## 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:
$3.4 \mathrm{~N} \cdot \mathrm{~m}$ (0.3 kgf-m, $2.5 \mathrm{ft}-\mathrm{Ib})$

## FUEL INJECTION (FUEL SYSTEMS)

## 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 negative 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. $4.2 \mathrm{~V}\left(\right.$ when $\left.25^{\circ} \mathrm{C}\left(77^{\circ} \mathrm{F}\right)\right)$ |

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

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

## CAUTION:

Do not apply vacuum of less than $-88 \mathrm{kPa}\left(-0.9 \mathrm{kgf} / \mathrm{cm}^{2},-12.8 \mathrm{psi}\right)$. 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 |
| :---: | :---: | :---: |
| $-88 \mathrm{kPa}\left(-0.9 \mathrm{kgf} / \mathrm{cm}^{2},-12.8 \mathrm{psi}\right)$ | $2(+)$ and $1(-)$ | Approx. $1 \mathrm{~V}\left(\right.$ when $\left.25^{\circ} \mathrm{C}\left(77^{\circ} \mathrm{F}\right)\right)$ |

