

Ford Powerstroke 6.0L Turbo Diesel Intake Manifold Installation Manual

Part Number: **S2r60**

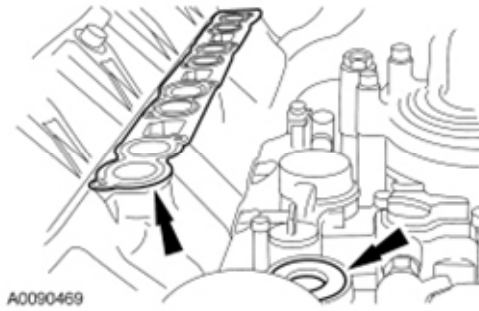
Fits 2003-2007 Ford F-250 & F-350 Trucks,
2003-2005 Excursion vehicles and 2004-2007 E-350

Please Place the included CARB EO Sticker in a Clean, Visible Location.

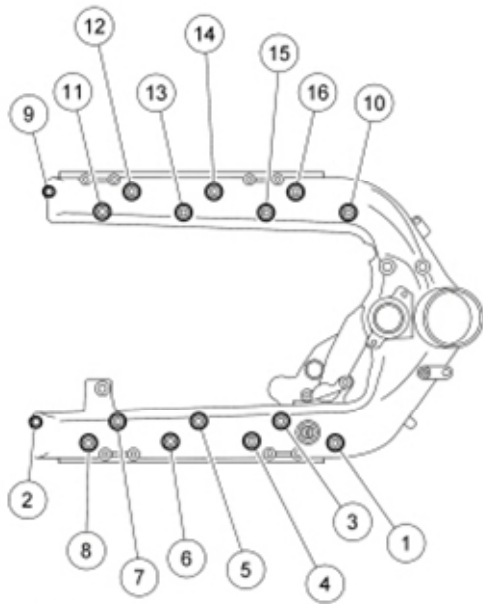


1. **NOTE:** *The locating tabs on the gaskets must be up and positioned toward the center of the engine or a leak will occur.*

Install the intake manifold gaskets and the new front module O-ring seal.

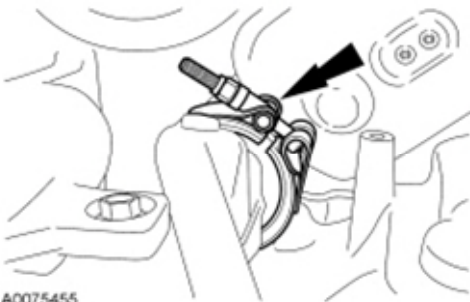


2. Install the intake manifold and bolts and tighten in 3 stages, in the sequence shown.
 - Stage 1: Loosely install bolts 1 through 8.
 - Stage 2: Tighten bolts 9 through 16 to 11 Nm (8 lb-ft).
 - Stage 3: Tighten all bolts to 11 Nm (8 lb-ft).



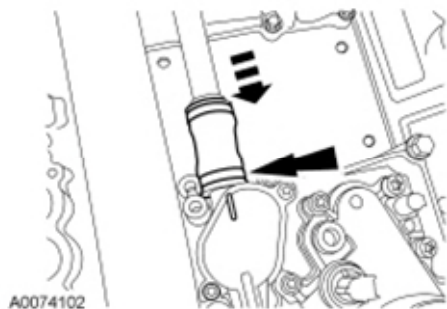
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3. Position the EGR cooler V-clamp over the EGR tube.
4. Install the gasket and the EGR cooler V-clamp.
 - Tighten to 6 Nm (53 lb-in).



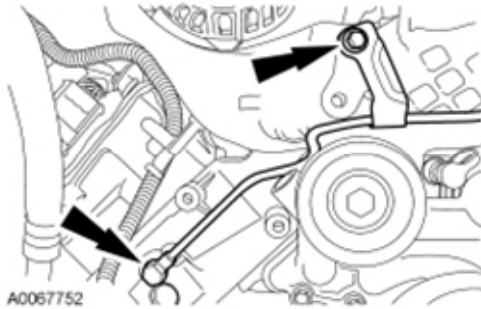
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5. Slide the EGR cooler hose forward and rotate flat to lock.

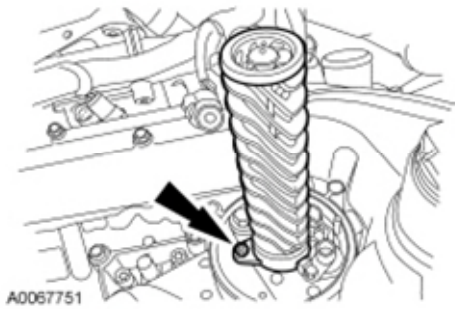


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6. Using new sealing washers, install the fuel tube, banjo bolt and the support bracket bolt.
 - Tighten the bolt to 13 Nm (10 lb-ft).
 - Tighten the banjo bolt.
 - For Viton® sealing washers, tighten to 25 Nm (21 lb-ft).
 - For copper sealing washers, tighten to 38 Nm (28 lb-ft).



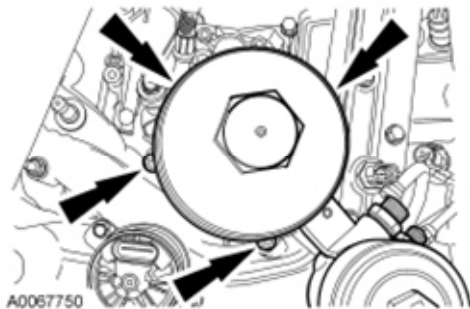
7. Install the oil filter return tube and bolt.
 - On new oil filter return tubes, tighten to 6 Nm (53 lb-in).
 - On used oil filter return tubes, tighten to 3 Nm (27 lb-in).



8. **NOTE:** *Install a new O-ring seal.*

Install the oil filter housing and the 4 bolts.

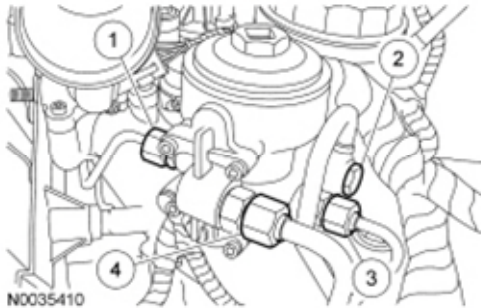
- Tighten to 15 Nm (11 lb-ft).



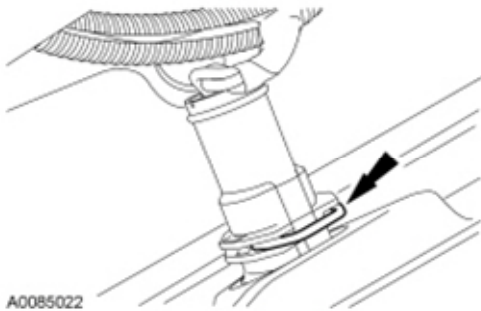
9. **NOTE:** *Install new sealing washers on the banjo bolt.*

Connect the fuel tube fittings.

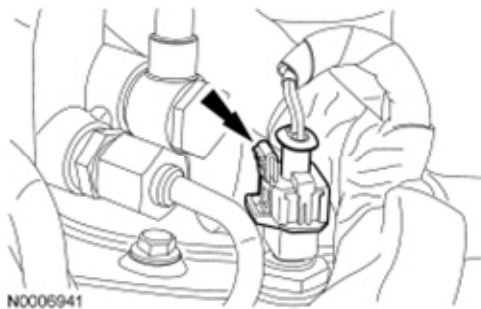
1. Tighten to 26 Nm (19 lb-ft).
2. Tighten the banjo bolt.
 - For Viton® sealing washers, tighten to 28 Nm (21 lb-ft).
 - For copper sealing washers, tighten to 35 Nm (26 lb-ft).
3. Tighten to 26 Nm (19 lb-ft).
4. Tighten to 43 Nm (32 lb-ft).



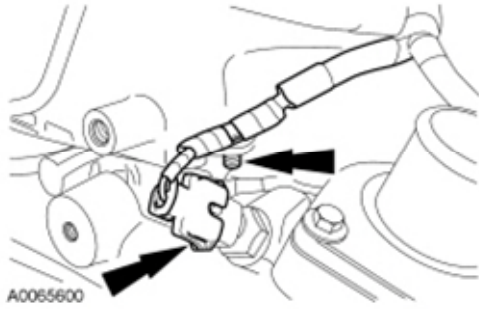
10. Connect the 8 fuel injectors electrical connectors.



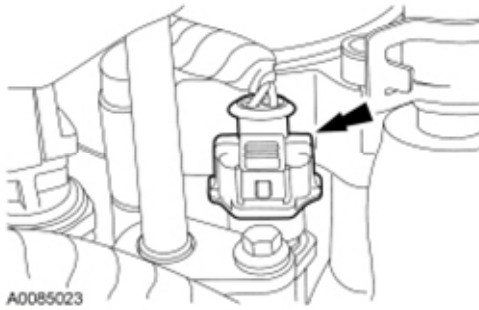
11. Connect the IAT2 sensor electrical connector.



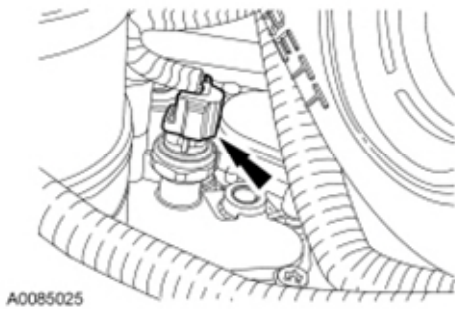
12. Connect the ECT sensor and the pin-type retainer.



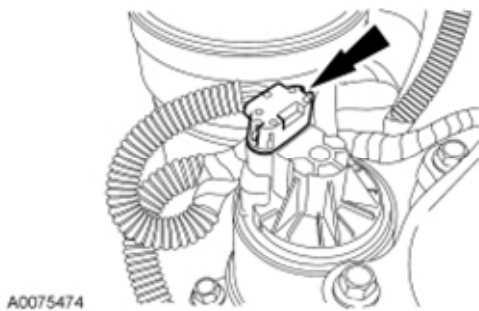
13. Connect the EOT sensor electrical connector.



14. Connect the EOP sensor electrical connector.



15. Connect the EGR valve electrical connector.

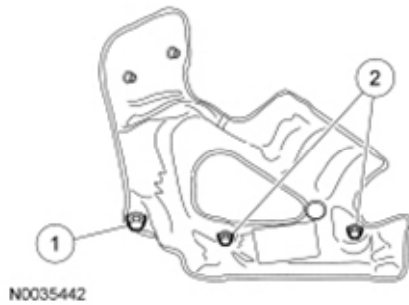


16. Connect the wiring retainer and injector pressure regulator electrical connector. Position back the heat insulating wrap.



17. Position the turbocharger heat shield and install the 3 bolts.

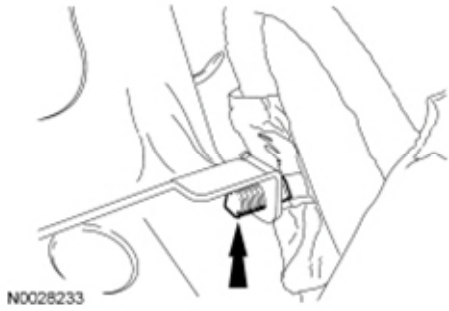
1. Tighten to 49 Nm (36 lb-ft).
2. Tighten to 11 Nm (8 lb-ft).



18. Install the heat shield bracket and bolts.



19. Connect the wiring retainer to the back of the heat shield bracket.

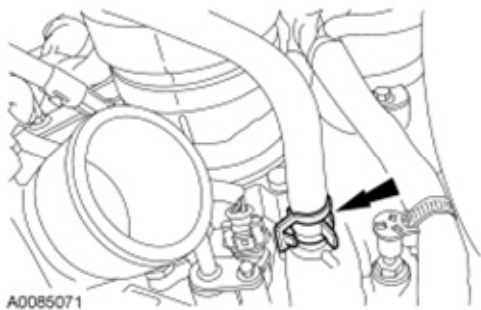


20. Position back the ground wire and install the retaining nuts.

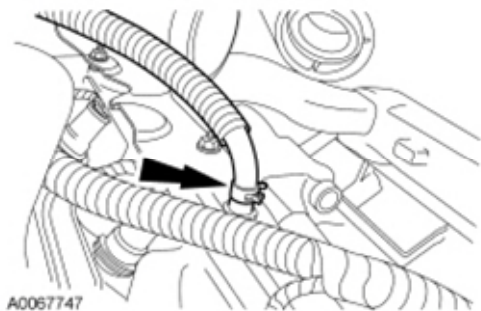


21. Install the fuel injector control module. For additional information, refer to Section 303-14B.

22. Connect the engine coolant vent hose and clamp.



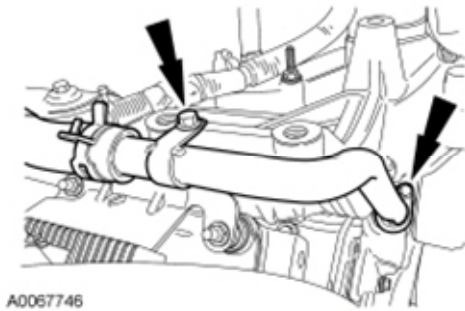
23. Connect the MAP sensor hose.



24. **NOTE:** *Install a new O-ring seal on the heater hose tube.*

Install the heater hose tube and the 2 bolts.

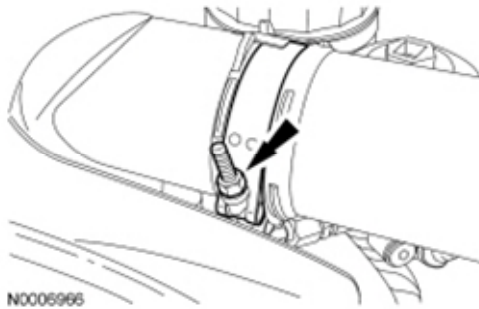
- Tighten to 13 Nm (10 lb-ft).



25. **NOTE:** *Engine side shown, CAC side similar.*

Install the CAC duct and tighten the clamps.

- Tighten to 12 Nm (9 lb-ft).

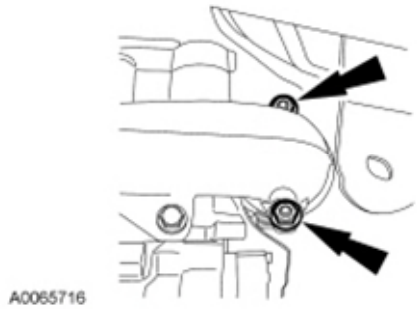


26. Install the turbocharger pedestal and turbocharger. For additional information, refer to Section 303-04D.

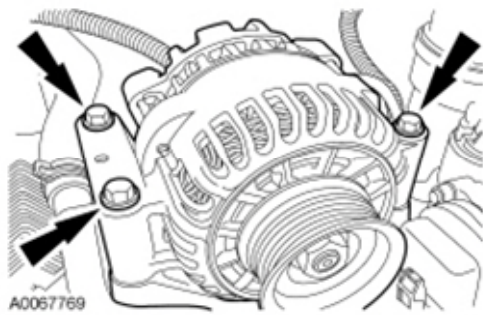
27. **NOTE:** *Alternately tighten the bolts to specification.*

Tighten the nuts and bolts in the adapter pipe.

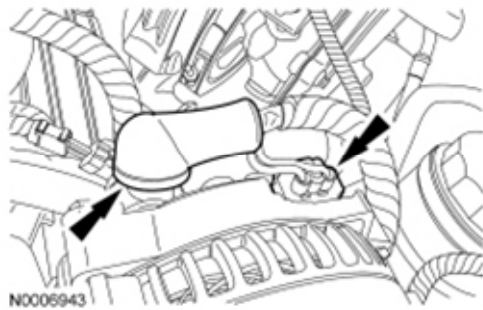
- Tighten to 27 Nm (20 lb-ft).



28. Install the generator and the 3 bolts.
- Tighten to 47 Nm (35 lb-ft).

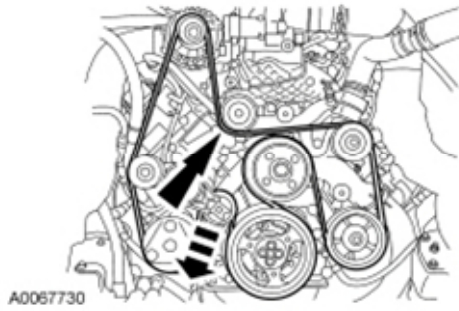


29. Connect the generator B+ wire, the electrical connector and position the boot back.
- Tighten to 8 Nm (71 lb-in).



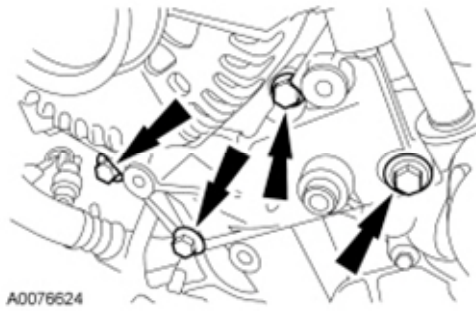
Vehicles with single generator

30. Install the accessory drive belt.

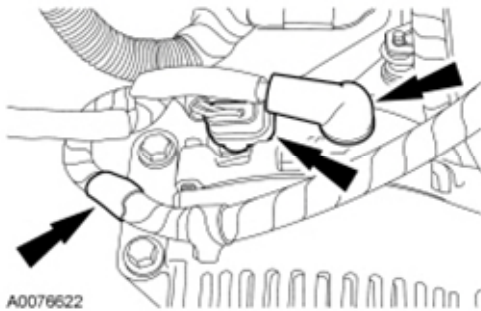


Vehicles with dual generators

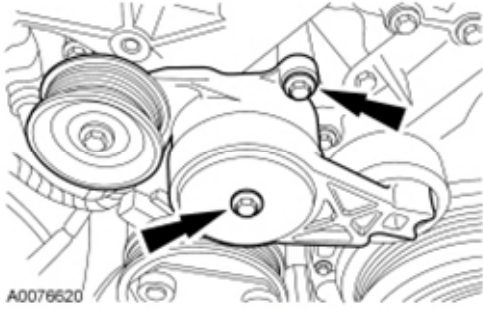
31. Install the generator with mounting bracket and the 4 bolts.
 - Tighten to 47 Nm (35 lb-ft).



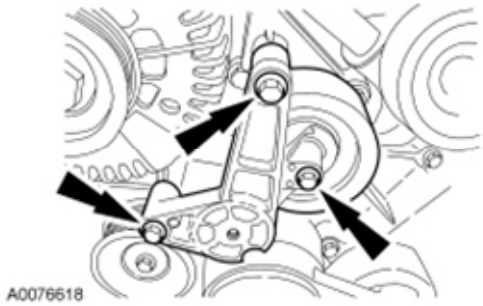
32. Connect the B+ wire, generator electrical connector and wiring harness retainer.
 - Tighten to 8 Nm (71 lb-in).



33. Install the accessory drive belt tensioner and bolts.
 - Tighten to 25 Nm (18 lb-ft).

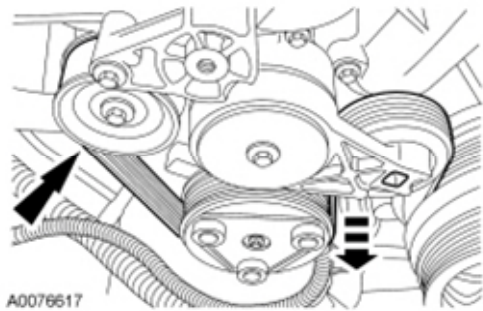


34. Position the accessory drive belt idler pulley. Install the bracket and bolts.
- Tighten to 25 Nm (18 lb-ft).



- If needed:
Spacer on smooth pulley, near coolant port on the front cover
for the 10mm bolt.

35. Install the accessory drive belt.



36. Install the accessory drive belt tensioner and bolt.
- Tighten to 25 Nm (18 lb-ft).



37. Install the accessory drive belt.



All vehicles

38. **NOTE:** *Engine side shown, CAC side similar.*

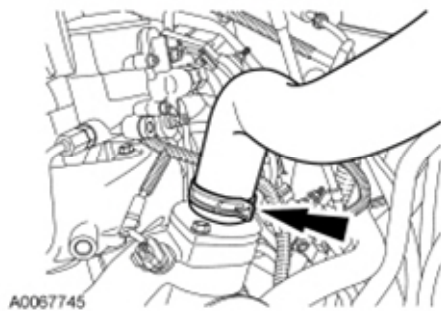
NOTE: *If there is any oil residue, clean both connecting ports and the inside surface of the charge air cooler duct to prevent the duct from blowing off.*

Install the turbocharger-to-CAC duct.

- Tighten to 12 Nm (9 lb-ft).



39. Connect the upper radiator hose.



40. Install the degas bottle. For additional information, refer to Section 303-03.

41. Install the auxiliary battery. For additional information, refer to Section 414-01.

42. Install the cooling fan stator. For additional information, refer to Section 303-03.

The provided E.O. identification must be placed on or near the new intake manifold in the engine compartment so that smog check technicians can verify the E.O. number.