



# Did You Know?

## NAPA Echlin MAP (Manifold Absolute Pressure) Sensors

### What does a MAP Sensor do?

The MAP sensor converts engine vacuum/manifold pressure to an electrical signal so the computer knows how much load the engine is under. This data is the basis for fuel delivery and timing control.

### Where are these sensors located?

The MAP sensor is typically located in the air cleaner, fender wall, firewall, intake manifold or under the dash.

### Will a malfunctioning MAP Sensor illuminate the check engine light or affect vehicle operation?

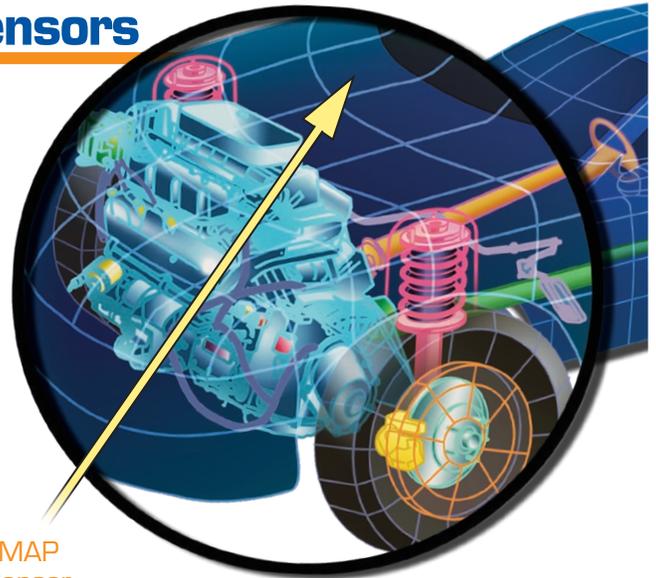
Yes, a failing sensor can illuminate the MIL, and may cause the engine to have a rich or lean fuel mixture condition.

### What are the common causes of failure?

Typically these sensors fail due to moisture entering the sensor when the engine is off and due to normal wear of the sensor element.

### How to determine if these sensors are malfunctioning?

The Diagnostic Monitor tests for voltages outside of the normal range. The PCM also compares actual MAP output to calculated values to determine sensor performance deterioration. The calculated values are based on TP and various engine load factors.



MAP Sensor

### What makes NAPA Echlin MAP Sensors the best.

- As a global manufacturer, NAPA Echlin has complete control of the manufacturing process from componentry to finished product to ensure precise operation
- Our manufacturing process includes extensive use of robotics for precision assembly
- 100% product in-line and end-of-line inspection from raw material to packaging of finished product



Ford  
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GM  
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2-16519



Toyota  
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Honda  
2-27024



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**NAPA Echlin  
LOOKS RIGHT. FITS RIGHT. PERFORMS RIGHT.**

**THE BEAR IS BACK**

