

MANDATORY SERVICE BULLETIN

MSB 50-013

I **TECHNICAL DETAILS**

I.1 **Category**

Mandatory.

I.1 **Airplanes affected**

Type: DA 50 C

Serial numbers: 50.C.A.A.007 through 50.C.A.A.033
50.C.A.A.035 through 50.C.A.A.038
50.C.A.A.040 through 50.C.A.A.050
50.C.A.A.052 through 50.C.A.A.054
50.C.A.A.057 through 50.C.A.A.060
50.C.A.A.062 through 50.C.A.A.074
50.C.A.A.076 through 50.C.A.A.077
50.C.A.A.079 through 50.C.A.A.081
50.C.Q.A.002

I.2 **Date of effectivity**

16-Sep-2025

I.3 **Time of Compliance**

Within 100 flight hours, but not later than 30-Sep-2026.

I.4 **Subject**

Replacement of the propeller de-ice brushes bracket bolts.

ATA-Code: 61-00

I.5 Reason

The effective thread length of the bolts that attach the propeller de-ice brushes bracket to the engine gearbox are shorter than specified by the engine manufacturer. This can cause tear out of the aluminum thread in gearbox housing and imperfect seal of the accessory drive cover and may subsequently lead to leakage of gearbox oil. This Service Bulletin describes replacement of these bolts with the right length as specified by the engine manufacturer as a precautionary action.

I.6 Concurrent Documents

None.

I.7 Approval

The technical information or instruction contained in this document relate to the Design Change Advisory No. OÄM 50-011/v, which has been approved under the authority of the DOA ref. EASA.21J.052.

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I.8 Accomplishments / Instructions

See WI-MSB 50-013, latest effective issue.

II Mass (Weight) and CG

The change in mass and CG is negligible.

II PLANNING INFORMATION

II.1 Material and Availability

See WI-MSB 50-013, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

0.5 hours.

II.4 Credit

For all Aircraft within warranty period:

- 0.5 hours of work.
- Material according to WI-MSB 50-013, latest effective issue.

II.5 Reference Documents

DA 50 C Airplane Maintenance Manual, Doc. No. 9.02.01, 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, particular that 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 log book.
4. If material and/or labor hours are subject to be credited through Diamond Aircraft Industries, the Service Bulletin must be done by an authorized Diamond Service Center within the time of compliance and the Warranty Application incl. Work Report must be sent not later than 30 days after completion of work.
5. In case of doubt contact Diamond Aircraft Industries GmbH.

EXECUTION REPORT TO SERVICE BULLETIN MSB 50-013

AIRPLANE INFORMATION

Airplane Serial Number _____

Airplane Registration _____

Airplane Operator _____

Hours of operation of airplane _____

Number of landings _____

Hours of operation – engine _____

Typical operation of airplane private, training, special mission, other

Date, Name, Sign

Submit the execution report to Diamond Aircraft Industries GmbH.

- Use preferably the electronic execution report via the Diamond Partner Portal.
 - Login to the Diamond Partner Portal <https://partners.diamondaircraft.com/>.
 - Search for the Aircraft (A/C):
 - Use the search field at the top, or
 - Navigate through the menu: Support > My Fleet, then open the A/C by clicking the link.
 - In the right section "Aircraft Action," click the button "Add Execution Report".
 - Choose "MSB 50-013".
 - Either create a new execution report or select a draft you previously created.
 - Save and then submit the execution report
- Alternatively send the execution report to executionreports@diamondaircraft.com.

Keep a copy of the execution report in the aircraft log.

WORK INSTRUCTION

WI-MSB 50-013

I GENERAL INFORMATION

I.1 Subject

Replacement of the propeller de-ice brushes bracket bolts.

I.2 Reference Documents

DA 50 C Airplane Maintenance Manual, Doc. No. 9.02.01, latest effective issue.

Goodrich Installation and Maintenance Manual for Prop De-Icing System ATA 30-60-02

I.3 Remarks

- a) All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic.
- b) All work, in particular if not described in this work instruction, must be done in accordance with the referenced maintenance manual.
- c) For conversion factors between SI units and US/Imperial units refer to AMM, Chapter 02.
- d) In case of doubt, contact Diamond Aircraft Industries GmbH.

II DRAWINGS, SPECIAL TOOLS & MATERIALS

II.1 Drawings

None.

II.2 Special Tools

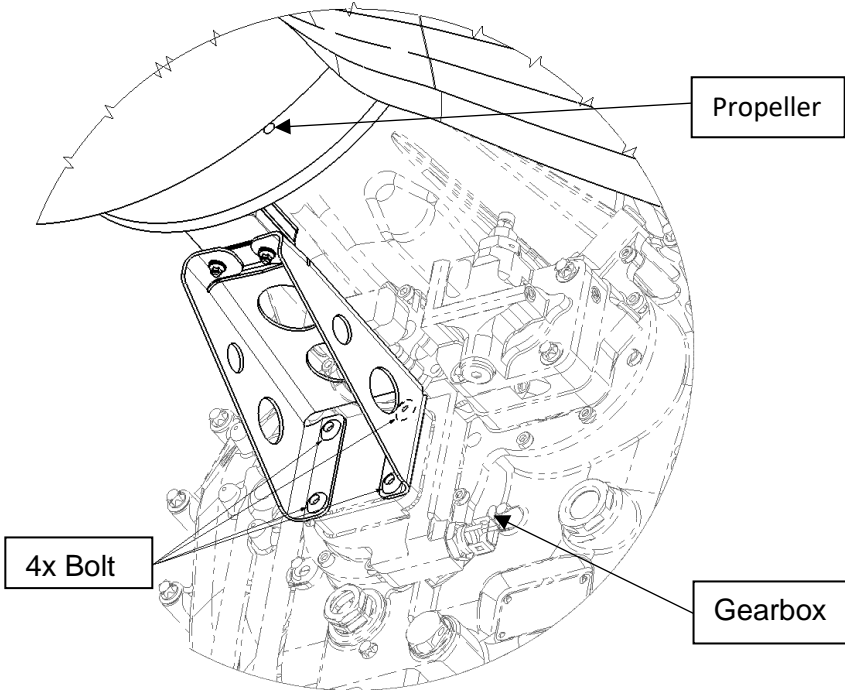
None.

II.3 Material

| Quantity | Part Number | Description |
|----------|------------------------|---------------------------------|
| 4 | ISO7380-M8x16-10.9-BZP | Hexagon Socket Button Head Bolt |

Material is available from Diamond Aircraft Industries.

III INSTRUCTIONS

| | |
|---|---|
| 1 | Remove the engine cowlings. Refer to AMM Section 71-10. |
| 2 | <p>Replace each of the 4 bolts that attach the propeller de-ice brushes bracket to the gearbox, one by one, with the ISO7380-M8x16-10.9-BZP bolts.</p> <ul style="list-style-type: none"> • Replace on bolt at a time • Apply Loctite 243 (or equivalent) to the bolts.  |
| 3 | Torque the bolts to 20 Nm \pm 2 Nm. |
| 4 | Clean working areas, check for foreign objects. |
| 5 | Check all altered, replaced, repaired parts for proper function. |
| 6 | Check adjustment of brush assembly position and brush alignments to the slip rings, acc. Goodrich Manual. |
| 7 | Install the engine cowlings. Refer to AMM, Section 71-10. |
| 8 | Test all systems in working area for function. |
| 9 | Do all necessary entries in the airplane logs. |