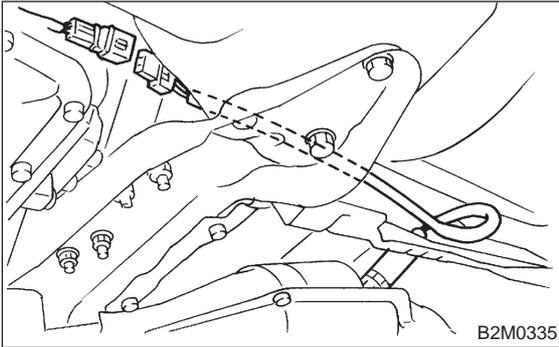
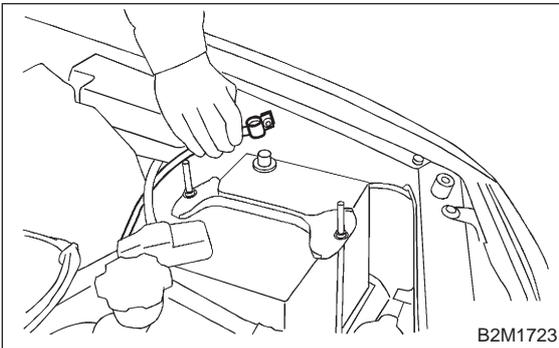


- 3) Connect connector to rear oxygen sensor.



- 4) Lower the vehicle.
- 5) Connect battery ground cable.

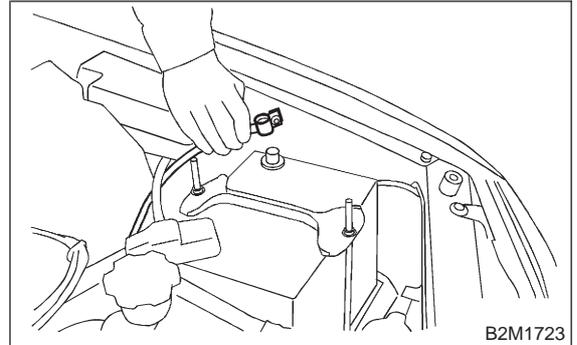


9. Throttle Position Sensor

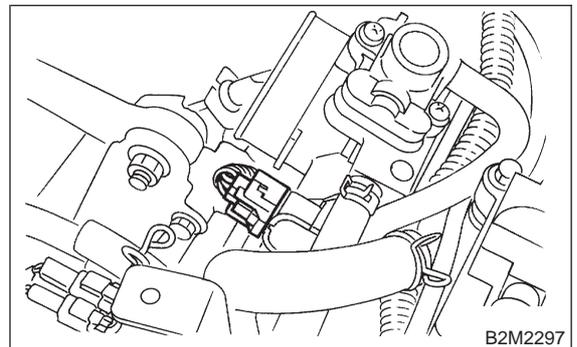
A: REMOVAL AND INSTALLATION

1. 2200 cc CALIFORNIA SPEC. VEHICLES

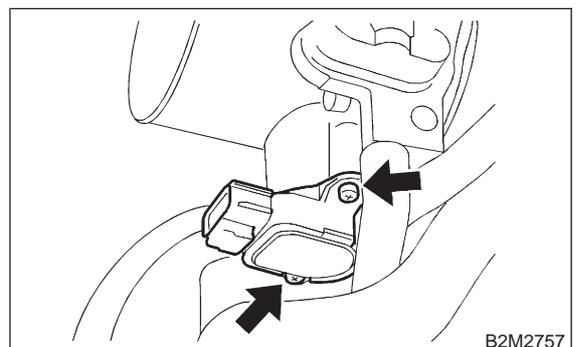
- 1) Disconnect battery ground cable.



- 2) Disconnect connector from throttle position sensor.



- 3) Remove throttle position sensor holding screws, and remove throttle position sensor itself.



2-7 [W9A2]

9. Throttle Position Sensor

SERVICE PROCEDURE

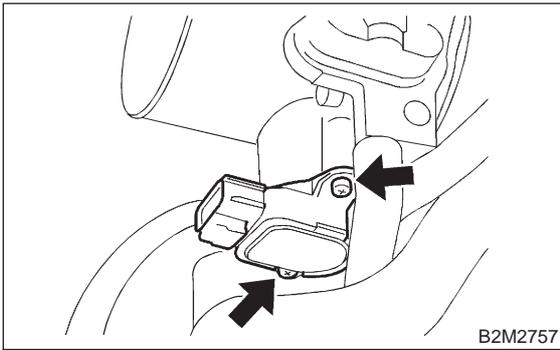
4) Installation is in the reverse order of removal.

CAUTION:

When installing throttle position sensor, adjust the position to match with the specified data.

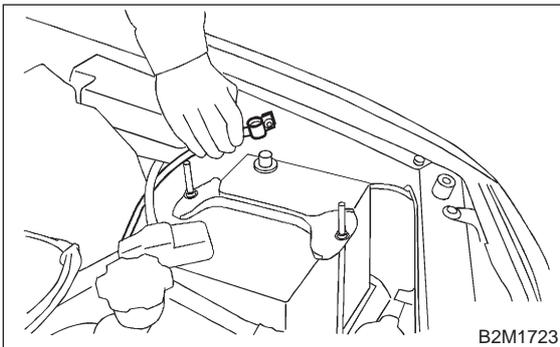
Tightening torque:

2.2 ± 0.2 N·m (0.22 ± 0.02 kg·m, 1.6 ± 0.1 ft·lb)

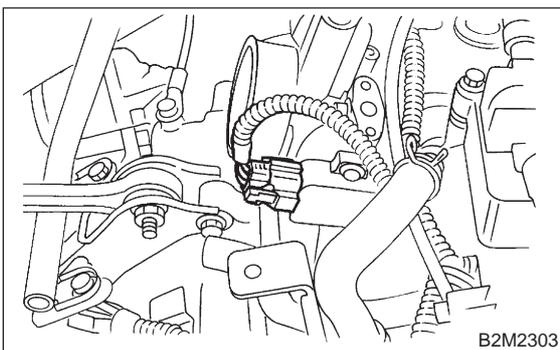


2. 2200 cc EXCEPT CALIFORNIA SPEC. VEHICLES

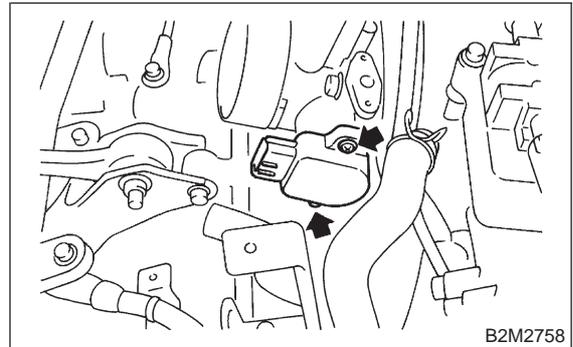
1) Disconnect battery ground cable.



2) Disconnect connector from throttle position sensor.



3) Remove throttle position sensor holding screws, and remove throttle position sensor itself.



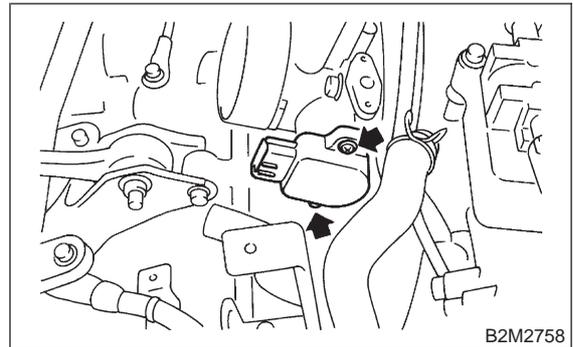
4) Installation is in the reverse order of removal.

CAUTION:

When installing throttle position sensor, adjust the position to match with the specified data.

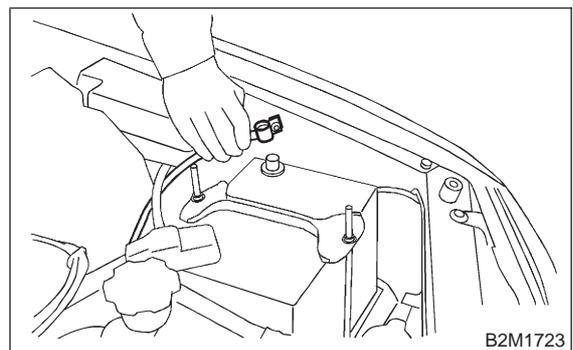
Tightening torque:

2.2 ± 0.2 N·m (0.22 ± 0.02 kg·m, 1.6 ± 0.1 ft·lb)

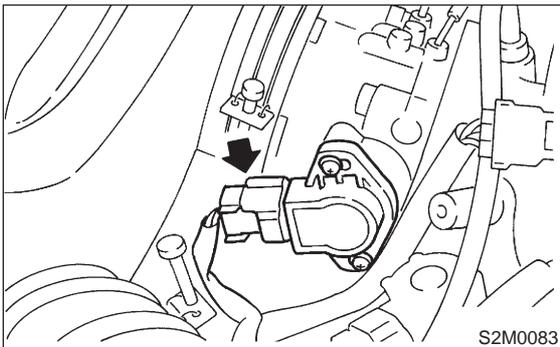


3. 2500 cc MODEL

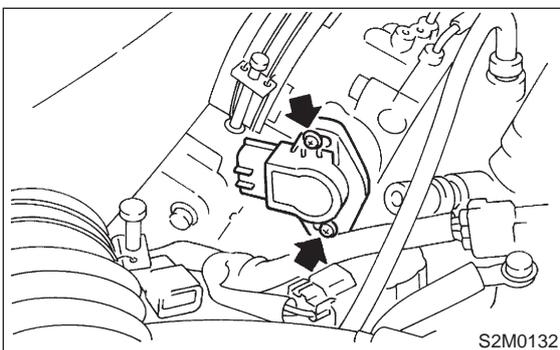
1) Disconnect battery ground cable.



- 2) Disconnect connector from throttle position sensor.



- 3) Remove throttle position sensor holding screws, and remove throttle position sensor itself.



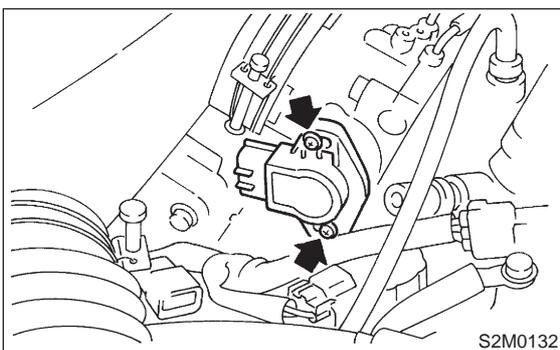
- 4) Installation is in the reverse order of removal.

CAUTION:

When installing throttle position sensor, adjust the position to match with the specified data.

Tightening torque:

$2.2 \pm 0.2 \text{ N}\cdot\text{m}$ ($0.22 \pm 0.02 \text{ kg}\cdot\text{m}$, $1.6 \pm 0.1 \text{ ft}\cdot\text{lb}$)

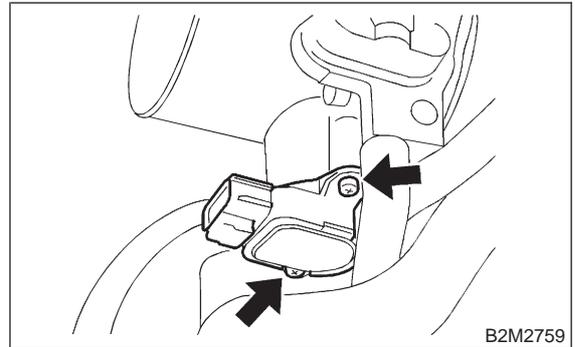


B: ADJUSTMENT

1. 2200 cc CALIFORNIA SPEC. VEHICLES

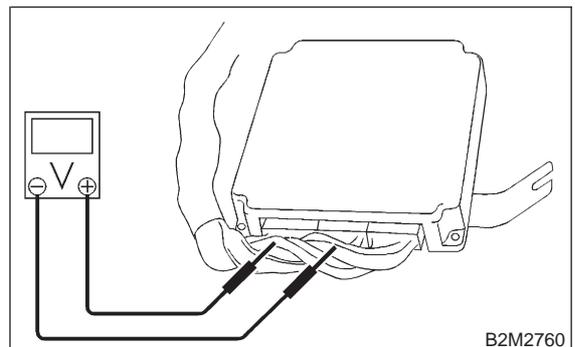
- 1) Turn ignition switch to OFF.

- 2) Loosen throttle position sensor holding screws.



- 3) When using voltage meter;
 (1) Take out ECM.
 (2) Turn ignition switch to ON.
 (3) Adjust throttle position sensor to the proper position to allow the voltage signal to ECM to be in specification.

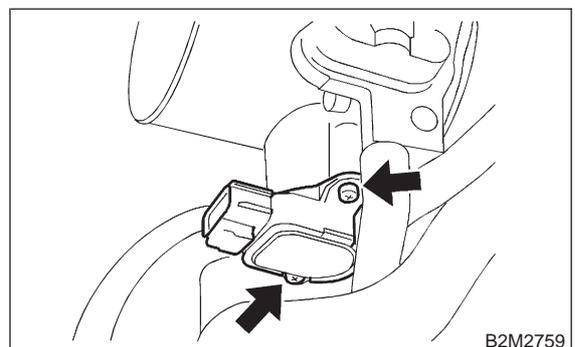
Connector & terminal / Specified voltage
(B136) No. 15 — (B136) No. 17 / 0.45 — 0.55 V
[Fully closed.]



- (4) Tighten throttle position sensor holding screws.

Tightening torque:

$2.2 \pm 0.2 \text{ N}\cdot\text{m}$ ($0.22 \pm 0.02 \text{ kg}\cdot\text{m}$, $1.6 \pm 0.1 \text{ ft}\cdot\text{lb}$)



- 4) When using Subaru Select Monitor;

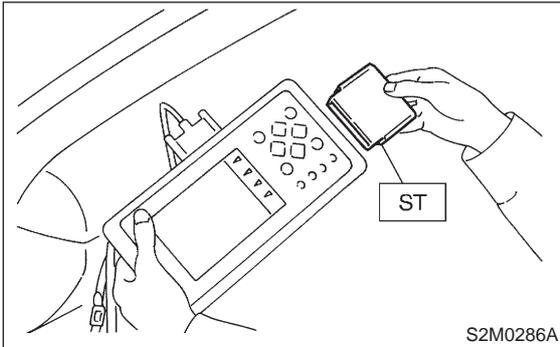
NOTE:

For detailed operation procedures, refer to the Subaru Select Monitor Operation Manual.

9. Throttle Position Sensor

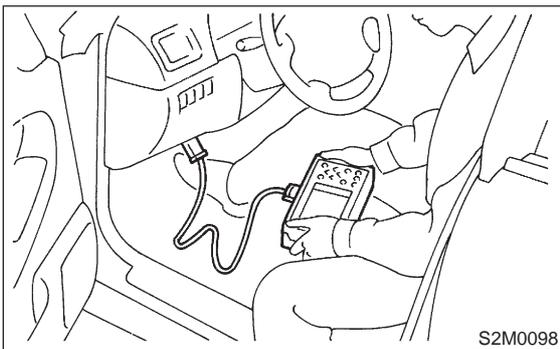
- (1) Insert the cartridge to Subaru Select Monitor.

ST 24082AA090 CARTRIDGE



- (2) Connect Subaru Select Monitor to the data link connector.
- (3) Turn ignition switch to ON, and Subaru Select Monitor switch to ON.
- (4) Select {2. Each System Check} in Main Menu.
- (5) Select {EGI/EMPI} in Selection Menu.
- (6) Select {1. Current Data Display & Save} in EGI/EMPI Diagnosis.
- (7) Select {1.12 Data Display} in Data Display Menu.
- (8) Adjust throttle position sensor to the proper position to match with the following specifications.

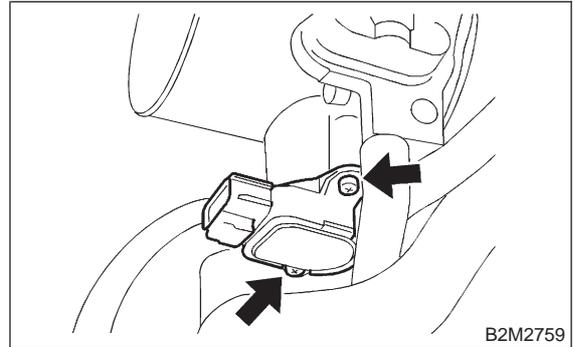
Condition: Throttle fully closed
Throttle opening angle 0.00%
Throttle sensor voltage 0.50 V



- (9) Tighten throttle position sensor holding screws.

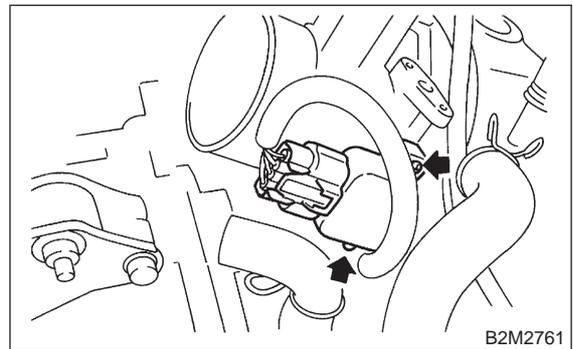
Tightening torque:

2.2±0.2 N·m (0.22±0.02 kg·m, 1.6±0.1 ft·lb)



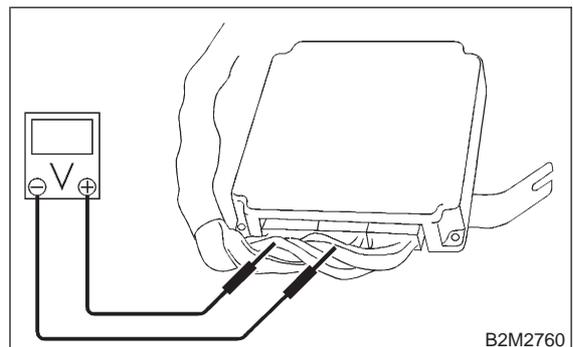
2. 2200 cc EXCEPT CALIFORNIA SPEC. VEHICLES

- 1) Turn ignition switch to OFF.
- 2) Loosen throttle position sensor holding screws.



- 3) When using voltage meter;
 - (1) Take out ECM.
 - (2) Turn ignition switch to ON.
 - (3) Adjust throttle position sensor to the proper position to allow the voltage signal to ECM to be in specification.

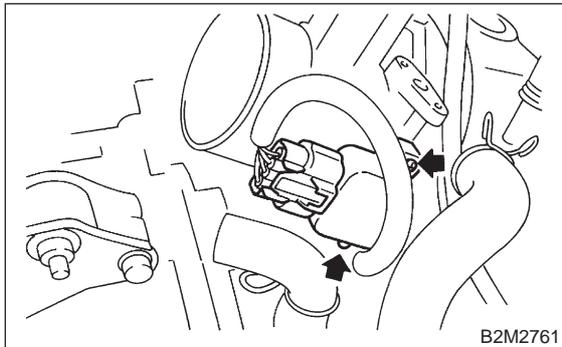
Connector & terminal / Specified voltage
(B136) No. 15 — (B136) No. 17 / 0.45 —
0.55 V
[Fully closed.]



(4) Tighten throttle position sensor holding screws.

Tightening torque:

2.2 ± 0.2 N·m (0.22 ± 0.02 kg·m, 1.6 ± 0.1 ft·lb)



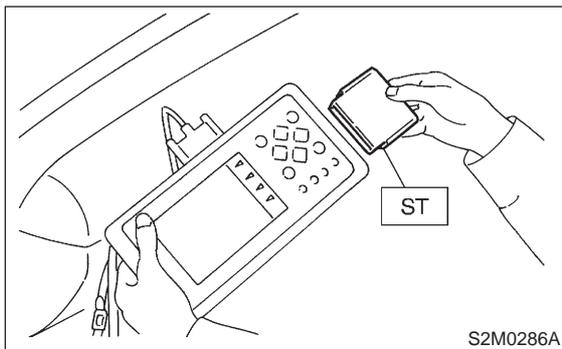
4) When using Subaru Select Monitor;

NOTE:

For detailed operation procedures, refer to the Subaru Select Monitor Operation Manual.

(1) Insert the cartridge to Subaru Select Monitor.

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(2) Connect Subaru Select Monitor to the data link connector.

(3) Turn ignition switch to ON, and Subaru Select Monitor switch to ON.

(4) Select {2. Each System Check} in Main Menu.

(5) Select {EGI/EMPI} in Selection Menu.

(6) Select {1. Current Data Display & Save} in EGI/EMPI Diagnosis.

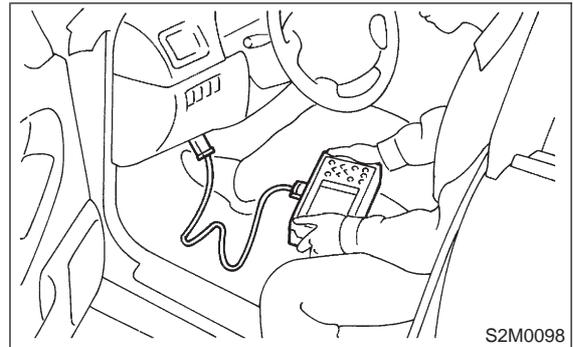
(7) Select {1.12 Data Display} in Data Display Menu.

(8) Adjust throttle position sensor to the proper position to match with the following specifications.

Condition: Throttle fully closed

Throttle opening angle 0.00%

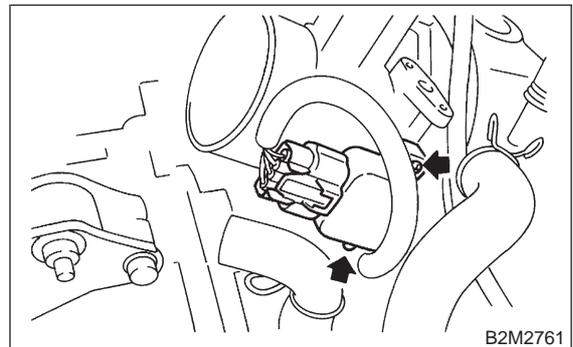
Throttle sensor voltage 0.50 V



(9) Tighten throttle position sensor holding screws.

Tightening torque:

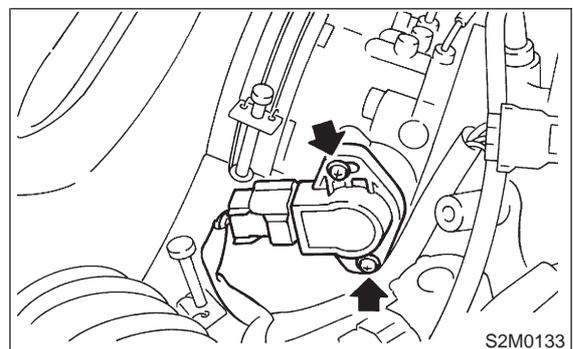
2.2 ± 0.2 N·m (0.22 ± 0.02 kg·m, 1.6 ± 0.1 ft·lb)



3. 2500 cc MODEL

1) Turn ignition switch to OFF.

2) Loosen throttle position sensor holding screws.



3) When using voltage meter;

(1) Take out ECM.

(2) Turn ignition switch to ON.

2-7 [W9B3]

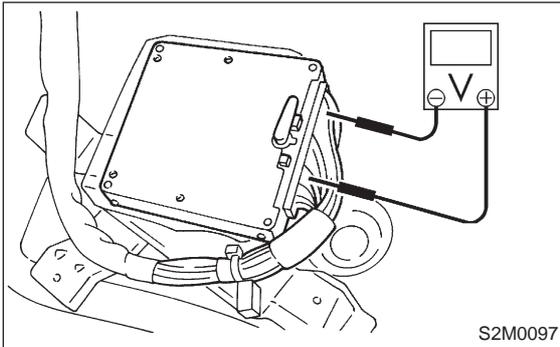
9. Throttle Position Sensor

SERVICE PROCEDURE

(3) Adjust throttle position sensor to the proper position to allow the voltage signal to ECM to be in specification.

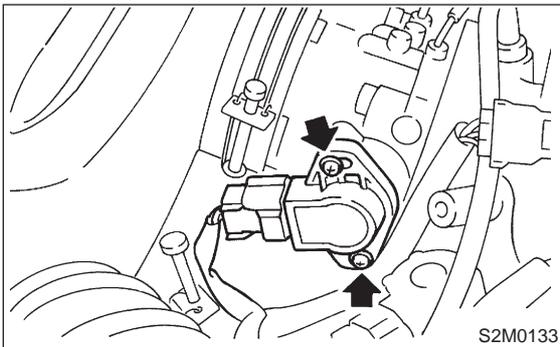
**Connector & terminal /
(B84) No. 6 — (B84) No. 20**

**Specified voltage /
0.45 — 0.55 V [Fully closed.]**



(4) Tighten throttle position sensor holding screws.

**Tightening torque:
2.2±0.2 N·m (0.22±0.02 kg·m, 1.6±0.1 ft·lb)**



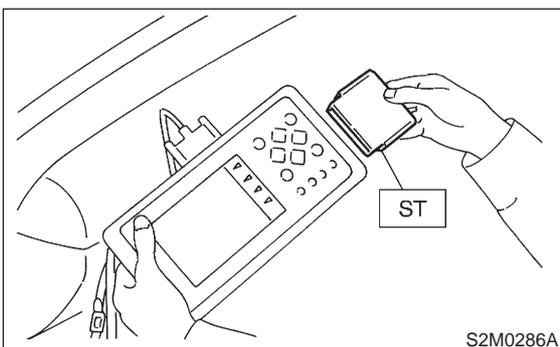
4) When using Subaru Select Monitor;

NOTE:

For detailed operation procedures, refer to the Subaru Select Monitor Operation Manual.

(1) Insert the cartridge to Subaru Select Monitor.

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(2) Connect Subaru Select Monitor to the data link connector.

(3) Turn ignition switch to ON, and Subaru Select Monitor switch to ON.

(4) Select {2. Each System Check} in Main Menu.

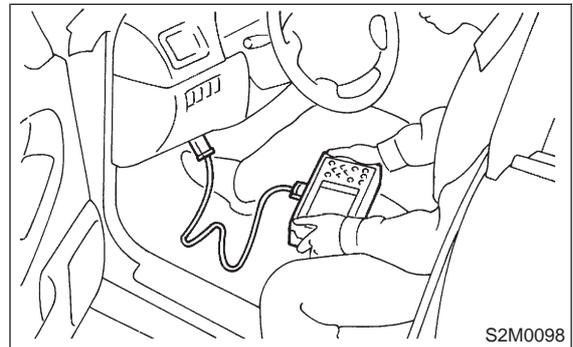
(5) Select {EGI/EMPI} in Selection Menu.

(6) Select {1. Current Data Display & Save} in EGI/EMPI Diagnosis.

(7) Select {1.12 Data Display} in Data Display Menu.

(8) Adjust throttle position sensor to the proper position to match with the following specifications.

**Condition: Throttle fully closed
Throttle opening angle 0.00%
Throttle sensor voltage 0.50 V**



(9) Tighten throttle position sensor holding screws.

**Tightening torque:
2.2±0.2 N·m (0.22±0.02 kg·m, 1.6±0.1 ft·lb)**

