
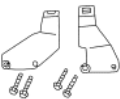


SECTION 303-01B: Engine — 4.6L (2V)  
REMOVAL

1999 Mustang Workshop Manual  
Procedure revision date: 04/19/2002

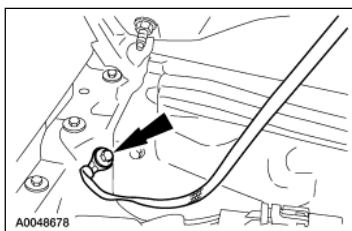
## Engine

### Special Tool(s)

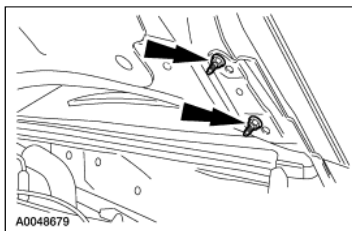
 <p>ST1502-A</p>	<p>Spreader Bar 303-D089 (D93P-6001-A3)</p>
 <p>ST1701-A</p>	<p>Lifting Bracket Set, Engine 303-D074 (D91P-6001-A)</p>

### Removal

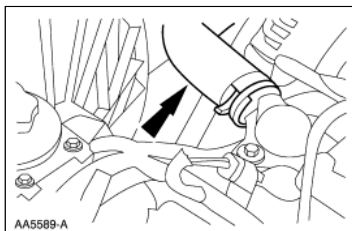
1. Place the gearshift lever in the neutral position.
2. Remove the hood ground strap.



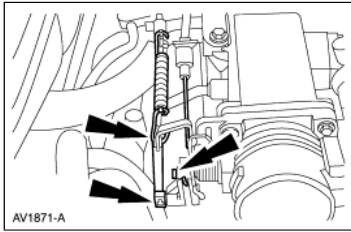
3. Remove the hood.



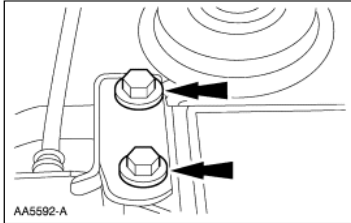
4. Drain the cooling system. For additional information, refer to [Section 303-03](#).
5. Recover the A/C system. For additional information, refer to [Section 412-00](#).
6. Remove the degas bottle. For additional information, refer to [Section 303-03](#).
7. Remove the air cleaner and outlet pipe. For additional information, refer to [Section 303-12](#).
8. Disconnect the fuel tube spring lock couplings. For additional information, refer to [Section 310-00](#).
9. Disconnect the upper radiator hose from the water outlet adapter.



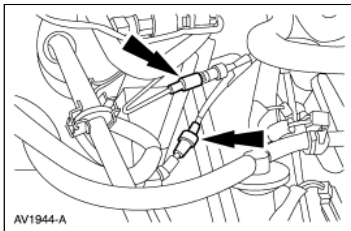
10. Disconnect the throttle and speed control cables, and remove the return spring.



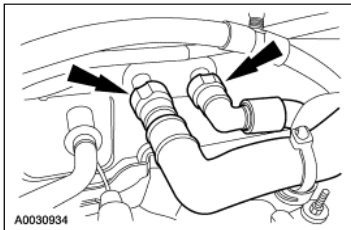
11. Remove the bolts and position the cables and bracket out of the way.



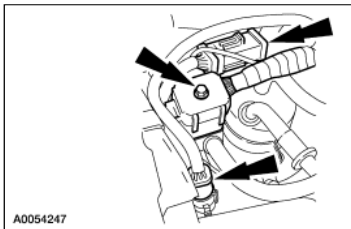
12. Disconnect the climate control vacuum supply hoses.



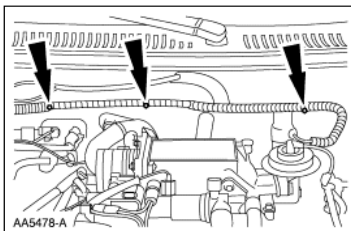
13. Disconnect the two heater water hoses.



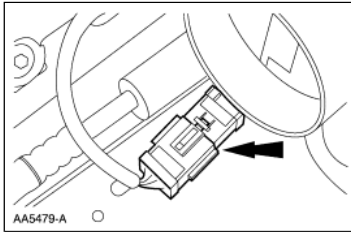
14. Disconnect the wiring harness connectors.



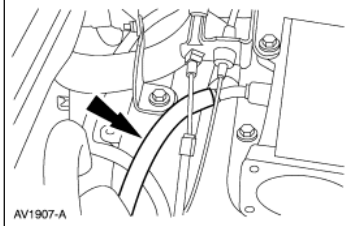
15. Unclip the harness in three locations.



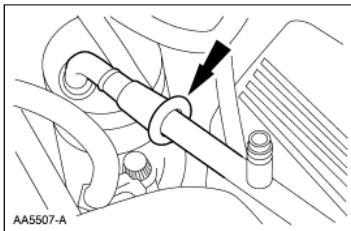
16. Disconnect the electrical connector.



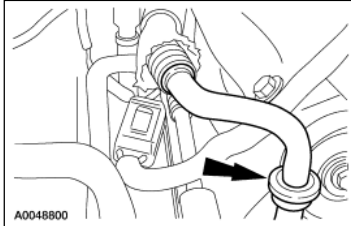
17. Disconnect the evaporative emissions (EVAP) return tube.



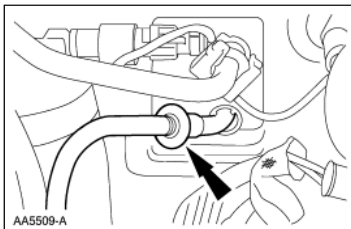
18. Disconnect the A/C suction tube from the accumulator.



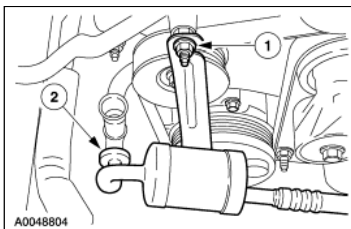
19. Disconnect and remove the A/C suction tube.



20. Disconnect the A/C tube and position the tube aside.

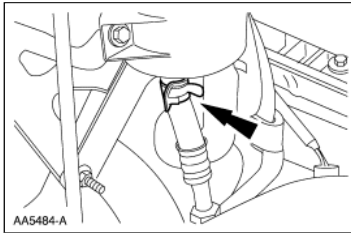


21. Position the A/C manifold and tube assembly aside.
1. Remove the bracket nut.
  2. Disconnect the A/C tube and position the components aside.

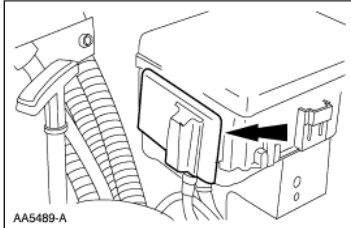


22. **NOTE:** Drain power steering fluid into a suitable container.

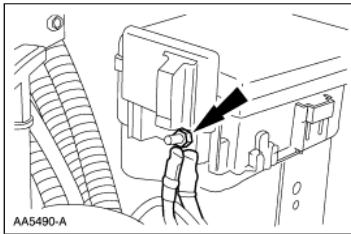
Disconnect the power steering hose from the reservoir.



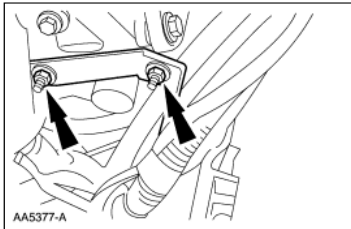
23. Slide the access cover up.



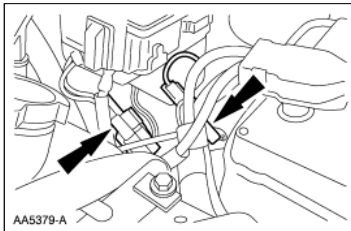
24. Remove the nut and the battery leads.



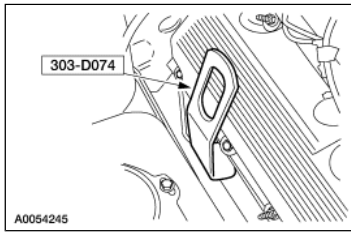
25. Remove the wiring support bracket.



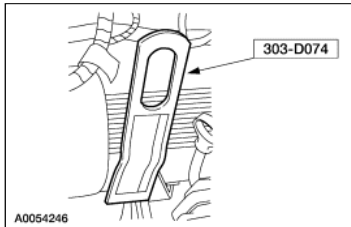
26. Disconnect the electrical connectors.



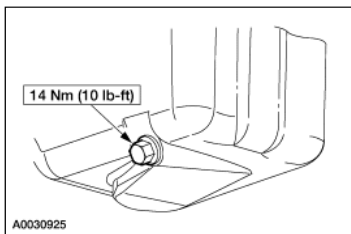
27. Position the RH lifting bracket.



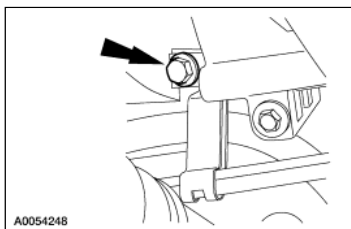
28. Install the LH lifting bracket.



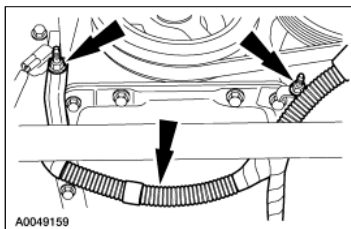
29. Remove the transmission. For additional information, refer to [Section 308-03A](#) (T5OD), [Section 308-03B](#) (TR3650) or [Section 307-01](#) for automatic transmissions.
30. Drain the engine oil.
- Install the drain plug when finished.



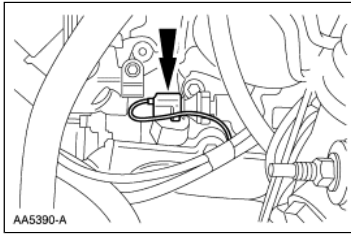
31. Remove the nut and position the wiring harness aside. If equipped, also position the transmission cooler tubes aside.



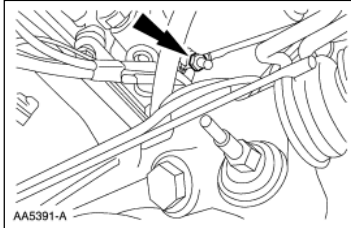
32. Remove the wiring harness retaining nuts. Position the wiring harness aside.



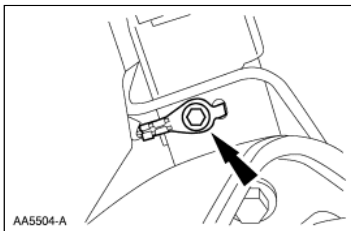
33. Disconnect the oil pressure sensor electrical connector.



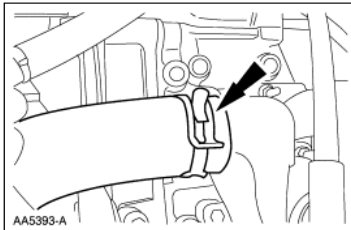
34. Remove the nut and the engine ground cable.



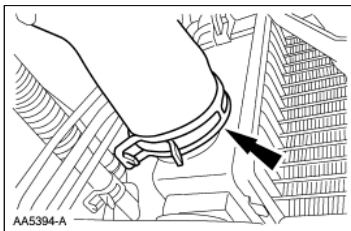
35. Remove the bolt and the body ground.



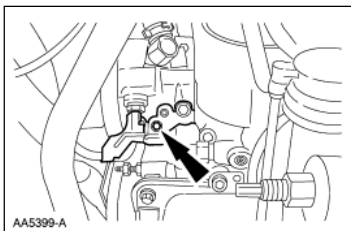
36. Disconnect the lower radiator hose from the oil filter adapter.



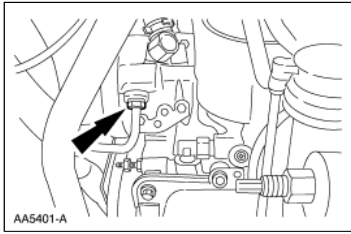
37. Disconnect and remove the lower radiator hose.



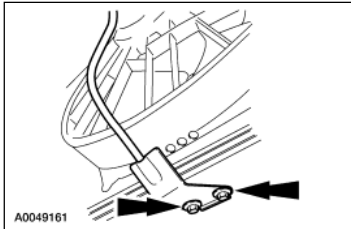
38. Remove the bolt and the anti-rotational clip.



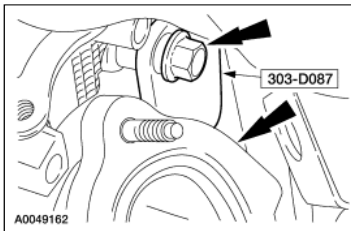
39. Disconnect the high pressure tube from the power steering pump.



40. Remove the degas bottle support bracket.

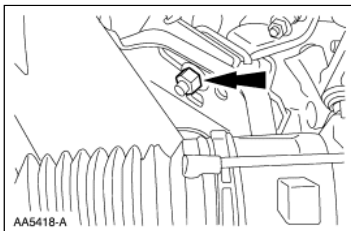


41. Install the bolts for the RH lifting bracket.

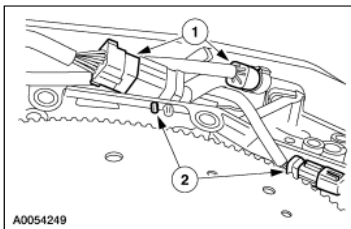


42. **NOTE:** RH shown, LH similar.

Remove the engine mount nuts.



43. Remove the transmission wiring harness.
1. Disconnect the transmission wiring harness electrical connectors.
  2. Detach the oxygen sensor and the wiring harness electrical connectors, and remove the wiring harness.



44. Lower the vehicle.
45. Using a floor crane and the special tool, remove the engine from the vehicle.

