

**CA65628-800E Fuel Boost Pump, Removal, Installation,
and Instructions for Continued Airworthiness**

Document No. CA65628-800E-MAINT

Rev. 2, Dated: 06-19-18

IMPORTANT NOTE: THIS IS A NEW STYLE SOLID STATE FUEL PUMP. WHILE MOST MAINTENANCE INFORMATION FOUND IN THE APPLICABLE PIPER AIRCRAFT MAINTENANCE MANUALS APPLIES TO THIS PUMP, THE MAJOR EXCEPTION IS THAT THIS PUMP CANNOT BE ELECTRICALLY CHECKED USING AN OHMMETER PER THE PIPER INFORMATION. PIPER SPECIFICATIONS FOR RESISTANCE CHECKS DO NOT APPLY.

REMOVAL:

- 1) Make sure that the aircraft battery and boost pump switches are "off".
- 2) Turn off the fuel supply at the selector and gain access to the pump.
- 3) Disconnect the fuel pump electrical lead and both fuel lines.
- 4) Remove the nuts and bolts securing the pump to its mounting bracket and remove the pump.

INSTALLATION:

- 1) If the pump being installed is different from the pump that was removed, remove the fittings from the old pump, noting their respective positions if different from each other. Clean and inspect the fittings and, if serviceable, install in the new pump in the proper positions, using appropriate thread sealant and tighten to 60-70 in/lb.
- 2) Position the pump to the mount bracket and secure with bolts, washers, and nuts.
- 3) Connect the electrical lead and fuel lines to the pump. The electrical connection must include the 3 amp in-line fuse.
- 4) Turn the fuel "on", and turn on the battery and fuel pump switch. Check to be sure there is no fuel leakage and for proper operation.
- 5) Reinstall and/or close any access panels that were removed to gain access to the pump.
- 6) Complete log entry.

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS:

Routine Filter Cleaning: Once each 100 hours or 12 months, turn off the fuel supply and gain access to the fuel pump. Cut the safety wire and remove the bottom cover, gasket, magnet, and filter screen from the pump. Note: If the screen does not come out easily, use caution removing it from the pump housing so as not to damage it. Clean the cover and filter with acetone or a suitable dry type solvent.

Caution:

Solvents are flammable and harmful to the skin. Avoid sparks or open flame and wear rubber gloves and eye protection. Blow off excess solvent and inspect cover, gasket, and filter. If no damage exists, reinstall filter, gasket, and cover and safety wire. Turn on fuel supply. Operate pump and check for leakage and normal operation. Return the aircraft to service.

Cleaning for Possible Contamination: Should the pump become contaminated from dirty fuel, further disassembly and cleaning can be accomplished. Remove the cover and filter as above. Referring to the figure below, remove the retainer spring from the plunger tube using thin nose pliers to spread and remove the ends of the retainer from the tube. Remove the washer, "o"ring seal, cup valve, and plunger assembly from the pump.

Caution:

Do not remove the buffer spring and valve from the plunger assembly.

Do not tamper with the seal at the center of the mounting bracket at the side of the pump as it retains the dry gas which surrounds the electric components on the upper portion of the pump.

Clean all parts per above using the same Caution. If the plunger assembly does not come clean or there are any rough spots, polish gently with crocus cloth. Inspect for the following:

- Check the filter screen for damage or distortion.
- Gently touch the cup valve and check for freedom of movement. Do not disassemble.
- Shake the plunger assembly and listen for clicks to indicate valve action.
- Check the condition of the "o" ring.
- Check the condition of the cover gasket and plunger spring cup gasket.

Parts replacement is limited to the cover gasket and filter. Any other damaged parts require pump replacement.

Reassemble the parts as follows: insert the plunger assembly (10) in the tube with the buffer spring end first. Install other components in the following order: cup valve, "o" ring seal, and then washer. Install the retainer spring securing the components inside the pump housing. Reinstall filter and cover with the gasket and magnet in place. Safety wire cover. Reinstall pump per above "Installation" instructions.

Fuse replacement: If the in-line 3 amp fuse should blow during service, replace it one time to see if the pump can be restored to service. If the fuse should blow a second time, the pump should be replaced.

Note: Life Limitation/Replacement Time
PMA Products, Inc. requires that the electric fuel pump be replaced at each engine overhaul or 5 years, whichever comes first.

