

**Manual Transmission – Remove and Install (2,0 DOHC 8V Engine) (16 114 0)****Workshop Equipment**

Transmission jack

**Materials**Brake fluid  
(Super Dot 4)

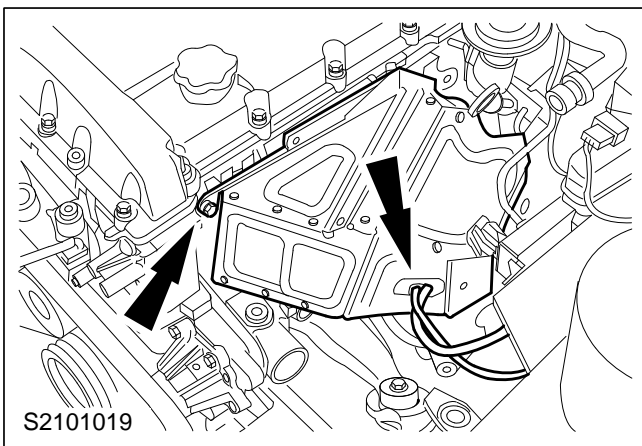
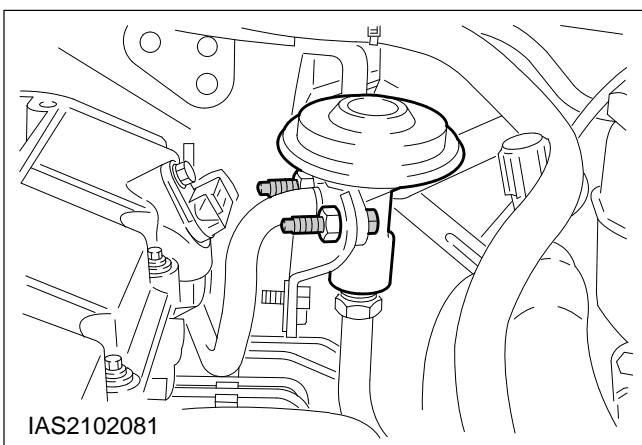
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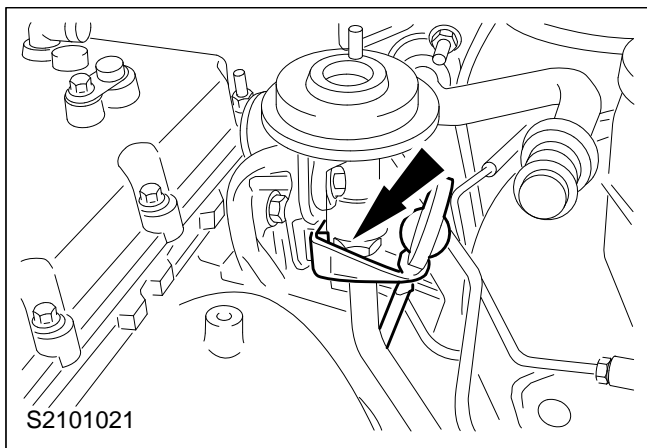
**Remove****1. Standard preparatory measures:**

- Make a note of the radio keycode.
- Make a note of the preset radio stations.

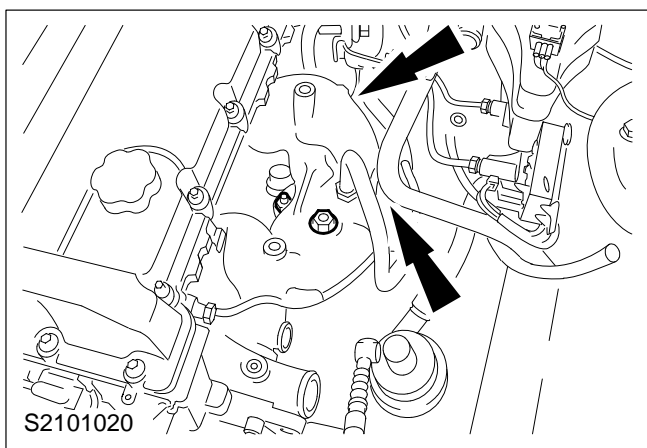
**CAUTION:** Disconnect the battery negative lead.**2. Remove the battery cover.****3. Detach the exhaust manifold upper and lower heat shield in one piece (four bolts).**

Disconnect the vacuum hoses to the DPFE sensor (electronic differential pressure feedback system).

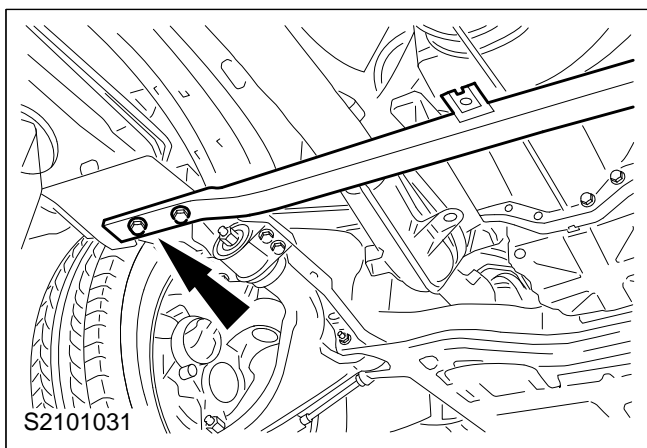
**4. Detach the exhaust gas recirculation (EGR) valve and pull it away from the engine.**



5. Remove the oil dipstick tube.

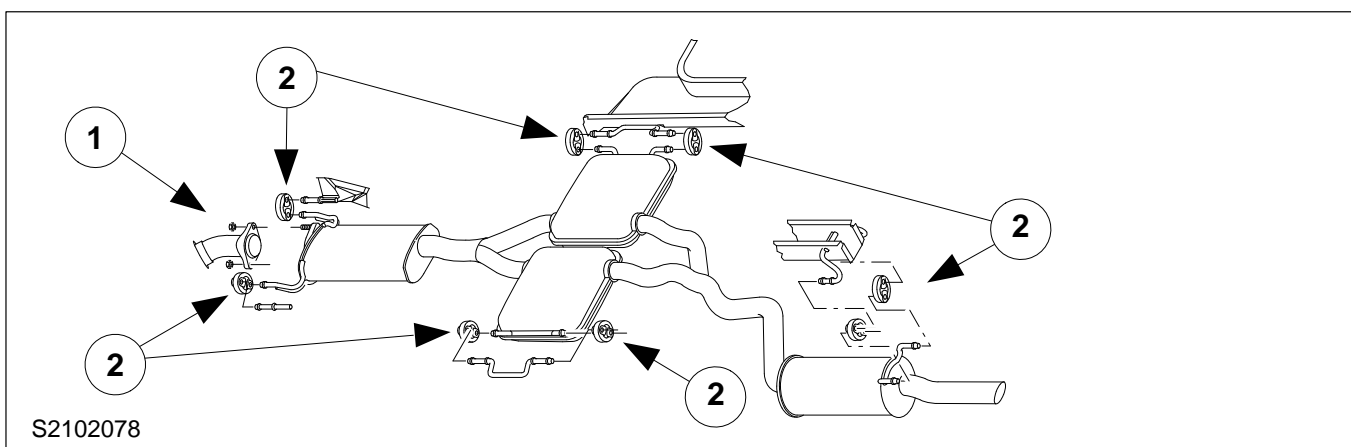


6. Detach the catalytic converter from the exhaust manifold (four nuts).



7. Detach the front axle transverse brace (left-hand side shown).

Raise the vehicle.

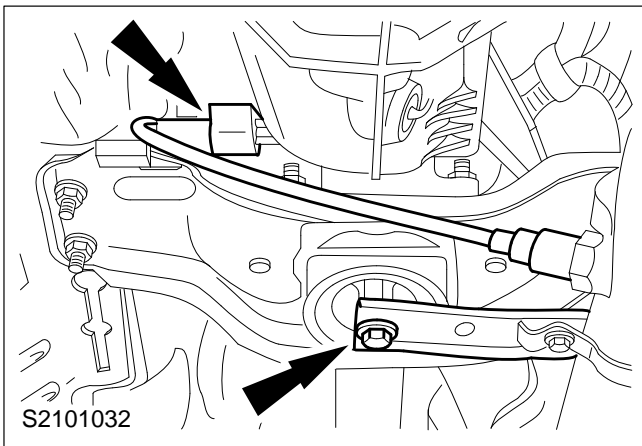


**8. Remove the rear part of the exhaust system.**

- 1 Detach the exhaust flange.
- 2 Unhook the rubber insulators.

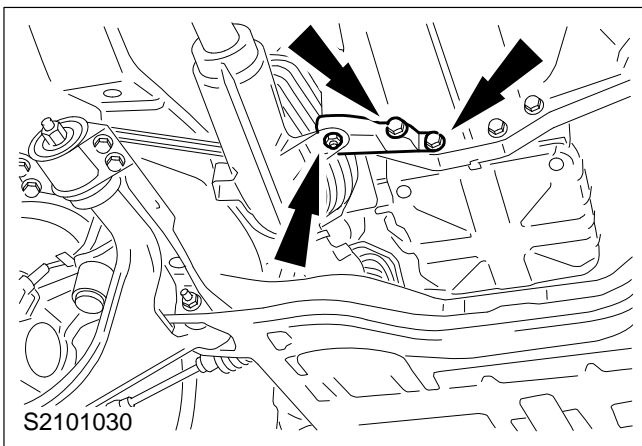
**9. Detach the exhaust mounting bracket.**

Disconnect the multiplug from the heated oxygen (HO<sub>2</sub>S) sensor.

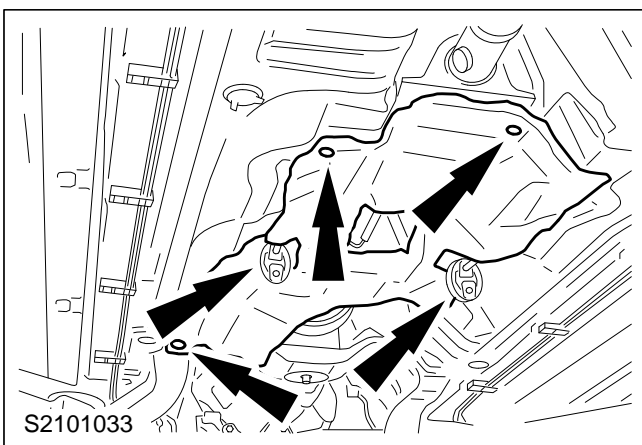


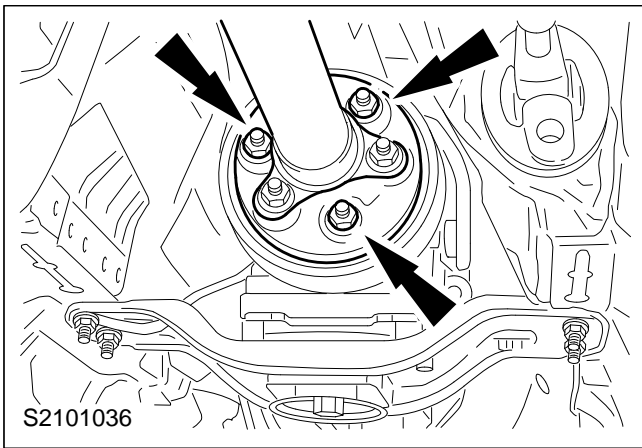
**10. Remove the front part of the exhaust system.**

- Detach the catalytic converter from the engine mounting bracket.
- Remove the catalytic converter.



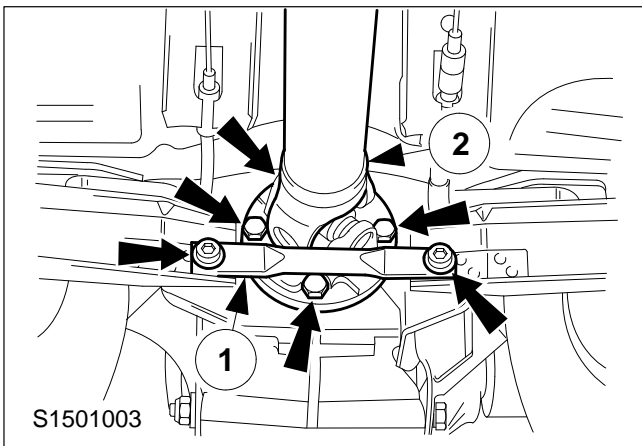
**11. Detach the exhaust system heat shield.**





**CAUTION:** Do not disconnect the driveshaft from the rubber coupling.

**12. Disconnect the driveshaft from the vibration damper.**

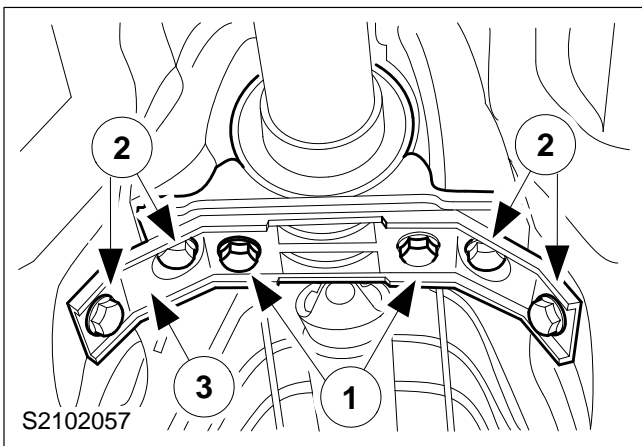


**CAUTION:** The driveshaft is precision-balanced by bolts of different lengths. Mark the position of the driveshaft and the bolts.

**13. Detach the driveshaft from the rear axle.**

**NOTE:** The transverse brace will no longer be installed in vehicles built from Jan '96 onwards.

- 1 Detach the transverse brace from the rear axle.
- 2 Detach the driveshaft.

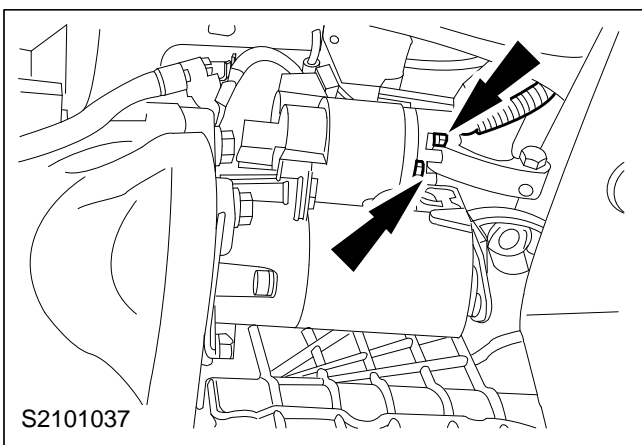


**14. Remove the driveshaft.**

- 1 Slacken the bolts.
- 2 Unscrew the bolts.

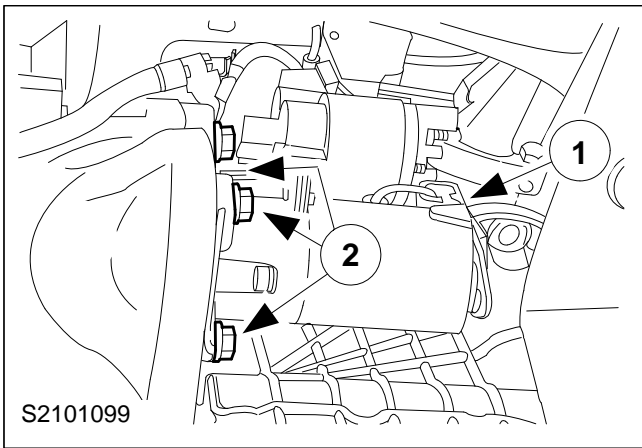
**NOTE:** There are spacer washers between the floor assembly and the centre bearing.

- 3 Turn both brackets through 90° and remove the driveshaft.



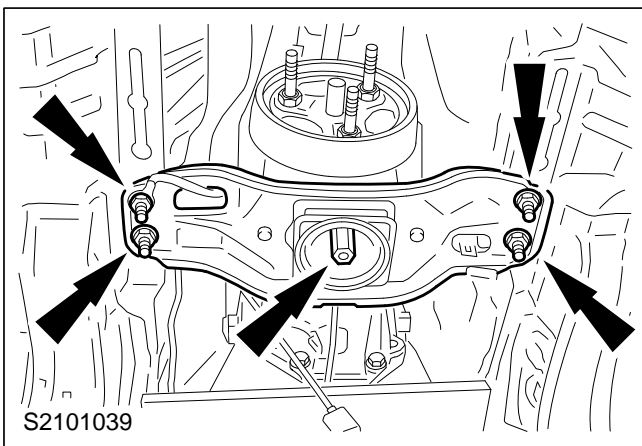
**15. Disconnect the starter motor.**

Disconnect the wiring from the solenoid.



**16. Remove the starter motor.**

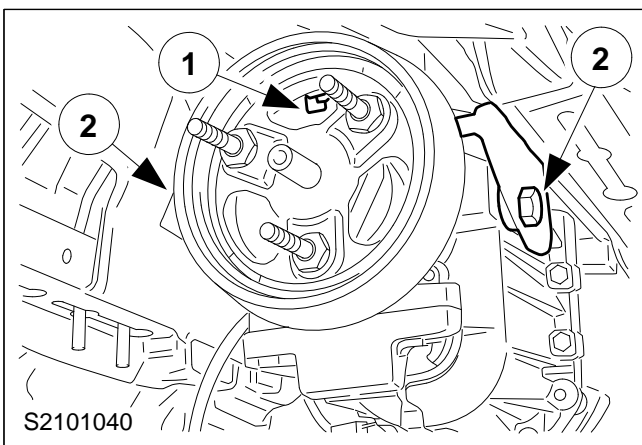
- 1 Detach the bracket from the cylinder block.
- 2 Unscrew the bolts.



**17. Support the transmission on a transmission jack.**

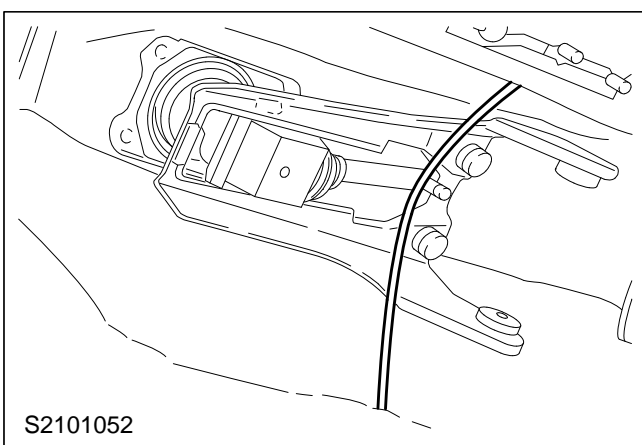
**18. Detach the transmission crossmember.**

Lower the transmission assembly.

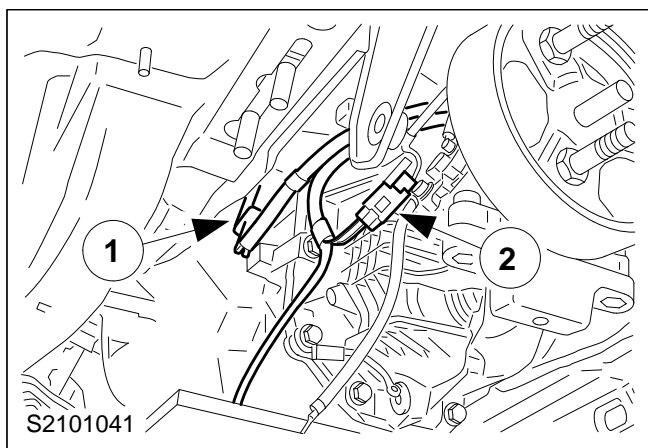


**19. Detach the gearshift support bracket from the transmission.**

- 1 Disconnect the gearshift linkage from the coupling.
- 2 Detach the gearshift support bracket (two bolts).

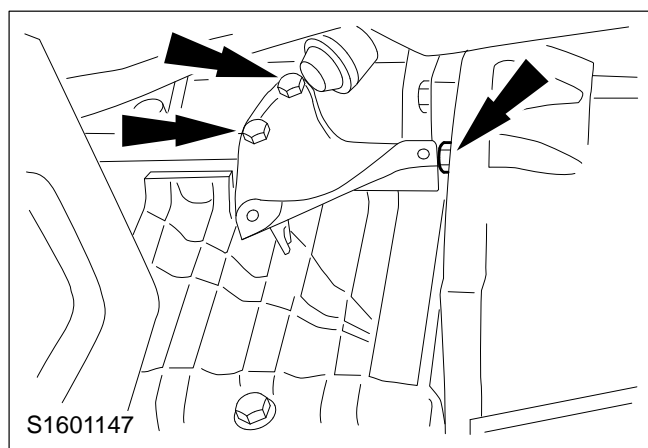


**20. Hold the gearshift support bracket in position and support it with a length of round steel rod.**



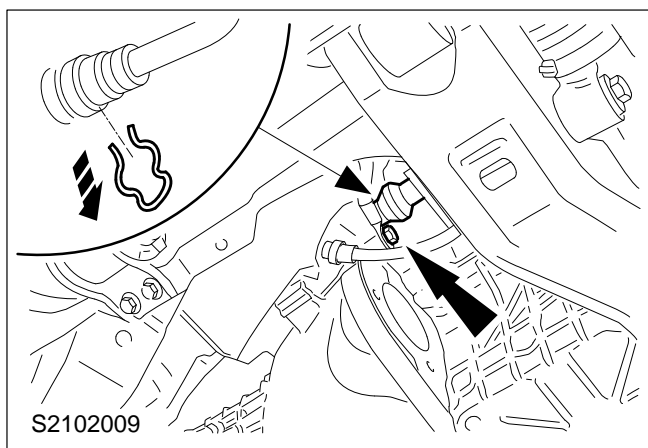
**21. Disconnect the multiplug.**

- 1 Reversing light switch.
- 2 Vehicle speed sensor (VSS).
- Disconnect the wiring loom completely from the transmission.



**22. Detach the bracket from the cylinder block.**

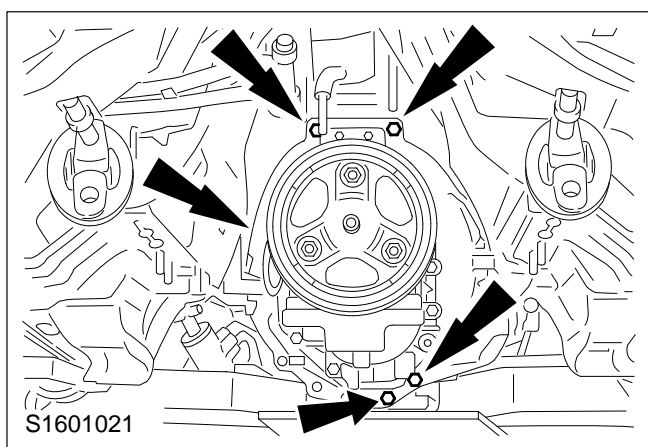
**23. Release the adaptor plate.**



**⚠ WARNING:** Seal the line ends with suitable plugs.

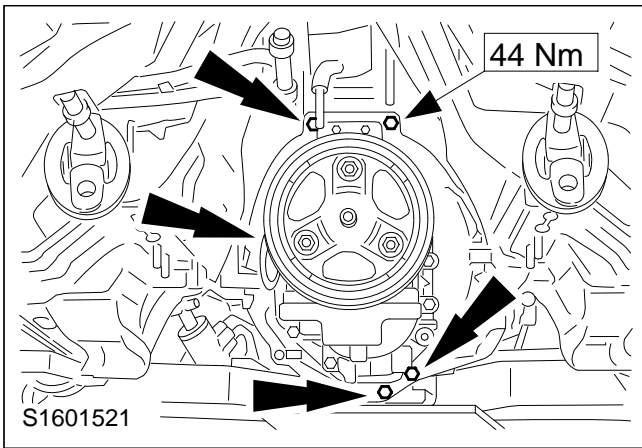
**24. Disconnect the hydraulic line from the clutch.**

**25. Disconnect the ground lead.**



**26. Remove the transmission assembly.**

- Unscrew the remaining flange bolts.
- Detach the transmission from the engine and lower it.

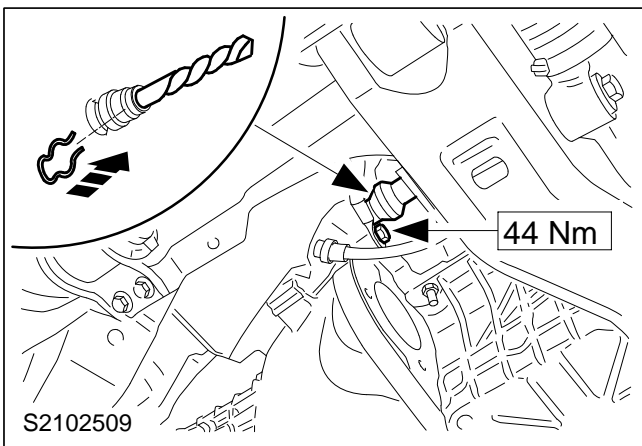


## Install

**NOTE:** Make sure the adaptor plate is positioned correctly.

### 27. Position the transmission on the engine.

Tighten the flange bolts.



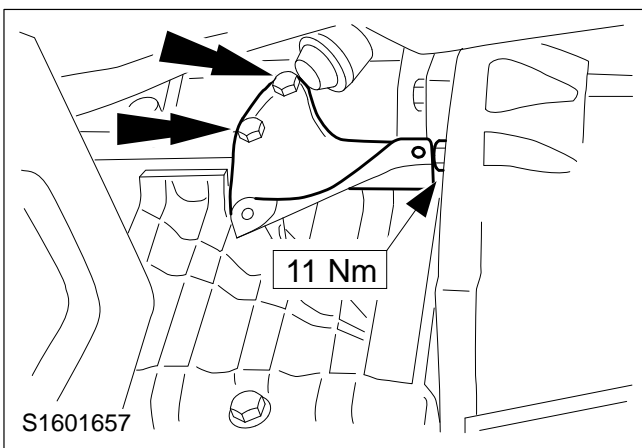
### 28. Connect the transmission ground lead.

Tighten the flange bolts.

**NOTE:** Make sure that the quick-release coupling locks securely.

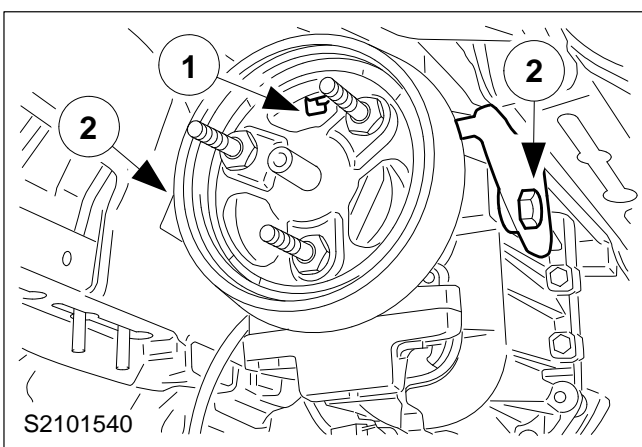
### 29. Connect the hydraulic line to the clutch.

- Insert a clean, burr-free drill bit ( $\varnothing$  9,5 mm) in the quick-release coupling as a guide for the spring clip.
- Fit the spring clip, remove the drill and compress the quick-release coupling.



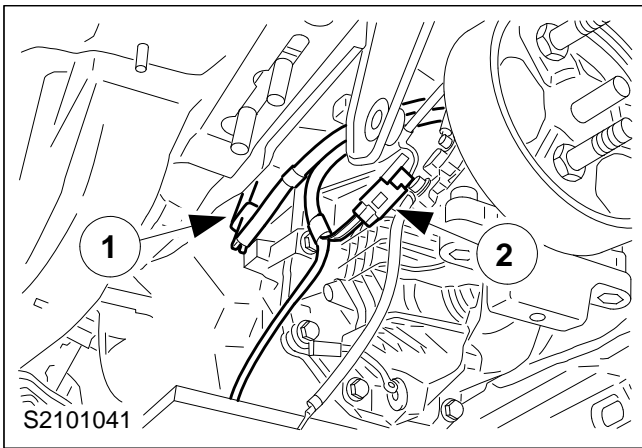
### 30. Secure the adaptor plate.

### 31. Attach the bracket to the cylinder block.



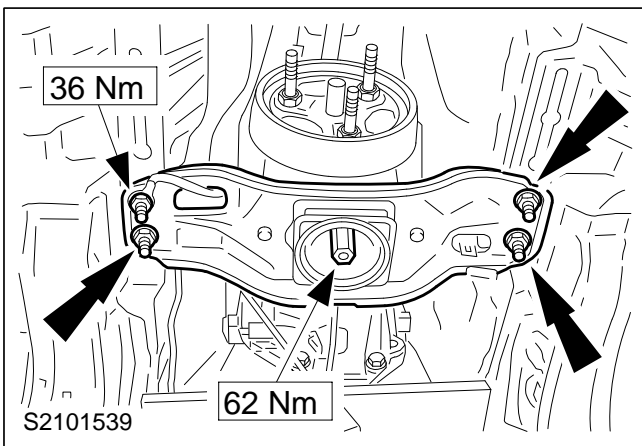
### 32. Attach the gearshift support bracket to the transmission.

- 1 Locate the gearshift linkage in position and attach it to the coupling.
  - 2 Tighten the two bolts to 11 Nm.
- Remove the length of round steel rod used to support the gearshift support bracket.



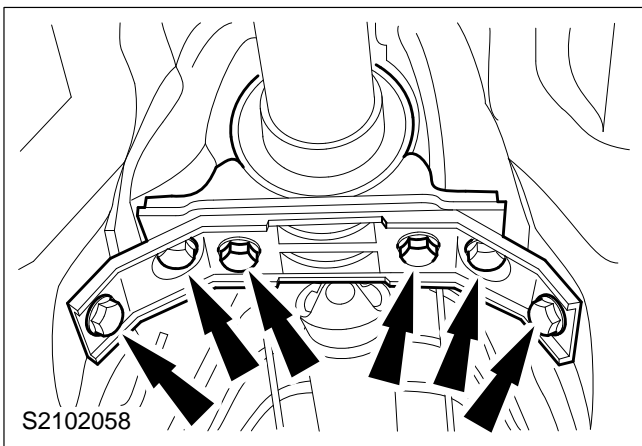
**33. Connect the plugs.**

- 1 Reversing light switch.
  - 2 Vehicle speed sensor (VSS).
- Lay the wiring loom in position.

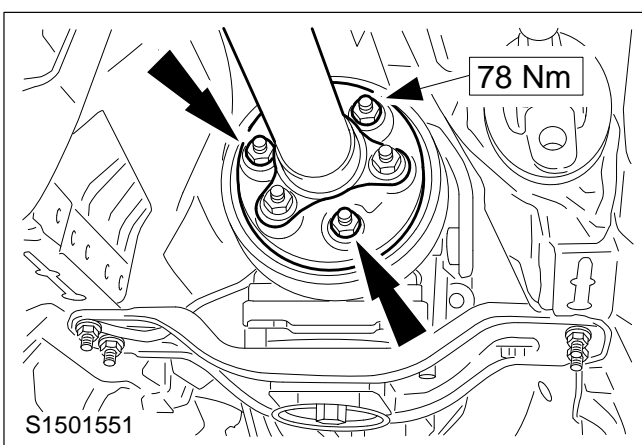


**34. Attach the transmission crossmember to the transmission and floor assembly.**

Remove the transmission jack.

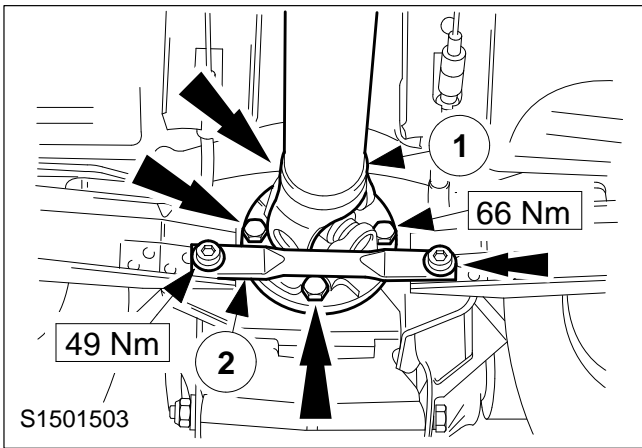


**35. Attach the centre bearing loosely.**



**36. Attach the driveshaft to the vibration damper.**





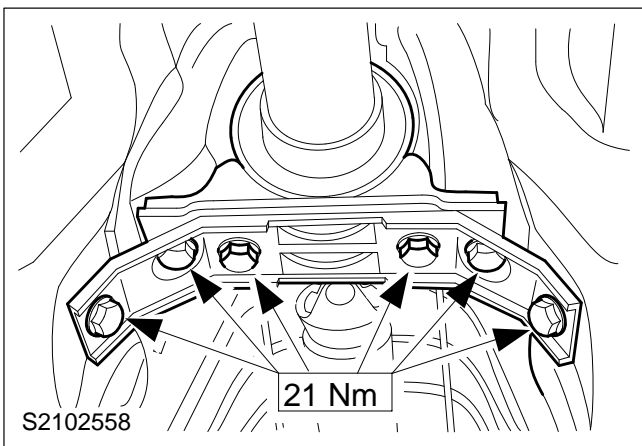
**⚠ CAUTION:** The driveshaft is precision-balanced by bolts of different lengths. Mark the position of the driveshaft and the bolts.

**37. Install the driveshaft (continued).**

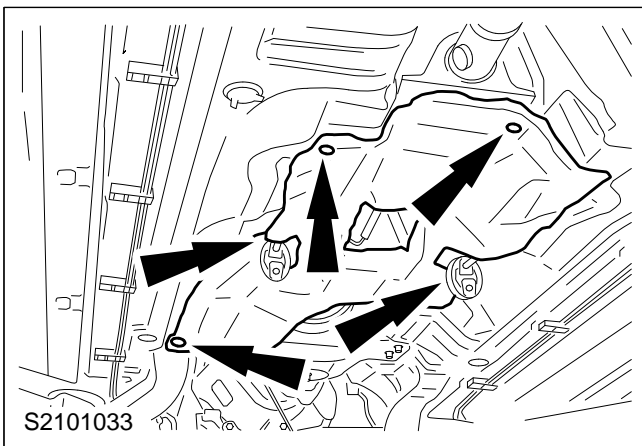
1 Attach the driveshaft to the rear axle flange.

**NOTE:** For vehicles built from Jan onwards. The transverse brace will not be installed from '96 onwards.

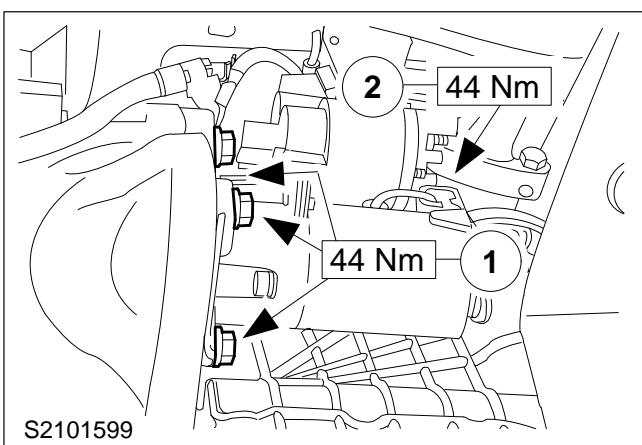
2 Attach the transverse brace.



**38. Align the centre bearing free of stress and secure it.**



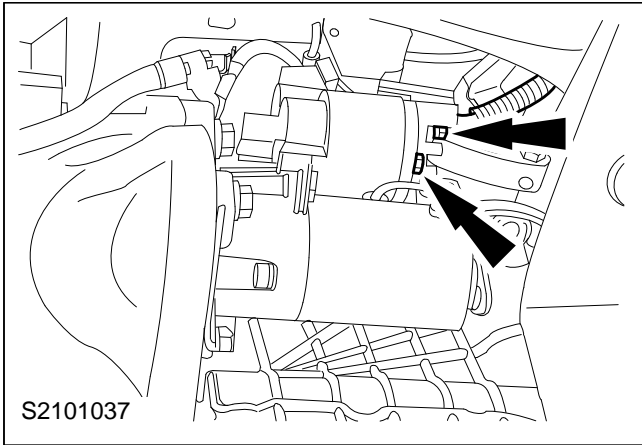
**39. Fit the exhaust system heat shield.**



**40. Install the starter motor.**

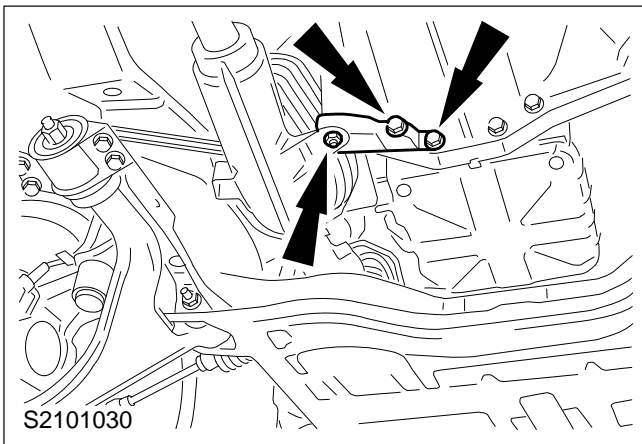
1 Tighten the bolts.

2 Tighten the bracket on the cylinder block.



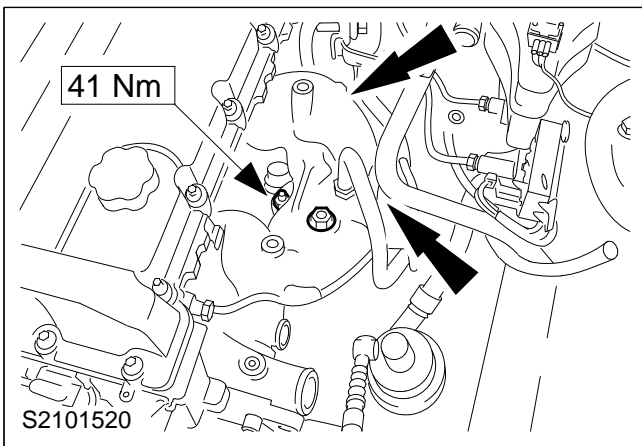
**41. Connect the starter motor wiring.**

Tighten the two nuts.

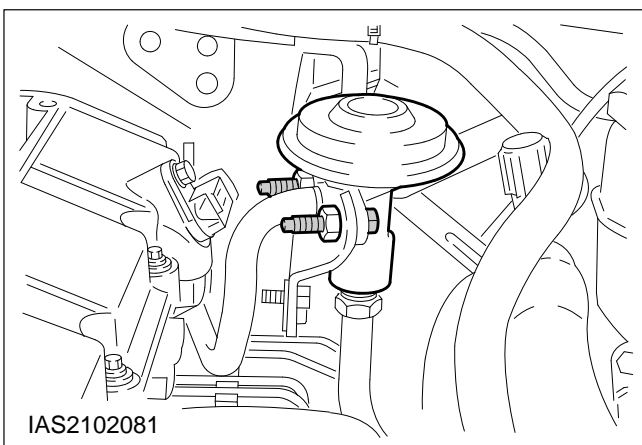


**42. Attach the front part of the exhaust system loosely.**

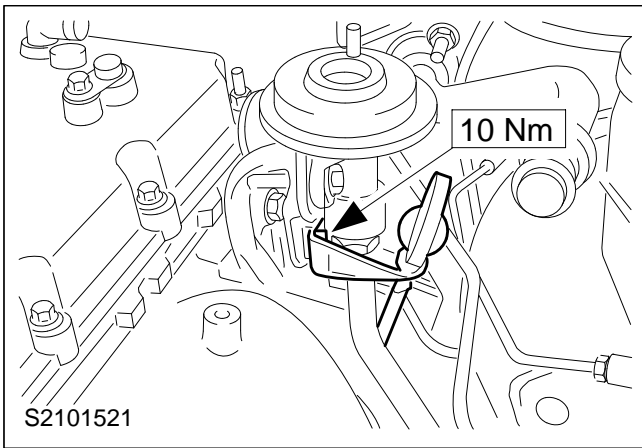
Lower the vehicle.



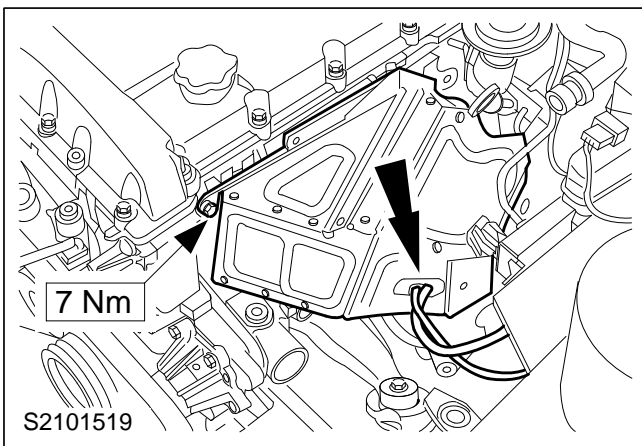
**43. Secure the catalytic converter to the exhaust manifold.**



**44. Locate the exhaust gas recirculation valve (EGR valve) in position and attach it to the engine.**

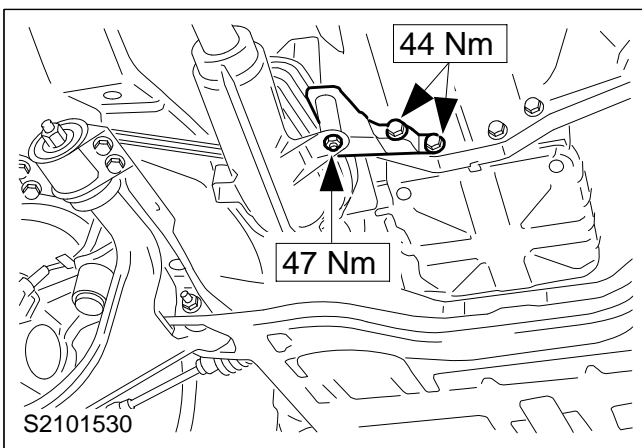


**45. Install the oil dipstick tube.**



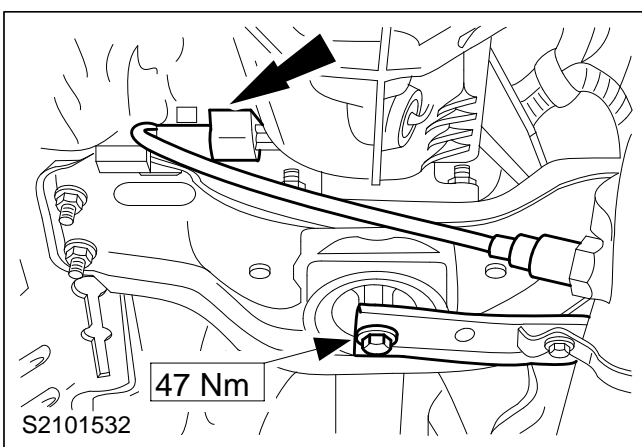
**46. Fit the exhaust manifold upper and lower heat shield (four bolts).**

Connect the vacuum hoses to the DPFE sensor (differential pressure feedback EGR).



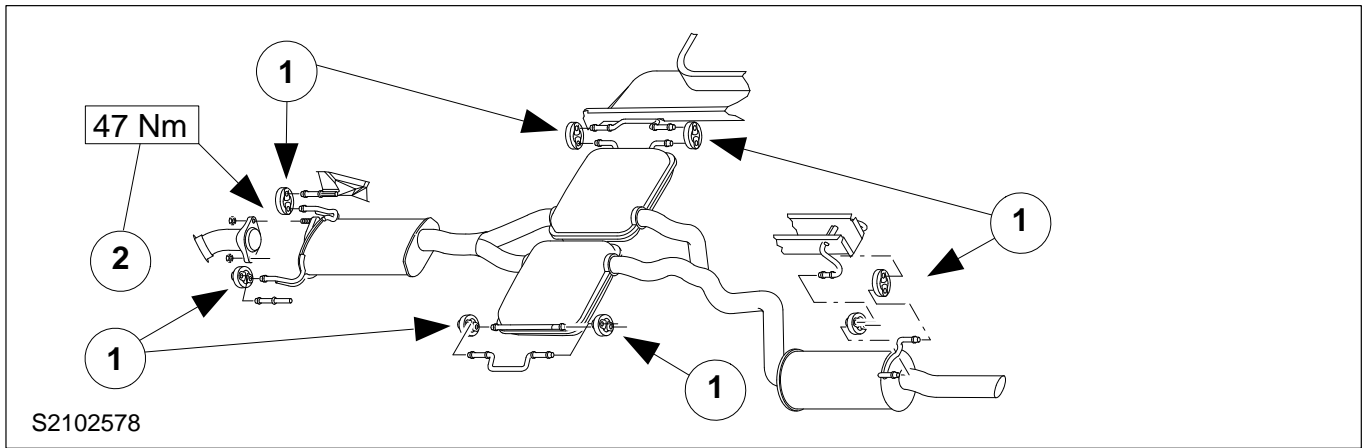
**47. Secure the exhaust mounting brackets.**

Raise the vehicle.



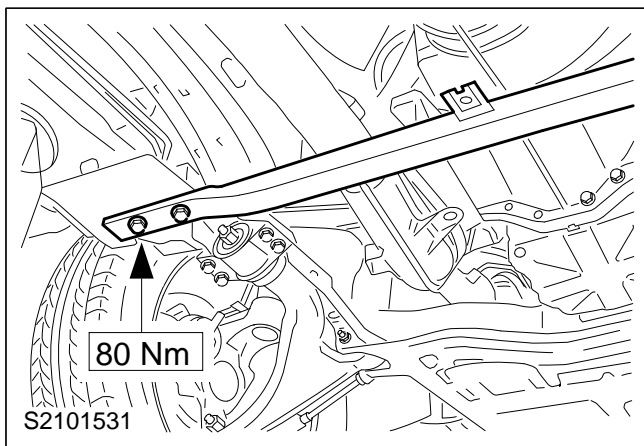
**48. Attach the exhaust mounting bracket.**

Connect the multiplug to the HO2S sensor and clip it in place.



**49. Install the rear part of the exhaust system.**

- 1 Attach the rubber insulators.
- 2 Secure the exhaust flange.



**50. Fit the front axle transverse brace (left-hand side shown).**

Fit the engine undershields (when applicable).

**51. Check the transmission fluid level.**

- Top up the fluid to the lower edge of the level check bore.
- Tighten the oil filler plug to 35 Nm.

**52. Bleed the hydraulic system as described in Operation No. 16 843 0.**

**53. Standard finishing operations:**

- Check the routing of the wiring and secure it with cable ties.
- Connect the battery negative lead and fit the battery cover.
- Enter the radio keycode and reprogramme the preset radio stations.
- Reset the clock.
- Carry out a road test to enable the PCM (EEC V) to gather data.