

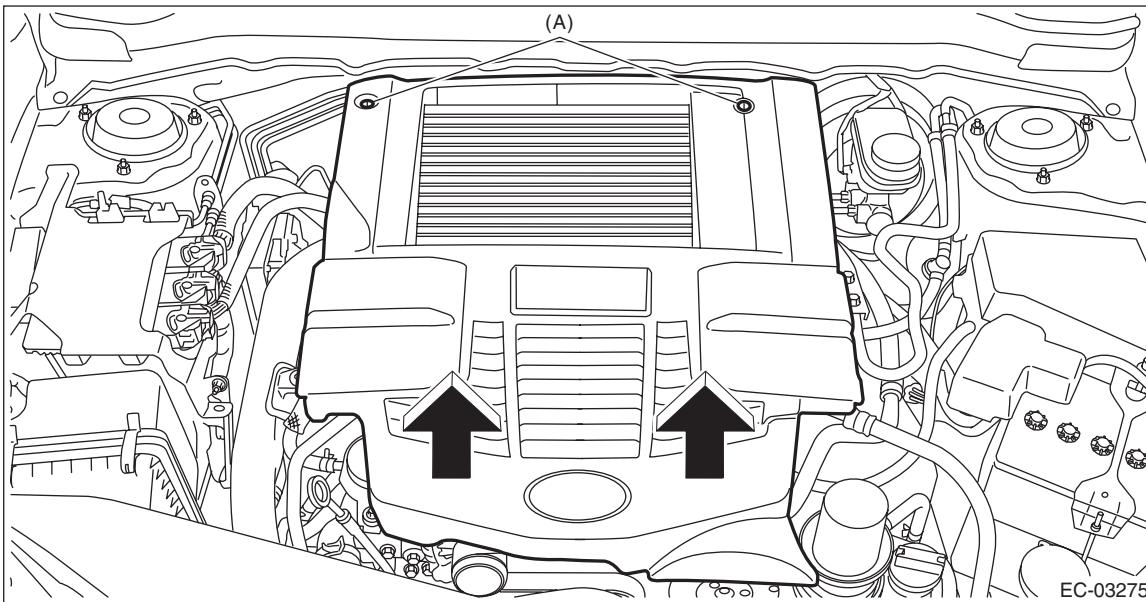
Throttle Body

FUEL INJECTION (FUEL SYSTEMS)

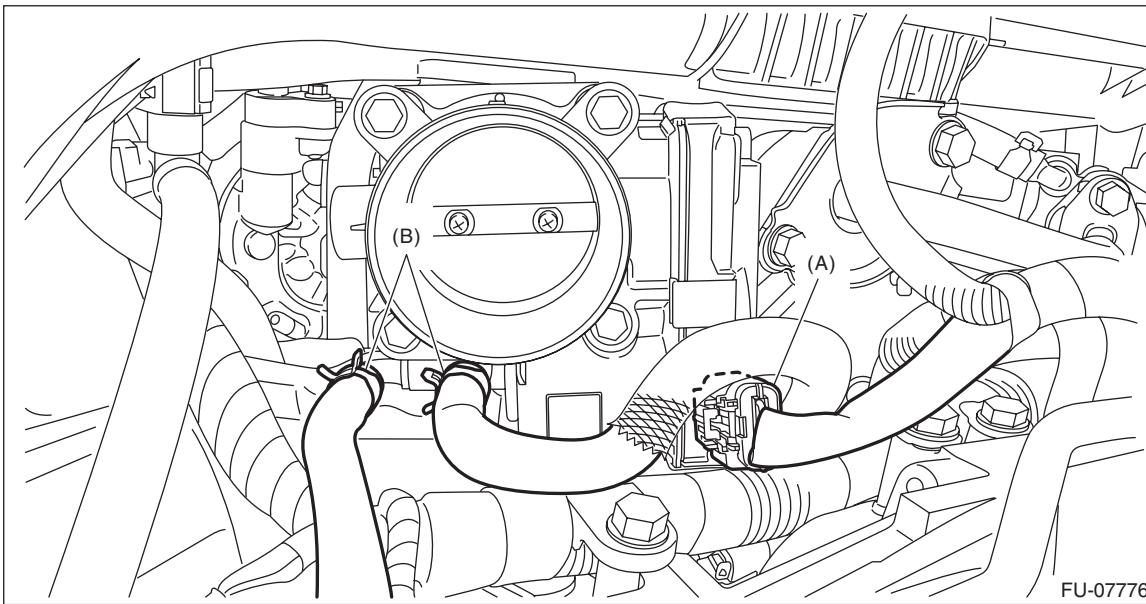
2. Throttle Body

A: REMOVAL

- 1) Remove the clip (A), lift the front of the collector cover in the direction of arrow, and then remove the collector cover.

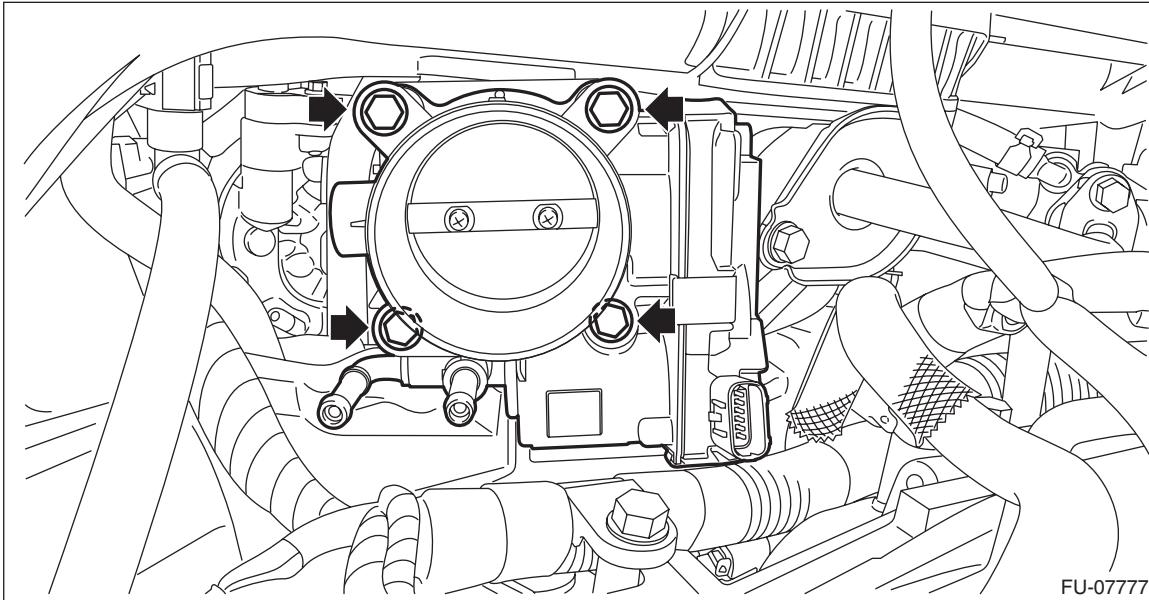


- 2) Disconnect the ground cable from battery.
- 3) Lift up the vehicle.
- 4) Remove the under cover. <Ref. to EI-22, REMOVAL, Front Under Cover.>
- 5) Drain approximately 3.0 L (3.2 US qt, 2.6 Imp qt) of coolant. <Ref. to CO(H4DOTC)-13, DRAINING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.>
- 6) Remove the intercooler. <Ref. to IN(H4DOTC)-35, REMOVAL, Intercooler.>
- 7) Remove the intake duct No. 3. <Ref. to IN(H4DOTC)-25, INTAKE DUCT NO. 3, REMOVAL, Intake Duct.>
- 8) Disconnect the connector (A) from the throttle position sensor, and disconnect the preheater hose (B) from the throttle body.



FU-07776

9) Remove the throttle body from the intake manifold.



B: INSTALLATION

Install in the reverse order of removal.

NOTE:

Use a new gasket.

Tightening torque:

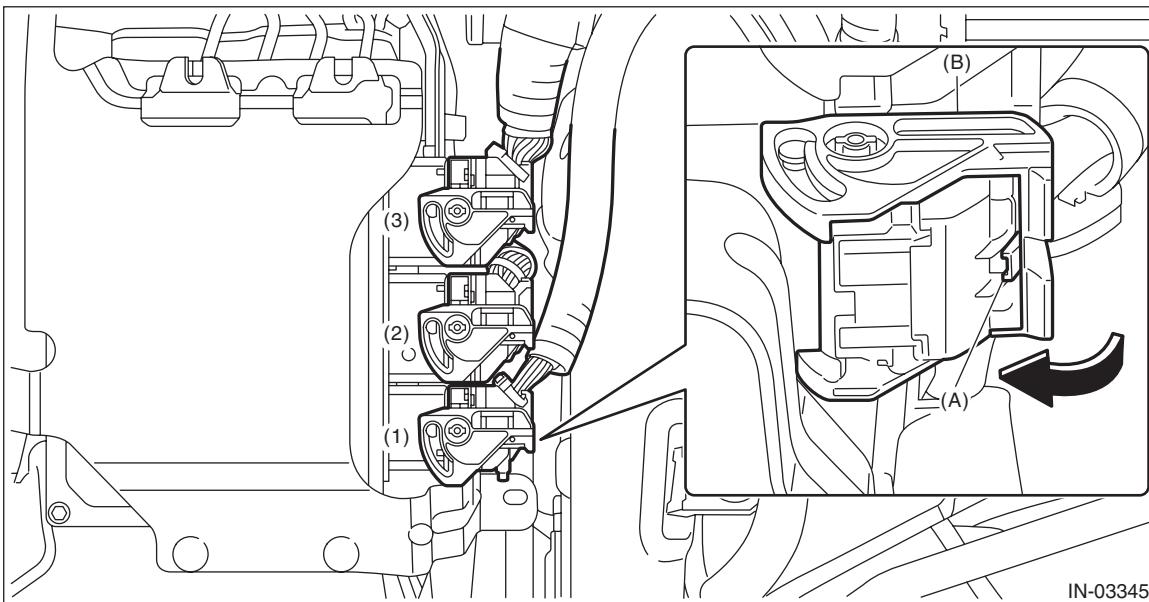
8 N·m (0.8 kgf·m, 5.9 ft-lb)

C: INSPECTION

1. THROTTLE SENSOR (METHOD WITH CIRCUIT TESTER)

1) Disconnect the ground cable from battery.

2) While pressing the section (A) shown in the figure, move the lock lever (B) in the direction of the arrow to disconnect the connectors from the ECM in numerical order as shown in the figure.

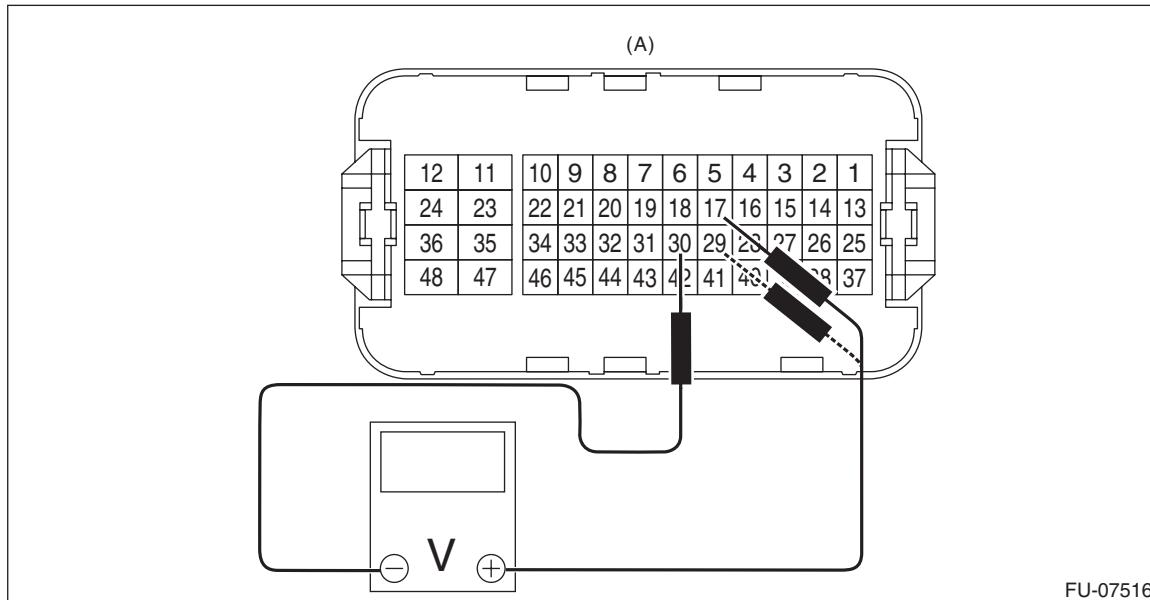


3) Install the special tool between the ECM and body harness and the engine harness. <Ref. to EN(H4DOTC)(diag)-6, CAUTION, General Description.>
ST 18460AA030 CHECK BOARD

Throttle Body

FUEL INJECTION (FUEL SYSTEMS)

- 4) Connect the battery ground terminal.
- 5) After warming-up the engine, turn the ignition switch to OFF.
- 6) Turn the ignition switch to ON. (engine OFF)
- 7) Measure the voltage between ECM connector terminals using ST.



(A) To the check board connector
(ECM connector)

| Throttle sensor | Accelerator pedal | Terminal No. | Standard |
|-----------------|-----------------------------|-------------------|---------------|
| Main | Not depressed (full closed) | 17 (+) and 30 (-) | Approx. 0.7 V |
| | Depressed (full opened) | | Approx. 3.9 V |
| Sub | Not depressed (full closed) | 29 (+) and 30 (-) | Approx. 4.4 V |
| | Depressed (full opened) | | Approx. 1.1 V |

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

2. THROTTLE SENSOR (METHOD WITH SUBARU SELECT MONITOR)

- 1) After warming-up the engine, turn the ignition switch to OFF.
- 2) Turn the ignition switch to ON. (engine OFF)
- 3) Read the throttle opening angle signal and voltage of throttle sensor using Subaru Select Monitor. <Ref. to EN(H4DO)(diag)-41, DISPLAY OF ENGINE FREEZE FRAME DATA, OPERATION, Subaru Select Monitor.>

NOTE:

Due to the specification of the Subaru Select Monitor, value read from the throttle opening angle signal is highlighted and displayed as the voltage readings of sub throttle sensor.

| Throttle sensor | Throttle opening angle signal | Standard |
|-----------------|-------------------------------|---------------|
| Main | 0.0% | Approx. 0.7 V |
| | 100.0% | Approx. 3.9 V |
| Sub | 0.0% | Approx. 1.1 V |
| | 100.0% | Approx. 4.4 V |

3. OTHER INSPECTIONS

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