
COMMON RAIL INJECTION SYSTEM [SKYACTIV-D 2.2]

id0114z7706900

Purpose, Outline

- The common rail fuel injection system stores fuel pressurized by the supply pump in the common rail and injects the fuel into each cylinder using the fuel injectors based on the control by the PCM.
- Fuel is atomized by the extremely high fuel injection pressure, and the generation of particulate matter is reduced by the dissipation of unburnt fuel.
- There is a high degree of flexibility in the fuel injection amount, fuel injection timing and fuel injection pattern, and NOx/PM is reduced by controlling the fuel conditions according to the conditions.

Structure

- The common rail fuel injection system consists of the following parts.

Part name	Reference
Fuel tank	(See FUEL TANK [SKYACTIV-D 2.2].)
Fuel filter	(See FUEL FILTER [SKYACTIV-D 2.2].)
Fuel warmer	(See FUEL WARMER [SKYACTIV-D 2.2].)
Supply pump	(See SUPPLY PUMP [SKYACTIV-D 2.2].)
Suction control valve	(See SUCTION CONTROL VALVE [SKYACTIV-D 2.2].)
Fuel check valve	(See FUEL CHECK VALVE [SKYACTIV-D 2.2].)
Fuel feed valve	(See FUEL FEED VALVE [SKYACTIV-D 2.2].)
Common rail	(See COMMON RAIL [SKYACTIV-D 2.2].)
Fuel pressure relief valve	(See FUEL PRESSURE RELIEF VALVE [SKYACTIV-D 2.2].)
Fuel injector	(See FUEL INJECTOR [SKYACTIV-D 2.2].)
Fuel pressure sensor	(See FUEL PRESSURE SENSOR [SKYACTIV-D 2.2].)
Fuel temperature sensor	(See FUEL TEMPERATURE SENSOR [SKYACTIV-D 2.2].)

Fuel flow

