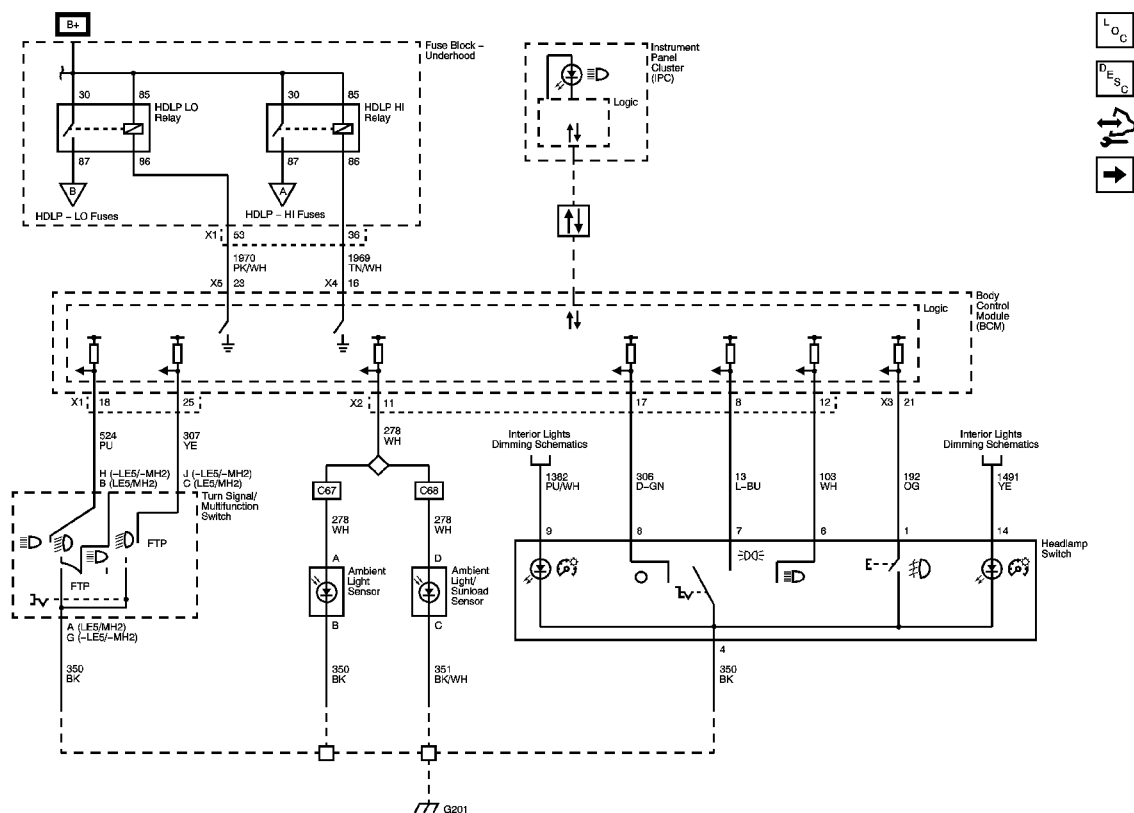


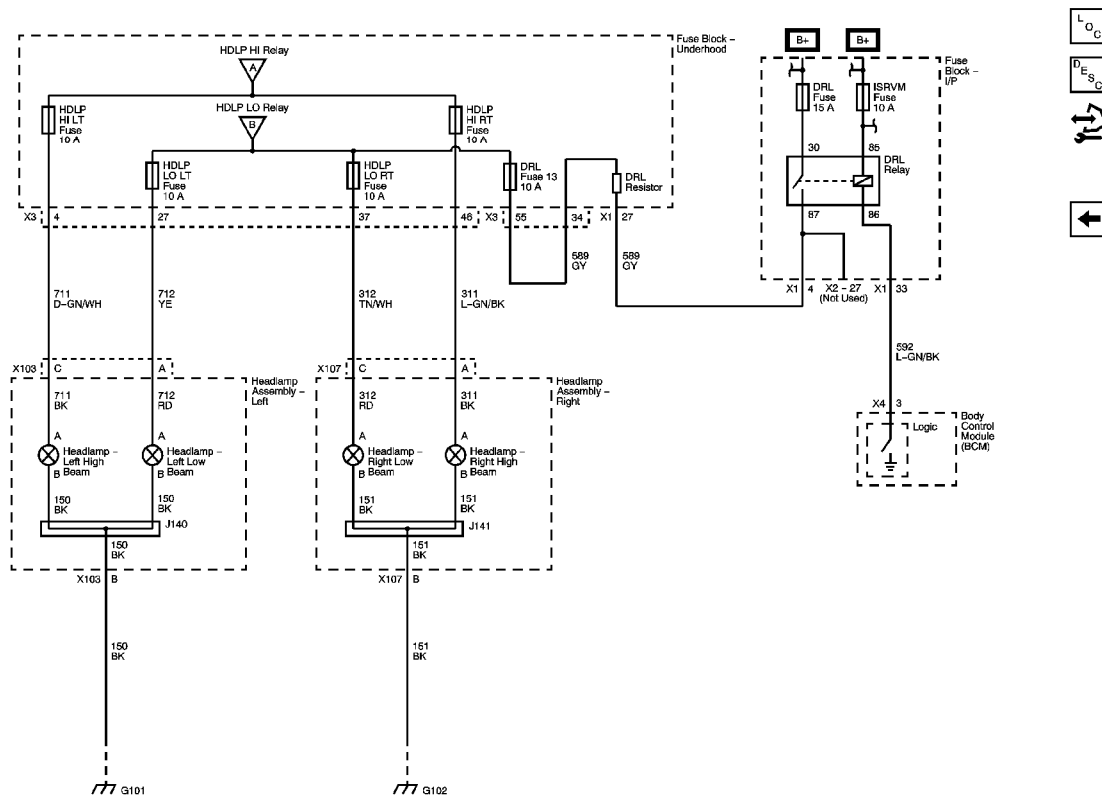
Fastener Tightening Specifications

Application	Specification	
	Metric	English
CHMSL to Rear Liftgate Spoiler Screw	2.5 N·m	22 lb in
Dome Lamp Screw	2 N·m	18 lb in
Fog Lamp Bracket Nut	3 N·m	27 lb in
Fog Lamp Bracket to Fascia Screws	1.5 N·m	13 lb in
Front Fog Lamp Opening Cover Screw	1.5 N·m	13 lb in
Headlamp Assembly Bolts-Base	7.5 N·m	66 lb in
Headlamp Assembly Bolts-Redline	7.5 N·m	66 lb in
Headlamp Housing Bracket Assembly Screw	2.5 N·m	22 lb in
Key Hole Lamp Retaining Screw	2.5 N·m	22 lb in
License Plate Bulb Assembly Screws	.9 N·m	8 lb in
Rear Bumper Reflector Nut	.5 N·m	4 lb in
Tail Lamp Screws	2.5 N·m	22 lb in

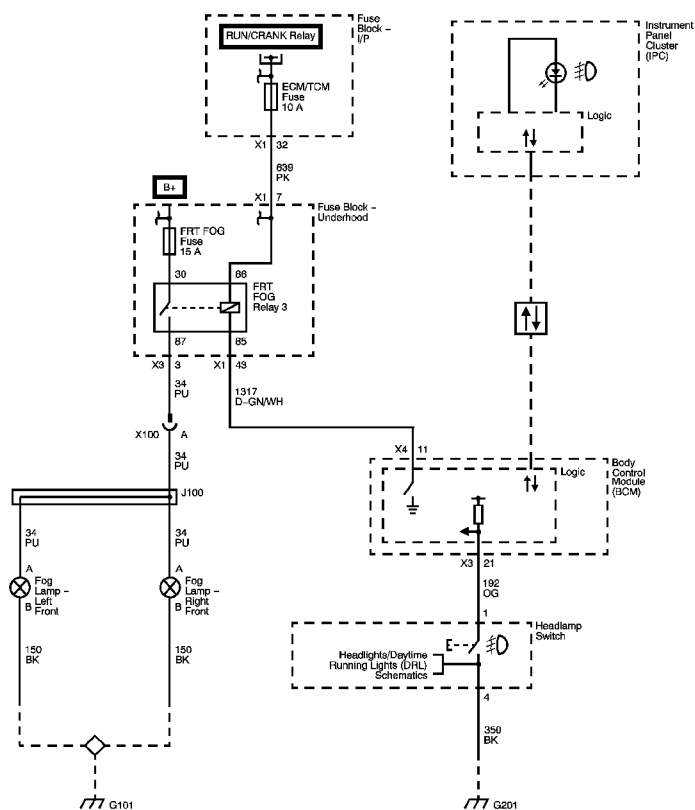
Headlights Controls



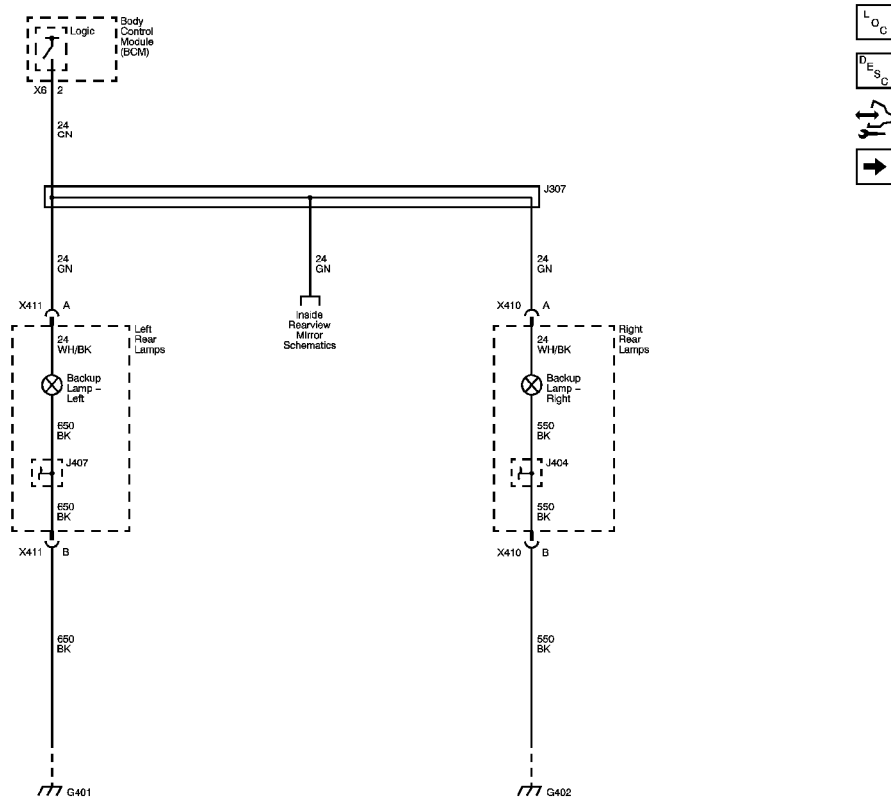
Headlights/DRL



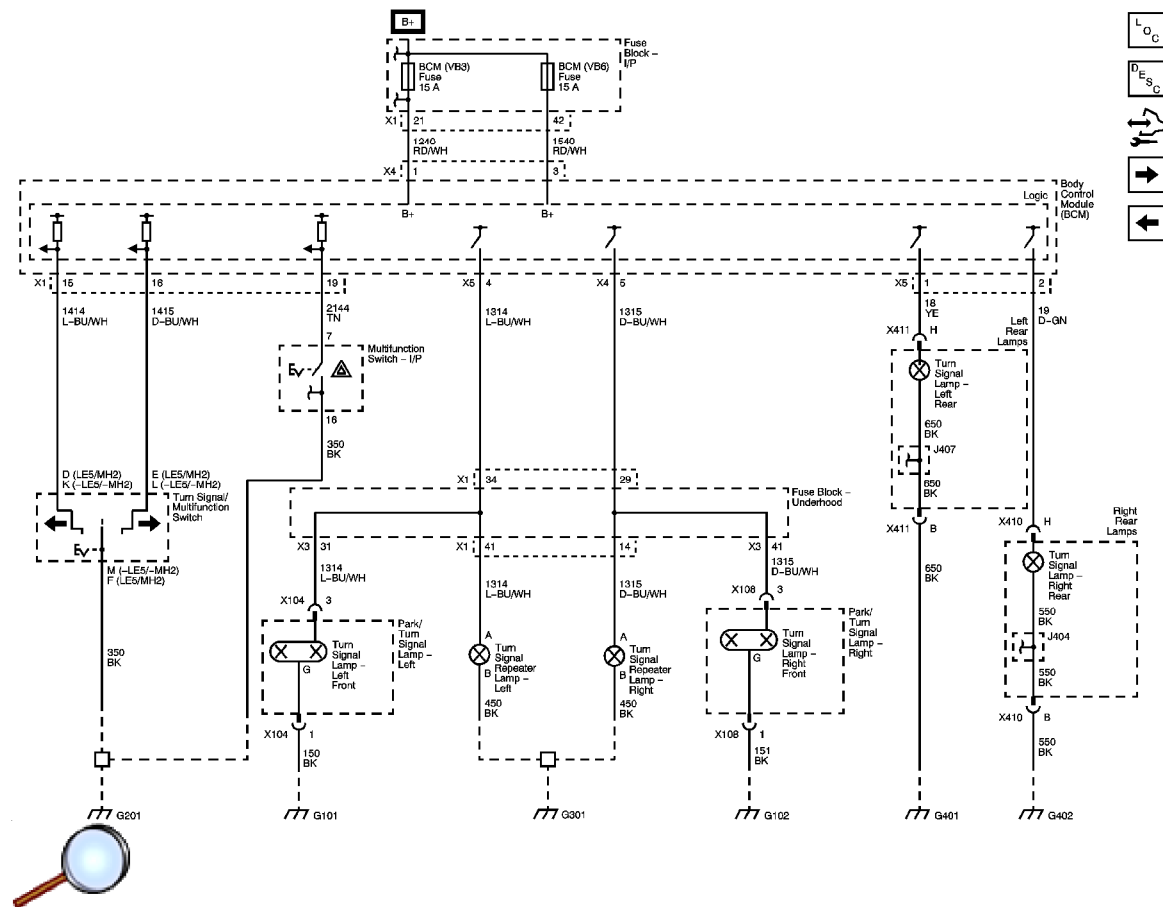
Fog Lights Schematics



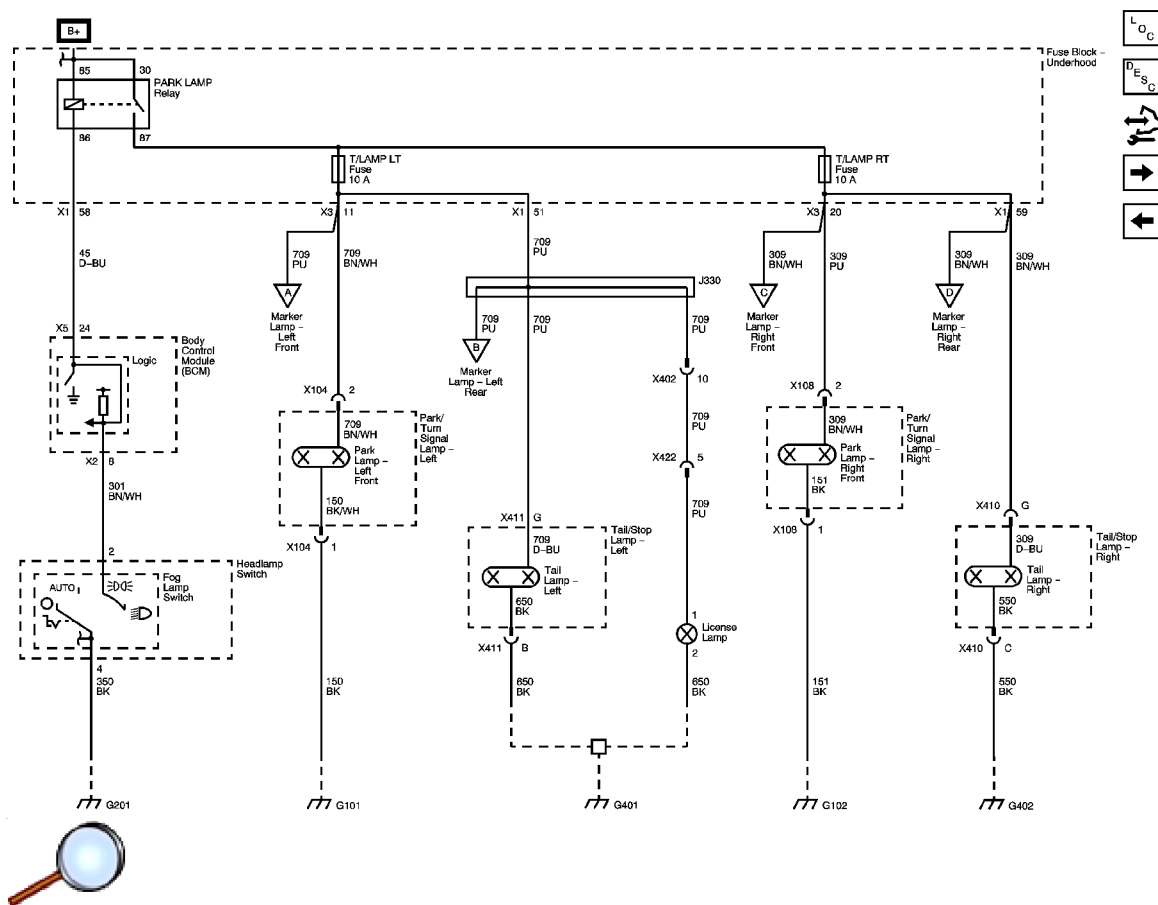
Backup Lamps



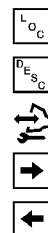
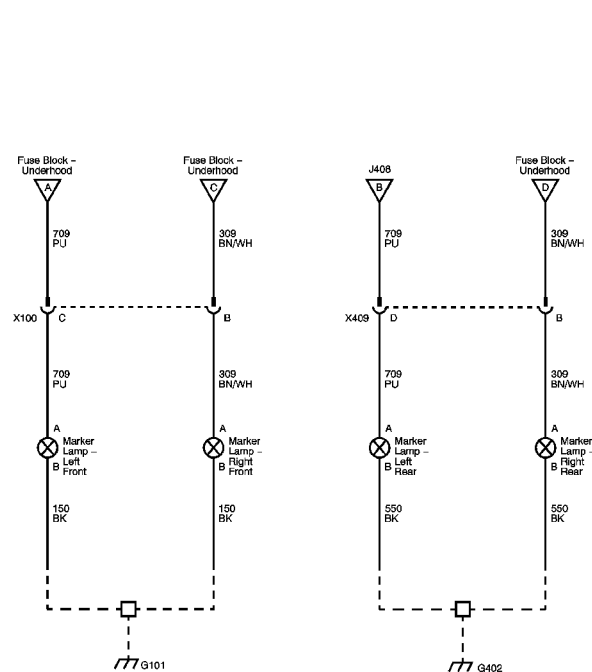
Turn/Hazard Lamps



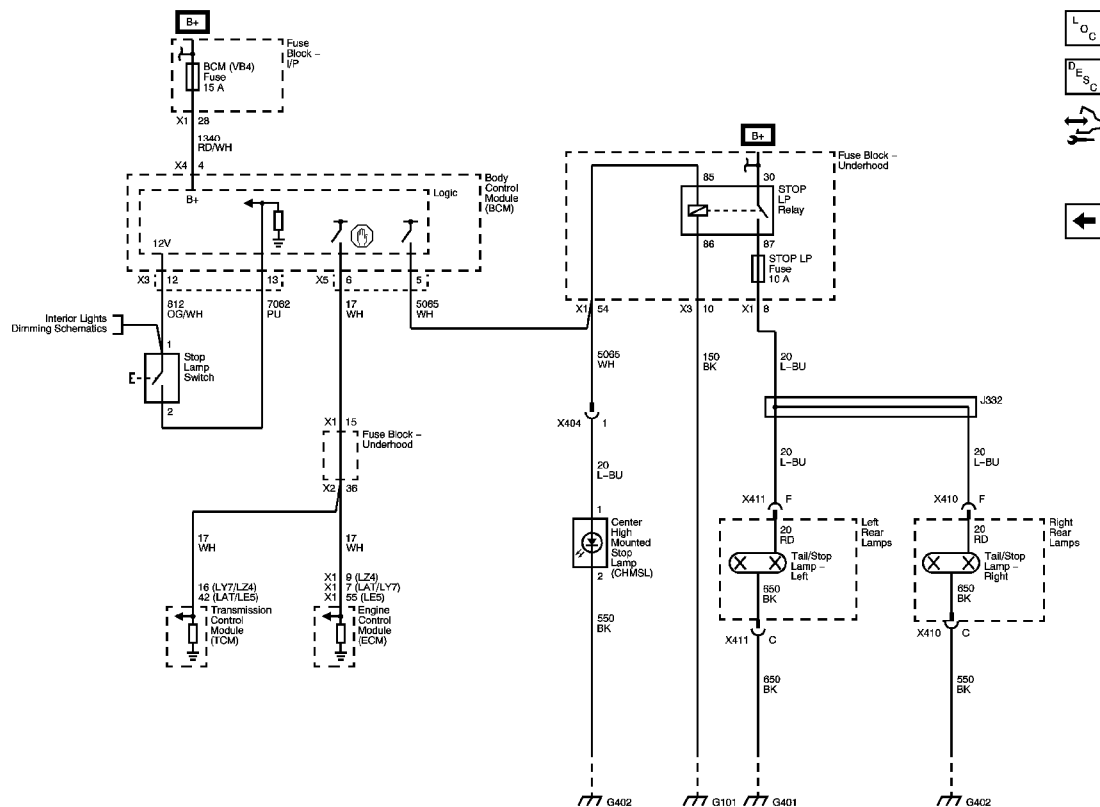
Park Lamps and License Lamp



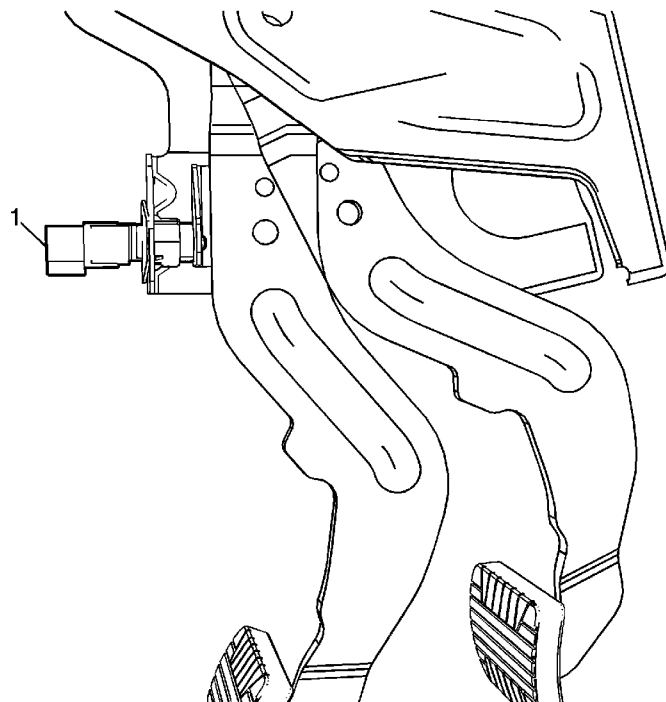
Marker Lamps



Stop Lamps



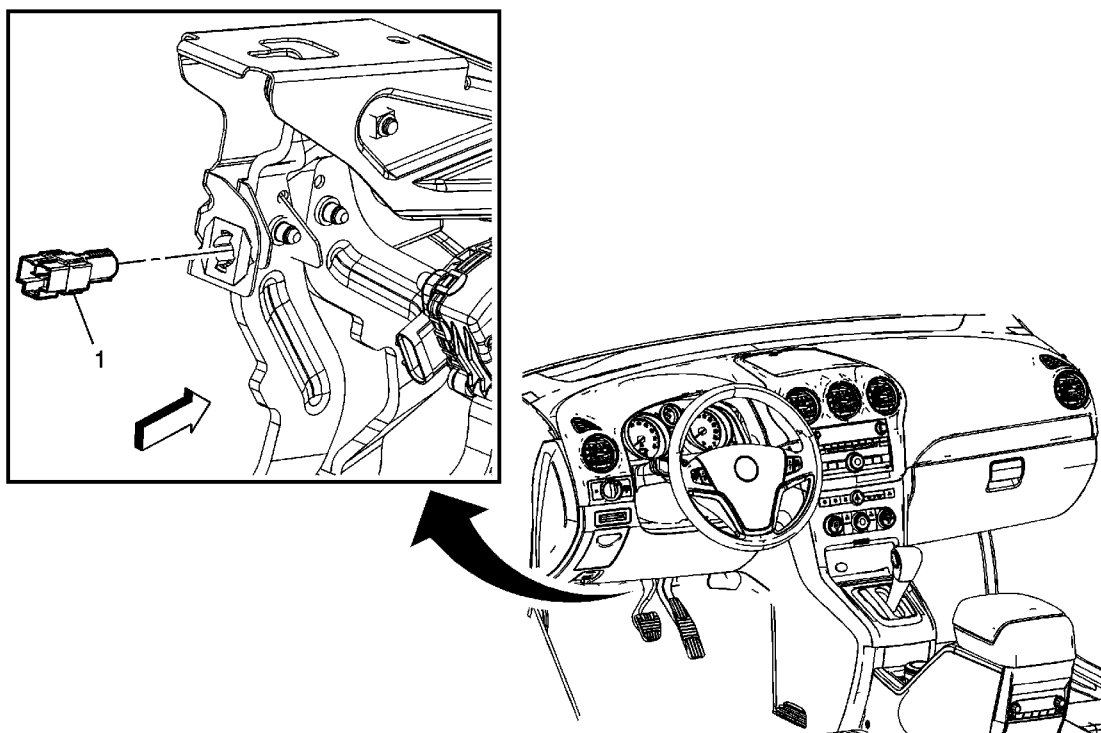
Stop Lamp Switch Adjustment



Callout	Component Name
1	<p>Stop Lamp Switch</p> <p>Procedure</p> <ol style="list-style-type: none">1. Cycle the brake pedal to ensure free brake pedal movement and full return prior to setting the switch.2. Slide the brake stop lamp switch into the retainer until the switch plunger is touching against the striker plate.3. Once the switch barrel is against the strike plate, twist clockwise 60 degrees until the travel stop has been reached to lock it in place. <p>Caution: Proper stoplamp switch adjustment is essential. Improper stoplamp switch adjustment could cause brake drag and excessive brake lining wear.</p> <ol style="list-style-type: none">4. With the switch properly adjusted, there will be a 0.2-1.2 mm (0.008-0.47 in) clearance between the end of the switch barrel and the striker plate on the pedal arm.5. Cycle the brake pedal to ensure the brake switch electrical connector is fully seated, and that the switch remains in place.6. Verify the operation of the brake stop lamp.

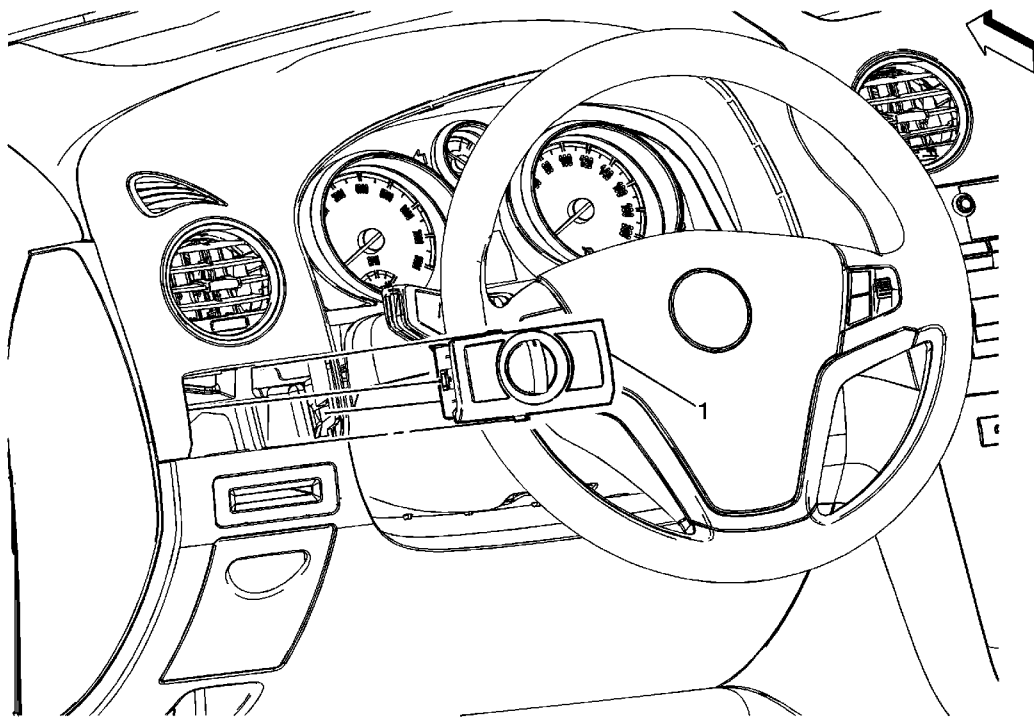
© 2010 General Motors Corporation. All rights reserved.

Stop Lamp Switch Replacement



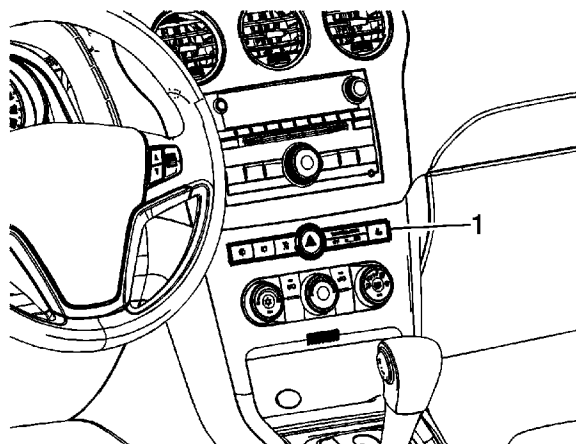
Callout	Component Name
1	<p>Stop Lamp Switch Assembly</p> <p>Procedure</p> <ol style="list-style-type: none">1. Disconnect the electrical connection.2. Rotate the stop lamp switch counterclockwise to remove it from the pedal assembly.3. Refer to Stop Lamp Switch Adjustment

Headlamp Switch Replacement



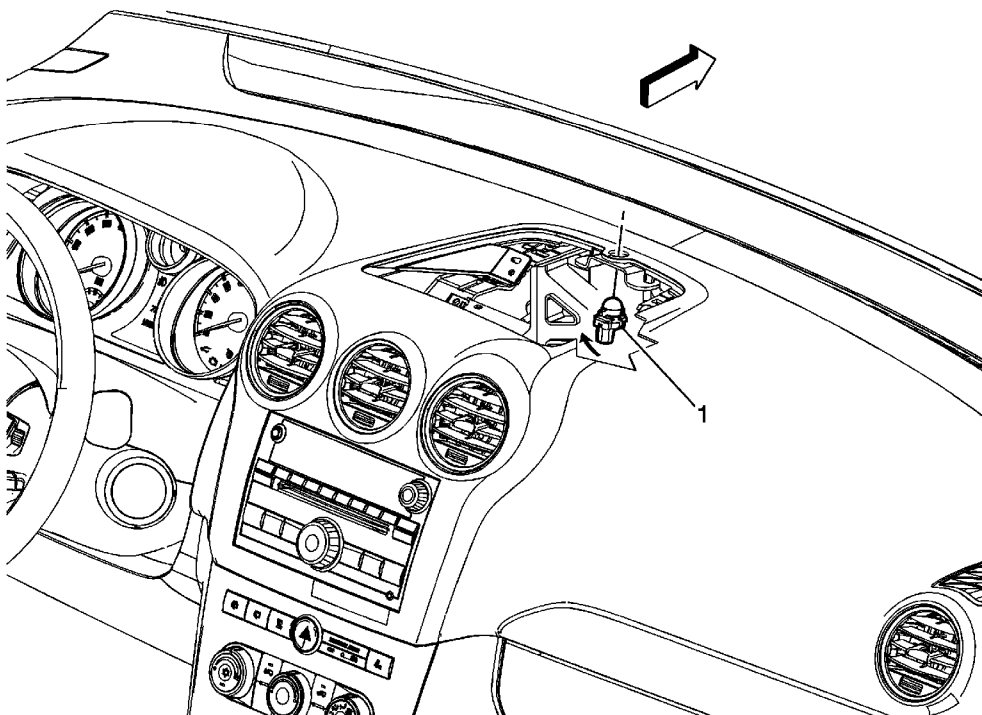
Callout	Component Name
1	Headlamp and Instrument Panel Lamp Dimmer and Fog Lamp Switch Assembly
Procedure	
<ol style="list-style-type: none">1. Carefully use a plastic flat bladed tool to remove the switch assembly from the instrument panel.2. Disconnect the electrical connector.	

Hazard Warning Switch Replacement



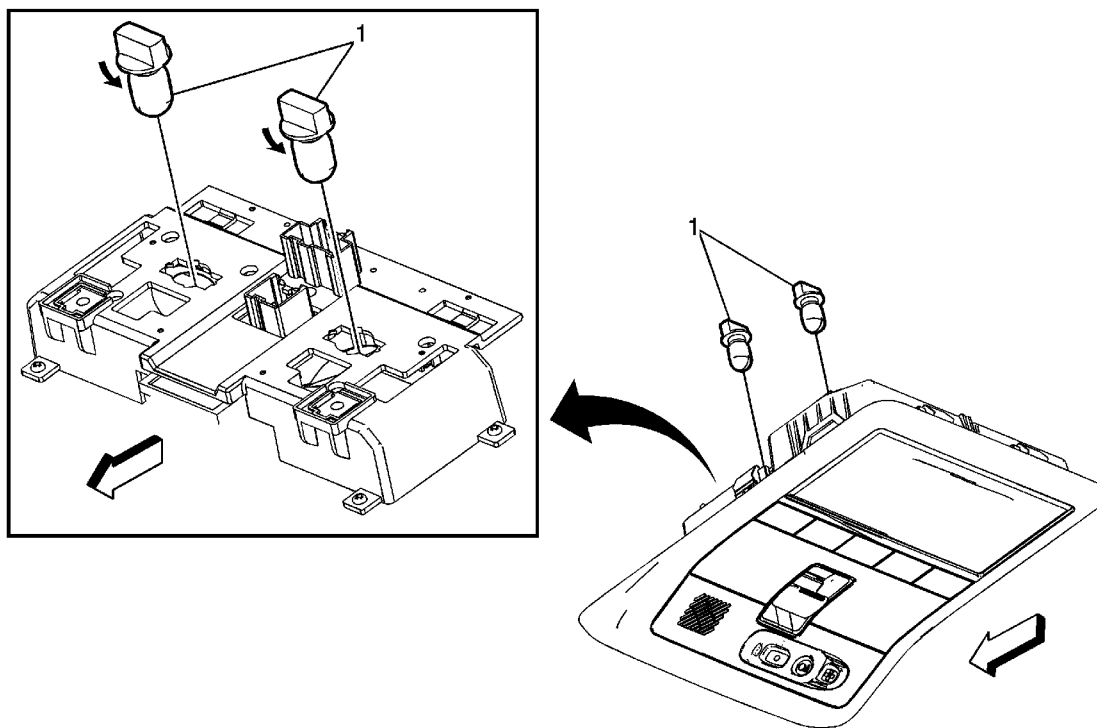
The hazard warning switch (1) located in the driver information display assembly can not be serviced separately. Should the switch assembly need to be replaced, the entire driver information display assembly will need to be replaced. Refer to [Driver Information Display Switch Replacement](#) .

Headlamp Automatic Control Ambient Light Sensor Replacement



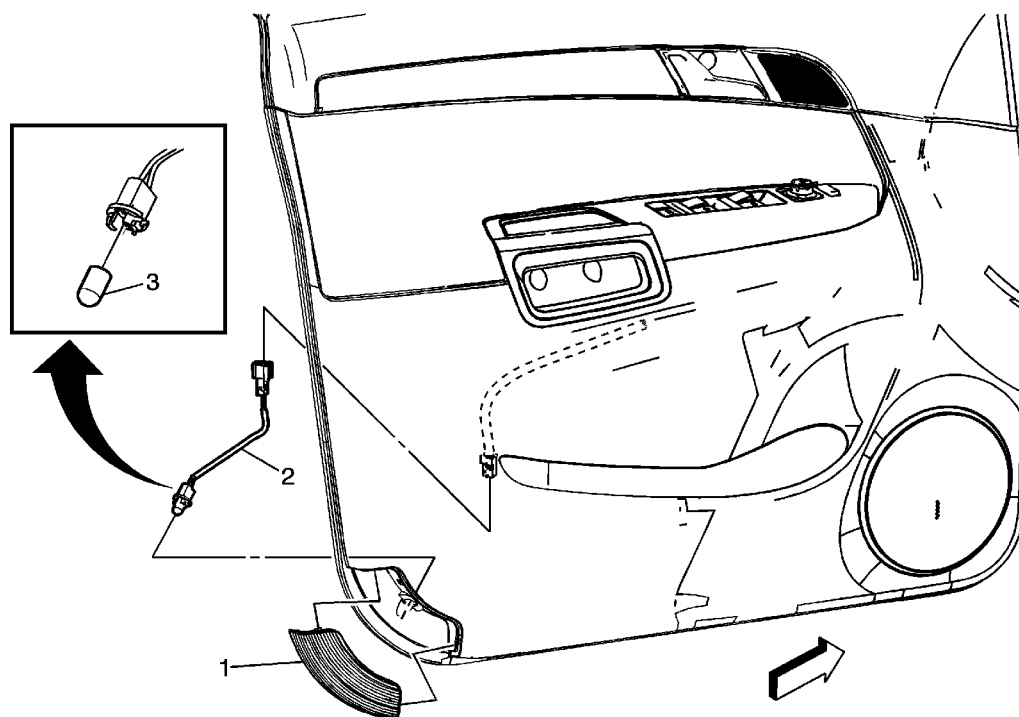
Callout	Component Name
Preliminary Procedure	
Remove the radio front speaker. Refer to Radio Front Speaker Replacement .	
1	Headlamp Auto Control Ambient Light Sensor Assembly Procedure <ol style="list-style-type: none">1. Twist and pull down to remove.2. Disconnect electrical connector.

Reading Lamp Bulb Replacement



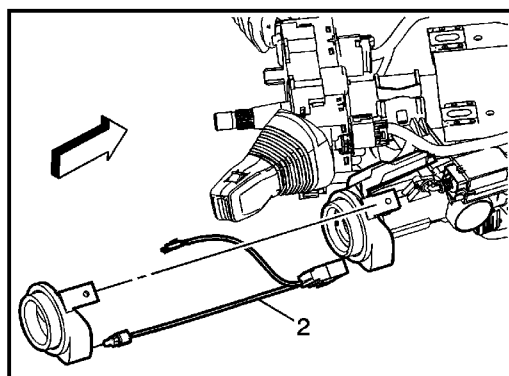
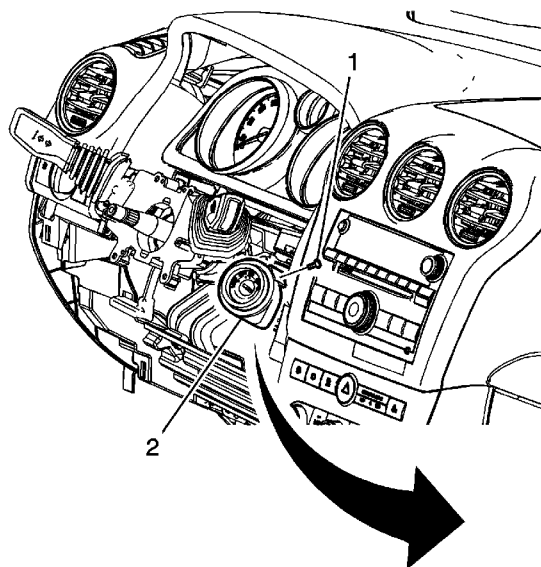
Callout	Component Name
Preliminary Procedure	
Remove the reading lamp assembly. Refer to Roof Console Replacement .	
1	Reading Lamp Bulb (Qty: 2)

Door Lamp Replacement



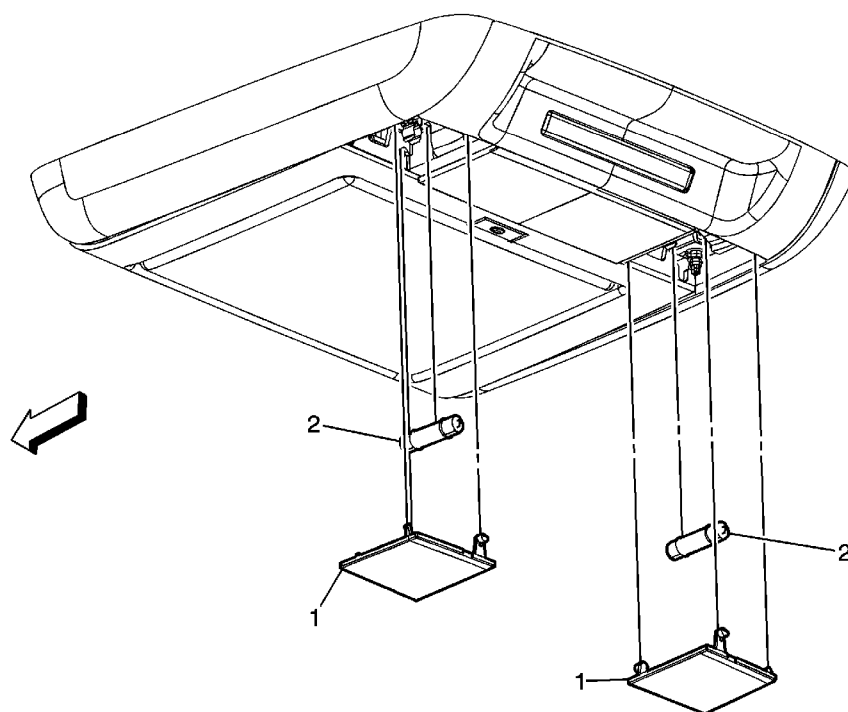
Callout	Component Name
Preliminary Procedure	
Remove the front side door trim. Refer to Front Side Door Trim Panel Replacement .	
1	Front Side Door Courtesy Lamp Lens
2	Front Side Door Courtesy Lamp Retainer Assembly
Procedure	
Disconnect the electrical connector.	
3	Front Side Door Courtesy Lamp Bulb

Ignition Lock Cylinder Bulb Replacement



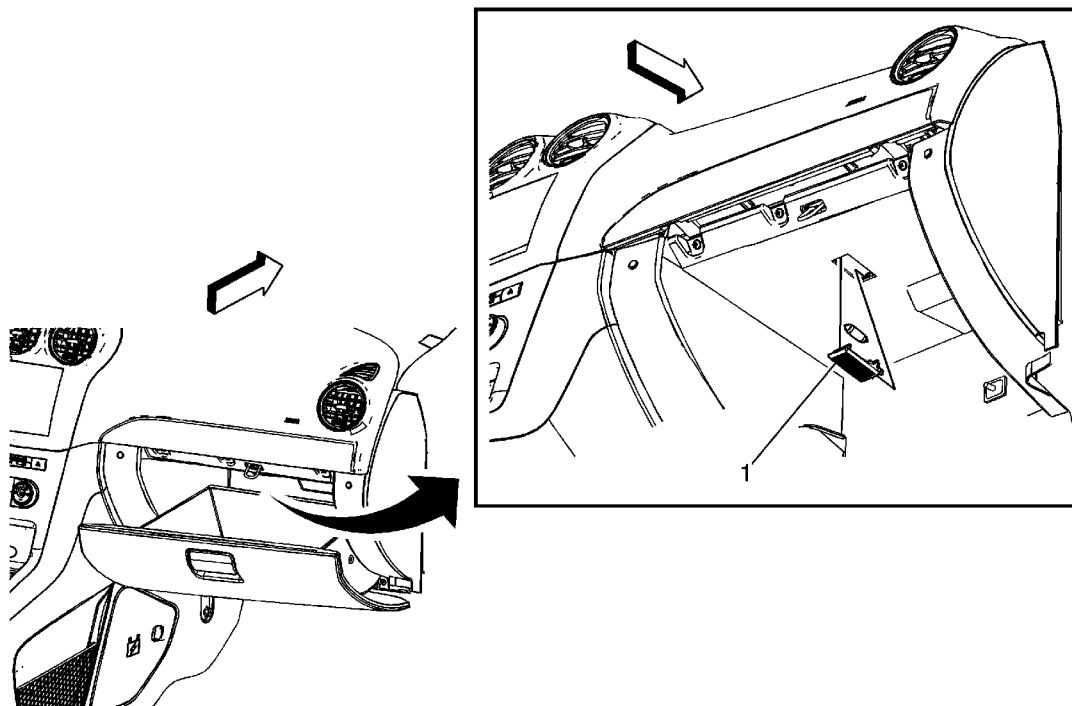
Callout	Component Name
Preliminary Procedure	
Remove the steering column upper trim cover. Refer to Steering Column Upper Trim Cover Replacement .	
1	Key Hole Lamp Retaining Screw Caution: Refer to Fastener Caution in the Preface section. Tighten 2.5 N·m (22 lb ft)
2	Ignition Key Alarm Switch Assembly Procedure 1. Disconnect the electrical connectors. 2. Twist to release the key hole lamp bulb.

Overhead Console Reading Lamp and Bulb Replacement



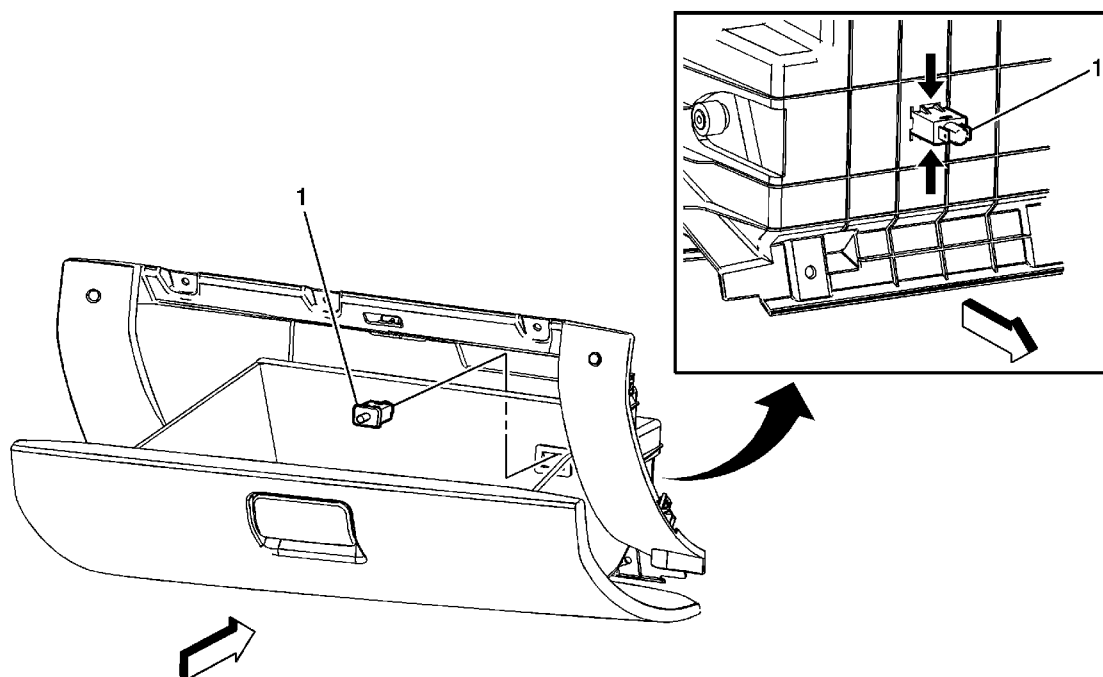
Callout	Component Name
1	Second Row DVD Push Lens (Qty: 2) Procedure Carefully use a plastic flat bladed tool, and release the tabs retaining the lens to the roof console assembly.
2	Reading Lamp Bulb (Qty: 2)

Instrument Panel Compartment Lamp Replacement



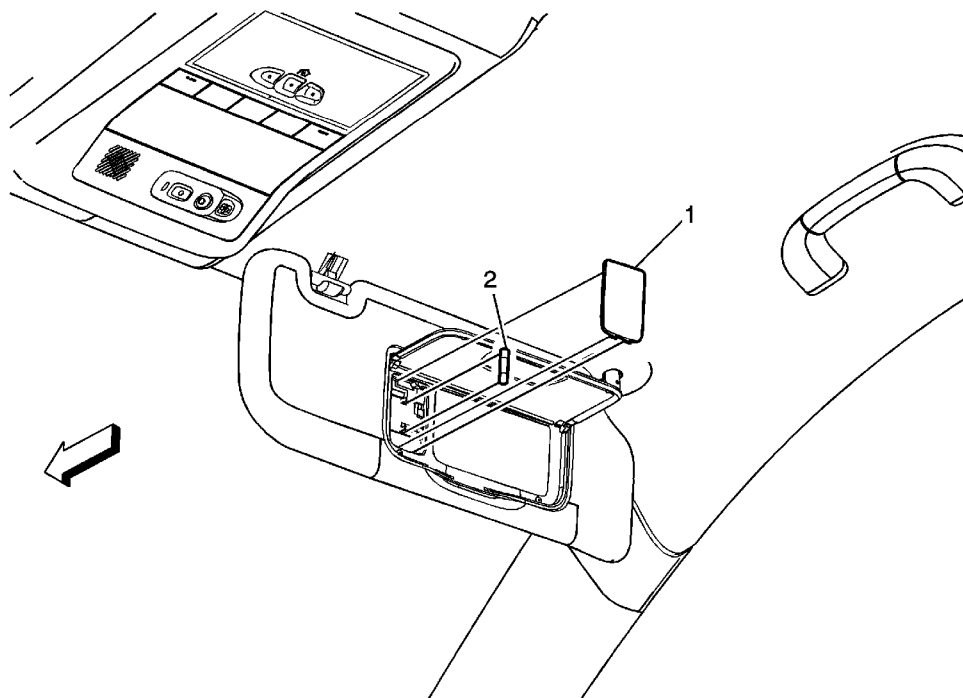
Callout	Component Name
1	Instrument Panel Compartment Lamp Assembly
	Procedure <ol style="list-style-type: none">1. Use a plastic flat bladed trim tool in order to release the lamp assembly from the instrument panel compartment housing.2. Disconnect the electrical connection.

Instrument Panel Compartment Lamp Switch Replacement



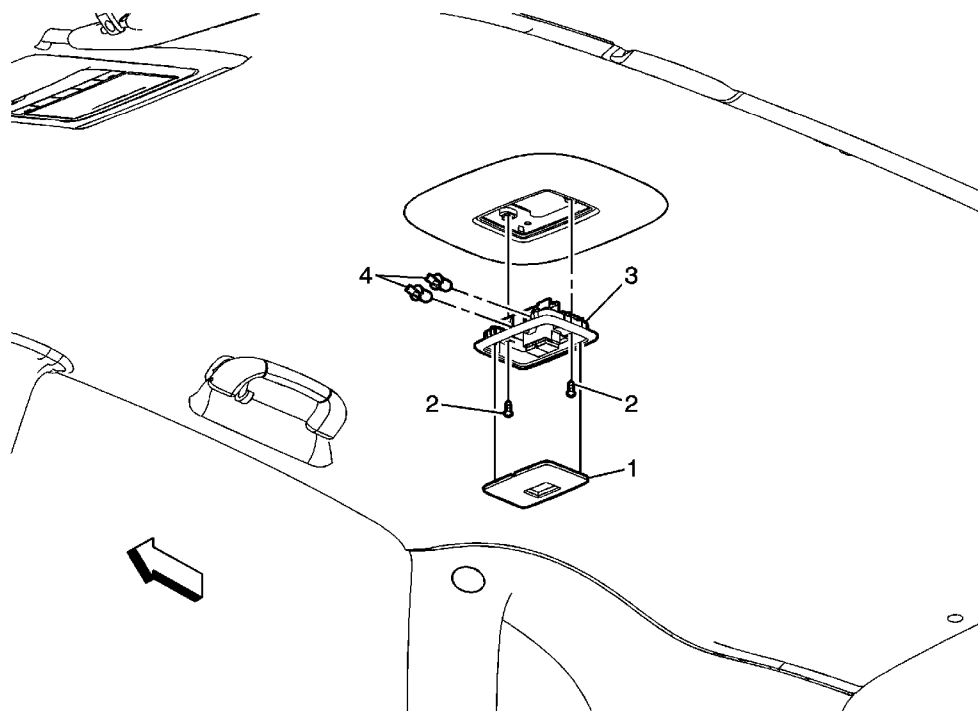
Callout	Component Name
Preliminary Procedure	
Remove the instrument panel compartment. Refer to Instrument Panel Compartment Replacement .	
1	Instrument Panel Compartment Lamp Switch Assembly
Procedure	
<ol style="list-style-type: none">1. Disconnect the electrical connection.2. Push the tabs in to release the lamp switch from the housing.	

Sunshade Illuminated Mirror Lamp Bulb Replacement



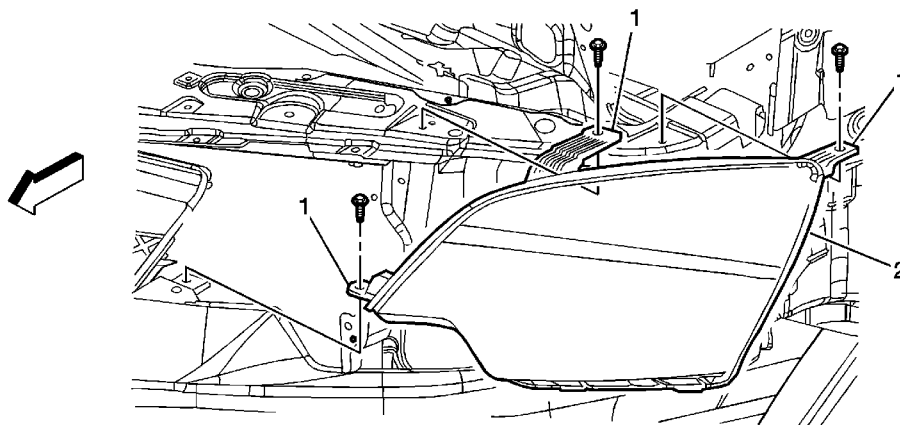
Callout	Component Name
1	Sunshade Illuminated Mirror Lamp Lens Procedure Carefully use a flat bladed tool, and release the tabs retaining the lamp lens to the sunshade assembly.
2	Sunshade Illuminated Mirror Lamp Bulb

Dome Lamp Replacement



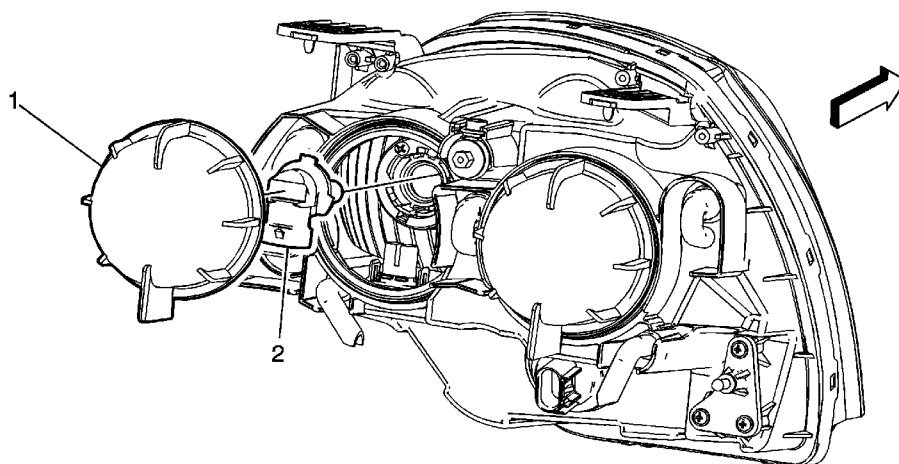
Callout	Component Name
1	Dome Lamp Lens Procedure Carefully use a plastic flat-bladed tool to remove the lens from the dome lamp assembly.
2	Dome Lamp Screw (Qty: 2) Caution: Refer to Fastener Caution in the Preface section. Tighten 2 N·m (18 lb in)
3	Dome Lamp Assembly Procedure Disconnect the electrical connection.
4	Reading Lamp Bulb (Qty: 2)

Headlamp Replacement



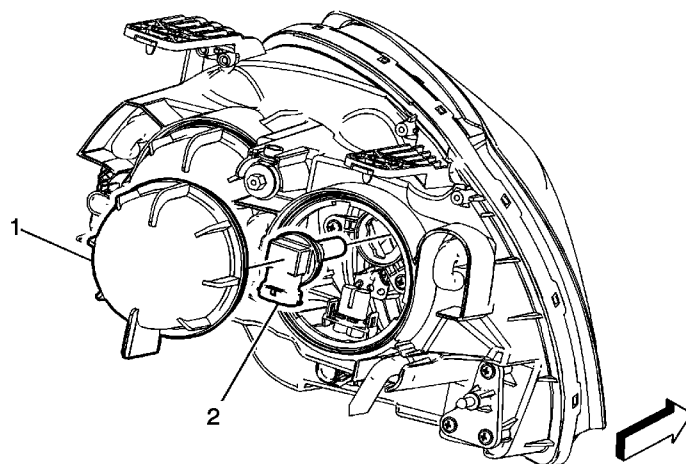
Callout	Component Name
<h3>Preliminary Procedure</h3> <p>Remove the radiator opening upper cover. Refer to Radiator Opening Upper Cover Replacement.</p>	
1	<p>Headlamp Assembly Bolt (Qty 3)</p> <p>Caution: Refer to Fastener Caution in the Preface section.</p> <p>Tighten 7.5 N·m (66 lb in)</p>
2	<p>Headlamp Assembly</p> <h3>Procedure</h3> <ol style="list-style-type: none"> 1. Pull on the outer edge of the headlamp assembly in order to release the headlamp housing bracket locator pin from the fender flange. 2. Disconnect the connector positive assurance connector. 3. Disconnect the electrical connectors from the headlamp assembly. 4. Upon assembly, secure the headlamp housing bracket locator pin to the fender flange. 5. Align the locator pin on the headlamp to the front impact and upper tie bar locations. 6. Snap the locator pin into the retainer. 7. Secure the headlamp bolts 8. Adjust the headlamp aim. Refer to Headlamp Aiming.

Headlamp Bulb Replacement (High Beam)



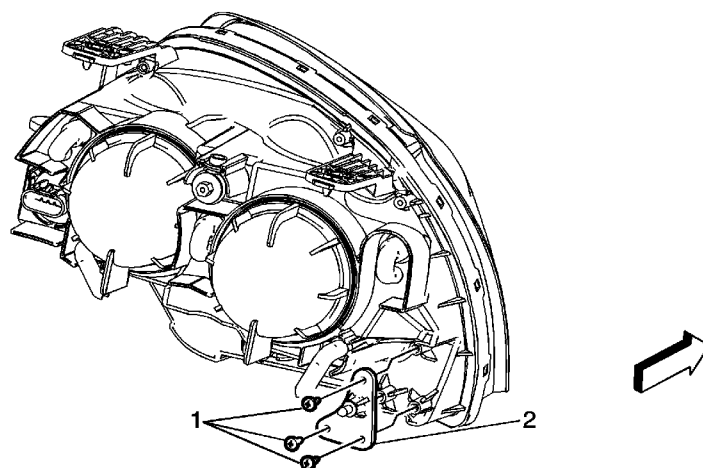
Callout	Component Name
Warning: Refer to Halogen Bulb Warning in the Preface section.	
Procedure	
Remove the headlamp assembly. Refer to Headlamp Replacement .	
1	Headlamp Bulb Accessory Cover (Qty: 2) Tip Ensure the cover seal is in workable condition.
2	Headlamp Bulb Assembly (High Beam) Tip Remove the bulb and disconnect the electrical connector.

Headlamp Bulb Replacement (Low Beam)



Callout	Component Name
Warning: Refer to Halogen Bulb Warning in the Preface section.	
Procedure	
Remove the headlamp assembly. Refer to Headlamp Replacement .	
1	Headlamp Bulb Accessory Cover (Qty: 2)
2	Headlamp Bulb Assembly (Low Beam) Tip Remove the bulb and disconnect the electrical connector.

Headlamp Bracket Replacement



Callout	Component Name
Preliminary Procedure	
Remove the headlamp assembly. Refer to Headlamp Replacement .	
1	Headlamp Housing Bracket Assembly Screw (Qty: 3) Caution: Refer to Fastener Caution in the Preface section. Tighten 2.5 N·m (22 lb in)
2	Headlamp Housing Bracket Assembly

Headlamp Aiming

The vehicle has a visual optical headlamp aiming system. The aim has been preset at the factory and should need no further adjustment.

However, If the vehicle is damaged in an accident, the headlamp aim may be affected and adjustment may be necessary.

If oncoming vehicles flash their high beams at you, this may also mean the vertical aim needs to be adjusted.

It is recommended that the vehicle is taken to your dealer for service if the headlamps need to be re-aimed. It is possible however, to re-aim the headlamps as described in the following procedure.

The vehicle should be properly prepared as follows:

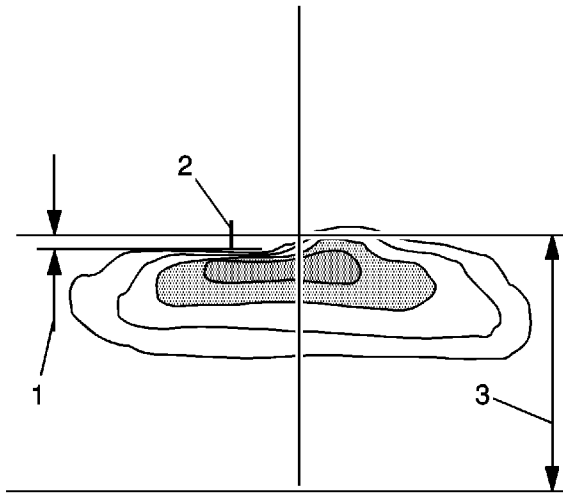
- The vehicle should be placed so the headlamps are 25 ft (7.6 m) from a light colored wall or other flat surface.
- The vehicle must have all four tires on a perfectly level surface which is level all the way to the wall or other flat surface.
- The vehicle should be placed so it is perpendicular to the wall or other flat surface.
- The vehicle should not have any snow, ice or mud on it.
- The vehicle should be fully assembled and all other work stopped while headlamp aiming is being done.
- The vehicle should be normally loaded with a full tank of fuel and one person or 160 lbs (75 kg) on the driver seat.
- Tires should be properly inflated.

Headlamp aiming is done with the vehicle low-beam headlamps. The high-beam headlamps will be correctly aimed if the low-beam headlamps are aimed properly.

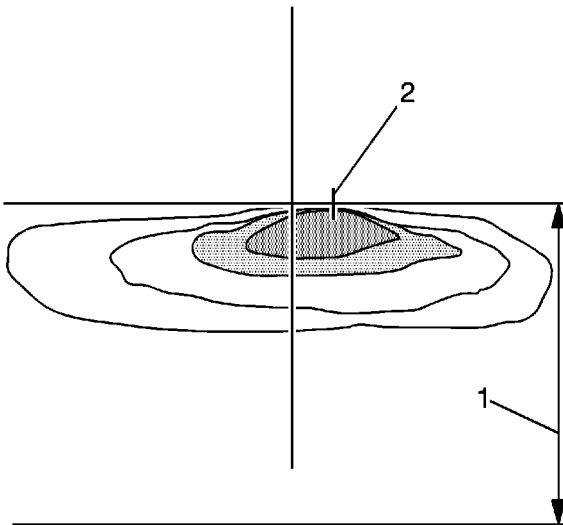
1. To adjust the vertical aim on the headlamps, complete the following:
2. Find the aim dots on the lens of the lamp assembly.
3. Measure the distance from the ground to the aim dot on the lamp with the hood in the closed position. Record the distance.
4. At the wall or other flat surface, measure from the ground upward the recorded distance and draw or tape a horizontal line the width of the vehicle.

Caution: Do not cover a headlamp to improve beam cut-off when aiming. Covering a headlamp may cause excessive heat build-up which may cause damage to the headlamp.

5. Turn on the low-beam headlamps and place a piece of cardboard or equivalent in front of the headlamp not being aimed. This should allow only the beam of light from the headlamp being aimed to be seen on the flat surface.

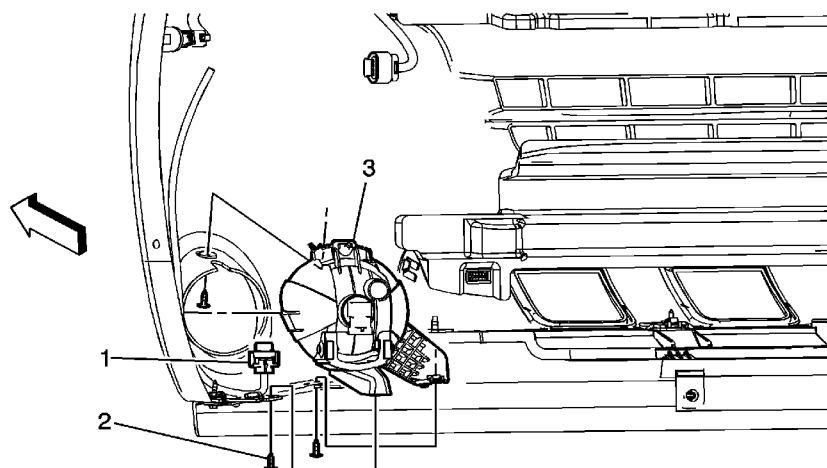


6. Adjust the vertical headlamp adjustment screw until the Hot Spot (Center of mass of the Bright Area) is set at 8.0 inches (2) below the headlamp horizontal access (1) within ± 2 inches when measured at 25 feet.



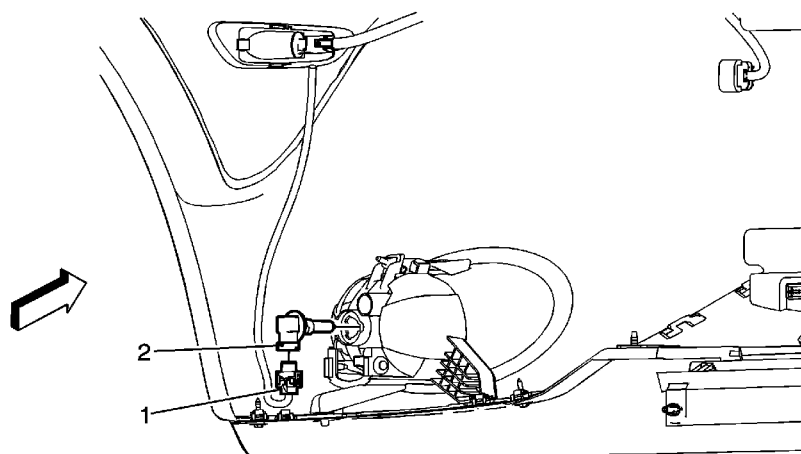
7. Adjust the vertical headlamp adjustment screw until the Right Gradient Line (Cutoff Line) is set at the Horizontal Axis within ± 2.0 inches (2) measured at 25 feet.
8. Repeat steps 5, 6 and 7 for the opposite headlamp.

Front Fog Lamp Replacement



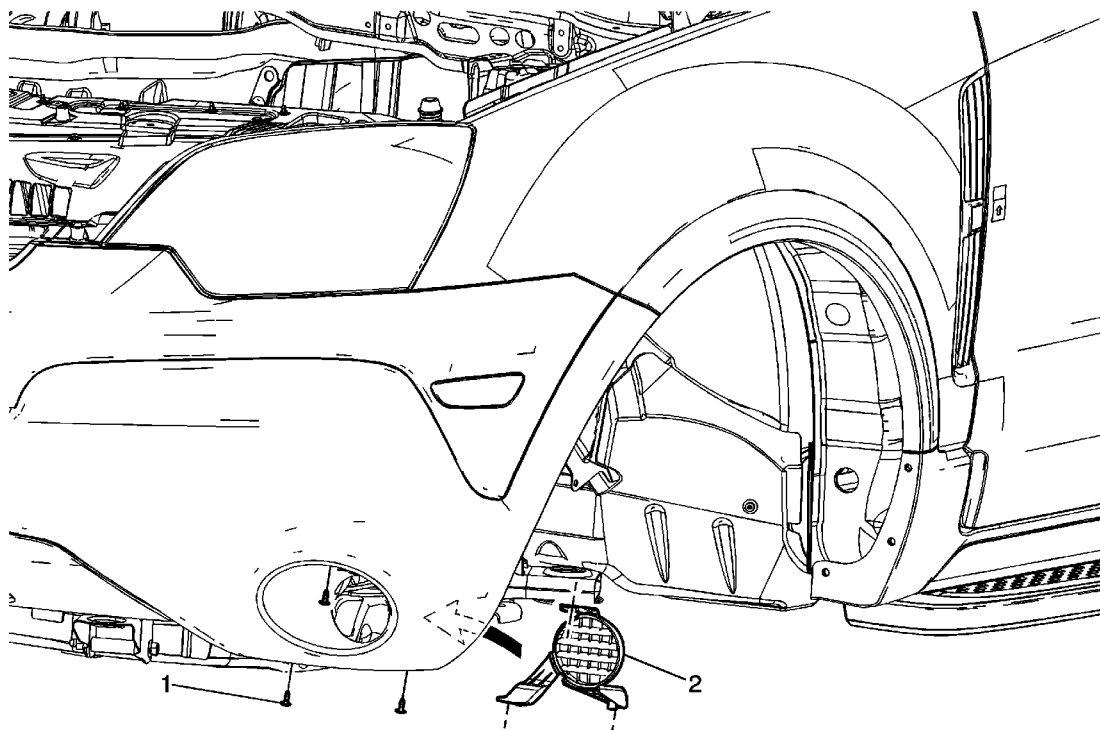
Callout	Component Name
Preliminary Procedure	
Remove the front wheelhouse liner. Refer to Front Wheelhouse Liner Replacement .	
1	Front Fog Lamp Assembly Electrical Connector
2	Front Fog Lamp Assembly Screw (Qty: 3) Caution: Refer to Fastener Caution in the Preface section. Tighten 1.5 N·m (13 lb in)
3	Front Fog Lamp Assembly Procedure Aim the front fog lamps after replacement. Refer to Fog Lamp Aiming .

Front Fog Lamp Bulb Replacement



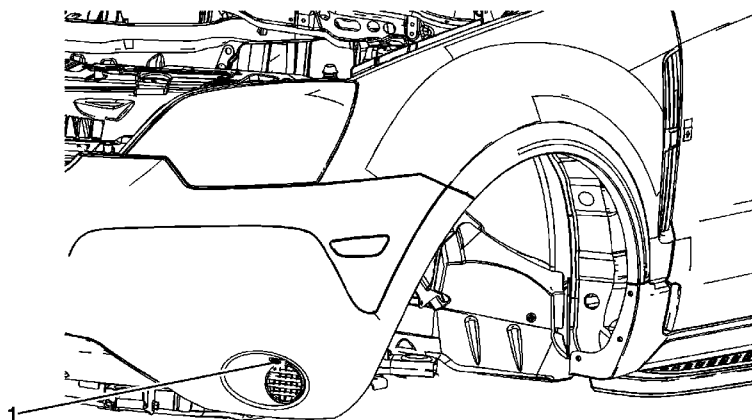
Callout	Component Name
Warning: Refer to Halogen Bulb Warning in the Preface section.	
Preliminary Procedure	
Remove the front wheelhouse liner. Refer to Front Wheelhouse Liner Replacement .	
1	Front Fog Lamp Assembly Electrical Connector
2	Front Fog Lamp Assembly Bulb
	Rotate and remove the bulb socket assembly from the fog lamp housing.

Front Fog Lamp Cover Replacement



Callout	Component Name
Preliminary Procedure	
Remove the wheelhouse liner in order to access the front fog lamp opening cover. Refer to Front Wheelhouse Liner Replacement .	
1	Front Fog Lamp Opening Cover Screw (Qty: 3) Caution: Refer to Fastener Caution in the Preface section. Tighten 1.5 N·m (13 lb in)
2	Front Fog Lamp Opening Cover Tip Inspect the retainer clips and replace if damaged.

Fog Lamp Aiming

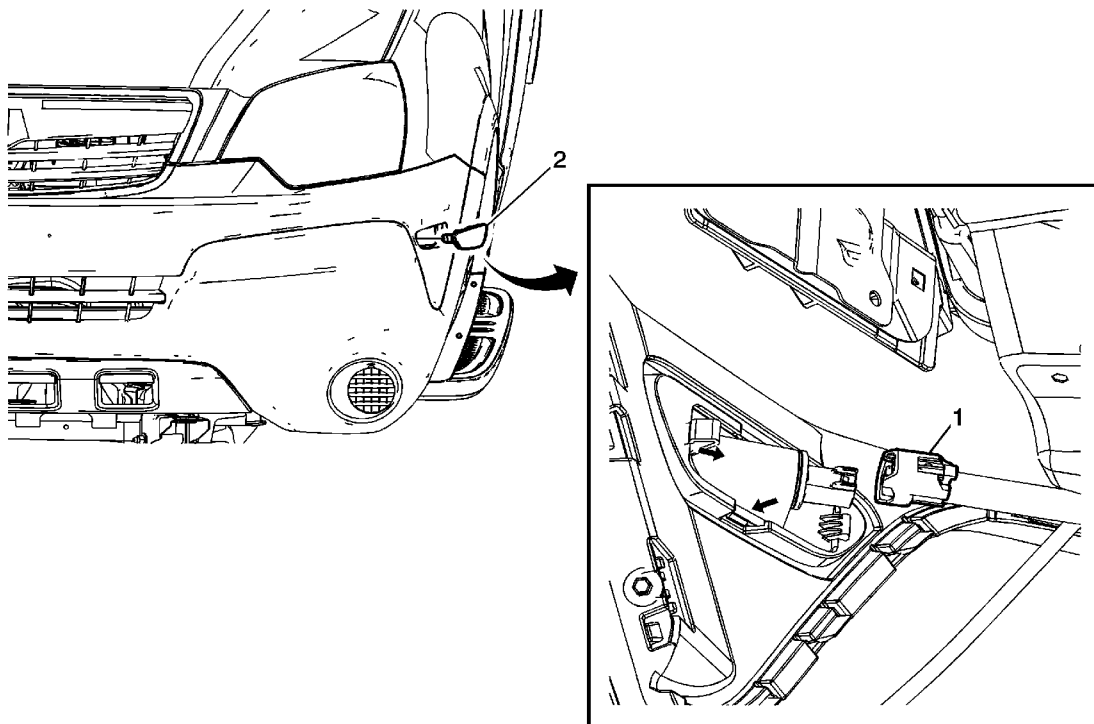


Callout	Component Name
<h3>Preliminary Procedures</h3> <ol style="list-style-type: none">1. Completely assemble all of the components on the vehicle.2. Place the vehicle on a level surface.3. Stop all work on the vehicle that could affect the ride height of the vehicle.4. Close all doors and verify that the luggage compartment is empty.5. Stabilize the suspension.6. Ensure the fuel level is full.7. Ensure the tires are inflated to proper specification, see the tire placard, inside edge of the driver's door.8. Ensure that the driver or a similar weight, approximately 75kg (165 lbs) is in the driver seat.9. Park the vehicle 7.6 m (25 ft) away from the target screen.10. Measure from the center of the fog lamp to the ground line. Using this measurement, mark the horizontal centerline of the fog lamp line on the target screen directly in front of the vehicle.11. Turn on the fog lamps.12. The top of the fog lamp beam image on the target screen should be 102 mm (4 in) below the center of the fog lamp lens height.13. Adjust the fog lamp beam as required using the adjusting screw just above the fog lamp lens, exterior side of the vehicle.14. Turn off the fog lamps after adjustment has been achieved.	
1	<p>Adjuster Screw</p> <h3>Procedure</h3> <p>Minimal turning of the adjuster screw will achieve maximum adjustment results on the screen.</p> <p>© 2010 General Motors Corporation. All rights reserved.</p>

Tip

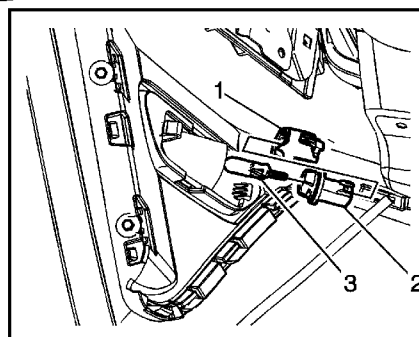
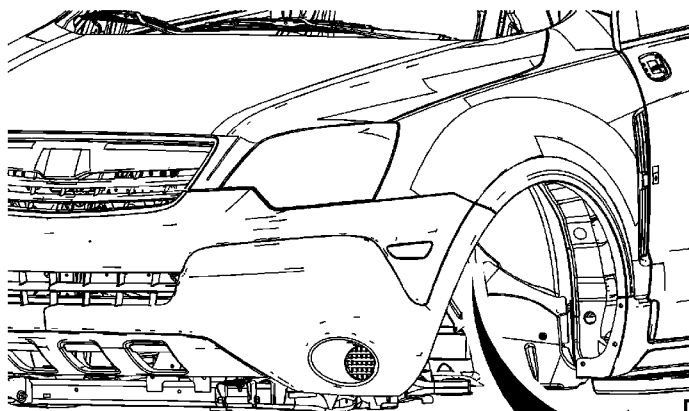
Horizontal aim is not adjustable on this vehicle. Vertical aiming is accomplished by turning the adjuster screw located at the top of the fog lamp, from the exterior side of the lower bumper fascia.

Front Side Marker Lamp Replacement



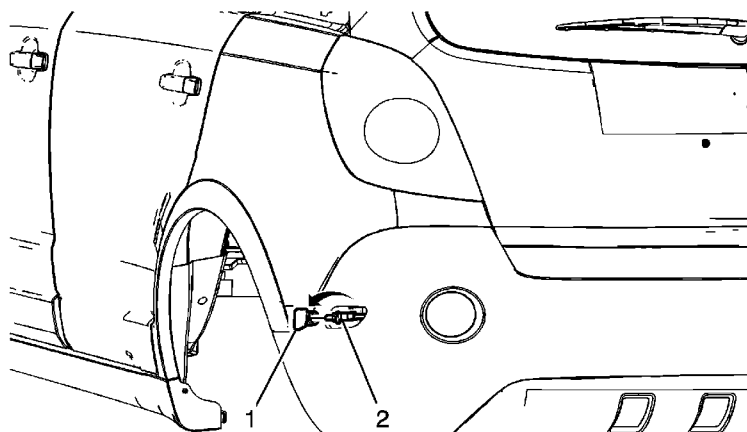
Callout	Component Name
Preliminary Procedure	
Remove the front wheelhouse liner. Refer to Front Wheelhouse Liner Replacement .	
1	Forward Lamp Harness Electrical Connector Tip Disconnect the electrical connector from the lamp socket.
2	Front Side Marker Lamp Assembly Procedure <ol style="list-style-type: none">1. Squeeze the rearward lamp assembly tab forward.2. Push outward from the rear edge of the lamp.3. Pull the lamp rearward to remove from the upper bumper fascia.

Front Side Marker Lamp Bulb Replacement



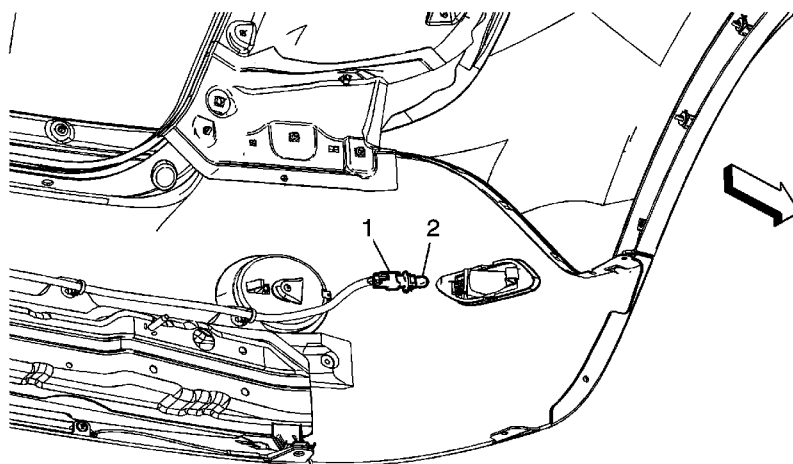
Callout	Component Name
Warning: Refer to Halogen Bulb Warning in the Preface section.	
Preliminary Procedure	
Remove the front wheelhouse liner in order to access the front side marker lamp bulb. Refer to Front Wheelhouse Liner Replacement .	
1	Forward Lamp Harness Electrical Connector
2	Front Side Marker Lamp Bulb Socket
3	Front Side Marker Lamp Bulb
Pull the bulb straight from the lamp socket.	

Rear Side Marker Lamp Replacement



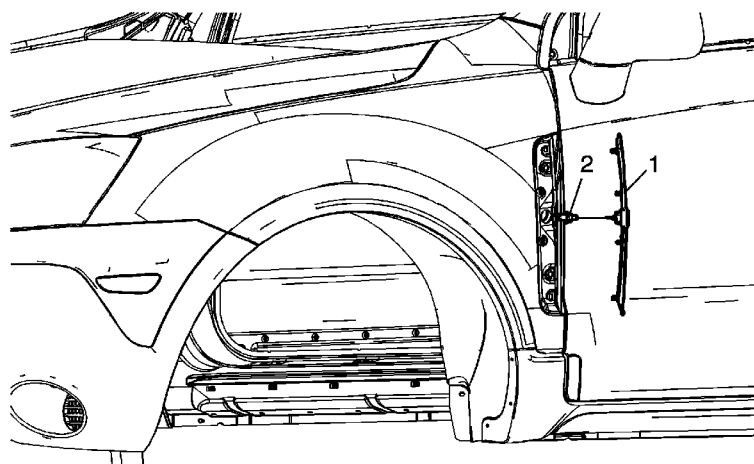
Callout	Component Name
Preliminary Procedure	
Remove the rear bumper fascia. Refer to Rear Bumper Fascia Replacement .	
1	Rear Side Marker Lamp Assembly Tip Push the forward clip edge of the lamp assembly outward from the rear bumper fascia.
2	Rear Side Marker Lamp Assembly Bulb Socket

Rear Side Marker Lamp Bulb Replacement



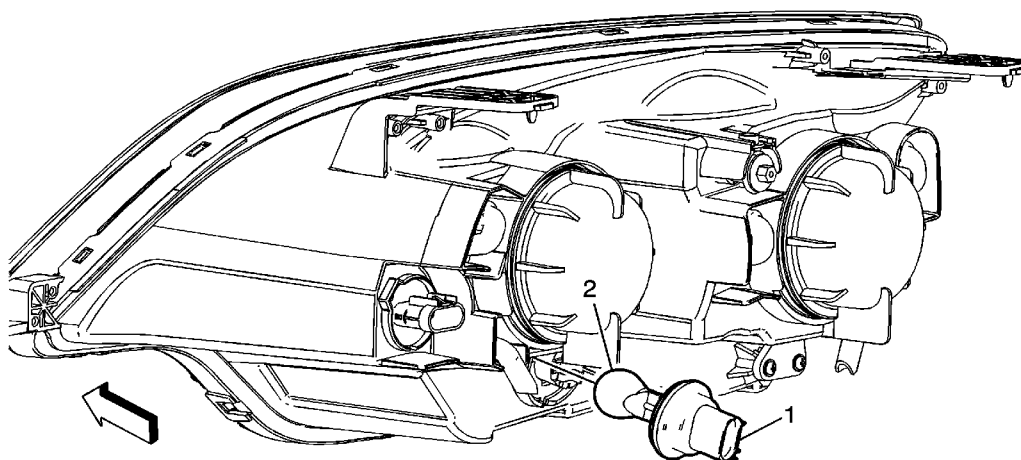
Callout	Component Name
Preliminary Procedure	
Remove the rear bumper fascia. Refer to Rear Bumper Fascia Replacement .	
1	Rear Side Marker Lamp Assembly Bulb Socket Tip Rotate the bulb socket a quarter turn counter-clockwise and remove.
2	Rear Side Marker Lamp Bulb

Front Side Turn Signal Lamp Replacement



Callout	Component Name
Preliminary Procedure	
Remove the front fender center molding. Refer to Front Fender Center Molding Replacement .	
1	Front Fender Center Molding Assembly
2	Front Side Turn Signal Lamp Assembly
Procedure	
Disconnect the electrical lamp socket prior to removing bulb socket from the front fender center molding assembly.	

Parking and Turn Signal Lamp Bulb Replacement

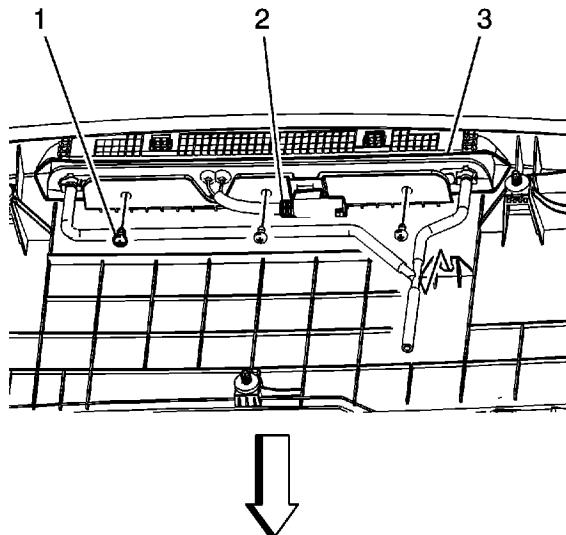


Callout	Component Name
Preliminary Procedures	
<ol style="list-style-type: none">1. Remove the headlamp assembly. Refer to Headlamp Replacement.2. Disconnect the front turn signal bulb electrical connector from the bulb socket.	
1	<p>Park and Turn Signal Lamp Bulb Socket (Qty: 2)</p> <p>Procedure</p> <ol style="list-style-type: none">1. Rotate the bulb sockets counter clockwise in order to access and remove the bulbs.2. Aim the headlamps after the bulb replacement. Refer to Headlamp Aiming.
2	Front Park and Turn Signal Lamp Bulb

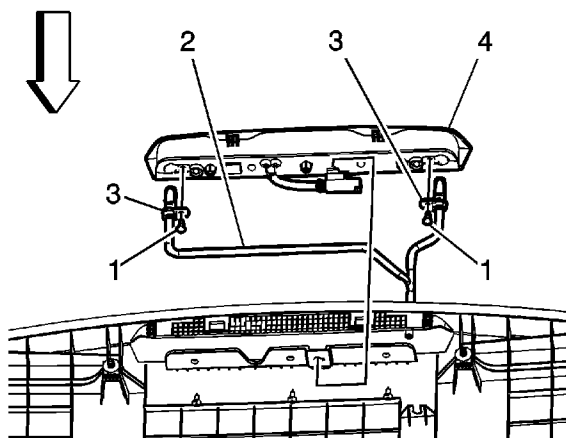
High Mount Stop Lamp Replacement

Removal Procedure

1. Remove the rear spoiler. Refer to [Rear Spoiler Replacement](#).
2. Invert the spoiler and place on a clean dry, protected surface.

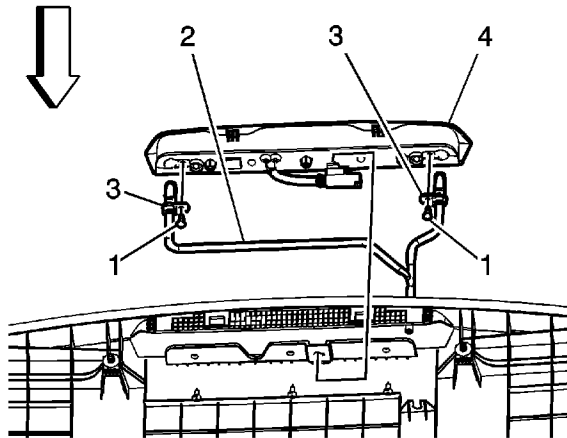


3. Remove the spoiler to high mounted stop lamp screws (1).
4. Disengage the washer hose from the spoiler.
5. Disengage the electrical connector (2) from the spoiler bracket.
6. Lift the high mounted stop lamp (3) from the spoiler.



7. Remove the washer nozzle screws (1).
8. Remove the rear washer nozzles (3) from the high mounted stop lamp (4) assembly.
9. Remove the high mounted stop lamp assembly (4).

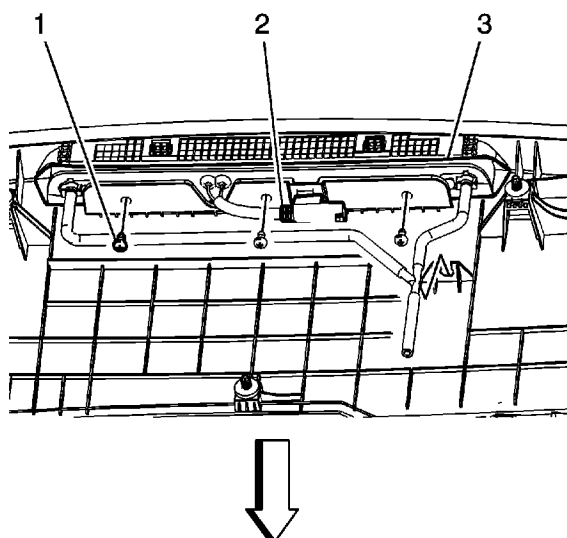
Installation Procedure



1. Install the washer nozzles (3) into the rear high mounted stop lamp assembly (4).

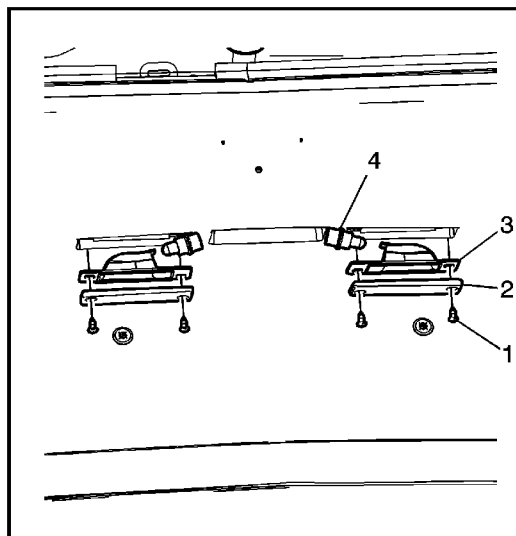
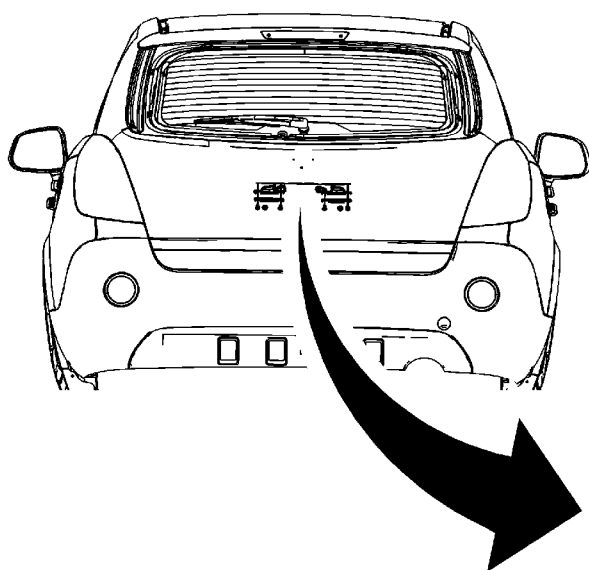
Caution: Refer to [Fastener Caution](#) in the Preface section.

2. Install the rear window washer nozzle screws (1). Tighten the screws to **2 N·m (18 lb in)**.



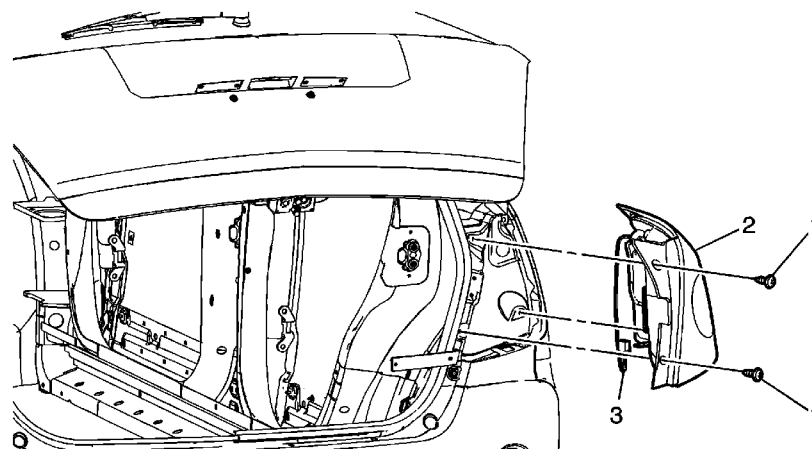
3. Position the high mounted stop lamp (3) to the rear spoiler bracket.
4. Install the screws (1) to secure the high mounted stop lamp (3) to the rear spoiler bracket. Tighten the screws **2 N·m (18 lb in)**.
5. Position and secure the high mounted stop lamp electrical connector (2) to the spoiler bracket.
6. Secure the washer hose to the spoiler.
7. Install the rear spoiler to the vehicle. Refer to [Rear Spoiler Replacement](#).

Rear License Plate Lamp Replacement



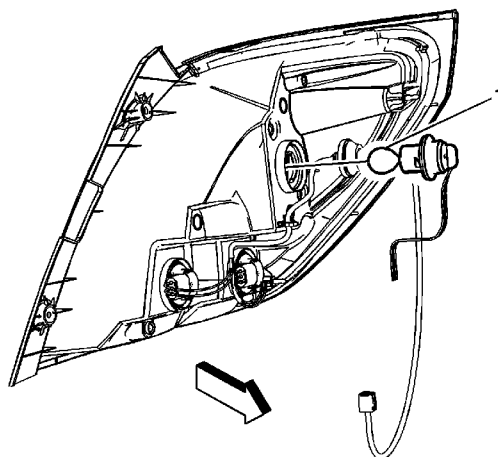
Callout	Component Name
1	License Lamp Screw (Qty: 4) Caution: Refer to Fastener Caution in the Preface section. Tighten .9 N·m (8 lb in)
2	License Lamp Lens (Qty: 2)
3	License Lamp Housing
4	License Plate Lamp Bulbs (Qty: 2)

Tail Lamp Replacement



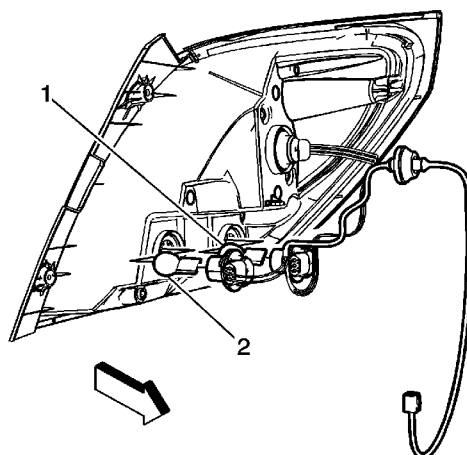
Callout	Component Name
Preliminary Procedure	
Open the rear liftgate in order to access and remove the tail lamp screws.	
1	<p>Tail Lamp Screw (Qty 2)</p> <p>Caution: Refer to Fastener Caution in the Preface section.</p> <p>Tighten 2.5 N·m (22 lb in)</p>
2	<p>Tail Lamp Assembly</p> <p>Procedure</p> <p>Pull on the outer edge of the tail lamp assembly in order to release the tail lamp locator pins from the rear bodyside panel.</p>
3	Tail Lamp Electrical Connector

Tail Lamp Bulb Replacement (Stop Lamp)



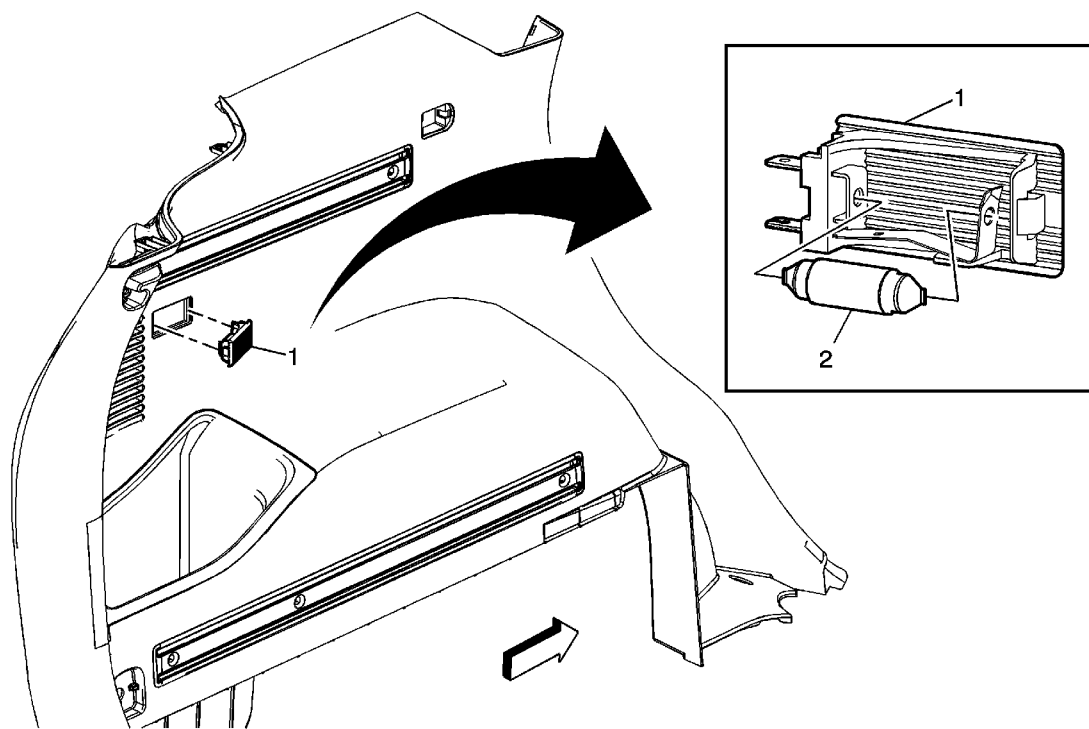
Callout	Component Name
Preliminary Procedure	
Remove the rear tail lamp assembly. Refer to Tail Lamp Replacement .	
1	<p>Turn Signal Bulb</p> <p>Warning: Refer to Halogen Bulb Warning in the Preface section.</p> <p>Procedure</p> <ol style="list-style-type: none">1. Rotate the bulb socket counterclockwise from the tail lamp assembly.2. Pull the bulb from the bulb socket.

Tail Lamp Bulb Replacement (Back Up Turn Signal)



Callout	Component Name
Preliminary Procedure	
Remove the rear tail lamp assembly. Refer to Tail Lamp Replacement .	
1	<p>Turn Signal Bulb</p> <p>Warning: Refer to Halogen Bulb Warning in the Preface section.</p> <p>Procedure</p> <ol style="list-style-type: none">1. Rotate the bulb socket counterclockwise from the tail lamp assembly.2. Pull the bulb from the bulb socket.
2	<p>Back Up Bulb</p> <p>Warning: Refer to Halogen Bulb Warning in the Preface section.</p> <p>Procedure</p> <ol style="list-style-type: none">1. Rotate the bulb socket counterclockwise from the tail lamp assembly.2. Pull the bulb from the bulb socket.

Rear Compartment Courtesy Lamp Replacement



Callout	Component Name
1	Rear Compartment Courtesy Lamp Assembly Procedure 1. Use a plastic flat bladed trim tool in order to release the lamp assembly from the rear quarter trim panel. 2. Disconnect the electrical connection.
2	Rear Compartment Courtesy Lamp Bulb