

MANDATORY**MTL-53-04****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, FM-106, FM-107
B300	FL-769 thru FL-1257, FL-1259 thru FL-1261, FL-1263, FL-1264, FL-1266, FL-1268, FL-1270 thru FL-1272, FL-1295 thru FL-1299, FL-1301 thru FL-1304

REASON

During inspection it was found that there might be an insufficient amount of rivets between Fuselage Station (FS) 100.50 to FS 107.00 on the left and right sides of the fuselage.

DESCRIPTION

This service document provides parts and instructions to inspect, count, and install any rivets as required between FS 100.50 to FS 107.00 on the left and right sides.

NOTE: The possible configurations may be different for each individual aircraft, including the left and right side configuration being different on the same individual aircraft. Review the flowchart and each procedural step carefully.

COMPLIANCE

MANDATORY. This service document must be accomplished within 12 months of publication.

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

- 1) 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.

May 08, 2023

MTL-53-04
Page 1 of 11

Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800

This document contains technical data and is subject to U.S. export regulations. This information has been exported from the United States in accordance with export administration regulations. Diversion contrary to U.S. law is prohibited. ECCN: 9E991

MANDATORY**MTL-53-04**

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.

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.
Isopropyl Alcohol		Commercially Available	To remove any incorrect marked locations.

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/B300C 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. (Refer to Figure 1, Sheet 1.) Count the number of rivets installed between FS 100.50 and FS 107.00 on the left and right sides 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.)
- A. (Refer to Figure 2, Sheet 1.) Thoroughly review the flowchart in Figure 2, Sheet 1.
- NOTE:** The flow chart in Figure 2, Sheet 1 should be reviewed and understood prior to any counting, marking, or drilling. The flow chart can be used as a guide throughout the procedural instructions of this service document.
- B. Remove interior components on the left and right side as necessary to access the location where the fasteners will be inspected.
- C. Count the amount of rivets between FS 100.50 and FS 107.00 on the left and right sides:
- (1) If there are 16 rivets or more on the left side and 16 rivets or more on the right side, go to Step 17.
 - (2) If there are 15 rivets or less on the left side or 15 rivets or less on the right side, go to Step 3.
3. If the rivet installation is on either the left and/or right side go to the steps as follows:
- A. If only the left side needs rivets installed, go to Step 4.
- B. If only the right side needs rivets installed, go to Step 8.
- C. If the left and right side needs rivets installed, go to Step 4.
4. Measure each gap between each rivet on the left side as follows:
- A. Measure all gaps between the centers of each rivet.
- B. If any of the gaps are less than or equal to 0.75 inch between the centers of each rivet, no rivets need to be installed, go to Step 17.
- C. If any of the gaps are greater than 1.00 inch between the centers of each rivet do as follows:
- (1) Mark the center location between each gap that is greater than 1.00 inch with a marker.
 - (2) Make sure that the measured gaps between the mark and the center of the adjacent rivet is between 0.50 to 0.75 inch.
- NOTE:** The distance between adjacent rivets and marks must maintain a minimum of 0.50-inch and the edge distance must be 1.5 times the rivet diameter.
- (a) If the gap exceeds 0.75 inch, use Isopropyl Alcohol and remove the marked center.
 - (b) Re-measure the gap and mark as many spots as required to get the distance of 0.50 to 0.75 inch between each of the marks and between the adjacent rivets.
- D. Re-count the total number of marks and installed rivets on the left side of the fuselage.
- (1) If the total count of the marks and rivets is 16 or more, go to Step 5.
 - (2) If the total count of the marks and rivets is 15 or less, go to Step 6.

MANDATORY**MTL-53-04**

5. (Refer to Figure 1, Sheet 2.) Install the CM3827AD4-4 Rivets into the marked areas on the left side of all B200 and B300 models as follows:

NOTE: The illustration provided is an example of where the possible rivets could be installed between FS 100.50 to FS 107.00. Each airplane might have different possible locations where the drilled holes and rivet installations should be located.

- A. From the inboard side of the lap joint, drill a Number 30 (0.1285 inch diameter) hole as required for each of the marked locations on the left side.
- B. Debur all drilled holes.
- C. From the outboard side, counter sink all drilled holes to 100 degrees x 0.222 to 0.228 inch diameter.
- D. Apply Color Chemical Film Treatment to all bare metal.
- E. Install a CM3827AD4-4 Rivet, as required, wet with U470637 Sealant into all drilled holes. (Refer to the Beechcraft Structural Inspection and Repair Manual, Chapter 20, Fastener Installation and Removal.)
- F. If the rivet installation is needed on the right side, go to the steps that follow:
 - (1) If the rivets needs to be installed on the right side, go to Step 8.
 - (2) If only the left side needed rivets to be installed, go to Step 13.

6. (Refer to Figure 1, Sheet 3.) Remove the previously installed rivets on the left side on all B200 and B300 airplanes as follows:

NOTE: The illustration provided is an example of where the possible rivets could be installed between FS 100.50 to FS 107.00. Each airplane might have different possible locations where the drilled holes and rivet installations should be located.

- A. Remove all the rivets, on the left side, that were installed between FS 100.50 and FS 107.00. (Refer to the Beechcraft Structural Inspection and Repair Manual, Chapter 20, Fastener Installation and Removal.)
 - B. From the inboard side of the lap joint, drill a Number 30 (0.1285 inch diameter) hole as required for each of the marked locations.
 - C. Debur all drilled holes.
 - D. From the outboard side, counter sink all drilled holes to 100 degrees x 0.222 to 0.228 inch diameter.
 - E. Apply Color Chemical Film Treatment to all bare metal.
 - F. Install a MS20427F4-4 Rivet, as required, wet with U470637 Sealant into all drilled holes. (Refer to the Beechcraft Structural Inspection and Repair Manual, Chapter 20, Fastener Installation and Removal.)
7. If the rivet installation is needed on the right side, go to the steps that follow:
- A. If the rivets needs to be installed on the right side, go to Step 8.
 - B. If only the left side needed rivets to be installed, go to Step 13.
8. Measure each gap between each rivet on the right side as follows:
- A. Measure all gaps between the centers of each rivet.
 - B. If any of the gaps are less than or equal to 0.75 inch between the centers of each rivet, no rivets need to be installed, go to Step 17.
 - C. If any of the gaps are greater than 1.00 inch between the centers of each rivet do as follows:
 - (1) Mark the center location between each gap that is greater than 1.00 inch with a marker.

- (2) Make sure that the measured gaps between the mark and the center of the adjacent rivet is between 0.50 to 0.75 inch.
- NOTE:** The distance between adjacent rivets and marks must maintain a minimum of 0.50-inch and the edge distance must be 1.5 times the rivet diameter.
- (a) If the gap exceeds 0.75 inch, use Isopropyl Alcohol and remove the marked center.
- (b) Re-measure the gap and mark as many spots as required to get the distance of 0.50 to 0.75 inch between each of the marks and between the adjacent rivets.
- D. If a FOD shield is installed on the right side of the airplane do as follows:
- NOTE:** Some B200 airplanes have the FOD shield installed over the area between FS 100.50 and FS 107.00.
- (1) If a FOD shield is installed on the right side of the airplane, go to Step 9.
- (2) If a FOD shield is not installed on the right side of the airplane, go to Step 10.
9. (Refer to Figure 1, Sheet 3.) Install the NAS1919B04S05 Rivets on the right side of any B200 airplane with a FOD shield installed as follows:
- NOTE:** The illustration provided is an example of where the possible rivets could be installed between FS 100.50 to FS 107.00. Each airplane might have different possible locations where the drilled holes and rivet installations should be located.
- A. Drill a Number 30 (0.1285 inch diameter) hole from the inside frame and through the FOD Shield as required for each of the marked locations.
- B. Debur all drilled holes from the inboard side.
- C. Apply Color Chemical Film Treatment to all bare metal.
- D. From the outboard side, install a NAS1919B04S05 Rivet, as required, wet with U470637 Sealant into all drilled holes. (Refer to the Beechcraft Structural Inspection and Repair Manual, Chapter 20, Fastener Installation and Removal.)
- E. Go to Step 13.
10. Re-count the total number of marks and installed rivets on the right side of the fuselage.
- A. If the total count of the marks and rivets is 16 or more, go to Step 11.
- B. If the total count of the marks and rivets is 15 or less, go to Step 12.
11. (Refer to Figure 1, Sheet 2.) Install the CM3827AD4-4 Rivets into the marked areas on the right side of all B200 and B300 models without a FOD shield as follows:
- NOTE:** The illustration provided is an example of where the possible rivets could be installed between FS 100.50 to FS 107.00. Each airplane might have different possible locations where the drilled holes and rivet installations should be located.
- A. From the inboard side of the lap joint, drill a Number 30 (0.1285 inch diameter) hole as required for each of the marked locations on the left side.
- B. Debur all drilled holes.
- C. From the outboard side, counter sink all drilled holes to 100 degrees x 0.222 to 0.228 inch diameter.
- D. Apply Color Chemical Film Treatment to all bare metal.
- E. Install a CM3827AD4-4 Rivet, as required, wet with U470637 Sealant into all drilled holes. (Refer to the Beechcraft Structural Inspection and Repair Manual, Chapter 20, Fastener Installation and Removal.)
- F. Go to Step 13.

12. (Refer to Figure 1, Sheet 3.) Remove the previously installed rivets on the right side on all B200 and B300 airplanes without a FOD shield as follows:

NOTE: The illustration provided is an example of where the possible rivets could be installed between FS 100.50 to FS 107.00. Each airplane might have different possible locations where the drilled holes and rivet installations should be located.

- A. Remove all the rivets, on the right side, that were installed between FS 100.50 and FS 107.00. (Refer to the Beechcraft Structural Inspection and Repair Manual, Chapter 20, Fastener Installation and Removal.)
 - B. From the inboard side of the lap joint, drill a Number 30 (0.1285 inch diameter) hole as required for each of the marked locations.
 - C. Debur all drilled holes.
 - D. From the outboard side, counter sink all drilled holes to 100 degrees x 0.222 to 0.228 inch diameter.
 - E. Apply Color Chemical Film Treatment to all bare metal.
 - F. Install a MS20427F4-4 Rivet, as required, wet with U470637 Sealant into all drilled holes. (Refer to the Beechcraft Structural Inspection and Repair Manual, Chapter 20, Fastener Installation and Removal.)
13. 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.
14. Do a Cabin Leak Test. (Refer to the applicable Model Maintenance Manual, Chapter 21, Pressurization Controls - Inspection Checks.)
15. Touch up paint as required using shop and local procedures.
16. Make sure all rivet shavings are removed.
17. Install all interior components on the left and right sides that was removed.
18. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

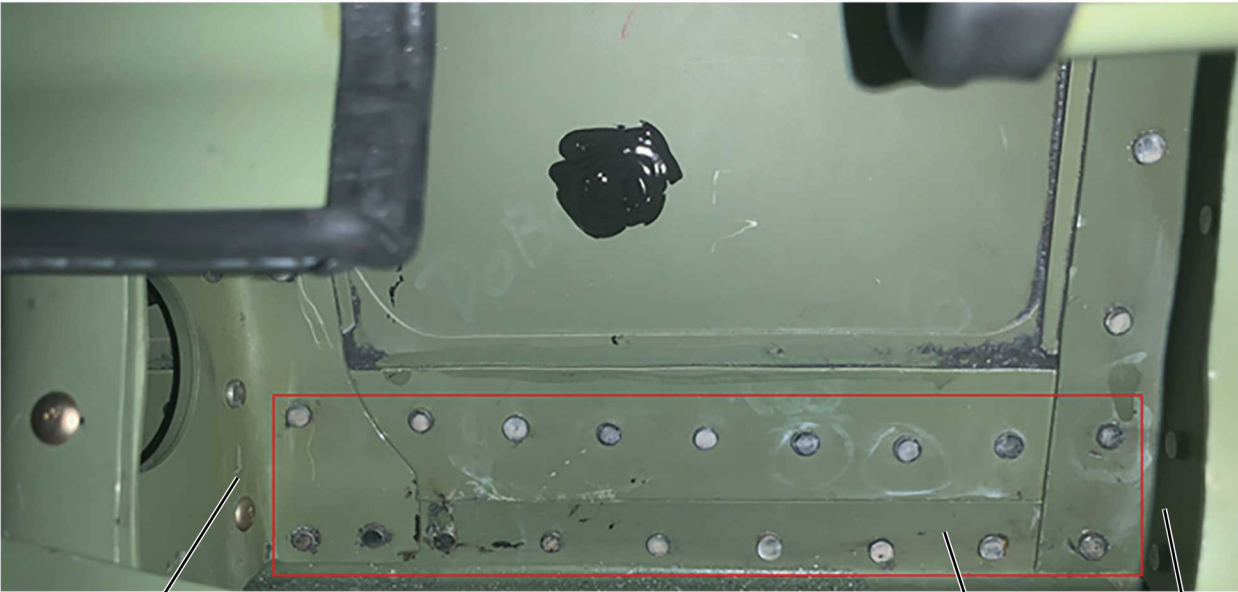
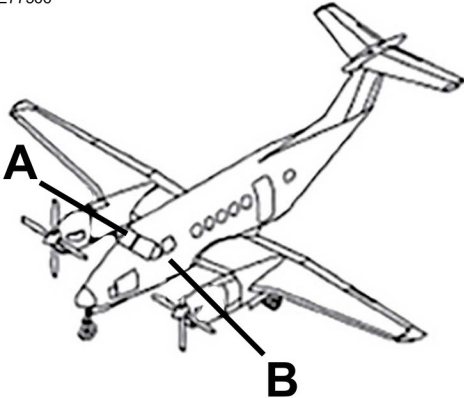
NOTE: Textron Aviation recommends that compliance with all service documents is reported to a maintenance tracking system provider.

- Complete a record of compliance. (Maintenance Transaction Report, Log Book Entry, or other record of compliance.)
- Put a copy of the completed record of compliance in the airplane logbook.
- Send a copy of the completed record of compliance to the maintenance tracking system provider used.

MANDATORY

MTL-53-04

E77566



FS 100.50

Stringer 11

FS 107.00

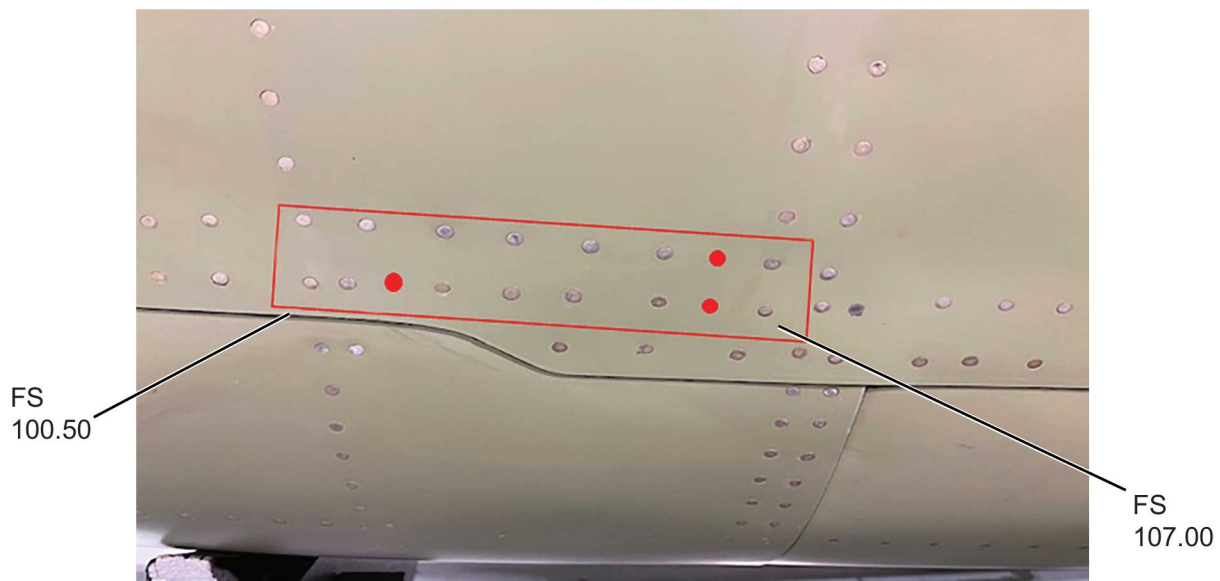
DETAIL A

View Looking Outboard at the Right Side

NOTE: The rivets inside the red box show the area where the rivets need to be counted on the left and right sides of the fuselage.

Figure 1. Rivet Inspection Area (Sheet 1)

E77567



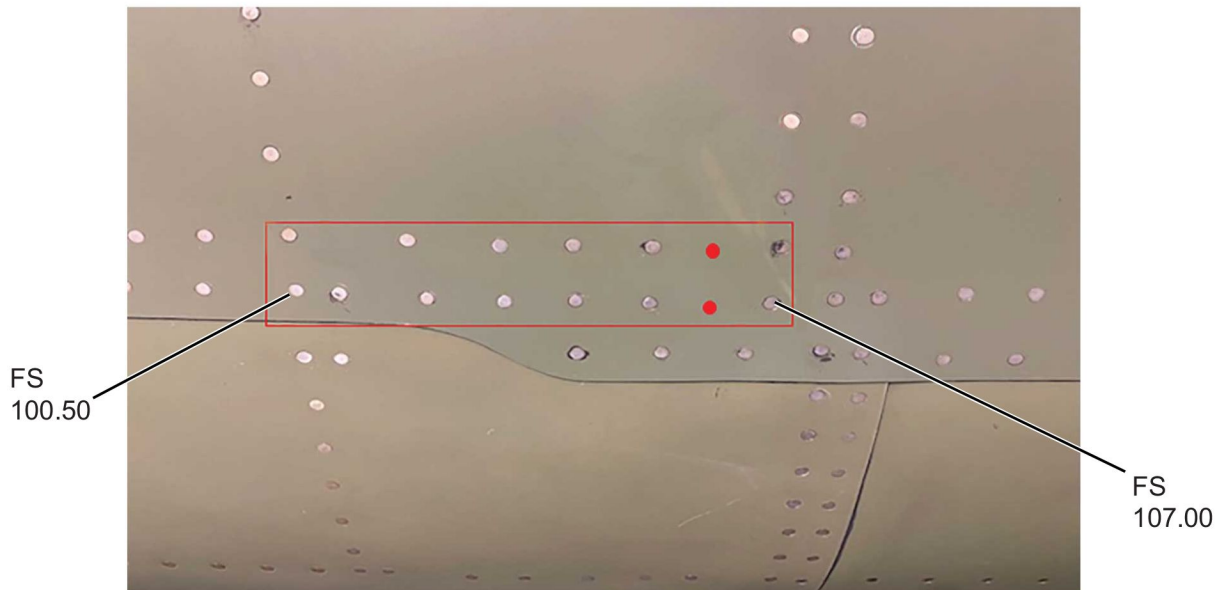
DETAIL B

View Looking Inboard at the Left Side

NOTE: The rivets and red circle marks inside the red box show a possible configuration that would have a total amount of 16 or more rivets and marks.

Figure 1. Rivet Inspection Area (Sheet 2)

E77568



DETAIL B

View Looking Inboard at the Left Side

NOTE: The rivets and red circle marks inside the red box show a possible configuration that would have a total amount of 15 or less rivets and marks.

Figure 1. Rivet Inspection Area (Sheet 3)

E77597

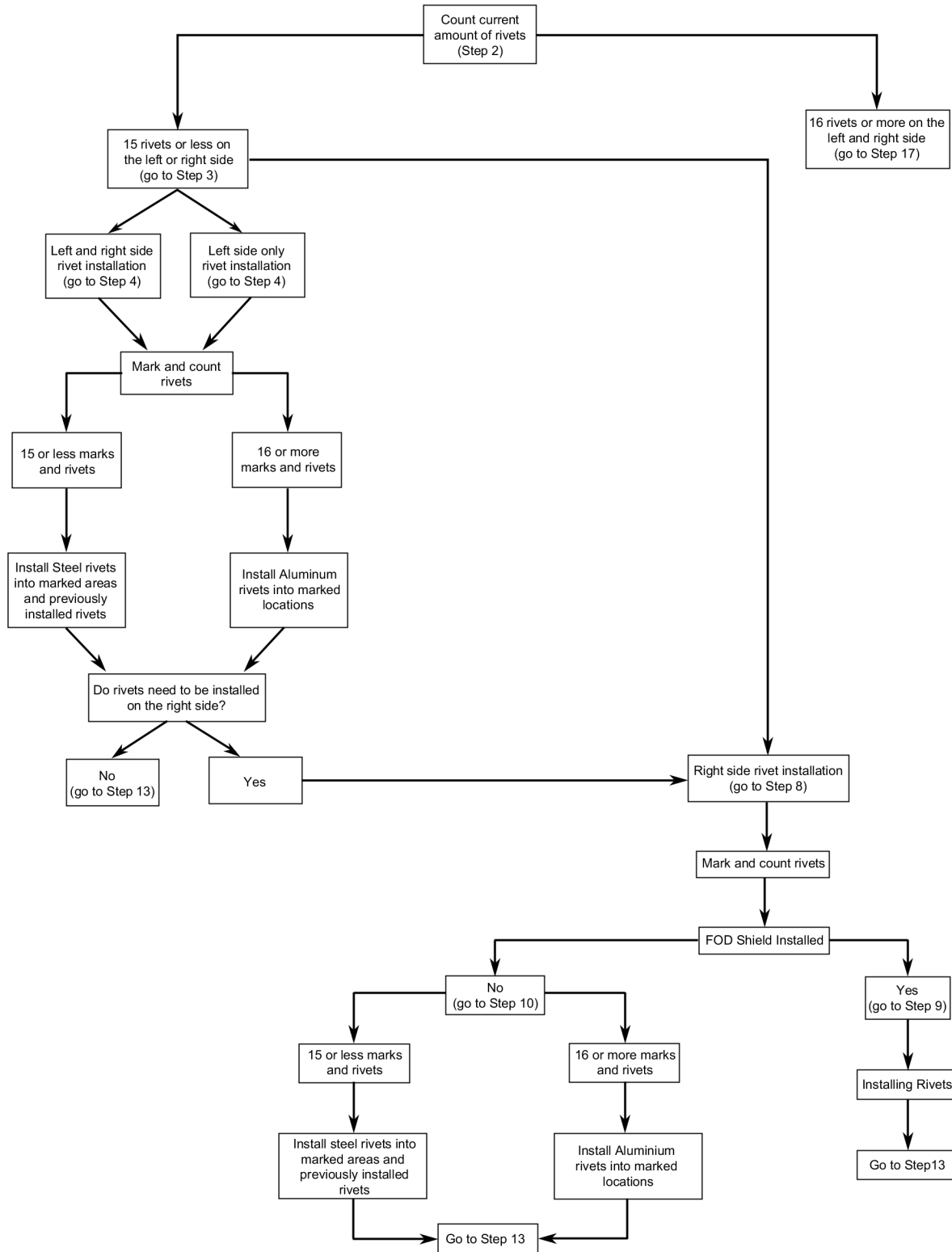


Figure 2. Rivet Installation Guide (Sheet 1)

MANDATORY**MTL-53-04****MATERIAL INFORMATION**

Order the part below to install this modification.

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
CM3827AD4-4	As Required	Rivet	N/A	Install
MS20427F4-4	As Required	Rivet	N/A	Install
NAS1919B04S05	As Required	Rivet	N/A	Install

* 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.

TITLE

FUSELAGE - FORWARD FUSELAGE FASTENER INSPECTION

TO:

Beechcraft Model B200GT, B200CGT, B300, and 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 of the fuselage.

COMPLIANCE

MANDATORY. This service document must be accomplished within 12 months of publication.

LABOR HOURS

WORK PHASE	LABOR-HOURS
Modification	45
Inspection	1

MATERIAL AVAILABILITY

PART NUMBER	AVAILABILITY	COST
CM3827AD4-4	*	*
MS20427F4-4	*	*
NAS1919B04S05	*	*

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.

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 Application: After this service document has been accomplished, a claim must be submitted to Textron 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 INC
CORE RETURNS
201 N GREENWICH RD BLDG 94
Wichita, KS 67206-2558

Expiration: May 08, 2025 (after this date the owner/operator assumes the responsibility for compliance costs)

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 support.txtav.com to register.