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SERVICE BULLETIN

SERVICE BULLETIN No. 222

Aircraft Heater Alternate Blower Motors

1. Planning Information

- A. Effectivity
 - (1) Various Janitrol Aero[™] I-Series (IS) cabin heater ventilating and combustion air blower assemblies are affected by this Service Bulletin (SB). See Section 3 for identification of installed motor.
 - (a) All serial numbers of listed heater assemblies are affected by this SB.
- WARNING: DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THIS SERVICE BULLETIN. INFORMATION CONTAINED HEREIN MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. FAILURE TO COMPLY WITH THIS SERVICE BULLETIN OR THE USE OF OBSOLETE INFORMATION MAY CREATE AN UNSAFE CONDITION THAT MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE. REFER TO THE JANITROL WEBSITE, WWW.JANITROL.AERO, FOR THE MOST RECENT REVISION LEVEL OF THIS SERVICE BULLETIN.
- B. Concurrent Requirements
 - (1) None
- C. Reason
 - (1) HET has developed and qualified a set of new brushless DC (BLDC) blower motors to replace the existing 94E56-2, -3, B94E56-2, 94E99-1, -2, -3, and 11E31-3, -4 motors and motor assemblies.
 - (a) See Table-1 for historical blower motor to brushless motor cross reference.
 - 1) Replacement (historical) blower motors may be purchased and installed until supply is exhausted.
 - 2) Replacement (brushless) motors are available for purchase and installation, if desired. See Table-1.
- D. Description
 - (1) This SB provides Instructions for Continued Airworthiness (ICA) for listed Janitrol heater assemblies containing brushless motor P/Ns 81251-1, 81251-2, 81260-1, 81260-2, 81260-3, 81260-4, 81260-5, and 81260-6.
 - (2) This SB shall remain in effect until incorporated into referenced manuals P/N 99M90 and 99M91.

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REPLACEMENT (HISTORICAL) BLOWER MOTOR P/N	REPLACEMENT (BRUSHLESS) BLOWER MOTOR P/N
94E56-3	81251-1
94E56-2	81251-2
94E99-1	81260-1
94E99-2	81260-2
94E99-3	81260-3
11E31-3	81260-4
11E31-4	81260-5
B94E56-2	81260-6

Table 1 - Blower Motor Cross-Reference

- E. Compliance
 - (1) Compliance with section 3.A of this SB is optional at the next and recurring 500 heater hour inspection from the release date of this SB.
- F. Approval
 - (1) FAA acceptance has been obtained on the technical data in this publication that affects type design.
- G. Manpower
 - (1) Labor hours are negligible when performed at scheduled aircraft inspection intervals.
- H. References
 - (1) Applicable Aircraft Service Instructions or Maintenance Manual
 - (2) Applicable Aircraft AFM or POH
 - (3) HET Manual P/N 99M90 I-Series Combustion Heater Owners Manual
 - (4) HET Manual P/N 99M91 I-Series Combustion Heater Overhaul Manual
- I. Weight and Balance
 - (1) No Change
- 2. Materials Required
 - A. None

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3. Accomplishment Instructions

- WARNING 1: THIS PROCEDURE MUST BE PERFORMED BY COMPETENT AND QUALIFIED PERSONNEL WHO ARE FAMILIAR WITH THE AIRFRAME MAINTENANCE. FAILURE TO DO SO MAY RESULT IN PHYSICAL INJURY, EQUIPMENT DAMAGE AND/OR ECONOMIC LOSS.
- WARNING 2: DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THIS SERVICE BULLETIN. INFORMATION CONTAINED HEREIN MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. FAILURE TO COMPLY WITH THIS SERVICE BULLETIN OR THE USE OF OBSOLETE INFORMATION MAY CREATE AN UNSAFE CONDITION THAT MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE. REFER TO THE JANITROL AERO WEBSITE FOR THE MOST RECENT REVISION LEVEL OF THIS SERVICE BULLETIN, WWW.JANITROL.AERO.
- **CAUTION:** REFER TO THE APPLICABLE MANUFACTURER'S MAINTENANCE MANUALS OR SERVICE INSTRUCTIONS TO GAIN ACCESS TO THE AIRFRAME OR HEATER. IN ADDITION, ANY PREFLIGHT OR IN-FLIGHT OPERATIONAL CHECKS REQUIRE USE OF THE APPROPRIATE AFM OR POH.
- A. Inspection (500 Hour), Recurrent
 - **NOTE:** The preferred method of recording heater time is directly from the heater with an installed Hobbs meter.

If a Hobbs meter is not installed on the heater, calculate heater time from the aircraft Hobbs meter. Two aircraft flight-hours is equal to one heater hour, e.g., one-thousand aircraft flight-hours is equal to five-hundred heater hours.

- (1) While performing a 500 hour recurring inspection, inspect the motor part number effectivity.
 - (a) If blower assembly motor P/N is <u>not</u> 81251-1, 81251-2, 81260-1, 81260-2, 81260-3, 81260-4, 81260-5, or 81260-6, continue with instructions in accordance with referenced manual, 99M90.
 - (b) If blower assembly motor P/N <u>is</u> 81251-1, 81251-2, 81260-1, 81260-2, 81260-3, 81260-4, 81260-5, or 81260-6 maintenance of the motor is not required.
 - 1) Replace motor at two-thousand heater hours.
 - **NOTE:** Follow inspection checks in accordance with referenced manual, 99M90 for maintenance and replacement intervals for heater blower motor of any other P/N.

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- (2) Motor Replacement Special Instructions
 - NOTE: Replacement (brushless) blower motors are available for purchase and installation, if desired (See Table-1). Brushless motors may be installed without deviation to installation instructions found in referenced manuals 99M90 and 99M91, with exception to the following:

When replacing blower motors in 10E26-1, -2, -3, -4, and -5 combustion air blower assemblies, the specific blower motor assembly should be ordered per Table 1 and installed per the below instructions.

- 1) 81260-4 and 81260-5 blower motors only
 - a) Install blower motor part numbers 81260-4 and 81260-5 per existing instructions in 99M90 or 99M91.
 - b) Install the ring terminal from the blower motor marked GROUND under one of the blower assembly relay mounting screws*, as shown in Fig. 1.

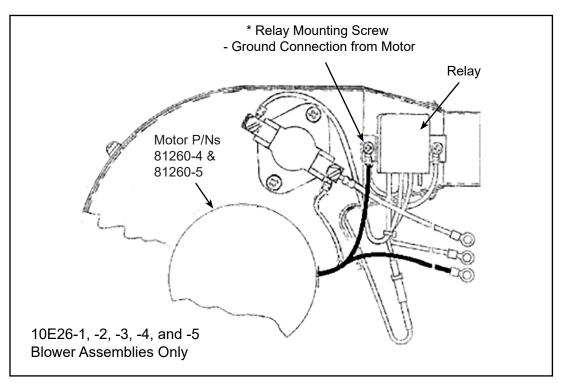


Figure-1 - Ground Connection from Motor

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- B. Return to Service
 - (1) Close all access doors and covers opened to gain access to the heater in accordance with applicable airframe maintenance manual.
 - (2) Perform operational check of the heater in accordance with applicable AFM or POH.
- C. Maintenance Record
 - (1) Make an appropriate logbook entry noting compliance with this Service Bulletin.

4. Contact Information

- A. Contact HET Product Support for all communications regarding the technical content of this Service Bulletin.
 - (1) Phone +1.334.386.5400 (Option 2)
 - (2) Fax +1.334.386.5450
 - (3) E-mail at techsupport@hartzell.aero
 - (4) Address

Hartzell Engine Tech LLC - ATTN: Product Support 2900 Selma Highway Montgomery, AL 36108 USA