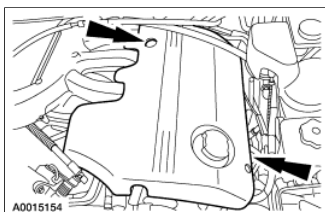
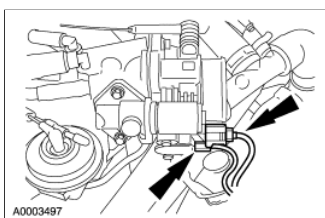


Intake Manifold — Upper**Removal**

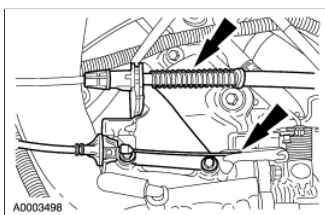
1. Disconnect the battery ground cable. For additional information, refer to Section 414-01.
2. Drain the engine cooling system. For additional information, refer to [Section 303-03](#).
3. Remove the engine appearance cover.



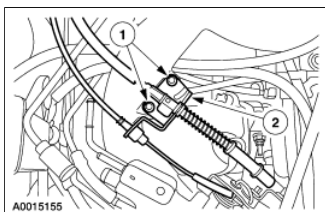
4. Remove the air cleaner outlet tube. For additional information, refer to [Section 303-12](#).
5. Disconnect the throttle position (TP) sensor and the idle air control (IAC) solenoid electrical connectors.



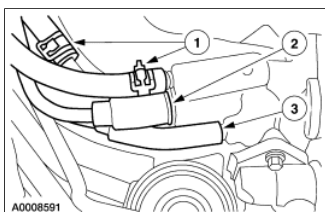
6. Disconnect the accelerator and speed control cables.



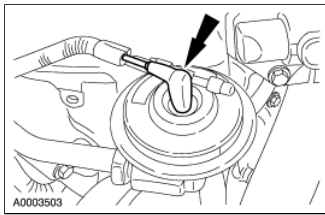
7. Remove the cable bracket.
 1. Remove the bolts.
 2. Remove the bracket.



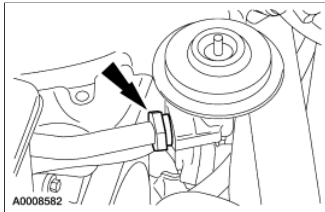
8. Disconnect the throttle body hoses.
 1. Disconnect the coolant hoses.
 2. Disconnect the positive crankcase ventilation (PCV) hose.
 3. Disconnect the vapor purge hose.



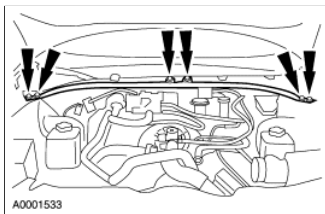
9. Disconnect the vacuum hose.



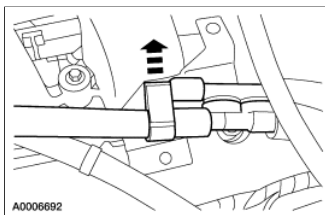
10. Disconnect the EGR to exhaust manifold tube nut.



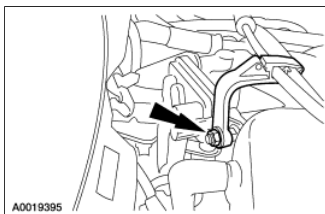
11. Remove the cowl vent screen. For additional information, refer to [Section 501-02](#).
12. Remove the brace.



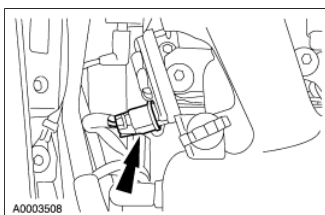
13. Remove the vacuum hoses from the mounting bracket.



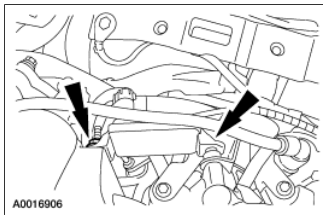
14. Remove the bracket and position the accelerator and cruise control cables aside.



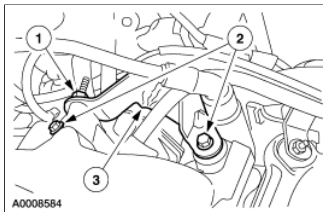
15. Disconnect the differential pressure feedback EGR electrical connector.



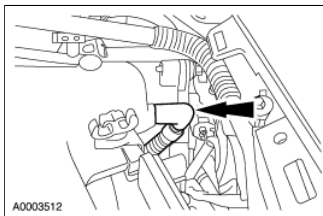
16. Remove the stud and nut and position the differential pressure feedback EGR transducer aside.



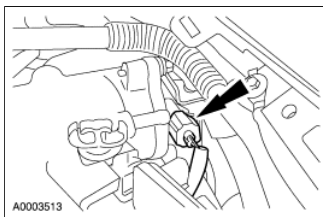
17. Remove the fuel pressure sensor shield.
 1. Remove the nut.
 2. Remove the bolts.
 3. Remove the shield.



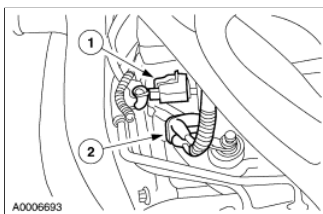
18. Disconnect the vacuum hose from the rear of the upper intake manifold.



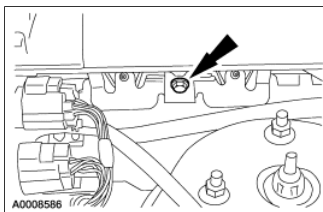
19. Disconnect the intake manifold tuning valve (IMTV) electrical connector.



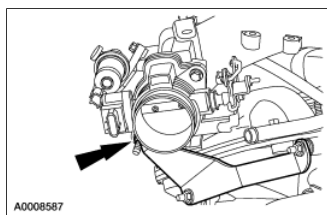
20. Disconnect the exhaust vacuum regulator (EVR).
 1. Disconnect the electrical connector.
 2. Disconnect the vacuum line.



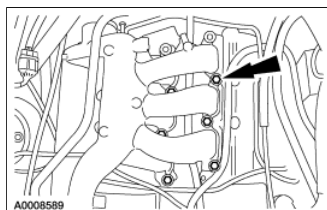
21. Remove the upper intake support bolt.



22. Remove the front intake manifold support bolt.

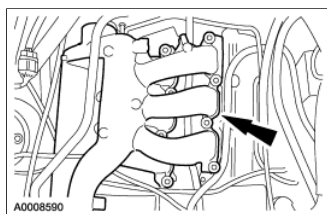


23. Remove the bolts and the upper intake manifold.
- Inspect the gaskets and discard as necessary.

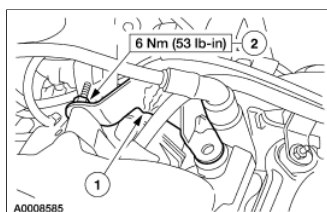


Installation

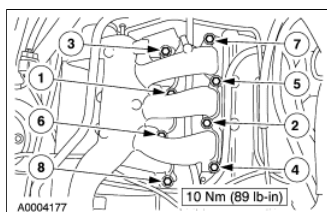
1. Position the upper intake manifold and gaskets.



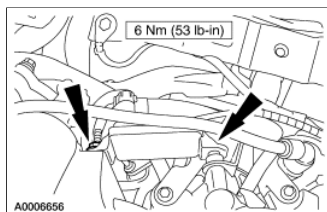
2. Install the fuel pressure sensor shield.
1. Position the shield.
 2. Install the nut.



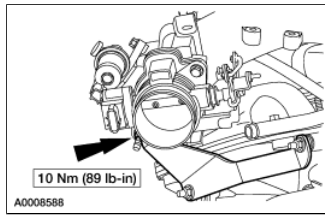
3. Install the upper intake manifold bolts and tighten in the sequence shown.



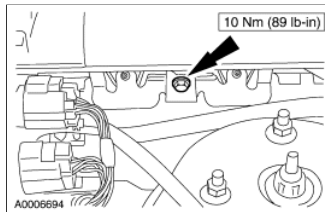
4. Position the differential pressure feedback EGR and install the nut and stud.



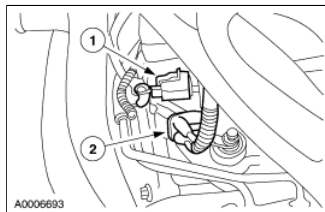
5. Install the upper intake manifold support bolt.



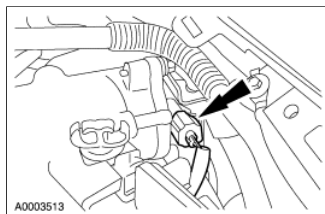
6. Install the upper intake support bolt.



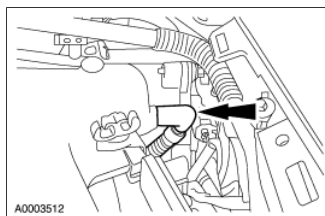
7. Connect the exhaust vacuum regulator (EVR).
1. Connect the electrical connector.
 2. Connect the vacuum line.



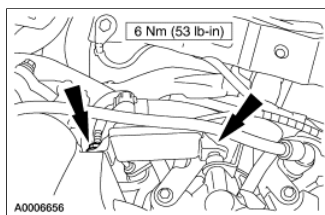
8. Connect the intake manifold tuning valve (IMTV) electrical connector.



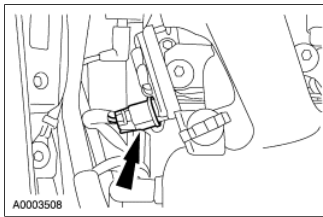
9. Connect the vacuum hose to the rear of the upper intake manifold.



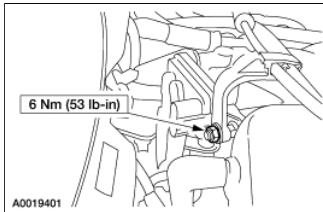
10. Position the differential pressure feedback EGR electrical connector.



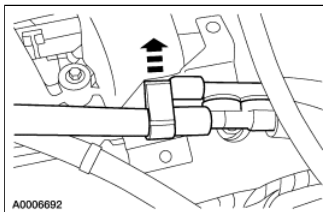
11. Connect the differential pressure feedback EGR electrical connector.



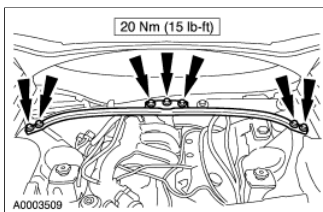
12. Position the accelerator and cruise control cables and install the bracket.



13. Clip the vacuum hoses into the mounting bracket.

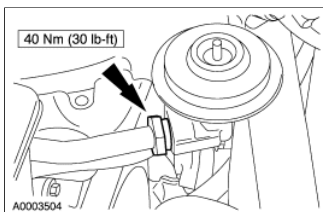


14. Install the brace.

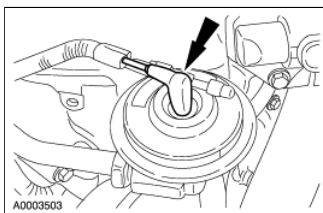


15. Install the cowl vent screen. Refer to [Section 501-02](#).

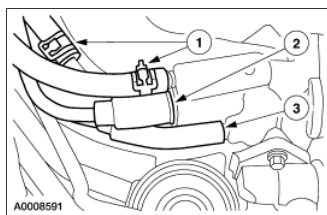
16. Connect the EGR to exhaust manifold tube nut.



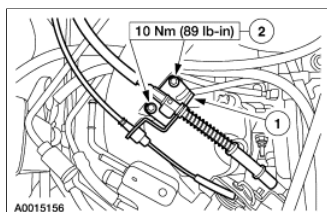
17. Connect the vacuum hose.



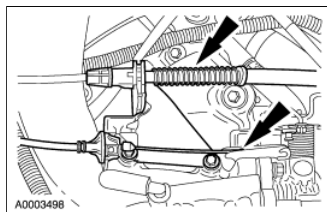
18. Connect the throttle body hoses.
1. Connect the coolant hoses.
 2. Connect the PCV hose.
 3. Connect the vapor purge hose.



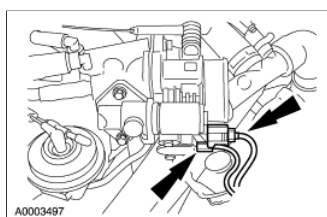
19. Install the cable bracket.
1. Position the bracket.
 2. Install the bolts.



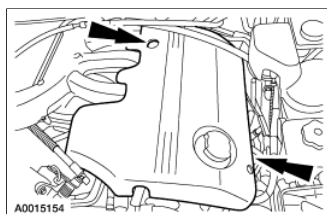
20. Connect the accelerator and speed control cables.



21. Connect the TP sensor and the IAC solenoid electrical connectors.



22. Install the air cleaner outlet tube. For additional information, refer to [Section 303-12](#).
23. Install the engine appearance cover.



24. Fill the engine cooling system. For additional information, refer to [Section 303-03](#).
25. Connect the battery ground cable. For additional information, refer to [Section 414-01](#).

