

MANDATORY SERVICE BULLETIN

NO. MSB40-046/3

Supersedes MSB 40-046/2

NO. MSBD4-046/3

Supersedes MSB D4-046/2

I TECHNICAL DETAILS

I.1 Category

Mandatory.

I.2 Airplanes affected

Type: DA 40
DA 40 D
DA 40 F

Serial Numbers: 40.006 up to and incl. 40.084
40.201 up to and incl. 40.643
D4.001 up to and incl. D4.196
40.FC001 up to and incl. 40.FC004
All DA 40 / D / FC which have installed a spare part
Nose Landing Gear Strut with P/N D41-3223-10-00

I.3 Time of Compliance

- A) Airplanes operated on grass surface within the next 25 hours of operation, not later than 31-Dec-2005, and every 100 hours inspection thereafter.
- B) Airplanes operated on paved surface within next 100 hours of operation and every 200 hour inspection thereafter.
- C) If the predominant ground surface operation of the affected airplanes is unknown (cf. subparagraph I.3 A) and I.3 B)) the recurring action interval stated in subparagraph I.3 A) is applicable
- D) The terminate action of this Service Bulletin is the replacement of the Nose Landing Gear Strut against the new design, P/N D41-3223-10-00_1 or higher (_2, ...)

I.4 Subject

Inspection of the nose landing gear leg

It has been found that, due to fatigue, cracks at the nose gear leg pivot might develop which can result in loss of nose wheel.

During the investigation, DAI came to the conclusion that the redesign of the Nose Landing Gear, with new P/N D41-3223-10-00_1 or higher (_2,...), which was introduced in Dec 2005 in the series is not affected by the cracking.

Therefore this Service Bulletin is no longer applicable for several serial numbers.
(Refer to item I.2)

All DA 40 / D / FC aircraft with replaced Nose Landing Gear Strut, with new P/N D41-3223-10-00_1 or higher (_2,...) needs no longer be inspected like described in this Service Bulletin.

NOTE:

Maintenance procedures in accordance with the AMM remain applicable.

I.5 Concurrent Documents

None.

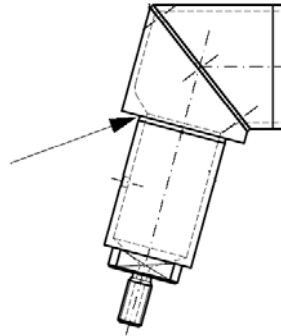
I.6 Approval

The technical information or instructions contained in this document relate to the Design Change Advisory No. MÄM 40-231/a, which has been approved under the authority of EASA Design Organization Approval No. EASA.21J.052.

The technical content of this document has been approved under the authority of EASA DOA No. EASA.21J.052.

I.7 Accomplishment/Instructions

1. All work must be done in accordance with the instructions given in the AMM.
2. Remove engine cowling (AMM, Chapter 71-10-00) DA 40
(AMM, Chapter 71-11-00) DA 40 D
3. Disconnect battery (AMM, Chapter 24-31-00)
4. Remove nose wheel fairing if installed (AMM, Chapter 32-20-00)
5. Remove nose wheel fork (AMM, Chapter 32-20-00)
6. Carefully clean pivot
7. Inspect the nose landing gear leg as shown for cracks using Dye penetration method only!



8. If cracks are detected replace nose landing gear leg (AMM, Chapter 32-20-00)
9. Reinstall nose wheel fork (AMM, Chapter 32-20-00)
10. Check steering friction (AMM, Chapter 32-20-00)
11. Reinstall nose wheel fairing if installed (AMM, Chapter 32-20-00)
12. Reconnect battery (AMM, Chapter 24-31-00)
13. Reinstall engine cowling (AMM, Chapter 71-10-00) DA 40
(AMM, Chapter 71-11-00) DA 40 D
14. Make all necessary entries in the airplane's log.
15. On first inspection inform DAI about result of inspection via e-mail or fax (using enclosed report sheet)

I.8 Mass (Weight) and CG

n. a.

II PLANNING INFORMATION

II.1 Material & Availability

n. a.

II.2 Special Tools

Dye Penetration Equipment

II.3 Labor effort

Approx. 1 hr

II.4 Credit

n. a.

II.5 Reference Documents

n. a.

III REMARKS

1. All measures must be carried out by a certified aircraft service station or a certified aircraft maintenance mechanic.
2. Accomplishment of the measures must be confirmed in the aircraft log book.
3. In case of doubt, contact Diamond Aircraft Industries.
4. If material or labor hours are subject to be credited through Diamond Aircraft Industries, the SB must be carried out by an authorized Diamond Service Center and the Warranty Application must be sent not later than 30 days after completion of the work.



INSPECTION REPORT

to MSB 40-046/3 and MSB D4-046/3

AIRPLANE DATA

Airplane Serial Number: _____
Airplane Registration: _____
Hours of operation of airplane: _____
Typical operation of airplane: private, club, training, other _____

MAINTENANCE DATA:

Inspection carried out on: _____
Inspection carried out by: _____

During scheduled inspection: yes / no

Condition of nose landing gear leg:

Nose landing gear leg exchanged: yes / no

Date, Name, Sign