# Beechcraft SERVICE INSTRUCTIONS

33, 35, 36, A45 (T-34A), B45, D45 (T-34B), 55, 56TC, 58, 95

No. 0448-211, Rev. I ATA Code 32-30 Recurring Inspection

SUBJECT:

LANDING GEAR - MAIN GEAR RETRACT MECHANISM - INSTALLATION OF

UP-LOCK ROLLER LUBRICATING BOLT ASSEMBLY.

SYNOPSIS OF REVISION:

Changed to Class I Service Instructions. AN320-5 /M/ nut and AN960-516L washer added in some early 35 and 45 series aircraft. Prices changed. Note changed. Compliance

changed.

**EFFECTIVITY:** 

BEECHCRAFT Debonairs/ Bonanzas 35-33, 35-A33, 35-B33, 35-C33, E33, F33, and

G33, serials CD-1 through CD-1256;

Debonairs/Bonanzas 35-C33A, E33A, and F33A, serials CE-1 through CE-349;

Bonanzas E33C and F33C, serials CJ-1 through CJ-30;

Bonanzas 35, A35, B35, C35, D35, E35, F35, G35, H35, J35, K35, M35, N35, P35, S35,

V35, V35TC, V35A, V35A-TC, V35B, and V35B-TC, serials D-1 through D-9287;

Bonanzas 36 and A36, serials E-1 through E-283;

All Model A45(T-34A), B45, and D45(T-34B) airplanes;

Barons 95-55, 95-A55, 95-B55, and 95-B55A, serials TC-1 through TC-1402;

Barons 95-C55, 95-C55A, D55, D55A, E55, and E55A, serials TE-1 through TE-846;

Turbo-Barons 56TC and A56TC, serials TG-1 through TG-94;

Baron 58, serials TH-1 through TH-174; and

Travel Airs 95, B95, B95A, D95A, and E95, serials TD-2 through TD-721.

**REASON:** 

Installation of the lubricating bolt assembly will facilitate lubrication of the up-lock roller bearing, which at present must be removed from the airplane and packed with grease.

**COMPLIANCE:** 

Within the next 300 hours time in service in accordance with AD 72-22-1 effective 10/25/72 (supersedes AD 72-17-2 effective 8/22/72) or subsequent. Thereafter, at each 100 hour interval lubricate the up-lock roller as indicated in these Service Instructions.

DESCRIPTION:

On each main landing gear the up-lock roller bolt is replaced with a lubricating bolt assembly. The grip bushing is examined for wear and replaced if necessary. To prevent possible interference of the lubrication fitting with the up-lock cable, plastic sleeving is installed on the cable assembly for support, and when necessary on single-engine airplanes, the cable assembly is clamped closer to its supporting stringer in the wheel well.

APPROVAL:

FAA Approved - DOA CE-2.

MANPOWER:

The following information is for planning purposes only:

Estimated man-hours: 2 hours. Suggested number of men: 1 man.

MATERIAL:

The following parts required for this modification are available through your

BEECHCRAFT Aviation Center. The miscellaneous attaching parts which should be

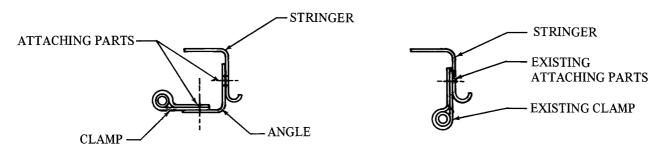
available locally, are indicated in the procedural steps.

AN-510, J-1348 1271 R1072

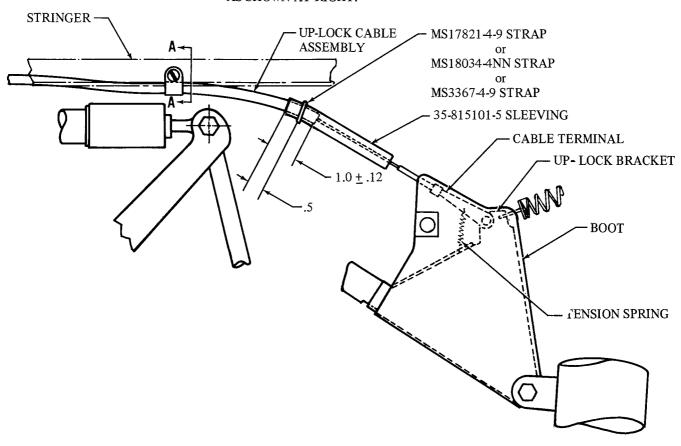
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MODEL	PART NUMBER	DESCRIPTION	QUANTITY	PRICE*
All	58-810014-1**	Bolt Assembly	2 each As required 2 each	\$ 6.80
except	35-810122-1**	Bushing		\$ 2.60
56TC	35-815101-5	Sleeving		\$ .75



VIEW A-A
ON SINGLE-ENGINE AIRPLANES
IF ANGLE IS INSTALLED, DISCARD
ANGLE AND REINSTALL CLAMP
AS SHOWN AT RIGHT.



56TC	60-810026-39	Bolt Assembly	2 each	\$21.00
	60-810040	Bushing	As required	\$ 7.90
	35-815101-5	Sleeving	2 each	\$ .75

<sup>\*</sup> Suggested selling price. (Price subject to change without notice.)

**SPECIAL TOOLS:** 

None.

**WEIGHT AND BALANCE:** 

None.

**REFERENCES:** 

The applicable current BEECHCRAFT shop/maintenance manual.

PUBLICATIONS AFFECTED:

It is suggested that a note be placed in the parts catalog until the new part numbers have been incorporated into a revision to the parts catalog. In addition, it is recommended that a note be made in the shop/maintenance manual to "See Service Instructions No. 0448-211, Rev. I."

ACCOMPLISHMENT INSTRUCTIONS:

Installation of the up-lock roller lubricating bolt assembly is described in the following procedure.

#### NOTE

The part numbers in parentheses pertain to Turbo-Barons only.

Inspect the roller to determine if the inner race has two holes and an oil groove to accept grease from the lubricating bolt. If these holes are not present, replace the up-lock roller with NAS505-5J bearing. (This bearing is available through your BEECHCRAFT Parts and Service Outlet.)

On Bonanza V35B, serial D-9287 and Bonanza A36, serial E-283, the up-lock roller lubricating bolt assembly was installed at the factory. For modification of these airplanes, place the airplane on jacks and proceed to Step 5.

- 1. Place the airplane on jacks and relieve down tension at the lift leg scissors on each main landing gear.
- 2. Remove the up-lock roller bolt, bearing, and grip bushing at the lift leg scissors of one main gear. Discard the bolt.
- 3. Examine the grip bushing for wear, and replace with a 35-810122-1 (60-810040) grip bushing, if necessary.
- 4. Using the existing nut and washers and a new cotter pin (obtain locally), install the up-lock roller bearing and grip bushing with a 58-810014-1 (60-810026-39) up-lock roller lubricating bolt assembly. (On some early 35 and 45 series aircraft it may be necessary to replace the existing retaining nut and the washer under the nut with an AN320-5 /M/ nut and AN960-516L washer).
- 5. To prevent the up-lock cable from snagging on the up-lock roller lubrication fitting during cycling of the gears, modify the up-lock cable assembly installation as described below. (Refer to the illustration.)
- a. Remove the boot from the up-lock bracket, and disconnect the tension spring from the bracket.
- b. Carefully measure or mark the position of the up-lock cable terminal on the cable, then disconnect the terminal from the up-lock bracket.

## **CAUTION**

If the terminal is permitted to change position on the cable, up-lock cable tension must be readjusted.

- c. Slip 35-815101-5 sleeving over the up-lock cable terminal and position on the up-lock cable assembly as shown in the illustration. Secure the sleeving with an MS17821-4-9, MS18034-4NN, or MS3367-4-9 strap (obtain locally).
- d. Make certain that the cable terminal is located at the same point on the cable as previously, then reconnect the cable terminal to the up-lock bracket using the existing bolt, washer, and nut and a new cotter pin (obtain locally).
- e. Reconnect the tension spring to the up-lock bracket, and reinstall the up-lock bracket boot.
- f. On single-engine airplanes, check the up-lock cable assembly clamp installation shown in View A-A of the illustration. If the clamp is attached to an angle, remove and discard the angle, then attach the clamp directly to the stringer as shown using existing clamp attaching parts.

<sup>\*\*</sup>Not required for serials D-9287 and E-283.

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- 6. Perform Steps 2 through 5 on the opposite main gear.
- 7. Lubricate each up-lock roller by injecting MIL-G-23827 grease into the lubrication fitting on the 58-810014-1 (60-810026-39) bolt assembly.

#### NOTE

Two products conforming to Specification MIL-G-23827 are Supermil Grease No. A72832 (product of American Oil Company, 910 South Michigan Avenue, Chicago, Illinois 60680) and Royco 27A (product of Royal Lubricants Company, River Road, P.O. Box 95, Hanover, New Jersey 07936). These products are provided as reference only, and are not

specifically recommended by Beech Aircraft Corporation; any product conforming to the specification may be used.

- 8. If there is any reason to believe that the up-lock cable terminal may not be at the same point on the cable as previously, check up-lock cable tension as described in the shop/maintenance manual.
- 9. If the grip bushing was replaced, check up-lock clearance and down-lock tension as specified in the shop/maintenance manual.
- 10. Cycle the landing gear and check for proper clearances and normal operation.
- 11. Remove the aircraft jacks.

### **RECORD COMPLIANCE:**

Upon completion of modification, make an appropriate maintenance record entry.