


## Transmission

### All vehicles

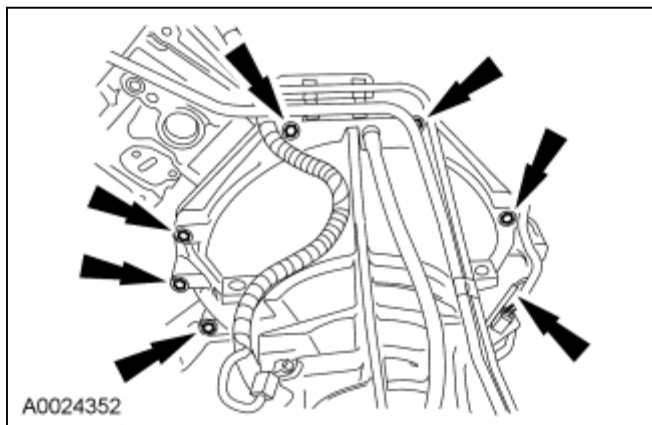
1.  **WARNING:** Secure the assembly to the jack. Avoid any obstructions while lowering and raising the jack. Contact with obstructions may cause the assembly to fall off the jack, which may result in serious personal injury.

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

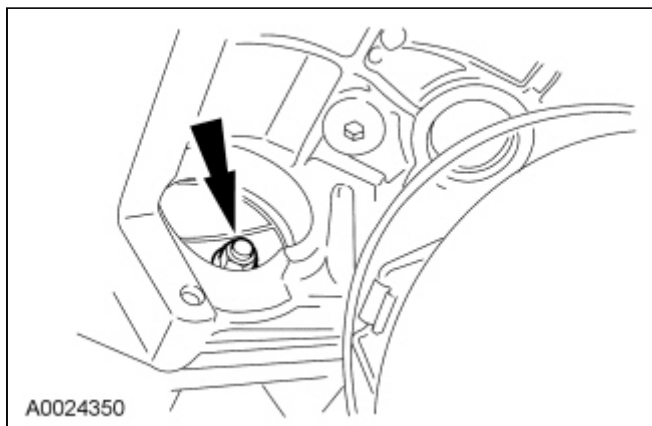
2. Rotate the torque converter and adapter plate so the orange or green paint daub on the torque converter is in the 12 o'clock location.
3. Raise and position the transmission to the back of the engine.

### 4.6L engine

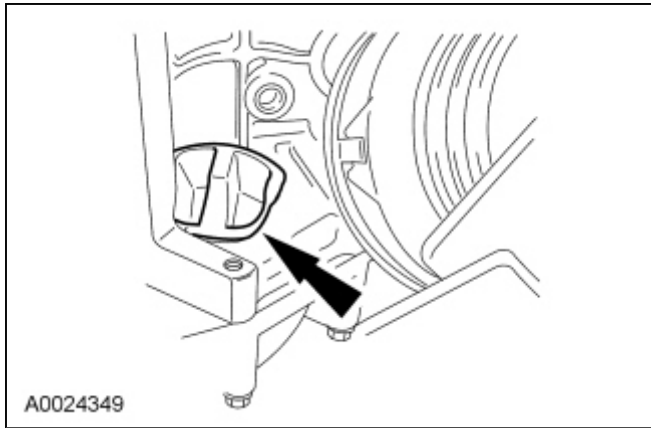
4. Install the 7 engine-to-transmission retaining bolts.
  - Tighten to 48 Nm (35 lb-ft).



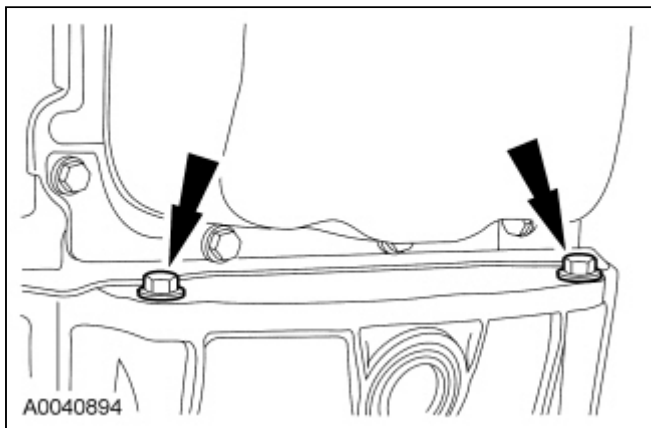
5. Install the 4 new torque converter nuts.
  - Tighten to 44 Nm (32 lb-ft).



6. Install the access cover.



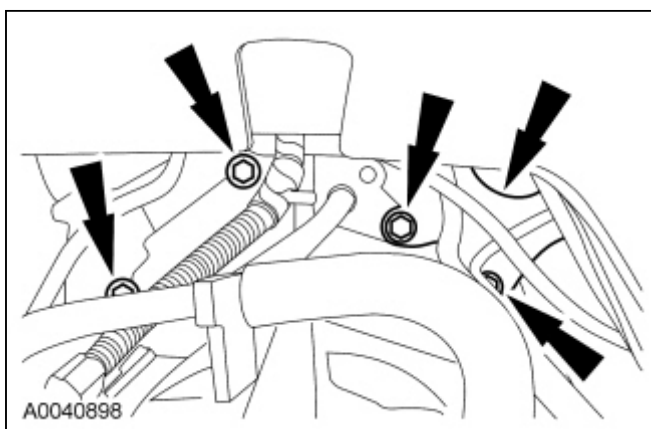
7. Install the flexplate cover.
  - Tighten to 35 Nm (26 lb-ft).



8. Install the starter. For additional information, refer to [Section 303-06](#).

#### 4.0L engine

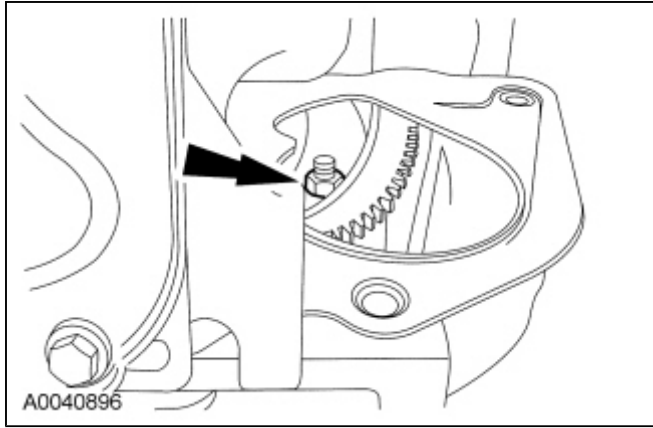
9. Position the fuel line bracket in place and install the 6 engine-to-transmission retaining bolts.
  - Tighten to 48 Nm (35 lb-ft).



10. **NOTICE:** Rotating the crankshaft pulley bolt counterclockwise could cause a reduction in clamp load on the crankshaft pulley and timing sprocket, which could cause severe engine damage.

Install the 4 new torque converter nuts.

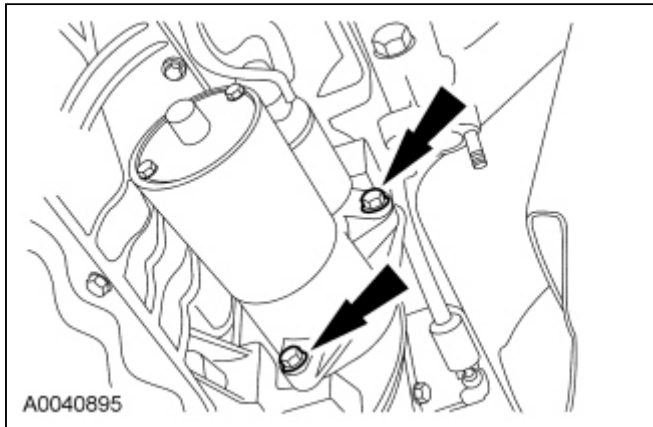
- Tighten to 44 Nm (32 lb-ft).



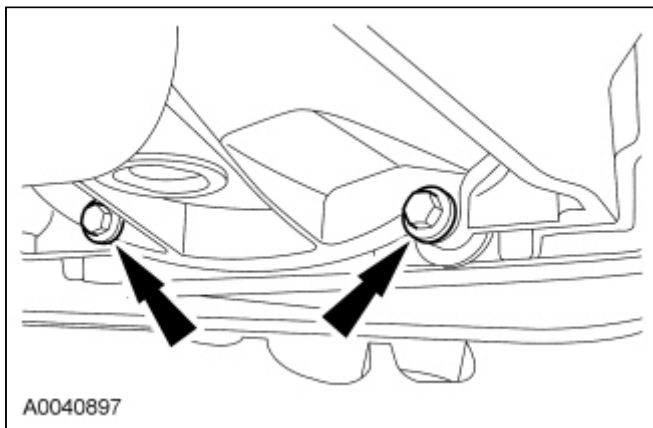
11. **NOTE:** Clean the starter motor mounting flange and mating surface of the starter motor to make sure there is a correct ground connection.

Install the starter motor.

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



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

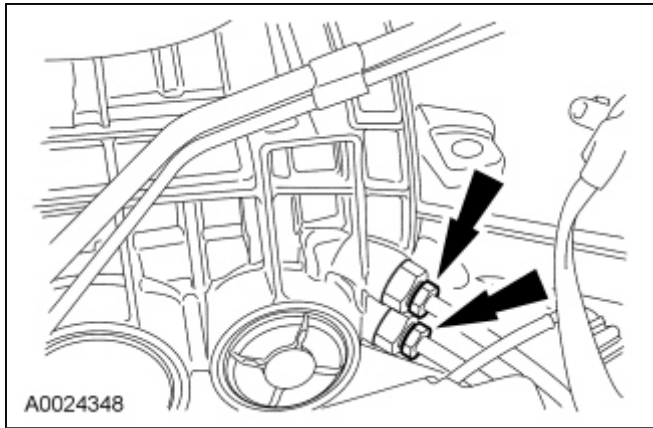


#### All vehicles

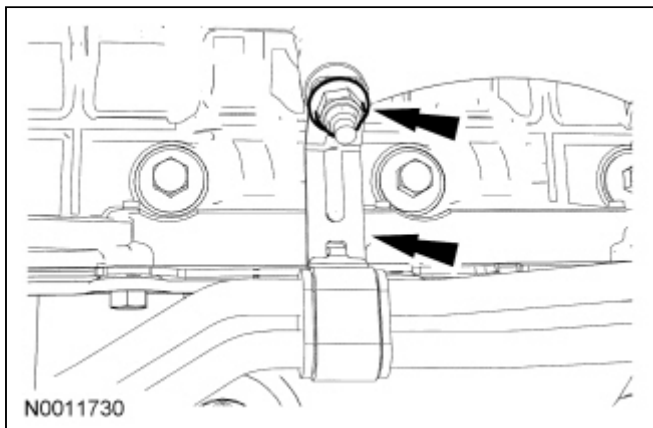
13. **NOTICE:** Use care not to bend or force the transmission fluid cooler tubes, otherwise, damage to the transmission fluid cooler tubes and the transmission may result.

Install the transmission fluid cooler tubes.

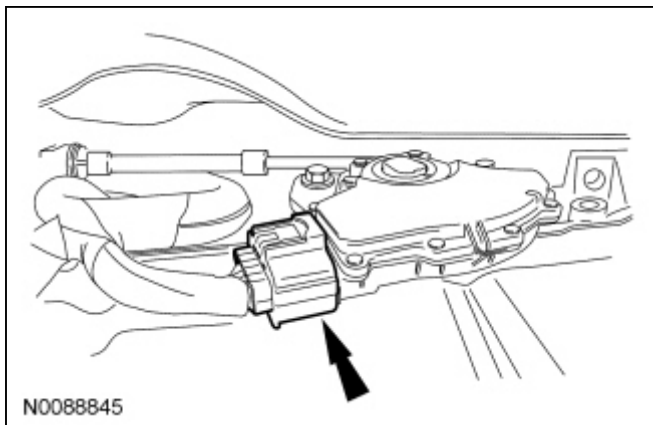
- Tighten to 40 Nm (30 lb-ft).



14. Install the transmission fluid cooler tube assembly bracket and nut.
  - Tighten to 25 Nm (18 lb-ft).



15. Connect the Transmission Range (TR) sensor connector.



16. **NOTICE:** Damage will occur to the transmission control solenoid body assembly if the screw is tightened above the specification.

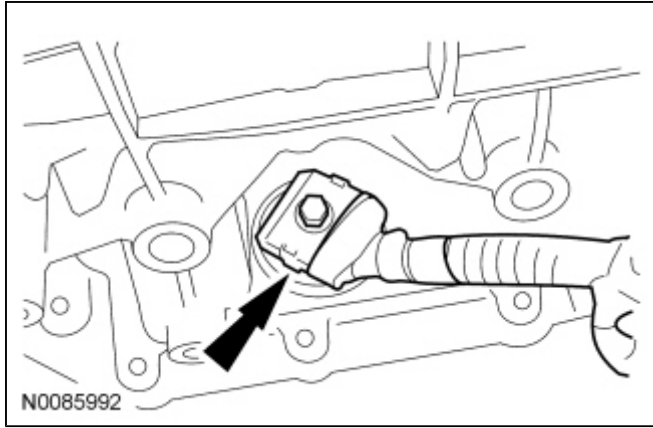
**NOTE:** Always install new O-ring seals on the transmission vehicle harness connector.

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

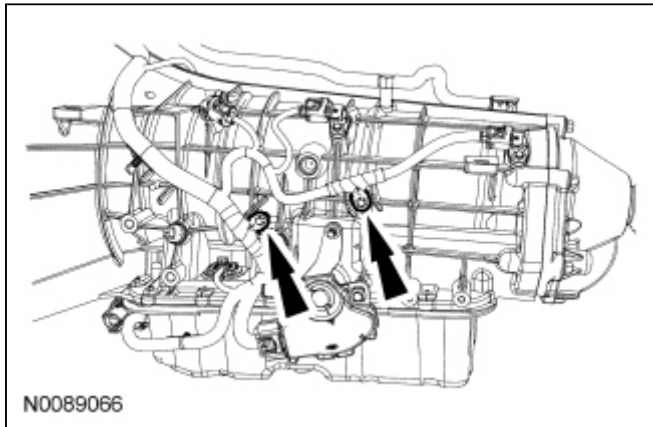
**NOTE:** Use petroleum jelly to lubricate the O-ring seals to aid in the installation process.

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

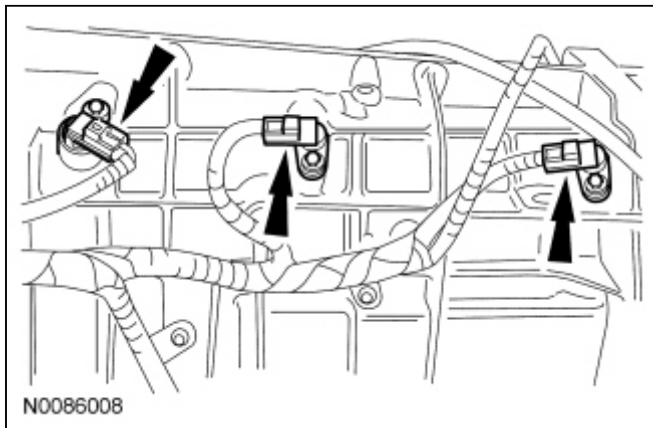
- Tighten to 5 Nm (44 lb-in).



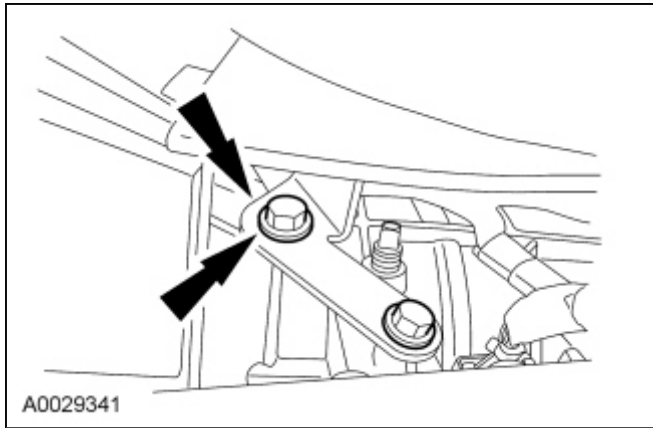
17. Position the transmission vehicle harness and install the retainers.



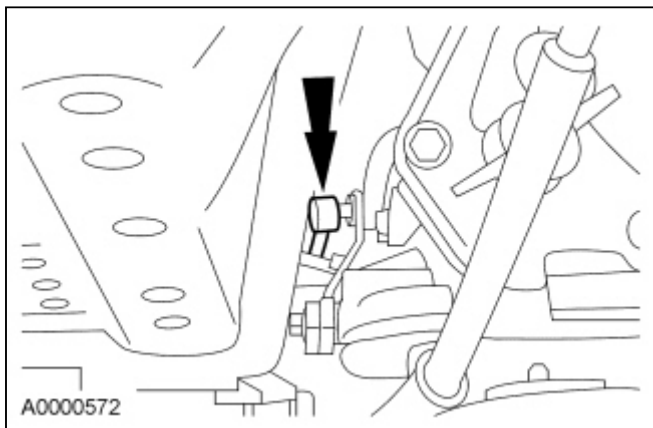
18. Connect the Turbine Shaft Speed (TSS) sensor, Output Shaft Speed (OSS) sensor and intermediate shaft speed sensor connectors.



19. Install the selector lever cable bracket and install the 2 bolts.
- Tighten to 28 Nm (21 lb-ft).

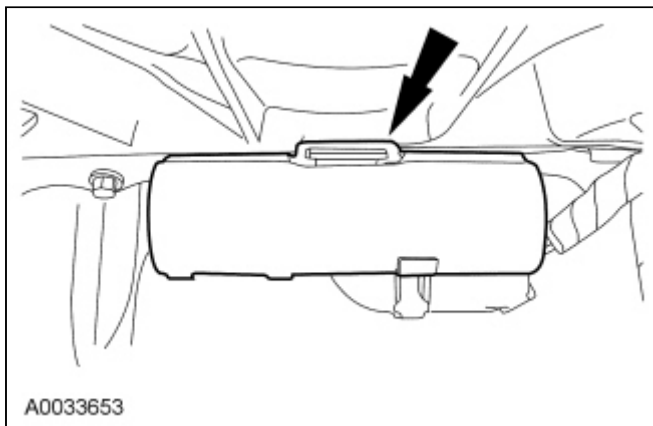


20. Install the selector lever cable onto the transmission manual lever.



21. Install the transmission crossmember. For additional information, refer to [Section 502-00](#).

22. Install the Heated Oxygen Sensor (HO2S) connector to the front of the transmission fluid pan rail.



23. Install the driveshaft. For additional information, refer to [Section 205-01](#).

24. Install the catalytic converter. For additional information, refer to [Section 309-00](#).

25. 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 Filter — In Line](#) in this section.

26. **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](#).

27. Carry out the fluid level check. For additional information, refer to [Transmission Fluid Level Check](#) in this section.
28. Verify that the selector lever cable is correctly adjusted. For additional information, refer to [Section 307-05](#).
29. Check the operation of the transmission and inspect for leaks.
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