



Power Systems

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Service Information Letter

The technical content of this letter is FAA Approved

Letter No. A-110B

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RECOMMENDED SERVICE/INSPECTION FOR MODEL 91E93-1 & 91E92-1 HEATER FUEL PUMP

REASON FOR REVISION:

Pumps built with the affected serial number tags had kit components inadvertently left out at the factory. Clarification of identification procedure. Addition of photo of new cover plate to aid identification.

INTRODUCTION:

In response to recent complaints of leakage on dual fuel pump installations outside of the original SIL A-110A timeframe. Kelly Aerospace, Inc. recommends an inspection of all model 91E93-1 (12 volt) and 91E92-1 (24-volt) aircraft heater fuel pumps.

COMPLIANCE:

If the instructions of PART II (original SIL A-110A) have been complied with by incorporating Kelly Aerospace Kit AK91E93 (Piper Part Number 767-367), no further action is necessary. If the original SIL A-110A was previously complied with by installation of a replacement 91E93-1 or 91E92-1 pump, compliance has not been achieved, proceed to PART I of these instructions. If no action for SIL A-110A has been taken (or compliance of Piper SB 1127), proceed to PART II of this SIL.

This Service Information Letter is divided into two parts. Part I adds serial number range affected and instructions. Part II contains the original requirements of this SIL.

PART I

PROCEDURE:

1. Access the aircraft heater fuel pumps in accordance with the approved aircraft maintenance instructions. If applicable, refer to Piper Service Bulletin 1127 (latest revision) for further information.
2. Inspect the pump for the serial number data plate. If the pump has a data plate, refer to the Table below for affected serial numbers and proceed to PART II Step 3. If a data plate is installed but has no serial number or if no data plate is installed, check the aircraft logbook for previous compliance of SIL A-110A or Piper Service Bulletin 1127 (latest revision) by installation of Kit AK91E93 or Piper kit 767-367.

3. If you are unsure of either the serial number, data plate or previous compliance, inspect the end filter access cover, part number 05487 to determine if it is correct. If the cover is identical to the one shown in Figure 1 proceed to Step 5 below. If the cover is not identical to the cover in Figure 1 continue with these instructions.

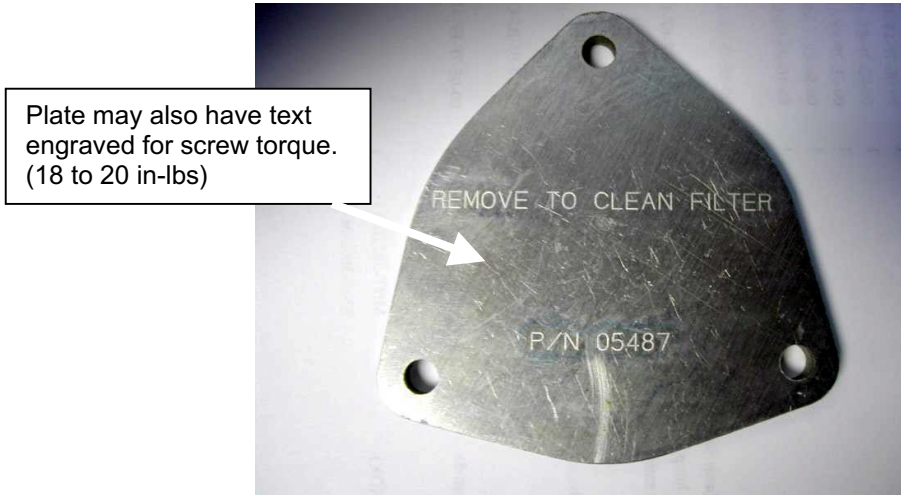


FIGURE 1

4. If the cover is not identical to the cover in Figure 1 proceed to Step 3 of PART II found below.
5. Make an appropriate logbook entry of compliance with PART I of this SIL.

(Serial Number Affectivity Table shown on next page.)

For questions concerning these instructions or availability of fuel pump service parts, please contact Kelly Aerospace, JanAero Devices Service Department at 334-227-8306.

Serial Number Affectivity Table

91E92-1	A03070061	A03040027	A03050049	A03060022	A03060055	A03060088	A03070030
	A03070062	A03040028	A03050050	A03060023	A03060056	A03060089	A03070031
A03030017	A03070063	A03040029	A03050051	A03060024	A03060057	A03060090	A03070032
A03030018	A03070064	A03040030	A03050052	A03060025	A03060058	A03060091	A03070033
A03030019	A03070065	A03040031	A03050053	A03060026	A03060059	A03060092	A03070034
A03030020	A03070066	A03040032	A03050054	A03060027	A03060060	A03060093	A03070035
A03030021	A03070067	A03040033	A03050055	A03060028	A03060061	A03060094	A03070036
A03030022	A03070068	A03040074	A03050056	A03060029	A03060062	A03060095	A03070037
A03030023	A03070069	A03040075	A03050057	A03060030	A03060063	A03060096	A03070038
A03030024	A03070070	A03040076	A03050058	A03060031	A03060064	A03060097	A03070039
A03030039	A03070071	A03040077	A03050059	A03060032	A03060065	A03060098	A03070040
A03030040	A03070072	A03050005	A03050060	A03060033	A03060066	A03060099	A03070041
A03030041	A03070073	A03050006	A03050061	A03060034	A03060067	A03060100	A03070042
A03030042	A03070074	A03050007	A03060002	A03060035	A03060068	A03060101	A03070043
A03030043	A03070075	A03050008	A03060003	A03060036	A03060069	A03060102	A03070044
A03030044		A03050009	A03060004	A03060037	A03060070	A03060103	A03070045
A03030045	91E93-1	A03050010	A03060005	A03060038	A03060071	A03060104	A03070046
A03030046		A03050011	A03060006	A03060039	A03060072	A03070009	A03070047
A03030047	A03040012	A03050012	A03060007	A03060040	A03060073	A03070010	A03070048
A03030048	A03040013	A03050013	A03060008	A03060041	A03060074	A03070011	A03070049
A03030049	A03040014	A03050014	A03060009	A03060042	A03060075	A03070012	A03070050
A03030050	A03040015	A03050037	A03060010	A03060043	A03060076	A03070013	A04110071
A03030051	A03040016	A03050038	A03060011	A03060044	A03060077	A03070014	A04110072
A03030052	A03040017	A03050039	A03060012	A03060045	A03060078	A03070015	A04110073
A03030053	A03040018	A03050040	A03060013	A03060046	A03060079	A03070016	A04110074
A03070053	A03040019	A03050041	A03060014	A03060047	A03060080	A03070017	A04110075
A03070054	A03040020	A03050042	A03060015	A03060048	A03060081	A03070018	A04110076
A03070055	A03040021	A03050043	A03060016	A03060049	A03060082	A03070019	A04110077
A03070056	A03040022	A03050044	A03060017	A03060050	A03060083	A03070020	A04110078
A03070057	A03040023	A03050045	A03060018	A03060051	A03060084	A03070021	A04110079
A03070058	A03040024	A03050046	A03060019	A03060052	A03060085	A03070027	A04110080
A03070059	A03040025	A03050047	A03060020	A03060053	A03060086	A03070028	
A03070060	A03040026	A03050048	A03060021	A03060054	A03060087	A03070029	

For questions concerning these instructions or availability of fuel pump service parts, please contact Kelly Aerospace, JanAero Devices Service Department at 334-227-8306.

PART II

PROCEDURE:

1. Access the aircraft heater fuel pumps in accordance with the approved aircraft maintenance instructions.
2. If the SN field of the fuel pump data tag is blank continue following the service instructions found below. *Note: If you are unsure the status of the pump, refer to PART I above to help identify whether it is in compliance with this SIL or not.*
3. Visually inspect each fuel pump body for signs of fuel stains, giving careful attention to the filter cover joint (see Figure 2). Fuel leakage may appear as a greenish blue stain or residue. Utilize supplemental lighting if needed to facilitate visual inspection. Visual inspection should include airframe areas around and beneath the fuel pump mounting locations.

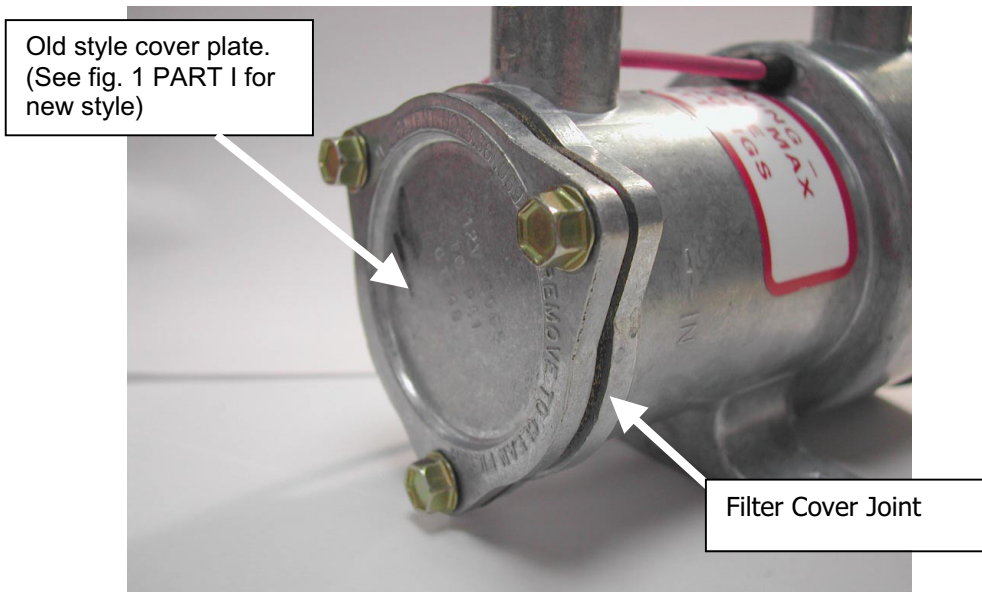


FIGURE 2

4. If signs of fuel leakage are found complete the following steps.
 - a. Remove fuel pump(s) from aircraft in accordance with the approved aircraft maintenance instructions.
 - b. Remove and discard fuel pump filter cover mounting screws, cover gasket, filter, and filter cover (see Figure 2).
 - c. Inspect the sealing surface of the fuel pump for surface abnormalities such as nicks, gouges, or warpage. If such abnormalities are found and cannot be corrected the fuel pump should be replaced.

- d. Install new filter, gasket, filter cover, and screws. These components are available in Kelly Aerospace Service Kit PN AK91E93. (**NOTE**... filter cover found in kit AK91E93 is fabricated from flat sheet stock and will not have surface relief feature on one side or small magnet on opposite side as depicted in Figure 3). Torque each screw in a sequential, progressive, fashion to 18-20 inch-lbs.
- e. Using permanent ink write the date of completion of this service activity on the pump ID tag in the SN field.
- f. Install the fuel pump(s) in accordance with the approved aircraft maintenance instructions.

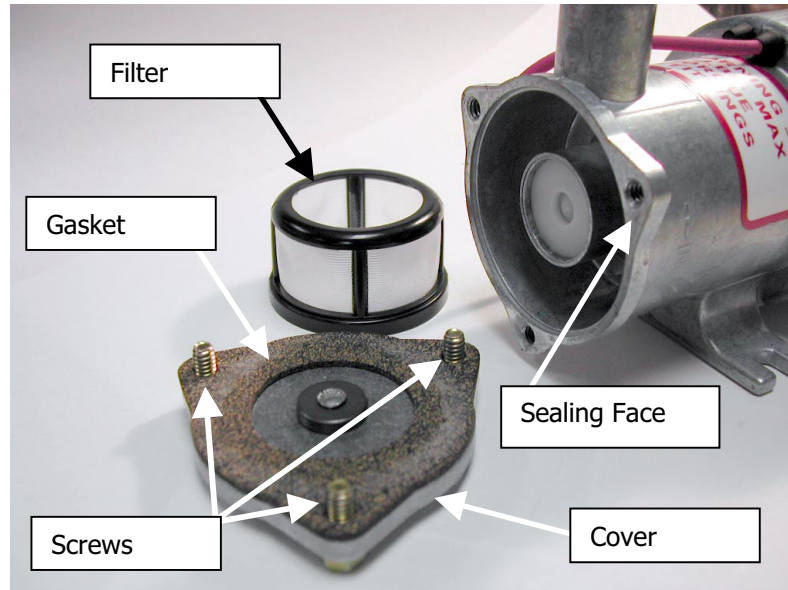


FIGURE 3

5. If no signs of fuel leakage are found **and** the fuel pump(s) have been installed prior to January 01, 2000 proceed to step 6. Otherwise complete the following steps.
 - a. Remove fuel pump(s) from aircraft in accordance with the approved aircraft maintenance instructions.
 - b. Remove fuel pump filter cover mounting screws and filter. Remove and discard cover gasket.
 - c. Inspect sealing surface of the fuel pump for surface abnormalities such as nicks, gouges, or warpage. If such abnormalities are found and cannot be corrected then the fuel pump should be replaced.
 - d. Inspect fuel filter for cleanliness.
 - e. Install filter (PN 91E94-1), gasket (PN 94E14), and screws. Torque each screw in a sequential, progressive, fashion to 18-20 inch-lbs.
 - f. Using permanent ink write the date of completion of this service activity on the pump ID tag in the SN field.
 - g. Install the fuel pump(s) in accordance with the approved aircraft maintenance instructions.
6. Install any and all hardware removed from aircraft in Step 1 in accordance with the approved aircraft maintenance instructions.
7. Make an appropriate logbook entry of compliance with PART II of this SIL.

For questions concerning these instructions or availability of fuel pump service parts, please contact Kelly Aerospace, JanAero Devices Service Department at 334-227-8306.