

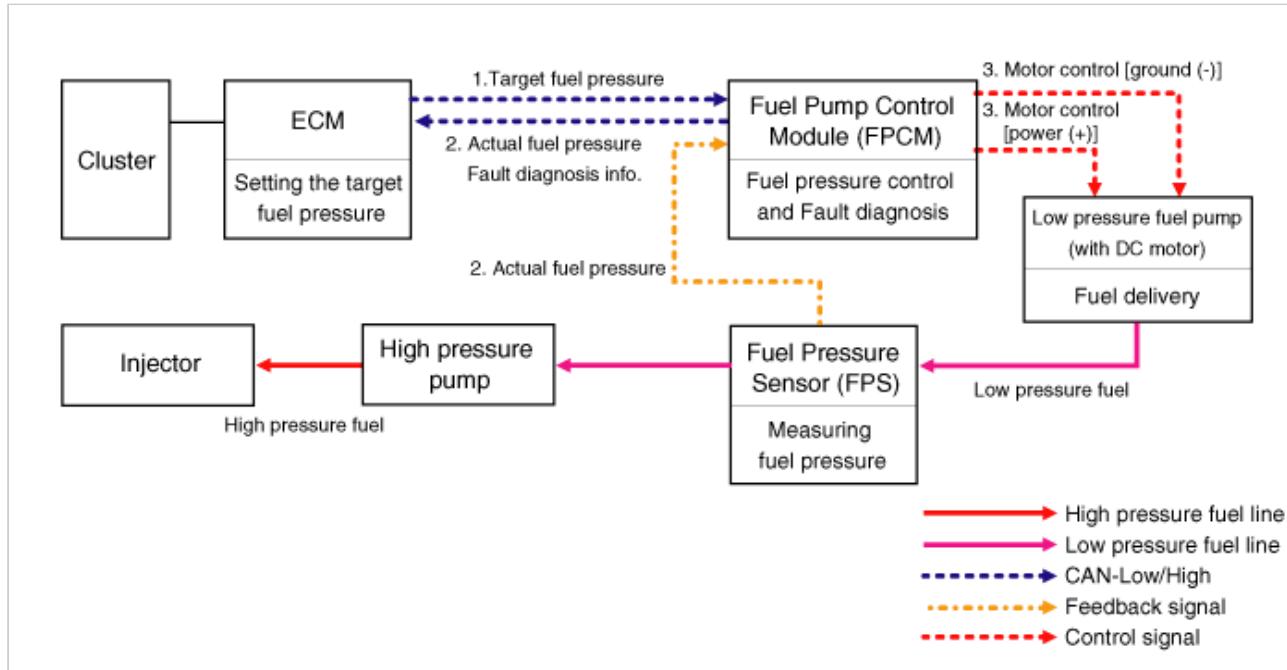


Description

Installed on the righthand side of the fuel tank, the fuel pump control module (FPCM) controls the DC motor mounted inside the low pressure fuel pump.

The module compares instantaneous fuel pressure information measured by the fuel pressure sensor (FPS) with target fuel pressure information provided by the ECM and generates the desired target fuel pressure by controlling the fuel pump motor and regulating fuel flow rate in the low pressure fuel line between the low and high pressure fuel pumps.

Operation



1. The ECM sends target fuel pressure to the FPCM via CAN network.
2. The FPS sends the actual pressure of the low pressure fuel line between the low and high pressure fuel pumps to the FPCM, and the FPCM forwards this to the ECM. Also, the FPCM diagnoses faults in the FPCM, fuel pump motor and FPS and then sends the diagnostic information to the ECM.
3. The FPCM compares the actual fuel pressure measured by the FPS with the target fuel pressure provided by the ECM and controls the voltage provided to the low pressure fuel pump motor. The FPCM keeps regulating fuel flow rate by controlling the low pressure fuel pump, depending on engine speed (rpm) and vehicle loads.