

205-02 Rear Drive Axle/Differential - Vehicles With: Dana M220
Removal and Installation

2019 Ranger
Procedure revision date: 11/27/2018

Axle Assembly

Base Part Number: 4000

Special Tool(s) / General Equipment


| |
|-------------------|
| Transmission Jack |
|-------------------|

Materials

| Name | Specification |
|--|---------------|
| Motorcraft® Threadlock and Sealer TA-25-B | - |

Removal

All vehicles

 **WARNING:** Do not apply heat or flame to the shock absorber or strut tube. The shock absorber and strut tube are gas pressurized and could explode if heated. Failure to follow this instruction may result in serious personal injury.

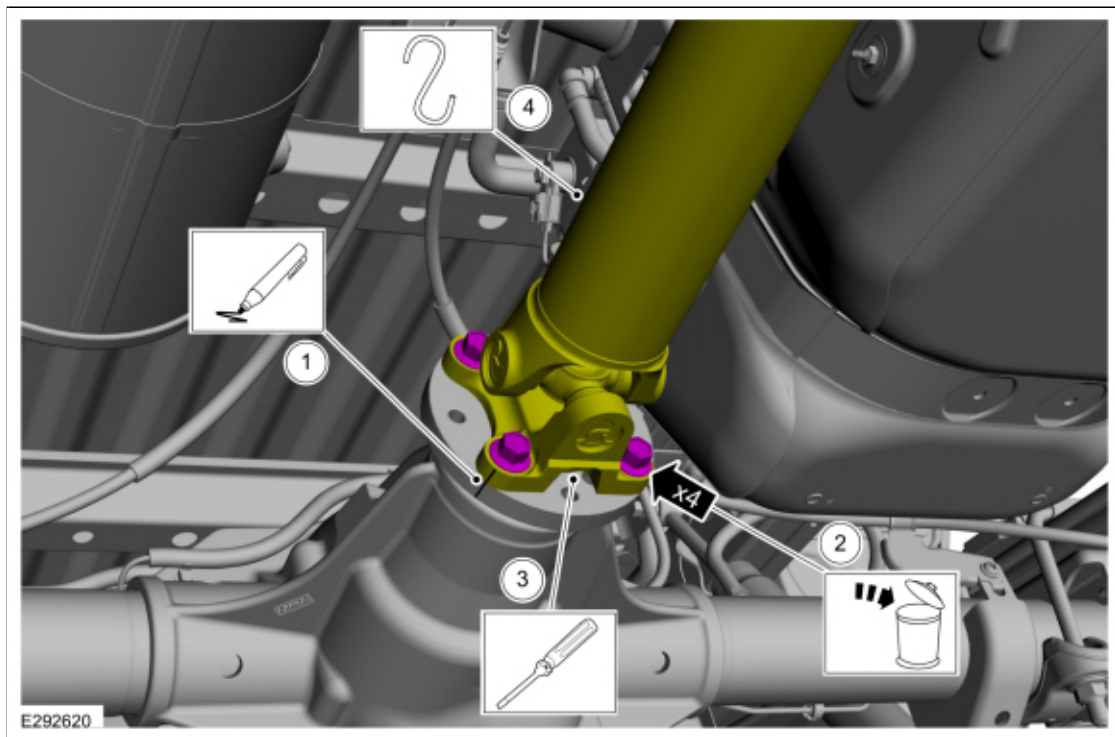
 **WARNING:** Keep all body parts clear of shock absorbers or strut rods. Shock absorbers or struts can bind and unassisted. Failure to follow this instruction may result in serious personal injury.

NOTICE: Suspension fasteners are critical parts that affect the performance of vital components and systems. Failure of these fasteners may result in major service expense. Use the same or equivalent parts if replacement is necessary. Do not use a replacement part of lesser quality or substitute design. Tighten fasteners as specified.

1. Position aside the rear driveshaft.
 1. Index-mark the driveshaft flange to the pinion flange to maintain alignment during installation.
 2. Remove and discard the driveshaft flange to pinion flange bolts.
 3. **NOTICE: The driveshaft flange fits tightly on the flange pilot. Never hammer on the driveshaft or any of its components to disconnect the driveshaft flange from the flange pilot.**

Separate the driveshaft flange from the pinion flange.

- 4. Support the driveshaft.



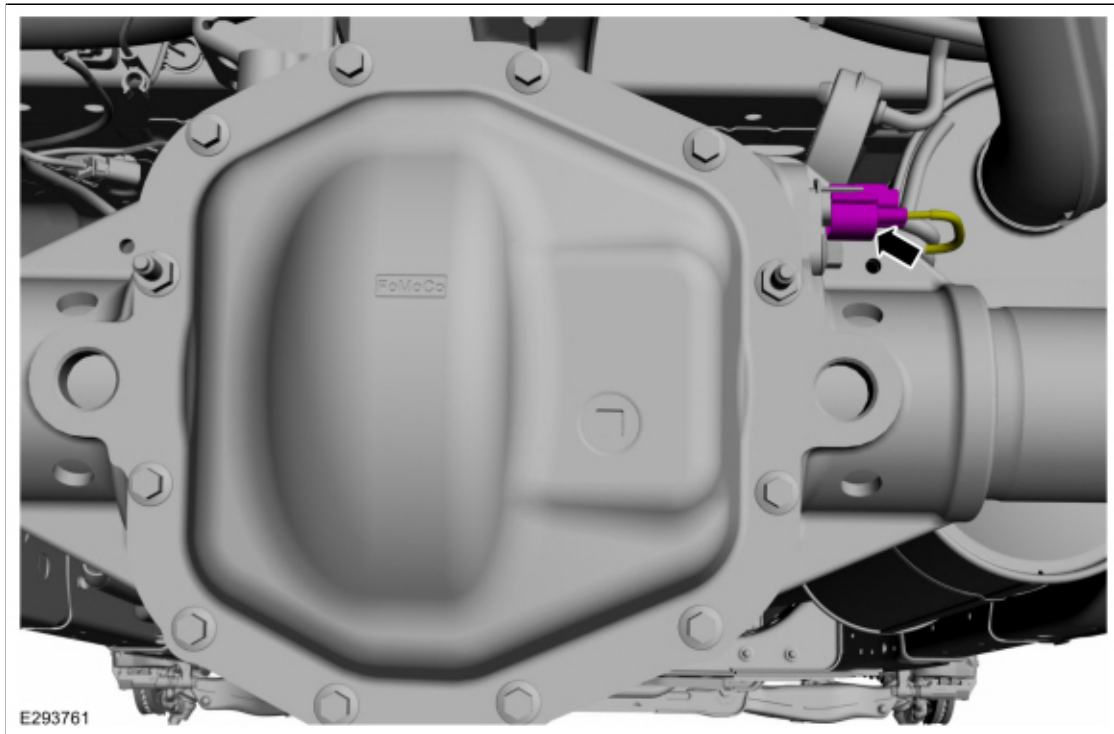
2. Remove the rear brake discs.
Refer to: [Brake Disc](#) (206-04 Rear Disc Brake, Removal and Installation).
3. Remove the rear brake inner flexible hose.
Refer to: [Rear Brake Inner Flexible Hose](#) (206-04 Rear Disc Brake, Removal and Installation).
4. Remove the rear brake outer flexible hose .
Refer to: [Rear Brake Outer Flexible Hose](#) (206-04 Rear Disc Brake, Removal and Installation).

Vehicle equipped with

5. **NOTICE: Do not pull on the wire harness to disconnect the connector or damage to the connector will occur.**

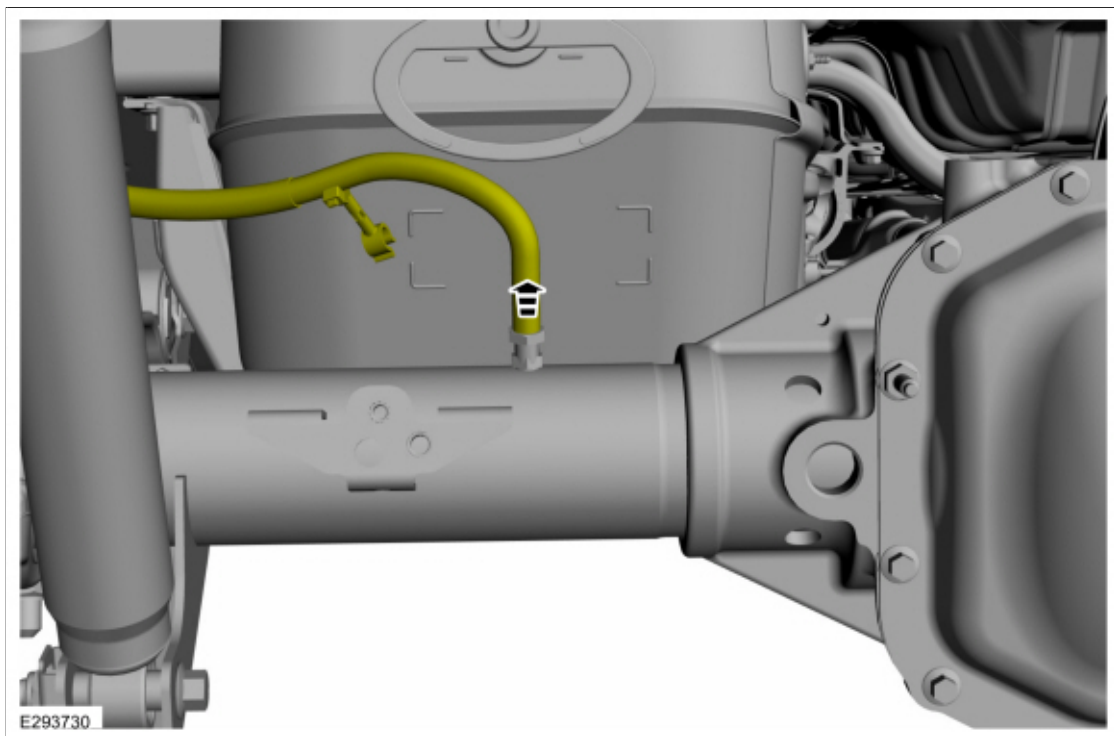
Disconnect the ELD solenoid switch electrical connector.





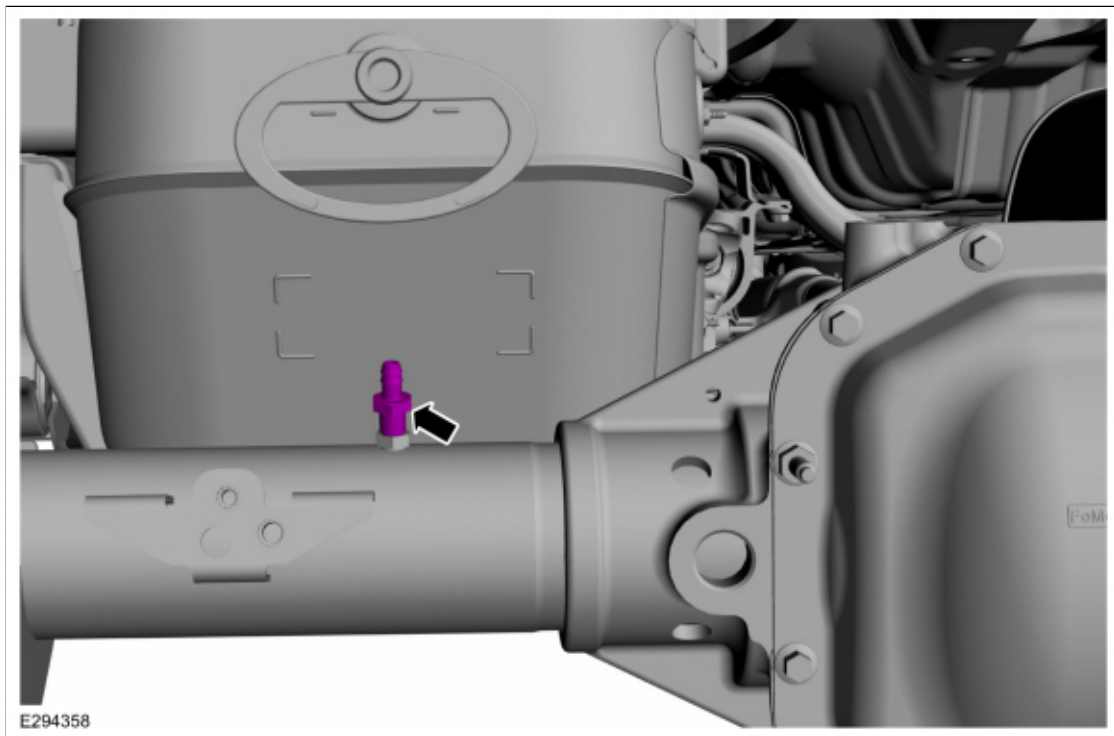
All vehicles

6. Remove the differential vent tube.

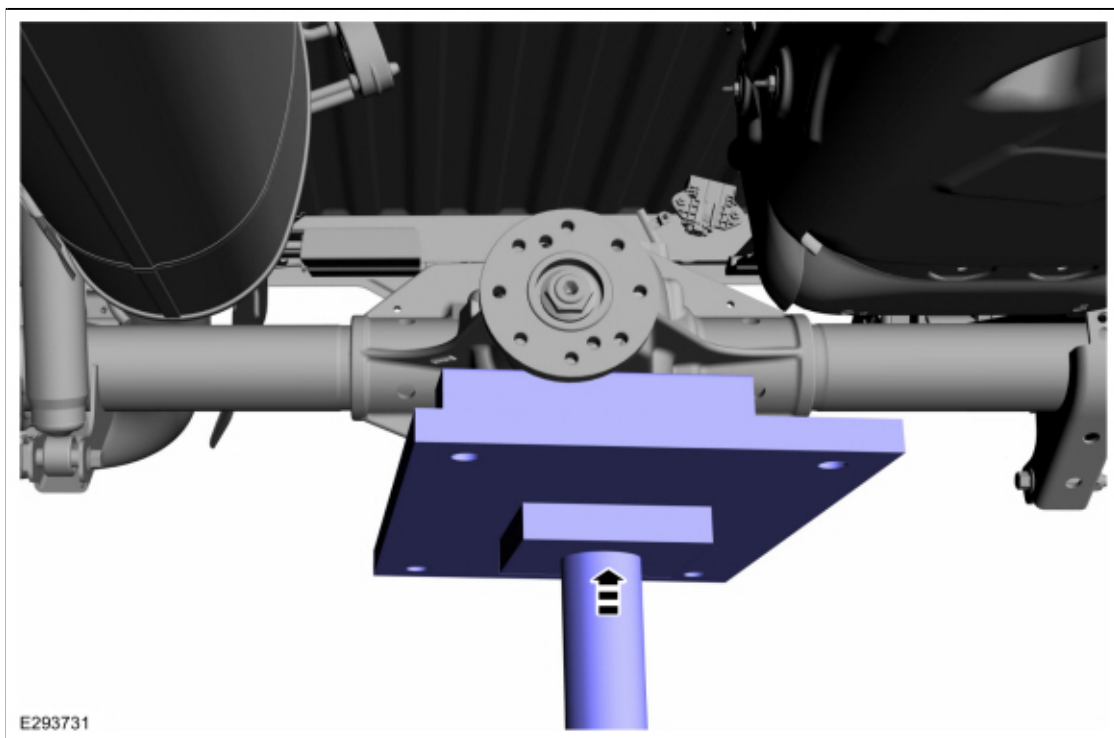


7. **NOTE:** Do not reuse this fastener. This fastener must be replaced if this joint is disturbed, repaired or serviced.

Remove and discard the rear axle assembly vent plug.

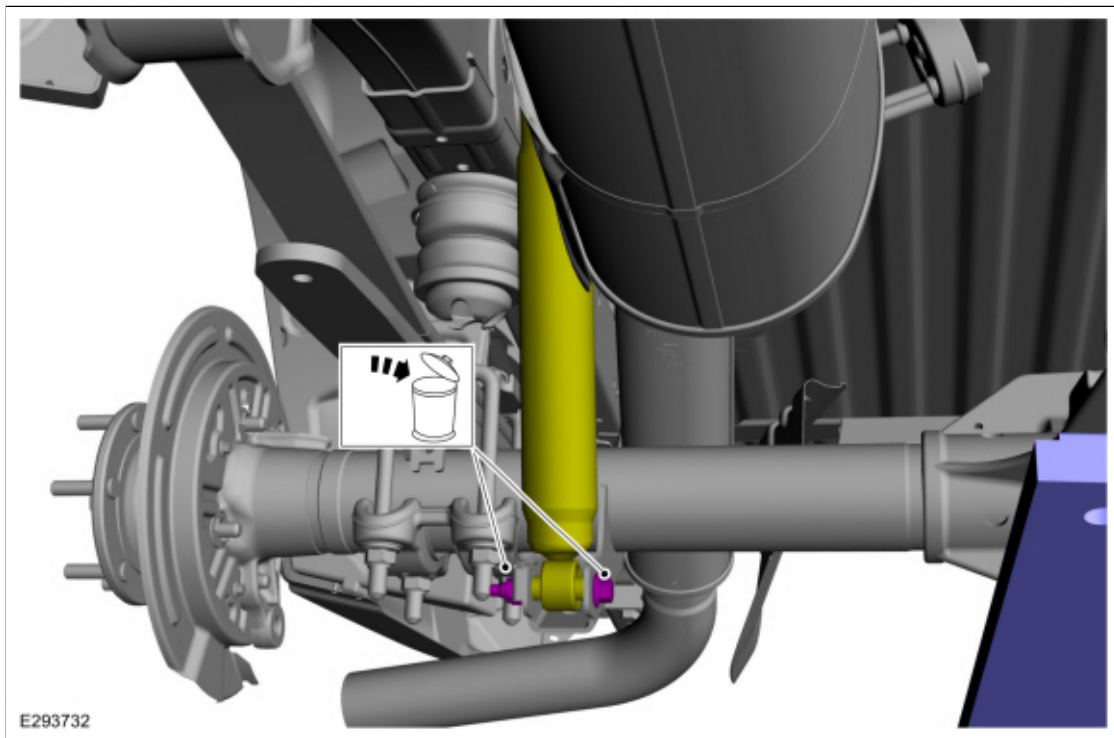


8. Using general equipment, support the rear axle assembly.
Use the General Equipment: Transmission Jack



9. On both sides.

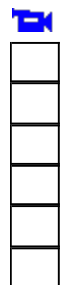
Remove and discard the rear shock absorber lower bolt and nut.

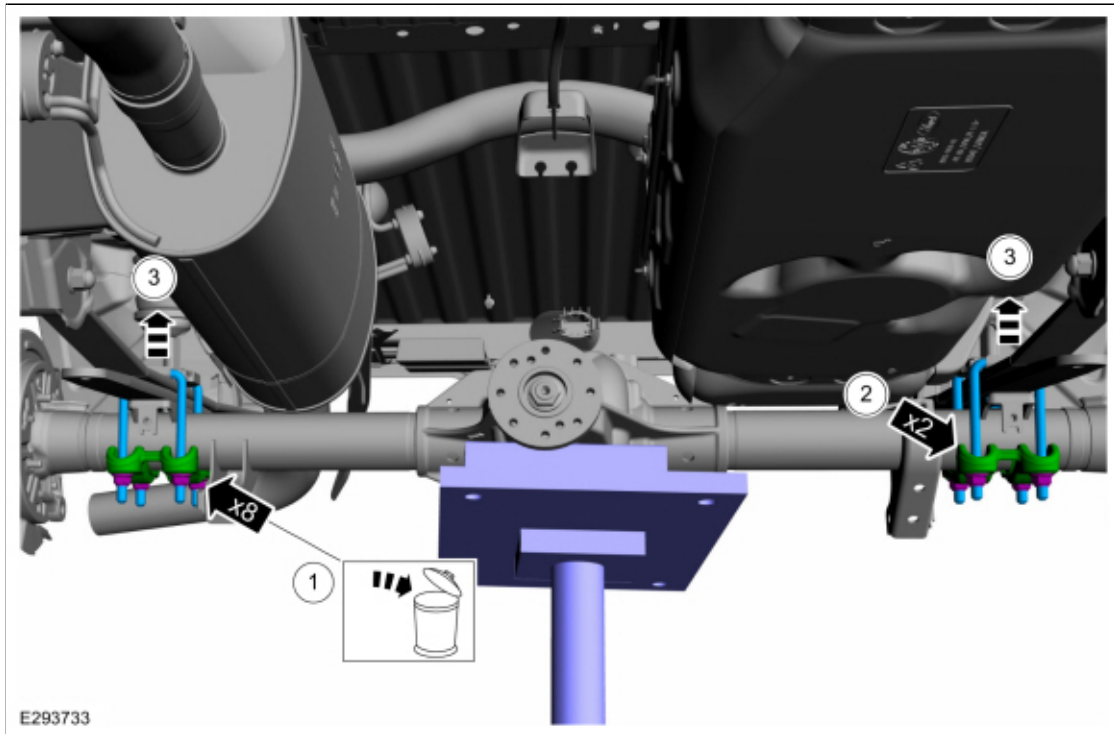


10. **NOTICE:** The rear axle must be supported before removing the rear spring U-bolts.

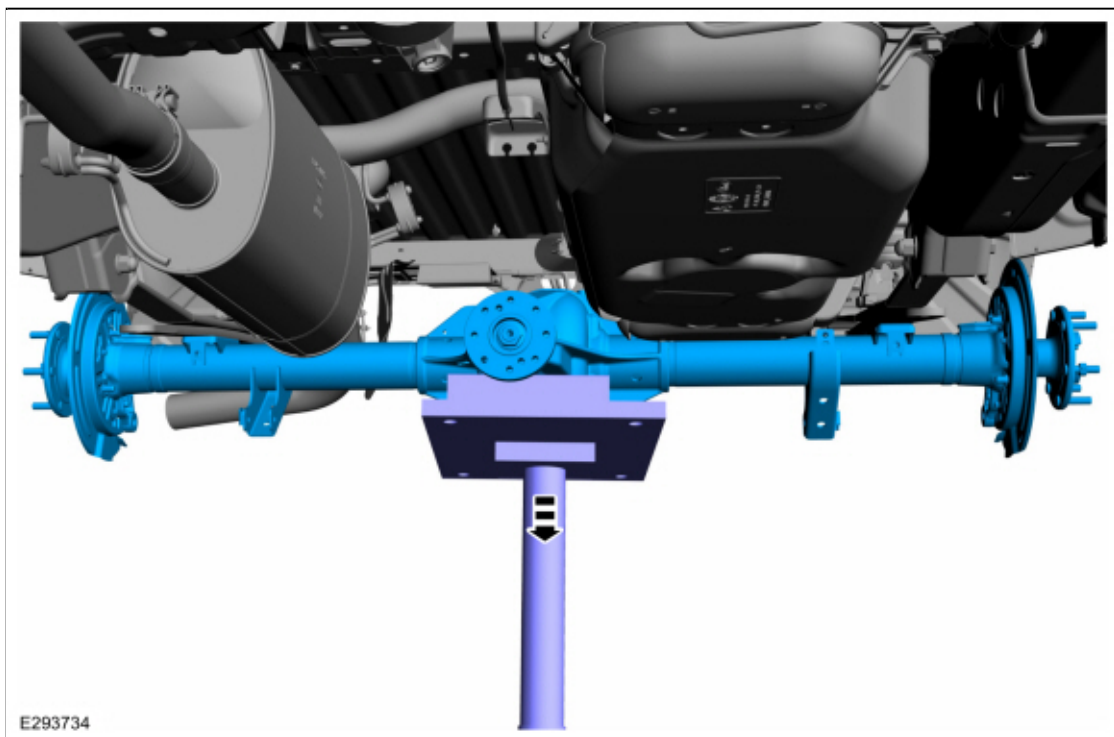
On both sides.

1. Remove and discard the rear leaf spring U-bolt nuts.
2. Remove the rear leaf spring U-bolt plates.
3. Remove U-bolts.





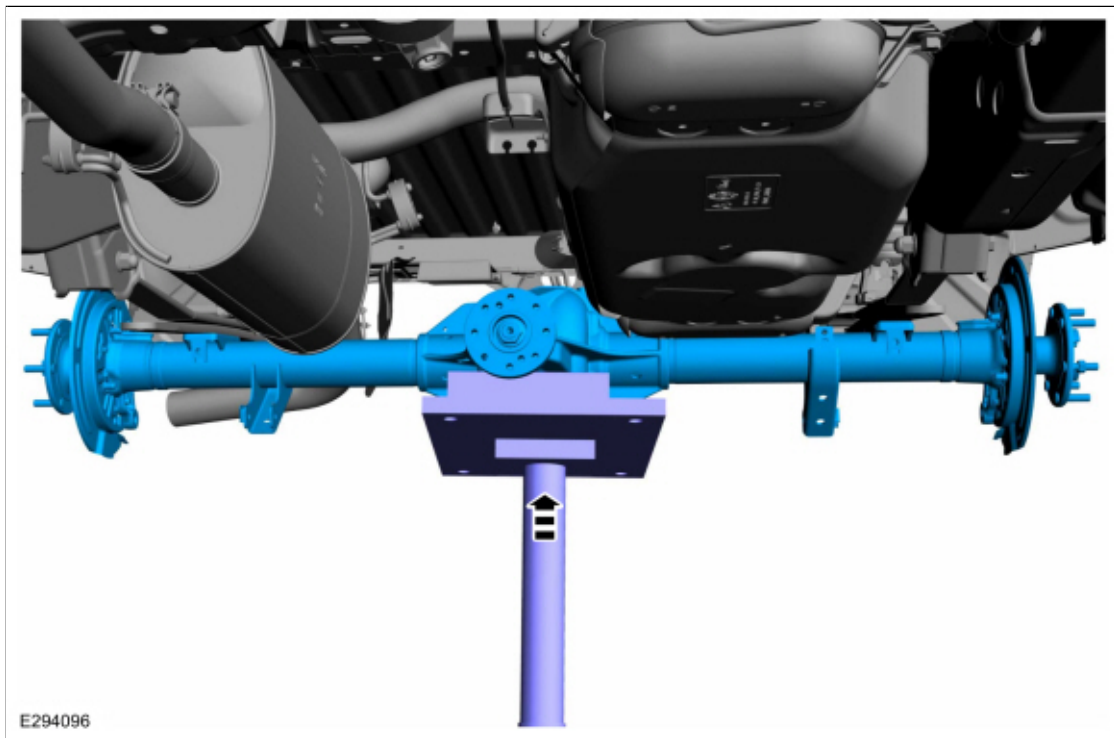
11. Lower the transmission jack and remove the axle assembly.
Use the General Equipment: Transmission Jack



Installation

1. Using general equipment, position the axle assembly.

Use the General Equipment: Transmission Jack



2. **NOTICE:** The rear axle must be supported at this time.

NOTE: The rear spring U-bolts need to be tightened in a cross pattern with the vehicle resting on the wheels and tires (curb height).

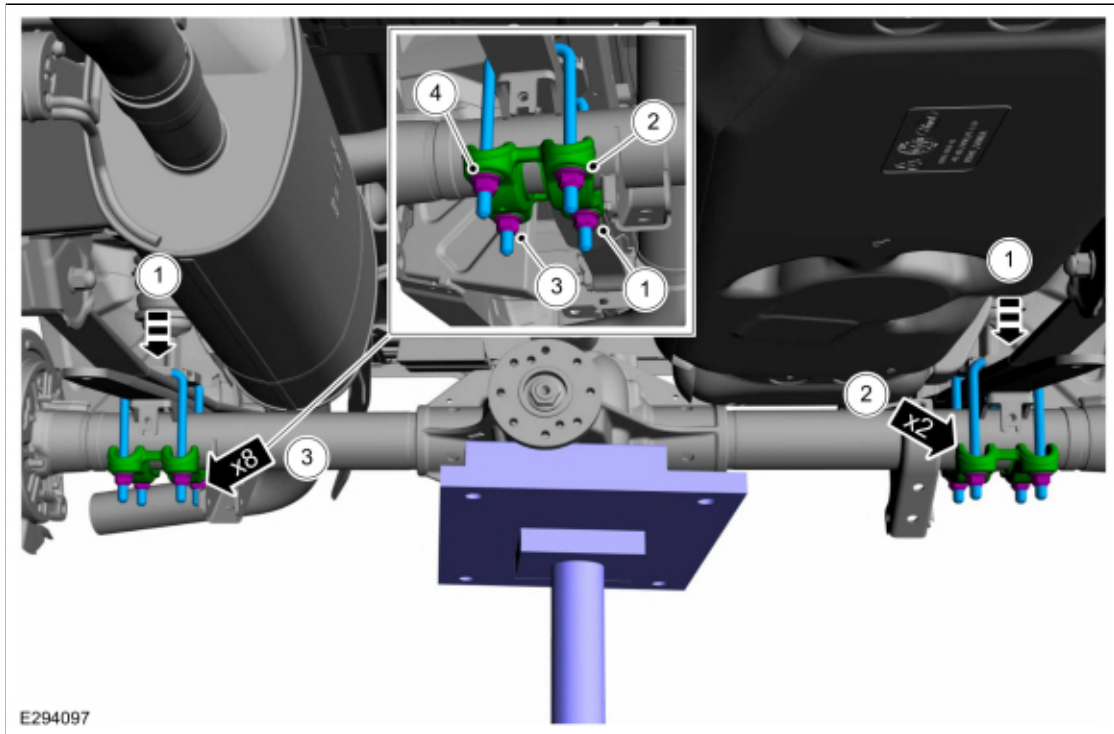
On both sides.

1. Position the U-bolt bolts.
2. Install the rear leaf spring U-bolt plates.
3. **NOTE:** Make sure the new nuts are installed.

NOTE: Tighten the U-bolt nuts as shown.

Install the new rear leaf spring U-bolt nuts.
Torque: 98 lb.ft (133 Nm)



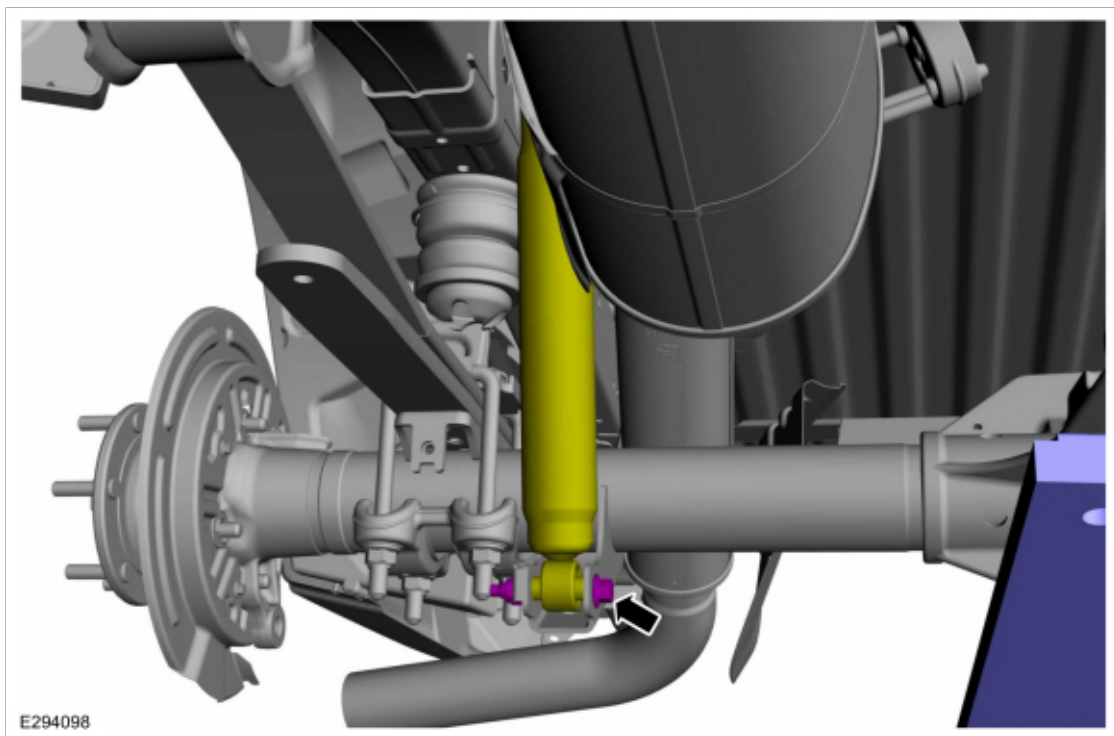


3. **NOTE:** Make sure that new bolts are installed.

On both sides.

Position the rear shock absorber lower and install a new bolt and nut. Remove the transmission jack.

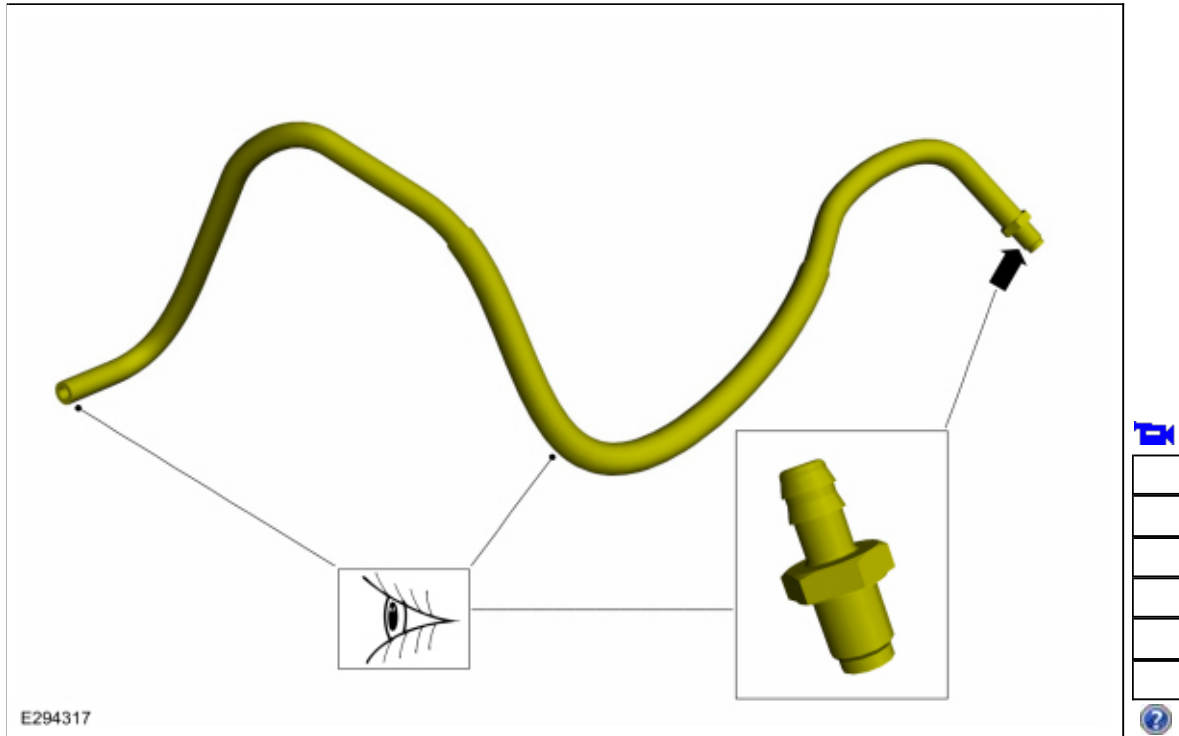
Torque: 52 lb.ft (70 Nm)



4. **NOTICE:** Make sure the axle assembly vent tube and vent plug is not damaged or blocked.

NOTE: This step is not necessary when installing a new component.

Inspect the vent tube for cracks and blockage.



5. **NOTE:** Apply loctite to the vent plug threads while installing vent plug into the axle assembly.

1. **NOTE:** Make sure the new component is used.

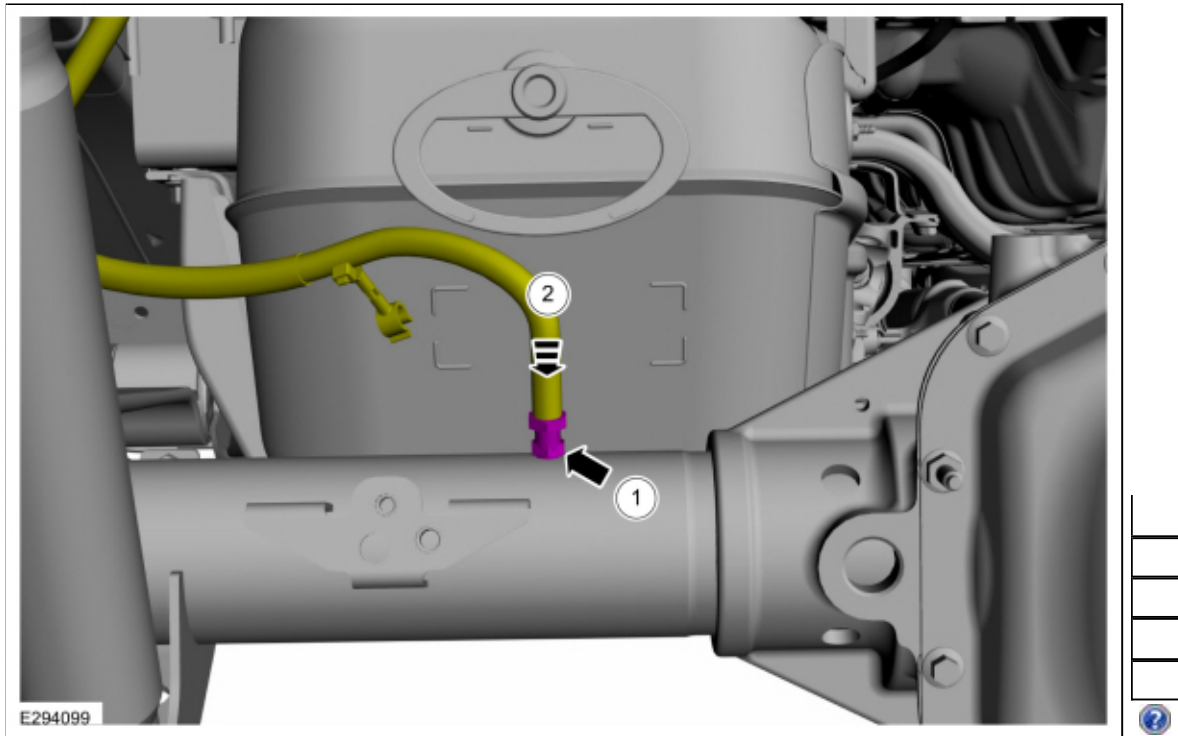
Install the new differential vent plug.

Material: Motorcraft® Threadlock and Sealer / TA-25-B

Torque: 159 lb.in (18 Nm)

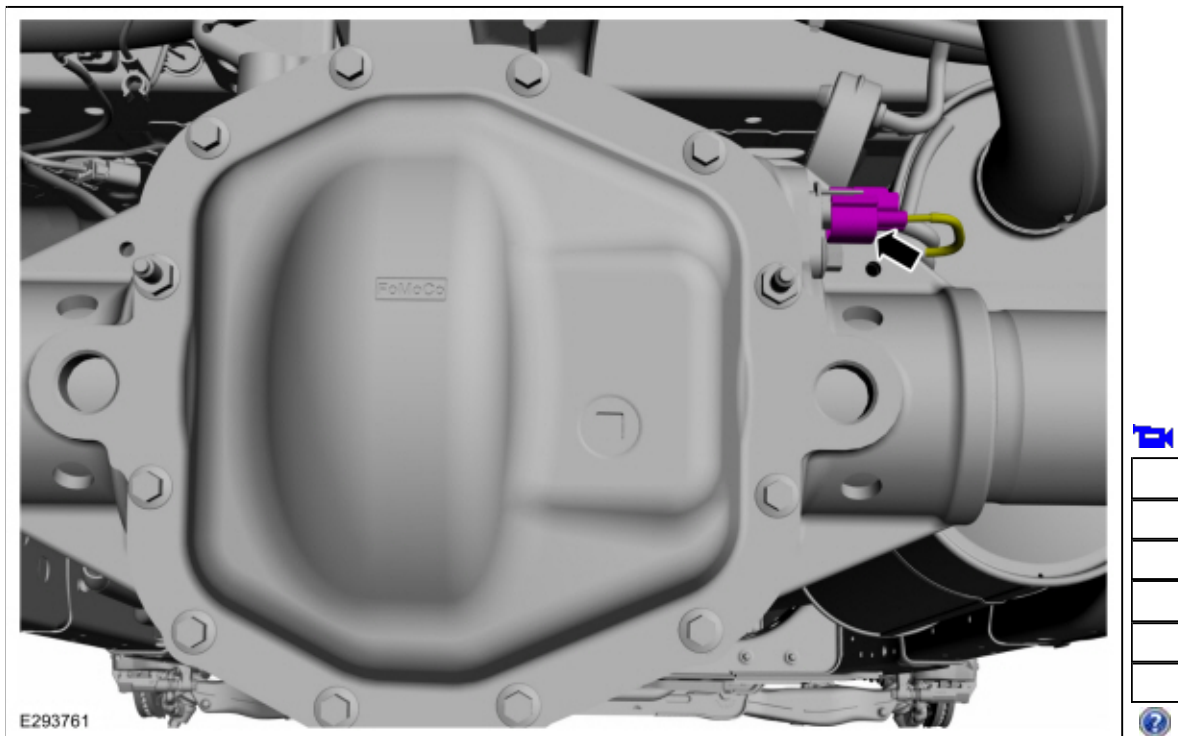
2. Install the differential vent tube.





6. **NOTICE:** Do not pull on the wire harness to disconnect the connector or damage to the connector will occur.

Connect the ELD solenoid switch electrical connector.



7. Install the rear brake outer flexible hose .

Refer to: [Rear Brake Outer Flexible Hose](#) (206-04 Rear Disc Brake, Removal and Installation).

8. Install the rear brake inner flexible hose.

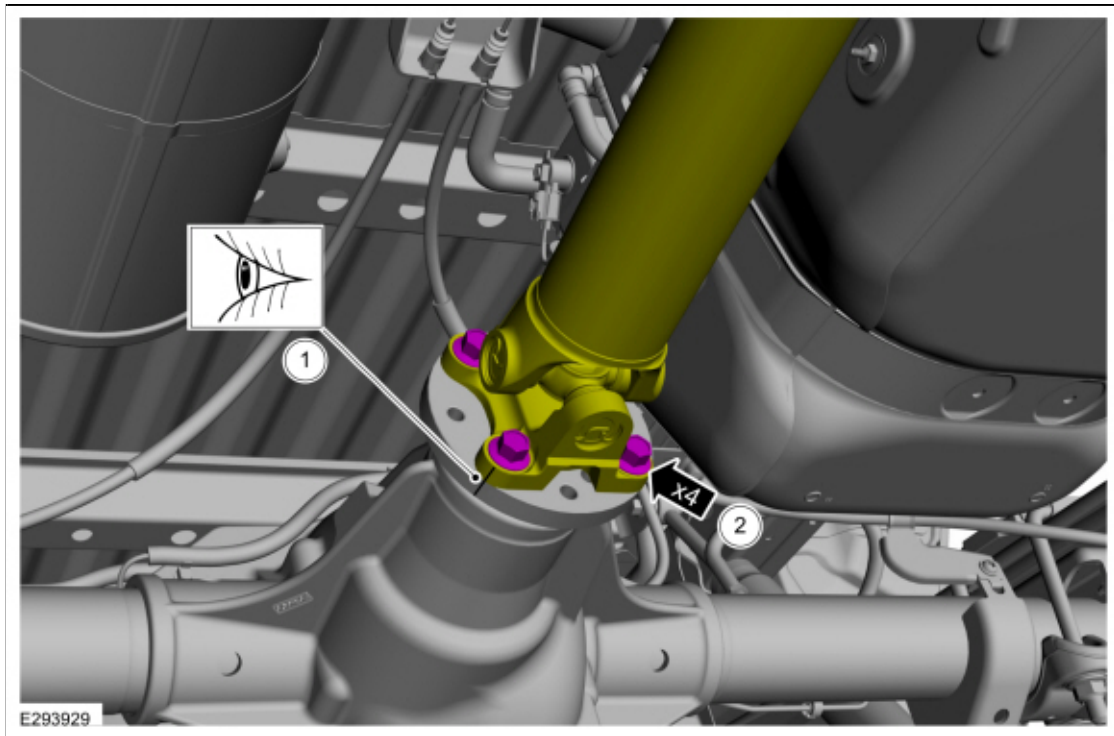
Refer to: [Rear Brake Inner Flexible Hose](#) (206-04 Rear Disc Brake, Removal and Installation).

9. Install the rear brake discs.

Refer to: [Brake Disc](#) (206-04 Rear Disc Brake, Removal and Installation).

10. **NOTE:** Make sure that new bolts are installed.

1. Make sure the alignment mark is aligned.
2. Install the new driveshaft flange to pinion flange bolts.
Torque: 81 lb.ft (110 Nm)



11. Bleed the brake system.

Refer to: [Brake System Pressure Bleeding](#) (206-00 Brake System - General Information, General Procedures).

