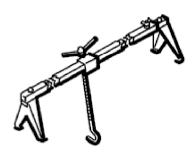
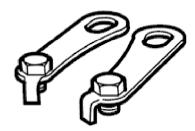
Transmission - Removal 44.20.01

Special Service tools



E36400

Engine support 303-021

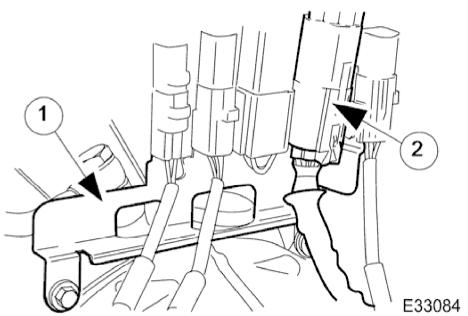


E36403

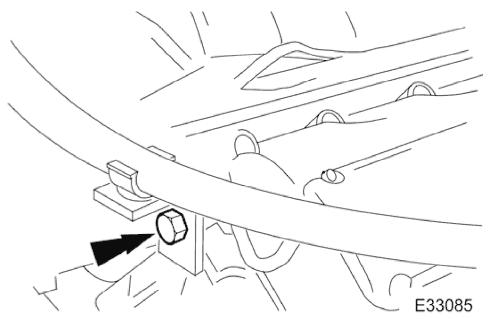
Engine lifting brackets 303-536

Removal

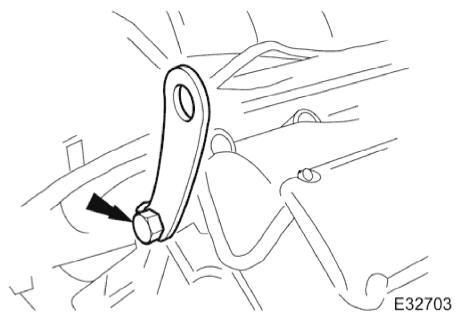
- 1. Select N gear position.
- 2. Disconnect the battery ground lead.
- 3. Remove the engine covers. Refer to Operation 12.30.06.
- 4. Remove the air intake tube, MAFM and air cleaner cover assembly. Refer to Operation 19.10.30.



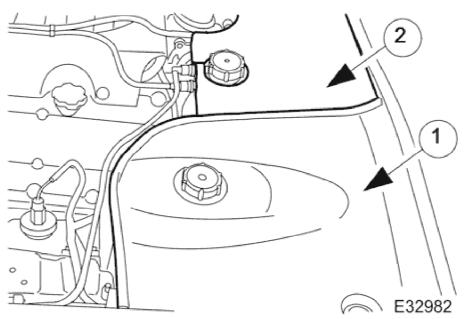
- 5. Disconnect the transmission link lead connector.1. Release the connector from its mounting bracket.
 - 2. Disconnect the multiplug.



- 6. Remove the EMS harness mounting bracket.
 - Release the bolt, bracket to cylinder head.

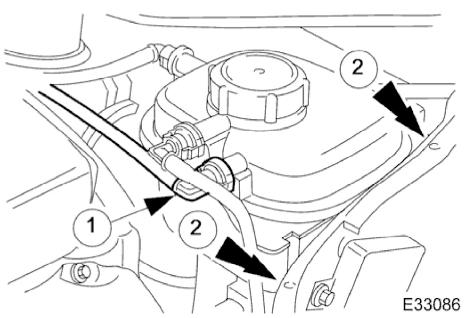


7. Fit engine lifting bracket 307 - 536 at the rear RH.

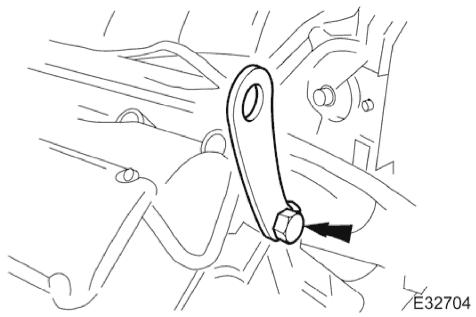


- 8. Remove the centre trim panel from the engine compartment.1. Remove the left hand side enclosure panel.

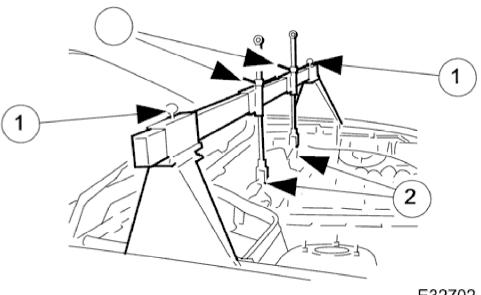
 - 2. Remove the centre trim panel.



- 9. Move the coolant header tank for access.
 - Disconnect the bleed pipe, header tank to radiator.
 Remove the header tank fixings.



10. Fit engine lifting bracket 307 - 536 at the rear LH.

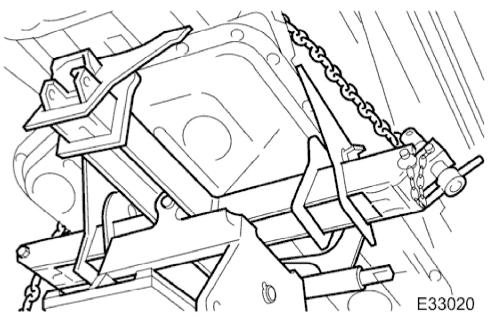


E32702

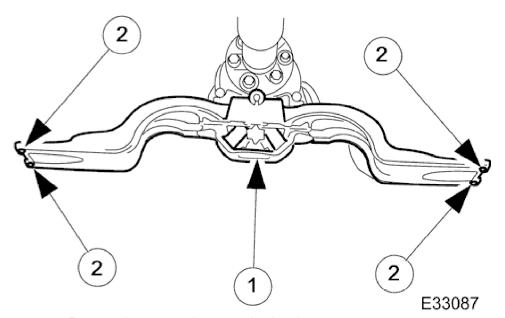
- 11. Support the engine using 307 021.
 - 1. Adjust and locate the side support brackets to fit into the LH and RH body channels and tighten the beam fixings.
 - 2. Engage the support hooks into the engine rear lifting brackets.
 - 3. Tighten the support hook adjusters to take the weight of the engine.
- 12. Raise the vehicle for access.
- 13. Remove the LH downpipe catalytic converter. Refer to Operation 17.50.09.
- 14. Remove the front muffler. Refer to Operation <<30.10.18>>.
- 15. Remove the RH downpipe catalytic converter. Refer to Operation 17.50.09 and 17.50.10.

5

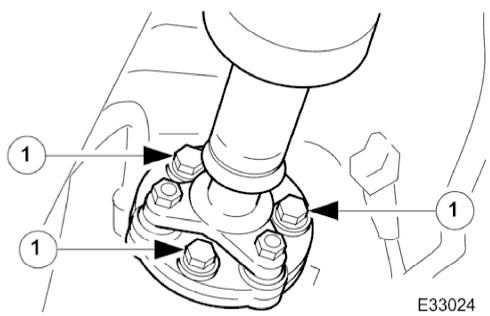
16. Drain the transmission fluid. Refer to Operation <<44.24.02>>.



- 17. Locate an Epco V-100, or similar lift, under the transmission unit.
 - Adjust the angle of the lift to suit the transmission.
 - Secure the side clamps.
 - Pass the safety chain over the transmission unit and tighten the clamp to secure the assembly.



- 18. Remove the rear engine mounting bracket.
 - 1. Remove the centre bolt from the engine/transmission mounting.
 - 2. Remove the four bolts which secure the mounting bracket to the body.



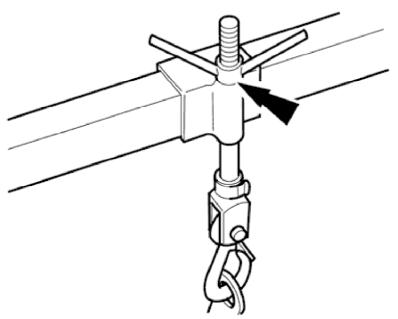
- 19. Detach the driveshaft (prop-shaft) from the transmission drive flange.
 - If the transmission is to be refitted, mark the position of the coupling relative to the drive flange.

7



Under no circumstances remove the driveshaft to flexible coupling fixings.

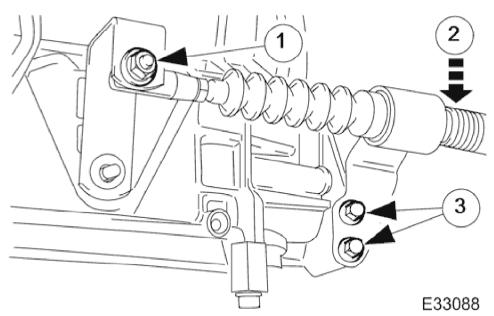
1. Remove the transmission drive flange to flexible coupling fixings.



20. Lower the transmission unit.

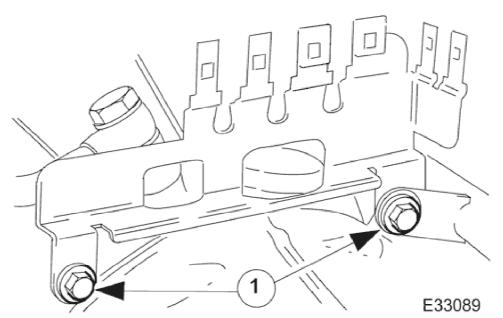
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E32743

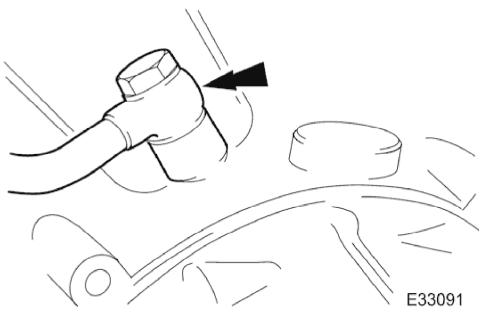


- 21. Detach the gear selector cable from the transmission unit.1. Remove the selector cable ball pin to selector lever nut.

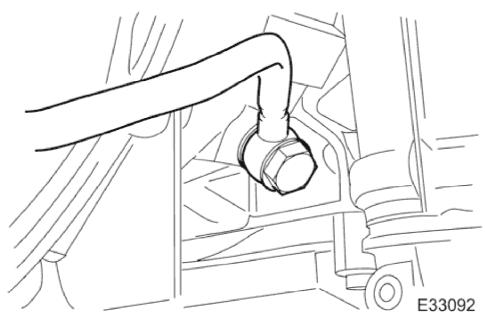
 - 2. Lower the transmission lift for access.
 - 3. Remove the selector cable to transmission casing bolts.



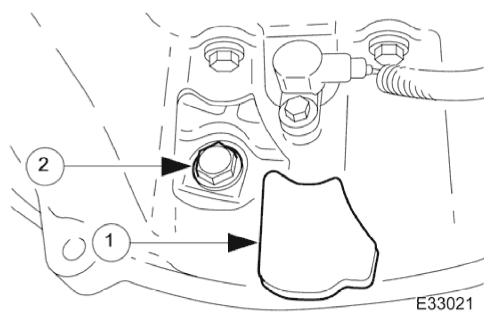
- 22. Release the transmission harness multiplug bracket.
 - 1. Remove the two bolts which secure the bracket to the transmission case, noting that one bolt also retains the dipstick tube.



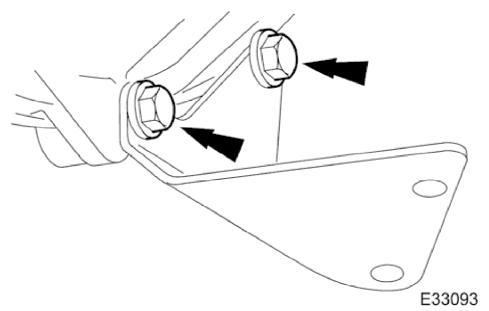
- 23. Disconnect the fluid cooler upper pipe.
 - Remove the bolt which secures the pipe to the cylinder block and remove the bracket.
 - Remove the 'banjo' bolt.
 - Discard the Dowty seals.
 - Fit blanking plugs to the pipe and transmission.



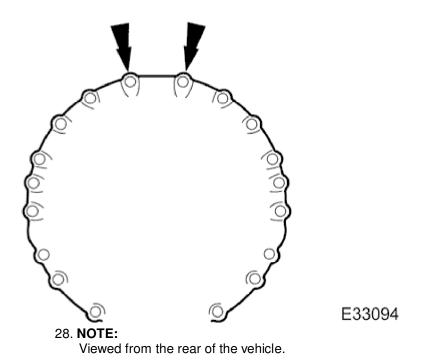
- 24. Disconnect the fluid cooler lower pipe.
 - Remove the 'banjo' bolt.
 - Discard the Dowty seals.
 - Fit blanking plugs to the pipe and transmission.



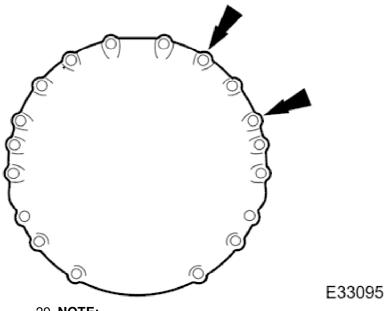
- 25. Remove the three bolts which secure the torque converter to the drive plate.
 - 1. Remove the access cover.
 - 2. Rotate the crankshaft for access to each bolt and hold to prevent movement. Remove each bolt.



- 26. Remove the LH and RH catalyst mounting brackets from the transmission case.
 - Remove the two bolts from each side.
- 27. On the RH side, clear the cooler pipe for access.



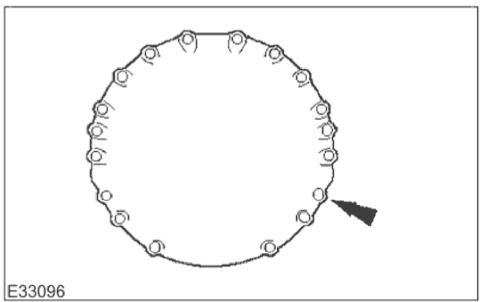
Remove the two upper bolts, as indicated, transmission to engine.



29. **NOTE:**

Viewed from the rear of the vehicle.

Remove the two bolts which secure the starter motor power cable clip.

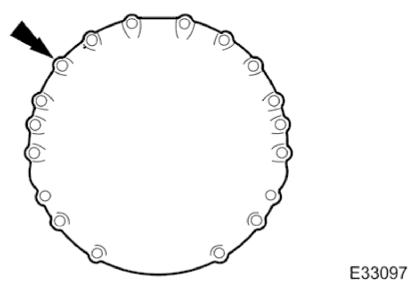


30. **NOTE:**

Viewed from the rear of the vehicle.

Remove the ground lead bolt.

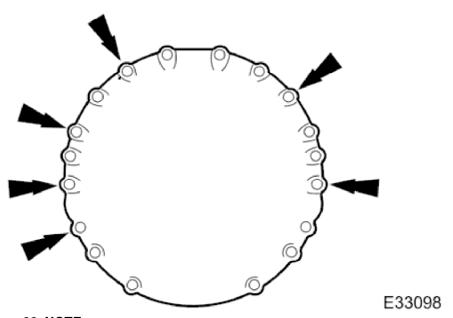
31. On the LH side.



32. **NOTE:**

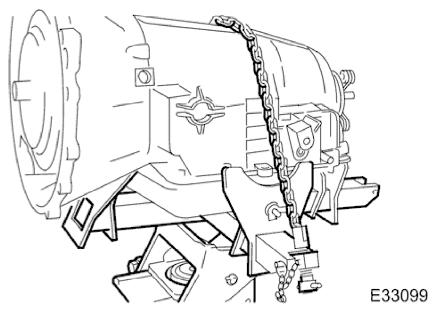
Viewed from the rear of the vehicle.

Remove the bolt which secures the cooler upper pipe clip to the transmission case.



33. **NOTE:** Viewed from the rear of the vehicle.

Remove the six remaining bolts from the transmission case to cylinder block.

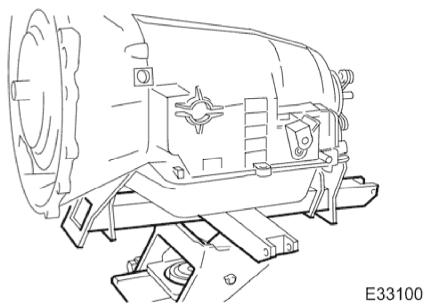


34. **NOTE:**

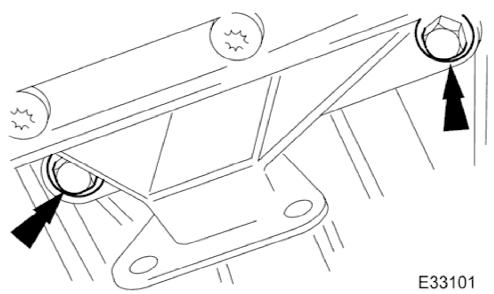
Do not allow the converter to detach from the transmission.

Remove the transmission / converter assembly from the vehicle.

• Lower the lift and remove the transmission, ensuring that the torque converter spigot disengages cleanly.



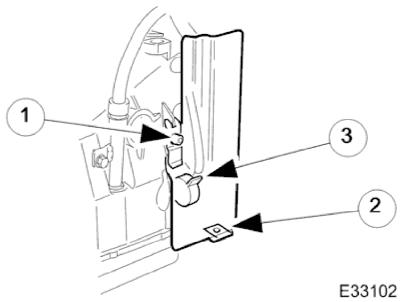
35. Remove the side clamps and chain for access.



- 36. Remove the front muffler mounting bracket.
 - Remove the two bolts which secure the bracket to the transmission case.



- 37. Remove the transmission dipstick tube.
 - 1. Remove the fixing which secures the tube to the case.
 - Discard the filler tube 'O' ring.
 - 2. Fit a blanking plug to the transmission casing orifice.



- 38. Remove the harness link lead.
 - 1. If required, slacken the harness heatshield spring clamp bolt.
 - 2. Remove the heatshield lower bolt.
 - 3. Release the harness multi-lock lever, disconnect and remove the harness.
- 39. If appropriate, fit retaining straps to the converter / transmission assembly.