
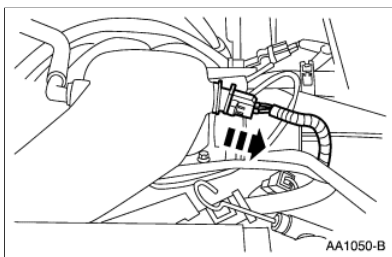


Engine**Special Tool(s)**

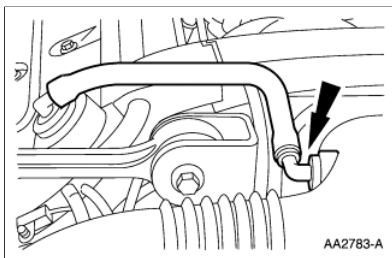
 <p>ST1802-A</p>	<p>Spreader Bar Set 303-D089 (D93P-6001-A3)</p>
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Removal

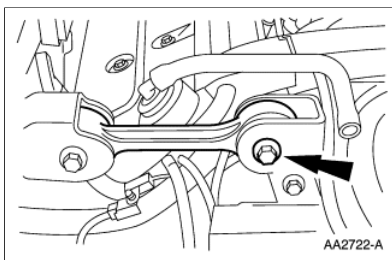
1. Disconnect the battery ground cable (14301).
2. Remove the LH dash close-out panel.
 - Remove the three pushpins.
 - Disconnect the courtesy lamp.
3. Remove the steering column boot.
 - Remove the bolts.
 - Position the boot.
4. Disconnect the steering column from the steering gear.
 - Remove the steering column pinch bolt.
 - Separate the steering column from the steering gear.
5. Disconnect the engine control sensor wiring (12A581) from the intake air temperature sensor (IAT sensor) (12A697).



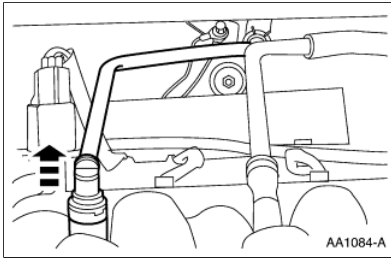
6. Disconnect the crankcase ventilation tube (6758) from the air cleaner outlet tube (9B659).



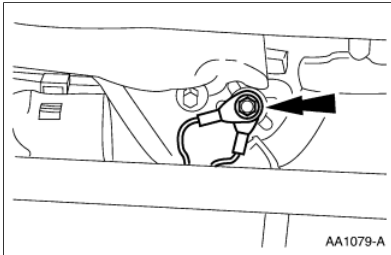
7. Remove the air cleaner outlet tube; refer to [Section 303-12](#).
8. Remove the bolt and position the upper motor mount out of the way.



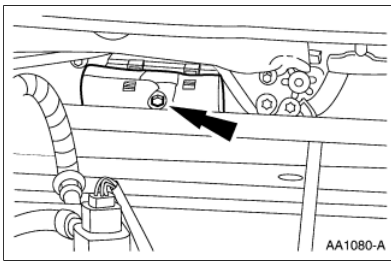
9. Drain the cooling system; refer to [Section 303-03](#).
10. Recover the A/C system; refer to [Section 412-00](#).
11. Disconnect the fuel tube (9291); refer to [Section 310-01](#).
12. Disconnect the chassis vacuum supply hose.



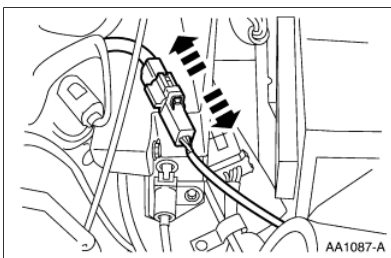
13. Disconnect the dash panel ground straps.



14. Disconnect the engine control sensor wiring from the powertrain control module (PCM) (12A650).



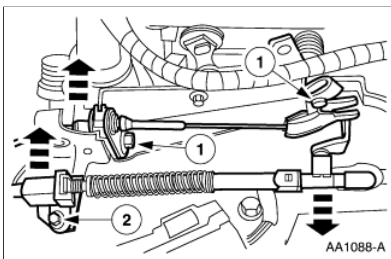
15. Disconnect the engine control sensor wiring from the mass air flow sensor (MAF sensor) (12B579).



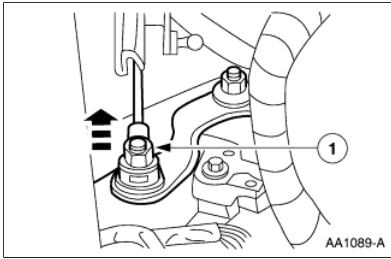
16. Disconnect the engine control sensor wiring from the traction control motor and the throttle position sensor (TP sensor) (9B989).

17. Remove the accelerator cable snow shield.

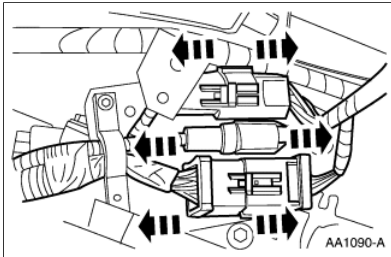
18. Disconnect the accelerator cable (9A758) and the speed control actuator cable (9A825) from the accelerator cable bracket (9723).



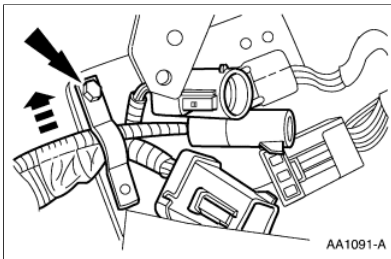
19. Disconnect the manual control cable from the transmission shift selector.
1. Remove the retaining nut and clip.
 - Disconnect the manual control lever.



20. Disconnect the engine control sensor wiring from the three main engine compartment wiring harness connectors.



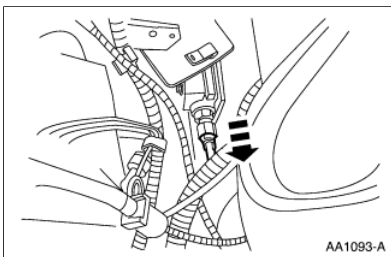
21. Remove the bolt from the retaining bracket and position the main engine compartment harness out of the way.

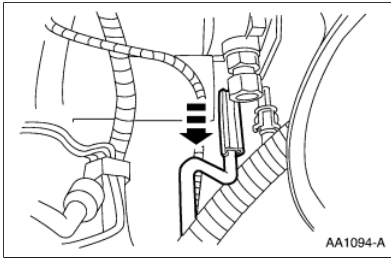


22. Disconnect the vapor management line.

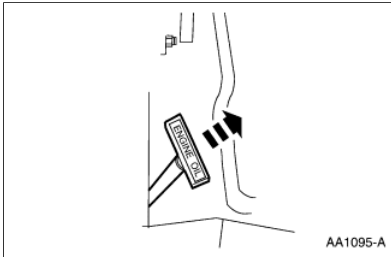


23. Disconnect the transaxle cooler tubes.
- Disconnect the fluid cooler inlet tube (7A030).
 - Disconnect the transaxle cooler outlet tube.

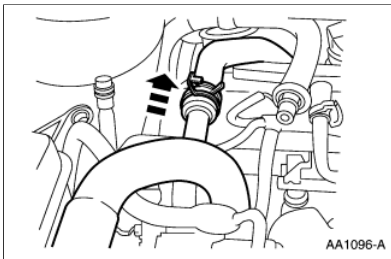




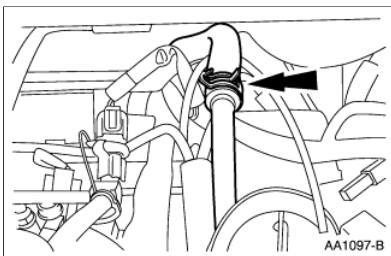
24. Remove the oil level dipstick (6750).



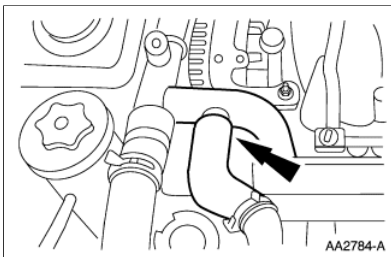
25. Disconnect the heater water hose from the water bypass tube.



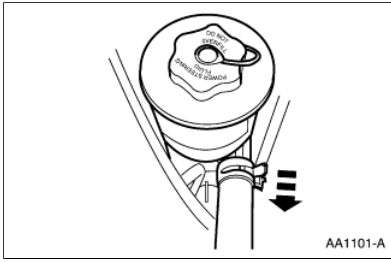
26. Disconnect the heater water hose (18472) from the RH cylinder head (6049).



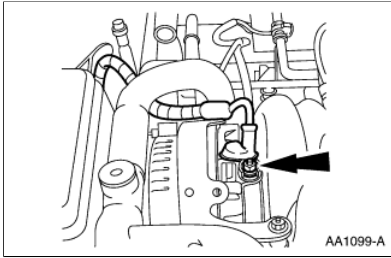
27. Disconnect the upper radiator hose (8260).



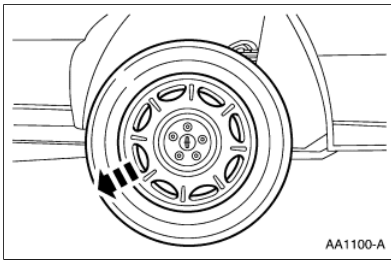
28. Disconnect the power steering return hose (3A713) and allow to drain.



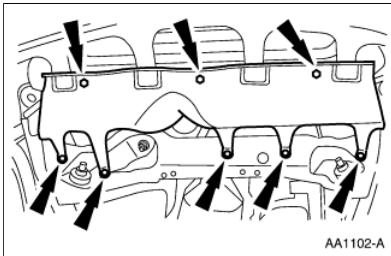
29. Disconnect the generator wiring harness.



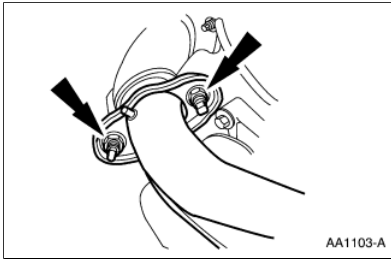
30. Partially raise the vehicle; refer to [Section 100-02](#).
 31. Remove the front wheel and tire assemblies; refer to [Section 204-04](#).



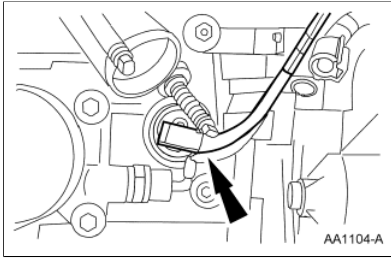
32. Disconnect the RH and LH height sensor links.
 33. Disconnect the RH and LH front stabilizer bar link (5K483); refer to [Section 204-01](#).
 34. Separate the RH and LH front suspension lower arms from the front wheel knuckles (3K186); refer to [Section 204-01](#).
 35. Separate the RH and LH tie rod ends from the front wheel knuckles; refer to [Section 211-02](#).
 36. Remove the RH and LH front axle wheel hub retainers (3B477); refer to [Section 204-01](#).
 37. Remove the RH and LH halfshafts from the front wheel knuckle; refer to [Section 205-04](#).
 38. Raise the vehicle; refer to [Section 100-02](#).
 39. Remove the lower radiator air deflector.



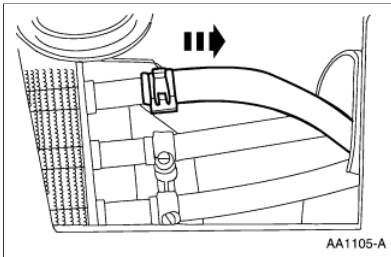
40. Remove the dual converter Y pipe (5F250); refer to [Section 309-00](#).



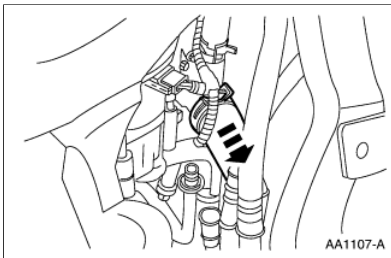
41. Disconnect the block heater wiring.



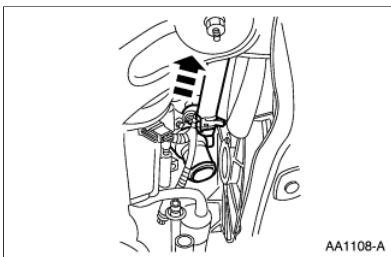
42. Disconnect the power steering cooler line.



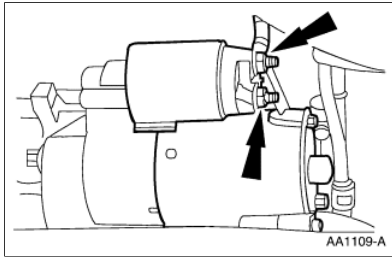
43. Disconnect the A/C compressor lines; refer to [Section 412-00](#).
 44. Disconnect the lower radiator hose (8286).



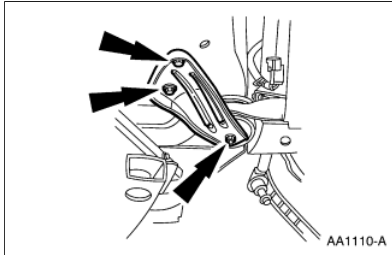
45. Disconnect the water bypass hose (8597).



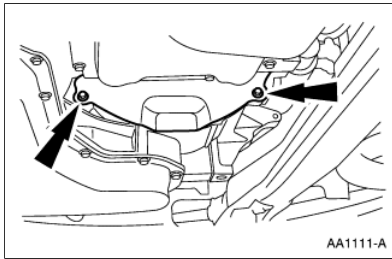
46. Disconnect the engine control sensor wiring from the starter motor (11001) ; refer to [Section 303-06](#).



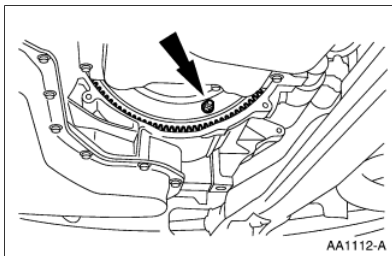
47. Remove the front sub-frame brackets.



48. Remove the torque converter shield.

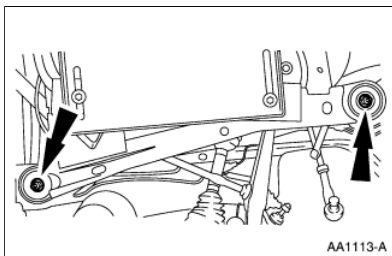


49. Remove the four nuts.



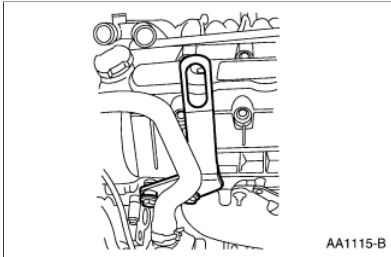
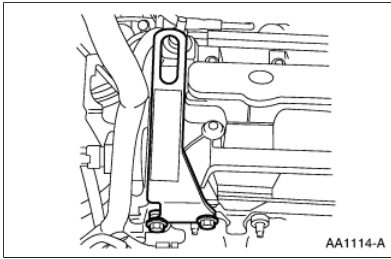
50. Support the front sub-frame with a Powertrain Lift and Universal Powertrain Removal Bracket.

51. Remove the four bolts.

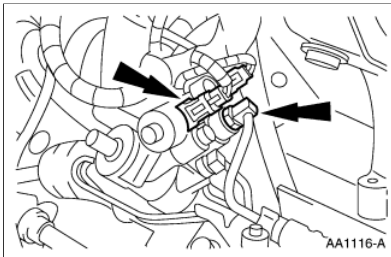


52. Lower the subframe.

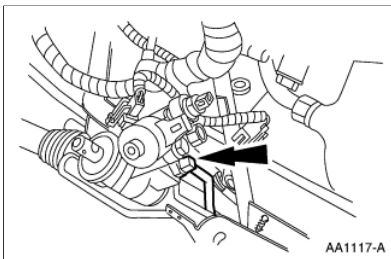
53. Install the Spreader Bar Set.



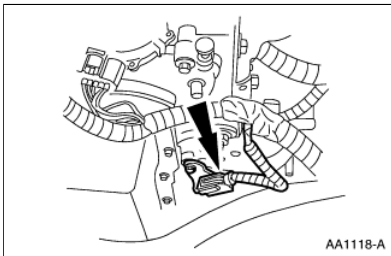
54. Support the engine and transaxle with a spreader bar and a suitable floor crane.
55. Disconnect the engine control sensor wiring from the steering gear.



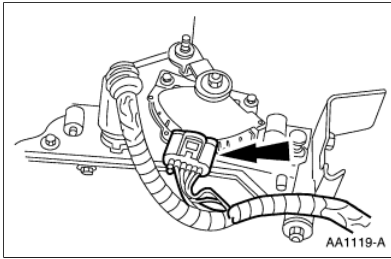
56. Disconnect the power steering return hose from the steering gear.



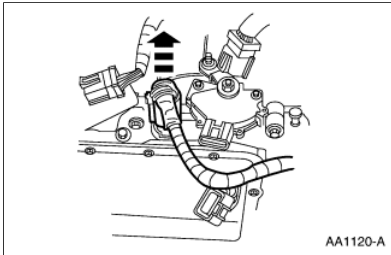
57. Disconnect the turbine shaft speed sensor.



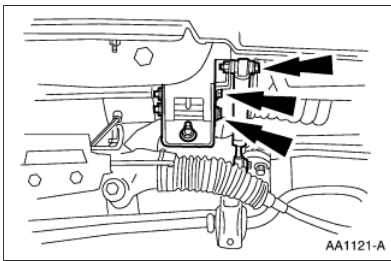
58. Disconnect the digital transmission range (TR) sensor.



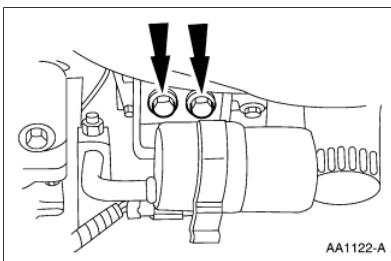
59. Disconnect the internal transmission wiring harness connector.



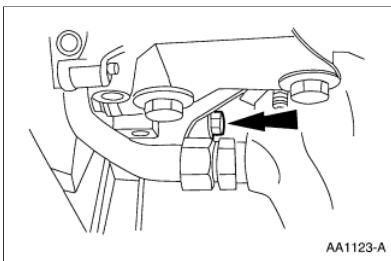
60. Disconnect the RH engine support insulator.



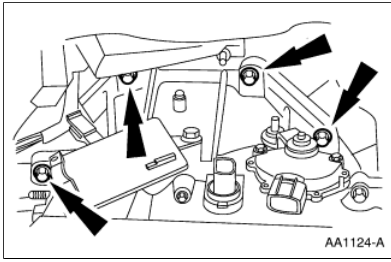
61. Remove the bolts retaining the LH engine support insulator.



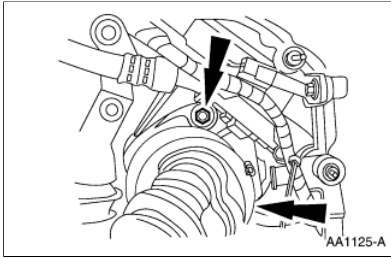
62. Remove the two bolts.



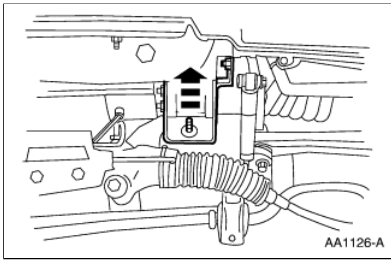
63. Remove the four bolts.



64. Remove the two bolts.

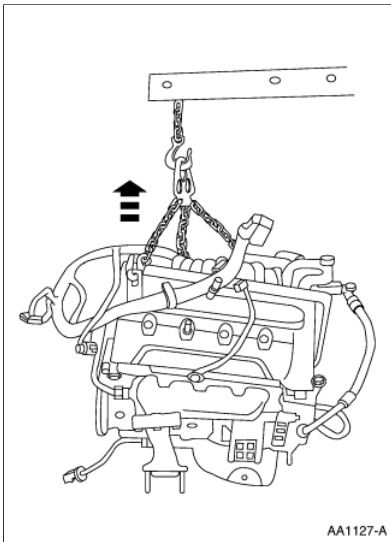


65. Remove the RH engine support insulator bracket.

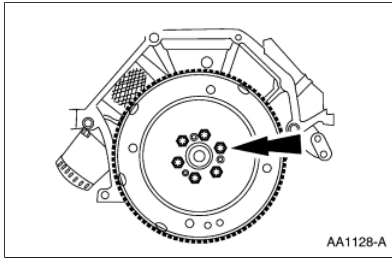


66. Separate the engine from the transaxle.

67. Remove the engine assembly.



68. Remove the bolts.



69. Place the engine on a suitable work stand.
 70. Remove the engine lifting equipment.
 71. Remove the water jacket pipe plugs.
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