



CLASS II

SERVICE INSTRUCTIONS

23, 24, 76

No. 1074
ATA Code 34-50

SUBJECT: NAVIGATION - REPLACEMENT OF ANTENNA CABLES ON FACTORY INSTALLED COLLINS ADF-650 INSTALLATIONS

EFFECTIVITY: BEECHCRAFT C23 Sundowner 180, serials M-1887, M-1904, M-1909, M-1931, M-1932, M-1936, M-1956, M-1963, M-2030, M-2050, and M-2078.
C24R Sierra 200, serials MC-449, MC-453, MC-454, MC-455, MC-456, MC-457, MC-460, MC-461, MC-481, MC-483, MC-491, MC-492, MC-495, MC-496, MC-501, MC-509, MC-514, MC-515, MC-525, MC-528, MC-529, MC-533, MC-534, MC-535, MC-536, MC-537, MC-538, MC-539, MC-540, MC-547, MC-554, MC-555, MC-557, MC-558, MC-576, MC-580, MC-581, MC-586, MC-588, MC-605, MC-607, MC-608, and MC-609.
Duchess 76, serials ME-3, ME-5, ME-8, ME-9, ME-10, ME-12, ME-13, ME-16, ME-20, ME-21, ME-23, ME-26, ME-29, ME-32, ME-35, ME-38, ME-39, ME-42, ME-46, ME-49, ME-50, ME-54, ME-56, ME-57, ME-58, ME-60, ME-64, ME-65, ME-66, ME-68, ME-69, ME-70, ME-72, ME-73, ME-75, ME-76, ME-78, ME-79, and ME-81, which are equipped with factory installed Collins ADF-650 installations;
Any other airplane serials of the above models on which Collins ADF-650 installations may have been field installed with RG58A/U coaxial cables.

REASON: To improve reliability of the ADF by replacing RG58A/U coaxial cables with new improved type 169-340083-11 cable assemblies.

COMPLIANCE: Beech Aircraft Corporation recommends that this change be accomplished as soon as possible but no later than the next scheduled inspection.

APPROVED: FAA Approved - DOA CE-2.

MANPOWER: The following information is for planning purposes only:

Estimated man-hours: 8 hours.
Suggested number of men: 1 man.

MATERIAL: The following parts required for accomplishing these Service Instructions may be ordered through BEECHCRAFT Aero or Aviation Centers and International Distributors and Dealers or may be obtained through local sources. Nylon wire ties of the appropriate length required herein, such as Ty-Rap (product of Thomas and Betts, Elizabeth, N.J.) may be obtained through local sources.

AW 1172
480 II

1 of 3

CLASS II

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) BEECHCRAFT Aero or Aviation Centers and International Distributors and Dealers.
- (b) 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.

98-34238D



Service Instructions No. 1074

PART NUMBER	DESCRIPTION	QUANTITY
169-340083-11	Cable Assembly	3
AN525-8R6	Screw	1
AN960-8	Washer	1
MS21042L08	Nut	1

The value of the parts required to incorporate 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 factory installations only on all warranty claims received prior to September 30, 1980. 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:

None.

PUBLICATIONS AFFECTED:

None.

**ACCOMPLISHMENT
INSTRUCTIONS:**

These Service Instructions may be accomplished as follows on all airplanes listed under EFFECTIVITY which are equipped with Collins ADF-650 installation.

1. Remove the pilot and copilot seats, the upholstery side panels below and forward of the LH door and the forward LH carpet assembly.

NOTE

On Duchess 76 airplanes, it is permissible to remove the LH nose compartment access panel and the FS 68.0 bulkhead access panel for access to the forward side of the instrument panel.

2. Beginning at the ADF receiver, cut loose all wire ties along the length of the ADF antenna cables, proceeding toward the antenna until the antenna cables are free from all other cables and wiring.

3. Disconnect one of the three ADF antenna cables at the ADF receiver. Trace the disconnected cable to the antenna, disconnect it from the antenna and remove the cable from the airplane.

NOTE

Only one antenna cable should be removed at a time. This will reduce the possibility of the cables being crossed between the antenna and the indicator. Crossing the cables will cause improper operation of the ADF system.

4. Install a P/N 169-340083-11 cable assembly to the same connectors from which the original cable was removed in step 3.

NOTE

On some airplanes, the antenna connectors may be of the phono plug type. In that case, it will be necessary to remove the phono plugs from the old cable assemblies, cut the BNC connectors off one end of the 169-340083-11 cable assemblies and solder the phono plugs to the 169-340083-11 cable assemblies.

5. Repeat steps 3 and 4 for the two remaining cables.
6. At the antenna ground lug, attach the three terminals of the outer shield of the new cable assemblies. At the back of the ADF receiver, attach the terminals of the outer shields to the ground lug.

NOTE

On airplanes with phono plug antenna connectors, it will be necessary to attach the shield terminals to a stringer adjacent to the antenna with a P/N AN525-8R6 screw, AN960-8 washer and MS21042L08 nut.

7. Using nylon cable ties of the appropriate length, secure the ADF antenna cables and any other cables or wires which were loosened to gain access to the antenna cables.

CAUTION

Be certain that all cables and wiring have adequate clearance from all moving parts of the flight control systems. Antenna cables should not be tied in with electrical cables or routed near high current wires or devices.

8. Reinstall all access panels, upholstery panels, carpet and seats which were removed for this modification.
9. Flight test the airplane in VFR conditions to ensure proper operation of the ADF system.

RECORD COMPLIANCE:

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