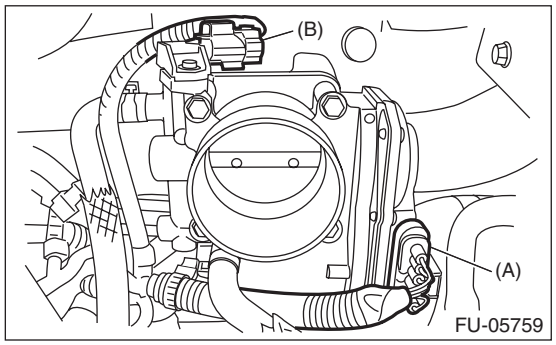
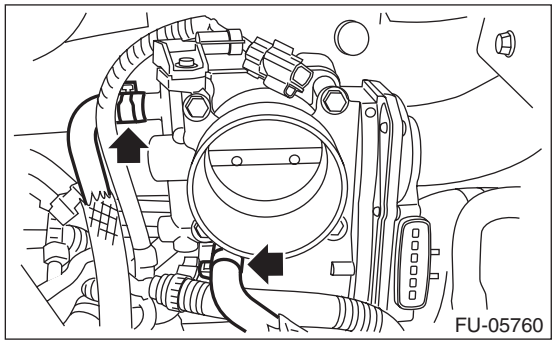
2. Throttle Body

A: REMOVAL

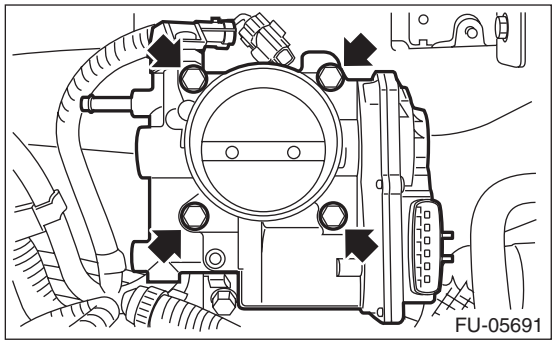
1) Disconnect the ground cable from battery.
2) Lift up the vehicle.
3) Remove the under cover. <Ref. to EI-21, REMOVAL, Front Under Cover.>
4) Drain approximately 3.0 L (3.2 US qt, 2.6 Imp qt) of coolant. <Ref. to CO(STI)-13, DRAINING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.>
5) Remove the intercooler. <Ref. to IN(STI)-13, REMOVAL, Intercooler.>
6) Disconnect the connector (A) from the throttle position sensor, and the connector (B) from the manifold pressure sensor.



7) Disconnect the engine coolant hose from throttle body.



8) Remove the throttle body from the intake manifold.



B: INSTALLATION

Install in the reverse order of removal.

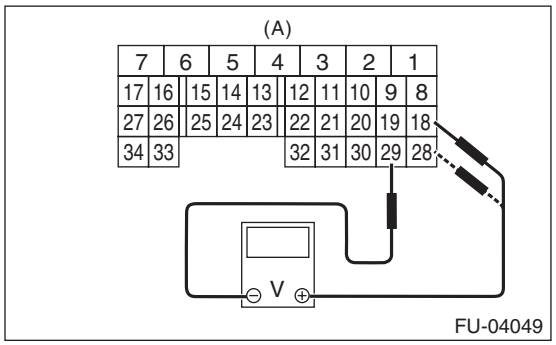
NOTE:
Use a new gasket.

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

C: INSPECTION

1. THROTTLE SENSOR INSPECTION (METHOD WITH CIRCUIT TESTER)

1) Remove the glove box. <Ref. to EI-63, REMOVAL, Glove Box.>
2) Turn the ignition switch to ON. (engine OFF)
3) Measure the voltage between ECM connector terminals.



(A) To ECM connector

Throttle sensor	Accelerator pedal	Terminal No.	Standard
Main	Not depressed (full closed)	18 (+) and 29 (–)	Approx. 0.6 V
	Depressed (full opened)		Approx. 3.96 V
Sub	Not depressed (full closed)	28 (+) and 29 (–)	Approx. 1.48 V
	Depressed (full opened)		Approx. 4.17 V

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

2. THROTTLE SENSOR INSPECTION (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(STI)(diag)-36, DISPLAY CURRENT ENGINE DATA (NORMAL MODE), OPERATION, Subaru Select Monitor.>

Throttle sensor	Throttle opening angle signal	Standard
Main	0.0%	Approx. 0.6 V
	100.0%	Approx. 3.96 V
Sub	0.0%	Approx. 1.48 V
	100.0%	Approx. 4.17 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.