
SUPPLY PUMP [SKYACTIV-D 2.2]

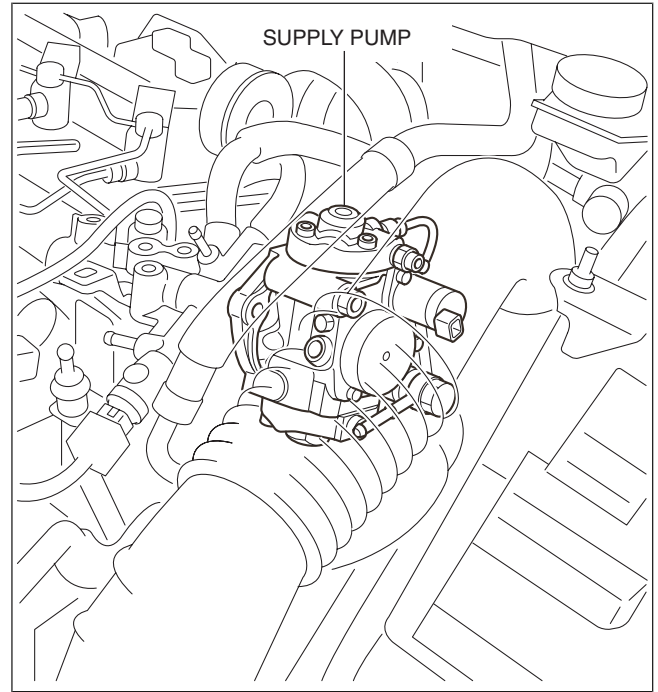
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Purpose, Function

- An electric supply pump with extremely high output pressure and low drive torque has been adopted.
- The pump mounting is made of aluminum for weight reduction.
- The supply pump pumps the correct amount of fuel and feeds it to the common rail.

Construction

- The supply pump is installed to the engine (backside)



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Operation

- Fuel supplied by the feed pump passes the suction control valve which controls the intake amount. The fuel is then sent to the high pressure chamber formed by the TDC of the plunger and passes through the intake valve.
- When the plunger approaches TDC of the high compression chamber, the fuel sent to the high pressure chamber is passed through a compression pipe and sent to the delivery valve, supplying pressure to the common rail.
- The outer cam is driven eccentrically by the rotation of the camshaft to produce the reciprocating movement of the cam ring. The exterior surface of the outer ring rubs against the plunger and they move together in a reciprocating motion.