

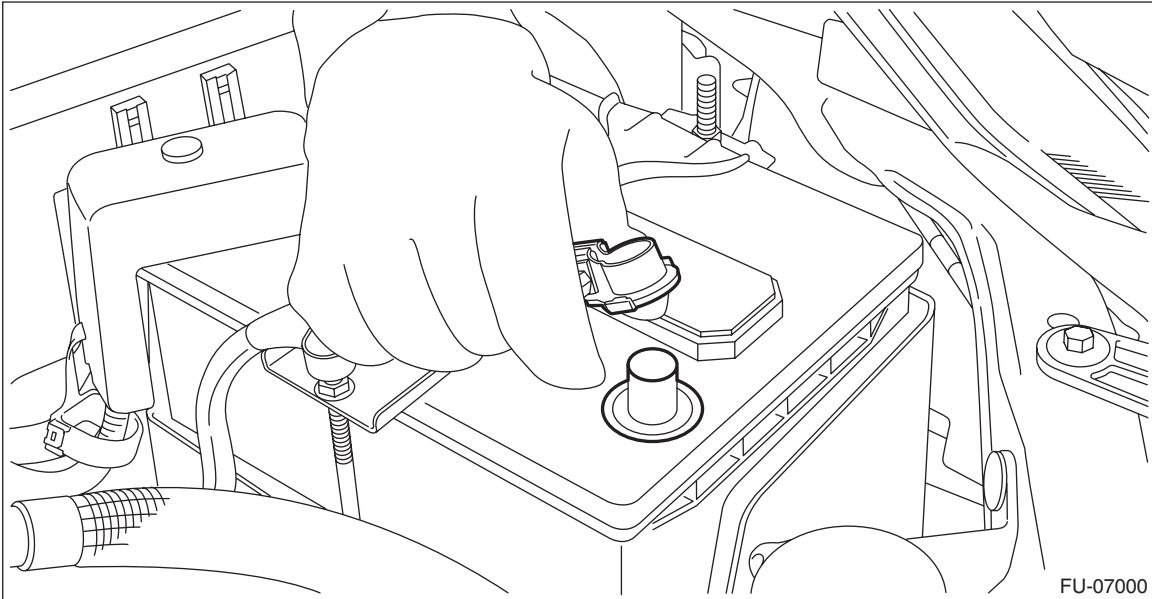
# Throttle Body

FUEL INJECTION (FUEL SYSTEMS)

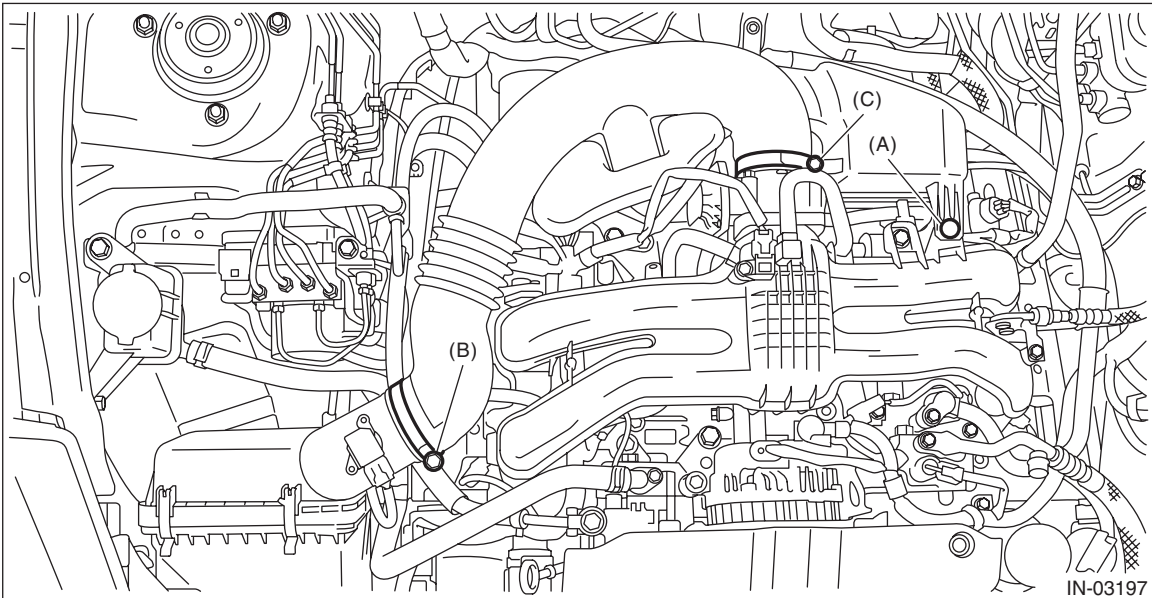
## 2. Throttle Body

### A: REMOVAL

- 1) Disconnect the ground cable from battery.



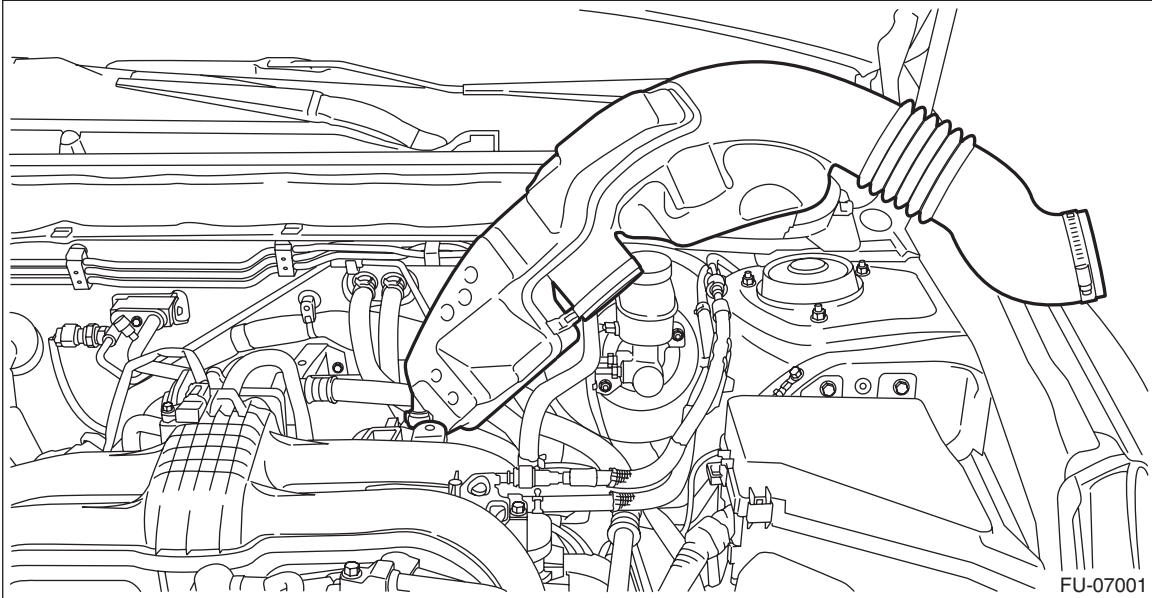
- 2) Lift up the vehicle.
- 3) Remove the under cover. <Ref. to EI-32, REMOVAL, Front Under Cover.>
- 4) Drain approximately 3.0 L (3.2 US qt, 2.6 Imp qt) of coolant. <Ref. to CO(H4DO)-14, DRAINING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.>
- 5) Remove the clip (A) from the air intake boot.
- 6) Loosen the clamp (B) connecting the air intake boot and air cleaner case (rear).
- 7) Loosen the clamp (C) which connects the air intake boot and throttle body.



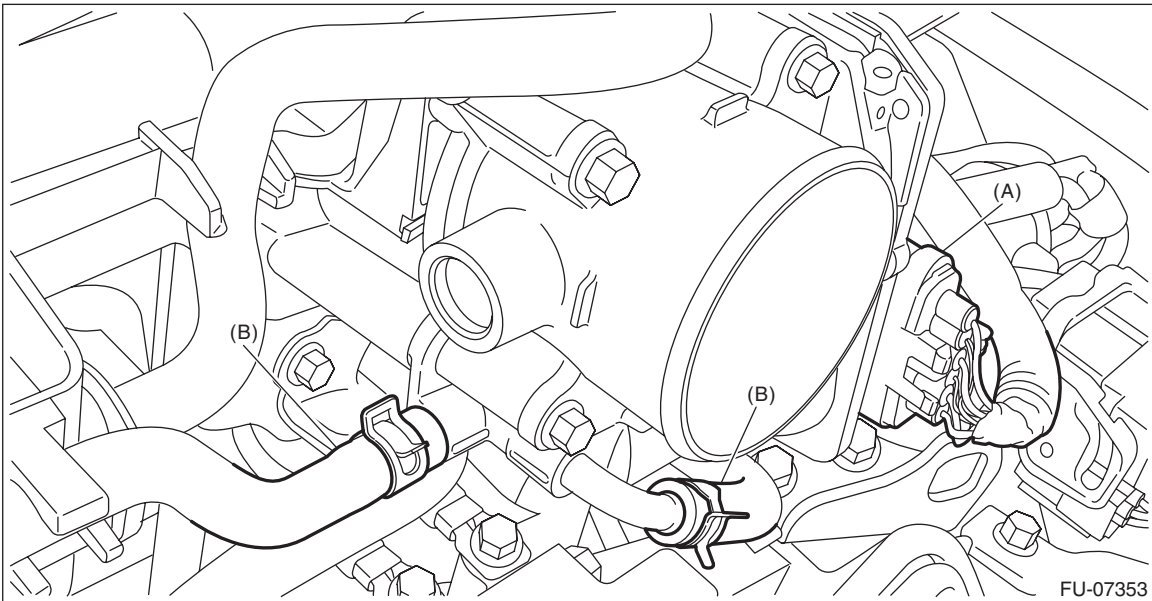
# Throttle Body

## FUEL INJECTION (FUEL SYSTEMS)

- 8) Remove the air intake boot from the throttle body, and move it to the left side wheel apron.



- 9) Disconnect the connectors (A) from the throttle position sensor.  
10) Disconnect the preheater hose (B) from the throttle body.

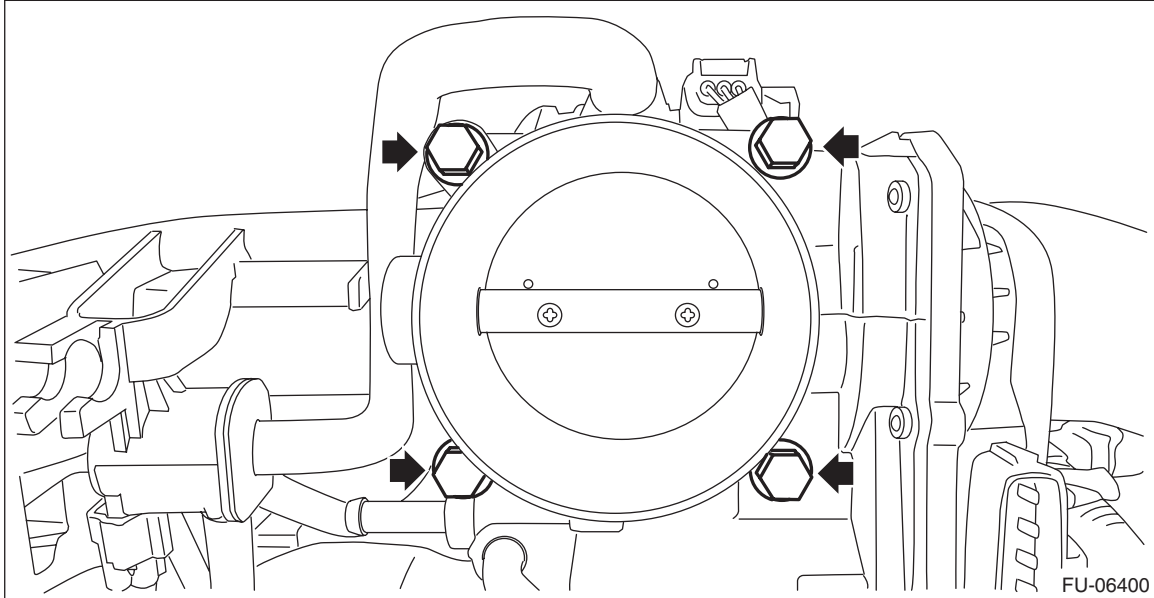


# Throttle Body

## FUEL INJECTION (FUEL SYSTEMS)

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11) Remove the throttle body from the intake manifold.



### **B: INSTALLATION**

Install in the reverse order of removal.

NOTE:

Use a new gasket.

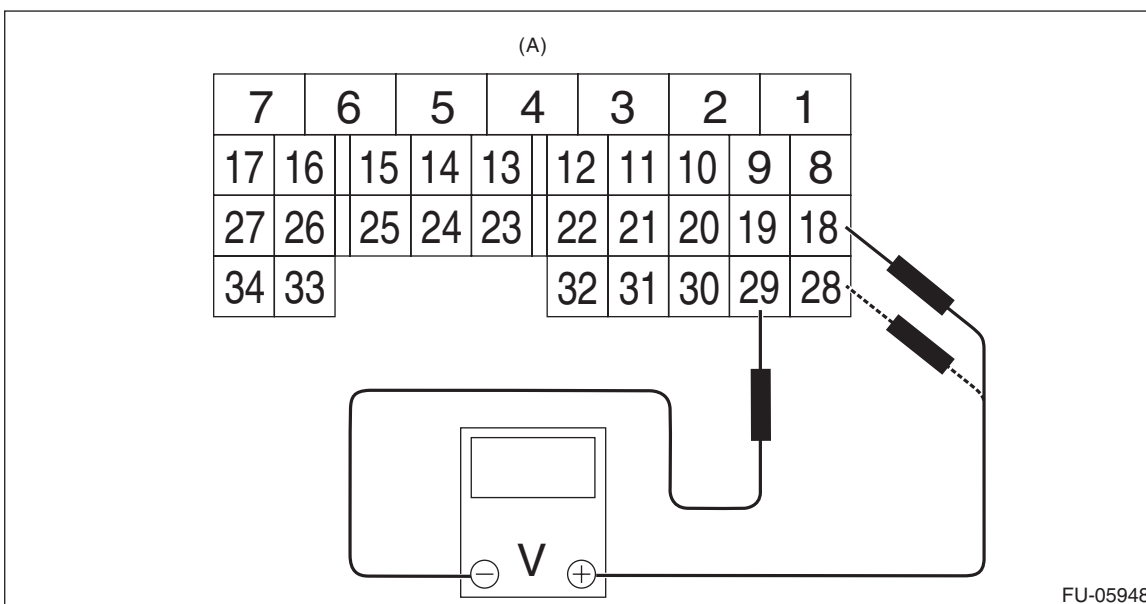
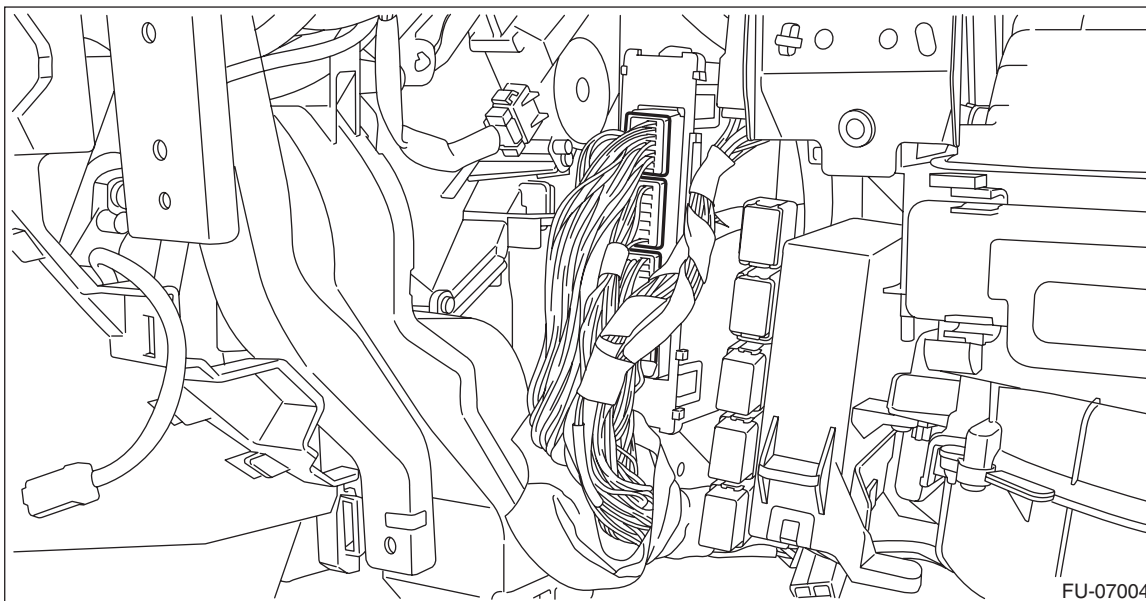
***Tightening torque:***

***8 N·m (0.8 kgf-m, 5.9 ft-lb)***

## C: INSPECTION

### 1. THROTTLE SENSOR (METHOD WITH CIRCUIT TESTER)

- 1) Remove the back panel - pocket. <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. 4.0 V
Sub	Not depressed (Full closed)	28 (+) and 29 (-)	Approx. 1.5 V
	Depressed (Full opened)		Approx. 4.2 V

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

# Throttle Body

## FUEL INJECTION (FUEL SYSTEMS)

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### 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(H4DO)(diag)-43, DISPLAY OF ENGINE FREEZE FRAME DATA, OPERATION, Subaru Select Monitor.>

Throttle sensor	Throttle opening angle signal	Standard
Main	0.0%	Approx. 0.6 V
	100.0%	Approx. 4.0 V
Sub	0.0%	Approx. 1.5 V
	100.0%	Approx. 4.2 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.