



## 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 .

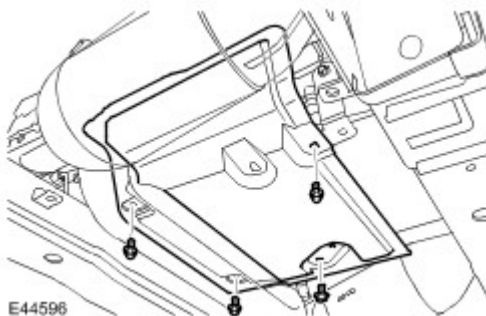
Remove the transfer case. For additional information, refer to [Transfer Case - 4.0L \(41.20.25.99\)](#) (Section 308-07B Transfer Case)

3 .

Remove the transmission heat shield.



Remove the 4 bolts.



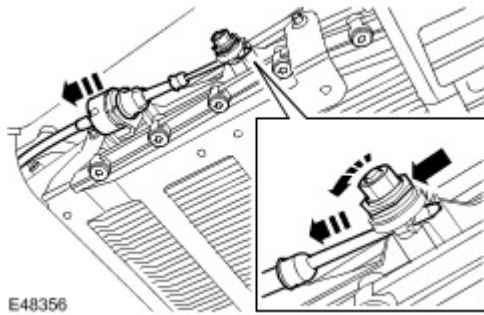
4 .

Release the selector cable.



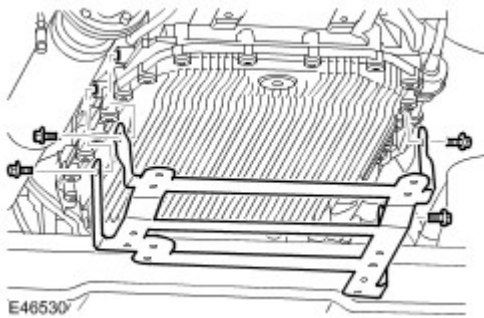
Using an additional wrench, restrain the clamping bush and loosen the locknut.

- Compress the latch and release the cable.



5. Remove the transmission heat shield bracket.

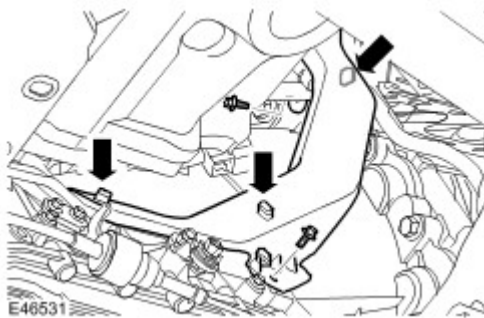
- Remove the 4 bolts.



6. Remove the fuel pipe heat shield.

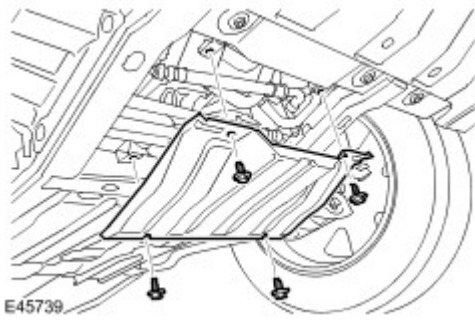
- Remove the 2 bolts.

- Release the fuel pipes from the 3 clips.



7. Remove the radiator access panel.

- Remove the 4 bolts.



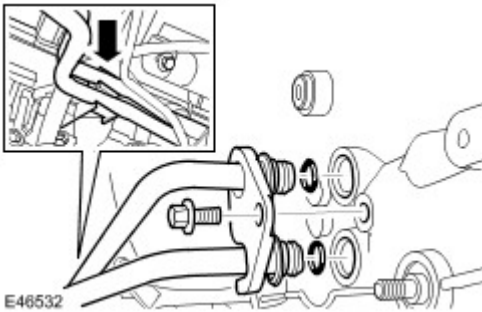
8.



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

Release the transmission fluid lines.

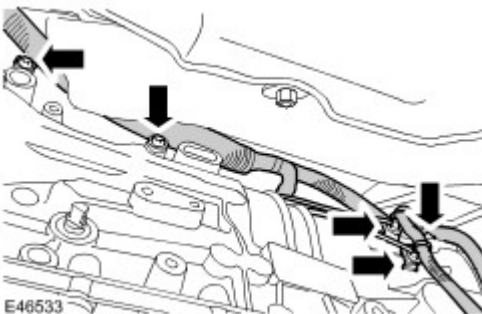
- Remove the bolt.
- Release the clip.
- Remove and discard both O-ring seals.



9.

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

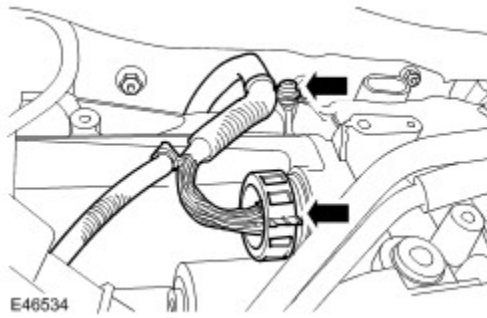
- Remove the 3 Torx screws.
- Release the 2 clips.



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 line clip.

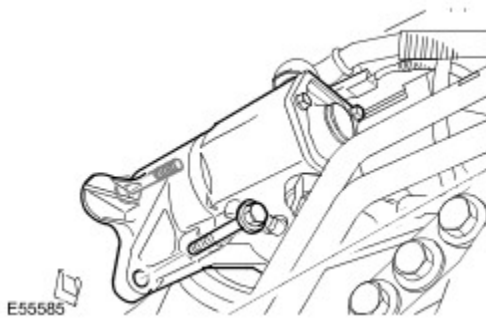
➤ Remove the bolt.



- 12 . Release the starter motor.

➤ Remove the 2 bolts.

➤ Tie the starter motor aside.



- 13 . Release the flexplate.

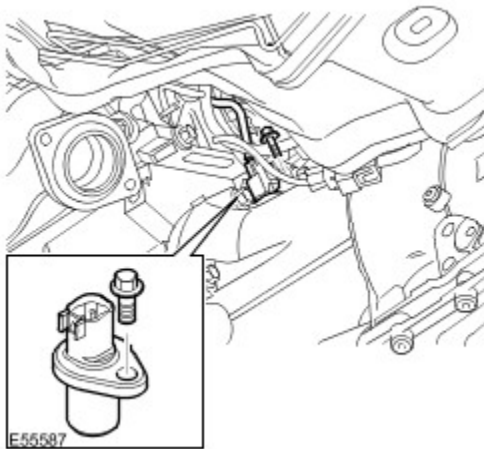
➤ Rotate the crankshaft to access the bolts.

➤ Remove the 4 bolts.

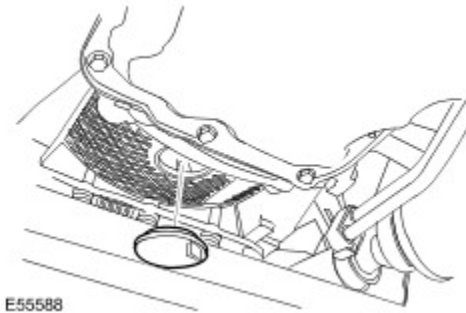



14. Remove the crankshaft position (CKP) sensor.

- Disconnect the electrical connector.
- Remove the bolt.



15. Remove the access hole plug.



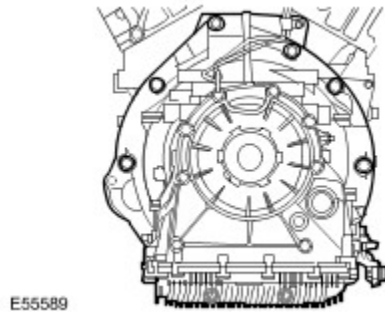
16.  **WARNING: Support the engine. The engine will fall forward when the transmission is removed.**

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

-  **WARNING: Make sure the torque converter remains with the transmission.**

With assistance, remove the transmission.

- ▶ Using a transmission jack, support the transmission.
- ▶ Remove the 8 bolts.



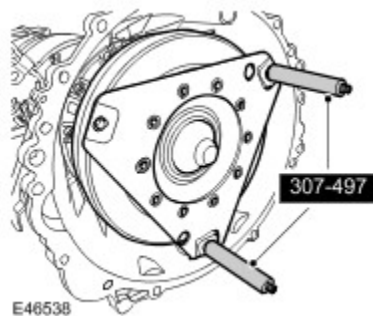
17 . Install the torque converter retainer.

18 . **NOTE :**

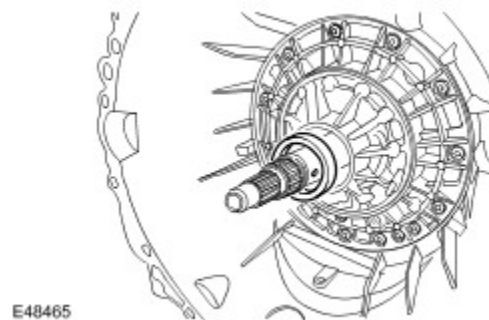
Do not disassemble further if the component is removed for access only.  
Remove the transmission from the transmission jack.

19 . Remove the torque converter retainer.

20 . Using the special tools, remove the torque converter.

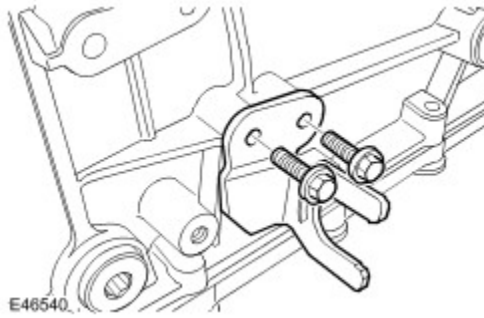


21 . Carefully remove and discard the torque converter fluid seal.



22 . Remove the selector cable bracket.


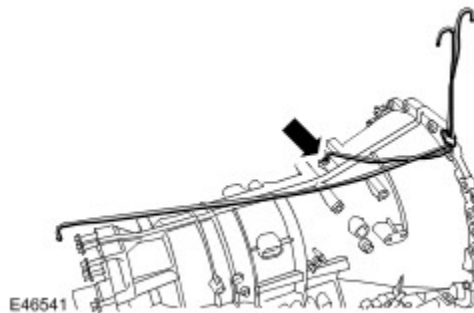
- ▶ Remove the 2 bolts.



23 .


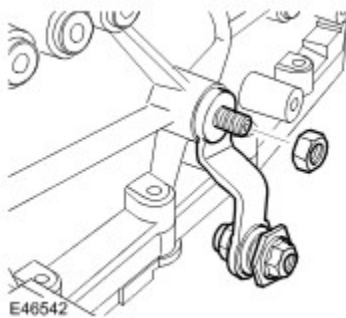
**CAUTION: Always plug any open connections to prevent contamination.**

Remove the transmission breather lines.

 Depress the locking ring.

24 .


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.

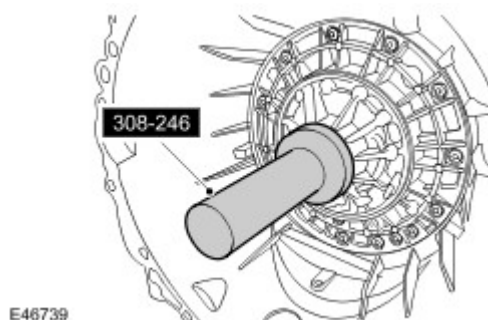
3 .

Attach the selector cable bracket.

- ▶ Tighten the bolts to 10 Nm (7 lb.ft).

- 4 . Using the special tool, install a new torque converter oil seal.

- ▶ Clean the seal register.



- 5 .  **CAUTION: Make sure the torque converter is fully located into the oil pump drive.**

Install the torque converter.

- ▶ Clean the seal contact area.
- ▶ Remove the special tools.

- 6 . Install the torque converter retainer.

- 7 .  **WARNING: Secure the transmission to the transmission jack.**

Position the transmission to the transmission jack.

- 8 . Remove the torque converter retainer.

- 9 .  **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).

- 10 . Attach the flexplate to the torque converter.
- ▶ Rotate the crankshaft to access the bolts.
  - ▶ Tighten the bolts to 45 Nm (33 lb.ft).

- 11 . Attach the transmission breather pipe clip.
- ▶ Tighten the bolt to 25 Nm (18 lb.ft).

- 12 . Attach the wiring harness.



- ▶ Tighten the Torx screws.
  - ▶ Connect the electrical connector.
- 13 .      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).
- 14 .      Install the fuel pipe heat shield.
- ▶ Tighten the bolts to 10 Nm (7 lb.ft).
  - ▶ Secure with the clips.
- 15 .      Install the transmission heat shield bracket.
- ▶ Tighten the bolts to 10 Nm (7 lb.ft).
- 16 .      Attach the selector cable.
- 17 .      Install the transfer case. For additional information, refer to [Transfer Case - 4.0L \(41.20.25.99\)](#) (Section 308-07B Transfer Case)
- 18 .      Adjust the selector cable. For additional information, refer to [Selector Lever Cable Adjustment \(44.30.04\)](#) (Section 307-05A Automatic Transmission/Transaxle External Controls - 4.0L)
- 19 .      Check and top-up the transmission fluid level. For additional information, refer to [Transmission Fluid Level Check \(44.24.06\)](#) (Section 307-01B Automatic Transmission/Transaxle - 4.4L)
- 20 .      Install the transmission heat shield.
- ▶ Tighten the bolts to 10 Nm (7 lb.ft).