



GFA AIRWORTHINESS DIRECTIVE

TYPE AFFECTED: DG-400, all Serial Numbers.

SUBJECT: Cracking of rear plate of propeller mount.

BACKGROUND: AD issued as a result of cracks found in one aircraft. Following the discovery of cracks in several other aircraft the AD has been revised. The content of the AD is unchanged except that periodically recurring inspections are now required.

DOCUMENTATION: DG-Flugzeugbau Technical Note No 826/42 and pages 0.3, 2A and Diagram 6 of DG-400 Maintenance Manual form part of this AD.

ACTION REQUIRED: Proceed in accordance with the instructions in attached DG Technical Note No 826/42.

WEIGHT AND BALANCE: Not affected.

IMPLEMENTATION: At the next 25 hour engine inspection, but in any case by 31 December 2001. Subsequent inspections must be performed at each 25 hour engine inspection.

COMPLIANCE: The requirements of this GFA Airworthiness Directive are mandatory. This Directive is issued pursuant to the Rules and Regulations of the Gliding Federation of Australia.

SIGNED: John Viney

CHIEF TECHNICAL OFFICER AIRWORTHINESS

For and on behalf of:

THE GLIDING FEDERATION
OF AUSTRALIA

Subject : Powerplant / rear plate of the propellermount

Effectivity : DG-400 all serial no's

Accomplishment : At the next 25 hour inspection, but at latest before December 31. 2001

Reason : At one DG-400 cracks occurred in the rear plate of the propellermount starting at the outside diameter of the washer below the bolthead of the lower bolted connection.

Instructions : Designation of parts see diagram 6 maintenance manual

1. Bolted connection of the rear plate of the propellermount 4M3 to the rear mounting blocks 4M5:
Remove the left mounting bolt and its washer first, if necessary heat the bolt to loosen the Loctite securing. Clean the plate in this area and check if the washer has left a mark in the plate and if cracks are visible. Cracks can be seen easily due to the oil residues which have penetrated into the crack. A mark of max. 0.1mm is acceptable. If the mark is deeper and / or if there are any cracks, the plate 4M3 has to be replaced. Check also the mounting blocks 4M5 for cracks and replace them if necessary.
Clean the inside threads according to the instructions on page 46d maintenance manual. Then assemble the new bolt M10x25 DIN912-8.8zn with the aluminium washer S48 next to the rear plate followed by the existing washer 10.5 DIN125 Stzn, use Loctite 243 or 672 (72b) to secure the bolt. Tighten the bolt with a torque wrench, torque 4 daNm (30 ft.lb.).
Proceed in the same manner with the right hand side bolt.
Note: Don't remove both bolts at the same time.
2. If the rear plate of the propellermount 4M3 or the mounting blocks 4M5 have to be exchanged proceed according to sections 4.6.4 and 4.6.5 of the maintenance manual.
3. Exchange the following maintenance manual pages against the new pages issued August 2001, marked TN 826/42:
0.3, 2a, diagram 6

Material : Manual pages see instruction 3
2 bolts M10x25DIN912-8.8 zn
2 washers S48
if necessary:
rear plate of the propellermount 4M3
mounting blocks 4M5/1 and /2 (for starter motor Bosch American992807)
or 4M5/3 and /4 (for starter motor Bosch DG 0001160001)

Weight and balance : influence negligible

Remarks : Instructions No.1 and 2 are to be executed by the manufacturer or by a licensed workshop and to be inspected and entered in the aircraft logs by a licensed inspector.

Bruchsal,
date: August 30. 2001

LBA – approved:

Author:
Dipl. Ing. Wilhelm Dirks

Wilhelm Dirks

Type certification
inspector:
Dipl. Ing. Swen Lehner

Swen Lehner

The German original of this TN has been approved by the LBA under the date of Sep 10/01 and is signed by Mr. Blume. The translation into English has been done by best knowledge and judgement.

Instructions for continued airworthiness
DG-400

content	page	issued
Diagrams		
1. Elevator control circuit, adjustment		Febr. 87
2. Rudder control circuit, undercarriage		July 88
2a. Tail wheel		July 88
3. Aileron, flap and spoiler control circuits, wheel brake		Febr. 87
4. Template for checking aileron deflection		Oct. 81
5. Tow hook, water ballast release system		April 88
6. Powerplant with Bosch electronic boxes (for Ducati electronic boxes refer in addition to drawing 4 M 71 see enclosure)		Aug. 01
7. Powerplant extension-retraction mechanism		April 88
8. Fuel system		April 88
9. Electrical system		July 84
10. Empty weight centre of gravity range		April 88
11. Placards		June 86
12. Installation brake motor (Option BEA)		Sept. 90
13. Electrical system with Option BEA		Sept. 90

Enclosures

Installation sketch EFWK "landing gear doors"	Oct. 87
Drawing W 33 special wrenches	March 88
Drawing W 34 " "	March 88
Installation sketch EFK additional tow hook for aerotow	Oct. 85
Installation sketch EOD Dräger oxygen system	July 7, 84
Installation sketch 4EP ELT (3) ELT Pointer	May 6, 91
Hotellier Instructions for the maintenance IM 10.01 A	01/89
Drawing 4 M 71 ducati ignition boxes	April 92
Service-information 0-2/92	March 92
Service-information 0-4/92	Nov. 92
TN 826/34 incl. Working instructions No. 1 and No. 2	Oct. 96

Maintenance manual

DG-400

Manual amendments

No.	Page	Description	Date	Signature
32	0.3, 2a, diagram 6	Powerplant TN 826/42	August 01	

Between all boltheads and all aluminium-parts there are washers DIN 125 Stzn, even if they are not mentioned in this plan.

