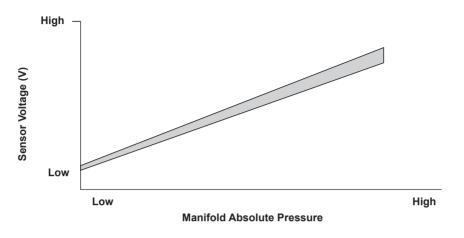
# **Advanced Diagnostics**

# DTC P1129: Manifold Absolute Pressure (MAP) Sensor Higher Than Expected

#### Manifold Absolute Pressure (MAP) Sensor Output Voltage

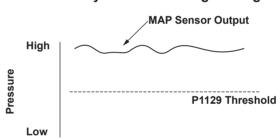


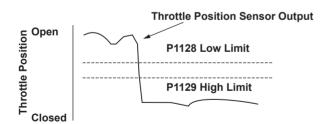
P0107-9671

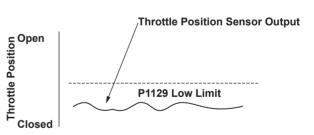
#### **Normal Operation**

# High P1128 Threshold P1129 Threshold Low

#### System Failure: High Voltage







P1129-9771

## **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 to the output voltage value of the MAP sensor.

If the MAP sensor outputs high voltage during fuel cut-off operation for deceleration with the throttle valve fully closed, which should make the manifold absolute pressure lower, the ECM detects a malfunction and stores a DTC.

### Monitor Execution, Sequence, Duration, DTC Type

Execution	Once per driving cycle
Sequence	None
Duration	2 seconds or more
DTC Type	Two drive cycles, MIL ON

#### **Enable Conditions**

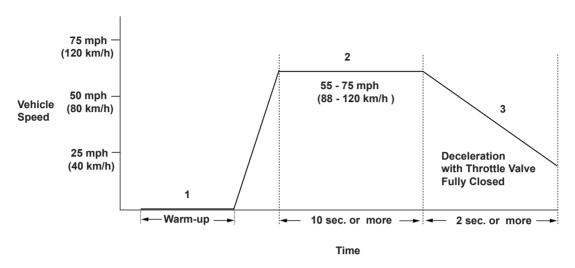
Condition	Minimum	Maximum
Engine coolant temperature	158°F (70°C)	_
Engine speed	1,300 rpm	5,500 rpm
Vehicle speed	15 mph (24 km/h)	_
Fuel feedback	During deceleration	
Throttle position	Fully closed	
No active DTCs	ECM, MAP, ECT, TP, EGR, IAC, VSS, VTEC System, Fuel System, A/T System*1	

<sup>\*1:</sup> CVT

#### **Malfunction Threshold**

The MAP sensor output is 44 kPa (325 mmHg, 12.8 in.Hg) or more for at least 2 seconds.

#### **Driving Pattern**



P1129-0050

- 1. Start the engine. Hold the engine at 3,000 rpm with no load (in park or neutral) until the radiator fan comes on.
- 2. Drive the vehicle at a steady speed between 55 75 mph (88 120 km/h) for at least 10 seconds.
- 3. Then, decelerate with the throttle valve fully closed for at least 2 seconds.
- If you have difficulty duplicating the DTC, retest after turning off electrical components such as the audio system and A/C, and try a different gear position.
- Drive the vehicle in this manner only if the traffic regulations and ambient conditions allow.

#### **Diagnosis Details**

#### Conditions for illuminating the MIL

When a malfunction is detected during the first drive cycle, a Temporary DTC is stored in the ECM memory. If the malfunction recurs during the next (second) drive cycle, the MIL comes on and the DTC and the freeze frame data are stored.

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