

MANDATORY SERVICE BULLETIN NO. MSB 62-042 REV. 1 **SUPERSEDES MSB 62-042 REV. 0**

I TECHNICAL DETAILS

I.1 Category

Mandatory.

I.2 Airplanes Affected

Model: DA 62

S/N: 62.193 and prior, and 62.205
62.C046 and prior

I.3 Date of Effectivity

19 October 2023.

I.4 Time of Compliance

Within the next 100 flight hours, but not later than 30-Sep-2024, whichever comes first.

I.5 Subject

Rudder rib hole size correction.

ATA-Code: 55-40

I.6 Reason

It has been observed on some aircraft that some hole sizes on the rudder rib were too large. This Service Bulletin describes the procedures to add a bushing to the holes to correct the hole sizes.

I.7 Concurrent Documents

None.

I.8 Approval

The technical information and instructions contained in this document relate to Design Change Advisory No. MÄM 62-1105, which has been approved as part of the type design.

I.9 Accomplishment/Instructions

Comply with WI-MSB 62-042, latest effective issue.

I.10 Mass (Weight) and CG

The change in mass and CG is negligible.

II PLANNING INFORMATION

II.1 Material and Availability

See WI-MSB 62-042, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

Approximately 1 hour will be required to accomplish this service bulletin.

This estimate is for direct labour performed by a technician, and it does not include setup, planning, familiarization, cure time, part fabrication, or tool acquisition.

II.4 Credit

None.

II.5 Reference Documents

DA 62 Series Airplane Maintenance Manual, Doc. No. 7.02.25, latest effective issue.

III REMARKS

1. All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic.
2. All work, in particular which is not especially described in this service bulletin, must be done in accordance with the referenced maintenance manual.
3. Completion of all work must be recorded in the logbook.
4. In case of doubt, contact Diamond Aircraft Industries Inc.

**EXECUTION REPORT TO
SERVICE BULLETIN
MSB 62-042 REV. 1**

AIRPLANE DATA

Airplane serial number _____
Airplane registration _____
Airplane operator _____
Hours of operation of airplane (TSN) _____
Typical operation of airplane private, club, training, other: _____

MAINTENANCE DATA

Date of maintenance _____
Maintenance carried out by _____
During scheduled inspection? Yes No

Name Signature Date

Please e-mail the completed form to Techpubs@diamondaircraft.com.

WORK INSTRUCTION WI-MSB 62-042 REV. 1
SUPERSEDES WI-MSB 62-042 REV. 0

I GENERAL INFORMATION

I.1 Subject

Rudder rib hole size correction.

ATA-Code: 55-40

I.2 Reference Documents

DA 62 Series Airplane Maintenance Manual, Doc. No. 7.02.25, latest effective issue.

I.3 Remarks

1. All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic.
2. All work, in particular which is not especially described in this work instruction, must be done in accordance with the referenced maintenance manual.
3. In case of doubt, contact Diamond Aircraft Industries Inc.

II DRAWINGS, SPECIAL TOOLS & MATERIALS

II.1 Drawings

None.

II.2 Special Tools

None.

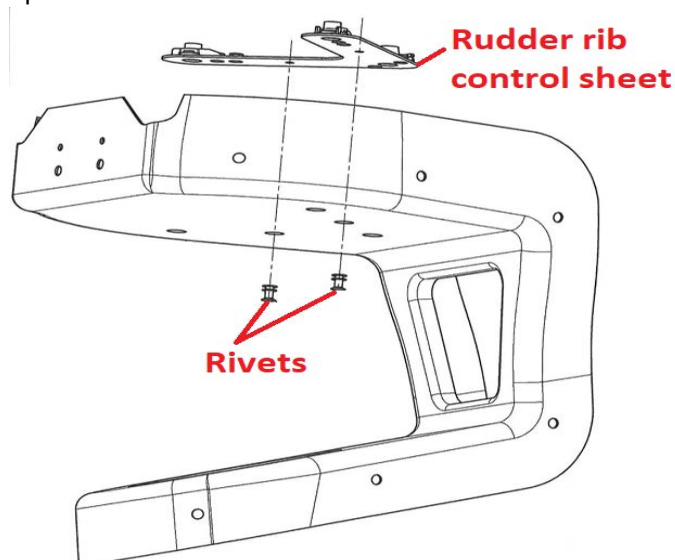
II.3 Material

Item	Quantity	Part Number	Description
1	3	BU6-8-6-0100-C	Bushing
2	A/R	Hysol EA934 NA	Paste adhesive
2a (ALT)	A/R	Hysol EA 9359.3	Paste adhesive
2b (ALT)	A/R	RIM 935 / Hardener RIMH937	Epoxy resin
2c (ALT)	A/R	L285 / Hardener - H286	Epoxy resin
3	2	ISO 15978-3,2x10	Countersunk blind rivet
3a (ALT)	2	ISO 15978-3,2x11	Countersunk blind rivet

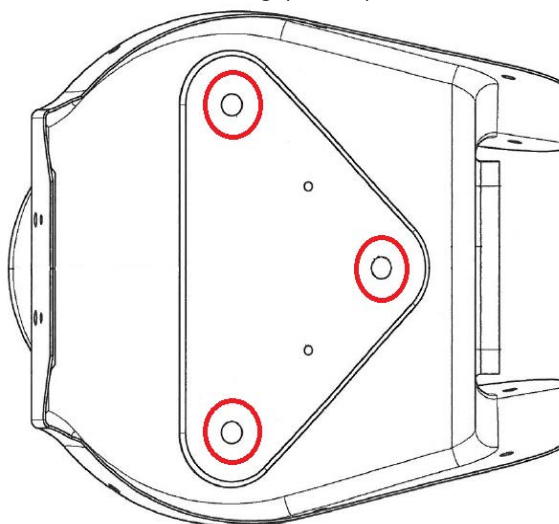
NOTE: The bushings (item 1) have the option to be fabricated rather than purchased. Refer to Section III.1 for bushing fabrication instructions.

III INSTRUCTIONS

1. Remove the Rudder Assembly. Refer to AMM Section 55-40.
2. Measure the diameter of the 3 holes in the rudder rib layup. If the measurement is within 6-6.2 mm, proceed to step 11. If not, proceed to step 3.
3. Drill out the rivets that attach the rudder rib control sheet.
4. Remove and keep the rudder rib control sheet.



5. Carefully drill to increase the diameter of the 3 holes in the rudder rib layup to a maximum of 1 mm larger than the diameter of the bushing (Item 1).



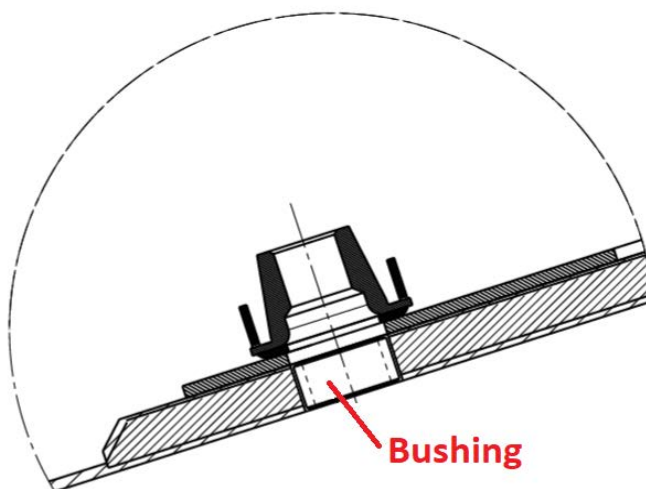
Rudder Rib Holes

6. Measure the composite thickness.
7. Adjust the length of the bushing (Item 1 or fabricated) to be 0.4-0.8 mm shorter than the composite thickness.
8. Prepare the surfaces for bonding as follows:
 - A. Lightly abrade the holes and bushings bonding surfaces.
 - B. Clean the surfaces from dirt or any contaminant. Surface should be solvent wiped and then wiped dry. Refer to AMM Section 51-30.
9. Bond the bushings (Item 1 or fabricated) inside the holes using one of the options below:

Adhesive/Resin	Cure Time
Hysol EA934 NA (item 2)	Cure for 5-7 days at room temperature OR Cure for 1 hour at 90° C
Hysol E9359.3 (item 2a)	Cure for 3 hours at 80° C
RIM 935 (item 2b) Hardener - RIMH937	Refer to manufacturer's data sheet
L285 (item 2c) Hardener - H286	Refer to manufacturer's data sheet

NOTE: Make sure the bushing is bonded 0.0-0.8 mm from surface on one of the sides of the composite. No protruding is allowed.

10. Reinstall the rudder control sheet using rivets (Item 3 or 3a).

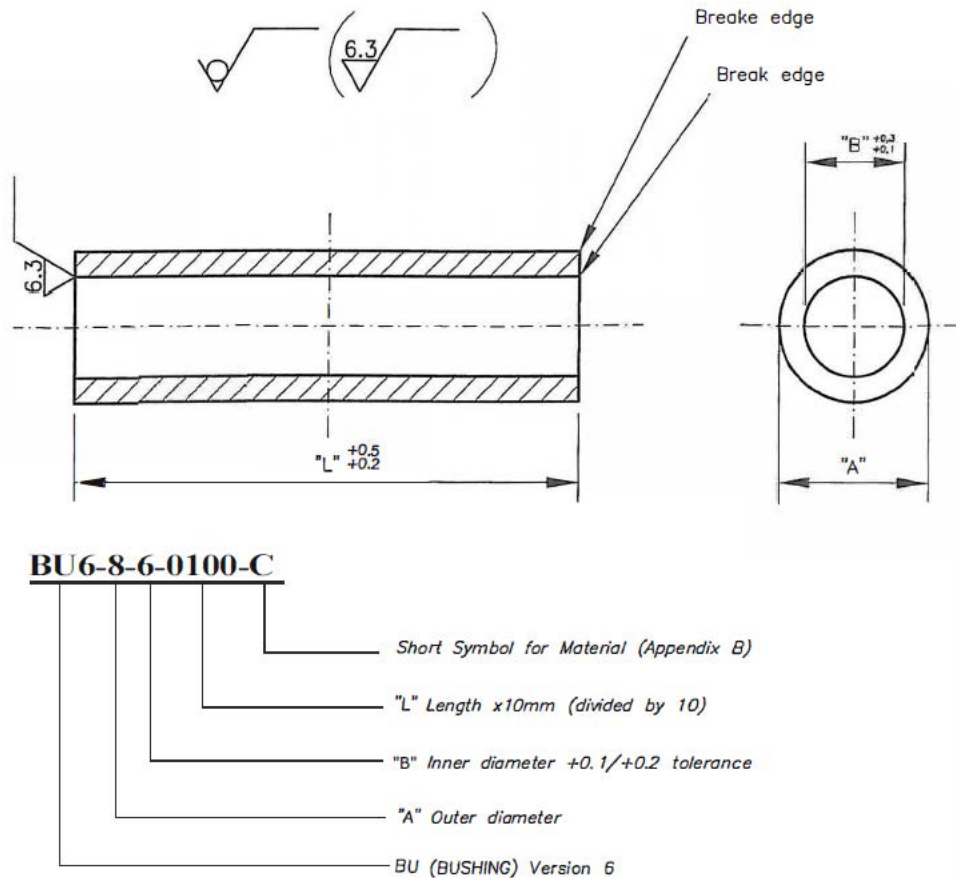


Rudder rib section view with bushing installed

11. Install the Rudder Assembly. Refer to AMM Section 55-40.
12. Clean the working area, and check for foreign objects.
13. Check all altered, replaced, repaired parts for proper function.
14. Test all systems in the working area for proper function.
15. Make all necessary entries in the logbooks.
16. Submit the execution report to Techpubs@diamondaircraft.com.

III.1 Bushing Fabrication (Optional)

17. Follow the bushing specs below for fabrication:



Bushing specs (dimensions in metric system)

18. Please refer to the table below for acceptable bushing materials:

NOTE: The letter 'C' in the bushing part number indicates that C1 through C4 are acceptable.

Appendix B: Table of Diamond Standard Materials

DS Letter	EN 10027-2 Description	North American Spec.	EN 10027-1 Description	Old Description	Material Group, -Name
C1	1.4301	A 276 Type 304, LNI AISI 304, UNS S 30403	X 5 CrNi 18 10	Niro	Stainless Steels, Technical delivery conditions for semi-finished products, bars, rods and sections for general purpose DIN EN 10088-3
C2	1.4544 = 1.4541	AISI 321, UNS S 32100	X 10 CrNiTi 18 10 = X6 CrNiTi 18 10		Stainless Steels, Technical delivery conditions for semi-finished products, bars, rods and sections for general purpose DIN EN 10088-3
C3	1.4305	A 276 Type 304, LNI AISI 304, UNS S 30403	X 5 CrNi 18 9	Niro	Stainless Steel
C4		17-4PH			Hard stainless steel with high strength, good corrosion resistance

To obtain satisfactory results, procedures specified in this service bulletin must be accomplished in accordance with accepted methods and current government regulations. Diamond Aircraft cannot be responsible for the quality of work performed in accomplishing the requirements of this service bulletin. Diamond Aircraft reserves the right to void continued warranty coverage in the area affected by this service bulletin if it is not incorporated.

If you no longer own the aircraft to which this service bulletin applies, please forward it to the current owner, and send the name of the current owner to Diamond Aircraft at the address below.

Diamond Aircraft Industries Inc.
1560 Crumlin Sideroad, London, Ontario, Canada
N5V 1S2

Customer Support:
Phone: (519) 457-4041, Fax: (519) 457-4045
E-mail: support-canada@diamondaircraft.com

Technical Publications:
E-mail: Techpubs@diamondaircraft.com