

Axle Assembly (51.15.01)

Special Service Tools



Halfshaft installer adapter
204-506-01



Halfshaft remover/replacer
204-506/3 (LRT-60-030/3)



Halfshaft remover/replacer
204-506/1 (LRT-60-030/1)



Retainers - halfshaft remover/replacer
204-506/5 (LRT-60-030/5)



Installer halfshaft oil seal
308-626/1

308-626/2

E54137

Installer/Guide halfshaft oil seal
308-626/2

100-012

E54135

Impulse extractor
100-012 (LRT-99-004)

308-005

E54134

Axle oil seal remover
308-005 (LRT-37-004/2)

Removal



CAUTION: Do not undo or remove the large protruding hexagon on the differential casing.

1 .



WARNING: Do not work on or under a vehicle supported only by a jack. Always support the vehicle on safety stands.

Raise and support the vehicle.

2 .

Remove the rear wheels and tires.

3 .

With assistance, remove the muffler assembly. For additional information, refer to [Muffler \(30.10.11\)](#) (Section 309 -00)

4 .

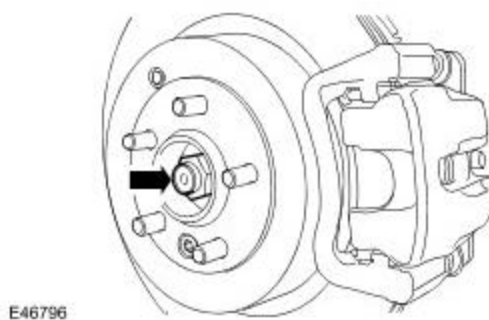
Remove the RH halfshaft. For additional information, refer to [Halfshaft \(47.11.01\)](#) (Section 205-05)

5 .

Remove the halfshaft retaining nut.



Discard the nut.



6.

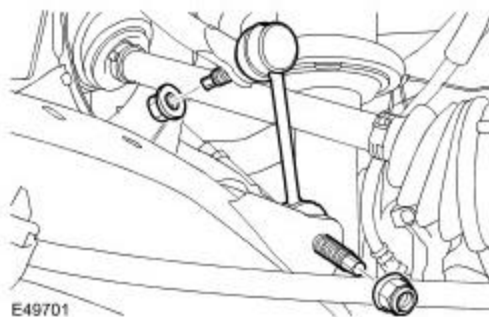


CAUTION: Use a wrench on the hexagon provided to prevent the ball joint rotating.

Remove the stabilizer bar link.

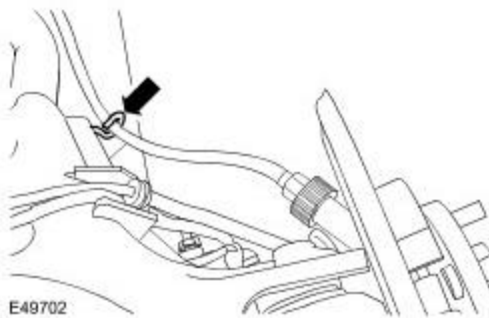


Remove the 2 nuts.



7.

Release the parking brake cable from the lower arm.

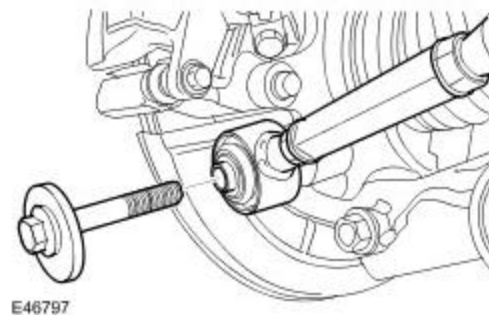


8.

Disconnect the toe link.



Remove the bolt.



9.

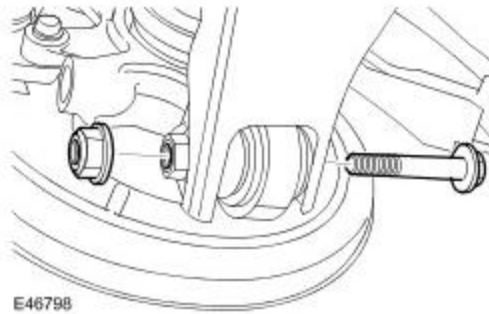


CAUTION: Ensure the ball joint seal is not damaged. A damaged seal will lead to the premature failure of the joint.

Release the knuckle from the lower arm.

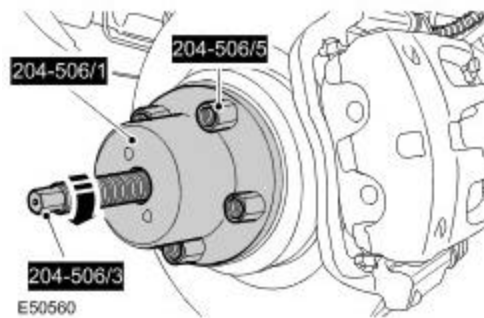


Remove the bolt.



10.

Using the special tools, release the halfshaft from the wheel hub.



11.

Position a container to collect the oil spillage.

12.

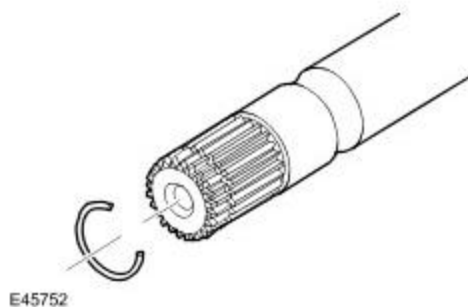
Release the halfshaft from the differential housing.

13.

With assistance, remove the halfshaft.

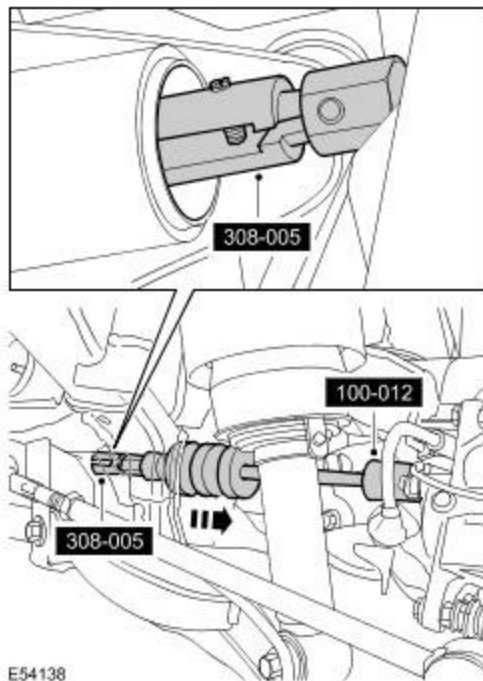


Remove and discard the snap ring.



14.

Using the special tools, remove and discard the halfshaft oil seal.



15 .



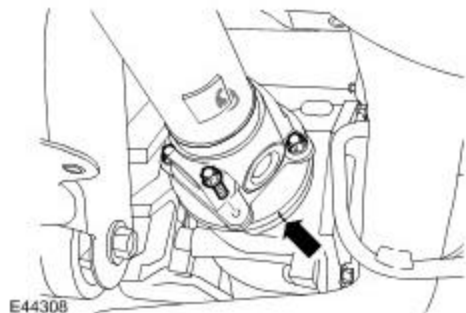
CAUTION: Mark the position of the driveshaft flange in relation to the drive pinion flange.



CAUTION: To avoid damage to the joint or gaiter, do not allow the driveshaft to hang.

Release the driveshaft from the rear axle drive flange.

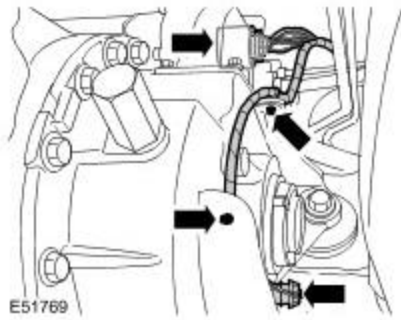
- Remove and discard the 4 Torx bolts.
- Tie aside.




16 .

Vehicles with differential locking motor: Disconnect the 2 electrical connectors.

- Release the 2 wiring harness clips.

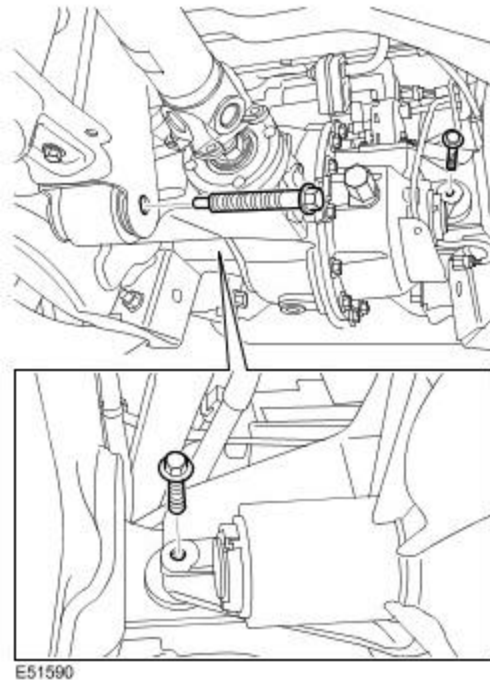


17. Using a transmission jack, support the differential.

18.  **CAUTION:** Before disconnecting or removing the components, ensure the area around the joint faces and connections are clean. Plug open connections to prevent contamination.

Remove the rear differential.

- Remove the 3 bolts.
- Disconnect the breather line.



Installation

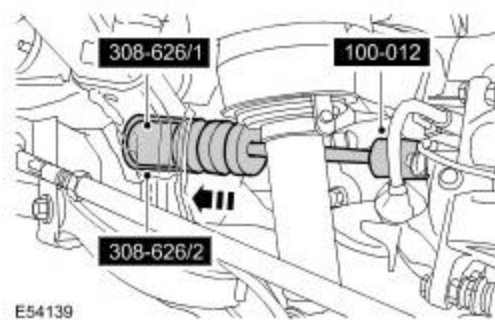
1. Install the rear differential.
- Connect the breather line.
 - Tighten the front mounting bolt to 275 Nm (203 lb.ft).
 - Tighten the rear mounting bolts to 175 Nm (129 lb.ft).

2.

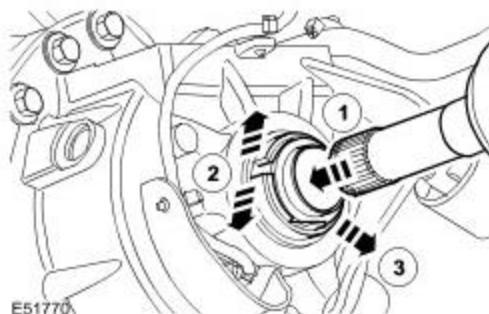
Vehicles with differential locking motor: Connect the electrical connectors.

- Secure the wiring harness clips.

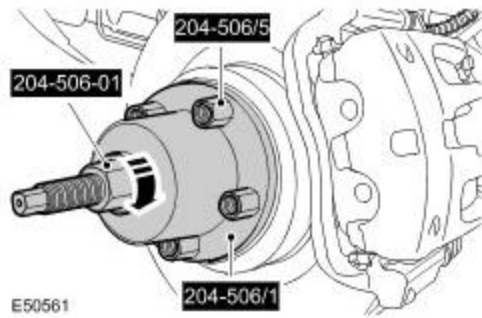
3. Attach the driveshaft to the rear axle drive flange.
 - Clean the component mating faces.
 - Tighten the new Torx bolts to 63 Nm (46 lb.ft).
4. Install the muffler assembly. For additional information, refer to [Muffler \(30.10.11\)](#) (Section 309-00)
5. Clean the components.
6. Using the special tools, install a new halfshaft oil seal.
 - The halfshaft oil seal protector must be left in place, until the halfshaft is fully installed.









7. With assistance, install the halfshaft.
 - Install the snap ring.
 - Open the halfshaft oil seal protector.
 - Make sure the snap ring is fully engaged and retains the halfshaft.
8. **NOTE:**
The oil seal protector is designed to break into two pieces.
Remove and discard the halfshaft oil seal protector.



9. Using the special tools, install the halfshaft in the wheel hub.



- 10 .  **CAUTION:** Ensure the ball joint seal is not damaged. A damaged seal will lead to the premature failure of the joint.
- Connect the lower arm to the wheel knuckle.
-  Tighten to 275 Nm (203 lb.ft).
- 11 . Install a new halfshaft retaining nut and lightly tighten.
- 12 . Connect the toe link.
-  Tighten the bolt to 175 Nm (129 lb.ft).
- 13 . Secure the parking brake cable to the lower arm.
- 14 . Install the stabilizer bar link.
-  Tighten the nuts to 115 Nm (85 lb.ft).
- 15 . Tighten the halfshaft retaining nut to 350 Nm (258 lb.ft).
-  Stake the nut to the halfshaft.
- 16 . Install the RH halfshaft. For additional information, refer to [Halfshaft \(47.11.01\)](#) (Section 205-05)
- 17 . Install the wheels and tires.
-  Tighten the wheel nuts to 140 Nm (103 lb.ft).