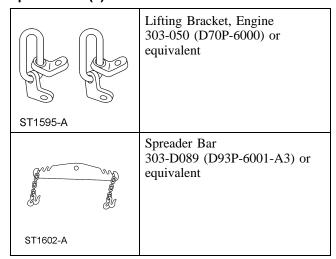
INSTALLATION

Engine

Special Tool(s)



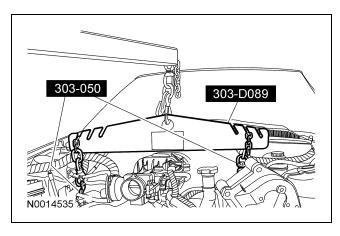
Material

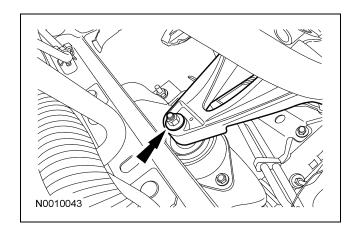
Item	Specification
Motorcraft SAE 5W-30 Premium Synthetic Blend Motor XO-5W30-QSP (in Canada Motorcraft SAE 5W-30 Super Premium Motor Oil CXO-5W30-LSP12) or equivalent	WSS-M2C929-A

Installation

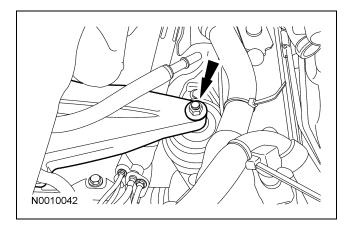
All vehicles

1. Using the special tools, position the engine in the vehicle.

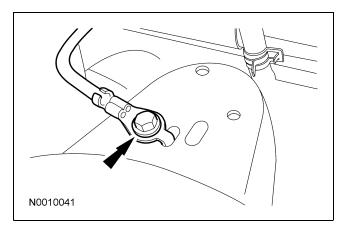




- 3. Install the LH engine mount nut.
 - Tighten to 63 Nm (46 lb-ft).

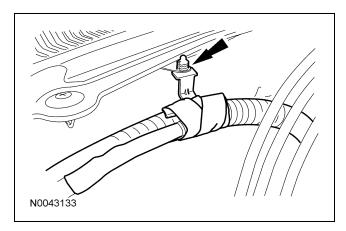


- 4. Attach the ground cable to the RH strut tower and install the bolt.
 - Tighten to 10 Nm (89 lb-in).

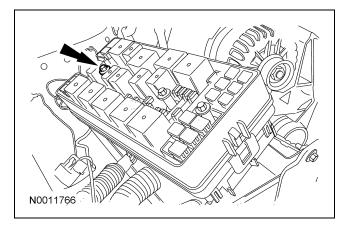


- 2. Install the RH engine mount nut.
 - Tighten to 63 Nm (46 lb-ft).

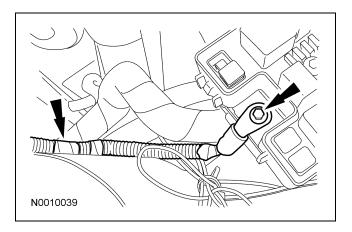
5. Attach the battery cable harness pin-type retainer to the cowl.



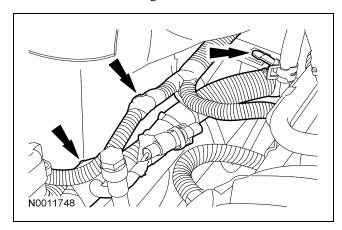
- 6. Connect the 68-pin connector to the power distribution box and tighten the bolt.
 - Tighten to 6 Nm (53 lb-in).
 - Attach the power distribution box upper housing to the lower housing.



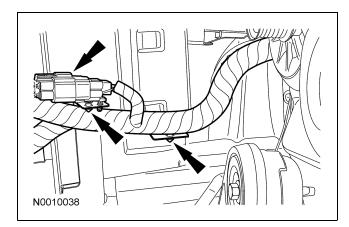
- 7. Attach the B+ terminal to the power distribution box and install the bolt.
 - Tighten to 12 Nm (9 lb-ft).
 - Attach the pin type retainer from the strut tower.



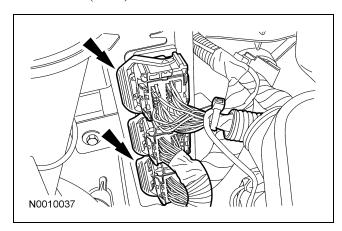
- 8. Install the power distribution box cover.
- 9. Attach the 3 wiring harness retainers.



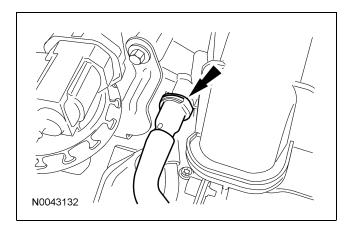
10. Connect the 16-pin electrical connector and attach the 2 wiring retainers.



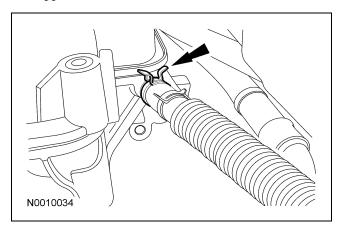
11. Connect the upper and lower powertrain control module (PCM) electrical connectors.



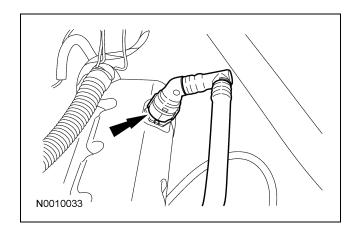
12. Connect the fuel vapor vent tube to the intake manifold.



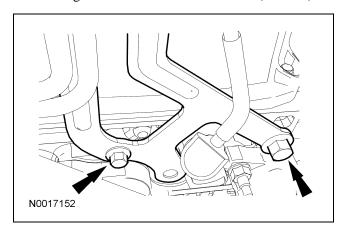
13. Connect the brake booster vacuum hose to the upper intake manifold.



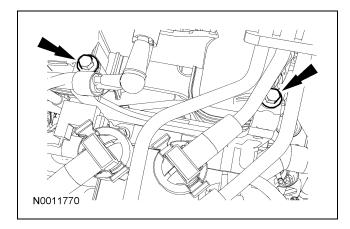
14. Attach the crankcase vent tube to the LH valve cover.



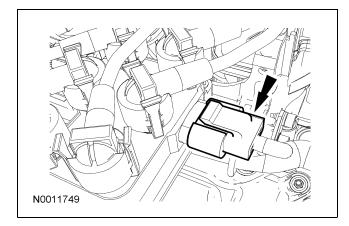
- 15. Position the ignition coil and spark plug wires and install the 2 bolts.
 - Tighten the M8 bolt to 9 Nm (80 lb-in).
 - Tighten the M12 bolt to 23 Nm (17 lb-ft).



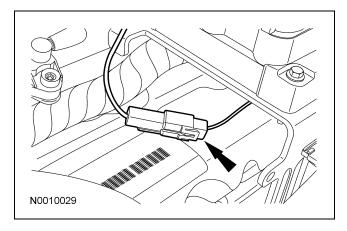
- 16. Install the 2 upper ignition coil bracket bolts.
 - Tighten to 9 Nm (80 lb-in).



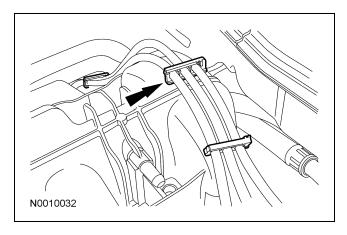
17. Connect the ignition coil electrical connector.



18. Connect the radio ignition interference capacitor electrical connector.



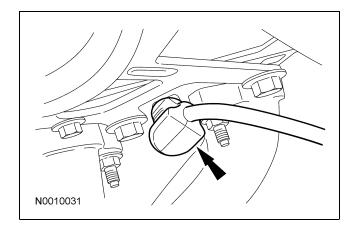
19. Attach the spark plug wire retainer to the intake manifold.



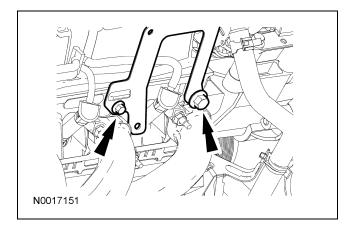
20. **NOTE:** Apply a light film of silicone brake caliper grease and dielectric compound to the inside of the spark plug wire boots before installation.

Connect the 6 spark plug wires to the spark plugs.

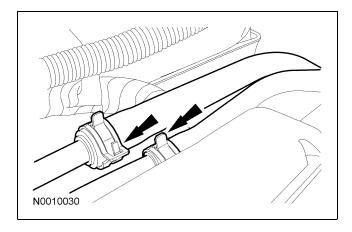
 Attach the retainers to the valve cover stud bolts and the ignition coil bracket.



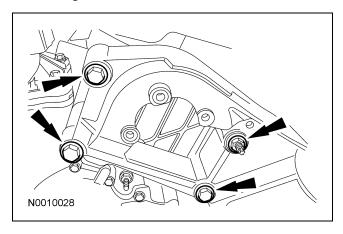
- 21. Install the 2 coolant tube bracket bolts.
 - Tighten the M12 bolt to 34 Nm (25 lb-ft).
 - Tighten the M8 bolt to 23 Nm (17 lb-ft).



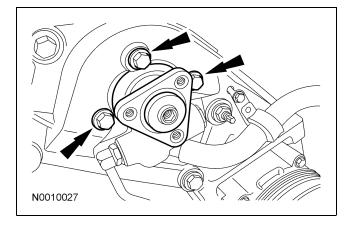
22. Connect the 2 heater hoses to the coolant tube.



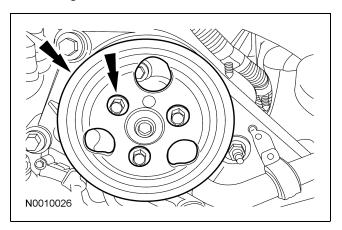
- 23. Position the front engine accessory drive (FEAD) bracket and A/C compressor. Install the 3 bolts and the nut.
 - Tighten to 47 Nm (35 lb-ft).



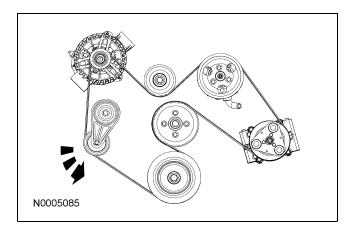
- 24. Position the power steering pump and install the 3 bolts.
 - Tighten to 25 Nm (18 lb-ft).



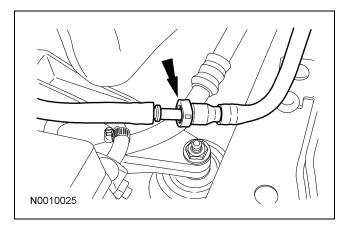
- 25. Position the power steering pump pulley and install the 3 bolts.
 - Tighten to 25 Nm (18 lb-ft).



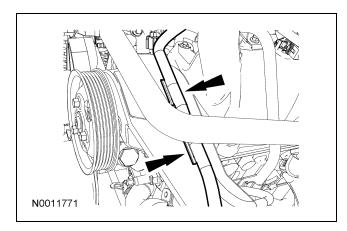
26. Rotate the accessory drive belt tensioner counterclockwise and install the accessory drive belt.



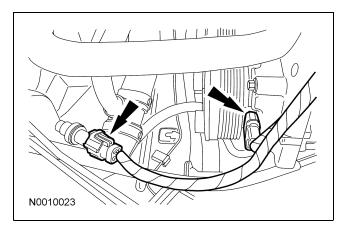
27. Connect the fuel supply tube coupling. For additional information, refer to Section 310-00.



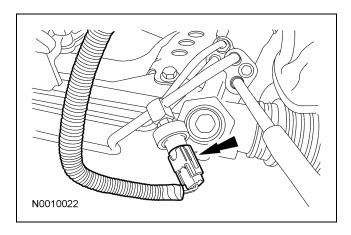
28. Attach the 2 wiring retainers to the FEAD bracket.



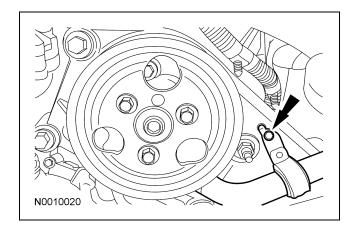
29. Connect the A/C compressor and A/C high pressure switch electrical connectors.



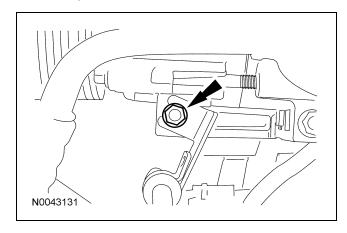
30. Connect the power steering pressure (PSP) switch electrical connector.



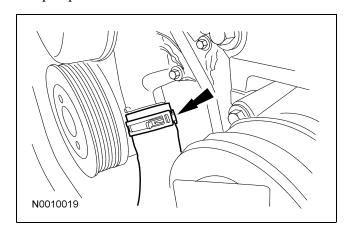
- 31. Attach the power steering supply hose bracket to the FEAD bracket and install the bolt.
 - Tighten to 11 Nm (8 lb-ft).



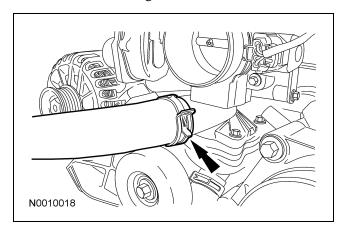
- 32. Position the power steering pressure tube bracket on the A/C compressor and install the nut.
 - Tighten to 7 Nm (62 lb-in).



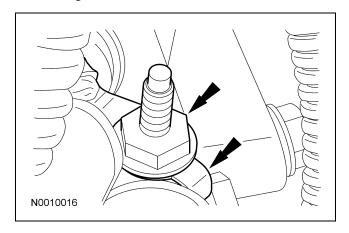
33. Connect the lower radiator hose to the coolant pump.



34. Connect the upper radiator hose to the thermostat housing.



- 35. Position the ground strap and install the stud bolt.
 - Tighten to 10 Nm (89 lb-in).



Vehicles with manual transmission

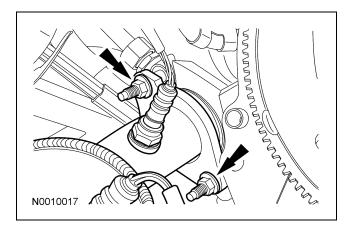
36. Install the clutch. For additional information, refer to Section 308-01.

Vehicles with automatic transmission

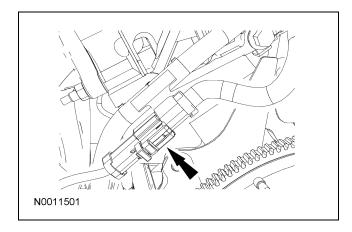
37. Install the transmission. For additional information, refer to Section 307-01.

All vehicles

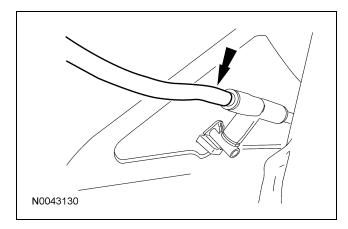
- 38. **NOTE:** LH side shown, RH side similar. Install the 4 catalytic converter-to-exhaust manifold nuts.
 - Tighten to 40 Nm (30 lb-ft).



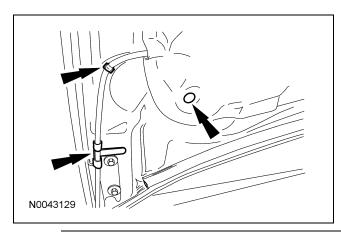
39. Connect the 2 heated oxygen sensor (HO2S) and the 2 catalyst monitor sensor electrical connectors.



- 40. **NOTE:** Use the index marks made during the removal procedure for correct hood alignment. Position the hood and install the 4 bolts.
 - Tighten to 12 Nm (9 lb-ft).
- 41. Connect the windshield washer hose and position the hood insulation.



42. Install the 1 hood insulation pin-type retainer and attach the 2 windshield washer hose retainers.



- 43. Install the air cleaner and air cleaner outlet pipe. For additional information, refer to Section 303-12.
- 44. Connect the battery ground and positive cables. For additional information, refer to Section 414-01.
- 45. Fill and bleed the cooling system. For additional information, refer to Section 303-00.
- 46. Fill the engine with clean engine oil.