

All Other Models (Figure 6)

1. Wash all parts thoroughly and use compressed air to dry.
2. Inspect each part carefully for wear or damage.
3. Replace pulsator diaphragm with new, if old diaphragm shows the least sign of deterioration.
4. Be sure that valve seats provide flat contact area for valve disc.
5. Tighten elbows and check valve connections firmly when replacing.
6. Do not use Permatex on valve retainer gasket.
7. Check valves after reassembling fuel pump cover by

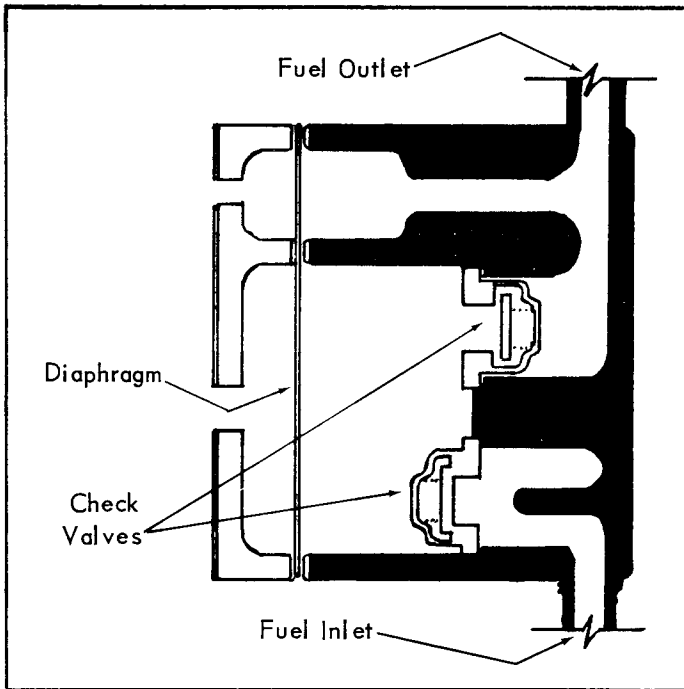


Figure 6. Fuel Pump for Most Models

blowing thru outlet hole. Air should be drawn thru valve but should close immediately when attempting to blow thru it.

3. Check inlet valve by reverse procedure. If leakage is encountered, check for free operation and accurate setting of valves.
4. Worn or slightly warped valve will cause leakage. Replace with new valves for more accurate setting.
5. When installing fuel line fittings, we recommend aviation Permatex for sealing. Apply sparingly to avoid clogging of fuel lines.

CAUTION: Do not use Liquid Neoprene on fuel line fittings. Neoprene is recommended only for exposed electrical connections. Permatex is available thru all local hardware stores.

6. Reassemble fuel pump(s), using new gasket(s).

FUEL PUMP DIAPHRAGM

A defective fuel pump diaphragm is often mistakenly diagnosed as ignition trouble. A tiny pin-hole in diaphragm will permit gas to enter crankcase causing that particular cylinder to wet foul the spark plug at idle speed. At higher speeds, quantity of gas is limited and spark plug will fire normally.

FUEL LINES AND FILTERS

1. Inspect fuel lines for kinks, leaks and restrictions and correct any defects found. If necessary, remove fuel lines and blow out with compressed air to remove any foreign material. When reinstalling lines, be sure that they are not twisted or kinked, thereby causing restrictions.
 2. Clean or replace fuel line filter element(s) as follows:
 - a. Remove filter cover(s) and element(s).
 - b. Wash parts in solvent and dry with compressed air.
 3. Reinstall element(s)
- NOTE: If a complaint of poor high speed performance exists, fuel pump pressure test, described under "Additional Checks and Adjustments" in this section, should be performed.*
4. Brass fuel line fittings are available for replacing damaged fittings or for shortening $\frac{1}{2}$ " diameter type fuel lines. No special tools are required. Order from following list:

A-22-33078 Brass Fuel Line Fitting, $\frac{1}{4}$ "-18 thread
A-22-33074 Brass Fuel Line Fitting, $\frac{1}{8}$ "-27 thread
C-54-20386 Circle Clamp

One circle clamp is required for each brass fitting used.

"5" Ignition System

1. Use equipment as directed by manufacturer. All ignition components must be checked.
 - a. Coil(s)
 - (1) Maximum Operating Amperage Test
 - (2) High Speed Test
 - (3) Secondary Continuity Test
 - (4) Surface Insulation Test
 - (5) Ground Test
 - b. Spark Plug Wires, Rotor, Distributor Cap
 - (1) High Voltage Leakage Test
 - (2) Continuity and/or Resistance Test
 - c. Condenser
 - (1) Capacity Test
 - (2) Leakage and Short Test
2. Breaker Points
 - a. Examine breaker points and clean or replace if necessary. Contact points, with an overall gray color and only slight roughness or pitting, need not be replaced. Replace points which are burned, badly pitted or have high resistance.
 - b. Where burned or badly pitted points are encountered, ignition system and engine should be checked to determine cause of trouble so that it can be eliminated. Unless condition which causes point burning or pitting is corrected, new points will provide no better service than the old points. See "Ignition System", Section IV, for an analysis of point burning or pitting.
 - c. Adjust points on 2-4 & 6-cyl. outboards with the recommended synchronizing (degree) plate. Refer to Ignition Sect. IV.
3. Resistors must be checked when 6-cylinder ignition system is serviced. Engines, which have the ignition by-pass, will start and run on all six cylinders, even if one resistor is burned out; however, voltage to ignition