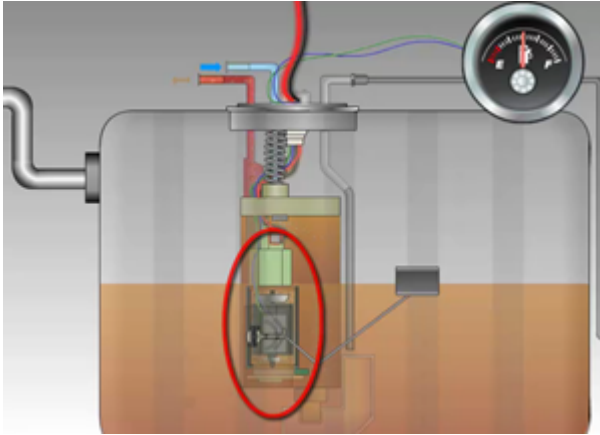


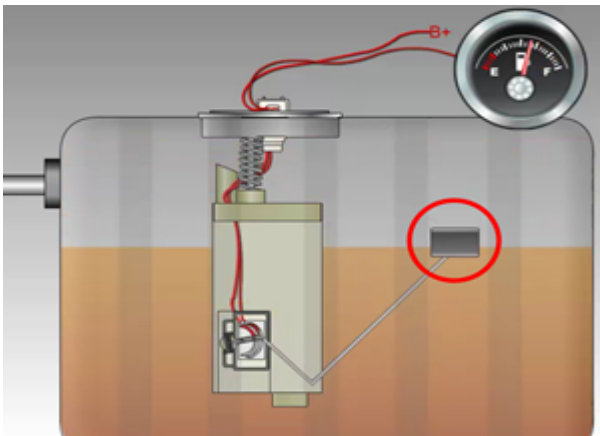
# Fuel Pump



The fuel pump itself is submerged in fuel to aid in cooling.

Most gasoline powered vehicles use an electric fuel pump located in the fuel tank to force fuel into the engine. The pump is submerged in fuel, which helps to keep the electric motor from overheating. Fuel is pumped at high pressures through a fuel filter to the fuel injectors. Electric fuel pumps can fail suddenly without warning signs, or may fail partially - with a drop in the amount of fuel the pump is able to deliver. This will result in a loss of power under extreme load conditions, such as when driving up a steep hill, or under heavy acceleration.

The fuel level sensor is often part of the fuel pump module assembly and is found inside the gas tank. It consists of a foam float connected to a metal rod that pivots. Attached to the metal rod is a variable resistor and as fuel levels change, the voltage flowing to the fuel gauge is changed. The fuel level sensor often sends a voltage signal to the engine computer, which is used to determine the range to empty.



The fuel voltage sensor consists of a foam float and a variable resistor, which sends a signal to the engine computer.