


INSTALLATION

Transmission

All vehicles

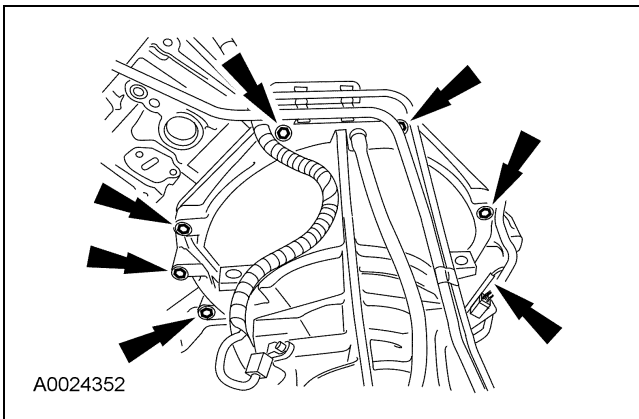
1.  **WARNING: Secure the transmission to the transmission jack with a safety chain. Failure to follow these instructions can result in personal injury.**

Secure the transmission to the transmission jack with a safety chain.

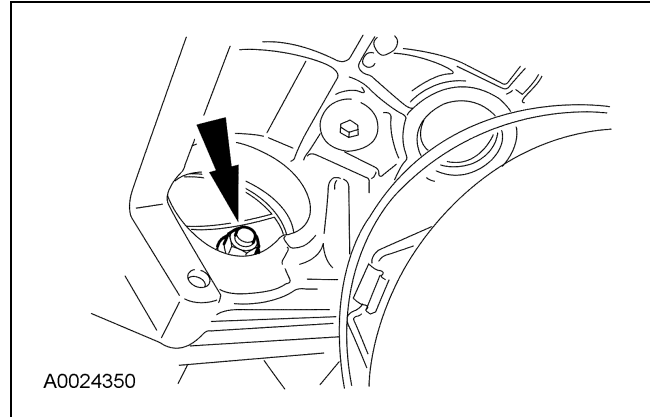
2. Rotate the torque converter and adapter plate so the orange or green paint daub on the torque converter is in the 12 o'clock location.
3. Raise and position the transmission to the back of the engine.

4.6L engine

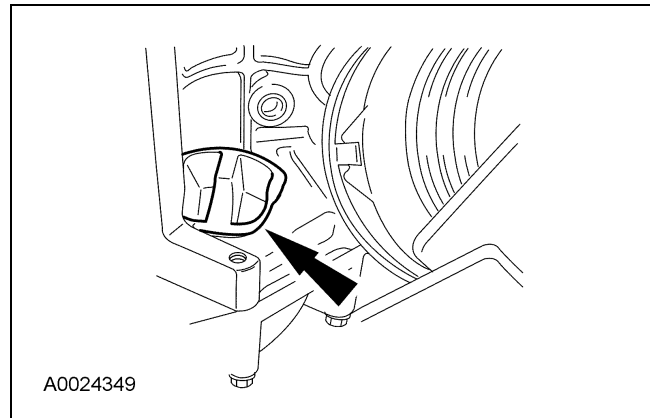
4. Install the 7 engine-to-transmission retaining bolts.
 - Tighten to 48 Nm (35 lb-ft).



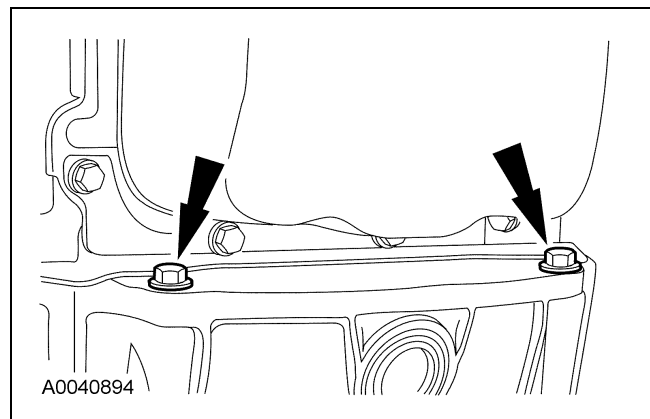
5. Install the 4 torque converter nuts.
 - Tighten to 40 Nm (30 lb-ft).



6. Install the access cover.



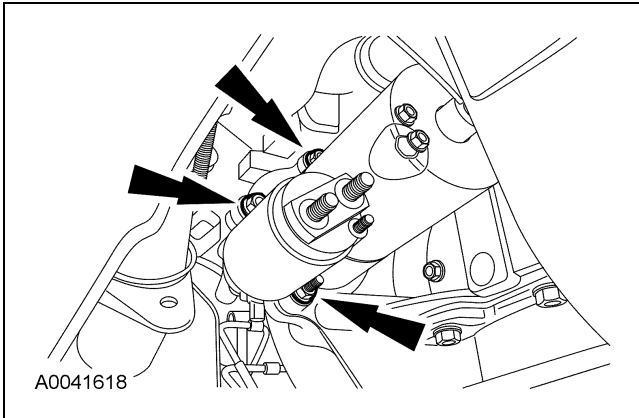
7. Install the flexplate cover.
 - Tighten to 35 Nm (26 lb-ft).



INSTALLATION (Continued)

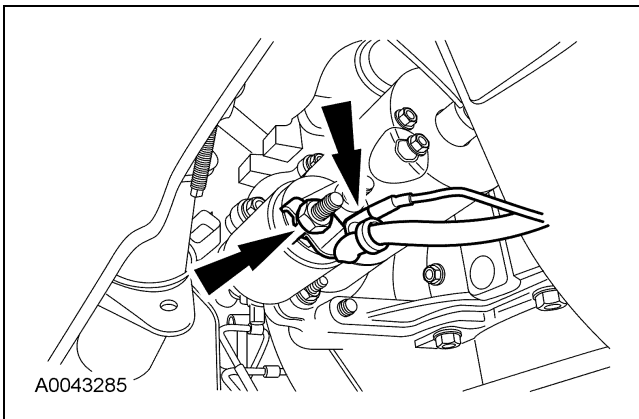
8. Install the starter.

- Tighten to 25 Nm (18 lb-ft).

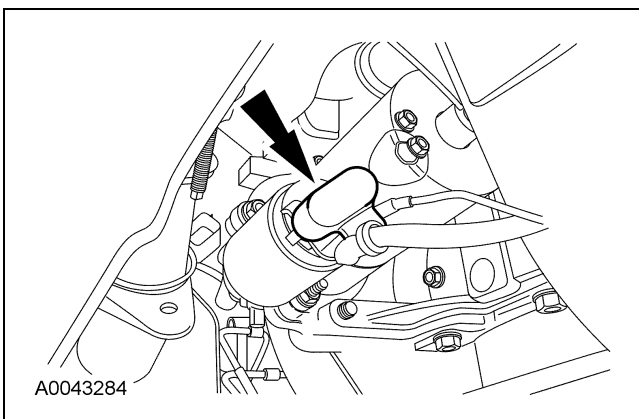


9. Install the starter motor electrical connectors.

- Tighten the cable to 13 Nm (10 lb-ft).
- Tighten the wire to 6 Nm (53 lb-in).

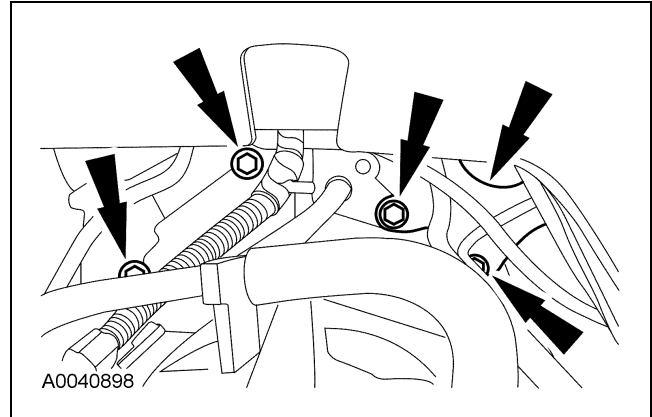


10. Install the starter motor electrical connector cover.

**4.0L engine**

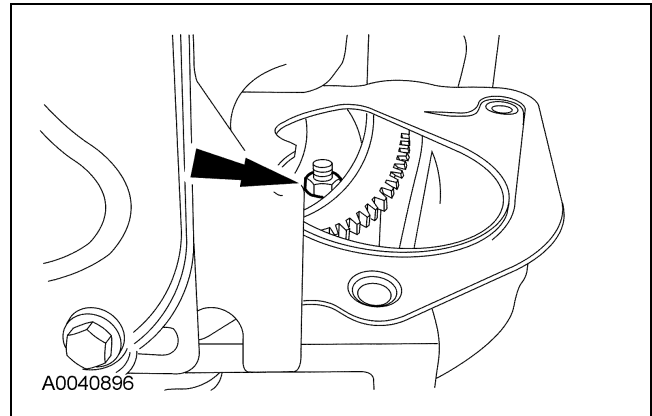
11. Position the fuel line bracket in place and install the 6 retaining bolts.

- Tighten to 48 Nm (35 lb-ft).



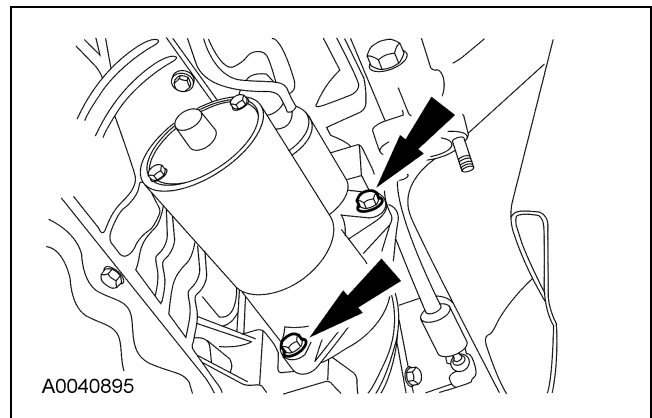
12. Install the 4 torque converter nuts.

- Tighten to 40 Nm (30 lb-ft).



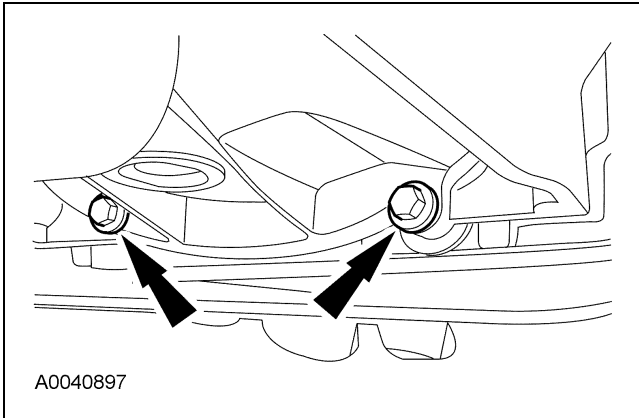
13. Install the starter motor.

- Tighten to 25 Nm (18 lb-ft).

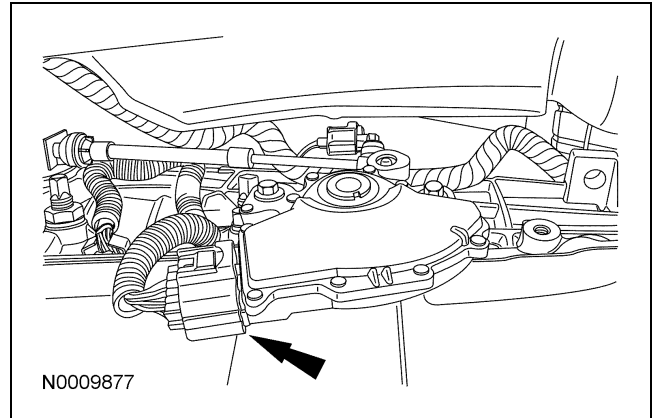


INSTALLATION (Continued)

14. Install the lower transmission retaining bolts.
- Tighten to 48 Nm (35 lb-ft).



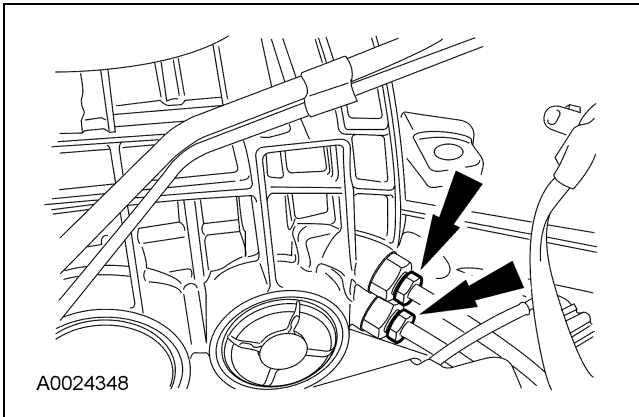
16. Connect the digital transmission range (TR) sensor connector.

**All vehicles**

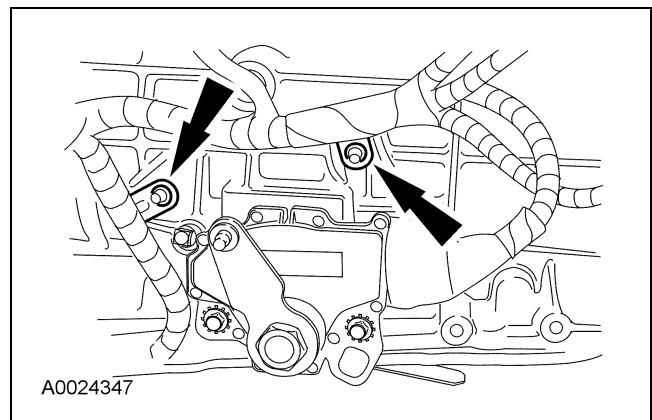
15. **⚠ CAUTION:** Use care not to bend or force the cooler tubes otherwise damage to the cooler tubes and the transmission can result.

Install the transmission fluid cooler tubes.


- Tighten to 40 Nm (30 lb-ft).



17. Position the wire harness and install the retainers.



INSTALLATION (Continued)

18.  **CAUTION:** Damage will occur to the solenoid body assembly if the screw is tightened above the specification.

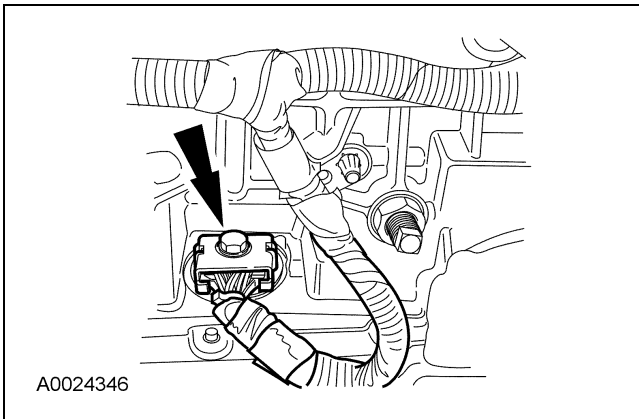
NOTE: Always install new O-ring seals on the vehicle harness connector.

NOTE: Clean the area around the connector to prevent contamination of the solenoid body connector.

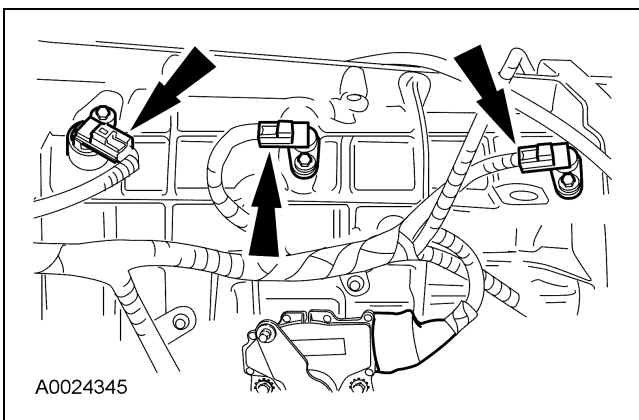
NOTE: Use petroleum jelly to lubricate the O-ring seals to aid in the installation process.

Install and lubricate new O-ring seals on the transmission connector and connect the connector.

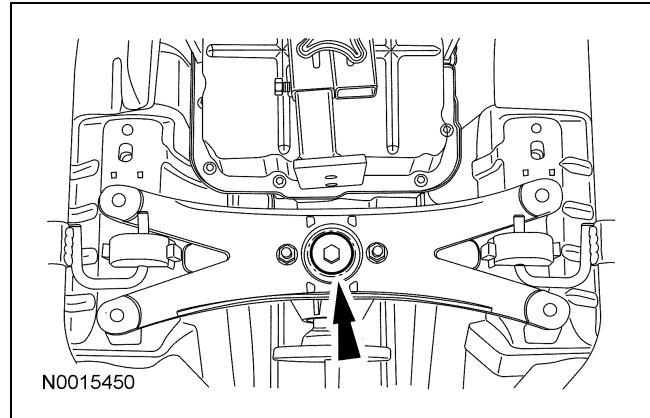
- Tighten to 5 Nm (44 lb-in).



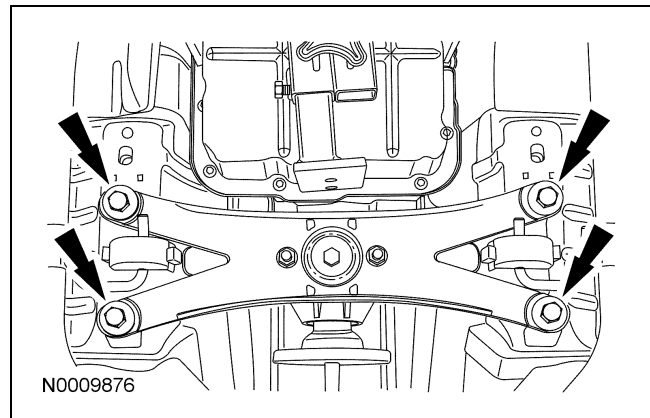
19. Connect the turbine shaft speed (TSS) sensor, output shaft speed (OSS) sensor and intermediate shaft speed (ISS) sensor electrical connectors.



20. Loosely install the transmission insulator-to-extension housing center screw.



21. Position the transmission crossmember in the vehicle and loosely install the transmission crossmember-to-floor pan screws.



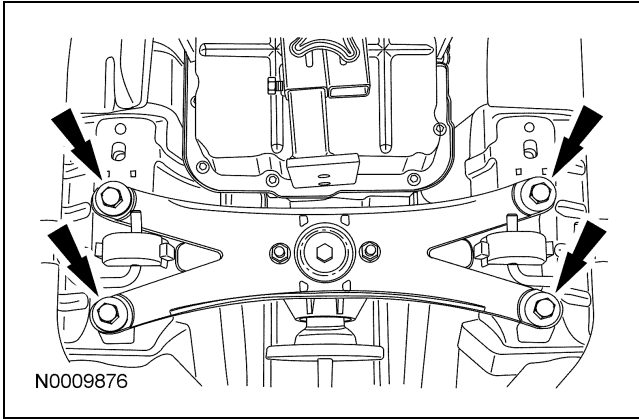
22. **NOTE:** The transmission support insulator must be neutralized.

Slide the transmission support insulator forward, rearward and side-to-side until the gaps between the transmission support insulator snubber and crossmember are equal.

INSTALLATION (Continued)

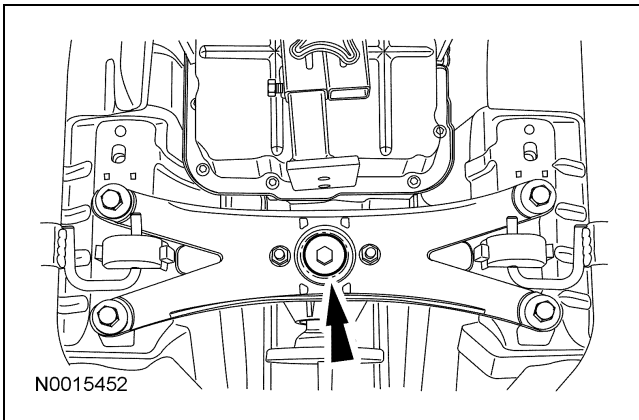
23. With the transmission support insulator neutralized, tighten the transmission crossmember-to-floor pan screws.

- Tighten to 63 Nm (46 lb-ft).

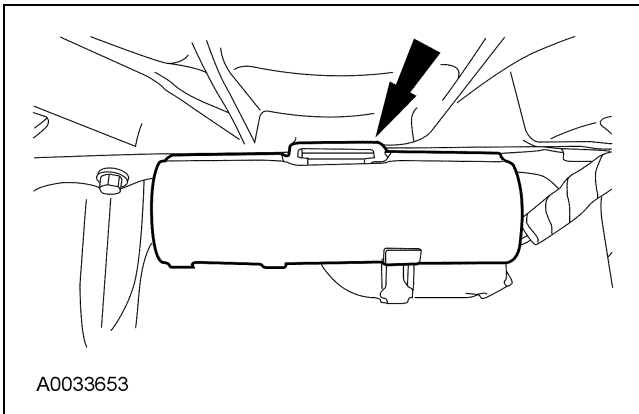


24. With the transmission support insulator neutralized, tighten the transmission insulator-to-extension housing center screw.

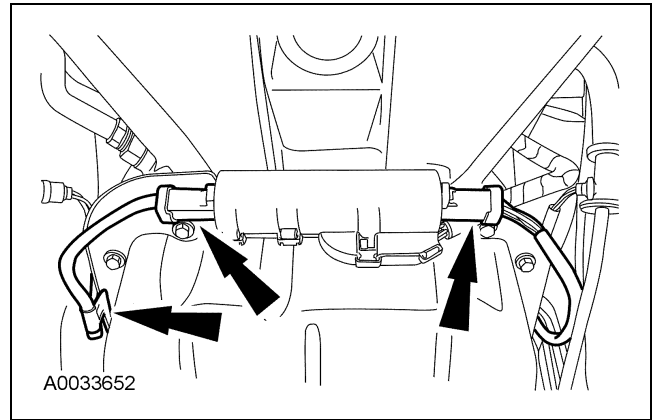
- Tighten to 70 Nm (52 lb-ft).



25. Install the heated oxygen sensor (HO2S) connector to the front of the transmission pan rail.



26. Connect the HO2S connector and install the sensor wire retaining clip to the RH side of the transmission pan rail.

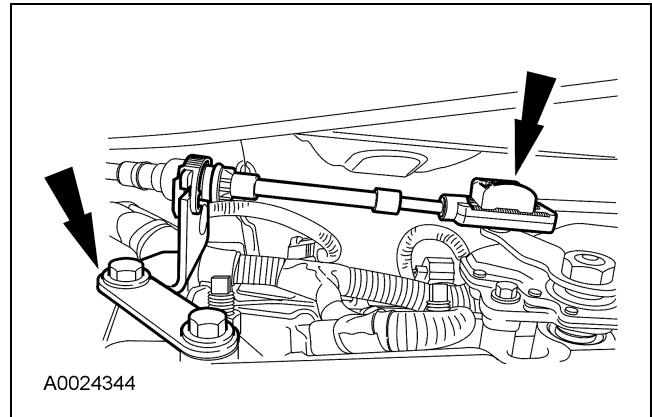


27. Install the driveshaft. For additional information, refer to Section 205-01.

28. Install the catalytic converter. For additional information, refer to Section 309-00.

29. Install the shift cable and bracket.

- Tighten to 40 Nm (30 lb-ft).



INSTALLATION (Continued)

30. Use the following guidelines for installing the in-line transmission fluid filter:
- If the transmission was overhauled and the vehicle was equipped with an in-line fluid filter, install a new in-line fluid filter.
 - If the transmission was overhauled and the vehicle was not equipped with an in-line fluid filter, install a new in-line fluid filter kit.
 - If the transmission is being installed for a non-internal repair, do not install an in-line filter or filter kit.
 - If installing a new or a Ford-authorized remanufactured transmission, install the in-line transmission fluid filter that is supplied.
 - Prior to lowering the vehicle, install a new in-line transmission filter or a filter kit. For additional information, refer to Transmission Fluid In-Line Filter in this section.
31. **NOTE:** When the battery has been disconnected and reconnected, some abnormal drive symptoms can occur while the vehicle relearns its adaptive strategy. The customer needs to be notified that they can experience slightly different upshifts (either soft or firm) and that this is a temporary condition and will eventually return to normal operating condition. Connect the battery ground cable. For additional information, refer to Section 414-01.
32. Carry out the fluid level check. For additional information, refer to Transmission Fluid Level Check in this section.
33. Verify that the shift cable is correctly adjusted. For additional information, refer to Section 307-05.
34. Check the operation of the transmission and inspect for leaks.
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