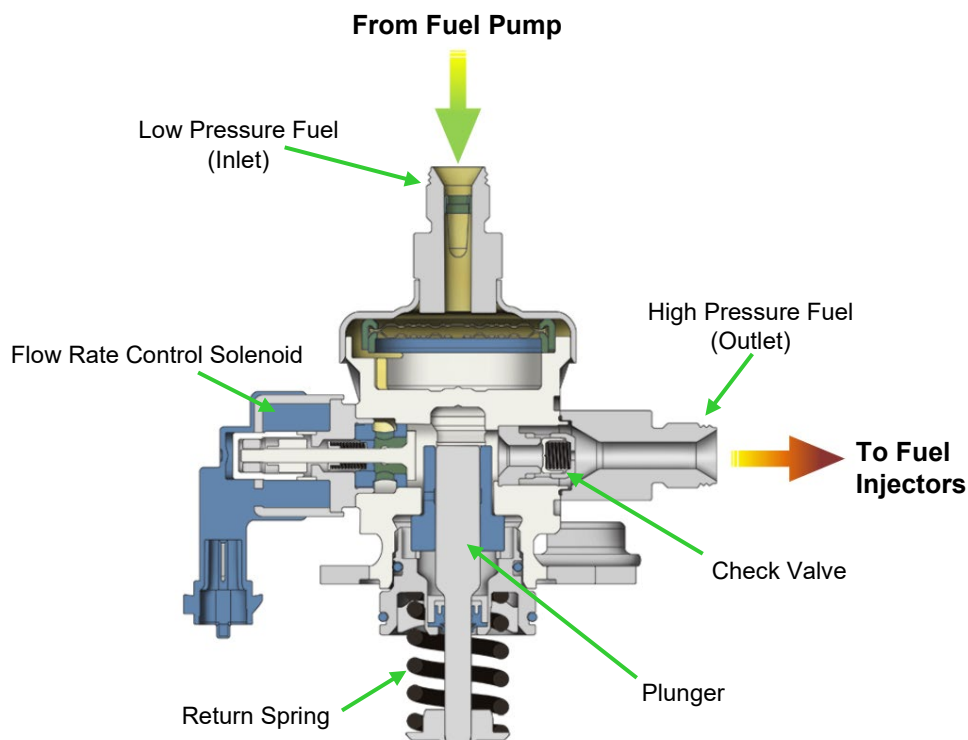


WHAT IS A HIGH-PRESSURE FUEL PUMP?

A high-pressure fuel pump (HPP) is used for a direct injection gasoline engine. The HPP pressurizes the fuel, supplied at approximately 0.6 MPa (6 bar/87 psi) from the low-pressure fuel pump inside the fuel tank, to 20 MPa (200 bar/2901 psi), and then sends the fuel to the common rail. The HPP, arranged at the engine, is actuated not through an electrical method but by applying the mechanical mechanism of the cam at the intake cam shaft.

Hitachi Astemo's HPP uses a flow rate control solenoid valve with a unique structure to achieve both industry-leading quietness and a large flow rate. In addition, we have achieved the smallest height in the industry through a unique internal configuration, resulting in a superior mounting design.



TYPICAL SYMPTOMS IN CASE OF FAILURE

Symptoms in case of failure

- Engine start-up failure
- Engine stall
- Insufficient power
- Fluctuating or slow acceleration