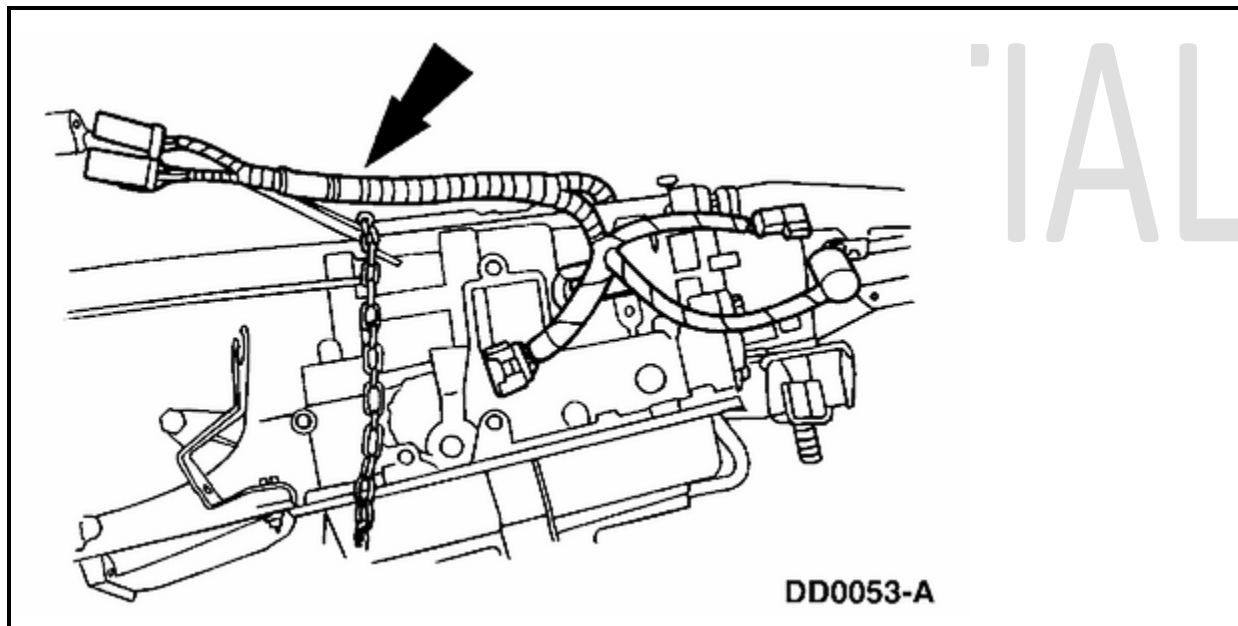


FORD 4R70 and 4R75 Installation Tips

FLUID TYPE RECOMMENDED - Please check with your location parts provider or OEM for updated fluid types

Item	Specification
MERCON® V Automatic Transmission Fluid XT-5-QM	MERCON® V

Please see information provided for basic removal and installation for all applications. Please note that vehicles may vary in specific steps. This guide is a generalization of the installation process.



1. Inspect the wiring harness and connectors for damage, condition of terminals, corrosion and seal integrity. Repair or install new as required. One of the most common issues for transmission malfunction at installation is electrical connections. **BE SURE TO CHECK GROUND STRAP FOR SOLID CONNECTION.** Sounds simple and not likely. But, we see a lot of technicians making this simple oversight and wasting their valuable time chasing down the issue.

2. Position, then raise the transmission into the vehicle.

- ^ **WARNING:** The torque converter must be held firmly in its installed position.

While holding the torque converter, carefully tilt the front of the transmission downward.

- ^ **CAUTION:** Do not allow the torque converter drive flats to disengage from the pump gear.

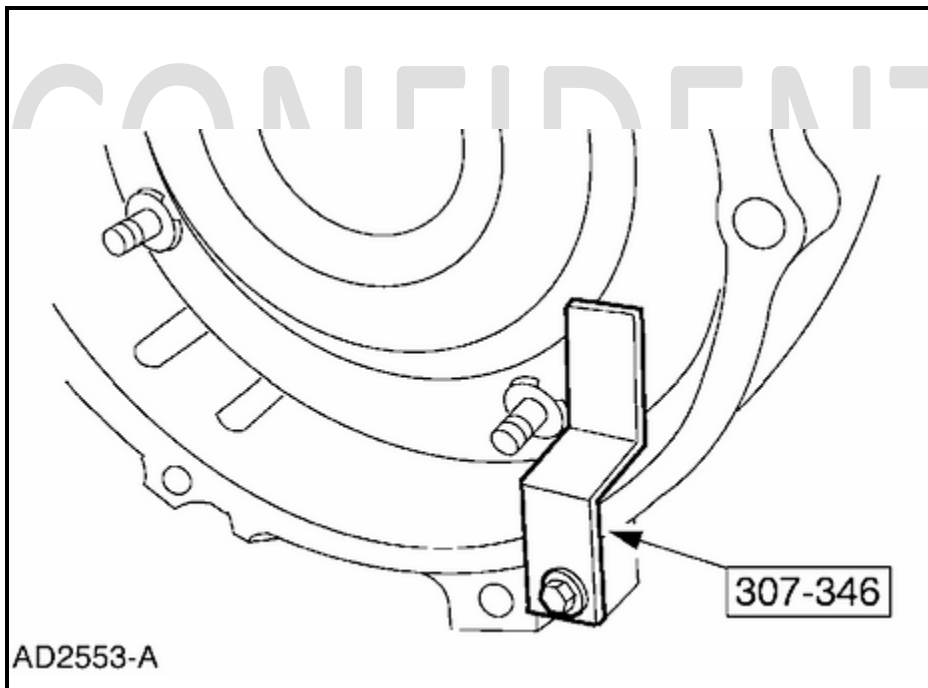
While continuing to hold the torque converter raise the transmission downward.

- ^ **CAUTION:** Watch for obstruction.

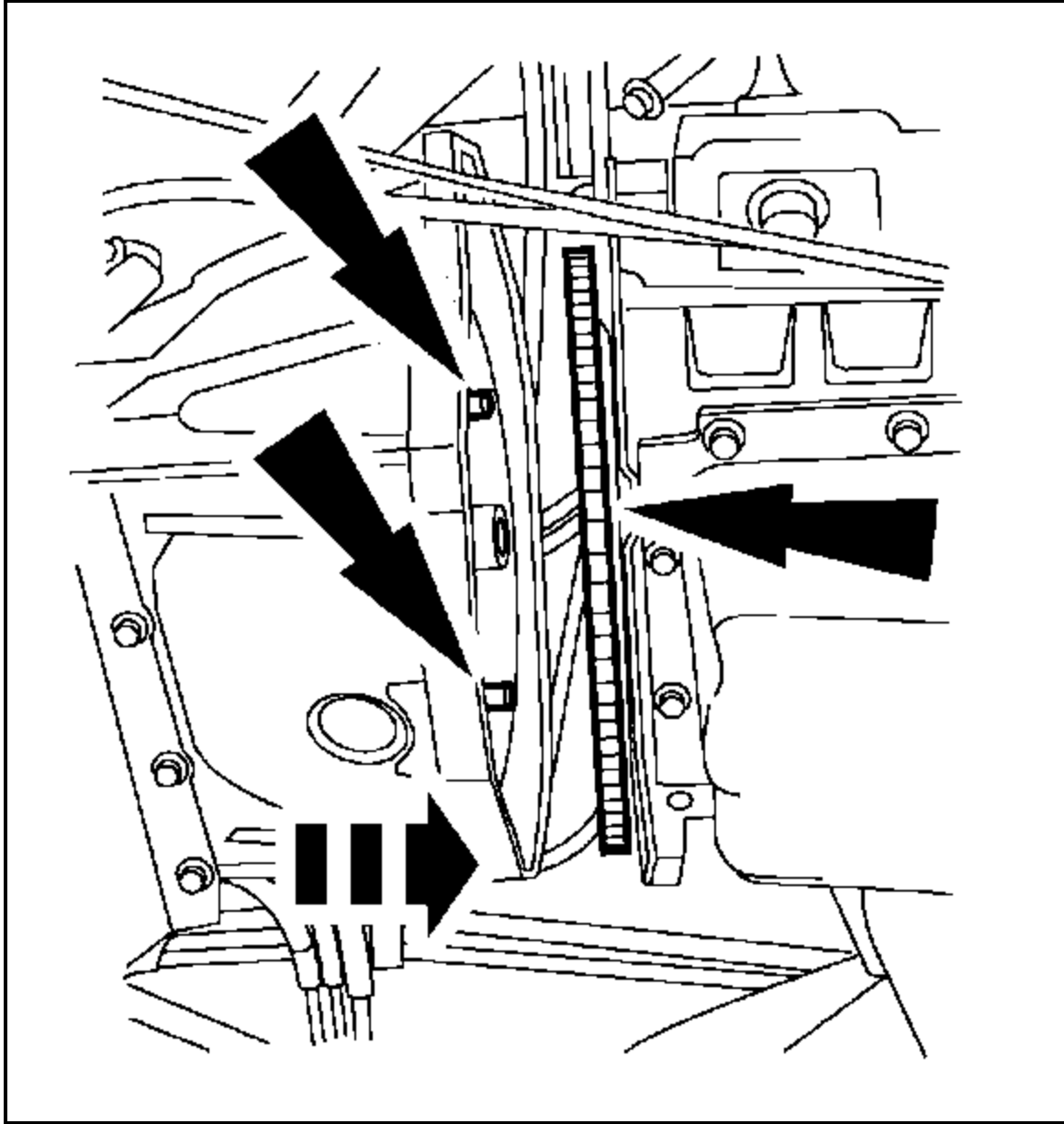
While continuing to hold the torque converter raise the transmission positioning the extension housing above the exhaust crossover pipe.

- ^ **CAUTION:** Watch for clearance between the transmission and engine and the transmission and exhaust crossover pipe.

Tilt the front of the transmission upward until level.



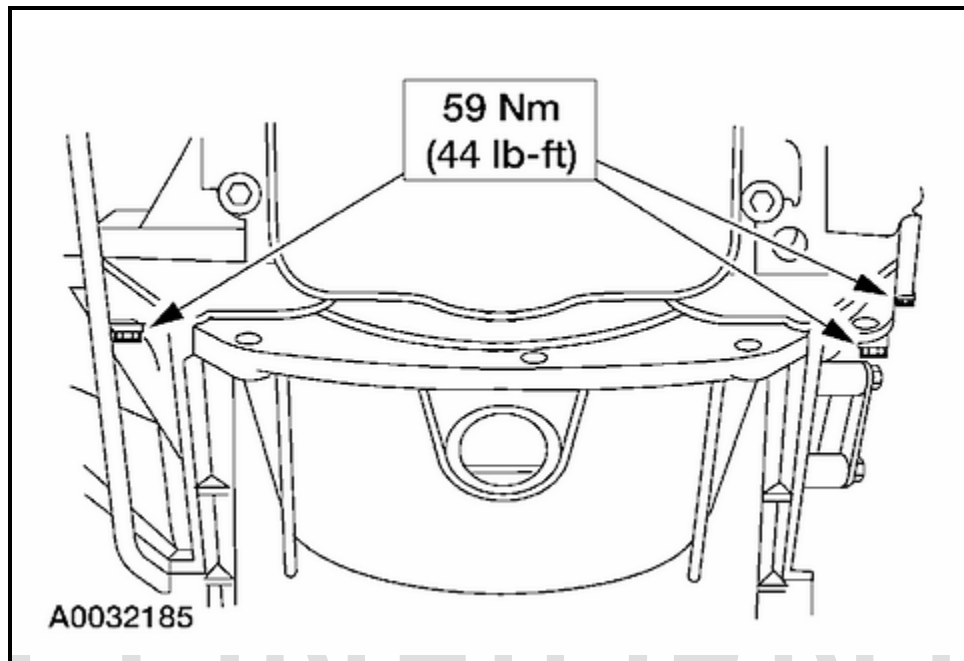
3. Remove the special tool.



4. **CAUTION:** Use care not to damage the flexplate and the converter pilot. The torque converter must rest squarely against the flexplate, indicating the converter pilot is not binding in the crankshaft.

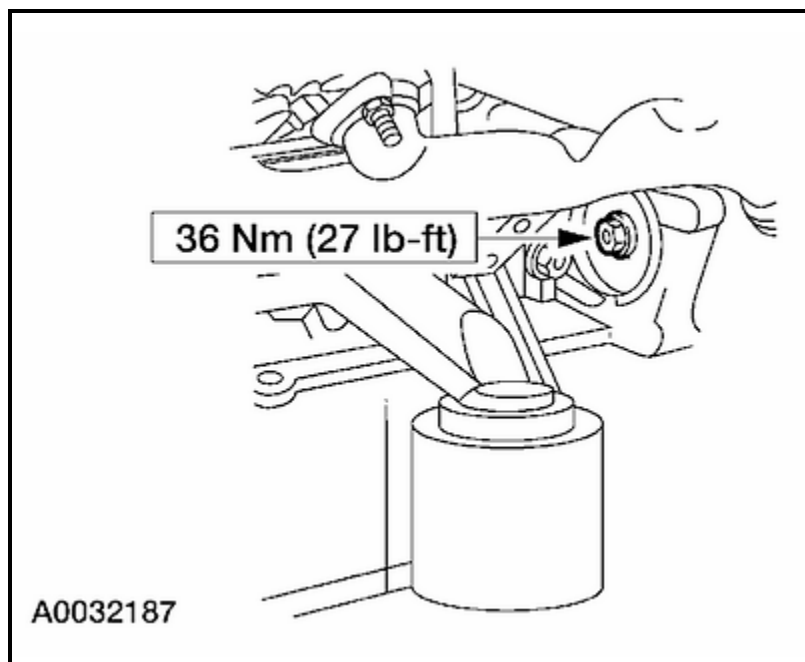
Align the torque converter studs with the mounting holes in the flexplate. Install the transmission to the engine.

4.6L and 5.4L engines

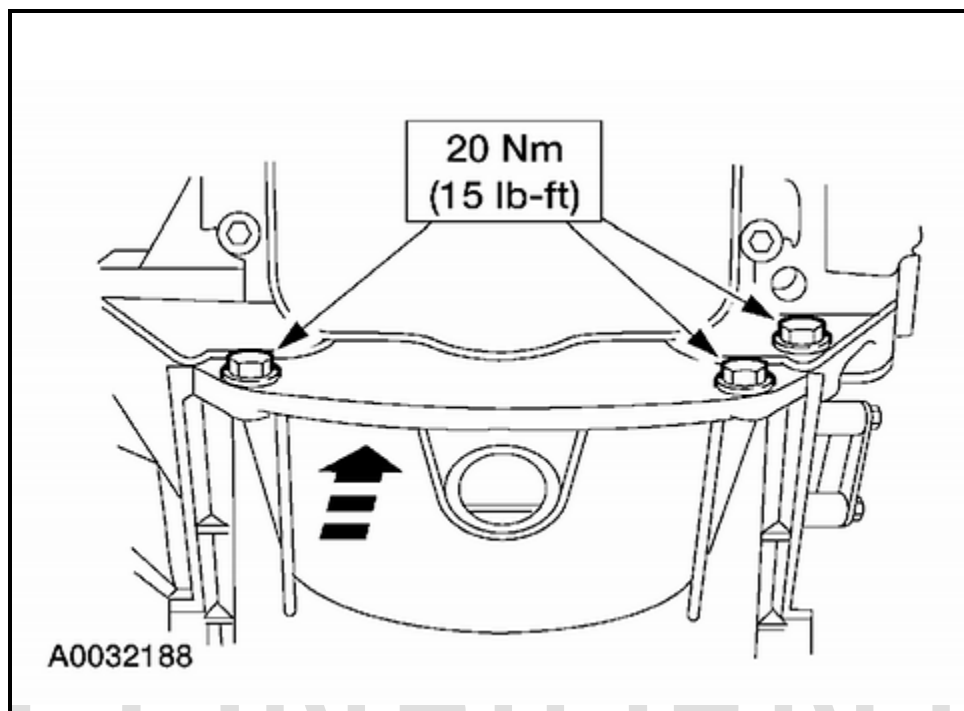


5. Install and alternately tighten the torque converter housing-to-engine retaining bolts.

4.6L and 5.4L engines

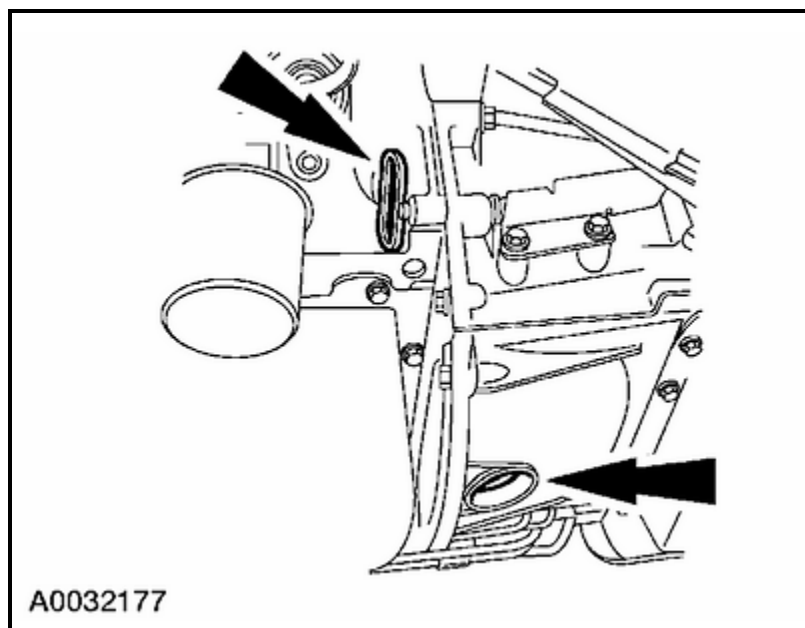


6. Install four new torque converter nuts.



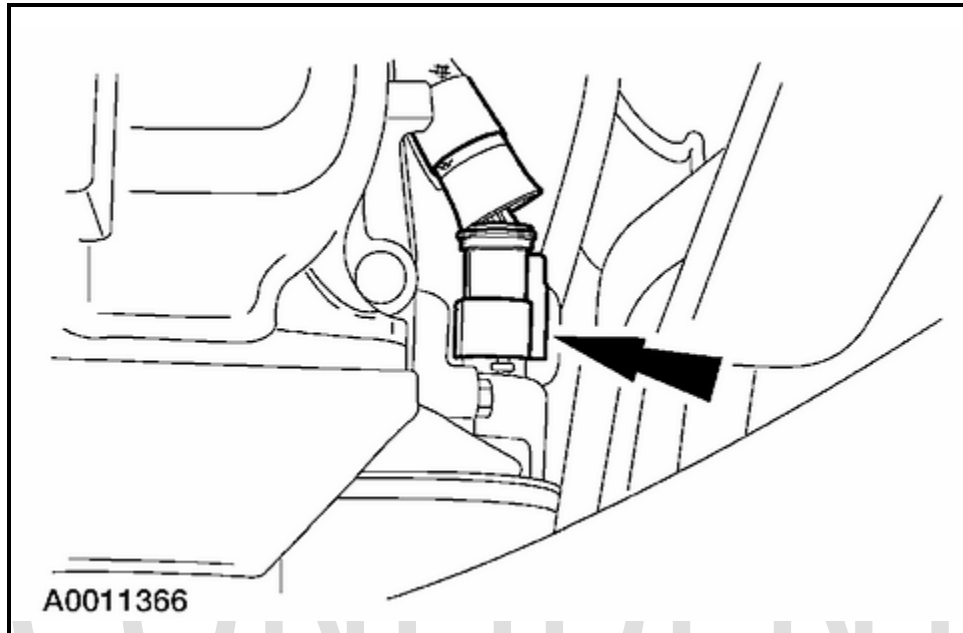
7. Install the flexplate inspection plate and the bolts. Install the rear engine plate-to-torque converter housing retaining bolt.

4.6L and 5.4L engines

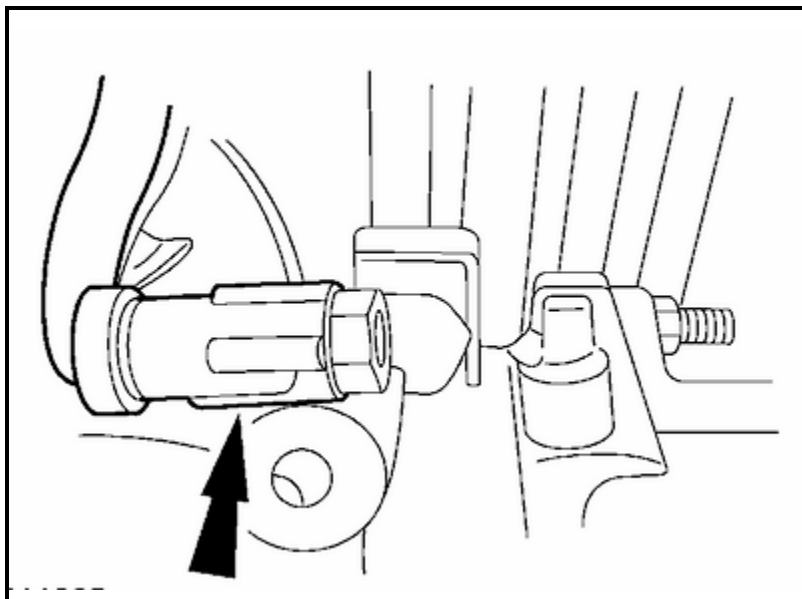


8. Install the access plugs.

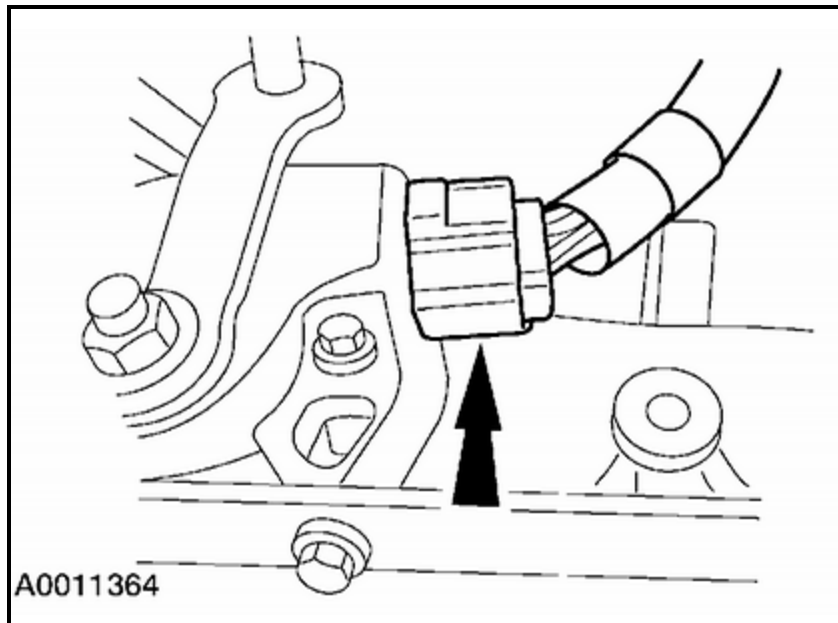
All applications



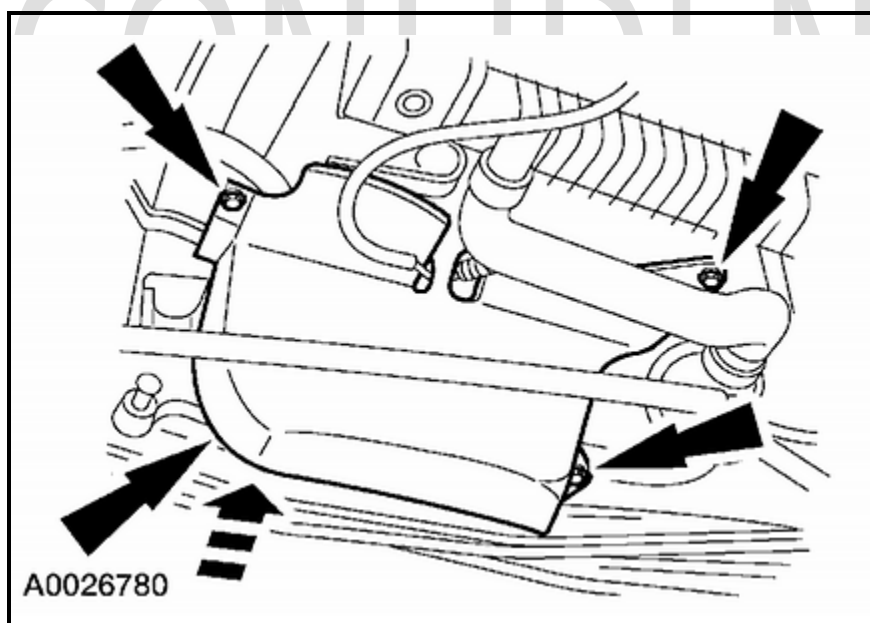
9. Connect the solenoid body connector.



10. Connect the output shaft speed (**OSS**) sensor connector.

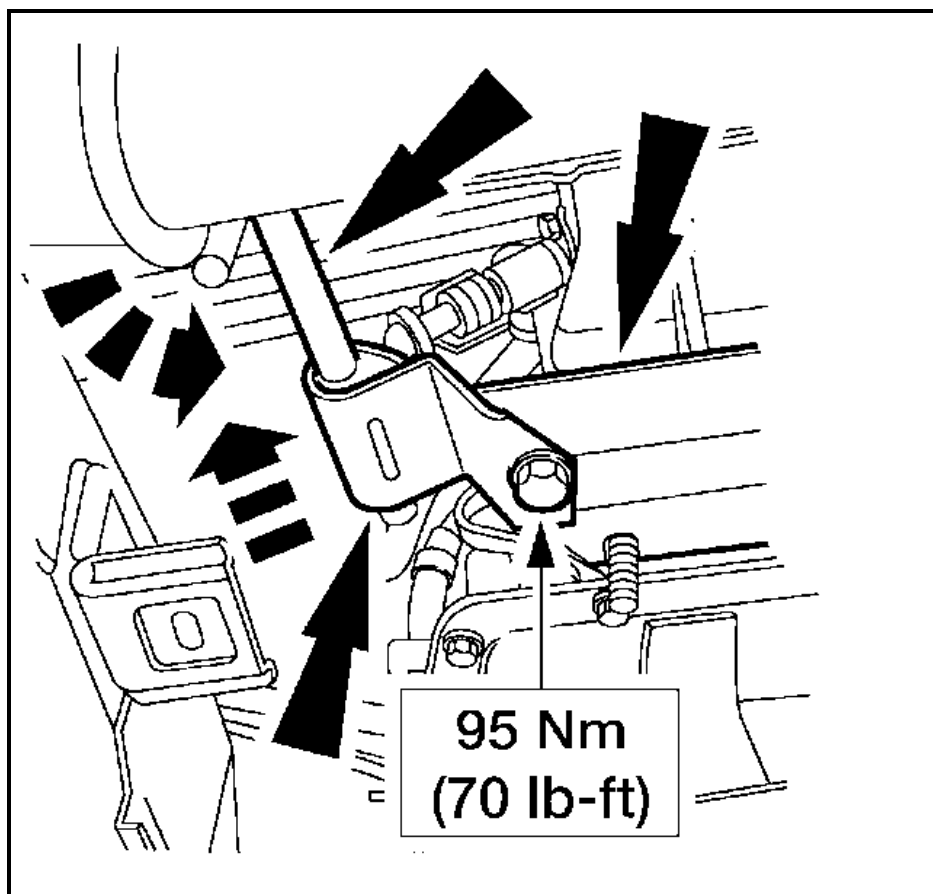


11. Connect the digital TR sensor connector.



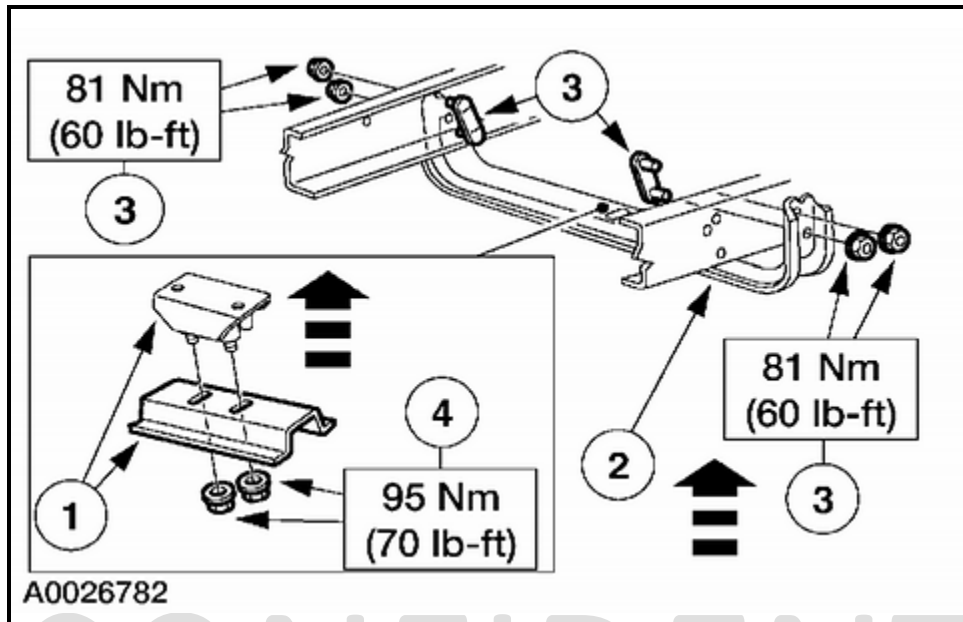
12. If so equipped, install the front A/C deflector assembly with the fasteners.

4.6L engines

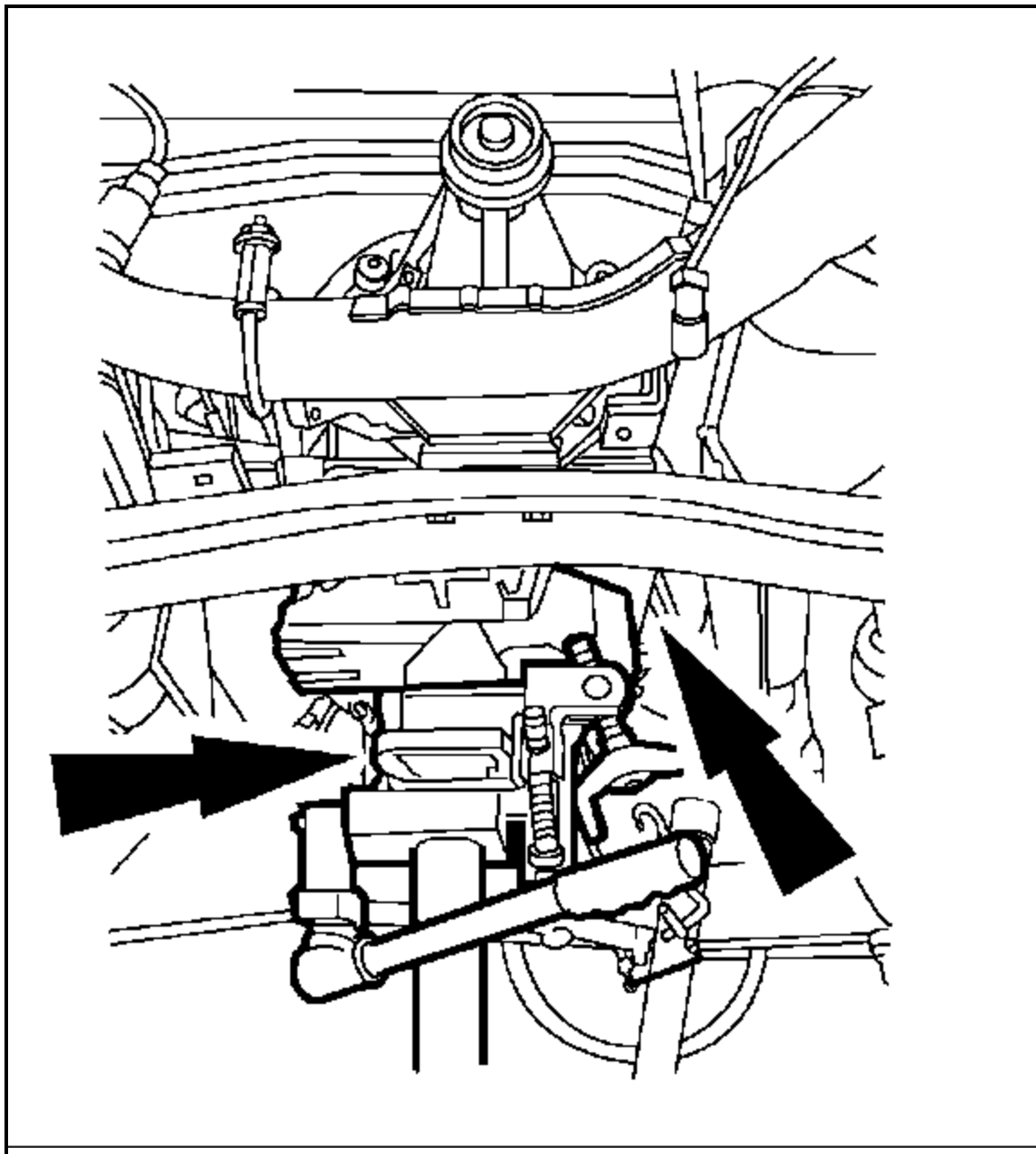


13. Install the bracket onto the hanger and position it to the transmission insulator and retainer. Install the bolt.

All applications

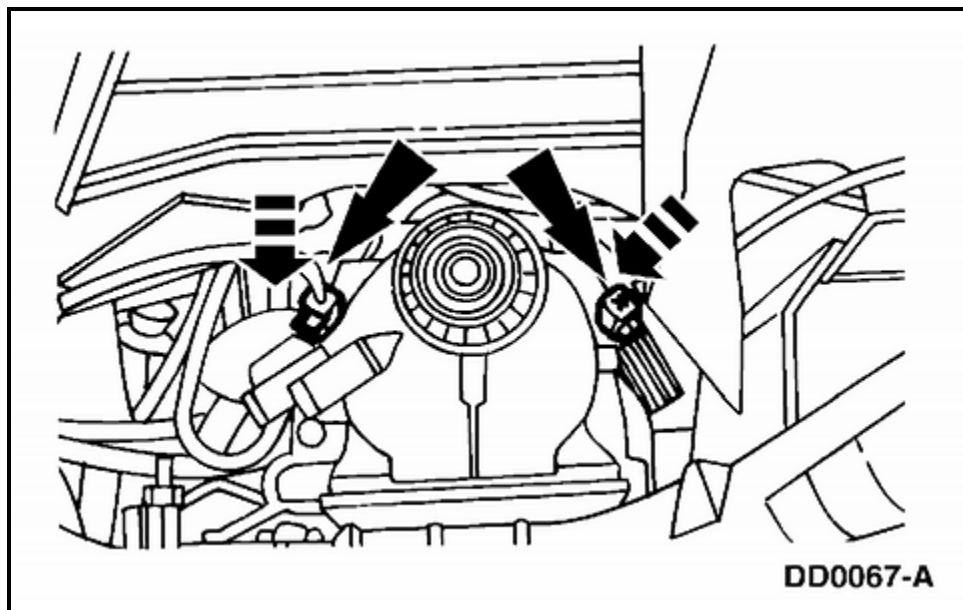


14. Install the transmission support crossmember.
 1. Install the transmission support crossmember onto the retainer and insulator studs. Install the retaining nuts hand-tight.
 2. Raise the transmission, aligning the transmission support crossmember to the frame.
 3. Install the stud brackets and the retaining nuts.
 4. Tighten the retainer and insulator-to-crossmember retaining nuts.

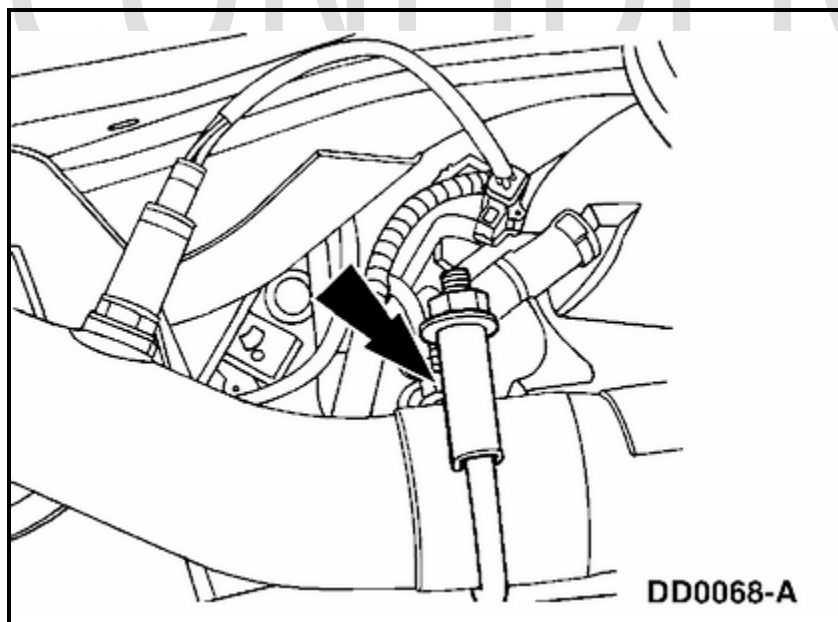


15. Remove the high-lift transmission jack.

4.6L engines

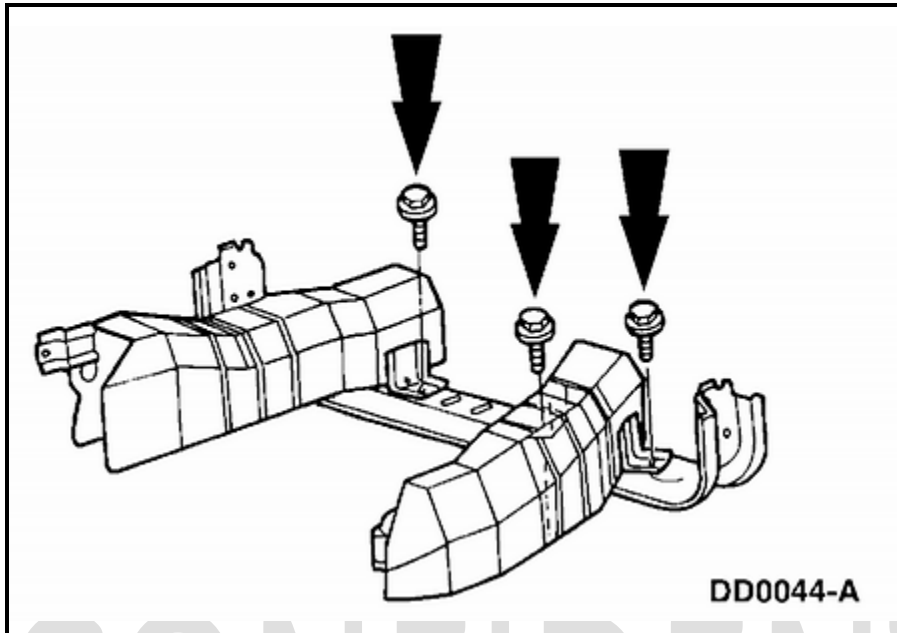


16. Connect the catalyst monitoring sensor harness connectors.



17. Tighten the clamp.

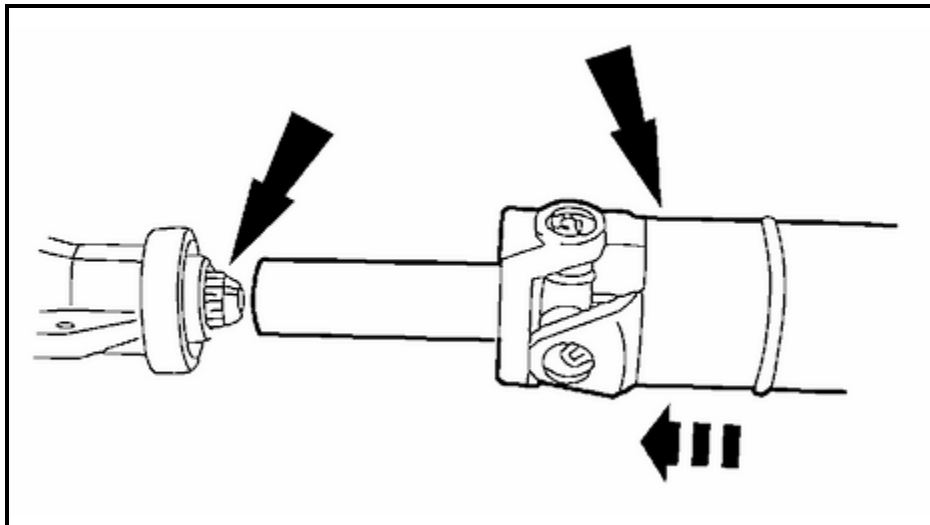
All applications



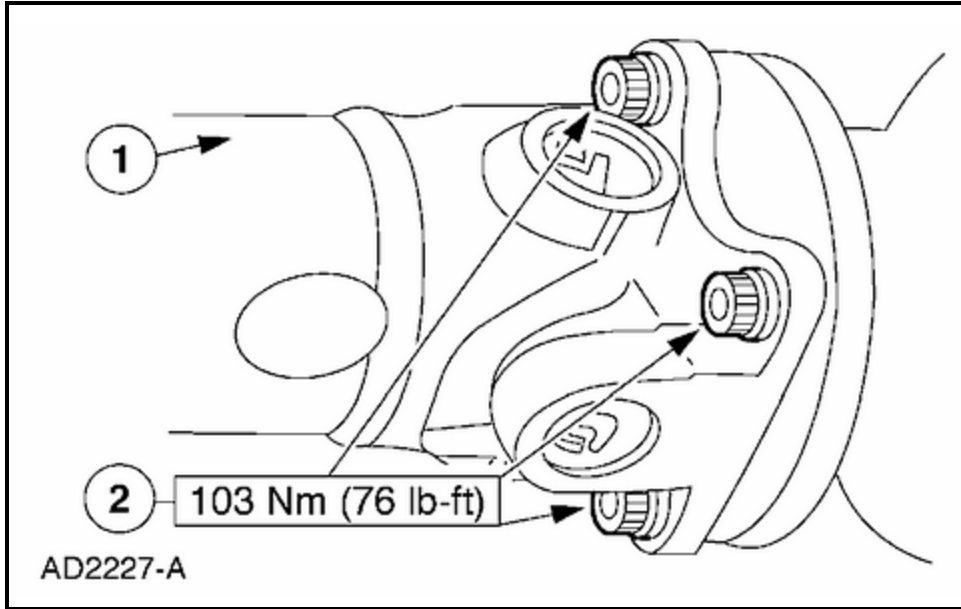
18. Install the exhaust heat shield-to-crossmember retaining bolts.

All applications

19. Install the starter motor.



20. **NOTE:** The output shaft and the driveshaft are a balanced assembly.
Install the driveshaft.
^ Align the index marks and position the driveshaft on the transmission.
^ Position the driveshaft to the rear differential.

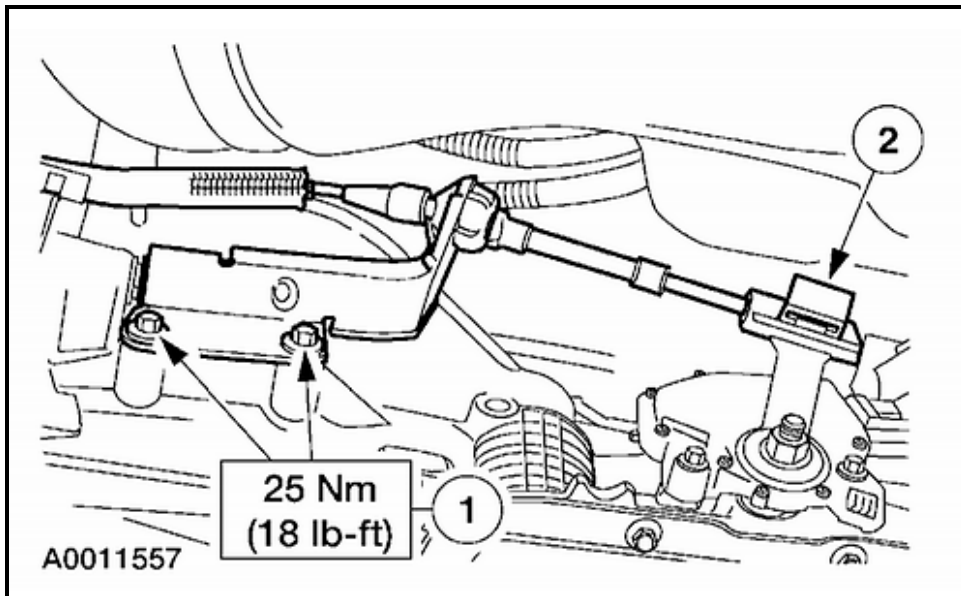


21. **NOTE:** To maintain initial driveshaft balance, align the index marks made during removal.

Install the driveshaft.

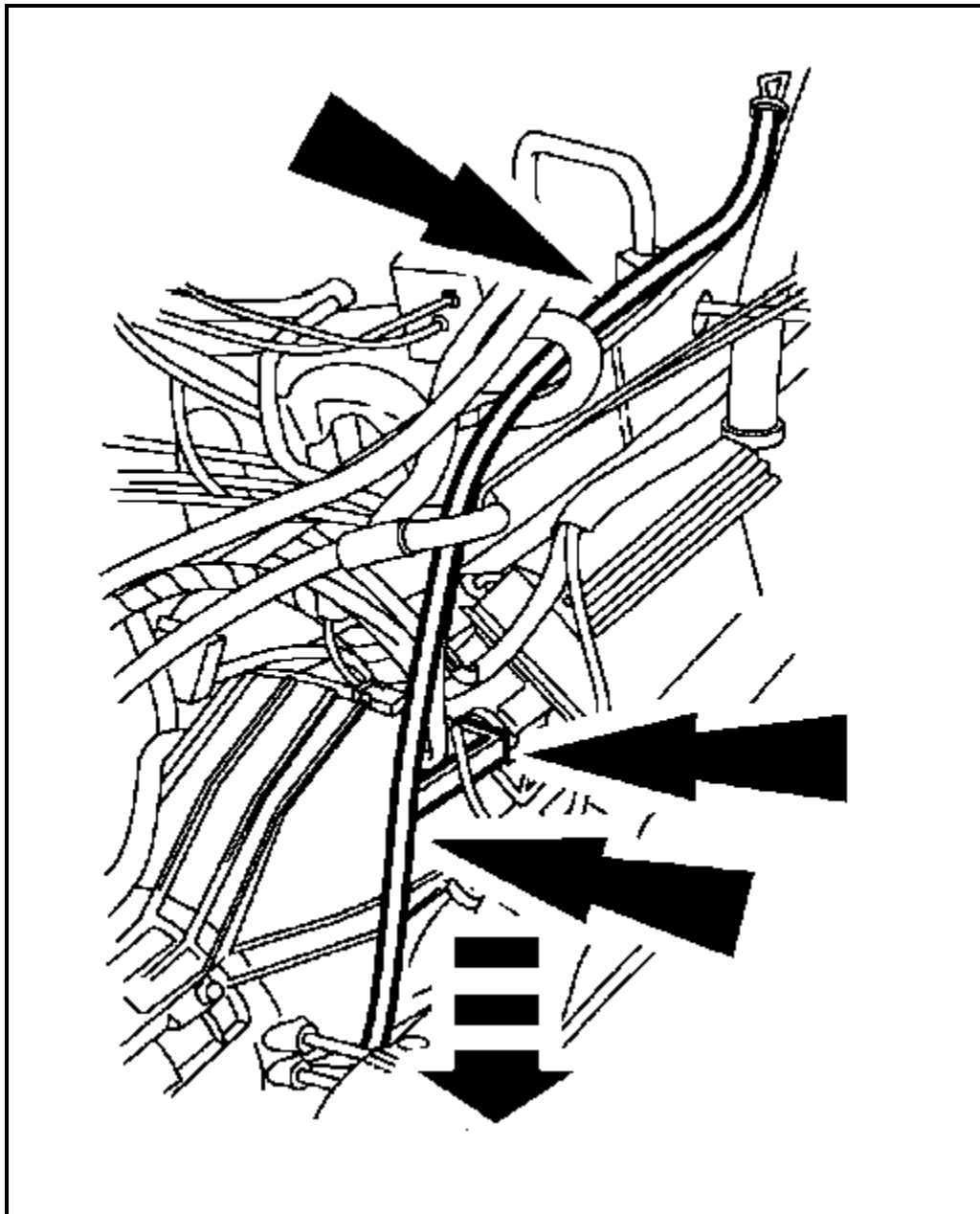
1. Install the driveshaft.
2. Install the bolts.

4.6L and 5.4L engines



22. Install the [shift cable](#) and bracket.

1. Install the bolts.
2. Connect the clip.

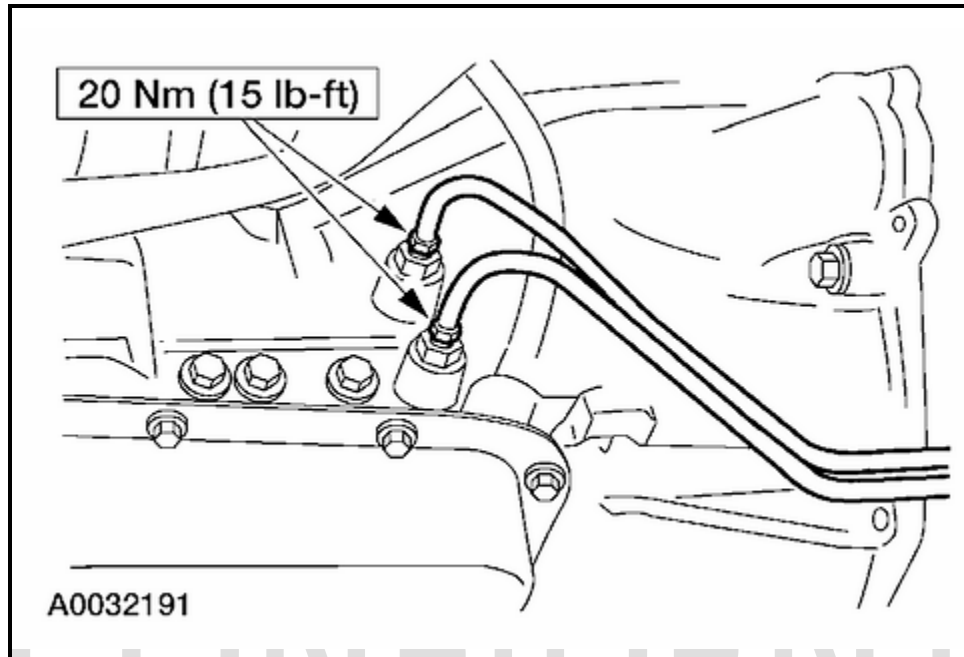


AL

23. **NOTE:** Prior to installation, check the condition of the transmission fluid filler tube O-ring. If damaged, install a new O-ring.

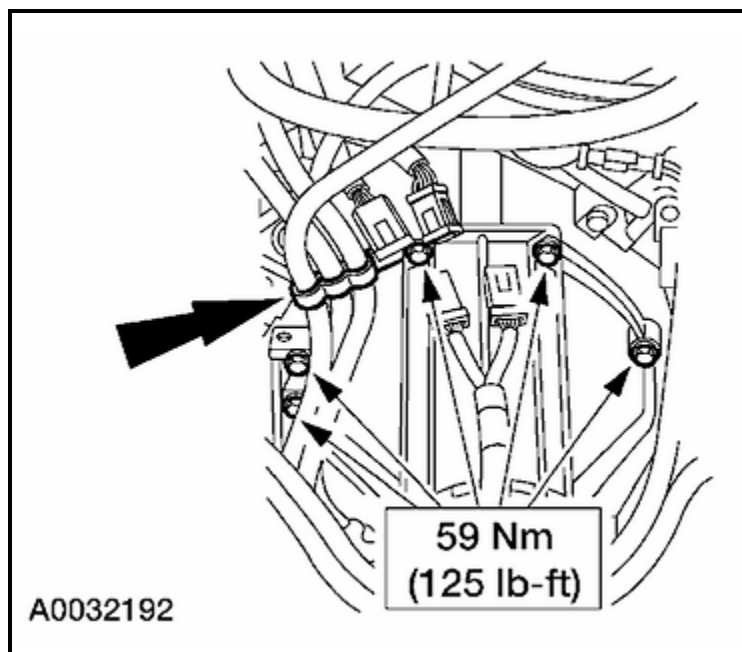
Install the fluid filler tube into the transmission. Position the retaining brackets. Install the bolt and nut.

All applications



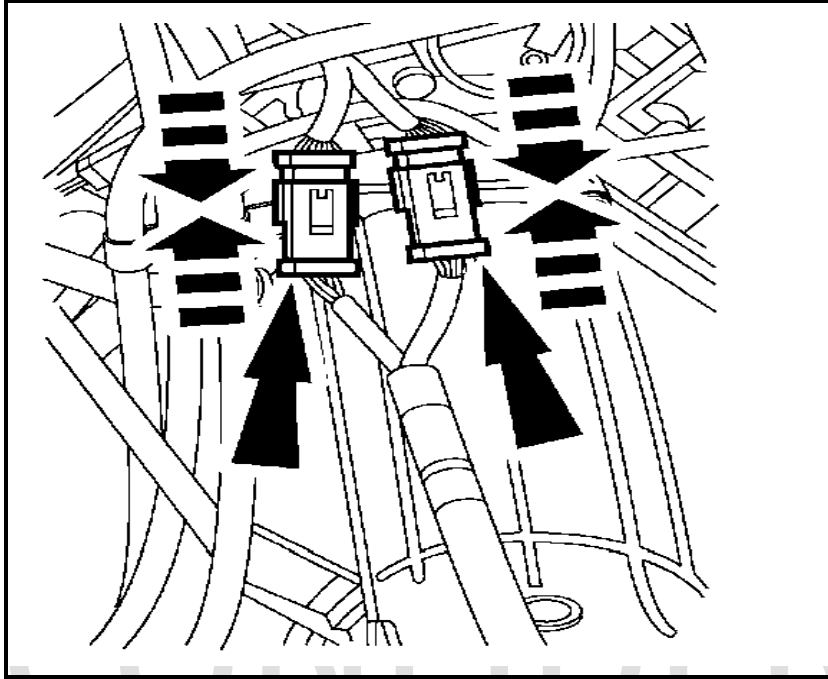
24. With a drain pan correctly positioned, remove the plugs and connect the fluid cooler tubes.

4.6L and 5.4L engines



25. Install the bolts and position fuel line in place.

All applications



26. Connect the electrical harness connectors.

27. **Install the in-line transmission fluid filter for potential debris. This is not required but a good safety measure.**

28. Install the engine cover.

29. Install the air cleaner air intake duct assembly.

30. **NOTE:** When the battery is disconnected and reconnected, some abnormal drive symptoms may occur while the vehicle relearns its adaptive strategy. The vehicle may need to be driven **16 km (10 miles)** or more to relearn the strategy. Connect the battery ground cable.

31. Fill the transmission to the specified level with clean automatic transmission fluid.