

## Automatic Transmission Assembly – Remove and Install (2,5 TCI Diesel Engine) (17 214 0)

### Workshop Equipment

Transmission jack	
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### Materials

Cable ties	
High-temperature grease	ESDM-1C220-A
Automatic transmission fluid (build date up to August '96)	ESP-M2C166-H
Automatic transmission fluid (build date from August '96 onwards)	WSS-M2C202-B
Automatic transmission fluid for vehicles with 2,3 DOHC 16V engine	WSS-M2C202-B

### Remove

#### 1. Standard preparatory measures:

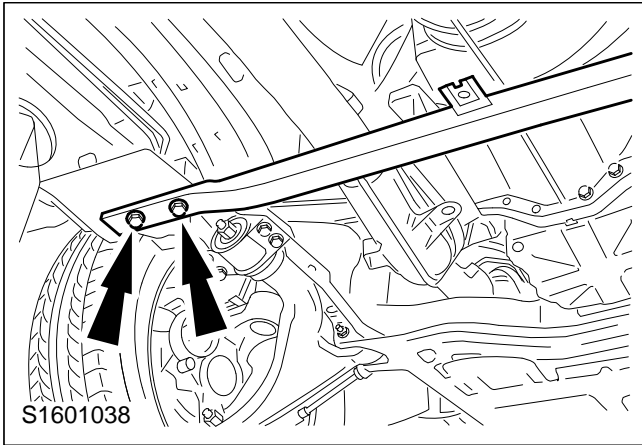
- Make a note of the radio keycode.
- Make a note of the preset radio stations.
- Remove the battery cover.

 **CAUTION:** Disconnect the battery negative lead.

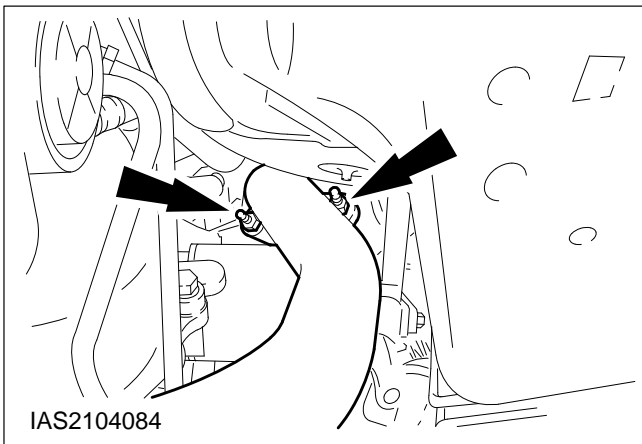
- Withdraw the automatic transmission fluid dipstick.

#### 2. Raise the vehicle.

#### 3. Detach the engine undershield.

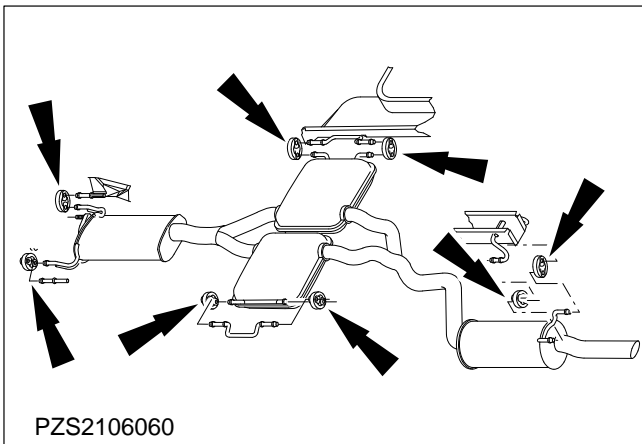


4. Detach the front axle transverse brace (left-hand side shown).

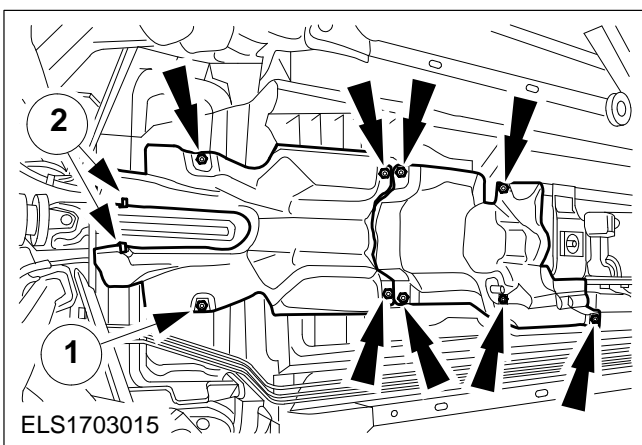


**⚠ CAUTION:** Support the exhaust system with the transmission jack.

5. Unscrew the front exhaust pipe from the exhaust manifold.



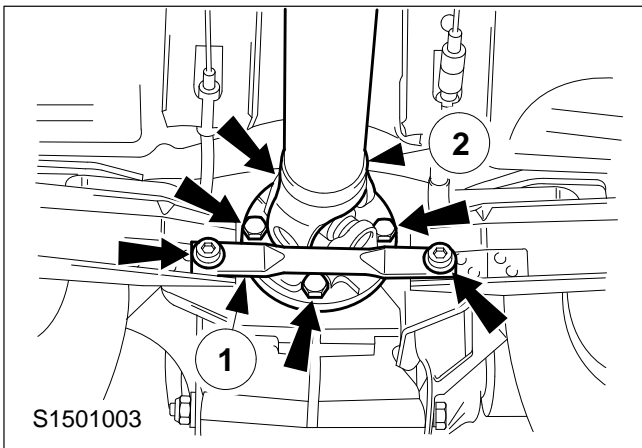
6. Unhook the rubber insulators and remove the exhaust system.



7. Detach the two heat shields (nine nuts, two clips).

1 Nuts

2 Clips

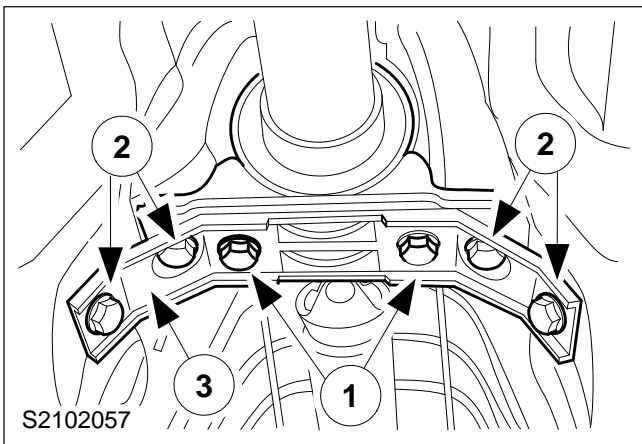


**⚠ CAUTION:** The driveshaft is finely balanced using bolts of different lengths. Mark the installation position of the driveshaft and bolts.

**8. Detach the driveshaft from the rear differential.**

**NOTE:** There is no transverse brace on vehicles from 01/96 onwards.

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



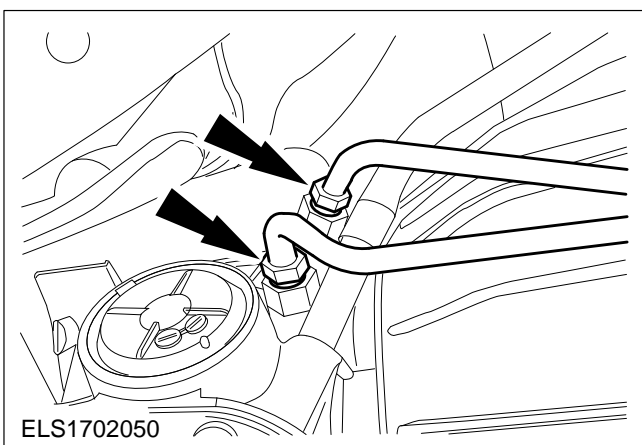
**NOTE:** There are spacer washers between the floor and the centre bearing.

**9. Remove the driveshaft centre bearing.**

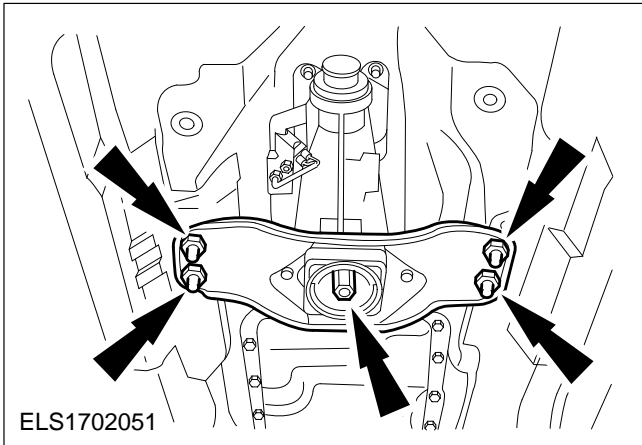
- 1 Slacken the bolts.
- 2 Remove the bolts.
- 3 Turn both brackets through 90°.

**10. Remove the driveshaft.**

- Pull out the driveshaft and remove it.
- Close off the transmission with auxiliary plugs.

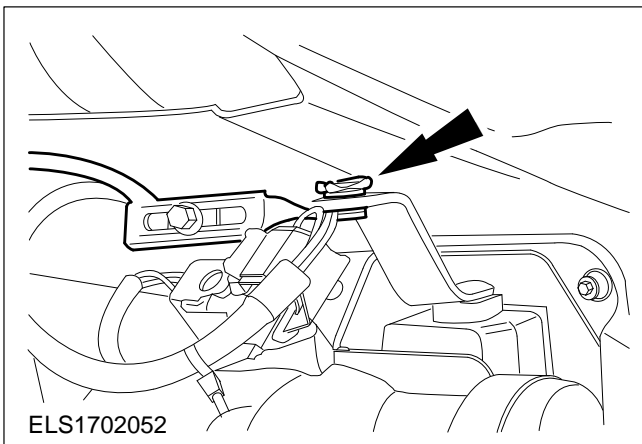


**11. Detach the oil pipes from the transmission.**



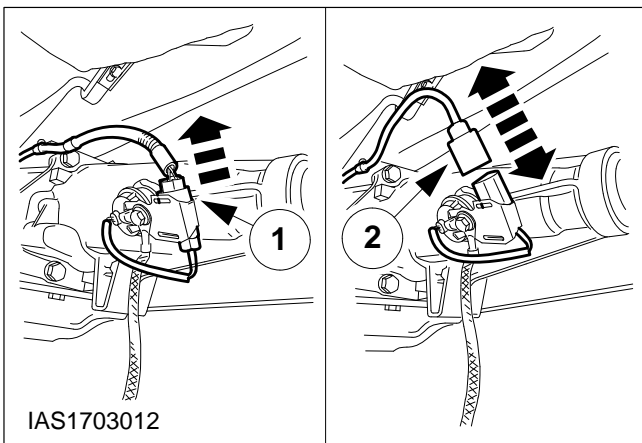
## 12. Detach the transmission crossmember.

- Lower the transmission with the transmission jack.



## 13. Detach the selector rod from the transmission.

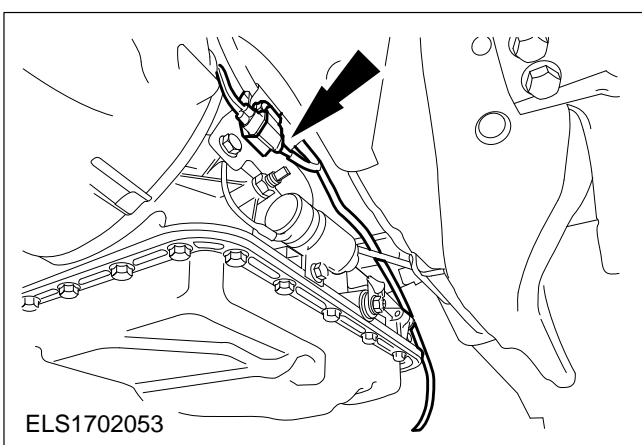
- Remove the clip.



## 14. Unclip and disconnect the vehicle speed sensor (VSS) multiplug.

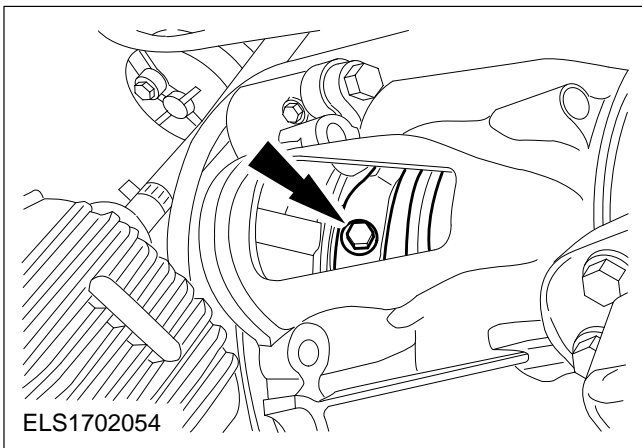
- 1 Push the connector out of the bracket.
- 2 Disconnect the VSS multiplug.

- Disconnect the other multiplugs, cut the cable ties, unclip the wiring loom and lay it to one side.



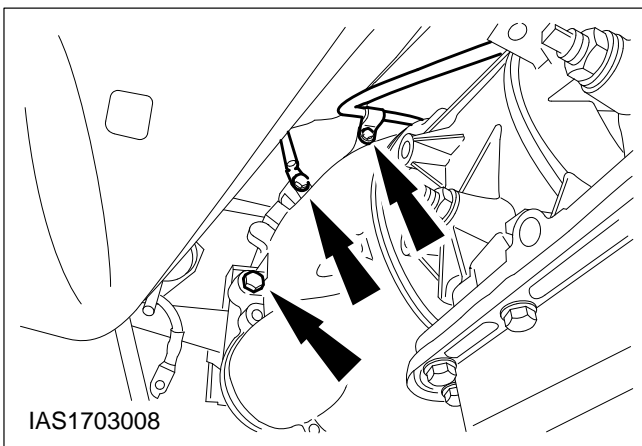
## 15. Detach the automatic transmission wiring loom.

- Release the kickdown solenoid multiplug from the bracket and disconnect it.

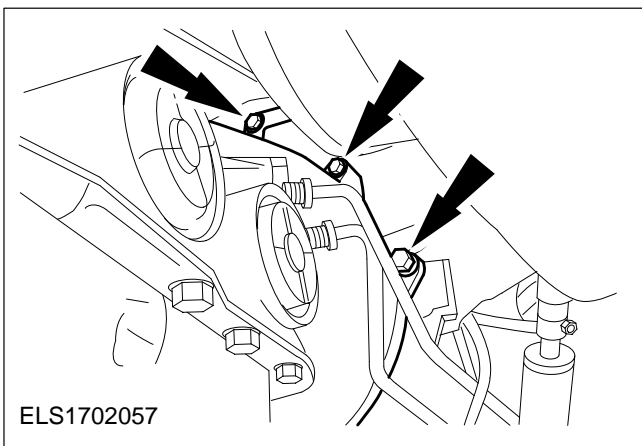


**16. Detach the torque converter.**

- Remove the rubber cover.
- Remove the four bolts.



**17. Unscrew the three transmission flange bolts on the left-hand side.**



**18. Unscrew the three transmission flange bolts on the right-hand side.**

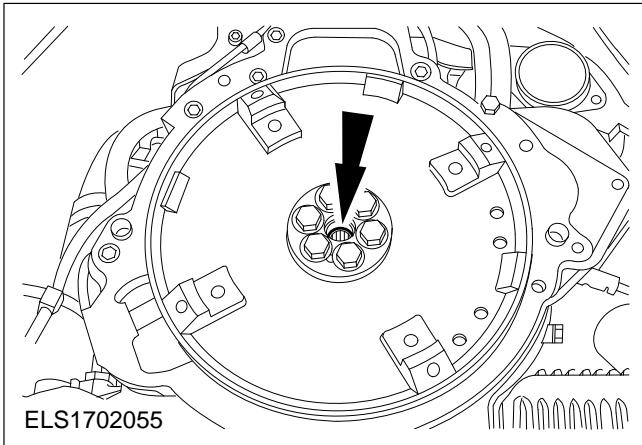
- Remove the bracket for the oil pipes.

**19. Separate the transmission from the engine and lower it carefully.**

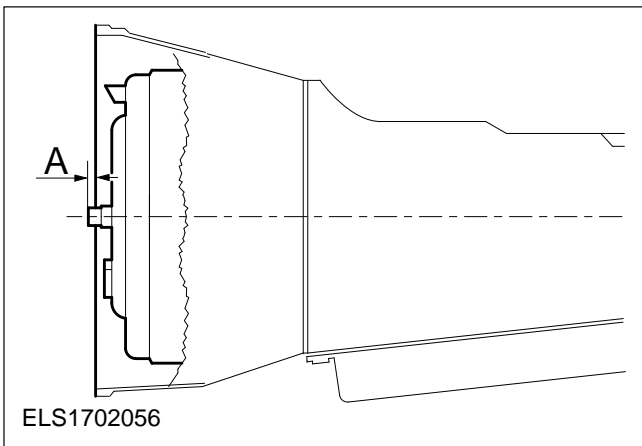
Install

**20. General note.**

Renew the self-locking nuts.



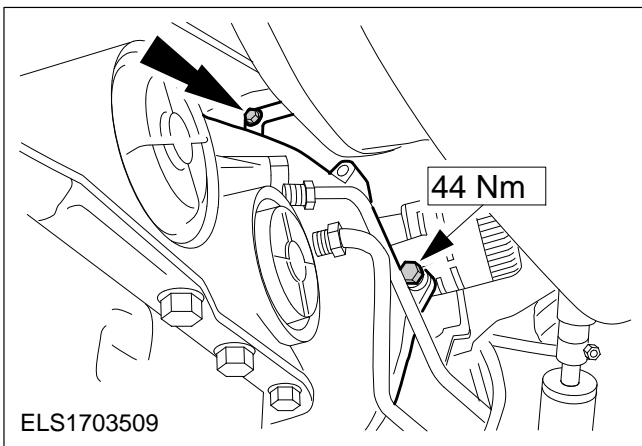
**21. Apply high-temperature grease (ESDM-1C220-A) to the bore for the torque converter spigot.**



**NOTE:** The hub of the torque converter must engage fully with the oil pump driving gear.

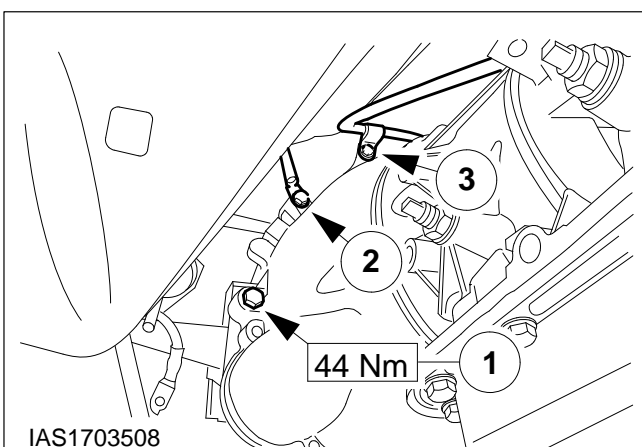
**22. Check the torque converter installation depth:**

Measurement "A" between the torque converter housing flange and the torque converter locating spigot should be approx. 4 mm.



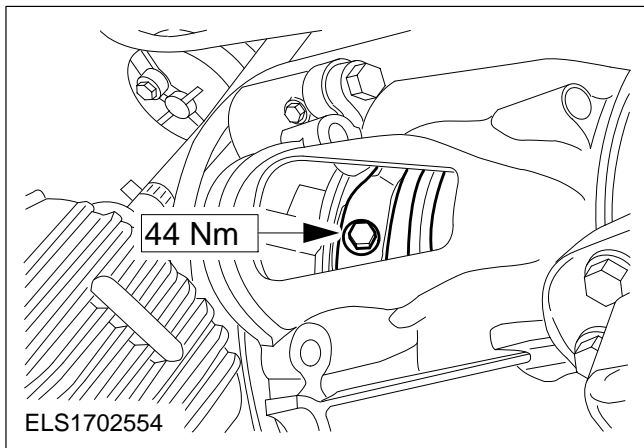
**23. Screw in the transmission flange bolts on the right-hand side.**

Attach the bracket for the oil pipes.



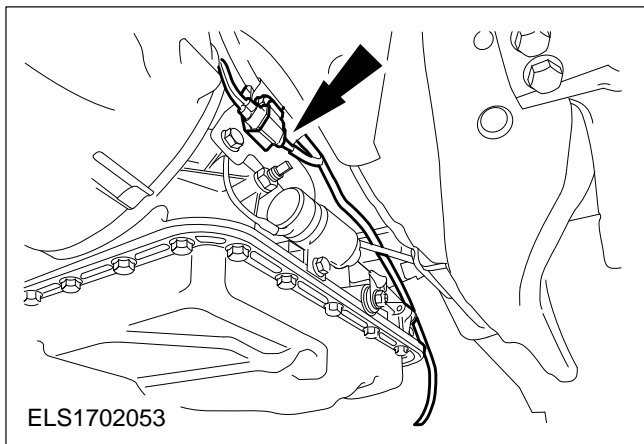
**24. Screw in the transmission flange bolts on the left-hand side.**

- 1 Bolt.
- 2 Bolt with ground lead.
- 3 Bolt with wiring clamp.



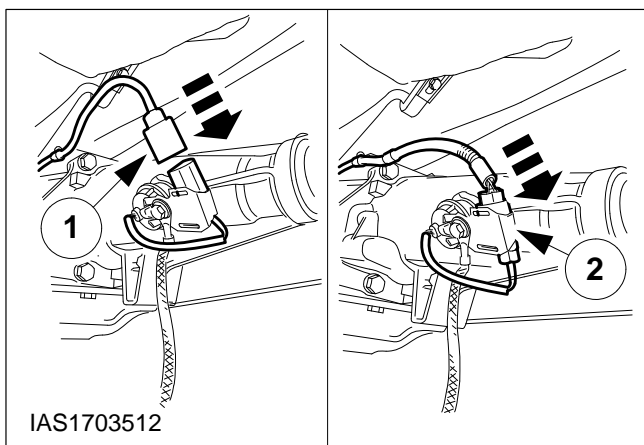
## 25. Screw in the four torque converter bolts.

Fit the rubber cover.



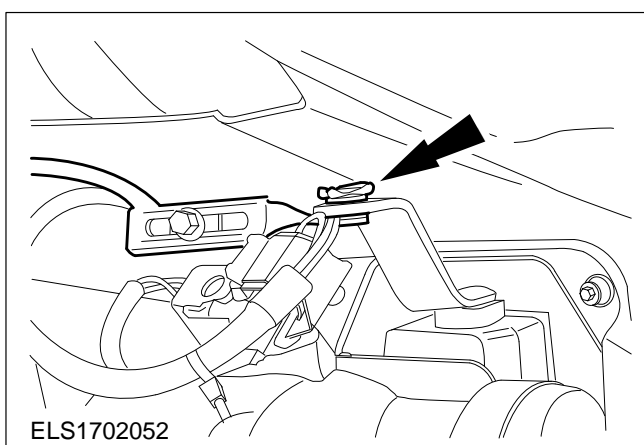
## 26. Fit the transmission wiring harness.

- Connect the kickdown solenoid multiplug and fit it in the bracket.



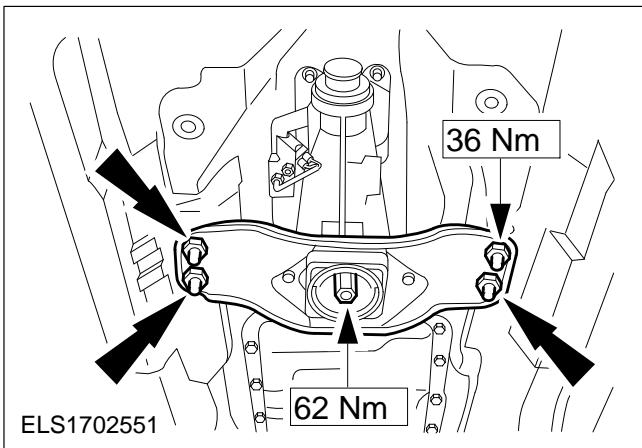
## 27. Connect the VSS multiplug and slide it into the bracket.

Connect the other multiplugs.



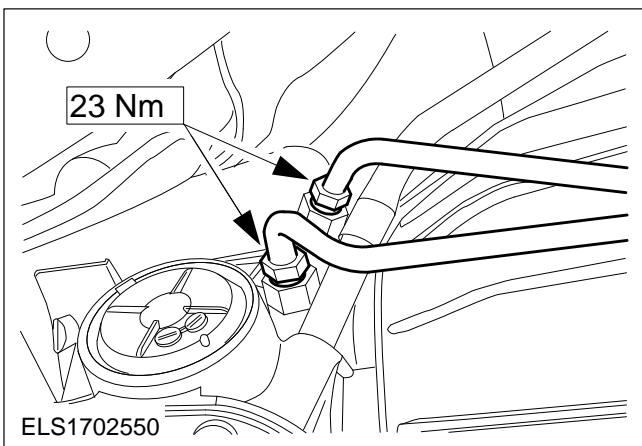
## 28. Connect the selector rod to the transmission.

- Fit the clip.

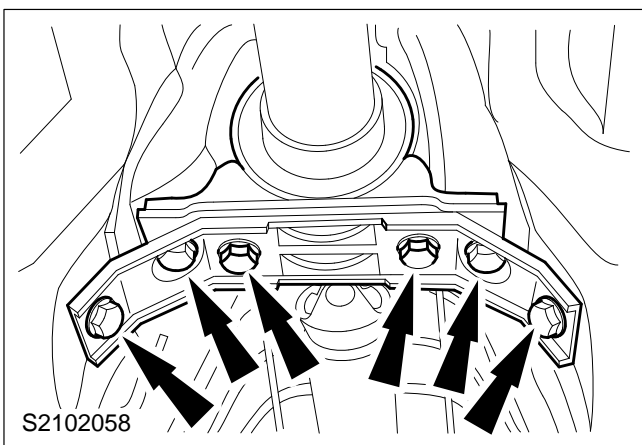


### 29. Attach the transmission crossmember.

- Raise the transmission using a transmission jack.



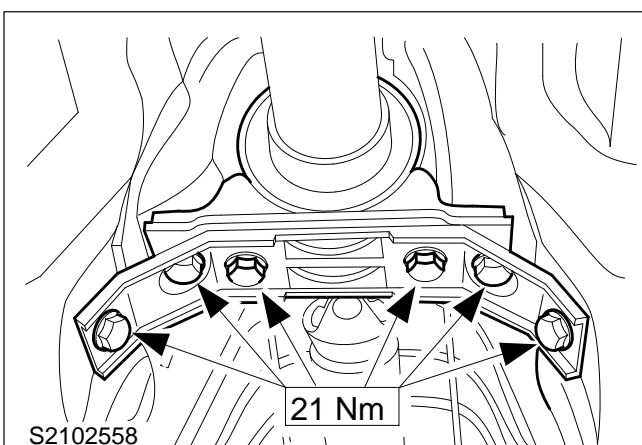
### 30. Fit the transmission oil pipes.



**NOTE:** A spacer washer must be placed between the floor assembly and the centre bearing in each case.

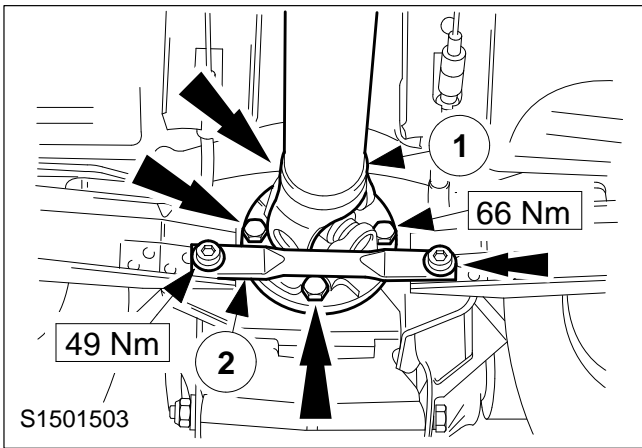
### 31. Fit the driveshaft.

- Pull the auxiliary plugs out of the transmission.
- Guide the driveshaft into the transmission.
- Attach the centre bearing to the floor assembly (do not tighten the bolts yet).



### 32. Align the centre bearing so that it is free of strain and tighten the bolts.





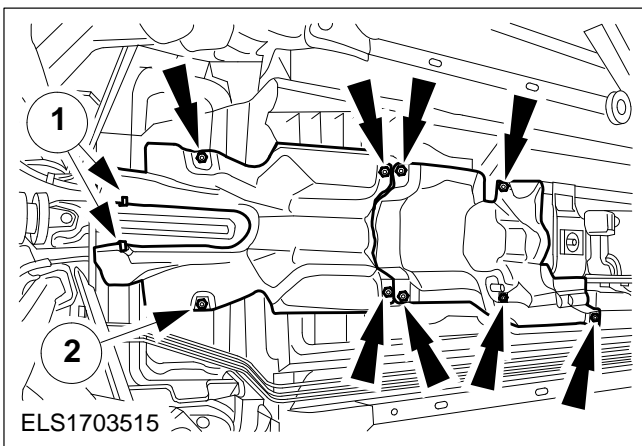
**CAUTION:** The driveshaft is finely balanced using bolts of different lengths. Note the marks showing the installation position of the driveshaft and bolts.

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

1 Attach the driveshaft to the rear axle flange.

**NOTE:** There is no transverse brace on vehicles from 01/96 onwards.

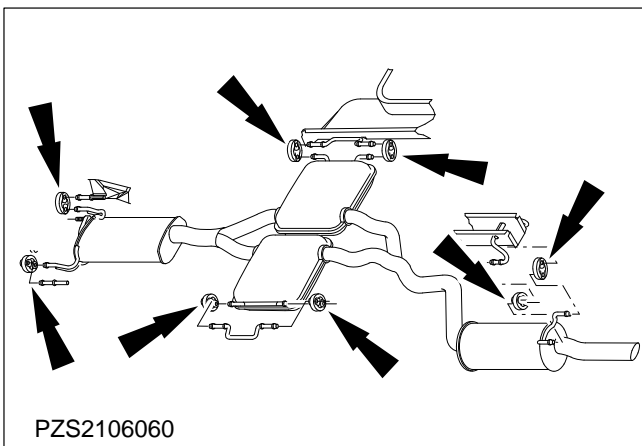
2 Attach the transverse brace.



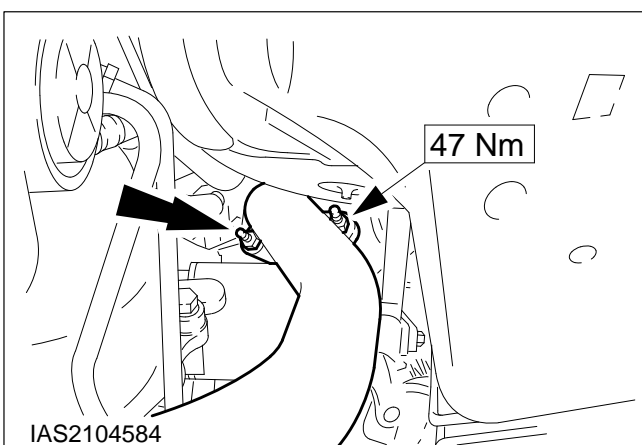
**34. Fit the two heat shields (nine nuts, two clips).**

1 Clips

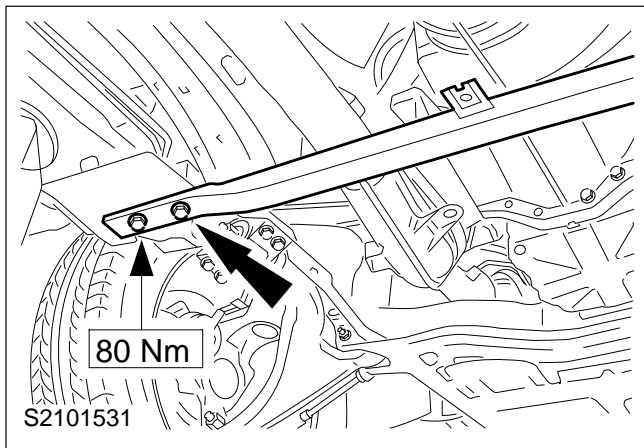
2 Nuts



**35. Suspend the exhaust system in the rubber insulators.**



**36. Attach the front exhaust pipe to the exhaust manifold.**



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

**38. Fit the engine cover.**

- Lower the vehicle.

**39. Standard finishing operations:**

- Check the fluid levels and rectify as necessary.
- Check the routing of the wiring and secure it with cable ties.
- Take off the protective covers.
- Connect the battery negative lead.
- Fit the battery cover.
- Enter the radio keycode.
- Reprogramme the preset radio stations.
- Reset the clock.
- Carry out a road test to enable the PCM to collect data.
- Check the fluid levels again.