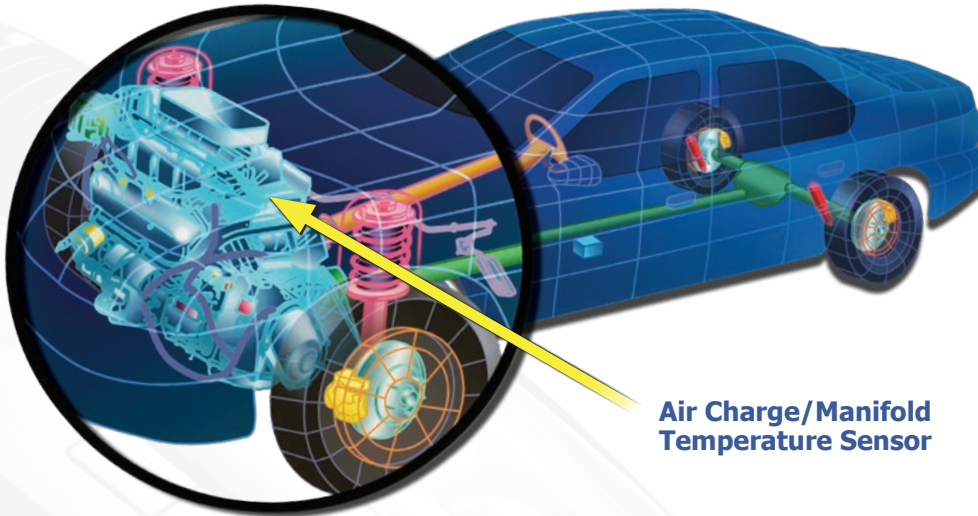


# « JUST THE FACTS »

## Air Charge/Manifold Temperature Sensors



**Air Charge/Manifold Temperature Sensor**

### What does an Air Charge/Manifold Temperature Sensor do?

The Air Charge/Manifold Temperature sensor is used by the computer to measure air density for fuel mixture control. The computer uses this information to trim the air/fuel ratio according to the air density.

### Where are the Air Charge/Manifold Temperature Sensors located?

They are located either in the intake air tubing or intake manifold and may be incorporated into the MAF sensor.

### Will a malfunctioning Air Charge/Manifold Temperature Sensor illuminate the check engine light or affect vehicle operation?

Yes, a failing sensor can illuminate the MIL, and may cause the engine to run rich or lean as a result of a failed sensor and may idle poorly especially when cold.

### What are the common causes of failure?

Typically these sensors fail due to exposure to the under hood heat from engine operation. Collecting debris on the sensor element may also cause it to operate improperly.

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

A DTC will be set if an abnormal reading occurs, P0112 low input or P0113 for a high input. The air charge/manifold sensor temperature reading should closely match the engine coolant temperature reading on a scan tool if the engine has not been run for over an hour. The sensor circuit can be checked for proper voltage using a voltmeter.

### What makes Standard® and Intermotor® Air Charge/Manifold Temperature Sensors the best?

- As basic manufacturers, Standard® and Intermotor® have complete control of the manufacturing process from componentry to finished product
- Temperature sensor design specifies tight tolerance thermistor response values to assure accuracy of the temperature measurement and proper part operation
- All Air Charge/Manifold Temperature sensors are 100% factory tested to ensure trouble-free performance



Chrysler  
AX49



Ford  
AX25



GM  
TX3



Honda  
AX39



Nissan  
AX50



Toyota  
AX33