## General

Fuel is pumped to the carburetors by a diaphragm pump which is mounted on the engine block. The fuel pump is operated by the distributor shaft eccentric over an actuating plunger. The quantity of fuel delivered by the pump is metered automatically in direct proportion to the amount of fuel dispensed by the carburetors.

The fuel pump consists of an upper and lower assembly. The upper assembly accomodates an inlet and outlet valve, and a fuel filter. The lower assembly contains an actuating plunger. Located between both assemblies is a diaphragm spring. The diaphragm is built up of several layers of a fuel-proof material, and is sandwiched between two supporting discs which are riveted to the plunger coupling.

## Operation

The eccentric on the distributor shaft presses against the diaphragm plunger. The plunger transmits the pressure to the diaphragm coupling against the plunger spring but with the support of the diaphragm spring. As a result, the sucked-in fuel is forced to the carburetors through the outlet valve and the fuel line. When the actuating plunger moves back, a vacuum is created above the diaphragm, thus sucking the fuel into the pump, through the inlet valve. This process repeats itself with every revolution of the eccentric (once every two revolutions of the crankshaft).

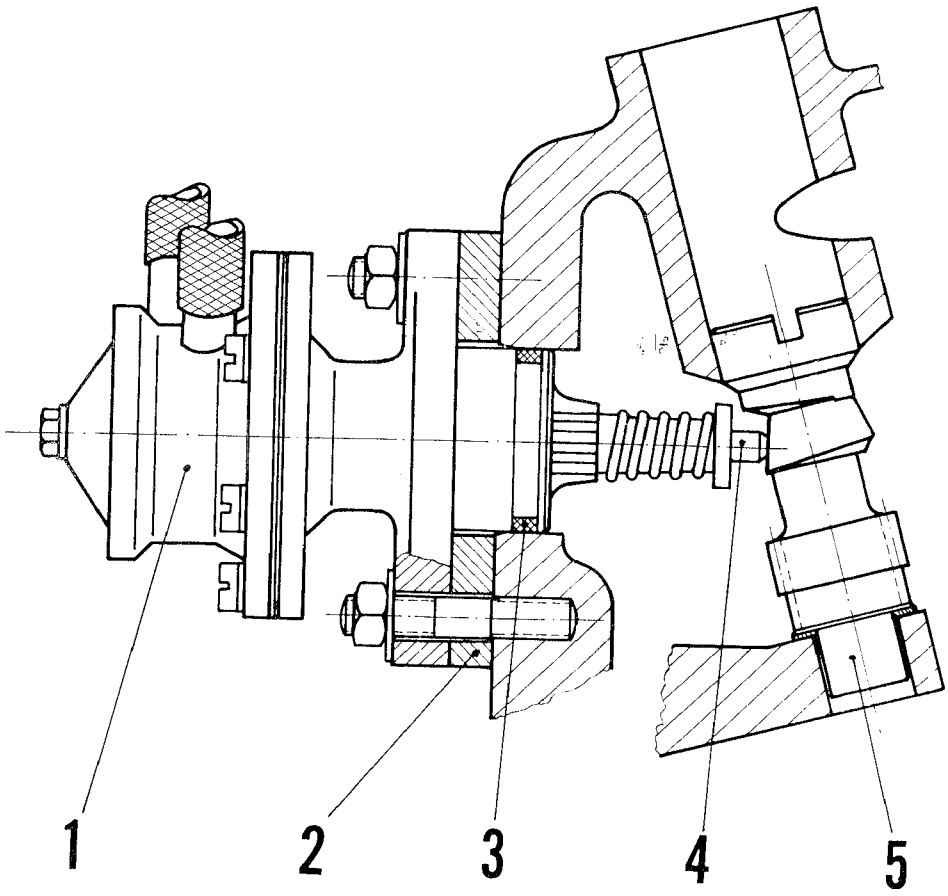


Fig. 2

1 Fuel pump
2 Pump insulating flange
3 O-ring
4 Actuating plunger
5 Distributor shaft