

19, 23, 24, 76

No. 1017
ATA Code 27-00

SUBJECT: FLIGHT CONTROLS - INSPECTION OF THE CONTROL COLUMN BEARING ASSEMBLIES

EFFECTIVITY: BEECHCRAFT B19 Sport 150, serials MB-866 through MB-904;
C23 Sundowner 180, serials M-1971 and M-1980 through M-2076;
C24R Sierra 200, serials MC-533 and MC-537 through MC-611;
Duchess 76, serials ME-2 through ME-75.

REASON: To inspect the control column bearing assemblies for indications of filing or grinding in the weld area and replace if necessary.

COMPLIANCE: Beech Aircraft Corporation considers this to be a mandatory inspection and it should be accomplished as soon as possible after receipt of these Service Instructions, but no later than the next 100 hour, annual or periodic inspection.

APPROVAL: FAA Approved DOA CE-2.

MANPOWER: The following information is for planning purposes only.

Estimated man-hours for inspection: .5 hour.
Estimated man-hours for replacement of bearing assemblies: 8 hours.
Suggested number of men: 1 man.

MATERIAL: The P/N 105-520033-1 bearing assemblies, if required, may be ordered through BEECHCRAFT Aero or Aviation Centers and International Distributors and Dealers. The value of the bearing assemblies, if required for the incorporation of these Service Instructions on one airplane is to be advised. Price, when issued, will be subject to change without notice.

WARRANTY: Warranty credit for parts and labor to the extent noted under MATERIAL and MANPOWER will be allowed for claims submitted prior to September 30, 1979 which are accompanied by the removed bearing assemblies.

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.

No BECP
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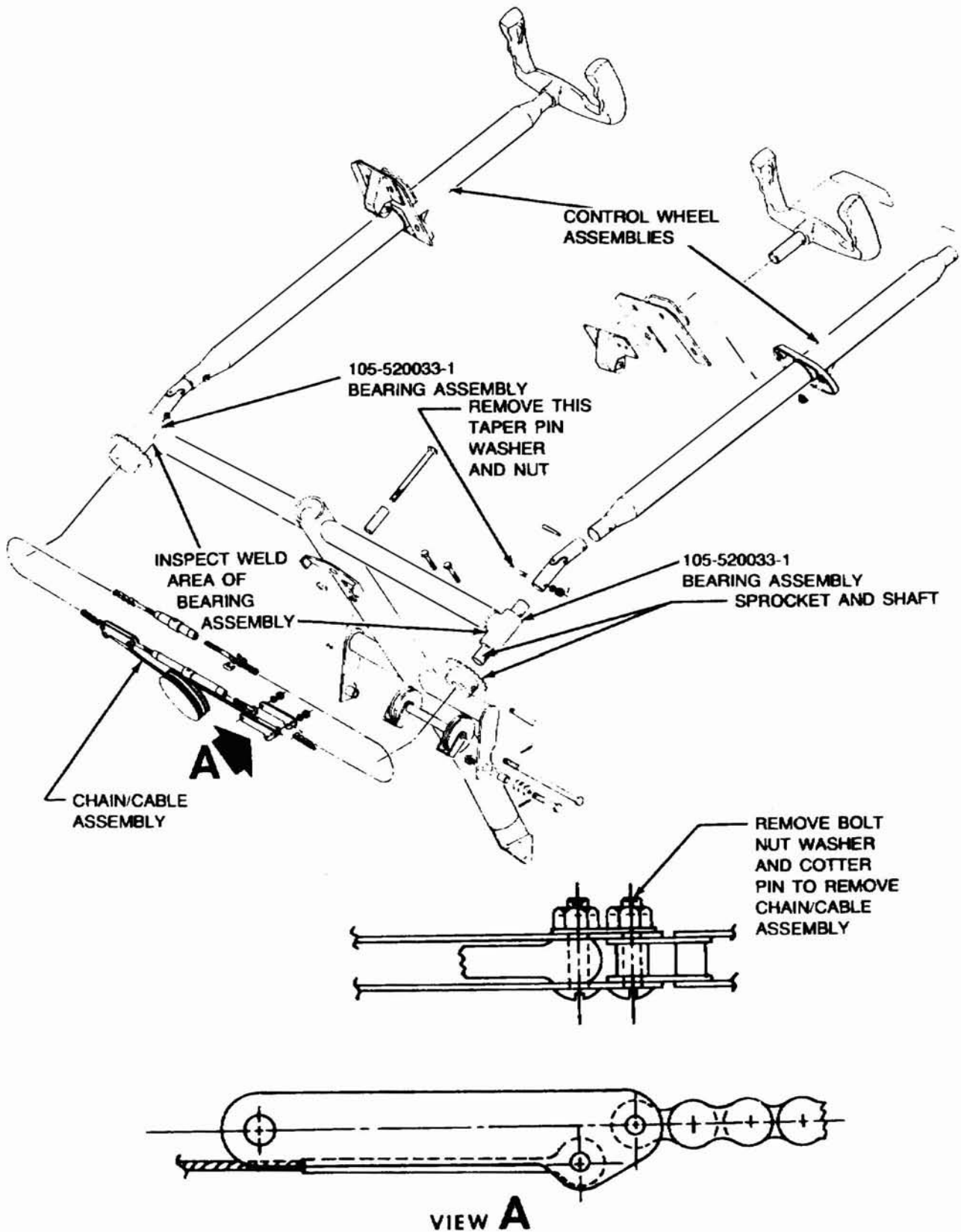
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Beech Aircraft Corporation issues service information for the benefit of owners and fixed base operators in the form of three classes of Service Instructions. CLASS I (Red Border) are changes, inspections, and modifications that could affect safety. 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.



WEIGHT AND BALANCE: None.

REFERENCES: BEEHCRAFT 19, 23 & 24 series Shop Manual, P/N 169-590015F or subsequent, Section 3.
BEEHCRAFT 76 Maintenance Manual, P/N 105-590000-7 or subsequent, Chapter 27.

PUBLICATIONS AFFECTED: None.

**ACCOMPLISHMENT
INSTRUCTIONS:**

These Service Instructions may be accomplished as follows:

1. Inspect both the LH and RH control column bearing assemblies for indications of any filing or grinding in the weld area. (See illustration.) If evidence of filing or grinding is indicated, the bearing assembly must be replaced as directed in the following steps.
2. Place an alignment mark on the chain and both sprockets to facilitate reassembly of the chain on the sprockets.
3. Disconnect and remove the chain/cable assembly from the sprockets by pulling the chain and cable together with safety wire at one end to relieve tension and remove the connecting bolt, nut, washer and cotter pin. (See illustration.)
4. Remove the nuts and washers from the taper pins which secure the sprocket shaft to the universal joint and tap out the taper pins to remove the sprocket and shaft from both the LH and RH control column bearing assemblies. (Use care when tapping out the taper pins to avoid damage to the threads.)
5. Slide the control wheel assemblies aft to allow more work room in the area of the bearing assemblies.
6. Remove the (two each) bolts, washers, and nuts which attach the LH and RH control column bearing assemblies to the outboard ends of the control column weld assembly and remove the bearing assemblies. (See illustration.)
7. Place the new P/N 105-520033-1 bearing assemblies in position in the outboard ends of the control column and check for alignment of the bolt holes. If necessary, sand or cut off the outboard ends of the control column weld assembly in order to align the bolt holes. Do not grind or file the weld on the bearing assembly. (Be certain that the ends of the control column weld assembly are cut off straight.) Deburr the ends of the control column weld assembly and install the bearing assemblies with the existing bolts, washers and nuts which were removed in step 6.
8. Slide the control wheel assemblies back into position and reinstall the sprockets and shafts with the existing attaching taper pins, washers and nuts which were removed in step 4.
9. Align the marks on the chain/cable assembly with the marks made on the sprockets and reinstall the chain/cable assembly on the control column sprockets. Safety wire can again be used to pull the chain and cable together to facilitate installation of the existing bolt, washer and nut which were removed in step 3. A new MS24665-5 cotter pin (obtain locally) should be used on reinstallation of the chain/cable assembly.
10. Check chain tension as directed in the Shop/Maintenance Manual and freedom of movement of the controls.

RECORD COMPLIANCE: Upon completion of these Service Instructions make an appropriate maintenance record entry.