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Transfer Case Front Output Shaft Seal - 4.4L (41.20.51)

Special Service Tools

307-486

E62808

Installer (LRT-41-019)
307-486

308-636

E55702


Installer
308-636

205-818

E55429

Installer
205-818

Removal

1. Disconnect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)
2.  **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.
3. Drain the transfer case fluid. For additional information, refer to [Transfer Case Draining and Filling \(41.20.04\)](#) (Section 308-07)
4. Remove the transfer case. For additional information, refer to [Transfer Case - 4.4L \(41.20.25.99\)](#) (Section 308-07)
5. With assistance, secure the transfer case with its transmission mating face down on a flat surface.

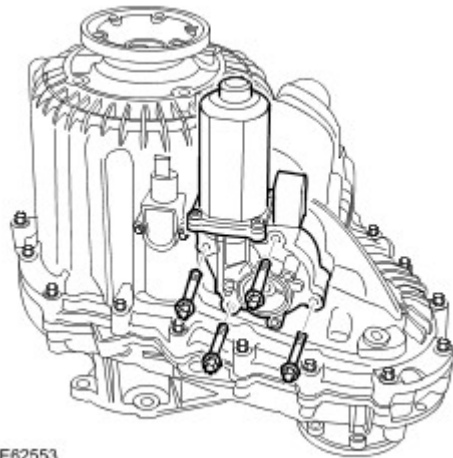
- Secure with 2 bolts.

6 .

**WARNING: Eye protection must be worn.**

Remove the shift motor.

- Remove the 4 bolts.
- Remove any debris from the bolt holes.



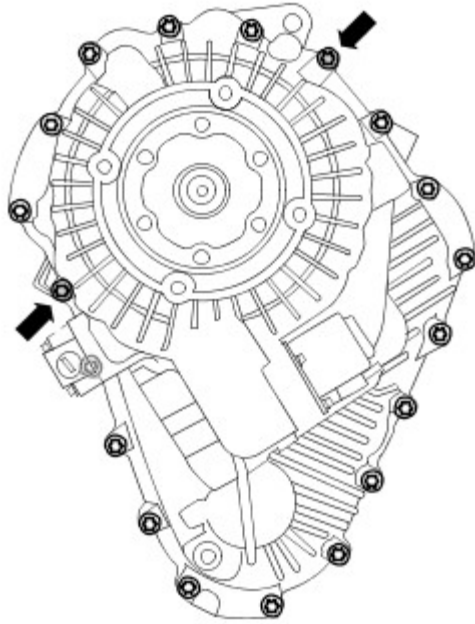
E62553

7 .

**WARNING: Eye protection must be worn.**

Remove 17 Torx bolts securing the transfer casings.


- The two bolts indicated remain fully tightened.
- Remove any debris from the bolt holes.






E62554

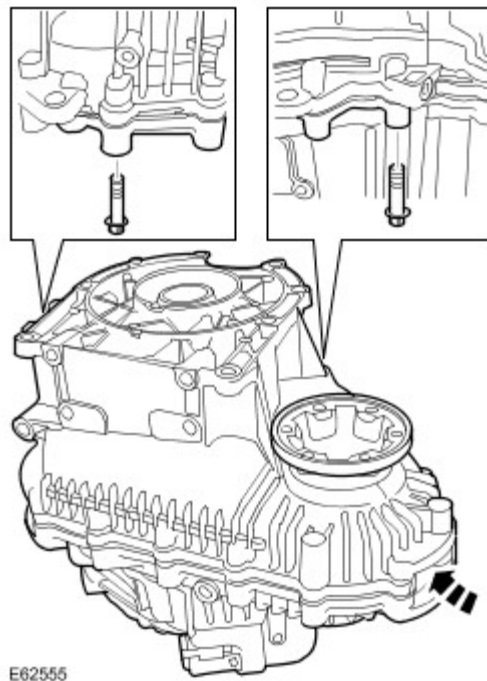
8. With assistance, release the transfer case and secure with the rear face of the transfer case facing down on a flat surface.

9.  **WARNING: Eye protection must be worn.**

 **CAUTION: Care must be taken to avoid damage to the mating surfaces.**

Remove the front half of the transfer case.

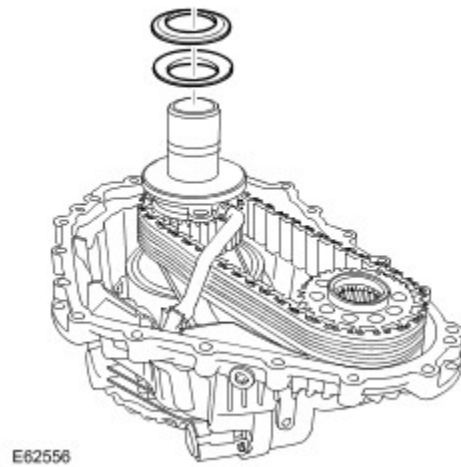
-  Remove the remaining 2 Torx bolts.
-  Remove any debris from the bolt holes.
-  Use a soft faced mallet.



10 .

**CAUTION: Note the fitted position of the special washers.**

Remove the 2 special washers.

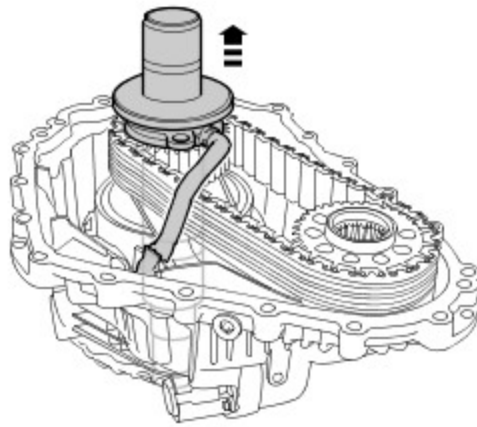


11 .

Remove the input shaft and oil pump assembly.

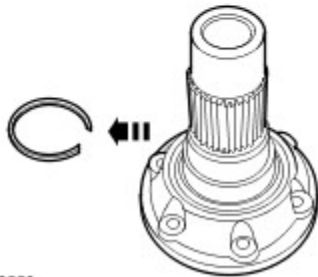
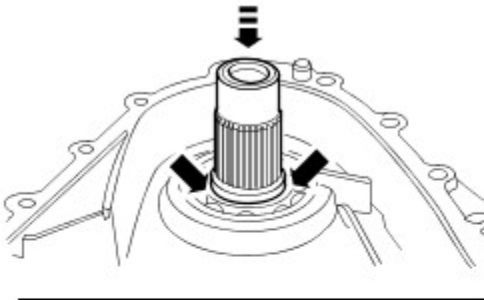


Release the fluid pump pickup line.



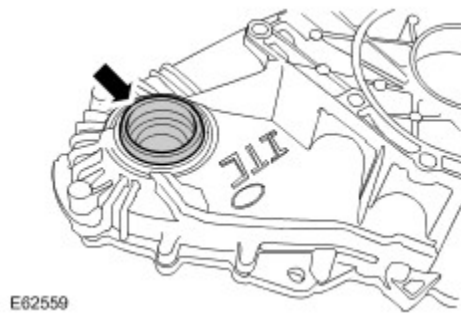
E62557

12. Remove the front output flange.
- ▶ Compress the snap ring.
 - ▶ Press the flange through the bearing.
 - ▶ Remove and discard the snap ring.

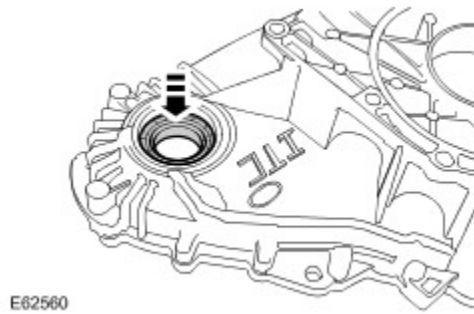


E62558

13.  **CAUTION:** Care must be taken to avoid damage to the seal register and running surface.
- Remove the output flange seal.



14. Remove the output flange bearing.



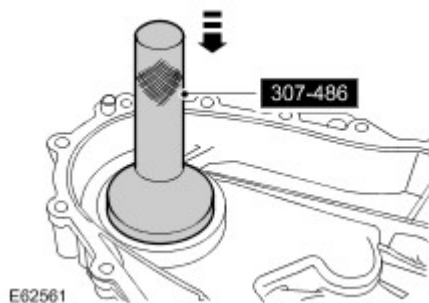
Installation

1. Remove the sealant from the transfer case mating faces.
2. Clean the magnetic filter.

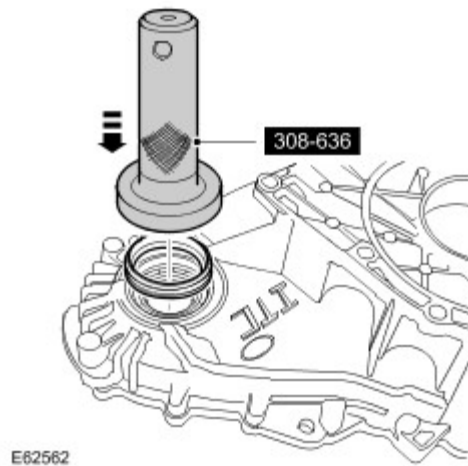
3.  **CAUTION: The chamfer on the bearing inner track must face the seal.**

Using the special tool, install the output flange bearing.

- ▶ Clean the components mating faces.



4. Using the special tool, install a new oil seal.
 - ▶ Clean the component mating faces.
 - ▶ Grease the new seal.



5.



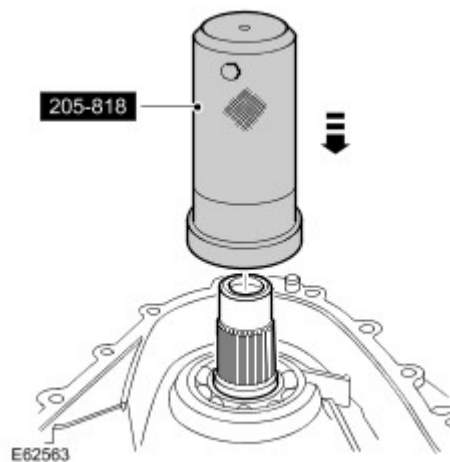
CAUTION: Centralise the snap ring in the snap ring groove before installing the output flange.



CAUTION: Extreme care is necessary to make sure the snap ring enters the bearing squarely.

Using the special tool and with assistance, install the drive flange.

- ▶ Clean the component mating faces.
- ▶ Install a new snap ring.
- ▶ Make sure the snap ring is fully engaged and retains the drive flange.



6.



CAUTION: Make sure the washers are installed correctly.

Install the 2 special washers.

- ▶ Clean the components.

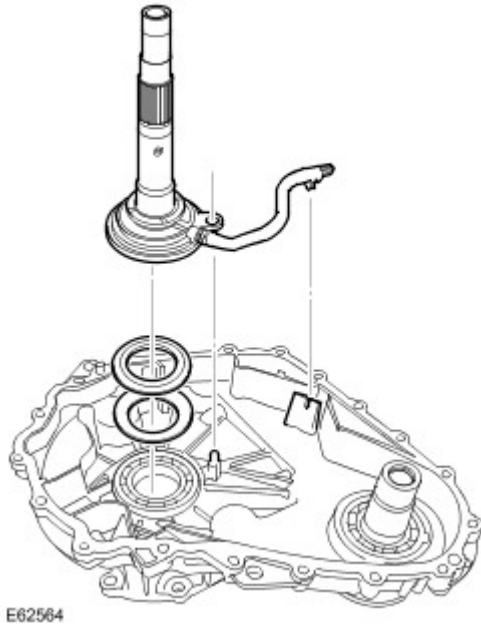
7.



CAUTION: Make sure the oil pump is installed over its location peg.

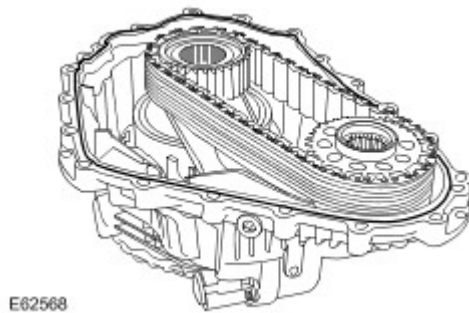
Install the input shaft and oil pump assembly.

- ▶ Clean the components.
- ▶ Secure the fluid pickup line.



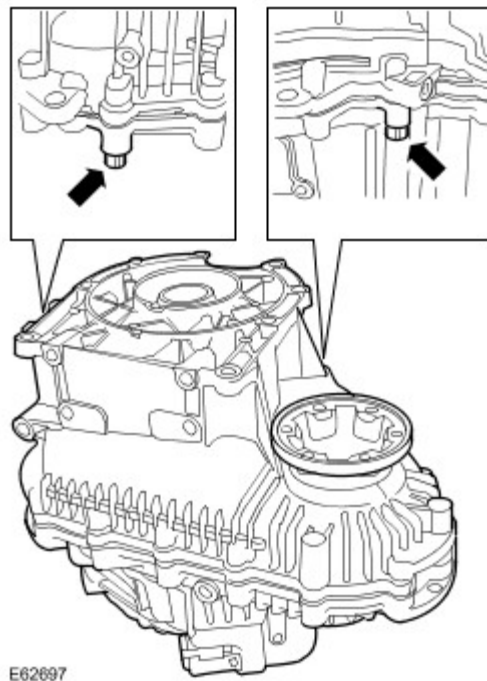
- 8 . Apply a 2 mm bead of sealant to one surface of the transfer case mating face, as shown.

- ▶ Clean the component mating faces.
- ▶ Clean the dowels and dowel holes.



- 9 . Install the front half of the transfer case.

- ▶ Evenly tighten the 2 Torx bolts shown to 35 Nm (26 lb.ft).



- 10 . With assistance, release the transfer case and secure with its transmission mating face down on a flat surface.
- 11 . Tighten the remaining Torx bolts to 35 Nm (26 lb.ft).
- 12 . Install the shift motor.
 - ▶ Clean the components.
 - ▶ Tighten the Torx bolts to 25 Nm (18 lb.ft).
- 13 . With assistance, release the transfer case.
 - ▶ Remove the 2 bolts.
- 14 . Install the transfer case. For additional information, refer to [Transfer Case - 4.4L \(41.20.25.99\)](#) (Section 308-07)
- 15 . Refill the transfer case with the recommended fluid. For additional information, refer to [Transfer Case Draining and Filling \(41.20.04\)](#) (Section 308-07)
- 16 . Connect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)