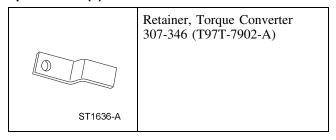
REMOVAL AND INSTALLATION

Transmission — 4x4

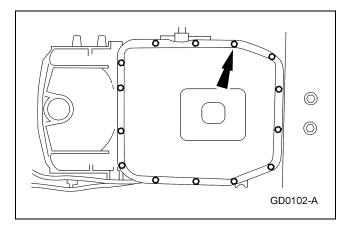
Special Tool(s)



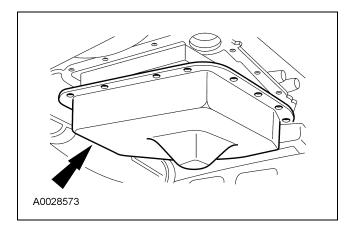
Removal

- 1. Disconnect the battery ground cable. For additional information, refer to Section 414-00.
- 2. Remove the transfer case. For additional information, refer to Section 308-07A.
- 3. **NOTE:** If transmission disassembly is required, drain the transmission fluid.

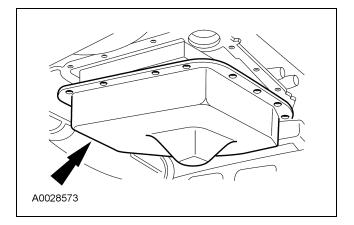
Loosen the transmission fluid pan bolts and allow the fluid to drain.



4. After the fluid has drained, remove the transmission fluid pan and drain the remaining fluid from the pan. Inspect the fluid pan for any visible debris (metal particles or clutch material).

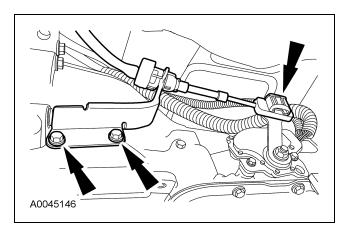


- 5. If transmission fluid contamination or transmission failure is confirmed by debris in the bottom of the transmission fluid pan, the transmission fluid cooler bypass valve must be replaced. If the vehicle is equipped with an oil-to-air (OTA) cooler, a new OTA must be installed.
- 6. **NOTE:** It is not necessary to torque the transmission fluid pan bolts in this step. Install the transmission fluid pan.

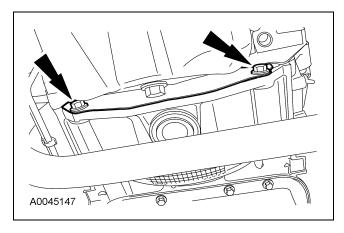


REMOVAL AND INSTALLATION (Continued)

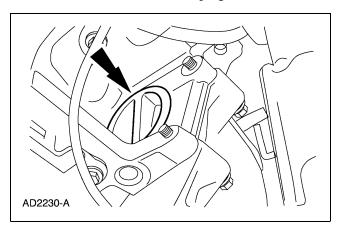
7. Disconnect the shift cable end and remove the shift cable bracket.



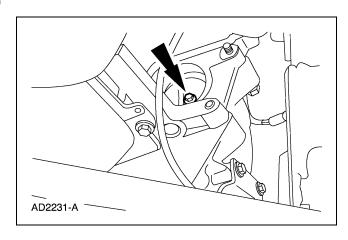
8. Remove the flexplate inspection cover.



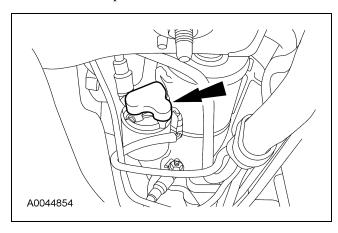
9. Remove the rubber access plug.



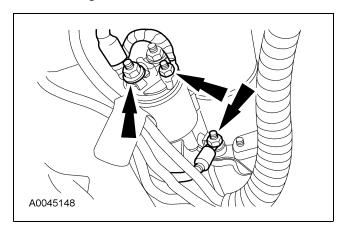
10. Remove and discard the 4 flexplate-to-torque converter nuts.



11. Remove the plastic starter motor electrical connector cap.



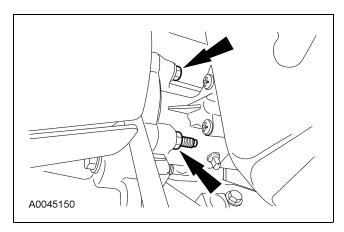
12. Remove the starter motor electrical connectors and the ground wire.



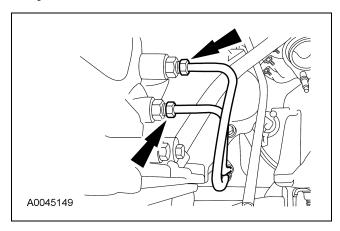
307-01-3

REMOVAL AND INSTALLATION (Continued)

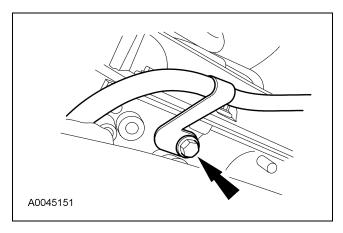
13. Remove the 3 bolts and the starter motor.



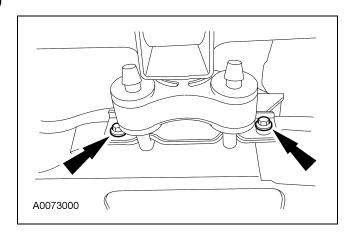
14. Disconnect the transmission cooler lines and position them aside.



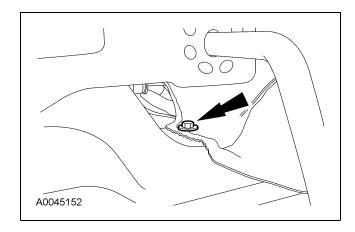
15. Remove the bolt from the RH cylinder head for the transmission filler tube and position the filler tube aside.



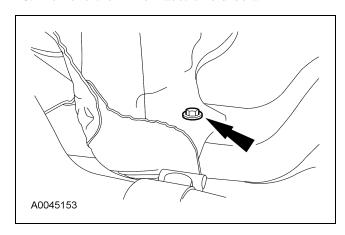
16. Remove the 2 bolts for the exhaust hanger.



17. Remove the RH exhaust shield bolt.



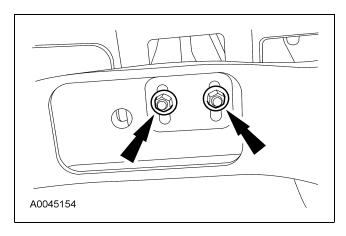
18. Remove the LH exhaust shield bolt.



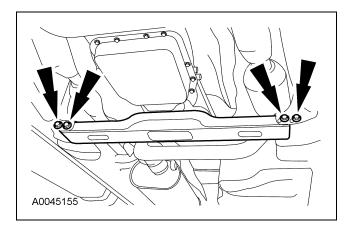
 NOTE: Make sure that the transmission is securely fastened to the transmission jack.
Position a suitable high-lift transmission jack under the transmission.

REMOVAL AND INSTALLATION (Continued)

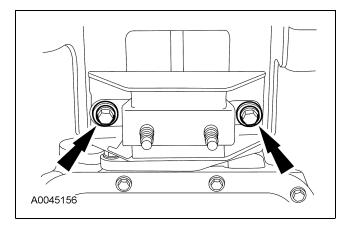
20. Remove the rear crossmember bolts.



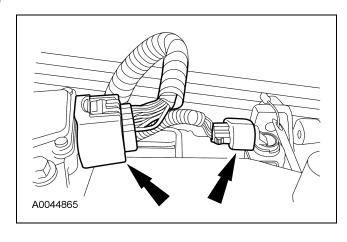
21. Remove the rear transmission retainer nuts and remove the crossmember.



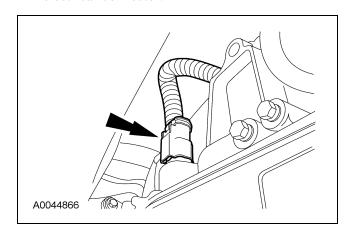
22. Remove the rear transmission support.



23. Disconnect the digital transmission range (TR) sensor and the output shaft speed (OSS) sensor.

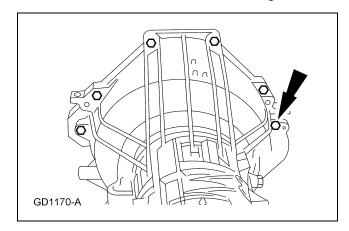


24. Disconnect the solenoid body assembly electrical connector.



25. **NOTE:** Note the length and the location of the bolts during removal.

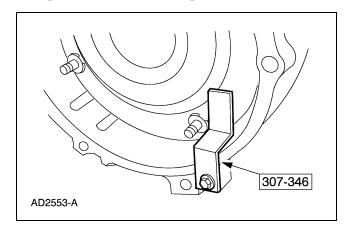
Remove the seven transmission-to-engine bolts.



REMOVAL AND INSTALLATION (Continued)

26. 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.

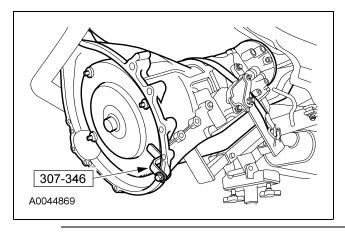
Leaving the transmission in a horizontal position, slide it back far enough to install the special tool. Install the special tool.



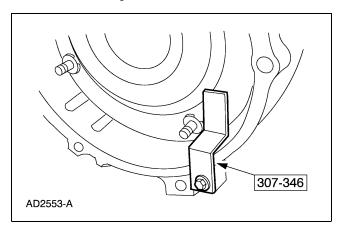
27. NOTICE: To remove the transmission from the vehicle, it will be necessary to put the transmission into a nose-down position to clear the flexplate and the exhaust system.

NOTE: Make sure that the special tool is in place and the transmission is securely fastened to the transmission jack before tilting the transmission.

Lower the transmission from the vehicle.



- 28. Once the transmission is clear of the vehicle the transmission fluid cooler and cooler tubes should be cleaned. Carry out transmission fluid cooler backflushing and cleaning. For additional information, refer to Transmission Fluid Cooler Backflushing and Cleaning in this section.
- 29. Remove the special tool.



30. Remove the vent tube.

