DG Flugzeugbau GmbH
76646 Bruchsal

Technical Note
No. 413/7

Subject : Landing gear / over centre lock in extended position

Effectivity : DG-1000 all ser. no.'s with landing gear without nose wheel
Ser. no.'s 10-1 up to 10-48 + 10-51 and 10-58 optional
From ser. no. 10-49 (except 10-51 and 10-58) during production with part 10FW04
From ser. no 10-64 on during production without part 10FW04, holder for rubber buffer already welded to landing gear strut 10FW10.

Accomplishment : Ser. no.'s 10-1 up to 10-48 + 10-51 and 10-58: none, optional
From ser. no. 10-49 (except 10-51 and 10-58)on: during production

Reason : To ensure a clear over centre lock of the landing gear in extended position a rubber buffer will be installed, to generate an over centre locking force even with no load on the main wheel.

Instructions :
1. Grind away a little from the contact surfaces of the landing gear strut 10FW10 to the fuselage shell, so that there will be no contact during L/G extension.
2. Install the bracket 10FW04 according to drawing 10FW05 to the left hand strut of 10FW10. The existing bolts are long enough and don't need to be replaced, use new self-locking-nuts (not applicable from ser. no. 10-64 on).
3. Grind the gluing surfaces and glue a GFRP block 10mm thick according to drawing 10FW05 to the fuselage shell, let cure min. 20 hours at min. 25°C.
4. Screw in the rubber buffer with nut completely into the M10 thread.
5. File the rear edge of the block so that it is parallel to the rubber buffer (L/G extended).
6. Screw out the rubber buffer just so far that it touched the GFRP block (L/G extended).
7. Retract the L/G a little and screw out the rubber buffer for another 4-4.5mm (.16-.18 in.). Fix in position by counter rotating the nut.
8. Sit in the front cockpit and extend the L/G. You must feel an over centre locking force.
9. Retract the L/G, you must feel a strong locking force. If necessary increase the locking force by unscrewing the rubber buffer or decrease the locking force by screwing in the buffer.
10. Exchange the following manual pages against new pages issued November 2004: 0.2, 0.4, 0.6, 1.9, diagram 7

Material : Manual pages see instruction 10
Drawing 10FW05
1 fitting 10FW04
1 Simrit rubber buffer D 4045
1 nut M10DIN 934-8 zn
2 self locking nuts M8 DIN985-8zn (not necessary from ser. no. 10-64 on)
GFRP block 38x43x10
Resin system L285/H285 or H286
Cotton flocks

Weight and balance : influence negligible

Remarks : Instructions No. 1 -9 are to be executed by the manufacturer or by a licensed workshop. All instructions are to be inspected and entered in the aircraft logs by a licensed inspector.

Bruchsal, date:
17. November 2004

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LBA – approved:

The German original of this TN has been approved by the LBA under the date of 02. DEZ. 2004 and is signed by Mr. Blume.

The translation into English has been done by best knowledge and judgement.
EASA approved on 10. Dec 2004 under Approval No. 2004-11941

Type certification inspector:
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