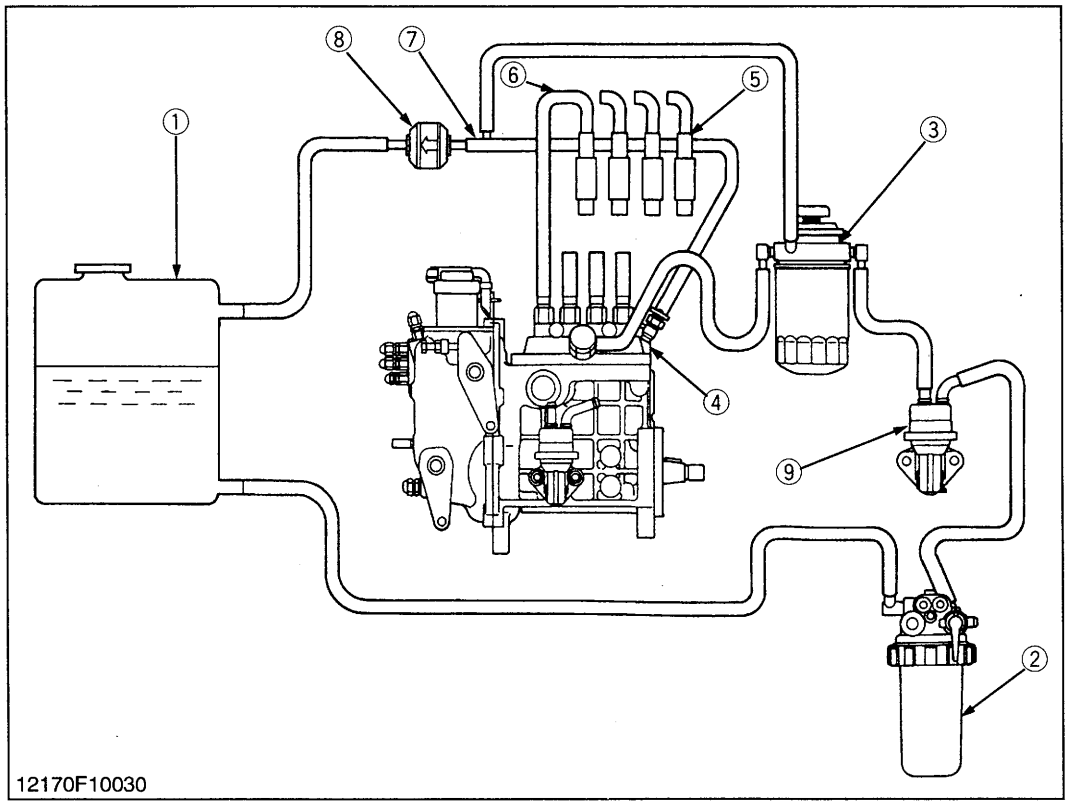
[5] FUEL SYSTEM



(1) Fuel Tank
(2) Separator (not included in the basic engine)
(3) Fuel Filter
(4) Injection Pump
(5) Injection Nozzle
(6) Injection Pipe
(7) Fuel Overflow Pipe
(8) Check Valve
(9) Fuel Feed Pump

Fuel from the fuel tank (1) suck up by feed pump (9) through the separator (2) and then enter the fuel filter (3).

After impurities such as dirt, water etc. are removed, the fuel enter the injection pump (4) and is pressurized.

The fuel pressurized by the injection pump to the opening pressure (13.7 to 14.71 MPa, 140 to 150 kgf/cm^2, 1991 to 2062 psi) of the injection nozzle (5) is injected into the combustion chamber.

Part of the fuel fed to the injection nozzle (5) lubricates the moving parts of the plunger inside the nozzle, then returns to the fuel tank (1) through the overflow pipe (7) and check valve (8) another end of overflow pipe is connected to pump body by joint.

Thus, this system is designed to prevent mixing of air into fuel which causes hard starting.

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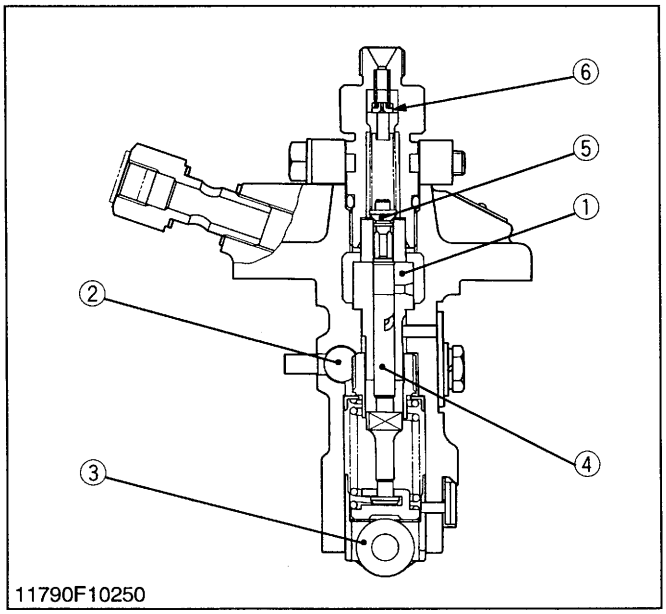
(1) Fuel Injection Pump



A Bosch type mini pump is used for the injection pump. It is small, lightweight and easy to handle.

The plunger (4) with a right-hand lead reciprocates via the tappet roller (3) by means of the camshaft fuel cam, causing the fuel to be delivered into the injection nozzle.

(1) Cylinder
(2) Control Rack
(3) Tappet Roller
(4) Plunger
(5) Delivery Valve
(6) Dumping Valve

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