

MANDATORY SERVICE BULLETIN

MSB 42NG-024

I TECHNICAL DETAILS

I.1 Category

Mandatory.

I.2 Airplanes affected

Type: DA 42 NG, DA 42 M-NG

Serial numbers: 42.N001 through 42.N031, 42.N034, 42.N035, 42.N038, 42.N039,
42.N041 through 42.N047,
42.MN001 through 42.MN018,
Airplanes converted to DA 42 NG and DA 42 M-NG using WI-OSB
42-068 up to Rev. 9

I.3 Date of effectivity

14-Nov-2011

I.4 Time of Compliance

Within 200 flight hours, but not later than 31-Dec-2012.

I.5 Subject

Removal of LH aft safety rope and inspection of engine mount.

ATA-Code: 71-20

I.6 Reason

In one case chafing marks of the LH aft safety rope on the engine mount were observed. Diamond has conducted further analysis and tests, in which it was shown, that the LH aft safety rope can be removed. In addition to the removal of the safety rope the engine mount must be inspected for chafing marks.

I.7 Concurrent Documents

None.

I.8 Approval

The technical information or instructions contained in this document relate to the Design Change Advisory No. MÄM 42-548, which has been approved under the authority of EASA Design Organization Approval ref. EASA.21J.052.

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

I.9 Accomplishments / Instructions

Comply with WI-MSB 42NG-024, latest effective issue.

Note: WI-MSB 42NG-024 is attached to this document.

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 42NG-024, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

Approx. 1 hour for removal and inspection.

II.4 Credit

For all AC within warranty period:

- 1 hour of labour effort.
- Material according to WI-MSB 42NG-024, latest effective issue.

II.5 Reference Documents

Diamond Aircraft 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, in particular that work 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 carried out by an authorized Diamond Service Center and the Warranty Application incl. Work Report must be sent not later than 30 days after the end of time of compliance.
5. In case of doubt contact Diamond Aircraft Industries GmbH.

EXECUTION REPORT TO SERVICE BULLETIN MSB 42NG-024

AIRPLANE DATA

Airplane Serial Number _____

Airplane Registration _____

Airplane Operator _____

Hours of operation of airplane _____

No. of landings _____

Hours of operation-engine LH _____

RH _____

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

Date, Name, Sign

Please fax the completed form to Fax No. +43-2622-26700-1369 or e-mail to
airworthiness@diamond-air.at

WORK INSTRUCTION

WI-MSB 42NG-024

Removal of LH aft safety rope

I GENERAL INFORMATION

I.1 Subject

Removal of LH aft safety rope and inspection of engine mount.

I.2 Reference Documents

Diamond Aircraft DA 42 NG Series 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
2	LN 9338-08	Hexagon nut self locking
2	LN 9037-08 020	Hexagon bolt
2	LN 9037-08 030	Hexagon bolt

Material is available from Diamond Aircraft Industries.

III INSTRUCTIONS

1	Remove LH cowlings (refer to AMM Chapter 71).
2	Remove items 17, 24, 35 and 40 (refer to figure 1). Note: Re-use washers (item 27).

VIEW EMA AFT LH
Figure 1

3 Install bolts i.a.w. figure 2. Secure bolt 38 with Loctite 243. Mark connections with torque seal.

Item	P/N	Description
27	LN 9025-0610K	Washer (Re-use washers removed previously)
33	LN 9037-08 030	Hexagon bolt
38	LN 9037-08 020	Hexagon bolt
47	LN 9338-08	Hexagon nut

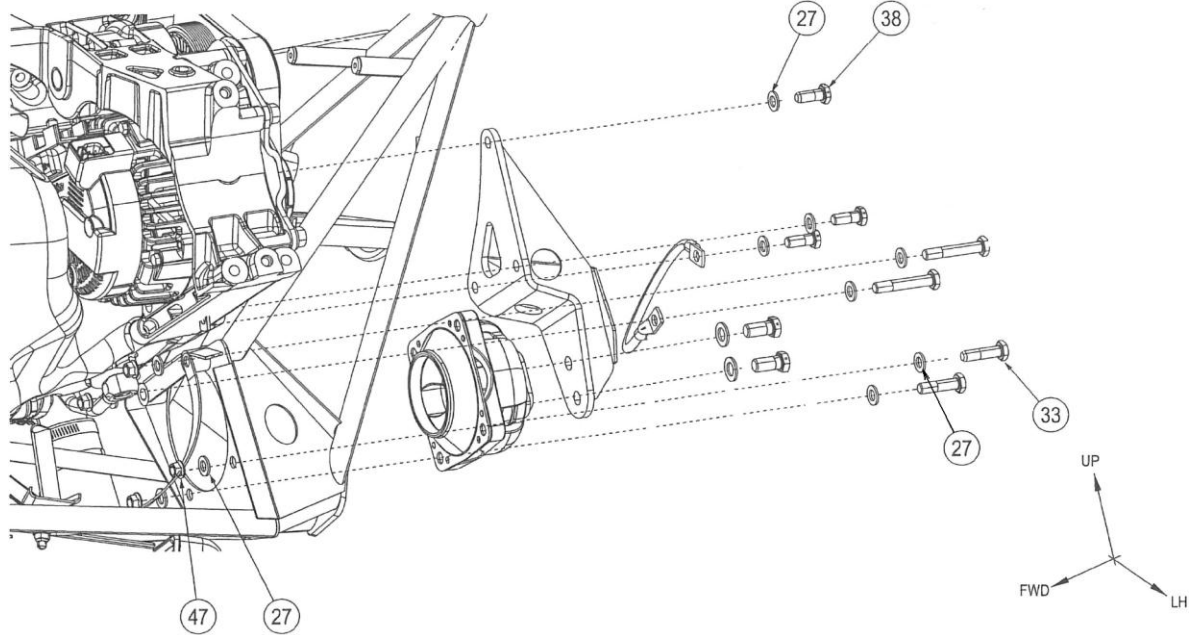


Figure 2

4 Inspect Engine Mount in Area where the safety rope was attached:

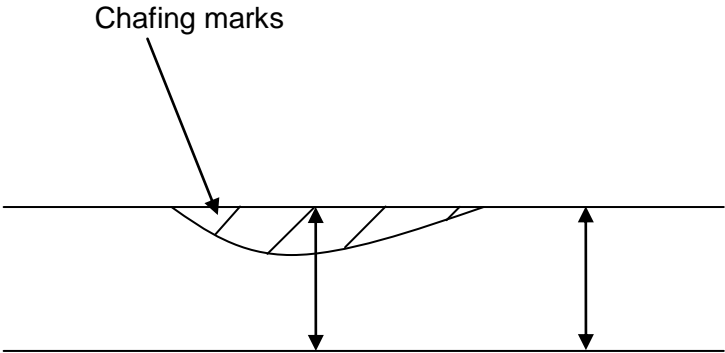
Visually inspect engine mount in marked area for chafing marks (refer to figure 3).

Note Especially inspect tube side facing away.

If chafing marks are found proceed with step 5. Otherwise proceed with step 8.



Figure 3

5	<p>If chafing marks are found:</p> <p>Measure the diameter of the engine mount tube at the smallest diameter (including notches) at the chafing marks: _____ mm</p> <p>Measure the diameter of the engine mount tube 25 mm away from the chafing marks: _____ mm</p> <p>If the difference is more than 0.6 mm, contact Diamond Aircraft Industries for further instructions.</p> <p>If the difference is 0.6 mm or less, proceed with the next steps.</p> <div style="text-align: center;">  <p>Figure 4</p> </div>
6	<p>Carefully sand off all notches. Repeat measurement of item 5. The difference must still be 0.6 mm or less.</p>
7	<p>Cover area where the powder coating of the engine mount is damaged: Clean the surface with clean solvent. Apply aviation zinc phosphate primer or equivalent.</p> <p>Note Cover surrounding surfaces prior to application of the primer.</p> <p>Let the primer dry i.a.w. the manufacturer's instructions.</p>
8	<p>Install cowlings (refer to AMM Chapter 71).</p>
9	<p>Repeat steps 1 through 8 on the RH side.</p>
10	<p>Clean working areas, check for foreign objects.</p>
11	<p>Check all altered, replaced, repaired parts for proper function.</p>
12	<p>Test all systems in working area for function.</p>
13	<p>Make all necessary entries in the airplane logs.</p>