

How to Spot a Faulty Fuel Tank Pressure Sensor

The fuel tank pressure sensor is an important part of the evaporative emissions control system that is designed to capture unburnt fuel vapors and reintroduce them back into the fuel system. The fuel tank pressure sensor is responsible for detecting leaks in the fuel system, whether it be an evaporative leak or bad seal on the fuel cap. Once the fuel tank pressure sensor detects a leak in the fuel tank/system, it alerts the ECU to trigger a “Check Engine” light.

Signs of a faulty fuel tank pressure sensor include:

- **“Check Engine” Light Turns On**
Because there are numerous reasons a “Check Engine” light could come on, always consult an automotive professional. The cause could be as simple as a broken seal on the fuel cap but may also signal a leak within the fuel system. Code P0452 is triggered by low input from the fuel pressure sensor.
- **Hard to Start Vehicle**
If the vehicle is continually hard to start, the fuel tank pressure sensor may be the cause because it has direct input to the air to fuel ratio.
- **Vehicle is Stalling**
If the vehicle is stalling suddenly, the cause may be a faulty fuel tank pressure sensor. Because the fuel tank pressure sensor manages the air to fuel ratio, it may be sending an incorrect signal.
- **Low Fuel Efficiency/Weak Acceleration**
If a decrease in MPG is noticed or the vehicle does not build up speed when the gas pedal is initially pressed, the fuel tank pressure sensor may be sending the wrong signal to the ECU causing a change in fuel usage and/or air to fuel ratio.

Common reasons for failure:

- Overexposure to extreme temperatures, weather, vibration, and/or corrosive fuel vapors
- Over filling the fuel tank will cause fuel to overflow into the charcoal canister and other overflow lines can cause the sensor to fail

Over time a faulty fuel tank pressure sensor will cause low fuel efficiency, trouble starting the vehicle and/or stalling, and eventually keep the vehicle from starting. In states that require emissions tests, a faulty fuel tank pressure sensor may cause a failed emissions test because it is an integral part of the evaporative emissions control system.