

Automatic Transmission - Remove and Install (17 214 0)

Automatic transmission on 2,5 Turbo-Diesel engine (85 PS)

Workshop Equipment

UAAA

3 Auxiliary plugs 3 3

AAA

3 Transmission jack 3 3

AAA

3 Retaining strap 3 3

AAU

Materials

UAAA

3 Cable ties 3 3

AAA

3 High temperature grease 3 ESD-M1C220-A 3

AAU

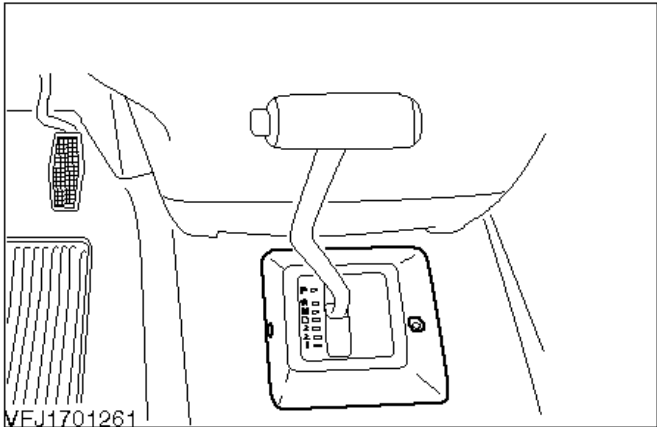
Remove

1. Preparations.
 - Obtain the audio keycode.
 - Make a note of the preset radio stations.

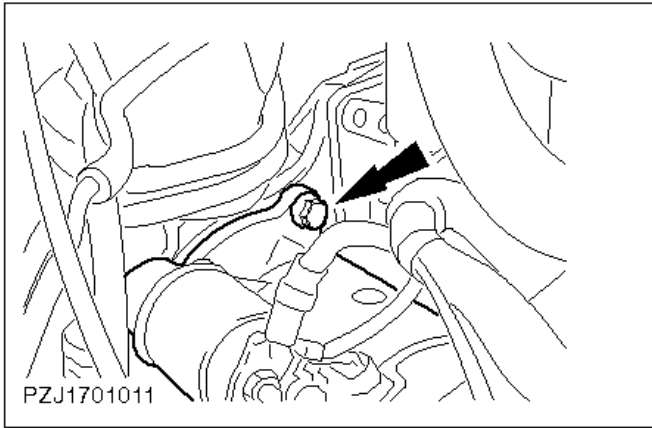


CAUTION:
Disconnect the battery negative lead.

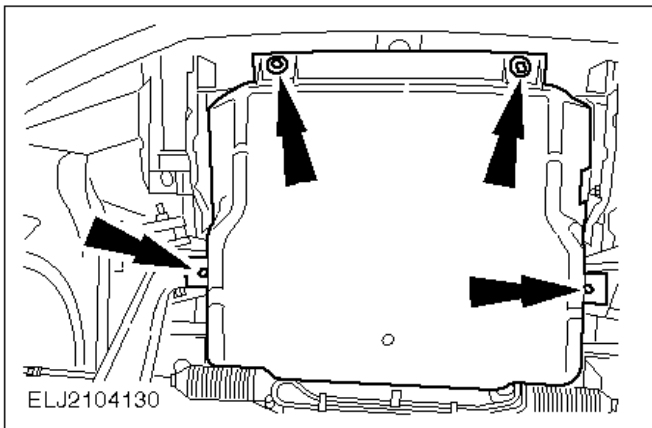
- Pull out the automatic transmission fluid dipstick.



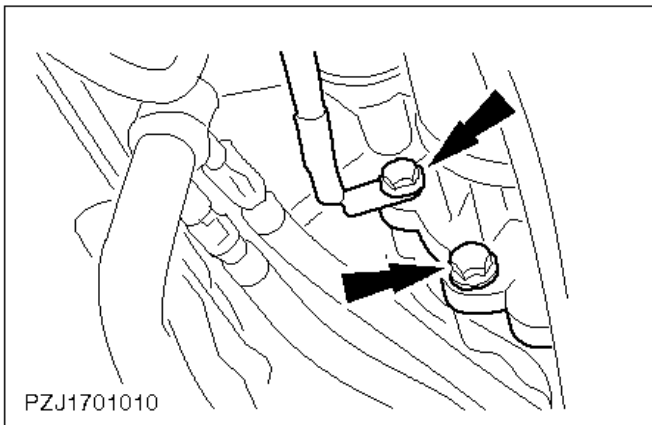
2. Move the selector lever to "N".



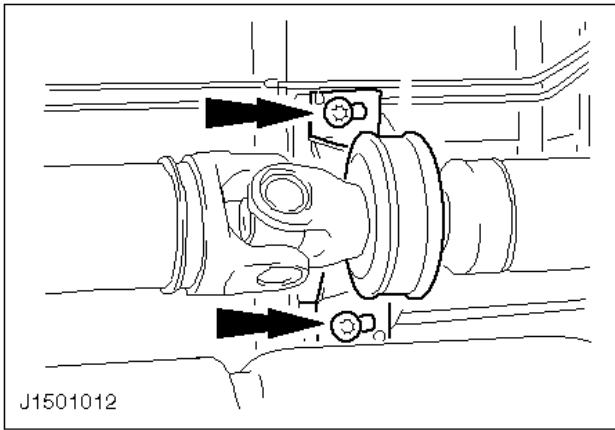
- μ 3. Detach the starter motor.



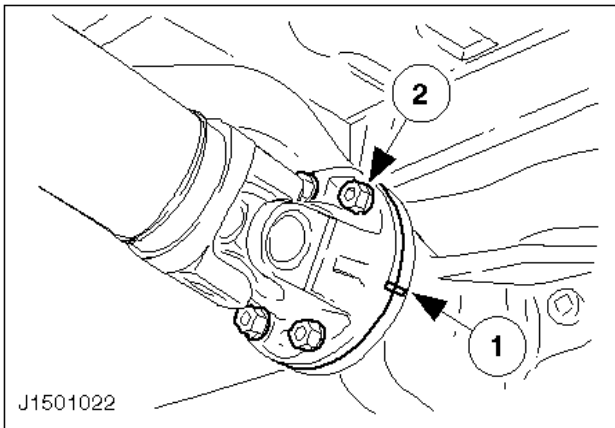
- μ 4. Raise the vehicle.
- 5. Remove the engine undershield.



- μ 6. Detach the starter motor (cont.)
- Swing the starter motor to one side and tie it there.



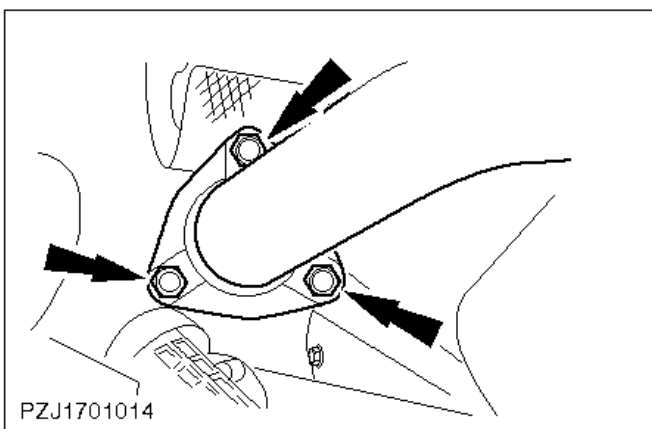
- μ 7. Detach the driveshaft intermediate bearing.



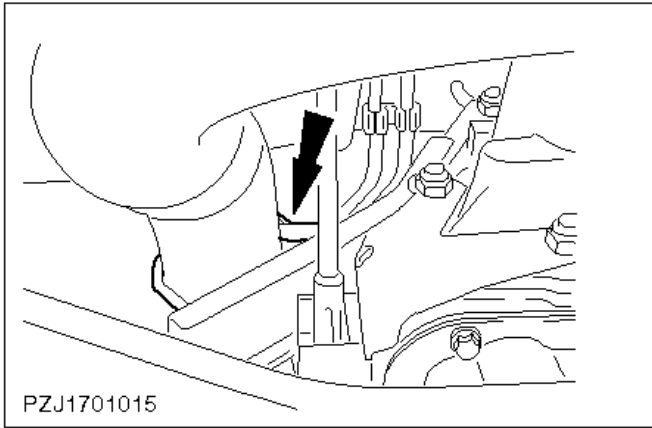
- μ 8. Detach the driveshaft from the rear axle.
 - 1 Mark the driveshaft flange in relation to the input flange.
 - 2 Four bolts.

Note:
Transmission fluid will escape.

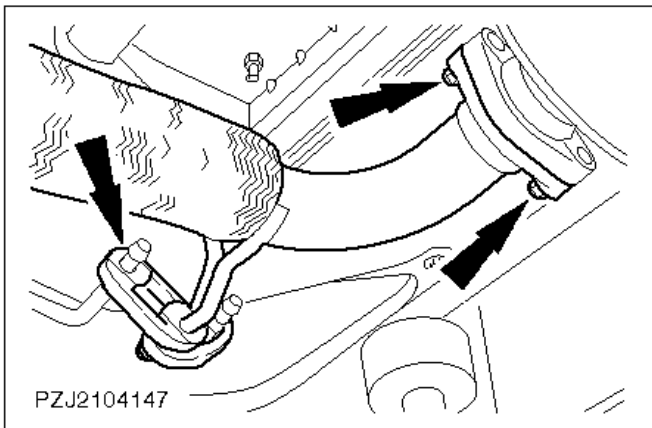
- 9. Pull the driveshaft out of the automatic transmission and close the opening with an auxiliary plug.



- μ 10. Detach the front exhaust pipe from the exhaust manifold.

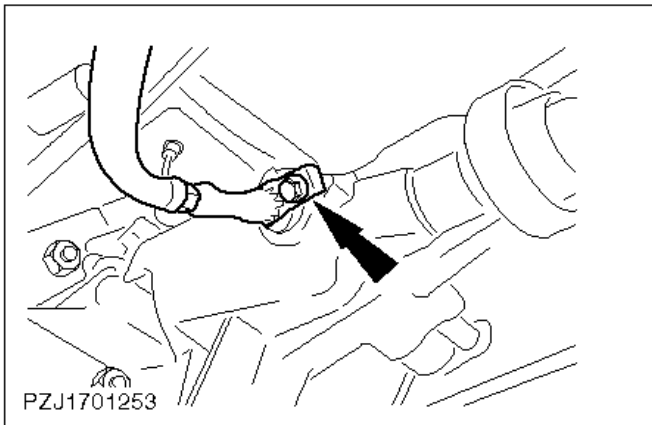


- μ 11. Detach the front exhaust pipe from the bracket (one nut and bolt).

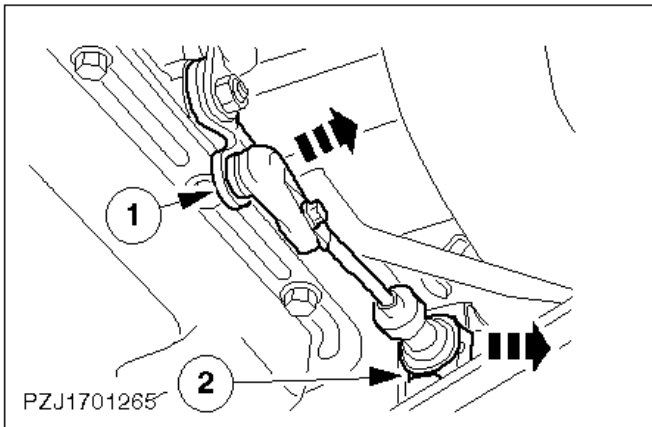


- μ 12. Remove the front exhaust pipe.

Remove the nuts and unhook the front exhaust pipe.

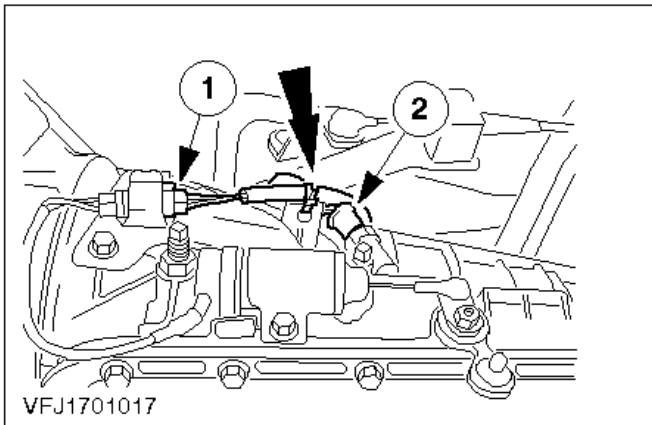


- μ 13. Detach the speedometer drive gear.



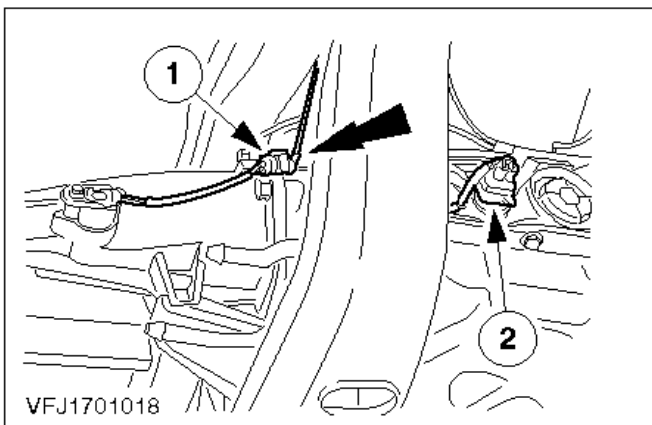
μ 14. Detach the selector cable.

- 1 Press the selector cable ball head off the transmission selector lever.
- 2 Pull the clip out of the bracket on the transmission and free the selector cable from the bracket.



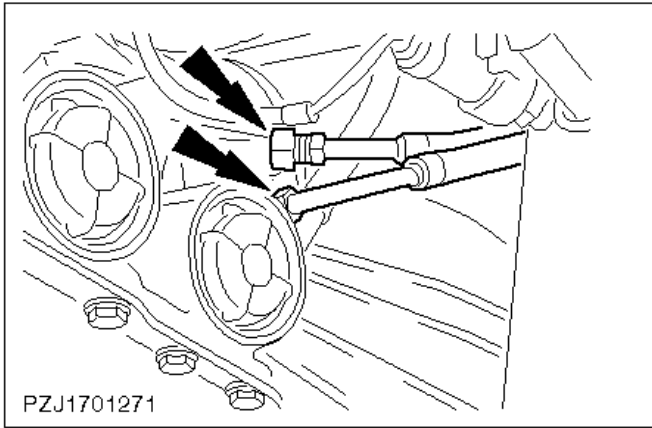
μ 15. Pull off and separate the multiplugs.

- 1 Kickdown solenoid coil multiplug
- 2 Start inhibit switch multiplug
- Undo the cable ties.



μ 16. Pull off and separate the multiplugs.

- 1 Vehicle speed sensor (VSS)
- 2 Throttle pressure valve multiplug
- Undo the cable ties.

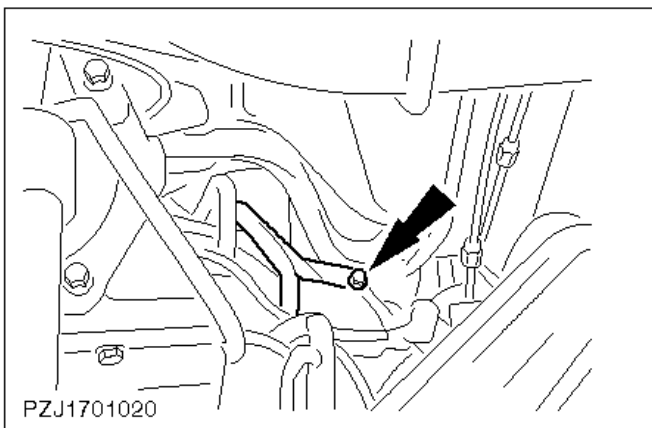


⚠ CAUTION:
Transmission fluid will escape.

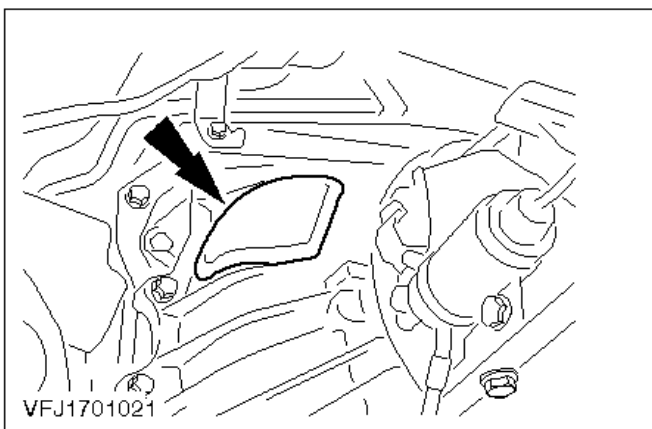
Note:
Hold the adaptor to stop it from turning.

- μ 17. Detach both lines from the transmission and remove them.

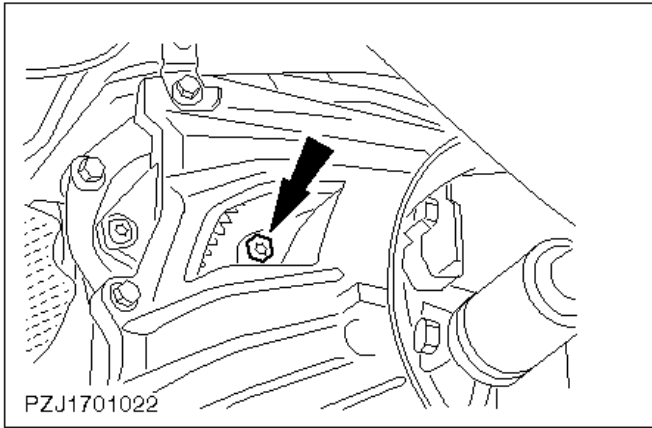
Plug the openings.



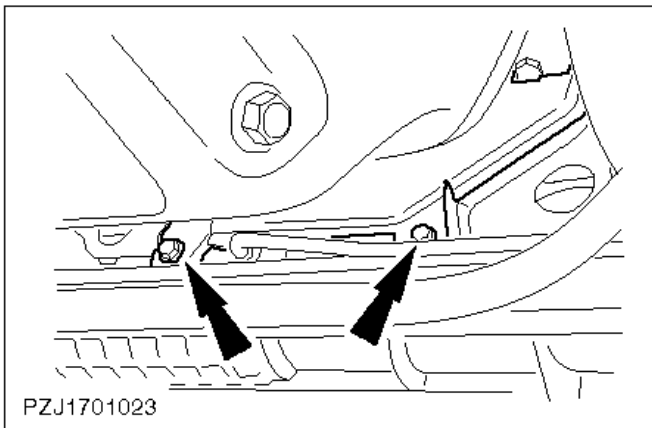
- μ 18. Detach the oil filler tube from the transmission flange.



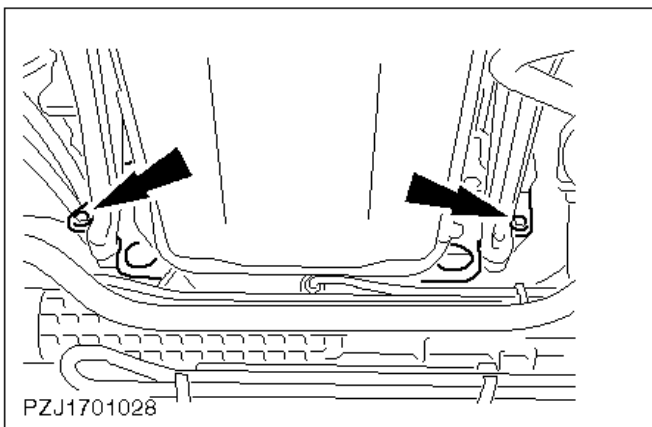
- μ 19. Detach the torque converter housing cover.



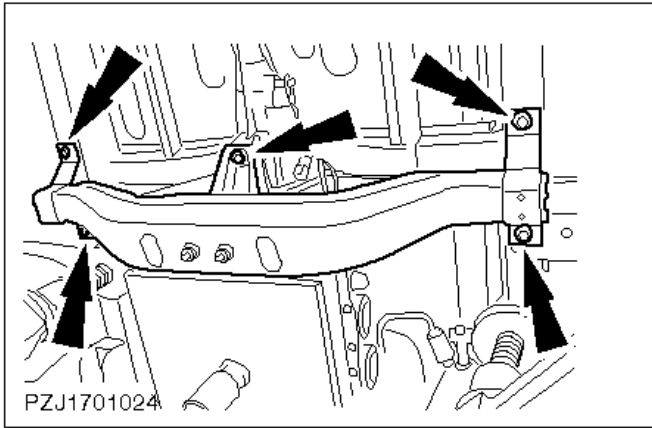
- μ 20. Unscrew and remove the torque converter bolts from the engine drive plate.



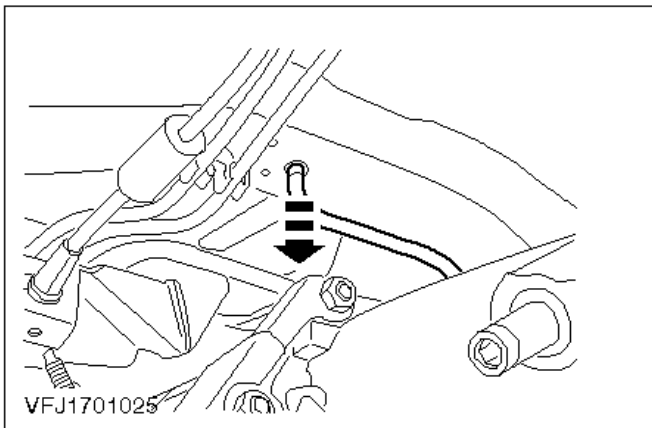
- μ 21. Detach the transmission undershield.



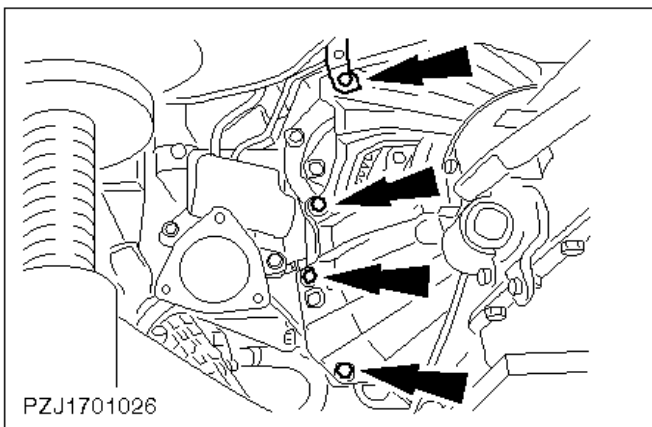
- μ 22. Detach the adapter plate.
- 23. Support the transmission using a transmission jack.
 - Check the transmission using wooden wedges.
 - Secure the transmission using a retaining strap.



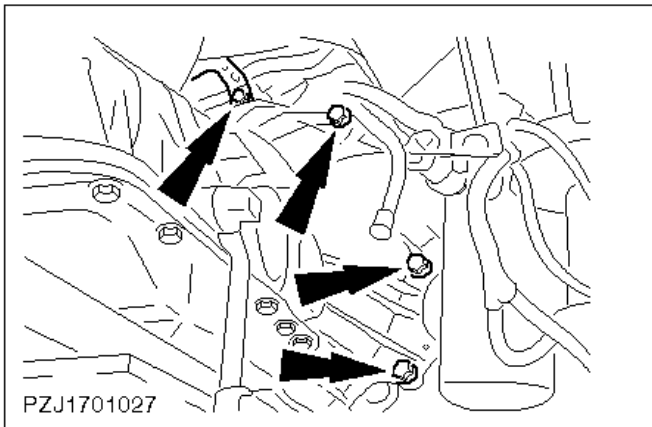
- μ 24. Detach the complete transmission crossmember from the transmission and bodywork.



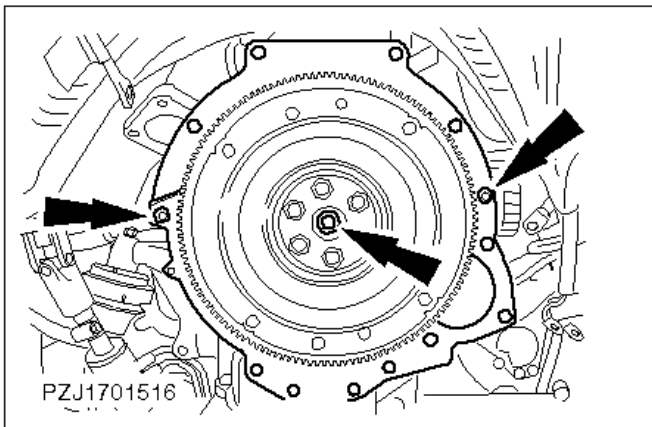
- μ 25. Pull off the transmission ventilation hose.



- μ 26. Unscrew and remove the transmission flange bolts on the left-hand side.

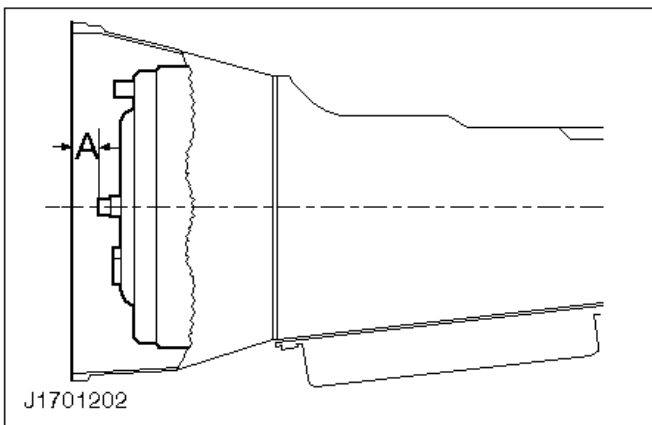


- μ 27. Unscrew and remove the transmission flange bolts on the right-hand side.
- 28. Separate the automatic transmission from the engine and lower it.



Install

- μ 29. Transfer any guide sleeves left on the transmission flange onto the engine flange.
 - 30. Align the adapter plate on the two guide sleeves.
- Hold the adapter plate in position using a little high temperature grease (ESDM-1C220-A).
- 31. Apply high temperature grease (ESDM-1C220-A) thinly to the torque converter centring spigot bore.

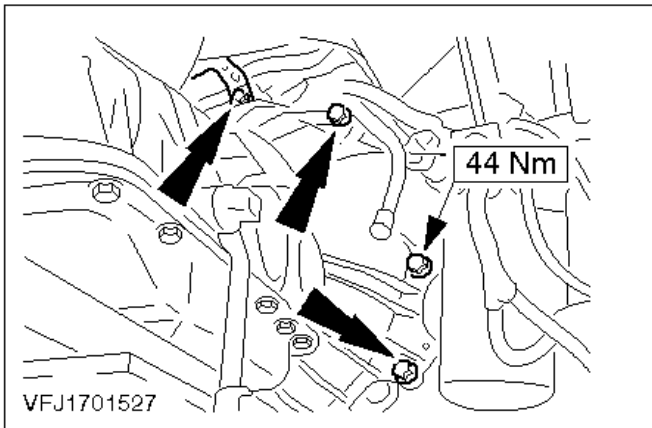


Note:

The torque converter hub must engage completely with the oil pump driving cog.

- μ 32. Check the installation measurement between the torque converter housing flange and the torque converter centring spigot.

- Installation measurement "A" for diesel engines: 21 mm
- Installation measurement "A" for petrol engines: 9 mm



Note:

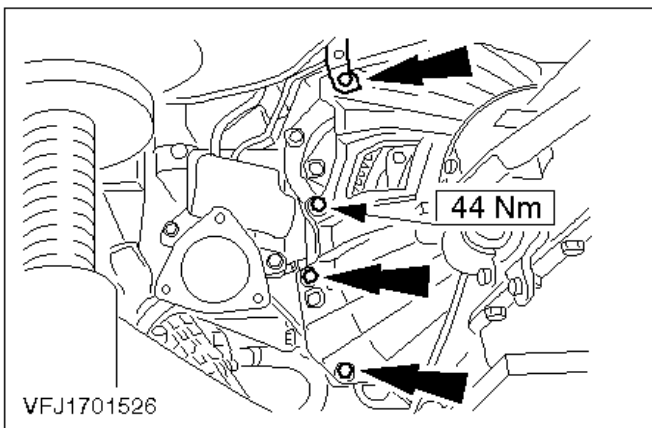
Secure the automatic transmission on the transmission jack using a retaining strap.

- μ 33. Position the automatic transmission using the transmission jack and screw in the transmission flange bolts.

Note:

Fuel pipe brackets.

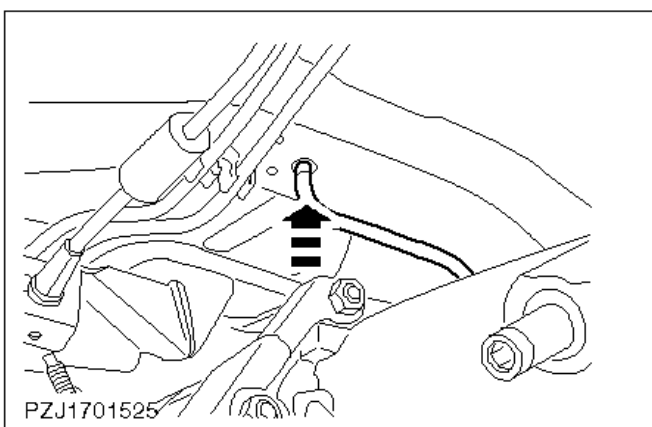
34. Tighten the transmission flange bolts on the right-hand side.



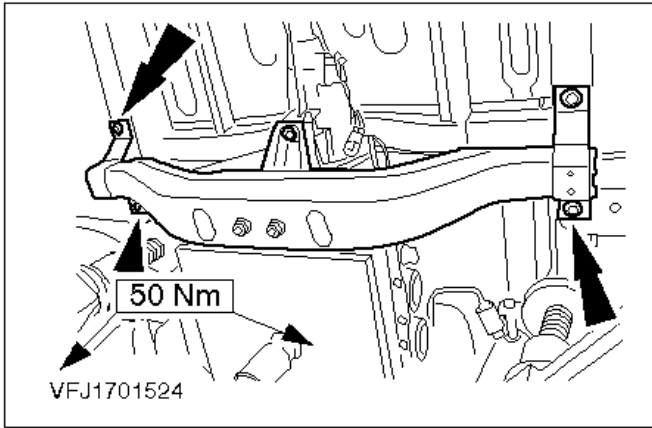
Note:

Fuel pipe brackets.

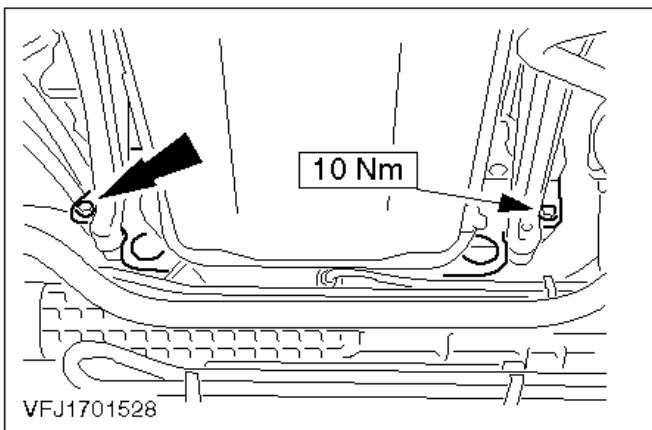
- μ 35. Tighten the transmission bolts on the left-hand side.



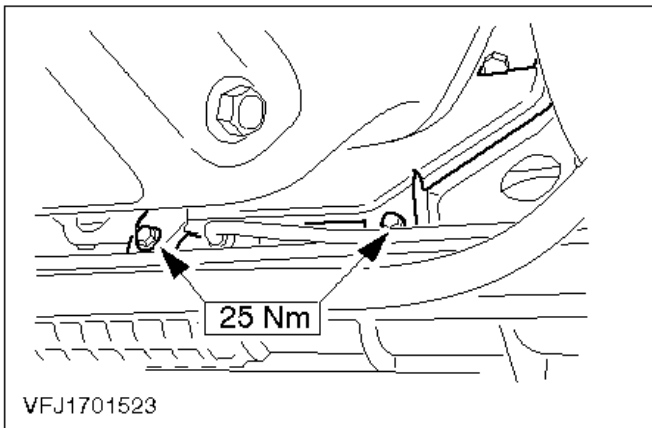
- μ 36. Push on the transmission breather hose.



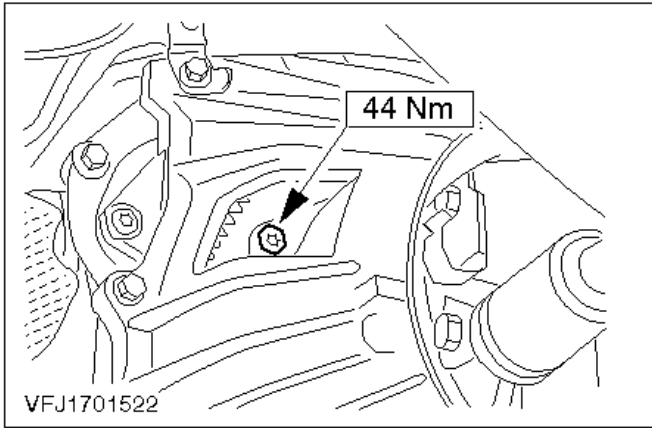
- μ 37. Attach the transmission crossmember to the transmission and the bodywork.



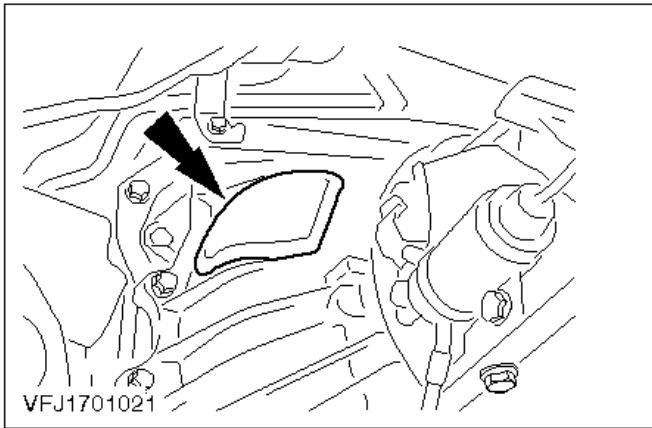
- μ 38. Install the adapter plate.



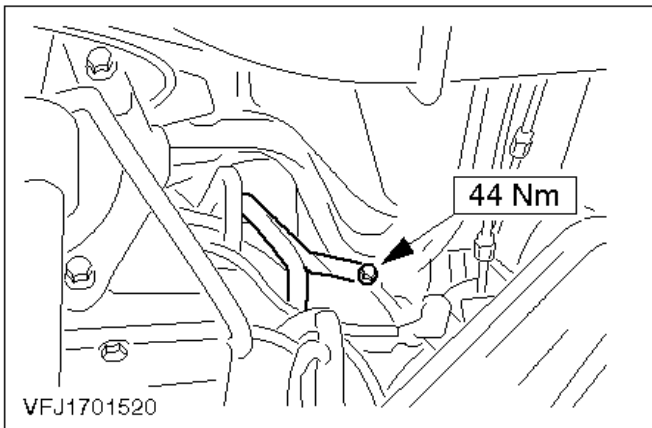
- μ 39. Install the transmission undershield.



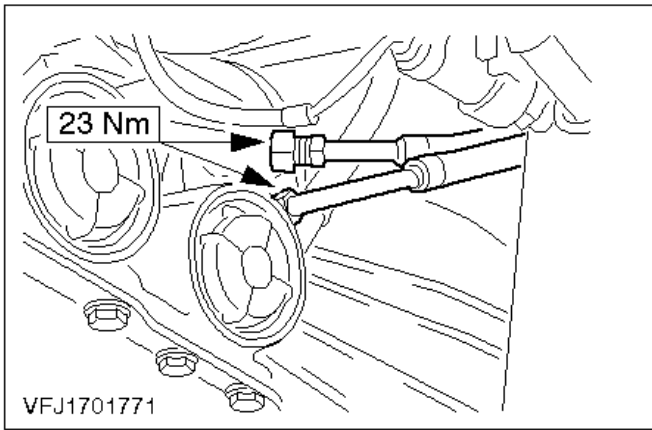
- μ 40. Tighten the torque converter bolts in the engine drive plate.



- μ 41. Install the torque converter housing cover.



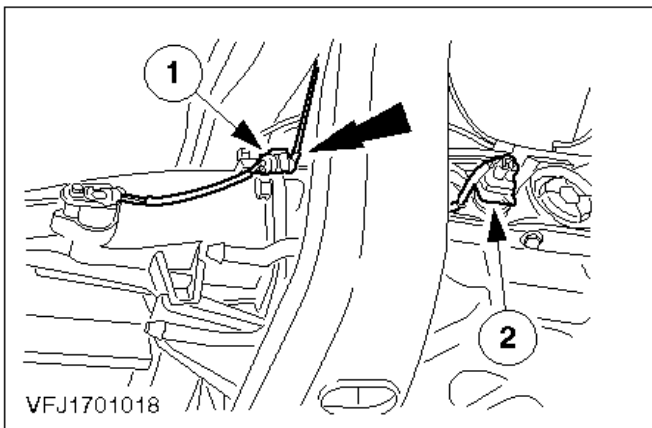
- μ 42. Install the oil filler pipe bracket on the transmission flange.



Note:

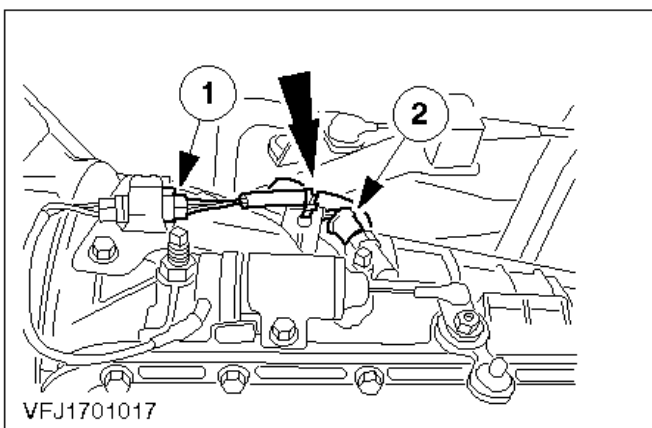
Hold the adaptor to stop it from turning.

- μ 43. Install the transmission fluid pipes on the transmission.



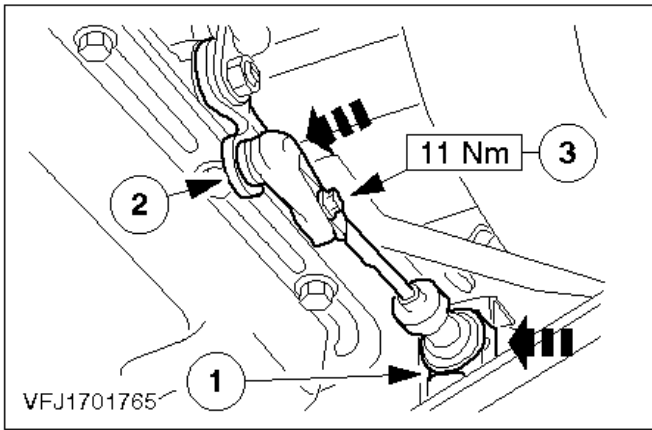
- μ 44. Push on and connect the multiplugs.

- 1 VSS multiplug
- 2 Throttle pressure valve
- Fix the cables in position using cable ties.



- μ 45. Push on and connect the multiplugs.

- 1 Kickdown solenoid coil multiplug
- 2 Start inhibit switch multiplug
- Fix the cables in position using cable ties.



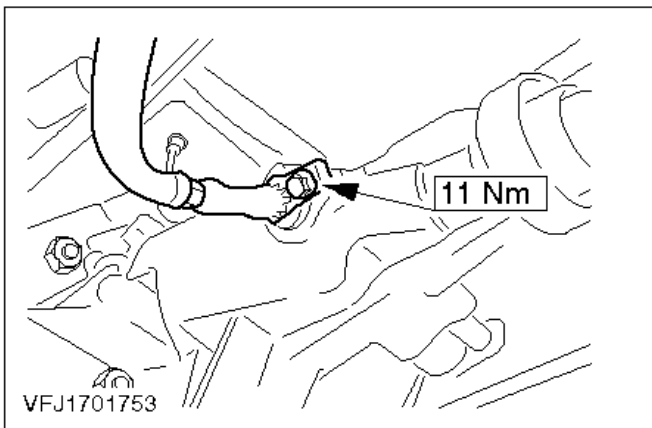
μ 46. Install the selector cable.

- 1 Insert the selector cable in the bracket on the transmission and fix it in position with a clip.

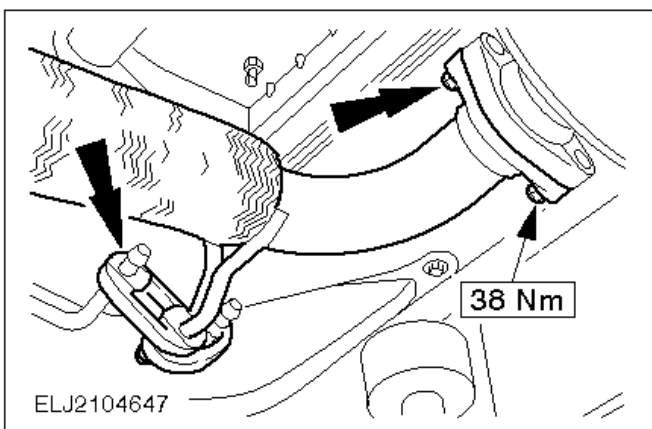
Note:

The selector lever on the transmission must be in the 'N' position; i.e. four clicks from the back stop or two from the front one.

- 2 Push the selector cable ball head into the selector lever on the transmission.
- 3 Undo the selector cable bolt and re-tighten it.

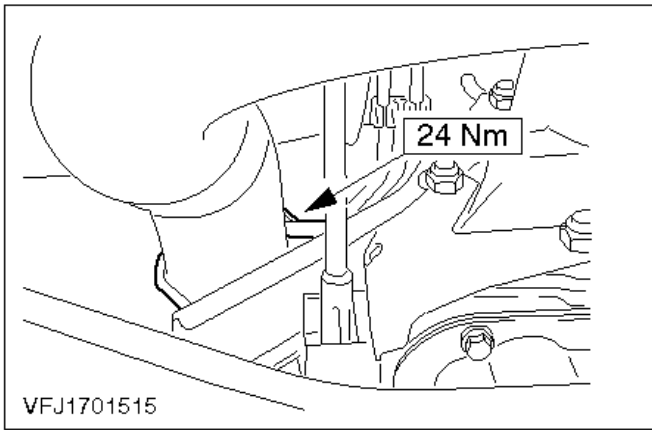


μ 47. Install the speedometer drive gear.

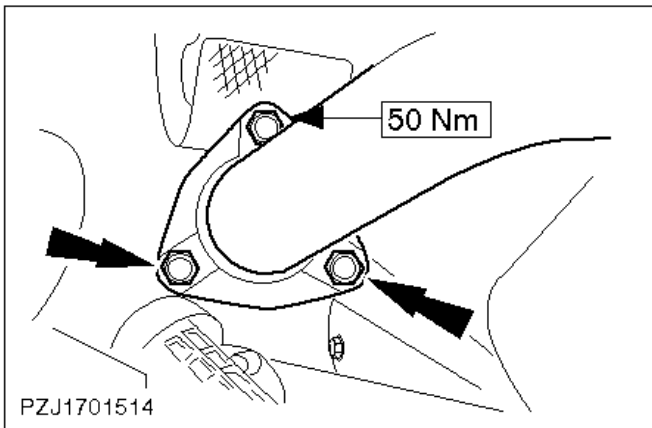


μ 48. Attach the front exhaust pipe to the rear exhaust pipe.

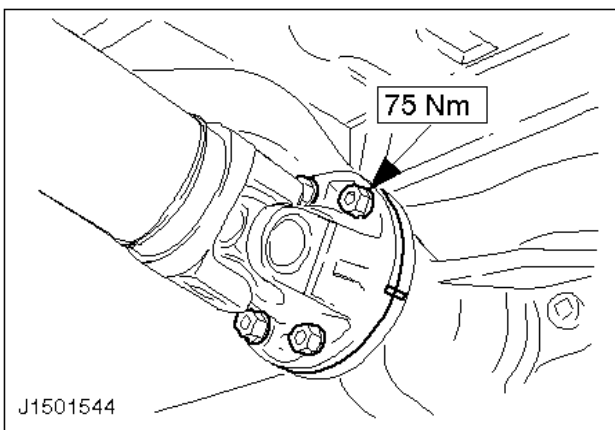
Hook the front exhaust pipe in position and tighten the nuts.



- μ 49. Install the front exhaust pipe on the bracket (one nut and bolt).



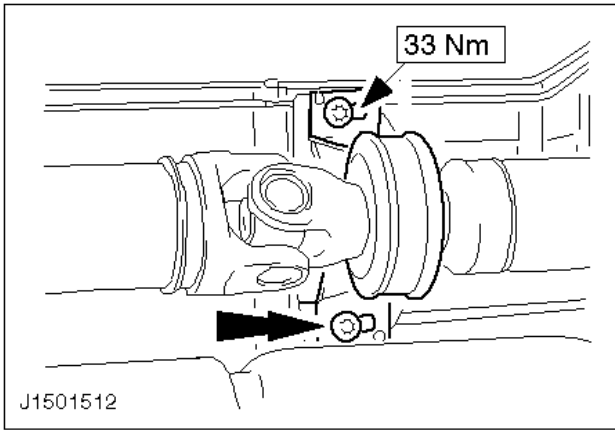
- μ 50. Install the front exhaust pipe on the exhaust manifold.



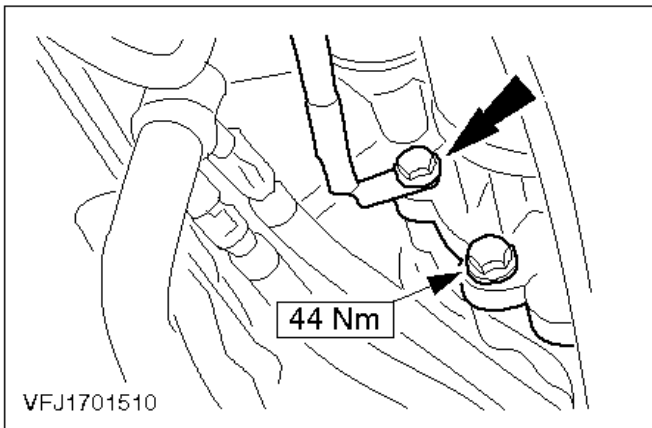
- μ 51. Slide the driveshaft into the automatic transmission.

Note:
Marking.

52. Install the driveshaft onto the rear axle.

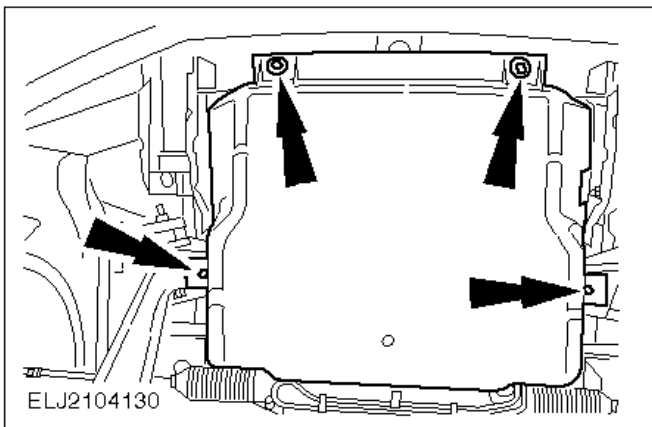


- μ 53. Install the driveshaft intermediate bearing.

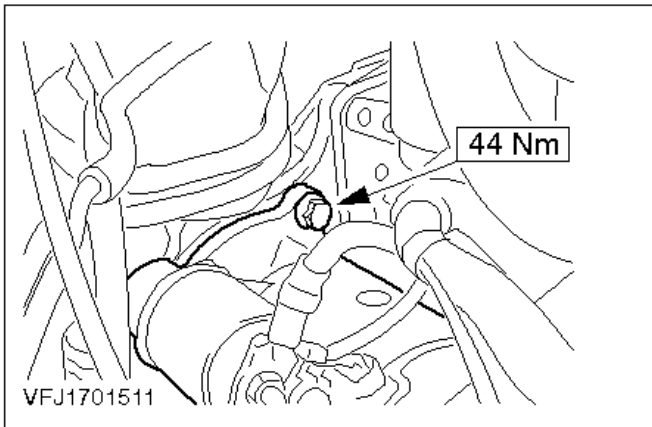


Note:
Ground lead.

- μ 54. Install the starter motor.



- μ 55. Install the engine undershield.



- μ 56. Lower the vehicle.
 - 57. Install the starter motor (cont.)
 - 58. Standard finishing operations.
 - Insert the automatic transmission fluid dipstick.
 - Check the automatic transmission fluid level and correct as necessary.
 - Check cable routing and tie the cables back with cable ties as necessary.
 - Connect the battery negative lead.
 - Reset the pre-set radio stations previously noted.
 - Set the clock.
 - Carry out a road test to allow the PCM (EEC VI) to re-learn values.
 - Install the engine undershield.
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