



SECTION 303-01B: Engine — 2.5L
REMOVAL

1999 Cougar Workshop Manual
Procedure revision date: 09/14/2001

Engine — Vehicles With: Automatic Transaxle

Special Tool(s)

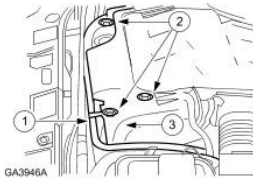
 <p>TOOL3290D</p>	<p>Separator, Ball Joint 211-001 (Tool-3290-0)</p>
 <p>T70P6000</p>	<p>Lifting Bracket, Engine 303-050 (T70P6000)</p>

Removal

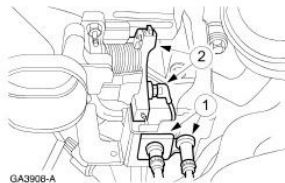
- NOTE:** The location of engine mountings and engine support insulators are described looking from the transaxle to the engine.

Remove the front wheels. For additional information, refer to Section [204-04](#).

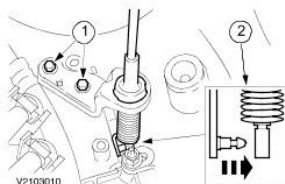
- Remove the battery. For additional information, refer to Section [414-01](#).
- Remove the hood.
- Remove the bolts and the water pump pulley cover.
 - Detach the coolant hose from the clip.
 - Remove the bolts.
 - Remove the cover.



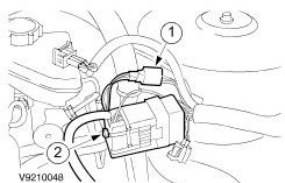
- Remove the air cleaner (ACL). For additional information, refer to Section [303-12B](#).
- Drain the cooling system. For additional information, refer to Section [303-03](#).
- Disconnect the accelerator and speed control cables.
 - Detach the cables from the bracket.
 - Disconnect the accelerator and speed control cables.



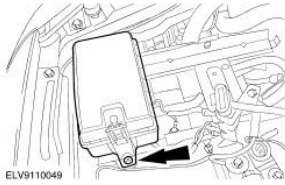
- Remove the selector cable.
 - Remove the bolts.
 - Disconnect the cable.



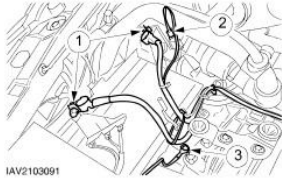
- Disconnect the bulkhead electrical connectors.
 - Disconnect the electrical connector.
 - Remove the bolt and disconnect the electrical connector.



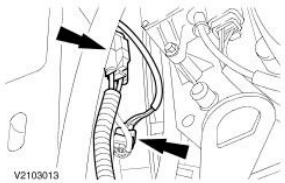
10. Detach the central junction box (CJB) and position it to one side.



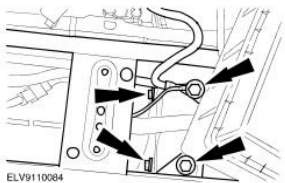
11. Disconnect the cables.
1. Battery cables.
 2. Electrical connector.
 3. Ground cable.



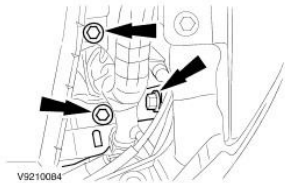
12. Disconnect the fan motor electrical connectors.



13. Remove the battery bracket bolts and remove the two ground cables.

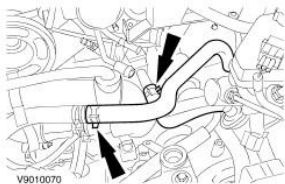


14. Remove the battery bracket.

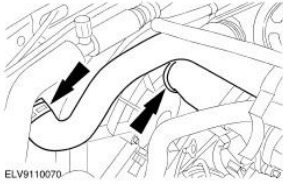


15. Disconnect the fuel line. For additional information, refer to Section [310-00](#).

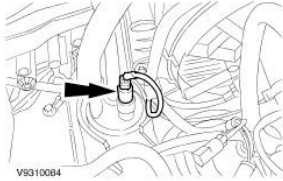
16. Disconnect the heater hoses.



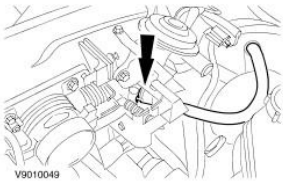
17. Disconnect the coolant hoses from the radiator and from the coolant passage.



18. Disconnect the suction accumulator electrical connector.

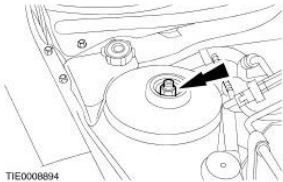


19. Disconnect the evaporative emission (EVAP) hose.

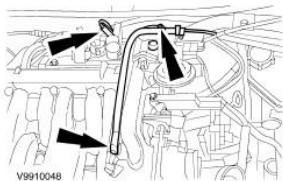


20. **NOTE:** Use an allen key to prevent the piston rod from turning.

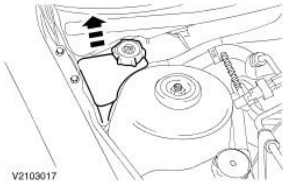
Loosen the suspension strut nuts five turns on both sides (right-hand side shown).



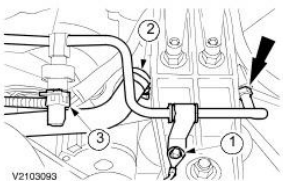
21. Disconnect the upper intake vacuum supply line and the heater control vacuum hoses.



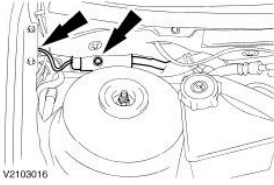
22. Drain the power steering fluid reservoir and pull it out (push-fit) and position it to one side.



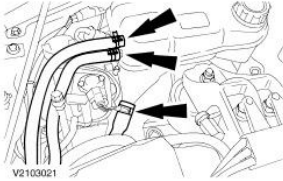
23. Disconnect the power steering hose.
1. Remove the bolt and the ground cable.
 2. Disconnect the power steering hose and position it to one side.
 3. Disconnect the connector.



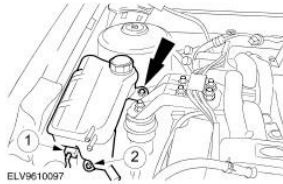
24. Disconnect the powertrain control module (PCM) and the ground cable.



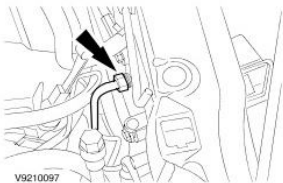
25. Disconnect the coolant expansion tank hoses.



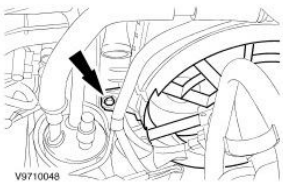
26. Remove the coolant expansion tank.
1. Disconnect the coolant level sensor connector.
 2. Remove the bolts.



27. Remove the transaxle upper cooling tube.
- Allow the fluid to drain into a suitable container.
 - Close off the openings with plugs.

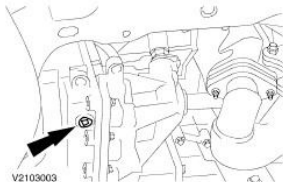


28. Remove the fan (one screw on each side).

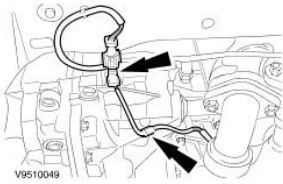


29. Raise and support the vehicle. For additional information, refer to Section [100-02](#).

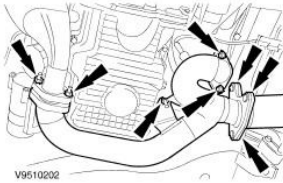
30. Remove the drain plug and drain the transmission fluid. For additional information, refer to Section [307-01](#).



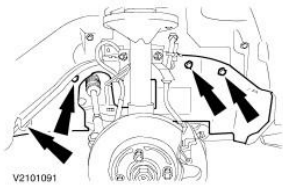
31. Drain the engine oil.
- Install the drain plug on completion.
32. Disconnect the heated oxygen sensor (HO2S) electrical connector.




33. Remove the dual converter Y-pipe.



34. Remove the right-hand fender splash shields.

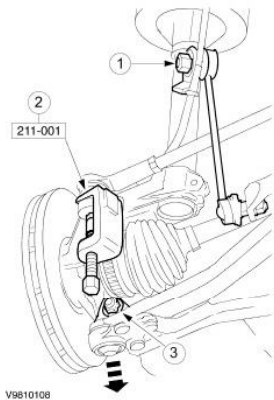


35.  **CAUTION:** Do not damage the boot or the ABS sensor ring.

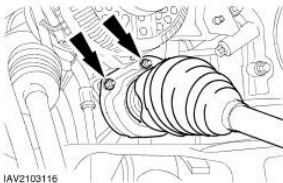
NOTE: Left-hand side shown, right-hand side similar.

Disconnect the suspension.

1. Disconnect the stabilizer link rods.
2. Using the special tool, disconnect the tie-rod ends.
3. Disconnect the lower suspension arm ball joints.
 - Disconnect the ABS wiring harness brackets from the suspension struts.



36. Remove the intermediate shaft bearing with the right-hand front drive halfshaft from the transaxle and secure it to one side with cable ties.



37. Remove the intermediate shaft bearing bracket.