

OPTIONAL SERVICE BULLETIN

OSB 42NG-029

I TECHNICAL DETAILS

I.1 Category

Optional.

I.2 Airplanes affected

Type: DA 42 NG, DA 42 M-NG
Serial numbers: 42.N012 through 42.N017, 42.N019 through 42.N050,
42.NC001, 42.MN003 through 42.MN024,
Airplanes converted to DA 42 NG and DA 42 M-NG using WI-OSB
42-068 Rev. 3 through Rev. 9,
Airplanes with OSB 42-013 installed

I.3 Date of effectivity

10-May-2012

I.4 Time of Compliance

At owner's discretion.

I.5 Subject

Installation of fire protection patches on cowling and nacelle.

ATA-Code: 71-00

I.6 Reason

Diamond Aircraft has developed fire protection patches, which can be installed instead of the fire protection paint aft of the cowling outlets. These patches are now available for retrofit with this Service Bulletin.

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 42-494/d, 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-OSB 42NG-029, latest effective issue.

I.10 Mass (Weight) and CG

The change in mass and CG is negligible.

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

See WI-OSB 42NG-029, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

Approx. 3 hours.

II.4 Credit

None.

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. All work, particular those that are 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.



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EXECUTION REPORT TO SERVICE BULLETIN OSB 42NG-029

AIRPLANE DATA

Airplane Serial Number: _____

Airplane Registration: _____

Airplane Operator: _____

Hours of operation of airplane: _____

No. of landings: _____

Hours of operation-engine _____

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-OSB 42NG-029

I GENERAL INFORMATION

I.1 Subject

Installation of fire protection patches aft of cowling outlets.

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.
- e) This Service Bulletin does not include installation of decorative sticker on the fire protection patches previously installed.

II DRAWINGS, SPECIAL TOOLS & MATERIALS

II.1 Drawings

None.

II.2 Special Tools

None.


II.3 Material



| Quantity | Part Number | Description |
|----------|---------------------|---|
| 1 | D64-5742-29-00_1 | Fuel tank cap assy RH (if aux tank (OÄM 42-056) is not installed) |
| 1 | D64-5442-10-00 | Fuel tank cap assy RH (if aux tank (OÄM 42-056) is installed) |
| 4 | DIN 985-M3-A2 | Selflocking hexagon nut (if aux tank (OÄM 42-056) is installed) |
| 1 | D64-5711-24-00 | Fire protection patch Nacelle LH |
| 1 | D64-5712-24-00-SB | Fire protection patch Nacelle RH |
| 1 | D64-7116-12-04 | Fire protection patch cowling B LH |
| 1 | D64-7116-22-03-SB | Fire protection patch cowling B RH |
| 1 | Rotabond 2000 Weiss | Rotabond 2000 white adhesive 290 ml cartridge |
| 12 | DIN 985-M3-A2 | Hexagon nut self-locking |

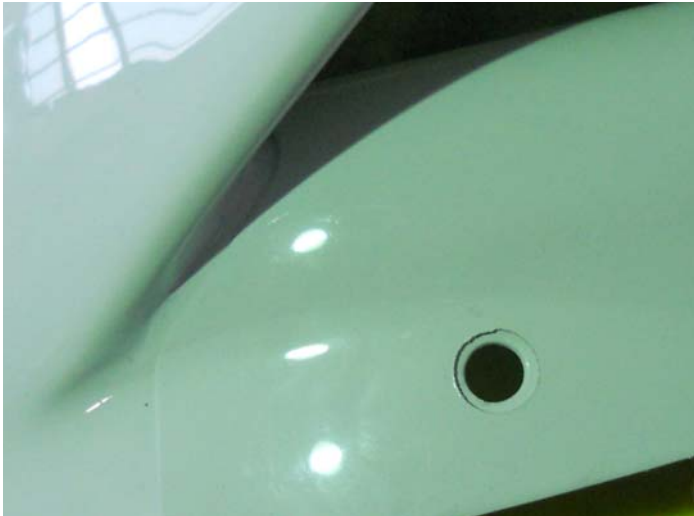
Material is available from Diamond Aircraft Industries.


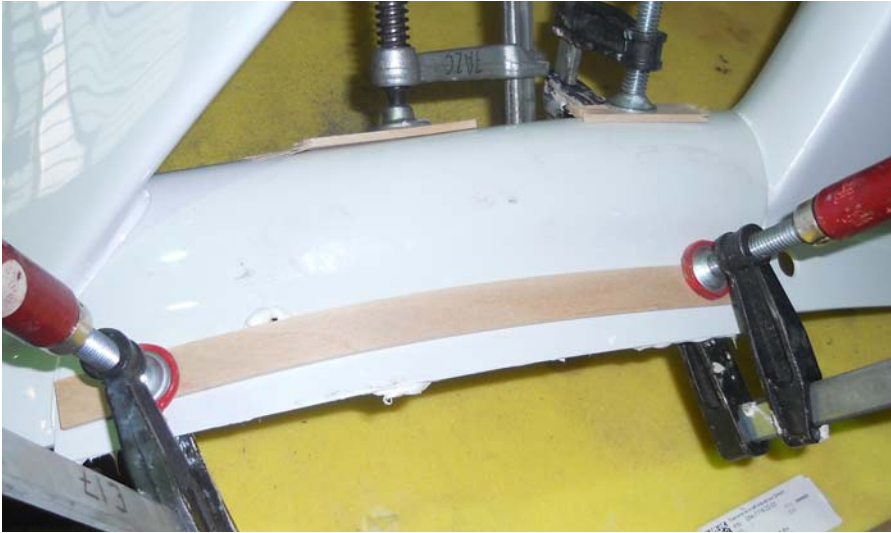
III INSTRUCTIONS

Note Unless otherwise indicated all steps refer to both LH and RH side

| Nacelle | |
|----------------|--|
| 1 | Remove cowlings (refer to AMM Section 71-10) |
| 2 | <p>Trial fit nacelle patches and cutout (RH only) for aux tank filler. Align upper edge to nacelle contour. Mark outline with masking tape.</p>  |

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| 3 | <p>If aux tank (OÄM 42-056) is installed: Replace RH aux fuel tank cap with P/N D64-5442-10-00. If aux tank (OÄM 42-056) is not installed: Replace filler cap with D64-5742-29-00_1. Use Rotabond 2000 for bonding.</p> |
| 4 | <p>Make sure the patches fit flush the front step. Trim if necessary.</p> |
| 5 | <p>Prepare bonding surface:</p> <ul style="list-style-type: none">• Remove decorative stickers within marked outline.• Remove fireproof paint. <p>Note Be careful not to damage the underlying structure.</p> <ul style="list-style-type: none">• Repaint, if necessary. Refer to AMM Chapter 51.• Clean surface with actone or equivalent.• Roughen up surface in outline. <p>Note If aux tank (OÄM 42-056) is installed, cover lock and hinges of fuel cap with masking tape.</p> |
| 6 | <p>Apply Rotabond adhesive to nacelle patches. Make sure there is a bond line around the edges.</p> <p>Note Gaps in the bond line will allow moisture to enter and reduce durability of the bonding.</p>  |
| 7 | <p>Install patch on nacelle. Apply pressure to the complete surface to make sure the bonding lines spread wide.</p> |
| 8 | <p>Wipe off surplus adhesive.</p>  |

| | |
|-----------------|---|
| 9 | Remove masking tape. |
| 10 | Clean with acetone or equivalent |
| 11 | Fix position with masking tape. Let the adhesive cure. |
| Cowlings | |
| 12 | Remove Cowling outlet grid. |
| 13 | Remove Camloc at aft cowling outlet. |
| 14 | Trial fit cowling patches and mark position of Camloc. |
| 15 | Cut hole for Camloc slightly larger than Camloc ring.  |
| 16 | Prepare bonding surface: <ul style="list-style-type: none">• Roughen up surface in outline.• Clean surface from dirt and grease. |

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| 17 | <p>Apply Rotabond 2000 adhesive to cowling patches.</p> <p>Note Gaps in the bond line will allow moisture to enter and reduce durability of the bonding.</p>  |
| 18 | <p>Install patch on cowling. Make sure all edges are sealed with adhesive.</p> |
| 19 | <p>Fix position with clamps. Let the adhesive cure.</p>  |
| 20 | <p>Clean surface with acetone or equivalent</p> |
| 21 | <p>Trim edge of edge to original edge of cowling.</p> |
| 22 | <p>Install Camloc.</p> |
| 23 | <p>Fit outlet grid, drill new holes and install outlet grid. Close old holes with Rotabond adhesive or thickened resin and touch up with paint.</p> |
| 24 | <p>Install cowling.</p> |

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| 25 | Clean working areas, check for foreign objects. |
| 26 | Check all altered, replaced, repaired parts for proper function. |
| 27 | Test all systems in working area for function. |
| 28 | Make all necessary entries in the airplane logs. |