

Temporarily Disabling Janitrol B Series Aircraft Heaters (Supercedes Janitrol Aero SB 76)

INTRODUCTION:

As a response to several FAA AD's and service difficulties regarding the combustion air tube, Janitrol Aero Division of Midland Ross (and FL Aerospace Corp.) issued Service Bulletin 76 on July 27, 1990. This Service Bulletin provided instructions to disable any B Series Aircraft Heater Model B-1500, B-2030, B-3040, and B-4050 to allow the heater assembly to remain installed in the aircraft or rotorcraft while inoperative. This also allowed an alternate means of compliance for the FAA AD notes regarding the combustion air tube including *FAA A.D. Note 2004-21-05 (or latest)*. Since the time Service Bulletin 76 was issued, Kelly Aerospace has added Models B-2500, B-3500, and B-4500. The contents of this service bulletin shall supercede the instructions of Janitrol Aero Division, Midland Ross (and FL Aerospace Corp.) issued Service Bulletin 76 or any revisions thereof. The intent of this Service Bulletin is to allow the aircraft heater to be *temporarily* disabled until suitable repairs or replacement of the aircraft heater is accomplished.

This Service Bulletin is being issued to assure that all models of Kelly Aerospace Power Systems, B Series aircraft heaters are covered by this document and to indicate that this is a temporary measure until repairs or replacement may be accomplished. *Inclusive all Janitrol, JanAero, and previous titles.*

COMPLIANCE:

- I. Temporarily disabling the B Series aircraft heater may be accomplished anytime the heater is rendered un-serviceable at the owner/operators discretion.
- II. Return to service of the B Series aircraft heater must occur two years (24 months) after disabling the heater or two years (24 months) from the effective date of this service bulletin, which ever is later.

EFFECTIVITY:

All aircraft or rotorcraft incorporating Kelly Aerospace Power Systems, Janitrol B Series aircraft heaters, Models B-1500, B-2030, B-2500, B-3040, B-3500, B-4050, and B-4500.

PROCEDURE:

Note:

The Janitrol B Series combustion heaters were designed and installed in aircraft and rotorcraft not only for comfort but as an essential component to provide a safe environment for operation and transport. The disabling of the aircraft heater should not be considered a permanent solution to resolve heater maintenance difficulties.

PROCEDURE: (cont'd)

WARNING:

Disabling the aircraft heater and operating the aircraft in adverse conditions is not advised. Low temperatures especially at high altitudes may cause injury to crew and passengers and may affect crew operational capability.

CAUTION:

Many aircraft and rotorcraft manufacturers may have their own policy and/or procedures for disabling the heater. Prior to using the generic instructions below, consult your aircraft or rotorcraft manufacturers service manuals, AFM or POH, and other service publications to determine if additional work is required.

The following instructions are generic in nature concerning B Series Janitrol aircraft heaters. Please refer to the KAPS maintenance and overhaul manual P/N 24E25-1 (standard tube) as reissued January 29, 2007 or P/N 94E47 (extended life tube) issued January 29, 2007 for more details.

A. Disable

1. Locate and disable the circuit breakers for the heater assembly, including the combustion heater fuel pump, combustion heater ignition assembly, and the combustion air blower assembly. Place a small nylon cable tie around the shaft of the breaker so the breaker cannot be re-engaged. If the breaker is not a pull out type, the circuit breaker should be removed and wires insulated and secured.
2. Locate the electrical terminal block on the heater assembly jacket. Locate and disconnect the power supply line coming from the aircraft electrical system. Insulate the wire terminals so the terminal is covered and it cannot find a path to ground (short). Identify and secure loose wire ends.
3. Disconnect the heater fuel line at the heater assembly. Install an "AN" type plug of the appropriate size in the line. Install an "AN" type cap of the appropriate size on the heater fuel fitting. (Do not use plastic plugs or caps.) Secure the heater fuel line to prevent movement.
4. Locally manufacture and place a warning placard in aircraft cockpit, in the area of the combustion heater controls and at the circuit breakers. The placard should state that the combustion heater is not operational and INOP at the circuit breakers. Placards must be firmly affixed in place. (See Figs. 1 & 2)
5. Consult the AFM, POH, checklist or other aircraft operational document for any operational requirement. If found, temporarily notate "inop" or "not operational" at that location.
6. Make an appropriate logbook entry indicating that the combustion heater has been disabled and made inoperative in accordance with (I) of this service bulletin.

B. Return to Service

1. Upon obtaining the compliance time of 24 months (II), the aircraft heater must be returned to service. Replace the heater with a new, rebuilt or serviceable heater assembly approved for your aircraft or rotorcraft. The existing heater assembly may be reused, however it must be overhauled to serviceable status using the applicable KAPS aircraft heater overhaul manual(s). Before the serviceable heater is installed or tested, be sure to check the air inlet(s) and heater air outlets for obstructions and condition.
2. Remove the heater fuel pump(s) if installed and make a performance test per the applicable chapter of the aircraft or rotorcraft manufacturers service manuals or by referring to the applicable section of the appropriate KAPS aircraft heater overhaul manual(s). (P/N 24E25-1 or P/N 94E47) If found defective, overhaul or replace the pump(s). Be sure to flush the line from the fuel source to the fuel pump thoroughly prior to reinstalling the pump.

B. Return to Service (cont'd)

3. Remove the "AN" plug from the heater fuel line remove any securing ties. Inspect the fuel line for damage and/or corrosion and replace if found. (Fuel lines are an aircraft or rotorcraft part.) Flush the line thoroughly with clean fuel into a catch container. If material is evident in the flush fuel, continue to flush line. Remove any inline filters along the heater fuel line route and clean the filter container. Install new filter(s) and flush the line again before attaching to the heater fuel pump or source. Connect fuel line to heater.
4. If installed, remove the small nylon cable ties around the shaft of the breaker on the heater assembly, including the combustion heater fuel pump, combustion heater ignition assembly, and the combustion air blower assembly. Engage and disengage the breaker, if difficulty in operation is encountered, replace the breaker. If a circuit breaker is not installed, consult the aircraft or rotorcraft manufacturers service and parts manuals for the appropriate part. (Circuit breakers are an aircraft or rotorcraft part.) Install the correct breaker and connect the wiring.
5. Locate the electrical terminal block on the heater assembly jacket. Locate the disconnected power supply line coming from the aircraft electrical system. Remove any insulation and clean the wire terminals. If identification tags were placed on the wires and are legible connect the wires to the correct location. If identification cannot be made, consult the applicable chapter of the aircraft or rotorcraft manufacturers service manuals or refer to the the applicable section of the appropriate KAPS aircraft heater manual(s). (P/N 24E25-1 or P/N 94E47).
6. Apply aircraft electrical power, preferably ground power, and make a quick check before proceeding. Turn on the air blower(s) and turn on the fuel pump(s) to assure basic operation. Do not start heater at this time.
7. With a serviceable heater now installed, electrical system connected and fuel connected, move the aircraft to an outside location to perform a heater test. Consult the applicable chapter of the aircraft or rotorcraft manufacturers AFM, POH, and/or service manuals or refer to the the applicable section of the appropriate KAPS aircraft heater manual(s) for test details. (P/N 24E25-1 or P/N 94E47).
8. Before proceeding to the next step, assure that the latest revisions of Service Bulletins A-107A, A-108, and A-110B have been accomplished as they pertain to devices not necessarily installed on the heater assembly. These bulletins are posted and may be printed from our website, www.kellyaerospace.com.
9. Upon a successful test of the aircraft heater, remove the warning placard in the aircraft cockpit located in the area of the combustion heater controls. Remove the "inop" placards at the circuit breakers.
10. Remove any notations in the AFM, POH, checklist or other aircraft operational document indicating an "inop" condition.
11. Make an appropriate logbook entry indicating that the combustion heater has been returned to service, tested, and made operative in accordance with (II) of this service bulletin.

MATERIAL REQUIRED*:

- A. Locally obtained: (as applicable to your model aircraft heater assembly)
 - Cable ties, quantity as required.
 - Aluminum or plastic placard material, quantity as required.
 - AN plug and cap of the appropriate size.
- B. Serviceable B Series aircraft heater of the appropriate part number as required.

** Additional items may be required to be obtained from the aircraft or rotorcraft manufacturer.*

PARTS AVAILABILITY:

- A. Locally obtained and manufactured.
- B. Any authorized Kelly Aerospace distributor.

Figure 1 - Sample Heater Controls Location
 Locate Placard Prominently Near Heater Controls

Minimum letter (font) size for
 Fig. 1 & 2 is .125 in. (.318 cm).

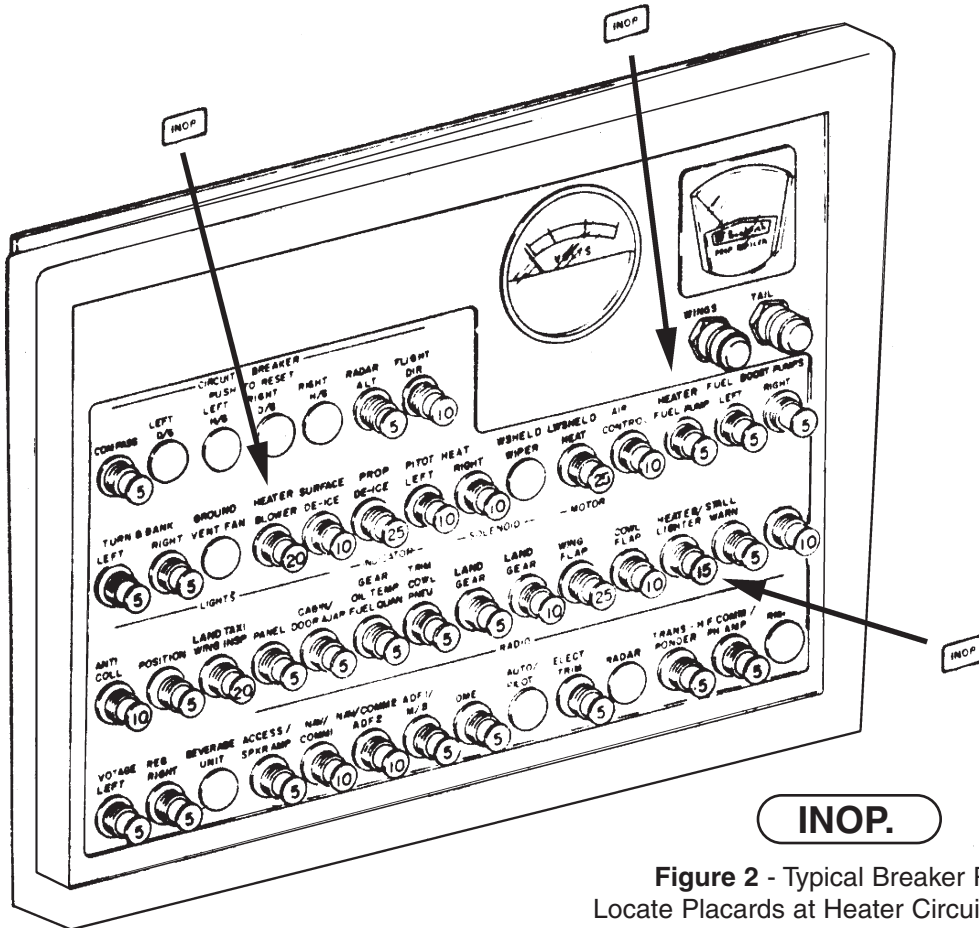
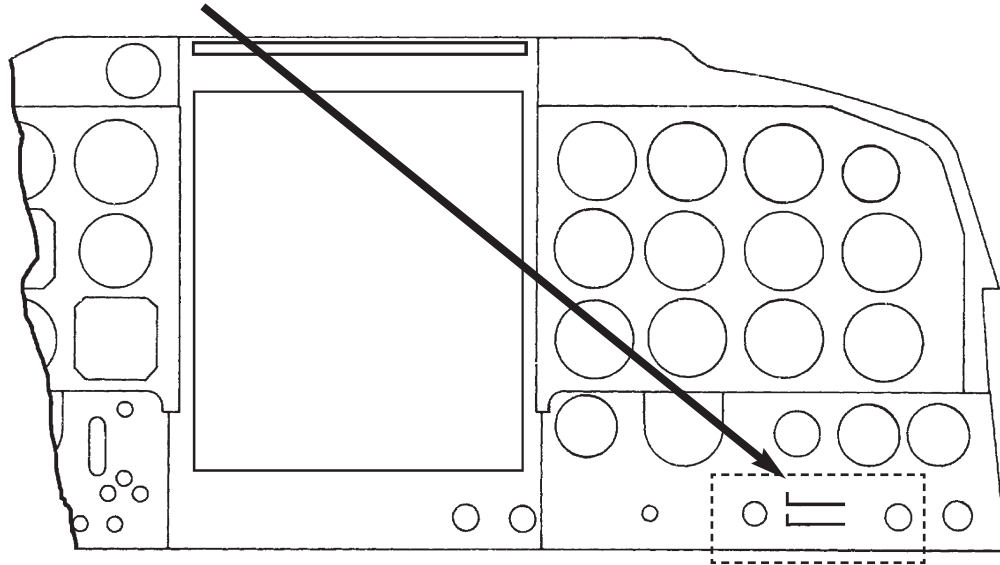


Figure 2 - Typical Breaker Panel
 Locate Placards at Heater Circuit Breakers