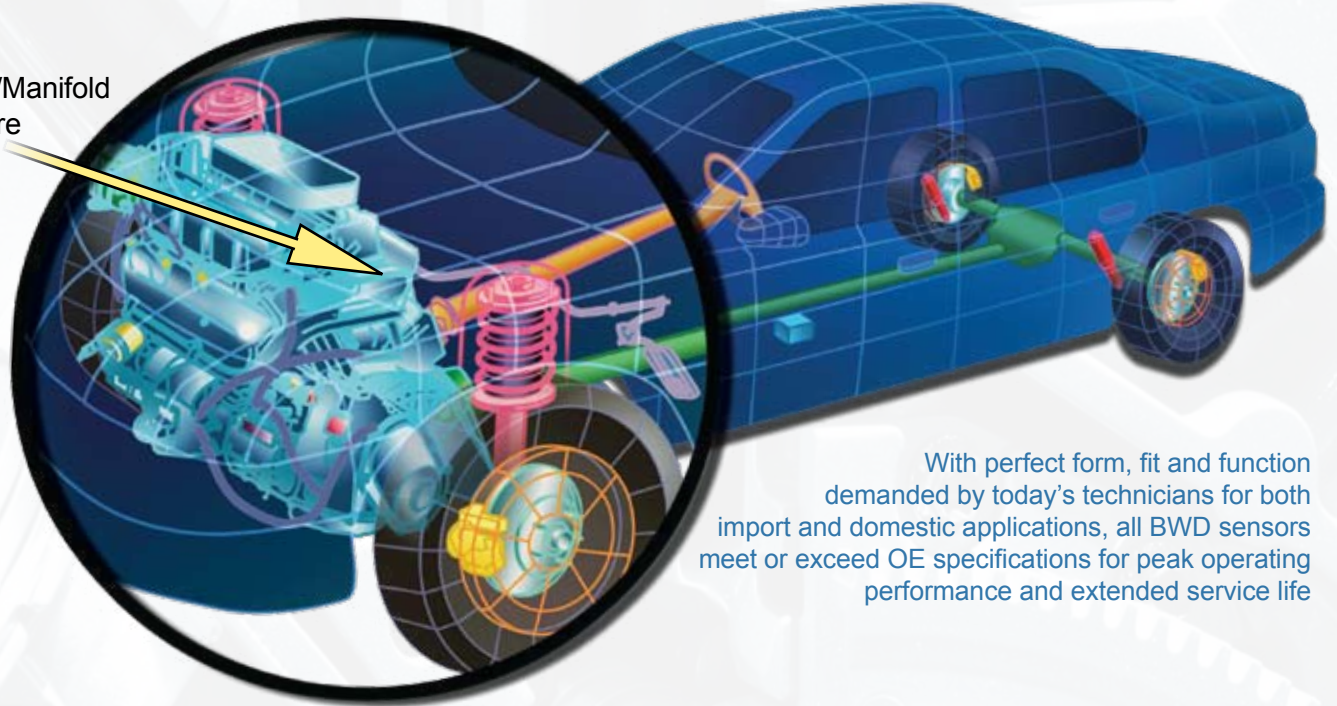


# Just the Facts

## Air Charge/Manifold Temperature Sensors

Air Charge/Manifold  
Temperature  
Sensor



With perfect form, fit and function demanded by today's technicians for both import and domestic applications, all BWD sensors meet or exceed OE specifications for peak operating performance and extended service life

### What does an Air Charge/Manifold Temperature 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 these 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 BWD Air Temp Sensors the best.

- As a basic manufacturer, BWD has 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 and Manifold Temperature sensors are 100% factory tested to ensure trouble-free performance



Ford  
WT3051



GM  
WT3000



Chrysler  
WT2000



Toyota  
EC438



Honda  
WT3077



Nissan  
WT3086

# BWD