

76

No. 1232
ATA Code 24-30

Kit No. 76-3001-1 S

- SUBJECT:** ELECTRICAL POWER - IMPROVED ALTERNATOR FEED DIODE INSTALLATION
- EFFECTIVITY:** BEECHCRAFT Duchess 76, serials ME-1 through ME-342.
- REASON:** To reduce the possibility of the alternator feed diode shorting to the airframe.
- COMPLIANCE:** Beech Aircraft Corporation considers this to be a mandatory modification and it should be accomplished as soon as possible after receipt of these Service Instructions, but no later than the next 50 service hours.
- APPROVAL:** Engineering data contained in these Service Instructions is FAA approved.
- MANPOWER:** The following information is for planning purposes only:

Estimated man-hours: 3 hours per airplane.
Suggested number of men: 1 man.
- MATERIAL:** The parts required to accomplish these Service Instructions are contained in Kit No. 76-3001-1 S. The kit may be ordered through BEECHCRAFT Aero or Aviation Centers and International Distributors and Dealers.
- Beech Aircraft Corporation expressly reserves the right to supersede, cancel and/or declare obsolete any kits or publications that may be referenced in these Service Instructions without prior notice.

NOTICE

All BEECHCRAFT kits, unless otherwise designated, are approved for installation on BEECHCRAFT airplanes in original or BEECHCRAFT modified configurations only. BEECHCRAFT kits may not be compatible with airplanes modified by STC installations or modifications other than BEECHCRAFT approved kits.

- WARRANTY:** Warranty credit for parts and labor to the extent noted under MATERIAL and MANPOWER will be allowed on all affected airplanes.

SPECIAL

- TOOLS:** None.

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Beech Aircraft Corporation issues service information for the benefit of owners and fixed base operators in the form of three classes of Service Instructions. CLASS I (Red Border) are changes, inspections, and modifications that could affect safety. The factory considers compliance mandatory. CLASS II (Green Border) covers changes, modifications, improvements or inspections the factory feels will benefit the owner and although highly recommended they are not considered mandatory compliance, unless specified at the time of issuance. Class I and II are mailed to:

- BEECHCRAFT Aero or Aviation Centers and International Distributors and Dealers.
- Owners of record on the FAA Registration list and the

BEECHCRAFT International Owner Notification Service List
(c) Those having a publications subscription

CLASS III (No Border) covers changes which are optional, maintenance aids, product improvement kits and miscellaneous service information. Compliance is at the owner or operator's prerogative. Copies of Class III are distributed per a and c above. Information on Owner Notification Service or Subscriptions can be obtained through any BEECHCRAFT Aero or Aviation Center, International Distributor and Dealer, or the Factory. As Service Instructions are issued, temporary notation in the index should be made until the index is revised. Warranty will be allowed only when specifically defined in the Service Instructions and in accordance with Beech Warranty Policy.

Service Instructions No. 1232

WEIGHT AND

BALANCE: None.

REFERENCES: None.

PUBLICATIONS

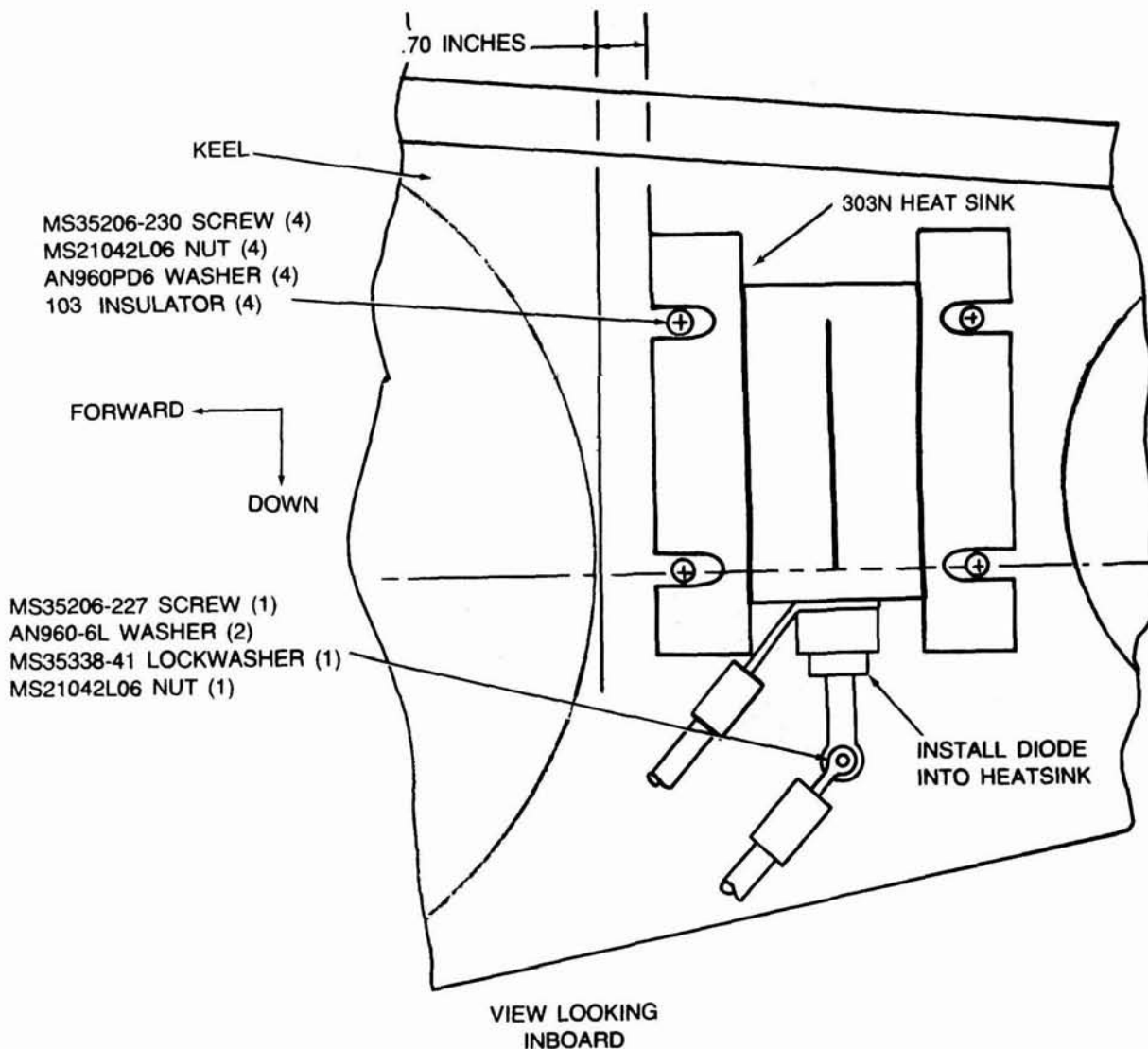
AFFECTED: It is recommended that a note to "See Service Instructions No. 1232" be made in the following:

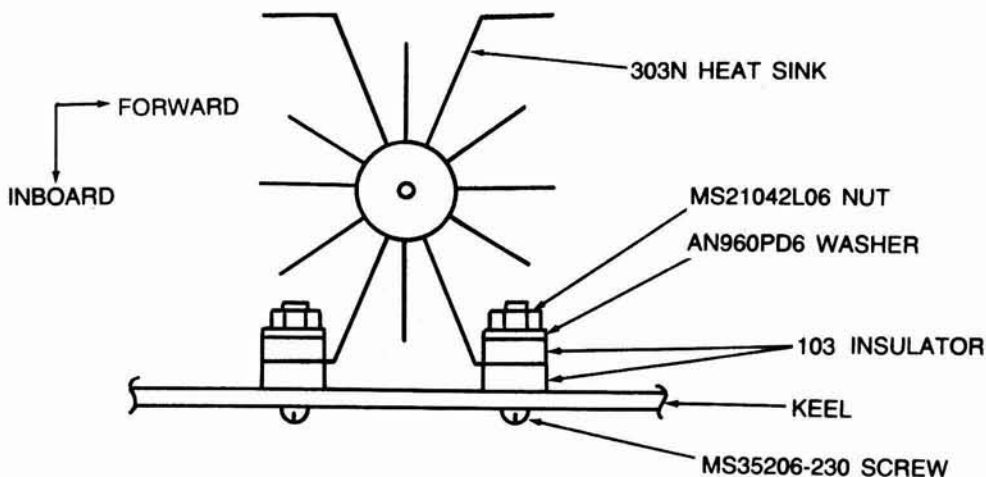
BEECHCRAFT Duchess 76 14 Volt Wiring Diagram Manual copies, P/N 105-590000-15B or subsequent, Chapter 24-30;
BEECHCRAFT Duchess 76 28 Volt Wiring Diagram Manual copies, P/N 105-590000-21B or subsequent, Chapter 24-31.

ACCOMPLISHMENT

INSTRUCTIONS: These Service Instructions may be accomplished as follows:

1. Turn off all electrical power and disconnect the battery.
2. Remove both upper aft nacelle access panels.
3. On either nacelle, disconnect the wires to the isolation diode, which is mounted through the inboard keel. Remove the diode and retain it for reinstallation. Discard the two insulation washers and teflon ring used to mount the diode in the keel.
4. Using a P/N 303N heat sink as a pattern, drill four .139/.148 inch diameter holes in the inboard keel. (see illustrations).
5. Mount the P/N 303N heat sink to the inboard keel using P/N 103 insulators, MS35206-230 screws, AN960PD6 washers and MS21042L06 nuts (see illustrations).





VIEW ROTATED FOR CLARITY

6. Reinstall the diode removed in Step 3 by threading it into the bottom end of the heat sink. Install the terminal on the end of wire P23A8 (LH nacelle) or P34A8 (RH nacelle) over the stud end of the diode before threading the diode into the heat sink. Coat both sides of the terminal with 120 Thermo-Joint Compound prior to installing the terminal.

7. Reinstall the wire which was removed in Step 3 on the diode terminal using a MS35206-227 screw,

two AN960-6L washers, a MS35338-41 lockwasher and MS21042L06 nut.

8. Using an ohmmeter (set on highest scale) check for infinite resistance between bare metal on the heat sink and bare metal on the keel. If continuity is present, the P/N 103 insulators must be replaced.

9. Repeat Steps 3 through 8 on the opposite nacelle.

10. Reinstall both nacelle access panels.

11. Reconnect the battery, start both engines and ensure proper operation of the electrical system.

RECORD COMPLIANCE:

Upon completion of these Service Instructions, make an appropriate maintenance record entry, specifying the kit identification number and the kit serial number. It is recommended that the parts list contained in the kit be filed for future reference until the listing of parts has been incorporated into the Wiring Diagram Manual.