

2. Throttle Body

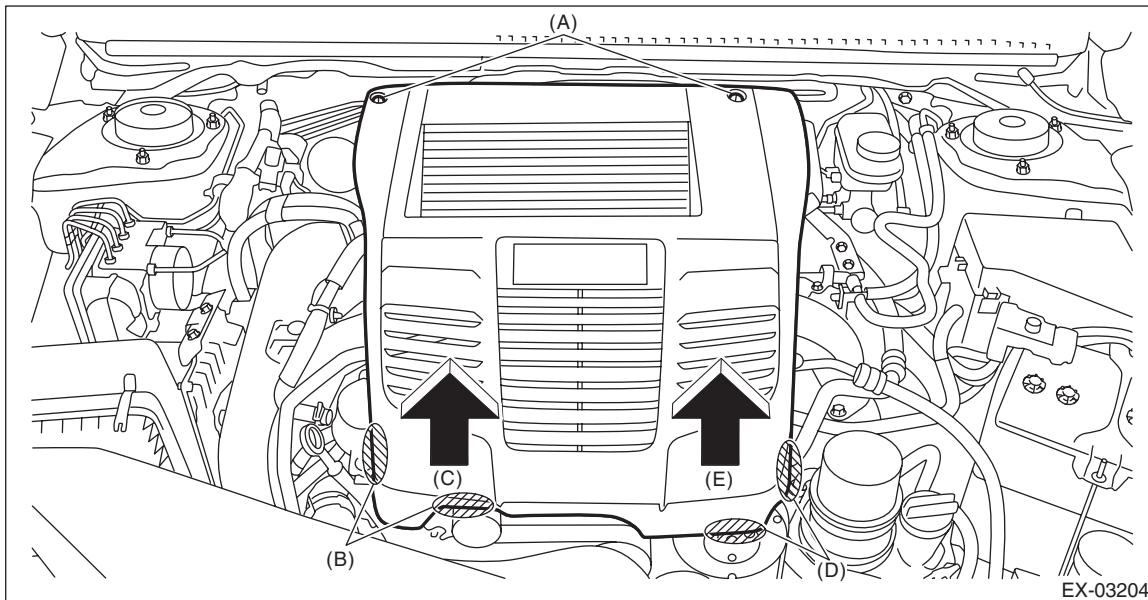
A: REMOVAL

1) Remove the collector cover.

(1) Remove the clips (A).

(2) Hold the shaded area (B) by hand and carefully pull the RH side (C) upward.

(3) Hold the shaded area (D) by hand and carefully pull the LH side (E) upward.



2) Disconnect the ground terminal from battery sensor. <Ref. to NT-5, BATTERY, NOTE, Note.>

3) Lift up the vehicle.

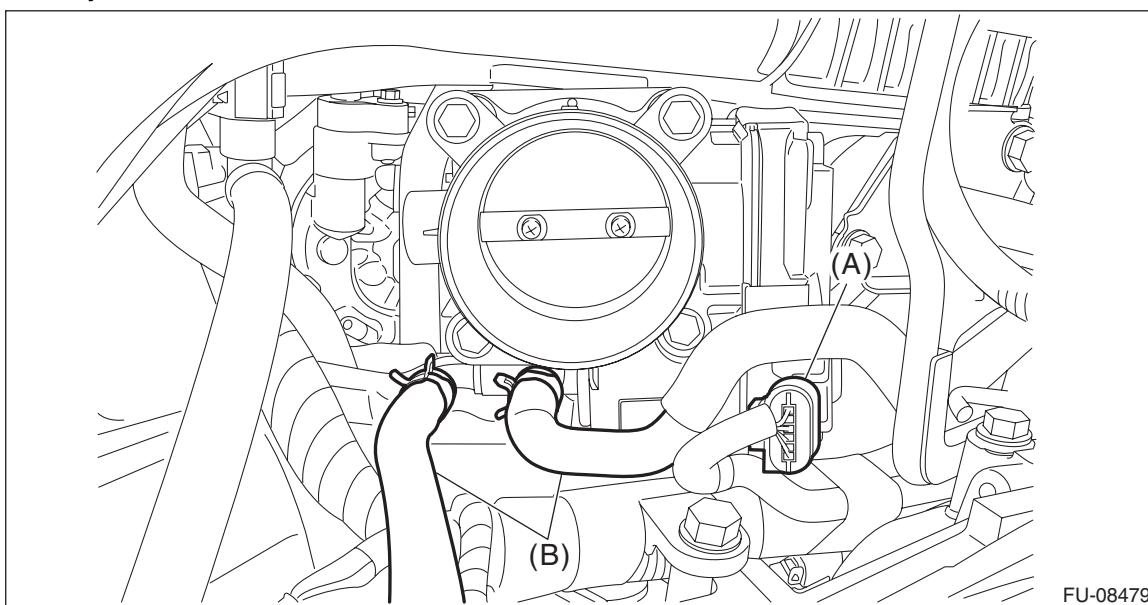
4) Remove the under cover. <Ref. to EI-21, REMOVAL, Front Under Cover.>

5) Drain approximately 3.0 L (3.2 US qt, 2.6 Imp qt) of coolant. <Ref. to CO(w/o STI)-13, DRAINING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.>

6) Remove the intercooler. <Ref. to IN(w/o STI)-38, REMOVAL, Intercooler.>

7) Remove the intake duct No. 3. <Ref. to IN(w/o STI)-28, INTAKE DUCT NO. 3, REMOVAL, Intake Duct.>

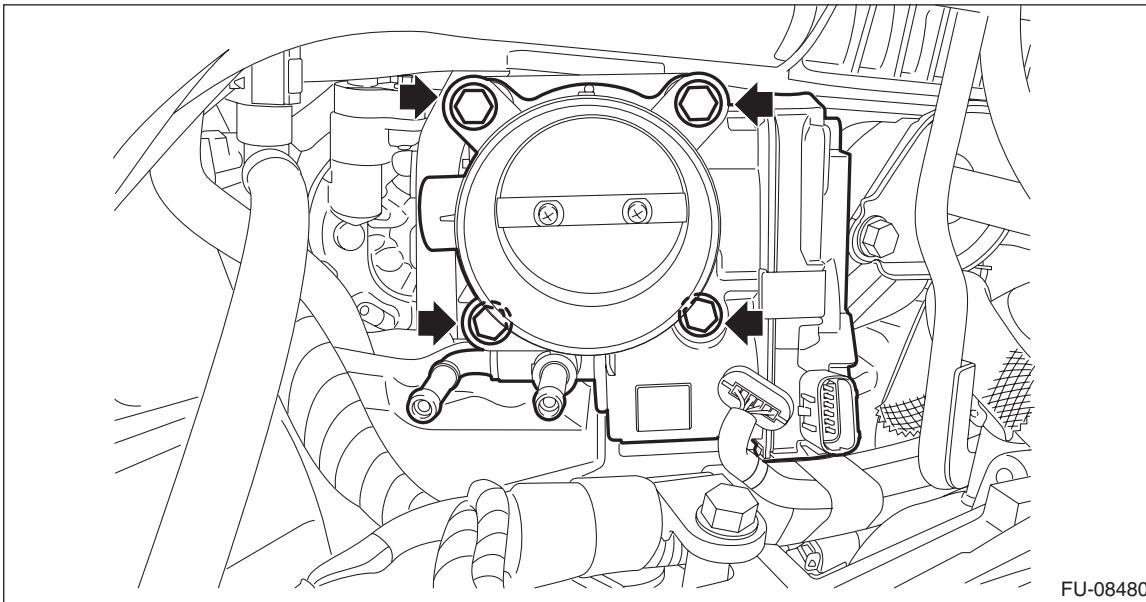
8) Disconnect the connector (A) from the throttle position sensor, and disconnect the preheater hose (B) from the throttle body.



Throttle Body

FUEL INJECTION (FUEL SYSTEMS)

- 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

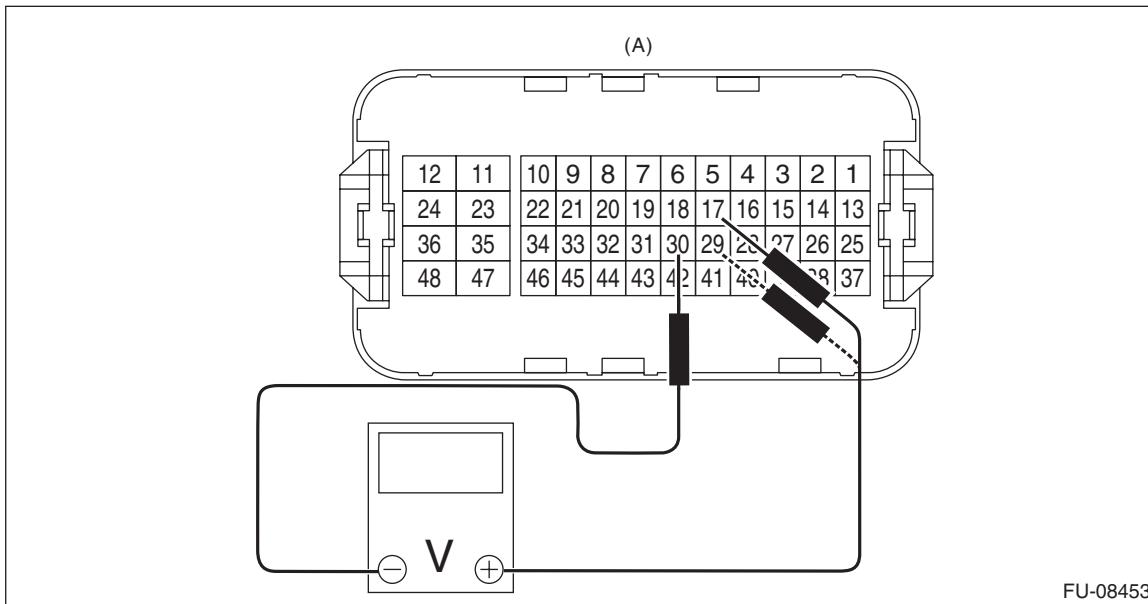
1. THROTTLE SENSOR (METHOD WITH CIRCUIT TESTER)

- 1) Disconnect the ground terminal from battery sensor. <Ref. to NT-5, BATTERY, NOTE, Note.>
- 2) Remove the engine control module (ECM). <Ref. to FU(w/o STI)-132, REMOVAL, Engine Control Module (ECM).>
- 3) Install the ST between the ECM and bulkhead harness and the engine harness. <Ref. to EN(w/o STI)(diag)-6, CAUTION, General Description.>
ST 18460AA030 CHECK BOARD
- 4) Connect the ground terminal to battery sensor. <Ref. to NT-5, BATTERY, NOTE, Note.>
- 5) After warming-up the engine, turn the ignition switch to OFF.
- 6) Turn the ignition switch to ON. (engine OFF)

Throttle Body

FUEL INJECTION (FUEL SYSTEMS)

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(w/o STI)(diag)-37, DISPLAY CURRENT ENGINE 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.