

MANDATORY SERVICE BULLETIN

MSB 42-148

MSB 42NG-094

I TECHNICAL DETAILS

I.1 Category

Mandatory

I.1 Airplanes affected

Type: DA 42, DA 42 M, DA 42 NG, DA 42 M-NG

Serial numbers: 42.004 through 42.427
42.AC001 through 42.AC151
42.M001 through 42.M026
42.N001 through 42.N268
42.N270 through 42.N274
42.N300 through 42.N537
42.NC001 through 42.NC007
42.MN001 through 42.MN112
42.NW001 and subsequent

I.2 Date of effectivity

11-Feb-2025

I.3 Time of Compliance

Within 200 flight hours, but not later than 28-Feb-2026.

I.4 Subject

Replacement of the main landing gear (MLG) and nose landing gear (NLG) retaining rings.

ATA-Code: 32-00

I.5 Reason

It was discovered that the main and nose landing gear braces of some aircraft had retaining rings with insufficient level of corrosion resistance being installed. This may cause the retaining rings to corrode, sustain damage, or fail (crack). If not corrected, this may lead to failure of the landing gear. This Service Bulletin describes the replacement of those retaining rings.

I.6 Concurrent Documents

None.

I.7 Approval

The technical information or instruction contained in this document relate to the Design Change Advisory No. MÄM 42-1285/b, which has been approved under the authority of the DOA ref. EASA.21J.052.

The technical content of this document has been approved under the authority of the DOA ref. EASA.21J.052.

I.8 Accomplishments / Instructions

See WI-MSB 42-148 / WI-MSB 42NG-094 latest effective issue.

II Mass (Weight) and CG

Mass and Center of Gravity are not affected.

II PLANNING INFORMATION

II.1 Material and Availability

See WI-MSB 42-148 / WI-MSB 42NG -094, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

Approx. 1 hour.

II.4 Credit

Material according to WI-MSB 42-148 / WI-MSB 42NG-094, latest effective issue.

II.5 Reference Documents

DA 42 Series Airplane Maintenance Manual, Doc. No. 7.02.01, latest effective issue.

DA 42 NG Airplane Maintenance Manual, Doc. No. 7.02.15, 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 is 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 42-148 MSB 42NG-094

AIRPLANE INFORMATION

Airplane Serial Number _____

Airplane Registration _____

Airplane Operator _____

Hours of operation of airplane _____

Number of landings _____

Hours of operation – engine LH _____

 RH _____

Typical operation of airplane private, club, training, other _____

Date, Name, Sign

Please send the completed form
to executionreports@diamondaircraft.com

WORK INSTRUCTION

WI-MSB 42-148

WI-MSB 42NG-094

I GENERAL INFORMATION

I.1 Subject

Replacement of the main landing gear (MLG) and nose landing gear (NLG) retaining rings.

I.2 Reference Documents

DA 42 Series Airplane Maintenance Manual, Doc. No. 7.02.01, latest effective issue.

DA 42 NG Airplane Maintenance Manual, Doc. No. 7.02.15, latest effective issue.

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

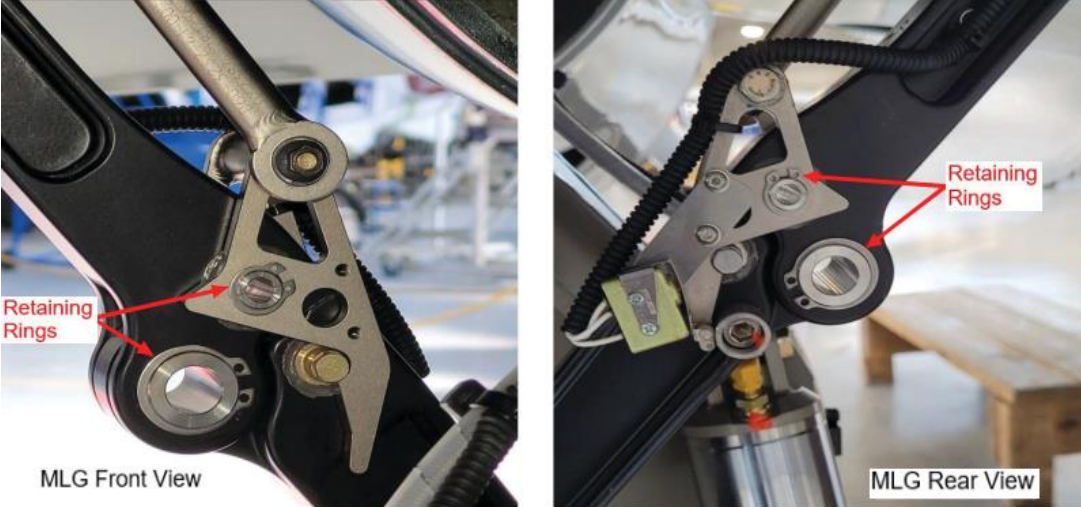
None.

II.3 Material

Quantity	Part Number	Description
4	DIN471-10-MZP	DIN 471-10x1.0-MZP, Retaining ring (MLG Brace Assy LH and RH)
4	DIN471-20-MZP	DIN 471-20x1.2-MZP, Retaining ring (MLG Brace Assy LH and RH)
2	DIN471-18-MZP	DIN 471-18x1.2-MZP, Retaining ring (NLG Brace Assy)
2	DIN471-10-MZP	DIN 471-10x1.0-MZP, Retaining ring (NLG Brace Assy)

Material is available from Diamond Aircraft Industries.

III INSTRUCTIONS

1	Pull and tag the GEAR circuit breaker to prevent inadvertent landing gear operation.
2	<p>Locate the retaining rings. See Figure 1 for MLG locations and Figure 2 for NLG locations.</p>  <p style="text-align: center;">Figure 1: MLG Retaining Rings</p>

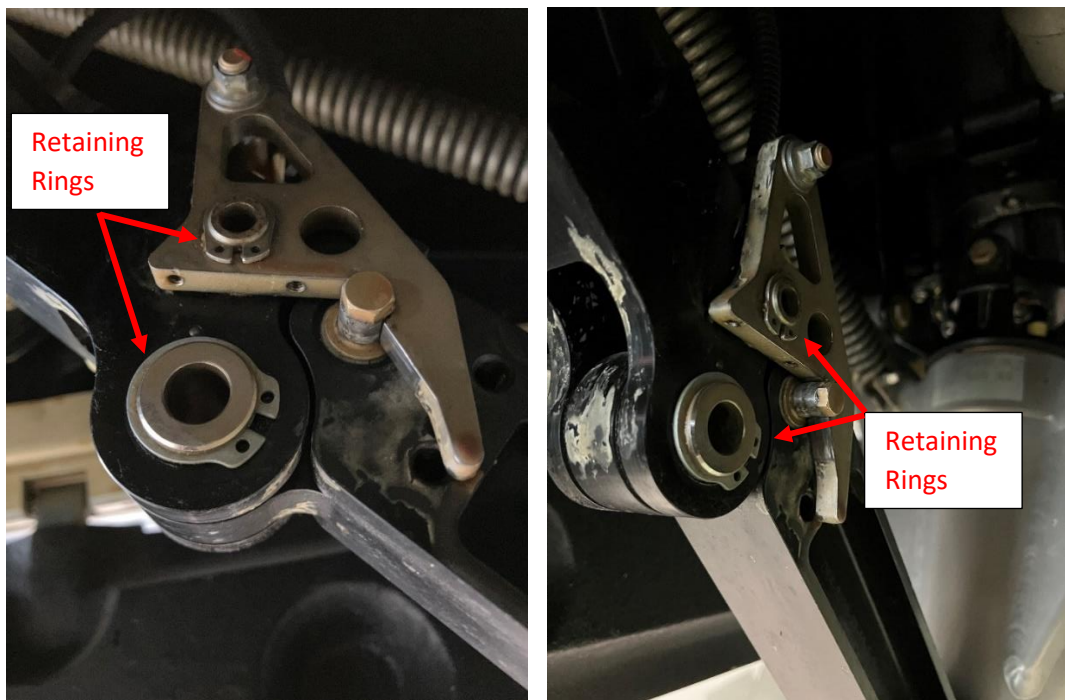


Figure 2: NLG Retaining Rings

3	Replace one retaining ring at a time.
4	Remove the retaining rings from the MLG legs and NLG leg as per the figures. (Refer to Figures 1 and 2 for location)
5	<p>CAUTION: Do not remove or move shafts while replacing retaining rings:</p> <p>Clean the grooves of the bearing shafts. Inspect the folding stay and bearing shafts for general condition before installing the new retaining rings.</p> <p>NOTE: If for any reason the folding stay, and/or the bearing shaft needs to be removed for repair / replacement / further inspection, perform work in accordance with AMM section 32-00, then proceed to step 6.</p>
6	<p>NOTE: Do not overstretch the retaining rings during installation. Open the rings only enough to fit over the shaft when installing.</p> <p>Install the new retaining rings. Make sure the retaining rings properly engage into the grooves of the bearing shafts.</p>
7	Clean working areas, check for foreign objects.
8	Check all altered, replaced, repaired parts for proper function.
9	Apply anti-corrosion coating. Refer to AMM Section 12-30-00.
10	Set the GEAR circuit breaker.
11	Test all systems in working area for function.
12	Do all necessary entries in the airplane logs.