

Published : Apr 28, 2005



Transfer Case Rear Output Shaft Seal - 4.4L (41.20.54)

Special Service Tools



Remover/installer (LRT-54-015)
205-726




Seal installer
308-637



Installer
204-525/1

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.

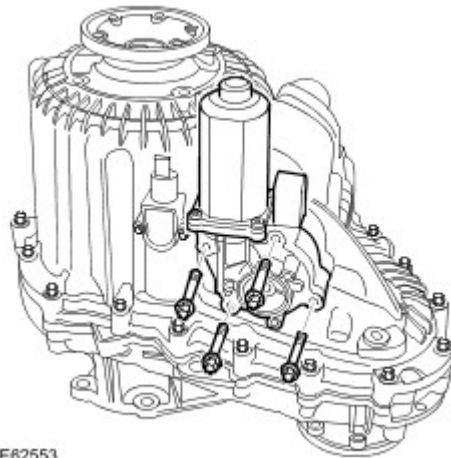
- Secure with 2 bolts.

6.

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

Remove the shift motor.

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



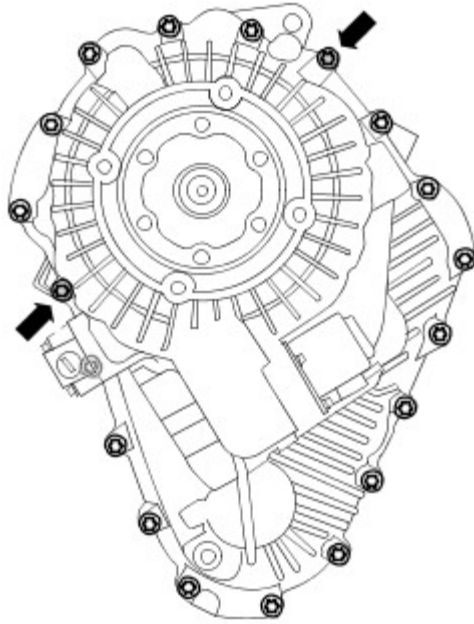
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7.

**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.



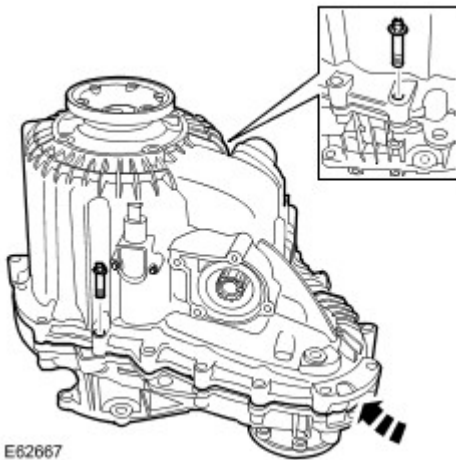
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8.

**WARNING: Eye protection must be worn.****CAUTION: Care must be taken to avoid damage to the mating surfaces.**

Remove the rear half of the transfer case.

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

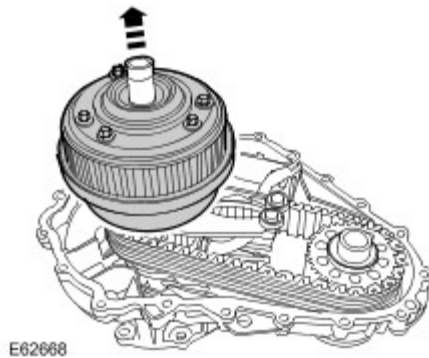
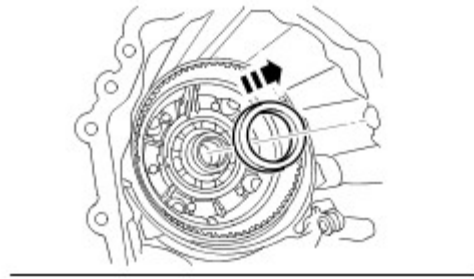


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9.

Remove the differential module.

- Remove the spacer.

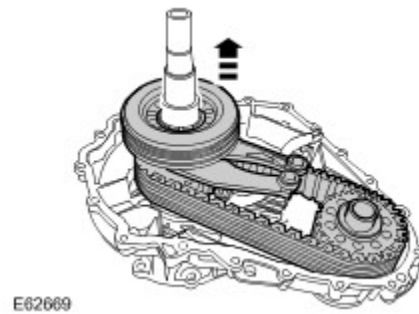


10 .

NOTE :

Remove as an assembly.

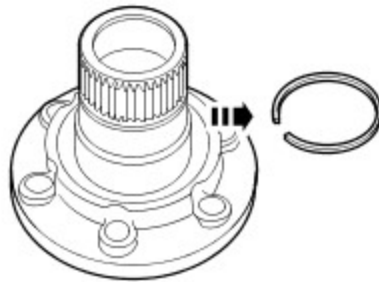
Remove the clutch, chain and sprocket.



11 .

Remove the rear output flange.

- Compress the snap ring.
- Press the flange through the bearing.
- Remove and discard the snap ring.

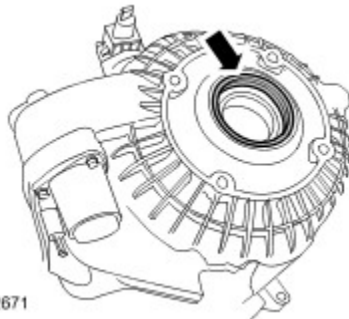


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12 .

**CAUTION:** Care must be taken to avoid damage to the seal register and running surface.

Remove the output flange seal.



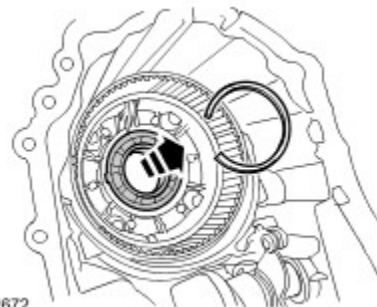
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13 .

Remove the output flange bearing.



Remove the circlip.



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14 .

Release the front half of the transfer case from the flat surface.

- ▶ Remove the 2 bolts.

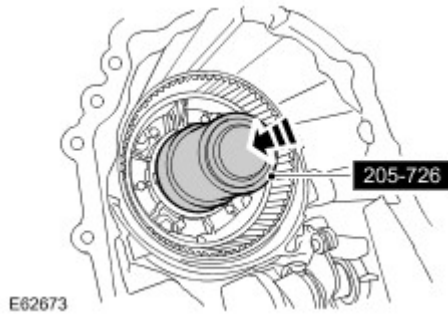
Installation

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

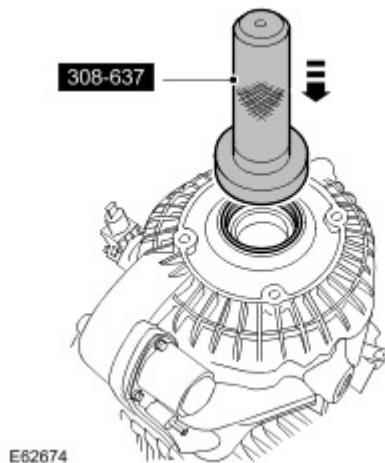
3.  **CAUTION: The chamfer on the bearing inner track must face the seal.**

Using the special tool, install the output flange bearing.

- ▶ Clean the components mating faces.
- ▶ Install the circlip.



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



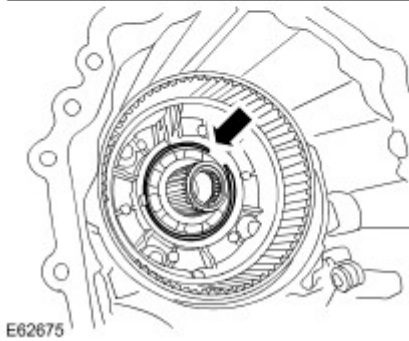
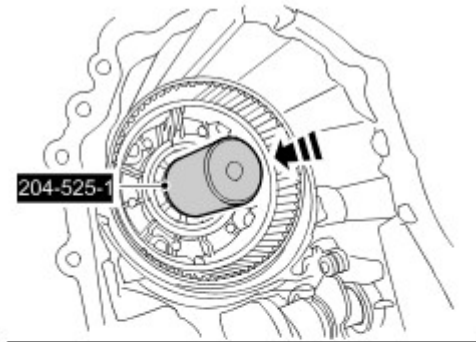
5.  **CAUTION: Centralise the snap ring in the snap ring groove before installing the output flange.**



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.

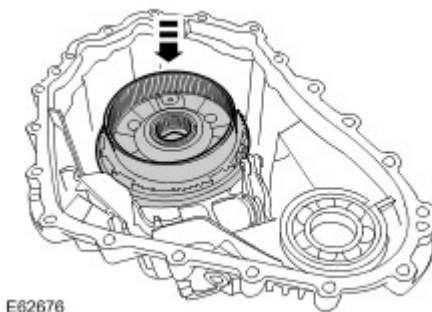
- Clean the component mating faces.
- Install a new snap ring.
- Make sure the snap ring is fully engaged and retains the drive flange.



6. Secure the rear half of the transfer case with its rear face down on a flat surface.

7. **NOTE :**
Rotate the differential to engage the splines.
Install the differential module.

- Clean the components.
- Install the spacer.



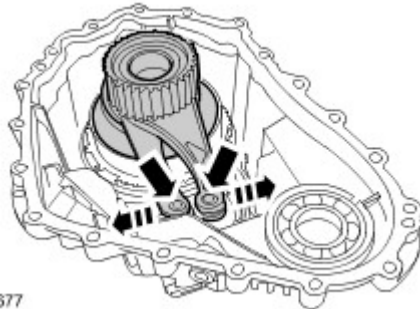
8. **NOTE :**
Rotate the assembly to engage the clutch plates.

NOTE :

Use circlip pliers to open the actuator levers.

Install the clutch.

- ▶ Clean the components.
- ▶ Engage the actuator levers.



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9.



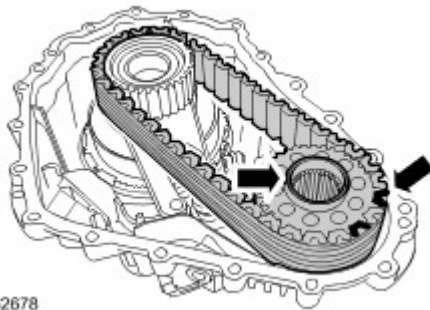
CAUTION: The dark links in the chain face up as shown.

NOTE :

The relieved splined inner diameter of the sprocket must face up as shown.

Install the chain and sprocket.

- ▶ Clean the components.

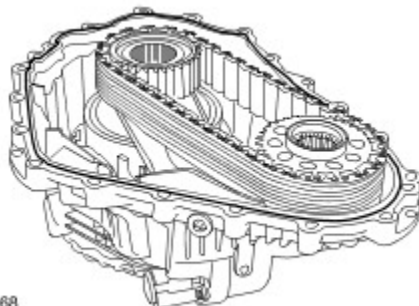


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10.

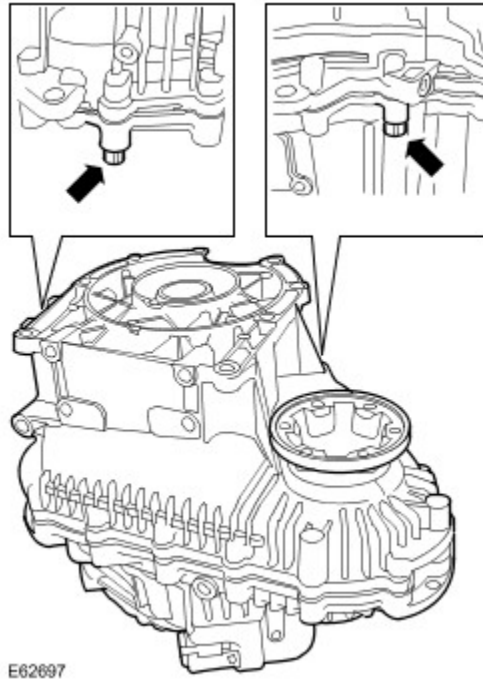
Apply a 2 mm bead of sealant to one surface of the transfer case mating face, as shown.

- ▶ Clean the component mating faces.
- ▶ Clean the dowels and dowel holes.
- ▶ Apply a 2 mm bead of sealant to one surface of the transfer case mating face, as shown.



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- 11 . Install the front half of the transfer case.
- ▶ Evenly tighten the 2 Torx bolts shown to 35 Nm (26 lb.ft).



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