Beech

TITLE: FUSELAGE - BATTERY DRAIN MAST REMOVAL

1. Planning Information

A. Effectivity

(1) Airplanes

The following airplanes without a ADF (long-wire) antenna anchored to the battery drain mast assembly:

Beech Baron Model 95-55, 95-A55, 95-B55, 95-C55, D55, and E55, Serials TC-1 through TC-2456, and TE-1 through TE-1201;

Beech Baron Model 58, 58P, and 58TC, Serials TH-1 through TH-1960, TJ-3 through TJ-497, and TK-1 through TK-151.

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

(2) Spares

None.

B. Reason

This Service Bulletin is being issued to allow the removal of the P/N 95-410006-57 or P/N 002-400001-33 battery drain mast assembly provided no ADF (long-wire) antenna was anchored to the mast. This Service Bulletin allows the owner/operator the option of removing the mast assembly rather than replacing it in the event of any damage to the mast assembly.

C. Description

This service bulletin incorporates instructions for the removal of the P/N 95-410006-57 or P/N 002-400001-33 battery drain mast assembly and fabrication and installation of a .032 aluminum plate, if required, and installation of a rubber grommet for the battery drain tube.

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Raytheon Aircraft Company (RAC) issues Service Information for the benefit of owners and fixed base operators in the form of two classes of Service Bulletins. The first class, Mandatory Service Bulletins (red border) includes changes, inspections and modifications that could affect safety or crash worthiness. RAC also issues Service Bulletins with no red border which are designated as either recommended or optional in the compliance section within the bulletin. In the case of recommended Service Bulletins, RAC feels the changes, modifications, improvements or inspections will benefit the owner/operator and although highly recommended, Recommended Service Bulletins are not considered mandatory at the time of issuance. In the case of Optional Service Bulletins, compliance with the changes, modifications, improvements or inspections is at the owner/operator's discretion. Both classes are mailed to:

(a) RAC Authorized Service Centers.
(b) Owners of record on the FAA Aircraft Registration Branch List and the RAC International Owner Notification/Registration Service List.
(c) Those having a publications subscription.

Information on Owner Notification Service or subscription can be obtained through any RAC Authorized Service Center. As Mandatory Service Bulletins and Service Bulletins are issued, temporary notification in the Service Bulletin Master Index should be made until the index is revised. Warranty will be allowed only when specifically defined in the Service Bulletin and in accordance with the RAC Warranty Policy. Unless otherwise designated, RAC Mandatory Service Bulletins, Service Bulletins and RAC Kits are approved for installation on RAC airplanes in original or RAC modified configurations only. RAC Mandatory Service Bulletins, Service Bulletins and Kits may not be compatible with airplanes modified by STC installations or modifications other than RAC approved kits.
D. Compliance

Raytheon Aircraft Company considers compliance to be at the owner’s/operator’s option.

E. Approval

The engineering data contained in this Service Bulletin is FAA approved.

F. Manpower

The following information is for planning purposes only:

Estimated man-hours: 4 hours.

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.

G. Weight and Balance

None.

H. Electrical Load Data

Not changed.

I. Software Accomplishment Summary

Not applicable.

J. References

None.

K. Publications Affected

It is recommended that a note "See Service Bulletin No. 53-3450" be made in the following:

Beech Baron, Model B55, E55, and 58, Illustrated Parts Catalog P/N 58-590000-19E7 or subsequent revisions;

Beech Baron, Model 55, A55, B55, C55, D55, and E55, Illustrated Parts Catalog P/N 96-590010-13B2 or subsequent revisions;

Beech Baron, Model 58P and 58TC, Illustrated Parts Catalog P/N 102-590000-7E3 or subsequent revisions.

L. Interchangeability of Parts

Not applicable.

M. Warranty Credit

Not applicable.
SERVICE BULLETIN

2. Material Information

A. Materials - Price and Availability

Contact a Raytheon Aircraft Authorized Service Center for information.

B. Industry Support

Not applicable.

C. Airplanes

The following parts required for this modification may be ordered through a Raytheon Aircraft Authorized Service Center, RAPID or obtained locally:

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Quantity Per Airplane</th>
</tr>
</thead>
<tbody>
<tr>
<td>1108-006</td>
<td>Grommet</td>
<td>1</td>
</tr>
<tr>
<td>AN525-10R7 or equivalent</td>
<td>Screw</td>
<td>4</td>
</tr>
<tr>
<td>.032 2024-T3 Alclad Sht.</td>
<td>Plate</td>
<td>1</td>
</tr>
<tr>
<td>MIL-C-5541 Alodine 1200, or equivalent</td>
<td>Chemical Conversion Coating</td>
<td>As Required</td>
</tr>
<tr>
<td>A-A-1491, CCC-C40, or equivalent.</td>
<td>Cotton Cheesecloth</td>
<td>As Required</td>
</tr>
<tr>
<td>MIL-P-23377 or equivalent</td>
<td>Epoxy Polyamide Primer</td>
<td>As Required</td>
</tr>
<tr>
<td></td>
<td>Methyl Propyl Ketone</td>
<td>As Required</td>
</tr>
</tbody>
</table>

Raytheon Aircraft Company expressly reserves the right to supersede, cancel and/or declare obsolete, without prior notice, any parts or publications that may be referenced in this Service Bulletin.

D. Spares

Not applicable.

E. Reidentified Parts

None.

F. Tooling - Price and Availability

Not applicable.
3. Accomplishment Instructions

This Service Bulletin shall be accomplished as follows:

**NOTE**
Should any difficulty be encountered in accomplishing this Service Bulletin, contact Raytheon Aircraft Company at 1-800-429-5372 or 316-676-3140.

**NOTE**
This Service Bulletin shall not be accomplished if the battery drain mast serves as the anchor for one end of any ADF (long-wire) antenna.

A. Airplane

**WARNING**
Observe all Warnings and Cautions contained in the aircraft manuals referred to in this Service Bulletin.

Whenever any part of this system is dismantled, adjusted, repaired or renewed, detailed investigation must be made on completion to make sure that distortion, tools, rags or any other loose articles or foreign matter that could impede the free movement and safe operation of the system are not present, and that the systems and installations in the work area are clean.

1. Remove all power from the airplane and disconnect the battery. Display warning notices prohibiting reconnection of airplane electrical power.

2. Remove the P/N 95-410006-57 or P/N 002-40001-33, mast assembly, by removing four AN525-10R8 screws that attach the mast to the fuselage. See figure 1.

3. Inspect the hole in the fuselage that the drain tube protrudes through. If the hole is round and approximately 1.00 inch diameter, proceed to step 9. If the hole is oblong or out of round, go to step 4. See figure 1.

4. Fabricate a plate made from .032 2024-T3 Alclad aluminum. Form to match skin contour. See figure 2.
Solvents, primers, and paints are flammable and toxic to skin, eyes, and respiratory tract. Skin and eye protection is required. Avoid repeated or prolonged contact. Keep away from flames or sources of heat. Use in well-ventilated area or respiratory protection equipment may be required.

Chemical conversion coating may affect skin, eyes, and respiratory tract. Chemical goggles and neoprene gloves will be worn. Use in well-ventilated area.

(5) Clean the fabricated plate with clean cotton cheesecloth or clean wiping rag dampened with appropriate solvent. Repeat solvent wipe cleaning, as necessary. Wipe surfaces dry with cotton cheesecloth.

(6) Apply chemical conversion coating to bare metal surfaces per manufacturing instructions. Allow adequate drying time following application of chemical conversion coating.

(7) Prime the fabricated plate with epoxy polyamide primer. Allow adequate drying time following application of primer and paint to match surrounding paint scheme.

(8) Install the plate using four AN525-10R7 screws. See figure 1. Proceed to step 11.

(9) Clean the area of the removed mast with cotton cheesecloth or clean wiping rag dampened with appropriate solvent. Repeat solvent wipe cleaning, as necessary. Wipe surfaces dry with clean cotton cheesecloth. Paint to match surrounding paint scheme.

(10) Install four AN525-10R7 screws to fill open nutplate holes.

(11) Install the battery drain hose through the center of the grommet. Install the P/N 1108-006 grommet into the 1.00 inch diameter hole. See figure 2.

(12) Cut the drain hose to match figure 2.

(13) Reconnect the airplane battery, remove warning notices and restore power.

(14) Ensure all work areas are clean and clear of tools and miscellaneous items of equipment.

(15) Return airplane to service.

B. Spares

Not applicable.

C. Record of Compliance

Upon completion of this Service Bulletin, make an appropriate maintenance record entry.
SERVICE BULLETIN

1.00" DIA HOLE IN SKIN (MAY BE OBLONG ON EARLY AIRCRAFT)

PLATE (IF REQD) SEE FIG. 2

AN525-10R7 SCREW (OR EQUIV) 4 PLACES (DO NOT RE-USE ORIGINAL AN525-10R8 SCREWS. GRIP IS EXCESSIVE.)

002-400001-33 OR 95-410006-57 MAST ASSEMBLY

DETAIL A

VIEW LOOKING AT FUSELAGE AFTER MAST ASSEMBLY HAS BEEN REMOVED

BATTERY DRAIN MAST REMOVAL

FIGURE 1
BATTERY DRAIN MAST REMOVAL

FIGURE 2

1108-006 GROMMET

INSTALL IN 1.00" DIA HOLE

DRAIN TUBE

FWD

DETAIL B

BATTERY BOX

DRAIN TUBE

1108-006 GROMMET

0.31" R

TYP

0.5" (TYP)

1.38"

0.69"

1.44"

2.54"

0.5" (TYP)

1.00" DIA HOLE

0.193" DIA HOLE

0.200" 4 PLACES

0.032" 2024-T3

ALCLAD SHT

PLATE

0.032" 2024-T3

ALCLAD SHT

4 PLACES

0.5" (TYP)

0.193" DIA HOLE

0.200" 4 PLACES

0.032" 2024-T3

ALCLAD SHT

4 PLACES