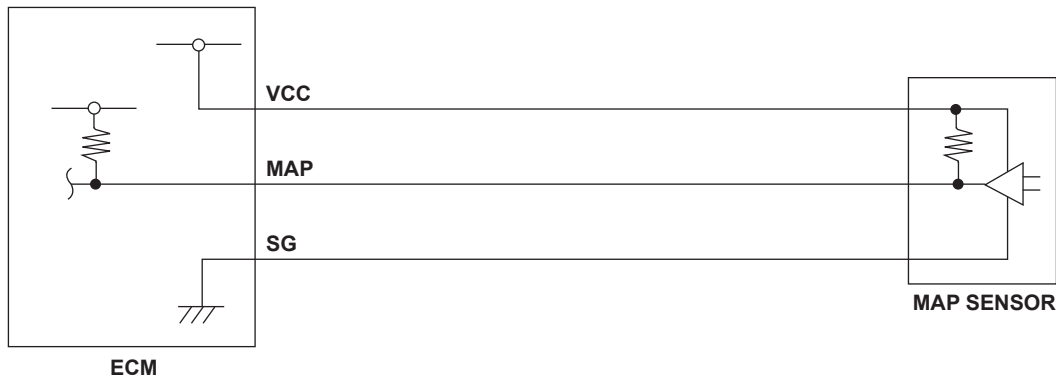


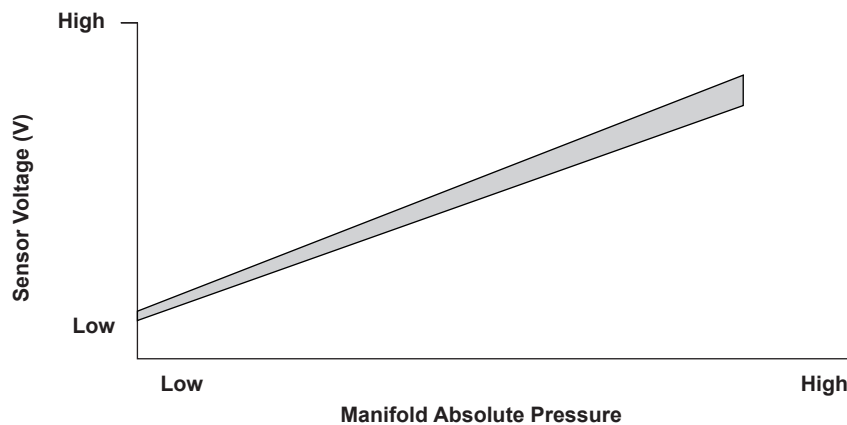
Advanced Diagnostics

DTC P0106: Manifold Absolute Pressure (MAP) Sensor Vacuum Connection Problem



P0106-9602

Manifold Absolute Pressure (MAP) Sensor Output Voltage



P0107-9671

General Description

The manifold absolute pressure (MAP) sensor senses manifold absolute pressure (vacuum) and converts it into electrical signals. The MAP sensor outputs low signal voltage at high-vacuum (throttle valve closed) and high signal voltage at low-vacuum (throttle valve wide open).

The engine control module (ECM) compares a predetermined MAP value at a given throttle position and manifold absolute pressure with the output voltage value of the MAP sensor. If the difference between the value from the MAP sensor before start-up (right after turning the ignition switch ON) and the current value is still a set value or less while the engine is running, the ECM detects a malfunction and a DTC is stored.

Monitor Execution, Sequence, Duration, DTC Type

Execution	Once per driving cycle
Sequence	None
Duration	5 seconds or more
DTC Type	One drive cycle, MIL ON

Enable Conditions

Condition	Minimum	Maximum
Engine speed	400 rpm	—
Throttle position	—	9.8°
No active DTCs	MAP, BARO	

Malfunction Threshold

The difference between the MAP sensor value measured before start-up (immediately after the ignition is turned ON) and the voltage is 40 mV or less for at least 5 seconds.

Diagnosis Details

Conditions for illuminating the MIL

When a malfunction is detected, the MIL comes on and the DTC and the freeze frame data are stored in the ECM memory.

Conditions for clearing the MIL

The MIL will be cleared if the malfunction does not recur during three consecutive trips in which the diagnostic runs.

The MIL, the DTC, and the freeze frame data can be cleared by using the scan tool Clear command or by disconnecting the battery.