

MANDATORY SERVICE BULLETIN

MSB 42NG-082

I TECHNICAL DETAILS

I.1 Category

Mandatory.

I.2 Airplanes affected

Type: DA 42 NG, DA 42 M-NG
Serial numbers: 42.N241 through 42.N254,
42.N300 through 42.N393,
42.N395 through 42.N399,
42.MN050, 42.MN053, 42.MN054,
42.MN055, 42.MN057, 42.MN058,
42.MN100,
42.MN104 through 42.MN108

I.3 Date of effectivity

07-Jul-2020

I.4 Time of Compliance

During the next 100 flight hours from the date of effectivity, but not later than 31-Jul-2021.

I.5 Subject

Cut-out in rudder gap cover.

ATA-Code: 55-40

I.6 Reason

Diamond Aircraft Industries have received reports of chafing marks on the rudder control cables on some airplanes. The chafing marks could be traced back to insufficient clearance between the rudder gap covers and the rudder control cables in the area where the rudder control cable thimbles are connected to the rudder mounting bracket.

This Service Bulletin prescribes to inspect the rudder control cables and to enlarge the cut-out of the rudder gap covers to avoid interference and chafing between rudder gap covers and rudder control cables.

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 42-1167, 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 the DOA ref. EASA.21J.052.

I.9 Accomplishments / Instructions

See WI-MSB 42NG-082, latest effective issue.

I.10 Mass (Weight) and CG

Mass and Center of Gravity are not affected.

II PLANNING INFORMATION

II.1 Material and Availability

See WI-MSB 42NG-082, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

Approx. 0.5 hours.

II.4 Credit

For all airplanes within warranty period.

II.5 Reference Documents

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. A tolerance on the flight hours in the time of compliance in the same amount as on the corresponding scheduled maintenance inspection i.a.w. AMM Section 05-10 applies.
3. All work, in particular that which is not especially described in this Service Bulletin, must be done in accordance with the referenced Maintenance Manual.
4. Completion of all work must be recorded in the log book.
5. 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.
6. In case of doubt contact Diamond Aircraft Industries GmbH.

EXECUTION REPORT TO SERVICE BULLETIN MSB 42NG-082

AIRPLANE INFORMATION

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 _____

Chafing marks found on the rudder control cables: no yes_____
Date, Name, SignPlease e-mail the completed form to executionreports@diamondaircraft.com

WORK INSTRUCTION

WI-MSB 42NG-082

I GENERAL INFORMATION

I.1 Subject

Cut-out in rudder gap cover.

I.2 Reference Documents

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

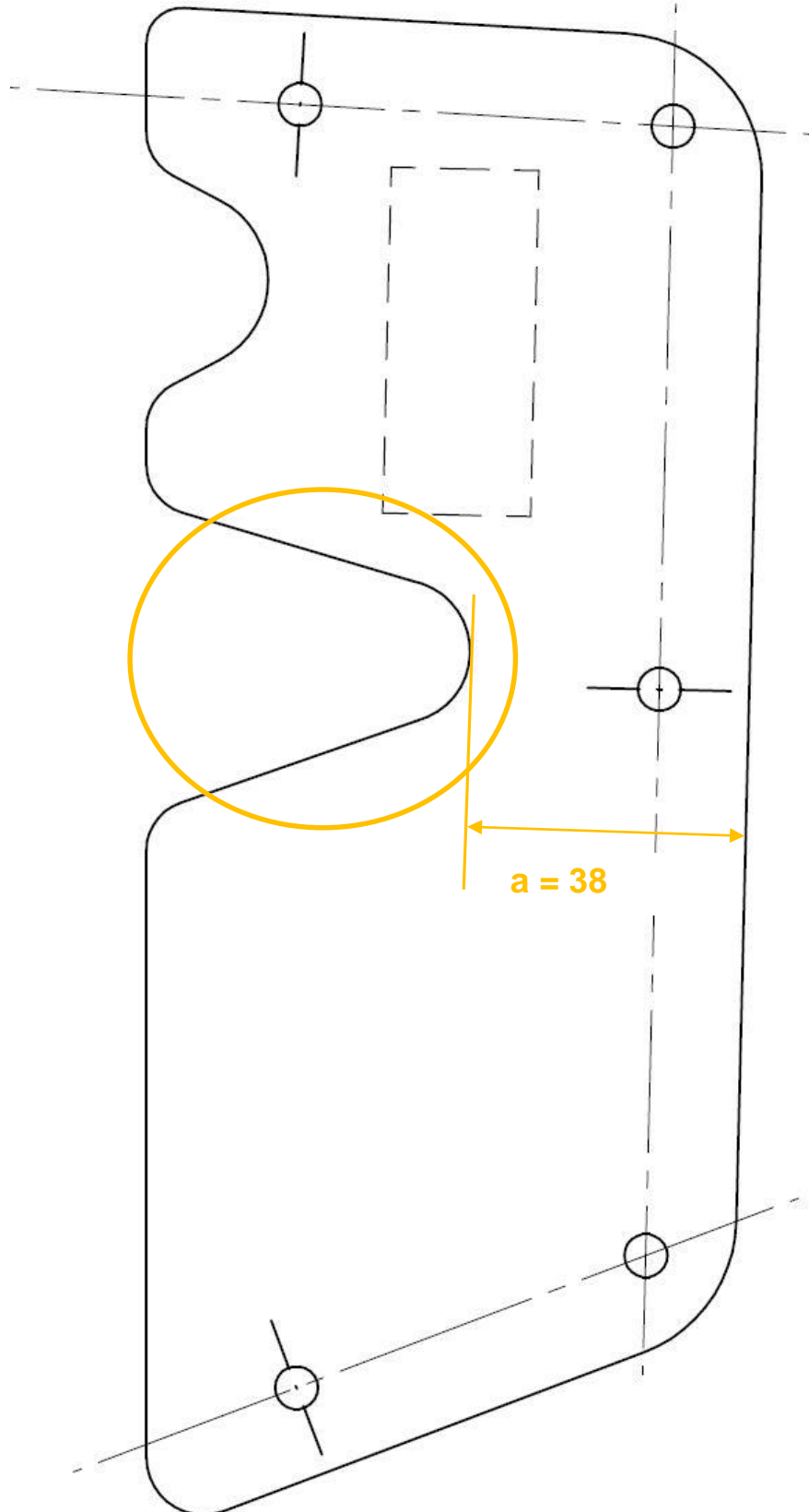
None.

III INSTRUCTIONS

1	Remove both rudder gap covers from the rudder.
2	Examine the rudder control cables in accordance with FAA AC 43.13-1B, paragraph 7-149. Replace rudder control cables, if necessary.
3	<p>Use the template in Appendix A for enlarging the cut-out of the left hand (LH) rudder gap cover in the area marked by the circle.</p> <ul style="list-style-type: none"> • Extend the cut-out up to the line that is marked by the distance a. • Trial-install the LH rudder gap cover to the rudder. • Move the rudder to full deflection in both directions and check the clearance between the LH rudder control cable / rudder control cable thimble and the LH rudder gap cover. • Make sure, there is a minimum clearance of 2 mm in any rudder position. If necessary, extend the cut-out of the LH rudder gap cover in the area where the clearance is less than 2 mm.
4	<p>Use the template in Appendix B for enlarging the cut-out of the right hand (RH) rudder gap cover in the area marked by the circle.</p> <ul style="list-style-type: none"> • Extend the cut-out up to the line that is marked by the distance b. • Trial-install the rudder gap cover to the rudder. • Move the rudder to full deflection in both directions and check the clearance between the RH rudder control cable / rudder control cable thimble and the RH rudder gap cover. • Make sure, there is a minimum clearance of 2 mm in any rudder position. If necessary, extend the cut-out of the RH rudder gap cover in the area where the clearance is less than 2 mm.
5	<p>Install both rudder gap covers to the rudder.</p> <div style="display: flex; justify-content: space-around;">   </div>

6	Clean working areas, check for foreign objects.
7	Check all altered, replaced, repaired parts for proper function.
8	Test all systems in working area for function.
9	Make all necessary entries in the airplane logs.

Appendix A - Template for enlarging the cut-out of the LH rudder gap cover



Appendix B - Template for enlarging the cut-out of the RH rudder gap cover

