



Transmission (44.20.01)

Special Service Tools



Torque converter seal installer
308-246



Torque converter support handles
307-497 (LRT-44-010)

Removal

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 .

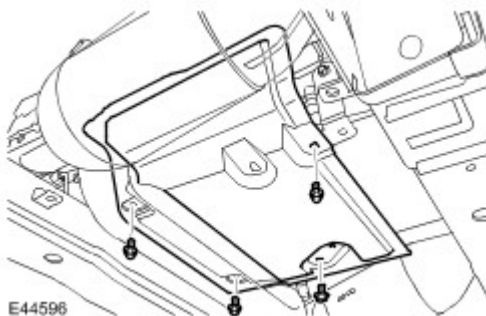
Remove the transfer case. For additional information, refer to [Transfer Case - 4.4L \(41.20.25.99\)](#) (Section 308-07)

3 .

Remove the transmission heat shield.



Remove the 4 bolts.



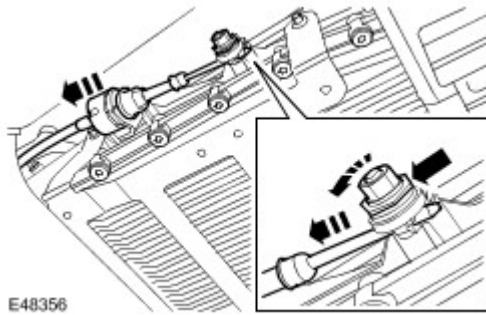
4 .

Release the selector cable.



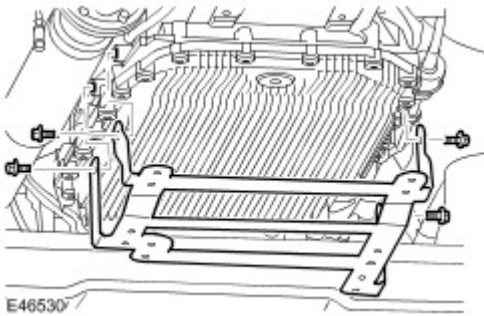
Using an additional wrench, restrain the clamping bush and loosen the locknut.

- Compress the latch and release the cable.



5. Remove the transmission heat shield bracket.

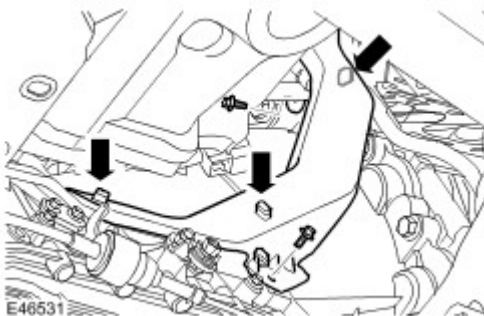
- Remove the 4 bolts.



6. Remove the fuel pipe heat shield.

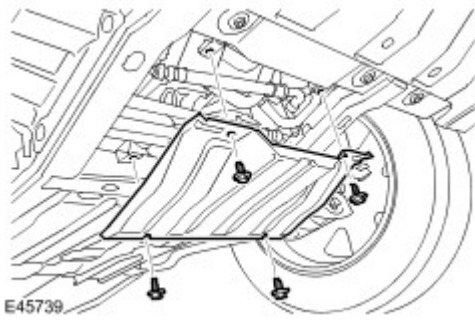
- Remove the 2 bolts.

- Release the fuel pipes from the 3 clips.



7. Remove the radiator access panel.

- Remove the 4 bolts.



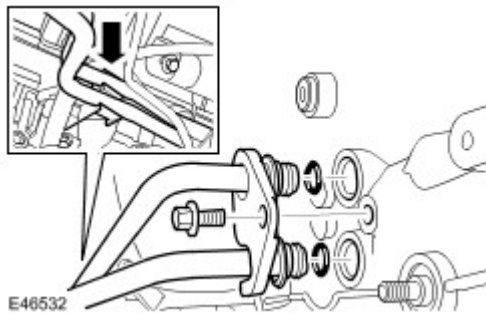
8.



CAUTION: Always plug any open connections to prevent contamination.

Release the transmission fluid lines.

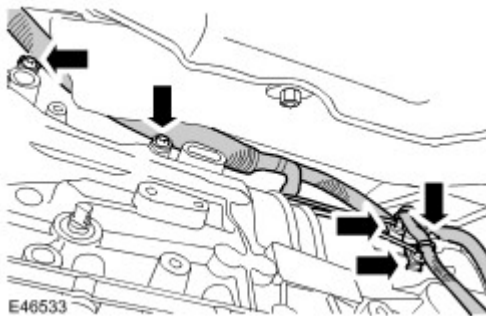
- Remove the bolt.
- Release the clip.
- Remove and discard both O-ring seals.



9.

Release the wiring harness from the LH side of the transmission.

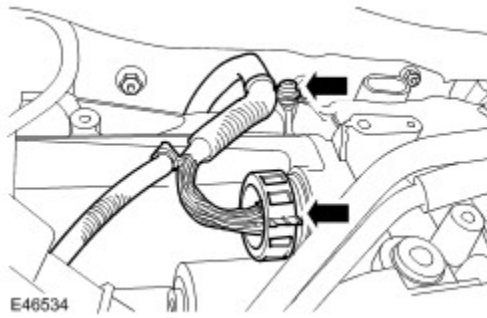
- Remove the 3 Torx screws.
- Release the 2 clips.



10.

Release the wiring harness from the RH side of the transmission.

- Remove the Torx screw.
- Disconnect the electrical connector.



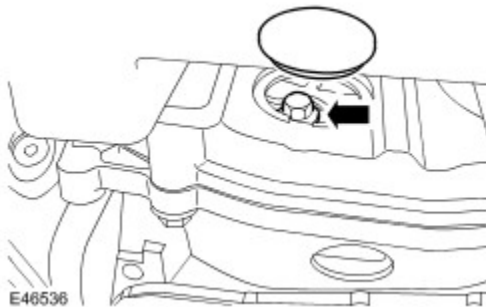
11. Release the transmission breather pipe clip.


➤ Remove the bolt.




12. Release the flexplate.

- Remove access plugs.
- Rotate the crankshaft to access the bolts.
- Remove the 3 bolts.



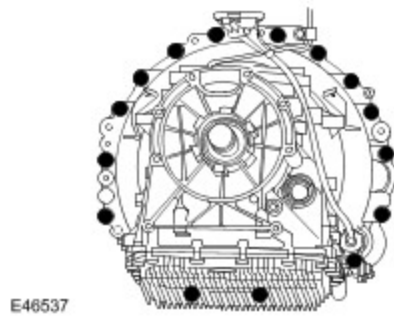
13.  **WARNING: Secure the transmission to the transmission jack.**

 **WARNING: Support the engine. The engine will fall forward when the transmission is removed.**

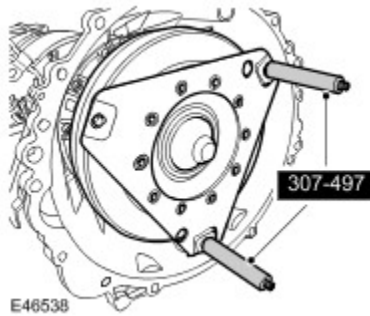
 **CAUTION: Make sure the torque converter remains connected to the transmission.**

With assistance, remove the transmission.

- Using a transmission jack, support the transmission.
- Remove the 15 bolts.

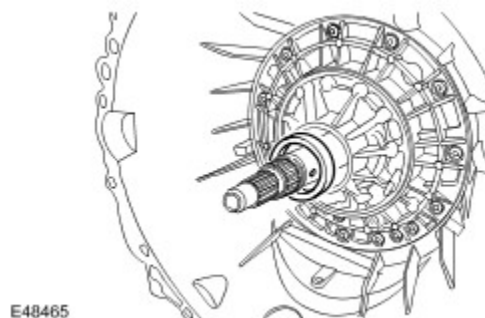


- 14 . Install the torque converter retainer.
- 15 . **NOTE :**
Do not disassemble further if the component is removed for access only.
Remove the transmission from the transmission jack.
- 16 . Remove the torque converter retainer.
- 17 . Using the special tools, remove the torque converter.



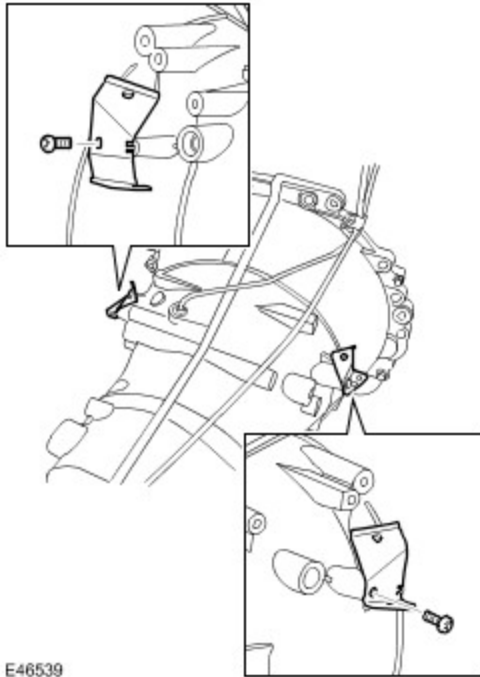
- 18 .  **CAUTION:** Care must be taken to avoid damage to the seal register and running surface.

Carefully remove and discard the torque converter fluid seal.



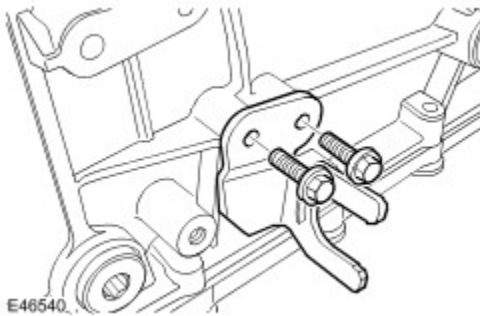
- 19 . Remove the wiring harness bracket.


- ▶ Remove the Torx screw.
- ▶ Repeat the above procedure for the other side.



20. Remove the selector cable bracket.

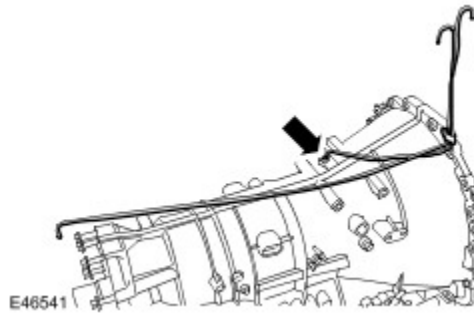
- ▶ Remove the 2 bolts.



21.  **CAUTION: Always plug any open connections to prevent contamination.**

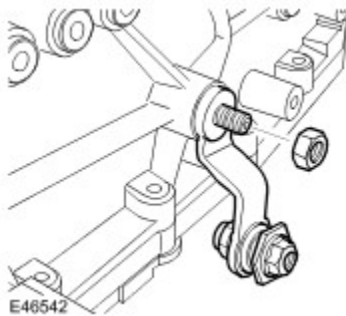
Remove the transmission breather lines.

- ▶ Depress the locking ring.



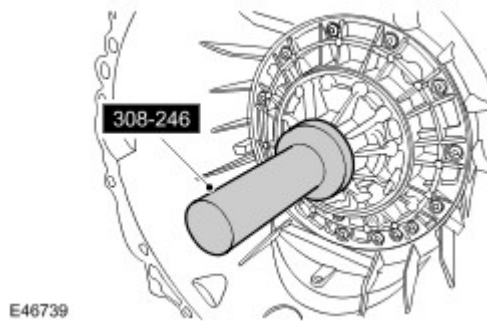
- 22 . Remove the selector lever.


➤ Remove the nut.



Installation

- 1 . Attach the selector lever.
➤ Tighten the nut to 12 Nm (9 lb.ft).
- 2 . Attach the transmission breather lines.
➤ Secure with the clip.
- 3 . Attach the selector cable bracket.
➤ Tighten the bolts to 10 Nm (7 lb.ft).
- 4 . Attach the wiring harness bracket.
➤ Tighten the Torx bolt to 10 Nm (7 lb.ft).
➤ Repeat the above procedure for the other side.
- 5 . Using the special tool, install a new torque converter oil seal.
➤ Clean the seal register.



- 6 . Install the torque converter.
 - Clean the seal contact area.
 - Remove the special tools.
- 7 . Install the torque converter retainer.
- 8 . Position the transmission to the transmission jack.
- 9 . Remove the torque converter retainer.
- 10 .  **CAUTION: Apply grease of the correct specification to the torque converter spigot.**
 - With assistance, install the transmission.
 - Clean the component mating faces.
 - Tighten the bolts to 45 Nm (33 lb.ft).
- 11 . Attach the flexplate to the torque converter.
 - Rotate the crankshaft to access the bolts.
 - Tighten the bolts to 45 Nm (33 lb.ft).
 - Install the access plugs.
- 12 . Install the radiator access panel.
 - Tighten the 4 bolts to 10 Nm (7 lb.ft).
- 13 . Attach the transmission breather pipe clip.
 - Tighten the bolt to 25 Nm (18 lb.ft).
- 14 . Attach the wiring harness.
 - Tighten the Torx screws.
 - Connect the electrical connector.
- 15 . Attach the transmission fluid lines.
 - Clean the components.

- ▶ Install the new O-ring seals.
 - ▶ Secure with the clip.
 - ▶ Tighten the bolt to 10 Nm (7 lb.ft).
- 16 . Install the fuel pipe heat shield.
- ▶ Tighten the bolts to 10 Nm (7 lb.ft).
 - ▶ Secure with the clips.
- 17 . Install the transmission heat shield bracket.
- ▶ Tighten the bolts to 10 Nm (7 lb.ft).
- 18 . **NOTE :**
Do not tighten the locking nut at this stage.
Connect the selector cable to the transmission.
- ▶ Engage the inner cable with the lever clamping bush.
 - ▶ Install the selector cable to its abutment bracket.
- 19 . Install the transfer case. For additional information, refer to [Transfer Case - 4.4L \(41.20.25.99\)](#) (Section 308-07)
- 20 . Adjust the selector cable. For additional information, refer to [Selector Lever Cable Adjustment \(44.30.04\)](#) (Section 307-05)
- 21 . Check and top-up the transmission fluid level. For additional information, refer to [Transmission Fluid Level Check \(44.24.06\)](#) (Section 307-01)
- 22 . Install the transmission heat shield.
- ▶ Tighten the bolts to 10 Nm (7 lb.ft).