

Model DA 40-180

OPTIONAL SERVICE BULLETIN NO. OSB 40-104 REV. 0

I TECHNICAL DETAILS

I.1 Category

Optional.

I.2 Airplanes Affected

Type: DA 40-180

S/N: 40.619 and prior.

I.3 Date of Effectivity

07 April 2025.

I.4 Time of Compliance

At owner's discretion.

I.5 Subject

Vertical stabilizer rivet nuts replacement by anchor nuts.

ATA-Code: 55-00, Vertical Stabilizer

I.6 Reason

The V-stab to H-stab faring is attached to V-stab at the trailing edge attachment points using rivet nuts. These rivet nuts are installed into V-stab composite structure. If these rivet nuts are not properly secured, they may disengage from the V-stab structure. This condition may lead to vibration in the tail-plane, affecting vertical and horizontal stability.

I.7 Concurrent Documents

None.

I.8 Approval

The technical content of this document is approved as part of the type design.

I.9 Accomplishment/Instructions

See WI-OSB 40-104, latest effective issue.

I.10 Mass (Weight) and CG

The change in mass and CG is negligible.

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II PLANNING INFORMATION

II.1 Material and Availability

See WI-OSB 40-104, latest effective issue.

II.2 Special Tools

None.

II.3 Labour Effort

Approximately 3.0 hours will be required to accomplish this service bulletin.

This estimate is for direct labour performed by a technician, and it does not include setup, planning, familiarization, cure time, part fabrication, or tool acquisition.

II.4 Credit

None.

II.5 Reference Documents

DA 40 Series Airplane Maintenance Manual, Doc. No. 6.02.01, 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 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 logbook.
- 4. In case of doubt, contact Diamond Aircraft Industries Inc.

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EXECUTION REPORT TO SERVICE BULLETIN OSB 40-104 REV. 0

	AIRPLANE DATA				
Airplane serial number					
Airplane registration					
Airplane operator					
Hours of operation of airplane (TSN)					
Typical operation of airplane	private, club, training, other:				
MAINTENANCE DATA					
Date of maintenance					
Maintenance carried out by					
During scheduled inspection?	Yes	No			
Name	Signature		Date		

Please submit the Execution Report through the Diamond Partner Portal at https://partners.diamondaircraft.com/



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WORK INSTRUCTION WI-OSB 40-104 REV. 0

I GENERAL INFORMATION

I.1 Subject

Vertical stabilizer rivet nuts replacement by anchor nuts.

ATA code: 55-00

I.2 Reference Documents

DA 40 Series Airplane Maintenance Manual, Doc. No. 6.02.01, latest effective issue.

I.3 Remarks

- 1. All work must be done by a certified aircraft service station or a certified aircraft maintenance mechanic.
- 2. All work, in particular which is not especially described in this work instruction, must be done in accordance with the referenced maintenance manual.
- 3. In case of doubt, contact Diamond Aircraft Industries Inc.

II DRAWINGS, SPECIAL TOOLS & MATERIALS

II.1 Drawings

None.

II.2 Special Tools

None.

II.3 Material

Item	Quantity	Part Number	Description
1	2	LN 29985-A05	Anchor nut
2	4	DIN 7337-B2,5x8,5	Blind rivet
3	4	ISO 7380-M5x16-A2	Hexagon socket screw
4	4	DIN 125-A5,3-PA	Washer

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III INSTRUCTIONS

1. Remove the 4 screws and 2 washers which attach the VS-HS fairing. Refer to Figure 1.

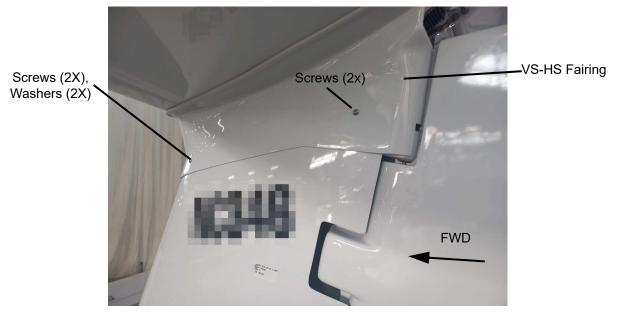
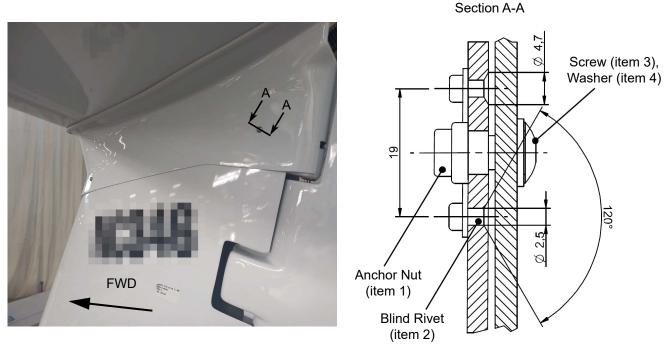


Figure 1. VS-HS fairing removal.

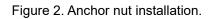
- 2. Remove the VS-HS fairing from the airplane.
- 3. Do an inspection of the V-stab to H-stab trailing edge attachment points on the V-stab.
- NOTE: If the aft attachment positions of the VS-HS fairing have anchor nuts, reinstall VS-HS fairing. No further action is required.
 - 4. Drill out and remove the 2 rivet nuts from the vertical stabilizer.
- NOTE: Make sure that the drilling is straight and the correct drill bit size is used to prevent increasing the diameter of the rivet holes.
 - 5. To install the 2 anchor nuts (item 1) at the same installation points of the rivet nuts, drill the vertical stabilizer to install the 4 blind rivets (item 2). Refer to Figure 2.

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Dimensions in mm



6. Install the 4 blind rivets (item 2) to attach the 2 anchor nuts (item 1) to the vertical stabilizer. Refer to Figures 2 and 3.

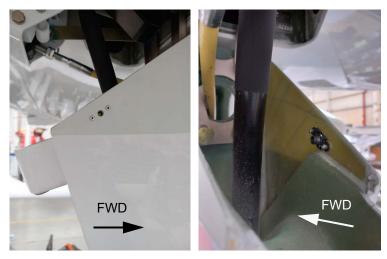


Figure 3. Anchor nuts installed on the vertical stabilizer



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 - 7. Put the VS-HS fairing in the installation position. Refer to Figure 4.
 - 8. Install the 4 screws (item 3) and the 4 washers (item 4). Refer to Figure 4.

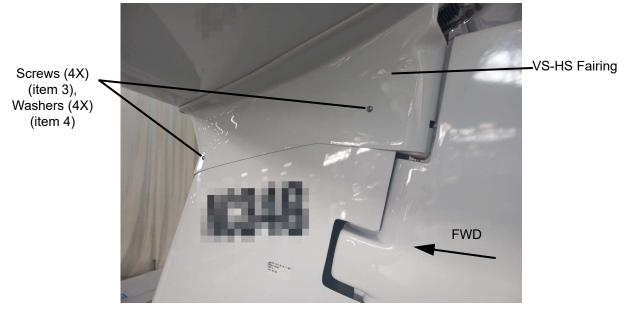


Figure 4. VS-HS fairing installation.

- 9. Make all necessary entries in the logbooks.
- 10. Submit the Execution Report through the Diamond Partner Portal at: https://partners.diamondaircraft.com/

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To obtain satisfactory results, procedures specified in this service bulletin must be accomplished in accordance with accepted methods and current government regulations. Diamond Aircraft cannot be responsible for the quality of work performed in accomplishing the requirements of this service bulletin. Diamond Aircraft reserves the right to void continued warranty coverage in the area affected by this service bulletin if it is not incorporated.

If you no longer own the aircraft to which this service bulletin applies, please forward it to the current owner, and send the name of the current owner to Diamond Aircraft at the address below.

Diamond Aircraft Industries Inc. 1560 Crumlin Sideroad, London, Ontario, Canada N5V 1S2

> Customer Support: Phone: (519) 457-4041 Portal: partners.diamondaircraft.com