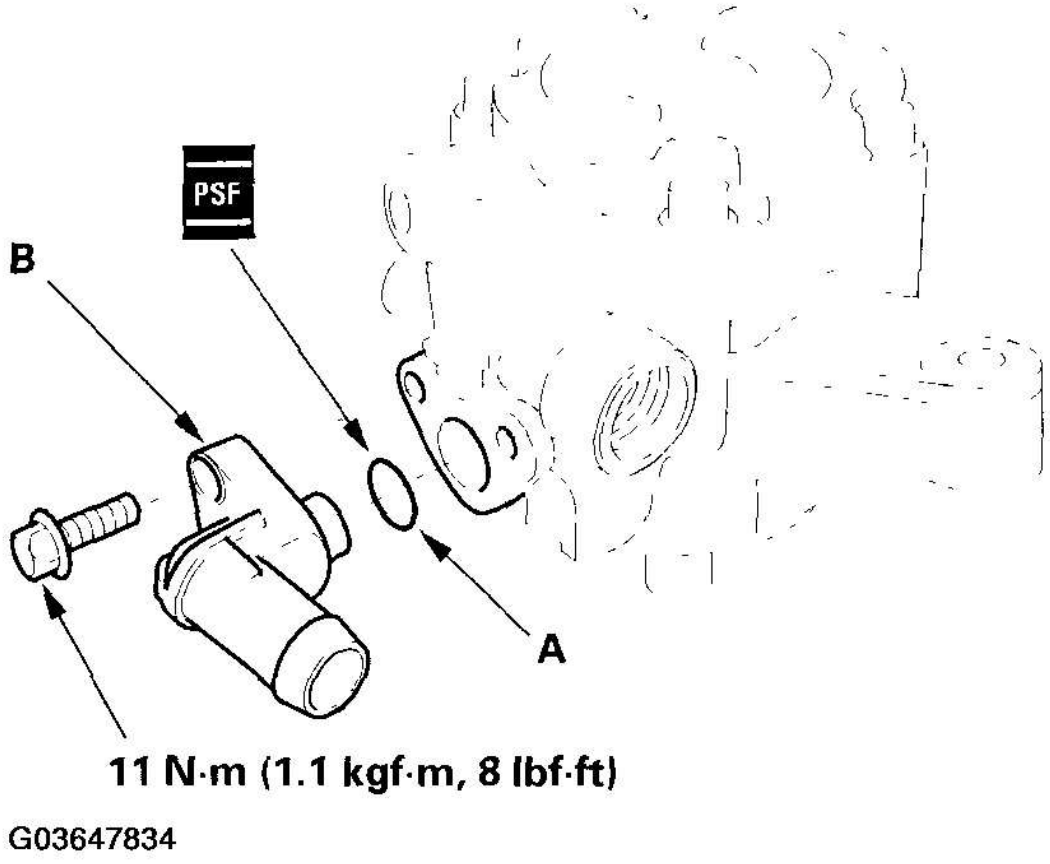


Fig. 35: Coating O-ring With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

45. Install the inlet joint on the pump housing.
46. Install the pulley (A), then loosely install the pulley nut (B). Hold the power steering pump in a vise with soft jaws (C). Be careful not to damage the pump housing with the jaws of the vise.

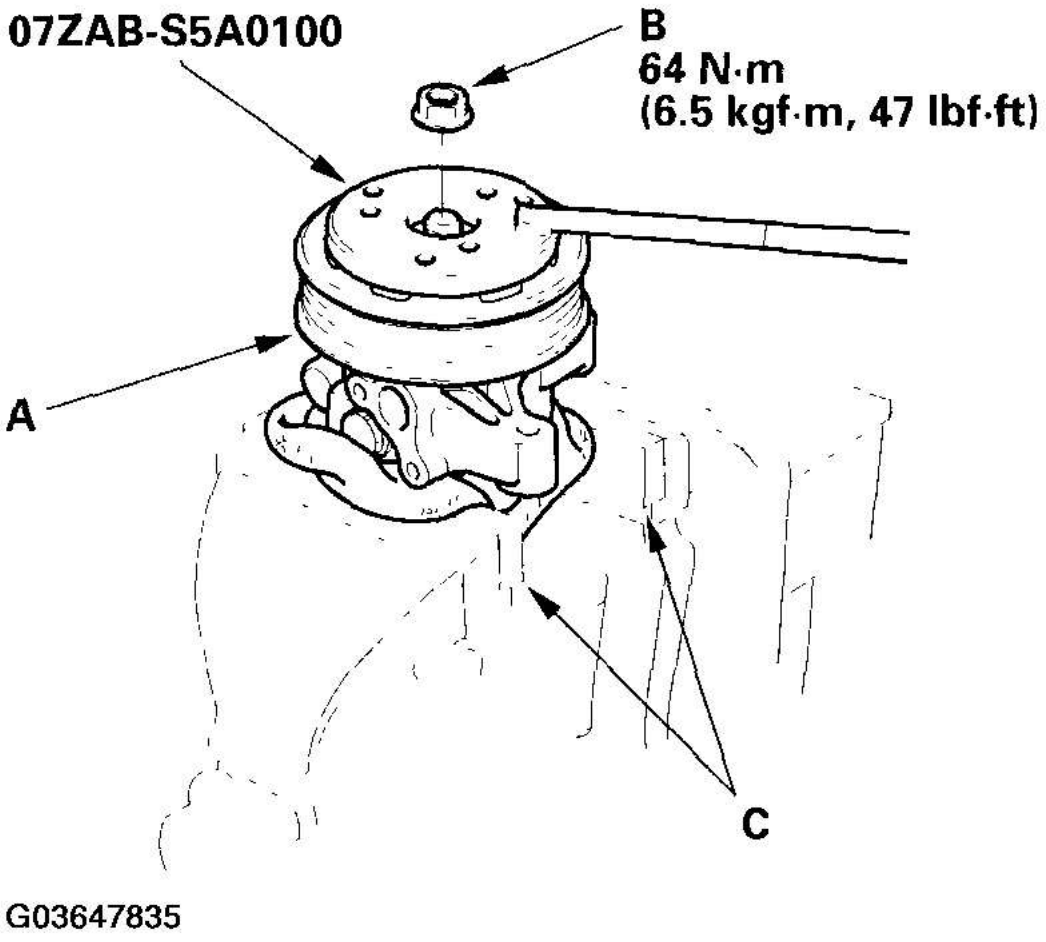


Fig. 36: Holding Power Steering Pump In Vise With Soft Jaw
Courtesy of AMERICAN HONDA MOTOR CO., INC.

47. Hold the pulley with the special tool, and tighten the pulley nut to specified torque.
48. Check that the pump turns smoothly by turning the pulley. If it turns hard, loosen the four flange bolts on the cover, then retightening them in the same manner as in the step 35. Turning the pump again by hand.

STEERING WHEEL REMOVAL

SRS components are located in this area. Review the SRS component locations (see

COMPONENT LOCATION INDEX) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

1. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the customer's radio station presets.
2. Align the front wheels straight ahead, then remove the driver's airbag from the steering wheel (see **DRIVER'S AIRBAG REPLACEMENT**).
3. Disconnect the cruise control set/resume switch, audio remote switch and navigation guide switch connectors (if equipped).
4. Loosen the steering wheel bolt (A).

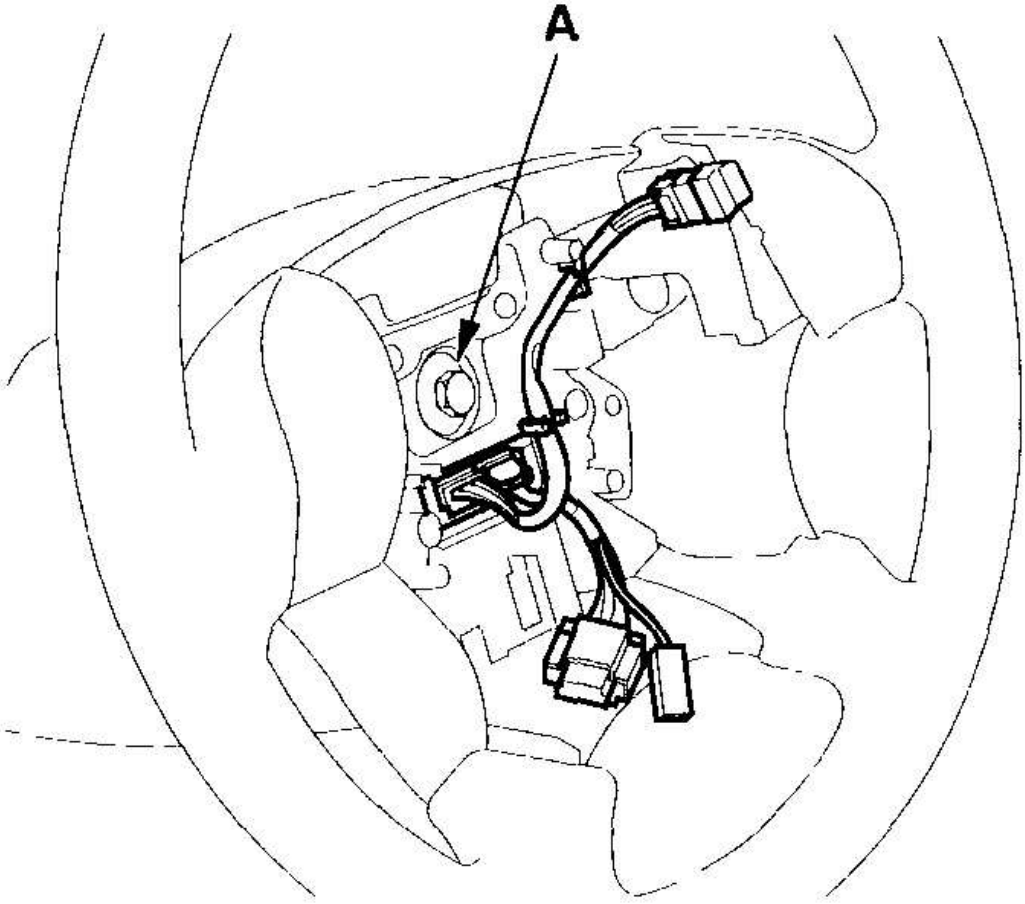


Fig. 37: Loosening Steering Wheel Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install a commercially available steering wheel puller (A) on the steering wheel (B). Free the steering wheel from the steering column shaft by turning the pressure bolt (C) of the puller.

   Note these items when removing the steering wheel:

   - Do not tap on the steering wheel or the steering column shaft when removing the steering wheel.

- If you thread the puller bolts (D) into the wheel hub more than five threads, the bolts will hit the cable reel and damage it. To prevent this, install a pair of jam nuts five threads up on each puller bolt.

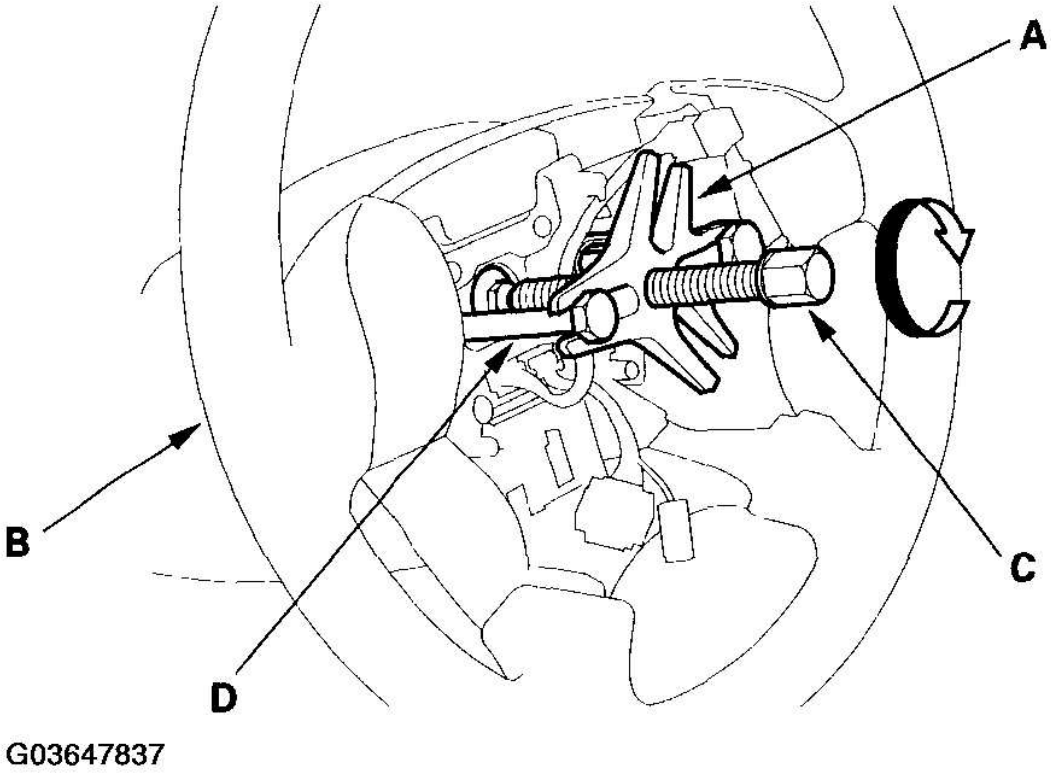
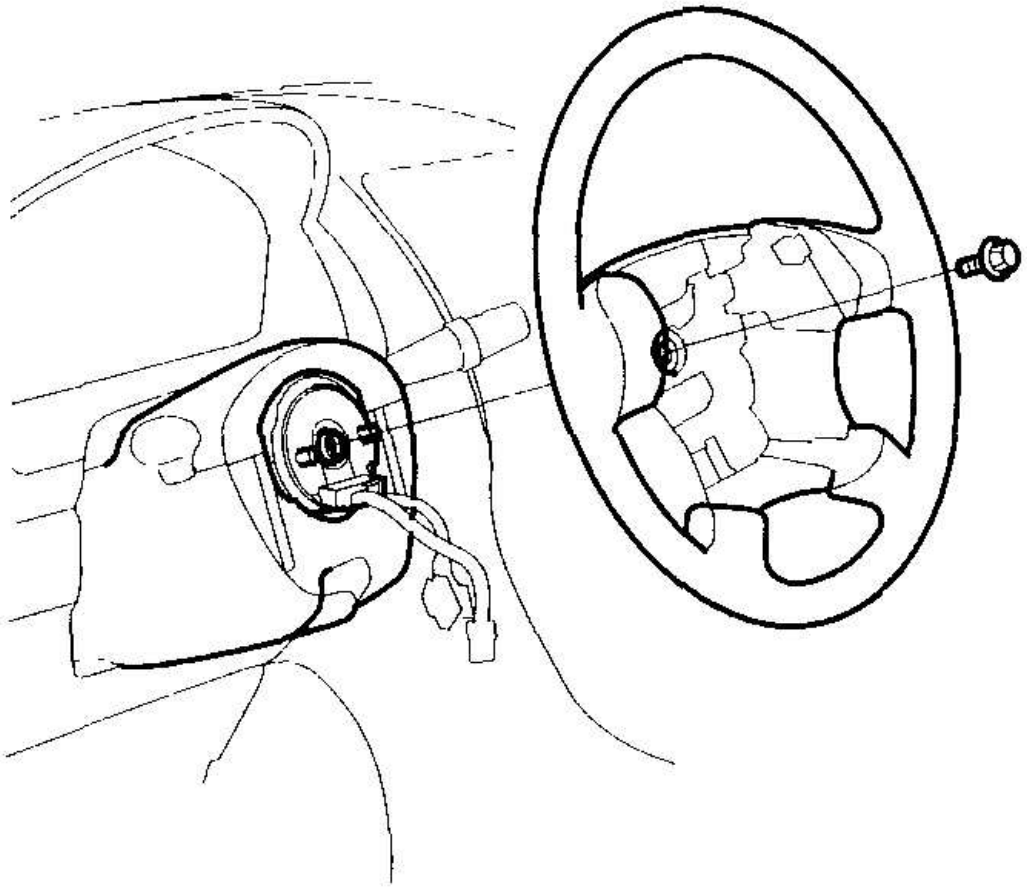


Fig. 38: Installing Commercially Steering Wheel Puller On Steering Wheel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the steering wheel puller, then remove the steering wheel bolt and steering wheel from the steering column.



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Fig. 39: Removing Wheel Puller And Steering Wheel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

STEERING WHEEL DISASSEMBLY/REASSEMBLY

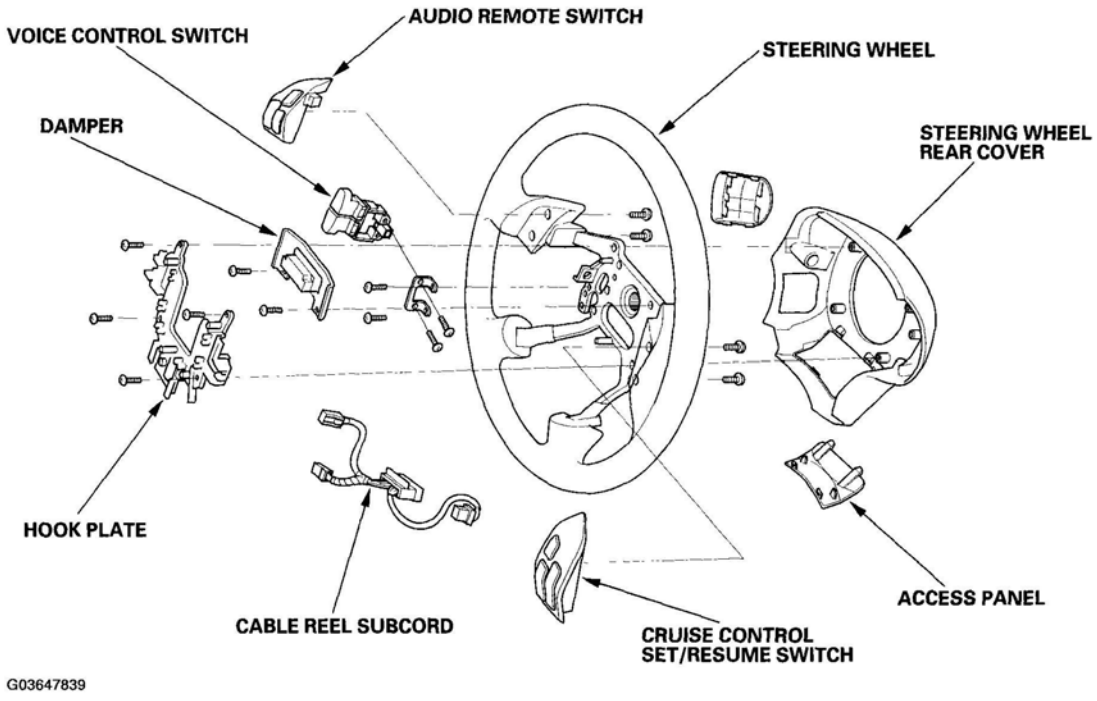


Fig. 40: Identifying Steering Wheel Components (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

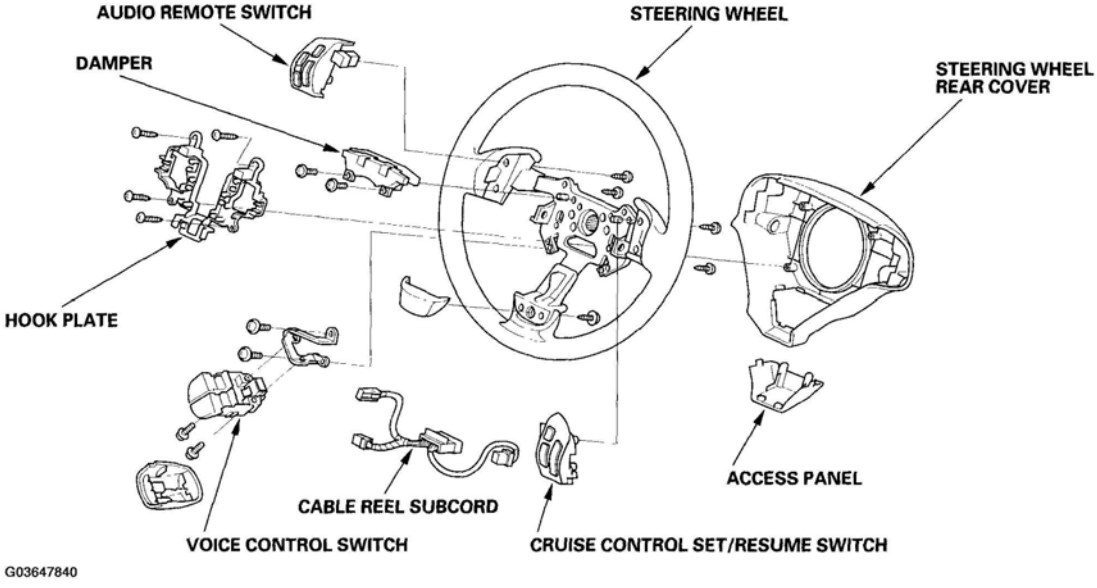


Fig. 41: Identifying Steering Wheel Components (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

STEERING WHEEL INSTALLATION

1. Before installing the steering wheel, make sure the front wheels are aligned straight ahead, then center the cable reel (A). Do this by first rotating the cable reel clockwise until it stops. Then rotate it counterclockwise about three full turns. The arrow mark (B) on the cable reel label point should point straight up.

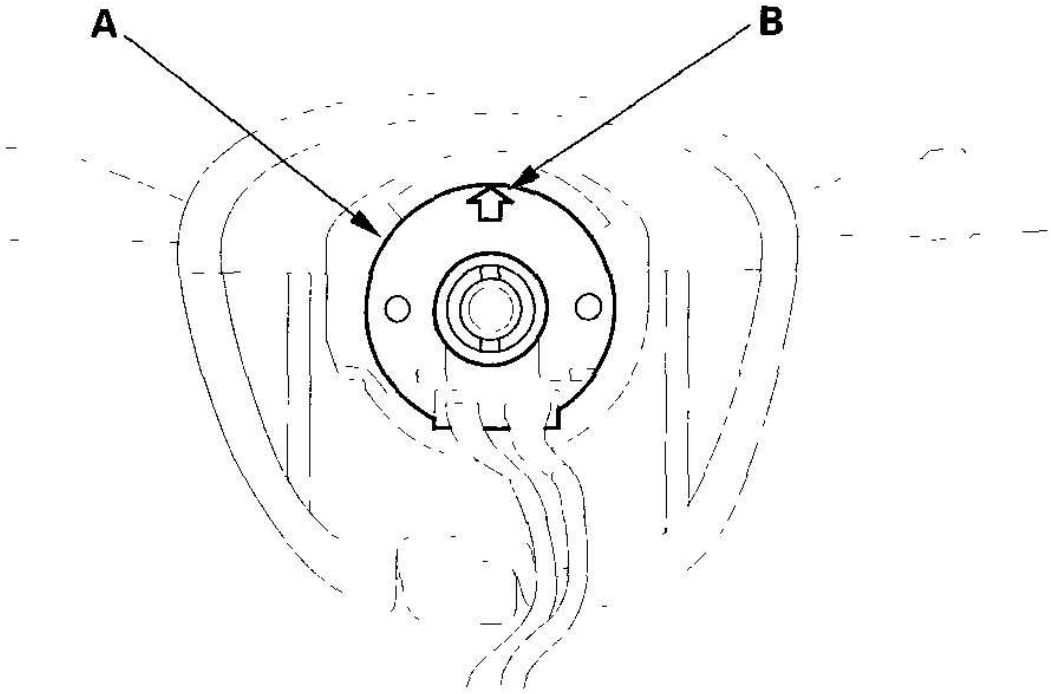


Fig. 42: Centering Cable Reel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Position the two tabs (A) of the turn signal cancelling sleeve (B) as shown in **Fig. 43**. Install the steering wheel on to the steering column shaft, making sure the steering wheel hub (C) engages the pins (D) of the cable reel and tabs of the turn signal canceling sleeve. Do not tap on the steering wheel or steering column shaft when installing the steering wheel.

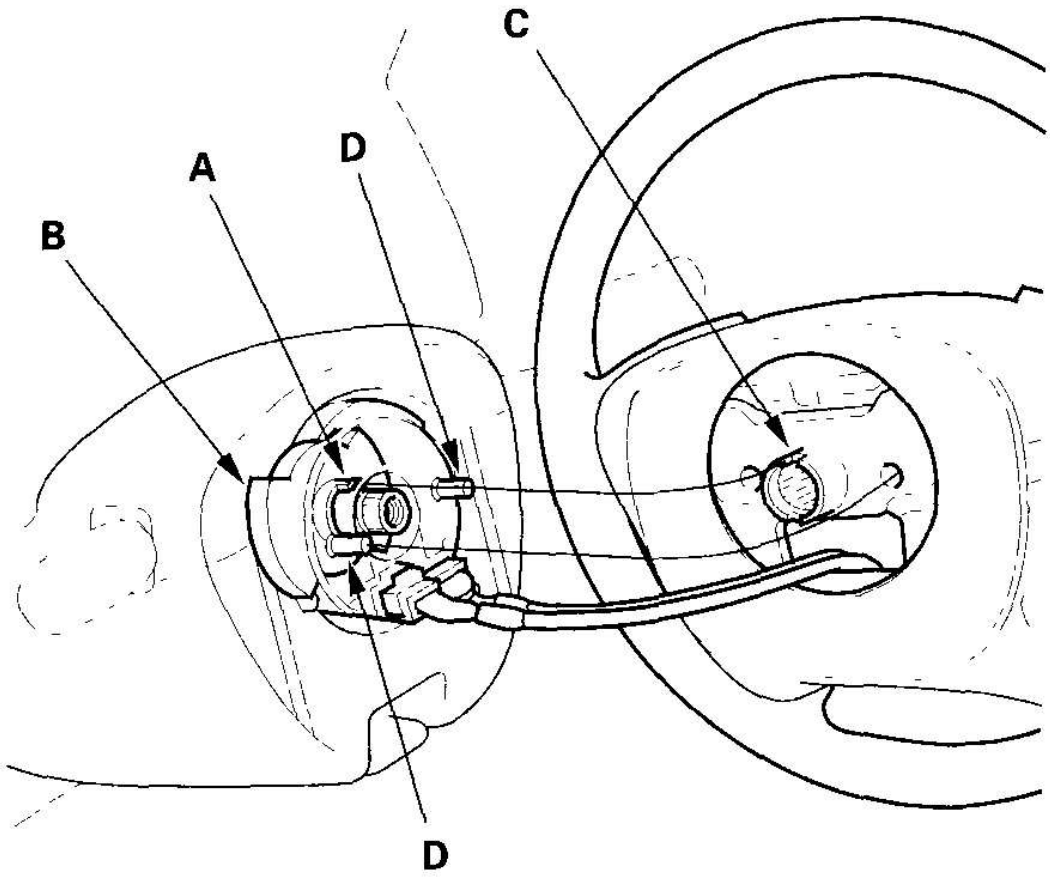


Fig. 43: Positioning Tabs Of Turn Signal Cancelling Sleeve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the steering wheel bolt (A) and tighten it to the specified torque. Connect the audio remote, navigation guide and cruise control set/resume switch connectors (if equipped). Make sure the wire harness is routed and fastened properly.

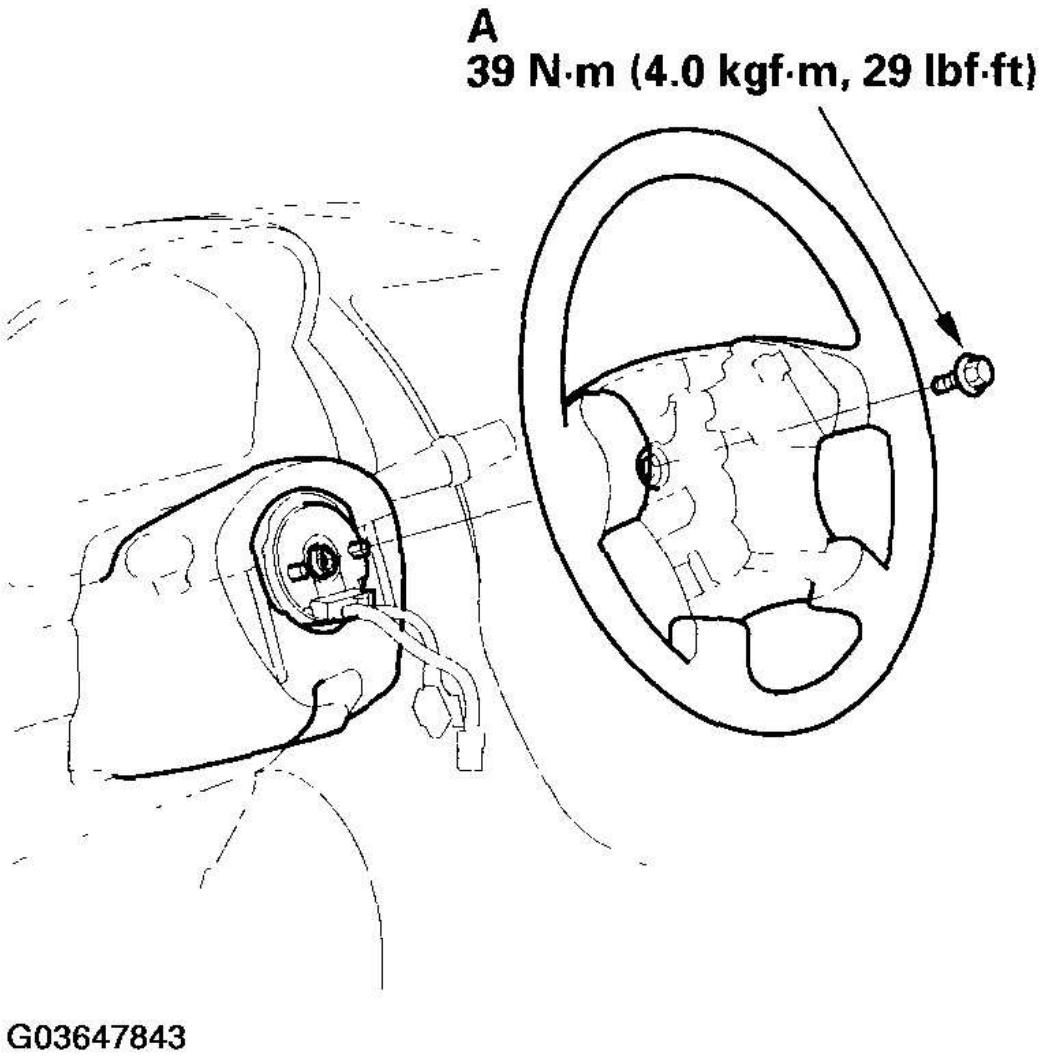


Fig. 44: Installing Steering Wheel Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the driver's airbag, and confirm that the system is operating properly (see **DRIVER'S AIRBAG REPLACEMENT**).
5. Enter the anti-theft codes for the radio and the navigation system, then enter the customer's radio station presets. Reset the clock.
6. Check the cruise control, audio remote, navigation guide and turn signal canceling for proper operation.

STEERING COLUMN REMOVAL AND INSTALLATION

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

REMOVAL

1. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the customer's radio station presets.
2. Disconnect the negative cable from the battery.
3. Remove the driver's airbag assembly and the steering wheel (see **STEERING WHEEL REMOVAL**).
4. Remove the column covers.
5. Remove the steering joint cover A.

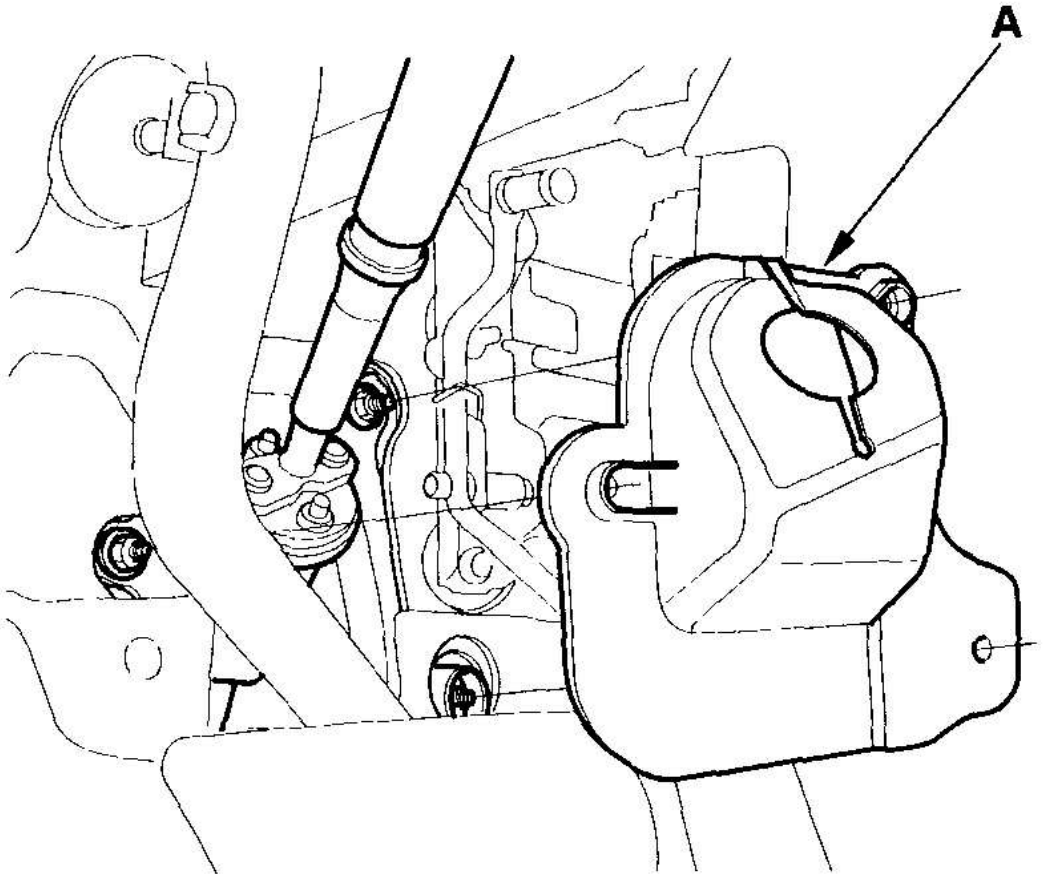


Fig. 45: Removing Steering Joint Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Release the tilt/telescopic lever, and adjust the steering column to full tilt up position, and to the full telescopic in position.
7. Tighten the tilt/telescopic lever.
8. Hold the slider shaft (A) on the column with a piece of wire (B) between the joint yoke (C) of the slider shaft and joint yoke (D) of the upper shaft to prevent the slider shaft from pulling out.

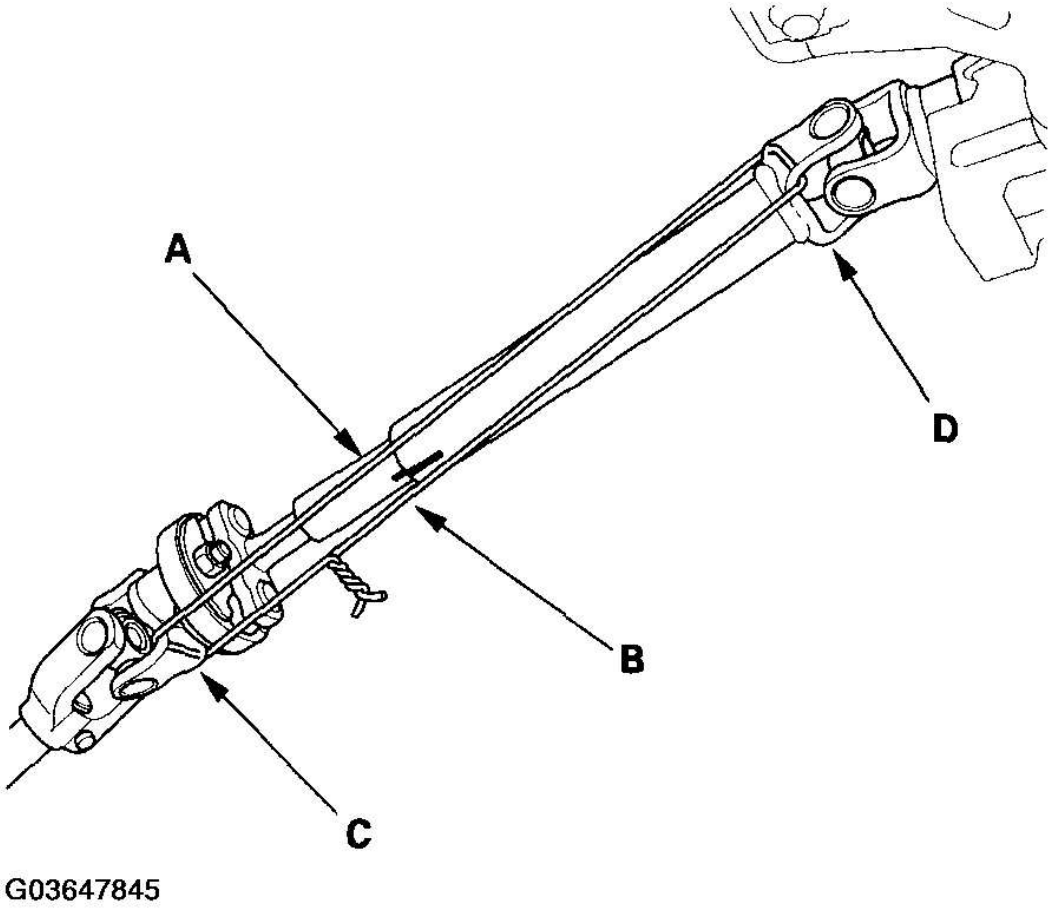


Fig. 46: Holding Slider Shaft On Column With Piece Of Wire Between Joint Yoke Of Slider Shaft And Joint Yoke
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Release the tilt/telescopic lever, and adjust the steering column to the full telescopic out position, then tighten the tilt/telescopic lever.
10. Disconnect the wire harness connectors from the combination switch assembly (A).

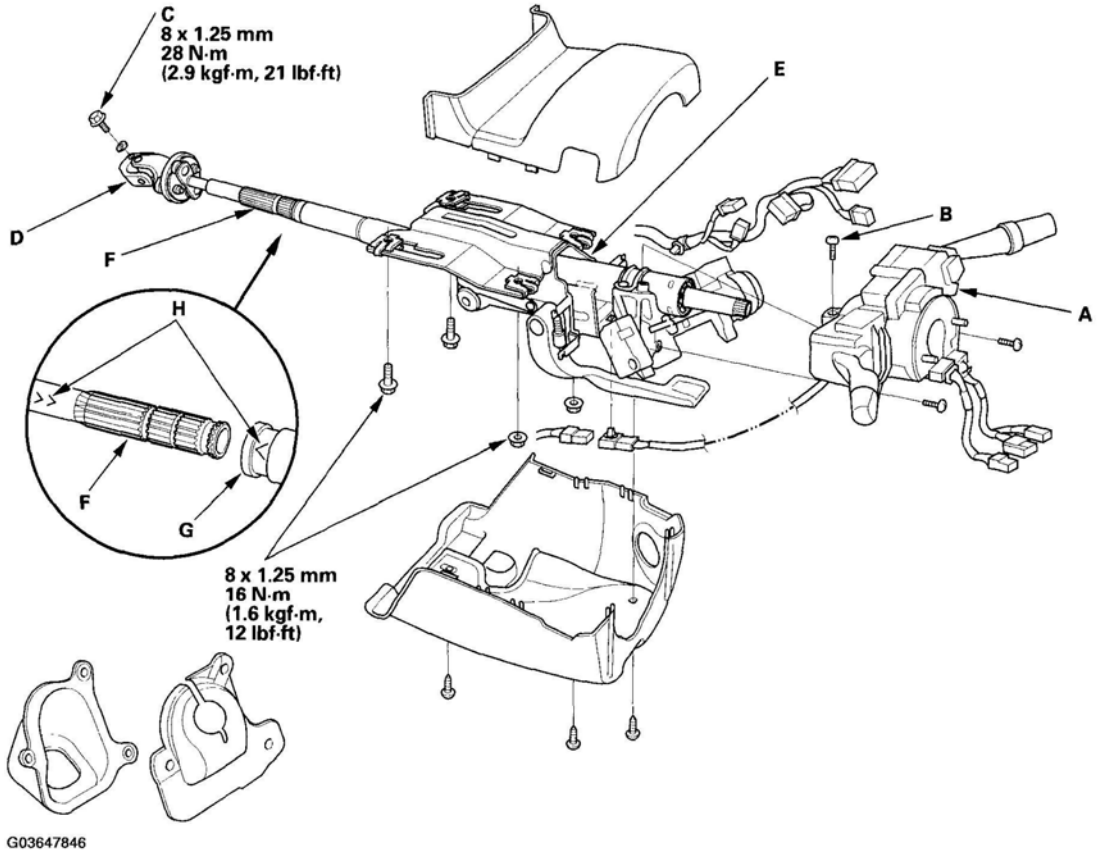


Fig. 47: Disconnecting Wire Harness Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the combination switch assembly from the steering column shaft by removing the screws (B).
12. Disconnect the connectors from the ignition switch, and release the wire harness clips from the steering column.
13. Remove the steering joint bolt (C), then disconnect the steering joint (D) from the pinion shaft.
14. Remove the steering column (E) by removing the attaching nuts and bolts. If the lower slide shaft (F) is removed, slip it into the upper shaft (G) by aligning the paint or stamped marks (H).

INSTALLATION

1. Install the steering column in the reverse order of removal, and note these

items:

- Make sure the wires are not caught or pinched by any parts.
- Take care not to let the sliding capsules fall out of position during column installation.

2. Steering joint connection; center the steering rack within its stroke.
3. Position the steering column joint (A) so the bolt (B) opposite to the notch (C) is within the range shown in **Fig. 48**.

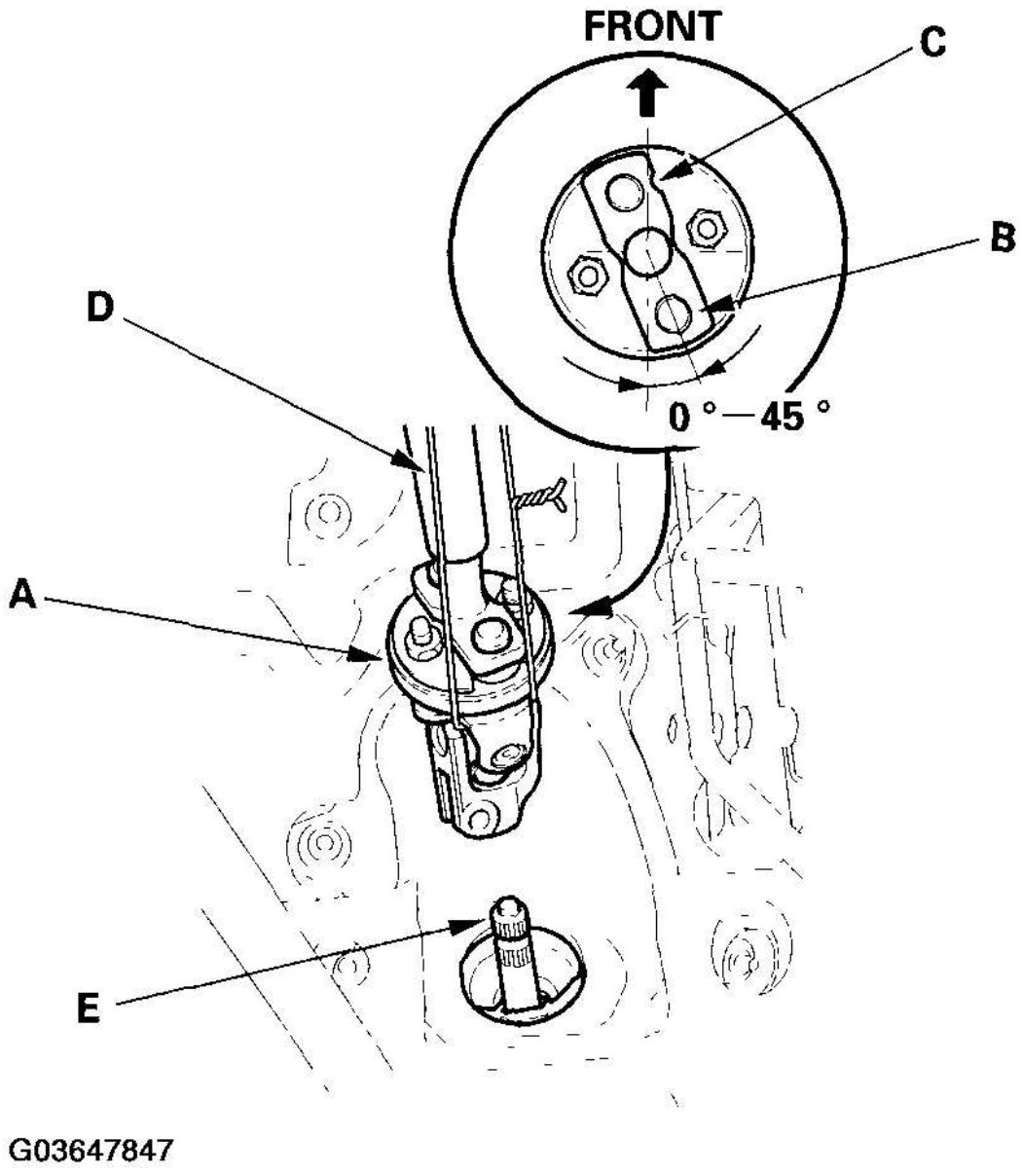


Fig. 48: Positioning Steering Column Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. With the rack in the straight ahead driving position, cut the wire (D) and slip the lower end of the steering joint on to the pinion shaft (E).
5. Align the bolt hole (A) on the steering joint with the groove (B) around the

pinion shaft, and loosely install the joint bolt (C). Be sure that the joint bolt is securely in the groove in the pinion shaft. Pull on the steering joint to make sure that the steering joint is fully seated. Tighten the steering joint bolt to the specified torque.

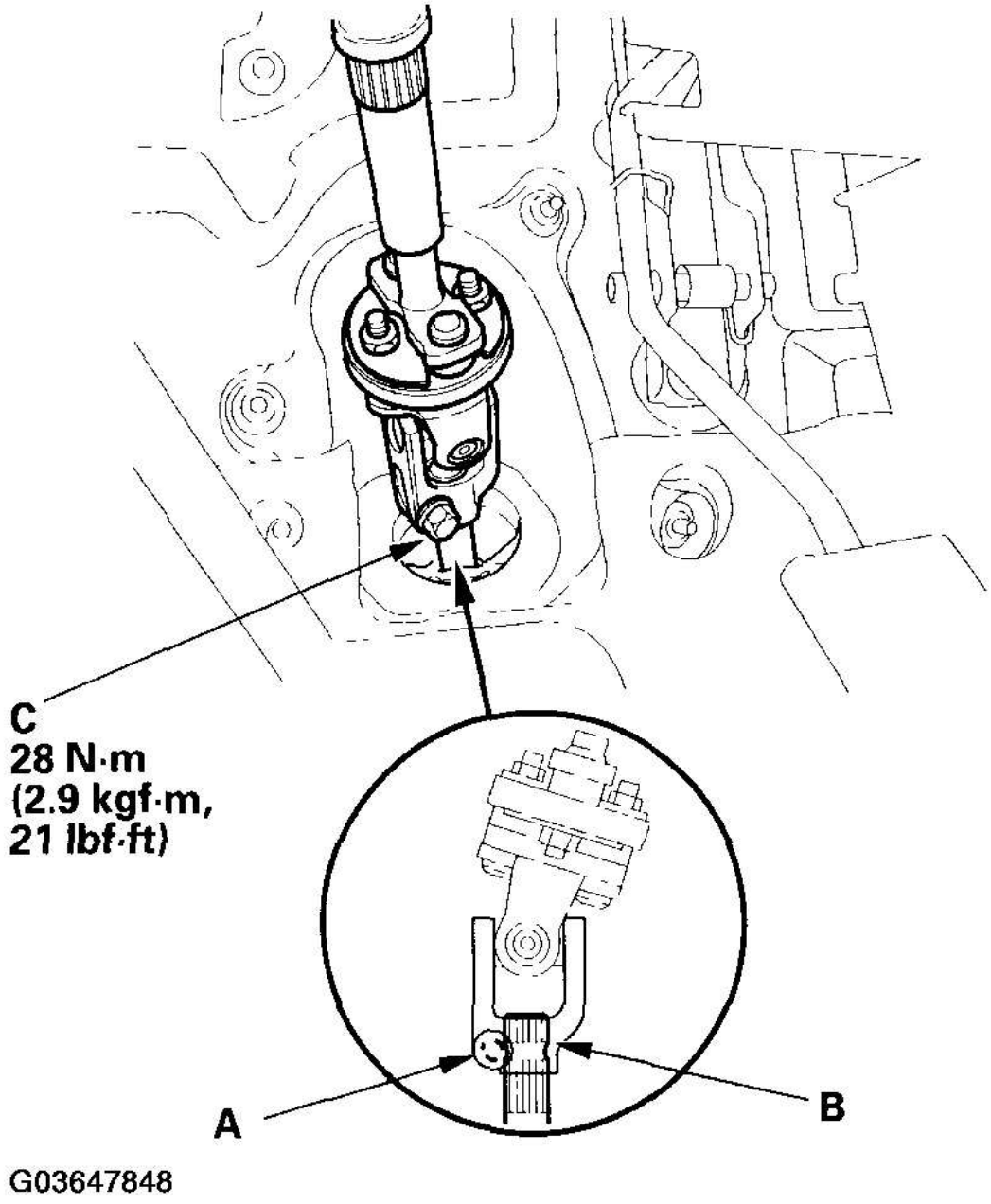


Fig. 49: Aligning Bolt Hole On Steering Joint With Groove Around Pinion Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Finish the installation, and note these items:
   - Make sure the connectors are properly connected.
   - Reinstall the steering wheel (see **STEERING WHEEL INSTALLATION**).
   - Reconnect the battery.
   - Enter the anti-theft codes for the radio and the navigation system, then the customer's radio station presets.
   - Set the clock.
   - Verify cruise control, audio remote, navigation guide and turn signal switch operation.
   - Make sure the steering wheel is centered.

STEERING COLUMN/TILT/TELESCOPIC INSPECTION

- Check the steering column ball bearing (A) and the steering joint bearings (B) for play and proper movement. If any bearing is noisy or has excessive play, replace the steering column as an assembly.
- Check the lower side shaft (C) for smooth movement in and out. If the lower slide shaft is removed, slip it into the upper shaft by aligning the paint or stamped marks (D). If it sticks or binds, replace the steering column as an assembly.
- Check the sliding capsules (E) for distortion or breakage. If there is distortion or breakage, replace the steering column as an assembly.
- Check the tilt mechanism and telescopic mechanism for movement and damage.

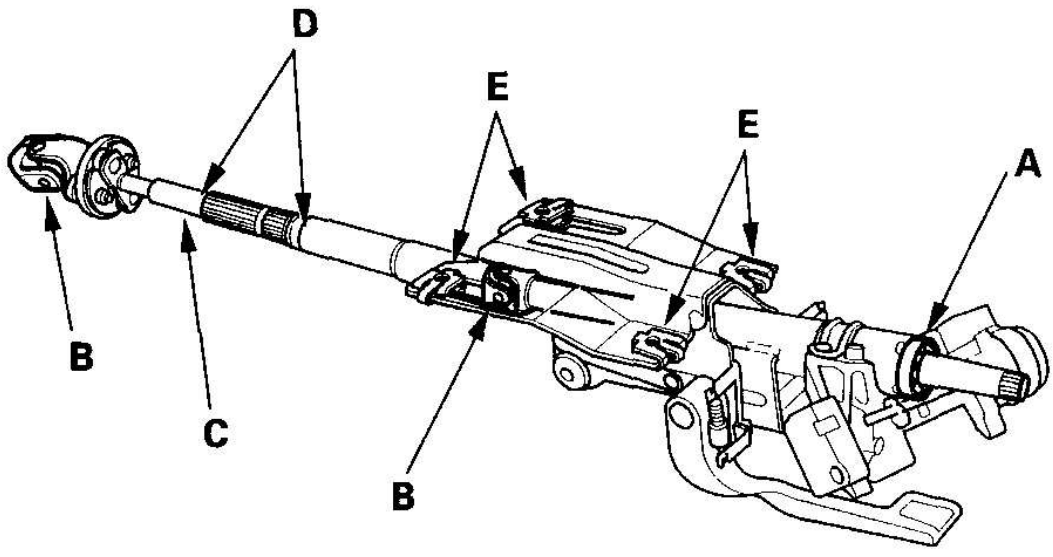
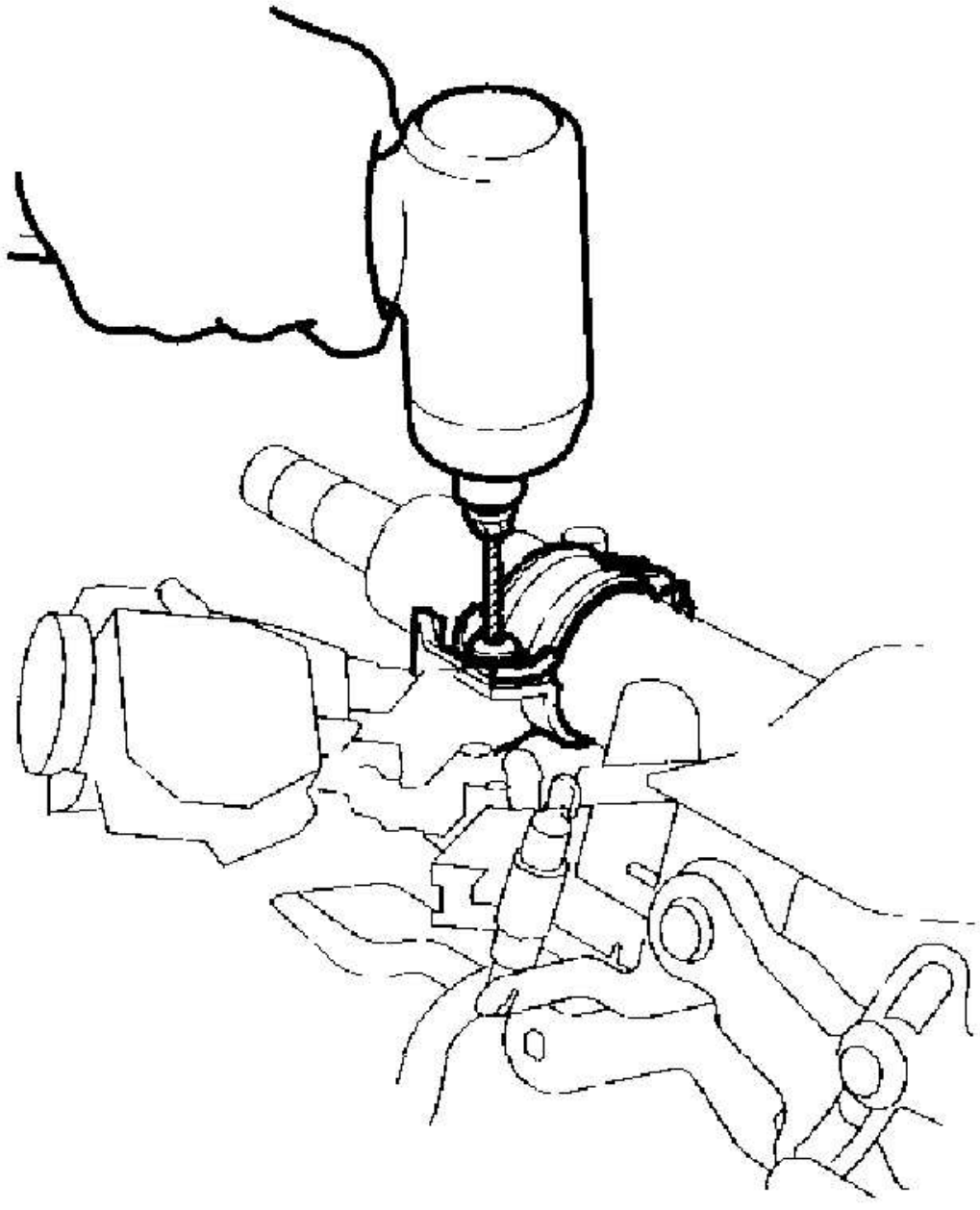


Fig. 50: Inspecting Steering Column/Tilt/Telescopic
Courtesy of AMERICAN HONDA MOTOR CO., INC.

STEERING LOCK REPLACEMENT

1. Remove the steering column (see **STEERING COLUMN REMOVAL AND INSTALLATION**).
2. Center-punch each of the two shear bolts, and drill the heads of the bolts off with a 5 mm (3/16 in.) drill bit. Be careful not to damage the switch body when removing the shear bolts.



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Fig. 51: Center-Punch Each Shear Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the shear bolts from the switch body.
4. Install the switch body without the key inserted.
5. Loosely tighten the new shear bolts.
6. Insert the ignition key, and check for proper operation of the steering wheel lock and that the ignition key turns freely.
7. Tighten the shear bolts (A) until the hex heads (B) twist off.

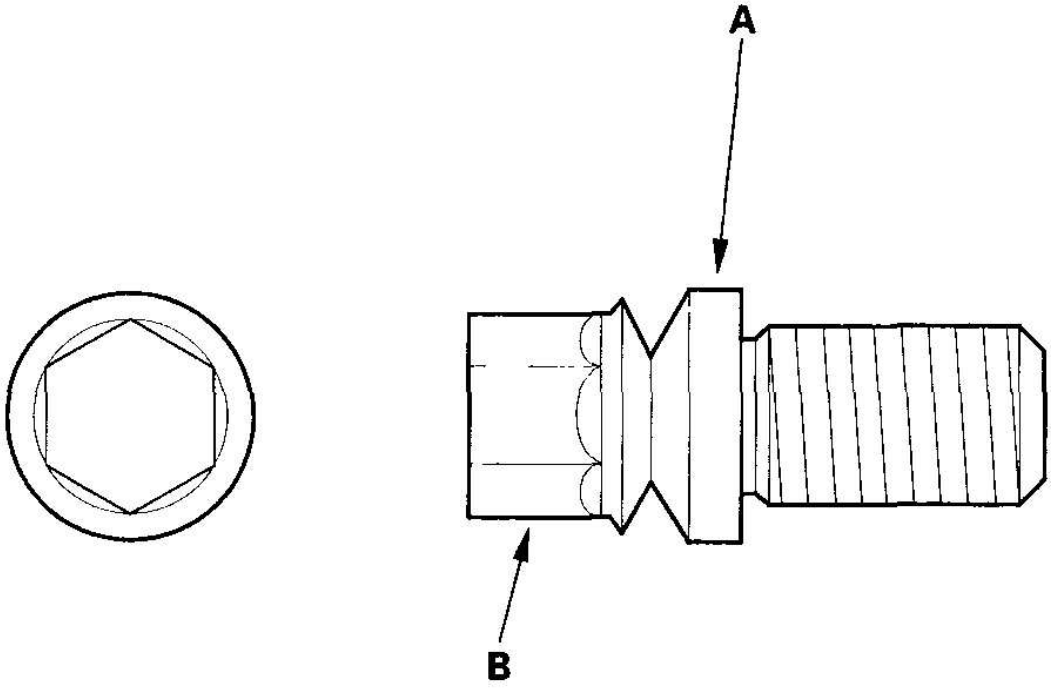


Fig. 52: Tightening Shear Bolts Until Hex Heads Twist Off
Courtesy of AMERICAN HONDA MOTOR CO., INC.

RACK GUIDE ADJUSTMENT

Special Tools Required

Locknut wrench, 40 mm 07916-SA50001

1. Set the wheels in the straight ahead position.
2. Loosen the rack guide screw locknut (A) with the special tool, then remove the rack guide screw (B).

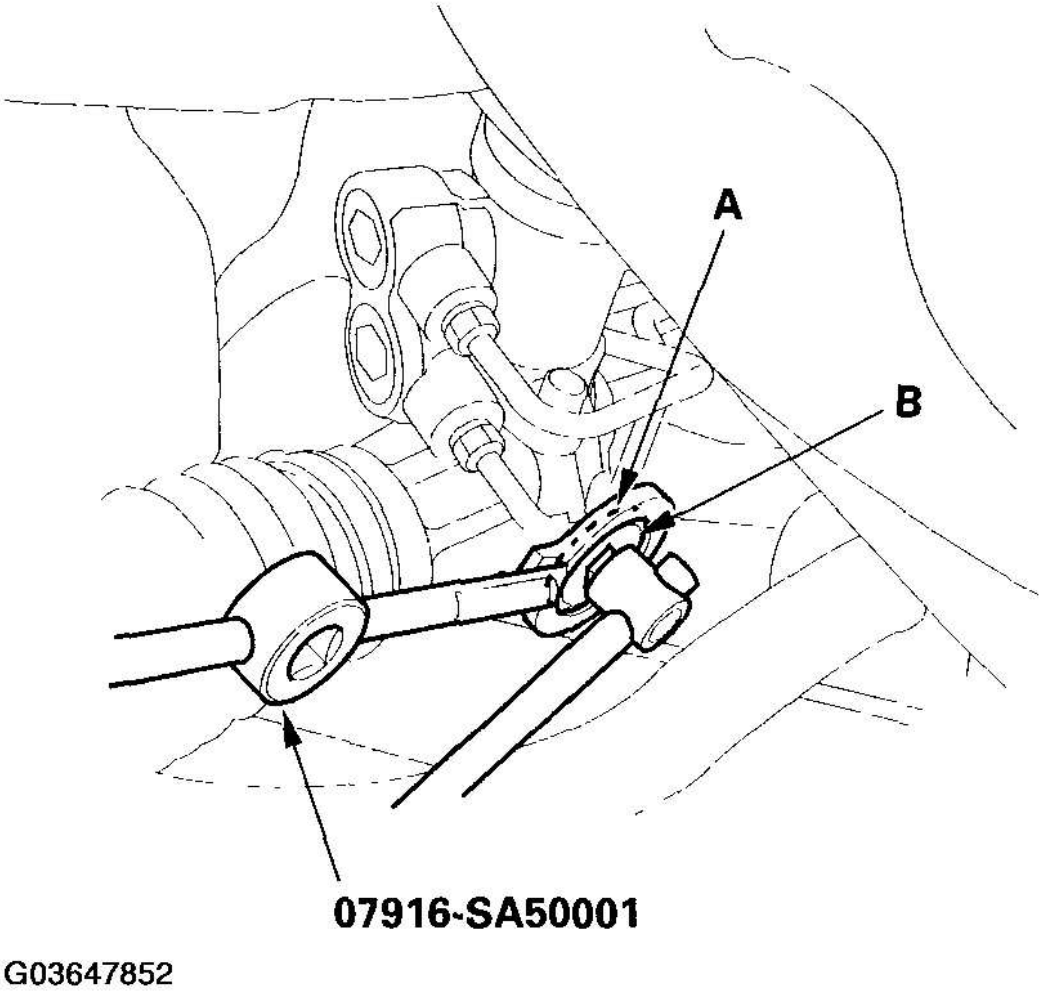


Fig. 53: Loosening Rack Guide Screw Locknut With Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the old sealant from the rack guide screw (A), and apply new sealant (Three Bond 1215 or Loctite 5699) to the middle of the threads (B). Loosely install the rack guide screw on the steering gearbox.

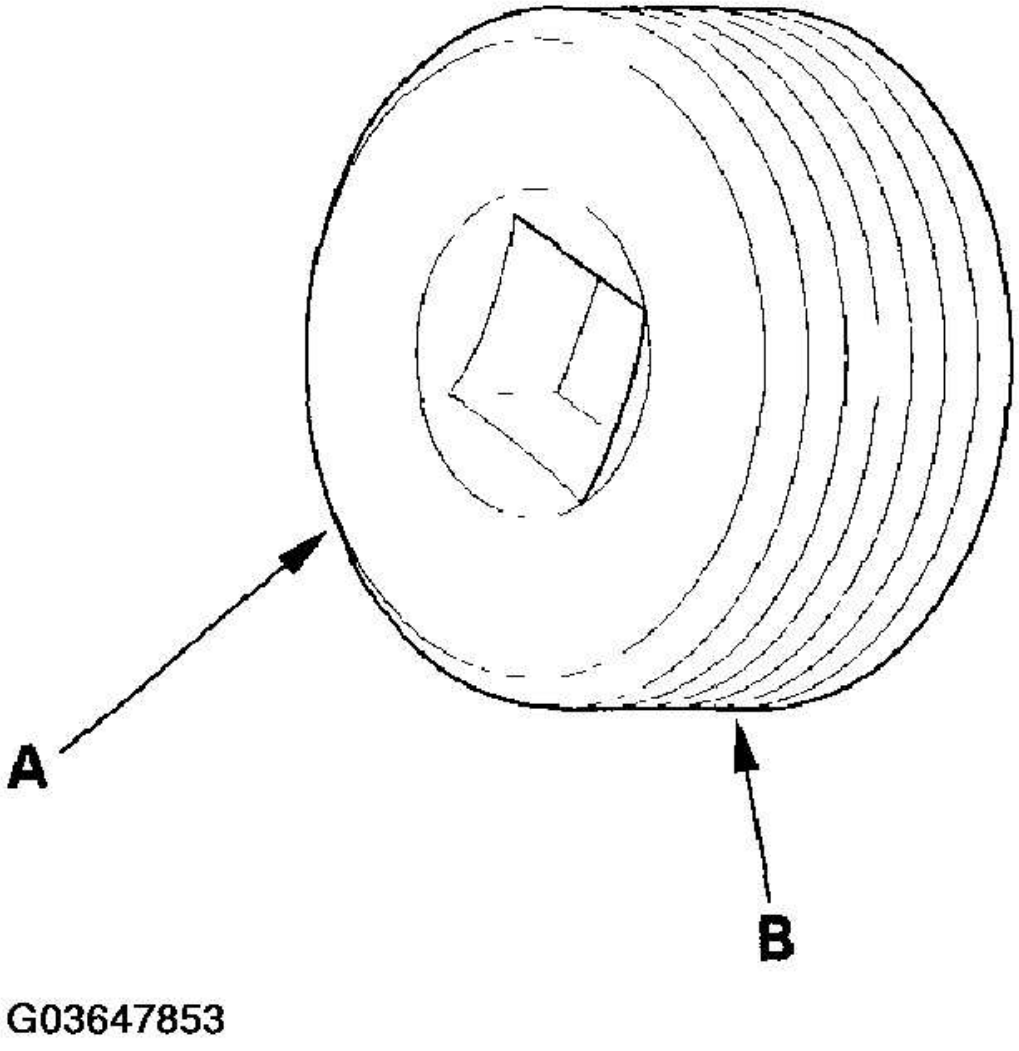


Fig. 54: Removing Old Sealant From Rack Guide Screw
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Tighten the rack guide screw (A) to 25 N.m (2.5 kgf.m, 18 lbf.ft), then loosen it.

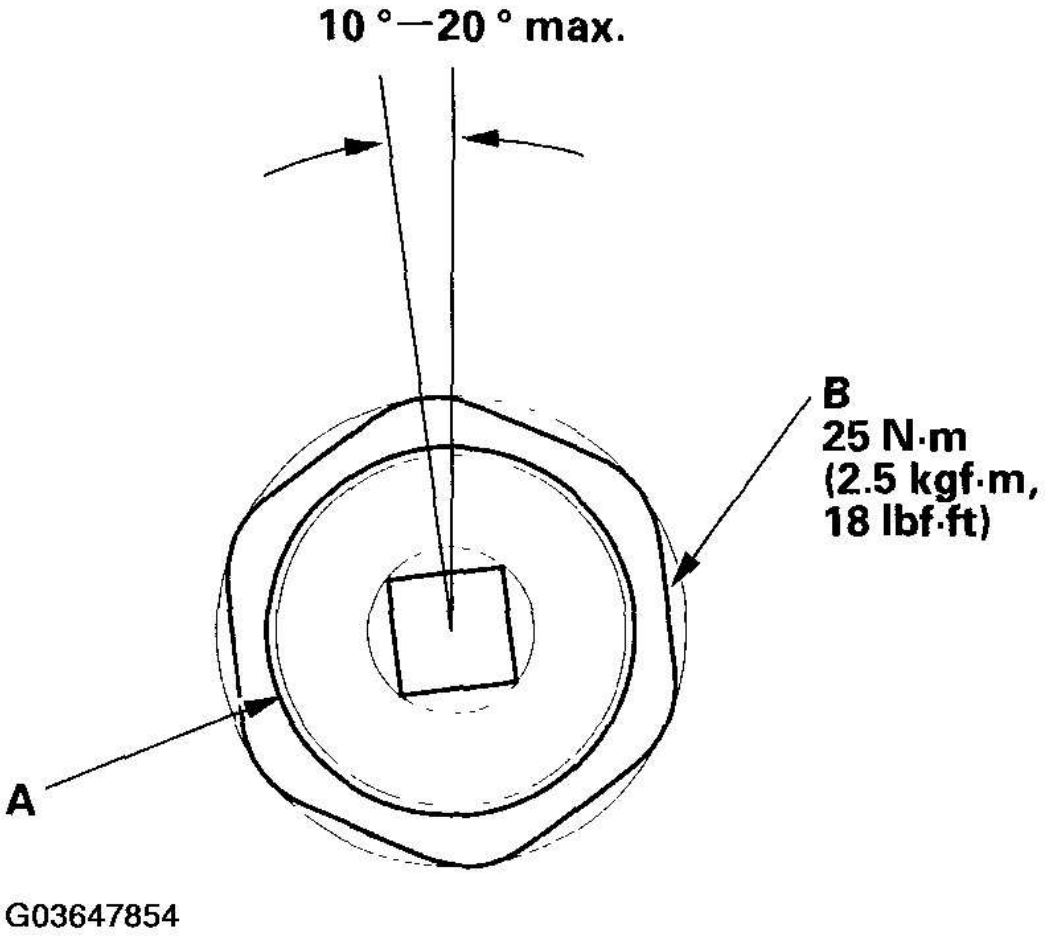


Fig. 55: Tightening Rack Guide Screw
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Retighten the rack guide screw to 3.9 N.m (0.4 kgf.m, 3 lbf.ft), then back it off to the specified angle.

   Specified return angle: 10°-20° max.

6. Hold the rack guide screw stationary with a wrench, and tighten the locknut by hand until it's fully seated.
7. Install the special tool on the locknut (B), and hold the rack guide screw stationary with a wrench. Tighten the locknut an additional 30° with the special

tool.

8. Check for unusual steering effort through the complete turning range.
9. Check the steering wheel rotation play (see **STEERING WHEEL ROTATIONAL PLAY CHECK**), and the power assist (see **STEERING WHEEL ROTATIONAL PLAY CHECK**).

STEERING GEARBOX REMOVAL

Special Tools Required

- Ball joint remover, 28 mm 07MAC-SL0A202
- Subframe adaptor EQS02C000016 (Available through the Honda Tool and Equipment program 888-424-6857)

Note these items during removal:

- Using solvent and a brush, wash any oil and dirt off the valve body unit, its lines, and the end of the gearbox. Blow dry with compressed air.
- Make sure to remove the steering wheel before disconnecting the steering joint. Damage to the cable reel can occur.

1. Drain the power steering fluid. (see step 1 in **Fluid Replacement**).
2. Raise the front of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
3. Remove the front wheels.
4. Remove the steering wheel (see **STEERING WHEEL REMOVAL**).
5. Remove the steering joint cover A.

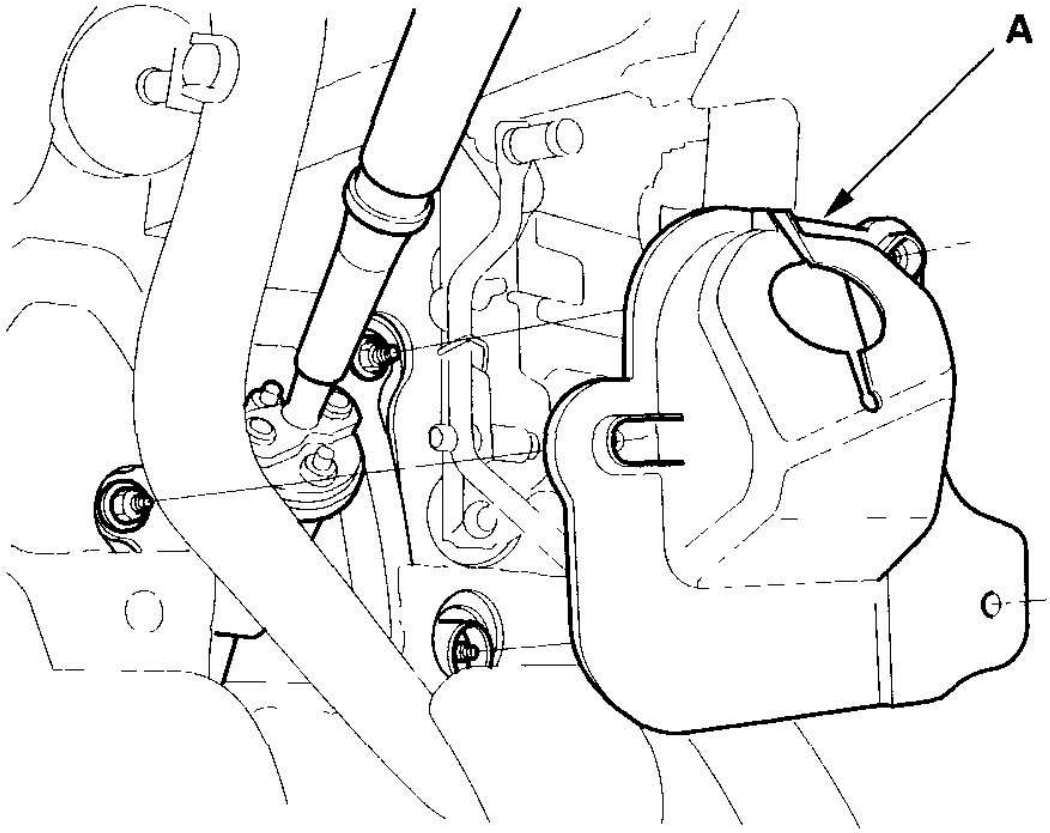


Fig. 56: Removing Steering Joint Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the steering joint bolt (A), and disconnect the steering joint by moving the steering joint (B) toward the column. Hold the slider shaft (C) on the column with a piece of wire (D) between the joint yoke (E) on the slider shaft to the joint yoke on the upper shaft (see **STEERING COLUMN REMOVAL AND INSTALLATION**).

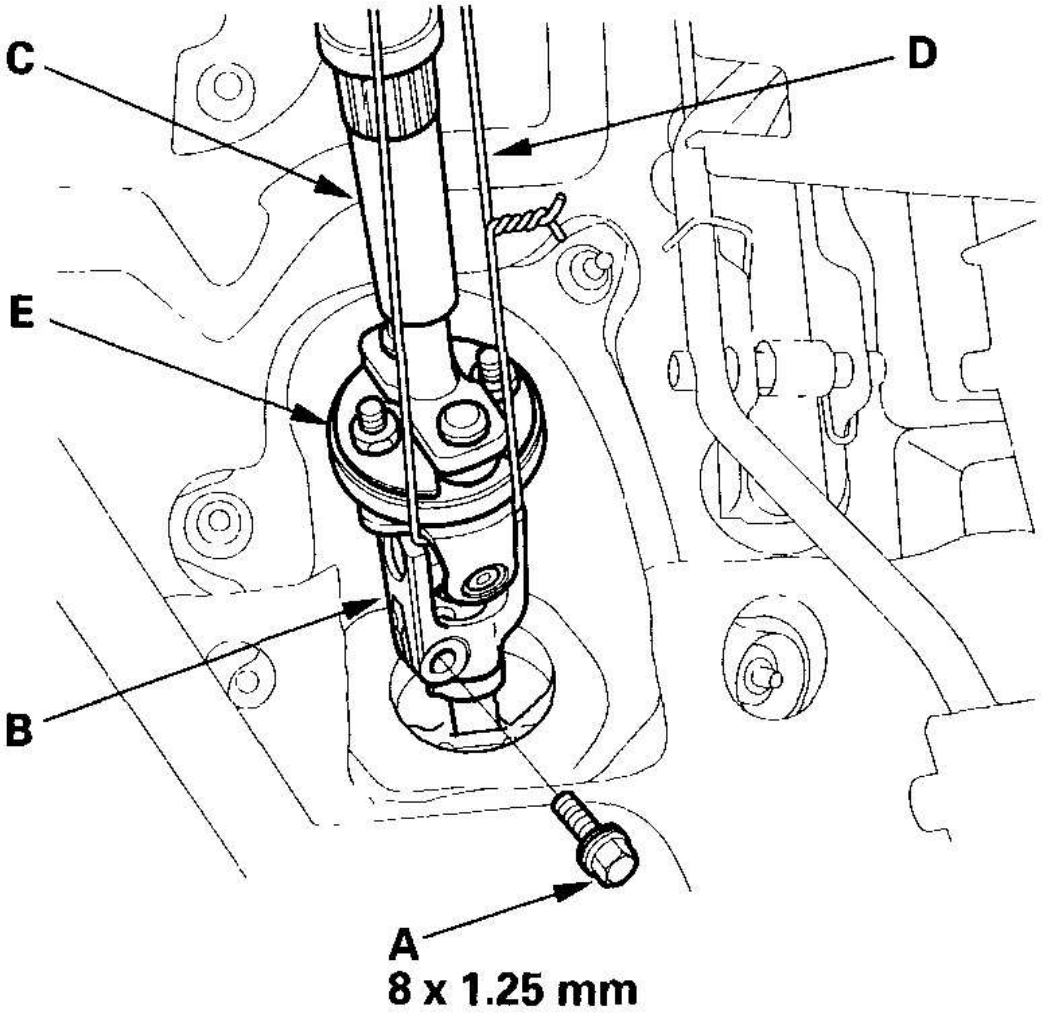


Fig. 57: Removing Steering Joint Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the steering joint cover B. Be careful not to damage the mating surface on the joint cover B and pinion shaft grommet. Replace the cover seal (A) if necessary.

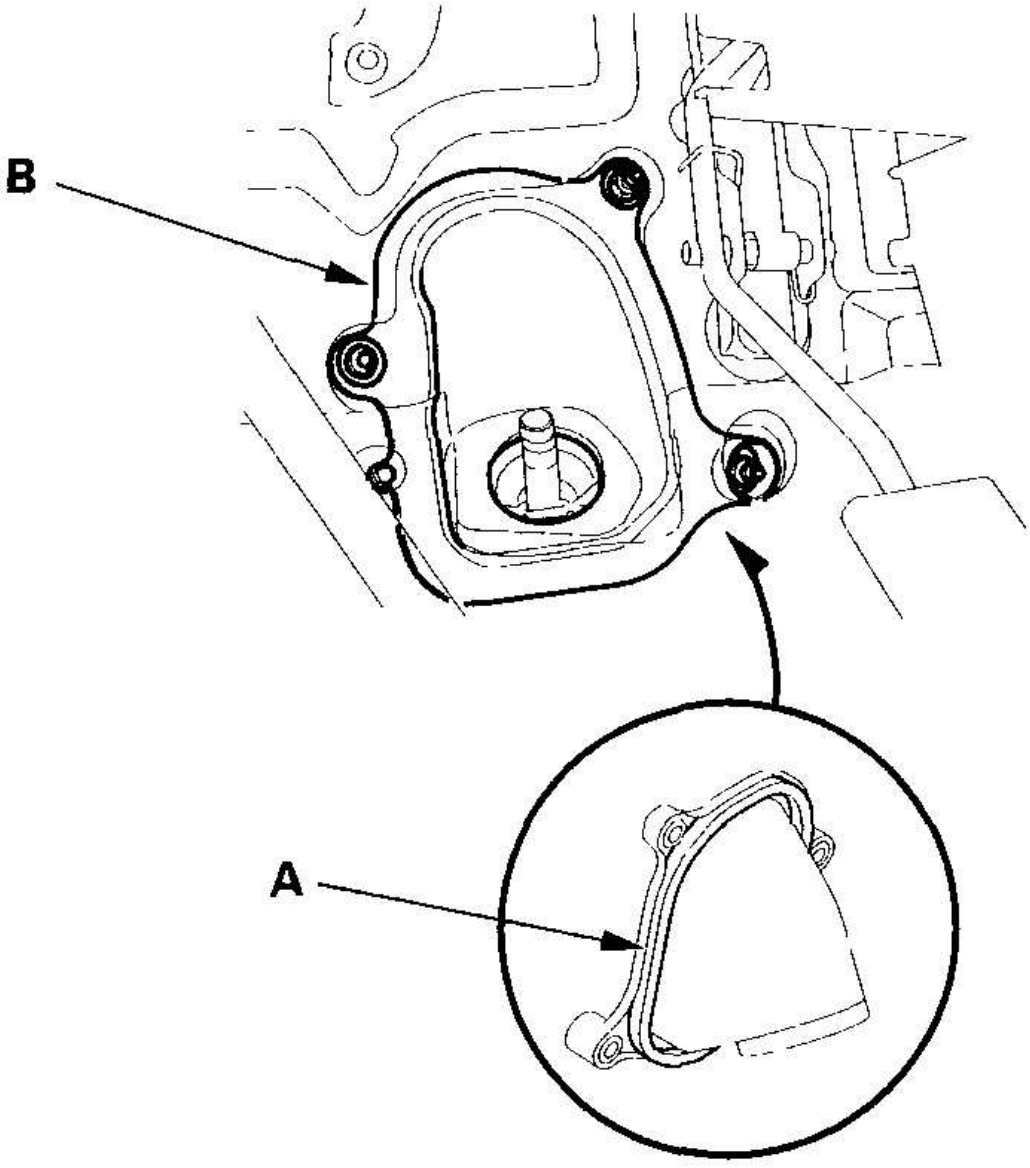


Fig. 58: Replacing Cover Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove and discard the cotter pin (A) from the tie-rod ball joint nut (B), then loosen the nut.

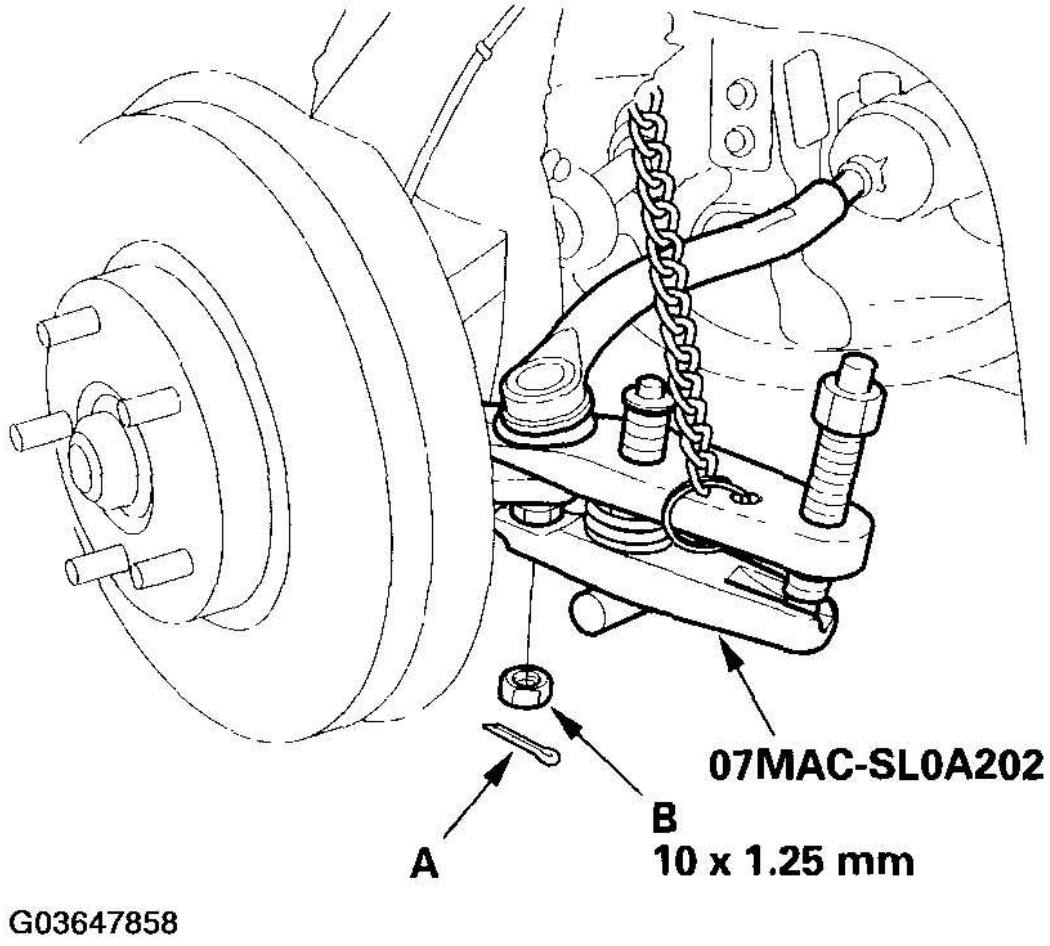


Fig. 59: Removing Cotter Pin From Tie-Rod Ball Joint Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Separate the tie-rod ball joint and knuckle using the special tool (see **BALL JOINT REMOVAL**).
10. Remove the P/S heat baffle plate (A).

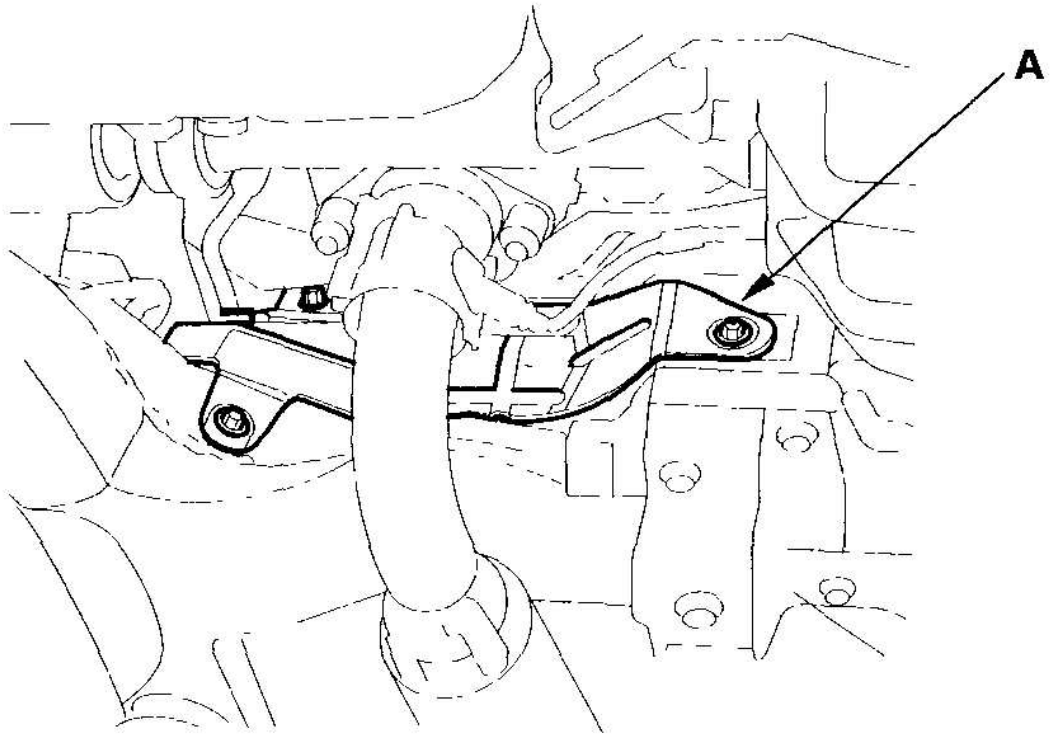


Fig. 60: Removing P/S Heat Baffle Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the feed line holder mounting bolt (A) on the front suspension subframe.

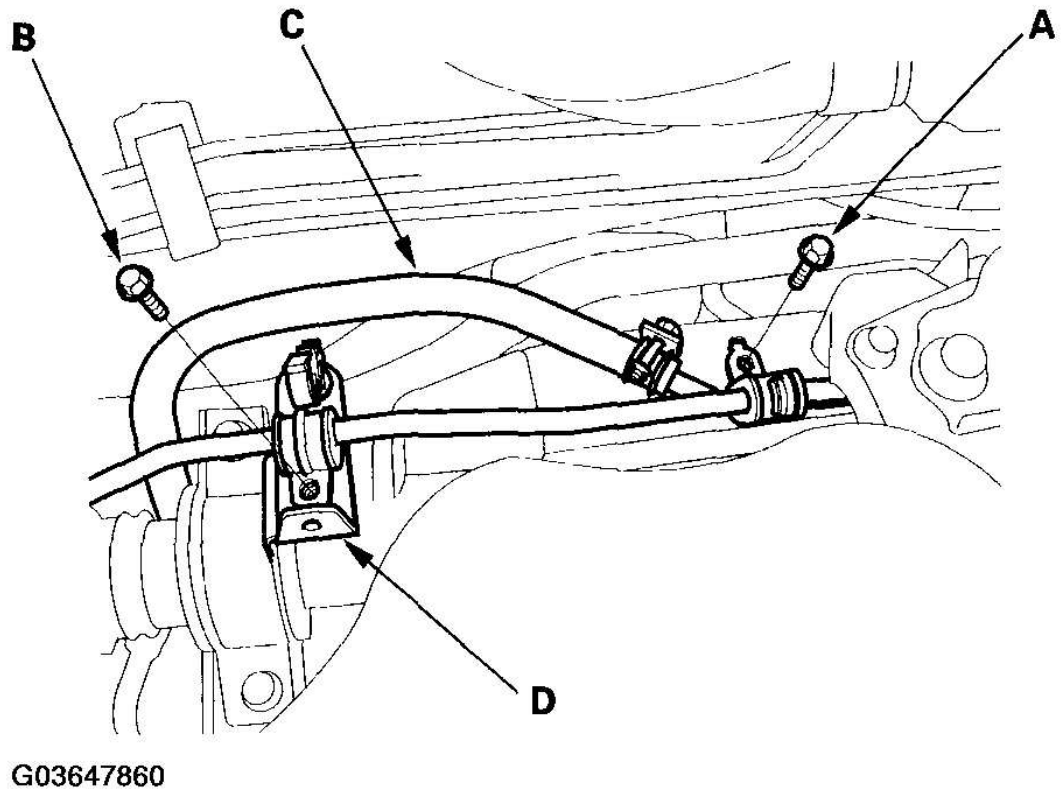


Fig. 61: Removing Feed Line Holder Mounting Bolt On Front Suspension Subframe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the feed line holder mounting bolt (B) and return hose (C) from the gearbox mounting bracket (D).
13. Place several shop towels under the line connections, and cover the gearbox mounting part to protect it from the power steering fluid. Loosen the flare nut (A), and disconnect the feed line (B).

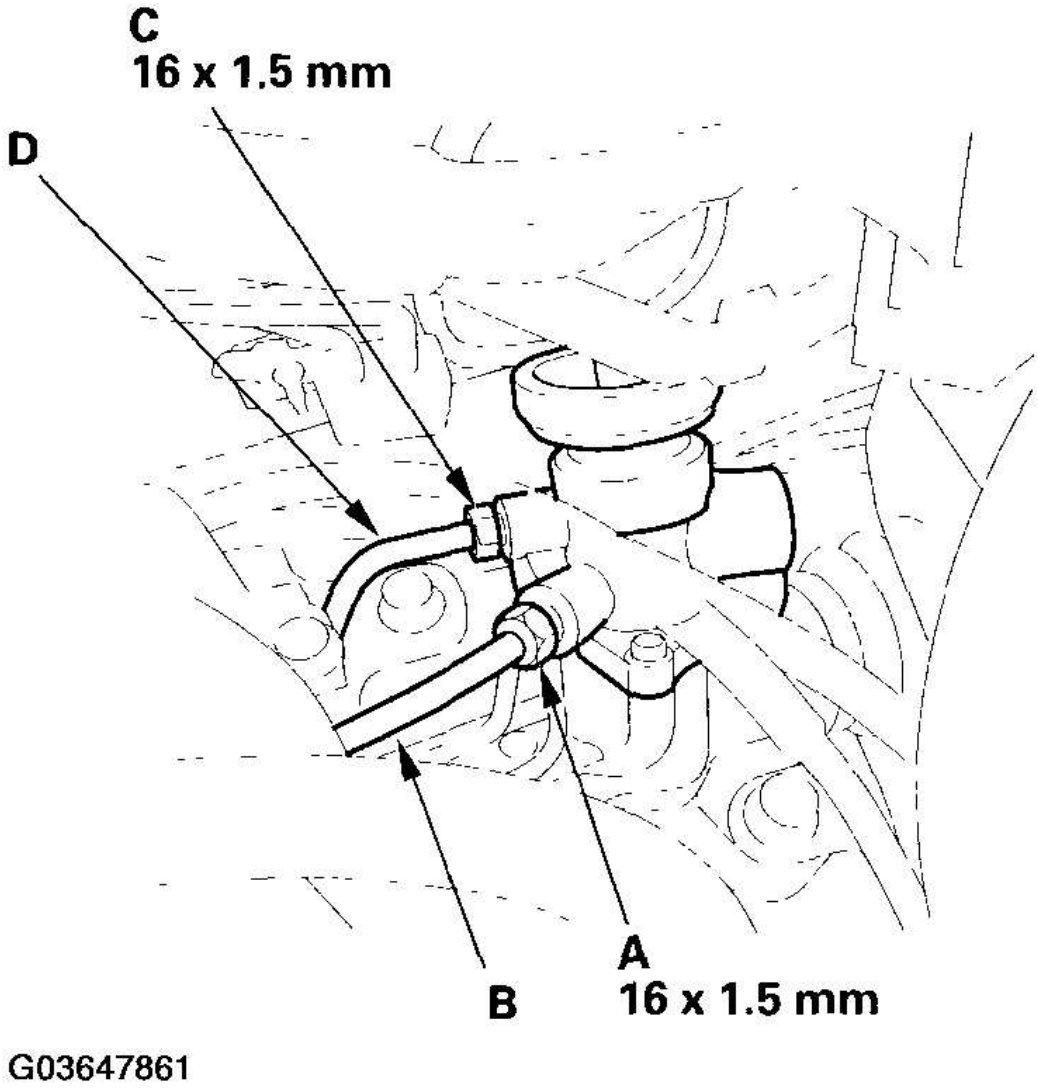


Fig. 62: Loosening Flare Nut And Disconnecting Feed Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Loosen the flare nut (C), and disconnect the return line (D).
15. After disconnecting the lines, plug or seal them with a piece of tape or equivalent to prevent foreign materials from entering.

NOTE: Do not loosen the cylinder line A and B between the

valve body unit and the cylinder.

16. Attach the special tool to the front suspension subframe (A) with hanging the hook of the special tool over the front of the subframe, then tighten the special tool screw.

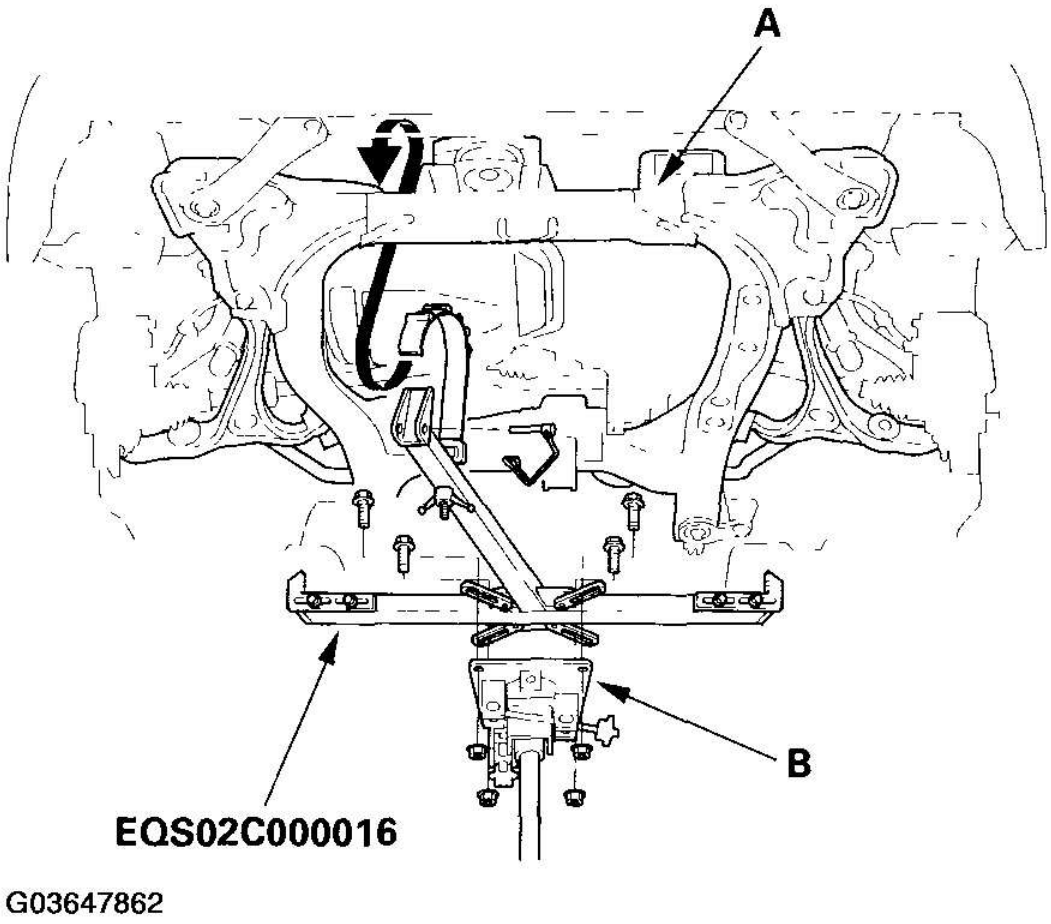


Fig. 63: Attaching Special Tool To Front Suspension Subframe With Hanging Hook
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Raise the jack (B) and line up the slots in the arms with the bolt holes on the corner of the jack base, then attach them with bolts securely.
18. Remove the front suspension subframe right middle mount bolts (A).

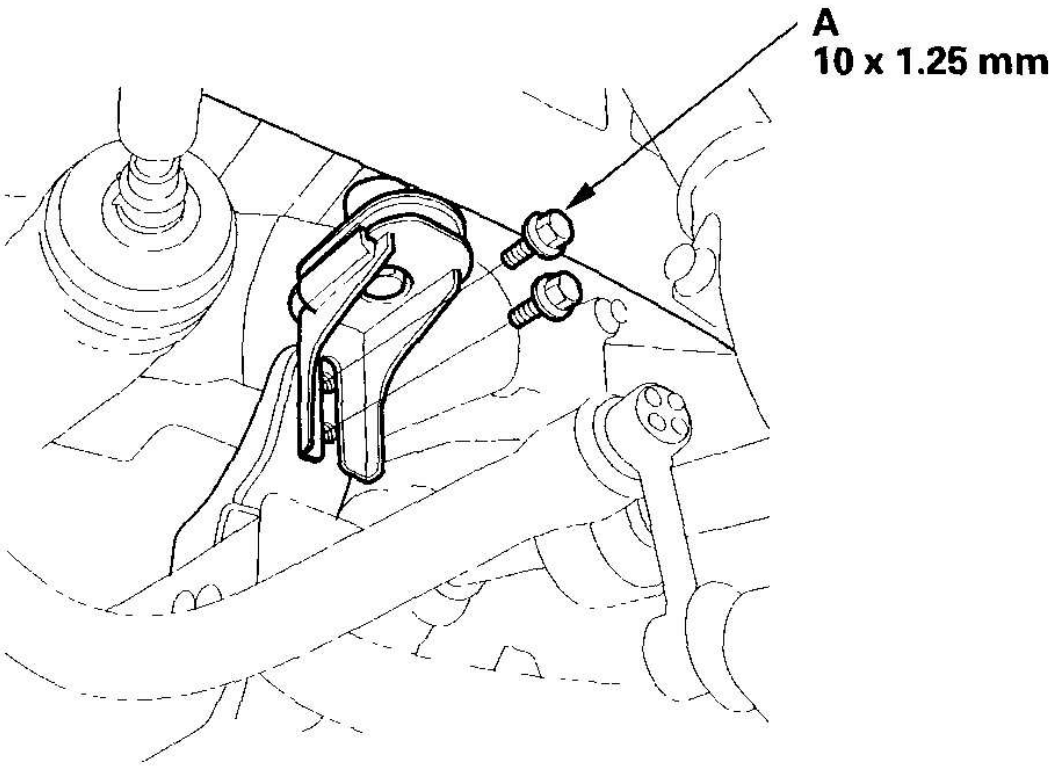


Fig. 64: Removing Front Suspension Subframe Right Middle Mount Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Remove the front suspension subframe left middle mount (A).

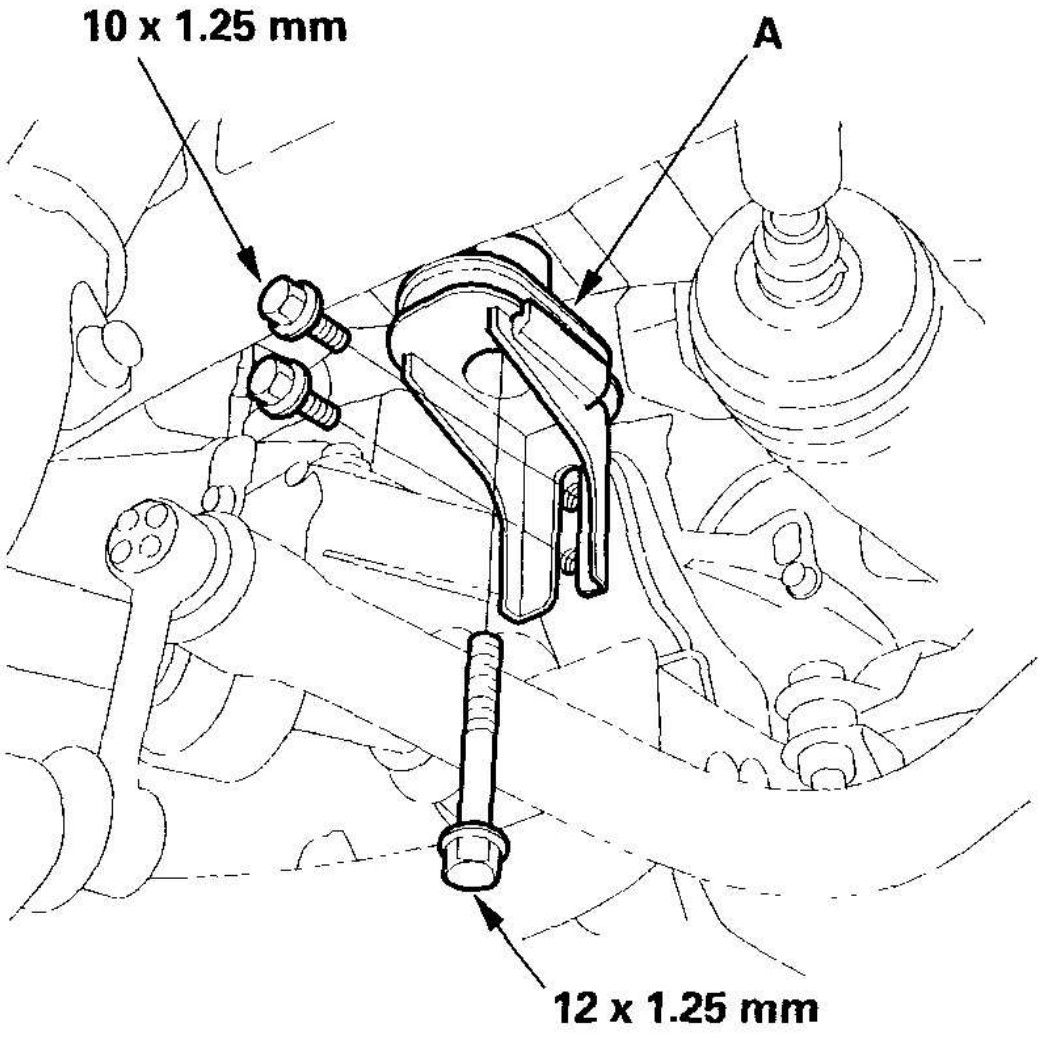


Fig. 65: Removing Front Suspension Subframe Left Middle Mount
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Remove the steering gearbox mounting bolts on the left gearbox mount, and remove the steering stiffener plate (A).

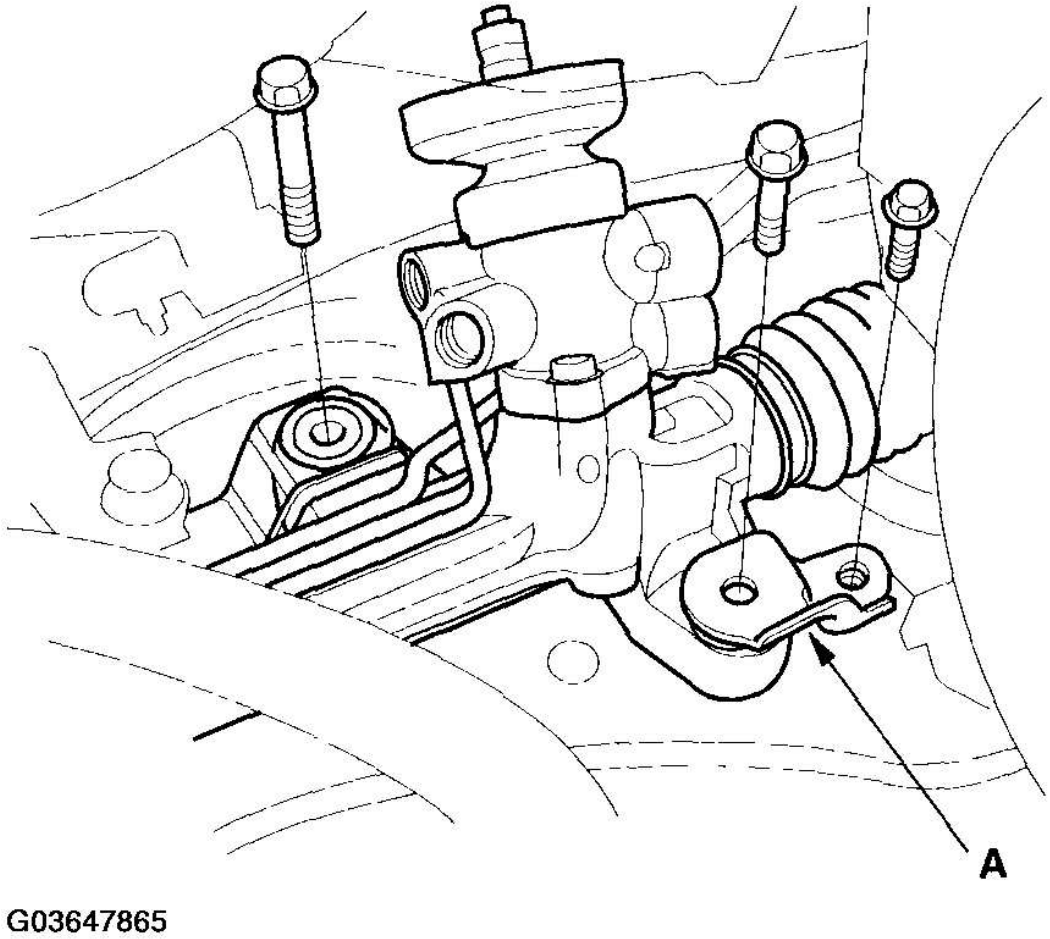


Fig. 66: Removing Steering Stiffener Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Remove the front suspension subframe rear bracket (A) mounting bolt (B).

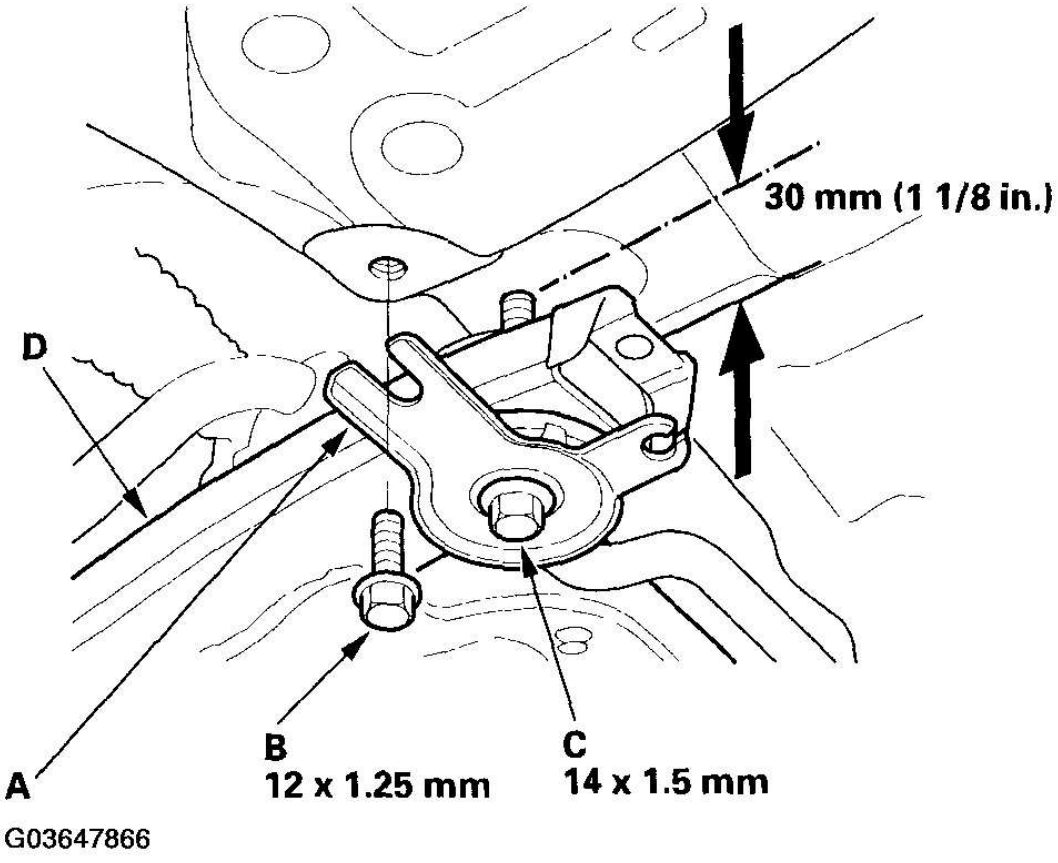


Fig. 67: Removing Front Suspension Subframe Rear Bracket Mounting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Loosen the two front suspension subframe rear bracket mounting bolts (C) on right and left, and slowly lower the jack supporting subframe (D) with special tool until the subframe has dropped 30 mm (1 1/8 in.) total.
23. Remove the two flange bolts from the right side of the gearbox, then remove the gearbox mounting bracket (A) and cushion (B).

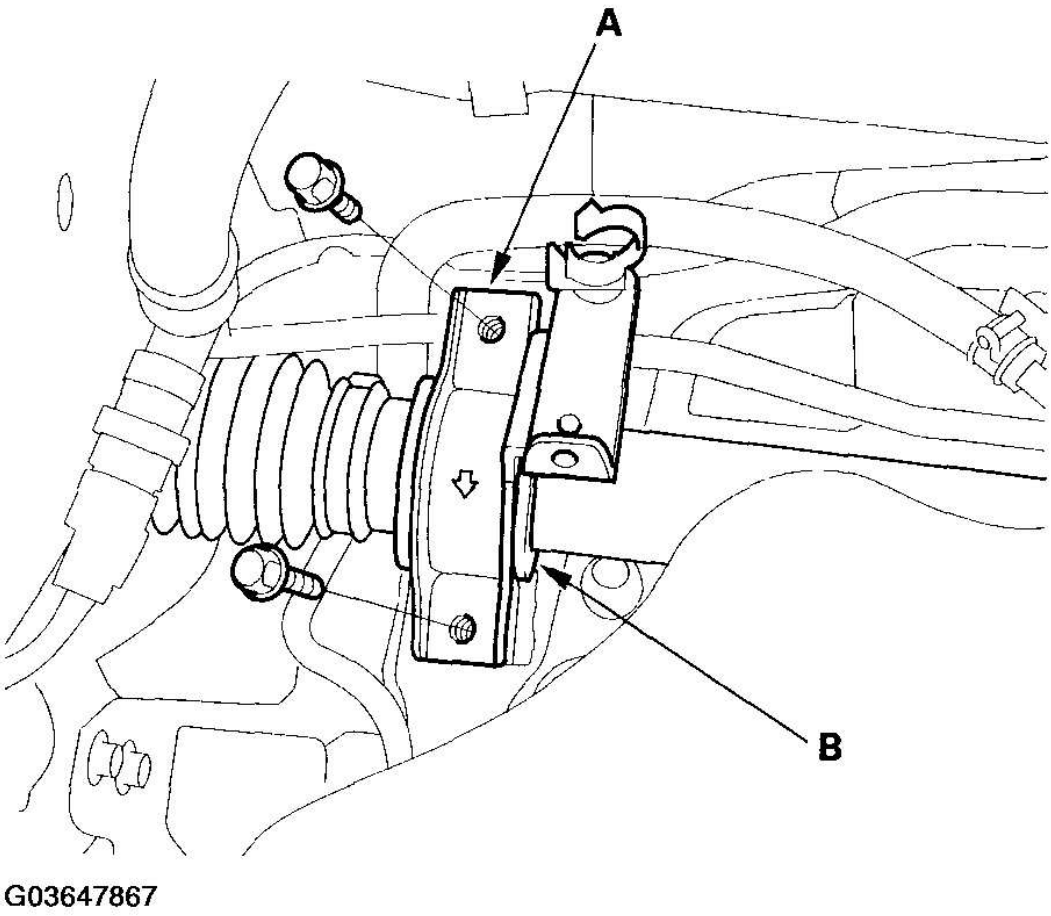
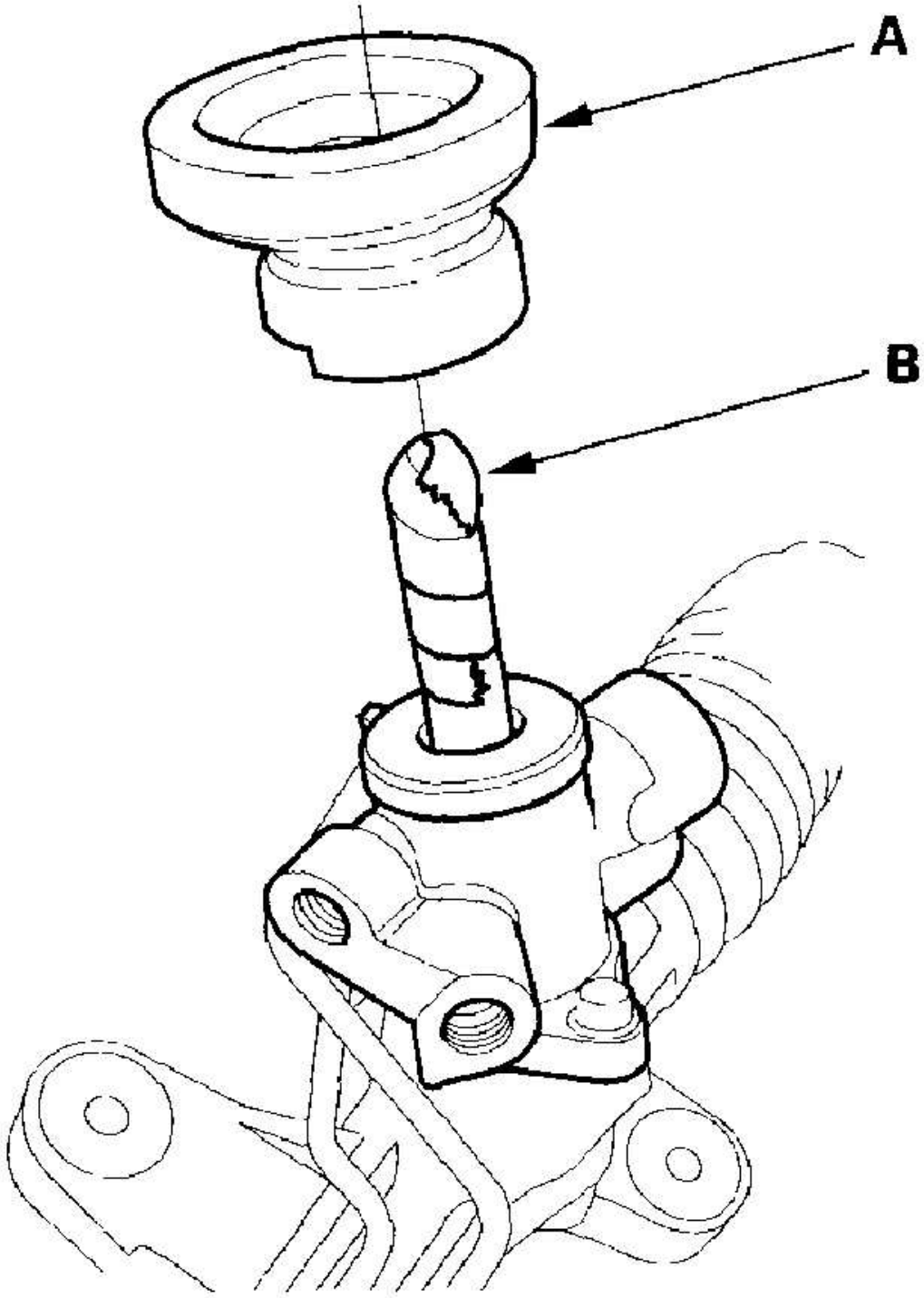


Fig. 68: Removing Gearbox Mounting Bracket And Cushion
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Move the steering gearbox toward the front, and remove the pinion shaft grommet (A) from the top of the valve body unit.



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Fig. 69: Removing Pinion Shaft Grommet
Courtesy of AMERICAN HONDA MOTOR CO., INC.

25. Apply vinyl tape (B) to the splines on the pinion shaft.
26. Apply vinyl tape or equivalent material (A) to the brake lines (B) to protect them from the pinion shaft.

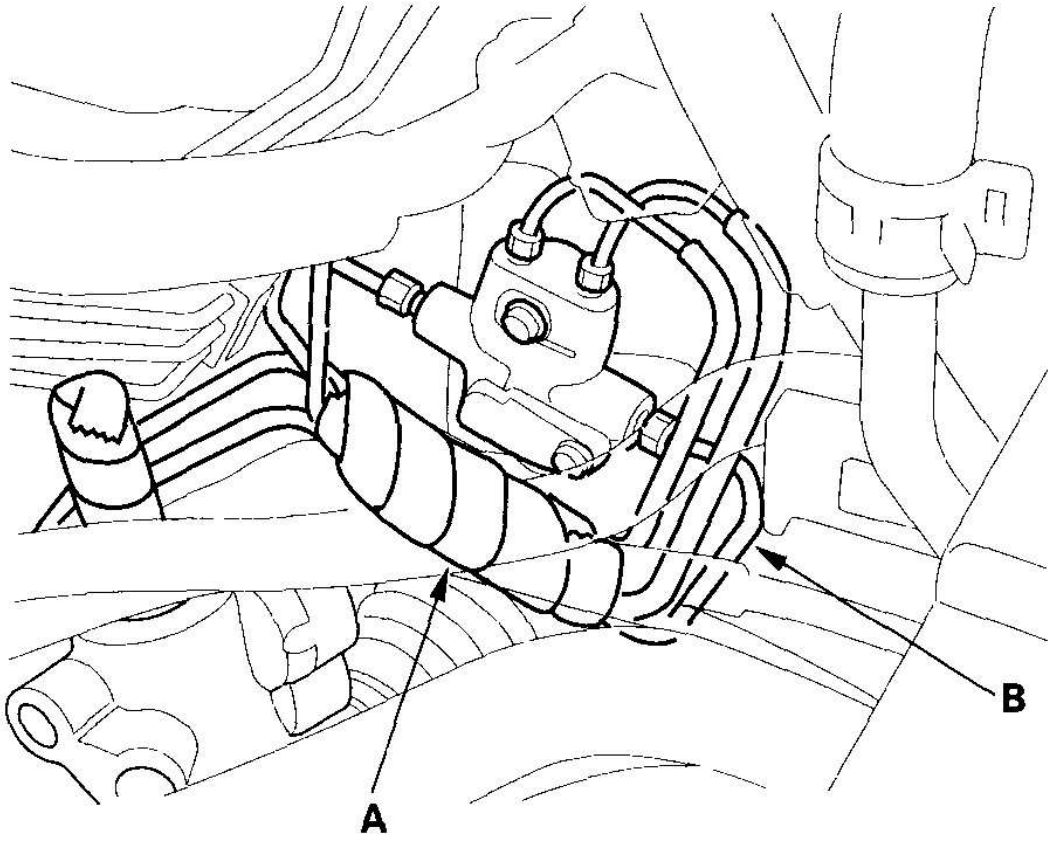


Fig. 70: Applying Vinyl Tape Or Equivalent Material To Brake Lines
Courtesy of AMERICAN HONDA MOTOR CO., INC.

27. Move the steering gearbox to the driver's side, and rotate it so the pinion shaft points toward the front of the vehicle.

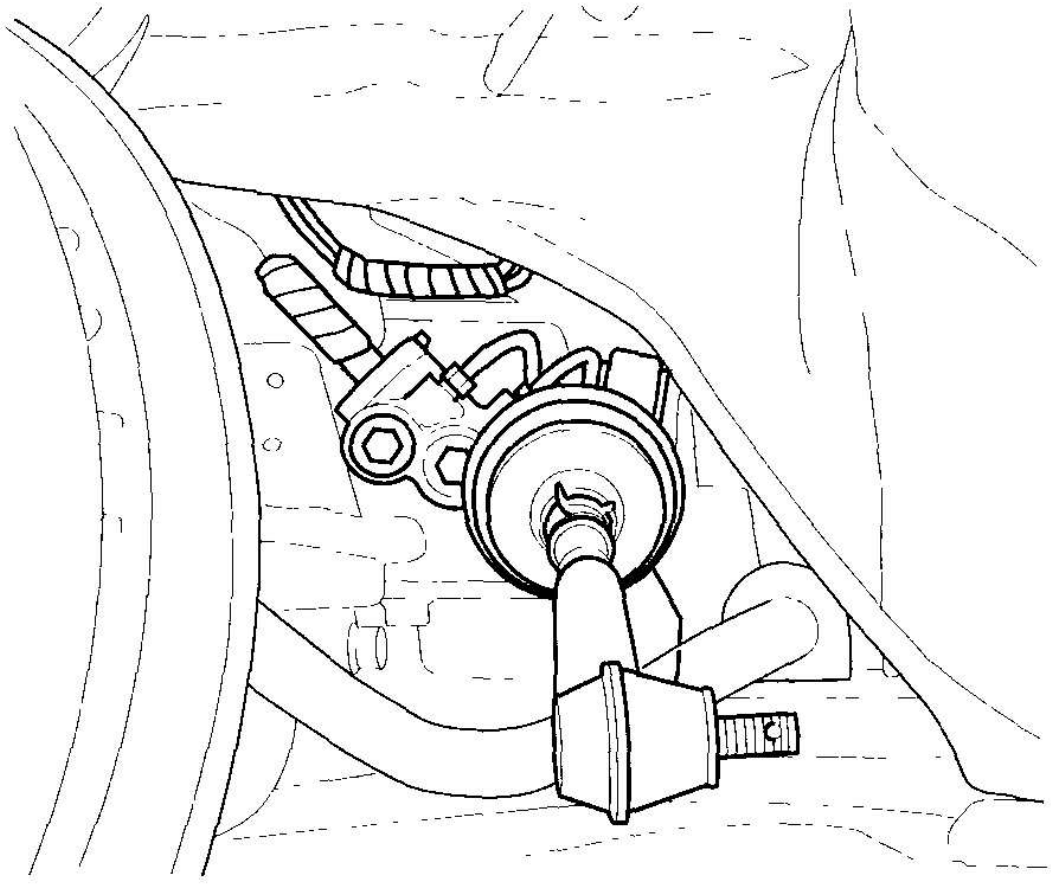


Fig. 71: Moving Steering Gearbox To Driver'S Side
Courtesy of AMERICAN HONDA MOTOR CO., INC.

28. Carefully move the steering gearbox as an assembly toward the driver's side of the vehicle until the pinion shaft clears the wheelwell opening. Be careful not to damage the brake lines with the pinion shaft.
29. Remove the steering gearbox through the wheelwell opening on the driver's side.

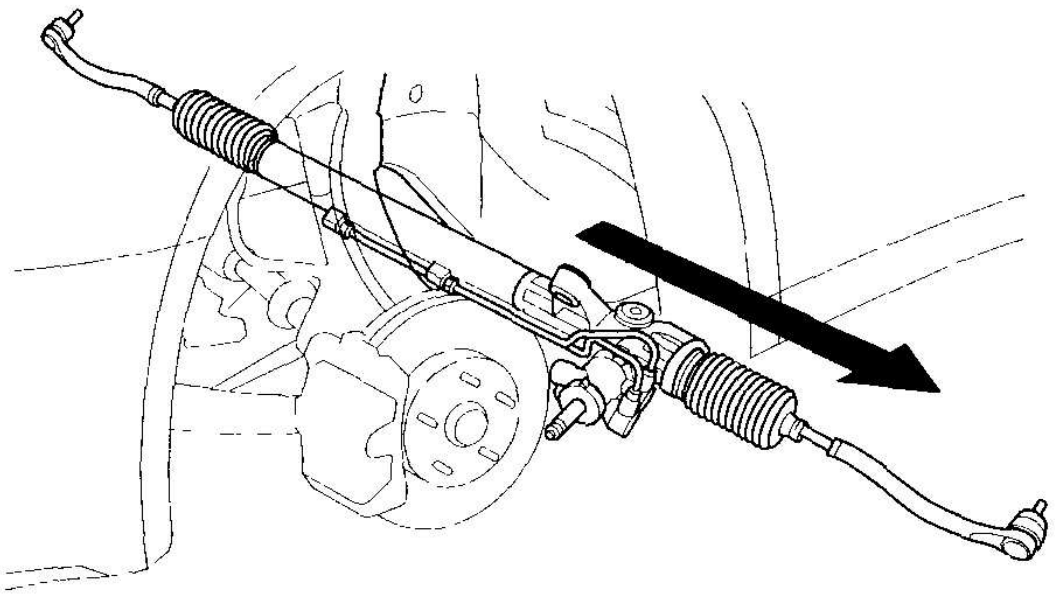


Fig. 72: Removing Steering Gearbox Through Wheelwell Opening On Driver's Side
Courtesy of AMERICAN HONDA MOTOR CO., INC.

30. After removing the steering gearbox, make sure that no power steering fluid gets on the gearbox mount cushions, gearbox housing, surface of the subframe and stiffener. Wipe off any spilled fluid at once.

STEERING GEARBOX OVERHAUL

Exploded View

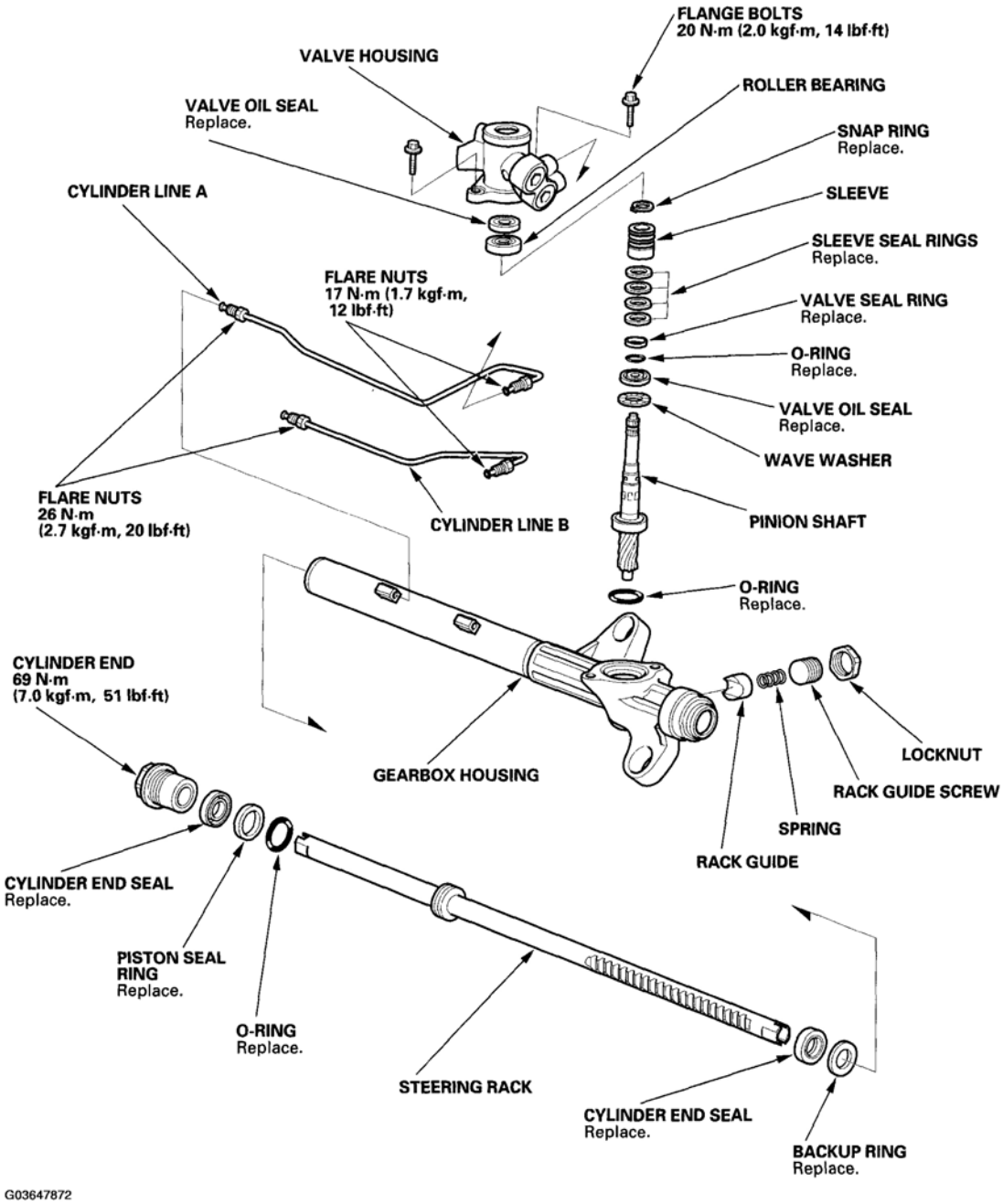


Fig. 73: Exploded View Of Steering Gearbox
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

- Cylinder end seal remover attachment 07NAD-SR3020A

- Pilot collar 07GAF-PH70100
- Valve seal ring sizing tool 07NAG-SR3090A
- Ball joint boot clip guide 07974-SA50800
- Sleeve seal ring sizing tool 07974-SA5020A or 07974-SA50200
- Attachment, 32 x 35 mm 07746-0010100
- Driver 07749-0010000
- Piston seal ring guide 07HAG-SF10100
- Piston seal ring sizing tool 07HAG-SF1020A or 07HAG-SF10200
- Cylinder end seal slider 07ZAG-S5A0300
- Pincers Oetiker 1098 or equivalent, commercially available

NOTE: Refer to the Fig. 73 as needed .

Removal

1. Remove the steering gearbox (see **STEERING GEARBOX REMOVAL**).

Disassembly

2. Remove the boot bands (A) and tie-rod clips (B). Pull the boot away from the ends of the steering gearbox.

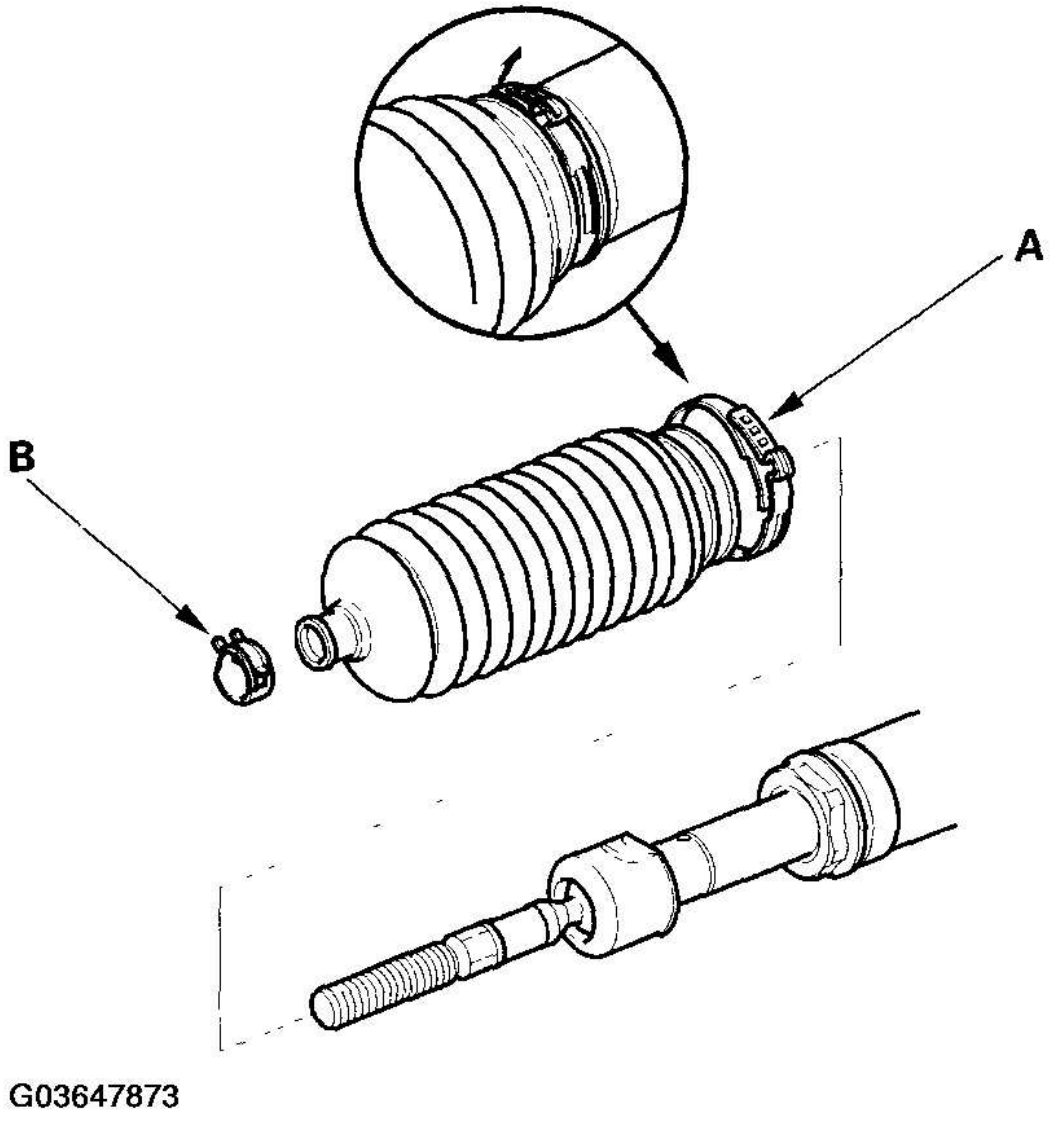


Fig. 74: Removing Boot Bands And Tie-Rod Clips
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Unbend the lock washer (A).

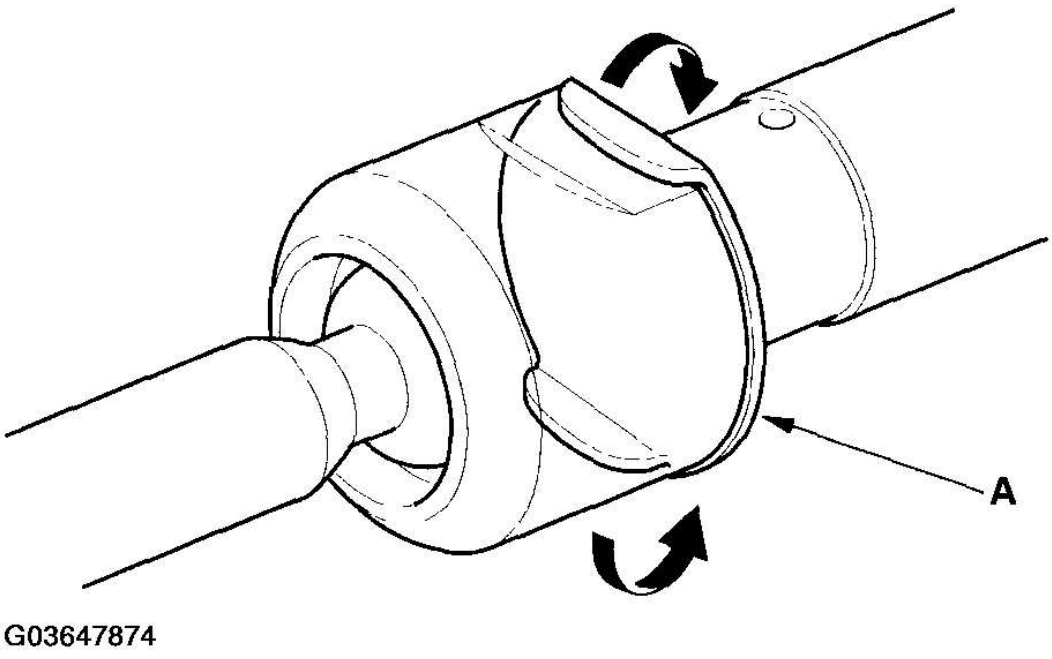


Fig. 75: Unbending Lock Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Hold the flat surface sections (A) of the steering rack with a wrench (B), and unscrew both rack ends (C) with a wrench (D). Be careful not to damage the rack surface with the wrench.

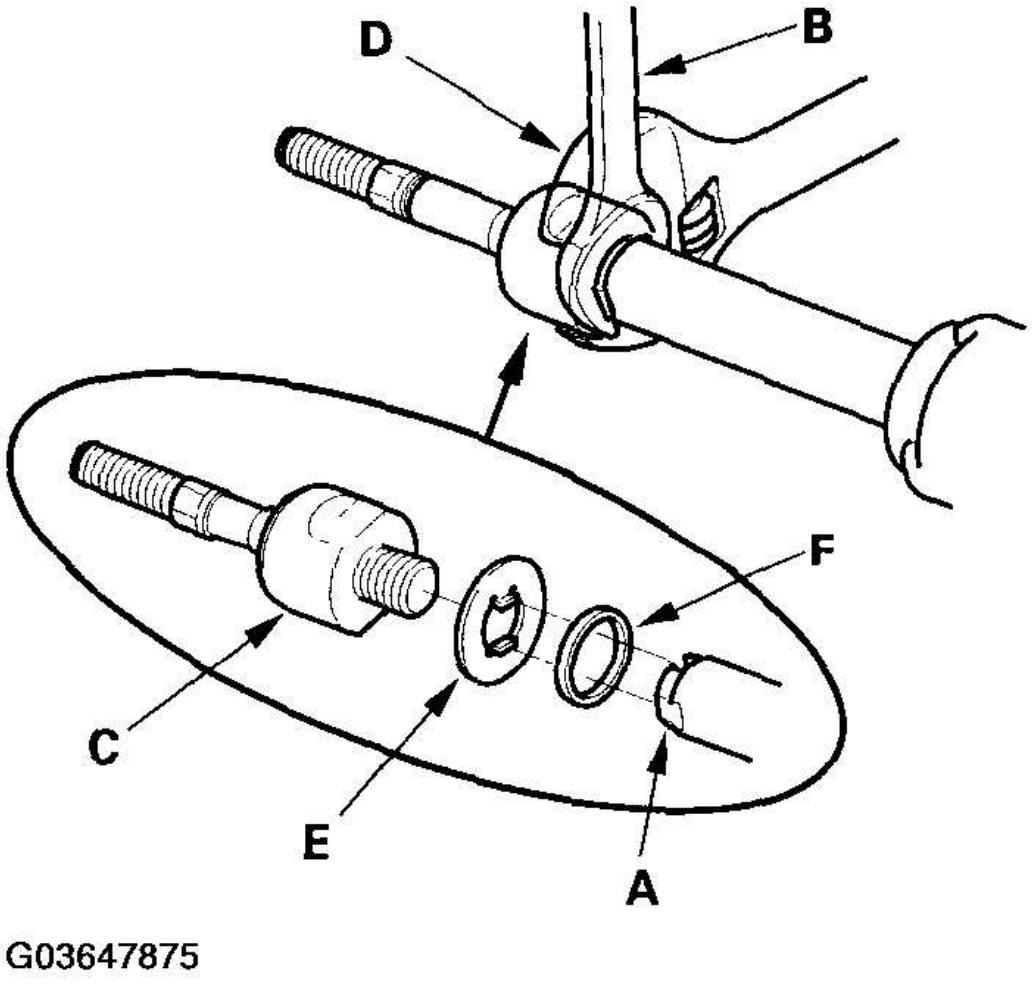


Fig. 76: Holding Flat Surface Sections Of Steering Rack With Wrench
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the lock washer (E) and stop rubber (F).
6. Loosen the locknut (A), then remove the rack guide screw (B).

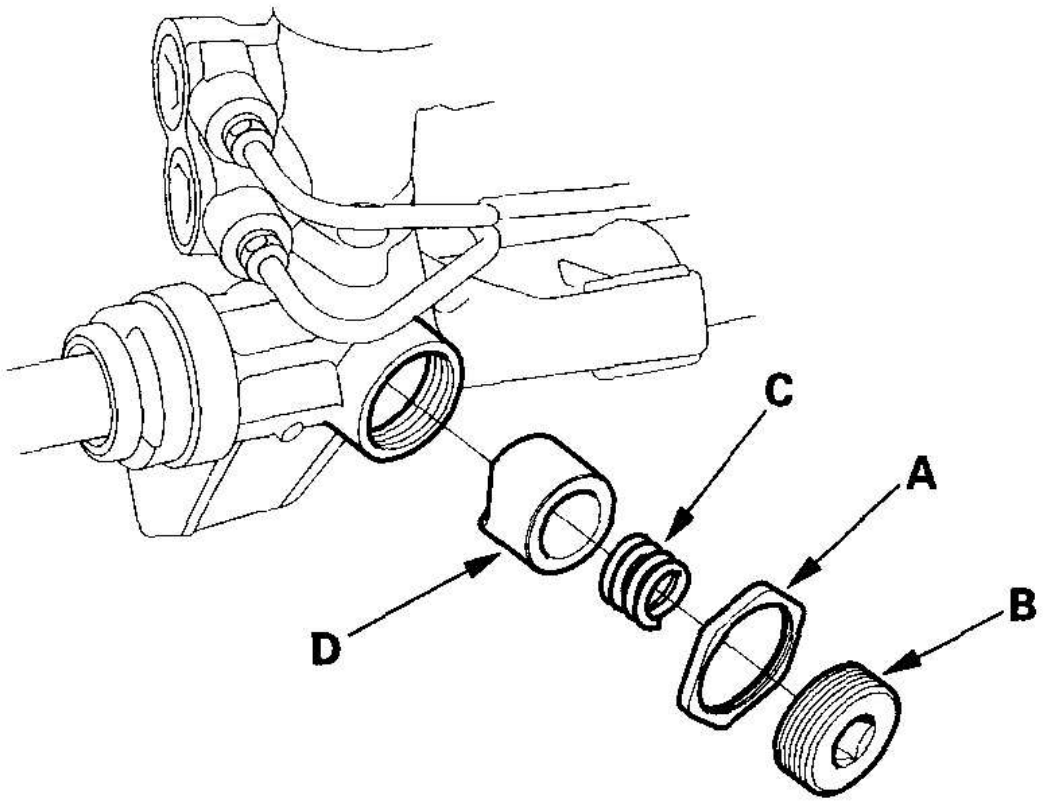
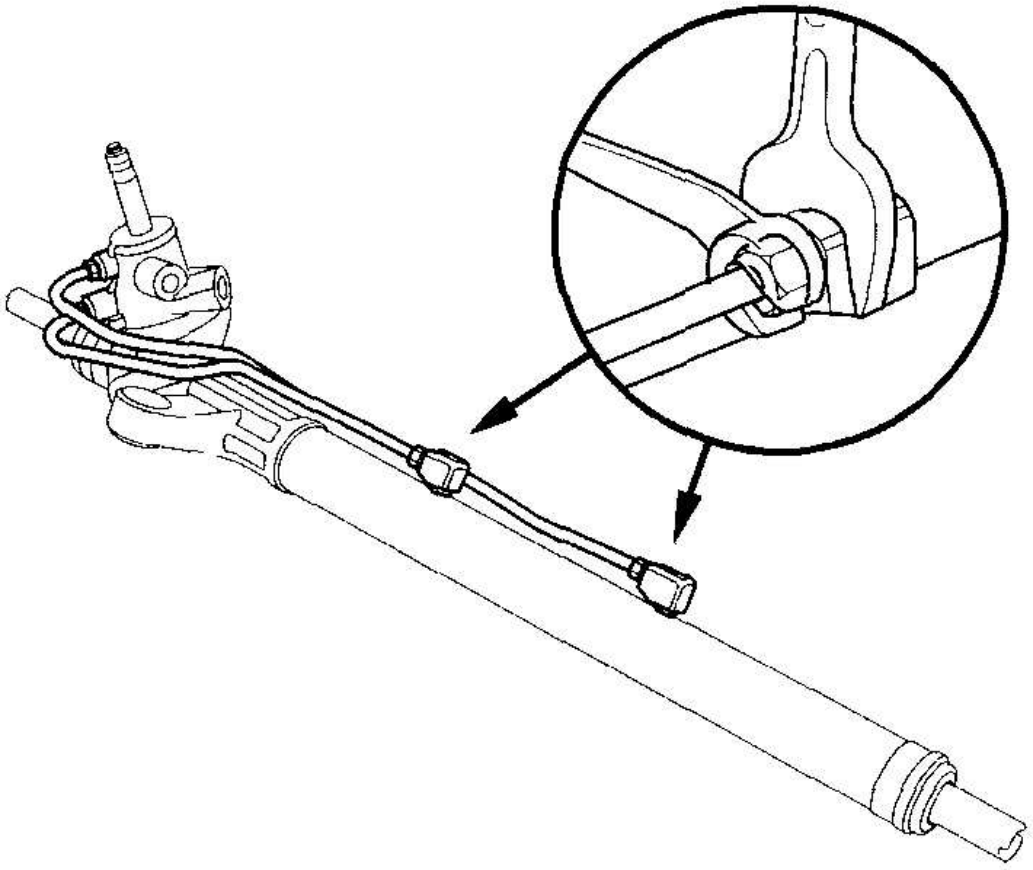


Fig. 77: Loosening Locknut And Remove Rack Guide Screw
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the spring (C) and the rack guide (D) from the gearbox housing.
8. Remove the cylinder lines from the gearbox.



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Fig. 78: Removing Cylinder Lines From Gearbox
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Drain the fluid from the cylinder fittings by slowly moving the steering rack back and forth.
10. Remove the two flange bolts, then remove the valve body unit (A) from the gearbox (B). Remove the O-ring (C), and discard it.

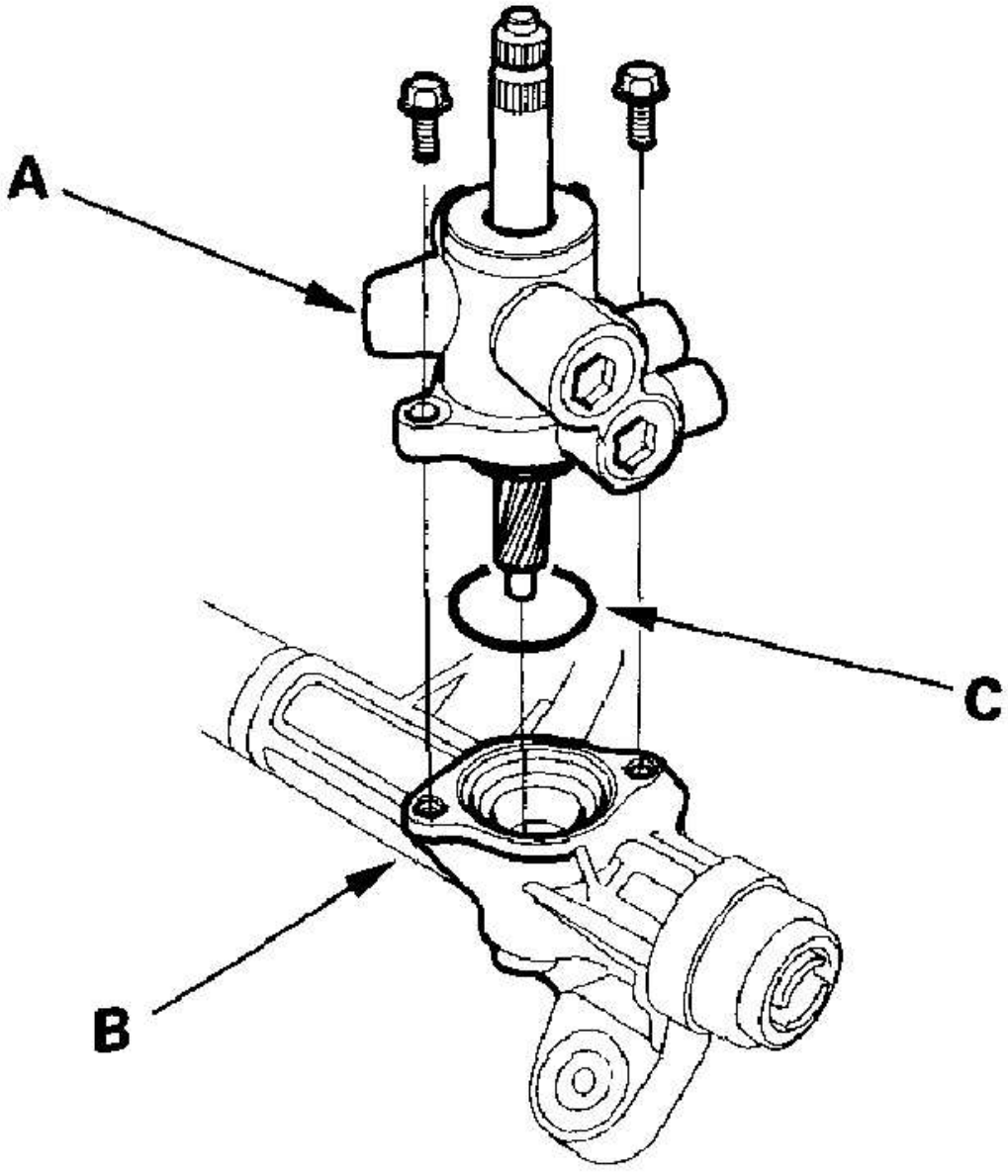


Fig. 79: Removing Valve Body Unit From Gearbox
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Drill a 3 mm (0.12 in.) diameter hole about 2.5-3.0 mm (0.10-0.12 in.) in depth

in the staked point (A) on the cylinder. Do not allow metal shavings to enter the cylinder housing. After removing the cylinder end (B), remove any burrs at the staked point.

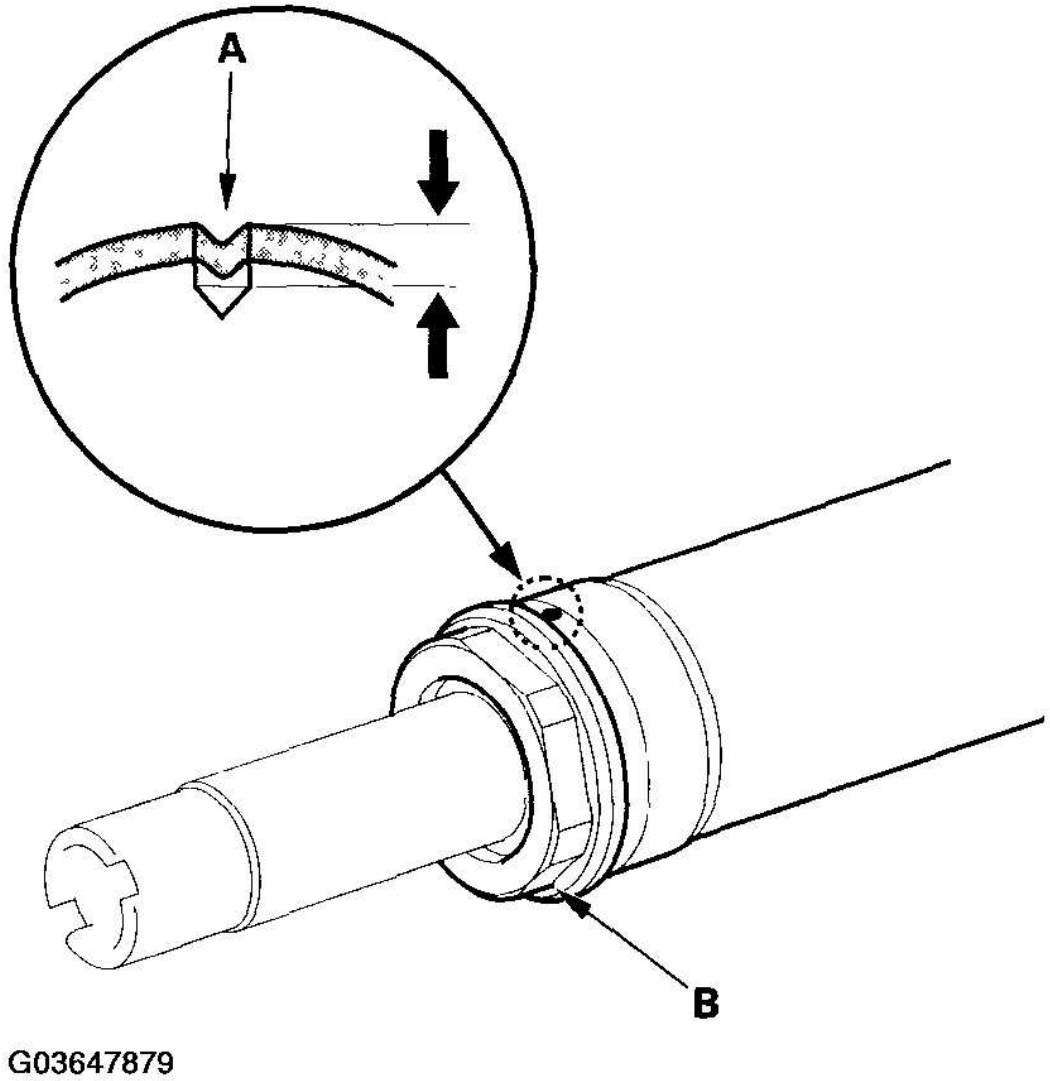


Fig. 80: Removing Burrs At Staked Point
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Hold the gearbox housing using a C-clamp (commercially available) (A) and the wooden blocks (B) as shown in **Fig. 81**. Do not clamp the cylinder part of

the housing or gearbox housing in the vise. Then remove the cylinder end (C).

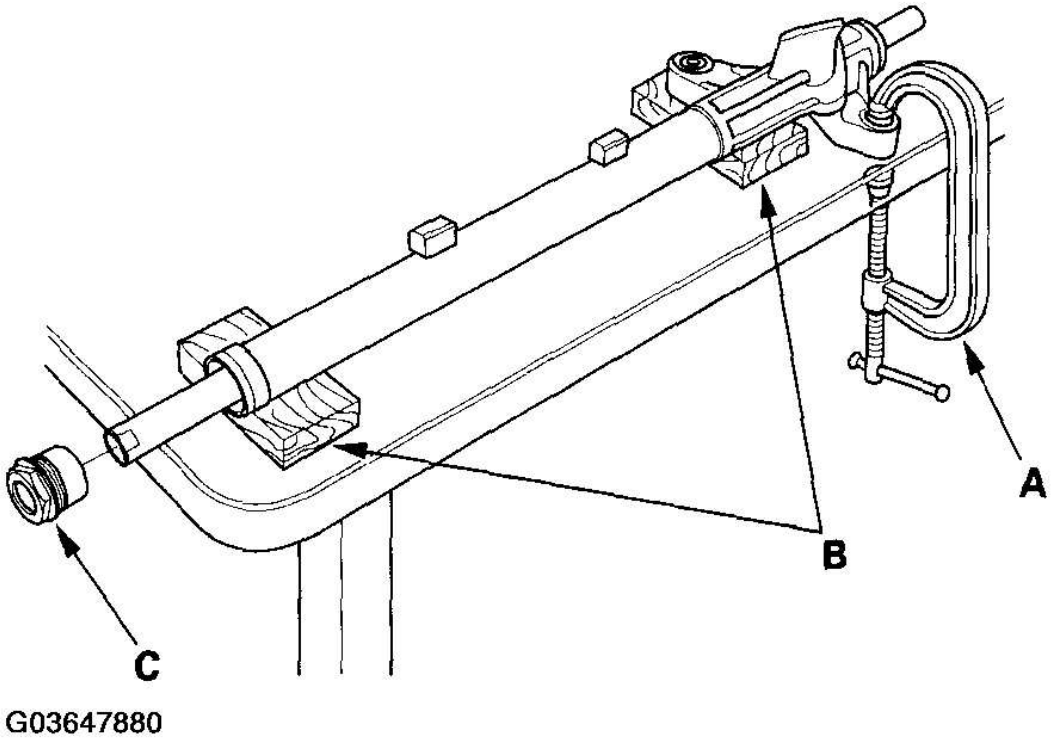


Fig. 81: Holding Gearbox Housing Using C-Clamp And Wooden Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install a commercially available bearing separator (A) in the gearbox housing as shown in **Fig. 82**.

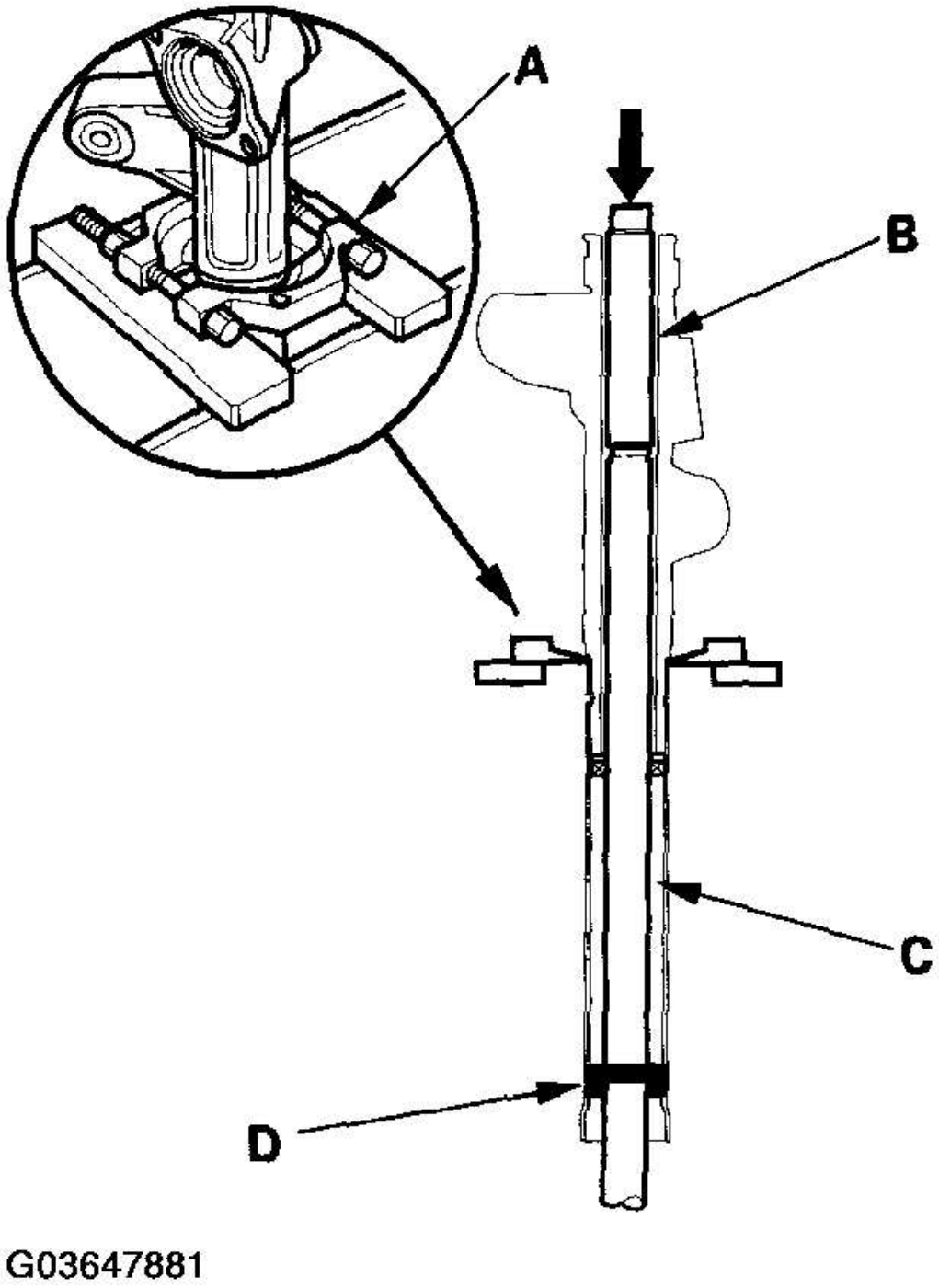


Fig. 82: Installing Commercially Available Bearing Separator In Gearbox

Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Place an appropriate size deep socket wrench (B) on the steering rack (C).
15. Set the steering gearbox in a press so the gearbox housing side points upward, then press the cylinder end seal (D) and steering rack out of the gearbox. Hold the steering rack to keep it from falling when pressed clear. Be careful not to damage the inner surface of the cylinder housing with the tool.
16. Install the special tool so it will fit through the rack guide hole of the gearbox housing. Insert a 24" long, 3/8" drive extension (A), and install it on the special tool. Make sure the special tool is securely positioned on the backup ring edges. Be careful not to damage the inner surface of the cylinder with the special tool.

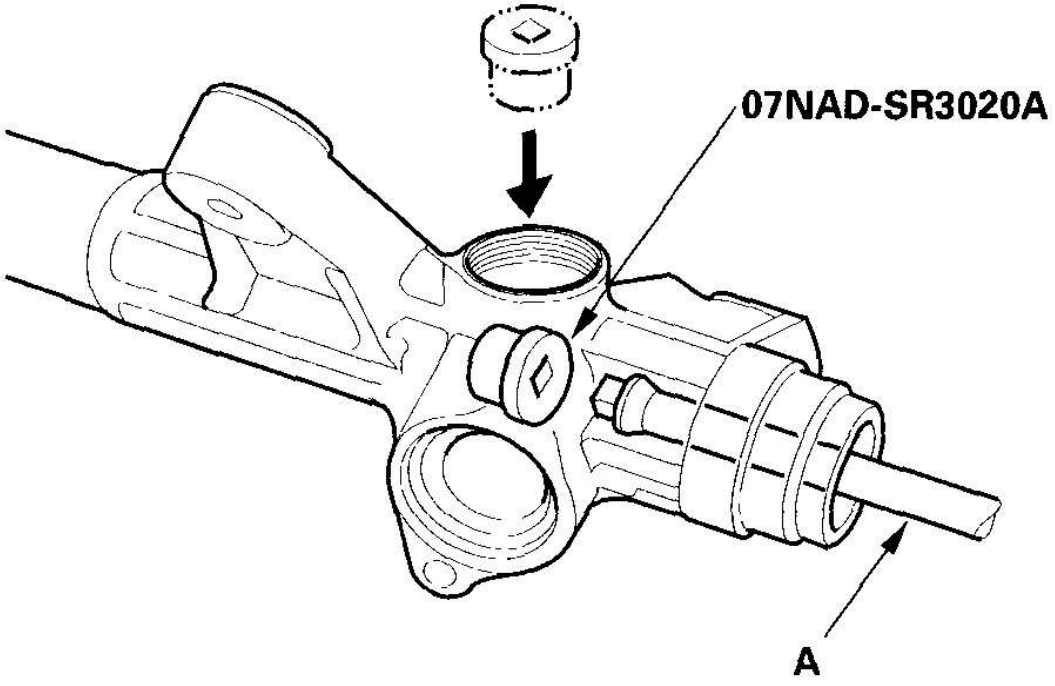


Fig. 83: Inserting Drive Extension On Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Place the steering gearbox in a press, then remove the cylinder end seal (A) and backup ring (B) from the gearbox by pressing on the 24" long, 3/8" drive extension.

    Note these items when pressing the cylinder end seal:

    - Keep the tool straight to avoid damaging the cylinder wall. Check the tool angle, and correct it if necessary, when removing the cylinder end seal.
    - Use a press to remove the cylinder end seal. Do not try to remove the seal by striking the tool; striking the tool could brake the backup ring, and the cylinder end seal would remain in the gearbox.

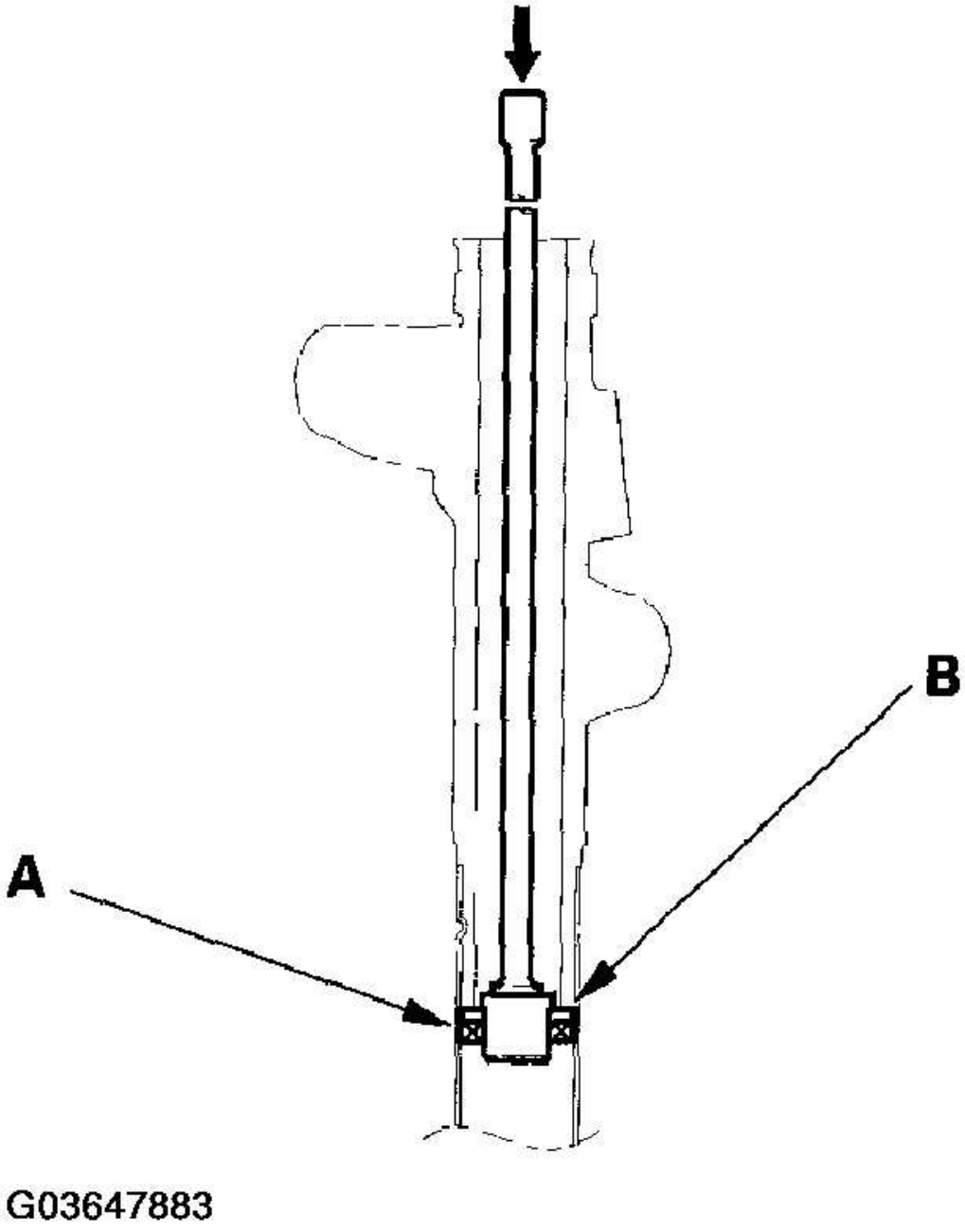


Fig. 84: Removing Cylinder End Seal Using Press
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Carefully pry the piston seal ring (A) and O-ring (B) off the rack piston. Be careful not to damage the inside of the seal ring groove and piston edges when removing the seal ring.

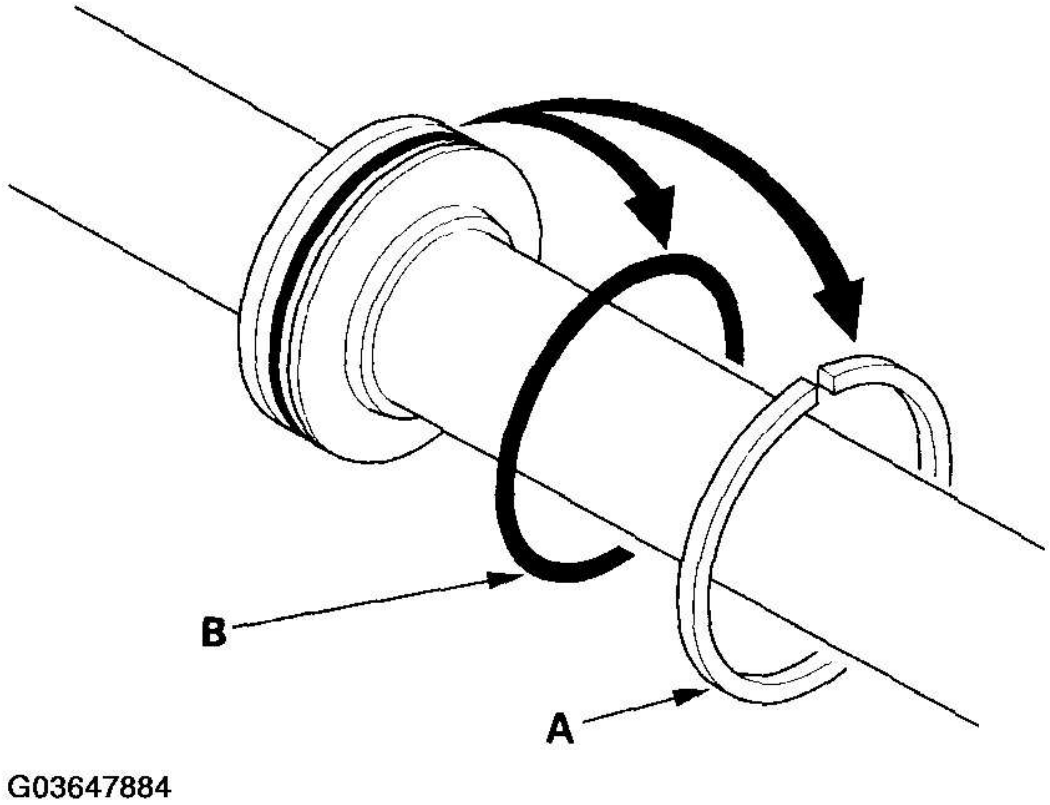


Fig. 85: Prying Piston Seal Ring And O-Ring Off Rack Piston
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. Before removing the valve housing (A), apply vinyl tape (B) to the splines on the pinion shaft.

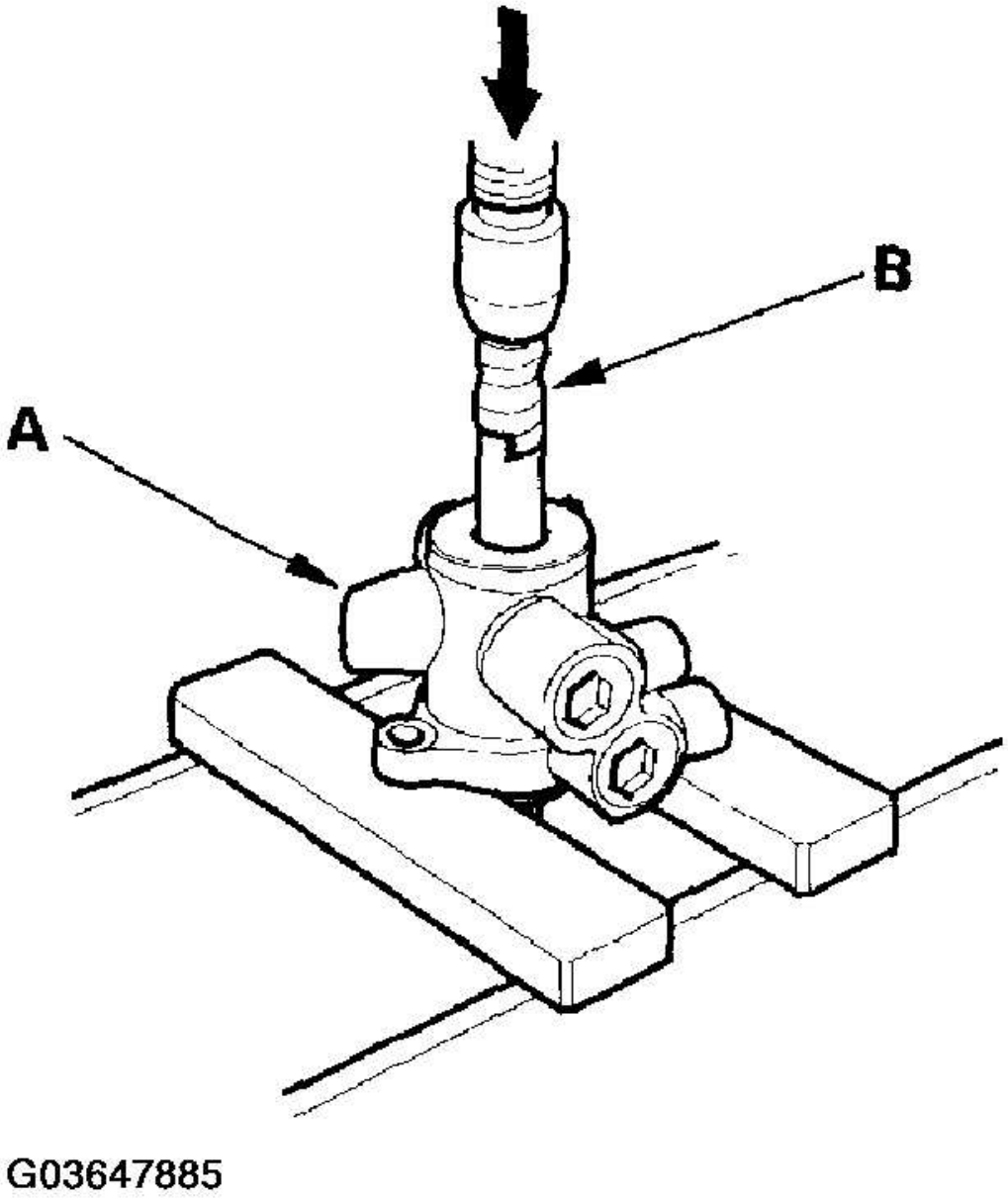


Fig. 86: Applying Vinyl Tape To Splines On Pinion Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Separate the valve housing from the pinion shaft/valve using a press.
21. With your finger, check the inner wall of the valve housing where the seal ring

slides. If there is a step in the wall, the housing is worn. Replace it.

NOTE: There may be sliding marks from the seal ring on the wall of the valve housing. Replace the valve housing only if the wall is stepped.

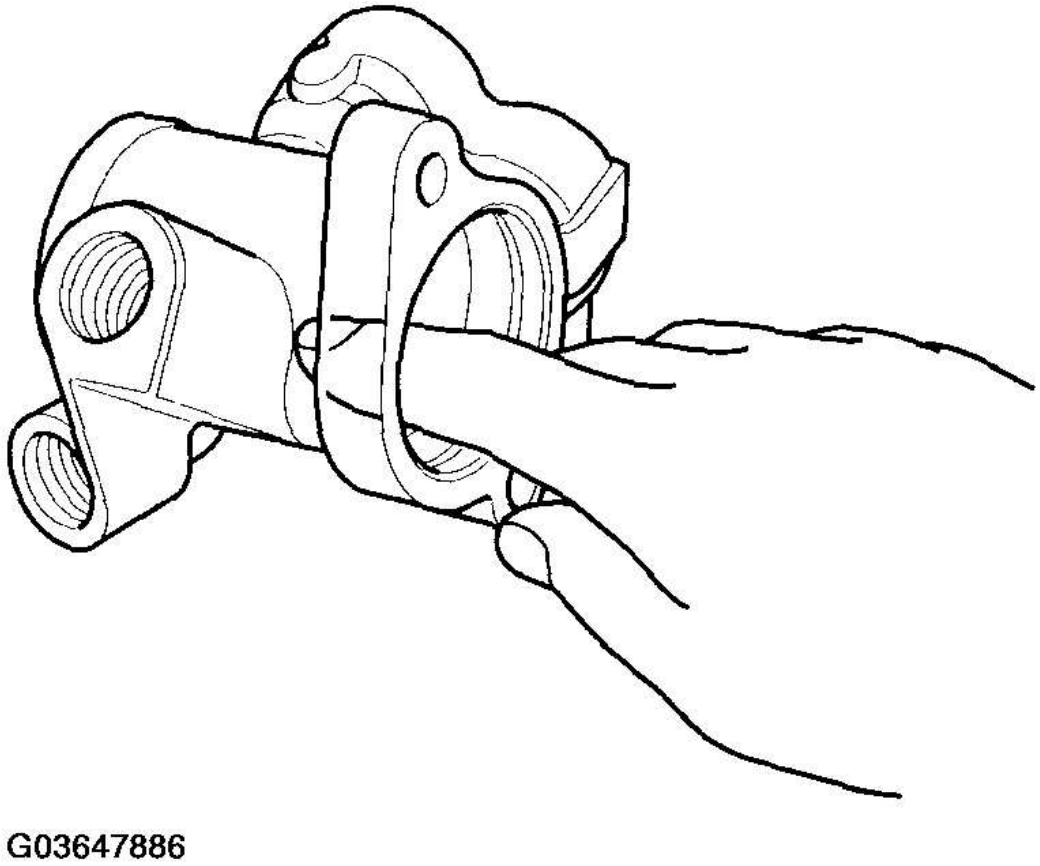
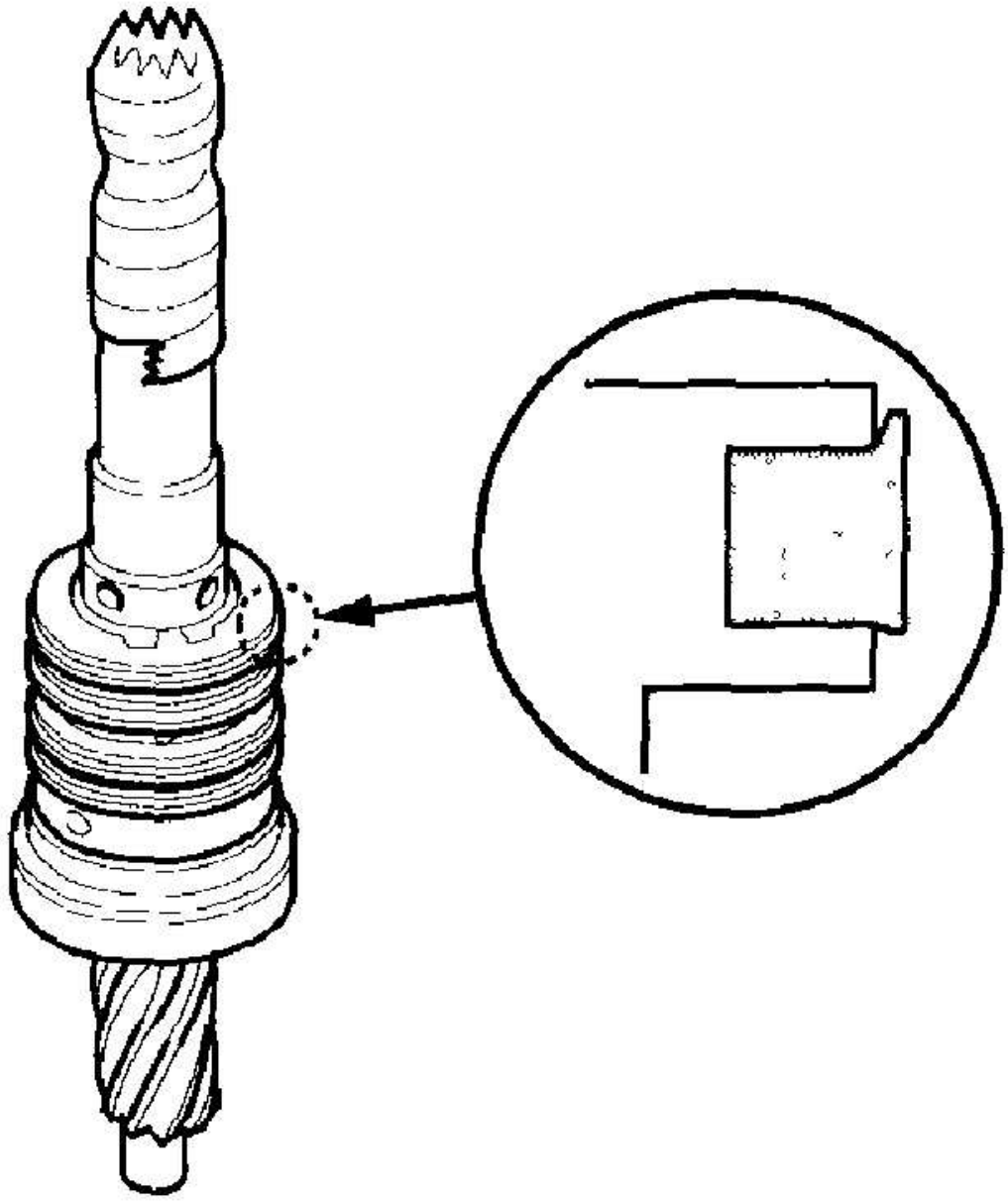


Fig. 87: Checking Inner Wall Of Valve Housing With Finger
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Check for wear, burrs, and other damage to the edges of the grooves in the sleeve.

NOTE: The pinion shaft and sleeve are a precision matched

set. If either the pinion shaft or sleeve must be replaced, replace both parts as a set.



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Fig. 88: Checking Wear, Burrs And Other Damage To Edges Of Grooves In Sleeve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Remove the snap ring (A) and sleeve (B) from the pinion shaft.

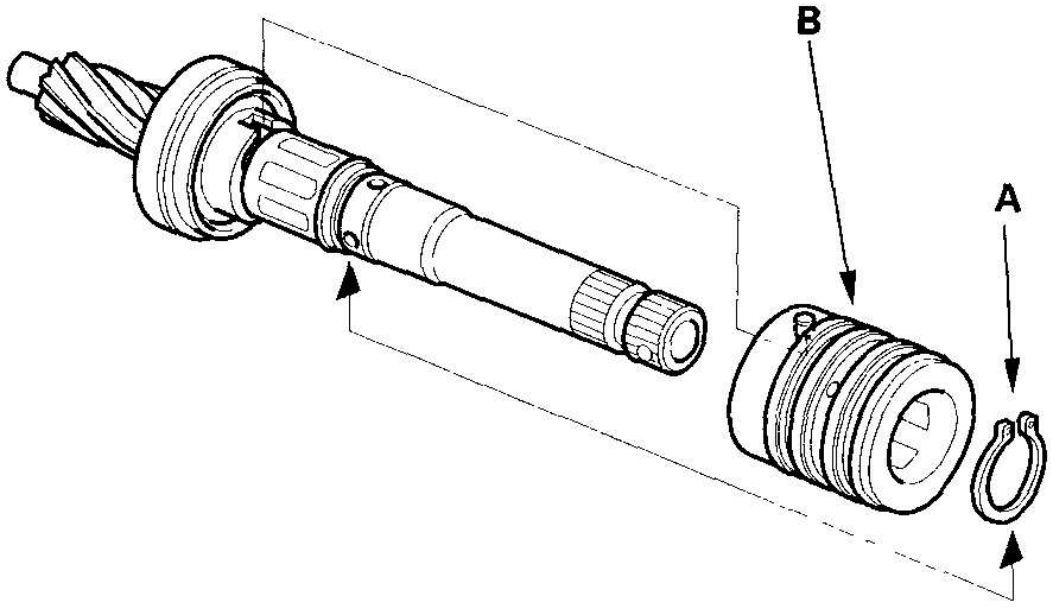
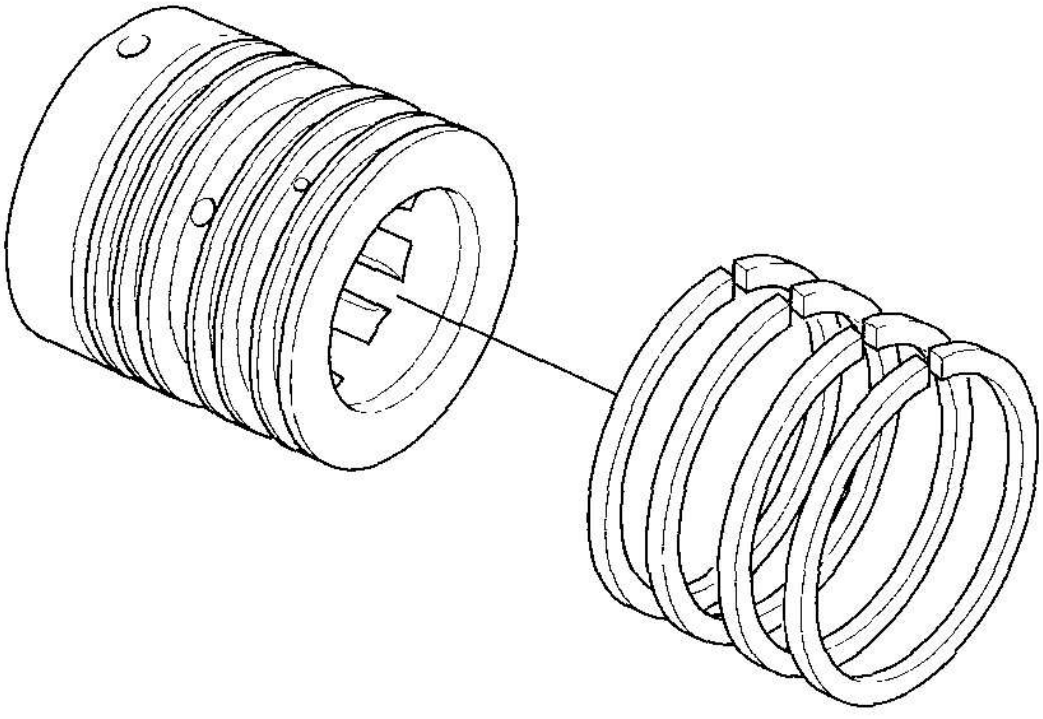


Fig. 89: Removing Snap Ring And Sleeve From Pinion Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

24. Using a cutter or an equivalent tool, cut and remove the four seal rings from the sleeve. Be careful not to damage the edges of the sleeve grooves and outer surface when removing the seal rings.



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Fig. 90: Removing Four Seal Rings From Sleeve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

25. Using a cutter or an equivalent tool, cut the valve seal ring (A) and O-ring (B) at the cutting groove position (C) in the pinion shaft. Remove the valve seal ring and O-ring. Be careful not to damage the edges of the pinion shaft groove and outer surface when removing the valve seal ring and O-ring.

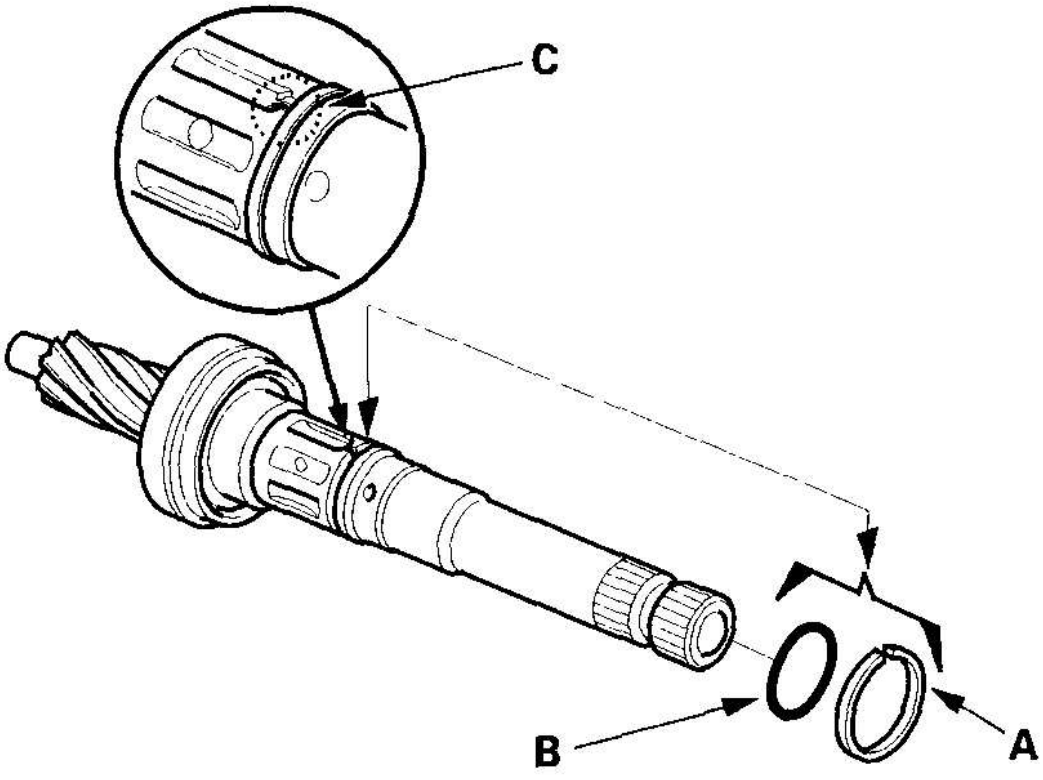


Fig. 91: Cutting Valve Seal Ring And O-Ring At Cutting Groove Position In Pinion Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. Remove the valve oil seal (A) and wave washer (B) from the pinion shaft.

    Note these items during disassembly:

    - Inspect the ball bearing (C) by rotating the outer race slowly. If there is any excessive play or wear, replace the pinion shaft and sleeve as an assembly.
    - The pinion shaft and sleeve are a precise fit; do not intermix old and new pinion shafts and sleeves.

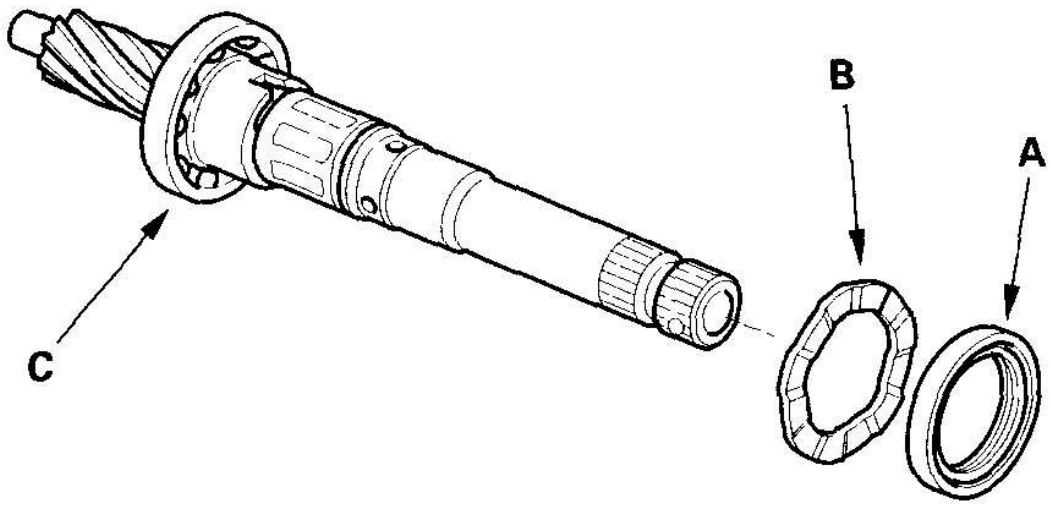


Fig. 92: Removing Valve Oil Seal And Wave Washer From Pinion Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

27. Press the valve oil seal (A) and roller bearing (B) out of the valve housing using a hydraulic press and special tool.

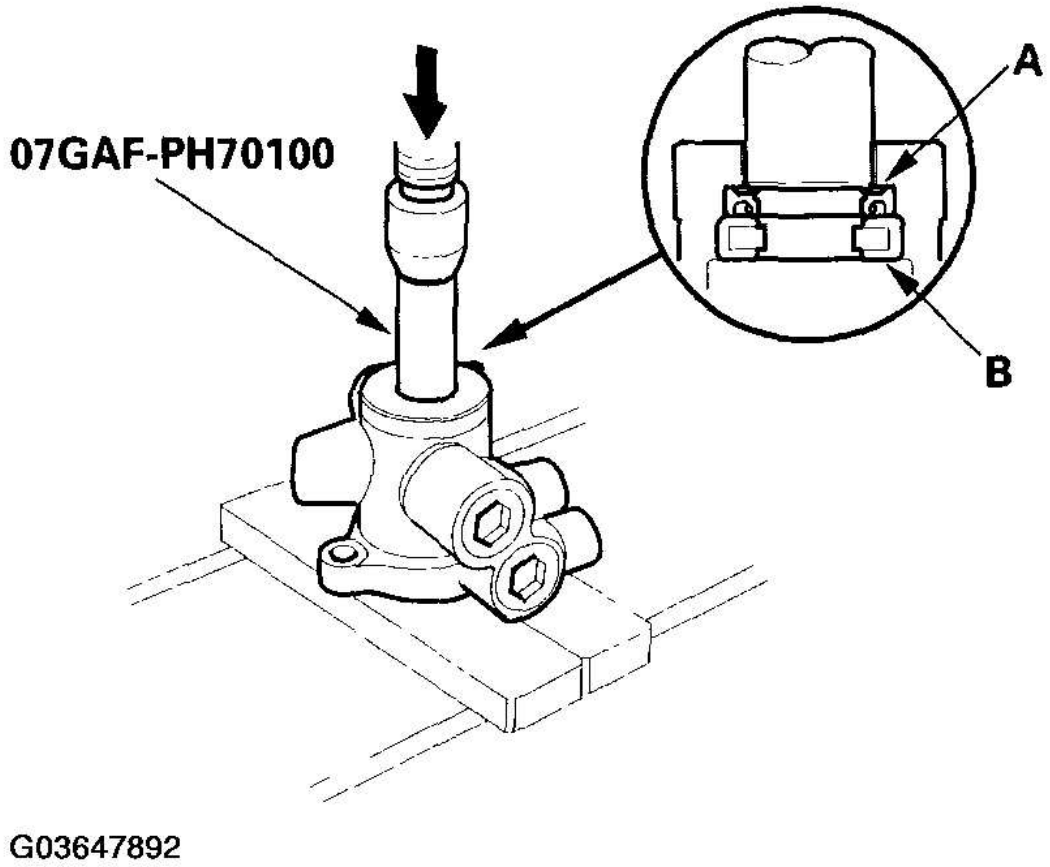


Fig. 93: Pressing Valve Oil Seal And Roller Bearing Out Of Valve Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

28. Clean the disassembled parts with solvent, and dry them with compressed air. Do not dip rubber parts in the solvent.

Reassembly

29. Apply vinyl tape (A) to the stepped portion of the pinion shaft, and coat the surface of the vinyl tape with power steering fluid.

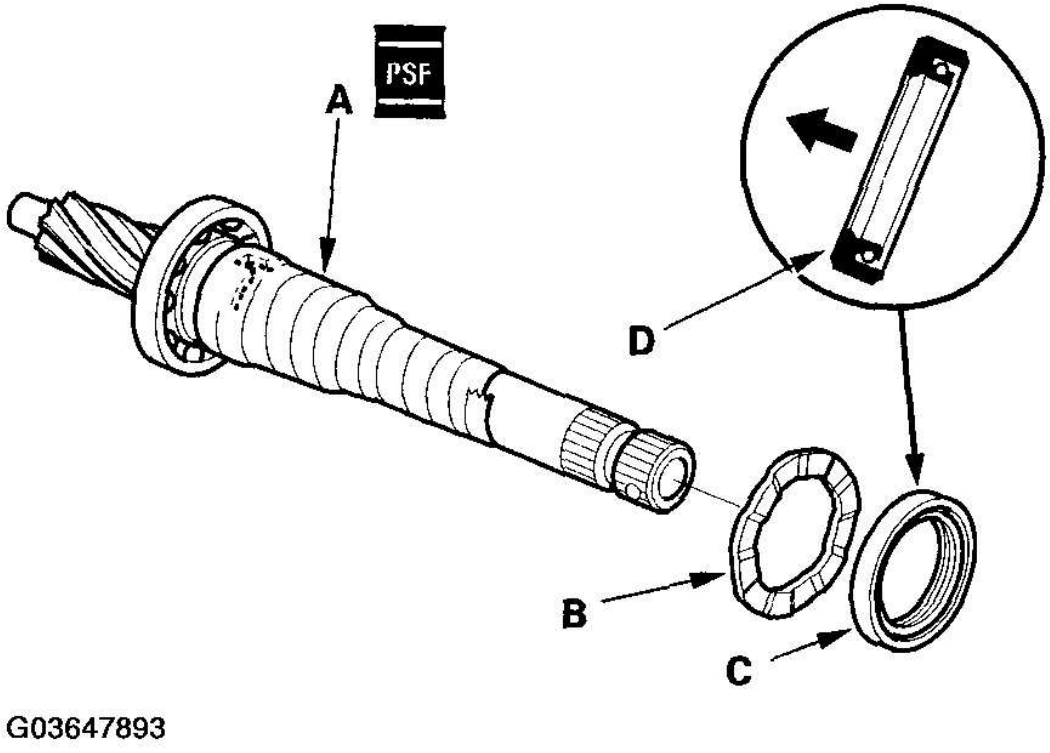


Fig. 94: Applying Vinyl Tape To Stepped Portion Of Pinion Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

30. Install the wave washer (B).
31. Coat the inside surface of the new valve oil seal (C) with power steering fluid, and install the seal with its grooved side facing opposite the bearing, then slide it over the pinion shaft, being careful not to damage its sealing lip (D).
32. Apply vinyl tape (A) to the splines and stepped portion of the shaft, and coat the surface of the vinyl tape with power steering fluid.

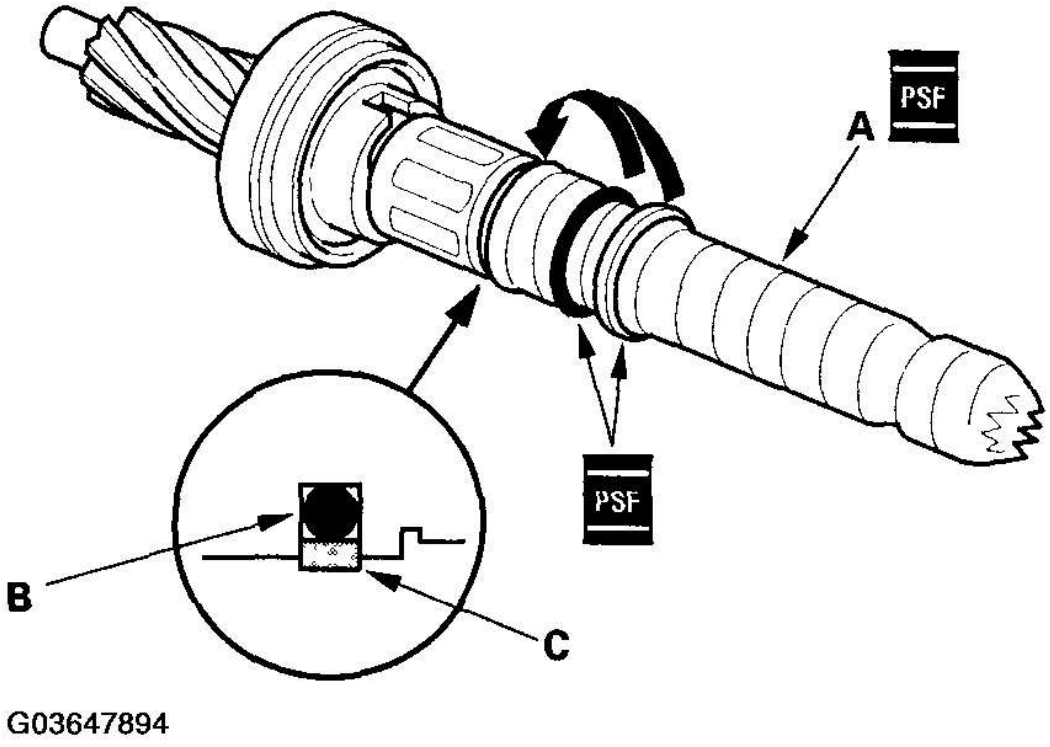


Fig. 95: Applying Vinyl Tape To Splines And Stepped Portion Of Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

33. Fit the new O-ring (B) in the groove of the pinion shaft. Then slide the new valve seal ring (C) over the shaft and in the groove on the pinion shaft.
34. Remove the tape, and apply power steering fluid to the surface of the valve seal ring (A).

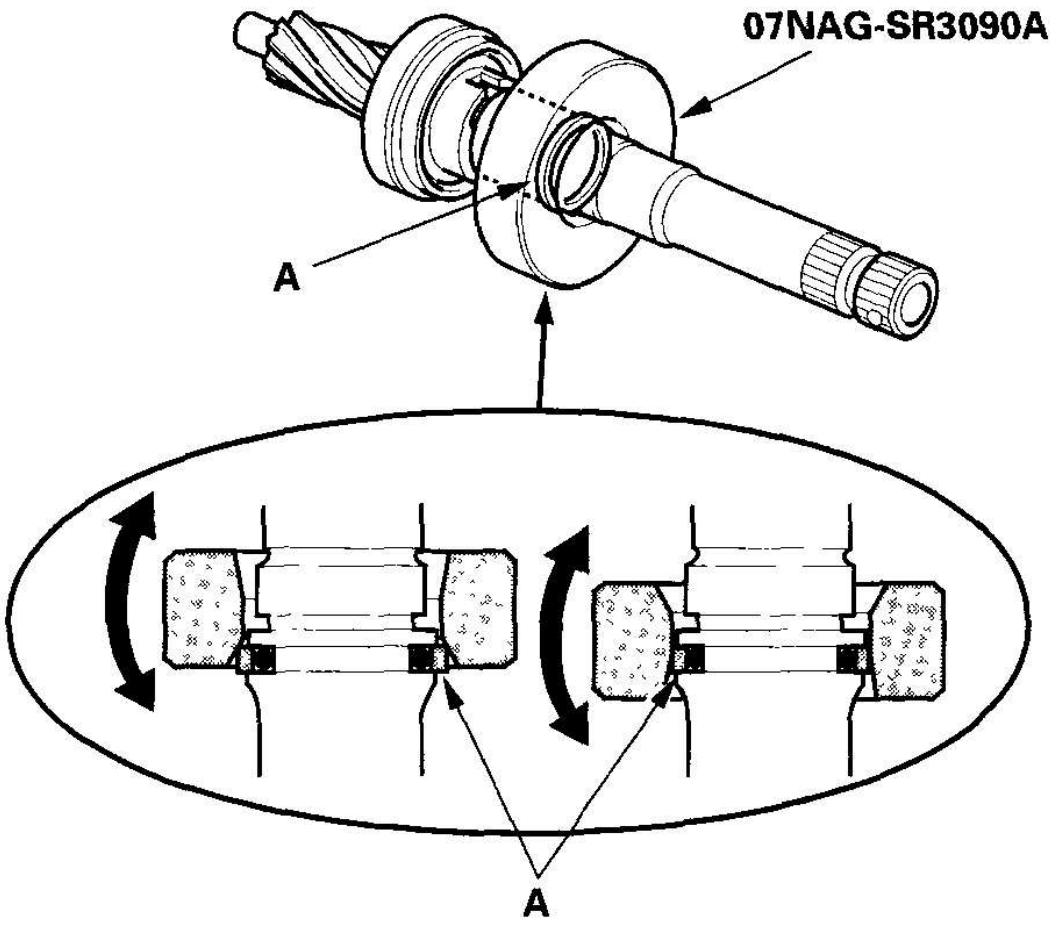


Fig. 96: Applying Power Steering Fluid To Surface Of Valve Seal Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

35. Apply power steering fluid to the inside of the special tool. Set the larger diameter end of the special tool over the valve seal ring, and move the special tool up and down several times to make the valve seal ring fit in the pinion shaft groove.
36. Remove the special tool, turn it over, slide the smaller diameter end over the valve seal ring. Move it up and down several times to make the valve seal ring fits snugly in the pinion shaft groove.
37. Apply power steering fluid to the surface of the special tool. Slip two new seal

rings (A) over the special tool from the smaller diameter end, and expand them. Install only two rings at a time from each end of the pinion shaft sleeve (B).

Note these items when installing the seal ring:

- Do not over-expand the seal ring. Install the resin seal rings with care so as not to damage them. After installation, make sure you contract the seal rings using the special tool (sizing tool).
- There are two types of sleeve seal rings: black and brown. Do not mix the different types of rings as they are not compatible.

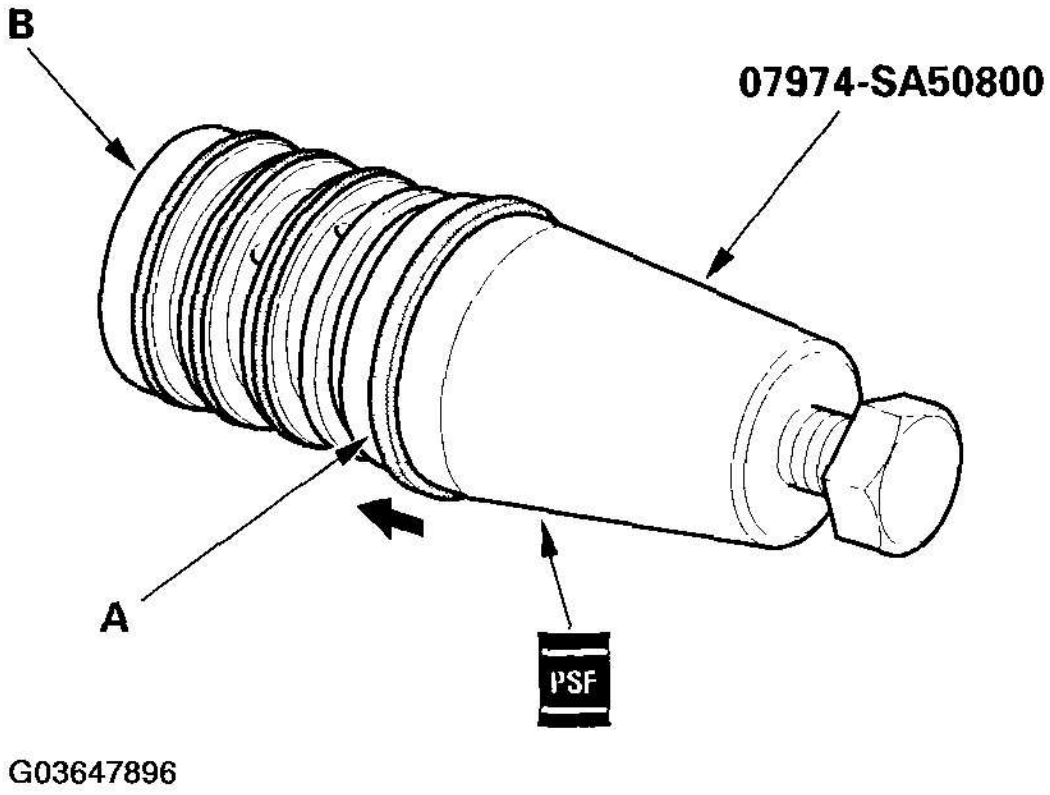


Fig. 97: Slipping Seal Rings Over Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

38. Align the special tool with each groove in the sleeve, and slide a sleeve seal ring into each groove. After installation, compress the seal rings with your

fingers temporarily.

39. Apply power steering fluid to the seal rings on the sleeve, and to the entire inside surface of the special tool, then slowly insert the sleeve into the special tool.

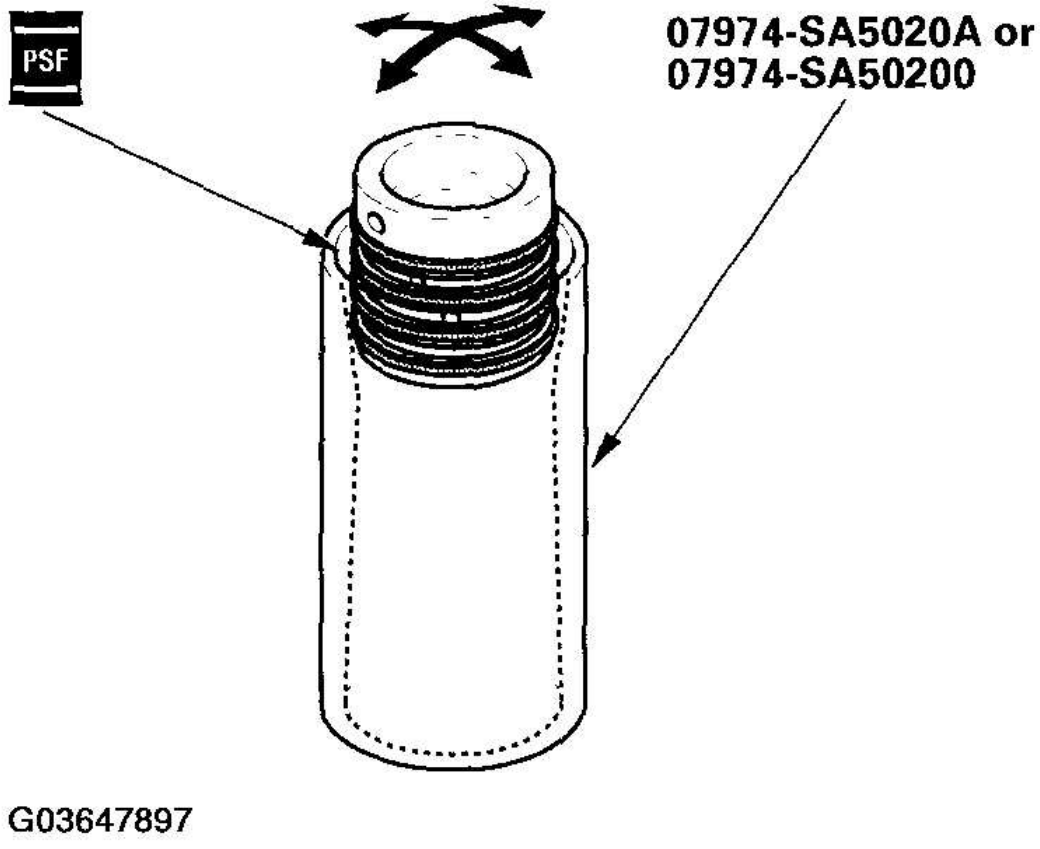


Fig. 98: Applying Power Steering Fluid To Seal Rings On Sleeve
Courtesy of AMERICAN HONDA MOTOR CO., INC.

40. Move the sleeve back and forth several times to make the seal rings snugly fit in the sleeve. Make sure the seal rings are not twisted.
41. Apply power steering fluid to the surface of the pinion shaft (A). Slide the sleeve (B) onto the pinion shaft by aligning the locating pin (C) on the inside of the sleeve with the cutout (D) in the shaft. Then install the new snap ring (E)

securely in the pinion shaft groove. Be careful not to damage the valve seal ring when inserting the sleeve.

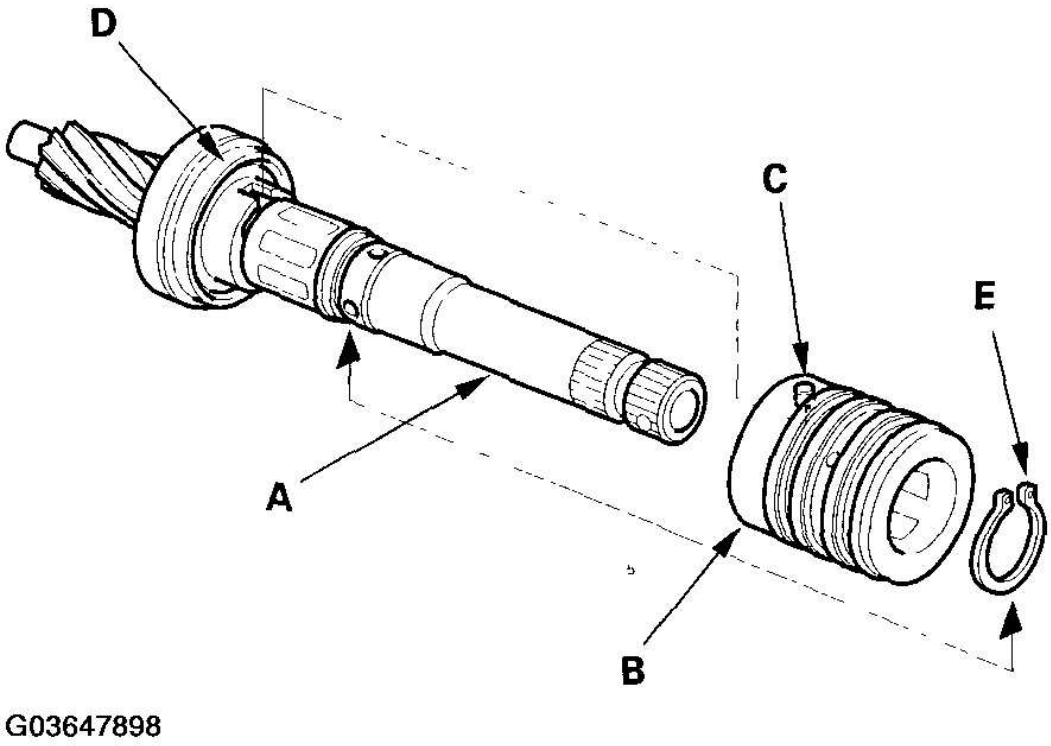


Fig. 99: Applying Power Steering Fluid To Surface Of Pinion Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

42. Apply power steering fluid to the seal ring lip of the new valve oil seal (A), then install the seal in the valve housing (B) using a hydraulic press and special tools. Install the seal with its grooved side facing the tool.

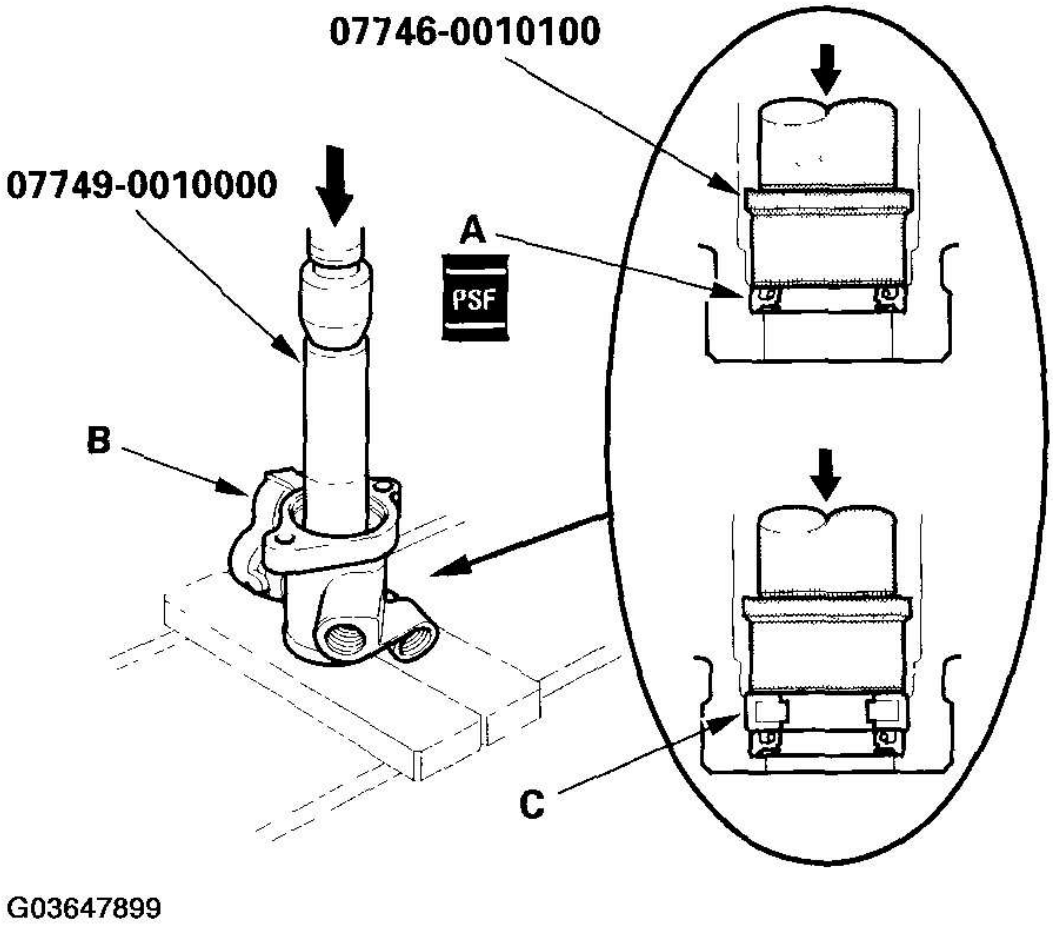


Fig. 100: Applying Power Steering Fluid To Seal Ring Lip Of Valve Oil Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

43. Press the roller bearing (C) into the valve housing with a hydraulic press and special tool.
44. Apply vinyl tape (A) to the pinion shaft, then coat the vinyl tape with power steering fluid.

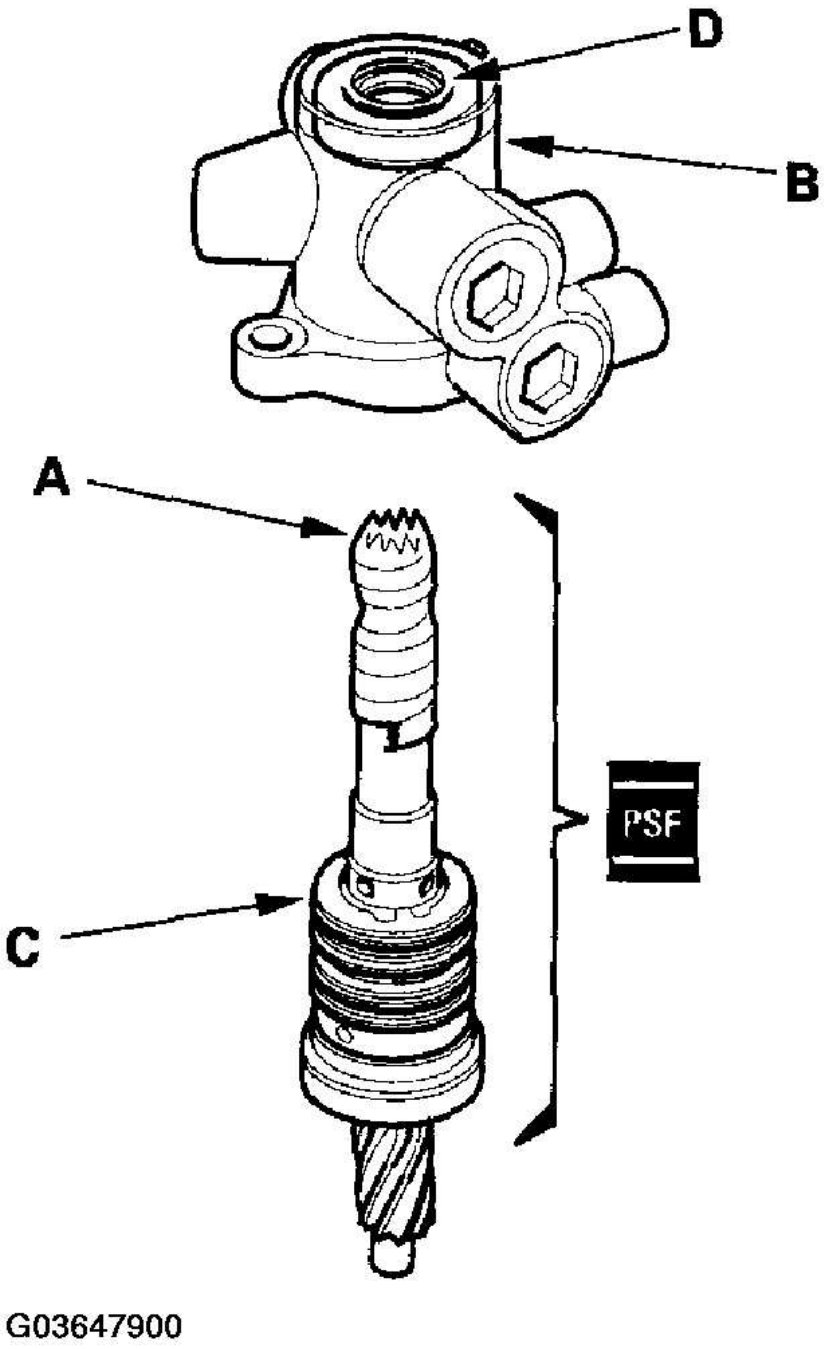


Fig. 101: Applying Vinyl Tape To Pinion Shaft, Then Coat Vinyl Tape With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

45. Insert the pinion shaft into the valve housing (B). Be careful not to damage the valve seal rings (C) and valve oil seal sealing lip (D).
46. Remove the vinyl tape from the pinion shaft, then remove any residue from the tape adhesive.
47. Press the pinion shaft/sleeve into the valve housing with a hydraulic press. Check that the pinion shaft/sleeve turns smoothly by hand after installing it.

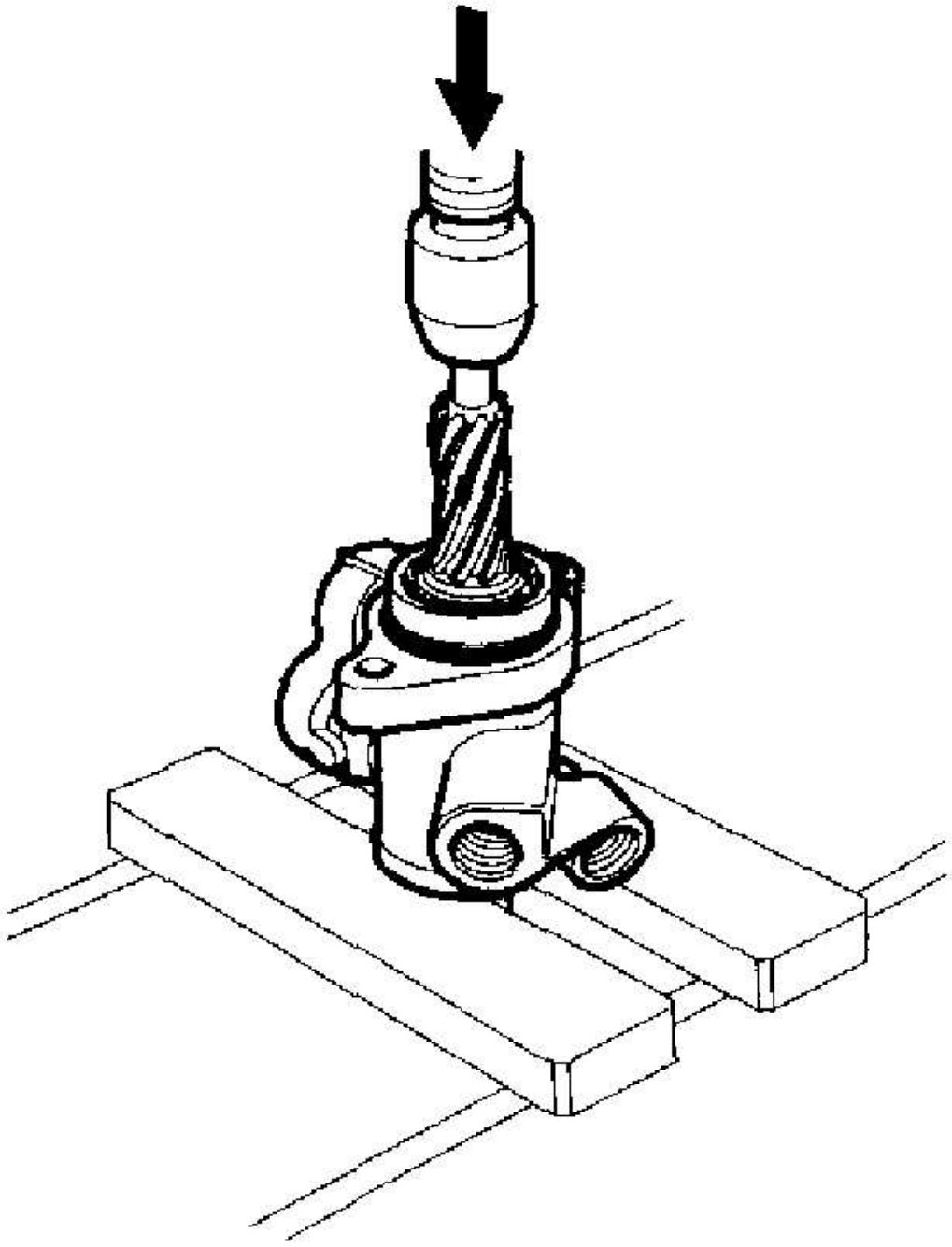


Fig. 102: Pressing Pinion Shaft/Sleeve Into Valve Housing With Hydraulic

Press
Courtesy of AMERICAN HONDA MOTOR CO., INC.

48. Coat the special tool with power steering fluid, then slide it onto the rack, big end first.
49. Position the new O-ring (A) and new piston seal ring (B) on the special tool, then slide them down toward the big end of the tool.

    Note these items during reassembly:

    - Do not over expand the resin seal rings. Install the resin seal rings with care so as not to damage them. After installation, make sure you contract the seal ring using the special tool (sizing tool).
    - Replace the piston's O-ring and seal ring as a set.

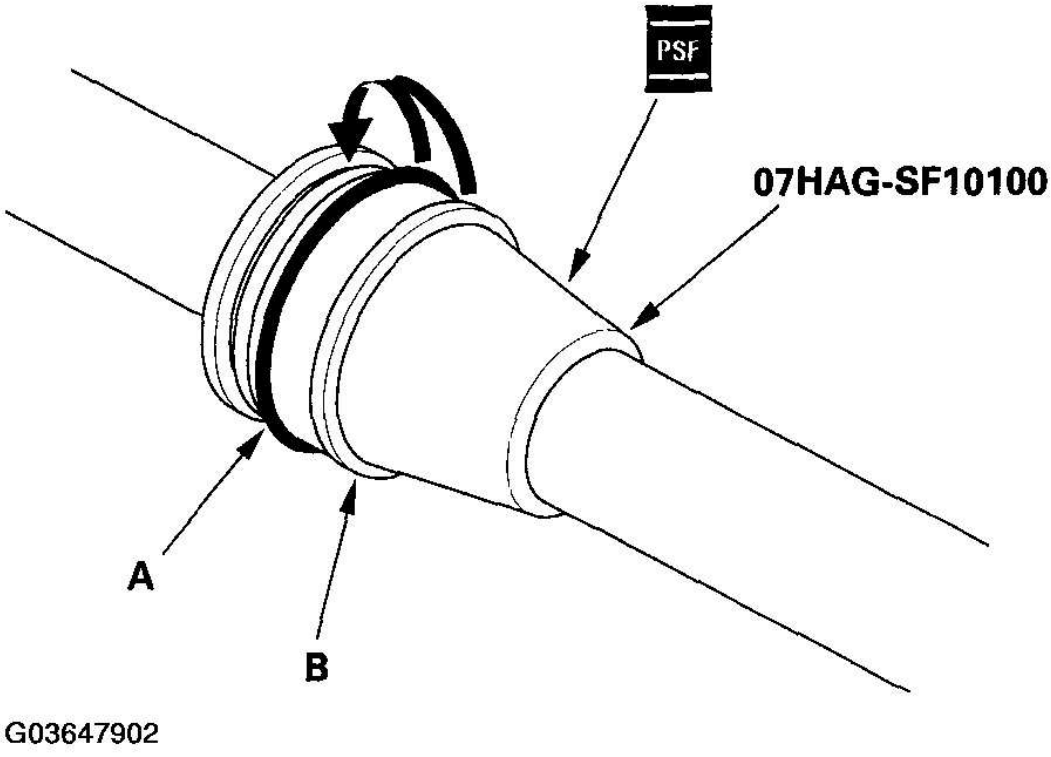


Fig. 103: Positioning O-ring And Piston Seal Ring On Special Tool

Courtesy of AMERICAN HONDA MOTOR CO., INC.

50. Pull the O-ring off into the piston groove, then pull the piston seal ring off into the piston groove on top of the O-ring.
51. Coat the piston seal ring (A) and the inside of the special tool with power steering fluid, then carefully slide the tool onto the rack and over the piston seal ring.

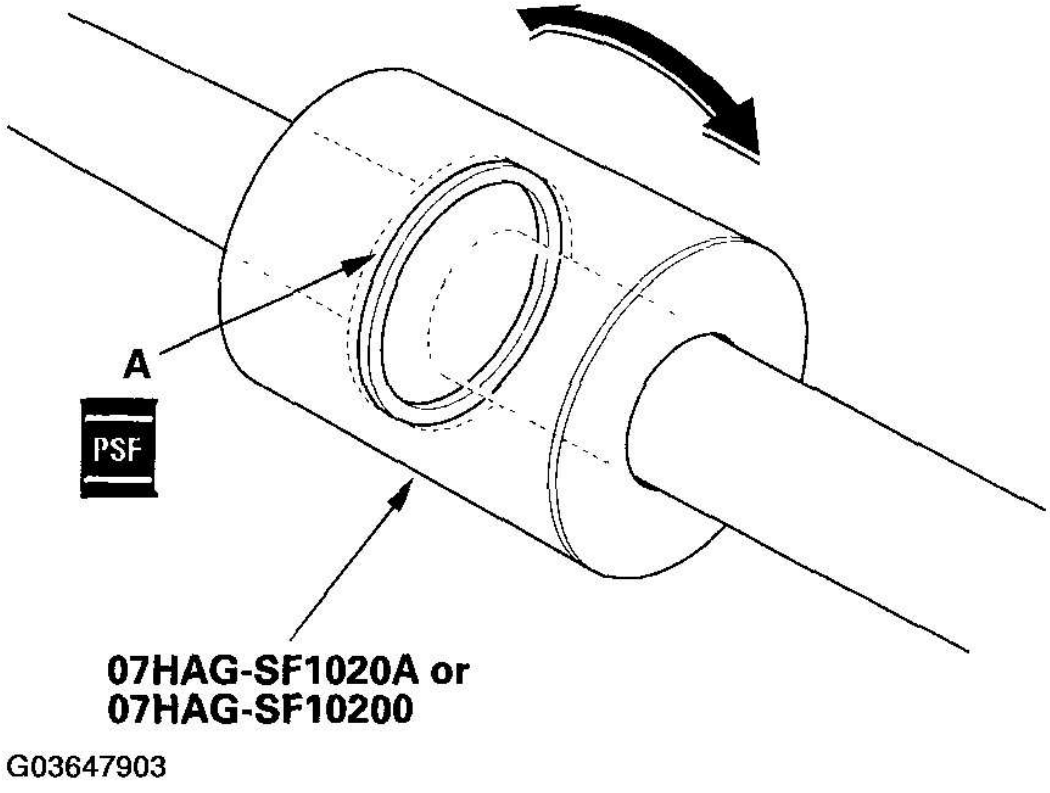


Fig. 104: Coating Piston Seal Ring And Inside Of Special Tool With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

52. Move the special tool back and forth several times to make sure the piston seal ring fits snugly in the piston.
53. Coat the sliding surface of the special tool (A) and new cylinder end seal (B)

with power steering fluid. Place the seal on the special tool with its grooved side (C) facing opposite the special tool.

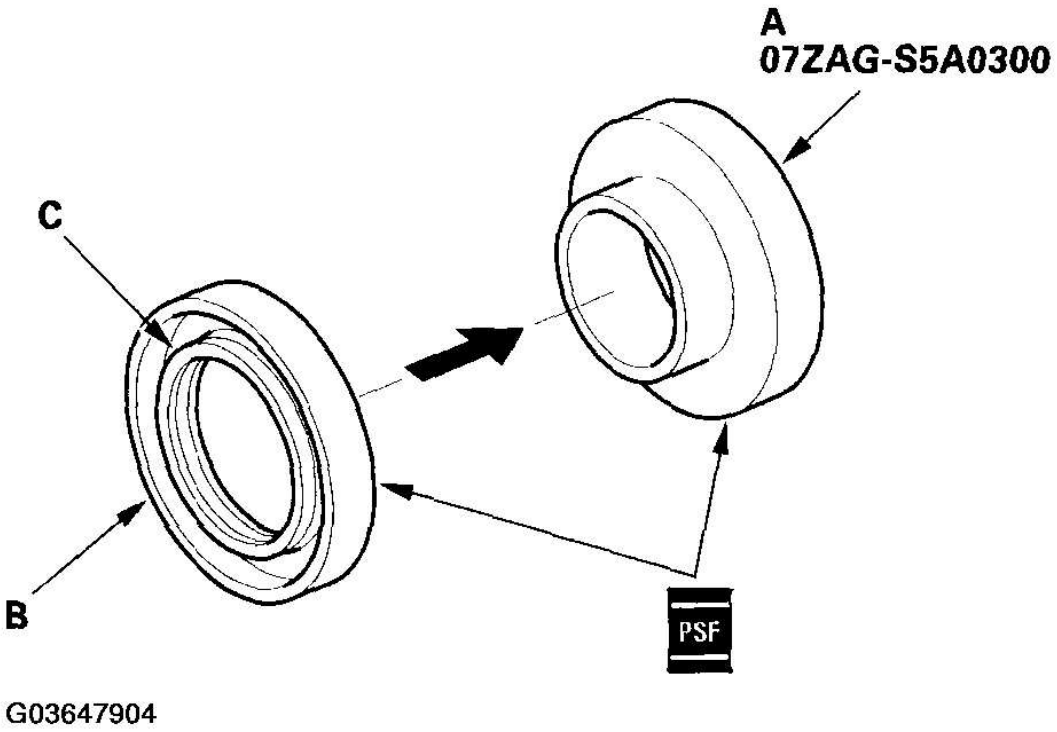


Fig. 105: Coating Sliding Surface Of Special Tool And Cylinder End Seal With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

54. Coat the surface of the steering rack (A) with power steering fluid.

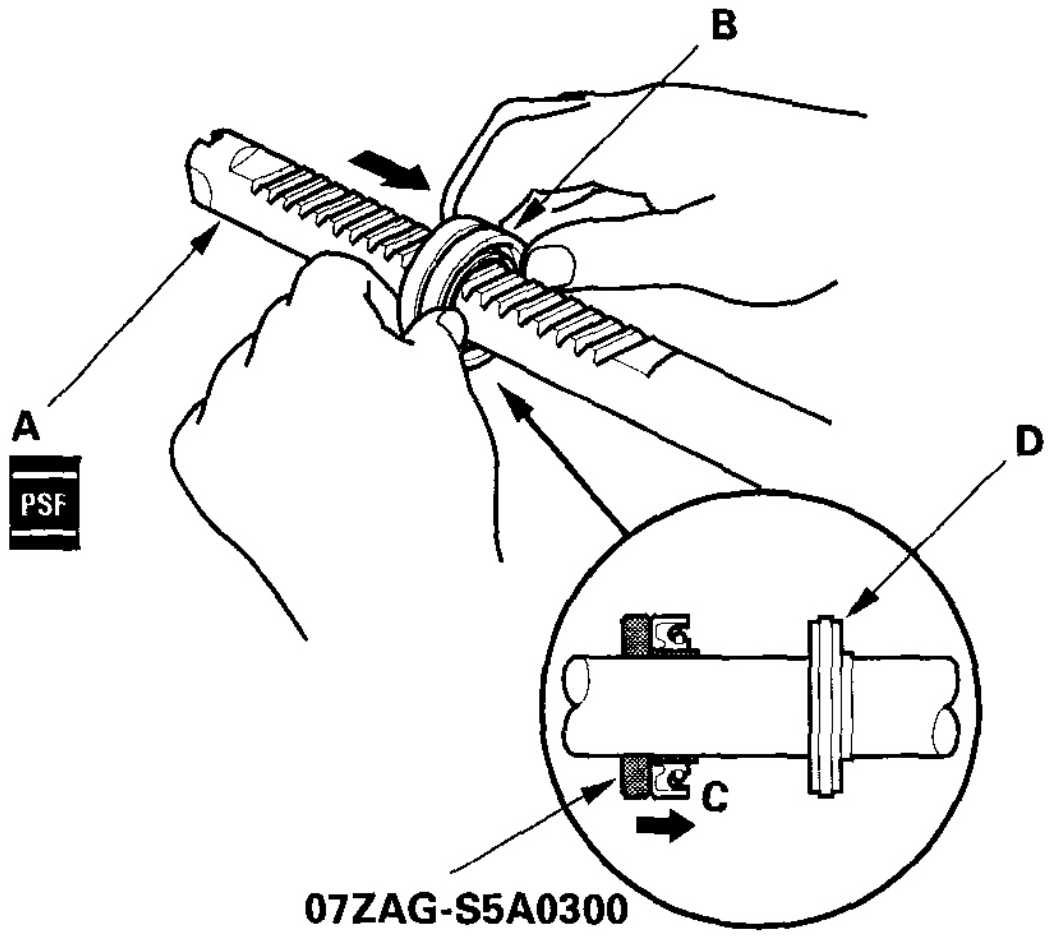


Fig. 106: Coating Surface Of Steering Rack With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

55. Install the cylinder end seal (B) onto the steering rack with its grooved side (C) toward the piston (D).
56. Separate the cylinder end seal from the special tool, then remove the special tool.
57. Install the new backup ring (A) on the steering rack, then place the backup ring and cylinder end seal (B) against the piston (C).

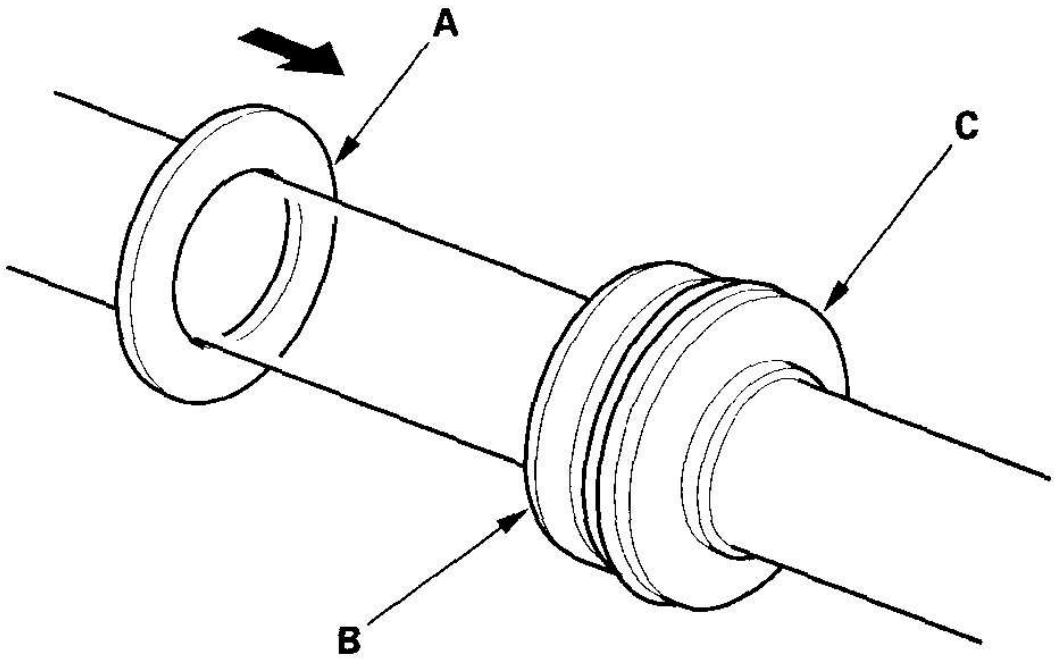


Fig. 107: Installing Backup Ring On Steering Rack
Courtesy of AMERICAN HONDA MOTOR CO., INC.

58. Apply multipurpose grease to the steering rack teeth, then insert the steering rack into the gearbox housing. Be careful not to damage the inner surface of the cylinder wall with the rack edges.

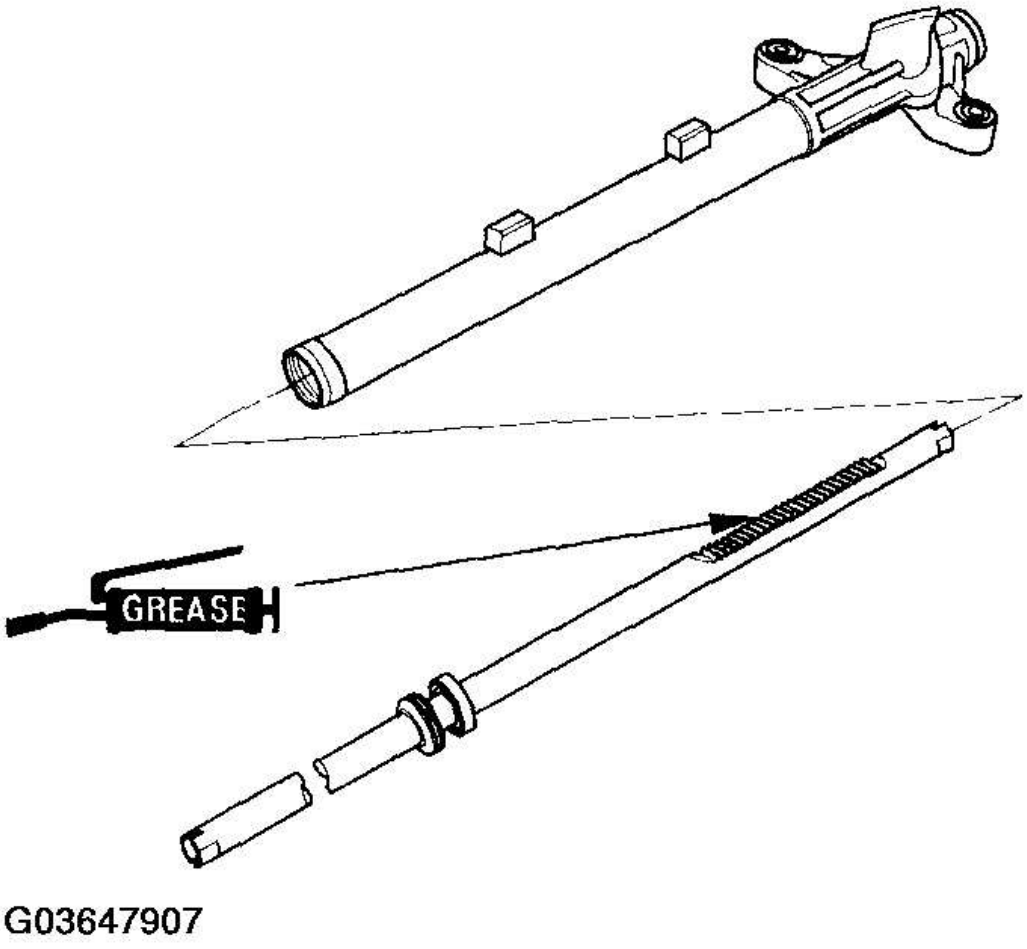


Fig. 108: Applying Multipurpose Grease To Steering Rack Teeth
Courtesy of AMERICAN HONDA MOTOR CO., INC.

59. Insert an appropriate size deep socket wrench (A) onto the steering rack as shown in **Fig. 109**.

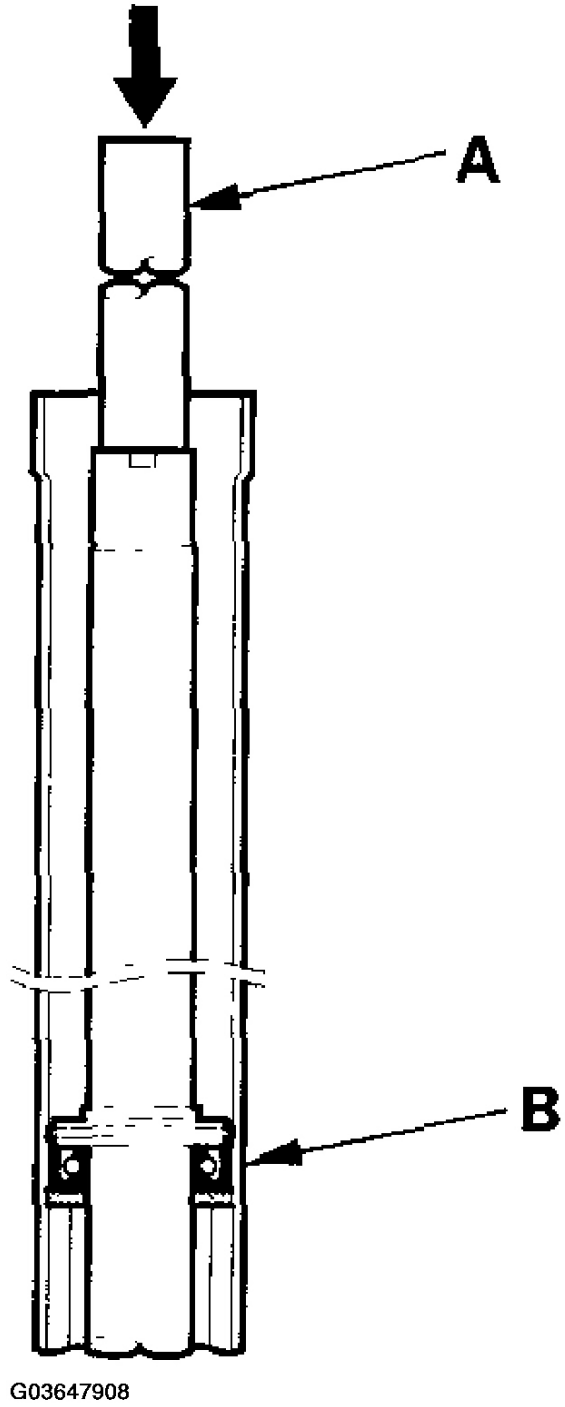


Fig. 109: Inserting Appropriate Size Deep Socket Wrench Onto Steering Rack

Courtesy of AMERICAN HONDA MOTOR CO., INC.

60. Install the cylinder end seal (B) into the bottom of the cylinder by pressing on the tool with a press. Do not push on the tool with excessive force as it may damage the cylinder end seal.
61. Remove the tool, and center the steering rack.
62. Coat the sliding surface of the special tool (A) and new cylinder end seal (B) with power steering fluid. Place the seal on the special tool with its grooved side (C) facing opposite the special tool.

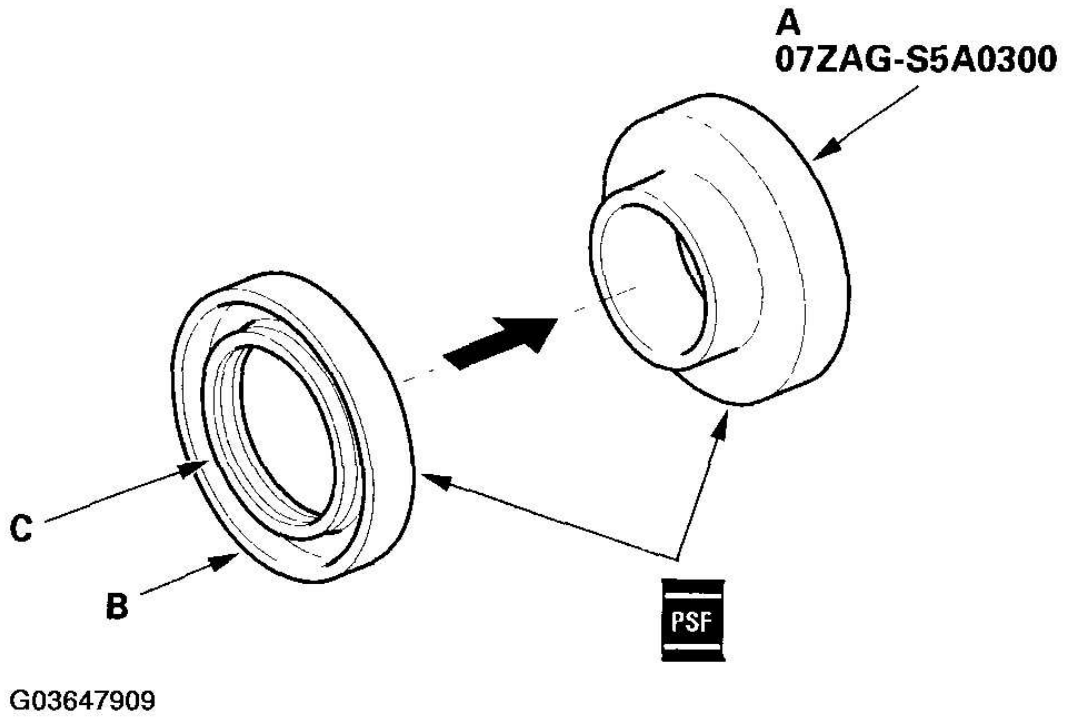


Fig. 110: Coating Sliding Surface Of Special Tool & Cylinder End Seal With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

63. Coat the inside surface of the special tool and steering rack with power steering fluid, then install the cylinder end seal (A) onto the steering rack with its grooved side toward the cylinder.

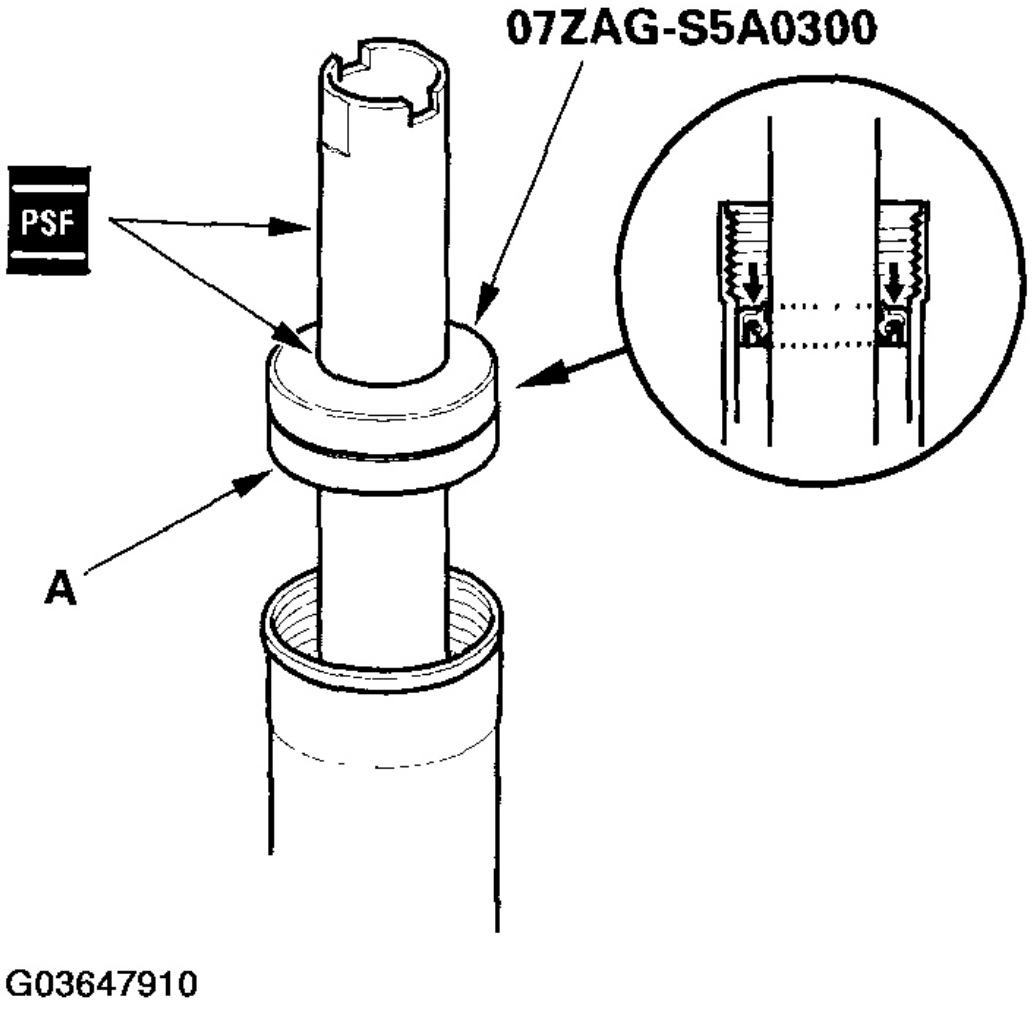


Fig. 111: Installing Cylinder End Seal Onto Steering Rack
Courtesy of AMERICAN HONDA MOTOR CO., INC.

64. Separate the cylinder end seal from the special tool, then remove the special tool.
65. Push in the cylinder end seal with your finger. Be careful not to damage the face of the seal with the threads and burrs at the staked position of the cylinder housing.
66. Hold the gearbox housing using a C-clamp (commercially available) (A) and the wooden blocks (B). Do not clamp the cylinder part of the housing and

gearbox housing in the vise.

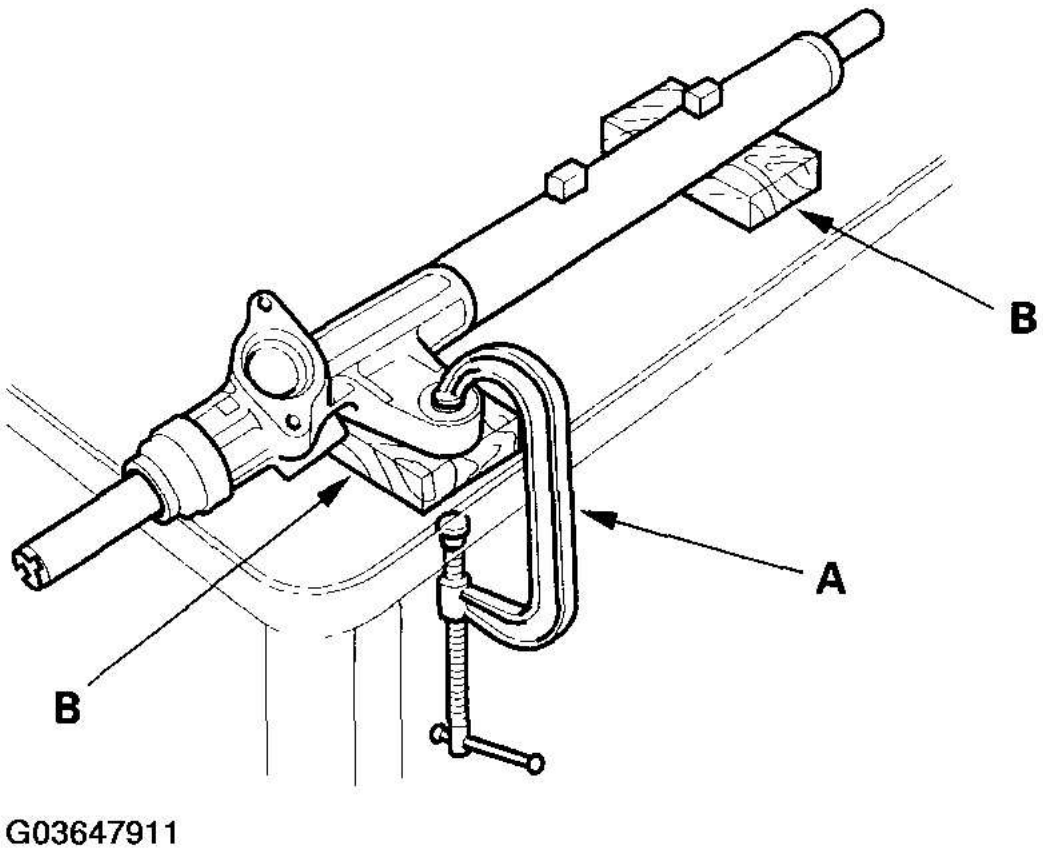


Fig. 112: Holding Gearbox Housing Using C-Clamp And Wooden Blocks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

67. Coat the inside surface of the cylinder end (A) with power steering fluid, then install the cylinder end by screwing it into the cylinder (B). Tighten the cylinder end to the specified torque.

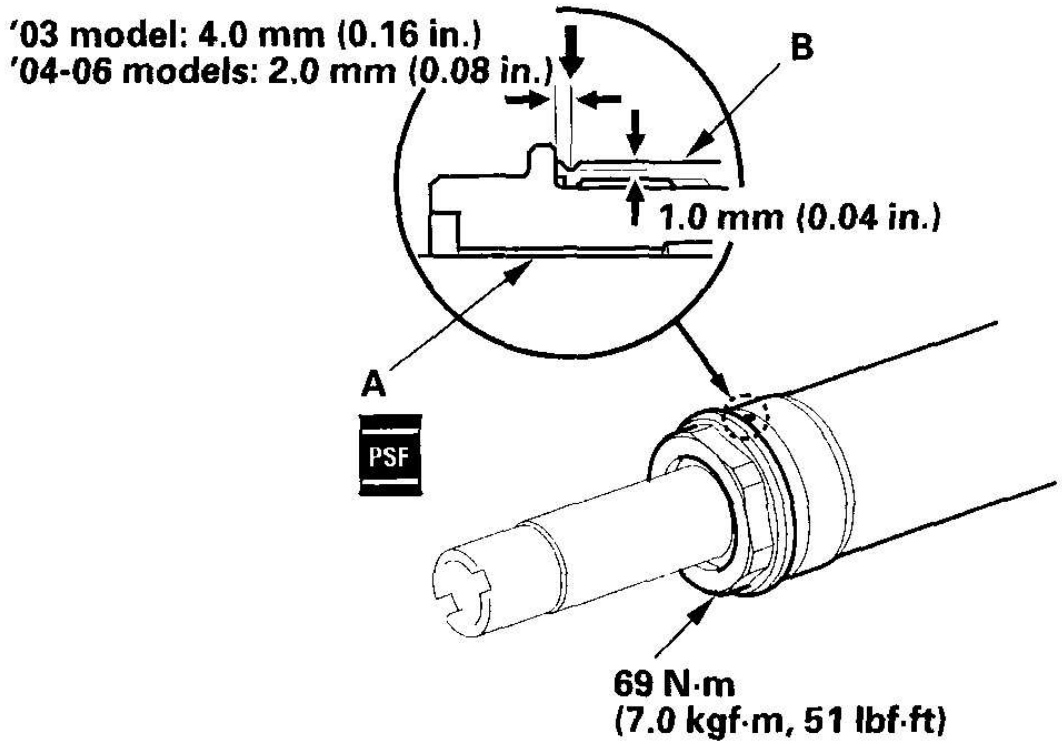


Fig. 113: Coating Inside Surface Of Cylinder End With Power Steering Fluid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

68. Stake the point of the cylinder show (opposite from where the stake was removed during disassembly).
69. Coat the new O-ring (A) with multipurpose grease, and carefully fit it on the valve housing.

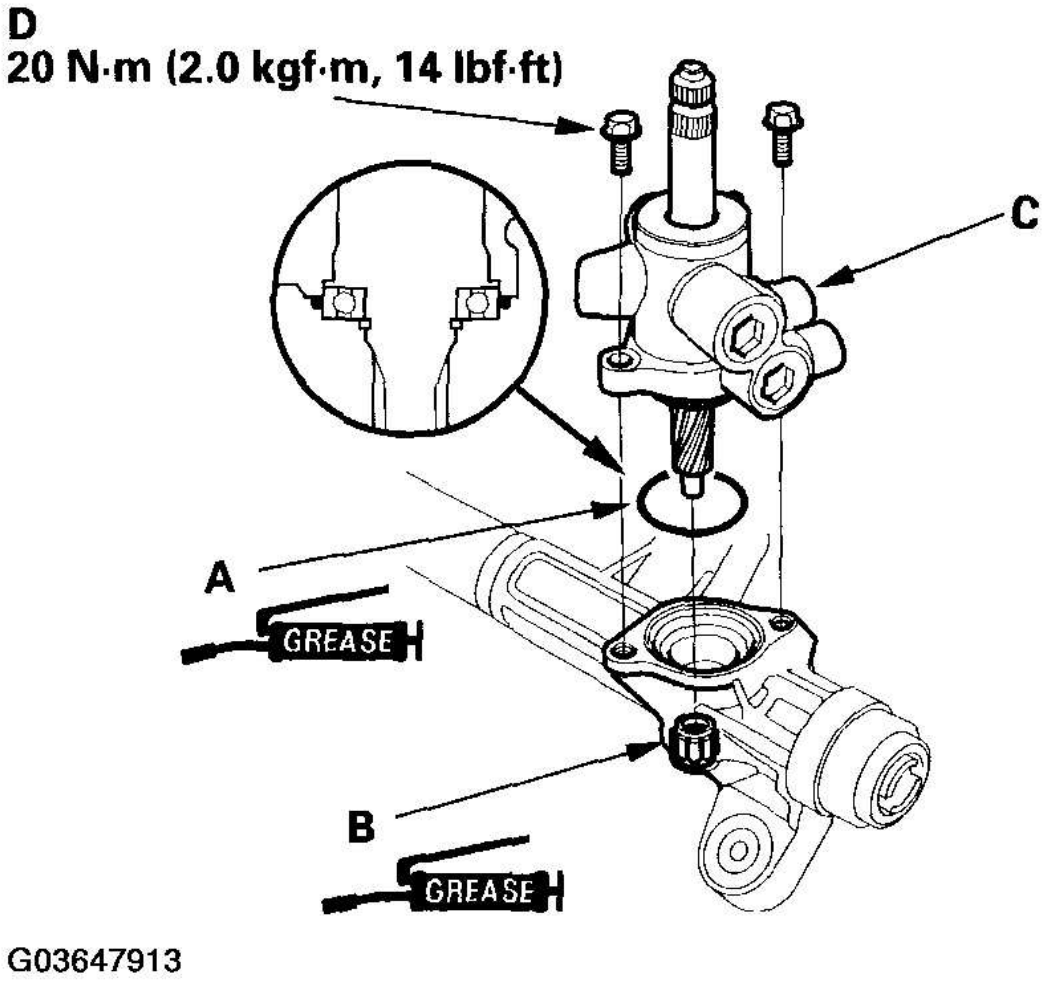


Fig. 114: Coating O-Ring With Multipurpose Grease
Courtesy of AMERICAN HONDA MOTOR CO., INC.

70. Apply multipurpose grease to the needle bearing (B) in the gearbox housing, then install the valve body unit (C) by engaging the gears. Note the valve body unit installation position (direction of the line connections).
71. Tighten the flange bolts (D) to the specified torque.
72. Install the cylinder lines.

Note these items during reassembly:

- Thoroughly clean the joints of the cylinder lines. The joints must be free of foreign material.
- Install the cylinder lines by tightening the flare nuts by hand first, then tighten the flare nuts to the specified torque.

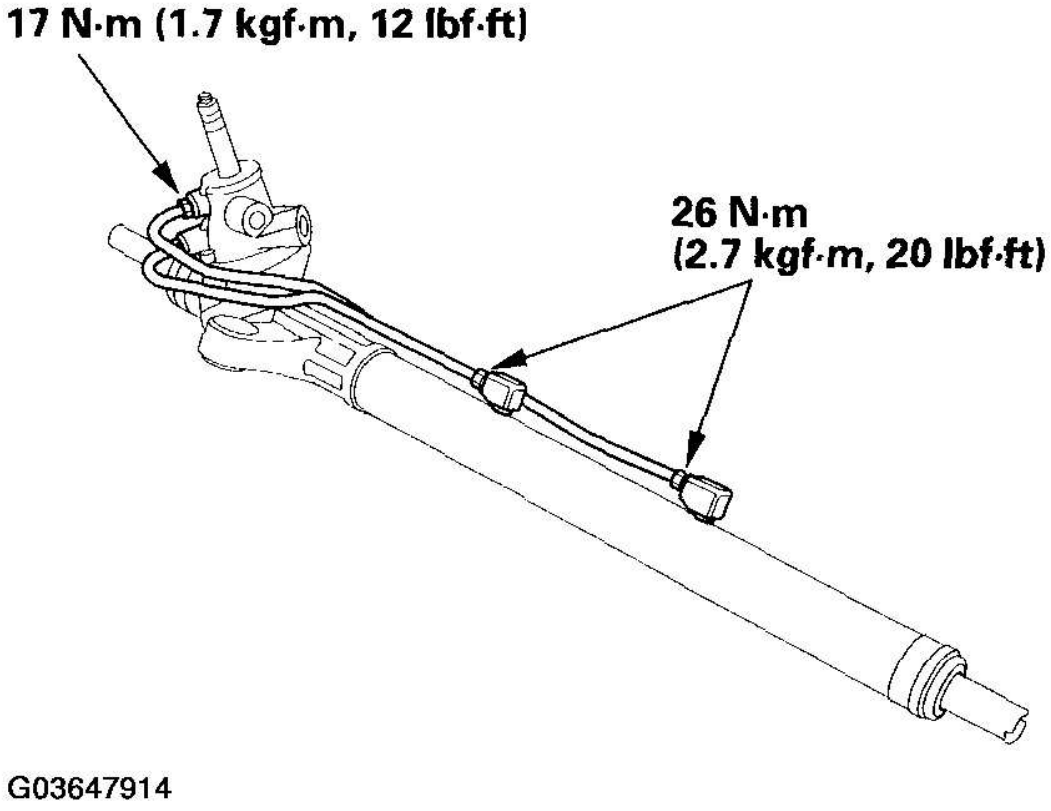


Fig. 115: Installing Cylinder Lines
Courtesy of AMERICAN HONDA MOTOR CO., INC.

73. Apply multipurpose grease to the sliding surface and circumference of the rack guide (A), and install it onto the gearbox housing.

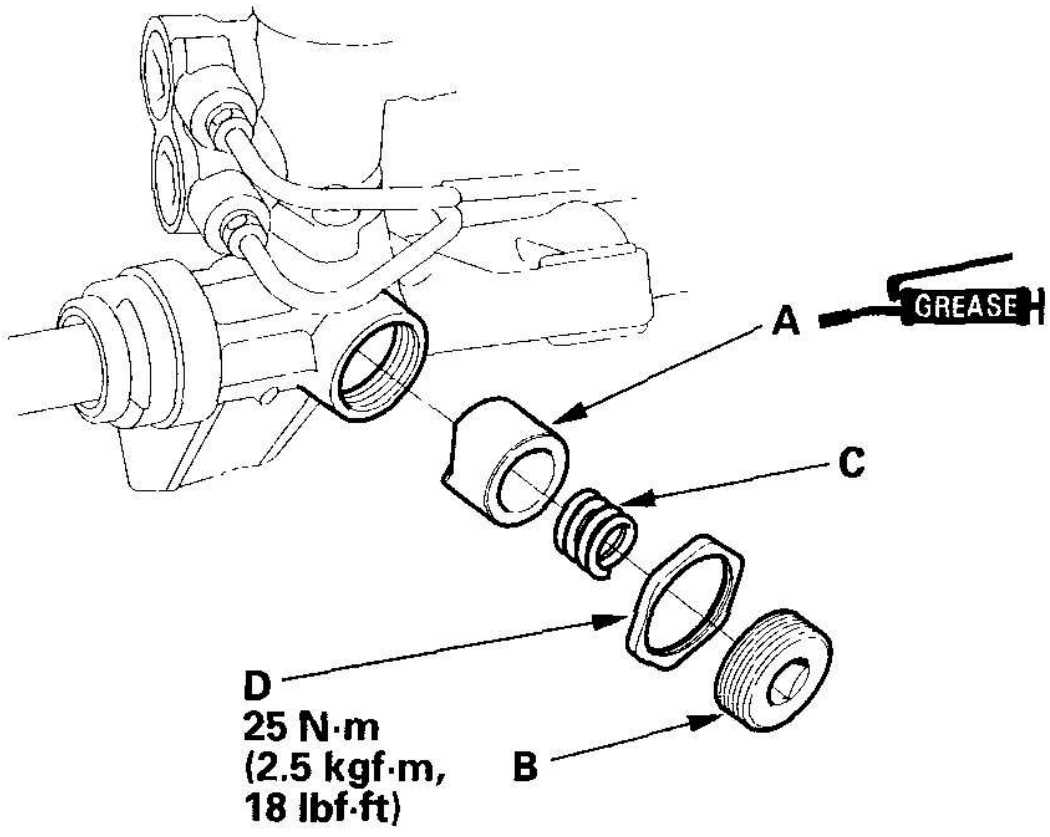


Fig. 116: Applying Multipurpose Grease To Sliding Surface And Circumference Of Rack Guide
Courtesy of AMERICAN HONDA MOTOR CO., INC.

74. Apply new sealant (Three Bond 1215 or Loctite 5699) to the middle of the threads on the rack guide screw (B), then install the spring (C) and rack guide screw.
75. Tighten the rack guide screw, and loosely install the locknut (D).
76. Adjust the rack guide screw (see **RACK GUIDE ADJUSTMENT**). After adjusting, check that the rack moves smoothly by sliding it right and left.
77. Install a new stop rubber (A) and a new lock washer (B). Align the lock washer tabs (C) with the slots (D) on the rack end (E) while holding the lock washer in place. Repeat this step for the other side of the rack.

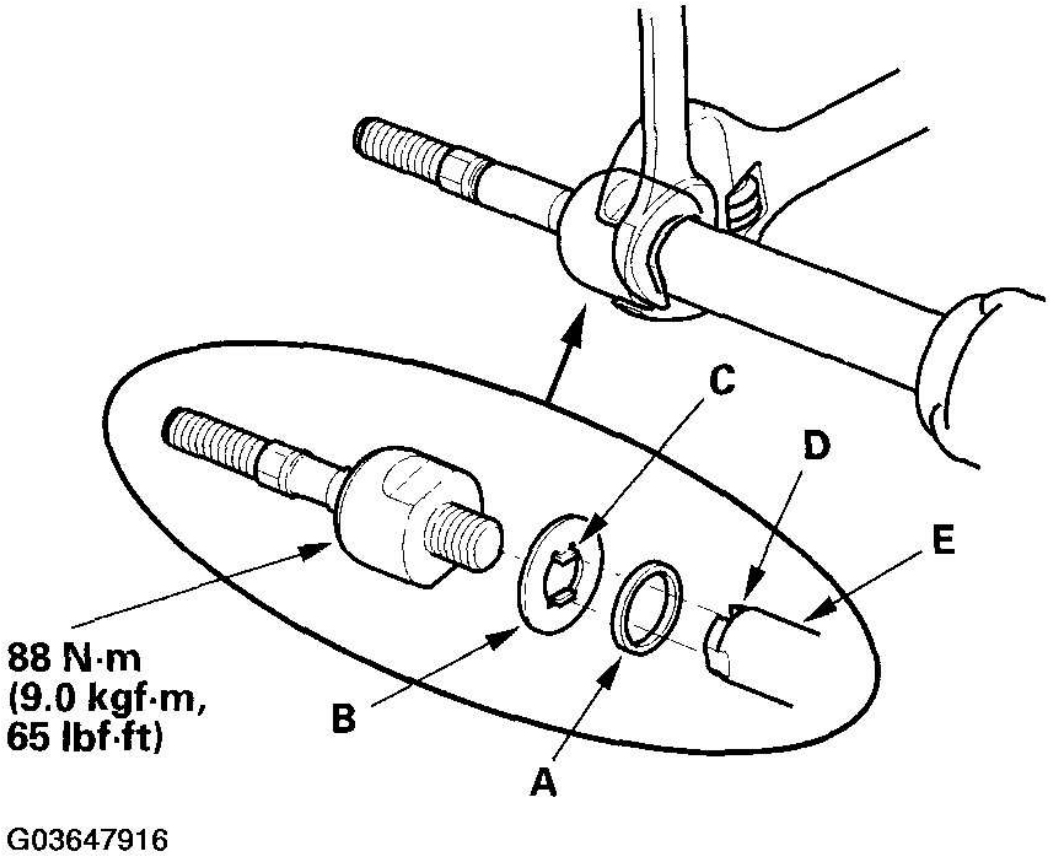


Fig. 117: Installing Stop Rubber & Lock Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

78. Hold the flat surface sections of the steering rack with a wrench, and tighten both rack ends. Be careful not to damage the rack surface with the wrench.
79. Bend the lock washer (A) back against the flat spots on the rack end joint housing.

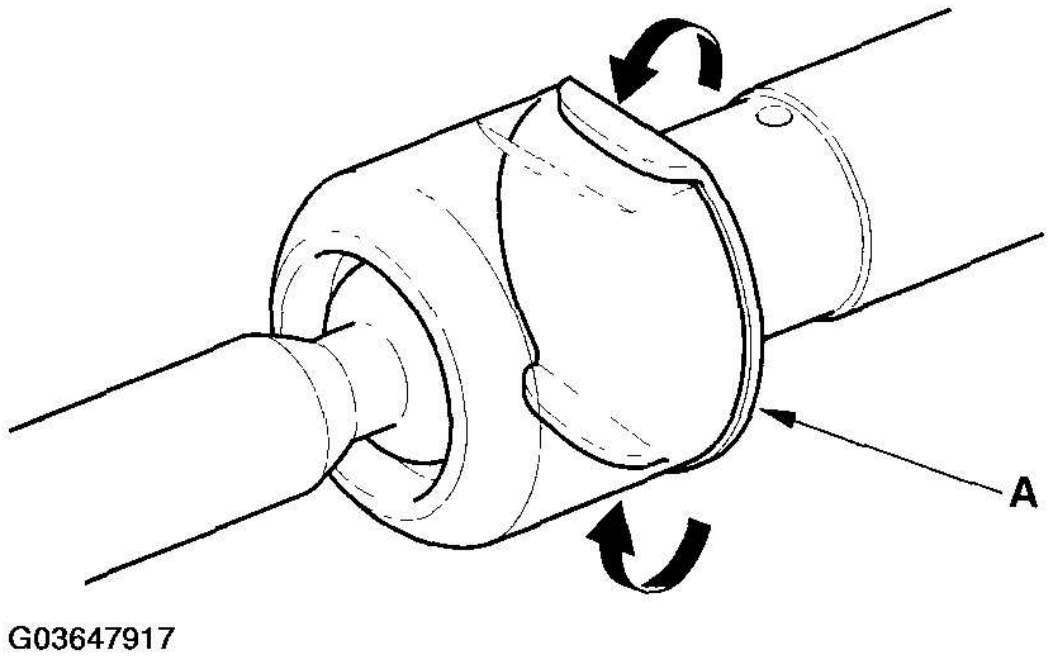


Fig. 118: Bending Lock Washer Back Against Flat Spots On Rack End Joint Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

80. Apply multipurpose grease to the circumference of the rack end joint housing (A).

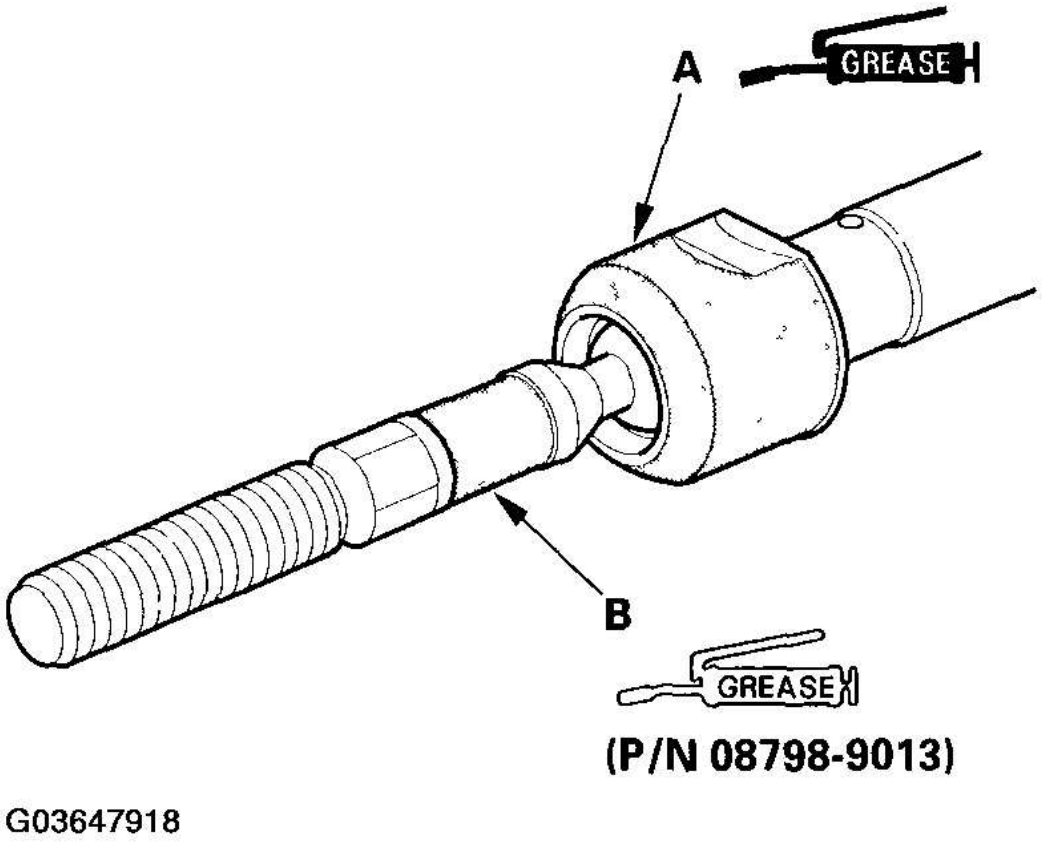


Fig. 119: Applying Multipurpose Grease To Circumference Of Rack End Joint Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

81. Apply a light coat of silicone grease to the boot grooves (B) on the rack ends.
82. Center the steering rack within its stroke.
83. Clean off any grease or contamination from the boot installation grooves (A) around the gearbox housing. Install the boots (B) on the rack ends with the tie-rod clips (C), and fit the boot end in the installation grooves in the housing properly.

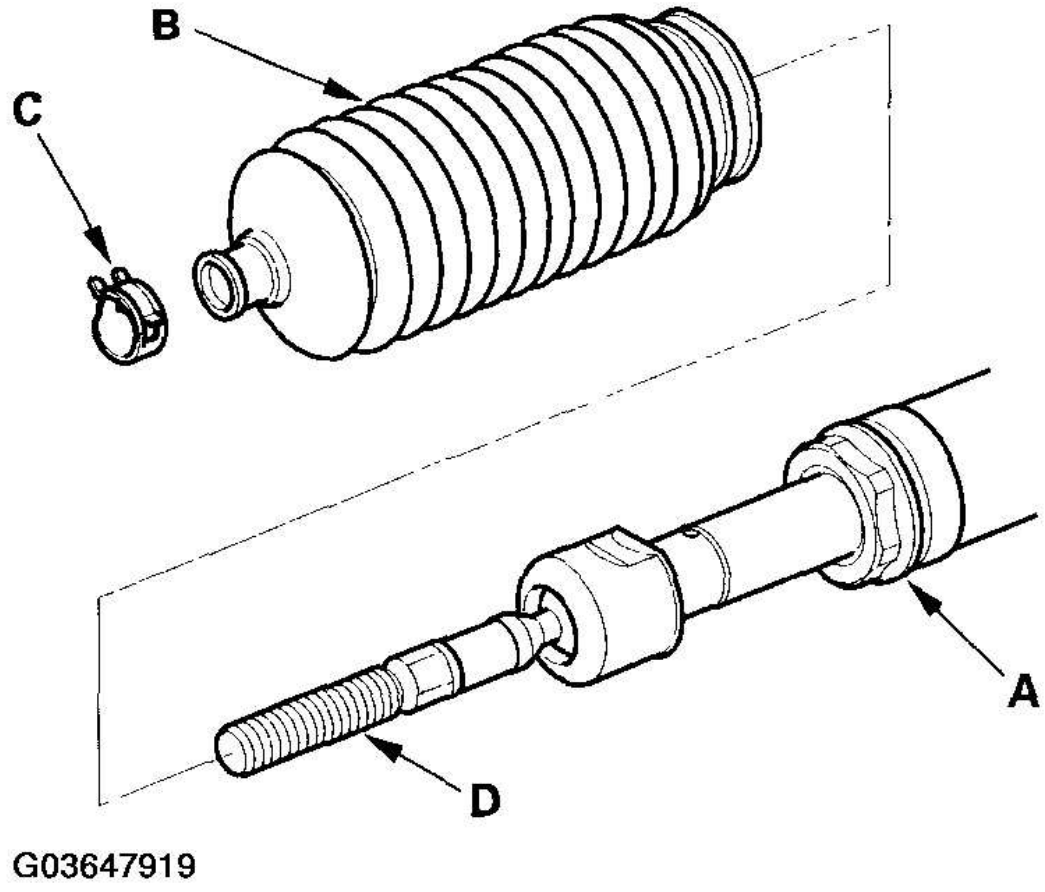


Fig. 120: Cleaning Off Boot Installation Grooves Around Gearbox Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

84. After installing the boots, wipe any grease off the threaded section (D) of the rack end.
85. Install the new boot bands by aligning the tabs (A) with the holes (B) of the band.

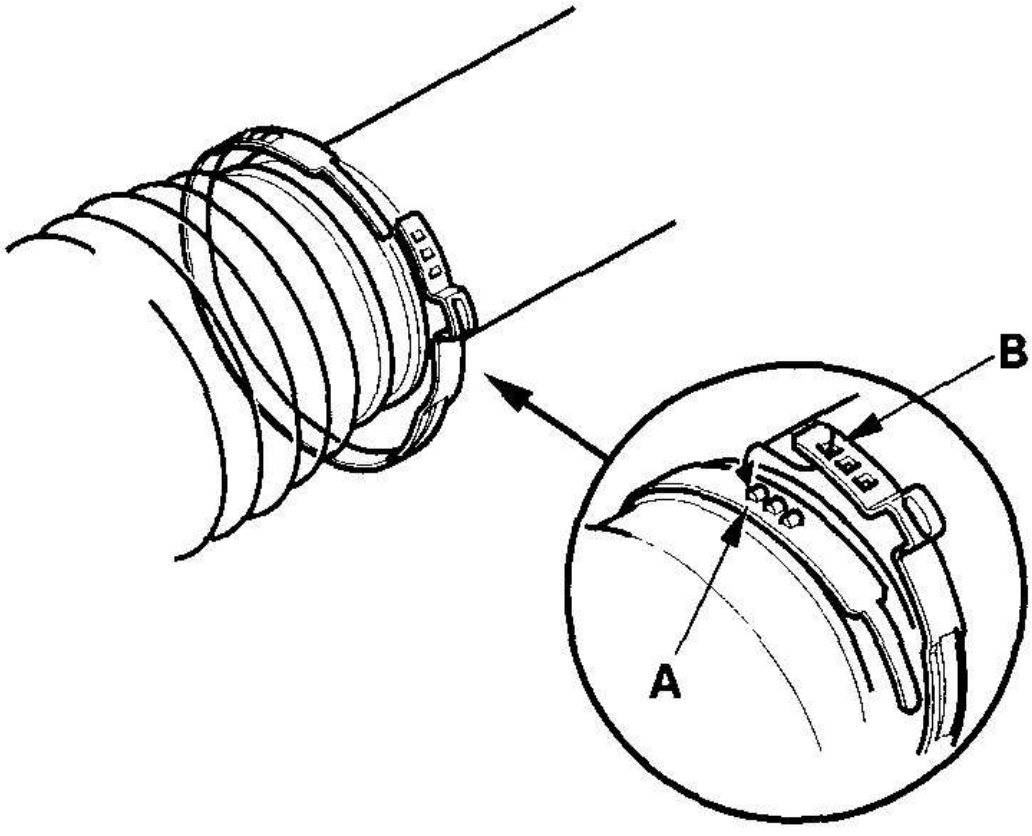


Fig. 121: Installing Boot Bands By Aligning Tabs With Holes Of Band
Courtesy of AMERICAN HONDA MOTOR CO., INC.

86. Close the ear portion (A) of the band (B) with commercially available pincers, Oetiker 1098 or equivalent (C).

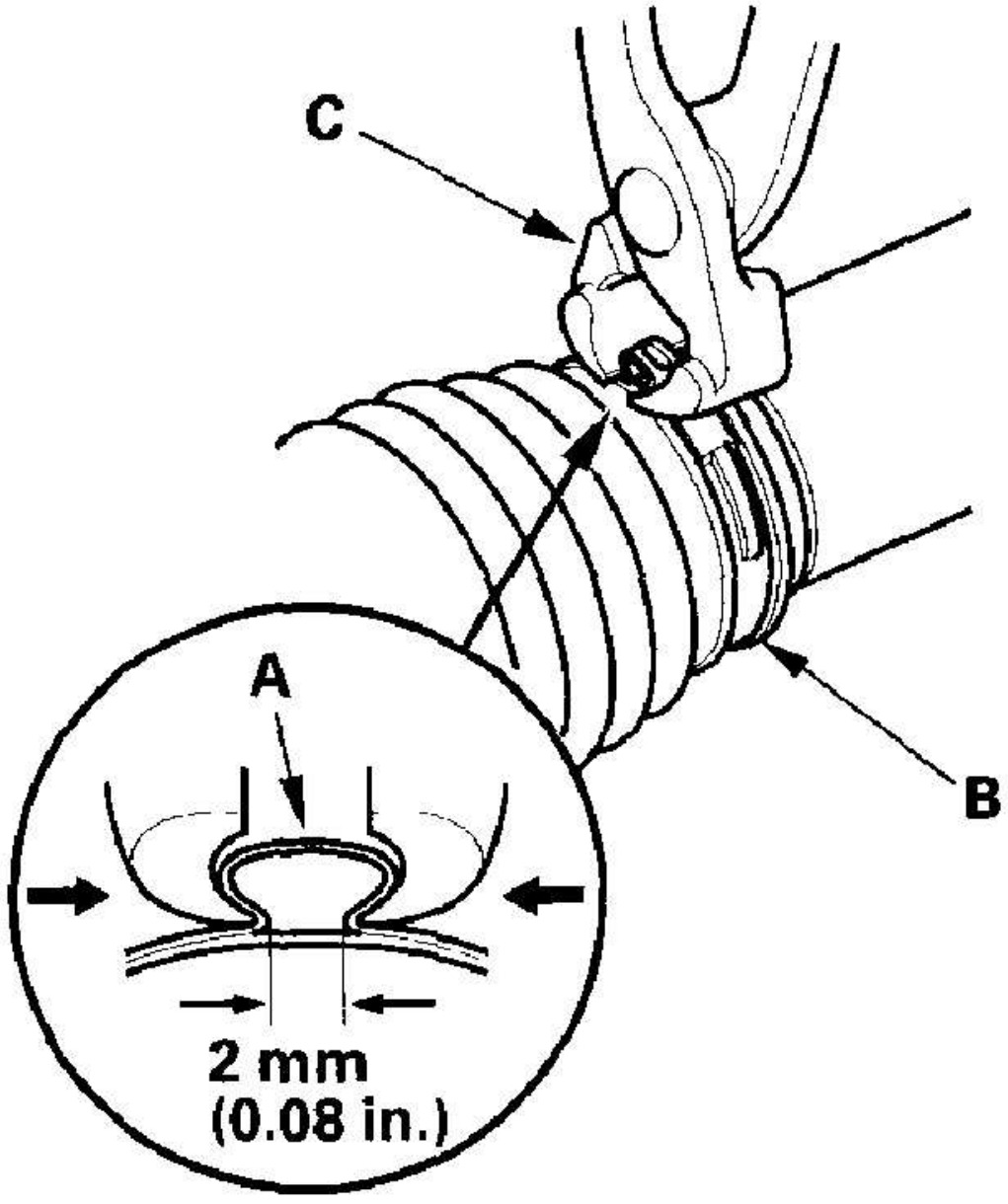


Fig. 122: Closing Ear Portion Of Band With Commercially Available Pincers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

87. Slide the rack right and left to be certain that the boots are not deformed or twisted.

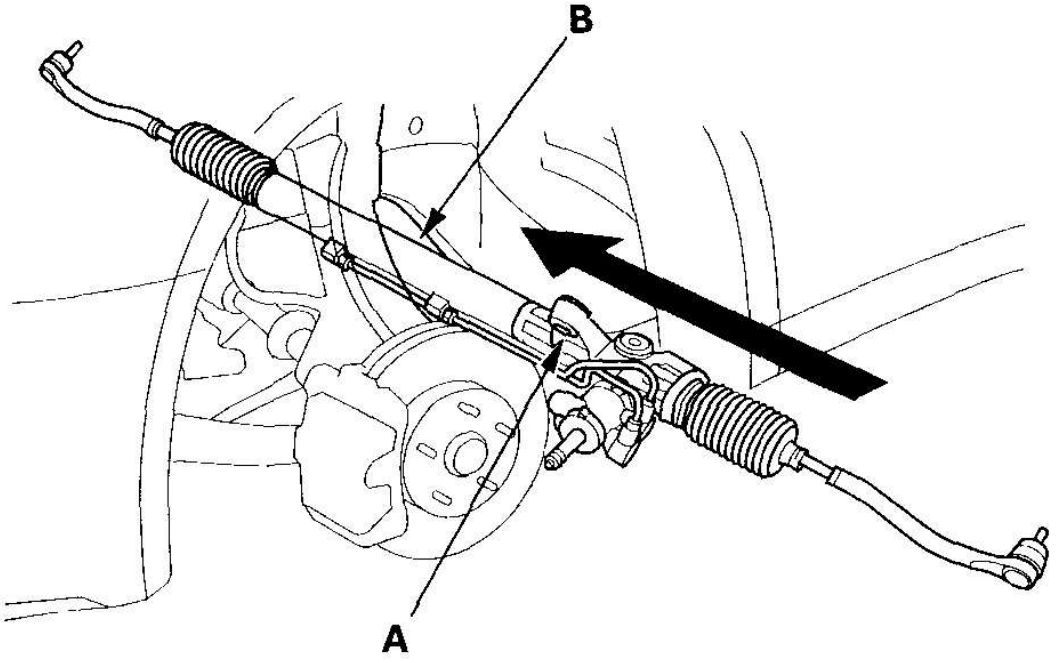
STEERING GEARBOX INSTALLATION

Special Tools Required

Subframe adaptor EOS02C000016

(Available through the Honda Tool and Equipment program 888-424-6857)

1. Before installing the steering gearbox, make sure that no power steering fluid is on the mating surface of the gearbox and a front suspension subframe. To prevent the gearbox mounting bolts from loosening after the installation, remove any power steering fluid from the mount cushions and bolt holes.
2. Apply a mild soap and water solution to both sides of the mount cushion mating surfaces (A).



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Fig. 123: Applying Mild Soap And Water Solution To Both Sides Of Mount Cushion Mating Surfaces
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Pass the cylinder of the steering gearbox (B) through the wheelwell opening on the driver's side.
4. Carefully move the steering gearbox toward the passenger's side until the pinion shaft clears the wheelwell opening on the body.
5. Rotate the steering gearbox so the pinion shaft (A) points upward.

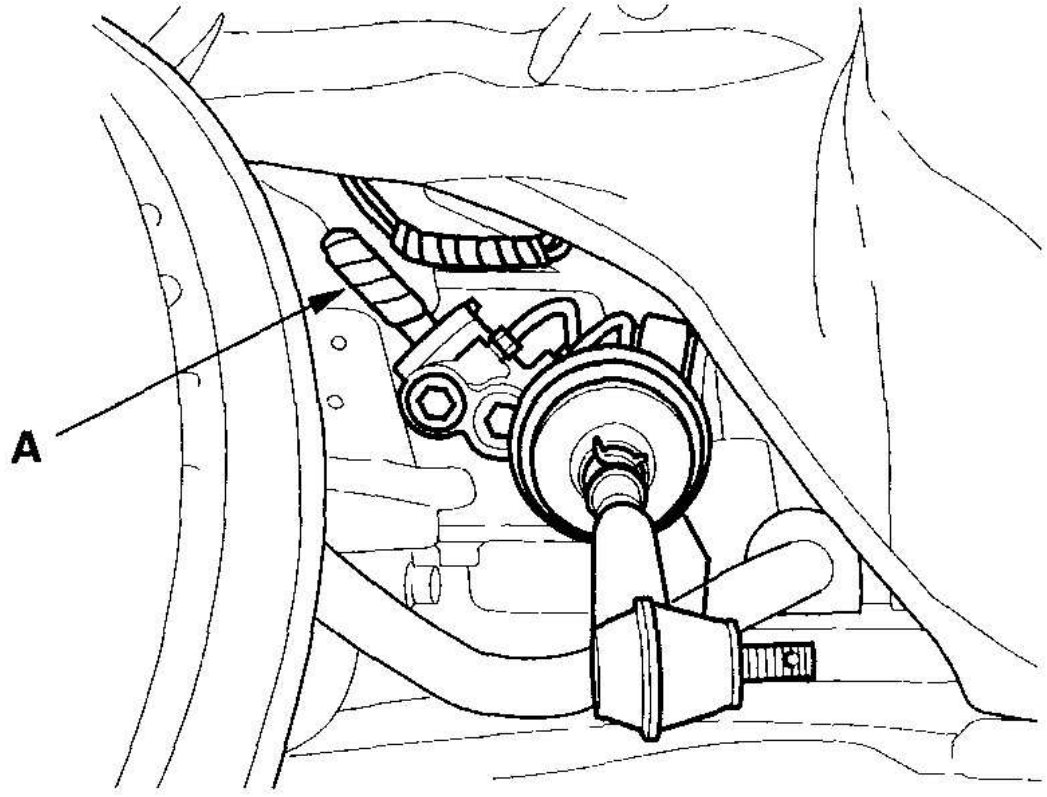


Fig. 124: Rotating Steering Gearbox So Pinion Shaft Points Upward
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Continue moving the gearbox toward the passenger's side until the steering

gearbox is in position. Make sure the power steering return line and feed line are routed above the gearbox.

7. Remove the vinyl tape from the pinion shaft, and install the pinion shaft grommet (A). Align the slot in the pinion shaft grommet with the lug portion (B) on the valve housing.

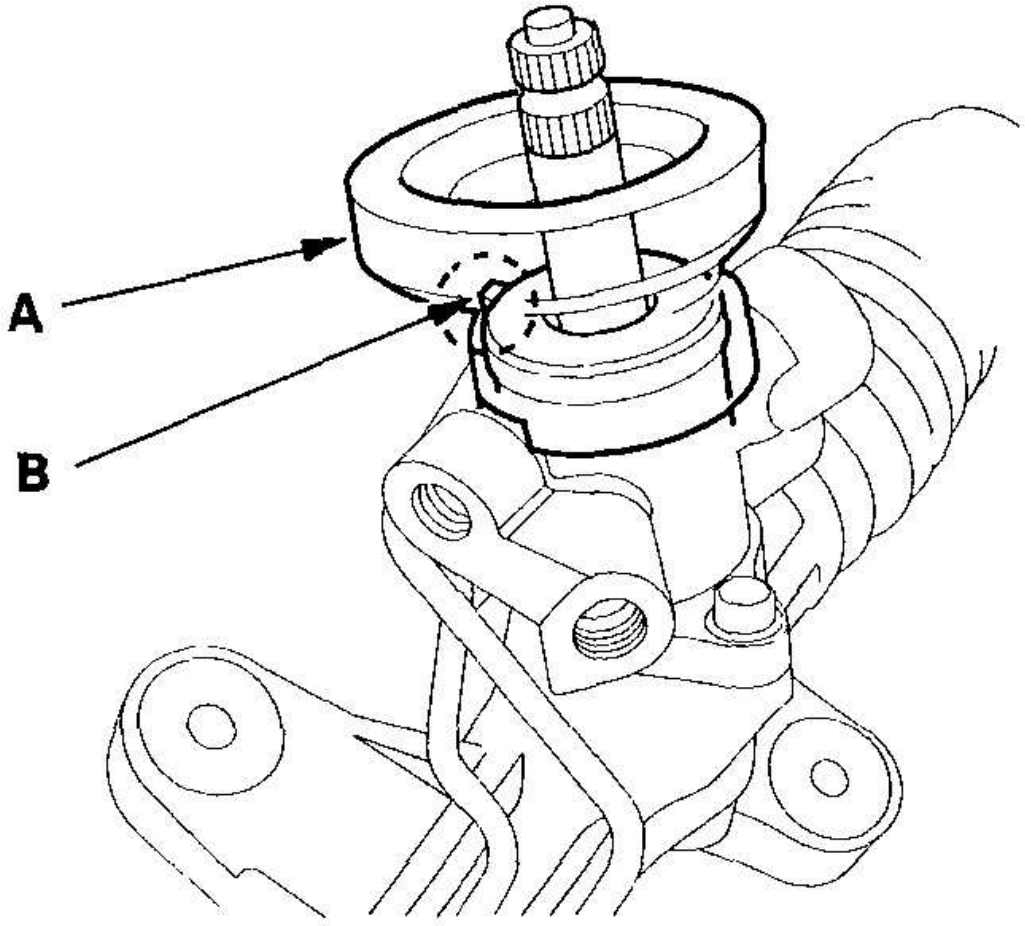


Fig. 125: Installing Pinion Shaft Grommet
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Position the cutout (A) on the mounting cushion (B) as shown in **Fig. 126**, and

install it on the cylinder of the gearbox securely.

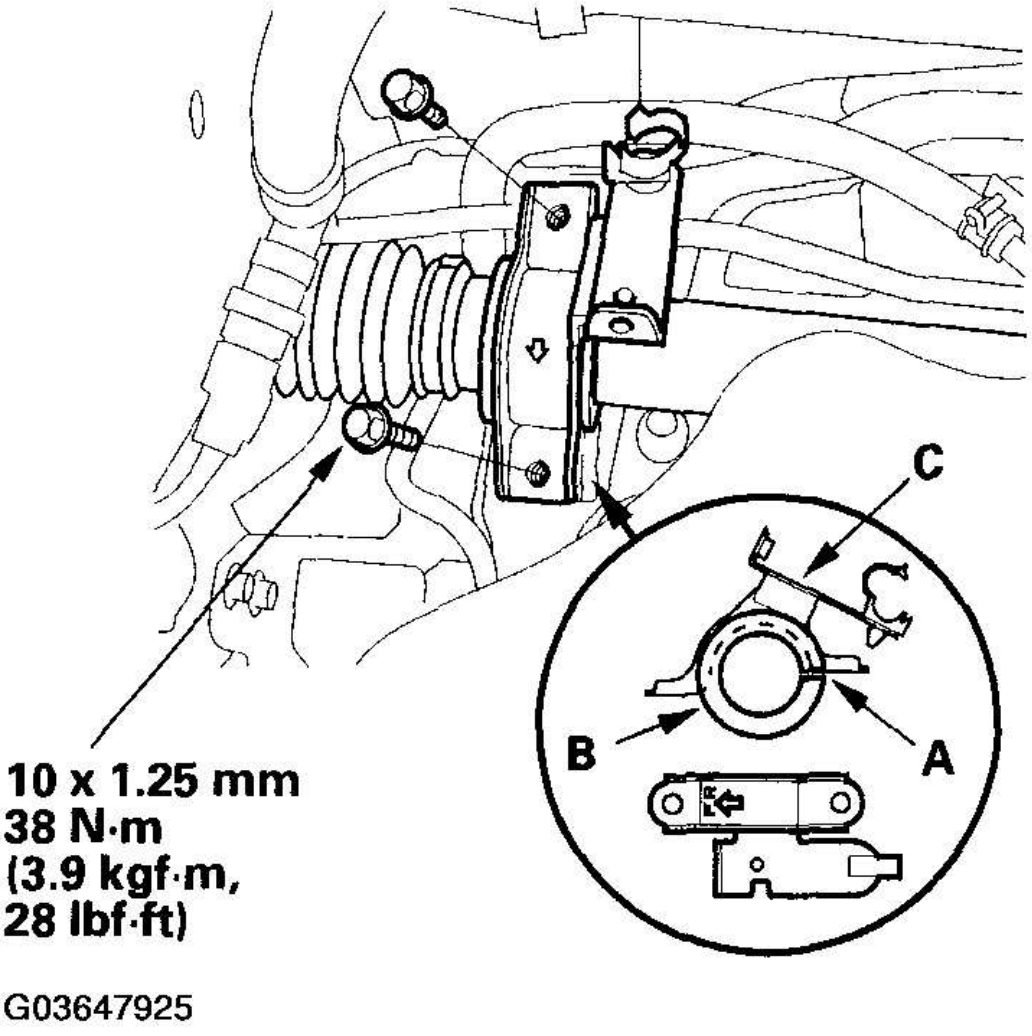


Fig. 126: Positioning Cutout On Mounting Cushion
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the gearbox mounting bracket (C) over the mounting cushion, and loosely install the two flange bolts.
10. Install the steering stiffener plate (A) and gearbox mounting bolts on the left side of the gearbox, then tighten them to the specified torque.

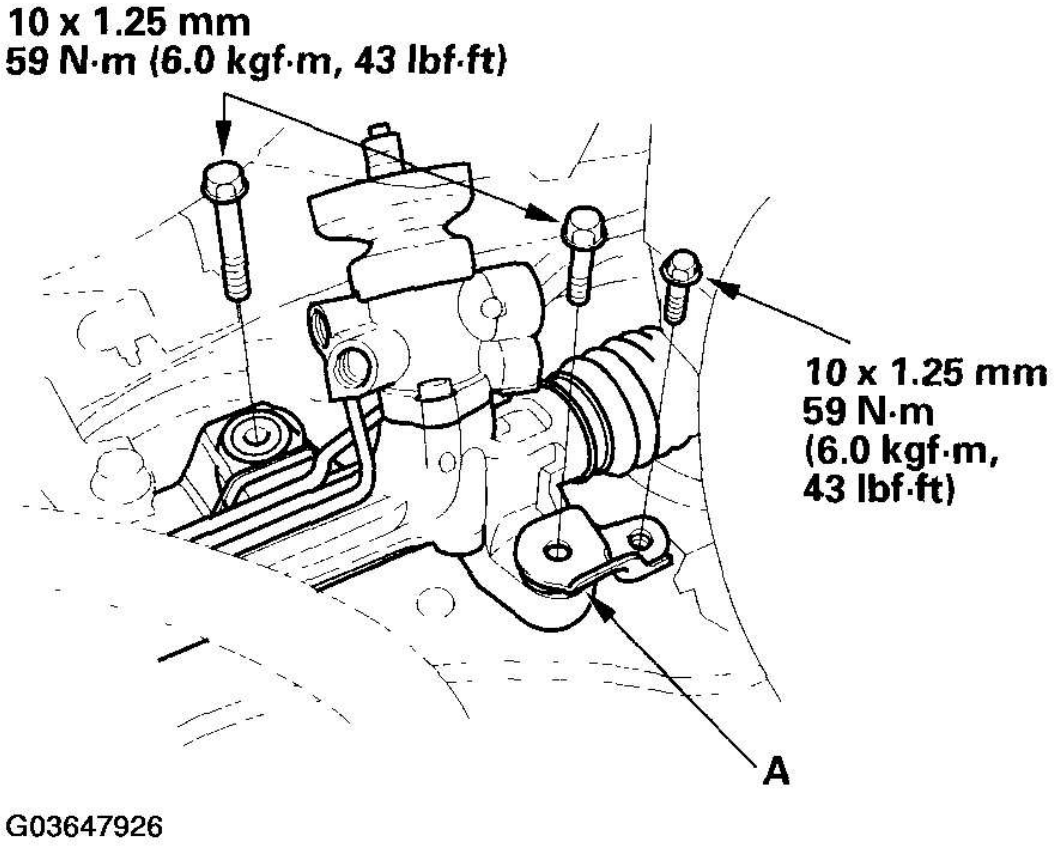


Fig. 127: Installing Steering Stiffener Plate And Gearbox Mounting Bolts On Left Side Of Gearbox
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Tighten the flange bolts on the right side of the gearbox to specified torque alternately in two or more steps.
12. Loosely connect the return line and feed line by hand.
13. Install the feed line holder (A) and return hose (B) on the gearbox mounting bracket (C)

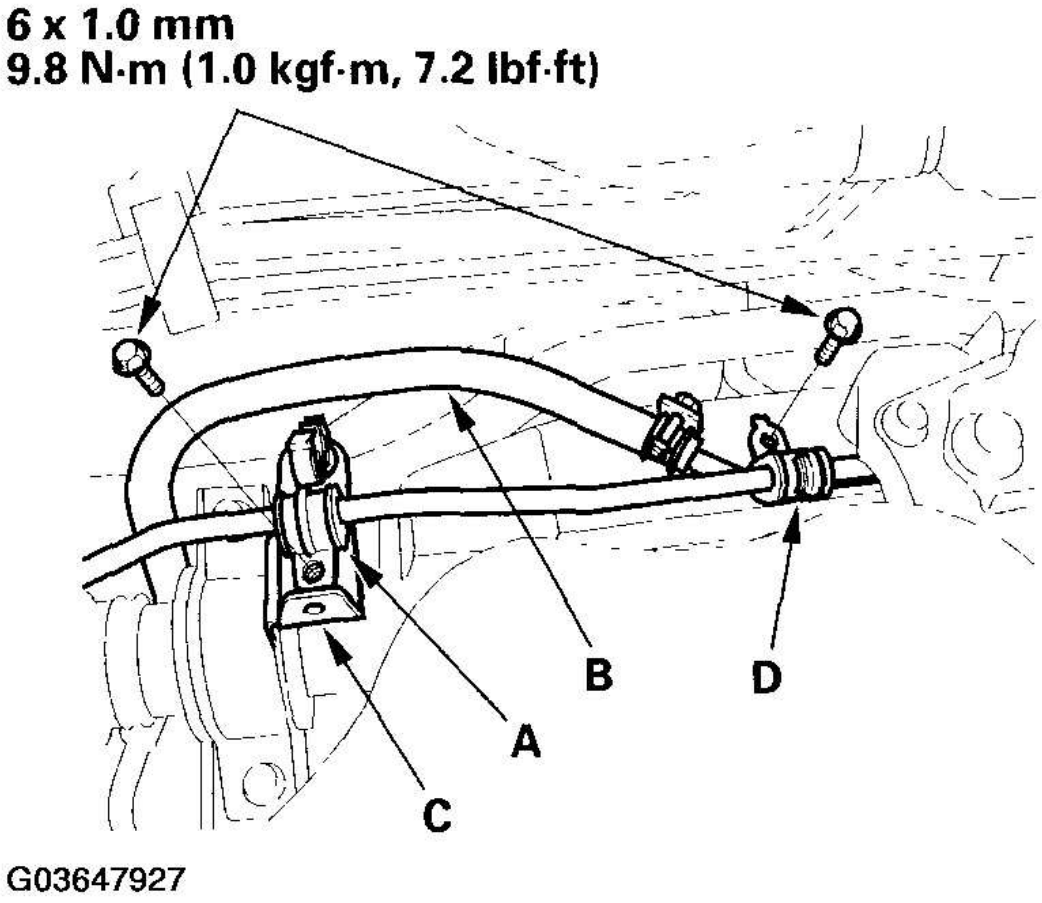


Fig. 128: Installing Feed Line Holder And Return Hose On Gearbox Mounting Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Install the feed line holder (D) on the front suspension subframe. Make sure that there is no interference between the feed and return lines and any other parts.
15. Tighten the return line flare nut (A) to the specified torque.

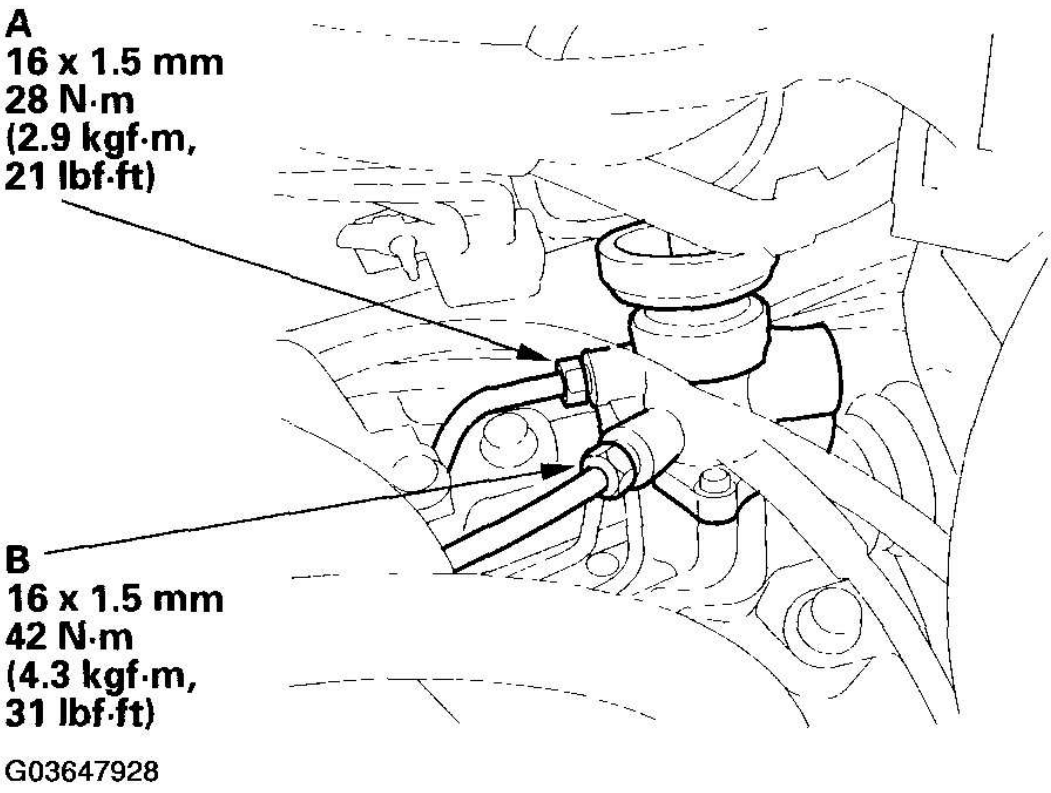


Fig. 129: Tightening Return Line Flare Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Tighten the feed line flare nut (B) to the specified torque.
17. Raise the jack supporting front suspension subframe (A) with special tool until the subframe is in position (see **FRONT SUBFRAME ALIGNMENT**).

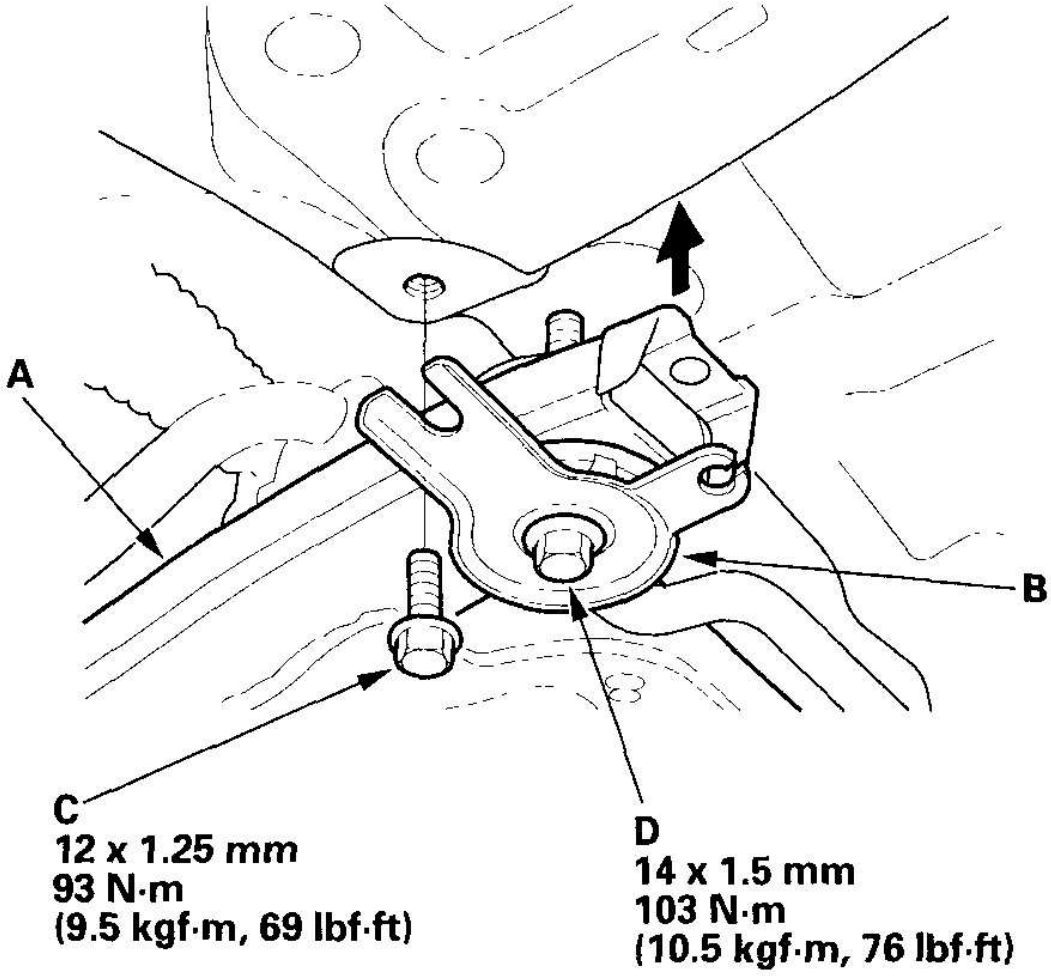


Fig. 130: Raising Jack Supporting Front Suspension Subframe With Special Tool Until Subframe Is In Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Install the front suspension subframe rear bracket (B) mounting bolt (C), then tighten new subframe mounting bolt (D) to the specified torque.
19. Install the front suspension subframe left middle mount (A).

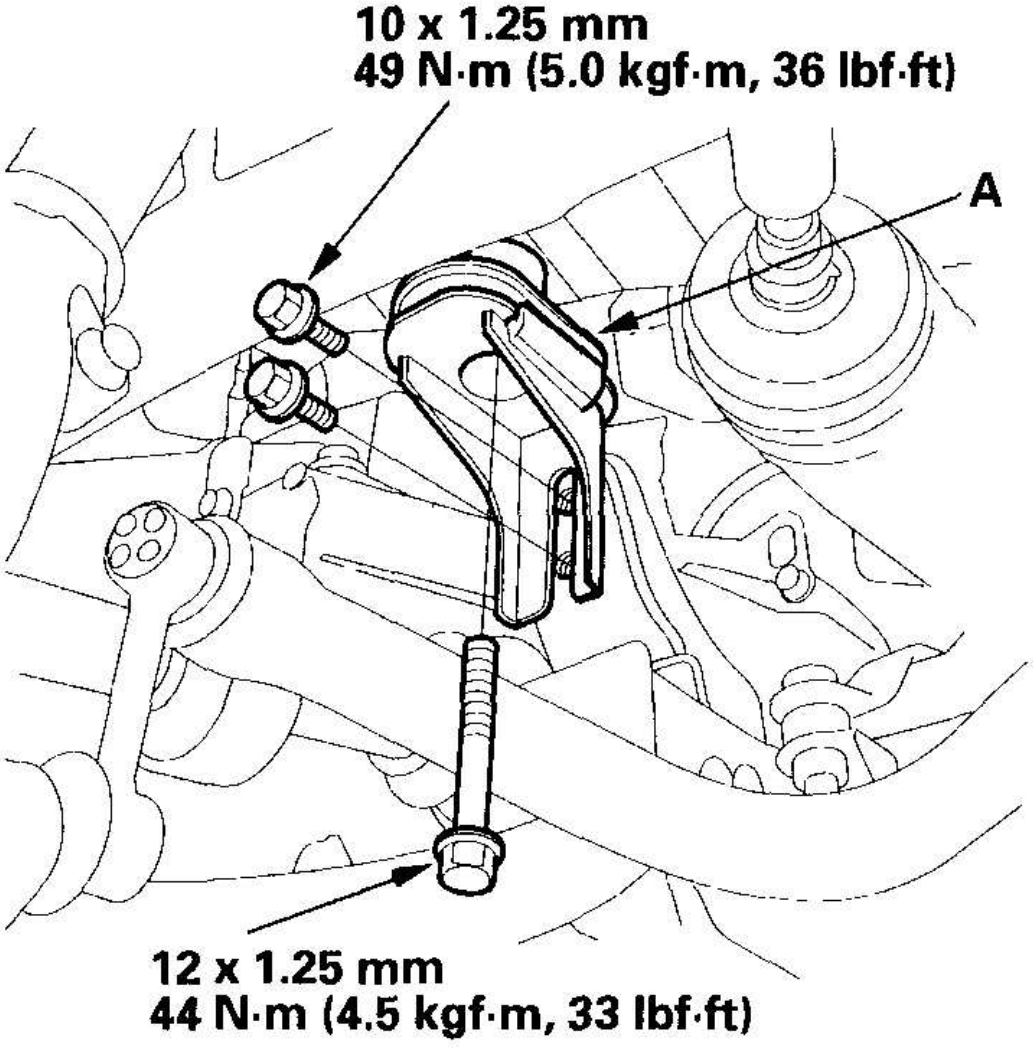


Fig. 131: Installing Front Suspension Subframe Left Middle Mount
Courtesy of AMERICAN HONDA MOTOR CO., INC.

20. Install the front suspension subframe right middle mount bolts (A).

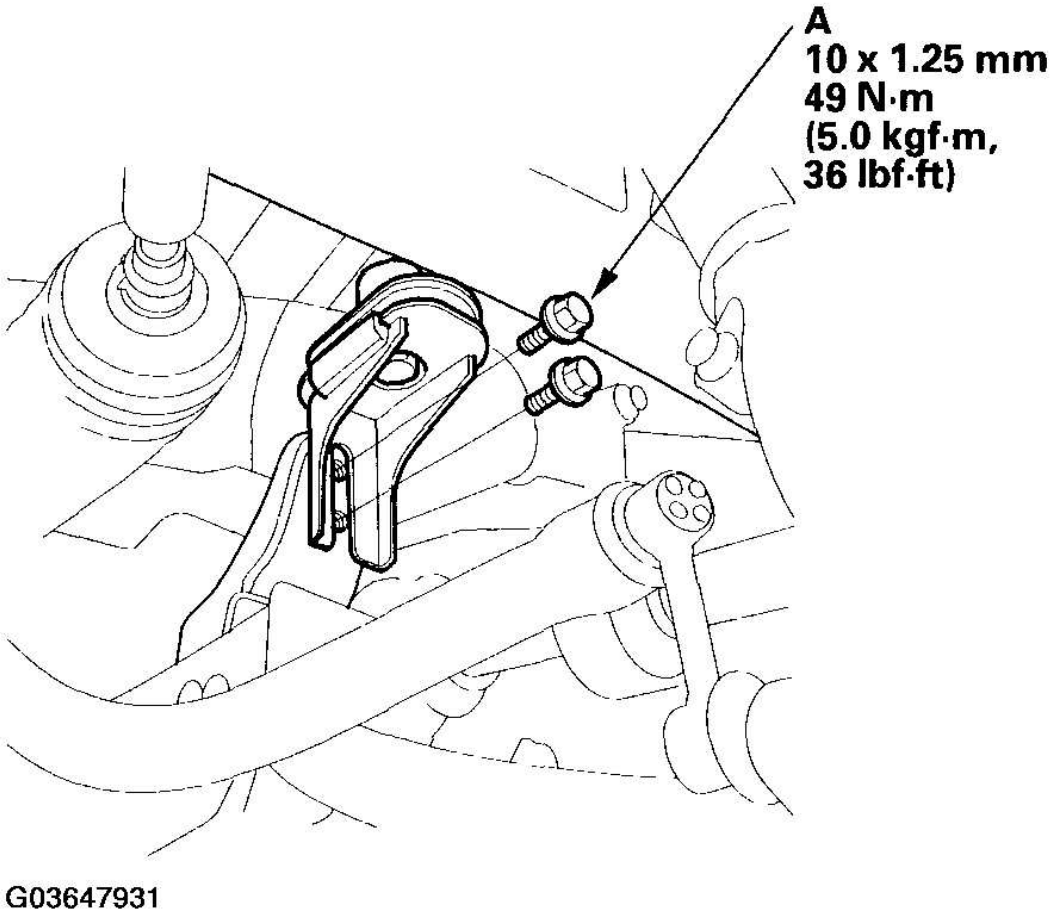


Fig. 132: Installing Front Suspension Subframe Right Middle Mount Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

21. Install the P/S heat baffle plate (A).

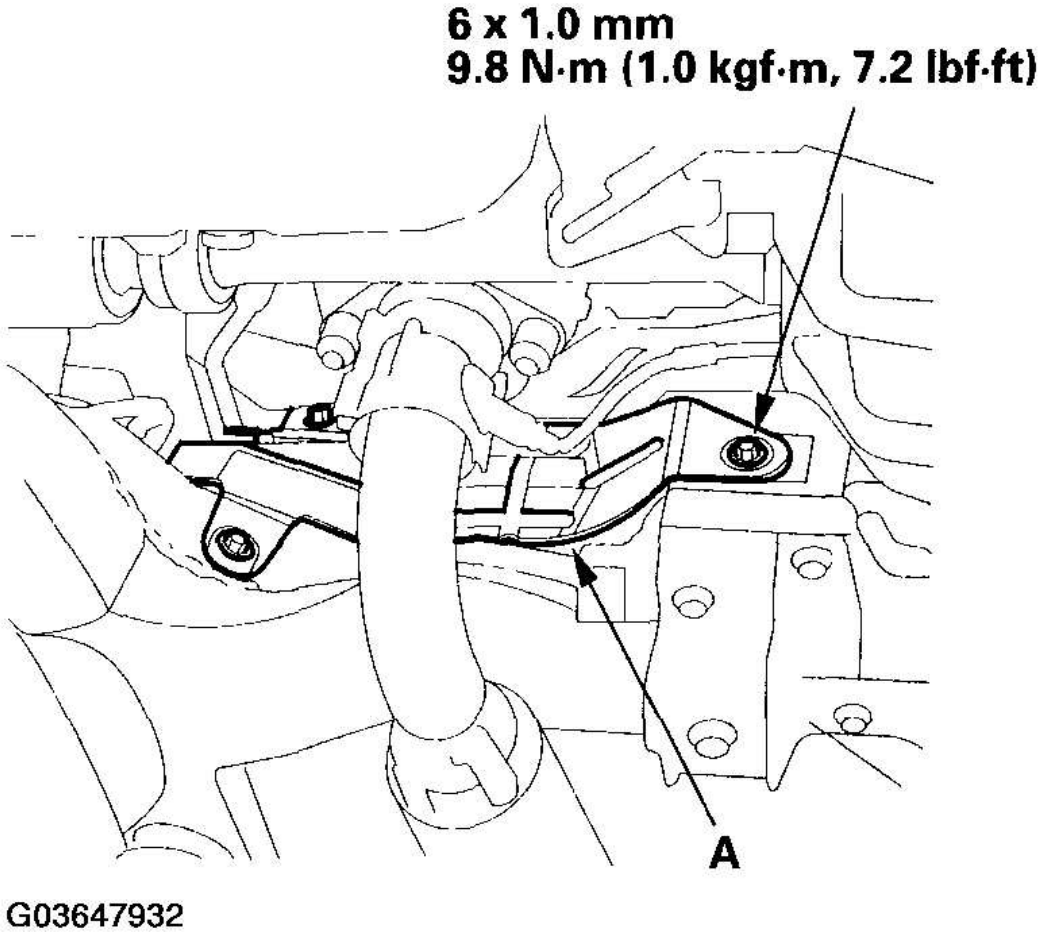


Fig. 133: Installing P/S Heat Baffle Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Wipe off any grease from the ball joint tapered section and threads. Then reconnect the tie-rod end (A) to the knuckle arms.

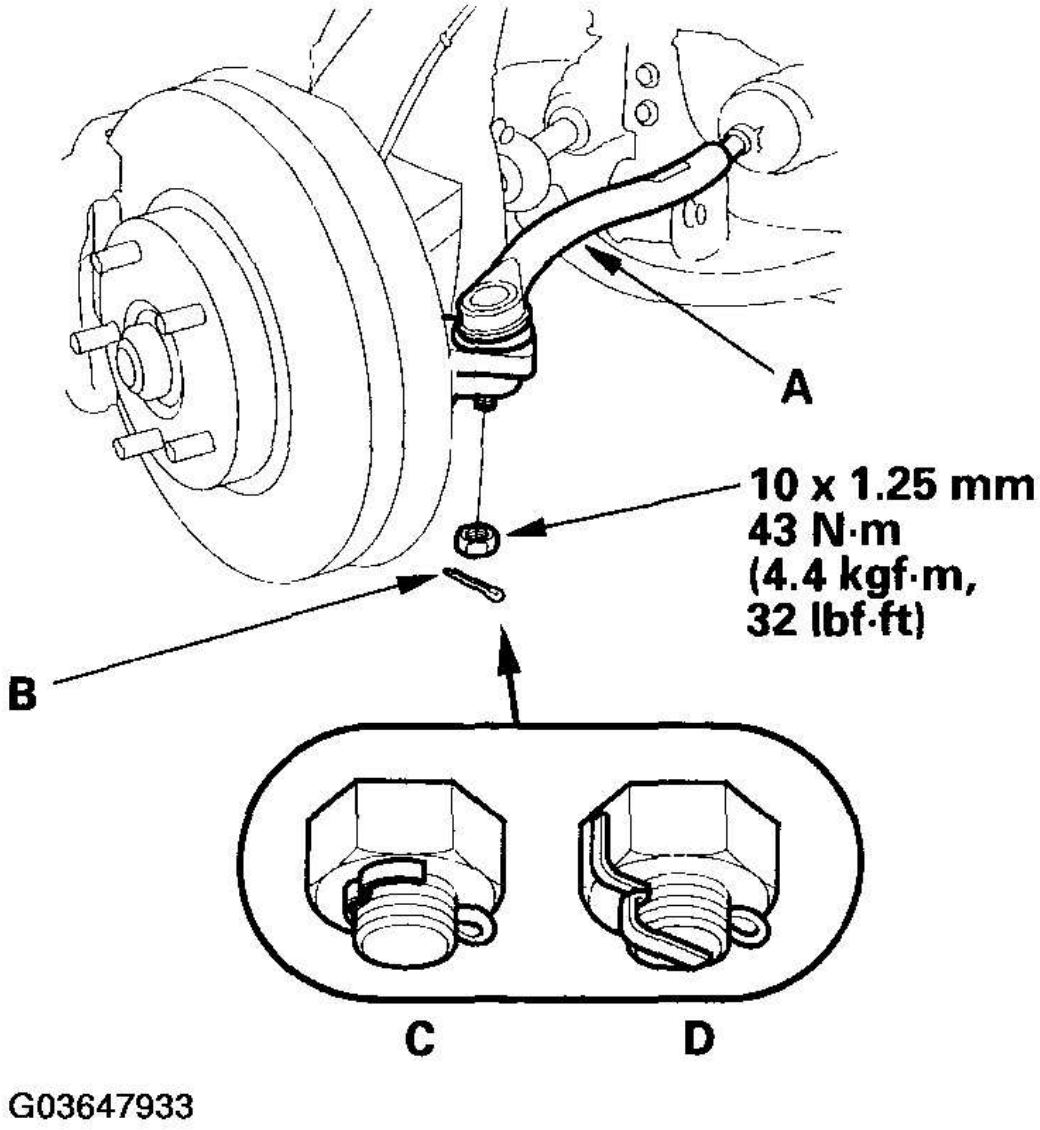


Fig. 134: Reconnecting Tie-Rod End To Knuckle Arms
Courtesy of AMERICAN HONDA MOTOR CO., INC.

23. Install the tie-rod end ball joint nut, and tighten it to the specified torque. Then install the new cotter pin (B), and bend it as shown in **Fig. 134** (C) or (D).
24. Install the new cover seal (A) all the way around in the steering joint cover B. Make sure there are no wrinkles in the seal, then install the steering joint cover

B.

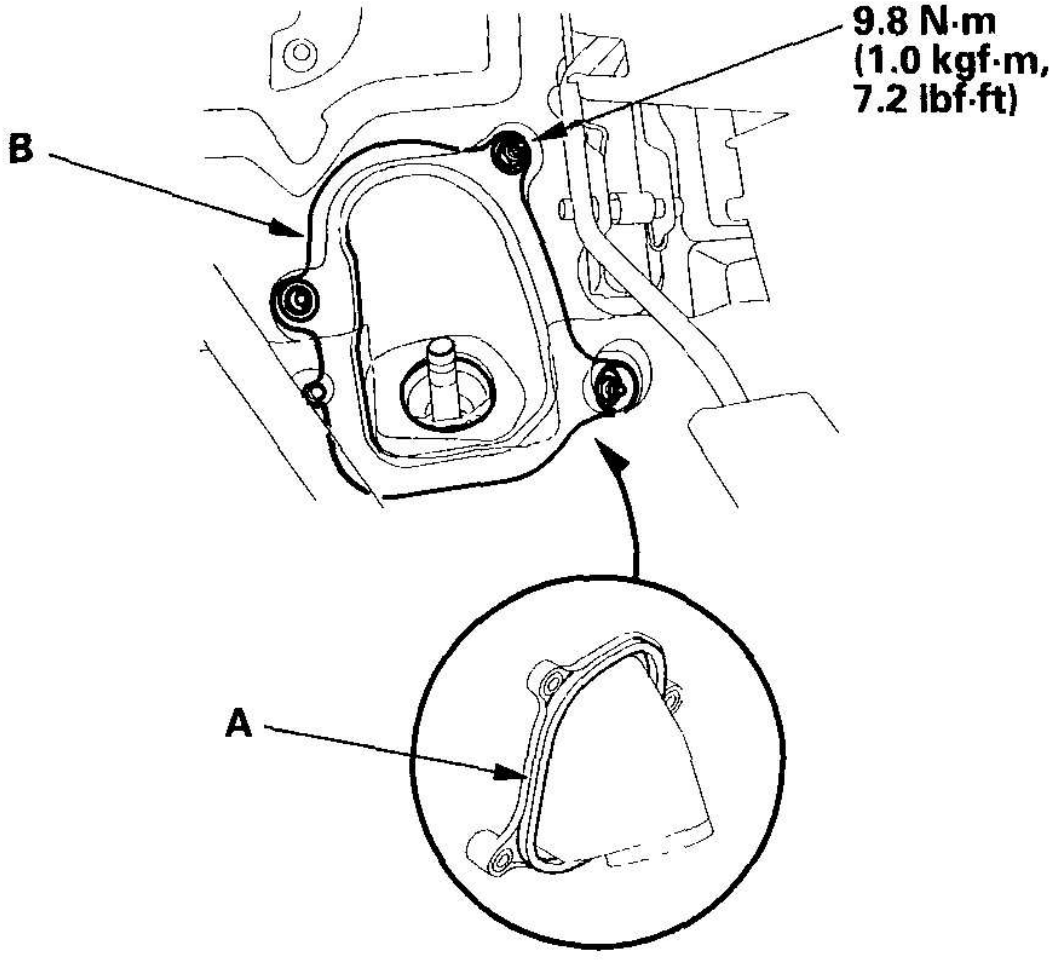


Fig. 135: Installing Cover Seal All Way Around In Steering Joint Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

25. Center the steering rack within its stroke.
26. Position the steering column joint (A) so the bolt (B) opposite to the notch (C) is within the range shown in **Fig. 136**.

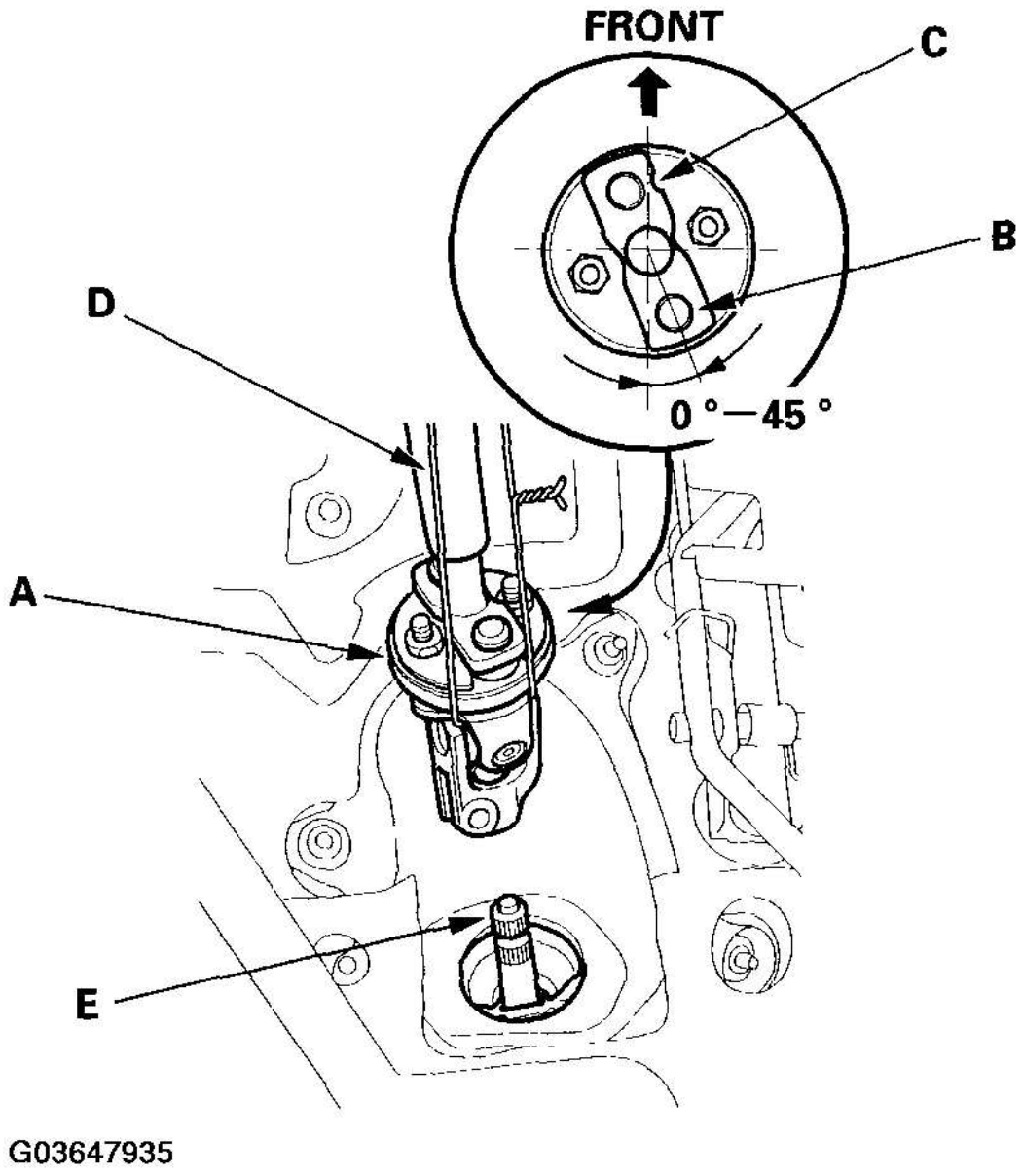


Fig. 136: Positioning Steering Column Joint So Bolt Opposite To Notch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

27. With the rack in the straight ahead driving position, cut the wire (D) and slip the lower end of the steering joint on to pinion shaft (E).
28. Align the bolt hole (A) on the steering joint with the groove (B) around the

pinion shaft, and loosely install the joint bolt (C). Make sure the joint bolt is securely in the groove in the pinion shaft. Pull on the steering joint to make sure the steering joint is fully seated.

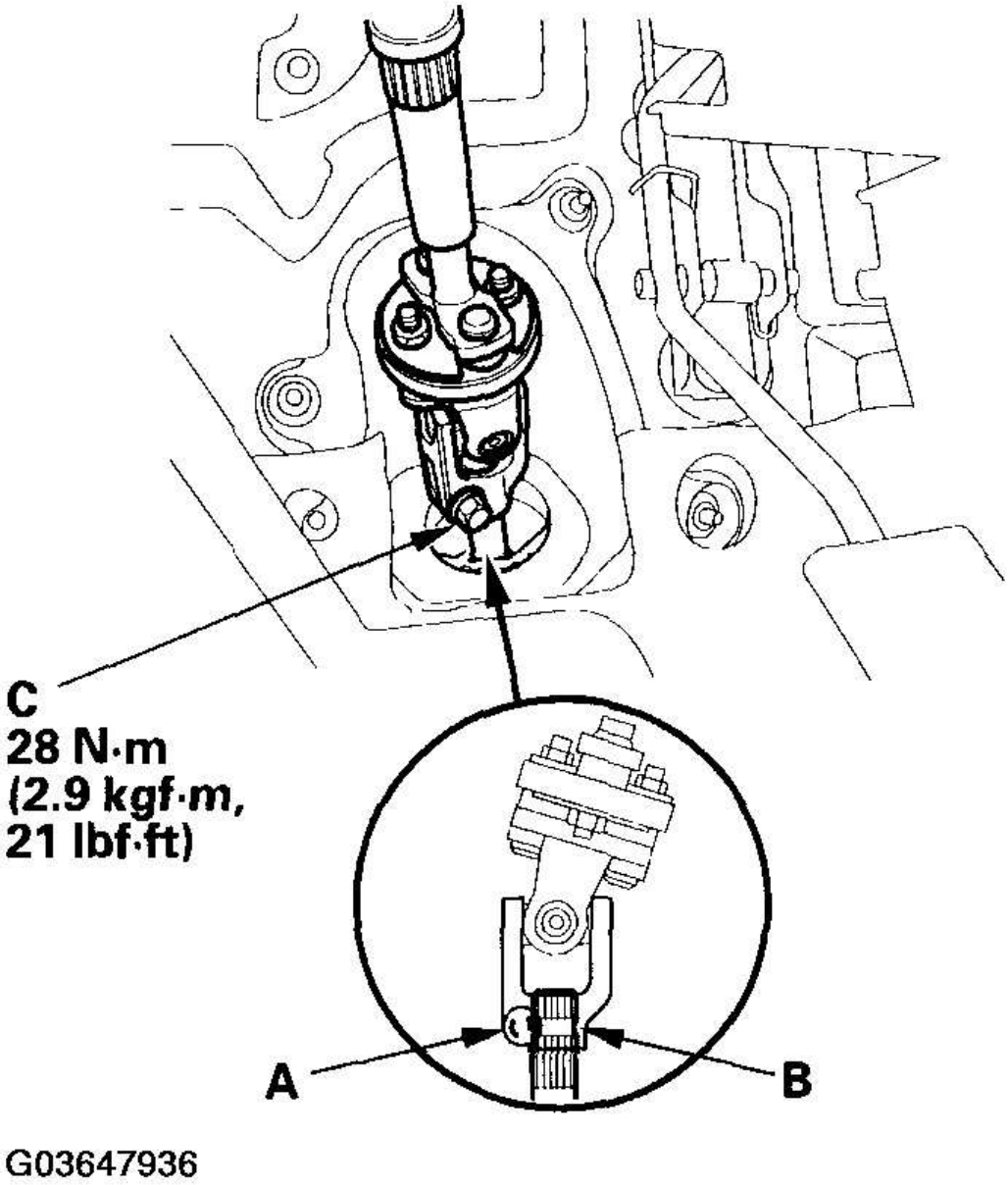


Fig. 137: Aligning Bolt Hole On Steering Joint With Groove Around Pinion Shaft

Courtesy of AMERICAN HONDA MOTOR CO., INC.

29. Tighten the steering joint bolt to the specified torque.
30. Install the steering joint cover A.

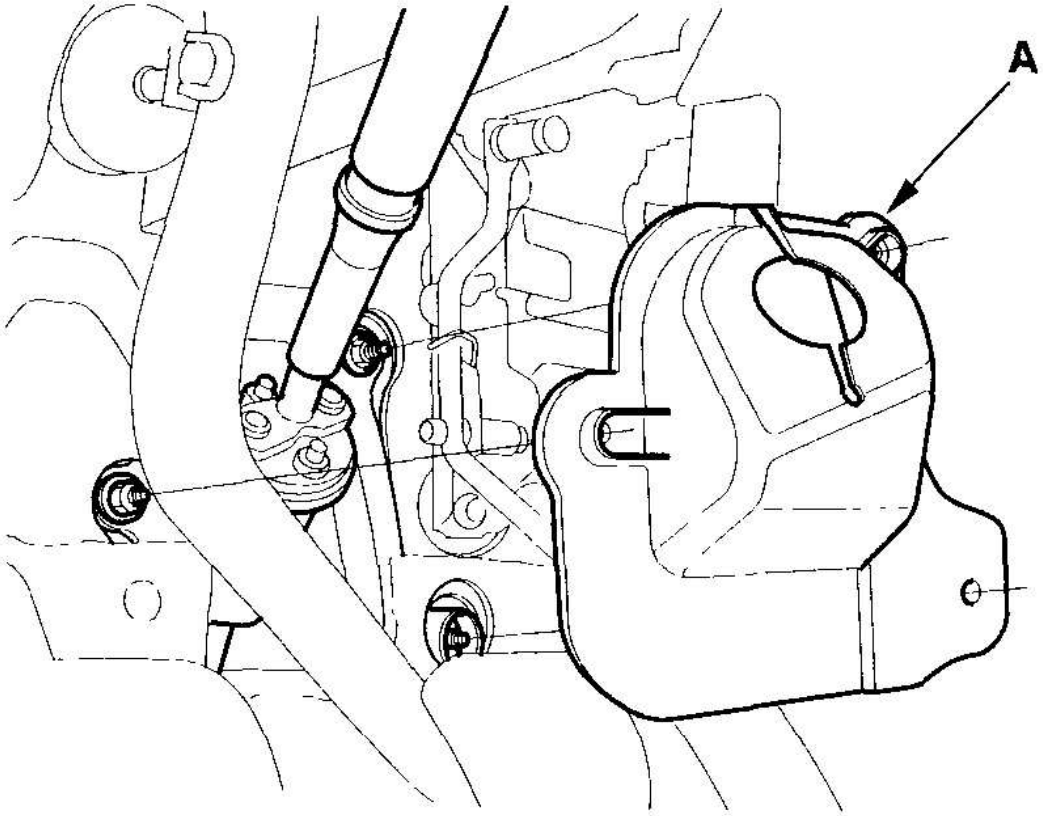


Fig. 138: Installing Steering Joint Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

31. Install the front wheels, then set the wheels in the straight ahead position.
32. Center the cable reel by first rotating it clockwise until it stops. Then rotate it counterclockwise (about three full turns) until the arrow mark on the label points straight up. Reinstall the steering wheel (see **STEERING WHEEL INSTALLATION**).

33. Fill the system with power steering fluid, and bleed air from the system (see **FLUID REPLACEMENT**).
34. After installation, do the following checks.
    - Start the engine, allow it to idle, and turn the steering wheel from lock-to-lock several times to warm up to the fluid. Check the gearbox for leaks (see **FLUID LEAKAGE INSPECTION**).
    - Do the front toe inspection (see **WHEEL ALIGNMENT**).
    - Check the steering wheel spoke angle. If steering spoke angles to the right and left are not equal (steering wheel and rack are not centered), correct the engagement of the joint/pinion shaft serrations, and repeat step 31. Then adjust the front toe by turning the tie-rod ends, if necessary.

TIE-ROD BALL JOINT BOOT REPLACEMENT

Special Tools Required

Front hub dis/assembly tool 07965-SA50500

1. Remove the boot from the tie-rod end, and wipe the old grease off the ball pin.
2. Pack the lower area of the ball pin (A) with fresh multipurpose grease.

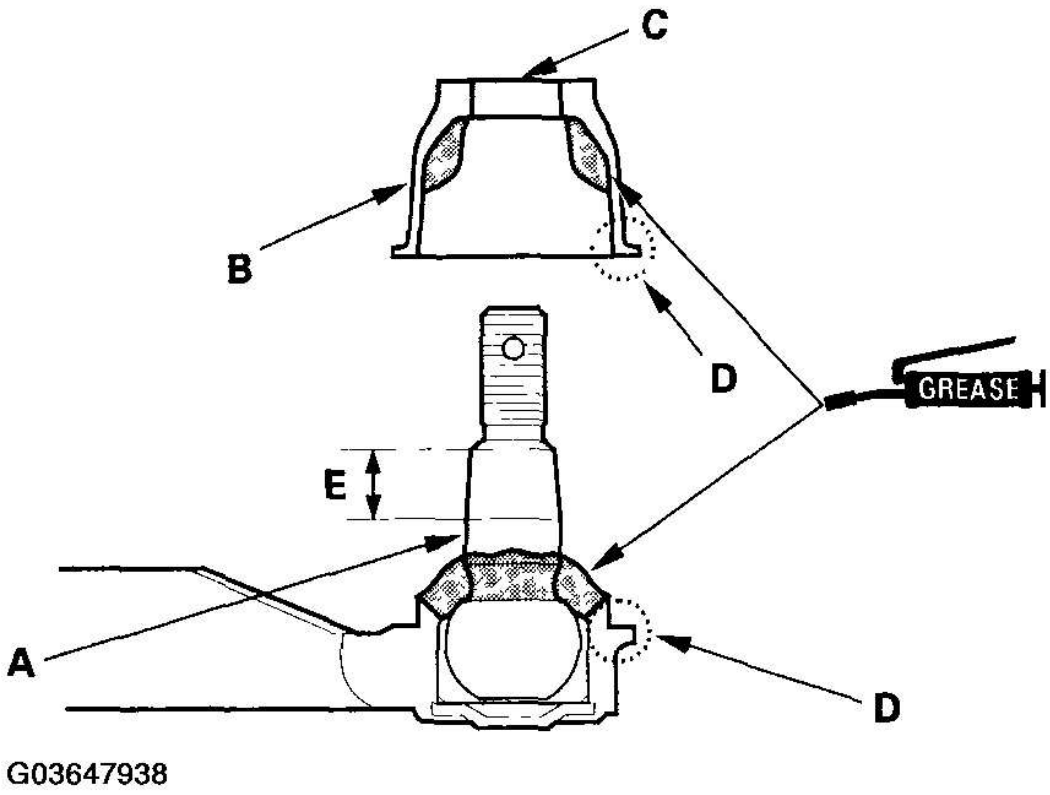


Fig. 139: Packing Lower Area Of Ball Pin With Fresh Multipurpose Grease
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Pack the interior of the new boot (B) and lip (C) with fresh multipurpose grease.

   Note these items when installing new grease:

   - Keep grease off the boot mounting area (D) and the tapered section (E) of the ball pin.
   - Do not allow dust, dirt, or other foreign materials to enter the boot.

4. Install the new boot (A) using the special tool. The boot must not have a gap at the boot installation sections (B). After installing the boot, check the ball pin tapered section for grease contamination, and wipe it if necessary.

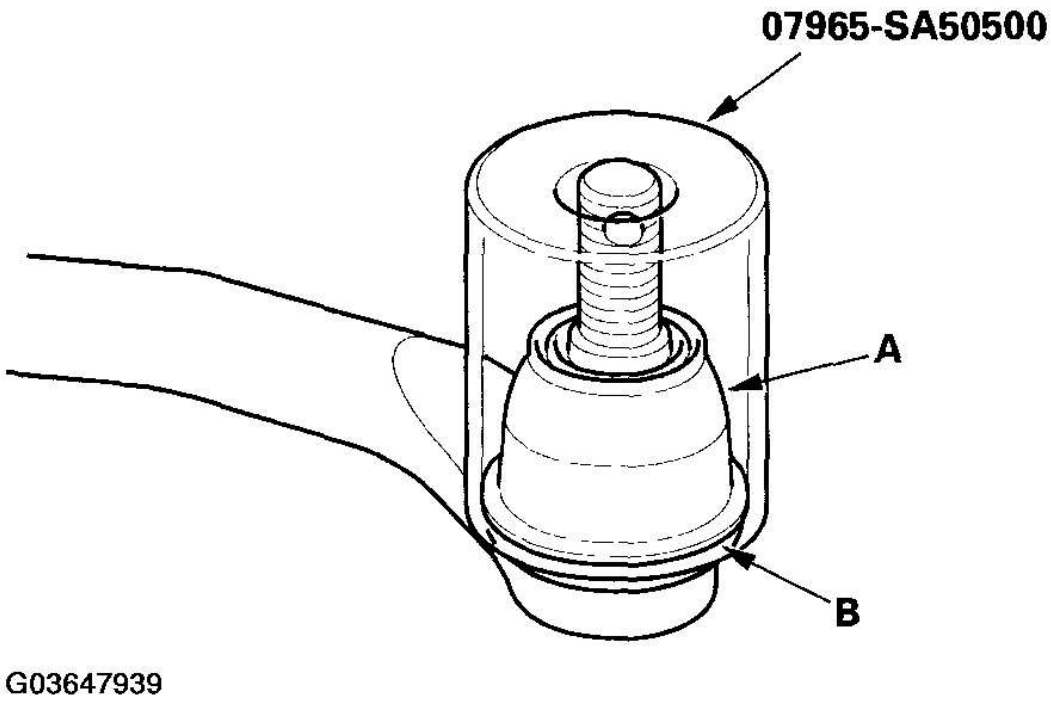


Fig. 140: Installing Boot Using Special Tool
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GEARBOX MOUNT CUSHION REPLACEMENT

1. Remove the steering gearbox (see **STEERING GEARBOX REMOVAL**).
2. Position the 34 mm socket wrench (A) on the flange part of the gearbox housing with a washer (B), 10 x 105 mm flange bolt (C) and the 10 mm nut (D) as shown in **Fig. 141**.

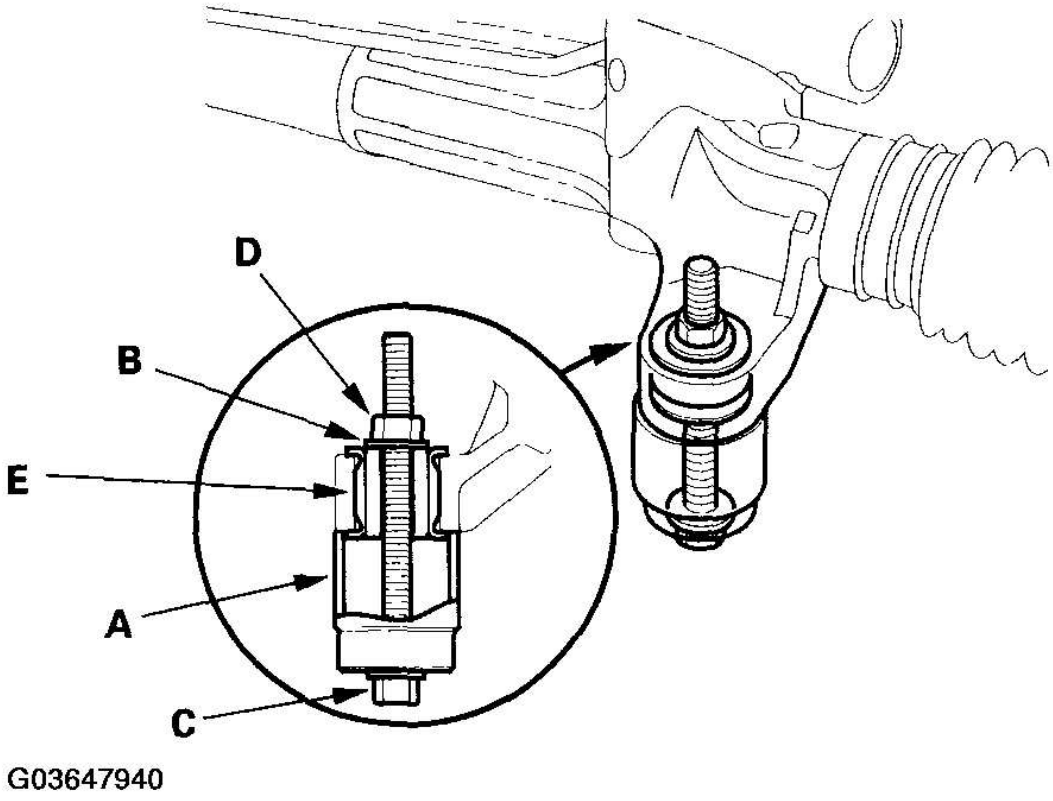


Fig. 141: Positioning Socket Wrench On Flange Part Of Gearbox Housing With Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Hold the flange bolt with a wrench, and tighten the nut with a wrench. Remove the gearbox mount cushion (E).
4. Apply a mild soap and water solution to the new gearbox mount cushion surface (A), then place it on the gearbox mounting cushion hole.

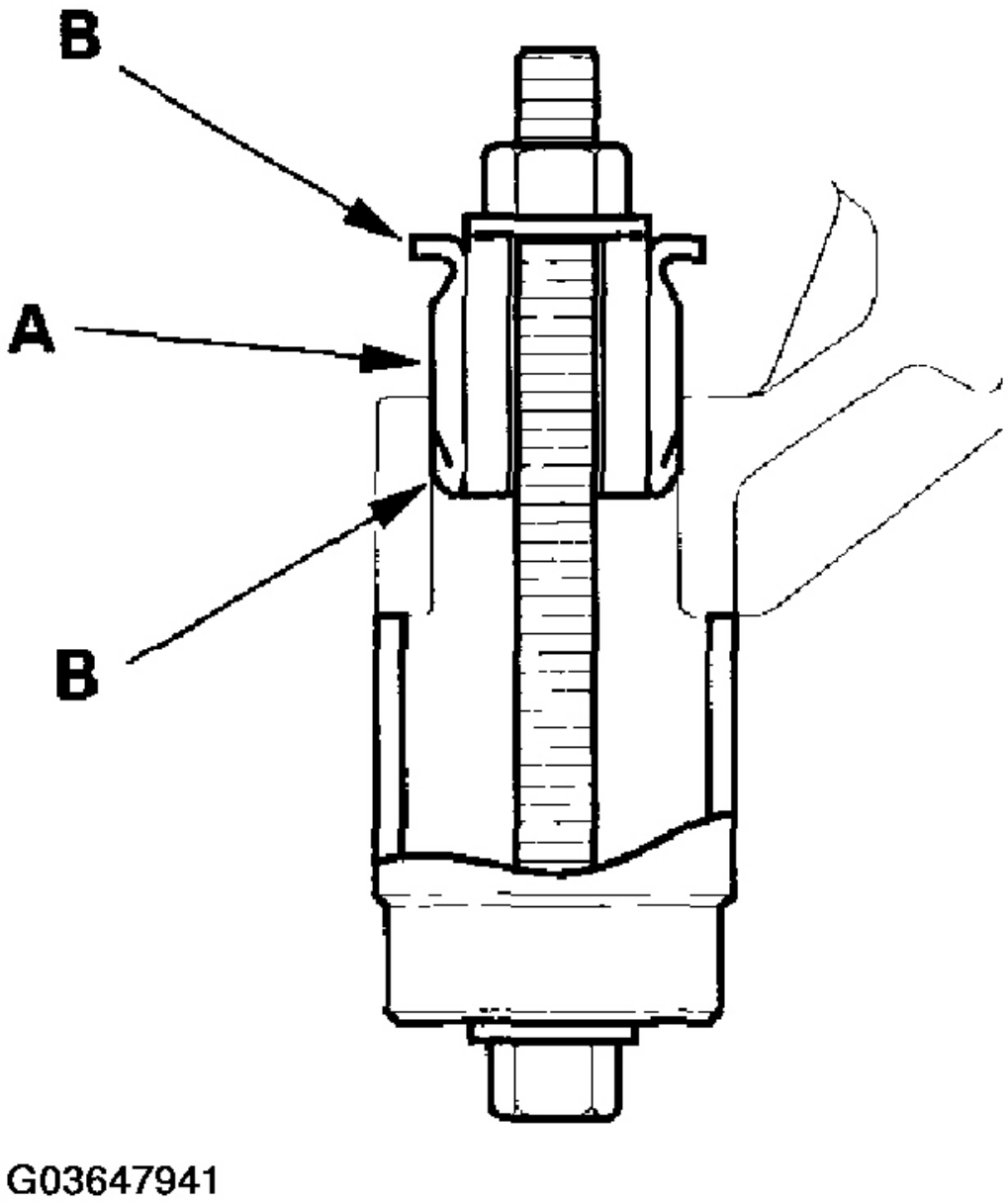


Fig. 142: Applying Mild Soap And Water Solution To Gearbox Mount Cushion Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Position the 34 mm socket wrench on the flange part of the gearbox housing

with a washer, flange bolt, and the nut as shown in **Fig. 142**.

6. Install the gearbox mount cushion by tightening the nut until the mount cushion edges (B) properly fit on the gearbox flange surface.

2003-07 ACCESSORIES & EQUIPMENT

Power Windows - Accord

COMPONENT LOCATION INDEX

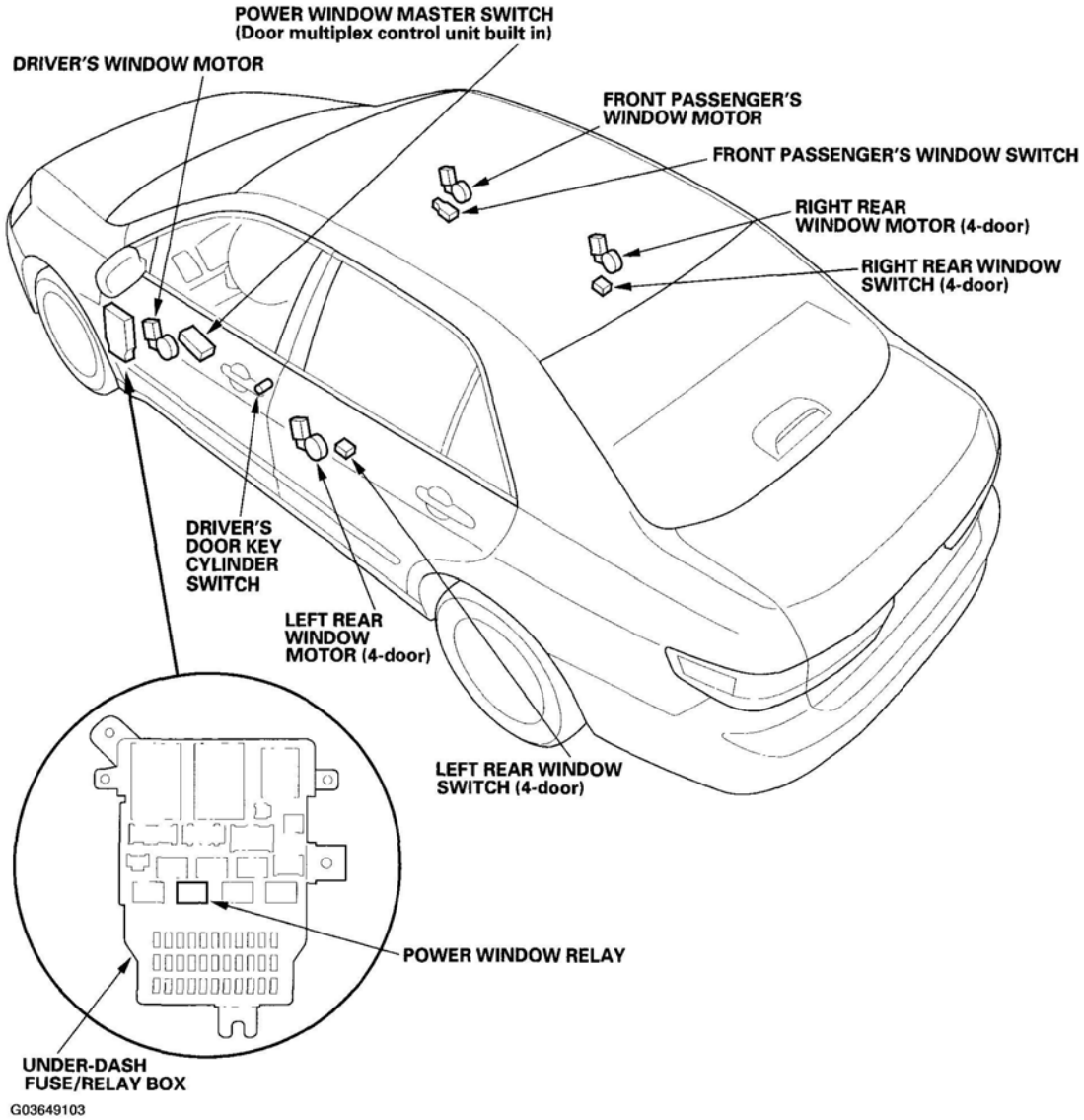


Fig. 1: Locating Power Windows Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYSTEM DESCRIPTION

KEY CYLINDER OPERATION

With the key inserted in the driver's door key cylinder, turn the key a second time and hold within 10 seconds to operate the windows (clockwise to open, counterclockwise to close). The windows stop moving when the key is released.

NOTE: Anti-trap will not work when door key cylinder switch is used to close the windows.

KEYLESS OPERATION

By pressing the UNLOCK button of the keyless transmitter a second time and holding, the windows open. The windows stop moving when the UNLOCK button is released. The windows do not close with the LOCK button.

ANTI-TRAP POWER WINDOW OPERATION

The system is composed of the power window master switch, the power window master switch and the driver's window motor. The power window motor incorporates a pulser which generates pulses during the motor's operation and sends the pulses to the power window control unit. As soon as the power window master switch detects no pulses from the pulser, the control unit makes the power window motor stop and reverse. This is to prevent pinching your hand or fingers during auto-up operation.

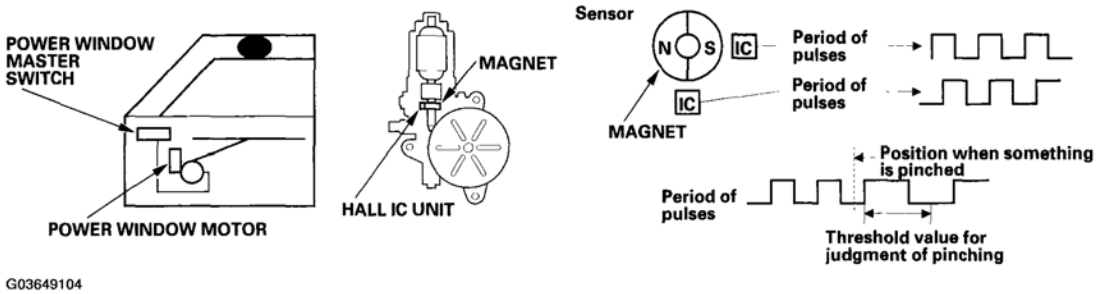


Fig. 2: Identifying Anti-Trap Power Window Operation
Courtesy of AMERICAN HONDA MOTOR CO., INC.

RESETTING THE POWER WINDOW CONTROL UNIT

RESETTING THE POWER WINDOW IS REQUIRED WHEN ANY OF THE FOLLOWING HAVE BEEN REMOVED OR REPAIRED

- Power window regulator
- Power window motor
- Window run channel
- Door glass

Using the HDS

1. Connect the Honda Diagnostic System (HDS) to the vehicle's DLC.
2. Turn the ignition switch ON (II), then enter the vehicle's VIN and mileage at the prompts.
3. Select Body Electrical from the System Selection menu.
4. From the Body Electrical System Select menu, select Power Windows.
5. From the Mode menu, select Adjustments.
6. From the Adjustment menu, select Window P Reset.
7. Follow the prompts on the screen.
8. Confirm that the power window master switch is reset by using the driver's window AUTO UP and DOWN function.

RESETTING THE POWER WINDOW

Without the HDS

1. Turn the ignition switch ON (II).
2. Move the driver's window all the way down by using the driver's window DOWN switch.
3. Open the driver's door.

NOTE: steps 4 - 7 must be done within 5 seconds of each other.

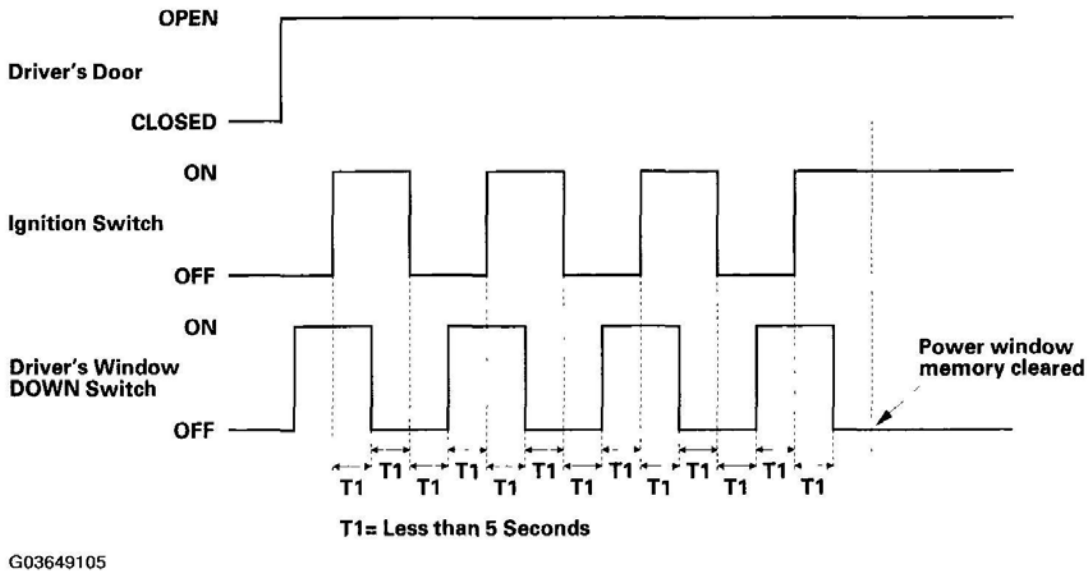


Fig. 3: Resetting Power Window - Without HDS
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Turn the ignition switch OFF.
5. Push and hold the driver's window DOWN switch.
6. Turn the ignition switch ON (II).
7. Release the driver's window DOWN switch.
8. Repeat steps 4 - 7 three more times.
9. Wait 1 second.
10. Confirm that AUTO UP and AUTO DOWN do not work. If AUTO UP and DOWN work, go back to step 1.
11. Move the driver's window all the way down by holding the driver's window DOWN switch to the AUTO DOWN position.
12. Pull up and hold the driver's window UP switch to the AUTO UP position until the window reaches the fully closed position, then continue to hold the switch for 1 second.
13. Confirm that the power window master switch is reset by using the driver's window AUTO UP and DOWN function.

    If the window still does not work in AUTO, repeat the procedure several times,

paying close attention to the 5 second time limit between steps. If it still does not work, go to B-CAN System Diagnosis Test Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

CIRCUIT DIAGRAM

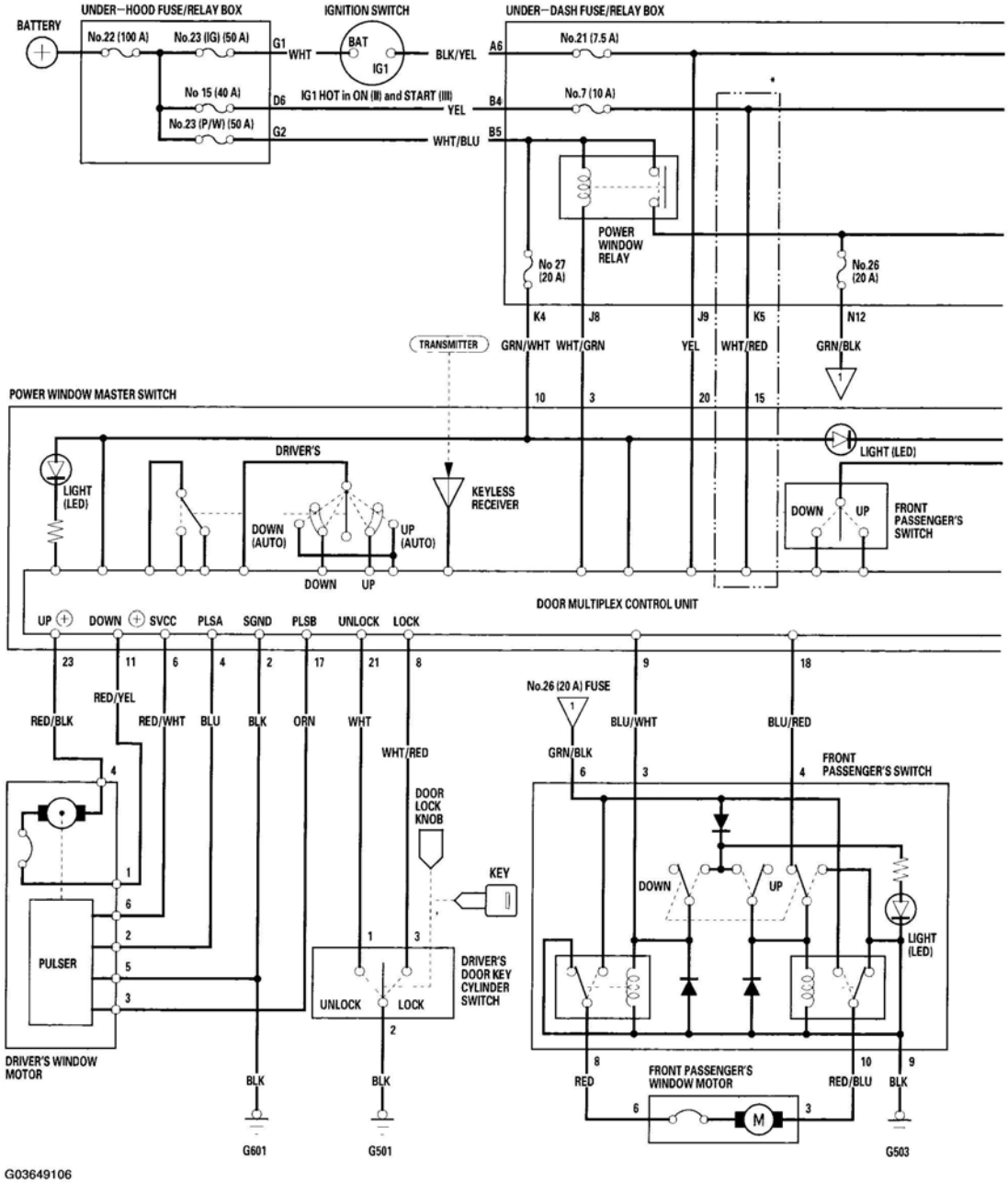
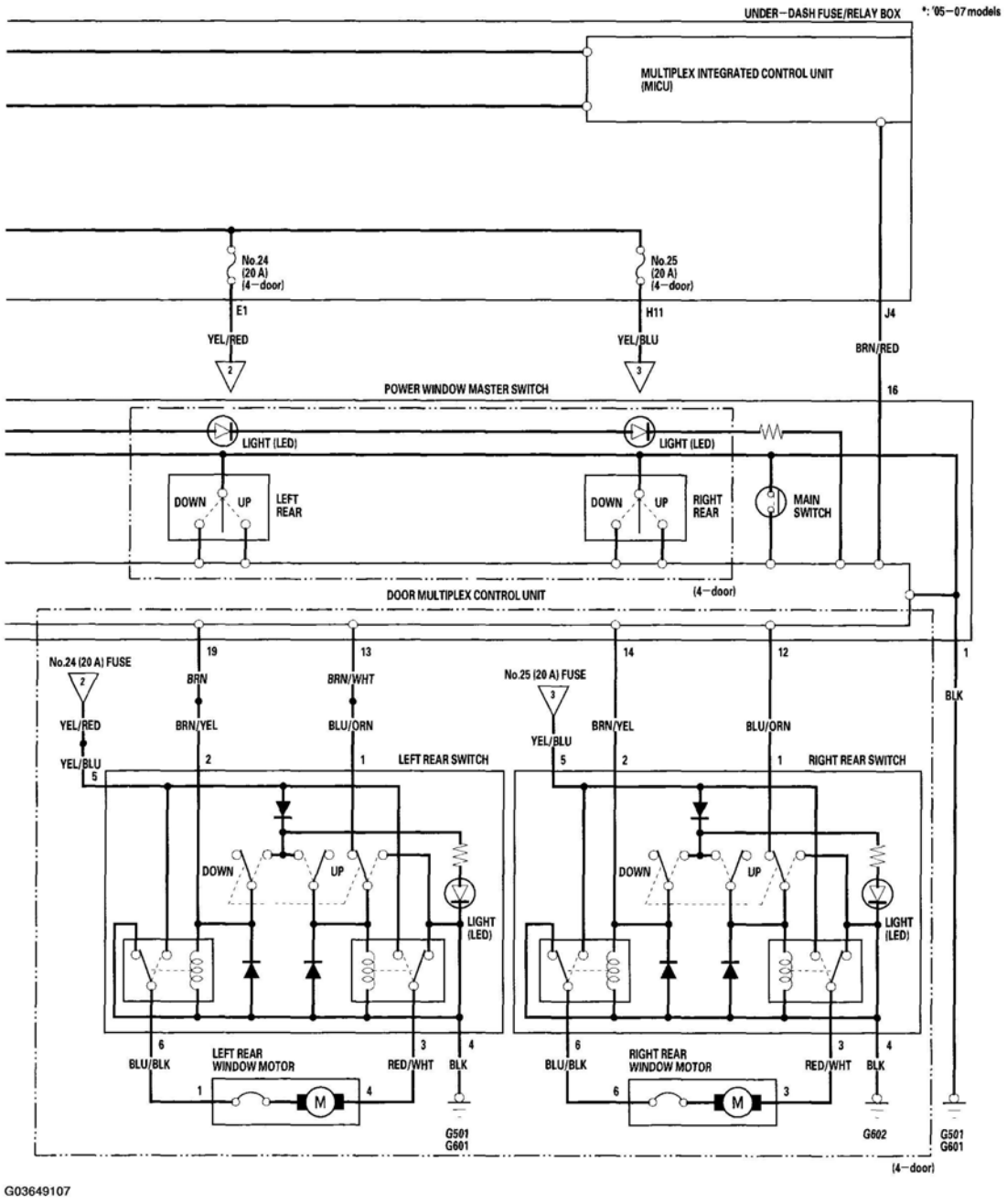


Fig. 4: Power Window Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G03649107

Fig. 5: Power Window Circuit Diagram (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MASTER SWITCH INPUT TEST

1. Before testing the power windows, troubleshoot the multiplex integrated control system using B-CAN System Diagnosis Test Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).
2. Remove the driver's door switch trim.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
3. Disconnect the 23P connector (A) from the power window switch (B).

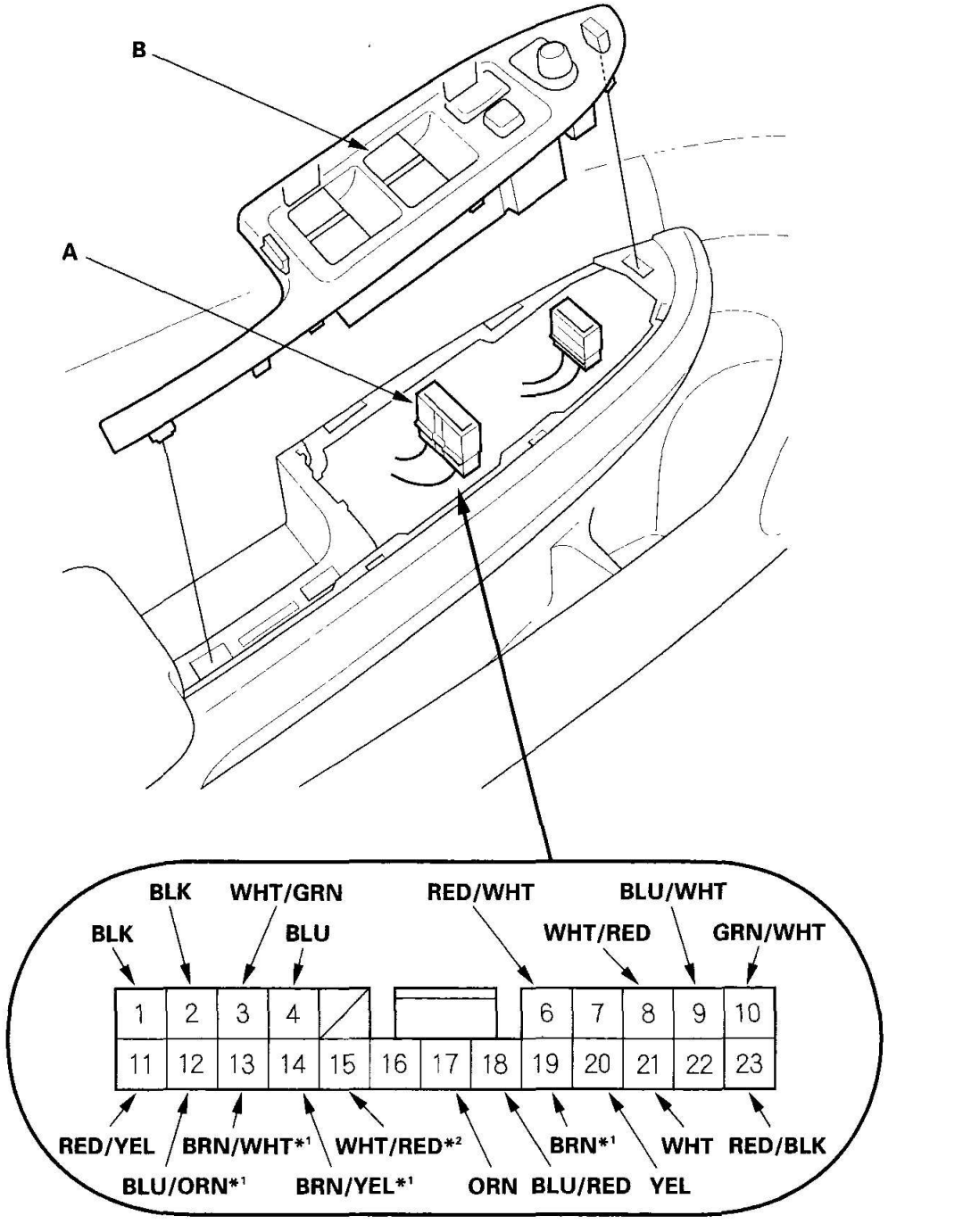


Fig. 6: Disconnecting 23P Connector From Power Window Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Inspect the connector and socket terminals to be sure they are all making good contact.
   - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
   - If the terminals look OK, go to step 5.
5. Reconnect the 23P connector to the switch.
6. Turn the ignition switch to ON (II) to keep the system awake and perform the following input tests.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 7.

MASTER SWITCH TROUBLESHOOTING

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
6	RED/WHT	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Faulty power window master switch • Short to ground in the wire
2	BLK	Under all conditions	Check for voltage to ground: There should be 1 V or less.	• Faulty power window master switch • Poor ground (G601)
				• Blown No.

10	GRN/WHT	Under all conditions	Check for voltage to ground: There should be battery voltage.	23 (P/W) (50 A) fuse in the under-hood fuse/relay box • Blown No. 27 (20 A) fuse in the under-dash fuse/relay box • Faulty under-dash fuse/relay box • An open in the wire
20	YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Blown No. 21 (7.5 A) fuse in the under-dash fuse/relay box • Faulty under-dash fuse/relay box • An open in the wire
			Check for	• Blown No. 7 (10 A) fuse in the under-dash

15(1)	WHT/RED	Under all conditions	voltage to ground: There should be battery voltage.	fuse/relay box • Faulty under-dash fuse/relay box • An open in the wire
1	BLK	Under all conditions	Check for voltage to ground: There should be less than 1 V.	• Poor ground (G601) • An open in the wire
4	BLU	Ignition switch ON (II), and the driver's window switch AUTO DOWN	Check for voltage between the No. 4 and No. 2 terminals: There should be 0 V-about 5 V-0 V-about 5 V repeatedly (a digital voltmeter reads about 2.5 V while the window moves).	• Blown No. 21 (7.5 A) fuse in the under-dash fuse/relay box • Blown No. 27 (20 A) fuse in the under-dash fuse/relay box • Faulty power window master switch • Short to
		Ignition switch	Check for voltage between the No. 17 and No. 2 terminals: There should	

17	ORN	ON (II), and the driver's window switch AUTO DOWN	be 0 V-about 5 V-0 V-about 5 V repeatedly (a digital voltmeter reads about 2.5 V while the window moves).	ground in the wire • Faulty driver's window motor
21	WHT	Driver's door key cylinder switch in UNLOCK	Check for voltage to ground: There should be 1 V or less.	• Faulty driver's door key cylinder switch • Poor ground (G501) • An open in the wire
		Driver's door key cylinder switch in neutral	Check for voltage to ground: There should be about 5 V.	• Short to ground • Faulty driver's door key cylinder switch
		Driver's door key cylinder switch in LOCK	Check for voltage to ground: There should be about 5 V.	
		Driver's door key cylinder	Check for voltage to	• Faulty driver's door key cylinder switch

		switch in LOCK	ground: There should be 1 V or less.	• Poor ground (G501) • An open in the wire
8	WHT/RED	Driver's door key cylinder switch in neutral	Check for voltage to ground: There should be about 5 V.	• Short to ground • Faulty driver's door key cylinder switch
		Driver's door key cylinder switch in UNLOCK	Check for voltage to ground: There should be about 5 V.	
(1) '05-06 models				

NOTE: Reference voltage is approximately 5 V when system is awake. The voltage drops to 0.8 V when the system goes into sleep mode.

7. Disconnect the 22P connector from the power window master switch, and make these input tests at the connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, the control unit must be faulty; replace the power window master switch.

MASTER SWITCH TROUBLESHOOTING

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
				• Blown No.

3	WHT/GRN	Under all conditions	Connect terminal No. 3 to ground. Check for voltage at under-dash fuse/relay box No. 26 (20 A) fuse: There should be battery voltage.	23 (P/W) (50 A) fuse in the under-hood fuse/relay box. • Faulty power window relay • Faulty under-dash fuse/relay box • An open in the wire
11	RED/YEL	Connect the No. 10 and No. 11 terminals with a jumper wire, and No. 23 terminal to body ground.	Check the driver's window motor operation: The window should go down.	• Blown No. 27 (20 A) fuse in the under-dash fuse/relay box • Faulty driver's power window motor • An open in the wire
23	RED/BLK	Connect the No. 10 and No. 23 terminals with a jumper wire, and No. 11 terminal to body ground.	Check for driver's window motor operation: The window should go up.	
		Connect the	Check the	• Poor ground (G503)

9	BLU/WHT	No. 10 and No. 9 terminals with a jumper wire, and the No. 3 terminal to body ground.	front passenger's window motor operation: The window should go down.	• Blown No. 26 (20 A) fuse in the under-dash fuse/relay box • Faulty front passenger's power window switch • Faulty front passenger's power window motor • An open in the wire
18	BLU/RED	Connect the No. 10 and No. 18 terminals with a jumper wire, and the No. 3 terminal to body ground.	Check the front passenger's window motor operation: The window should go up.	
13(1)	BRN/WHT	Connect the No. 10 and No. 13 terminals with a jumper wire, and the No. 3 terminal to body ground.	Check the left rear window motor operation: The window should go up.	• Poor ground (G601) • Blown No. 24 (20 A) fuse in the under-dash fuse/relay box • Faulty left rear power window switch • Faulty left rear power window motor
19(1)	BRN	Connect the No. 10 and No. 19 terminals with a jumper wire, and the No. 3	Check the left rear window motor operation: The window should	

		terminal to body ground.	go down.	• An open in the wire
12(1)	BLU/ORN	Connect the No. 10 and No. 12 terminals with a jumper wire, and the No. 3 terminal to body ground.	Check the right rear window motor operation: The window should go up.	• Poor ground (G602) • Blown No. 25 (20 A) fuse in the under-dash fuse/relay box • Faulty right rear power window switch • Faulty right rear power window motor • An open in the wire
14(1)	BRN/YEL	Connect the No. 10 and No. 14 terminals with a jumper wire, and the No. 3 terminal to body ground.	Check the right rear window motor operation: The window should go down.	
(1) 4-door				

DRIVER'S WINDOW MOTOR TEST

MOTOR TEST

1. Remove the driver's door panel.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
2. Disconnect the 6P connector (A) from the window motor.

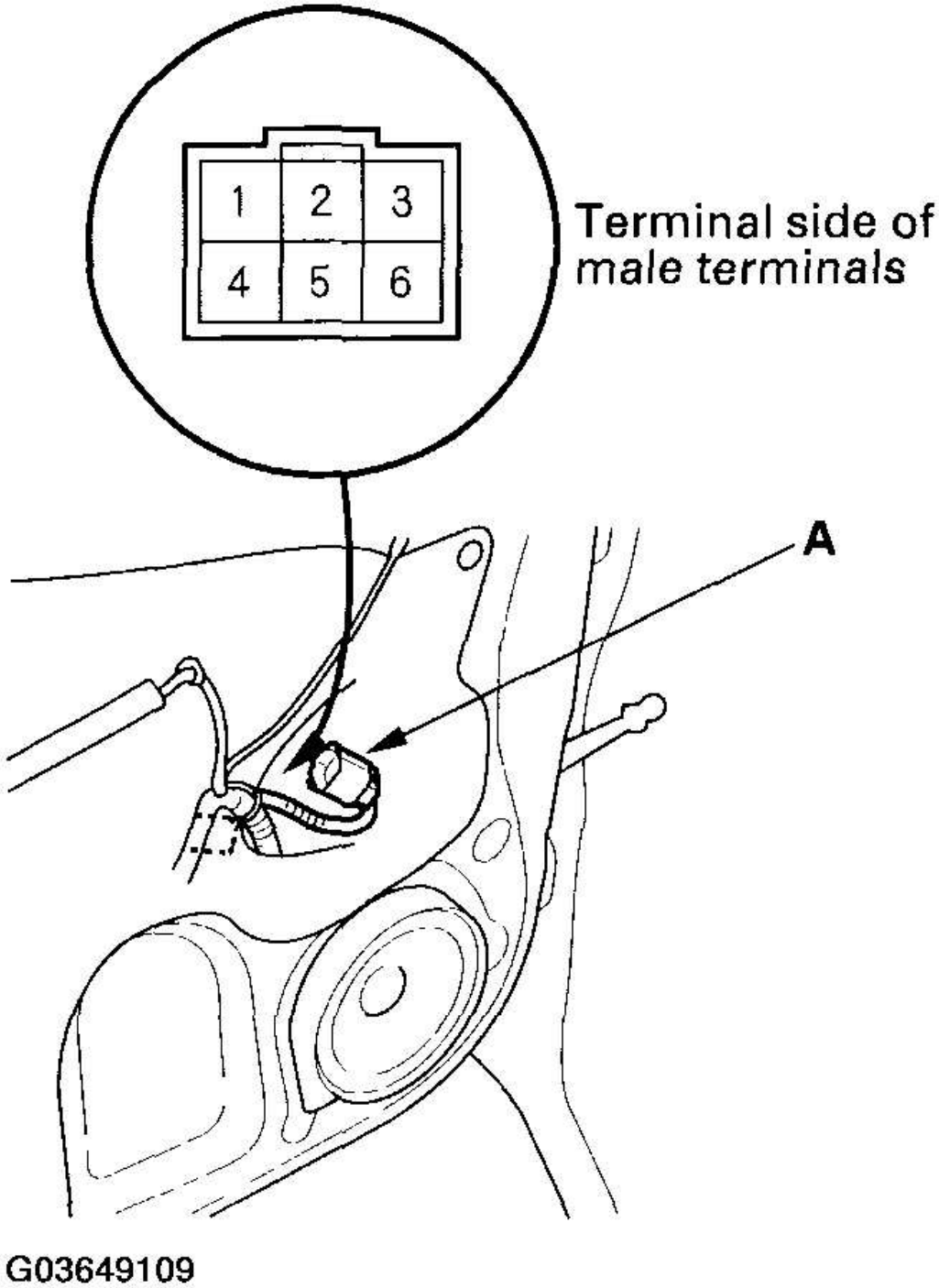
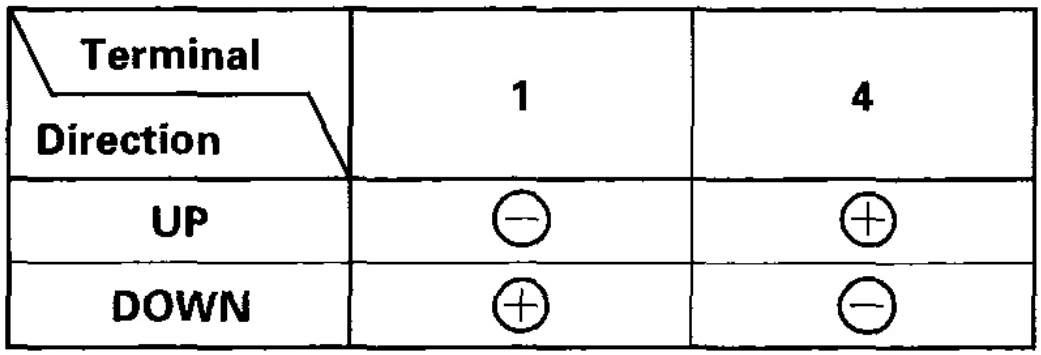


Fig. 7: Disconnecting 6P Connector From Window Motor

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Test the motor in each direction by connecting battery power and ground according to the table shown below. When the motor stops running, disconnect one lead immediately.



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Fig. 8: Connecting Battery Power And Ground Table
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the motor does not run or fails to run smoothly, replace it.

Pulser Test

5. Reconnect the 6P connector to the window motor.
6. Check for voltage between the terminals.
   - There should be battery voltage between the No. 6 (+) and No. 5 (-) terminals when the ignition switch is ON (II).
   - Connect an analog voltmeter between the No. 2 (+) and No. 5 (-) terminals, and run the window motor down or up. The voltmeter needle should move back and forth alternately (a digital voltmeter should show the average voltage between 0-5 V).
   - Connect an analog voltmeter between the No. 3 (+) and No. 5 (-) terminals, and run the window motor at down or up. The voltmeter needle

should move back and forth alternately.

If the voltage is not as specified, replace the driver's window motor.

PASSENGER'S WINDOW MOTOR TEST

1. Remove the passenger's door panel.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
2. Disconnect the 6P connector (A) from the window motor.

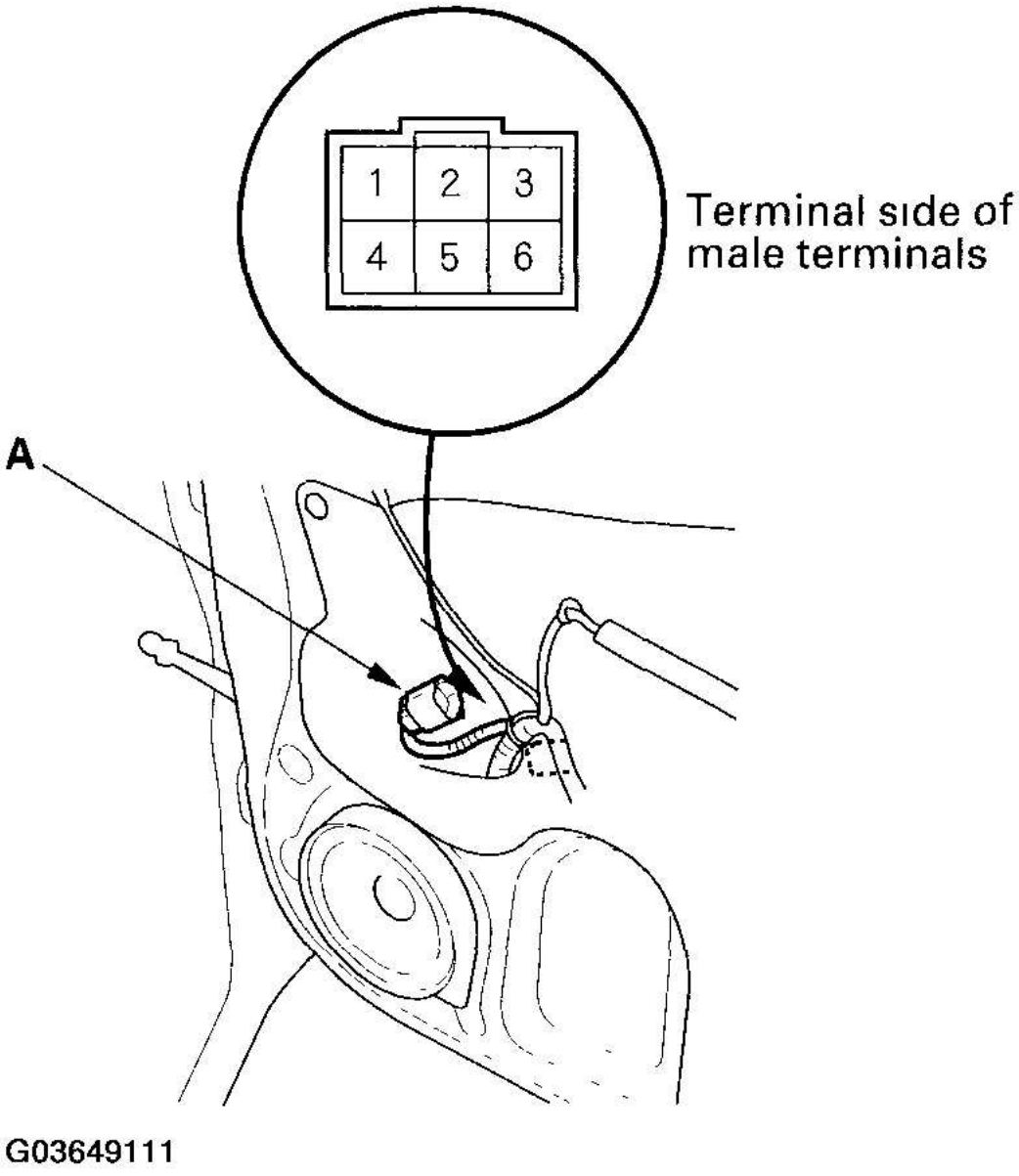
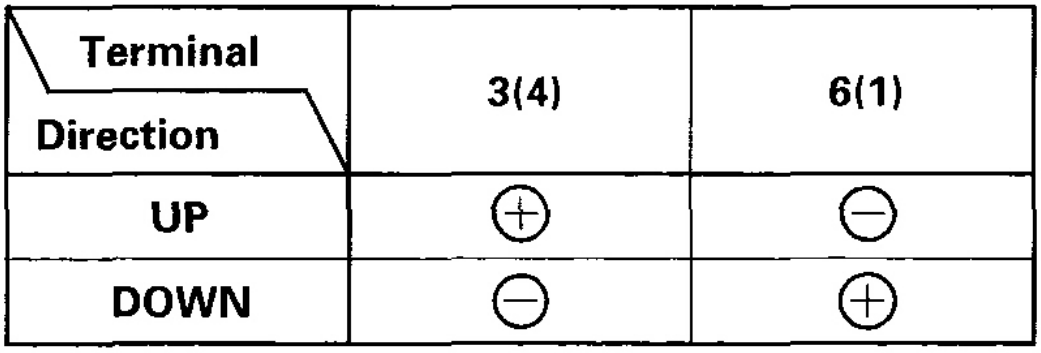


Fig. 9: Disconnecting 6P Connector From Window Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Test the motor by connecting battery power and ground according to the table shown below. When the motor stops running, disconnect one lead immediately.



Terminal / Direction	3(4)	6(1)
UP	⊕	⊖
DOWN	⊖	⊕

( ): Left rear window motor

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Fig. 10: Connecting Battery Power And Battery Table
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the motor does not run or fails to run smoothly, replace it.

MASTER SWITCH REPLACEMENT

1. Carefully pry off the driver's door switch trim.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
2. Disconnect the power mirror and power window switch connectors (A).

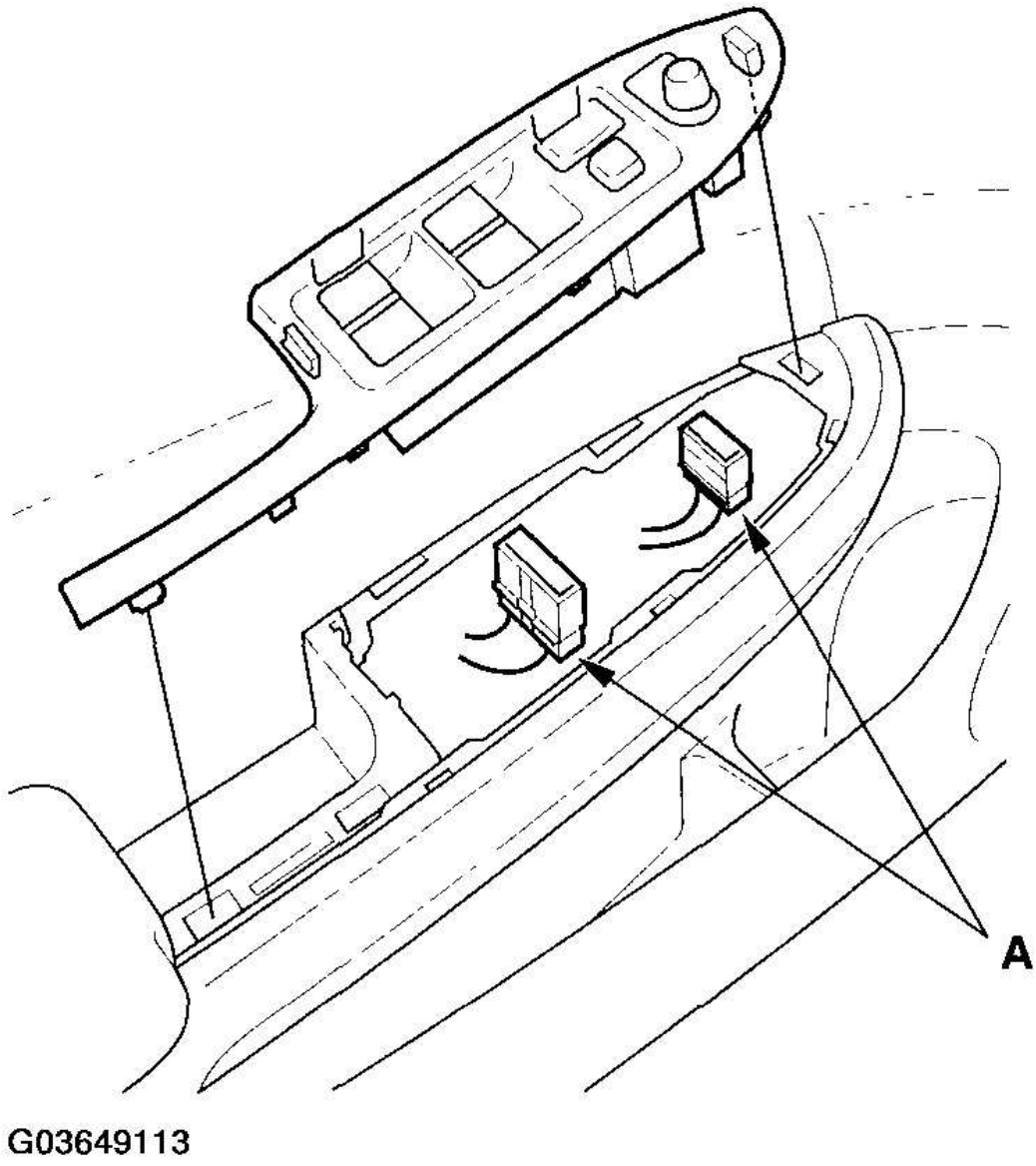
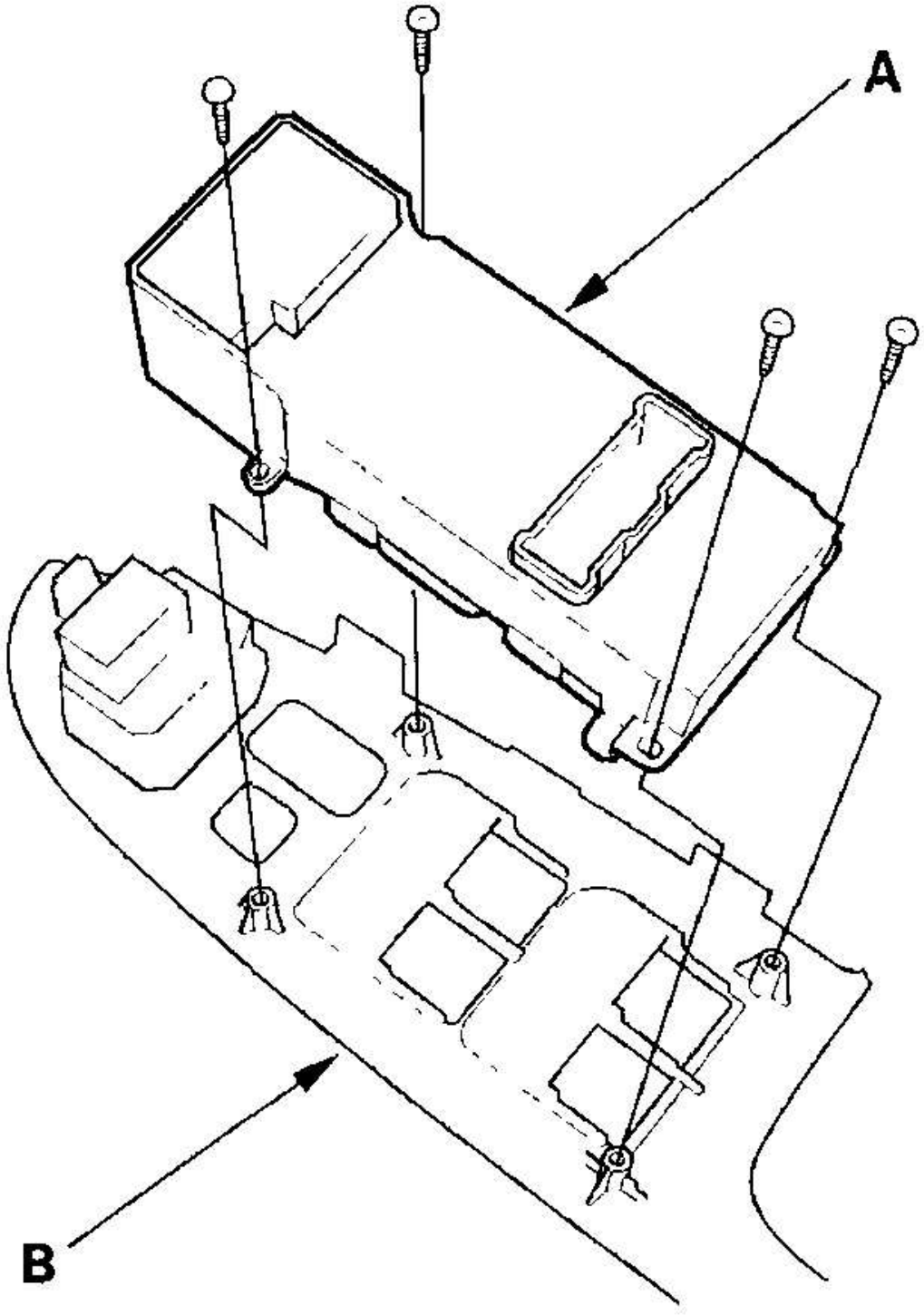


Fig. 11: Disconnecting Power Mirror And Power Window Switch Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the four mounting screws, then remove the master switch (A) from the panel (B).



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Fig. 12: Removing Master Switch From Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Reinstall the switch in reverse order of removal.
5. Reset the power window control unit (see **RESETTING THE POWER WINDOW CONTROL UNIT**).
6. Check for DTCs again using the HDS.).

PASSENGER'S WINDOW SWITCH TEST/REPLACEMENT

1. Carefully pry off the door switch trim.
   - 2-door (see **2-DOOR**)
   - 4-door (see **4-DOOR**)
2. Disconnect the power window switch connector (A), then remove the three mounting screws and the power window switch (B) from the switch trim (C).

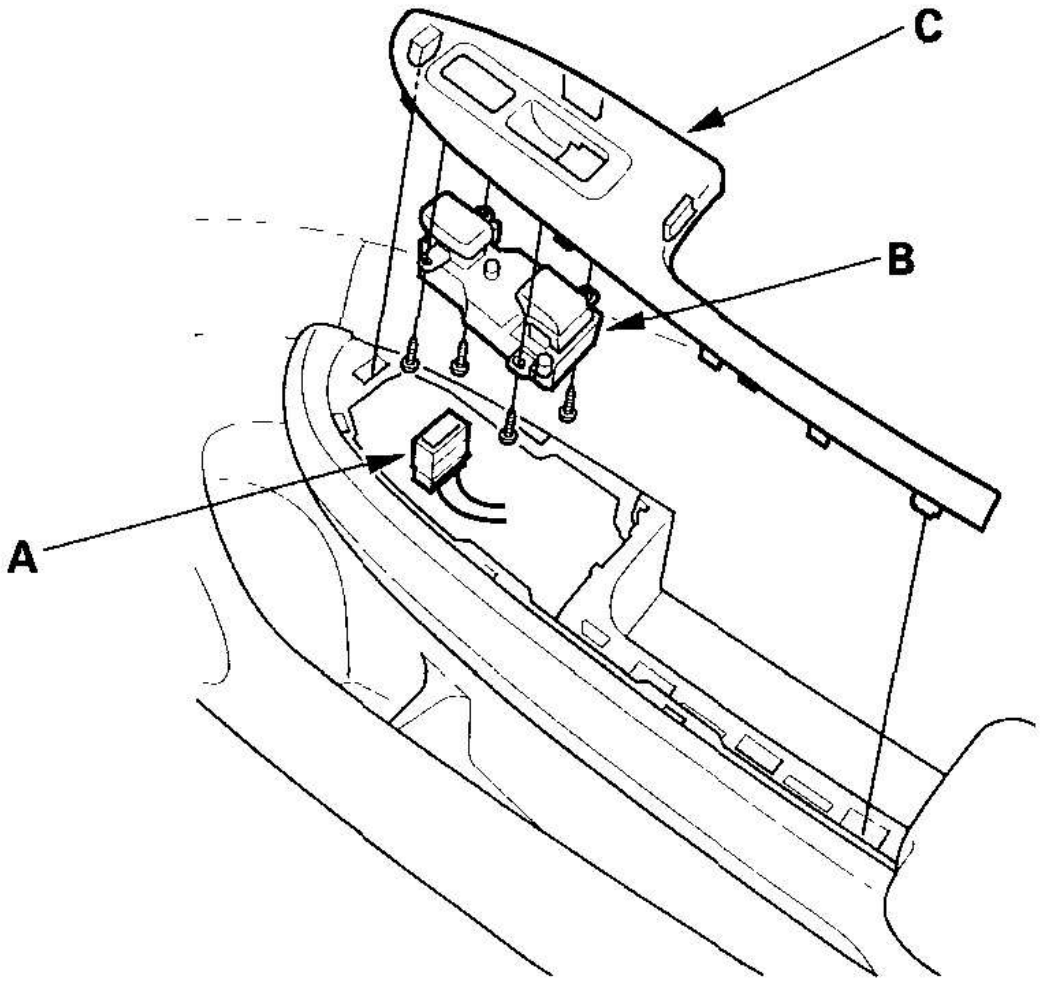


Fig. 13: Disconnecting Power Window Switch Connector (Front Passenger's)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

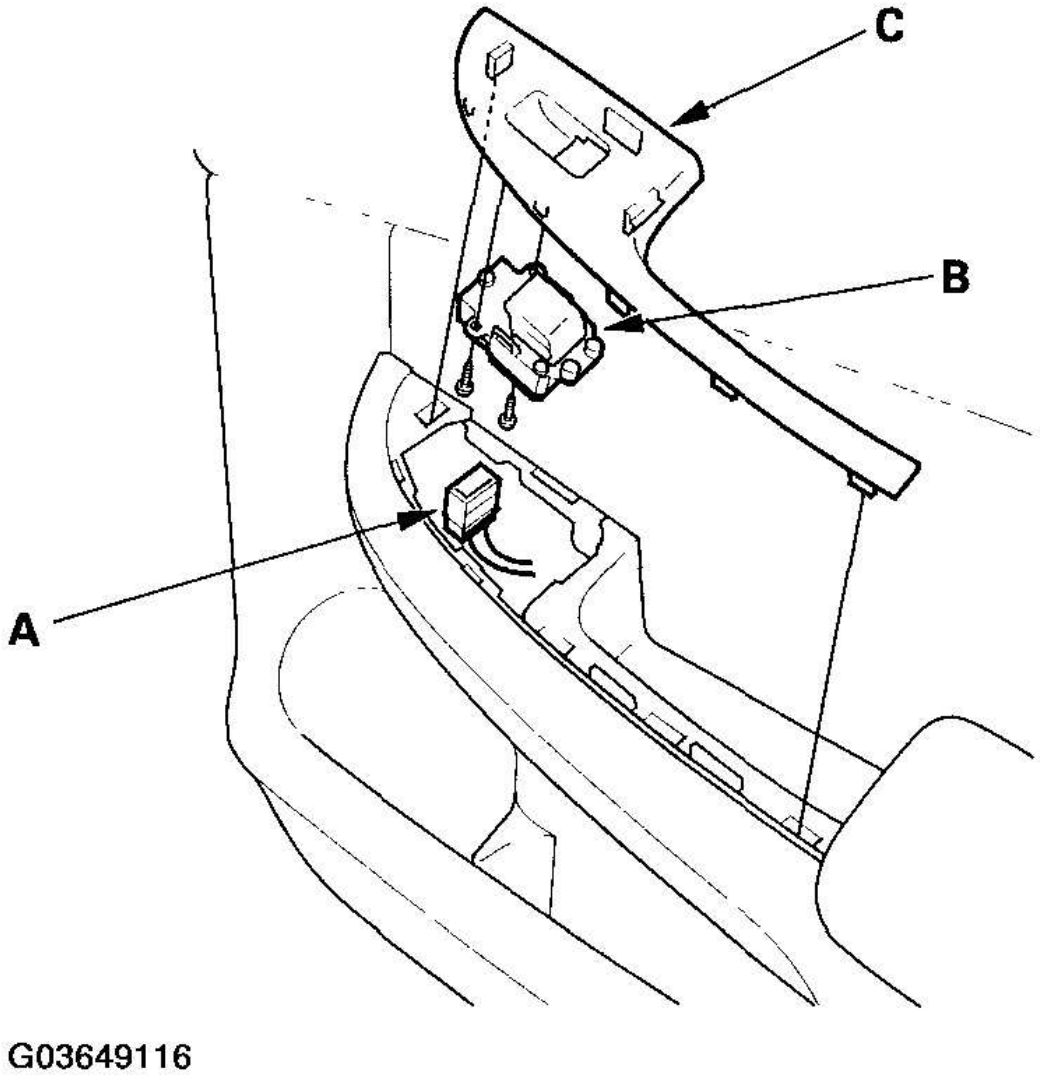


Fig. 14: Disconnecting Power Window Switch Connector (Rear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Swap the window switch with another known-good switch and test.

   If the original window switch is faulty, replace it.

DTC TROUBLESHOOTING

DTC B1125: DRIVER'S POWER WINDOW MOTOR A PULSE ERROR; DTC B1126: DRIVER'S

POWER WINDOW MOTOR B PULSE ERROR

1. Open and close the driver's power window by using the driver's switch manually.
2. While the power window moving, select POWER WINDOWS from the HDS and enter the DATA LIST.
3. Check the EXIST/NONE information of the P/W PLSA (B1125) or P/W PLSB (B1126) in the DATA LIST.

   Do the information indicators display EXIST?

   YES - Replace the power window master switch.

   NO - Go to step 4.
4. Refer to the power window master switch input test, check for continuity between the driver's power window motor 6P connector and the power window master switch 23P connector (see **MASTER SWITCH INPUT TEST**).

   Are all the wire harnesses OK?

   YES - Substitute a known-good power window master switch, and recheck. If DTC is gone, the original master switch is faulty; replace it. If the DTC is still indicated, replace the driver's power window motor.

   NO - Repair a short or an open in the wire.

DTC B1140: DRIVER'S POWER WINDOW POSITION DETECT CIRCUIT ERROR

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON (II).
3. Open and close the driver's power window by using the driver's switch manually.
4. Check for DTCs using the HDS.

   Is DTC B1125 or B1126 indicated?

   YES - Troubleshoot the DTC B1125 or B1126 (see **DTC TROUBLESHOOTING**).

NO - Go to step 5.

5. Reset the power window control unit (see **RESETTING THE POWER WINDOW CONTROL UNIT**).
6. Check for DTCs again using the HDS.

Is DTC B1140 indicated?

YES - Faulty door multiplex control unit; replace the power window master switch.

NO - The system is recovered at this time.

2003-07 SUSPENSION

Rear Suspension - Accord

KNUCKLE/HUB BEARING UNIT REPLACEMENT

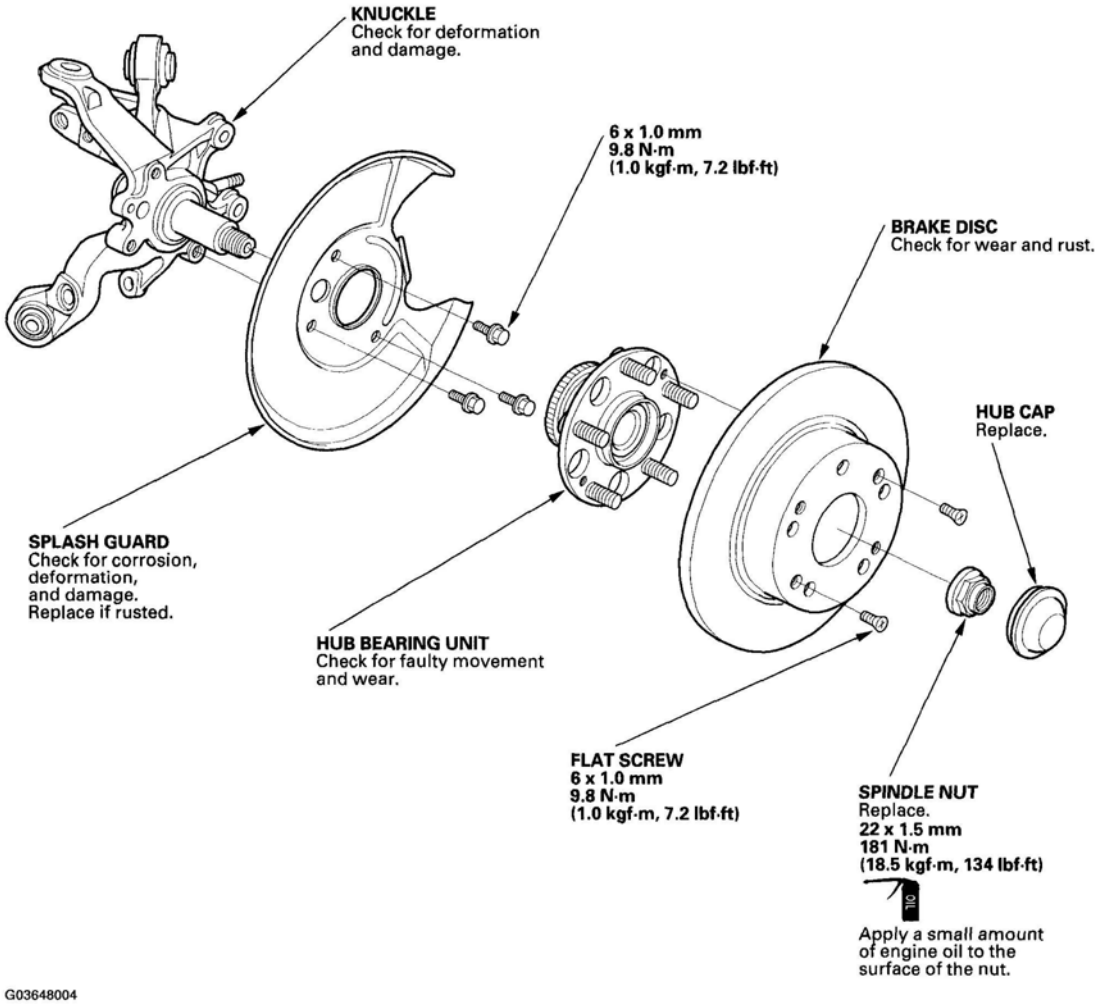


Fig. 1: Exploded View Of Disc Brake
Courtesy of AMERICAN HONDA MOTOR CO., INC.

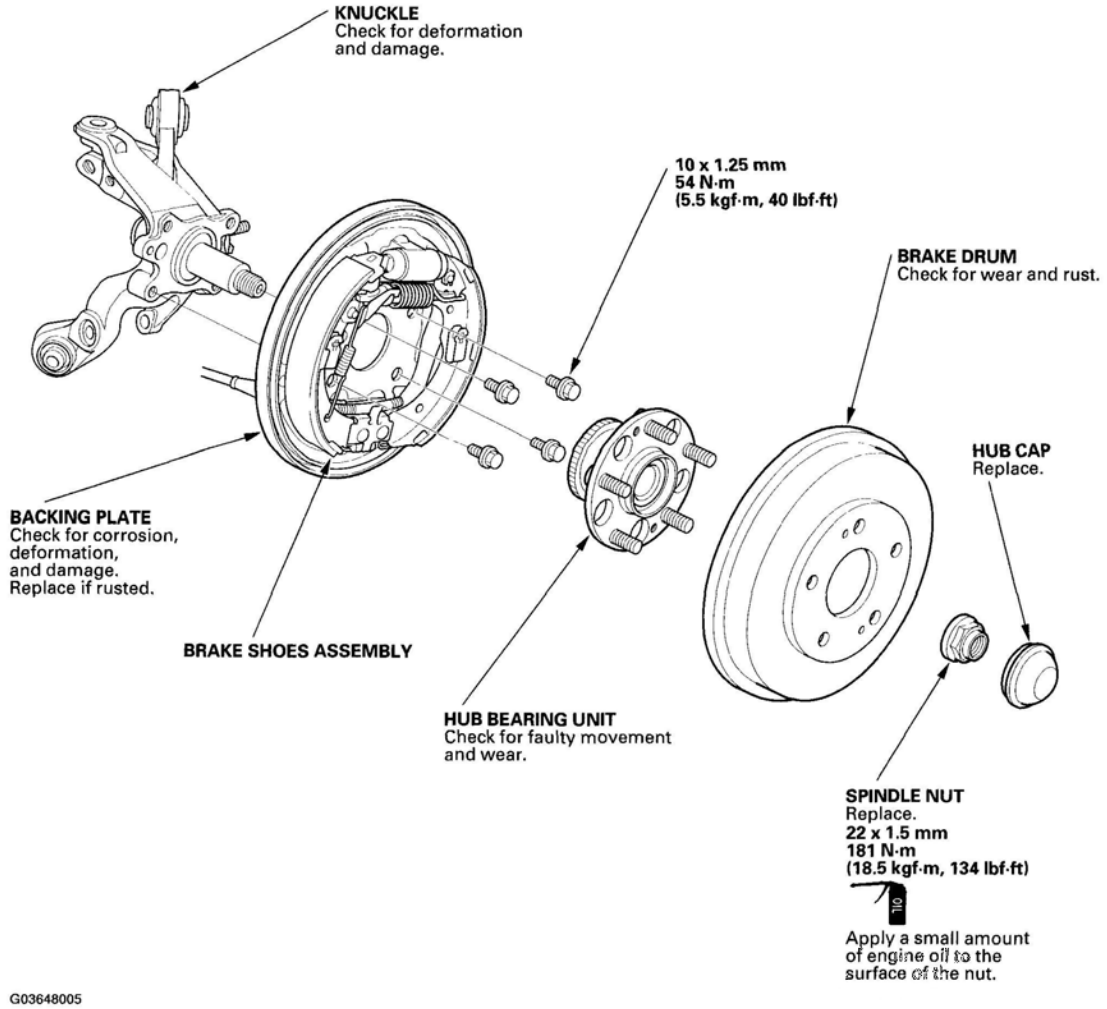


Fig. 2: Exploded View Of Drum Brake
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

Ball joint remover, 28 mm 07MAC-SL0A202

HUB BEARING UNIT REPLACEMENT-DISC BRAKE

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the wheel nuts and rear wheel.

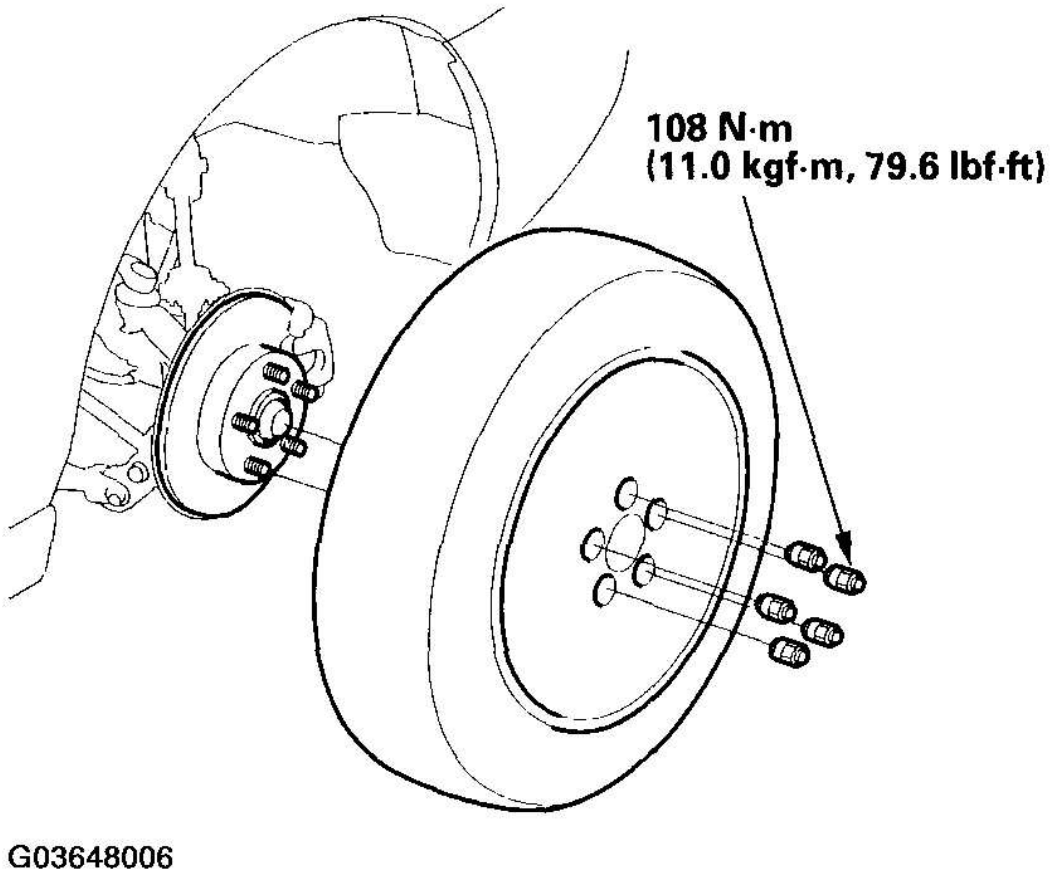


Fig. 3: Removing Wheel Nuts And Rear Wheel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the brake hose mounting bracket (A).

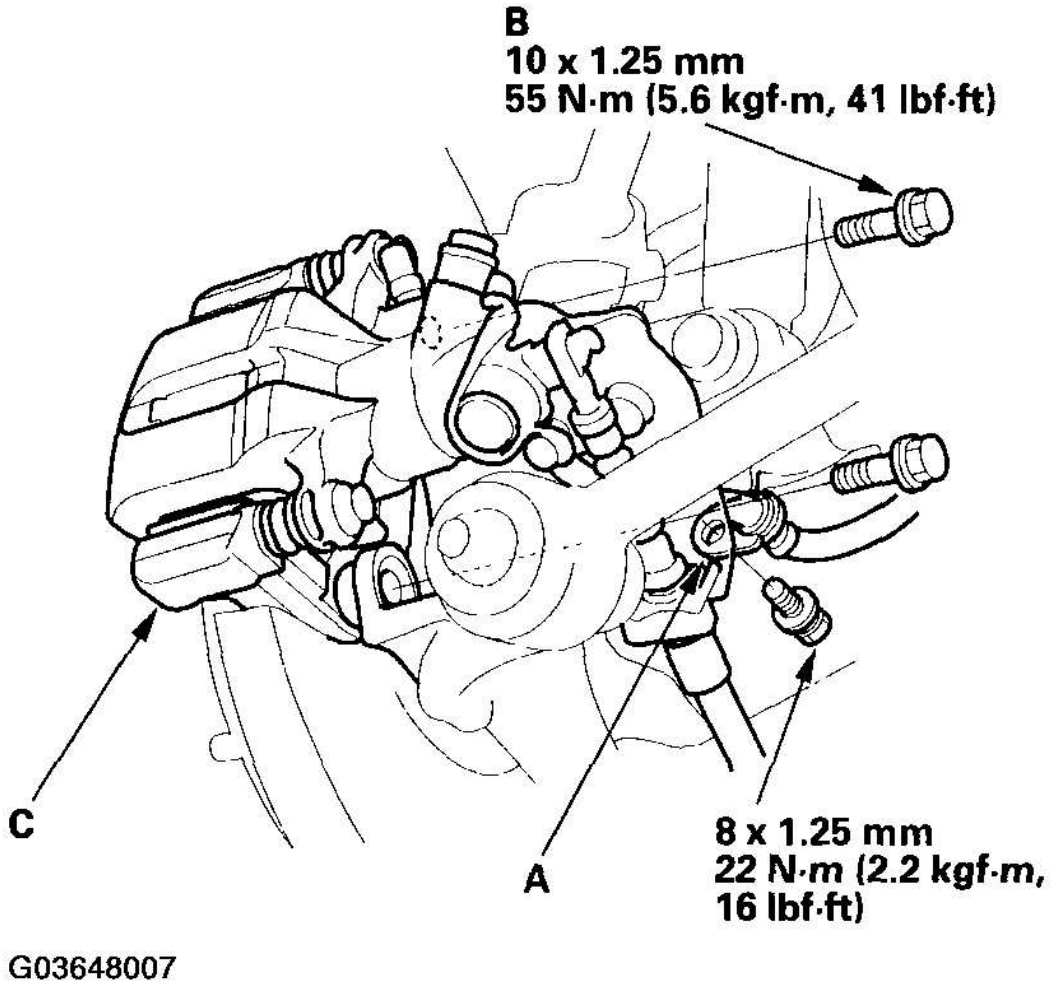


Fig. 4: Removing Brake Hose Mounting Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the brake caliper bracket mounting bolts (B), and remove the caliper assembly (C) from the knuckle. To prevent damage to the caliper assembly or brake hose, use a short piece of wire to hang the caliper assembly from the undercarriage. Do not twist the brake hose with force.
5. Remove the hubcap (A).

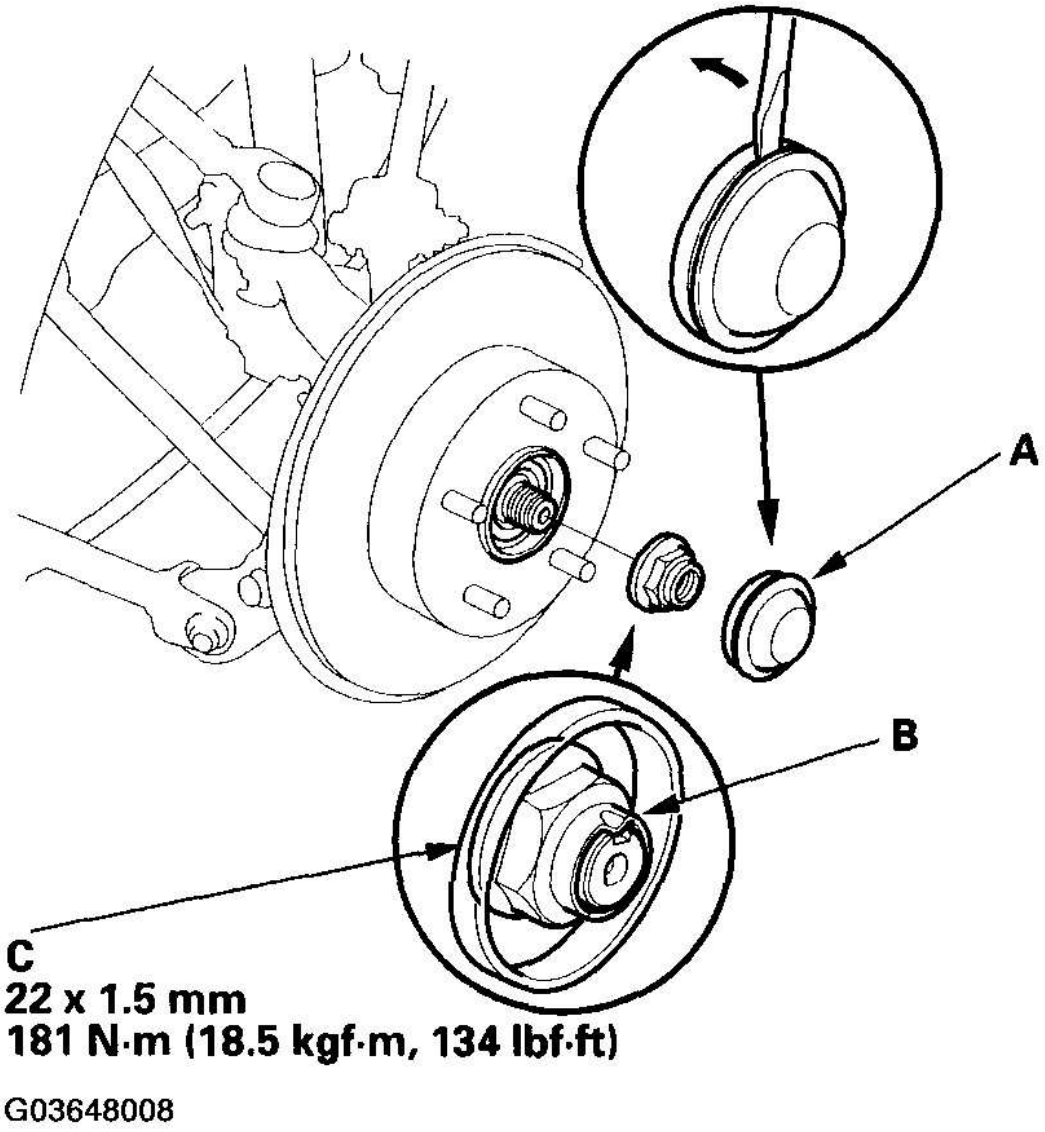


Fig. 5: Removing Hubcap
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Raise the stake (B), and remove the spindle nut (C).
7. Remove the 6 mm brake disc retaining screws (A).

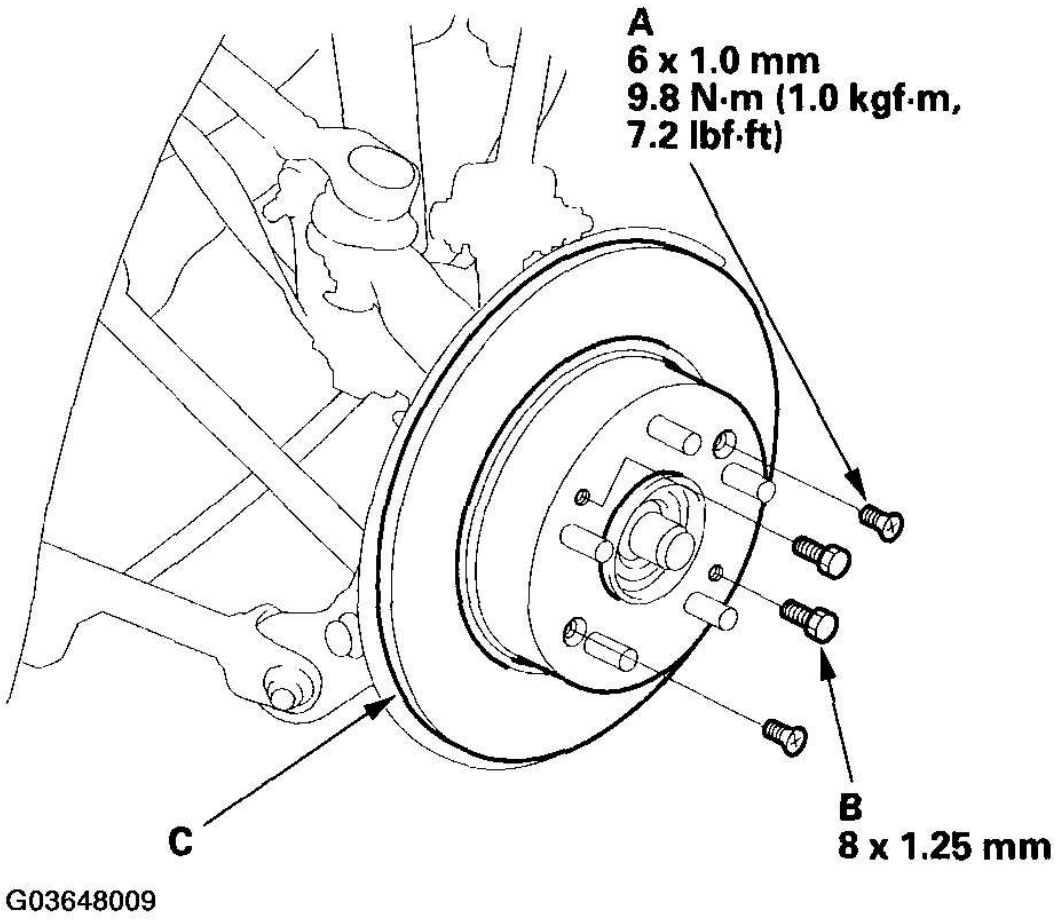


Fig. 6: Removing Brake Disc Retaining Screws
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Screw two 8 x 1.25 mm bolts (B) into the disc to push it away from the hub. Turn each bolt two turns at a time to prevent cocking the disc excessively.
9. Remove the brake disc (C).
10. Remove the hub bearing unit (A).

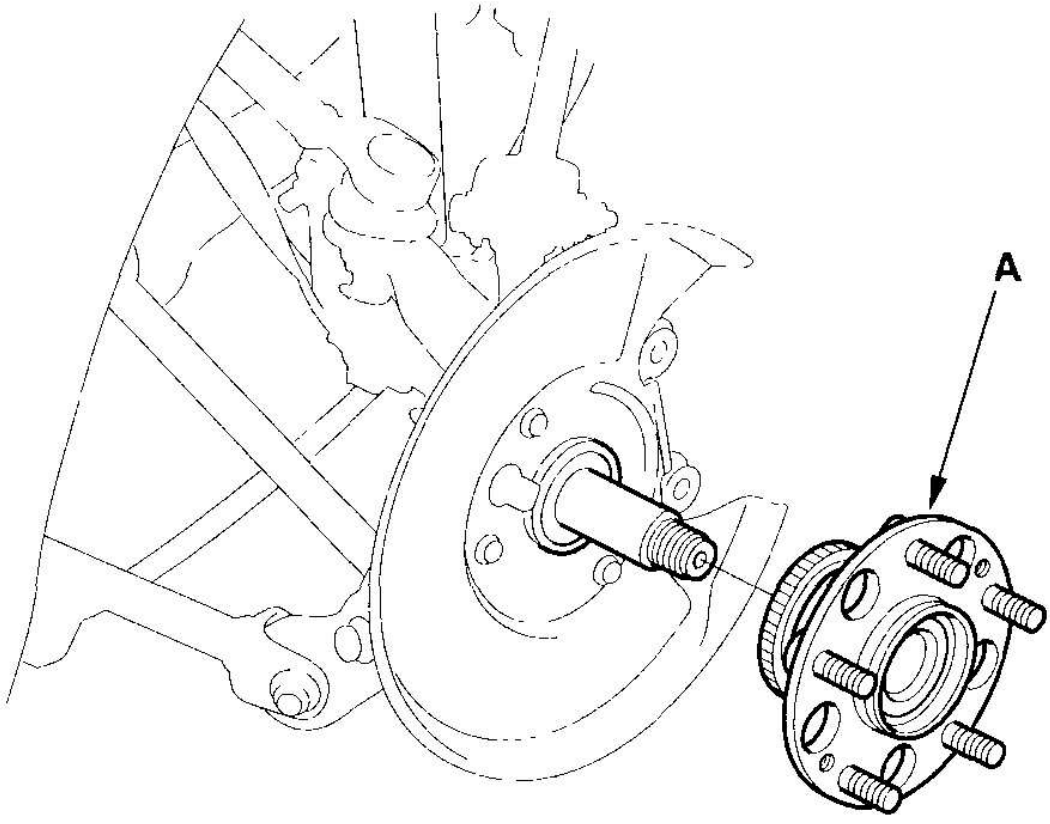


Fig. 7: Removing Hub Bearing Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Install the hub bearing unit in the reverse order of removal, and note these items:
    - Tighten all mounting hardware to the specified torque values.
    - Use a new spindle nut on reassembly.
    - Wash the spindle thoroughly in high flash point solvent before reassembly.
    - Before installing the spindle nut, apply a small amount of engine oil to the seating surface of the nut. After tightening, use a drift to stake the spindle nut shoulder against the driveshaft.
    - Before installing the brake disc, clean the matching surfaces of the hub

bearing unit and brake disc.

- Before installing the wheel, clean the mating surfaces of the brake disc and the inside of the wheel.
- Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

HUB REPLACEMENT-DRUM BRAKE

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the wheel nuts and rear wheel.

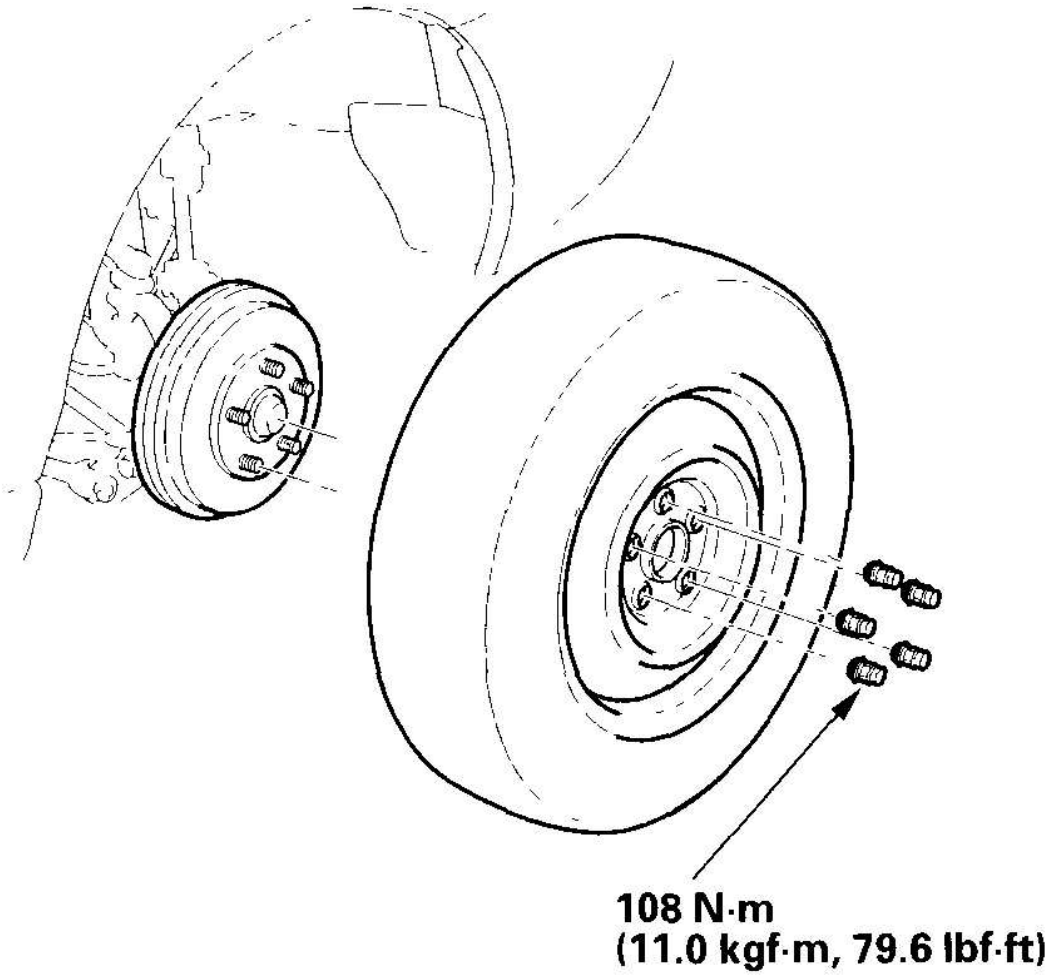


Fig. 8: Removing Wheel Nuts And Rear Wheel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the hub cap (A).

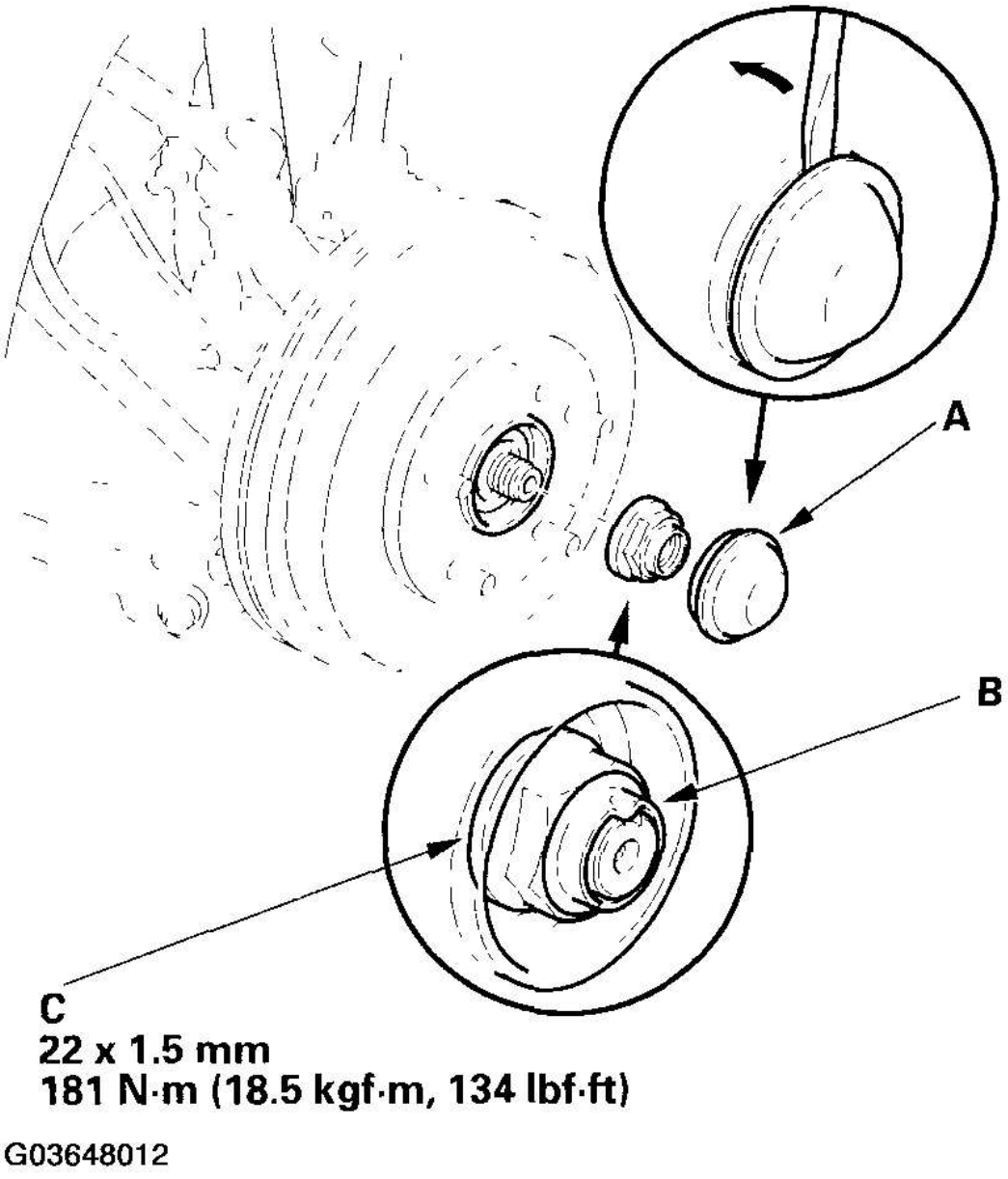


Fig. 9: Removing Hub Cap
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Raise the stake (B), and remove the spindle nut (C).
5. Release the parking brake lever, and remove the brake drum (A). Screw two 8 x 1.25 mm bolts (B) into the drum to push it away from the hub. Turn each bolt

two turns at a time to prevent cocking the drum excessively.

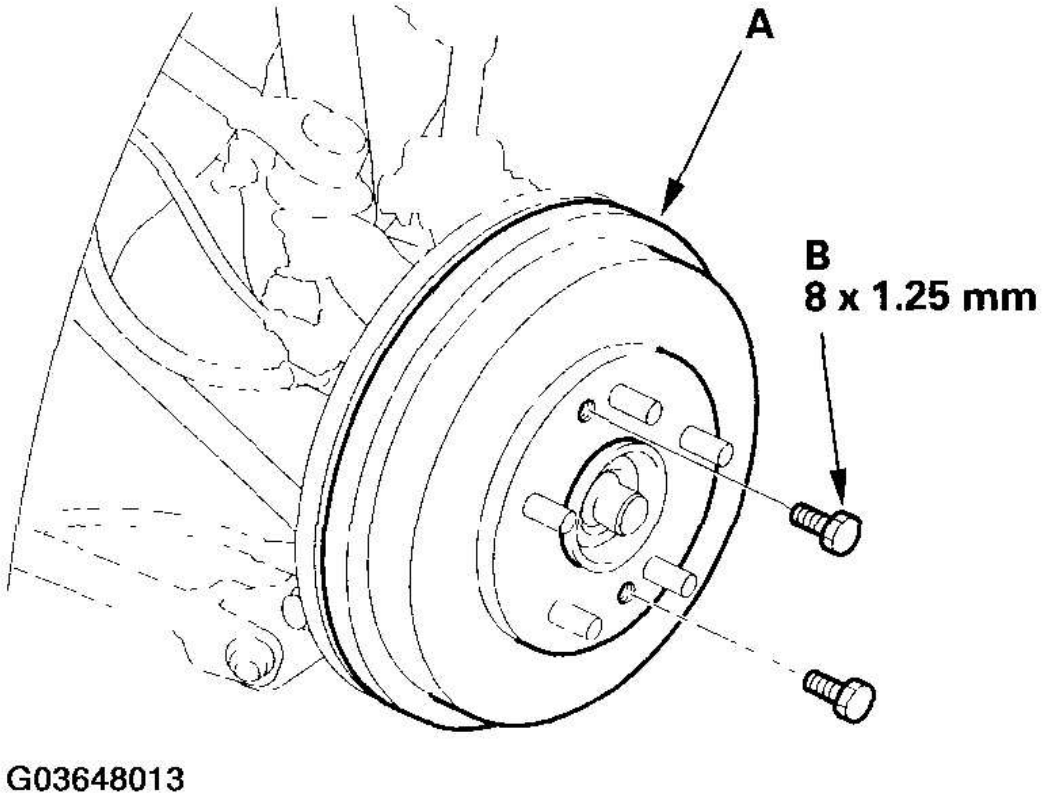


Fig. 10: Removing Brake Drum
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the hub bearing unit (A).

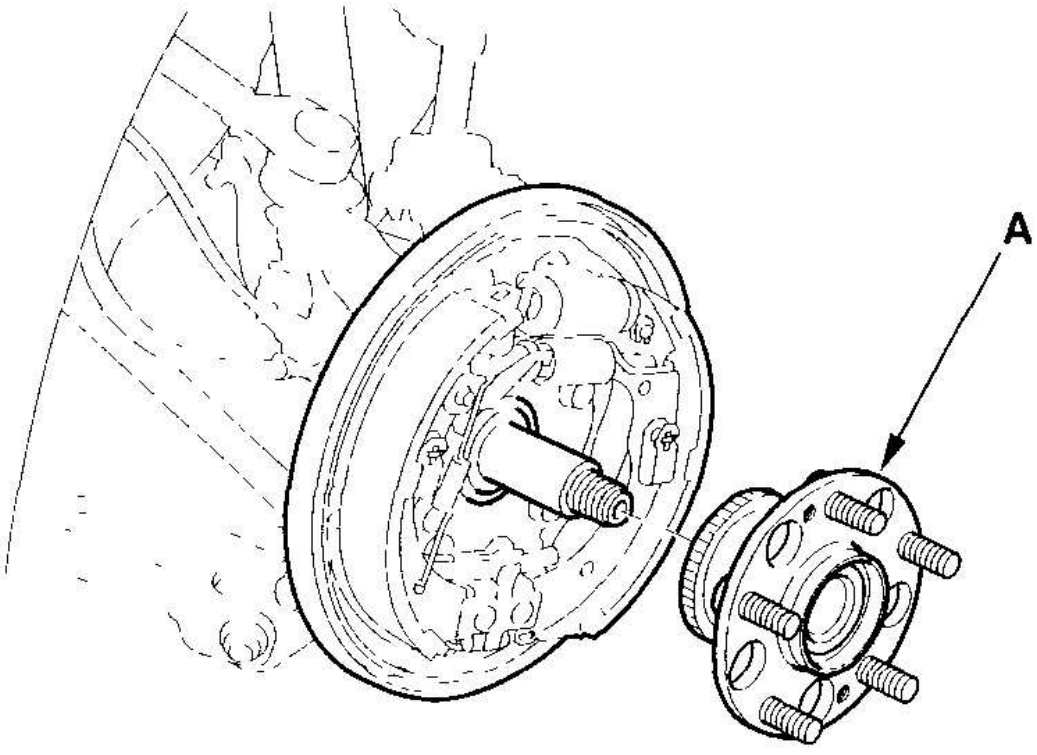


Fig. 11: Removing Hub Bearing Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the hub bearing unit in the reverse order of removal, and note these items:
   - Tighten all mounting hardware to the specified torque values.
   - Wash the spindle thoroughly in high flash point solvent before reassembly.
   - Use a new spindle nut during reassembly.
   - Before installing the spindle nut, apply a small amount of engine oil to the seating surface of the nut. After tightening, use a drift to stake the spindle nut shoulder against the driveshaft.
   - Before installing the brake drum, clean the matching surfaces of the hub

bearing unit and brake drum.

- Before installing the wheel, clean the mating surfaces of the brake drum and the inside of the wheel.
- Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

KNUCKLE REPLACEMENT-DISC BRAKE

1. Remove the hub bearing unit.
2. Remove the splash guard (A).

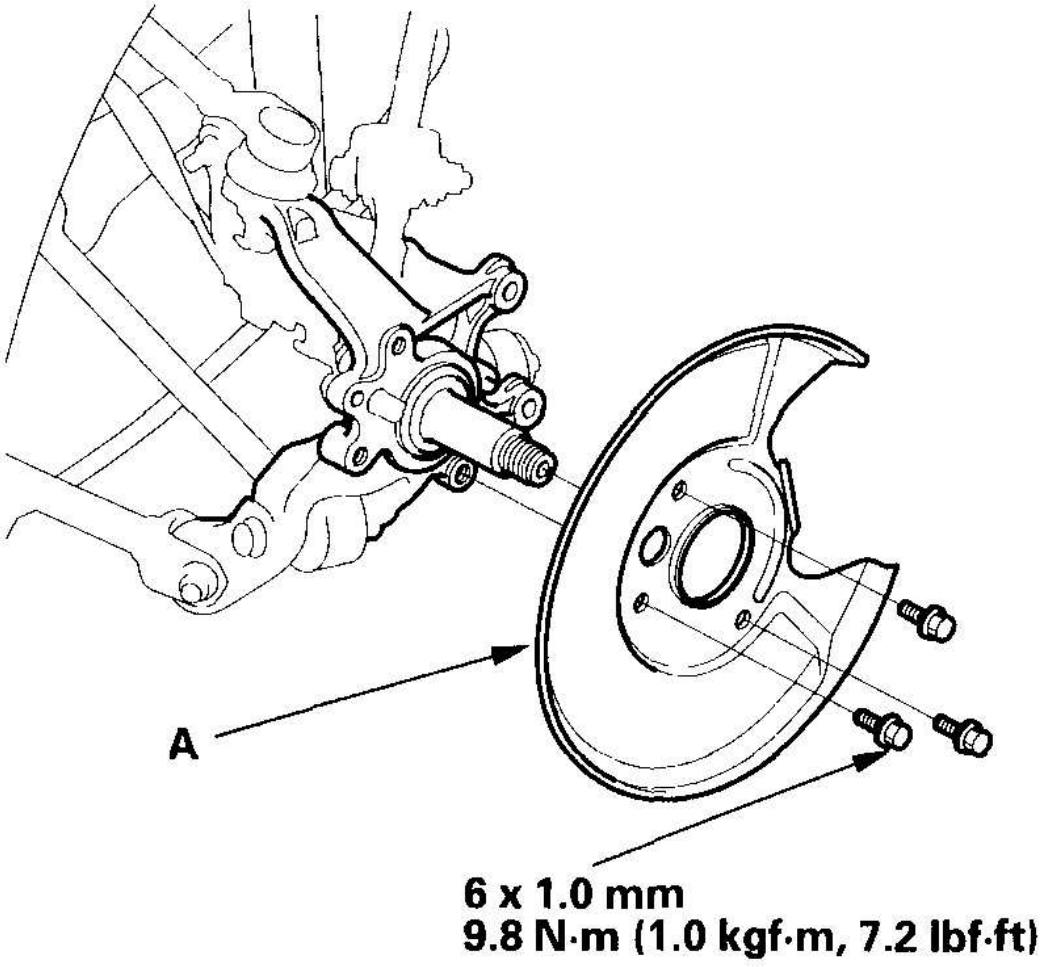


Fig. 12: Removing Splash Guard
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the lock pin (A) from the upper arm ball joint, and loosen the nut (B).

NOTE: During installation, install the new lock pin as shown below after tightening the nut.

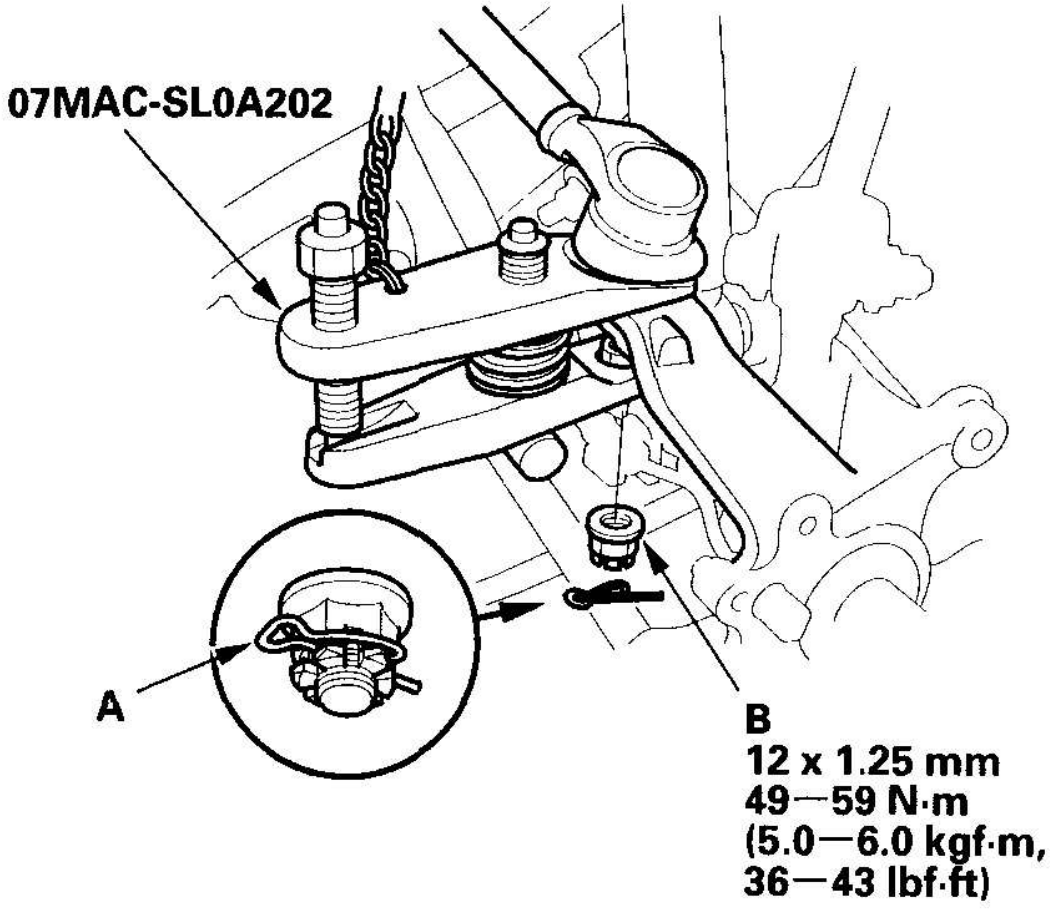


Fig. 13: Removing Lock Pin From Upper Arm Ball Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Disconnect the upper arm ball joint from the knuckle using the ball joint remover (see **BALL JOINT REMOVAL**).
5. Remove the flange nut (A) while holding the joint pin (B) with a hex wrench (C), then disconnect the stabilizer link (D) from the stabilizer link bracket (E).

NOTE: During installation, install the new flange nut.

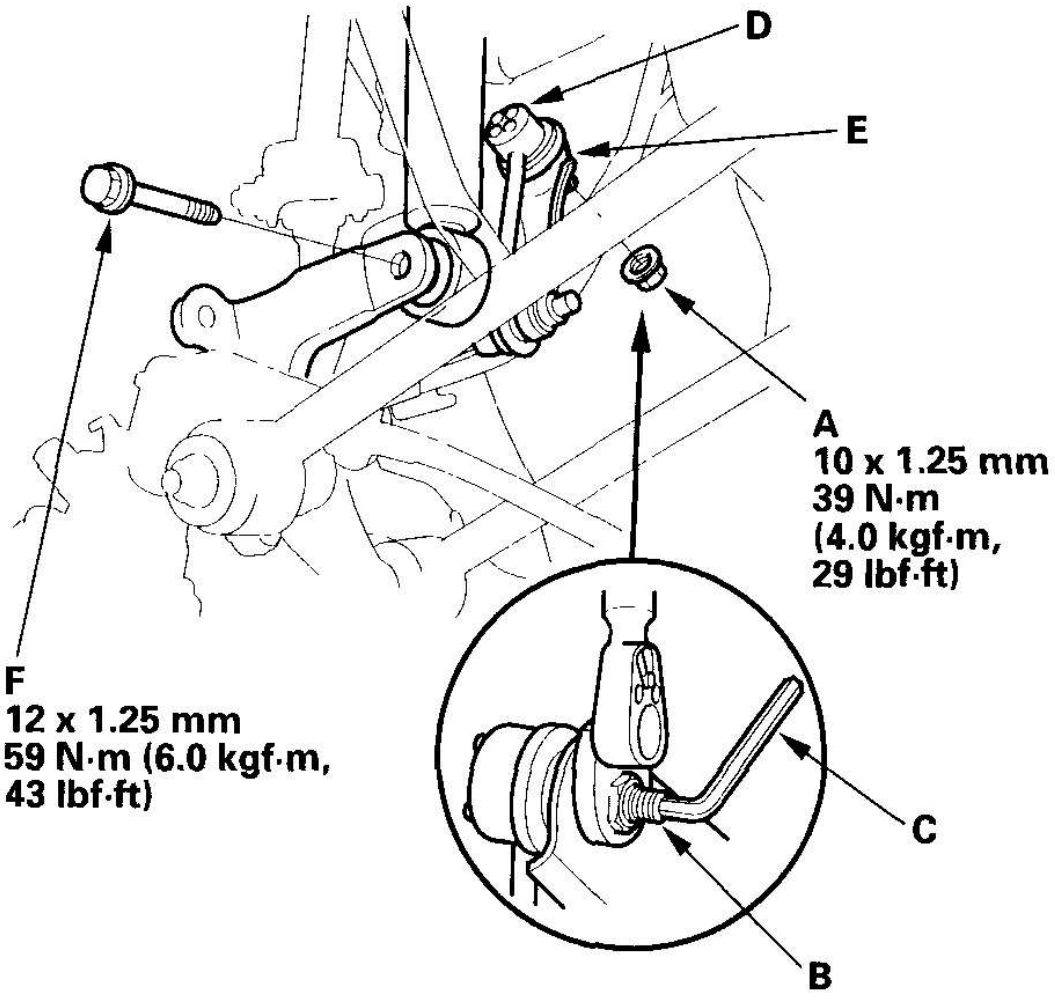


Fig. 14: Removing Flange Nut Holding Joint Pin With Hex Wrench
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the damper lower mounting bolt (F), and disconnect the damper from the knuckle.

NOTE: During installation, install the new damper lower mounting bolt.

7. Remove the wheel sensor (A) from the knuckle. Do not disconnect the wheel

sensor connector.

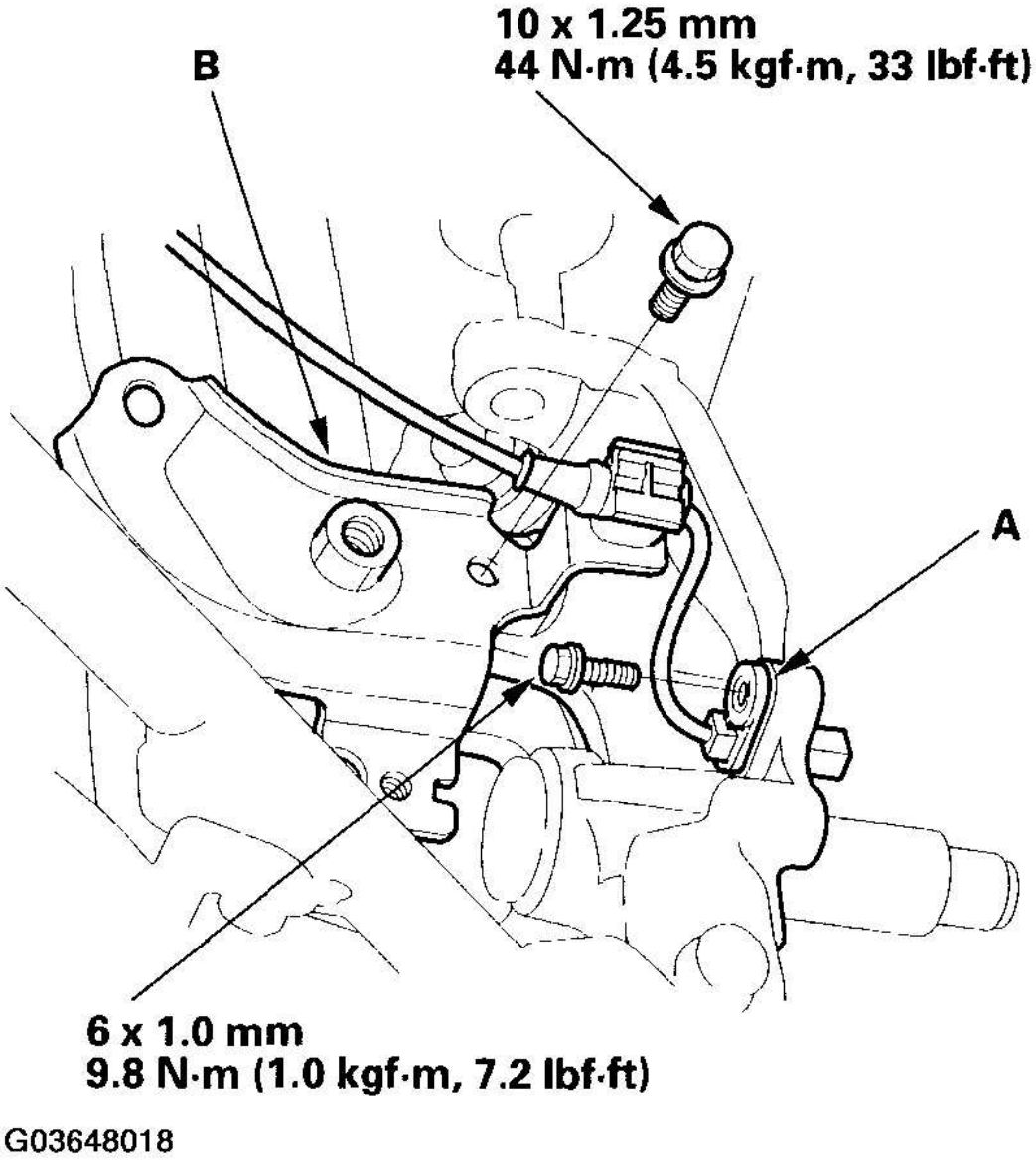


Fig. 15: Removing Wheel Sensor From Knuckle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the stabilizer link bracket (B) from the knuckle.
9. Remove the leading arm mounting bolt (A) from the knuckle.

NOTE: During installation, install the new leading arm mounting bolt.

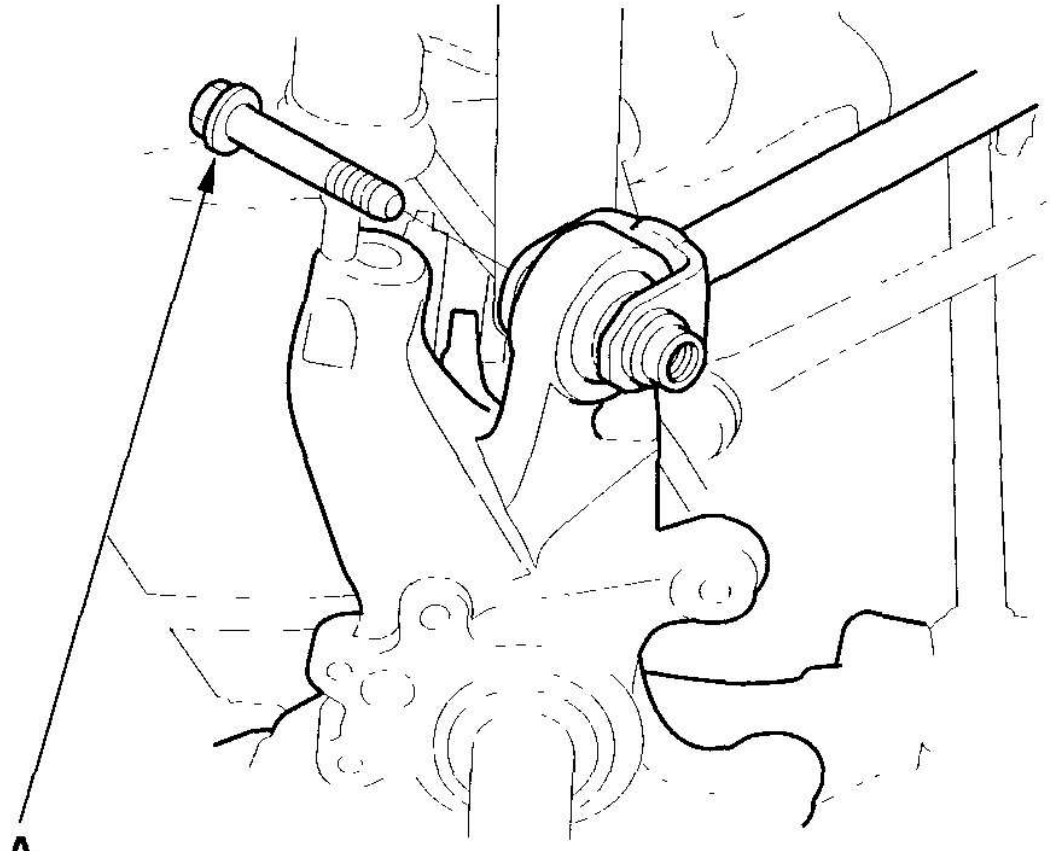


Fig. 16: Removing Leading Arm Mounting Bolt From Knuckle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the control arm mounting nut (A) and washer (B) from the knuckle.

NOTE: During installation, install the new control arm mounting nut.

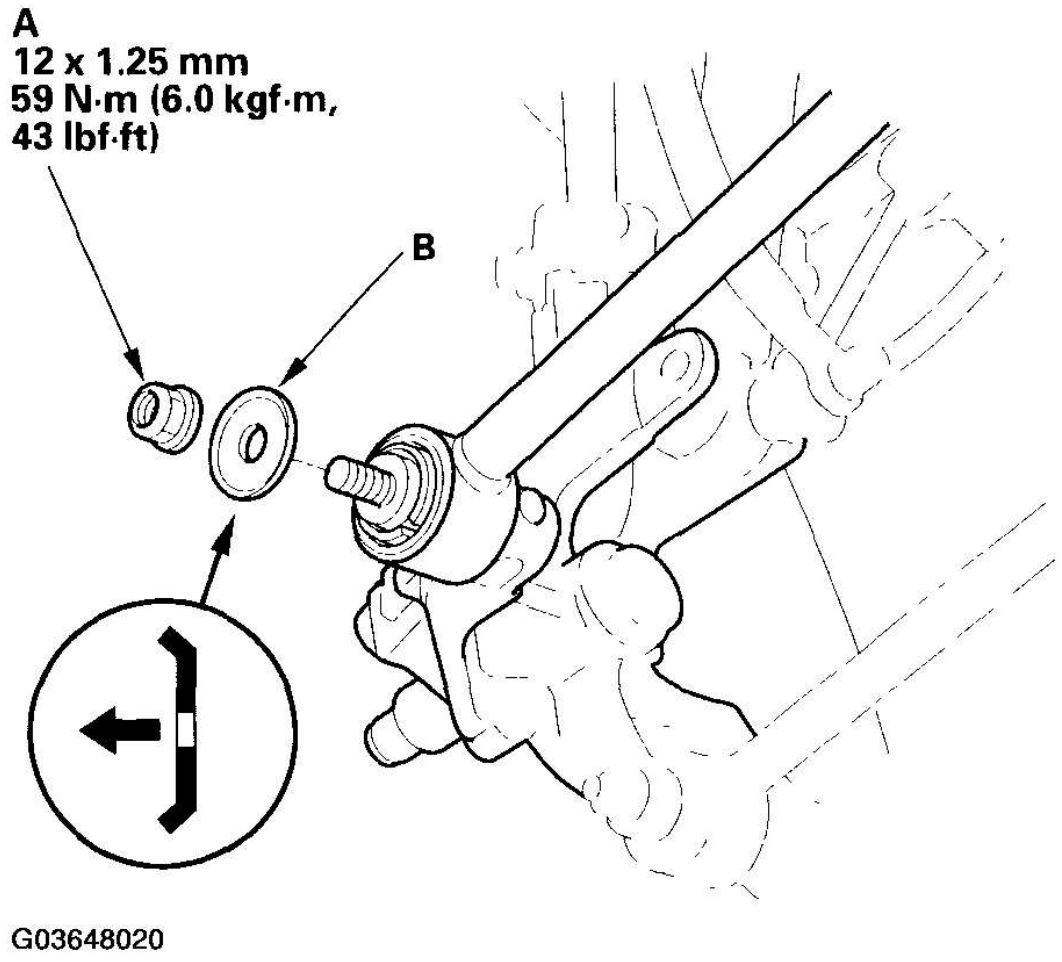


Fig. 17: Removing Control Arm Mounting Nut And Washer From Knuckle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the trailing arm mounting bolt (A) from the knuckle.

NOTE: During installation, install the new trailing arm mounting bolt.

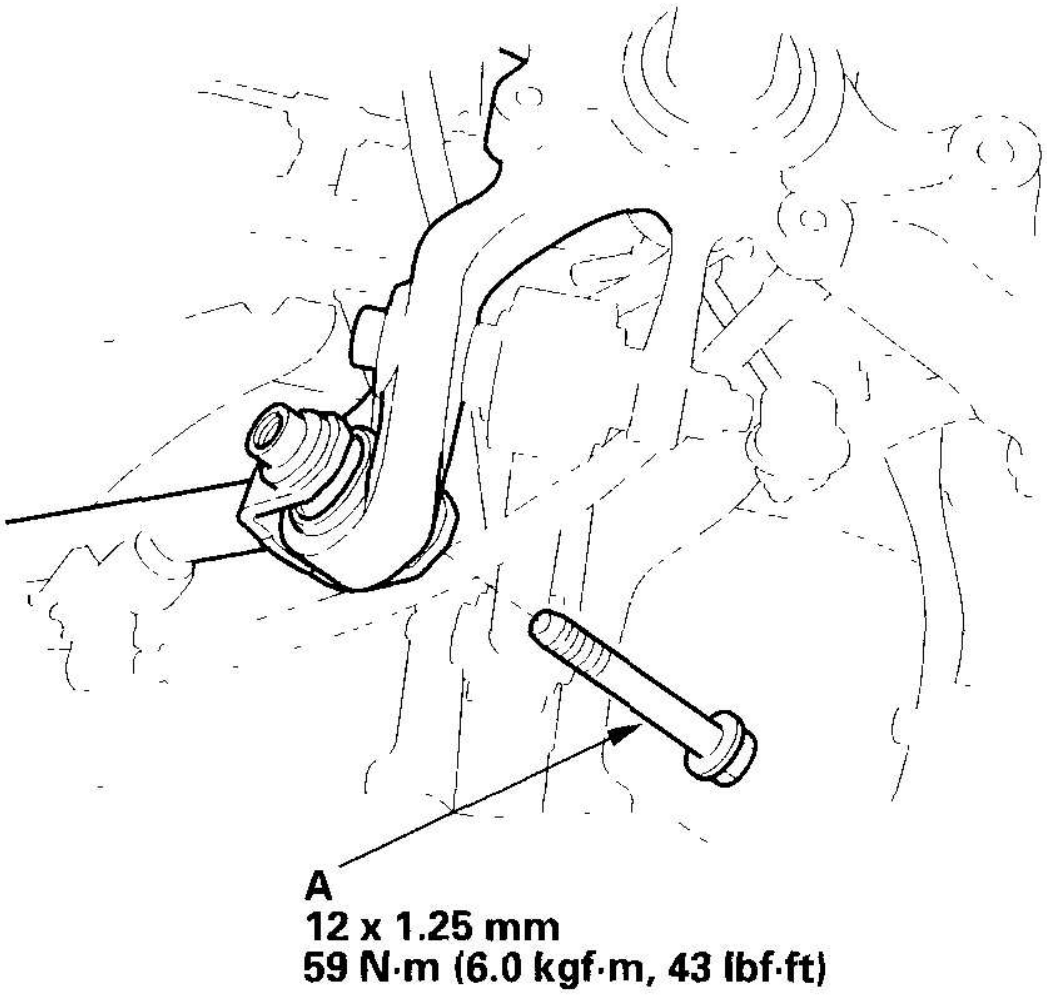


Fig. 18: Removing Trailing Arm Mounting Bolt From Knuckle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the lower arm mounting bolt (A), then remove the knuckle (B).

NOTE: During installation, install the new lower arm mounting bolt and nut.

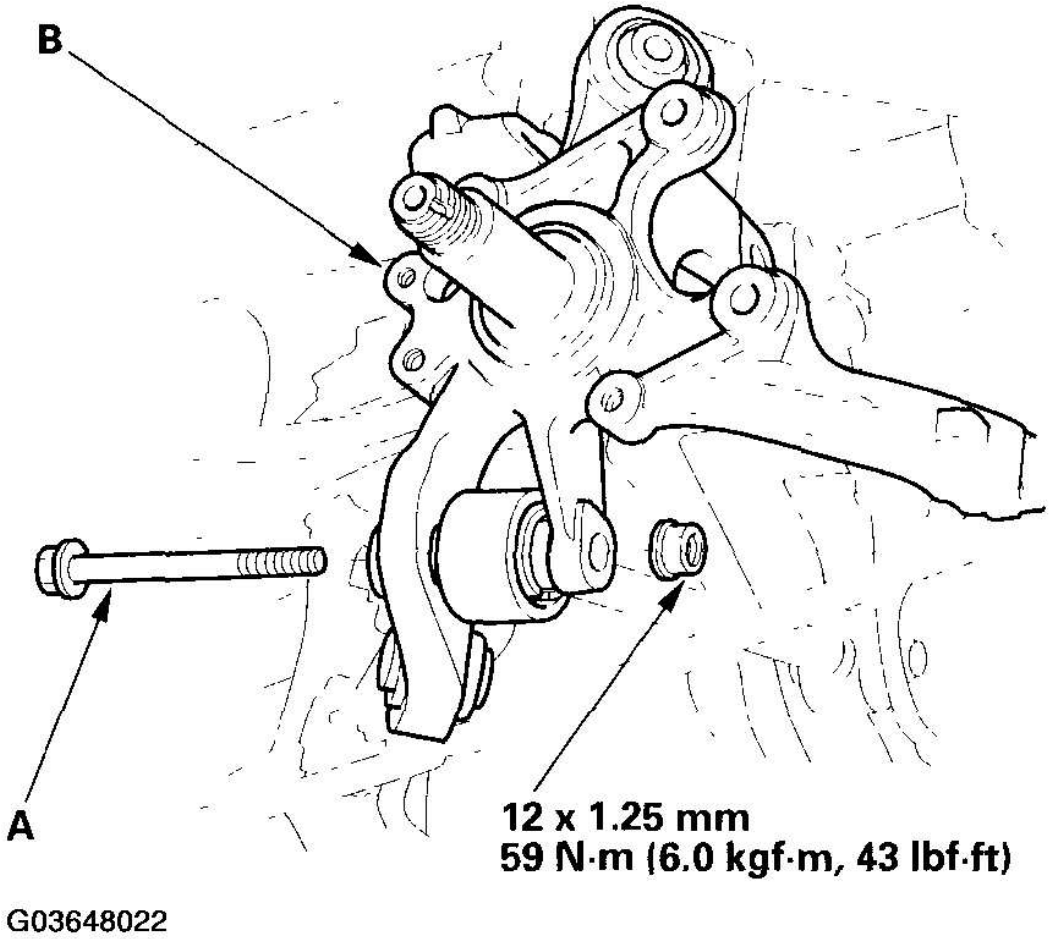


Fig. 19: Removing Lower Arm Mounting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install the knuckle in the reverse order of removal, and note these items:
    - Be careful not to damage the ball joint boot when installing the knuckle.
    - Tighten all mounting hardware to the specified torque values.
    - First install all the components and lightly tighten the bolts and nuts, then raise the suspension to load it with the vehicle's weight before fully tightening to the specified torque values.
    - Torque the castle nut to the lower torque specification, then tighten it only far enough to align the slot with the ball joint pin hole. Do not align the

castle nut by loosening it.

- Install a new lock pin on the castle nut after torquing.
- Before installing the wheel, clean the mating surface on the brake disc and the inside of the wheel.
- Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

KNUCKLE REPLACEMENT-DRUM BRAKE

1. Remove the hub bearing unit.
2. Remove the lock pin (A) from the upper arm ball joint, and loosen the nut (B).

NOTE: During installation, insert the new lock pin as shown below after tightening the nut.

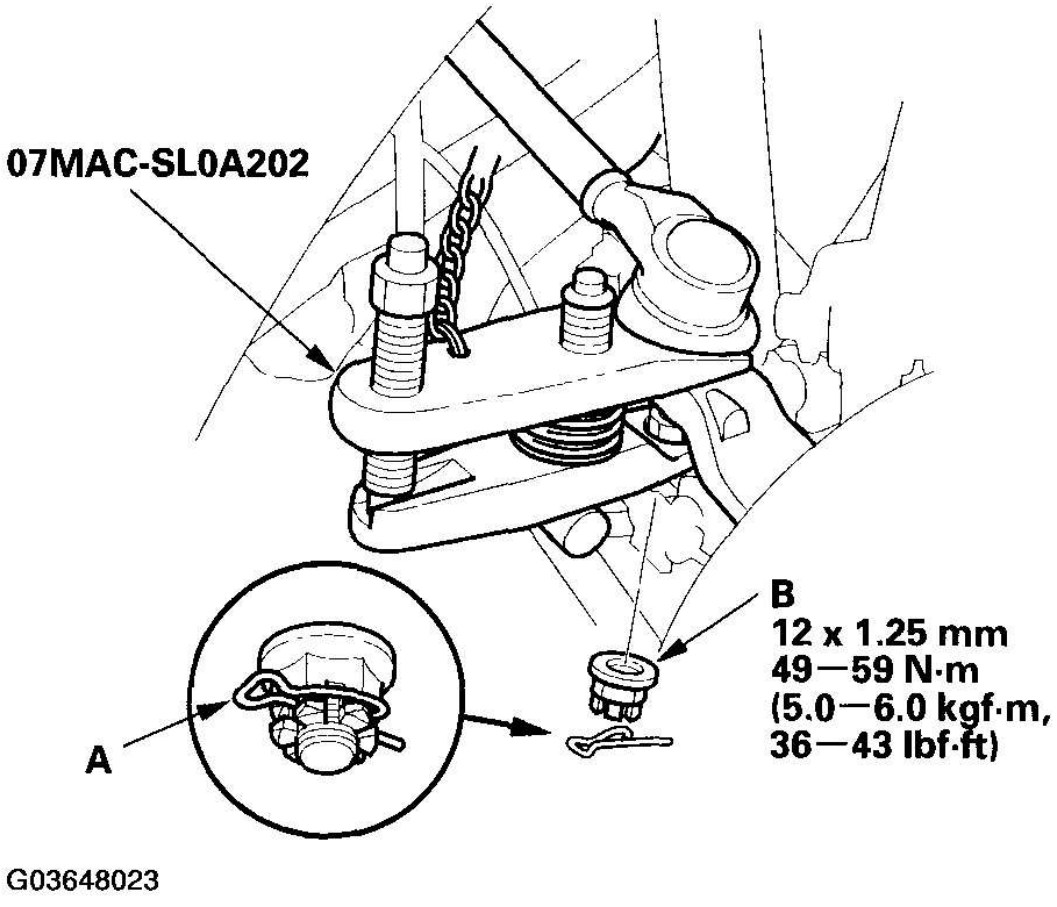


Fig. 20: Removing Lock Pin From Upper Arm Ball Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the upper arm ball joint from the knuckle using the ball joint remover (see **BALL JOINT REMOVAL**).
4. Remove the flange nut (A) while holding the joint pin (B) with a hex wrench (C), and disconnect the stabilizer link (D) from the stabilizer link bracket (E).

NOTE: During installation, install the new flange nut.

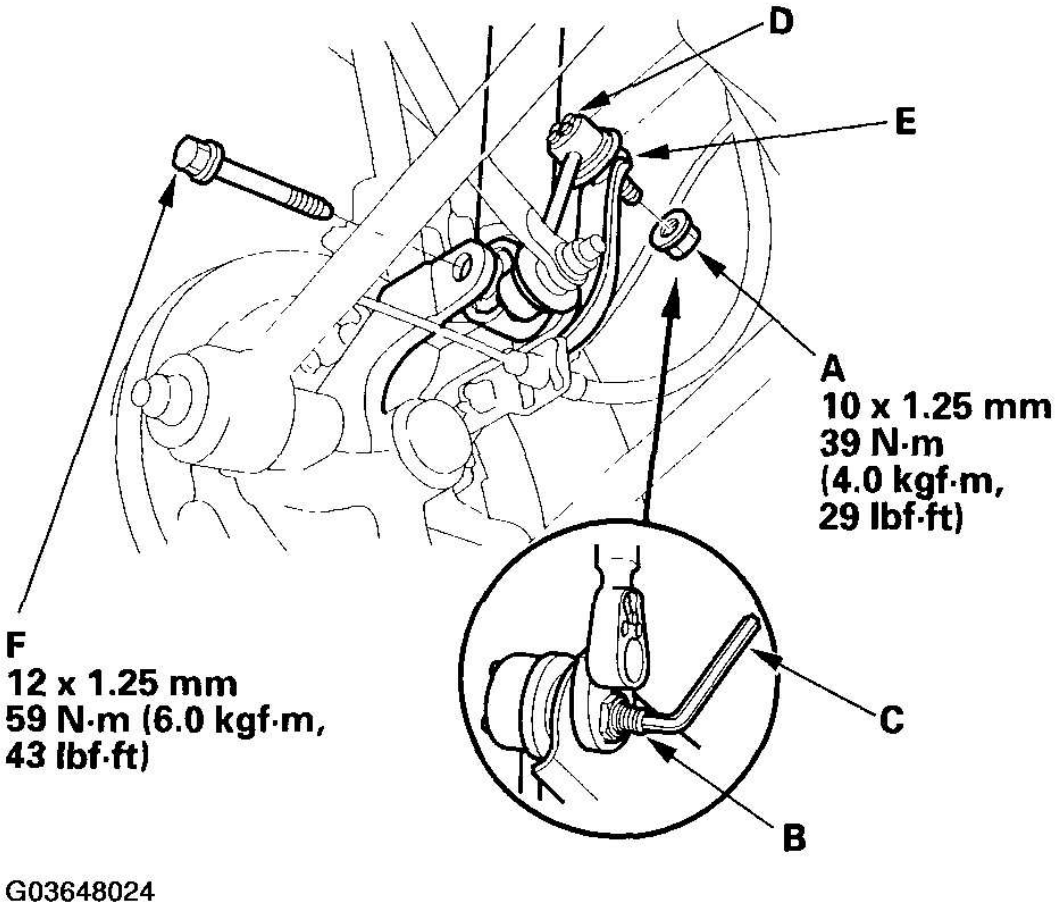


Fig. 21: Removing Flange Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the damper lower mounting bolt (F), and disconnect the damper from the knuckle.

NOTE: During installation, install the new damper lower mounting bolt.

6. Disconnect the brake line (A) from the wheel cylinder (B). Remove the flange bolts and rear brake assembly (C) from the knuckle.

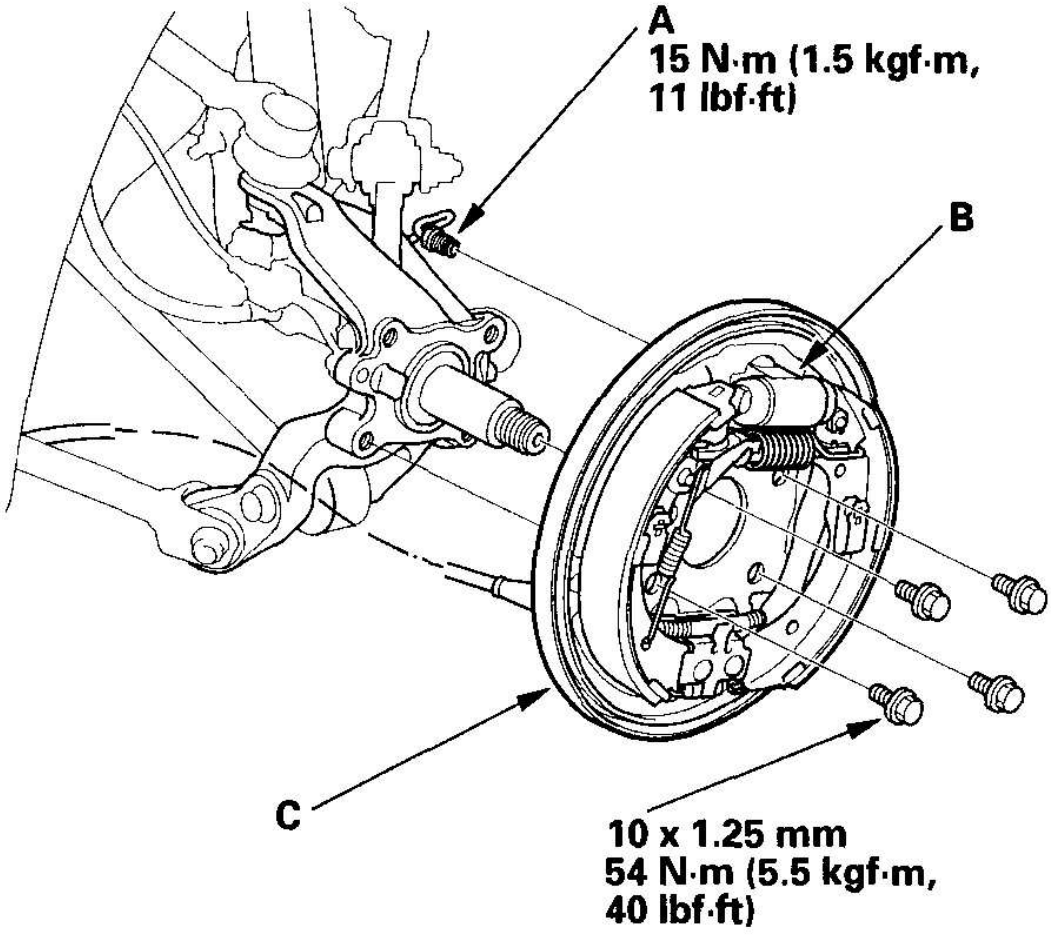


Fig. 22: Disconnecting Brake Line From Wheel Cylinder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the wheel sensor (A) from the knuckle. Do not disconnect the wheel sensor connector.

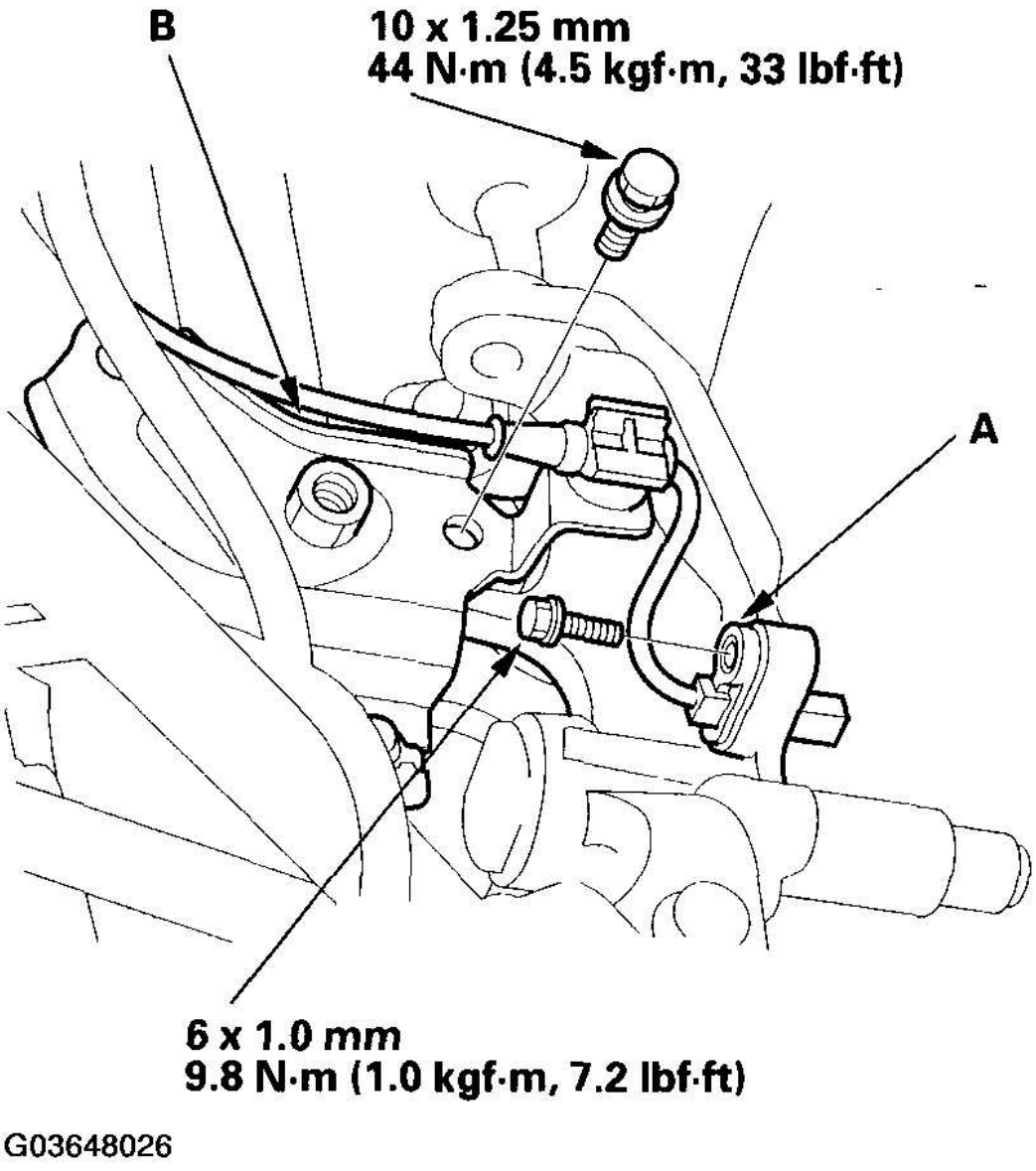


Fig. 23: Removing Wheel Sensor From Knuckle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the stabilizer link bracket (B) from the knuckle.
9. Remove the leading arm mounting bolt (A) from the knuckle.

NOTE: During installation, install the new leading arm

mounting nut.

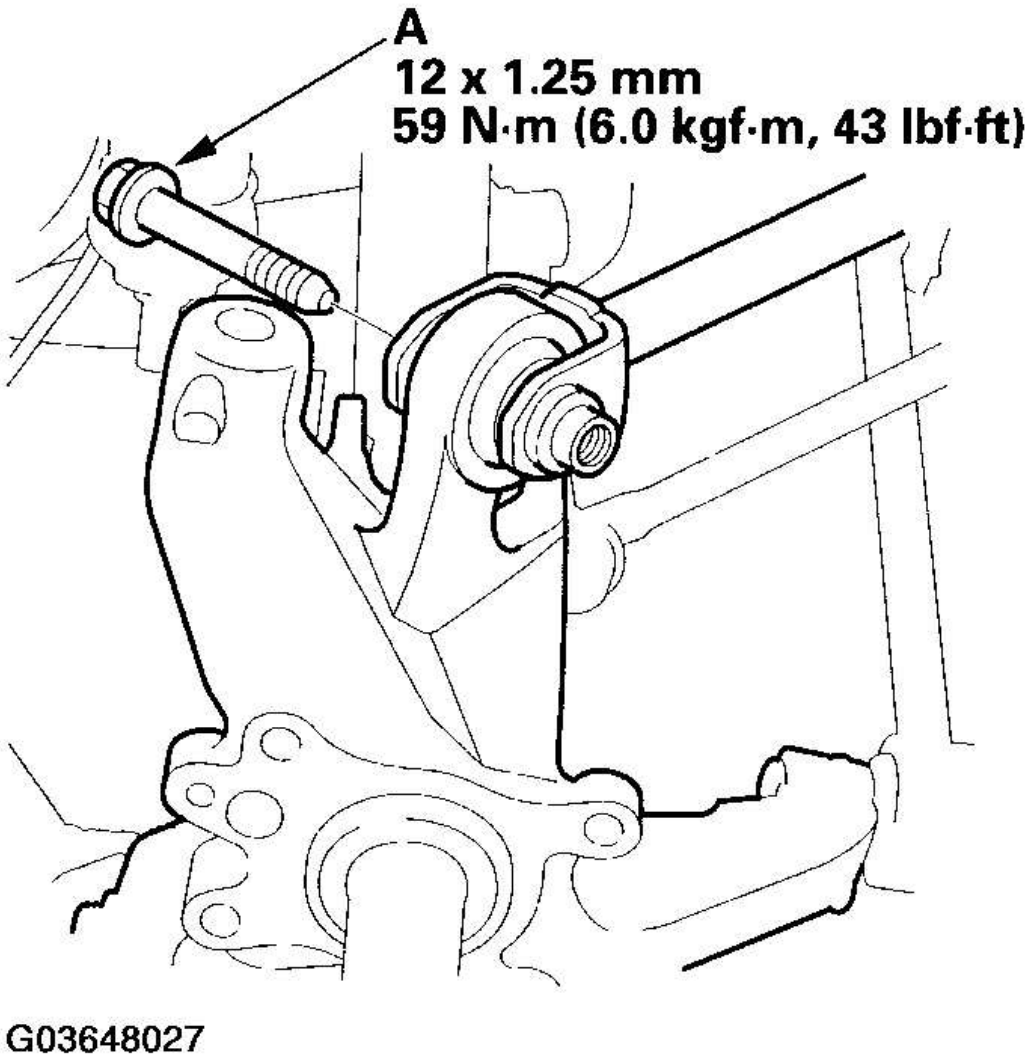


Fig. 24: Removing Leading Arm Mounting Bolt From Knuckle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the control arm mounting nut (A) and washer (B) from the knuckle.

NOTE: During installation, install the new control arm mounting nut.

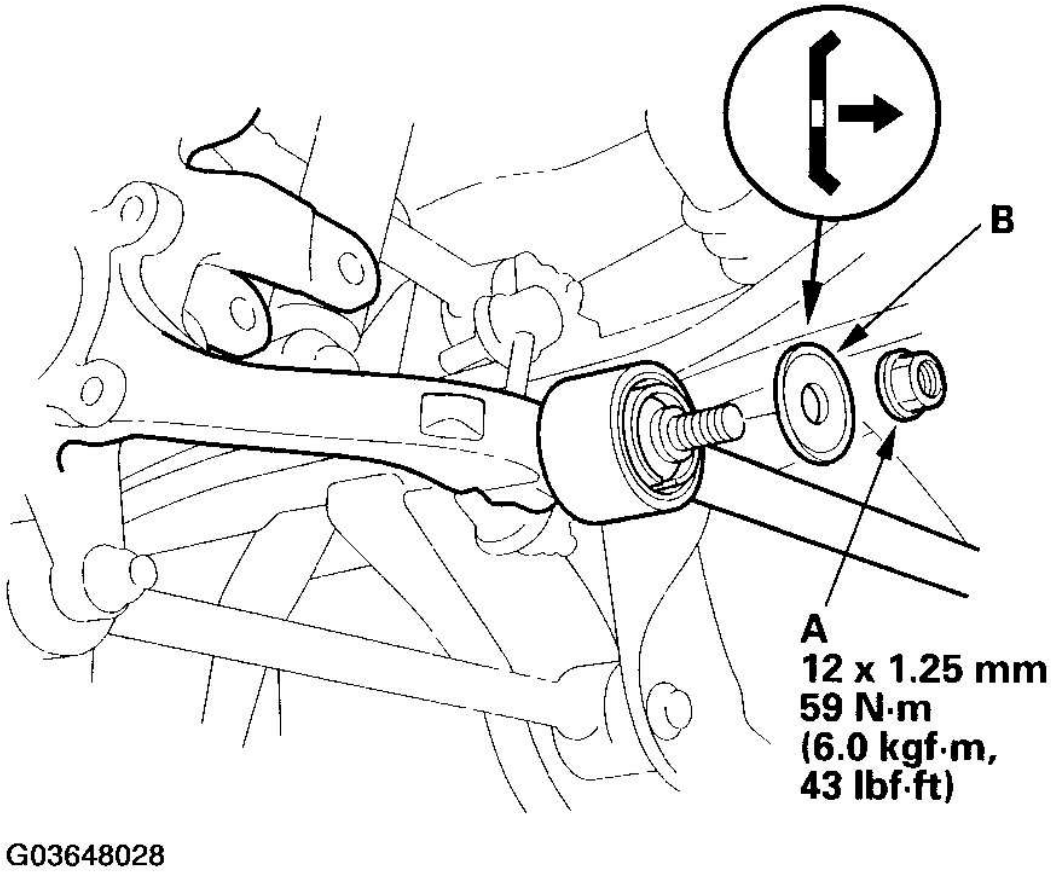


Fig. 25: Removing Control Arm Mounting Nut And Washer From Knuckle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Remove the trailing arm mounting bolt (A) from the knuckle.

NOTE: During installation, install the new trailing arm mounting bolt.

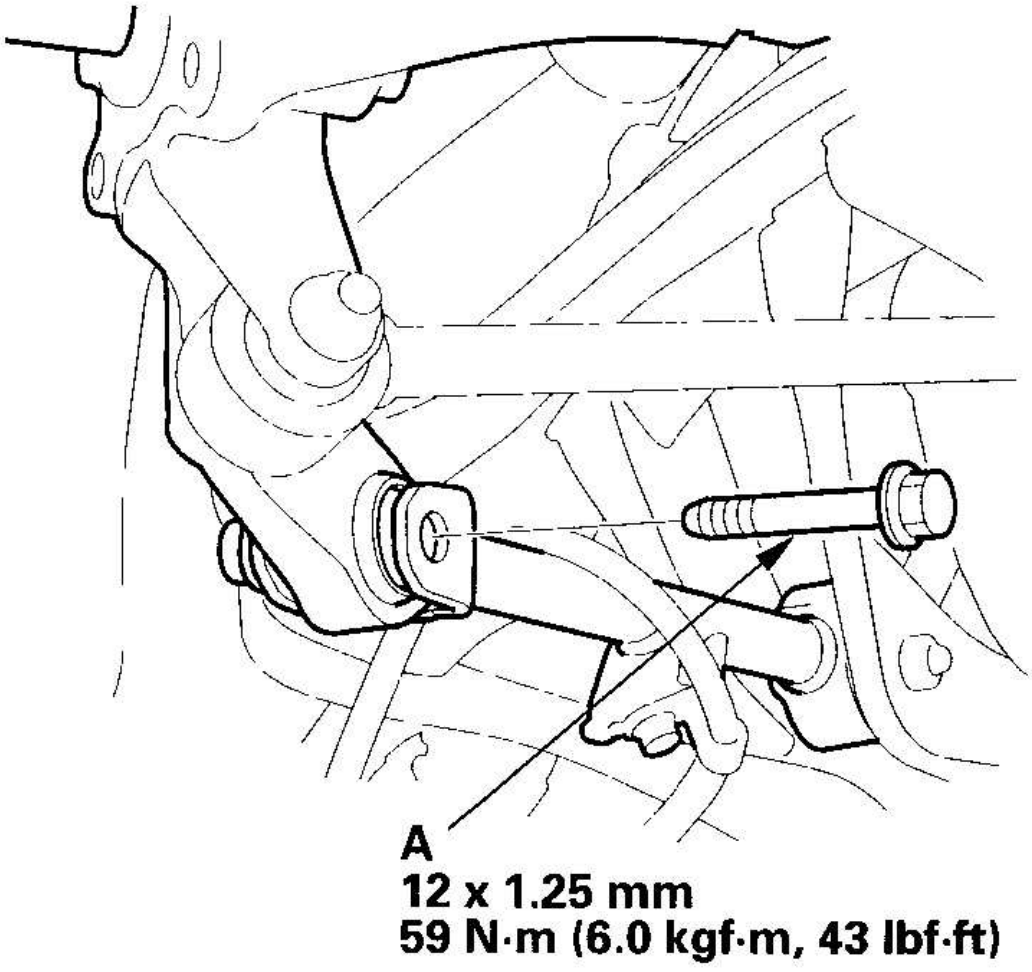


Fig. 26: Removing Trailing Arm Mounting Bolt From Knuckle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the lower arm mounting bolt (A), then remove the knuckle (B).

NOTE: During installation, install the new lower arm mounting bolt and new nut.

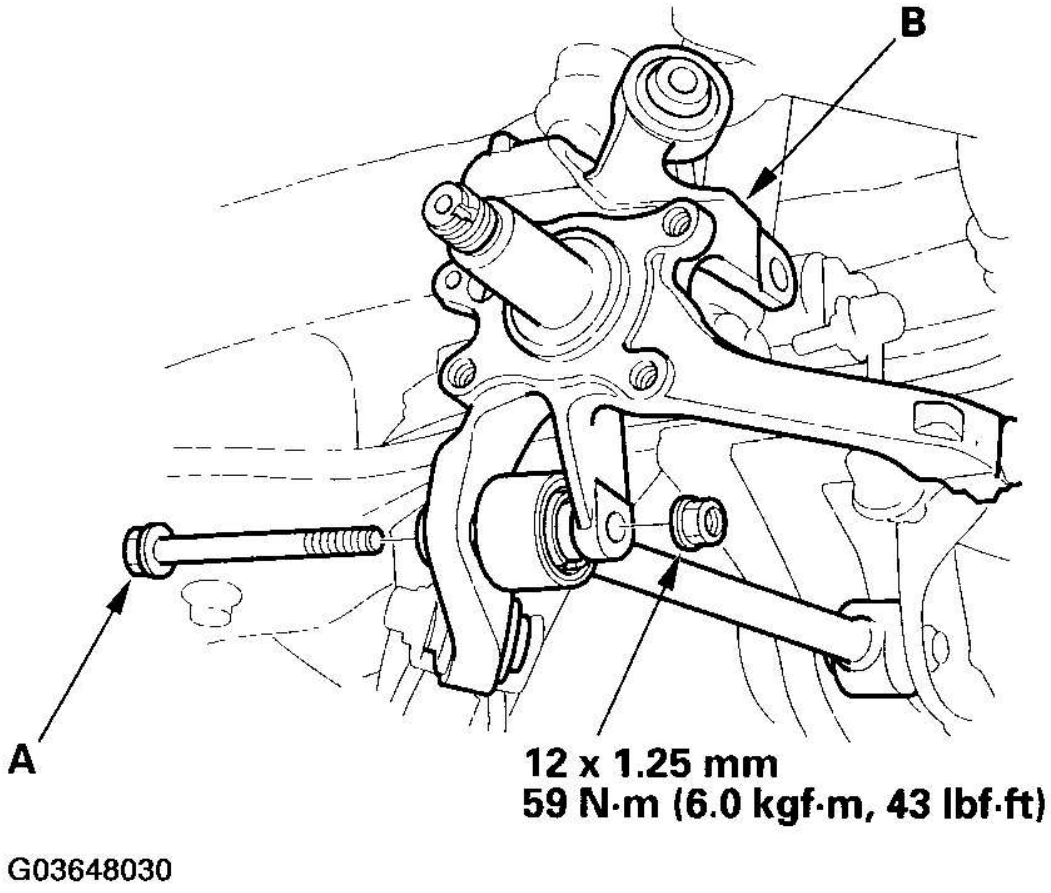


Fig. 27: Removing Lower Arm Mounting Bolt
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Install the knuckle in the reverse order of removal, and note these items:
    - Be careful not to damage the ball joint boot when installing the knuckle.
    - Tighten all mounting hardware to the specified torque values.
    - First install all the components and lightly tighten the bolts and nuts, then raise the suspension to load it with the vehicle's weight before fully tightening to the specified torque values.
    - Torque the castle nut to the lower torque specification, then tighten it only far enough to align the slot with the ball joint pin hole. Do not align the castle nut by loosening it.

- Install a new lock pin on the castle nut after torquing.
- Before installing the wheel, clean the mating surface on the brake drum and the inside of the wheel.
- Fill the master cylinder reservoir to the MAX (upper) level line, and bleed the brake system (see **BRAKE SYSTEM BLEEDING**). Check for a leak at the brake line to wheel cylinder, and retighten if necessary.
- Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

UPPER ARM REMOVAL/INSTALLATION

Special Tools Required

Ball joint remover, 28 mm 07MAC-SL0A202

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheel.
3. Remove the lock pin (A) from the upper arm ball joint, and loosen the nut (B).

NOTE: During installation, install the new lock pin as shown below after tightening the nut.

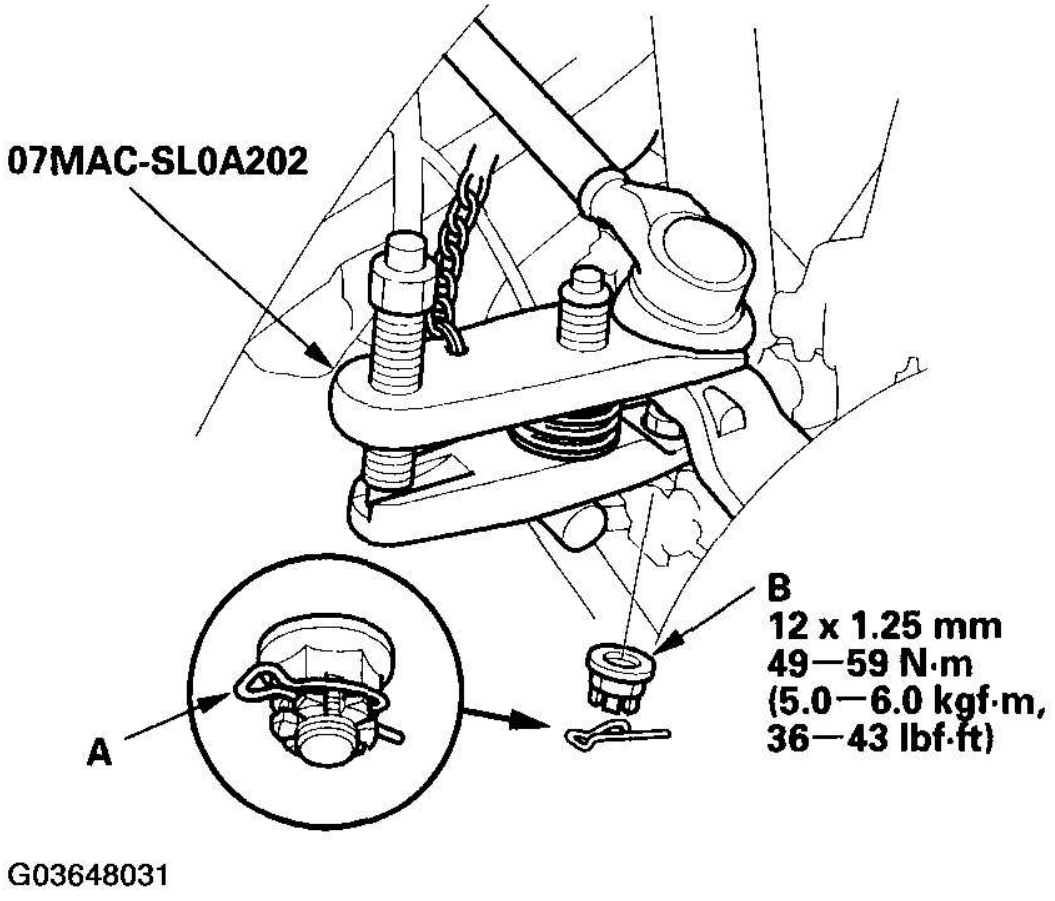


Fig. 28: Removing Lock Pin From Upper Arm Ball Joint
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Disconnect the upper arm ball joint from the knuckle using the ball joint remover (see **BALL JOINT REMOVAL**).
5. Remove the brake hose mounting bracket (A). Do not disconnect the brake line.

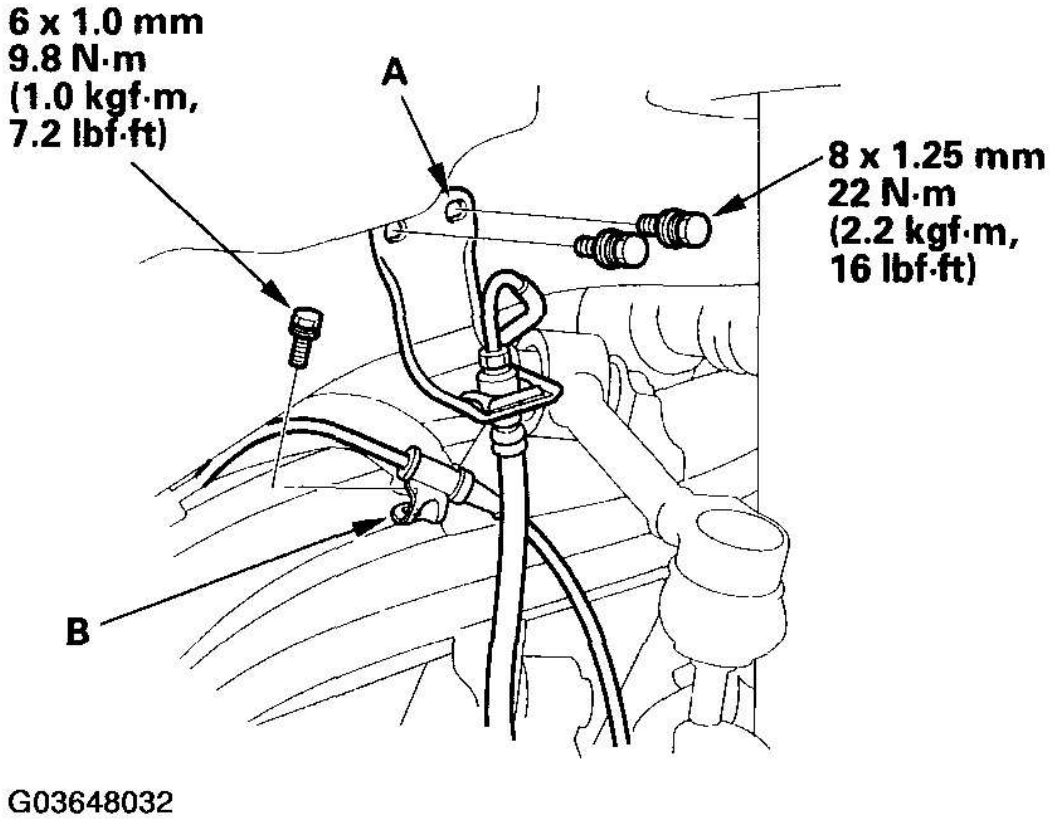


Fig. 29: Removing Brake Hose Mounting Bracket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the wheel sensor harness mounting bracket (B).
7. Remove the flange bolt (A), and remove the upper arm (B).

NOTE: During installation, install the new flange bolt.

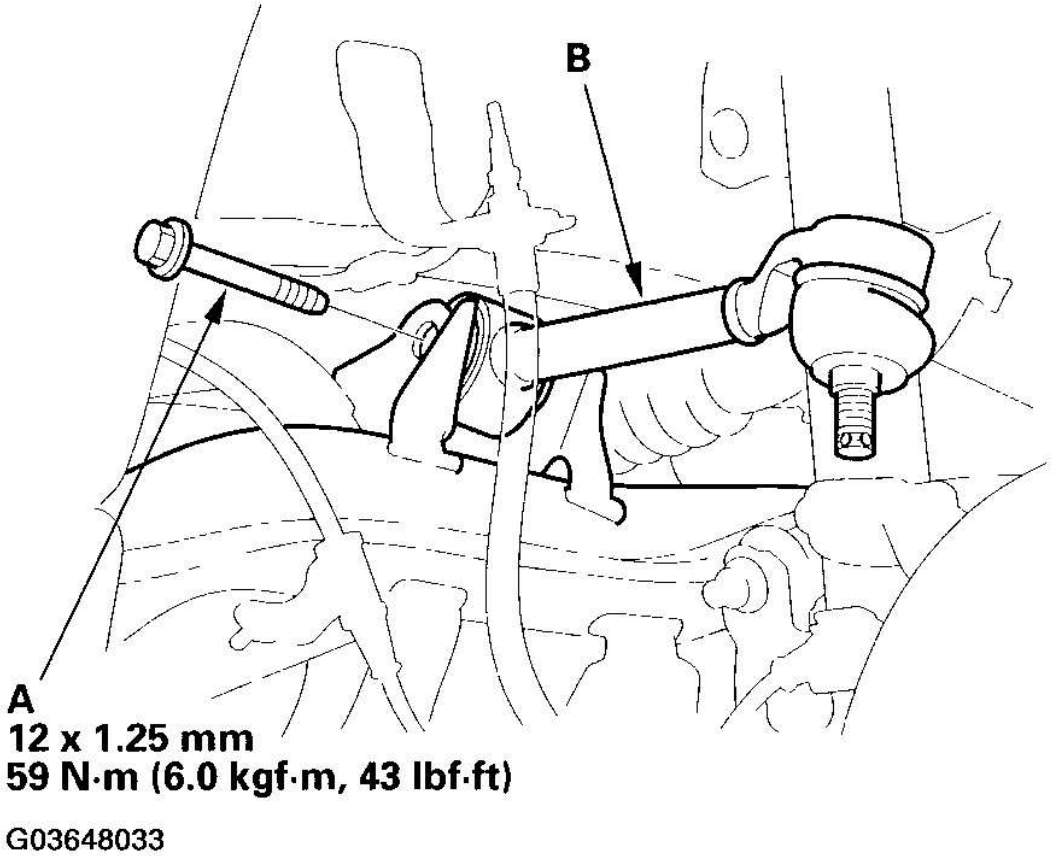


Fig. 30: Removing Flange Bolt And Upper Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the upper arm in the reverse order of removal, and note these items:
   - Be careful not to damage the ball joint boot when installing the knuckle.
   - Before connecting the ball joints to the knuckle, degrease the threaded section and tapered portion of the ball joint pin, the knuckle connecting hole, the threaded section, and the mating surface of the castle nut.
   - Tighten all mounting hardware to the specified torque values.
   - First install all the components and lightly tighten the bolts and nuts, then raise the suspension to load it with the vehicle's weight before fully tightening to the specified torque values.
   - Torque the castle nut to the lower torque specification, then tighten it only

far enough to align the slot with the ball joint pin hole. Do not align the castle nut by loosening it.

- Install a new lock pin on the castle nut after torquing.
- Before installing the wheel, clean the mating surface on the brake disc or drum and inside of the wheel.
- Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

LOWER ARM REPLACEMENT

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS** , **SAFETY STANDS**).
2. Remove the rear wheel.
3. Remove the lower arm mounting nut (A) and mounting bolt (B) from the knuckle side.

NOTE: During installation, install the new lower arm mounting bolt and nut.

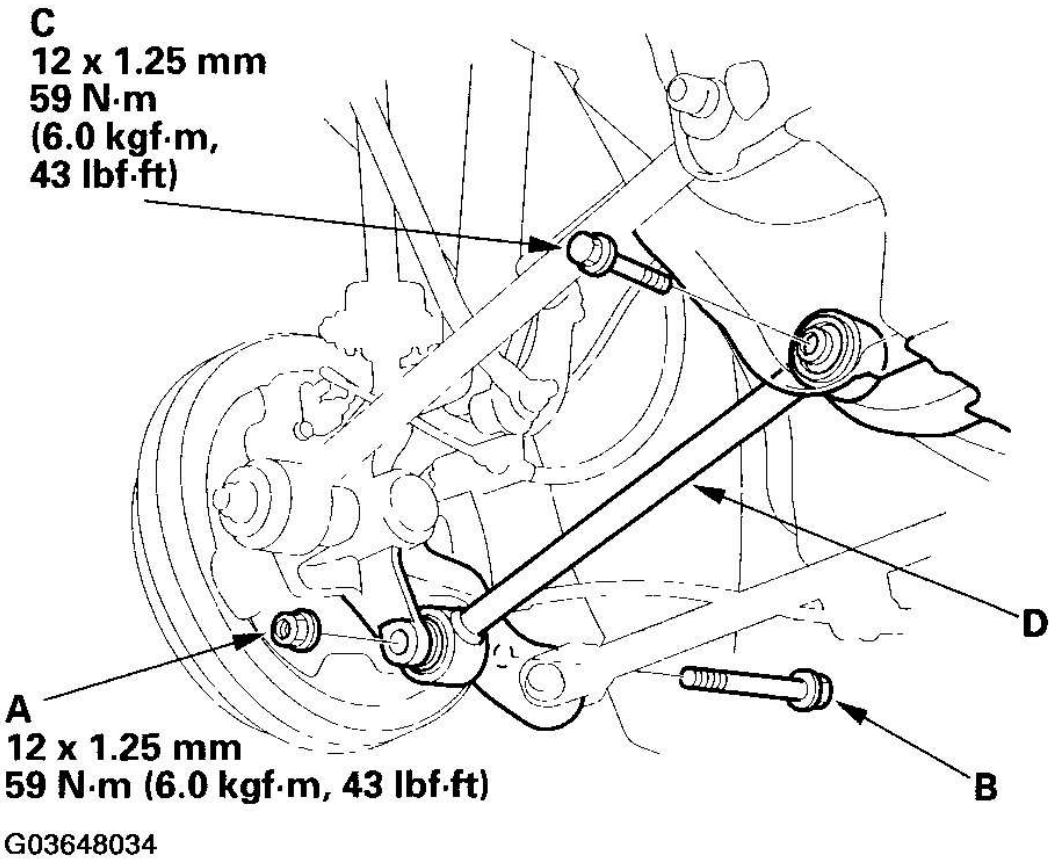


Fig. 31: Removing Lower Arm Mounting Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the flange bolt (C), and remove the lower arm (D).
5. Install the lower arm in the reverse order of removal, and note these items:
   - Tighten all mounting hardware to the specified torque values.
   - First install all the components and lightly tighten the bolts and nuts, then raise the suspension to load it with the vehicle's weight before fully tightening to the specified torque values.
   - Before installing the wheel, clean the mating surface on the brake disc or drum and inside of the wheel.
   - Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

CONTROL ARM REPLACEMENT

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheel.
3. Remove the control arm mounting nut (A) and washer (B) from the knuckle side.

NOTE: During installation, install the new control arm mounting nut.

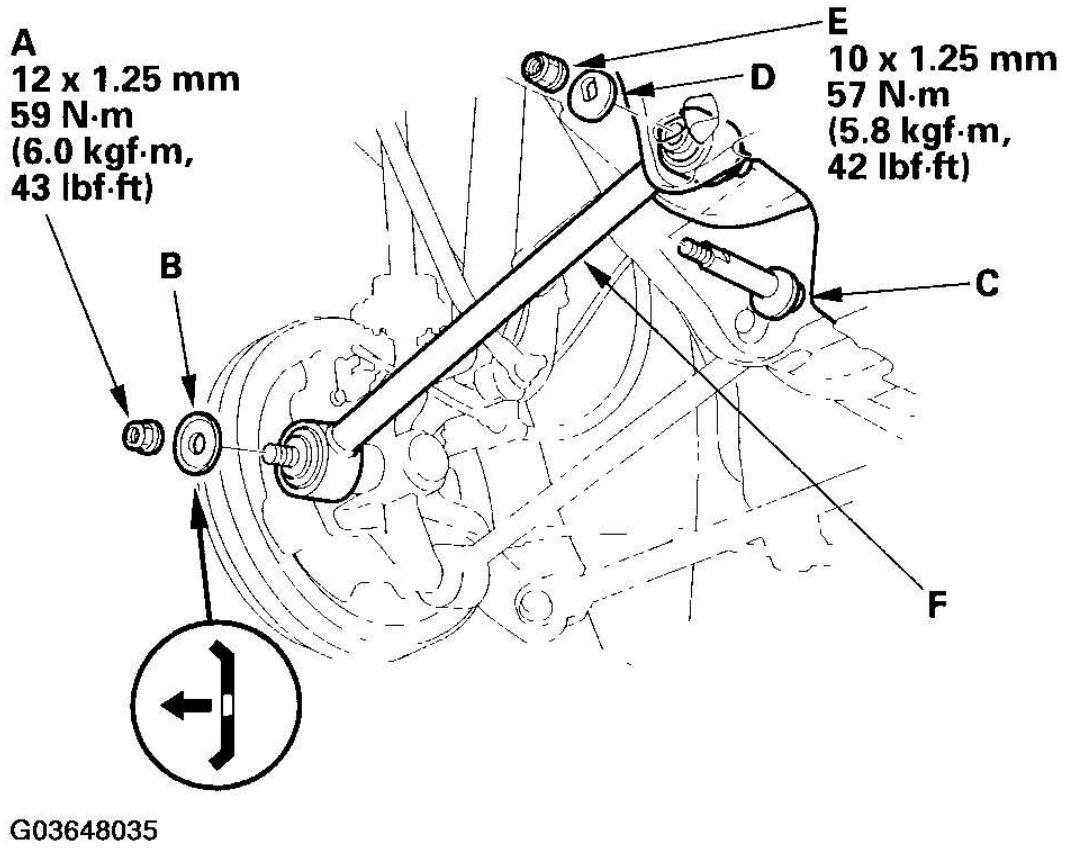


Fig. 32: Removing Control Arm Mounting Nut And Washer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Mark the cam positions of the adjusting bolt (C) and adjusting cam (D), then remove the self-locking nut (E), and adjusting cam, and adjusting bolt. Discard the self-locking nut and control arm mounting nut.

NOTE: During installation, install the new self locking nut and the new adjusting bolt.

5. Remove the control arm (F).
6. Install the control arm in the reverse order of removal, and note these items:
   - Align the cam positions of the adjusting bolt and adjusting cam with the marked positions when tightening.
   - Use a new self-locking nut and control arm mounting nut on reassembly.
   - Tighten all mounting hardware to the specified torque values.
   - First install all the components and lightly tighten the bolts and nuts, then raise the suspension to load it with the vehicle's weight before fully tightening to the specified torque values.
   - Before installing the wheel, clean the mating surface on the brake disc or drum and inside of the wheel.
   - Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

TRAILING ARM REMOVAL/INSTALLATION

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheel.
3. Remove the parking brake cable bracket (A) from the trailing arm (B).

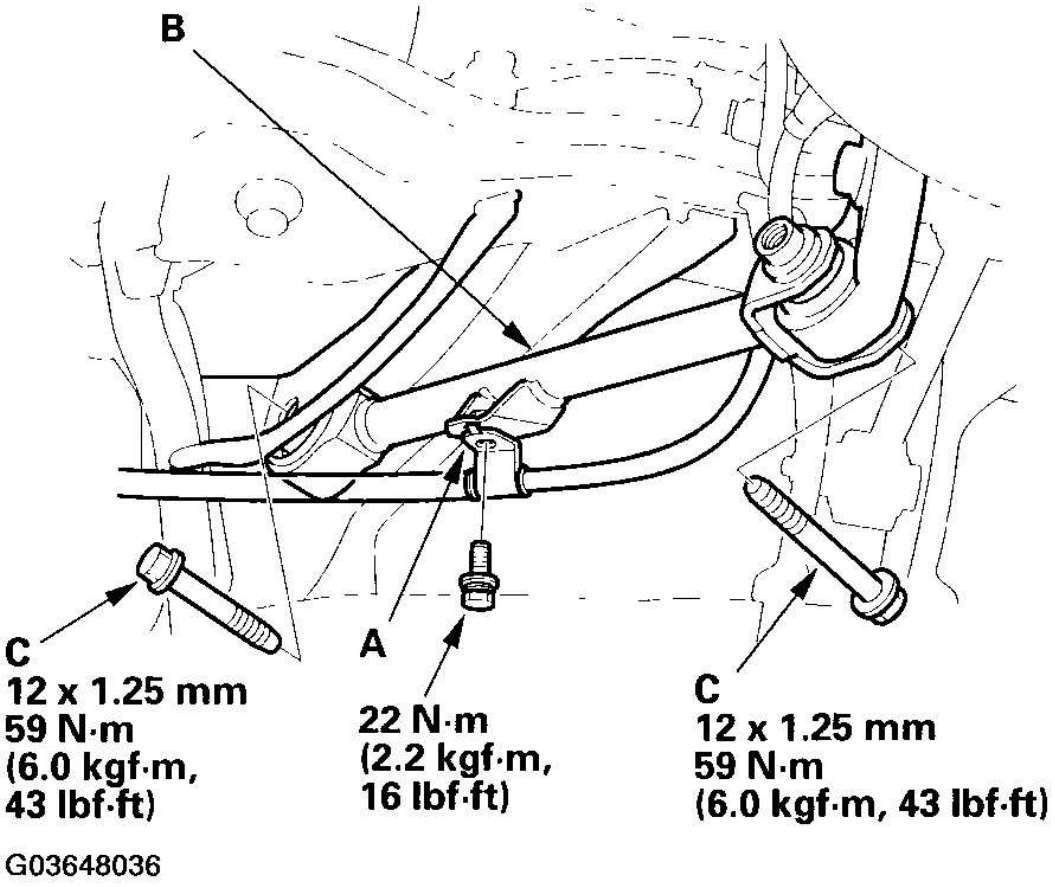


Fig. 33: Removing Parking Brake Cable Bracket From Trailing Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the mounting bolts (C), and remove the trailing arm.

NOTE: During installation, install the new mounting bolts.

5. Install the trailing arm in the reverse order of removal, and note these items:
   - Tighten all mounting hardware to the specified torque values.
   - First install all the components and lightly tighten the bolts and nuts, then raise the suspension to load it with the vehicle's weight before fully tightening to the specified torque values.
   - Before installing the wheel, clean the mating surface on the brake disc or

drum and inside of the wheel.

- Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

LEADING ARM REPLACEMENT

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheel.
3. Remove the mounting bolts, and remove the leading arm (A).

NOTE: During installation, install the new mounting bolts.

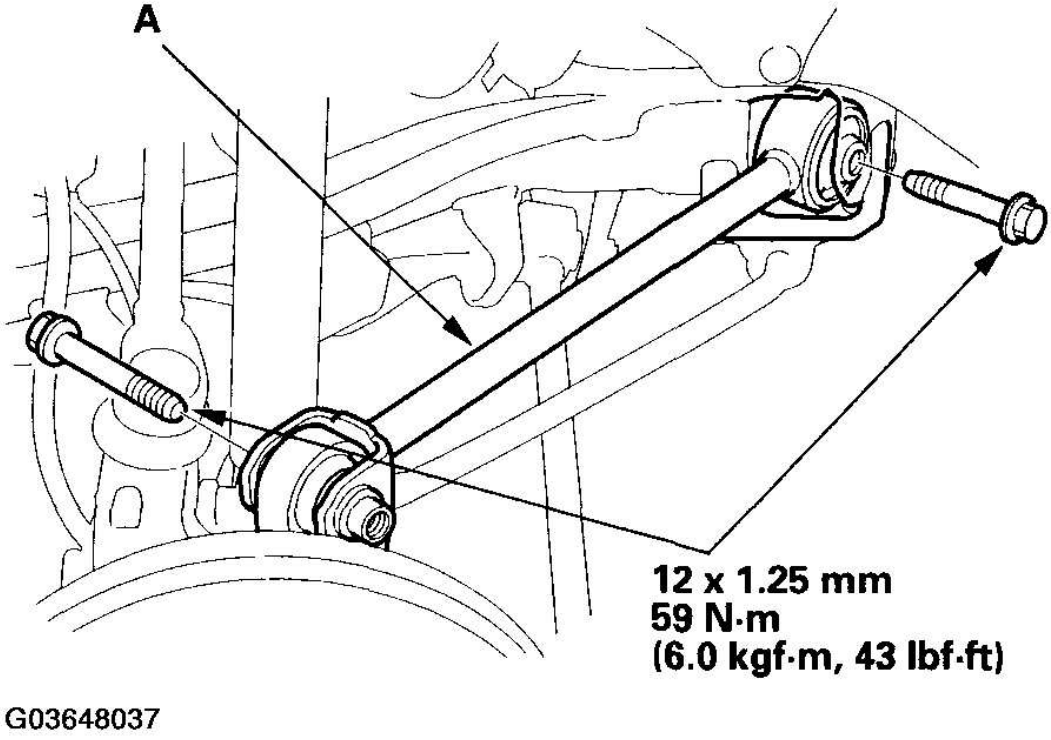


Fig. 34: Removing Leading Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the leading arm in the reverse order of removal, and note these items:

- Tighten all mounting hardware to the specified torque values.
- First install all the components and lightly tighten the bolts and nuts, then raise the suspension to load it with the vehicle's weight before fully tightening to the specified torque values.
- Before installing the wheel, clean the mating surface on the brake disc or drum and inside of the wheel.
- Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

STABILIZER LINK REMOVAL/INSTALLATION

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**). Remove the rear wheels.
2. Remove the rear wheel.
3. Remove the self-locking nut (A) and flange nut (B) while holding the respective joint pin (C) with a hex wrench (D), and remove the stabilizer link (E).

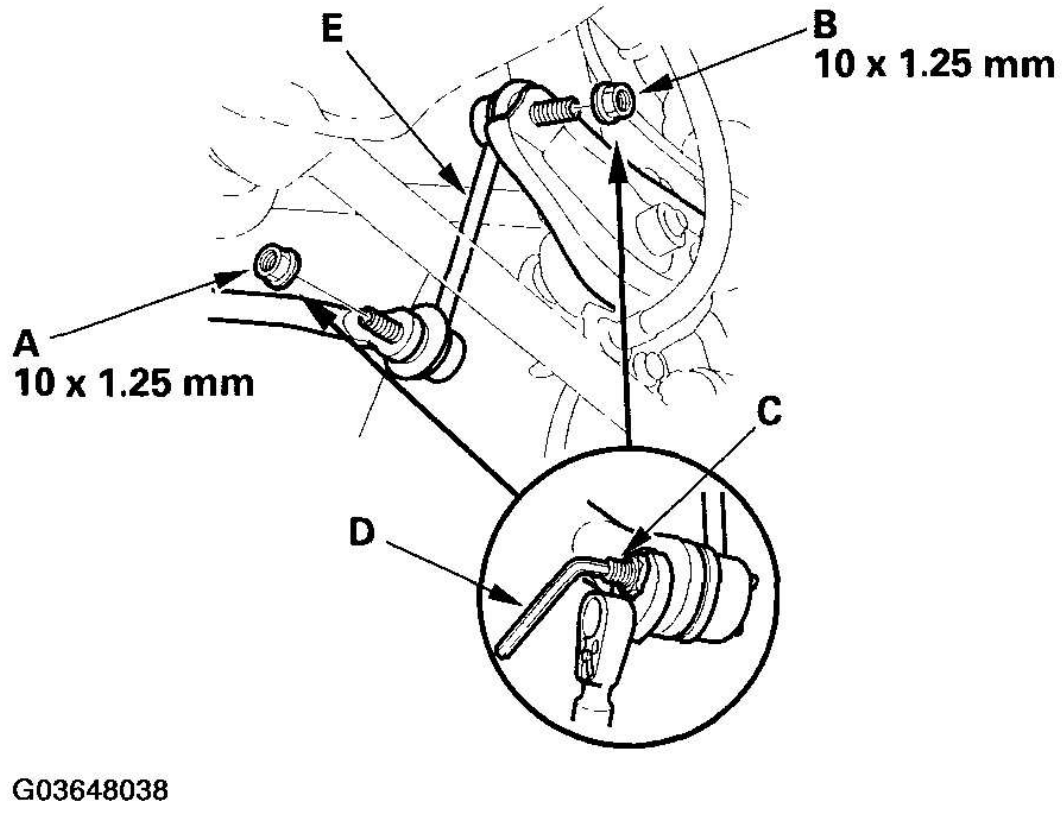


Fig. 35: Removing Self-Locking Nut And Flange Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the stabilizer link (A) on the stabilizer bar (B) and stabilizer link bracket (C) with the joint pins set at the center of their range of the movement.

NOTE: The left stabilizer link has a white paint mark (D), while the right stabilizer link has a yellow paint mark.

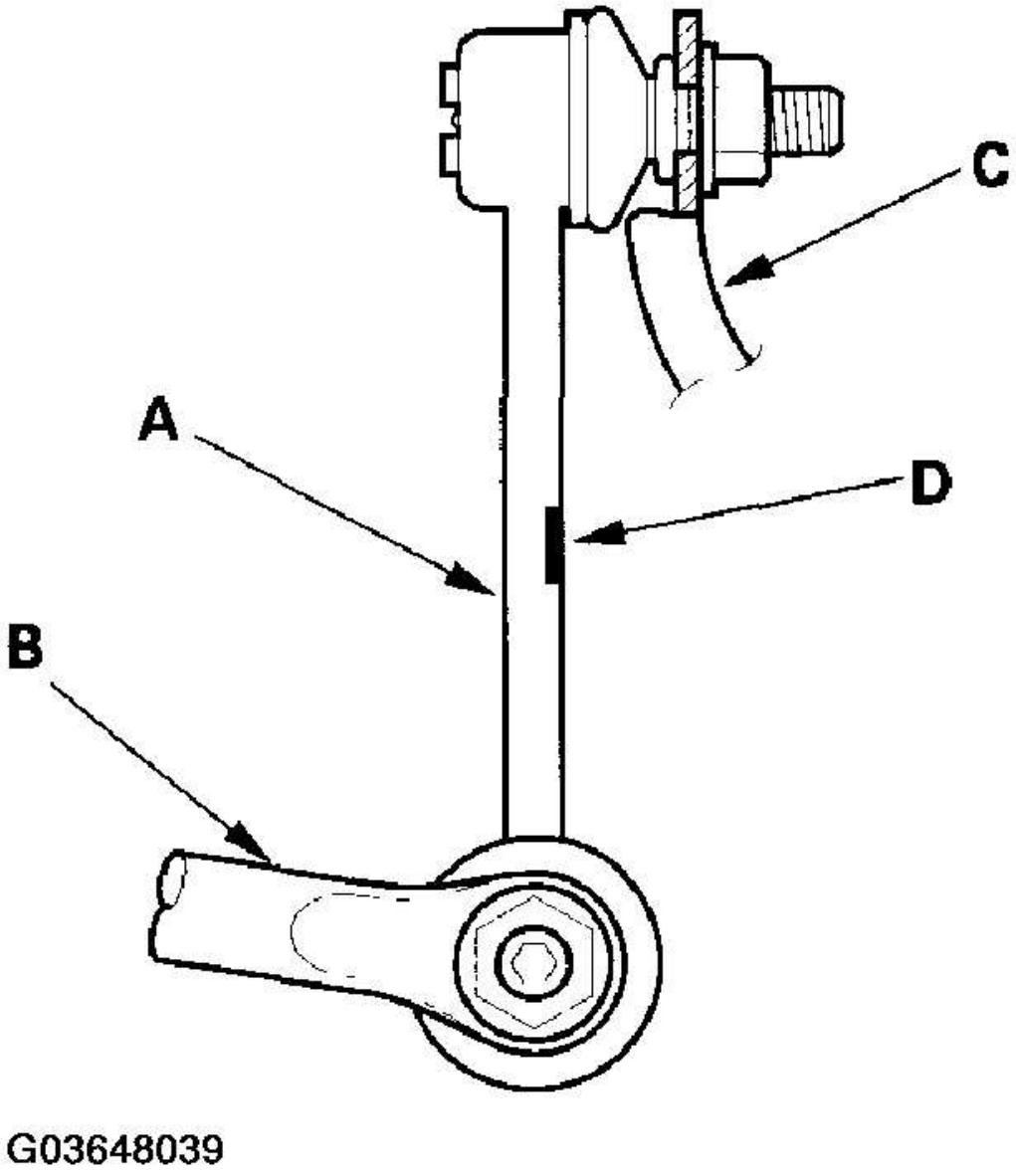


Fig. 36: Installing Stabilizer Link On Stabilizer Bar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the new self-locking nut and flange nut, and lightly tighten them.
6. Place the floor jack under the knuckle, and raise the suspension to load it with the vehicle's weight.

7. Tighten the self-locking nut (A) and flange nut (B) to the specified torque values while holding the respective joint pins (C) with a hex wrench (D).

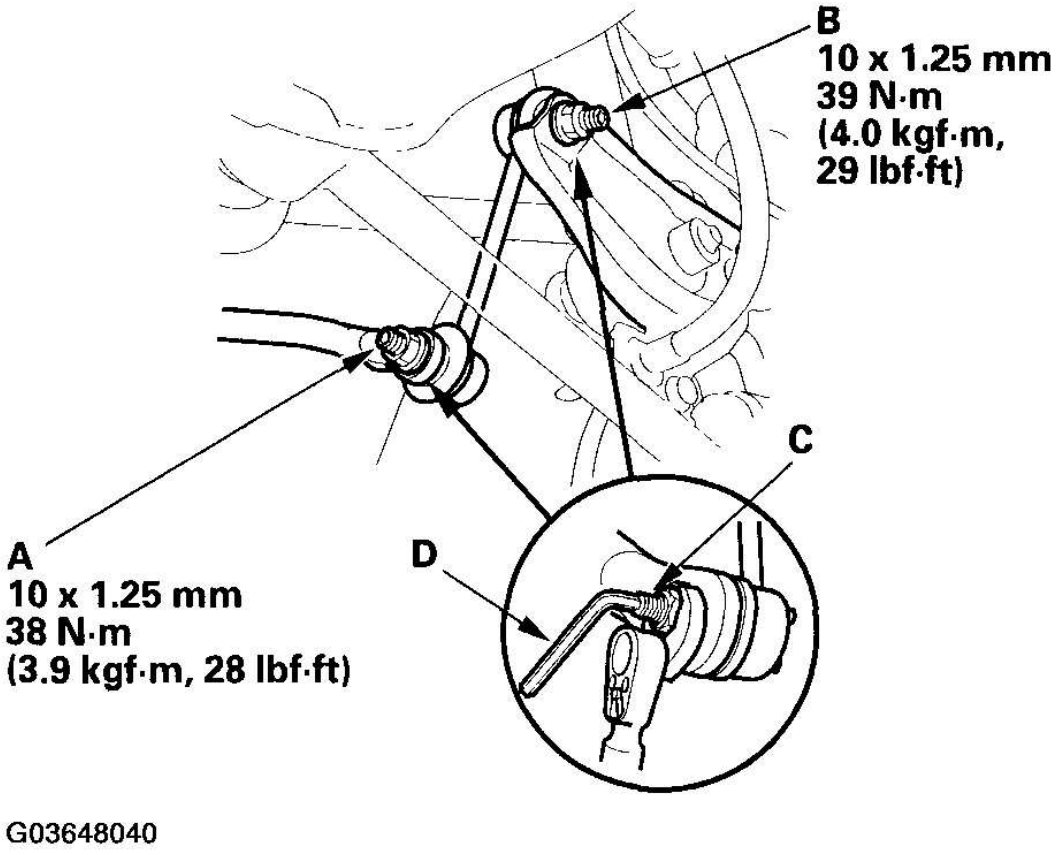


Fig. 37: Tightening Self-Locking Nut And Flange Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Reinstall all removed parts, and test-drive the vehicle.
9. After 5 minutes of driving, tighten the self-locking nut again to the specified torque value.

STABILIZER BAR REPLACEMENT

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**). Remove the rear wheels.

2. Remove the rear wheel.
3. Disconnect the stabilizer links from the stabilizer bar (A) on the right and left (see **STABILIZER LINK REMOVAL/INSTALLATION**).

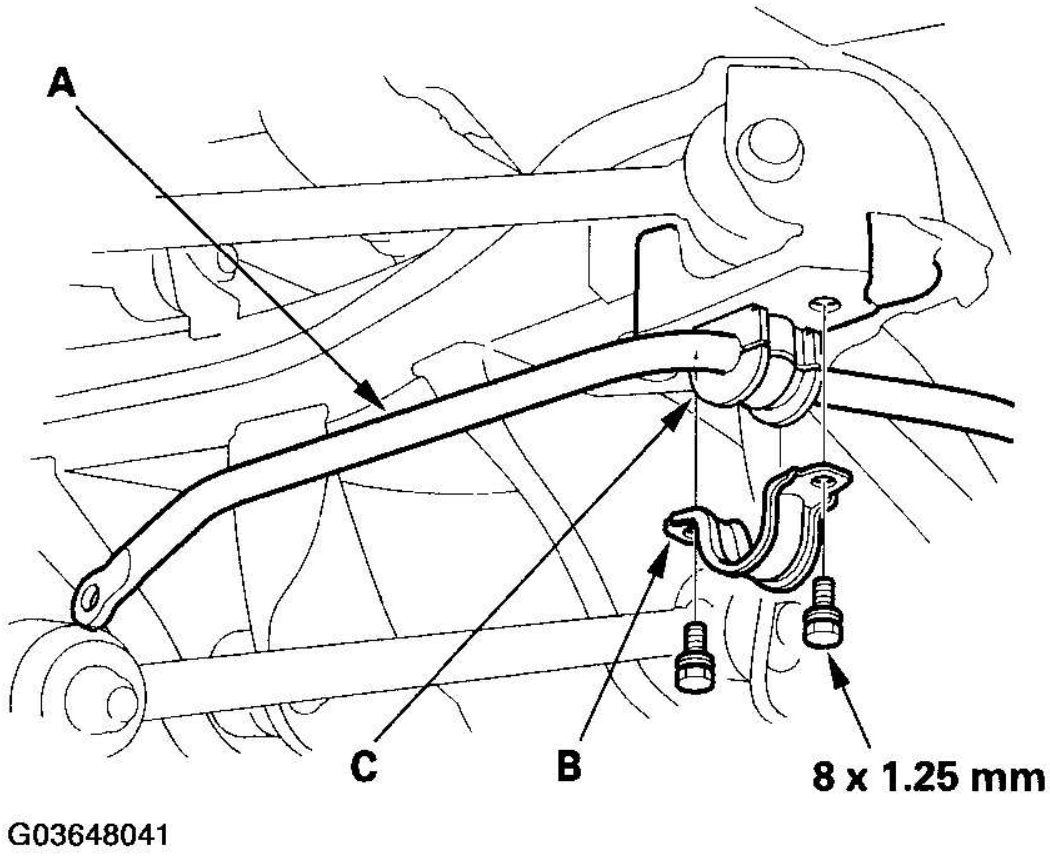


Fig. 38: Disconnecting Stabilizer Links From Stabilizer Bar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the flange bolts and bushing holders (B), then remove the bushing (C) and the stabilizer bar.
5. Install the stabilizer bar in the reverse order of removal, and note these items:
   - Note the right and left direction of the stabilizer bar.
   - Align the ends of the paint marks (A) on the stabilizer bar with the bushing (B).

- Refer to **STABILIZER LINK REMOVAL/INSTALLATION** to connect the stabilizer to the links .

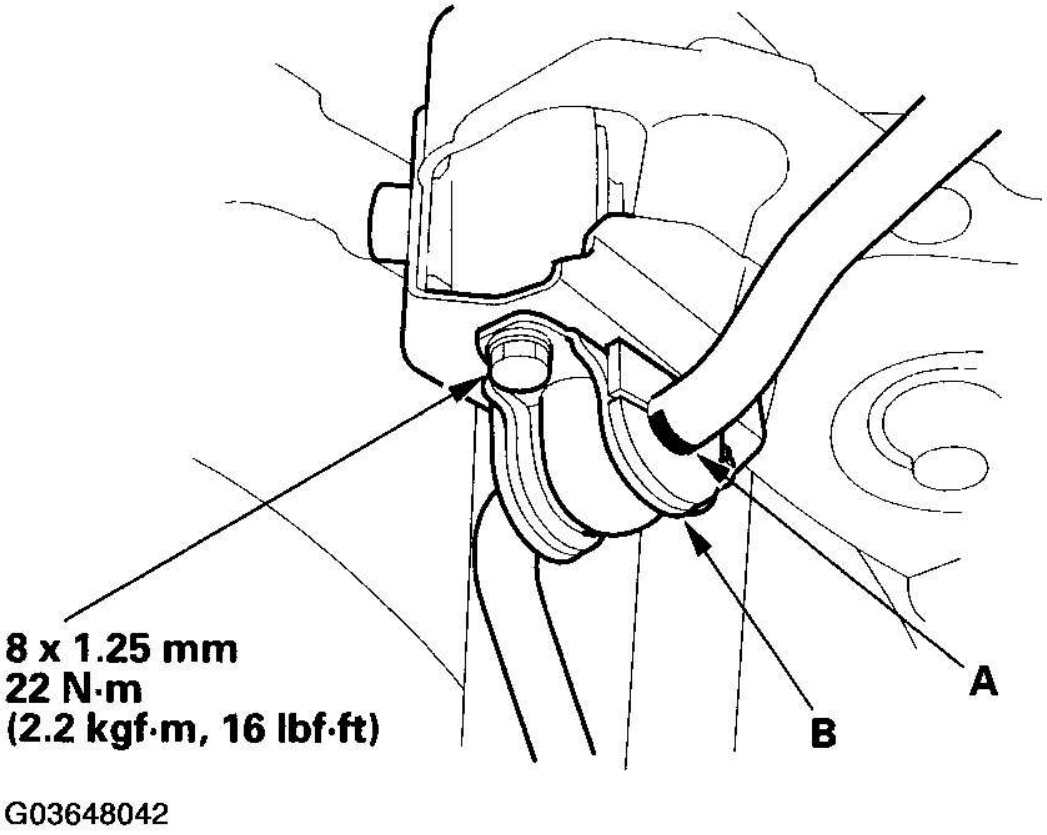


Fig. 39: Aligning Ends Of Paint Marks On Stabilizer Bar
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- Before installing the wheel, clean the mating surfaces on the brake disc or drum and inside of wheel.
- Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

KNUCKLE BUSHING REPLACEMENT

Special Tools Required

Bushing driver 30-40 07NAD-SS00100 or 07NAD-SS00101

1. Position the knuckle (A) on the press with the machined surface (B) facing down.

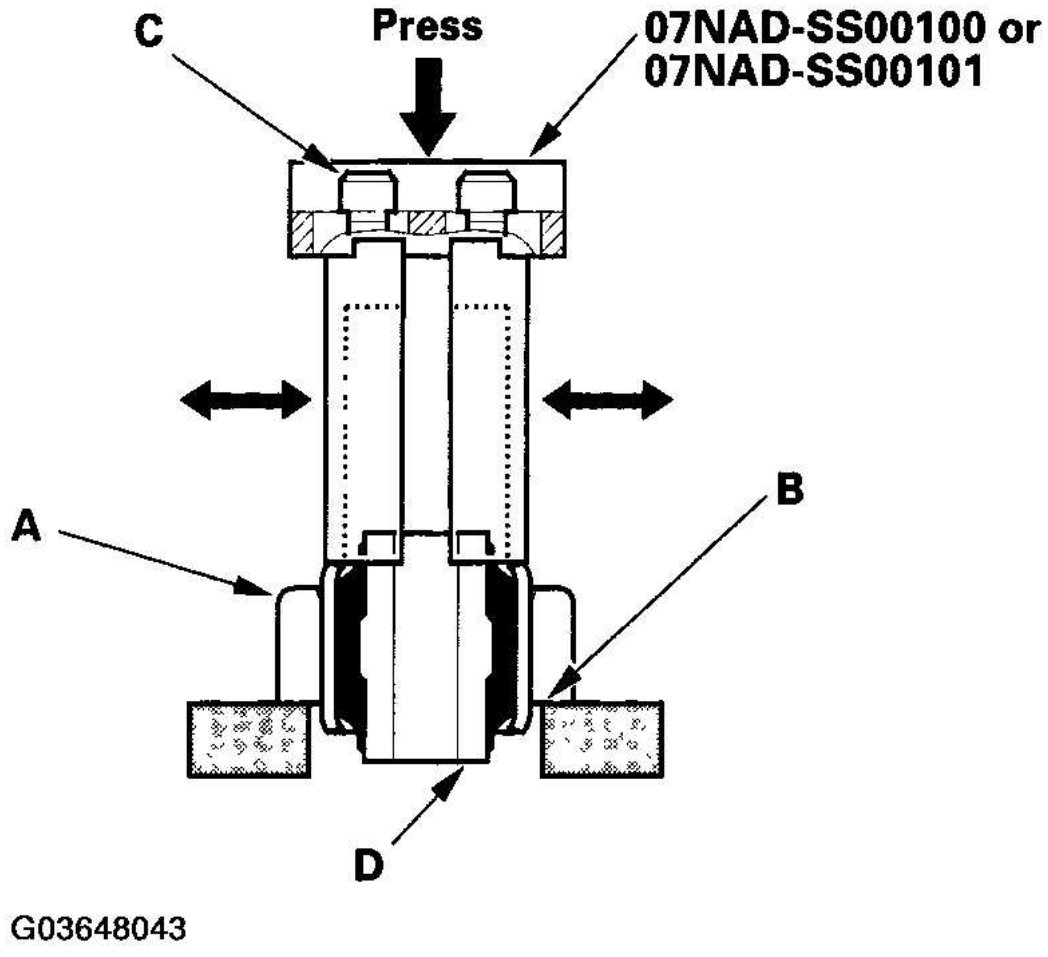


Fig. 40: Positioning Knuckle On Press With Machined Surface Facing Down
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Adjust the bushing driver so it matches the inner diameter of the bushing hole, then tighten the socket bolts (C) securely.
3. Position the bushing driver on the bushing (D).

4. Remove the bushing by pressing on the special tool with a press as shown in **Fig. 40**.

NOTE: Be careful not to damage the inside of the bushing hole while pressing on the bushing.

5. Position the knuckle (A) on the press with the machined surface (B) facing up.

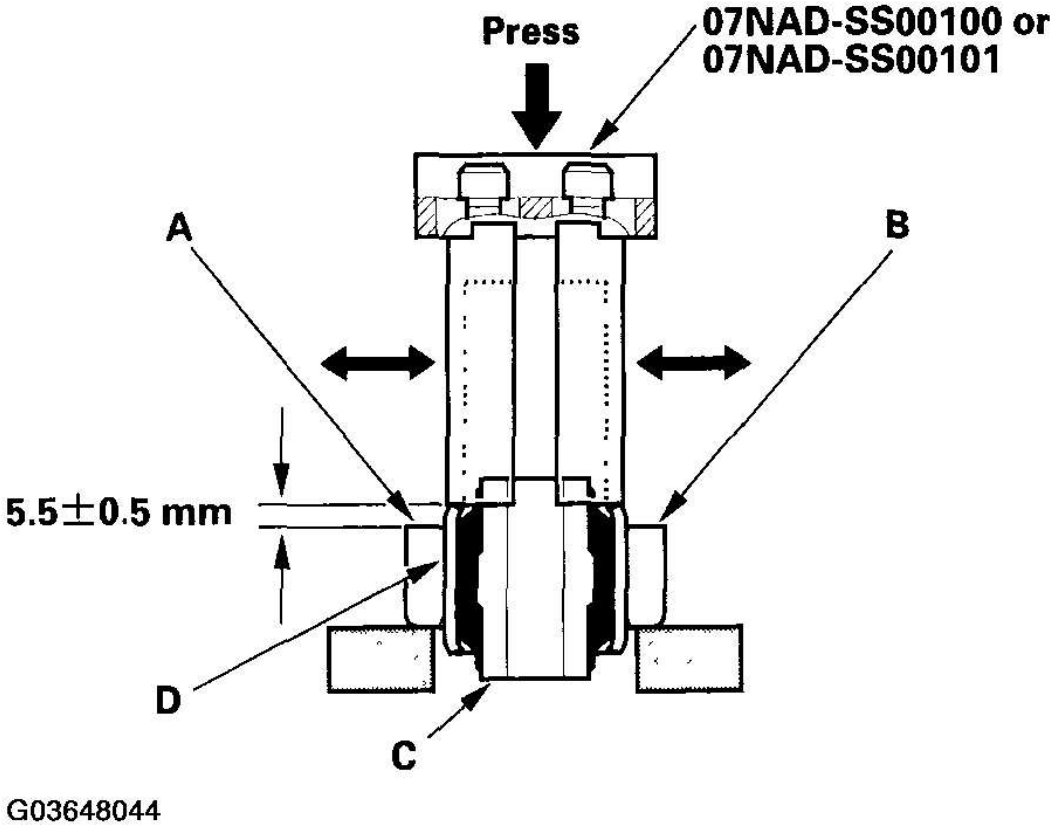


Fig. 41: Positioning Knuckle On Press With Machined Surface Facing Up
Courtesy of AMERICAN HONDA MOTOR CO., INC.

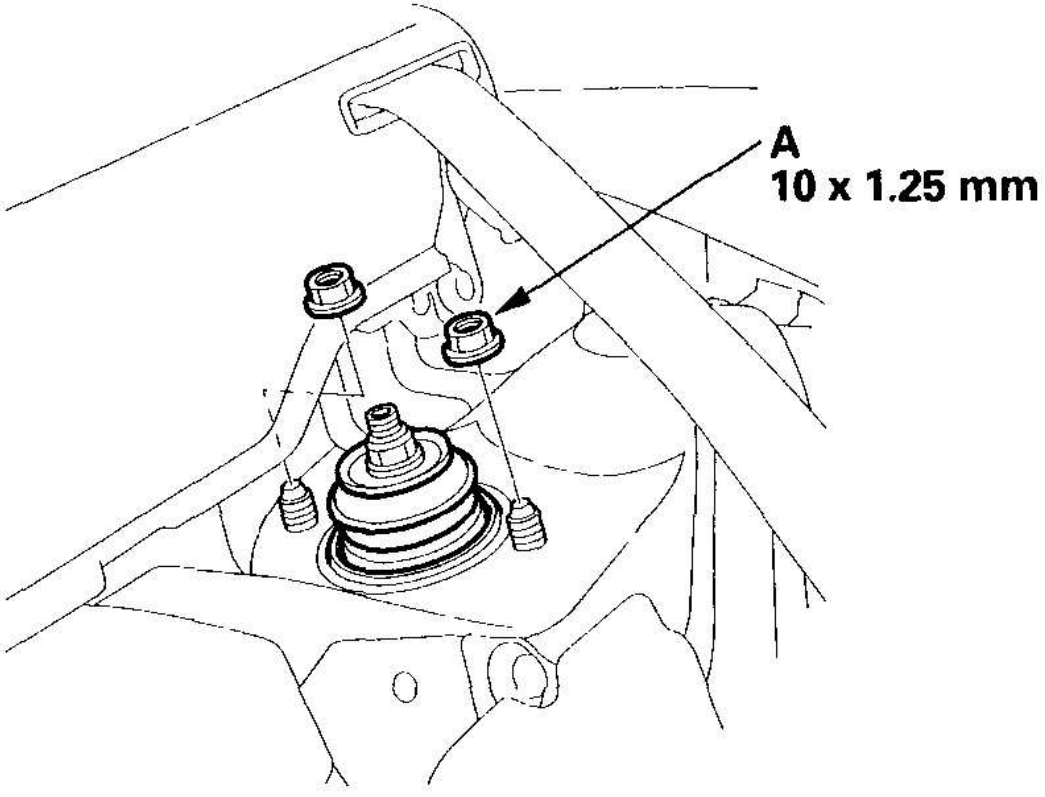
6. Adjust the special tool so it matches with the outer diameter of the bushing (C).
7. Position the special tool on the outer sleeve (D) of the bushing.
8. Press the bushing into the knuckle using the bushing driver as shown in **Fig.**

41.

DAMPER/SPRING REMOVAL AND INSTALLATION

REMOVAL

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheel.
3. Remove the rear bulkhead cover (see **TRIM REMOVAL/INSTALLATION - REAR SHELF AREA**).
4. Remove the seat side bolster (see **4-DOOR**).
5. Remove the two flange nuts (A).



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Fig. 42: Removing Flange Nuts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the flange nut (A) while holding the joint pin (B) with a hex wrench (C), and disconnect the stabilizer link (D) from the stabilizer link bracket (E).

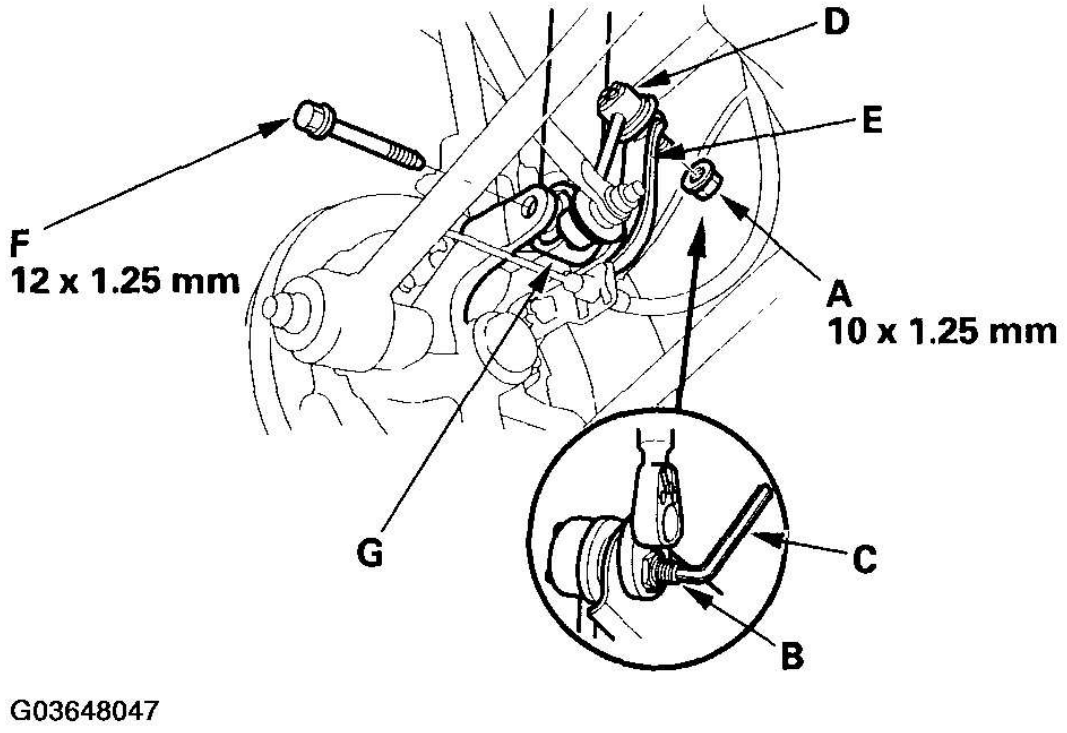


Fig. 43: Removing Flange Nut Holding Joint Pin With Hex Wrench
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the flange bolt (F) from the knuckle.
8. Lower the rear suspension, and remove the damper (G) from the vehicle. Damper springs are different, left and right. Mark the springs L and R before you continue.

INSTALLATION

1. Lower the rear suspension, and position the damper (A), in the body.

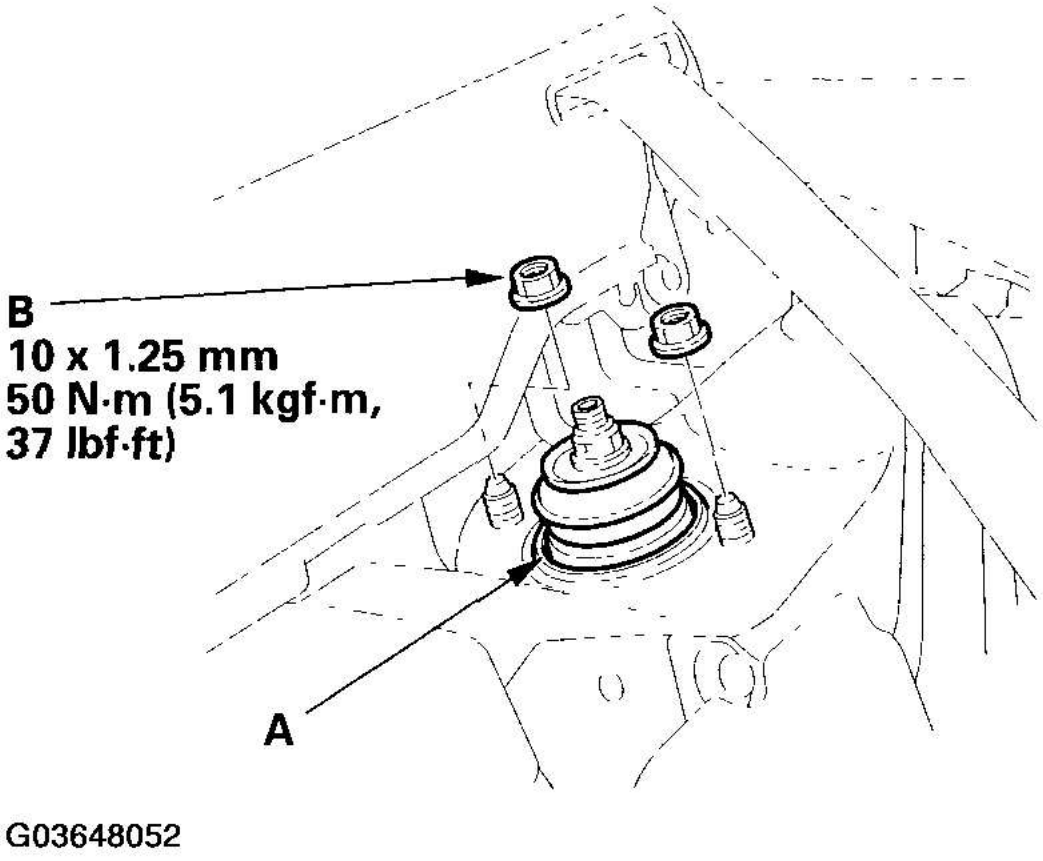


Fig. 44: Positioning Damper In Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Loosely install the flange nuts (B) onto the top of the damper.
3. Loosely install the flange bolt (A) on the bottom of the damper. Connect the stabilizer link (B) on the bracket (C), and loosely install the flange nut (D).

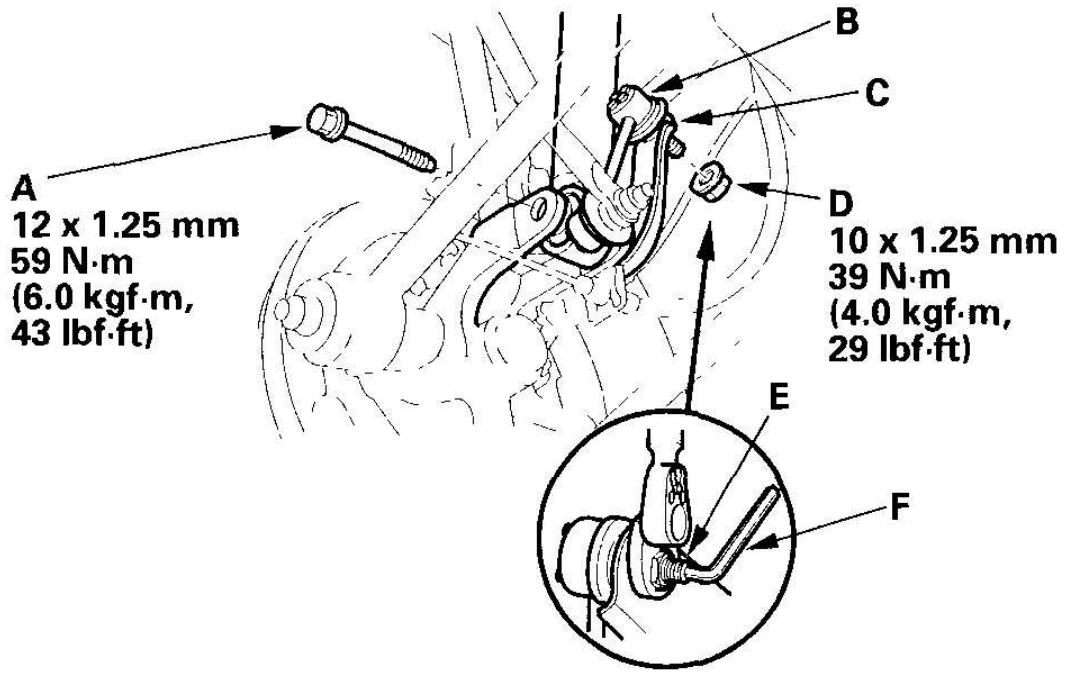


Fig. 45: Installing Flange Bolt On Bottom Of Damper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Raise the rear suspension with a floor jack load the vehicle weight, and tighten the flange bolt to the specified torque value.
5. Tighten the flange nut while holding the joint pin (E) with a hex wrench (F).
6. Tighten the two flange nuts on top of the damper to the specified torque value.
7. Install the seat side bolster (see **4-DOOR**).
8. Install the rear bulkhead cover (see **TRIM REMOVAL/INSTALLATION - REAR SHELF AREA**).
9. Clean the mating surface of the brake disc or drum and the inside of the wheel, then install the rear wheel.
10. Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

EXPLODED VIEW

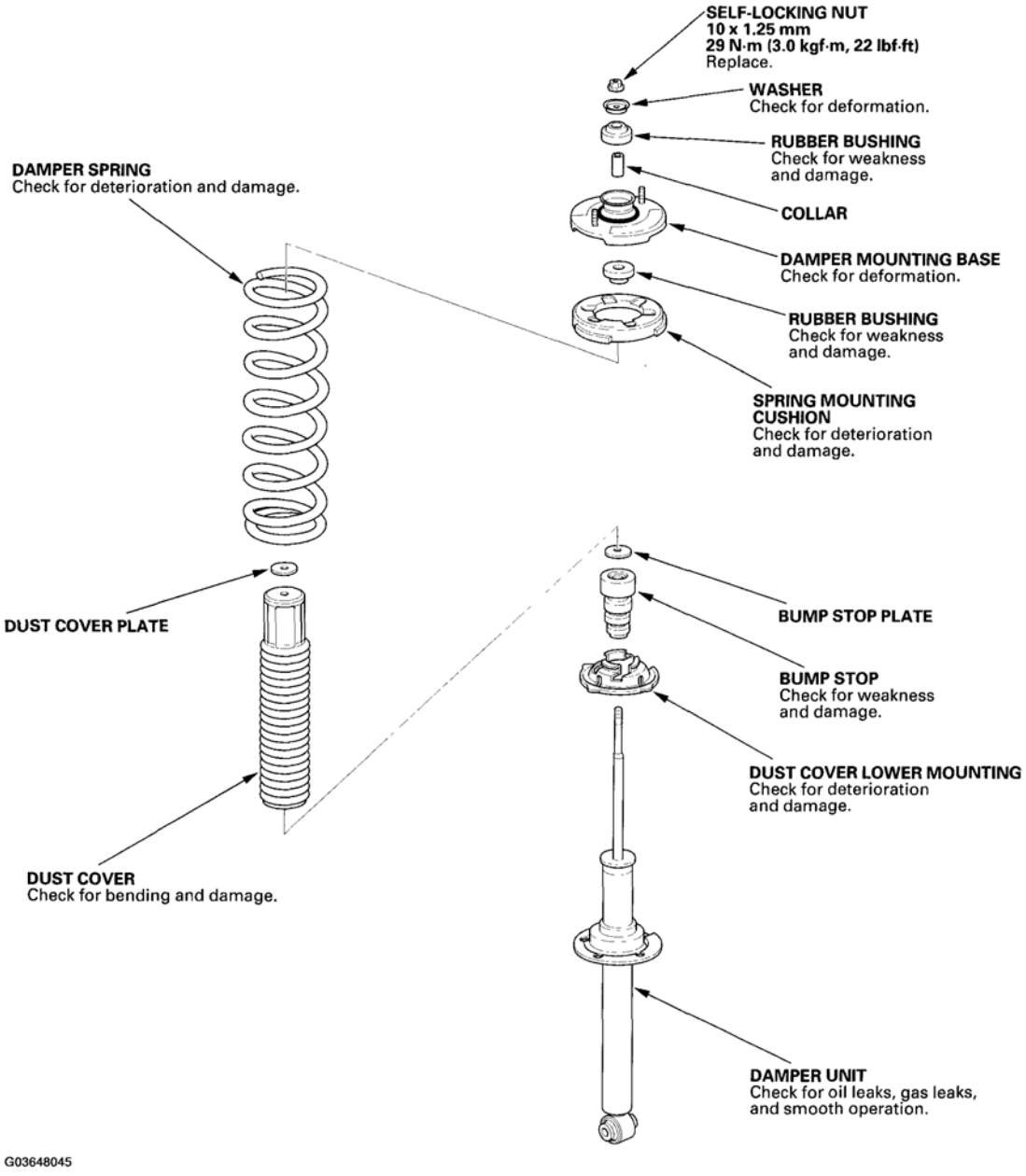


Fig. 46: Exploded View Of Damper/Spring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

NOTE: When compressing the damper spring, use a commercially available strut spring compressor (Branick MST-580A or Model 7200, or equivalent). According to the manufacturer's instructions.

DISASSEMBLY

1. Compress the damper spring, then remove the self-locking nut (A) while holding the damper shaft with a hex wrench (B). Do not compress the spring more than necessary to remove the self-locking nut.

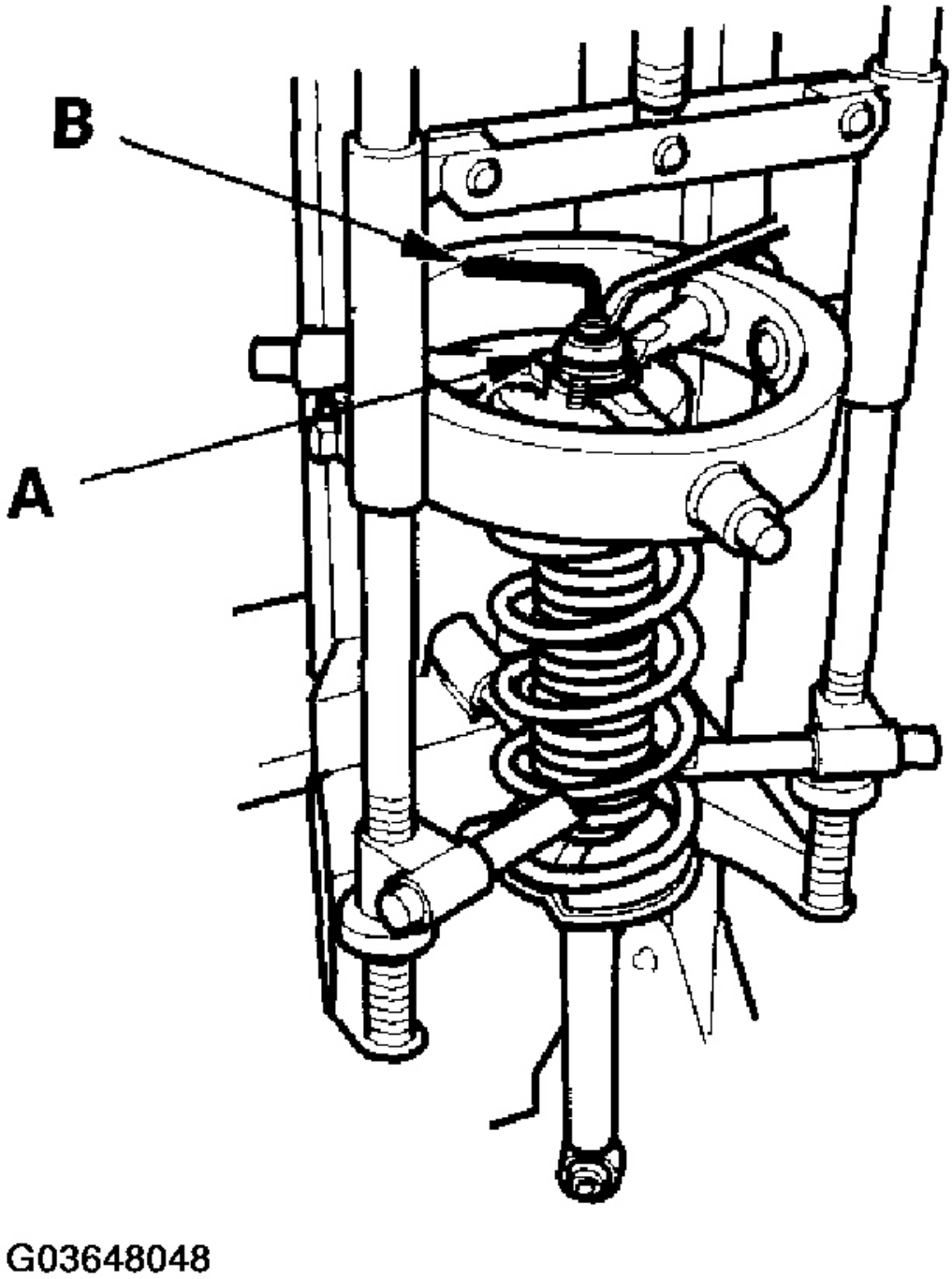


Fig. 47: Removing Self-Locking Nut Holding Damper Shaft With Hex Wrench

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Release the pressure from the strut spring compressor, then disassemble the damper as shown in **Fig. 46** .

INSPECTION

1. Reassemble all parts, except the spring.
2. Compress the damper assembly by hand, and check for smooth operation through a full stroke, both compression and extension. The damper should extend smoothly and constantly when compression is released. If it does not, the gas is leaking and the damper should be replaced.

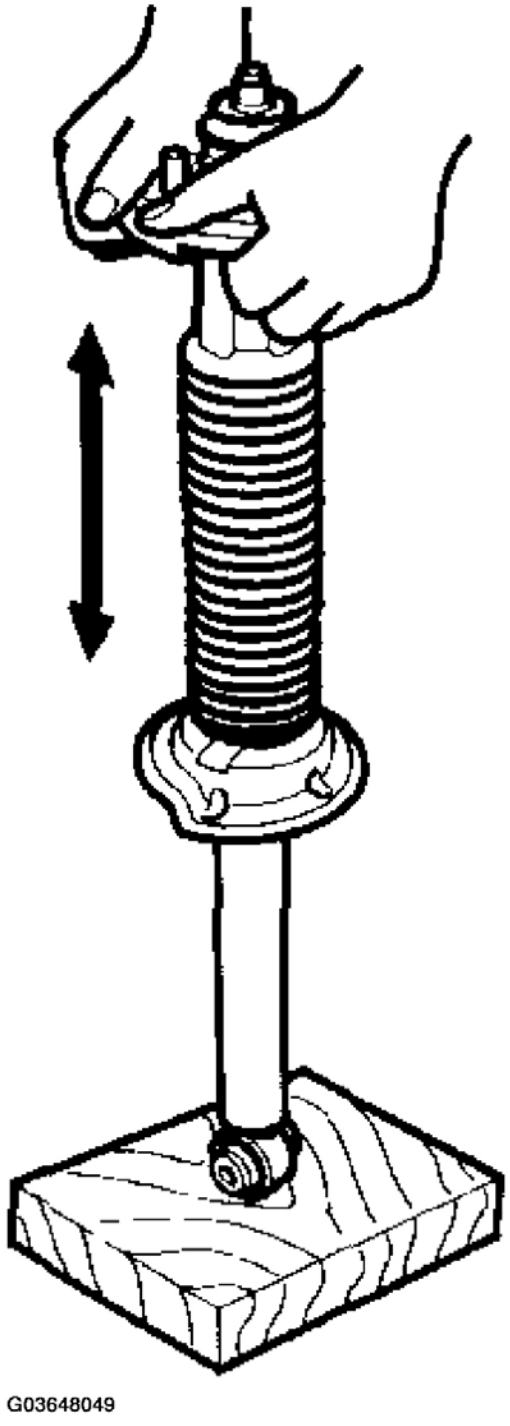


Fig. 48: Compressing Damper Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for oil leaks, abnormal noises, and binding during these tests.

REASSEMBLY

1. Install all parts except the self-locking nut and washer onto the damper unit by referring to the Exploded View. Align the bottom of the spring (A) and the stepped part of the lower spring seat (B), and align the damper mounting base (C) as shown below.

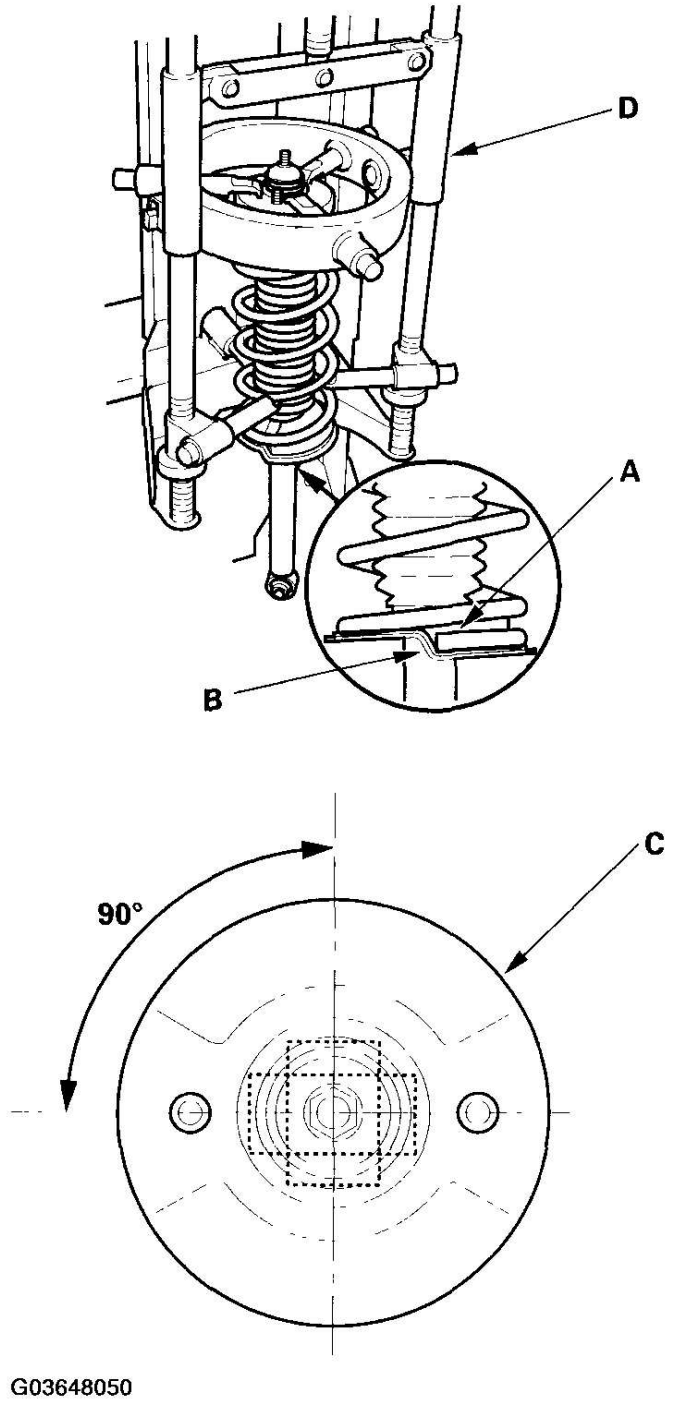


Fig. 49: Aligning Damper Mounting Base
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the damper assembly on commercially available strut spring compressor (D).
3. Compress the damper spring with the spring compressor.
4. Install the washer (A), and loosely install a new self-locking nut (B).

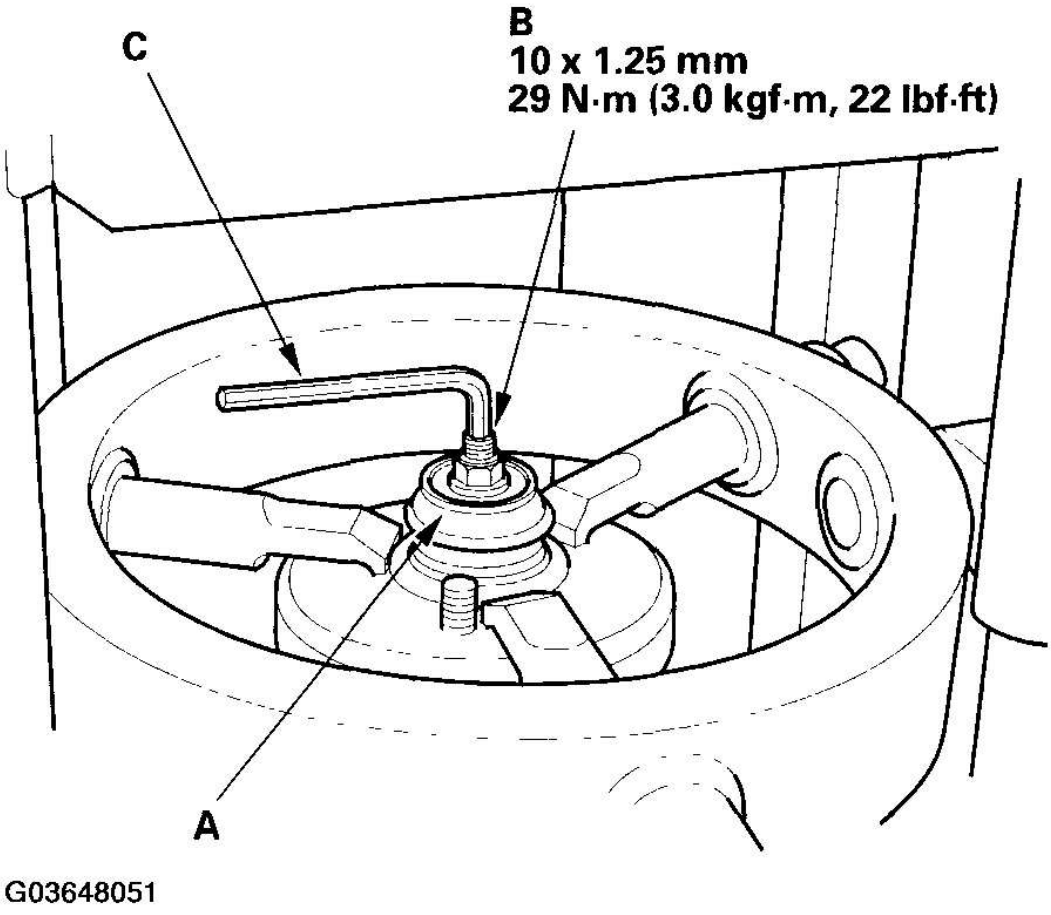


Fig. 50: Installing New Self-Locking Nut
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Hold the damper shaft with a hex wrench (C), and tighten the self-locking nut to the specified torque value.

2003-07 ACCESSORIES & EQUIPMENT

Seat Heaters - Accord

COMPONENT LOCATION INDEX

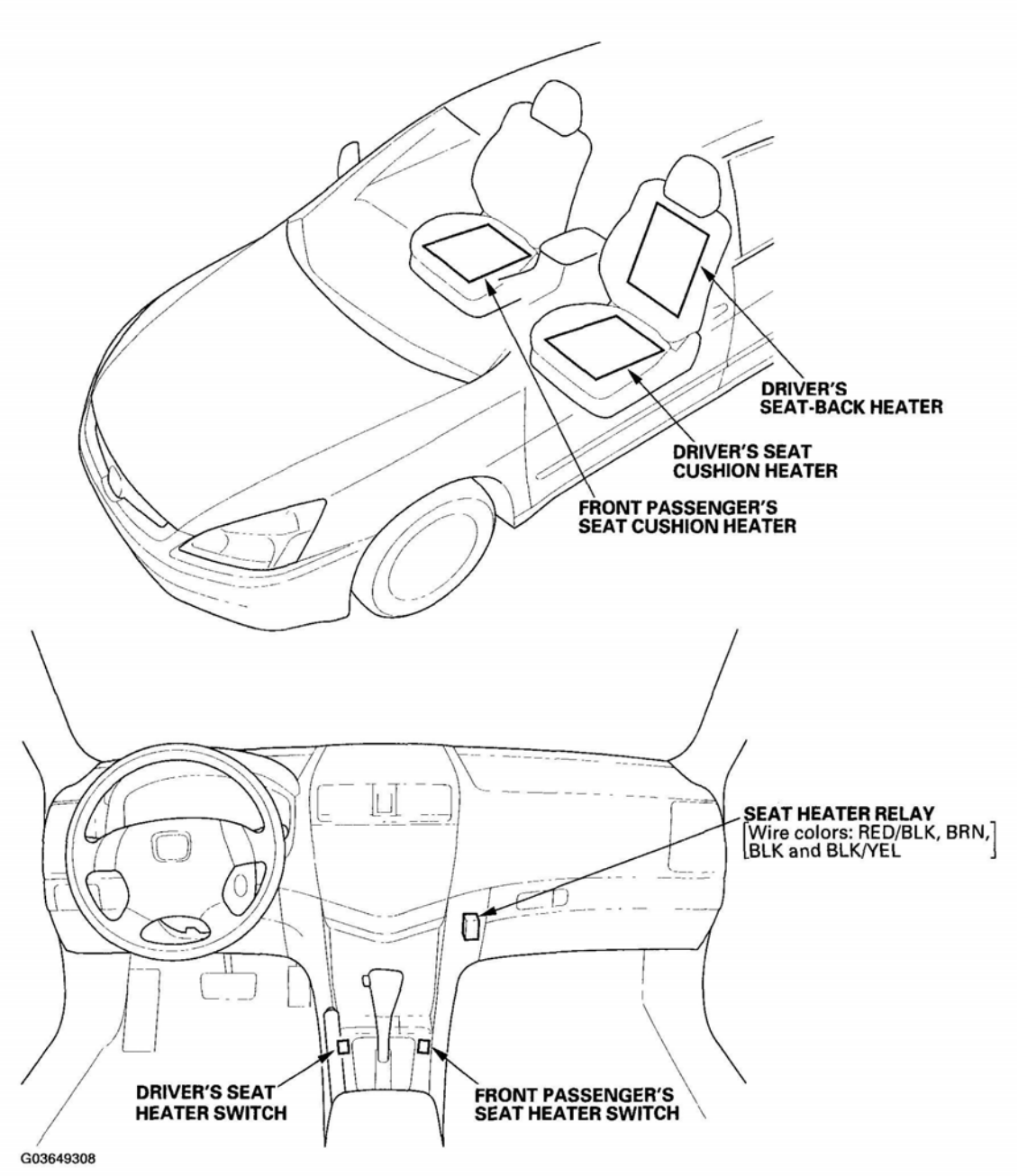


Fig. 1: Identifying Seat Heaters Components Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

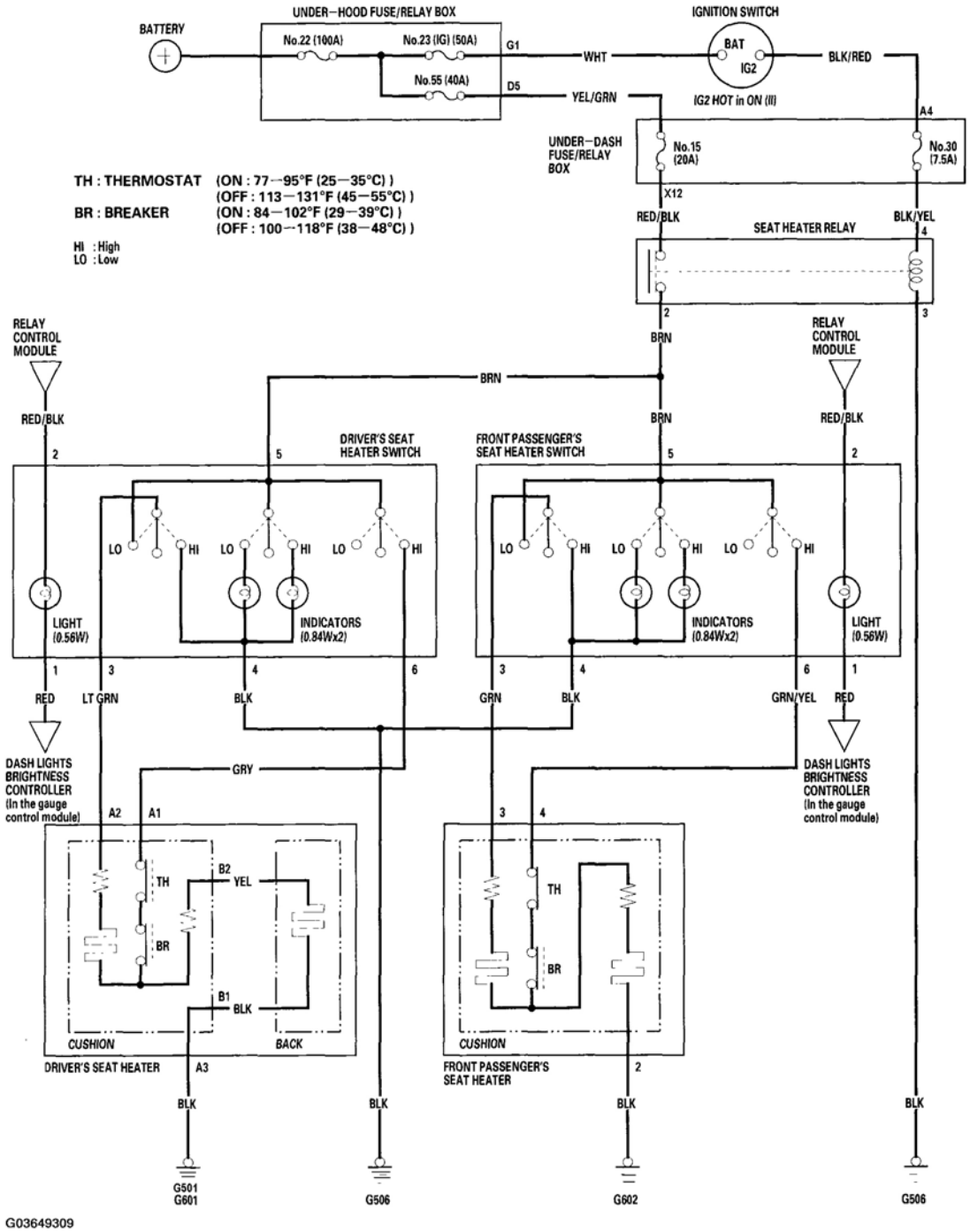


Fig. 2: Seat Heaters Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SEAT HEATER TEST

DRIVER'S SEAT

1. Remove the driver's seat (see **FRONT SEAT REMOVAL/INSTALLATION**).
2. Disconnect the 4P connector (A) and 2P connector (B) from the seat heater.

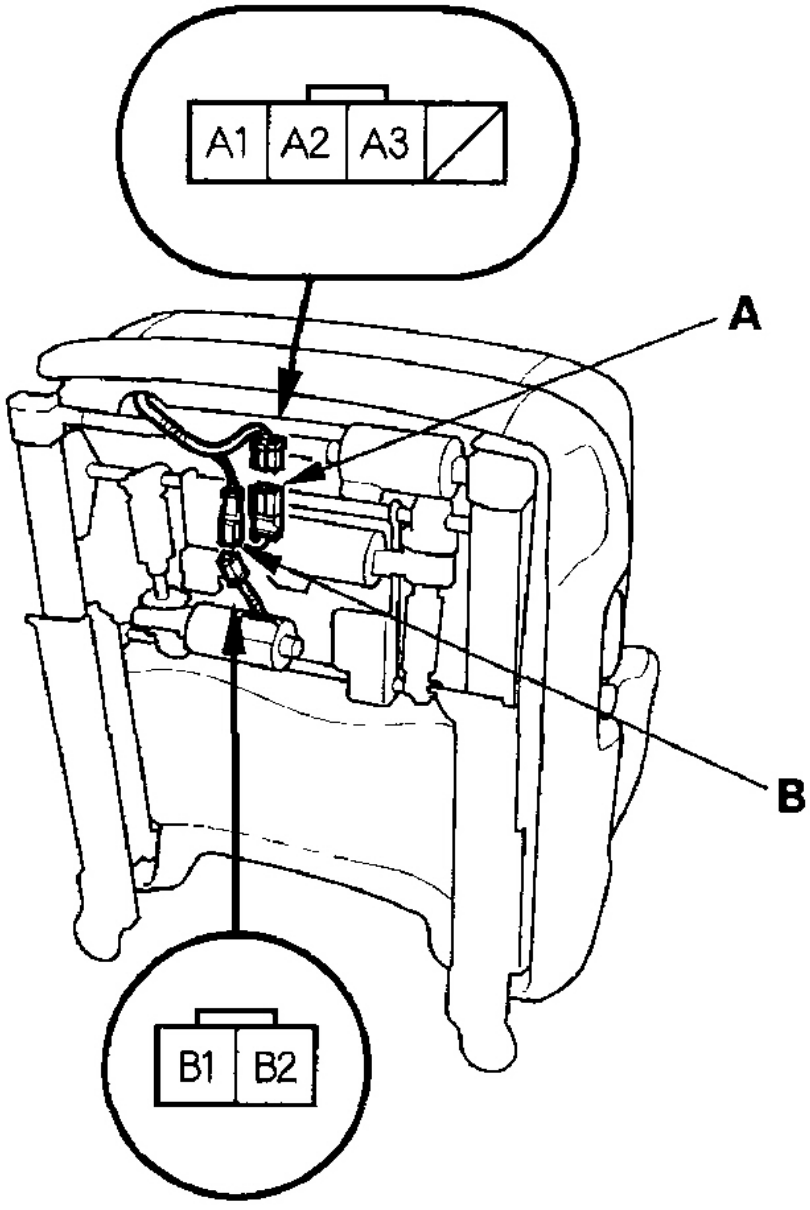
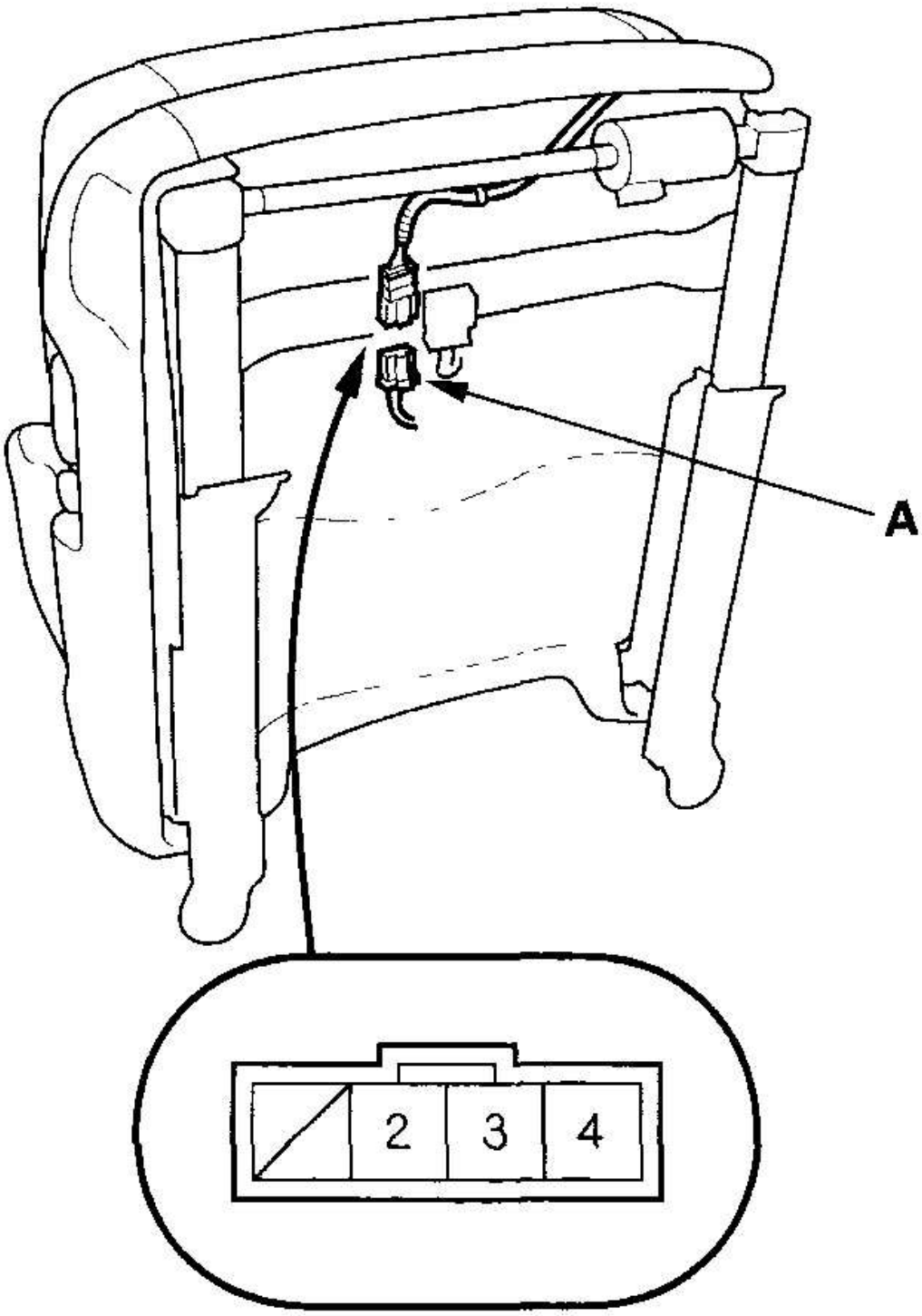


Fig. 3: Disconnecting 4P Connector & 2P Connector From Seat Heater
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the B1 and B2 terminals of the seat-back heater 2P connector. There should be continuity.
4. Check for continuity between the A1 and A2 terminals, and the A1 and B2 terminals. There should be continuity.
5. If the continuity check is not as specified, replace the seat heater.

FRONT PASSENGER'S SEAT

1. Remove the passenger's seat (see **FRONT SEAT REMOVAL/INSTALLATION**).
2. Disconnect the 4P connector (A) from the seat heater.



Terminal side of male terminals

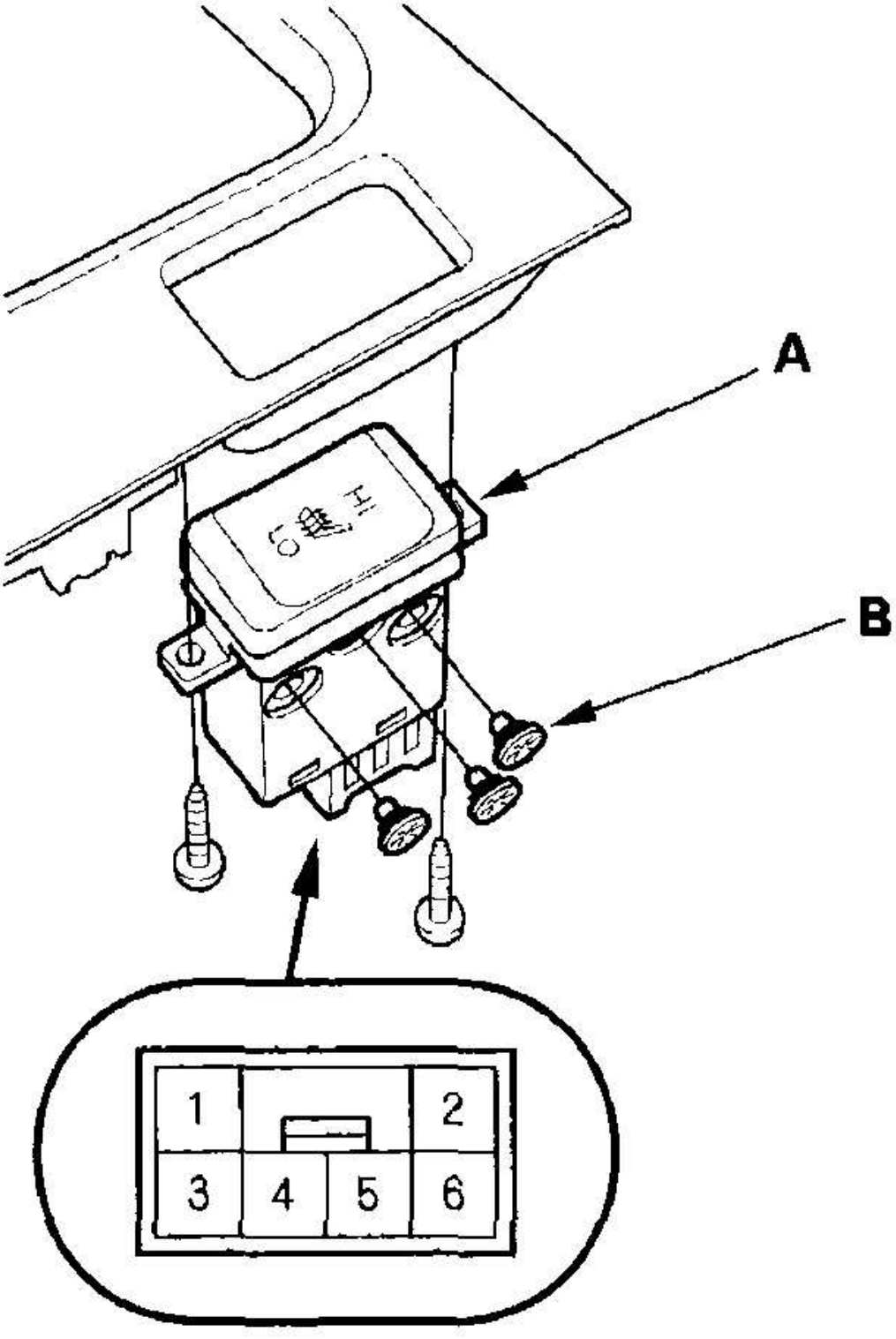
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Fig. 4: Disconnecting 4P Connector From Seat Heater
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the No. 2 and No. 3 terminals, and No. 3 and No. 4 terminals of the 4P connector. There should be continuity.
4. If the continuity is not as specified, replace the seat heater.

SWITCH TEST

1. Remove the center console front panel (see **CENTER CONSOLE REMOVAL/INSTALLATION**).
2. Disconnect the 6P connector from the seat heater switch (A), then remove the switch.



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Fig. 5: Disconnecting 6P Connector From Seat Heater Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Check for continuity between the terminals in each switch position according to the table shown below.

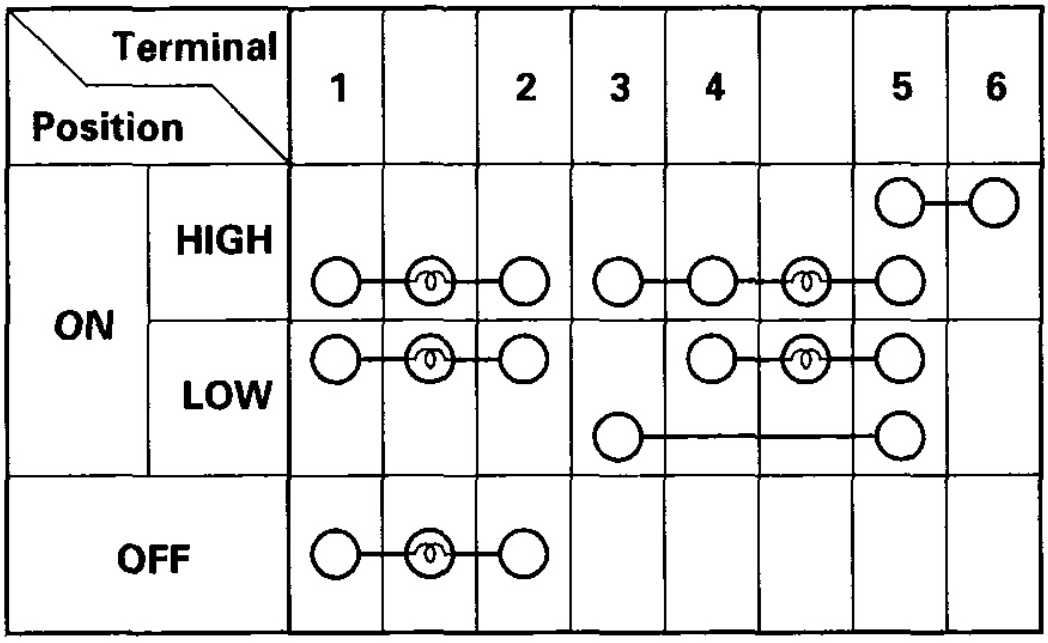


Fig. 6: Checking Continuity Between Terminals In Each Switch Position
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the continuity check is not as specified, replace the illumination bulbs (B) or the switch.

2003-07 ACCESSORIES & EQUIPMENT

Seats - Accord (V6)

FRONT SEAT REMOVAL/INSTALLATION

SRS components are located in this area. Review the SRS component locations, refer to **COMPONENT LOCATION INDEX** and the precautions and procedures, refer to **PRECAUTIONS AND PROCEDURES** before performing repairs or service.

PASSENGER'S 4-WAY POWER SEAT

NOTE:

- **Use the appropriate tool from the KTC tool set to avoid damage when prying components.**
- **Take care not to scratch the body or tear the seat covers.**
- **Put on gloves to protect your hands.**

1. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the frequencies for the preset buttons.
2. '04-07 models passenger's seat: Carefully insert the tip of a small screwdriver (A) through the hole in the back of the front seat belt lower anchor cover (B) and into the hole in the front seat belt lower anchor (C).

   Unlock the lower anchor by pushing in on the screwdriver. Remove the screwdriver, and then detach the front seat belt anchor plate (D) and anchor cover from the lower anchor.

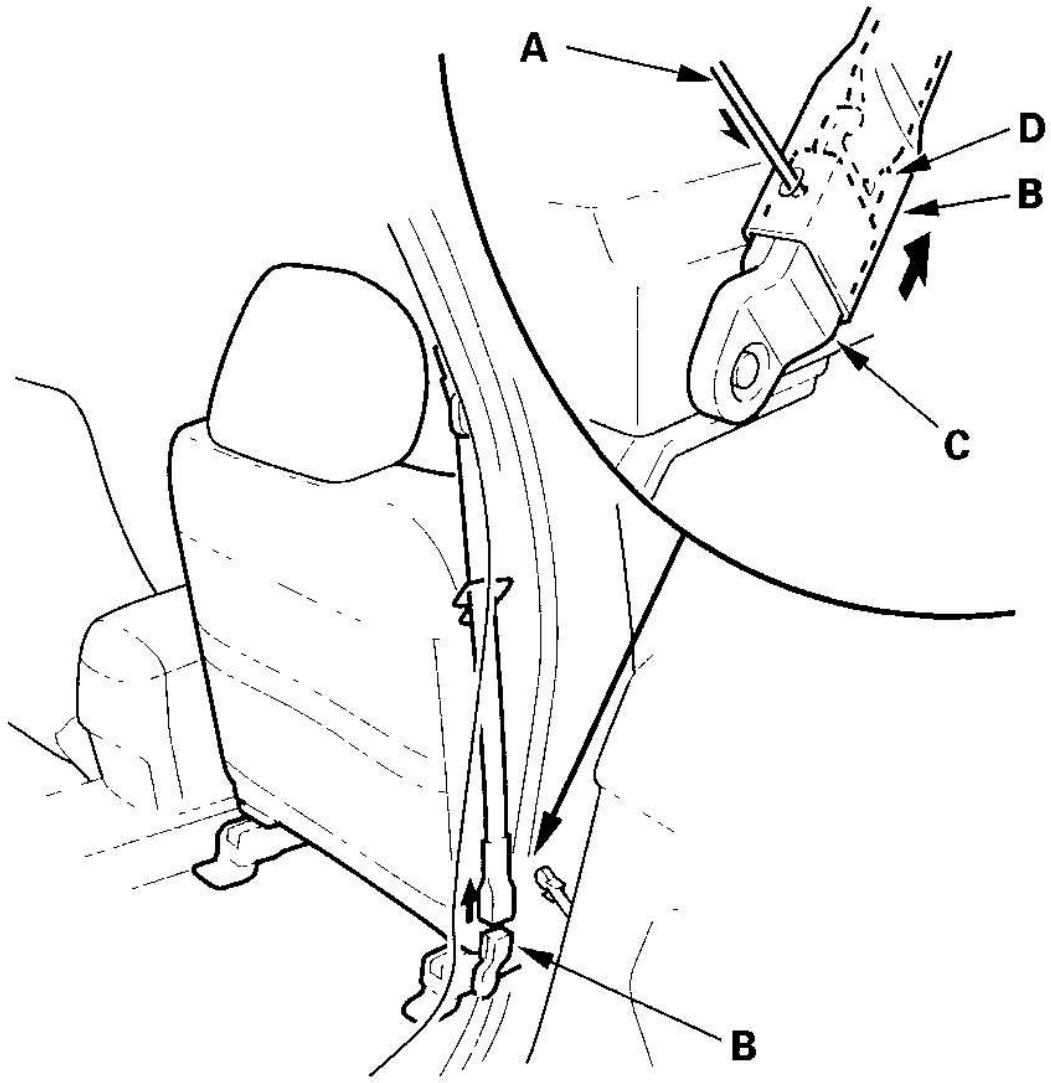


Fig. 1: Inserting Small Screwdriver Through Hole in Back Of Front Seat Belt Lower Anchor Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Slide the seat all the way forward, then remove the seat track end covers (A) from the back of both seat tracks.

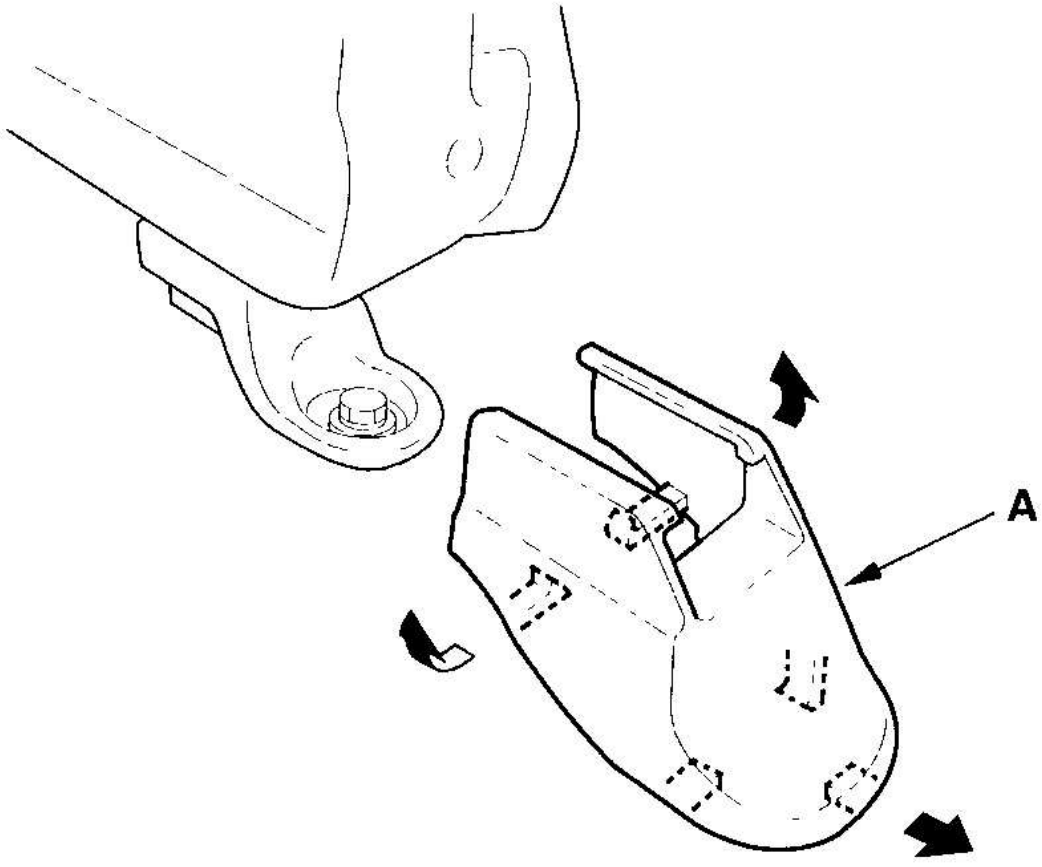


Fig. 2: Removing Seat Track End Covers From Back Of Both Seat Tracks ('03 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

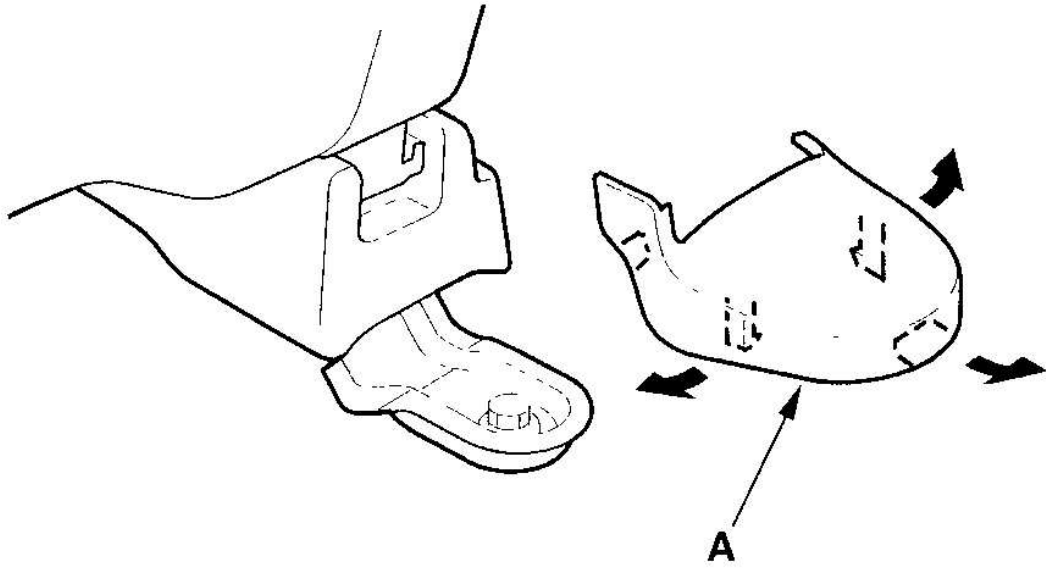


Fig. 3: Removing Seat Track End Covers From Back Of Both Seat Tracks ('04-07 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Slide the seat about halfway to the rear so you can access the mounting bolts.
5. Disconnect the negative cable from the battery, and wait at least 3 minutes before removing the seat.
6. Remove the bolts securing the front seat.

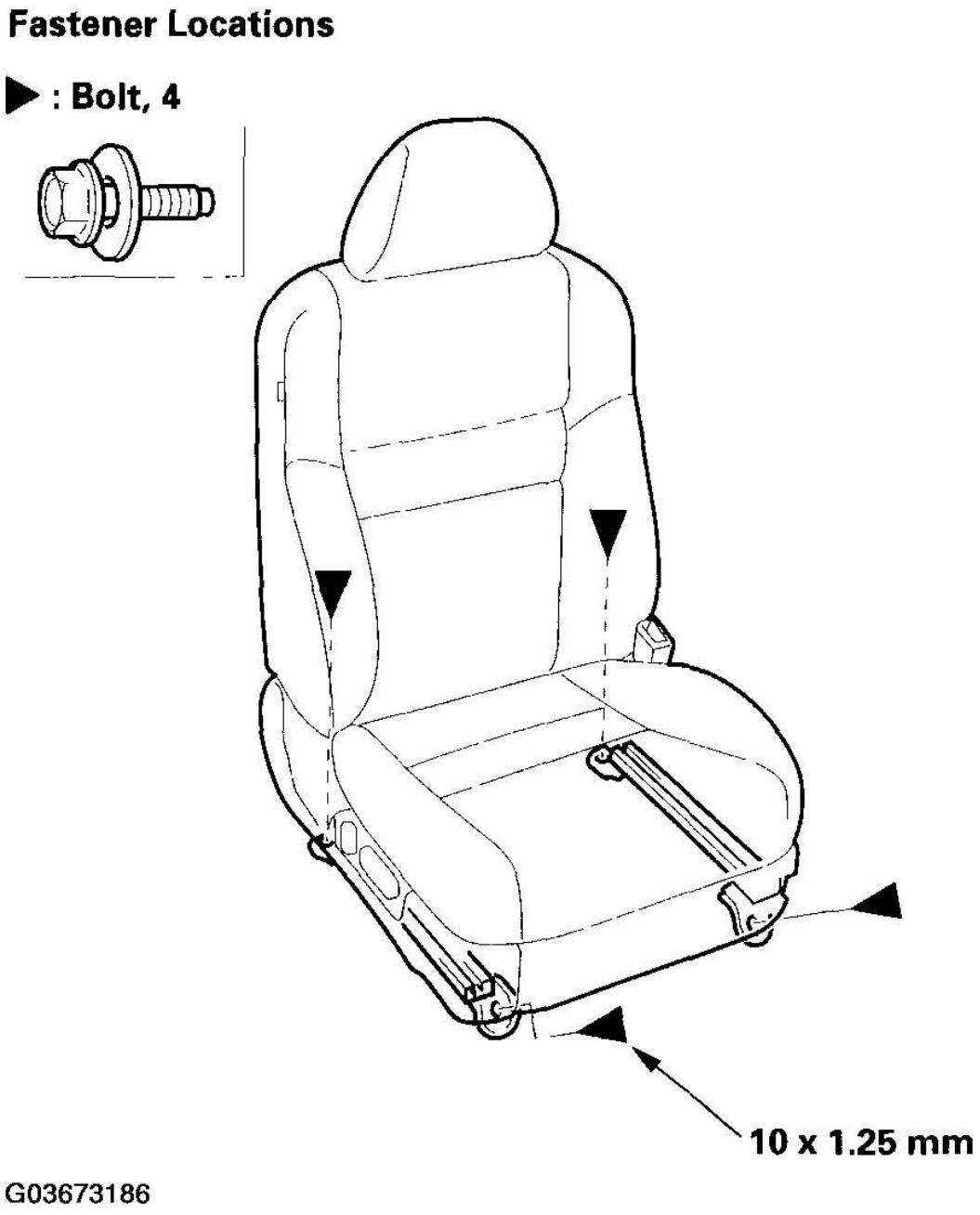


Fig. 4: Identifying Front Seat Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Lift up the front seat, then detach the harness clip (A), and disconnect the power seat connector (B), the side airbag connector (C), and the OPDS/ODS

unit connector (D). On '04-05 models, disconnect the weight sensor unit connector (E) or '06-07 model, disconnect the weight sensor connector (F).

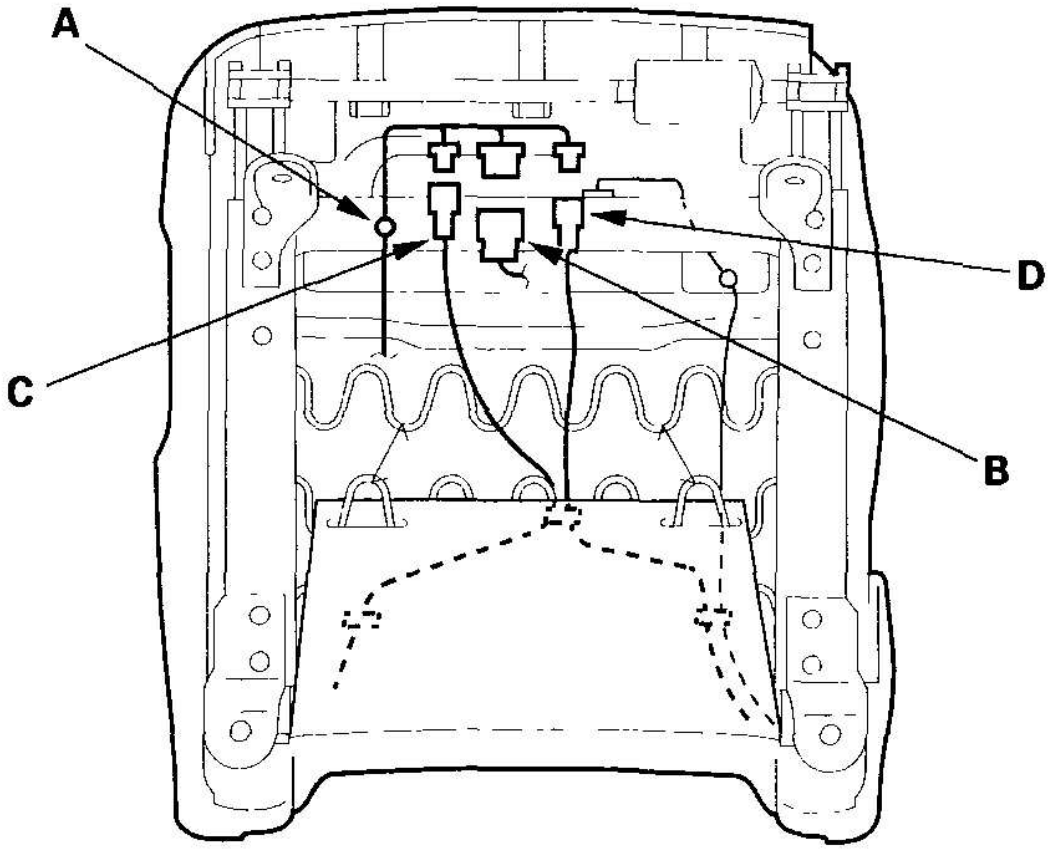


Fig. 5: Detaching Harness Clip And Disconnecting Power Seat Connector ('03 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

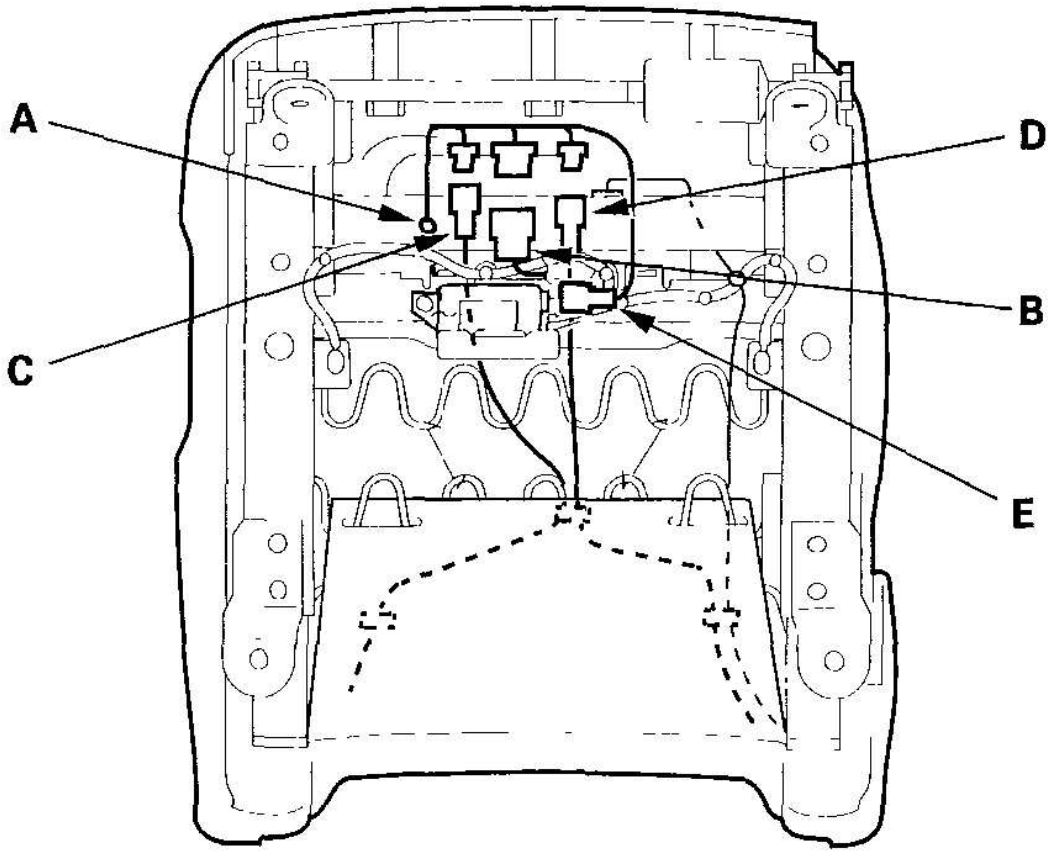


Fig. 6: Detaching Harness Clip And Disconnecting Power Seat Connector ('04-05 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

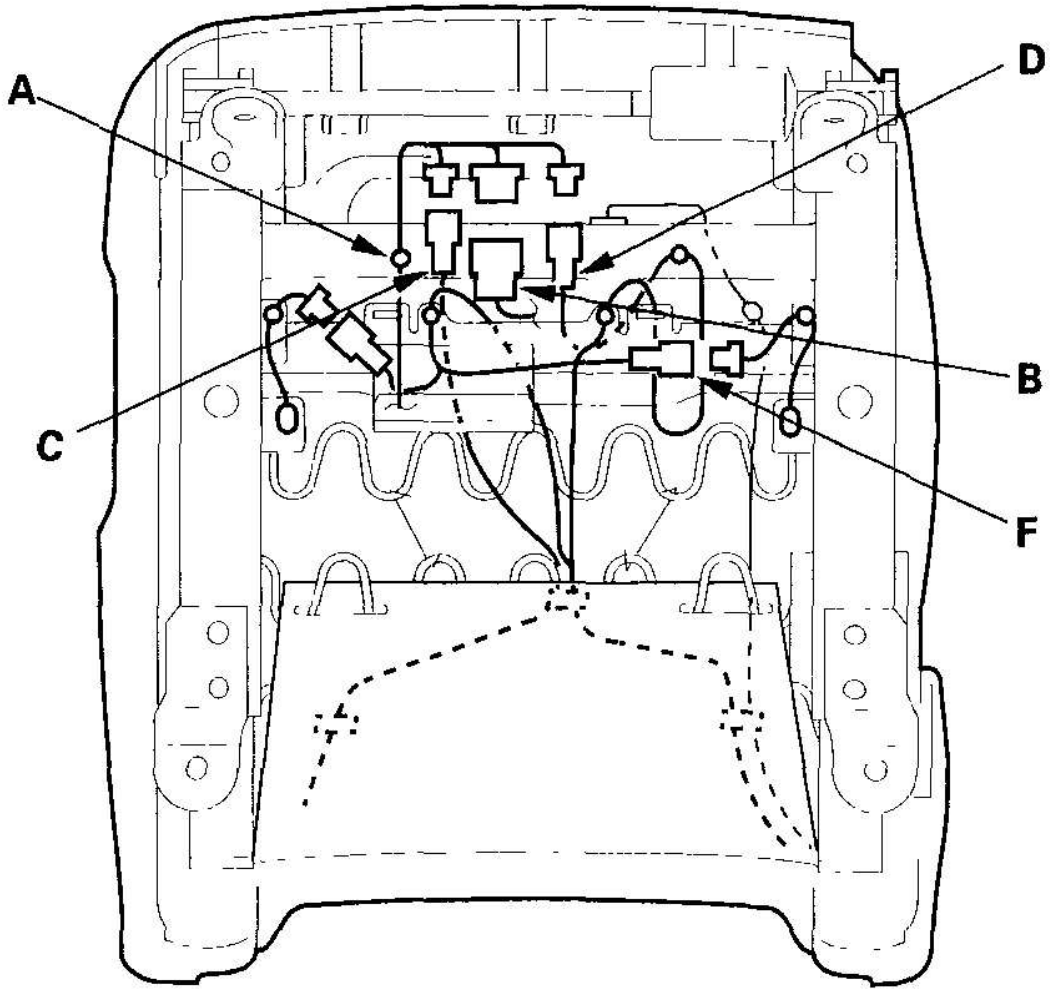


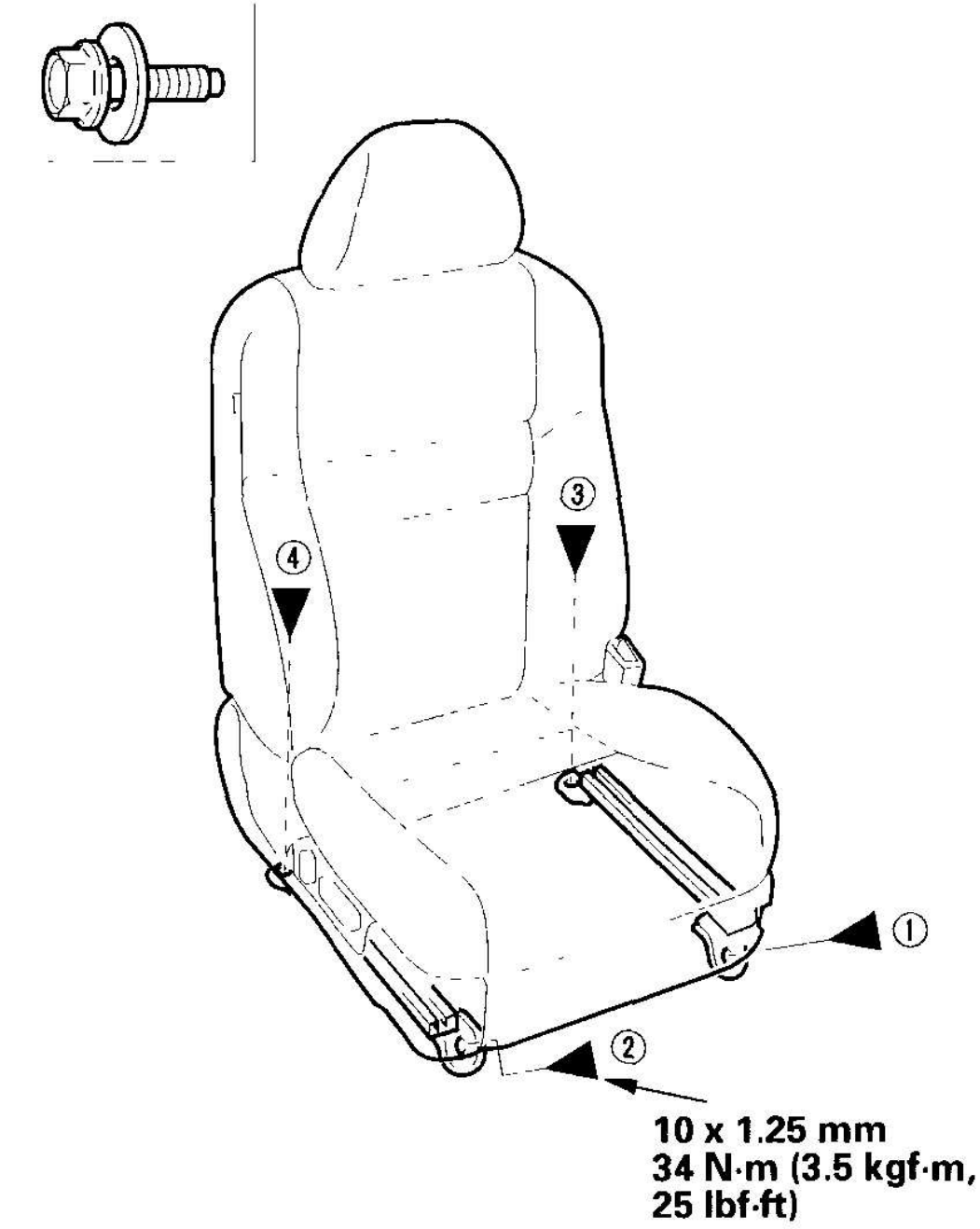
Fig. 7: Detaching Harness Clip And Disconnecting Power Seat Connector ('06-07 Model)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. With the help of an assistant, carefully remove the front seat through the front door opening.
9. Install the seat in the reverse order of removal, and note these items:
    - Apply medium strength type liquid thread lock to the front seat mounting bolts before reinstallation.

- Make sure each connector is plugged in properly.
- Tighten the seat mounting bolts to the specified torque in the sequence shown in . Slide the seat all the way back and tighten 1 and 2, then slide it forward and tighten 3 and 4.
- Before attaching the lower anchor bolts, make sure there are no twists or kinks in the seat belts.
- '04-07 models passenger's seat: The triangle marks (A) on the anchor plate (B) and the lower anchor (C) must face the same side. Insert the anchor plate into the lower anchor, and make sure that it is locked securely.
- Reconnect the negative cable to the battery.
- Enter the anti-theft codes for the audio and the navigation system, then enter the customer's audio station and XM radio channel presets.
- Reset the clock.
- Perform the power window control unit reset procedure, refer to **RESETTING THE POWER WINDOW CONTROL UNIT** .

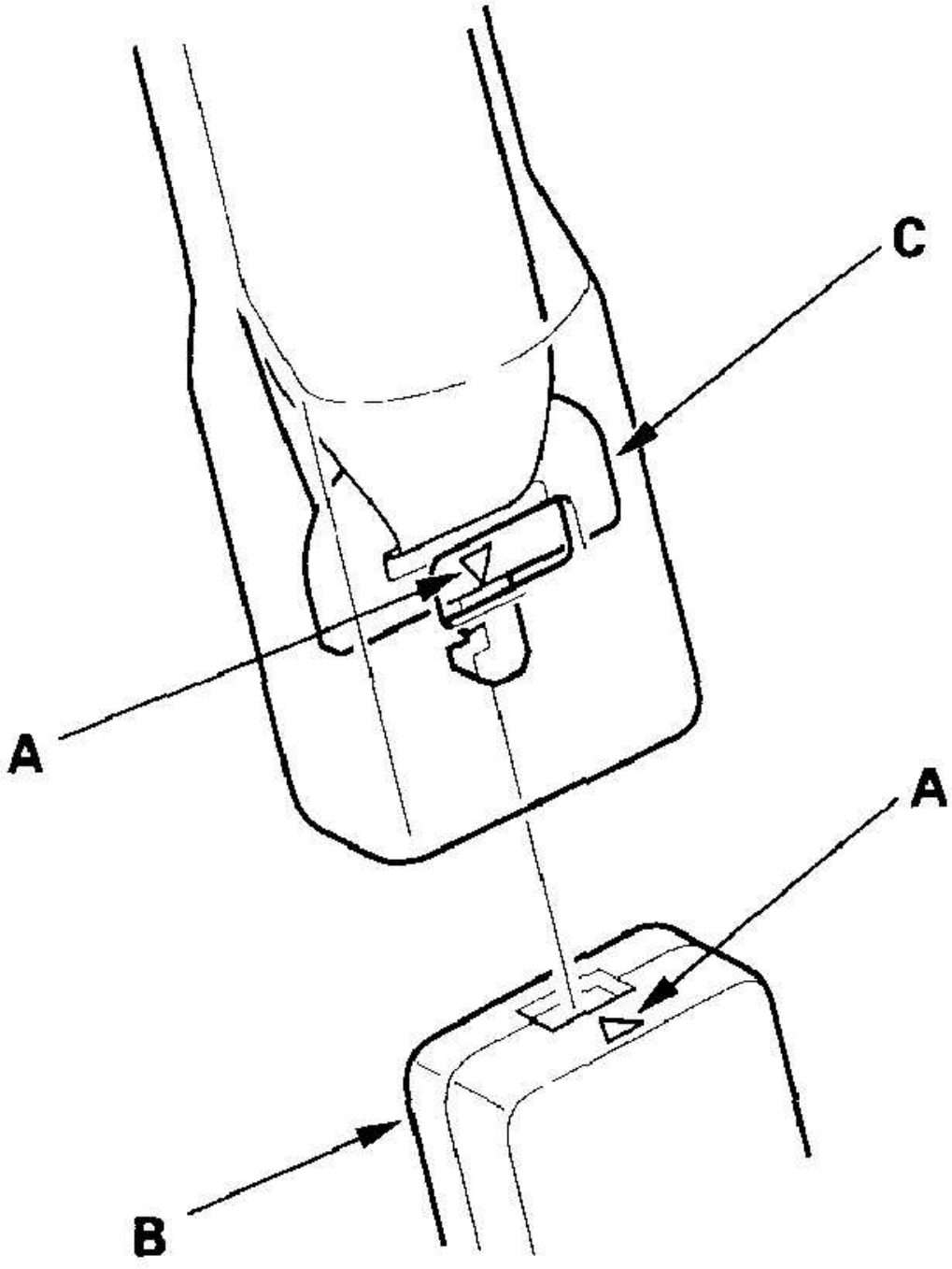
Fastener Locations

▶ : Bolt, 4



G03673190

Fig. 8: Identifying Seat Mounting Bolts Tightening Sequence
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G03673191

Fig. 9: Identifying Front Seat Belt Lower Anchor ('04-07 Models Passenger's)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT SEAT DISASSEMBLY/REASSEMBLY - 4-WAY POWER

Special Tools Required

KTC trim tool set SOJATP2014

'03 MODEL 4-DOOR

SRS components are located in this area. Review the SRS component locations, refer to **COMPONENT LOCATION INDEX** and the precautions and procedures, refer to **PRECAUTIONS AND PROCEDURES** before performing repairs or service.

NOTE:

- **Take care not to tear the seams or damage the seat covers.**
- **Put on gloves to protect your hands.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Apply multipurpose grease to the moving parts of the seat track.**
- **To prevent wrinkles in the seat cushion cover, stretch the material evenly over the pad.**

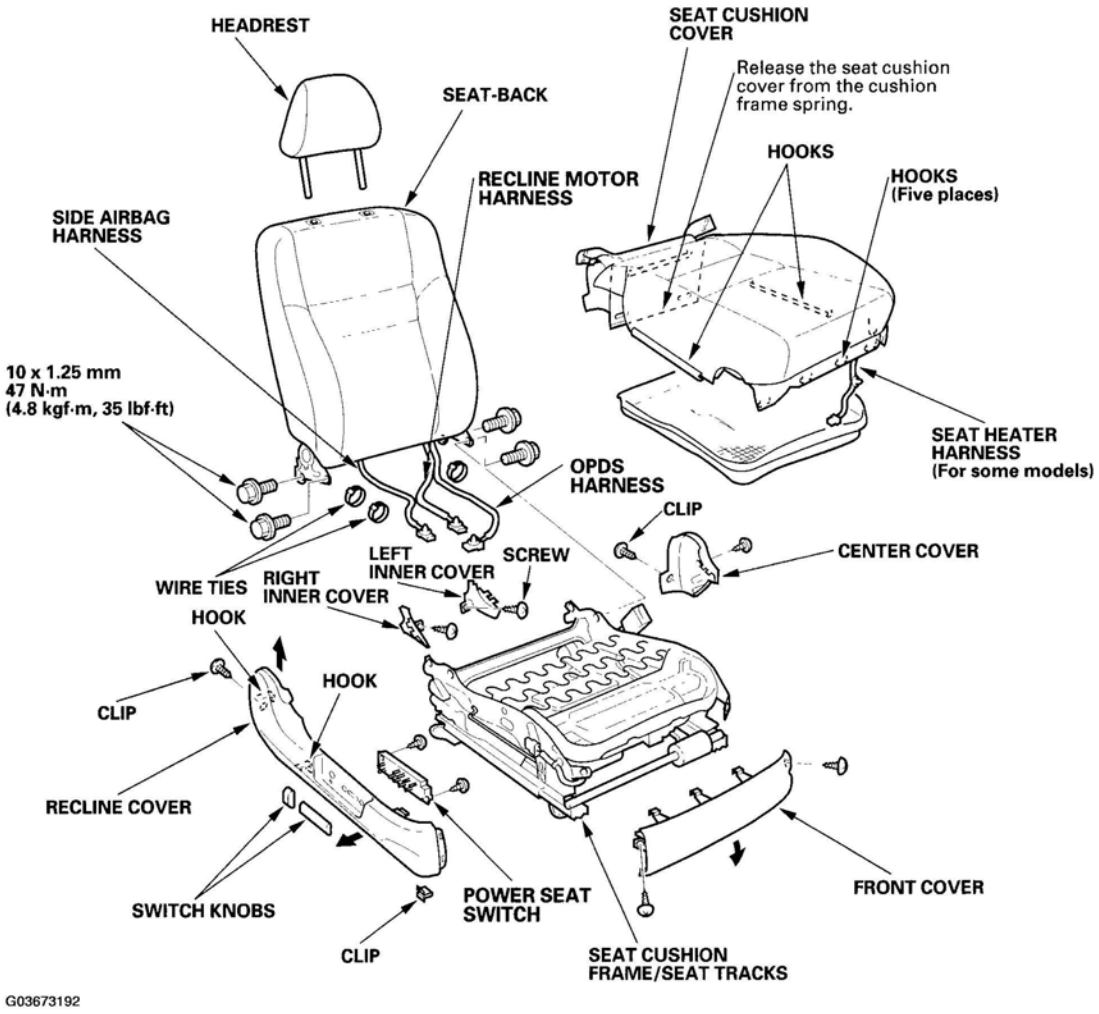


Fig. 10: Exploded View Of Front Seat - 4-Way Power ('03 Model 4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

KTC trim tool set SOJATP2014

'04-07 MODELS 4-DOOR

- SRS components are located in this area. Review the SRS component locations, refer to **COMPONENT LOCATION INDEX** and the precautions and procedures, refer to **PRECAUTIONS AND PROCEDURES** before performing repairs or service.

- '04-05 models: The front passenger's weight sensor (SWS) unit must be calibrated after any of these actions, refer to **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06-07 MODEL)** :
  - Front passenger's seat replacement (including any seat components)
  - Replacement of the seat weight sensors
  - Replacement of the seat weight sensor unit
- '06-07 model: The ODS unit must be calibrated after any for this actions, refer to **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06-07 MODEL)** :
  - Front passenger's seat replacement (including any seat components)
  - Replacement of the seat weight sensors

NOTE:

- **Take care not to tear the seams or damage the seat covers.**
- **Put on gloves to protect your hands.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Apply multipurpose grease to the moving parts of the seat track.**
- **To prevent wrinkles in the seat cushion cover, stretch the material evenly over the pad.**

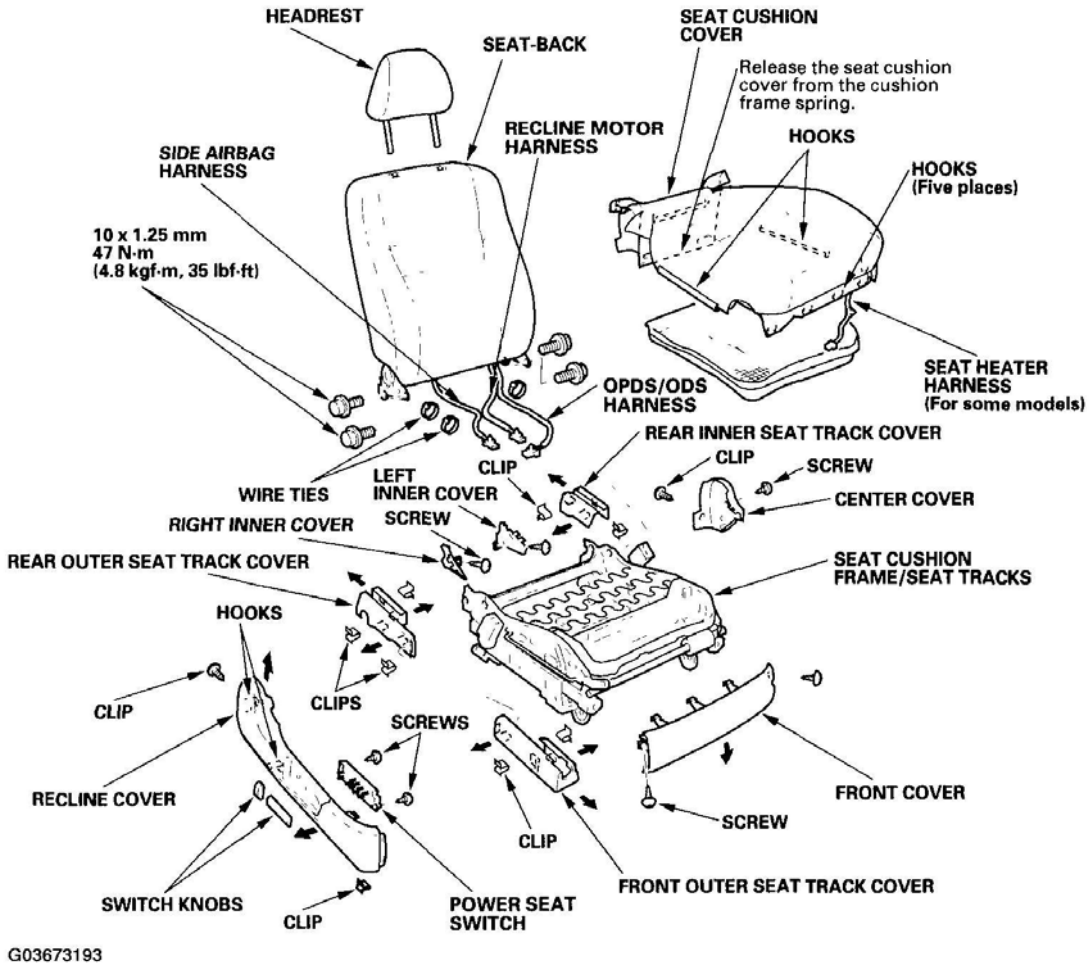


Fig. 11: Exploded View Of Front Seat - 4-Way Power ('04-07 Models 4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT SEAT LINKAGE DISASSEMBLY/REASSEMBLY - 4-WAY POWER

'03 MODEL

NOTE:

- **Put on gloves to protect your hands.**
- **Apply multipurpose grease to the sliding and pivot portions of the linkage.**

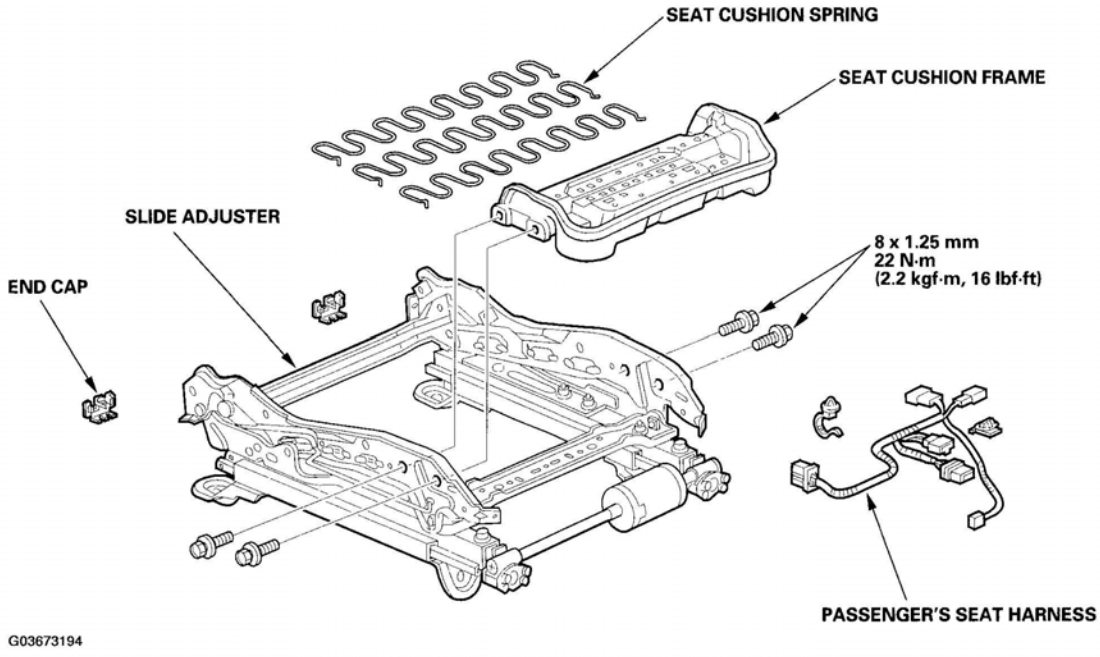


Fig. 12: Exploded View Of Front Seat Linkage - 4-Way Power ('03 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

'04-07 MODELS

- '04-05 models: The front passenger's weight sensor (SWS) unit must be calibrated after any of these actions, refer to **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06-07 MODEL)** :
  - Front passenger's seat replacement (including any seat components)
  - Replacement of the seat weight sensors
  - Replacement of the seat weight sensor unit
- '06-07 model: The ODS unit must be calibrated after any for this actions, refer to **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06-07 MODEL)** :
  - Front passenger's seat replacement (including any seat components)
  - Replacement of the seat weight sensors

NOTE:

- **Put on gloves to protect your hands.**
- **Apply multipurpose grease to the sliding and pivot portions of the linkage.**
- **When tightening the weight sensor mounting nuts, tighten the nuts in the sequence shown in . Improper tightening could cause the passenger's airbag system to malfunction.**
- **Make sure the weight sensor unit ('04-05 models) connectors are plugged in properly.**
- **Make sure the weight sensor wires are routed properly so they are not pinched and do not interfere with other parts.**

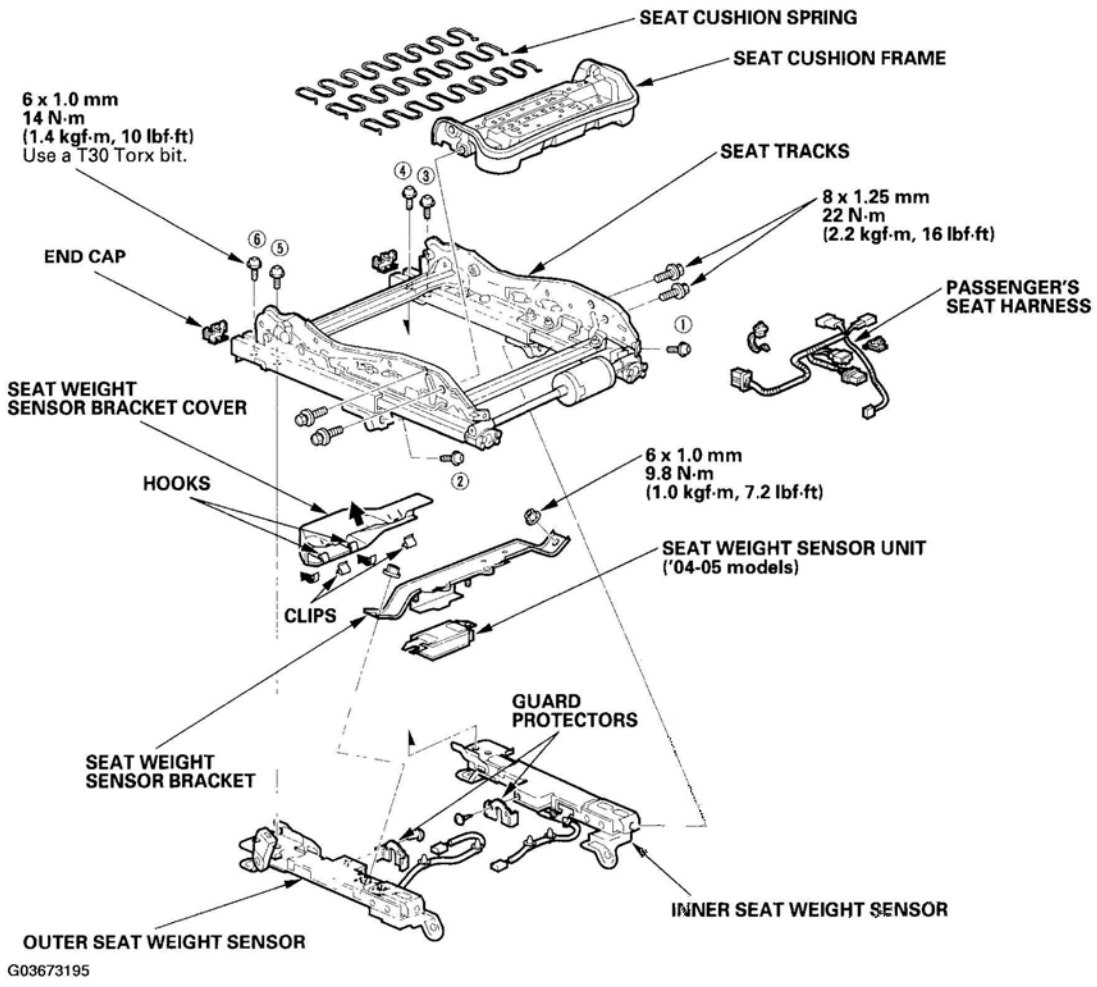


Fig. 13: Exploded View Of Front Seat Linkage - 4-Way Power ('04-07 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT SEAT COVER REPLACEMENT

- SRS components are located in this area. Review the SRS component locations, refer to **COMPONENT LOCATION INDEX** and the precautions and procedures, refer to **PRECAUTIONS AND PROCEDURES** before performing repairs or service.
- '04-05 models: The front passenger's weight sensor (SWS) unit must be calibrated after any of the these actions, refer to **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06-07 MODEL)** :

- Front passenger's seat replacement (including any seat components)
- Seat weight sensor replacement
- Seat weight sensor unit replacement

- '06-07 model: The ODS unit must be calibrated after any for this actions, refer to **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06-07 MODEL)** :
  - Front passenger's seat replacement (including any seat components)
  - Replacement of the seat weight sensors

NOTE:

- **Seats with a side airbag have a "SIDE AIRBAG" label on the seat-back. Because the component parts (seat-back cover, cushion, etc.) of seats with and without airbags are different, make sure you install only the correct replacement parts.**
- **Do not repair any tears or frayed spots in the seat-back cover. If necessary, replace the seat-back cover.**
- **Take care not to tear the seams or damage the seat covers.**
- **Do not touch the OPDS sensor in the seat-back pad, and keep it away from oil. Oil can corrode the sensor causing it to fail.**
- **Put on gloves to protect your hands.**

SEAT-BACK COVER - 4-WAY POWER SEAT

1. Remove the front seat (see **FRONT SEAT REMOVAL/INSTALLATION**).
2. Remove the headrest.
3. From under the seat cushion, disconnect the recline motor connector (A), detach the side airbag connector clip (B), the OPDS/ODS unit connector clip (C), and harness clip (D). Release the seat cushion cover (E) from the seat cushion frame spring (F), then pull the cover back and remove the wire ties (G).

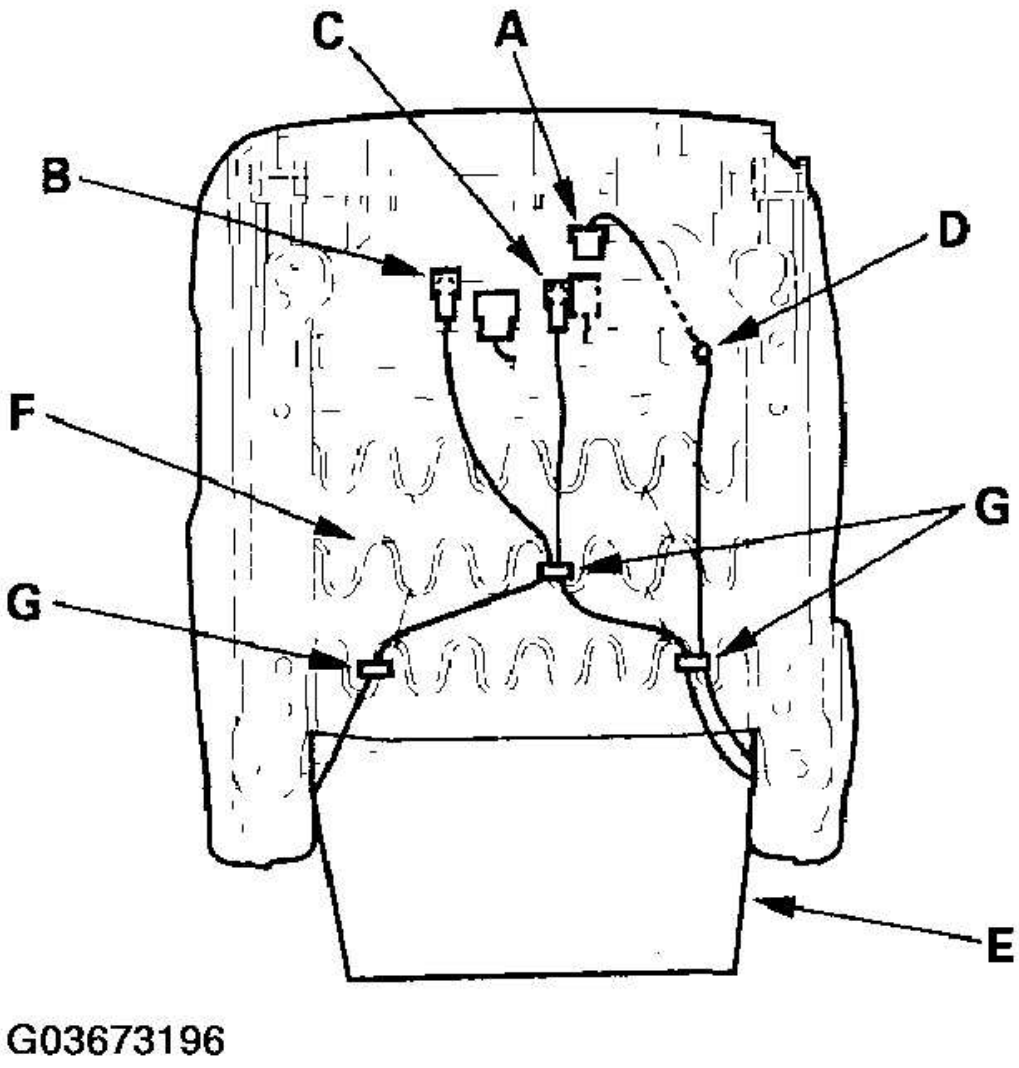


Fig. 14: Identifying Recline Motor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove these items from the front seat, then remove the seat-back, '03 model (see **'03 MODEL 4-DOOR**), '04-07 models (see **'04-07 MODELS 4-DOOR**):
   - Recline cover
   - Center cover
5. Detach the clips and hooks (A) by carefully pulling the bottom of the back

panel (B) back, pull the panel downward to release the hooks (C) from the seat-back frame, then remove the panel.

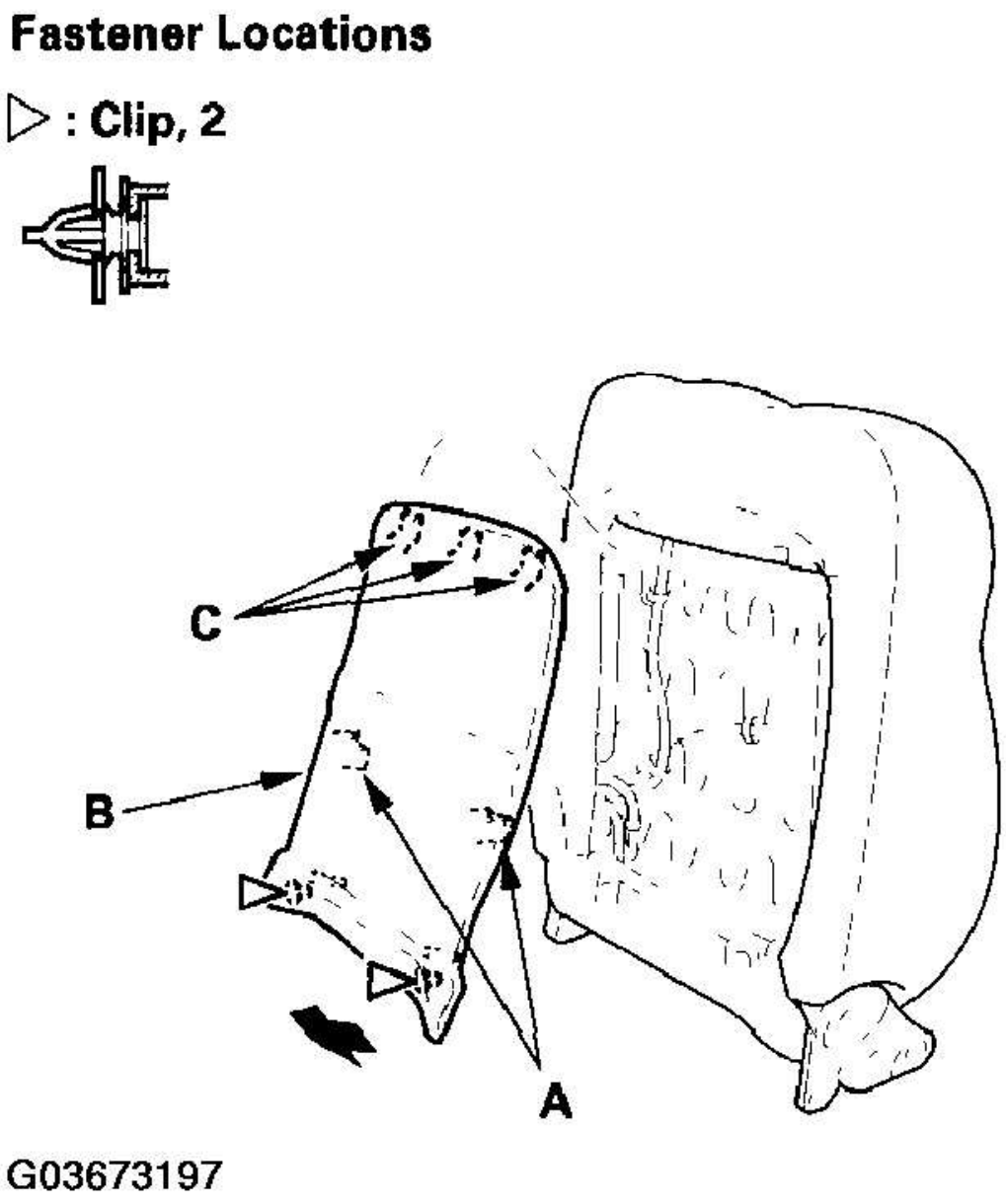


Fig. 15: Detaching Clips And Hooks Pulling Bottom Of Back Panel Back
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Release the hook strips (A), then loosen the seat-back cover (B).

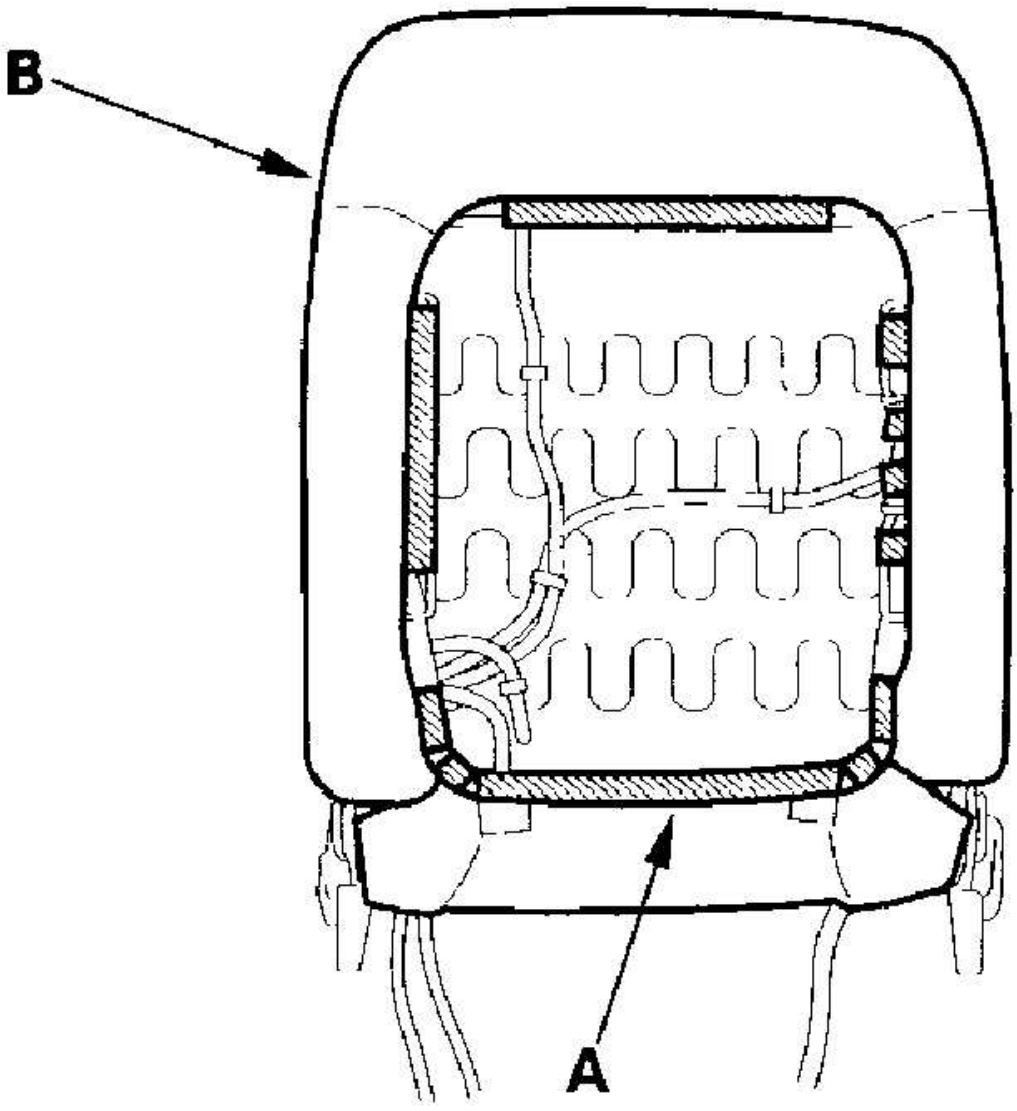


Fig. 16: Releasing Hook Strips And Loosening Seat-Back Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Pull the recline motor harness (A), side airbag harness (B) and the OPDS/ODS

harness (C) out through the holes (D) in the seat-back cover.

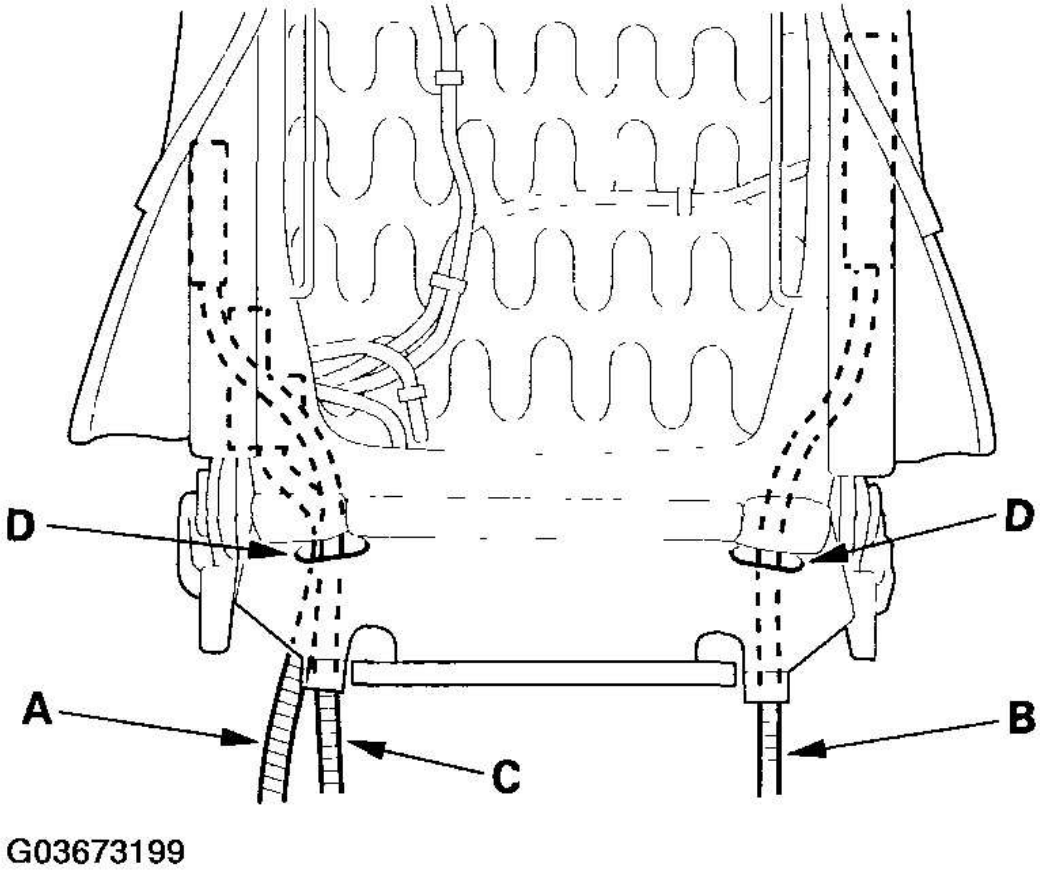


Fig. 17: Pulling Recline Motor Harness, Side Airbag Harness And OPDS/ODS Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Release the front hook (A) and rear hook (B) of the reinforcing cloth (C) from seat-back frame (D).

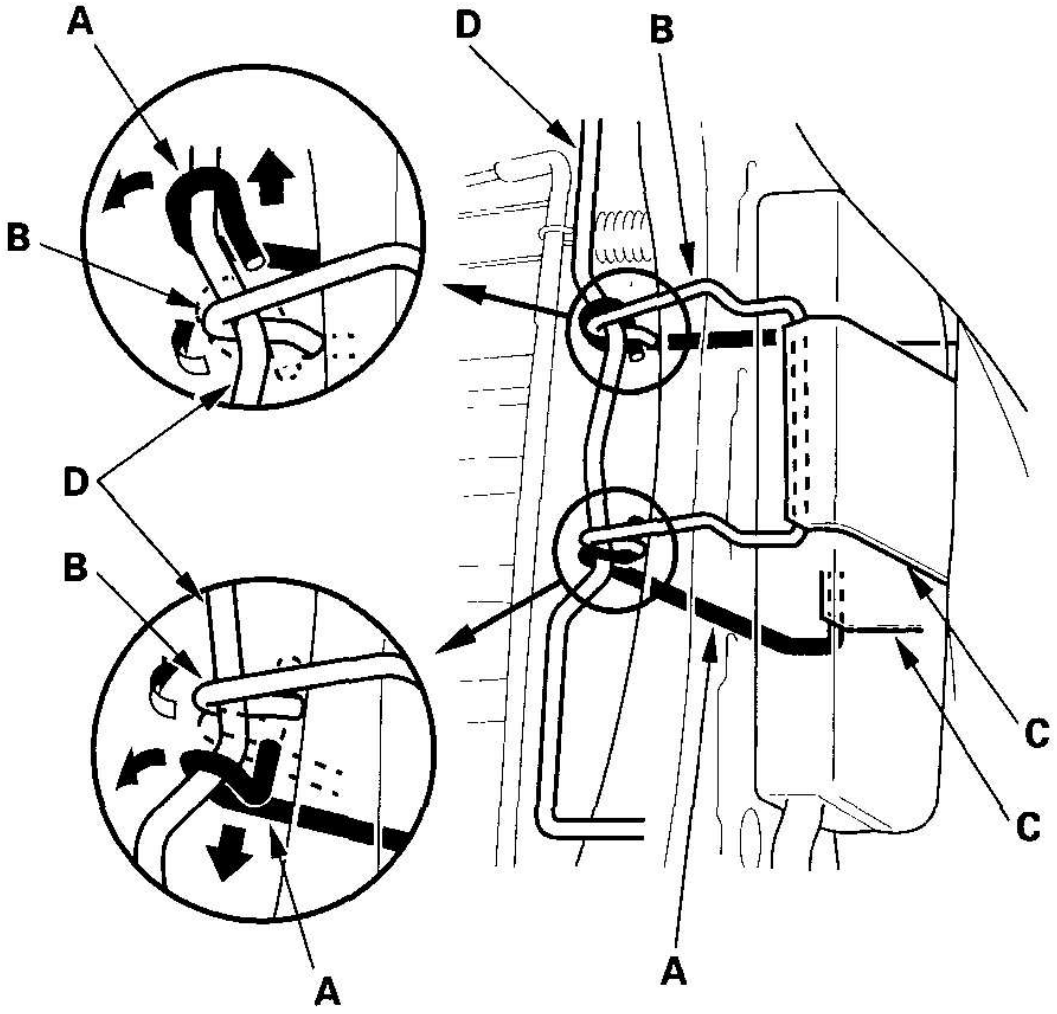


Fig. 18: Releasing Front And Rear Hook Of Reinforcing Cloth From Seat-Back Frame
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Pull out the headrest guides (A) by pinching the tabs on the ends of the guides, and remove them.

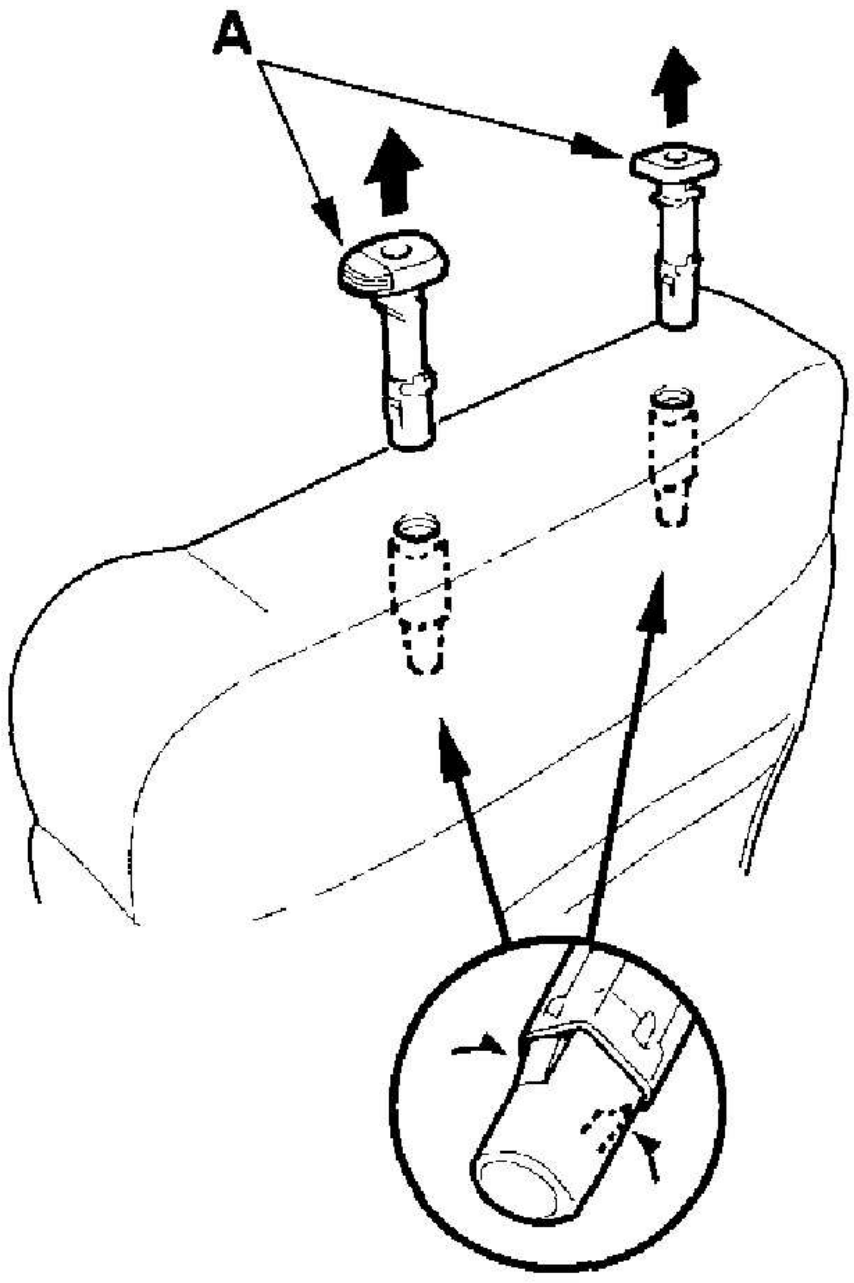


Fig. 19: Pulling Out Headrest Guides Pinching Tabs On Ends Of Guides
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. From the back of the seat-back, pass both lower retainers (A) through the slots in the seat-back pad, and release all of the clips (B).

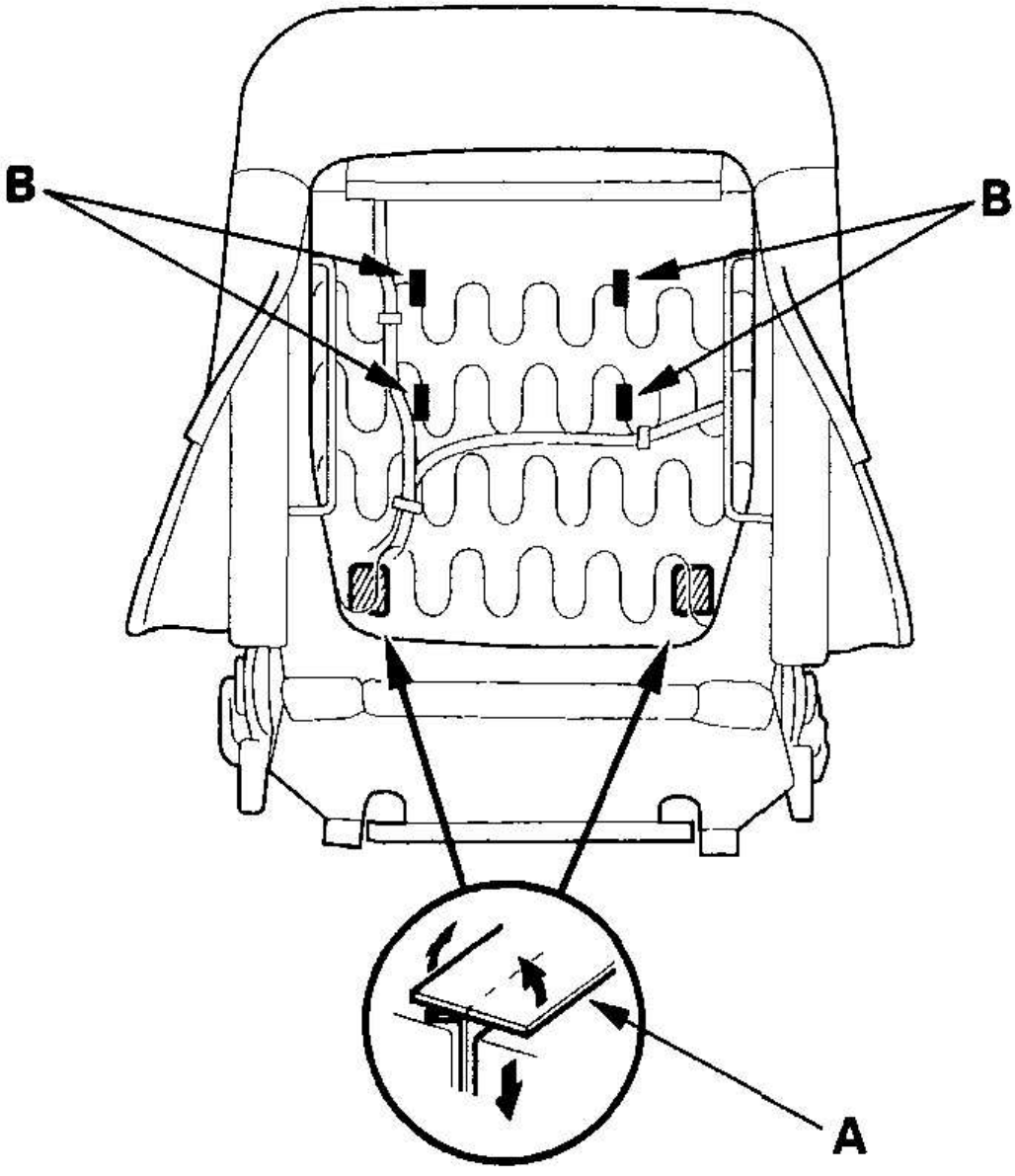


Fig. 20: Passing Both Lower Retainers Through Slots In Seat-Back Pad

Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Pull back the edge of the seat-back cover all the way around, and release the clips (A), then remove the seat-back cover.

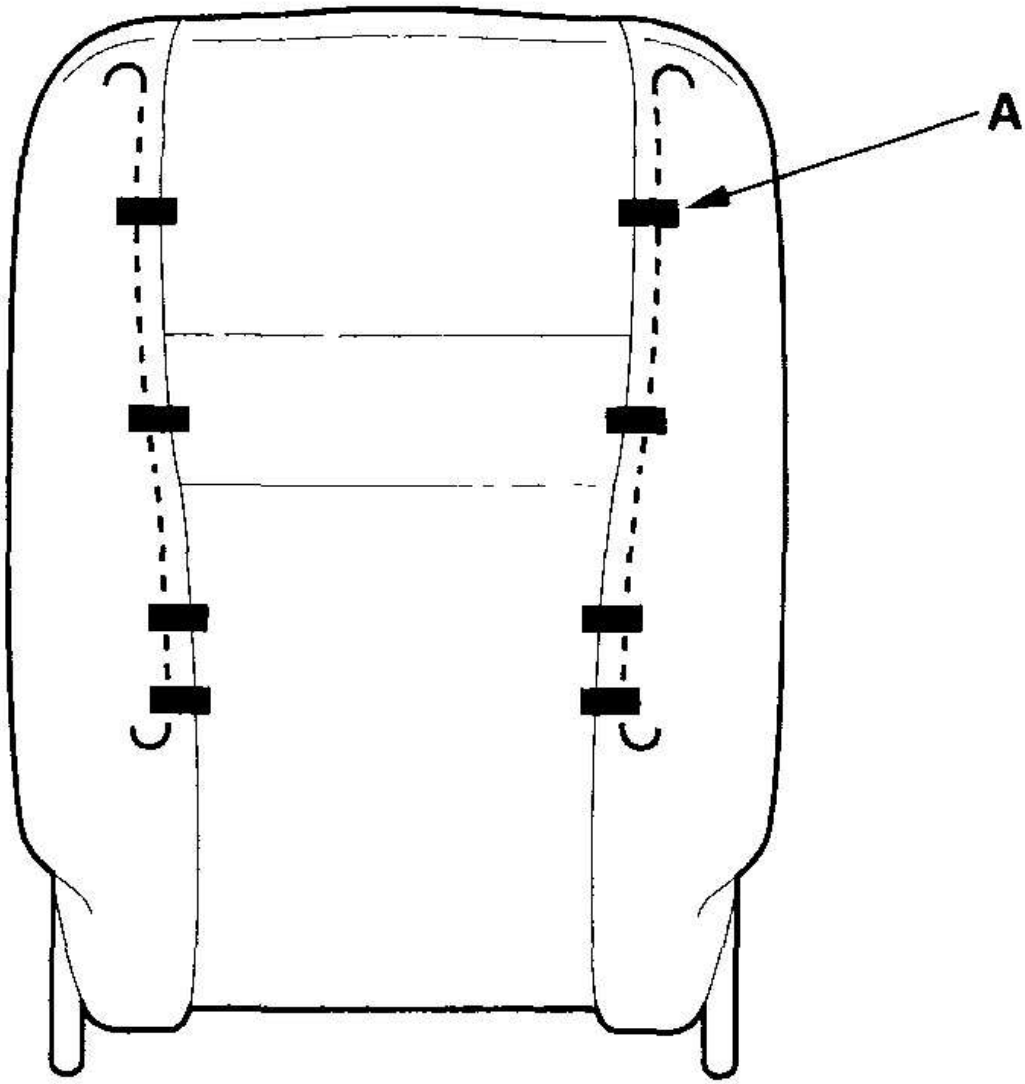


Fig. 21: Releasing Clips And Seat-Back Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Install the cover in the reverse order of removal, and note these items:
    - Reinitialize the OPDS/ODS control unit, refer to **INITIALIZING THE OPDS/ODS UNIT** .
    - To prevent wrinkles when installing a seat-back cover, make sure the material is stretched evenly over the pad before securing the clips, hooks, and hook strips.
    - Replace any clips you removed with new ones (A). Install them with commercially available upholstery ring pliers (6).
    - Reinstall the front hook (C) and rear hook (D) of the reinforcing cloth (E) securely.
    - Use only original Honda replacement seat-back covers.
    - Make sure the Recline motor harness, side airbag harness, and OPDS/ODS harness are routed properly.

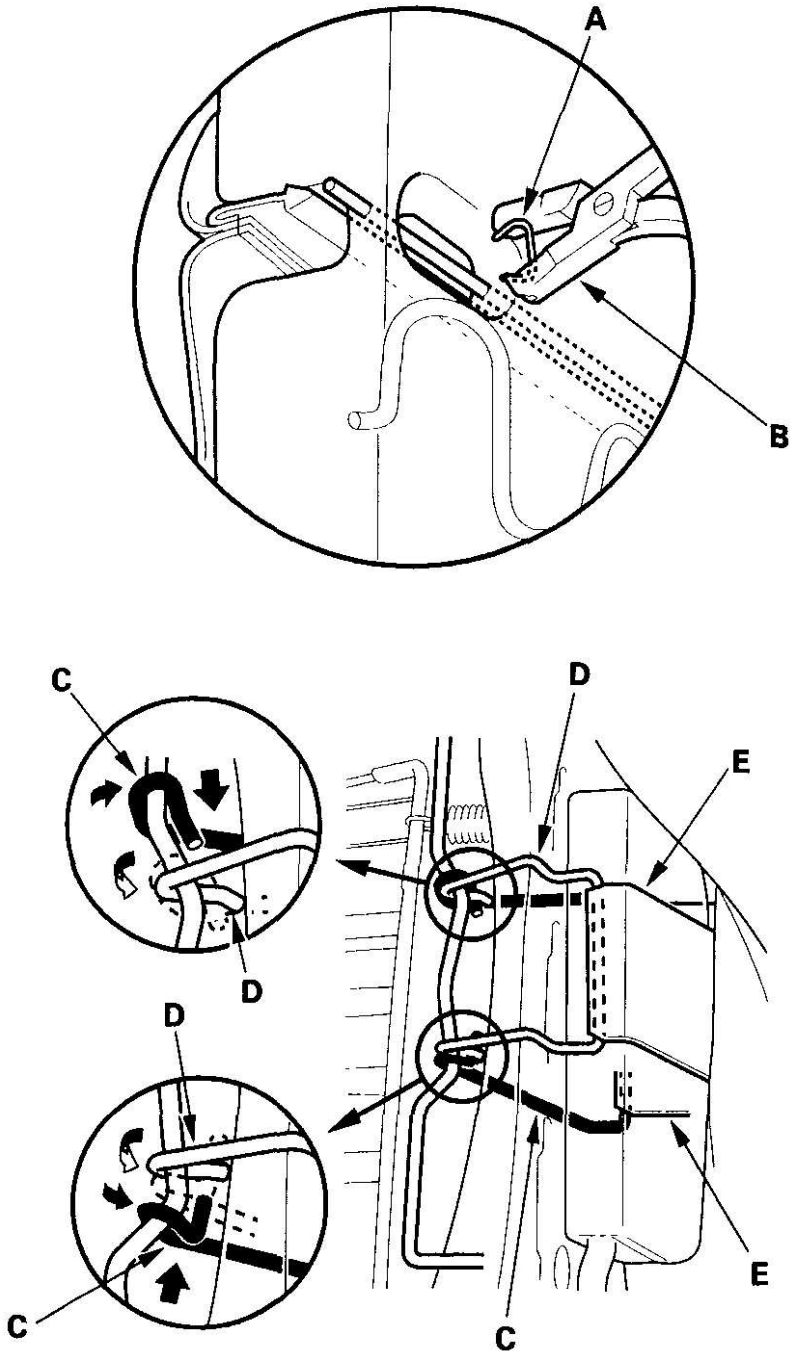


Fig. 22: Identifying Seat-Back Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SEAT CUSHION COVER

1. Remove the front seat (see **FRONT SEAT REMOVAL/INSTALLATION**).
2. With recline motor and/or side airbag: From under the seat cushion, detach the recline motor connector clip, the side airbag connector clip, and on the passenger's seat, the OPDS/ODS unit connector clip. Release the hook springs (on some driver's seats) and the seat cushion cover from the seat cushion frame spring, then pull the cover back, and remove the wire ties.
3. Remove these items from the front seat, then remove the seat-back, '03 model (see **'03 MODEL 4-DOOR**), '04-07 models (see **'04-07 MODELS 4-DOOR**):
   - Recline cover
   - Center cover
4. Release the hook strips (A) and retainers (B) (manual height adjustable seat) from both sides the seat cushion.

NOTE: Manual height adjustable seat is shown in ; other seats are similar, except for the height ratchet unit portion.

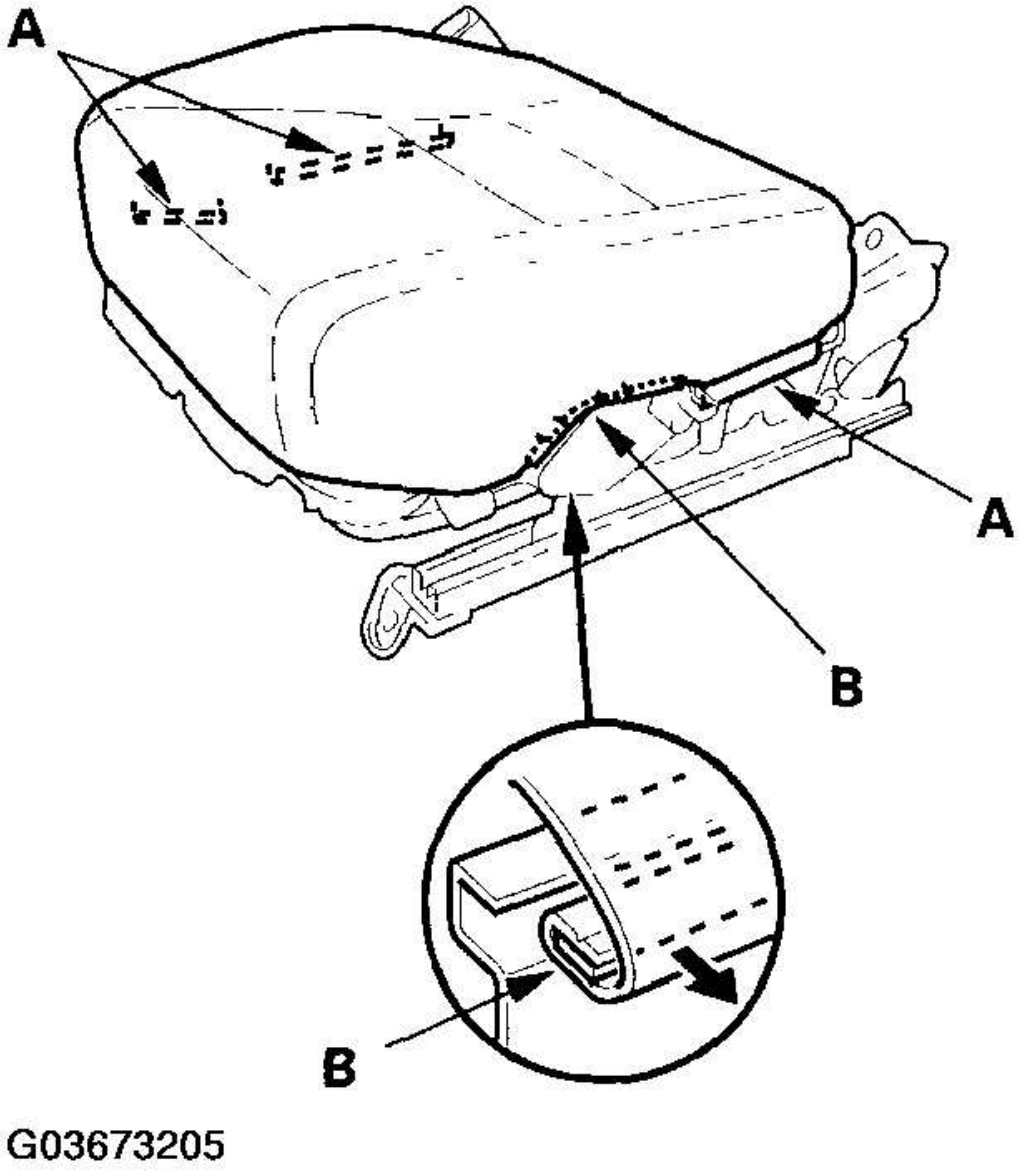


Fig. 23: Releasing Hook Strips And Retainers From Both Sides Seat Cushion
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Pull back the seat cushion cover (A), and release the hooks (B) from under the seat cushion. On manual height adjustable/2-way power seat, detach the clips

from the seat cushion frame (C).

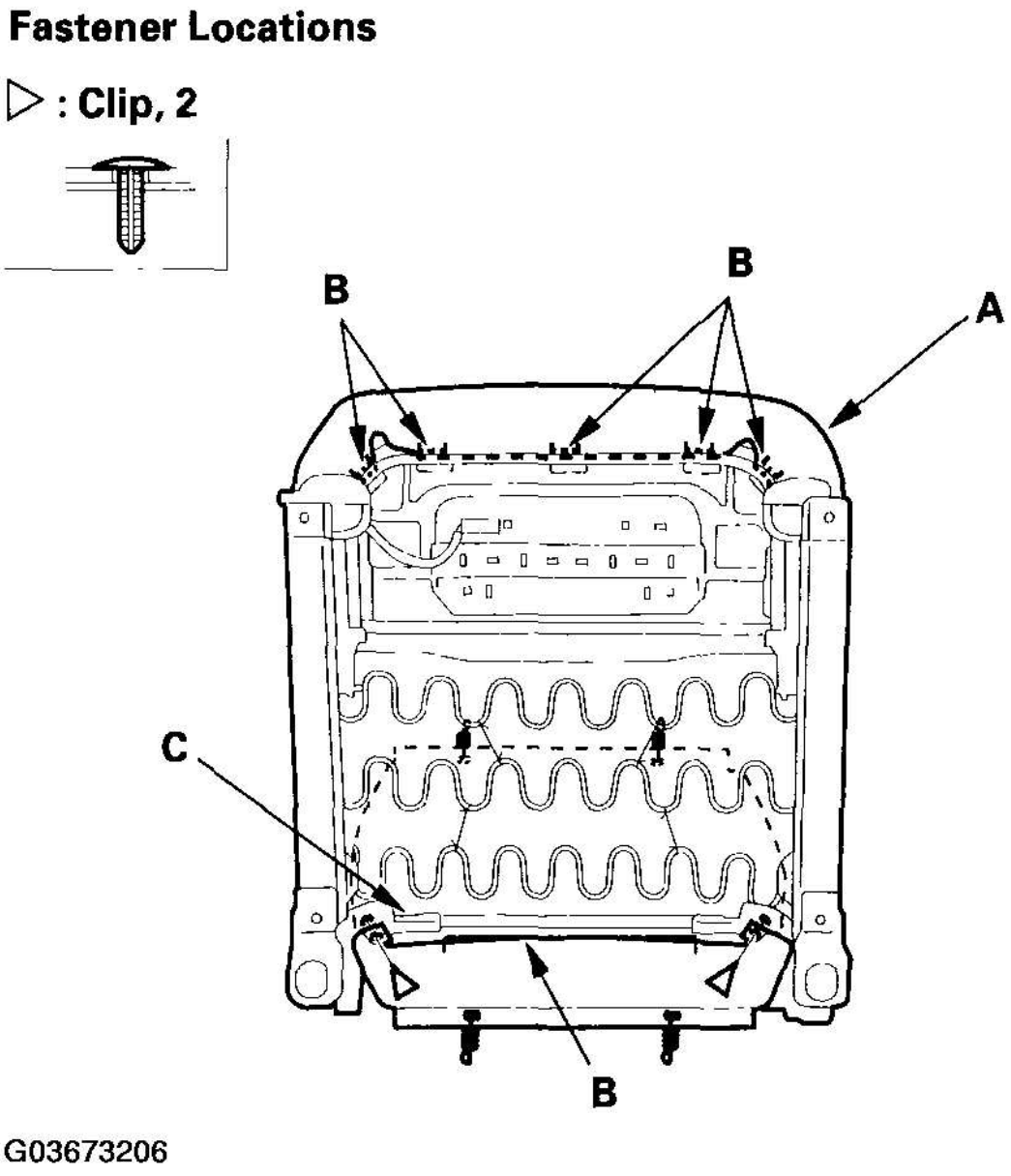


Fig. 24: Pulling Back Seat Cushion Cover And Releasing Hooks
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the cushion cover/pad from the seat cushion frame.

7. Release the clips (A) from under the seat cushion (B).

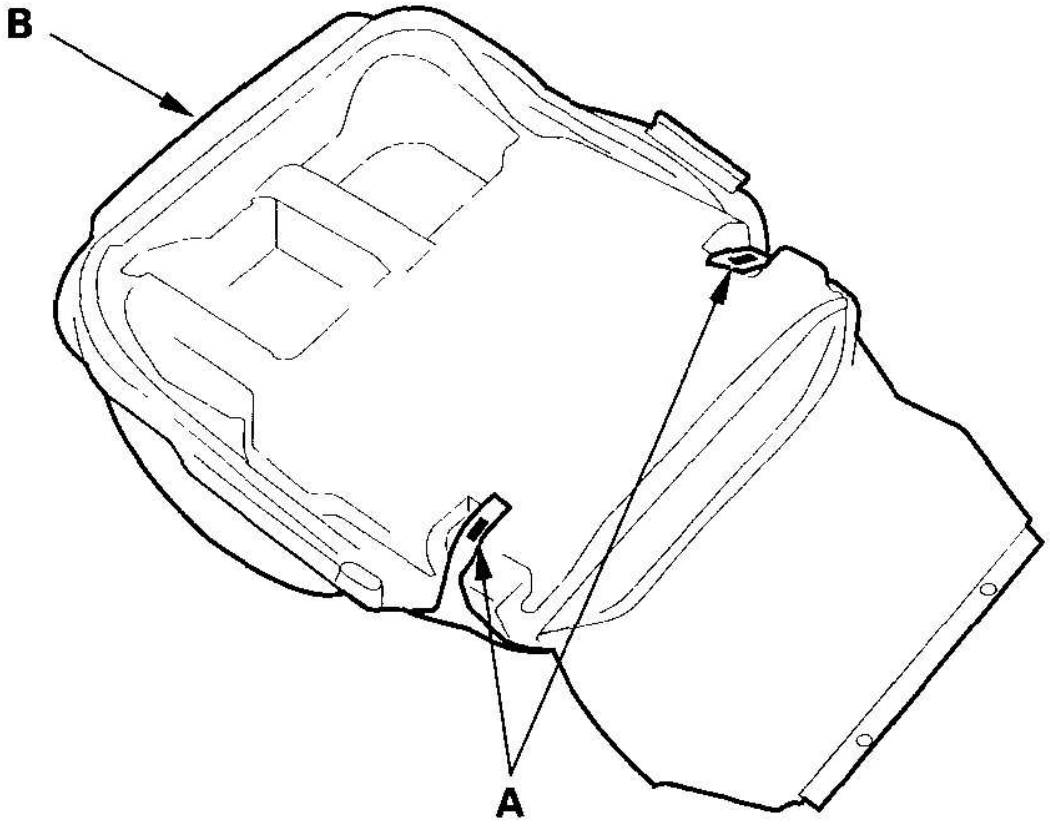


Fig. 25: Releasing Clips From Under Seat Cushion
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Pull back the edge of the seat cushion cover all the way around, and release the clips (A), then remove the seat cushion cover.

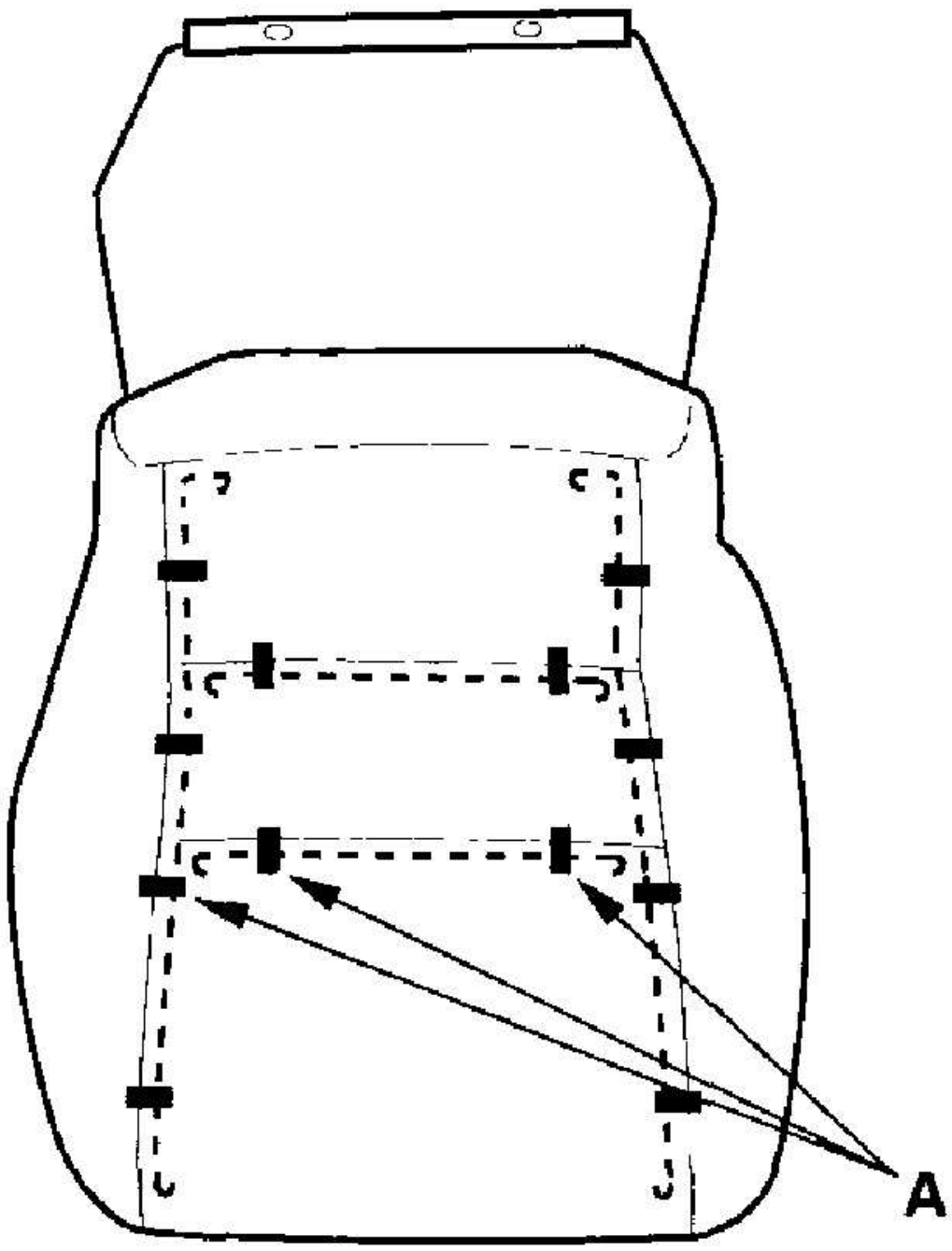


Fig. 26: Releasing Clips And Removing Seat Cushion Cover

Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the cover in the reverse order of removal, and note these items:
   - To prevent wrinkles when installing a seat cushion cover, make sure the material is stretched evenly over the pad before securing the clips and hook strips.
   - Replace any clips you removed with new ones (A). Install them with commercially available upholstery ring pliers (B).

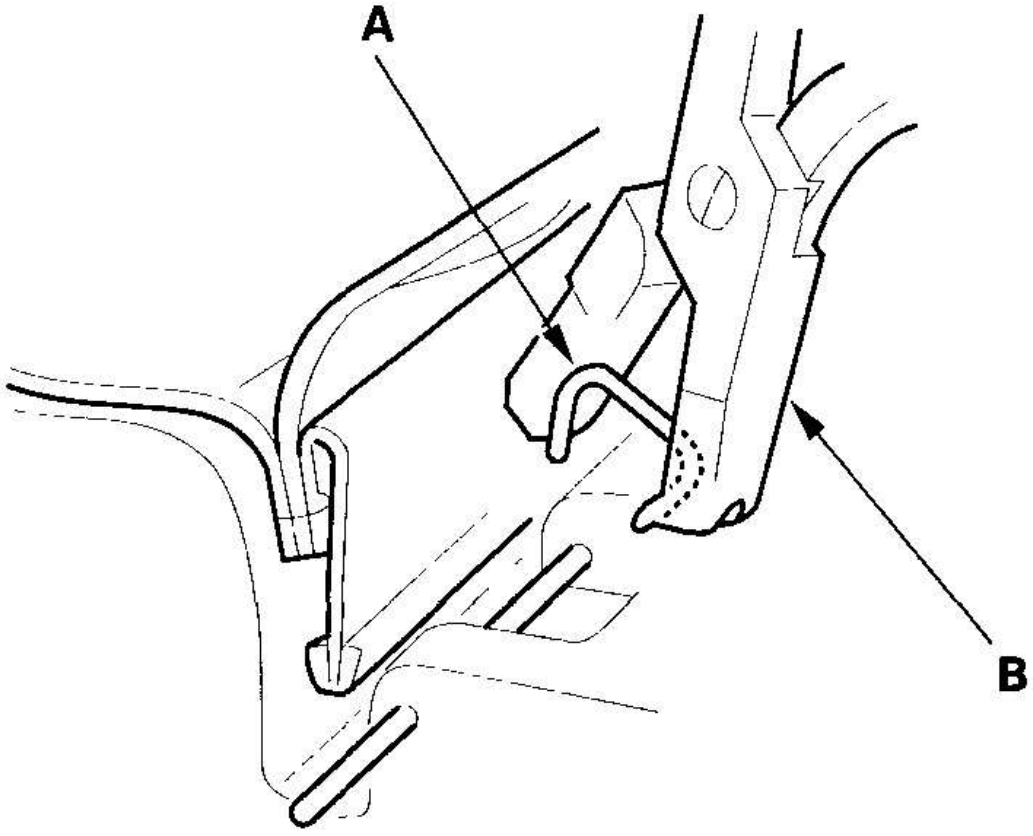


Fig. 27: Identifying Seat Cushion Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ACCESSORIES & EQUIPMENT

Seats - Accord

COMPONENT LOCATION INDEX

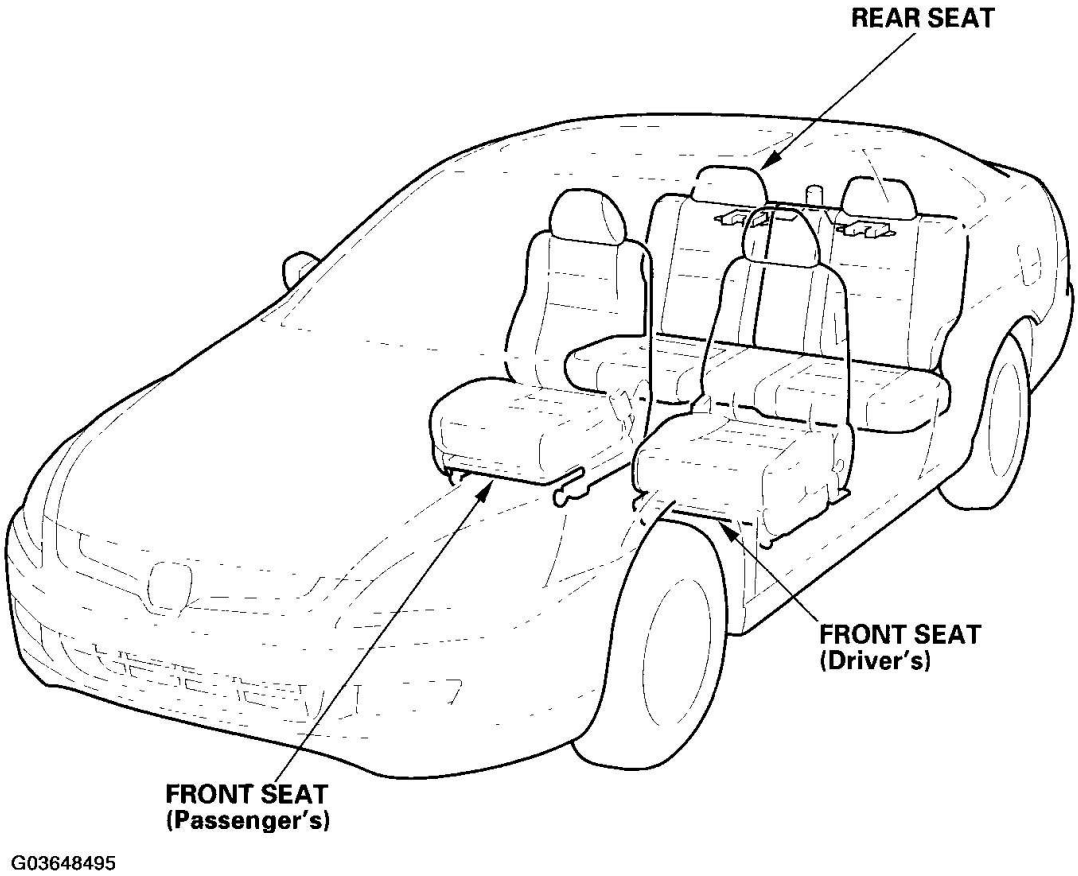


Fig. 1: Locating Seats Components (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

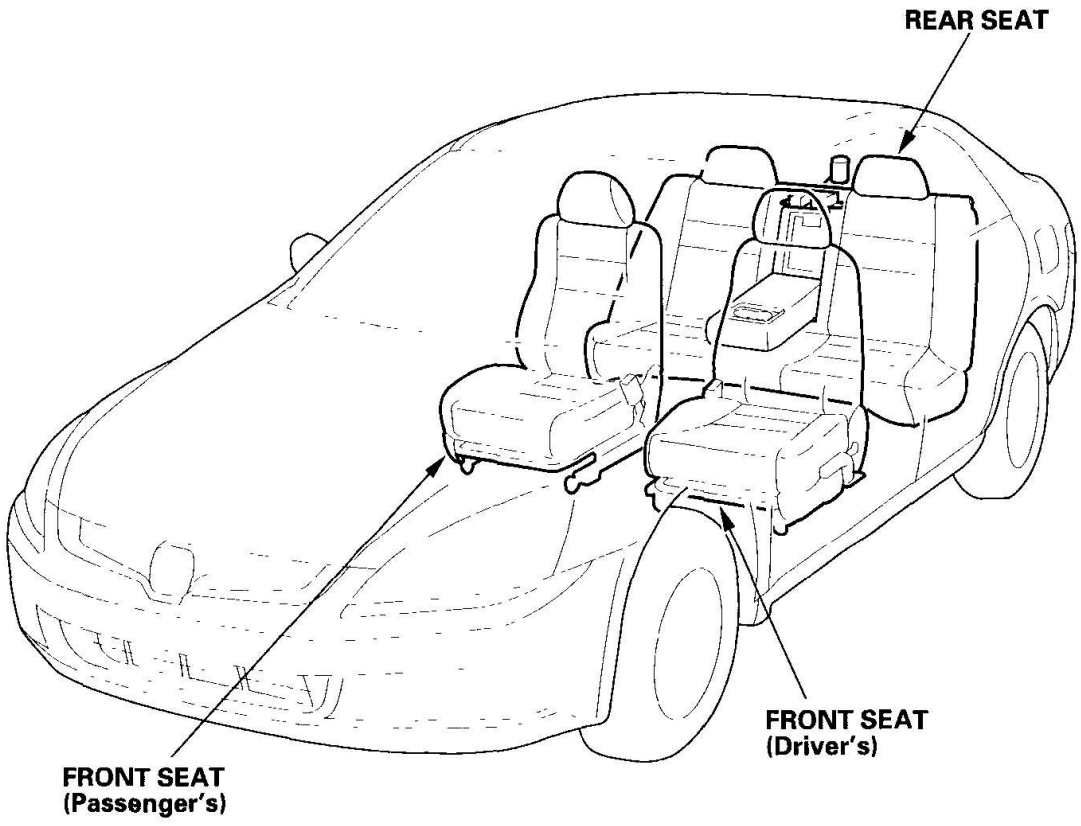


Fig. 2: Locating Seats Components (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT SEAT REMOVAL/INSTALLATION

Special Tools Required

KTC trim tool set SOJATP2014

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:

- **Put on gloves to protect your hands.**
- **When prying with a flat-tip screwdriver, wrap it with**

protective tape to prevent damage.

- **Take care not to scratch the body or tear the seat covers.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**

1. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the frequencies for the preset buttons.
2. Tilt the steering wheel all the way up and telescope it all the way in.
3. '04-07 models passenger's seat: Carefully insert the tip of a small screwdriver (A) through the hole in the back of the front seat belt lower anchor cover (B) and into the hole in the front seat belt lower anchor (C). Unlock the lower anchor by pushing in on the screwdriver. Remove the screwdriver, and then detach the front seat belt anchor plate (D) and anchor cover from the lower anchor.

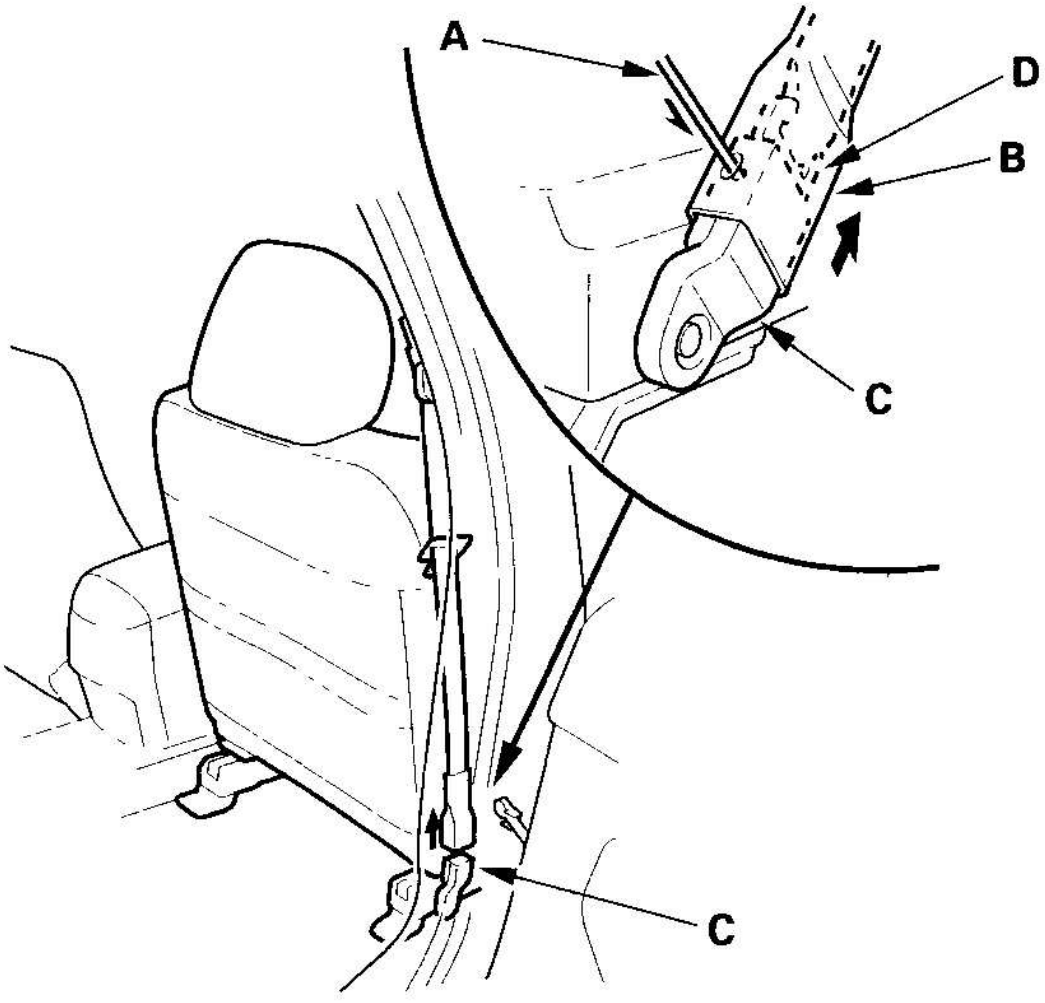


Fig. 3: Detaching Front Seat Belt Anchor Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Slide the seat all the way forward, then remove the seat track end covers (A) from the back of both seat tracks.

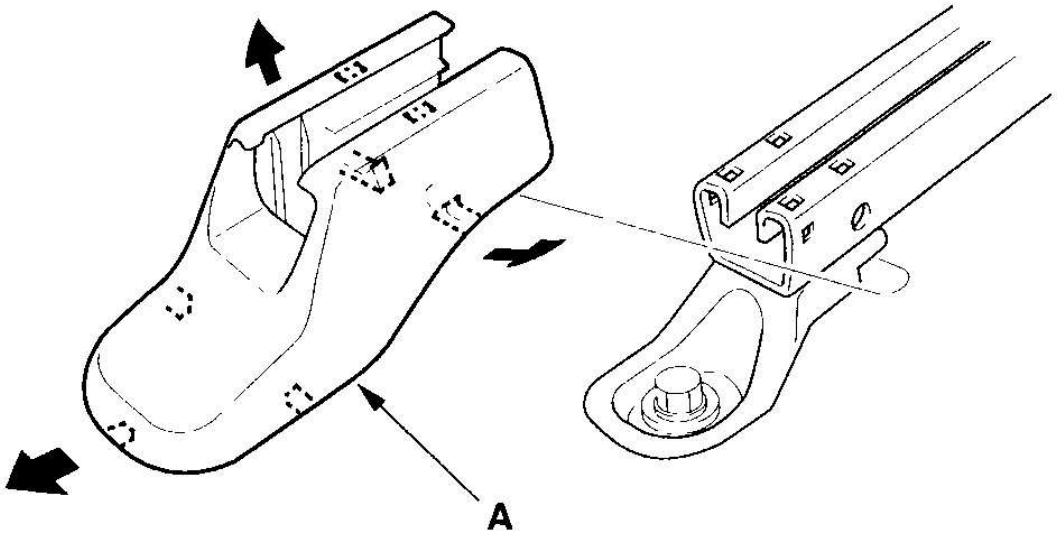


Fig. 4: Removing Seat Track End Covers (Manual/Manual Height Adjustable/2-Way Power ('03 model))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

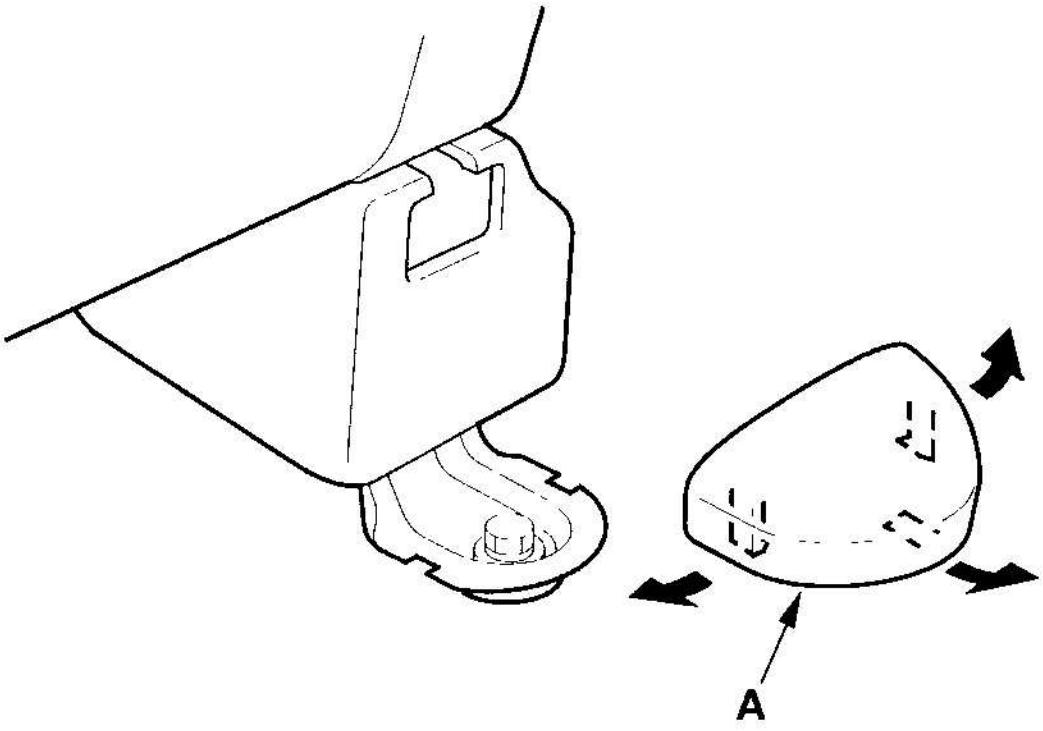


Fig. 5: Removing Seat Track End Covers (Manual ('04-06 Models 2-Door))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

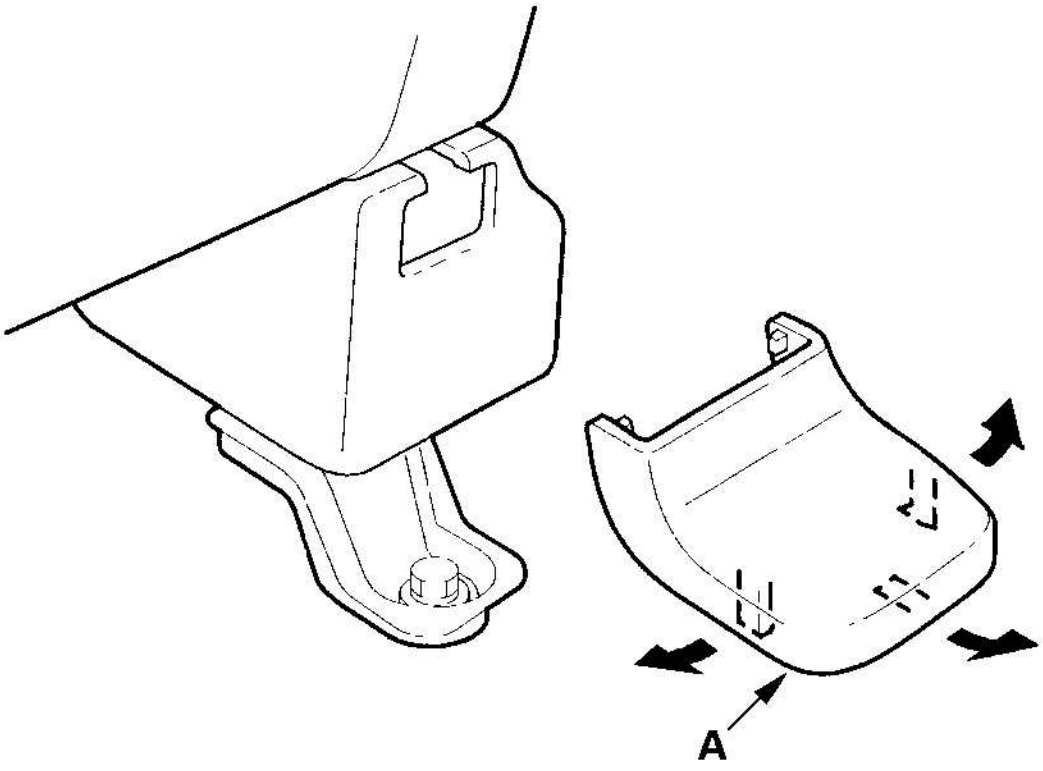


Fig. 6: Removing Seat Track End Covers (Manual ('04-06 Models 4-Door))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

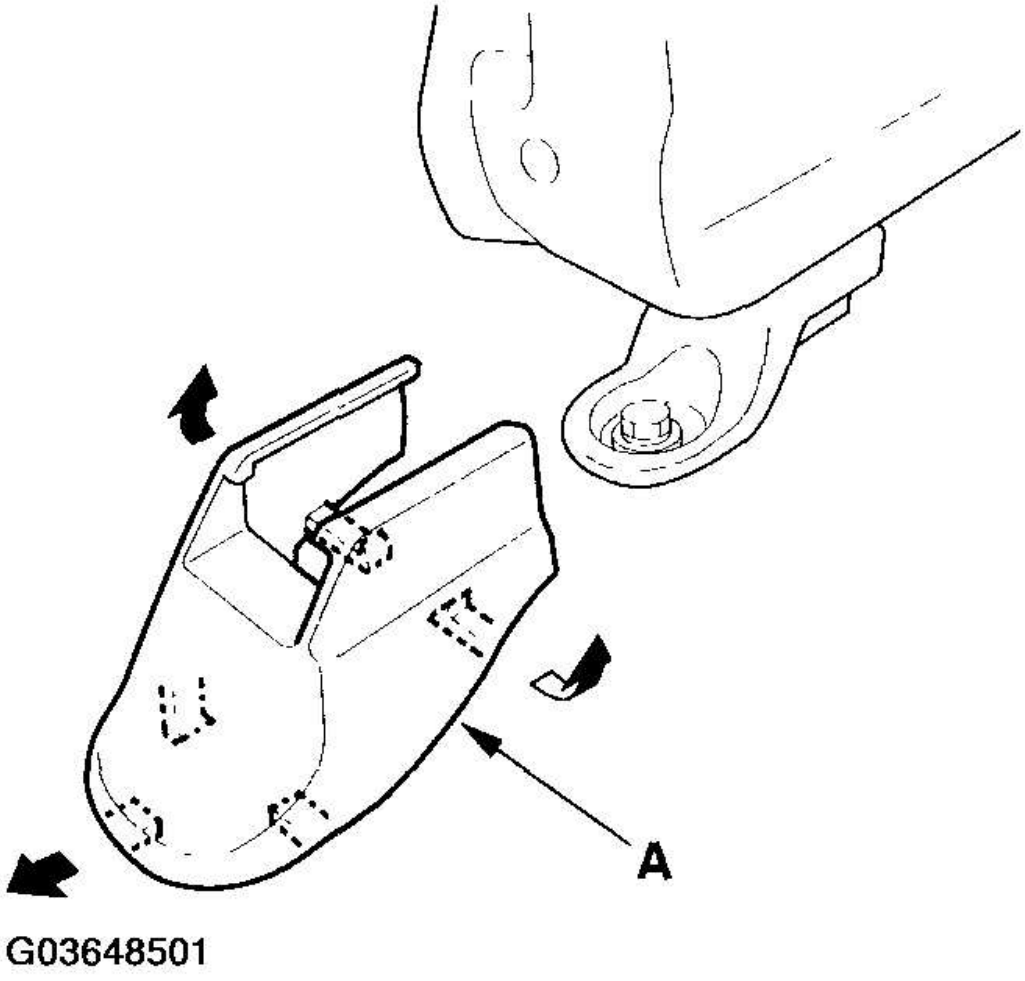


Fig. 7: Removing Seat Track End Covers (8-Way Power)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Slide the seat about half way to the rear so you can access the seat mounting bolts. If equipped with the 8-way power seat, fully raise the seat.
6. If equipped with a side airbag, disconnect the negative cable from the battery, and wait at least 3 minutes before removing the seat.
7. Remove the bolts securing the front seat (A).

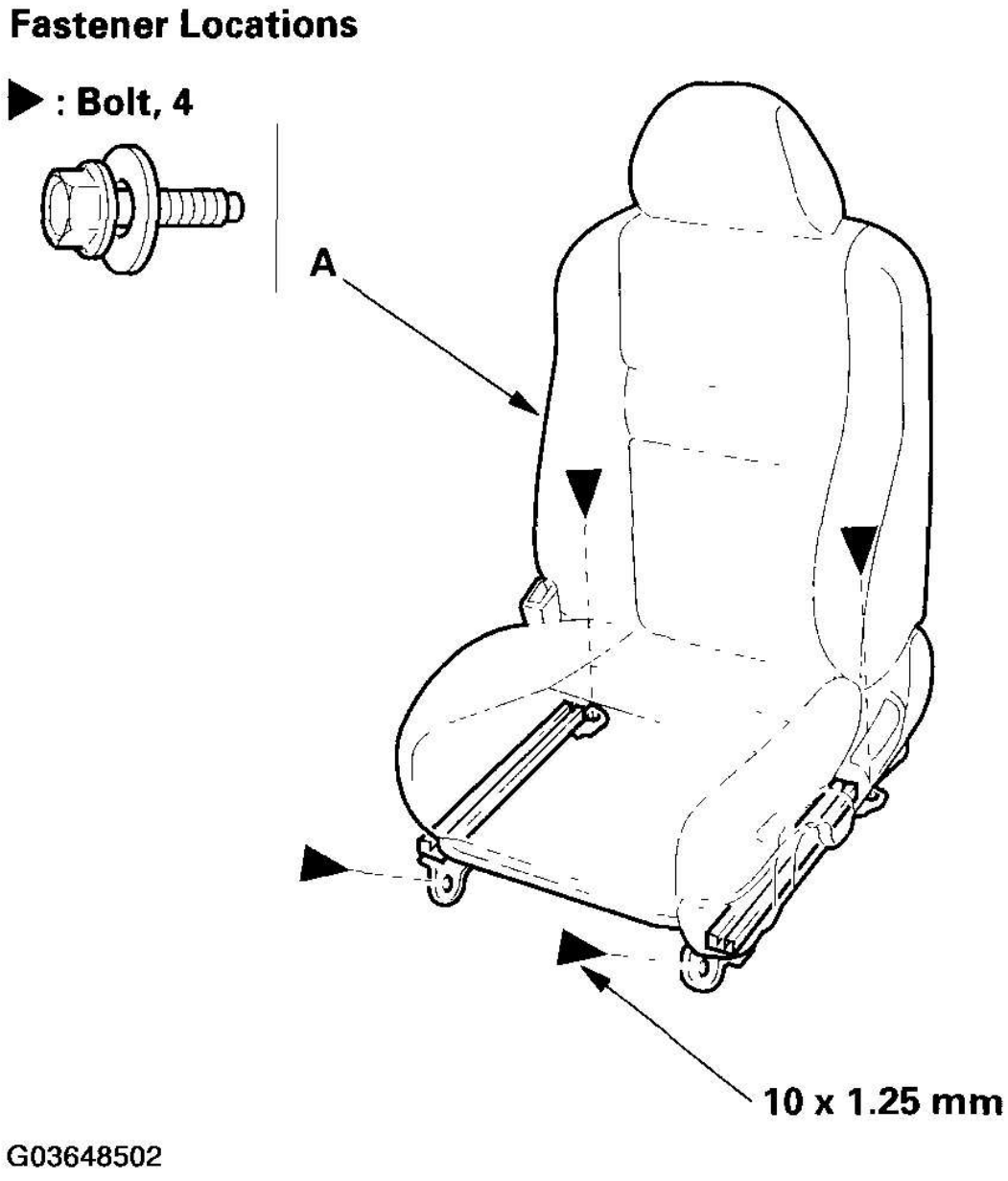


Fig. 8: Removing Front Seat Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Lift up the front seat, then detach the harness clip (A), and disconnect the connector.
    - Seat belt switch connector (B) except on the 8-way power seat.

- Power seat harness connector (C) on the driver's and passenger's power seats.
- If equipped, the seat heater connector (D) on the 2-way power seat and passenger's manual seat.
- Side airbag connector (E) on the driver's and passenger's seat.
- OPDS/ODS unit connector (F) on the passenger's seat.
- '04-07 models, disconnect the seat position sensor subharness connector (G) on the driver's manual height adjustable seat and the 8-way power seat.
- Weight sensor unit connector (H) ('04-05 models), weight sensor connector (I) ('06-07 models) on the passenger's seat.

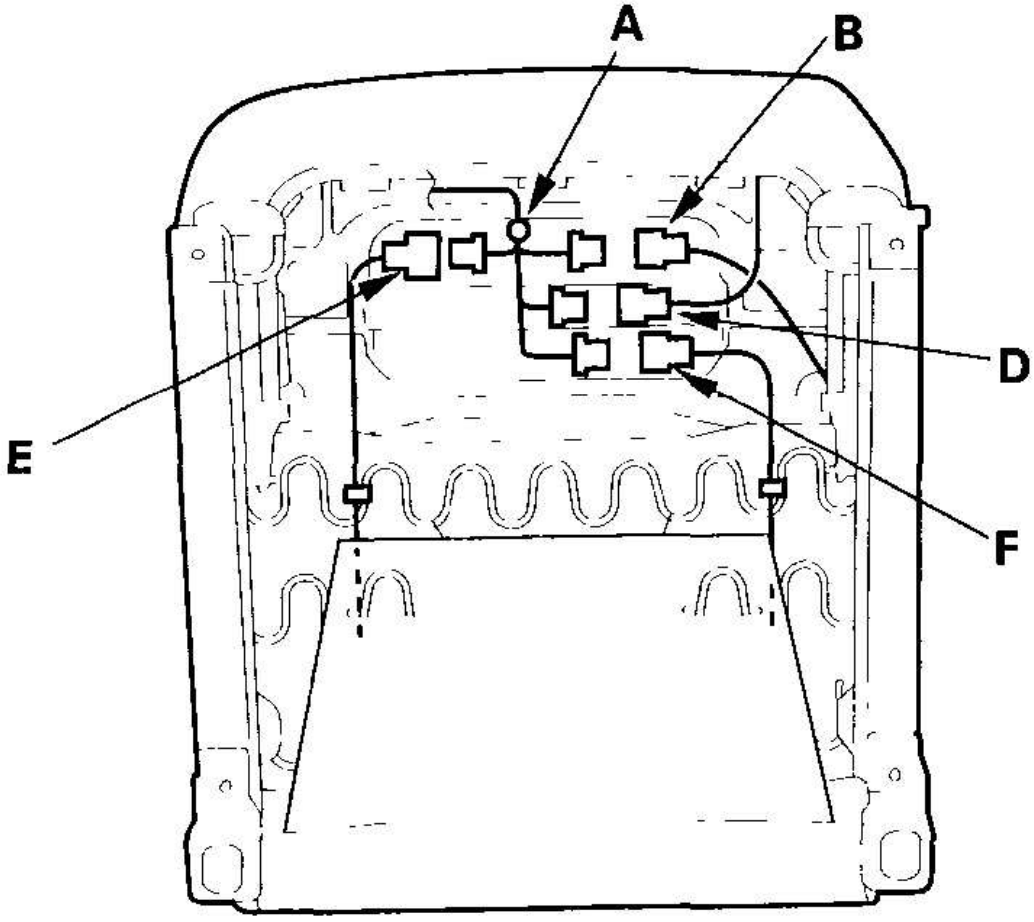


Fig. 9: Detaching Harness Clip (Manual Seat ('03 Model Passenger's))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

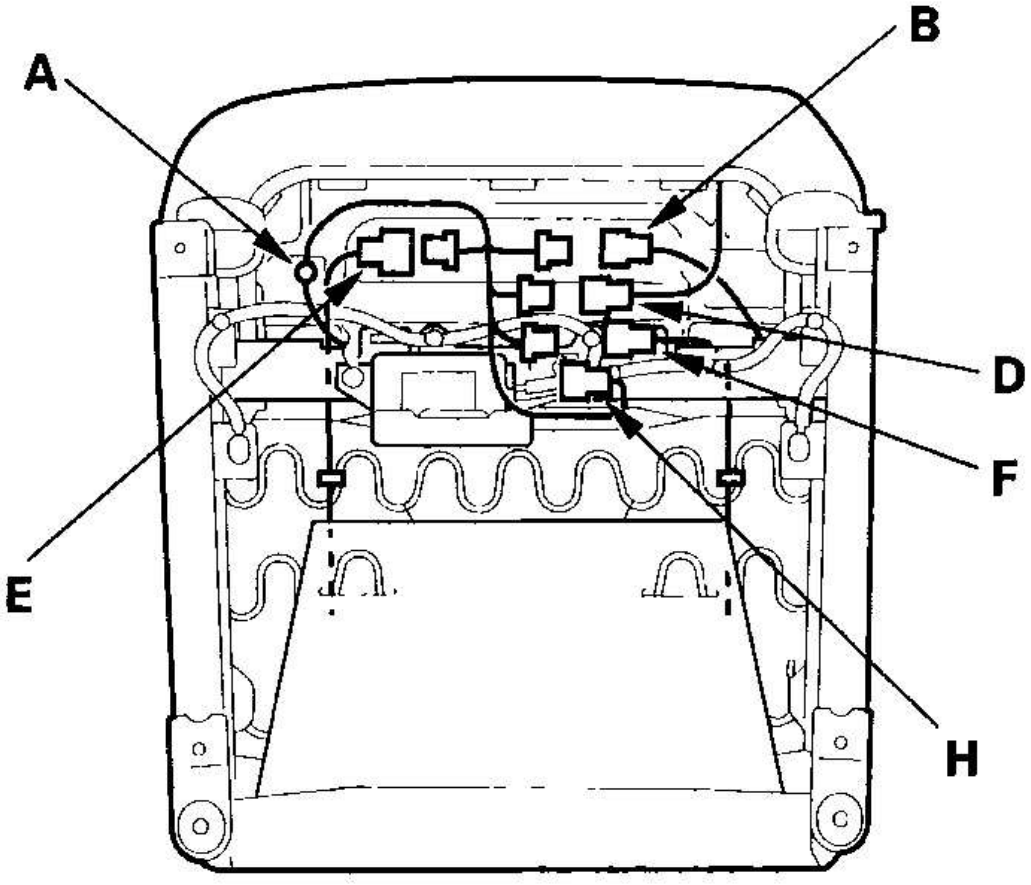


Fig. 10: Detaching Harness Clip (Manual Seat ('04-05 Models Passenger's))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

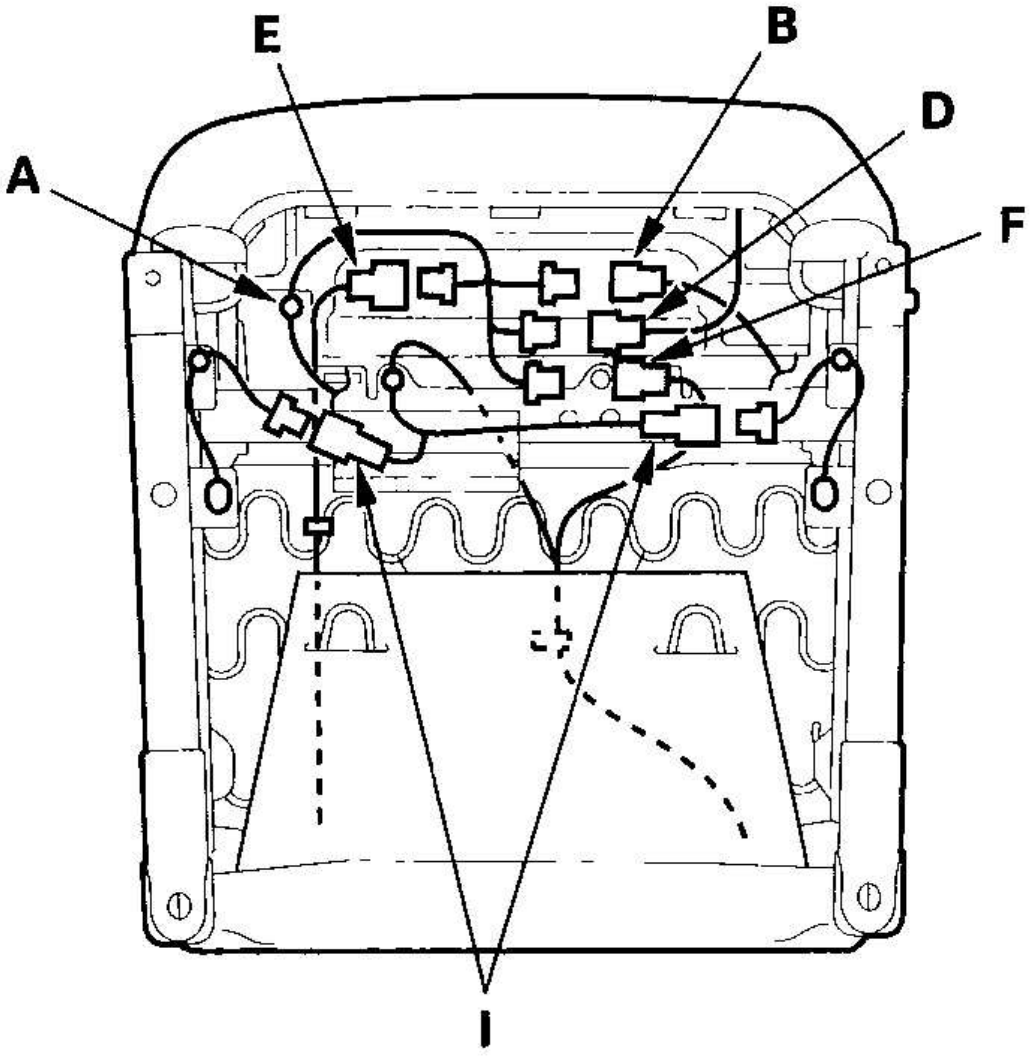


Fig. 11: Detaching Harness Clip (Manual Seat ('06-07 Models Passenger's))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

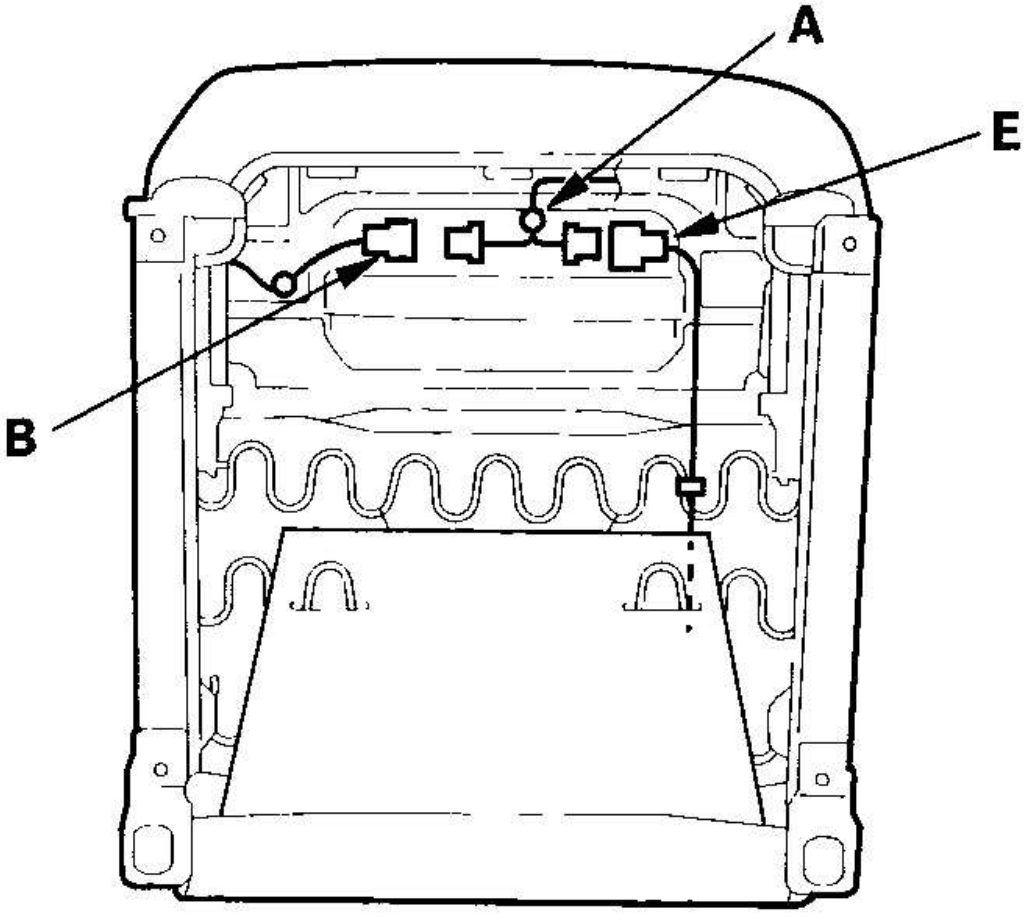


Fig. 12: Detaching Harness Clip (Manual Seat ('03 Model Driver's/Manual Height Adjustable Seat ('03 Model))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

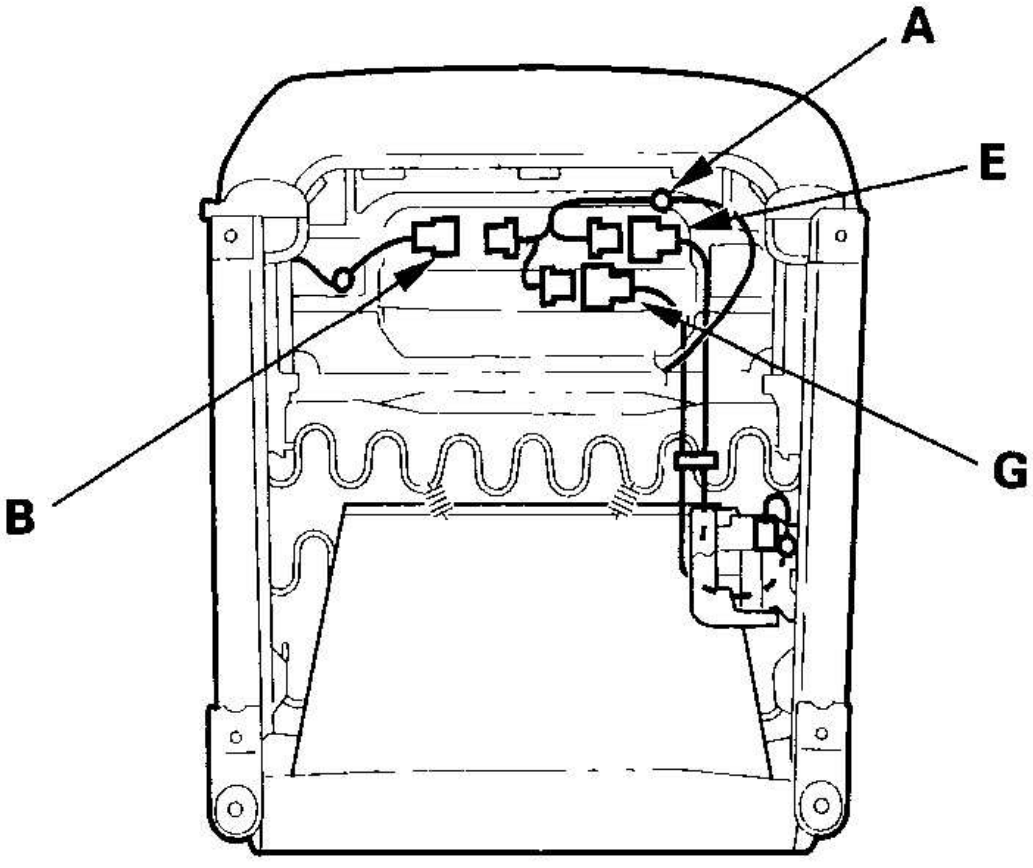


Fig. 13: Detaching Harness Clip (Manual Height Adjustable Seat ('04-07 Models))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

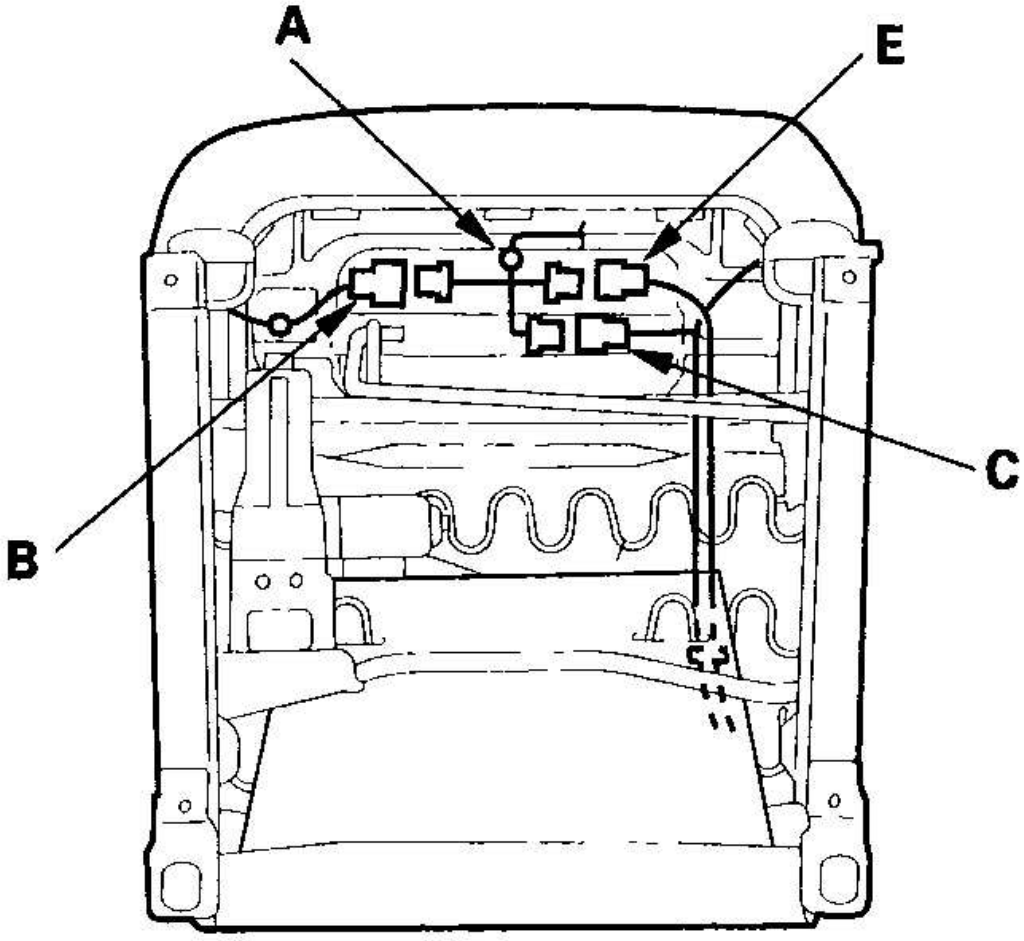


Fig. 14: Detaching Harness Clip (2-Way Power Seat ('03 Model))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

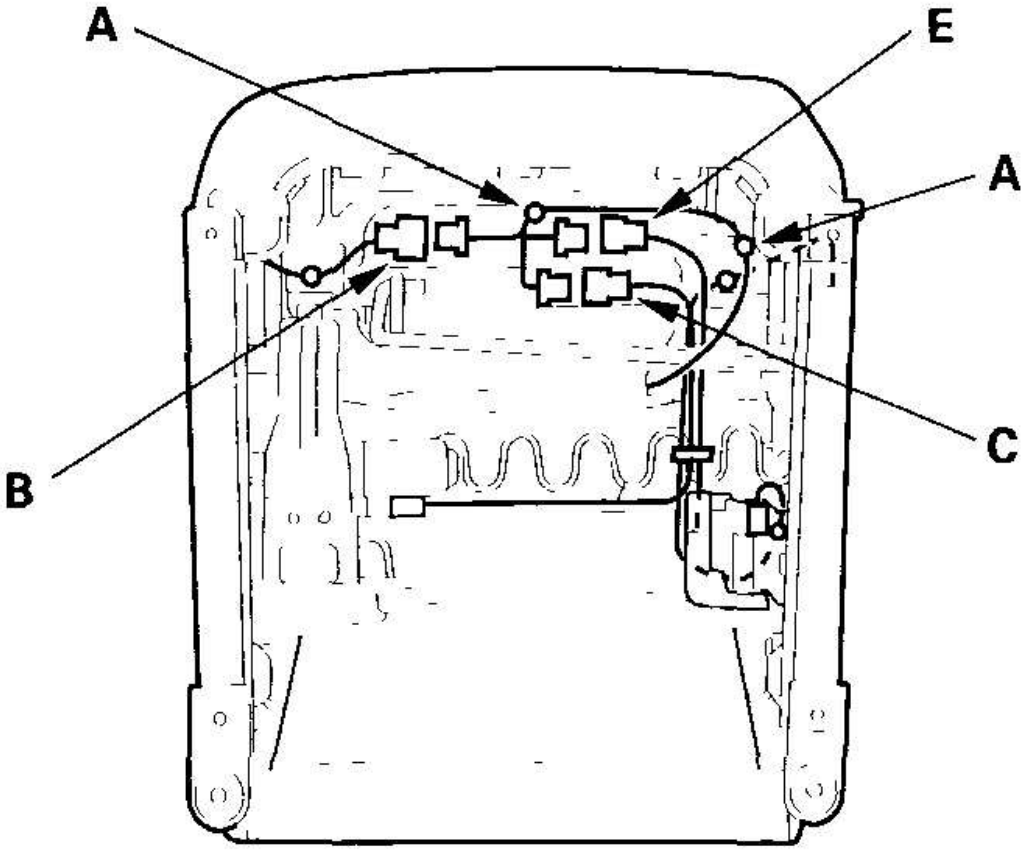


Fig. 15: Detaching Harness Clip (2-Way Power Seat ('04-06 Models))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

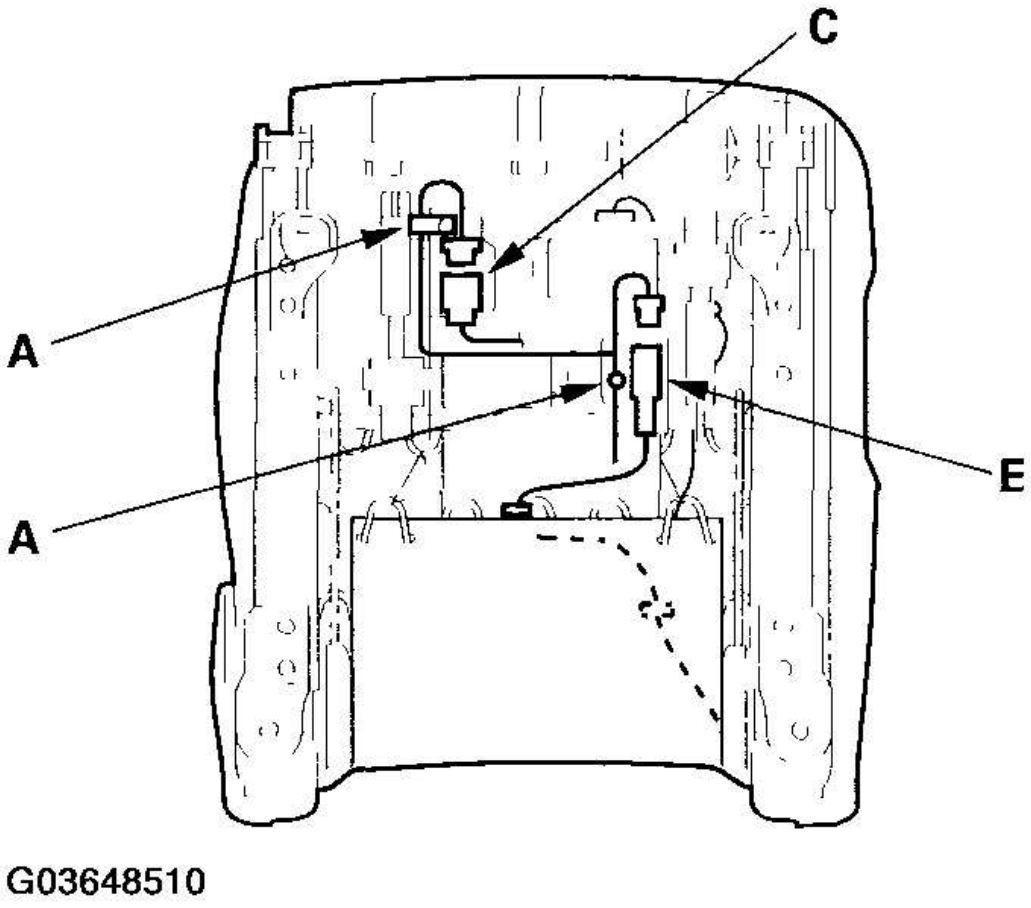


Fig. 16: Detaching Harness Clip (8-Way Power Seat ('03 Model))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

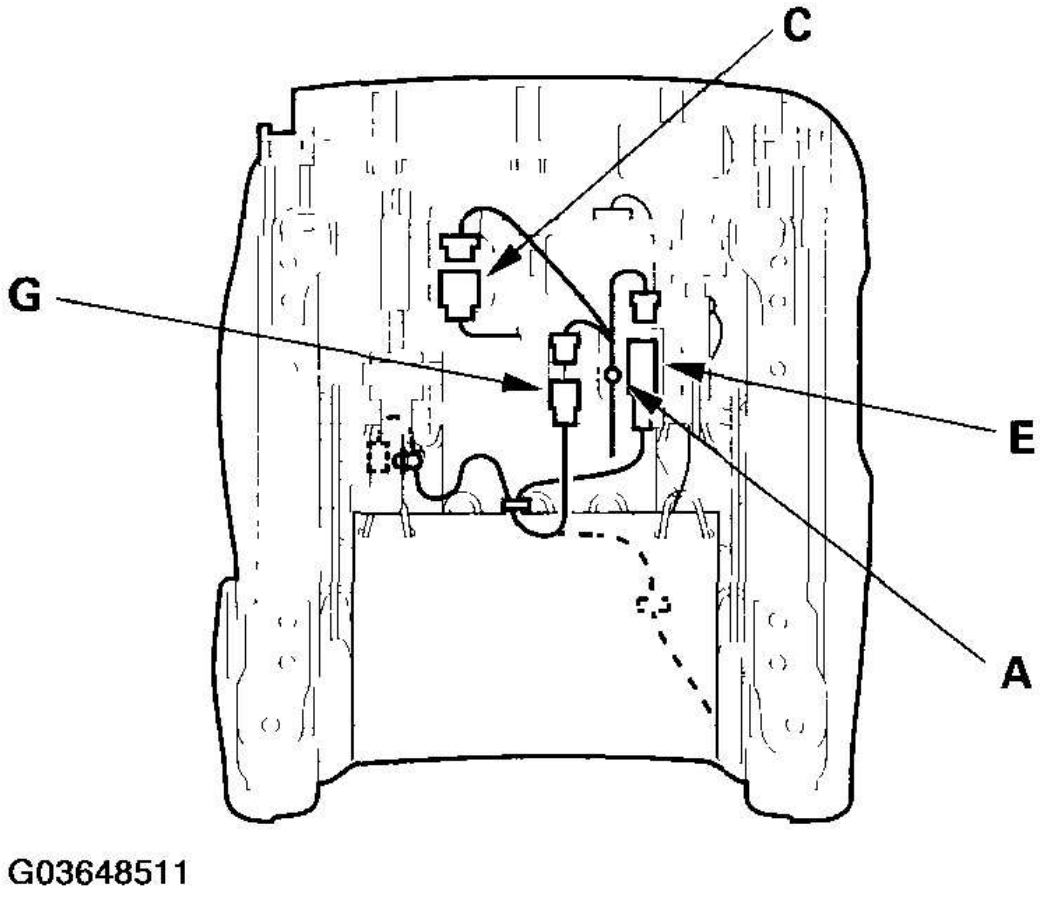


Fig. 17: Detaching Harness Clip (8-Way Power Seat ('04-06 Models))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. With the help of an assistant, carefully remove the front seat through the front door opening.
10. Install the seat in the reverse order of removal, and note these items:
    - Apply medium strength liquid thread lock to the front seat mounting bolts before reinstallation.
    - Make sure each connector is plugged in properly.
    - Tighten the seat mounting bolts to the specified torque in the sequence shown in **Fig. 18**. Slide the seat all the way back and tighten (1) and (2) then slide it forward and tighten (3) and (4).

- Before attaching the lower anchor bolts, make sure there are no twists or kinks in the seat belts.
- '04-07 models passenger's seat: The triangle marks (A) on the anchor plate (B) and the lower anchor (C) must face the same side. Insert the anchor plate into the lower anchor, and make sure that it is locked securely.
- If equipped with a side airbag, reconnect the negative cable to the battery.
- Enter the anti-theft codes for the radio and navigation system, then enter the customer's radio station presets.
- Reset the clock.

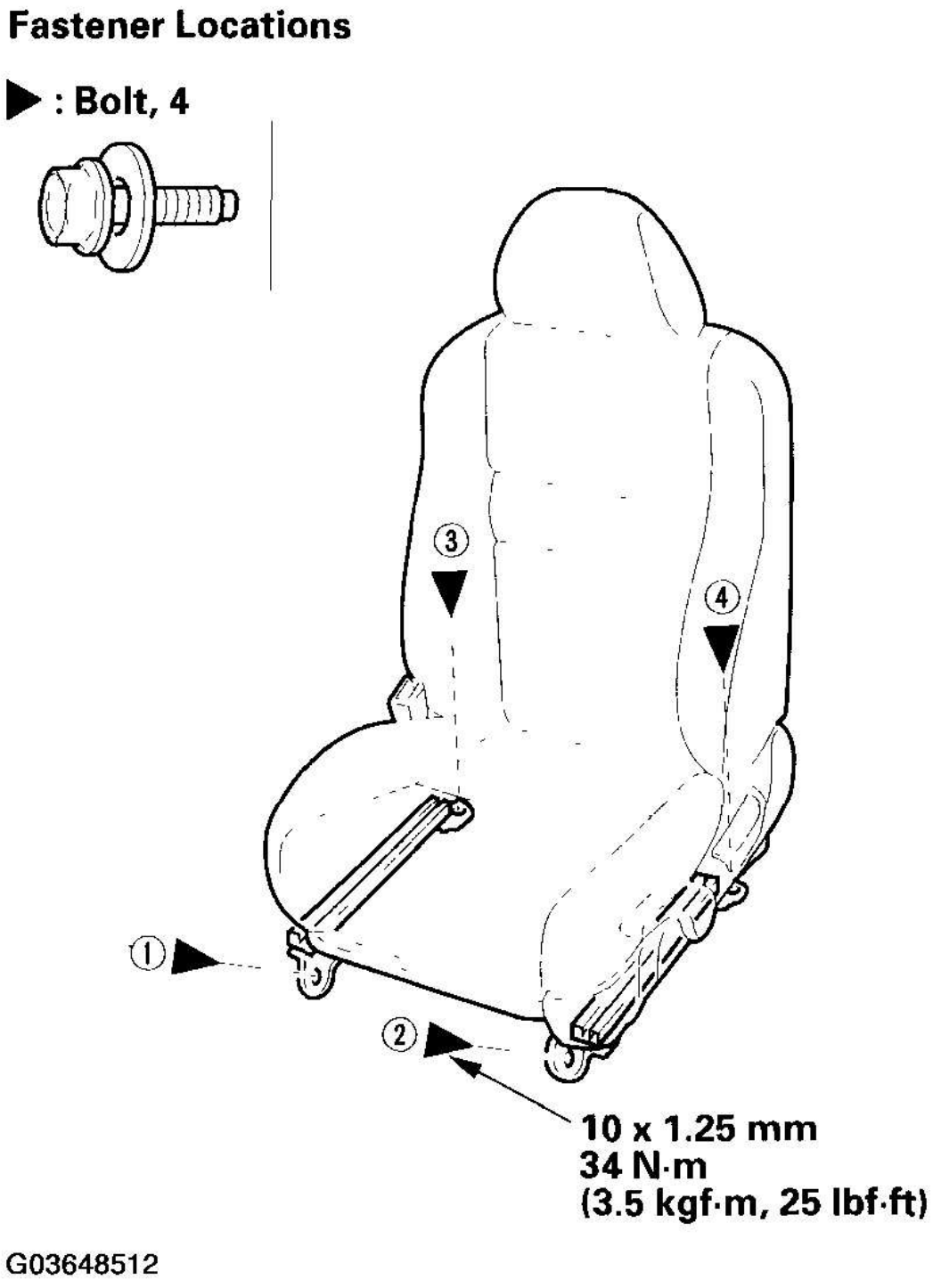


Fig. 18: Tightening Seat Mounting Bolts In Sequence

Courtesy of AMERICAN HONDA MOTOR CO., INC.

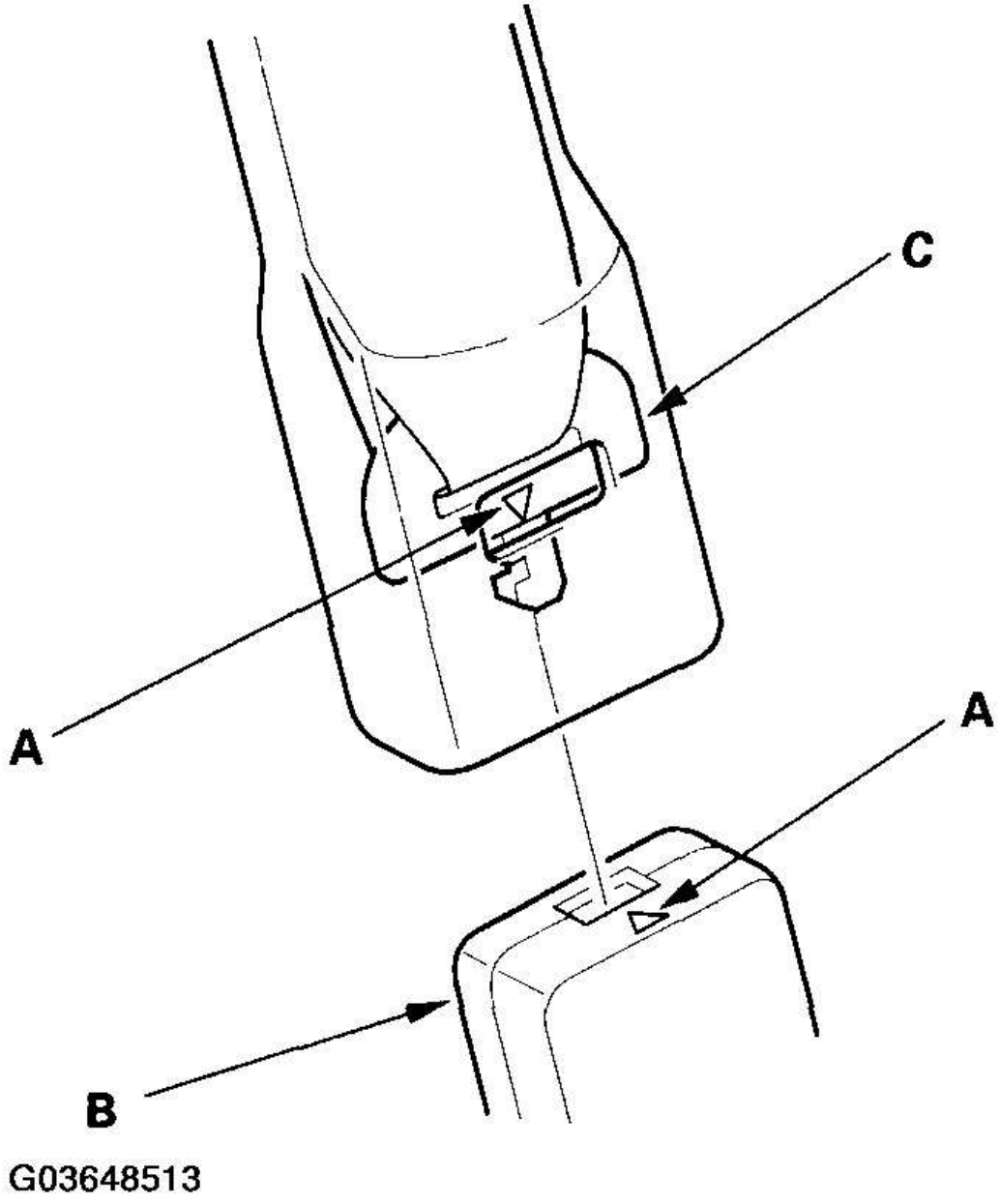


Fig. 19: Front Seat Belt Lower Anchor Installation ('04-06 Models Passenger's)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT SEAT DISASSEMBLY/REASSEMBLY - MANUAL

Special Tools Required

KTC trim tool set SOJATP2014

'03 MODEL 2-DOOR

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:

- **Take care not to tear the seams or damage the seat covers.**
- **Put on gloves to protect your hands.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Apply multipurpose grease to the moving parts of the seat track.**
- **To prevent wrinkles in the seat cushion cover, stretch the material evenly over the pad.**

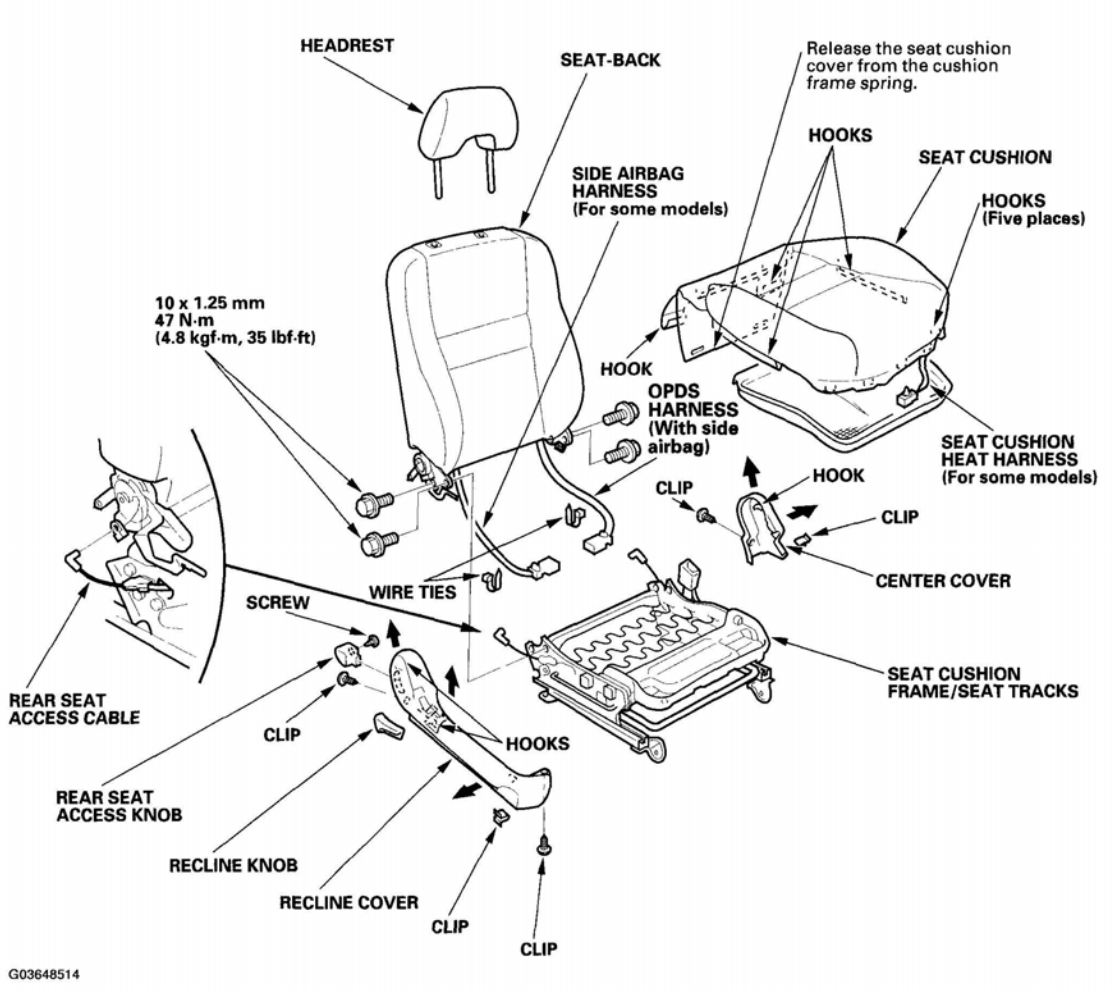


Fig. 20: Exploded View Of Front Seat ('03 Model 2-Door - Manual)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

KTC trim tool set SOJATP2014

'04-07 MODELS 2-DOOR

- SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

- '04-05 models: The front passenger's weight sensor (SWS) unit must be calibrated after any of these actions (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06 MODEL)**):
  - Front passenger's seat replacement (including any seat components)
  - Replacement of the seat weight sensors
  - Replacement of the seat weight sensor unit
- '06-07 models: The front passenger's weight sensor (ODS) must be calibrated after any of these actions (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06 MODEL)**):
  - Front passenger's seat replacement (including any seat components)
  - Replacement of the seat weight sensors

NOTE:

- **Take care not to tear the seams or damage the seat covers.**
- **Put on gloves to protect your hands.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Apply multipurpose grease to the moving parts of the seat track.**
- **To prevent wrinkles in the seat cushion cover, stretch the material evenly over the pad.**

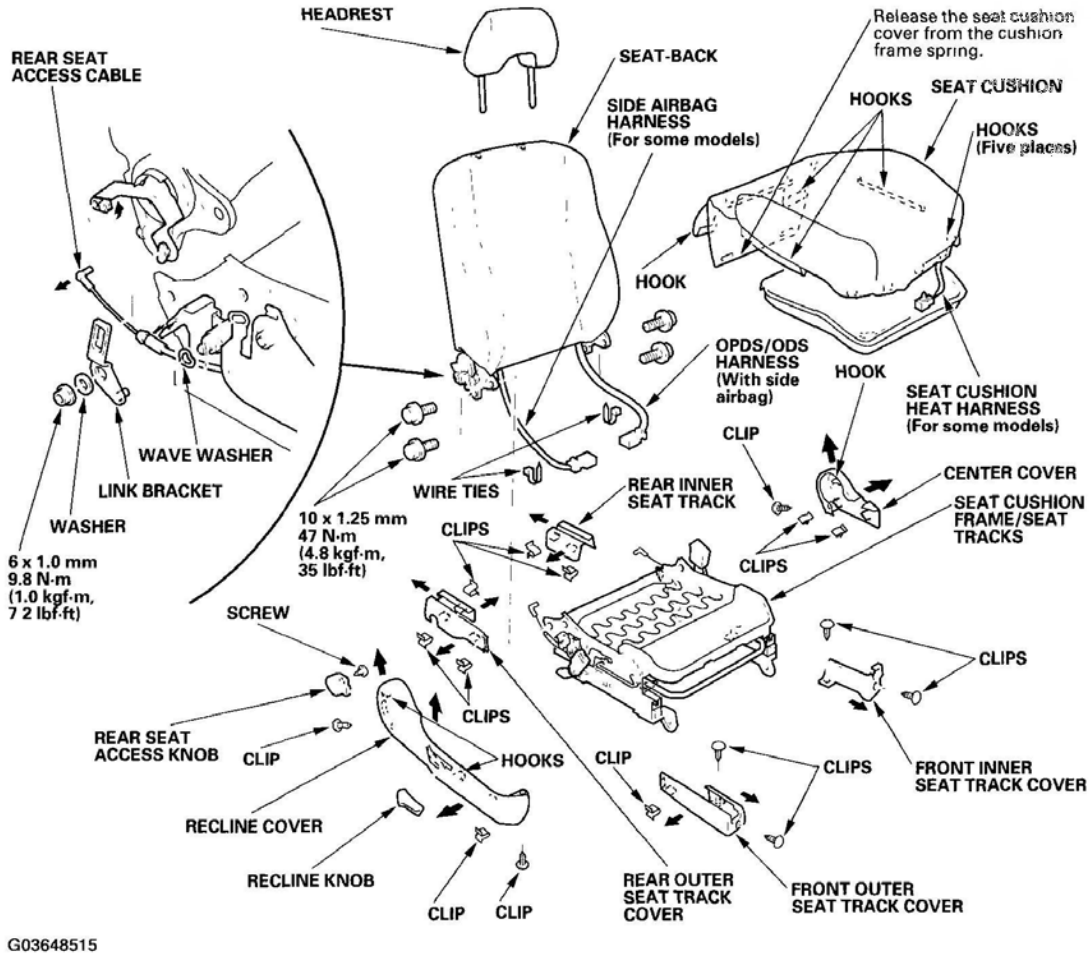


Fig. 21: Exploded View Of Front Seat ('04-07 Models 2-Door - Manual)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

KTC trim tool set SOJATP2014

'03 MODEL 4-DOOR

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:

- **Take care not to tear the seams or damage the seat covers.**
- **Put on gloves to protect your hands.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Apply multipurpose grease to the moving parts of the seat track.**
- **To prevent wrinkles in the seat cushion cover, stretch the material evenly over the pad.**
- **The passenger's seat is shown below; driver's seat is similar except it has no OPDS unit.**

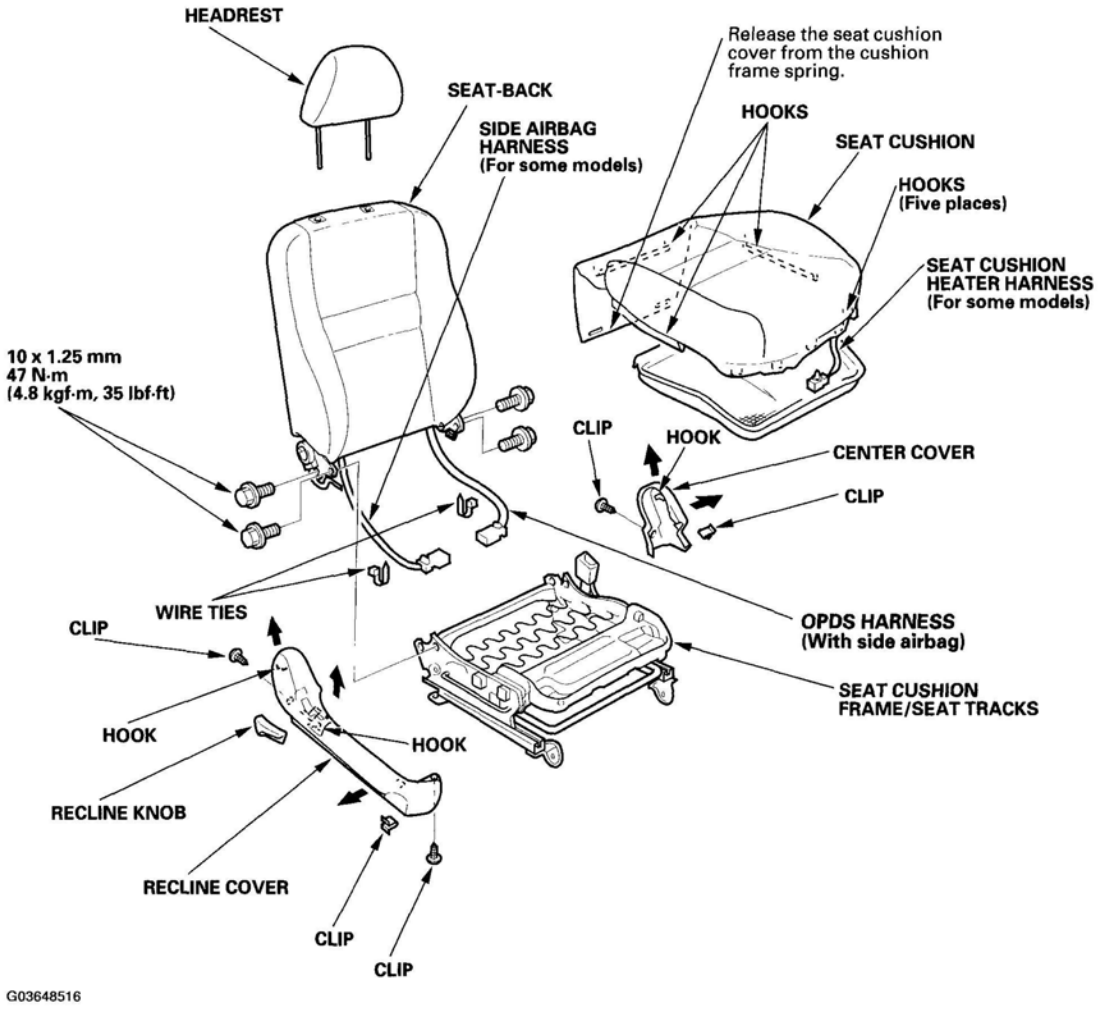


Fig. 22: Exploded View Of Front Seat ('03 Model 4-Door - Manual)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Special Tools Required

KTC trim tool set SOJATP2014

'04-07 MODELS 4-DOOR PASSENGER'S

- SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing

repairs or service.

- '04-05 models: The front passenger's weight sensor (SWS) unit must be calibrated after any of these actions (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06-07 MODEL)**):
  - Front passenger's seat replacement (including any seat components)
  - Replacement of the seat weight sensors
  - Replacement of the seat weight sensor unit
- '06-07 model: The front passenger's seat weight sensor (ODS) must be calibrated after any of these actions (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06 MODEL)**):
  - Front passenger's seat replacement (including any seat components)
  - Replacement of the seat weight sensors

NOTE:

- **Take care not to tear the seams or damage the seat covers.**
- **Put on gloves to protect your hands.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Apply multipurpose grease to the moving parts of the seat track.**
- **To prevent wrinkles in the seat cushion cover, stretch the material evenly over the pad.**

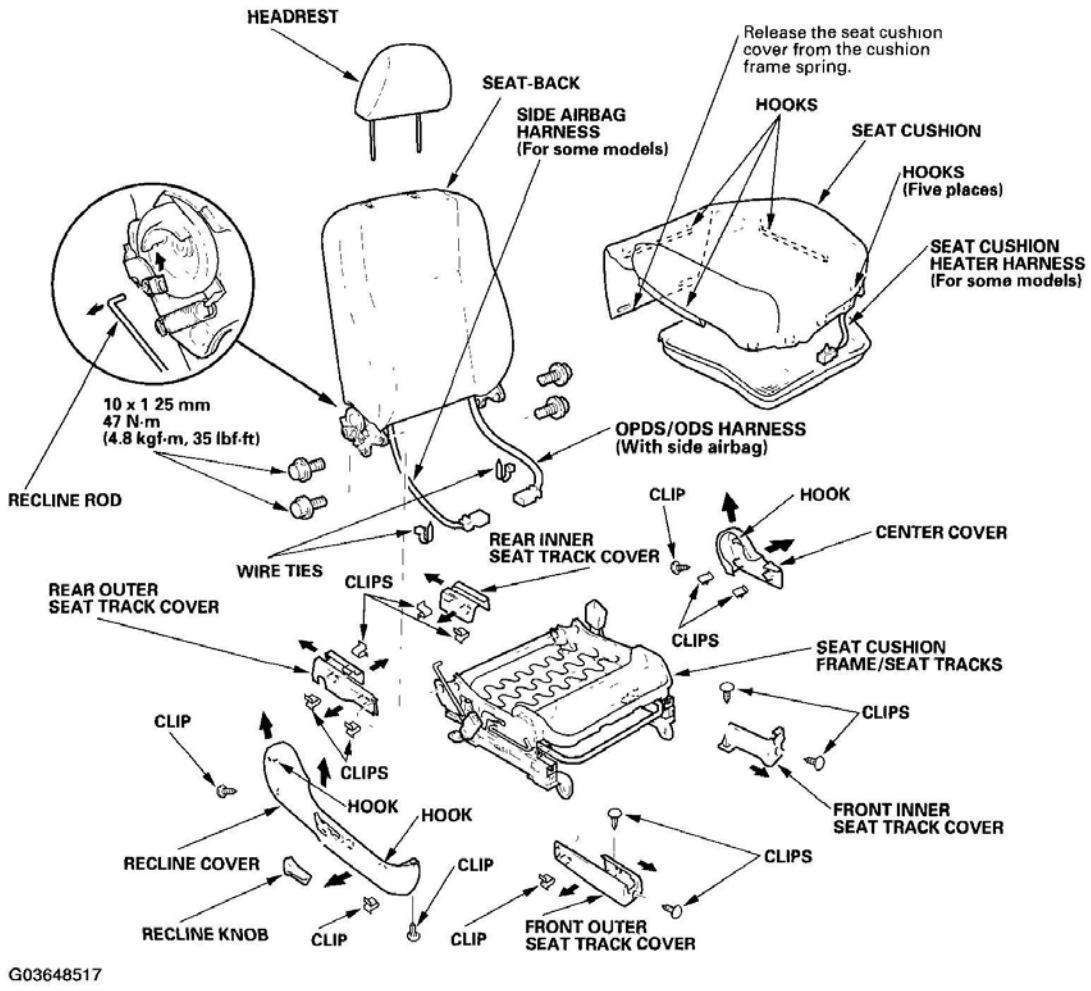


Fig. 23: Exploded View Of Front Seat ('04-07 Models 4-Door Passenger's - Manual)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT SEAT DISASSEMBLY/REASSEMBLY - MANUAL HEIGHT ADJUSTABLE

Special Tools Required

KTC trim tool set SOJATP2014

- SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and

procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

- '04-06 models: The operation of the driver's seat position sensor must be checked after any of these actions (see **OPERATION CHECK OF THE DRIVER'S SEAT POSITION SENSOR**):
  - Driver's seat position sensor replacement
  - Cover plate (front side of driver's seat slide rail) replacement

NOTE:

- **Take care not to tear the seams or damage the seat covers.**
- **Put on gloves to protect your hands.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Apply multipurpose grease to the moving parts of the height ratchet unit and seat track.**
- **To prevent wrinkles in the seat cushion cover, stretch the material evenly over the pad.**

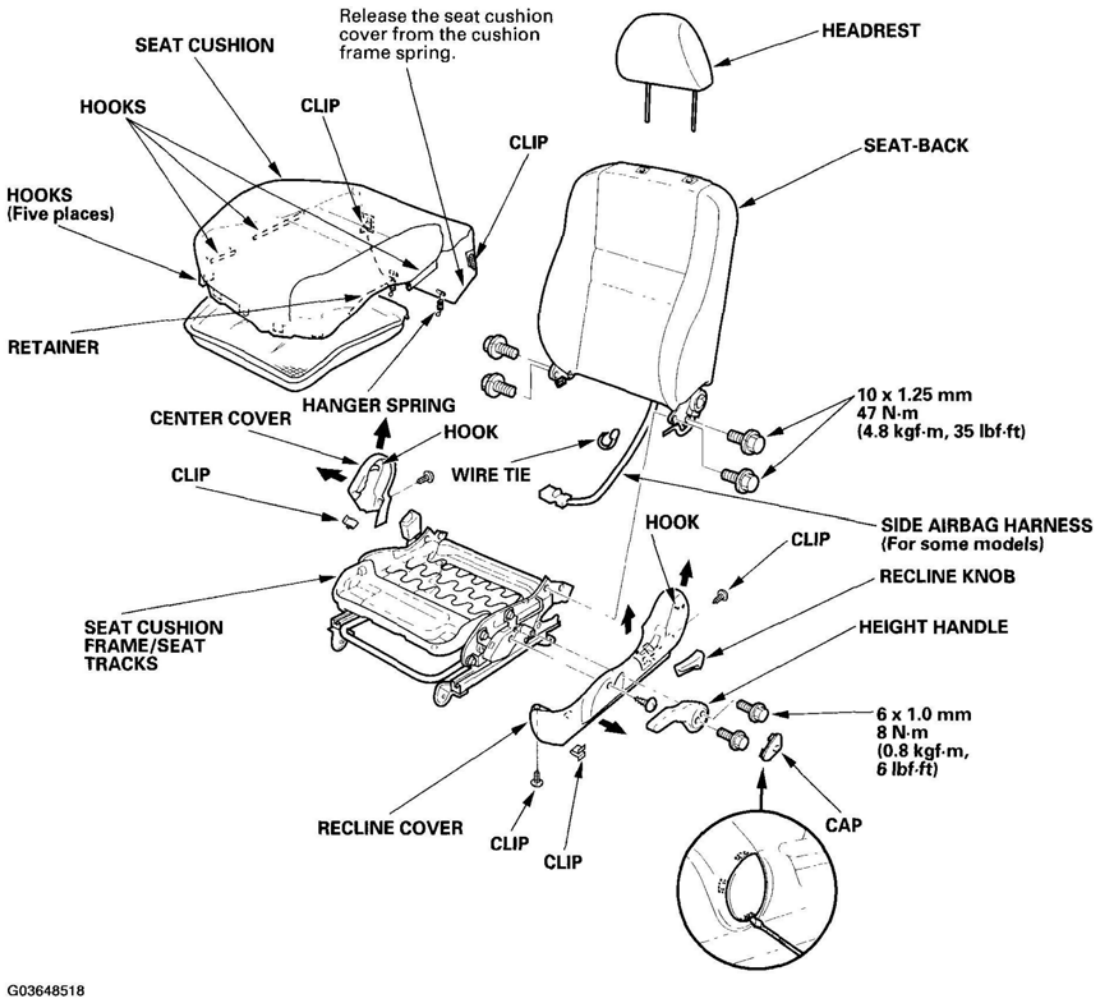


Fig. 24: Exploded View Of Front Seat (Manual Height Adjustable)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT SEAT DISASSEMBLY/REASSEMBLY - DRIVER'S 2-WAY POWER

Special Tools Required

KTC trim tool set SOJATP2014

- SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing

repairs or service.

- '04-07 models: The operation of the driver's seat position sensor must be checked after any of these actions (see **OPERATION CHECK OF THE DRIVER'S SEAT POSITION SENSOR**):
  - Driver's seat position sensor replacement
  - Cover plate (front side of driver's seat slide rail) replacement

NOTE:

- **Take care not to tear the seams or damage the seat covers.**
- **Put on gloves to protect your hands.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Apply multipurpose grease to the moving parts of the seat track.**
- **To prevent wrinkles in the seat cushion cover, stretch the material evenly over the pad.**

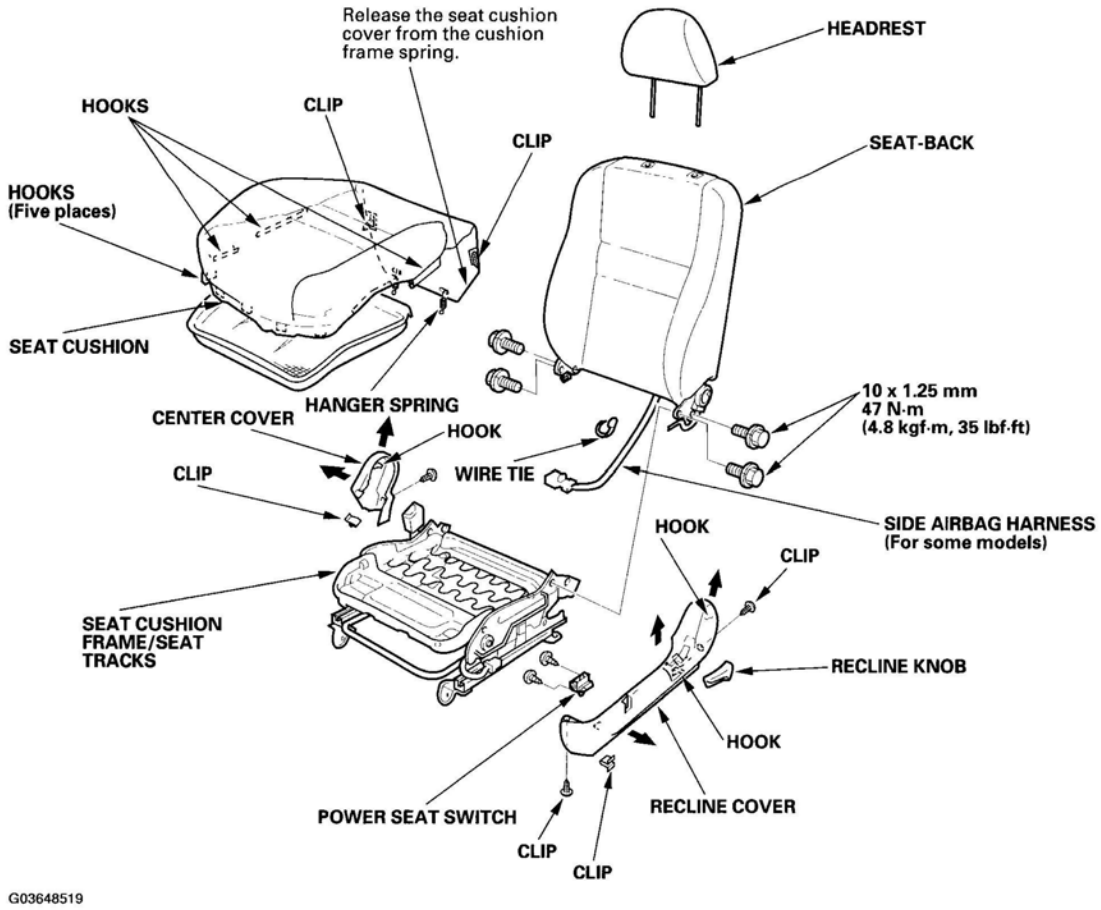


Fig. 25: Exploded View Of Front Seat (2-Way Power)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT SEAT DISASSEMBLY/REASSEMBLY - 8-WAY POWER

Special Tools Required

KTC trim tool set SOJATP2014

- SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.
- '04-07 models: The operation of the driver's seat position sensor must be checked after any of these actions (see **OPERATION CHECK OF THE**

DRIVER'S SEAT POSITION SENSOR):

- Driver's seat position sensor replacement
- Cover plate (front side of driver's seat slide rail) replacement

NOTE:

- **Take care not to tear the seams or damage the seat covers.**
- **Put on gloves to protect your hands.**
- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Apply multipurpose grease to the moving parts of the seat track.**
- **To prevent wrinkles in the seat cushion cover, stretch the material evenly over the pad.**

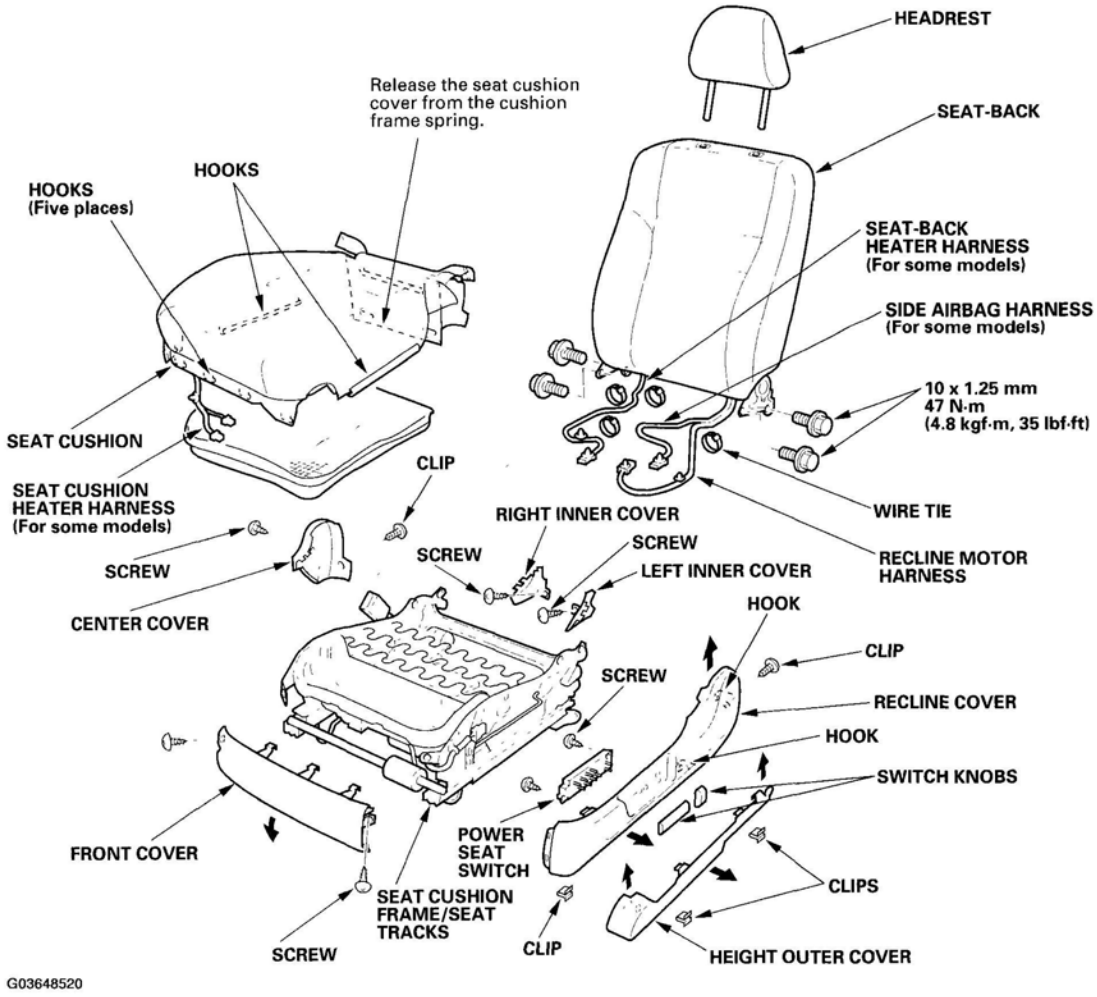


Fig. 26: Exploded View Of Front Seat (8-Way Power)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT SEAT LINKAGE DISASSEMBLY/REASSEMBLY - MANUAL

'03 MODEL

NOTE:

- **Put on gloves to protect your hands.**
- **Apply oil to the pivot portions of the slide locks.**
- **Apply multipurpose grease to the sliding portions of the seat tracks.**
- **4-door model is shown below; 2-door model is similar.**

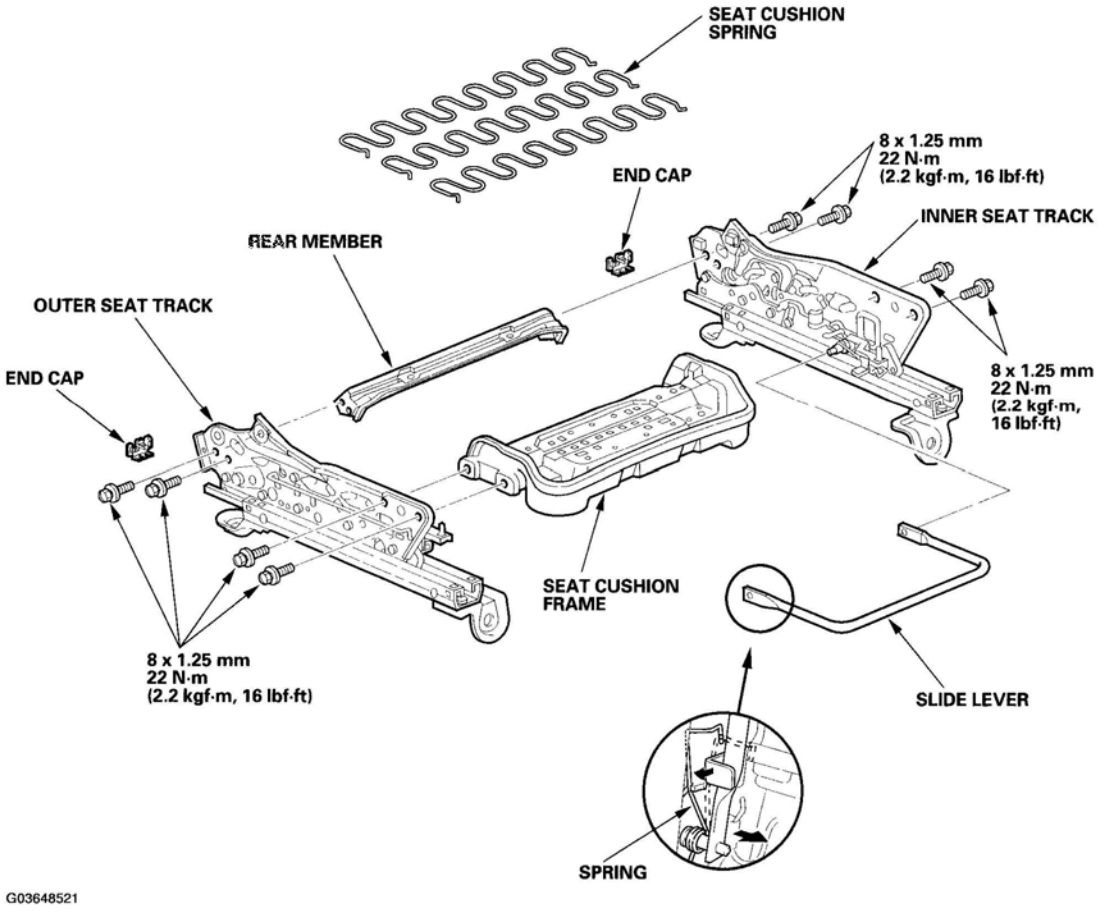


Fig. 27: Exploded View Of Front Seat Linkage ('03 Model - Manual)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

'04-07 MODELS 2-DOOR

- '04-05 models: The front passenger's weight sensor (SWS) unit must be calibrated after any of these actions (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06 MODEL)**):
  - Front passenger's seat replacement (including any seat components)
  - Replacement of the seat weight sensors
  - Replacement of the seat weight sensor unit
- '06-07 models: The front passenger's weight sensor (ODS) must be calibrated

after any of these actions (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06 MODEL)**):

- Front passenger's seat replacement (including any seat components)
- Replacement of the seat weight sensors

NOTE:

- **Put on gloves to protect your hands.**
- **Apply oil to the pivot portions of the slide locks.**
- **Apply multipurpose grease to the sliding portions of the seat tracks.**
- **When tightening the weight sensor mounting bolts, tighten the bolts in the sequence shown in Fig. 28. Improper tightening could cause the front passenger's airbag system to malfunction.**
- **Make sure the weight sensor unit ('04-05 models) connectors are plugged in properly.**
- **Make sure the weight sensor wires are routed properly so they are not pinched and do not interfere with other parts.**

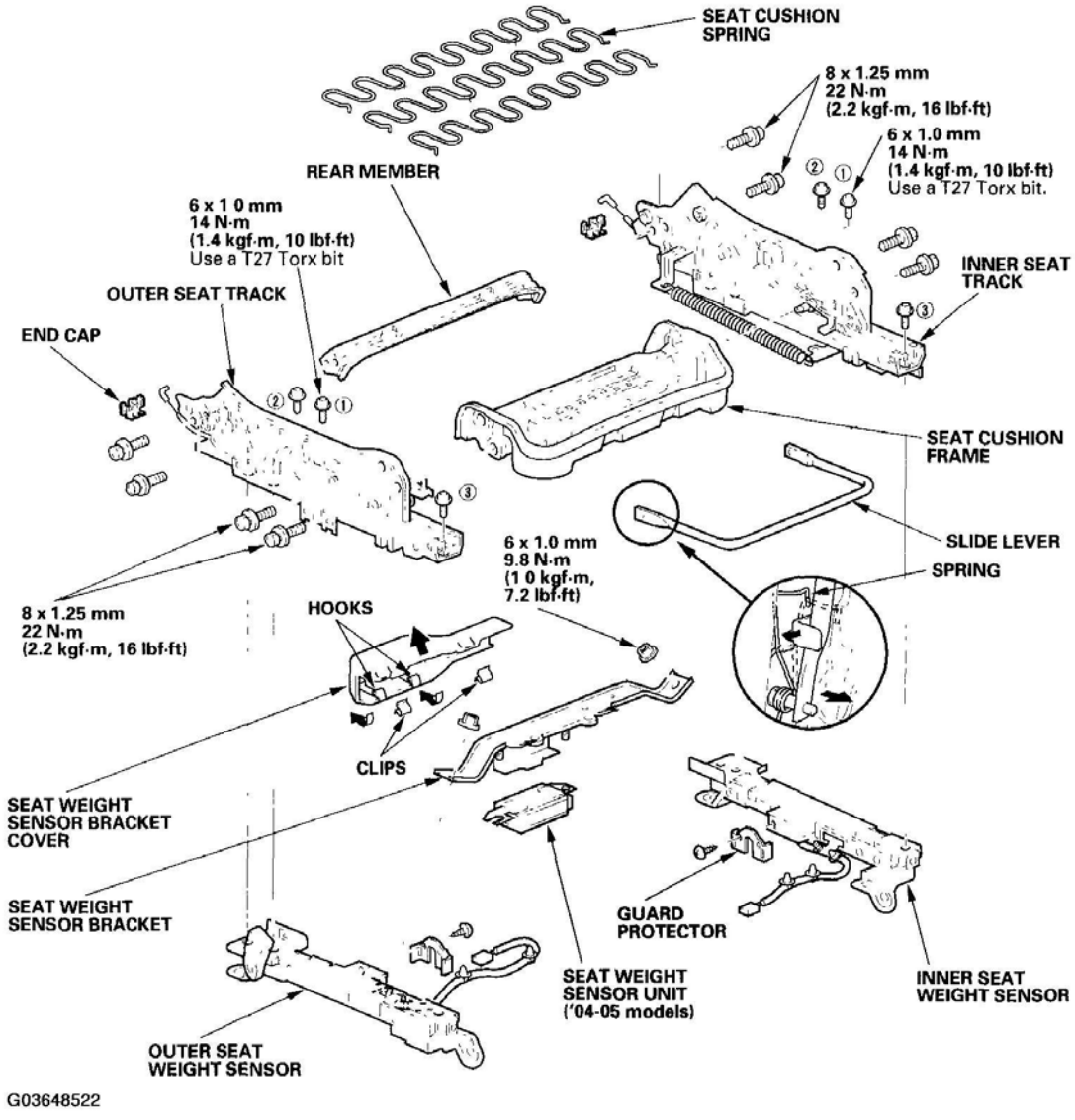


Fig. 28: Exploded View Of Front Seat Linkage ('04-06 Models 2-Door - Manual)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

'04-07 MODELS 4-DOOR

- '04-05 models: The front passenger's weight sensor (SWS) unit must be calibrated after any of these actions (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06 MODEL)**):

- Front passenger's seat replacement (including any seat components)
- Replacement of the seat weight sensors
- Replacement of the seat weight sensor unit

- '06-07 models: The front passenger's weight sensor (ODS) must be calibrated after any of these actions (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06-07 MODEL)**):
  - Front passenger's seat replacement (including any seat components)
  - Replacement of the seat weight sensors

NOTE:

- **Put on gloves to protect your hands.**
- **Apply oil to the pivot portions of the slide locks.**
- **Apply multipurpose grease to the sliding portions of the seat tracks.**
- **When tightening the weight sensor mounting bolts, tighten the bolts in the sequence shown in Fig. 29. Improper tightening could cause the front passenger's airbag system to malfunction.**
- **Make sure the weight sensor unit ('04-05 models) connectors are plugged in properly.**
- **Make sure the weight sensor wires are routed properly so they are not pinched and do not interfere with other parts.**

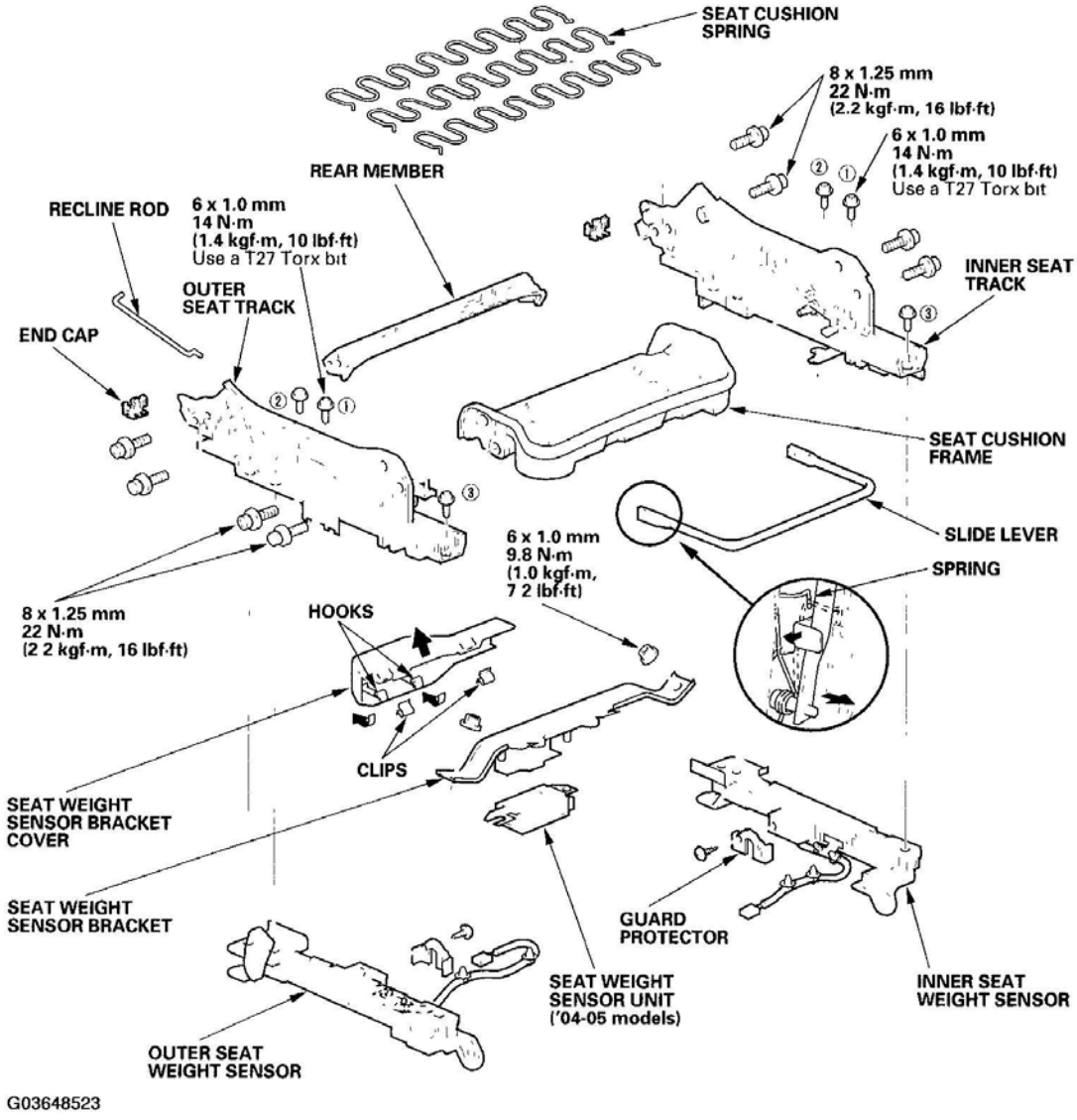


Fig. 29: Exploded View Of Front Seat Linkage ('04-07 Models 4-Door - Manual)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT SEAT LINKAGE DISASSEMBLY/REASSEMBLY - MANUAL HEIGHT ADJUSTABLE

- '04-07 models: The operation of the driver's seat position sensor must be checked after any of these actions (see **OPERATION CHECK OF THE DRIVER'S SEAT POSITION SENSOR**):

- Driver's seat position sensor replacement
- Cover plate (front side of driver's seat slide rail) replacement

NOTE:

- **Put on gloves to protect your hands.**
- **Apply oil to the pivot portions of the slide lock.**
- **Apply multipurpose grease to the sliding portions and pivot portions of the seat tracks.**

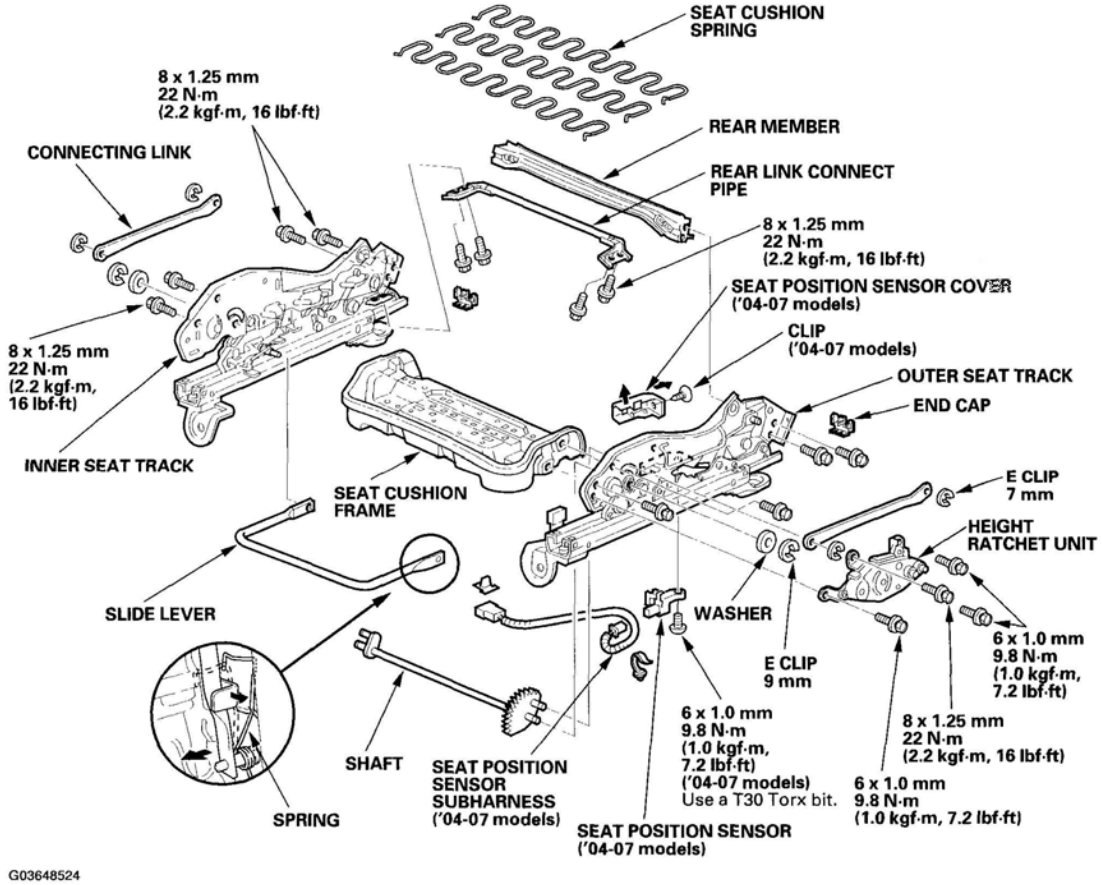


Fig. 30: Exploded View Of Front Seat Linkage (Manual Height Adjustable)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT SEAT LINKAGE DISASSEMBLY/REASSEMBLY - 2-WAY POWER

- '04-07 models: The operation of the driver's seat position sensor must be

checked after any of these actions (see **OPERATION CHECK OF THE DRIVER'S SEAT POSITION SENSOR**):

- Driver's seat position sensor replacement
- Cover plate (front side of driver's seat slide rail) replacement

NOTE:

- **Put on gloves to protect your hands.**
- **Apply oil to the pivot portions of the slide lock.**
- **Apply multipurpose grease to the sliding portions and pivot portions of the seat tracks.**
- **Replace the bushing on the up-down motor with a new one.**

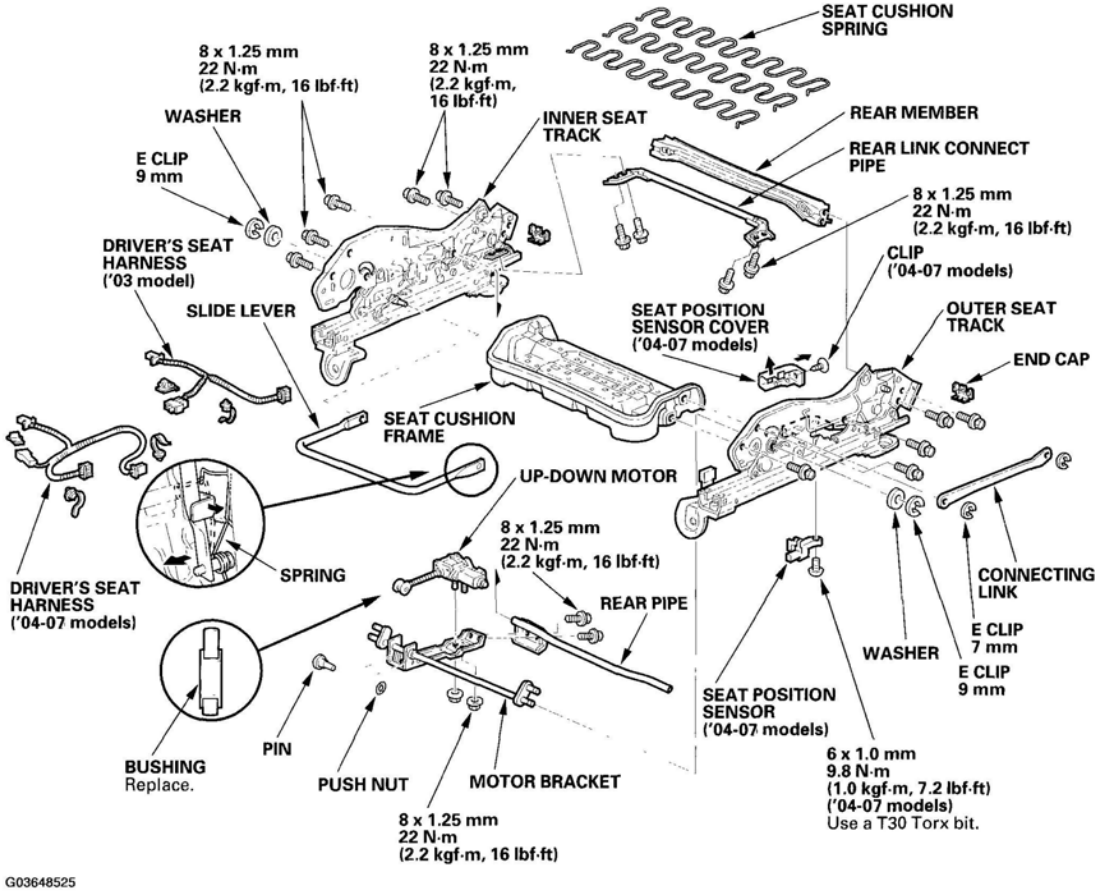


Fig. 31: Exploded View Of Front Seat Linkage (2-Way Power)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT SEAT LINKAGE DISASSEMBLY/REASSEMBLY - 8-WAY POWER

- '04-07 models: The operation of the driver's seat position sensor must be checked after any of these actions (see **OPERATION CHECK OF THE DRIVER'S SEAT POSITION SENSOR**):
  - Driver's seat position sensor replacement
  - Cover plate (front side of driver's seat slide rail) replacement

NOTE: Apply multipurpose grease to the sliding and pivot portions.

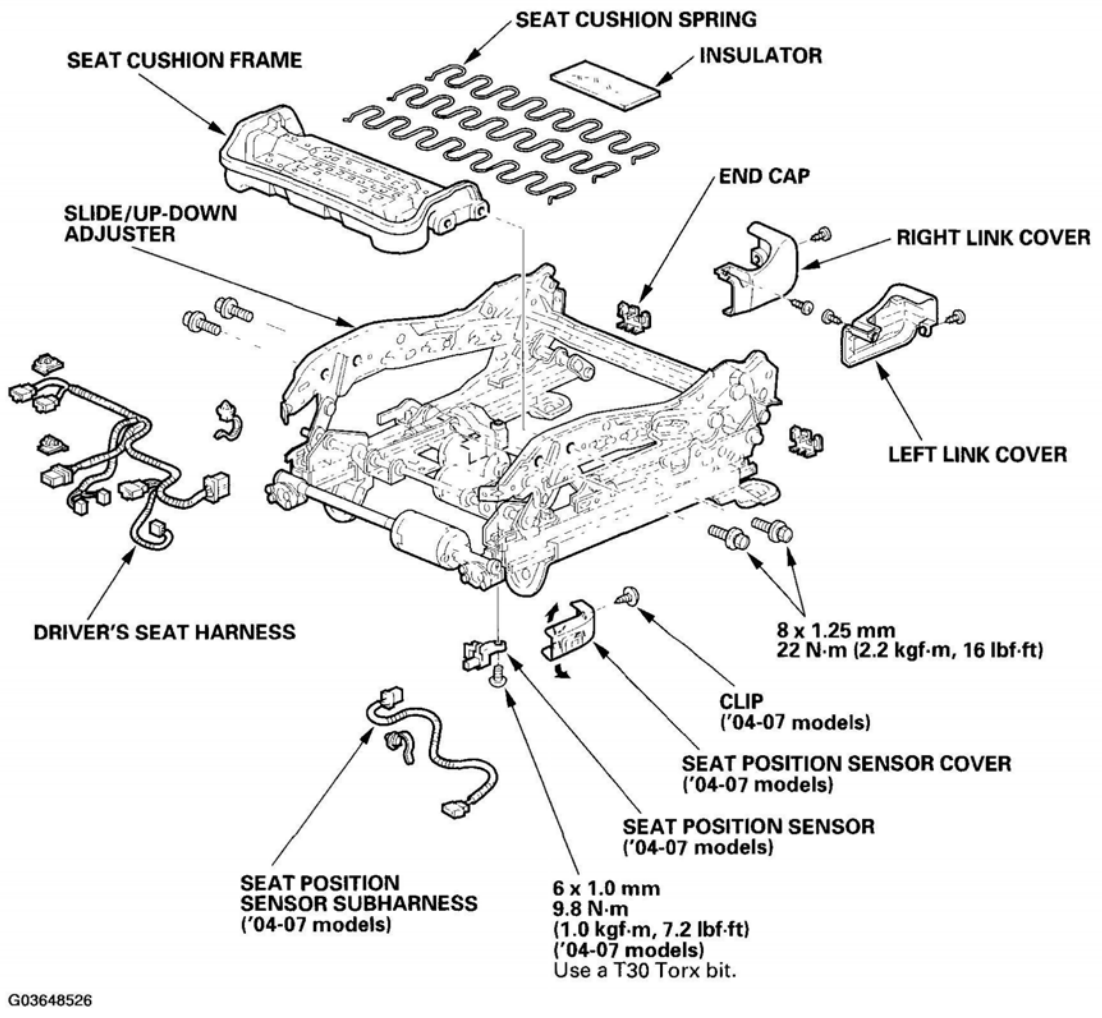


Fig. 32: Exploded View Of Front Seat Linkage (8-Way Power)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT SEAT RECLINE MOTOR REPLACEMENT

DRIVER'S 8-WAY POWER SEAT

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE: Put on gloves to protect your hands.

1. Remove the front seat (see **FRONT SEAT REMOVAL/INSTALLATION**).
2. Remove the seat-back cover/pad from the seat-back frame (see **FRONT SEAT COVER REPLACEMENT**).
3. Remove the recline motor (A).

   -1 Release the push nut (B) from the motor side end of the connecting rod (C).

   -2 Gently tap on the motor side of the connecting rod to remove it from the recline motor and both recline adjusters (D).

   -3 Remove the rod cover (E).

   -4 Remove the motor mounting bolt, then remove the recline motor.

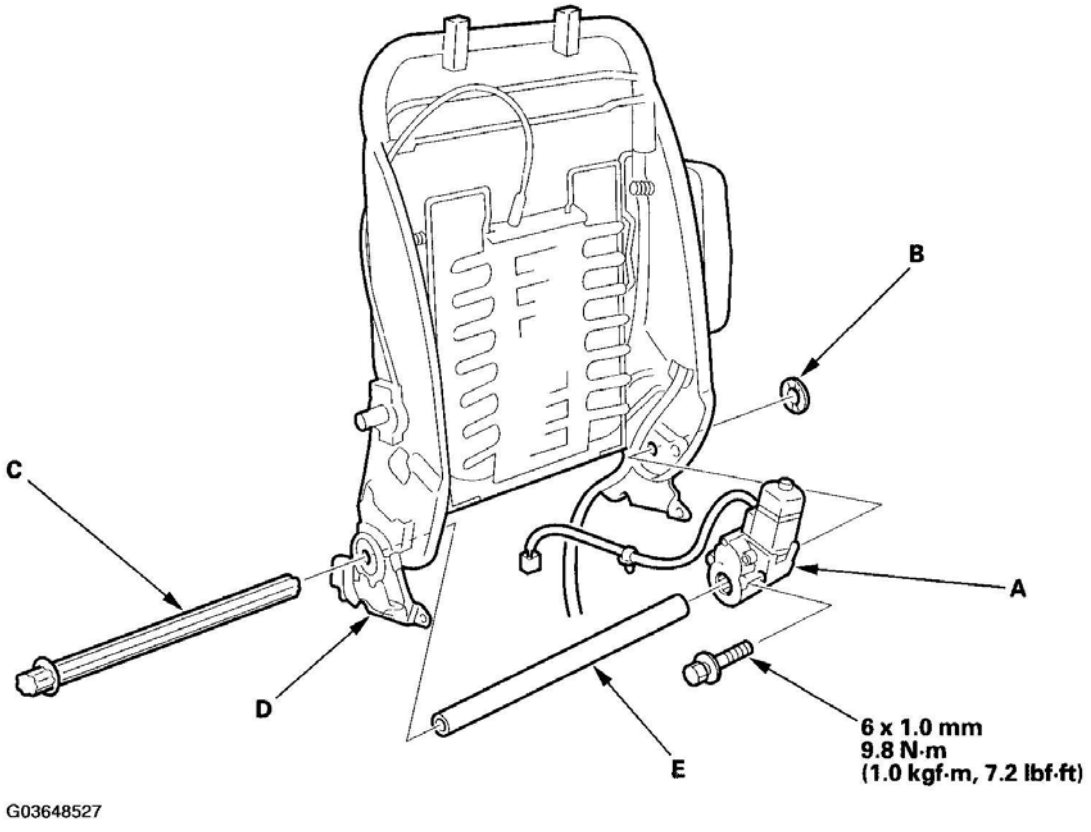


Fig. 33: Removing Front Seat Recline Motor (8-Way Power Seat)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the motor in the reverse order of removal, and note these items:

- Replace the push nut with a new one. Make sure the push nut is installed correctly.
- Apply medium strength type liquid thread lock to the motor mounting bolt before reinstallation.

FRONT SEAT LUMBAR SUPPORT REPLACEMENT

Special Tools Required

KTC trim tool set SOJATP2014

FOR SOME MODELS (DRIVER'S SEAT)

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:

- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Take care not to bend the cable.**
- **Take care not to tear the seams or damage the seat covers.**
- **Put on gloves to protect your hands.**

1. Remove these items:
   - Lumbar support knob (see step 6 in **Seat-back Cover**)
   - Back panel (see step 8 in **Seat-back Cover**)
2. Release the hook strips on the inside of the seat-back (see step 9 in **Seat-back Cover**).
3. Remove the screws securing the lumbar support actuator (A).

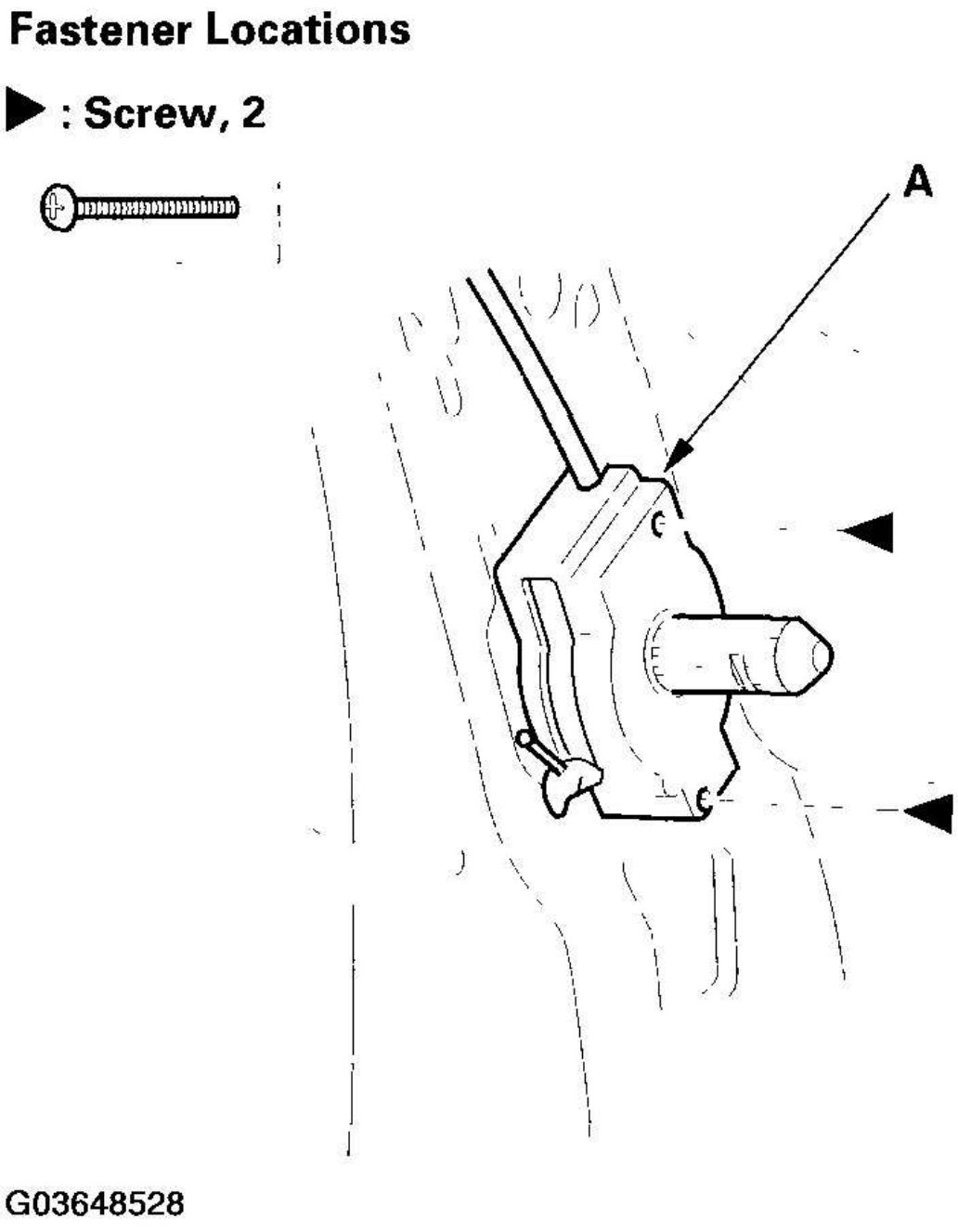


Fig. 34: Removing Lumbar Support Actuator Screws
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Release the hook of the yoke wire (A) from top of the basket (B) to loosen the

lumbar support cable (C), then disconnect it.

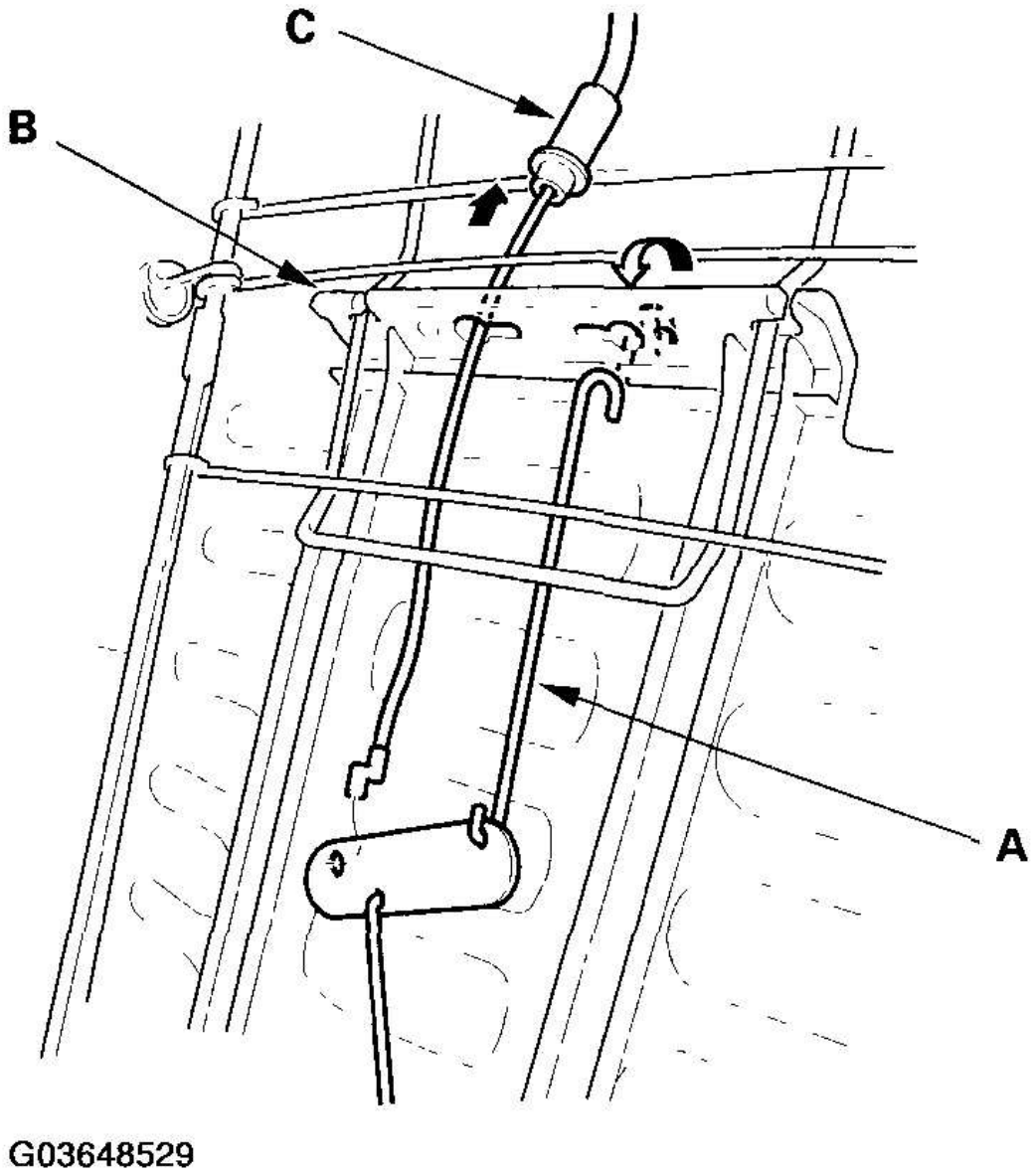


Fig. 35: Releasing Hook Of Yoke Wire From Top Of Basket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Release the wire tie (A), then remove the lumbar support cable (B) and actuator (C) as an assembly.

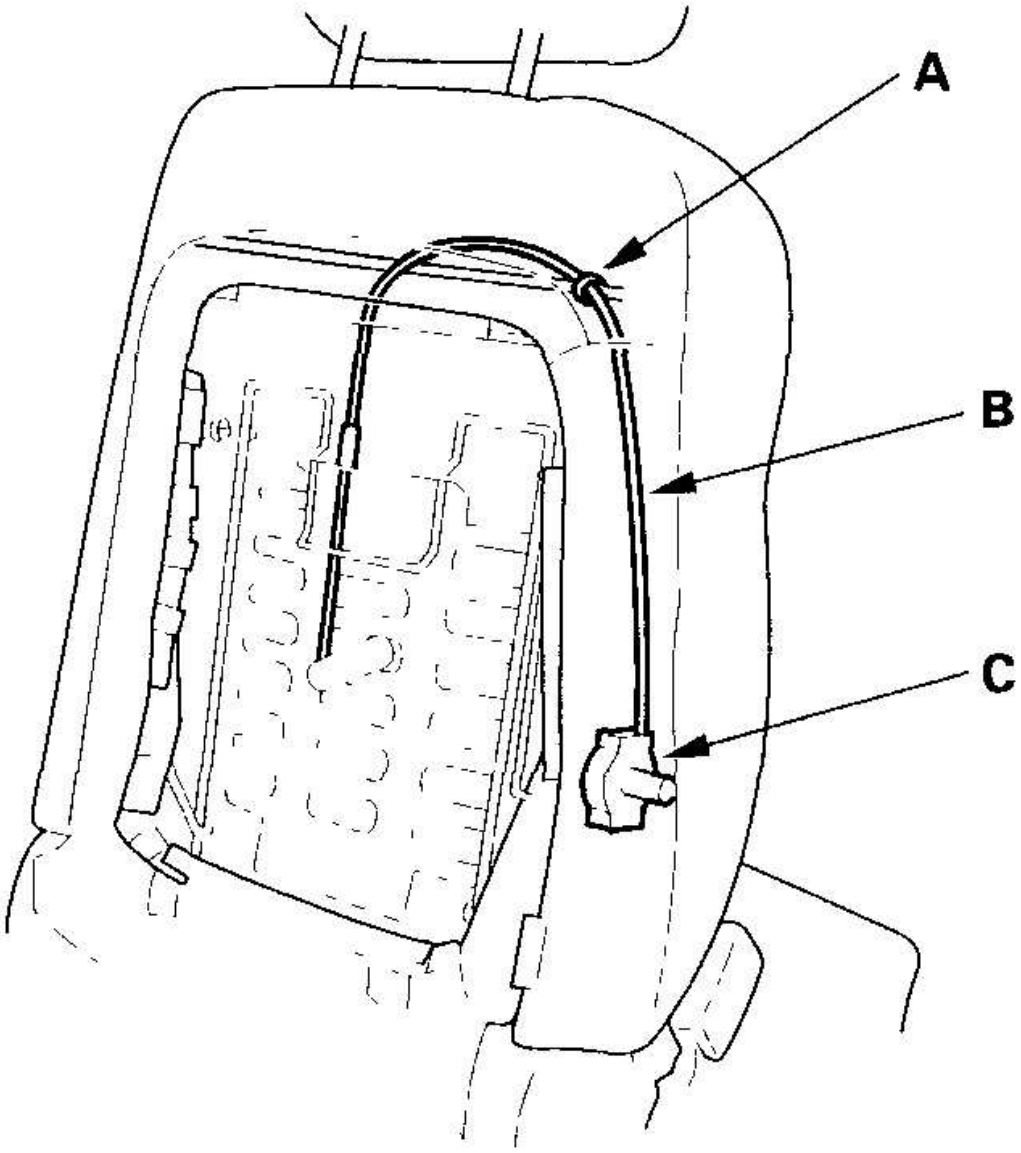


Fig. 36: Removing Lumbar Support Cable & Actuator As An Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Disconnect the lumbar support cable (A) from the lumbar support actuator (B).

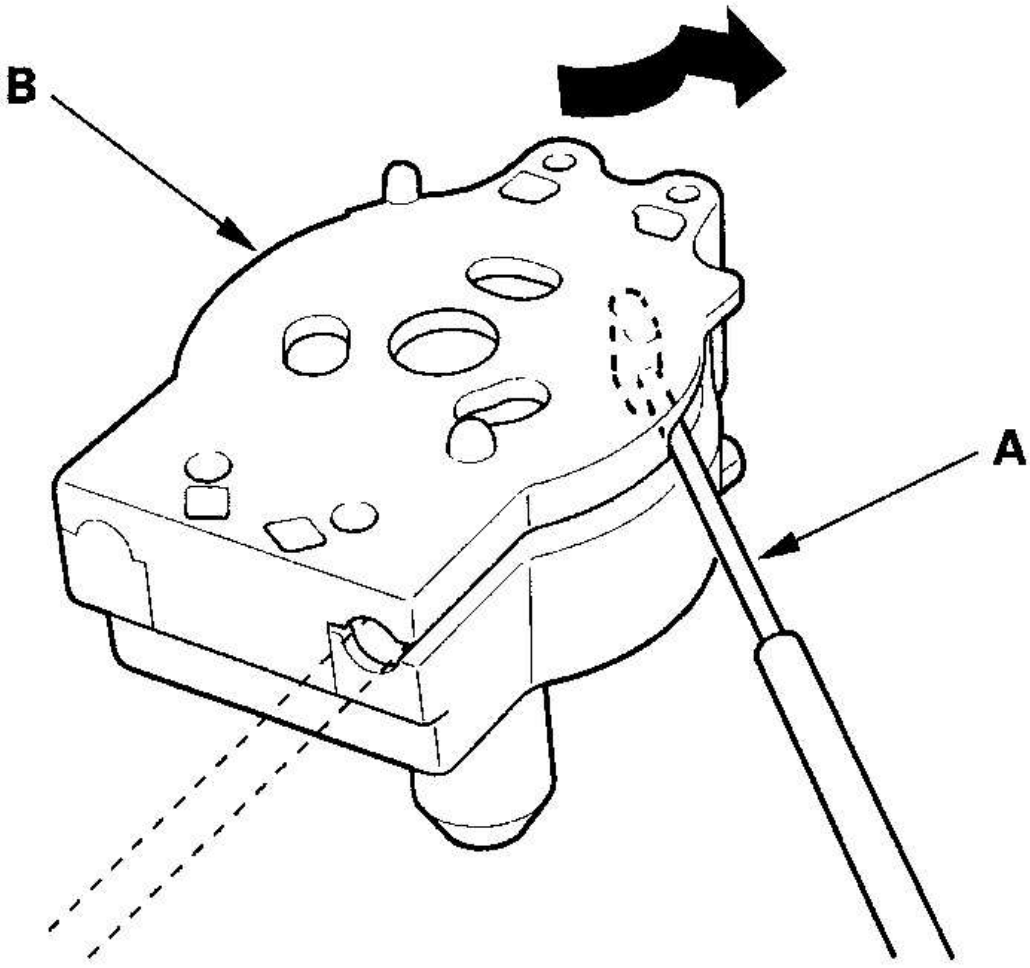


Fig. 37: Disconnecting Lumbar Support Cable From Lumbar Support Actuator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the lumbar support (A).
    -1 Release both lower springs (B) from inside the seat-back.
    -2 Release the lumbar support from both upper springs (C).

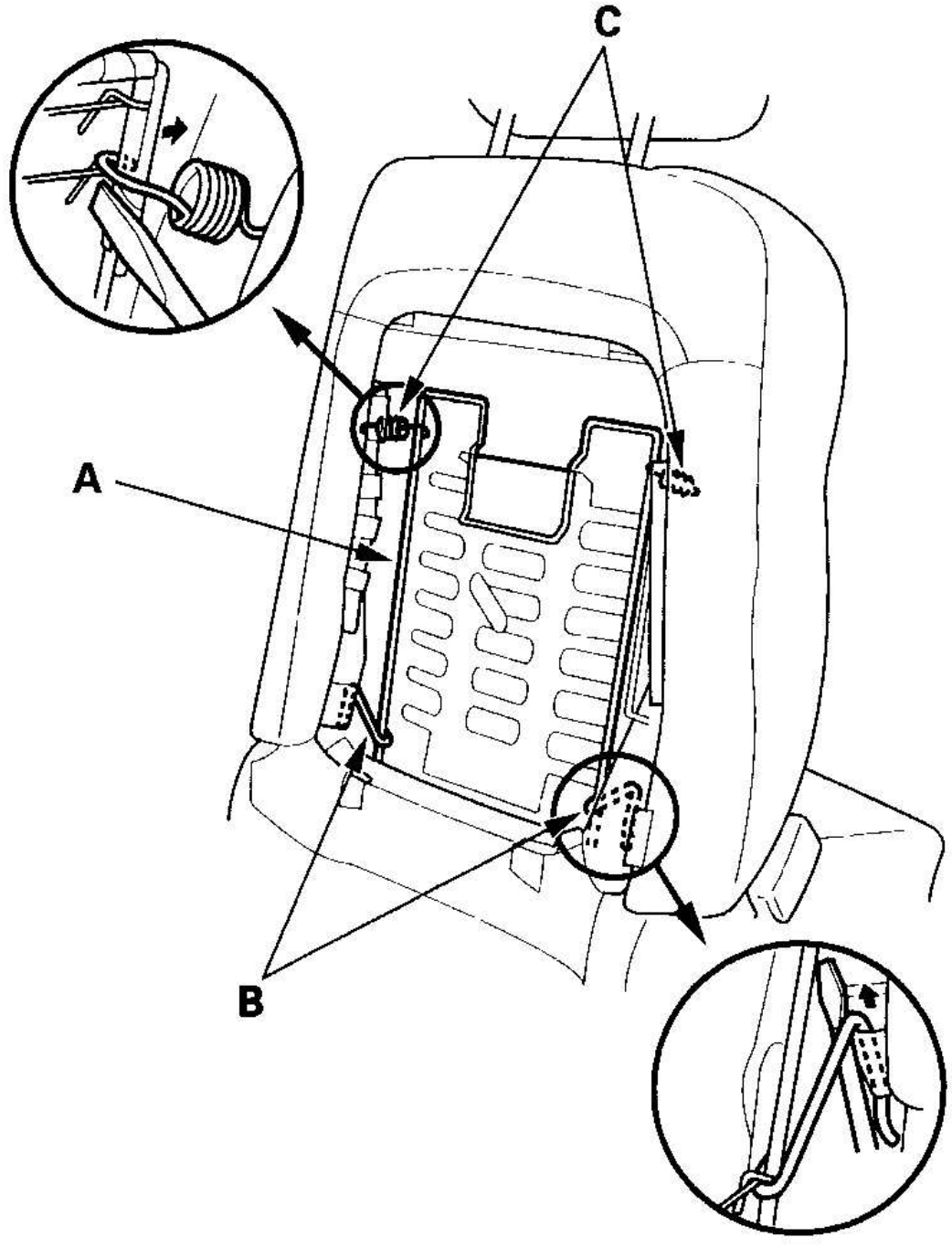


Fig. 38: Removing Lumbar Support

Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Install the lumbar support in the reverse order of removal, and note these items:
   - Make sure the cable is connected securely.
   - To prevent wrinkles when installing a seat-back cover, make sure the material is stretched evenly over the pad before securing the hook strips.
   - Replace the back panel clips with new ones.

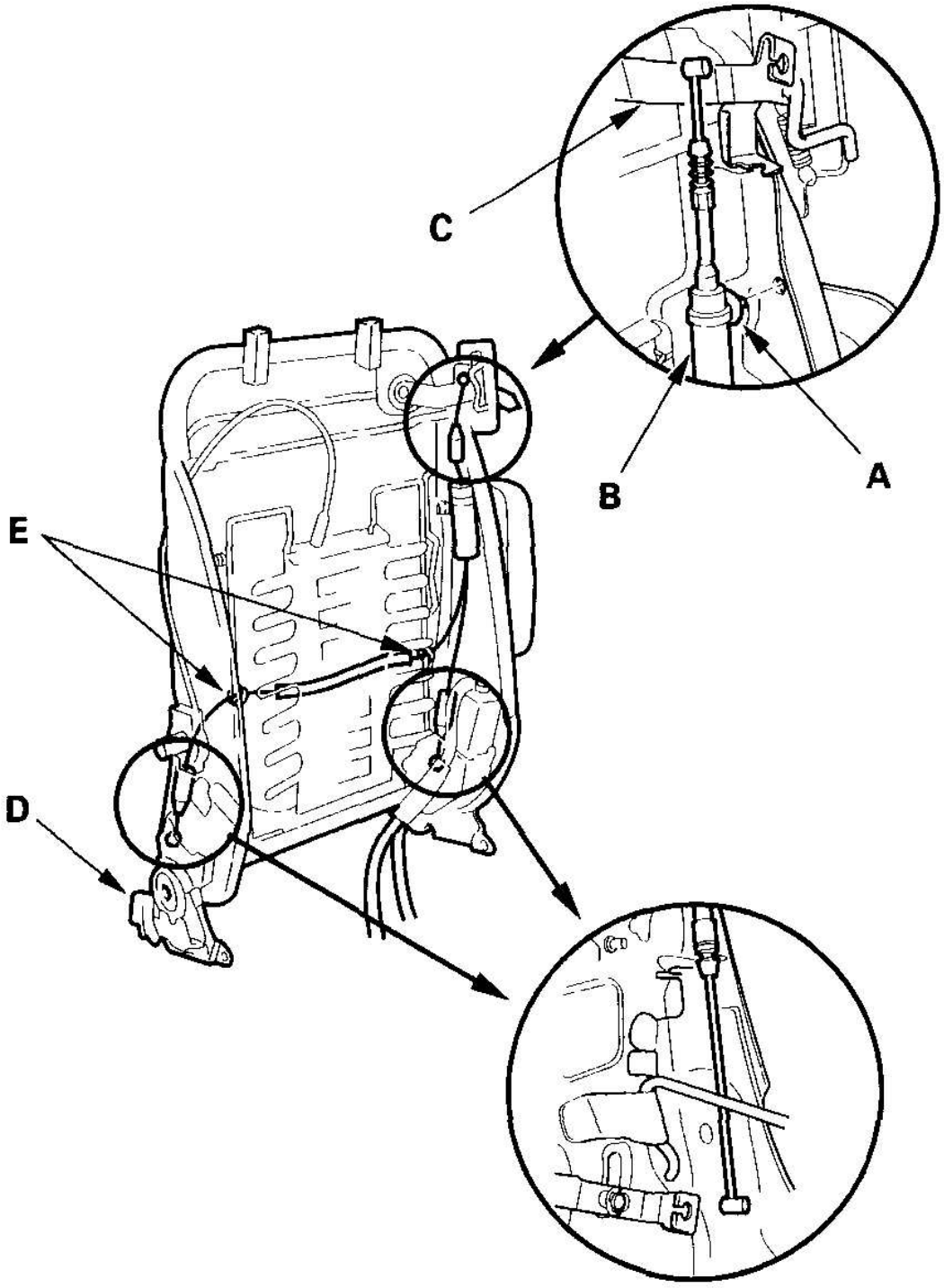
REAR SEAT ACCESS CABLE REPLACEMENT

2-DOOR DRIVER'S SEAT

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.

NOTE:
- **Take care not to tear the seams or damage the seat covers.**
- **Take care not to bend the cable.**
- **Put on gloves to protect your hands.**

1. Remove the front driver's seat (see **FRONT SEAT REMOVAL/INSTALLATION**).
2. Remove the seat-back (see **FRONT SEAT DISASSEMBLY/REASSEMBLY - 8-WAY POWER**).
3. Remove the seat-back cover/pad as an assembly from the seat-back frame (see **FRONT SEAT COVER REPLACEMENT**).
4. Detach the cable clip (A), and disconnect the rear seat access cable (B) from the rear seat access lever (C) and both recline adjusters (D). Release the wire ties (E), then remove the cable.



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Fig. 39: Disconnecting Rear Seat Access Cable From Rear Seat Access Lever
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the cable in the reverse order of removal, and note these items:
   - Replace any wire ties you removed with new ones.
   - To prevent wrinkles when installing a seat-back cover, make sure the material is stretched evenly over the pad before securing the hooks.

FRONT SEAT COVER REPLACEMENT

- SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before performing repairs or service.
- '04-07 models: The operation of the driver's seat position sensor must be checked after any of these actions (see **OPERATION CHECK OF THE DRIVER'S SEAT POSITION SENSOR**):
  - Driver's seat position sensor replacement
  - Cover plate (front side of driver's seat slide rail) replacement
- '04-05 models: The front passenger's weight sensor (SWS) unit must be calibrated after any of the these actions (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06 MODEL)**):
  - Front passenger's seat replacement (including any seat components)
  - Replacement of the seat weight sensors
  - Replacement of the seat weight sensor unit
- '06-07 models: The front passenger's weight sensor must be calibrated after any for this action (see **CALIBRATING THE FRONT PASSENGER'S WEIGHT SENSOR UNIT ('04-05 MODELS) OR CALIBRATE THE ODS UNIT ('06 MODEL)**):
  - Replacement of the seat weight sensors

NOTE:

- **With side airbag: Seats with a side airbag have a "SIDE**

AIRBAG" label on the seat-back. Because the component parts (seat-back cover, cushion, etc.) of seats with and without airbags are different, make sure you install only the correct replacement parts.

- **With side airbag: Do not repair any tears or frayed spots of the seat-back cover. If necessary, replace the seat-back cover.**
- **Take care not to tear the seams or damage the seat covers.**
- **On the passenger's seat with side airbag, do not touch the OPDS sensor in the seat-back pad, and keep it away from oil. Oil can corrode the sensor causing it to fail.**
- **Put on gloves to protect your hands.**

SEAT-BACK COVER

1. Remove the front seat (see **FRONT SEAT REMOVAL/INSTALLATION**).
2. Remove the headrestraint.
3. With recline motor and/or side airbag: From under the seat cushion, disconnect the recline motor connector (A), and if equipped, the seat-back heater connector (B) on the driver's 8-way power seat. Detach the side airbag connector clip (C), the OPDS/ODS unit connector clip (D) on the passenger's seat, and harness clips (E). Release the hook springs (F) (on some driver's seat) and seat cushion cover (G) from the seat cushion frame spring (H), release the hook strips (I) on 2-door passenger's seat, then pull the cover back, and remove the wire ties (J).

   The driver's manual height adjustable seat is similar to the 2-way power seat.

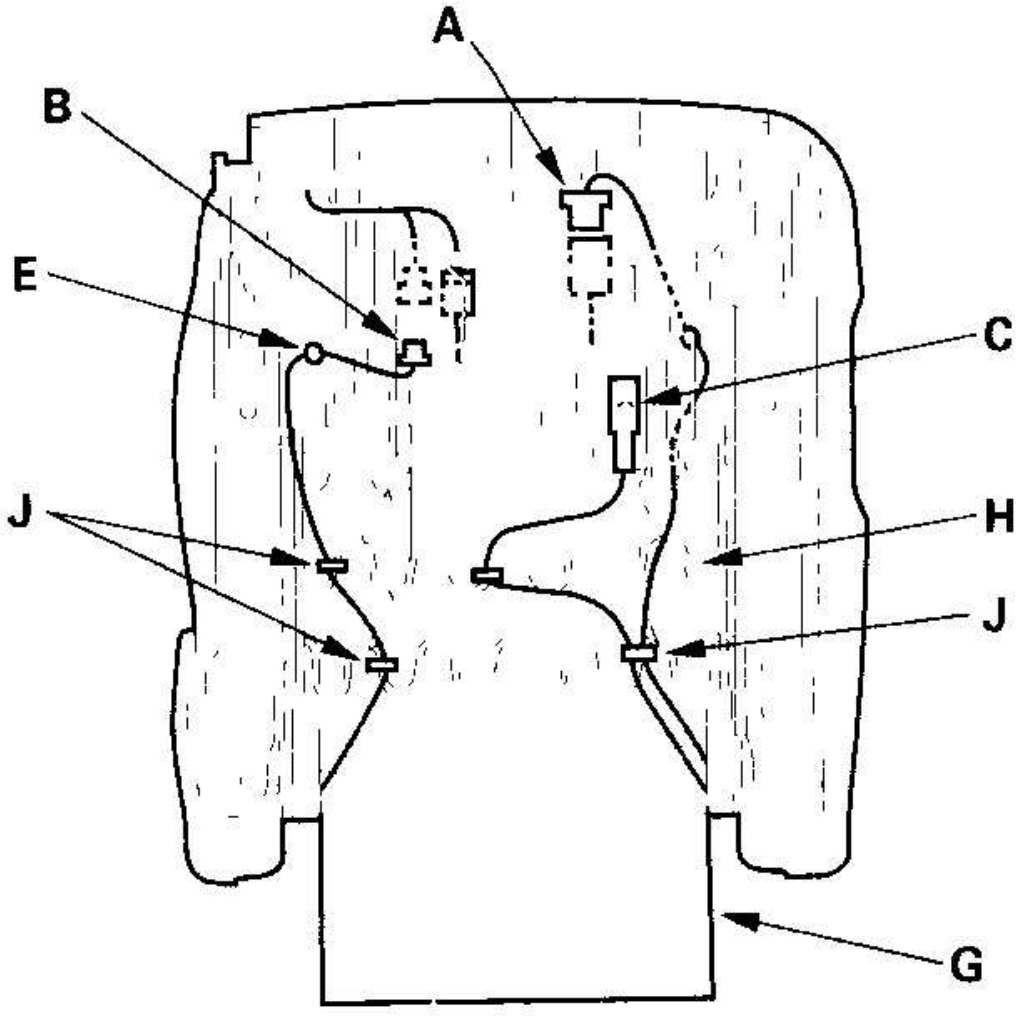


Fig. 40: Detaching All Connectors (8-Way Power Seat)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

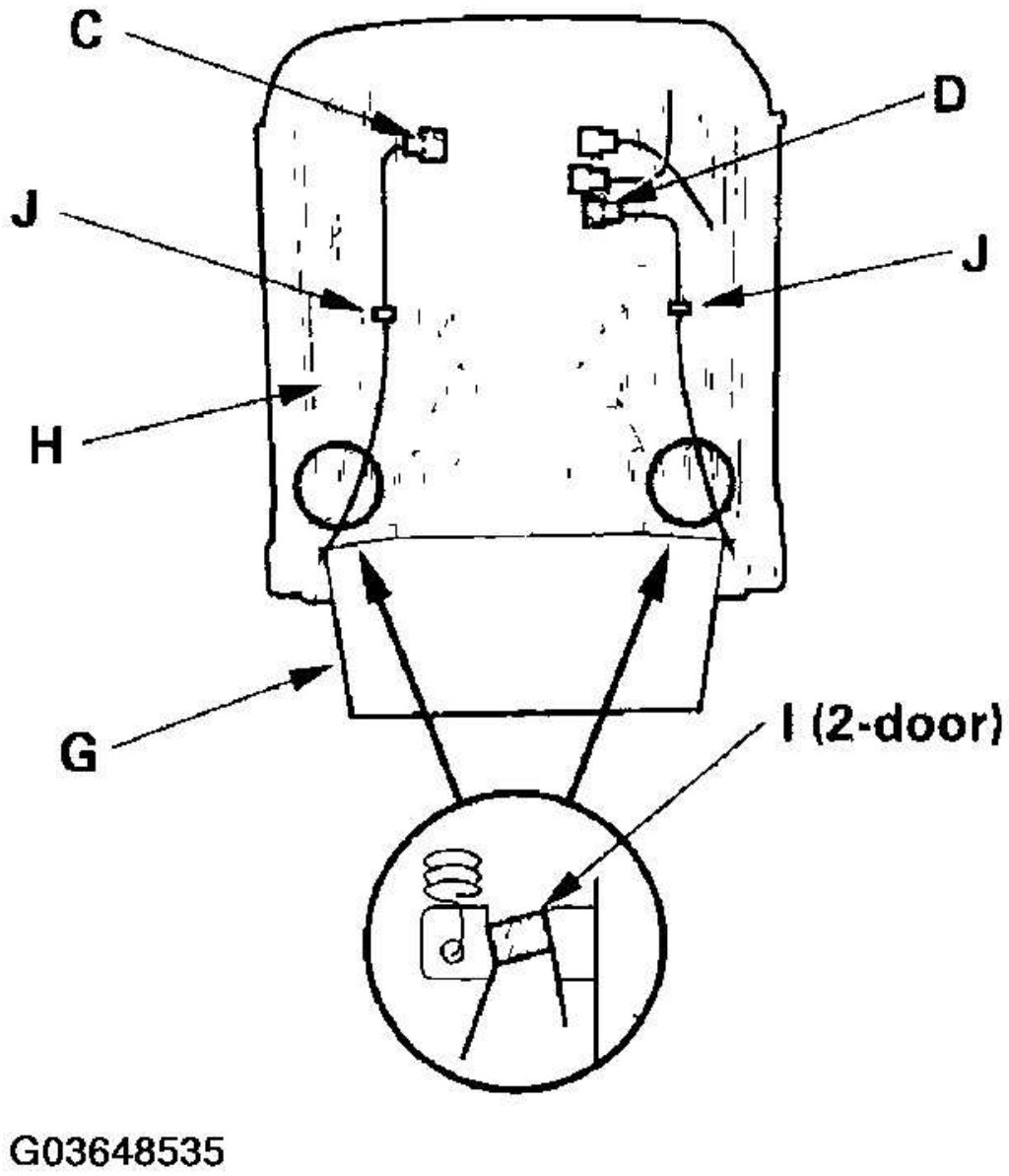


Fig. 41: Detaching All Connectors (Manual Seat)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

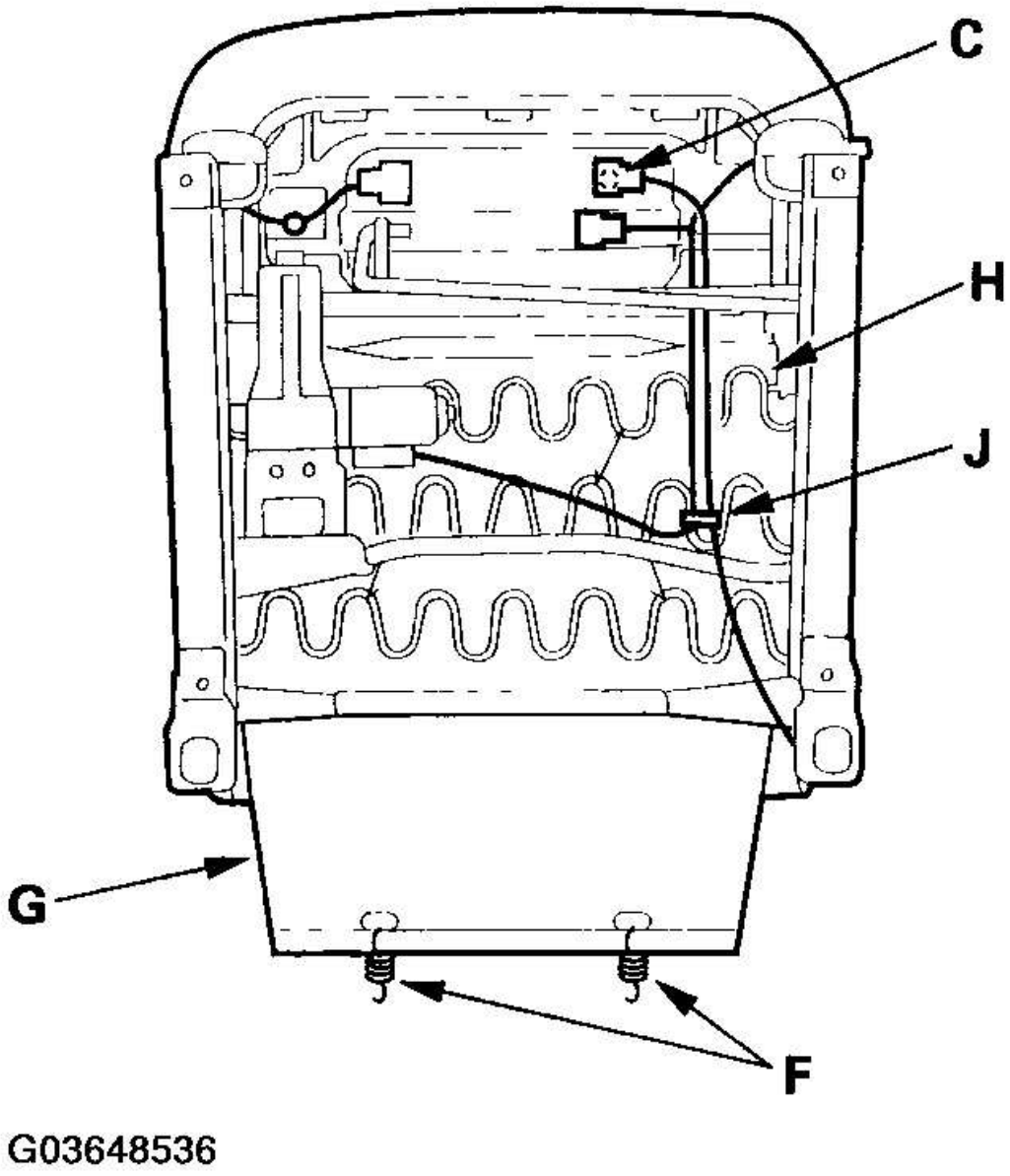


Fig. 42: Detaching All Connectors (Manual Height Adjustable Seat/2-Way Power Seat ('03 Model))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

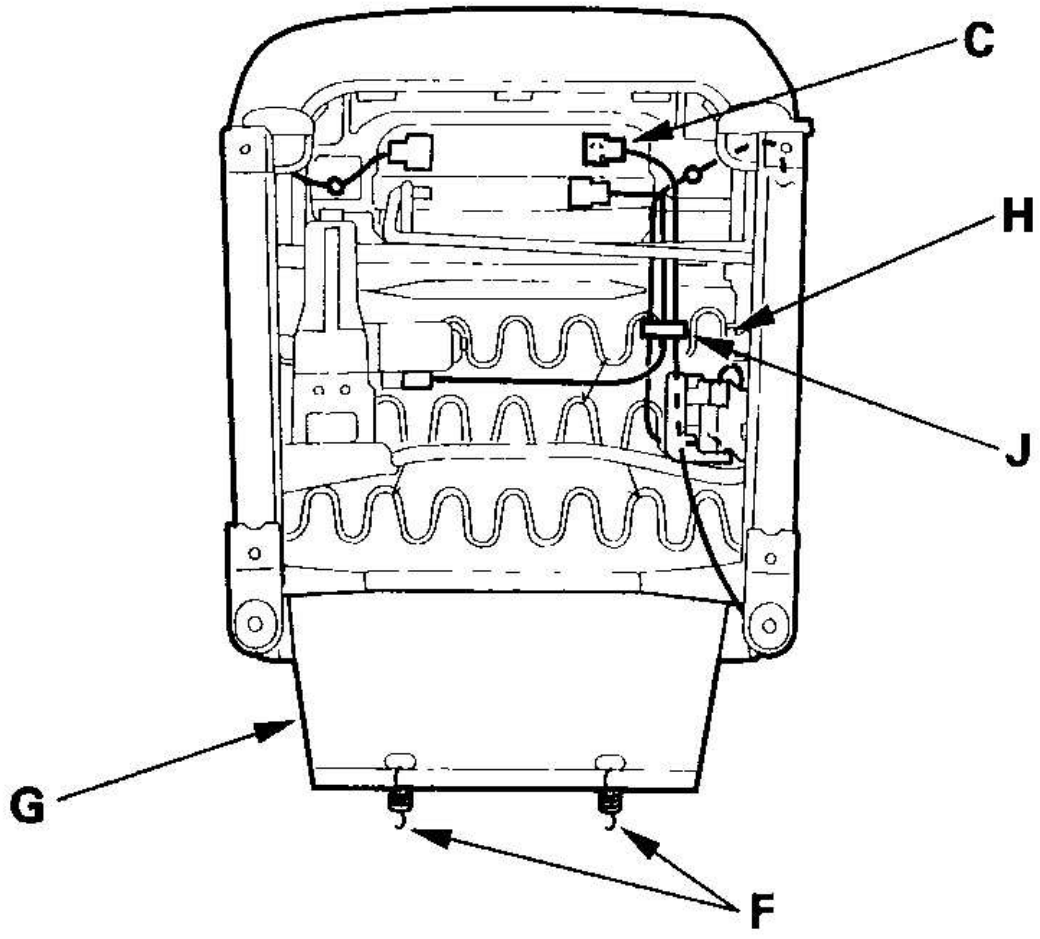


Fig. 43: Detaching All Connectors (Manual Height Adjustable Seat ('04-07 Models)/2-Way Power Seat ('04-07 Models))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove these items from the front seat, then remove the seat-back, '03 model 2-door manual seat (see **'03 MODEL 2-DOOR**), '04-07 models 2-door manual seat (see **'04-07 Models 2-door**), '03 model 4-door manual seat (see **'03 Model 4-door**), '04-07 models 4-door manual seat (see **'04-07 Models 4-door Passenger's**), manual height adjustable seat (see **FRONT SEAT DISASSEMBLY/REASSEMBLY - MANUAL HEIGHT ADJUSTABLE**),

2-way power seat (see **FRONT SEAT DISASSEMBLY/REASSEMBLY - 2-WAY POWER**), 8-way power seat (see **FRONT SEAT DISASSEMBLY/REASSEMBLY - 8-WAY POWER**):

- Recline cover
- Center cover

5. Remove the screws (A, B), then remove the rear seat access knob (C), and rear seat access trim (D).

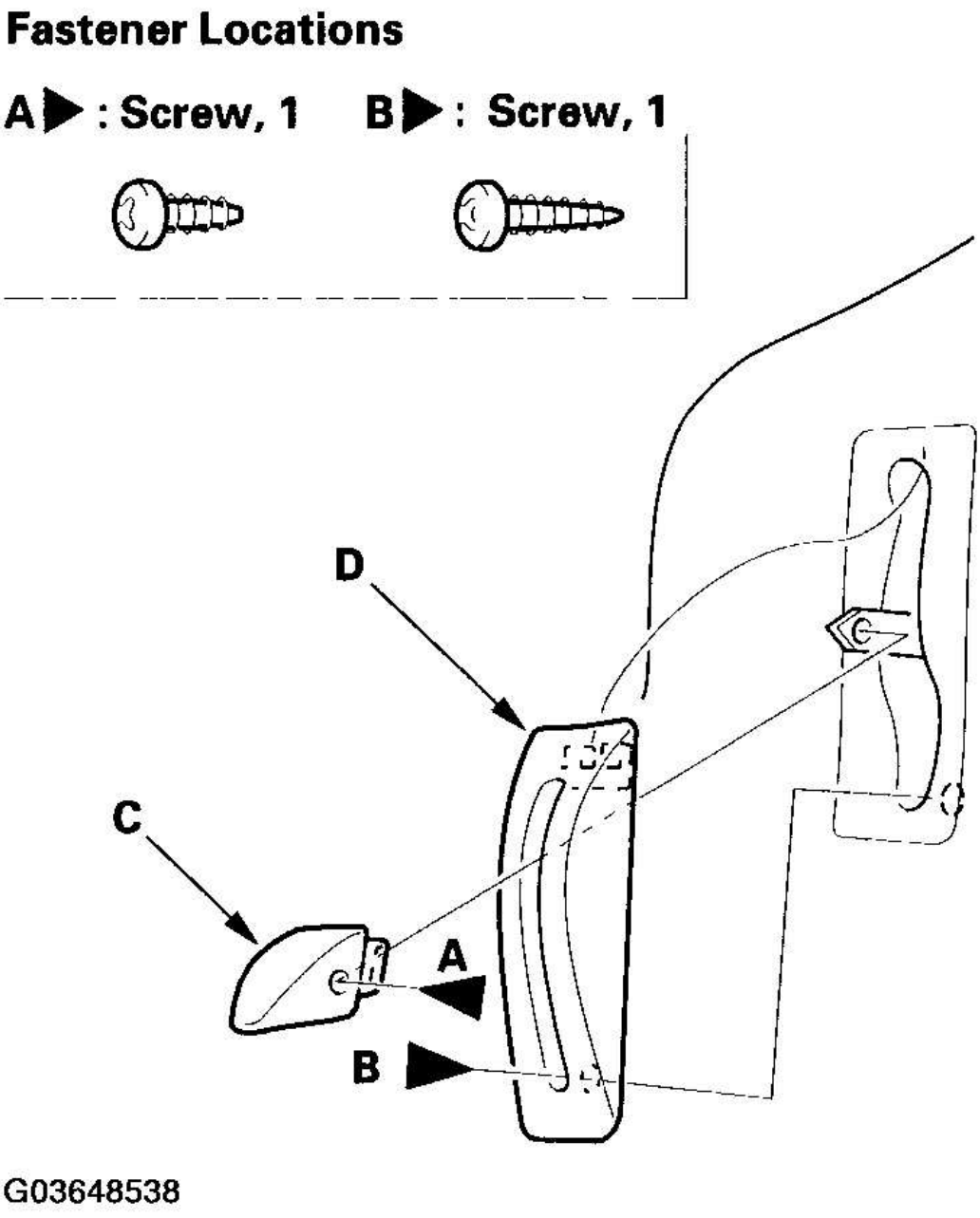


Fig. 44: Removing Rear Seat Access Knob
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. If equipped with a lumbar support, remove the clip (A), then remove the lumbar support handle (B).

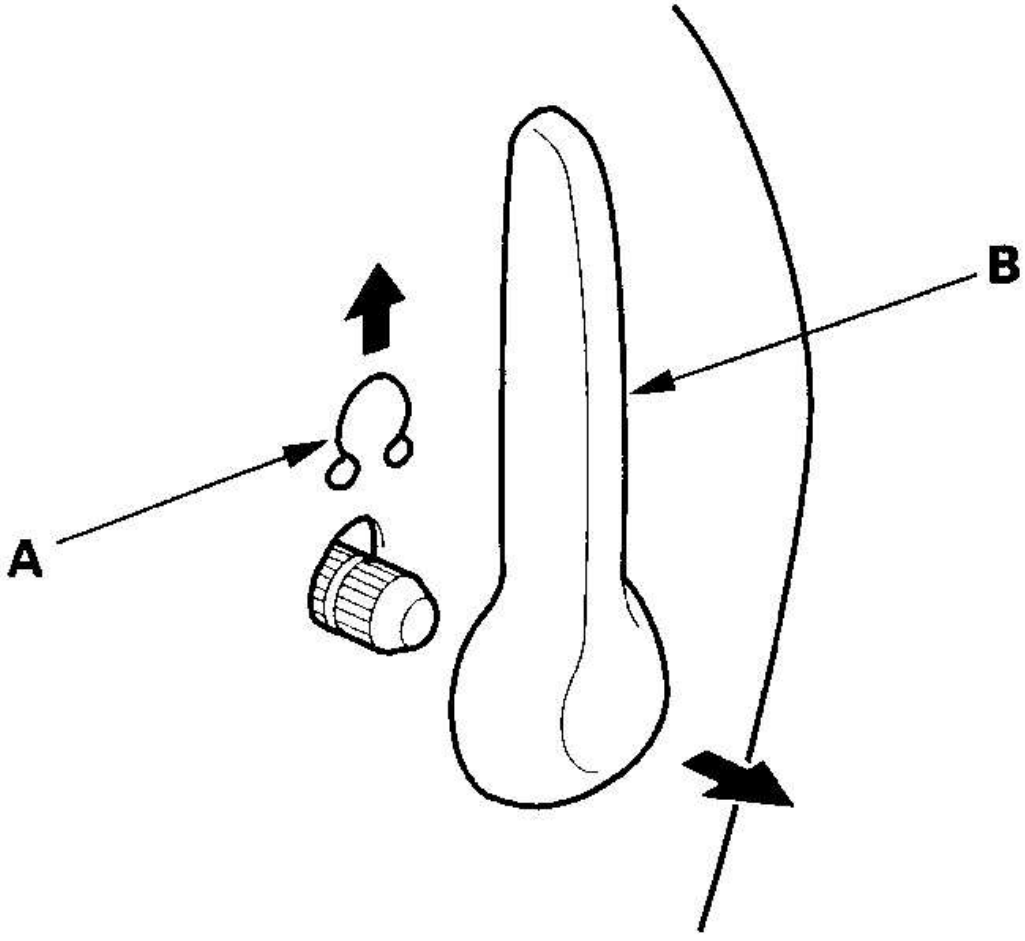


Fig. 45: Removing Lumbar Support Handle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Without side airbag: Release the hook (A), and unzip the seat-back cover (B).

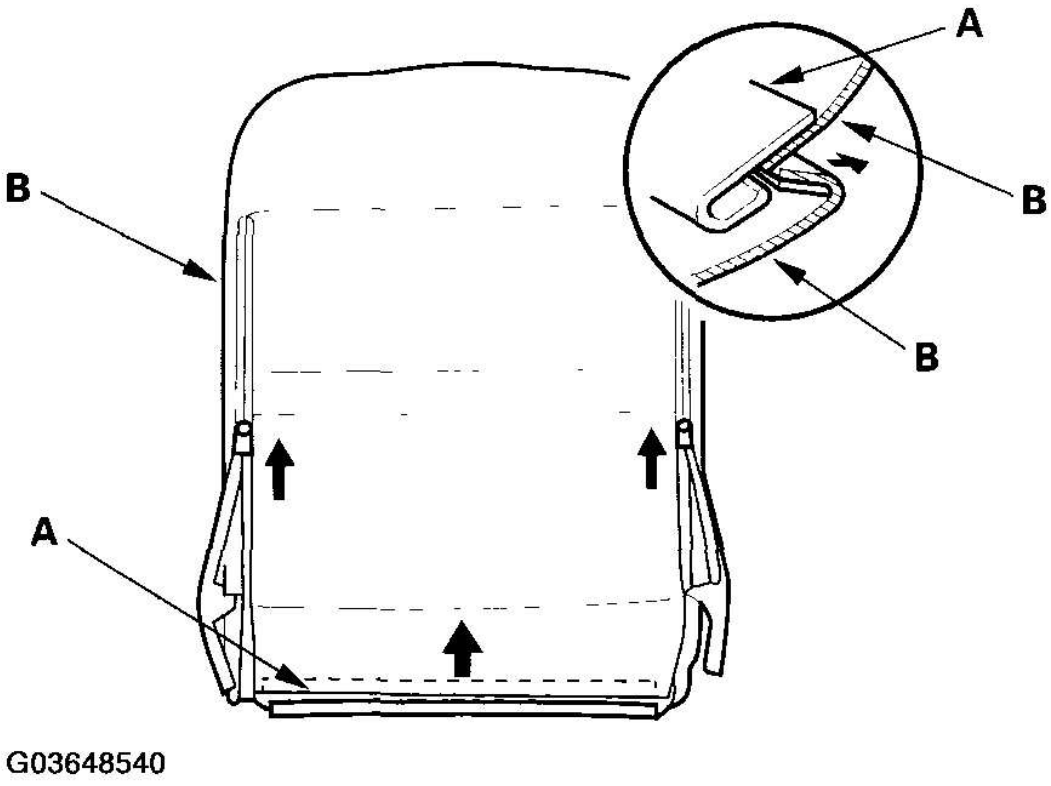
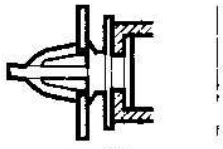


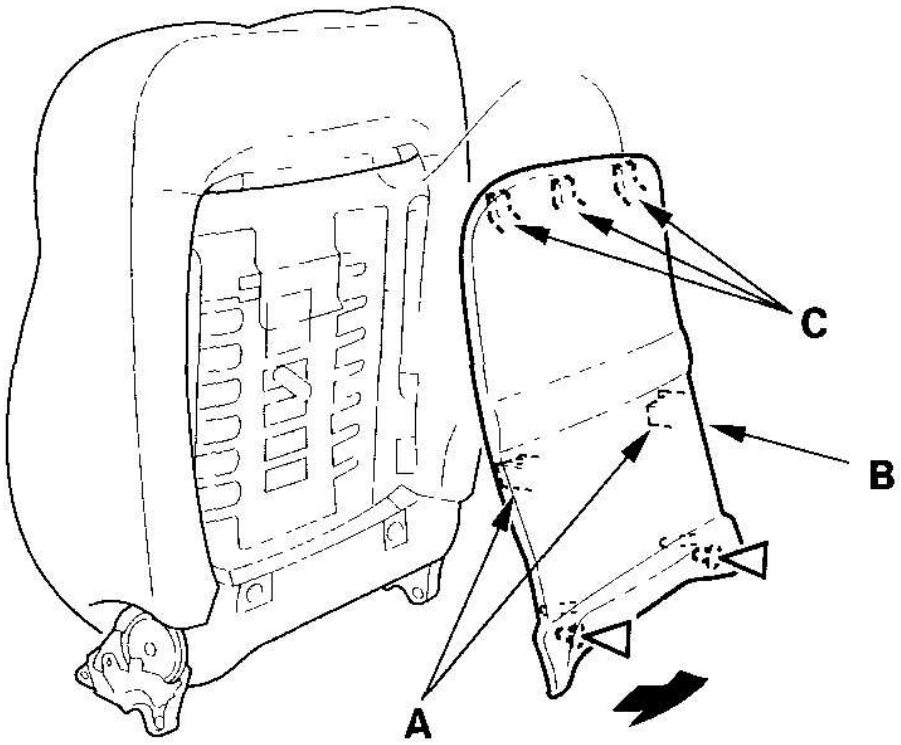
Fig. 46: Releasing Hook And Unzipping Seat-Back Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. With side airbag: Detach the clips and hooks (A) by pulling the bottom of the back panel (B) back, then pull the panel downward to release the hooks (C) from the seat back frame, and remove the panel.

Fastener Locations

▷ : **Clip, 2**





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Fig. 47: Removing Back Panel (With Side Airbag)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Release the hook strips (A), then loosen the seat-back cover (B).

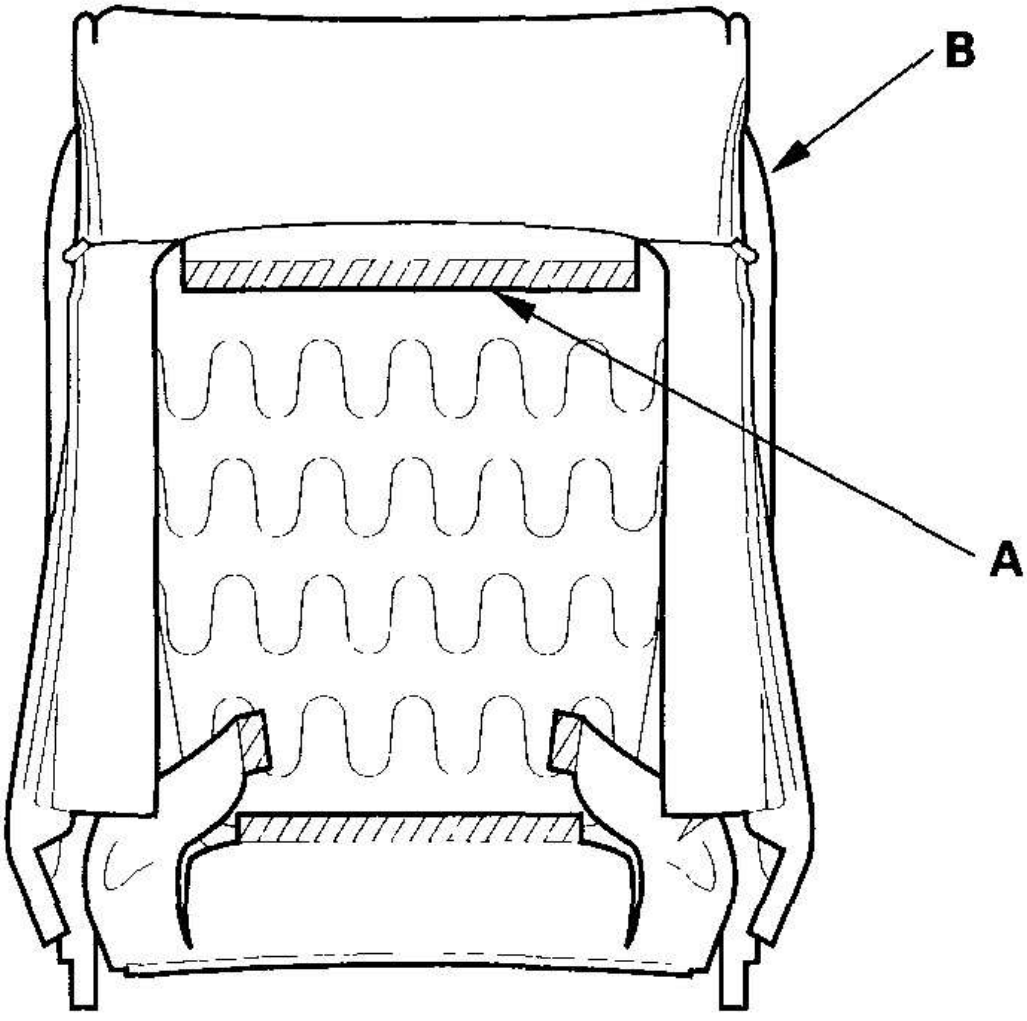


Fig. 48: Releasing Hook Strips (Without Side Airbag)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

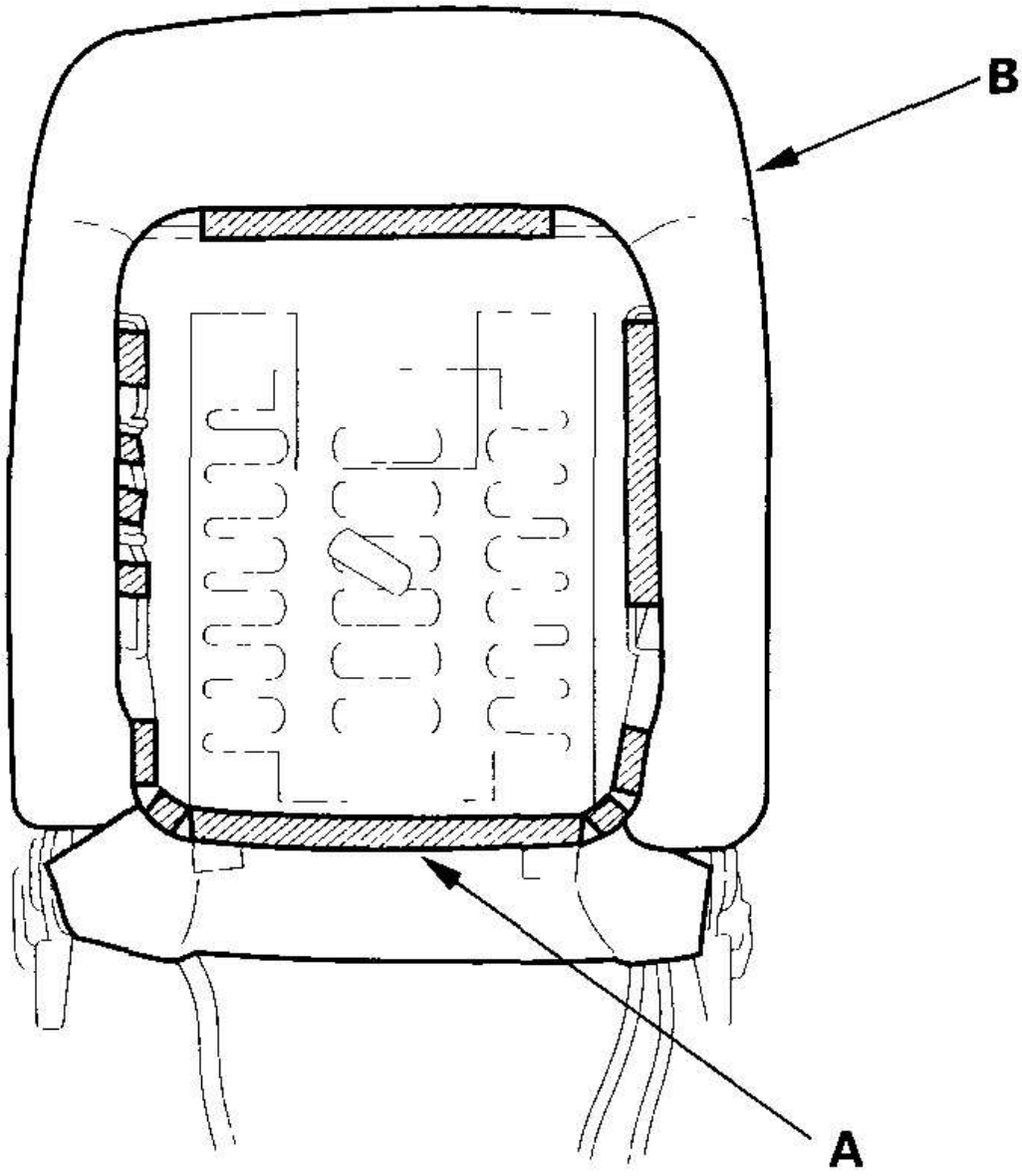


Fig. 49: Releasing Hook Strips (With Side Airbag)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. With recline motor and/or side airbag: Pull the recline motor harness (A), seat-back heater harness (B) (some driver's seat), side airbag harness (C) and the

OPDS/ODS harness (D) (passenger's seat) out through the holes (E) in the seat-back cover.

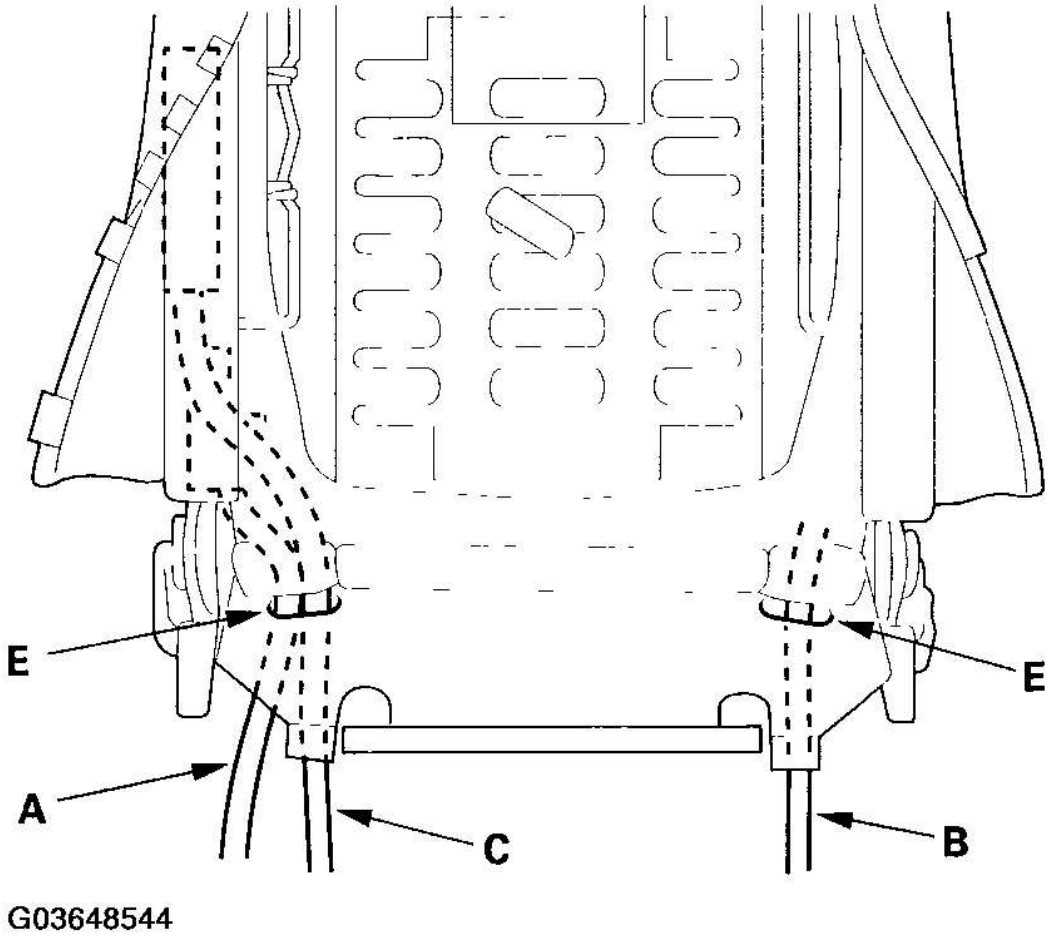


Fig. 50: Removing All Harness (Driver's Seat-Back)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

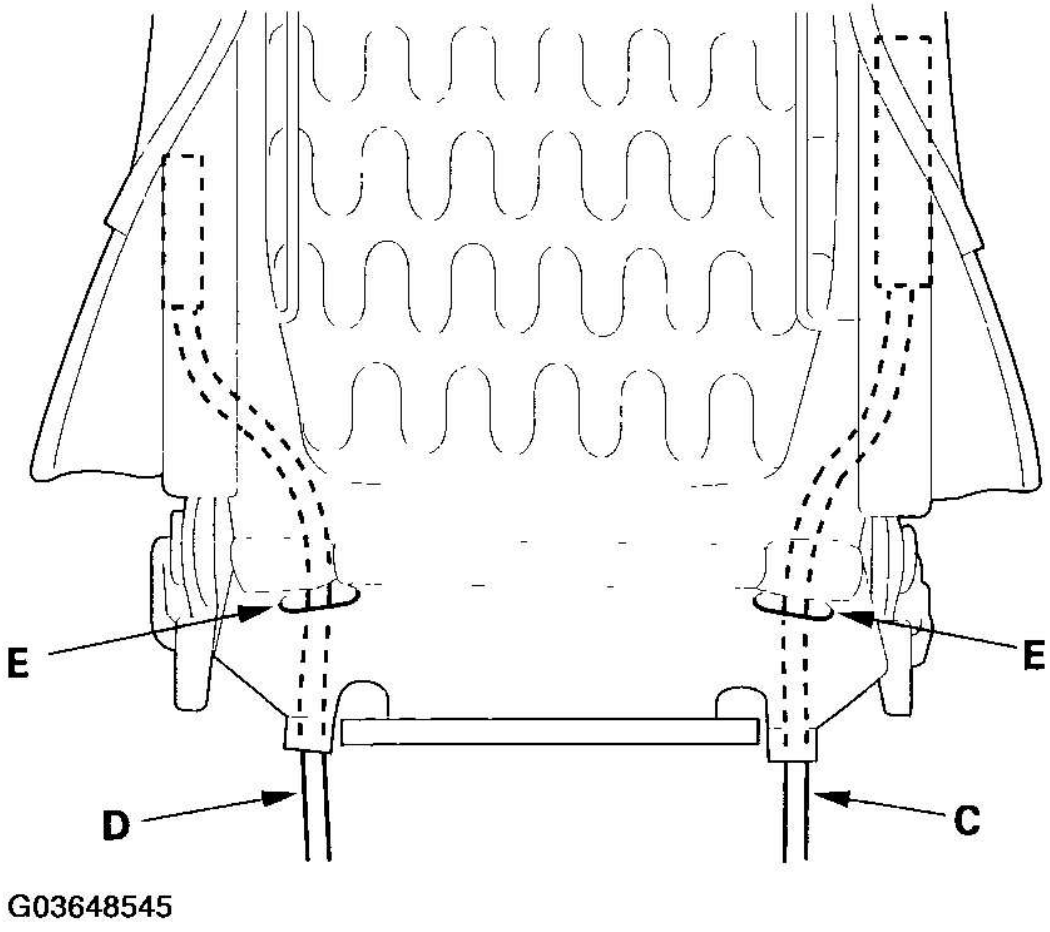


Fig. 51: Removing All Harness (Passenger's Seat-Back)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. With side airbag: Release the front hook (A) and rear hook (B) of the reinforcing cloth (C) from seat-back frame (D).

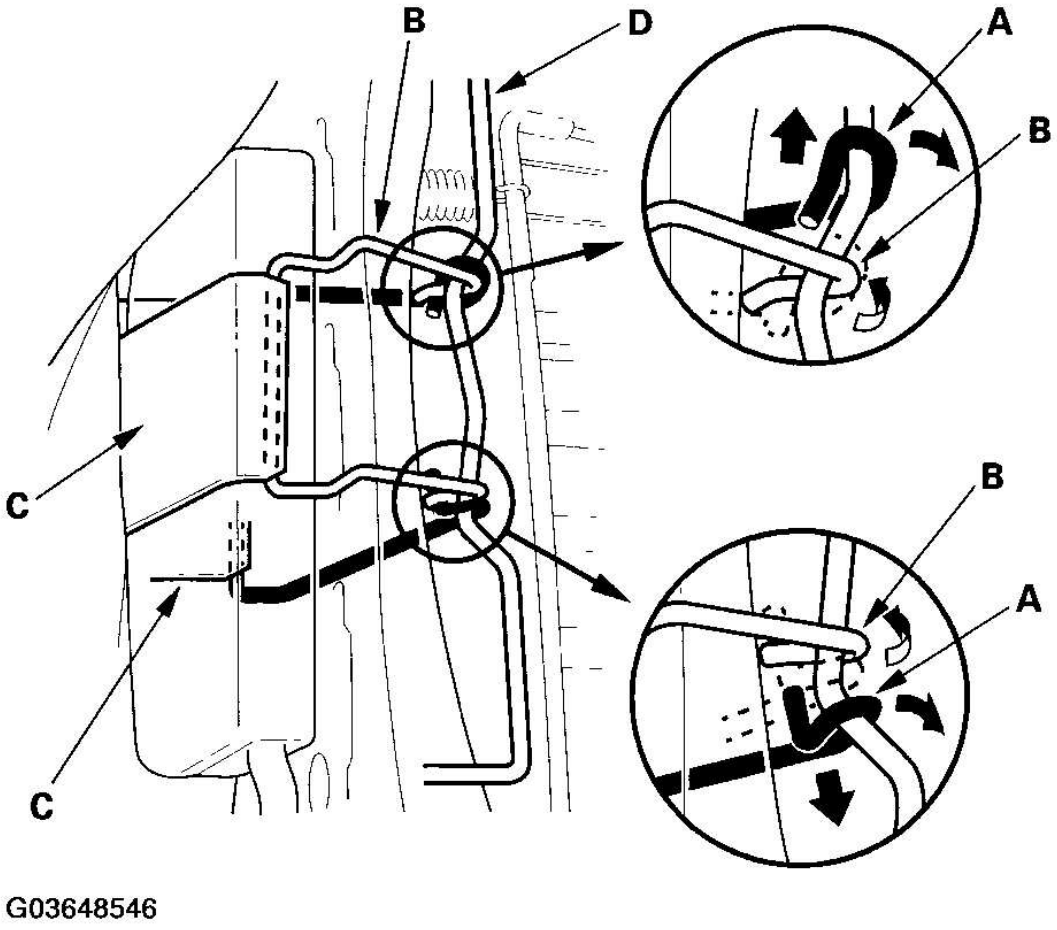


Fig. 52: Releasing Front And Rear Hook
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Pull out the headrestraint guides (A) while pinching the tabs on the ends of the guides, and remove them.

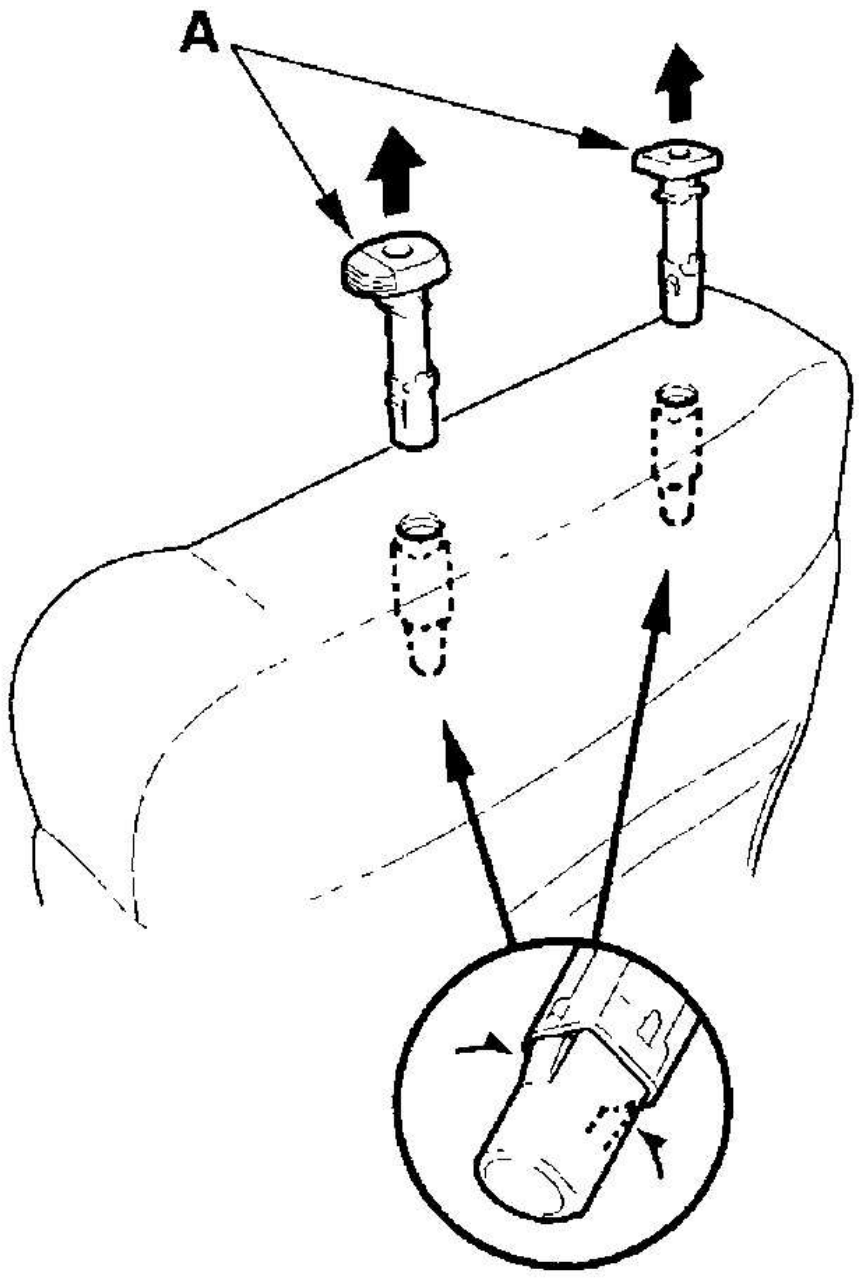


Fig. 53: Pulling Out Headrest Guides
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. From the back of the seat-back, pass both lower retainers (A) through the slots in the seat-back pad, and on passenger's seat with side airbag release all of the clips (B).

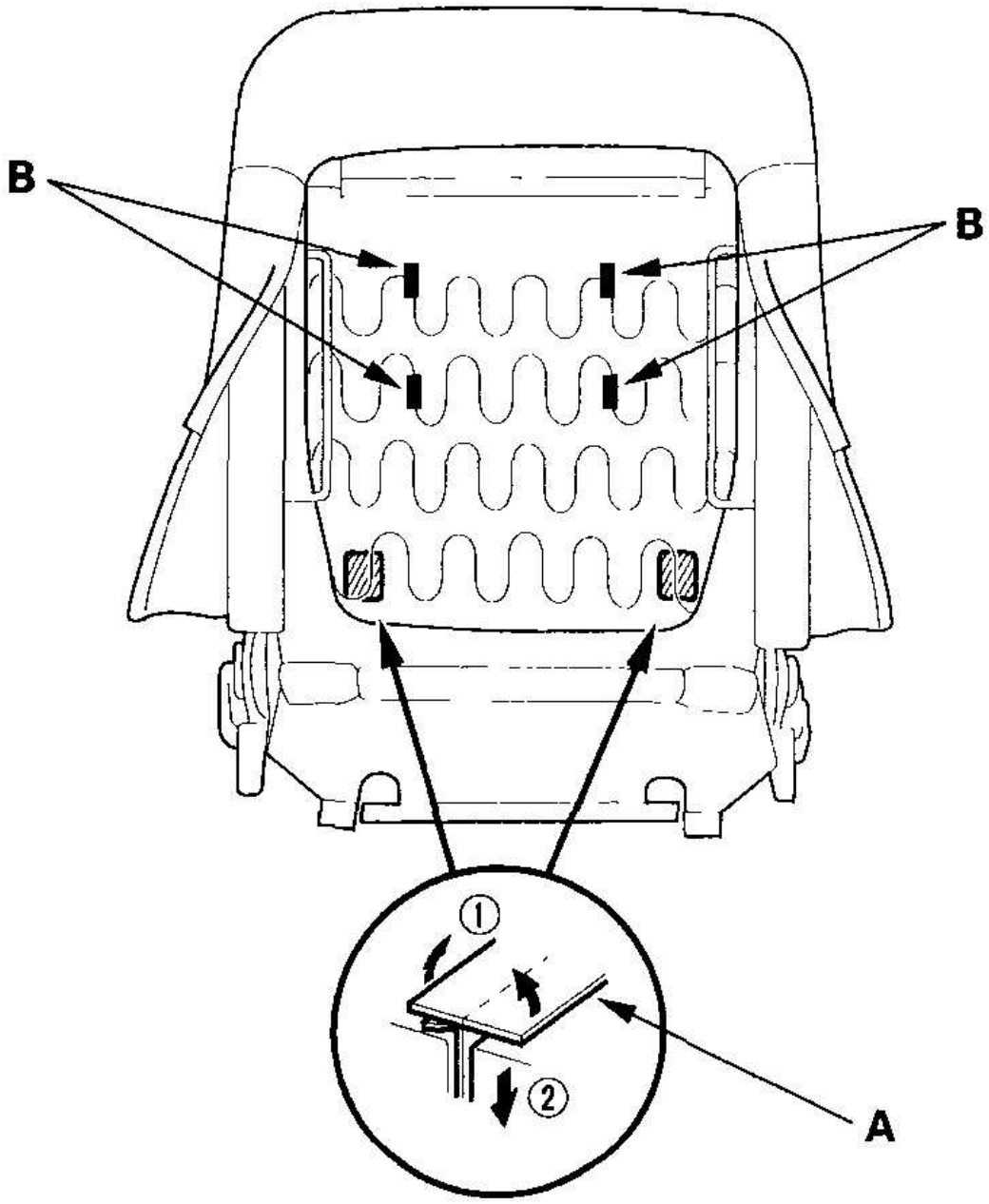


Fig. 54: Passing Both Lower Retainers Through Slots In Back Seat-Back Pad

Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Pull back the edge of the seat-back cover all the way around, and release the clips (A), then remove the seat-back cover.

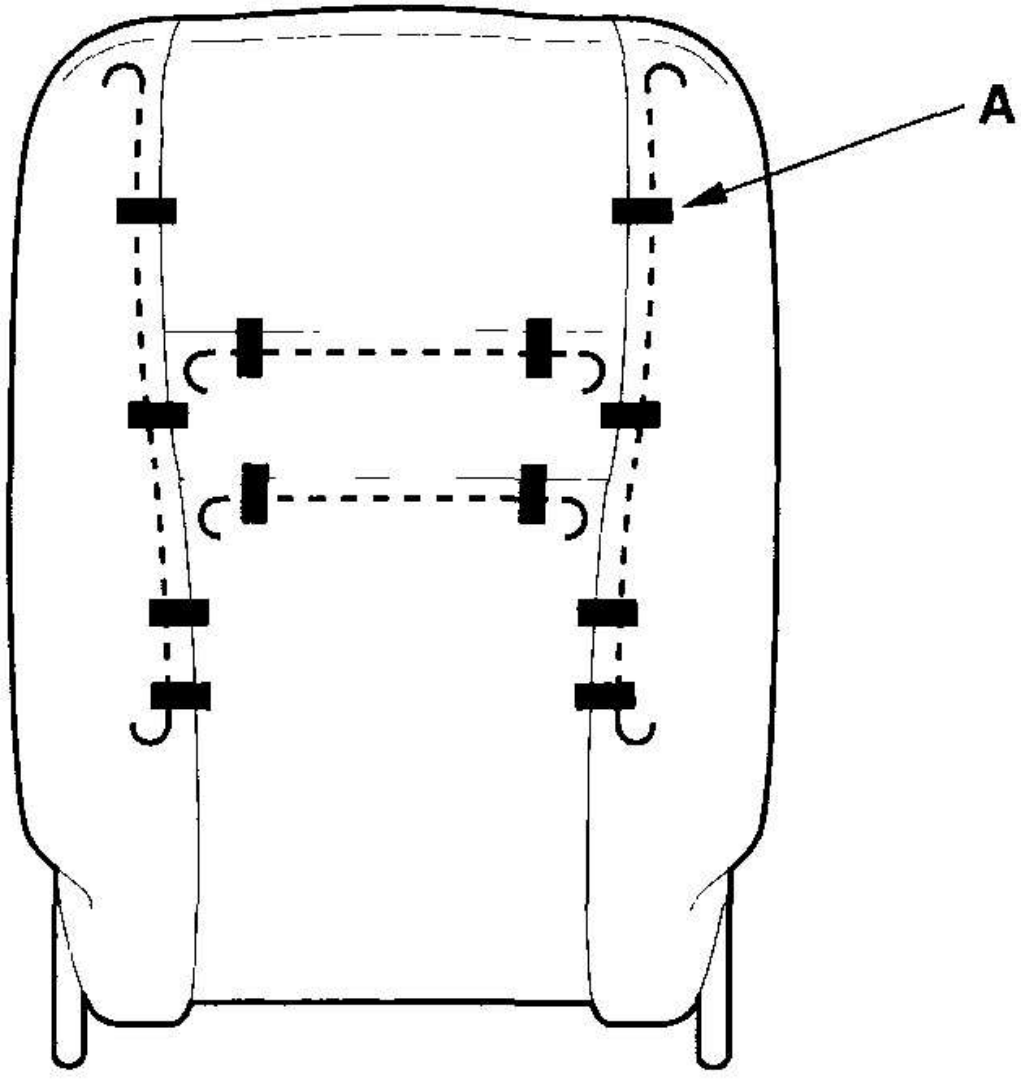


Fig. 55: Releasing Clips And Seat-Back Cover (Driver's And Passenger's Without Side Airbag)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

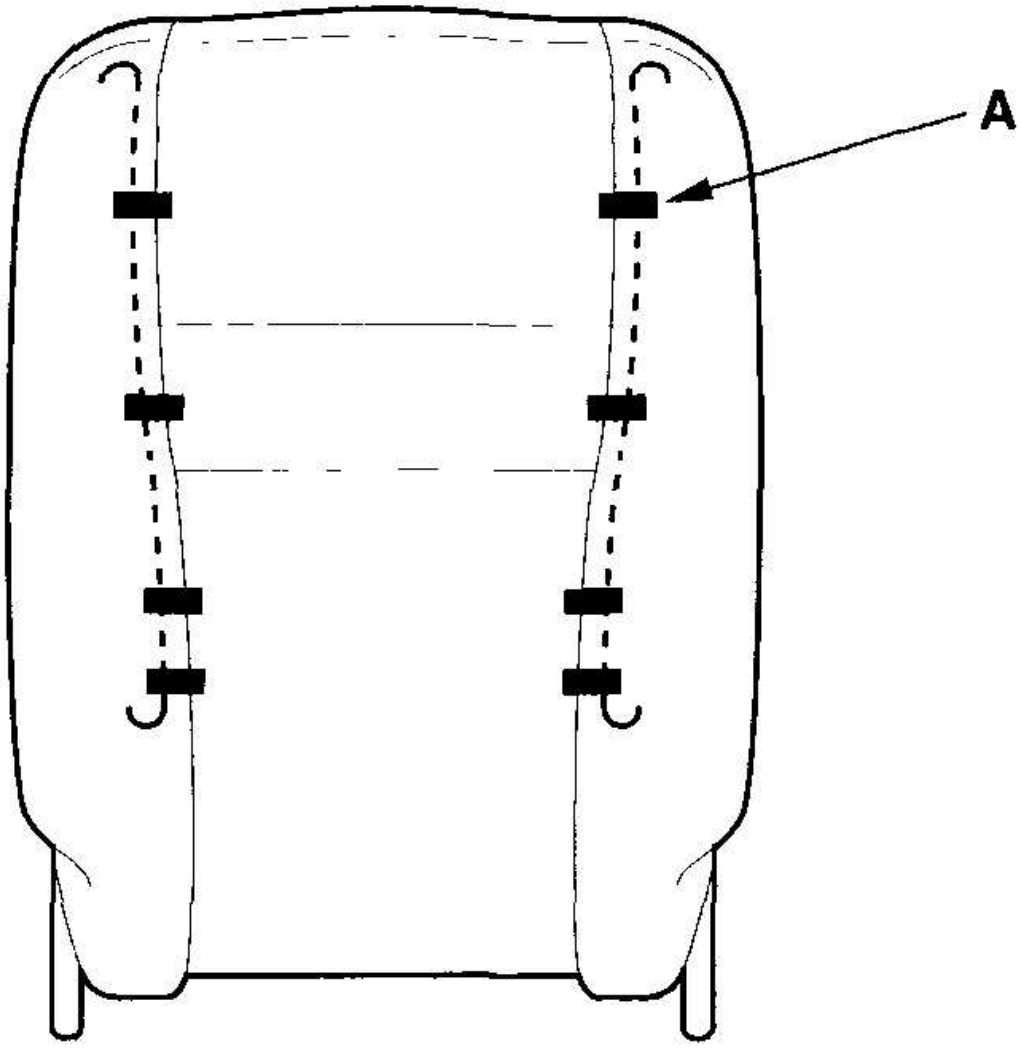


Fig. 56: Releasing Clips And Seat-Back Cover (Passenger's With Side Airbag)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Install the cover in the reverse order of removal, and note these items:
    - Reinitialize the OPDS/ODS control unit (see **INITIALIZING THE OPDS/ODS UNIT**).

- To prevent wrinkles when installing a seat-back cover, make sure the material is stretched evenly over the pad before securing the clips, hooks, and hook strips.
- Replace any clips you removed with new ones (A). Install them with commercially available upholstery ring pliers (B).
- Reinstall the front hook (C) and rear hook (D) of the reinforcing cloth (E) securely.
- Use only original Honda replacement seat-back covers.
- If equipped, make sure the recline motor harness, side airbag harness, and OPDS/ODS harness (passenger's seat) are routed properly.

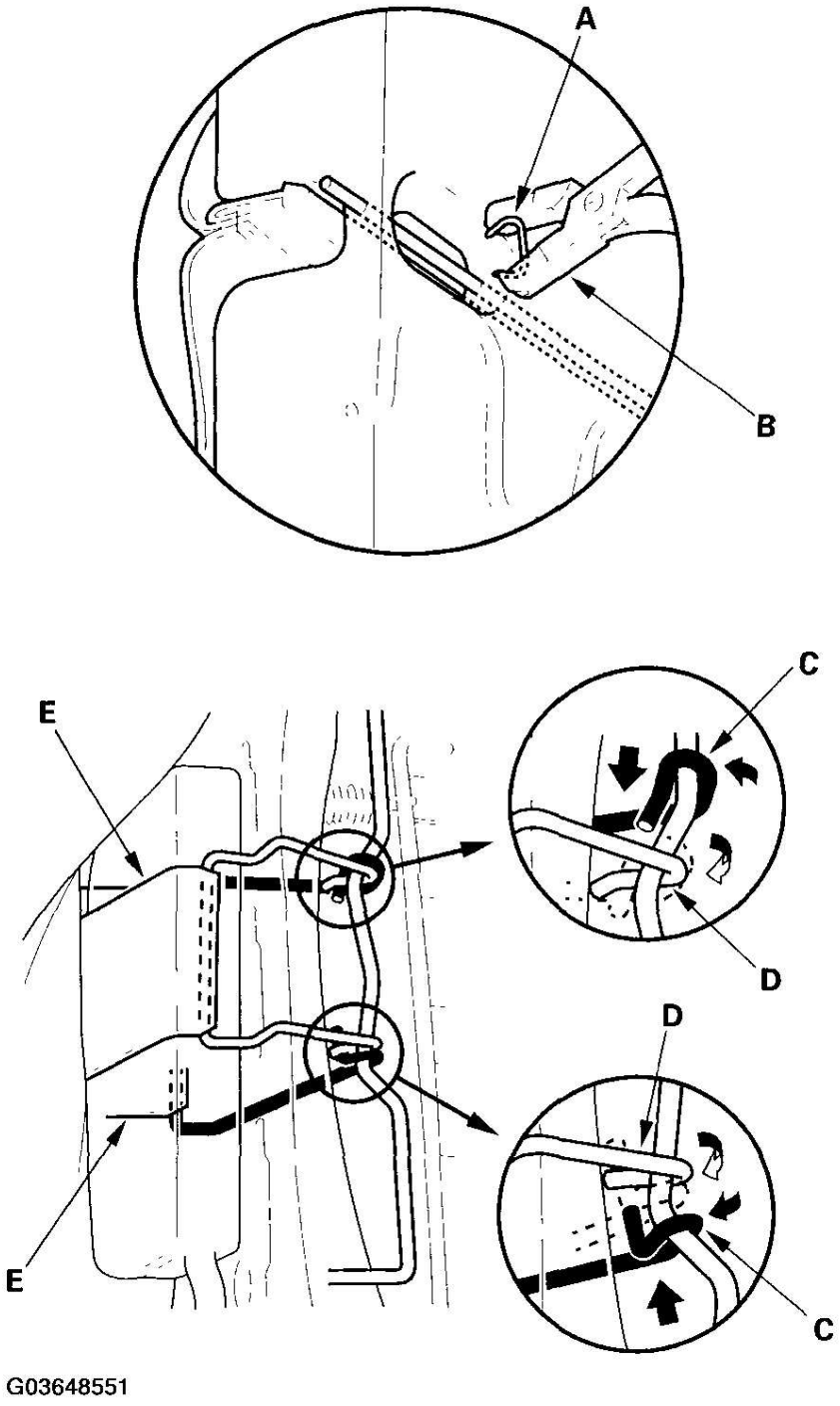


Fig. 57: Installing Seat-Back Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SEAT CUSHION COVER

1. Remove the front seat (see **FRONT SEAT REMOVAL/INSTALLATION**).
2. With recline motor and/or side airbag: From under the seat cushion, detach the recline motor connector clip, the side airbag connector clip, and on the passenger's seat, the OPDS/ODS unit connector clip. Release the hook springs (on some driver's seats) and the seat cushion cover from the seat cushion frame spring, then pull the cover back, and remove the wire ties.
3. Remove these items from the front seat, then remove the seat-back, '03 model 2-door manual seat (see **'03 MODEL 2-DOOR**), '04-07 models 2-door manual seat (see **'04-07 Models 2-door**), '03 model 4-door manual seat (see **'03 Model 4-door**), '04-07 models 4-door manual seat (see **'04-07 Models 4-door Passenger's**), manual height adjustable seat (see **FRONT SEAT DISASSEMBLY/REASSEMBLY - MANUAL HEIGHT ADJUSTABLE**), 2-way power seat (see **FRONT SEAT DISASSEMBLY/REASSEMBLY - 2-WAY POWER**), 8-way power seat (see **FRONT SEAT DISASSEMBLY/REASSEMBLY - 8-WAY POWER**):
   - Recline cover
   - Center cover
4. Release the hook strips (A) and retainers (B) (manual height adjustable seat) from both sides the seat cushion.

NOTE: Manual height adjustable seat is shown below; other seats are similar, except for the height ratchet unit portion.

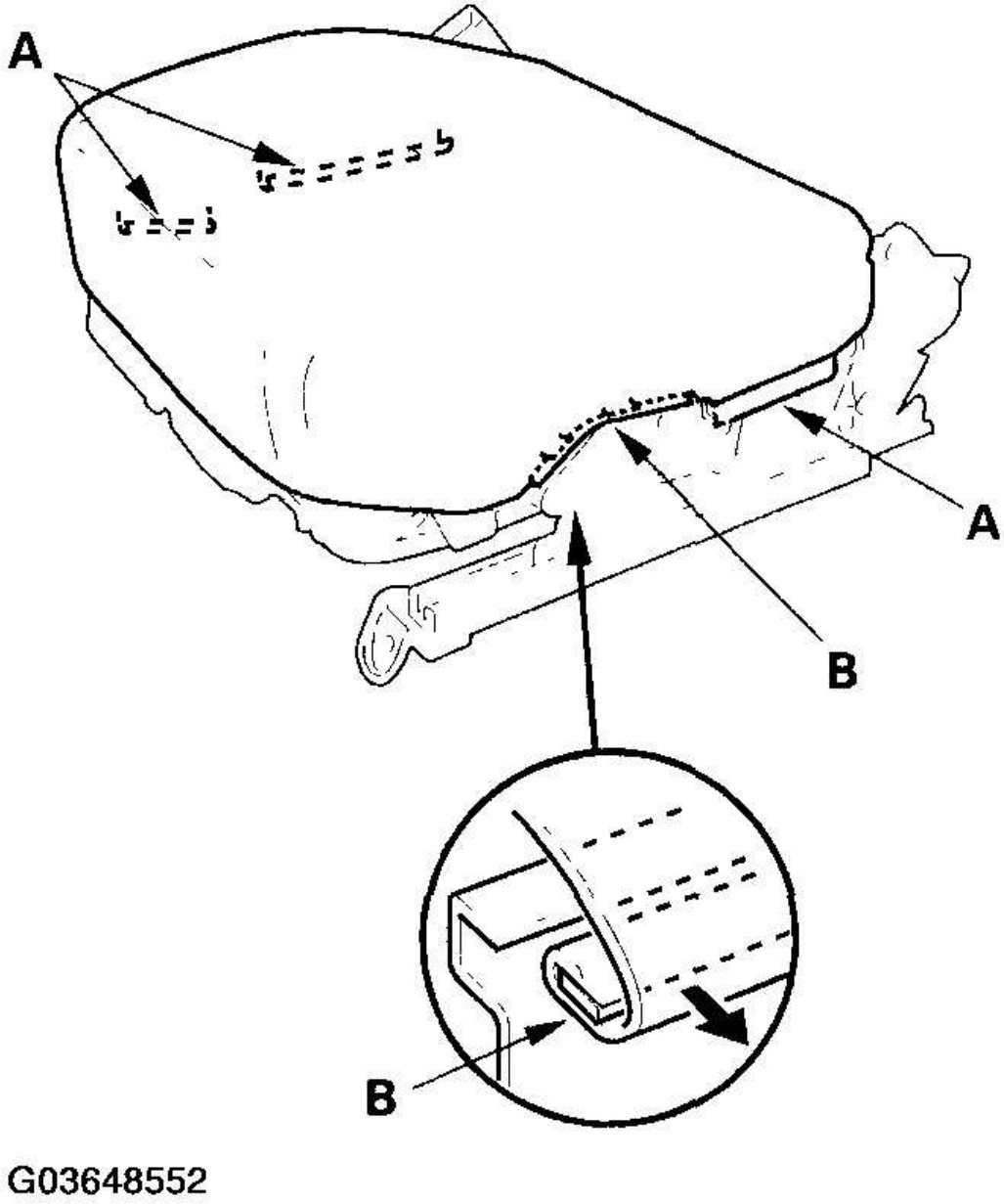


Fig. 58: Releasing Hook Strips And Retainers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Pull back the seat cushion cover (A), and release the hooks (B) from under the seat cushion. On driver's manual height adjustable/2-way power seat, detach

the clips from the seat cushion frame (C).

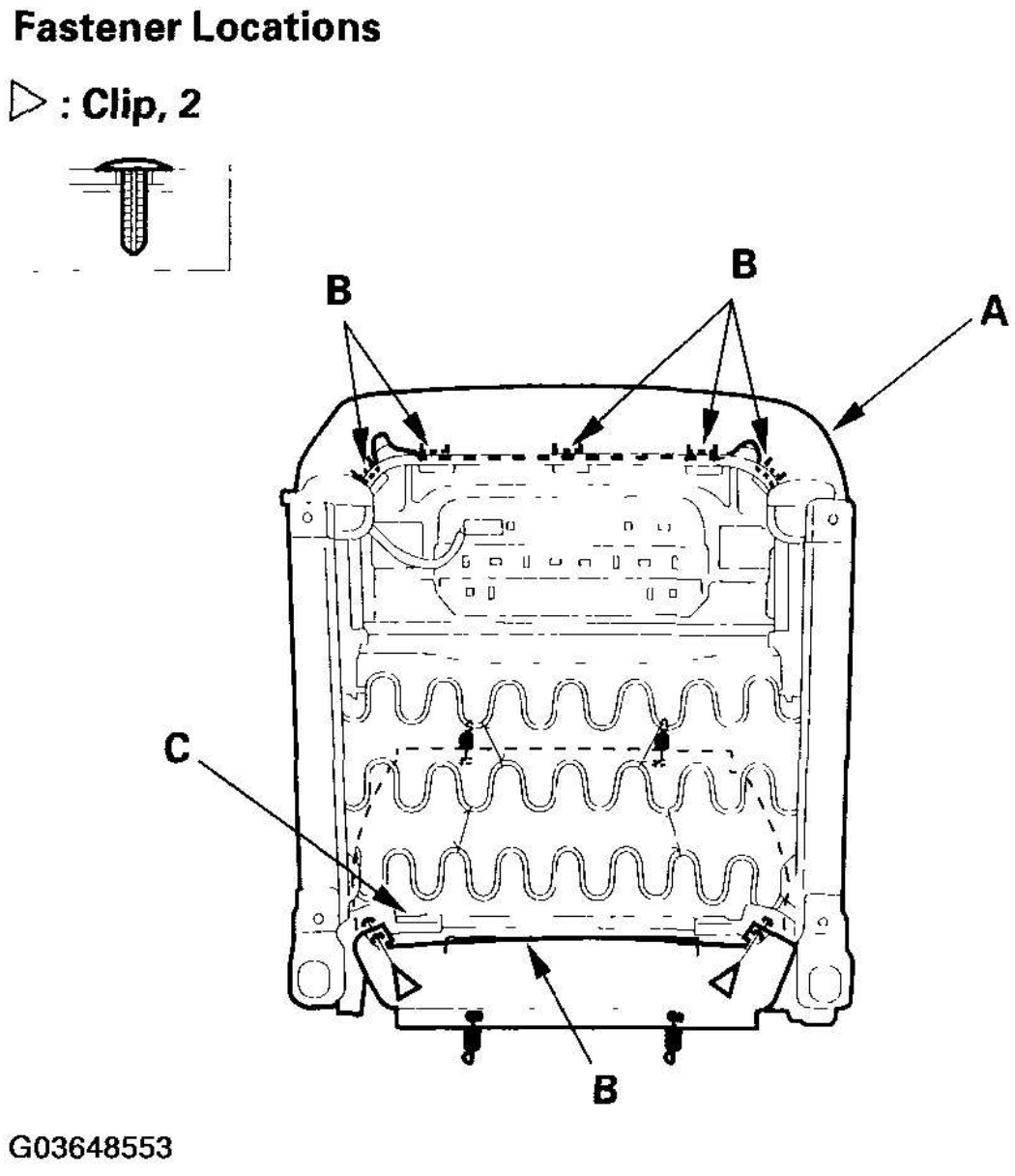


Fig. 59: Pulling Back Seat Cushion Cover & Releasing Hooks From Under Seat Cushion
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the cushion cover/pad from the seat cushion frame.

7. Release the clips (A) from under the seat cushion (B).

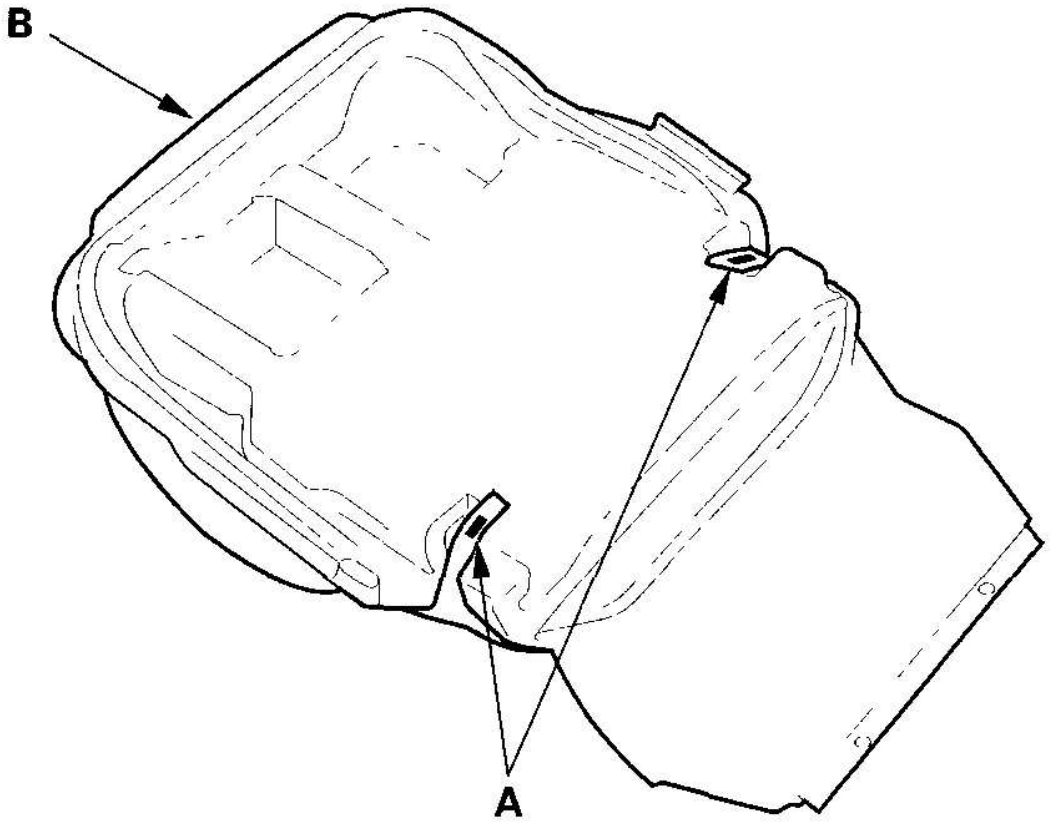


Fig. 60: Removing Clips From Under Seat Cushion
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Pull back the edge of the seat cushion cover all the way around, and release the clips (A), then remove the seat cushion cover.

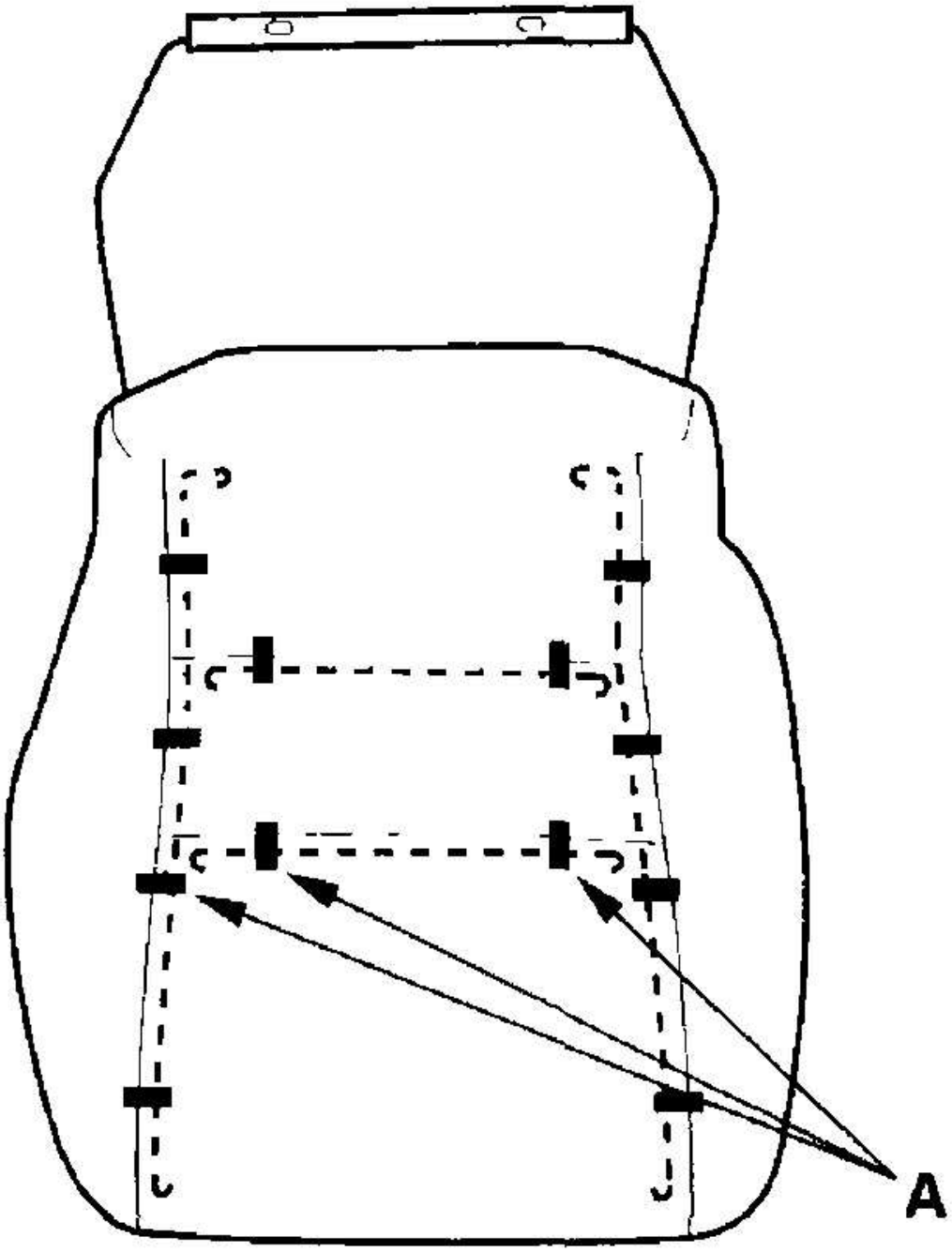


Fig. 61: Removing Seat Cushion Cover

Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the cover in the reverse order of removal, and note these items:
   - To prevent wrinkles when installing a seat cushion cover, make sure the material is stretched evenly over the pad before securing the clips and hook strips.
   - Replace any clips you removed with new ones (A). Install them with commercially available upholstery ring pliers (B).

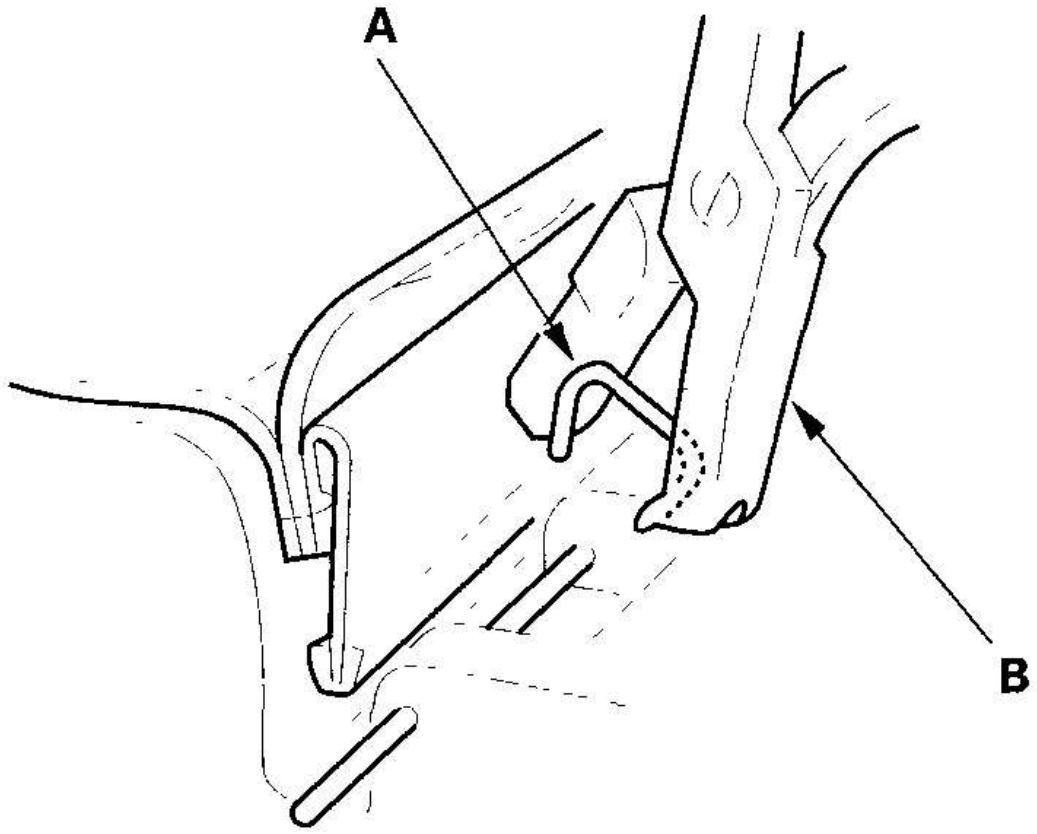


Fig. 62: Installing Seat Cushion Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REAR SEAT REMOVAL/INSTALLATION

2-DOOR

NOTE: Take care not to scratch the body or tear the seat covers.

1. Remove the rear seat as shown in **Fig. 63**.
2. Install the seat in the reverse order of removal, and note these items:
   - Before attaching the rear seat-back and cushion, make sure there are no twists or kinks in the seat belts.
   - When installing the seat cushion, slip the seat belt buckles through the slits in the seat cushion.
   - Make sure the seat-back locks securely.

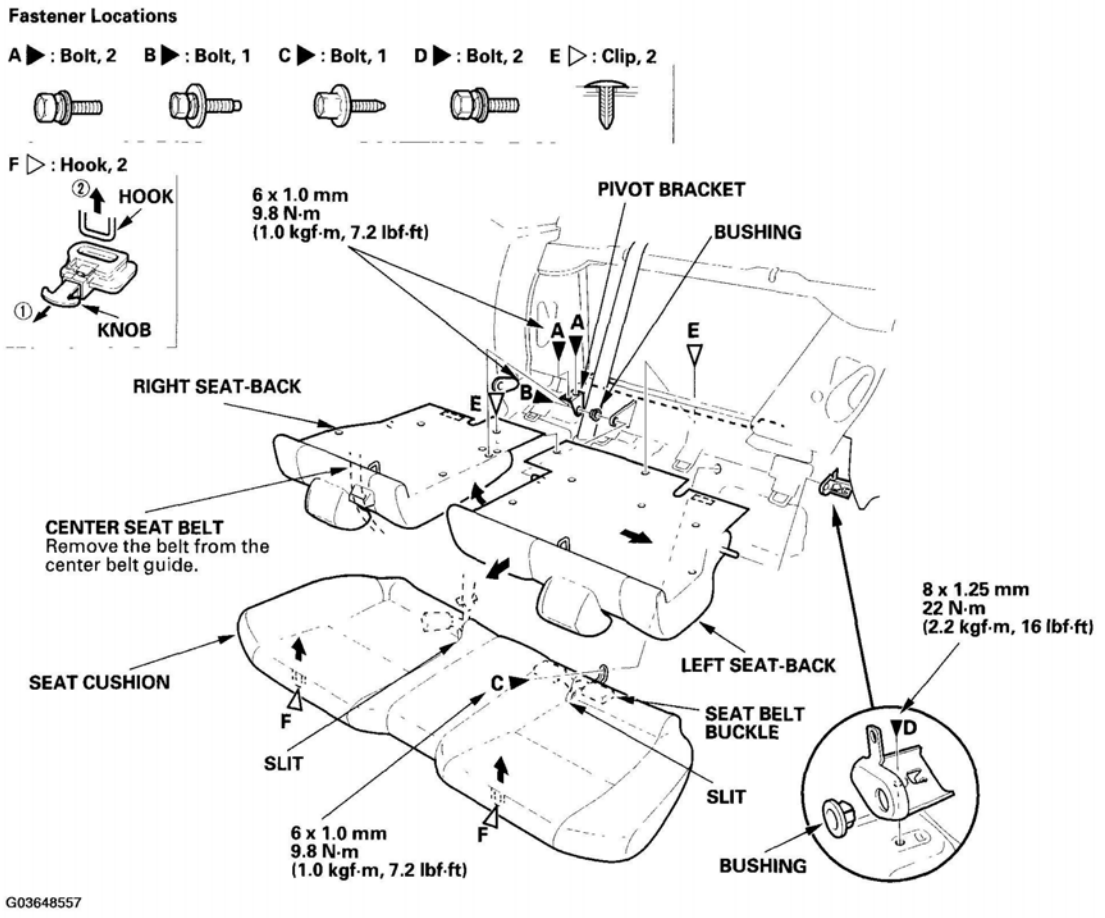


Fig. 63: Removing Rear Seat (2-door)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR

NOTE: Take care not to scratch the body or tear the seat covers.

1. To remove the seat side bolster, remove the rear door sill trim (see **4-DOOR - REAR DOOR SILL AREA**).
2. Remove the rear seat as shown in **Fig. 64**.
3. Install the seat in the reverse order of removal, and note these items:
   - Before attaching the rear seat-back and cushion, make sure there are no twists or kinks in the seat belts.
   - When installing the seat cushion, slip the seat belt buckles through the slits in the seat cushion.
   - Make sure the seat-back locks securely.

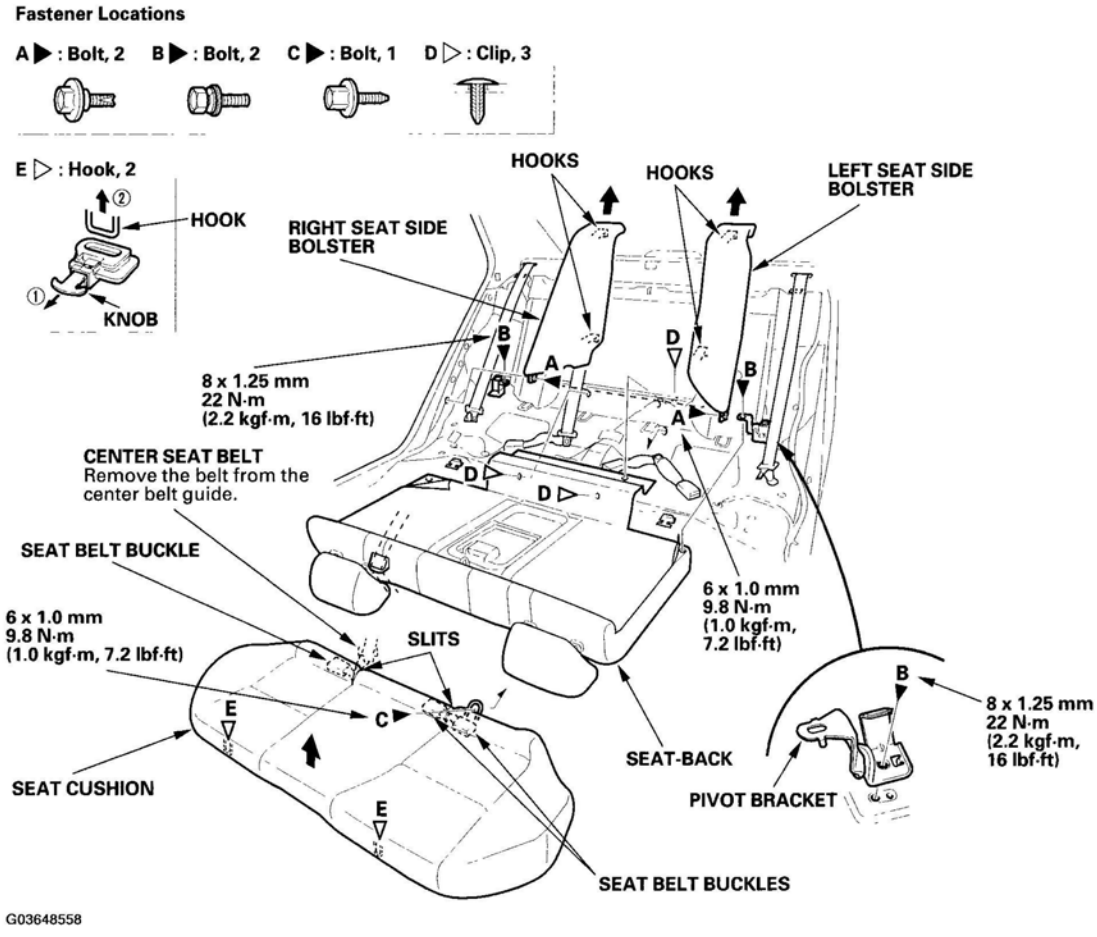


Fig. 64: Removing Rear Seat (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REAR SEAT-BACK LATCH REPLACEMENT

Special Tools Required

KTC trim tool set SOJATP2014

2-DOOR

NOTE:

- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Take care not to bend or scratch the interior trim.**

1. Remove the rear bulkhead cover (see **TRIM REMOVAL/INSTALLATION - REAR SHELF AREA**).
2. Disconnect the cylinder rod (A), remove the bolts, then remove the seat-back latch (B).

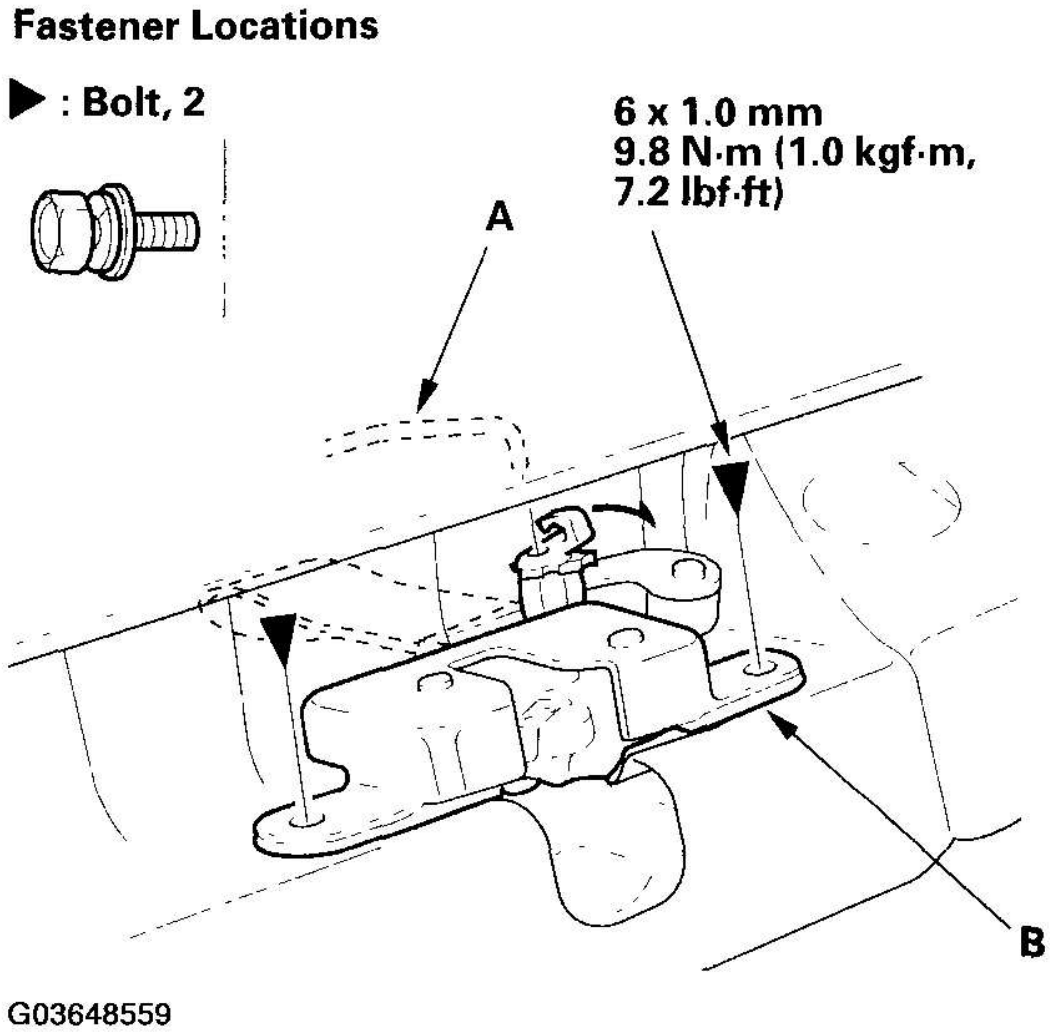


Fig. 65: Removing Seat-Back Latch (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the latch in the reverse order of removal, and note these items:
   - Make sure the cylinder rod is connected securely.

- Make sure the seat-back locks securely and unlocks properly.

Special Tools Required

KTC trim tool set SOJATP2014

4-DOOR

NOTE:

- **Use the appropriate tool from the KTC trim tool set to avoid damage when prying components.**
- **Take care not to bend or scratch the interior trim.**

1. Remove these items:
   - Rear door sill trim, both sides (see **4-DOOR - REAR DOOR SILL AREA**)
   - Seat side bolster, both sides (see **4-DOOR**)
   - Rear bulkhead cover (see **4-DOOR**)
2. Disconnect the cylinder rod (A).

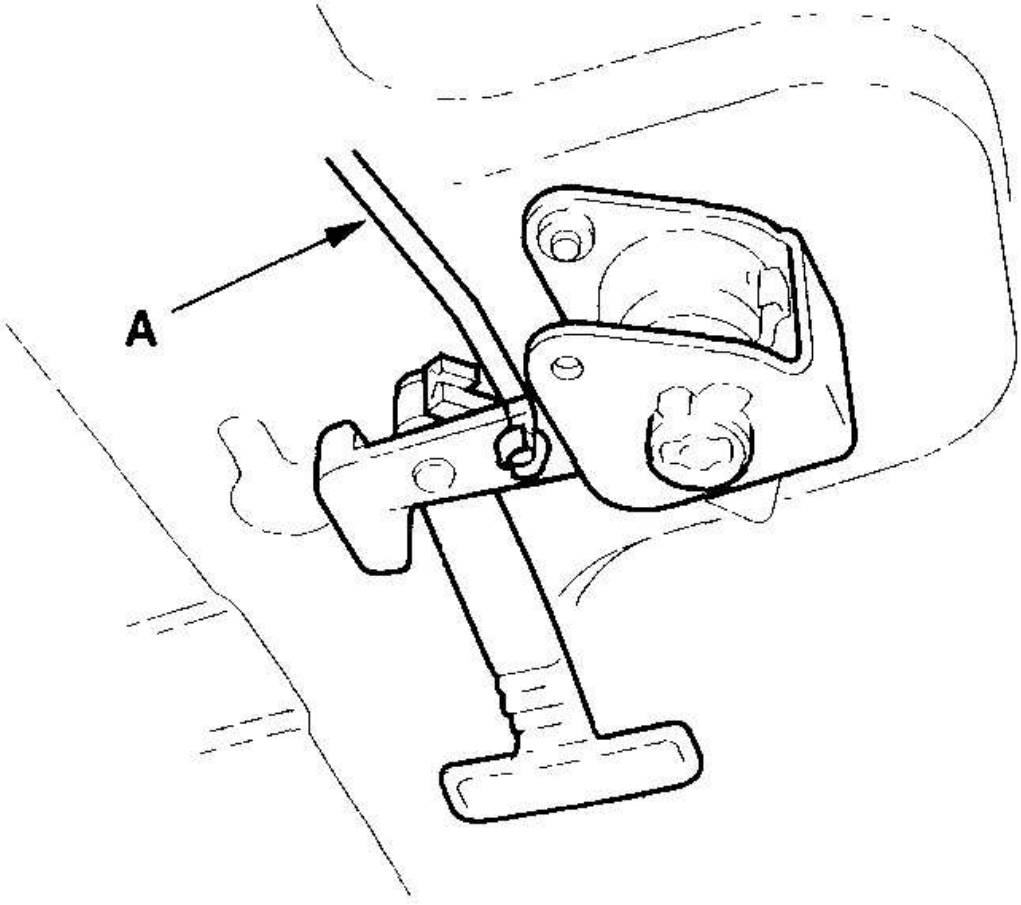


Fig. 66: Disconnecting Cylinder Rod
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the bolts, then remove the seat-back latch.

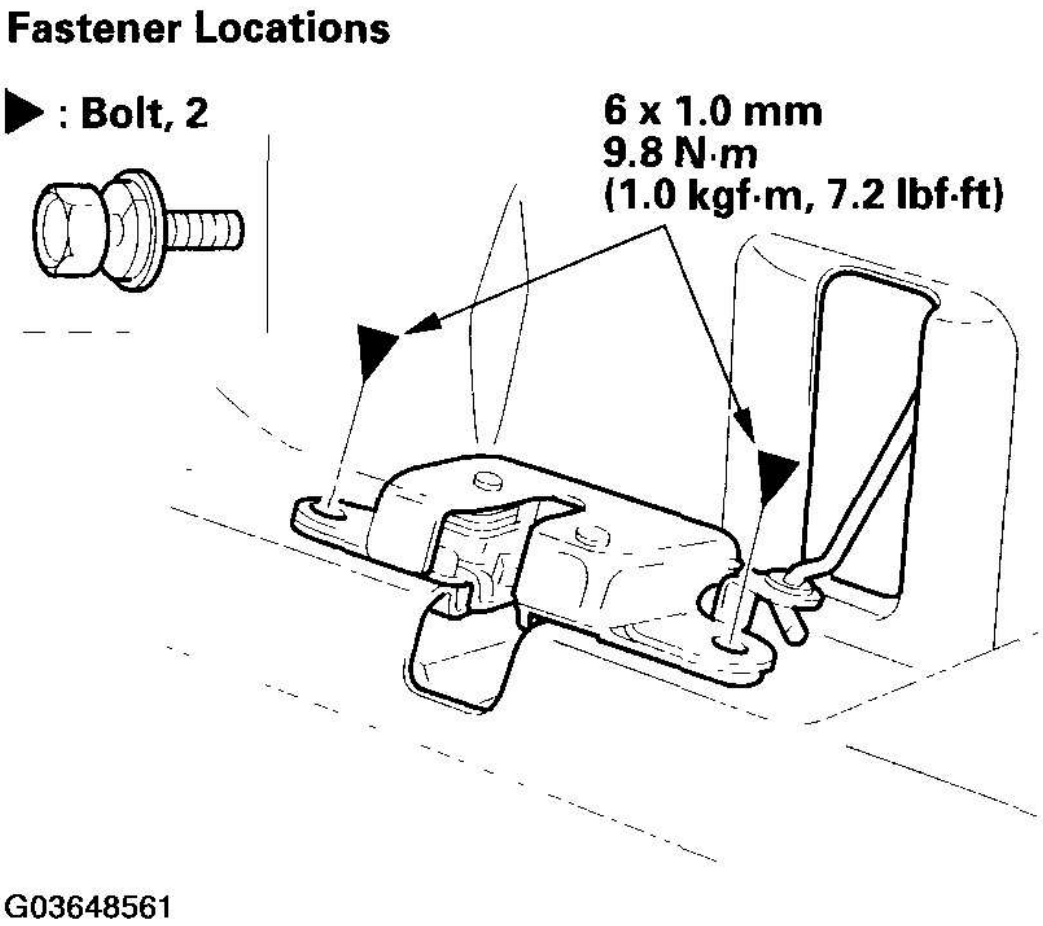


Fig. 67: Removing Seat-Back Latch (4-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the latch in the reverse order of removal, and note these items:
   - Make sure the cylinder rod is connected securely.
   - Make sure the seat-back locks securely and unlocks properly.

REAR SEAT-BACK LOCK CYLINDER REPLACEMENT

2-DOOR

NOTE: Take care not to scratch the interior trim.

1. Remove the rear shelf (see **TRIM REMOVAL/INSTALLATION - REAR SHELF AREA**).
2. Disconnect the cylinder rods from both seat-back latches (see **REAR SEAT-BACK LATCH REPLACEMENT**).
3. Remove the self-tapping ET screws, then remove the seat-back lock cylinder (A) and cylinder rods (B).

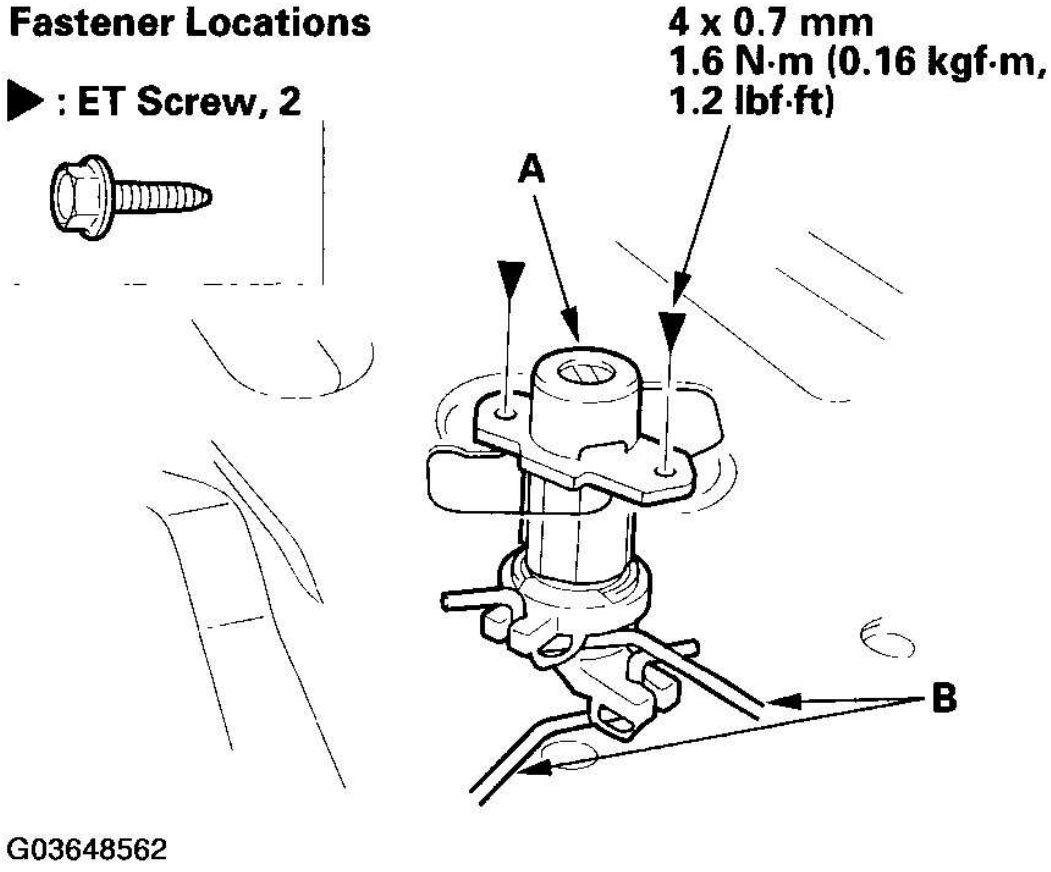


Fig. 68: Removing Seat-Back Lock Cylinder And Rods (2-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the lock cylinder in the reverse order of removal, and note these items:
   - Make sure the cylinder rod is connected securely.
   - Make sure the seat-back unlocks properly.

4-DOOR

NOTE: Take care not to bend or scratch the interior trim.

1. Remove the rear shelf (see **4-DOOR**).
2. Disconnect the cylinder rod (see **REAR SEAT-BACK LATCH REPLACEMENT**).
3. Remove the bolts, then remove the seat-back lock cylinder.

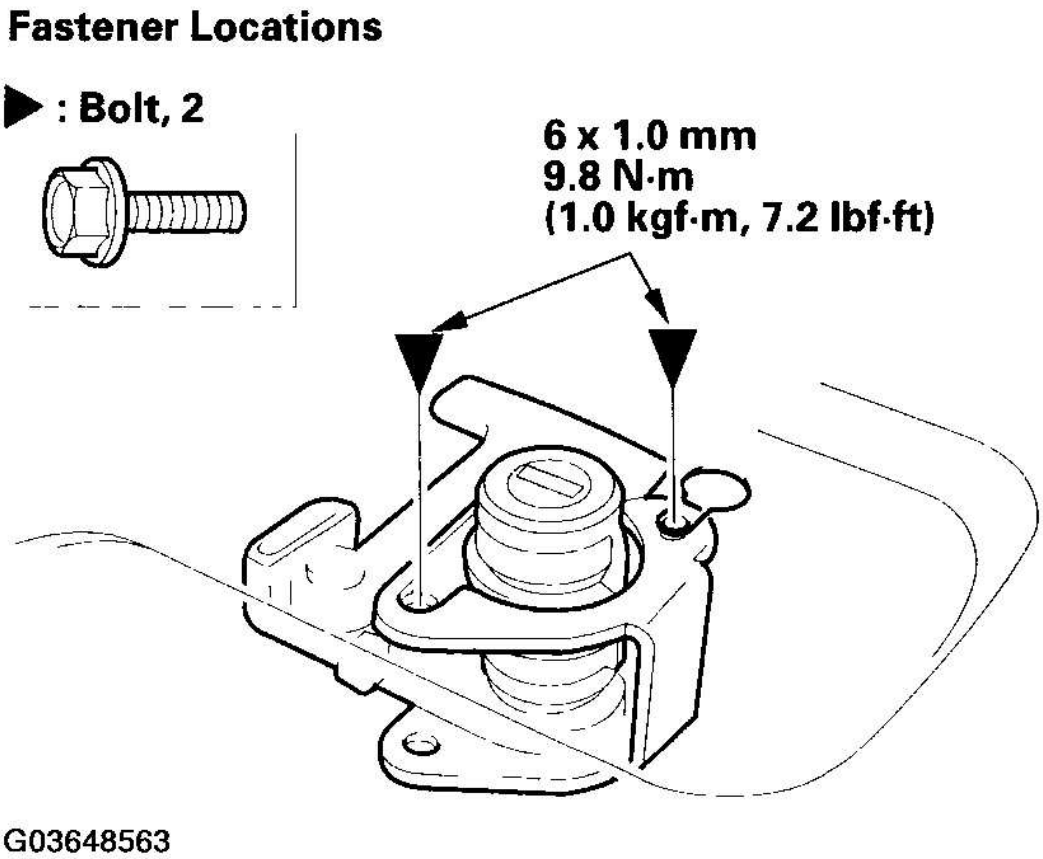


Fig. 69: Removing Seat-Back Lock Cylinder (4-door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the lock cylinder in the reverse order of removal, and note these items:
   - Make sure the cylinder rod is connected securely.

- Make sure the seat-back unlocks properly.

REAR SEAT ARMREST/TRUNK PASS-THROUGH COVER REPLACEMENT

4-DOOR

NOTE: Take care not to tear the seams or damage the seat covers.

1. Remove the clip (A) from the left portion of the armrest pivot.

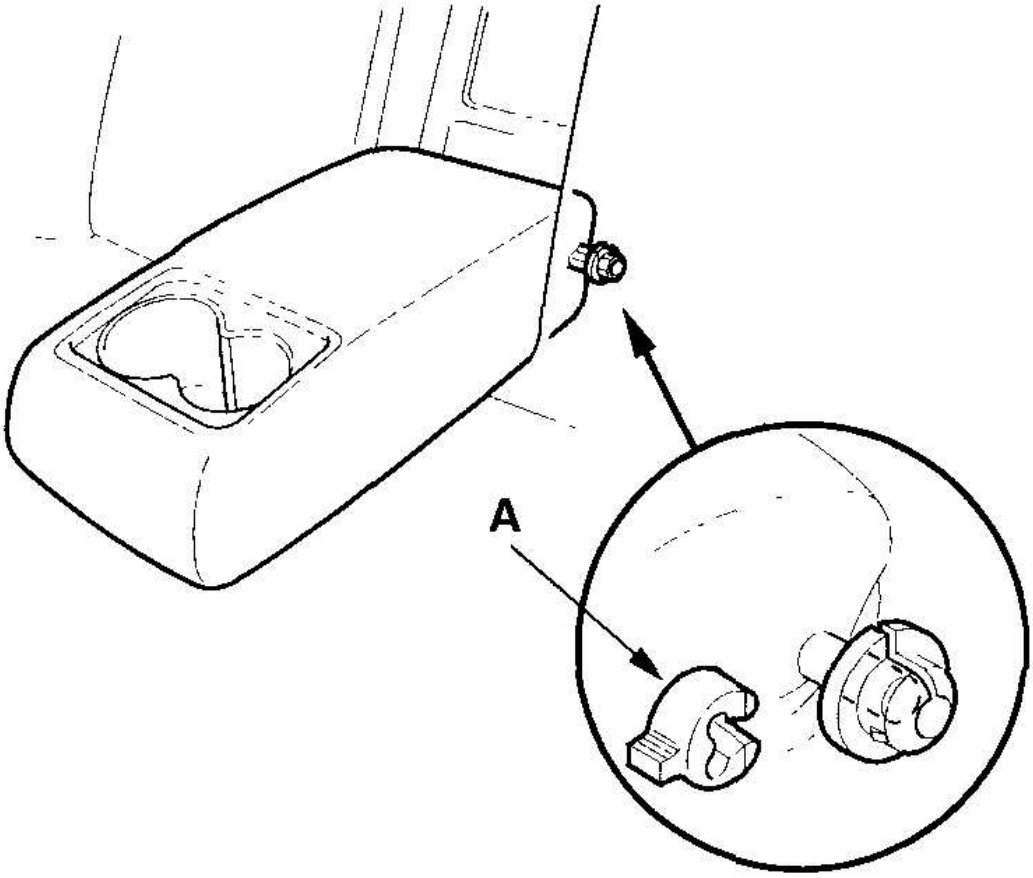


Fig. 70: Removing Clip From Left Portion Of Armrest Pivot
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the armrest.

   -1 Slide the armrest (A) toward the driver's side of the vehicle.

   -2 Remove the pivot shaft (B) from the collar (C) on the passenger's side of the vehicle by pulling up on the armrest, and remove the pivot shaft from the collar (D) by pulling up on the armrest.

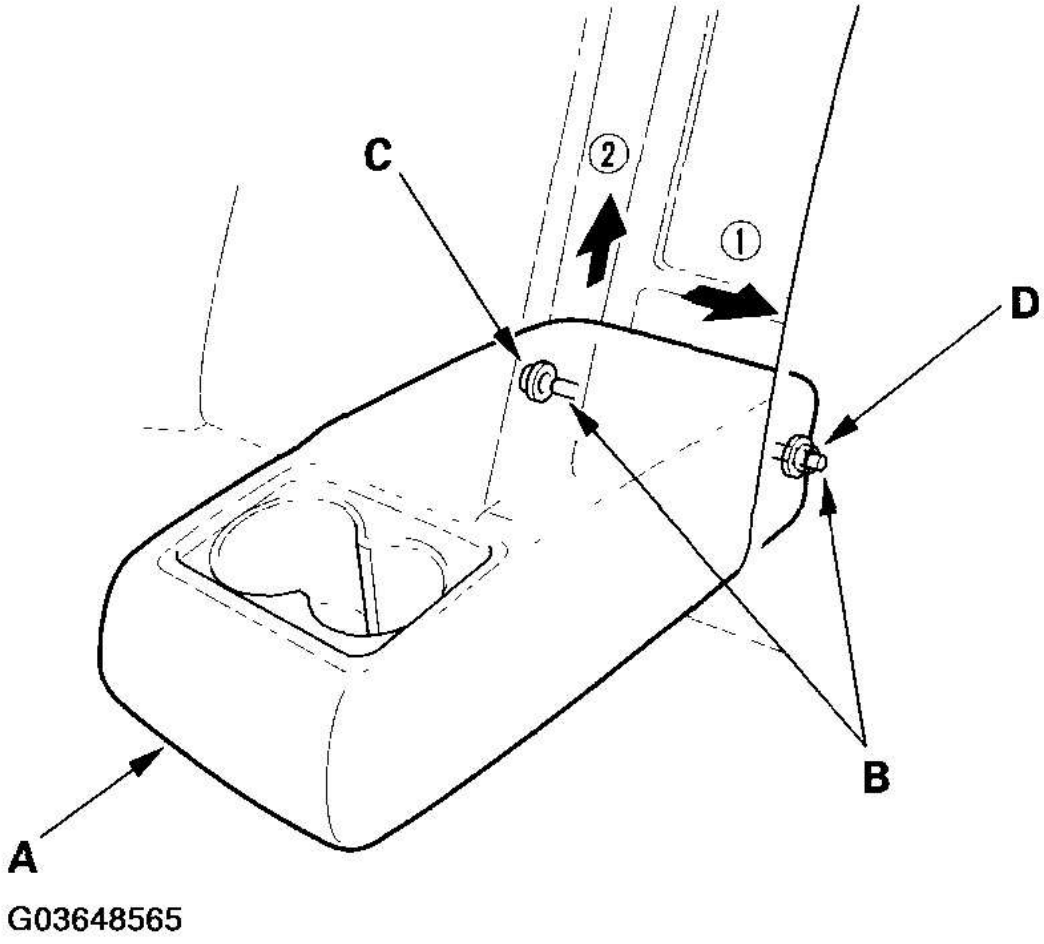
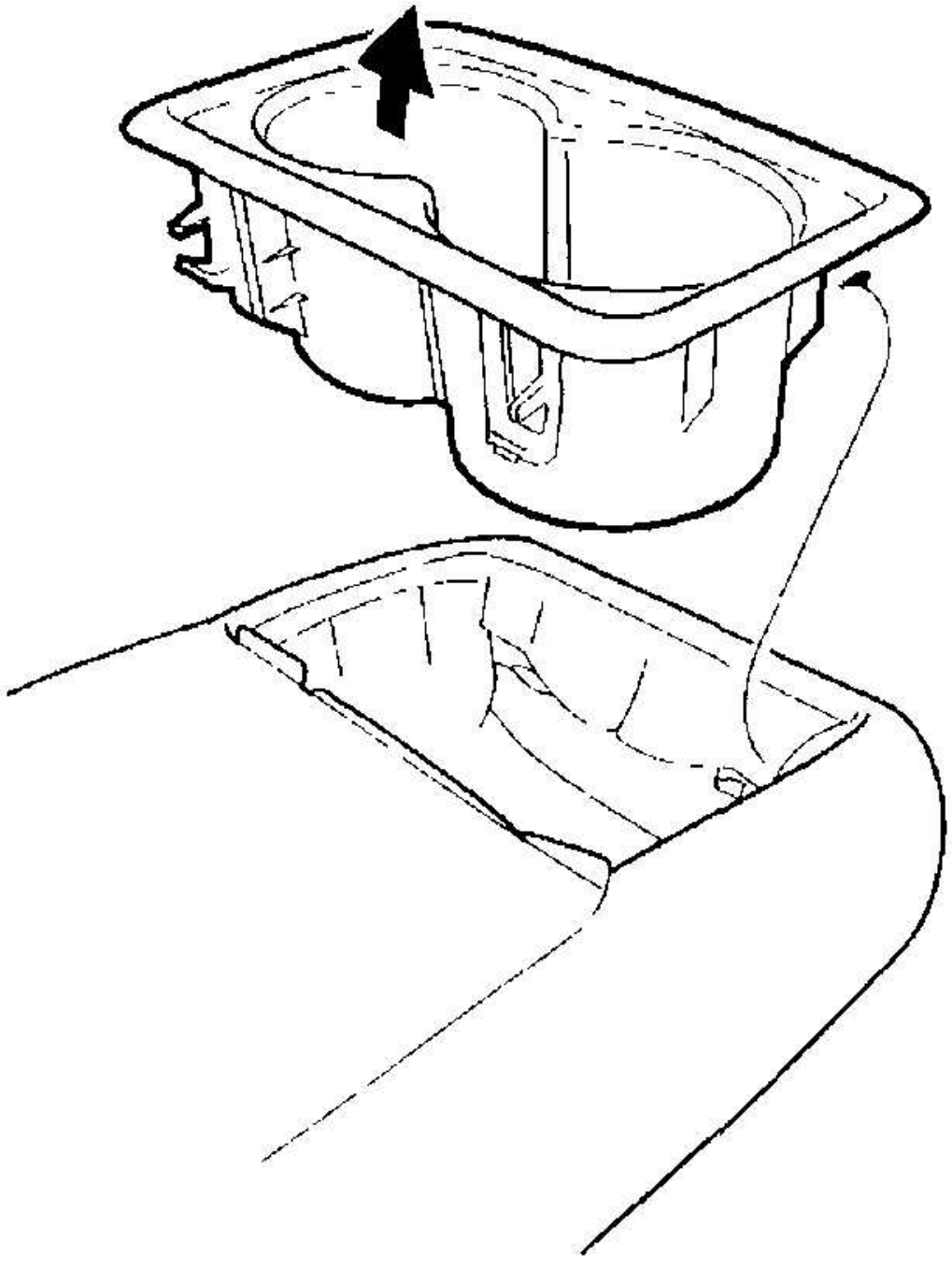


Fig. 71: Removing Pivot Shaft From Collar On Passenger's Side
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the beverage holder.



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Fig. 72: Removing Beverage Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Fold the seat-back forward.
5. Remove the screws, and detach the hooks (A), then remove the trunk pass-through cover (B).

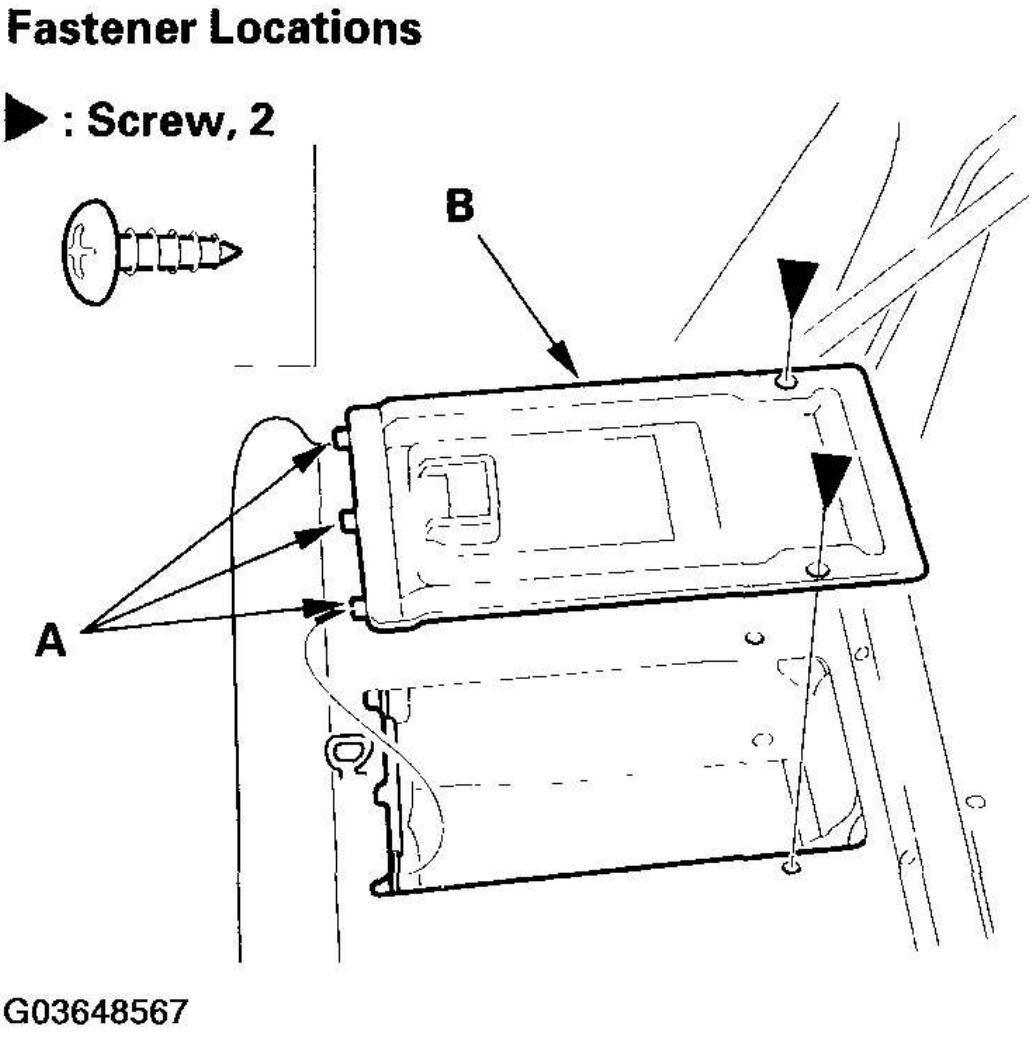


Fig. 73: Removing Trunk Pass-Through Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install the armrest and trunk pass-through cover in the reverse order of removal.

TRUNK PASS-THROUGH COVER KEY CYLINDER REPLACEMENT

4-DOOR

NOTE:

- **When prying with a flat-tip screwdriver, wrap it with protective tape to prevent damage.**
- **Take care not to scratch the cover.**

1. Using a flat-tip screwdriver, pry the rear seat handle (A) up at both hook portions (B) on the forward side of the trunk pass through cover (C). Then slide the handle half-way up.

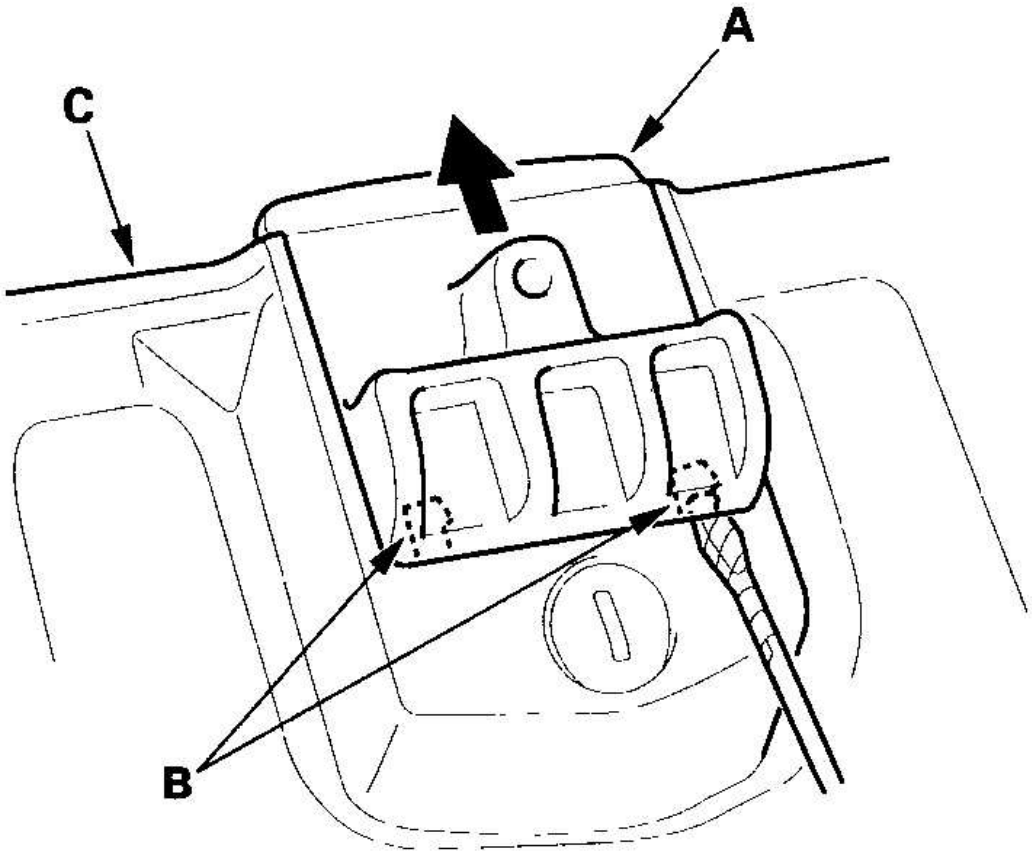


Fig. 74: Prying Rear Seat Handle
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. From the trunk compartment side of the cover, insert a small screwdriver through the access hole (A) and press down on the hook (B).

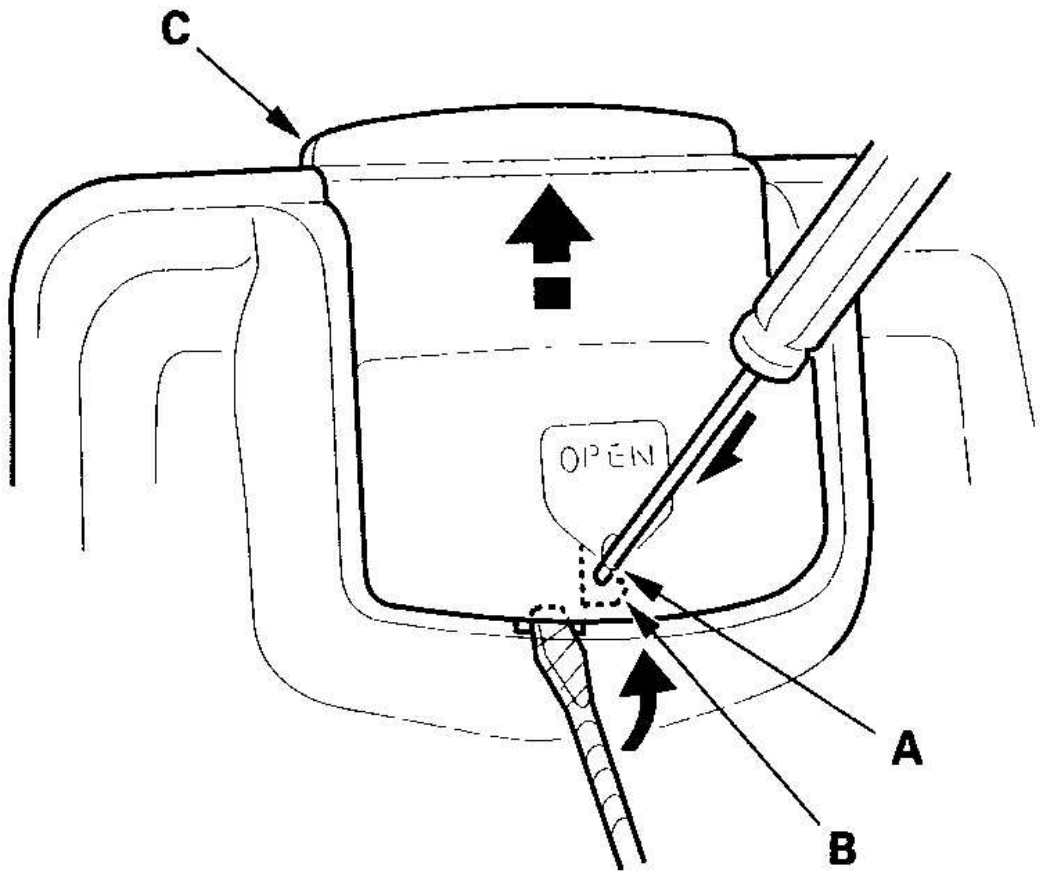


Fig. 75: Inserting Small Screwdriver In Access Hole
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. While pressing the hook, pry the trunk-side handle (C) up with a flat-tip screwdriver.
4. Remove the trunk-side handle (A) and rear seat handle (B) together.

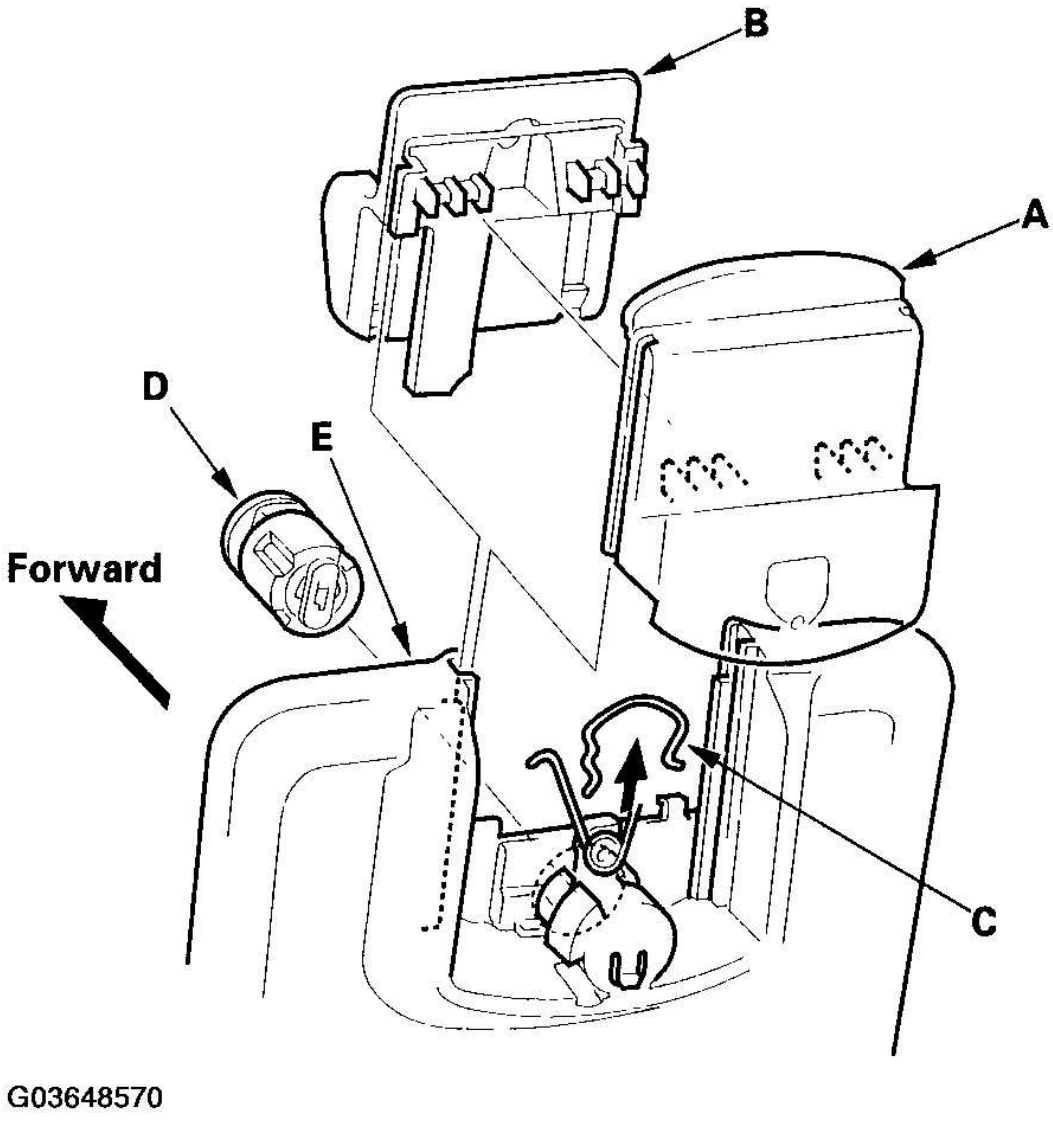


Fig. 76: Removing Trunk-Side Handle And Rear Seat Handle Together
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the retainer clip (C), then remove the trunk pass-through cover key cylinder (D) from the cover (E).
6. Install the key cylinder in the reverse order of removal, and note these items:
    - Put the two handles together before installing them on the trunk pass-through cover.

- Make sure the trunk pass-through cover opens properly and locks securely.

REAR SEAT-BACK COVER REPLACEMENT

NOTE:

- **Take care not to tear the seams or damage the seat covers.**
- **Put on gloves to protect your hands.**

1. Remove the seat-back, 2-door (see **2-DOOR**), 4-door (see **4-DOOR**).
2. Remove these items:
   - Armrest and trunk pass-through cover, 4-door (see **4-DOOR**)
   - Headrestraint
3. Remove the screws, then remove the center belt guide.

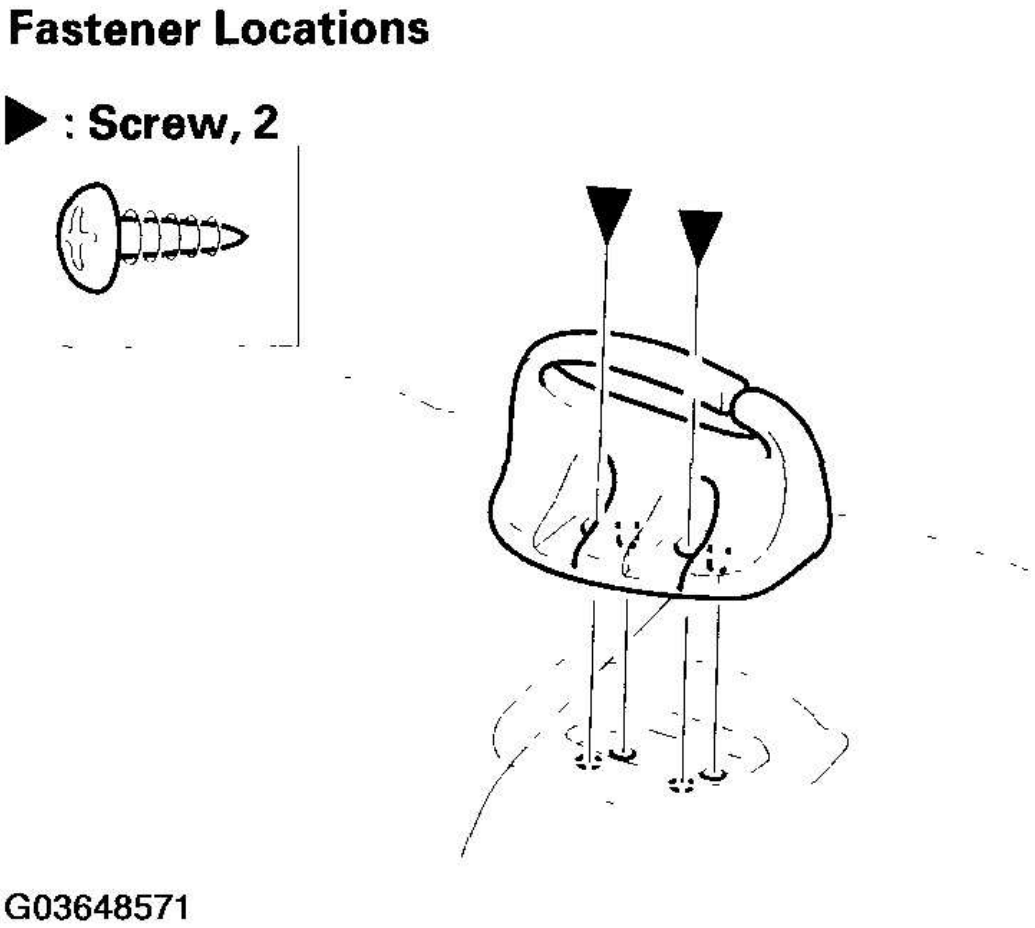


Fig. 77: Removing Center Belt Guide
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the clips and release the fasteners (A) (4-door), then pull back the seat-back mat (B).

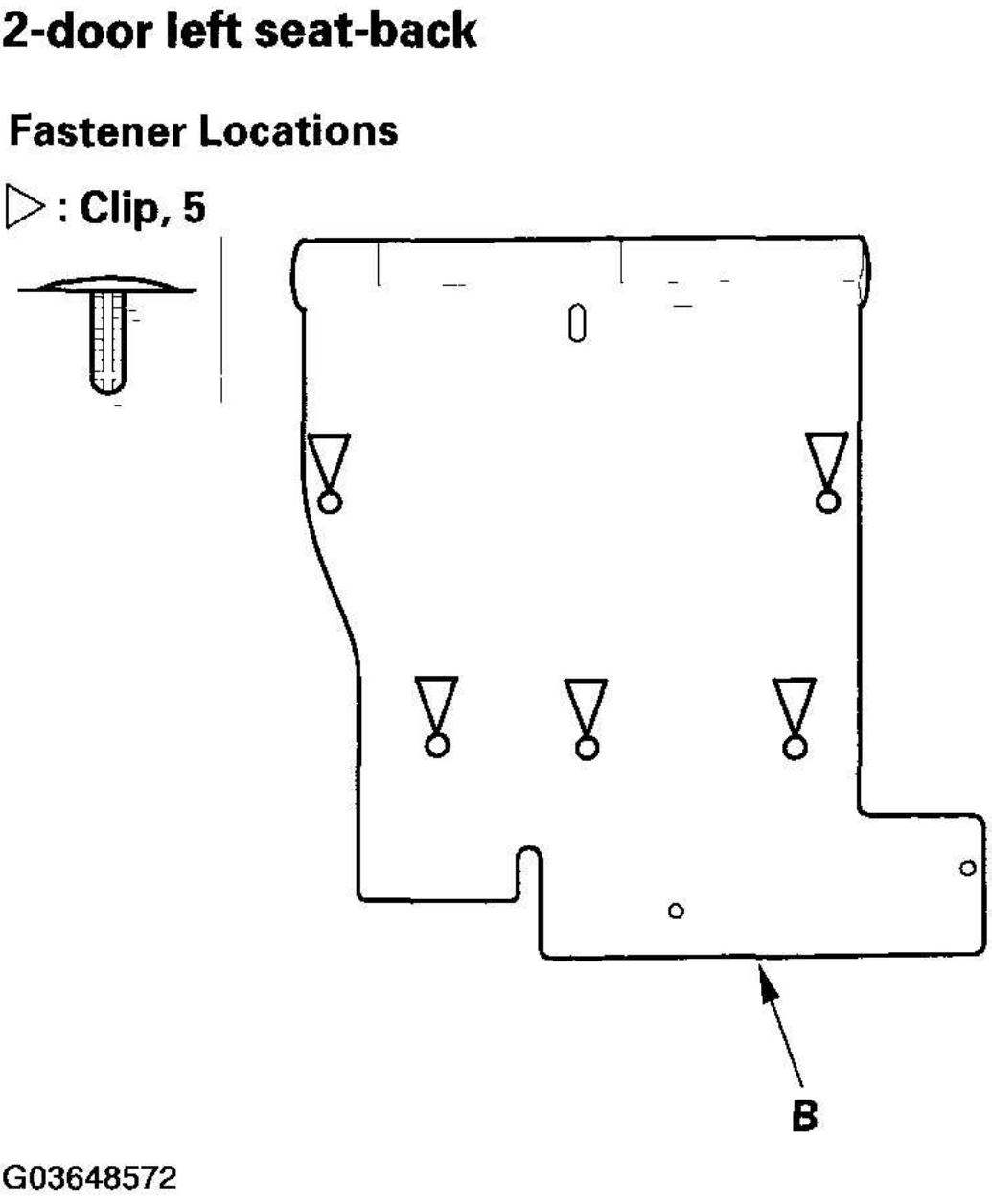


Fig. 78: Releasing Fasteners And Pulling Back Seat-back Mat (2-Door Left Seat-Back)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

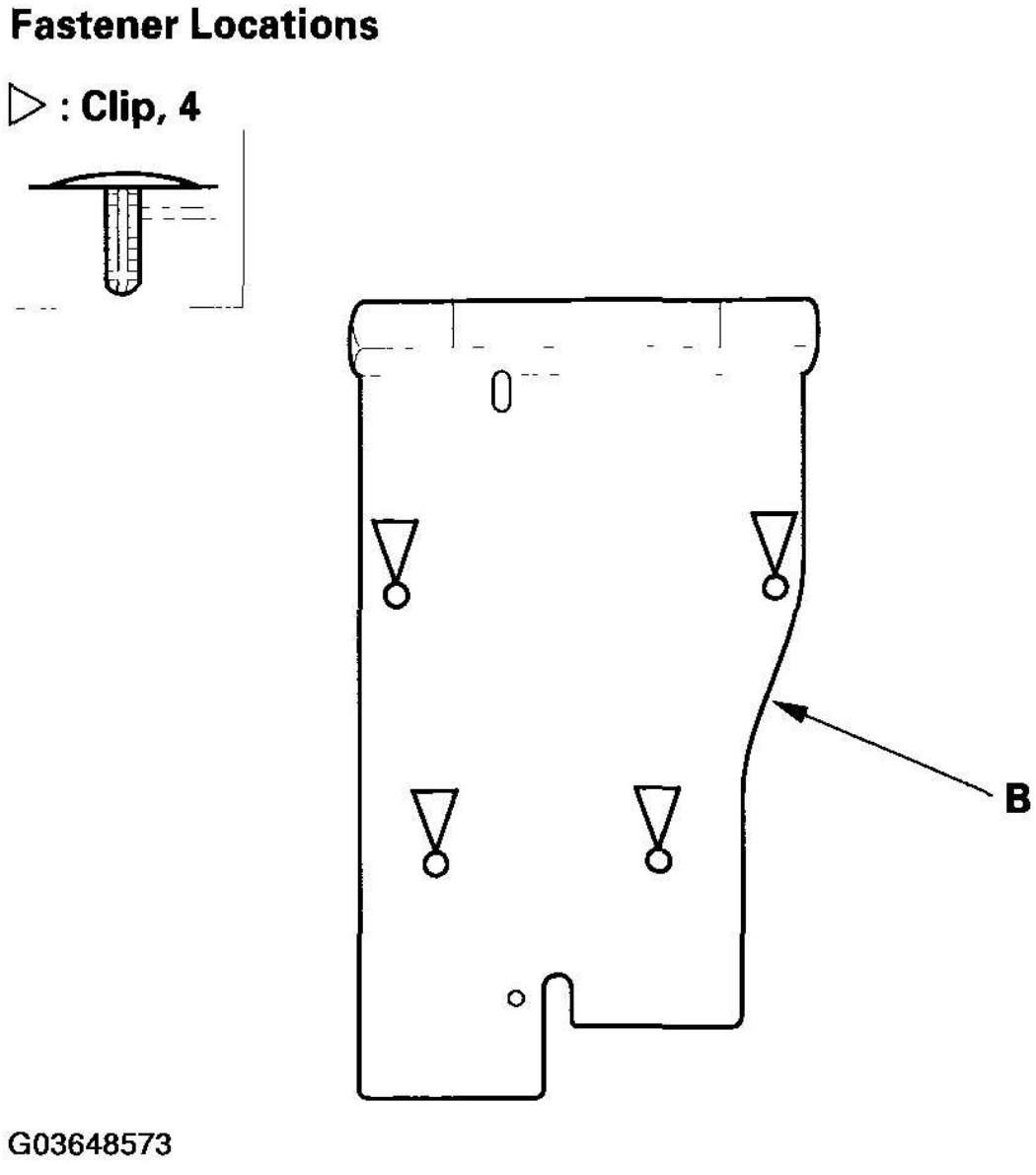


Fig. 79: Releasing Fasteners And Pulling Back Seat-back Mat (2-Door Right Seat-Back)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

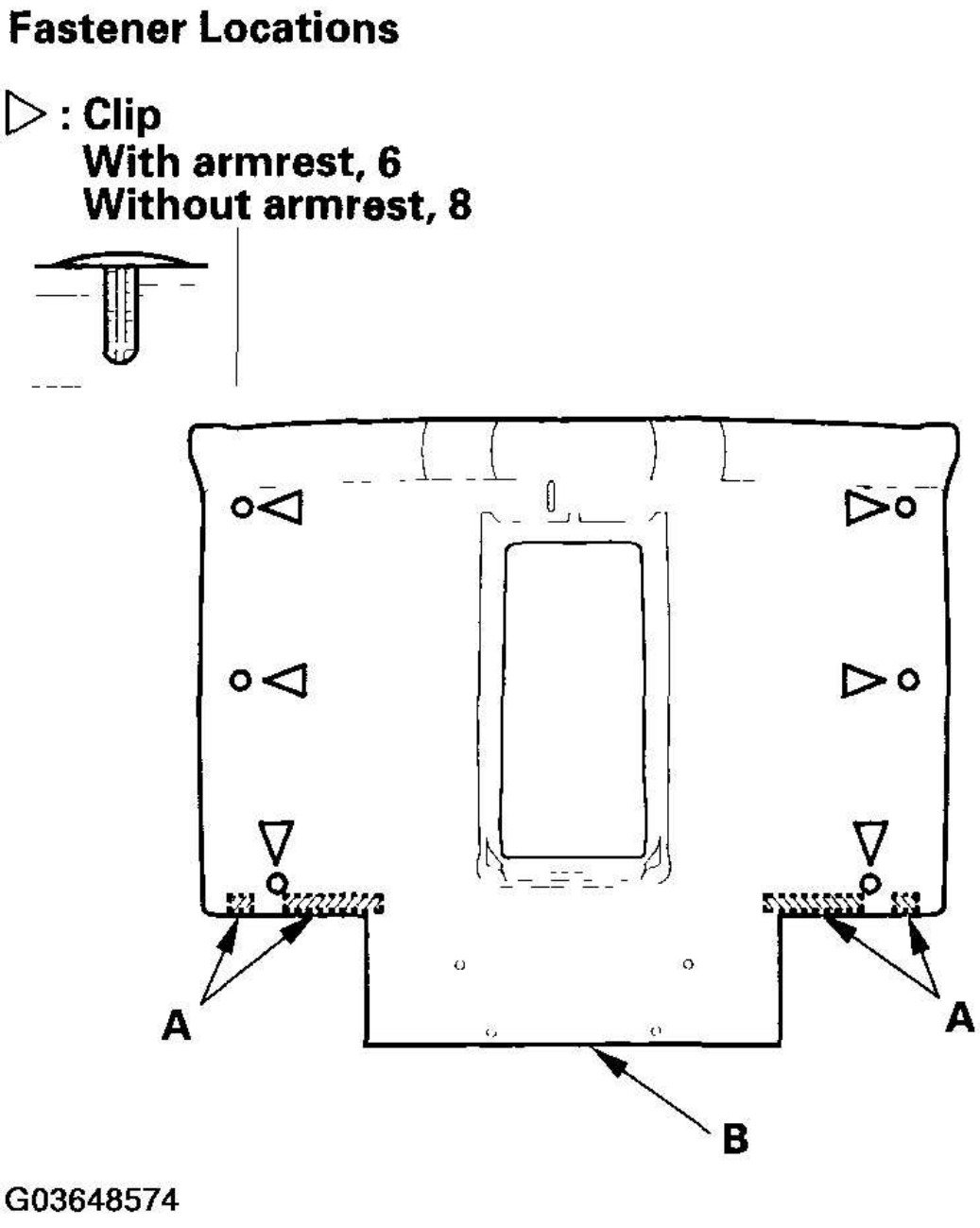


Fig. 80: Releasing Fasteners And Pulling Back Seat-back Mat (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Release all the clips (A), and hook strips (B), and fold back the seat-back cover

(C).

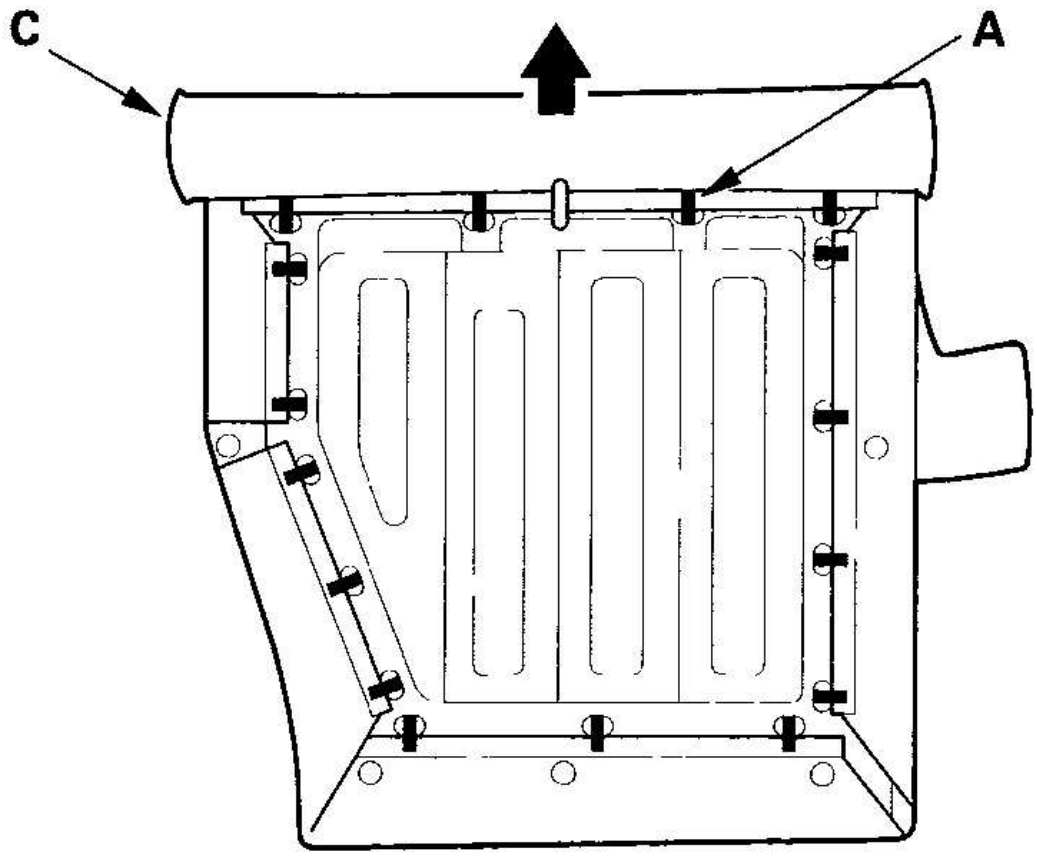


Fig. 81: Releasing Clips And Hook Strips (2-Door Left Seat-Back)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

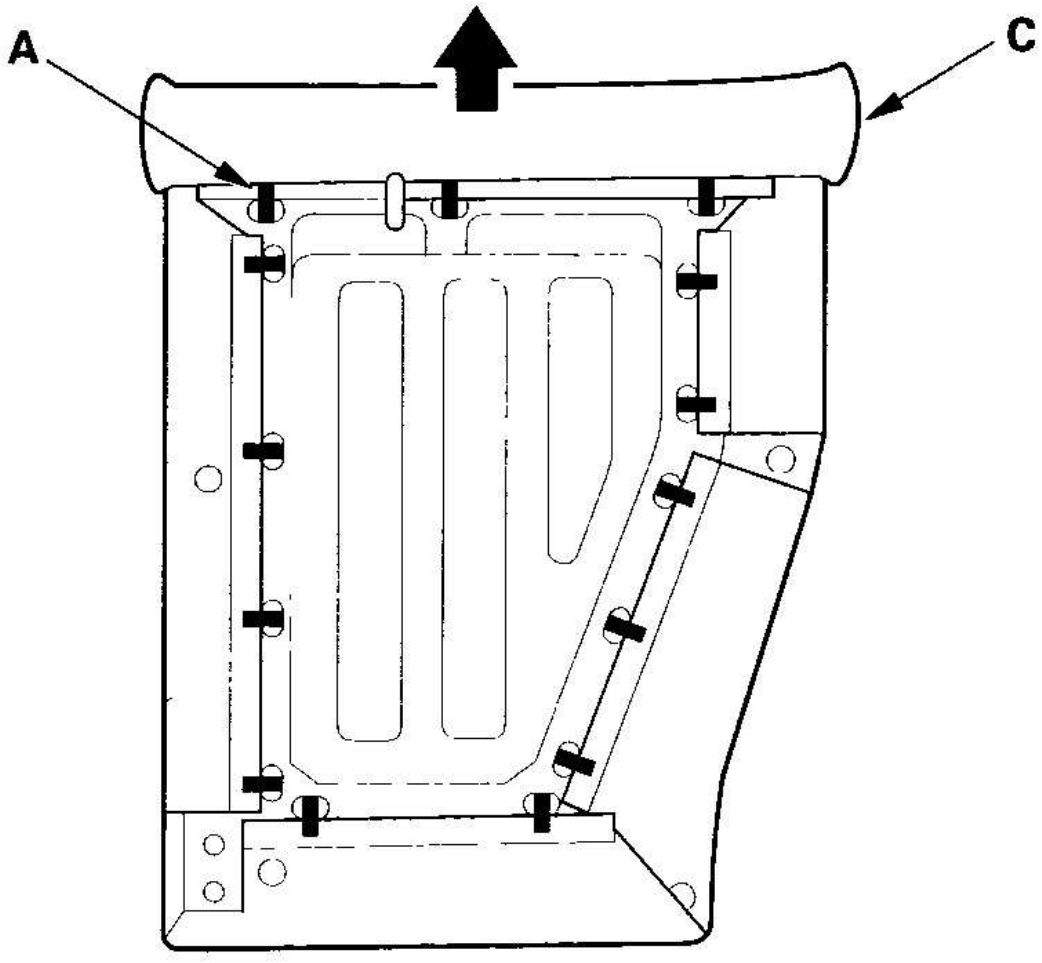


Fig. 82: Releasing Clips And Hook Strips (2-Door Right Seat-Back)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

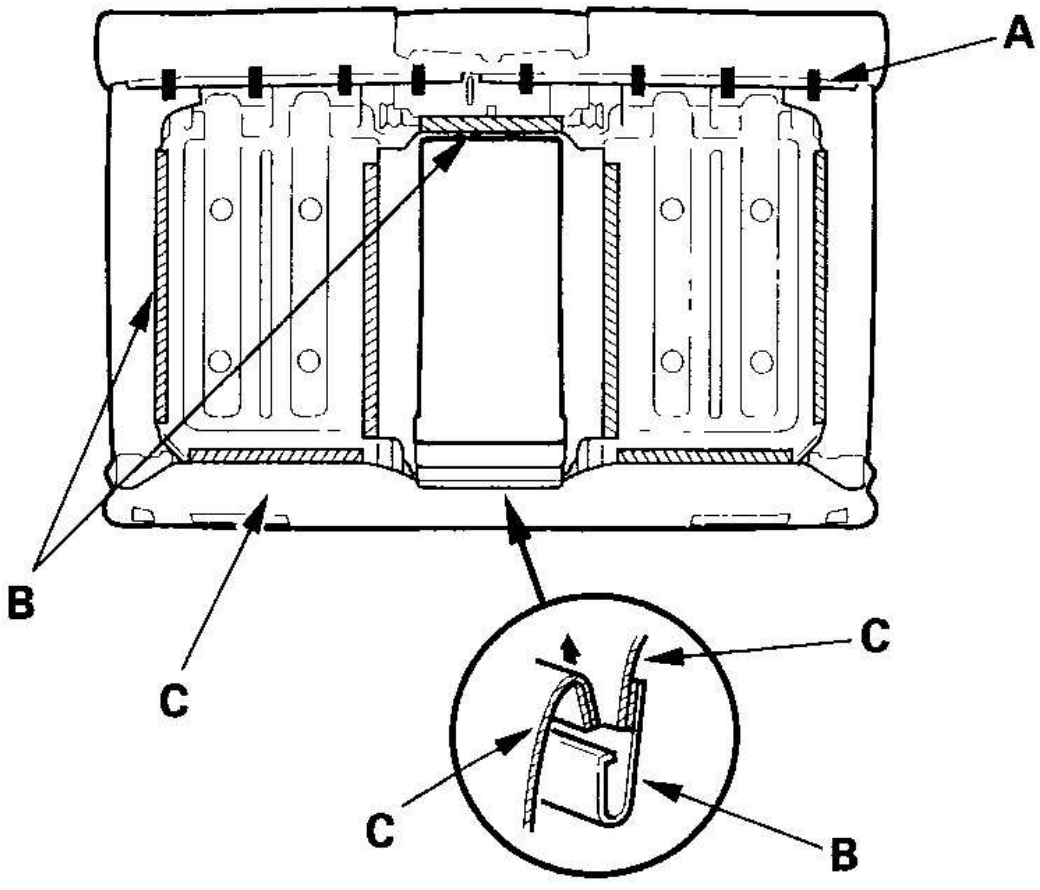


Fig. 83: Releasing Clips And Hook Strips (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Pull out the seat-back pad (A) from the frame (B), then pull out the headrest guides (C) while pinching the end of the guides, and remove them.

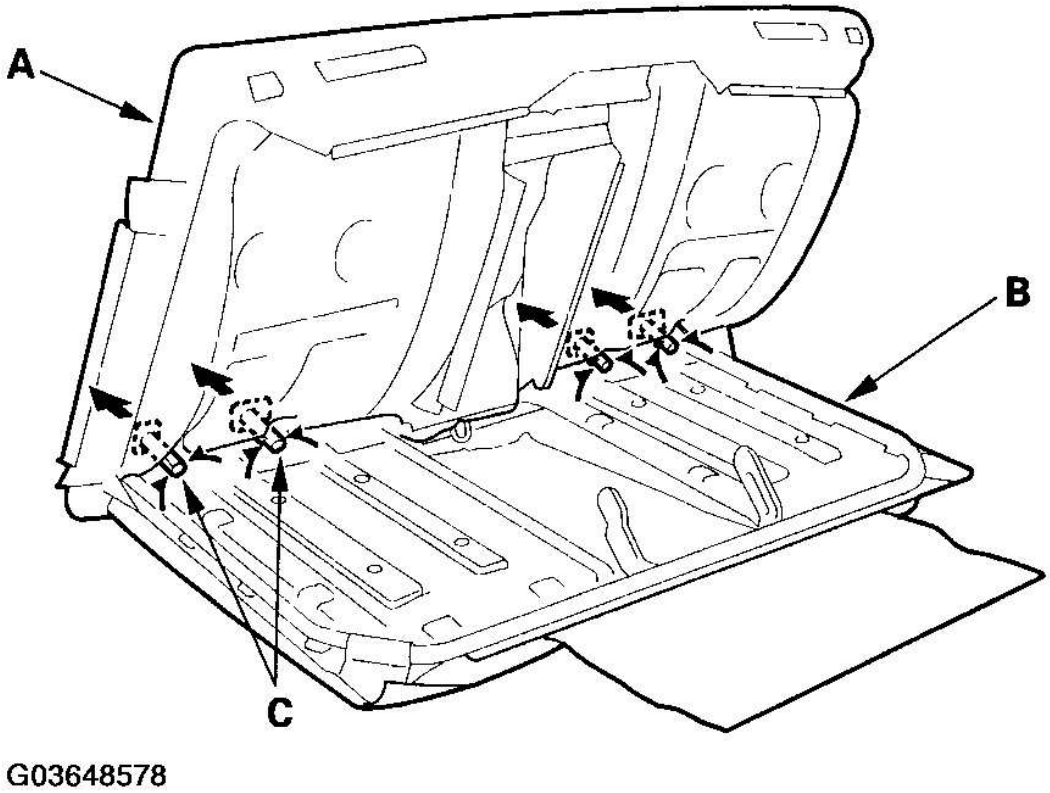


Fig. 84: Pulling Out Seat-Back Pad From Frame
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the seat-back cover and pad from the seat-back frame.
8. Pull back the edge of the seat-back cover (A) all the way around, and release the hooks (B) of the horizontal wires (C) from the vertical wires (D) on the pad (4-door), and remove the clips (E), then remove the seat-back cover.

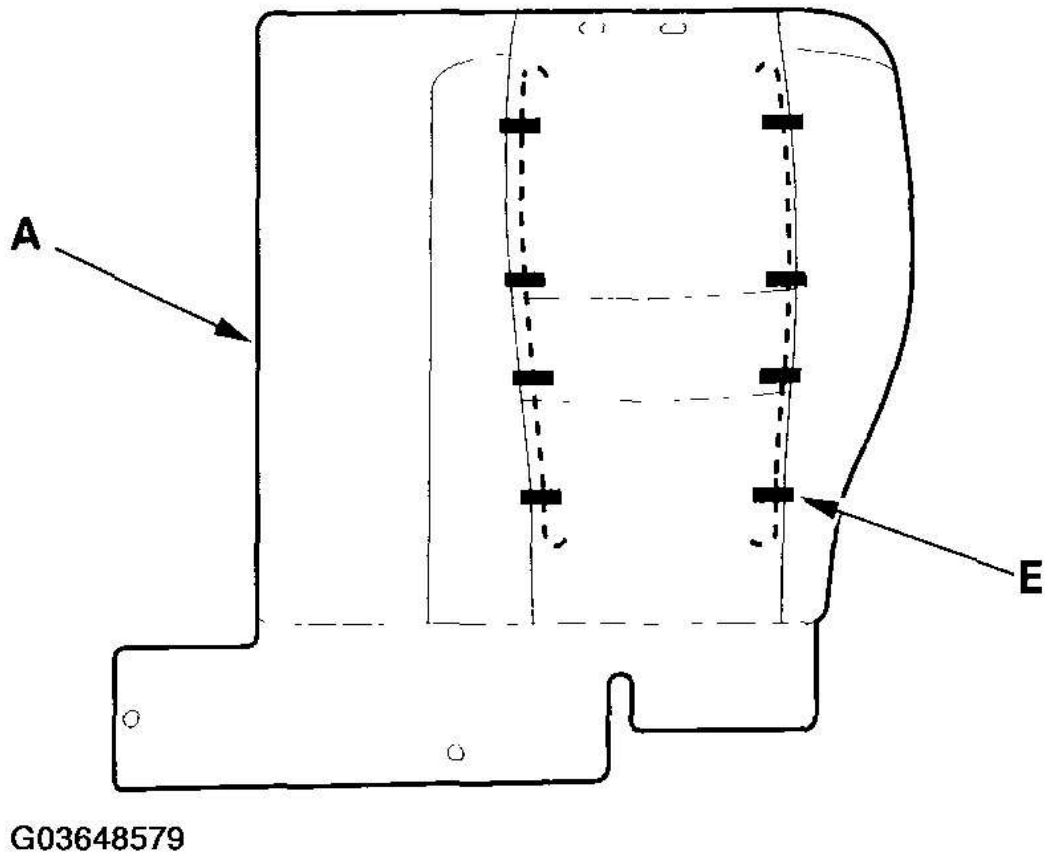


Fig. 85: Pulling Back Edge Of Seat-Back Cover (2-Door Left Seat-Back)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

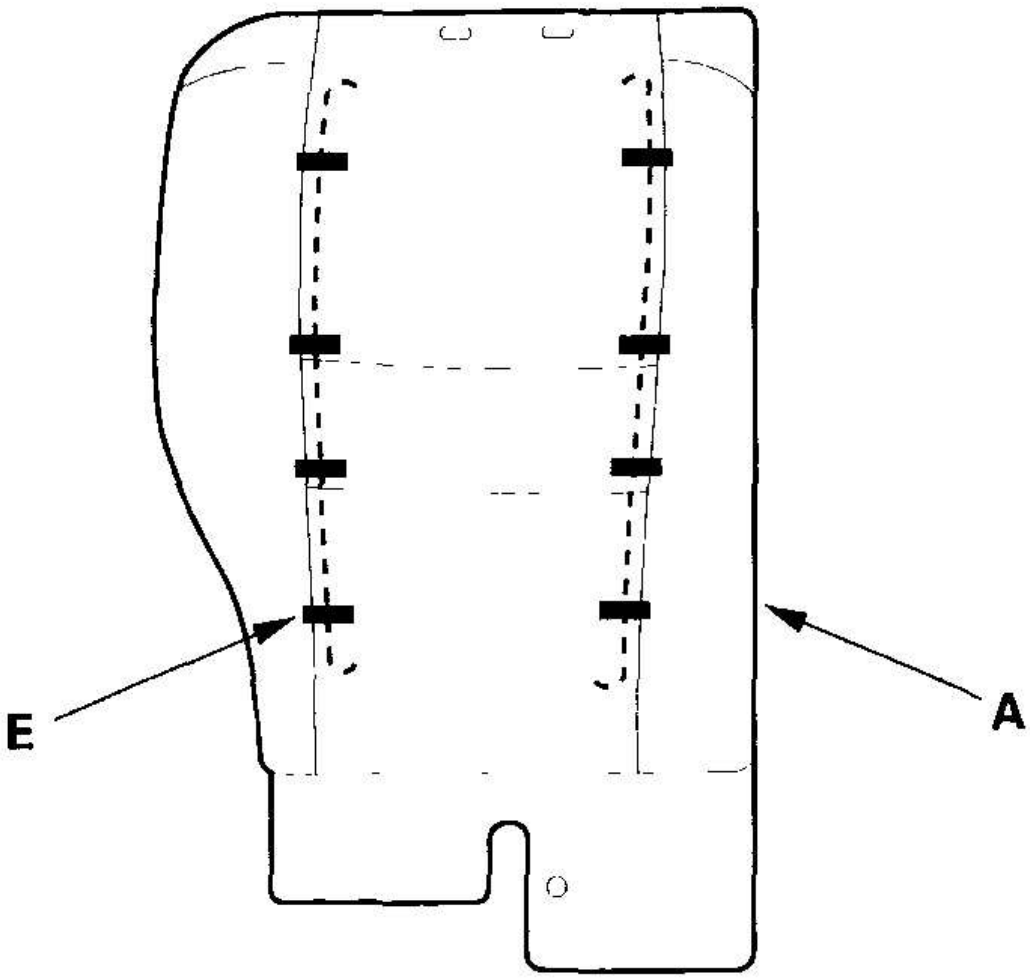


Fig. 86: Pulling Back Edge Of Seat-Back Cover (2-Door Right Seat-Back)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

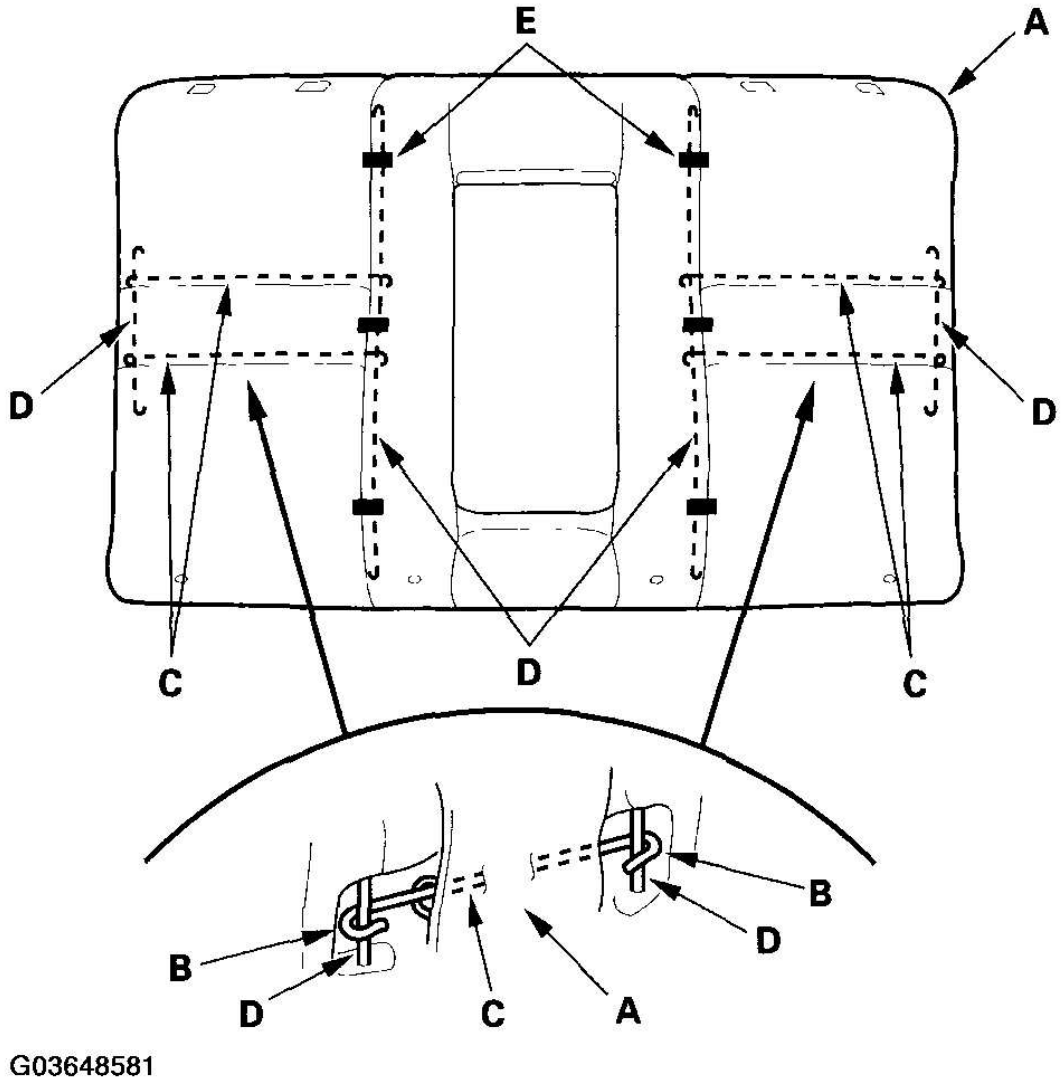


Fig. 87: Pulling Back Edge Of Seat-Back Cover (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the cover in the reverse order of removal, and note these items:
   - To prevent wrinkles when installing a seat-back cover, make sure the material is stretched evenly over the pad before securing the fasteners, hook strips, and clips.
   - Replace any clips you removed with new ones. Install them with commercially available upholstery ring pliers.

REAR SEAT SIDE BOLSTER COVER REPLACEMENT

4-DOOR

1. Remove the seat side bolster (see **4-DOOR**).
2. Release all the hook strips (A), fold back the seat side bolster cover (B), and release the cover from the hooks (C) to remove it.

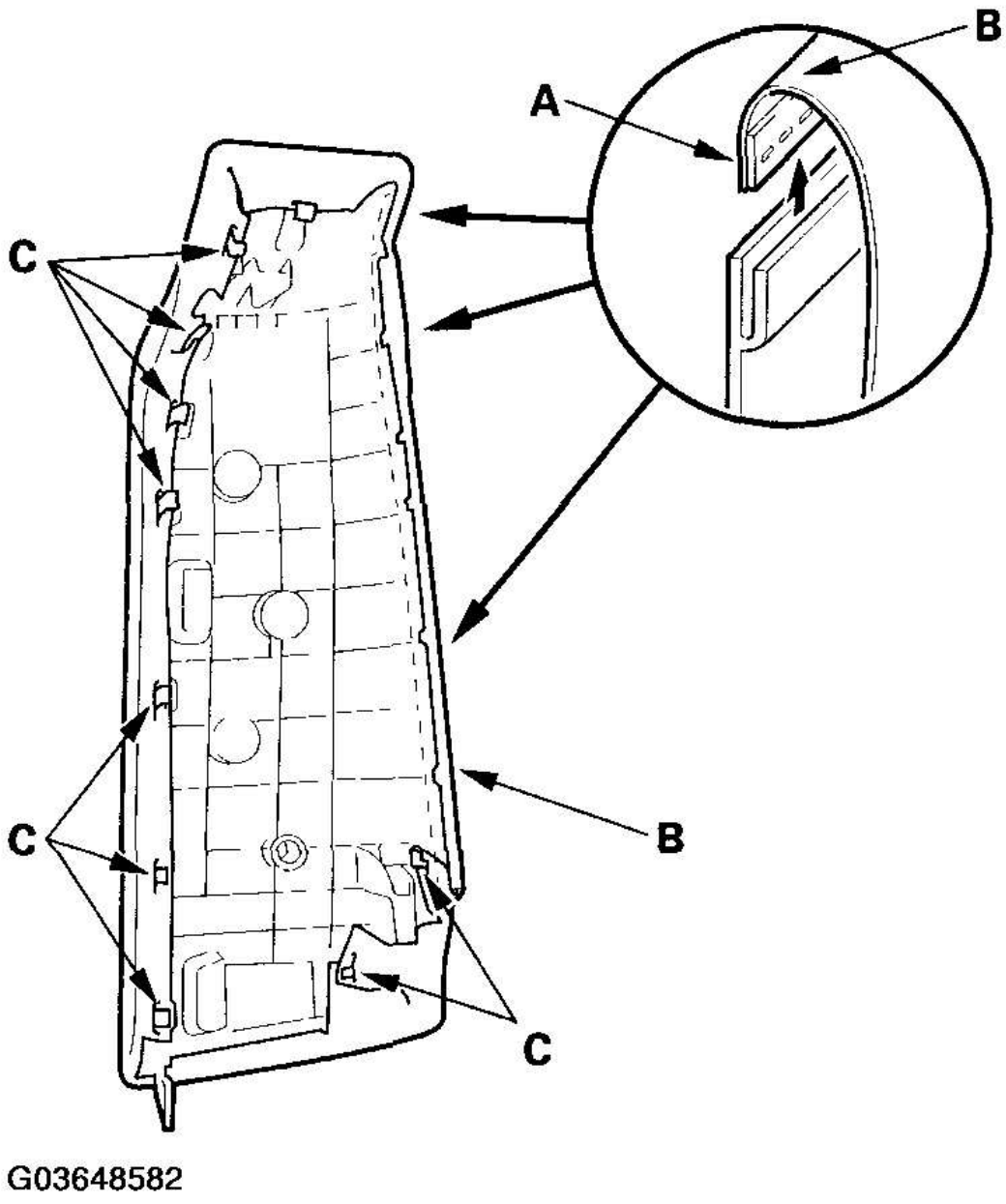


Fig. 88: Releasing Hook Strips Folding Back Seat Side Bolster Cover (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the cover in the reverse order of removal, and to prevent wrinkles, make

sure the material is stretched evenly over the pad before securing the hook strips.

REAR SEAT CUSHION COVER REPLACEMENT

1. Remove the seat-backs and seat cushion, 2-door (see **2-DOOR**), 4-door (see **4-DOOR**).
2. Release all the clips (A) from under the seat cushion, and fold back the seat cushion cover.

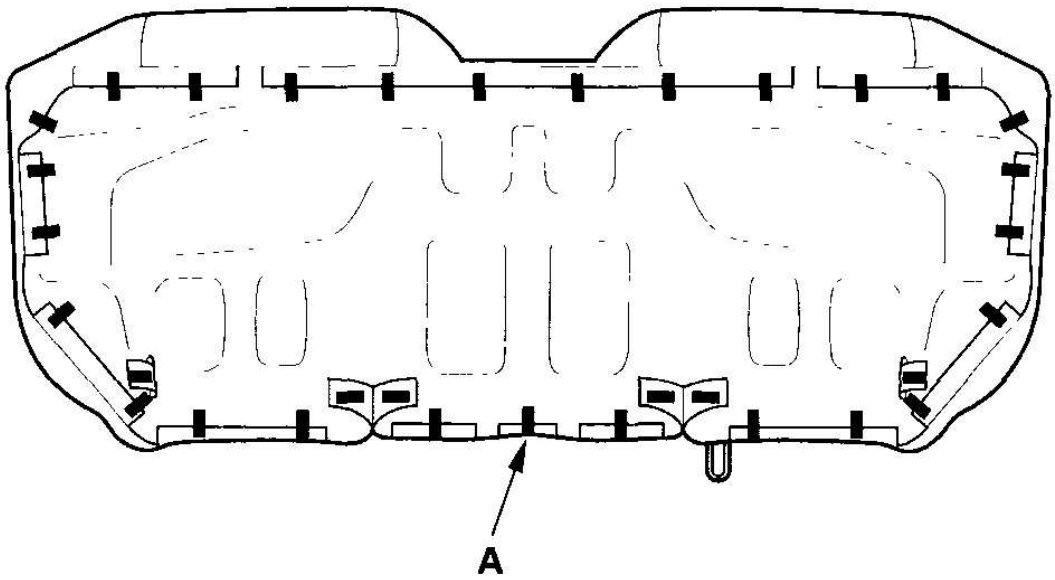


Fig. 89: Releasing Clips From Under Seat Cushion (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

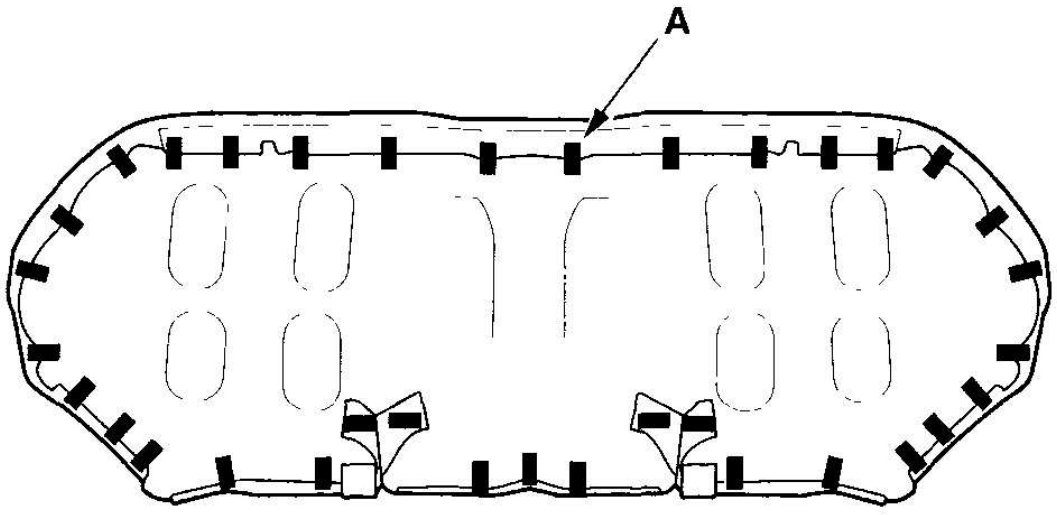
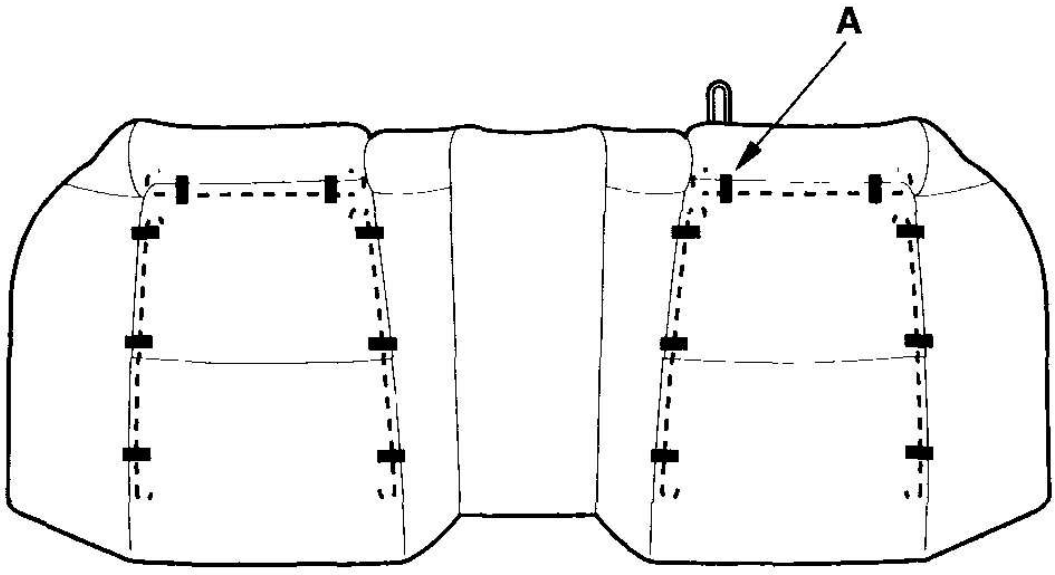


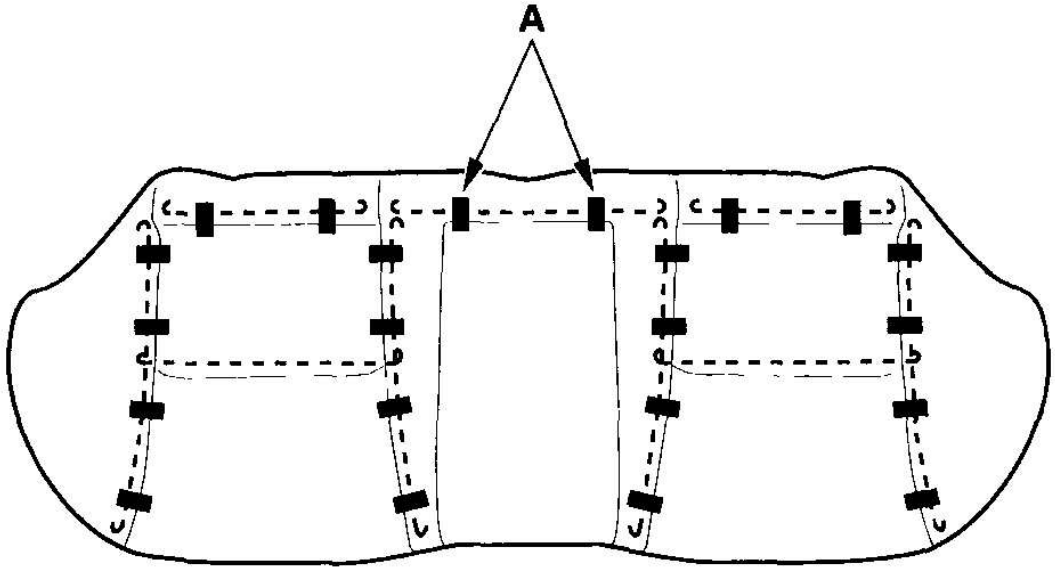
Fig. 90: Releasing Clips From Under Seat Cushion (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Pull back the edge of the seat cushion cover all the way around, and release the clips (A), then remove the seat cushion cover.



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Fig. 91: Releasing Clips And Removing Seat Cushion Cover (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.



G03648586

Fig. 92: Releasing Clips And Removing Seat Cushion Cover (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the cover in the reverse order of removal, and note these items:
   - To prevent wrinkles, make sure the material is stretched evenly over the pad before securing the clips.
   - Replace any clips (A) you removed with new ones. Install them with commercially available upholstery ring pliers (B).

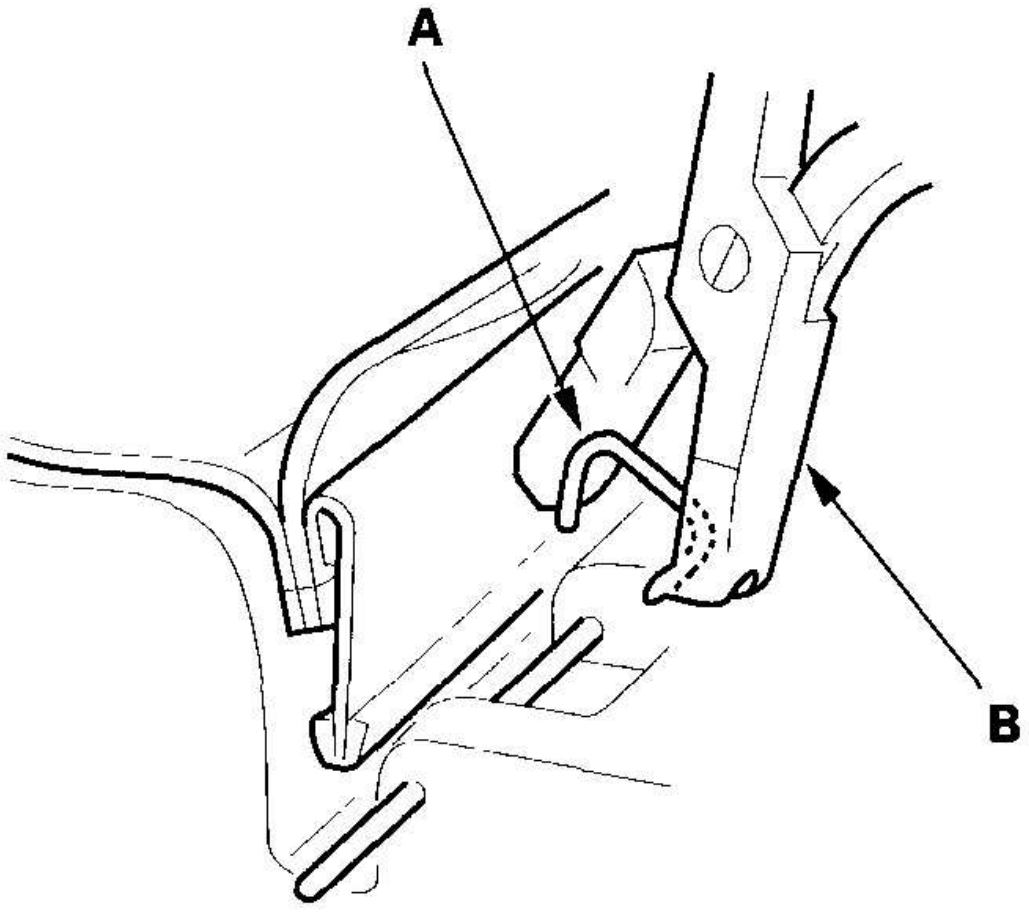


Fig. 93: Installing Rear Seat Cushion Cover

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 GENERAL INFORMATION

Specifications - Accord (V6)

STANDARDS AND SERVICE LIMITS

ENGINE ELECTRICAL

ENGINE ELECTRICAL STANDARDS AND SERVICE LIMITS SPECIFICATIONS

Item	Measurement	Qualification	Standard or New	Service Limit
Ignition coil	Rated voltage		12 V	
	Firing order		1-4-2-5-3-6	
Sparkplug	Type		NGK: IZFR6K11 DENSO: SKJ20DR-M11	
	Gap		1.0-1.1 mm (0.039-0.043 in.)	-
Ignition timing	At idle Check the red mark	M/T(in neutral)	10+/-2° BTDC	
		A/T (in N or P position)	10+/-2° BTDC	
Drive belt	Tension		Auto tensioner	
Alternator (DELPHI)	Output	At 13.5 V and normal engine temperature	105 A	
Alternator (DENSO)	Output	At 13.5 V and normal engine temperature	110 A	
	Coil (rotor) resistance	At 68° F (20° C)	2.3-2.7 ohms	
	Slip ring O.D.		14.2-14.4 mm (0.56-0.57 in.)	13.8 mm (0.54 in.)
	Brush length		10.5 mm (0.41 in.)	1.5 mm (0.06 in.)

	Brush spring tension		2.94-3.53 N (0.30-0.36 kgf, 0.66-0.80 lbf)	
Starter	Output		1.6 kW	
	Commutator mica depth		0.4-0.5 mm (0.016-0.020 in.)	0.15 mm (0.006 in.)
	Commutator runout		0.02 mm (0.001 in.) max.	0.05 mm (0.002 in.)
	Commutator O.D.		28.0-28.1 mm (1.102-1.106 in.)	27.5 mm (1.083 in.)
	Brush length		15.8-16.2 mm (0.62-0.64 in.)	11.0 mm (0.43 in.)
	Brush spring tension (new)		15.7-17.7 N (1.60-1.80 kgf, 3.53-3.97 lbf)	

ENGINE ASSEMBLY

ENGINE ASSEMBLY STANDARDS AND SERVICE LIMITS SPECIFICATIONS

Item	Measurement	Qualification	Standard or New	Service Limit
Compression	Pressure Check the engine with the starter cranking	Minimum	930 kPa (9.5 kgf/cm^2 , 135 psi)	-
		Maximum variation	200 kPa (2.0 kgf/cm^2 , 28 psi)	-

CYLINDER HEAD

CYLINDER HEAD STANDARDS AND SERVICE LIMITS SPECIFICATIONS

Item	Measurement	Qualification	Standard or New	Service Limit
Head	Warpage			0.05 mm (0.002 in.)
	Height		120.95-121.05 mm (4.762-4.766 in.)	-
Camshaft	End play		0.05-0.20 mm (0.002-0.008 in.)	0.20 mm (0.008 in.)
	Camshaft-to-holder oil clearance		0.050-0.089 mm (0.0020-0.0035 in.)	0.15 mm (0.006 in.)
	Total runout		0.03 mm (0.001 in.) max.	0.04 mm (0.002 in.)
	Cam lobe height	Intake, primary	35.041 mm (1.3796 in.)	
		Intake, mid	36.445 mm (1.4348 in.)	-
		Intake, secondary	35.284 mm (1.3891 in.)	-
		Exhaust	36.326 mm (1.4302 in.)	-
Valve	Clearance (cold)	Intake	0.20-0.24 mm (0.008-0.009 in.)	-
		Exhaust	0.28-0.32 mm (0.011-0.013 in.)	-
	Stem O.D.	Intake	5.485-5.495 mm (0.2159-0.2163 in.)	5.455 mm (0.2148 in.)
		Exhaust	5.450-5.460 mm (0.2146-0.2150 in.)	5.420 mm (0.2134 in.)
		Intake	0.020-0.045 mm (0.0008-0.0018	0.08 mm

	Stem-to-guide clearance		in.)	(0.003 in.)
		Exhaust	0.055-0.080 mm (0.0022-0.0031 in.)	0.11 mm (0.004 in.)
Valve seat	Width	Intake	1.25-1.55 mm (0.049-0.061 in.)	2.00 mm (0.079 in.)
		Exhaust	1.25-1.55 mm (0.049-0.061 in.)	2.00 mm (0.079 in.)
	Stem installed height	Intake	46.75-47.55 mm (1.841-1.872 in.)	47.80 mm (1.882 in.)
		Exhaust	46.68-47.48 mm (1.838-1.869 in.)	47.73 mm (1.879 in.)
Valve spring	Free length	Intake	51.54 mm (2.029 in.)	-
		Exhaust	51.06 mm (2.010 in.)	-
Valve guide	I.D.	Intake	5.515-5.530 mm (0.2171-0.2177 in.)	5.55 mm (0.219 in.)
		Exhaust	5.515-5.530 mm (0.2171-0.2177 in.)	5.55 mm (0.219 in.)
	Installed height	Intake	21.20-22.20 mm (0.835-0.874 in.)	-
		Exhaust	20.63-21.63 mm (0.812-0.852 in.)	-
Rocker arm	Arm-to-shaft clearance	Intake	0.026-0.067 mm (0.0010-0.0026 in.)	0.067 mm (0.0026 in.)
		Exhaust	0.026-0.077 mm (0.0010-0.0030 in.)	0.077 mm (0.0030 in.)

ENGINE BLOCK

ENGINE BLOCK STANDARDS AND SERVICE LIMITS SPECIFICATIONS

Item	Measurement	Qualification	Standard or New	Service Limit
Block	Warpage of deck		0.07 mm (0.003 in.) max.	0.10 mm (0.004 in.)
	Bore diameter		86.000-86.015 mm (3.3858-3.3864 in.)	86.065 mm (3.3884 in.)
	Bore taper		-	0.05 mm (0.002 in.)
	Reboring limit		-	0.5 mm (0.02 in.)
Piston	Skirt O.D. at 16.0 mm (0.63 in.) from bottom of skirt		85.975-85.985 mm (3.3848-3.3852 in.)	85.965 mm (3.3844 in.)
	Clearance in cylinder		0.015-0.040 mm (0.0006-0.0016 in.)	0.08 mm (0.003 in.)
	Ring groove width	Top	1.240-1.250 mm (0.0488-0.0492 in.)	1.27 mm (0.050 in.)
		Second	1.220-1.230 mm (0.0480-0.0484 in.)	1.25 mm (0.049 in.)
		Oil	2.805-2.825 mm (0.1104-0.1112 in.)	2.85 mm (0.112 in.)
	Ring-to-groove clearance	Top	0.055-0.080 mm (0.0022-0.0031 in.)	0.15 mm (0.006 in.)
			0.030-0.055 mm	

Piston ring		Second	(0.0012-0.0022 in.)	0.13 mm (0.005 in.)
	Ring end gap	Top	0.20-0.35 mm (0.008-0.014 in.)	0.60 mm (0.024 in.)
		Second	0.40-0.55 mm (0.0016-0.022 in.)	0.70 mm (0.028 in.)
		Oil	0.20-0.70 mm (0.008-0.028 in.)	0.80 mm (0.031 in.)
Piston pin	O.D.		21.962-21.965 mm (0.8646-0.8648 in.)	21.954 mm (0.8643 in.)
	Pin-to-piston clearance		-0.0050 to +0.0010 mm (-0.00020 to +0.00004 in.)	0.004 mm (0.0002 in.)
Connecting rod	Pin-to-rod clearance		0.005-0.014 mm (0.0002-0.0006 in.)	0.019 mm (0.0007 in.)
	Small-end bore diameter		21.970-21.976 mm (0.8650-0.8652 in.)	-
	Large-end bore diameter (Normal)		56.0 mm (2.20 in.)	-
	End play installed on crankshaft		0.15-0.35 mm (0.006-0.014 in.)	0.45 mm (0.018 in.)
	Main journal diameter		71.976-72.000 mm (2.8337-2.8346 in.)	-
	Rod journal diameter		52.976-53.000 mm (2.0857-2.0866 in.)	-
				0.010 mm

Crankshaft	Rod/main journal taper		0.005 mm (0.0002 in.) max.	(0.0004 in.)
	Rod/main journal out-of-round		0.005 mm (0.0002 in.) max.	0.010 mm (0.0004 in.)
	End play		0.10-0.35 mm (0.004-0.014 in.)	0.45 mm (0.018 in.)
	Runout		0.020 mm (0.0008 in.) max.	0.03 mm (0.0012 in.)
Crankshaft bearing	Main bearing-to-journal oil clearance		0.020-0.044 mm (0.0008-0.0017 in.)	0.050 mm (0.0020 in.)
	Rod bearing clearance		0.020-0.044 mm (0.0008-0.0017 in.)	0.050 mm (0.0020 in.)

ENGINE LUBRICATION

ENGINE LUBRICATION STANDARDS AND SERVICE LIMITS SPECIFICATIONS

Item	Measurement	Qualification	Standard or New	Service Limit
Engine oil	Capacity	Engine overhaul	5.0 L (5.3 US qt)	
		Oil change, including filter	4.3 L (4.5 US qt)	
		Oil change, without filter	4.0L (4.2 US qt)	
	Inner-to-outer rotor clearance		0.04-0.16 mm (0.002-0.006 in.)	0.20 mm (0.008 in.)
	Pump housing-to-outer rotor clearance		0.14-0.19 mm (0.006-0.007 in.)	0.20 mm (0.008 in.)

Oil pump	Pump housing-to-outer rotor axial clearance		0.02-0.07 mm (0.001-0.003 in.)	0.12 mm (0.005 in.)
	Oil pressure with oil temperature at 176°F (80°C)	At idle	70 kPa (0.7 kgf/cm^2 , 10 psi)	
		At 3,000 rpm	490 kPa (5.0 kgf/cm^2 , 71 psi)	

COOLING

COOLING STANDARDS AND SERVICE LIMITS SPECIFICATIONS

Item	Measurement	Qualification	Standard or New
Radiator	Coolant capacity (includes engine, heater, hoses, and reservoir) Use Honda Long Life Antifreeze/ Coolant Type 2	M/T: engine overhaul	8.2 L (2.17 US gal)
		M/T: coolant change	6.6 L (1.74 US gal)
		A/T: engine overhaul	8.4 L (2.22 US gal)
		A/T: coolant change	6.7 L (1.77 US gal)
Reservoir	Coolant capacity		0.6 L (0.16 US gal)
Radiator cap	Opening pressure		93-123 kPa (0.95-1.25 kgf/cm^2 , 14-18 psi)
Thermostat	Opening temperature	Begins to open	169-176 ° F (76-80 ° C)
		Fully open	194°F (90°C)
	Valve lift at fully open		10.0 mm (0.39 in.) min.

FUEL AND EMISSIONS

FUEL AND EMISSIONS STANDARDS AND SERVICE LIMITS SPECIFICATIONS

Item	Measurement	Qualification	Standard or New
Fuel pressure regulator	Pressure with fuel pressure gauge connected	2003-2004 models	330-380 kPa (3.4-3.9 kgf/cm^2 , 48-55 psi)
		2005-2006 models	380-430 kPa (3.9-4.4 kgf/cm^2 , 55-63 psi)
Fuel tank	Capacity		64.7 L (17.09 US gal)
Engine idle	Idle speed without load	A/Tin Nor P position	790+/-50 rpm
		M/T in neutral	750+/-50 rpm
	Idle speed with high electric load (A/C switch ON, temperature set to Max Cool, blower fan on High, rear window defogger ON, and headlights on high beams)	A/T in N or P position	790+/-50 rpm
		M/T in neutral	750+/-50 rpm

CLUTCH

CLUTCH STANDARDS AND SERVICE LIMITS SPECIFICATIONS

Item	Measurement	Qualification	Standard or New	Service Limit
Clutch pedal	Height from the floor		191 mm (7.52 in.)	-
	Stroke		130-140 mm (5.12-5.51 in.)	-
	Play		10-18 mm (0.39-0.71 in.)	-

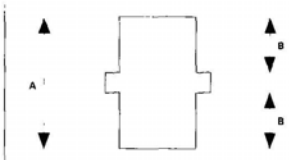
	Disengagement height from the floor		90.5 mm (3.56 in.) min.	-
Clutch disc	Rivet head depth		1.0 mm (0.039 in.) min.	0.2 mm (0.008 in.)
	Thickness		8.68-9.53 mm (0.342-0.375 in.)	7.2 mm (0.28 in.)
Pressure plate	Warpage		0.03 mm (0.001 in.) max.	0.15 mm (0.006 in.)
	Height of diaphragm spring fingers	Measured with special tool and feeler gauge	0.6 mm (0.02 in.) max.	0.8 mm (0.03 in.)

MANUAL TRANSMISSION AND M/T DIFFERENTIAL

Item	Measurement	Qualification	Standard or New	Service Limit
Transmission fluid	Capacity	Fluid change	2.2 L (2.3 US qt)	
	Use Honda MTF	Overhaul	2.5 L (2.6 US qt)	
Mainshaft	End play		0.14—0.21 mm (0.006—0.008 in.)	Adjust
	Diameter of pilot bearing surface		19.967—19.980 mm (0.7861—0.7866 in.)	19.91 mm (0.784 in.)
	Diameter of 4th and 5th gears distance collar		35.987—36.000 mm (1.4168—1.4173 in.)	35.93 mm (1.415 in.)
	Diameter of ball bearing contact area (clutch housing side)		28.002—28.015 mm (1.1024—1.1030 in.)	27.95 mm (1.100 in.)
	Diameter of needle bearing contact area		41.984—42.000 mm (1.6529—1.6535 in.)	41.93 mm (1.651 in.)
	Diameter of 6th gear distance collar		32.987—33.000 mm (1.2987—1.2992 in.)	32.93 mm (1.296 in.)
	Diameter of ball bearing contact area (transmission housing side)		30.987—31.000 mm (1.2200—1.2205 in.)	30.93 mm (1.218 in.)
	Runout		0.02 mm (0.001 in.) max.	0.05 mm (0 002 in.)
Mainshaft 3rd gear	I.D.		47.009—47.025 mm (1.8507—1.8514 in.)	47.08 mm (1.854 in.)
	End play		0.06—0.19 mm (0.002—0.007 in.)	0.3 mm (0.01 in.)
	Thickness		23.89—23.97 mm (0.941—0.944 in.)	23.8 mm (0.94 in.)
Mainshaft 4th and 5th gear	I.D.		47.009—47.025 mm (1.8507—1.8514 in.)	47.08 mm (1.854 in.)
	End play		0.06—0.19 mm (0.002—0.007 in.)	0.3 mm (0.01 in.)
	Thickness		22.39—22.47 mm (0.881—0.885 in.)	22.3 mm (0.88 in.)
Mainshaft 6th gear	I.D.		44.009—44.025 mm (1.7326—1.7333 in.)	44.08 mm (1.735 in.)
	End play		0.06—0.19 mm (0.002—0.007 in.)	0.3 mm (0.01 in.)
	Thickness		21.89—21.97 mm (0.862—0.865 in.)	21.8 mm (0.86 in.)
Countershaft	Diameter of needle bearing contact area (clutch housing side)		43.974—43.990 mm (1.7313—1.7319 in.)	43.92 mm (1.729 in.)
	Diameter of distance collar contact area		42.975—42.991 mm (1.6919—1.6926 in.)	42.92 mm (1.690 in.)
	Diameter of ball bearing contact area (transmission housing side)		30.002—30.015 mm (1.1812—1.1817 in.)	29.95 mm (1.179 in.)
	Diameter of countershaft reverse gear		45.934—45.950 mm (1.8084—1.8091 in.)	45.88 mm (1.806 in.)
	Runout		0.02 mm (0.001 in.) max.	0.05 mm (0.002 in.)
	35 mm shim-to-bearing inner race clearance		0.04—0.10 mm (0.0016—0.0039 in.)	Adjust
Countershaft 1st gear	I.D.		57.010—57.029 mm (2.2445—2.2452 in.)	57.08 mm (2.247 in.)
	End play		0.04—0 17 mm (0.002—0.007 in.)	0.28 mm (0.011 in.)
	Thickness		22.91—22.99 mm (0.902—0.905 in.)	22.86 mm (0.900 in.)
Countershaft 2nd gear	I.D.		57.010—57.029 mm (2.2445—2.2452 in.)	57.08 mm (2.247 in.)
	End play		0.04—0.17 mm (0.002—0.007 in.)	0.28 mm (0.011 in.)
	Thickness		22.91—22.99 mm (0.902—0.905 in.)	22.86 mm (0.900 in.)
Countershaft *reverse gear*	I.D.		45.970—45.988 mm (1.8098—1.8105 in.)	46.04 mm (1.813 in.)
	O.D.		51.987—52.000 mm (2.0467—2.0472 in.)	51.93 mm (2.044 in.)
	Length		23.03—23.08 mm (0.907—0.909 in.)	——
Countershaft 2nd gear distance collar	I.D.		42.990—43.000 mm (1.6925—1.6929 in.)	43.05 mm (1.695 in.)
	O.D.		51.989—52.000 mm (2.0468—2.0472 in.)	51.94 mm (2.045 in.)
	Length		23.03—23.08 mm (0.907—0.909 in.)	——

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Fig. 1: Manual Transmission And M/T Differential Standards And Service Limits Specifications (1 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Item	Measurement	Qualification	Standard or New	Service Limit
Mainshaft 4th and 5th gear distance collar	I.D.		36.002—36.012 mm (1.4174—1.4178 in.)	36.06 mm (1.420 in.)
	O.D.		41.989—42.000 mm (1.6531—1.6535 in.)	41.94 mm (1.651 in.)
	Length	A	49.95—50.05 mm (1.967—1.970 in.)	———
		B	22.53—22.58 mm (0.887—0.889 in.)	———
				
Mainshaft 6th gear distance collar	I.D.		33.002—33.012 mm (1.2993—1.2997 in.)	33.06 mm (1.302 in.)
	O.D.		38.989—39.000 mm (1.5350—1.5354 in.)	38.94 mm (1.533 in.)
	Length		22.03—22.08 mm (0.867—0.869 in.)	———
Reverse shaft	O.D.		19.989—20.000 mm (0.7870—0.7874 in.)	19.93 mm (0.785 in.)
Reverse drive/ driven gear	I.D.		25.007—25.020 mm (0.9845—0.9850 in.)	25.07 mm (0.987 in.)
5th synchro ring	Ring-to-gear clearance	Ring pushed against gear	0.70—1.49 mm (0.028—0.059 in.)	0.4 mm (0.016 in.)
6th synchro ring	Ring-to-gear clearance	Ring pushed against gear	0.73—1.44 mm (0.029—0.057 in.)	0.4 mm (0.016 in.)
Double cone synchro	Outer synchro ring-to-synchro cone clearance	Ring pushed against gear	0.70—1.19 mm (0.028—0.047 in.)	0.3 mm (0.012 in.)
	Synchro cone-to-gear clearance	Ring pushed against gear	0.50—1.04 mm (0.020—0.041 in.)	0.3 mm (0.012 in.)
	Outer synchro ring-to-gear cone clearance	Ring pushed against gear	0.95—1.68 mm (0.037—0.066 in.)	0.6 mm (0.024 in.)
1st triple cone synchro	Outer synchro ring-to-synchro cone clearance	Ring pushed against gear	0.70—1.19 mm (0.028—0.047 in.)	0.3 mm (0.012 in.)
	Synchro cone-to-gear clearance	Ring pushed against gear	0.45—1.14 mm (0.018—0.045 in.)	0.3 mm (0.012 in.)
	Outer synchro ring-to-gear cone clearance	Ring pushed against gear	1.12—1.68 mm (0.044—0.066 in.)	0.6 mm (0.024 in.)
2nd triple cone synchro	Outer synchro ring-to-synchro cone clearance	Ring pushed against gear	0.70—1.19 mm (0.028—0.047 in.)	0.3 mm (0.012 in.)
	Synchro cone-to-gear clearance	Ring pushed against gear	0.60—1.88 mm (0.024—0.074 in.)	0.3 mm (0.012 in.)
	Outer synchro ring-to-gear cone clearance	Ring pushed against gear	0.87—1.82 mm (0.034—0.072 in.)	0.6 mm (0.024 in.)
1st/2nd, 3rd/4th, 5th/6th Shift fork	Finger thickness		7.4—7.6 mm (0.29—0.30 in.)	———
	Fork-to-synchro sleeve clearance		0.35—0.65 mm (0.014—0.026 in.)	1.0 mm (0.039 in.)
Reverse shift fork	Finger thickness		6.2—6.4 mm (0.24—0.25 in.)	———
	Fork-to-synchro sleeve clearance		0.35—0.65 mm (0.014—0.026 in.)	1.0 mm (0.039 in.)
Reverse shift lever	Finger thickness		6.400—6.650 mm (0.2520—0.2618 in.)	———
	Shift lever-to-shift fork clearance		0.05—0.50 mm (0.002—0.020 in.)	0.6 mm (0.024 in.)
	Shift lever diameter at contact area		13.0—13.2 mm (0.51—0.52 in.)	———
	Shift lever-to-interlock clearance		0—0.4 mm (0—0.015 in.)	0.5 mm (0.020 in.)
Shift piece	I.D.		14.000—14.068 mm (0.5512—0.5539 in.)	———
	Shift fork diameter at contact area		12.8—13.0 mm (0.50—0.51 in.)	———
	Shift piece-to-shift fork clearance		0.2—0.6 mm (0.008—0.024 in.)	0.7 mm (0.028 in.)

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Fig. 2: Manual Transmission And M/T Differential Standards And Service Limits Specifications (2 Of 3)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Item	Measurement	Qualification	Standard or New	Service Limit
Shift arm	I.D.		15.973—16.005 mm (0.6289—0.6301 in.)	———
	Shift piece diameter at contact area		13.9—14.0 mm (0.54—0.55 in.)	———
	Shift arm-to-shift piece clearance		0.05—0.25 mm (0.002—0.010 in.)	0.5 mm (0.020 in.)
Select arm	I.D.		11.01—11.05 mm (0.433—0.435 in.)	———
	Interlock diameter at contact area		12.9—13.0 mm (0.50—0.51 in.)	———
	Select arm-to-interlock clearance		0.05—0.25 mm (0.002—0.010 in.)	0.5 mm (0.020 in.)
Oil pump	Oil pump thrust clearance		0.03—0.13 mm (0.001—0.005 in.)	0.15 mm (0.006 in.)
	Outer rotor-to-body clearance		0.1—0.2 mm (0.004—0.008 in.)	0.22 mm (0.009 in.)
	Inter rotor-to-outer rotor clearance		0.14 mm (0.006 in.)	0.2 mm (0.008 in.)
	Oil pump inner rotor I.D.		17.1—17.2 mm (0.67—0.68 in.)	———
	Oil pump shaft O.D.		16.8—17.0 mm (0.66—0.67 in.)	———
M/T differential carrier	Backlash		0.4—1.3 mm (0.016—0.051 in.)	———
	Driveshaft contact area I.D.		30.025—30.045 mm (1.1821—1.1829 in.)	———
	Carrier bearing starting torque (preload)		3.43—4.51 N·m (35—46 kgf-cm, 30—40 lbf-in.)	Adjust

G03671098

Fig. 3: Manual Transmission And M/T Differential Standards And Service Limits Specifications (3 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

AUTOMATIC TRANSMISSION AND A/T DIFFERENTIAL

AUTOMATIC TRANSMISSION AND A/T DIFFERENTIAL STANDARDS AND SERVICE LIMITS SPECIFICATIONS (1 OF 3)

Item	Measurement	Qualification	Standard or New	Service Limit
ATF (Automatic Transmission Fluid)	Capacity Use Honda ATF-Z1	Fluid change	3.0 L (3.2 US qt)	
		Overhaul	7.0 L (7.4 US qt)	
	Line pressure	At 2,000 rpm in N or P position	900-960 kPa (9.2-9.8 kgf/cm^2, 130-140 psi)	850 kPa (8.7 kgf/cm^2, 120 psi)
	5th clutch pressure	At 2,000 rpm in D position	890-970 kPa (9.1-9.9 kgf/cm^2, 130-140 psi)	840 kPa (8.6 kgf/cm^2, 120 psi)
		At 2,000 rpm in	890-970 kPa (9.1-9.9	840 kPa (8.6

ATF pressure	4th clutch pressure	D position	kgf/cm^2 , 130-140 psi)	kgf/cm^2 , 120 psi)
	3rd clutch pressure	At 2,000 rpm in D3 position	890-970 kPa (9.1-9.9 kgf/cm^2 , 130-140 psi)	840 kPa (8.6 kgf/cm^2 , 120 psi)
	2nd clutch pressure	At 2,000 rpm in 2 position	890-970 kPa (9.1-9.9 kgf/cm^2 , 130-140 psi)	840 kPa (8.6 kgf/cm^2 , 120 psi)
	1st clutch pressure	At 2,000 rpm in 1 position	890-970 kPa (9.1-9.9 kgf/cm^2 , 130-140 psi)	840 kPa (8.6 kgf/cm^2 , 120 psi)
	Ist-hold clutch pressure	At 2,000 rpm in 1 position	760-830 kPa (7.7-8.5 kgf/cm^2 , 110-120 psi)	710 kPa (7.2 kgf/cm^2 , 100 psi)
Torque converter	Stall speed Check with vehicle on level ground		2,000 rpm	1,850-2,150 rpm
	Clutch end-plate-to-top-disc	1st	-	1.1 - 1.3 mm (0.043-0.051 in.)
		2nd (2003-2005 models)	-	0.7-0.9 mm (0.028-0.035 in.)
		2nd (2006 model)	-	0.85-1.05 mm (0.033-0.041 in.)
		3rd		0.7-0.9 mm (0.028-

clearance			0.035 in.)
	4th, 5th (2003-2005 models)		0.55-0.75 mm (0.022-0.030 in.)
	4th, 5th (2006 model)		0.7-0.9 mm (0.028-0.035 in.)
	1st-hold		0.5-0.9 mm (0.020-0.035 in.)
Clutch return spring free length	1st	68.3 mm (2.69 in.)	66.3 mm (2.61 in.)
	2nd	53.4 mm (2.10 in.)	51.4 mm (2.02 in.)
	3rd	52.0 mm (2.05 in.)	50.0 mm (1.97 in.)
	4th	33.5 mm (1.32 in.)	31.5 mm (1.24 in.)
	5th	37.4 mm (1.47 in.)	35.4 mm (1.39 in.)
Clutch disc thickness		1.94 mm (0.076 in.)	-
Clutch plate thickness	1st, 2nd	1.6 mm (0.063 in.)	When discolored
	3rd, 4th (2003-2004 models)	2.3 mm (0.091 in.)	When discolored
	4th (2005 model)	2.0 mm (0.079 in.)	When discolored
	4th (2006 model)	1.6 mm (0.063 in.)	When discolored
	5th (2003-2005 models)	2.0 mm (0.079 in.)	When discolored
	5th (2006	1.6 mm	When

	model)	(0.063 in.)	discolored
	1st-hold	1.8 mm (0.071 in.)	When discolored
1st clutch end plate thickness	Mark 1	3.10 mm (0.122 in.)	When discolored
	Mark 2	3.20 mm (0.126 in.)	When discolored
	Mark 3	3.30 mm (0.130 in.)	When discolored
	Mark 4	3.40 mm (0.134 in.)	When discolored
	Mark 5	3.50 mm (0.138 in.)	When discolored
	Mark 6	3.60 mm (0.142 in.)	When discolored
	Mark 7	3.70 mm (0.146 in.)	When discolored
	Mark 8	3.80 mm (0.150 in.)	When discolored
	Mark 9	3.90 mm (0.154 in.)	When discolored
1st-hold clutch end plate thickness		5.00 mm (0.197 in.)	When discolored
2nd clutch end plate thickness	Mark 1	2.10 mm (0.083 in.)	When discolored
	Mark 2	2.20 mm (0.087 in.)	When discolored
	Mark 3	2.30 mm (0.091 in.)	When discolored
	Mark 4	2.40 mm (0.094 in.)	When discolored
	Mark 5	2.50 mm (0.098 in.)	When discolored

		Mark 6	2.60 mm (0.102 in.)	When discolored
		Mark 7	2.70 mm (0.106 in.)	When discolored
		Mark 8	2.80 mm (0.110 in.)	When discolored
		Mark 9	2.90 mm (0.114 in.)	When discolored
	3rd clutch end plate thickness (2003 model)	Mark 1	3.10 mm (0.083 in.)	When discolored
		Mark 2	3.20 mm (0.087 in.)	When discolored
		Mark 3	3.30 mm (0.091 in.)	When discolored
		Mark 4	3.40 mm (0.094 in.)	When discolored
		Mark 6	2.60 mm (0.102 in.)	When discolored
		Mark 7	2.70 mm (0.106 in.)	When discolored
		Mark 8	2.80 mm (0.110 in.)	When discolored
		Mark 9	2.90 mm (0.114 in.)	When discolored
		Mark 0	3.00 mm (0.118 in.)	When discolored
		Mark 1	2.10 mm (0.083 in.)	When discolored
		Mark 2	2.20 mm (0.087 in.)	When discolored
		Mark 3	2.30 mm (0.091 in.)	When discolored
		Mark 4	2.40 mm	When

		(0.094 in.)	discolored
	Mark 5	2.50 mm (0.098 in.)	When discolored
	Mark 6	2.60 mm (0.102 in.)	When discolored
	Mark 7	2.70 mm (0.106 in.)	When discolored
	Mark 8	2.80 mm (0.110 in.)	When discolored
	Mark 9	2.90 mm (0.114 in.)	When discolored
	Mark 10	3.00 mm (0.118 in.)	When discolored
	Mark 11	3.10 mm (0.122 in.)	When discolored
3rd clutch end plate thickness (2004-2006 models)			
	Mark 1	2.10 mm (0.083 in.)	When discolored
	Mark 2	2.20 mm (0.087 in.)	When discolored
	Mark 3	2.30 mm (0.091 in.)	When discolored
	Mark 4	2.40 mm (0.094 in.)	When discolored
	Mark 5	2.50 mm (0.098 in.)	When discolored
	Mark 6	2.60 mm (0.102 in.)	When discolored
	Mark 7	2.70 mm (0.106 in.)	When discolored
	Mark 8	2.80 mm (0.110 in.)	When discolored
	Mark 9	2.90 mm (0.114 in.)	When discolored
4th and 5th clutch end plate thickness			

Valve body	Stator shaft needle bearing contact I.D.	Torque converter side	27.000-27.021 mm (1.0630-1.0638 in.)	When worn or damaged
		ATF pump side	29.000-29.021 mm (1.1417-1.1426 in.)	When worn or damaged
	ATF pump gear thrust clearance		0.03-0.06 mm (0.001-0.002 in.)	0.07 mm (0.003 in.)
	ATF pump gear-to-body clearance	Drive gear	0.210-0.265 mm (0.0083-0.0104 in.)	-
		Driven gear	0.070-0.125 mm (0.0028-0.0049 in.)	-
	ATF pump driven gear I.D.		14.016-14.034 mm (0.5518-0.5525 in.)	When worn or damaged
	ATF pump driven gear shaft O.D.		13.980-13.990 mm (0.5504-0.5508 in.)	When worn or damaged
Reverse shift fork	Fork finger thickness		5.60-6.00 mm (0.220-0.236 in.)	5.40 mm (0.213 in.)
Park gear and pawl			-	When worn or damaged
Servo body	Shift fork shaft bore I.D.		14.000-14.010 mm (0.5512-0.5516 in.)	-

	Shift fork shaft valve bore I.D.		37.000-37.039 mm (1.4567-1.4582 in.)	37.045 mm (1.4585 in.)
Regulator valve body	Sealing ring contact I.D.		32.000-32.025 mm (1.2598-1.2608 in.)	32.050 mm (1.2618 in.)
Accumulator body	Sealing ring contact I.D.		35.000-35.025 mm (1.3780-1.3789 in.)	35.05 mm (1.3799 in.)
Stator shaft	Sealing ring contact I.D.		29.000-29.021 mm (1.1417-1.1426 in.)	29.050 mm (1.1437 in.)
	Diameter of needle bearing contact area	At stator shaft	22.984-23.000 mm (0.9049-0.9055 in.)	When worn or damaged
		At 4th gear	52.975-52.991 mm (2.0856-2.0863 in.)	When worn or damaged
		At 5th gear collar	33.975-33.991 mm (1.3376-1.3382 in.)	When worn or damaged
	I.D. of 4th gear		59.000-59.019 mm (2.3228-2.3236 in.)	When worn or damaged
	I.D. of 5th gear		40.000-40.016 mm	When worn

			(1.5748-1.5754 in.)	or damaged
	End play of 4th gear		0.03-0.11 mm (0.001-0.004 in.)	-
	End play of 5th gear		0.10-0.22 mm (0.004-0.009 in.)	-
Mainshaft	41 X 73 mm thrust shim thickness	No. 1	7.85 mm (0.309 in.)	When worn or damaged
		No. 2	7.90 mm (0.311 in.)	When worn or damaged
		No. 3	7.95 mm (0.313 in.)	When worn or damaged
		No. 4	8.00 mm (0.315 in.)	When worn or damaged
		No. 5	8.05 mm (0.317 in.)	When worn or damaged
		No. 6	8.10 mm (0.319 in.)	When worn or damaged
	Thrust washer thickness	27 X 47 X 5 mm	5.00 mm (0.197 in.)	When worn or damaged
	Length of 5th gear collar		58.5-58.6 mm (2.303-2.307 in.)	-
	5th gear collar flange thickness		4.45-4.60 mm (0.175-0.181 in.)	When worn or damaged
	Sealing ring thickness	32 mm sealing ring	1.87-1.97 mm (0.074-0.078 in.)	1.800 mm (0.071 in.)
		29 mm sealing ring	1.87-1.97 mm (0.074-0.078 in.)	1.800 mm (0.071 in.)

	Width of sealing ring groove		2.025 - 2.060 mm (0.080 - 0.081 in.)	2.080 mm (0.082 in.)
	Clutch feed pipe O.D.	4th clutch	5.97 - 5.98 mm (0.2350 - 0.2354 in.)	5.95 mm (0.2343 in.)
		5th clutch	11.47 - 11.48 mm (0.4516-0.4520 in.)	11.45 mm (0.4508 in.)
	Clutch feed pipe bushing I.D.	4th clutch	6.018 - 6.030 mm (0.2369 - 0.2374 in.)	6.045 mm (0.2380 in.)
		5th clutch	11.500-11.518 mm (0.4528 - 0.4535 in.)	11.530 mm (0.4539 in.)
	Diameter of needle bearing contact area	At 5th gear	34.975-34.991 mm (1.3770-1.3776 in.)	When worn or damaged
		At 2nd gear	39.979-40.000 mm (1.574-1.575 in.)	When worn or damaged
		At park gear	41.964-41.980 mm (1.6521-1.6528 in.)	When worn or damaged
		At right end	38.505-38.515 mm (1.5159-1.5163 in.)	When worn or damaged
	I.D. of 5th gear		41.000-41.016 mm	When worn

			(1.6142-1.6148 in.)	or damaged
	I.D. of 3rd gear		50.000-50.016 mm (1.9685-1.9691 in.)	When worn or damaged
	I.D. of reverse gear		46.000-46.016 mm (1.8110-1.8116 in.)	When worn or damaged
	End play of 1st gear		0.00-0.33 mm (0.000-0.013 in.)	
	End play of 5th gear		0.04-0.27 mm (0.002-0.011 in.)	
Countershaft	End play of 3rd gear		0.015-0.045 mm (0.0006-0.0018 in.)	
	End play of reverse gear		0.10-0.25 mm (0.004-0.010 in.)	
	31 x 63.5 x 8.5 mm splined washer difference	A	3.503-3.515 mm (0.1379-0.1384 in.)	When worn or damaged
		B	3.490-3.502 mm (0.1374-0.1379 in.)	When worn or damaged
		C	3.477-3.489 mm (0.1369-0.1374 in.)	When worn or damaged
		D	3.464-3.476 mm (0.1364-0.1369 in.)	When worn or damaged

	Length of distance collar	35 x 47 x 45.6 mm	45.56-45.60 mm (1.794-1.795 in.)	-
		35 x 47 x 7.8 mm	5.92-5.96 mm (0.233-0.235 in.)	-
	Cotter thickness		1.99-2.02 mm (0.078-0.080 in.)	
	Reverse selector hub O.D.		55.87-55.90 mm (2.1996-2.2008 in.)	When worn or damaged
	Clutch feed pipe O.D.		8.97-8.98 mm (0.353-0.354 in.)	8.95 mm (0.352 in.)
	Clutch feed pipe bushing I.D.		9.000-9.015 mm (0.354-0.355 in.)	9.030 mm (0.356 in.)
	Diameter of needle bearing contact area	At 1st gear	37.978-37.993 mm (1.4951-1.4958 in.)	When worn or damaged
		At 2nd gear	33.986-33.999 mm (1.3380-1.3385 in.)	When worn or damaged
	I.D. of 1st gear		44.000-44.016 mm (1.7323-1.7329 in.)	When worn or damaged
	I.D. of 2nd gear		40.000-40.016 mm (1.5748-1.5754 in.)	When worn or damaged

Secondary shaft	End play of 1st gear		0.07-0.15 mm (0.003-0.006 in.)	-
	End play of 2nd gear		0.04-0.12 mm (0.002-0.005 in.)	-
	38 x 56.5 mm splined washer thickness	No. 1	6.85 mm (0.270 in.)	When worn or damaged
		No. 2	6.90 mm (0.272 in.)	When worn or damaged
		No. 3	6.95 mm (0.274 in.)	When worn or damaged
		No. 4	7.00 mm (0.276 in.)	When worn or damaged
		No. 5	7.05 mm (0.278 in.)	When worn or damaged
		No. 6	7.10 mm (0.280 in.)	When worn or damaged
	37 x 55 mm thrust shim thickness	No. 1	4.90 mm (0.193 in.)	When worn or damaged
		No. 2	4.95 mm (0.195 in.)	When worn or damaged
		No. 3	5.00 mm (0.197 in.)	When worn or damaged
		No. 4	5.05 mm (0.199 in.)	When worn or damaged
		No. 5	5.10 mm (0.201 in.)	When worn or damaged
		No. 6	5.15 mm (0.203 in.)	When worn or damaged
		No. 7	5.20 mm (0.205 in.)	When worn or damaged
			1.99-2.02	

	Cotter thickness		mm (0.078-0.080 in.)	-
	Sealing ring thickness		1.890-1.950 mm (0.074-0.077 in.)	1.800 mm (0.071 in.)
	Width of sealing ring groove		2.025-2.060 mm (0.080-0.081 in.)	2.080 mm (0.082 in.)
	Clutch feed pipe O.D.		7.97-7.98 mm (0.3138-0.3142 in.)	7.95 mm (0.3130 in.)
	Clutch feed pipe bushing I.D.		8.000-8.015 mm (0.3150-0.3156 in.)	8.030 mm (0.3161 in.)
Reverse idler gear	Diameter of needle bearing contact area	At reverse idler gear shaft	13.990-14.000 mm (0.5508-0.5512 in.)	When worn or damaged
	End play		0.06-0.38 mm (0.002-0.015 in.)	-
	I.D.		18.007-18.020 mm (0.7089-0.7094 in.)	When worn or damaged
	Thrust washer thickness	Transmission housing side	0.96-1.04 mm (0.038-0.041 in.)	-
		Reverse idler gear shaft holder side	0.97-1.05 mm (0.038-0.041 in.)	-
	I.D. of reverse idler gear shaft holder		14.006-14.024 mm (0.5514-	When worn or damaged

			0.5521 in.)	
	I.D. of transmission housing of reverse idler gear shaft contact area		14.006-14.024 mm (0.5514-0.5521 in.)	-

AUTOMATIC TRANSMISSION AND A/T DIFFERENTIAL STANDARDS AND SERVICE LIMITS SPECIFICATIONS (2 OF 3)

Item	Measurement	Qualification	Standard or New			
			Wire Diameter	O.D.	Free Length	No. of Coils
Main valve body spring (see **MAIN VALVE BODY DISASSEMBLY, INSPECTION AND**	Shift valve D spring		0.7 mm (0.028 in.)	6.6 mm (0.260 in.)	33.7 mm (1.327 in.)	11.6
	Shift valve C spring		0.8 mm (0.031 in.)	6.6 mm (0.260 in.)	49.1 mm (1.933 in.)	21.7
	Kick-down valve spring		0.8 mm (0.031 in.)	6.6 mm (0.260 in.)	49.1 mm (1.933 in.)	21.7
	Modulator valve spring		1.6 mm (0.063 in.)	10.4 mm (0.409 in.)	33.5 mm (1.319 in.)	9.8
	Relief valve spring		1.2 mm (0.047 in.)	11.1 mm (0.437 in.)	39.0 mm (1.535 in.)	9.9
	Lock-up shift		0.9 mm (0.035	7.6 mm	63.0 mm	22.4

REASSEMBLY)	valve spring		in.)	(0.299 in.)	(2.480 in.)	
	Cooler check valve spring		0.6 mm (0.024 in.)	5.8 mm (0.228 in.)	14.5 mm (0.571 in.)	6.8
	Torque converter check valve spring		1.2 mm (0.047 in.)	8.6 mm (0.339 in.)	34.4 mm (1.354 in.)	11.7
	Servo control valve spring		0.9 mm (0.035 in.)	6.4 mm (0.252 in.)	32.5 mm (1.280 in.)	17.5
	Reverse CPC valve spring		0.7 mm (0.028 in.)	6.1 mm (0.240 in.)	17.8 mm (0.701 in.)	7.9
Regulator valve body spring (see **REGULATOR VALVE BODY DISASSEMBLY, INSPECTION AND REASSEMBLY**)	Stator reaction spring	2003 model	5.5 mm (0.217 in.)	37.4 mm (1.472 in.)	30.3 mm (1.193 in.)	2.1
		2004-2006 models	4.5 mm (0.177 in.)	35.4 mm (1.394 in.)	30.3 mm (1.193 in.)	1.92
	Regulator valve spring A		1.9 mm (0.075 in.)	14.7 mm (0.579 in.)	80.6 mm (3.173 in.)	16.1
	Regulator valve spring B		1.6 mm (0.063 in.)	9.2 mm (0.362 in.)	44.0 mm (1.732 in.)	12.5

	Lock-up control valve spring		0.7 mm (0.028 in.)	6.6 mm (0.260 in.)	42.9 mm (1.689 in.)	15.3
	Lock-up timing valve spring		0.65 mm (0.026 in.)	6.6 mm (0.260 in.)	34.8 mm (1.370 in.)	15.6
Servo body spring (see **SERVO BODY DISASSEMBLY, INSPECTION, AND REASSEMBLY**)	CPC valve B spring		0.7 mm (0.028 in.)	6.1 mm (0.240 in.)	17.8 mm (0.701 in.)	7.9
	CPC valve A spring		0.7 mm (0.028 in.)	6.1 mm (0.240 in.)	17.8 mm (0.701 in.)	7.9
	Shift valve B spring		0.8 mm (0.031 in.)	6.6 mm (0.260 in.)	49.1 mm (1.933 in.)	21.7
	Shift valve A spring		0.8 mm (0.031 in.)	6.6 mm (0.260 in.)	49.1 mm (1.933 in.)	21.7
Top accumulator body spring (see **TOP ACCUMULATOR BODY**	Shift valve E spring		0.8 mm (0.031 in.)	7.1 mm (0.280 in.)	49.0 mm (1.929 in.)	17.2
	CPC valve C spring		0.7 mm (0.028 in.)	6.1 mm (0.240 in.)	17.8 mm (0.701 in.)	7.9
	5th accumulator		2.2 mm (0.087	16.4 mm	75.7 mm	14.2

DISASSEMBLY, INSPECTION AND REASSEMBLY)	spring A		in.)	(0.646 in.)	(2.980 in.)	
	5th accumulator spring B		2.0 mm (0.079 in.)	10.0 mm (0.394 in.)	45.5 mm (1.791 in.)	11.6
	4th/1st-hold accumulator spring		3.4 mm (0.134 in.)	19.6 mm (0.772 in.)	57.4 mm (2.260 in.)	8.4
Accumulator body spring (see **ACCUMULATOR BODY DISASSEMBLY, INSPECTION AND REASSEMBLY**)	1st accumulator spring B		2.3 mm (0.091 in.)	12.6 mm (0.496 in.)	42.0 mm (1.654 in.)	9.9
	1st accumulator spring A		2.4 mm (0.094 in.)	19.5 mm (0.768 in.)	67.7 mm (2.665 in.)	10.2
	2nd accumulator spring B		2.6 mm (0.102 in.)	13.0 mm (0.512 in.)	44.0 mm (1.732 in.)	9.0
	2nd accumulator spring A		2.5 mm (0.098 in.)	19.6 mm (0.772 in.)	57.7 mm (2.272 in.)	9.5
3rd accumulator spring (see **3RD ACCUMULATOR AND END COVER DISASSEMBLY, INSPECTION AND**	3rd accumulator spring		3.1 mm (0.122 in.)	19.6 mm (0.772 in.)	39.4 mm (1.551 in.)	5.5

REASSEMBLY)						

AUTOMATIC TRANSMISSION AND A/T DIFFERENTIAL STANDARDS AND SERVICE LIMITS SPECIFICATIONS (3 OF 3)

Item	Measurement	Qualification	Standard or New	Service Limit
A/T differential carrier	Pinion shaft contact area I.D.		18.010-18.028 mm (0.7091-0.7098 in.)	-
	Carrier-to-pinion shaft clearance		0.023-0.057 mm (0.0009-0.0022 in.)	0.1 mm (0.004 in.)
	Driveshaft contact area I.D.		30.025-30.045 mm (1.182-1.182 in.)	
	Carrier-to-driveshaft clearance		0.045-0.086 mm (0.002-0.003 in.)	0.12 mm (0.005 in.)
	Carrier-to-intermediate shaft clearance		0.080-0.116 mm (0.003-0.005 in.)	-
	Tapered roller bearing starting torque (preload)	For new bearing (2003-2005 models)	2.7-3.9 N.m (28-40 kgf.cm, 24-35 lbf.in.)	Adjust
		For new bearing (2006 model)	2.9-4.1 N.m (30-42 kgf.cm, 26-37 lbf.in.)	Adjust
		For used bearing (2003-2005 models)	2.5-3.6 N.m (25-37 kgf.cm, 22-32 lbf.in.)	Adjust
		For used bearing (2006 model)	2.7-3.8 N.m (27-39 kgf.cm, 23-34 lbf.in.)	Adjust
			0.05-0.15 mm	

A/T differential pinion gear	Backlash		(0.002-0.006 in.)	-
	I.D.		18.042-18.066 mm (0.7103-0.7113 in.)	-
	Pinion gear-to-pinion shaft clearance		0.055-0.095 mm (0.0022-0.0037 in.)	0.12 mm (0.005 in.)

STEERING

STEERING STANDARDS AND SERVICE LIMITS SPECIFICATIONS

Item	Measurement	Qualification	Standard or New
Steering wheel	Rotational play measured at outside edge with engine running		0-10 mm (0-0.39 in.)
	Starting load measured at outside edge with engine running		29 N (3.0 kgf, 6.6 lbf)
Gearbox	Angle of rack guide screw loosened from locked position	20° max. (SHOWA)	
		15° +/-5° (TKS)	7,940-8,630 kPa (81-88 kgf/cm^2 , 1,150-1,250 psi)
Pump	Output pressure with shut-off valve closed		
Power steering fluid	Capacity Use Honda Power Steering Fluid	Reservoir	0.4 L (0.42 US qt)
		System overhaul	1.1 L (1.16 US qt)

SUSPENSION

SUSPENSION STANDARDS AND SERVICE LIMITS SPECIFICATIONS

Item	Measurement	Qualification	Standard or New	Service Limit

Wheel alignment	Camber	Front	0° 00'+/-45'	
		Rear	-1° 00'+/-30'	
	Caster	Front	3° 15'+/-45'	
	Total Toe-in	Front	0+/-2mm (0+/-1/16in.)	
		Rear	2+/-2mm (1/16+/-1/16in.)	
	Front wheel turning angle	Inside wheel (2003-2005 models)	38° 50'+/-2°	
		Inside wheel (2006 model)	35° 20'+/-2 °	
		Outside wheel (2003-2005 models)	31° 40' (Reference)	
		Outside wheel (2006 model)	29° 40' (Reference)	
Wheel	Aluminum wheel runout	Axial	0-0.7 mm (0-0.03 in.)	2.0 mm (0.08 in.)
		Radial	0-0.7 mm (0-0.03 in.)	1 5 mm (0.06 in.)
	Steel wheel runout	Axial	0-1 0 mm (0-0.04 in.)	2.0 mm (0.08 in.)
		Radial	0-1.0 mm (0-0.04 in.)	1.5 mm (0.06 in.)
Wheel bearing	End play	Front	0-0.05 mm (0-0.002 in.)	
		Rear	0-0.05 mm (0-0.002 in.)	

BRAKES

BRAKES STANDARDS AND SERVICE LIMITS SPECIFICATIONS

Item	Measurement	Qualification	Standard or New	Service Limit
Parking brake lever	Distance traveled when lever pulled with 196 N (20 kgf, 44 lbf) of force		6 to 9 clicks	
	Pedal height (carpet			

Brake pedal	removed)		172 mm (6 13/16 in.)	
	Free play		1-5 mm (1/16-3/16 in.)	
Brake disc	Thickness	Front (A/T model)	22.9-23.1 mm (0.90-0.91 in.)	21.0 mm (0.83 in.)
		Front (M/T model)	27.9-28.1 mm (1.10-1.11 in.)	26.0 mm (1.02 in.)
		Rear	9.9-10.1 mm (0.39-0.40 in.)	8.0 mm (0.31 in.)
	Runout	Front	-	0.10 mm (0.004 in.)
		Rear	-	0.10 mm (0.004 in.)
	Parallelism	Front and rear	-	0.015 mm (0.0006 in.)
Brake pad	Thickness	Front	10.5-11.5 mm (0.41-0.45 in.)	1.6 mm (0.06 in.)
		Rear	9.0 mm (0.35 in.)	1.6 mm (0.06 in.)

AIR CONDITIONING

AIR CONDITIONING STANDARDS AND SERVICE LIMITS SPECIFICATIONS

Item	Measurement	Qualification	Standard or New
Refrigerant	Type		HFC-134a (R-134a)
	Capacity of system		500-550 g (17.6-19.4 oz)
	Type		DENSO: ND-OIL 8 (P/N 38897-PR7-A01 AH or 38899-PR7-A01)

Refrigerant oil	Capacity of components	Condenser	25mL (5/6 fl oz)
		Evaporator	45mL (1 1/2fl oz)
		Each line and hose	10mL (1/3 fl oz)
		Receiver	10mL (1/3 fl oz)
		Compressor	160-175mL (5 1/3-5 2/3 fl oz)
Compressor	Starter coil resistance	At 68° F (20° C)	3.9-4.3 Q
	Pulley-to-pressure plate clearance		0.35-0.60 mm (0.014-0.024 in.)

DESIGN SPECIFICATIONS

DESIGN SPECIFICATIONS

Item	Measurement	Qualification	Specification
DIMENSIONS 4-door	Overall length	2003-2005 models	4,813 mm (189.5 in.)
		2006 model	4,854 mm (191.1 in.)
	Overall width		1,820 mm (71.7 in.)
	Overall height	LX (2003-2005 models)	1,453 mm (57.2 in.)
		EX (2003-2005 models)	1,456 mm (57.3 in.)
		2006 model	1,456 mm (57.3 in.)
	Wheelbase	2003-2005 models	2,715 mm (106.9 in.)
		2006 model	2,740 mm (107.9 in.)
	Track	Front	1,553 mm (61.1 in.)
		Rear	1,554 mm (61.2 in.)
	Seating capacity		five (5)

DIMENSIONS 2-door	Overall length	2003-2005 models	4,766 mm (187.6 in.)
		2006 model	4,770 mm (187.8 in.)
	Overall width		1,810 mm (71.3 in.)
	Overall height	2003-2005 models	1,415 mm (55.7 in.)
		2006 model	1,418 mm (55.8 in.)
	Wheelbase		2,670 mm (105.1 in.)
	Track	Front	1,553 mm (61.1 in.)
		Rear	1,554 mm (61.2 in.)
	Seating capacity		five (5)
WEIGHT (U.S.A.)	Gross Vehicle Weight Rating (GVWR)	2003-2005 models	4,300 lbs
		2006 model	4,345 lbs
WEIGHT (CANADA)	Gross Vehicle Weight Rating (GVWR)	2003-2005 models	1,950 kg
		2006 model	1,970 kg
ENGINE	Type		Water-cooled, 4-stroke SOHC VTEC V6 gasoline engine
	Cylinder arrangement		60° V6-cylinder, transverse
	Bore and stroke		86 x 86 mm (3.39 x 3.39 in.)
	Displacement		2,997 cm^3 (183 cu in.)
	Compression ratio		10.0
	Valve train		Belt driven, SOHC VTEC 4 valves per cylinder
	Lubrication		Forced, wet sump,

	system		with trochoid pump
	Oil pump displacement	At 6,300 rpm	52.8 L (55.8 US qt)/minute
	Water pump displacement	At 6,000 rpm	95.5 L (101 US qt)/minute
	Fuel required		UNLEADED gasoline with 86 pump octane number or higher
STARTER	Type		Gear reduction
	Normal output		1.6 kW
	Normal voltage		12 V
	Hour rating		30 seconds
	Rotation direction		Clockwise as viewed from gear end
CLUTCH	Clutch type		Single plate dry, diaphragm spring
	Clutch friction material surface area		264 cm^2 (40.85 sq in.)
MANUAL TRANSMISSION	Type	ATC6	Synchronized, 6-speed forward, 1 reverse
	Primary reduction		Direct 1:1
	Gear ratio	1st	3.933
		2nd	2.478
		3rd	1.700
		4th	1.250
		5th	0.976
		6th	0.771
		Reverse	4.008
	Final reduction		4.235

	Final reduction	Type	Single helical gear
		Gear ratio	3.286
AUTOMATIC TRANSMISSION	Type		Electronically controlled automatic, 5-speed forward, 1 reverse
	Primary reduction		Direct 1:1
	Gear ratio	1st	2.563
		2nd	1.552
		3rd	1.022
		4th	0.727
		5th	0.520
		Reverse	1.846
	Final reduction	Type	Single helical gear
		Gear ratio	4.429
STEERING	Type		Power-assisted rack and pinion
	Overall ratio		15.21
	Turns, lock-to-lock		2.98
	Steering wheel diameter		380 mm (15.0 in.)
SUSPENSION	Type	Front	Independent double wishbone, coil spring, with stabilizer
		Rear	Independent double wishbone, coil spring, with stabilizer
		Front	Telescopic, hydraulic, nitrogen

	Shock absorber		gas-filled
		Rear	Telescopic, hydraulic, nitrogen gas-filled
TIRES	Size (2003-2005 models)	Front and rear (without 2-door EX M/T model)	P205/60R16 91V M+S
		Front and rear (EX MAT model)	P215/50R17 93 V M+S
		Spare (without EX M/T model)	T135/90D15 100M
		Spare (EX M/T model)	T135/80R16 101M
	Size (2006 model)	Front and rear	T215/50R17 93 V M+S
		Spare (without 2-door EX model)	T135/90D15 100M
		Spare (2-door EX model)	T135/80R16 101M
WHEEL ALIGNMENT	Camber	Front	0°
		Rear	1°
	Caster	Front	3° 15'
	Total Toe-in	Front	0 mm (0 in.)
		Rear	2 mm (1/16 in.)
BRAKES	Type of service brake	Front	Power-assisted self-adjusting ventilated disc
		Rear	Power-assisted self-adjusting solid disk
	Type of parking brake		Mechanical actuating, rear wheels
		Front: US model	56 cm^2 (8.7 sq in.)

	Pad friction surface area		x 2
		Front: Canada model	57 cm^2 (8.8 sq in.) x 2
	Shoe friction surface area	Rear	28 cm^2 (4.3 sq in.) x 2
AIR CONDITIONING	Compressor	Type	Swash plate
		Capacity	188 mL (11.47 cu m.)/rev.
		Maximum speed	7,922 rpm
		Lubricant capacity	160mL (5 1/3fl oz)
		Lubricant type	ND-OIL 8(DENSO)
	Condenser	Type	Corrugated fin
	Evaporator	Type	Corrugated fin
	Blower	Type	Radial
		Motor type	210 W/12 V
		Speed control	Infinite variable
		Maximum capacity	505 m^3 /h (17,805 cu ft/h)
	Temperature control		Air-mix type
	Compressor clutch	Type	Dry, single plate, Poly V-belt drive
		Electrical power consumption at 68° F (20° C)	35 W maximum at 12 V
	Refrigerant	Type	HFC-134a (R-134a)
		Capacity	500-550 g (17.6-19.4 oz)
	Battery		12 V-52 AH/5 hours
		Under-hood	100 A, 50 A, 40 A, 30 A, 20 A, 15 A,

ELECTRICAL RATINGS	Fuses	fuse/relay box	10 A, 7.5 A
		Under-dash fuse/relay box	30 A, 20 A, 15 A, 10 A, 7.5 A
	Light bulbs	Headlight high beam	12 V-60 W
		Headlight low beam	12 V-55W
		Front turn signal/front side marker lights	12 V-21/5 W (two filaments)
		Rear turn signal lights	12 V-21 W Amber color
		Brake/taillights	12 V-21/5 W (two filaments)
		Inner/taillights (4-door)	12 V-5 W
		High-mount brake light	12 V-21 W
		Back-up lights	12 V-21 W (4-door), 12 V-16 W (2-door)
		License plate light	12 V-5 W
		Ceiling light	12 V-8 W
		Spotlights	12 V-8 W
		Trunk light	12 V-5 W
		Door courtesy lights	12 V-3.8 W
		Glove box light	12 V-3.4 W
		Vanity mirror lights	12 V-1.1W
		Gauge lights	12 V-LED (non-replaceable)
		Indicator, panel,	12 V-LED, 14 V-

		ambient light	0.56 W, 0.84 W

BODY SPECIFICATIONS

4-DOOR: 2003-2005 MODELS

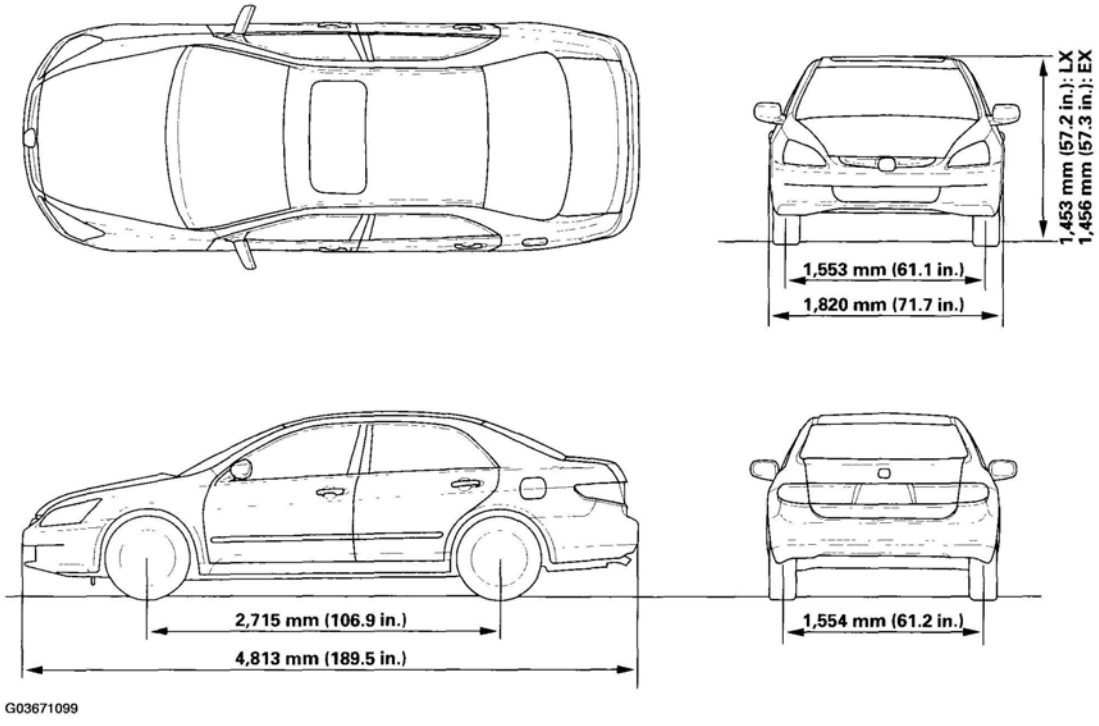


Fig. 4: Identifying Body Specifications (4-Door: 2003-2005 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2-DOOR: 2003-2005 MODELS

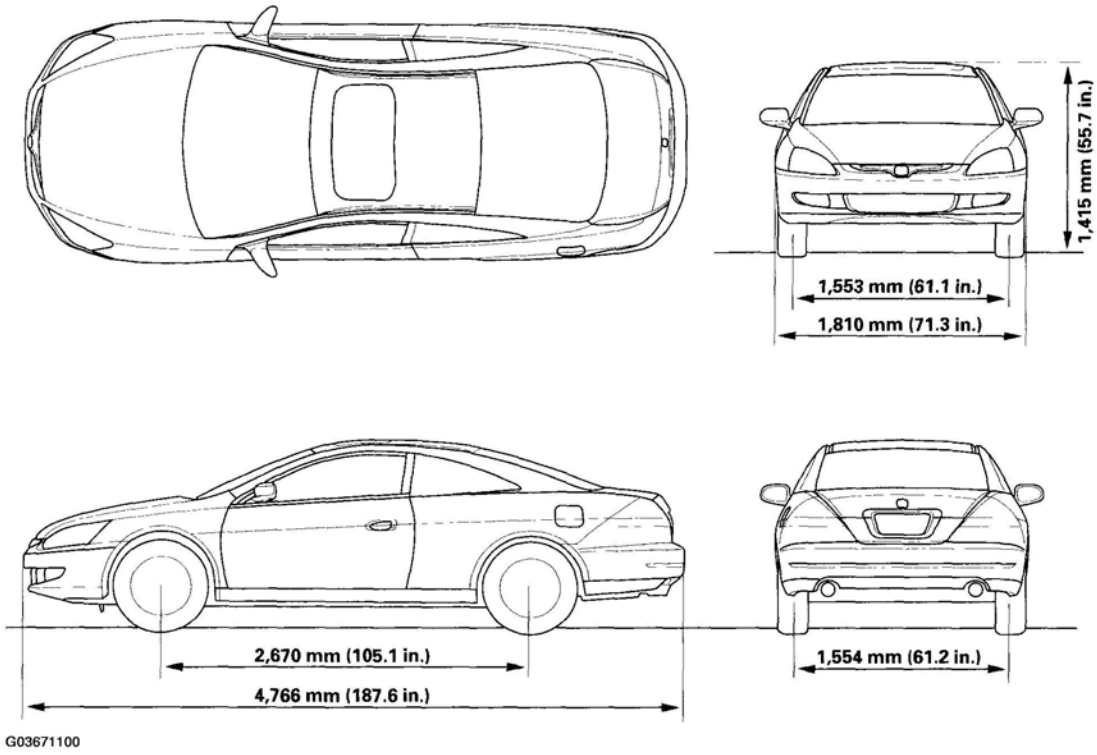


Fig. 5: Identifying Body Specifications (2-Door: 2003-2005 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4-DOOR: 2006-2007 MODEL

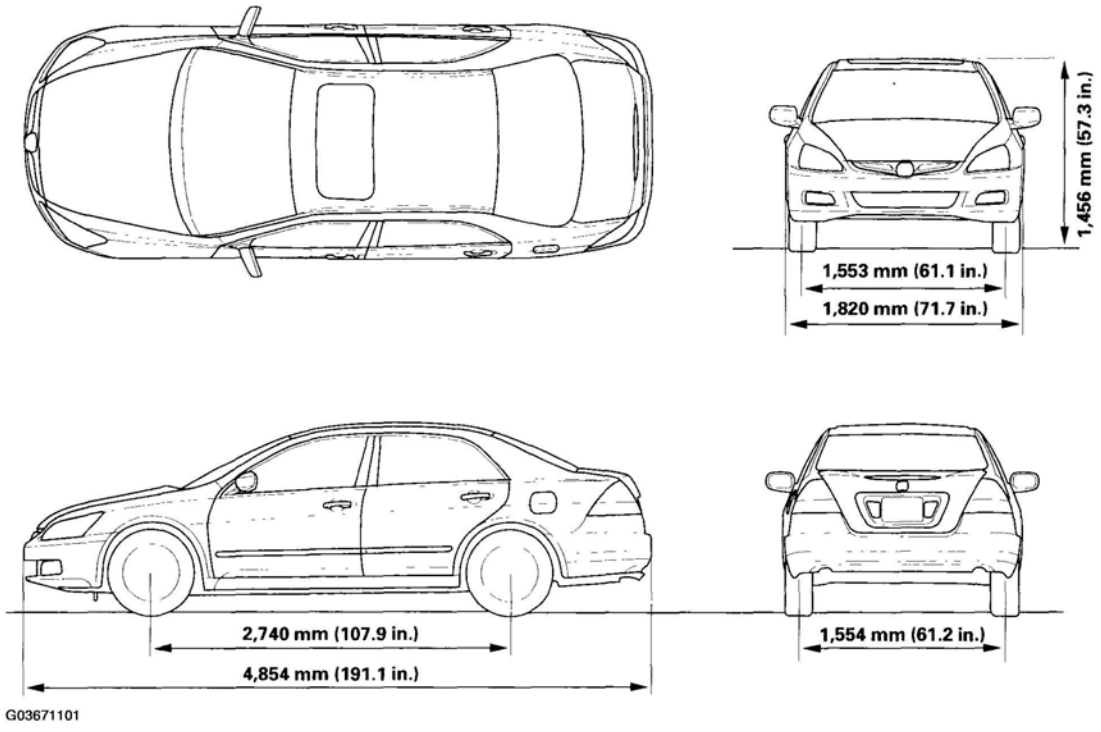


Fig. 6: Identifying Body Specifications (4-Door: 2006-2007 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2-DOOR: 2006-2007 MODEL

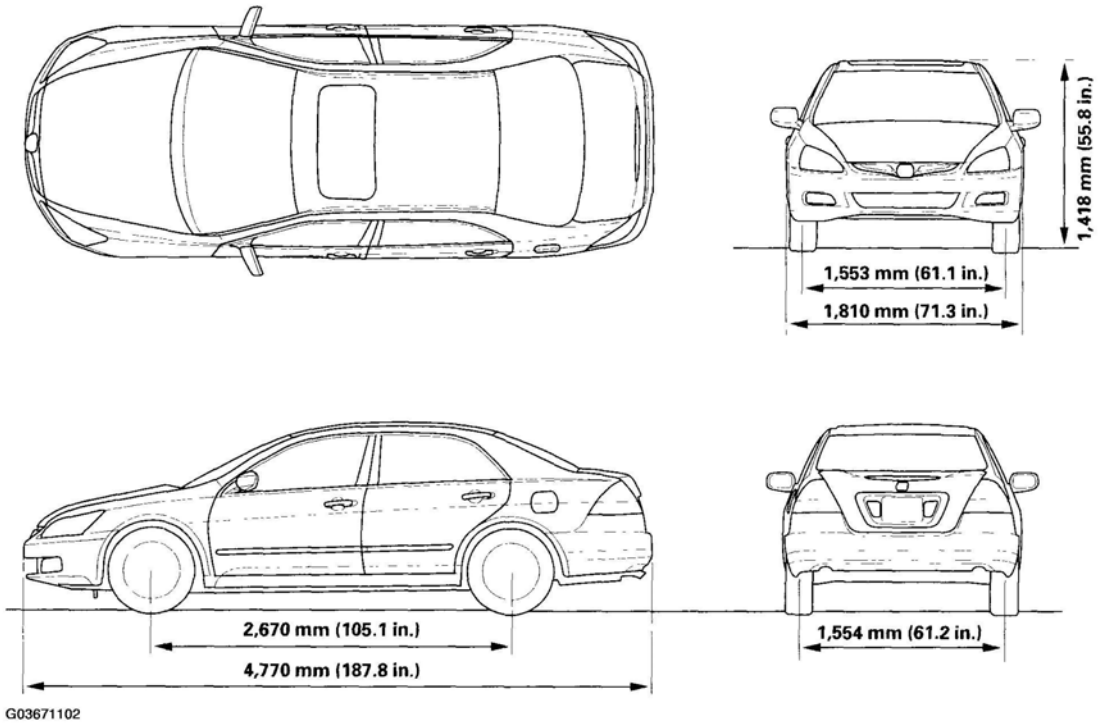


Fig. 7: Identifying Body Specifications (2-Door: 2006-2007 Models)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 GENERAL INFORMATION

Specifications - Accord

STANDARDS AND SERVICE LIMITS

ENGINE ELECTRICAL

ENGINE ELECTRICAL SERVICE LIMITS CHART

Item	Measurement	Qualification	Standard or New	Service Limit
Ignition coil	Rated voltage		12 V	
	Firing order		1---3---4---2	
Spark plug	Type	Except LX-SULEV, EX-SULEV, EX-L-SULEV	NGK: IZFR6K11 DENSO: SKJ20DR-M11	
		LX-SULEV, EX-SULEV, EX-L-SULEV	NGK: IZFR6K13 DENSO: SKJ20DR-M13	
	Gap	Except LX-SULEV, EX-SULEV, EX-L-SULEV	1.0---1.1 mm (0.039---0.043 in.)	-
		LX-SULEV, EX-SULEV, EX-L-SULEV	1.2---1.3 mm (0.047---0.051 in.)	-
Ignition timing	At idle Check the *red* mark	M/T(in neutral)	8+/-2° BTDC	
		A/T (in N or P position)	8+/-2° BTDC	
Drive belt	Tension		Auto tensioner	
	Output	At 13.5 V and normal engine temperature	105A	
	Coil (rotor) resistance	At 68°F (20°C)	2.5 ohms	

Alternator	Slip ring O.D.		14.4 mm (0.57 in.)	14.0 mm (0.55 in.)
	Brush length		10.5 mm (0.41 in.)	1.5 mm (0.06 in.)
	Brush spring tension		3.2 N (0.33 kgf, 0.7 lbf)	
Starter (MITSUBISHI)	Output		1.7 kW	
	Commutator mica depth		0.4---0.6 mm (0.016---0.024 in.)	0.2 mm (0.008 in.)
	Commutator runout		0.05 mm (0.002 in.) max.	0.1 mm (0.004 in.)
	Commutator O.D.		29.3---29.5 mm (1.154---1.161 in.)	28.8 mm (1.134 in.)
	Brush length		7.7---8.0 mm (0.30---0.31 in.)	0.9 mm (0.04 in.)
Starter (MITSUBA)	Output		1.6 kW	
	Commutator mica depth		0.4---0.5 mm (0.016---0.020 in.)	0.15 mm (0.006 in.)
	Commutator runout		0.02 mm (0.001 in.) max.	0.05 mm (0.002 in.)
	Commutator O.D.		28.0---28.1 mm (1.102---1.106 in.)	27.5 mm (1.083 in.)
	Brush length		11.1---11.5 mm (0.44---0.45 in.)	4.3 mm (0.17 in.)

ENGINE ASSEMBLY

ENGINE ASSEMBLY SERVICE LIMITS CHART

Item	Measurement	Qualification	Standard or New	Service Limit
Compression	Pressure Check the engine with the starter cranking	Minimum	930 kPa (9.5 kgf/cm^2 , 135 psi)	-
		Maximum variation	200 kPa (2.0 kgf/cm^2 , 28 psi)	-

CYLINDER HEAD

CYLINDER HEAD SERVICE LIMITS CHART

Item	Measurement	Qualification	Standard or New	Service Limit
Head	Warpage		-	0.05 mm (0.002 in.)
	Height		103.95---104.05 mm (4.093---4.096 in.)	-
Camshaft	End play		0.05---0.20 mm (0.002---0.008 in.)	0.4 mm (0.02 in.)
	Camshaft-to-holder oil clearance	No. 1 journal	0.030---0.069 mm (0.001---0.003 in.)	0.15 mm (0.006 in.)
		No. 2, 3, 4, 5 journals	0.060---0.099 mm (0.002---0.004 in.)	0.15 mm (0.006 in.)
	Total runout		0.03 mm (0.001 in.) max.	0.04 mm (0.002 in.)
			33.925 mm	

	Cam lobe height	Intake, primary	(1.3356 in.)	-
		Intake, secondary	29.638 mm (1.1668 in.)	-
		Exhaust	34.092 mm (1.3422 in.)	-
Valve	Clearance (cold)	Intake	0.21---0.25 mm (0.008---0.010 in.)	-
		Exhaust	0.28---0.32 mm (0.011---0.013 in.)	-
	Stem O.D.	Intake	5.475---5.485 mm (0.2156---0.2159 in.)	5.445 mm (0.214 in.)
		Exhaust	5.450---5.460 mm (0.2146---0.2150 in.)	5.42 mm (0.213 in.)
	Stem-to-guide clearance	Intake	0.030---0.055 mm (0.0012---0.0022 in.)	0.08 mm (0.003 in.)
		Exhaust	0.055---0.080 mm (0.0022---0.0031 in.)	0.11 mm (0.004 in.)
Valve seat	Width	Intake	1.25---1.55 mm (0.049---0.061 in.)	2.00 mm (0.079 in.)
		Exhaust	1.25---1.55 mm (0.049---0.061 in.)	2.00 mm (0.079 in.)
	Stem installed height	Intake	44.0---44.5 mm (1.73---1.75 in.)	44.7 mm (1.76 in.)
		Exhaust	44.1---44.6 mm (1.74---	44.8 mm

			1.76 in.)	(1.76 in.)
Valve spring	Free length	Intake	47.61 mm (1.874 in.)	-
		Exhaust	49.64 mm (1.954 in.)	-
Valve guide	I.D.	Intake	5.515---5.530 mm (0.2171---0.2177 in.)	5.55 mm (0.219 in.)
		Exhaust	5.515---5.530 mm (0.2171---0.2177 in.)	5.55 mm (0.219 in.)
	Installed height	Intake	15.2---16.2 mm (0.598---0.638 in.)	-
		Exhaust	15.5---16.5 mm (0.610---0.650 in.)	-
Rocker arm	Arm-to-shaft clearance	Intake	0.025---0.052 mm (0.0010---0.0020 in.)	0.08 mm (0.003 in.)
		Exhaust	0.018---0.056 mm (0.0007---0.0022 in.)	0.08 mm (0.003 in.)

ENGINE BLOCK

ENGINE BLOCK SERVICE LIMITS CHART

Item	Measurement	Qualification	Standard or New	Service Limit
	Warpage of deck		0.07 mm (0.003 in.) max.	0.10 mm (0.004 in.)
		A or I	87.010---87.020 mm (3.4256---	87.070 mm (3.4279 in.)

Block	Bore diameter		3.4260 in.)	
		B or II	87.000---87.010 mm (3.4252---3.4256 in.)	87.070 mm (3.4279 in.)
	Bore taper		-	0.05 mm (0.002 in.)
	Reboring limit		-	0.25 mm (0.01 in.)
Piston	Skirt O.D. at 13 mm (0.5 in.) from bottom of skirt	No letter or A	86.980---86.990 mm (3.4244---3.4248 in.)	86.930 mm (3.4224 in.)
		Letter B	86.970---86.980 mm (3.4240---3.4244 in.)	86.920 mm (3.4220 in.)
	Clearance in cylinder		0.020---0.040 mm (0.0008---0.0016 in.)	0.05 mm (0.002 in.)
	Ring groove width	Top	1.230---1.240 mm (0.0484---0.0488 in.)	1.26 mm (0.0450 in.)
		Second	1.240---1.250 mm (0.0488---0.0492 in.)	1.270 mm (0.050 in.)
		Oil	2.005---2.025 mm (0.0789---0.0797 in.)	2.05 mm (0.081 in.)
	Ring-to-groove clearance	Top	0.045---0.070 mm (0.0018---0.0028 in.)	0.13 mm (0.005 in.)
		Second	0.050---0.075 mm (0.0020---	0.13 mm

			0.0030 in.)	(0.005 in.)
Piston ring	Ring end gap	Top	0.20---0.35 mm (0.008---0.014 in.)	0.60 mm (0.024 in.)
		Second	0.40---0.55 mm (0.016---0.022 in.)	0.70 mm (0.028 in.)
		Oil	0.20---0.70 mm (0.008---0.028 in.)	0.80 mm (0.031 in.)
Piston pin	O.D.		21.961---21.965 mm (0.8646---0.8648 in.)	21.953 mm (0.8643 in.)
	Pin-to-piston clearance		-0.005 to +0.002 mm (-0.00020 to +0.00008 in.)	0.005 mm (0.0002 in.)
Connecting rod	Pin-to-rod clearance		0.005---0.015 mm (0.0002---0.0006 in.)	0.02 mm (0.0008 in.)
	Small-end bore diameter		21.970---21.976 mm (0.8650---0.8652 in.)	-
	Large-end bore diameter (Normal)		51.0 mm (2.01 in.)	-
	End play installed on crankshaft		0.15---0.35 mm (0.006---0.014 in.)	0.40 mm (0.016 in.)
		No. 1 journal No. 2 journal No. 4 journal	54.984---55.008 mm (2.1648---	-

Crankshaft	Main journal diameter	No. 5 journal	2.1657 in.)	
		No. 3 journal	54.976---55.000 mm (2.1644---2.1654 in.)	-
	Rod journal diameter		47.976---48.000 mm (1.8888---1.8898 in.)	-
	Rod/main journal taper		0.005 mm (0.0002 in.) max.	0.010 mm (0.0004 in.)
	Rod/main journal out-of-round		0.005 mm (0.0002 in.) max.	0.010 mm (0.0004 in.)
	End play		0.10---0.35 mm (0.004---0.014 in.)	0.45 mm (0.018 in.)
	Runout		0.03 mm (0.0012 in.) max.	0.04 mm (0.0016 in.)
Crankshaft bearing	Main bearing-to-journal oil clearance	No. 1 journal No. 2 journal No. 4 journal No. 5 journal	0.017---0.041 mm (0.0007---0.0016 in.)	0.050 mm (0.0020 in.)
		No. 3 journal	0.025---0.049 mm (0.0010---0.0019 in.)	0.055 mm (0.0022 in.)
	Rod bearing clearance		0.020---0.050 mm (0.0008---0.0020 in.)	0.060 mm (0.0024 in.)

ENGINE LUBRICATION

ENGINE LUBRICATION SERVICE LIMITS CHART

Item	Measurement	Qualification	Standard or New	Service Limit
Engine oil	Capacity	Engine overhaul	5.3 L (5.6 US qt)	
		Oil change, including filter	4.2 L (4.4 US qt)	
		Oil change, without filter	4.0 L(4.2 US qt)	
	Inner-to-outer rotor clearance		0.06---0.16 mm (0.002---0.006 in.)	0.20 mm (0.008 in.)
	Pump housing-to-outer rotor clearance		0.15---0.21 mm (0.006---0.008 in.)	0.23 mm (0.009 in.)
	Pump housing-to-rotor axial clearance		0.035---0.070 mm (0.0014---0.0028 in.)	0.12 mm (0.005 in.)
	Balancer shafts, journal diameter	No. 1 journal, front shaft	19.938---19.950 mm (0.7850---0.7854 in.)	19.92 mm (0.784 in.)
		No. 1 journal, rear shaft	23.938---23.950 mm (0.9424---0.9429 in.)	23.92 mm (0.942 in.)
		No. 2 journal, front and rear shaft	32.949---32.961 mm (1.2972---1.2977 in.)	32.93 mm (1.296 in.)
	Balancer shafts, journal taper		0.005 mm (0.0002 in.) max.	-
	Balancer shafts,	Front	0.063---0.108 mm (0.0025---0.0043 in.)	0.14 mm (0.0055 in.)

Oil pump	end play	Rear	0.063---0.108 mm (0.0025---0.0043 in.)	0.14 mm (0.0055 in.)
	Balancer shafts, shaft-to-bearing clearance	No. 1 journal, front shaft	0.050---0.082 mm (0.0020---0.0032 in.)	0.10 mm (0.004 in.)
		No. 1 journal, rear shaft	0.050---0.082 mm (0.0020---0.0032 in.)	0.10 mm (0.004 in.)
		No. 2 journal, front and rear shaft	0.060---0.120 mm (0.0024---0.0047 in.)	0.15 mm (0.006 in.)
	Balancer shaft bearings, I.D.	No. 1 journal, front shaft	20.000---20.020 mm (0.7874---0.7882 in.)	20.03 mm (0.789 in.)
		No. 1 journal, rear shaft	24.000---24.020 mm (0.9449---0.9457 in.)	24.03 mm (0.946 in.)
		No. 2 journal, front and rear shaft	33.021---33.069 mm (1.3000---1.3019 in.)	33.09 mm (1.303 in.)
	Relief valve, oil pressure with oil temperature at 176°F (80°C)	At idle	70 kPa (0.7 kgf/cm^2 , 10 psi) min.	
		At 3,000 rpm	300 kPa (3.1 kgf/cm^2 ,44 psi) min.	

COOLING

COOLING STANDARD CHART

Item	Measurement	Qualification	Standard or New
	Coolant capacity	M/T at engine	7.2 L (1.90 US

Radiator	(includes engine, heater, hoses, and reservoir) Use Honda All Season Antifreeze/Coolant Type 2	overhaul	gal)
		M/T at coolant change	5.1 L (1.35 US gal)
		A/T at engine overhaul	7.1 L (1.88 US gal)
		A/T at coolant change	5.0 L (1.32 US gal)
Reservoir	Coolant capacity		0.6 L (0.16 US gal)
Radiator cap	Opening pressure		93---123 kPa (0.95---1.25 kgf/cm^2 , 14---18 psi)
Thermostat	Opening temperature	Begins to open	169---176°F (76---80°C)
		Fully open	194°F (90°C)
	Valve lift at fully open	8.0 mm (0.31 in.) min.	
Radiator fan switch (2003-2004 models)	Switching temperature	Turns ON	196---203°F (91---95°C)
		Turns OFF	Subtract 5---15°F (3---8°C) from actual ON temperature

FUEL AND EMISSIONS

FUEL AND EMISSIONS STANDARD CHART

Item	Measurement	Qualification	Standard or New
Fuel pressure	Pressure with fuel pressure gauge	2003-2004 (except SULEV) models, 2005 model, and 2006-07 SULEV model	330---380 kPa (3.4---3.9 kgf/cm^2 , 48---55 psi)

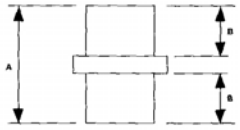
regulator	connected	2003-2004 SULEV model and 2006-07 (except SULEV) model	320---370 kPa (3.3---3.8 kgf/cm^2 , 47---54 psi)
Fuel tank	Capacity	64.7 L (17.1 US gal)	
Engine idle (2003-2004 models)	Idle speed without load	SULEV and M/T models (A/T in P or N position, M/T in neutral)	700+/-50 rpm
		A/T (except SULEV) models (in P or N position)	800+/-50 rpm
	Idle speed with high electric load (A/C switch ON, temperature set to Max Cool, blower fan on High, rear window defogger ON, and headlights on high beam)	SULEV and M/T models (A/T in P or N position, M/T in neutral)	720+/-50 rpm
		A/T (except SULEV) models (in P or N position)	800+/-50 rpm
Engine idle (2005-2007 models)	Idle speed with no load	M/T models (in neutral)	720+/-50 rpm
		A/T models (in P or N position)	800+/-50 rpm
	Idle speed with high electric load (A/C switch ON, temperature set to Max Cool, blower fan on High, rear window defogger ON, and headlights on high beam)	M/T models (in neutral)	720+/-50 rpm
		A/T models (in P or N position)	800+/-50 rpm

CLUTCH

CLUTCH SERVICE LIMIT CHART

Item	Measurement	Qualification	Standard or New	Service Limit
Clutch pedal	Height from floor		191 mm (7.52 in.)	-
	Stroke		130---140 mm (5.12---5.51 in.)	-
	Play		10---18 mm (0.39---0.71 in.)	-
	Disengagement height from floor		95 mm (3.74 in.) min.	-
Flywheel	Runout on clutch mating surface		0.05 mm (0.002 in.) max.	0.15 mm (0.006 in.)
Clutch disc	Rivet head depth		1.65---2.25 mm (0.065---0.089 in.)	0.7 mm (0.03 in.)
	Thickness		8.6---9.2 mm (0.34---0.36 in.)	6.0 mm (0.24 in.)
Pressure plate	Warpage		0.03 mm (0.001 in.) max.	0.15 mm (0.006 in.)
	Height of diaphragm spring fingers measured with special tool and feeler gauge		0.6 mm (0.02 in.) max.	0.8 mm (0.03 in.)

MANUAL TRANSMISSION AND M/T DIFFERENTIAL

Item	Measurement	Qualification	Standard or New	Service Limit
Transmission fluid	Capacity	Fluid change	1.9 L (2.0 US qt)	
	Use Honda MTF	Overhaul	2.1 L (2.2 US qt)	
Mainshaft	End play		0.11—0.17 mm (0.004—0.007 in.)	Adjust
	Diameter of bushing surface		20.80—20.85 mm (0.8189—0.8209 in.)	20.75 mm (0.817 in.)
	Diameter of distance collar		31.984—32.000 mm (1.2594—1.2598 in.)	31.93 mm (1.257 in.)
	Diameter of ball bearing contact area (clutch housing side)		27.977—27.990 mm (1.1015—1.1020 in.)	27.94 mm (1.100 in.)
	Diameter of needle bearing contact area		38.984—39.000 mm (1.5348—1.5354 in.)	38.93 mm (1.533 in.)
	Diameter of ball bearing contact area (transmission housing side)		27.987—28.000 mm (1.1019—1.1024 in.)	27.94 mm (1.100 in.)
	Runout		0.02 mm (0.001 in.) max.	0.05 mm (0.002 in.)
Mainshaft 3rd, 4th, and 5th gears	I.D.		44.009—44.025 mm (1.7326—1.7333 in.)	44.08 mm (1.735 in.)
	End play		0.06—0.16 mm (0.002—0.006 in.)	0.25 mm (0.010 in.)
	Thickness		23.92—23.97 mm (0.941—0.944 in.)	23.80 mm (0.937 in.)
Countershaft	Diameter of needle bearing contact area (clutch housing side)		40.000—40.015 mm (1.5748—1.5754 in.)	39.95 mm (1.573 in.)
	Diameter of distance collar contact area		39.937—39.950 mm (1.5723—1.5728 in.)	39.88 mm (1.570 in.)
	Diameter of ball bearing contact area (transmission housing side)		30.020—30.033 mm (1.1819—1.1824 in.)	29.97 mm (1.180 in.)
	Runout		0.02 mm (0.001 in.) max.	0.05 mm (0.002 in.)
	35 mm shim-to-bearing inner race clearance		0.04—0.10 mm (0.0016—0.0039 in.)	Adjust
Countershaft 1st gear	I.D.		52.010—52.029 mm (2.0476—2.0484 in.)	52.08 mm (2.050 in.)
	End play		0.06—0.16 mm (0.002—0.006 in.)	0.25 mm (0.010 in.)
	Thickness		22.92—22.97 mm (0.902—0.904 in.)	22.87 mm (0.900 in.)
Countershaft 2nd gear	I.D.		52.010—52.029 mm (2.0476—2.0484 in.)	52.08 mm (2.050 in.)
	End play		0.06—0.16 mm (0.002—0.006 in.)	0.25 mm (0.010 in.)
	Thickness		27.92—27.97 mm (1.099—1.101 in.)	27.87 mm (1.097 in.)
Countershaft 1st gear distance collar	I.D.		39.95—39.96 mm (1.5728—1.5732 in.)	39.97 mm (1.574 in.)
	O.D.		46.989—47.000 mm (1.8499—1.8504 in.)	46.94 mm (1.848 in.)
	Length		23.03—23.08 mm (0.907—0.909 in.)	———
Countershaft 2nd gear distance collar	I.D.		39.95—39.96 mm (1.5728—1.5732 in.)	39.97 mm (1.574 in.)
	O.D.		46.989—47.000 mm (1.8499—1.8504 in.)	46.94 mm (1.848 in.)
	Length		28.03—28.08 mm (1.104—1.106 in.)	———
Mainshaft 4th and 5th gears distance collar	I.D.		32.00—32.01 mm (1.2598—1.2602 in.)	32.02 mm (1.261 in.)
	O.D.		38.989—39.000 mm (1.5350—1.5354 in.)	38.94 mm (1.533 in.)
	Length	A	51.95—52.05 mm (2.045—2.049 in.)	———
		B	24.03—24.08 mm (0.946—0.947 in.)	———
MBS distance collar	I.D.		28.00—28.01 mm (1.102—1.103 in.)	28.02 mm (1.103 in.)
	Length		23.95—24.05 mm (0.943—0.947 in.)	———

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Fig. 1: Manual Transmission And M/T Differential Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MANUAL TRANSMISSION AND M/T DIFFERENTIAL CHART

Item	Measurement	Qualification	Standard or New	Service Limit
			20.016---	

Reverse idler gear	I.D.		20.043 mm (0.7880---0.7891 in.)	20.90 mm (0.832 in.)
	Gear-to-reverse gear shaft clearance		0.036---0.084 mm (0.0014---0.0033 in.)	0.16 mm (0.006 in.)
Synchro ring	Ring-to-gear clearance	Ring pushed against gear	0.70---1.49 mm (0.028---0.059 in.)	0.4 mm (0.016 in.)
Double cone synchro	Outer synchro ring-to-synchro cone clearance	Ring pushed against gear	0.70---1.19 mm (0.028---0.047 in.)	0.3 mm (0.012 in.)
	Synchro cone-to-gear clearance	Ring pushed against gear	0.50---1.04 mm (0.020---0.041 in.)	0.3 mm (0.012 in.)
	Outer synchro ring-to-gear cone clearance	Ring pushed against gear	0.95---1.68 mm (0.037---0.066 in.)	0.6 mm (0.024 in.)
Triple cone synchro	Outer synchro ring-to-synchro cone clearance	Ring pushed against gear	0.70---1.19 mm (0.028---0.047 in.)	0.3 mm (0.012 in.)
	Synchro cone-to-gear clearance	Ring pushed against gear	0.50---1.04 mm (0.020---0.041 in.)	0.3 mm (0.012 in.)
	Outer synchro ring-to-gear cone clearance	Ring pushed against gear	0.95---1.68 mm (0.037---0.066 in.)	0.6 mm (0.024 in.)
Shift fork	Finger thickness		7.4---7.6 mm (0.29---0.30 in.)	-
	Fork-to-synchro sleeve clearance		0.35---0.65 mm (0.014---0.026 in.)	1.0 mm (0.039 in.)
			13.4---13.7	

Reverse shift fork	Finger thickness		mm (0.527---0.539 in.)	-
	Fork-to-reverse idler gear clearance		0.20---0.59 mm (0.007---0.024 in.)	1.2 mm (0.047 in.)
Shift arm	I.D.		13.973---14.000 mm (0.5501---0.5512 in.)	-
	Shift fork diameter at contact area		16.9---17.0 mm (0.665---0.669 in.)	-
	Shift arm-to-shift lever clearance		0.2---0.5 mm (0.008---0.020 in.)	0.6 mm (0.024 in.)
Select lever	Finger width		14.85---14.95 mm (0.585---0.589 in.)	-
Change lever	Change-to-select lever clearance		0.05---0.25 mm (0.002---0.010 in.)	0.5 mm (0.020 in.)
	Groove (to select lever)		15.00---15.10 mm (0.591---0.594 in.)	-
	Shaft-to-shift arm clearance		0.013---0.07 mm (0.0005---0.003 in.)	0.1 mm (0.004 in.)
M/T differential carrier	Pinion shaft contact area I.D.		18.010---18.028 mm (0.7091---0.7098 in.)	-
	Carrier-to-pinion shaft clearance		0.027---0.057 mm (0.0011---0.0022 in.)	0.1 mm (0.004 in.)

	Driveshaft contact area I.D.		28.025---28.045 mm (1.1033---1.1041 in.)	-
M/T differential pinion gear	Backlash		0.05---0.15 mm (0.002---0.006 in.)	-
	I.D.		18.042---18.066 mm (0.7103---0.7113 in.)	-
	Pinion gear-to-pinion shaft clearance		0.059---0.095 mm (0.0023---0.0037 in.)	0.15 mm (0.006 in.)
80 mm shim	80 mm shim-to-bearing outer race clearance in transmission housing		0---0.10 mm (0---0.0039 in.)	Adjust

AUTOMATIC TRANSMISSION AND A/T DIFFERENTIAL

AUTOMATIC TRANSMISSION AND A/T DIFFERENTIAL CHART

Item	Measurement	Qualification	Standard or New	Service Limit
ATF (Automatic Transmission Fluid)	Capacity Use Honda ATF-Z1	Fluid change	2.9 L (3.0 US qt)	
		Overhaul	6.5 L (6.9 US qt)	
	Line pressure	At 2,000 rpm in N or P position	900---960 kPa (9.2---9.8 kgf/cm^2 , 130---140 psi)	850 kPa (8.7 kgf/cm^2 ,120 psi)

ATF pressure	1st clutch pressure	At 2,000 rpm in 1 position	890---970 kPa (9.1---9.9 kgf/cm^2, 130---140 psi)	840 kPa (8.6 kgf/cm^2, 120 psi)
	2nd clutch pressure	At 2,000 rpm in 2 position	890---970 kPa (9.1---9.9 kgf/cm^2, 130---140 psi)	840 kPa (8.6 kgf/cm^2, 120 psi)
	3rd clutch pressure	At 2,000 rpm in 3rd gear in D3 position	890---970 kPa (9.1---9.9 kgf/cm^2, 130---140 psi)	840 kPa (8.6 kgf/cm^2, 120 psi)
	4th clutch pressure	At 2,000 rpm in 4th gear in D position	890---970 kPa (9.1---9.9 kgf/cm^2, 130---140 psi)	840 kPa (8.6 kgf/cm^2, 120 psi)
	5th clutch pressure	At 2,000 rpm in 5th gear in D position	890---970 kPa (9.1---9.9 kgf/cm^2, 130---140 psi)	840 kPa (8.6 kgf/cm^2, 120 psi)
Torque converter	Stall speed Check with vehicle on level		2,400 rpm	2,250---2,550 rpm

	ground			
	Clutch end plate-to-top disc clearance	1st (2003-2005 models)	-	1.28---1.48 mm (0.050---0.058 in.)
		1st (2006-07 model)	-	1.38---1.58 mm (0.054---0.062 in.)
		2nd (2003-2005 models)	-	0.88---1.08 mm (0.035---0.043 in.)
		2nd (2006-07 model)	-	1.18---1.38 mm (0.046---0.054 in.)
		3rd (2003-2005 models)	-	0.93---1.13 mm (0.037---0.044 in.)
		3rd (2006-07 model)	-	1.23---1.43 mm (0.048---0.056 in.)
		4th and 5th (2003-2004 models)	-	0.73---0.93 mm (0.029---0.037 in.)
		4th and 5th (2005-2007 models)	-	0.93---1.13 mm (0.037---0.044 in.)
	Clutch return spring free length	1st, 2nd, and 3rd	50.8 mm (2.00 in.)	48.8 mm (1.92 in.)
		4th and 5th	33.5 mm (1.32 in.)	31.5 mm (1.24 in.)
	Clutch disc thickness	1.94 mm (0.076 in.)		-
		1st and 3rd	1.6 mm (0.063 in.)	When discolored
			2.0 mm	When

Clutch plate thickness	2nd	(0.079 in.)	discolored
		4.0 mm (0.157 in.)	When discolored
	4th and 5th (2003-2004 models)	2.3 mm (0.091 in.)	When discolored
	4th and 5th (2005-2007 models)	2.0 mm (0.079 in.)	When discolored
Clutch waved-plate phase difference	1st	0.15---0.25 mm (0.006---0.010 in.)	-
	2nd, 3rd, 4th, and 5th	0.1---0.2 mm (0.004---0.008 in.)	-
1st, 2nd, and 3rd clutch end plate thickness (2003-2005 models)	Mark 1	2.6 mm (0.102 in.)	When discolored
	Mark 2	2.7 mm (0.106 in.)	When discolored
	Mark 3	2.8 mm (0.110 in.)	When discolored
	Mark 4	2.9 mm (0.114 in.)	When discolored
	Mark 5	3.0 mm (0.118 in.)	When discolored
	Mark 6	3.1 mm (0.122 in.)	When discolored
	Mark 7	3.2 mm (0.126 in.)	When discolored
	Mark 8	3.3 mm (0.130 in.)	When discolored
	Mark 9	3.4 mm (0.134 in.)	When discolored

1st and 2nd clutch end plate thickness (2006-07 model)	Mark 1	2.6 mm (0.102 in.)	When discolored
	Mark 2	2.7 mm (0.106 in.)	When discolored
	Mark 3	2.8 mm (0.110 in.)	When discolored
	Mark 4	2.9 mm (0.114 in.)	When discolored
	Mark 5	3.0 mm (0.118 in.)	When discolored
	Mark 6	3.1 mm (0.122 in.)	When discolored
	Mark 7	3.2 mm (0.126 in.)	When discolored
	Mark 8	3.3 mm (0.130 in.)	When discolored
	Mark 9	3.4 mm (0.134 in.)	When discolored
3rd clutch end plate thickness (2006-07 model)	Mark 1	2.1 mm (0.083 in.)	When discolored
	Mark 2	2.2 mm (0.087 in.)	When discolored
	Mark 3	2.3 mm (0.091 in.)	When discolored
	Mark 4	2.4 mm (0.094 in.)	When discolored
	Mark 5	2.5 mm (0.098 in.)	When discolored
	Mark 6	2.6 mm (0.102 in.)	When discolored
	Mark 7	2.7 mm (0.106 in.)	When discolored
	Mark 8	2.8 mm	When

			(0.110 in.)	discolored
		Mark 9	2.9 mm (0.114 in.)	When discolored
	4th and 5th clutch end plate thickness	Mark 1	2.1 mm (0.083 in.)	When discolored
		Mark 2	2.2 mm (0.087 in.)	When discolored
		Mark 3	2.3 mm (0.091 in.)	When discolored
		Mark 4	2.4 mm (0.095 in.)	When discolored
		Mark 5	2.5 mm (0.098 in.)	When discolored
		Mark 6	2.6 mm (0.102 in.)	When discolored
		Mark 7	2.7 mm (0.106 in.)	When discolored
		Mark 8	2.8 mm (0.110 in.)	When discolored
		Mark 9	2.9 mm (0.114 in.)	When discolored

Clutch					

Mainshaft	Diameter of needle bearing contact area	At stator shaft	22.984---23.000 mm (0.905---0.906 in.)	When worn or damaged
		At 5th gear	51.975---51.991 mm (2.046---2.047 in.)	When worn or damaged
		4th gear collar	37.975---33.991 mm (1.3376 - 1.3382 in.)	When worn or damaged
	I.D. of gears	5th gear	57.000---57.019 mm (2.2441---2.2448 in.)	When worn or damaged
		4th gear	40.000---40.016 mm (1.5748---1.5754 in.)	When worn or damaged
	End play of gears	5th gear	0.03---0.11 mm (0.001---0.004 in.)	-
		4th gear	0.1---0.22 mm (0.004---0.009 in.)	-
	41 x 68 mm thrust washer thickness	No. 1	6.35 mm (0.250 in.)	When worn or damaged
		No. 2	6.40 mm (0.252 in.)	When worn or damaged
		No. 3	6.45 mm (0.254 in.)	When worn or damaged
			6.50 mm	When worn or

		No. 4	(0.256 in.)	damaged
		No. 5	6.55 mm (0.258 in.)	When worn or damaged
		No. 6	6.60 mm (0.260 in.)	When worn or damaged
	4th gear collar length		66.3---66.4 mm (2.610---2.614 in.)	-
	Length of 4th gear collar flange from end		19.15---19.30 mm (0.754---0.760 in.)	When worn or damaged
	Sealing ring thickness		1.91---1.97 mm (0.0752---0.0776 in.)	1.86 mm (0.0732 in.)
	Width of sealing ring groove		2.025---2.060 mm (0.0797---0.0811 in.)	2.080 mm (0.0819 in.)
	Clutch feed pipe O.D.		7.97---7.98 mm (0.3138---0.3142 in.)	7.95 mm (0.313 in.)
	Clutch feed pipe bushing I.D.		8.000---8.015 mm (0.3150---0.3156 in.)	8.030 mm (0.3161 in.)
	Diameter of needle bearing contact area	At torque converter housing	36.005---36.015 mm (1.4175---1.4179 in.)	When worn or damaged
		At 4th gear	34.982---34.998 mm (1.3772---1.3779 in.)	When worn or damaged

Countershaft		At reverse gear	39.979---40.000 mm (1.5740---1.5748 in.)	When worn or damaged
	I.D. of gears	4th gear	41.000---41.016 mm (1.6142---1.6148 in.)	When worn or damaged
		Reverse gear	46.000---46.016 mm (1.8110---1.8116 in.)	When worn or damaged
	End play of gears	5th gear	0.00---0.48 mm (0.000---0.019 in.)	-
		4th gear	0.04---0.27 mm (0.002---0.011 in.)	-
		Reverse gear	0.10---0.25 mm (0.004---0.010 in.)	-
	Collar, 35 x 47 x 7.8 mm thickness		7.8 mm (0.31 in.)	-
	Collar, 37 x 41 x 57.8 mm length		57.75---57.80 mm (2.274---2.276 in.)	-
	Reverse selector hub width		25.45---25.65 mm (1.002---1.010 in.)	-
	Reverse selector		55.87---55.90 mm	When worn or

	hub O.D.		(2.200---2.201 in.)	damaged
	Diameter of needle bearing contact area	At 1st gear	39.986---39.999 mm (1.5742---1.5748 in.)	When worn or damaged
		At 2nd gear	39.986---39.999 mm (1.5742---1.5748 in.)	When worn or damaged
		3rd gear collar	36.975---36.991 mm (1.4557---1.4563 in.)	When worn or damaged
	I.D. of gears	1st gear	47.000---47.016 mm (1.8504---1.8510 in.)	When worn or damaged
		2nd gear	46.000---46.016 mm (1.8110---1.8116 in.)	When worn or damaged
		3rd gear	43.000---43.016 mm (1.6929---1.6935 in.)	When worn or damaged
	End play of gears	1st gear	0.04---0.12 mm (0.002---0.005 in.)	-
		2nd gear	0.04---0.12 mm (0.002---0.005 in.)	-
		3rd gear	0.10---0.22 mm (0.004--	-

		-0.009 in.)	
37 x 58 mm thrust washer thickness	No. 1	3.900 mm (0.154 in.)	When worn or damaged
	No. 2	3.925 mm (0.155 in.)	When worn or damaged
	No. 3	3.950 mm (0.156 in.)	When worn or damaged
	No. 4	3.975 mm (0.156 in.)	When worn or damaged
	No. 5	4.000 mm (0.157 in.)	When worn or damaged
	No. 6	4.025 mm (0.158 in.)	When worn or damaged
	No. 7	4.050 mm (0.159 in.)	When worn or damaged
	No. 8	4.075 mm (0.160 in.)	When worn or damaged
	No. 9	4.100 mm (0.161 in.)	When worn or damaged
	No. 10	4.125 mm (0.162 in.)	When worn or damaged
	No. 11	4.150 mm (0.163 in.)	When worn or damaged
	No. 12	4.175 mm (0.164 in.)	When worn or damaged
	No. 13	4.200 mm (0.165 in.)	When worn or damaged
	No. 14	4.225 mm (0.166 in.)	When worn or damaged
	No. 15	4.250 mm (0.167 in.)	When worn or damaged
	No. 16	4.275 mm (0.168 in.)	When worn or damaged

	No. 17	4.300 mm (0.169 in.)	When worn or damaged
	No. 18	4.325 mm (0.170 in.)	When worn or damaged
	No. 19	4.350 mm (0.171 in.)	When worn or damaged
	No. 20	4.375 mm (0.172 in.)	When worn or damaged
40 x 51.5 mm thrust washer thickness	No. 1	4.80 mm (0.189 in.)	When worn or damaged
	No. 2	4.85 mm (0.191 in.)	When worn or damaged
	No. 3	4.90 mm (0.193 in.)	When worn or damaged
	No. 4	4.95 mm (0.195 in.)	When worn or damaged
	No. 5	5.00 mm (0.197 in.)	When worn or damaged
	No. 6	5.05 mm (0.199 in.)	When worn or damaged
3rd gear collar length		43.9---44.0 mm (1.728---1.732 in.)	-
Length of 3rd gear collar flange from end		5.25---5.40 mm (0.207---0.213 in.)	When worn or damaged
Sealing ring thickness		1.91---1.97 mm (0.0752---0.0776 in.)	1.86 mm (0.0732 in.)
Width of sealing ring groove		2.025---2.060 mm (0.0797---0.0811 in.)	2.080 mm (0.0819 in.)
		11.47---	

Clutch feed pipe O.D.	3rd clutch feed pipe	11.48 mm (0.4516---0.4520 in.)	11.45 mm (0.4508 in.)
	1st clutch feed pipe	6.97---6.98 mm (0.2744---0.2748 in.)	6.95 mm (0.2736 in.)
Clutch feed pipe bushing O.D.	3rd clutch feed pipe	11.500---11.518 mm (0.4528---0.4553 in.)	11.530 mm (0.4539 in.)
	1st clutch feed pipe	7.018---7.030 mm (0.2763---0.2768 in.)	7.045 mm (0.2774 in.)
ATF guide collar of sealing ring contact I.D.		29.000---29.021 mm (1.1417---1.1426 in.)	29.05 mm (1.144 in.)

Secondary					

shaft				
Idler gear shaft	Diameter of needle bearing contact area	End cover side	32.003---32.013 mm {1.2600---1.2604 in.)	When worn or damaged
	Thickness of cotters		1.39---1.42 mm (0.0547---0.0559 in.)	-----
Reverse idler gear	Reverse idler gear shaft diameter at needle bearing contact area		14.99---15.00 mm (0.7877---0.7882 in.)	When worn or damaged
	I.D.		20.007---20.020 mm (0.7877---0.7882 in.)	When worn or damaged
	I.D. of reverse idler gear shaft contact area on transmission housing		14.800---14.818 mm (0.5827---0.5834 in.)	-----
	I.D. of reverse idler gear shaft holder		14.800---14.824 mm (0.5827---0.5836 in.)	When worn or damaged
	ATF pump thrust clearance		0.03---0.05 mm (0.001---0.002 in.)	0.07 mm (0.003 in.)
	ATF pump gear-to-body	Drive gear	0.210---0.265 mm (0.008---0.010 in.)	-----

ATF pump	clearance	Driven gear	0.070---0.125 mm (0.003---0.005 in.)	-----
	ATF pump driven gear I.D.		14.016---14.034 mm (0.5518---0.5525 in.)	When worn or damaged
	ATF pump driven gear shaft O.D.		13.980---13.990 mm (0.5504---0.5508 in.)	When worn or damaged
Stator shaft	Needle bearing contact I.D.	Torque converter side	27.000---27.021 mm (1.063---1.064 in.)	When worn or damaged
		ATF pump side	29.000---29.021 mm (1.1417---1.1426 in.)	-----
	Sealing ring contact area I.D.		29.000---29.021 mm (1.1417---1.1426 in.)	29.05 mm (1.144 in.)
	Reverse shift fork	Fork finger thickness	5.90---6.00 mm (0.232---0.236 in.)	5.40 mm (0.213 in.)
Park gear and pawl			-----	When worn or damaged
Servo body	Shift fork shaft bore I.D.		14.000---14.010 mm (0.5512---0.5516 in.)	-----
			37.000---	

	Shift fork shaft valve bore I.D.		37.039 mm (1.4567---1.4582 in.)	37.045 mm (1.4585 in.)
Regulator valve body	Sealing ring contact I.D.		29.000---29.021 mm (1.1417---1.1426 in.)	29.05 mm (1.144 in.)

AUTOMATIC TRANSMISSION AND A/T DIFFERENTIAL CHART

Item	Measurement	Qualification	Standard or New			
			Wire Diameter	O.D.	Free Length	No. of Coil
Main valve body spring (see **MAIN VALVE BODY DISASSEMBLY, INSPECTION, AND**)	Shift valve A spring		0.8 mm (0.031 in.)	5.6 mm (0.220 in.)	28.1 mm (1.106 in.)	15.9
	Shift valve B spring		0.8 mm (0.031 in.)	5.6 mm (0.220 in.)	28.1 mm (1.106 in.)	15.9
	Shift valve C spring		0.8 mm (0.031 in.)	5.6 mm (0.220 in.)	28.1 mm (1.106 in.)	15.9
	Relief valve spring		1.0 mm (0.039 in.)	9.6 mm (0.378 in.)	34.1 mm (1.343 in.)	10.2
	Lock-up control valve spring		0.65 mm (0.026 in.)	7.1 mm (0.280 in.)	23.1 mm (0.909 in.)	12.7
			0.9 mm	6.6	26.5	

	Cooler check valve spring	2003-2004 models	(0.035 in.)	mm (0.260 in.)	mm (1.043 in.)	12.6
		2005-2007 models	0.85 mm (0.034 in.)	6.6 mm (0.260 in.)	27.0 mm (1.063 in.)	11.3
	Servo control valve spring		0.7 mm (0.028 in.)	6.6 mm (0.260 in.)	35.7 mm (1.406 in.)	17.2
	Shift valve E spring		0.8 mm (0.031 in.)	5.6 mm (0.220 in.)	28.1 mm (1.106 in.)	15.9
Regulator valve body spring 2003-2004 models (see **2003-2004 MODELS**), 2005-2007 models (see **2005-2007**	Stator reaction spring		4.5 mm (0.177 in.)	35.4 mm (1.394 in.)	30.3 mm (1.193 in.)	1.92
	Regulator valve spring A		1.9 mm (0.075 in.)	14.7 mm (0.579 in.)	80.6 mm (3.173 in.)	16.1
	Regulator valve spring B		1.6 mm (0.063 in.)	9.2 mm (0.362 in.)	44.0 mm (1.732 in.)	12.5
	Torque converter check valve spring		1.2 mm (0.047 in.)	8.6 mm (0.339 in.)	33.8 mm (1.331 in.)	12.2
	Lock-up shift valve spring		1.0 mm (0.039 in.)	6.6 mm (0.260	35.5 mm (1.398	18.2

MODELS)				in.)	in.)	
	3rd accumulator spring		2.5 mm (0.098 in.)	14.6 mm (0.575 in.)	29.9 mm (1.177 in.)	4.9
	1st accumulator spring A		2.4 mm (0.094 in.)	18.6 mm (0.732 in.)	49.0 mm (1.929 in.)	7.1
	1st accumulator spring B		2.3 mm (0.091 in.)	12.2 mm (0.480 in.)	31.5 mm (1.240 in.)	6.6
Servo body spring (see **SERVO BODY DISASSEMBLY, INSPECTION, AND REASSEMBLY**)	Shift valve D spring		0.8 mm (0.031 in.)	5.6 mm (0.220 in.)	28.1 mm (1.106 in.)	15.9
	4th accumulator spring B		2.3 mm (0.091 in.)	12.2 mm (0.480 in.)	31.5 mm (1.240 in.)	6.6
	4th accumulator spring A		2.4 mm (0.094 in.)	18.6 mm (0.732 in.)	49.0 mm (1.929 in.)	7.1
	2nd accumulator spring B		2.0 mm (0.079 in.)	10.6 mm (0.417 in.)	34.0 mm (1.339 in.)	8.0
	2nd accumulator spring A		2.2 mm (0.087 in.)	16.6 mm (0.654 in.)	48.2 mm (1.898 in.)	8.5
	5th		2.5 mm	14.6	29.9	

	accumulator spring		(0.098 in.)	mm (0.575 in.)	mm (1.177 in.)	4.9

AUTOMATIC TRANSMISSION AND A/T DIFFERENTIAL CHART

Item	Measurement	Qualification	Standard or New	Service Limit
A/T differential carrier	Pinion shaft contact area I.D.		18.000---18.025 mm (0.709---0.719 in.)	-----
	Carrier-to-pinion shaft clearance		0.013---0.054 mm (0.001---0.002 in.)	0.1 mm (0.004 in.)
	Driveshaft contact area I.D.		28.015---28.045 mm (1.103---1.104 in.)	-----
	Carrier-to-driveshaft clearance		0.035---0.086 mm (0.002---0.003 in.)	0.12 mm (0.005 in.)
	Carrier bearing starting torque (preload	For new bearing	2.7---3.9 N.m (28---40 kgf.cm, 24---35 lbf.in.)	Adjust
		For bearing reused	2.5---3.6 N.m (25---37 kgf.cm, 22---32 lbf.in.)	Adjust
	Final driven gear backlash	(References)	0.085---0.144 mm (0.003---0.006 in.)	0.2 mm (0.008 in.)
	Backlash		0.05---0.15 mm (0.002---	-----

			0.006 in.)	
A/T differential pinion gear	I.D.		18.042---18.066 mm (0.7103---0.7113 in.)	-----
	Pinion gear-to-pinion shaft clearance		0.055---0.095 mm (0.0022---0.0037 in.)	0.12 mm (0.005 in.)

STEERING

STEERING STANDARD CHART

Item	Measurement	Qualification	Standard or New
Steering wheel	Rotational play measured at outside edge with engine running		0---10 mm (0---0.39 in.)
	Starting load measured at outside edge with engine running		29 N (3.0 kgf, 6.6 lbf)
Gearbox	Angle of rack guide screw loosened from locked position		10°---20° max.
Pump	Output pressure with shut-off valve closed		7,160---7,850 kPa (73---80 kgf/cm^2, 1,040---1,140 psi)
Power steering fluid	Capacity Use Honda Power Steering Fluid	Fluid change	0.4 L (0.42 US qt)
		System overhaul	1.1 L (1.16 US qt)
Drive belt	Tension		Auto tensioner

SUSPENSION

SUSPENSION SERVICE LIMIT CHART

Item	Measurement	Qualification	Standard or New	Service Limit
Wheel alignment: DX (2003-2005 models), VP	Camber	Front	0°03'+/-45'	
		Rear	-0°50'+/-30'	
	Caster	Front	3°10'+/-45'	
	Total Toe-in	Front	0+/-2 mm (0+/-1/16 in.)	
		Rear	2+/-2 mm (1/16+1/16 in.)	
	Front wheel turning angle	Inside wheel	39°00'+/-2°	
		Outside wheel	31°50' (Reference)	
Wheel alignment: DX (2006-07 model), LX, LX-P, SE, EX, EX-L	Camber	Front	0°00'+/-45'	
		Rear	-1°00'+/-30'	
	Caster	Front	3°15'+/-45'	
	Total Toe-in	Front	0+/-2 mm (0+/-1/16 in.)	
		Rear	2+/-2 mm (1/16+/-1/16 in.)	
	Front wheel turning angle	Inside wheel	38°50'+/-20	
		Outside wheel	31°40' (Reference)	
Wheel	Aluminum wheel runout	Axial	0---0.7 mm (0---0.03 in.)	2.0 mm (0.08 in.)
		Radial	0---0.7 mm (0---0.03 in.)	1.5 mm (0.06 in.)
	Steel wheel runout	Axial	0---1.0 mm (0---0.04 in.)	2.0 mm (0.08 in.)
		Radial	0---1.0 mm (0---0.04 in.)	1.5 mm (0.06 in.)
Wheel bearing	End play	Front	0---0.05 mm (0---0.002 in.)	
		Rear	0---0.05 mm (0---0.002 in.)	

BRAKES

BRAKES SERVICE LIMIT CHART

Item	Measurement	Qualification	Standard or New	Service Limit

Parking brake lever	Distance traveled when lever pulled with 196 N (20 kgf, 44 lbf) of force	Disc brake	6 to 9 clicks	
		Drum brake	4 to 7 clicks	
Brake pedal	Pedal height (carpet removed)	M/T	167 mm (6 9/16 in.)	
		A/T	172 mm (6 13/16 in.)	
	Free play	1---5 mm (1/16---3/16 in.)		
Brake disc	Thickness	Front	22.9---23.1 mm (0.90---0.91 in.)	21.0 mm (0.83 in.)
		Rear	8.9---9.1 mm (0.35---0.36 in.)	8.0 mm (0.31 in.)
	Runout	Front	-----	0.10 mm (0.004 in.)
		Rear	-----	0.10 mm (0.004 in.)
	Parallelism	Front and rear	-----	0.015 mm (0.0006 in.)
Brake pad	Thickness	Front	10.5---11.5 mm (0.41---0.45 in.)	1.6 mm (0.06 in.)
		Rear	8.9---9.1 mm (0.350---0.358 in.)	1.6 mm (0.06 in.)
Brake drum	I.D.		219.9---220.0 mm (8.657---8.661 in.)	221 mm (8.701 in.)
Brake shoe	Lining thickness		4.5 mm (0.18 in.)	2.0 mm (0.08 in.)

AIR CONDITIONING

AIR CONDITIONING STANDARD CHART

Item	Measurement	Qualification	Standard or New
Refrigerant	Type		HFC-134a (R-134a)
	Capacity of system		500---550 g (17.6---19.4 oz)
Refrigerant oil	Type		DENSO: ND-OIL 8 (P/N 38897-PR7-A01AH or 38899-PR7-A01)
	Capacity of components	Condenser	25 mL (5/6 fl oz)
		Evaporator	45 mL (1 1/2 fl oz)
		Each line and hose	10 mL (1/3 fl oz)
		Receiver	10 mL (1/3 fl oz)
		Compressor	160---175 mL (5 1/3---5 2/3 fl oz)
Compressor	Starter coil resistance	At 68°F (20°C)	3.9---4.3 ohms
	Pulley-to-pressure plate clearance		0.35---0.60 mm (0.014---0.024 in.)
Drive belt	Tension		Auto tensioner

DESIGN SPECIFICATIONS

DESIGN SPECIFICATIONS CHART

Item	Measurement	Qualification	Specification
	Overall length	2003-2005 models	4,813 mm (189.5 in.)
		2006-07 model	4,854 mm (191.1 in.)
	Overall width		1,820 mm (71.7 in.)
		DX, LX (2003-	1,453 mm (57.2

DIMENSIONS 4-door	Overall height	2005 models)	in.)
		EX, EX-L (2003-2005 models)	1,456 mm (57.3 in.)
		2006-07 model	1,453 mm (57.2 in.)
	Wheelbase		2,740 mm (107.9 in.)
	Track	Front	1,553 mm (61.1 in.)
		Rear	1,554 mm (61.2 in.)
	Seating capacity		five (5)
DIMENSIONS 2-door	Overall length	2003-2005 models	4,766 mm (187.6 in.)
		2006-07 model	4,770 mm (187.8 in.)
	Overall width		1,810 mm (71.3 in.)
	Overall height		1,415 mm (55.7 in.)
	Wheelbase		2,670 mm (105.1 in.)
	Track	Front	1,553 mm (61.1 in.)
		Rear	1,554 mm (61.2 in.)
	Seating capacity		five (5)
WEIGHT (U.S.A.)	Gross Vehicle Weight Rating (GVWR)	DX, VP (2006-07 model), LX	4,080 lbs
		SE (2006-07 model), EX, EX-L	4,145 lbs
	Gross Vehicle	DX (2003-2005 models), LX	1,850 kg

WEIGHT (CANADA)	Weight Rating (GVWR)	DX (2006-07 model), SE (2006-07 model), EX, EX-L	1,880 kg
ENGINE	Type		Water cooled, 4-stroke DOHC i-VTEC engine
	Cylinder arrangement		Inline 4-cylinder, transverse
	Bore and stroke		87 x 99 mm (3.43 x 3.90 in.)
	Displacement		2,354 cm^3 (144 cu in.)
	Compression ratio		9.7
	Valve train		Chain drive, DOHC i-VTEC 4 valves per cylinder
	Lubrication system		Forced, wet sump, with trochoid pump
	Oil pump displacement	At 6,000 rpm	52.8 L (55.8 US qt)/minute
	Water pump displacement	At 6,000 rpm	95.5 L (101 US qt)/minute
	Fuel required		Regular UNLEADED gasoline with 87 pump octane number or higher
	Type		Gear reduction
	Normal output	M/T (2003-2005 models)	1.7 kW

STARTER		A/T, M/T (2006-07 model)	1.6 kW
	Normal voltage		12 V
	Hour rating		30 seconds
	Rotation of direction		Clockwise as viewed from gear end
CLUTCH	Clutch type	M/T	Single plate dry, diaphragm spring
		A/T	3-element torque converter with lock-up clutch
	Clutch friction material surface area	M/T	221 cm^2 (34.22 sq in.)
MANUAL TRANSMISSION	Type	APG6	Synchronized, 5-speed forward, 1 reverse
	Primary reduction		Direct 1:1
	Gear ratio	1st	3.267
		2nd	1.769
		3rd	1.147
		4th	0.872
		5th	0.659
		Reverse	3.583
		Final	4.389
	Final reduction	Type	Single helical gear
	Type	MCLA	Electronically controlled automatic, 5-speed forward, 1 reverse
	Primary reduction		Direct 1:1

AUTOMATIC TRANSMISSION	Gear ratio	1st	2.652
		2nd	1.517
		3rd	1.037
		4th	0.738
		5th	0.566
		Reverse	2.000
	Final reduction	Type	Single helical gear
		Gear ratio	4.438
STEERING	Type		Power-assisted rack and pinion
	Overall ratio		15.21
	Turns, lock-to-lock		2.98
	Steering wheel diameter		380 mm (15.0 in.)
SUSPENSION	Type	Front	Independent double wishbone, coil spring, with stabilizer
		Rear	Independent double wishbone, coil spring, with stabilizer
	Shock absorber	Front	Telescopic, hydraulic, nitrogen gas-filled
		Rear	Telescopic, hydraulic, nitrogen gas-filled
		DX (2003-2005 models), VP	P195/65R15 89H M+S
		LX (2003-2005 models),	P205/65R15 92H

TIRES	Size of front and rear tires	LX (2006-07 model 4-door), LX-P	M+S
		DX (2006-07 model), LX (2006-07 model 2-door), SE, EX, EX-L	P205/60R16 91V M+S
		Size of spare tire	T135/80D16
WHEEL ALIGNMENT	Camber (2003-2005 models), VP (2006-07 model)	Front: DX (2003-2005 models), VP	0°03'
		Front: DX (2006-07 model), LX, LX-P, SE (2006-07 model), EX, EX-L	0°00'
		Rear: DX (2003-2005 models), VP	-0°50'
		Rear: DX (2006-07 model) LX, LX-P, SE (2006-07 model), EX, EX-L	-1°00'
	Caster	Front: DX (2003-2005 models), VP	3°10'
		Front: DX (2006-07 model), LX, LX-P, SE (2006-07 model), EX, EX-L	3°15'
	Total Toe-in	Front	0 mm (0 in.)
		Rear	2 mm (1/16 in.)
			Power-assisted

BRAKES	Type of service brake	Front	self-adjusting ventilated disc
		Rear: DX, VP (2006-07 model), LX, LX-P	Power-assisted self-adjusting drum
		Rear: SE (2006-07 model), EX, EX-L	Power-assisted self-adjusting solid disc
	Type of parking brake		Mechanical actuating, rear wheels
	Pad friction surface area	Front: US model	56 cm^2 (8.7 sq in.) x 2
		Front: Canada model	57 cm^2 (8.8 sq in.) x 2
		Rear	28 cm^2 (4.3 sq in.) x 2
	Shoe friction surface area	Rear	74 cm^2 (11.5 sq in.) x 2
AIR	Compressor	Type	Swash plate
		Capacity	188 mL (11.47 cu in.)/rev.
		Maximum speed	7,922 rpm
		Lubricant capacity	160 mL (5 1/3 fl oz)
		Lubricant type	DENSO ND-OIL 8
	Condenser	Type	Corrugated fin
	Evaporator	Type	Corrugated fin
		Type	Radial
		Motor type	210 W/12 V
		Speed control	Infinite variable

CONDITIONING	Blower	Maximum capacity	505 m^3 /h (17,805 cu ft/h)
	Temperature control		Air-mix type
	Compressor clutch	Type	Dry, single plate, poly V-belt drive
		Electrical power consumption at 68°F (20°C)	35 W maximum at 12 V
	Refrigerant	Type	HFC-134a (R-134a)
		Capacity	500---550 g (17.6---19.4 oz)
	Battery		12 V---36 AH/5 hours
	Starter	M/T	12 V---1.7 kW
		A/T	12 V---1.6 kW
	Alternator		12 V---105A
	Fuses	Under-hood fuse/relay box	100A, 50A, 40A, 30A, 20A, 15A, 10A, 7.5A
		Under-dash fuse/relay box	30A, 20A, 15A, 10A, 7.5A
		Headlight high beam	12 V---60 W
		Headlight low beam	12 V---51 W
		Front turn signal/front side marker lights	12 V---21/5 W (two filaments) Amber color
		Rear turn signal lights	12 V---21 W Amber color
		Brake/taillights	

ELECTRICAL RATINGS	Light bulbs	(2003-2005 models)	12 V---21/5 W (two filaments)
		Brake/taillights (2006-07 model)	LED
		Inner/taillights	12 V---5 W
		High mount brake light (2003-2005 models)	12 V---21 W
		High mount brake light (2006-07 model)	LED
		Back-up lights: 4-door	12 V---21 W
		Back-up lights: 2-door	12 V---16 W
		License plate light	12 V---5 W
		Ceiling light	12 V---8 W
		Spotlights	12 V---8 W
		Trunk light	12 V---5 W
		Door courtesy lights	12 V---3.8 W
		Glove box light	12 V---3.8 W
		Vanity mirror lights	12 V---1.1 W
		Gauge lights	12 V---LED (non-replaceable)
		Indicator, panel, ambient light	12 V---LED, 14 V---0.56 W, 0.84 W

BODY SPECIFICATIONS

2003-2005 MODELS 4-DOOR:

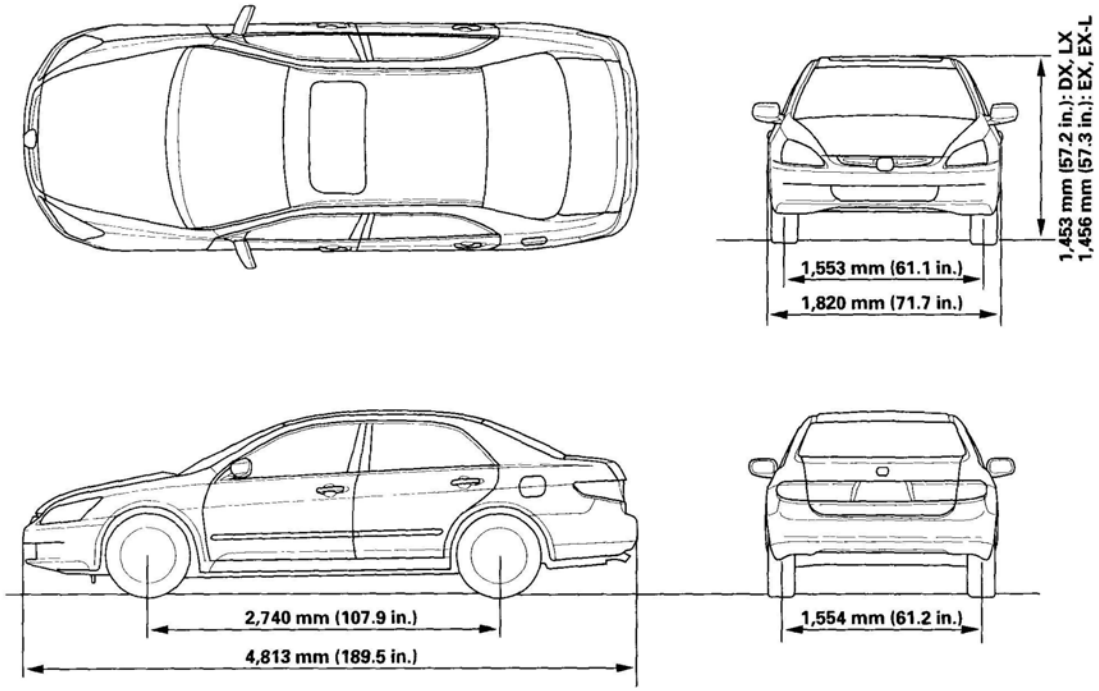


Fig. 2: Identifying 2003-2005 Models 4-Door Body Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-2005 MODELS 2-DOOR:

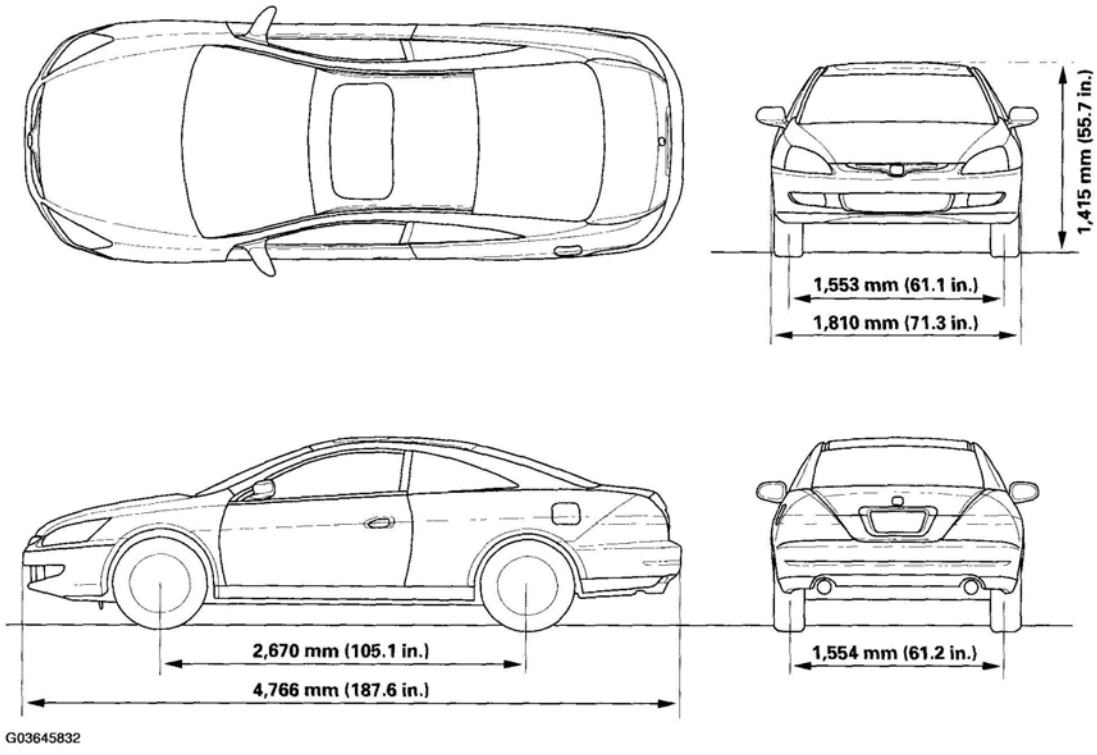


Fig. 3: Identifying 2003-2005 Models 2-Door Body Specifications Courtesy of AMERICAN HONDA MOTOR CO., INC.

2006-07 MODEL 4-DOOR:

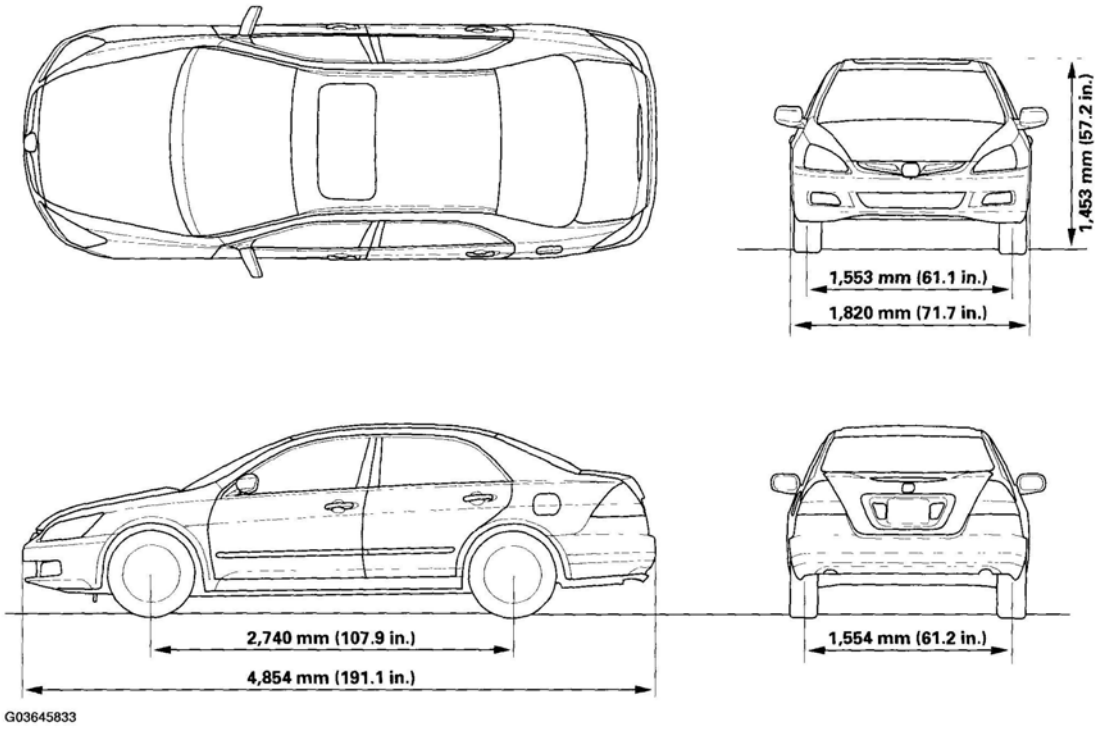


Fig. 4: Identifying 2006-07 Model 4-Door Body Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2006-07 MODEL 2-DOOR:

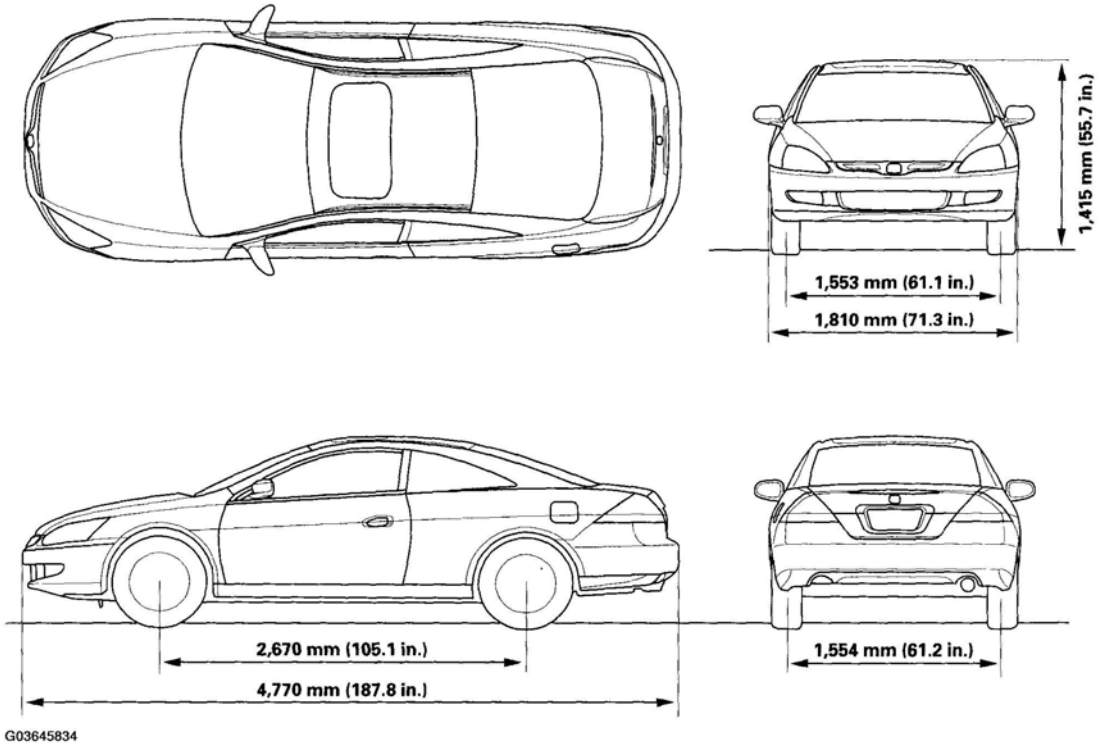


Fig. 5: Identifying 2006-07 Model 2-Door Body Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ENGINE

Starting System - Accord (V6)

COMPONENT LOCATION INDEX

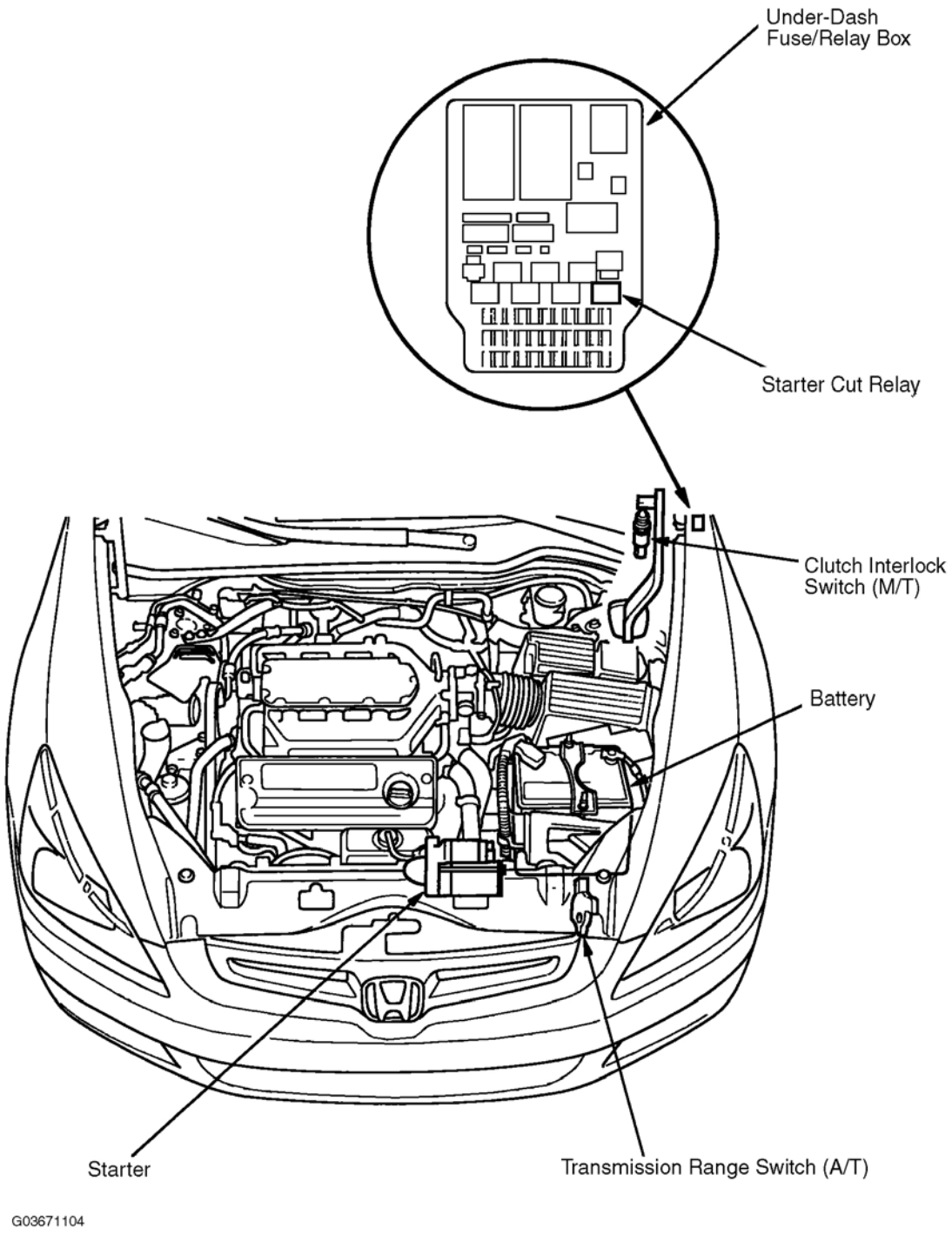


Fig. 1: Starting System Component Location Index
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for
Engine does not start (does not crank)	1. Check for loose battery terminals or connections. 2. Test the battery for a low charge, refer to **BATTERY (EXCEPT HYBRID & V6)** . 3. Check the starter (see **STARTER CIRCUIT TROUBLESHOOTING**). 4. Check the starter cut relay (see **POWER RELAY TEST**). 5. Check the transmission range switch (A/T) (see **TRANSMISSION RANGE SWITCH TEST**). 6. Check the clutch interlock switch (M/T) (see **CLUTCH INTERLOCK SWITCH TEST**). 7. Check the ignition switch or wire, refer to**TEST** .	Poor ground at G101, G102(A/T)or G501 (M/T)
	1. Check for PGM-FI DTCs. 2. Check the fuel pressure (see **FUEL PRESSURE RELIEVING**). 3. Check for a plugged or damaged fuel line (see **FUEL LINE INSPECTION**).	

Engine cranks, but does not start	4. Check for a plugged fuel filter (see **FUEL FILTER REPLACEMENT**). 5. Check the throttle body (see **THROTTLE BODY TEST**). 6. Check for low engine compression (see**ENGINE COMPRESSION INSPECTION**). 7. Check for a damaged or broken timing belt.	Fuel level in tank
Engine is hard to start	1. Check for PGM-FI DTCs. 2. Check the fuel pressure (see **FUEL PRESSURE RELIEVING**). 3. Check for a plugged or damaged fuel line (see **FUEL LINE INSPECTION**). 4. Check for a plugged fuel filter (see **FUEL PRESSURE REGULATOR REPLACEMENT**). 5. Check for a restricted three way catalytic converter (TWC) or exhaust system.	
	1. Check for loose battery terminals or connections. 2. Test the battery for a low charge, refer to**BATTERY (EXCEPT HYBRID &**	

Engine cranks slowly	**V6)** . 3. Check the starter for binding (see **STARTER PERFORMANCE TEST**). 4. Check for excessive drag in the engine.	

CIRCUIT DIAGRAM

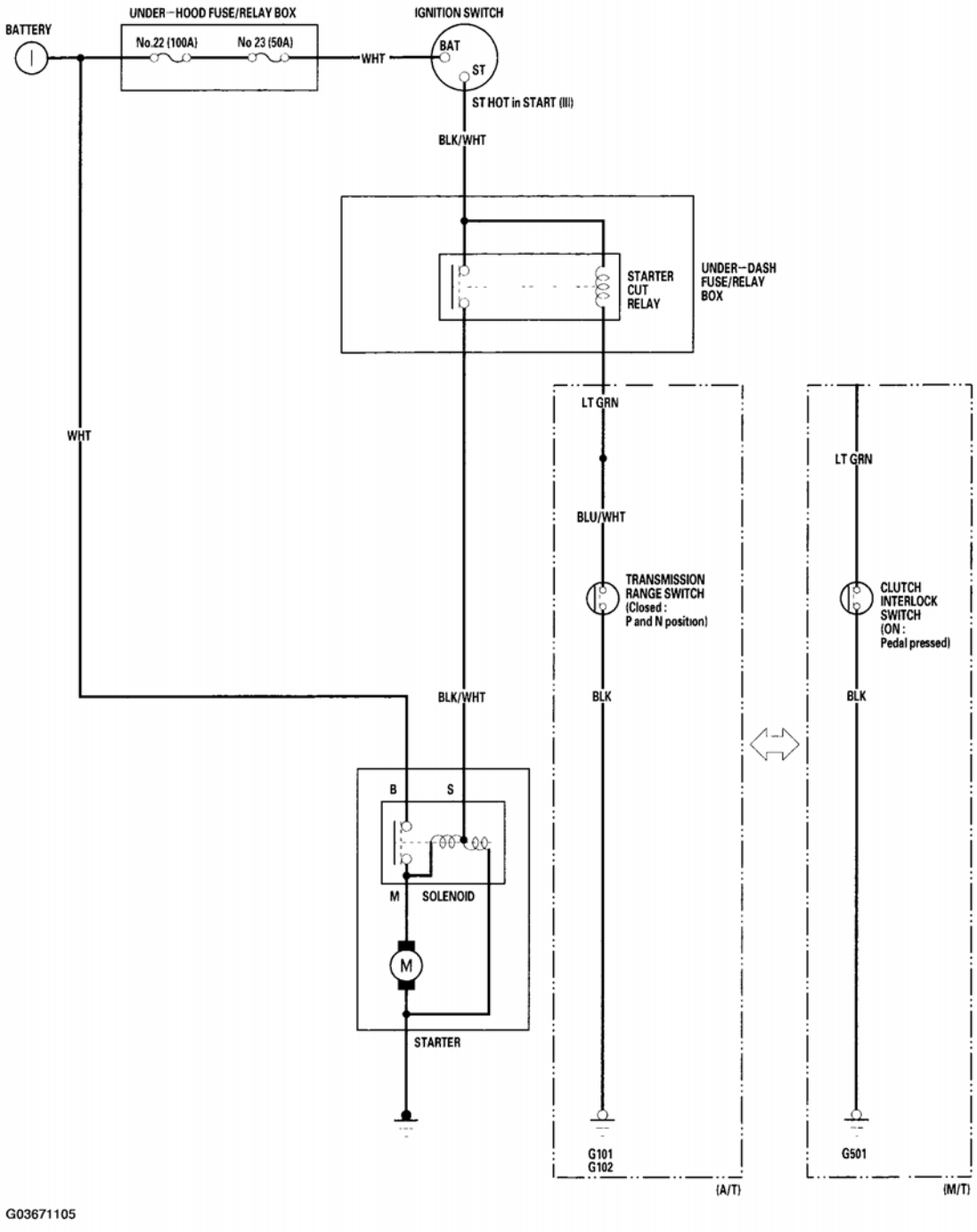


Fig. 2: Starting System Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

STARTER CIRCUIT TROUBLESHOOTING

NOTE:

- **Air temperature must be between 59 and 100°F (15 and 38°C) during this procedure.**
- **After this inspection, you must select engine control module (ECM)/powertrain control module (PCM) reset using the Honda Diagnostic System (HDS) (see HDS CLEAR COMMAND), otherwise the ECM/PCM will continues to stop the fuel injectors from operating.**
- **The battery must be in good condition and fully charged.**

Recommended Procedure:

- Use a starter system tester.
- Connect and operate the equipment in accordance with the manufacturer's instructions.

ALTERNATE PROCEDURE

1. Hook up the following equipment:
   - Ammeter, 0-400A
   - Voltmeter, 0-20 V (accurate within 0.1 volt)

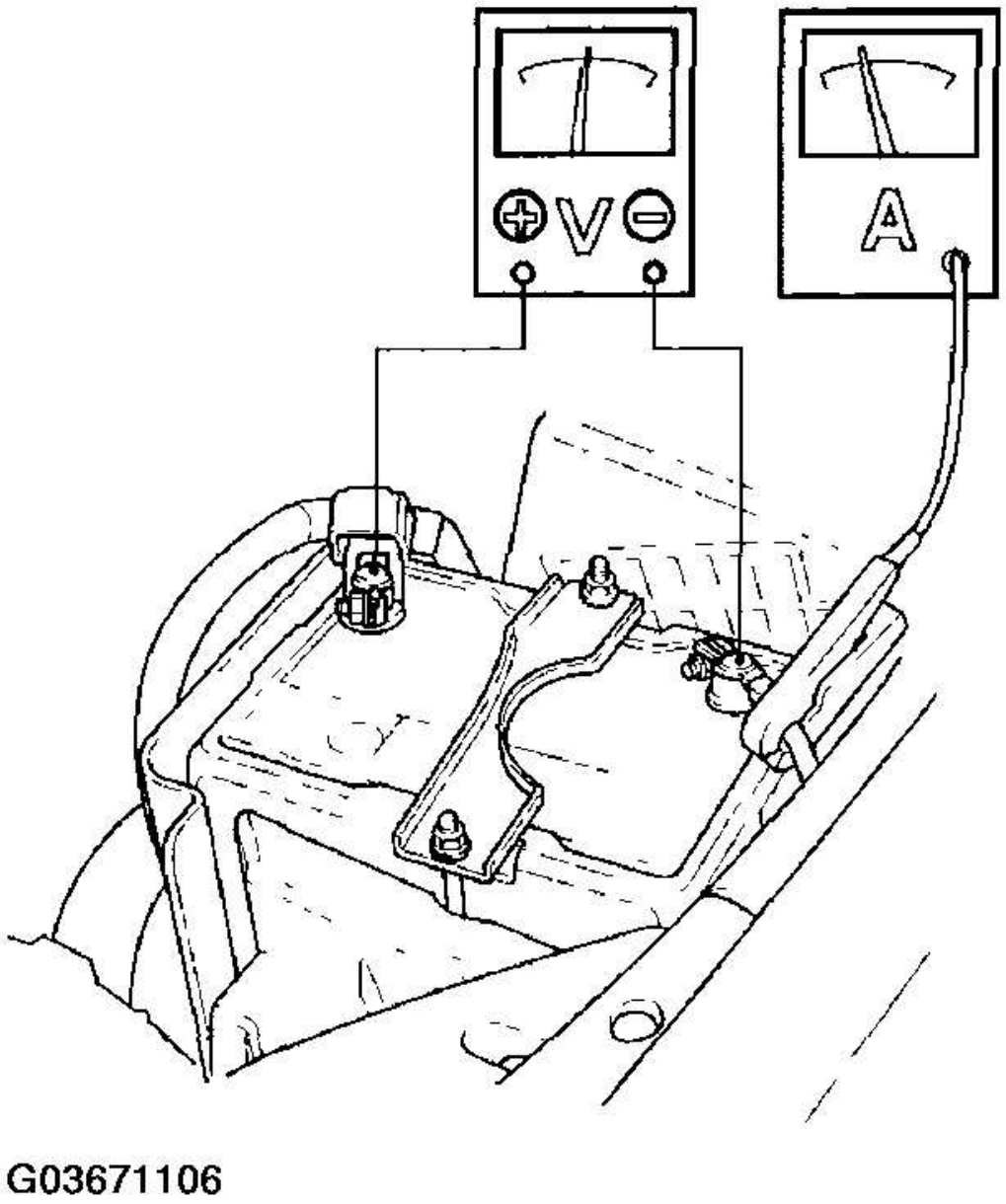


Fig. 3: Hooking Up Ammeter & Voltmeter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Connect the HDS to the data link connector (DLC) (see step 2 in **IF THE MIL (MALFUNCTION INDICATOR LAMP) HAS COME ON**).

3. Turn the ignition switch ON (II), and select PGM-FI, INSPECTION, then ALL INJECTORS OFF on the HDS.
4. With the shift lever in N or P (A/T) or the clutch pedal pressed (M/T), turn the ignition switch to START (III).

   Does the starter crank the engine normally?

   YES - The starting system is OK. Go to step .

   NO - Go to step 5.
5. Check the battery condition. Check electrical connections at the battery, the negative battery cable to body, the engine ground cables and the starter for looseness and corrosion. Then try cranking the engine again.

   Does the starter crank the engine?

   YES - Repairing the loose connection corrected the problem. The starting system is OK. Go to step .

   NO - Check the following:

   - If the starter will not crank the engine at all, go to step 6.
   - If it cranks the engine erratically or too slowly, go to step .
   - If it does not disengage from the flywheel or torque converter ring gear when you release the key, check the following:
     - Solenoid plunger and switch malfunction
     - Dirty drive gear or damaged overrunning clutch
6. Make sure the transmission is in Neutral, then disconnect the BLK/WHT wire (A) from the starter solenoid S terminal. Connect a jumper wire from the battery positive terminal to the solenoid terminal.

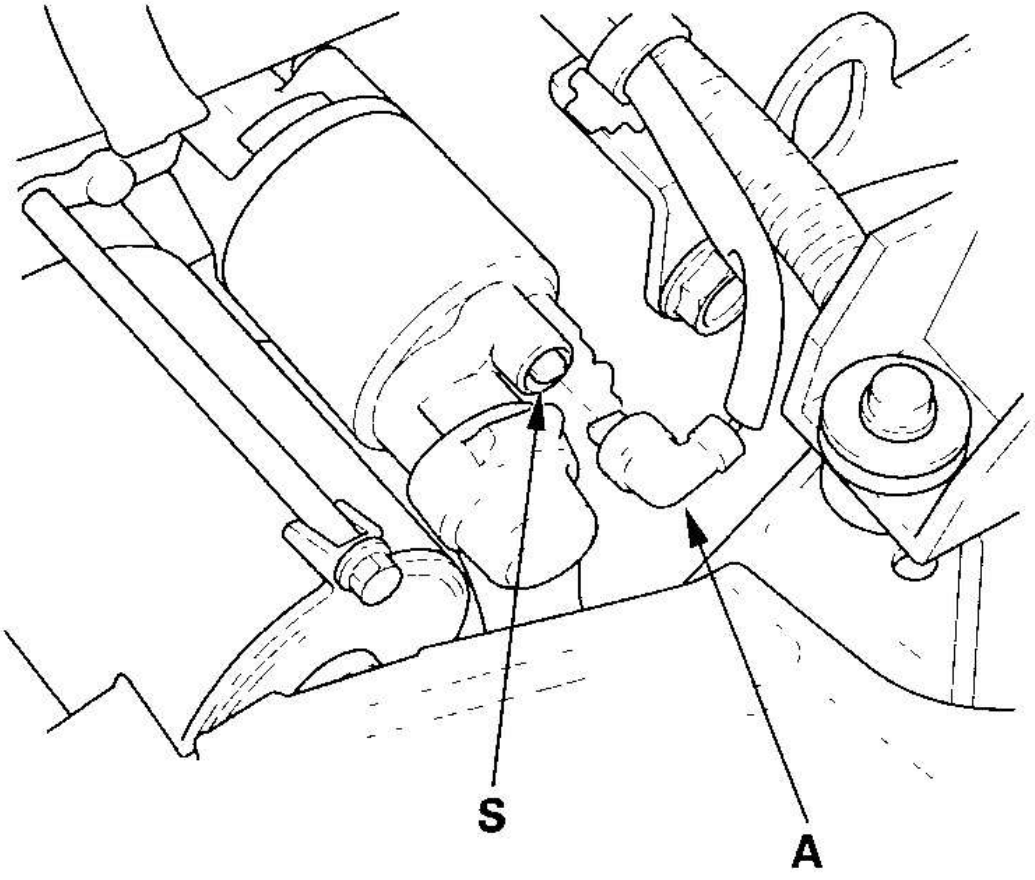


Fig. 4: Disconnecting BLK/WHT Wire From Starter Solenoid Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the starter crank the engine?

YES - Check the following items in the order listed until you find the open circuit:

- The BLK/WHT wire and connectors between the under-dash fuse/relay box and the ignition switch, and between the under-dash fuse/relay box and the starter.
- The ignition switch, refer to **IGNITION SWITCH (EXCEPT**

HYBRID & V6) .

- The transmission range switch and connector (A/T) or the clutch interlock switch and connector (M/T).
- The starter cut relay.

NO - Remove the starter, and repair or replace as necessary.

7. While cranking the engine, check the cranking voltage and current draw.

   Is the cranking voltage greater than or equal to 8.5 V and is the current draw less than or equal to 380 A?

   YES - Go to step 8.

   NO - Replace the starter, or remove and disassemble it, and check for the following:

   - Drag in the starter armature
   - Shorted armature winding
   - Excessive drag in the engine

8. Check the engine speed while cranking the engine.

   Is the engine speed above 100 rpm?

   YES - Go to step 9.

   NO - Replace the starter, or remove and disassemble it, and check for the following:

   - Open circuit in starter armature commutator segments
   - Excessively worn starter brushes
   - Open circuit in commutator brushes
   - Dirty or damaged helical splines or drive gear
   - Faulty drive gear clutch

9. Remove the starter, and inspect its drive gear and the flywheel or torque converter ring gear for damage. Replace any damaged parts.
10. Select ECM/PCM reset (see **ECM/PCM RESET**) to cancel ALL INJECTORS OFF on the HDS.

CLUTCH INTERLOCK SWITCH TEST

1. Disconnect the clutch interlock switch 2P connector (A).

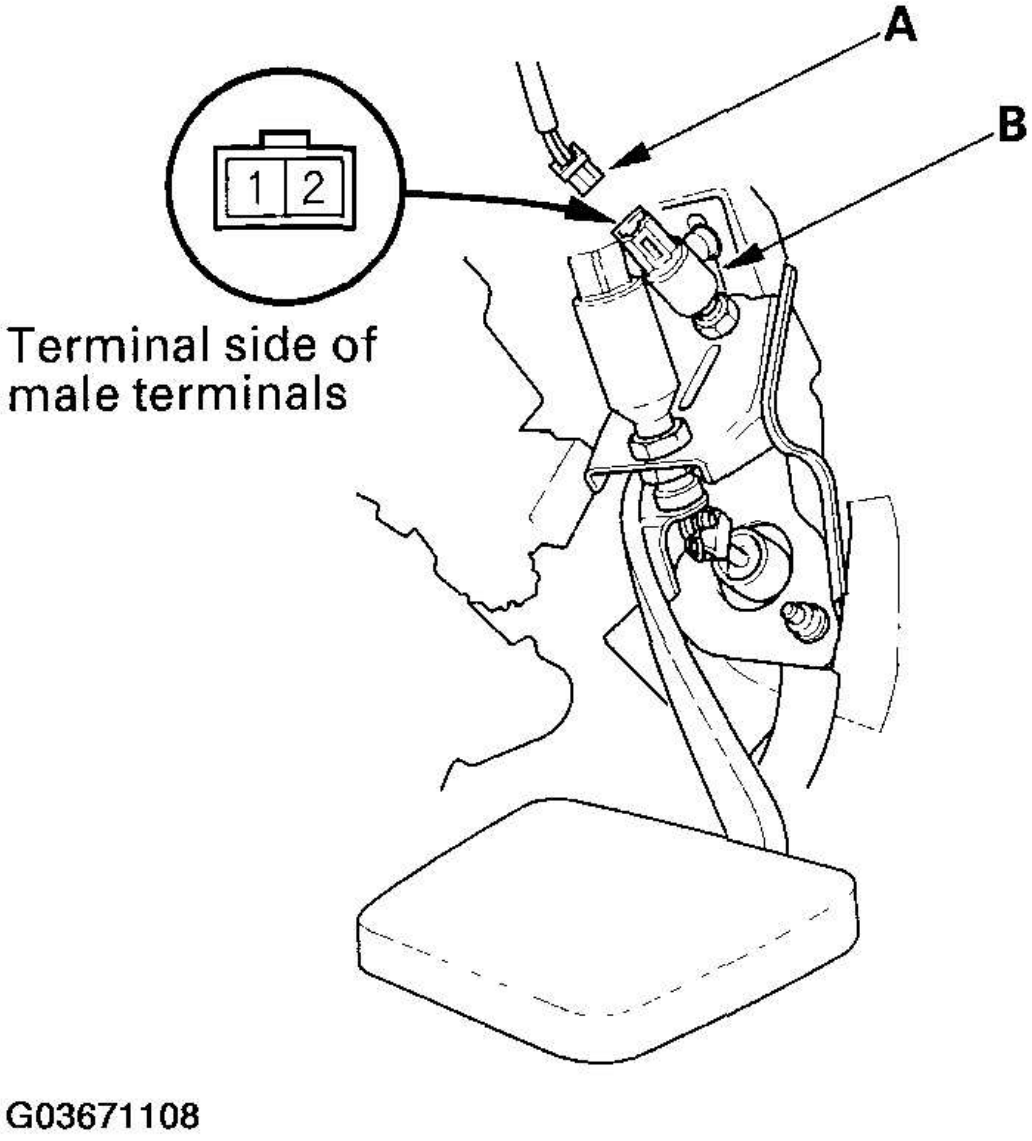


Fig. 5: Disconnecting Clutch Interlock Switch 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the clutch interlock switch (B).

3. Check for continuity between the terminals according to the table.
   - If the continuity is not as specified, replace the clutch interlock switch.
   - If OK, install the clutch interlock switch, and adjust the pedal height (see **CLUTCH PEDAL, CLUTCH PEDAL POSITION SWITCH, AND CLUTCH INTERLOCK SWITCH ADJUSTMENT**).

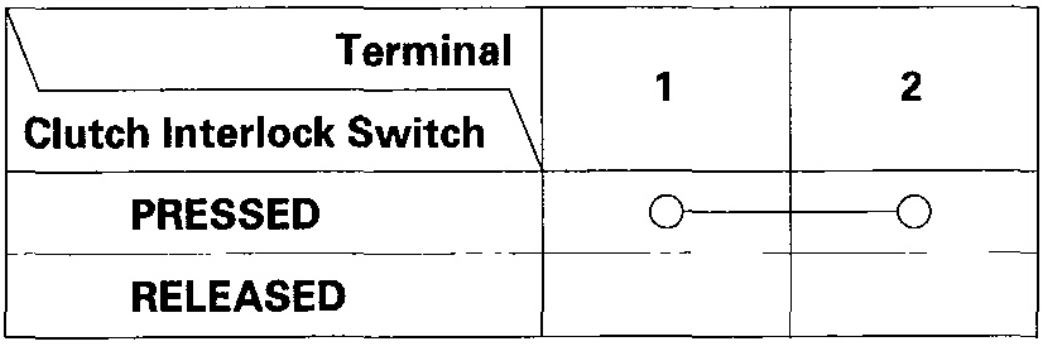


Fig. 6: Clutch Interlock Switch Connector Terminals Continuity Check Table
Courtesy of AMERICAN HONDA MOTOR CO., INC.

STARTER SOLENOID TEST

1. Make sure you have the anti-theft codes for the radio and the navigation system, then write down the customer's audio presets. Make sure the ignition switch is OFF.
2. Disconnect the negative cable from the battery first, then disconnect the positive cable.
3. Remove the starter cable (A), BLK/WHT wire (B), and motor cable (C).

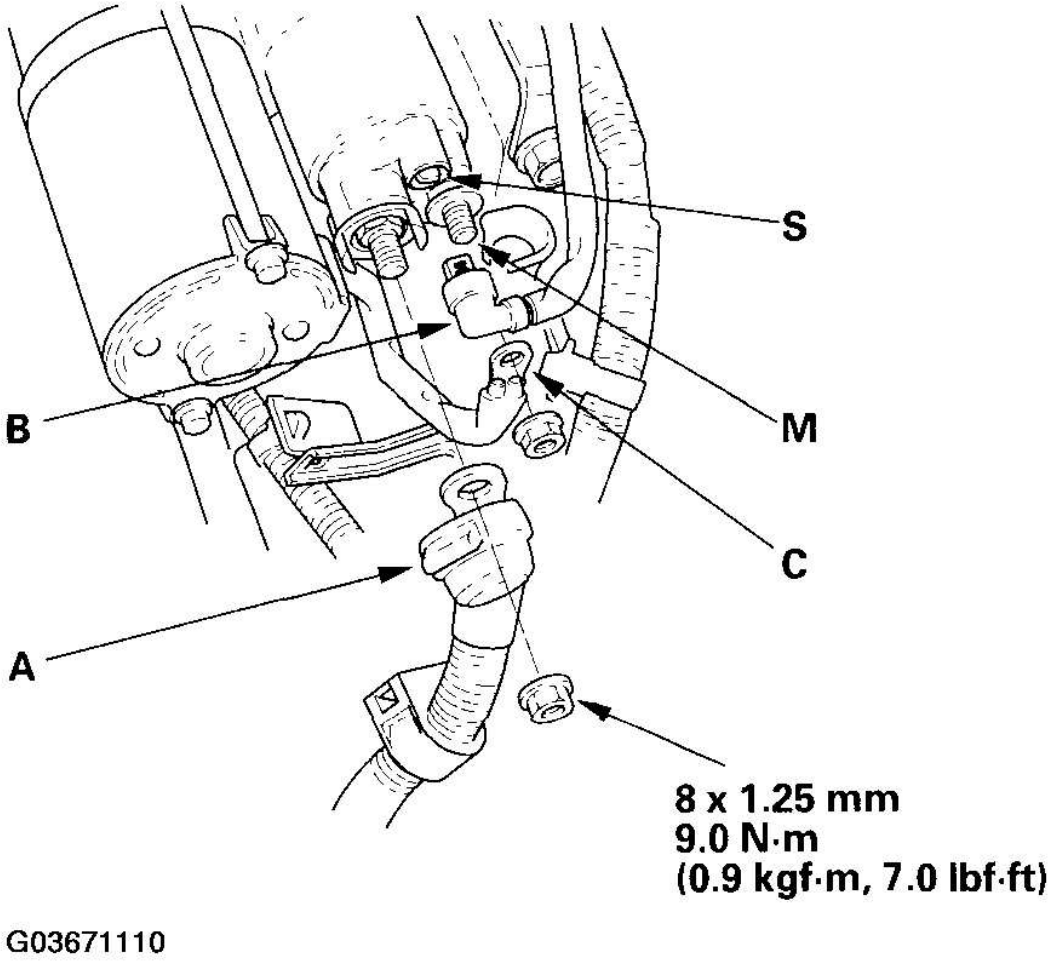


Fig. 7: Identifying Starter Cable
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check the hold-in coil for continuity between the S terminal and the armature housing (ground). There should be continuity.
   - If there is continuity, go to step 5.
   - If there is no continuity, replace the solenoid.
5. Check the pull-in coil for continuity between the S terminal and the M terminal. There should be continuity.
   - If there is continuity, the solenoid is OK.
   - If there is no continuity, replace the solenoid.

6. Install in the reverse order of removal.
7. Connect the positive cable to the battery first, then connect the negative cable.
8. Enter the anti-theft codes for the radio and the navigation system, then enter the customer's audio presets.
9. Set the clock.

STARTER PERFORMANCE TEST

1. Disconnect the wire from the M terminal.
2. Make a connection as shown in using as heavy a wire as possible (preferably equivalent to the wire used for the vehicle). To avoid damaging the starter, never leave the battery connected for more than 10 seconds.

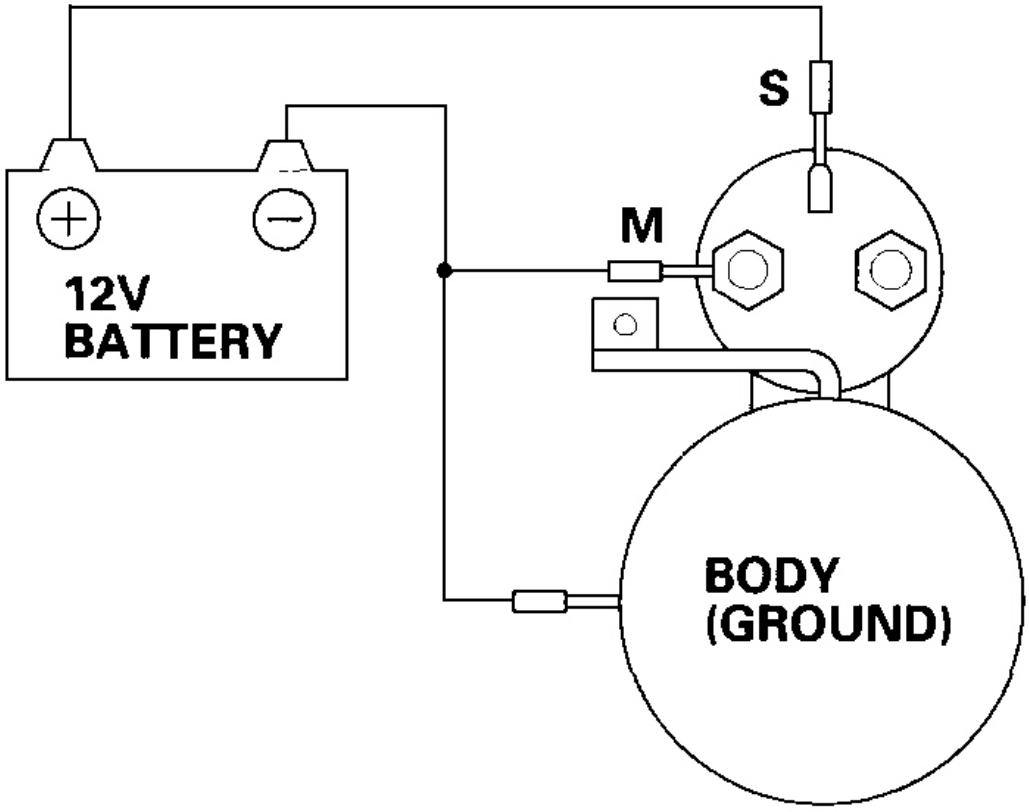


Fig. 8: Making Connection Using Heavy Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Connect the battery as shown. Make sure you disconnect the starter motor wire from the solenoid. If the starter pinion moves out, it is working properly.
4. Disconnect the battery from the M terminal. If the pinion does not retract, the hold-in coil of the solenoid is working properly.

Specifications

Electric Current: 80A or less

Motor Speed: 2,600 rpm or more

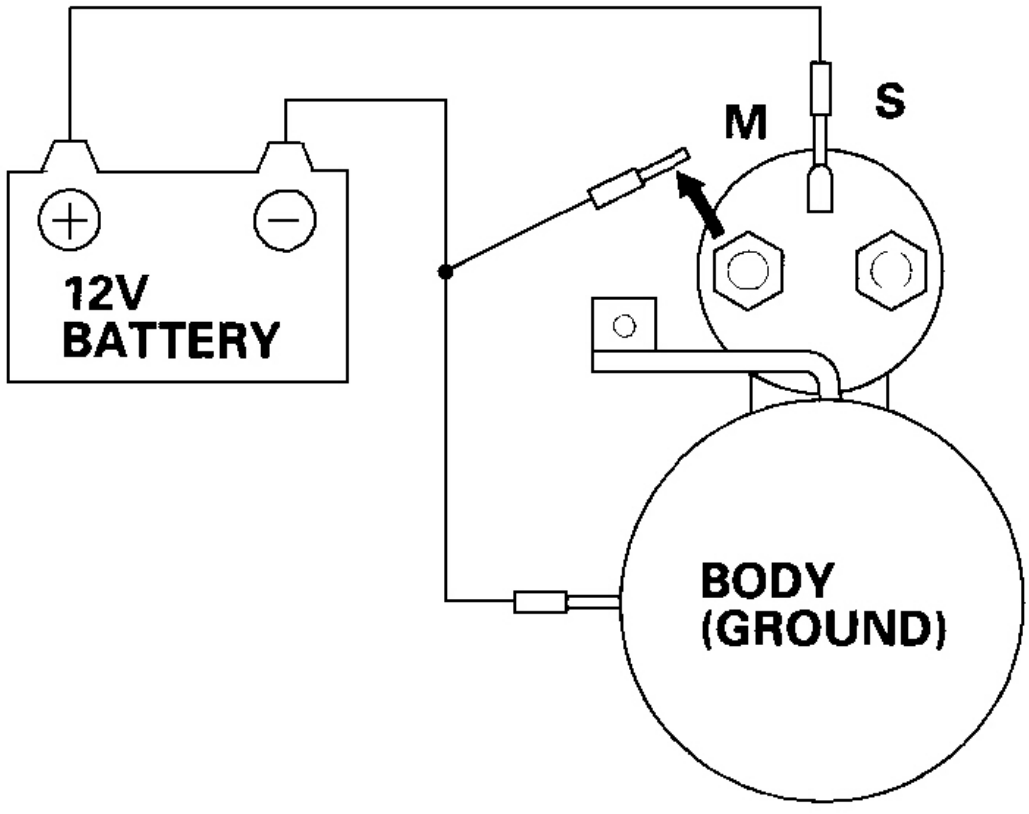


Fig. 9: Identifying Battery From M Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the battery from the starter body. If the pinion retracts immediately, it is working properly.

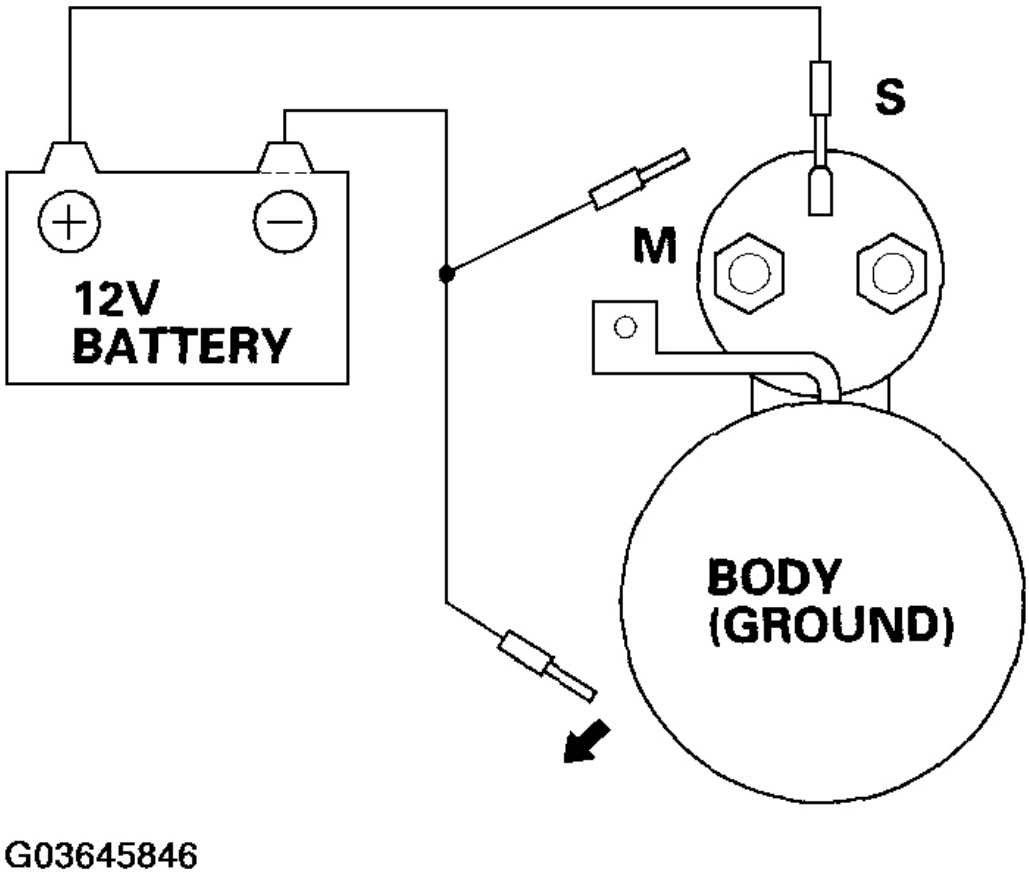


Fig. 10: Identifying Battery From Starter Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Firmly the starter in a vise
7. Reconnect the wire to the M terminal.
8. Connect the starter to the battery as shown in , and check that the motor turns and keeps rotating.

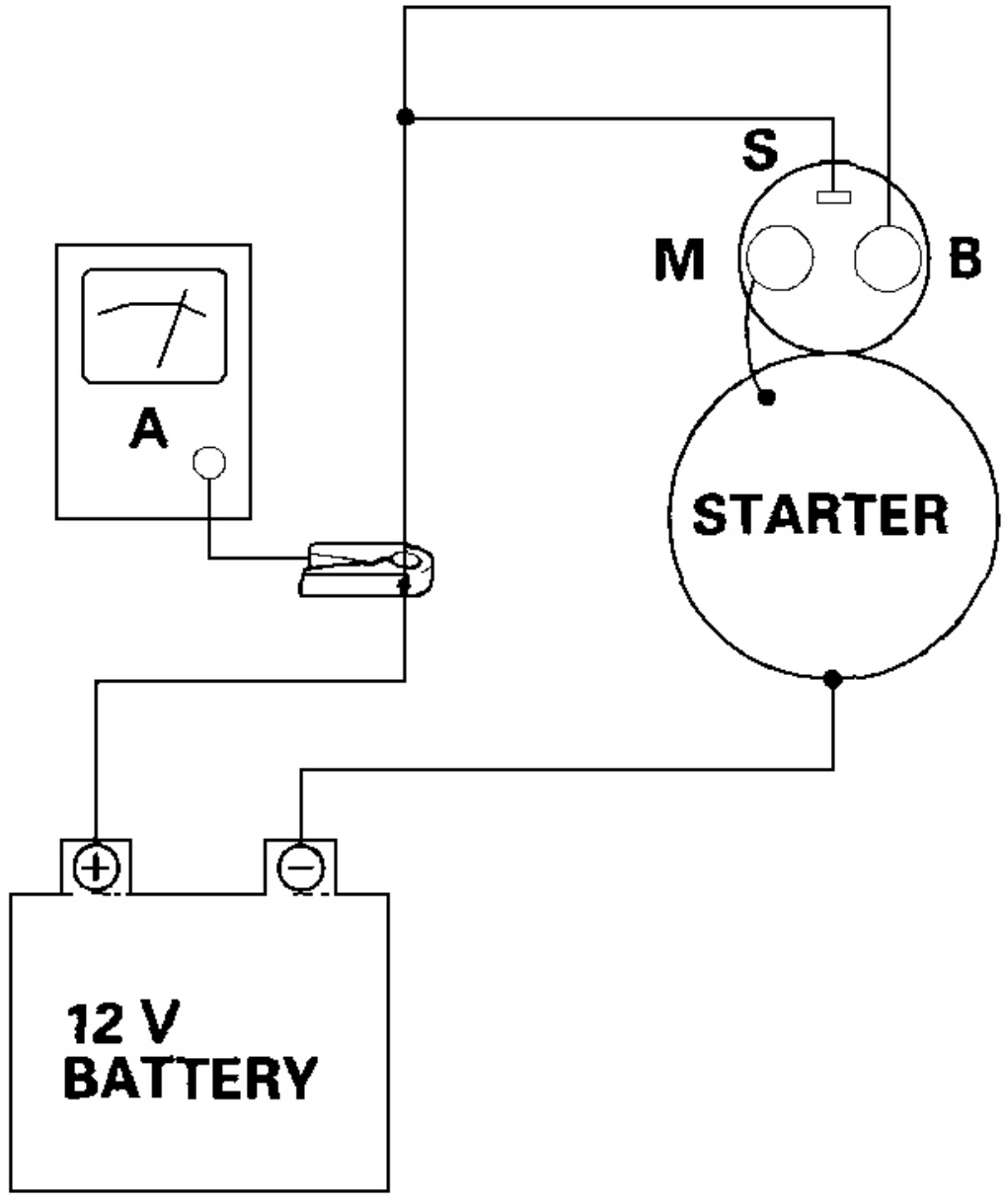


Fig. 11: Identifying Starter To Battery
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. If the electric current and motor speed meet the specifications when the battery voltage is at 11.5 V, the starter is working properly.

   Specifications

   Electric Current: 80A or less

STARTER REMOVAL AND INSTALLATION

REMOVAL

1. Make sure you have the anti-theft codes for the radio, and the navigation system, then write down the customer's audio presets. Make sure the ignition switch is OFF.
2. Disconnect the negative cable from the battery first, then disconnect the positive cable.
3. Remove the battery.
4. Remove the harness clamp (A).

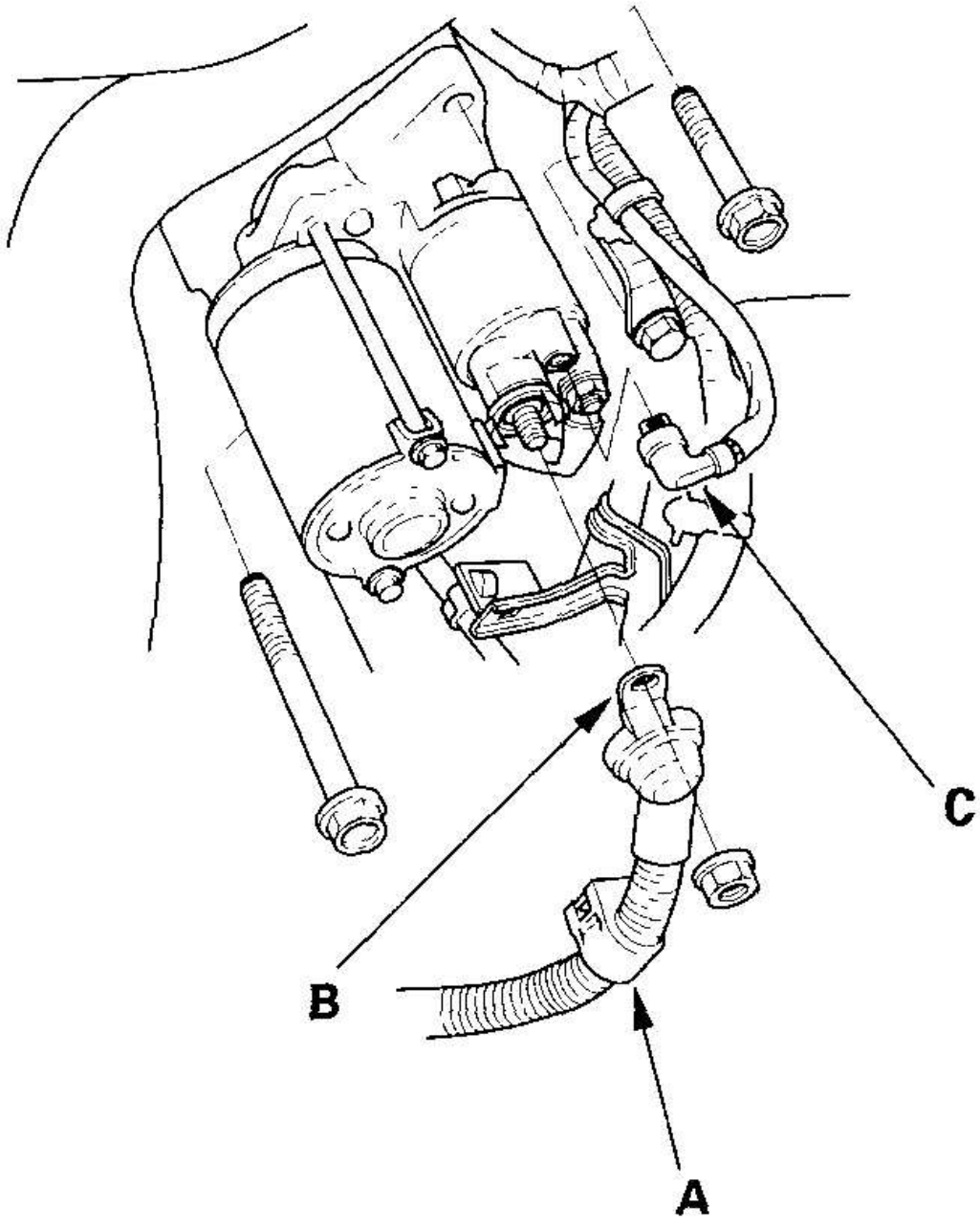


Fig. 12: Identifying Harness Clamp
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the starter cable (B) from the B terminal, then disconnect the BLK/WHT wire (C) from the S terminal.
6. Remove the two bolts holding the starter, then remove the starter.

INSTALLATION

1. Install the starter (A). Make sure the crimped side of the ring terminal is facing out.

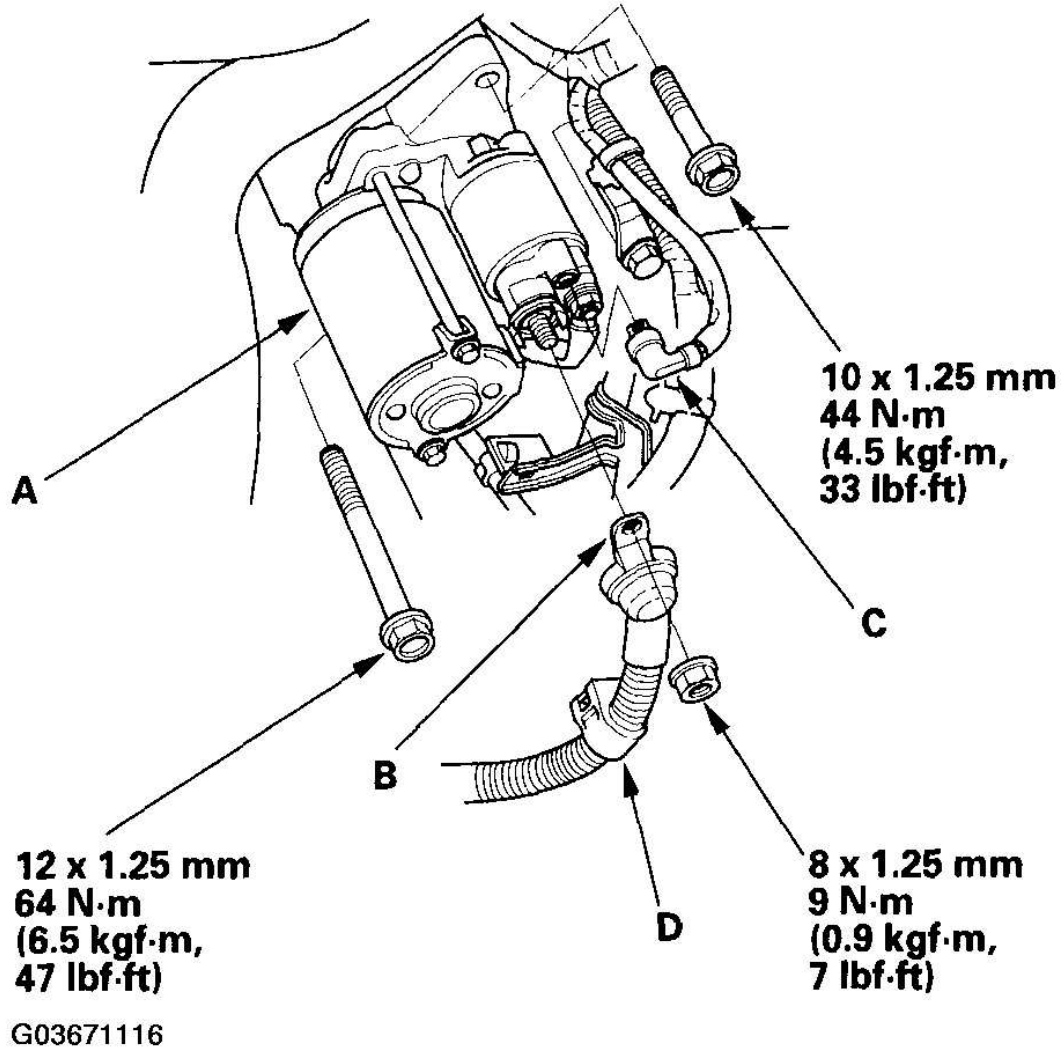


Fig. 13: Identifying Starter

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Connect the cable (B) to the B terminal, then connect the BLK/WHT (C) to the S terminal.
3. Install the harness cramp (D).
4. Instal the battery.
5. Connect the positive cable to the battery first, then connect the negative cable.
6. Start the engine to make sure the starter works properly.
7. Enter the anti-theft codes for the radio and the navigation system, then enter the customer's audio presets.
8. Set the clock.

STARTER OVERHAUL

DISASSEMBLY/REASSEMBLY

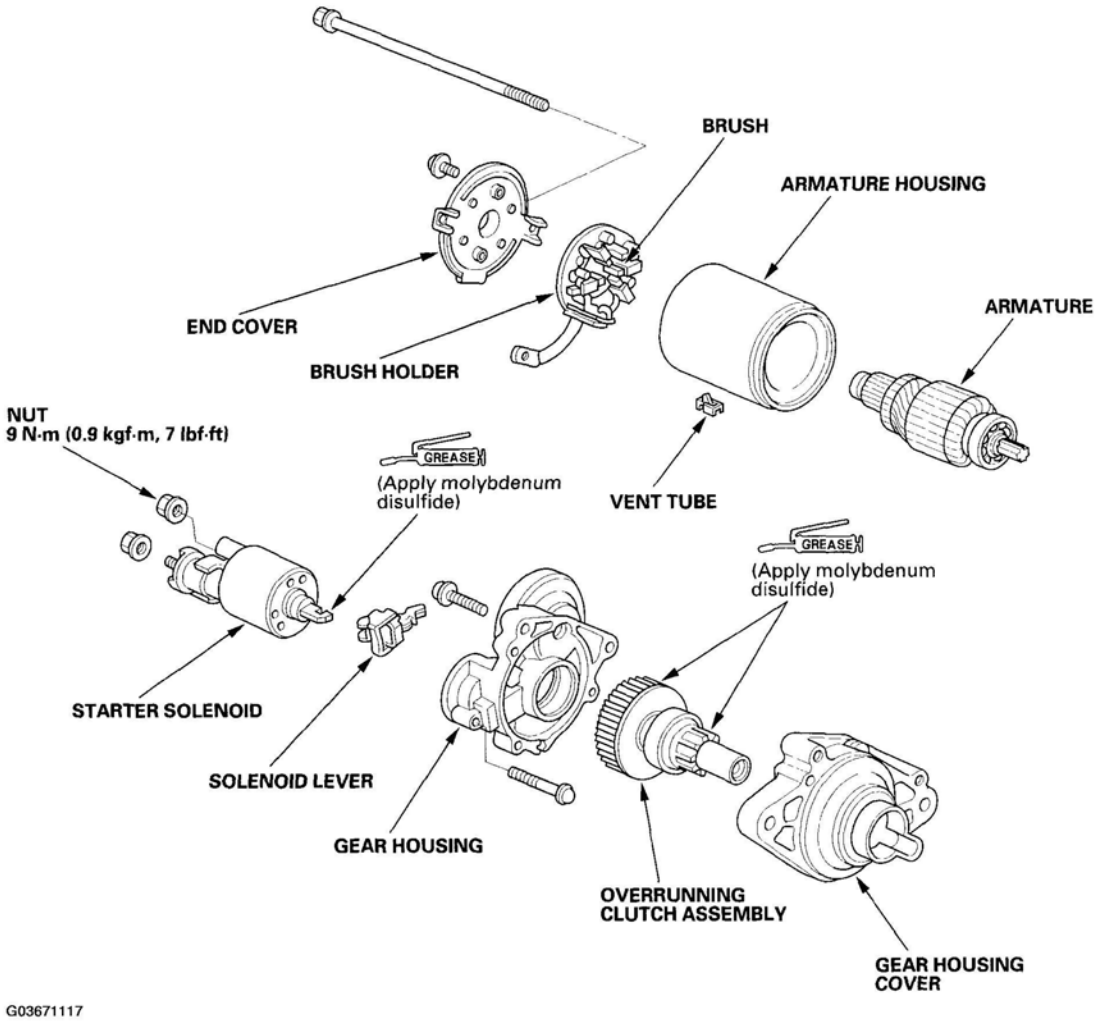
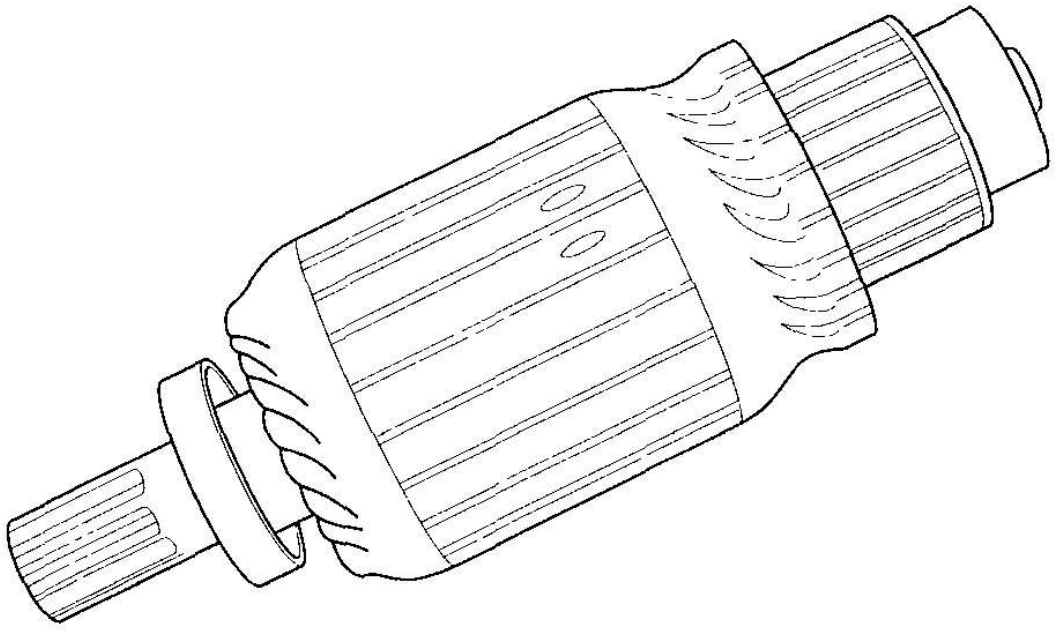


Fig. 14: Exploded View Of Starter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Armature Inspection and Test

1. Remove the starter (see **STARTER REMOVAL AND INSTALLATION**).
2. Disassemble the starter as shown in .
3. Inspect the armature for wear or damage from contact with the permanent magnet. If there is wear or damage, replace the armature.



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Fig. 15: Inspecting Armature For Wear Or Damage
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check the commutator (A) surface. If the surface is dirty or burnt, resurface with emery cloth or a lathe within the following specifications, or recondition with # 500 or # 600 sandpaper (B).

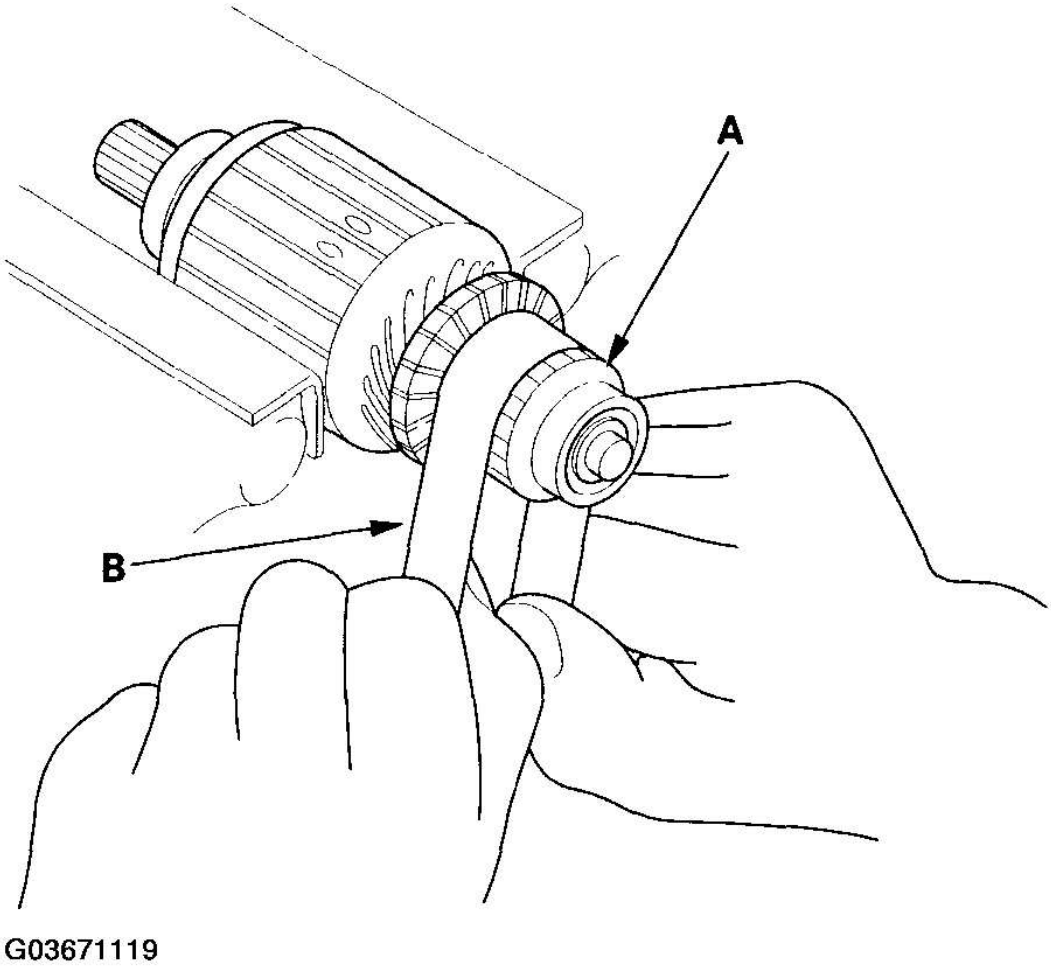


Fig. 16: Checking Commutator Surface
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Check the commutator diameter. If the diameter is below the service limit, replace the armature.

   Commutator Diameter

   Standard (New): 28.0-28.1 mm (1.102-1.106 in.)

   Service Limit: 27.5 mm (1.083 in.)

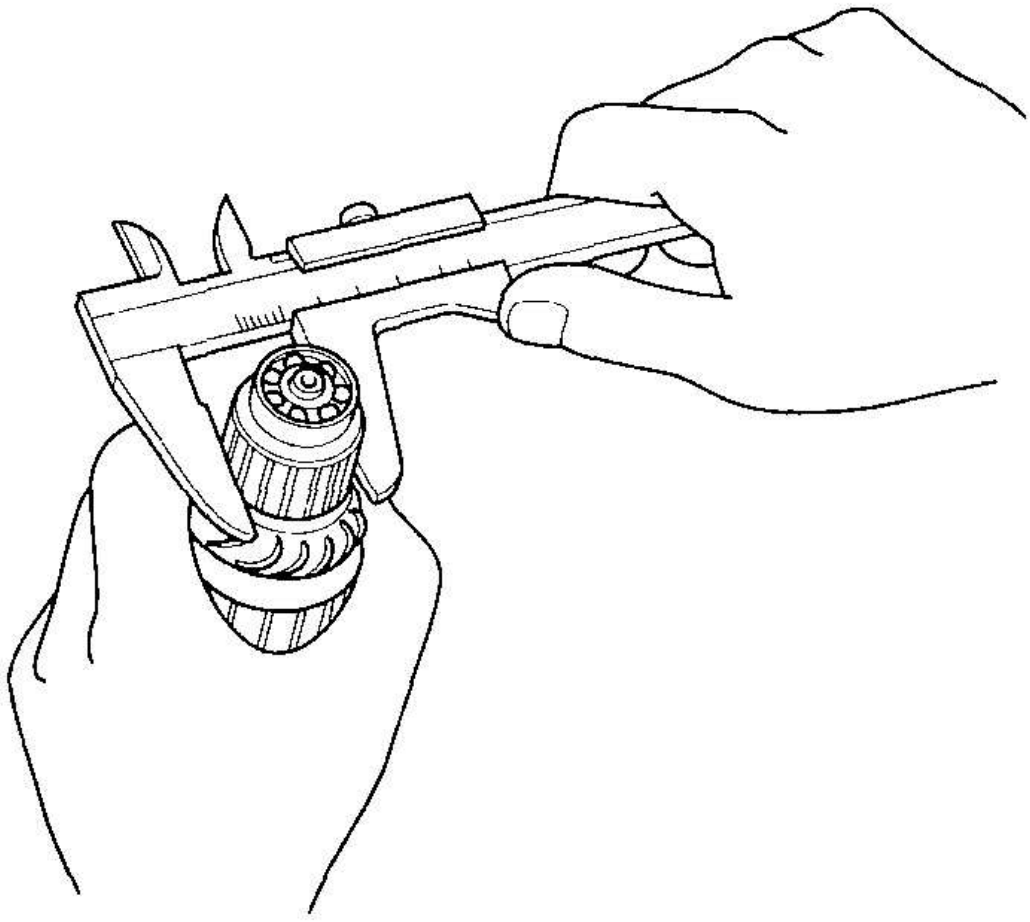


Fig. 17: Checking Commutator Diameter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Measure the commutator (A) runout.
   - If the commutator runout is within the service limit, check the commutator for carbon dust or brass chips between the segments.
   - If the commutator runout is not within the service limit, replace the armature.

Commutator Runout

Standard (New): 0.02 mm (0.001 in.) max.

Service Limit: 0.05 mm (0.002 in.)

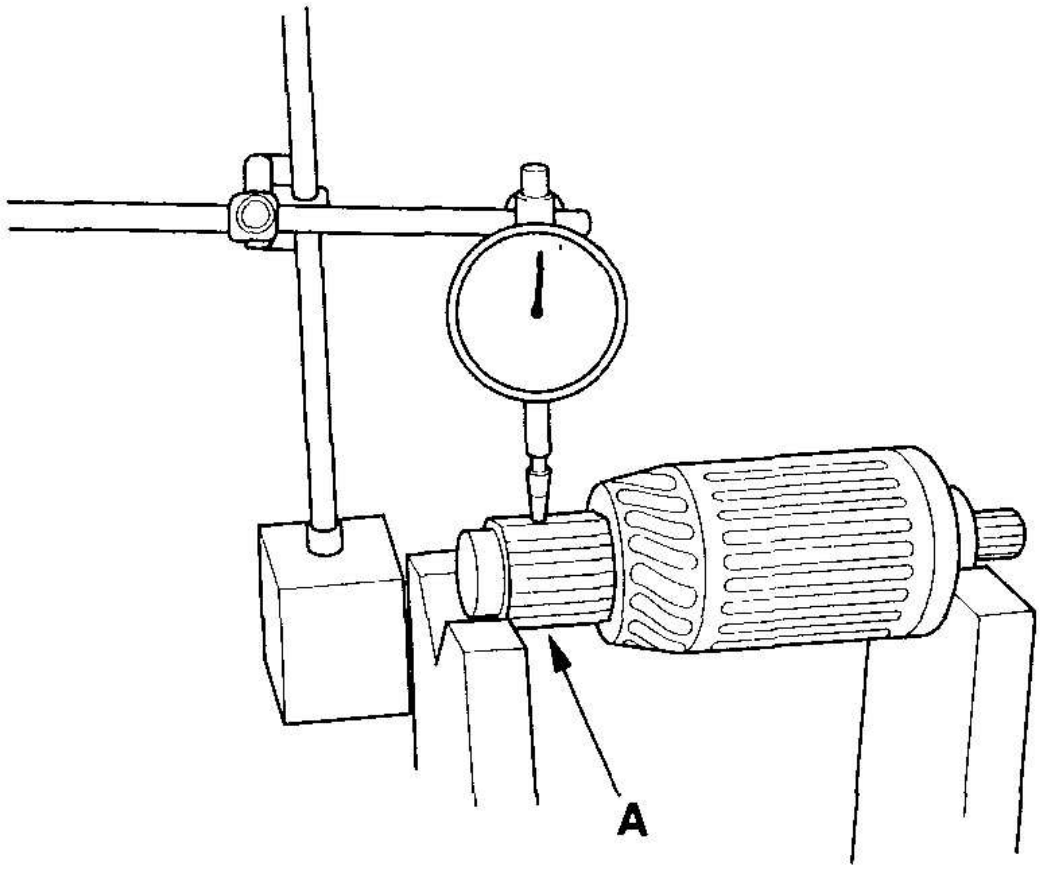


Fig. 18: Measuring Commutator Runout
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Check the mica depth (A). If the mica is too high (B), undercut the mica with a hacksaw blade to the proper depth. Cut away all the mica (C) between the commutator segments. The undercut should not be too shallow, too narrow, or V-shaped (D).

Commutator Mica Depth

Standard (New): 0.4-0.5 mm (0.016-0.020 in.)

Service Limit: 0.15 mm (0.006 in.)

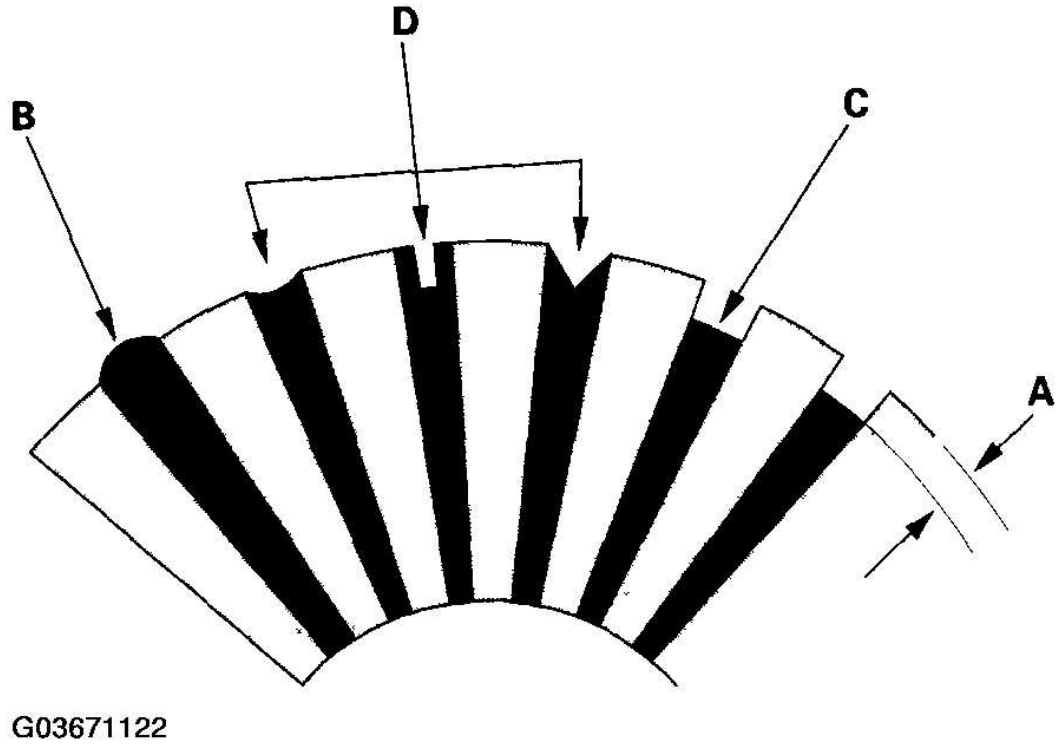


Fig. 19: Checking Mica Depth
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Check for continuity between the segments of the commutator. If there is an open circuit between any segments, replace the armature.

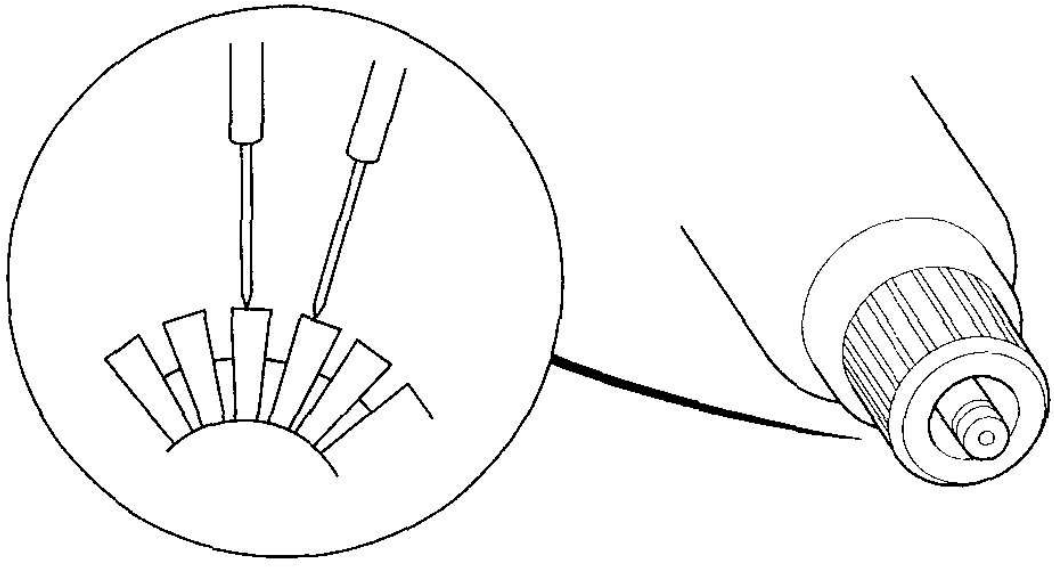


Fig. 20: Checking Continuity Between Segments Of Commutator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Place the armature (A) on an armature tester (B). Hold a hacksaw blade (C) on the armature core. If the blade is attracted to the core or vibrates while the core is turned, the armature is shorted. Replace the armature.

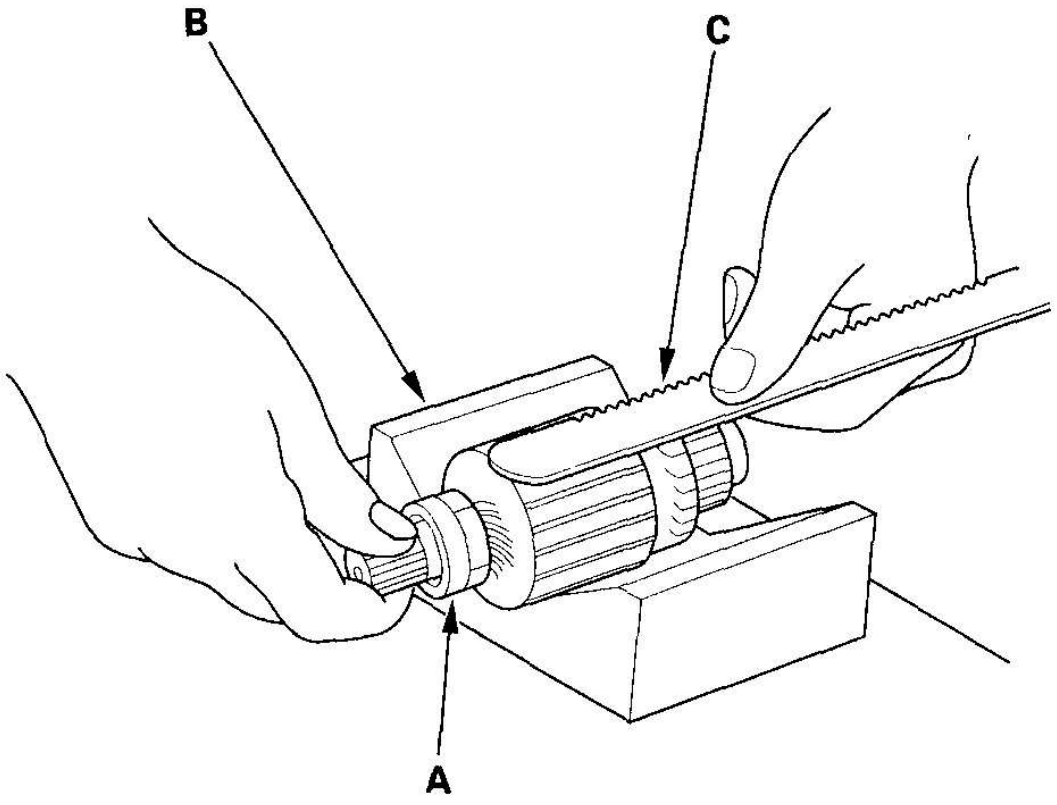


Fig. 21: Placing Armature On Armature Tester
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Check with an ohmmeter for continuity between the commutator (A) and armature coil core (B), and between the commutator and armature shaft (C). If there is continuity, replace the armature.

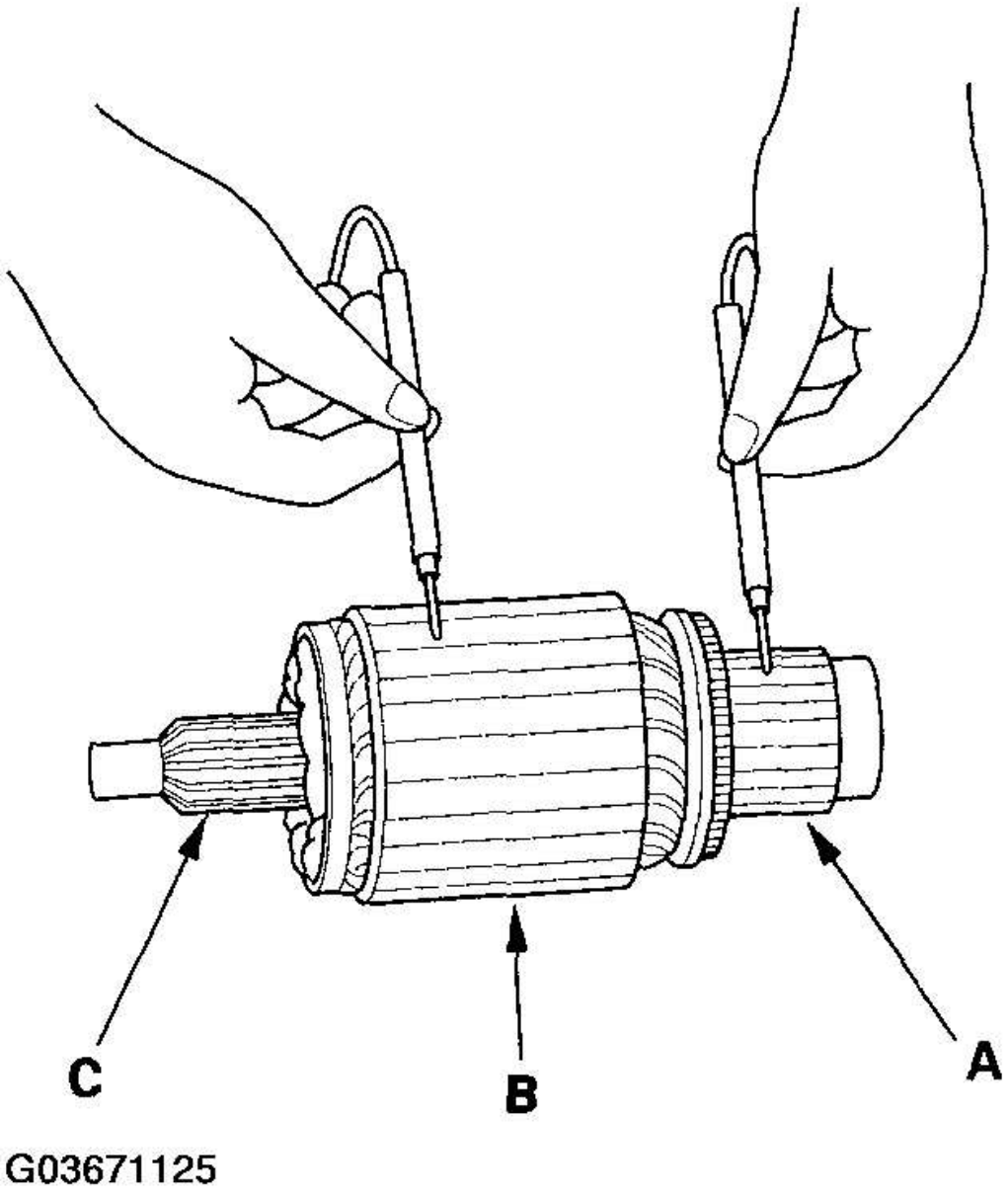


Fig. 22: Checking Continuity Between Commutator And Armature Coil Core
Courtesy of AMERICAN HONDA MOTOR CO., INC.

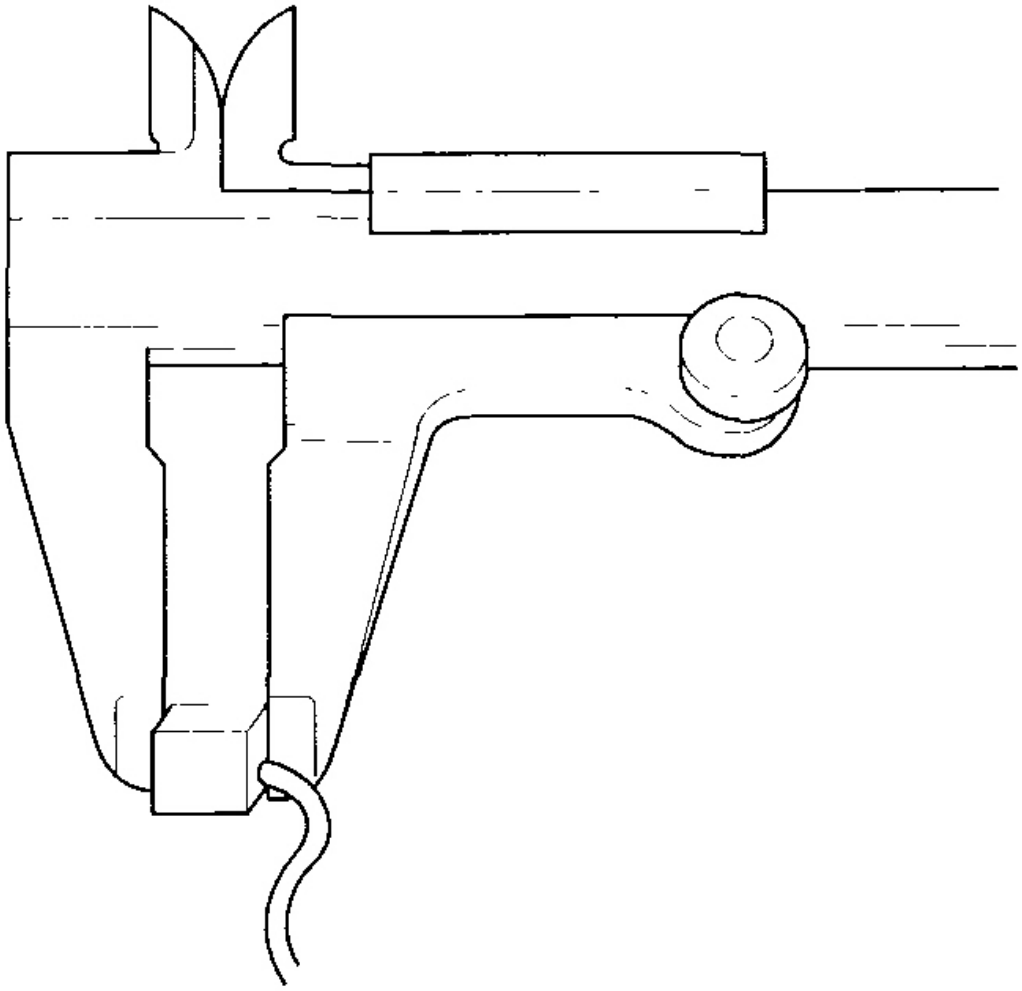
Starter Brush Inspection

11. Measure the brush length. If it is not within the service limit, replace the brush holder assembly.

    Brush Length

    Standard (New): 15.8-16.2 mm (0.62-0.64 in.)

    Service Limit: 11.0 mm (0.43 in.)



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Fig. 23: Measuring Brush Length
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Starter Brush Holder Test

12. Check for continuity between the (+) brush holder (A) and (-) brush holder (B). If there is continuity, replace the brush holder assembly

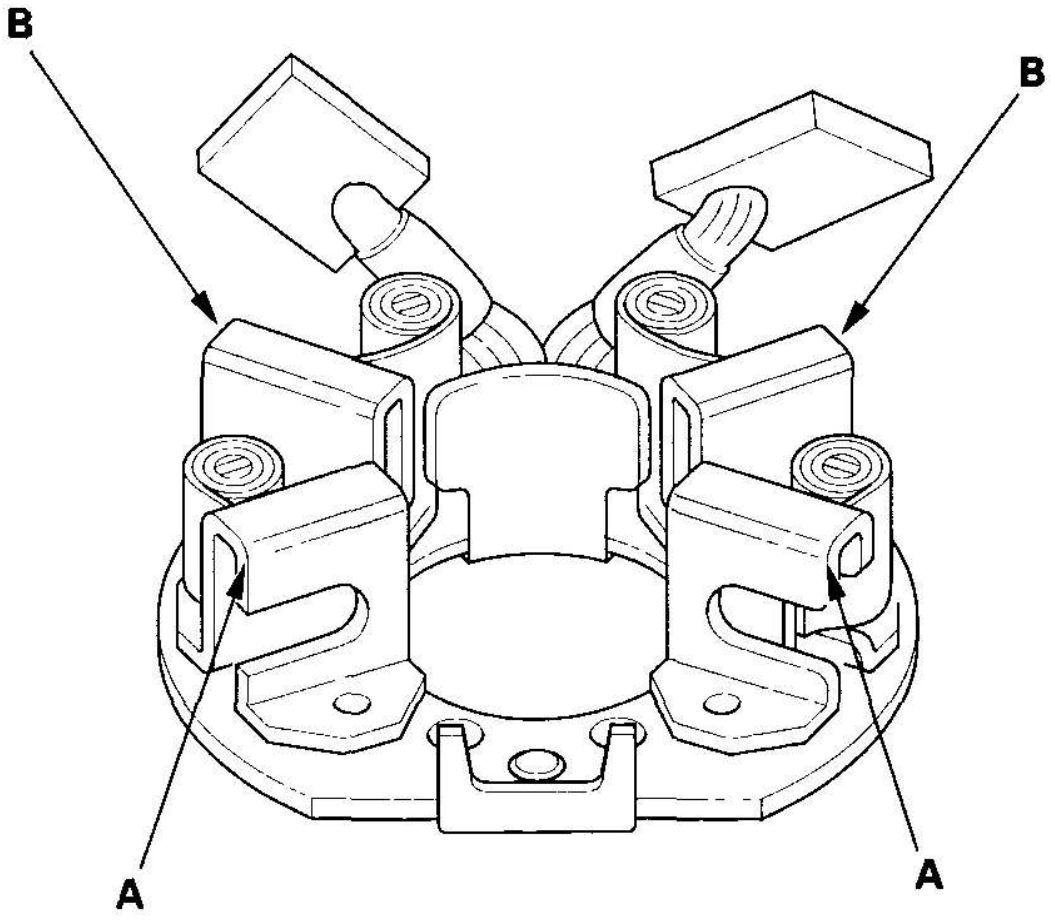


Fig. 24: Checking Continuity Between Brush Holder And Brush Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Brush Spring Inspection

13. Insert the brush (A) into the brush holder, and bring the brush into contact with the commutator, then attach a spring scale (B) to the spring (C). Measure the spring tension at the moment the spring lifts off the brush. If the spring tension is not within specification, replace the spring.

    Spring Tension: 15.7-17.7 N (1.60-1.80 kgf, 3.53-3.97 lbf)

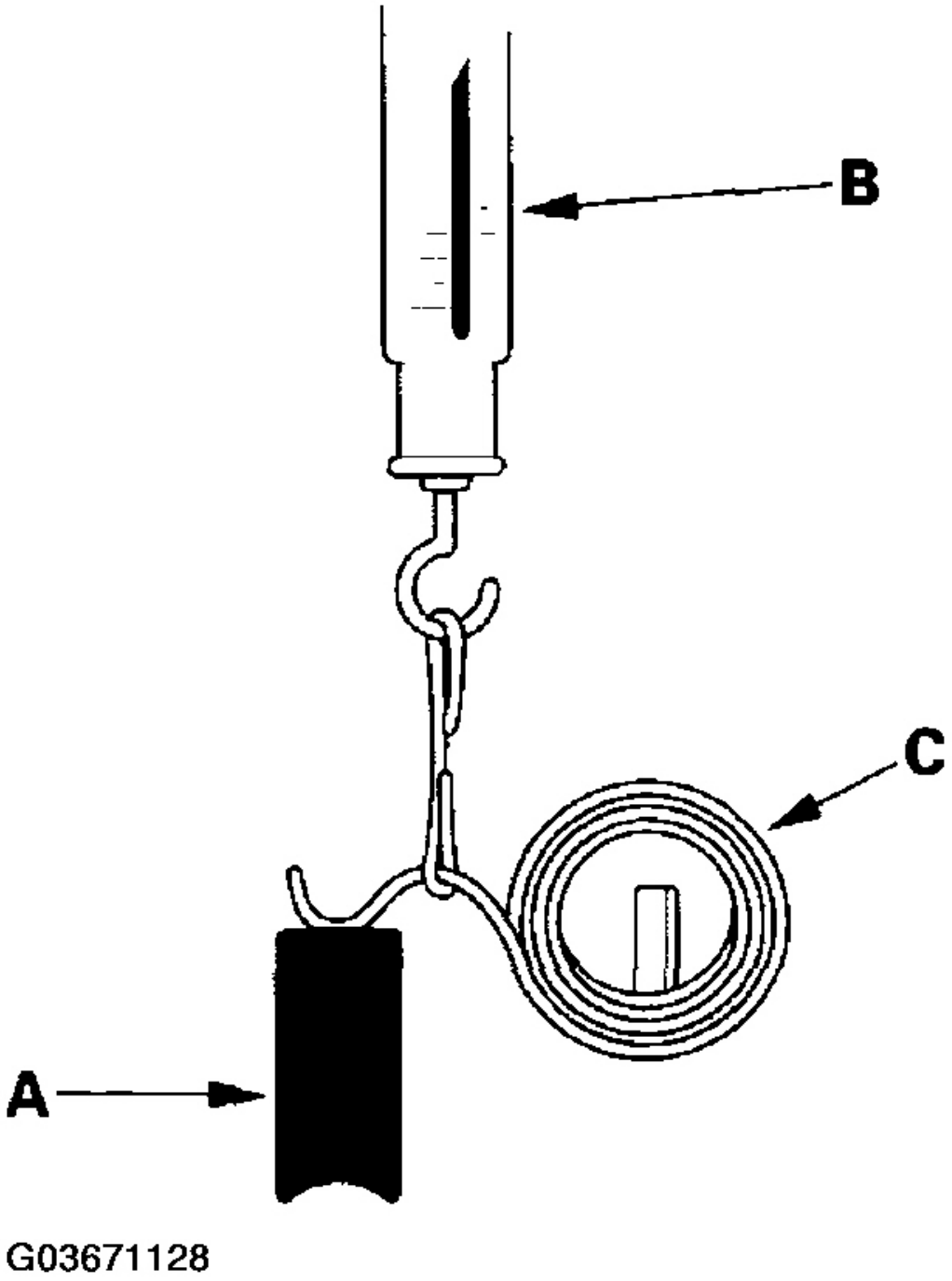


Fig. 25: Measuring Spring Tension

Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Pry back each brush spring with a screwdriver, then position the brush about halfway out of its holder, and release the spring to hold it there.

NOTE: To seat new brushes, slip a strip of # 500 or # 600 sandpaper, with the grit side up, between the commutator and each brush, and smoothly rotate the armature. The contact surface of the brushes will be sanded to the same contour as the commutator.

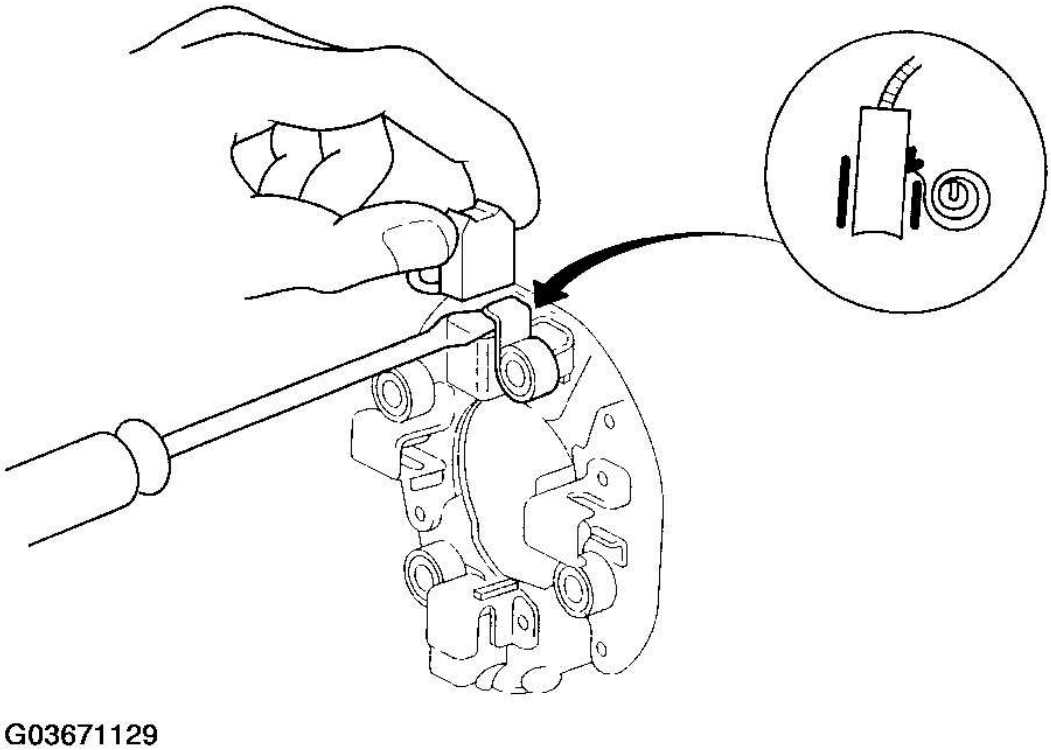


Fig. 26: Prying Brush Spring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Install the armature in the housing. Next, pry back each brush spring again, and push the brush down until it seats against the commutator, then release the spring against the end of the brush.

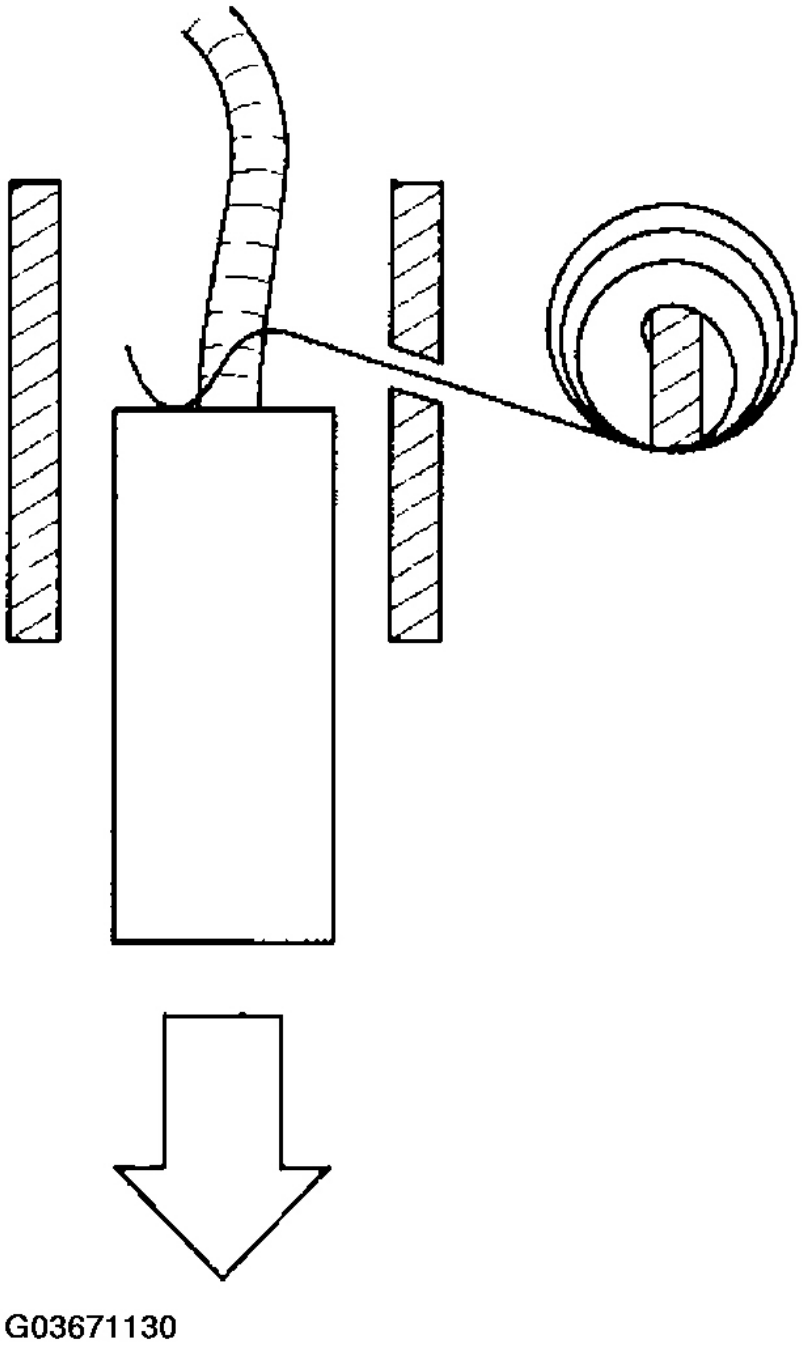


Fig. 27: Pushing Brush Down To Seat Against Commutator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

16. Install the starter end cover (A) to retain the brush holder (B).

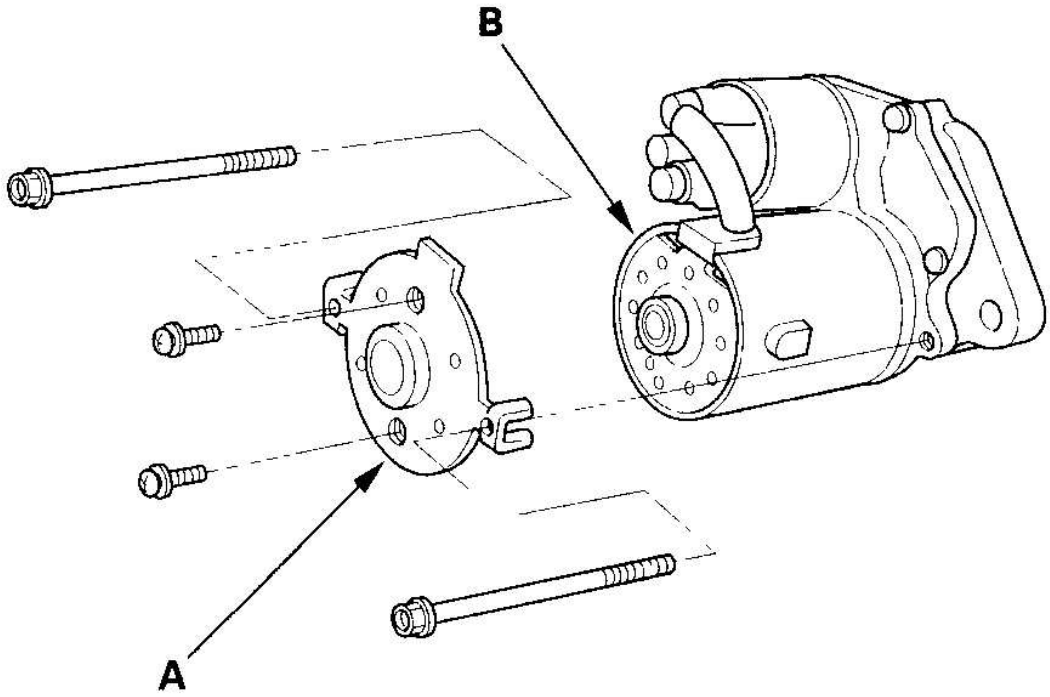
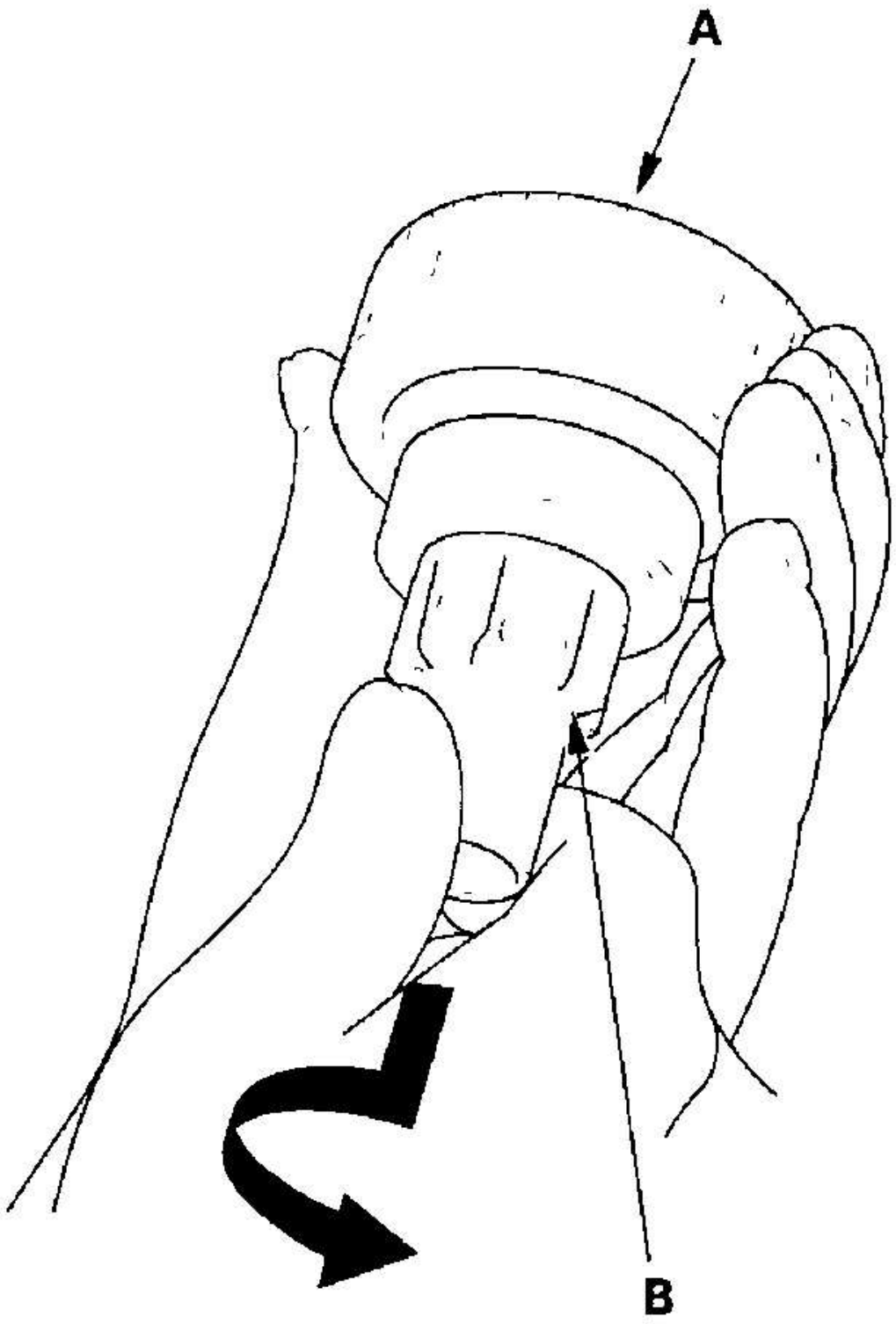


Fig. 28: Identifying Starter End Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Overrunning Clutch Inspection

17. Slide the overrunning clutch along the shaft. Replace it if it does not slide smoothly
18. Rotate the overrunning clutch (A) in both directions. It should lock and move upward in one direction and rotate smoothly in the other direction. If it does not lock in either direction or if it locks both directions, then replace it.



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Fig. 29: Rotating Overrunning Clutch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. If the starter drive gear (B) is worn or damaged, replace the overrunning clutch assembly; the gear is not available separately. Check the condition of the torque converter ring gear to see if the starter drive gear teeth are damaged
20. Reassemble the starter in the reverse order of disassembly.

2003-07 ENGINE

Starting System - Accord

COMPONENT LOCATION INDEX

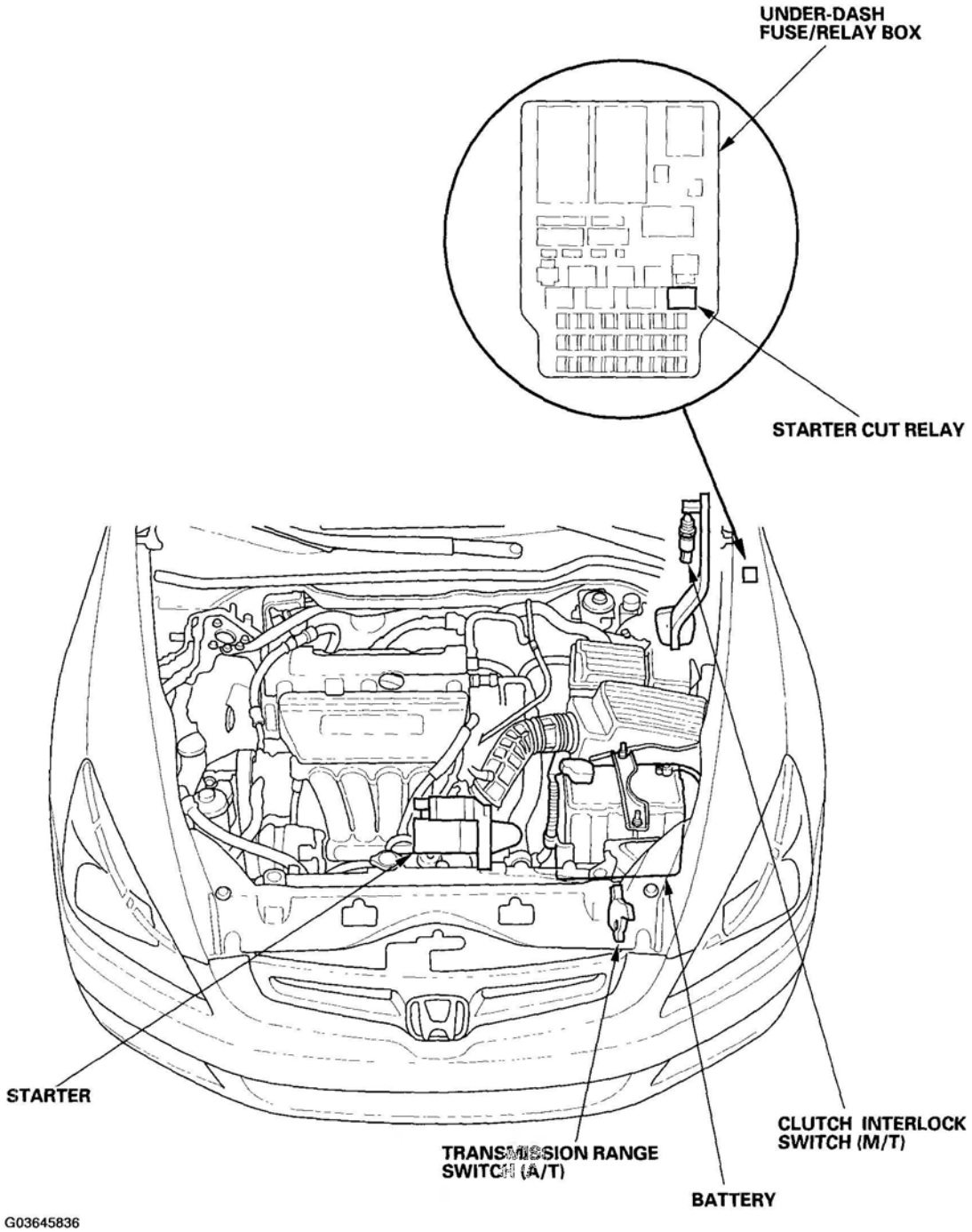


Fig. 1: Identifying Starting System Component Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for
Engine does not start (does not crank)	1. Check for loose battery terminals or connections. 2. Test the battery for a low charge (see **BATTERY TEST**). 3. Check the starter (see **STARTER CIRCUIT TROUBLESHOOTING**). 4. Check the starter cut relay (see **POWER RELAY TEST**). 5. Check the transmission range switch (A/T) (see **TRANSMISSION RANGE SWITCH TEST**). 6. Check the clutch interlock switch (M/T) (see **CLUTCH INTERLOCK SWITCH TEST**). 7. Check the ignition switch or wire (see **TEST**).	Poor ground at G101 (A/T)or G501 (M/T)
	1. Check for PGM-FI DTCs. 2. Check the fuel pressure (see **FUEL PRESSURE TEST**).	

Engine cranks, but does not start	3. Check for a plugged or damaged fuel line (see **FUEL LINE INSPECTION**). 4. Check for a plugged fuel filter (see **FUEL FILTER REPLACEMENT**). 5. Check the throttle body (see **THROTTLE BODY TEST**). 6. Check for low engine compression (see **ENGINE COMPRESSION INSPECTION**). 7. Check for a damaged or broken cam chain.	
Engine is hard to start	1. Check for PGM-FI DTCs. 2. Check the fuel pressure (see **FUEL PRESSURE TEST**). 3. Check for a plugged or damaged fuel line (see **FUEL LINE INSPECTION**). 4. Check for a plugged fuel filter (see **FUEL FILTER REPLACEMENT**).	
Engine cranks slowly	1. Check for loose battery terminals or connections. 2. Test the battery for a low charge (see **BATTERY TEST**). 3. Check the starter for	

	binding (see **STARTER CIRCUIT TROUBLESHOOTING**). 4. Check for excessive drag in the engine.	

CIRCUIT DIAGRAM

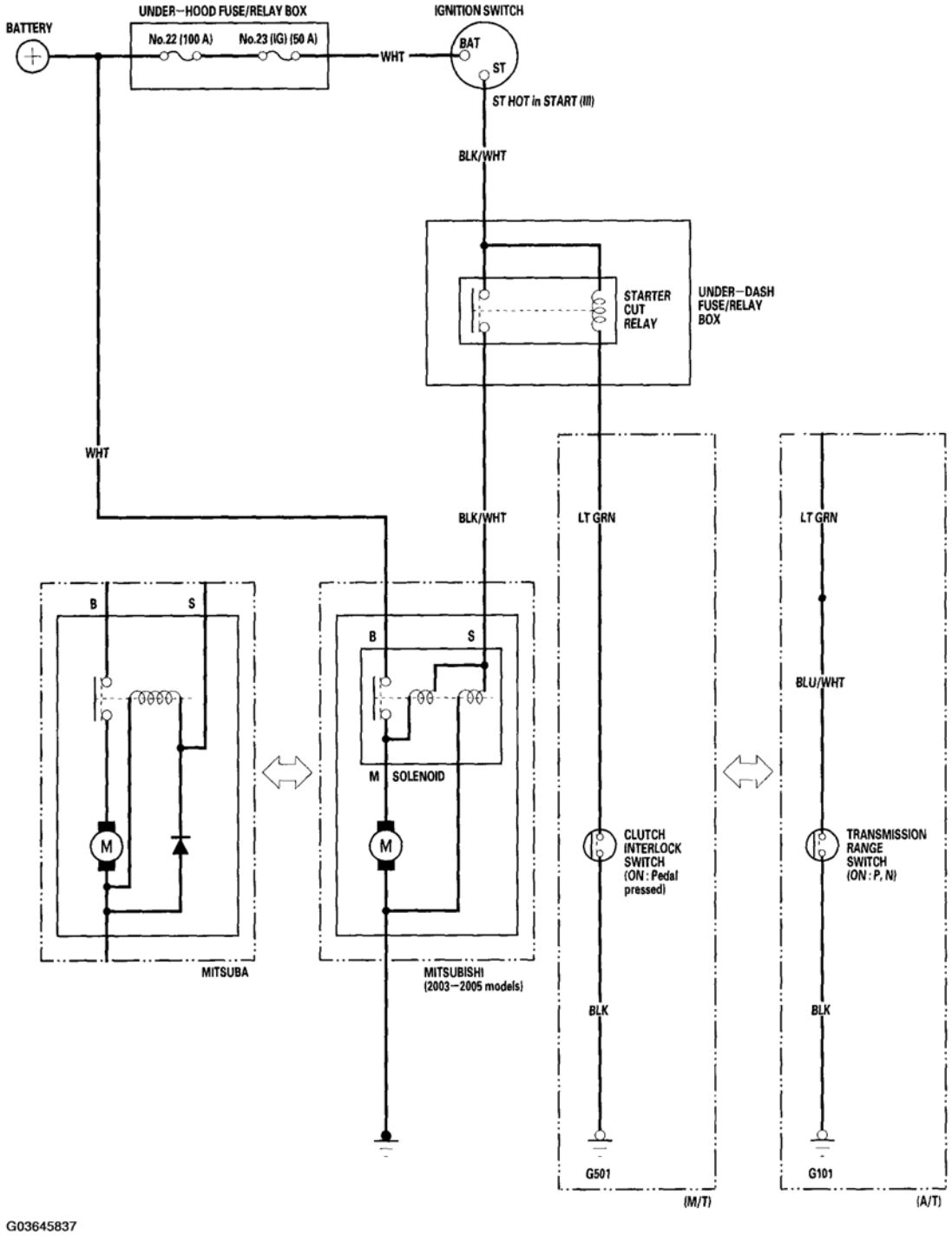


Fig. 2: Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

STARTER CIRCUIT TROUBLESHOOTING

NOTE:

- **Air temperature must be between 59 and 100°F (15 and 38°C) during this procedure.**
- **After this inspection, you must select engine control module (ECM)/powertrain control module (PCM) reset using the Honda Diagnostic System (HDS) (see ECM/PCM RESET), otherwise the ECM/PCM continues to stop the fuel injectors.**
- **The battery must be in good condition and fully charged.**

Recommended Procedure:

- Use a starter system tester.
- Connect and operate the equipment in accordance with the manufacturer's instructions.

1. Hook up the following equipment:
   - Ammeter, 0---400 A
   - Voltmeter, 0---20 V (accurate within 0.1 V)

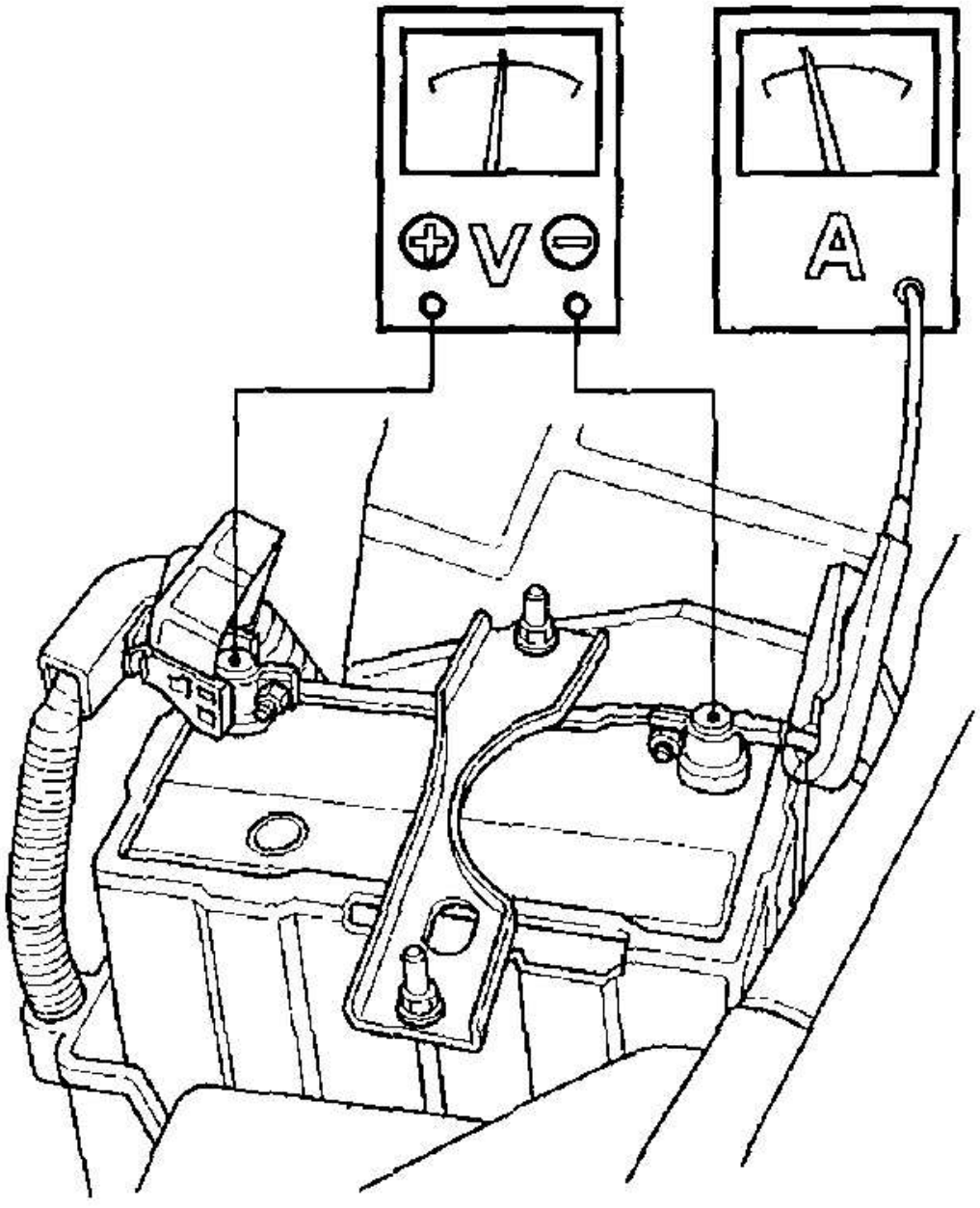


Fig. 3: Identifying Ammeter And Voltmeter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Connect the HDS to the data link connector (DLC) (see **GENERAL TROUBLESHOOTING INFORMATION**).
3. Turn the ignition switch ON (II), then select PGM-FI, INSPECTION, then ALL INJECTORS OFF on the HDS.
4. With the shift lever in N or P (A/T) or the clutch pedal pressed (M/T), turn the ignition switch to START (III).

   Did the starter crank the engine normally?

   YES - The starting system is OK. Go to step 10.

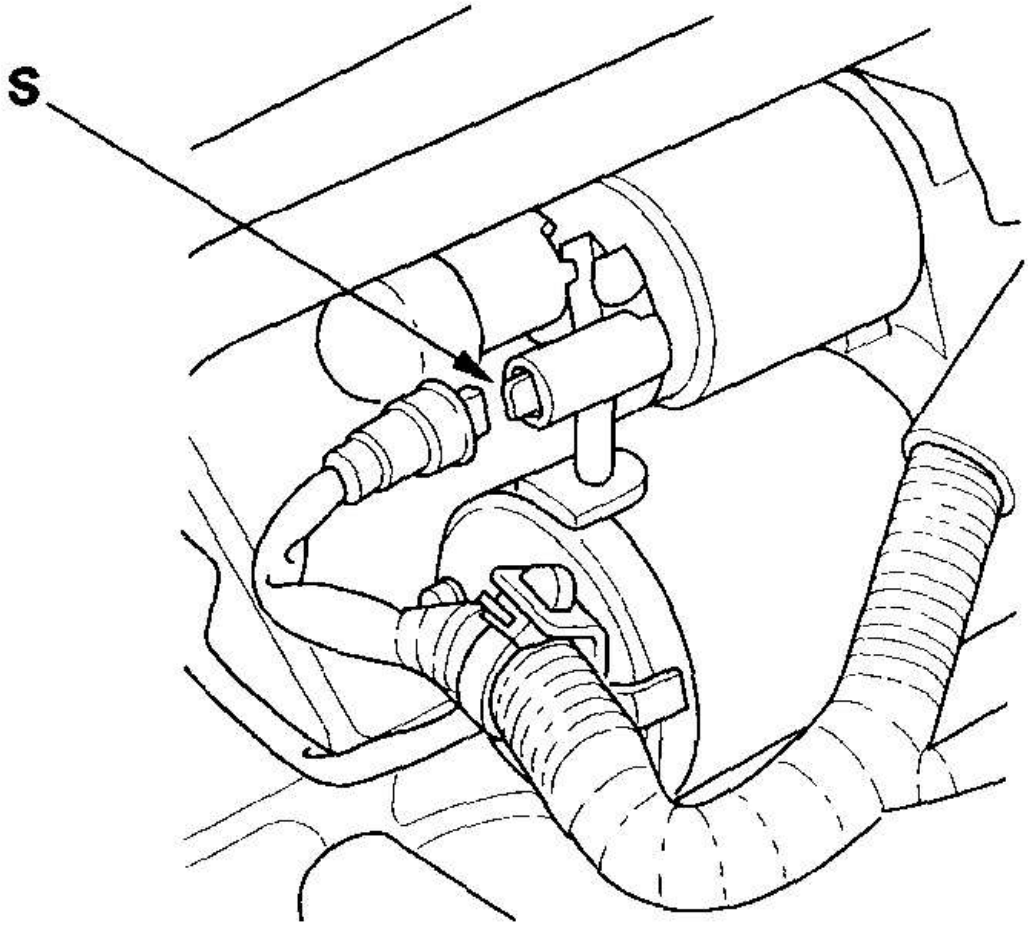
   NO - Go to step 5.
5. Check the battery condition. Check electrical connections at the battery, the negative battery cable to body, the engine ground cables, and the starter for looseness and corrosion. Then try cranking the engine again.

   Did the starter crank the engine?

   YES - Repairing the loose connection corrected the problem. The starting system is OK. Go to step 10.

   NO - Check the following:
   - If the starter will not crank the engine at all, go to step 6.
   - If it cranks the engine erratically or too slowly, go to step 7.
   - If it does not disengage from the flywheel or torque converter ring gear when you release the key, check the following:
     - Solenoid plunger and switch malfunction
     - Dirty drive gear or damaged overrunning clutch
6. Make sure the transmission is in Neutral, then disconnect the BLK/WHT wire from the starter solenoid S terminal. Connect a jumper wire from the battery positive terminal to the solenoid terminal.

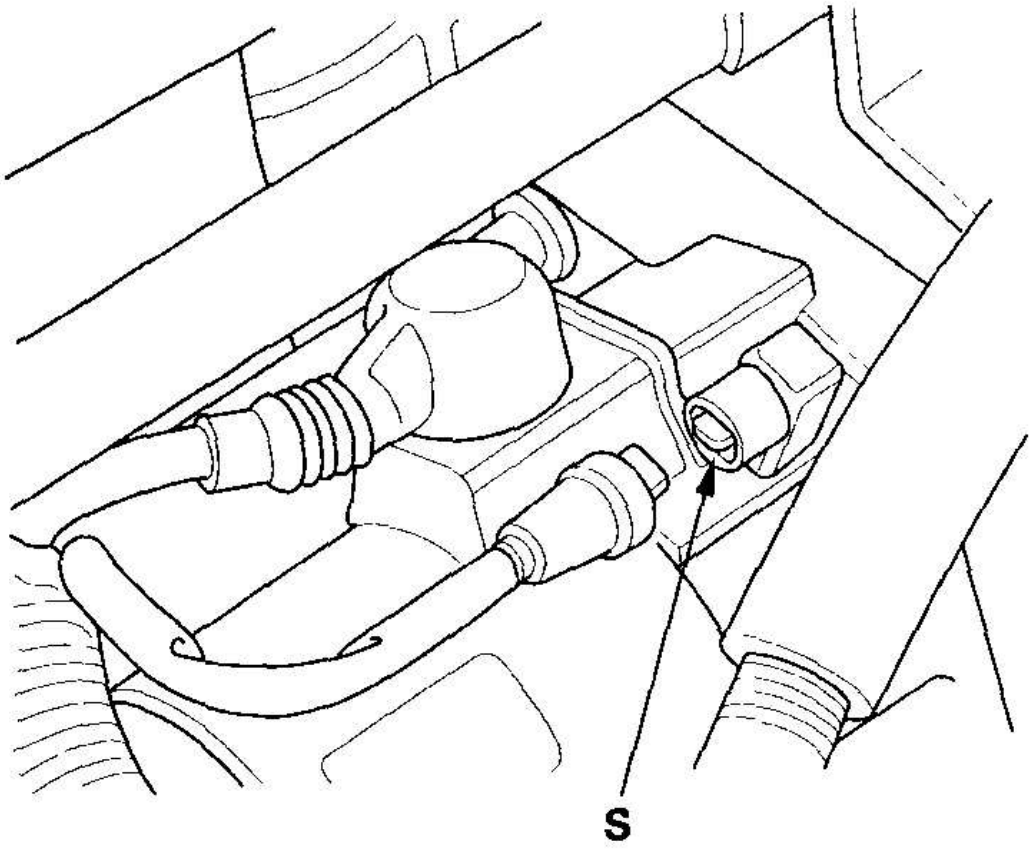
   M/T (2003-2005 Models)



G03645839

Fig. 4: Disconnecting BLK/WHT Wire From Starter Solenoid S Terminal (M/T (2003-2005 Models))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/T, M/T (2006 Model)



G03645840

Fig. 5: Disconnecting BLK/WHT Wire From Starter Solenoid S Terminal (A/T, M/T (2006 Model))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Did the starter crank the engine?

YES - Check the following items in the order listed until you find the open circuit:

- The BLK/WHT wire and connectors between the under-dash fuse/relay box and the ignition switch, and between the under-dash fuse/relay box and the starter.
- The ignition switch (see **TEST**).

- The transmission range switch and connector (A/T) or the clutch interlock switch and connector (M/T).
- The starter cut relay (see **POWER RELAY TEST**).

NO - Remove the starter, and repair or replace as necessary.

7. While cranking the engine, check the cranking voltage and current draw.

   Is cranking voltage greater than or equal to 7.7 V (M/T 2003-2005 Models)/8.5 V (A/T, M/T 2006 Model) and current draw less than or equal to 400A (M/T 2003-2005 Models)/380A (A/T, M/T 2006 Model)?

   YES - Go to step 9.

   NO - Replace the starter, or remove and disassemble it, and check for the following until you find the cause:

   - Drag in the starter armature
   - Shorted armature winding
   - Excessive drag in the engine

8. Check the engine speed while cranking the engine.

   Is the engine speed above 100 rpm?

   YES - Go to step 9.

   NO - Replace the starter, or remove and disassemble it, and check for the following:

   - Open circuit in starter armature commutator segments
   - Excessively worn starter brushes
   - Open circuit in commutator brushes
   - Dirty or damaged helical splines or drive gear
   - Faulty drive gear clutch

9. Remove the starter, and inspect its drive gear and the flywheel or torque converter ring gear for damage. Replace any damaged parts.
10. Select ECM/PCM reset (see **ECM/PCM RESET**) to cancel the ALL INJECTORS OFF function on the HDS.

CLUTCH INTERLOCK SWITCH TEST

M/T

1. Disconnect the clutch interlock switch 2P connector (A).

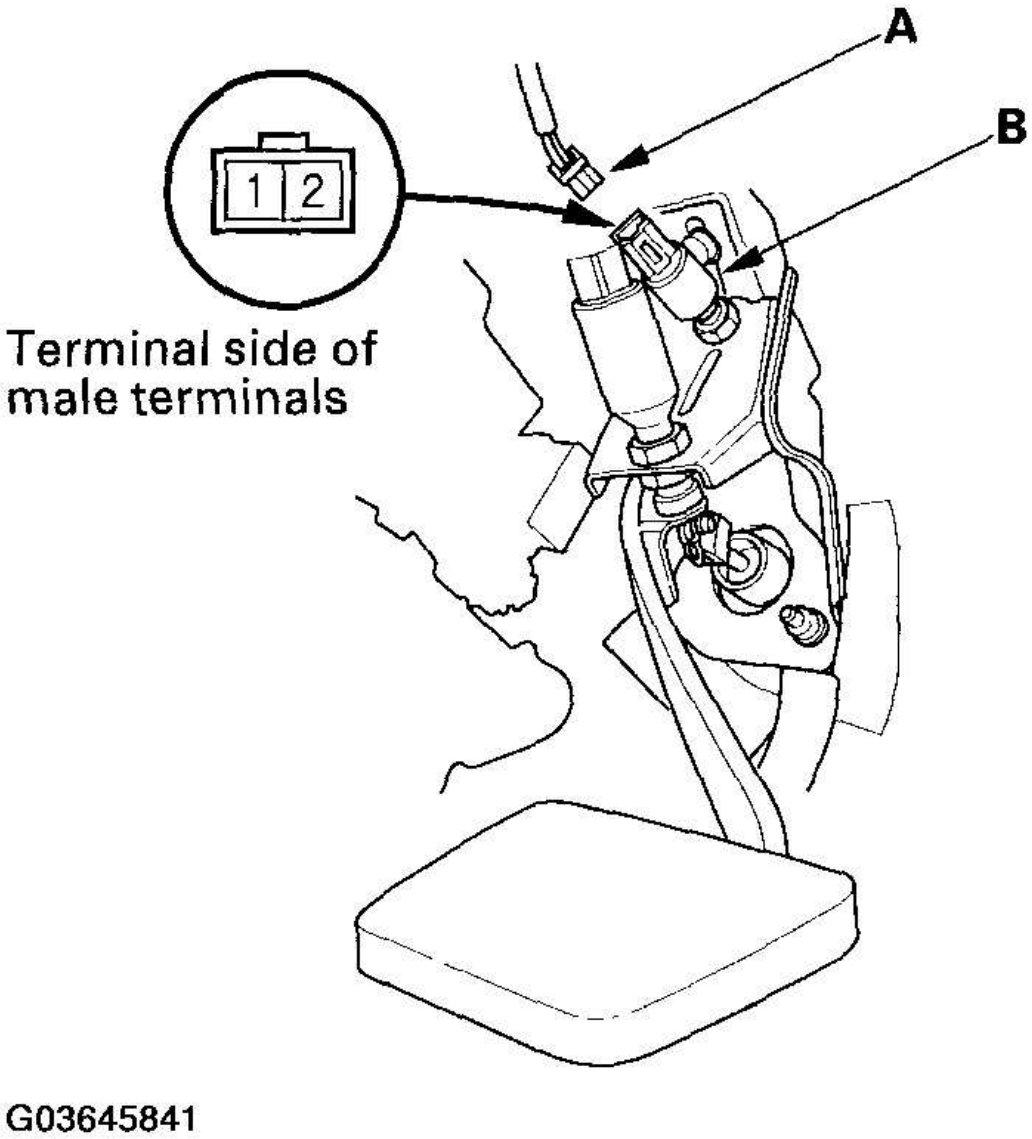


Fig. 6: Disconnecting Clutch Interlock Switch 2P Connector And Clutch Interlock Switch

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the clutch interlock switch (B).
3. Check for continuity between the terminals according to the table.

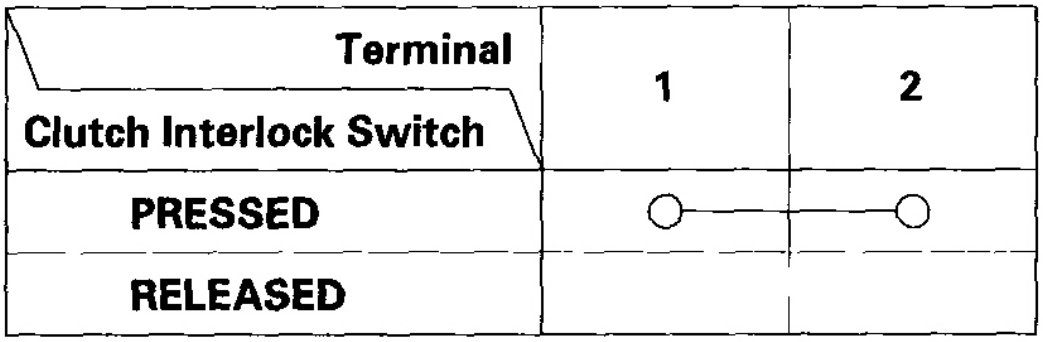


Fig. 7: Terminals Continuity Checking Table
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- If the continuity is not as specified, replace the clutch interlock switch.
- If OK, install the clutch interlock switch and adjust the pedal height (see **CLUTCH PEDAL, CLUTCH PEDAL POSITION SWITCH, AND CLUTCH INTERLOCK SWITCH ADJUSTMENT**).

STARTER SOLENOID TEST

M/T (2003-2005 MODELS)

1. Check the hold-in coil for continuity between the S terminal and the armature housing (ground). There should be continuity.
2. Check the pull-in coil for continuity between the S terminal and the M terminal. There should be continuity.
3. Remove the starter cable (A), BLK/WHT wire (B) and motor cable (C)

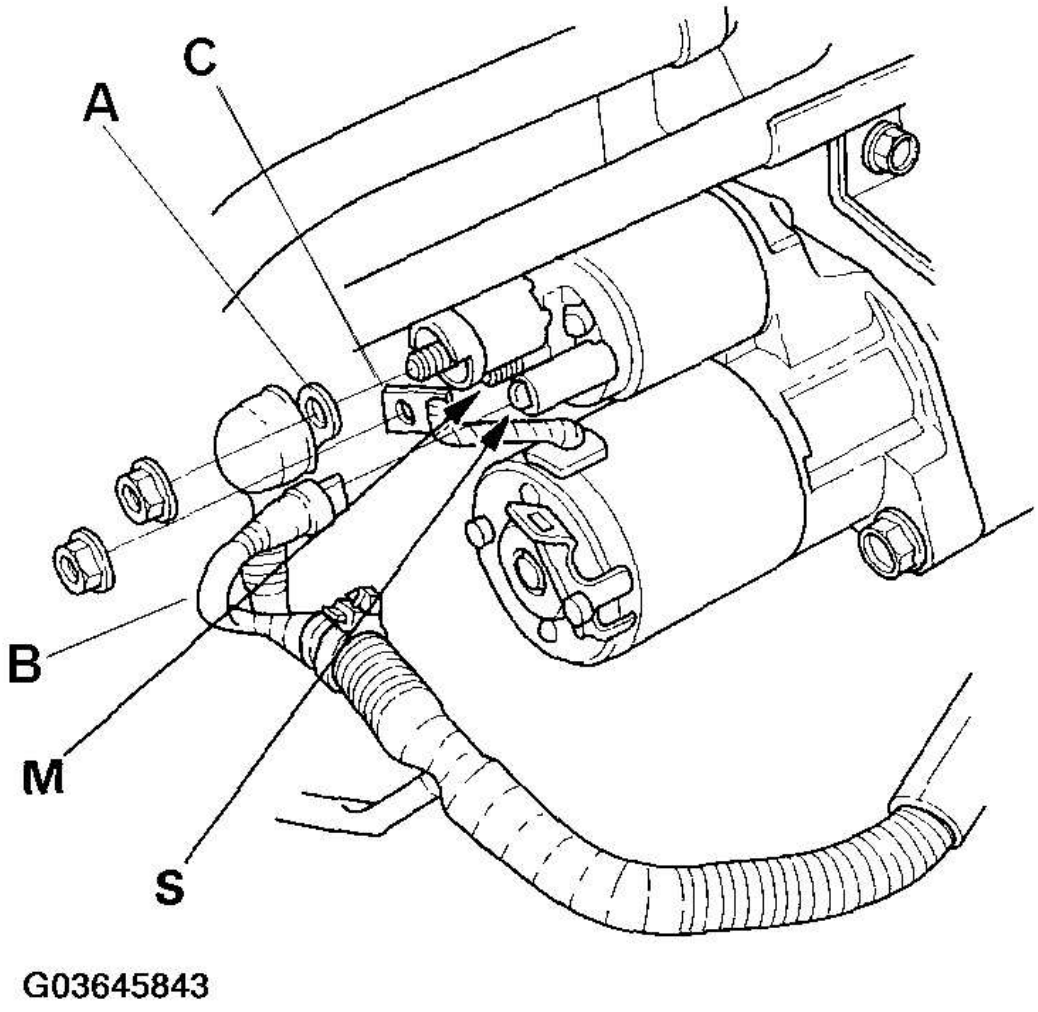


Fig. 8: Checking Pull-In Coil For Continuity Between S Terminal And M Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check the hold-in coil for continuity between the S terminal and the armature housing (ground). There should be continuity.
   - If there is continuity, go to step 5.
   - If there is no continuity, replace the solenoid.
5. Check the pull-in coil between the S terminal and the M terminal. There should be continuity.

- If there is continuity, the solenoid is OK.
- If there is no continuity, replace the solenoid.

6. Install the cobles and wire in the reverse order of removal.
7. Connect the positive cable the the battery first, and then connect the negative cable.
8. Enter the anti-theft codes for the audio unit (and navigation code if equipped), then enter the audio presets.

STARTER PERFORMANCE TEST

M/T (2003-2005 MODELS)

1. Disconnect the wires from the M terminal.
2. Make the connections using as heavy a wire as possible (preferably equivalent to the wire used for the vehicle). To avoid damaging the starter, never leave the battery connected for more than 10 seconds.
3. Connect the battery as shown in **Fig. 9**. Be sure to disconnect the starter motor wire from the solenoid. If the starter pinion moves out, it is working properly.

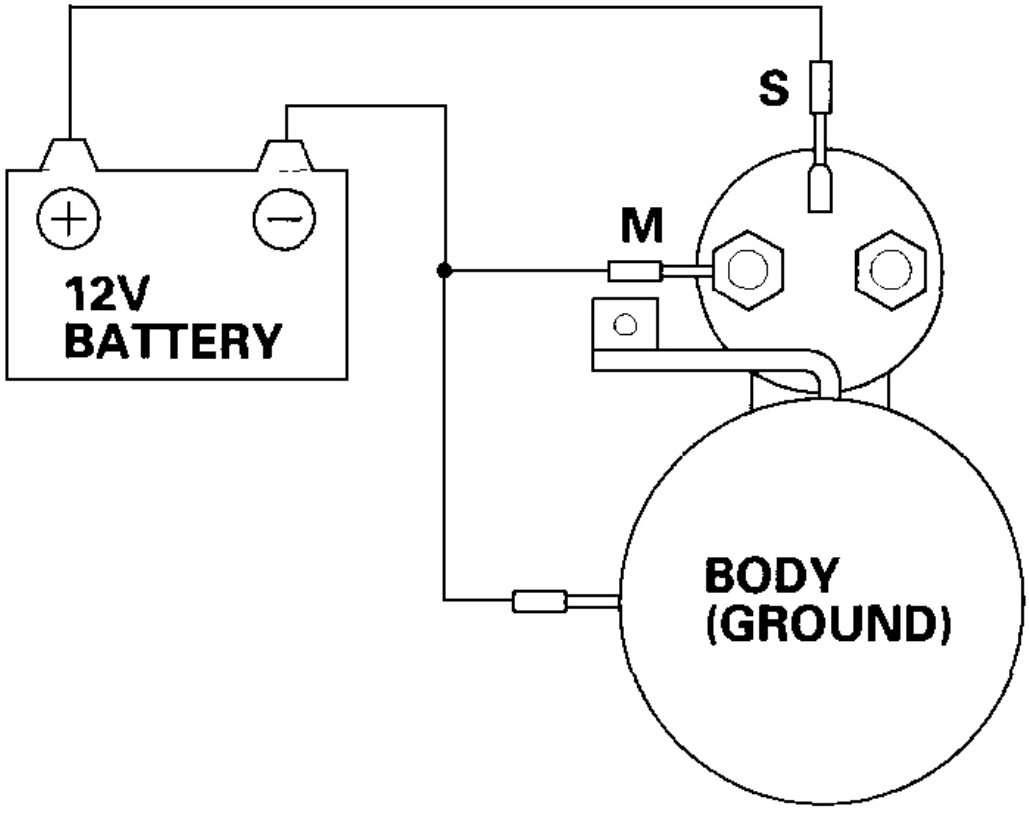


Fig. 9: Disconnecting Starter Motor Wire From Solenoid
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Disconnect the negative battery terminal from the M terminal. If the pinion does not retract, the hold-in coil of the solenoid is working properly.

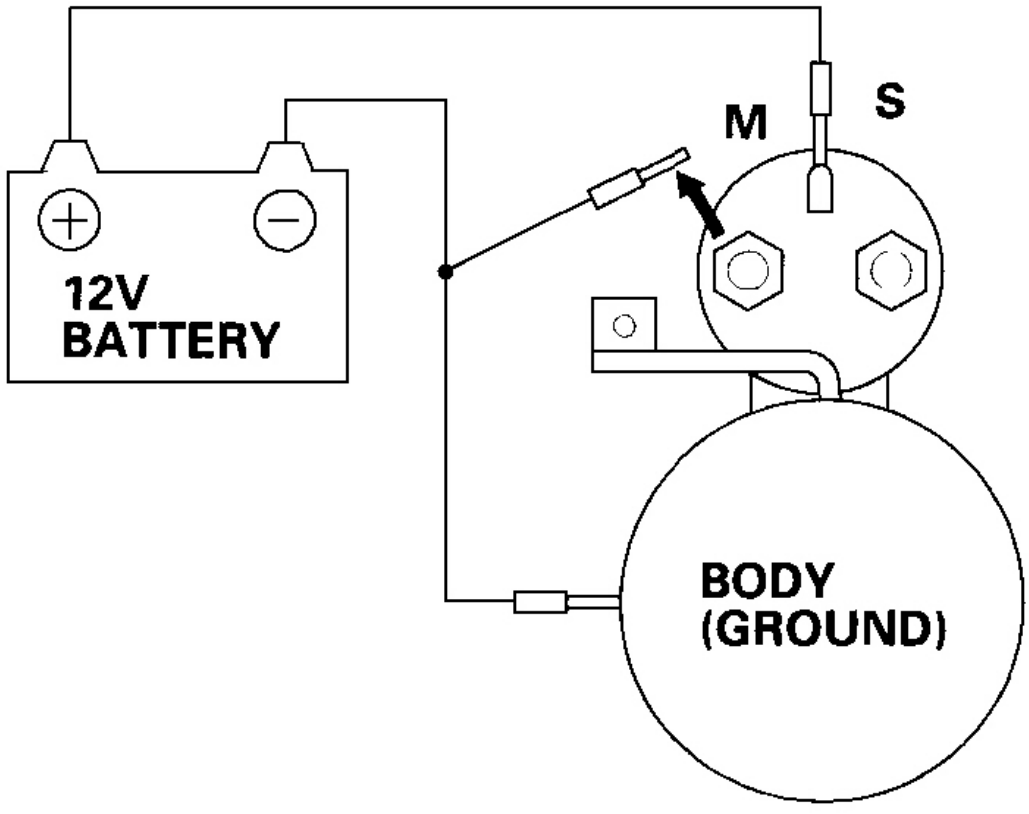


Fig. 10: Disconnecting Negative Battery Terminal From M Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the battery from the starter body. If the pinion retracts immediately, it is working properly.

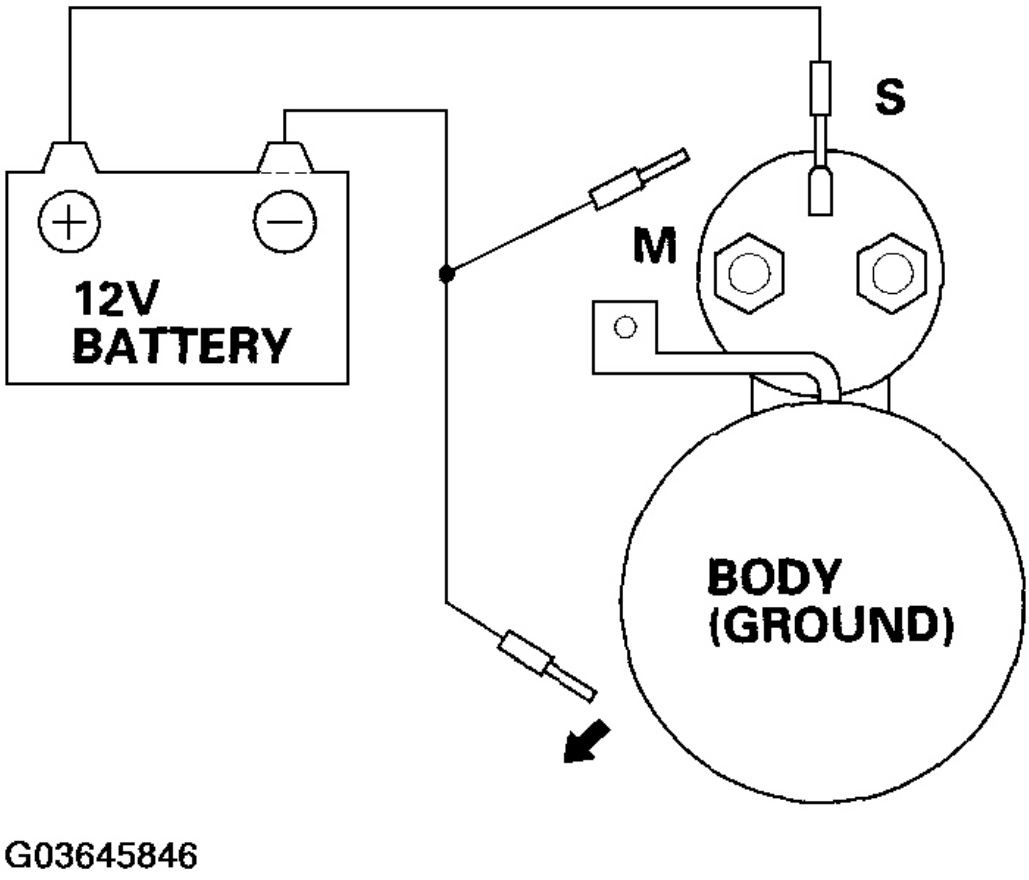


Fig. 11: Disconnecting Battery From Starter Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Firmly clamp the starter in a vise.
7. Reconnect the wire to the M terminal.
8. Connect the starter to the battery as shown in **Fig. 12**, and check that the motor turns and keeps rotating.

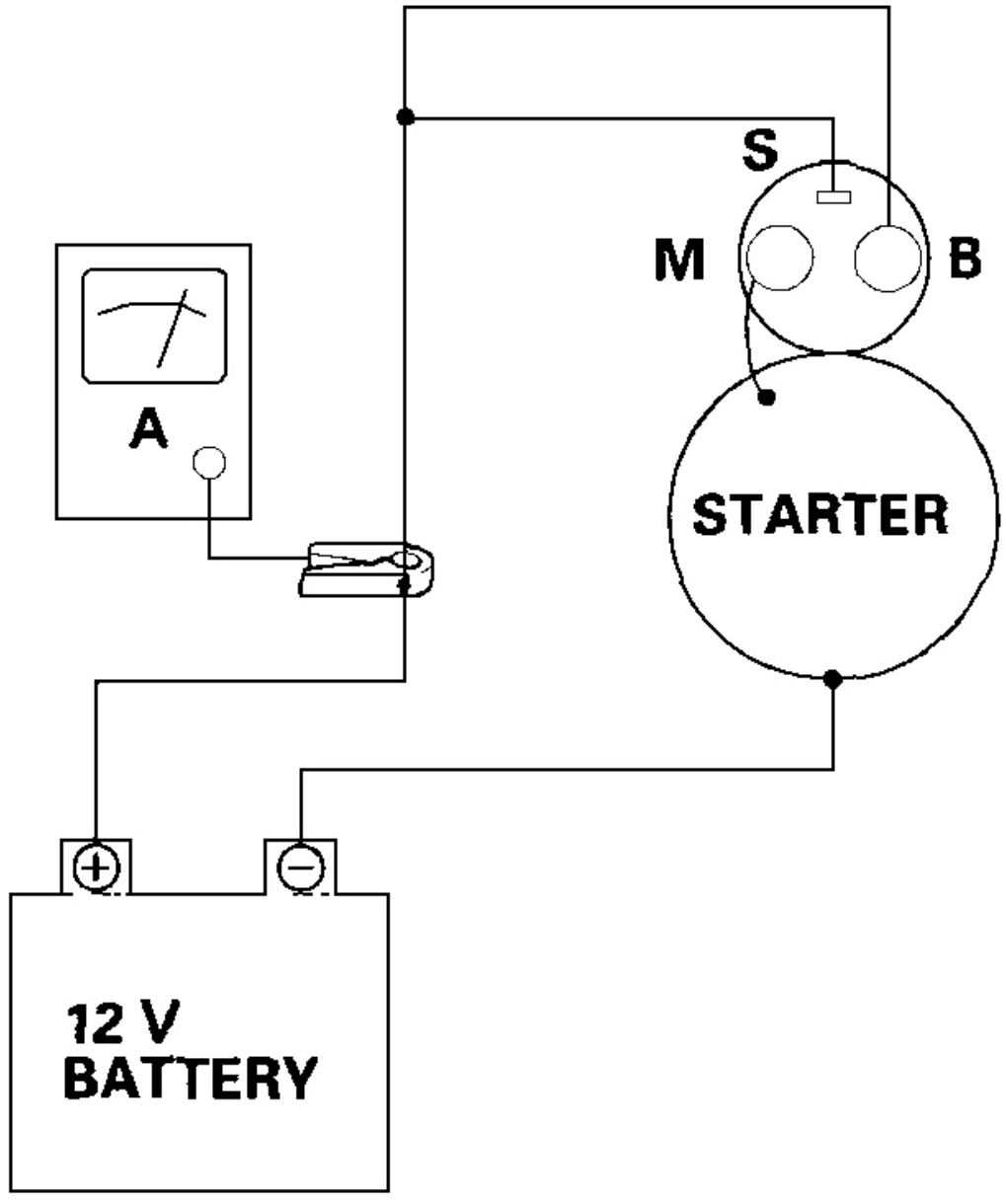


Fig. 12: Connecting Starter To Battery And Check That Motor Keeps Rotating

Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. If the electric current and motor speed meet the specifications when the battery voltage is at 11 V, the starter is working properly.

   Specifications

   Electric current: 90 A or less

   Motor speed: 2,000 rpm or more

A/T, M/T (2006 MODEL)

1. Connect the battery to the starter using as heavy a wire as possible (preferably equivalent to the wire used for the vehicle). To avoid damaging the starter, never leave the battery connected for more than 10 seconds.

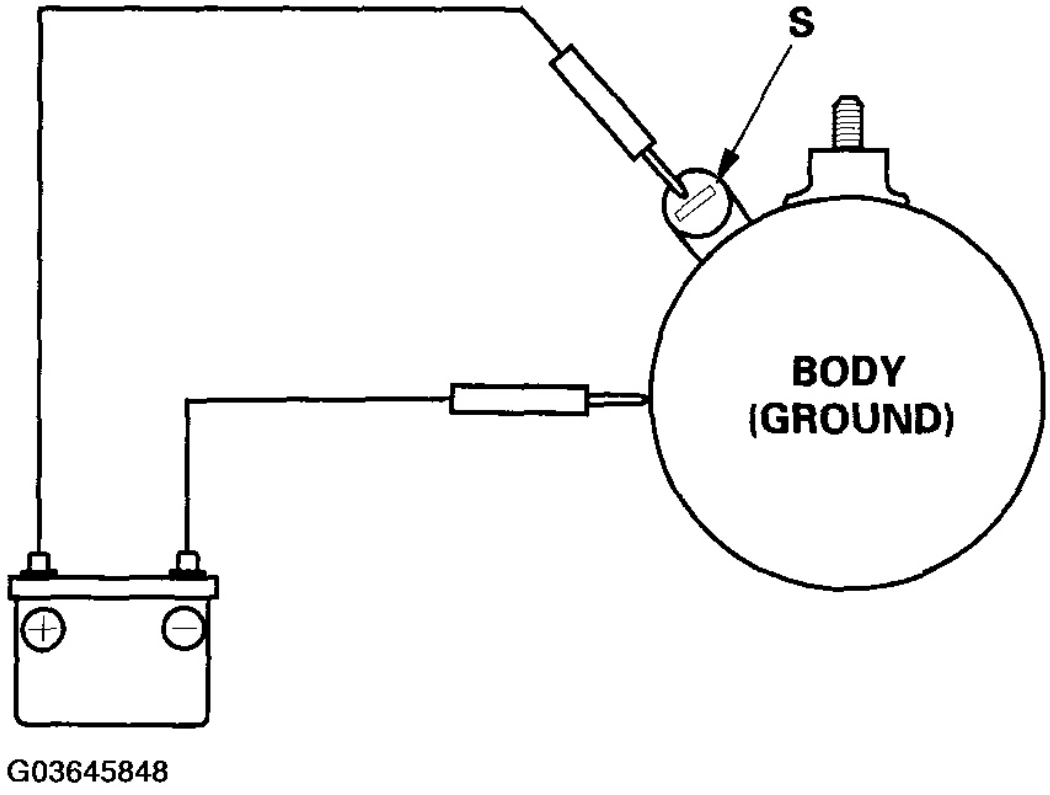


Fig. 13: Connecting Battery To Starter

Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Connect the battery as shown in **Fig. 13**. If the starter pinion moves out, it is working properly.
3. Disconnect the negative battery terminal from the body as shown in **Fig. 14**. If the pinion retracts immediately, it is working properly.

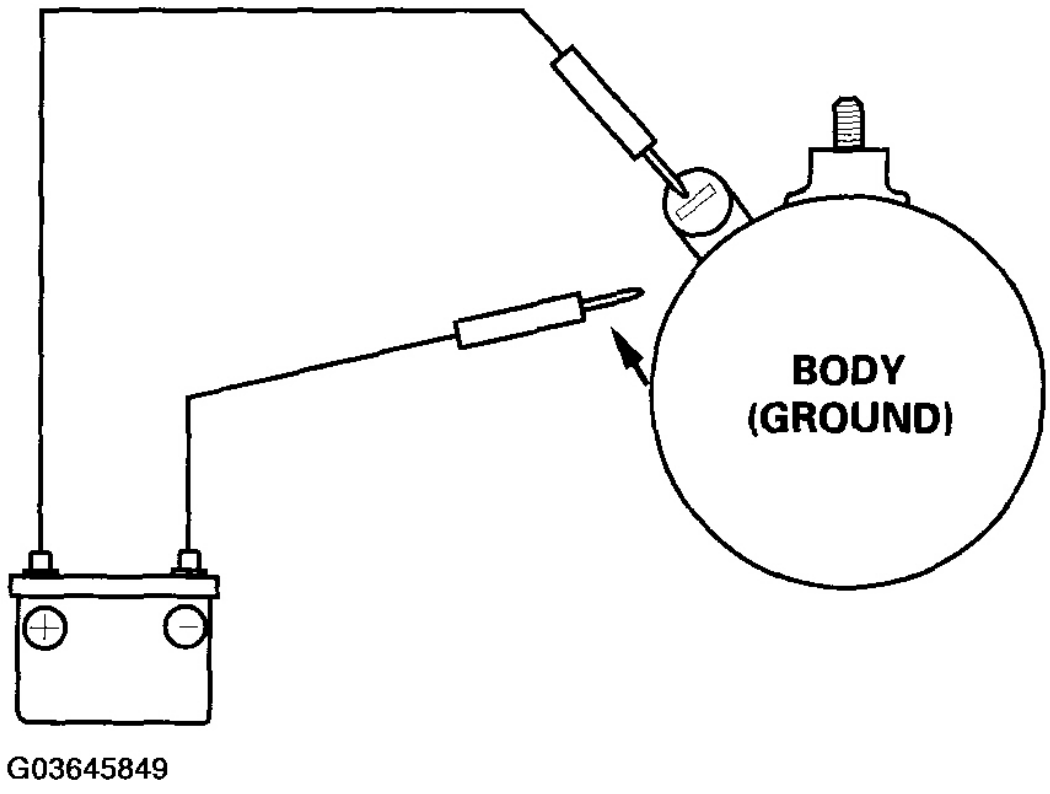


Fig. 14: Disconnecting Negative Battery Terminal From Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Firmly clamp the starter in a vise.
5. Connect the starter to the battery as shown in **Fig. 15**, and check that the motor turns and keeps rotating.

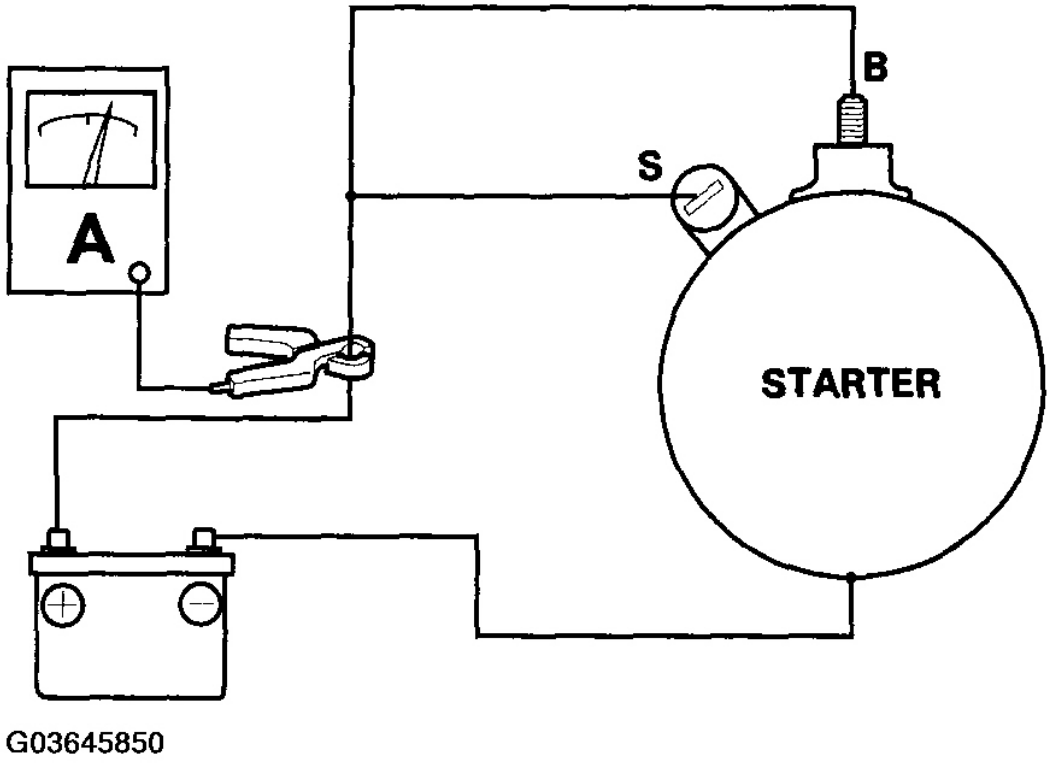


Fig. 15: Connecting Starter To Battery And Check That Motor Keeps Rotating
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. If the electric current and motor speed meet the specifications when the battery voltage is at 11.5 V, the starter is working properly.

   Specifications

   Electric current: 80 A or less

   Motor speed: 2,300 rpm or more

STARTER REMOVAL AND INSTALLATION

REMOVAL

1. Make sure you have the anti-theft codes for the radio, and the navigation system, then write down the customer's radio station and XM radio channel presets.
2. Disconnect the negative cable from the battery first, then disconnect the positive cable.
3. Remove the intake manifold (see **REMOVAL (2003-2005 MODELS)**).
4. Disconnect the starter cable (A) from the B terminal, then disconnect the BLK/WHT wire (B) from the S terminal.

M/T (2003-2005 Models)

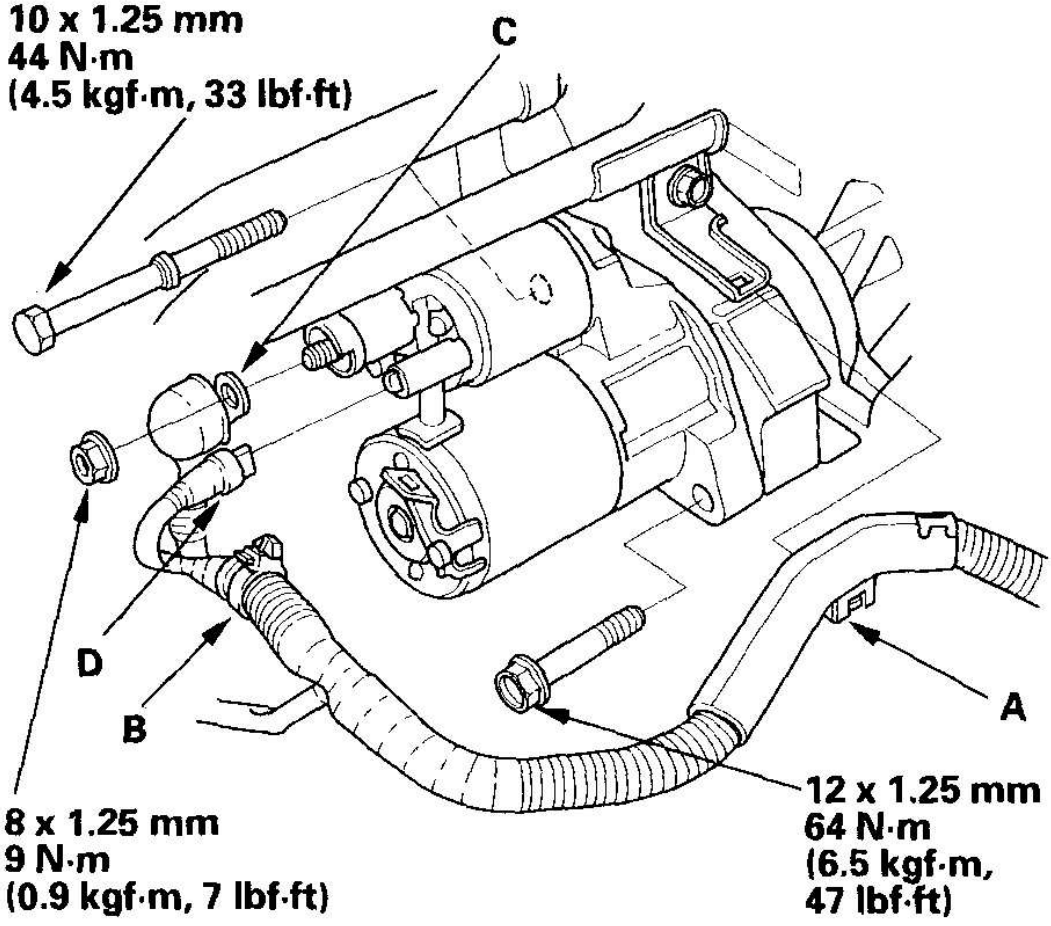


Fig. 16: Disconnecting Starter Cable From B Terminal And BLK/WHT Wire From S Terminal (M/T (2003-2005 Models))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/T, M/T (2006 Model)

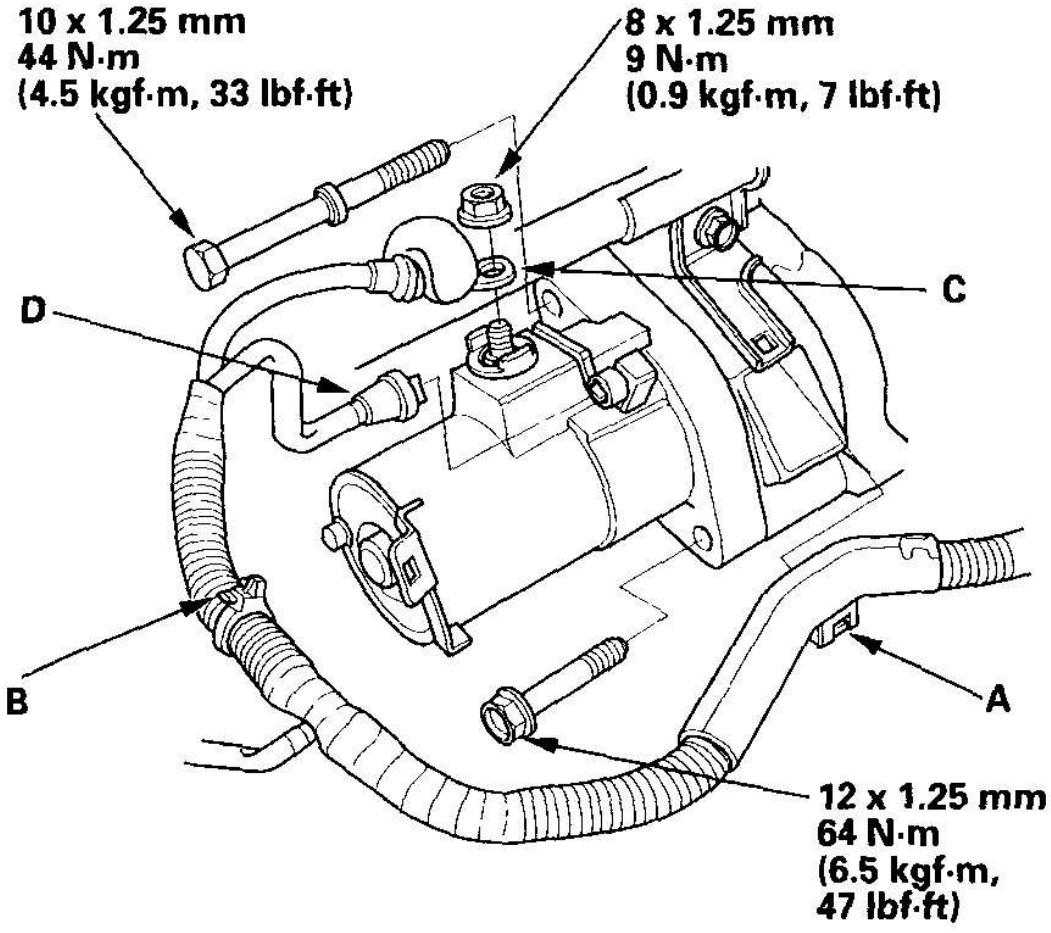


Fig. 17: Disconnecting Starter Cable From B Terminal And BLK/WHT Wire From S Terminal (A/T, M/T (2006 Model))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the harness clamp (C).

6. Remove the harness holder (D).
7. Remove the two bolts holding the starter, then remove the starter.

INSTALLATION

1. Install in the reverse order of removal. Make sure the crimped side of the ring terminal (A) is facing out.

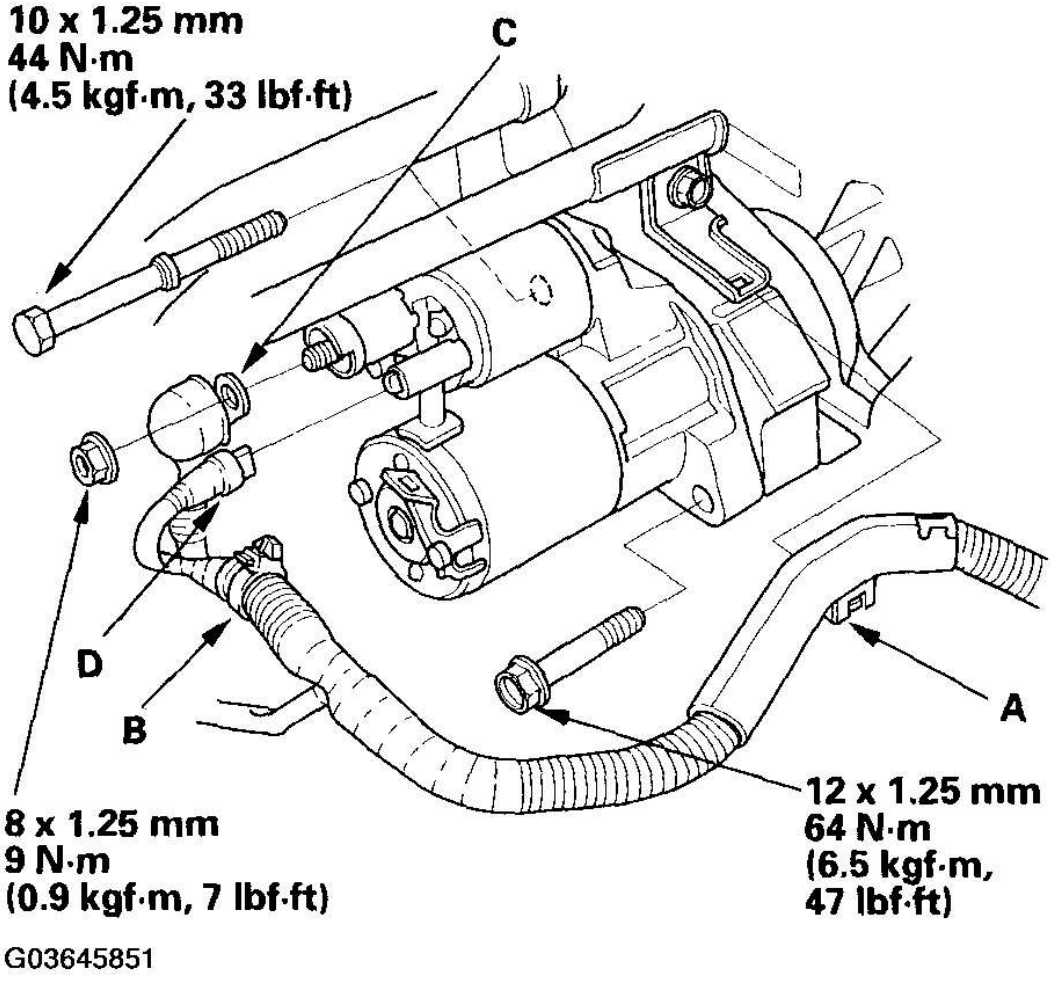


Fig. 18: Disconnecting Starter Cable From B Terminal And BLK/WHT Wire From S Terminal (M/T (2003-2005 Models))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

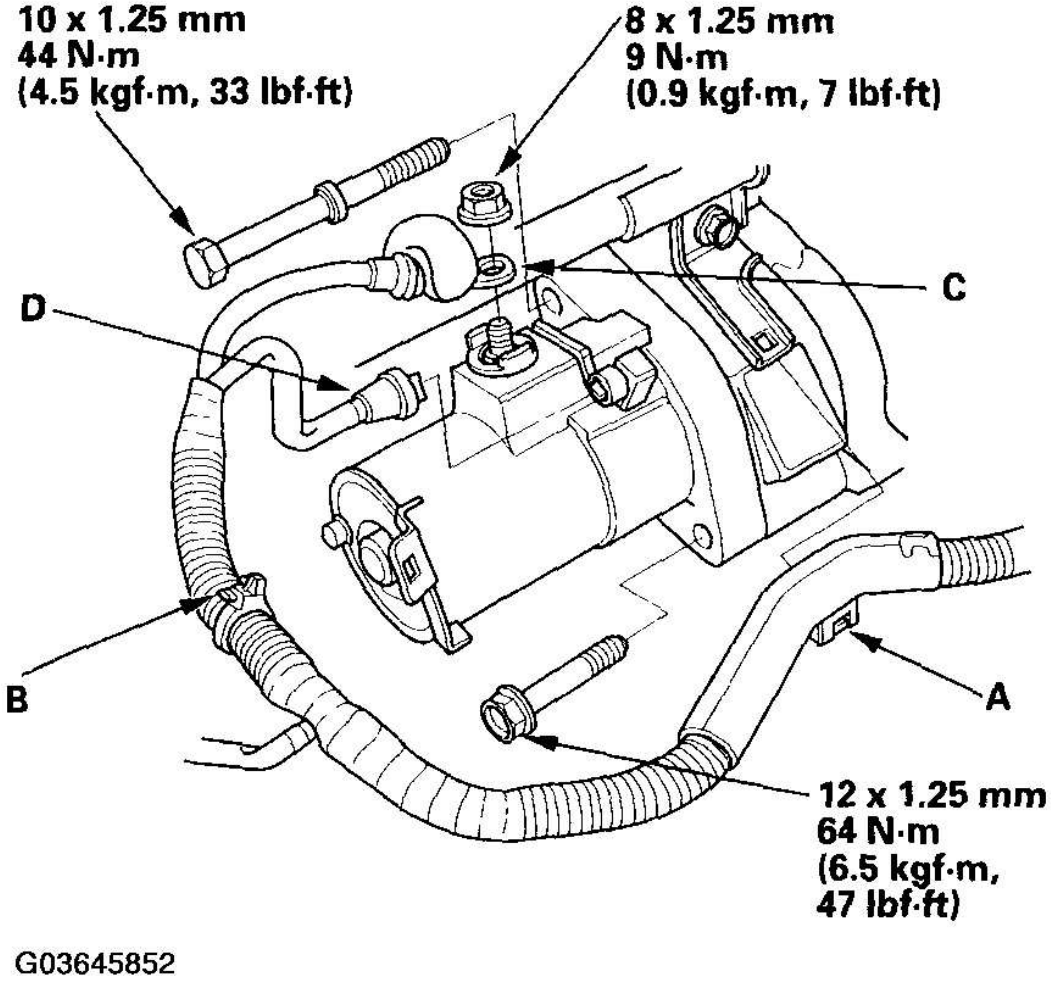


Fig. 19: Disconnecting Starter Cable From B Terminal And BLK/WHT Wire From S Terminal (A/T, M/T (2006 Model))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the intake manifold:
   - '03-05 models**INSTALLATION (2003-2005 MODELS)**
   - '06-07 models**INSTALLATION (2006 MODEL)**
3. Connect the positive cable to the battery first, then connect the negative cable.
4. Start the engine to make sure the starter works properly.
5. Enter the anti-theft codes for the audio unit (and naviagtion code if equipped),

then enter the audio presets.

6. Set the clock.

STARTER OVERHAUL

MITSUBISHI M/T (2003-2005 MODELS)

Disassembly/Reassembly

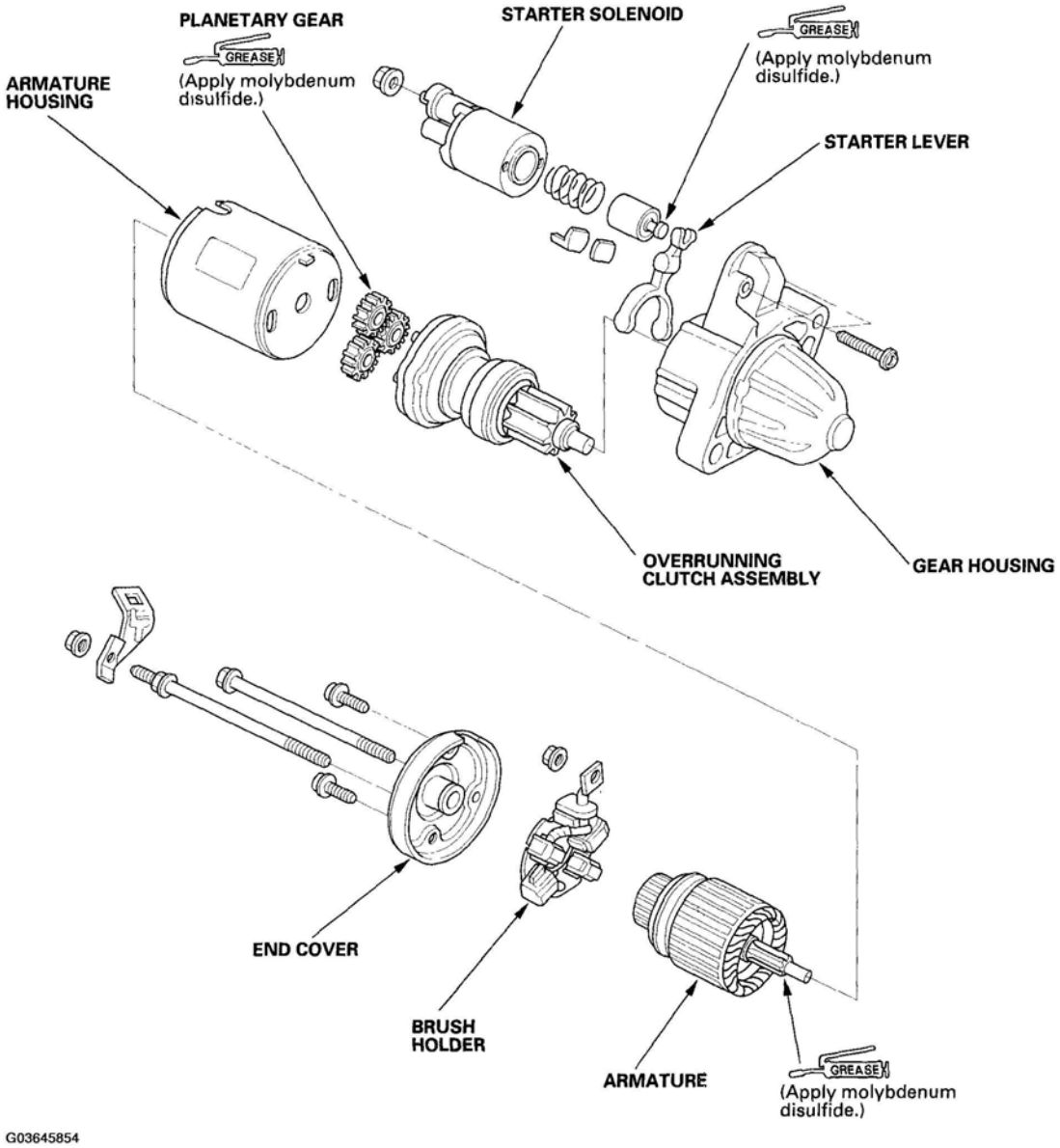


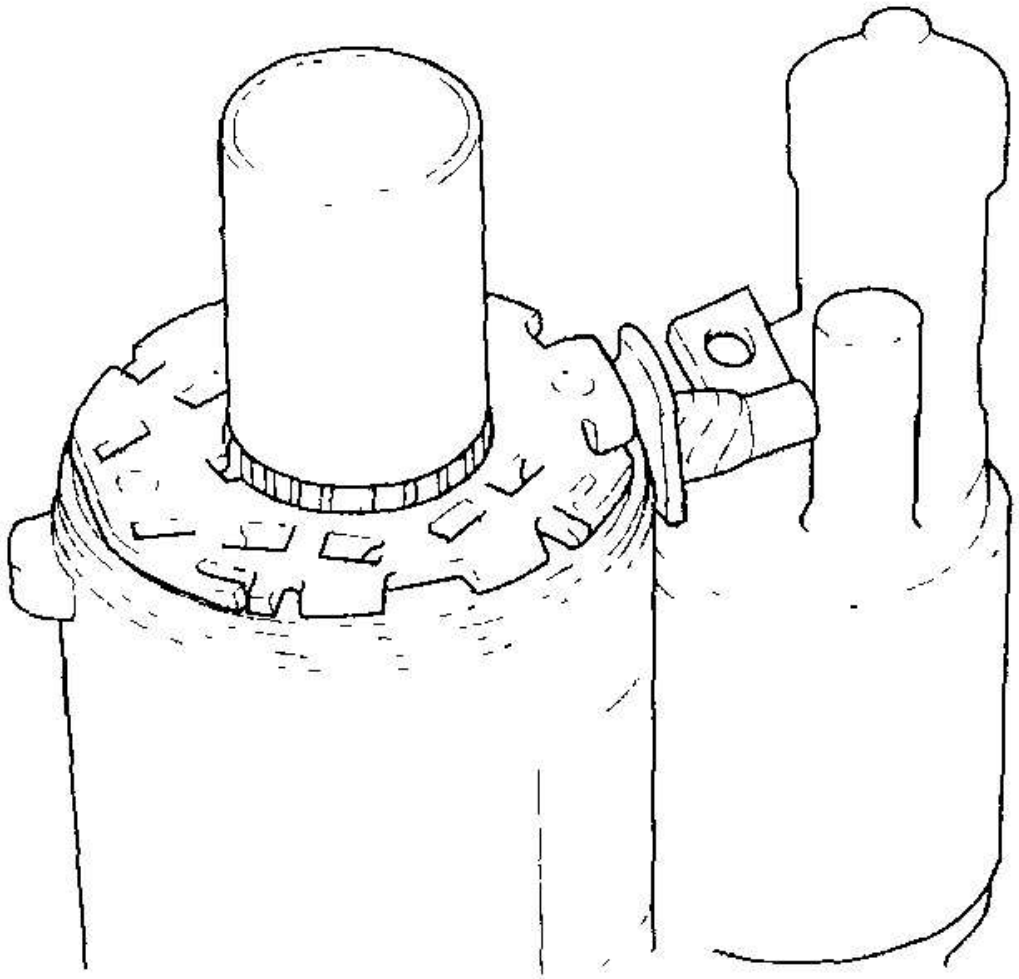
Fig. 20: Identifying Components Of Starter Assembly (Mitsubishi M/T (2003-

2005 Models))

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Brush Holder Removal

1. Remove the starter (see **STARTER REMOVAL AND INSTALLATION**).
2. Disconnect the wire from the M terminal, and remove the end cover.
3. Place a 29.4 mm (1.16 in.) outside diameter plastic pipe on the armature.



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Fig. 21: Placing 29.4 mm (1.16 in.) Outside Diameter Plastic Pipe On Armature
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Move the brush holder (A) up to the pipe (B) while holding the pipe so the brushes do not pop out from the holder.

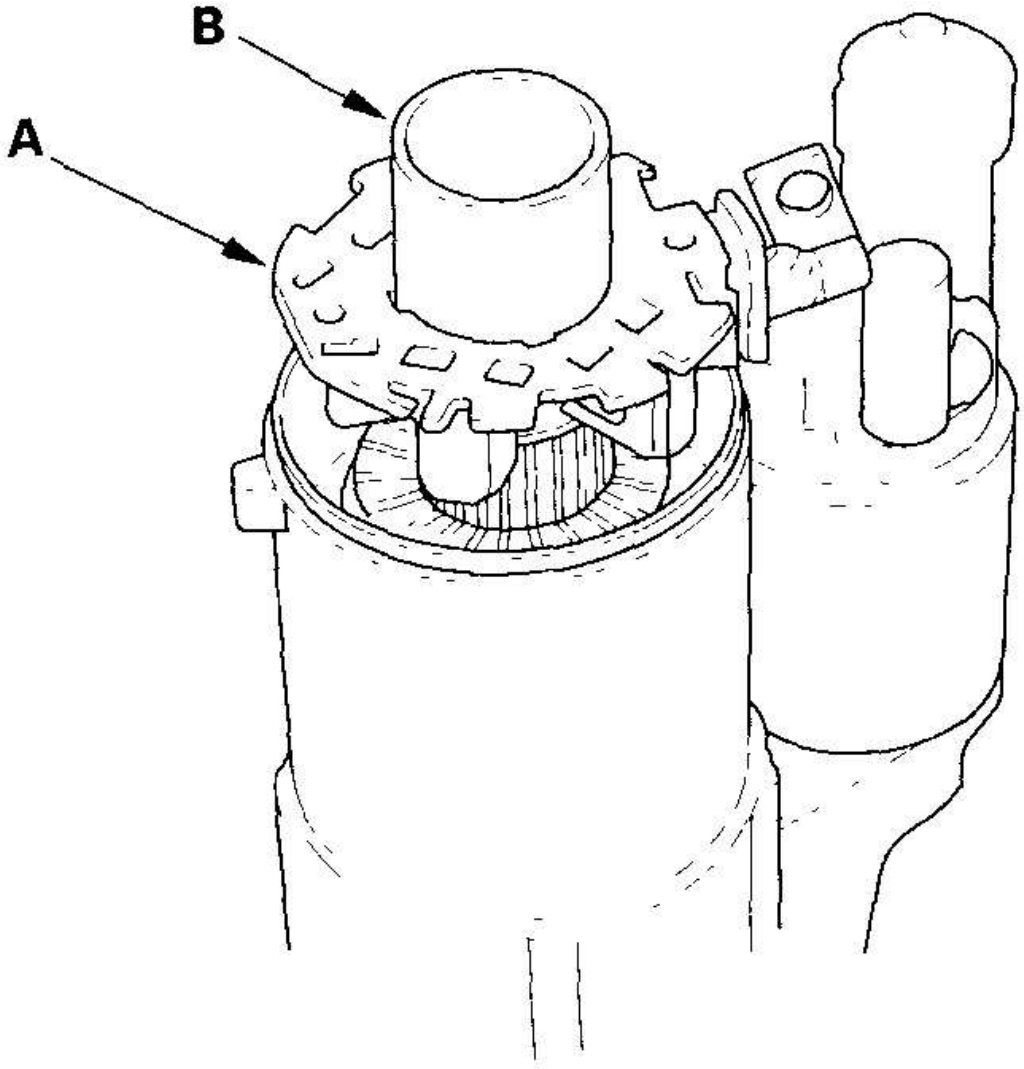
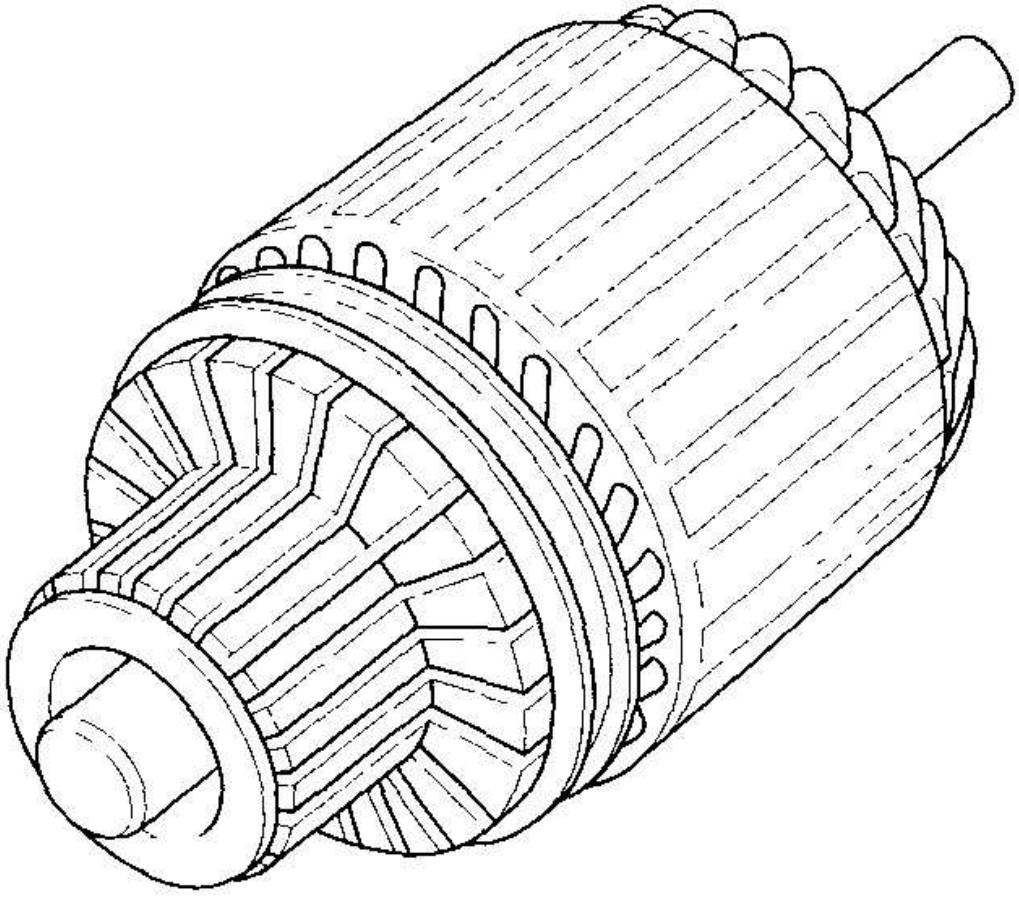


Fig. 22: Moving Brush Holder Up To Pipe
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Armature Inspection and Test

5. Disassemble the starter as shown at the beginning of this procedure.
6. Inspect the armature for wear or damage from contact with the permanent magnet. If there is wear or damage, replace the armature.



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Fig. 23: Identifying Armature

Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Check the commutator (A) surface. If the surface is dirty or burnt, resurface with emery cloth or a lathe within the following specifications, or recondition with #500 or #600 sandpaper (B).

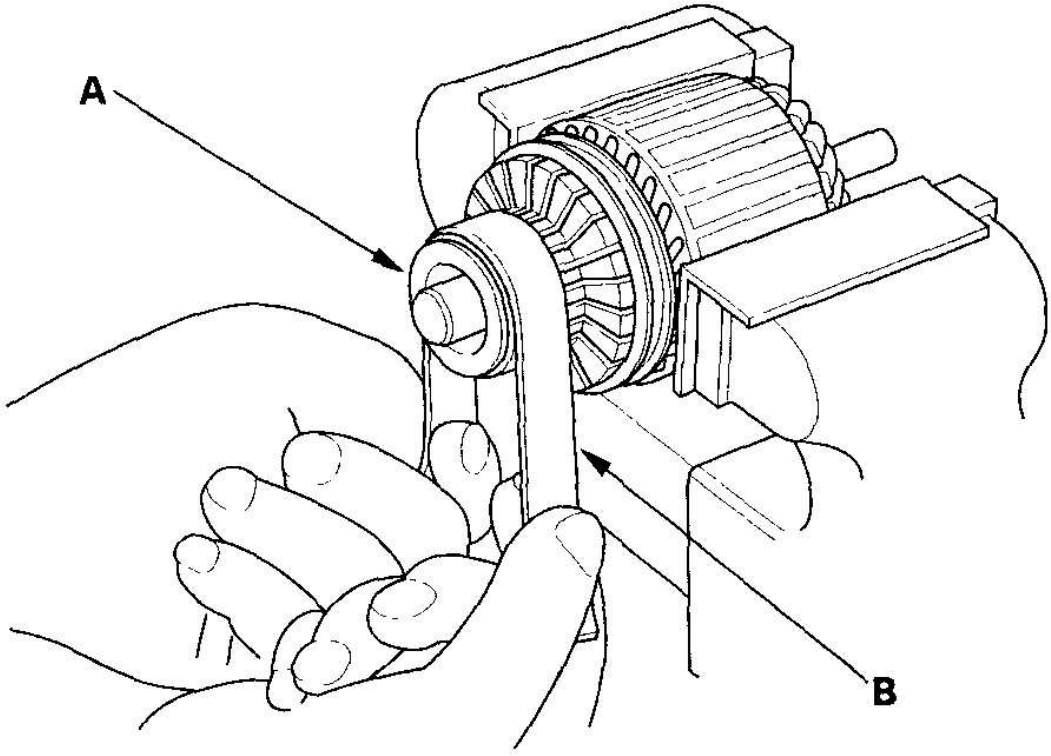


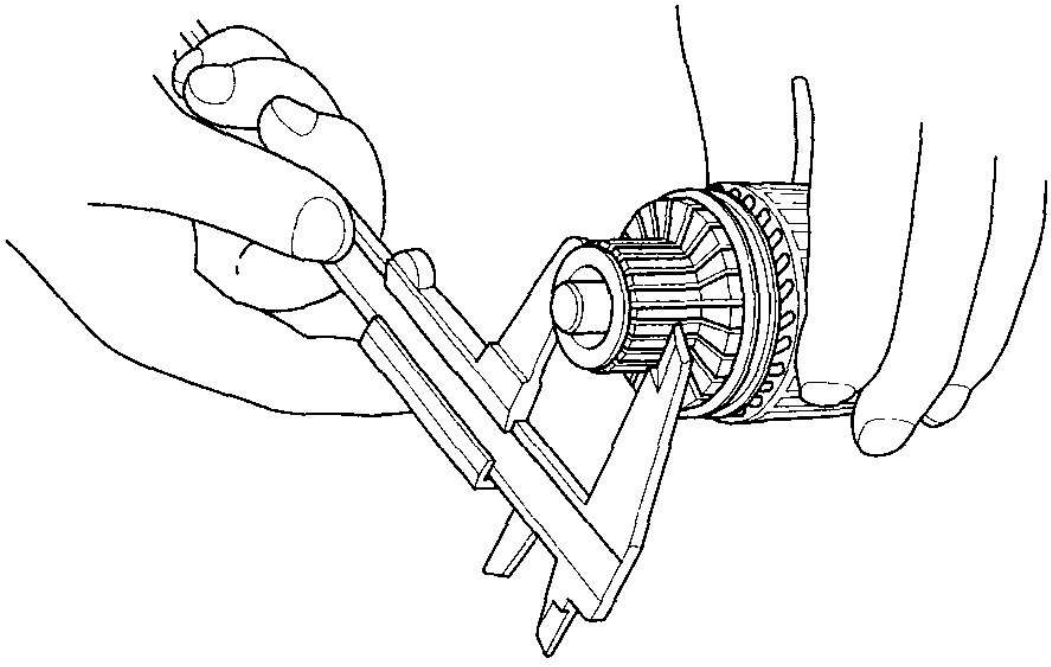
Fig. 24: Reconditioning Commutator Surface With Sandpaper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Check the commutator diameter. If the diameter is below the service limit, replace the armature.

Commutator Diameter

Standard (New): 29.3---29.5 mm (1.154---1.161 in.)

Service Limit: 28.8 mm (1.134 in.)



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Fig. 25: Checking Commutator Diameter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Measure the commutator (A) runout.
   - If the commutator runout is within the service limit, check the commutator for carbon dust or brass chips between the segments.
   - If the commutator runout is not within the service limit, replace the armature.

Commutator Runout

Standard (New): 0.05 mm (0.002 in.) max.

Service Limit: 0.1 mm (0.004 in.)

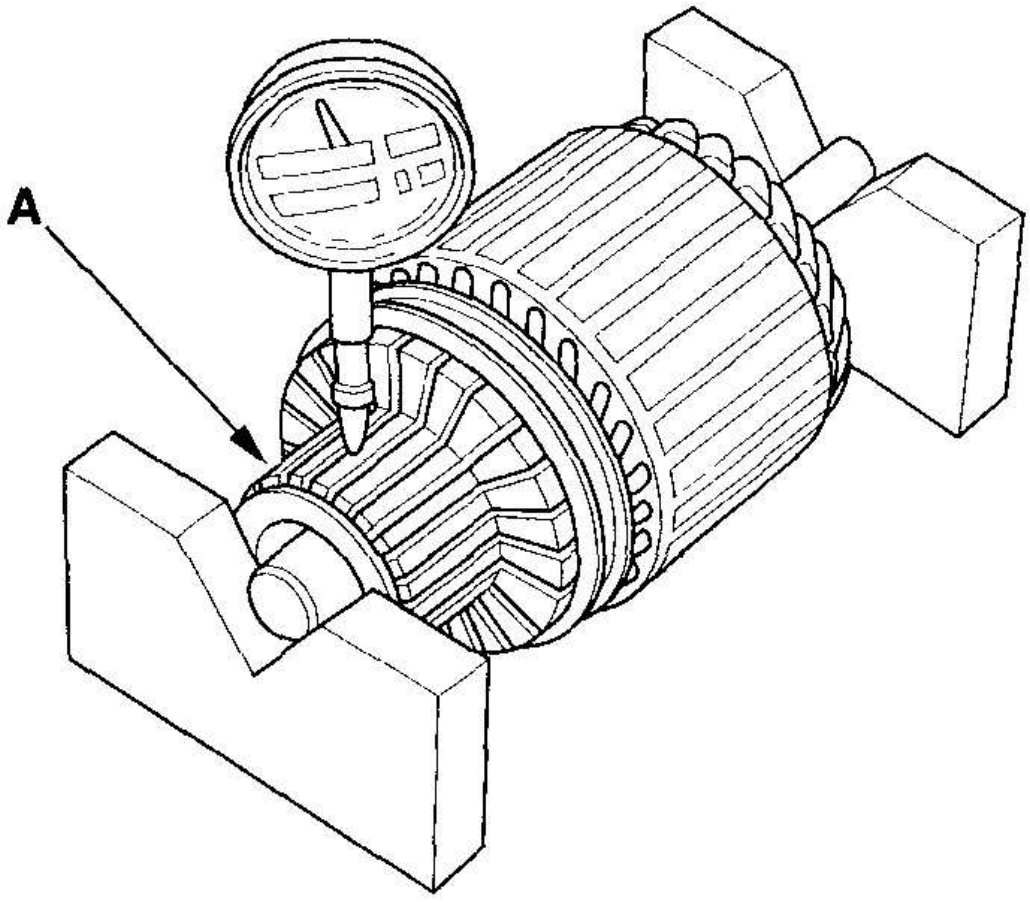


Fig. 26: Measuring Commutator Runout
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Check the mica depth (A). If the mica is too high (B), undercut the mica with a hacksaw blade to the proper depth. Cut away all the mica (C) between the commutator segments. The undercut should not be too shallow, too narrow, or V-shaped (D).

Commutator Mica Depth

Standard (New): 0.40---0.60 mm (0.016---0.024 in.)

Service Limit: 0.20 mm (0.008 in.)

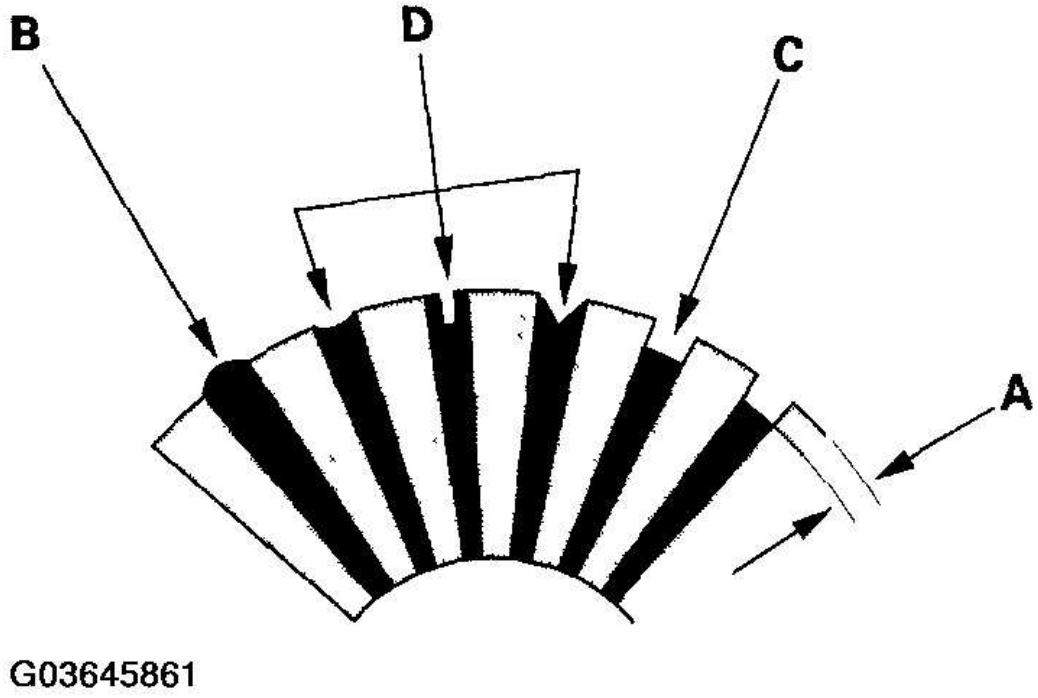


Fig. 27: Checking Mica Depth
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Check for continuity between the segments of the commutator. If there is an open circuit between any segments, replace the armature.

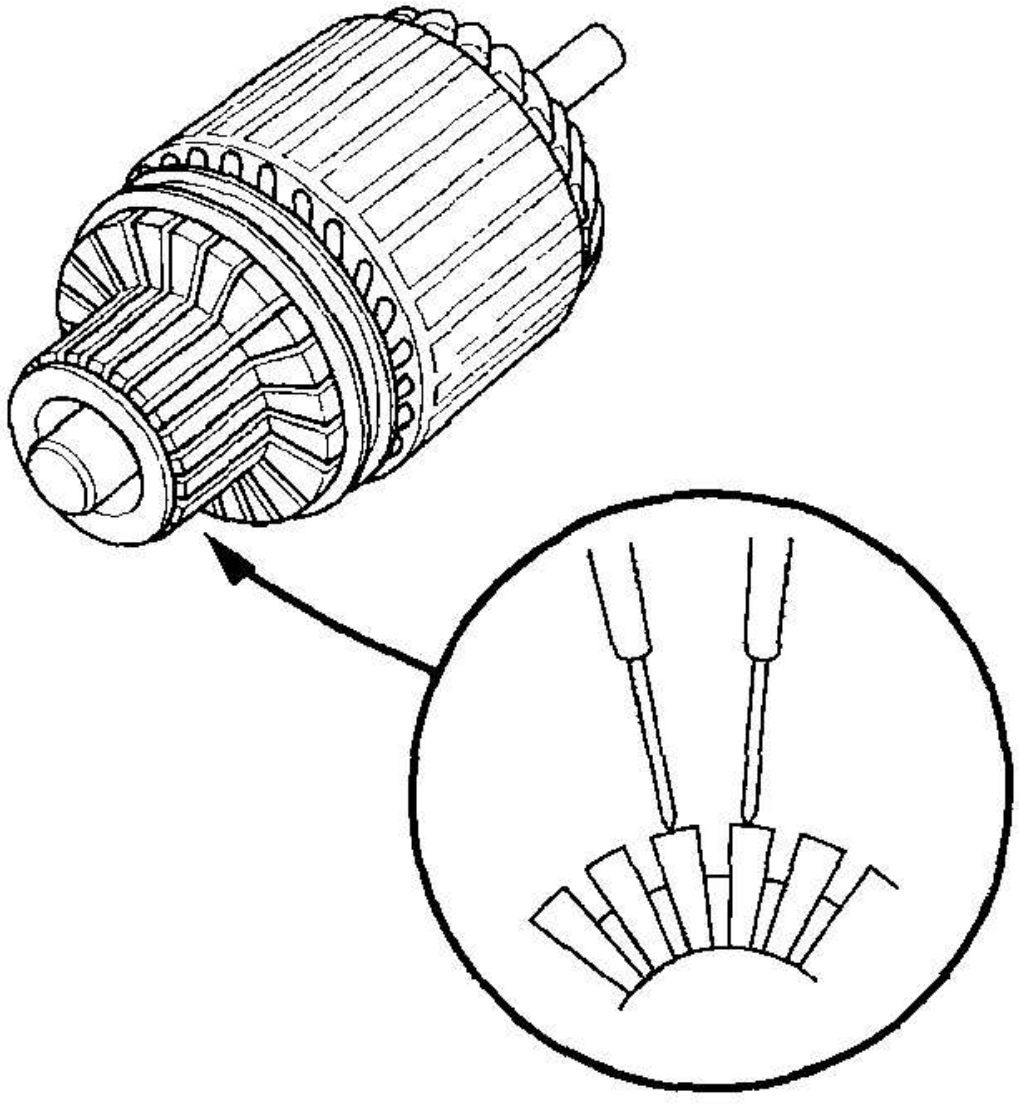


Fig. 28: Checking Continuity Between Segments Of Commutator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Place the armature (A) on an armature tester (B). Hold a hacksaw blade (C) on the armature core. If the blade is attached to the core or vibrates while the core is turned, the armature is shorted. Replace the armature.

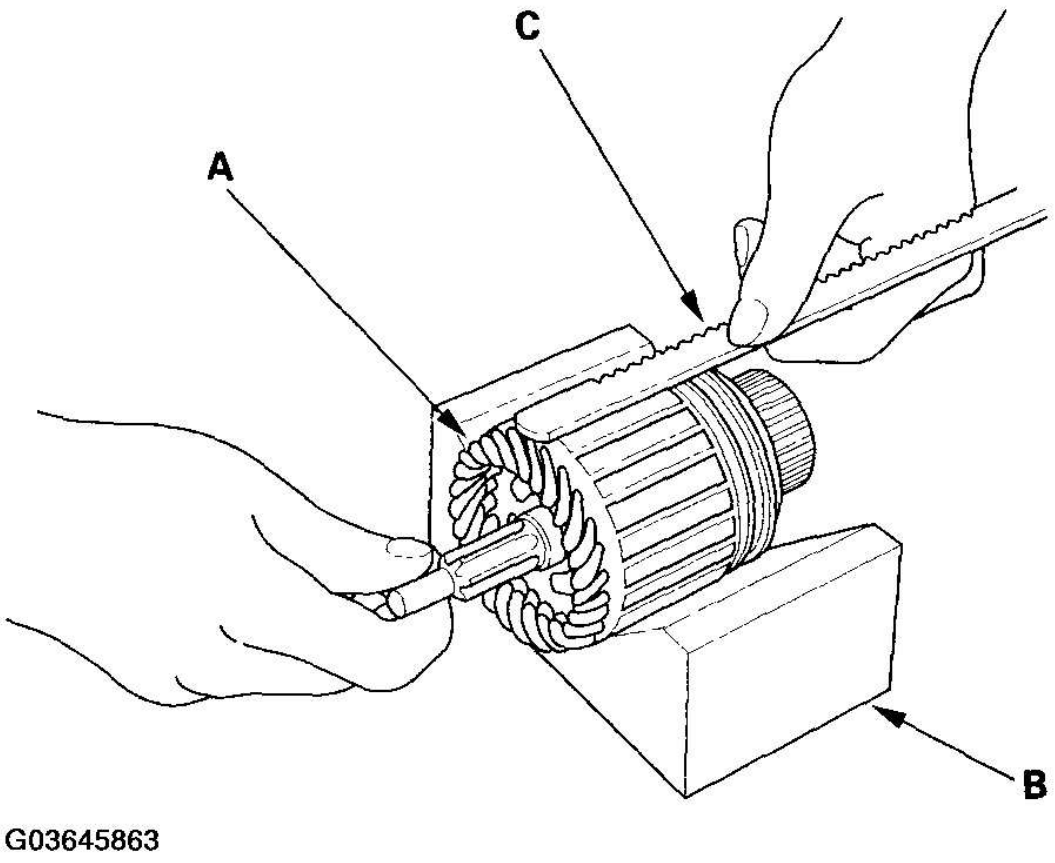


Fig. 29: Placing Armature On Armature Tester And Hold Hacksaw Blade On Armature Core
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Check with an ohmmeter for continuity between the commutator (A) and armature coil core (B), and between the commutator and armature shaft (C). If there is continuity, replace the armature.

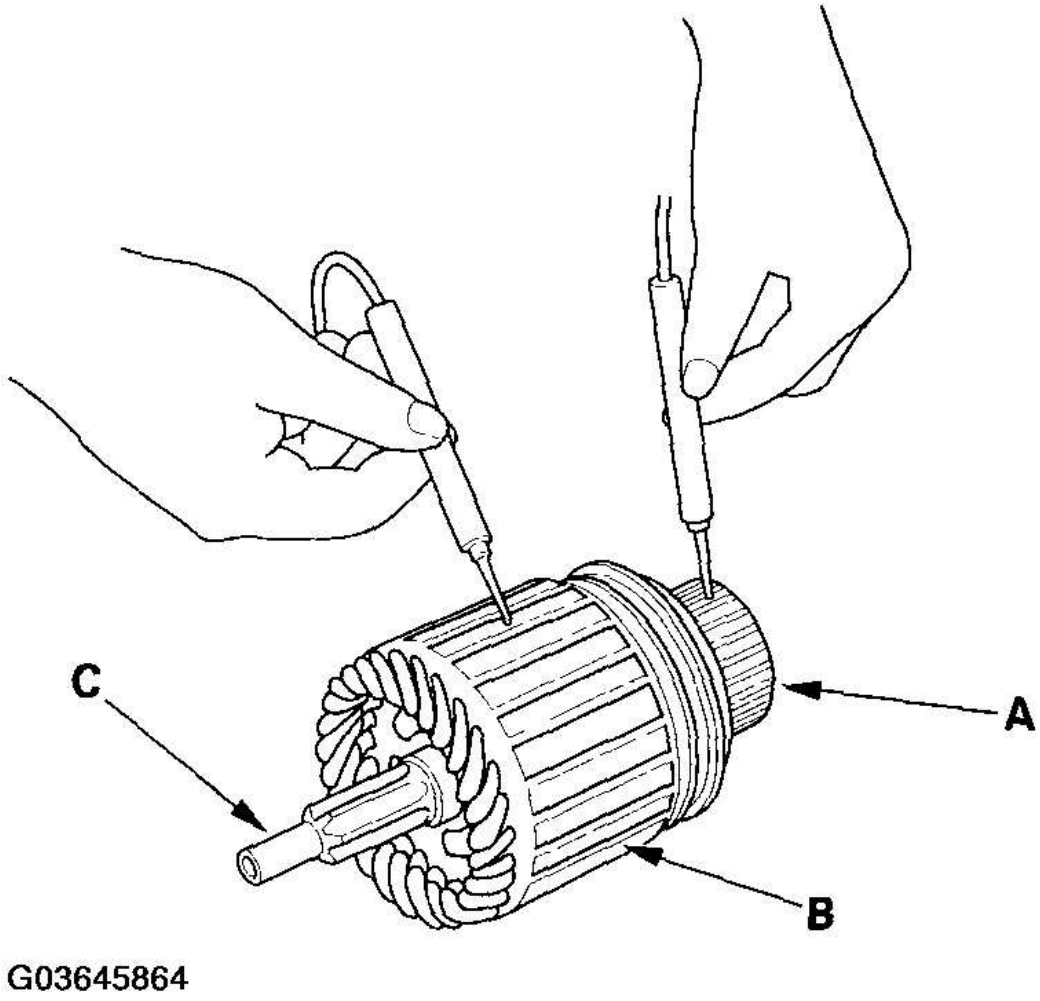


Fig. 30: Checking Continuity Between Commutator And Armature Coil Core, And Armature Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Starter Brush Inspection

14. Measure the brush length (A). If it is shorter than the service limit, replace the brush holder assembly.

Brush Length

Standard (New): 7.7---8.0 mm (0.30---0.31 in.)

Service Limit: 0.9 mm (0.04 in.)

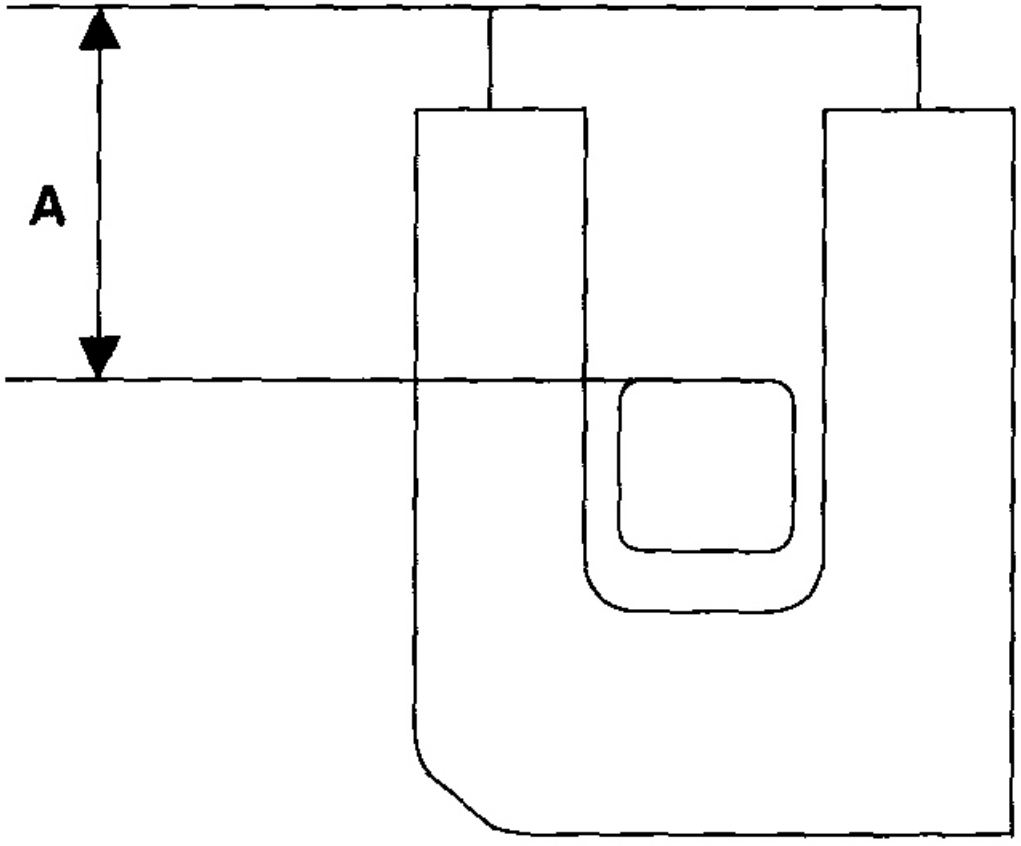


Fig. 31: Measuring Brush Length
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Starter Brush Holder Test

15. Check for continuity between the (+) brush (A) and (-) brush (B). If there is continuity, replace the brush holder assembly.

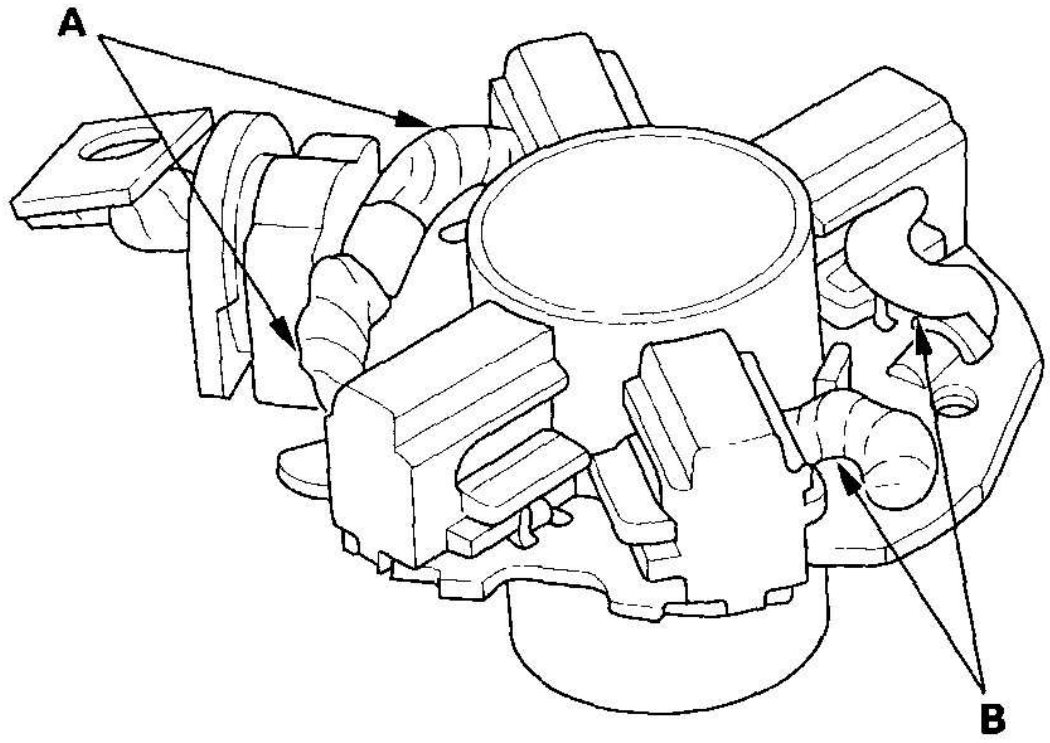


Fig. 32: Checking Continuity Between (+) Brush And (-) Brush
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Planetary Gear Inspection

16. Check the planetary gears (A) and ring gear (B). Replace them if they are worn or damaged.

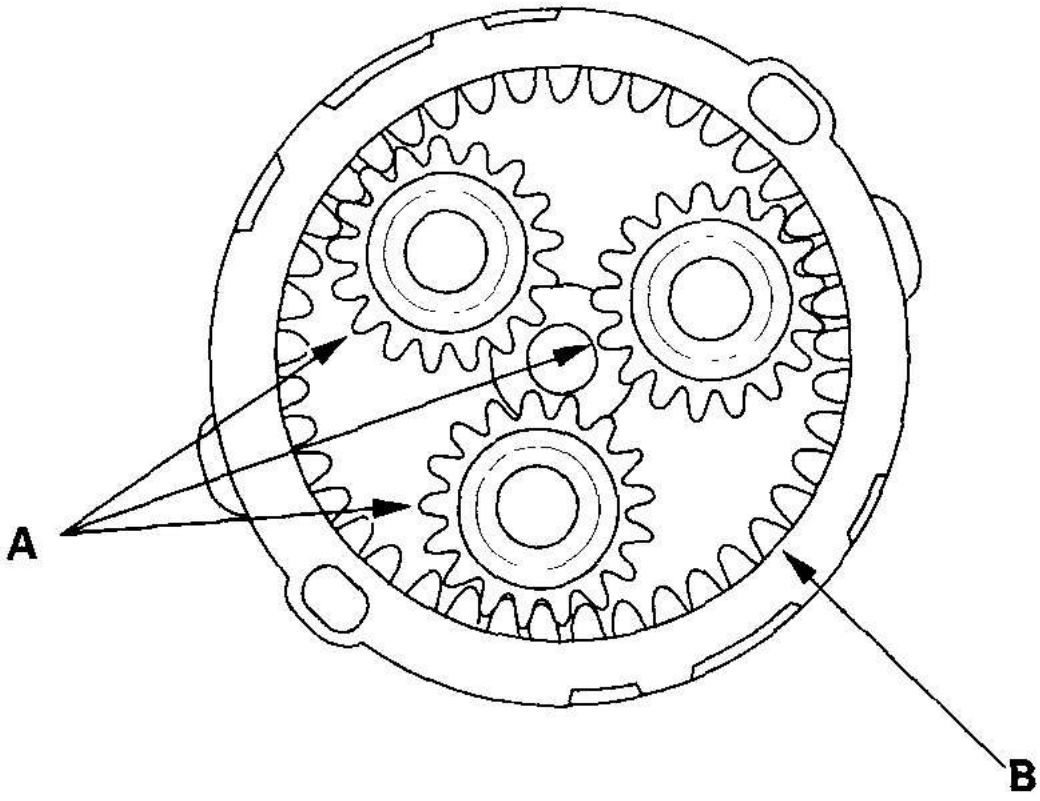


Fig. 33: Checking Planetary Gears And Ring Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Overrunning Clutch Inspection

17. Slide the overrunning clutch along the shaft. Replace it, if it does not slide smoothly.
18. Hold the drive gear (A), and turn the overrunning clutch in the direction shown in **Fig. 34**to be sure it turns freely. Also make sure the overrunning clutch locks in the opposite direction. If it does not lock in either direction or it locks in both directions, replace it.

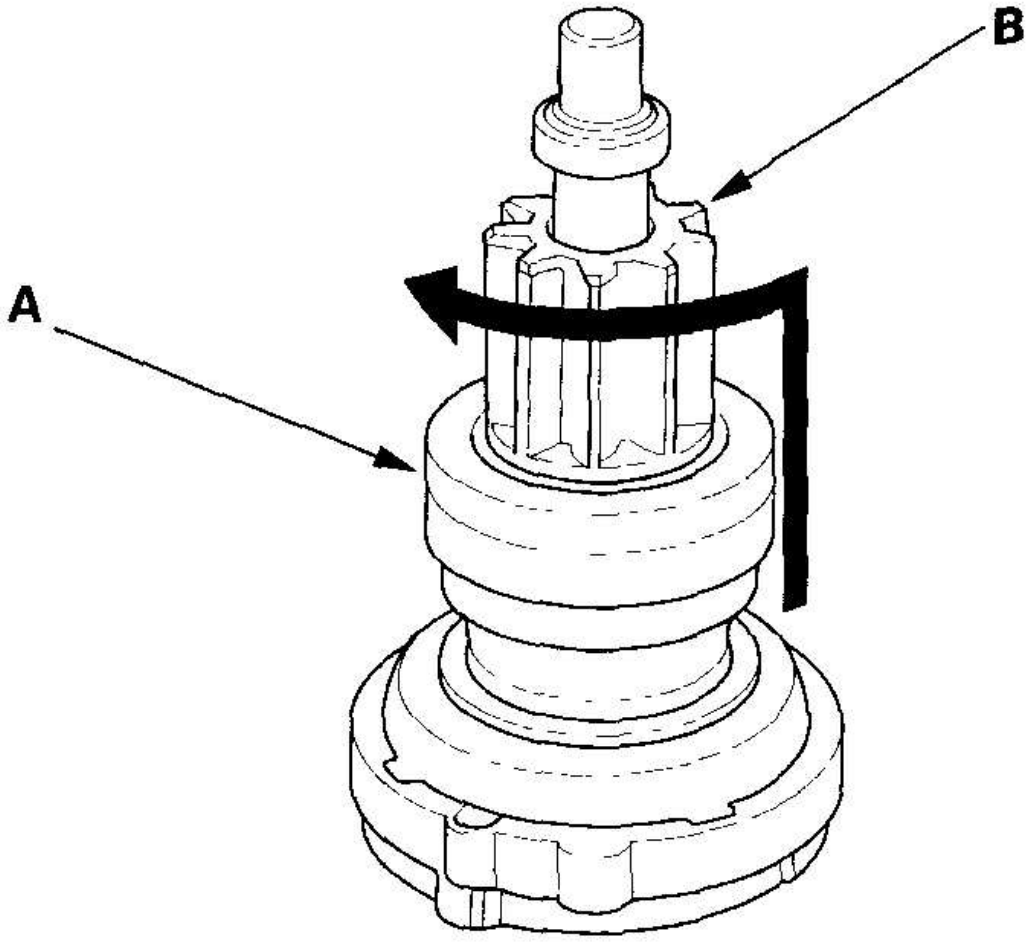


Fig. 34: Turning Overrunning Clutch While Holding Drive Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

19. If the starter drive gear (B) is worn or damaged, replace the overrunning clutch assembly; the gear is not available separately. Check the condition of the flywheel ring gear to see, if the starter drive gear teeth are damaged.

Starter Reassembly

20. Install the armature into the housing.

21. Place the brush holder assembly on the armature, then move the brush holder (A) down to the armature.

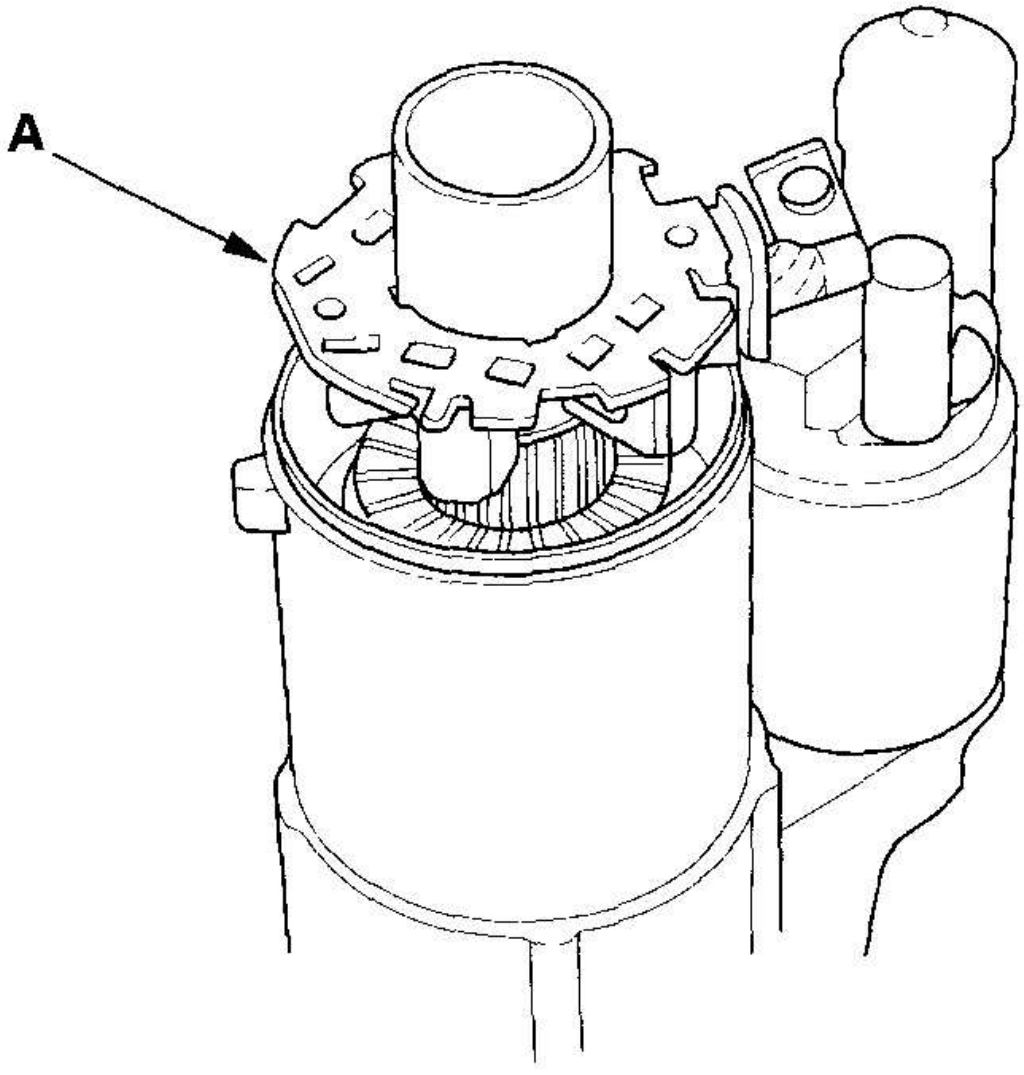


Fig. 35: Placing Brush Holder Assembly On Armature
Courtesy of AMERICAN HONDA MOTOR CO., INC.

22. Install the end cover to retain the brush holder.

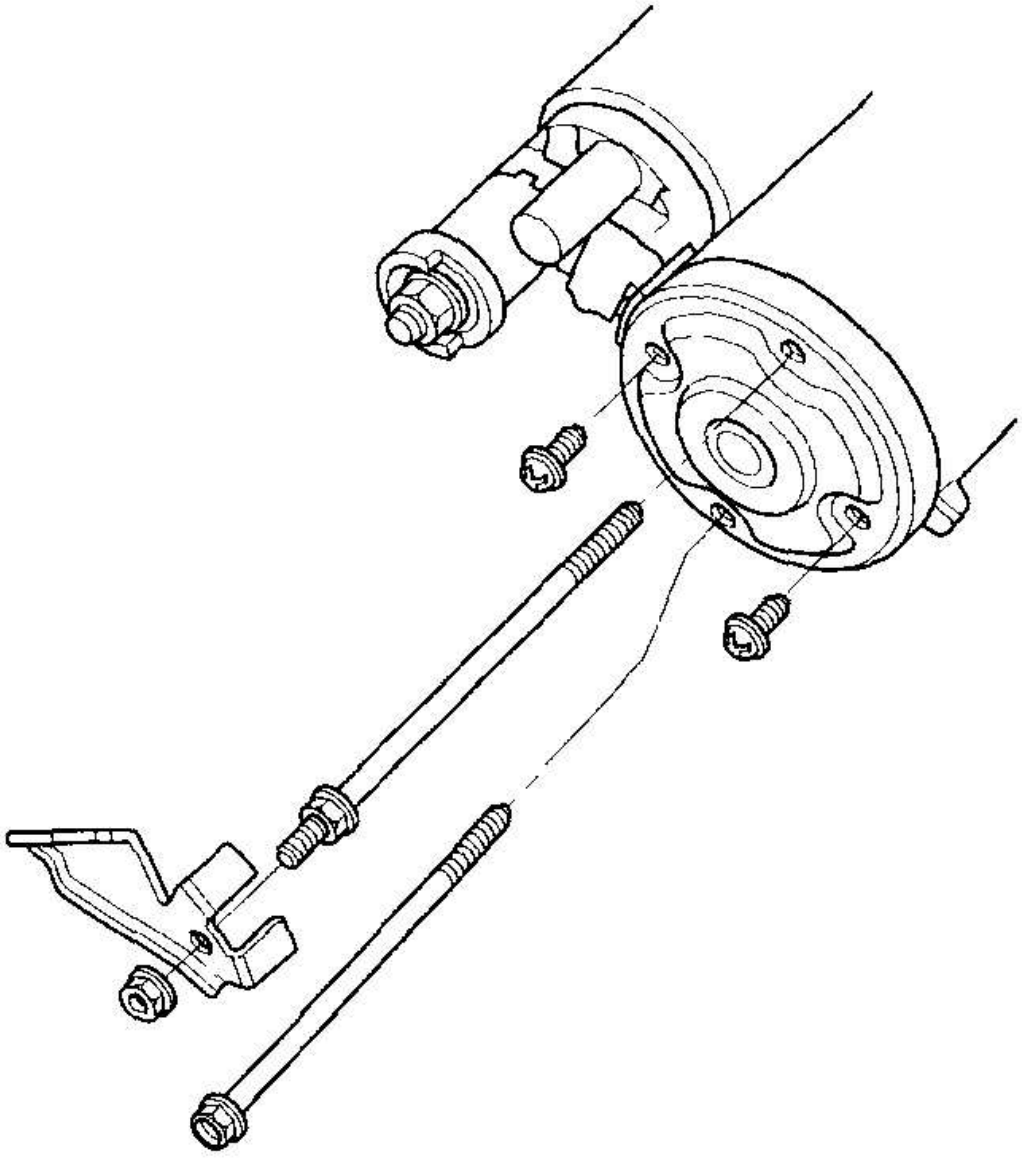


Fig. 36: Installing End Cover To Retain Brush Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MITSUBA A/T, M/T ('06-'07 MODELS)

Disassembly/Reassembly

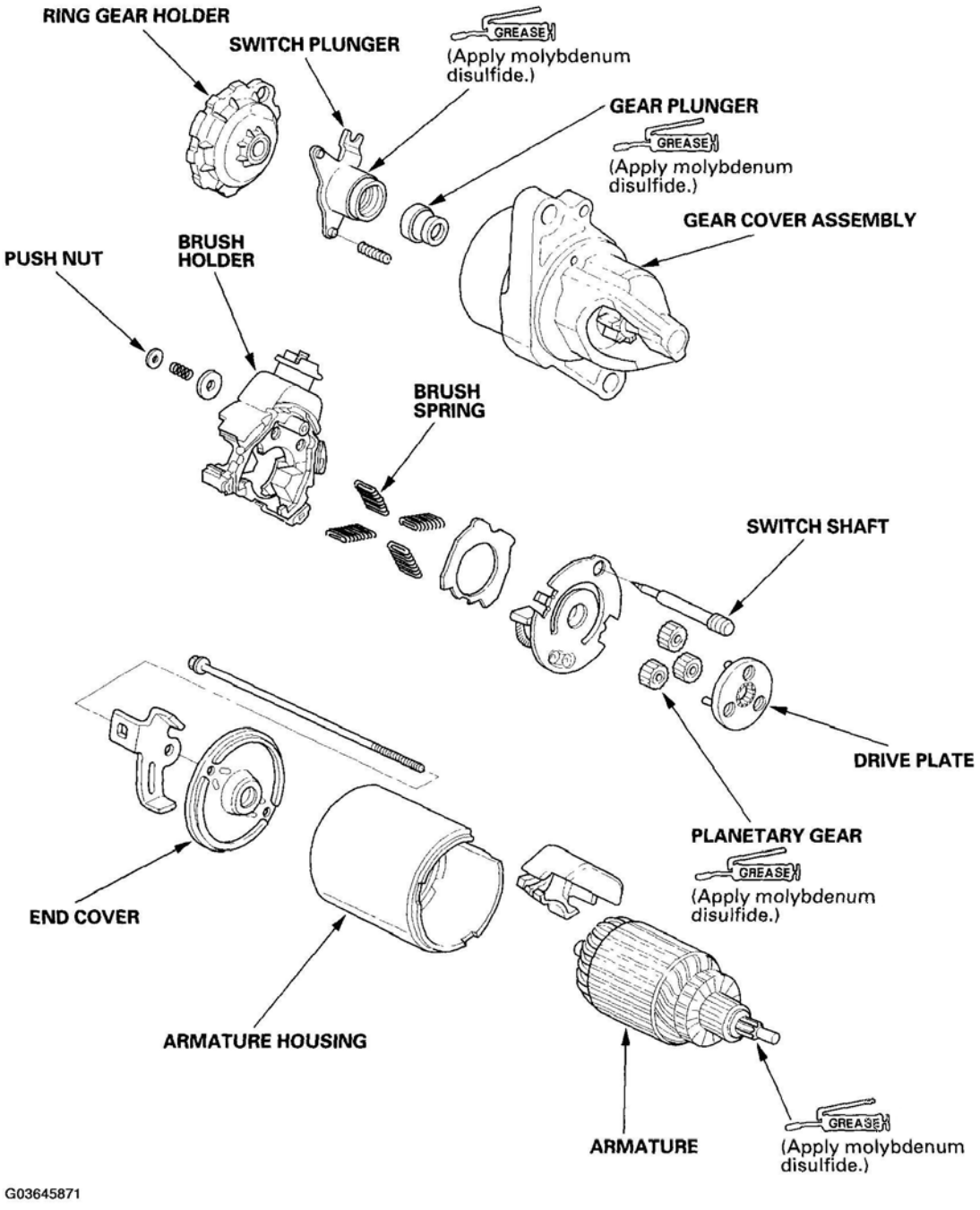
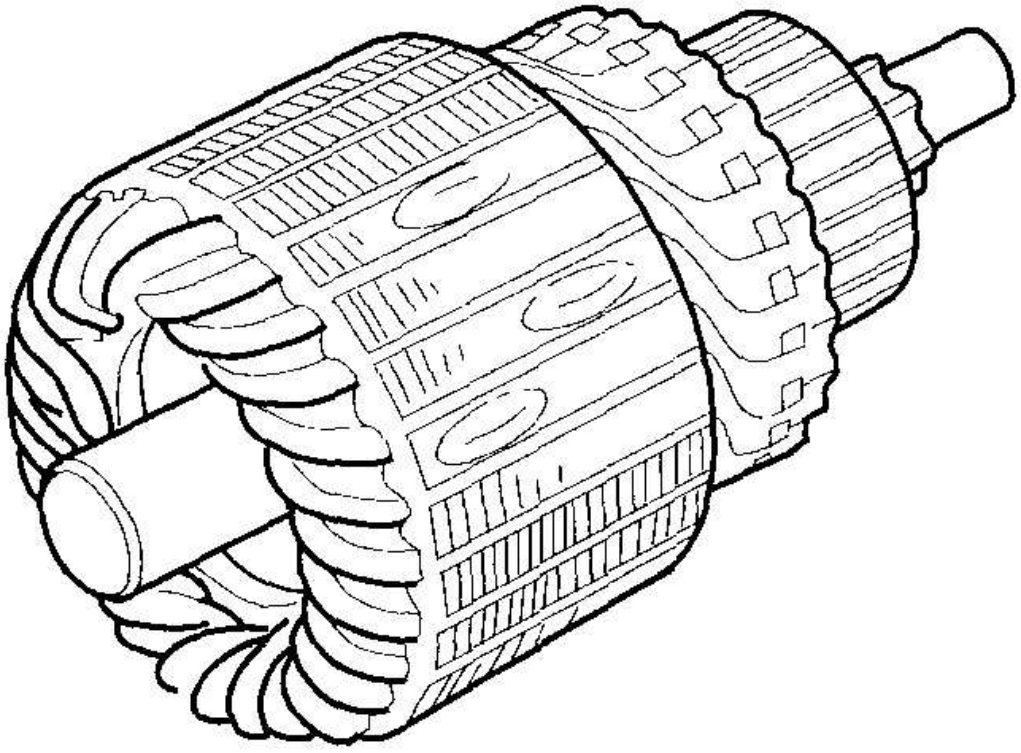


Fig. 37: Identifying Components Of Starter Assembly (MITSUBA A/T, M/T (2006 Model))
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Armature Inspection and Test

1. Remove the starter (see **STARTER REMOVAL AND INSTALLATION**).
2. Disassemble the starter as shown at the beginning of this procedure.
3. Inspect the armature for wear or damage from contact with the permanent magnet. If there is wear or damage, replace the armature.



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Fig. 38: Identifying Armature Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check the commutator (A) surface. If the surface is dirty or burnt, resurface with emery cloth or a lathe within the following specifications, or recondition with #500 or #600 sandpaper (B).

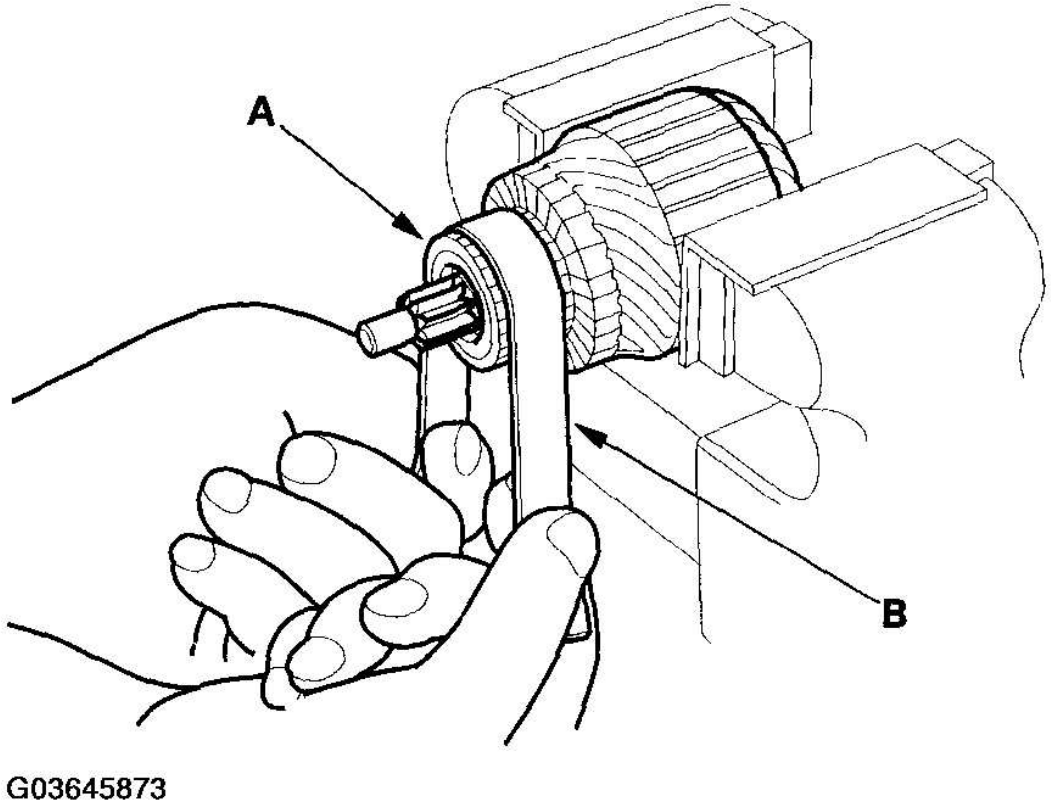


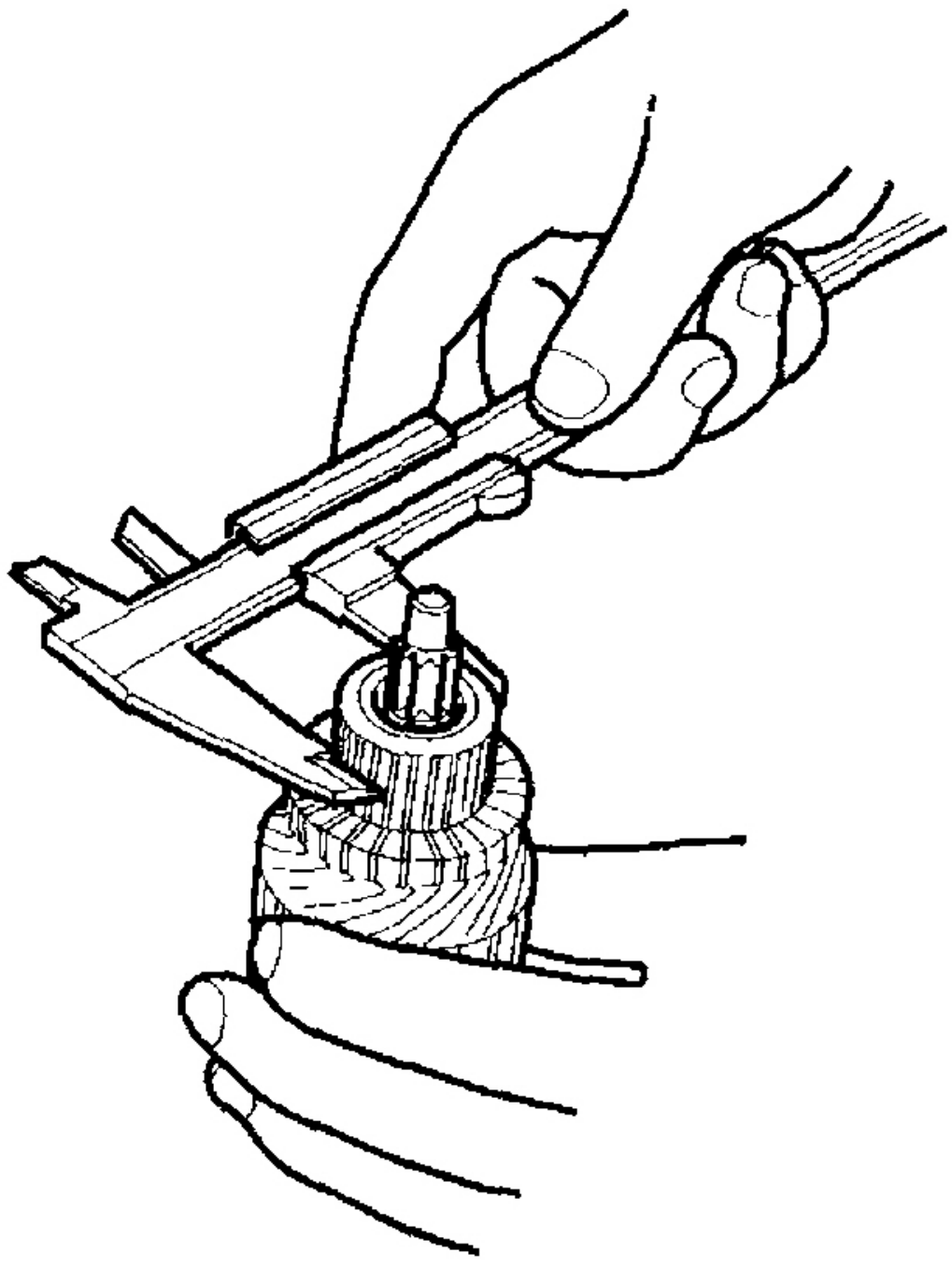
Fig. 39: Reconditioning Commutator Surface With Sandpaper
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Check the commutator diameter. If the diameter is below the service limit, replace the armature.

   Commutator Diameter

   Standard (New): 28.0---28.1 mm (1.102---1.106 in.)

   Service Limit: 27.5 mm (1.083 in.)



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Fig. 40: Checking Commutator Diameter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Measure the commutator (A) runout.
   - If the commutator runout is within the service limit, check the commutator for carbon dust or brass chips between the segments.
   - If the commutator runout is not within the service limit, replace the armature.

Commutator Runout

Standard (New): 0.02 mm (0.001 in.) max.

Service Limit: 0.05 mm (0.002 in.)

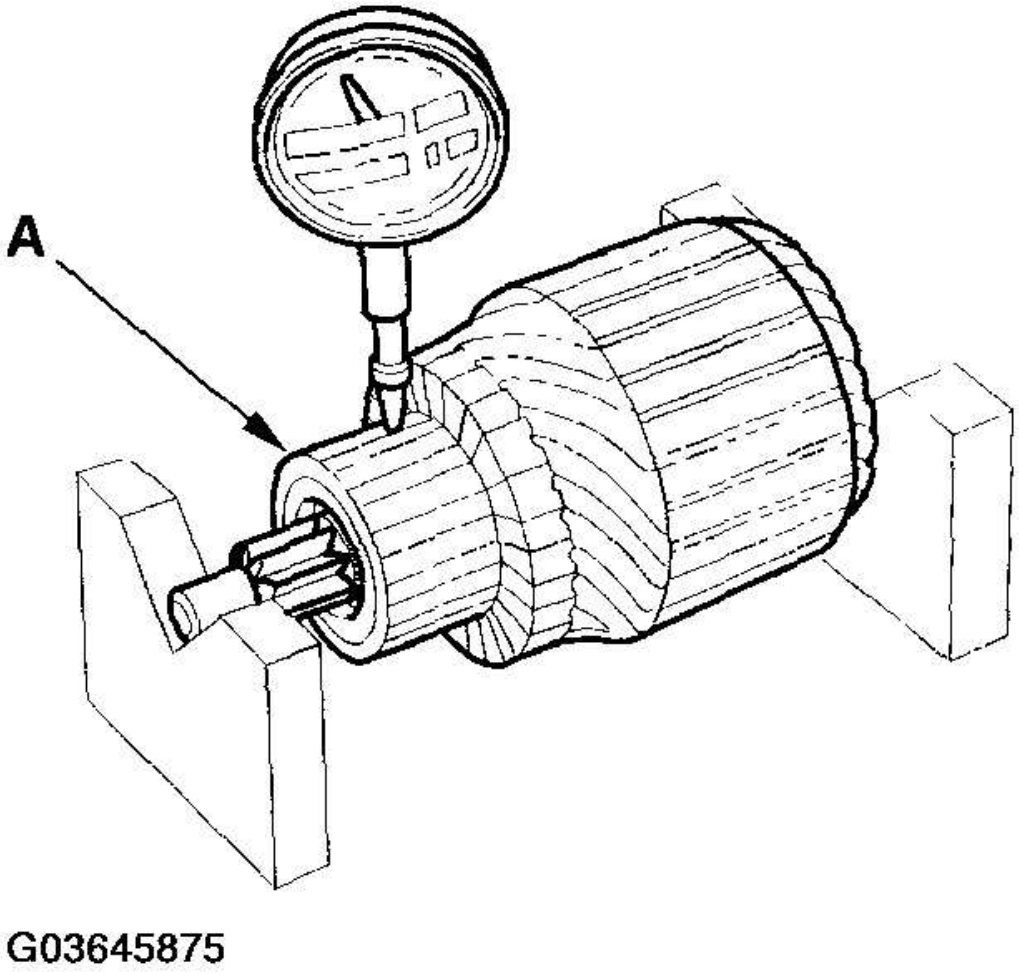


Fig. 41: Measuring Commutator Runout
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Check the mica depth (A). If the mica is too high (B), undercut the mica with a hacksaw blade to the proper depth. Cut away all the mica (C) between the commutator segments. The undercut should not be too shallow, too narrow, or V-shaped (D).

Commutator Mica Depth

Standard (New): 0.40---0.50 mm (0.016---0.020 in.)

Service Limit: 0.15 mm (0.006 in.)

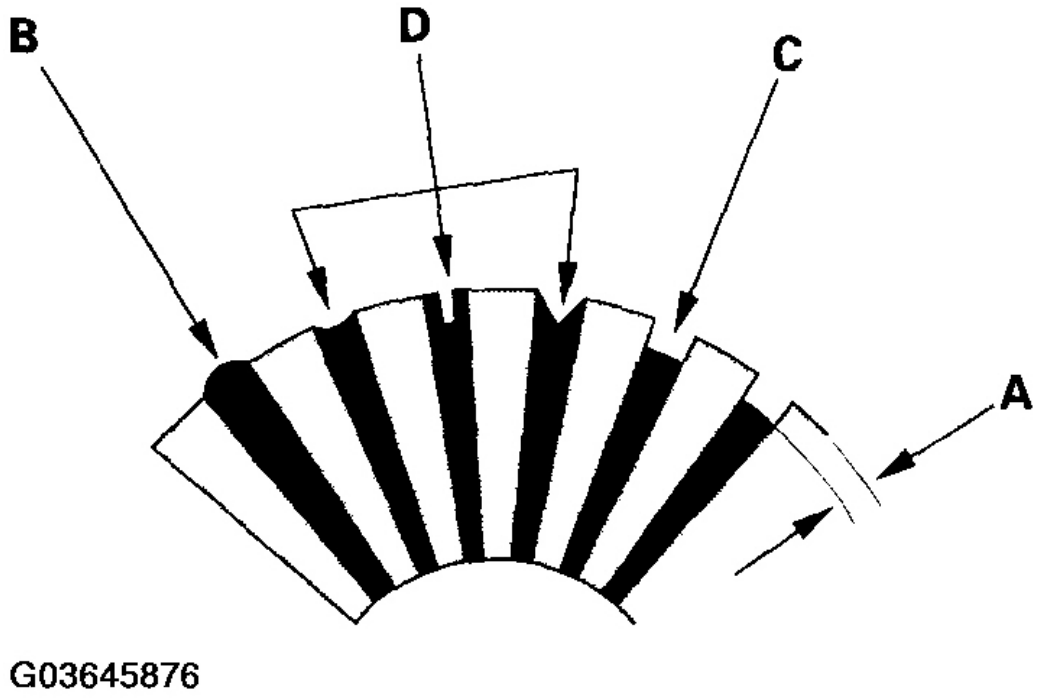


Fig. 42: Checking Mica Depth
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Check for continuity between the segments of the commutator. If there is an open circuit between any segments, replace the armature.

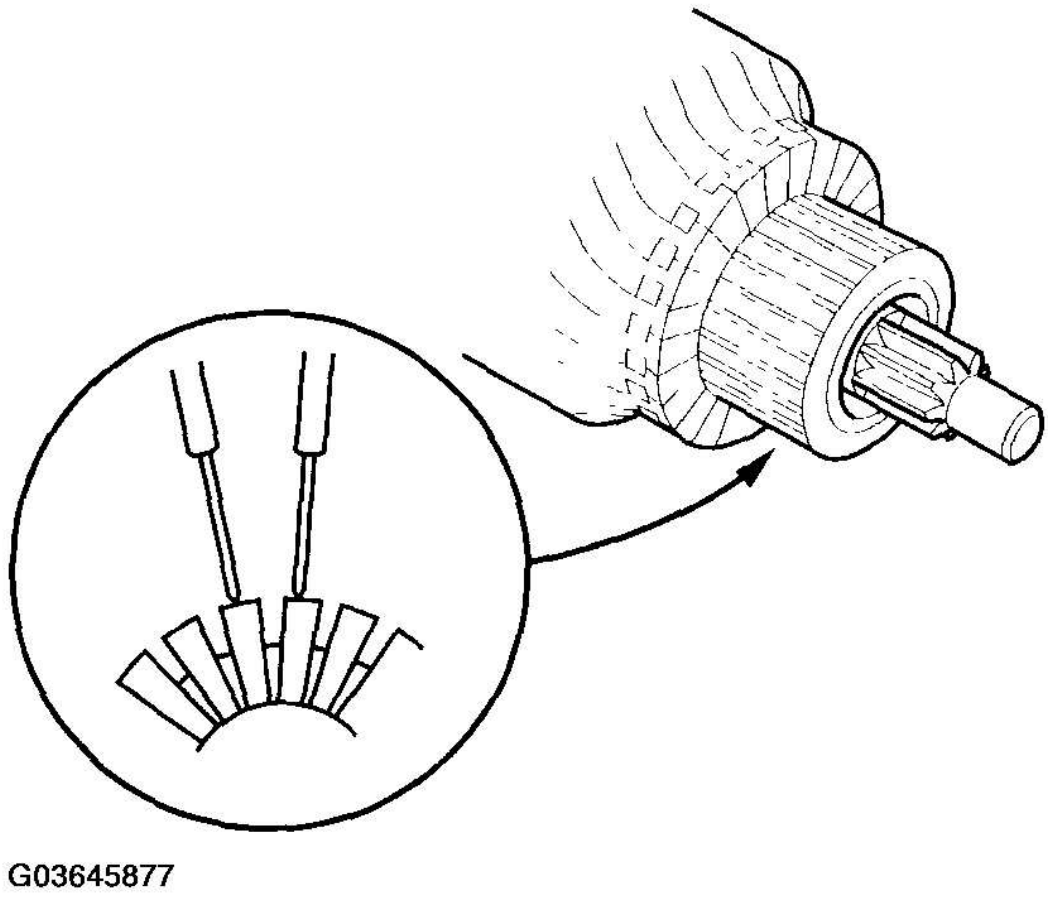


Fig. 43: Checking Continuity Between Segments Of Commutator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Place the armature (A) on an armature tester (B). Hold a hacksaw blade (C) on the armature core. If the blade is attracted to the core or vibrates while the core is turned, the armature is shorted. Replace the armature.

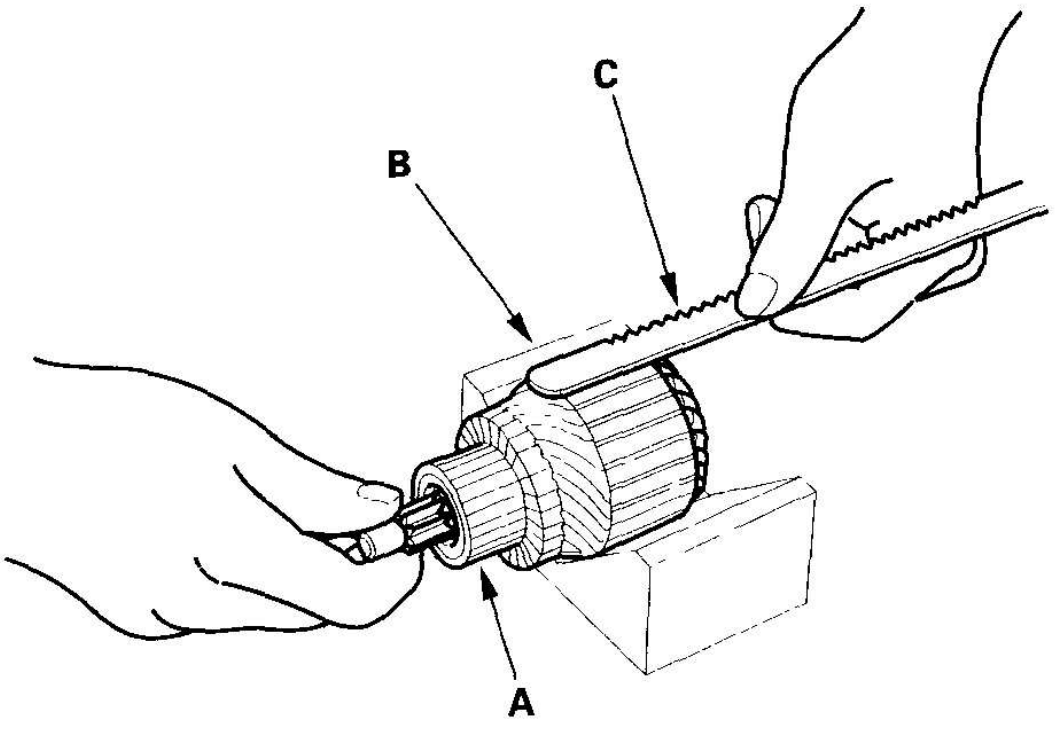


Fig. 44: Placing Armature On Armature Tester And Hold Hacksaw Blade On Armature Core
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Check with an ohmmeter for continuity between the commutator (A) and armature coil core (B), and between the commutator and armature shaft (C). If there is continuity, replace the armature.

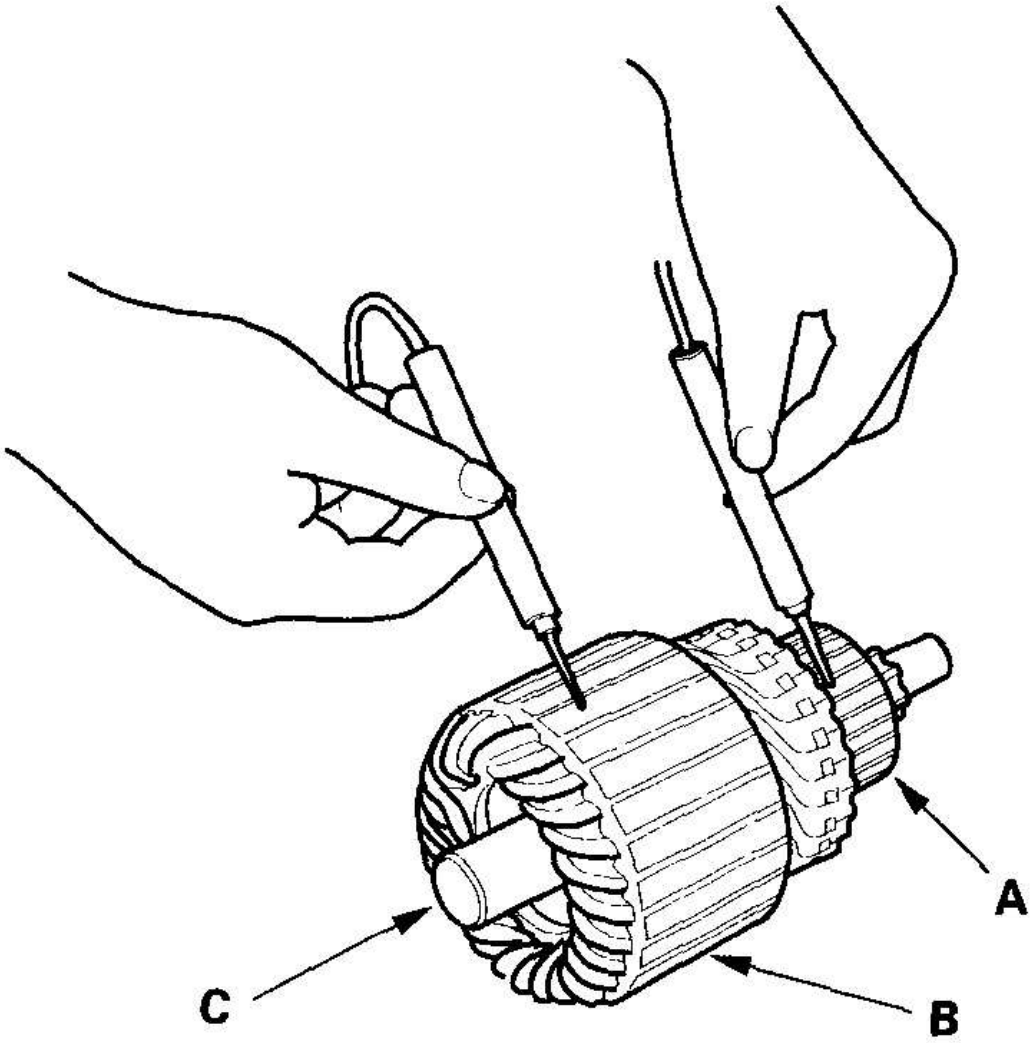


Fig. 45: Checking Continuity Between Commutator And Armature Coil Core And Armature Shaft
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Starter Brush Inspection

11. Measure the brush length. If it is shorter than the service limit, replace the brush holder assembly.

Brush Length

Standard (New): 11.1---11.5 mm (0.44---0.45 in.)

Service Limit: 4.3 mm (0.17 in.)

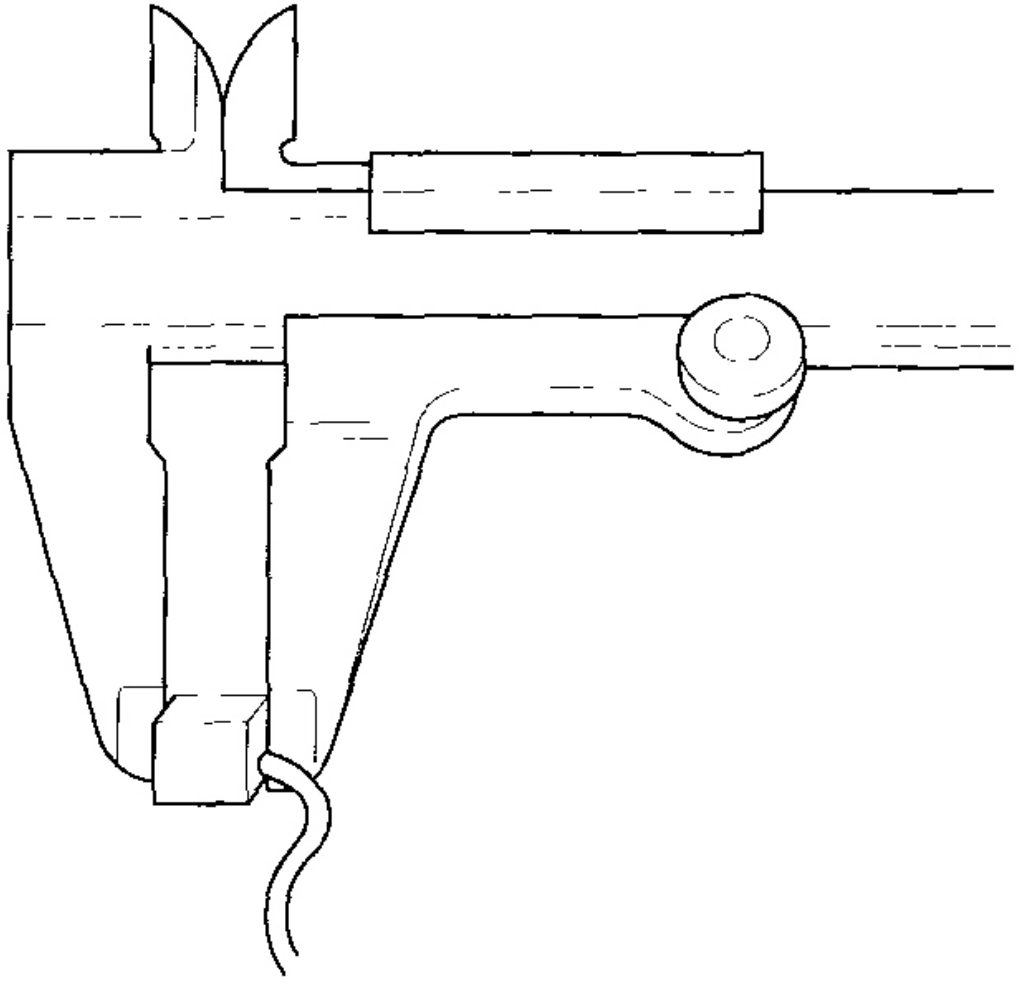


Fig. 46: Measuring Brush Length
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Starter Brush Holder Test

12. Check for continuity between the (+) brush (A) and (-) brush (B). If there is continuity, replace the brush holder assembly.

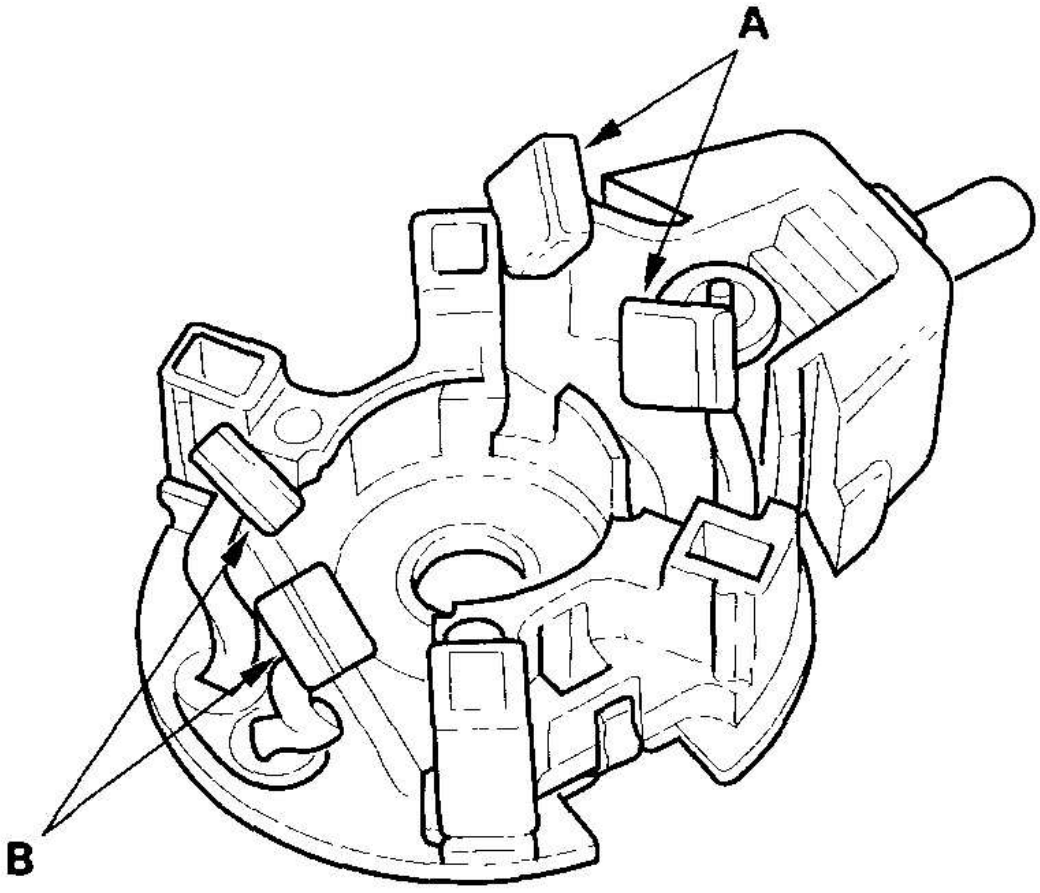


Fig. 47: Checking Continuity Between (+) Brush And (-) Brush
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Planetary Gear Inspection

13. Check the planetary gears (A) and ring gear (B). Replace them if they are worn or damaged.

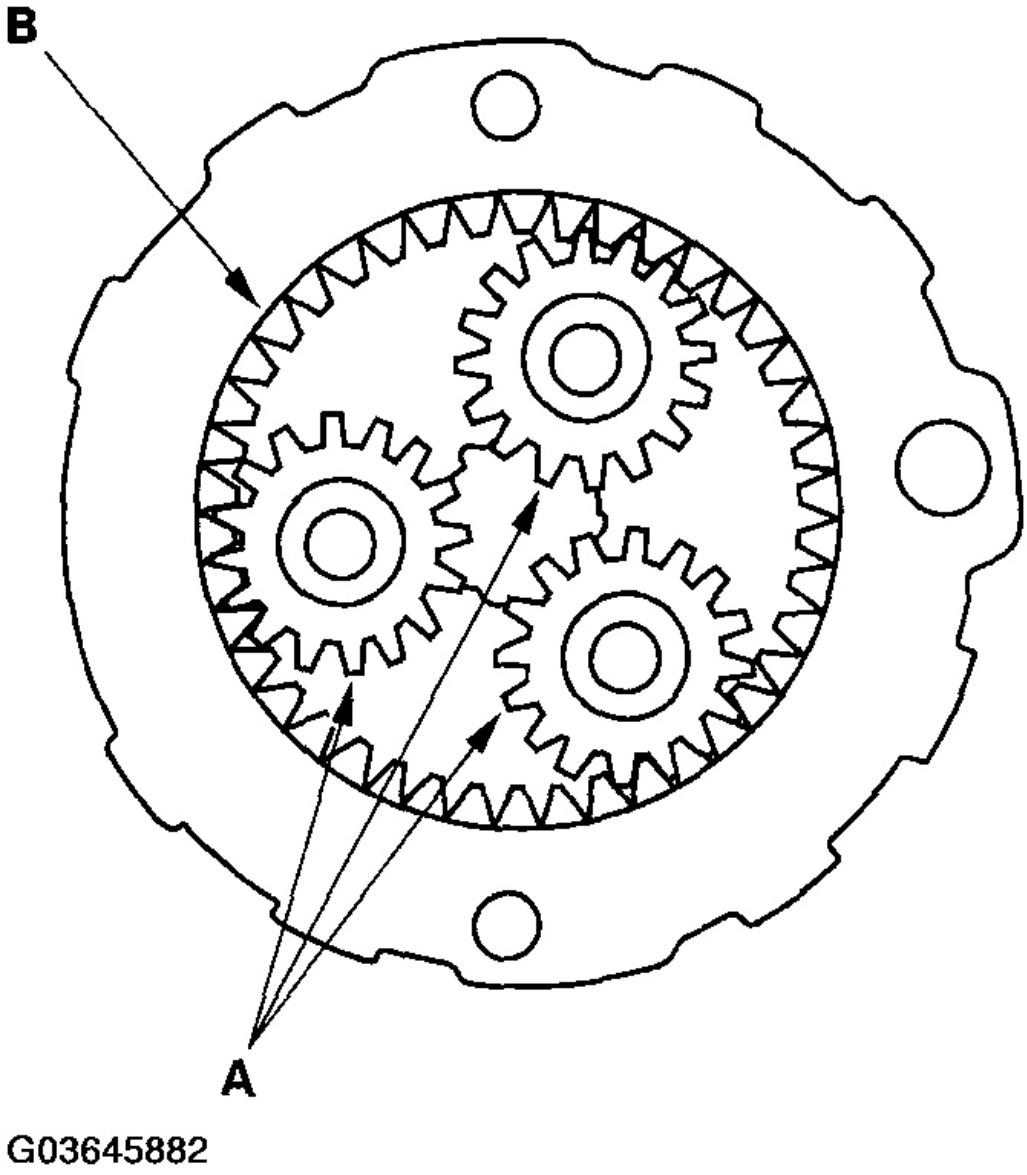


Fig. 48: Checking Planetary Gears And Ring Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Overrunning Clutch Inspection

14. While holding the drive gear (A), turn the gear shaft (B) clockwise. Check that the drive gear comes out to the other end. If the drive gear does not move

smoothly, replace the gear cover assembly.

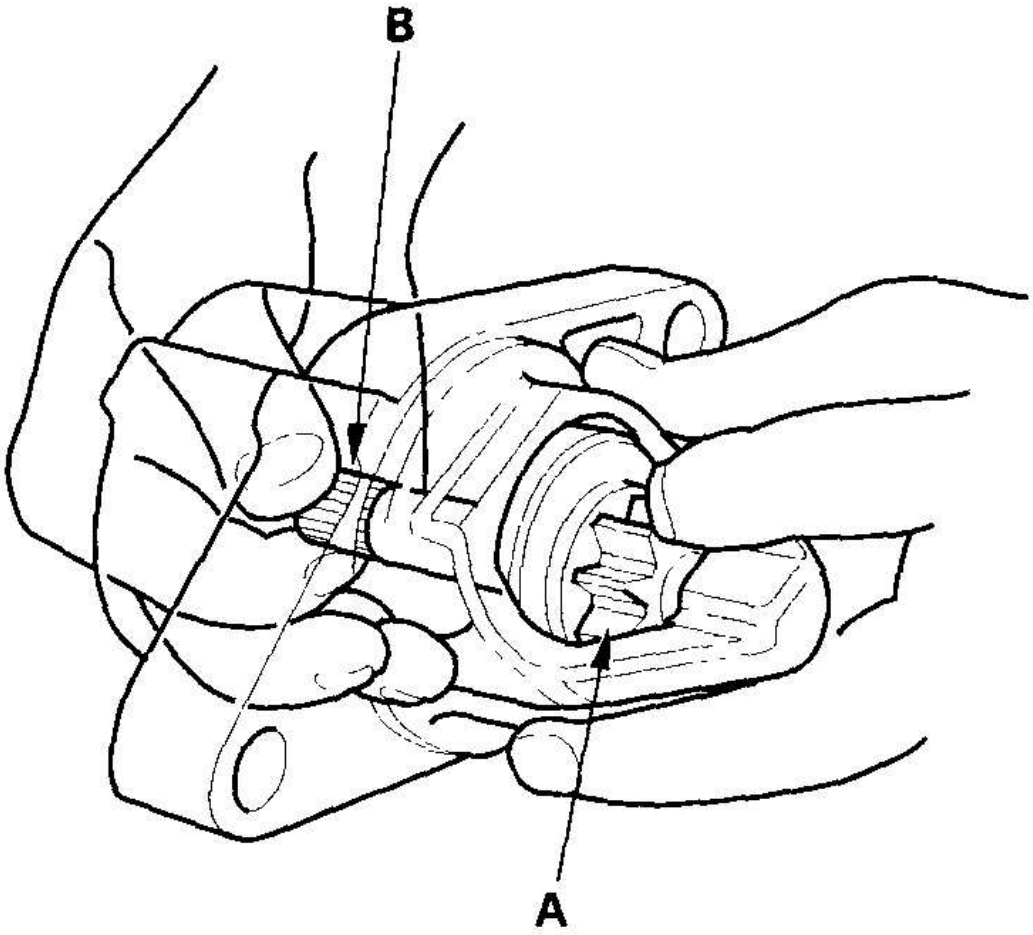


Fig. 49: Turning Gear Shaft Clockwise While Holding Drive Gear
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. While holding the drive gear, turn the gear shaft counterclockwise. The gear shaft should rotate freely. If the gear shaft does not rotate smoothly, replace the gear cover assembly.
16. If the starter drive gear is worn or damaged, replace the overrunning clutch assembly; the gear is not available separately.

Check the condition of the torque converter ring gear to see if the starter drive gear teeth are damaged.

Starter Reassembly

17. Install the brush into the brush holder, and set the armature (A) in the brush holder (B).

NOTE: To seat the new brushes, slip a strip of #500 or #600 sandpaper, with the grit side up, between the commutator and each brush, and smoothly rotate the armature. The contact surface of the brushes will be sanded to the same contour as the commutator.

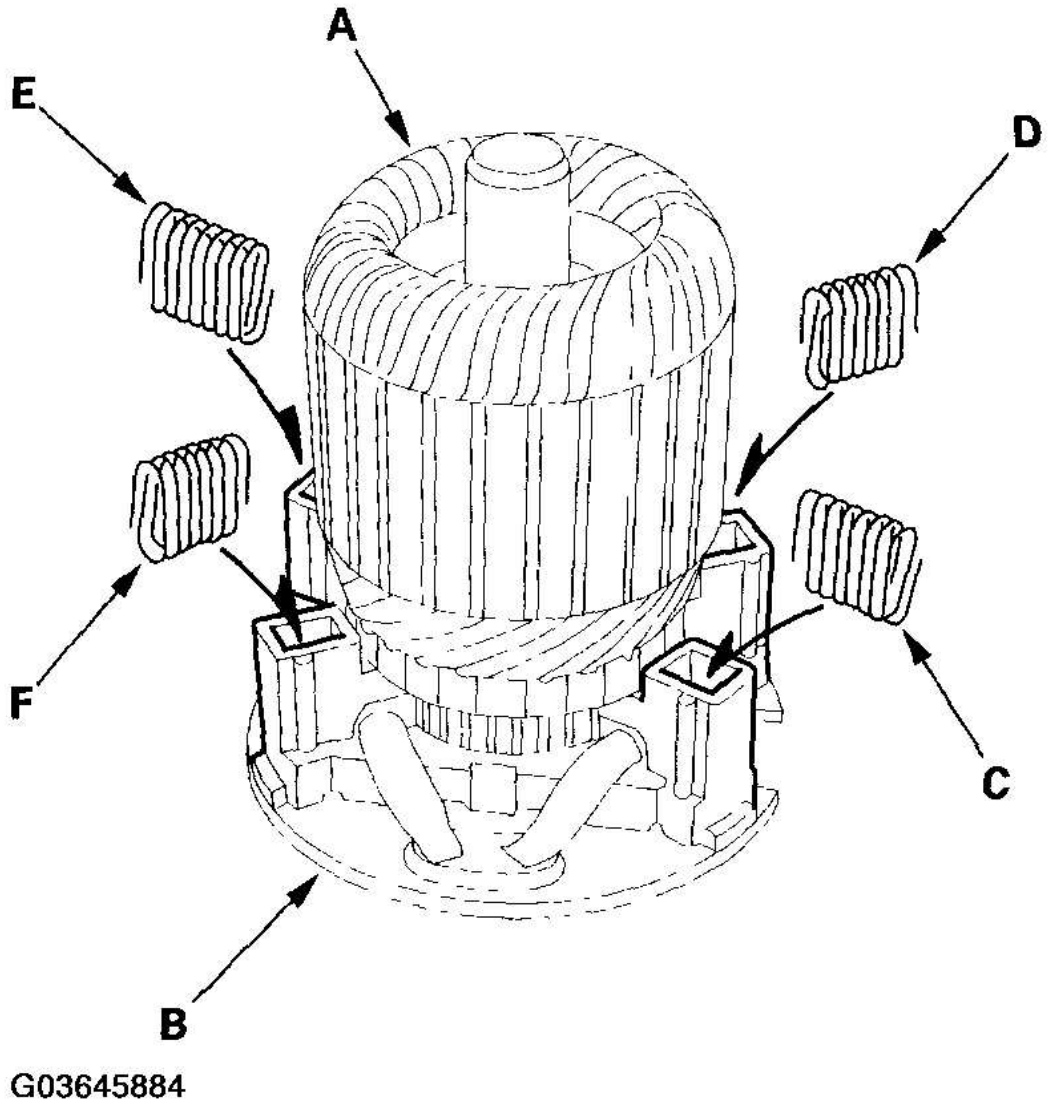


Fig. 50: Installing Brush Into Brush Holder, And Set Armature In Brush Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. While squeezing a spring (C), insert it in the hole on the brush holder, and push it until it bottoms.

    Repeat this for the other three springs (D, E, and F).

19. Install the armature and brush holder assembly into the housing.

NOTE: Make sure the armature stays in the holder.

2003-07 ACCESSORIES & EQUIPMENT

Trunk Lid - Accord

ADJUSTMENT

1. Remove these items:
   - Rear shelf, 2-door (see **2-DOOR**) or 4-door (see **4-DOOR**)
   - Trunk rear trim panel, 2-door (see **2-DOOR**), 4-door (see **4-DOOR ('03-05 MODELS)** , or 4-door (see **4-DOOR ('06 MODEL)**)
2. Slightly loosen each bolt.
3. Adjust the trunk lid (A) alignment in the following sequence.
   - Adjust the trunk lid hinges (B) right and left, as well as forward and rearward, by using the elongated holes. Take care not to hit the rear window when loosening the bolts (C).
   - Turn the trunk lid edge cushions (D), in or out as necessary, to make the trunk lid fit flush with the body at the rear and side edges.
   - Adjust the fit between the trunk lid and the trunk lid opening by moving the striker (E).

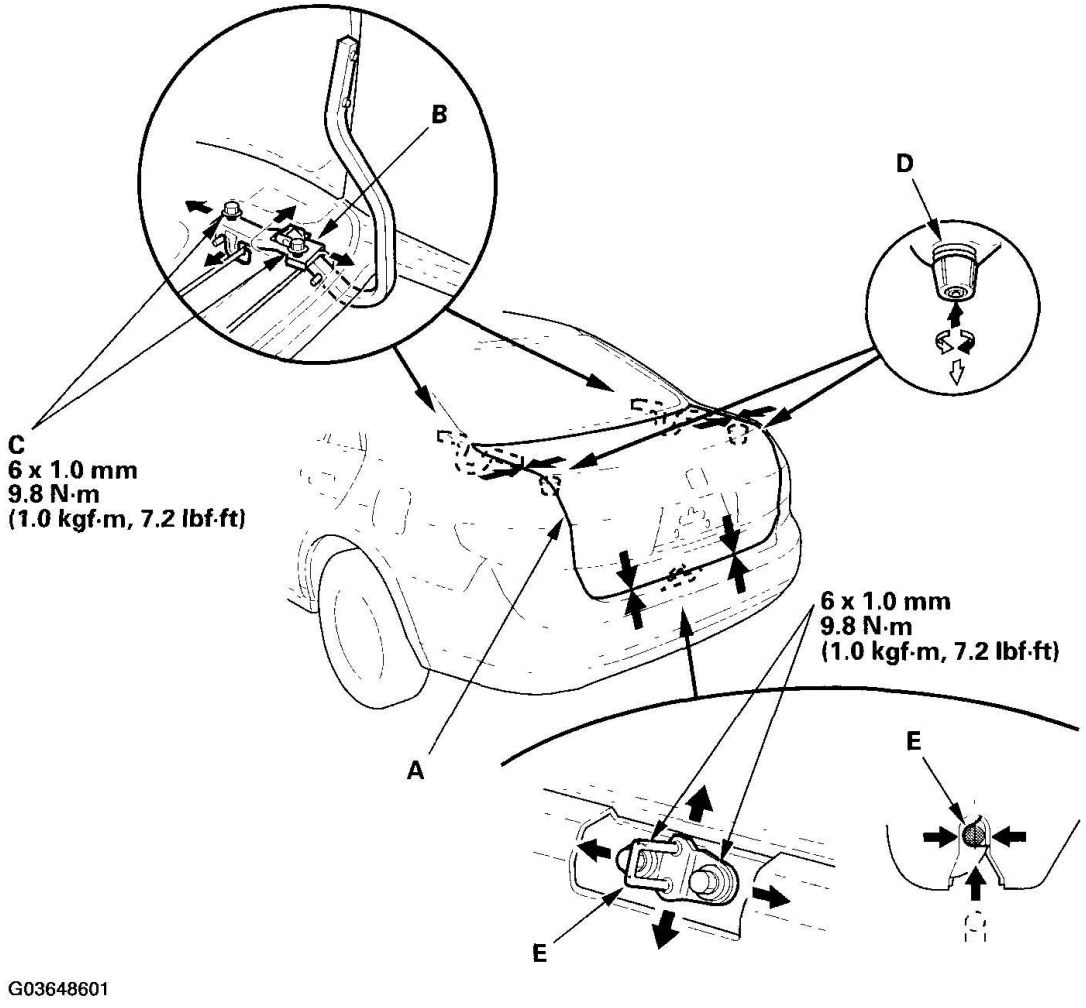


Fig. 1: Adjusting Trunk Lid Alignment
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Tighten the bolts to the specified torque.
5. Make sure the trunk lid opens properly and closes securely.
6. Reinstall all remaining removed parts.

TRUNK LID TORSION BAR REPLACEMENT

Special Tools Required

Torsion bar assembly tool 08M10-SM4-100 or 07AAE-SDAA100

NOTE: Put on gloves to protect your hands.

1. Remove the torsion bars (A) from the torsion bar center clip (B).

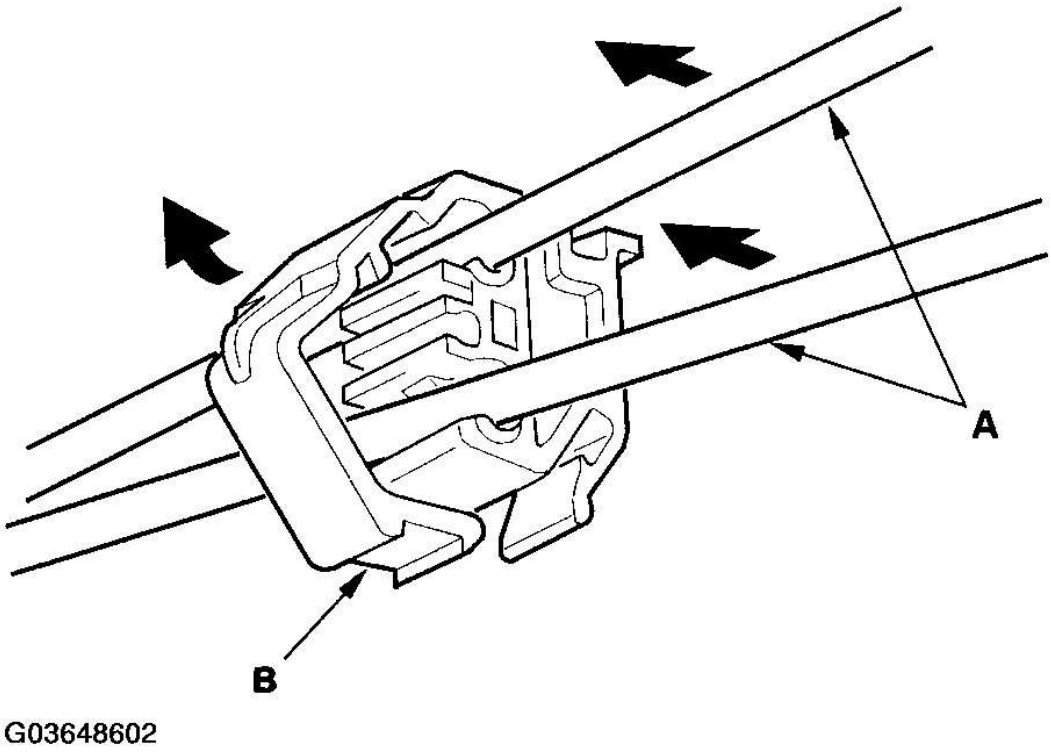


Fig. 2: Removing Torsion Bars From Torsion Bar Center Clip (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

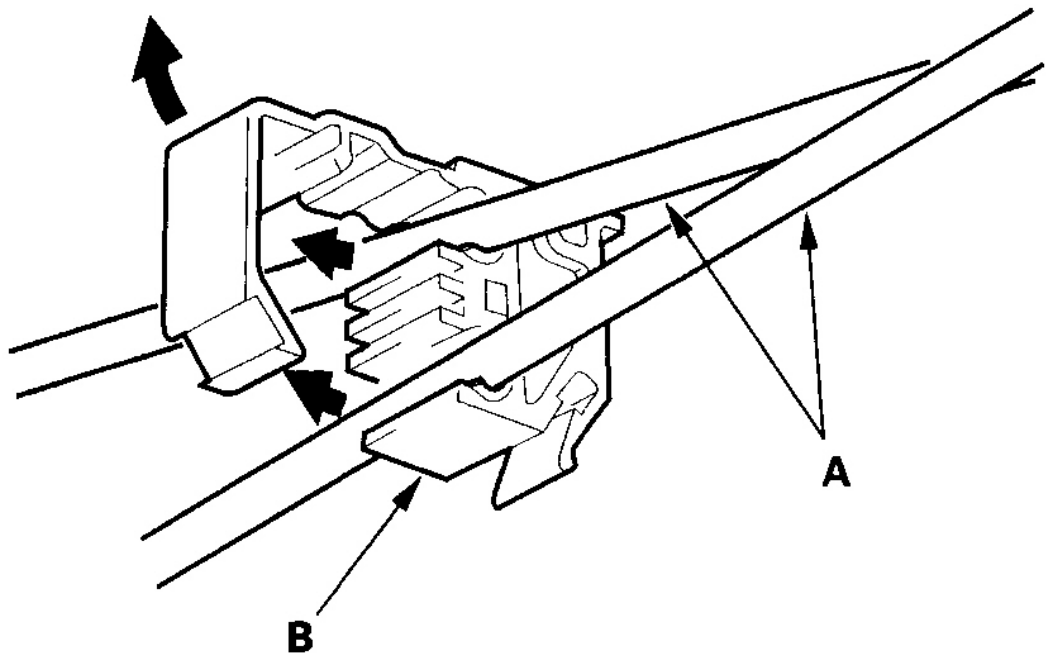


Fig. 3: Removing Torsion Bars From Torsion Bar Center Clip (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Use the torsion bar tool to remove the torsion bars from both trunk lid hinges.

NOTE:

- **2-door: First remove the left torsion bar (A), then remove the right torsion bar (B).**
- **4-door: First remove the right torsion bar (A), then remove the left torsion bar (B).**

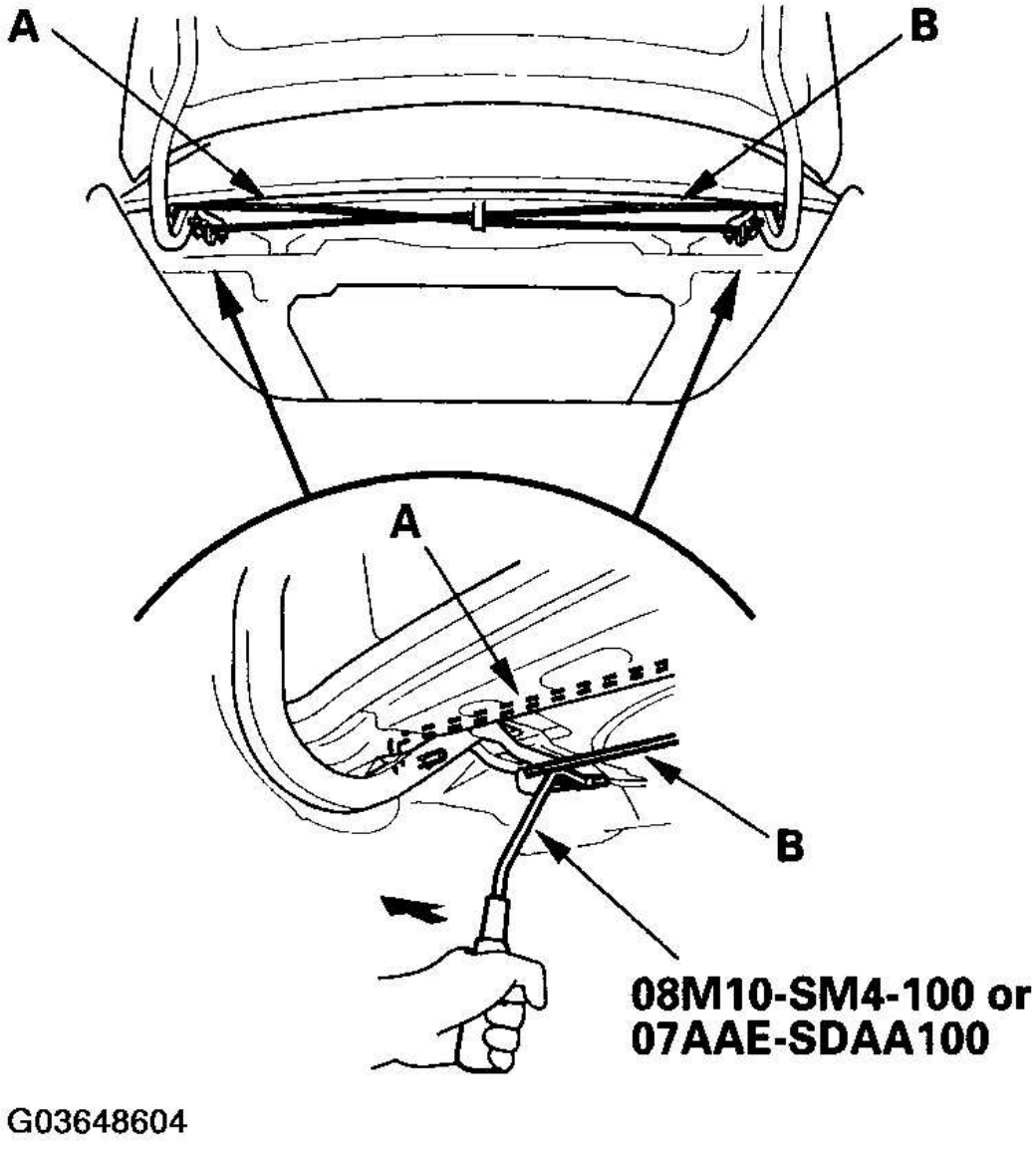


Fig. 4: Removing Torsion Bars From Both Trunk Lid Hinges (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

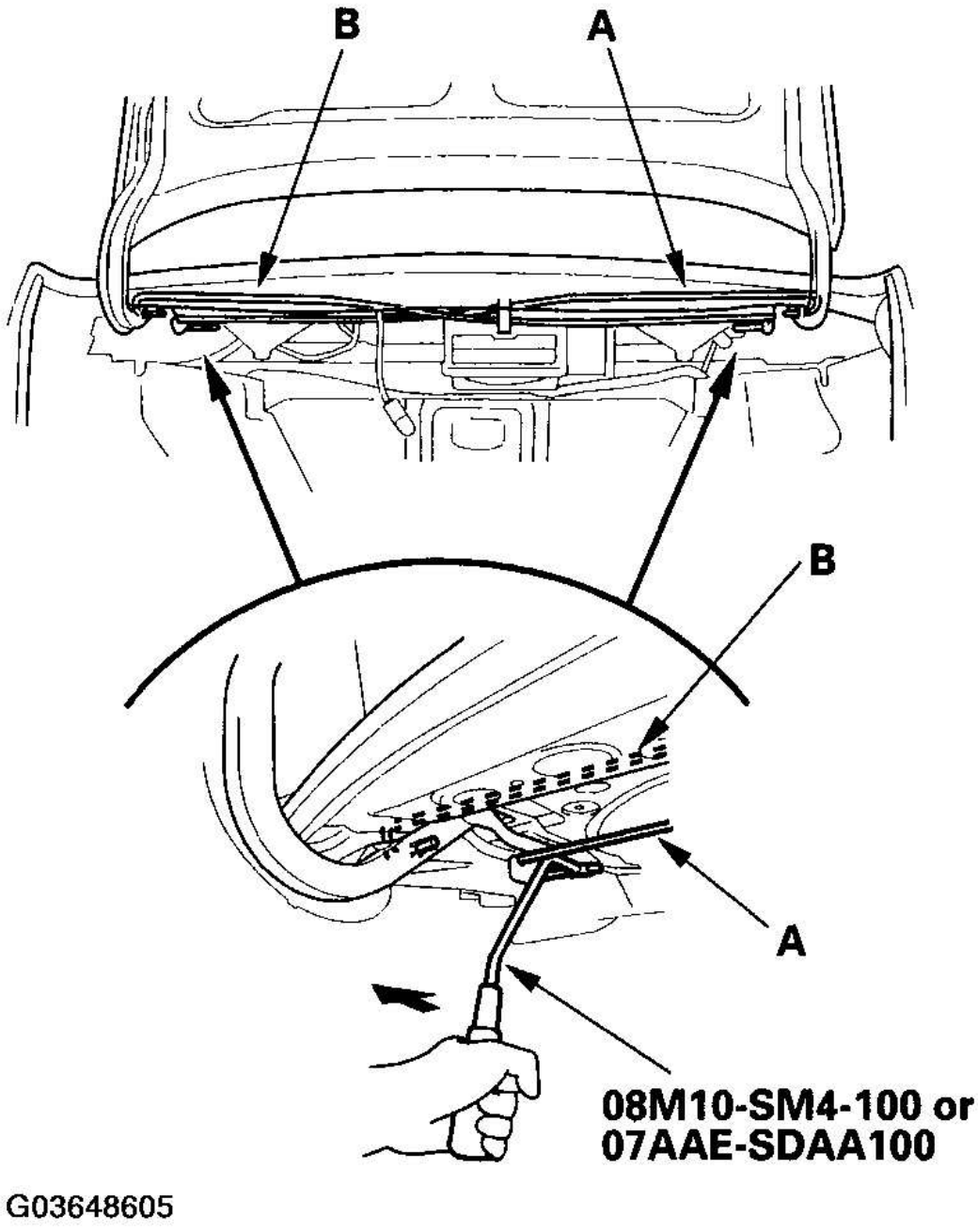


Fig. 5: Removing Torsion Bars From Both Trunk Lid Hinges (4-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the torsion bar center clip from the body.

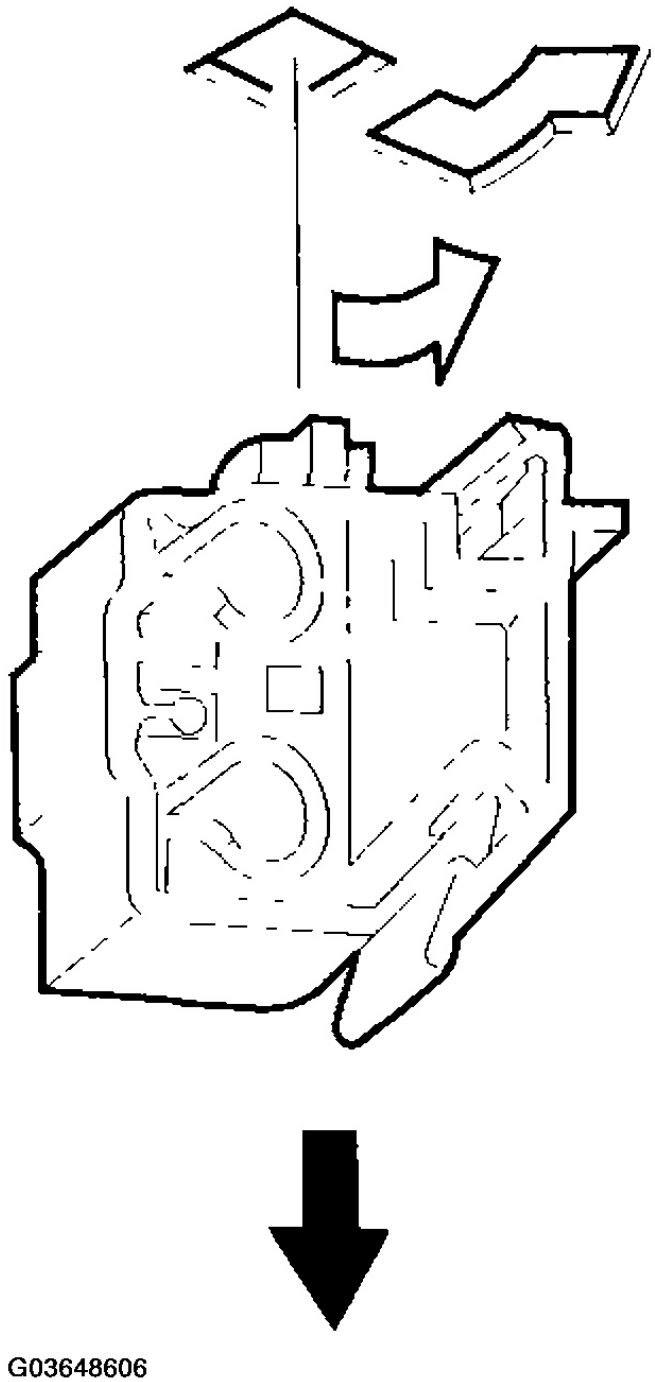


Fig. 6: Removing Torsion Bar Center Clip From Body
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the torsion bars in the reverse order of removal, and note these items:
   - The shapes of the left torsion bar (A) and right torsion bar (B) are shown in **Fig. 7**. Install the torsion bars properly.
   - Adjust the torsion bars forward or rearward with the torsion bar assembly tool. The standard torsion bar positions are:

     Left torsion bar: Higher tension

     Right torsion bar: Normal position
   - Make sure the trunk lid opens properly and locks securely.

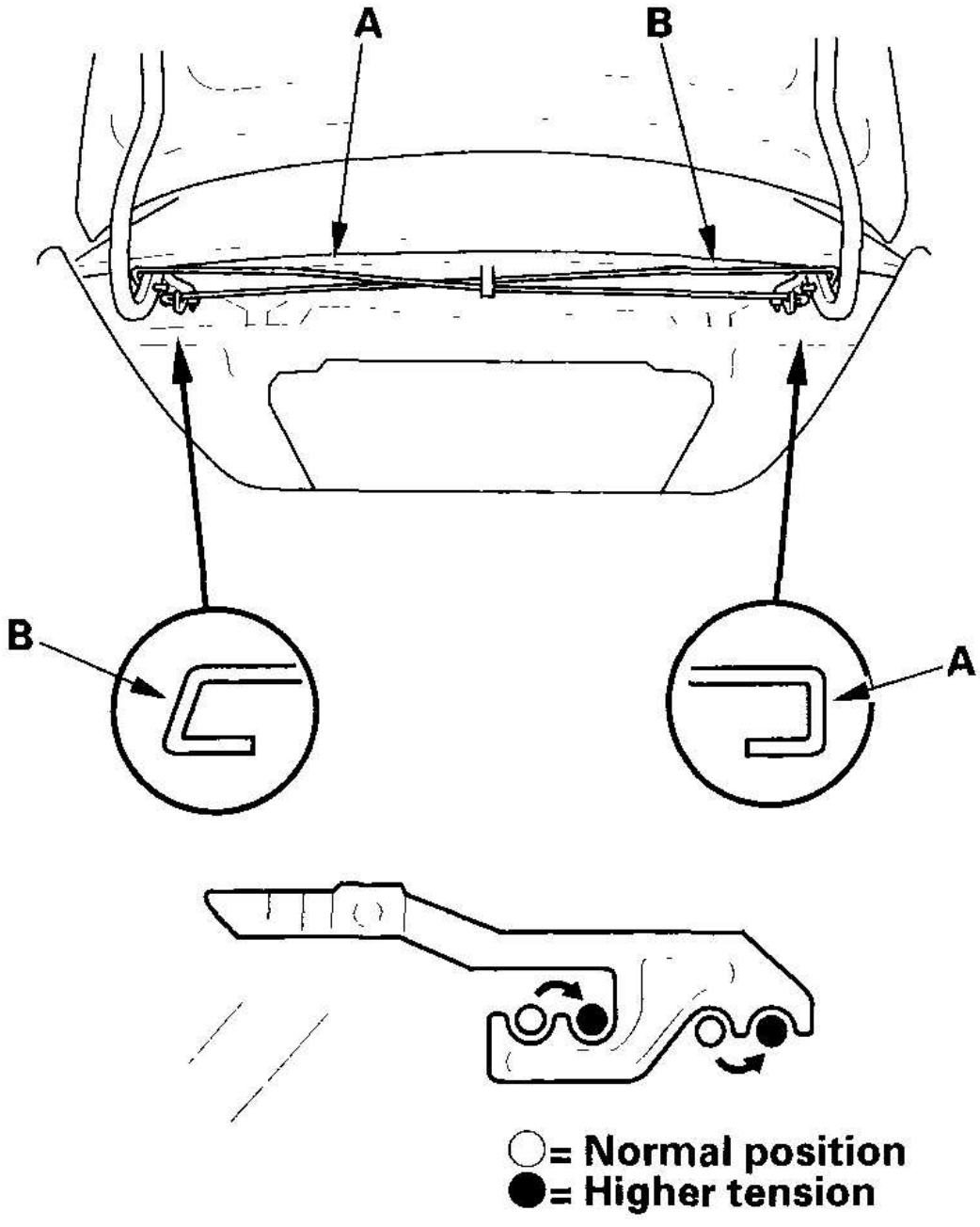
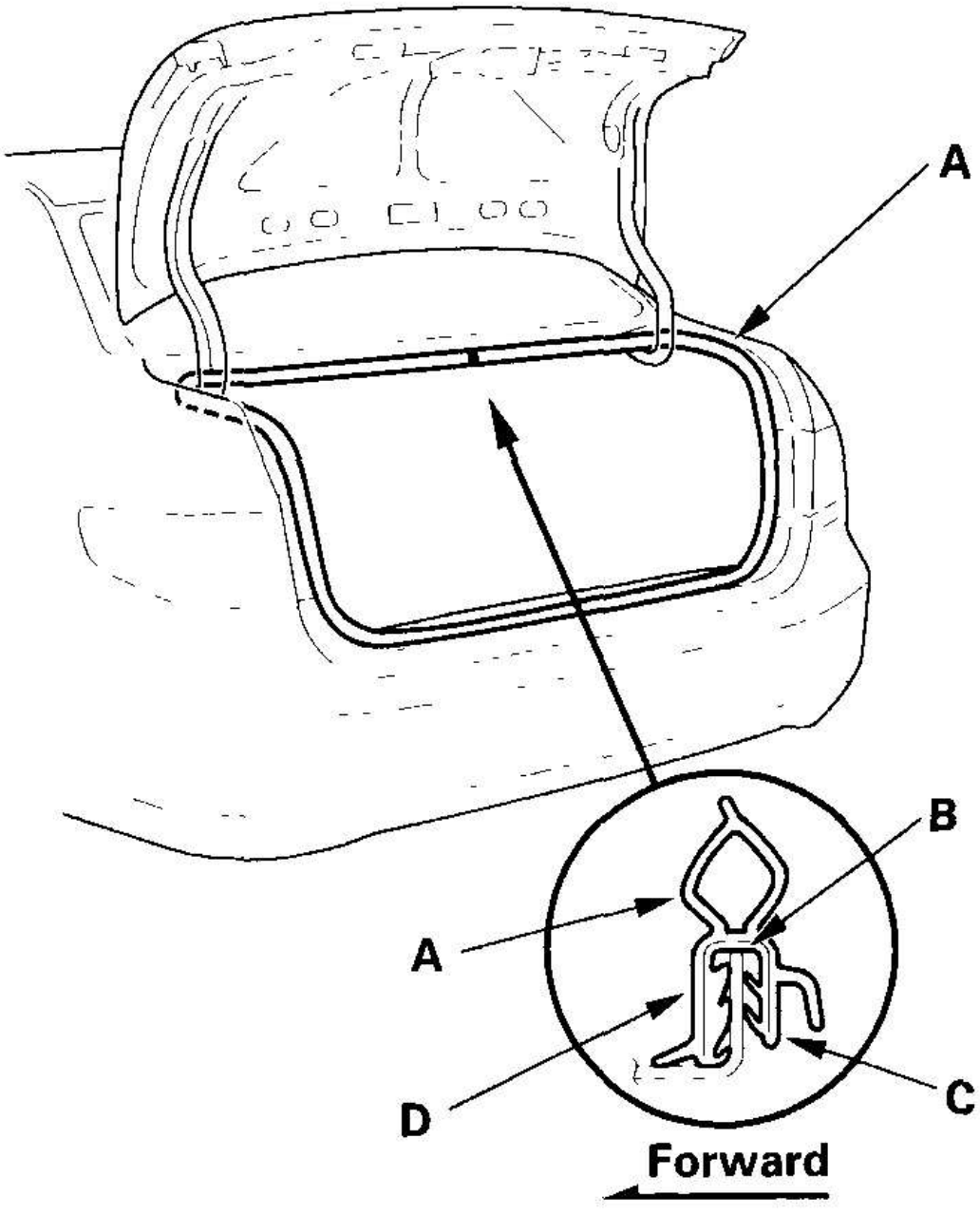


Fig. 7: Installing Torsion Bars
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TRUNK LID WEATHERSTRIP REPLACEMENT

1. Remove the trunk lid weatherstrip (A) by pulling it off.



G03648608

Fig. 8: Removing Trunk Lid Weatherstrip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Apply clear sealant (B) into the channel of the trunk lid weatherstrip all the way around.

   Sealant: Cemedine P/N 08712-0004, or equivalent

3. Locate the painted alignment mark (C or D) on the trunk lid weatherstrip. Align the painted mark with the center of the tailgate opening, and install the trunk lid weatherstrip all the way around in the direction shown in **Fig. 8**. Make sure there are no wrinkles in the weatherstrip.
4. Check for water leaks.

2003-07 ACCESSORIES & EQUIPMENT

Turn Signal/Hazard Flasher - Accord

COMPONENT LOCATION INDEX

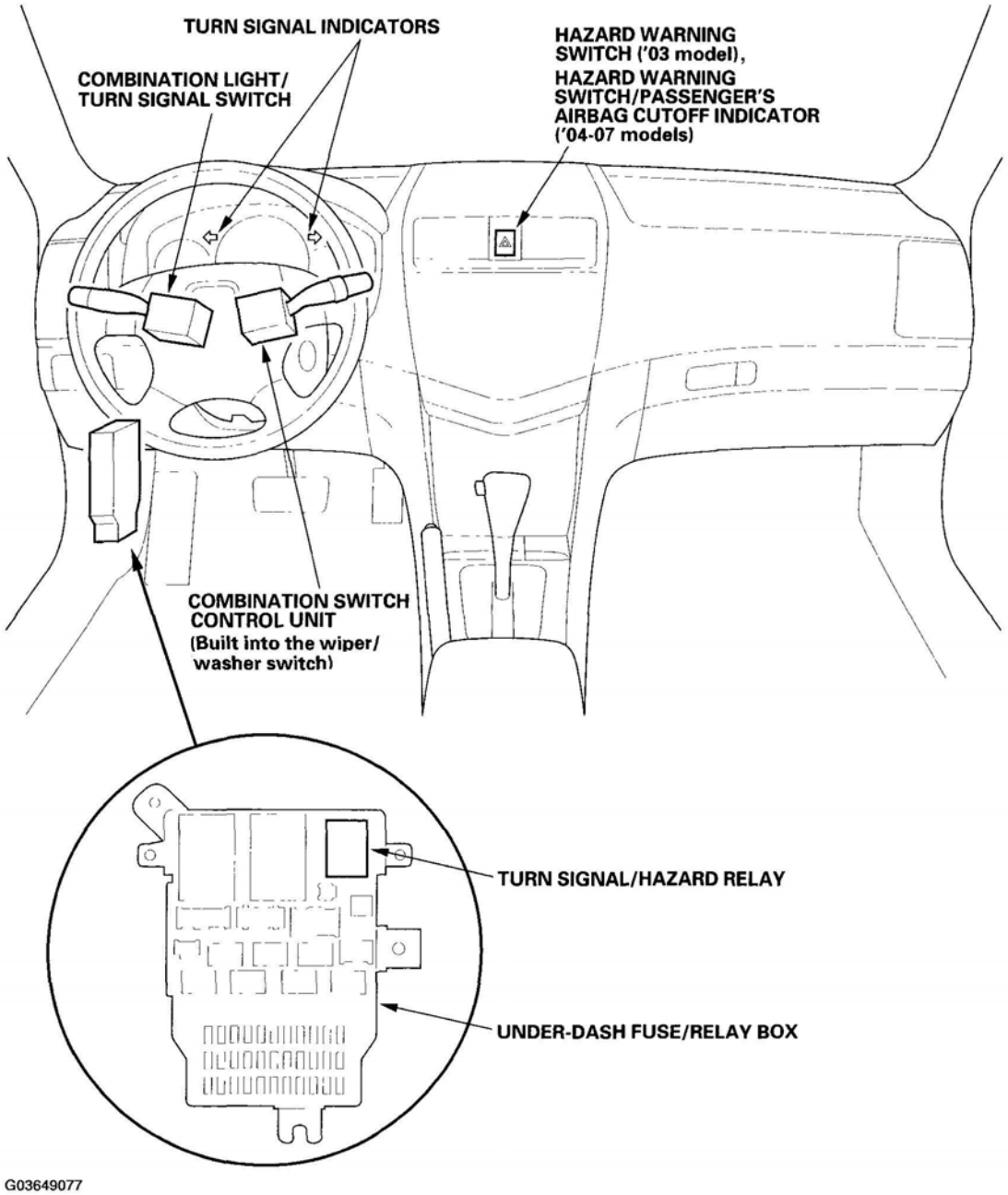


Fig. 1: Identifying Turn Signal/Hazard Flasher Components

Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

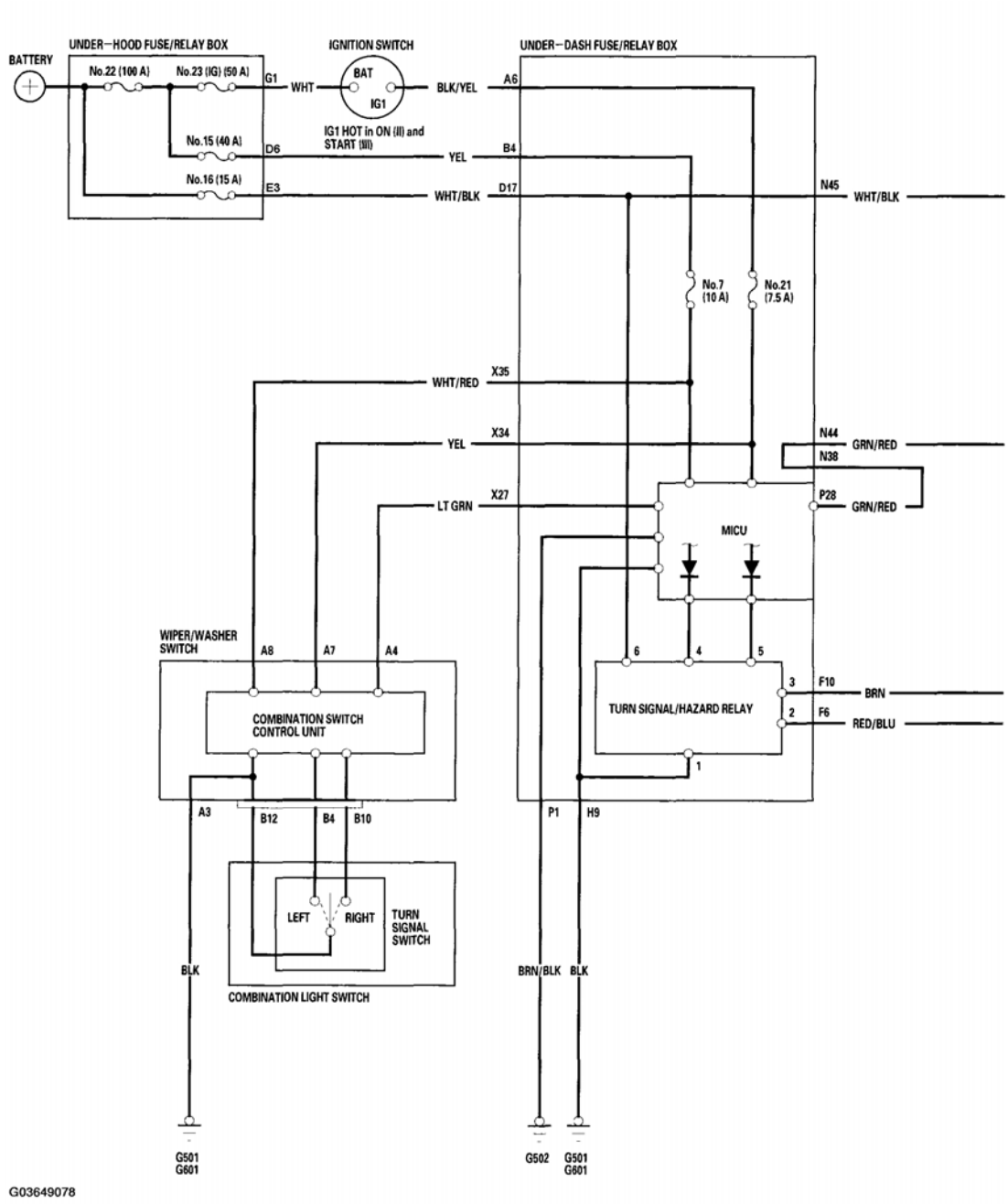


Fig. 2: Identifying Turn Signal/Hazard Flasher Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

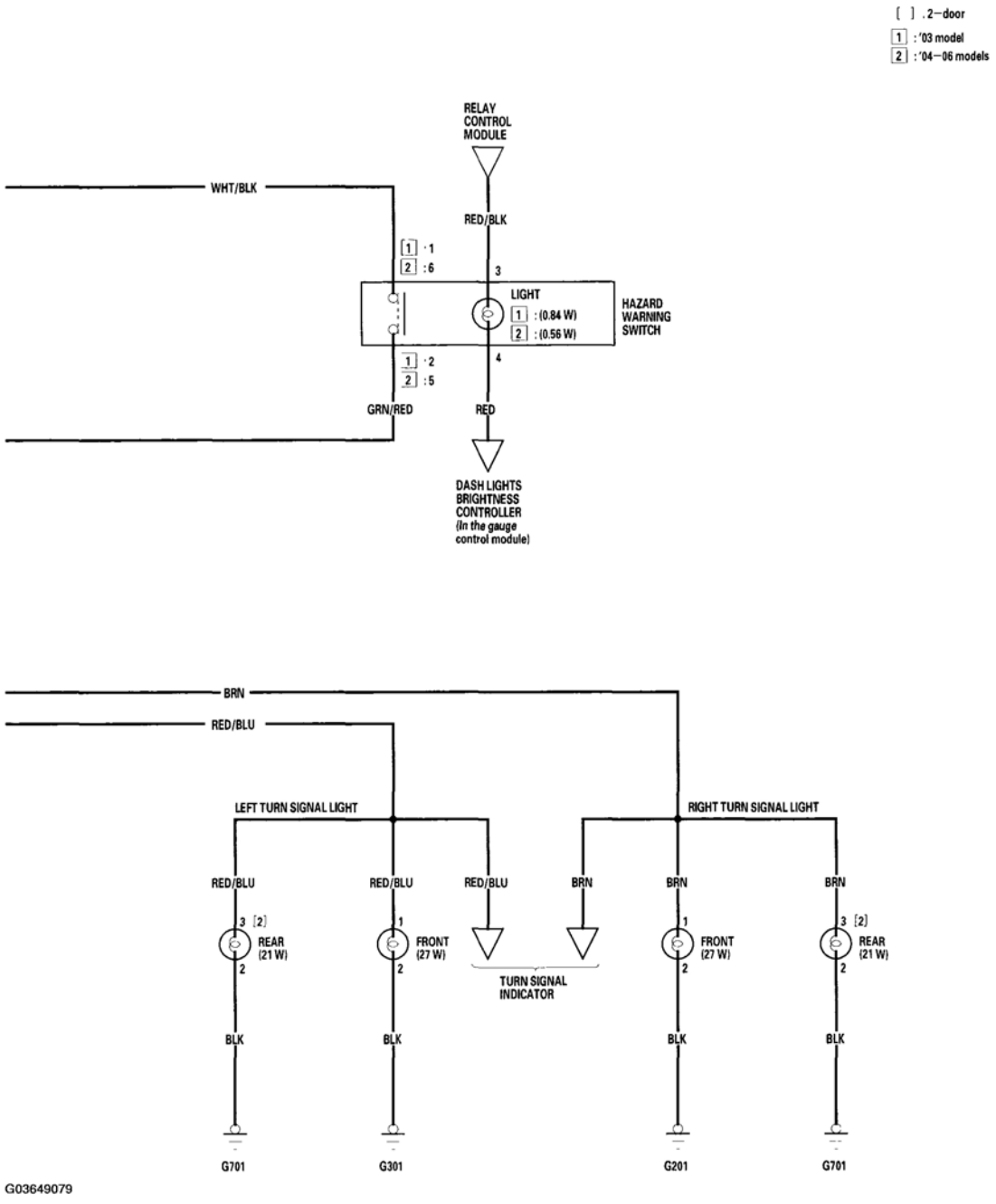


Fig. 3: Identifying Turn Signal/Hazard Flasher Circuit Diagram (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TURN SIGNAL/HAZARD RELAY INPUT TEST

1. Remove the turn signal/hazard relay (A) from the under-dash fuse/relay box

(B).

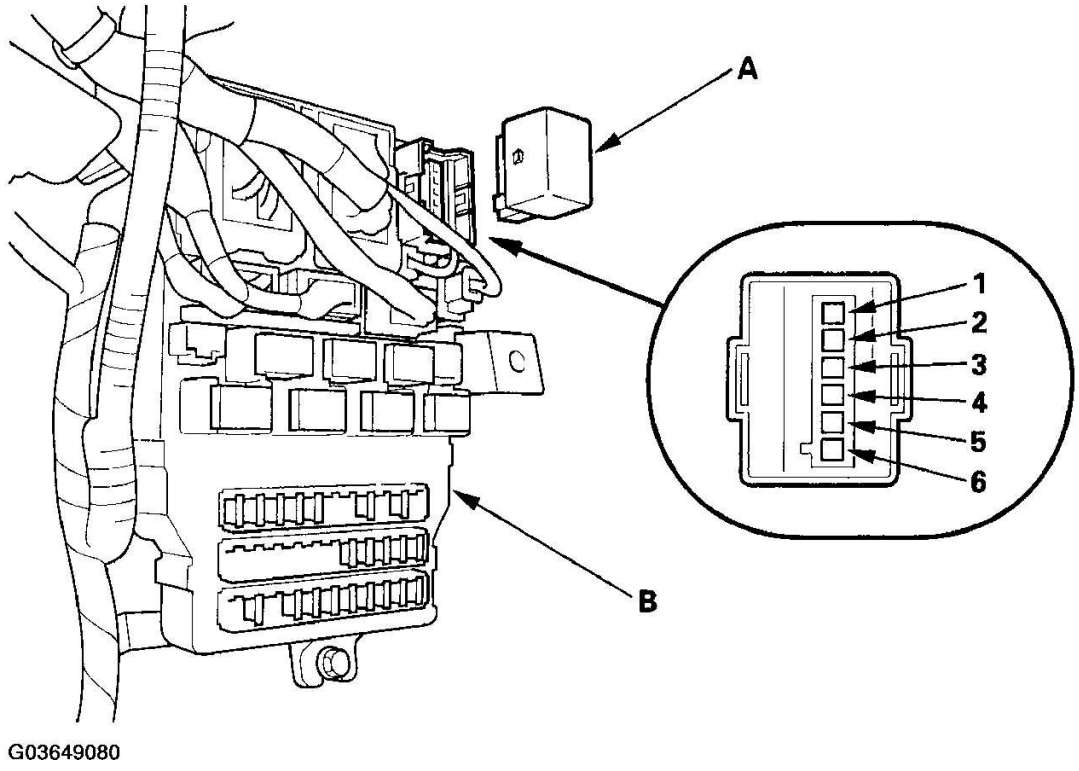


Fig. 4: Removing Turn Signal/Hazard Relay From Under-Dash Fuse/Relay Box
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Inspect the relay and fuse/relay box socket terminals to be sure they are all making good contact.
   - If the terminals are bent, loose, or corroded, repair them as necessary, and recheck the system.
   - If the terminals look OK, go to step 3.
3. Make these input tests at the fuse/relay box.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, the turn signal/hazard relay must be faulty; replace it.

FUSE/RELAY BOX INPUT TESTS

Cavity	Test condition	Test: Desired result	Possible cause if result is not obtained
6	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No. 16 (15 A) fuse in the under-hood fuse/relay box • Faulty under-dash fuse/relay box • An open in the wire
1	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G501, G601) • Faulty under-dash fuse/relay box • An open in the wire
2	Connect the No. 6 terminal to the No. 2 terminal with a jumper wire.	Check the turn signal lights operation: The left turn signal lights should come on.	• Blown bulb • Poor ground (G301, G701) • An open in the wire
3	Connect the No. 6 terminal to the No. 3 terminal with a jumper wire.	Check the turn signal lights operation: The right turn signal lights should come on.	• Blown bulb • Poor ground (G201, G701 or G702) • An open in the wire
			• Poor ground

4	Ignition switch ON (II) and turn signal switch in Left position.	Check for voltage to ground: There should be about 10 V.	(G501, G601) • Faulty turn signal switch • Faulty under-dash fuse/relay box • An open in the wire • Faulty combination switch control unit(1) • Faulty MICU(1)
5	Ignition switch ON (II) and turn signal switch in Right position.	Check for voltage to ground: There should be about 10 V.	
4	Hazard warning switch ON	Check for voltage to ground: There should be about 10 V.	• Poor ground (G501, G601) • Blown No. 16 (15 A) fuse in the under-hood fuse/relay box • Faulty under-dash fuse/relay box • Faulty hazard warning switch • An open in the wire • Faulty MICU(1)
5		Check for voltage to ground: There should be about 10 V.	

(1) Go to the multiplex integrated control system test mode A troubleshooting (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

HAZARD WARNING SWITCH TEST

HAZARD WARNING SWITCH ('03 MODEL)

1. Remove the upper panel (see **UPPER PANEL REMOVAL/INSTALLATION**).
2. Disconnect the 5P connector (A) from the hazard warning switch (B).

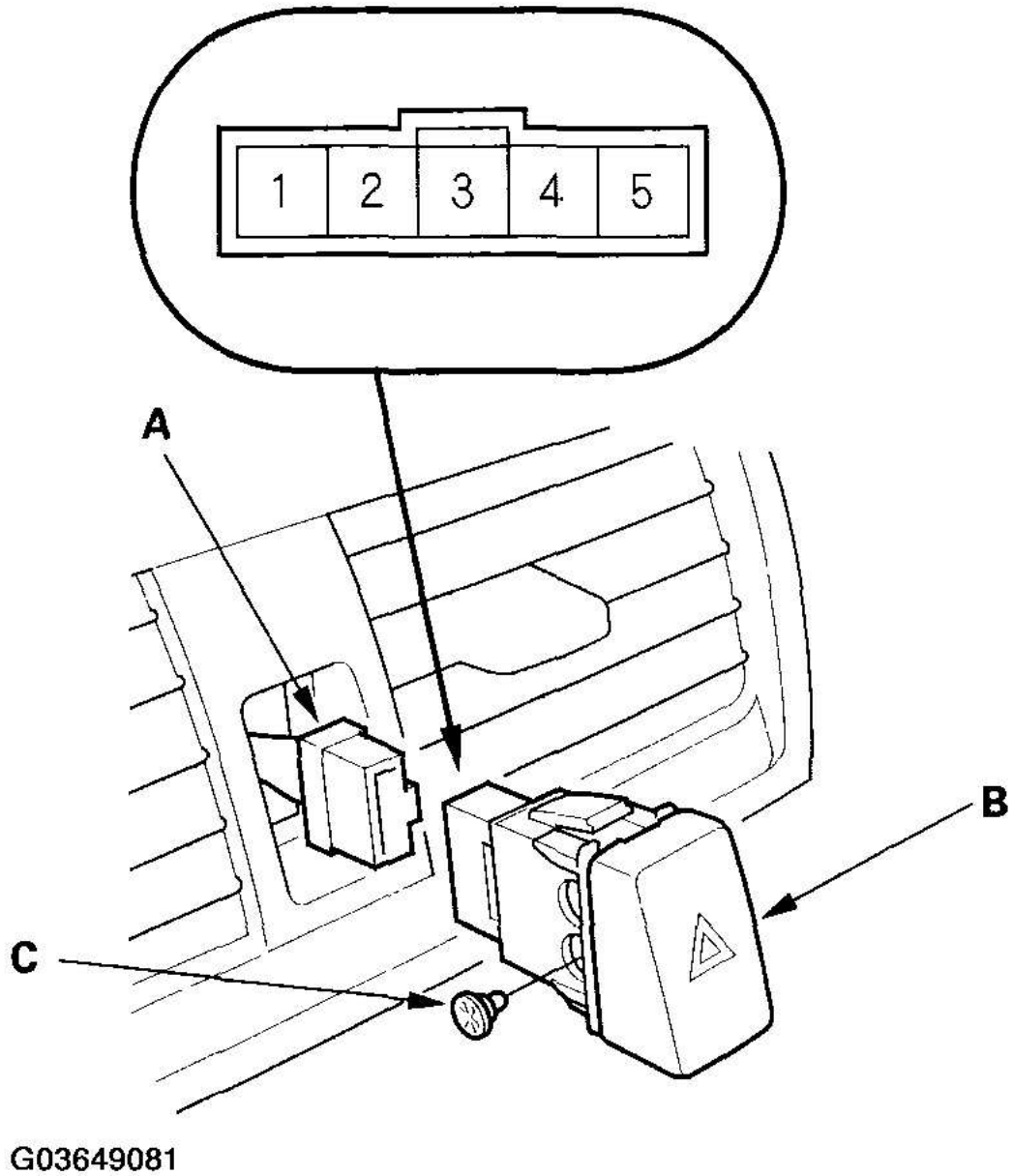


Fig. 5: Disconnecting 5P Connector From Hazard Warning Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Push out the hazard warning switch from behind the upper panel.
4. Check for continuity between the terminals in each switch position according to the table shown below.

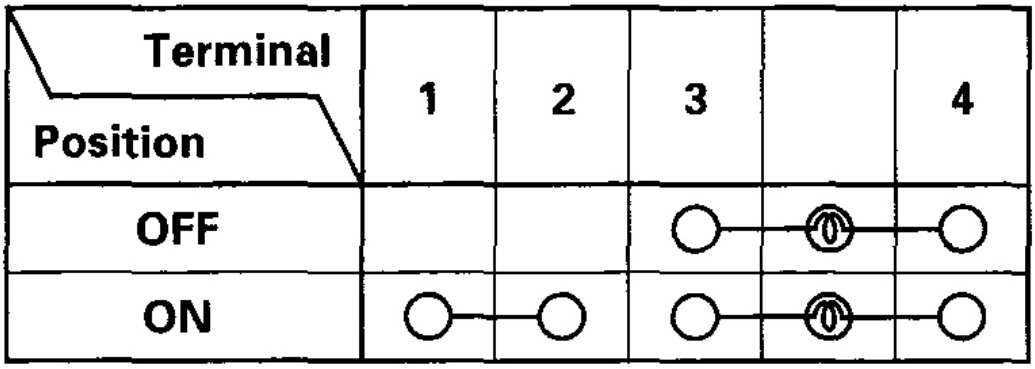


Fig. 6: Checking Continuity Between Terminals Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If the continuity is not as specified, replace the bulb (C) or the hazard warning switch.

HAZARD WARNING SWITCH/PASSENGER'S AIRBAG CUTOFF INDICATOR ('04-07 MODELS)

1. Remove the upper panel (see **UPPER PANEL REMOVAL/INSTALLATION**).
2. Disconnect the 6P connector (A) from the hazard warning switch/passenger's airbag cutoff indicator (B).

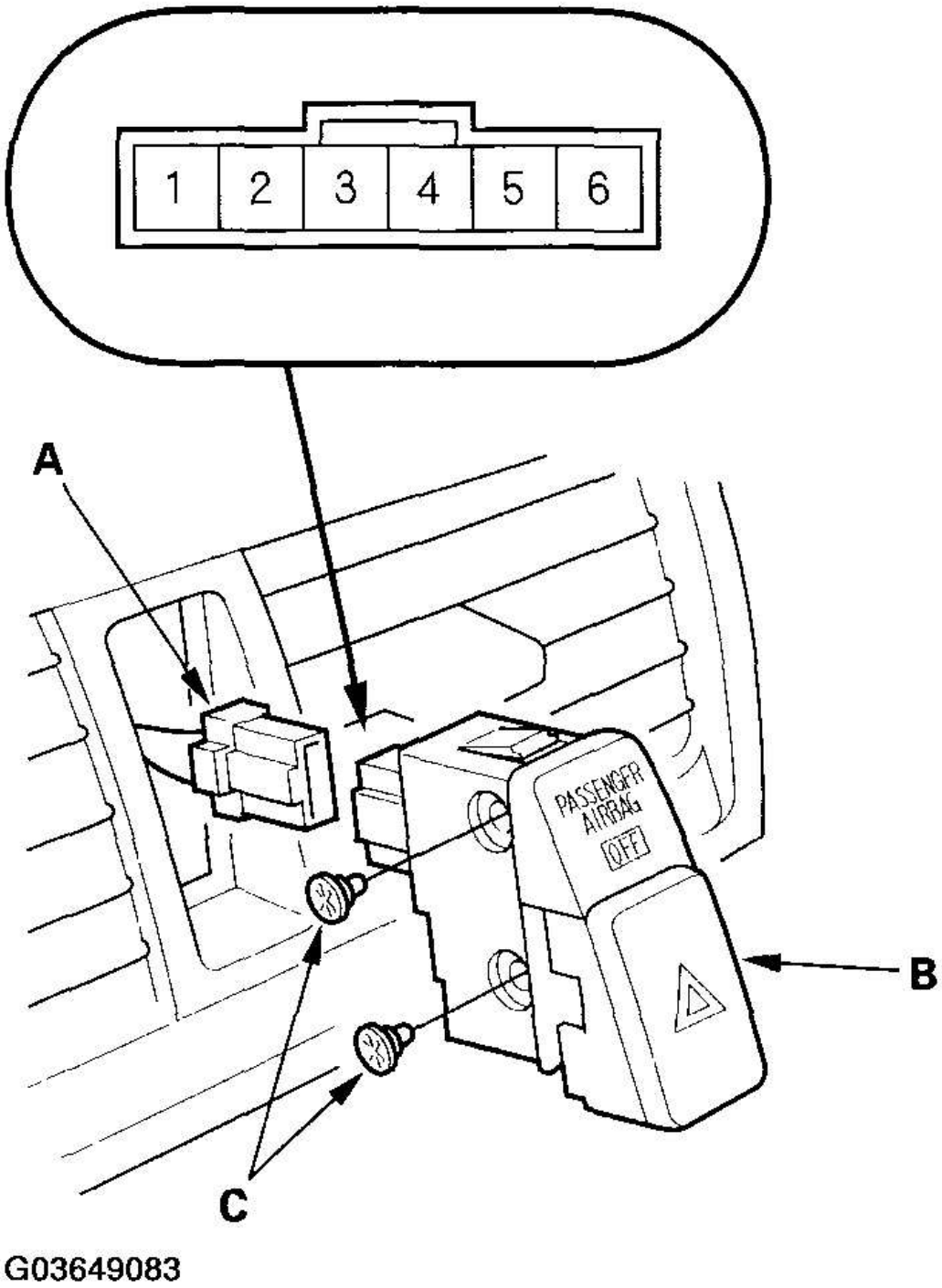


Fig. 7: Disconnecting 6P Connector From Hazard Warning

Switch/Passenger's Airbag Cutoff Indicator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Push out the hazard warning switch/passenger's airbag cutoff indicator from the upper panel.
4. Check for continuity between the terminals in each switch position according to the table shown below.

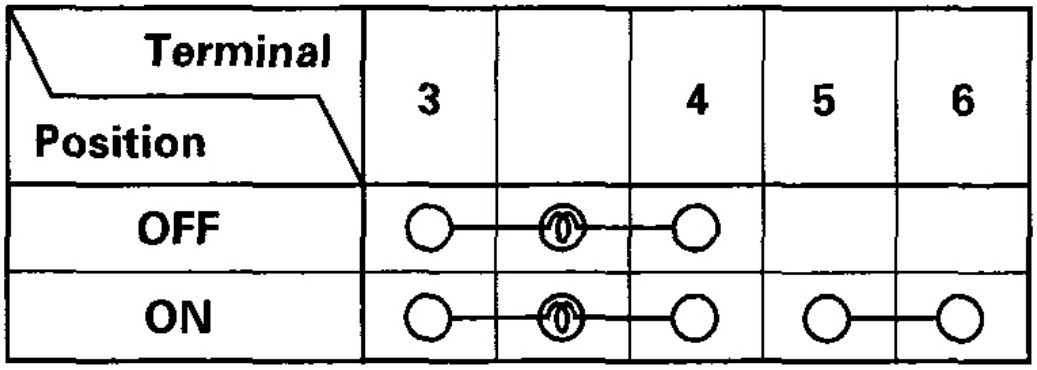


Fig. 8: Checking Continuity Between Terminals Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If the continuity is not as specified, replace the illumination bulb(s) (C) or the hazard warning switch.

2006-2007 BRAKES

VSA (Vehicle Stability Assist) System - Accord (V6)

COMPONENT LOCATION INDEX

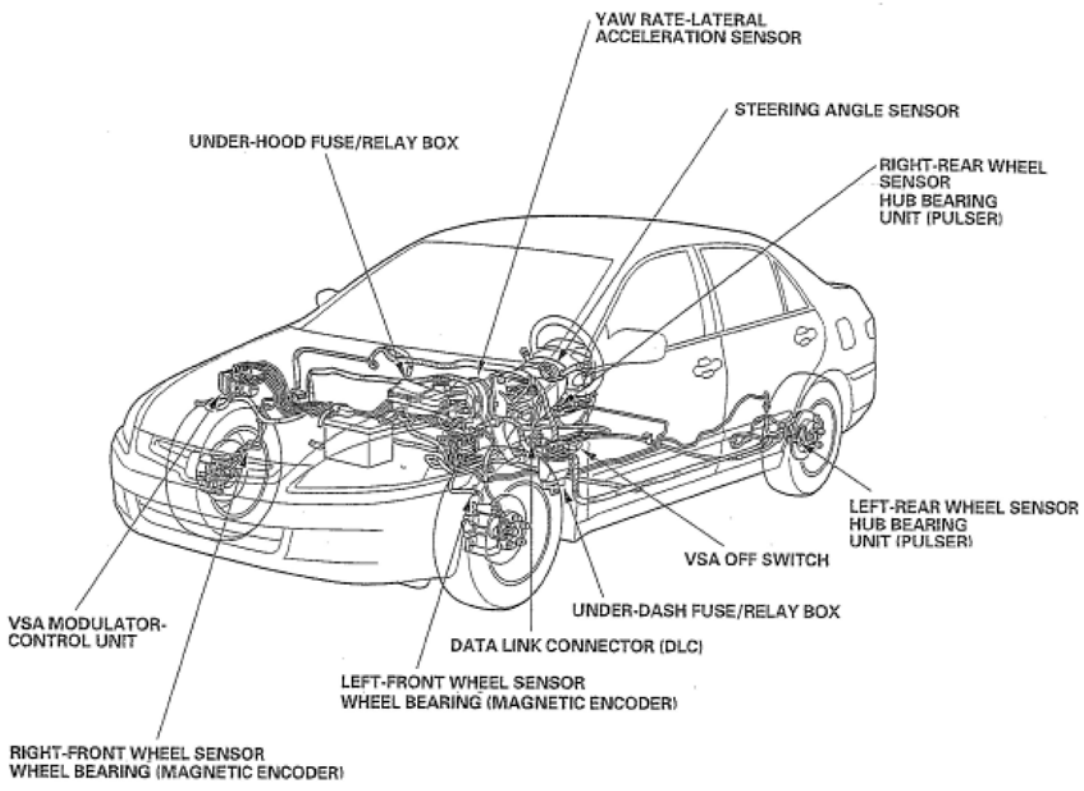


Fig. 1: Identifying VSA Components Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

SYSTEM INDICATOR

This system has four indicators:

- ABS indicator (A)
- Brake system indicator (B)
- VSA indicator (C)

- VSA activation indicator (D)

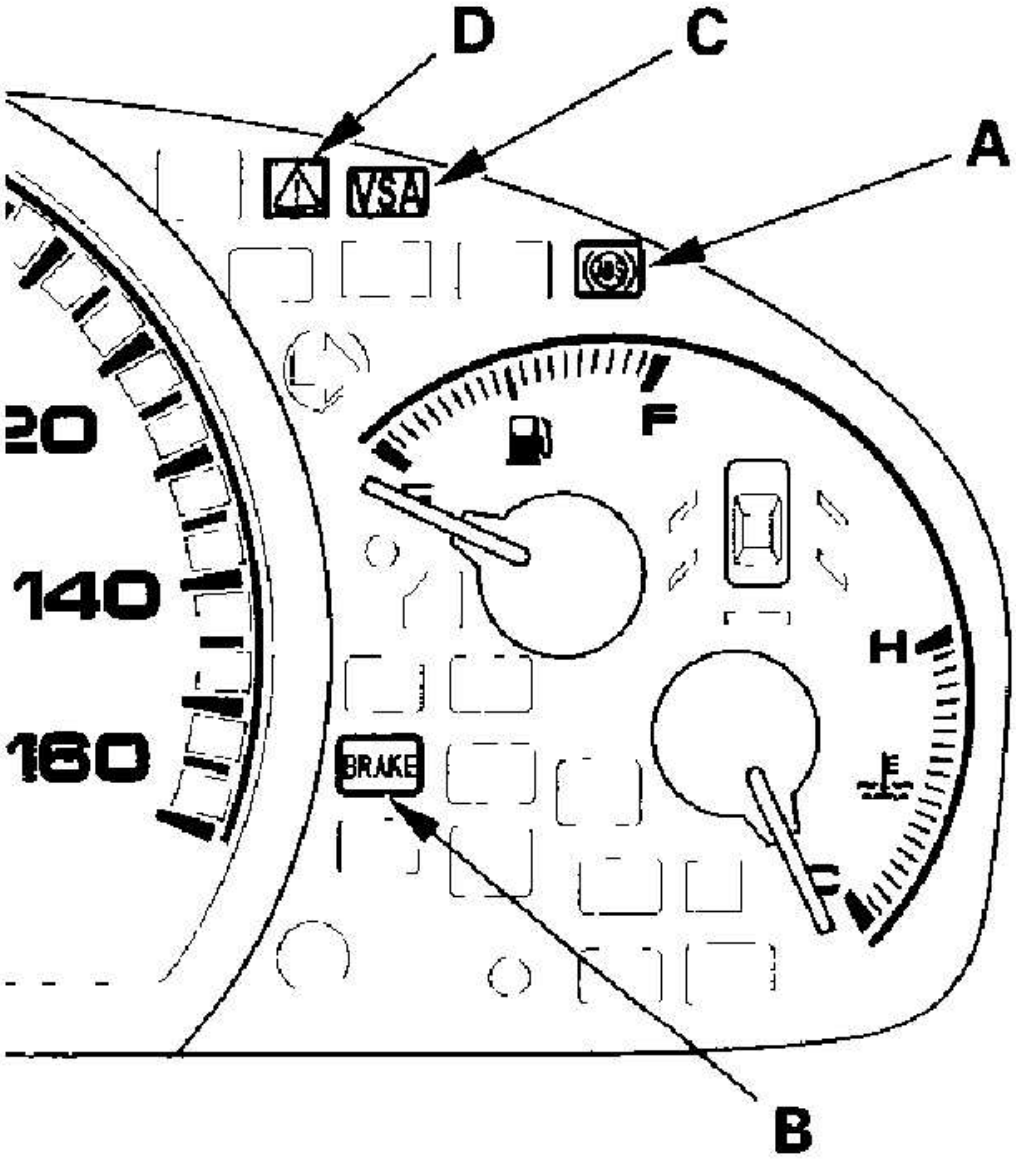


Fig. 2: Identifying System Indicator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

When the system is OK, each indicator comes on for about 2 seconds after turning the ignition switch ON (II), then go off.

When the system detects a problem, it turn the appropriate indicators on. Depending on the failure, the VSA modulator-control unit determines which indicators are turned on. If the problem goes away (system returns to normal), the indicator(s) will be controlled in the following way depending upon the DTC that was set:

- The indicator(s) will come on and stay on when the igition swith is on.
- The indicator(s) will automatically go off.
- The indicator(s) will go off after the vehicle is driven.

ABS indicator

ABS indicator comes on, when ABS function is lost. The brakes still work like a conventional system.

Brake system indicator

Brake system indicator comes on, when EBD function is lost, the parking brake is applied, and/or the brake fluid level is low.

VSA indicator

VSA indicator comes on, when VSA function is lost.

VSA activation indicator

VSA activation indicator blinks, when VSA function is activating. VSA activation indicator comes on, when VSA is off, or VSA function is lost.

DIAGNOSTIC TROUBLE CODE (DTC)

- The memory can hold 10 DTCs. However, when the same DTC is detected more than once, the more recent DTC is written over the earlier one. Therefore, when the same problem is detected repeatedly, it is memorized as a single DTC.
- The DTCs are indicated in the order they occur.
- The DTCs are memorized in the EEPROM. Therefore, the memorized DTCs

cannot be canceled by disconnecting the battery. Do the specified procedures to clear the DTCs.

SELF-DIAGNOSIS

- Self-diagnosis can be classified into two categories:

  - Initial diagnosis: Done right after the ignition switch is turned ON (II) and until the ABS and VSA indicators go off.

  - Regular diagnosis: Done right after the initial diagnosis until the ignition switch is turned OFF.
- When the system detects a problem, the VSA modulator-control unit shifts to fail-safe mode.

KICKBACK

The pump motor operates when the VSA modulator-control unit is functioning, and the fluid in the reservoir is forced out to the master cylinder, causing kickback at the brake pedal.

PUMP MOTOR

- The pump motor operates when the VSA modulator-control unit is functioning.
- The VSA modulator-control unit checks the pump motor operating during regular diagnosis when the vehicle is driven over 10 mph (15 km/h) the first time after the ignition switch is turned ON (II). You may hear the motor operate at this time, but it is normal.

BRAKE FLUID REPLACEMENT/AIR BLEEDING

Brake fluid replacement and air bleeding procedures are identical to the procedures used on vehicles not equipped with VSA system (see **BRAKE BOOSTER REPLACEMENT**).

HOW TO TROUBLESHOOT DTCS

The troubleshooting procedures assume that the cause of the problem is still present and the ABS and/or VSA indicator is still on. Following the flowchart when the ABS and/or VSA indicator does not come on can result in incorrect diagnosis.

The connector illustrations show the female terminal connectors with a single outline and the male terminal connectors with a double outline.

- Question the customer about the conditions when the problem occurred, and try to reproduce the same conditions for troubleshooting. Find out when the ABS and/or VSA indicator came on, such as during control, after control, when vehicle was traveling at a certain speed, etc.
- When the ABS or VSA indicator does not come on during the test-drive, but troubleshooting is done based on the DTC, check for loose connectors, poor contact of the terminals, etc. before you start troubleshooting.
- After troubleshooting, or repairs are done, clear the DTCs, and test-drive the vehicle under the same conditions as originally set with the DTCs. Make sure the ABS and VSA indicators do not come on.
- Check for other unit DTCs which connected via F-CAN, if there are DTCs that are related to F-CAN, the most likely cause was that the ignition switch was turned ON (II) with the VSA modulator-control unit connector disconnected. Clear the DTCs. Check for PGM-FI and ABS codes, and troubleshoot those first.

INTERMITTENT FAILURES

The team "intermittent failure" means a system may have had a failure, but it checks OK now. If the system indicators in the gauge control module does not come on, check for poor connections or loose pins at all connectors related to the circuit that you are troubleshooting. If the indicators were on but then went out, the original problem may have been intermittent.

HOW TO USE THE HDS (HONDA DIAGNOSTIC SYSTEM)

1. If the system indicators stay on, connect the HDS to the data link connector (DLC) (A) located under the driver's side of the dashboard.

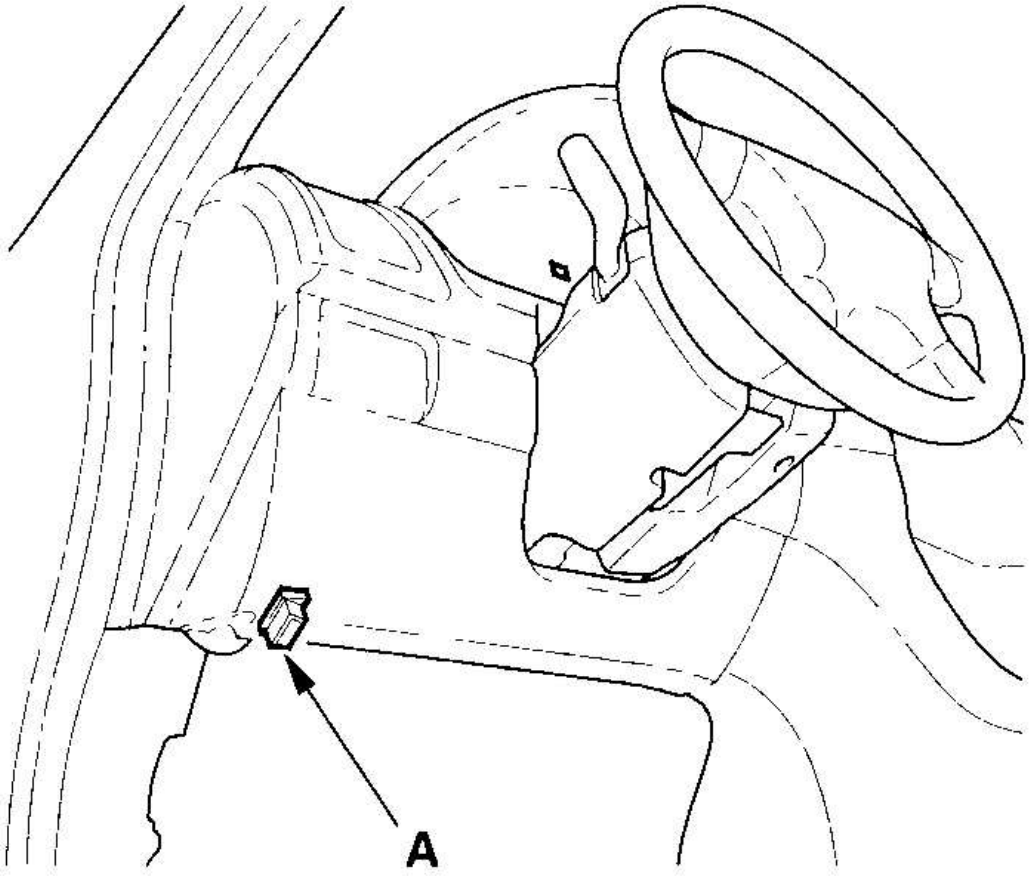


Fig. 3: Identifying DLC Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Turn the ignition switch ON (II).
3. Check the diagnostic trouble code (DTC) and note it. Also check the on-board snapshot data, and download any data found. Then refer to the indicated DTC's troubleshooting, and begin the appropriate troubleshooting procedure.

NOTE:

- **The HDS communication will be stopped when the vehicle speed is at 31 mph or more.**
- **The HDS can read the DTC, the current data, and**

other system data.

- **For specific operations, refer to the Help menu that came with the HDS.**

HOW TO RETRIEVE DTCS

1. With the ignition swith OFF, connect the HDS to the data link connector (DLC) under the driver's side of the dashboard.
2. Turn the ignition switch ON.
3. Follow the prompts on the HDS to display the DTCs on the screen. After determining the DTC, refer to the DTC troubleshooting.
4. Turn the ignition switch OFF.

HOW TO CLEAR DTCS

1. With the ignition switch OFF, connect the HDS to the 16P data link connector (DLC) (A) under the left side of the dashboard.
2. Turn the ignition switch ON (II), and clear the DTC(s) by following the screen prompts on the HDS.
3. Clear the DTCs by following the screen prompts on the HDS.
4. Turn the ignition switch OFF.

DTC TROUBLESHOOTING INDEX

DTC TROUBLESHOOTING INDEX

DTC		Detection Item	ABS Indicator	Brake System Indicator	VSA Indicator	VSA Activation Indicator	
11	13	Right-front wheel sensor circuit malfunction					**TROU**
12	11	Right-front wheel sensor electrical noise	ON	ON/OFF (1)	ON	ON	(see **D** **SENS**

	or intermittent interruption					**INTE 14-** **ELE OR INTE 16-** **ELE OR INTE 18** **ELE OR I**
12	Right-front wheel sensor short to the other sensor line (13 mph (20 km/h) or more)					(see **D** **SE THE K** **SE THE K D** **SE THE**

						K **]** **SE** **THE** **]** **KN**
21	Right-front wheel sensor installation error (Start to 15 Seconds)					(see **D** **ERRO** **SECO** **LEFT** **ERRO** **SECO** **RIGH** **ERRO** **SECO** **LEF** **ERRO**
22	Right-front wheel sensor installation error (19 mph (30 km/h) or more)					(see **D** **ER** **K** **]**

							ER K D
							ER K]
							ER KN
	23	Right-front wheel sensor installation error (0 to 9 mph (0 to 15 km/h))					(see **D** **ERRO TO 15** **ERRO TO 15** **ERRO TO 15**

							ERRO
13	13	Left-front wheel sensor circuit malfunction					(se **f Ci**
14	11	Left-front wheel sensor electrical noise or intermittent interruption	ON	ON/OFF (1)	ON	ON	(see **D SENSO INTE 14- ELE OR INTE 16- ELE OR INTE 18 ELE OR I**
	12	Left-front wheel sensor short to the other sensor line (13 mph (20 km/h) or more)					(see **D SE THE K**

							SE **THE**] **K** **D** **SE** **THE**] **K**] **SE** **THE**] **KN**
	21	Left-front wheel sensor installation error (Start to 15 Seconds)					(see **D** **ERR** **SEC** **LEFT** **ERR** **SEC** **RIGH** **ERR** **SEC** **LEF**

						ERRO
22	Left-front wheel sensor installation error (19 mph (30 km/h) or more)					(see **DT** **ERRO SECO LEFT** **ERRO SECO RIGH** **ERRO SECO LEF** **ERRO**
23	Left-front wheel sensor installation error (0 to 9 mph (0 to15 km/h))					(see **DT** **ERRO TO 15** **ERRO TO 15**

							ERRO TO 15 **ERRO**
15	13	Right-rear wheel sensor circuit malfunction					(see **Ci**
16	11	Right-rear wheel sensor electrical noise or intermittent interruption	ON	ON/OFF (1)	ON	ON	(see **D** **SENS(** **INTE 14-** **ELE OR INTE 16-** **ELE OR INTE 18** **ELE OR I**

12	Right-rear wheel sensor short to the other sensor line (13 mph (20 km/h) or more)					(see **D** **SE** **THE** **K** **SE** **THE** **K** **D** **SE** **THE** **K** **SE** **THE** **K**
21	Right-rear wheel sensor installation error (Start to 15 Seconds)					(see **D** **ERR** **SECO** **LEFT** **ERR** **SECO**

						RIGH **ERRO** **SECO** **LEF** **ERRO**
	22	Right-rear wheel sensor installation error (19 mph (30 km/h) or more)				(see **D** **ERRO** **SECO** **LEFT** **ERRO** **SECO** **RIGH** **ERRO** **SECO** **LEF** **ERRO**
	23	Right-rear wheel sensor installation error (0 to 9				(see **D**

		mph (0 to 15 km/h))					**ERRO TO 15** **ERRO TO 15** **ERRO TO 15** **ERRO**
17	13	Left-rear wheel sensor circuit malfunction					(se **Ci**
18	11	Left-rear wheel sensor electrical noise or intermittent interruption	ON	ON/OFF (1)	ON	ON	(see **D** **SENS** **INTE 14-** **ELE OR INTE 16-** **ELE OR**

						INTE 1 **ELE OR I**
12	Left-rear wheel sensor short to the other sensor line (13 mph (20 km/h) or more)					(see **D** **SE THE K** **SE THE K D** **SE THE K** **SE THE KN**
21	Left-rear wheel sensor installation error (Start to 15 Seconds)					(see **D** **ERR**

							SECO LEFT **ERRO SECO RIGH** **ERRO SECO LEF** **ERRO**
	22	Left-rear wheel sensor installation error (19 mph (30 km/h) or more)					(see **D** **ERRO SECO LEFT** **ERRO SECO RIGH** **ERRO SECO LEF**

							ERR
	23	Left-rear wheel sensor installation error (0 to 9mph (0 to 15km/h))					(see **D** **ERRO TO 15** **ERRO TO 15** **ERRO TO 15** **ERRO**
21	11	Right-front magnetic encoder malfunction (corrugated missing)	OFF	OFF	ON	ON	(see **D** **ERRO TO 15** **ERRO TO 15**

							ERRO TO 15 **ERRO**
22	11	Left-front magnetic encoder malfunction (corrugated missing)	OFF	OFF	ON	ON	(see **D** **ERRO TO 15** **ERRO TO 15** **ERRO TO 15** **ERRO**
23	11	Right-rear pulser malfunction (corrugated missing)	OFF	OFF	ON	ON	(see **D** **ERRO**

							TO 15 **ERRO** **TO 15** **ERRO** **TO 15** **ERRO**
24	11	Left-rear pulser malfunction (corrugated missing)	OFF	OFF	ON	ON	(see **DT** **ERRO** **TO 15** **ERRO** **TO 15** **ERRO** **TO 15**

							ERRO
25	11	Yaw rate sensor internal circuit malfunction (initial)	(see **DTC 25-11: YAW RATE SENSOR INTERNAL CIRCUIT MALFUNCTION (INITIAL), DTC 25-12: YAW RATE SENSOR INTERNAL CIRCUIT MALFUNCTION (OPEN, SHORT), DTC 25-21: YAW RATE SENSOR NEUTRAL POSITION MALFUNCTION**)				
	12	Yaw rate sensor internal circuit malfunction (open, short)	(see **DTC 25-11: YAW RATE SENSOR INTERNAL CIRCUIT MALFUNCTION (INITIAL), DTC 25-12: YAW RATE SENSOR INTERNAL CIRCUIT MALFUNCTION (OPEN, SHORT), DTC 25-21: YAW RATE SENSOR NEUTRAL POSITION MALFUNCTION**)				
	21	Yaw rate sensor neutral position malfunction	(see **DTC 25-11: YAW RATE SENSOR INTERNAL CIRCUIT MALFUNCTION (INITIAL), DTC**				

			25-12: YAW RATE SENSOR INTERNAL CIRCUIT MALFUNCTION (OPEN, SHORT), DTC 25-21: YAW RATE SENSOR NEUTRAL POSITION MALFUNCTION)
	22	Yaw rate sensor stuck	(see **DTC 25-22: YAW RATE SENSOR STUCK**)
	23	Yaw rate sensor circuit intermittent interruption	(see **DTC 25-23: YAW RATE SENSOR CIRCUIT INTERMITTENT INTERRUPTION**)
	24	Yaw rate sensor gain high	(see **DTC 25-23: YAW RATE SENSOR CIRCUIT INTERMITTENT INTERRUPTION**)
	25	Yaw rate sensor gain low	(see **DTC 25-23: YAW RATE SENSOR CIRCUIT INTERMITTENT INTERRUPTION**)
26	11	Lateral acceleration sensor internal	

		circuit malfunction (initial)					SE (INI SE (OP SENS S I
	12	Lateral acceleration sensor internal circuit malfunction (open, short)					SE (INI SE (OP SENS

						S **I**
21	Lateral acceleration sensor stuck					**SE** **(INI** **SE** **(OP** **SENS** **S** **I**
22	Lateral acceleration sensor neutral position malfunction					**SE** **(INI** **SE**

						(OPI **SENS** **S** **I**
23	Lateral acceleration sensor circuit intermittent interruption					**SEI** **(INI** **SEI** **(OPI** **SENS** **S** **I**
24	Lateral acceleration sensor gain					(see

		high					**I**
	25	Lateral acceleration sensor gain low					(see **I**
27	11	Steering angle sensor DIAG signal error					**ST SIGN ANGL S**
	21	Steering angle sensor stuck neutral position					**ST NEU DTC**
	22	Steering angle sensor stuck offset position					**ST NEU DTC**
	23	Steering angle sensor exchange malfunction					**ST SEN I**
	24	Steering angle					

		sensor counter malfunction					**ST SE**
	26	Steering angle sensor DIAG signal error					**ST SIGN ANGL**
31	01	ABS right-front inlet solenoid valve malfunction	ON	ON	ON	ON	**ST SE**
	21	ABS right-front inlet solenoid valve malfunction					**ST SE**
	22	ABS right-front inlet solenoid valve malfunction					**ST SE**
	23	ABS right-front inlet solenoid valve malfunction					**ST SE**
32	01	ABS right-front outlet solenoid valve malfunction	ON	ON	ON	ON	**ST SE**
	21	ABS right-front outlet solenoid valve malfunction					**ST SE**

	22	ABS right-front outlet solenoid valve malfunction					**ST SE**
	23	ABS right-front outlet solenoid valve malfunction					**ST SE**
33	01	ABS left-front inlet solenoid valve malfunction	ON	ON	ON	ON	**ST SE**
	21	ABS left-front inlet solenoid valve malfunction					**ST SE**
	22	ABS left-front inlet solenoid valve malfunction					**ST SE**
	23	ABS left-front inlet solenoid valve malfunction					**ST SE**
34	01	ABS left-front outlet solenoid valve malfunction	ON	ON	ON	ON	**ST SE**
	21	ABS left-front outlet solenoid valve malfunction					**ST SE**
	22	ABS left-front outlet solenoid					**ST**

		valve malfunction					**SE**
	23	ABS left-front outlet solenoid valve malfunction					**ST SE**
35	01	ABS right-rear inlet solenoid valve malfunction	ON	ON	ON	ON	**ST SE**
	21	ABS right-rear inlet solenoid valve malfunction					**ST SE**
	22	ABS right-rear inlet solenoid valve malfunction					**ST SE**
	23	ABS right-rear inlet solenoid valve malfunction					**ST SE**
36	01	ABS right-rear outlet solenoid valve malfunction	ON	ON	ON	ON	**ST SE**
	21	ABS right-rear outlet solenoid valve malfunction					**ST SE**
	22	ABS right-rear outlet solenoid valve malfunction					**ST SE**

	23	ABS right-rear outlet solenoid valve malfunction					**ST SE**
37	01	ABS left-rear inlet solenoid valve malfunction	ON	ON	ON	ON	**ST SE**
	21	ABS left-rear inlet solenoid valve malfunction					**ST SE**
	22	ABS left-rear inlet solenoid valve malfunction					**ST SE**
	23	ABS left-rear inlet solenoid valve malfunction					**ST SE**
38	01	ABS left-rear outlet solenoid valve malfunction	ON	ON	ON	ON	**ST SE**
	21	ABS left-rear outlet solenoid valve malfunction					**ST SE**
	22	ABS left-rear outlet solenoid valve malfunction					**ST SE**
	23	ABS left-rear outlet solenoid					**ST**

		valve malfunction					**SE**
41	21	Right-front wheel lock	ON	ON/OFF (1)	ON	ON	(see **D** **I** **LEFT** **I** **RIGH** **I** **LEF**
42	21	Left-front wheel lock	ON	ON/OFF (1)	ON	ON	(see **D** **I** **LEFT** **I** **RIGH** **I** **LEF**
43	21	Right-rear wheel lock	ON	ON/OFF (1)	ON	ON	(see **D** **I** **LEFT** **I** **RIGH** **I** **LEF**
44	21	Left-rear wheel lock	ON	ON/OFF (1)	ON	ON	(see **D** **I** **LEFT** **I** **RIGH**

							I LEF
51	11	Motor lock	ON	OFF	ON	ON	**MO 51-13: OFF I**
	12	Motor lock circuit malfunction					**MO 51-13: OFF I**
	13	Motor relay OFF malfunction					**MO 51-13: OFF I**
52	12	Motor lock circuit malfunction					I
53	01	Motor relay stuck ON	(see **DTC 53-01: MOTOR RELAY STUCK ON, DTC 53-12: MOTOR RELAY STUCK ON**)				
	12	Motor relay stuck ON	(see **DTC 53-01: MOTOR RELAY STUCK ON, DTC 53-12: MOTOR RELAY STUCK ON**)				
54	03	Fail-safe relay 1 stuck ON	ON	ON	ON	ON	(see **SAFE ON, SAFE OFF, SAFE**

	04	Fail-safe relay 1 stuck OFF 1					(see **SAFE ON, SAFE OFF, SAFE**
	21	Fail-safe relay 1 stuck OFF 2					(see **SAFE ON, SAFE OFF, SAFE**
56	01	Initial VIG FET stuck OFF	(see **DTC 54-03: FAIL-SAFE RELAY 1 STUCK ON, DTC 54-04: FAIL-SAFE RELAY 1 STUCK OFF, DTC 54-21: FAIL-SAFE RELAY 1 STUCK OFF 2**)				
	02	Initial VIG FET stuck ON	(see **DTC 54-03: FAIL-SAFE RELAY 1 STUCK ON, DTC 54-04: FAIL-SAFE RELAY 1 STUCK OFF, DTC 54-21: FAIL-SAFE RELAY 1 STUCK OFF 2**)				
	11	VIG FET stuck OFF	(see **DTC 54-03: FAIL-SAFE RELAY 1 STUCK ON, DTC 54-04: FAIL-SAFE RELAY 1 STUCK**				

			OFF, DTC 54-21: FAIL-SAFE RELAY 1 STUCK OFF 2)				
61	01	VSA modulator-control unit initial IG low voltage	ON	ON/OFF	ON	ON	(se **VOLT VS** **POWE VOLT VS** **POWE VOLT VS** **POWE**
	21	VSA modulator-control unit power source low voltage					(se **VOLT VS** **POWE VOLT VS** **POWE VOLT VS**

						POWE
22	VSA modulator-control unit power source low voltage					(se **VOLT** **VS** **POWE** **VOLT** **VS** **POWE** **VOLT** **VS** **POWE**
23	VSA modulator-control unit power source low voltage					(se **VOLT** **VS** **POWE** **VOLT** **VS** **POWE** **VOLT** **VS**

							POWE
62	22	VSA modulator-control unit IG high voltage	ON	ON	ON	ON	(se **CC H**
64	11	Steering angle sensor power circuit short	OFF	OFF	ON	ON	**ST C**
	12	Steering angle sensor power circuit open					**ST**
65	21	Brake fluid level stuck ON	OFF	OFF	ON	ON	(see **D' FLUI**
66	11	VSA pressure sensor (inside of VSA modulator-control unit) malfunction	OFF	OFF	ON	ON	**PR MAL SEN VS MAL SEN VS MAL SEN**

						VS **MAL** **SEN** **VS**
12	VSA pressure sensor (inside of VSA modulator-control unit) malfunction					**PR** **MAL** **SEN** **VS** **MAL** **SEN** **VS** **MAL** **SEN** **VS** **MAL** **SEN** **VS**
13	VSA pressure					

	sensor (inside of VSA modulator-control unit) malfunction					PR MAL SEN VS MAL SEN VS MAL SEN VS MAL SEN VS M
14	VSA pressure sensor (inside of VSA modulator-control unit) malfunction					PR MAL SEN VS

						MAL SEN VS MAL SEN VS MAL SEN VS I
	15	VSA pressure sensor (inside of VSA modulator-control unit) malfunction				PR I
	16	VSA pressure sensor (inside of VSA modulator-control unit) malfunction				PR MAL SEN VS MAL SEN

							VS **MAL** **SEN** **VS** **MAL** **SEN** **VS**
68	21	Brake pedal position switch stuck OFF	OFF	OFF	ON	ON	**PR**
	22	Brake pedal position switch stuck ON					(see **D** **P** **SWI**
71	27	Right-front or left-rear different diameter tire malfunction	ON/OFF	ON/OFF	ON	ON	(see **D** **R** **MAL** **71-** **MAL** **71-2** **A**

							] **MAL** **71-2** **A**] **MAL** **71-2** **AN**] **MAL** **71** **A**] **M**
	28	Left-front or right-rear different diameter tire malfunction					(see **DT** **F** **R**] **MAL** **71-** **(**] **MAL** **71-29** **A**] **MAL** **71-2** **A**

							] **MAL** **71-** **AN**] **MAL** **71** **A**] **N**
	29	Right-front and right-rear different diameter tire malfunction					(see **D** **F** **R**] **MAL** **71-** **(**] **MAL** **71-29** **A**] **MAL** **71-** **A**] **MAL** **71-** **AN**

							] **MAL** **71** **A**] **N**
	2A	Left-front and left-rear different diameter tire malfunction					(see **D** **F** **R**] **MAL** **71-** **(**] **MAL** **71-29** **A**] **MAL** **71-** **A**] **MAL** **71-** **AN**] **MAL** **71** **A**

						] I
2B	Left-front and right-rear different diameter tire malfunction					(see **D** **F** **R**] **MAL** **71-** **(**] **MAL** **71-29** **A**] **MAL** **71-** **A**] **MAL** **71-** **AN**] **MAL** **71** **A**] I
2C	Left-rear and right-rear different					(see **D** **F** **R**

		diameter tire malfunction					**MAL 71- (MAL 71-29 A MAL 71-2 A MAL 71-2 AN MAL 71 A M**
81	01	Central processing unit (CPU) internal circuit malfunction	ON	OFF	ON	ON	**PR (M**
	02	Central processing unit					

	(CPU) internal circuit malfunction					**PR (** N
03	Central processing unit (CPU) internal circuit malfunction					**PR (** N
05	Central processing unit (CPU) internal circuit malfunction					**PR (** N
06	Central processing unit (CPU) internal circuit malfunction					**PR (**
07	Central processing unit (CPU) internal circuit malfunction					**PR (** N
08	Central processing unit (CPU) internal circuit malfunction					**PR (** N
11	Central					

	processing unit (CPU) internal circuit malfunction					**PR (** I
12	Central processing unit (CPU) internal circuit malfunction					**PR (** I
13	Central processing unit (CPU) internal circuit malfunction					**PR (** I
14	Central processing unit (CPU) internal circuit malfunction					**PR (** I
21	Central processing unit (CPU) internal circuit malfunction					**PR (** I
22	Central processing unit (CPU) internal circuit malfunction					**PR (** I

23	Central processing unit (CPU) internal circuit malfunction					**PR (** N
31	Central processing unit (CPU) internal circuit malfunction					**PR (** N
32	Central processing unit (CPU) internal circuit malfunction					**PR (** N
33	Central processing unit (CPU) internal circuit malfunction					**PR (** N
35	Central processing unit (CPU) internal circuit malfunction					**PR (** N
36	Central processing unit (CPU) internal circuit malfunction					**PR (**

						N
37	Central processing unit (CPU) internal circuit malfunction					**PR** **(** N
38	Central processing unit (CPU) internal circuit malfunction					**PR** **(** N
39	Central processing unit (CPU) internal circuit malfunction					**PR** **(** N
40	Central processing unit (CPU) internal circuit malfunction					**PR** **(** N
41	Central processing unit (CPU) internal circuit malfunction					**PR** **(** N
42	Central processing unit (CPU) internal circuit					**PR** **(**

		malfunction					
81	51	Central processing unit (CPU) internal circuit malfunction	ON	OFF	ON	ON	(see **D Pro Malfu Centi (CP Malfu Centi (CP Malfu Centi (CP**
	52	Central processing unit (CPU) internal circuit malfunction					**PR (I**
	53	Central processing unit (CPU) internal circuit malfunction					(see **D Pro Malfu Centi (CP Malfu Centi (CP Malfu Centi (CP**
	54	Central					

	processing unit (CPU) internal circuit malfunction					**PR (** **I**
55	Central processing unit (CPU) internal circuit malfunction					(see **D Pro** **Malfu Centi (CP Malfu Centi (CP Malfu Centi (CP**
56	Central processing unit (CPU) internal circuit malfunction					**PR (** **I**
57	Central processing unit (CPU) internal circuit malfunction					(see **D Pro** **Malfu Centi (CP Malfu Centi (CP Malfu Centi**

						(CP
58	Central processing unit (CPU) internal circuit malfunction					**PR (**
59	Central processing unit (CPU) internal circuit malfunction					**PR (** **MAL** **PR (** **DTC PR (**
71	Central processing unit (CPU) internal circuit malfunction					**PR (**
80	Central processing unit (CPU) internal circuit malfunction					**PR (**

						N
3A	Central processing unit (CPU) internal circuit malfunction					**PR (N**
3C	Central processing unit (CPU) internal circuit malfunction					**PR (N**
3D	Central processing unit (CPU) internal circuit malfunction					**PR (MAL PR (DTC PR (N**
3E	Central processing unit (CPU) internal circuit malfunction					**PR (MAL**

							PR (**MAL** **PR (**
83	13	ECM/PCM relation failure	OFF	OFF	ON	ON	**ECM FAI ECM**
	14	ECM/PCM relation failure					**ECM FAI ECM**
84	21	VSA sensor neutral position not writing	OFF	OFF	ON	ON	**ECM FAI ECM**
86	01	F-CAN BUS-OFF malfunction	OFF	OFF	ON	ON	(see **I MAL**
	11	F-CAN communication with ECM/PCM malfunction					(see **I C MAL C**

							MAL **CC** **MAL** **CC** **MAL** **CC** I
	21	F-CAN communication with engine malfunction					(see **I** **CC** **MAL** **CC** **MAL** **CC** **MAL** **CC** **MAL** **CC** I
	22	F-CAN communication					(see **I** **CC**

	with engine malfunction					MAL CC MAL CC MAL CC MAL CC I
23	F-CAN communication with engine malfunction					(see I CC MAL CC MAL CC MAL CC MAL

							CC **N**
	31	F-CAN communication with gauge control module malfunction					(see **I** **CC** **CON** **N**
	41	F-CAN communication with EAT malfunction					(see **I** **CC** **MAL** **CC** **MAL** **CC** **MAL** **CC** **MAL** **CC** **N**
107	22	Central processing unit (CPU) internal circuit malfunction					**PR** **(** **N**
108	21	Steering angle					

		sensor malfunction					**PR (** I
112	01	Central processing unit (CPU) internal circuit malfunction					**PR (** I
121	01	VSA sensor valve module malfunction	ON	ON	ON	ON	**PR (** I
	02	VSA solenoid valve malfunction					**PR (** I
	11	VSA solenoid valve malfunction					**PR (** I
	21	VSA solenoid valve malfunction					**PR (** I

	22	VSA solenoid valve malfunction					**PR**
	23	VSA solenoid valve malfunction					**PR**
	24	VSA solenoid valve malfunction					**PR**
122	01	VSA solenoid valve malfunction	ON	ON	ON	ON	**PR**
	21	VSA solenoid valve malfunction					**PR**
	22	VSA solenoid valve malfunction					**PR**

	23	VSA solenoid valve malfunction					**PR**
123	01	VSA solenoid valve malfunction	ON	ON	ON	ON	**PR**
	02	VSA solenoid valve malfunction					**PR**
	11	VSA solenoid valve malfunction					**PR**
	21	VSA solenoid valve malfunction					**PR**
	22	VSA solenoid valve malfunction					**PR**

							I
	23	VSA solenoid valve malfunction					**PR** **(** I
	24	VSA solenoid valve malfunction					**PR** **(** I
124	01	VSA solenoid valve malfunction	ON	ON	ON	ON	**PR** **(** I
	21	VSA solenoid valve malfunction					**PR** **(** I
	22	VSA solenoid valve malfunction					**PR** **(** I
	23	VSA solenoid valve malfunction					**PR**

(1) Brake system indicator turns ON when 2 or more wheels fail.

SYMPTOM TROUBLESHOOTING INDEX

When the vehicle has one of these symptoms, check for diagnostic trouble code (DTC) with the HDS. If there is no DTC, do the diagnostic procedure for the symptom, in the sequence listed, until you find the cause.

SYMPTOM TROUBLESHOOTING INDEX

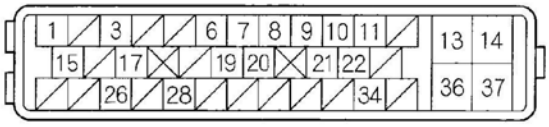
Symptom	Diagnostic procedure
ABS indicator and VSA indicator do not go off, and no DTC's are stored	Symptom Troubleshooting (see **SYMPTOM TROUBLESHOOTING**).
ABS indicator does not come on	1. Do the gauge control module troubleshooting, refer to **DTC TROUBLESHOOTING** . 2. Substitute a known-good VSA modulator-control unit, then recheck. If it is OK, replace the original VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).
Brake system indicator does not come on	1. Do the gauge control module troubleshooting, refer to**DTC TROUBLESHOOTING** . 2. Substitute a known-good VSA modulator-control unit, then recheck. If it is OK, replace the original VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT**

	REMOVAL AND INSTALLATION).
Brake system indicator does not go off	Do the gauge control module troubleshooting, refer to**DTC TROUBLESHOOTING** .
VSA indicator does not come on	1. Do the gauge control module troubleshooting, refer to**DTC TROUBLESHOOTING** . 2. Substitute a known-good VSA modulator-control unit, then recheck. If it is OK, replace the original VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).
VSA activation indicator does not go off, and no DTCs are stored	1. Do the gauge control module troubleshooting, refer to**DTC TROUBLESHOOTING** . 2. Substitute a known-good VSA modulator-control unit, then recheck. If it is OK, replace the original VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**). 3. Symptom Troubleshooting (see **VSA ACTIVATION INDICATOR DOES NOT GO OFF, AND NO DTCS ARE STORED**).
VSA activation indicator does not	1. Do the gauge control module troubleshooting, refer to**DTC TROUBLESHOOTING** . 2. Substitute a known-good VSA

come on at start-up (bulb check)	modulator-control unit, then recheck. If it is OK, replace the original VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

SYSTEM DESCRIPTION

VSA MODULATOR-CONTROL UNIT INPUTS AND OUTPUTS FOR 37P CONNECTOR (CONNECTOR ATTACHED TO THE VSA MODULATOR-CONTROL UNIT. BACK-PROBE THE TERMINALS WHEN TESTING.)



Wire side of female terminals

Terminal number	Wire color	Terminal sign	Description	Measurement (Disconnect the VSA modulator-control unit 37P connector)		
				Terminals	Conditions	Voltage
1	RED	CAN-L	CAN communication circuit	1—GND	—	—
3	BLU/ RED	STR-D	Detects steering angle sensor	3—GND	—	—
6	PNK	FR-GND	Detects right-front wheel sensor signal	6—GND	—	—
7	RED/ WHT	SVCC	Power source for the sensors	7—GND	—	—
8	RED	RL-GND	Detects left-rear wheel sensor signal	8—GND	—	—
9	GRN/ YEL	RR +B	Detects right-rear wheel sensor signal	9—GND	—	—
10	YEL/ BLK	SGND	Ground for the sensors	10—GND	—	—
11	BRN/ WHT	FL-GND	Detects left-front wheel sensor signal	11—GND	—	—
13	WHT	FSR +B	Power source for the fail-safe relay	13—GND	At all times	Battery voltage
14	WHT/ RED	MR +B	Power source for the motor relay	14—GND	—	—
15	WHT	CAN-H	CAN communication circuit	15—GND	—	—
17	GRN/ WHT	STR-B	Detects steering angle sensor signal	16—GND	—	—
19	GRN/ BLK	FR +B	Detects right-front wheel sensor signal	19—GND	—	—
20	YEL/ RED	RL +B	Detects right-rear wheel sensor signal	20—GND	—	—
21	BLU/ YEL	RR-GND	Detects right-rear wheel sensor signal	21—GND	—	—
22	BLU/ WHT	FL +B	Detects left-front wheel sensor signal	22—GND	—	—
26	BLU	K-LINE	Communications with HDS	26—GND	—	—
28	BLK/ RED	IG1	Power source for activating the system	28—GND	—	Battery voltage
29	GRN	GLAT	Detects lateral acceleration sensor signal	29—GND	—	—
31	BLU/ BLK	YAW	Detects yaw rate sensor signal	31—GND	—	—
34	GRN/ RED	STR-A	Detects steering angle sensor signal	34—GND	—	—
36	BLK	GND	Ground for the VSA modulator-control unit	36—GND	—	0.1 V or less
37	BLK	MR-GND	Ground for the pump motor	37—GND	—	0.1 V or less

G03673117

Fig. 4: Identifying VSA Modulator-Control Unit Inputs and Outputs for 37P

Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYSTEM OUTLINE

This system is composed of the VSA modulator-control unit, the wheel sensor, steering angle sensor, and yaw rate-lateral acceleration sensor, and do the ABS, EBD, TCS, VSA, and brake assist control by controlling the brake pressure of each wheel and the engine torque.

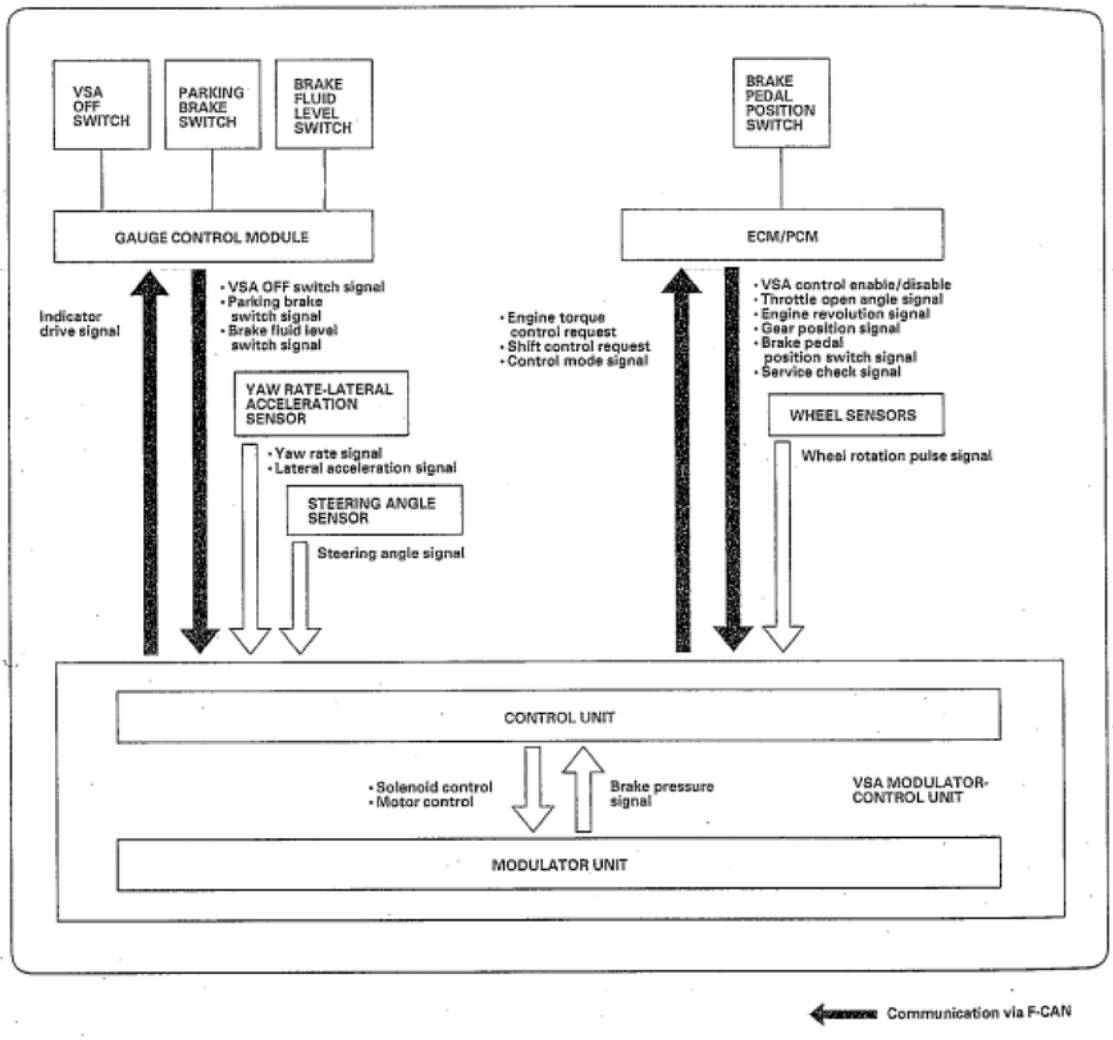


Fig. 5: VSA Modulator-Control Unit System Outline
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ABS FEATURES

Anti-lock control

When the brake pedal is pressed while driving, the wheels sometimes lock before the vehicle comes to a stop. In such an event, the maneuverability of the vehicle is reduced if the front wheels are locked, and the stability of the vehicle is reduced if the rear wheels are locked, creating an extremely unstable condition. The ABS precisely controls the slip rate of the wheels to ensure maximum grip force from the tires, and it thereby ensures maneuverability and stability of the vehicle. The ABS calculates the slip rate of the wheels based on the four wheel speed, then it controls the brake fluid pressure to reach the target slip rate.

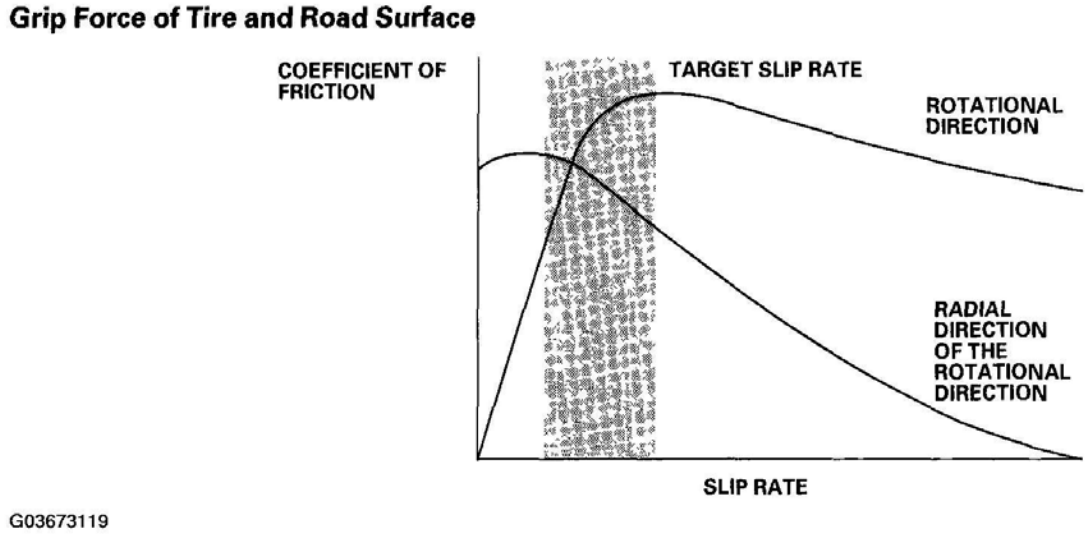


Fig. 6: Grip Force Of Tire And Road Surface Graph
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ABS CONTROL UNIT

Main Control

The control unit detects the wheel speed based on the wheel sensor signal it received, then it calculates the vehicle speed based on the detected wheel speed. The control unit detects the vehicle speed during deceleration based on the rate of deceleration.

The control unit calculates the slip rate of each wheel, and transmits the control

signal to the modulator unit solenoid valve when the slip rate is high.

The hydraulic control has three modes pressure: Pressure reducing pressure, pressure retaining, pressure intensifying.

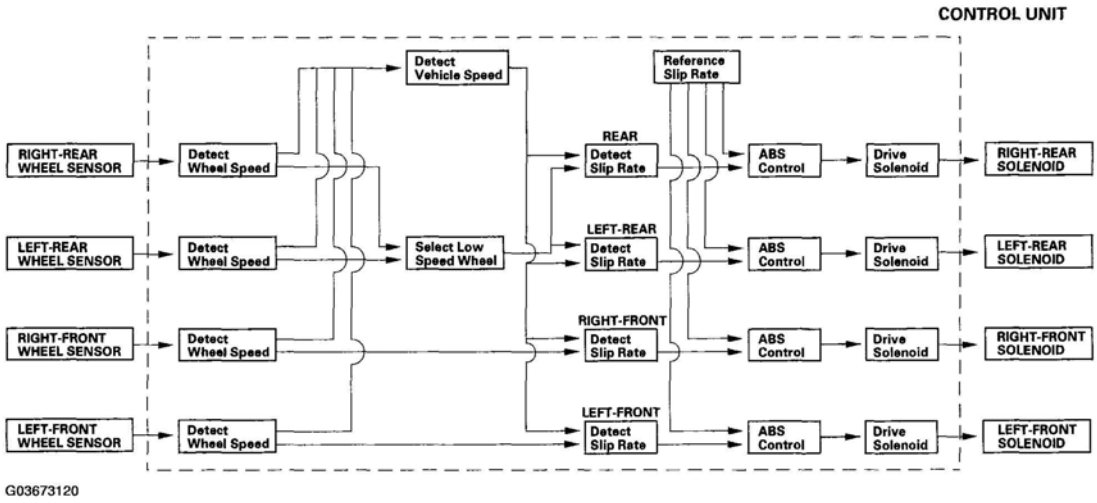


Fig. 7: ABS Control Unit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

EBD FEATURES

The electronic brake distribution (EBD) helps control vehicle braking by adjusting the rear brake force in accordance with rear wheel load before the ABS operates. Based on wheel sensor signals, the ABS control unit uses the modulator to control the rear brakes individually. When the rear wheel speed is less than the front wheel speed, the VSA modulator-control unit retains the current rear brake fluid pressure by closing the inlet valve in the modulator. As the rear wheel speed increases and approaches the front wheel speed, the VSA modulator-control unit increases the rear brake fluid pressure by momentarily opening the inlet valve. This whole process is repeated very rapidly. While this is happening, there is kickback at the brake pedal.

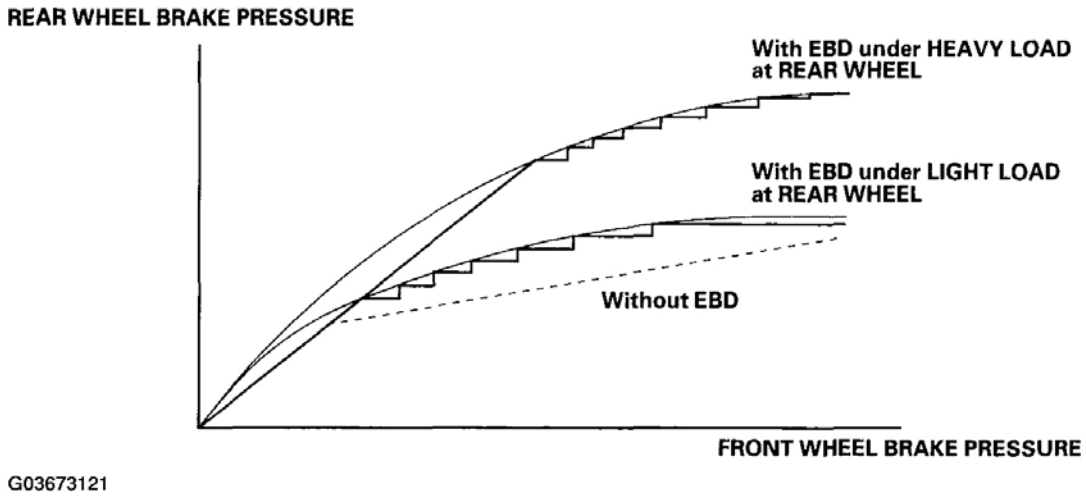


Fig. 8: Identifying EBD Features
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TCS FEATURES

When a drive wheel loses traction on a slippery road surface and starts to spin, the VSA modulator-control unit applies brake pressure to the spinning wheel and sends engine torque control request to the ECM/PCM to slow the spinning wheel and keep traction.

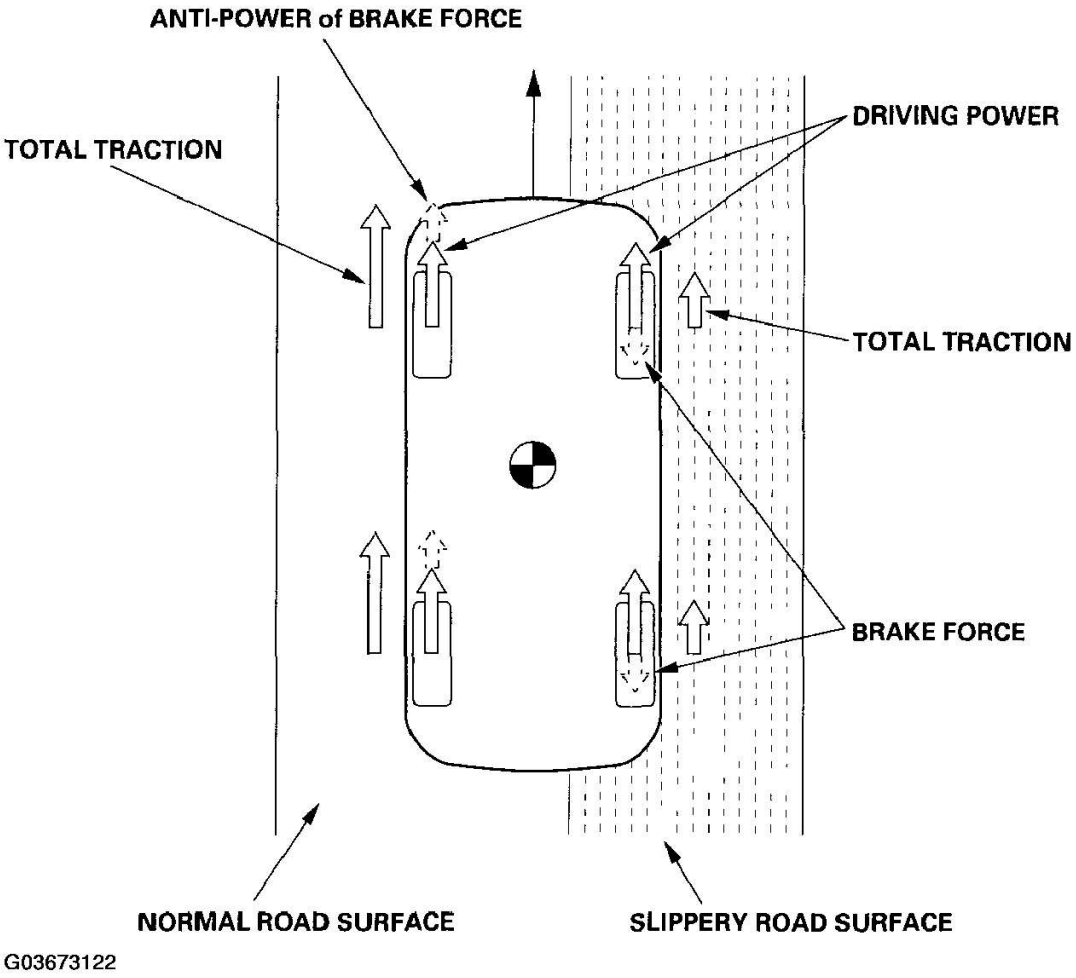


Fig. 9: Identifying TCS Features
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VSA SYSTEM FEATURES

Oversteer control

Applies the brake to the front and rear outside wheels

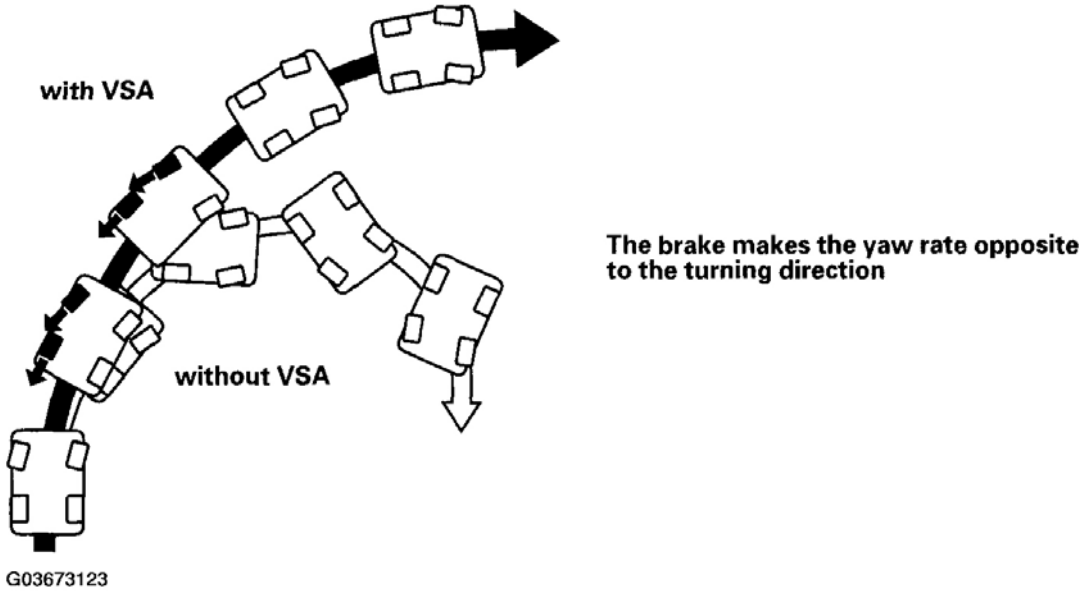


Fig. 10: Identifying VSA System Features (Oversteer Control)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Understeer control

- Applies the brake to the front and rear inside wheels
- Controls the engine torque when accelerating

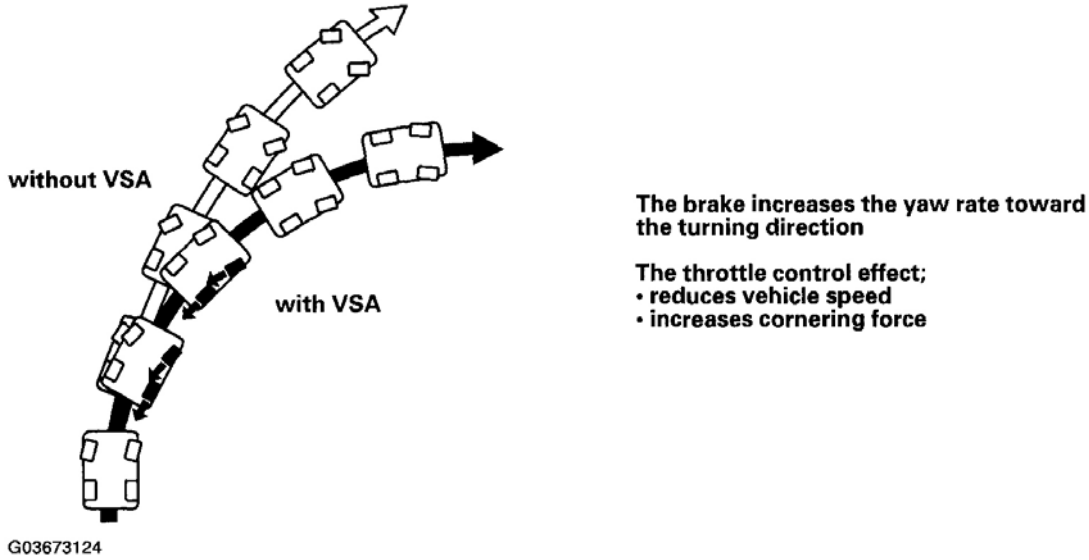


Fig. 11: Identifying VSA System Features (Understeer Control)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

BRAKE ASSIST FEATURES

Brake assist helps ensure that any driver can achieve the full braking potential of the vehicle by increasing brake system pressure in a panic situation, bringing the vehicle into a full ABS stop.

Each time the ignition switch is turned ON (II), the VSA modulator-control unit learns the current driver's normal braking characteristics by monitoring the brake pressure sensor and the brake pedal position switch at each stop. Using these inputs and their values, the VSA modulator-control unit is able to learn the driver's normal braking habits, and then determine the difference between a normal stop and a panic stop for the individual driver of the vehicle. If during a panic stop the VSA modulator-control unit determines that the brake system pressure increases above a learned threshold in less than a learned amount of time, the VSA modulator-control unit engages brake assist. Because the brake system pressure crossed the threshold before the time threshold had expired, the VSA modulator-control unit goes into brake assist mode.

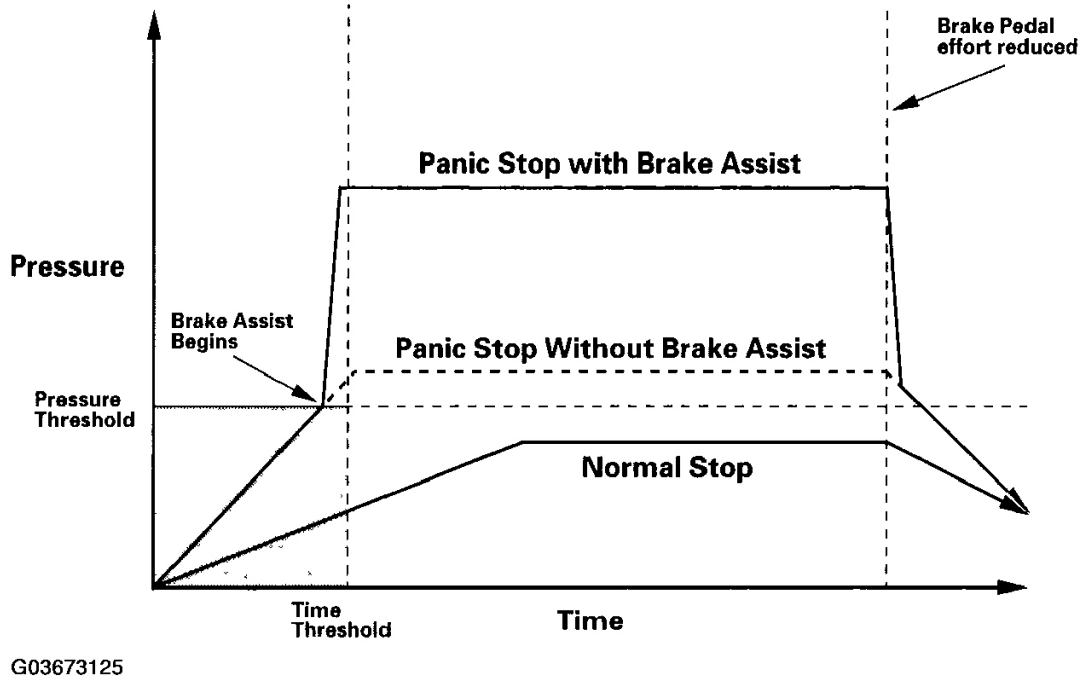


Fig. 12: Identifying Brake Assist Features
Courtesy of AMERICAN HONDA MOTOR CO., INC.

MODULATOR UNIT

The modulator unit consists of the inlet solenoid valve, outlet solenoid valve, VSA NO (normally open) solenoid valve, VSA NC (normally closed) solenoid valve, reservoir, pump, pump motor, and the damping chamber.

The hydraulic control has three modes at ABS action; pressure intensifying, pressure retaining, and pressure reducing. And pressure adding mode is combined at TCS, VSA, and brake assist action.

The hydraulic circuit is an independent four channel type, one channel for each wheel.

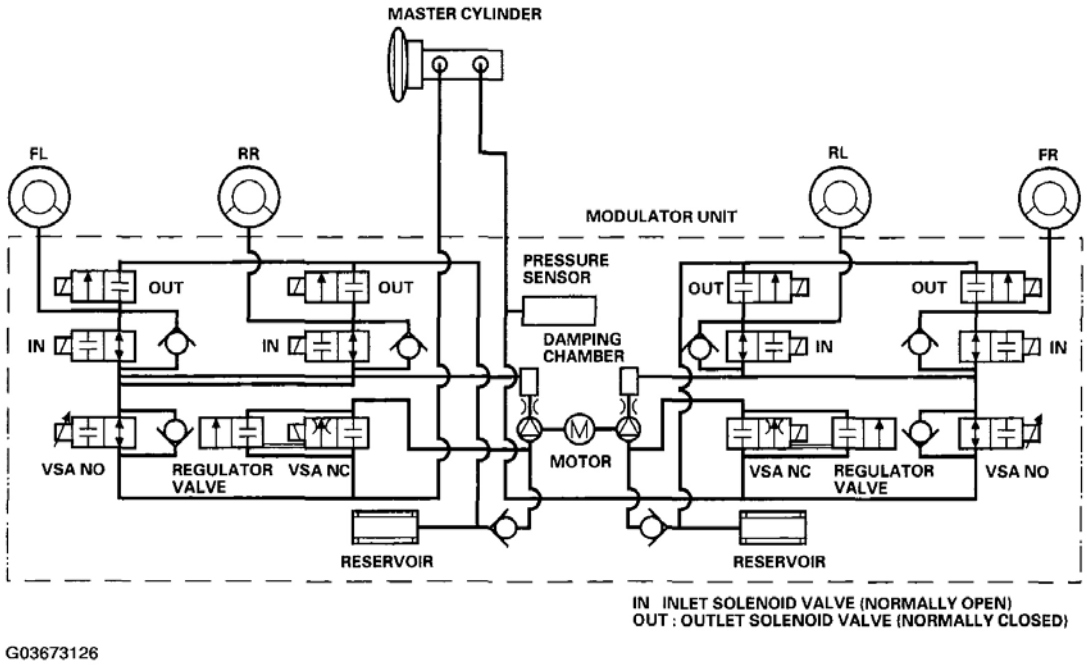


Fig. 13: Modulator Unit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SOLENOID VALVE OPERATION SPECIFICATION

Mode	VSA NO Valve	VSA NC Valve	Inlet Solenoid Valve	Outlet Solenoid Valve	Brake Fluid
Pressure intensifying mode	open	closed	open	closed	Master cylinder fluid is pumped out to the caliper.
Pressure retaining mode	open	closed	closed	closed	Caliper fluid is retained by the inlet valve and outlet valve.
Pressure reducing mode	open	closed	closed	open	• Caliper fluid flows through

					the outlet valve to the reservoir. • The reservoir fluid is pumped out by the pump with motor(1), through the damping chamber, to the master cylinder.
Pressure adding mode	closed	open	open	closed	• Master cylinder fluid is pumped out by pump with motor through VSA NC valve to the caliper. • Caliper fluid

					pressure exceed master cylinder pressure.

(1) The motor will be keep the action until operation of the one anti-lock brake control is finished from the first pressure reducing mode.

CIRCUIT DIAGRAM

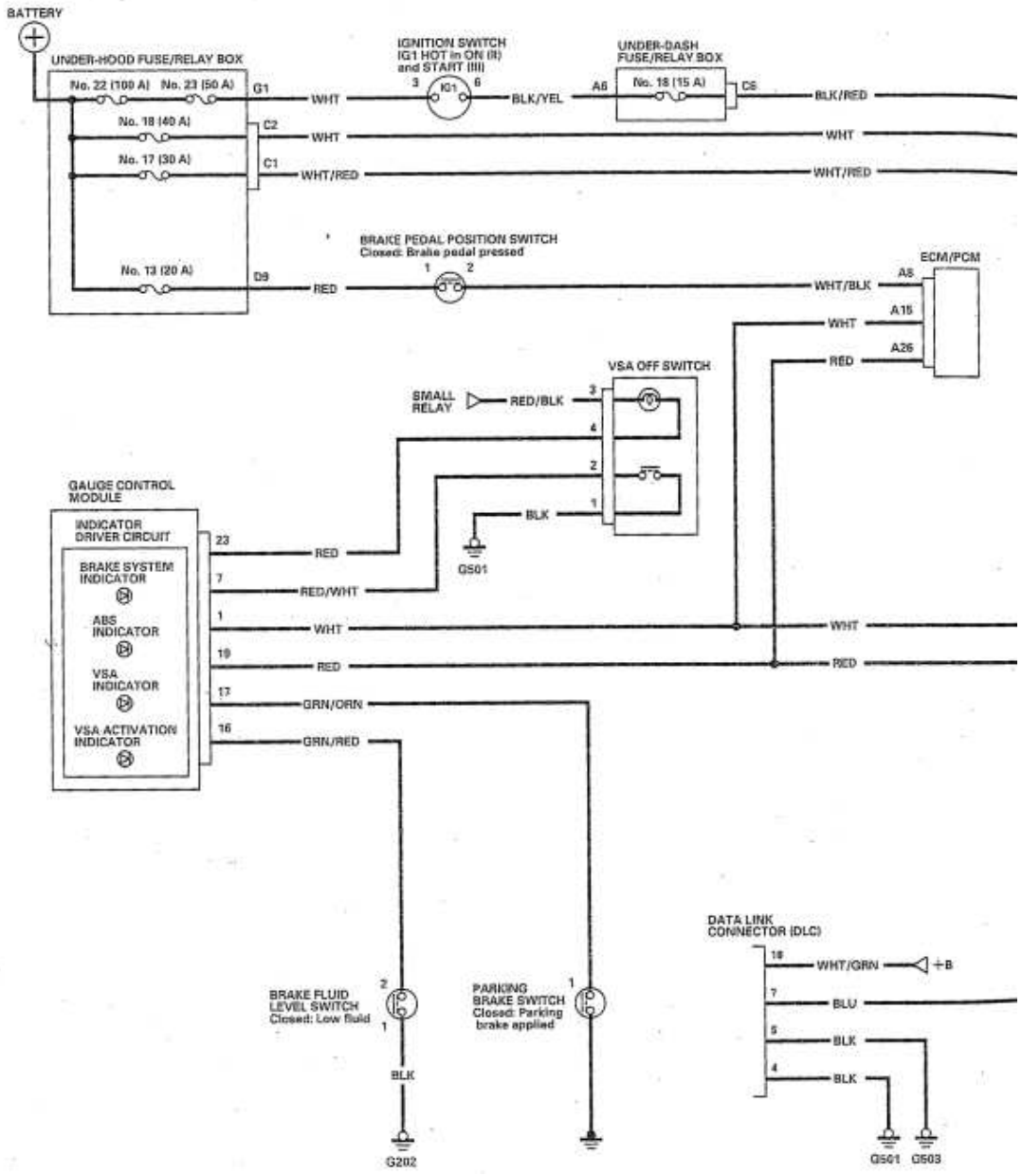


Fig. 14: VSA System Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

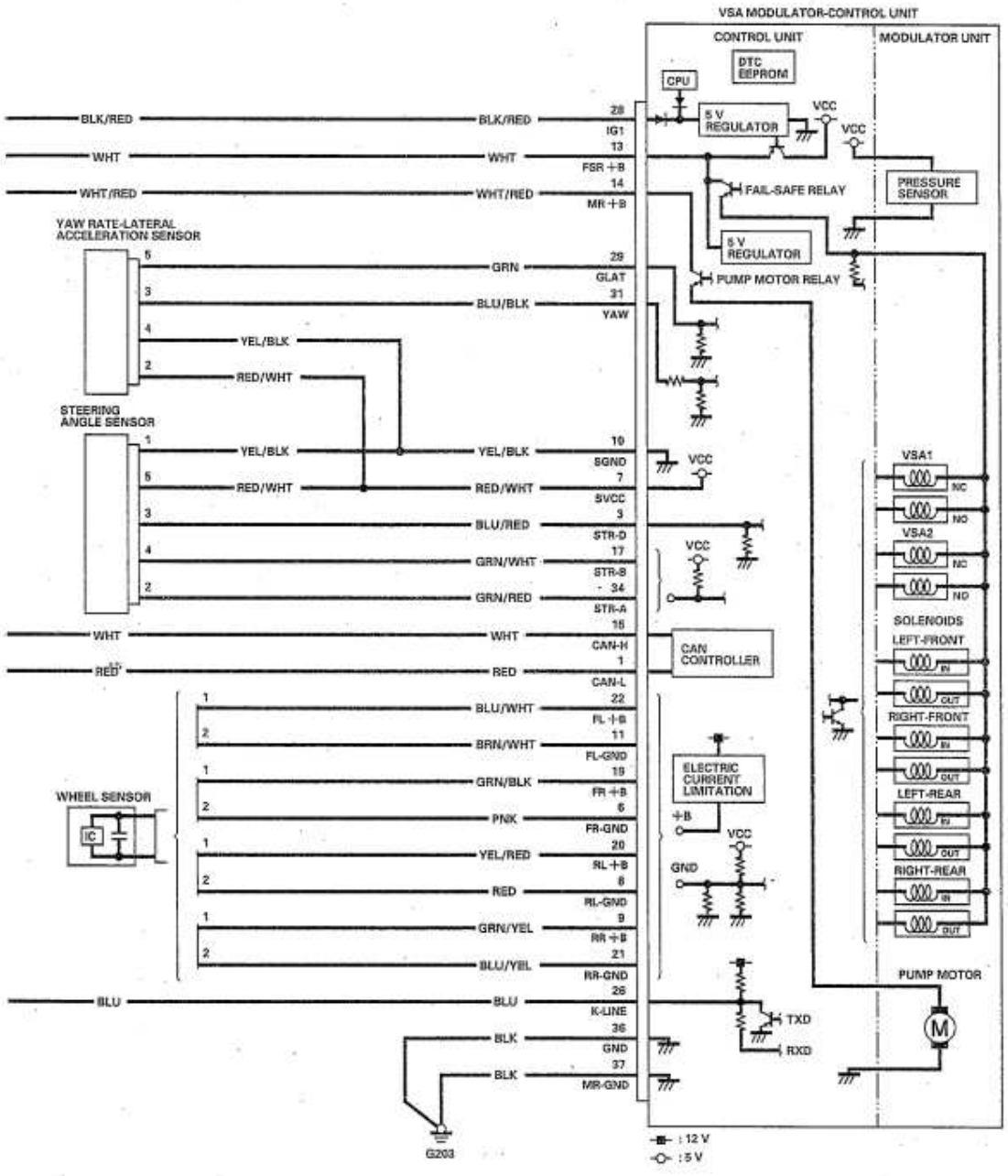


Fig. 15: VSA System Circuit Diagram (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

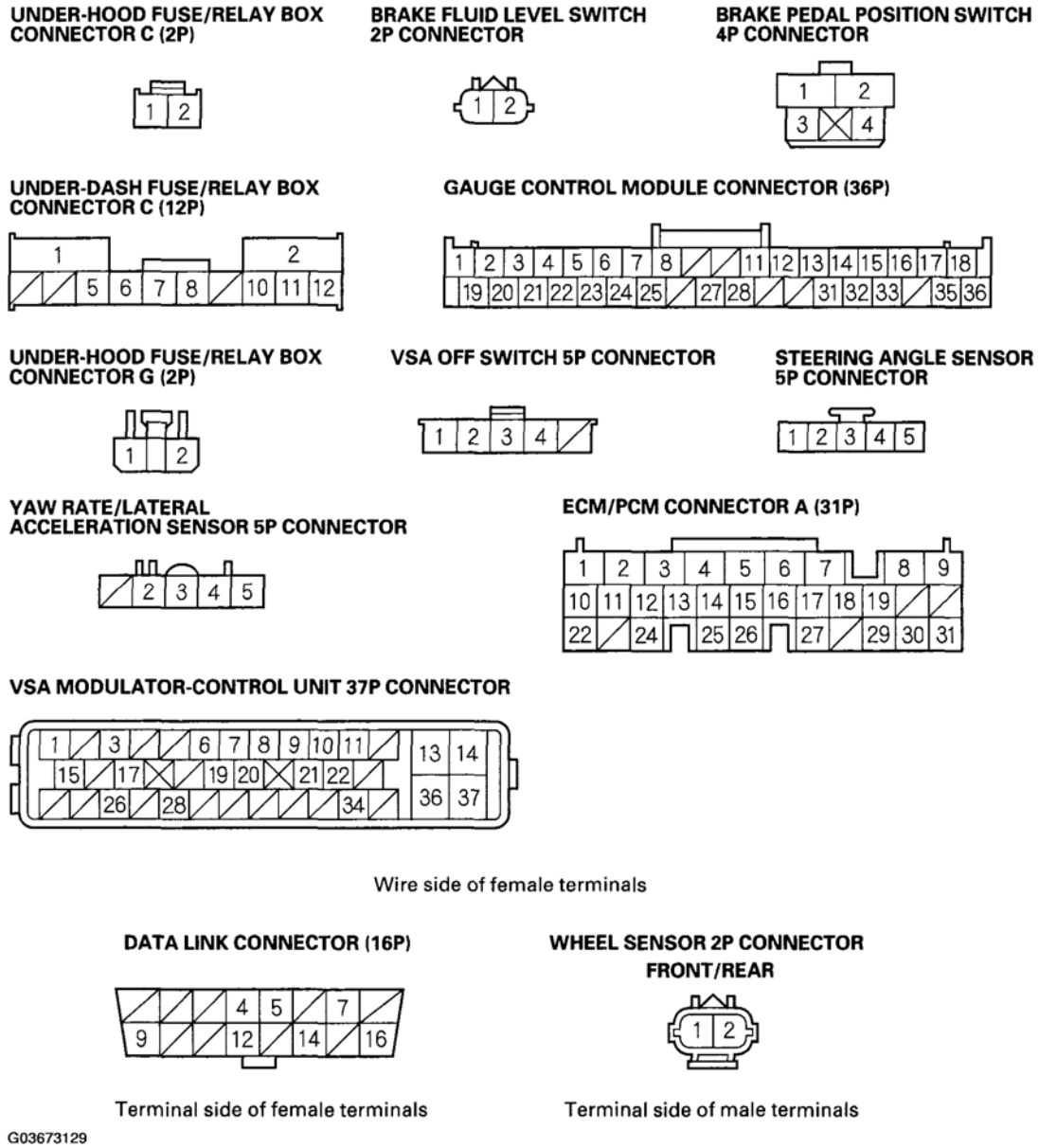


Fig. 16: Identifying VSA System Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC CODES

DTC CHART

DTC	Description
DTC 11-13	Right-front Wheel Sensor Circuit

	Malfunction
DTC 13-13	Left-front Wheel Sensor Circuit Malfunction
DTC 15-13	Right-rear Wheel Sensor Circuit Malfunction
DTC 17-13	Left-rear Wheel Sensor Circuit Malfunction
DTC 12-11	Right-front Wheel Sensor Electrical Noise or Intermittent Interruption
DTC 14-11	Left-front Wheel Sensor Electrical Noise or Intermittent Interruption
DTC 16-11	Right-rear Wheel Sensor Electrical Noise or Intermittent Interruption
DTC 18-11	Left-rear Wheel Sensor Electrical Noise or Intermittent Interruption
DTC 12-12	Right-front Wheel Sensor Short to the Other Sensor Line (13 mph (20 km/h) or more)
DTC 14-12	Left-front Wheel Sensor Short to the Other Sensor Line (13 mph (20 km/h) or more)
DTC 16-12	Right-rear Wheel Sensor Short to the Other Sensor Line (13 mph (20 km/h) or more)
DTC 18-12	Left-rear Wheel Sensor Short to the Other Sensor Line (13 mph (20 km/h) or more)
DTC 12-21	Right-front Wheel Sensor Installation Error (Start to 15 Seconds)
DTC 14-21	Left-front Wheel Sensor Installation Error (Start to 15 Seconds)
DTC 16-21	Right-rear Wheel Sensor Installation Error (Start to 15 Seconds)

DTC 18-21	Left-rear Wheel Sensor Installation Error (Start to 15 Seconds)
DTC 12-22	Right-front Wheel Sensor Installation Error (19 mph (30 km/h) or more)
DTC 14-22	Left-front Wheel Sensor Installation Error (19 mph (30 km/h) or more)
DTC 16-22	Right-rear Wheel Sensor Installation Error (19 mph (30 km/h) or more)
DTC 18-22	Left-rear Wheel Sensor Installation Error (19 mph (30 km/h) or more)
DTC 12-23	Right-front Wheel Sensor Installation Error (0 to 9 mph (0 to 15 km/h))
DTC 14-23	Left-front Wheel Sensor Installation Error (0 to 9 mph (0 to 15 km/h))
DTC 16-23	Right-rear Wheel Sensor Installation Error (0 to 9 mph (0 to 15 km/h))
DTC 18-23	Left-rear Wheel Sensor Installation Error (0 to 9 mph (0 to 15 km/h))
DTC 21-11	Right-front Magnetic Encoder Malfunction (Corrugated Missing)
DTC 22-11	Left-front Magnetic Encoder Malfunction (Corrugated Missing)
DTC 23-11	Right-rear Pulser Malfunction (Corrugated Missing)
DTC 24-11	Left-rear Pulser Malfunction (Corrugated Missing)
DTC 25-11	Yaw Rate Sensor Internal Circuit Malfunction (Initial)
DTC 25-12	Yaw Rate Sensor Internal Circuit Malfunction (Open, Short)
DTC 25-21	Yaw Rate Sensor Neutral Position Malfunction
DTC 25-22	Yaw Rate Sensor Stuck

DTC 25-23	Yaw Rate Sensor Circuit Intermittent Interruption
DTC 25-24	Yaw Rate Sensor Gain High
DTC 25-25	Yaw Rate Sensor Gain Low
DTC 26-24	Lateral Acceleration Sensor Gain High
DTC 26-25	Lateral Acceleration Sensor Gain Low
DTC 26-11	Lateral Acceleration Sensor Internal Circuit Malfunction (Initial)
DTC 26-12	Lateral Acceleration Sensor Internal Circuit Malfunction (Open, Short)
DTC 26-21	Lateral Acceleration Sensor Stuck
DTC 26-23	Lateral Acceleration Sensor Circuit Intermittent Interruption
DTC 26-22	Lateral Acceleration Sensor Neutral Position Malfunction
DTC 27-11	Steering Angle Sensor DIAG Signal Error
DTC 27-26	Steering Angle Sensor DIAG Signal Error
DTC 27-21	Steering Angle Sensor Stuck Neutral Position,
DTC 27-22	Steering Angle Sensor Stuck Offset Position
DTC 27-23	Steering Angle Sensor Exchange Malfunction
DTC 27-24	Steering Angle Sensor Counter Malfunction
DTC 41-21	Right-front Wheel Lock
DTC 42-21	Left-front Wheel Lock
DTC 43-21	Right-rear Wheel Lock
DTC 44-21	Left-rear Wheel Lock
DTC 51-11	Motor Lock
DTC 51-13	Motor Relay OFF Malfunction

DTC 51-12	Motor Lock Circuit Malfunction
DTC 52-12	Motor Lock Circuit Malfunction
DTC 53-01	Motor Relay Stuck ON
DTC 53-12	Motor Relay Stuck ON
DTC 54-03	Fail-safe Relay 1 Stuck ON
DTC 54-04	Fail-safe Relay 1 Stuck OFF 1
DTC 54-21	Fail-safe Relay 1 Stuck OFF 2
DTC 56-01	Initial VIG FET Stuck OFF
DTC 56-02	Initial VIG FET Stuck ON
DTC 56-11	VIG FET Stuck OFF
DTC 61-01	VSA Modulator-control Unit Initial IG Low Voltage 11
DTC 61-21	VSA Modulator-control Unit Power Source Low Voltage
DTC 61-22	VSA Modulator-control Unit Power Source Low Voltage
DTC 61-23	VSA Modulator-control Unit Power Source Low Voltage
DTC 62-22	VSA Modulator-control Unit IG High Voltage
DTC 64-11	Steering Angle Sensor Power Circuit Short
DTC 64-12	Steering Angle Sensor Power Circuit Open
DTC 65-21	Brake Fluid Level Stuck ON
DTC 66-11	Pressure Sensor (Inside of VSA Modulator-control Unit) Malfunction
DTC 66-12	Pressure Sensor (Inside of VSA Modulator-control Unit) Malfunction
DTC 66-13	Pressure Sensor (Inside of VSA Modulator-control Unit) Malfunction
DTC 66-14	Pressure Sensor (Inside of VSA

	Modulator-control Unit) Malfunction
DTC 66-16	Pressure Sensor (Inside of VSA Modulator-control Unit) Malfunction
DTC 66-15	Pressure Sensor (Inside of VSA Modulator-control Unit) Malfunction
DTC 68-21	Brake Pedal Position Switch Stuck OFF
DTC 68-22	Brake Pedal Position Switch Stuck ON
DTC 71-27	Right-front or Left-rear Different Diameter Tire Malfunction
DTC 71-28	Left-front or Right-rear Different Diameter Tire Malfunction
DTC 71-29	Right-front and Right-rear Different Diameter Tire Malfunction
DTC 71-2A	Left-front and Left-rear Different Diameter Tire Malfunction
DTC 71-2B	Left-front and Right-front Different Diameter Tire Malfunction
DTC 71-2C	Left-rear and Right-rear Different Diameter Tire Malfunction
DTC 81-xx*	Central Processing Unit (CPU) Internal Circuit Malfunction
DTC 81-11	Central Processing Unit (CPU) Internal Circuit Malfunction
DTC 81-52	Central Processing Unit (CPU) Internal Circuit Malfunction
DTC 81-54	Central Processing Unit (CPU) Internal Circuit Malfunction
DTC 81-56	Central Processing Unit (CPU) Internal Circuit Malfunction
DTC 81-58	Central Processing Unit (CPU) Internal Circuit Malfunction
DTC 81-51: Central Processing Unit	Central Processing Unit (CPU) Internal

(CPU) Internal Circuit Malfunction, DTC 81-53: Central Processing Unit (CPU) Internal Circuit Malfunction, DTC 81-55: Central Processing Unit (CPU) Internal Circuit Malfunction, DTC 81-57: Central Processing Unit (CPU) Internal Circuit Malfunction	Circuit Malfunction
DTC 81-51: Central Processing Unit (CPU) Internal Circuit Malfunction, DTC 81-53: Central Processing Unit (CPU) Internal Circuit Malfunction, DTC 81-55: Central Processing Unit (CPU) Internal Circuit Malfunction, DTC 81-57: Central Processing Unit (CPU) Internal Circuit Malfunction	Central Processing Unit (CPU) Internal Circuit Malfunction
DTC 81-51: Central Processing Unit (CPU) Internal Circuit Malfunction, DTC 81-53: Central Processing Unit (CPU) Internal Circuit Malfunction, DTC 81-55: Central Processing Unit (CPU) Internal Circuit Malfunction, DTC 81-57: Central Processing Unit (CPU) Internal Circuit Malfunction	Central Processing Unit (CPU) Internal Circuit Malfunction
DTC 81-51: Central Processing Unit (CPU) Internal Circuit Malfunction, DTC 81-53: Central Processing Unit (CPU) Internal Circuit Malfunction, DTC 81-55: Central Processing Unit (CPU) Internal Circuit Malfunction, DTC 81-57: Central Processing Unit (CPU) Internal Circuit Malfunction	Central Processing Unit (CPU) Internal Circuit Malfunction
DTC 81-59	Central Processing Unit (CPU) Internal Circuit Malfunction
DTC 81-3D	Central Processing Unit (CPU) Internal Circuit Malfunction

DTC 81-3E	Central Processing Unit (CPU) Internal Circuit Malfunction
DTC 83-13	ECM/PCM Relation Failure
DTC 83-14	ECM/PCM Relation Failure
DTC 84-21	VSA Sensor Neutral Position not Writing
DTC 86-01	F-CAN Malfunction (BUS-OFF)
DTC 86-11	F-CAN Communication with ECM/PCM Malfunction
DTC 86-21	F-CAN Communication with Engine Malfunction
DTC 86-22	F-CAN Communication with Engine Malfunction
DTC 86-23	F-CAN Communication with Engine Malfunction
DTC 86-41	F-CAN Communication with EAT Malfunction
DTC 86-31	F-CAN Communication with Gauge Control Module Malfunction
DTC 107-22	Central Processing Unit (CPU) Internal Circuit Malfunction
DTC 108-21	Steering Angle Sensor Malfunction
DTC 112-01	Central Processing Unit (CPU) Internal Circuit Malfunction
DTC 121-xx	VSA Solenoid Valve Malfunction
DTC 122-xx	VSA Solenoid Valve Malfunction
DTC 123-xx	VSA Solenoid Valve Malfunction
DTC 124-xx	VSA Solenoid Valve Malfunction

DTC TROUBLESHOOTING

DTC 11-13: RIGHT-FRONT WHEEL SENSOR CIRCUIT MALFUNCTION, DTC 13-13: LEFT-FRONT WHEEL SENSOR CIRCUIT MALFUNCTION, DTC 15-13: RIGHT-REAR WHEEL SENSOR CIRCUIT MALFUNCTION, DTC 17-13: LEFT-REAR WHEEL SENSOR CIRCUIT MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS. Turn the ignition switch OFF, then ON (II) again.
3. Check for DTCs with the HDS.

   Is DTC 11-13, 13-13, 15-13, and/or 17-13 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the wheel sensor and the VSA modulator-control unit.
4. Turn the ignition switch OFF.
5. Disconnect the VSA modulator-control unit 37P connector.
6. Check for continuity between the appropriate VSA modulator-control unit 37P connector wheel sensor +B and GND terminals (see **VSA MODULATOR-CONTROL UNIT CONNECTOR WHEEL SENSOR**), then check for continuity between the same terminals and reverse the positive and negative tester probes.

VSA MODULATOR-CONTROL UNIT CONNECTOR WHEEL SENSOR

DTC	VSA Modulator-control Unit 37P Connector Terminal No.	
11-13	No. 19	No. 6
13-13	No. 22	No. 11
15-13	No. 9	No. 21
17-13	No. 20	No. 8

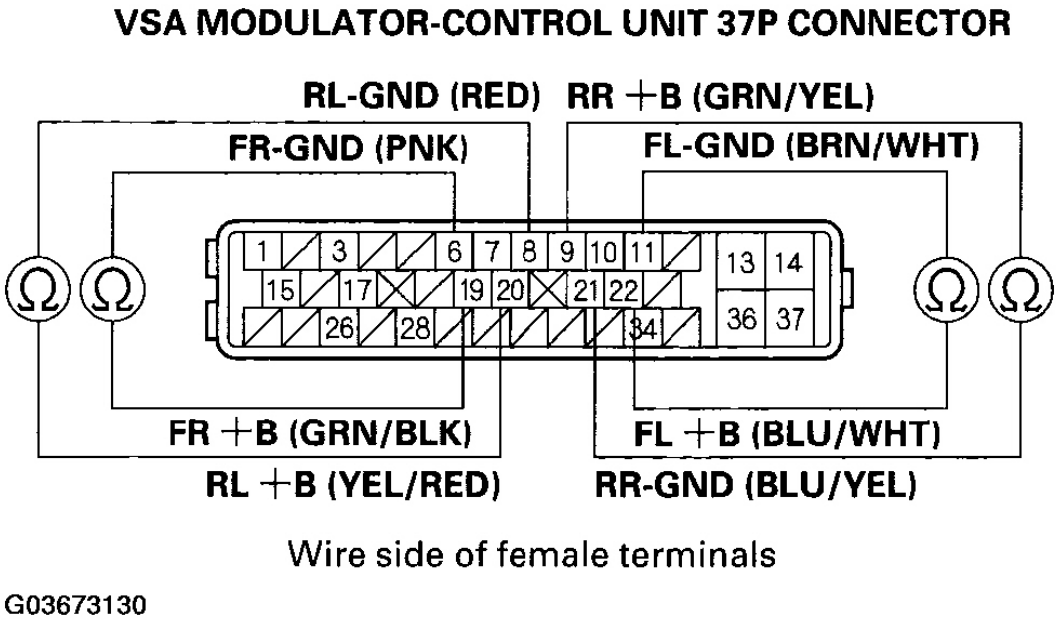


Fig. 17: Checking Continuity Between VSA Modulator-Control Unit Connector Wheel Sensor And GND Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Are there continuity in both directions?

YES - Go to step 7.

NO - If there are not continuity in both directions, go to step 9. If the are continuity in only one way, go to step 11.

7. Disconnect the appropriate wheel sensor 2P connector.
8. Check for continuity between appropriate wheel sensor 2P connector terminals No. 1 and No. 2, then check for continuity between the same terminals and reverse the positive and negative tester probes.

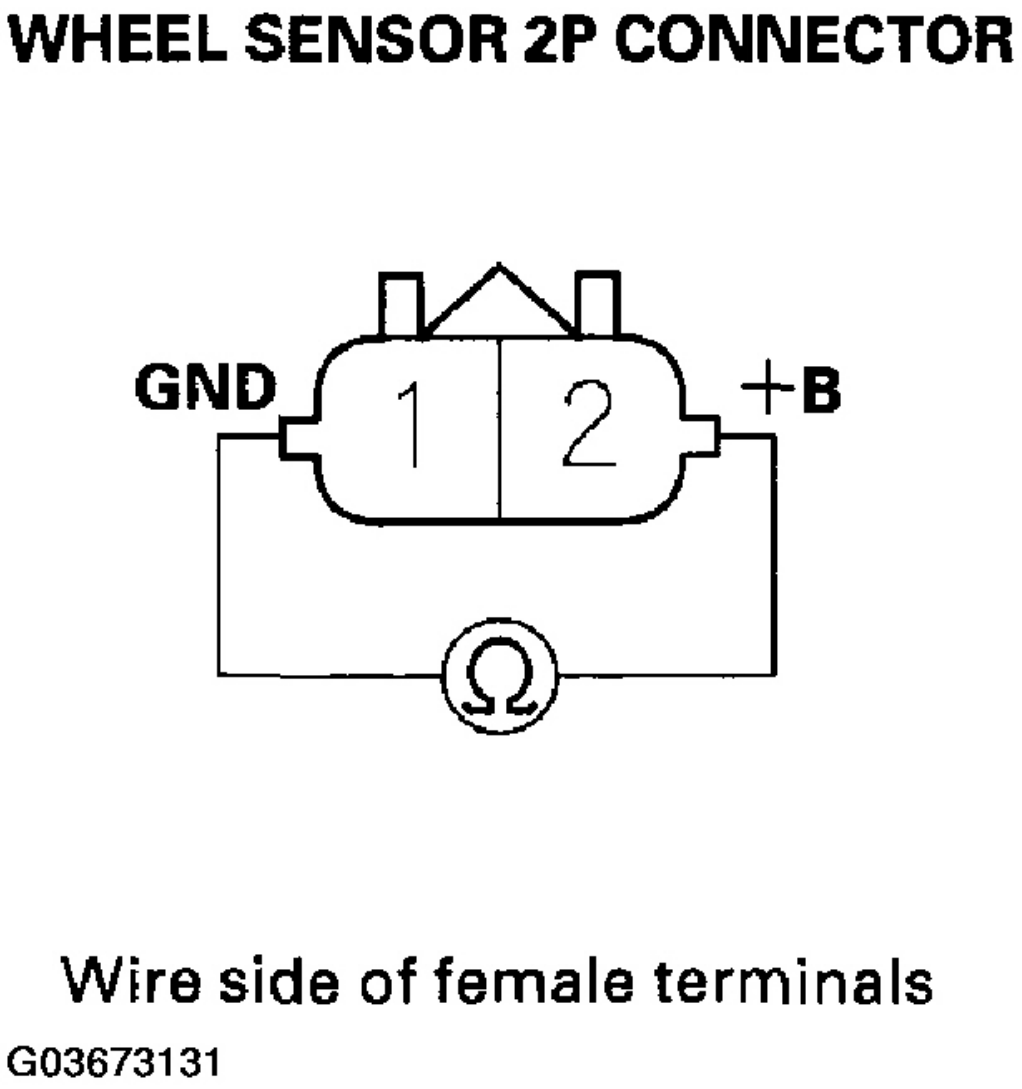


Fig. 18: Checking Continuity Between Appropriate Wheel Sensor Connector Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

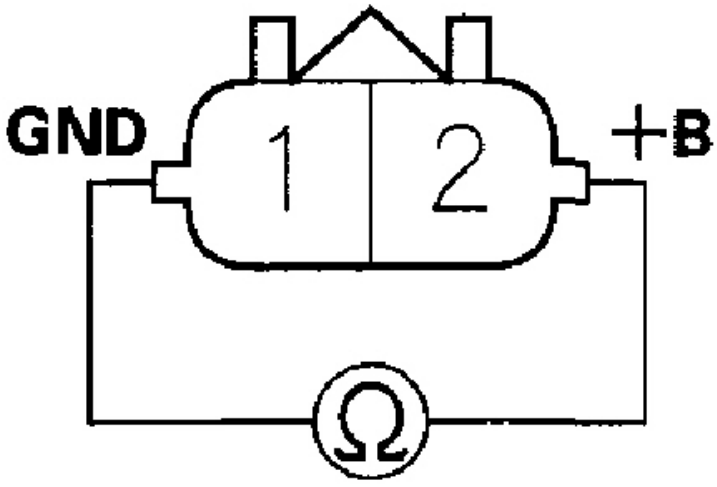
Are there continuity in both direction?

YES - Replace the appropriate wheel sensor (see **WHEEL SENSOR REPLACEMENT**).

NO - Repair short in the wire between the appropriate wheel sensor and the VSA modulator-control unit.

9. Disconnect the appropriate wheel sensor 2P connector.
10. Check for continuity between appropriate wheel sensor 2P connector terminals No. 1 and No. 2, then check for continuity between the same terminals and reverse the positive and negative tester probes.

WHEEL SENSOR 2P CONNECTOR



Wire side of female terminals

G03673132

Fig. 19: Checking Continuity Between Appropriate Wheel Sensor Connector Terminals No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity in only one direction?

YES - Repair open in the wire between the appropriate wheel sensor and the VSA modulator-control unit.

NO - Replace the appropriate wheel sensor (see **WHEEL SENSOR REPLACEMENT**).

11. Check for continuity between body ground and the appropriate VSA modulator-control unit 37P connector terminal (see **VSA MODULATOR-CONTROL UNIT 37P CONNECTOR TERMINAL**).

VSA MODULATOR-CONTROL UNIT 37P CONNECTOR TERMINAL

DTC	VSA Modulator-control Unit 37P Connector Terminal No.	
11-13	No. 19	No. 6
13-13	No. 22	No. 11
15-13	No. 9	No. 21
17-13	No. 20	No. 8

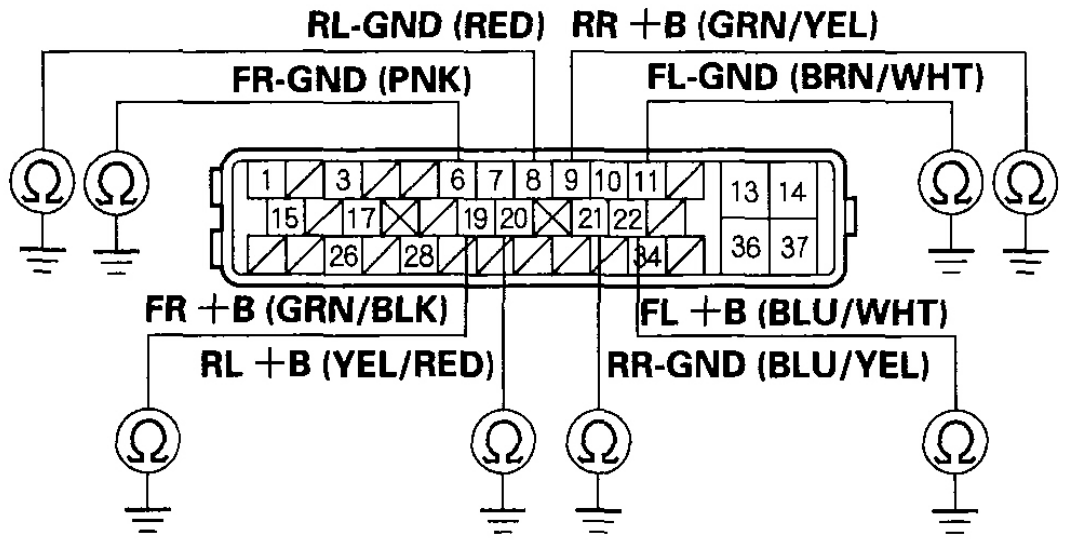


Fig. 20: Checking Continuity Between Body Ground And VSA Modulator-Control Unit Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 12.

NO - Go to step 14.

12. Disconnect the appropriate wheel sensor 2P connector.
13. Check for continuity between body ground and appropriate wheel sensor 2P connector terminal No. 1 and No. 2.

NOTE: Check the wheel sensor with mounted on the vehicle

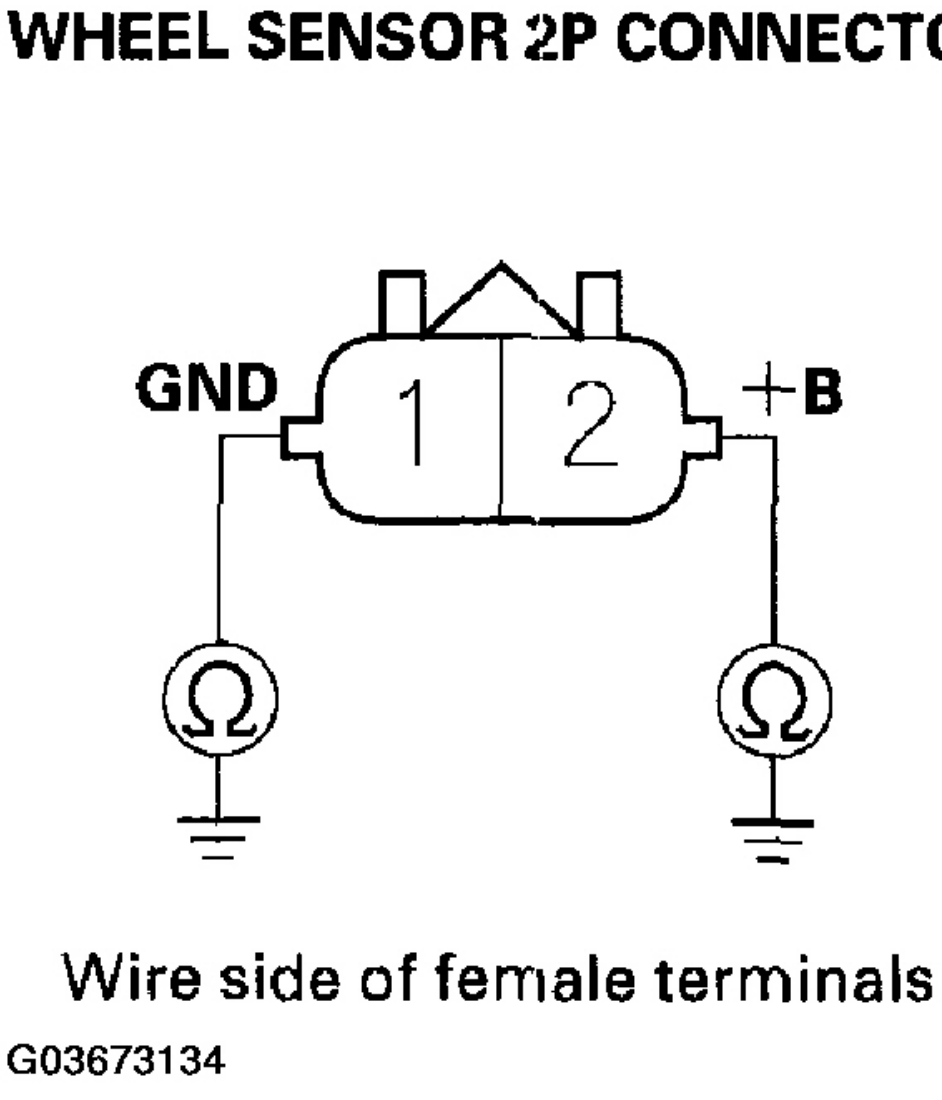


Fig. 21: Checking Continuity Between Body Ground And Wheel Sensor Connector Terminal No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the appropriate wheel sensor (see **WHEEL SENSOR REPLACEMENT**).

NO - Repair short in the wire between the appropriate wheel sensor and the VSA modulator-control unit.

14. Turn the ignition switch ON (II).
15. Measure voltage between body ground and the appropriate VSA modulator-control unit 37P connector terminal (see **VSA MODULATOR-CONTROL UNIT 37P CONNECTOR TERMINAL**).

VSA MODULATOR-CONTROL UNIT 37P CONNECTOR TERMINAL

DTC	VSA Modulator-control Unit 37P Connector Terminal No.	
11-13	No. 19	No. 6
13-13	No. 22	No. 11
15-13	No. 9	No. 21
17-13	No. 20	No. 8

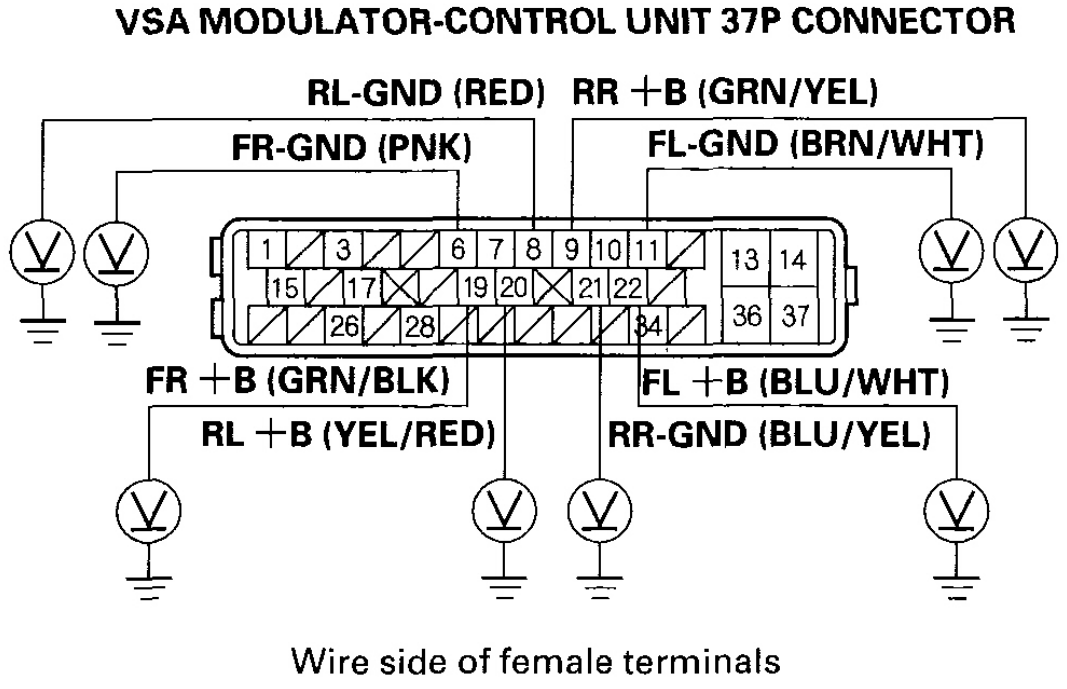


Fig. 22: Measuring Voltage Between Body Ground And VSA Modulator-

Control Unit Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 0.1 V or more?

YES - Repair short to power in the wire between the appropriate wheel sensor and the VSA modulator-control unit.

NO - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

DTC 12-11: RIGHT-FRONT WHEEL SENSOR ELECTRICAL NOISE OR INTERMITTENT INTERRUPTION, DTC 14-11: LEFT-FRONT WHEEL SENSOR ELECTRICAL NOISE OR INTERMITTENT INTERRUPTION, DTC 16-11: RIGHT-REAR WHEEL SENSOR ELECTRICAL NOISE OR INTERMITTENT INTERRUPTION, DTC 18-11: LEFT-REAR WHEEL SENSOR ELECTRICAL NOISE OR INTERMITTENT INTERRUPTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Test-drive the vehicle.
4. Check for DTCs with the HDS.

Is DTC 12-11, 14-11, 16-11, and/or 18-11 indicated?

YES - Troubleshooting DTC 12-12,14-12,16-12, and/or 18-12.

NO Troubleshoot the indicated DTC. If there are no DTCs indicated, there may be an intermittent failure; the system is OK at this time. Check for loose terminals between the wheel sensor 2P connector and the VSA modulator-control unit 37P connector.

5. Turn the ignition switch OFF.
6. Check that the appropriate wheel sensor is properly mounted..

WHEEL SENSOR

DTC	Appropriate Wheel Sensor

12-11	Right-front
14-11	Left-front
16-11	Right-rear
18-11	Left-rear

Is the wheel sensor installation OK?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Reinstall the wheel sensor, and check the mounting position (see **WHEEL SENSOR INSPECTION**).

DTC 12-12: RIGHT-FRONT WHEEL SENSOR SHORT TO THE OTHER SENSOR LINE (13 MPH (20 KM/H) OR MORE), DTC 14-12: LEFT-FRONT WHEEL SENSOR SHORT TO THE OTHER SENSOR LINE (13 MPH (20 KM/H) OR MORE), DTC 16-12: RIGHT-REAR WHEEL SENSOR SHORT TO THE OTHER SENSOR LINE (13 MPH (20 KM/H) OR MORE), DTC 18-12: LEFT-REAR WHEEL SENSOR SHORT TO THE OTHER SENSOR LINE (13 MPH (20 KM/H) OR MORE)

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS. Turn the ignition switch OFF, then ON (II) again.
3. Test-drive the vehicle. Drive the vehicle speed at 13 mph (20 km/h) or more, and go a distance of 7 miles (100 m) or more.

NOTE: Drive the vehicle on the road, not on the hoist.

4. Check for DTCs with the HDS.

Is DTC 12-12, 14-12, 16-12, and/or 18-12 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the wheel sensor. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

5. Turn the ignition switch OFF.
6. Disconnect the VSA modulator-control unit 37P connector.
7. Check for continuity between the appropriate wheel sensor +B terminal and other wheel sensor +B terminals of the VSA modulator-control unit 37P connector (see **WHEEL SENSOR TERMINAL AND OTHER WHEEL SENSOR TERMINALS**).

WHEEL SENSOR TERMINAL AND OTHER WHEEL SENSOR TERMINALS

DTC	VSA Modulator-control Unit 37P Connector Terminal No.			
	Appropriate Terminal	Other Terminals		
12-12	No. 19	No. 22	No. 9	No. 20
14-12	No. 22	No. 19	No. 9	No. 20
16-12	No. 9	No. 19	No. 22	No. 20
18-12	No. 20	No. 19	No. 22	No. 9

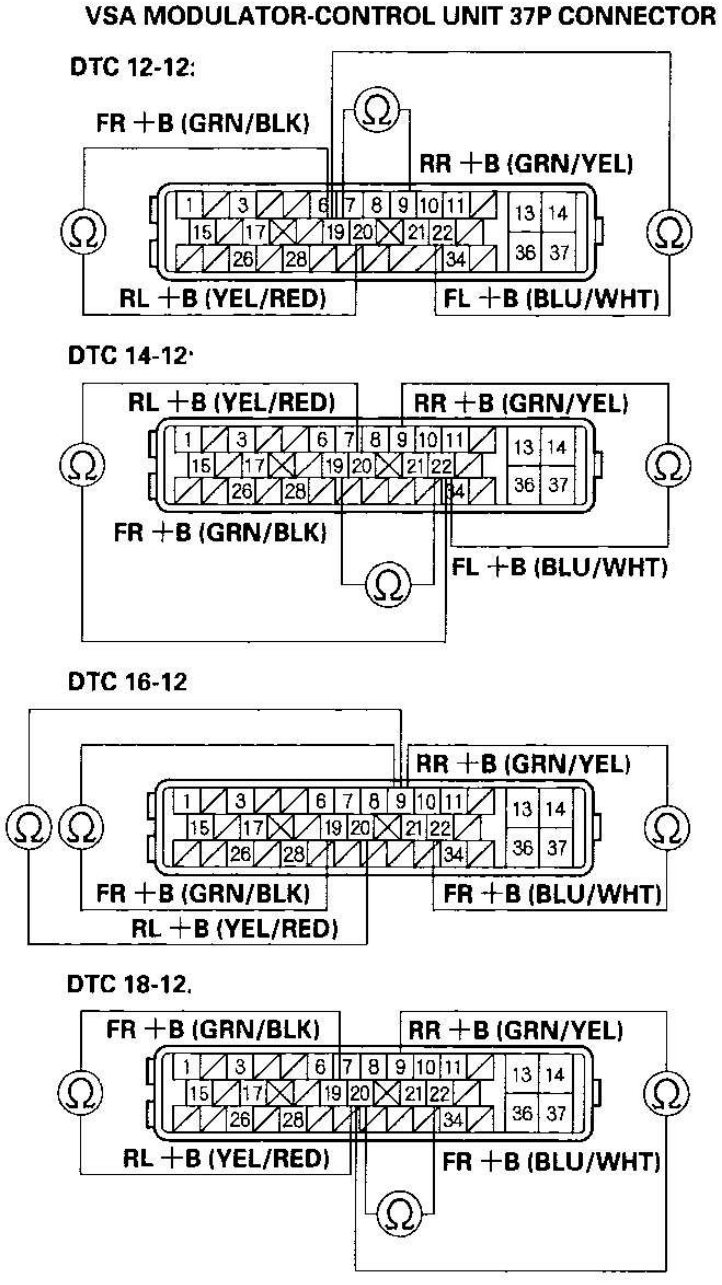


Fig. 23: Checking Continuity Between Wheel Sensor And Other Wheel Sensor

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the appropriate wheel sensor and the VSA modulator-control unit.

NO - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

DTC 12-21: RIGHT-FRONT WHEEL SENSOR INSTALLATION ERROR (START TO 15 SECONDS), DTC 14-21: LEFT-FRONT WHEEL SENSOR INSTALLATION ERROR (START TO 15 SECONDS), DTC 16-21: RIGHT-REAR WHEEL SENSOR INSTALLATION ERROR (START TO 15 SECONDS), DTC 18-21: LEFT-REAR WHEEL SENSOR INSTALLATION ERROR (START TO 15 SECONDS)

1. Test-drive the vehicle. Drive the vehicle speed at 7mph (10km/h.)
2. Check the RF, LF, RR, LR WHEEL SPD in the DATA LIST with the HDS

Are all the same as the indicated values?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the wheel sensor and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

NO - Go to step 3.

3. Turn the ignition switch OFF.
4. Check the appropriate wheel sensor is properly mounted.

WHEEL SENSOR INSTALLATION ERROR (START TO 15 SECONDS)

DTC	Appropriate Wheel Sensor
12-21	Right-front
14-21	Left-front
16-21	Right-rear
18-21	Left-rear

Is the wheel sensor installation OK ?

YES - Replace the appropriate wheel sensor (see **WHEEL SENSOR REPLACEMENT**).

NO - Reinstall the wheel sensor, and check the mounting position (see **WHEEL SENSOR INSPECTION**).

DTC 12-22: RIGHT-FRONT WHEEL SENSOR INSTALLATION ERROR (19 MPH (30 KM/H) OR MORE), DTC 14-22: LEFT-FRONT WHEEL SENSOR INSTALLATION ERROR (19 MPH (30 KM/H) OR MORE), DTC 16-22: RIGHT-REAR WHEEL SENSOR INSTALLATION ERROR (19 MPH (30 KM/H) OR MORE), DTC 18-22: LEFT-REAR WHEEL SENSOR INSTALLATION ERROR (19 MPH (30 KM/H) OR MORE)

1. Test-drive the vehicle. Drive the vehicle speed between 19 mph (30 km/h) and 31 mph (50 km/h) for 70 seconds or more.
2. Check the RF, LF, RR, LR WHEEL SPD of all the wheel sensors in the DATA LIST with the HDS.

Are all the same as the indicated values?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the wheel sensor.

NO - Go to step 3.

3. Turn the ignition switch OFF.
4. Check the appropriate wheel sensor is properly mounted.

WHEEL SENSOR INSTALLATION ERROR (19 MPH (30 KM/H) OR MORE)

DTC	Appropriate Wheel Sensor
12-22	Right-front
14-22	Left-front
16-22	Right-rear
18-22	Left-rear

Is the wheel sensor installation OK?

YES - Replace the appropriate wheel sensor (see **WHEEL SENSOR**

REPLACEMENT).

NO - Reinstall the wheel sensor, and check the mounting position (see **WHEEL SENSOR INSPECTION**).

DTC 12-23: RIGHT-FRONT WHEEL SENSOR INSTALLATION ERROR (0 TO 9 MPH (0 TO 15 KM/H)), DTC 14-23: LEFT-FRONT WHEEL SENSOR INSTALLATION ERROR (0 TO 9 MPH (0 TO 15 KM/H)), DTC 16-23: RIGHT-REAR WHEEL SENSOR INSTALLATION ERROR (0 TO 9 MPH (0 TO 15 KM/H)), DTC 18-23: LEFT-REAR WHEEL SENSOR INSTALLATION ERROR (0 TO 9 MPH (0 TO 15 KM/H))

1. Test-drive the vehicle. Drive the vehicle speed between 1 mph (1 km/h) and 9 mph (15 km/h).
2. Check the RF, LF, RR, LR WHEEL SPD of all the wheel sensors in the DATA LIST with the HDS.

Are all the same as the indicated values?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the wheel sensor.

NO - Go to step 3.

3. Turn the ignition switch OFF.
4. Check the appropriate wheel sensor is properly mounted.

WHEEL SENSOR INSTALLATION ERROR (0 TO 9 MPH (0 TO 15 KM/H))

DTC	Appropriate Wheel Sensor
12-23	Right-front
14-23	Left-front
16-23	Right-rear
18-23	Left-rear

Is the wheel sensor installation OK?

YES - Replace the appropriate wheel sensor (see **WHEEL SENSOR REPLACEMENT**).

NO - Reinstall the wheel sensor, and check the mounting position (see

WHEEL SENSOR INSPECTION).

DTC 21-11: RIGHT-FRONT MAGNETIC ENCODER MALFUNCTION (CORRUGATED MISSING), DTC 22-11: LEFT-FRONT MAGNETIC ENCODER MALFUNCTION (CORRUGATED MISSING), DTC 23-11: RIGHT-REAR PULSER MALFUNCTION (CORRUGATED MISSING), DTC 24-11: LEFT-REAR PULSER MALFUNCTION (CORRUGATED MISSING)

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS. Turn the ignition switch OFF, then ON (II) again.
3. Test-drive the vehicle. Drive the vehicle speed at 13 mph (20 km/h) or more, and go a distance of 6.2 miles (100 m) or more.
4. Check for DTCs with the HDS.

Is DTC 21-11,22-11, 23-11, and/or 24-11 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the wheel sensor.

5. Turn the ignition switch OFF.
6. Inspect the appropriate magnetic encoder, or pulser (see **MAGNETIC ENCODER MALFUNCTION (CORRUGATED MISSING)**).

MAGNETIC ENCODER MALFUNCTION (CORRUGATED MISSING)

DTC	Appropriate Magnetic Encoder (Front), Pulser (Rear)	Note
21-11	Right-front	Remove the outboard joint on the driveshaft from the wheel hub (see **COMPONENT LOCATION INDEX**).
22-11	Left-front	
23-11	Right-rear	Remove the wheel bearing unit, refer to **KNUCKLE/HUB REPLACEMENT** .
24-11	Left-rear	

Is the magnetic encoder surface, or the pulser gears OK?

YES - Replace the wheel bearing or wheel bearing unit:

- Front: Replace the front wheel bearing, refer to **KNUCKLE/HUB/WHEEL BEARING REPLACEMENT** .
- Rear: Replace the rear wheel bearing, refer to**KNUCKLE/HUB REPLACEMENT** .

NO - Clean off dust or dirt from the appropriate magnetic encoder surface on the wheel bearing, or the wheel bearing unit, or replace the appropriate pulser gears for a chipped or damaged tooth, then go to step 1 and recheck.

DTC 25-11: YAW RATE SENSOR INTERNAL CIRCUIT MALFUNCTION (INITIAL), DTC 25-12: YAW RATE SENSOR INTERNAL CIRCUIT MALFUNCTION (OPEN, SHORT), DTC 25-21: YAW RATE SENSOR NEUTRAL POSITION MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS. Turn the ignition switch OFF, then ON (II) again.
3. Check for DTCs with the HDS.

Is DTC 25-11, 25-12, or 25-21 indicated?

YES - Replace yaw rate-lateral acceleration sensor (see **YAW RATE-LATERAL ACCELERATION SENSOR REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the yaw rate-lateral acceleration sensor and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

DTC 25-22: YAW RATE SENSOR STUCK

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Do the VSA sensor neutral position memorization.
4. Turn the ignition switch OFF.
5. Test-Drive the vehicle. Drive the vehicle at 7 mph or more.

6. Check for DTCs with the HDS.

   Is DTC 25-22 indicated?

   YES - Go to step 7.

   NO - If any DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**. If DTC is not indicated, intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the yaw rate-lateral acceleration sensor and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

7. Check the LATERAL ACCELERATION SENSOR and YAW RATE S in the DATA LIST with the HDS.

   Are there 0 m/s indicated?

   YES - Go to step 6.

   NO - Do the VSA sensor neutral position memorization (see **VSA SENSOR NEUTRAL POSITION MEMORIZATION**), then go to step 1 and recheck.

8. Test-drive the vehicle. Check the YAW RATE S in the DATA LIST with the HDS while driving in corners.

   Does the indicated value change?

   YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the yaw rate-lateral acceleration sensor and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

   NO - Replace the yaw rate-lateral acceleration sensor (see **YAW RATE-LATERAL ACCELERATION SENSOR REPLACEMENT**).

DTC 25-23: YAW RATE SENSOR CIRCUIT INTERMITTENT INTERRUPTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.

3. Do the VSA sensor neutral position memorization.
4. Turn the ignition switch OFF, then turn it ON again.
5. Wait 10 seconds or more.
6. Check for DTCs with the HDS.

Is DTC 25-23 indicated?

YES - Replace the yaw rate-lateral acceleration sensor (see **YAW RATE-LATERAL ACCELERATION SENSOR REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the yaw rate-lateral acceleration sensor and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

DTC 25-24: YAW RATE SENSOR GAIN HIGH, DTC 25-25: YAW RATE SENSOR GAIN LOW, DTC 26-24: LATERAL ACCELERATION SENSOR GAIN HIGH, DTC 26-25: LATERAL ACCELERATION SENSOR GAIN LOW

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Do the VSA sensor position memorization.
4. Test-drive the vehicle. Drive the vehicle speed at 10 mph (15 km/h) or more.
5. Check for DTCs with the HDS.

Is DTC 25-24,25-25, 26-24, or 26-25 indicated?

YES - Replace the yaw rate-lateral acceleration sensor (see **YAW RATE-LATERAL ACCELERATION SENSOR REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the yaw rate-lateral acceleration sensor and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

DTC 26-11: LATERAL ACCELERATION SENSOR INTERNAL CIRCUIT MALFUNCTION (INITIAL), DTC 26-12: LATERAL ACCELERATION SENSOR INTERNAL CIRCUIT MALFUNCTION (OPEN, SHORT)

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then turn it ON again.
4. Check for DTCs with the HDS.

   Is DTC 26-11 or 26-12 indicated?

   YES Go to step 5.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the yaw rate-lateral acceleration sensor and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).
5. Turn the ignition switch OFF.
6. Disconnect the yaw rate-lateral accelleration sensor 5p connector.
7. Disconnect the VSA modulator-control unit 37P connector.
8. Check for continuity between body ground and yaw rate-lateral acceleration sensor 5P connector terminal No.5.

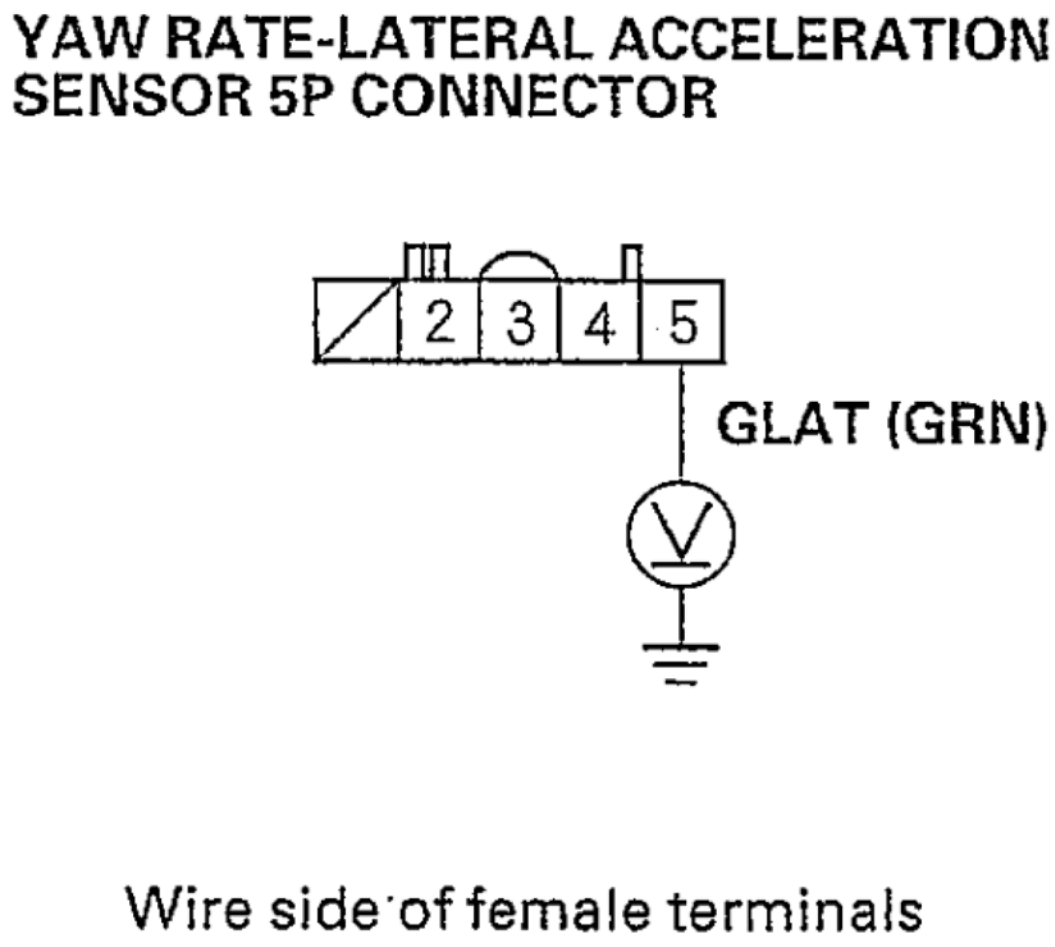


Fig. 24: Identifying Yaw Rate Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there contunuity?

YES - Repair short to body ground in the wire between the yaw rate-lateral accelleration sensor and the VSA modulator-control unit.

NO - Go to step 9.

9. Check for continuity between the VSA modulator-control unit 37P connector terminal and the yaw rate-lateral accelleration sensor 5P connector terminal individually.

Connector Terminals

Sign	Connector Terminal No.	
	VSA Modulator-Control Unit	Yaw Rate-Lateral Acceleration Sensor
SVCC	7	2
SGND	10	4
GLAT	29	5

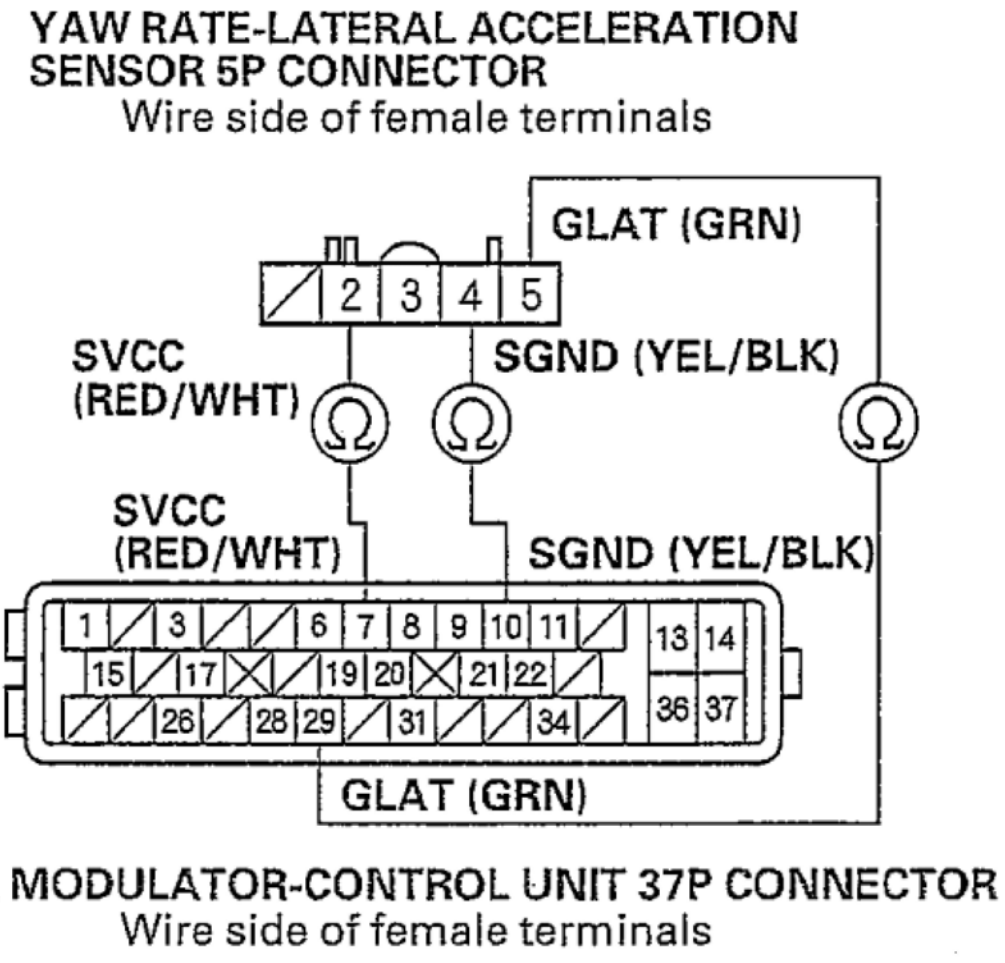


Fig. 25: Identifying Yaw Rate Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there Continuity?

YES - Go to step 10.

NO - Repair open in the wire between the yaw rate-lateral acceleration sensor and the VSA modulator-control unit.

10. Turn the ifnition switch ON.
11. Measure voltage between yaw rate-lateral acceleration sensor 5P connector terminal No.5 and body ground.

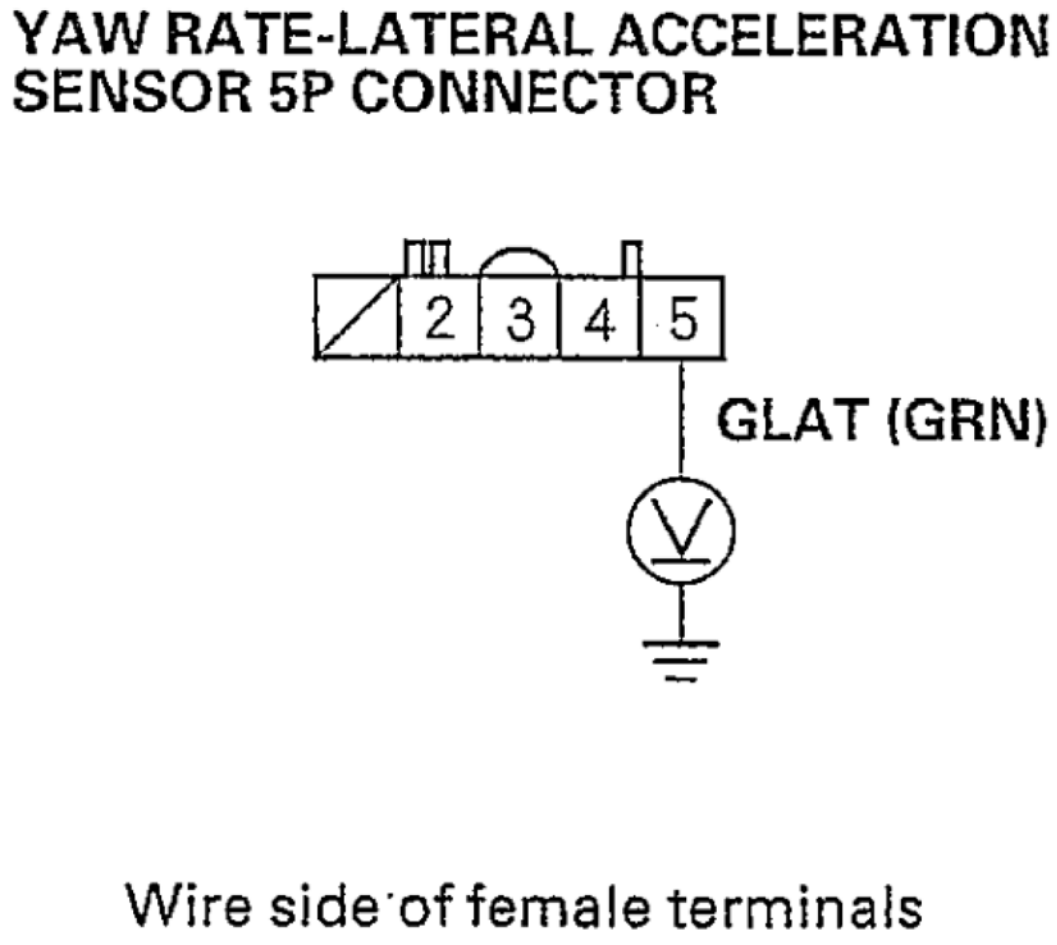


Fig. 26: Identifying Yaw Rate Sensor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 0.1 V or more?

YES - Repair short to power in the wire beterrn the yawa reate-lateral acceleration sensor and the VSA modulator-control unit.

NO - Replace the yaw rate-lateral acceleration sensor.

DTC 26-21: LATERAL ACCELERATION SENSOR NEUTRAL POSITION MALFUNCTION, DTC 26-23: LATERAL ACCELERATION SENSOR CIRCUIT INTERMITTENT INTERRUPTION

NOTE: While doing this troubleshooting, avoid vibration or shaking of the vehicle.

1. Park the vehicle on the flat and level surface.
2. Turn the ignition switch ON.
3. Clear the DTC with the HDS.
4. Do the VSA sensor neutral position memorization.
5. Turn the ignition switch OFF, then turn it ON again.
6. Wait 15 seconds or more.
7. Check for DTCs with the HDS.

Is DTC 26-21, or 26-23 indicatied?

YES - Replace the yaw rate-lateral acceleration sensor.

NO - Intermittent failure, the system is OK at this time.

DTC 26-22: ACCELERATION SENSOR STUCK

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

Is DTC 26-22 indicated?

YES - Go to step 5.

NO - If any DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**. If DTC is not indicated, intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the yaw rate-lateral acceleration sensor and the VSA modulator-

control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

5. Check the LATERAL ACCELERATION SENSOR and YAW RATE S in the DATA LIST with the HDS.

   Are there 0 m/s indicated?

   YES - Go to step 6.

   NO - Do the VSA sensor neutral position memorization (see **VSA SENSOR NEUTRAL POSITION MEMORIZATION**), then go to step 1 and recheck.

6. Test-drive the vehicle. Check the YAW RATE S in the DATA LIST with the HDS while driving in corners.

   Does the indicated value change?

   YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the yaw rate-lateral acceleration sensor and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

   NO - Replace the yaw rate-lateral acceleration sensor (see **YAW RATE-LATERAL ACCELERATION SENSOR REPLACEMENT**).

DTC 27-11: STEERING ANGLE SENSOR DIAG SIGNAL ERROR, DTC 27-26: STEERING ANGLE SENSOR DIAG SIGNAL ERROR

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

   Is DTC 27-11, or 27-26 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the steering angle sensor and the

VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

5. Turn the ignition switch OFF.
6. Disconnect the steering angle sensor 5P connector.
7. Disconnect the yaw rate-lateral acceleration sensor 5P connector.
8. Disconnect the VSA modulator-control unit 37P connector.
9. Check for continuity between steering angle sensor 5P connector terminal No. 3 and body ground.

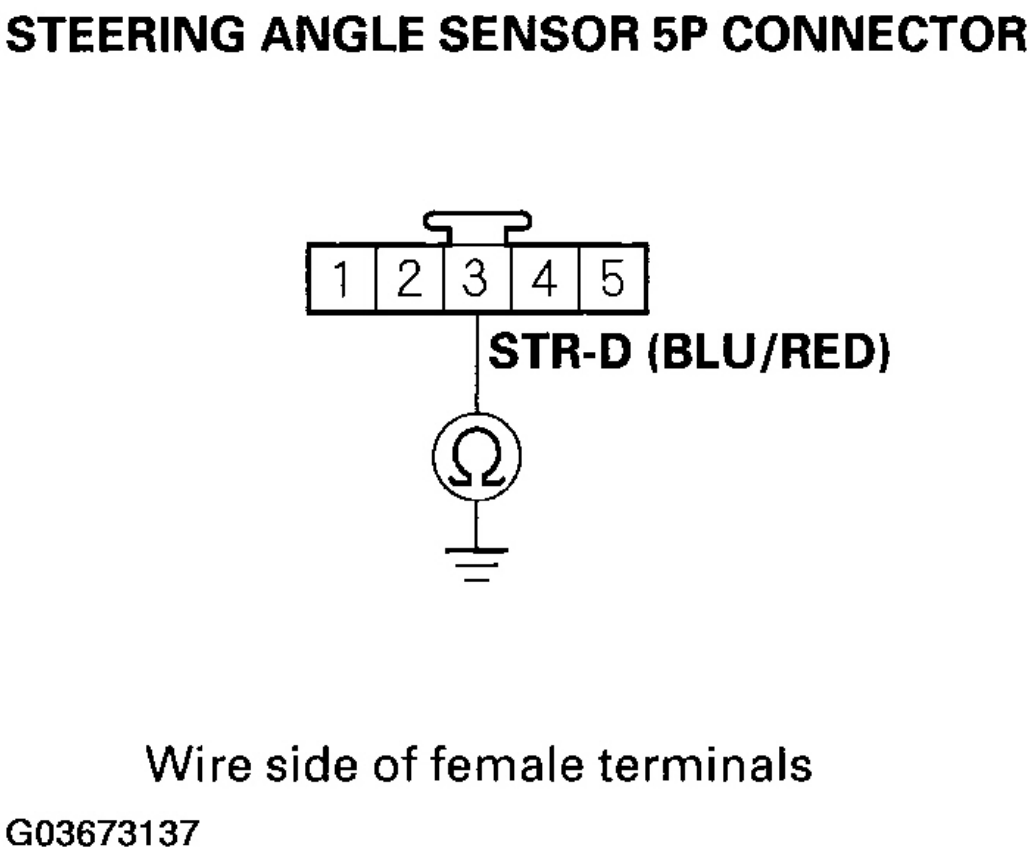


Fig. 27: Checking Continuity Between Steering Angle Sensor Connector Terminal No. 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the steering angle sensor and the VSA modulator-control unit.

NO - Go to step 8.

10. Check for continuity between VSA modulator-control unit 37P connector terminal No. 3 and steering angle sensor 5P connector terminal No. 3.

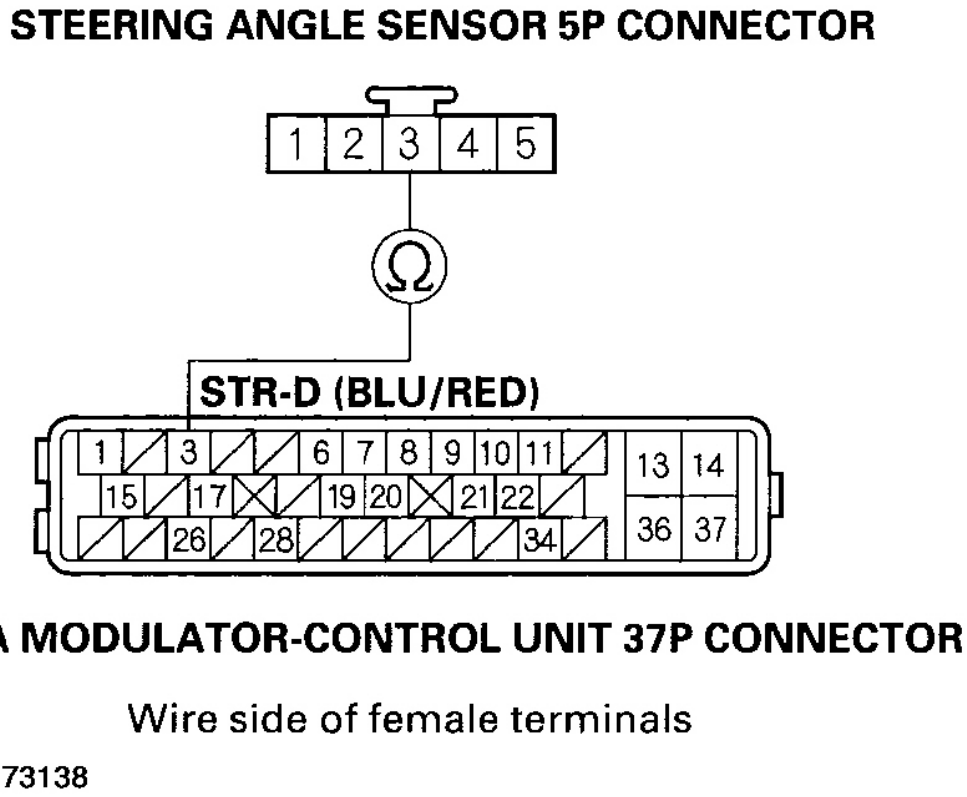


Fig. 28: Checking Continuity Between Modulator-Control Unit Connector Terminal And Steering Angle Sensor Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 9.

NO - Repair open in the wire between the steering angle sensor and the VSA modulator-control unit.

11. Turn the ignition switch ON (II).
12. Measure voltage between steering angle sensor 5P connector terminal No. 3 and body ground.

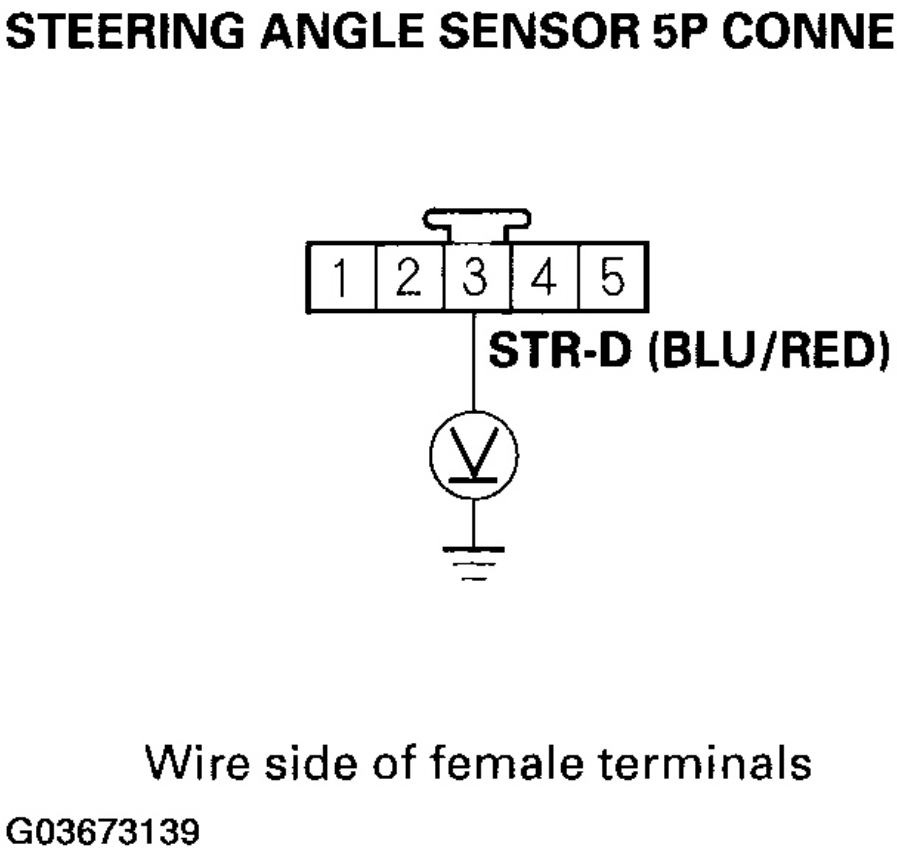


Fig. 29: Measuring Voltage Between Steering Angle Sensor Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 0.1 V or more?

YES - Repair short to power in the wire between the steering angle sensor

and the VSA modulator-control unit.

NO - Replace the steering angle sensor (see **COMPONENT LOCATION INDEX**).

DTC 27-21: STEERING ANGLE SENSOR STUCK NEUTRAL POSITION, DTC 27-22: STEERING ANGLE SENSOR STUCK OFFSET POSITION

1. Turn the ignition switch ON.
2. Turn the steering wheel left and right at 90 degree or more. Check the STEERING ANGLE in the VSA DATA LIST while the HDS.

Is there 90 or more?

YES Intermittent failure, the system is OK at this time. Check for loose terminals between the steering angle sensor 5P connector and the VSA modulator-control unit 37P connector. Refer to intermittent failures troubleshooting.

NO - Go to step 3.

3. Turn the ignition switch OFF.
4. Disconnect the steering angle sensor 5P connector.
5. Disconnect the yaw rate-lateral acceleration sensor 5P connector.
6. Disconnect the VSA modulator-control unit 37P connector.
7. Check for continuity between body ground and steering angle sensor 5P connector terminals No. 2 and No. 4 individually.

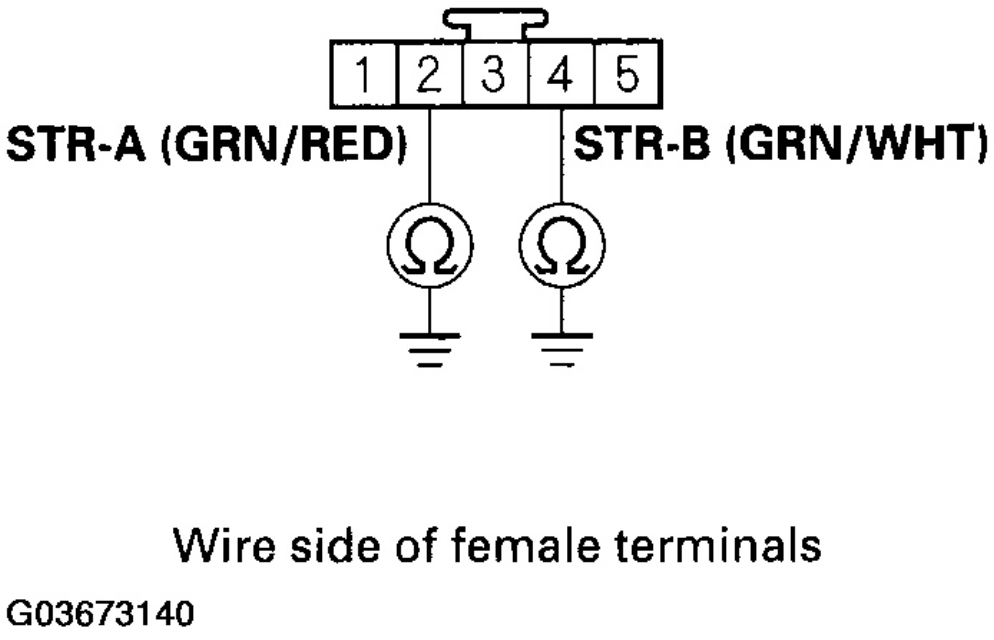


Fig. 30: Checking Continuity Between Body Ground And Steering Angle Sensor Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the steering angle sensor and the VSA modulator-control unit.

NO - Go to step 9.

8. Check for continuity between the VSA modulator-control unit 37P connector terminal and the steering angle sensor 5P connector terminal individually.

VSA MODULATOR-CONTROL UNIT AND STEERING ANGLE SENSOR

Sign	Connector Terminal No.	
	VSA Modulator control unit	Steering Angle Sensor
STR-A	34	2
STR-B	17	4
SVCC	7	5
SGND	10	1

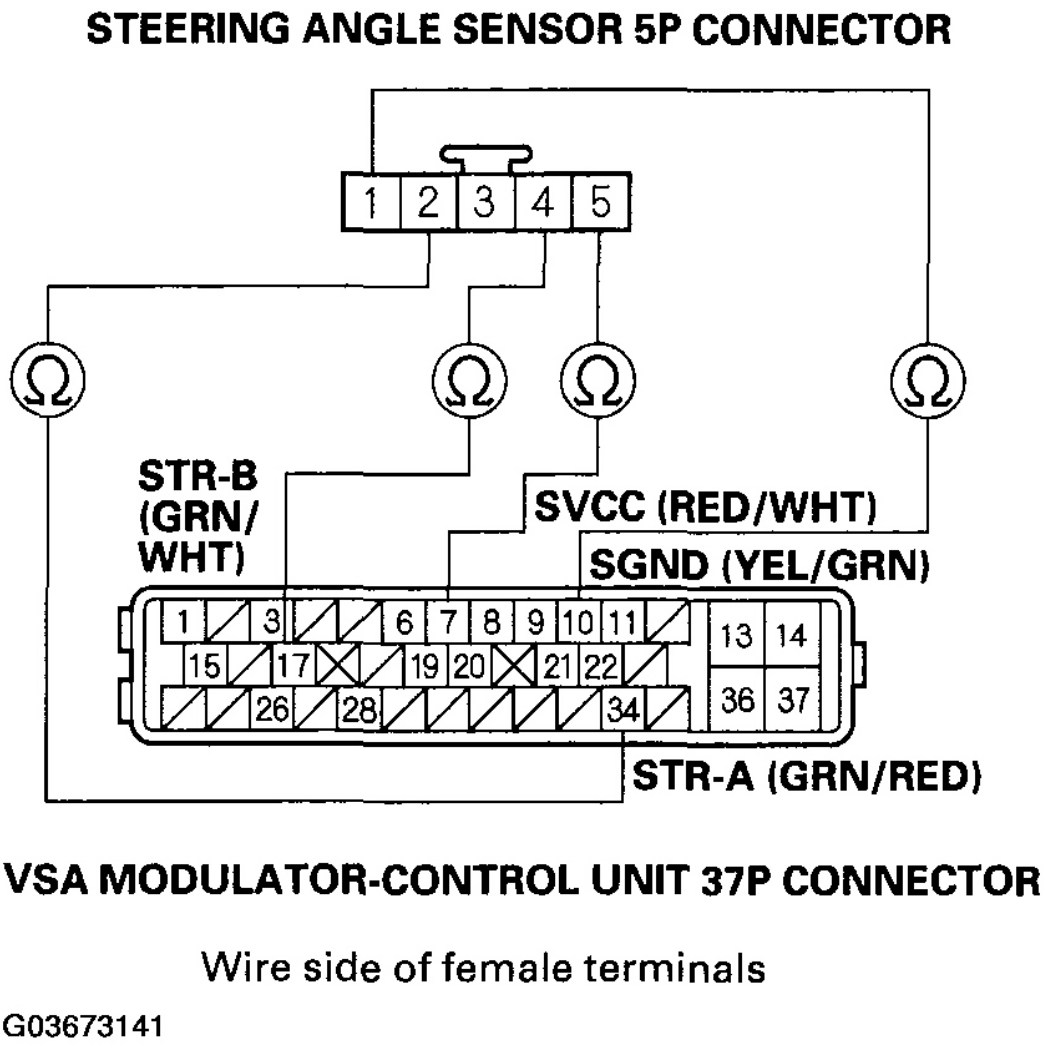


Fig. 31: Checking Continuity Between Modulator-Control Unit Connector

Terminal And Steering Angle Sensor Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10.

NO - Repair open in the wire between the steering angle sensor and the VSA modulator-control unit.

9. Check for continuity between steering angle sensor 5P connector terminals No. 2 and No. 4.

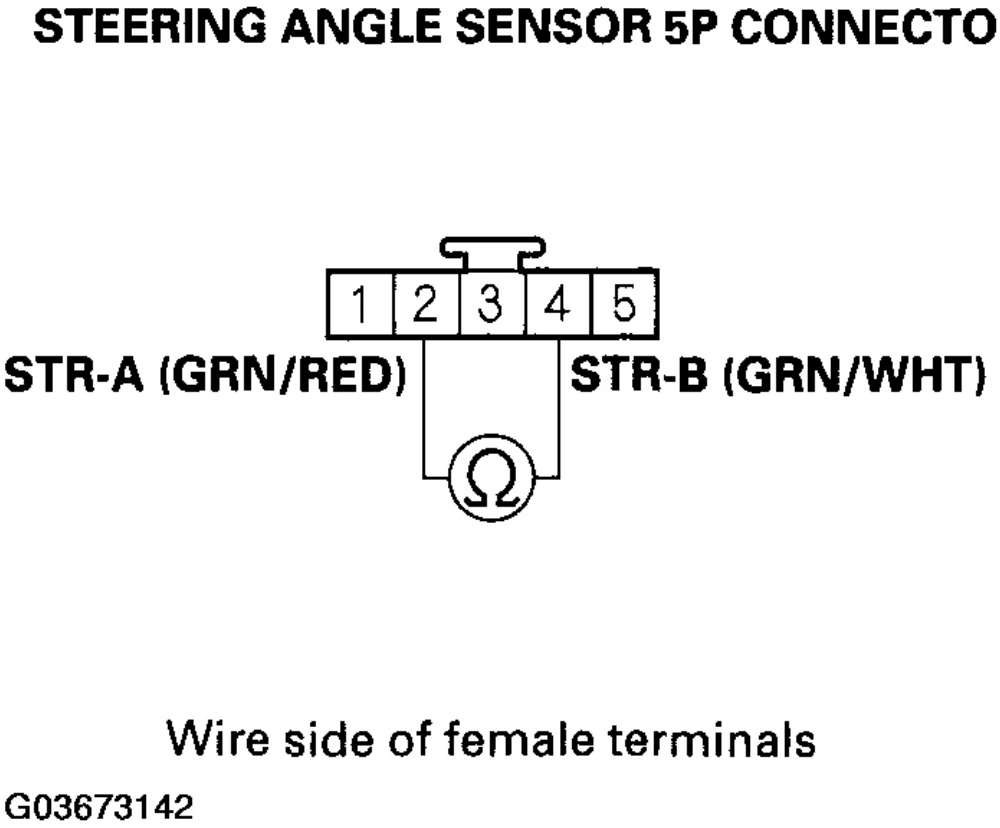


Fig. 32: Checking Continuity Between Steering Angle Sensor Connector Terminals No. 2 And No. 4
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the steering angle sensor and the VSA modulator-control unit.

NO - Go to step 10.

10. Check for continuity between steering angle sensor 5P connector terminals No. 5 and No. 2, No. 5 and No. 4 individually.

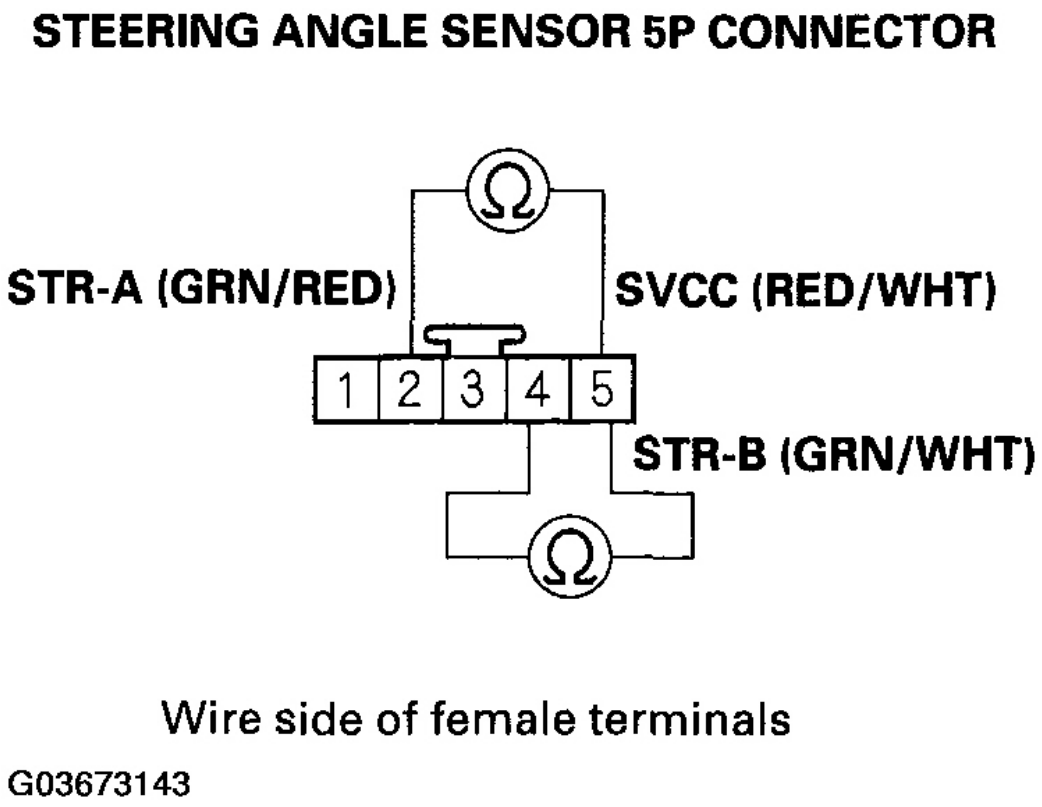


Fig. 33: Checking Continuity Between Steering Angle Sensor Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the steering angle sensor and the

VSA modulator-control unit.

NO - Go to step 11.

11. Check for continuity between steering angle sensor 5P connector terminals No. 1 and No. 2, No. 1 and No. 4 individually.

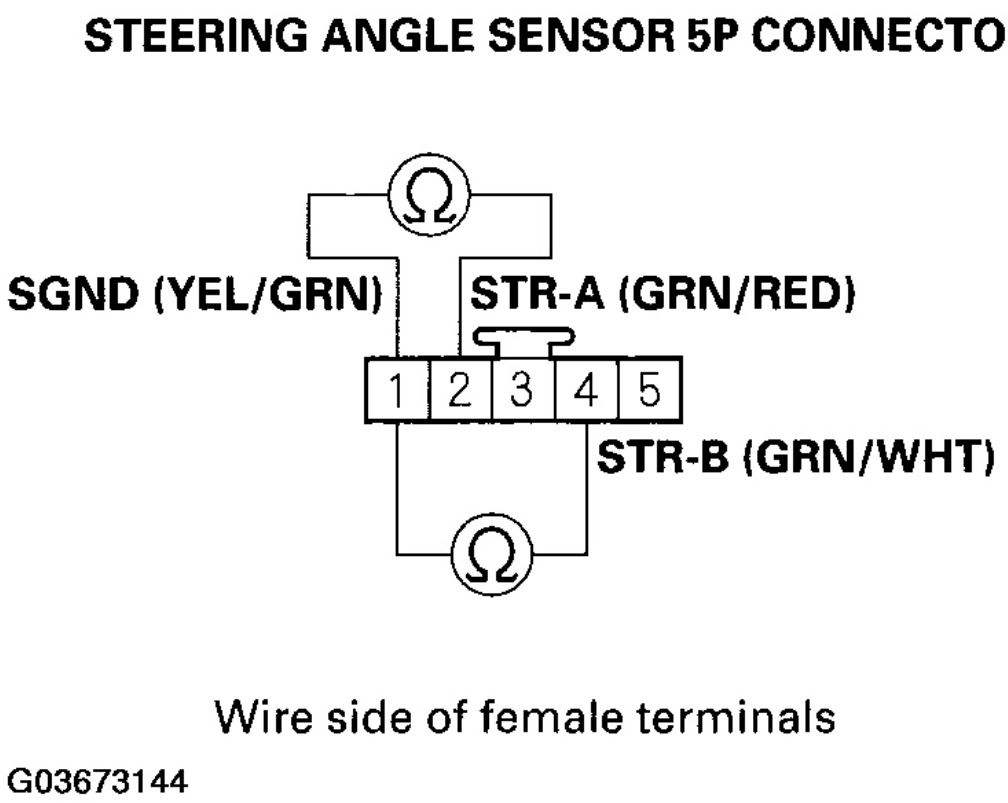


Fig. 34: Checking Continuity Between Steering Angle Sensor 5P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the steering angle sensor and the VSA modulator-control unit.

NO - Go to step 12.

12. Turn the ignition switch ON (II).
13. Measure voltage between body ground and steering angle sensor 5P connector terminals No. 2 and No. 4 individually.

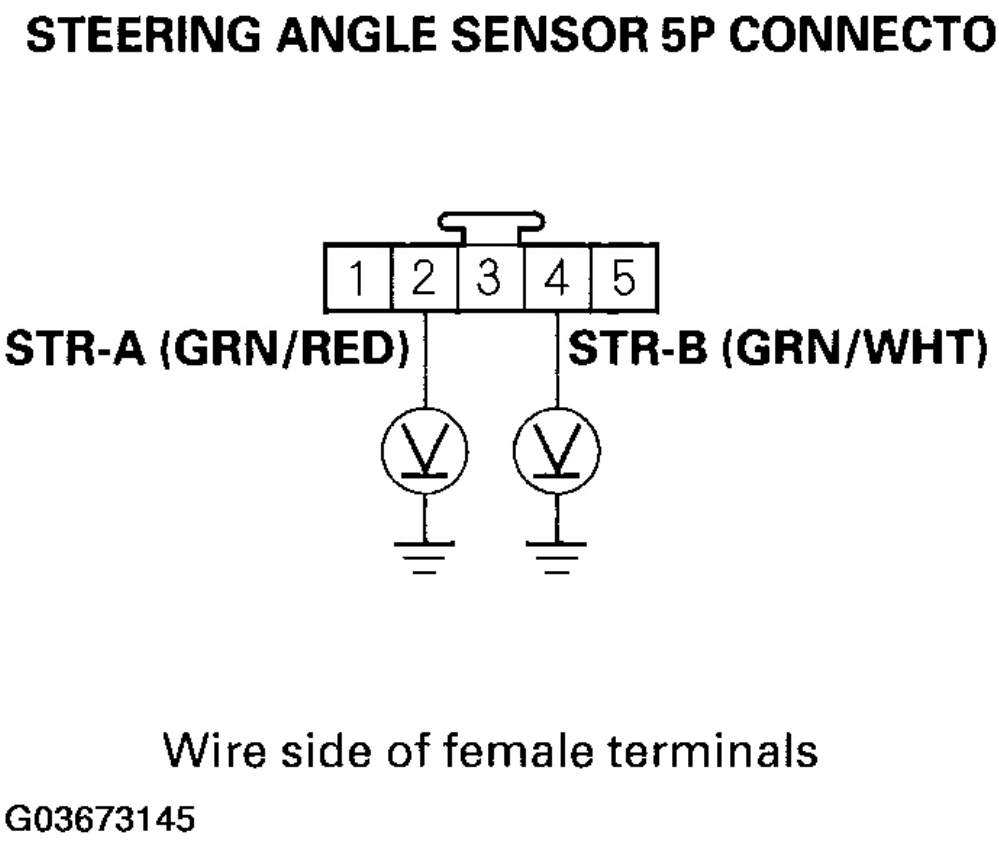


Fig. 35: Measuring Voltage Between Body Ground And Steering Angle Sensor 5P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 0.1 V or more?

YES - Repair short to power in the wire between the steering angle sensor and the VSA modulator-control unit.

NO - Replace the steering angle sensor (see**STEERING ANGLE SENSOR REPLACEMENT**).

DTC 27-23: STEERING ANGLE SENSOR EXCHANGE MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Turn the steering wheel from lock to lock.
5. Check for DTCs with the HDS.

Is DTC 27-23 indicated?

YES - Check for the steering angle sensor installation. If installation is OK, replace the steering angle sensor.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the steering angle sensor and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

DTC 27-24: STEERING ANGLE SENSOR COUNTER MALFUNCTION

1. Turn the ignition switch ON (II).
2. Turn the steering wheel at 1 turn. Check the STEERING ANGLE in the DATA LIST with the HDS.

Is there about 288-432°?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the steering angle sensor and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

NO - Replace the steering angle sensor (see **STEERING ANGLE SENSOR REPLACEMENT**).

DTC31-XX*: ABS RIGHT-FRONT INLET SOLENOID VALVE MALFUNCTION, DTC 32-XX*: ABS RIGHT-FRONT OUTLET SOLENOID VALVE MALFUNCTION, DTC33-XX*: ABS LEFT-FRONT INLET SOLENOID VALVE MALFUNCTION, DTC 34-XX*: ABS LEFT-FRONT OUTLET SOLENOID VALVE MALFUNCTION, DTC 35-XX*: ABS RIGHT-REAR INLET SOLENOID VALVE MALFUNCTION, DTC 36-XX*: ABS RIGHT-REAR OUTLET SOLENOID VALVE MALFUNCTION, DTC 37-XX*: ABS LEFT-REAR INLET SOLENOID VALVE MALFUNCTION,

DTC 38-XX*: ABS LEFT-REAR OUTLET SOLENOID VALVE MALFUNCTION

*: -xx means any subcode

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

INLET SOLENOID VALVE MALFUNCTION

Subcode	Malfunction	Note (DTC)
01	Solenoid Initial Pulse	31-01, 32-04, 33-01, 34-01, 35-01, 36-01, 37-01, 38-01
21	Solenoid Pulse	31-21, 32-21, 33-21, 34-21, 35-21, 36-21, 37-21, 38-21
22	Solenoid Speculative	31-22, 32-22, 33-22, 34-22, 35-22, 36-22, 37-22, 38-22
23	Solenoid Stuck ON	31-23, 32-23, 33-23, 34-23, 35-23, 36-23, 37-23, 38-23

Is DTC 31-xx, 32-xx, 33-xx, 34-xx, 35-xx, 36-xx, 37-xx, or 38-xx indicated?

YES - Replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Intermittent failure, system is OK at this time.

DTC 41-21: RIGHT-FRONT WHEEL LOCK, DTC 42-21: LEFT-FRONT WHEEL LOCK, DTC 43-21: RIGHT-REAR WHEEL LOCK, DTC 44-21: LEFT-REAR WHEEL LOCK

The DTCs may indicated under these conditions:

- The vehicle goes into a spin.
- The ABS or VSA continues to operate for a long time.
- Snow build-up on the wheel sensor.
- Misadjusted brake switch.
- Contaminated brake fluid.

1. Raise the vehicle, and support it with safety stands in the proper locations, refer to **LIFT AND SUPPORT POINTS** .
2. Turn the appropriate wheel by hand.

   WHEEL LOCK

DTC	Appropriate Wheel
41-21	Right-front
42-21	Left-front
43-21	Right-rear
44-21	Left-rear

   Is there the brake drag?

   YES - Repair the brake drag.

   NO - Go to step 3.
3. Check to see if the appropriate wheel sensor is properly mounted.

   Is the wheel sensor installation OK?

   YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the wheel sensor and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

   NO - Reinstall the wheel sensor, and check the mounting position (see **WHEEL SENSOR INSPECTION**).

DTC 51-11: MOTOR LOCK, DTC 51-13: MOTOR RELAY OFF MALFUNCTION

1. Turn the ignition switch ON (II).

2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Wait 5 seconds.
5. Do the MOTOR FUNCTION TEST in the INSPECTION MENU repeat test five times with the HDS.
6. Check for DTCs with the HDS.

Is DTC 51-11 or 51-13 indicated?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

DTC 51-12: MOTOR LOCK CIRCUIT MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check the DTCs with the HDS.

Is DTC 51-12 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

5. Turn the ignition switch OFF.
6. Check the No. 17 MR +B (30 A) fuse in the under-hood fuse/relay box.

Is the fuse blown?

YES - Go to step 7.

NO - Reinstall the fuse, then go to step 10.

7. Disconnect the VSA modulator-control unit 37P connector.
8. Check for continuity between VSA modulator-control unit 37P connector terminal No. 14 and body ground.

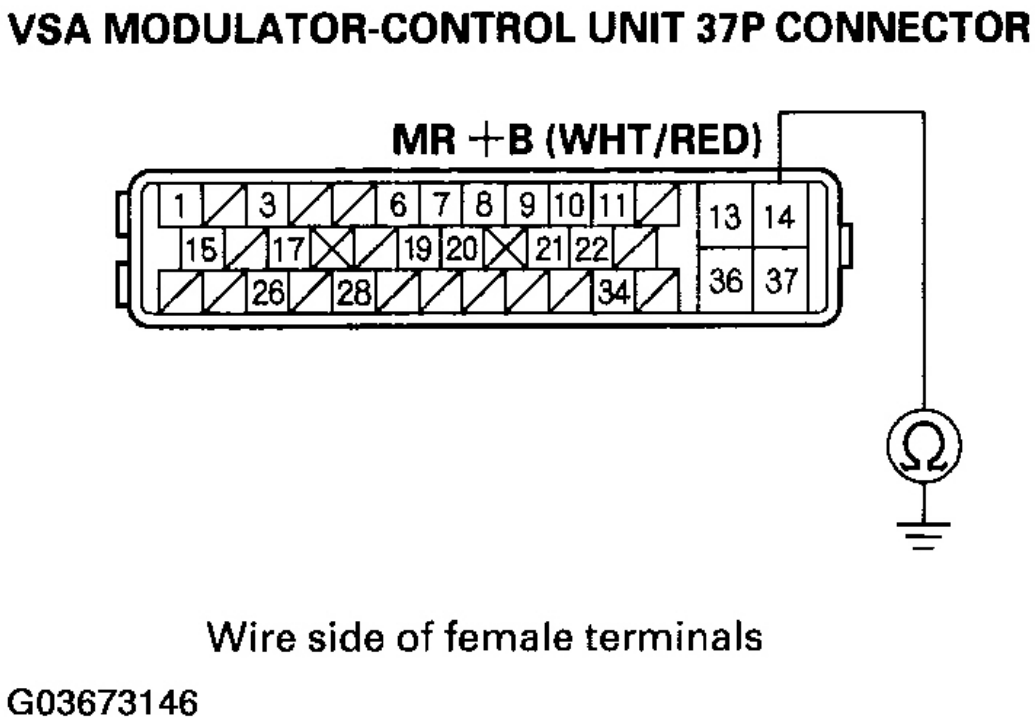


Fig. 36: Checking Continuity Between Modulator-Control Unit Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the No. 17 MR +B (30 A) fuse and the VSA modulator-control unit.

NO - Install the new No. 17 MR +B (30 A) fuse, then go to step 8.

9. Disconnect the VSA modulator-control unit 37P connector.
10. Measure voltage between VSA modulator-control unit 37P connector terminal No. 14 and body ground.

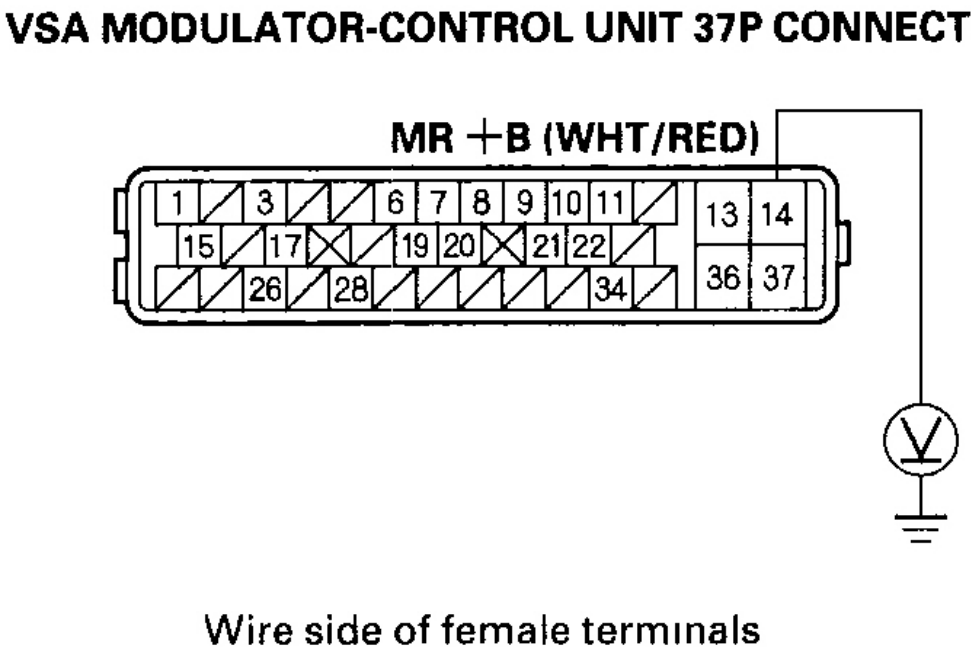


Fig. 37: Measuring Voltage Between Modulator-Control Unit Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Repair open in the wire between the No. 17 MR +B (30 A) fuse and

the VSA modulator-control unit.

DTC 52-12: MOTOR LOCK CIRCUIT MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Do the each SOLENOID or VSA in the FUNCTION TEST repeat test five times with the HDS.
5. Check for DTCs with the HDS.

Is DTC 51-12 indicated?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

DTC 53-01: MOTOR RELAY STUCK ON, DTC 53-12: MOTOR RELAY STUCK ON

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

Is DTC 53-01 or 53-12 indicated?

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

5. Turn the ignition switch OFF.

6. Disconnect the VSA modulator-control unit 37P connector.
7. Check for continuity between VSA modulator-control unit 37P connector terminal No. 37 and body ground.

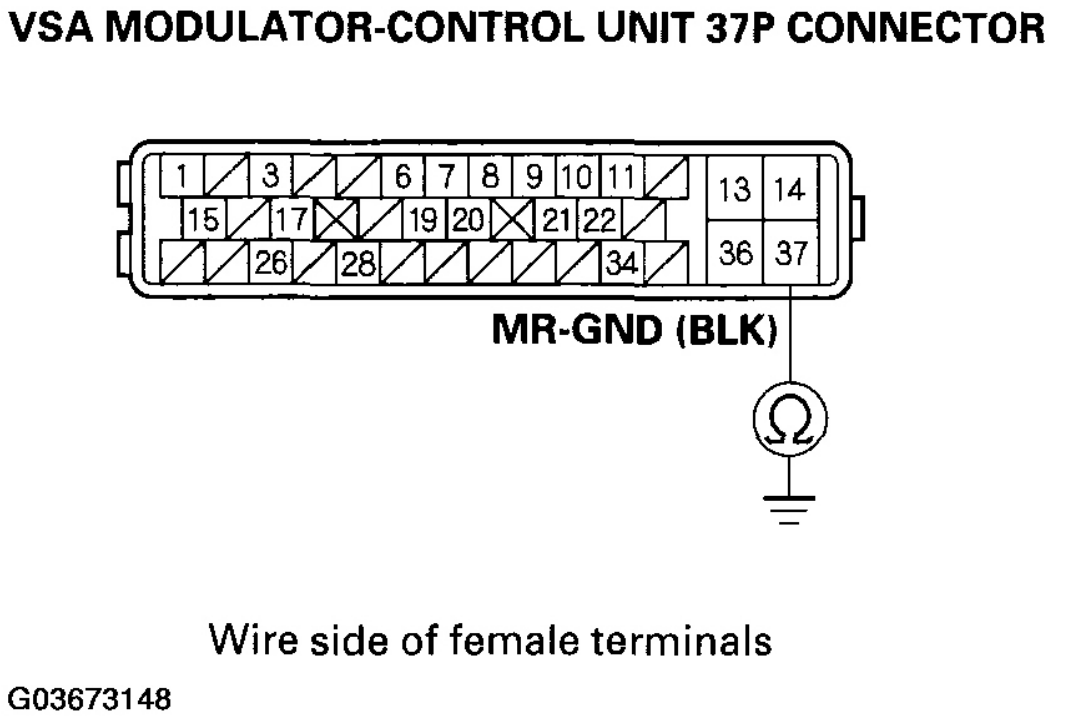


Fig. 38: Checking Continuity Between Modulator-Control Unit Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Repair open in the wire between the VSA modulator-control unit and body ground (G203).

DTC 54-03: FAIL-SAFE RELAY 1 STUCK ON, DTC 54-04: FAIL-SAFE RELAY 1 STUCK OFF 1, DTC 54-21: FAIL-SAFE RELAY 1 STUCK OFF 2

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

Is DTC 54-03, 54-04, or 54-21 indicated?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

DTC 56-01: INITIAL VIG FET STUCK OFF, DTC 56-02: INITIAL VIG FET STUCK ON, DTC 56-11: VIG FET STUCK OFF

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

Is DTC 56-01, 56-02, or 56-11 indicated?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the VSA modulator-control unit. Refer to

intermittent failure (see **INTERMITTENT FAILURES**).

DTC 61-01: VSA MODULATOR-CONTROL UNIT INITIAL IG LOW VOLTAGE, DTC 61-21: VSA MODULATOR-CONTROL UNIT POWER SOURCE LOW VOLTAGE, DTC 61-22: VSA MODULATOR-CONTROL UNIT POWER SOURCE LOW VOLTAGE, DTC 61-23: VSA MODULATOR-CONTROL UNIT POWER SOURCE LOW VOLTAGE

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

   Is DTC 61-01, 61-21, 61-22, or 61-23 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).
5. Check the IG1 and BATTERY voltage in the VSA DATA LIST with the HDS. If the voltage listed is 0 V, go to step 8, otherwise go to step 6.
6. Using a voltmeter, measure and note the voltage betwen the battery terminals.

   NOTE: If the voltage is 9.5 V, go to step 5. If there is the any voltage, check the battery performance, refer to BATTERY (EXCEPT HYBRID & V6) , and do the alternator and regulator circuit troubleshooting (see ALTERNATOR AND REGULATOR CIRCUIT TROUBLESHOOTING).

7. Compare the voltage noted in step 5 to the voltage in step 6.

   Is the difference between the two voltage readings less than 3V?

   YES - Intermittent failure, the system is OK at this time. Check for loose terminals at the VSA modulator-control unit 37P connector. Refer to intermittent failures troubleshooting. If the code resets after clearing, replace the VSA modulator-control unit.

NO - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit.

8. Turn the ignition switch OFF.
9. Disconnect the VSA modulator-control unit 37P connector.
10. Measure voltage between VSA modulator-control unit 37P connector terminal No. 13 and body ground.

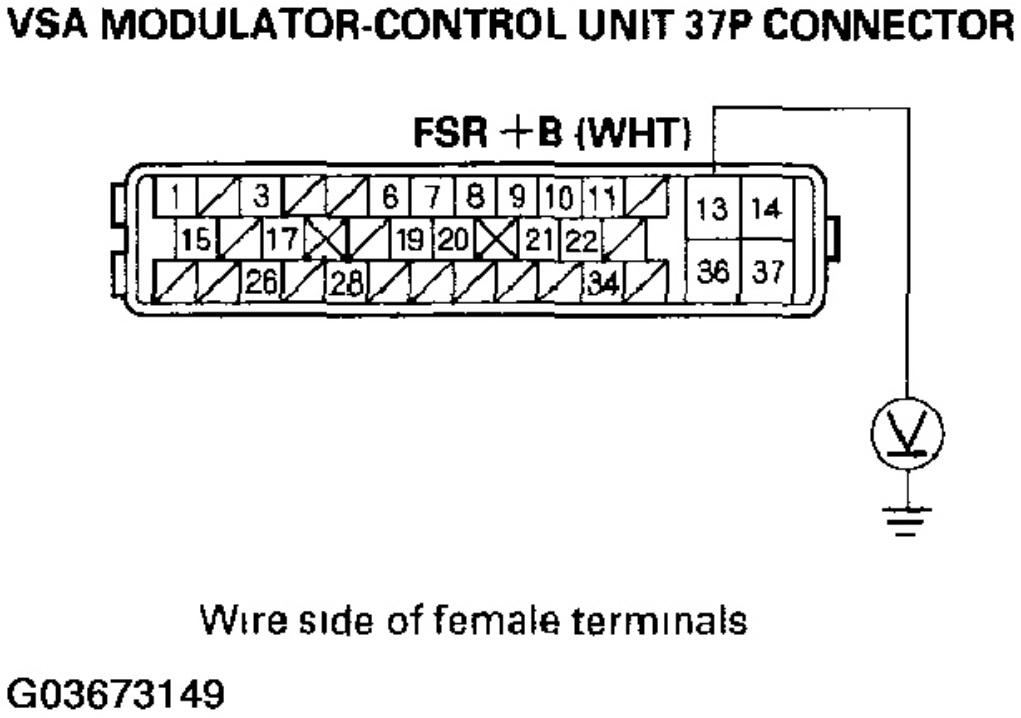


Fig. 39: Measuring Voltage Between Modulator-Control Unit Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control

unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Repair open in the wire between the No. 18 FSR +B (40 A) fuse and the VSA modulator-control unit.

11. Turn the ignition switch ON (II).
12. Measure voltage between the VSA modulator-control unit 37P connector terminal No. 28 and body ground.

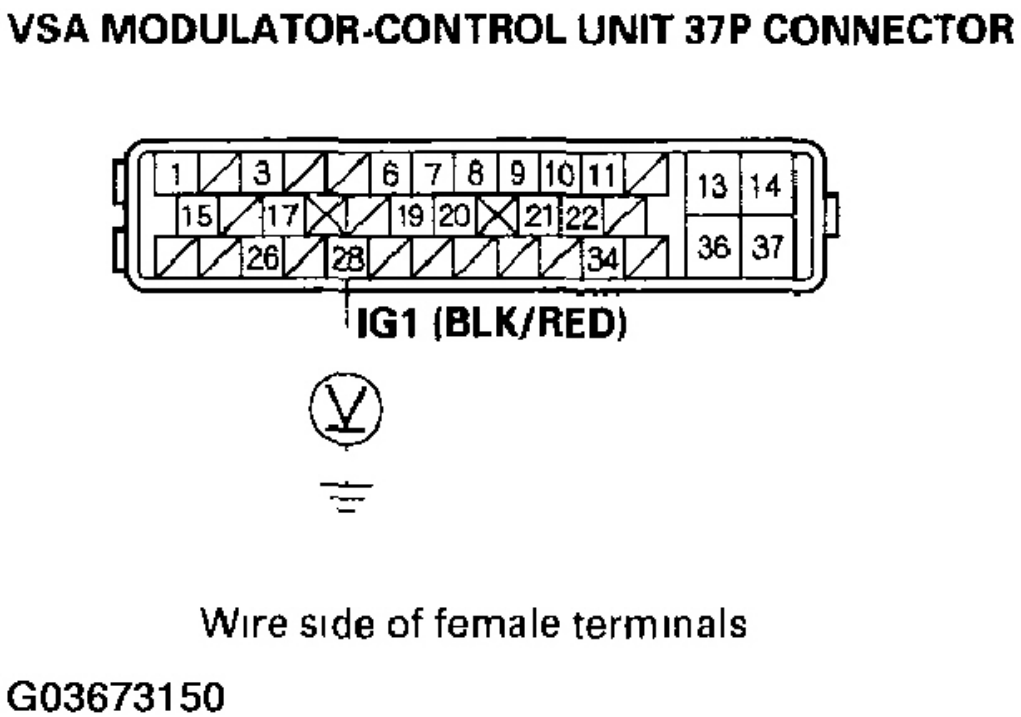


Fig. 40: Measuring Voltage Between Modulator-Control Unit 37P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Repair open in the wire between the No. 18 IG (15 A) fuse and the VSA modulator-control unit.

DTC 62-22: VSA MODULATOR-CONTROL UNIT IG HIGH VOLTAGE

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

Is DTC 62-21 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the VSA modulator-control unit.

5. Using a voltmeter, measure the voltage between the battery terminals. Compare the voltage measured at the battery with the voltage shown in the VSA DATA LIST with the HDS.

Is the voltage difference 3V or more?

YES - Replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Check the battery, refer to the 2003-2007 Accord Service Manual, and troubleshoot the alternator regulator circuit. Also check for loose terminal sin the VSA modulator-control unit 37P connector. It it is OK, replace the known-good VSA modulator-control unit. (See**BATTERY (EXCEPT HYBRID & V6)**).

DTC 64-11: STEERING ANGLE SENSOR POWER CIRCUIT SHORT

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

Is DTC 64-11 indicated?

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the steering angle sensor and the VSA modulator-control unit.

5. Turn the ignition switch OFF.
6. Disconnect the steering angle sensor 5P connector.
7. Disconnect the yaw rate-lateral acceleration sensor 5P connector.
8. Disconnect the VSA modulator-control unit 37P connector.
9. Check for continuity between steering angle sensor 5P connector terminal No. 5 and body ground.

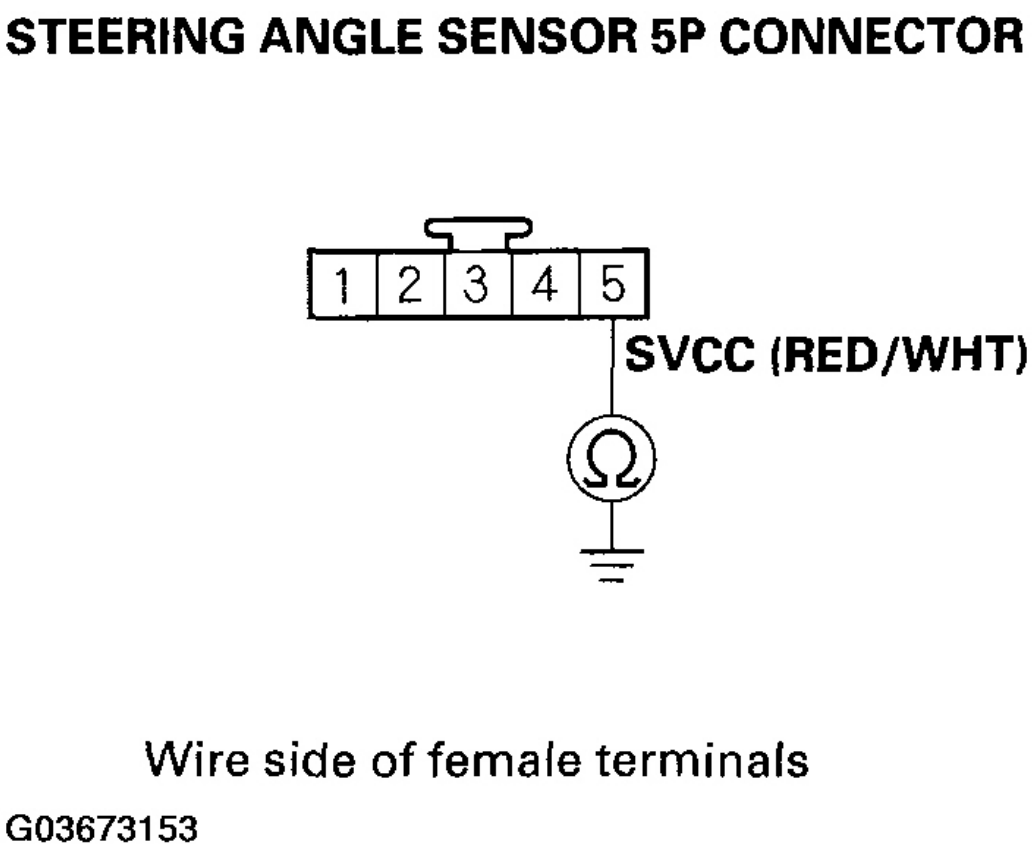


Fig. 41: Checking Continuity Between Steering Angle Sensor 5P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the steering angle sensor and the VSA modulator-control unit.

NO - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

DTC 64-12: STEERING ANGLE SENSOR POWER CIRCUIT OPEN

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

   Is DTC 64-12 indicated?

   YES - Go to step 4.

   NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the steering angle sensor and the VSA modulator-control unit.
5. Turn the ignition switch OFF.
6. Disconnect the steering angle sensor 5P connector.
7. Disconnect the VSA modulator-control unit 37P connector.
8. Check for continuity between VSA modulator-control unit 37P connector terminal No. 7 and steering angle sensor 5P connector terminal No. 5.

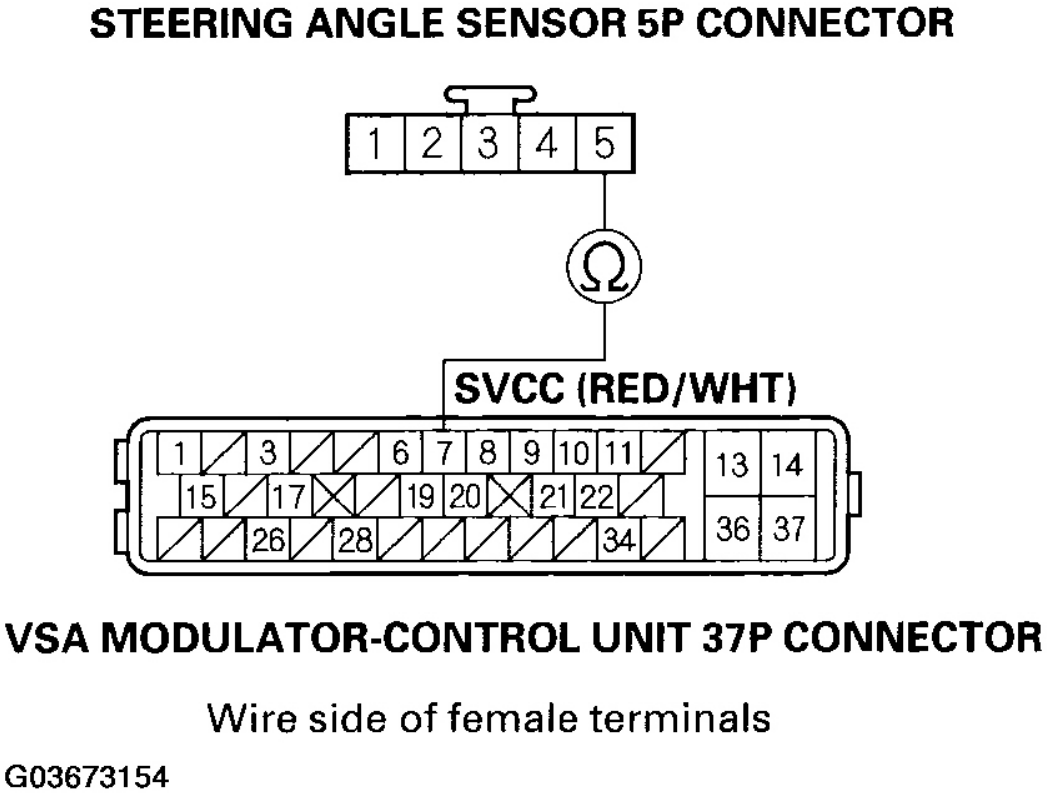


Fig. 42: Checking Continuity Between Modulator-Control Unit Connector Terminal And Steering Angle Sensor Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 8.

NO - Repair open in the wire between steering angle sensor and the VSA modulator-control unit.

9. Disconnect the yaw rate-lateral acceleration sensor 5P connector.
10. Turn the ignition switch ON (II).
11. Measure voltage between VSA modulator-control unit 37P connector terminal No. 7 and body ground.

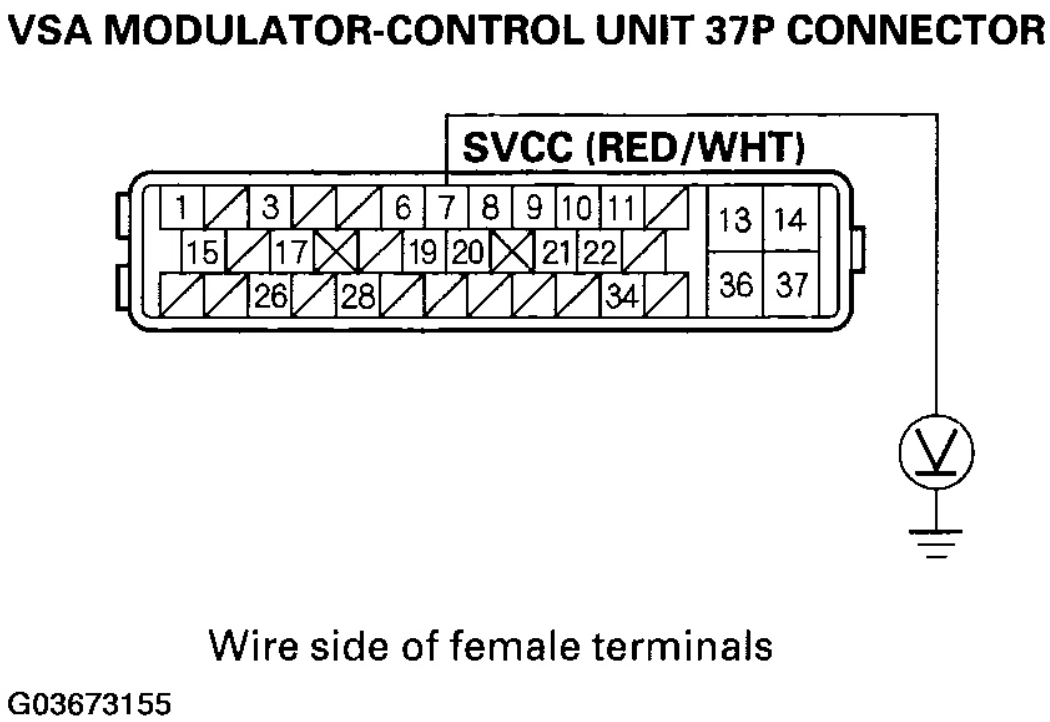


Fig. 43: Measuring Voltage Between Modulator-Control Unit 37P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Repair open in the wire between steering angle sensor and the VSA modulator-control unit.

NO - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

DTC 65-21: BRAKE FLUID LEVEL STUCK ON

1. Turn the ignition switch ON (II).

2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

Is DTC 65-21 indicated?

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the brake pedal position switch, the ECM/PCM, and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

5. Release the parking brake.
6. Turn the ignition switch ON (II).
7. Check the brake system indicator in the gauge control module after several seconds with ignition switch turned ON (II).

The indicator comes on then goes off?

YES - Go to step 9.

NO - Go to step 7.

8. Check the FLUID LEVEL in the DATA LIST with the HDS while moving the brake fluid reservoir tank float.

Does it indicate ON with float is lowered and OFF with float raised?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the brake fluid level switch, gauge control module, and VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

NO - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

9. Check the brake fluid level in the master cylinder reservoir tank.

   Is brake fluid level OK?

   YES - Go to step 9.

   NO - Do the brake pad inspection: Front (see **FRONT BRAKE PAD INSPECTION AND REPLACEMENT**), rear with disc brake type, refer to **ABS MAIN CONTROL** , check for brake fluid leaks, repair leaks or replace worn pads, then go to step 1 and recheck.

10. Check the FLUID LEVEL in the DATA LIST with the HDS while moving the brake fluid reservoir tank float.

    Does it indicate ON with float is lowered and OFF with float raised?

    YES - Go to step 10.

    NO - Replace the brake fluid reservoir tank (brake fluid level switch is included), refer to **DTC TROUBLESHOOTING INDEX**).

11. Turn the ignition switch OFF.
12. Disconnect the gauge control module 36P connector.
13. Disconnect the brake fluid level switch 2P connector.
14. Check for continuity between brake fluid level switch 2P connector terminal No. 2 and body ground.

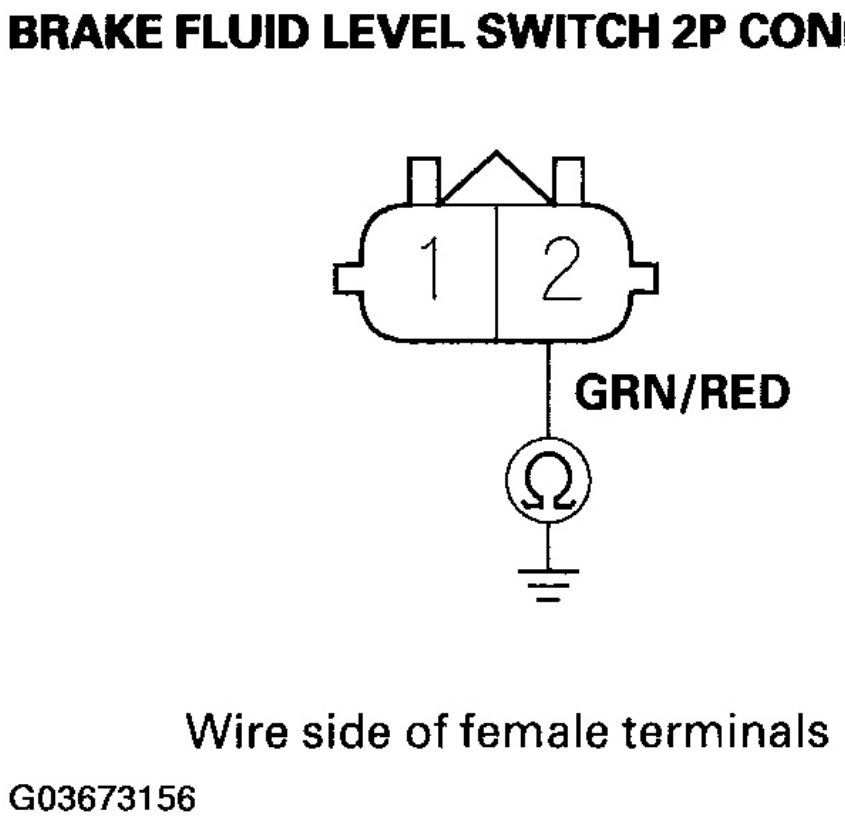


Fig. 44: Checking Continuity Between Brake Fluid Level Switch 2P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the gauge control module and the brake level position switch.

NO - Substitute a known-good gauge control module, then go to step 1 and recheck. If no DTCs are indicated, replace the original gauge control module, refer to **DTC TROUBLESHOOTING** .

DTC 66-11: PRESSURE SENSOR (INSIDE OF VSA MODULATOR-CONTROL UNIT) MALFUNCTION, DTC 66-12: PRESSURE SENSOR (INSIDE OF VSA MODULATOR-CONTROL UNIT) MALFUNCTION, DTC 66-13: PRESSURE SENSOR (INSIDE OF VSA MODULATOR-

CONTROL UNIT) MALFUNCTION, DTC 66-14: PRESSURE SENSOR (INSIDE OF VSA MODULATOR-CONTROL UNIT) MALFUNCTION, DTC 66-16: PRESSURE SENSOR (INSIDE OF VSA MODULATOR-CONTROL UNIT) MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

Is DTC 66-11, 66-12, 66-13, 66-14, or 66-16 indicated?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

DTC 66-15: PRESSURE SENSOR (INSIDE OF VSA MODULATOR-CONTROL UNIT) MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

Is DTC 66-15 indicated?

YES - Go to step 4.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the brake pedal position switch, the ECM/PCM and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

5. Check the PRESSURE SWITCH in the DATA LIST with the HDS, while

moving the brake pedal.

Do the indicated value change?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the brake pedal position switch, the ECM/PCM, and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

NO - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

DTC 68-21: BRAKE PEDAL POSITION SWITCH STUCK OFF

1. Turn the ignition switch ON (II).
2. Check the BRK PRESS in the DATA LIST with the HDS.

Is 0.5 V or less?

YES - Go to step 3.

NO - Replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

3. Check the BRAKE SWITCH in the VSA DATA LIST with the HDS while moving the brake pedal.

Does it indicate ON when the pedal is pushed, and OFF when pedal is released?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the brake pedal position switch, the ECM/PCM, and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

NO - Go to step 4.

4. Turn the ignition switch OFF.
5. Disconnect the brake pedal position switch 4P connector.
6. Connect the brake pedal position switch 4P connector terminal No.1 and No.2 to with a jumper wire.

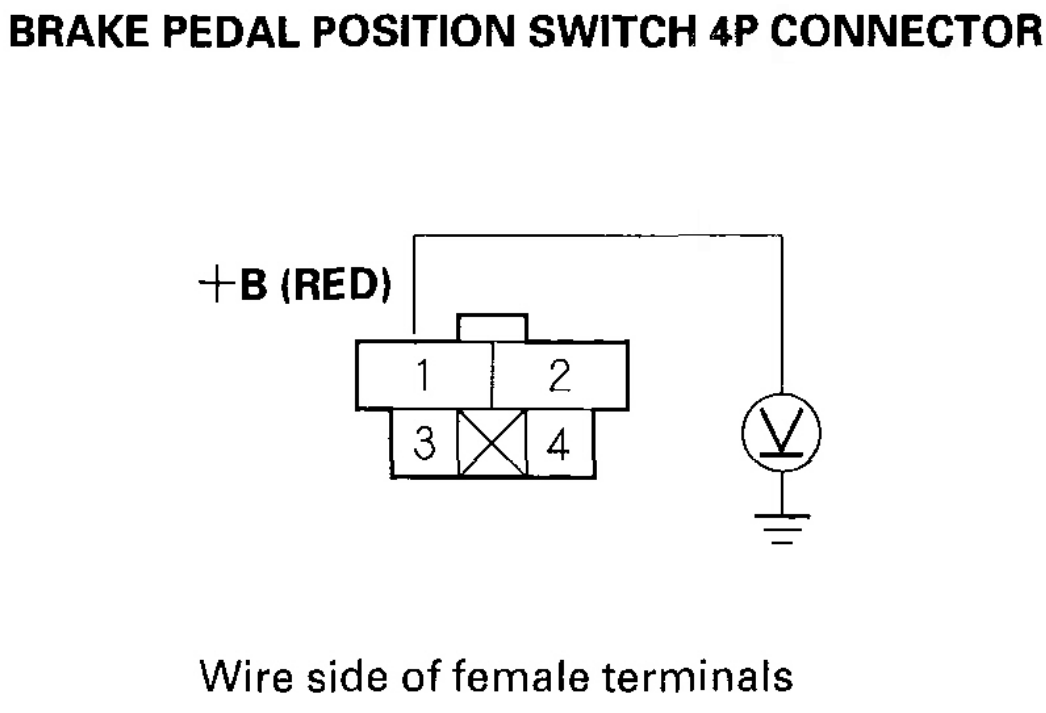


Fig. 45: Checking Voltage Between Body Ground And Brake Pedal Position Switch 4P Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Turn the ignition switch ON.
8. Check the BRAKE SWITCH in the VSA DATA LIST with the HDS.

Does it indicate ON?

YES - Check the brake pedal position switch adjustment, refer to the 2003-2007 Accord Service Manual. If OK, replace the brake pedal

position switch.

NO Go to step 9.

9. Disconnect the jumper wire.
10. Turn the ignition switch OFF.
11. Short the SCS line with the HDS
12. Disconnect ECM/PCM connector A (31P).
13. Check for continuity between brake pedal position switch 4P connector terminal No.2 and ECM/PCM connector A (31P) terminal No.8.

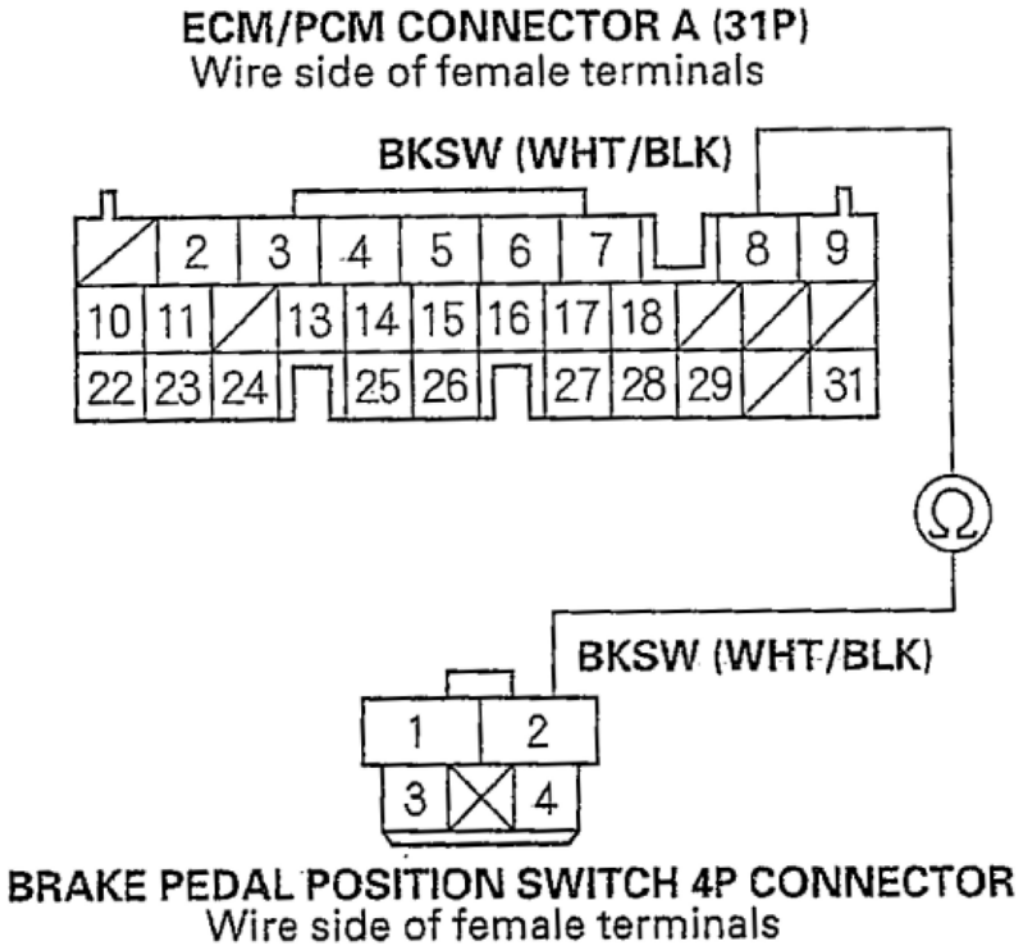


Fig. 46: Identifying ECM/PCM Connector A
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Substitute a known-good ECM/PCM, then go to step 1 and recheck. If DTCs are not indicated, replace the original ECM/PCM.

NO - Repair open in the wire between the ECM/PCM and the brake pedal position switch.

DTC 68-22: BRAKE PEDAL POSITION SWITCH STUCK ON

1. Turn the ignition switch ON (II).
2. Check the BRK PRESS in the DATA LIST with the HDS.

Is 0.5 V or less?

YES - Go to step 3.

NO - Replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

3. Check the BRAKE SWITCH in the DATA LIST while the HDS with moving the brake pedal.

Does it indicate ON when the pedal is pushed, and OFF when pedal is released?

YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the brake pedal position switch, the ECM/PCM, and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

NO - Go to step 4.

4. Check the BRAKE SWITCH in the DATA LIST with the HDS, and disconnect the brake pedal position switch 4P connector.

Does indicator change to OFF?

YES - Substitute a known-good ECM/PCM, then go to step 1 and recheck. If DTCs are not indicated, replace the original ECM/PCM (see **DTC P2122: APP SENSOR A (THROTTLE POSITION SENSOR D) CIRCUIT LOW VOLTAGE 2003/2004 MODELS**).

NO - Go to step 5.

5. Check for continuity between brake pedal position switch 4P connector terminal No. 2 and body ground.

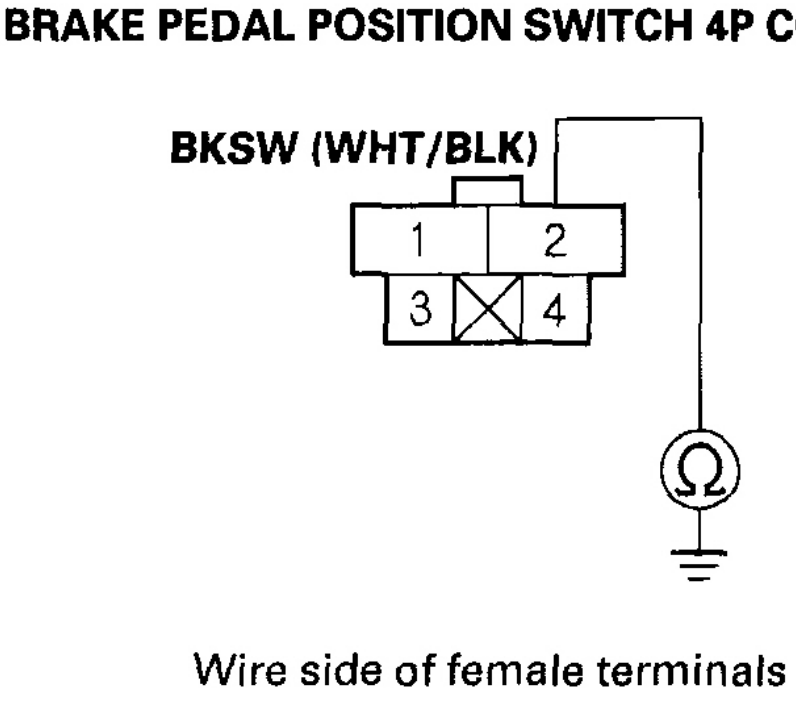


Fig. 47: Checking Continuity Between Brake Pedal Position Switch 4P Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the ECM/PCM and the brake pedal position switch.

NO - Replace the brake pedal position switch.

DTC 71-27: RIGHT-FRONT OR LEFT-REAR DIFFERENT DIAMETER TIRE MALFUNCTION,
DTC 71-28: LEFT-FRONT OR RIGHT-REAR DIFFERENT DIAMETER TIRE MALFUNCTION,
DTC 71-29: RIGHT-FRONT AND RIGHT-REAR DIFFERENT DIAMETER TIRE MALFUNCTION,

DTC 71-2A: LEFT-FRONT AND LEFT-REAR DIFFERENT DIAMETER TIRE MALFUNCTION,
DTC 71-2B: LEFT-FRONT AND RIGHT-FRONT DIFFERENT DIAMETER TIRE MALFUNCTION,
DTC 71-2C: LEFT-REAR AND RIGHT-REAR DIFFERENT DIAMETER TIRE MALFUNCTION

1. ABS and/or VSA Indicator will indicated when the vehicle has a different diameter tire(s) against other tire(s).

DIFFERENT DIAMETER TIRE MALFUNCTION

DTC	Sectional
71-27	Right-front or left-rear
71-28	Left-front or right-rear
71-29	Right-front and right-rear
71-2A	Left-front and left-rear
71-2B	Left-front and right-front
71-2C	Left-rear and right-rear

DTC 81-XX* : CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION

*: Except DTC 81-11, 81-51, 81-52, 81-53, 81-54, 81-55, 81-56, 81-57, 81-58, 81-59, 81-3D, and 81-3E

1. Check the tires for proper inflation.
2. Turn the ignition switch ON (II).
3. Clear the DTC with the HDS.
4. Turn the ignition switch OFF, then ON (II) again.
5. Test drive the vehicle.
6. Check for DTCs with the HDS.

Is DTC 71-21, 71-22, 71-23, 71-24, 71-25, 71-26, 71-27, 71-28, 71-29, 71-2A, 71-2B, or 71-2C indicated?

YES - Replace all four tires with the proper size.
NO - Intermittent failure, system is OK at this time.

DTC 81-XX: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

Is DTC 81-11, 81-52, 81-54, 81-56, or 81-58 indicated?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

DTC 81-11: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION, DTC 81-52: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION, DTC 81-54: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION, DTC 81-56: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION, DTC 81-58: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Test drive the vehicle.
4. Check for DTCs with the HDS.

Is DTC 81-11, 81-52, 81-54, 81-56, or 81-58 indicated?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the VSA modulator-control unit. Refer to

intermittent failure (see **INTERMITTENT FAILURES**).

DTC 81-51: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION, DTC 81-53: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION, DTC 81-55: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION, DTC 81-57: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS. Turn the ignition switch OFF, then ON (II) again.
3. Test-drive the vehicle.
4. Check for DTCs with the HDS.

Is DTC 81-51, 81-53, 81-55, or 81-57 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the appropriate wheel sensor and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

5. Turn the ignition switch OFF.
6. Disconnect the VSA modulator-control unit 37P connector.
7. Turn the ignition switch ON (II).
8. Measure voltage between VSA modulator-control unit 37P connector (see **CPU INTERNAL CIRCUIT MALFUNCTION**).

CPU INTERNAL CIRCUIT MALFUNCTION

DTC	Appropriate Terminal	Appropriate Wheel Sensor
81-51	19	Right-front
81-53	22	Left-front
81-55	9	Right-rear
81-57	20	Left-rear

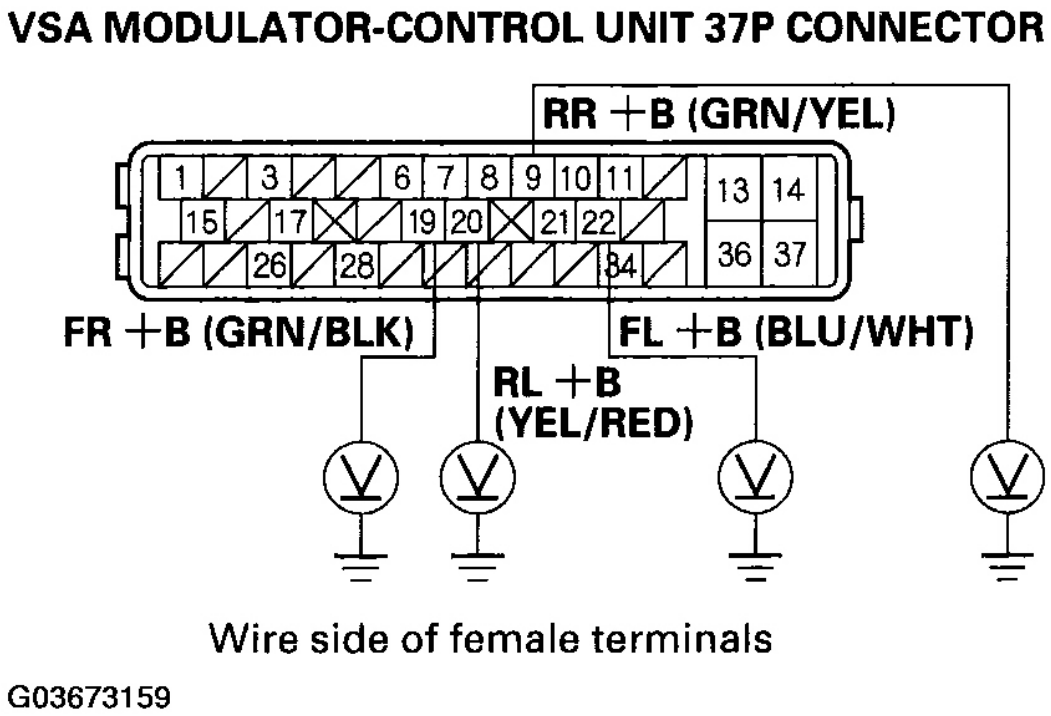


Fig. 48: Measuring Voltage Between VSA Modulator-Control Unit 37P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Repair short in the wire between the appropriate wheel sensor and the VSA modulator-control unit.

NO - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

DTC 81-59: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION, DTC 81-3D: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION, DTC81-3E: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Turn the steering wheel from lock to lock.
5. Check for DTCs with the HDS.

Is DTCs 81-59, 81-3D or 81-3E indicated?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

DTC 83-13: ECM/PCM RELATION FAILURE, DTC 83-14: ECM/PCM RELATION FAILURE

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Test-drive the vehicle.
4. Check for DTCs with the HDS.

Is DTC 83-13, or 83-14 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the brake pedal position switch, the ECM/PCM, and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

5. Turn the ignition switch OFF.
6. Substitute a known-good ECM/PCM.
7. Turn the ignition switch ON.

8. Clear the DTC with the HDS.
9. Test-drive the vehicle.
10. Check for DTCs with the HDS. (see **GENERAL TROUBLESHOOTING INFORMATION**).

Is DTC 83-13, or 83-14 indicated?

YES Replace the VSA modulator-control unit. (See **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**)

NO - Replace the origional ECM/PCM.

DTC 84-21: VSA SENSOR NEUTRAL POSITION NOT WRITING

Do the VSA sensor neutral position memorization (see **VSA SENSOR NEUTRAL POSITION MEMORIZATION**).

DTC 86-01: F-CAN MALFUNCTION (BUS-OFF)

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

Is DTC 86-01 indicated?

YES - Go to step 5.

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the yaw rate-lateral acceleration sensor, the ECM/PCM, the gauge control module, and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

5. Turn the ignition switch OFF.
6. Disconnect the VSA modulator-control unit 37P connector.
7. Disconnect the ECM/PCM connector A (31P).
8. Disconnect the VSA modulator-control unit 37P connector and the guage

control module connector (36P).

9. Check for continuity between the VSA modulator-controlunit 37P connector terminals No.1 and No.15 and body ground individually.

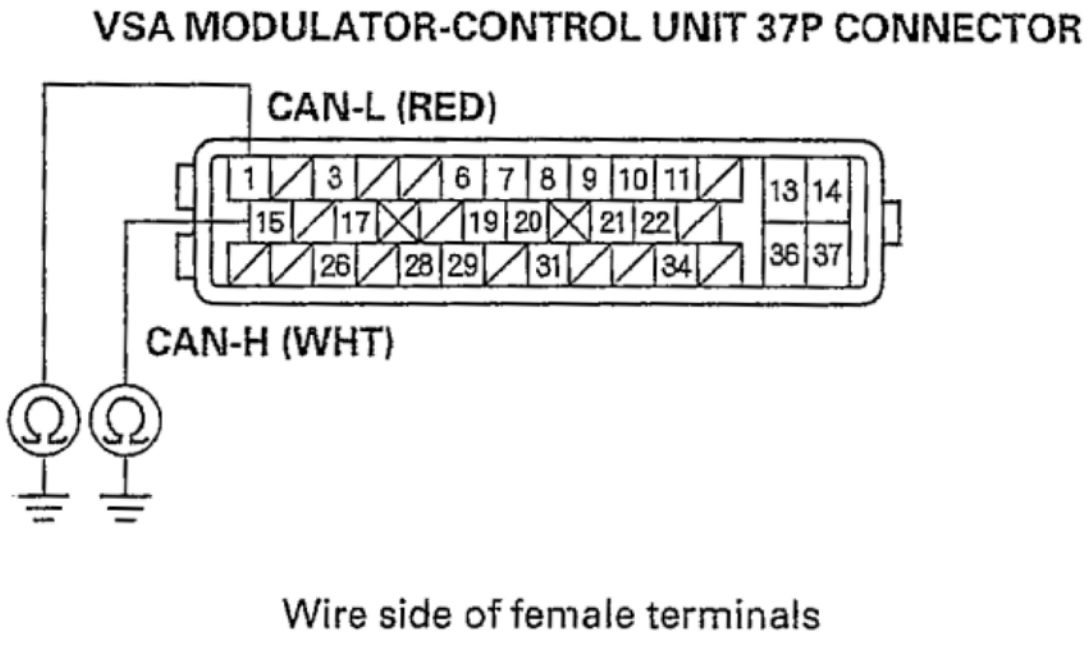


Fig. 49: Identifying VSA Modular Control Unit 37P
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair the short to ground on the appropriate wire.

NO - Go to step 10.

10. Check for continuity between VSA modulator-control unit 37P connector terminals No.1 and No.15.

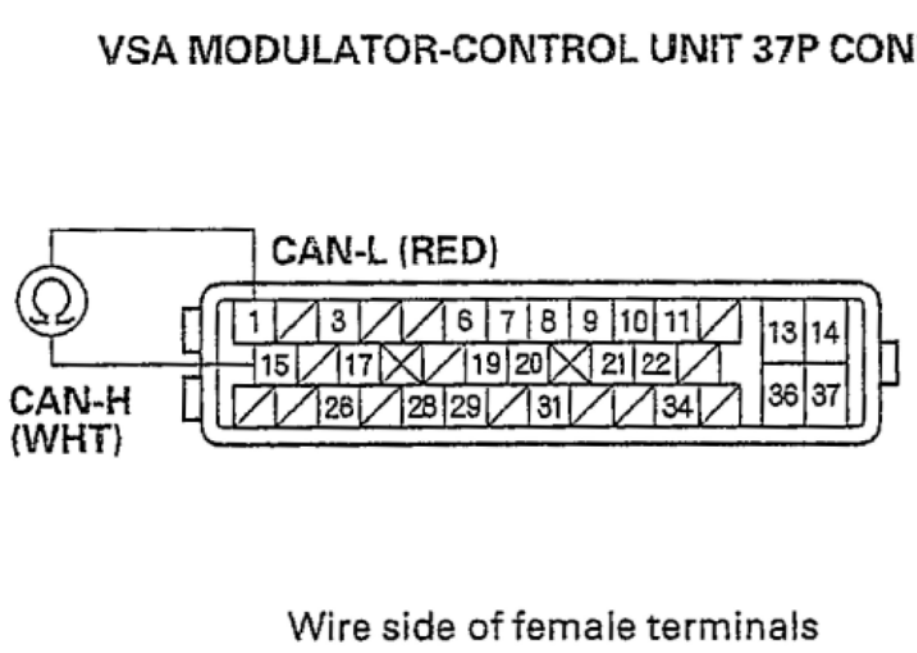


Fig. 50: Identifying VSA Modular Control Unit 37P
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between VSA moduilator-control unit 37P connector terminals no.1 (CAN-L line) and No.15 (CAN-H line).

NO - Go to step 11.

11. Check for continuity between VSA modulator-control unit 37P terminal and ECM/PCM connector A (31P) terminal (see **VSA MODULATOR CONTROL UNIT AND ECM/PCM CONNECTOR**).

VSA MODULATOR CONTROL UNIT AND ECM/PCM CONNECTOR

	Connector Terminal No.	
Sign	**VSA Modulator control Unit**	**ECM/PCM**
CAN-L	1	26
CAN-H	15	15

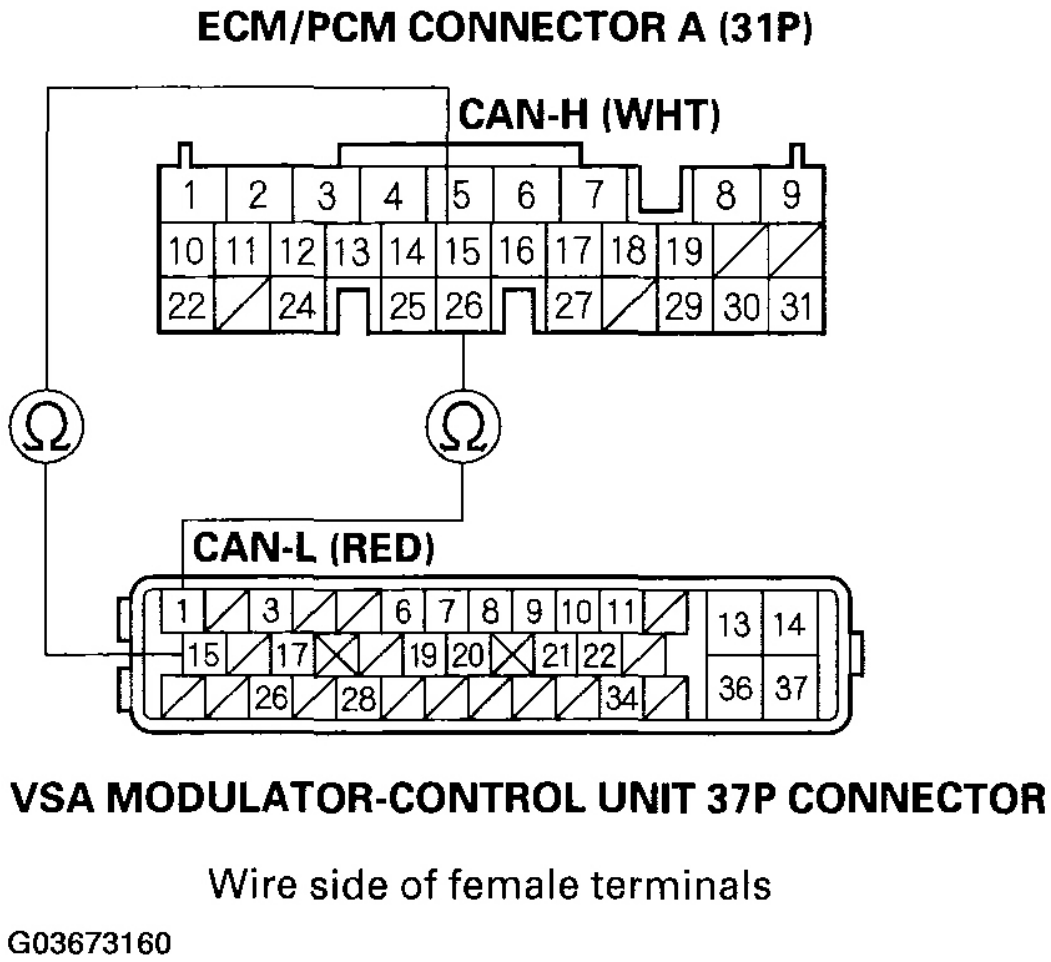


Fig. 51: Checking Continuity Between Modulator-Control Unit Terminal And ECM/PCM Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Repair open in the wire between the ECM/PCM and the VSA

modulator-control unit.

DTC 86-11: F-CAN COMMUNICATION WITH ECM/PCM MALFUNCTION, DTC 86-21: F-CAN COMMUNICATION WITH ENGINE MALFUNCTION, DTC 86-22: F-CAN COMMUNICATION WITH ENGINE MALFUNCTION, DTC 86-23: F-CAN COMMUNICATION WITH ENGINE MALFUNCTION, DTC 86-41: F-CAN COMMUNICATION WITH EAT MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Test-drive the vehicle. Drive the vehicle speed at 7 mph (10 km/h) or more.
4. Check for DTCs with the HDS.

   Is 86-11, 86-21, 86-22, 86-23, and/or 86-41 DTC indicated?

   YES - If the DTC 86-01 is indicated at the same time, do the **DTC 86-01: F-CAN MALFUNCTION (BUS-OFF)** troubleshooting (see). If 86-01 is not indicated, go to step 8.

   NO - If any DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**. If DTC is not indicated, intermittent failure, system is OK at this time. Check for poor connections or loose terminals between the yaw rate-lateral acceleration sensor, the ECM/PCM, the gauge control module, and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).
5. Turn the ignition switch OFF.
6. Short the SCS line with the HDS.
7. Disconnect ECM/PCM connector A (31P).
8. Disconnect the VSA modulator-control unit 37P connector.
9. Check for continuity between the VSA modulator-control unit 37P connector terminal and ECM/PCM connector A (31P) terminal (see **VSA MODULATOR-CONTROL AND ECM/PCM CONNECTOR**).

VSA MODULATOR-CONTROL AND ECM/PCM CONNECTOR

Sign	Connector Terminal No.	
	VSA Modulator-control Unit	ECM/PCM

CAN-L	1	26
CAN-H	15	15

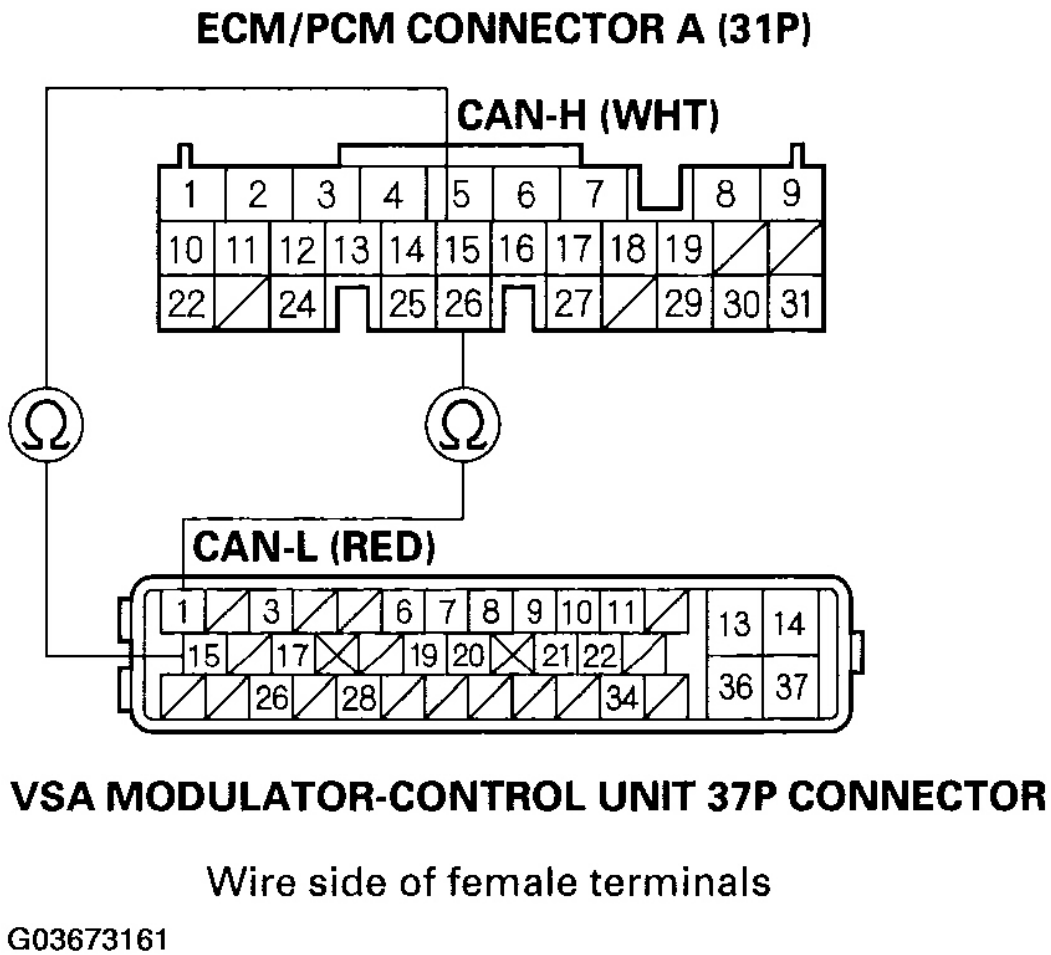


Fig. 52: Checking Continuity Between Modulator-Control Unit Connector Terminal And ECM/PCM Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check terminal pin fit, if OK, substitute a known-good ECM/PCM, then go to step 1 and recheck. If no DTCs are indicated, replace the original ECM/PCM (see **DTC P2122: APP SENSOR A (THROTTLE**

POSITION SENSOR D) CIRCUIT LOW VOLTAGE 2003/2004 MODELS).

NO - Repair open in the wire between the ECM/PCM and the VSA modulator-control unit.

DTC 86-31: F-CAN COMMUNICATION WITH GAUGE CONTROL MODULE MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

Is 86-31 DTC indicated?

YES - If the DTC 86-01 is indicated as same time, do the **DTC 86-01: F-CAN MALFUNCTION (BUS-OFF)** troubleshooting . If 86-01 is not indicated, go to step 4.

NO - If any DTCs are indicated, go to the indicated **DTC TROUBLESHOOTING**. If DTC is not indicated, intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the yaw rate-lateral acceleration sensor, the ECM/PCM, the gauge control module, and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

5. Turn the ignition switch ON (II).

Do any indicators come on?

YES - Go to step 6.

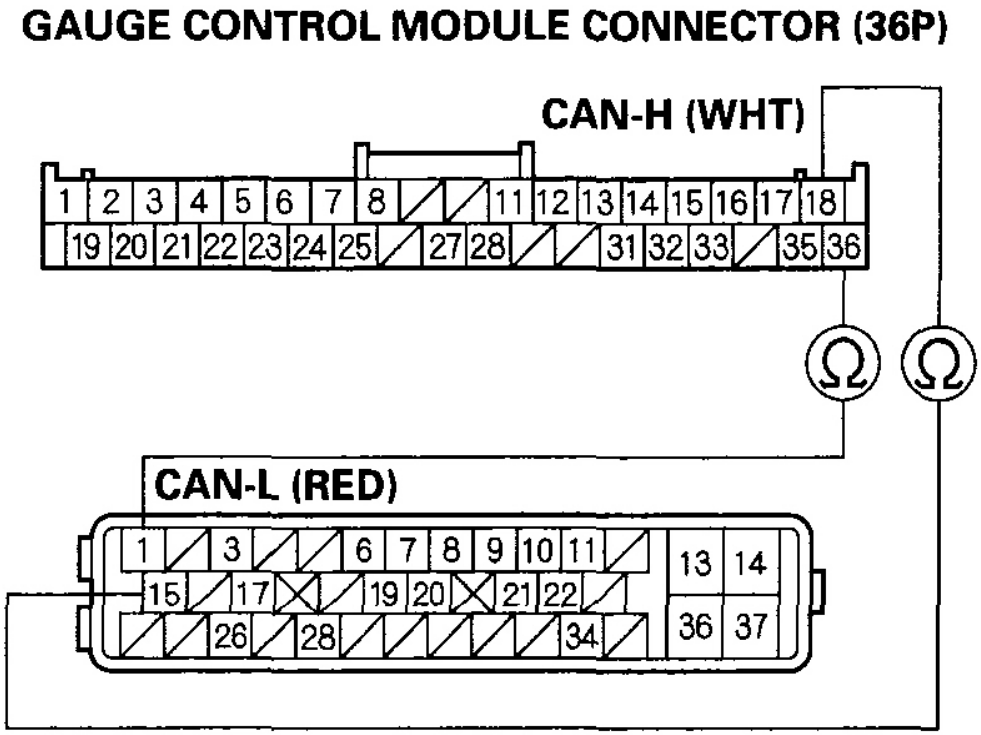
NO - Do the gauge control module troubleshooting, refer to**DTC TROUBLESHOOTING** .

6. Turn the ignition switch OFF.
7. Disconnect the gauge control module 28P connector.
8. Disconnect the VSA modulator-control unit 37P connector.
9. Check for continuity between the VSA modulator-control unit 37P connector terminal and gauge control module connector (36P) terminal (see **VSA**

MODULATOR-CONTROL UNIT AND GAUGE CONTROL MODULE).

VSA MODULATOR-CONTROL UNIT AND GAUGE CONTROL MODULE

Sign	Connector Terminal No.	
	VSA Modulator-control Unit	Gauge Control Module
CAN-L	1	36
CAN-H	15	18



VSA MODULATOR-CONTROL UNIT 37P CONNECTOR

Wire side of female terminals

G03673162

Fig. 53: Checking Continuity Between Modulator-Control Unit Connector Terminal And Gauge Control Module Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Substitute a known-good gauge control module, then go to step 1 and recheck. If no DTCs are indicated, replace the original gauge control module, refer to **GAUGE CONTROL MODULE REPLACEMENT** .

NO - Repair open in the wire between the gauge control module and the VSA modulator-control unit.

DTC 107-22: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION

1. Turn the ignition switch OFF to cool the VSA modulator-control unit, and wait 1 hour or more.
2. Turn the ignition switch ON.
3. Clear the DTC with the HDS.
4. Turn the ignition switch OFF, then turn it ON again.
5. Check for DTCs with the HDS.

Is DTC 107-22 indicated?

YES - Replace the VSA modulator-control unit.

NO - The system is OK at this time.

DTC 108-21: STEERING ANGLE SENSOR MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Do the VSA sensor neutral position memorization.
4. Test-drive the vehicle.
5. Check for DTCs with the HDS.

Is DTC 81-21 indicated?

YES - Replace the steering angle sensor (see**STEERING ANGLE SENSOR REPLACEMENT**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the steering angle sensor and the VSA modulator-control unit. Refer to intermittent failure (see **INTERMITTENT FAILURES**).

6. Turn the ignition switch OFF.
7. Substitute a known-good steering angle sensor.
8. Turn the ignition switch ON.
9. Clear the DTC with the HDS.
10. Do the VSA sensor neutral position memorization.
11. Test-drive the vehicle.
12. Check for DTCs with the HDS.

Is DTC 108-21 indicated?

YES - Replace the VSA modulator-control unit.

NO - Replace the origional steering angle sensor.

DTC 112-01: CENTRAL PROCESSING UNIT (CPU) INTERNAL CIRCUIT MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF.
4. Disconnect the VSA modulator-control unit 37P connector.
5. Measure voltage between VSA modulator-control unit 37P connector terminal No. 13 and body ground.

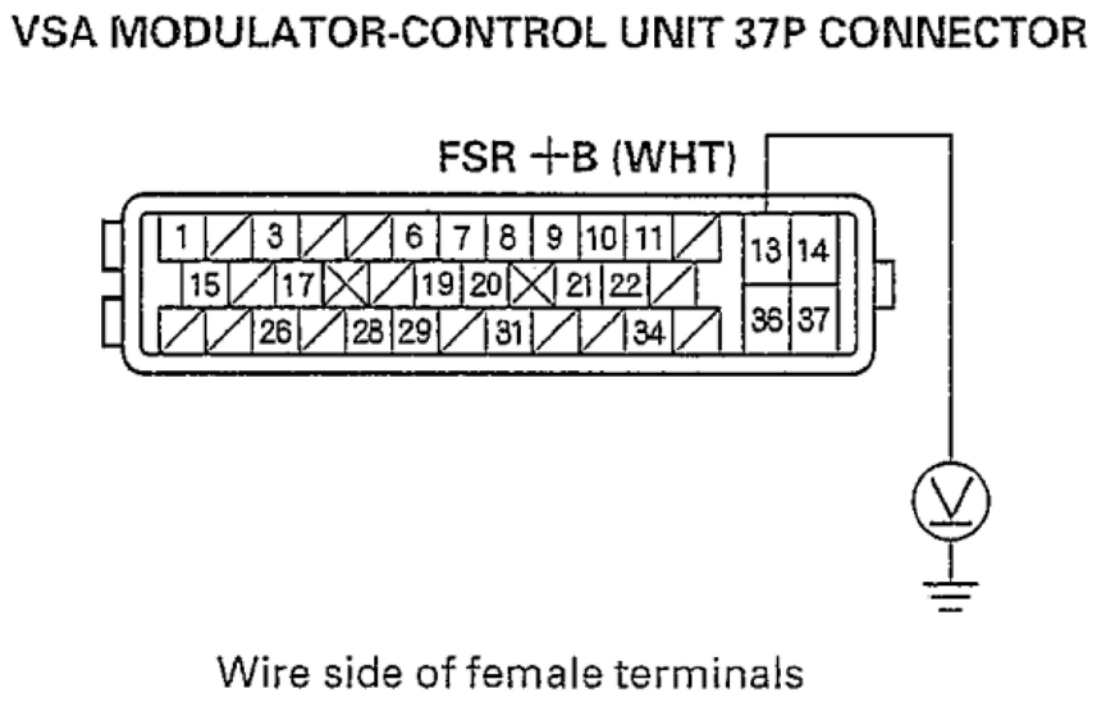


Fig. 54: Identifying VSA modulator-control unit 37P
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 6.

NO - Check the battery, refer to the 2003-2007 Accord Service Manual, and troubleshoot the alternator regulator circuit.

6. Measure voltage between VSA modulator-control unit 37P connector terminal No. 28 and body ground.

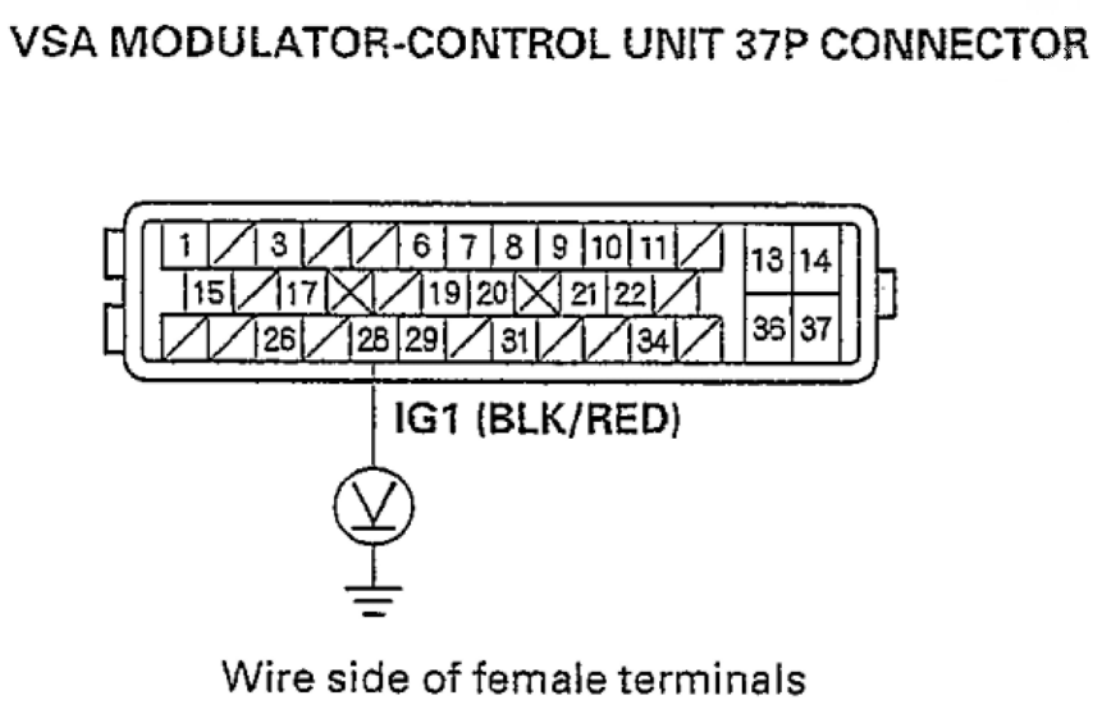


Fig. 55: Identifying VSA modulator-control unit 37P
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there 0 V?

YES - Go to step 7.

NO - Repair short to power in the wire between the No. 18 (15 A) in the under-dash fuse/relay box and the VSA modulator-control unit.

7. Turn the ignition switch ON.
8. Measure voltage between VSA modulator-control unit 37P connector terminal No. 28 and body ground.

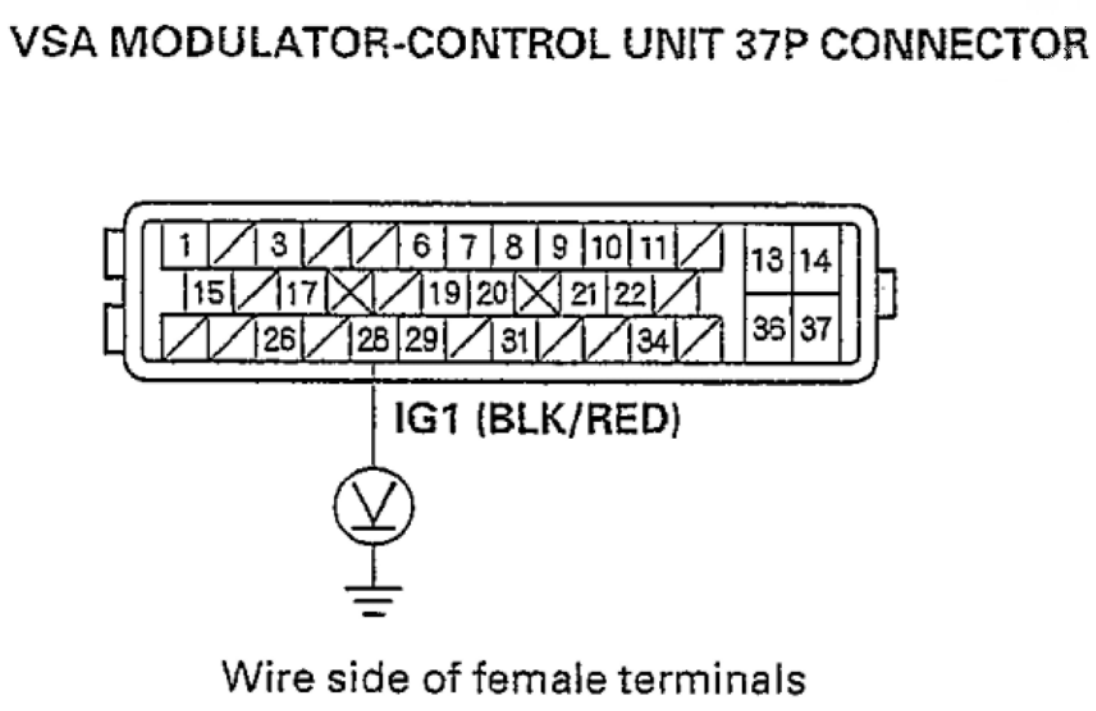


Fig. 56: Identifying VSA modulator-control unit 37P
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unitand retest.

NO - Repair open in the wire between the No. 18 (15 A) fuse in the under-dash fuse/relay box and the VSA modulator-control unit.

DTC 121-XX: VSA SOLENOID VALVE MALFUNCTION, DTC 122-XX: VSA SOLENOID VALVE MALFUNCTION, DTC 123-XX: VSA SOLENOID VALVE MALFUNCTION, DTC 124-XX: VSA SOLENOID VALVE MALFUNCTION

1. Turn the ignition switch ON (II).
2. Clear the DTC with the HDS.
3. Turn the ignition switch OFF, then ON (II) again.
4. Check for DTCs with the HDS.

VSA SOLENOID VALVE MALFUNCTION

DTC		Sectional	Valve
121	-01	Right-front and left-rear	master cut
121	-02		regulator
121	-11		
121	-21		master cut
121	-22		
121	-23		
121	-24		regulator
122	-01		suction
122	-21		
122	-22		
122	-23		
123	-01	Left-front and right-rear	master cut
123	-02		regulator
123	-11		
123	-21		master cut
123	-22		
123	-23		
123	-24		regulator
124	-01		suction
124	-21		
124	-22		
124	-23		

Is DTC 121-xx, 122-xx, 123-xx, or 124-xx indicated?

YES - Check for loose terminals in the VSA modulator-control unit 37P connector. If necessary, substitute a known-good VSA modulator-control unit and retest. If DTCs are not indicated, replace the VSA modulator-control unit (see **VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION**).

NO - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the VSA modulator-control unit. Refer to

intermittent failure (see **INTERMITTENT FAILURES**).

SYMPTOM TROUBLESHOOTING

VSA ACTIVATION INDICATOR DOES NOT GO OFF, AND NO DTCS ARE STORED

1. Turn the ignition switch ON (II).
2. Check the VSA activation indicator in the gauge control module when ignition switch is turned ON (II) after several seconds.

   The indicator comes on then goes off?

   YES - Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the VSA OFF switch, the gauge control module, and VSA modulator-control unit.

   NO - Go to step 3.
3. Check the VSA OFF SWITCH in the VSA DATA LIST witht the HDS when pushing the VSA OFF switch.

   Does the indicator change from ON (OFF) to OFF (ON)?

   YES - Do the guage control module troubleshooting.

   NO - Go to step 4.

4. Turn the ignition switch OFF.
5. Check the VSA OFF switch.

   Is the VSA off switch OK?

   YES - Go to step 5.

   NO - Replace the VSA OFF switch (see **VSA OFF SWITCH TEST**).
6. Disconnect the gauge control module 28P connector.
7. Disconnect the VSA OFF switch 5P connector.
8. Check for continuity between VSA OFF switch 5P connector terminal No. 2 and body ground.

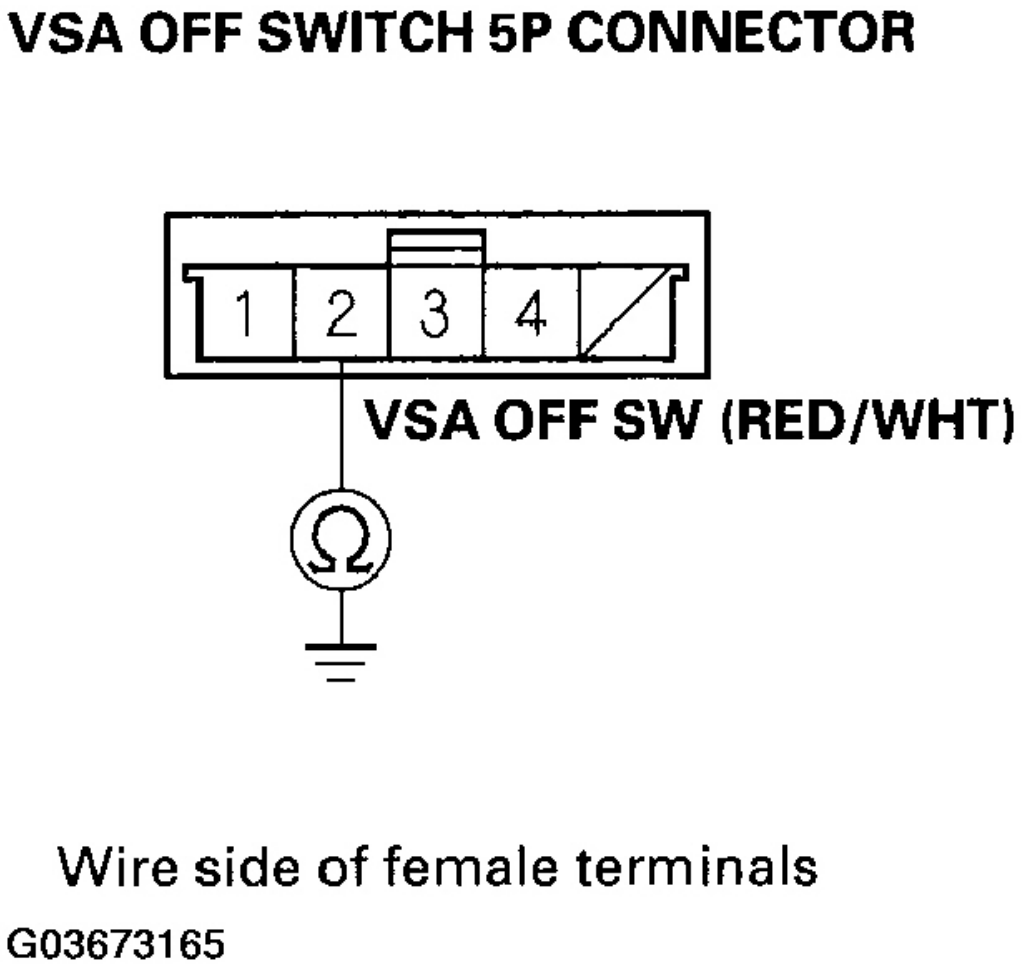


Fig. 57: Checking Continuity Between Off Switch Connector Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wire between the gauge control module and the VSA OFF position switch.

NO - Substitute a known-good gauge control module, then go to step 1 and recheck. If it is OK, replace the original gauge control module, refer to

GAUGE CONTROL MODULE REPLACEMENT .

ABS INDICATOR, BRAKE SYSTEM INDICATOR, AND VSA INDICATOR DO NOT GO OFF AT THE SAME TIME

1. Release the parking brake.
2. Turn the ignition switch ON.
3. Check the ABS indicator, the brake system indicator and the VSA indicator for seceral seconds when the ignition switch is turned ON.

   Do the indicators come on then go off?

   YES - Intermittent failure, the system is OK at this time. Check for loose terminals between the gauge control module (36P) connector and the VSA modulator-control unit 37P connector. Refer to intermittent failures troubleshooting.

   NO - Go to step 4.
4. Turn the ignition switch OFF.
5. Short the SCS line with the HDS.
6. Disconnect ECM/PCM connector A (31P)
7. Disconnect the guage control module (36P) connector.
8. Disconnect the VSA modulator-control unit 37P connector.
9. Check for continuity between the VSA modulator-control unit 37P connector terminals No. 1 and No. 15 and bodt ground individually.

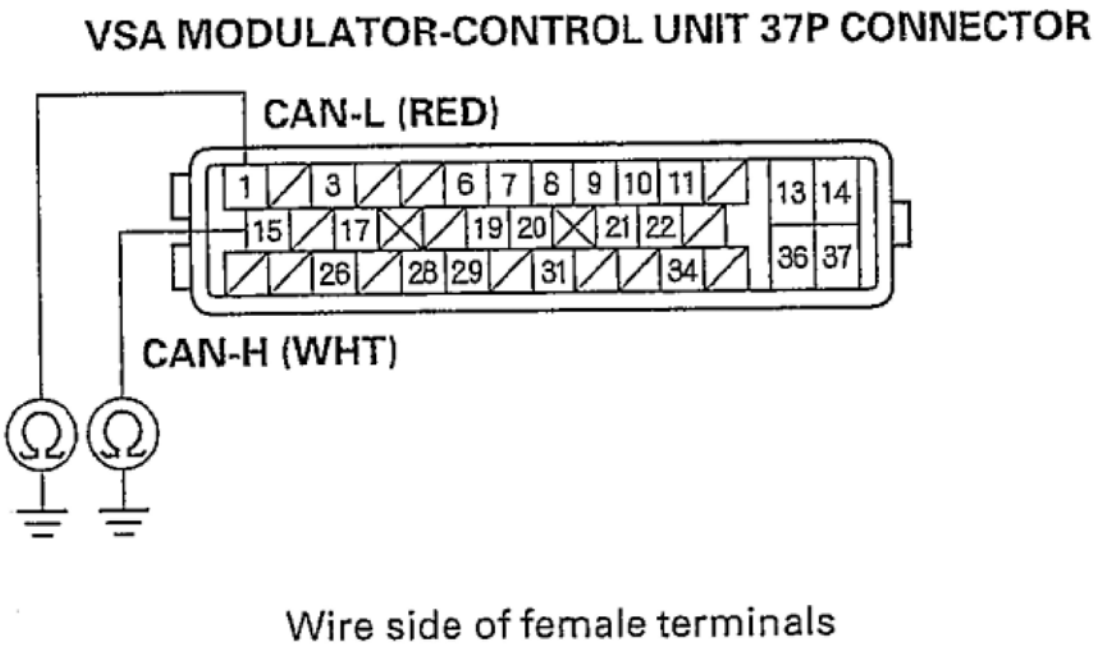


Fig. 58: Identifying VSA Modulator-Control Unit 37P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair the short to ground on the approprite wire.

NO - Go to step 10.

10. Check for continuity between VSA modulator-control unit 37P connector terminals No. 1 and No. 15.

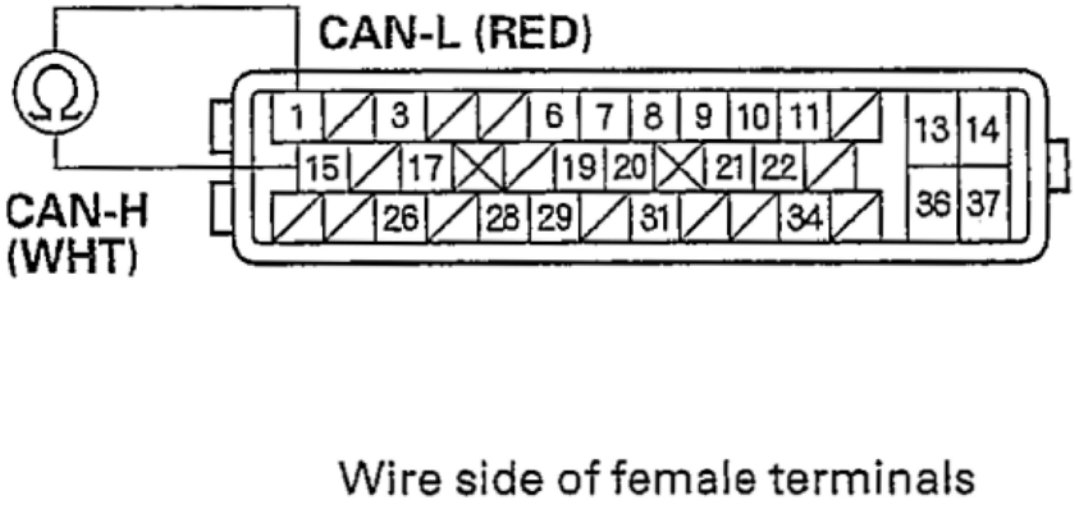


Fig. 59: Identifying VSA Modulator-Control Unit 37P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair the short in the wire between VSA modulator-control unit 37P connector terminals No.1 (CAN-L line) and No. 15 (CAN-H line).

NO - Go to step 11.

11. Check for continuity between VSA modulator-control unit 37P connector terminal and guage control module (36P) connector terminal (see table).

37P Connector Terminal And Guage Control Module

Sign	Connector Terminal No.	
	VSA Modulator-Control Unit	Guage Control Module
CAN-L	1	19
CAN-H	15	1

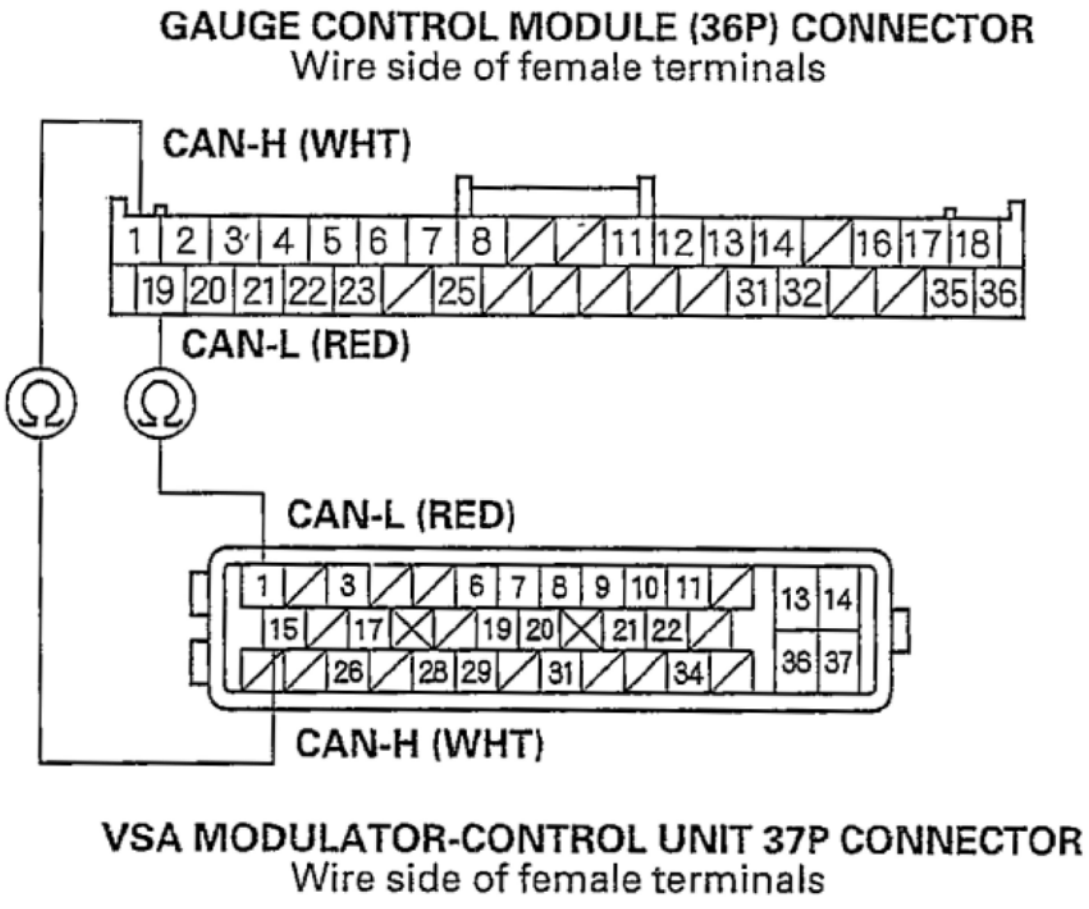


Fig. 60: Identifying VSA Modulator-Control Unit 37P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose terminals int he guage control module (36P) connector. If necessary, substitute a known-good guage control module, then go to step 1 and recheck. If it is OK, replace the origional guage control module, refer to the 2003-2007 Accord Service Manual. If DTCs are indicated, replace the VSA modulator-control unit.

NO - Repair open in the wire between the guage control module and the VSA modulator-control unit.

STEERING ANGLE SENSOR REPLACEMENT

NOTE: Do not damage or drop the combination switch as the

steering angle sensor is sensitive to shock and vibration.

1. Remove the steering wheel, refer to **STEERING WHEEL REMOVAL** and steering column cover, refer to step 4 in **STEERING COLUMN REMOVAL AND INSTALLATION** .
2. Remove the combination switch assembly, refer to step 10 in **STEERING COLUMN REMOVAL AND INSTALLATION** .
3. Remove the combination light switch (A) and the wiper/washer switch (B).

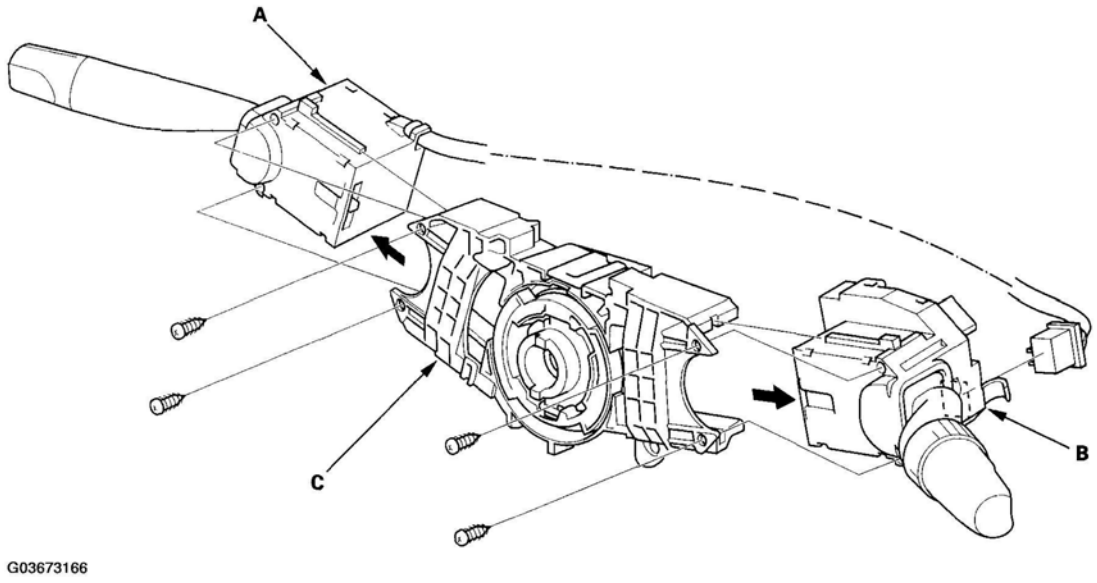


Fig. 61: Removing Combination Light Switch And Wiper/Washer Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Replace the combination switch body complete (C).
5. Install the combination switch in the reverse order of removal.

NOTE: Do not remove the steering angle sensor from the combination switch body.

YAW RATE-LATERAL ACCELERATION SENSOR REPLACEMENT

NOTE:
- **Do not damage or drop the sensor as it is sensitive.**

- **Do not use an impact wrench.**

1. M/T model: Lower the shift lever boot (A) to release the hooks (B) from the knob, then remove the shift knob (C).

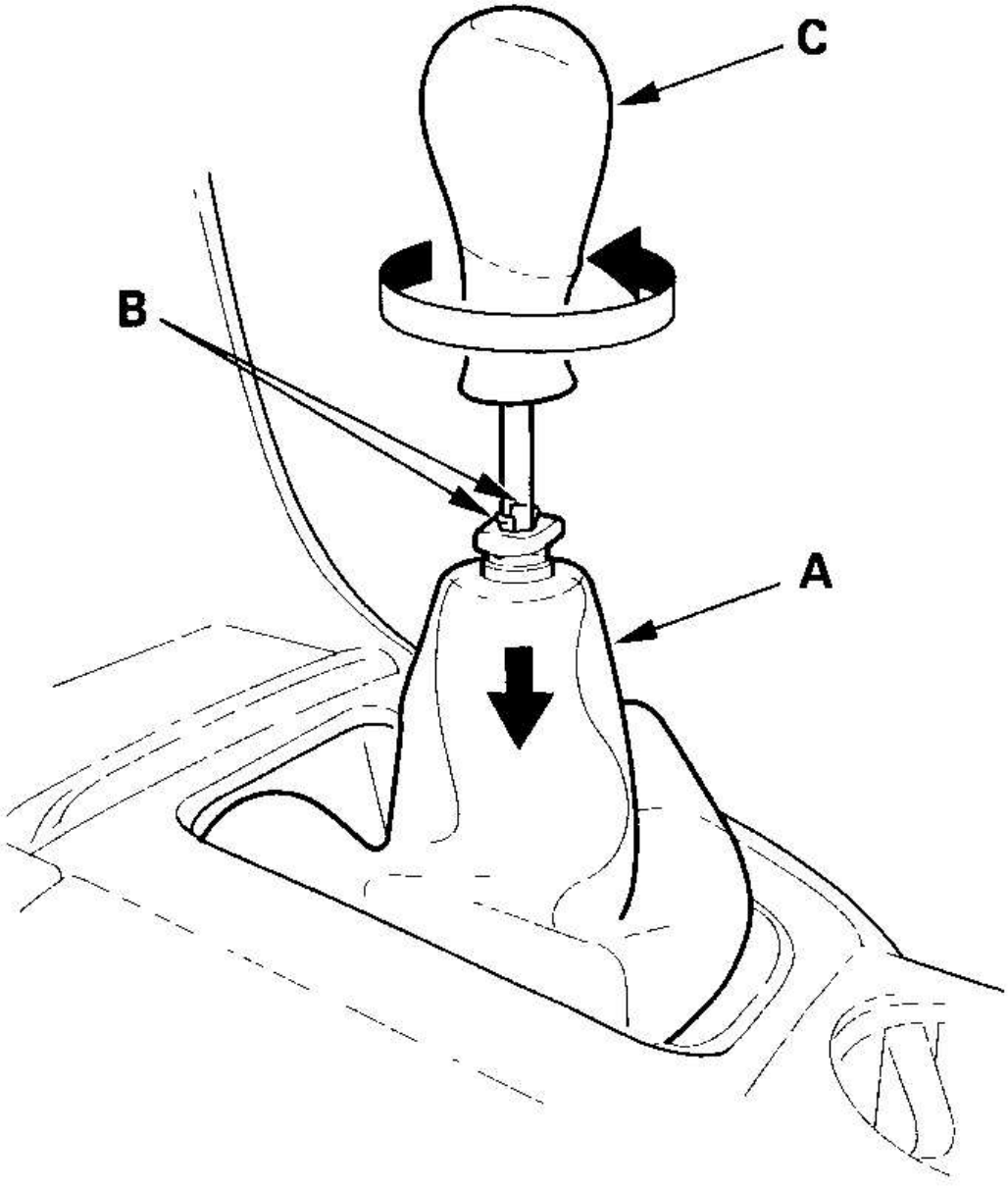


Fig. 62: Removing Shift Knob
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the center console front panel (A). If equipped, disconnect the seat

heater switch connectors (B).

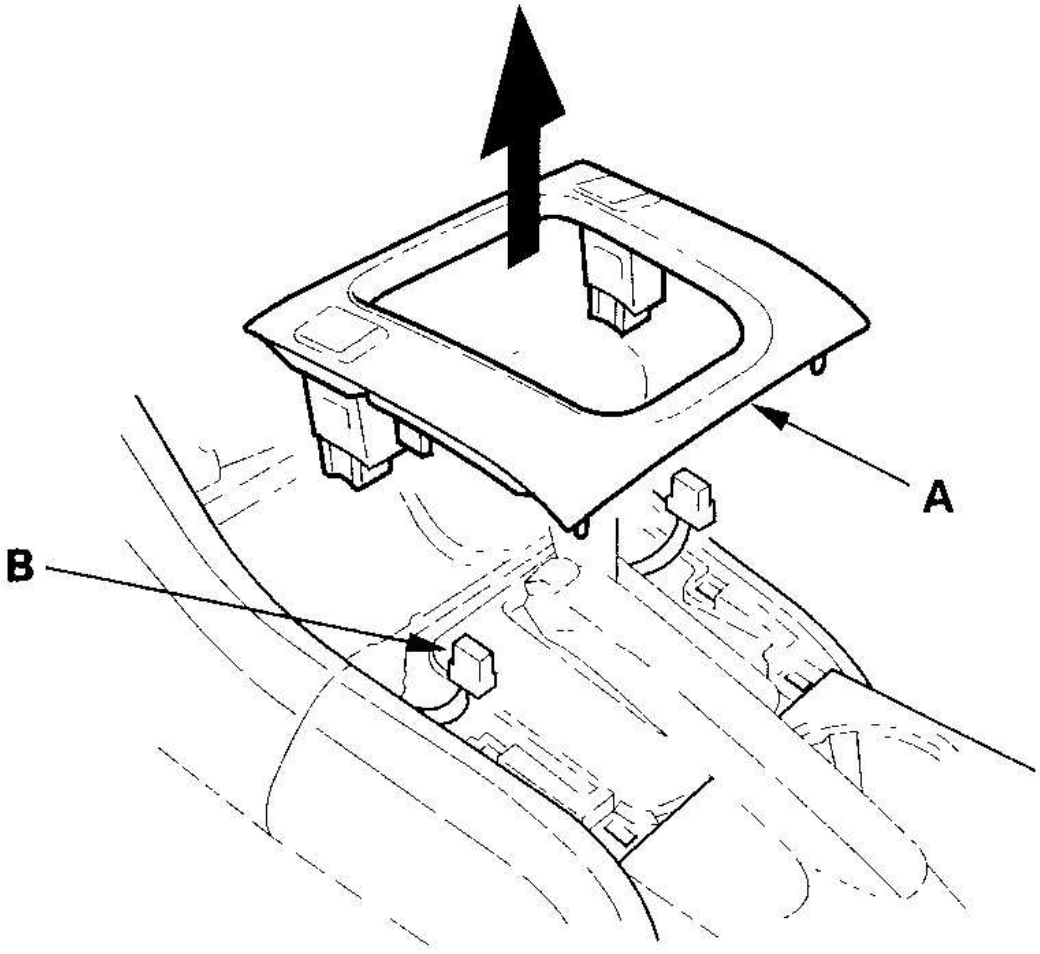


Fig. 63: Removing Center Console Front Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the console packet (A).

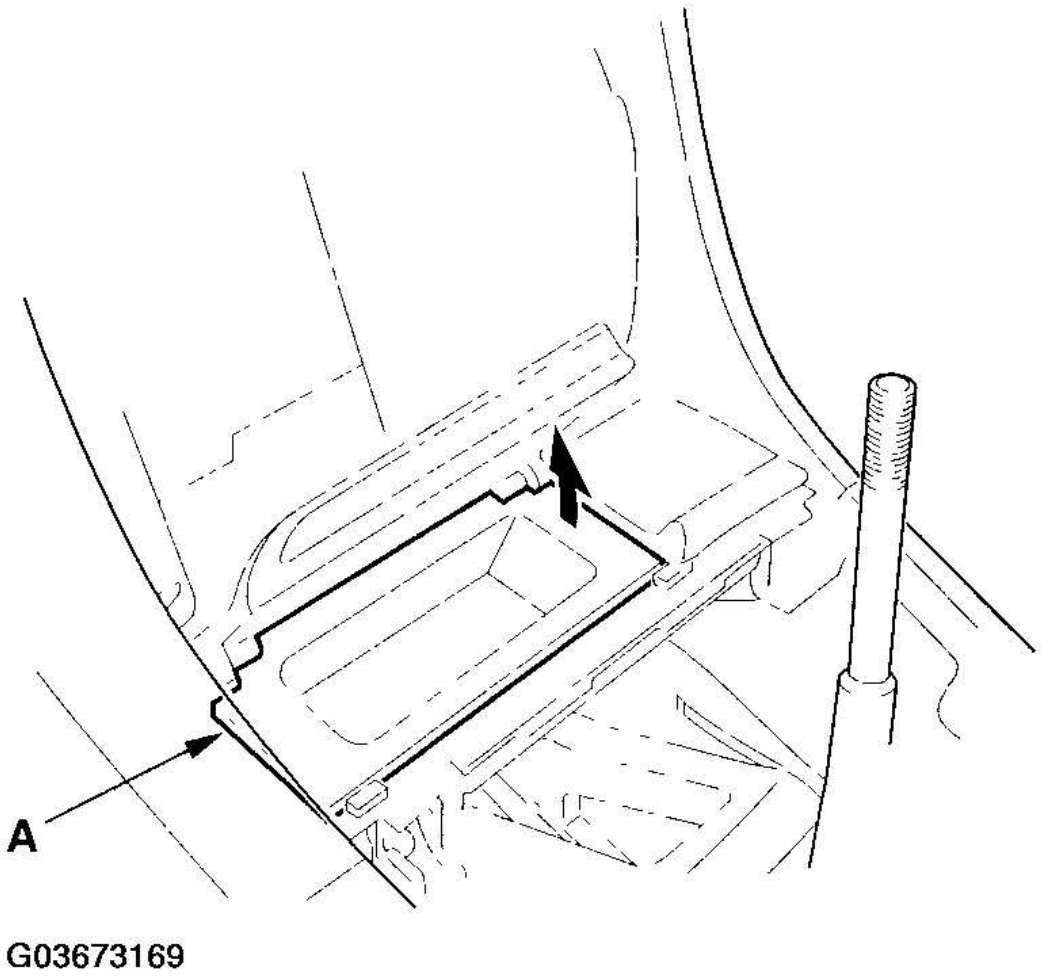


Fig. 64: Removing Console Packet
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the screws (A), then remove the center holder (B) and disconnect the front accessory power socket connector (C).

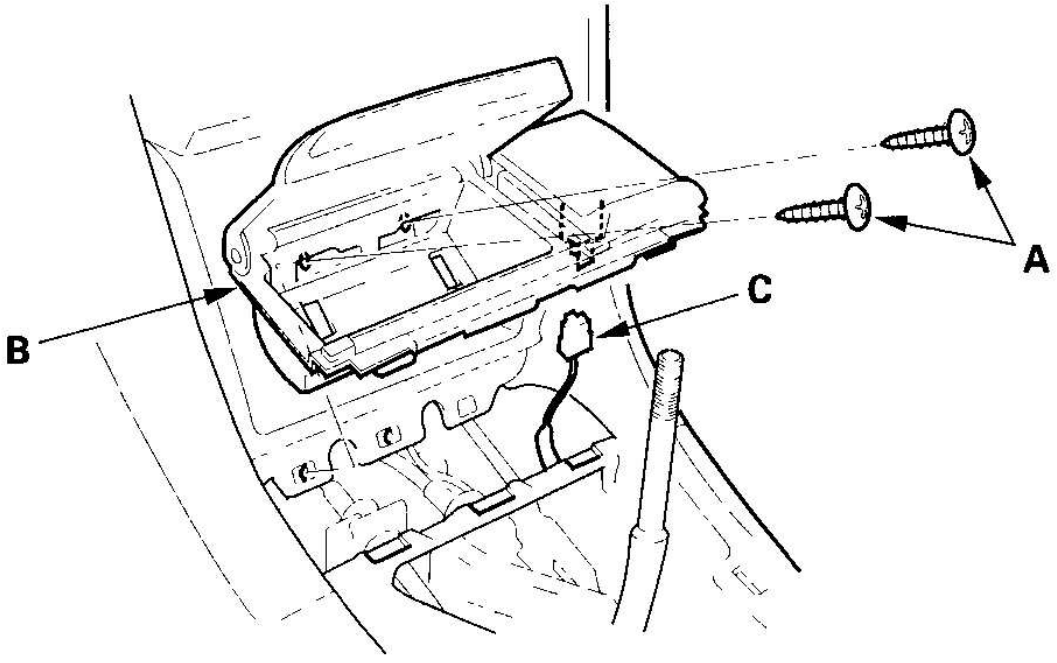


Fig. 65: Removing Center Holder
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the screws (A), then remove the center pocket (B).

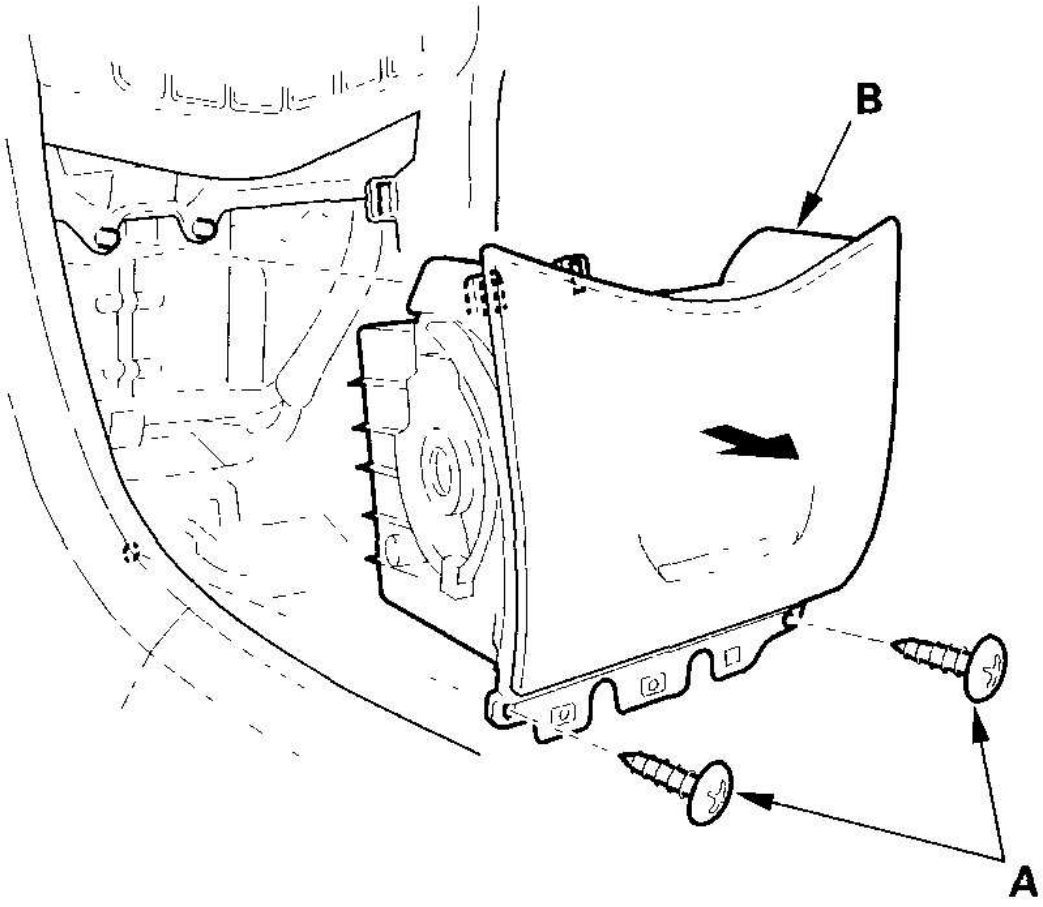


Fig. 66: Removing Center Pocket
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Disconnect the connector (A).

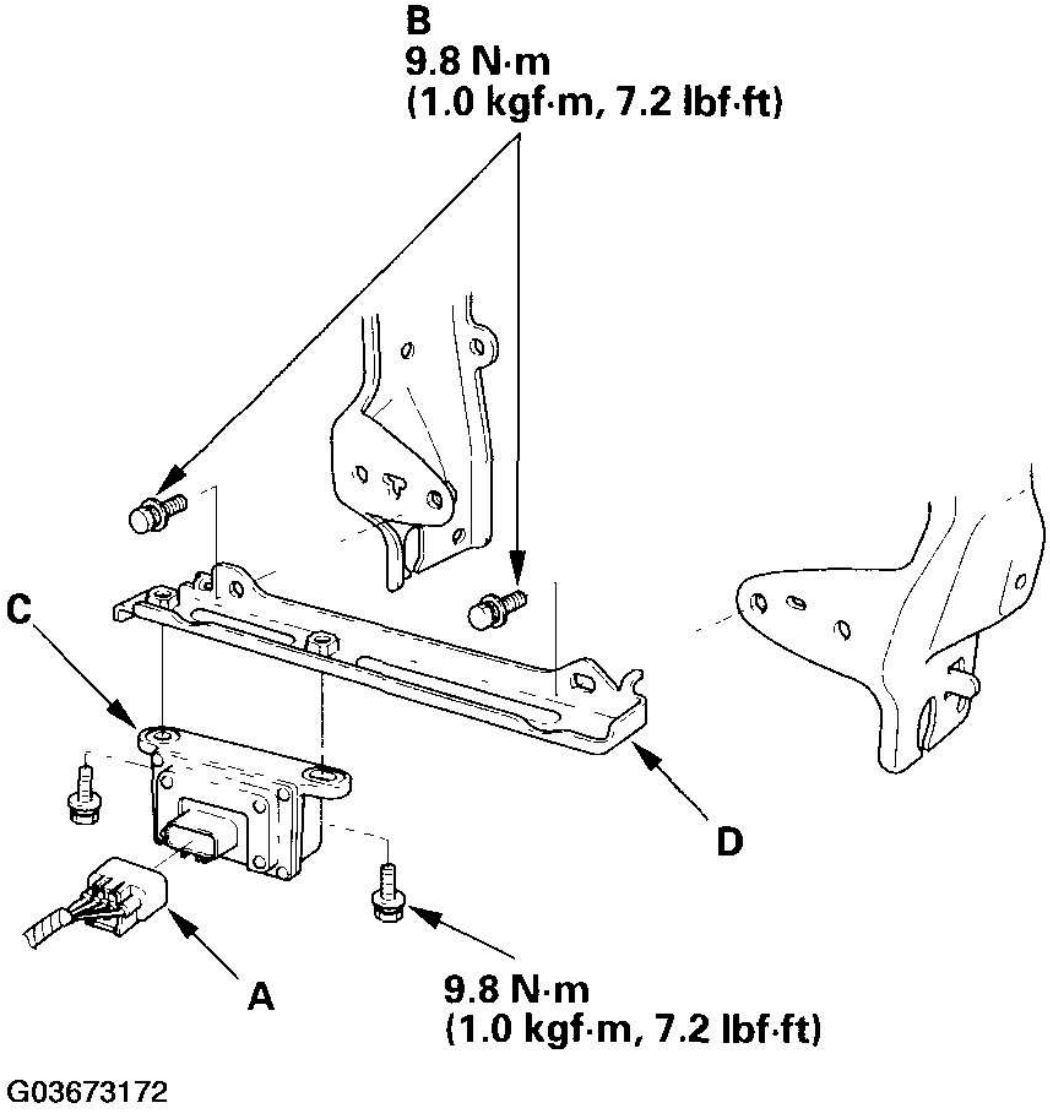


Fig. 67: Disconnecting Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the sensor bracket mounting bolts (B).
8. Remove the yaw rate-lateral acceleration sensor (C) with the bracket (D).
9. Remove the sensor from the bracket.
10. Install the sensor in the reverse order of removal.

VSA SENSOR NEUTRAL POSITION MEMORIZATION

NOTE: Do not press the brake pedal during this procedure.

1. Park the vehicle on a flat and level surface.
2. With the ignition switch OFF, connect the HDS to the 16P data link connector (DLC) (A) under the driver's side of the dashboard.

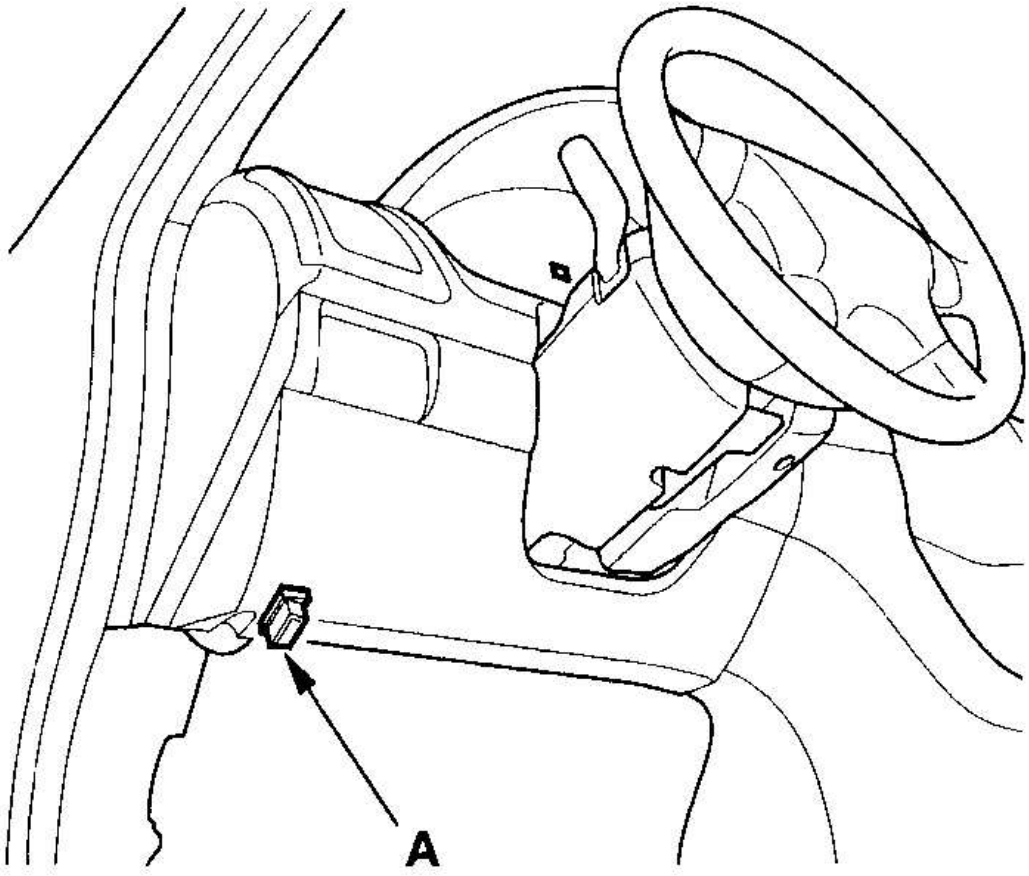


Fig. 68: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch ON.

4. Select VSA ADJUSTMENT with the HDS, and follow the screen prompts.

NOTE: See the HDS Help menu for specific instructions.

5. Turn the ignition switch OFF.

VSA OFF SWITCH TEST

1. Remove the VSA OFF switch (A) from the switch panel.

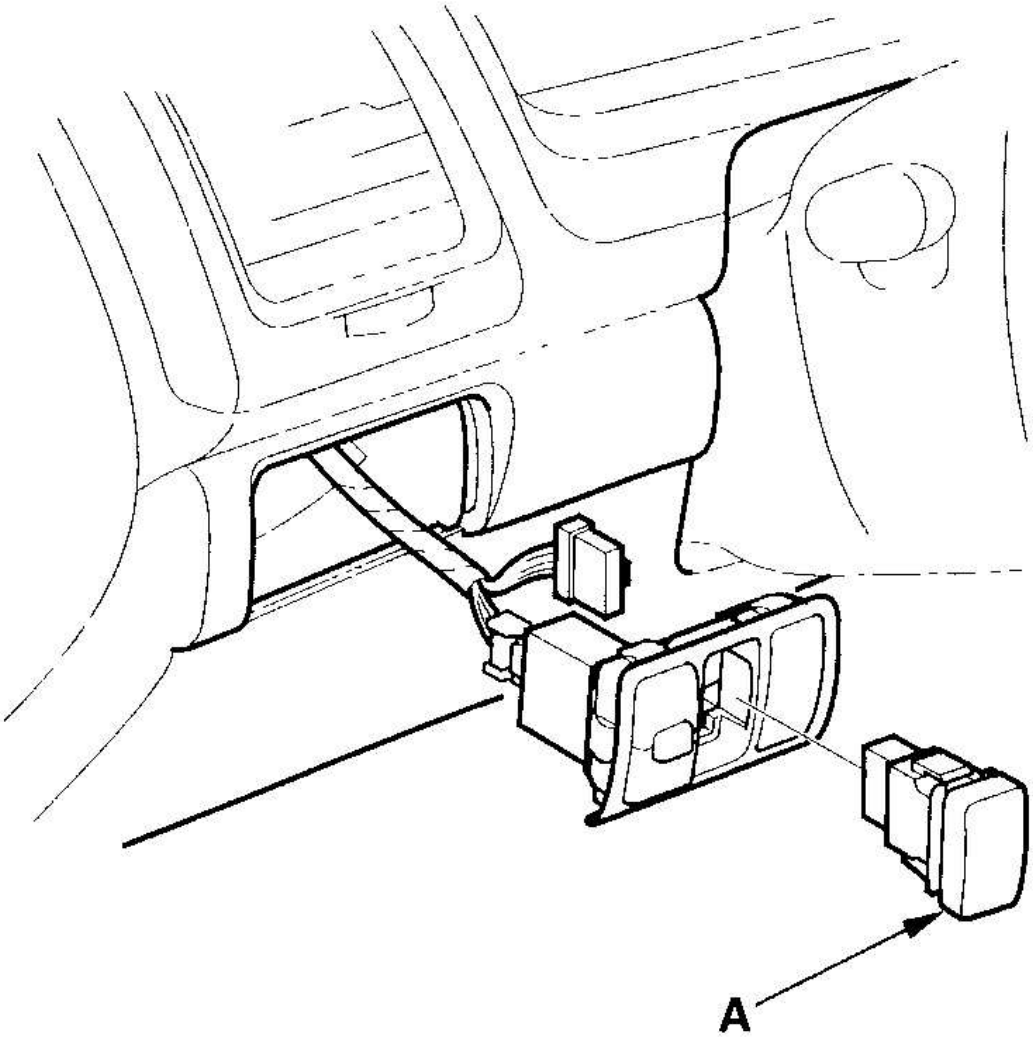


Fig. 69: Removing VSA OFF Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Disconnect the VSA OFF switch 5P connector.
3. Check for continuity between VSA OFF switch connector terminal No. 1 and No. 2. There should be continuity when the switch is pushed.

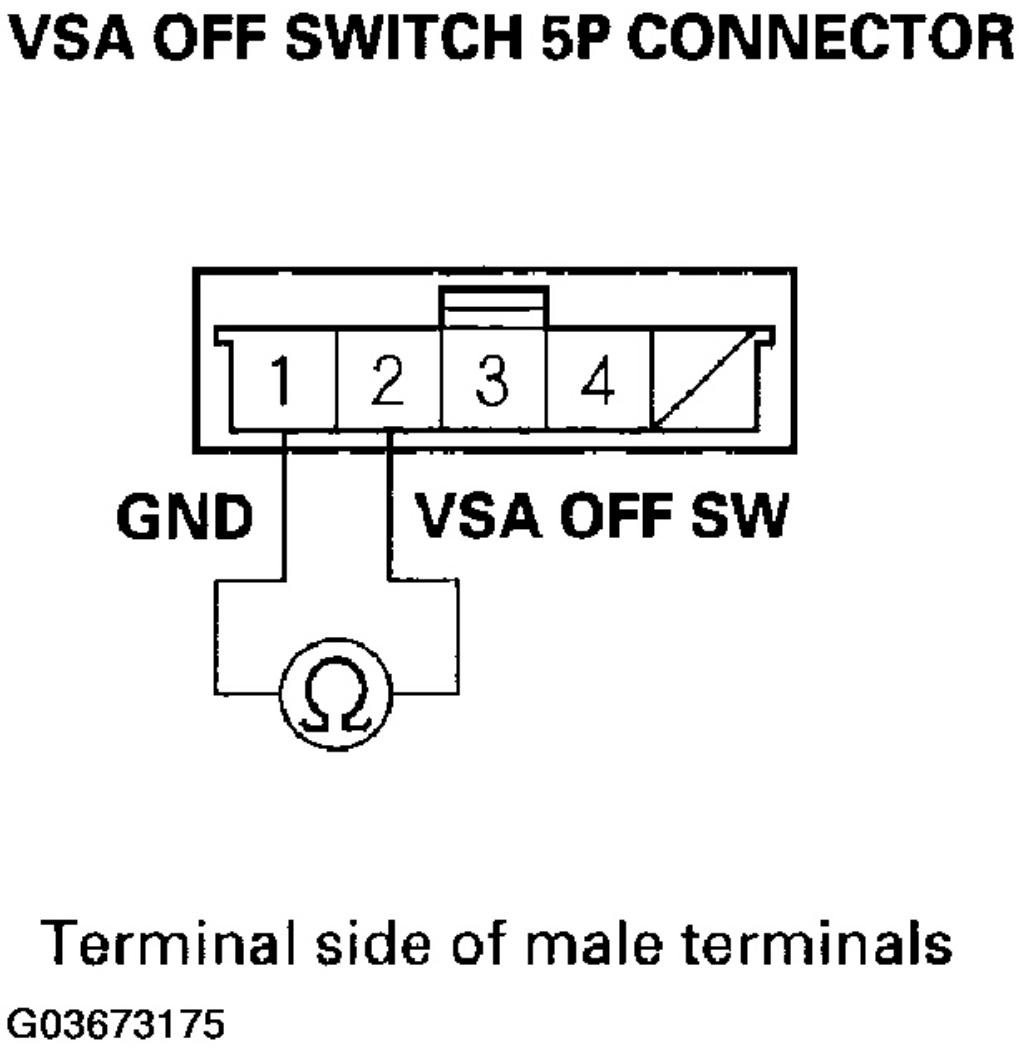


Fig. 70: Checking Continuity Between VSA OFF Switch Connector Terminal No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Check for continuity between VSA OFF switch connector terminal No. 3 and No. 4. There should be continuity at all times.

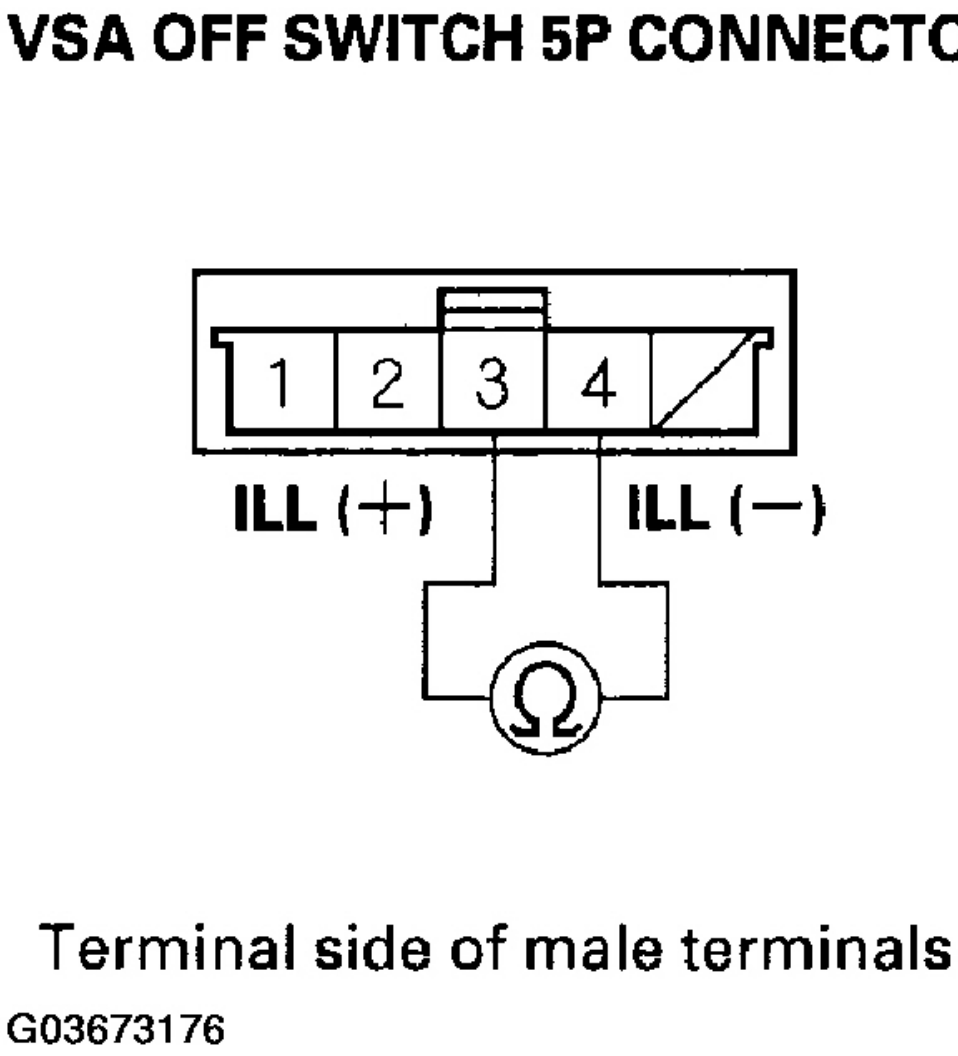


Fig. 71: Checking Continuity Between VSA OFF Switch Connector Terminal No. 3 And No. 4
Courtesy of AMERICAN HONDA MOTOR CO., INC.

VSA MODULATOR-CONTROL UNIT REMOVAL AND INSTALLATION

NOTE:

- **Do not spill brake fluid on the vehicle; it may damage the paint; if brake fluid gets on the paint, wash it off**

immediately with water.

- **Be careful not to damage or deform the brake lines during removal and installation.**
- **To prevent the brake fluid from flowing, plug and cover the hose ends and joints with a shop towel or equivalent material.**

REMOVAL

1. Pull up the lock (A) of the VSA modulator-control unit 37P connector (B), and the connector disconnects itself.

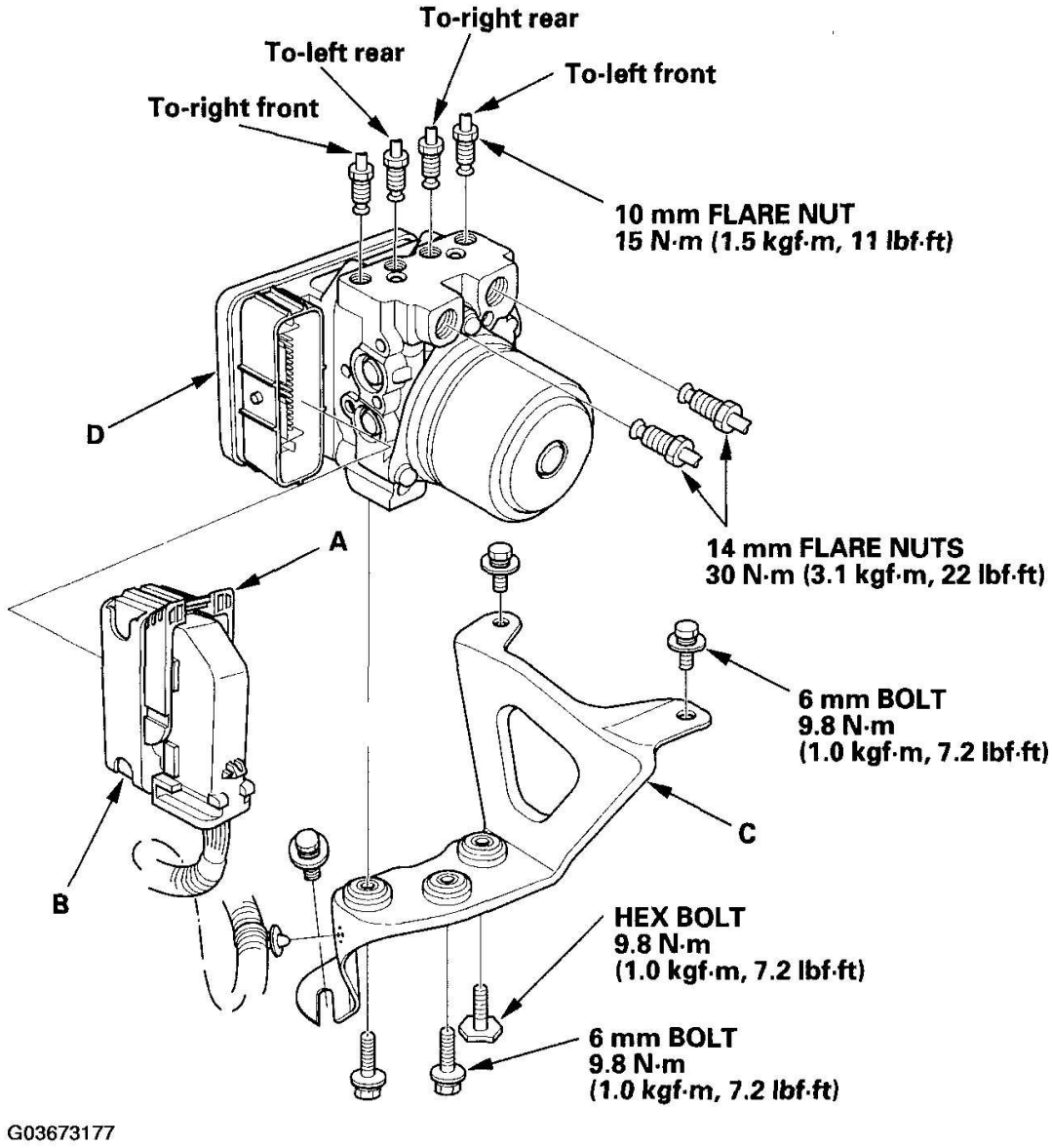


Fig. 72: Pulling Lock Of VSA Modulator-Control Unit Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Disconnect the six brake lines.
3. Remove the three 6 mm bolts, then remove the bracket (C) with the VSA modulator-control unit (D) from the body.
4. Remove the two 6 mm bolts and the hex bolt, then remove the VSA modulator-control unit from the bracket.

INSTALLATION

1. Install the VSA modulator-control unit on the bracket, then tighten the two 6 mm bolts and the hex bolt.
2. Install the bracket with the VSA modulator-control unit, then tighten the three 6 mm bolts.
3. Reconnect the six brake lines, then tighten the flare nuts to the specified torque.
4. Align the connecting surface of the VSA modulator-control unit 37P connector to the VSA modulator-control unit.
5. Lower the lock of the VSA modulator-control unit 37P connector, then confirm the connector is fully seated.
6. Bleed the brake system, starting with the front wheels, refer to **BRAKE SYSTEM BLEEDING** .
7. Perform the VSA sensor neutral position memorization (see **VSA SENSOR NEUTRAL POSITION MEMORIZATION**).
8. Start the engine, and check that the ABS and VSA indicators go off.
9. Test-drive the vehicle, and check that the ABS and VSA indicators do not come on.
10. If the brake pedal is now spongy, there maybe air trapped in the modulator and then induced into the normal brake system during modulation. Bleed the brake system again, starting with the front wheels, refer to **BRAKE SYSTEM BLEEDING** .

WHEEL SENSOR INSPECTION

1. Check the magnetic encoder (A) or pulser (B) after cleaning it. If necessary, replace the encoder or pulser.

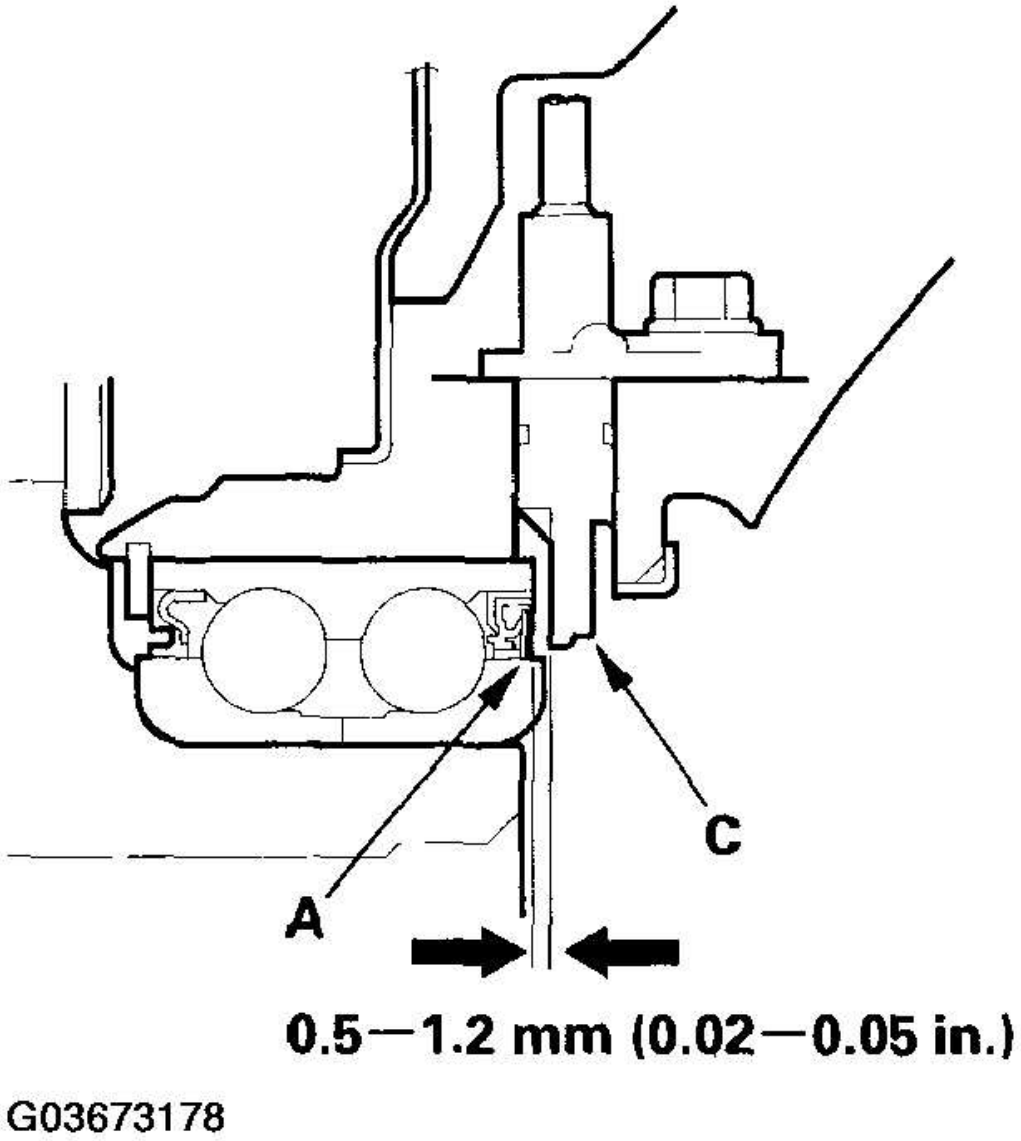


Fig. 73: Checking Magnetic Encoder Or Pulser (Front)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

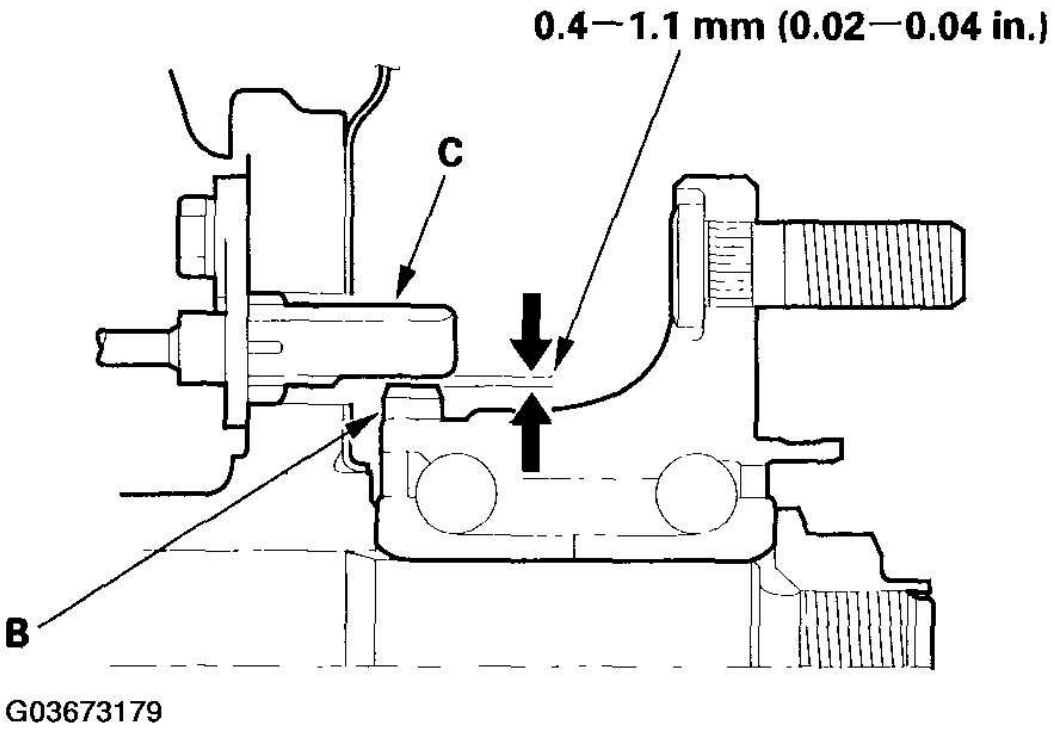


Fig. 74: Checking Magnetic Encoder Or Pulser (Rear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the air gap between the wheel sensor (C) and the magnetic encoder or pulser all the way around while rotating the encoder or pulser.

   Standard:

   Front: 0.5-1.2 mm (0.02-0.05 in.)
   Rear: 0.4-1.1 mm (0.02-0.04 in.)

WHEEL SENSOR REPLACEMENT

NOTE: Install the sensor carefully to avoid twisting the wires.

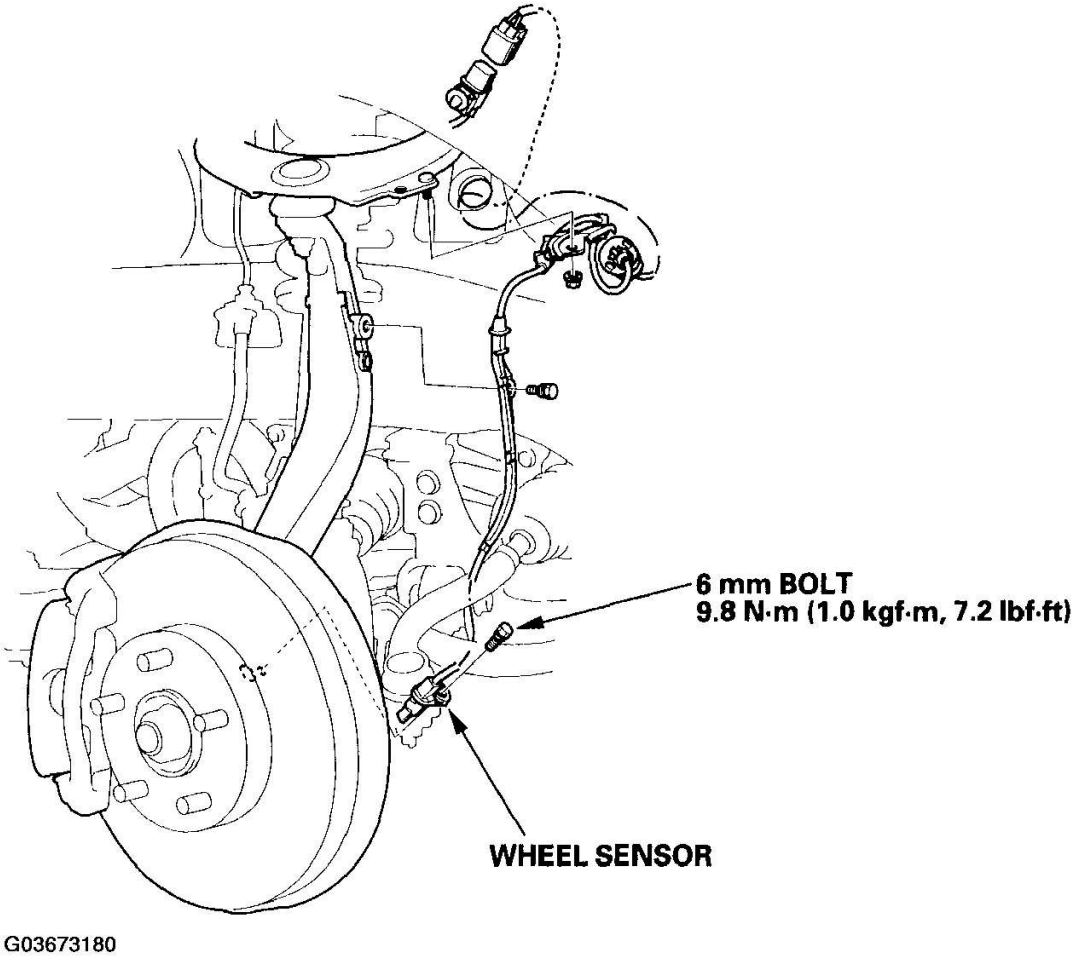


Fig. 75: Replacing Wheel Sensor (Front)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

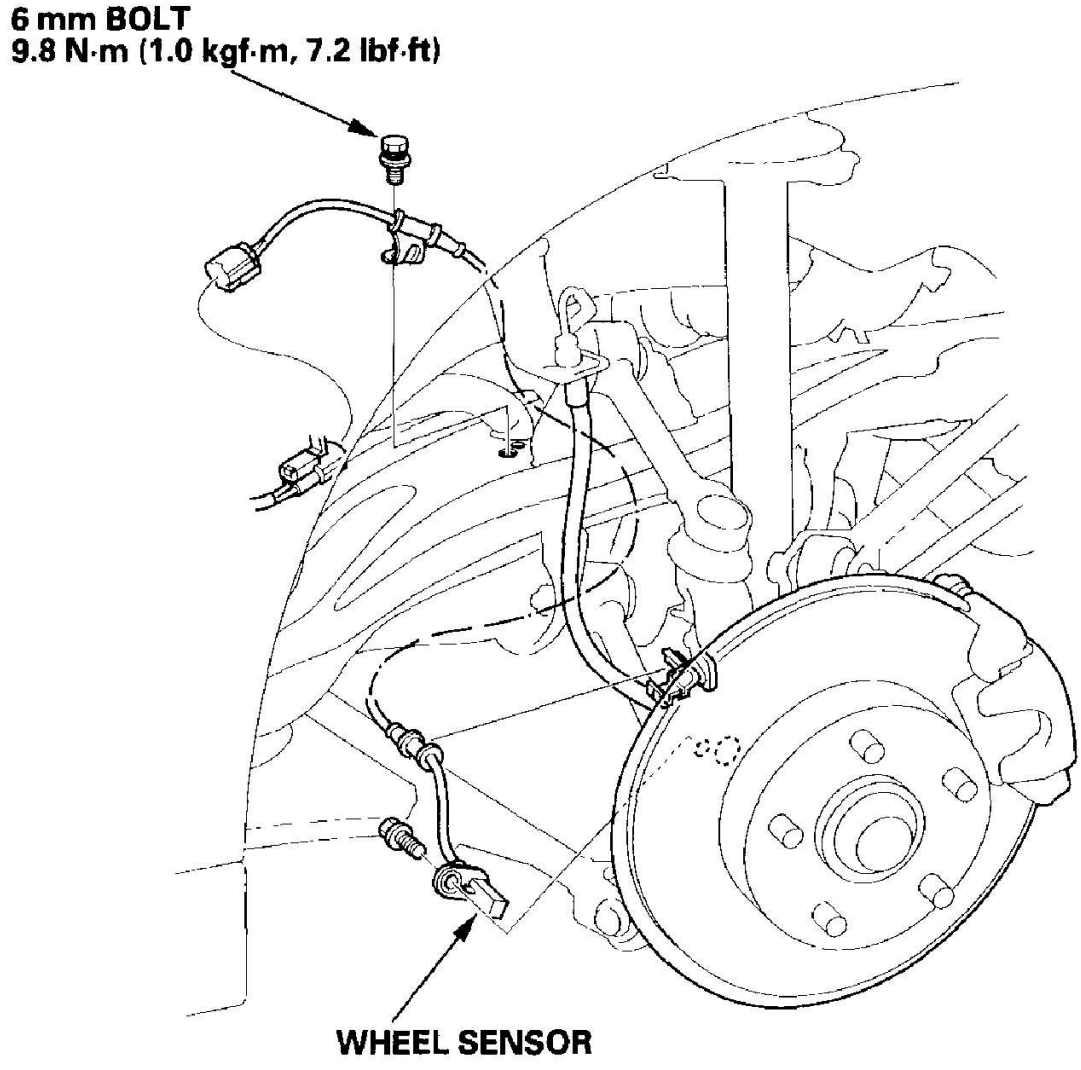


Fig. 76: Replacing Wheel Sensor (Rear)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2003-07 ACCESSORIES & EQUIPMENT

Wiper/Washers - Accord

COMPONENT LOCATION INDEX

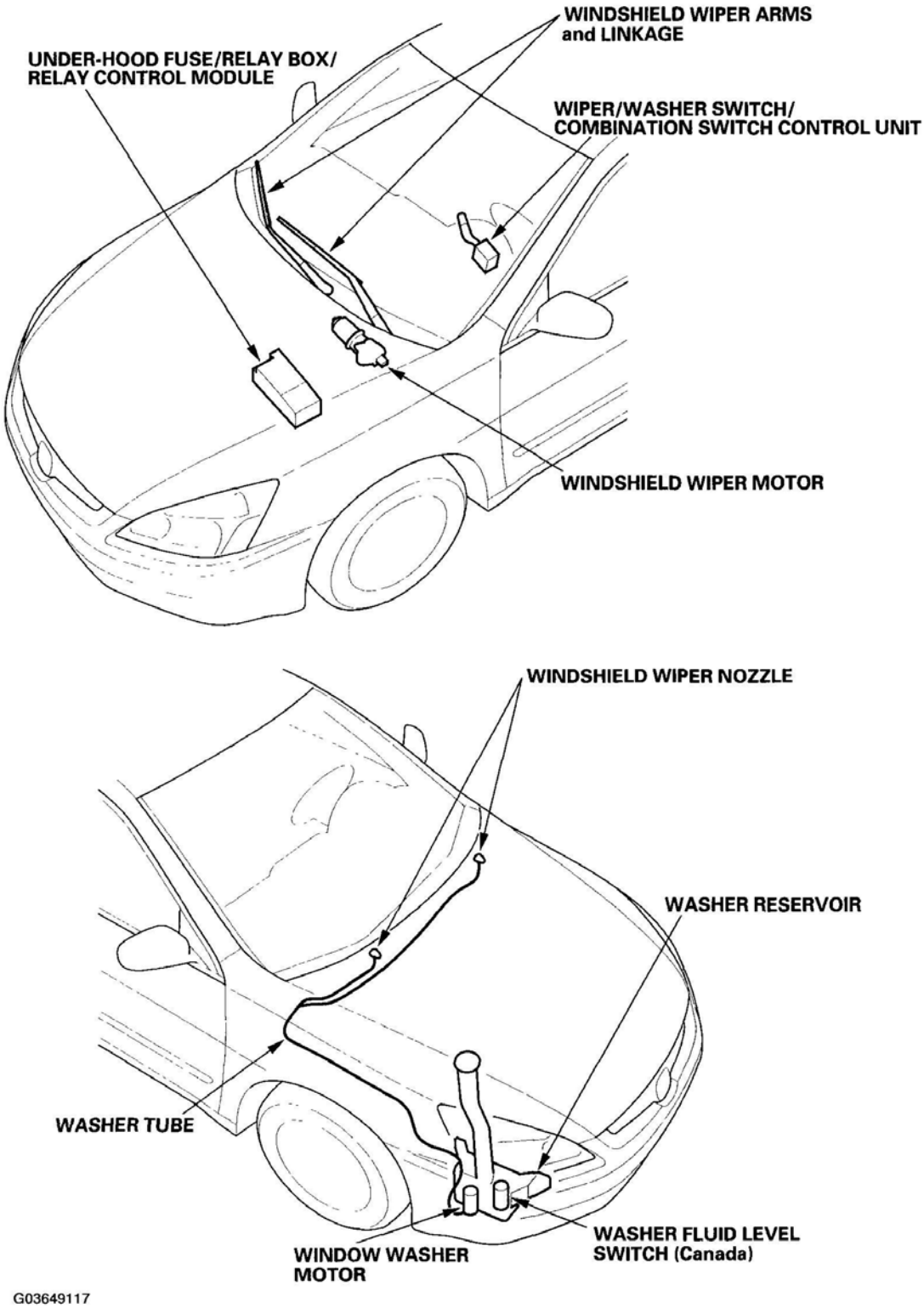


Fig. 1: Locating Wiper/Washers Components

Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

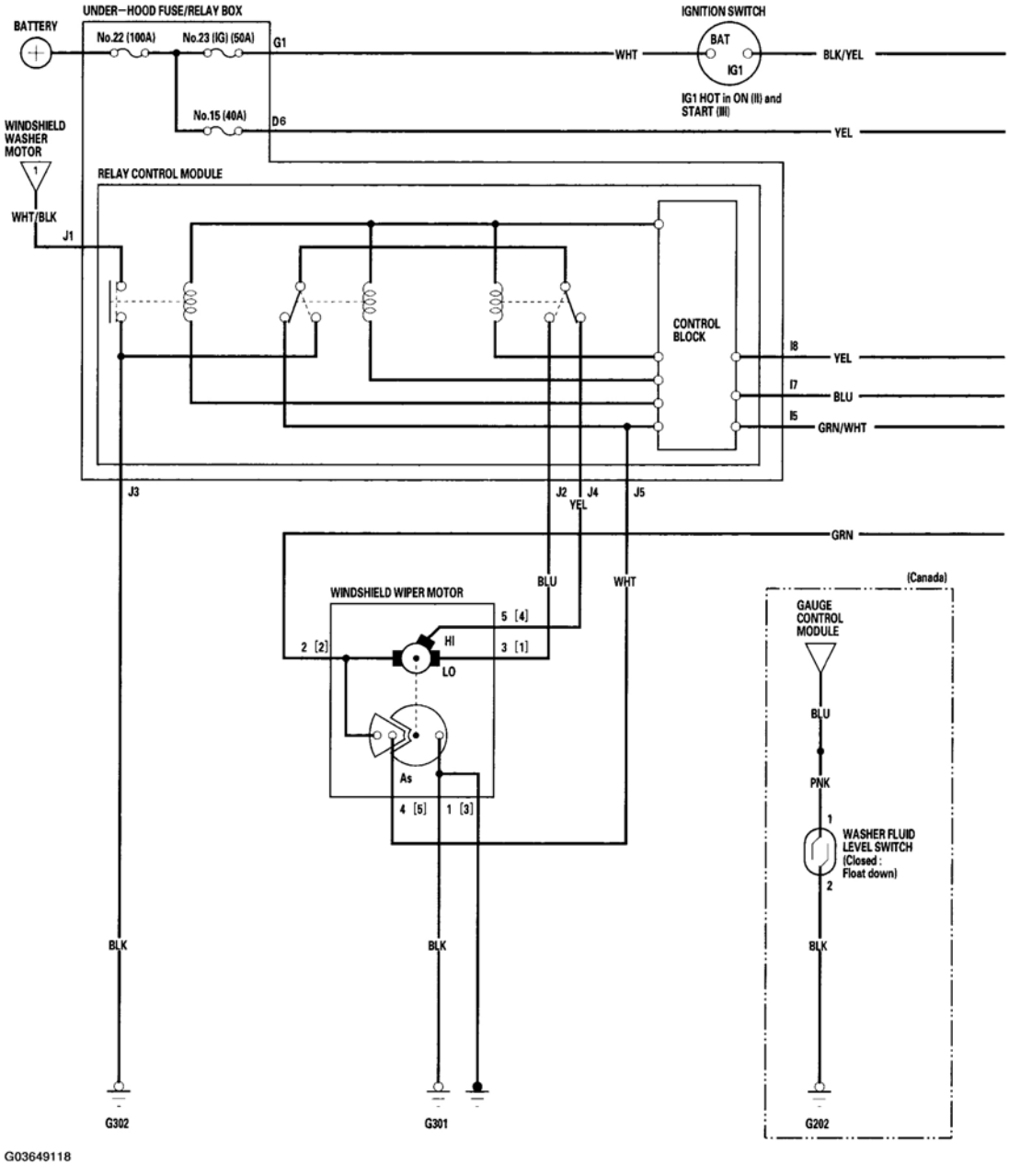


Fig. 2: Identifying Wiper/Washers Circuit Diagram (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

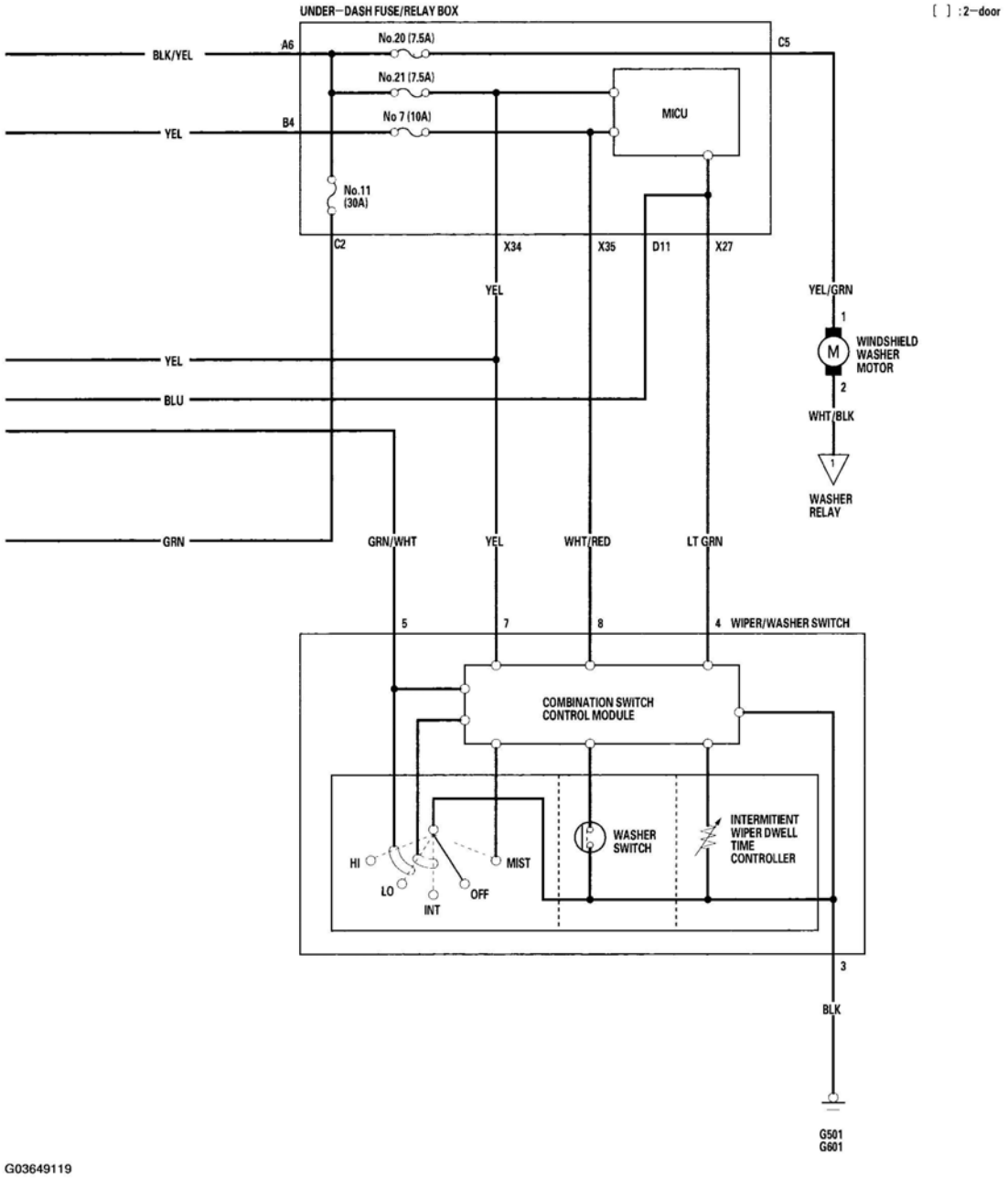


Fig. 3: Identifying Wiper/Washers Circuit Diagram (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC B1076: WINDSHIELD WIPER SIGNAL ERROR

1. Clear the DTCs using the HDS.

2. Cycle the ignition switch to OFF and then back ON (II).
3. Turn the wiper switch to INT, LOW, then HIGH for at least 2 seconds each.
4. Check for DTCs using the HDS.

   Is DTC B1076 indicated?

   YES - Go to step 5.

   NO - Intermittent failure. The windshield wiper system is OK at this time. Check pinfits and connections.
5. With the wiper/washer switch OFF, select WINDSHIELD WIPERS from the HDS, and enter the DATA LIST.
6. Check the ON/OFF information of the Windshield Wiper Switch (BACK-UP) in the DATA LIST.

   Is the information indicator OFF?

   YES - Go to step 7.

   NO - Go to step 11.
7. Turn the wiper switch ON (low or high).
8. Check the ON/OFF information of the Windshield Wiper Switch (BACK-UP) in the DATA LIST.

   Is the information indicator ON?

   YES - Faulty relay control module; replace the under-hood fuse/relay box.

   NO - Go to step 9.
9. Disconnect the relay control module 10P connector and the wiper/washer switch 8P connector.
10. Check for continuity between the No. 5 terminal of the relay control module 10P connector and the No. 5 terminal of the wiper/washer switch (combination switch control unit) 8P connector.

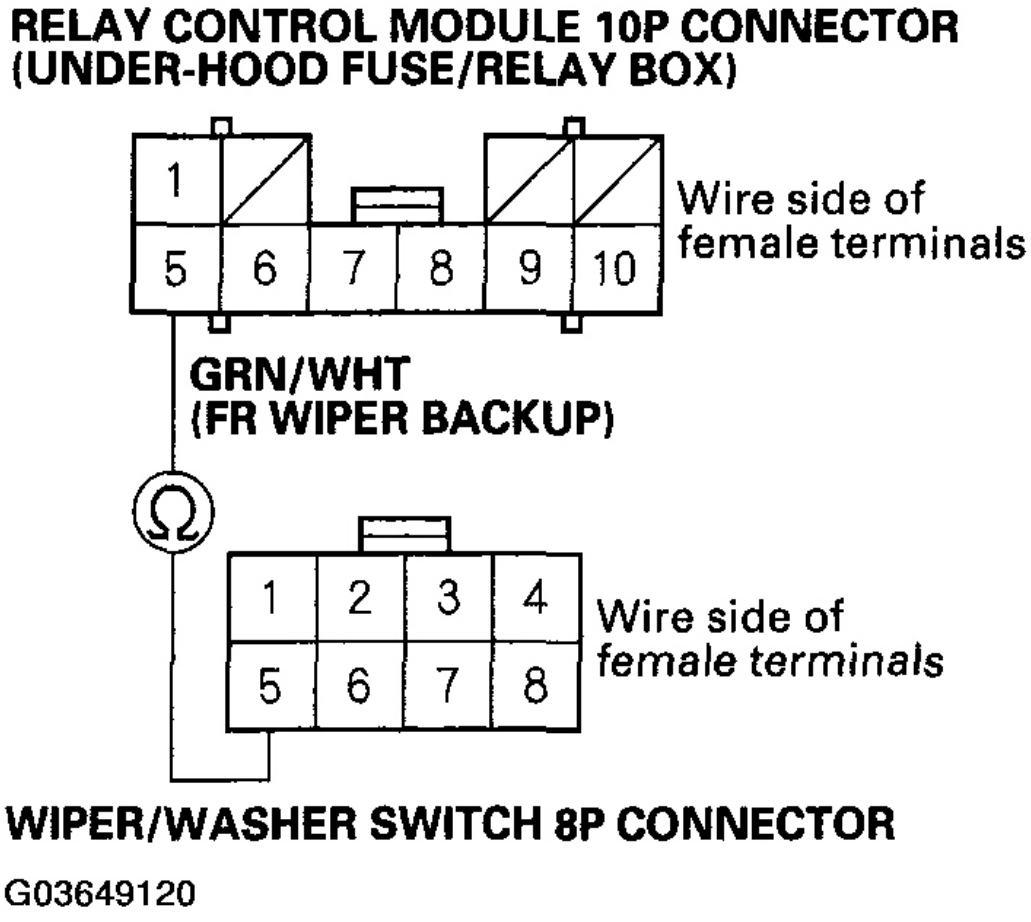


Fig. 4: Checking Continuity Between No. 5 Terminal Of Relay Control Module 10P Connector And No. 5 Terminal Wiper/Washer Switch 8P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Faulty combination switch control unit; replace the wiper/washer switch.

NO - Repair an open in the GRN/WHT wire.

11. Disconnect the relay control module 10P connector and the wiper/washer switch 8P connector.

12. Check for continuity between the No. 5 terminal of the relay control module 10P connector and body ground.

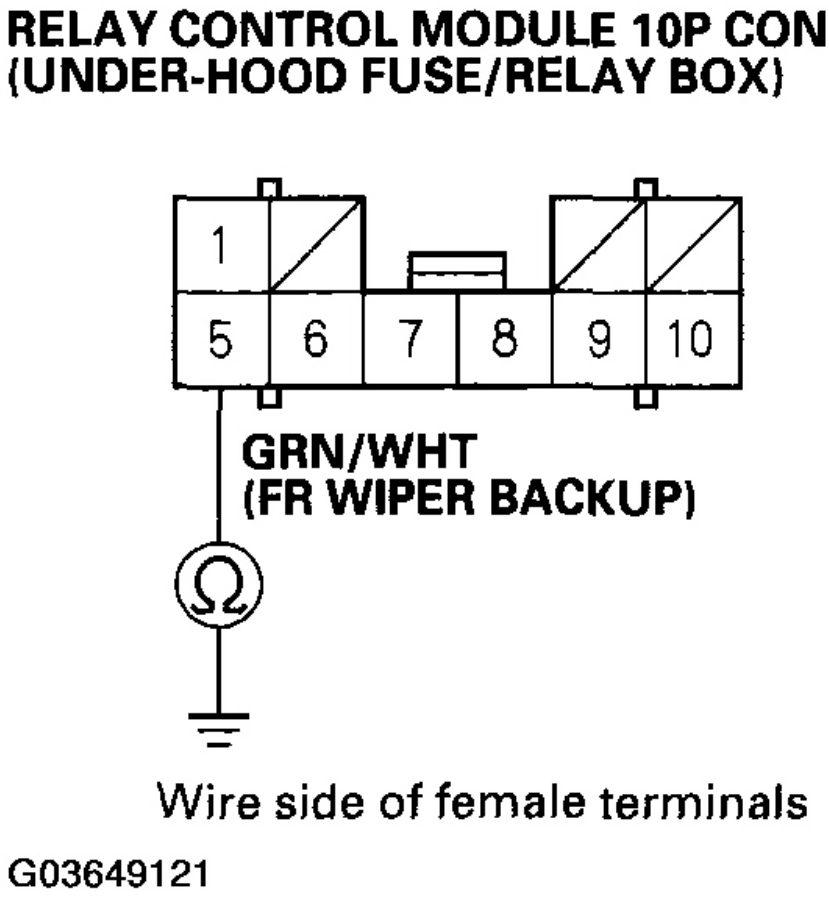


Fig. 5: Checking Continuity Between No. 5 Terminal Of Relay Control Module 10P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair a short in the GRN/WHT wire.

NO - Faulty relay control module; replace the under-hood fuse/relay box.

DTC B1077: WINDSHIELD WIPER (AS) SIGNAL ERROR

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON (II).
3. Turn the wiper switch to INT, LOW, then HIGH for at least 2 seconds each.
4. Check for DTCs using the HDS.

   Is DTC B1077 indicated?

   YES - Go to step 5.

   NO - Intermittent failure. The windshield wiper system is OK at this time. Check pinfits and connections.
5. Turn the ignition switch ON (II).
6. Select WINDSHIELD WIPERS from the HDS and enter the DATA LIST.
7. Turn the windshield wiper switch ON.
8. Check the ON/OFF information of the Windshield Wiper Switch (INTERMITTENT), Windshield Wiper Switch (LOW), and Windshield Wiper Switch (HIGH) in the DATA LIST at each wiper switch position.

   Is the information indicator ON at each switch position?

   YES - Go to step 9.

   NO - Go to step 17.
9. Select FUNCTIONAL. TEST from the TEST MODE MENU, and operate the windshield wiper motor with FR WIPER (LOW) and FR WIPER (HIGH).

   Does the windshield wiper motor run?

   YES - Go to step 10.

   NO - Go to step 18.
10. Turn the windshield wiper switch OFF, and stop the wiper arms at the park position. (If the wiper arms do not stop at the park position, turn the ignition switch OFF and stop the wiper arms at the park position correctly.)
11. Turn the ignition switch ON (II).

    Do the wipers begin to run as soon as the ignition switch is cycled ON?

YES - Go to step 16.

NO - Go to step 12.

12. Check the ON/OFF information of the Windshield Wiper Motor PARK Switch in the DATA LIST.

    Is the information indicator OFF?

    YES - Go to step 13.

    NO - Faulty relay control module; replace the under-hood fuse/relay box.

13. Turn the ignition switch ON (II), and turn the windshield wiper switch ON at low speed.
14. Check the ON/OFF information of the Windshield Wiper Motor PARK Switch in the DATA LIST.

    Does the DATA LIST information indicate ON and OFF alternately as the wipers pass the PARK position?

    YES - Intermittent failure, the windshield wiper system is OK at this time. Check pinfits and connections.

    NO - Go to step 15.

15. Check for continuity between the No. 4 [No.5] terminal of the windshield wiper motor 5P connector and No. 5 terminal of the under-hood fuse/relay box 5P connector J.

    [ ]: 2-door

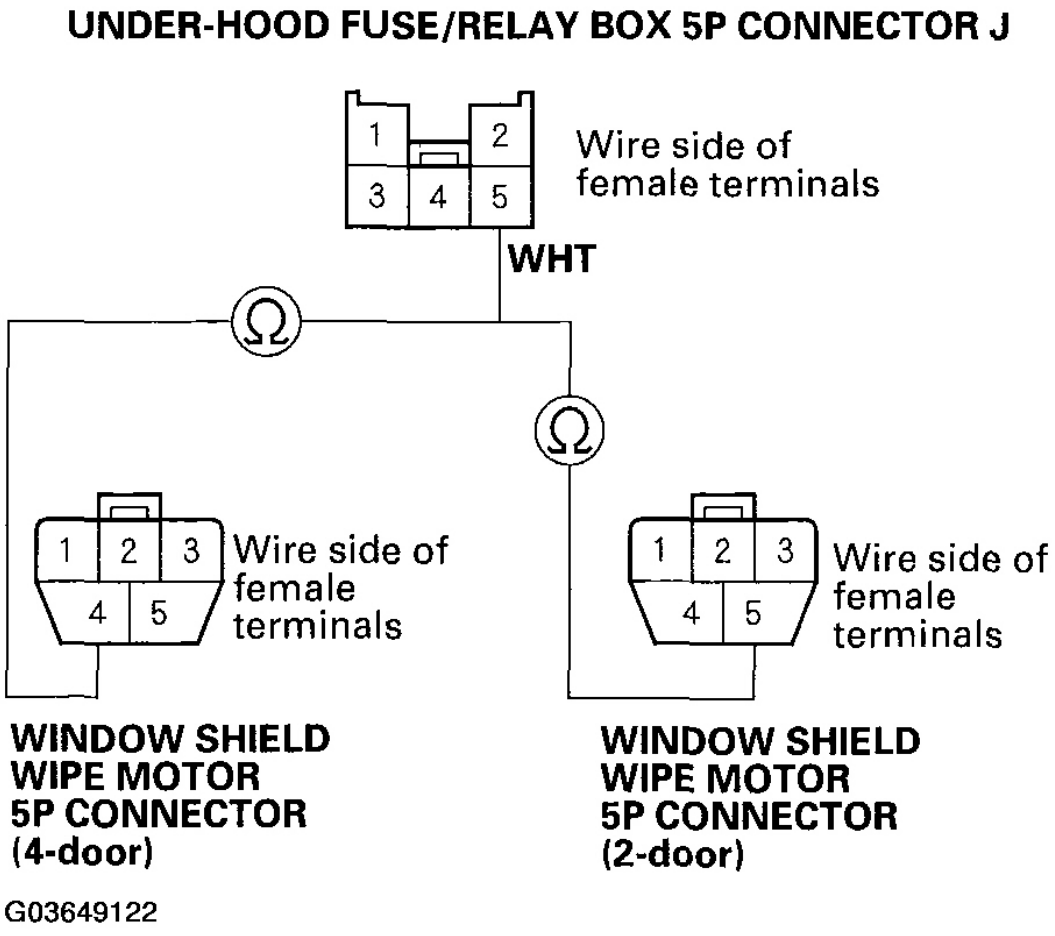


Fig. 6: Checking For Continuity Between No. 4 [No.5] Terminal Of Windshield Wiper Motor 5P Connector And No. 5 Terminal Of Under-Hood Fuse/Relay Box 5P Connector J
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Faulty windshield wiper motor; replace it.

NO - Repair an open in the WHT wire.

16. Check for continuity between the No. 5 terminal of the under-hood fuse/relay box 5P connector J and body ground.

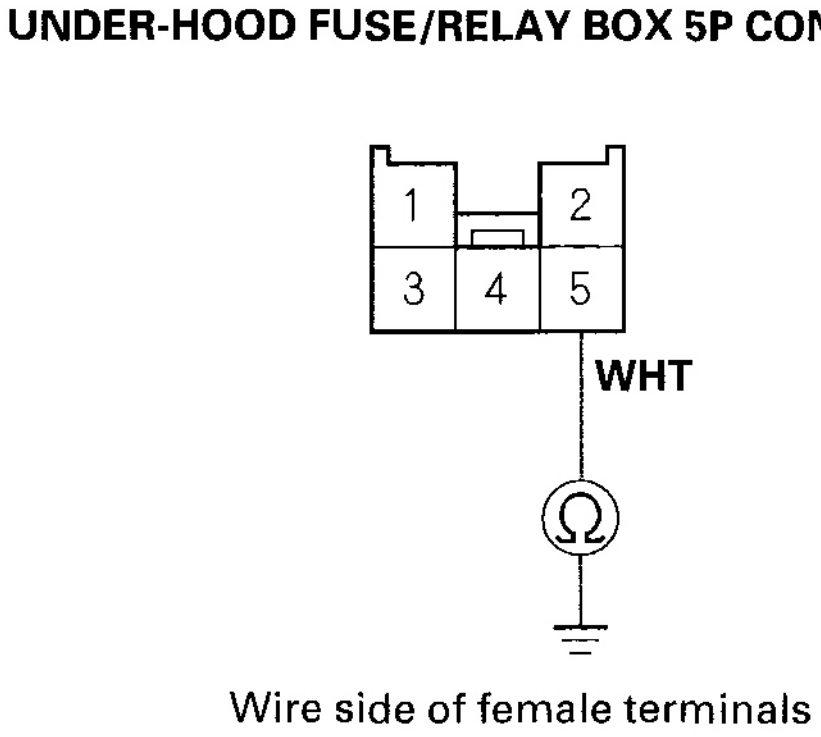


Fig. 7: Checking For Continuity Between No. 5 Terminal Of Under-Hood Fuse/Relay Box 5P Connector J And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair a short in the WHT wire.

NO - Faulty windshield wiper motor; replace it.

17. Check the No. 7 (10 A), No. 11 (30 A) and No. 21 (7.5 A) fuses in the under-dash fuse/relay box.

Are the fuses OK?

YES - Faulty relay module; Replace the under-hood fuse/relay box.

NO - Replace the blown fuse and recheck the system.

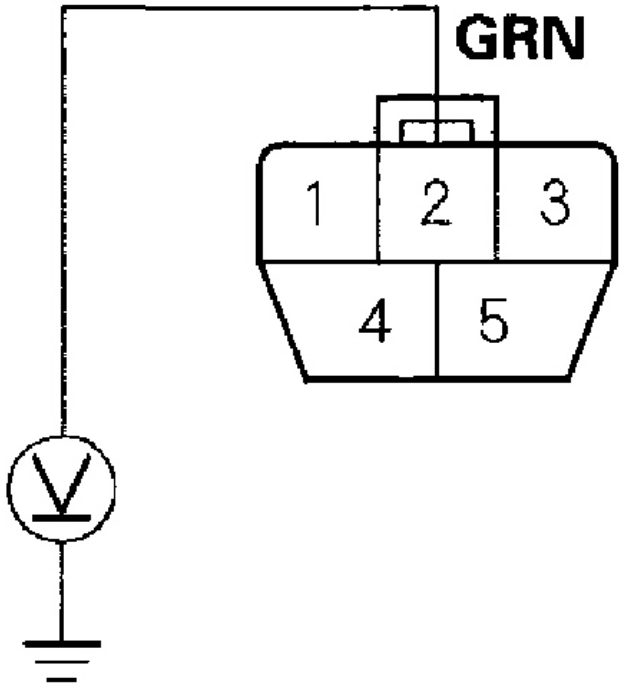
18. Turn the ignition switch OFF, and check the No. 11 (30 A) fuse in the under-dash fuse/relay box.

    Is the fuse OK?

    YES - Go to step 19.

    NO - Replace the blown fuse and recheck the system.
19. Turn the ignition switch ON (II).
20. Check for voltage between the No. 2 terminal of the windshield wiper motor 5P connector and body ground.

WINDSHIELD WIPER MOTOR 5P CONNECTOR



Wire side of female terminals

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Fig. 8: Checking For Voltage Between No. 2 Terminal Of Windshield Wiper Motor 5P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 21.

NO - Repair an open in the GRN wire.

21. Check for continuity between the No. 3 [No.1] and No. 5 [No.4] terminals of the windshield wiper motor 5P connector and the No. 2 and No. 4 terminal of the under-hood fuse/relay box 5P connector J.

[ ] : 2-door

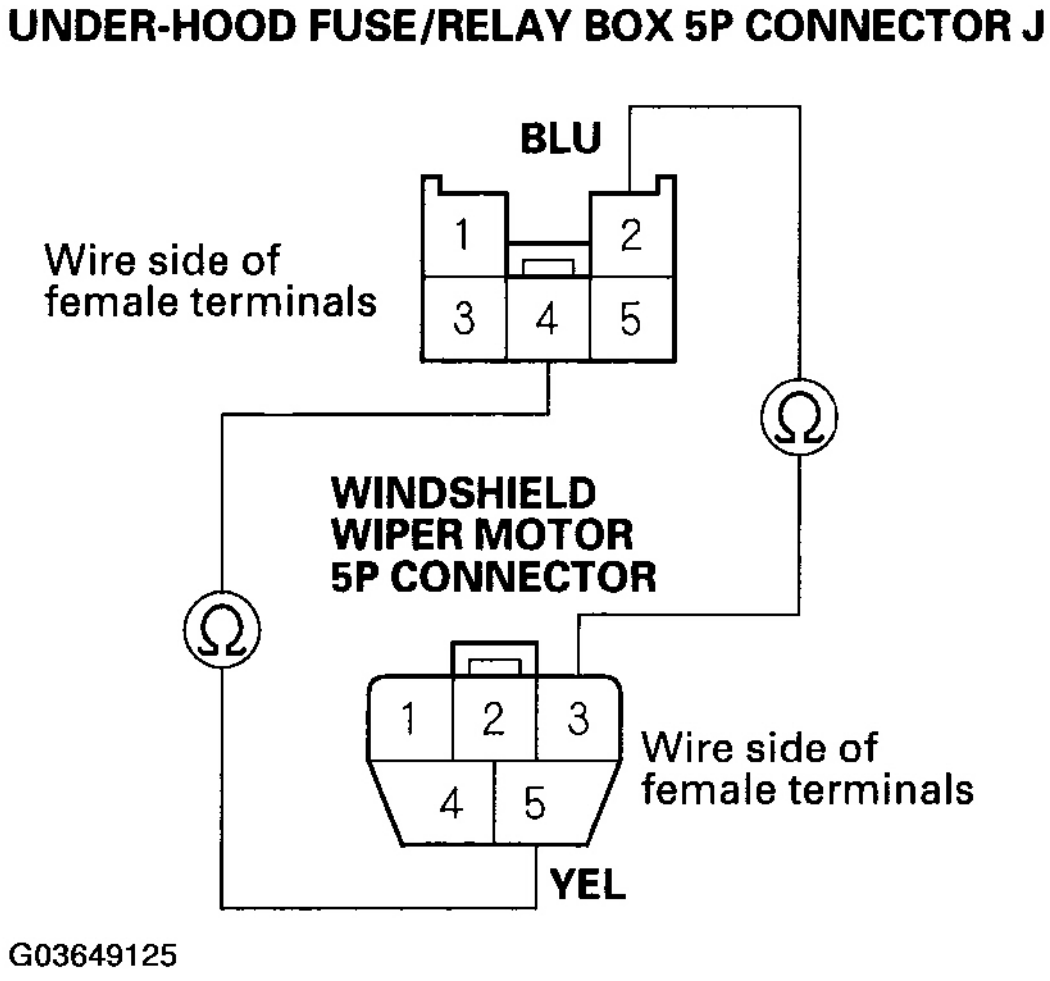


Fig. 9: Checking For Continuity Between Terminals Of Windshield Wiper Motor 5P Connector And Terminal Of Under-Hood Fuse/Relay Box 5P Connector J (4-Door)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

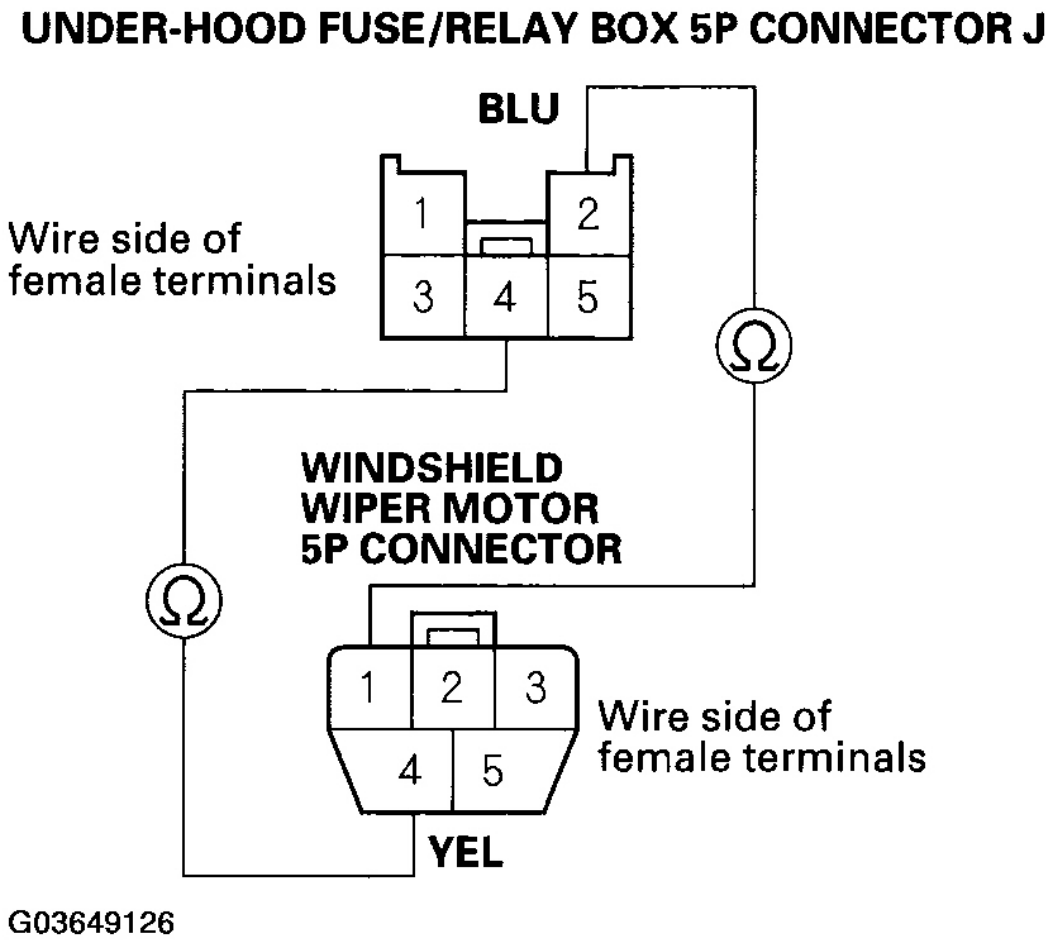


Fig. 10: Checking For Continuity Between Terminals Of Windshield Wiper Motor 5P Connector And Terminal Of Under-Hood Fuse/Relay Box 5P Connector J (2-Door)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair an open in the BLU or YEL wire.
NO - Go to step 22.

22. Perform the wiper motor test (see **WIPER MOTOR TEST**).

Does the wiper motor operate correctly?

YES - Faulty relay module; Replace the under-hood fuse/relay box.

NO - Replace the windshield wiper motor.

DTC B1281: WINDSHIELD WIPER SWITCH MIST POSITION CIRCUIT MALFUNCTION; DTC B1282: WINDSHIELD WIPER SWITCH INT (AUTO) POSITION CIRCUIT MALFUNCTION; DTC B1283: WINDSHIELD WIPER SWITCH LOW POSITION CIRCUIT MALFUNCTION; DTC B1284: WINDSHIELD WIPER SWITCH HIGH POSITION CIRCUIT MALFUNCTION

1. Clear the DTCs using the HDS.
2. Cycle the ignition switch to OFF and then back ON (II).
3. Turn the windshield wiper switch in MIST and wait for 2 seconds.
4. Turn the windshield wiper switch OFF and wait for 2 seconds.
5. Turn the windshield wiper switch in INT (AUTO) and wait for 2 seconds.
6. Turn the windshield wiper switch in LOW and wait for 2 seconds.
7. Turn the windshield wiper switch in HIGH and wait for 2 seconds.
8. Check for DTCs using the HDS.

Is DTC B1281, B1282, B1283, or B1284 indicated?

YES - Replace the windshield wiper/washer switch.

NO - Intermittent failure, the windshield wiper/washer switch and the combination switch control unit are OK at this time. Check pinfits and connections.

WIPER/WASHER SWITCH TEST/REPLACEMENT

NOTE: The wiper/washer switch is built into the combination switch control unit. For the wiper/washer test, refer to the wiper/washer switch input test (see WIPER/WASHER SWITCH INPUT TEST).

1. Remove the dashboard lower cover (see **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**).
2. Remove the steering column covers (see **STEERING COLUMN REMOVAL AND INSTALLATION**).

3. Disconnect the combination light switch 12P connector (A) and dashboard wire harness 8P connector (B) from the wiper/washer switch (C).

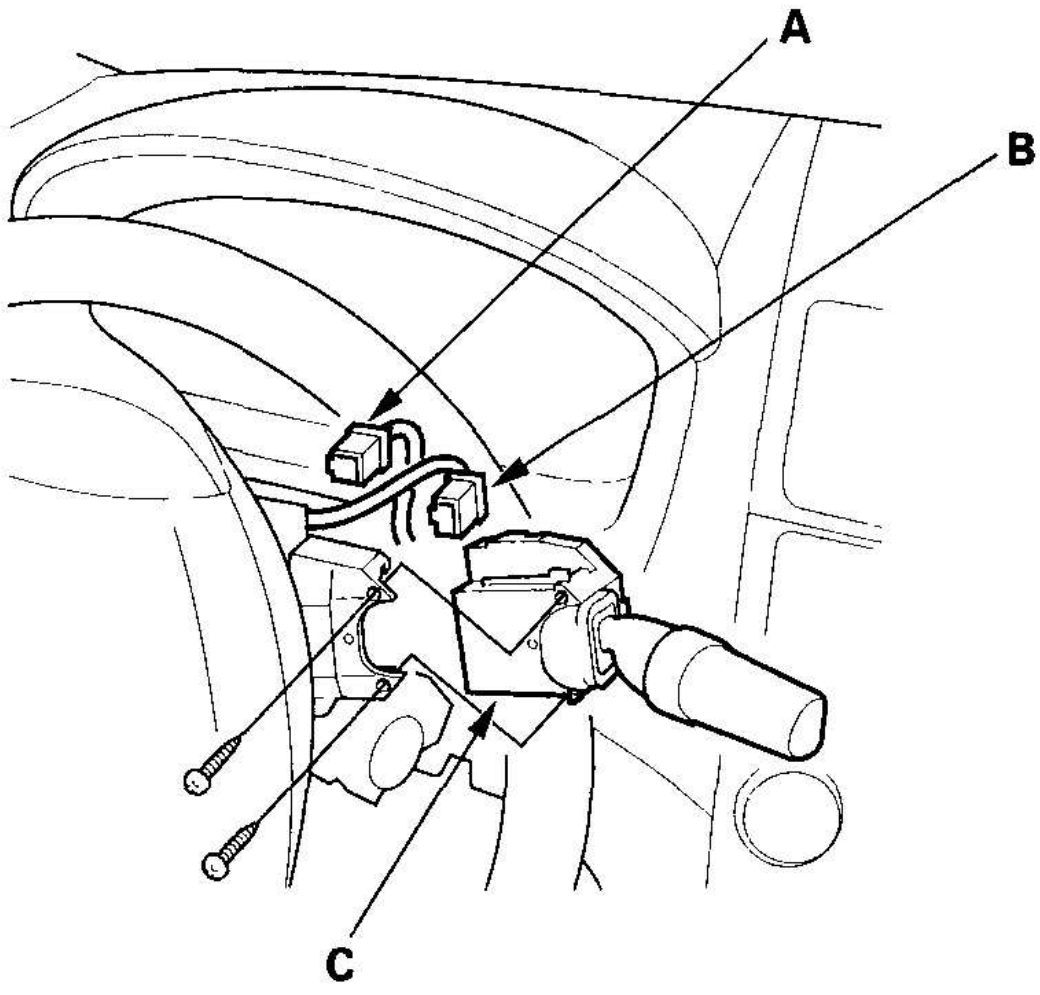


Fig. 11: Disconnecting Combination Light Switch And Dashboard Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the two screws, then slide out the wiper/washer switch.

WIPER/WASHER SWITCH INPUT TEST

1. Before troubleshooting the wiper/washer system, troubleshoot the B-CAN System Diagnosis Test Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).
2. Remove the dashboard lower cover (see **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**).
3. Remove the steering column covers (see **STEERING COLUMN REMOVAL AND INSTALLATION**).
4. Disconnect the 8P connector (A) from the wiper/washer switch (B).

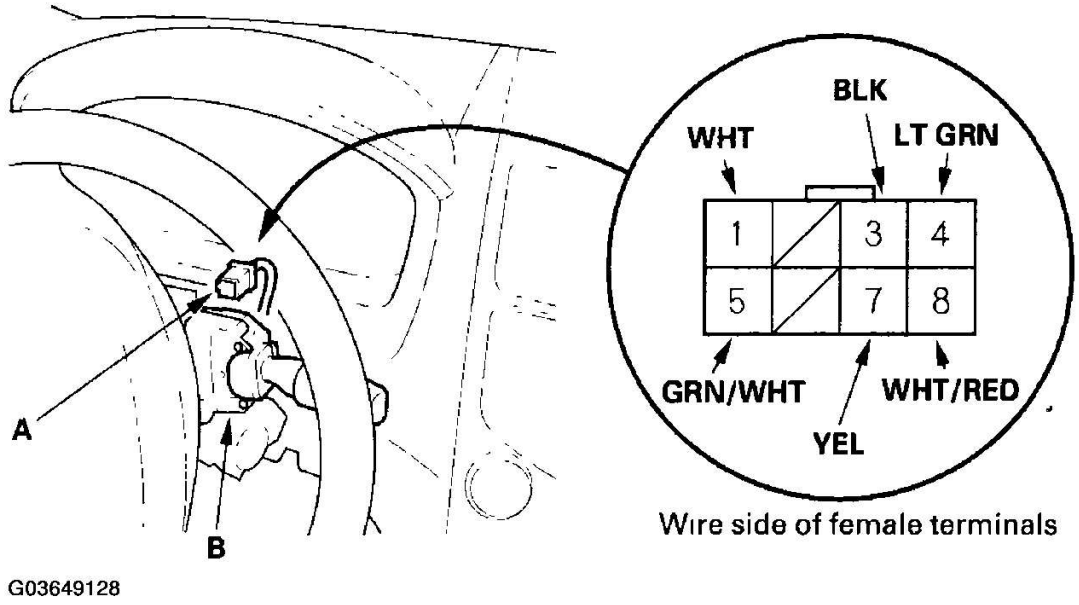


Fig. 12: Disconnecting 8P Connector From Wiper/Washer Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Inspect the connector and socket terminals to be sure they are all making good contact.
   - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
   - If the terminals look OK, go to step 6.
6. Reconnect the connect, and make these input tests at the connector.
   - If any test indicates a problem, find and correct the cause, then recheck the

system.

- If all the input tests prove OK, go to step 7.

WIPER/WASHER SWITCH INPUT TEST (RECONNECT CONNECTOR)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
3	BLK	Under all conditions	Check for voltage to ground: There should be less than 1 V.	• Poor ground (G501, G601) • An open in the wire
8	WHT/RED	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No. 15 (40 A) fuse in the under-dash fuse/relay box • Blown No. 7 (10 A) fuse in the under-dash fuse/relay box • An open in the wire
7	YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery	• Blown No. 21 (7.5 A) fuse in the under-dash fuse/relay box

			voltage.	• An open in the wire

7. Disconnect the connector from the wiper/washer switch, and make these input tests at the connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, the combination switch control unit must be faulty, replace the wiper/washer switch.

WIPER/WASHER SWITCH INPUT TEST (DISCONNECT CONNECTOR)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
5	GRN/WHT	Under all conditions	Check for continuity between the No. 5 terminal and under-hood fuse/relay box 10P connector No. 5 terminal: There should be continuity.	An open in the wire
4	LT GRN	Under all conditions	Check for continuity between the No. 4 terminal and under-dash fuse/relay box X	An open in the wire

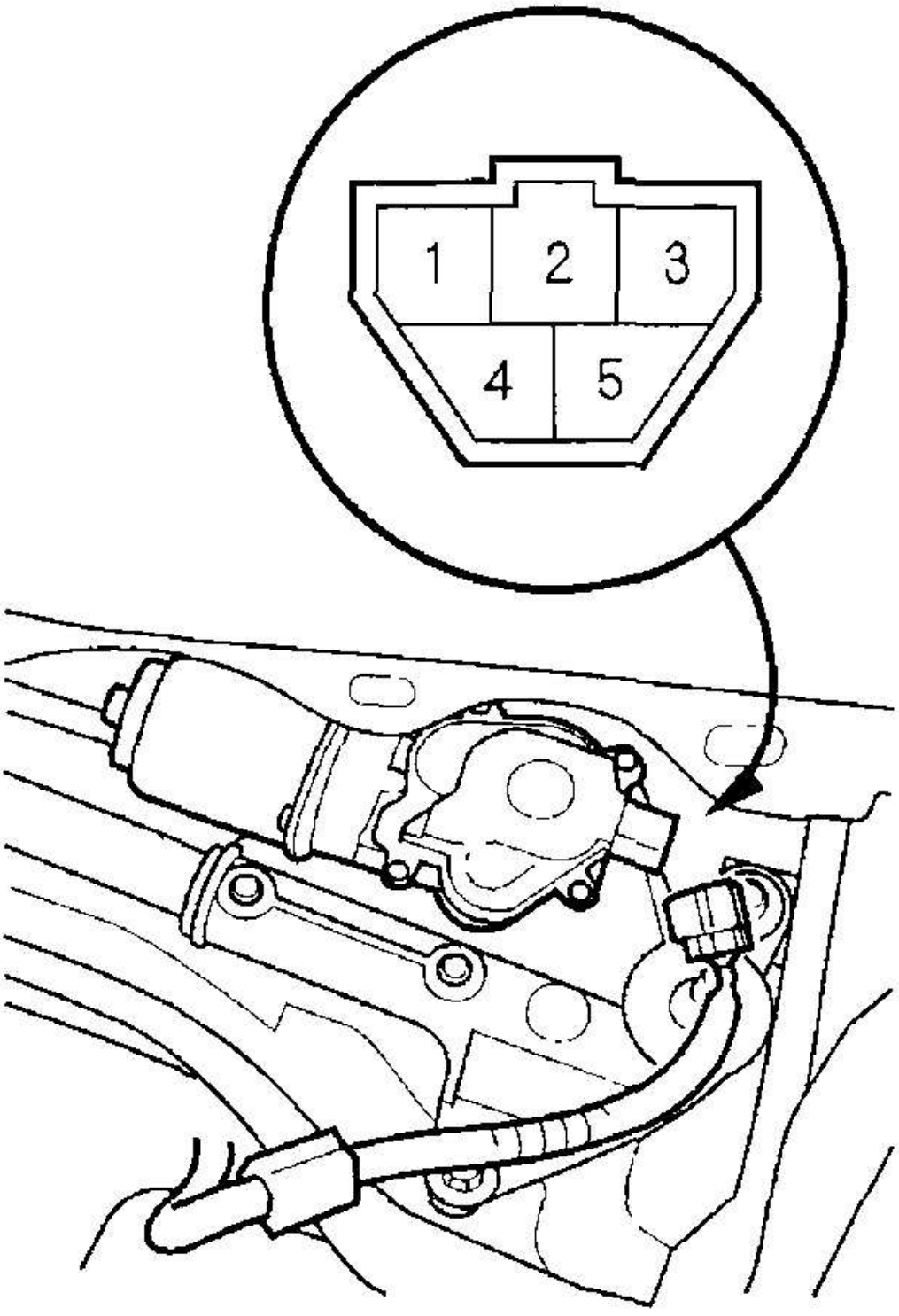
			connector No. 27 terminal: There should be continuity.	
1	WHT	Under all conditions	Check for continuity between the No. 1 terminal and under-hood fuse/relay box 10P connector No. 6 terminal: There should be continuity.	An open in the wire

WIPER MOTOR TEST

1. Open the hood, and remove the wiper arms.

NOTE: Carefully remove the wiper arms, so that they do not touch the hood.

2. Remove the hood seal and cowl cover.
3. Disconnect the connector from the wiper motor.



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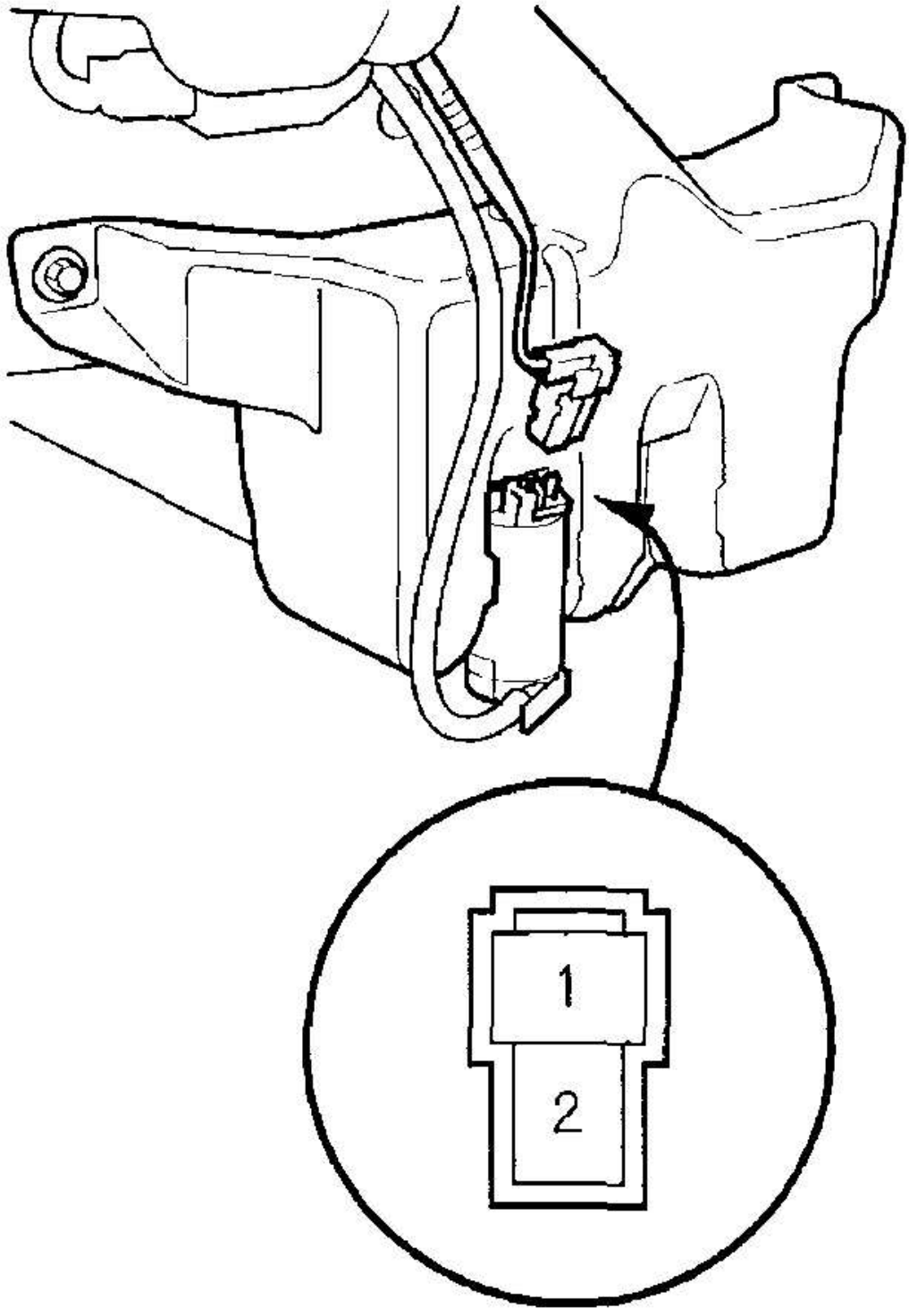
Fig. 13: Disconnecting Connector From Wiper Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Test the motor by connecting battery power to the No. 2 terminal and ground the No. 3 [1] terminal of the wiper motor 5P connector. The motor should run at low speed. If the motor does not run or fails to run smoothly, replace the motor.
5. Test the motor by connecting battery power to the No. 2 terminal and ground the No. 5 [4] terminal of the wiper motor 5P connector. The motor should run at high speed. If the motor does not run or fails to run smoothly, replace the motor.
6. Connect an analog voltmeter between the No. 4 [5] (+) and No. 1 [3] (-) terminals, and run the motor at low or high speed. The voltmeter should indicate 12 V and 4 V or less alternately. If it does not, replace the wiper motor.

[ ] :2-door

WASHER MOTOR TEST

1. Remove the right inner fender (see **FRONT INNER FENDER REPLACEMENT**).
2. Disconnect the 2P connector from the washer motor.



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Fig. 14: Disconnecting 2P Connector From Washer Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Test the motor by connecting battery power to the No. 1 terminal and ground the No. 2 terminal of the washer motor. The motor should run.
   - If the motor does not run or fails to run smoothly, replace it.
   - If the motor runs smoothly, but little or no washer fluid is pumped, check for a disconnected or blocked washer hose, or a clogged washer motor outlet.

WIPER MOTOR REPLACEMENT

1. Open the hood. Remove the caps, nuts (A), and the windshield wiper arms (B).

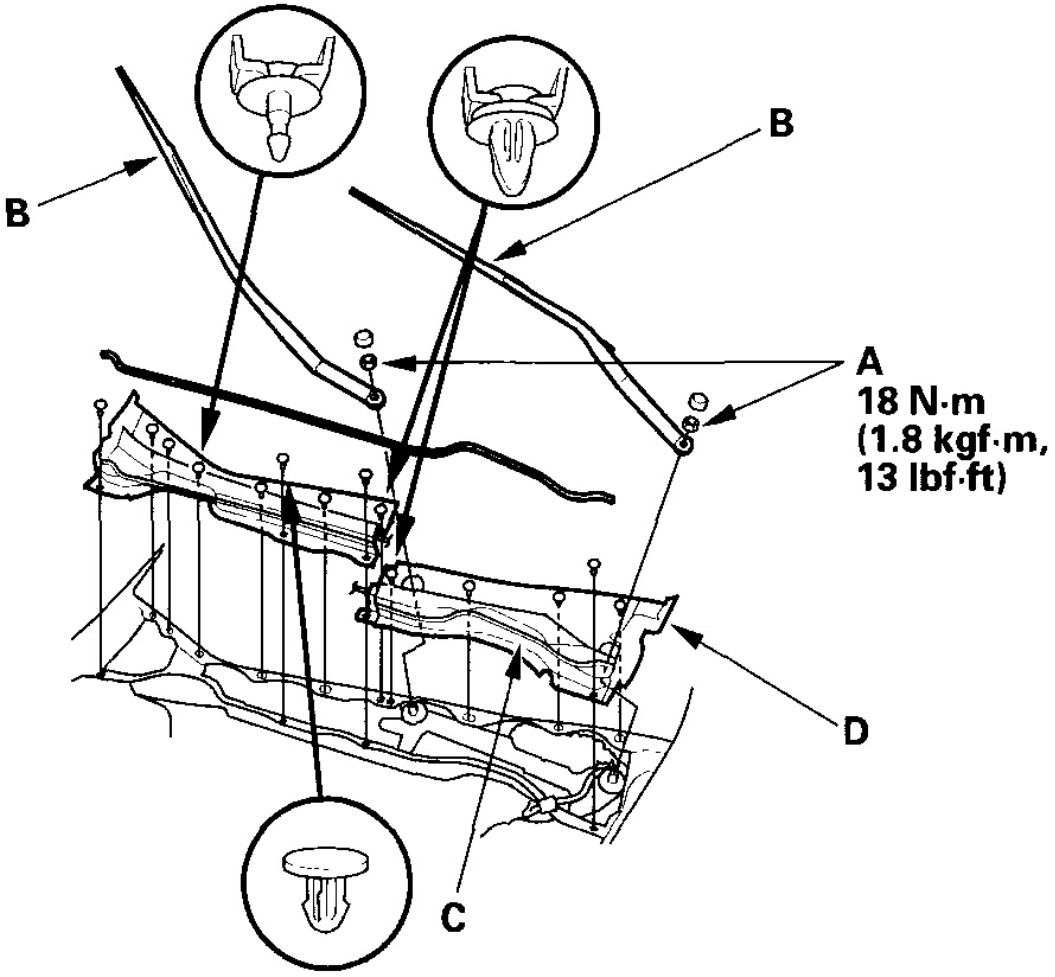


Fig. 15: Removing Caps, Nuts And Windshield Wiper Arms
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the hood seals (C) and cowl covers (D).
3. Disconnect the 5P connector (A) from the wiper motor.

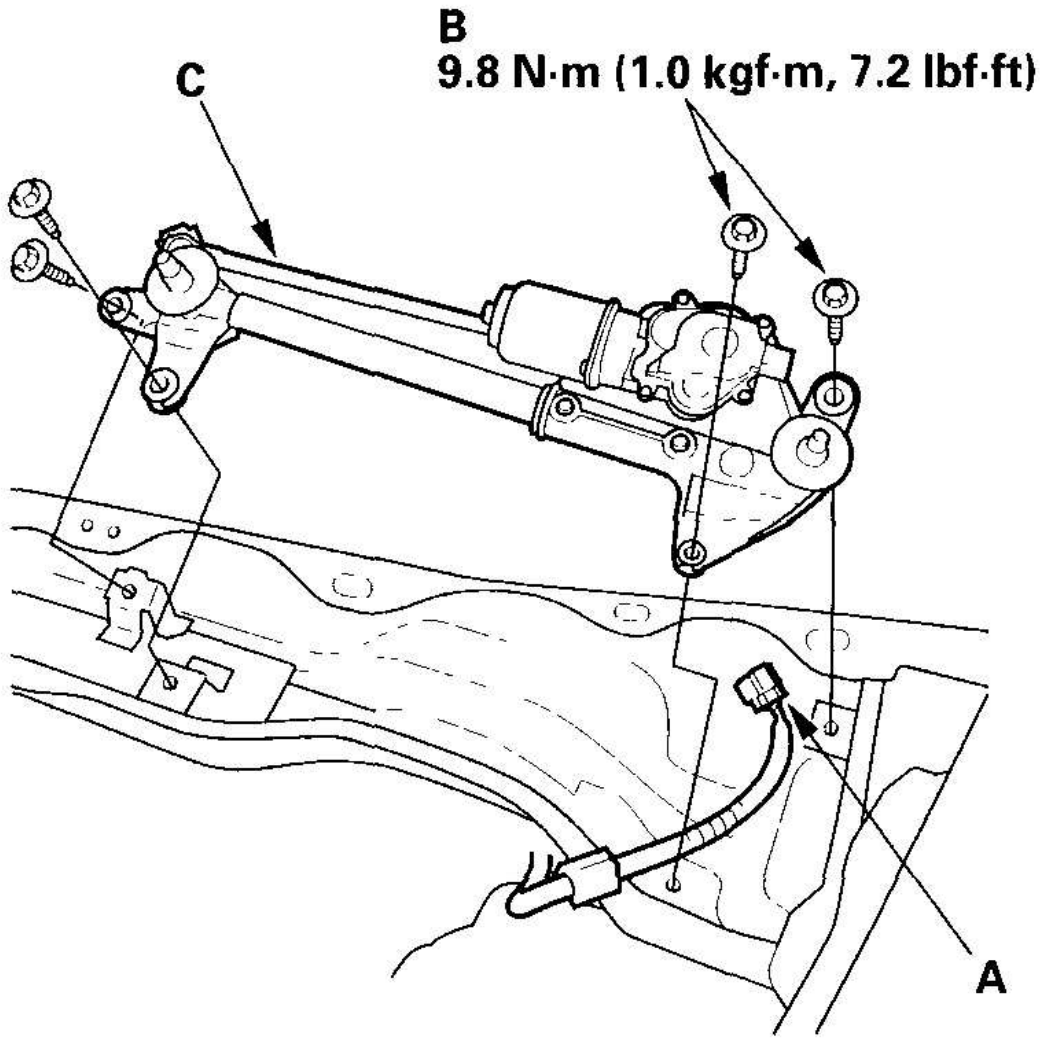


Fig. 16: Disconnecting 5P Connector From Wiper Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the four bolts (B) and wiper linkage assembly (C).
5. Scribe a line (A) across the link and windshield wiper linkage to show the original adjustment. Separate the windshield wiper linkage (B) from the wiper motor (C).

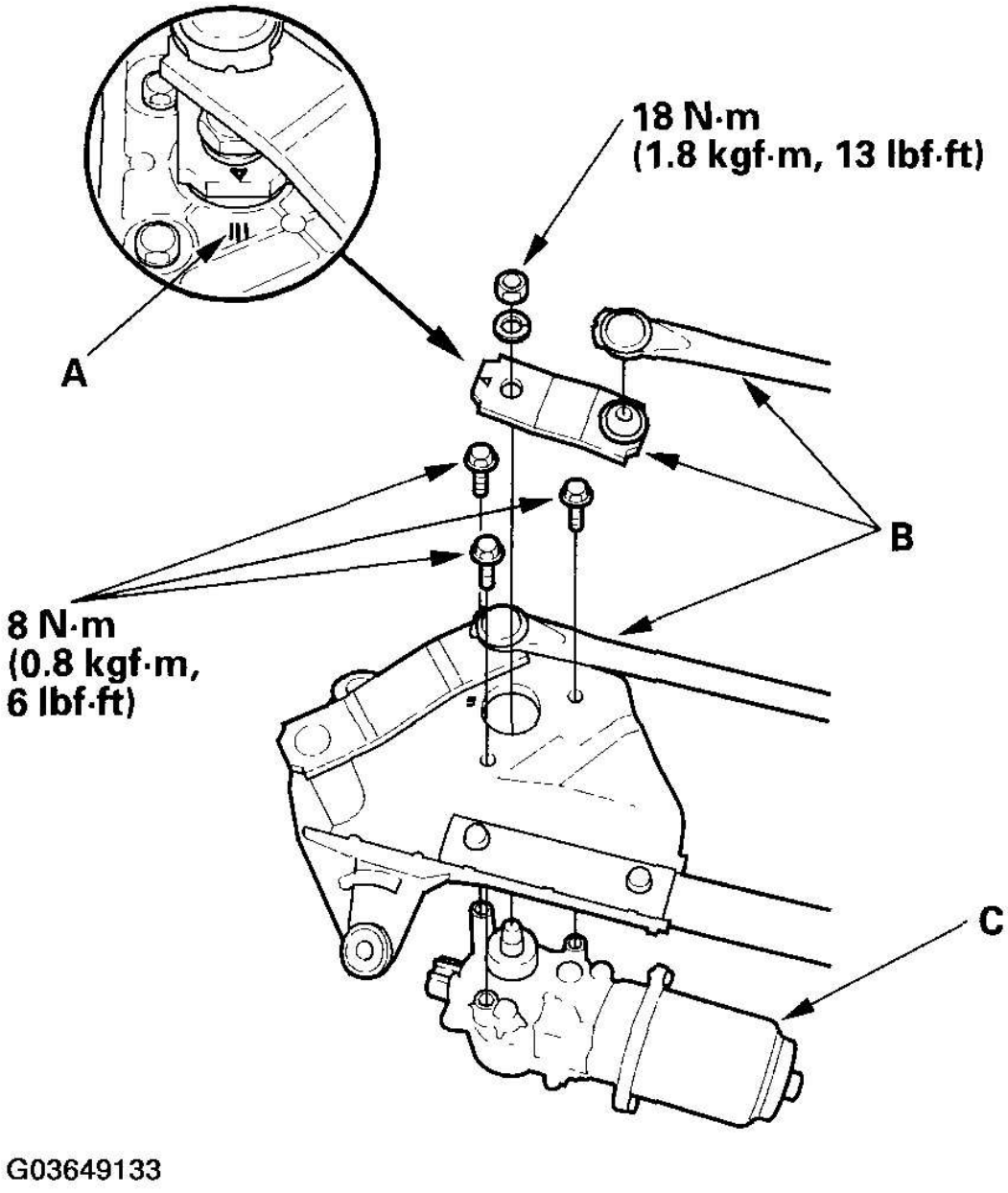


Fig. 17: Separating Windshield Wiper Linkage From Wiper Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Install in the reverse order to removal, and note these items:
   - Apply multipurpose grease to the moving parts.

- Before reinstalling the wiper arms, turn the wiper switch ON, then OFF to return the wiper shafts to the park position.
- If necessary, replace any damaged clips.
- Check the wiper motor operation.

WASHER RESERVOIR REPLACEMENT

1. Remove the right inner fender (see **FRONT INNER FENDER REPLACEMENT**).
2. Disconnect the washer tube (A) and washer motor 2P connector (B).

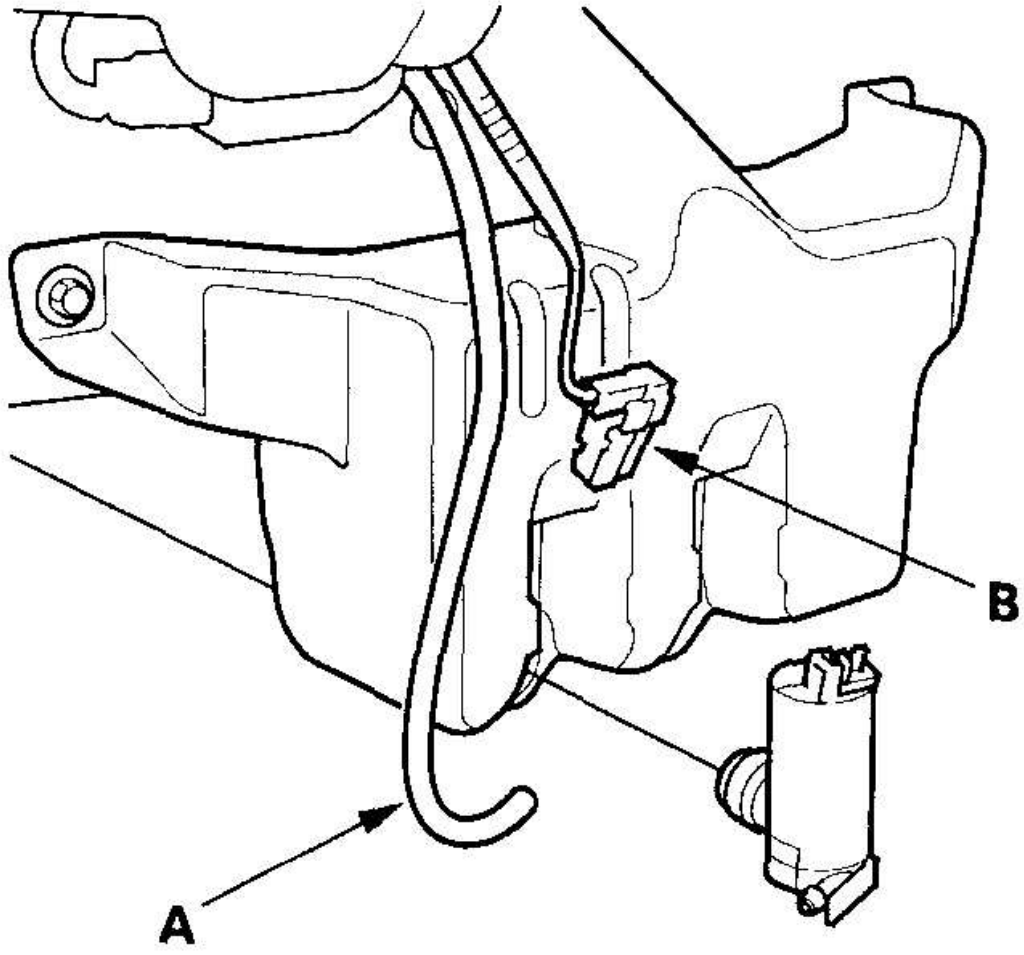
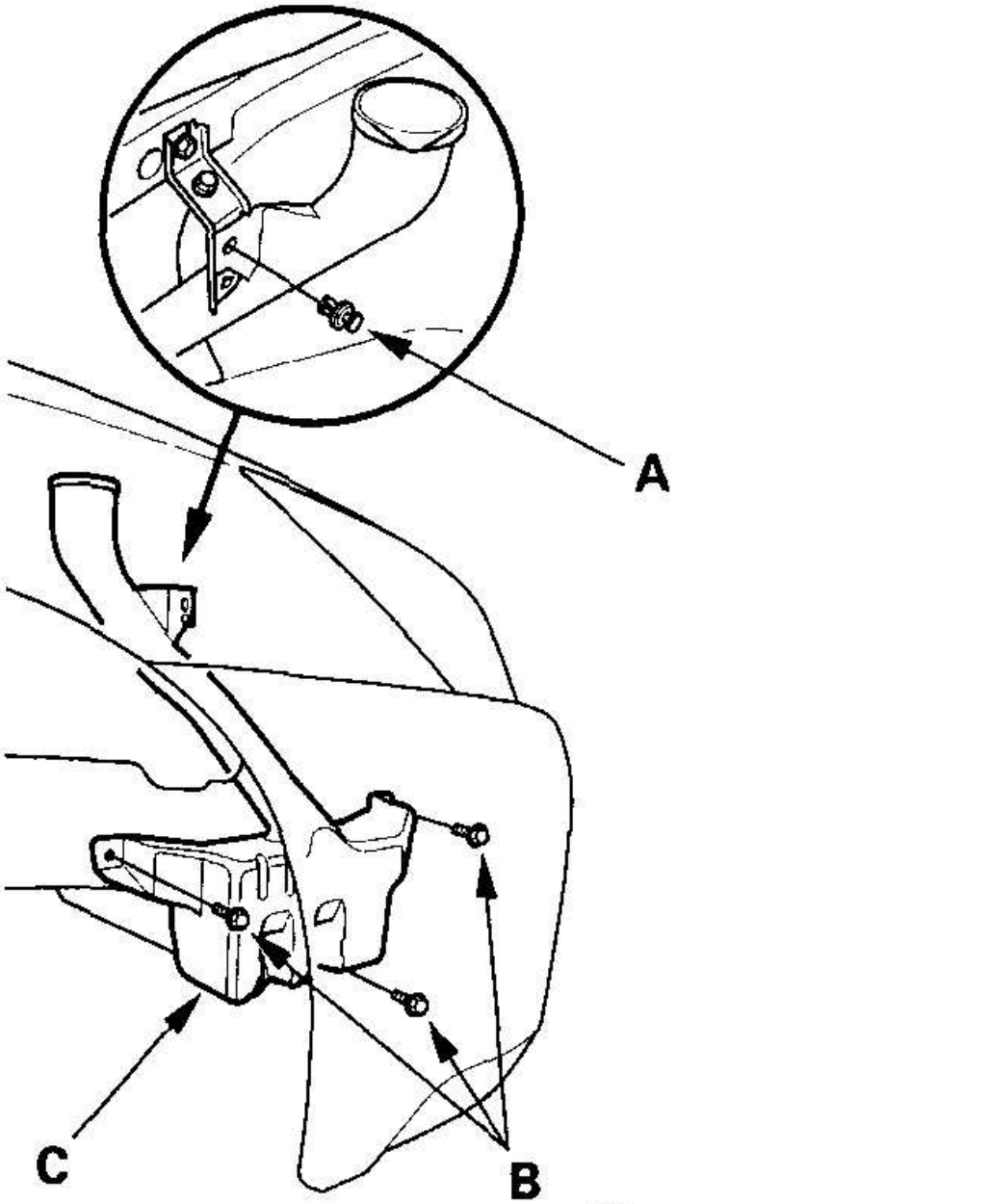


Fig. 18: Disconnecting Washer Tube And Washer Motor 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the clip (A) and three bolts (B), then remove the washer reservoir (C).



G03649135

Fig. 19: Removing Washer Reservoir
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the reservoir in the reverse order of removal.

WASHER FLUID LEVEL SWITCH TEST

CANADA

1. Remove the right inner fender (see **FRONT INNER FENDER REPLACEMENT**).
2. Disconnect the 2P connector (A) from the washer fluid level switch (B).

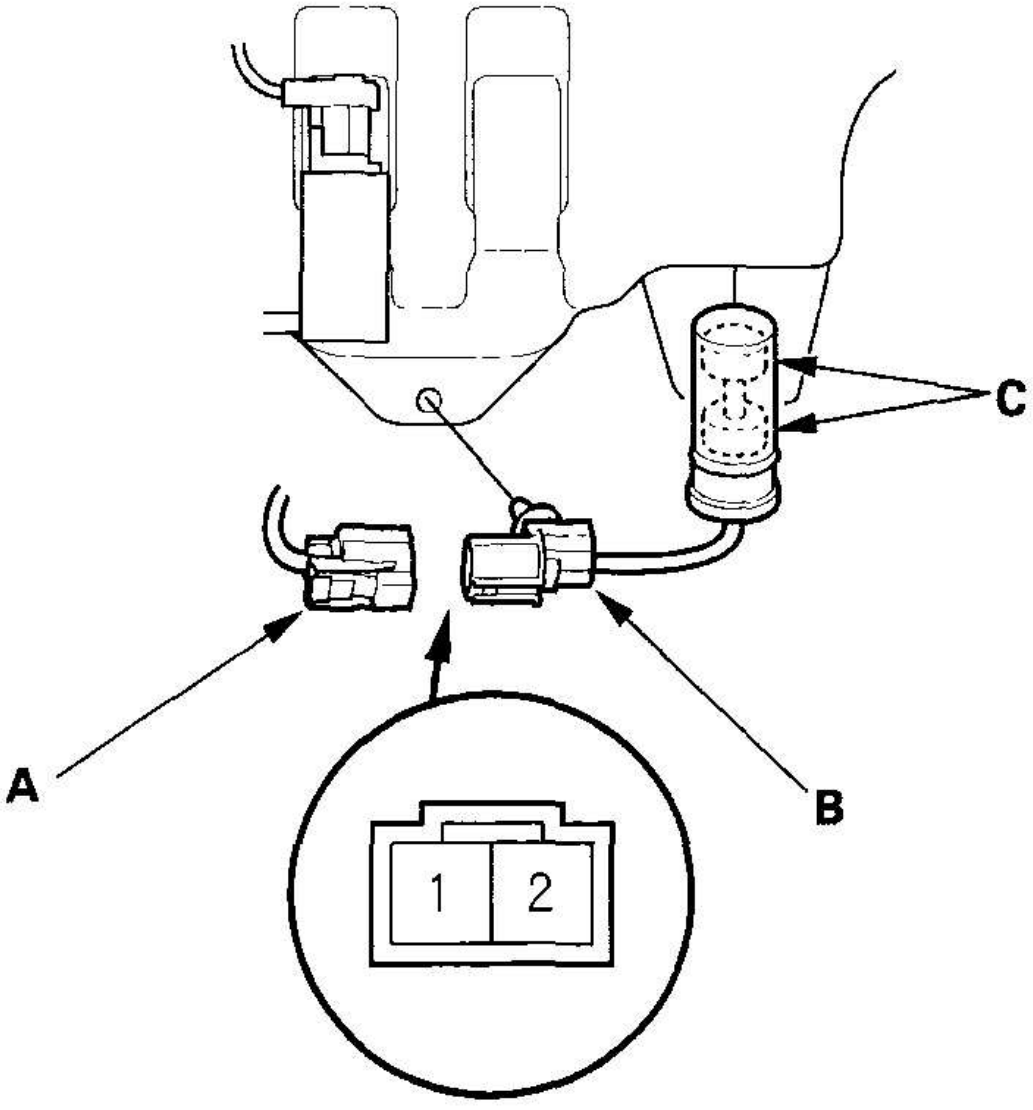


Fig. 20: Disconnecting 2P Connector From Washer Fluid Level Switch
Courtesy of AMERICAN HONDA MOTOR CO., INC.

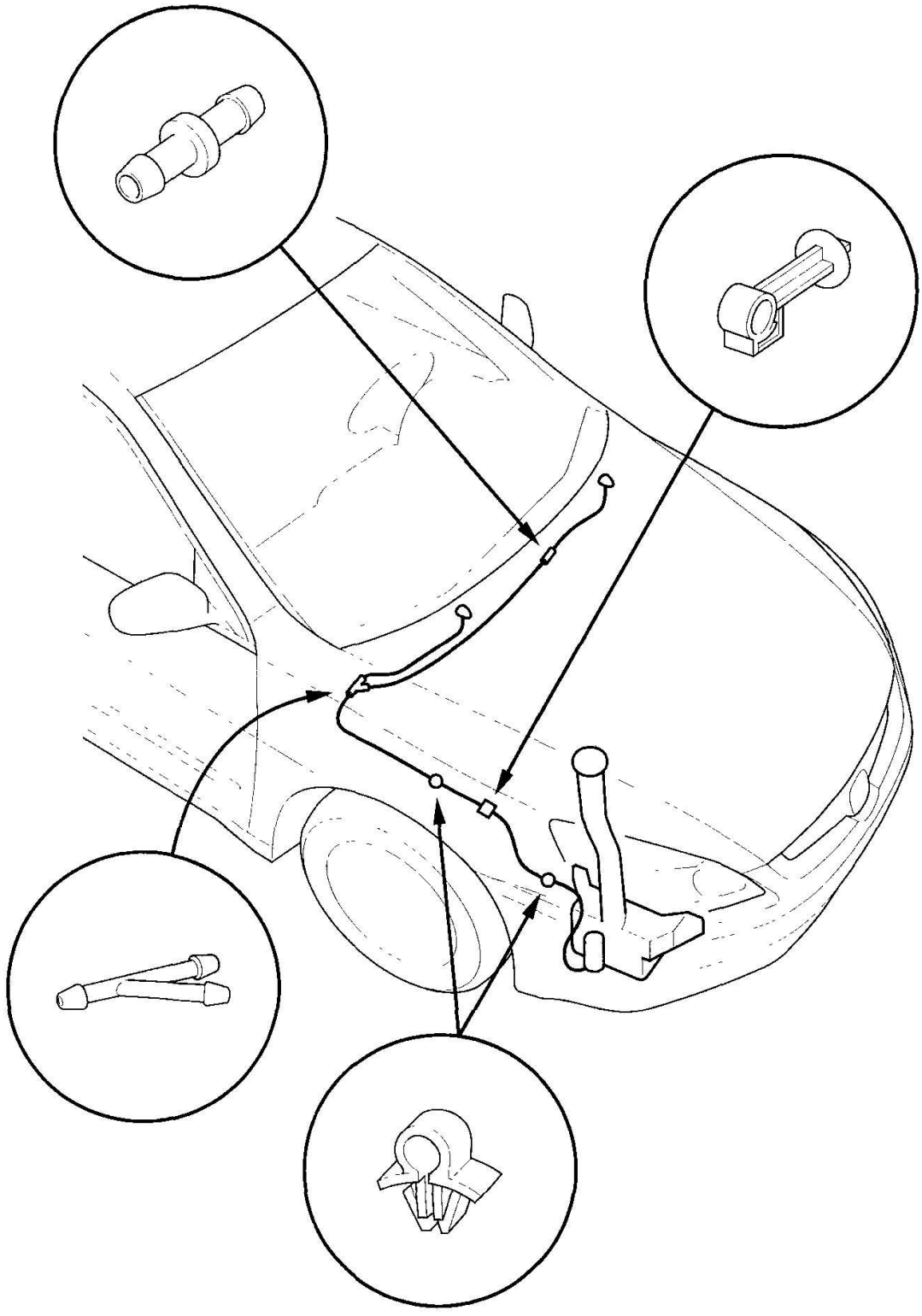
3. Remove the washer fluid level switch from the reservoir.

NOTE: Fluid may flow out of the opening.

4. Check for continuity between the No. 1 and No. 2 terminals in each float position (C).
   - There should be continuity when the float is down.
   - There should be no continuity when the float is up.

WASHER TUBE REPLACEMENT

1. Remove the right inner fender (see **FRONT INNER FENDER REPLACEMENT**).
2. Remove the windshield washer nozzles and clips, then remove the tube.



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Fig. 21: Removing Windshield Washer Nozzles, Clips And Tube
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install in the reverse order of removal. Take care not to pinch the washer tube. Check the windshield washer operation.

AIR CONDITIONING

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

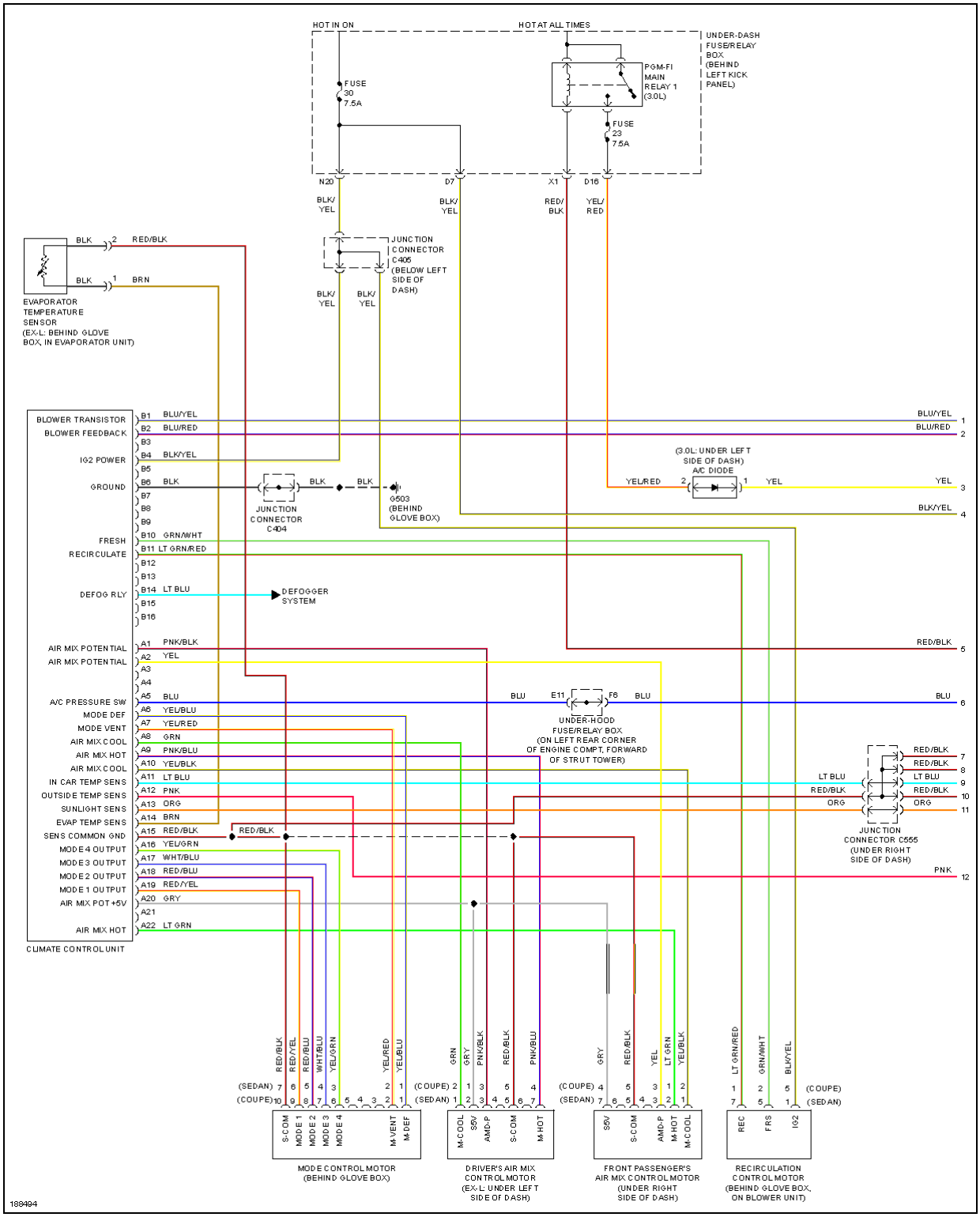


Fig. 1: Automatic A/C Circuit (1 of 3)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

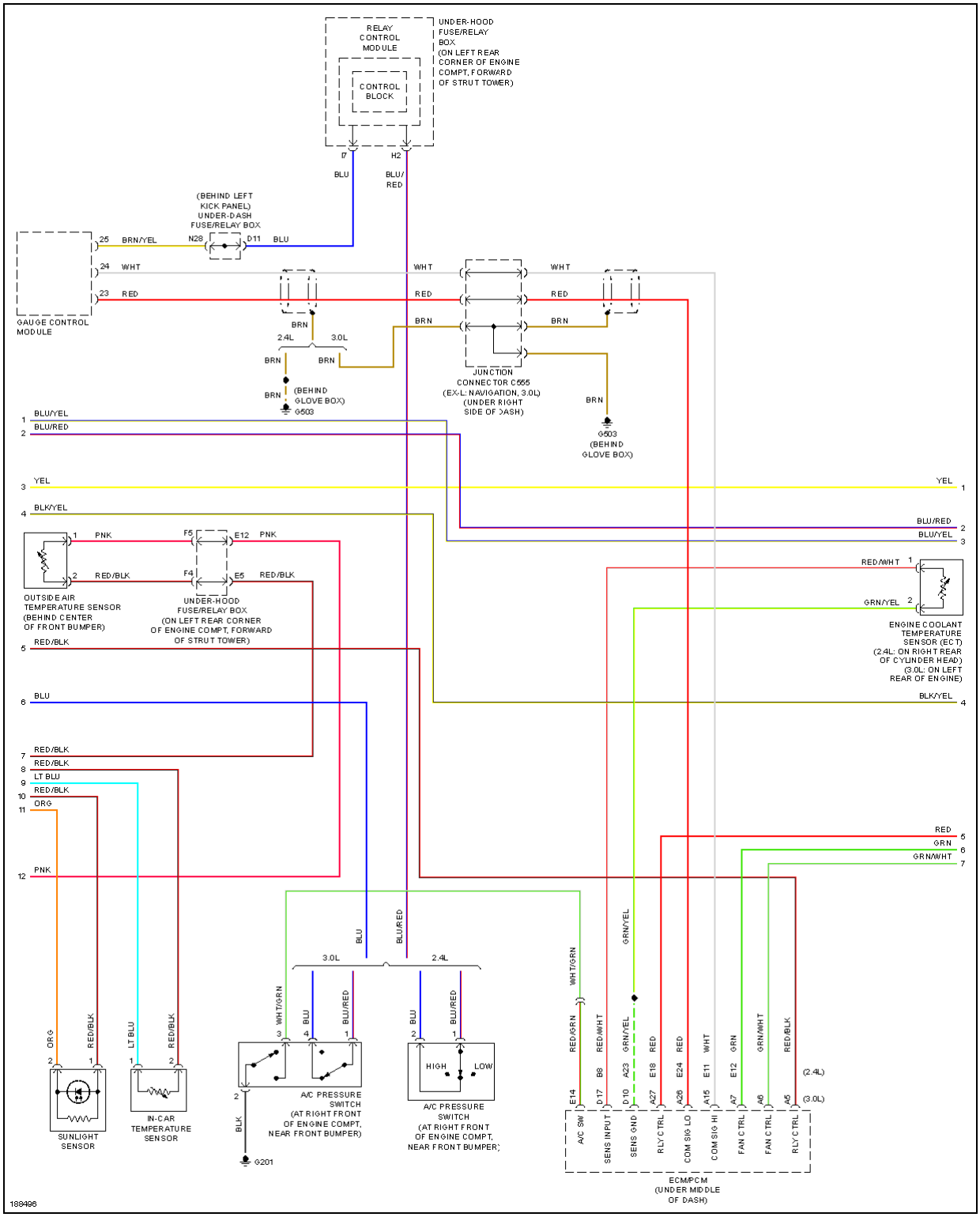


Fig. 2: Automatic A/C Circuit (2 of 3)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

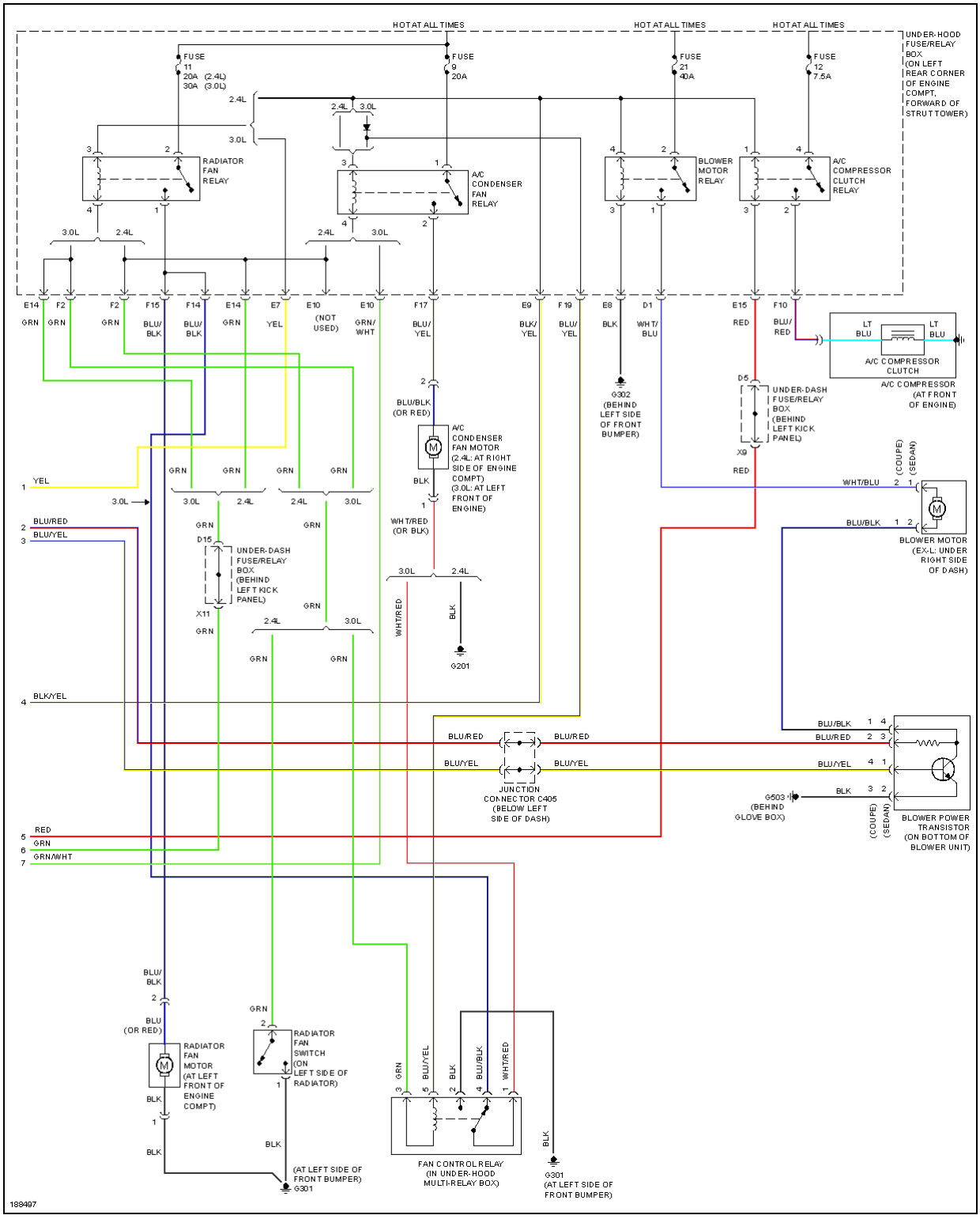


Fig. 3: Automatic A/C Circuit (3 of 3)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

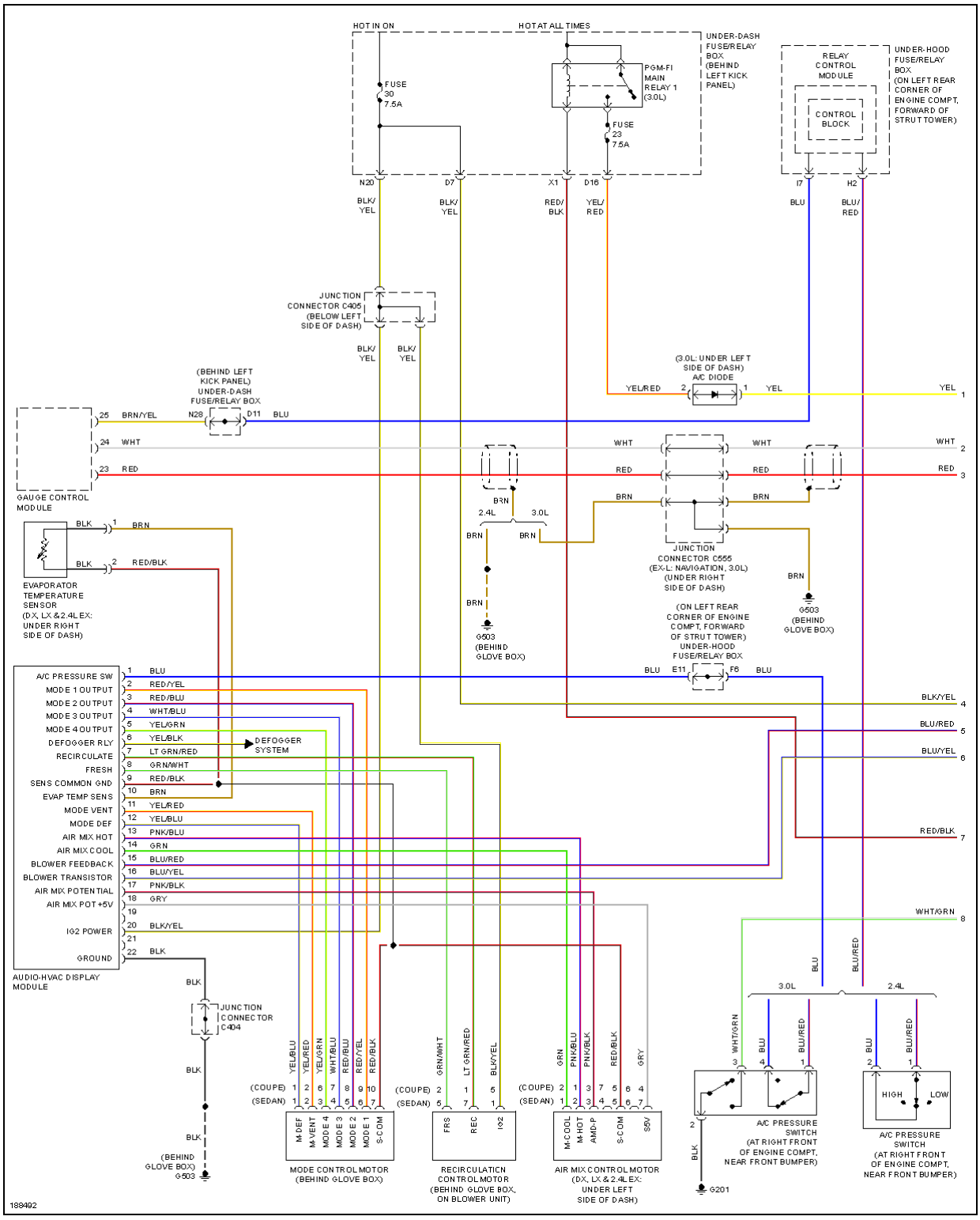


Fig. 4: Manual A/C Circuit (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

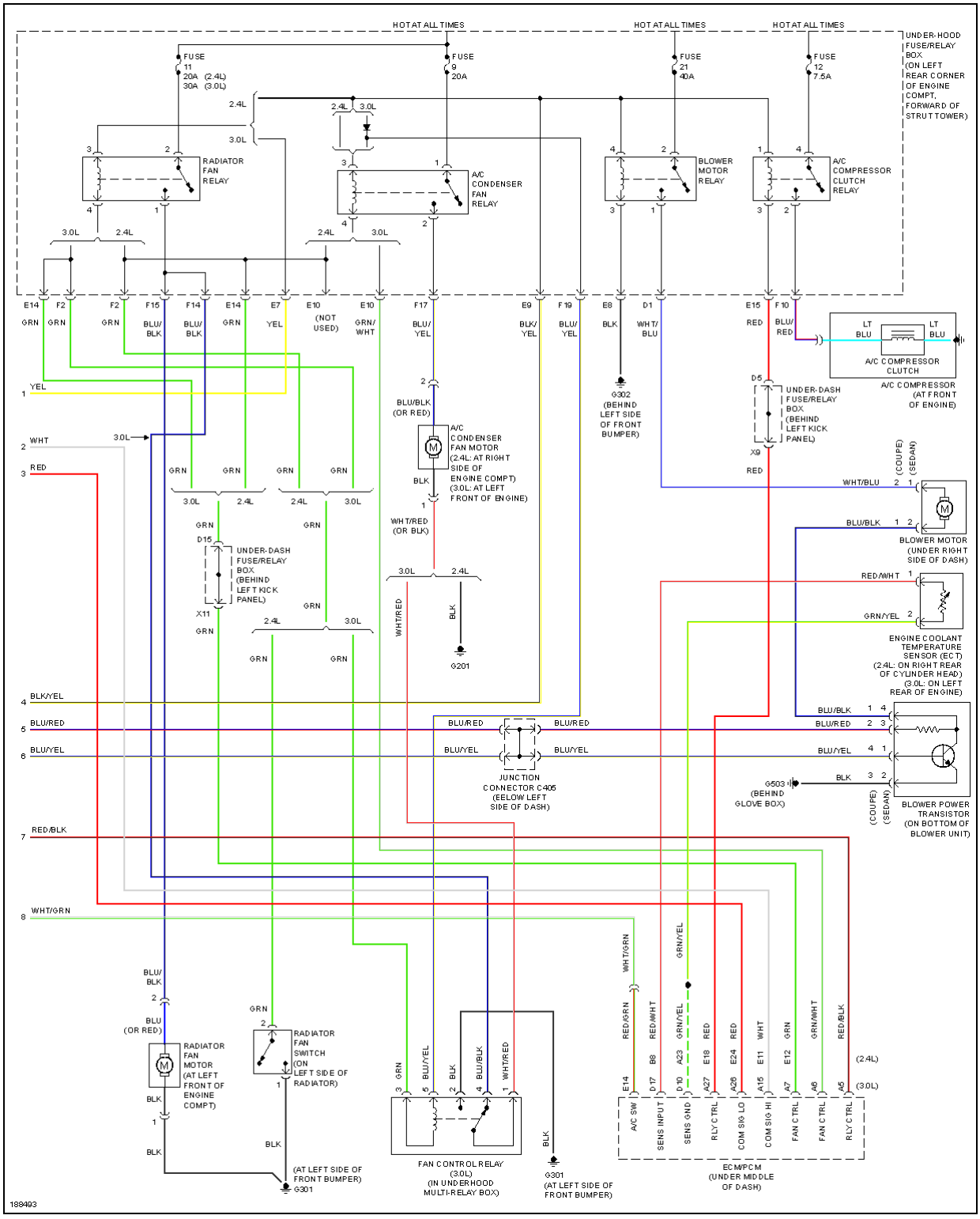


Fig. 5: Manual A/C Circuit (2 of 2)

ANTI-LOCK BRAKES

2.4L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

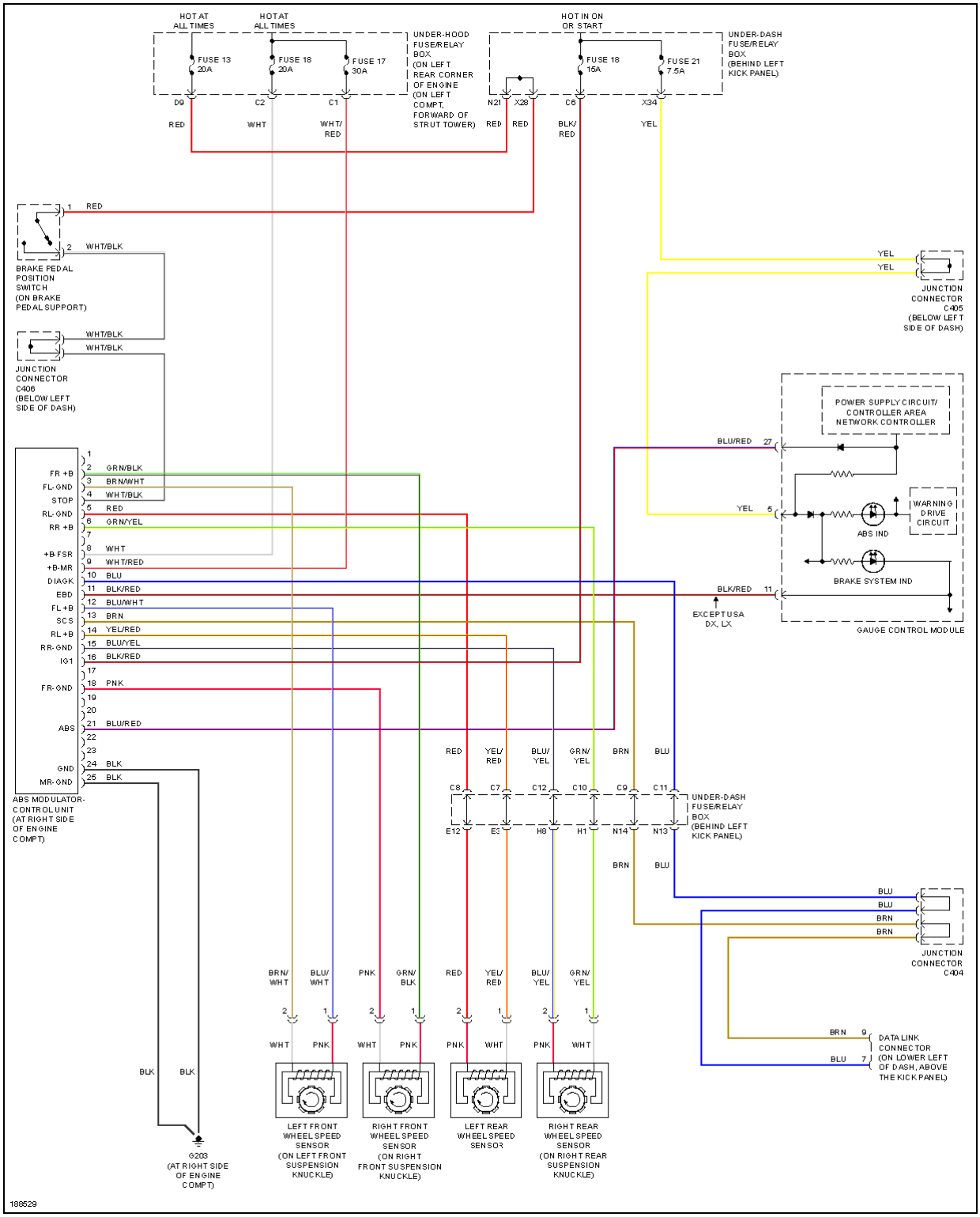


Fig. 6: 2.4L, Anti-lock Brakes Circuit

3.0L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

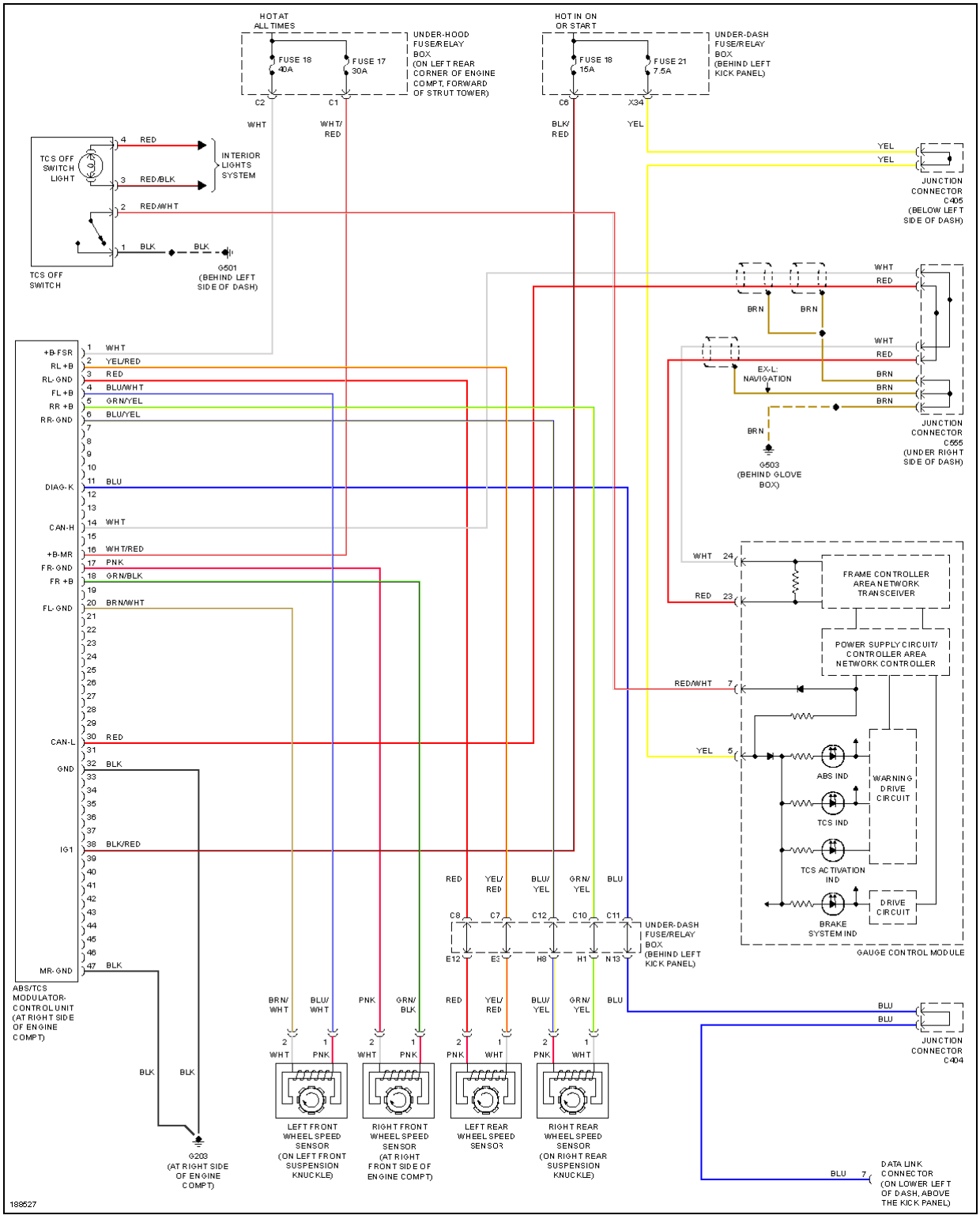


Fig. 7: 3.0L, Anti-lock Brakes Circuit

ANTI-THEFT

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

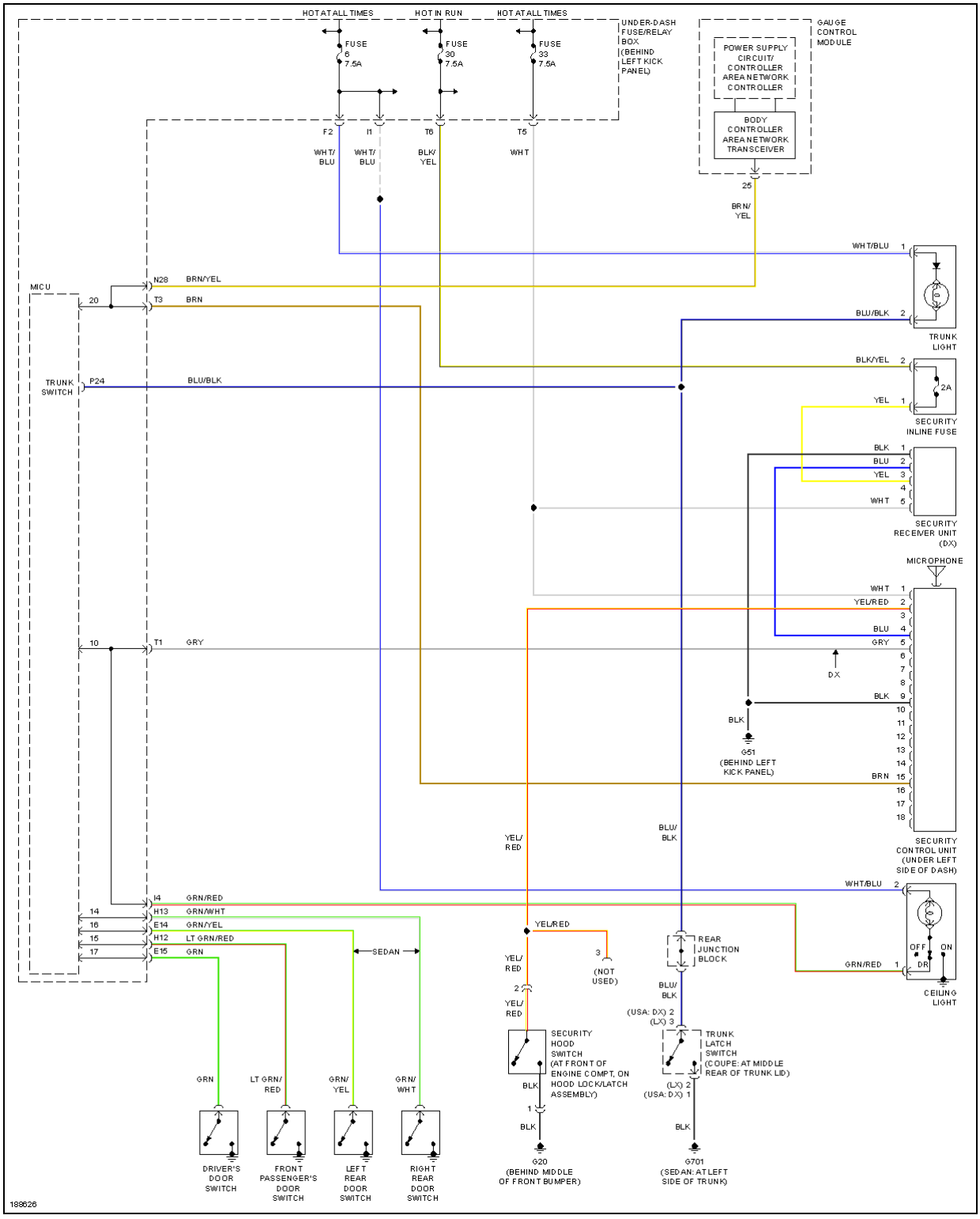


Fig. 8: Forced Entry Circuit, Accessory

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

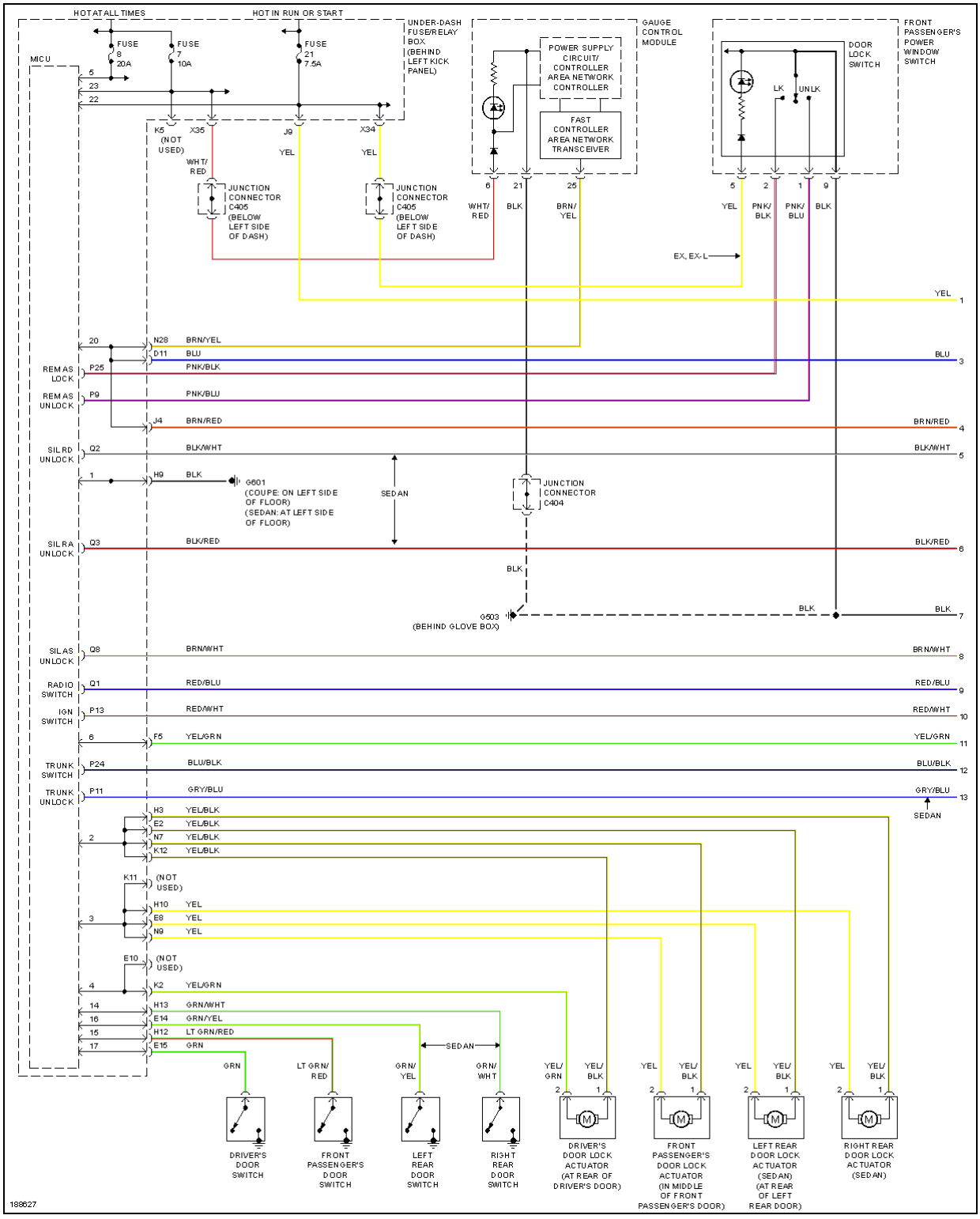


Fig. 9: Forced Entry Circuit, Factory Installed (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

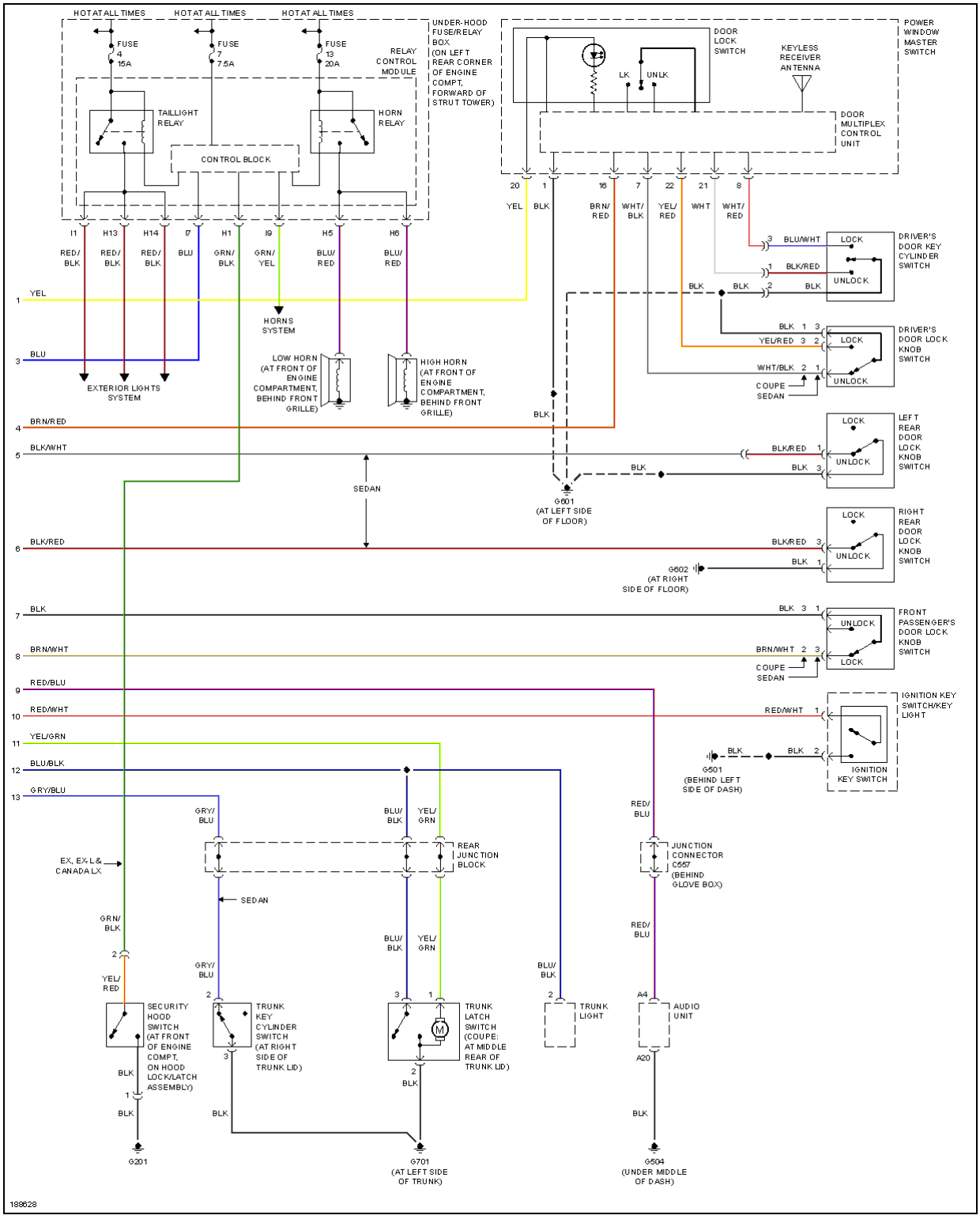


Fig. 10: Forced Entry Circuit, Factory Installed (2 of 2)

2.4L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

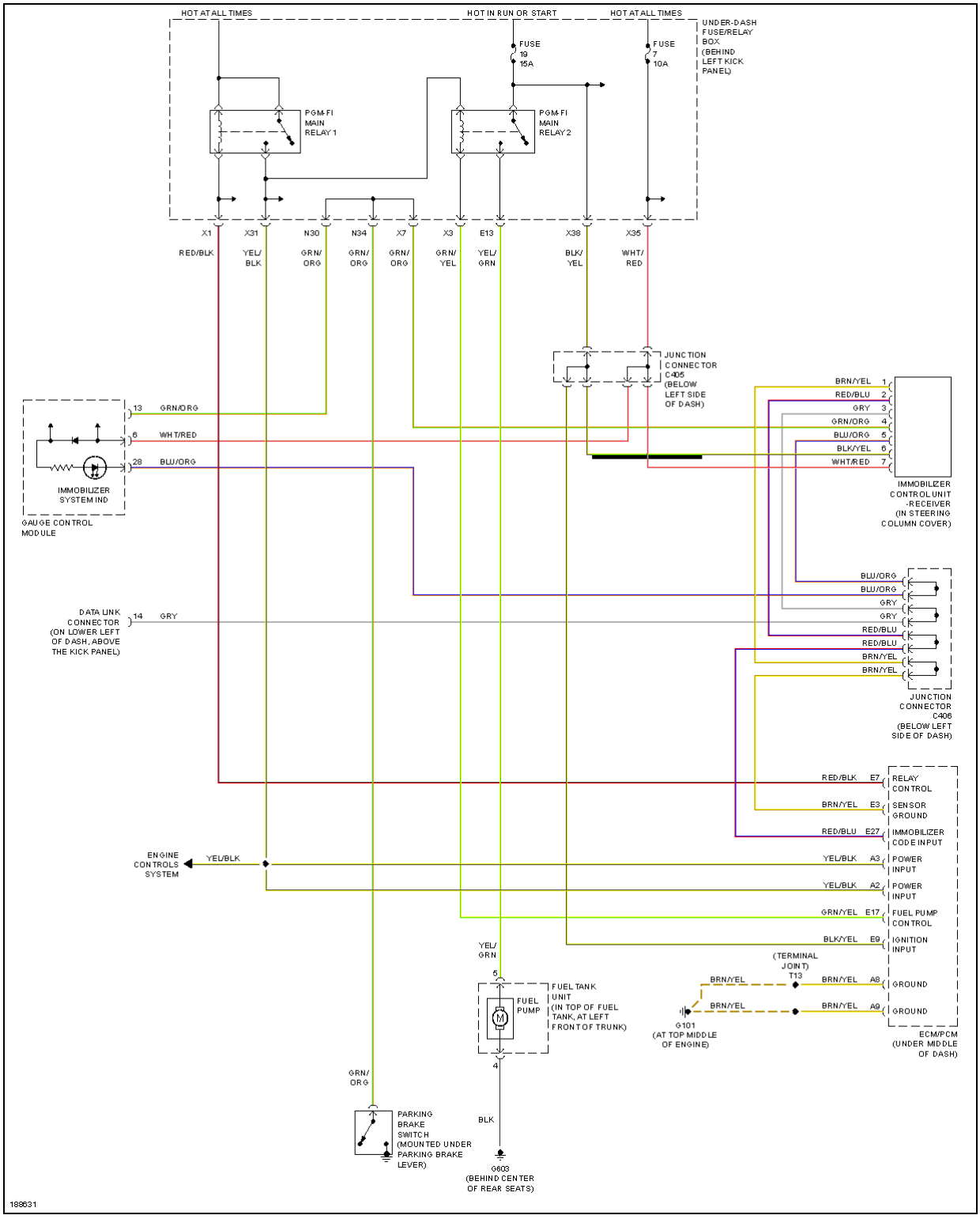


Fig. 11: 2.4L, Immobilizer Circuit

3.0L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

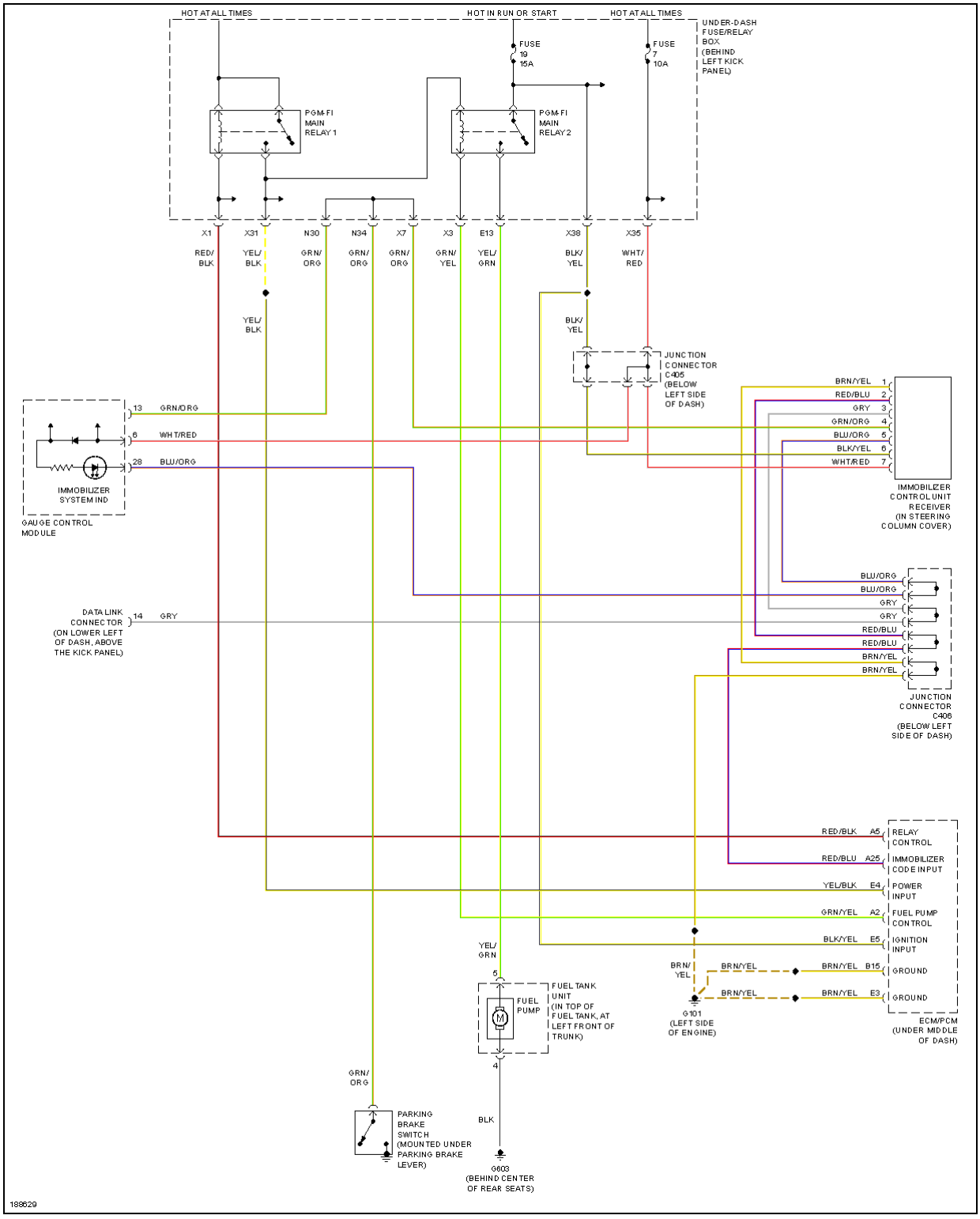


Fig. 12: 3.0L, Immobilizer Circuit

BODY CONTROL MODULES

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

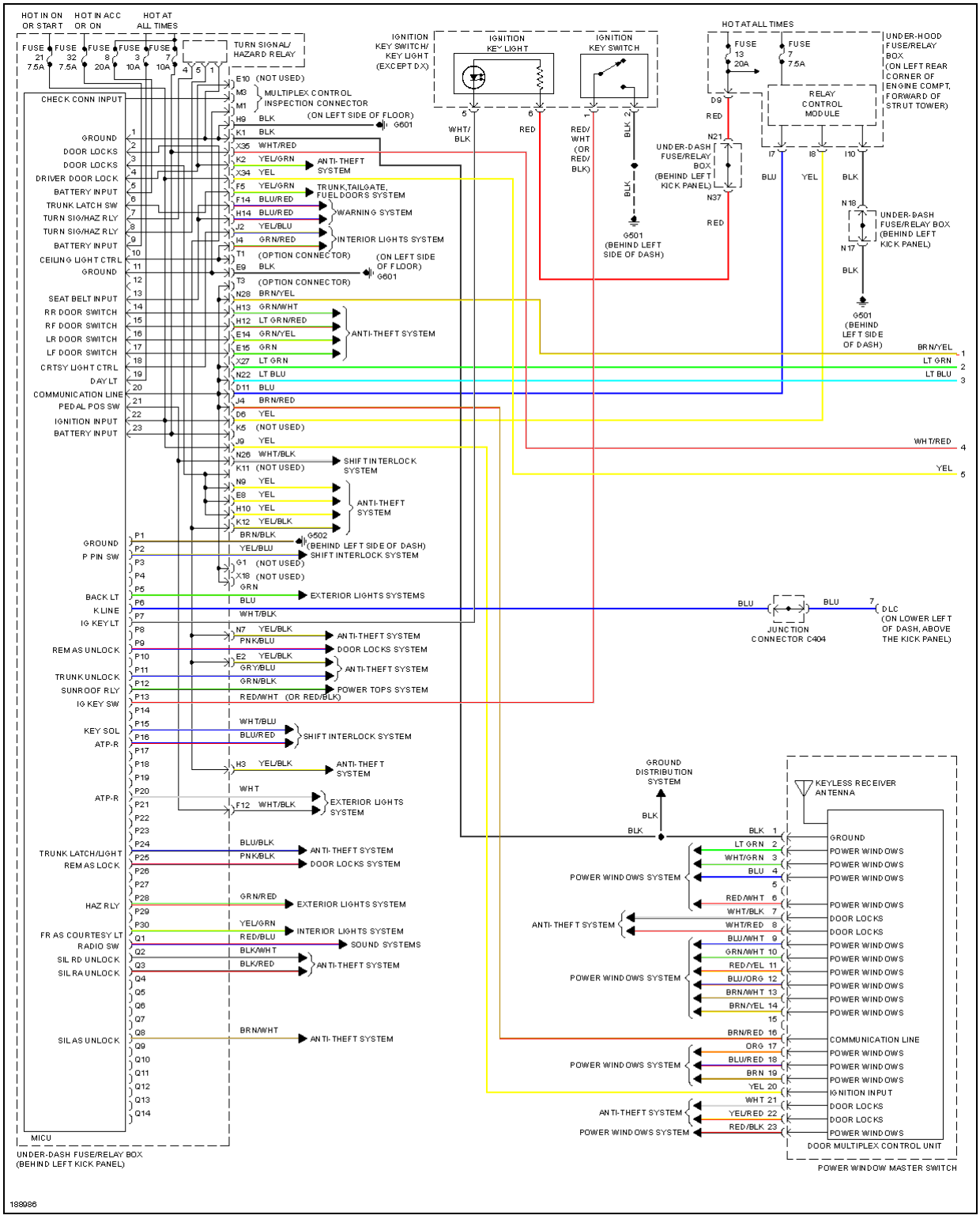


Fig. 13: Body Control Modules Circuit (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

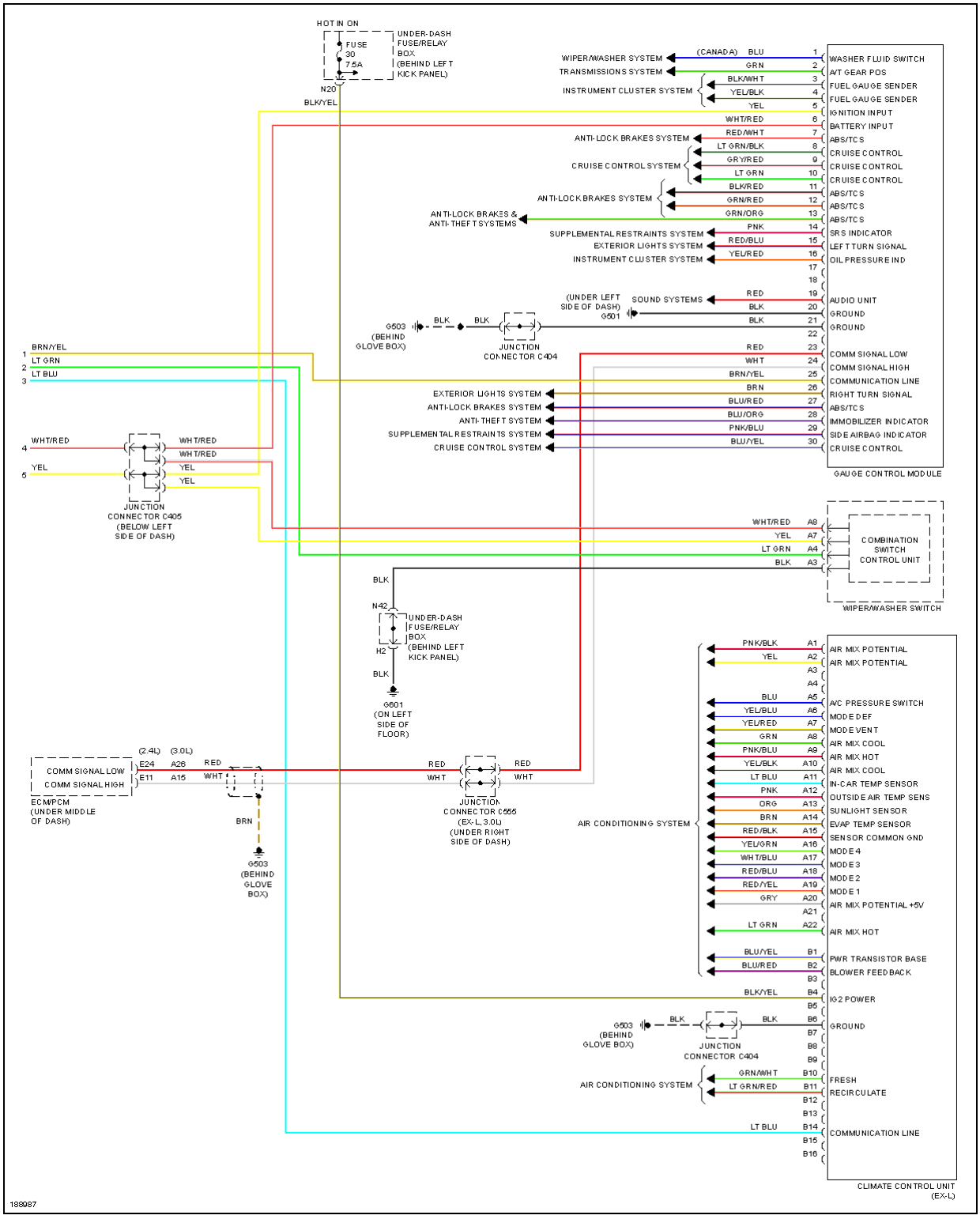


Fig. 14: Body Control Modules Circuit (2 of 2)

COMPUTER DATA LINES

2.4L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

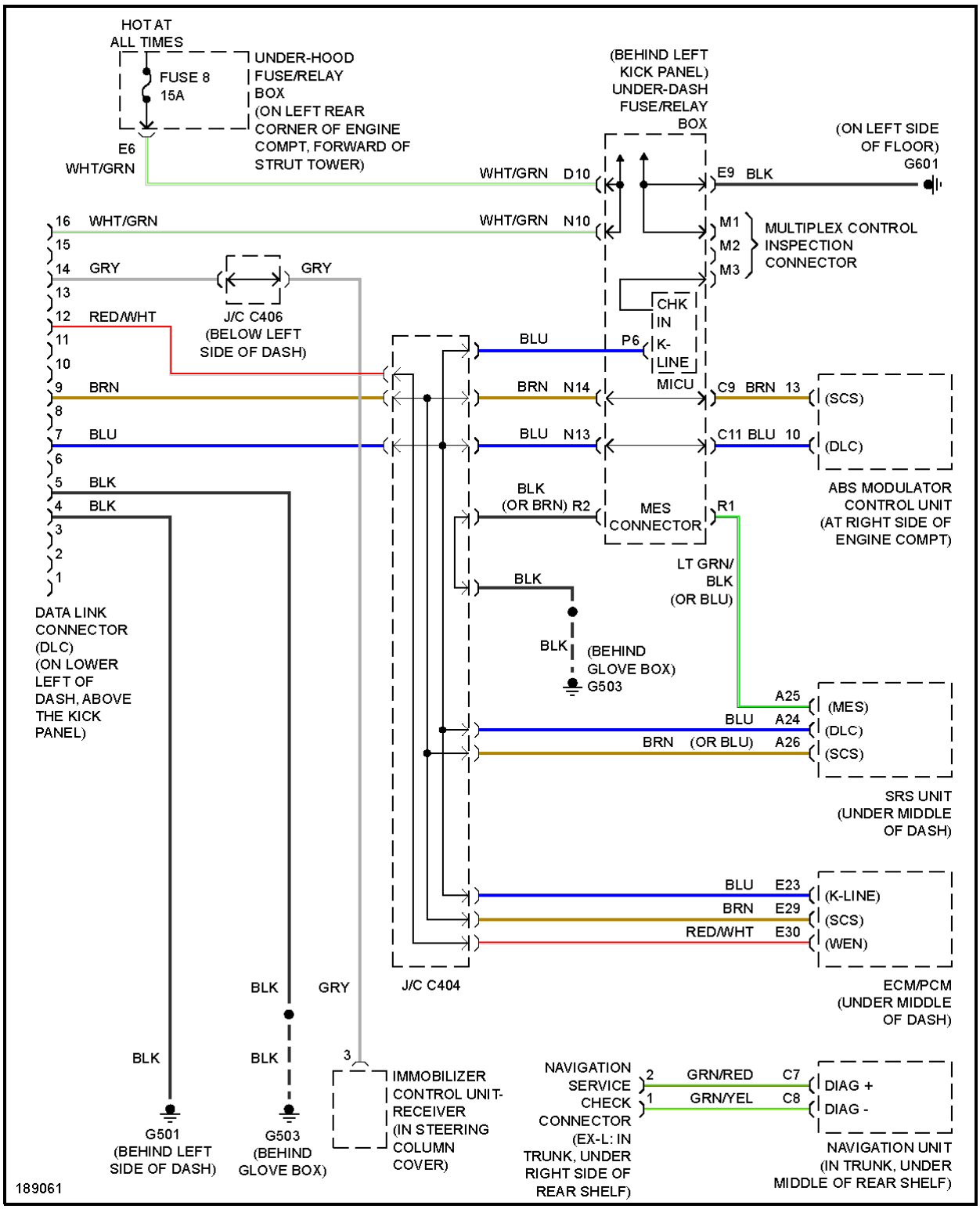


Fig. 15: 2.4L, Data Link Connector Circuit

3.0L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

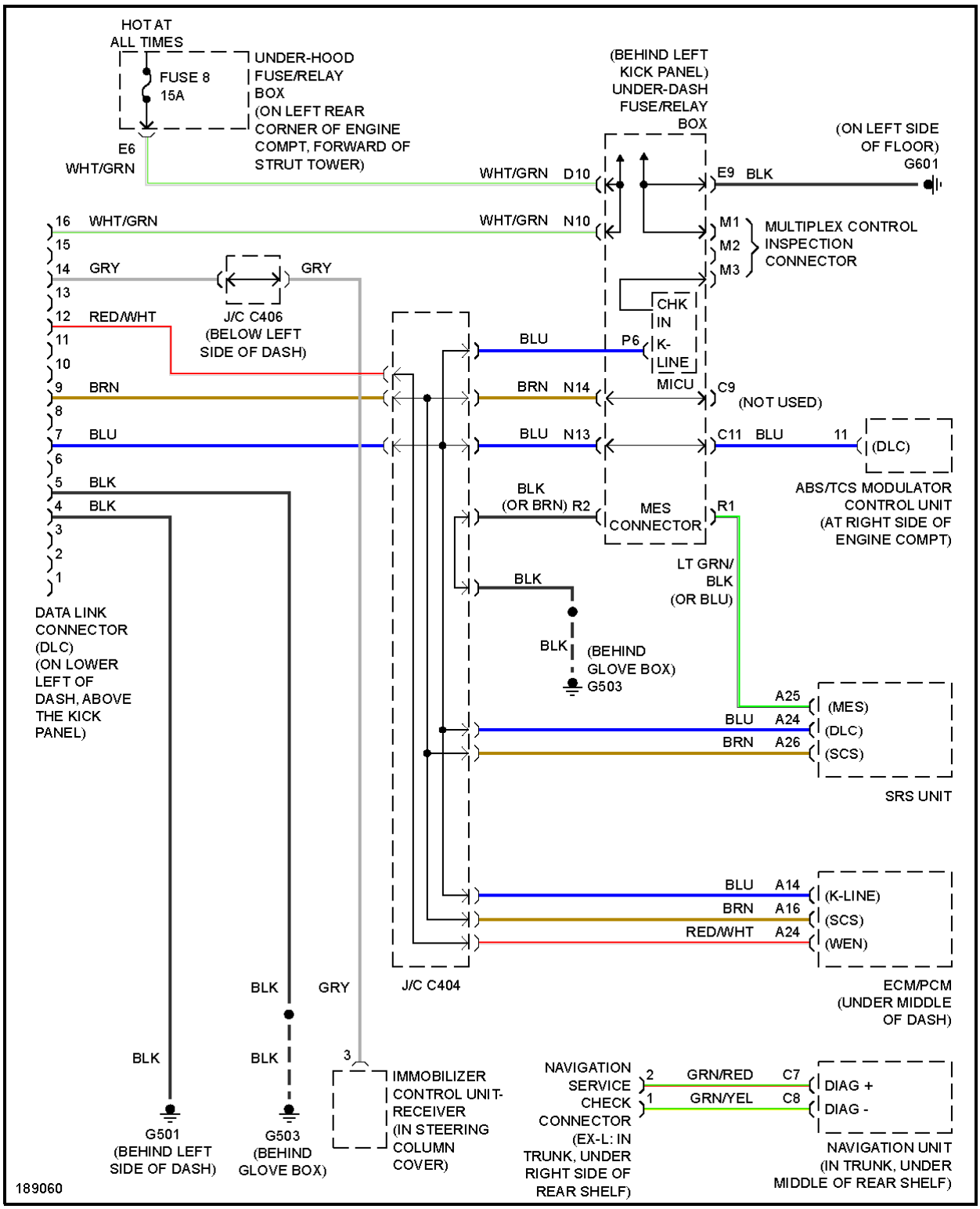


Fig. 16: 3.0L, Data Link Connector Circuit

COOLING FAN

2.4L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

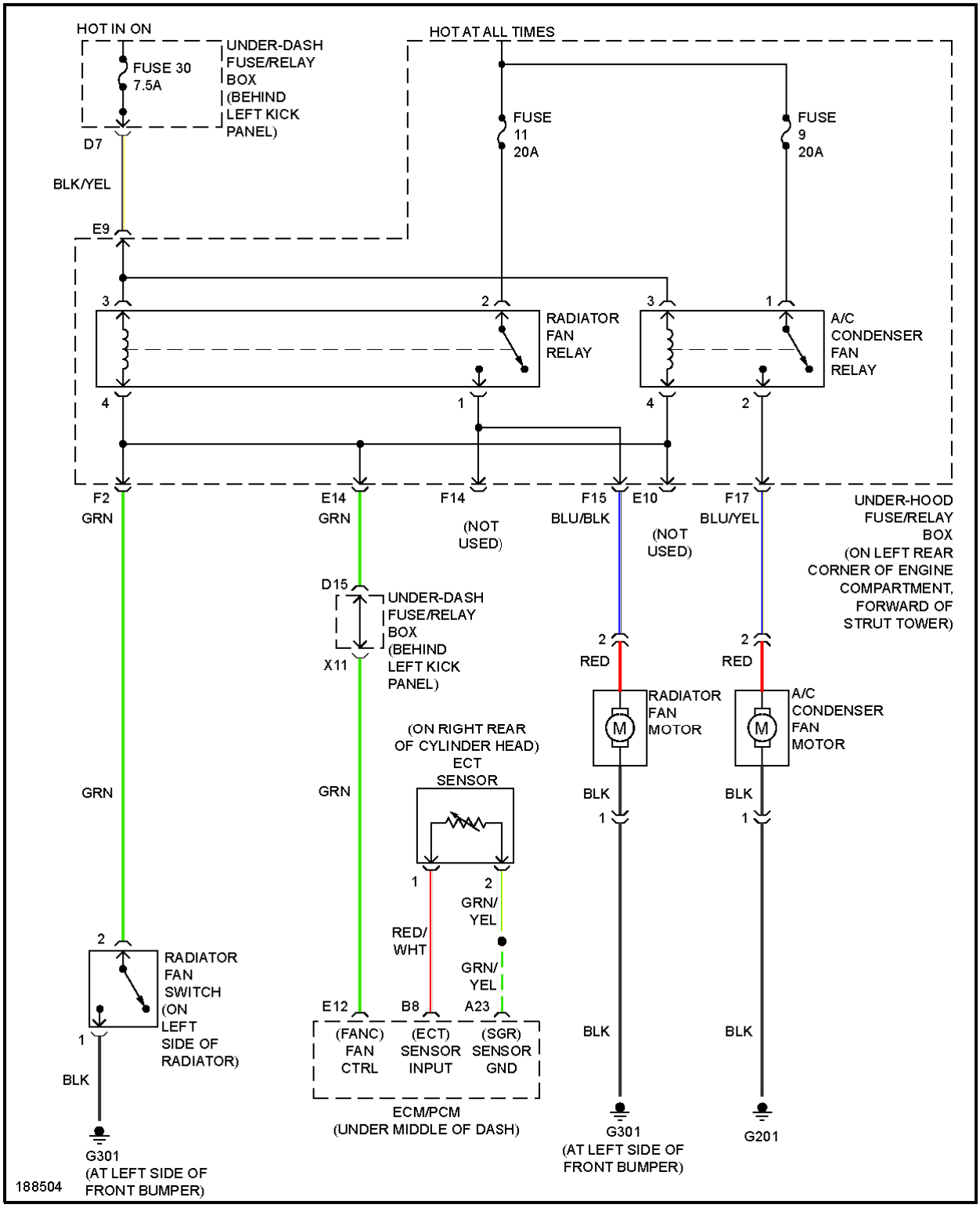


Fig. 17: 2.4L, Cooling Fan Circuit

3.0L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

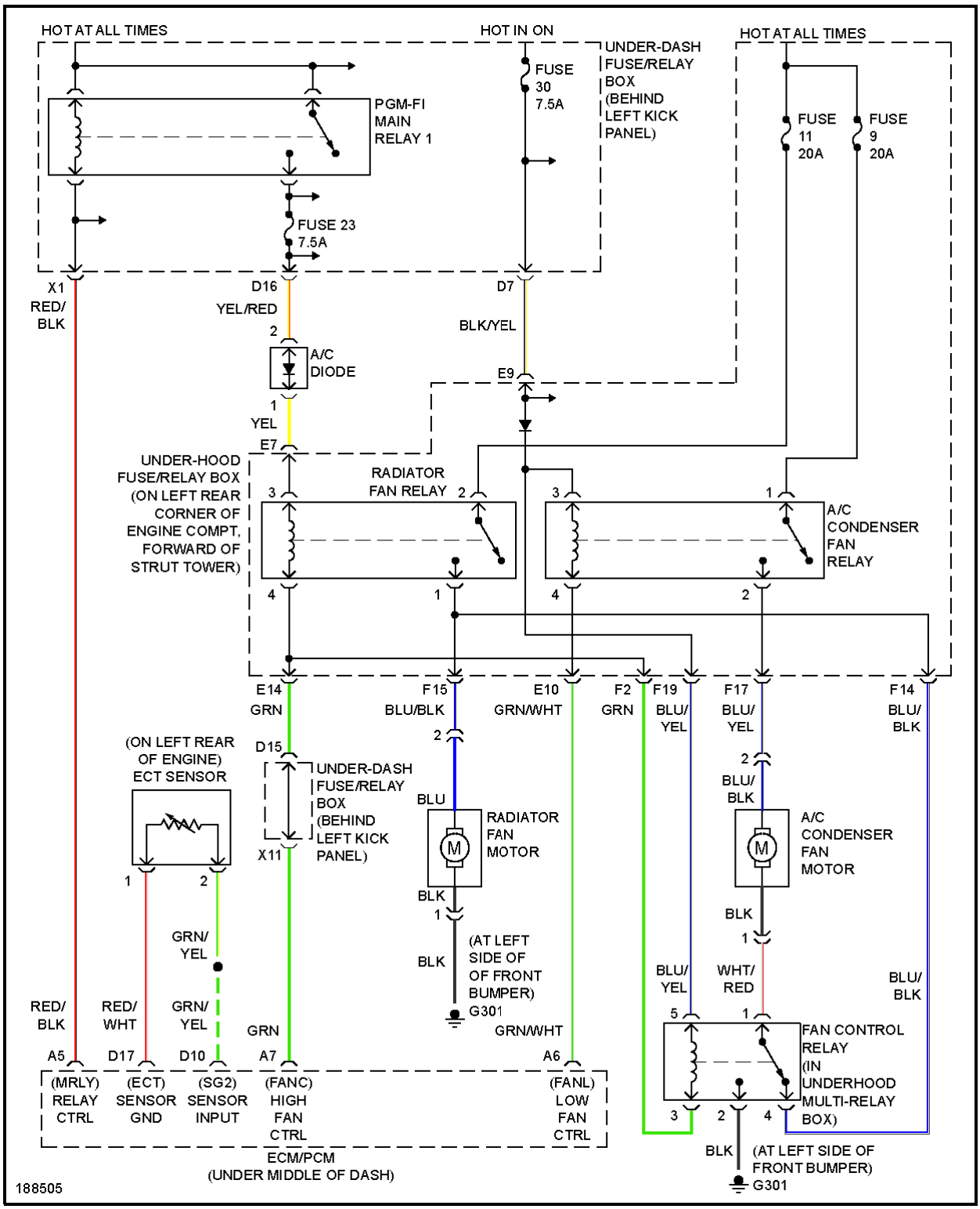


Fig. 18: 3.0L, Cooling Fan Circuit

CRUISE CONTROL

2.4L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

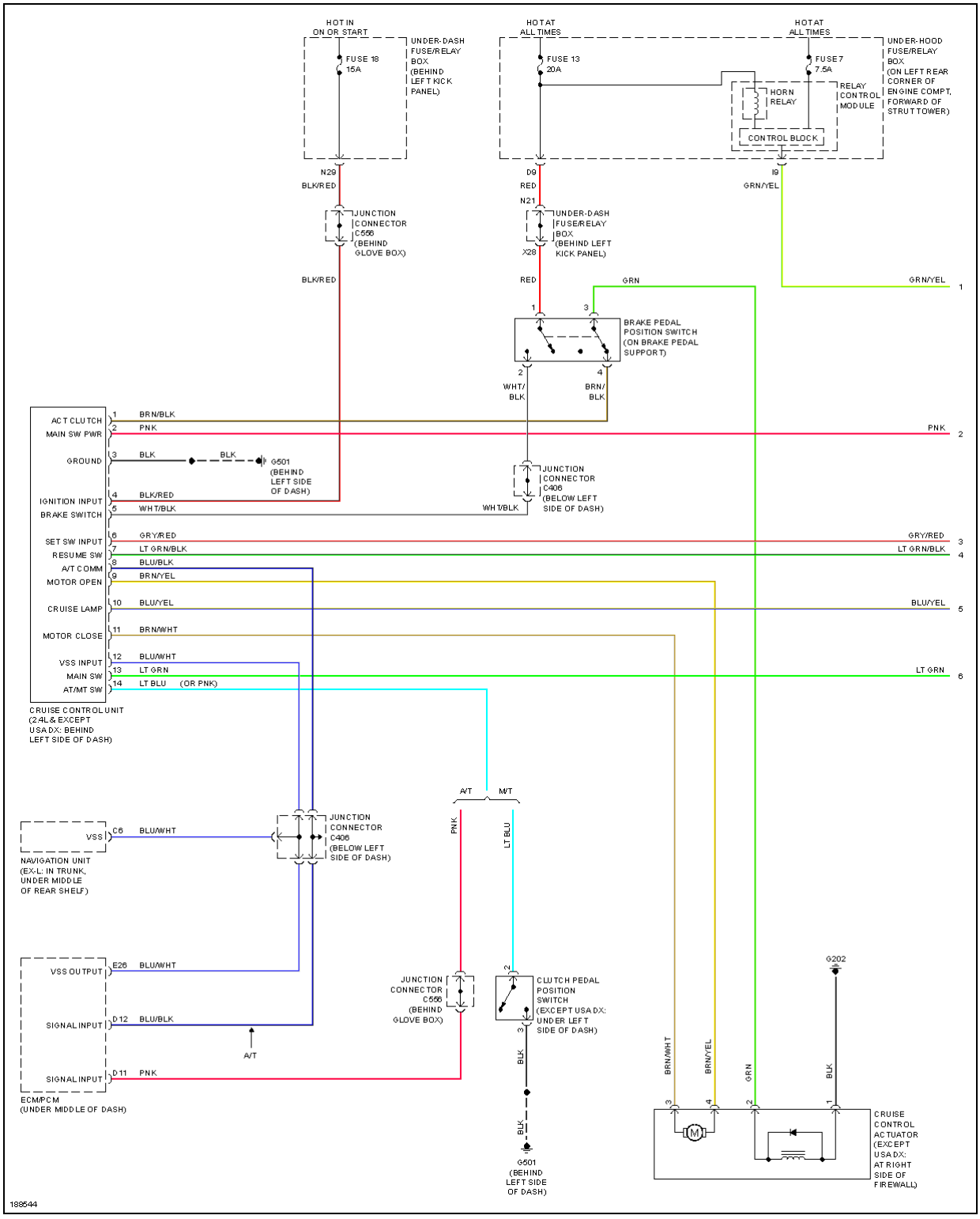


Fig. 19: 2.4L, Cruise Control Circuit (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

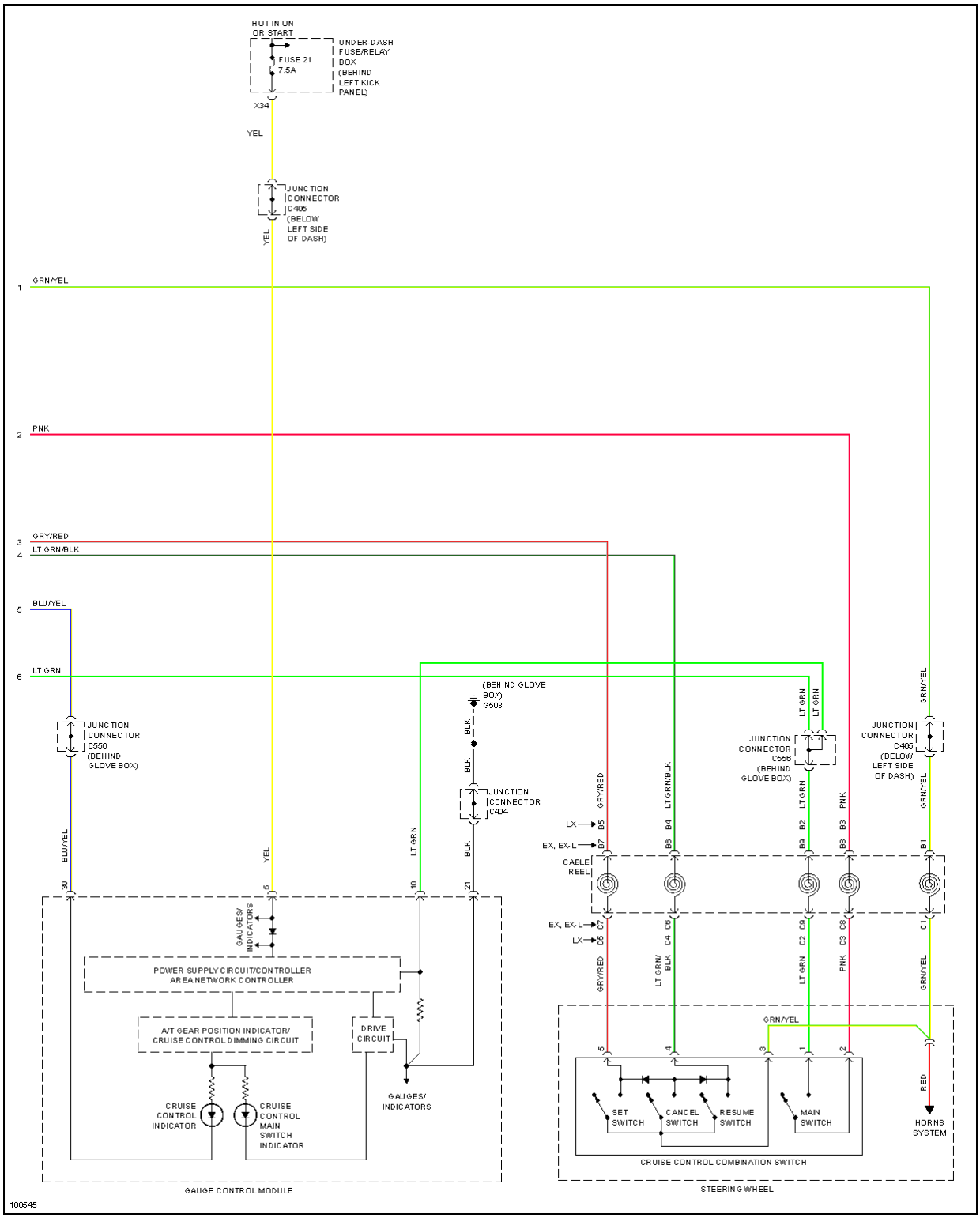


Fig. 20: 2.4L, Cruise Control Circuit (2 of 2)

3.0L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

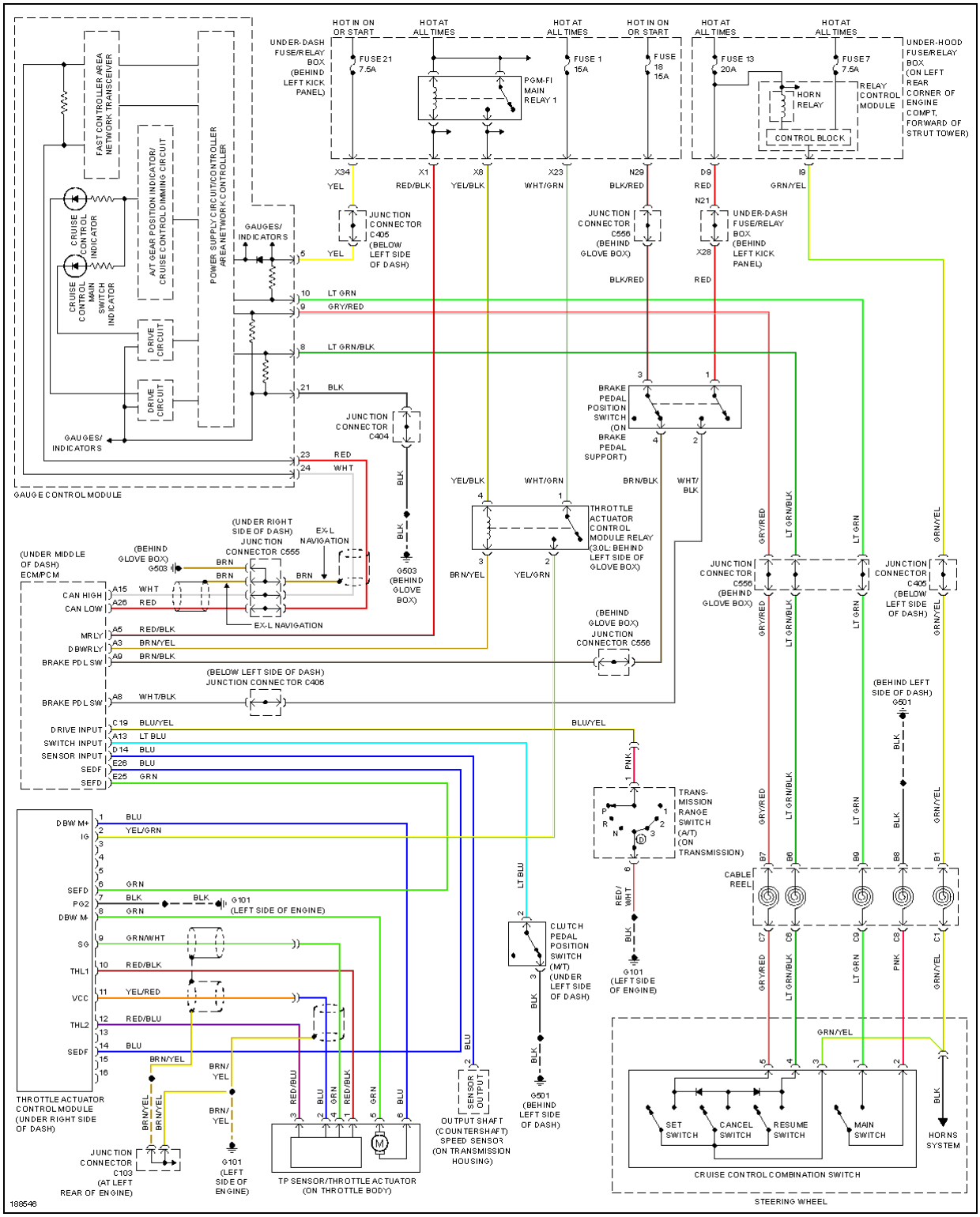


Fig. 21: 3.0L, Cruise Control Circuit

DEFOGGERS

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

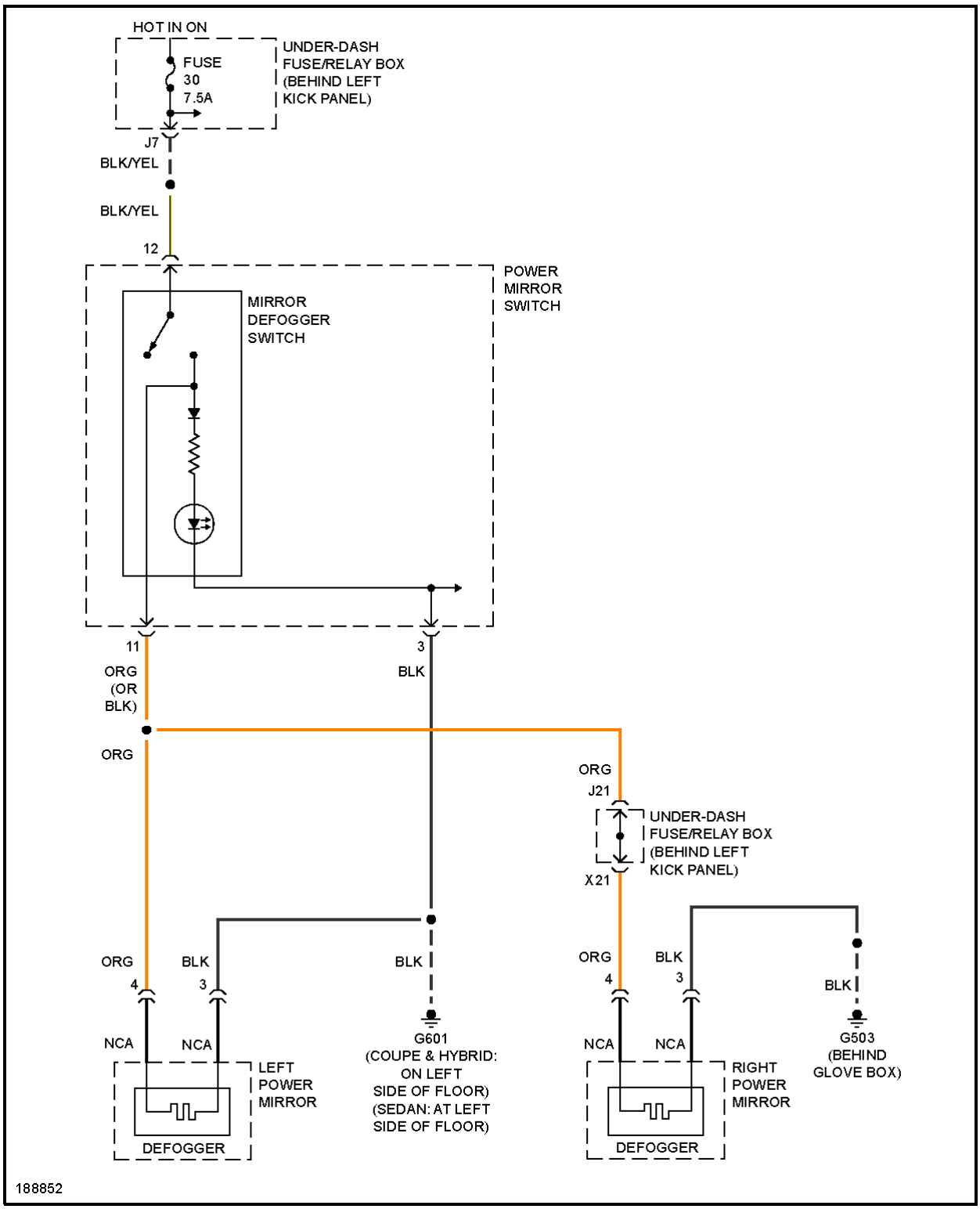


Fig. 22: Heated Mirrors Circuit

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

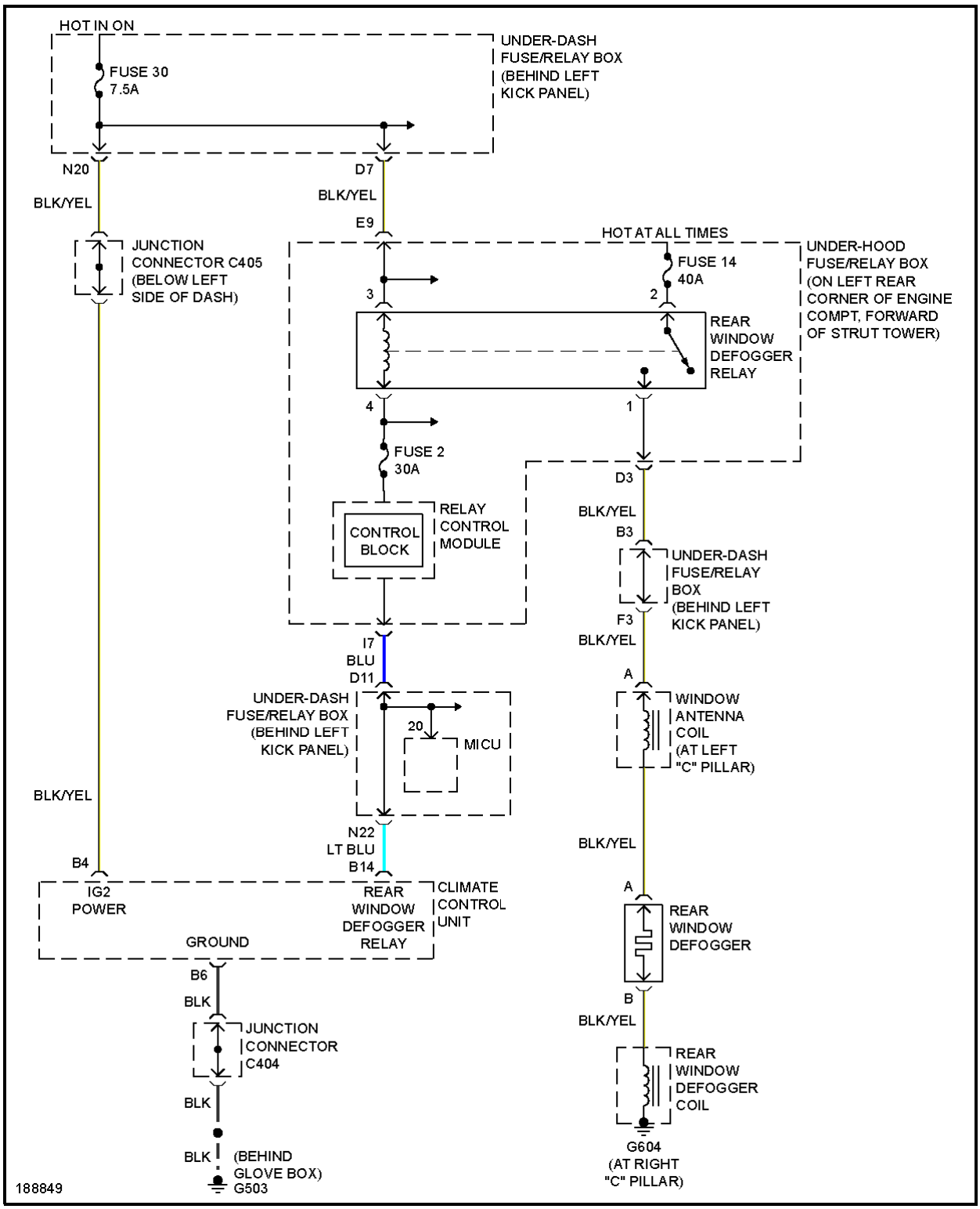


Fig. 23: Rear Defogger Circuit, Auto A/C

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

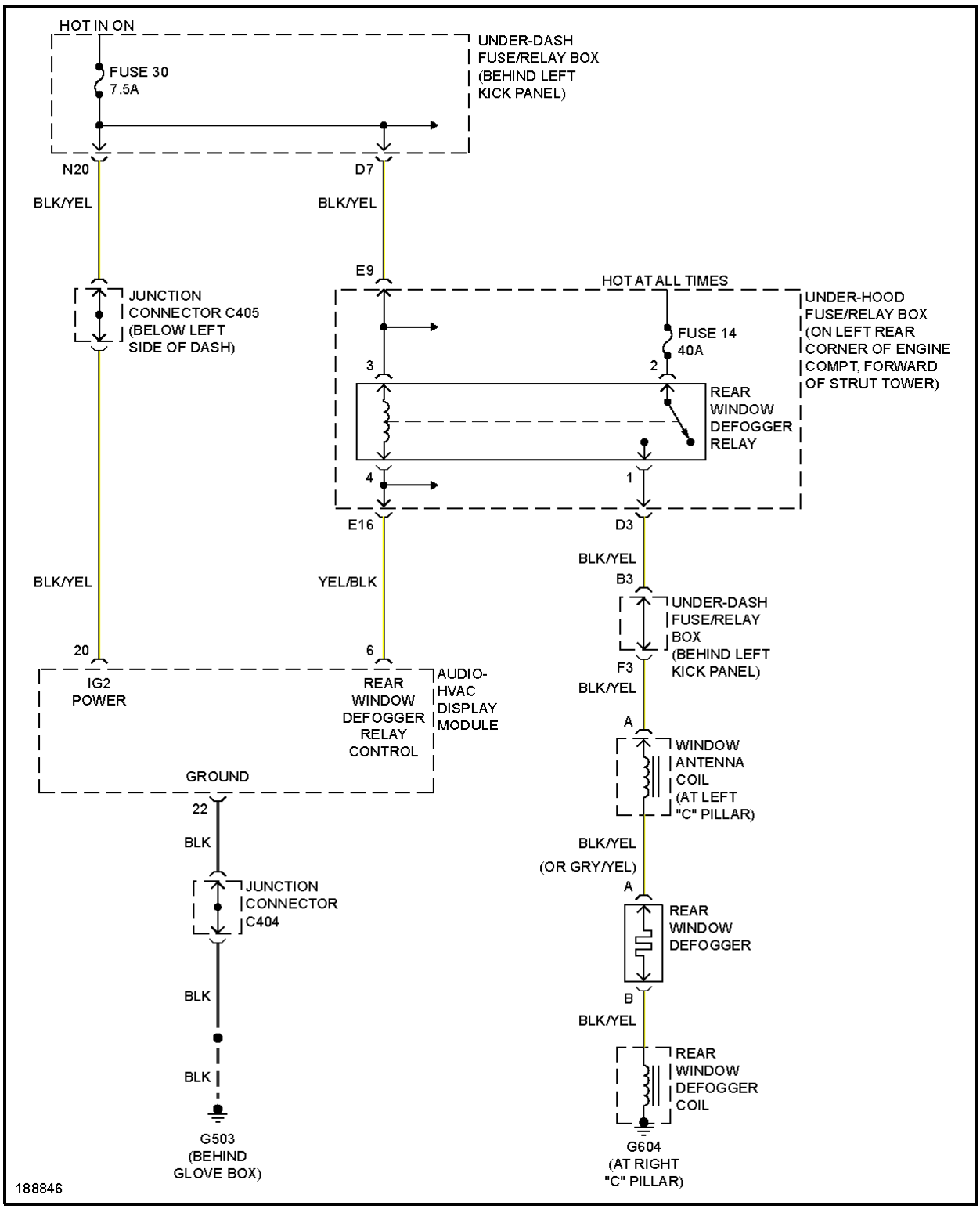


Fig. 24: Rear Defogger Circuit, Manual A/C

ENGINE PERFORMANCE

2.4L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

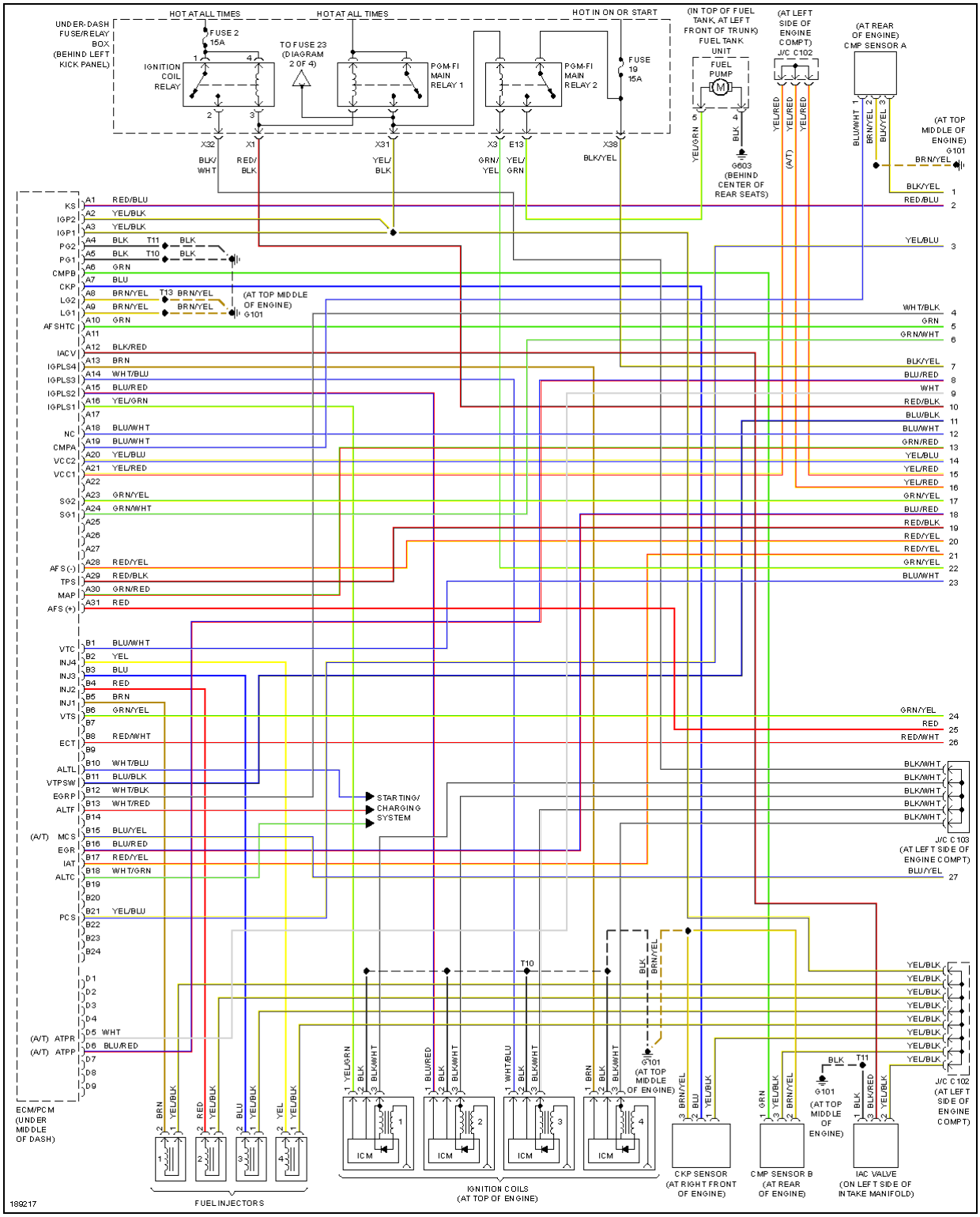


Fig. 25: 2.4L, Engine Performance Circuit (1 of 4)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

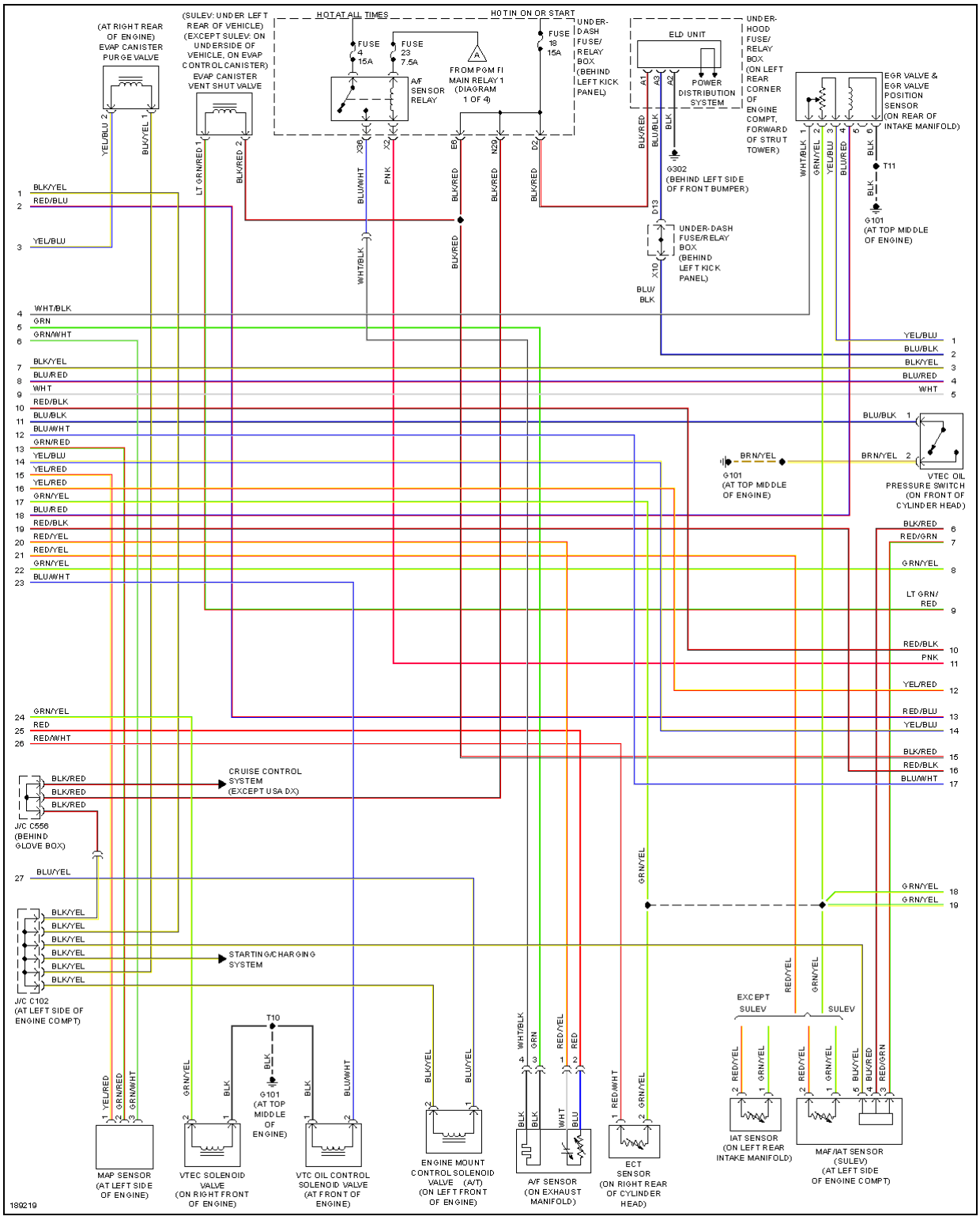


Fig. 26: 2.4L, Engine Performance Circuit (2 of 4)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

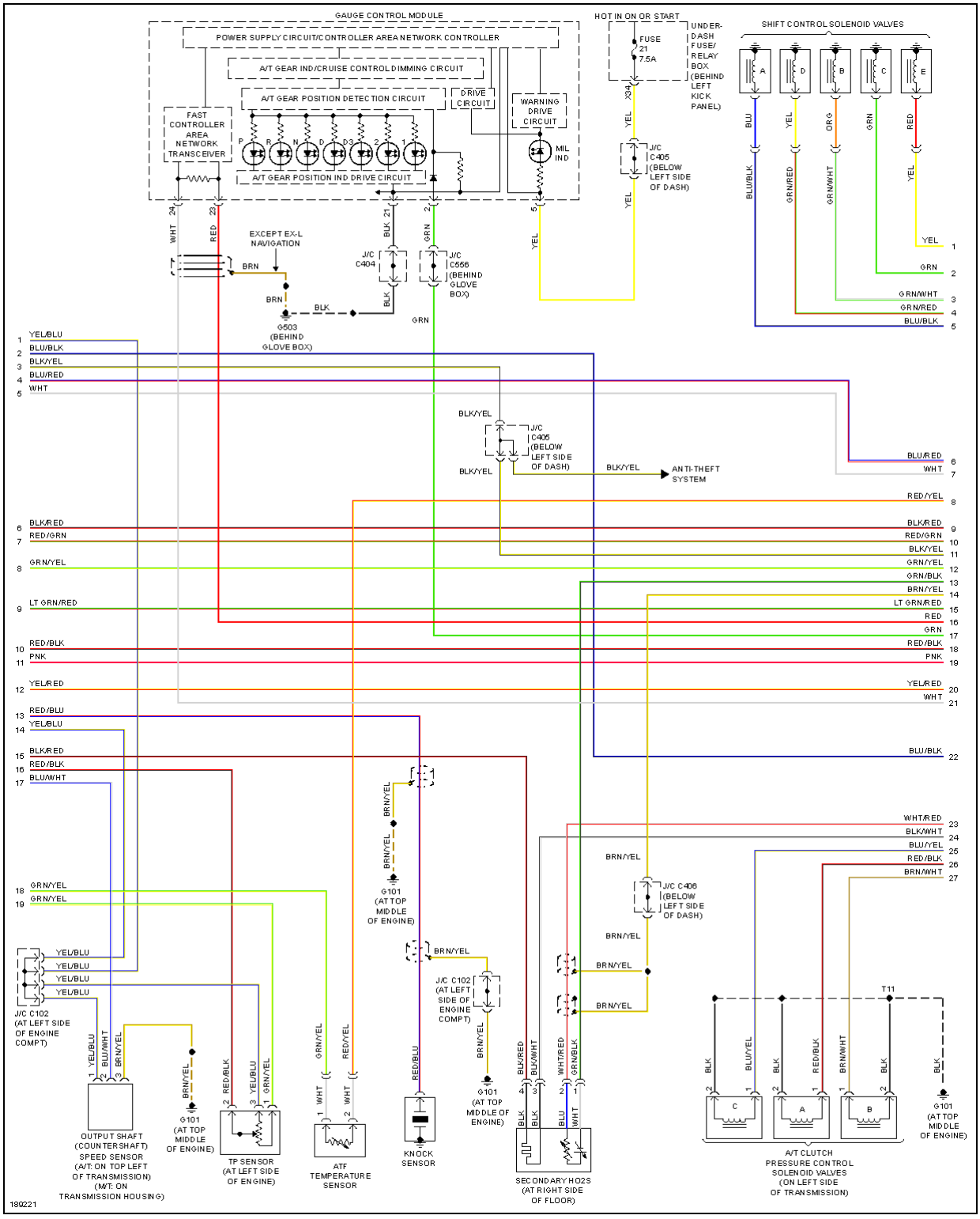


Fig. 27: 2.4L, Engine Performance Circuit (3 of 4)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

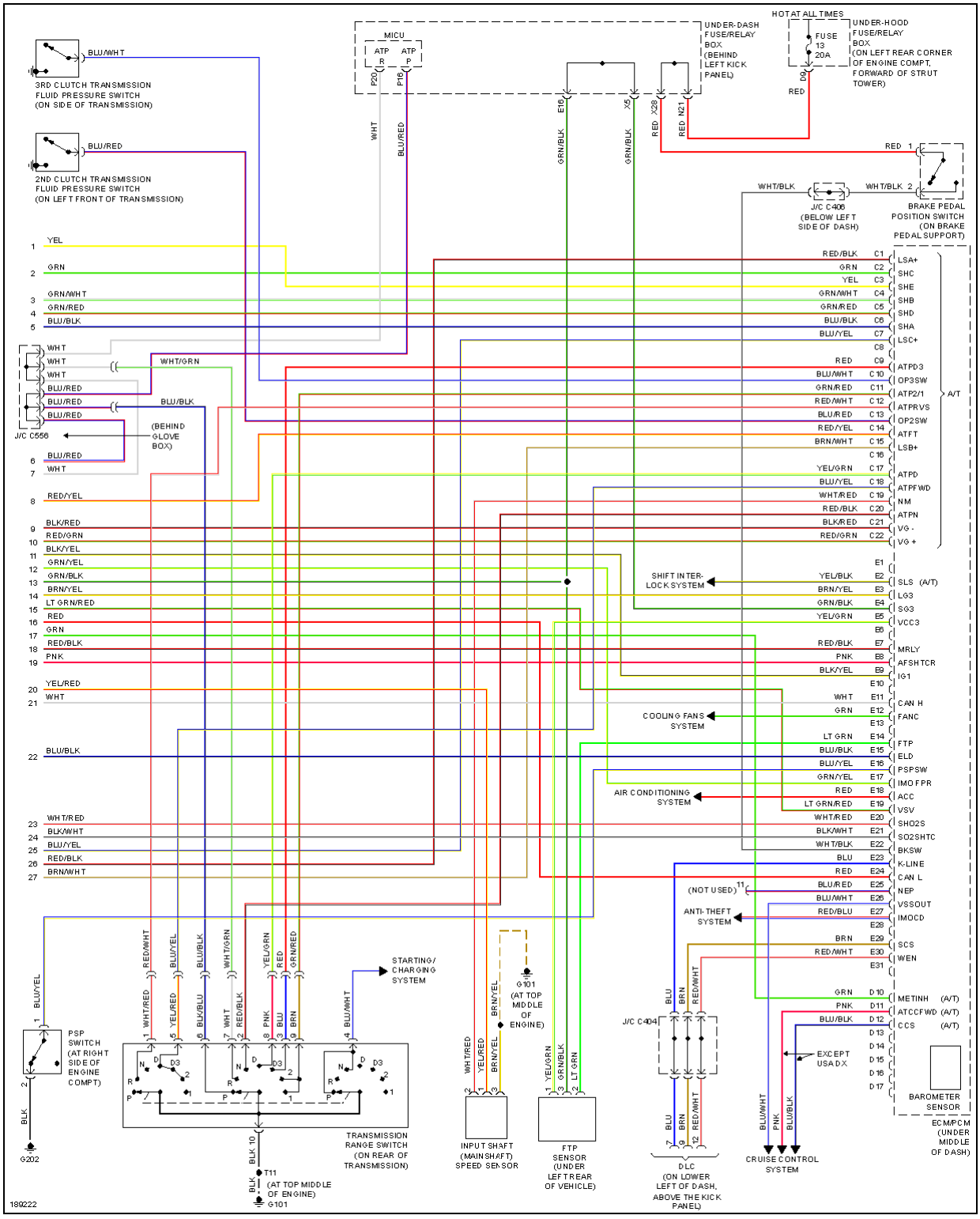


Fig. 28: 2.4L, Engine Performance Circuit (4 of 4)

3.0L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

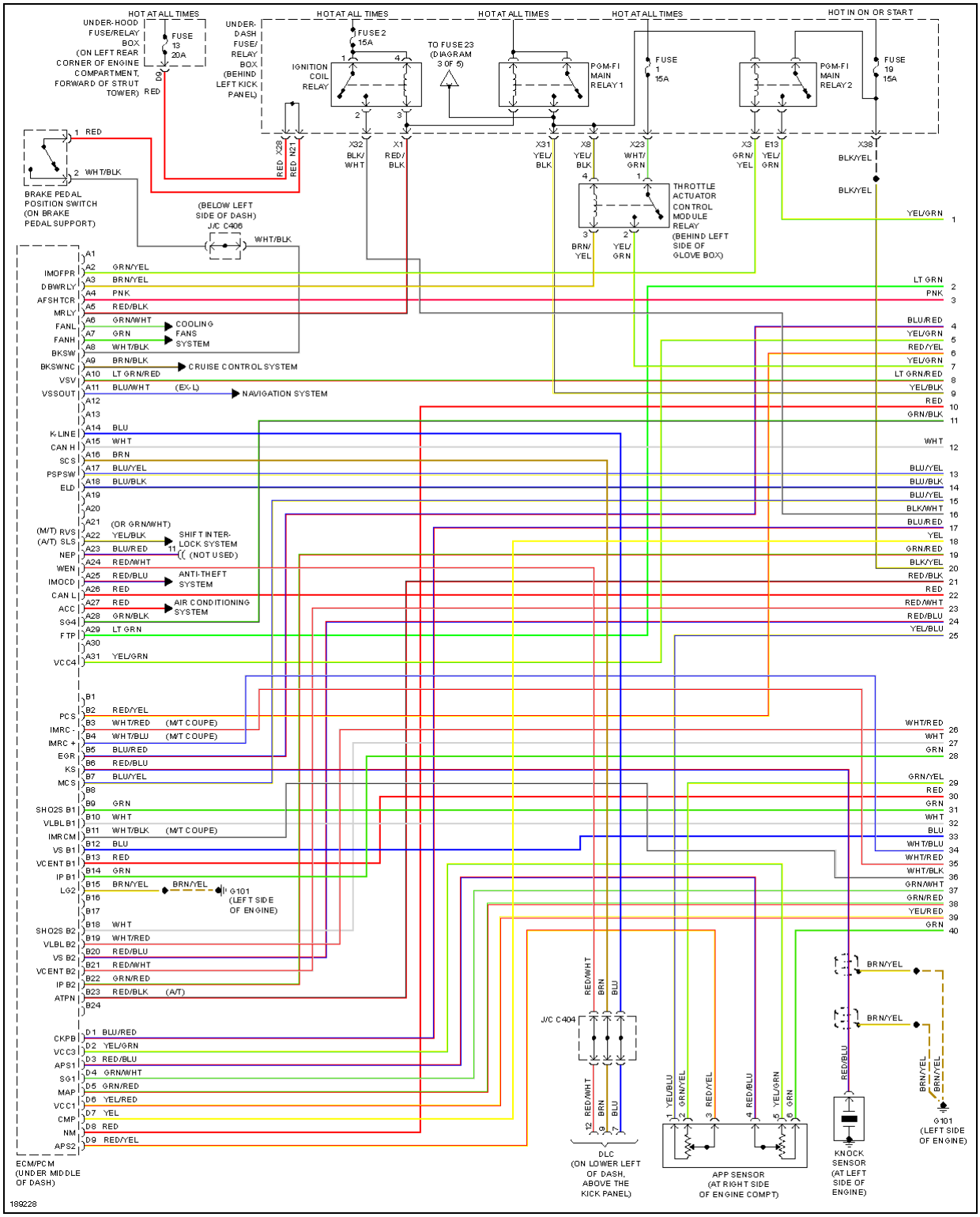


Fig. 29: 3.0L, Engine Performance Circuit (1 of 5)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

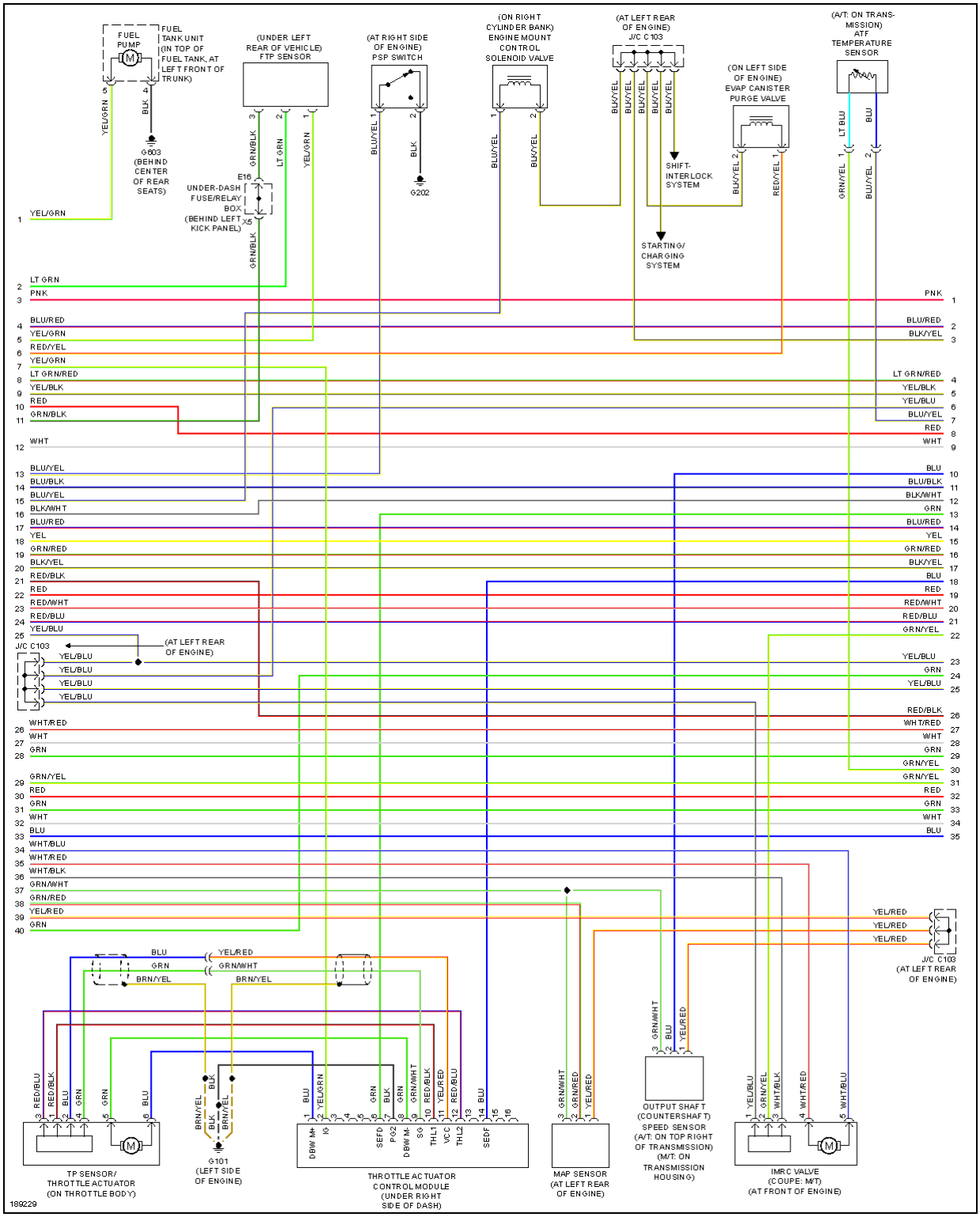


Fig. 30: 3.0L, Engine Performance Circuit (2 of 5)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

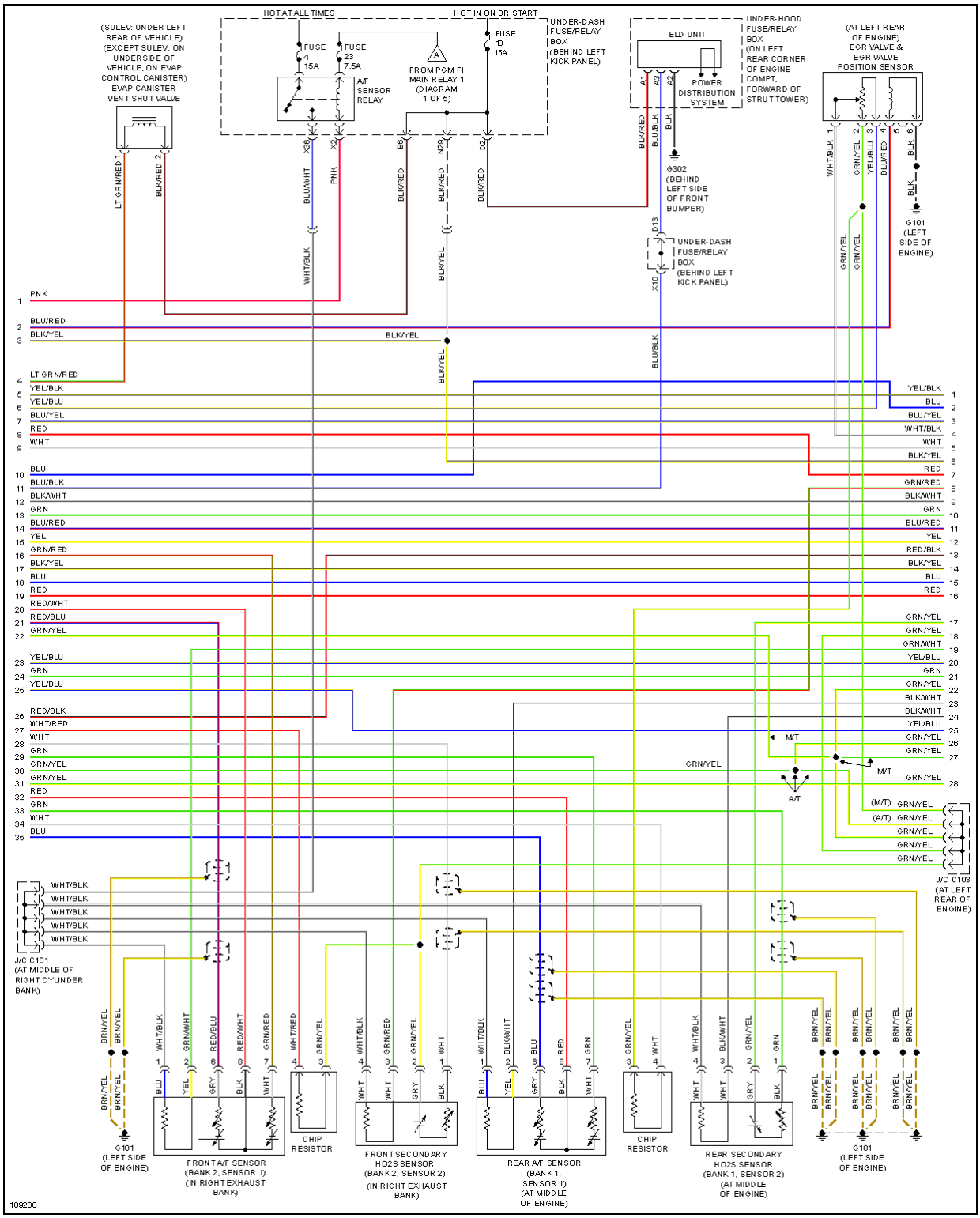


Fig. 31: 3.0L, Engine Performance Circuit (3 of 5)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

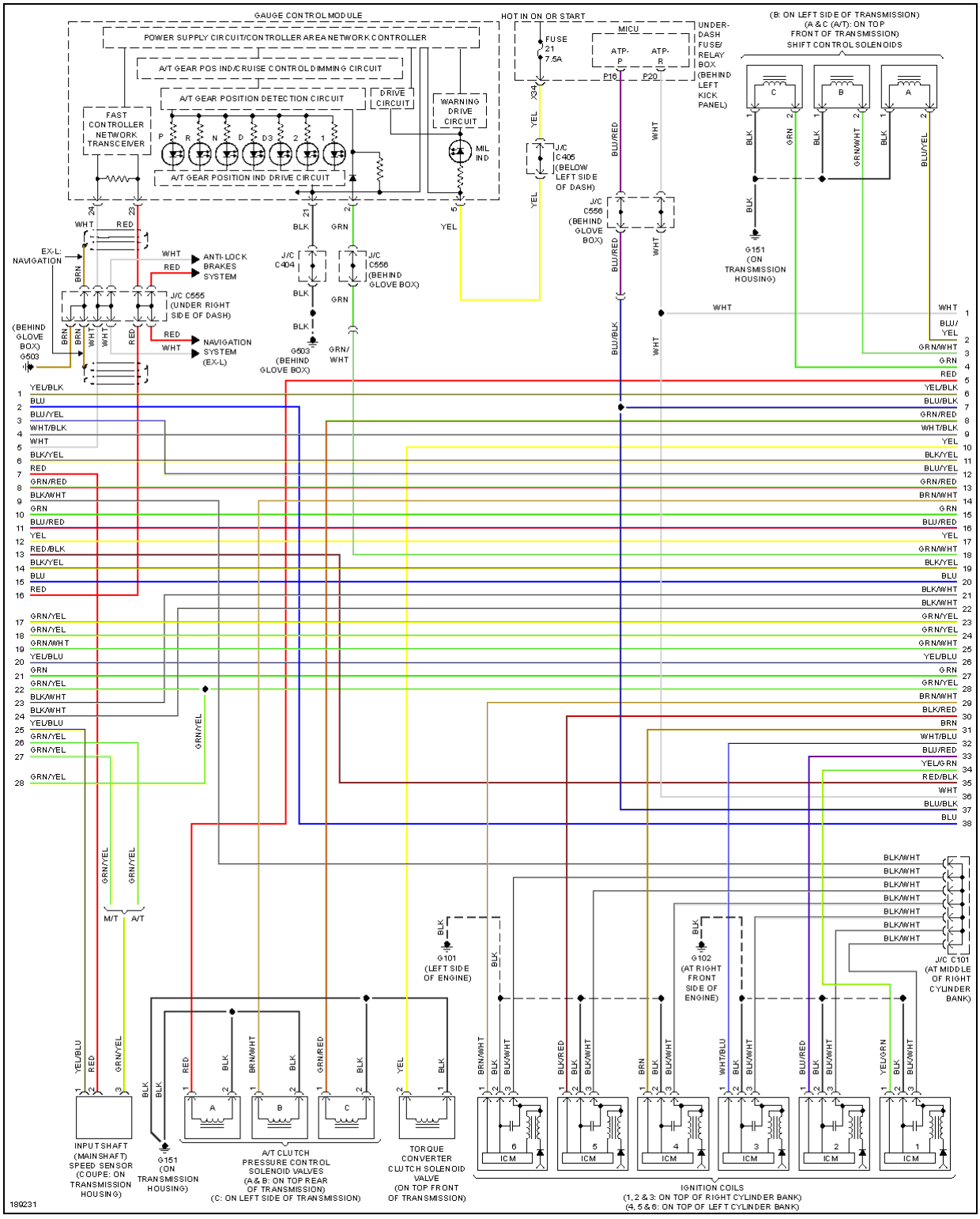


Fig. 32: 3.0L, Engine Performance Circuit (4 of 5)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

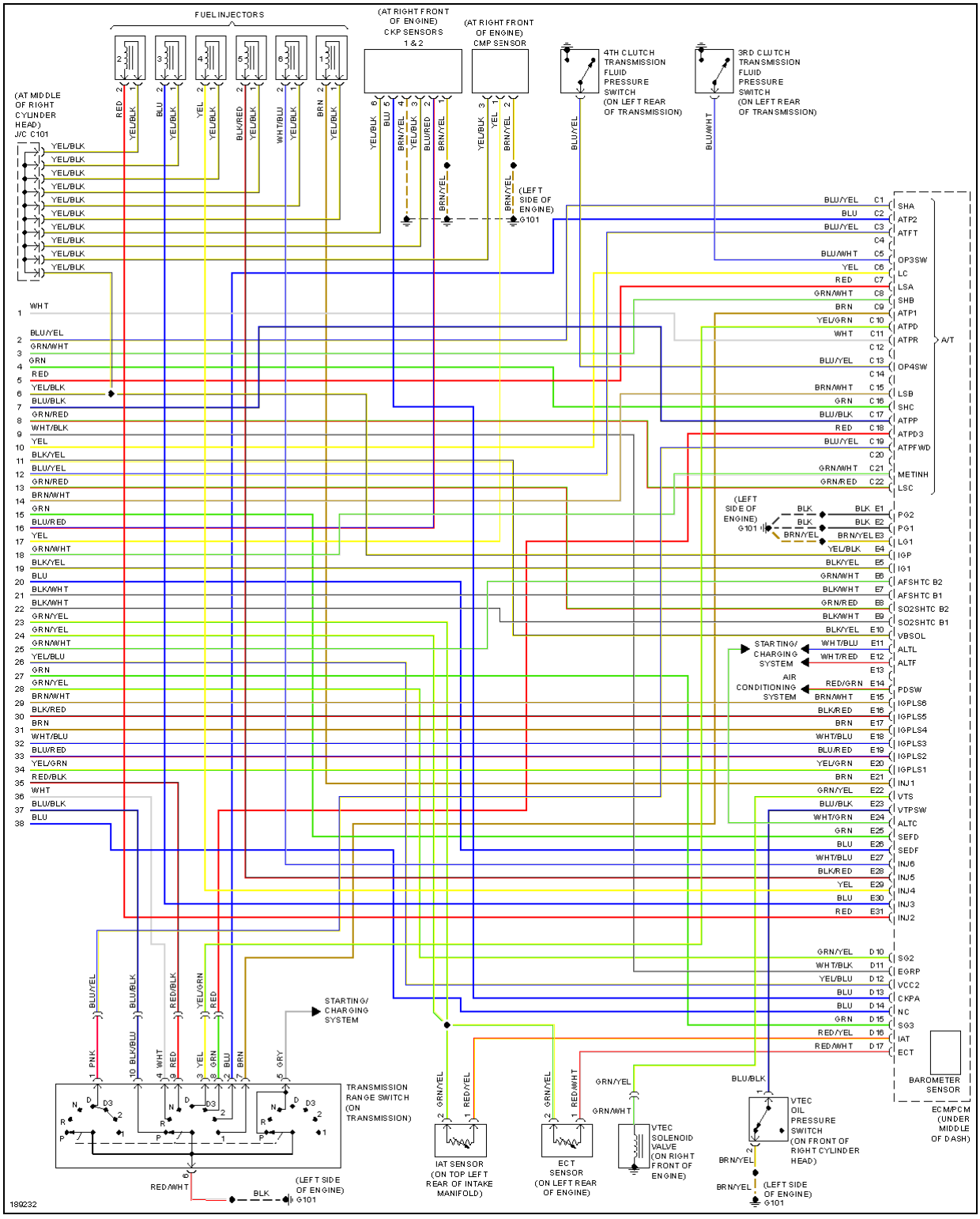


Fig. 33: 3.0L, Engine Performance Circuit (5 of 5)

EXTERIOR LIGHTS

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

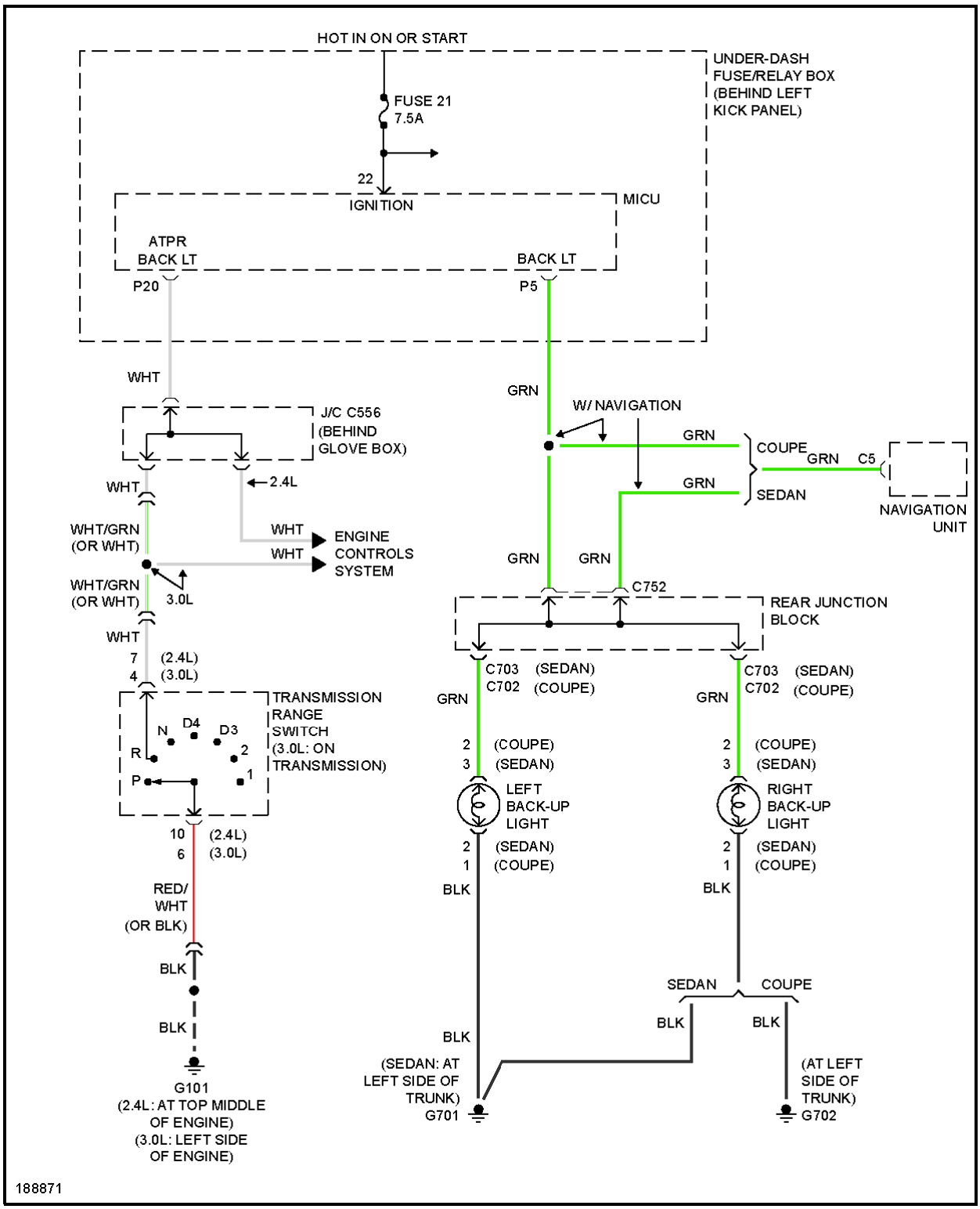


Fig. 34: Back-up Lamps Circuit, A/T

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

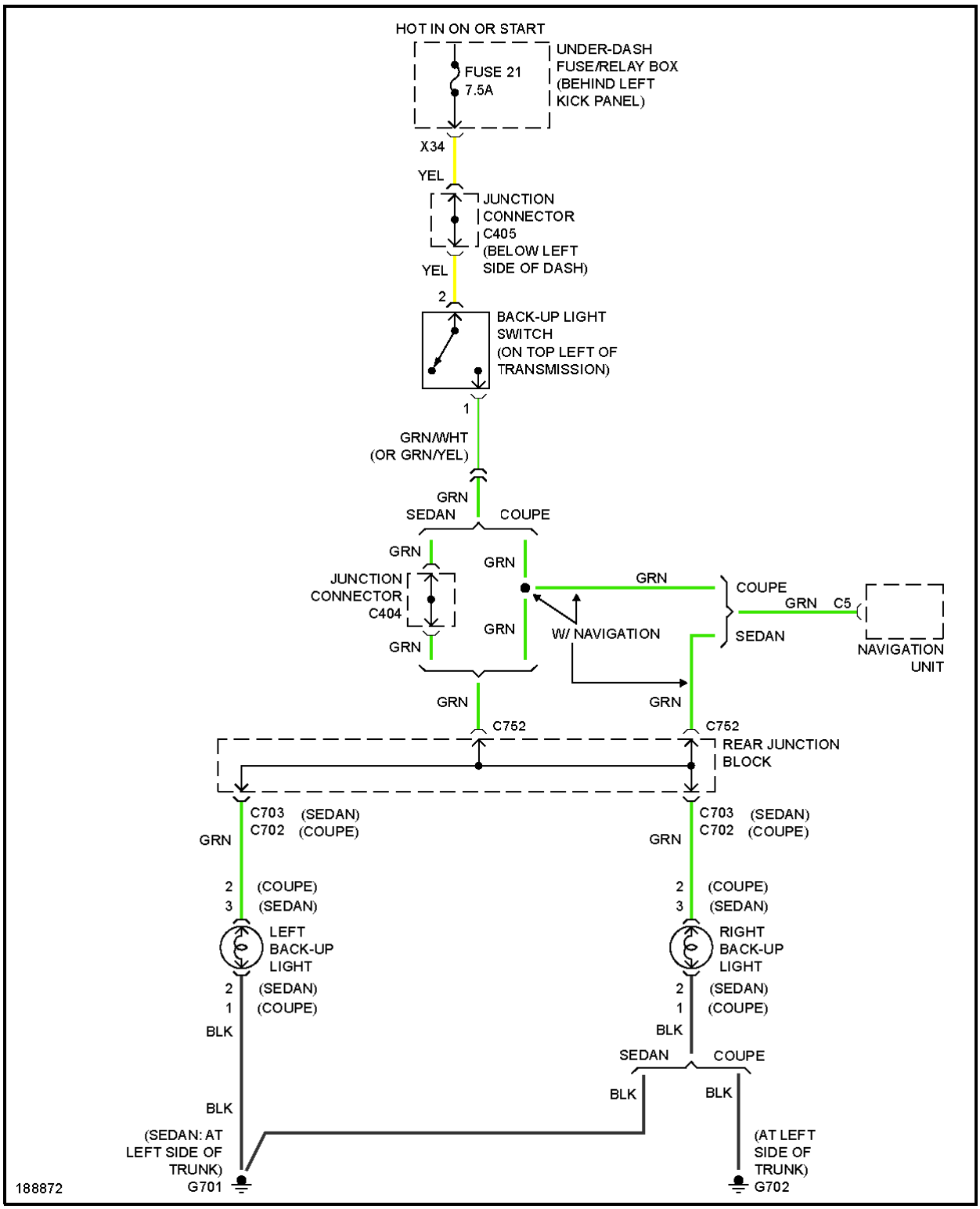


Fig. 35: Back-up Lamps Circuit, M/T

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

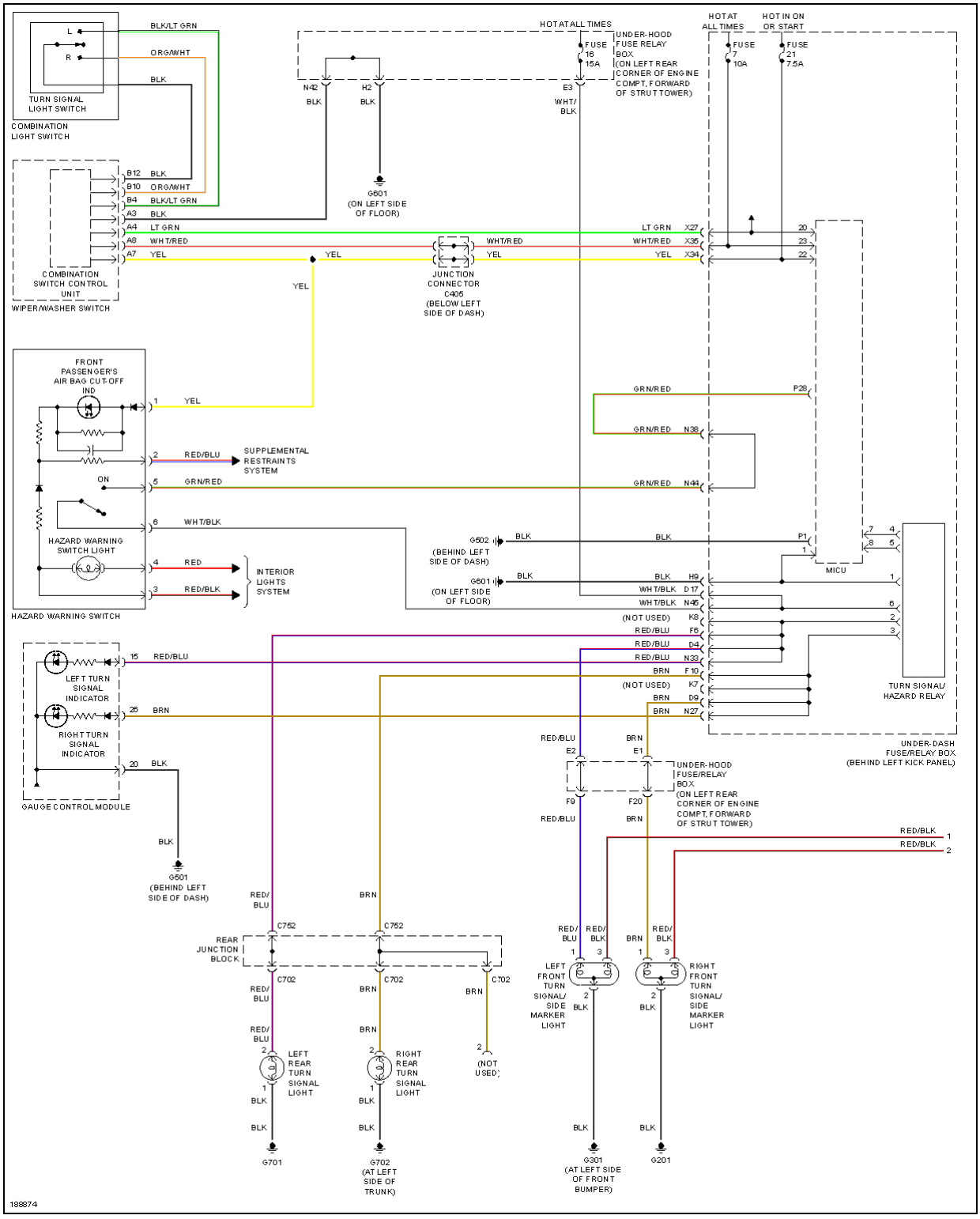


Fig. 36: Exterior Lamps Circuit, Coupe (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

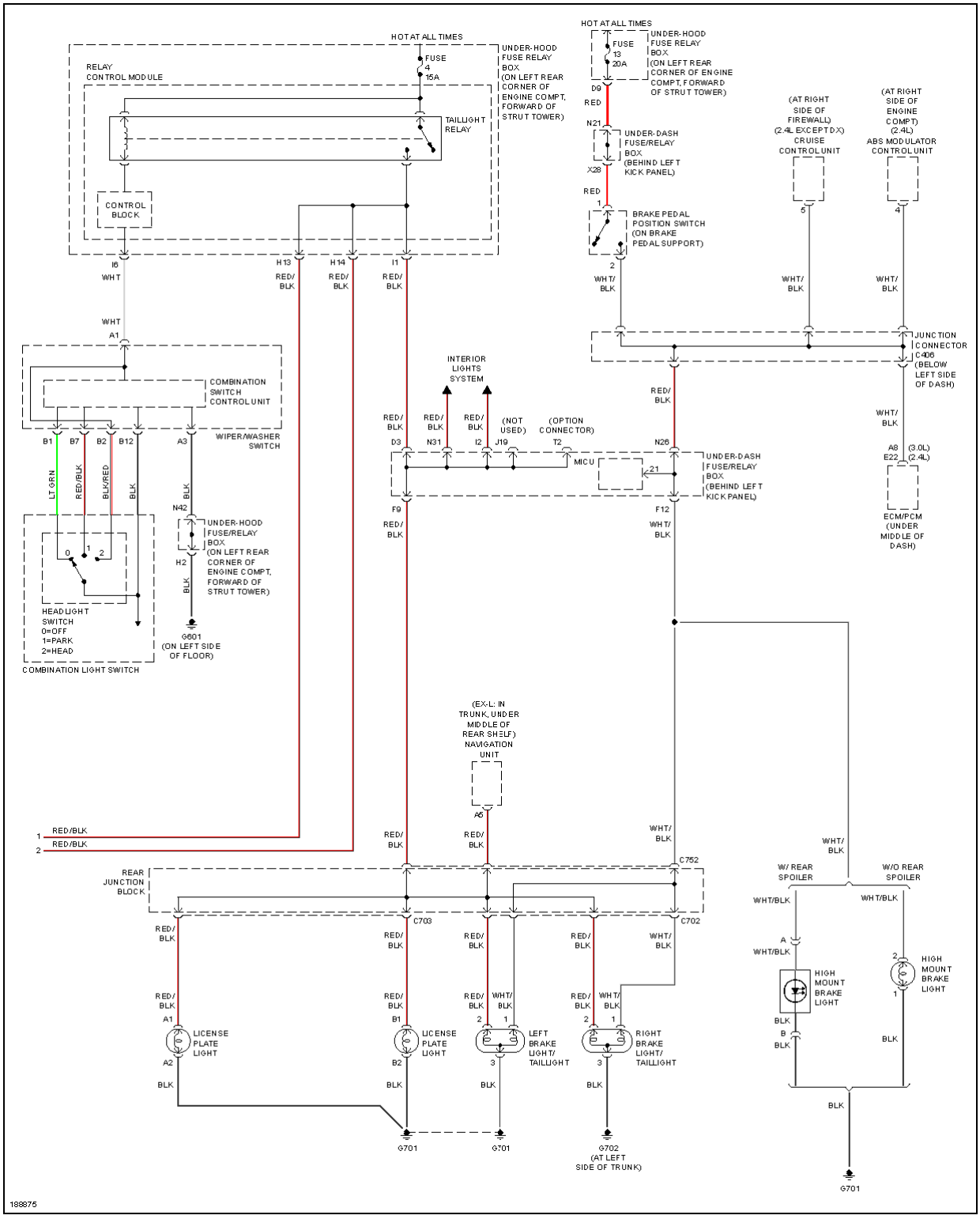


Fig. 37: Exterior Lamps Circuit, Coupe (2 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

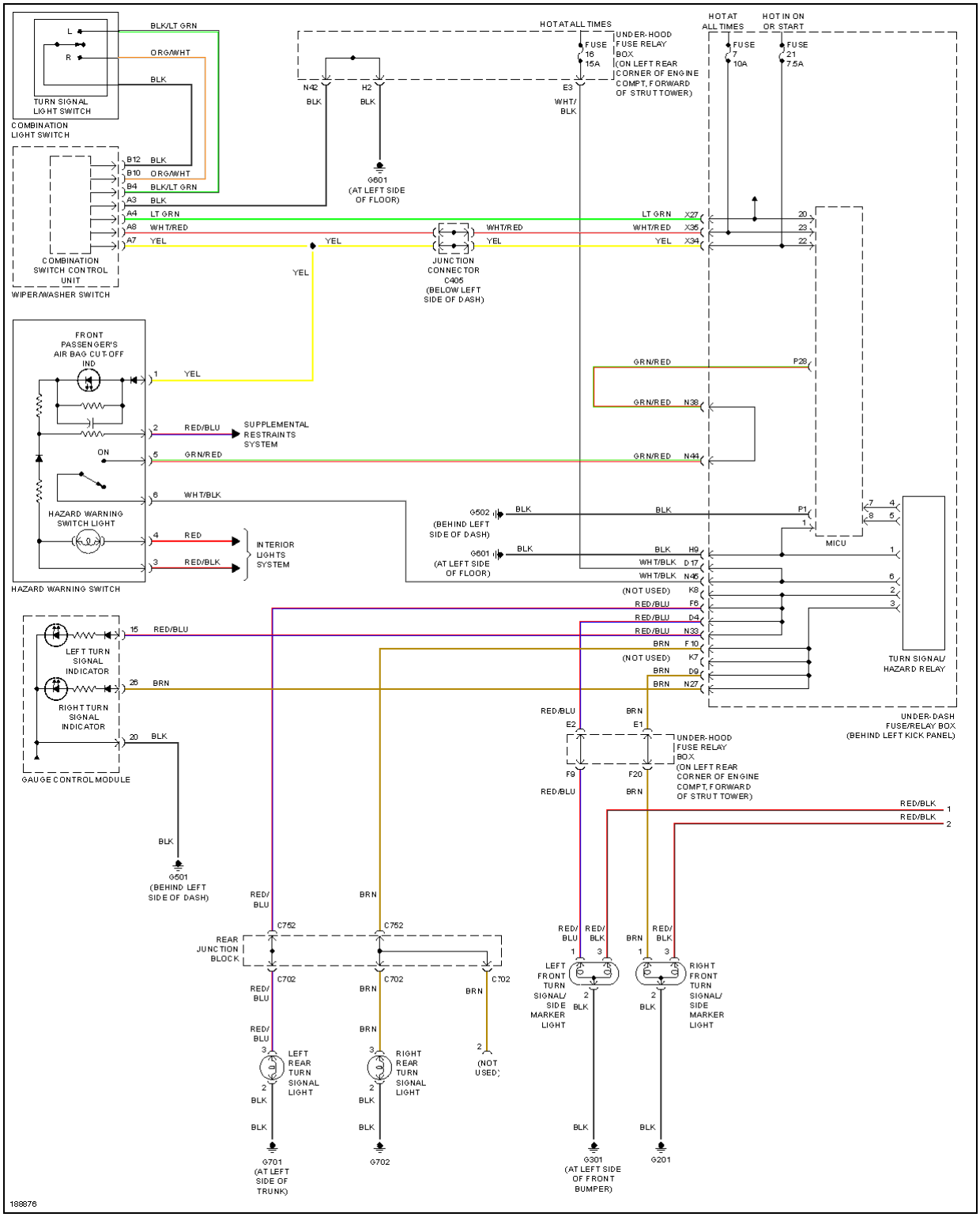


Fig. 38: Exterior Lamps Circuit, Sedan (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

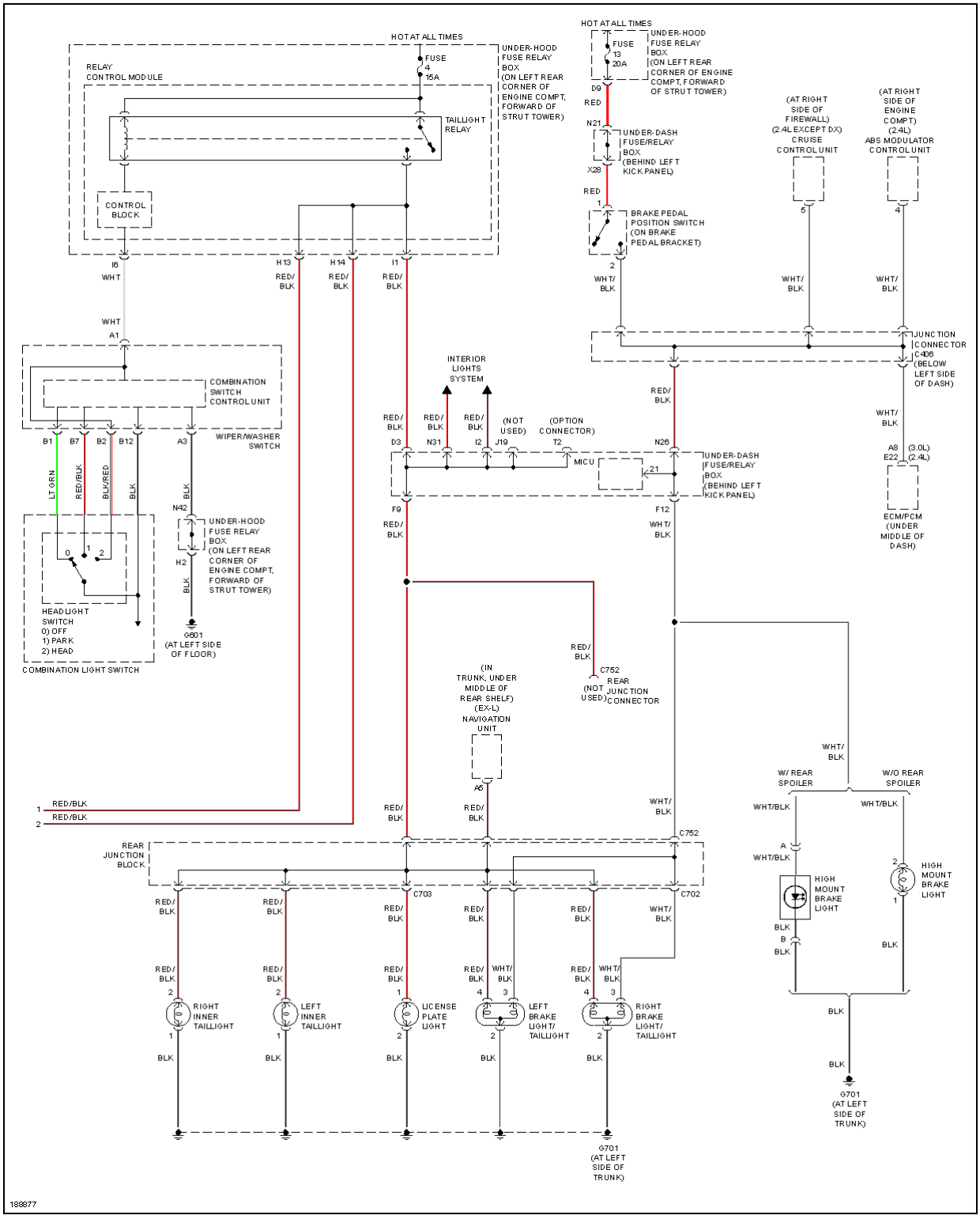


Fig. 39: Exterior Lamps Circuit, Sedan (2 of 2)

GROUND DISTRIBUTION

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

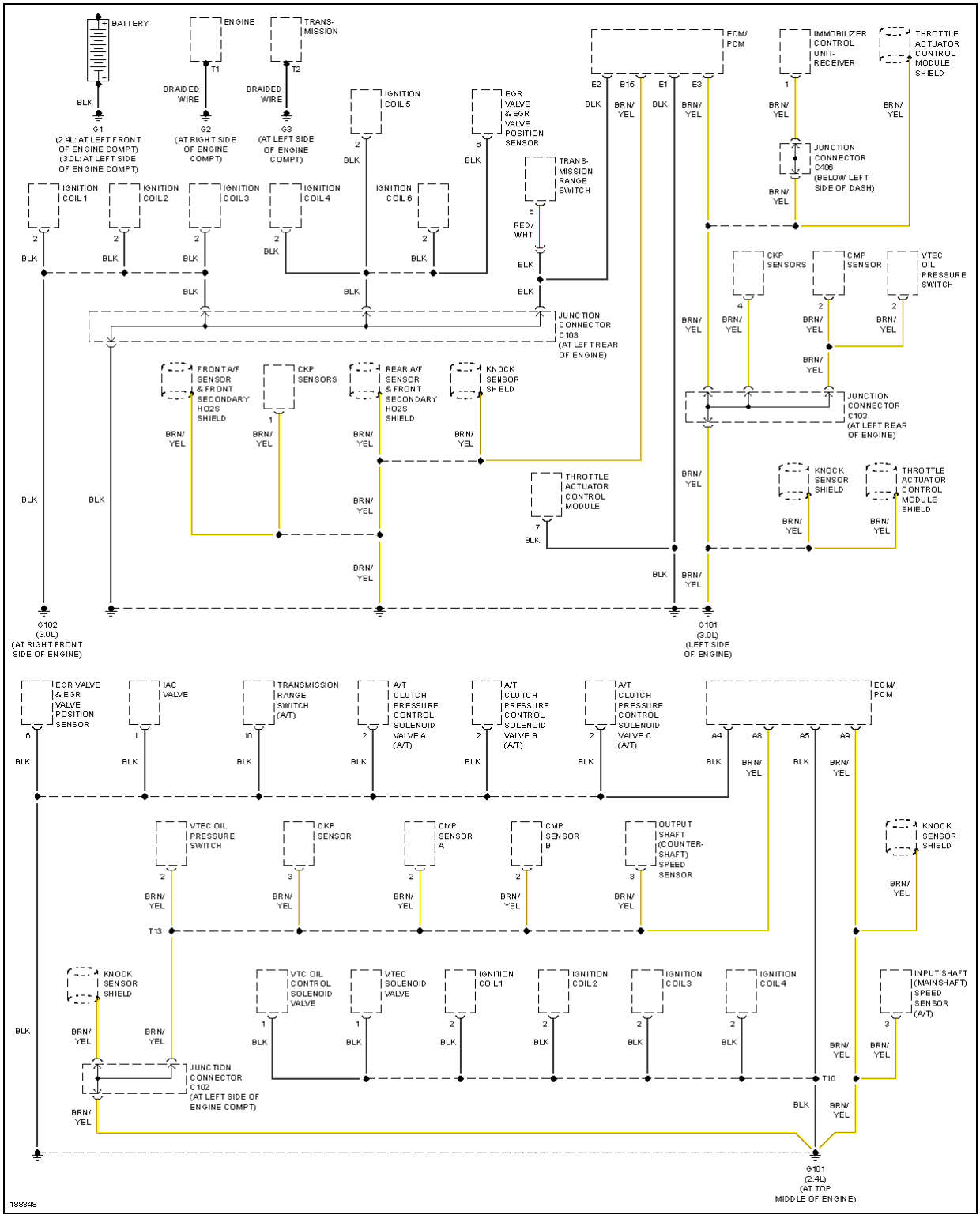


Fig. 40: Ground Distribution Circuit (1 of 4)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

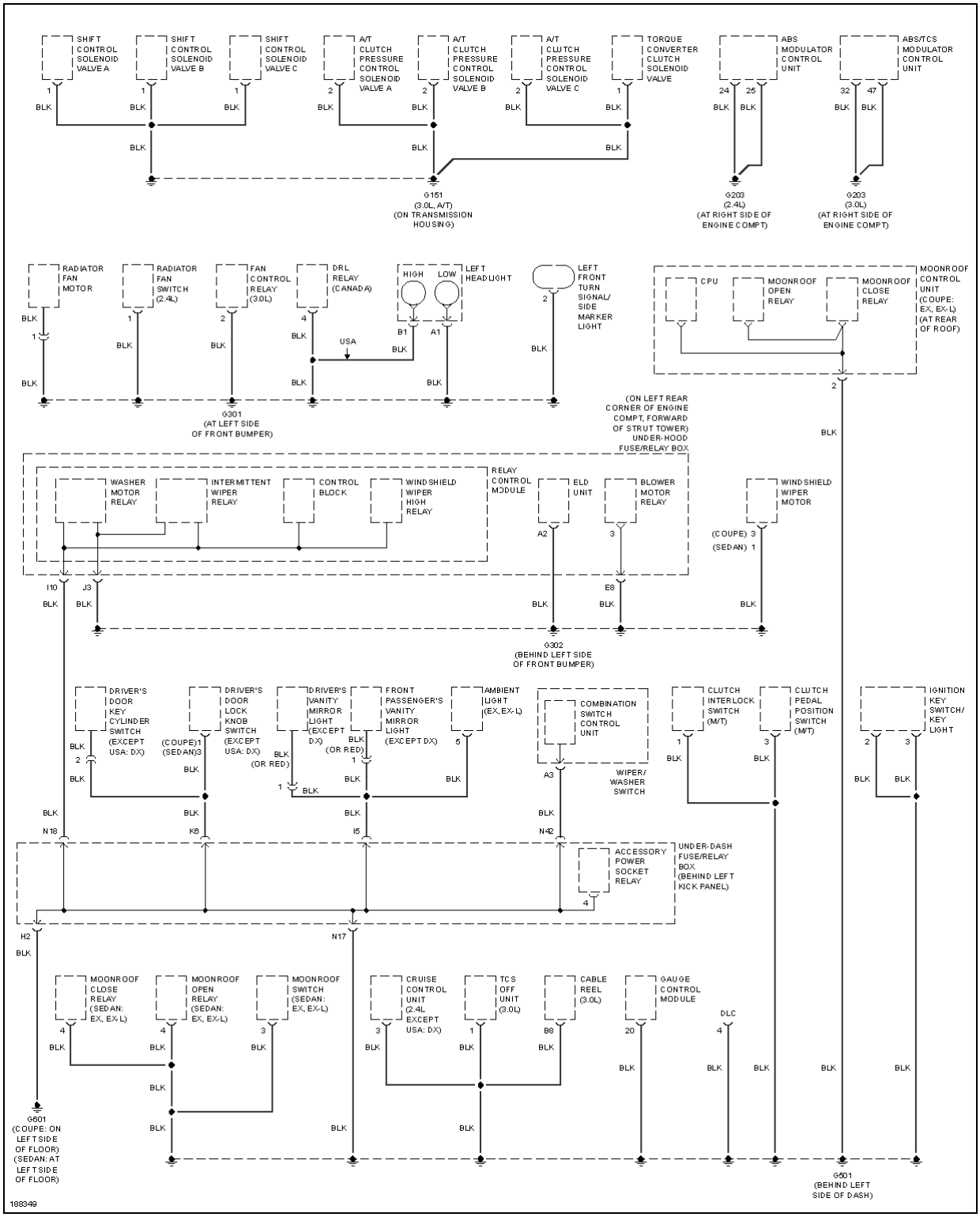


Fig. 41: Ground Distribution Circuit (2 of 4)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

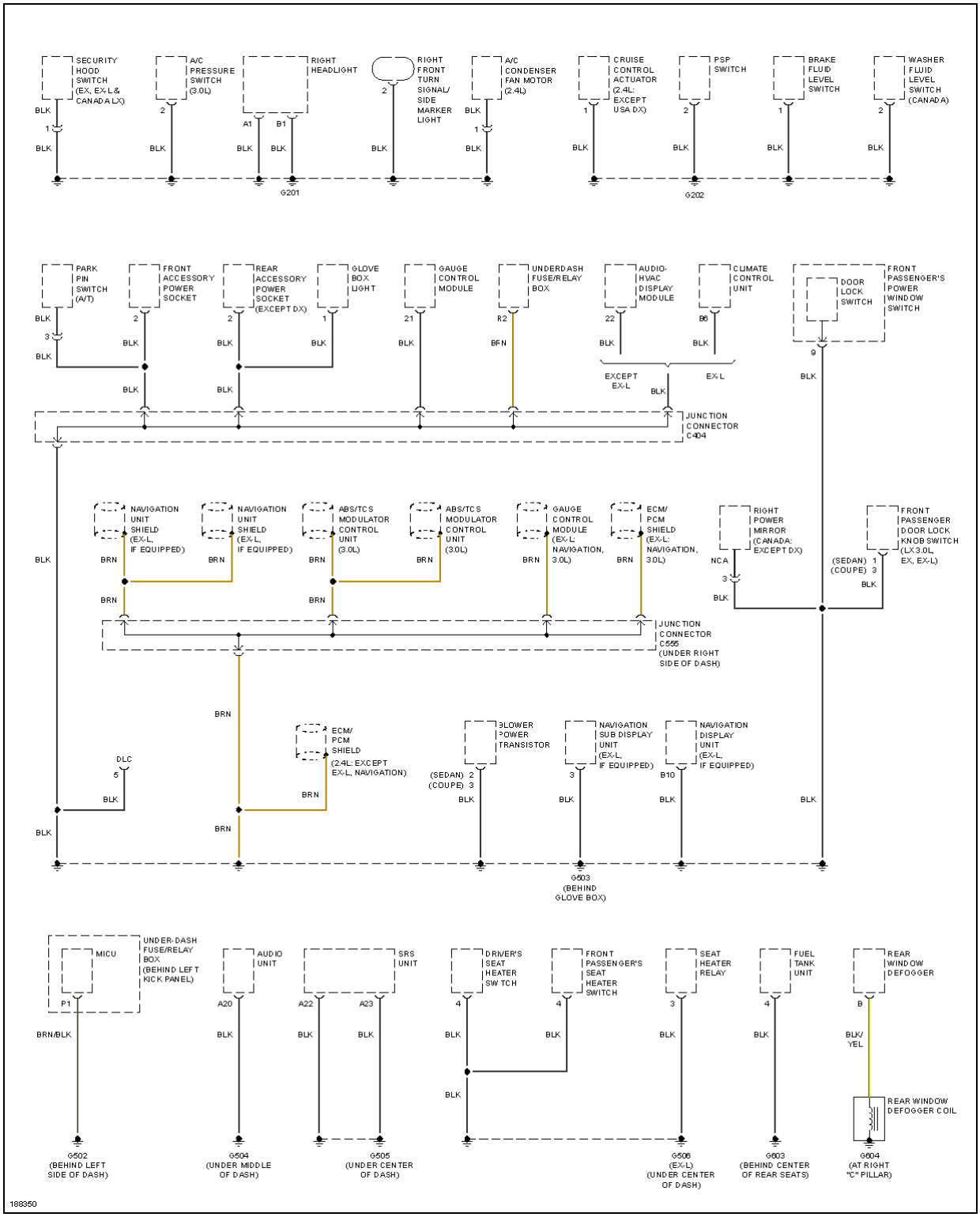


Fig. 42: Ground Distribution Circuit (3 of 4)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

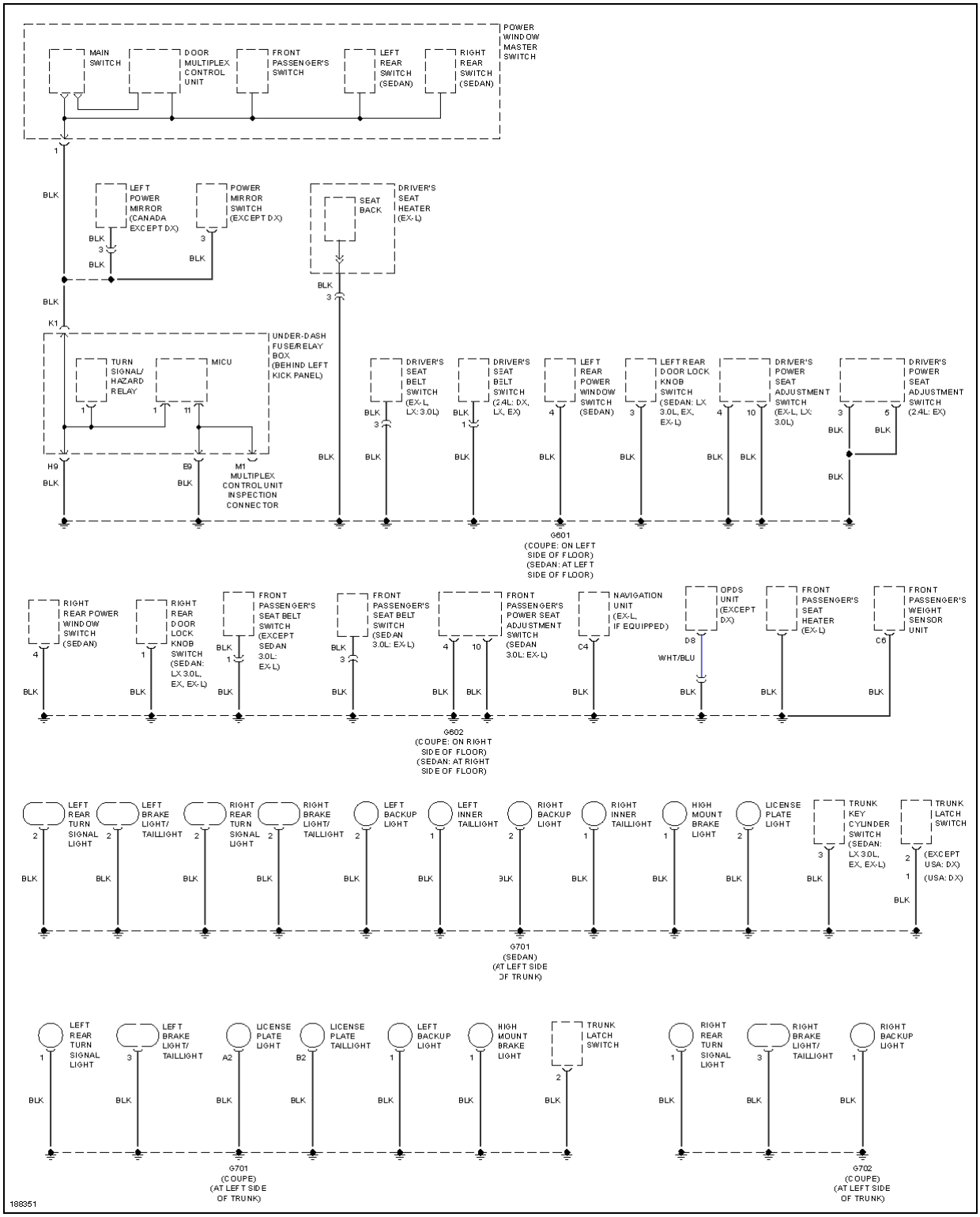


Fig. 43: Ground Distribution Circuit (4 of 4)

HEADLIGHTS

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

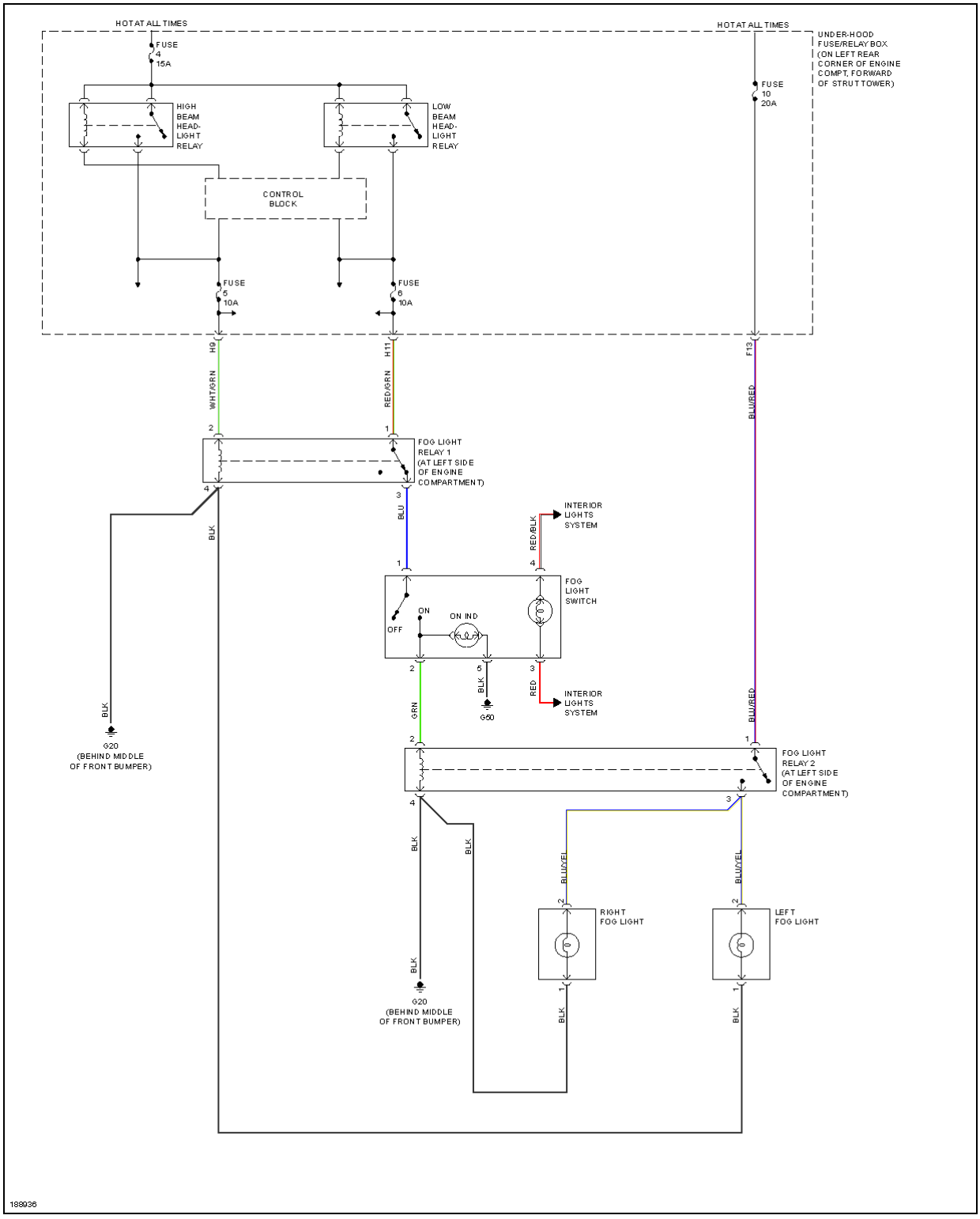


Fig. 44: Fog Lamp Circuit, Except Hybrid

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

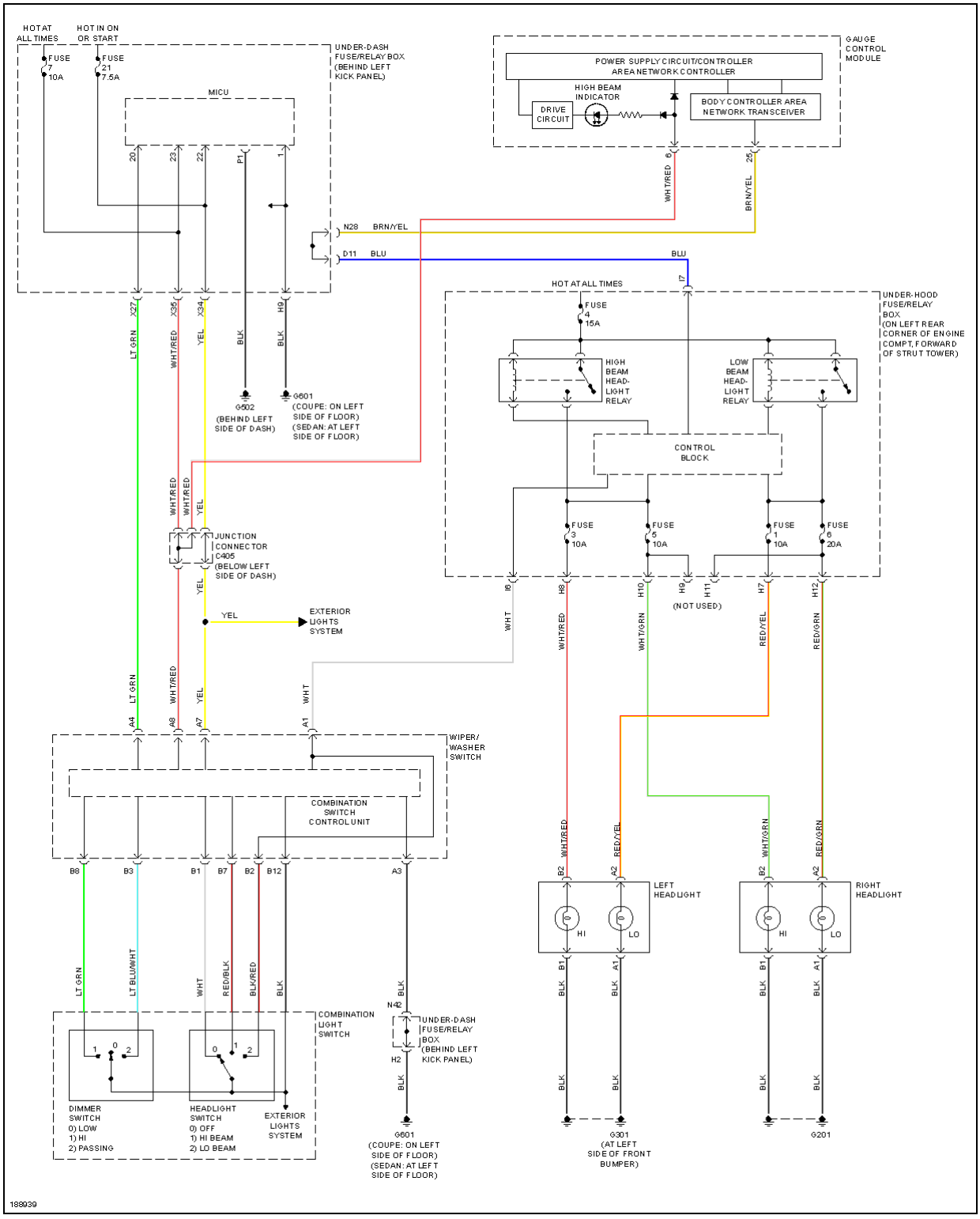


Fig. 45: Headlamps Circuit, Except Hybrid W/O DRL

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

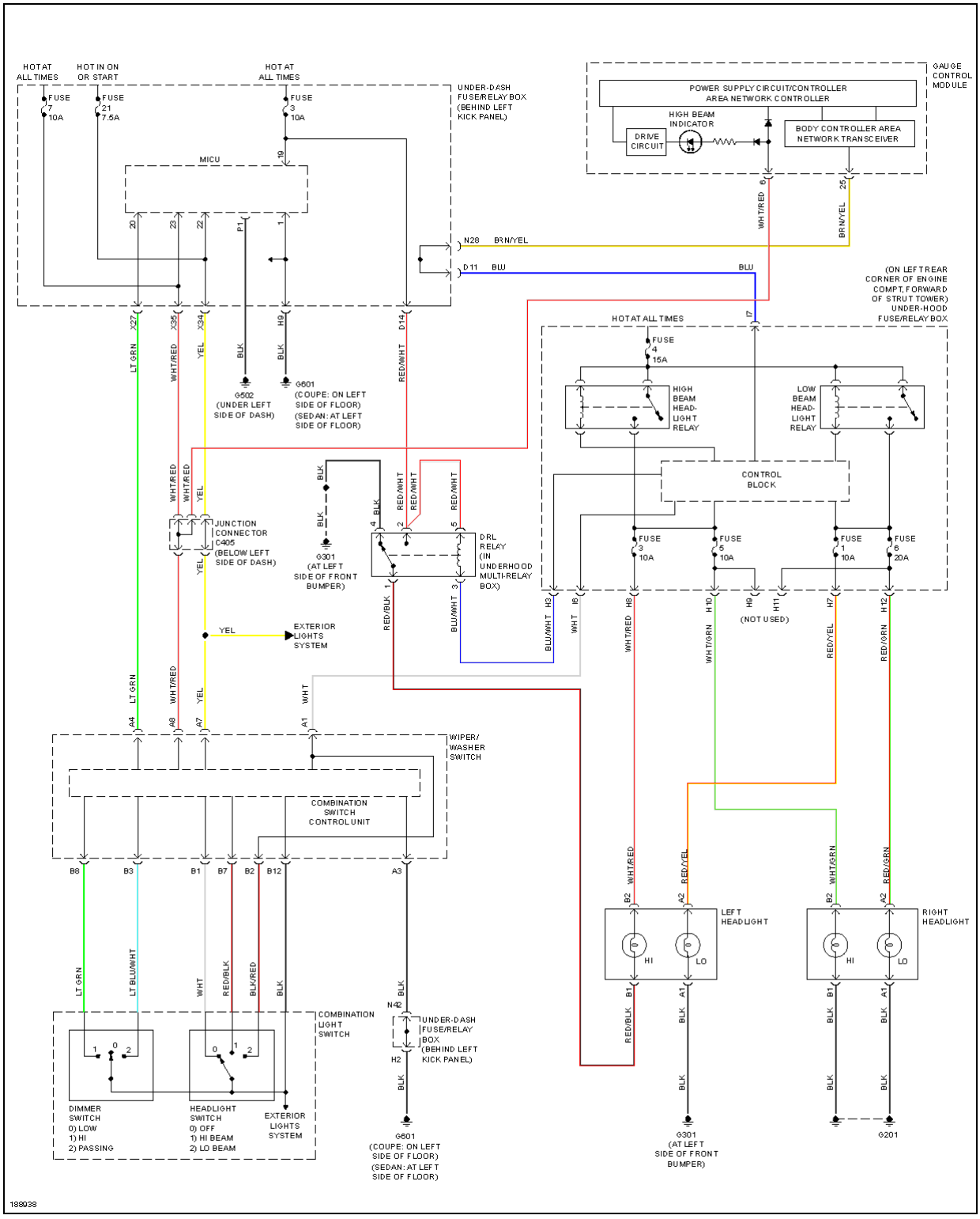


Fig. 46: Headlamps Circuit, W/ DRL

HORN

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

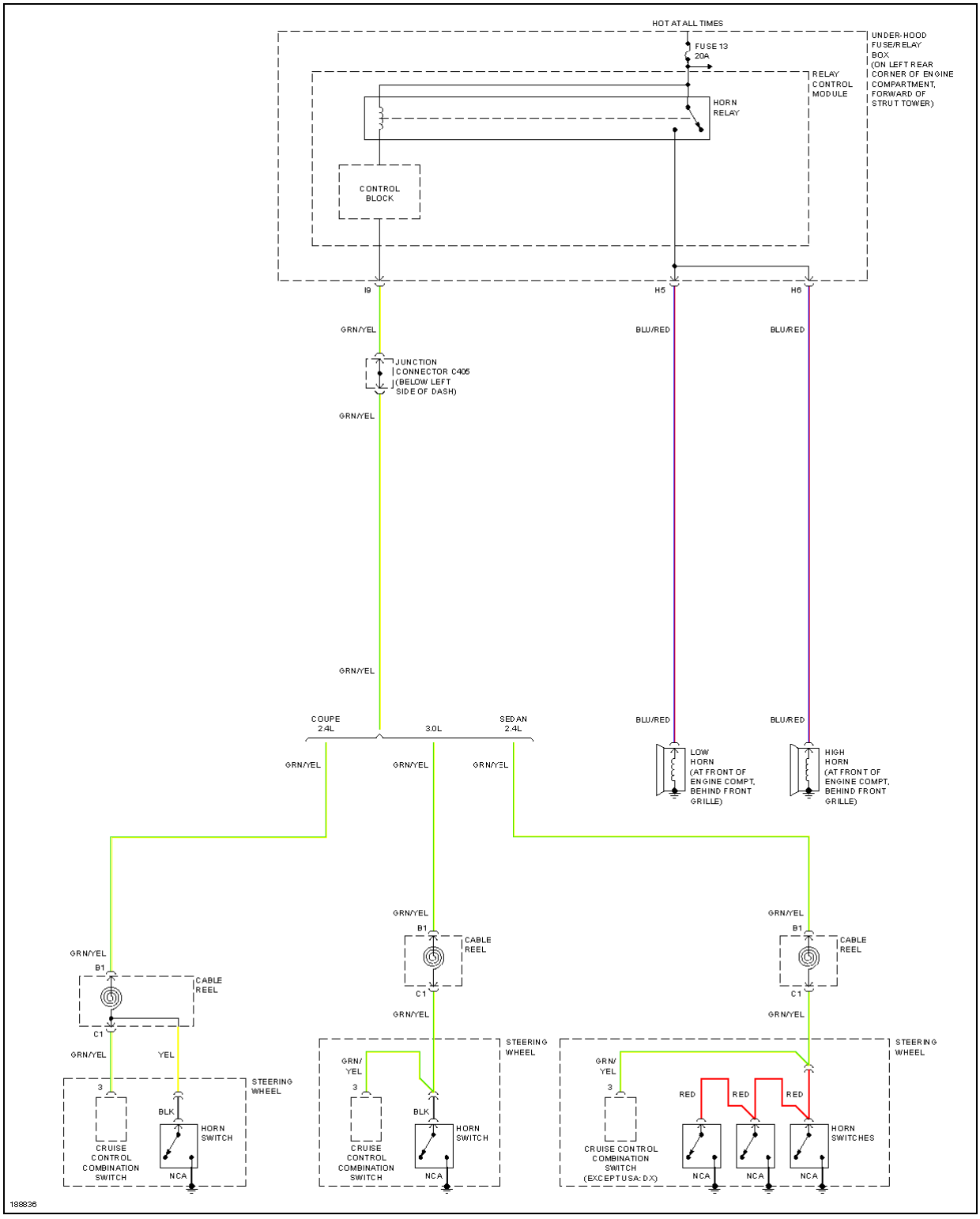


Fig. 47: Horn Circuit

INSTRUMENT CLUSTER

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

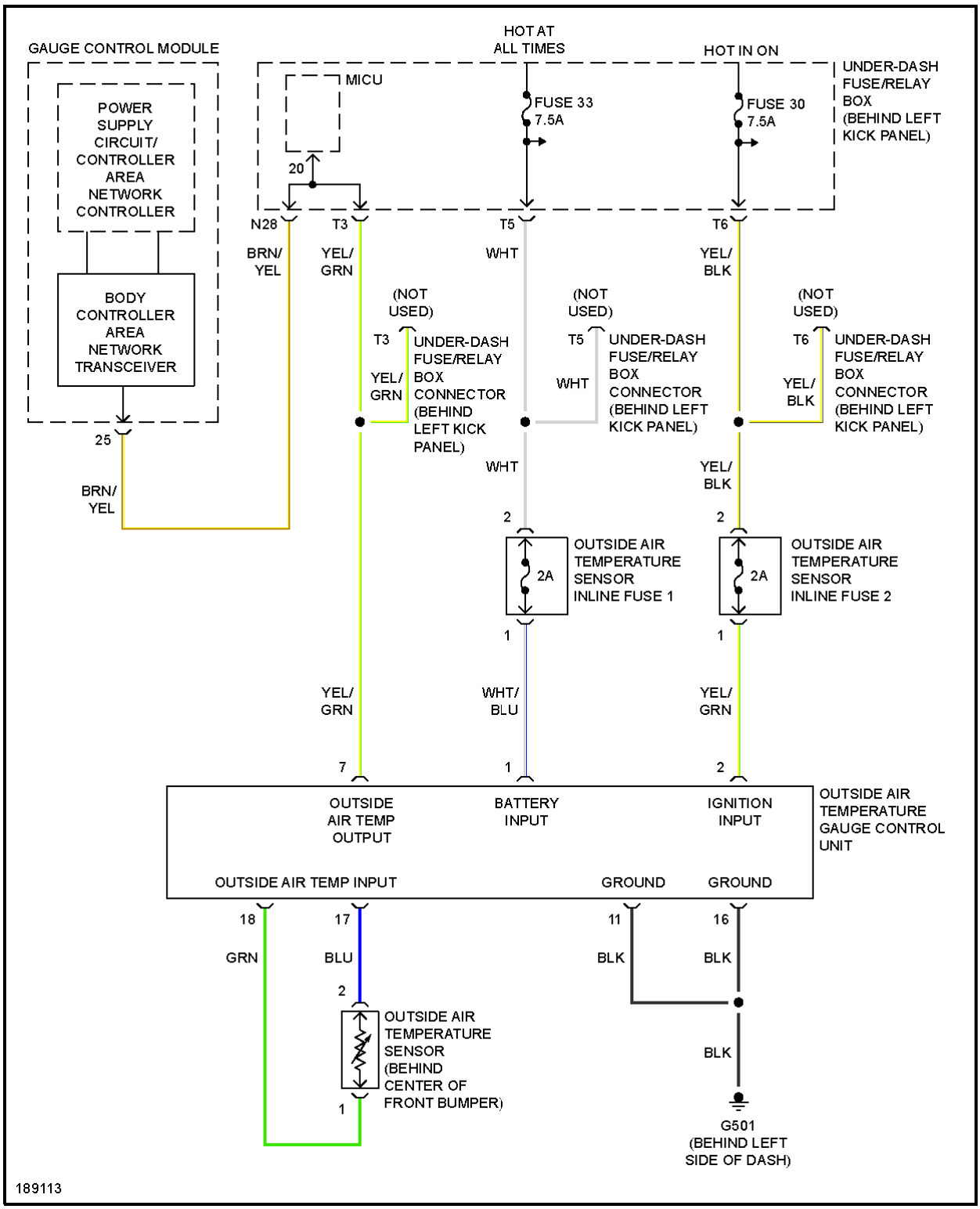


Fig. 48: Outside Air Temperature Gauge Circuit

2.4L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

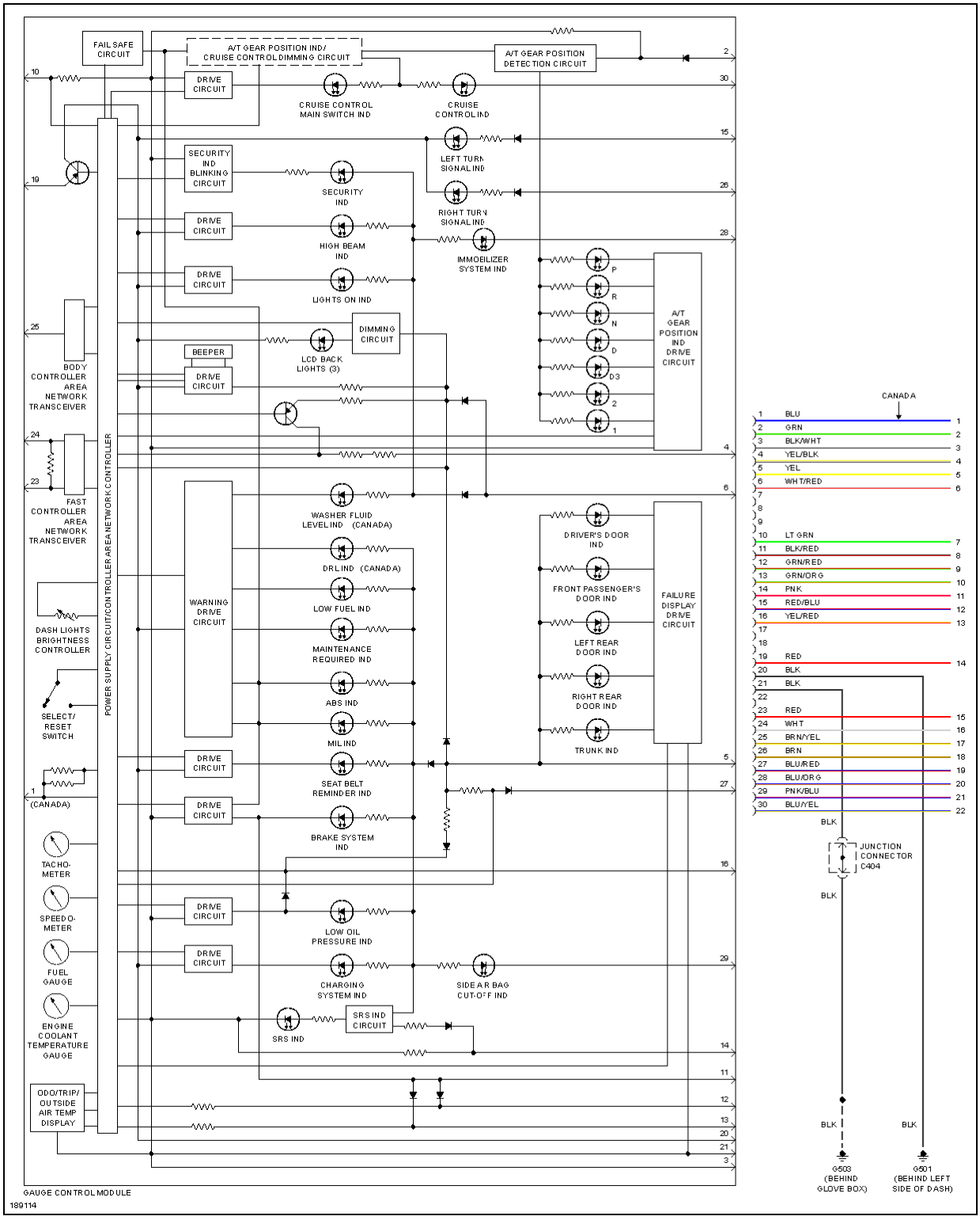


Fig. 49: 2.4L, Instrument Cluster Circuit (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

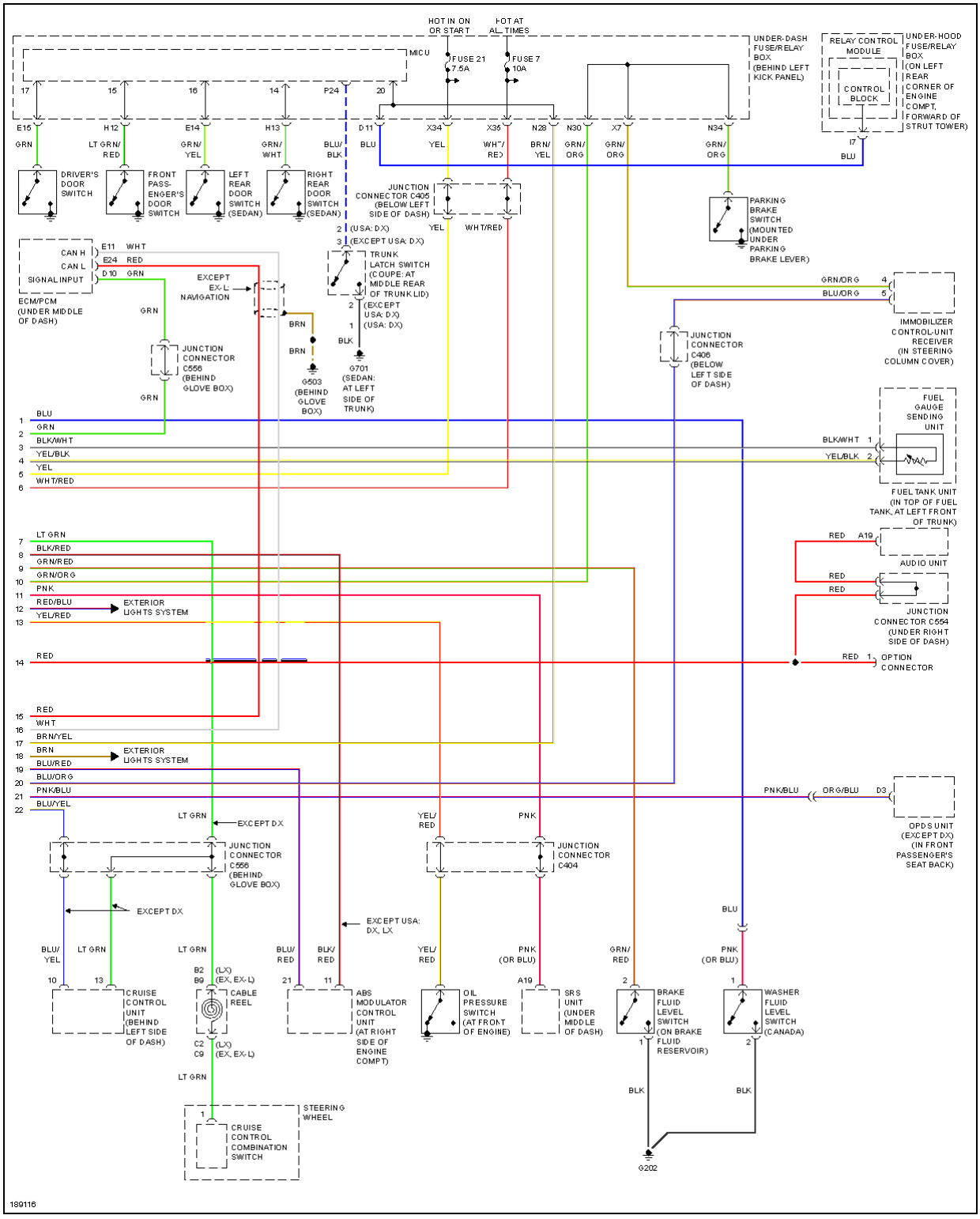


Fig. 50: 2.4L, Instrument Cluster Circuit (2 of 2)

3.0L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

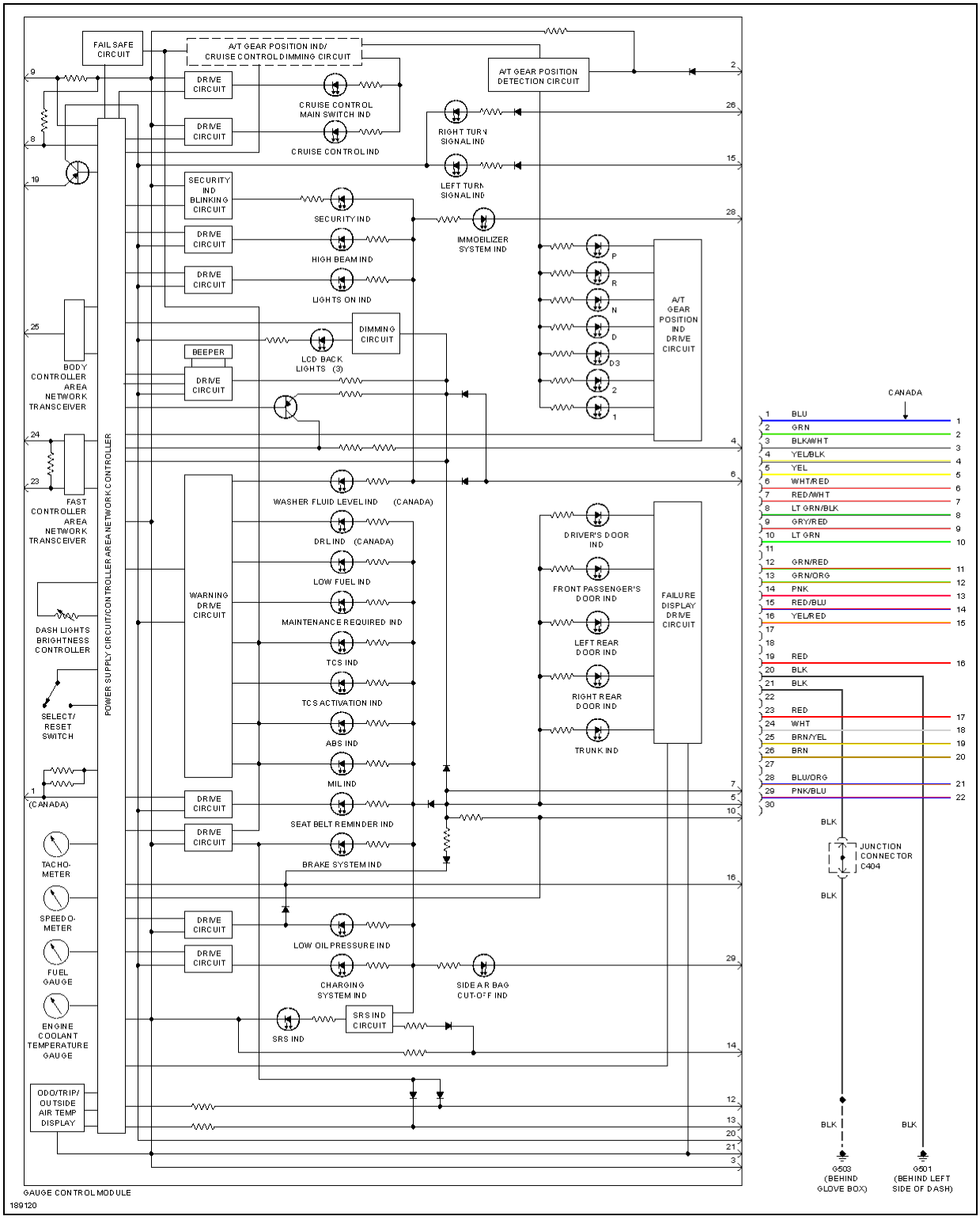


Fig. 51: 3.0L, Instrument Cluster Circuit (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

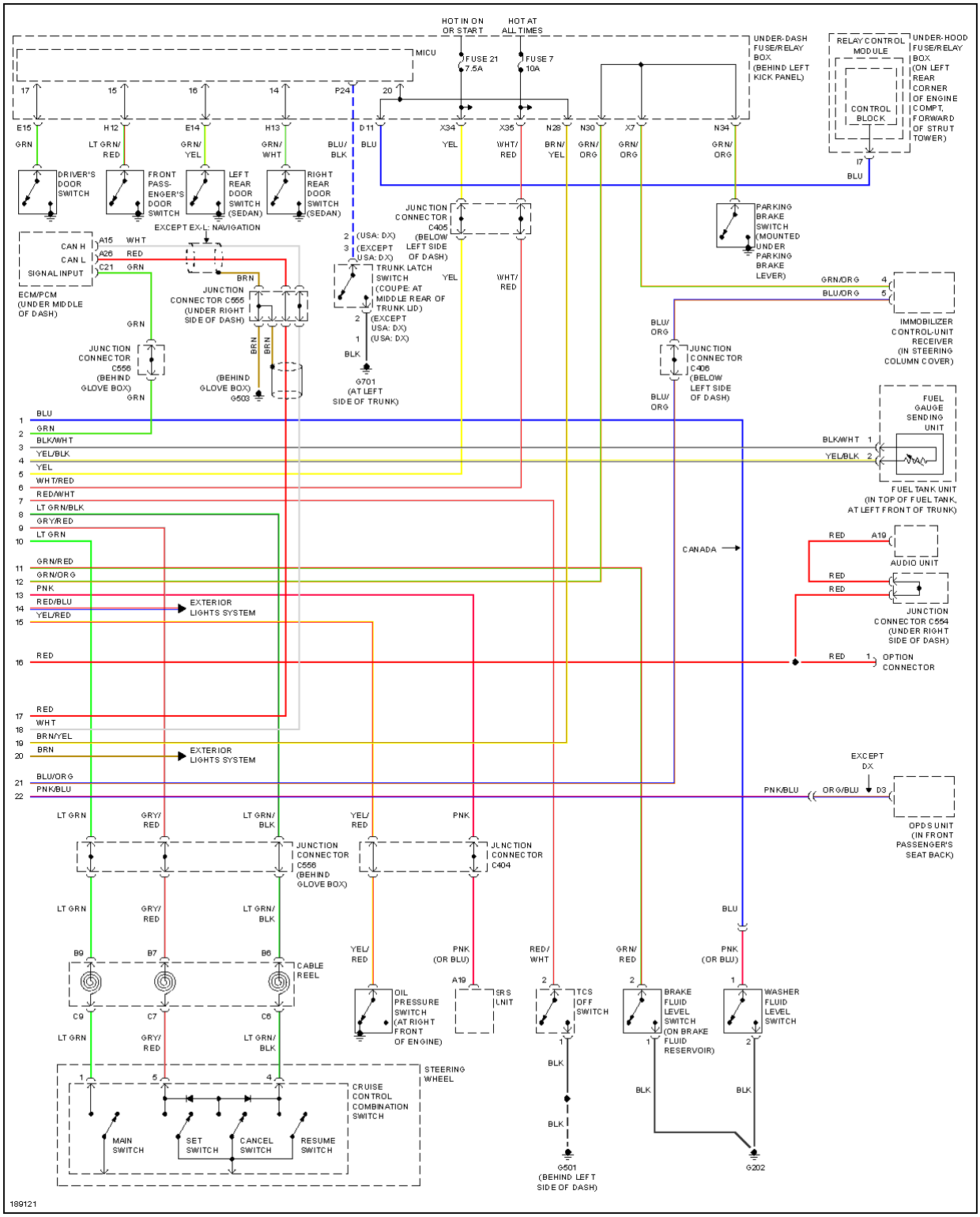


Fig. 52: 3.0L, Instrument Cluster Circuit (2 of 2)

INTERIOR LIGHTS

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

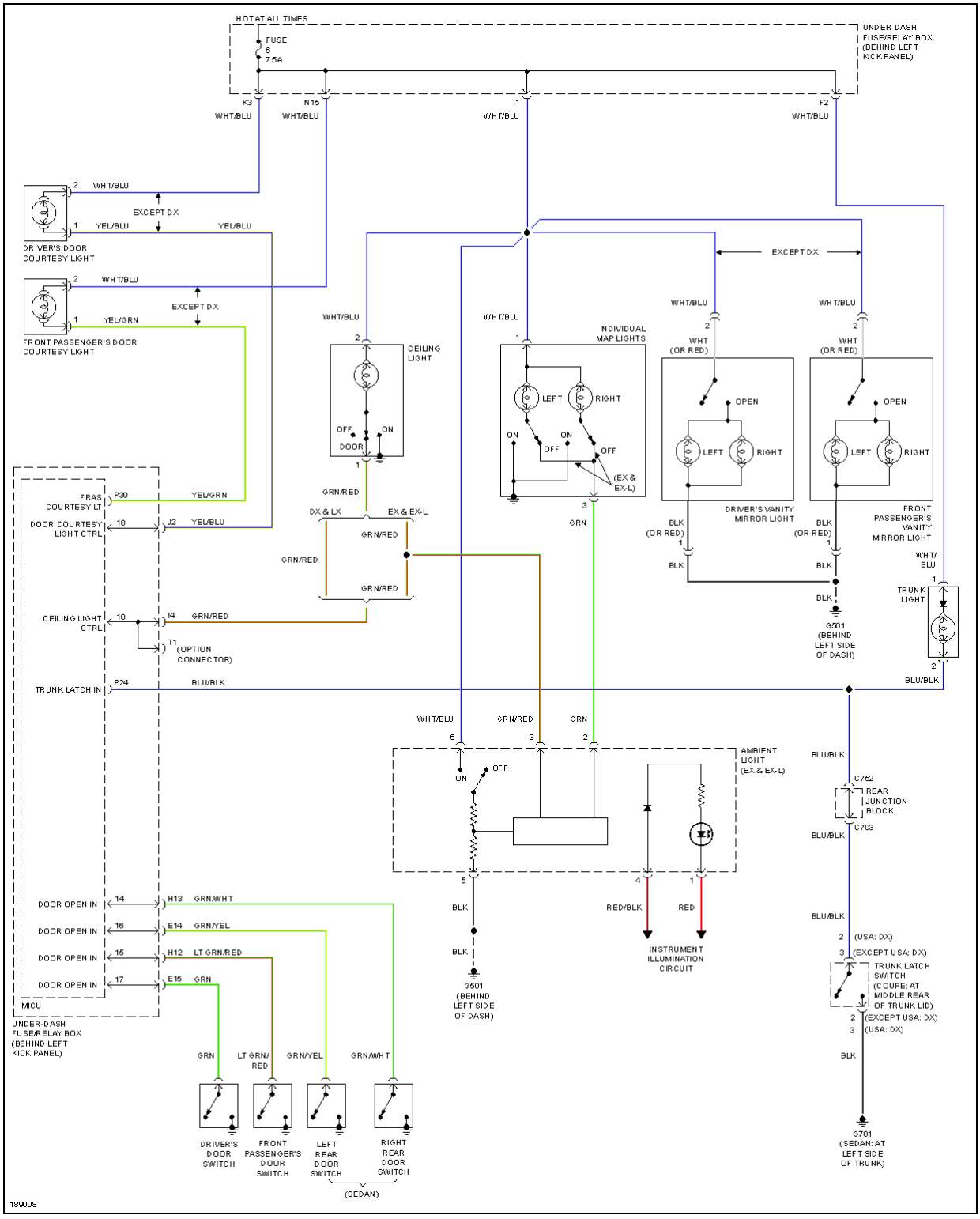


Fig. 53: Courtesy Lamps Circuit

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

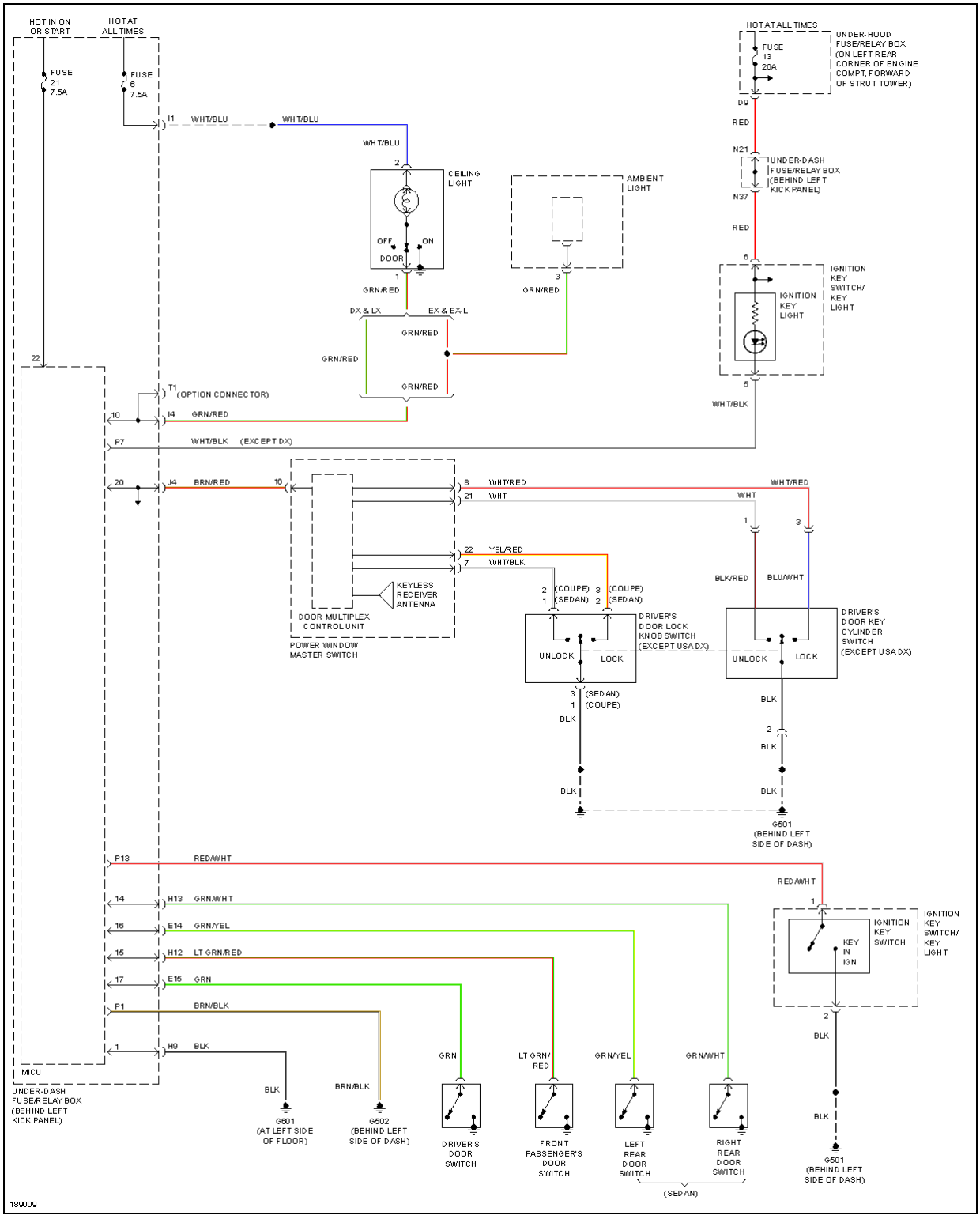


Fig. 54: Entry Light Timer Circuit

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

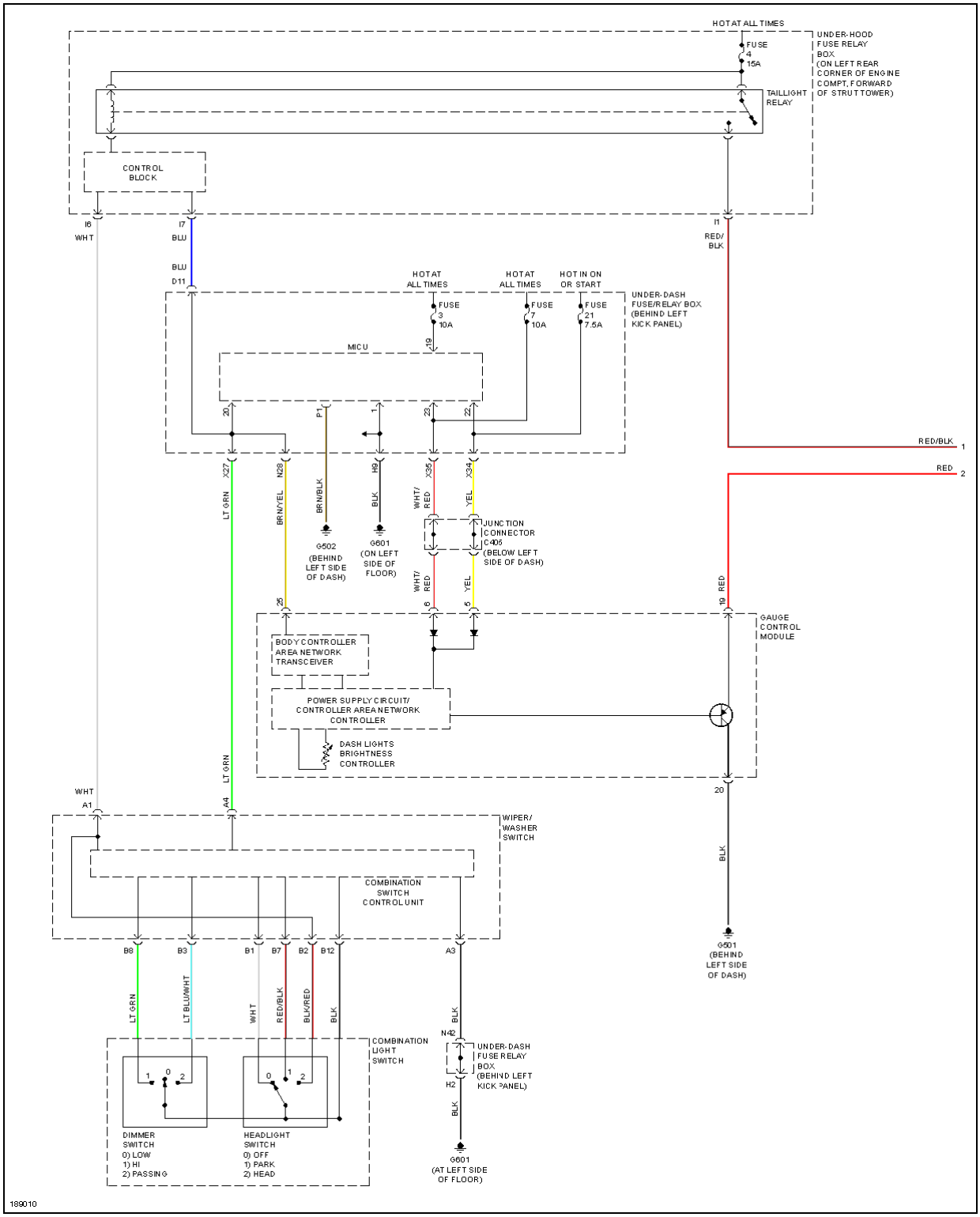


Fig. 55: Instrument Illumination Circuit (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

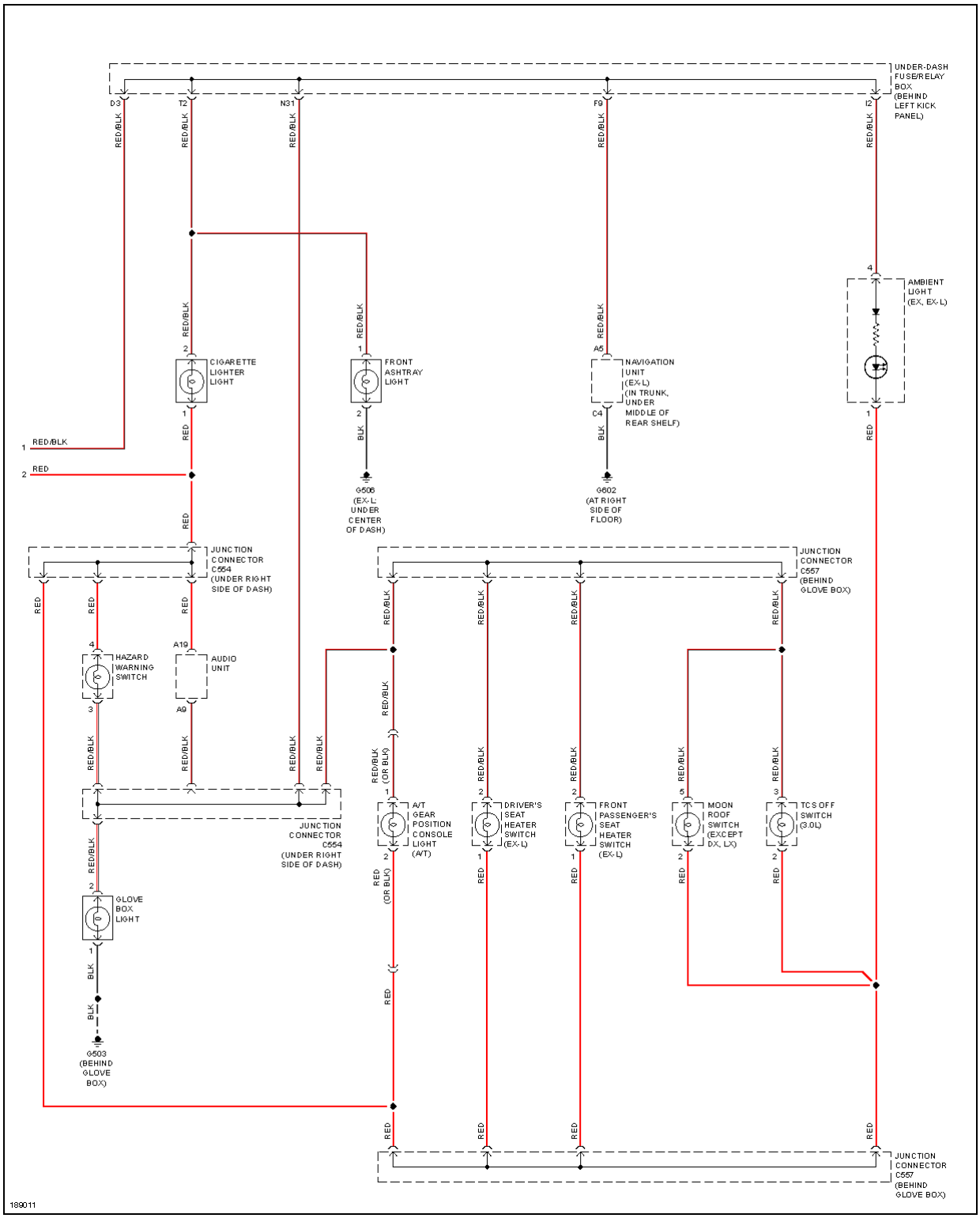


Fig. 56: Instrument Illumination Circuit (2 of 2)

NAVIGATION

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

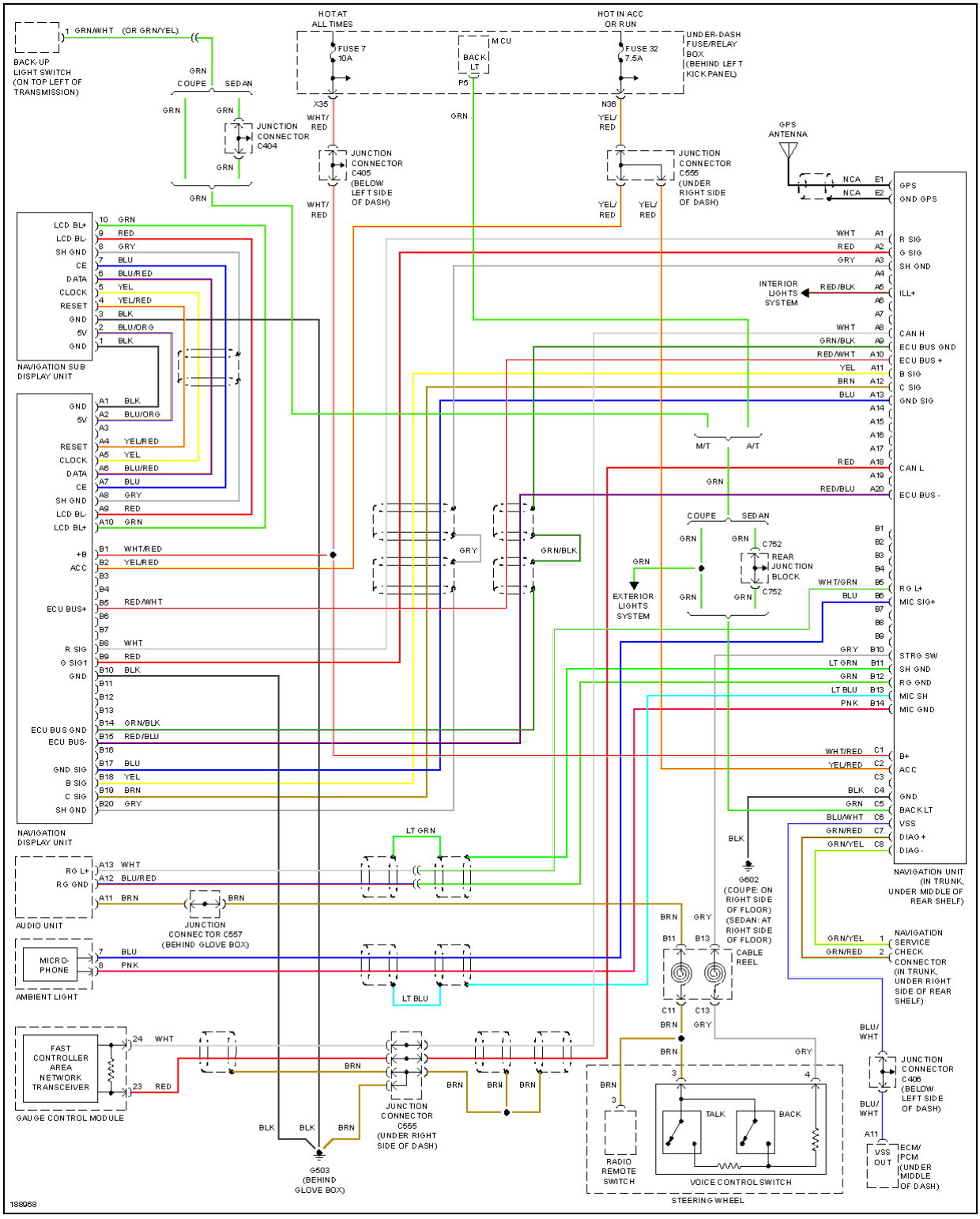


Fig. 57: Navigation Circuit

POWER DISTRIBUTION

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

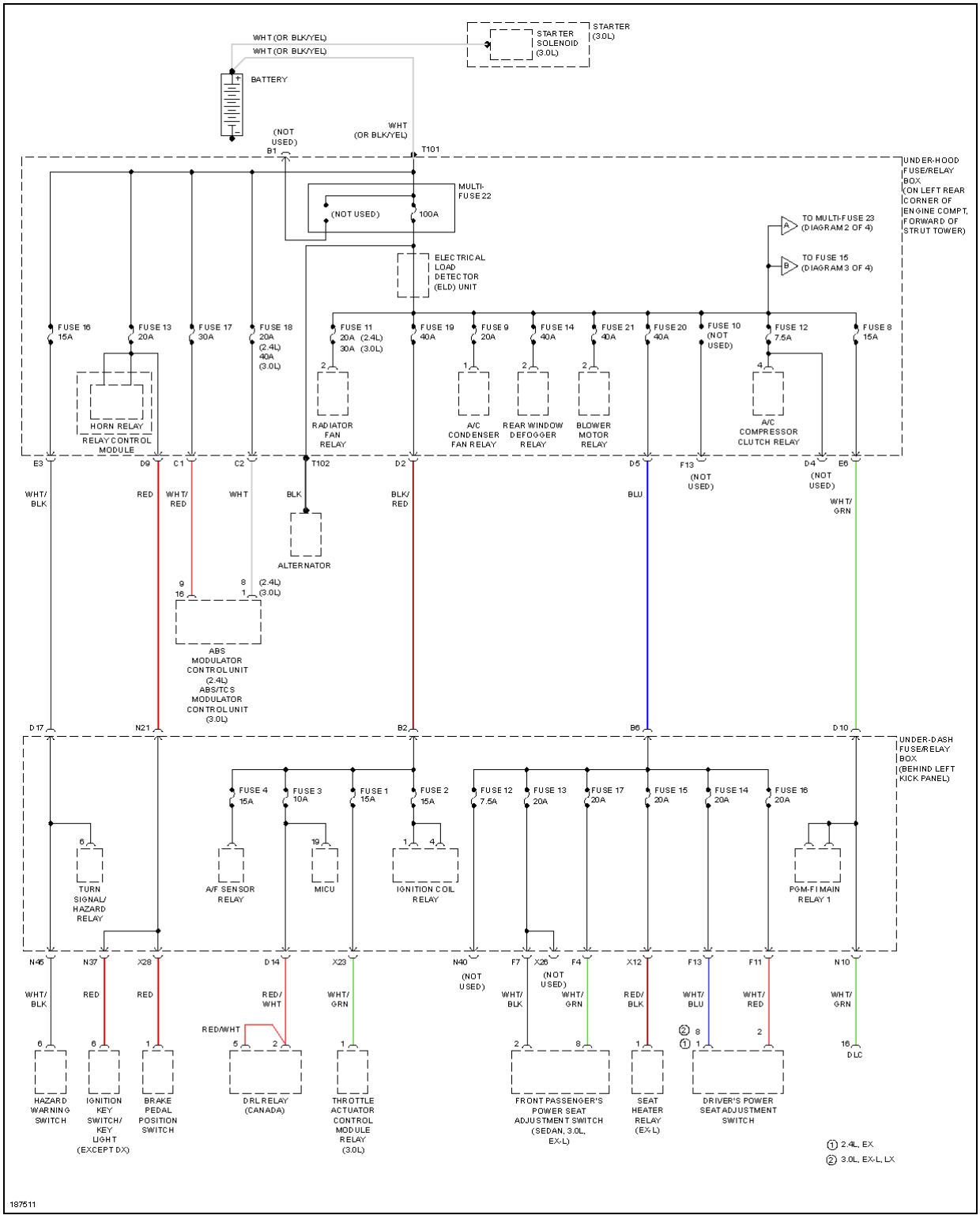


Fig. 58: Power Distribution Circuit (1 of 4)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

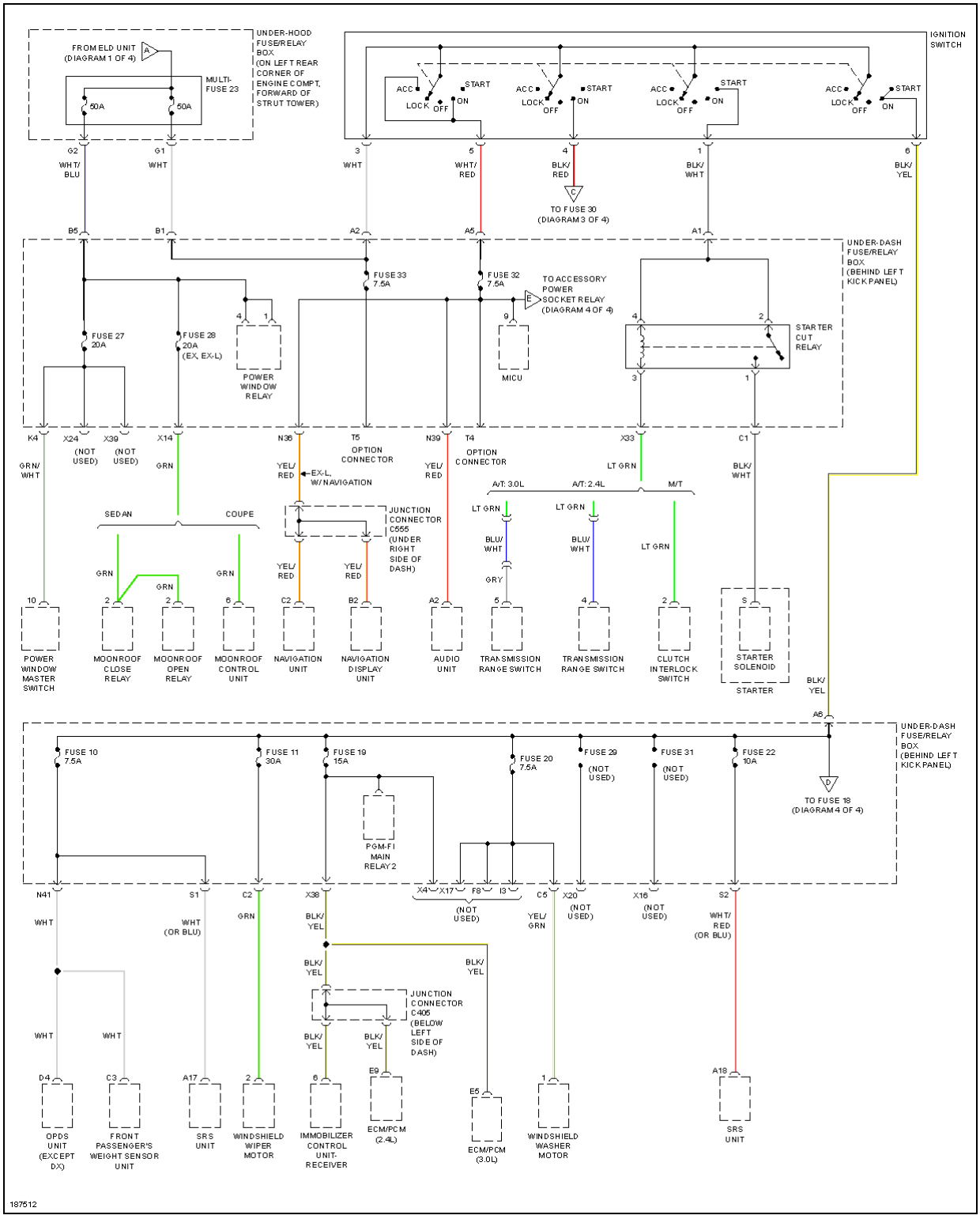


Fig. 59: Power Distribution Circuit (2 of 4)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

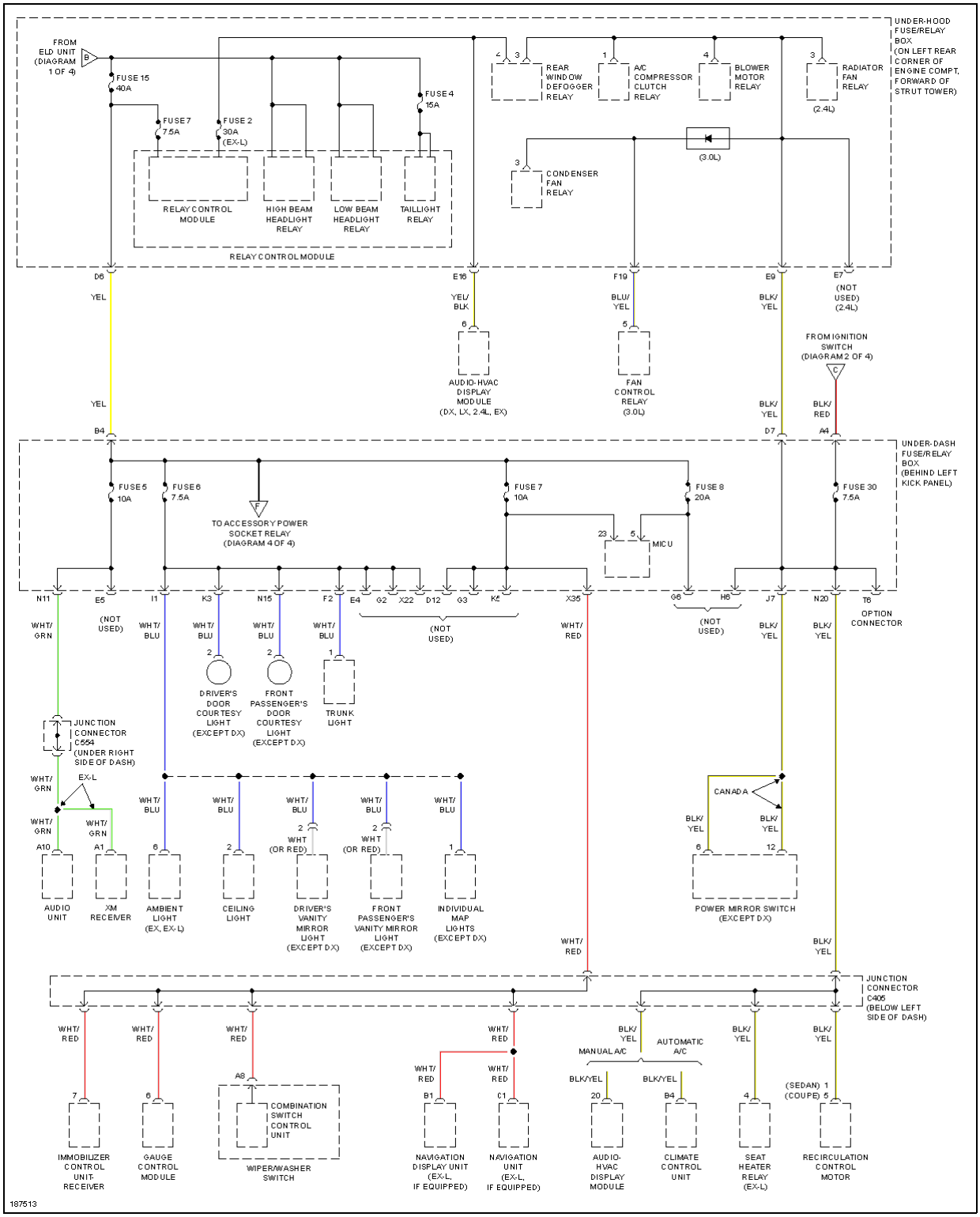


Fig. 60: Power Distribution Circuit (3 of 4)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

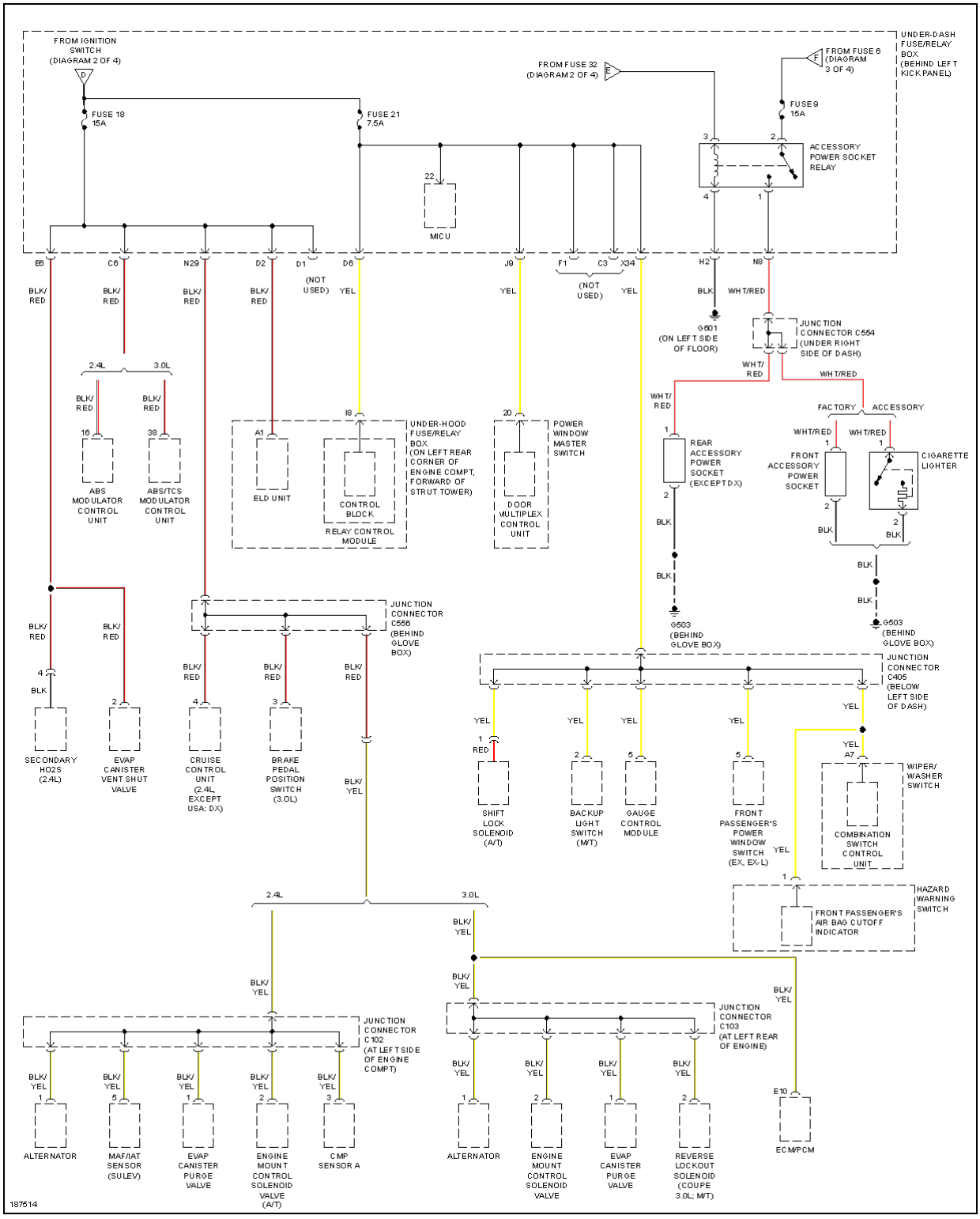


Fig. 61: Power Distribution Circuit (4 of 4)

POWER DOOR LOCKS

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

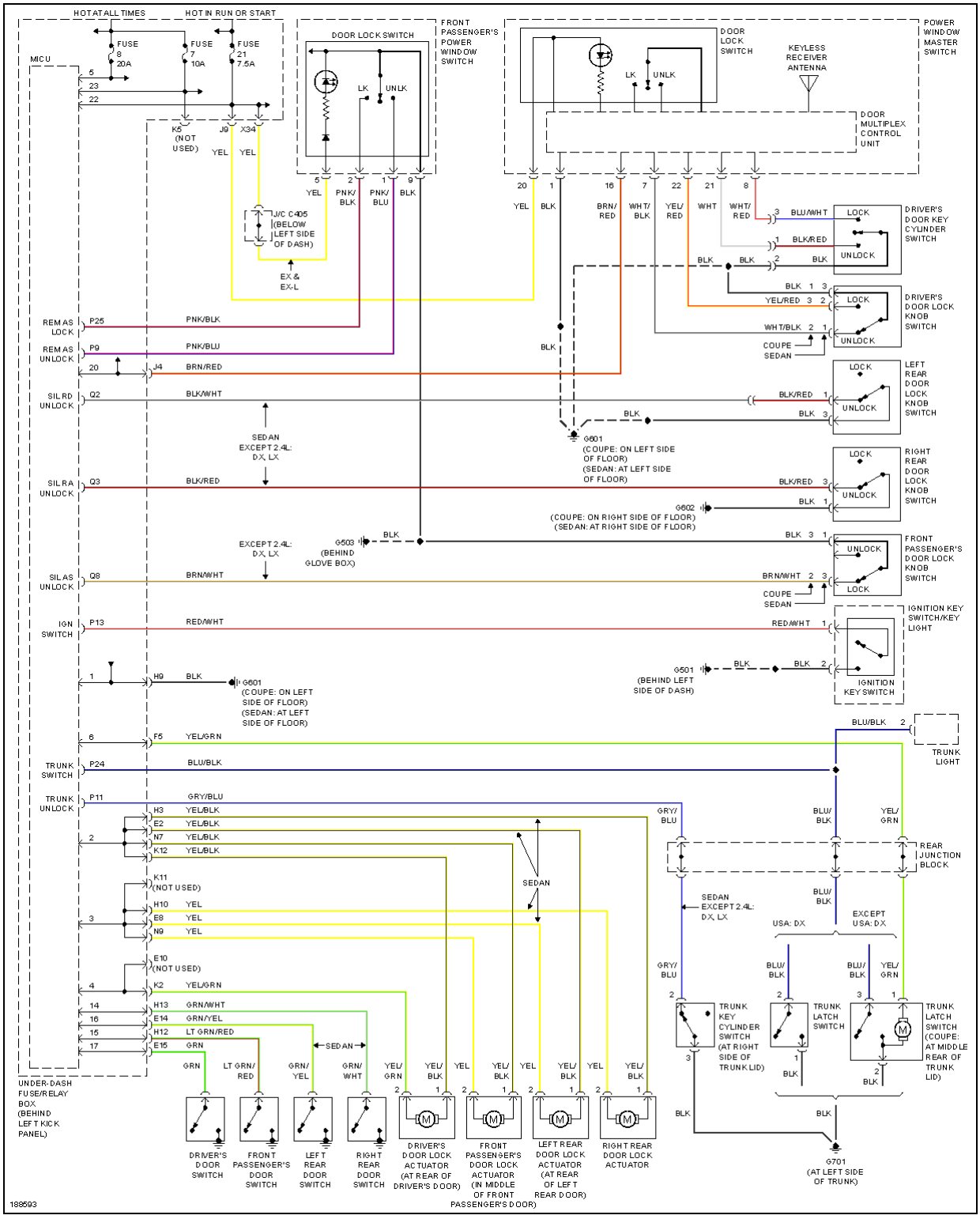


Fig. 62: Power Door Locks Circuit

POWER MIRRORS

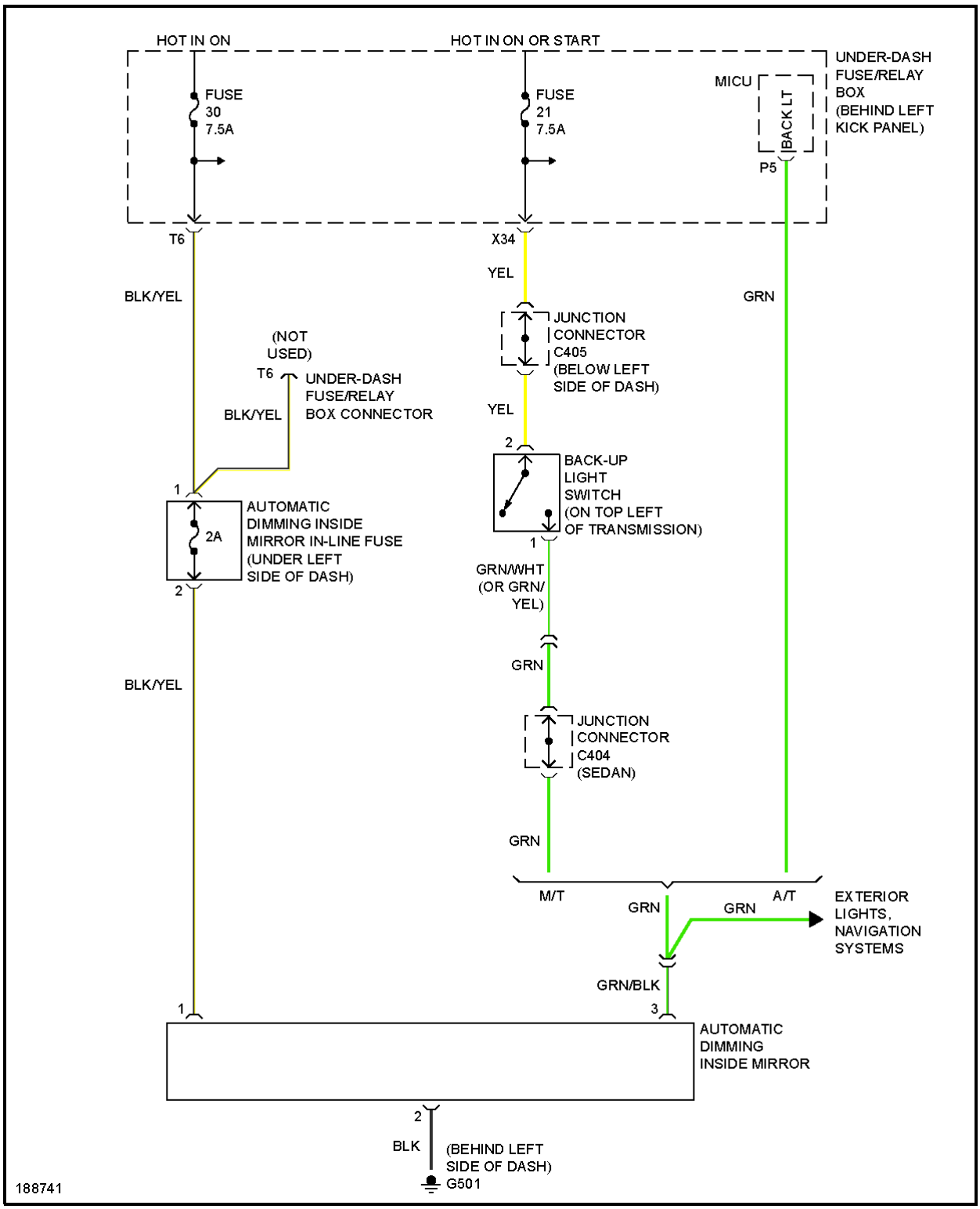

HOT IN ON
HOT IN ON OR START
UNDER-DASH FUSE/RELAY BOX (BEHIND LEFT KICK PANEL)
FUSE 30 7.5A
FUSE 21 7.5A
MICU
BACK LT
P5
T6
X34
YEL
BLK/YEL
GRN
JUNCTION CONNECTOR C405 (BELOW LEFT SIDE OF DASH)
(NOT USED)
T6
UNDER-DASH FUSE/RELAY BOX CONNECTOR
BLK/YEL
YEL
2
BACK-UP LIGHT SWITCH (ON TOP LEFT OF TRANSMISSION)
1
1
AUTOMATIC DIMMING INSIDE MIRROR IN-LINE FUSE (UNDER LEFT SIDE OF DASH)
2A
2
GRN/WHT (OR GRN/YEL)
GRN
BLK/YEL
JUNCTION CONNECTOR C404 (SEDAN)
GRN
M/T
A/T
GRN
GRN
EXTERIOR LIGHTS, NAVIGATION SYSTEMS
GRN/BLK
3
1
AUTOMATIC DIMMING INSIDE MIRROR
2
BLK
(BEHIND LEFT SIDE OF DASH)
G501
188741

Fig. 63: Automatic Day/Night Mirror Circuit

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

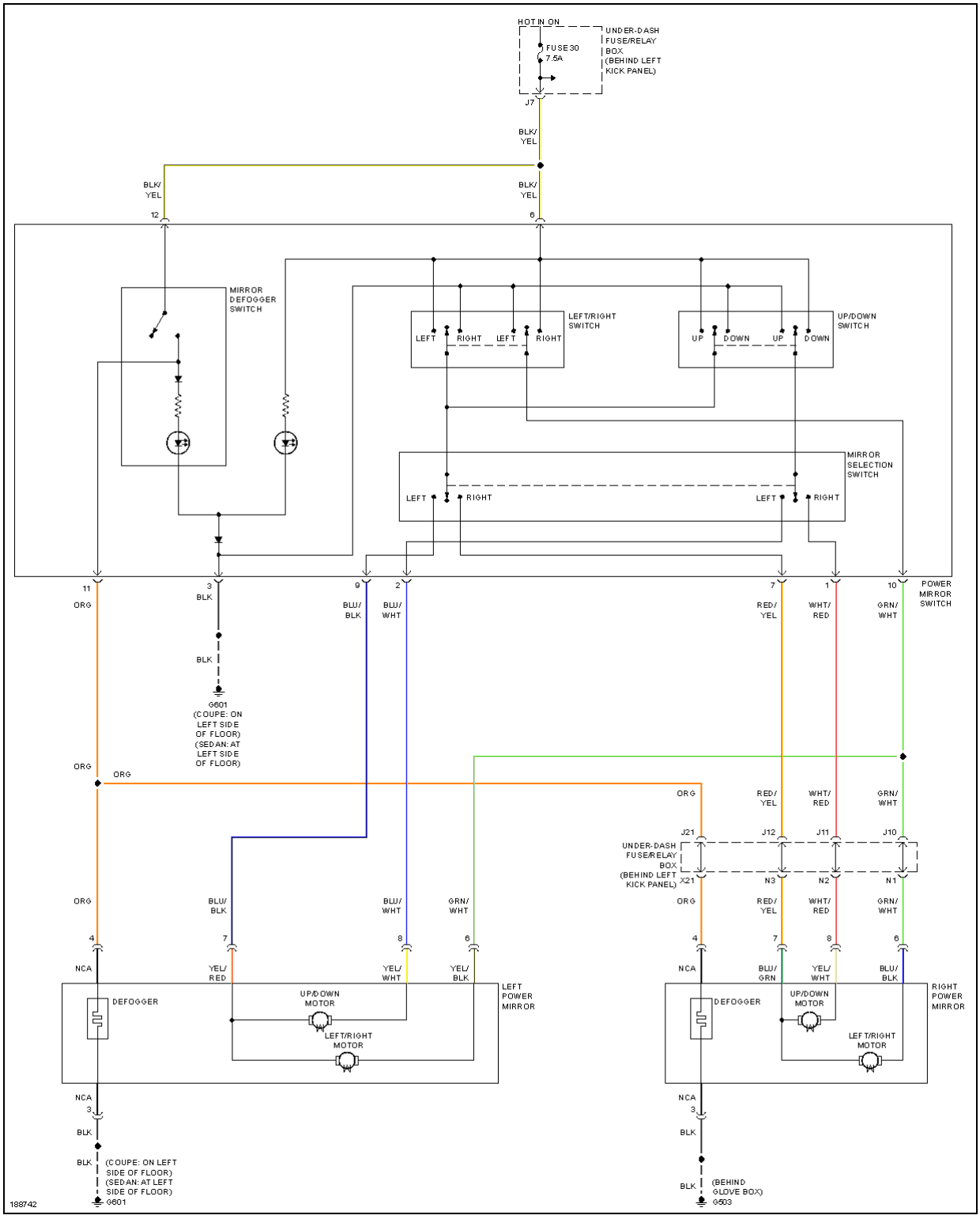


Fig. 64: Power Mirrors Circuit, Canada

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

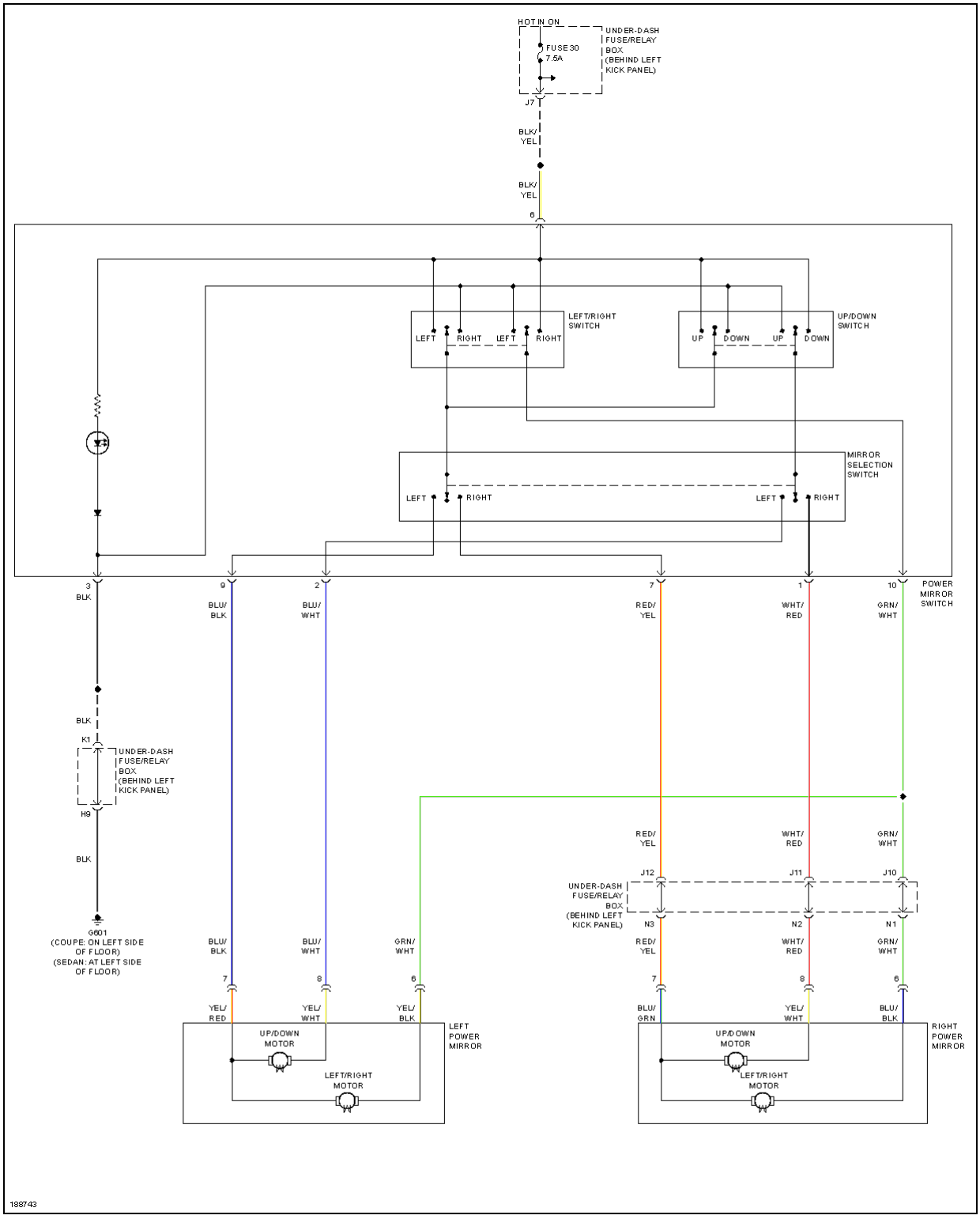


Fig. 65: Power Mirrors Circuit, USA

POWER SEATS

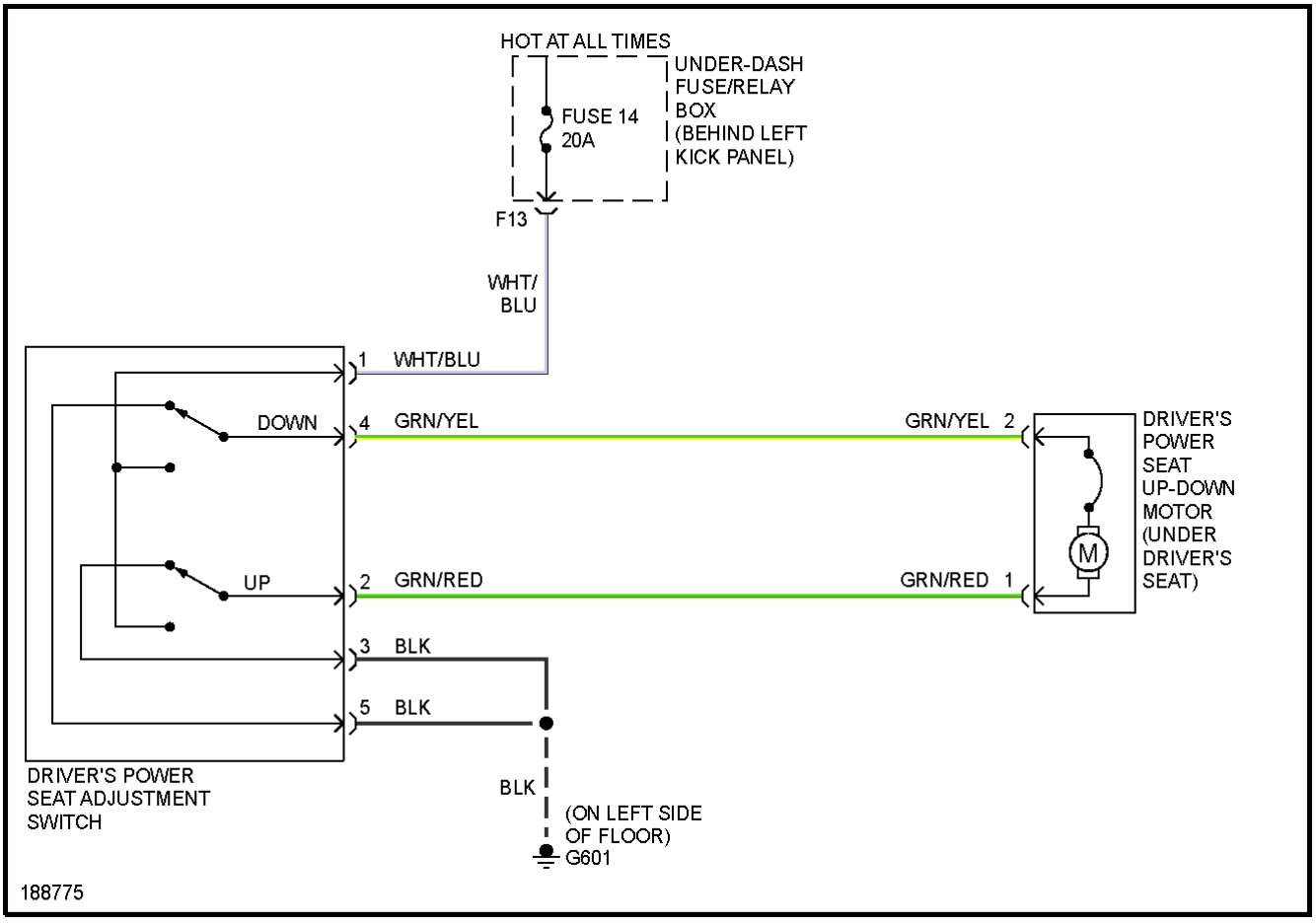

HOT AT ALL TIMES
UNDER-DASH FUSE/RELAY BOX (BEHIND LEFT KICK PANEL)
FUSE 14 20A
F13
WHT/ BLU
1 WHT/BLU
DOWN
4 GRN/YEL
GRN/YEL 2
DRIVER'S POWER SEAT UP-DOWN MOTOR (UNDER DRIVER'S SEAT)
M
UP
2 GRN/RED
GRN/RED 1
3 BLK
5 BLK
DRIVER'S POWER SEAT ADJUSTMENT SWITCH
BLK
(ON LEFT SIDE OF FLOOR)
G601
188775

Fig. 66: 2-Way Adjustable Power Seat Circuit

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

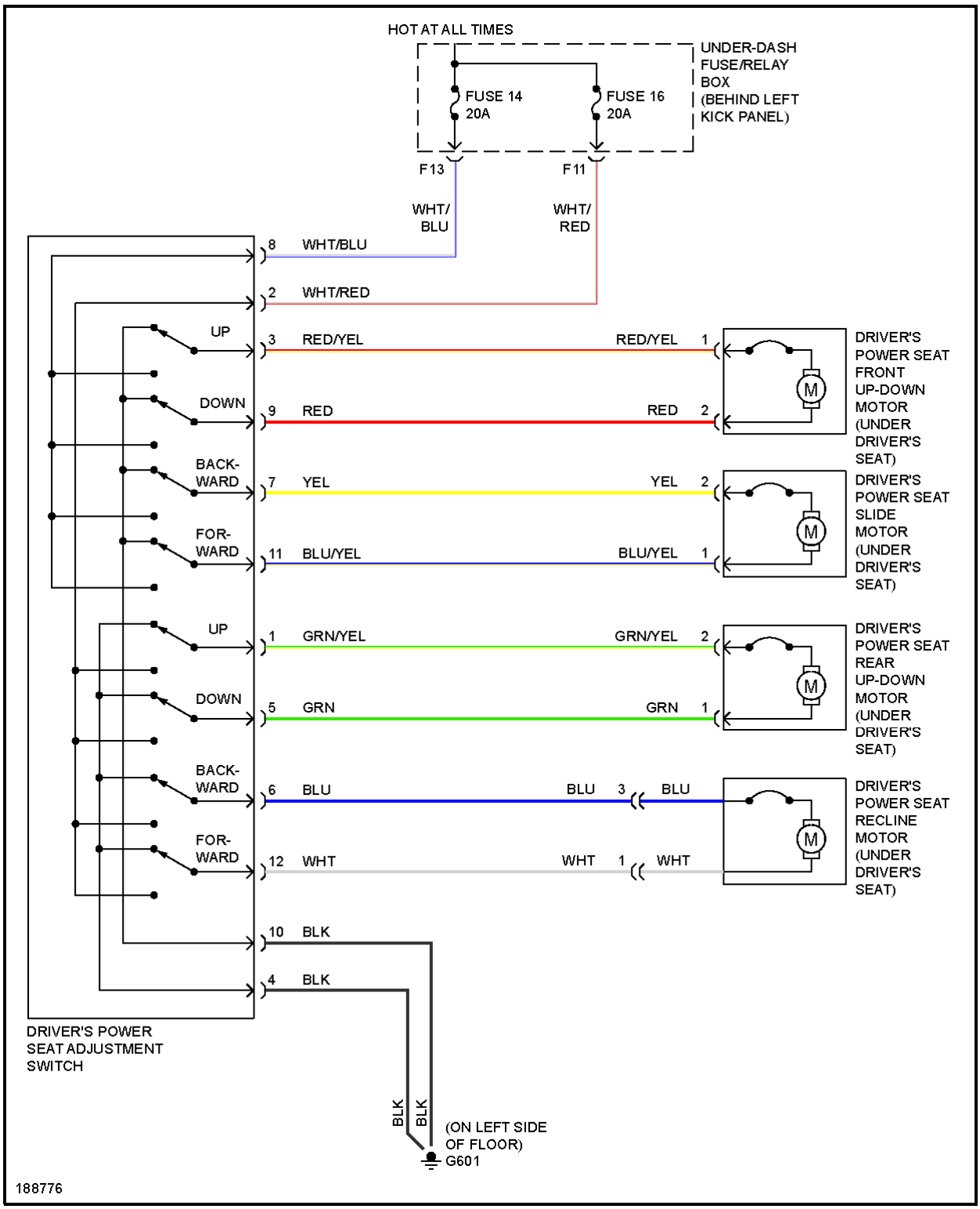


Fig. 67: Driver Power Seat Circuit

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

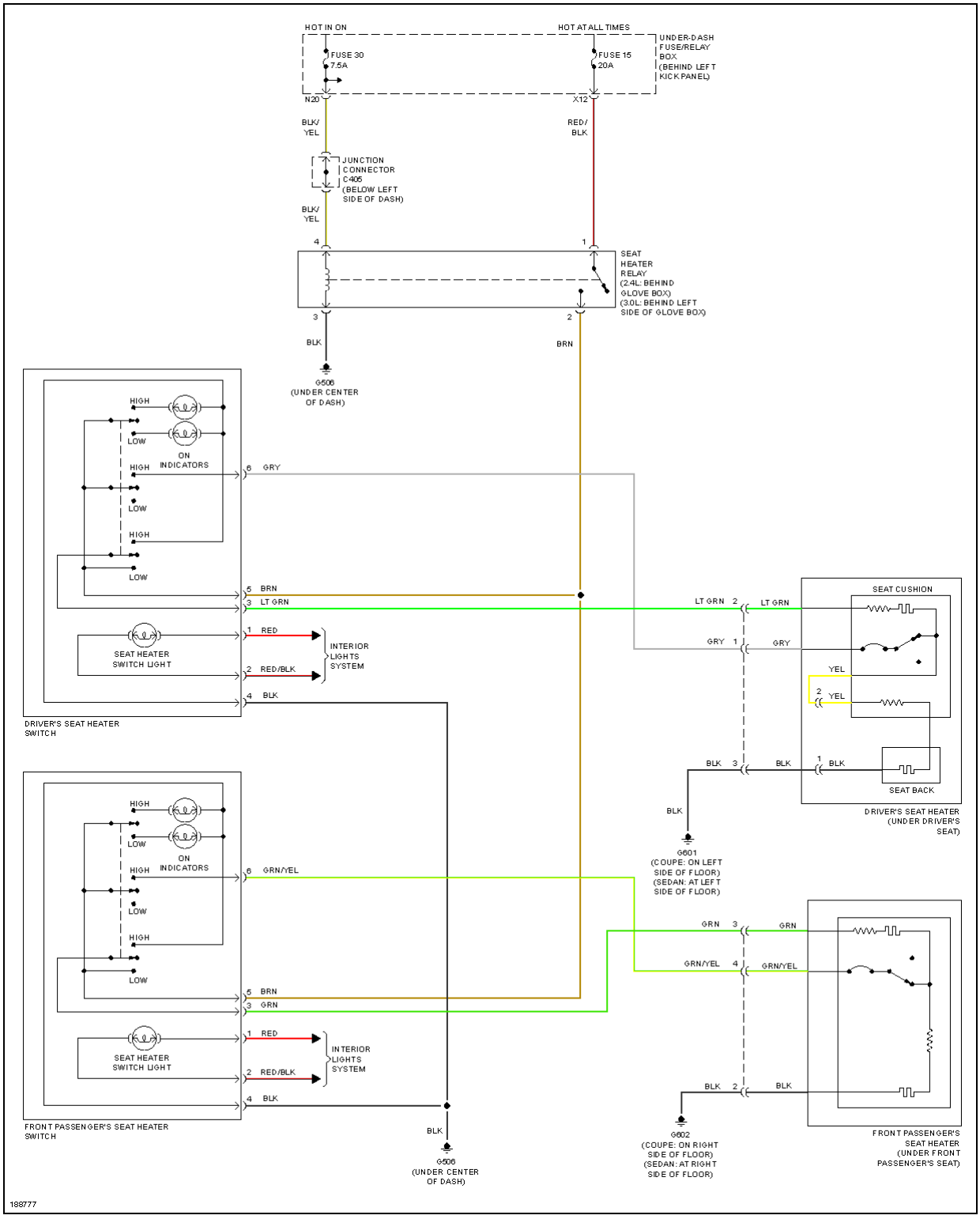


Fig. 68: Heated Seats Circuit

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

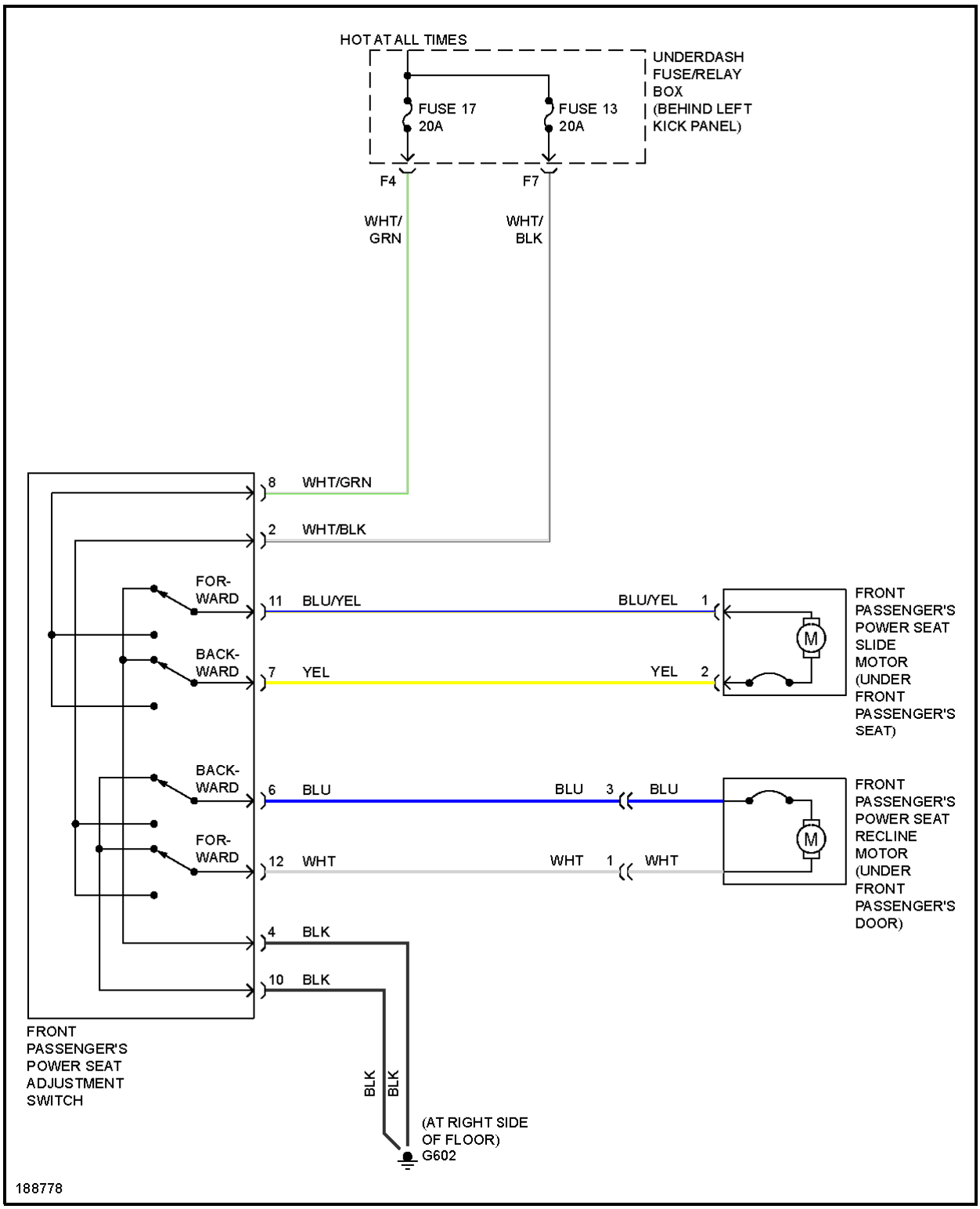


Fig. 69: Passenger"s Power Seat Circuit

POWER TOP/SUNROOF

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

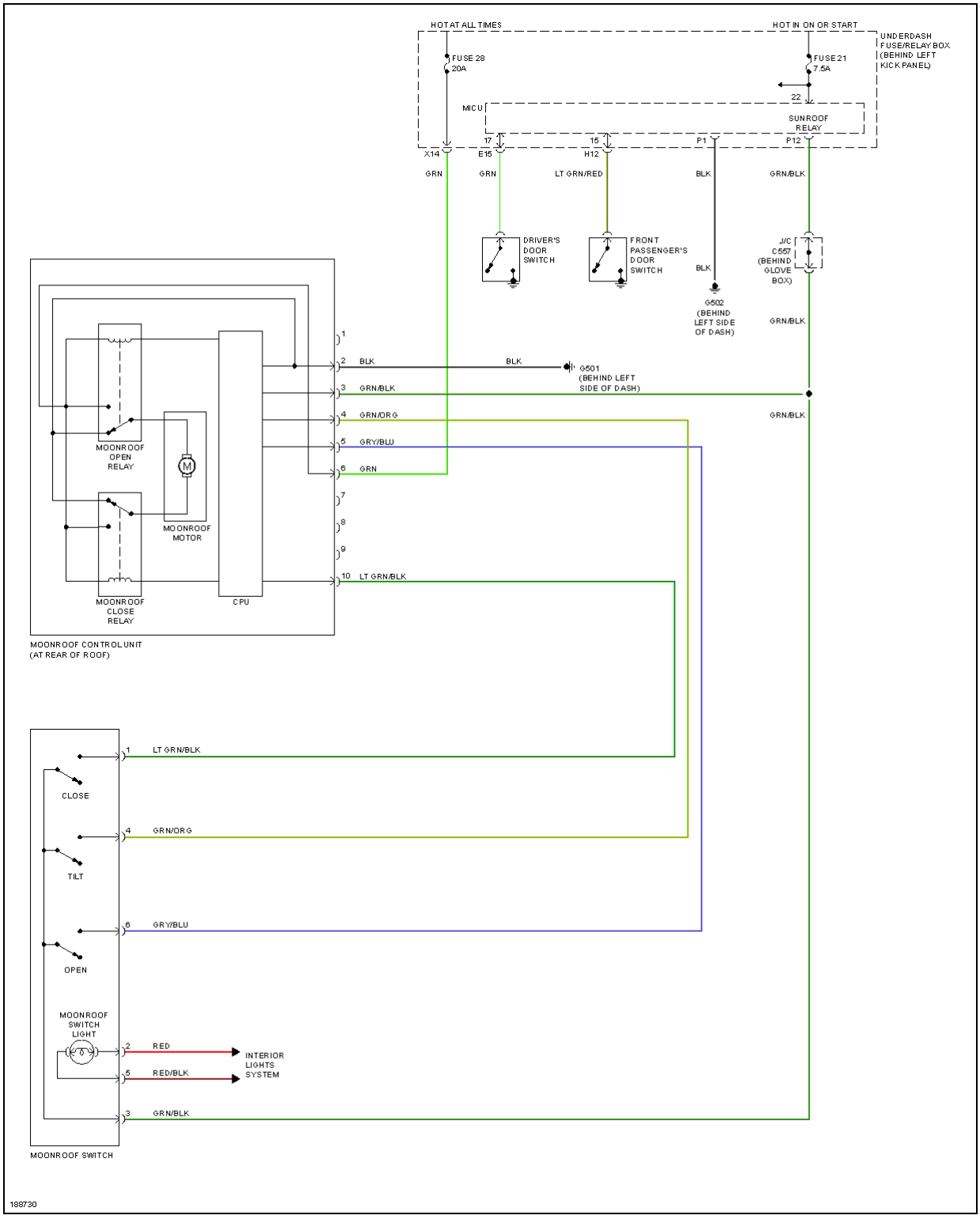


Fig. 70: Power Top/Sunroof Circuit, Coupe

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

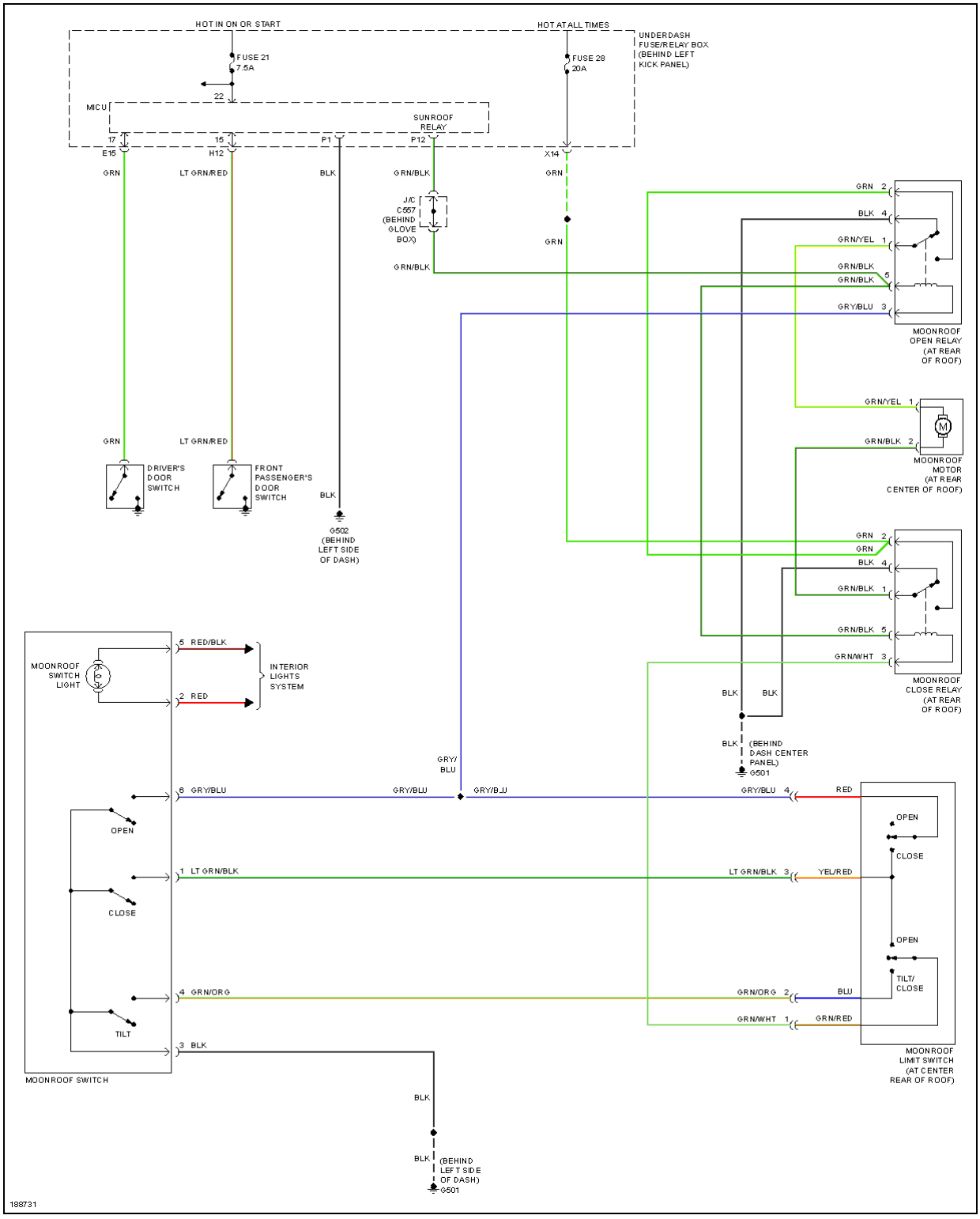


Fig. 71: Power Top/Sunroof Circuit, Sedan

POWER WINDOWS

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

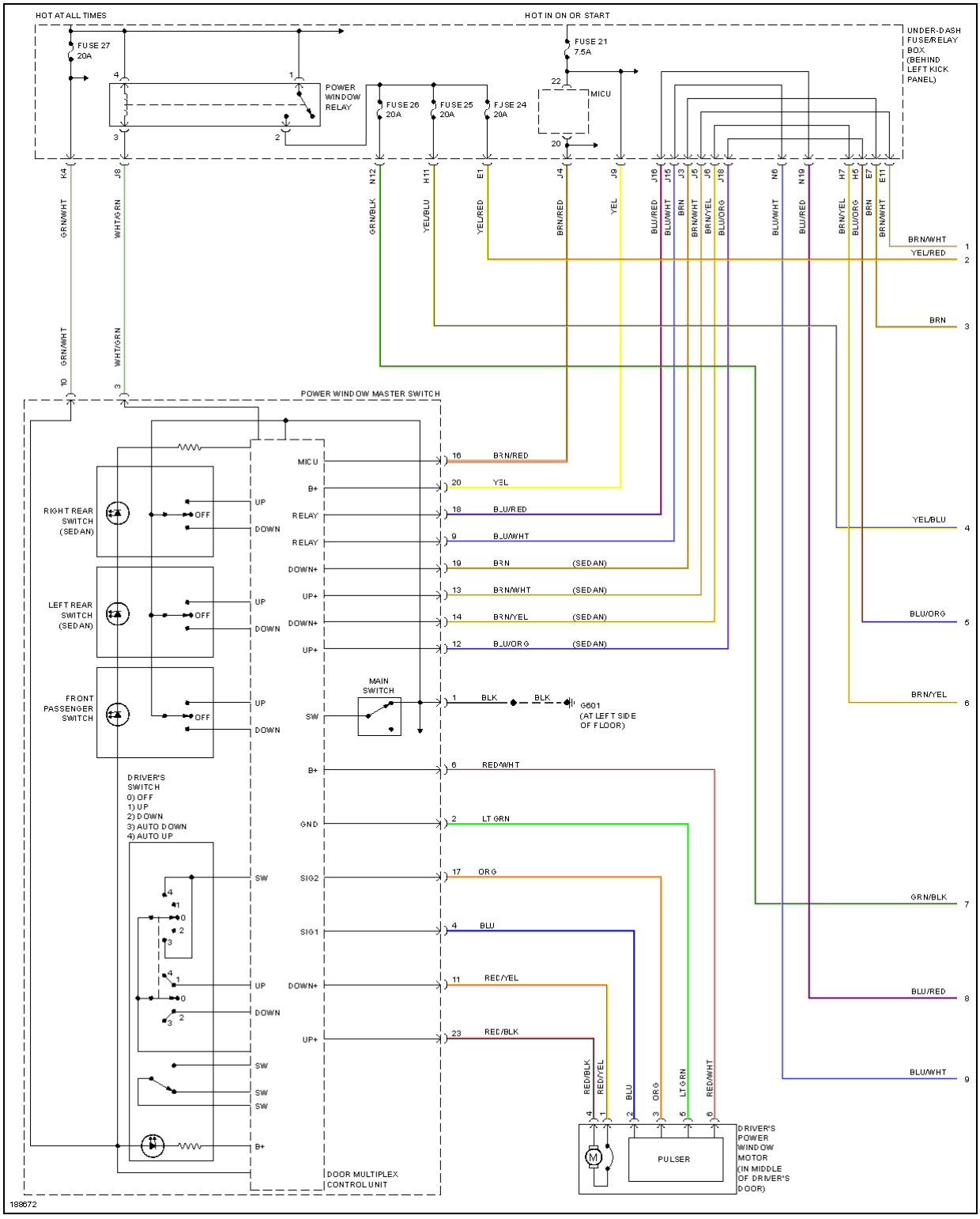


Fig. 72: Power Windows Circuit (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

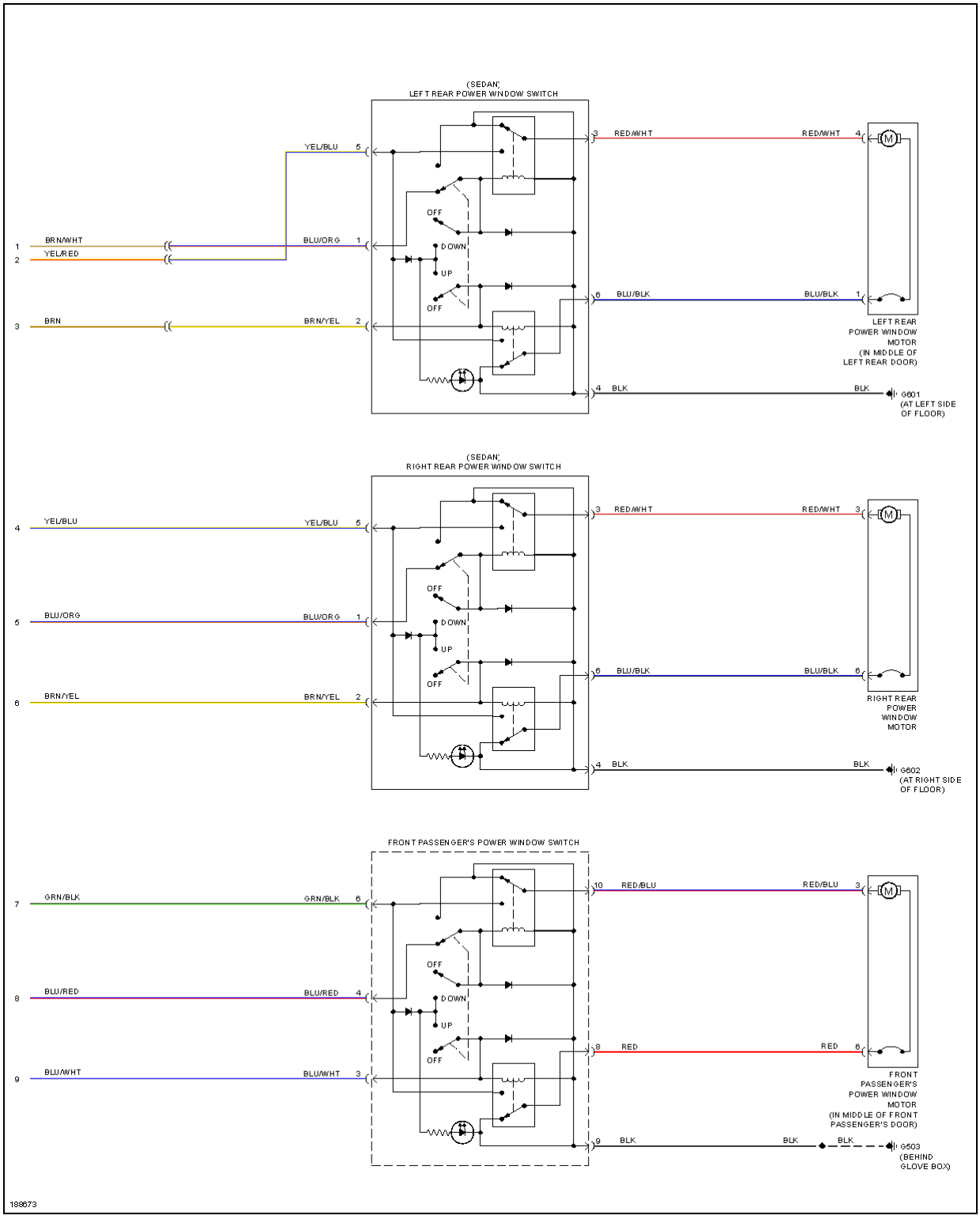


Fig. 73: Power Windows Circuit (2 of 2)

RADIO

2.4L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

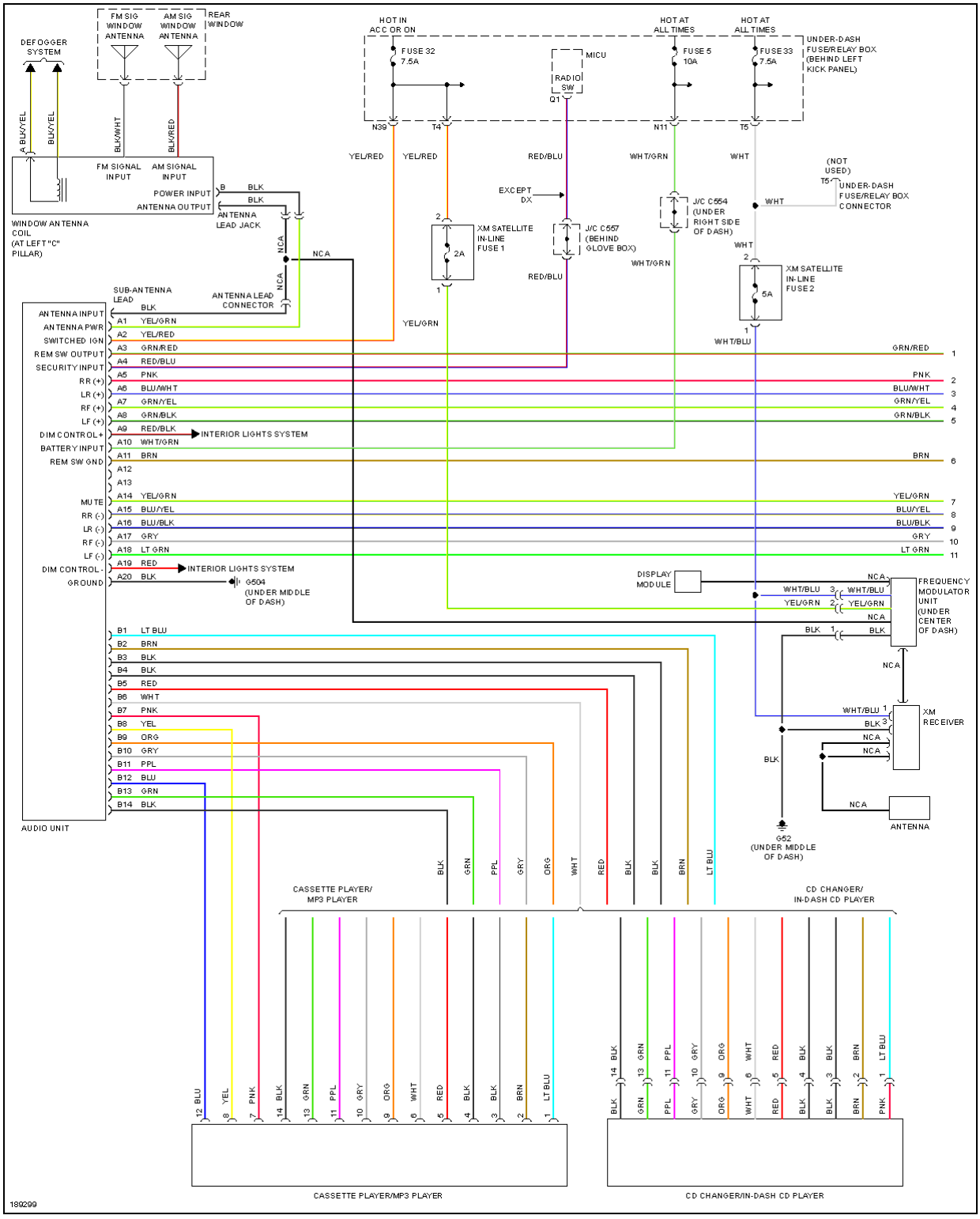


Fig. 74: 2.4L, Radio Circuit, DX, LX, EX Sedan & A/T Coupe (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

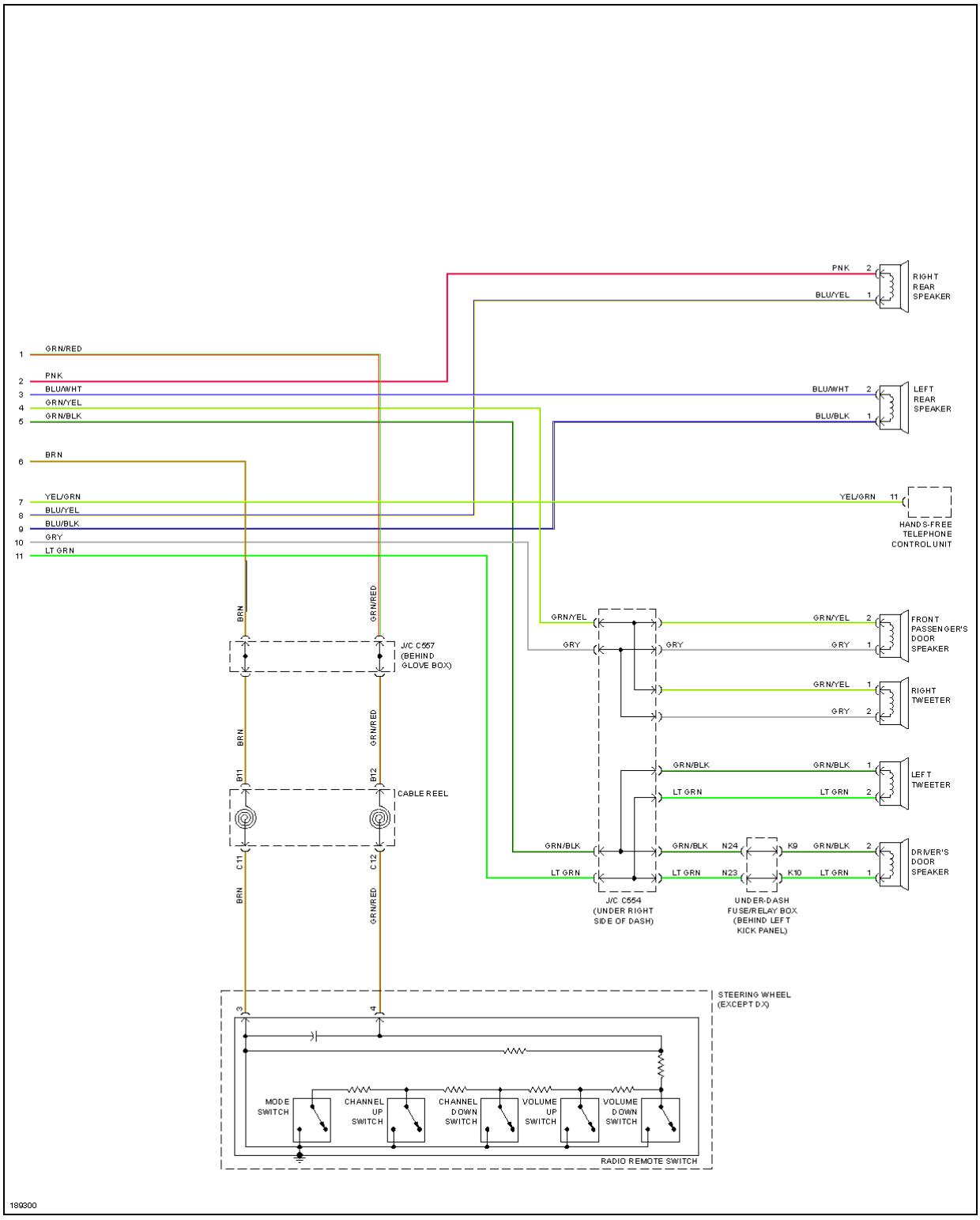


Fig. 75: 2.4L, Radio Circuit, DX, LX, EX Sedan & A/T Coupe (2 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

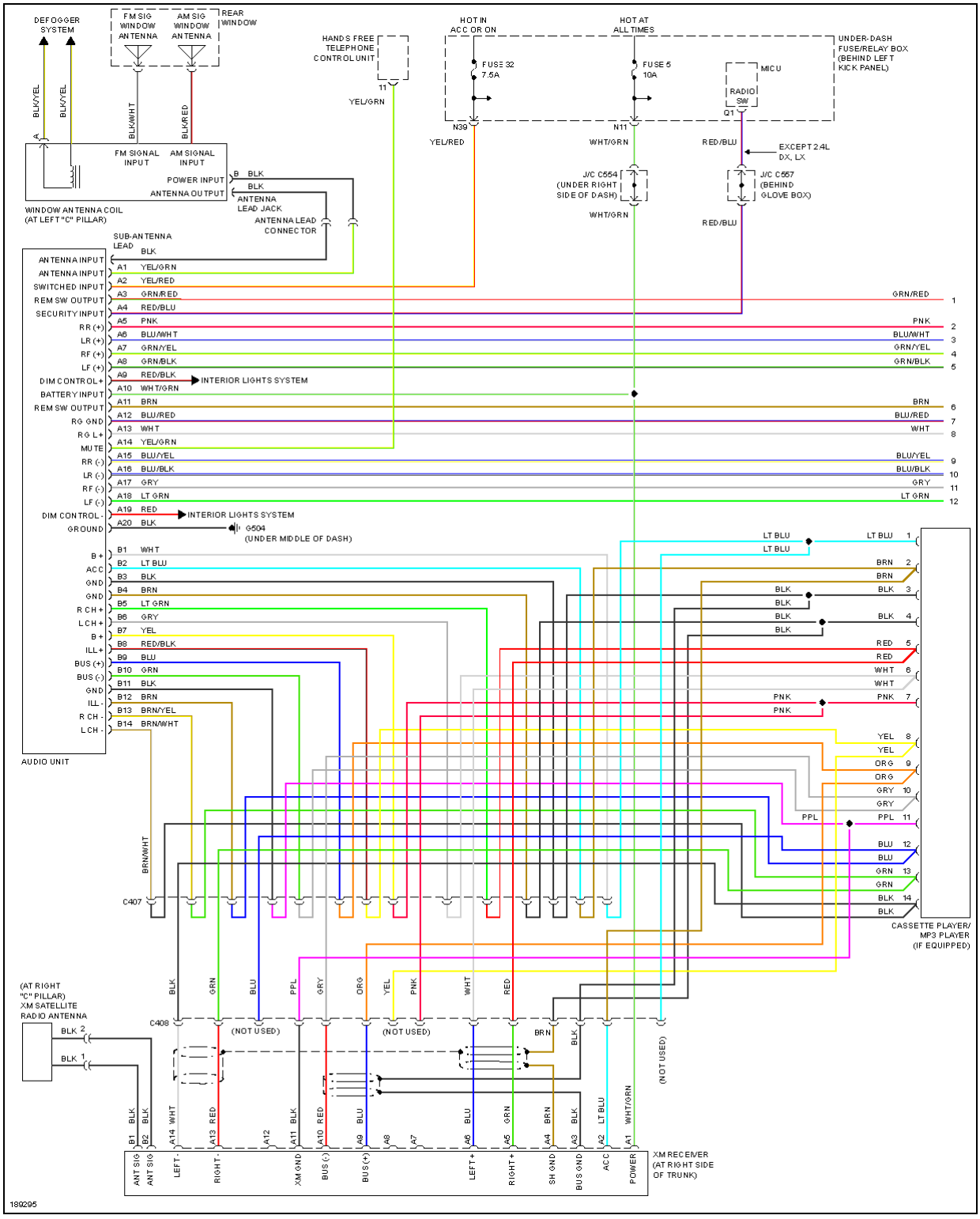


Fig. 76: 2.4L, Radio Circuit, EX-L Sedan & A/T Coupe (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

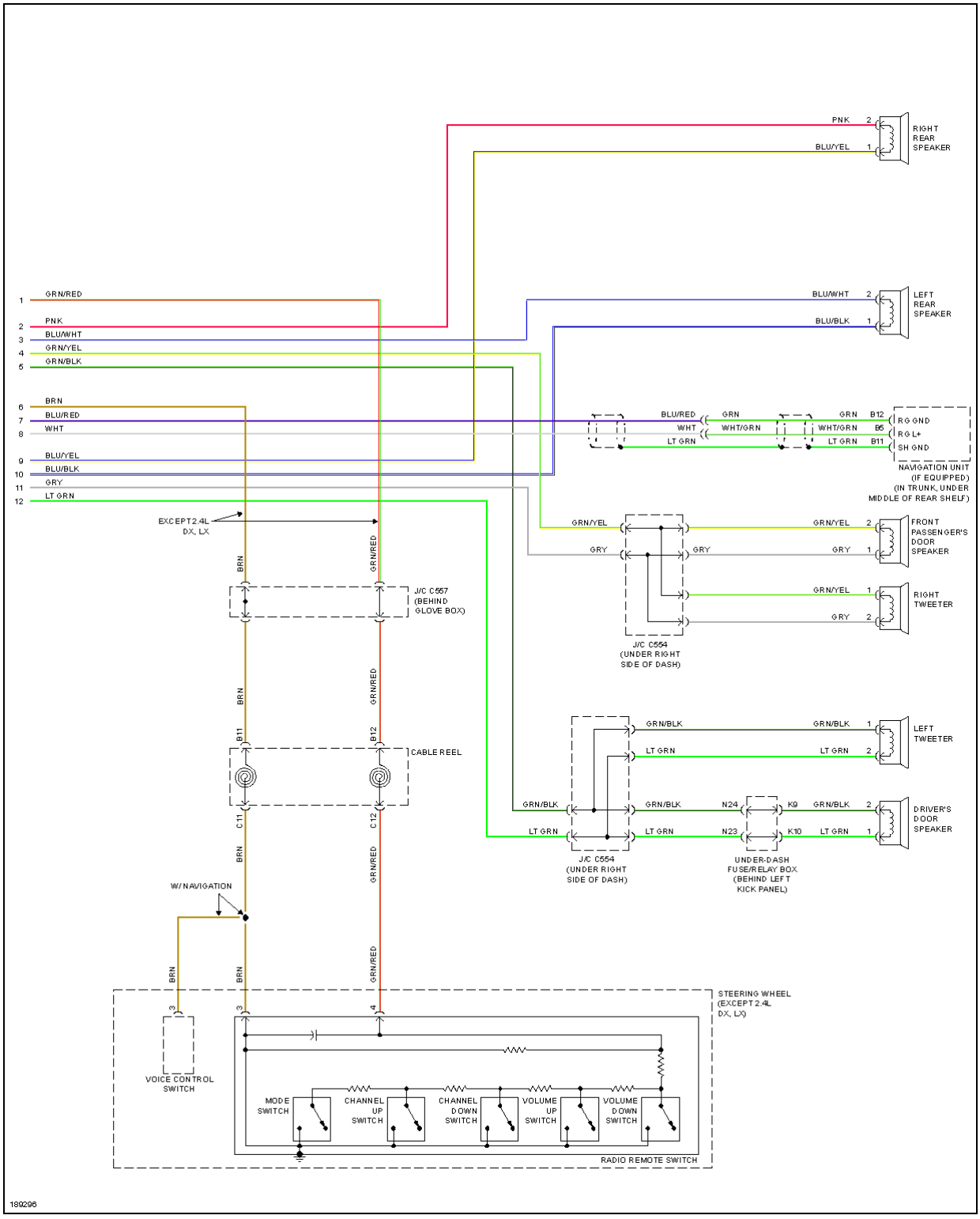


Fig. 77: 2.4L, Radio Circuit, EX-L Sedan & A/T Coupe (2 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

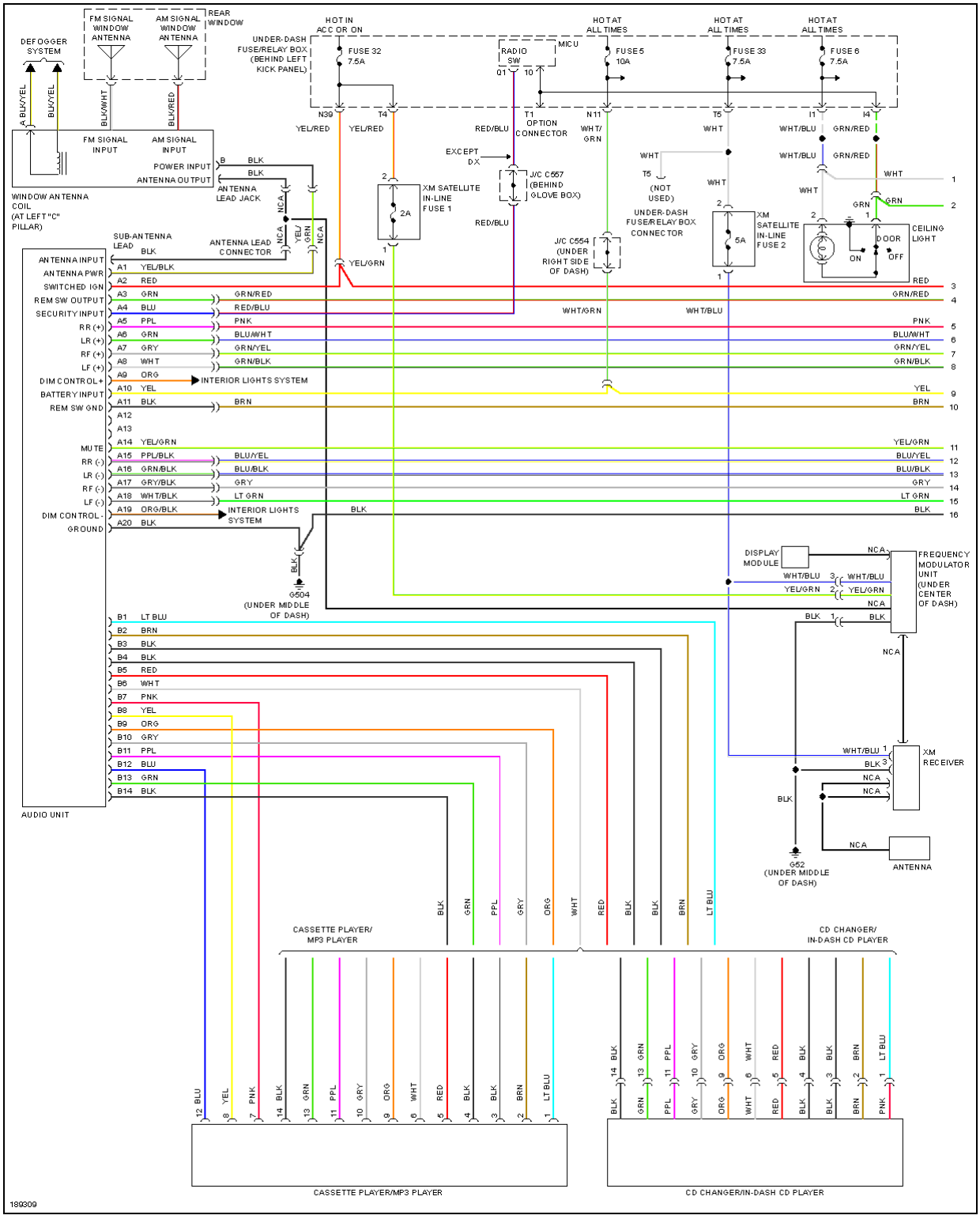


Fig. 78: 2.4L, Rear Seat Entertainment Circuit, DX, LX, EX Sedan & A/T Coupe (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

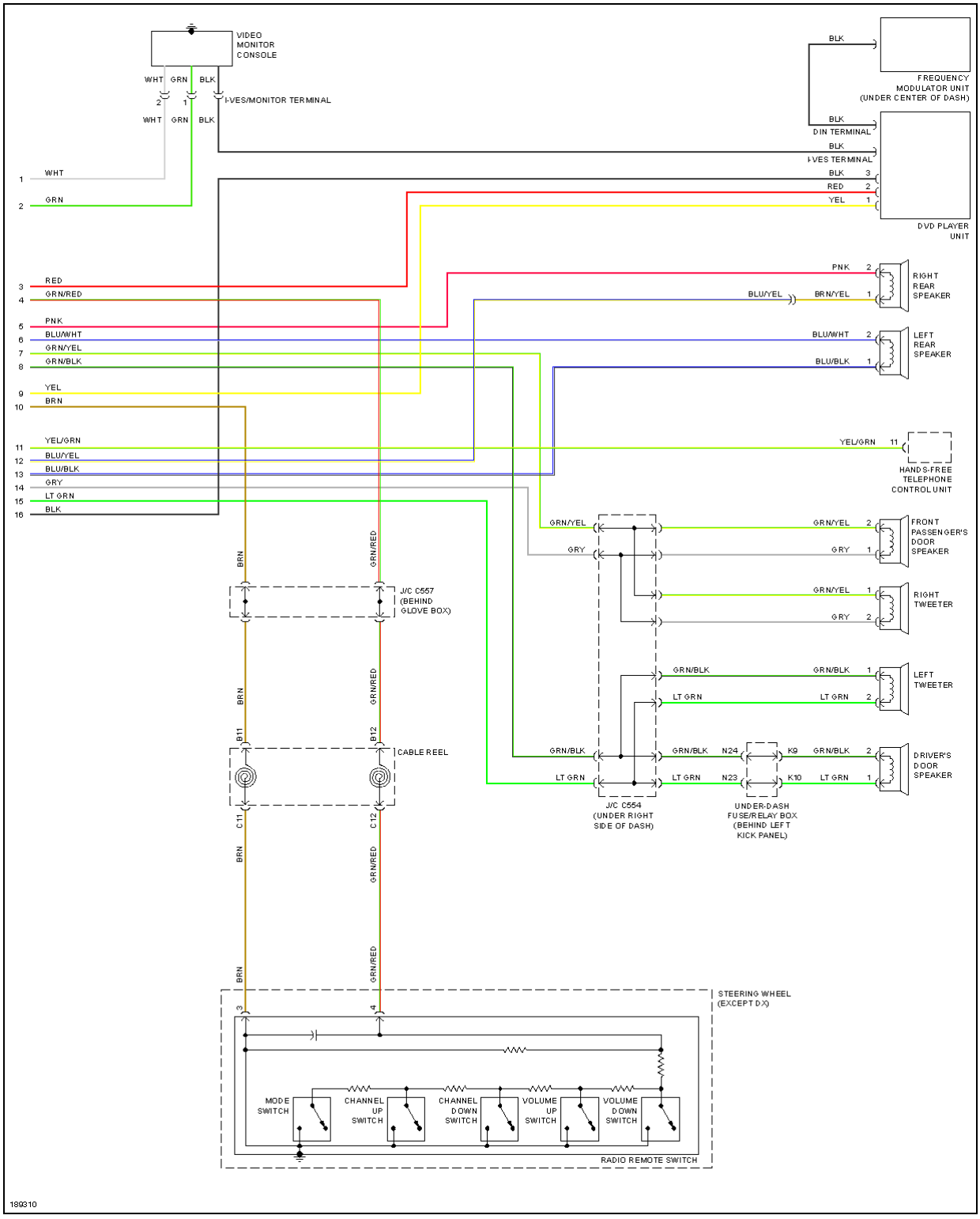


Fig. 79: 2.4L, Rear Seat Entertainment Circuit, DX, LX, EX Sedan & A/T Coupe (2 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

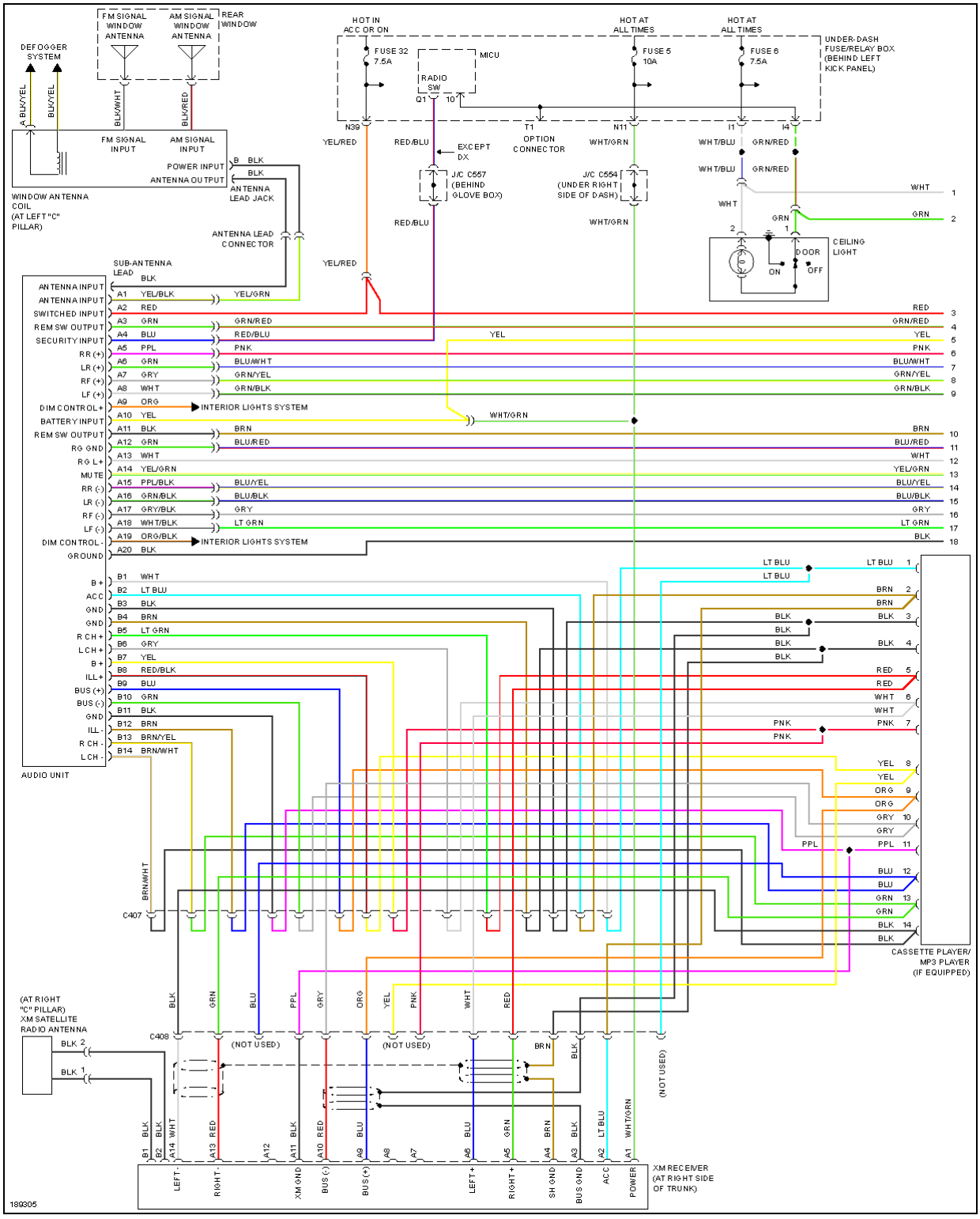


Fig. 80: 2.4L, Rear Seat Entertainment Circuit, EX-L Sedan & A/T Coupe (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

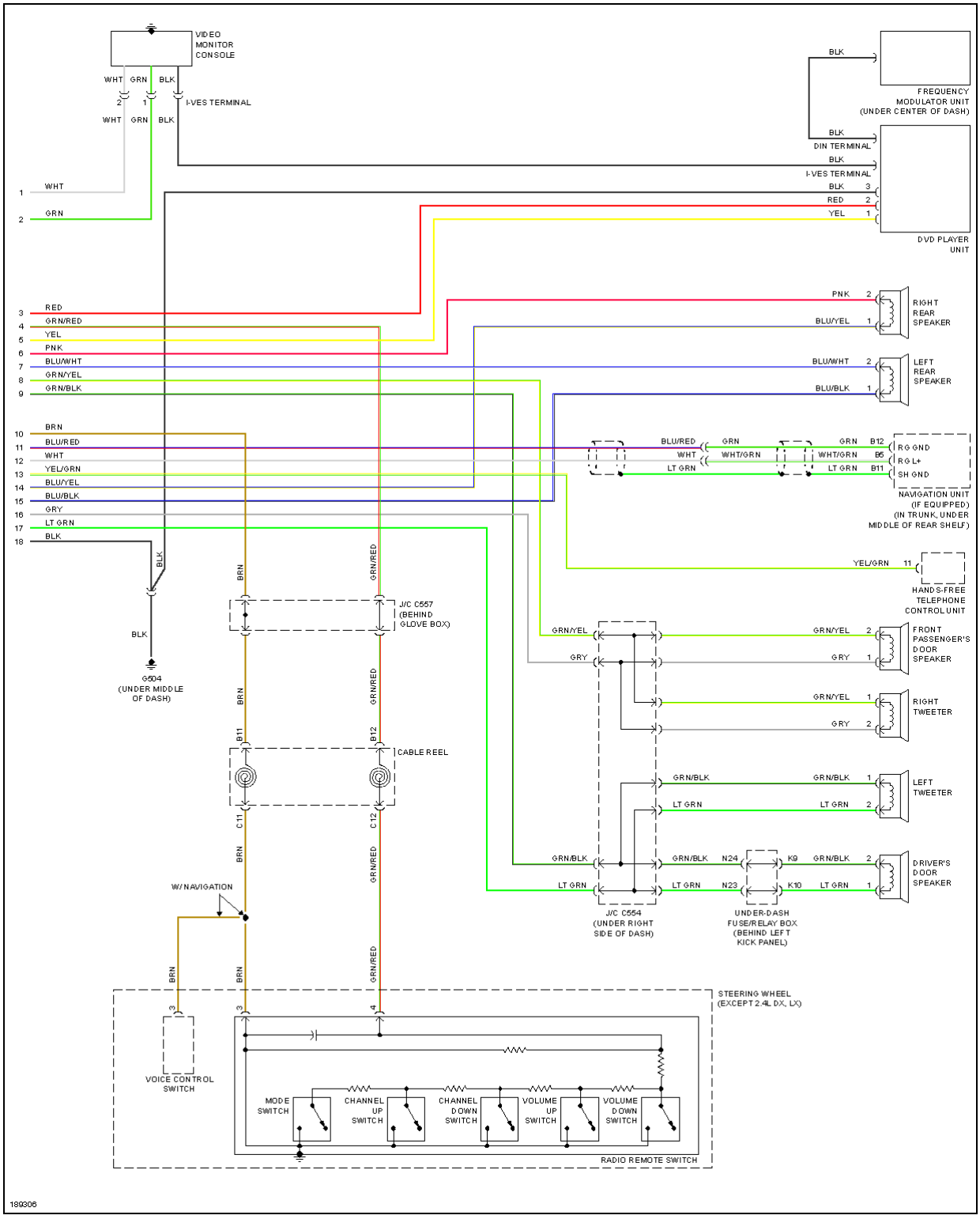


Fig. 81: 2.4L, Rear Seat Entertainment Circuit, EX-L Sedan & A/T Coupe (2 of 2)

3.0L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

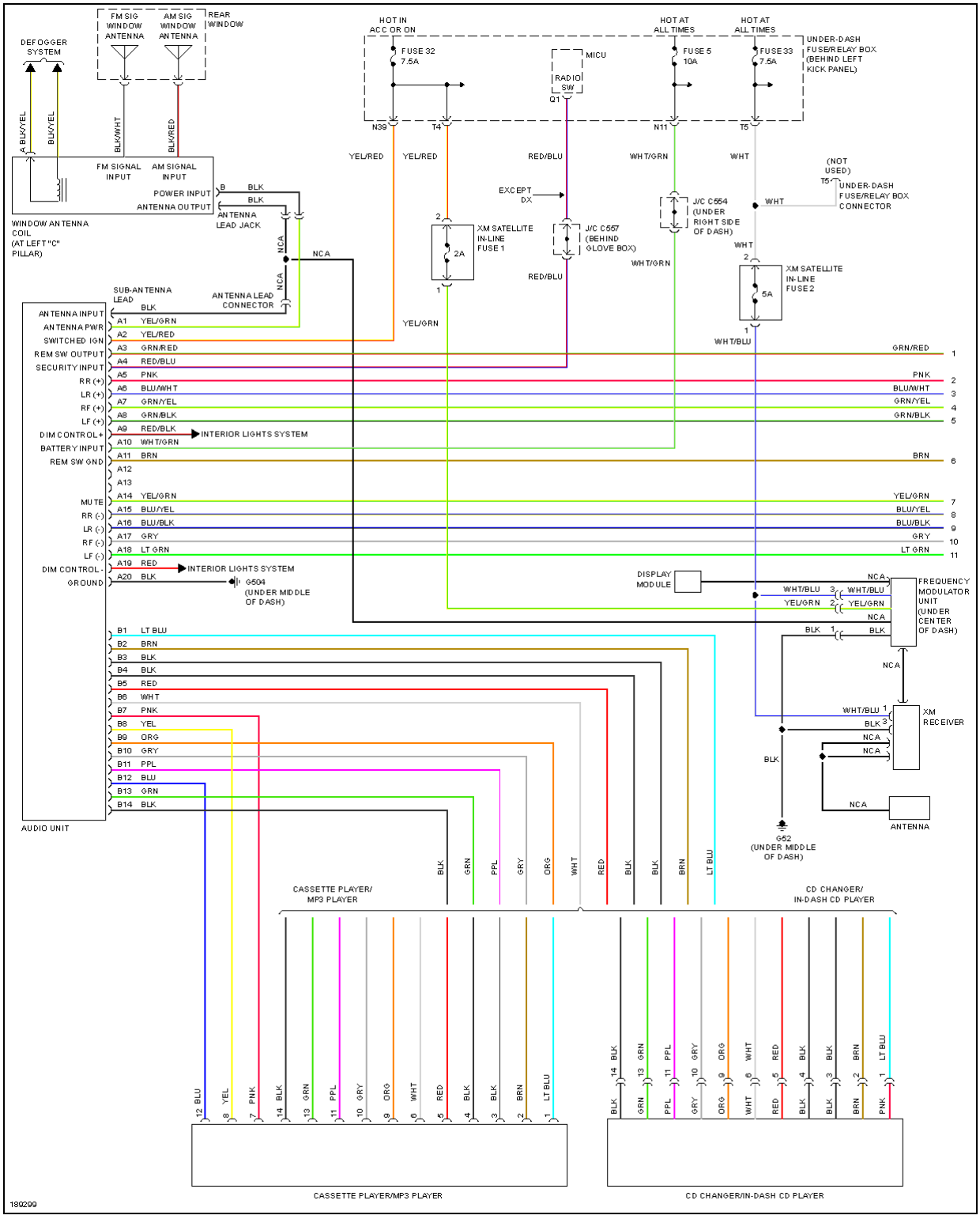


Fig. 82: 3.0L, Radio Circuit, DX, LX, EX Sedan & A/T Coupe (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

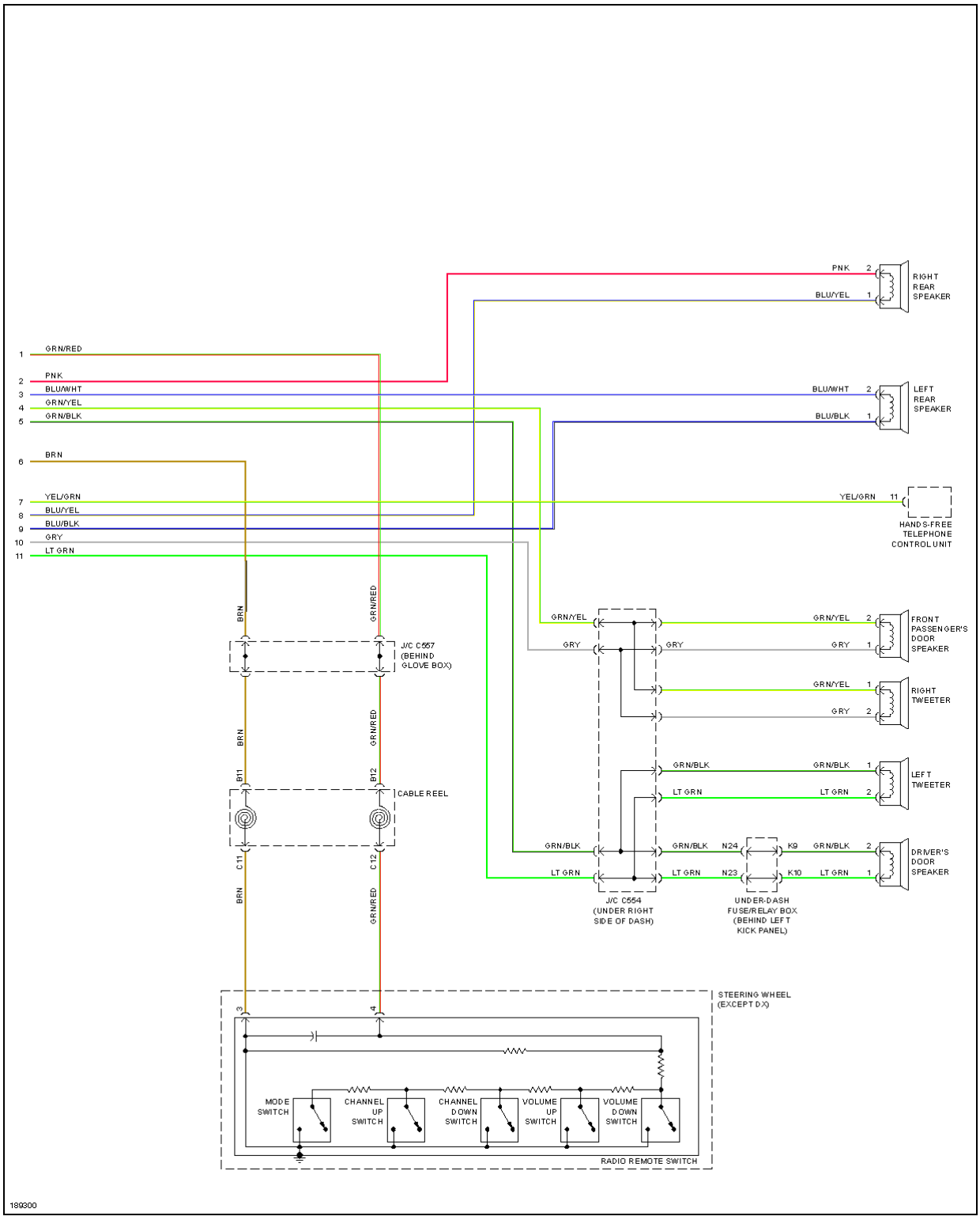


Fig. 83: 3.0L, Radio Circuit, DX, LX, EX Sedan & A/T Coupe (2 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

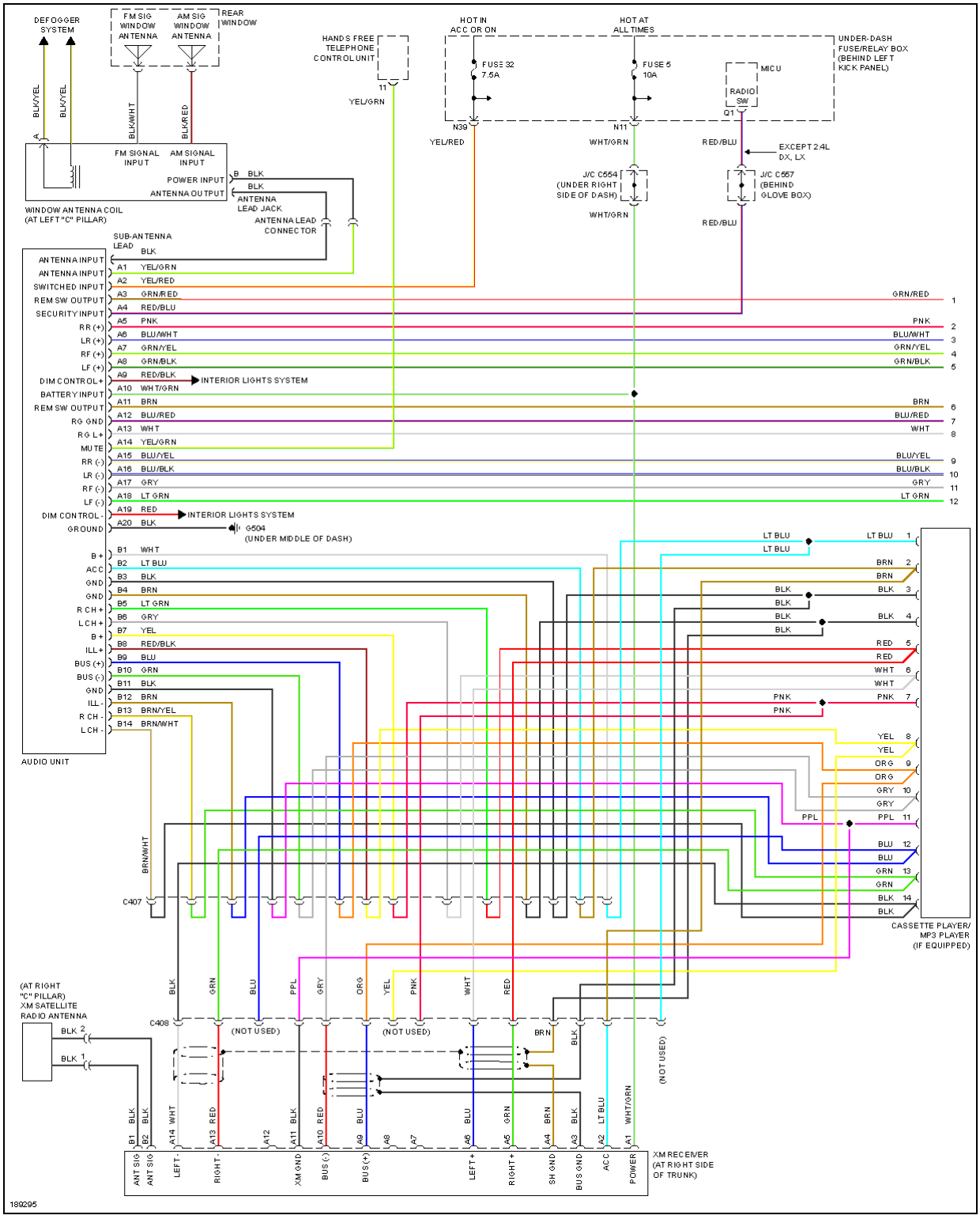


Fig. 84: 3.0L, Radio Circuit, EX-L Sedan & A/T Coupe (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

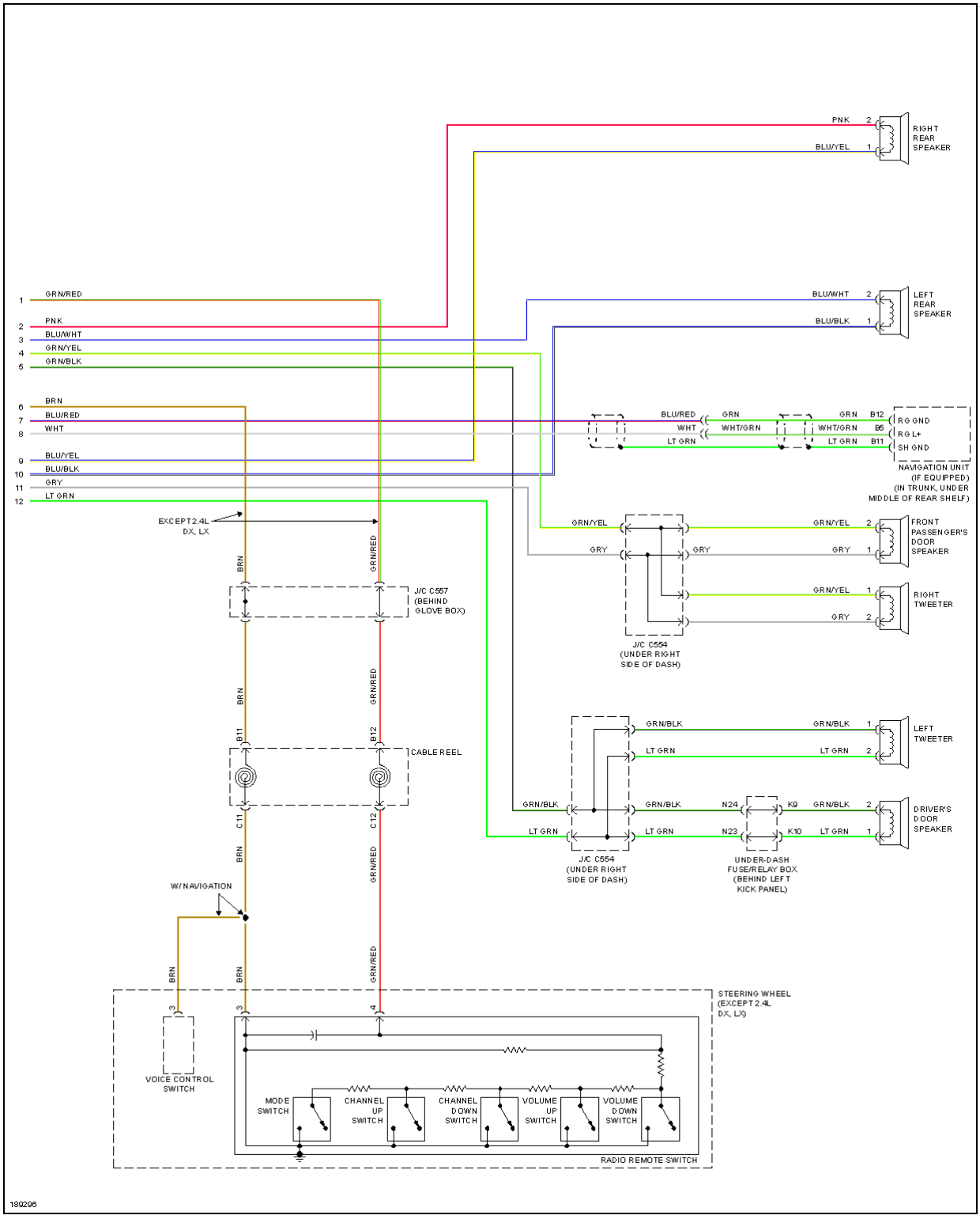


Fig. 85: 3.0L, Radio Circuit, EX-L Sedan & A/T Coupe (2 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

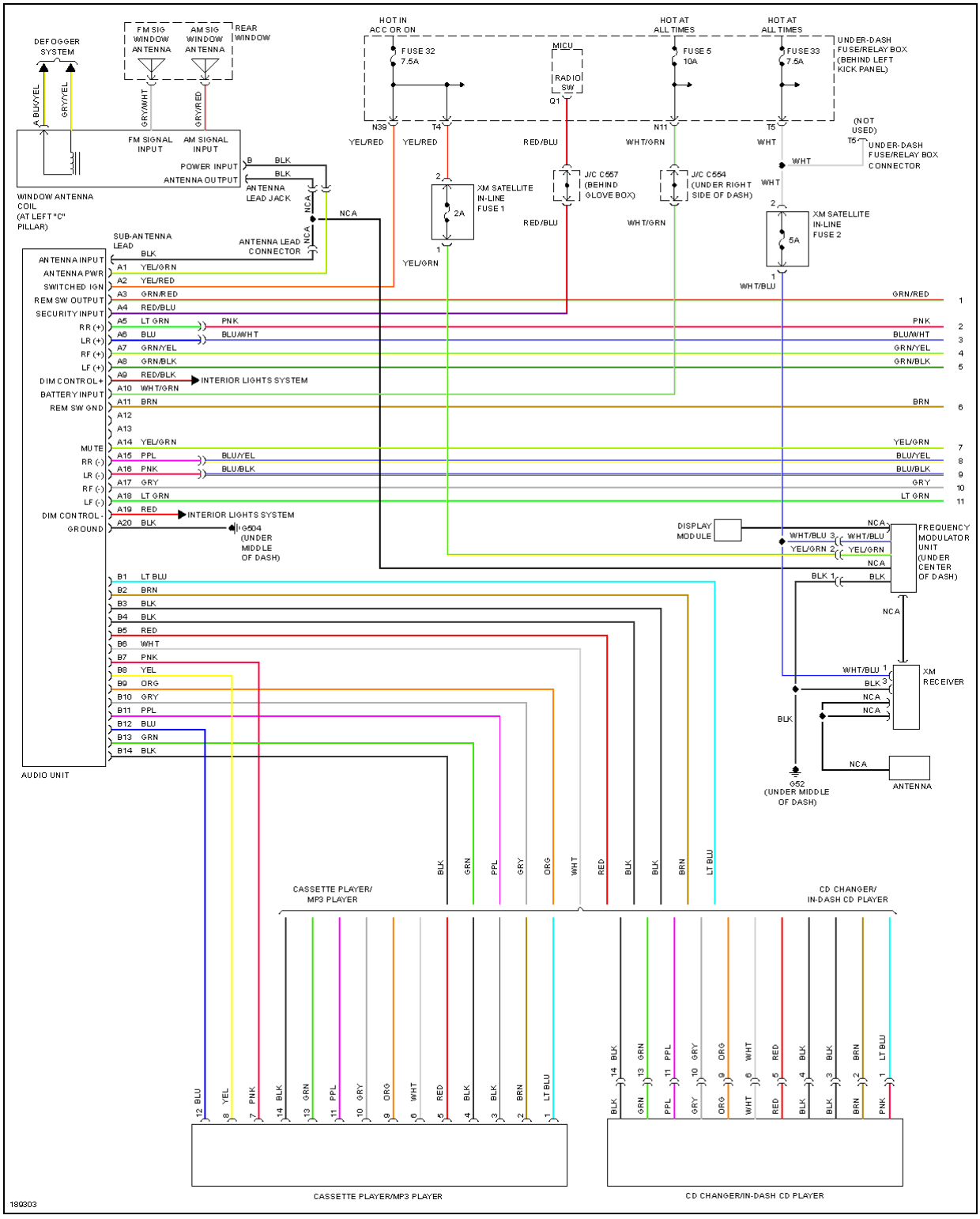


Fig. 86: 3.0L, Radio Circuit, DX, LX, EX M/T Coupe (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

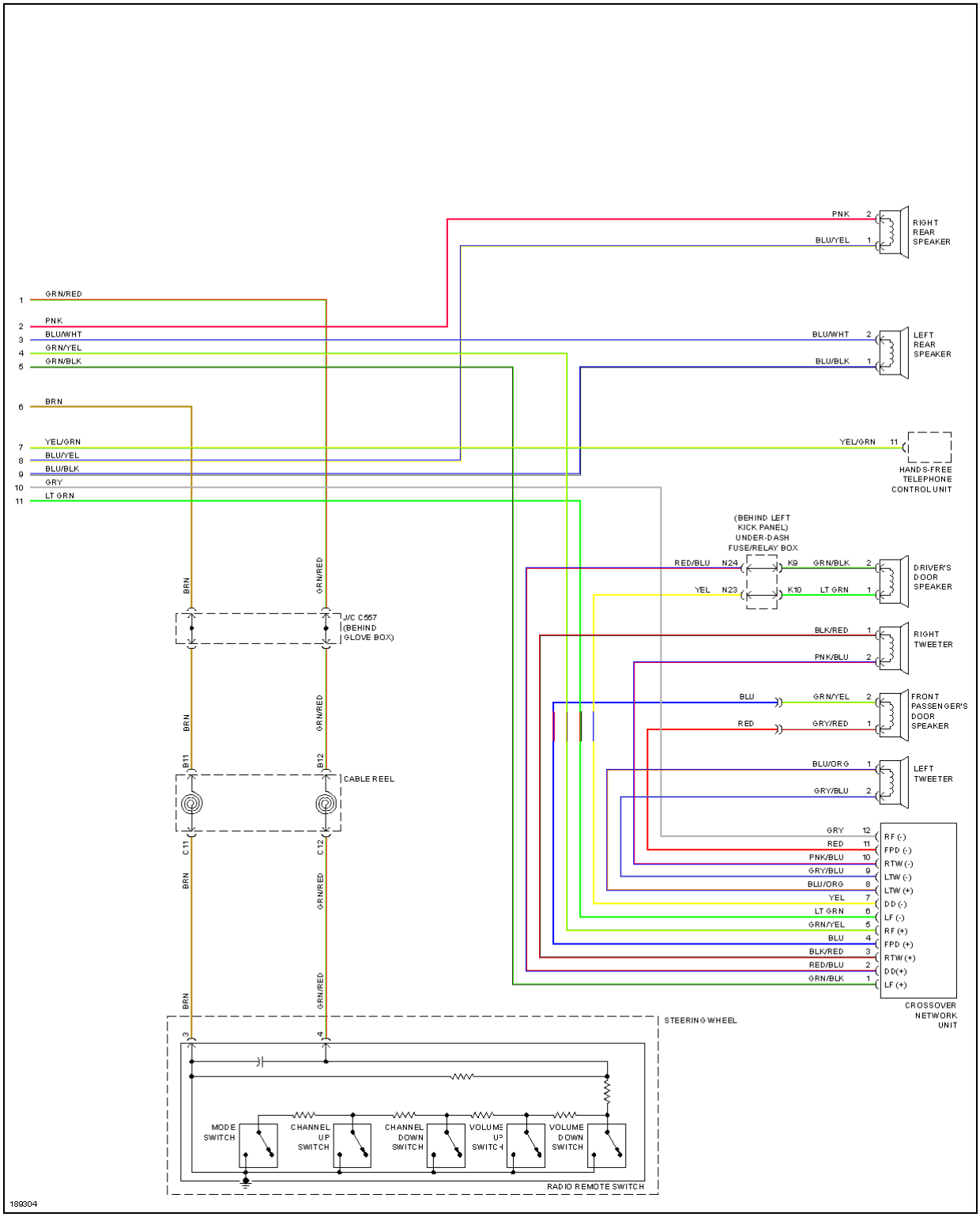


Fig. 87: 3.0L, Radio Circuit, DX, LX, EX M/T Coupe (2 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

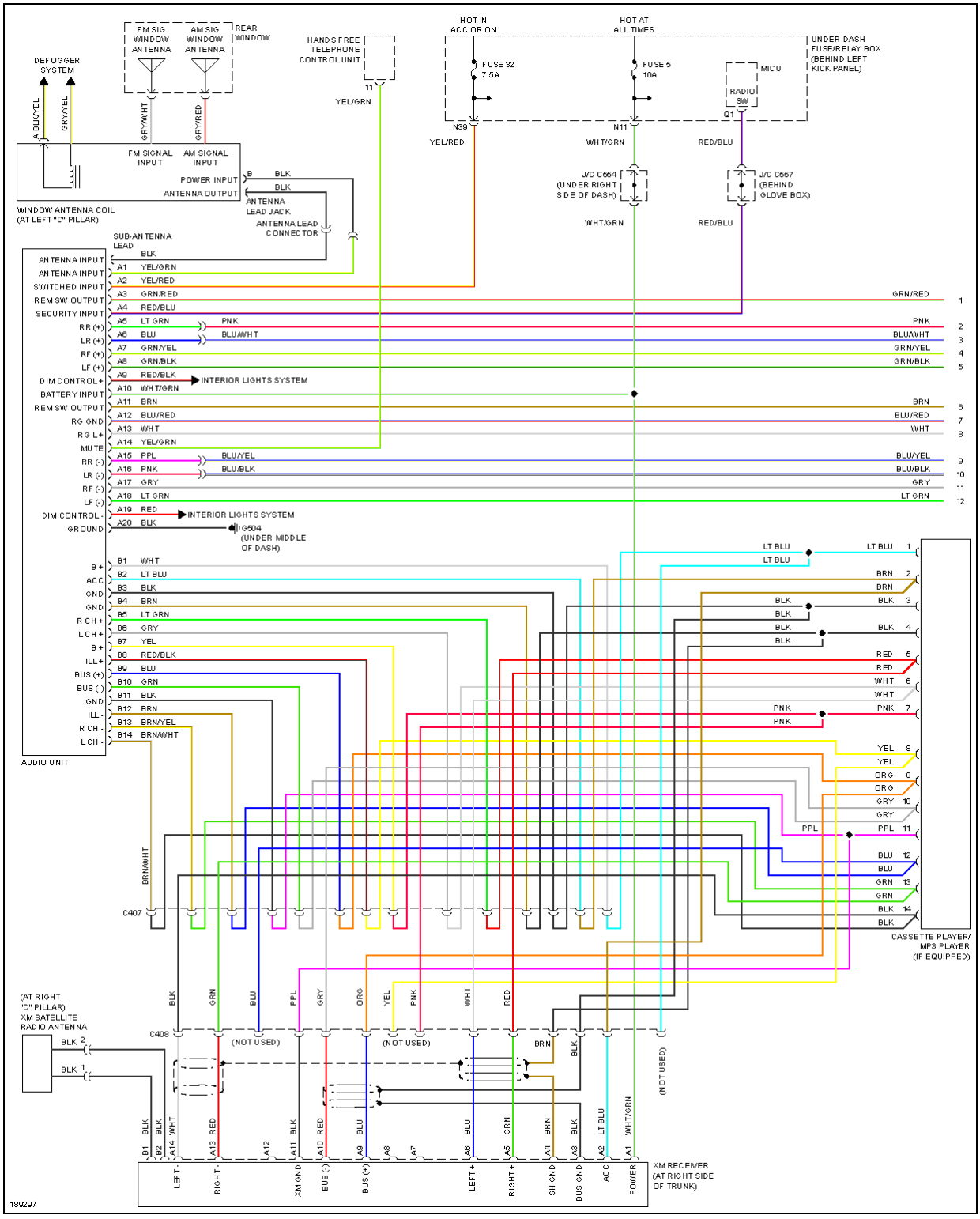


Fig. 88: 3.0L, Radio Circuit, EX-L Coupe M/T (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

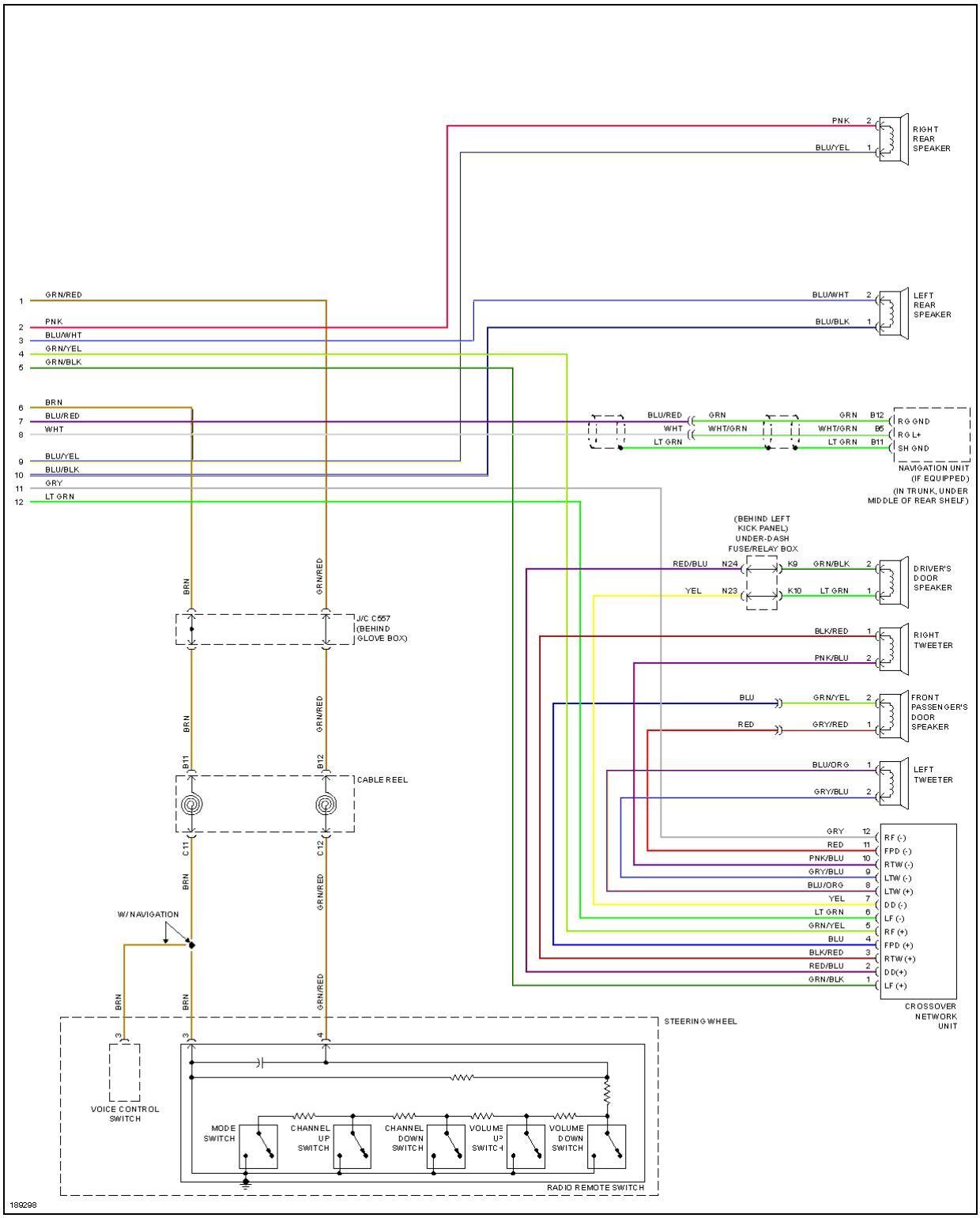


Fig. 89: 3.0L, Radio Circuit, EX-L Coupe M/T (2 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

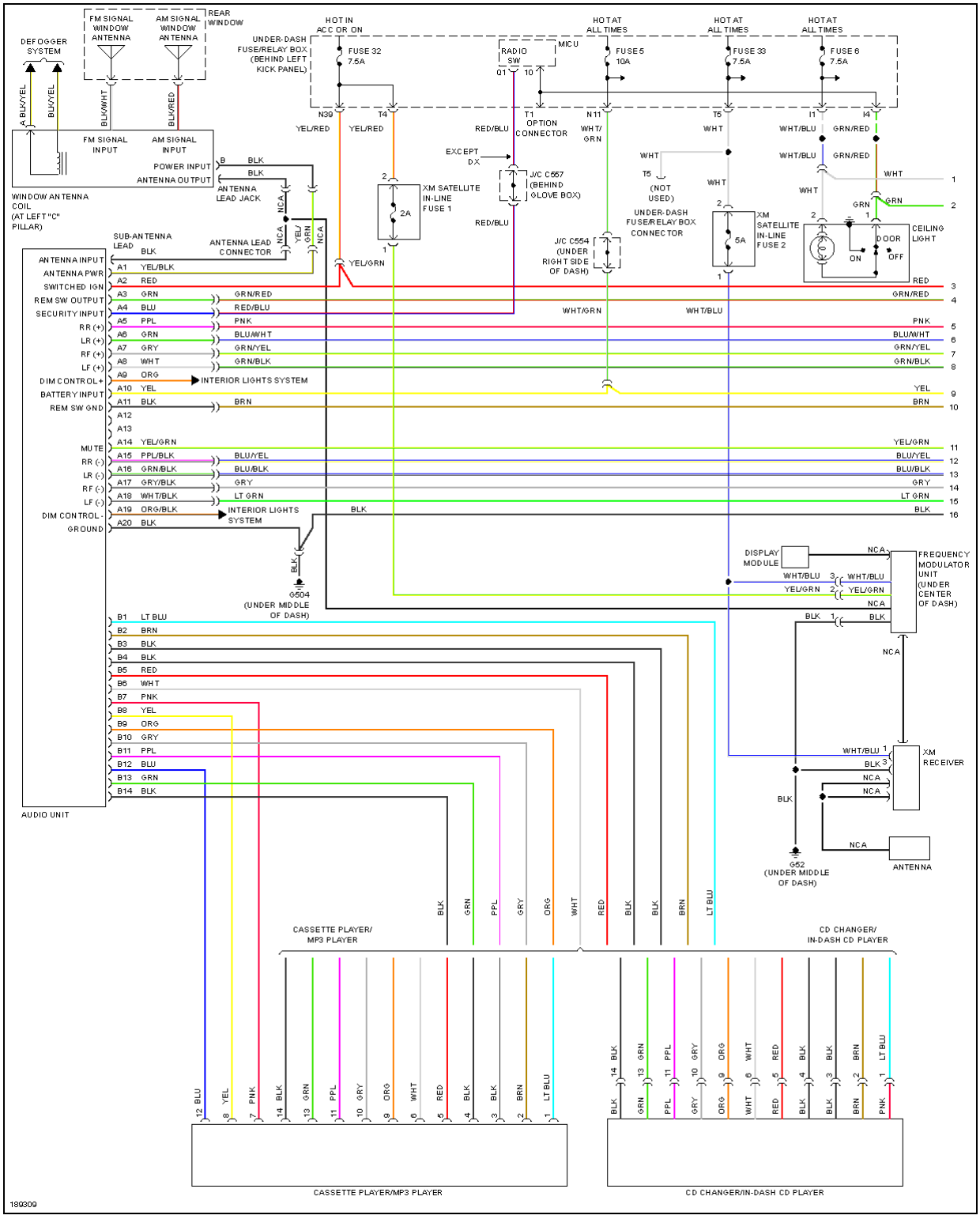


Fig. 90: 3.0L, Rear Seat Entertainment Circuit, DX, LX, EX Sedan & A/T Coupe (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

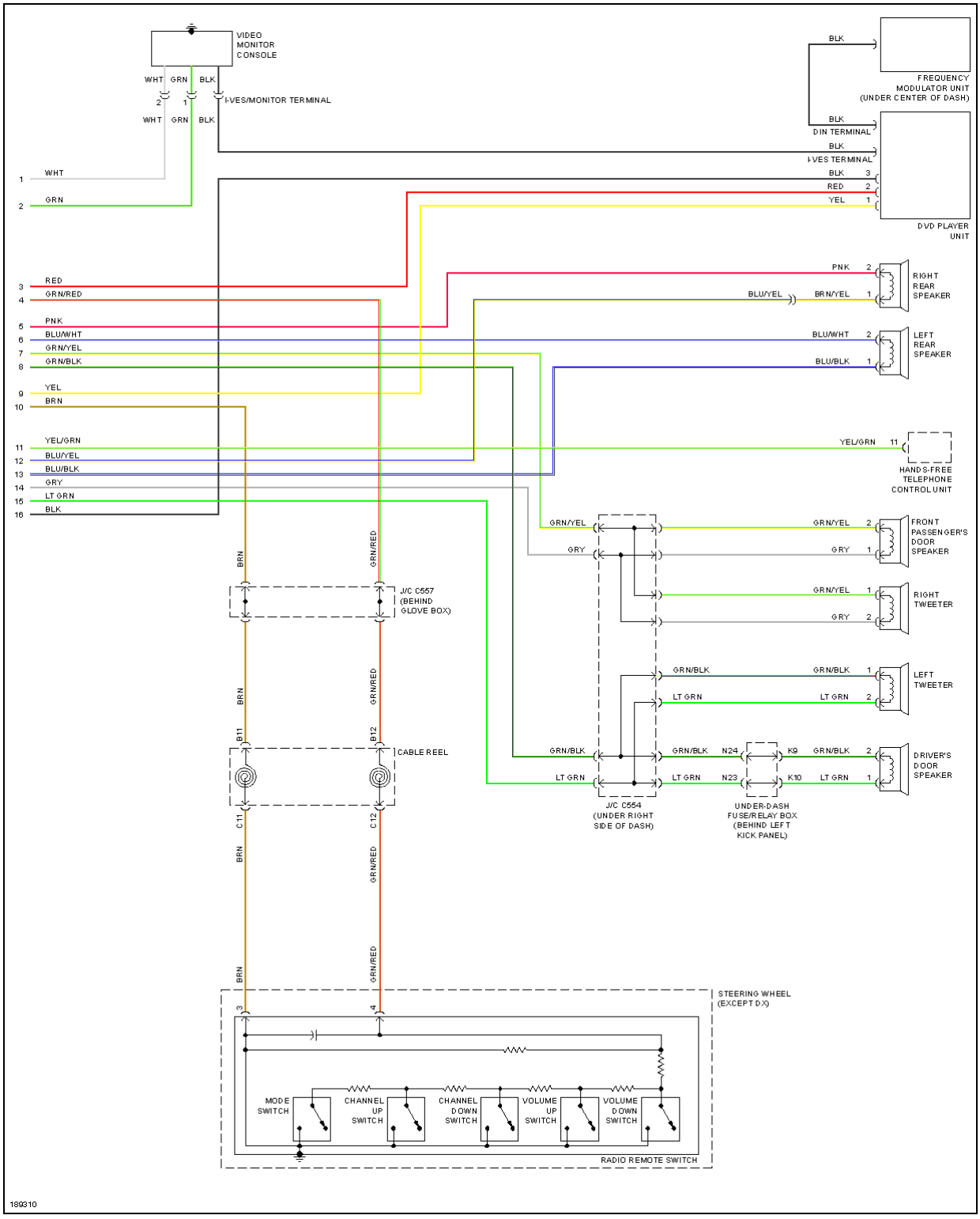


Fig. 91: 3.0L, Rear Seat Entertainment Circuit, DX, LX, EX Sedan & A/T Coupe (2 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

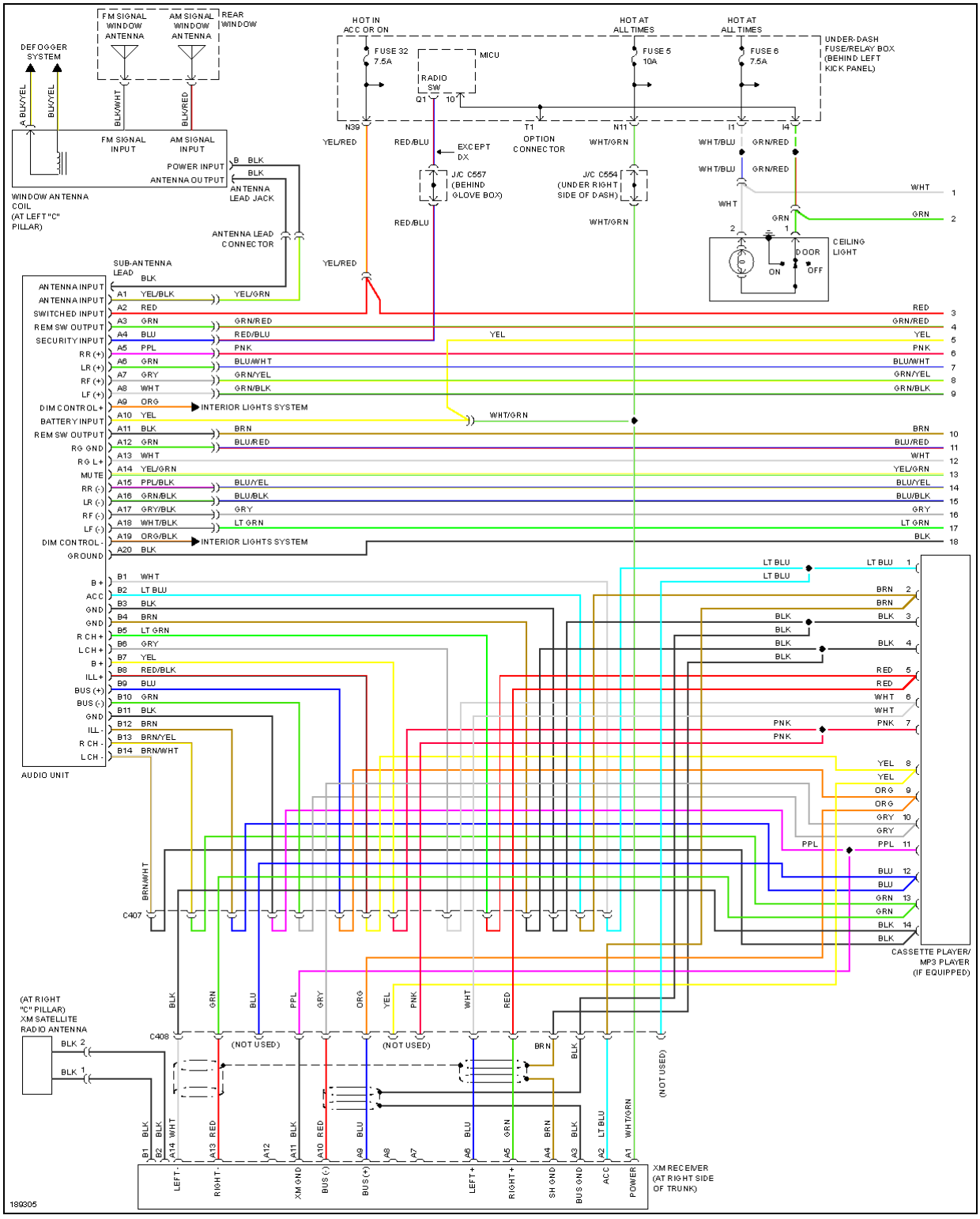


Fig. 92: 3.0L, Rear Seat Entertainment Circuit, EX-L Sedan & A/T Coupe (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

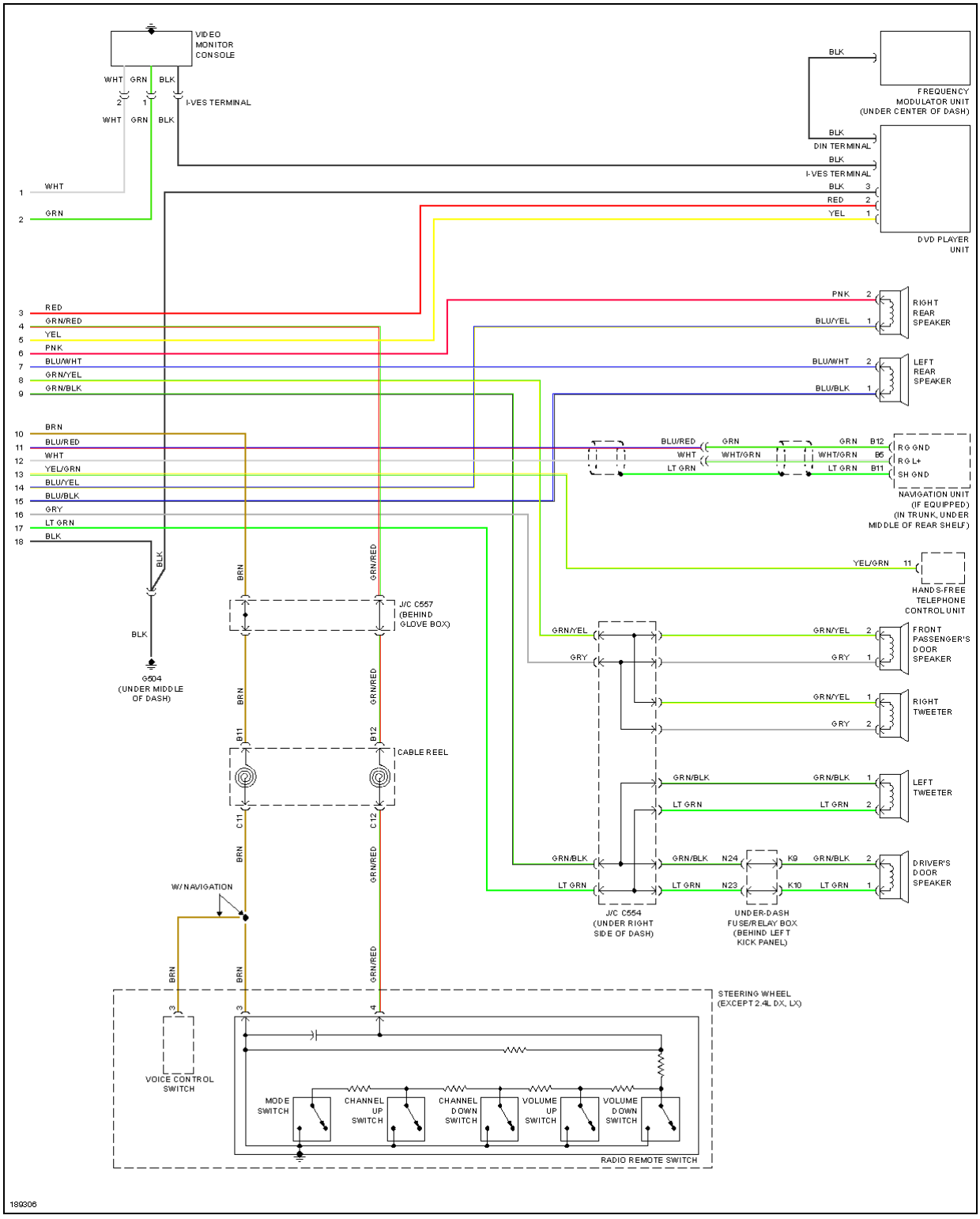


Fig. 93: 3.0L, Rear Seat Entertainment Circuit, EX-L Sedan & A/T Coupe (2 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

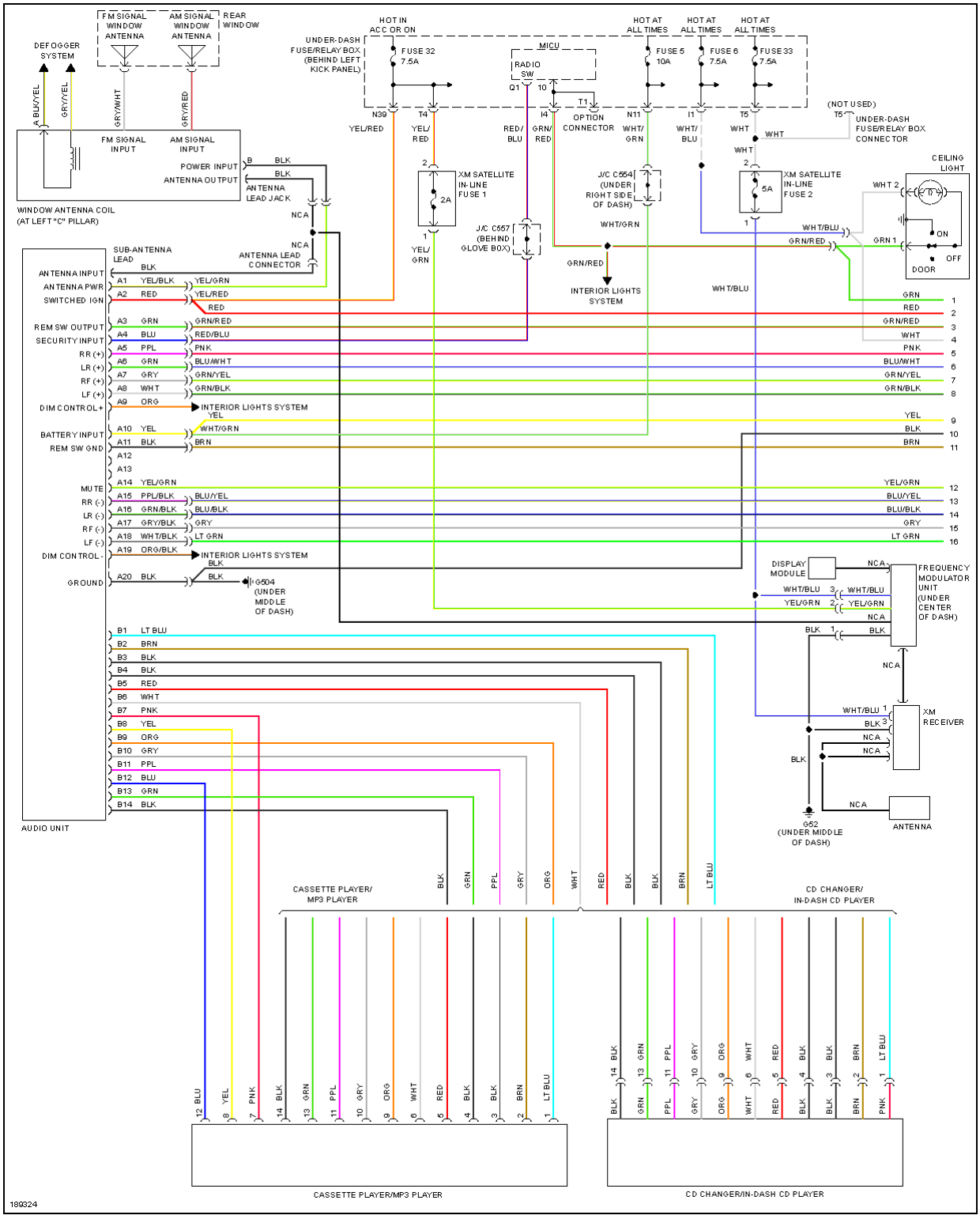


Fig. 94: 3.0L, Rear Seat Entertainment Circuit, DX, LX, EX M/T Coupe (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

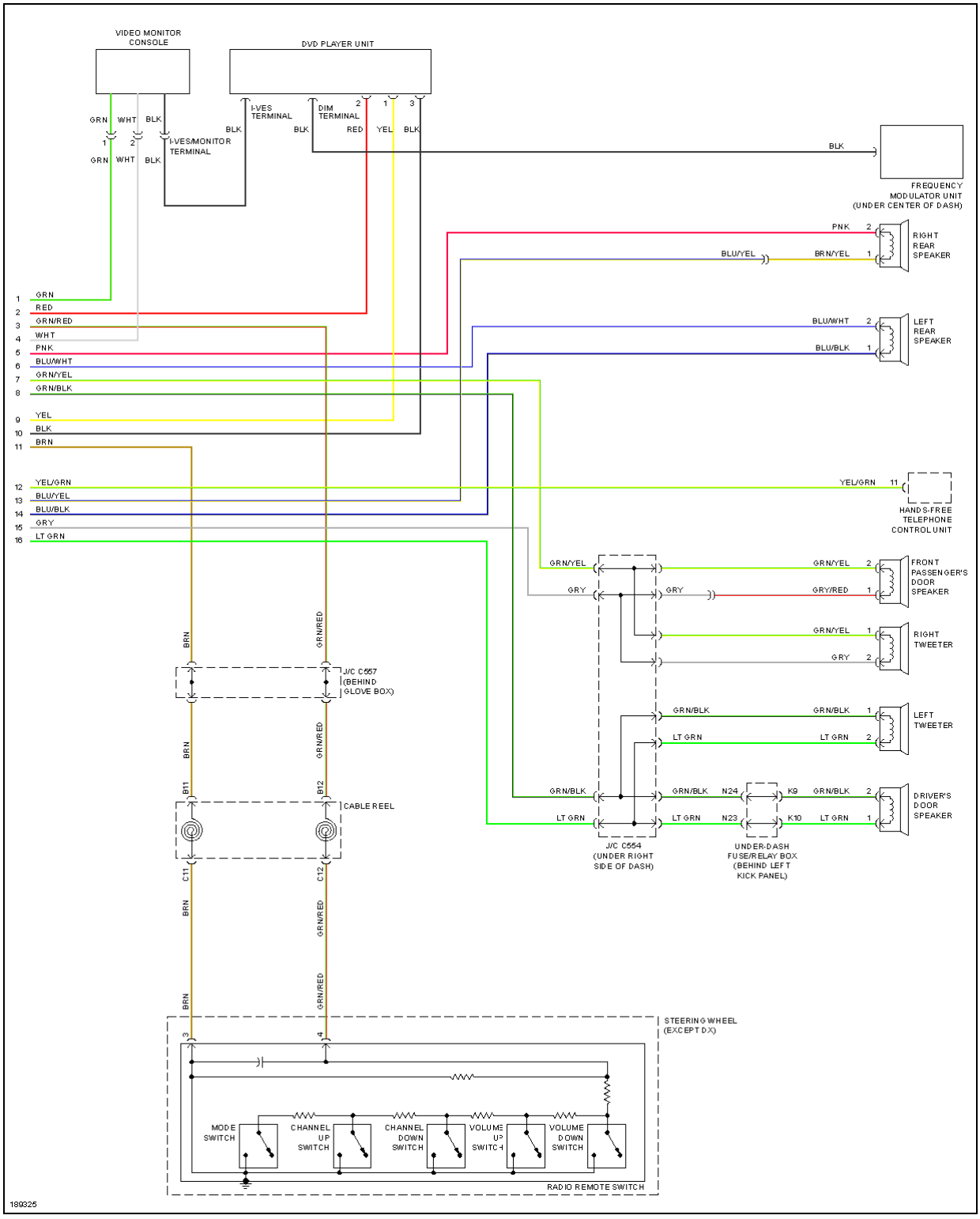


Fig. 95: 3.0L, Rear Seat Entertainment Circuit, DX, LX, EX M/T Coupe (2 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

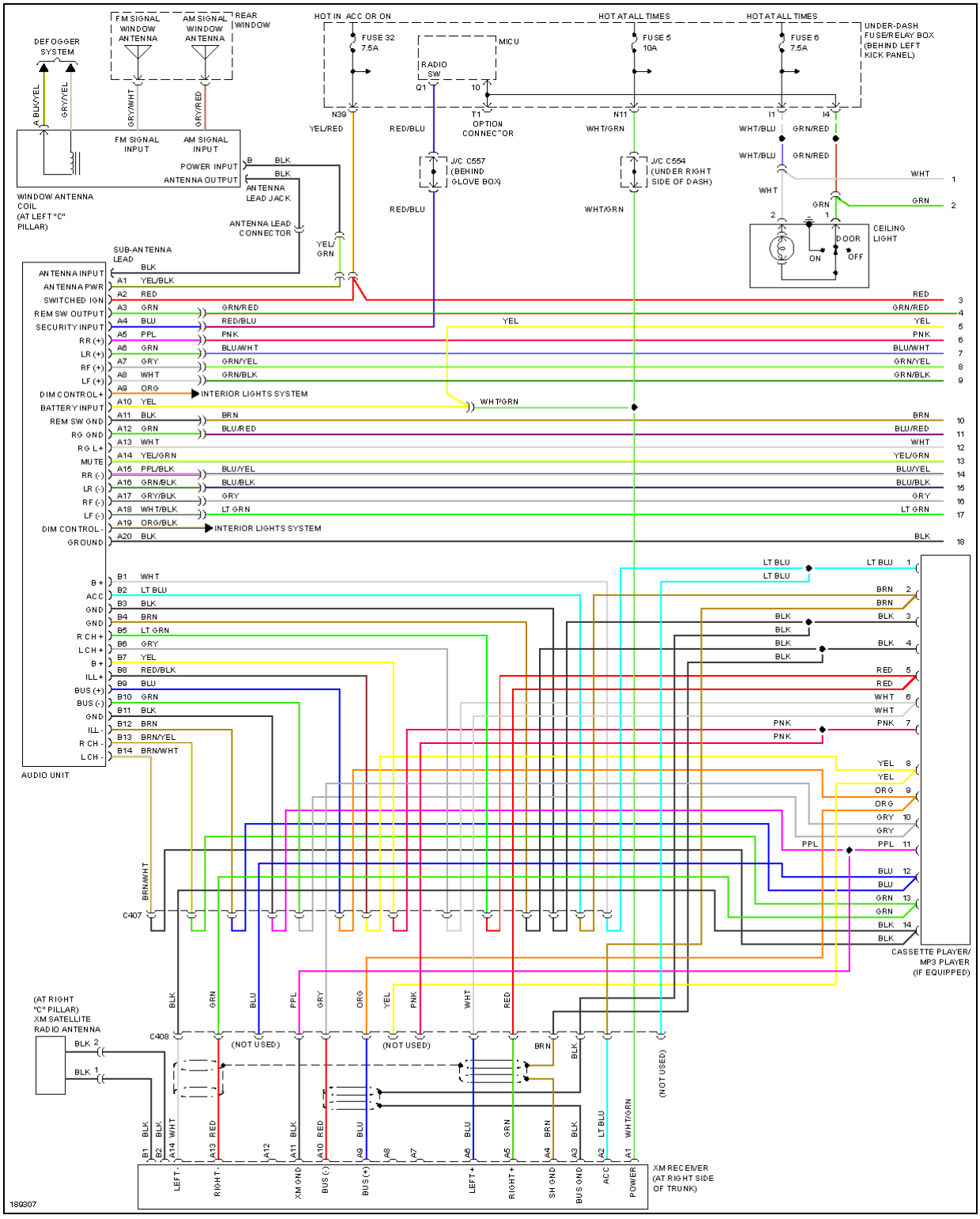


Fig. 96: 3.0L, Rear Seat Entertainment Circuit, EX-L Coupe M/T (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

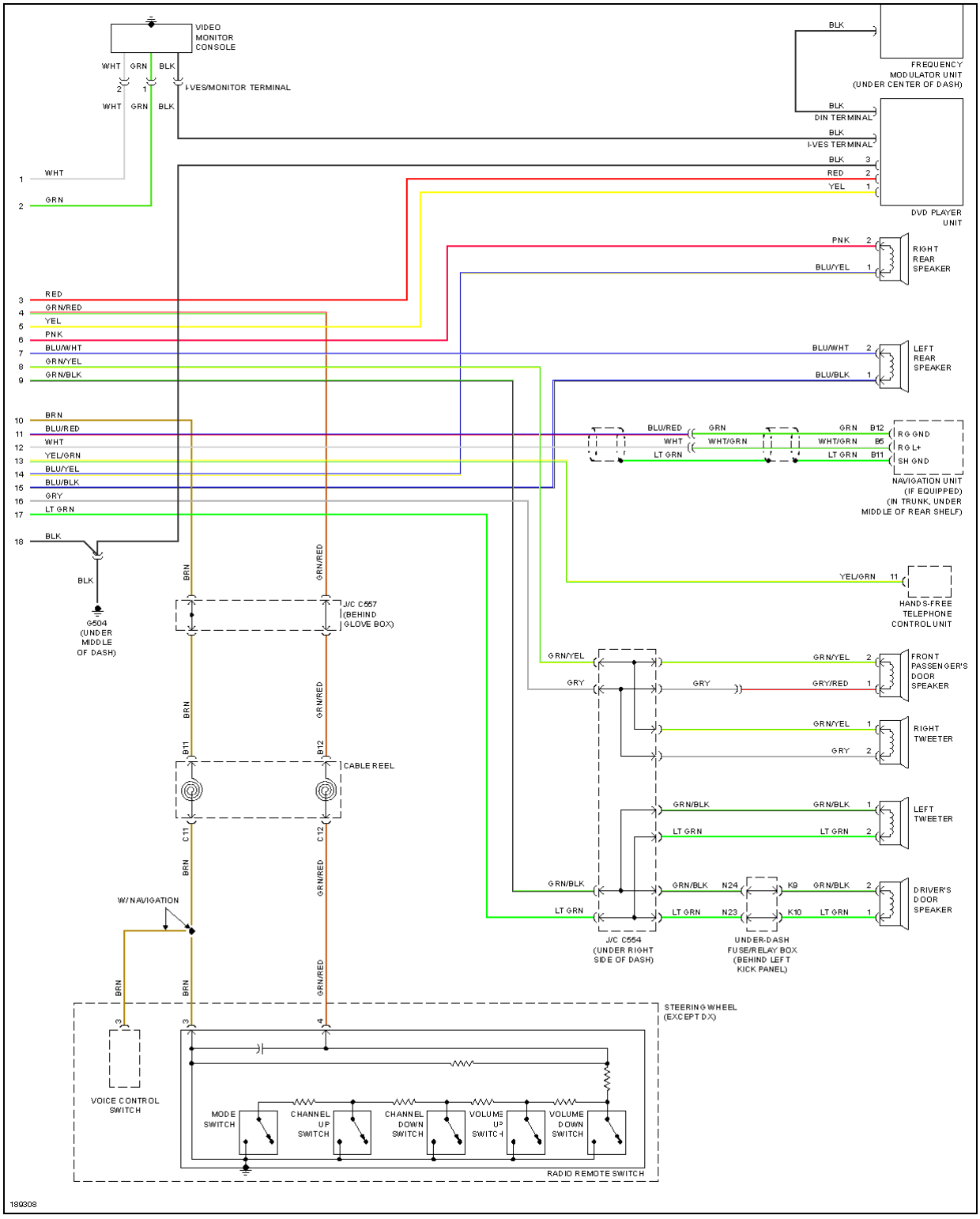


Fig. 97: 3.0L, Rear Seat Entertainment Circuit, EX-L Coupe M/T (2 of 2)

SHIFT INTERLOCK

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

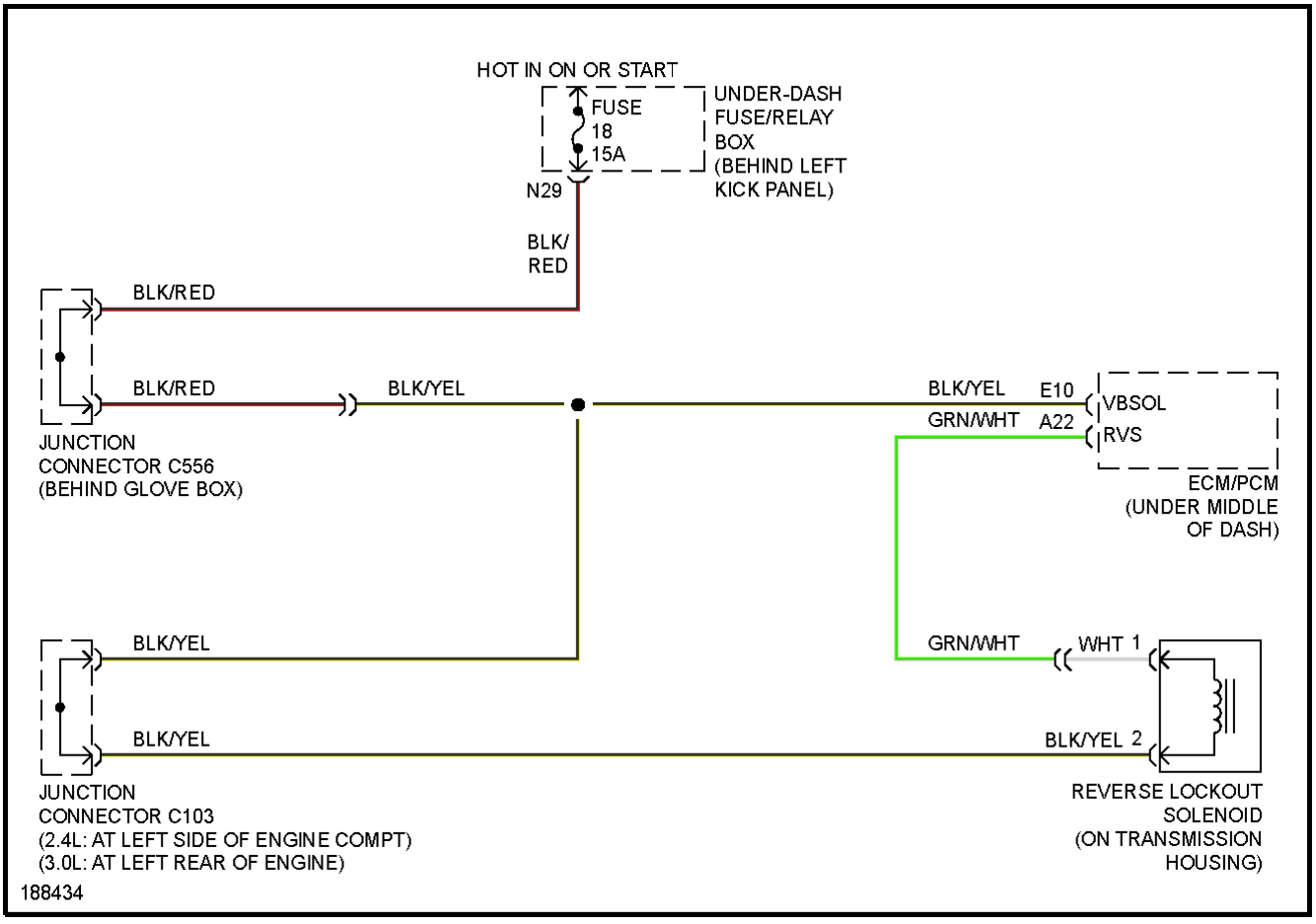


Fig. 98: Reverse Lockout Circuit

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

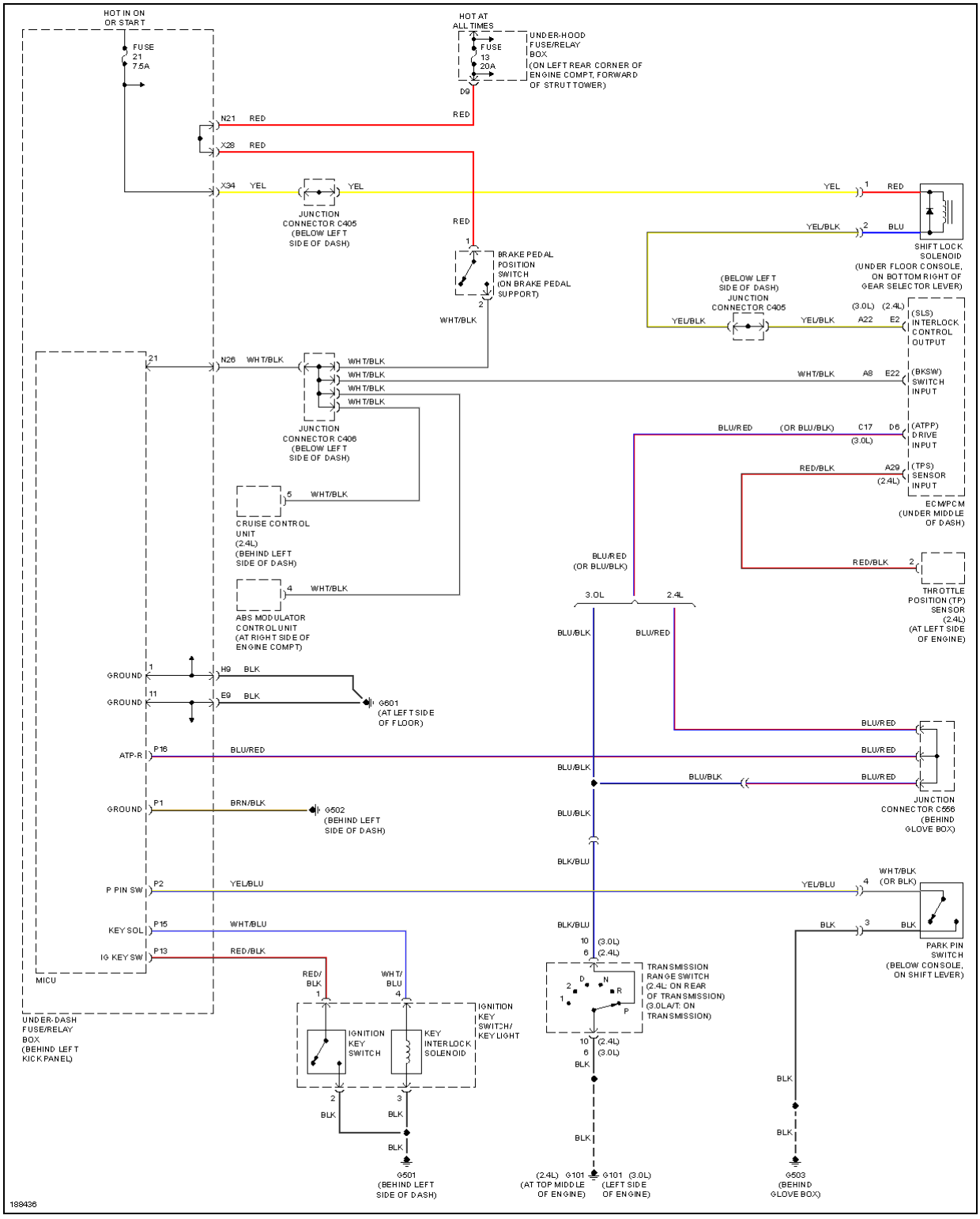


Fig. 99: Shift Interlock Circuit

STARTING/CHARGING

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

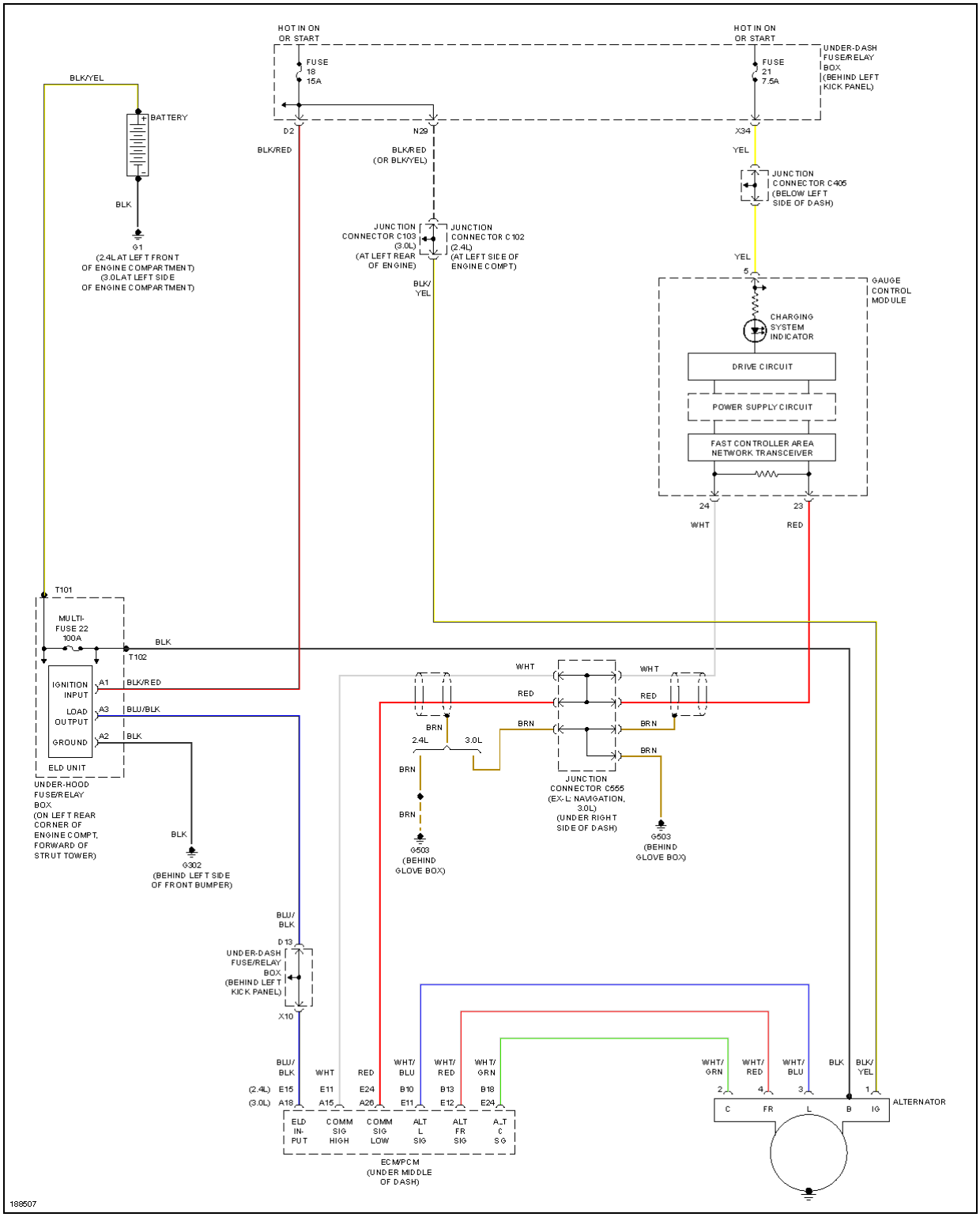


Fig. 100: Charging Circuit, Except Hybrid

2.4L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

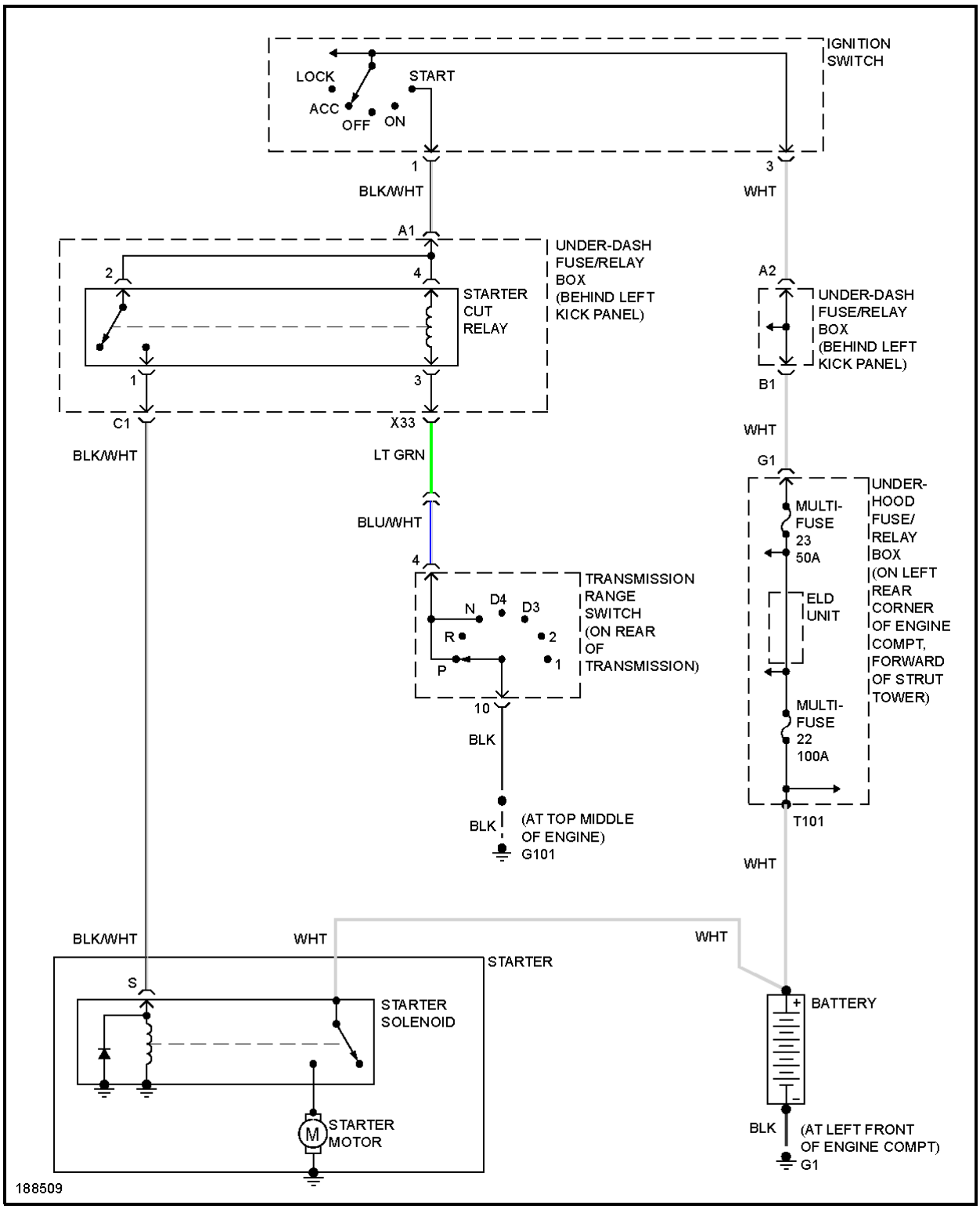


Fig. 101: 2.4L, Starting Circuit, A/T

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

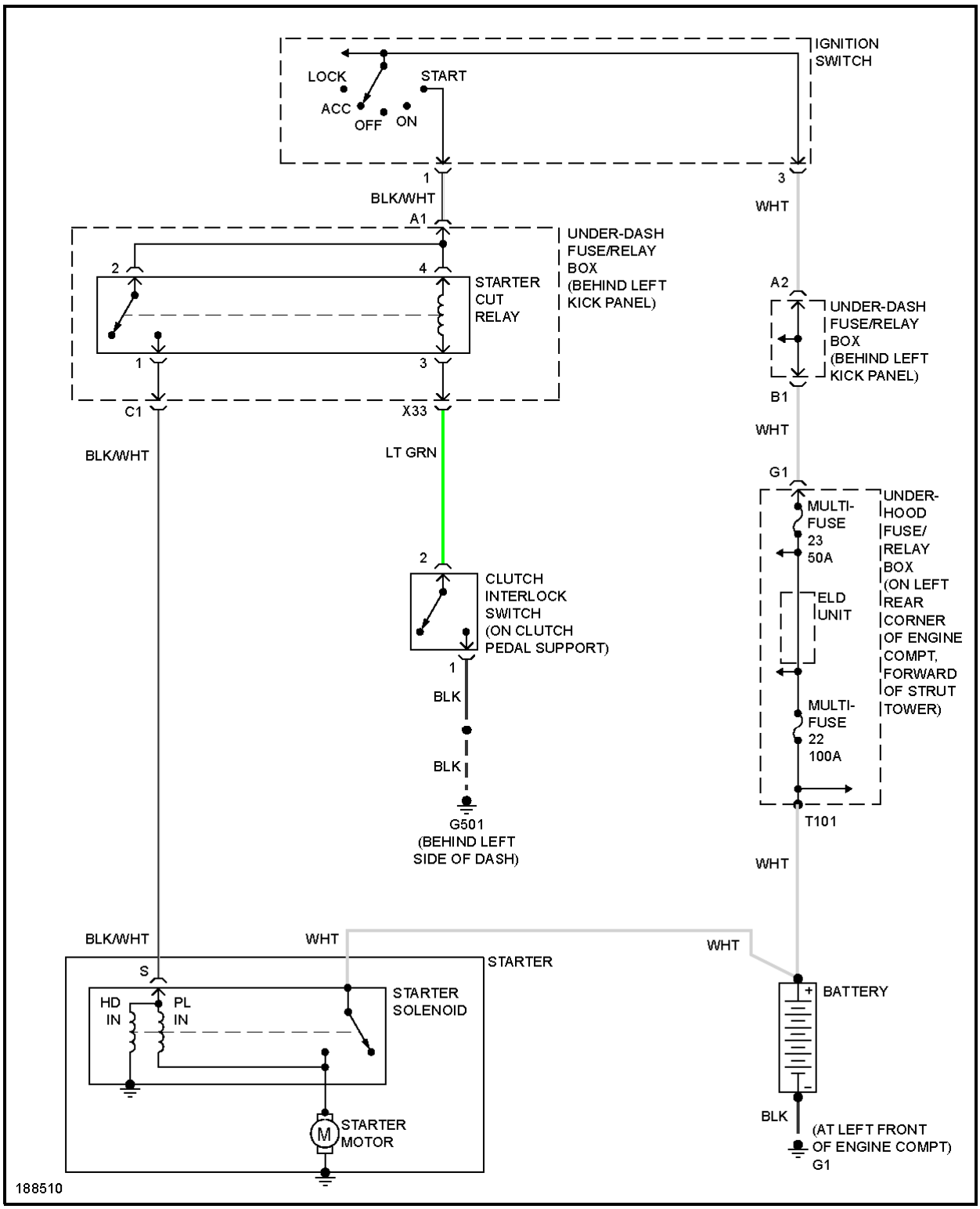


Fig. 102: 2.4L, Starting Circuit, M/T

3.0L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

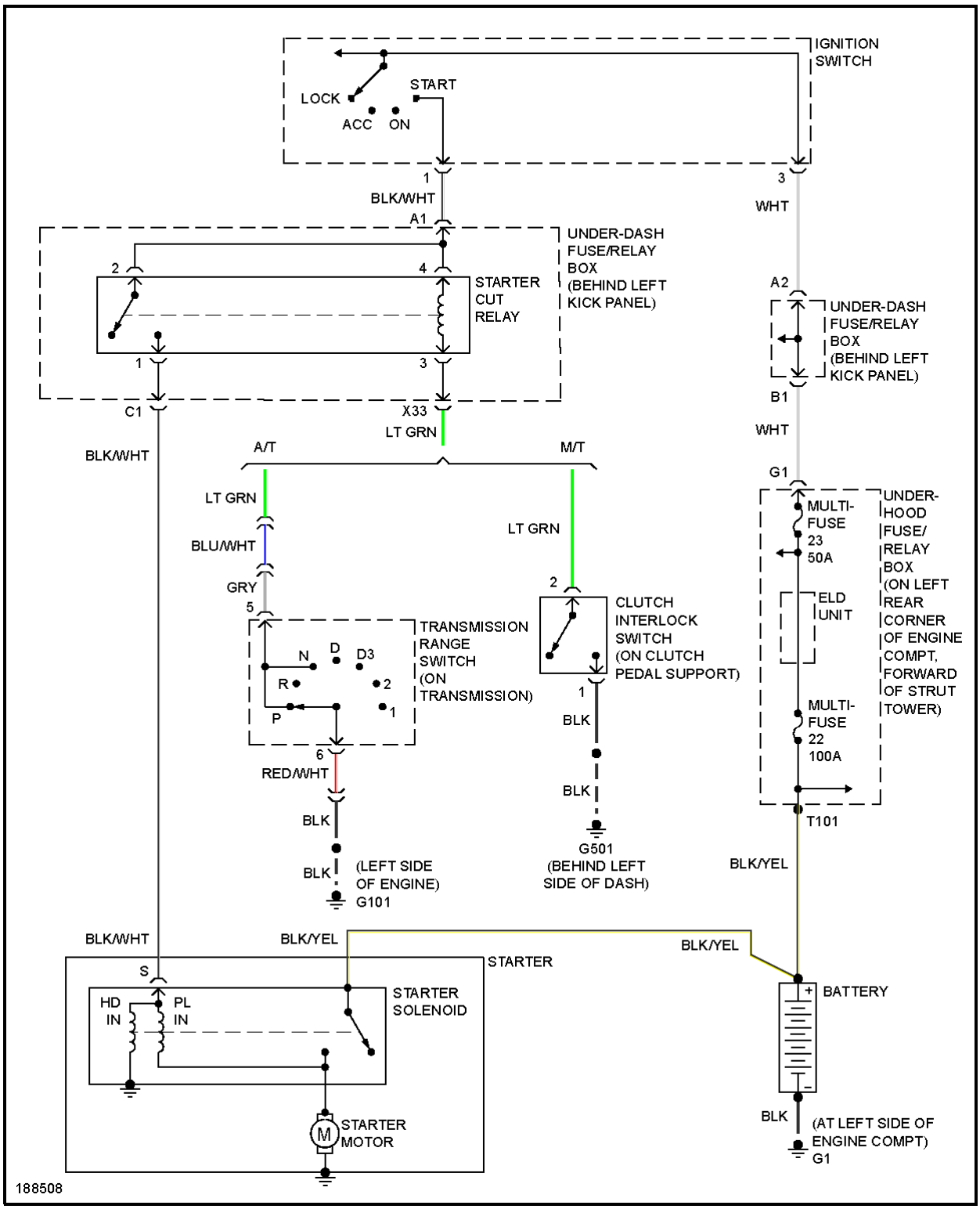


Fig. 103: 3.0L, Starting Circuit, Except Hybrid

SUPPLEMENTAL RESTRAINTS

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

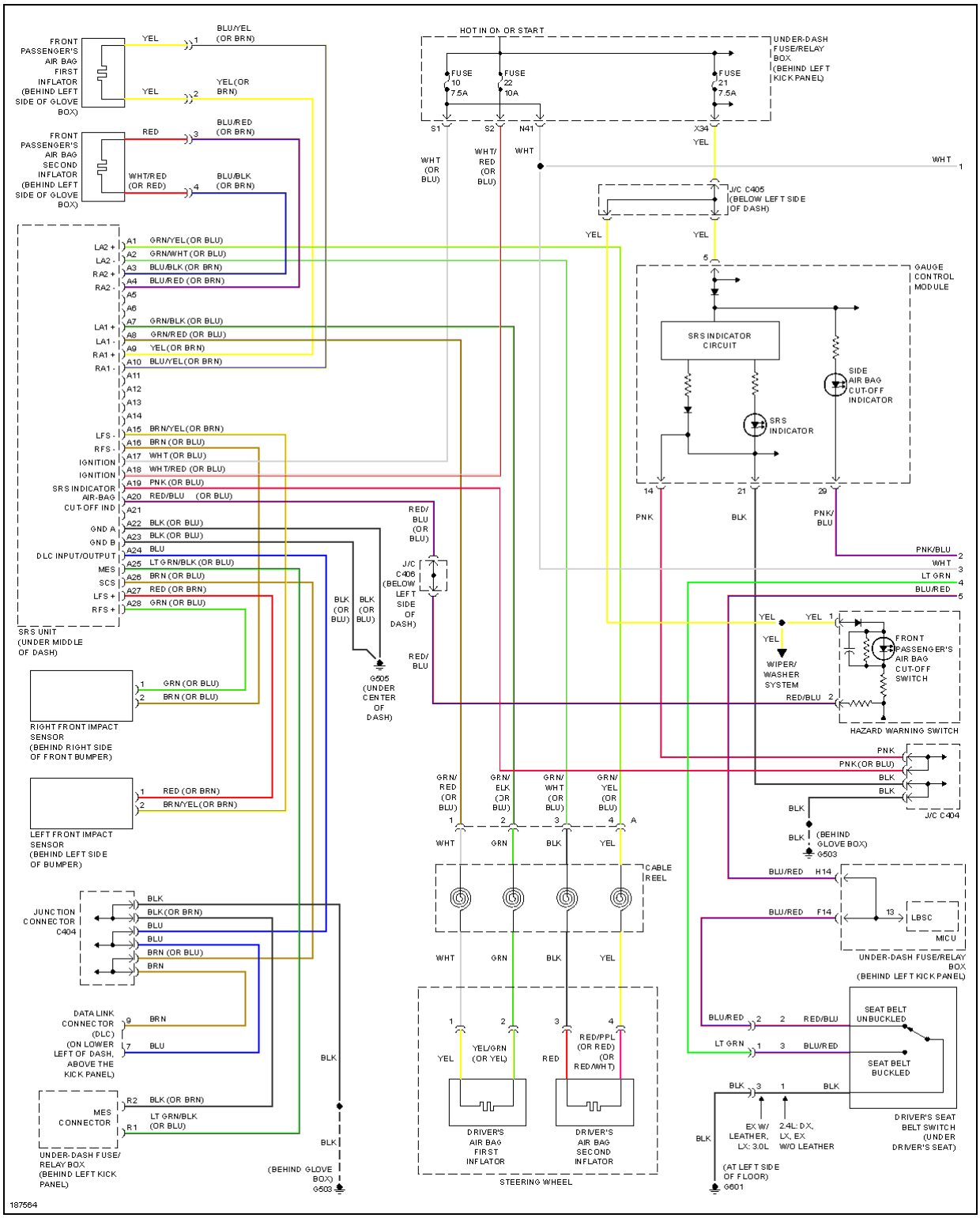


Fig. 104: Supplemental Restraints Circuit, Except Hybrid (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

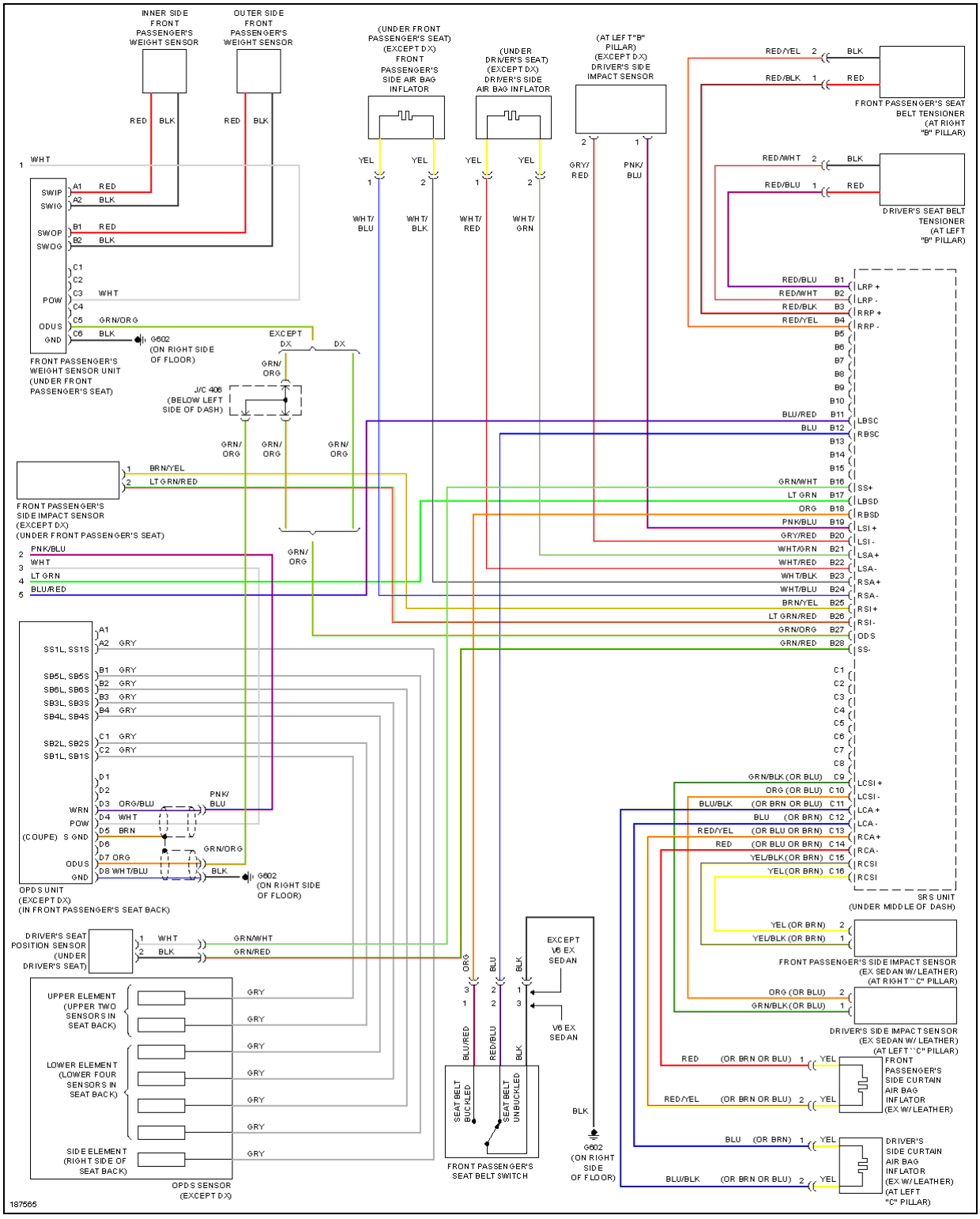


Fig. 105: Supplemental Restraints Circuit, Except Hybrid (2 of 2)

TRANSMISSION

2.4L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

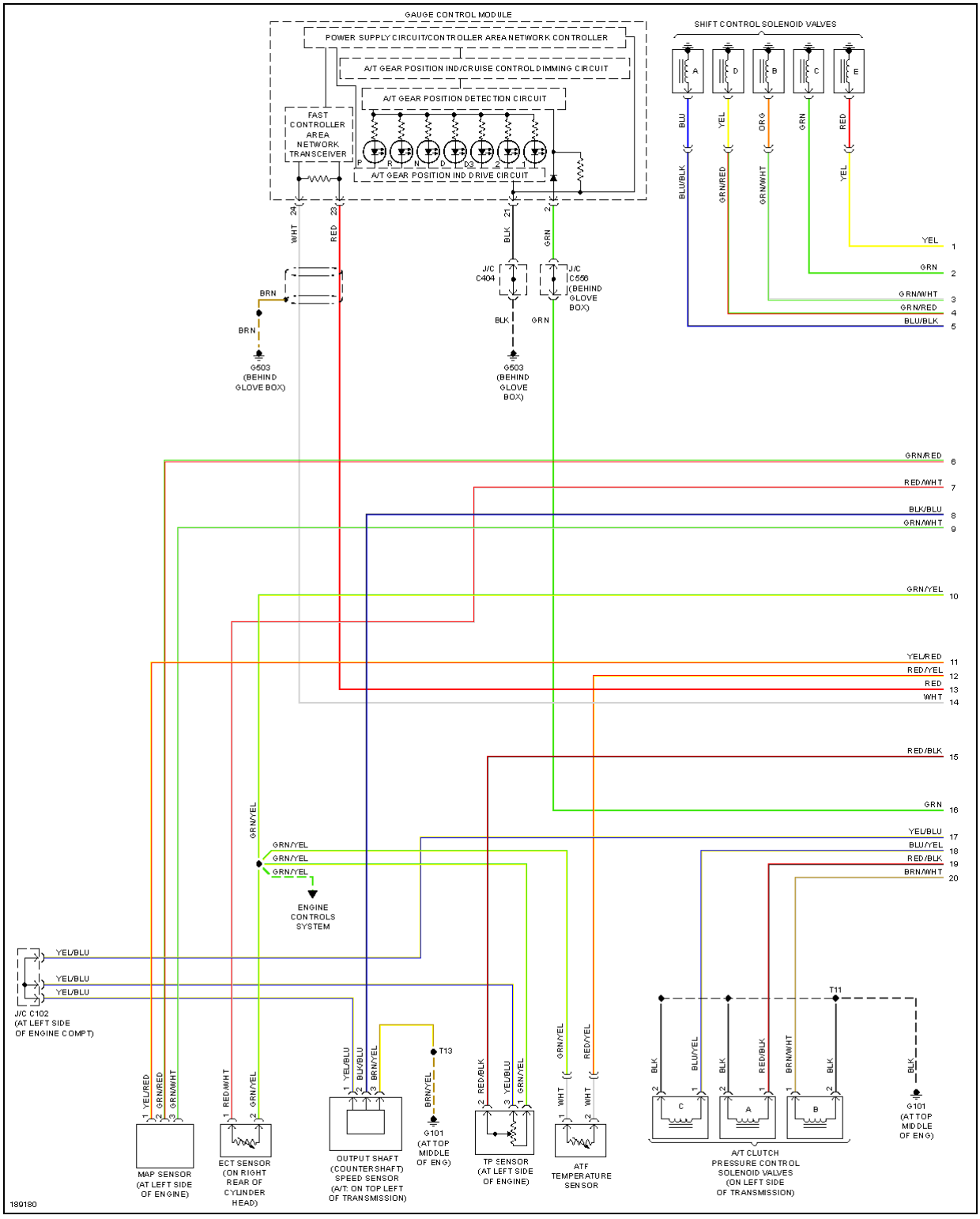


Fig. 106: 2.4L, Transmission Circuit (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 107: 2.4L, Transmission Circuit (2 of 2)

3.0L

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 108: 3.0L, Transmission Circuit (1 of 2)

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 109: 3.0L, Transmission Circuit (2 of 2)

TRUNK, TAILGATE, FUEL DOOR

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 110: Trunk, Tailgate, Fuel Door Circuit, Except Hybrid

WARNING SYSTEMS

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 111: Warning Systems Circuit, Except Hybrid

WIPER/WASHER

2004 Honda Accord DX

2004 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 112: Wiper/Washer Circuit, Except Hybrid

AIR CONDITIONING

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

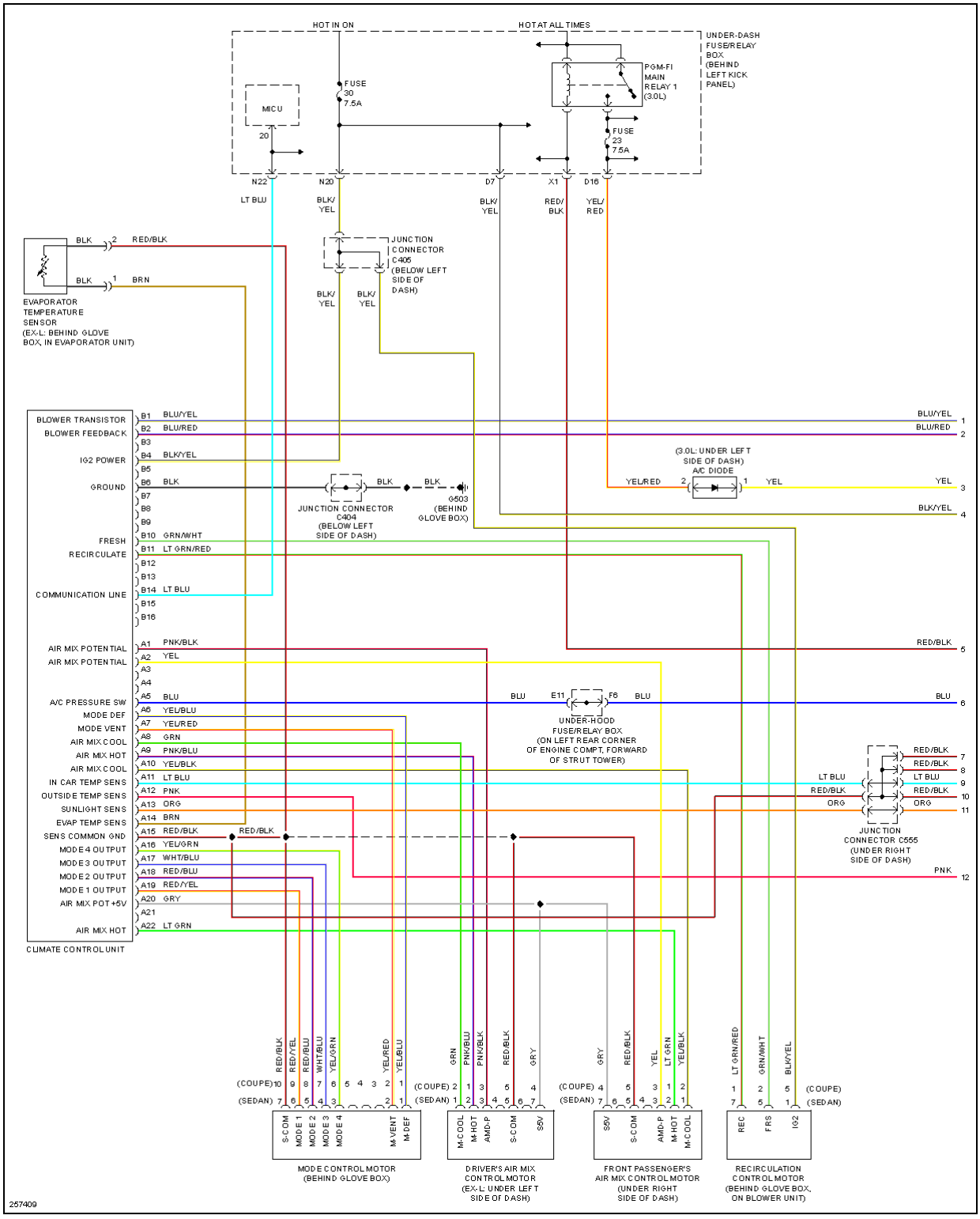


Fig. 1: Automatic A/C Circuit, Except Hybrid (1 of 3)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

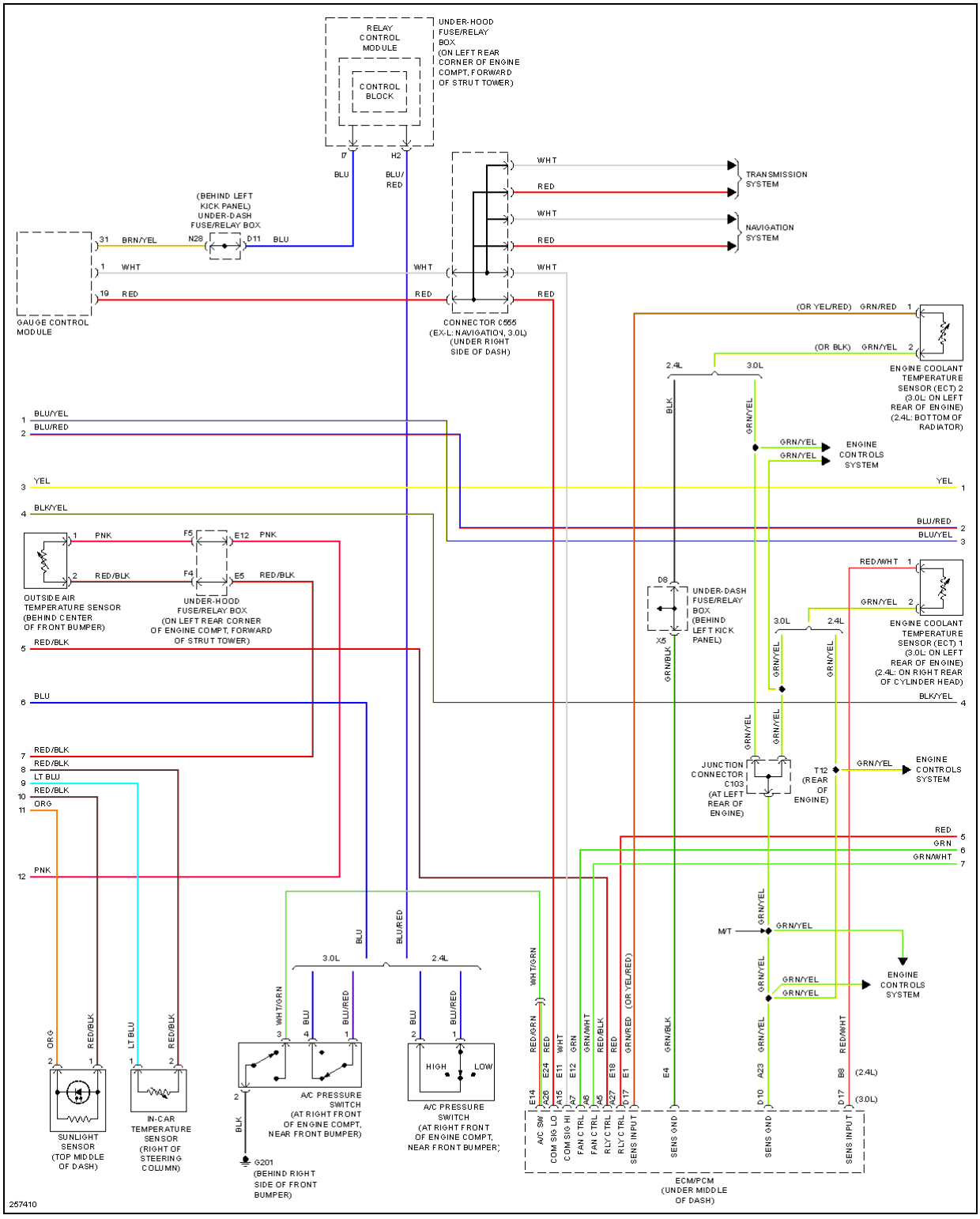


Fig. 2: Automatic A/C Circuit, Except Hybrid (2 of 3)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

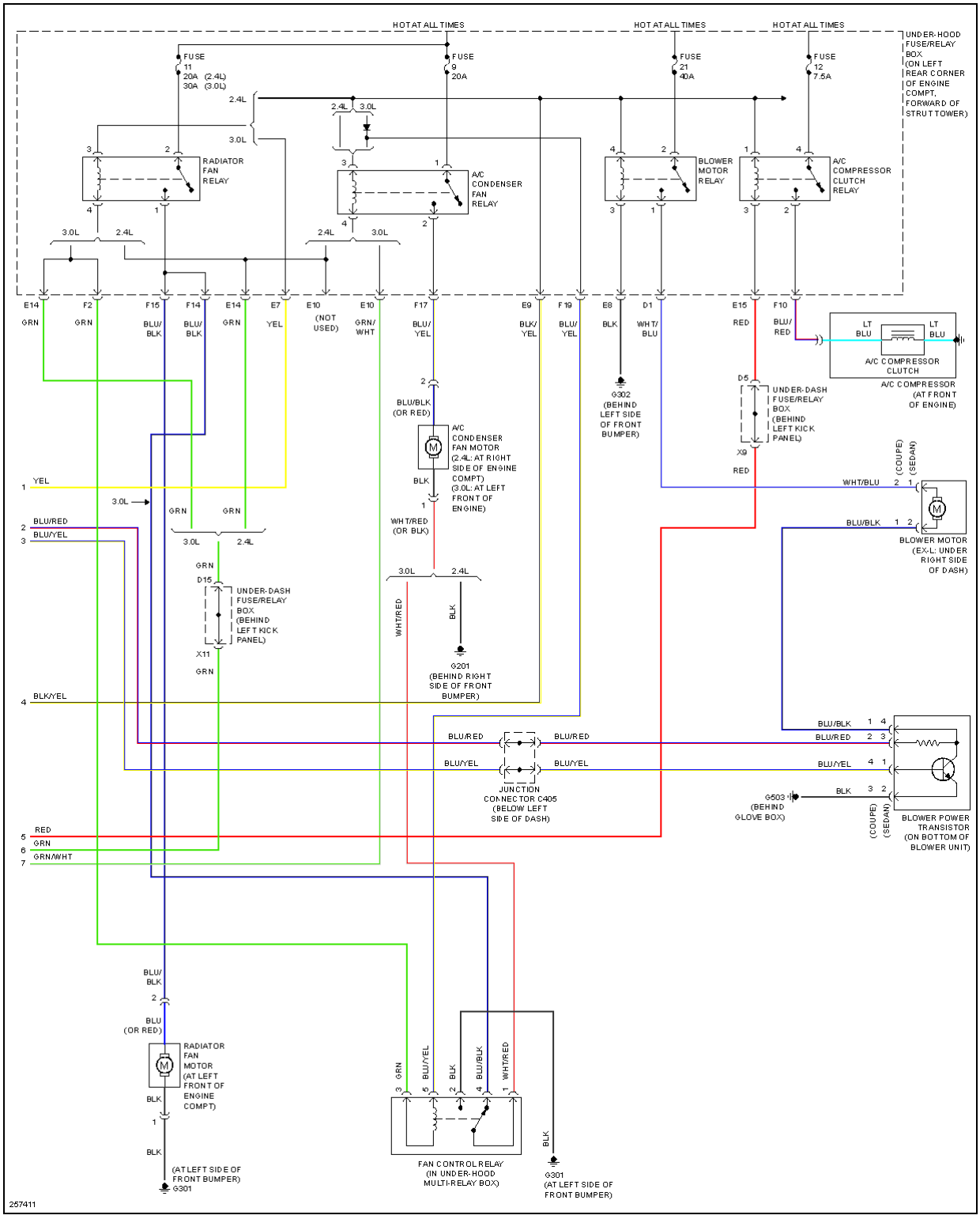


Fig. 3: Automatic A/C Circuit, Except Hybrid (3 of 3)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

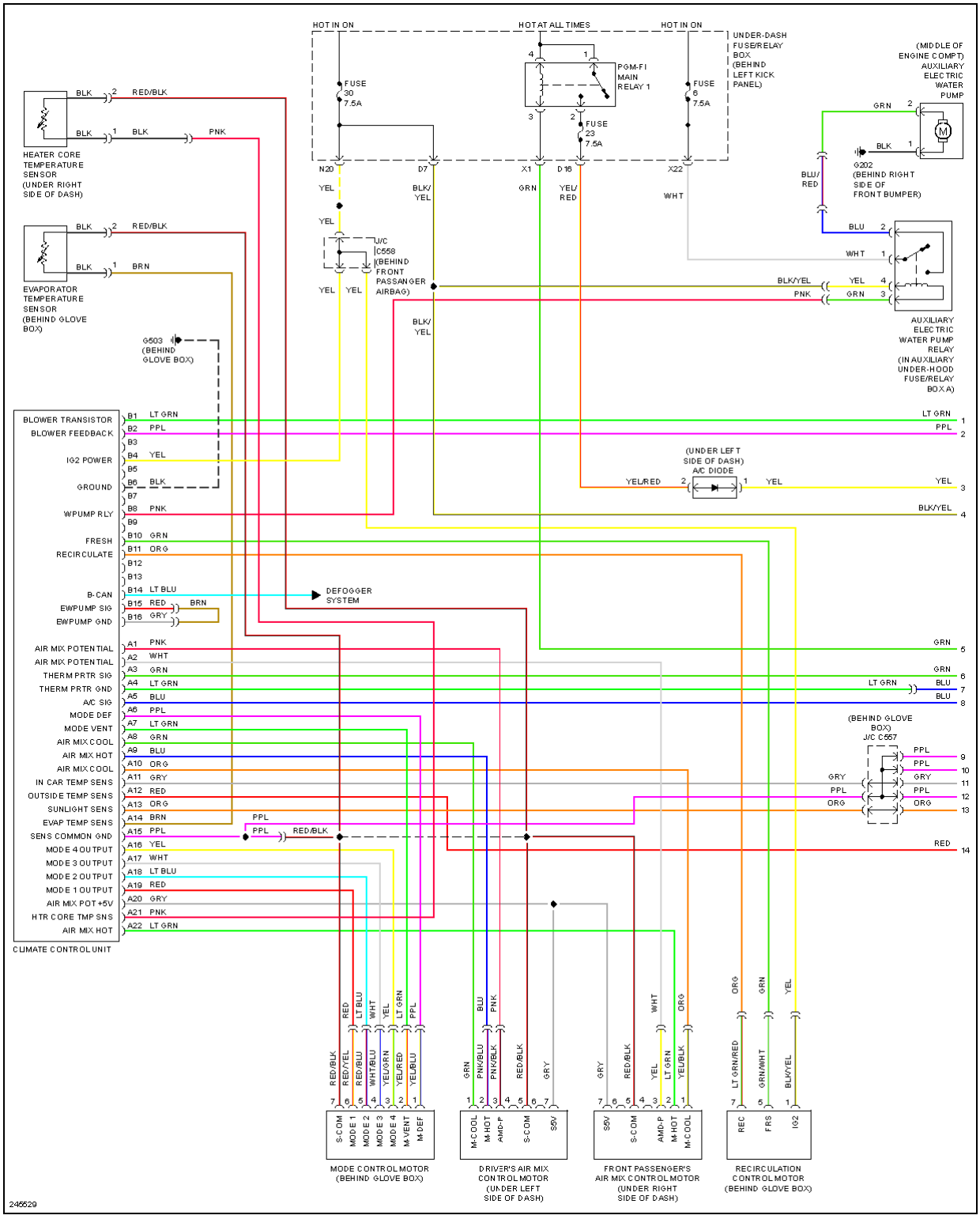


Fig. 4: Automatic A/C Circuit, Hybrid (1 of 3)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

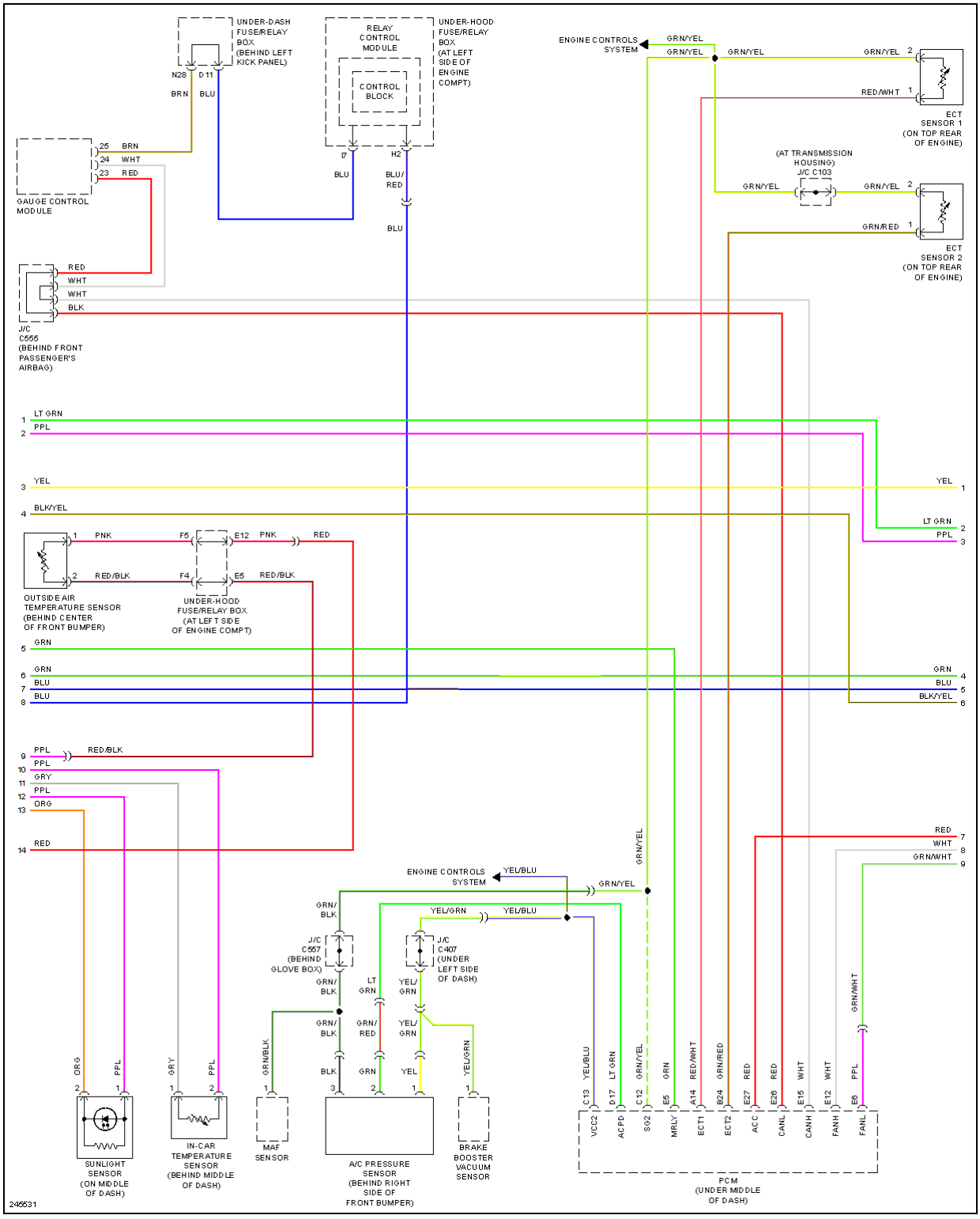


Fig. 5: Automatic A/C Circuit, Hybrid (2 of 3)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

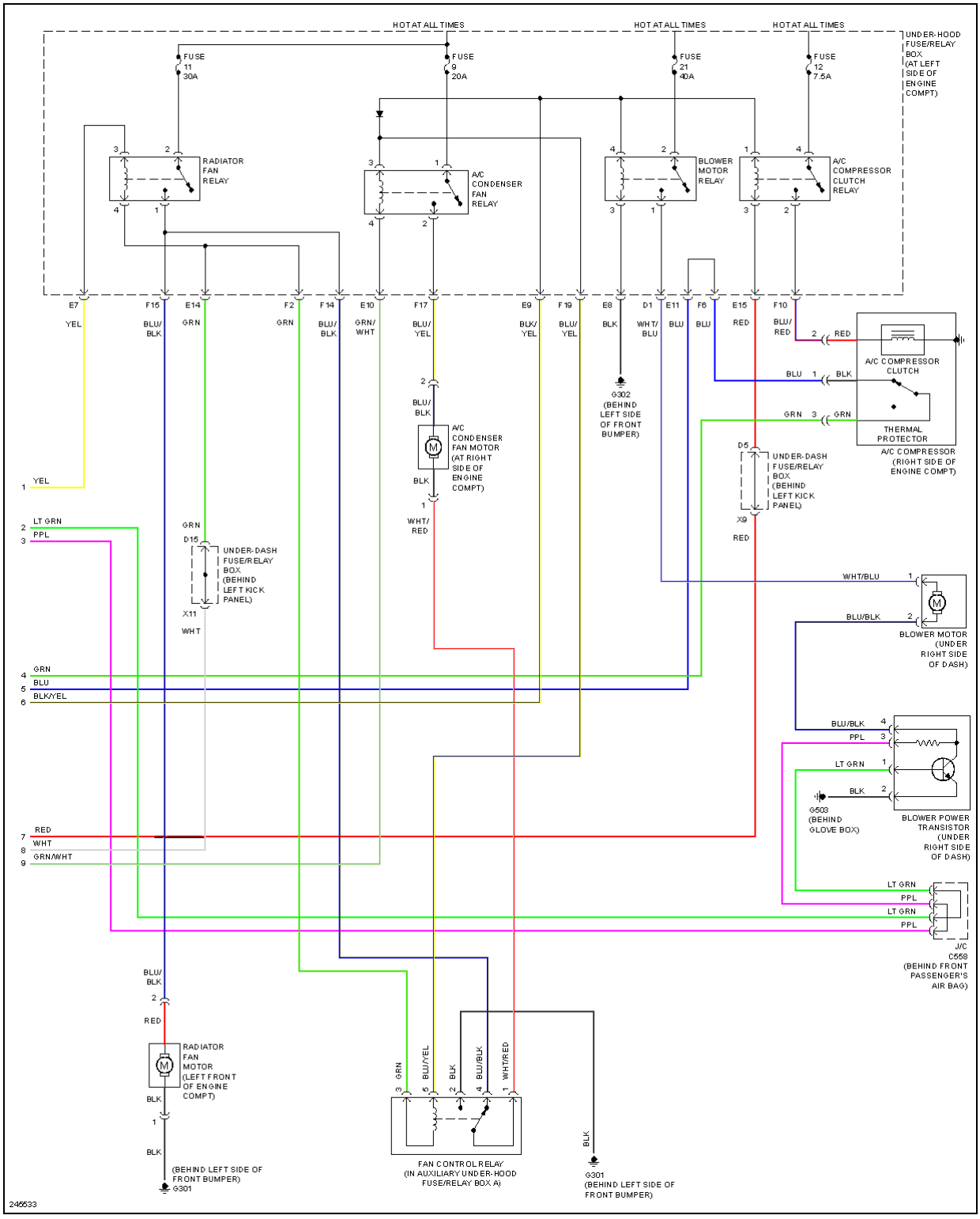


Fig. 6: Automatic A/C Circuit, Hybrid (3 of 3)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

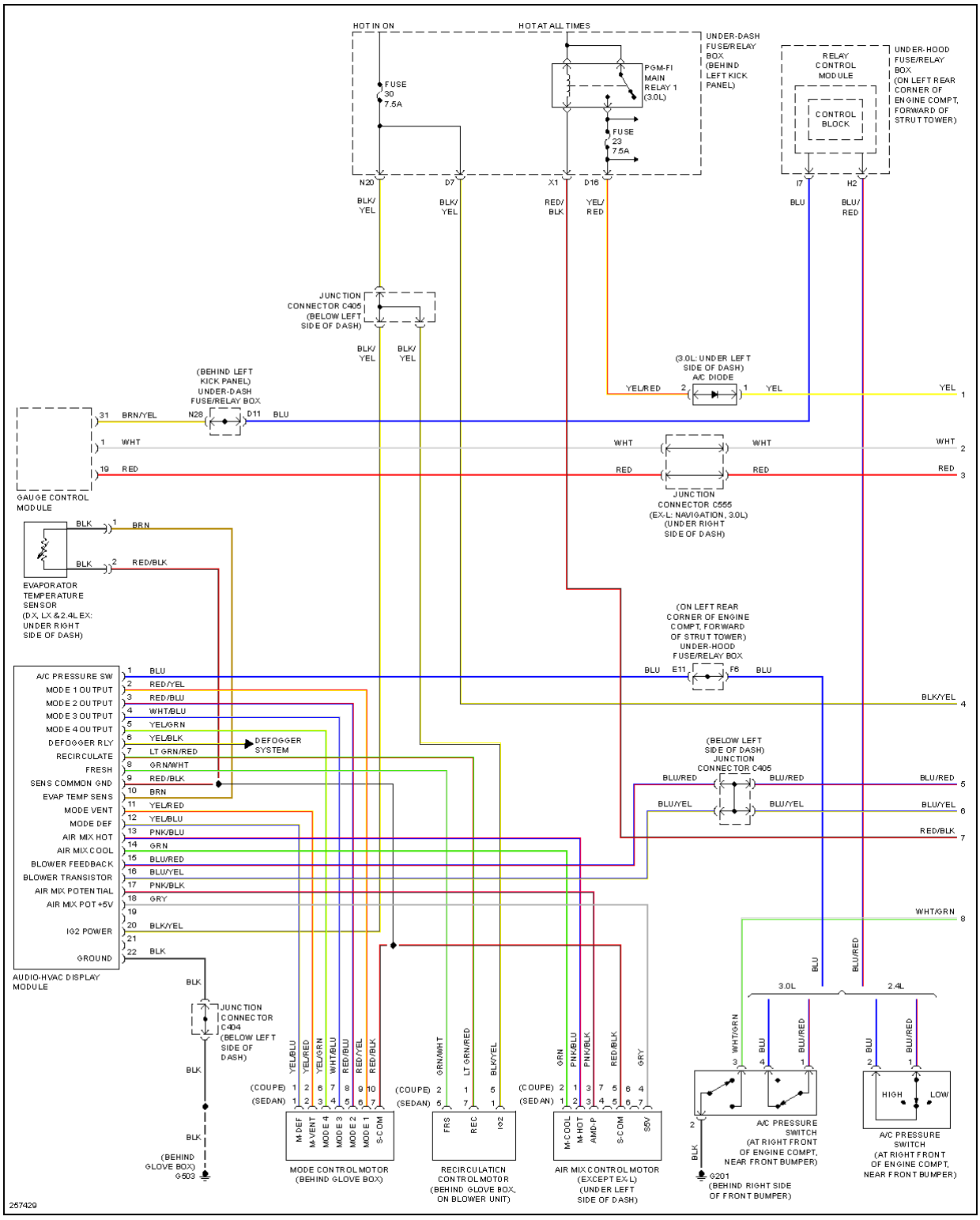


Fig. 7: Manual A/C Circuit (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

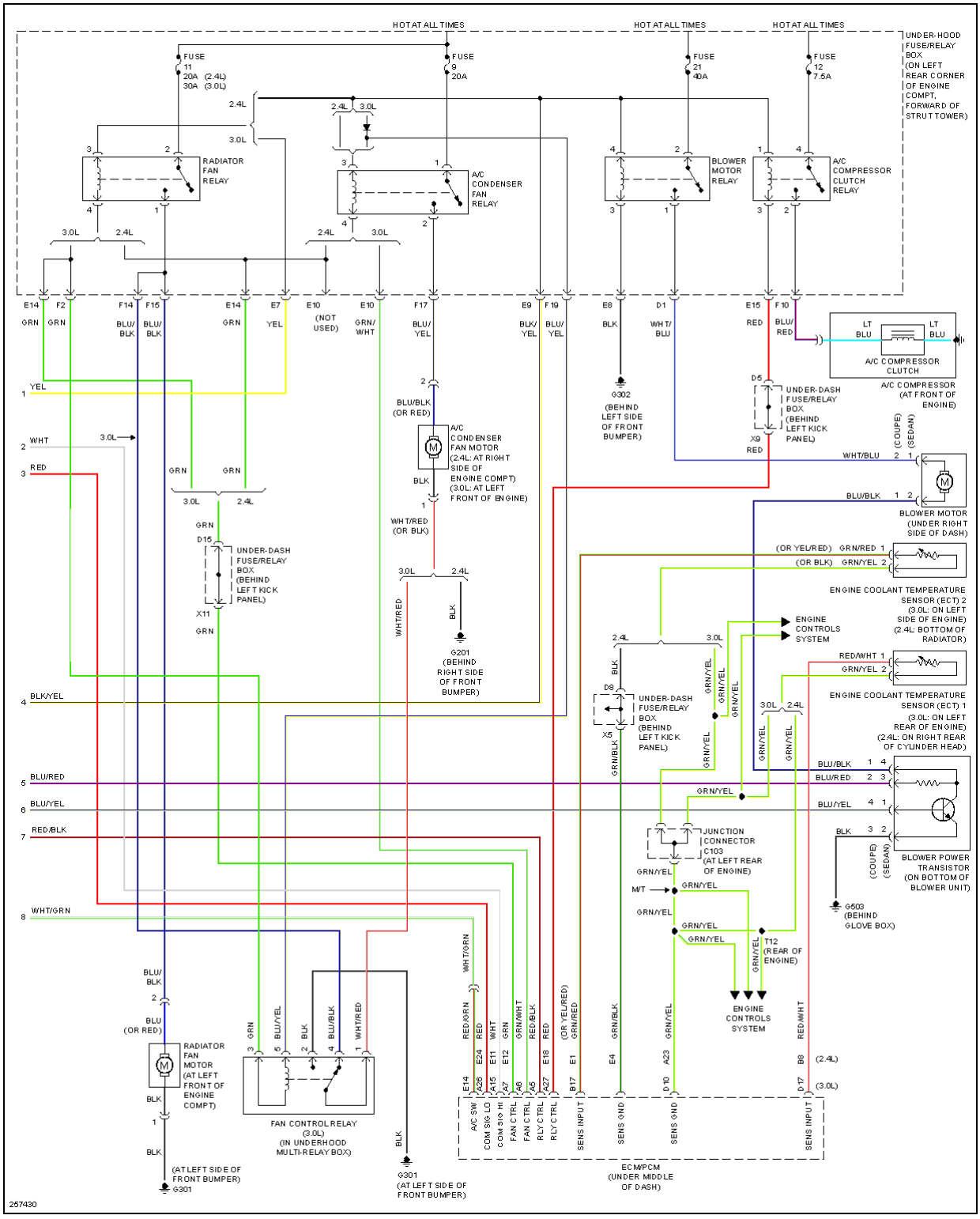


Fig. 8: Manual A/C Circuit (2 of 2)

ANTI-LOCK BRAKES

2.4L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

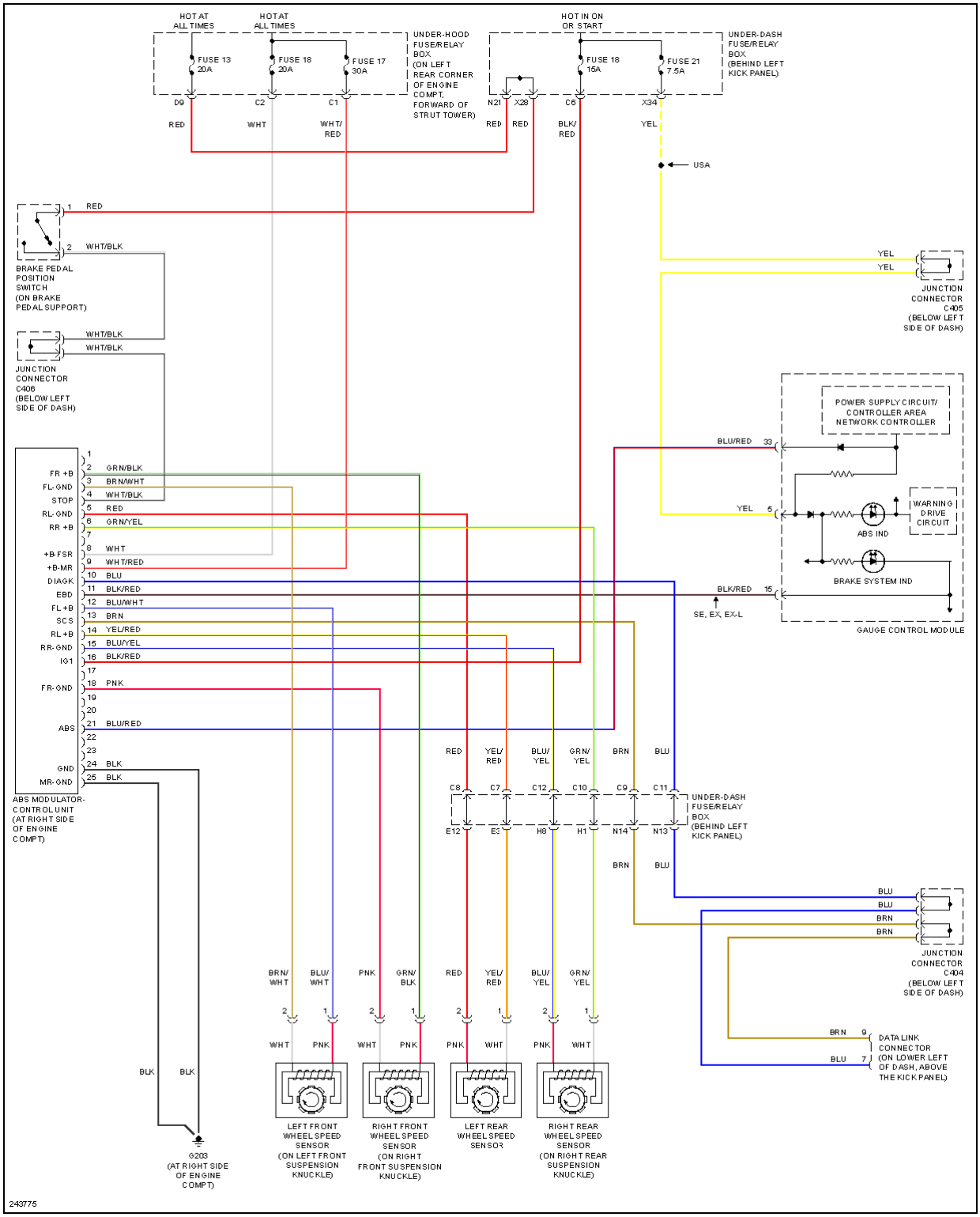


Fig. 9: 2.4L, Anti-lock Brakes Circuit

3.0L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

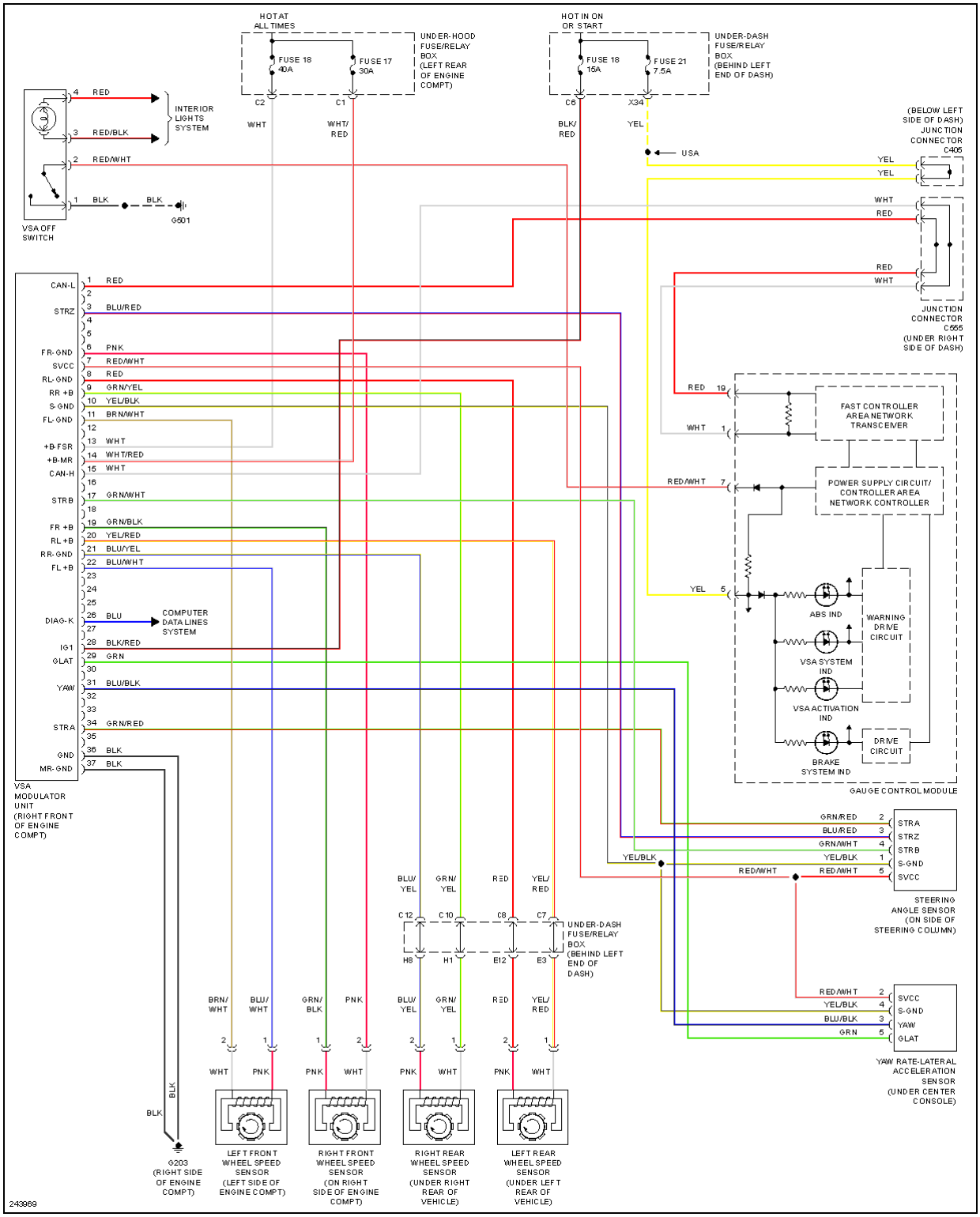


Fig. 10: 3.0L, Anti-lock Brakes Circuit, Except Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

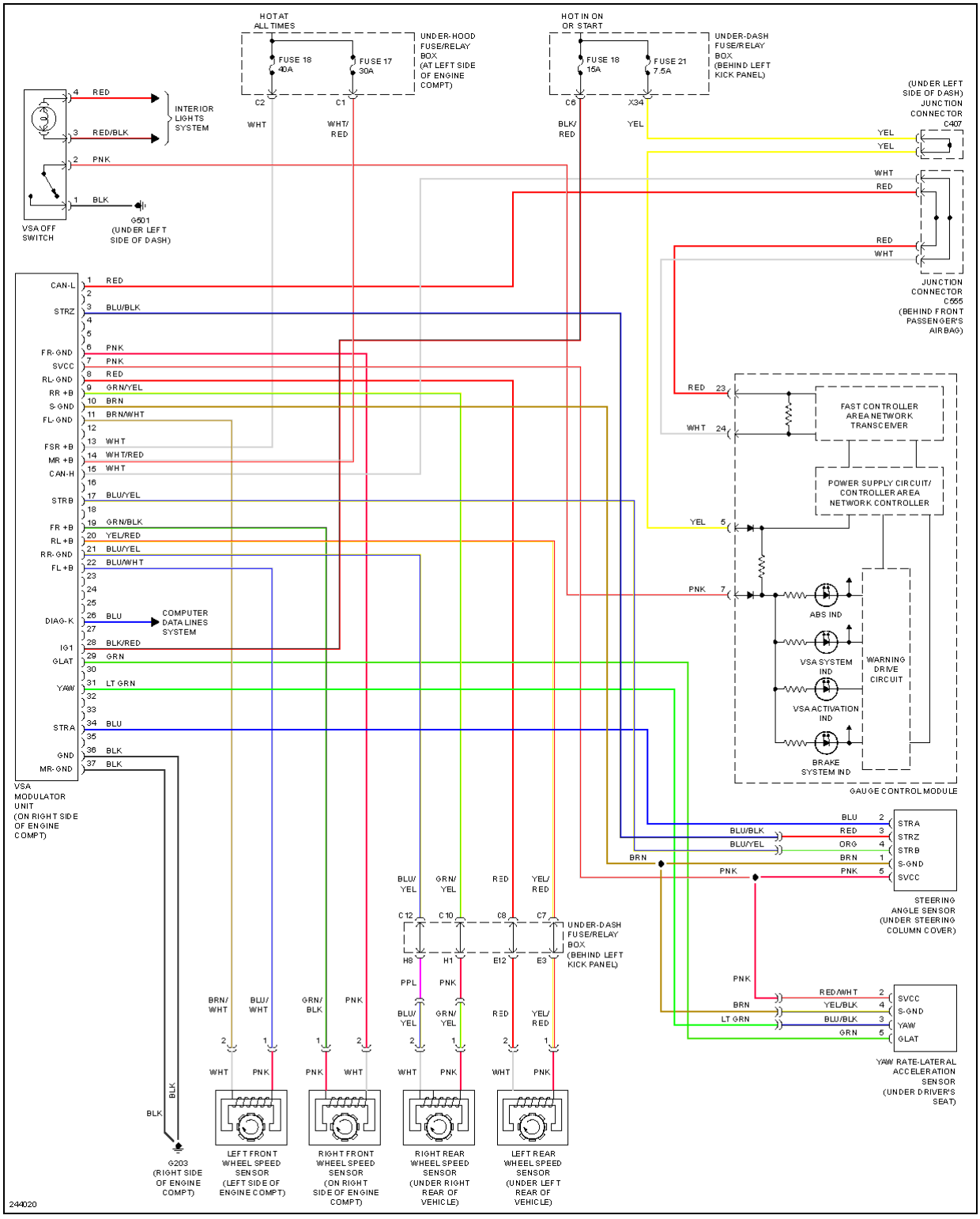


Fig. 11: 3.0L, Anti-lock Brakes Circuit, Hybrid

ANTI-THEFT

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

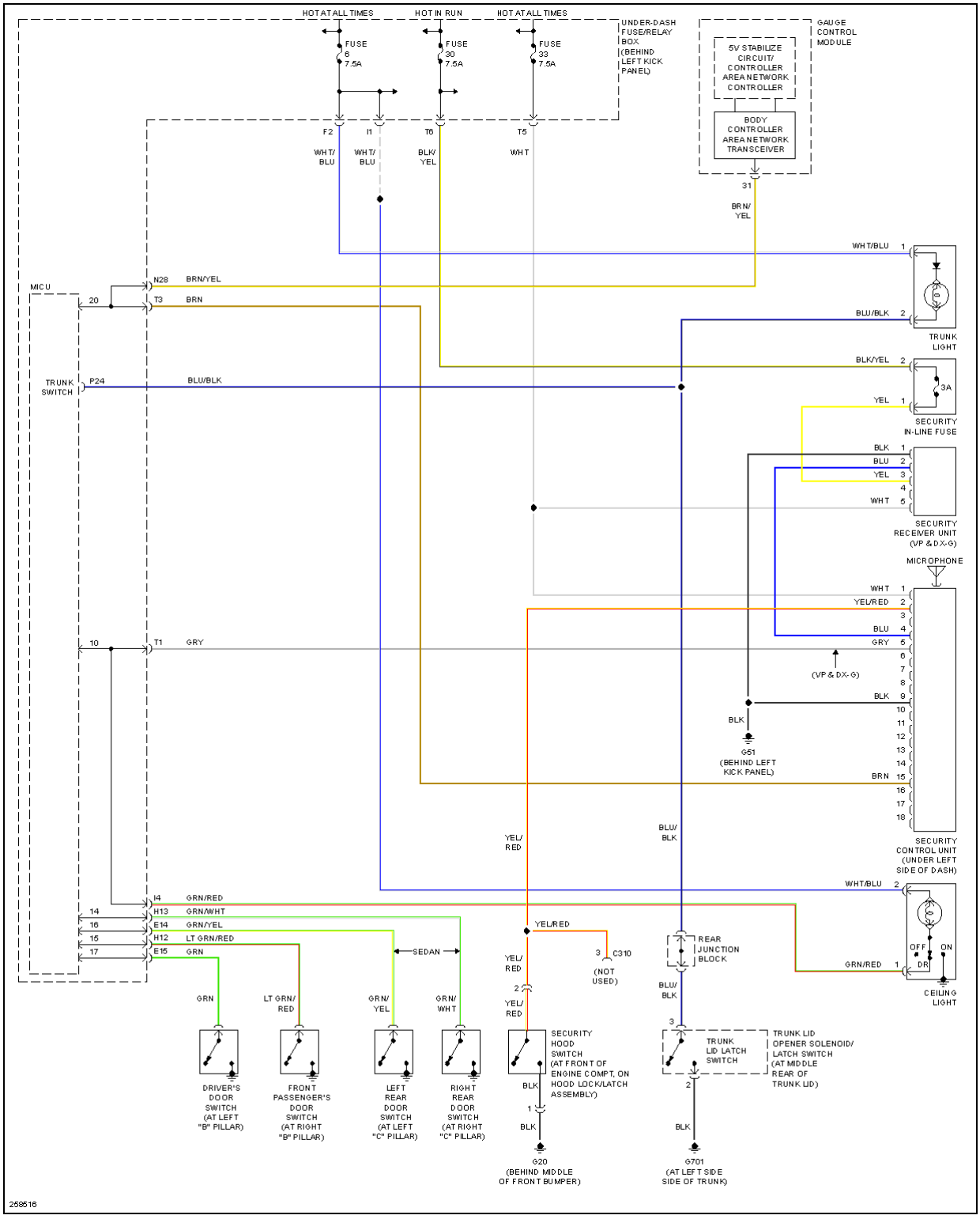


Fig. 12: Forced Entry Circuit, Except Hybrid W/ Accessory

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

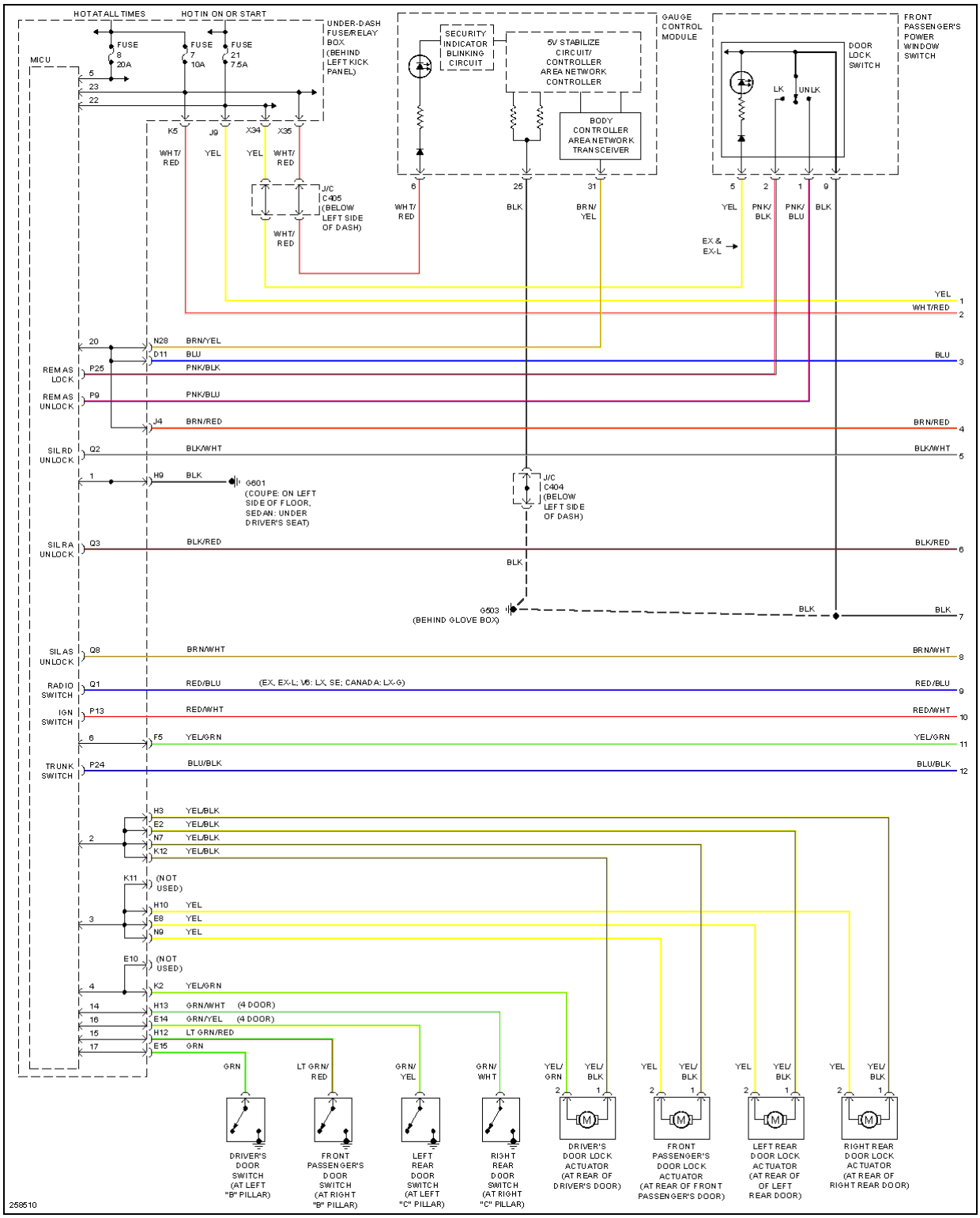


Fig. 13: Forced Entry Circuit, Except Hybrid W/O Accessory (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

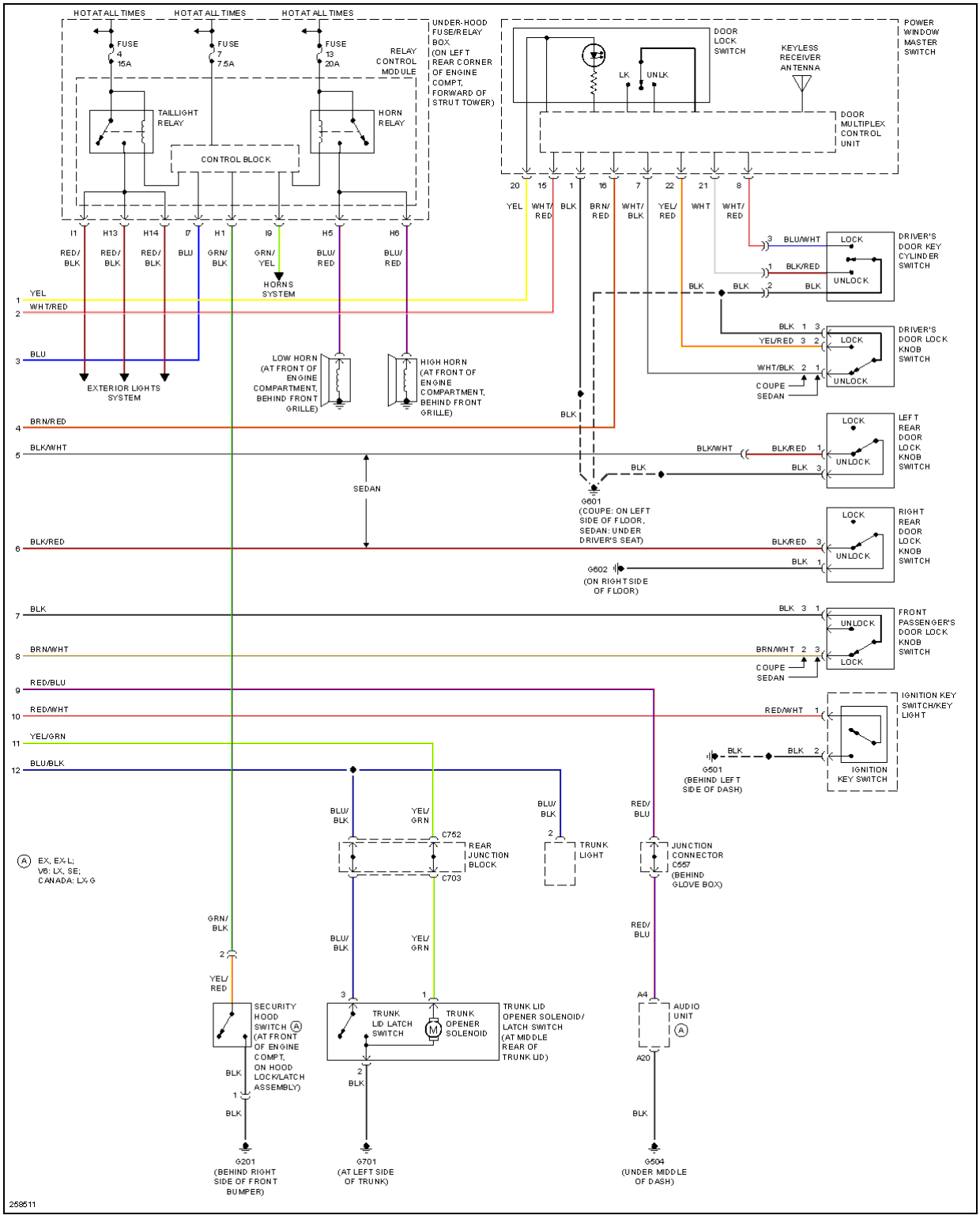


Fig. 14: Forced Entry Circuit, Except Hybrid W/O Accessory (2 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

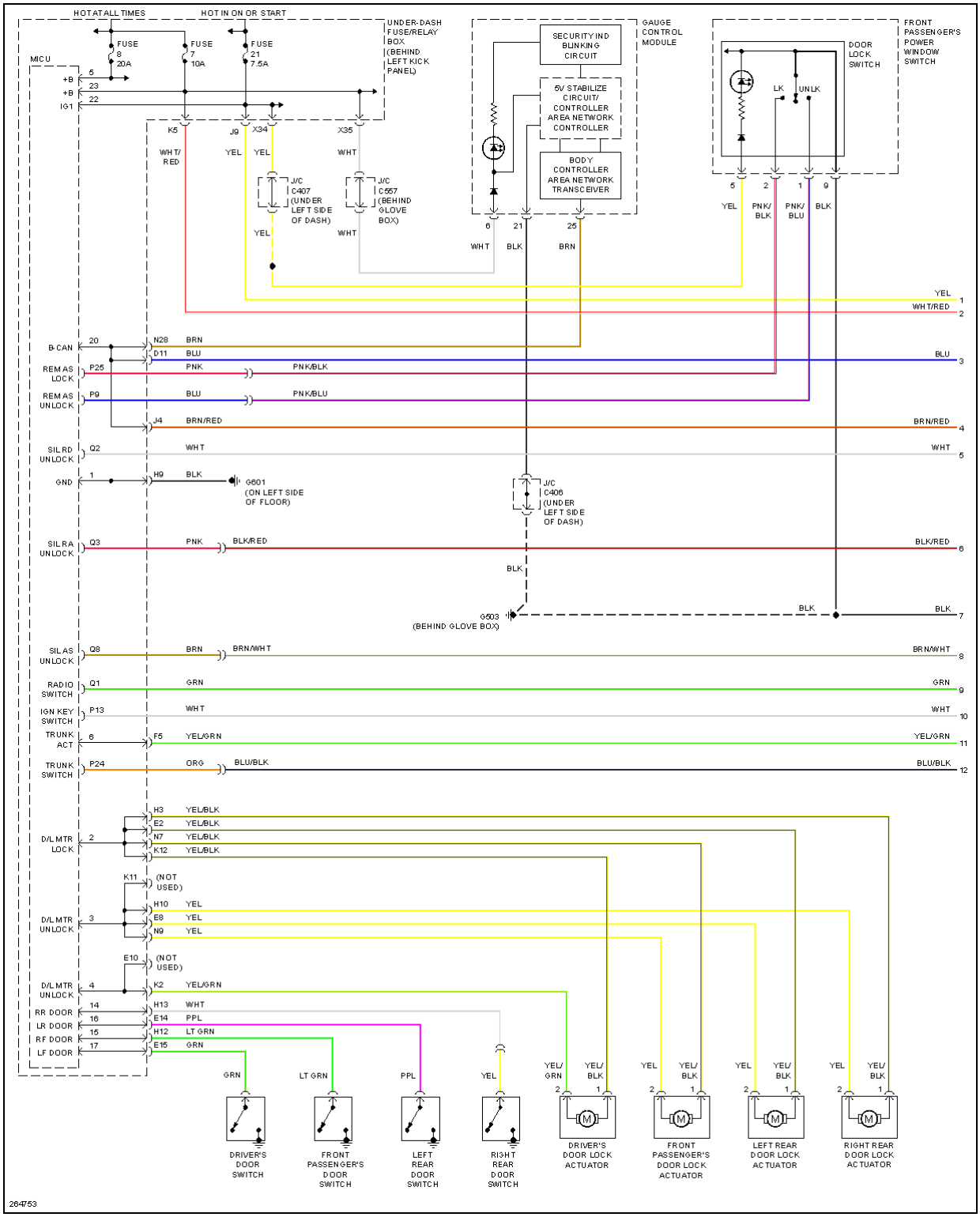


Fig. 15: Forced Entry Circuit, Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

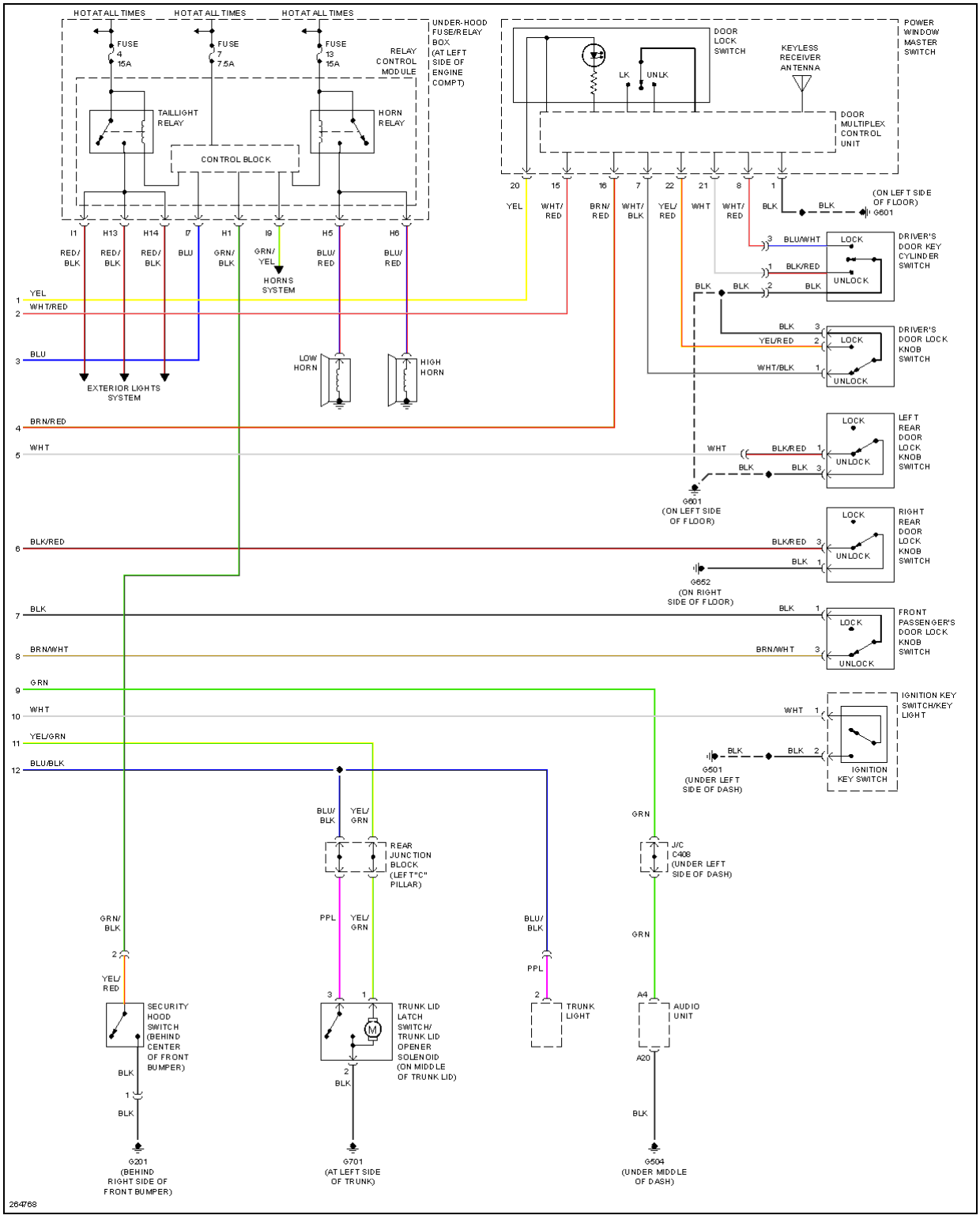


Fig. 16: Forced Entry Circuit, Hybrid (2 of 2)

2.4L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

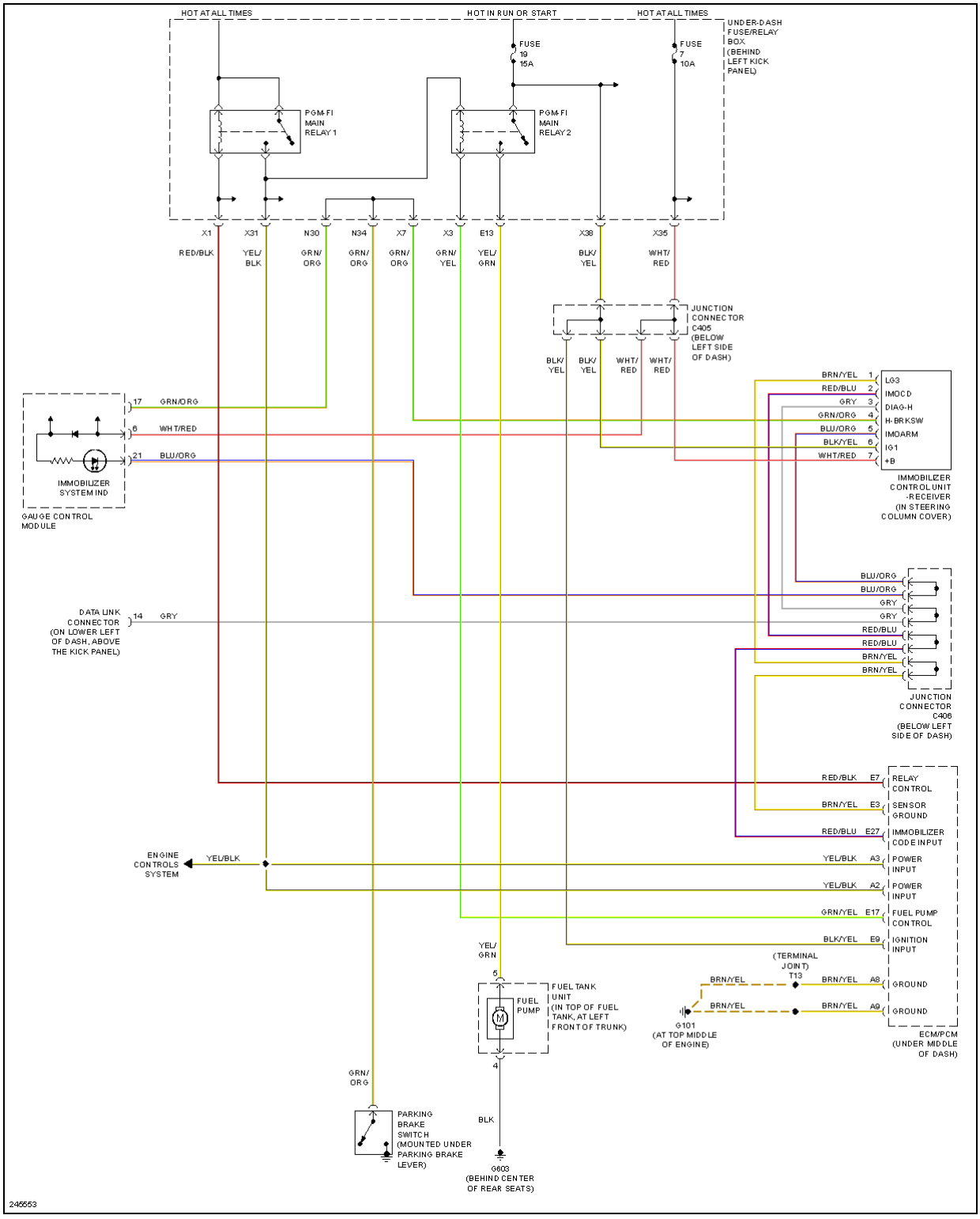


Fig. 17: 2.4L, Immobilizer Circuit

3.0L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

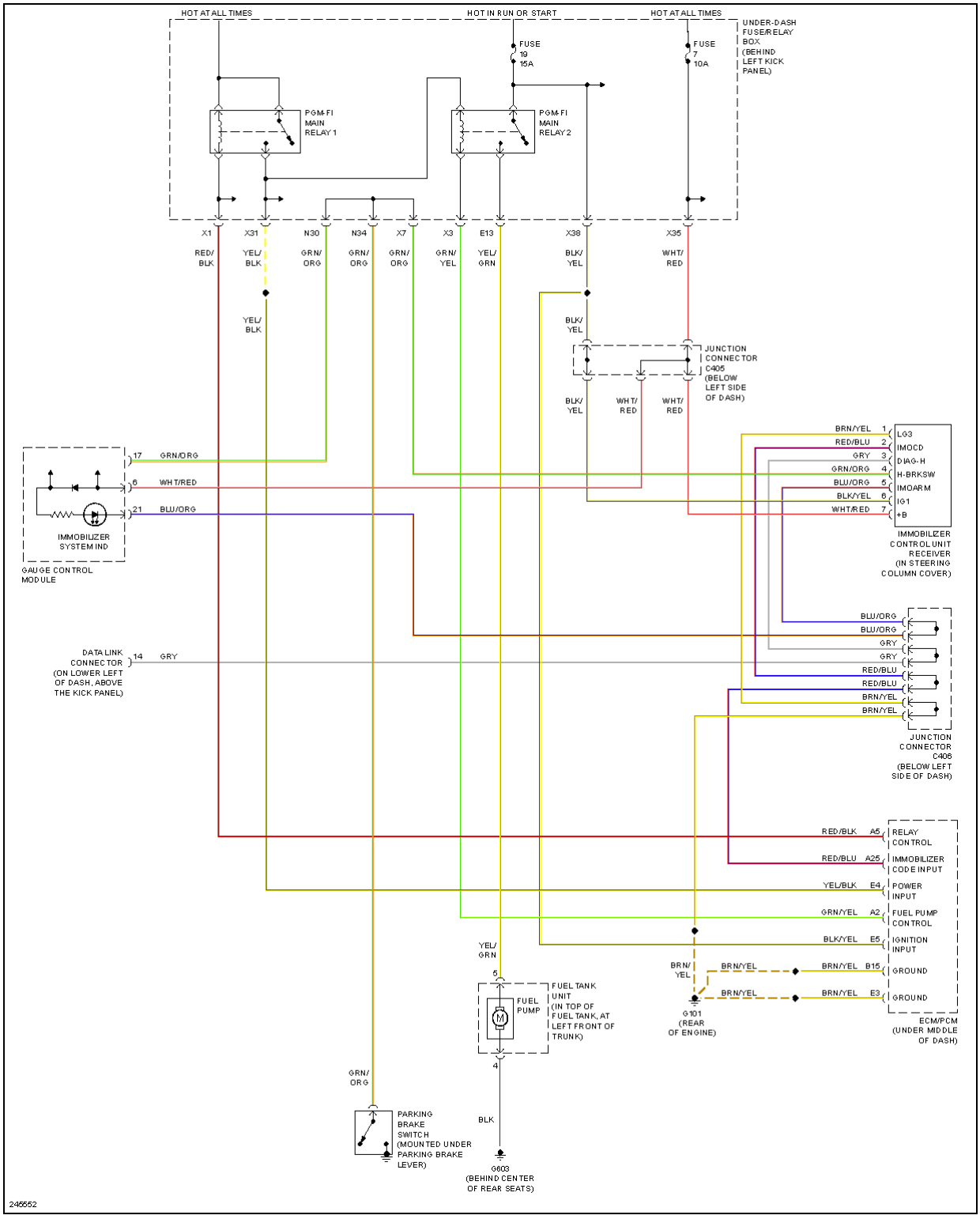


Fig. 18: 3.0L, Immobilizer Circuit, Except Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

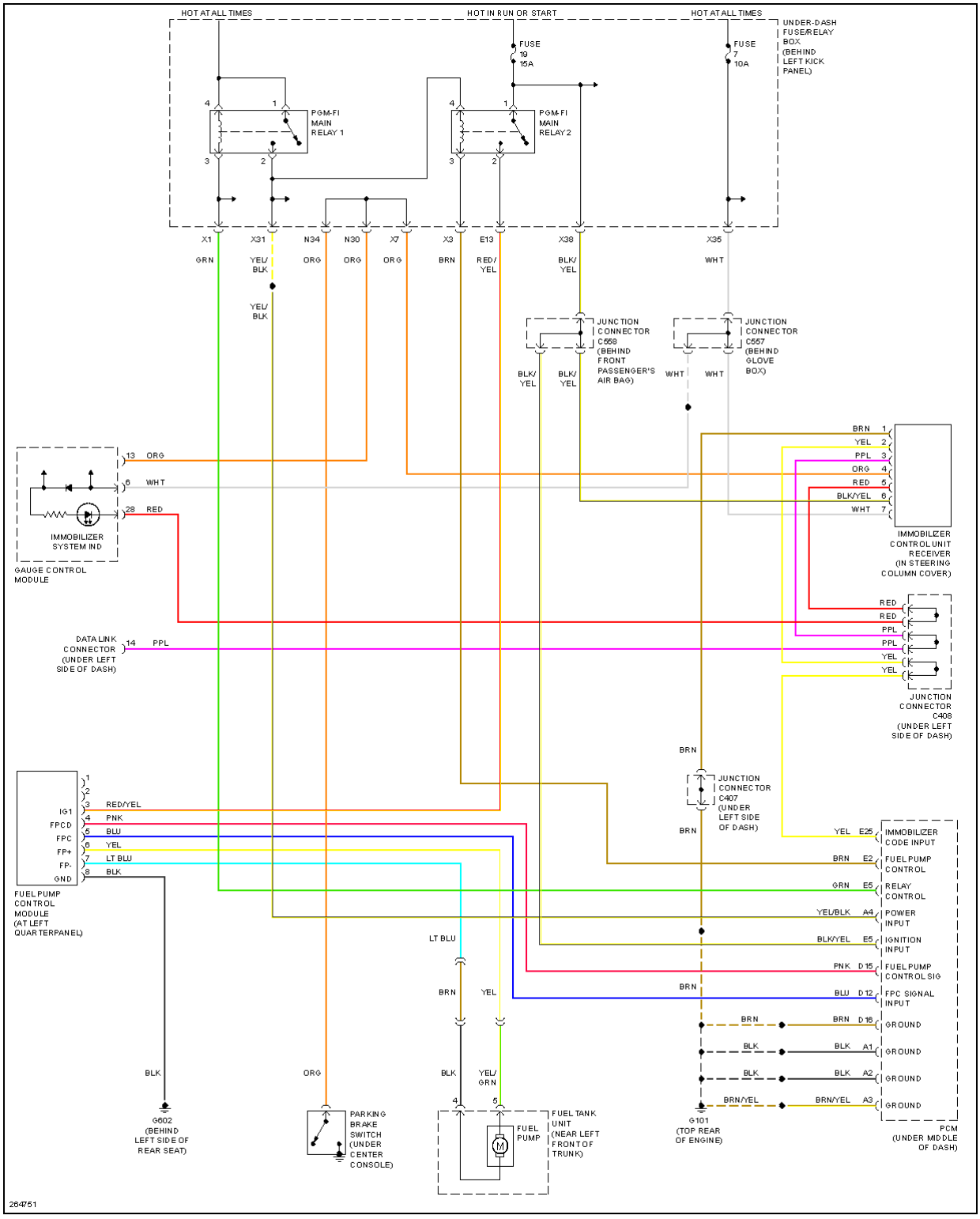


Fig. 19: 3.0L, Immobilizer Circuit, Hybrid

BODY CONTROL MODULES

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

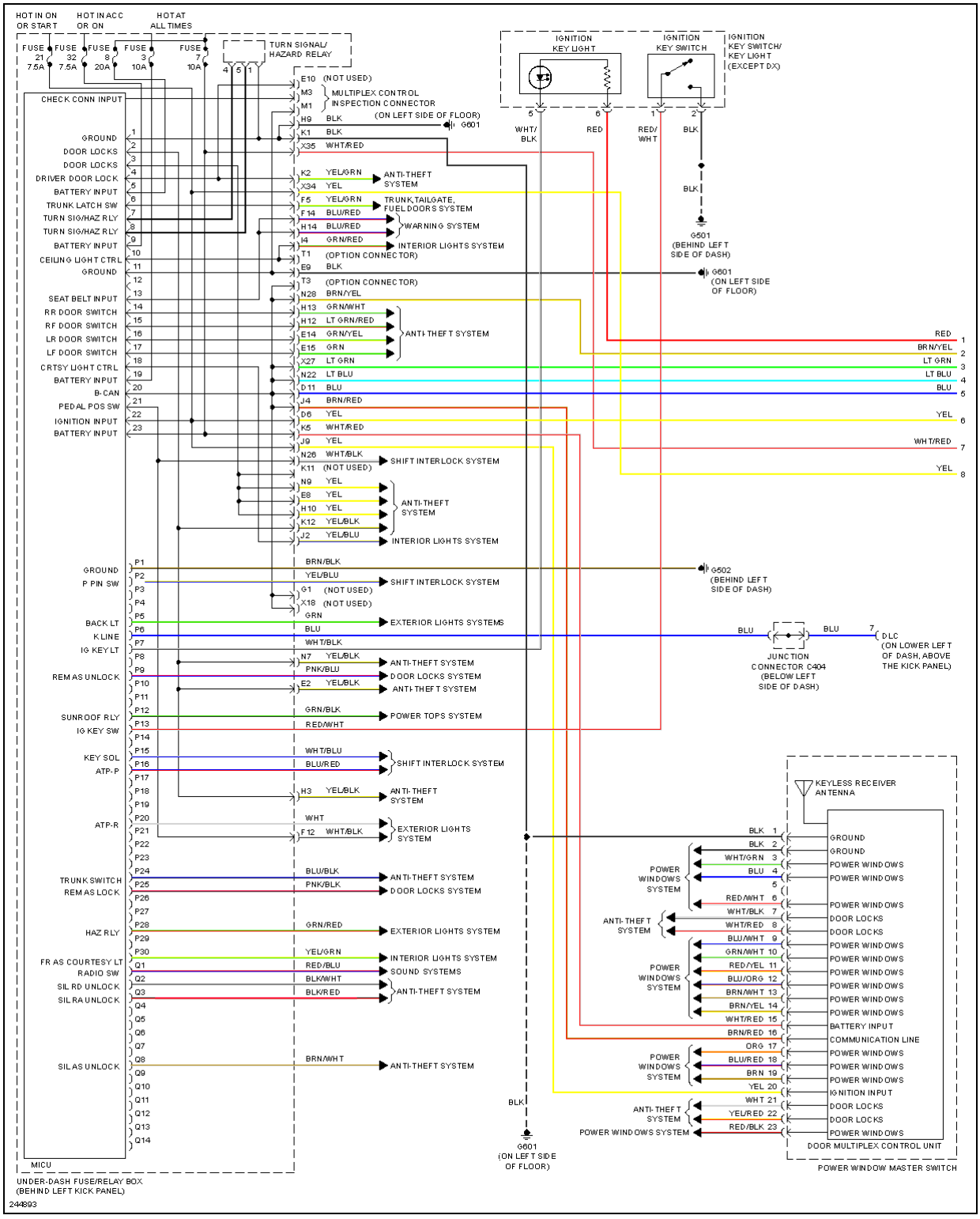


Fig. 20: Body Control Modules Circuit, Except Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

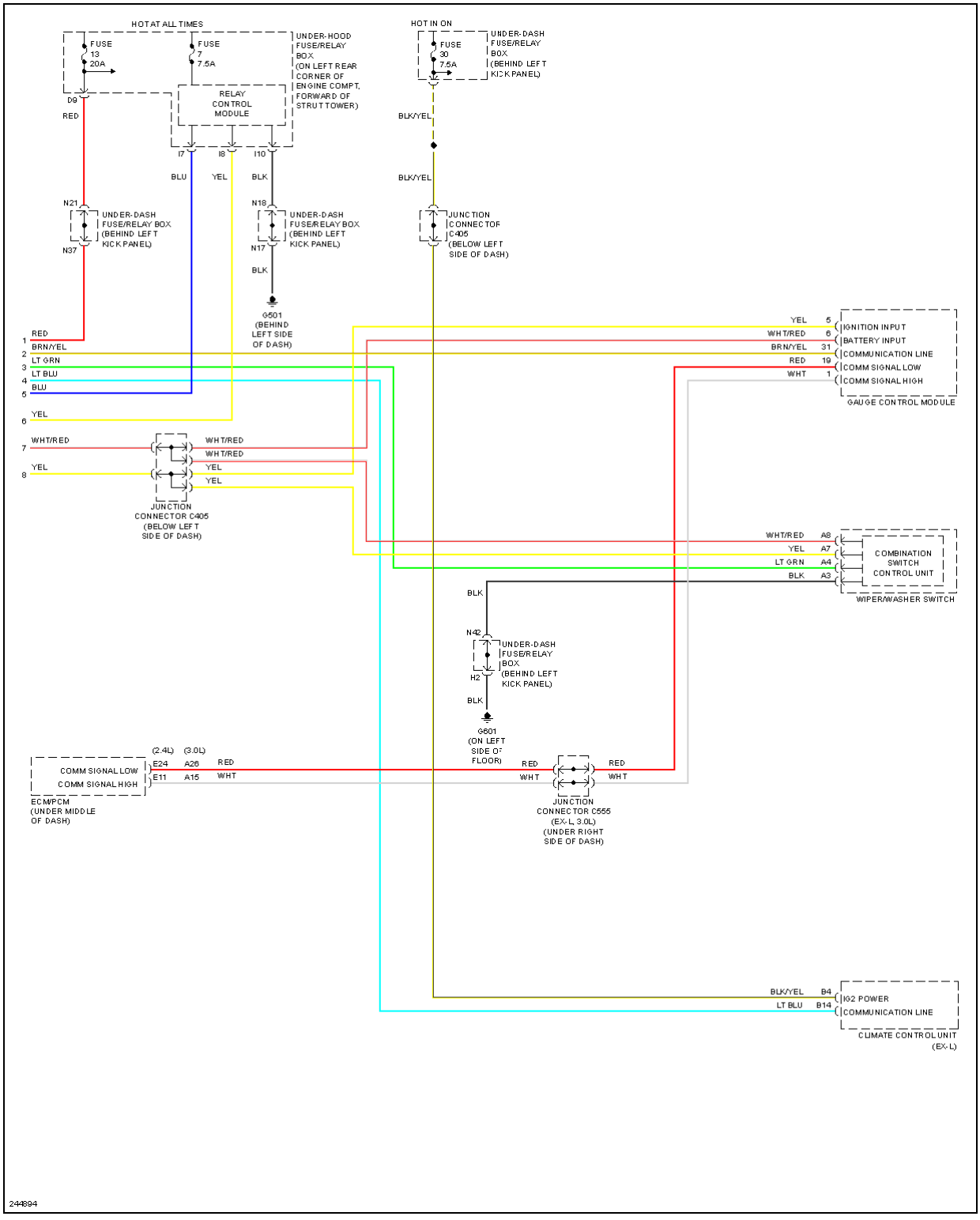


Fig. 21: Body Control Modules Circuit, Except Hybrid (2 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

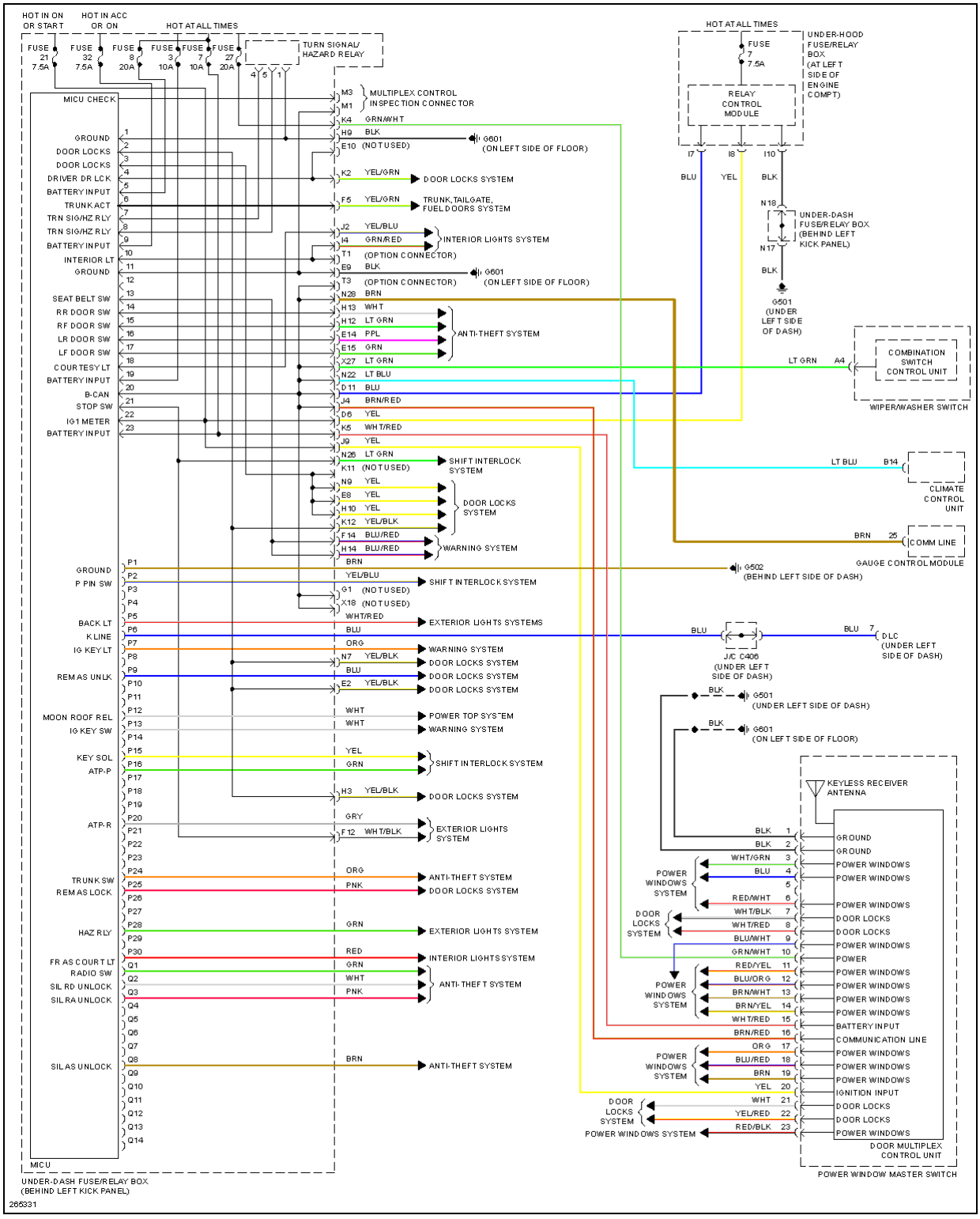


Fig. 22: Body Control Modules Circuit, Hybrid

COMPUTER DATA LINES

2.4L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

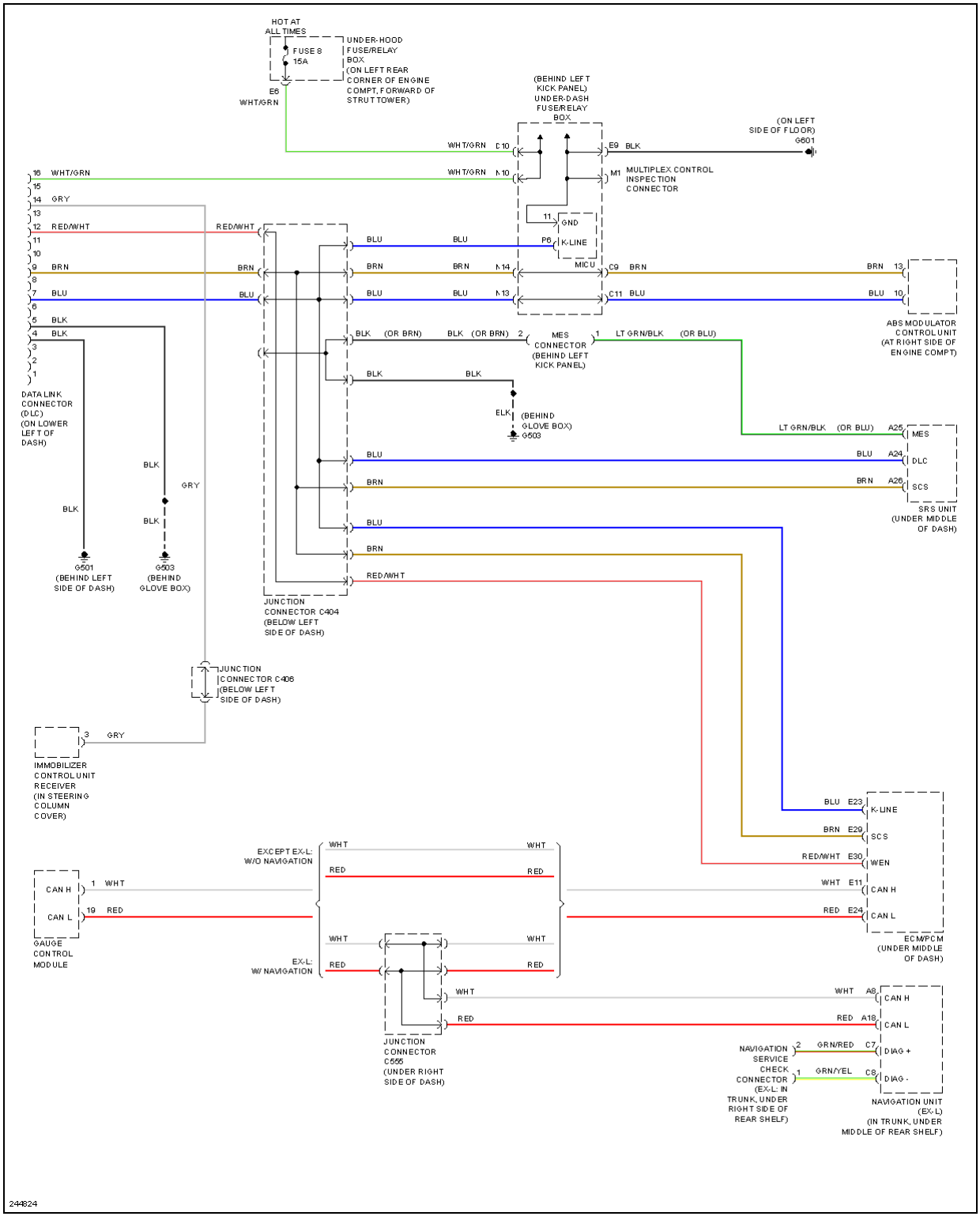


Fig. 23: 2.4L, Computer Data Lines Circuit

3.0L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 24: 3.0L, Computer Data Lines Circuit, Except Hybrid

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2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 25: 3.0L, Computer Data Lines Circuit, Hybrid

COOLING FAN

2.4L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 26: 2.4L, Cooling Fan Circuit

3.0L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 27: 3.0L, Cooling Fan Circuit, Except Hybrid

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Fig. 28: 3.0L, Cooling Fan Circuit, Hybrid (1 of 2)

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2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 29: 3.0L, Cooling Fan Circuit, Hybrid (2 of 2)

CRUISE CONTROL

2.4L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 30: 2.4L, Cruise Control Circuit (1 of 2)

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2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 31: 2.4L, Cruise Control Circuit (2 of 2)

3.0L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 32: 3.0L, Cruise Control Circuit, Except Hybrid

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2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 33: 3.0L, Cruise Control Circuit, Hybrid

DEFOGGERS

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 34: Heated Mirrors Circuit, Except Hybrid

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2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 35: Heated Mirrors Circuit, Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 36: Rear Defogger Circuit, Auto A/C

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 37: Rear Defogger Circuit, Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 38: Rear Defogger Circuit, Manual A/C

ELECTRONIC POWER STEERING

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 39: Electronic Power Steering Circuit

ENGINE PERFORMANCE

2.4L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 40: 2.4L, Engine Performance Circuit, A/T (1 of 4)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 41: 2.4L, Engine Performance Circuit, A/T (2 of 4)

2007 Honda Accord SE

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Fig. 42: 2.4L, Engine Performance Circuit, A/T (3 of 4)

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Fig. 43: 2.4L, Engine Performance Circuit, A/T (4 of 4)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 44: 2.4L, Engine Performance Circuit, M/T (1 of 4)

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Fig. 45: 2.4L, Engine Performance Circuit, M/T (2 of 4)

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Fig. 46: 2.4L, Engine Performance Circuit, M/T (3 of 4)

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Fig. 47: 2.4L, Engine Performance Circuit, M/T (4 of 4)

3.0L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 48: 3.0L, Engine Performance Circuit, Except Hybrid (1 of 5)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 49: 3.0L, Engine Performance Circuit, Except Hybrid (2 of 5)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 50: 3.0L, Engine Performance Circuit, Except Hybrid (3 of 5)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 51: 3.0L, Engine Performance Circuit, Except Hybrid (4 of 5)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 52: 3.0L, Engine Performance Circuit, Except Hybrid (5 of 5)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 53: 3.0L, Engine Performance Circuit, Hybrid (1 of 9)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 54: 3.0L, Engine Performance Circuit, Hybrid (2 of 9)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 55: 3.0L, Engine Performance Circuit, Hybrid (3 of 9)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 56: 3.0L, Engine Performance Circuit, Hybrid (4 of 9)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 57: 3.0L, Engine Performance Circuit, Hybrid (5 of 9)

2007 Honda Accord SE

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Fig. 58: 3.0L, Engine Performance Circuit, Hybrid (6 of 9)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 59: 3.0L, Engine Performance Circuit, Hybrid (7 of 9)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 60: 3.0L, Engine Performance Circuit, Hybrid (8 of 9)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 61: 3.0L, Engine Performance Circuit, Hybrid (9 of 9)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 62: 3.0L, IMA Circuit (1 of 3)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 63: 3.0L, IMA Circuit (2 of 3)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 64: 3.0L, IMA Circuit (3 of 3)

EXTERIOR LIGHTS

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 65: Back-up Lamps Circuit, A/T Except Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 66: Back-up Lamps Circuit, Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 67: Back-up Lamps Circuit, M/T Except Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 68: Exterior Lamps Circuit, Coupe (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 69: Exterior Lamps Circuit, Coupe (2 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 70: Exterior Lamps Circuit, Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 71: Exterior Lamps Circuit, Hybrid (2 of 2)

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2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 72: Exterior Lamps Circuit, Sedan W/O Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 73: Exterior Lamps Circuit, Sedan W/O Hybrid (2 of 2)

GROUND DISTRIBUTION

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 74: Ground Distribution Circuit, Except Hybrid (1 of 4)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 75: Ground Distribution Circuit, Except Hybrid (2 of 4)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 76: Ground Distribution Circuit, Except Hybrid (3 of 4)

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2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 77: Ground Distribution Circuit, Except Hybrid (4 of 4)

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2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 78: Ground Distribution Circuit, Hybrid (1 of 5)

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2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 79: Ground Distribution Circuit, Hybrid (2 of 5)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 80: Ground Distribution Circuit, Hybrid (3 of 5)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 81: Ground Distribution Circuit, Hybrid (4 of 5)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 82: Ground Distribution Circuit, Hybrid (5 of 5)

HEADLIGHTS

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 83: Fog Lamp Circuit

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 84: Headlamps Circuit, Except Hybrid Canada

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 85: Headlamps Circuit, Except Hybrid USA

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 86: Headlamps Circuit, Hybrid Canada

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 87: Headlamps Circuit, Hybrid USA

HORN

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 88: Horn Circuit, Except Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 89: Horn Circuit, Hybrid

INSTRUMENT CLUSTER

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 90: Instrument Cluster Circuit, Except Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 91: Instrument Cluster Circuit, Except Hybrid (2 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 92: Instrument Cluster Circuit, Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 93: Instrument Cluster Circuit, Hybrid (2 of 2)

INTERIOR LIGHTS

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 94: Courtesy Lamps Circuit, Except Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 95: Courtesy Lamps Circuit, Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 96: Entry Light Timer Circuit, Except Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 97: Entry Light Timer Circuit, Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 98: Instrument Illumination Circuit, Except Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 99: Instrument Illumination Circuit, Except Hybrid (2 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 100: Instrument Illumination Circuit, Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 101: Instrument Illumination Circuit, Hybrid (2 of 2)

NAVIGATION

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 102: Navigation Circuit, Except Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 103: Navigation Circuit, Hybrid

POWER DISTRIBUTION

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 104: Power Distribution Circuit, Except Hybrid (1 of 4)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 105: Power Distribution Circuit, Except Hybrid (2 of 4)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 106: Power Distribution Circuit, Except Hybrid (3 of 4)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 107: Power Distribution Circuit, Except Hybrid (4 of 4)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 108: Power Distribution Circuit, Hybrid (1 of 5)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 109: Power Distribution Circuit, Hybrid (2 of 5)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 110: Power Distribution Circuit, Hybrid (3 of 5)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 111: Power Distribution Circuit, Hybrid (4 of 5)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 112: Power Distribution Circuit, Hybrid (5 of 5)

POWER DOOR LOCKS

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 113: Power Door Locks Circuit, Except Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 114: Power Door Locks Circuit, Except Hybrid (2 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 115: Power Door Locks Circuit, Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 116: Power Door Locks Circuit, Hybrid (2 of 2)

POWER MIRRORS

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 117: Automatic Day/Night Mirror Circuit, Except Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 118: Automatic Day/Night Mirror Circuit, Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 119: Power Mirrors Circuit, Canada

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 120: Power Mirrors Circuit, Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 121: Power Mirrors Circuit, USA

POWER SEATS

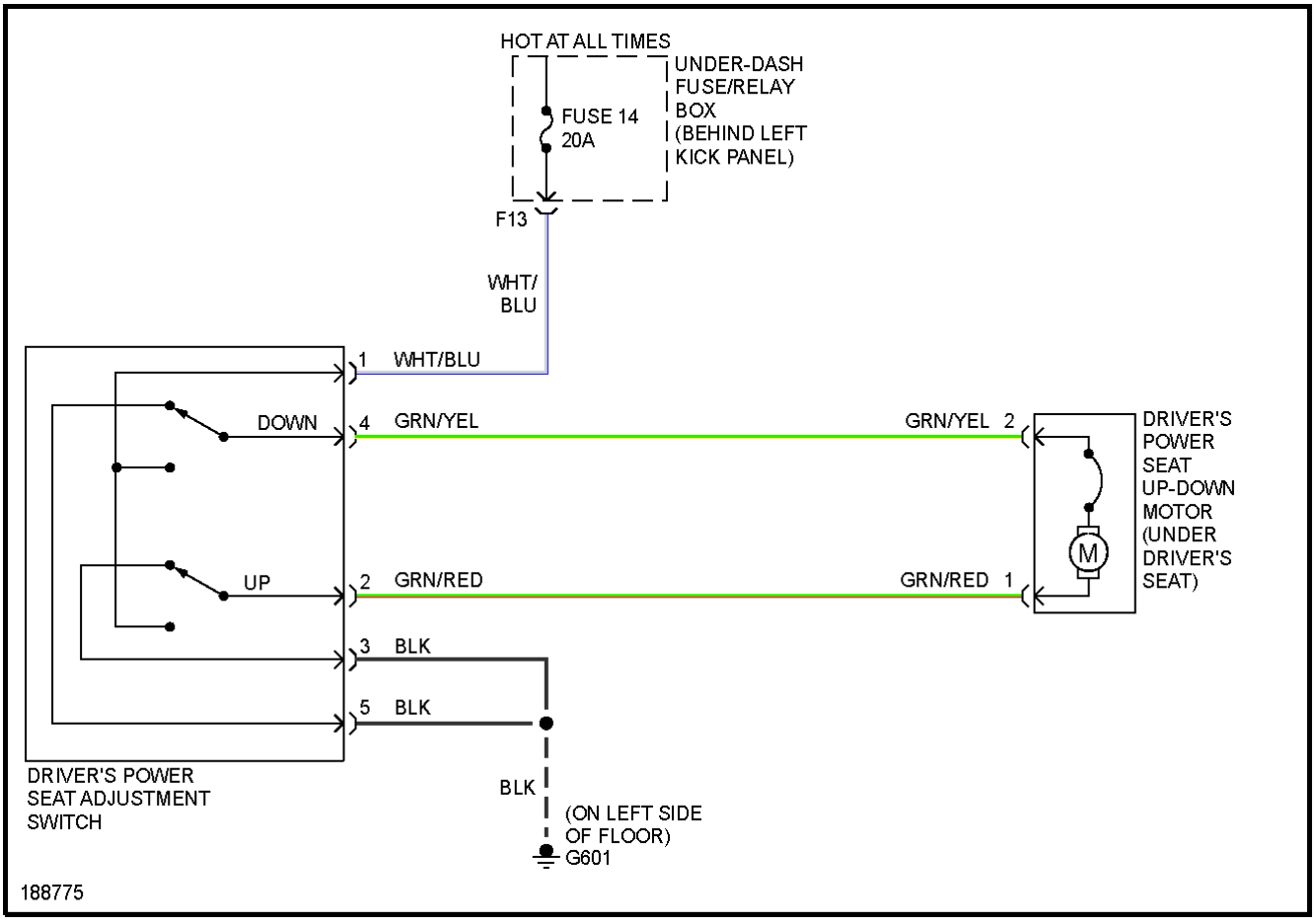

HOT AT ALL TIMES
UNDER-DASH FUSE/RELAY BOX (BEHIND LEFT KICK PANEL)
FUSE 14 20A
F13
WHT/ BLU
1 WHT/BLU
DOWN
4 GRN/YEL
GRN/YEL 2
DRIVER'S POWER SEAT UP-DOWN MOTOR (UNDER DRIVER'S SEAT)
M
UP
2 GRN/RED
GRN/RED 1
3 BLK
5 BLK
DRIVER'S POWER SEAT ADJUSTMENT SWITCH
BLK
(ON LEFT SIDE OF FLOOR)
G601
188775

Fig. 122: 2-Way Adjustable Power Seat Circuit

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 123: 8-Way Adjustable Power Seat Circuit

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 124: Heated Seats Circuit, Except Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 125: Heated Seats Circuit, Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 126: Passenger"s Power Seat Circuit

POWER TOP/SUNROOF

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 127: Power Top/Sunroof Circuit, Coupe

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 128: Power Top/Sunroof Circuit, Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 129: Power Top/Sunroof Circuit, Sedan W/O Hybrid

POWER WINDOWS

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 130: Power Windows Circuit, Except Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 131: Power Windows Circuit, Except Hybrid (2 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 132: Power Windows Circuit, Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 133: Power Windows Circuit, Hybrid (2 of 2)

RADIO

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 134: Base Radio Circuit, Except Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 135: Base Radio Circuit, Except Hybrid (2 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 136: Base Radio Circuit, Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 137: Base Radio Circuit, Hybrid (2 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 138: Music Link Circuit, Accessory

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 139: Premium Radio Circuit, Except Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 140: Premium Radio Circuit, Except Hybrid (2 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 141: Premium Radio Circuit, Hybrid (1 of 3)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 142: Premium Radio Circuit, Hybrid (2 of 3)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 143: Premium Radio Circuit, Hybrid (3 of 3)

SHIFT INTERLOCK

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

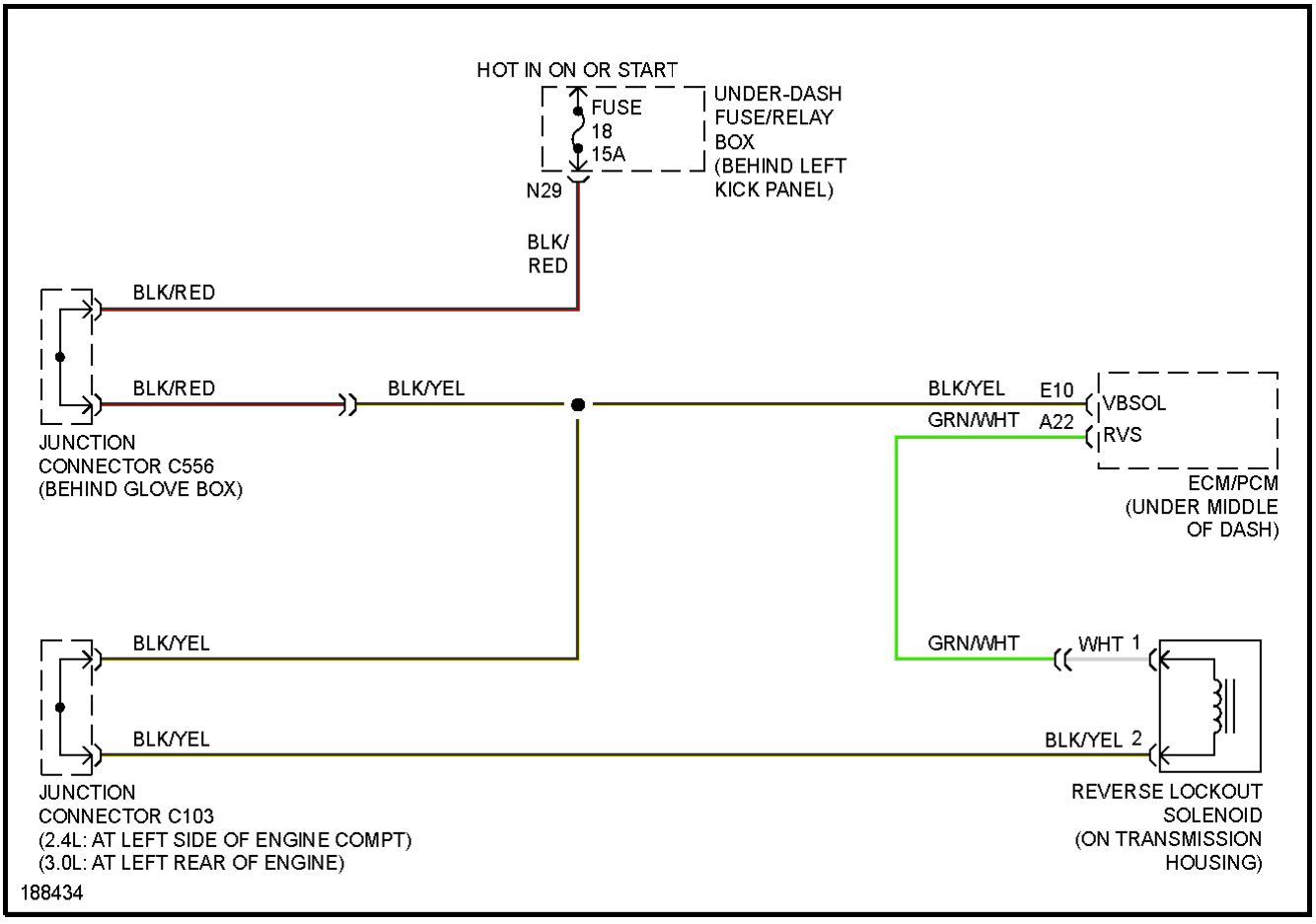


Fig. 144: Reverse Lockout Circuit

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 145: Shift Interlock Circuit, Except Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 146: Shift Interlock Circuit, Hybrid

STARTING/CHARGING

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 147: Charging Circuit

2.4L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 148: 2.4L, Starting Circuit, A/T

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 149: 2.4L, Starting Circuit, M/T

3.0L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 150: 3.0L, Starting Circuit, Except Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 151: 3.0L, Starting Circuit, Hybrid

SUPPLEMENTAL RESTRAINTS

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 152: Supplemental Restraints Circuit, Except Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 153: Supplemental Restraints Circuit, Except Hybrid (2 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 154: Supplemental Restraints Circuit, Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 155: Supplemental Restraints Circuit, Hybrid (2 of 2)

TRANSMISSION

2.4L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 156: 2.4L, Transmission Circuit (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 157: 2.4L, Transmission Circuit (2 of 2)

3.0L

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 158: 3.0L, Transmission Circuit, Except Hybrid (1 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 159: 3.0L, Transmission Circuit, Except Hybrid (2 of 2)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 160: 3.0L, Transmission Circuit, Hybrid (1 of 4)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 161: 3.0L, Transmission Circuit, Hybrid (2 of 4)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 162: 3.0L, Transmission Circuit, Hybrid (3 of 4)

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 163: 3.0L, Transmission Circuit, Hybrid (4 of 4)

TRUNK, TAILGATE, FUEL DOOR

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 164: Trunk, Tailgate, Fuel Door Circuit, Except Hybrid

2007 Honda Accord SE

2007 SYSTEM WIRING DIAGRAMS Honda - Accord

Fig. 165: Trunk, Tailgate, Fuel Door Circuit, Hybrid

WARNING SYSTEMS

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Fig. 166: Warning Systems Circuit, Except Hybrid

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Fig. 167: Warning Systems Circuit, Hybrid

WIPER/WASHER

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Fig. 168: Wiper/Washer Circuit, Except Hybrid

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Fig. 169: Wiper/Washer Circuit, Hybrid