

Transmission**Special Tool(s)**

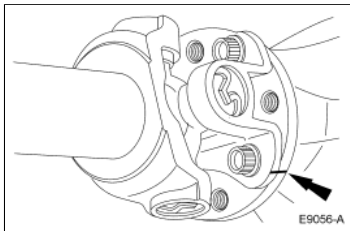
 <p>ST1636-A</p>	<p>Retainer, Torque Converter 307-346 (T97T-7902-A)</p>
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All vehicles

1. Disconnect the battery ground cable. For additional information, refer to [Section 414-01](#).
2. With the vehicle in NEUTRAL, position on a hoist. For additional information, refer to [Section 100-02](#)

4x4 vehicles

3. Remove the transfer case. For additional information, refer to [Section 308-07A](#).
4. To maintain initial driveshaft balance, index-mark the front flange and pinion flange.
 - Remove the four bolts and remove the front driveshaft.

**4x2 vehicles**

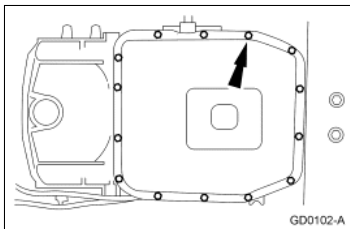
5. Remove the rear driveshaft. For additional information, refer to [Section 205-01](#).

All vehicles

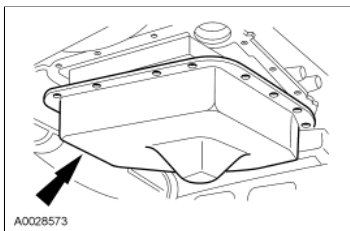
6. **NOTE:** Drain the transmission fluid if the transmission is disassembled, or installation of a new transmission is necessary.

Place a drain pan under the transmission fluid pan.

7. Drain the transmission fluid.
 - Loosen the transmission fluid pan bolts and allow the fluid to drain. After the fluid has drained, remove the bolts.



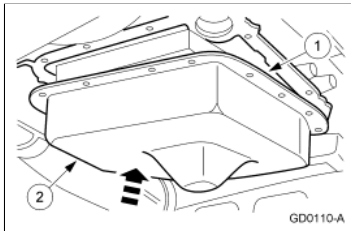
8. Remove the transmission fluid pan and transmission fluid pan gasket.



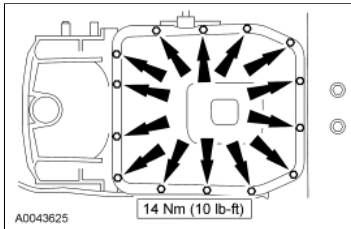
9. **NOTE:** The transmission fluid pan gasket is reusable. Clean and inspect for damage. If not damaged, the gasket should be reused.

Install the transmission fluid pan and gasket.

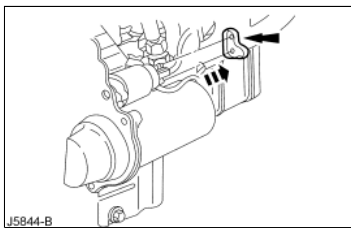
1. Position the transmission fluid pan gasket.
2. Position the transmission fluid pan.



10. Install the bolts.

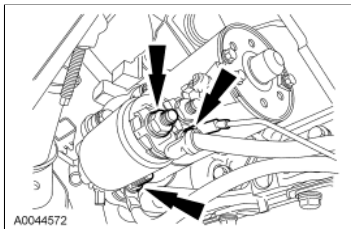


11. Remove the starter motor solenoid terminal cover.



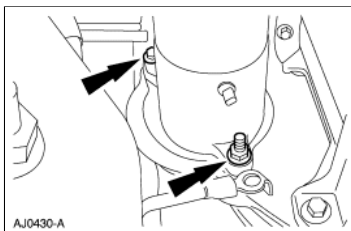
12. **NOTE:** The 4.6L engine is shown, the 4.2L and 5.4L engines are similar.

Disconnect the starter motor electrical connectors.



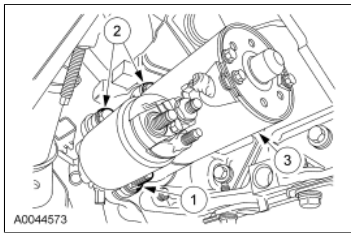
4.2L engines

13. Remove the bolt, stud bolt and starter.



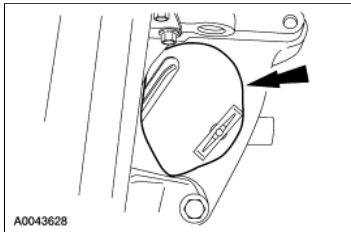
4.6L and 5.4L engines

14. Remove the starter motor.
 1. Remove the stud bolt.
 2. Remove the two bolts.
 3. Remove the starter.

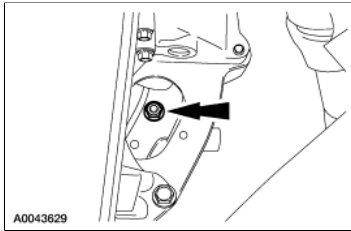


4.2L engines

15. Remove the inspection cover.

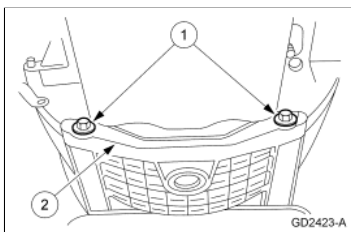


16. Remove the four torque converter nuts.
 - Rotate the crankshaft/flexplate assembly to access all the nuts.

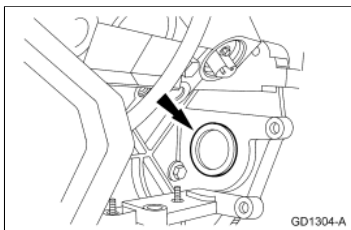


4.6L and 5.4L engines

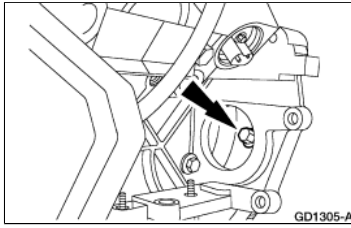
17. Remove the transmission inspection cover.
 1. Remove the two bolts.
 2. Remove the transmission inspection cover.



18. Remove the rubber plug to access the nuts.

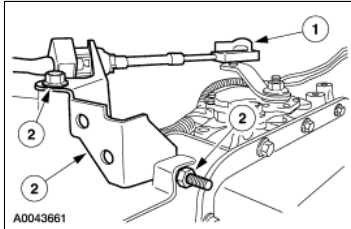


19. Remove the four nuts.
 - Rotate the crankshaft/flexplate assembly to access all the nuts.

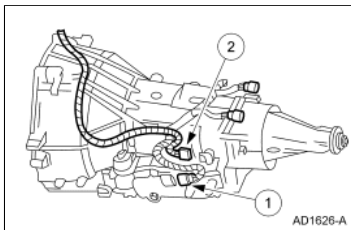


All engines

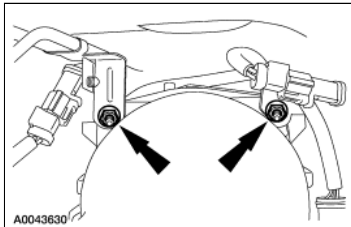
20. Remove the shift cable and bracket.
 1. Disconnect the shift linkage from the manual control lever.
 2. Remove the bolts and the bracket, and position the cable aside.



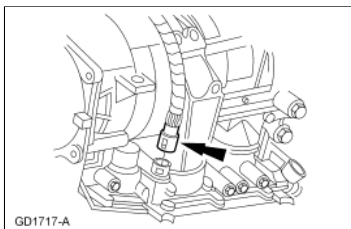
21. Disconnect the transmission electrical connectors.
 1. Disconnect the digital transmission range (TR) sensor.
 2. Disconnect the output shaft speed (OSS) sensor.



22. Remove the fuel line bracket and the wire harness bracket.



23. Disconnect the solenoid body assembly electrical connector.

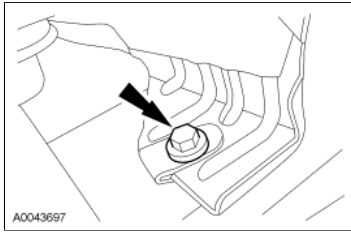


24. **NOTE:** The 4x2 vehicle is shown, the 4x4 vehicle is similar.

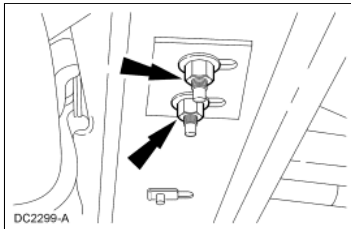
Using a suitable transmission jack, support the transmission and secure the transmission to it with a safety strap.

25. **NOTE:** RH shown; LH is similar.

Remove the two bolts retaining the heat shield to the transmission support crossmember.

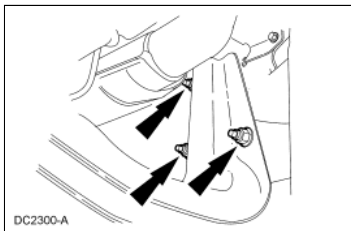


26. Loosen, but do not remove the transmission mount-to-crossmember nuts.

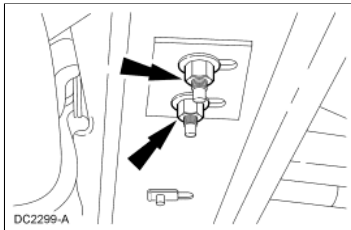


27. **NOTE:** RH shown; LH similar.

Remove the six crossmember-to-frame nuts and bolts (three on each side).

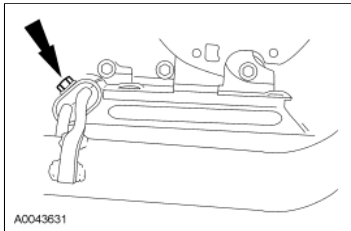


28. Remove the transmission mount-to-crossmember nuts, and remove the crossmember.



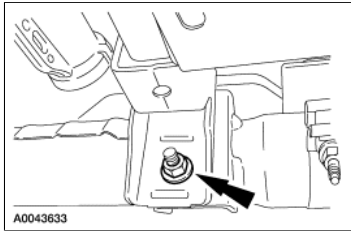
5.4L engines

29. Remove the nut from the exhaust bracket.



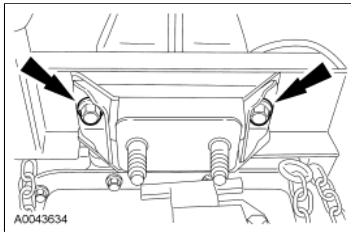
4.2L and 4.6L engines

30. Remove the nut from the exhaust bracket.



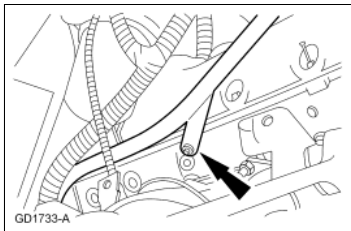
All engines

31. Remove the two bolts, the rear transmission mount and the exhaust hanger.



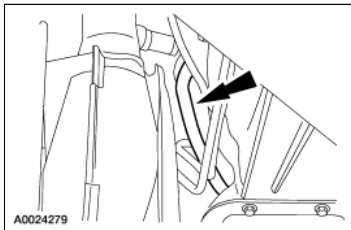
4.6L and 5.4L engines

32. Remove the transmission fill tube bolt from the RH cylinder head.



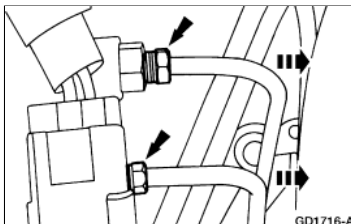
33. **NOTE:** If the transmission fluid has not been drained, position a drain pan and install a suitable plug into the transmission.

Position aside the transmission fluid fill tube.



All engines

34. Disconnect the transmission cooler tubes and allow to drain into a suitable container.

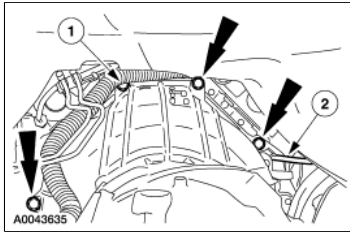


4.2L engines

35. **NOTE:** If the transmission fluid has not been drained, position a drain pan and install a suitable plug into the transmission.

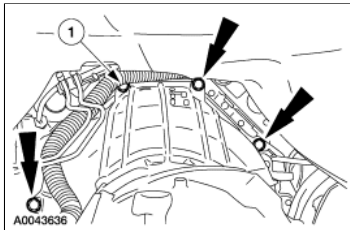
Remove the nine transmission-to-engine bolts.

1. Position the fuel lines and bracket aside.
2. Position the fill tube aside.



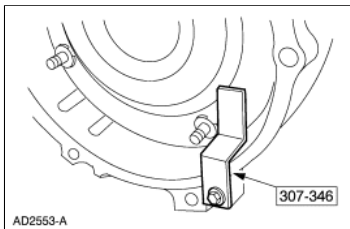
4.6L and 5.4L engines

36. Remove the seven transmission-to-engine bolts.
1. Position the fuel lines and bracket aside.



37. **⚠ WARNING:** The torque converter is heavy and can result in injury if it falls out of the transmission. Secure the torque converter in the transmission. If the torque converter is dropped, a new one must be installed.

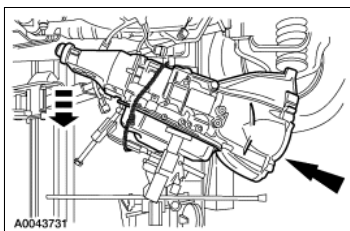
Install the special tool.



38. **⚠ WARNING:** The transmission must be secured with a safety chain or strap.

NOTE: The front of the transmission must be lowered for the transmission to clear the exhaust system during removal.

Continue moving the transmission rearward, while gradually lowering the front of the transmission. As the transmission jack is being lowered, move the transmission forward and remove it from the vehicle.



39. If the transmission is to be overhauled or if installing a new transmission, carry out transmission backflushing and cleaning. For additional information, refer to [Transmission Fluid Cooler — Backflushing and Cleaning](#) in this section.

