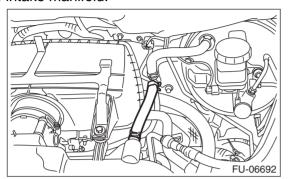
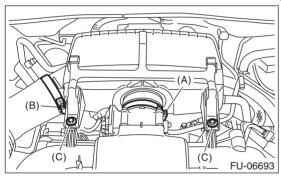
### 2. Throttle Body

### A: REMOVAL

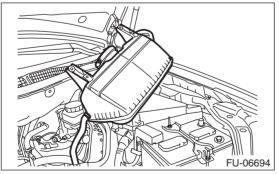
- 1) Remove the collector cover.
- 2) Disconnect the ground cable from battery.
- 3) Disconnect the brake booster vacuum hose from the intake manifold.



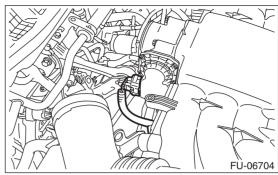
- 4) Loosen the clamp (A) which connects air intake chamber to throttle body.
- 5) Loosen the clamp (B) which connects intake boot to air intake chamber.
- 6) Remove the bolt (C) which secures air intake chamber and collector cover bracket to the stay.



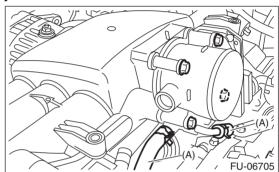
7) Remove the air intake chamber, and move it to the left side wheel apron.



8) Disconnect the connector from the throttle body.



- 9) Disconnect the engine coolant hoses (A) from throttle body.
- 10) Remove the bolts which secure the throttle body to the intake manifold.



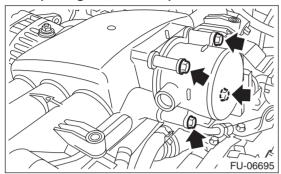
### **B: INSTALLATION**

Install in the reverse order of removal.

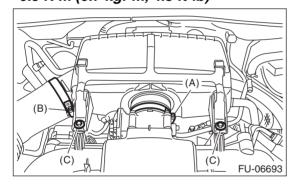
NOTE:

Use new O-rings.

Tightening torque: 8 N·m (0.8 kgf-m, 5.9 ft-lb)



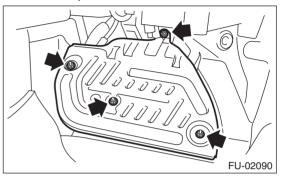
Tightening torque:
Clamp (A), (B)
3 N·m (0.3 kgf-m, 2.2 ft-lb)
Bolt (C)
6.5 N·m (0.7 kgf-m, 4.8 ft-lb)



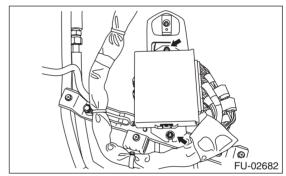
### C: INSPECTION

# 1. THROTTLE SENSOR (METHOD WITH CIRCUIT TESTER)

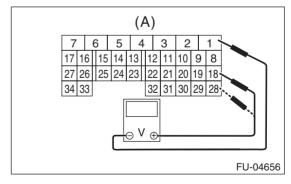
- 1) Disconnect the ground cable from battery.
- 2) Remove the front pillar lower trim and console side panel lower RH of passenger's side.
- 3) Detach the floor mat of passenger's seat.
- 4) Remove the protect cover.



5) Remove the ECM from vehicle.



- 6) Turn the ignition switch to ON. (engine OFF)
- 7) Measure the voltage between ECM connector terminals.



(A) To ECM connector

| Throttle sensor | Accelerator pedal           | Terminal<br>No.     | Standard       |
|-----------------|-----------------------------|---------------------|----------------|
| Main            | Not depressed (Full closed) | 18 (+) and<br>1 (-) | Approx. 0.6 V  |
|                 | Depressed<br>(Full opened)  |                     | Approx. 4.04 V |
| Sub             | Not depressed (Full closed) | 28 (+) and<br>1 (-) | Approx. 1.48 V |
|                 | Depressed<br>(Full opened)  |                     | Approx. 4.23 V |

8) After inspection, install the related parts in the reverse order of removal.

#### Tightening torque:

7.5 N⋅m (0.8 kgf-m, 5.5 ft-lb)

# 2. THROTTLE SENSOR (METHOD WITH SUBARU SELECT MONITOR)

- 1) Turn the ignition switch to ON. (engine OFF)
- 2) Read the throttle opening angle signal and voltage of throttle sensor using Subaru Select Monitor. <Ref. to EN(H6DO)(diag)-38, READ CURRENT DATA FOR ENGINE (NORMAL MODE), OPERATION, Subaru Select Monitor.>

| Throttle sensor | Throttle opening angle signal | Standard       |
|-----------------|-------------------------------|----------------|
| Main            | 0.0%                          | Approx. 0.6 V  |
| IVIAIII         | 100.0%                        | Approx. 4.04 V |
| Sub             | 0.0%                          | Approx. 1.48 V |
| Sub             | 100.0%                        | Approx. 4.23 V |

#### 3. OTHER INSPECTIONS

- 1) Check that the throttle body has no deformation, cracks or other damages.
- 2) Check that the engine coolant hose has no cracks, damage or loose part.