

Fuel Level Sender Unit

Function

This fuel level sender unit is installed in the vehicle's fuel tank and provides the engine control unit (ECU) with information on the current fuel level. Within the ECU the electrical resistance is recorded as a signal and processed to, for example, indicate to the driver the amount of fuel in the tank or calculate the remaining range of the vehicle. To generate this signal a magnetic float triggers a series of reed switches within a sealed vertical tube, generating a resistance with an ohmic value that increases or decreases with the changing position of the magnetic float in relation to the amount of fuel in the tank.

In addition to providing the fuel level signal, the fuel supply and return lines are also connected to the head of this fuel level sender unit.

Cause of Failure

Problems with the electrical connection, damaged wiring, or defective electronic components such as the reed switches can all lead to the fuel sender unit becoming faulty. Any of these issues can result in the sensor sending an inaccurate signal - or no signal at all - to the ECU, both of which will cause the Malfunction Indicator Light (MIL) to illuminate. Since this fuel level sender unit also connects the supply and return lines to the fuel tank, problems with leaking fuel lines or their connections can also occur.

Fuel may leak from the return line or air may be sucked into the fuel supply line; the latter certainly leading to engine faults.

For more technical information please visit: partsfinder.bilsteingroup.com

