

OPTIONAL SERVICE BULLETIN

OSB 42-114

OSB 42NG-054

I TECHNICAL DETAILS

I.1 Category

Optional.

I.2 Airplanes affected

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

Serial numbers: 42.004 through 42.084

I.3 Date of effectivity

19-May-2015

I.4 Time of Compliance

At owner's discretion.

I.5 Subject

Installation of maintenance access holes in the elevator.

ATA-Code: 55-20 Elevator

I.6 Reason

Maintenance Access holes for simplified maintenance and replacement of the intermediate hinges of the elevator have been introduced in production. This Service Bulletin makes those access holes available for DA 42 series aircraft prior to this change.

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 42-126, 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

See WI-OSB 42-114 / WI-OSB 42NG-054, latest effective issue.

I.10 Mass (Weight) and CG

No change.

II PLANNING INFORMATION**II.1 Material and Availability**

See WI-OSB 42-114 / WI-OSB 42NG-054, latest effective issue.

II.2 Special Tools

See WI-OSB 42-114 / WI-OSB 42NG-054, latest effective issue.

II.3 Labour Effort

Approx. 3 hours.

II.4 Credit

None.

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, in 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. In case of doubt contact Diamond Aircraft Industries GmbH

**EXECUTION REPORT TO
SERVICE BULLETIN
OSB 42-114
OSB 42NG-054**

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 _____

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

WORK INSTRUCTION

WI-OSB-42-114

WI-OSB-42NG-054

I GENERAL INFORMATION

I.1 Subject

Installation of maintenance access holes in the elevator.

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 that which is not explicitly described in this work instruction, must be done in accordance with the referenced maintenance manual.
- c) In case of doubt, contact Diamond Aircraft Industries.

II DRAWINGS, SPECIAL TOOLS & MATERIALS

II.1 Drawings

None.

II.2 Special Tools

Ring saw Ø 25mm (1 in.)

II.3 Material

Quantity	Description	Part No.
50 g	LR 285 / LH 286 Resin system	i.a.w. AMM Section 51-30
a.r.	Cotton Flakes	i.a.w. AMM Section 51-30
a.r.	Aerosil	i.a.w. AMM Section 51-30
4	Blanking Plug	245-032

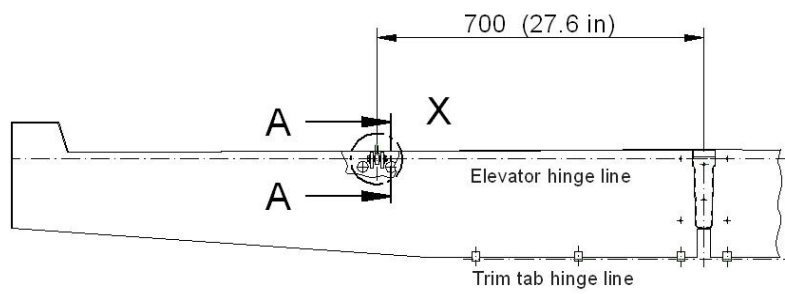
Material is available from Diamond Aircraft Industries.

III INSTRUCTIONS

CAUTION Always observe safety precaution i.a.w. AMM Section 51-20.

1	Remove elevator i.a.w. AMM Section 55-20.
2	Drill the 4 holes i.a.w. sketch 1.
4	Remove foam core (5-7 mm or 0.2 to 0.25 in.) at the edge of the holes in the elevator lower shell.
5	Fill the gap with thickened resin i.a.w. AMM Section 51-20.
6	Precure the thickened resin i.a.w. AMM Section 51-20.
7	Post-cure the elevator repair 12 hrs. at min. 60 °C (140 °F).
8	Install the blanking plugs in the elevator access holes and check for proper fit, i.a.w. sketch 1 (Detail X).
9	Make an evaluation of the new weight and residual moment of the control surface i.a.w. AMM Section 51-60.
10	Install elevator i.a.w. AMM Section 55-20.
11	Clean working area and check for foreign objects.
12	Perform functional check of altered, repaired and new parts.
13	Test all systems in working area for function.
14	Make necessary entries into aircraft logs.

Sketch 1



Section A-A

Detail X

