## MANDATORY SERVICE BULLETIN



Model DA 40 NG

### MANDATORY SERVICE BULLETIN NO. MSB 40NG-078 REV. 1 SUPERSEDES MSB 40NG-078 REV. 0

### **I TECHNICAL DETAILS**

### I.1 Category

Mandatory.

### **1.2** Airplanes Affected

Model: DA 40 NG

S/N: 40.N432 through 40.N454, 40.N456 through 40.N459, 40.N461 through 40.N463,

40.N465, 40.N466, 40.N468 through 40.N486, 40.N488, 40.N492 through 40.N495, 40.N498 through 40.N532, 40.N535, 40.N538 through 40.N540, 40.N542, 40.N543,

40.N546 through 40.N550, 40.N552 through 40.N569

#### **I.3** Date of Effectivity

24 November 2022

### I.4 Time of Compliance

At next scheduled maintenance. No later than 3 months from the date of effectivity.

### I.5 Subject

Inspection of rudder cables in the footwells.

### I.6 Reason

During production, some DA 40 NG aircraft were reworked to give sufficient clearance between the rudder pedal assembly and the center console side panel. It has come to Diamond's attention that some of the reworked airplanes may have had their rudder cables damaged during the rework. This service bulletin describes the inspection of the suspect aircraft. If damage to the rudder cables are discovered, the cables must be replaced.

### **I.7** Concurrent Documents

None.

#### I.8 Approval

The technical information and instructions contained in this document are approved as part of the type design.

#### I.9 Accomplishment/Instructions

Comply with WI-MSB 40NG-078, latest effective issue.

Page 1 of 4 24 November 2022

## MANDATORY SERVICE BULLETIN



#### Model DA 40 NG

### 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 40NG-078, latest effective issue.

### II.2 Special Tools

None.

### II.3 Labour Effort

Approximately 4 hours will be required if the cables need replacement.

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

Parts and labour for the replacement of damaged rudder cables.

### II.5 Reference Documents

DA 40 NG series Airplane Maintenance Manual, Doc. No. 6.02.15, latest effective issue.

## MANDATORY SERVICE BULLETIN



Model DA 40 NG

### **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.

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, Fax: (519) 457-4045 E-mail: support-canada@diamondaircraft.com

Technical Publications: E-mail: Techpubs@diamondaircraft.com

Page 3 of 4 24 November 2022

## MANDATORY SERVICE BULLETIN



Model DA 40 NG

# EXECUTION REPORT TO SERVICE BULLETIN MSB 40NG-078 REV. 1

# **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 \_ Were the cables damaged? Yes 🗌 No Were the cables replaced? Yes No $\square$ Name Signature Date

Please e-mail the completed form to Techpubs@diamondaircraft.com. If damage to the guide tubes or rudder cables was noticed, please attach photos of the damage.

## **WORK INSTRUCTION**





## WORK INSTRUCTION WI-MSB 40NG-078 REV. 1 SUPERSEDES WI-MSB 40NG-078 REV. 0

### **I GENERAL INFORMATION**

### I.1 Subject

Inspection of rudder cables in the footwells.

### I.2 Reference Documents

DA 40 NG series Airplane Maintenance Manual, Doc. No. 6.02.15, latest effective revision.

#### 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	Part No.	Qty	Description
1	CA1-2000-WIP	2	Cable
2	DS TH1-32-12	2	Thimble
3	MS51844-24	2	Swaging sleeve
4	FT500-1270-BLACK	2	Heatshrink

## **WORK INSTRUCTION**

Model DA 40 NG



### **III INSTRUCTIONS**

### III.1 Inspect the Cable in the Pilot-side Footwell

- 1. Fully depress the right-side rudder pedal.
- 2. Inspect the inboard rudder cable:
  - A. Use an inspection mirror and flashlight to visually inspect the rudder cable.
  - B. Run a thick cloth along the rudder cable to check for damage. Inspect areas were the cloth snags for damage.

### III.2 Inspect the Cable in the Passenger-side Footwell

- 1. Fully depress the left-side rudder pedal.
- 2. Inspect the inboard rudder cable:
  - A. Use an inspection mirror and flashlight to visually inspect the rudder cable.
  - B. Run a thick cloth along the rudder cable to check for damage. Inspect areas were the cloth snags for damage.

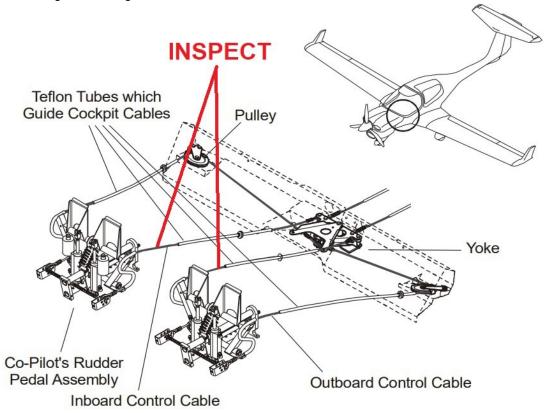


Figure 1. Inspect the inboard cables.

## **WORK INSTRUCTION**

#### Model DA 40 NG



#### III.3 Replace Damaged Cables & Guide Tubes

1. If damage was found on the rudder cables, replace the cables in accordance with AMM Section 27-20.

#### III.4 Finishing Steps

- 1. Clean the working areas and check for foreign objects.
- 2. Test all systems in the working areas for proper function.
- 3. Make all necessary entries into the logbooks.
- 4. Submit the execution report to Techpubs@diamondaircraft.com.

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.

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