# **SERVICE LETTER**



MANDATORY MTL-53-02

#### TITLE

FUSELAGE - FORWARD FUSELAGE FASTENER INSPECTION

#### **EFFECTIVITY**

MODEL	SERIAL NUMBERS
B200GT	BY-178 thru BY-395, BY-397 thru BY-406
B200CGT	BZ-1, BZ-2
B300C	FM-51 thru FM-100, FM-102
B300	FL-769 thru FL-1257, FL-1259 thru FL-1261, FL-1263, FL-1264, FL-1266, FL-1268, FL-1270 thru FL-1272

### **REASON**

During inspection it was found that the rivets might not have been installed in the lap joint between Fuselage Station (FS) 100.50 to FS 107.00 on the left and right sides.

## **DESCRIPTION**

This service document provides parts and instructions to inspect the number of rivets between FS 100.50 to FS 107.00 and install if required.

#### **COMPLIANCE**

MANDATORY. This service document must be accomplished at the next 200-hour or next scheduled inspection.

A service document published by Textron Aviation may be recorded as *completed* in an aircraft log only when the following requirements are satisfied:

- The mechanic must complete all of the instructions in the service document, including the intent therein.
- 2) The mechanic must correctly use and install all applicable parts supplied with the service document kit. Only with written authorization from Textron Aviation can substitute parts or rebuilt parts be used to replace new parts.
- 3) The mechanic or airplane owner must use the technical data in the service document only as approved and published.
- 4) The mechanic or airplane owner must apply the information in the service document only to aircraft serial numbers identified in the *Effectivity* section of the document.
- 5) The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.

No individual or corporate organization other than Textron Aviation is authorized to make or apply any changes to a Textron Aviation-issued service document or flight manual supplement without prior written consent from Textron Aviation.

Textron Aviation is not responsible for the quality of maintenance performed to comply with this document, unless the maintenance is accomplished at a Textron Aviation-owned Service Center.

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### **CONSUMABLE MATERIAL**

You must use the consumable materials that follow, or their equivalent, to complete this service document.

NAME	NUMBER	MANUFACTURER	USE
Color Chemical Film Treatment	U074093 (Alodine 1132 Touch n Prep)	Textron Aviation Parts Distribution 7121 Southwest Boulevard Wichita, KS 67215	To prepare bare aluminum surface for intermediate primer. Bonderite M-CR 1132, (formerly the Alodine 1132 Touch-n-prep) are both approved for small touch up areas, generally less than 6 inches square.)
Sealant Type I, Class B–1/2, (2 ounce Simkit)	U470637	Textron Aviation Parts Distribution 7121 Southwest Boulevard Wichita, KS 67215	To shank seal rivets.

## **TOOLING**

No specialized tooling is required to complete this service document.

## **REFERENCES**

Beechcraft Super King Air B200GT/B200CGT Fusion Maintenance Manual

Beechcraft Model Super King Air B300/B300C Fusion Maintenance Manual

Beechcraft Model Super King Air B300 Maintenance Manual

Beechcraft Structural Inspection and Repair Manual

## **PUBLICATIONS AFFECTED**

None

#### **ACCOMPLISHMENT INSTRUCTIONS**

- 1. Prepare the airplane for maintenance.
  - A. Make sure that the airplane is electrically grounded.
  - B. Make sure that all switches are in the OFF/NORM position.
  - C. Disconnect electrical power from the airplane.
    - (1) Disconnect external electrical power.
    - (2) Disconnect the airplane battery.
  - D. Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER MAINTENANCE IN PROGRESS"** written on them.
- 2. Depending upon the airplane model go to the steps as follows:
  - A. For all B200 Airplanes, go to Step 3.
  - B. For all B300 Airplanes, go to Step 7.

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3. (Model B200 Series Airplanes, Refer to Figure 1, Sheet 1 and Sheet 2.) Inspect for the correct number of rivets installed between FS 100.50 and FS 107.00 as follows:

**NOTE:** FS 100.50 to FS 107.00 and Stringer 11 is located at the forward fuselage below the windscreen approximately halfway down the fuselage. The seam lines for the fuselage skin panels can be used for locating the location of FS 107.00 while FS 100.50 will be the next forward vertical row of rivets. (Refer to the applicable Model Maintenance Manual, Chapter 6, Dimensions and Areas, Airplane Stations - Description and Operations.)

- Remove interior components as necessary to access the location where the fasteners will be installed.
- B. Count the top and bottom row of rivets on the left and right side.
  - Left side top row should have 7 rivets and the bottom row should have 6 rivets.
  - Right side top row should have 7 rivets and the bottom row should have 6 rivets.
- C. If the rivet count on the top and bottom are correct, go to Step 5.
- D. If the rivet count on the top or bottom row are not correct, go to Step 4.
- 4. Install missing rivets as follows:
  - Measure and identify the center location between the rivets that have the widest space.

**NOTE:** The distance between adjacent rivets must maintain a minimum of 0.50-inch and the edge distance must be 1.5 times the rivet diameter.

- B. From the inboard side of Stringer 11, mark and drill a Number 30 (0.1285 inch diameter) hole as required to match the number of holes as shown in the figures through the stringer, the lap joint of the upper and lower skin, and the FOD shield.
- C. (Model B200 Series Airplanes, Refer to Figure 1, Sheet 1.)
  - Left side top row should have 7 rivets and the bottom row should have 6 rivets.
  - Right side top row should have 7 rivets and the bottom row should have 6 rivets.
- D. From the out board side of the FOD shield, counter sink all drilled holes to 100 degrees x 0.222 to 0.228 inch diameter.
- E. Debur all drilled holes.
- F. Make sure all rivet shavings are removed.
- G. Apply Color Chemical Film Treatment to all bare metal.
- H. Apply U470637 Sealant to any required 132271A405 Rivet. (Refer to the applicable Maintenance Manual, Chapter 51, Structures Maintenance Practices.)
- I. Install the sealed 132271A405 Rivet into any drilled hole from the outboard side of the FOD shield. (Refer to the Beechcraft Structural Inspection and Repair Manual, Chapter 20, Fastener Installation and Removal.)
- 5. Install all interior components that were removed for this service bulletin.
- 6. Depending upon the method of installation, go to the steps as follows:
  - A. If the 132271A405 Rivets were installed on either the left or right side, go to Step 9.
  - B. If the rivet count was correct, go to Step 11.
- 7. (Model B300 Series Airplanes, Refer to Figure 2, Sheet 1 and Sheet 2.) Inspect for the correct number of rivets installed between the FS 100.50 to FS 107.00 are as follows:

**NOTE:** FS 100.50 to FS 107.00 and Stringer 11 is located at the forward fuselage in line with the forward end of the windscreen. (Refer to the applicable Model Maintenance Manual, Chapter 6, Dimensions and Areas, Airplane Stations - Description and Operations.)

A. Remove interior components as necessary to access the location where the fasteners were installed.

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- B. Count the top and bottom row of rivets on the left and right side.
  - Left side top row should have 5 rivets and the bottom row should have 6 rivets.
  - Right side top row should have 6 rivets and the bottom row should have 7 rivets.
- C. If the rivet count on the top and bottom are correct, go to Step 11.
- D. If the rivet count on the top or bottom row are not correct, go to Step 8.
- 8. Install missing rivets as follows:
  - A. Measure and identify the center location between the rivets that have the widest space.

**NOTE:** The distance between adjacent rivets must maintain a minimum of 0.50-inch and the edge distance must be 1.5 times the rivet diameter.

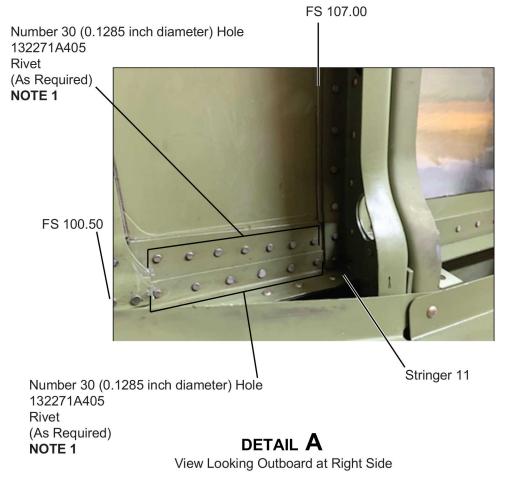
- B. From the outboard side of the lap joint, mark and drill a Number 30 (0.1285 inch diameter) hole as required to match the number of holes as shown in the figures through the lap joint of the upper and lower skin.
  - (1) (Model B300 Series Airplanes, Refer to Figure 2, Sheet 1 and 2.)
    - Left side top row should have 5 rivets and the bottom row should have 6 rivets.
    - Right side top row should have 6 rivets and the bottom row should have 7 rivets.
- C. Counter sink all drilled holes to 100 degrees x 0.222 to 0.228 inch diameter.
- D. Debur all drilled holes.
- E. Apply Color Chemical Film Treatment to all bare metal.
- F. Apply U470637 Sealant to any required 132271A404 Rivet. (Refer to the applicable Maintenance Manual, Chapter 51, Structures Maintenance Practices.)
- G. Install the sealed 132271A404 Rivet into any drilled hole. (Refer to the Beechcraft Structural Inspection and Repair Manual, Chapter 20, Fastener Installation and Removal.)
- H. Touch up paint as required using shop and local procedures.
- I. Make sure all rivet shavings are removed.
- J. Install all interior components that were removed for this service bulletin.
- 9. Remove the maintenance warning tags and connect the airplane battery.

NOTE: Prior to a cabin leak test, make sure that the U470637 Sealant has cured.

- 10. Do a Cabin Leak Test. (Refer to the applicable Model Maintenance Manual, Chapter 21, Pressurization Controls Inspection Checks.)
- 11. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

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**NOTE:** The Left and Right Side have the same number of Rivets.

(7 rivets on top row and 6 Rivets on the bottom row)

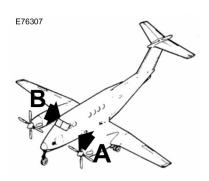
NOTE 1: Counter Sink 100 Degrees X 0.222 to 0.228 Inch Diameter

Outboard of the FOD shield (As Required).

Figure 1. Model B200 Airplanes Rivet Installation (Sheet 1)



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Number 30 (0.1285 inch diameter) Hole Counter Sink 100 Degrees X 0.222 to 0.228 Inch Diameter 132271A404 Rivet (As Required) NOTE 2 FS 100.50 FS 107.00 Upper Skin (Reference) Stringer 11 (Reference) Lower Skin (Reference) Number 30 (0.1285 inch diameter) Hole Counter Sink 100 Degrees X 0.222 to 0.228 Inch Diameter 132271A404 Rivet (As Required) NOTE 2

# DETAIL A

View Looking at Left Side Model B300 Airplanes

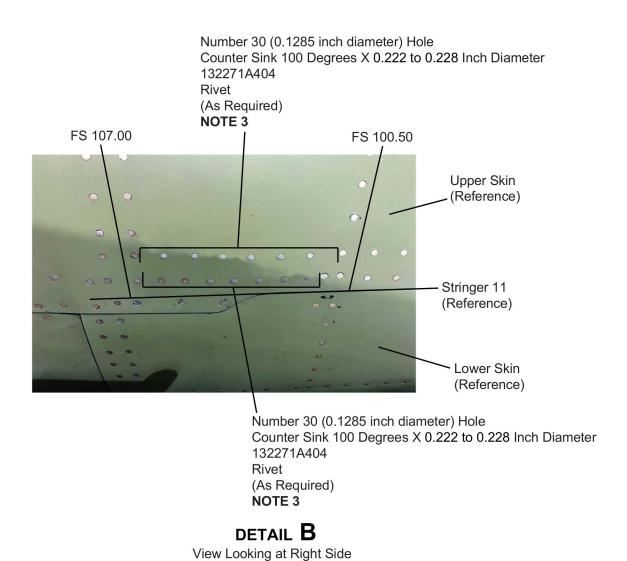
**NOTE 2:** Top row should have 5 rivets. Bottom row should have 6 rivets.

Figure 2. Model B300 Airplanes Rivet Installation (Sheet 1)



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**NOTE 3:** Top row should have 6 rivets. Bottom row should have 7 rivets.

Figure 2. Model B300 Airplanes Rivet Installation (Sheet 2)

Model B300 Airplanes

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## **MATERIAL INFORMATION**

Order the part below to install this modification.

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
132271A404	As Required	Rivet (B300)	N/A	Install
132271A405	As Required	Rivet (B200)	N/A	Install

<sup>\*</sup> Please contact your Regional Textron Aviation Parts Distribution Customer Support Team for current cost and availability of parts listed in this service document. Phone at 1-800-835-4000 (Domestic) or 1-316-517-5603 (International).

For more information, please visit the TAPD Support & Aftermarket Account Management website at https://ww2.txtav.com/Parts/Promos/TAPD.

Based on availability and lead times, parts may require advanced scheduling.

# **OWNER ADVISORY**



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#### TITLE

FUSELAGE - FORWARD FUSELAGE FASTENER INSPECTION

#### TO:

Beechcraft King Air Model B200GT, B200CGT, B300, B300C Aircraft Owner

## **REASON**

During inspection it was found that the rivets might not have been installed in the lap joint between Fuselage Station (FS) 100.50 to FS 107.00 on the left and right sides.

## **COMPLIANCE**

MANDATORY. This service document must be accomplished at the next 200-hour or 12-month (annual-type) inspection.

## **LABOR HOURS**

WORK PHASE LABOR-HOURS

Modification 20

### **MATERIAL AVAILABILITY**

PART NUMBER	AVAILABILITY	COST
132271A404	*	*
132271A405	*	*

#### WARRANTY

This service document is *mandatory*. Eligible airplanes may qualify for parts and labor coverage to the extent noted in the *Labor Hours* and *Material Availability* sections of this document.

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# **OWNER ADVISORY**



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**Eligibility:** Airplanes identified within the serial number effectivity of this service document must have

active Airframe warranty coverage on the original issue date of this document and the

coverage must be active on the day the work is accomplished.

Parts Coverage: Textron Aviation-owned and Textron Aviation-authorized Service Facilities, operators, or

other maintenance facilities may submit a claim for the parts required to accomplish this service document as defined in the *Material Availability* section of this document.

Labor Coverage: Textron Aviation-owned and Textron Aviation-authorized Service Facilities rated to perform

maintenance on the specific model of Beechcraft Aircraft may submit a claim for the labor necessary to accomplish this service document as defined in the *Labor Hours* section of

this document.

**Credit** After this service document has been accomplished, a claim must be submitted to Textron **Application:** Aviation within 30 days of the service document completion. Claims for compliance of this

service document are to be filed as a W4 type claim.

Please submit your claim form online at ww2.txtav.com/Parts or email the completed Textron Aviation Claim Form to warranty@txtav.com. If submitted on-line a Return Authorization will be provided. If a paper claim is submitted your claim will be entered into

the system and a Return Authorization will be sent to you.

The Return Authorization must accompany any required return parts (see Material

Availability), to the point of purchase.

Parts to be returned to Textron Aviation Parts Distribution should be forwarded to:

Textron Aviation Parts Distribution Warranty Administration 285 South Greenwich Road Bldg B89, Docks 1-4

Wichita, KS 67206

USA

**Expiration:** August 16, 2024

Textron Aviation reserves the right to void continued airplane warranty coverage for the parts affected by this service document until the service document is accomplished.

**NOTE:** As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the Customer Access link at www.txtavsupport.com to register.