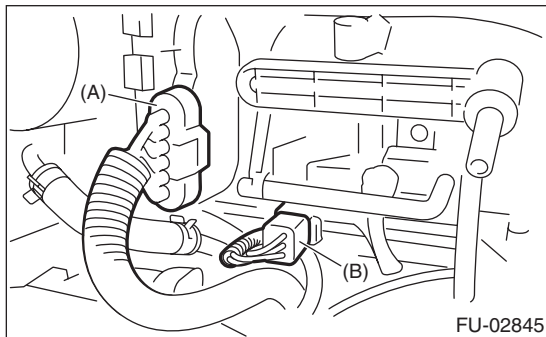


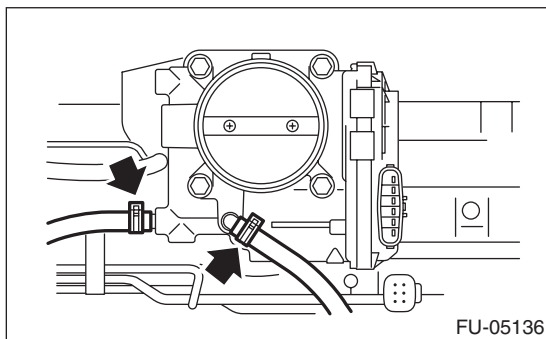
3. Intake Manifold

A: REMOVAL

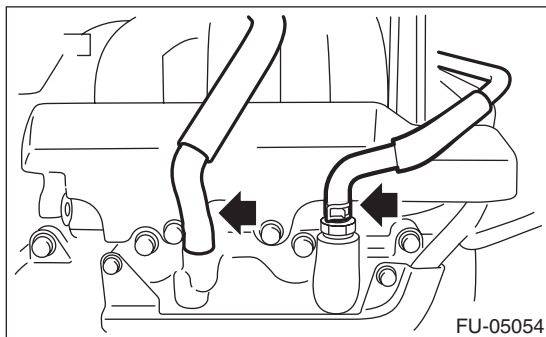
- 1) Remove the collector cover.
- 2) Release the fuel pressure. <Ref. to FU(H6DO)-44, RELEASING OF FUEL PRESSURE, PROCEDURE, Fuel.>
- 3) Disconnect the ground cable from battery.
- 4) Open the fuel filler lid and remove the fuel filler cap.
- 5) Remove the air cleaner case and air intake chamber. <Ref. to IN(H6DO)-5, REMOVAL, Air Cleaner Case.> <Ref. to IN(H6DO)-7, REMOVAL, Air Intake Chamber.>
- 6) Disconnect the connector (A) from throttle body.
- 7) Disconnect the engine harness connector (B).



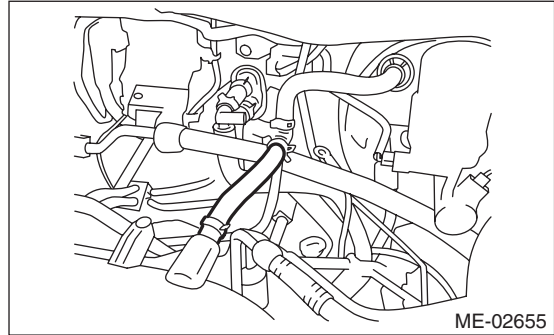
- 8) Disconnect the engine coolant hose from throttle body.



- 9) Disconnect the PCV hose and blow-by hose.



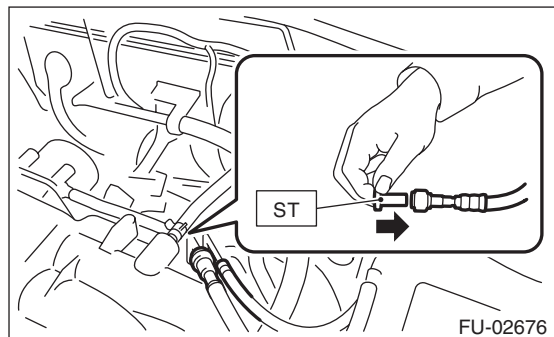
- 10) Disconnect the brake booster hose.



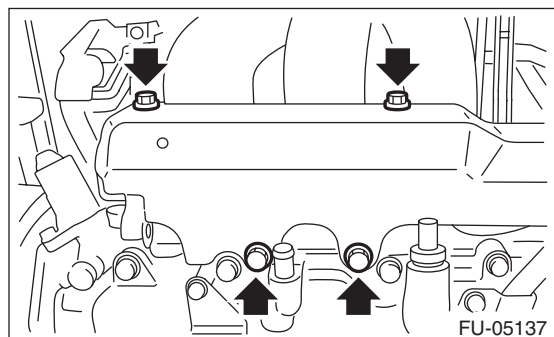
- 11) Disconnect the fuel hoses from the fuel pipe.
 - (1) Disconnect the connector of fuel pipe by pushing the ST in the direction of arrow.
- ST 42099AE000 QUICK CONNECTOR RELEASE
- (2) Remove the clip and disconnect the evaporation hose from the pipe.

CAUTION:

- Be careful not to spill fuel.
- Catch the fuel from hoses using a container or cloth.



- 12) Remove the harness from the fuel pipe protector LH.
- 13) Remove the fuel pipe protector LH.

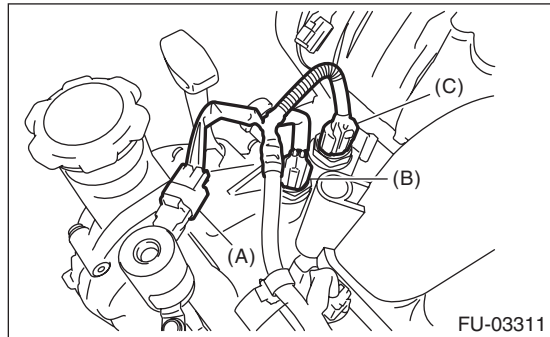


- 14) Remove the engine harness from the fuel injector pipe LH.

Intake Manifold

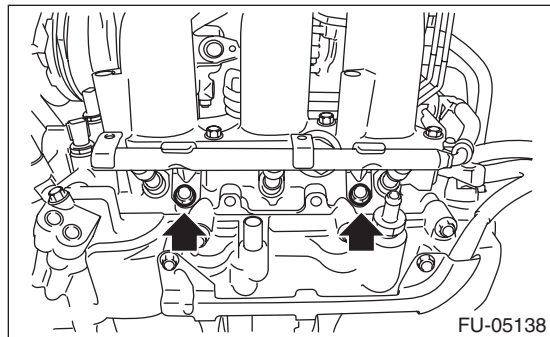
FUEL INJECTION (FUEL SYSTEMS)

15) Disconnect the connectors of the oil temperature sensor, engine coolant temperature sensor and intake oil flow control solenoid valve LH.

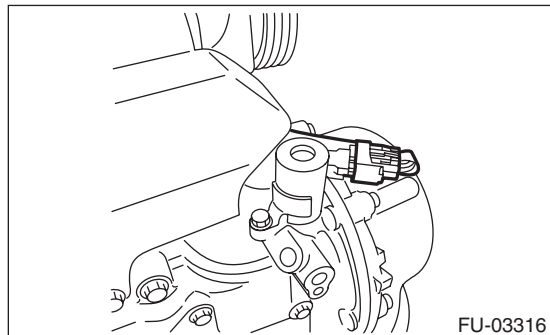


- (A) Intake oil flow control solenoid valve LH
- (B) Oil temperature sensor
- (C) Engine coolant temperature sensor

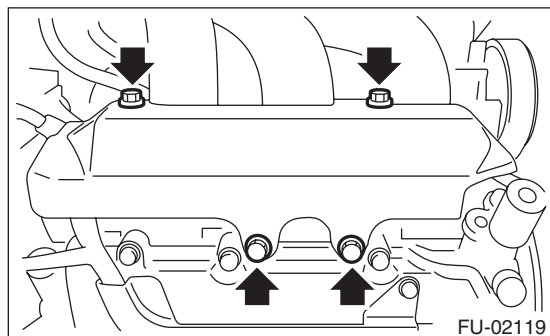
16) Remove the bolts which hold fuel injector pipe LH to cylinder head.



17) Disconnect the connectors of the intake oil flow control solenoid valve RH.

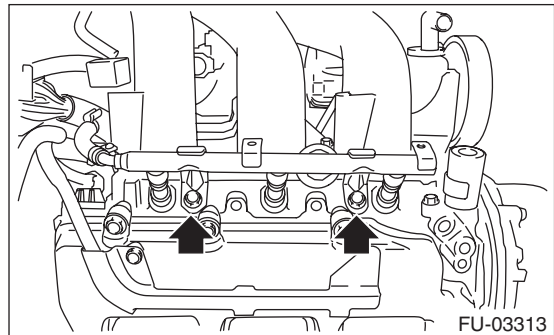


18) Remove the fuel pipe protector RH.



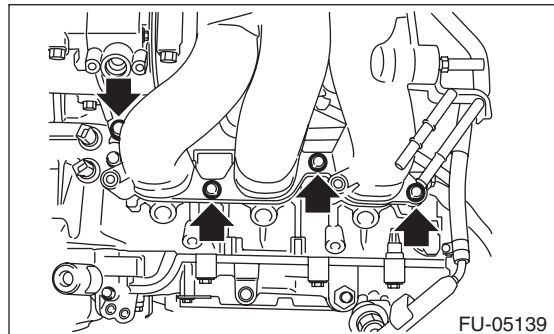
19) Remove the engine harness from the fuel injector pipe RH.

20) Remove the bolts which hold the fuel injector pipe RH to the cylinder head.

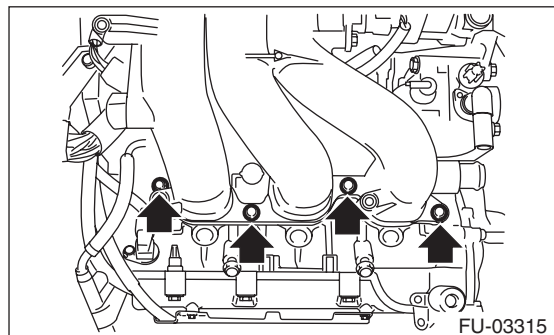


21) Remove the bolts which hold the intake manifold to the cylinder head.

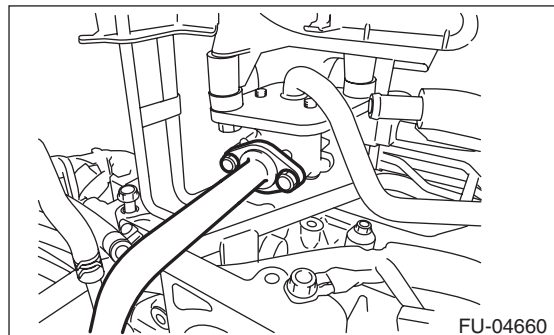
- LH side



- RH side



22) Remove the EGR pipe securing bolt.



23) Remove the intake manifold.

B: INSTALLATION

1) Install the intake manifold onto cylinder heads.

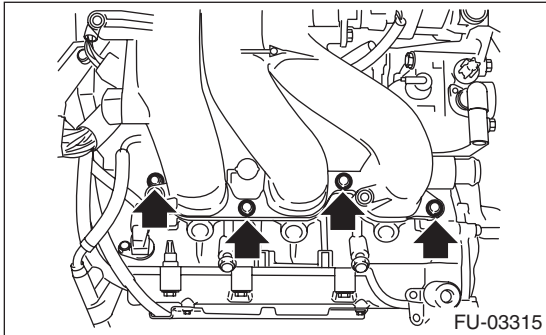
NOTE:

Use new O-rings.

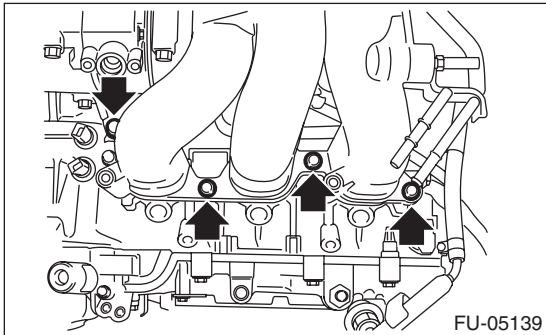
Tightening torque:

25 N·m (2.5 kgf-m, 18.4 ft-lb)

- RH side



- LH side



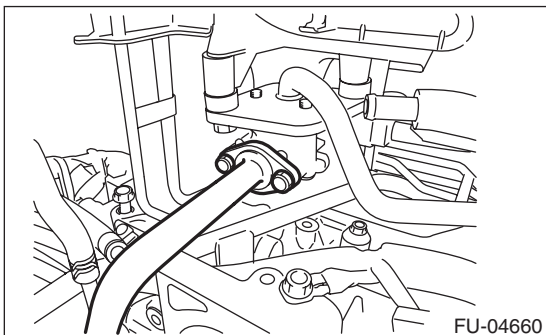
2) Install the EGR pipe securing bolt.

NOTE:

Use a new gasket.

Tightening torque:

6.4 N·m (0.7 kgf-m, 4.7 ft-lb)



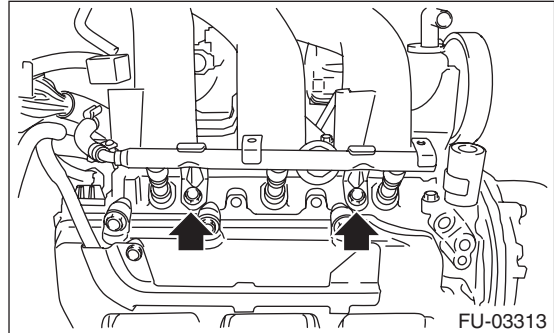
3) Install the bolts which hold fuel injector pipe RH to cylinder head.

NOTE:

Use new O-rings.

Tightening torque:

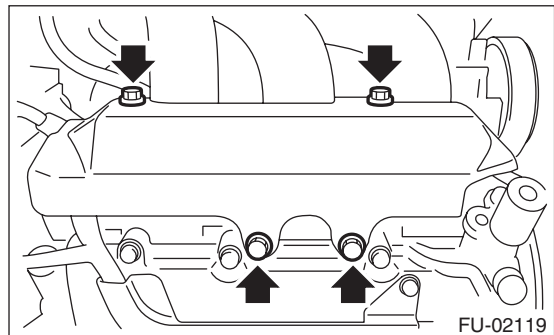
19 N·m (1.9 kgf-m, 14.0 ft-lb)



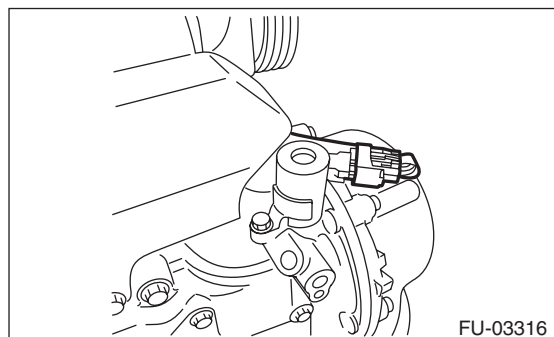
4) Install the fuel pipe protector RH.

Tightening torque:

19 N·m (1.9 kgf-m, 14.0 ft-lb)



5) Connect the connectors of the intake oil flow control solenoid valve RH.



Intake Manifold

FUEL INJECTION (FUEL SYSTEMS)

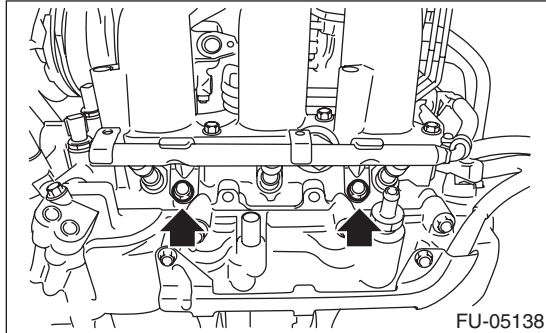
6) Install the bolts which hold fuel injector pipe LH to cylinder head.

NOTE:

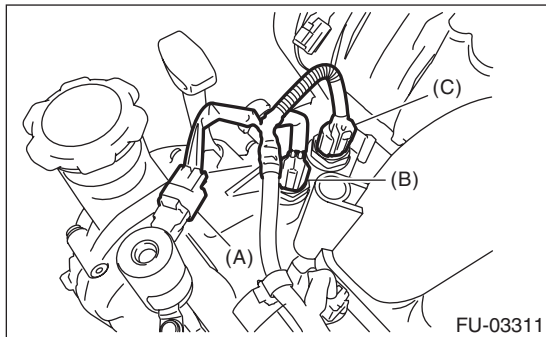
Use new O-rings.

Tightening torque:

19 N·m (1.9 kgf-m, 14.0 ft-lb)



7) Connect the connectors of the oil temperature sensor, engine coolant temperature sensor and intake oil flow control solenoid valve LH.



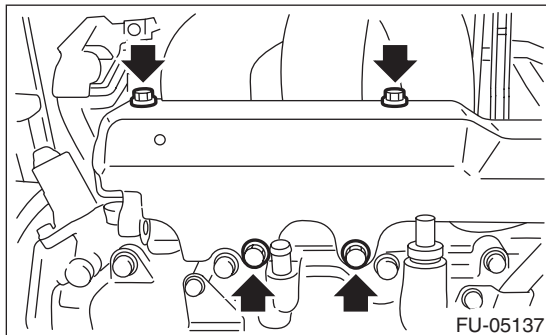
- (A) Intake oil flow control solenoid valve LH
- (B) Oil temperature sensor
- (C) Engine coolant temperature sensor

8) Install the engine harness to fuel injector pipe LH.

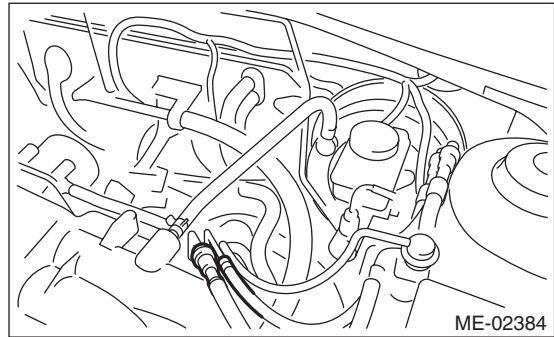
9) Install the fuel pipe protector LH.

Tightening torque:

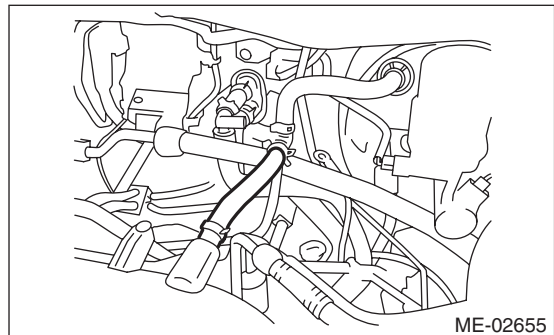
19 N·m (1.9 kgf-m, 14.0 ft-lb)



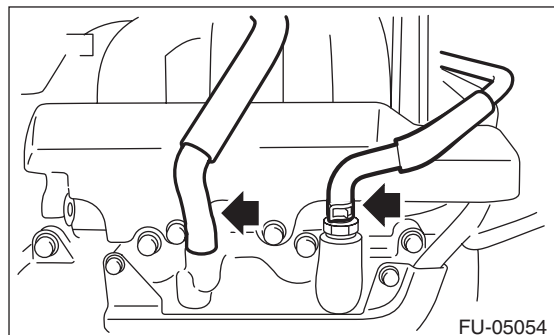
10) Connect fuel hoses to the fuel pipe.



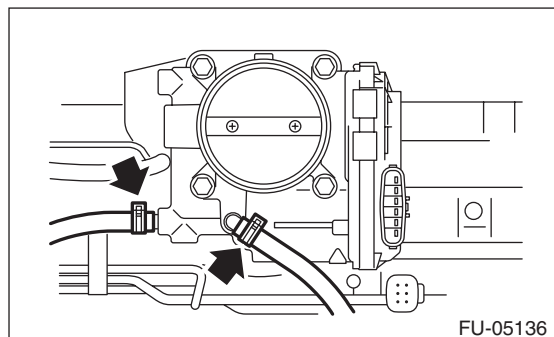
11) Connect the brake booster hose.



12) Connect the PCV hose and blow-by hose.



13) Connect the engine coolant hoses to throttle body.

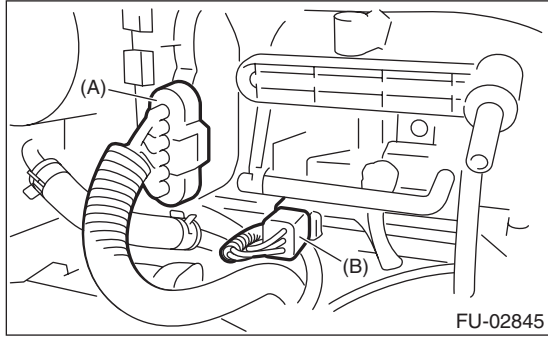


14) Connect the connector (A) to throttle body.

Intake Manifold

FUEL INJECTION (FUEL SYSTEMS)

- 15) Connect the engine harness connector (B).



- 16) Install the air cleaner case and air intake chamber. <Ref. to IN(H6DO)-5, INSTALLATION, Air Cleaner Case.> <Ref. to IN(H6DO)-7, INSTALLATION, Air Intake Chamber.>

- 17) Connect the ground cable to battery.

- 18) Install the collector cover.

C: DISASSEMBLY

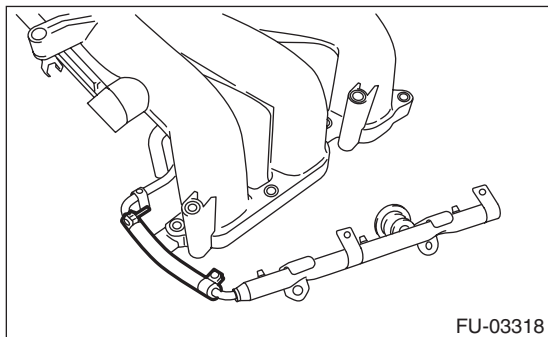
- 1) Remove the engine harness from intake manifold. <Ref. to FU(H6DO)-7, ENGINE HARNESS, COMPONENT, General Description.>

- 2) Remove the throttle body. <Ref. to FU(H6DO)-16, REMOVAL, Throttle Body.>

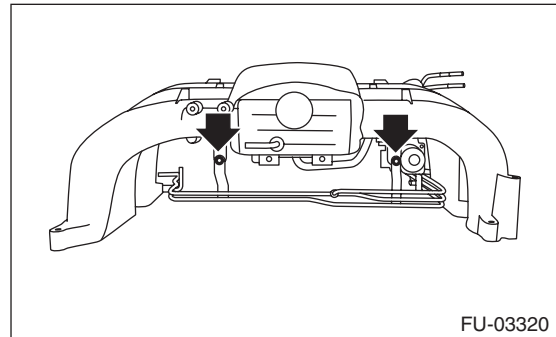
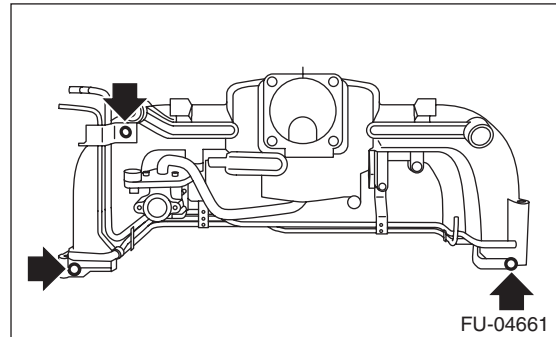
- 3) Remove the manifold absolute pressure sensor. <Ref. to FU(H6DO)-28, REMOVAL, Manifold Absolute Pressure Sensor.>

- 4) Remove the purge control solenoid valve. <Ref. to EC(H6DO)-7, REMOVAL, Purge Control Solenoid Valve.>

- 5) Loosen the clamp which holds the fuel injector pipe to the fuel hose, and disconnect the pipe from the fuel hose.



- 6) Remove the bolts which install fuel pipes on intake manifold.



- 7) Remove the EGR valve. <Ref. to FU(H6DO)-30, REMOVAL, EGR Valve.>

Intake Manifold

FUEL INJECTION (FUEL SYSTEMS)

D: ASSEMBLY

NOTE:

When assembling the nipple, apply liquid gasket.

Liquid gasket:

THREE BOND 1105 (Part No. 004403010) or equivalent

Tightening torque:

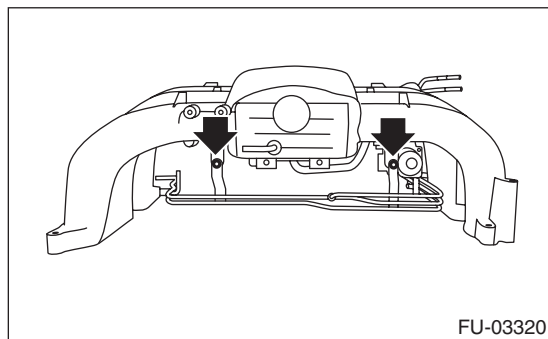
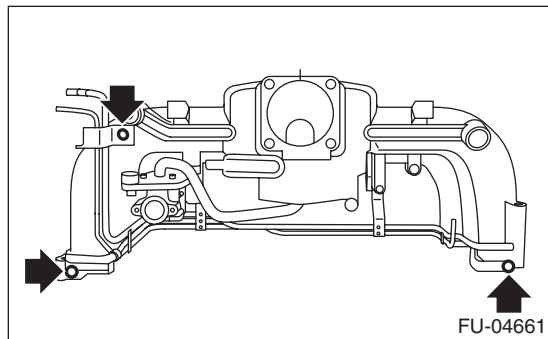
17 N·m (1.7 kgf-m, 12.5 ft-lb)

1) Install the EGR valve. <Ref. to FU(H6DO)-30, INSTALLATION, EGR Valve.>

2) Tighten the bolts which install fuel pipes on intake manifold.

Tightening torque:

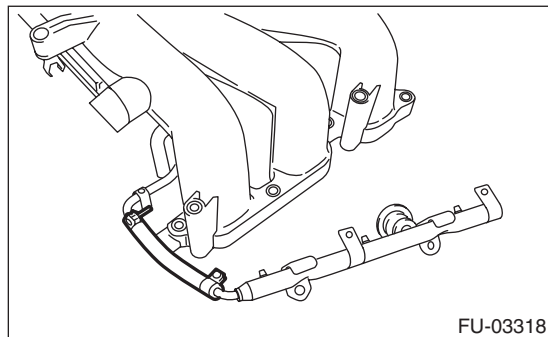
6.4 N·m (0.7 kgf-m, 4.7 ft-lb)



3) Connect the fuel injector pipe to fuel hose, and tighten the clamp screw.

Tightening torque:

1.25 N·m (0.1 kgf-m, 0.9 ft-lb)



4) Install the purge control solenoid valve. <Ref. to EC(H6DO)-7, INSTALLATION, Purge Control Solenoid Valve.>

5) Install the manifold absolute pressure sensor. <Ref. to FU(H6DO)-28, INSTALLATION, Manifold Absolute Pressure Sensor.>

6) Install the throttle body to the intake manifold. <Ref. to FU(H6DO)-16, INSTALLATION, Throttle Body.>

7) Install the engine harness to the intake manifold. <Ref. to FU(H6DO)-7, ENGINE HARNESS, COMPONENT, General Description.>

E: INSPECTION

Make sure the fuel pipe and fuel hoses are not damaged and the connections are tightened firmly.