

# CLASS I

No. 1122 76 ATA Code 76-10

ENGINE CONTROLS - INSTALLATION OF IMPROVED FEATHERING STOP SPRING SUBJECT:

BEECHCRAFT Duchess 76, serials ME-1 through ME-299. **EFFECTIVITY:** 

To reduce the possibility of the propeller control levers becoming locked in the FEATHER REASON:

position.

Beech Aircraft Corporation considers this to be a mandatory change and it should be COMPLIANCE:

accomplished within the next 100 service hours, but no later than the next scheduled

inspection.

NOTE

Airplanes ME-1 through ME-93 may accomplish these Service Instructions in conjunction with Service Instructions No. 1066 or

subsequent, unless previously accomplished.

APPROVAL: FAA Approved - DOA CE-2.

The following information is for planning purposes only: MANPOWER:

> Estimated man-hours: 3.5 hours. Suggested number of men: 1 man.

The following parts required for this modification may be ordered through BEECHCRAFT MATERIAL:

Aero or Aviation Centers and International Distributors and Dealers.

QUANTITY PER DESCRIPTION PART NUMBER

**AIRPLANE** 

Feathering Stop Spring 105-940021-3

As Required AN960-10 Washer

AN960-10L

Warranty credit for parts replacement and labor to the extent noted under MATERIAL and WARRANTY:

MANPOWER will be allowed on all affected airplanes for claims received before January

30, 1981.

DB-167

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Beech Aircraft Corporation issues service information for the benefit of owners BEECHCRAFT International Owner Notification Service List 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

Distributors and Dealers

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 all 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 Centers and 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.



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#### Service Instructions No. 1122

All warranty reimbursements are handled through franchised BEECHCRAFT outlets. Owners and operators may arrange with these outlets to perform the work and submit the standard Beech Aircraft Corporation warranty claim form to the Commercial Service Department, Beech Aircraft Corporation, Wichita, Kansas, 67201.

SPECIAL TOOLS:

None.

WEIGHT AND BALANCE:

None.

REFERENCES:

BEECHCRAFT Duchess 76 Pilot's Operating Handbook and FAA Approved Airplane Flight Manual, P/N 105-590000-5 or subsequent.

**PUBLICATIONS AFFECTED:** 

It is recommended that a note to "See Service Instructions No. 1122" be made in all Duchess 76 Parts Catalog copies, P/N 105-590000-9B or subsequent, Chapter 76-10.

ACCOMPLISHMENT INSTRUCTIONS:

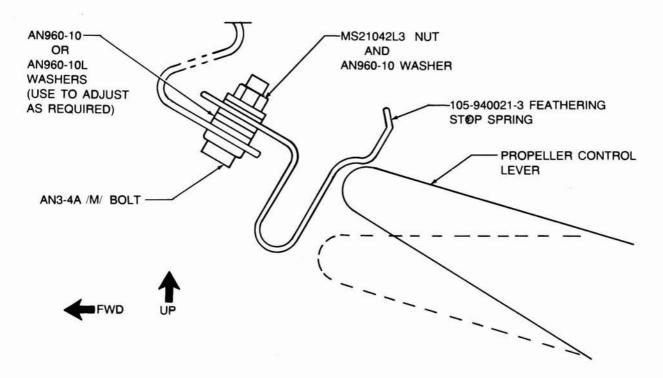
These Service Instructions may be accomplished as follows:

- 1. Remove the friction control knob from the right side of the engine control quadrant.
- 2. Remove the attaching screws and remove the engine control quadrant covers.
- Remove the four screws securing the left side of the pedestal cover. Access may now be gained to the two bolts securing the feathering stop spring by carefully lifting the left side of the pedestal cover away from the pedestal.

### CAUTION

Because the pedestal cover remains attached along the right side, avoid lifting the left side any further than necessary to gain access to the feathering stop spring.

4. Remove the P/N 105-940021-1 feathering stop spring and install the new P/N 105-940021-3 stop spring.



- 5. Adjust the new feathering stop spring as necessary to obtain proper detent action with the propeller control levers (see illustration). The elongated holes in the feathering stop spring allow adjustment forward and aft for proper detent action.
- 6. To check for proper vertical adjustment, refer to the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual starting procedures and ground run both engines. Pull the propeller control levers back until they contact the feather stop detent. Do not pull the propeller levers into the feather position. Slowly move the throttles forward until the rpm stabilizes. The rpm reading should be 2000 ± 25 rpm. If adjustment is necessary, add or remove washers as necessary under the feathering stop spring (see illustration).
- 7. Adjust power to 1500 rpm and feather check both propellers.

### CAUTION

Do not exceed 500 rpm drop.

- 8. Refer to the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual for shutdown procedures.
- 9. Reinstall the four screws securing the left side of the pedestal cover, the engine control quadrant covers, and the friction control knob.

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## RECORD COMPLIANCE:

Upon completion of these Service Instructions, make an appropriate maintenance record entry.