

76

No. 1145  
ATA Code 32-10

**SUBJECT:** LANDING GEAR - INSTALLATION OF AN IMPROVED MAIN LANDING GEAR SIDE BRACE SPRING PIVOT ASSEMBLY AND BUSHING

**EFFECTIVITY:** BEEHCRAFT Duchess 76, serials ME-1 through ME-333.

**REASON:** To provide an improved main landing gear side brace spring pivot assembly with a larger bearing surface to reduce excessive wear and the possibility of landing gear collapse.

**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 100 service hours.

NOTE

In order to avoid excessive man-hour costs and reduce down time, it is recommended that BEEHCRAFT Service Instructions No. 1092 or subsequent revision, LANDING GEAR - INSPECTION OF MAIN LANDING GEAR SIDE BRACE OVER CENTER TRAVEL AND LIMIT SWITCH ADJUSTMENT be accomplished prior to or in conjunction with these Service Instructions. If these Service Instructions are accomplished in conjunction with Service Instructions No. 1092, the measurements specified in Service Instructions No. 1092 must be accomplished prior to replacement of the spring pivot assembly.

**APPROVAL:** FAA Approved - DOA CE-2.

**MANPOWER:** The following information is for planning purposes only:

Estimated man-hours per airplane: 2 hours.

Suggested number of men: 1 man.

**MATERIAL:** The following parts required for this modification may be ordered through BEEHCRAFT Aero or Aviation Centers and International Distributors and Dealers.

DB-197

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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:

- (a) BEEHCRAFT Aero or Aviation Centers and International Distributors and Dealers.
- (b) Owners of record on the FAA Registration list and the

BEEHCRAFT 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 BEEHCRAFT 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. 1145**

PART NUMBER	DESCRIPTION	QUANTITY PER AIRPLANE
105-810023-63	Pivot Assembly	2
105-810023-65	Grip Bushing	2

**WARRANTY:**

Warranty credit for parts and labor to the extent noted under MATERIAL and MANPOWER will be allowed on all claims submitted prior to December 31, 1980.

All warranty reimbursements are handled through franchised BEEHCRAFT Aero or Aviation Centers and International Distributors and Dealers. Owners and operators should arrange with these outlets to perform the work and have them submit the standard Beech Aircraft Corporation warranty claim form, through BEEHCRAFT Parts and Equipment Wholesalers or International Distributors.

**SPECIAL TOOLS:**

None.

**WEIGHT AND BALANCE:**

None.

**REFERENCES:**

BEEHCRAFT Duchess 76 Maintenance Manual, P/N 105-590000-7 or subsequent, Chapters 7-00 and 32-30.

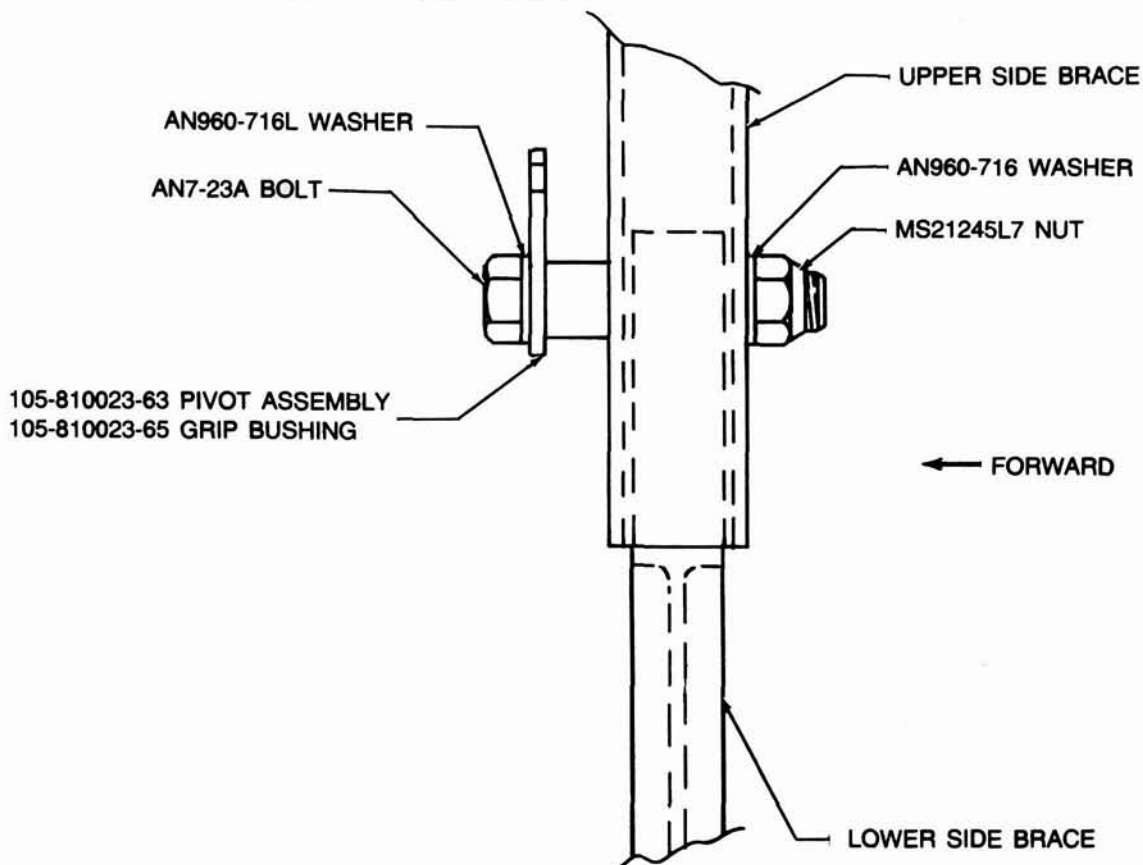
**PUBLICATIONS AFFECTED:**

It is recommended that a note to "See Service Instructions No. 1145" be made in all BEEHCRAFT Duchess 76 Parts Catalog copies, P/N 105-590000-9B or subsequent, Chapter 32-10.

**ACCOMPLISHMENT INSTRUCTIONS:**

These Service Instructions may be accomplished as follows:

1. Refer to the BEEHCRAFT Duchess 76 Maintenance Manual, Chapter 7-00 and place the airplane on jacks.



*CAUTION*

The landing gear circuit breaker should be pulled and the emergency landing gear extension valve should be opened to relieve pressure in the hydraulic system. This will reduce the possibility of inadvertent retraction of the landing gear.

2. Remove the four bolts which attach the shock absorber to the main landing gear housing and rotate the main landing gear fork forward to relieve the tension from the main landing gear side brace springs.
3. Remove the main landing gear side brace springs.
4. Remove the pivot bolt which attaches the upper main landing gear side brace to the lower main landing gear side brace (see illustration).
5. Remove and discard the existing main landing gear side brace spring pivot and bushings from the pivot bolt (see illustration).
6. Install a P/N 105-810023-63 pivot assembly and P/N 105-810023-65 grip bushing on the pivot bolt as shown in the illustration.
7. Reinstall the pivot bolt in the upper and lower side braces using the hardware which was removed in step 4 and torque the bolt to 270-300 inch pounds.
8. Reinstall the main landing gear side brace springs between the new spring pivot assembly and the main landing gear fork.
9. Rotate the main landing gear fork aft and reinstall the four bolts which attach the shock absorber to the main landing gear housing.
10. Repeat steps 2 through 9 on the other main landing gear.
11. Close the emergency landing gear extension valve and reset the landing gear circuit breaker.
12. Refer to the BEECHCRAFT Duchess 76 Maintenance Manual, Chapter 32-30 and perform a landing gear retraction check.
13. Remove the airplane from the jacks.

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**RECORD COMPLIANCE:**

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