Beechcraft®

MANDATORY SERVICE BULLETIN

33, 34, 35, 36, 45, 55, 56TC, 58, 58P, 58TC, 60, 95

No. 2460, Rev. I
ATA Code 27-50

SUBJECT: **FLIGHT CONTROLS - INSPECTION OF FLAP DRIVE CABLE/FLAP DRIVE MOTOR COUPLING CONNECTION**

SYNOPSIS OF CHANGE: Revised Bonanza Model 35 EFFECTIVITY to exclude serials D-1 through D-837; Added 95-55 model designation. Revised ACCOMPLISHMENT INSTRUCTIONS to clarify procedures.

REASON: This Service Bulletin is being issued to provide an inspection and instructions for proper attachment of the flap drive cable to the flap motor drive shaft. Improper attachment may result in a split flap condition.

A revised Maintenance Manual Temporary Revision for flap drive cable connection is attached to this Service Bulletin. It should be inserted in any maintenance manual associated with airplanes listed in EFFECTIVITY so that those manuals will be "current manufacturers maintenance manuals" for compliance with FAR 43.13 and 65.81.

EFFECTIVITY: **COMMERCIAL AIRPLANES**

BEECHCRAFT Debonair/Bonanza 35-33, A33, B33, C33, E33, F33, G33, serials CD-1 through CD-1304;

35-C33A, E33A, F33A, serials CE-1 through CE-1632;

Bonanza E33C, F33C, serials CJ-1 through CJ-179;

Turbine Mentor 34C, serials GP-1 through GP-50;

T-34C-1, serials GM-1 through GM-71 and GM-78 through GM-98;

Bonanza 35, 35R, A35, B35, C35, D35, E35, F35, G35, H35, J35, K35, M35, N35, P35, S35, V35, V35A, V35A-TC, V35B, V35B-TC, serials D-838 through D-10403, D-15001 and D-15002;

36, A36, serials E-1 through E-2679;

A36TC, B36TC, serials EA-1 through EA-525;

Baron 95-55, 95-A55, 95-A55A, 95-B55, 95-B55A, serials TC-1 through TC-2456;

95-C55, C55A, D55, D55A, E55, E55A, serials TE-1 through TE-1201;

Turbo Baron 56TC, serials A56TC, serials TG-2 through TG-94;

Baron 58 and 58A, serials TH-1 through TH-1646;

No BECP M

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MANDATORY

58P and 58PA, serials TJ-3 through TJ-497;

58TC and 58TCA, serials TK-1 through TK-151;

Duke 60, A60 and B60, serials P-4 through P-596;

Travel Air 95, B95, B95A, D95, E95, serials TD-2 through TD-721.

MILITARY AIRPLANES

T-34C, serials GL-1 through GL-353;

45, A45, B45 and D45, All Serials;

B55B (T-42A), serials TF-1 through TF-70.

COMPLIANCE:

COMMERCIAL AIRPLANES

Beech Aircraft Corporation considers this to be a mandatory inspection/modification. It should be accomplished as soon as possible after receipt of this Service Bulletin, but no later than the next 100 service hours or the next annual inspection, whichever occurs first, unless previously completed in accordance with the original issue of this Service Bulletin. Accomplish this Service Bulletin during an inspection when access to this area is available.

A revised Maintenance Manual Temporary Revision for flap drive cable connection is attached to this Service Bulletin. It should be inserted in any maintenance manual associated with the airplanes listed in EFFECTIVITY regardless of compliance with the previous issue of this Service Bulletin so that those manuals will be "current manufacturer's maintenance manuals" for compliance with FAR 43.13 and 65.81.

This Service Bulletin supersedes and cancels BEECHCRAFT Service Bulletin No. 65-20 INSPECTION OF FLAP ACTUATOR CABLE and Service Bulletin No. 67-40 SECURING THE WOODRUFF KEY ON THE WING FLAP DRIVE FLEX SHAFT.

MILITARY AIRPLANES

For compliance information on military airplanes, contact your local headquarters.

APPROVAL:

Engineering data contained in this Service Bulletin is FAA approved.

MANPOWER:

The following information is for planning purposes only:

Estimated man-hours for inspection .5 hour.

Estimated man-hours for retainer installation, if required: .5 hour per retainer.

Suggested number of men: 1 man.

The above is an estimate based on experienced, properly equipped personnel complying with this Service Bulletin. Occasionally, after work has started, conditions may be found which could result in additional man-hours.

MATERIAL:

The following parts, if required for this Service Bulletin, may be ordered through a BEECHCRAFT Authorized Outlet:

PART NUMBER	DESCRIPTION	QUANTITY PER AIRPLANE
50-361131	Retainer	2, If Required

SPARES AFFECTED:

None.

WARRANTY CREDIT: COMMERCIAL AIRPLANES

None.

MILITARY AIRPLANES

For warranty information on military airplanes, contact your local headquarters.

SPECIAL TOOLS: 5/8-24 UNEF die, if required.

WEIGHT AND BALANCE: None.

REFERENCES: Refer to the appropriate Section/Chapter of the applicable Shop/Maintenance Manual for pilot and copilot chair removal.

BEECHCRAFT Service Bulletin No. 65-20, INSPECTION OF FLAP ACTUATOR CABLE;

BEECHCRAFT Service Bulletin No. 67-40, SECURING THE WOODRUFF KEY ON THE WING FLAP DRIVE FLEX SHAFT.

PUBLICATIONS AFFECTED: It is recommended that a note to "See Service Bulletin No 2460" be made in the appropriate Section/Chapter of the applicable Shop/Maintenance Manual.

It is recommended that a copy of the Temporary Revision(s) attached to this Service Bulletin be added to the appropriate Section/Chapter of the applicable Shop/Maintenance Manual(s) for reference.

ACCOMPLISHMENT INSTRUCTIONS: This Service Bulletin shall be accomplished as follows:

INSPECTION OF FLAP DRIVE CABLE CONNECTION

1. Remove electrical power from the airplane and disconnect the battery.

2. For Model 45 series and T-34C series, remove the forward chair from the airplane in accordance with the instructions specified in the applicable Shop/Maintenance Manual. For all other affected models, remove both the pilot's and copilot's chairs from the airplane in accordance with the instructions specified in the applicable Shop/Maintenance Manual.

3. Remove any equipment or covers required to gain access to the flap motor located aft of the forward wing spar on the centerline of the airplane.

4. Refer to Figures 1 and 2, and inspect the attachment of both the LH and RH flap cables and flap cable housings.

a. The flap drive cable configurations shown in Figure 1 are not affected by this Service Bulletin. If the airplane is configured as shown in View A or View B of Figure 1, proceed as follows:

1) Replace all seats and equipment that were removed to gain access to the flap drive motor.

2) Restore electrical power to the airplane and ensure that the flap system operates properly.

b. If the airplane is configured as shown in Figure 2, proceed to Step 5.

5. Verify that retainers are installed and cable housings and hardware are arranged as shown in Figure 2. Ensure that the keyway slot is rotated 90° relative to the slot in the motor drive shaft. Clearance must exist between the outboard end of the retainer and the inboard end of the flap cable housing. If retainers are not installed and/or if flap cable housings need to be repositioned, proceed in accordance with the FLAP DRIVE CABLE CONNECTION instructions in this Service Bulletin. Refer to the applicable Shop/Maintenance Manual for instructions to disconnect the flap cables from the flap motor drive shaft.

FLAP DRIVE CABLE CONNECTION

1. Connect the LH and RH flap drive cables to the flap drive motor as follows, using Figure 2 for component locations:

a. Install the outboard nut and washer as far as it will go on the threaded portion of the flap cable.

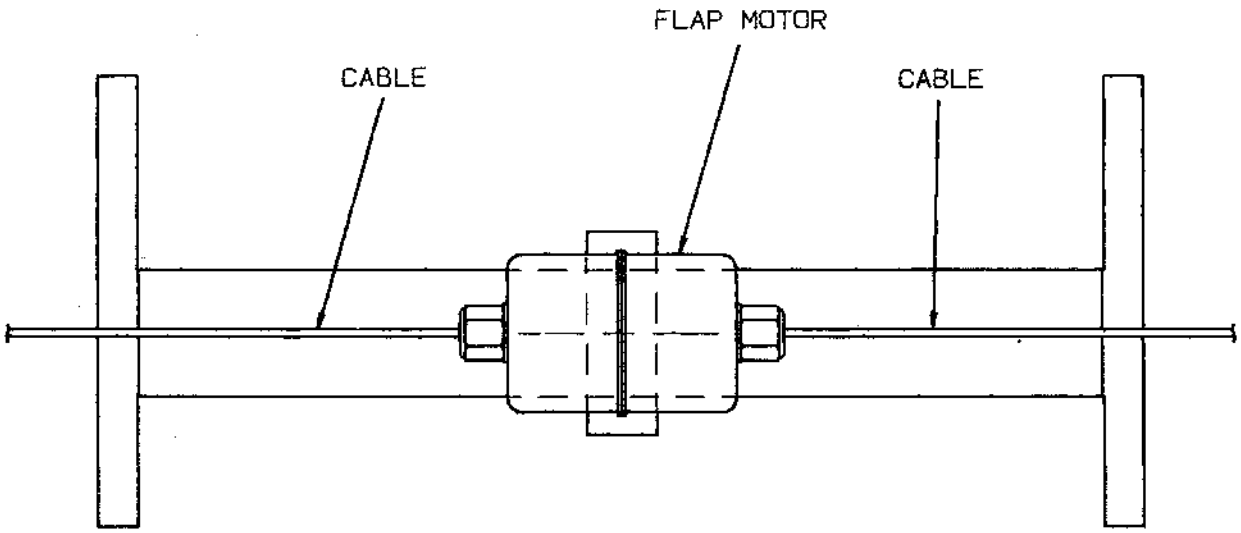
b. Insert the retainer through the mount support and onto the motor shaft as far as it will go. Align the retainer keyway with the key slot in the flap motor drive shaft and tighten one set screw temporarily.

c. While inserting the flap cable through the mount support, install the inboard washer and nut. Fully install the cable through the retainer and into the motor drive shaft until the keyway is just past the key slot in the retainer.

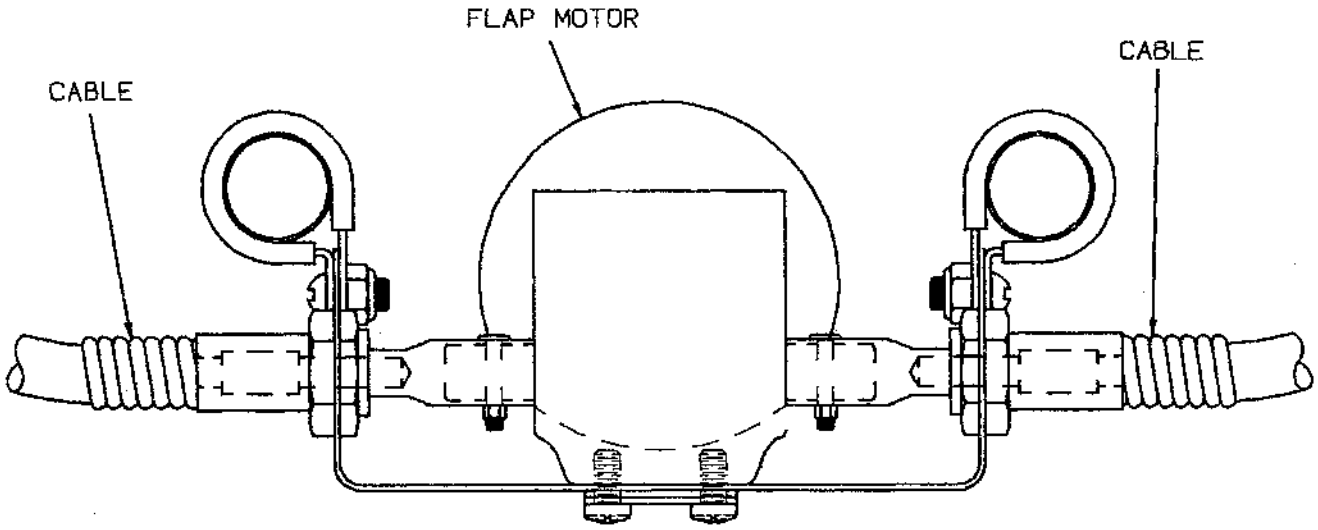
d. Loosen the set screw that was tightened in Step b. Ensure that the retainer is still installed on the motor shaft as far as it will go and rotate the retainer 90°.

e. Keep inboard pressure on the retainer and tighten both retainer set screws.

f. Secure the flap drive cable to the mounting support by tightening the nuts. Tighten the inboard nut to ensure that there is sufficient clearance between the out-



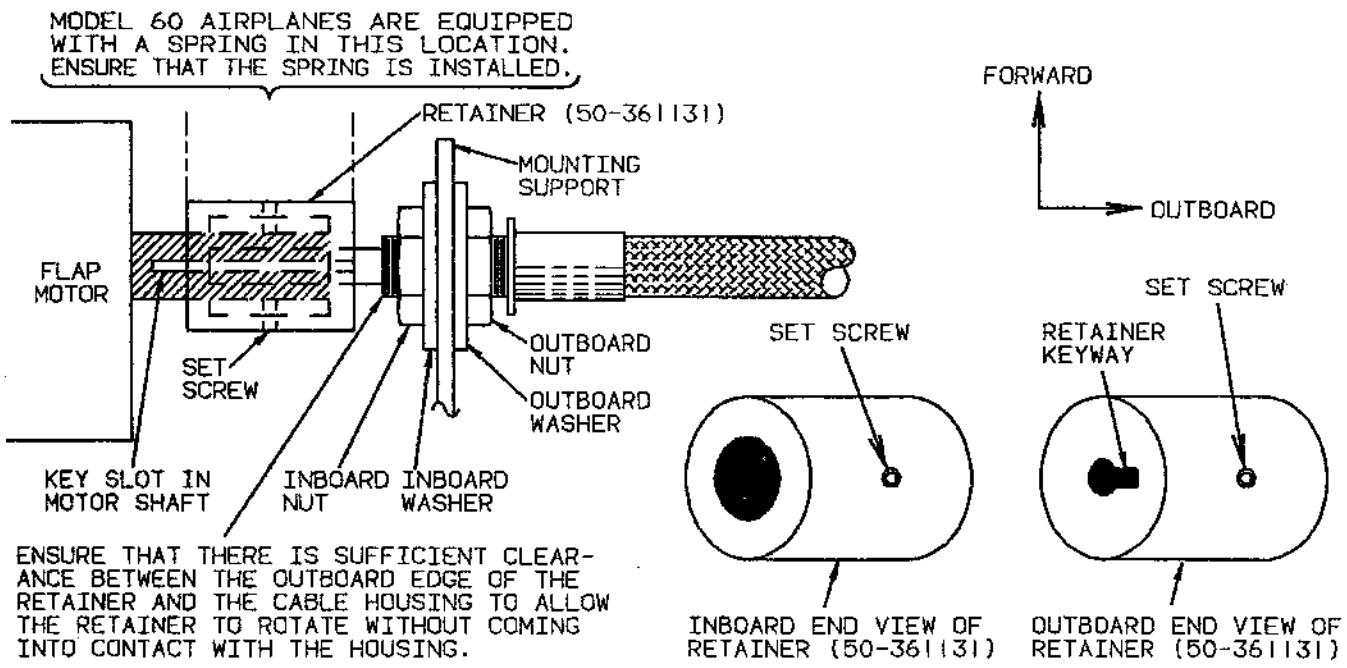
DETAIL A
LOOKING FORWARD



DETAIL B
LOOKING FORWARD

AIRPLANES WITH EITHER OF THESE CONFIGURATIONS ARE NOT AFFECTED BY THIS SERVICE BULLETIN.

Flap Drive Cable/Flap Drive Motor Coupling Connection
Figure 1



AIRPLANES WITH THIS CONFIGURATION ARE AFFECTED BY THIS SERVICE BULLETIN.

Flap Drive Cable/Flap Drive Motor Coupling Connection
Figure 2

board edge of the retainer and the cable housing to allow the retainer to rotate without coming into contact with the cable housing. If the threaded part of the cable housing is not long enough to install the two nuts and washers, using a die, add 5/8-24 UNEF threads until .88 inch thread length is reached. Tighten the outboard nut against the mounting support.

2. Replace all seats and equipment that were removed to gain access to the flap drive motor.

3. Restore electrical power to the airplane and ensure that the flap system operates properly.

4. Insert a copy of the attached Maintenance Manual Temporary Revision in the appropriate section/chapter of all shop/maintenance manuals for Commercial Airplanes identified under EFFECTIVITY.

RECORD COMPLIANCE: Upon completion of this Service Bulletin, make an appropriate maintenance record entry.

NOTE

If you are no longer in possession of this airplane, please forward this information to the present owner.