

Fuel Shutoff Valve

Some engines are equipped with a fuel shutoff valve with a wire mesh screen. On engines without a shutoff valve, a straight outlet fitting is used. The wire mesh prevents relatively large particles in the tank from reaching the carburetor. The shutoff valve permits work on the fuel system without the need for draining the tank.

Fuel Filter

Some engines covered by this manual may be equipped with a see-through inline fuel filter. When the interior of the filter appears to be dirty, it should be replaced.

Fuel Pump

All K series have provisions for mounting a mechanically operated fuel pump. If no fuel pump is mounted on these engines, a cover is placed over the pump mounting pad on the crankcase.

Older fuel pumps have a metal body. Later models have a body made of plastic. The plastic body better insulates the fuel from the hot engine, minimizing the chance of vapor lock.

OPERATION

The mechanical fuel pump is operated by a lever that rides on the engine camshaft. The lever transmits a pumping action to the flexible diaphragm inside the pump body. The pumping action draws fuel in through the inlet check valve on the downward stroke of the diaphragm. On the upward stroke, the fuel is forced out through the outlet check valve.

REMOVAL

1. Disconnect the fuel lines from the inlet and outlet fittings of the pump.
2. Remove the fillister head screws, flat washers, fuel pump and gasket.
3. If required, remove the fittings from the pump body.

REPAIR

♦ See Figure 163

Plastic bodied fuel pumps are not serviceable and must be replaced when faulty. Replacement pumps are available in kits which include the pump, mounting gasket and plain washers.

INSTALLATION

♦ See Figure 164

1. Fittings - Apply a small amount of Permatex Aviation Perm-A-Gasket® (or equivalent gasoline resistant thread seal-

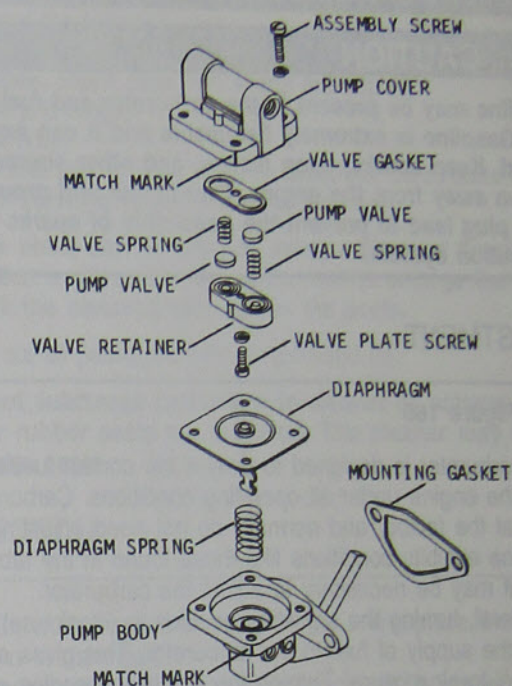


Fig. 163 Exploded view of the fuel pump

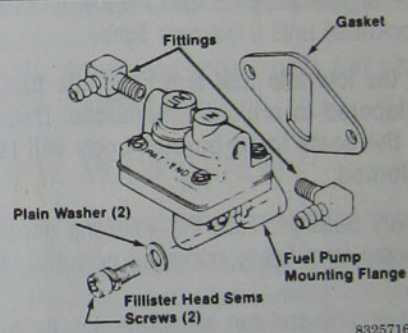


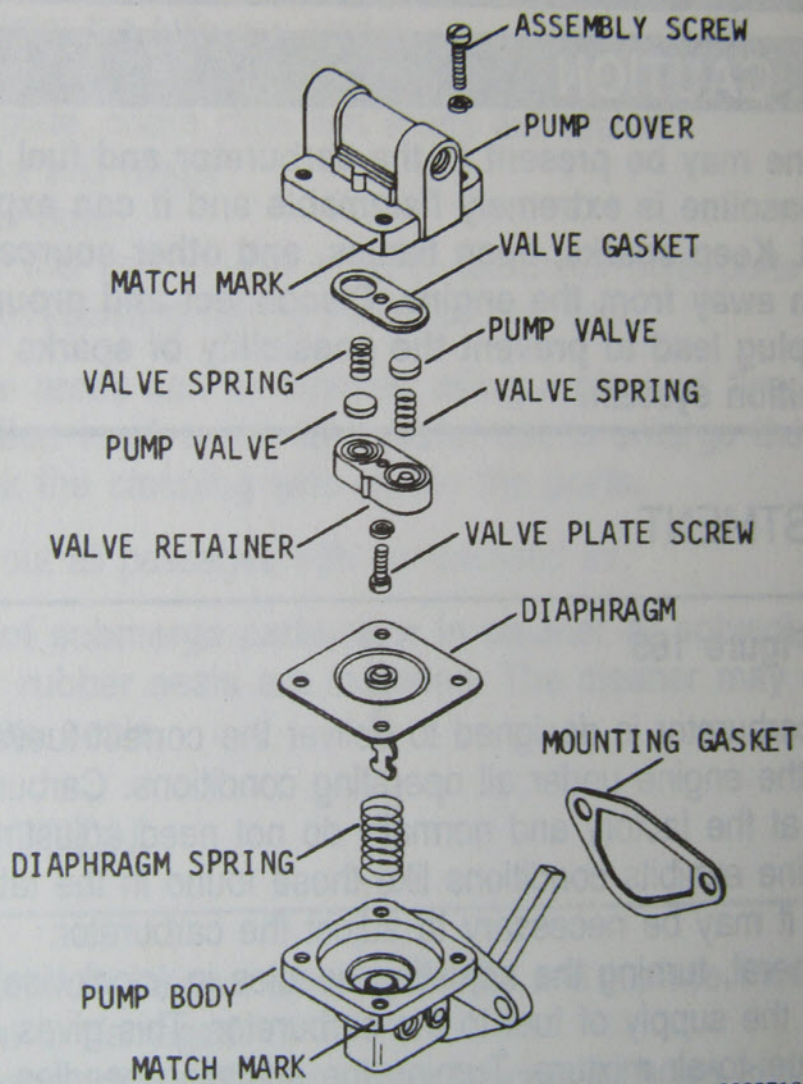
Fig. 164 Fuel pump installation

ant) to fittings. Turn fittings into pump six full turns; continue turning fittings in the same direction until desired direction is reached.

2. Install new gasket, fuel pump, flat washers, lock washers and fillister head screws.

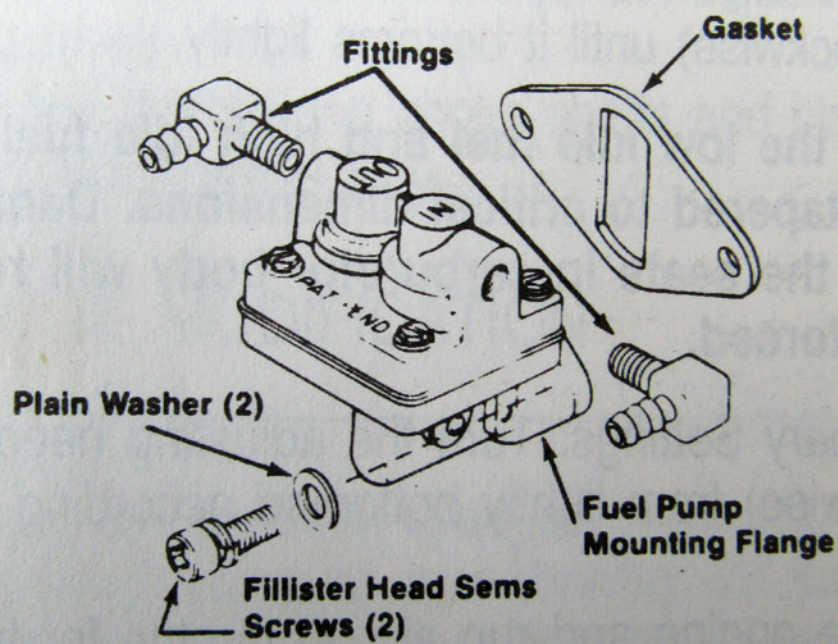
► Make sure that the fuel pump lever is positioned above the camshaft. Damage to the fuel pump and severe damage to the engine could result if the lever is positioned below the camshaft. Make sure that the flat washers are installed next to the mounting flange to prevent damage from the lock washers.

3. If a metal bodied pump was replaced by a plastic bodied pump, make sure that the old thick gasket is discarded and the new thin gasket is used.
4. Torque screws 37-45 inch lbs.
5. Connect fuel lines to inlet and outlet fittings.



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Fig. 163 Exploded view of the fuel pump



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Fig. 164 Fuel pump installation