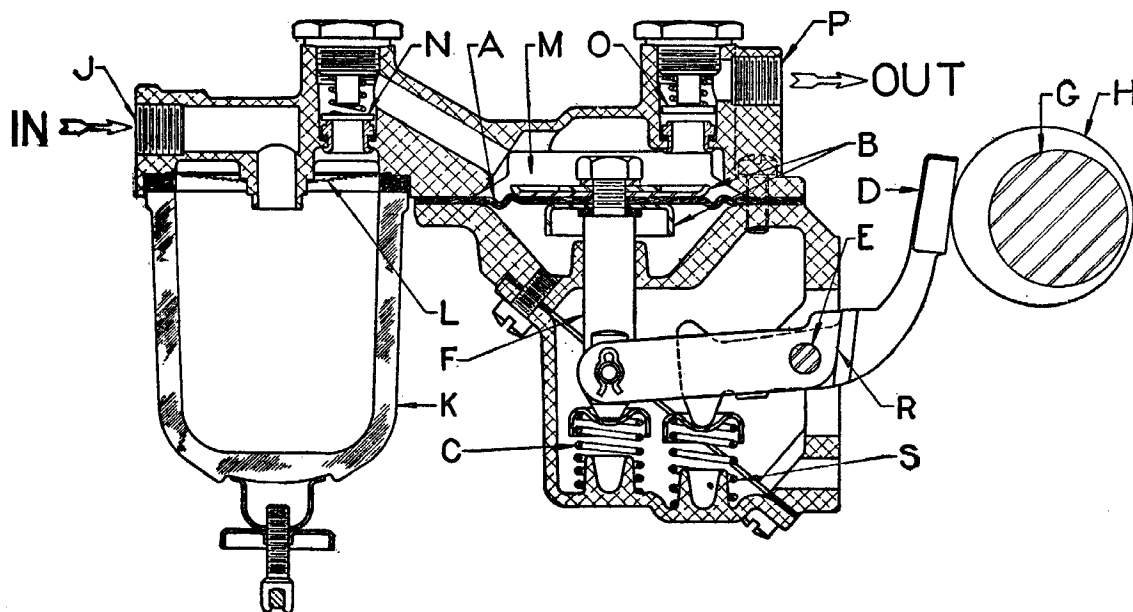


THE AC FUEL PUMP

SERIES B



How It Works

By revolving shaft (G) the eccentric (H) will lift rocker arm (D), which is pivoted at (E) and which pulls the pull rod (F), together with diaphragm (A) held between metal discs (B) downward against spring pressure (C), thus creating a vacuum in pump chamber (M).

Fuel from the rear tank will enter at (J) into sediment bowl (K) and through strainer (L) and suction valve (N) into pump chamber (M). On the return stroke, spring pressure (C) pushes diaphragm (A) upward forcing fuel from chamber (M) through pressure valve (O) and opening (P) into the carburetor.

When the carburetor bowl is filled the float in the float chamber will shut off the inlet needle valve, thus creating a pressure in pump chamber (M). This pressure will hold diaphragm (A) downward against the spring pressure (C) and it will remain in this position until the carburetor requires further fuel and the needle valve opens. The rocker arm (D) is in two pieces split at (R) and the movement of the eccentric (H) is absorbed by this "break" (R) when fuel is not required.

Spring (S) is merely for the purpose of keeping rocker arm (D) in constant contact with eccentric (H) to eliminate noise.

Service Hints

Service on the AC Fuel Pump is available through United Motors Service Branches and Authorized AC Service Stations, who are prepared with parts and fixtures for repairing all types of pumps. There are some service operations on this fuel pump that can, if necessary, be done without referring to the service station and these are tabulated on the reverse side of this sheet. In some instances trouble is attributed to the fuel pump which in reality is caused by some other condition. These should be carefully checked to avoid the needless replacement of fuel pumps.

THE AC FUEL PUMP—Service Hints (*Cont'd*)

LACK OF FUEL AT THE CARBURETOR

Check as follows:

Cause	Remedy
Gasoline tank empty.	Refill.
Leaky tubing or connections.	Replace tubing and tighten all pipe connections at the fuel pump and gasoline tank.
Bent or kinked tubing.	Replace tubing.
Glass bowl loose.	Tighten thumb nut, making certain that cork gasket lies flat in its seat and not broken.
Dirty screen.	Remove glass bowl and clean the screen. Make certain that cork gasket is properly seated when reassembling.
Loose valve plug.	Tighten valve plug securely, replacing valve plug gasket if necessary.
Dirty or warped valves.	Remove valve plugs and valves. Wash valves in gasoline. If damaged or warped, replace them. Examine valve seat to make certain there are no irregularities which prevent proper seating of valves. Place valve in valve chamber with the polished side downward. Make certain that valve lies flat on its seat and is not left standing on edge. Reassemble valve plug and spring, making certain that spring is around the lower stem of the valve plug properly. Use new gasket under valve plug if necessary.

LEAKAGE OF FUEL AT THE DIAPHRAGM

Check as follows:

Cause	Remedy
Loose cover screws.	Tighten cover screws alternately and securely. CAUTION: Do not disassemble the pump body. NOTE: Sometimes there appears to be a leak at the diaphragm, whereas the leak actually exists at one of the pipe fittings and the fuel has run down the pump to the diaphragm flange, appearing to originate there.

FLOODING OF CARBURETOR

Check as follows:

Cause	Remedy
Carburetor needle valve not seating.	Check carburetor for proper adjustment.

IMPORTANT: Do not attempt to disassemble the fuel pump further than described above, because it is absolutely necessary to use a special fixture in reassembling the pump when once taken apart. When the above remedies do not correct the condition, replace with a new fuel pump sending the old fuel pump to your nearest AC service station.