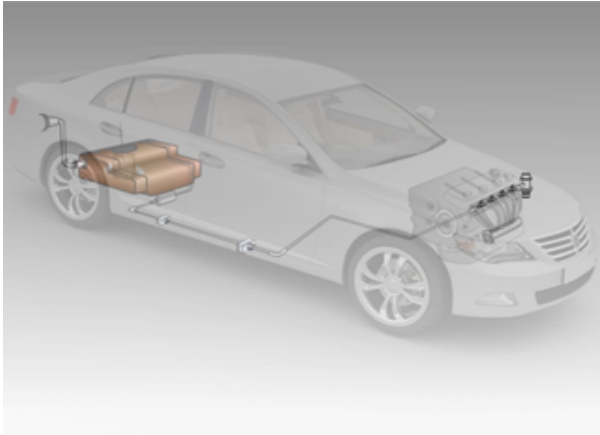
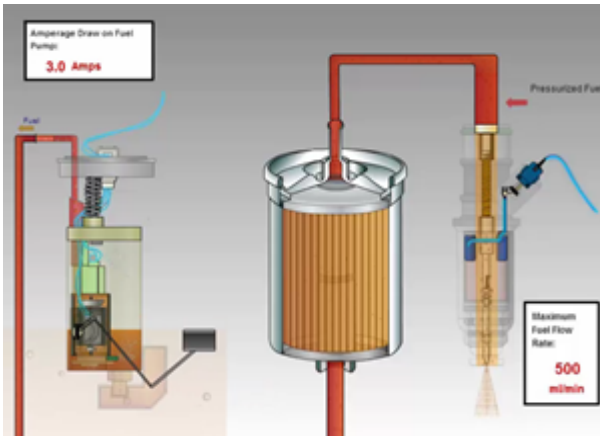


# Fuel System



The goal of the fuel system is to bring clean fuel to the engine as efficiently as possible.



A fuel filter removes particulate matter from fuel, which could damage the fuel injectors. Dirty fuel filters restrict the flow of fuel to the engine and should be replaced periodically.

The fuel system is responsible for supplying fuel to the engine so that it can be burned along with the incoming air charge. The fuel pump is located inside the fuel tank, with a fuel strainer normally connected to the inlet of the fuel pump, to filter out any debris found in the tank.

Fuel is pressurized by the fuel pump and sent through the fuel filter, which removes fine particles found in the fuel so as not to damage the fuel injectors. The fuel injectors are attached to the fuel rail, which usually also includes a pressure regulator. The fuel injector sprays a measured amount of pressurized fuel into the intake manifold. A valve in the pressure regulator allows excess fuel to return to the fuel tank via the return line.

A slight variation on this system is to place the fuel pressure regulator in the tank as part of the pump assembly, making the fuel return line unnecessary.