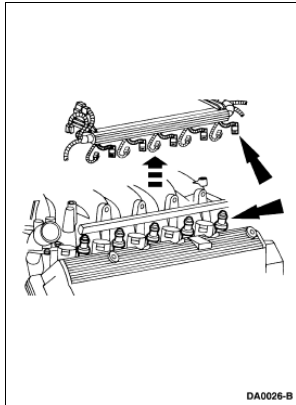
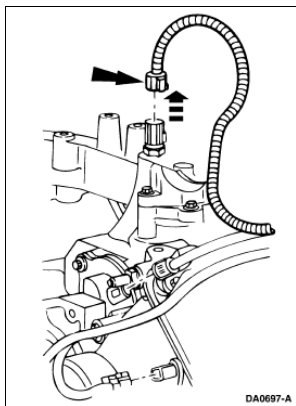


24. Disconnect the five LH fuel injector electrical connectors and ignition coil connectors.



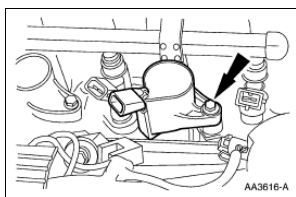
25. Disconnect the water temperature indicator sender unit electrical connectors.



26. Remove the generator (GEN) (10300). For additional information, refer to [Section 414-02](#) .

27. Remove the ignition coils.

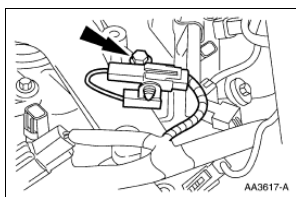
- Remove the 10 bolts.
- Remove the 10 ignition coils.



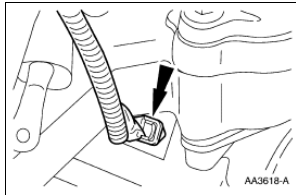
28. Disconnect the fuel injection supply manifold.

- Disconnect the fuel lines.
- Disconnect the vacuum connector from the fuel pressure regulator.

29. Remove the bolt and position the capacitor aside.

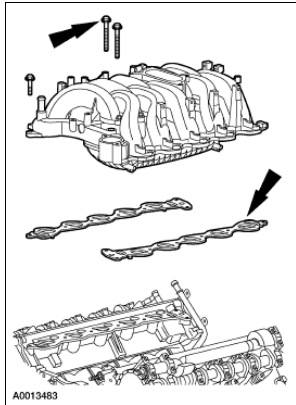


30. Disconnect the cylinder head temperature sensor.



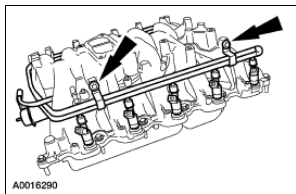
31. Remove the water thermostat and housing.

32. Remove the bolts, the upper intake manifold and the intake manifold gaskets (9439). Discard the intake manifold gaskets.



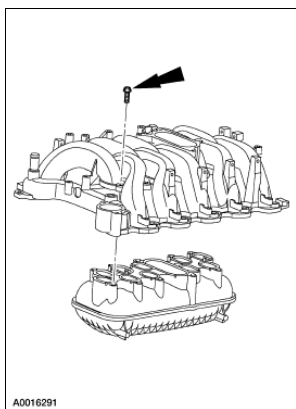
33. If necessary, remove the fuel injection supply manifold.

- Remove the four bolts.
- Remove the fuel injection supply manifold.



34. Separate the upper and lower intake manifolds (9424).

- Remove the 10 bolts.

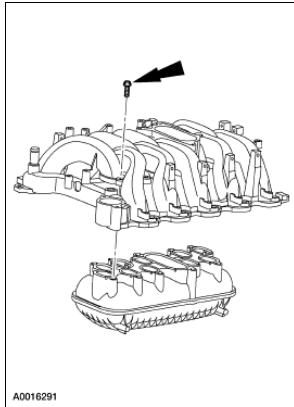


35. **⚠ CAUTION:** Do not use metal scrapers, wire brushes, power abrasive discs or other abrasive means to clean the aluminum retainer plate. These tools cause scratches and gouges, which make leak paths.

Clean all mating surfaces.

## Installation

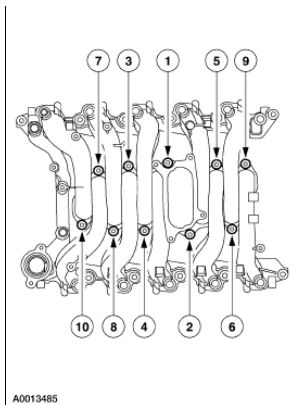
1. Position the lower intake manifold to the upper intake manifold and loosely install the 10 bolts.



2. **NOTE:** Tighten the bolts in two stages.

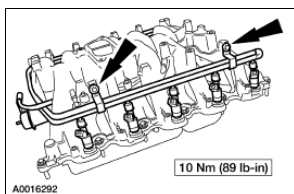
Tighten the bolts in the sequence shown.

- Stage 1: Tighten to 2 Nm (18 lb-in).
- Stage 2: Tighten to 10 Nm (89 lb-in).

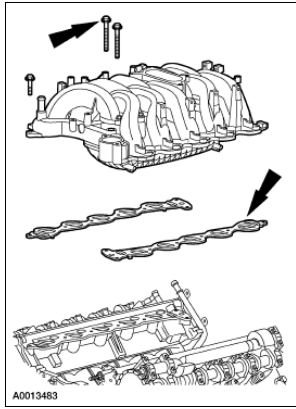


3. If necessary, install the fuel injector supply manifold.

- Position the fuel injection supply manifold.
- Install the seven bolts.

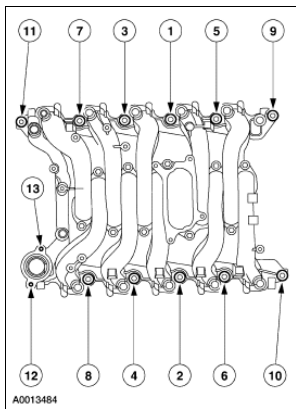


4. Position the water thermostat and housing.
5. Install the upper intake manifold.
  - Position the upper intake manifold gaskets and the intake manifold, and loosely install the bolts.

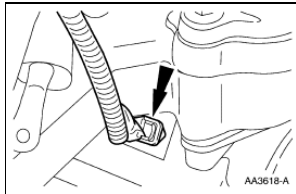


6. Tighten the bolts in two stages, in the sequence shown.

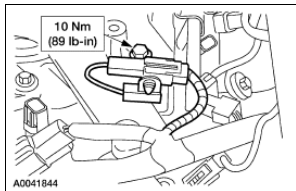
- Stage 1: Tighten to 2 Nm (18 lb-in).
- Stage 2: Tighten to 25 Nm (18 lb-ft).



7. Connect the cylinder head temperature sensor.



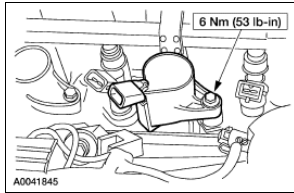
8. Install the LH radio interference capacitor.



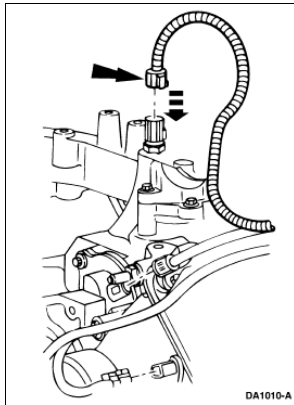
9. Connect the fuel lines and the vacuum line to the fuel injection supply manifold.

10. Install the ignition coils.

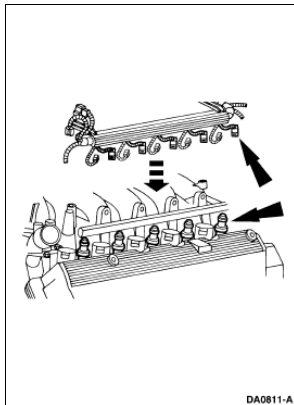
- Position the 10 ignition coils.
- Install the 10 bolts.



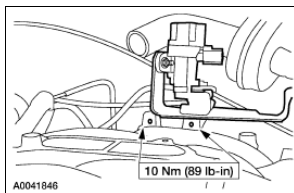
11. Install the generator. For additional information, refer to [Section 414-02](#) .
12. Connect the water temperature indicator sending unit electrical connector.



13. Connect the five LH fuel injector electrical connectors and five LH ignition coil connectors.



14. If equipped, install the EVR solenoid bracket.
  - Position the bracket.
  - Install the bolts.

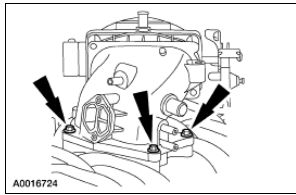


15. **NOTE:** The idle air control valve is shown removed for clarity.

Install the throttle body adapter.

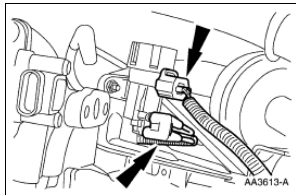
- Position a new throttle body adapter gasket.
- Position the throttle body adapter.
- Install four bolts and tighten in two stages.

- ◆ Stage 1: Tighten to 9 Nm (80 lb-in).
- ◆ Stage 2: Tighten an additional 85-95 degrees.

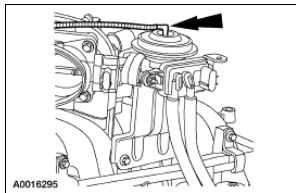


16. **NOTE:** The EGR valve is shown removed for clarity.

If equipped, connect the EVR solenoid vacuum and electrical connectors.

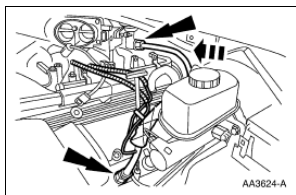


17. If equipped, connect the EGR valve vacuum line.



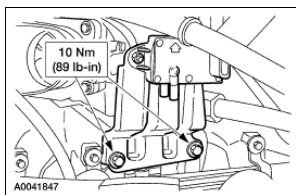
18. If equipped, install the EGR valve-to-exhaust manifold tube.

- Hand-tighten the fittings.
- Tighten the upper fitting to 40-60 Nm (30-44 lb-ft).
- Tighten the lower fitting to 40-60 Nm (30-44 lb-ft).

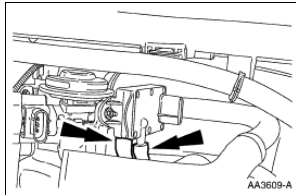


19. If equipped, install the EGR transducer bracket.

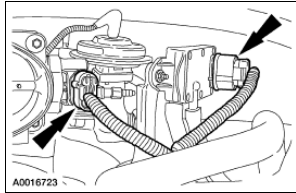
- Position the bracket.
- Install the bolts.



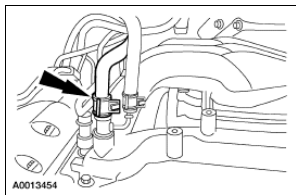
20. If equipped, connect the vacuum lines.



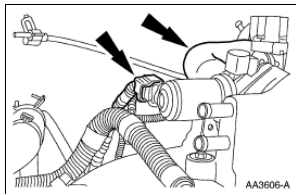
21. If equipped, connect the EGR transducer and throttle position sensor electrical connectors.



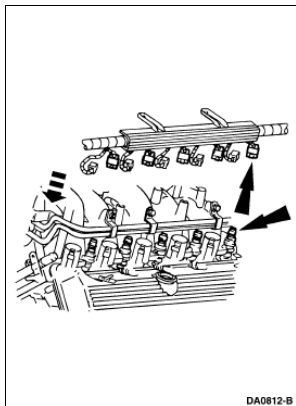
22. Connect the heater hose.



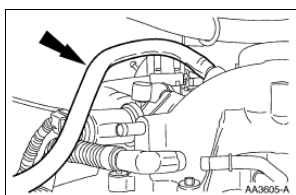
23. Connect the idle air control motor bypass hose and connector.



24. Connect the five RH fuel injector electrical connectors and five RH ignition coil connectors.

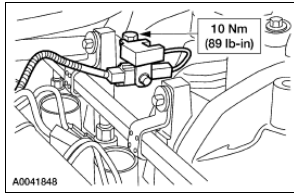


25. Connect the vacuum line.



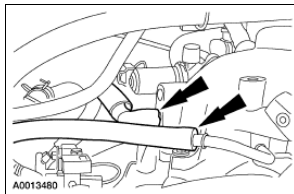
26. Install the RH radio interference capacitor.

- Position the capacitor.
- Install the bolt.

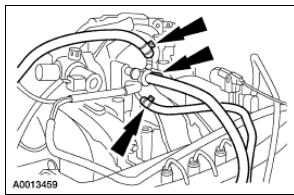


27. Connect the vacuum lines to the:

- brake booster.
- engine control sensor wiring harness.

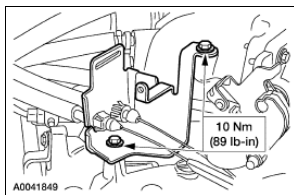


28. Connect the PCV vacuum and coolant hoses.

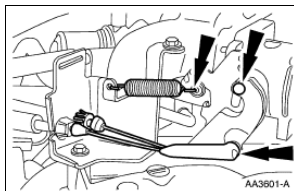


29. Install the accelerator bracket.

- Position the bracket.
- Install the bolts.

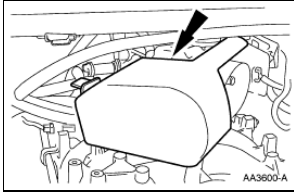


30. Connect the accelerator and speed control cables and return spring.



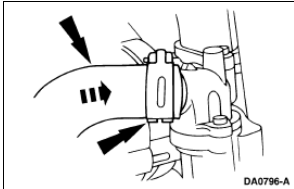
31. Install the accelerator cable splash shield.





32. Install the air cleaner outlet tube. For additional information, refer to [Section 303-12](#) .

33. Connect the engine water outlet hose and position the hose clamp.



34. Fill the cooling system. For additional information, refer to [Section 303-03](#) .

35. Connect the battery ground cable.

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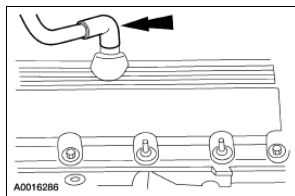
**Valve Cover LH**

## Material

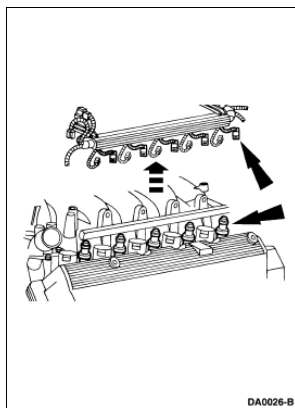
Item	Specification
Metal Surface Cleaner F4AZ-19A536-RA or equivalent	WSE-M5B392-A
Silicone Gasket and Sealant F7AZ-19554-EA or equivalent	WSE-M4G323-A4

**Removal**

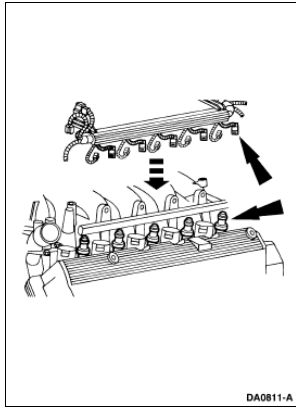
1. Disconnect the battery ground cable (14301). For additional information, refer to [Section 414-01](#) .
2. Remove the engine air cleaner and the air cleaner outlet tube. For additional information, refer to [Section 303-12](#) .
3. Remove the crankcase ventilation tube (6758) from the valve cover.



4. Disconnect the LH fuel injector electrical connections and the LH ignition coil electrical connections.



5. Disconnect the fuel pressure regulator vacuum hose and lift the fuel charging wiring (9D930) off the valve cover studs.



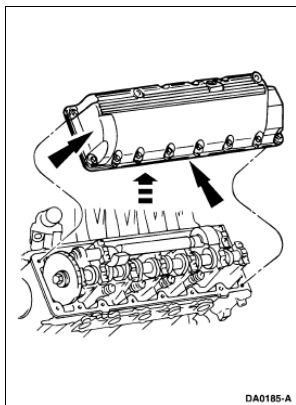
6. **⚠ CAUTION:** Do not use metal scrapers, wire brushes, power abrasive discs or other abrasive means to clean the sealing surfaces. These tools cause scratches and gouges which make leak paths. Use a plastic scraping tool to remove all traces of old sealant.

**NOTE:** The intake manifold is shown removed for clarity.

**NOTE:** The bolts are part of the valve cover and should not be removed.

Remove the LH valve cover.

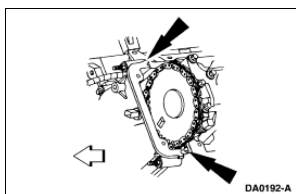
- Fully loosen the bolts and remove the valve cover.
- Inspect the valve cover gasket and clean the mating surface of the cylinder head.



## Installation

1. **NOTE:** If not secured within four minutes, the sealant must be removed and the sealing area cleaned with metal surface cleaner. Allow to dry until there is no sign of wetness, or four minutes, whichever is longer. Failure to follow this procedure can cause future oil leakage.

Apply a bead of silicone gasket and sealant in two places where the engine front cover (6019) meets the cylinder head.



2. Position the valve cover and the valve cover gasket on the cylinder head and loosely install the bolts.