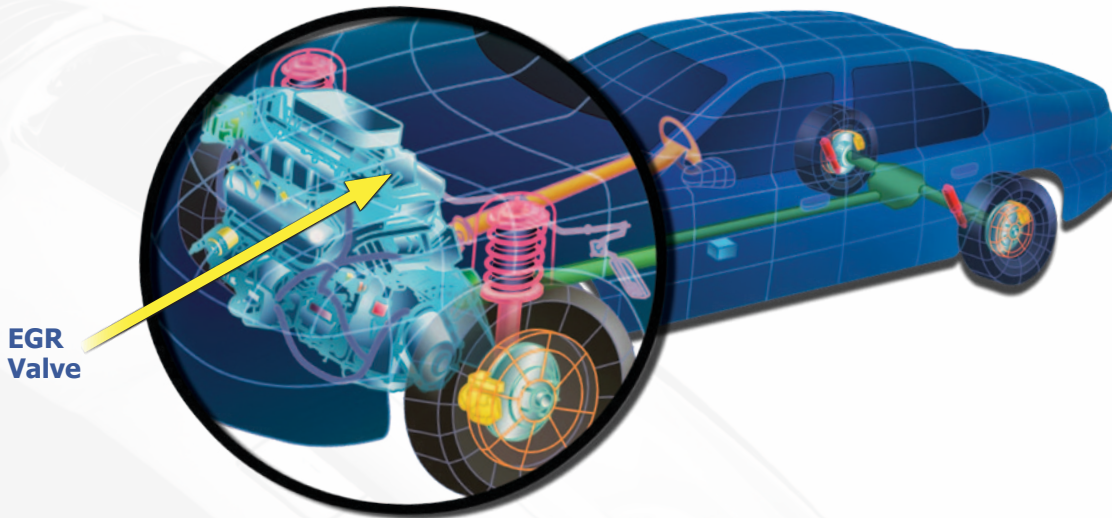


EGR Valves



What does an EGR valve do?

The EGR (Exhaust Gas Recirculation) valve is an emission control device which helps maintain the combustion chamber temperature in an effort to reduce the formation of nitrogen oxides (NOx). The EGR valve draws exhaust by means of intake vacuum which dilutes the incoming air/fuel mixture reducing the temperature in the chambers bringing the NOx within acceptable limits. The EGR valve also reduces the engine's octane requirements and lessens the danger of detonation (spark knock).

Where is the EGR valve located?

The EGR valve is located on the intake manifold of an engine.

Will a malfunctioning EGR valve illuminate the check engine light or affect vehicle operation?

Yes, a failing EGR valve can cause a check engine light to come on, especially on the Ford DFPE (Differential Pressure Feedback EGR) and those vehicles with electronic valves. Symptoms of a faulty EGR valve are rough idle, hesitation, knocking and in some cases stalling. Failure to replace the EGR valve when needed may shorten engine life and increase harmful emissions.

What are the common causes of failure?

Exposure to water and heat from the engine compartment typically leads to EGR valve failure. If the EGR valve becomes stuck in the open position, it eventually will cause a vacuum leak. If stuck in the closed position, the nitrogen oxides will rise and the fuel mixture will ignite before reaching the "explosion" section in the cylinder. Both conditions will lead to significant drivability problems.

How to determine if the EGR valve is malfunctioning?

On a mechanical valve a visual inspection of the plunger and plunger shaft during idle can determine whether the valve is stuck open or closed. On-board diagnostics and an illuminated MIL will indicate when an electronic valve needs to be replaced.

What makes BWD® EGR Valves the best?

- As a basic manufacturer, BWD® controls the process from start to finish. Each valve is calibrated to OEM specifications for precision performance.
- BWD® valves are made of high-strength silicon diaphragms with steel reinforcement for extended service life
- Comprehensive quality testing and computer controlled bench testing checks resistance, leakage, response and flow rates to ensure trouble-free operation



Chrysler
EGR1903



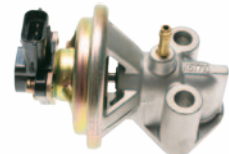
Ford
EGR1798



GM
EGR1291



Honda
EGR1433



Nissan
EGR1103



Toyota
EGR1229