

Description

Manifold Absolute Pressure Sensor (MAPS) is a speed-density type sensor and is installed on the surge tank. It senses absolute pressure of the surge tank and transfers the analog signal proportional to the pressure to the ECM. By using this signal, the ECM calculates the intake air quantity and engine speed.

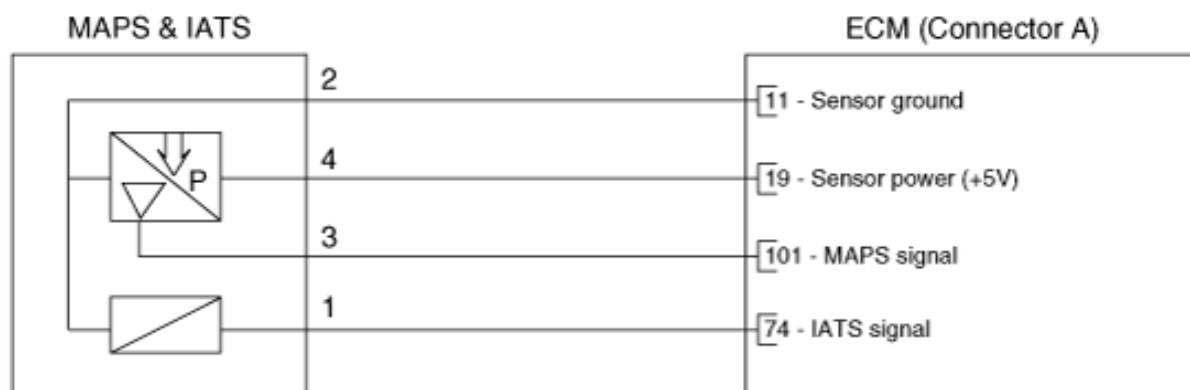
The MAPS consists of a piezo-electric element and a hybrid IC amplifying the element output signal. The element is silicon diaphragm type and adapts pressure sensitive variable resistor effect of semi-conductor. Because 100% vacuum and the manifold pressure apply to both sides of the sensor respectively, this sensor can output analog signal by using the silicon variation proportional to pressure change.



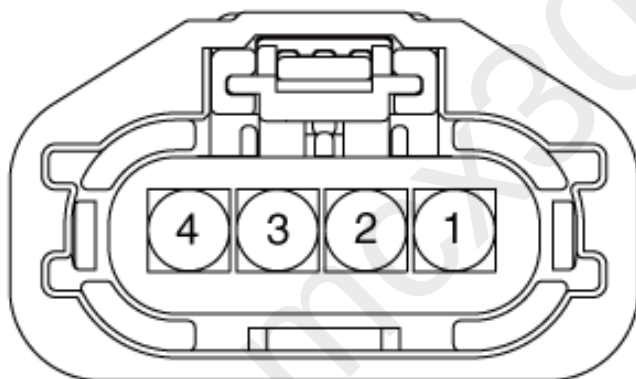
Specification

Pressure [kPa (kgf/cm², psi)]	Output Voltage (V) [Vref = 5.0V]
10 (0.1, 1.45)	0.5
20 (0.2, 2.9)	0.88
30 (0.3, 4.35)	1.26
40 (0.4, 5.8)	1.64
50 (0.5, 7.25)	2.02
60 (0.61, 8.7)	2.4
70 (0.71, 10.15)	2.79
80 (0.81, 11.60)	3.17
100 (1.01, 14.5)	3.93
115 (1.17, 16.67)	4.5

Circuit
Diagram



Harness Connector



Inspection

1. Connect a diagnostic tool on Data Link Connector (DLC).
2. Check MAPS output voltage at idle and IG ON.

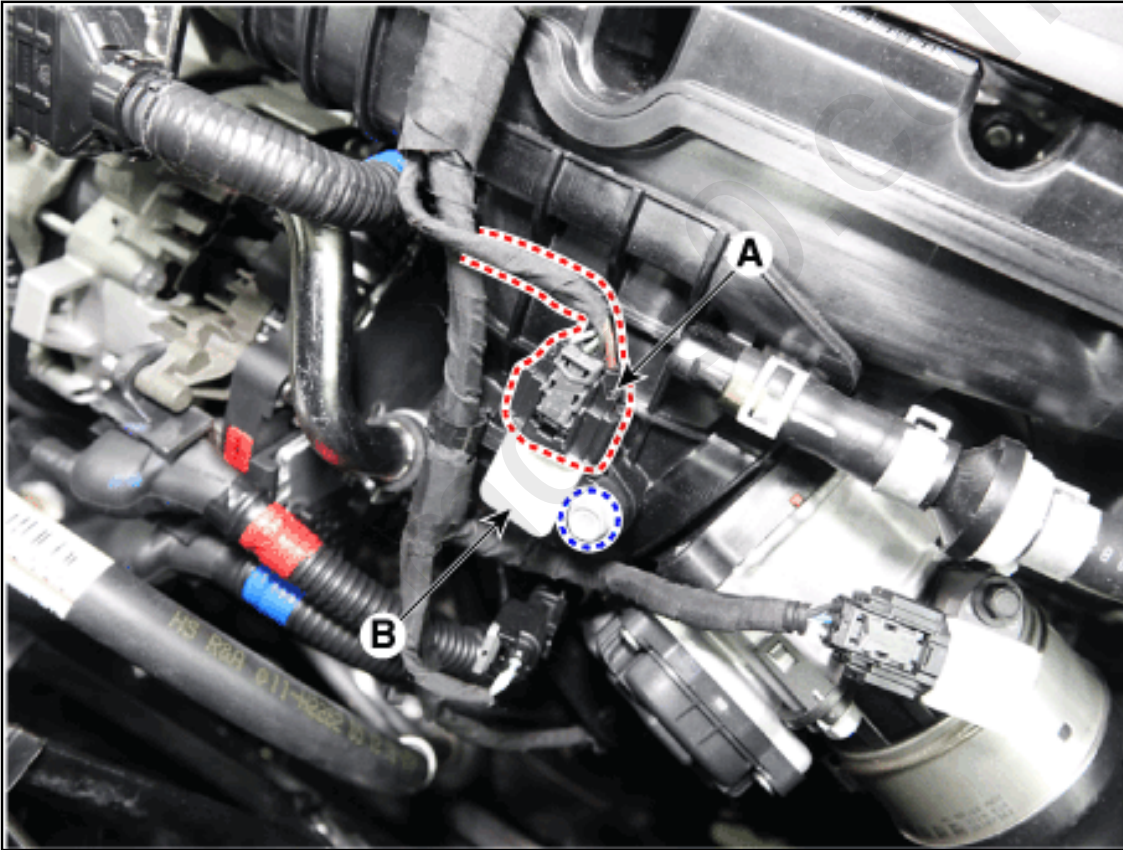
Condition	Output Voltage (V)
IG ON	3.9 - 4.1
Idle	0.8 - 1.6

Removal

1. Turn ignition switch OFF and disconnect the battery negative (-) terminal.
2. Disconnect the manifold absolute pressure sensor connector (A).
3. Remove the manifold absolute pressure sensor (B) after loosening the bolt.

Tightening Torque :

9.8 - 11.8 N.m (1.0 - 1.2 kgf.m, 7.2 - 8.7 lb-ft)



Installation



- Install the component with the specified torques.
- Note that internal damage may occur when the component is dropped. In this case, use it after inspecting.



•Insert the sensor in the installation hole and be careful not to damage when installation.

1. Install in the reverse order of removal.

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