

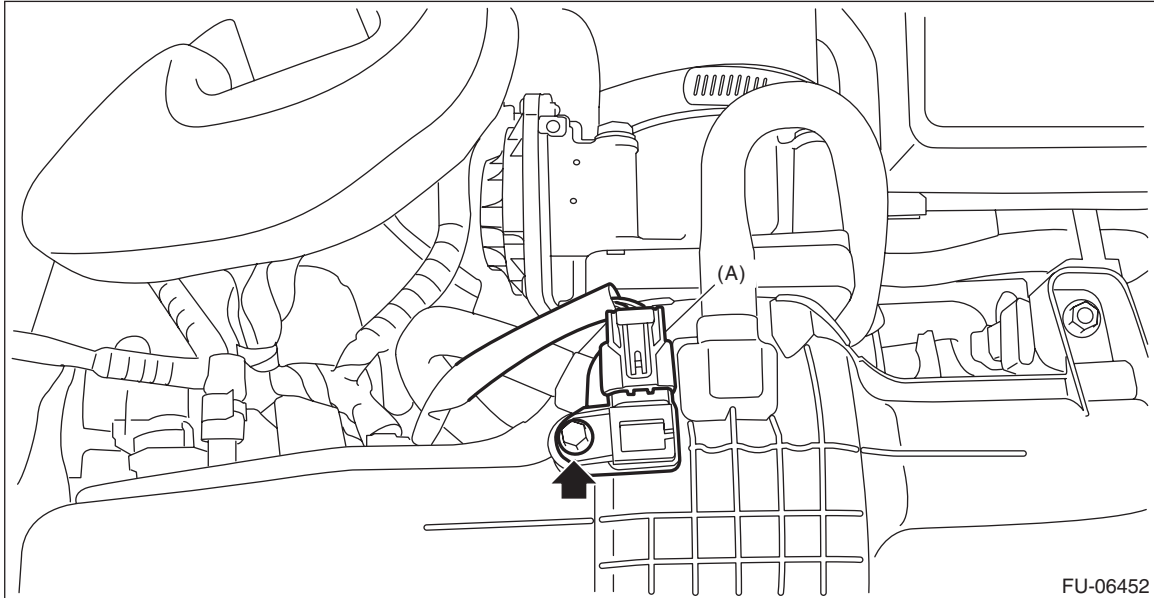
# Manifold Absolute Pressure Sensor

FUEL INJECTION (FUEL SYSTEMS)

## 14. Manifold Absolute Pressure Sensor

### A: REMOVAL

- 1) Disconnect the ground cable from battery.
- 2) Disconnect the connector (A) from the manifold absolute pressure sensor, and remove the manifold absolute pressure sensor from intake manifold.



### B: INSTALLATION

Install in the reverse order of removal.

NOTE:

Use new O-rings.

**Tightening torque:**

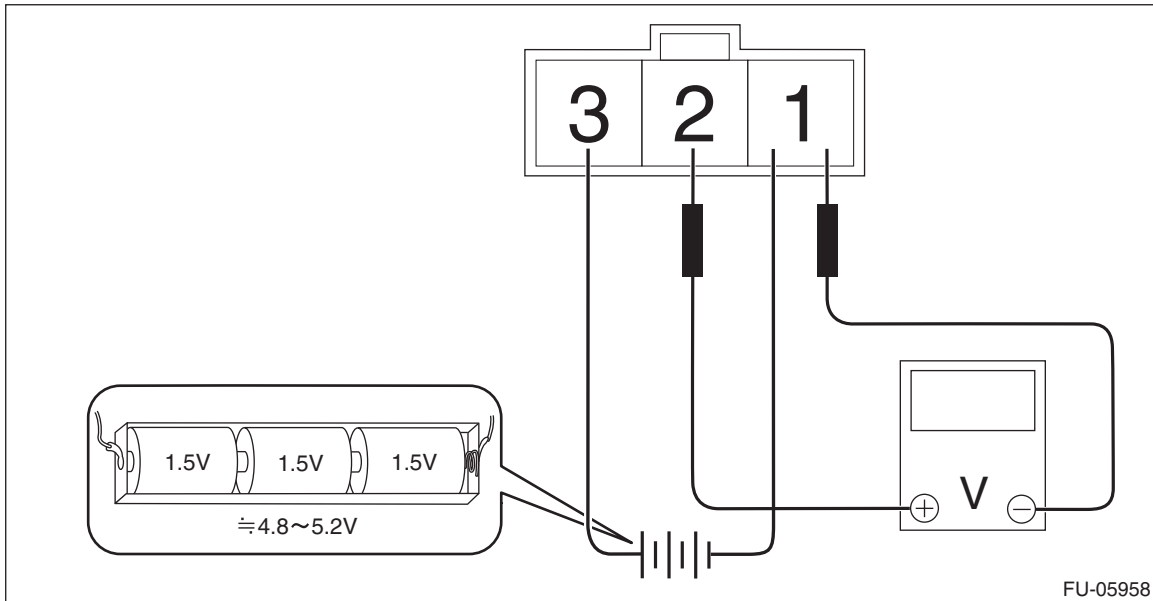
**3.4 N·m (0.3 kgf-m, 2.5 ft-lb)**

## C: INSPECTION

- 1) Check that the manifold absolute pressure sensor has no deformation, cracks or other damages.
- 2) Connect dry-cell battery positive terminal to terminal No. 3 and dry-cell battery ground terminal to terminal No. 1, circuit tester positive terminal to terminal No. 2 and the circuit tester ground terminal to terminal No. 1.

### NOTE:

- Use new dry-cell batteries.
- Using circuit tester, check the voltage of a single dry-cell battery is 1.6 V or more. And also check the voltage of three batteries in series is between 4.8 V and 5.2 V.



- 3) Check the voltage at a normal atmospheric pressure.

### NOTE:

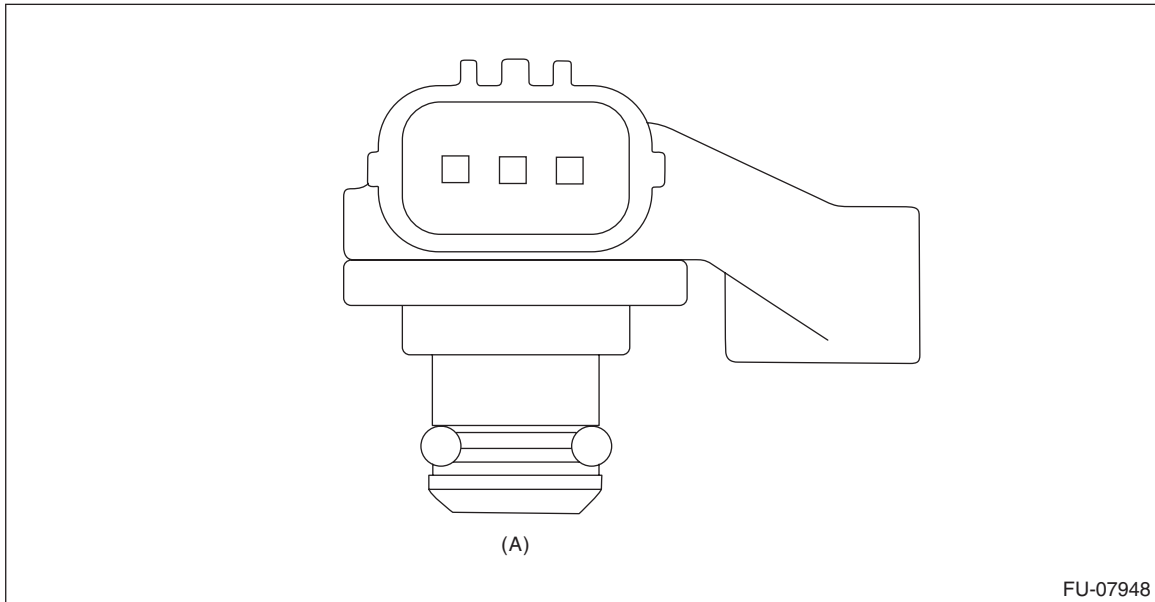
The atmospheric pressure at higher altitude is lower than normal. Therefore, the voltage is lower than the standard value.

Terminal No.	Standard
2 (+) and 1 (-)	Approx. 4.2 V (when 25°C (77°F))

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4) Connect the Mighty Vac to the pressure port (A) of manifold absolute pressure sensor.



5) Check the voltage when generating vacuum using Mighty Vac.

#### CAUTION:

**Do not apply vacuum of less than  $-88 \text{ kPa}$  ( $-0.9 \text{ kg/cm}^2$ ,  $-12.8 \text{ psi}$ ). Doing so may damage the manifold absolute pressure sensor.**

#### NOTE:

When vacuum occurs at the pressure port of manifold absolute pressure sensor, the voltage will drop from the value as in step 3).

Pressure	Terminal No.	Standard
$-88 \text{ kPa}$ ( $-0.9 \text{ kg/cm}^2$ , $-12.8 \text{ psi}$ )	2 (+) and 1 (-)	Approx. 1 V (when $25^\circ\text{C}$ ( $77^\circ\text{F}$ ))