DG Flugzeugbau GmbH
76646 Bruchsal

Technical Note
No.843/27

Subject : Spindle drive / screwed joint with adapter

Effectivity : DG-500MB all Ser. No's

Accomplishment : latest July 31. 2008

Reason : On a DG-500MB the bolts connecting the adapter 5M204 to the spindle drive failed, causing the powerplant to retract itself after engine shutdown.
To improve the rigidity of the connection, higher strength bolts will be used and the parts will be glued together.

Instructions :

1. Remove the spindle drive from the aircraft referring to drawing 5M210.
2. Remove the 4 bolts M5x12 connecting the fork 5M203 to the adapter 5M204 and the 4 bolts M5x20 connecting the adapter to the spindle drive, use a hot air gun to loosen the bolts.
3. Clean the threads in the adapter and in the spindle drive according to MM section 4.8.
   Note: Loctite 18896 which is mentioned in the MM is no longer available. Acetone may be used instead to clean the threads.
   Clean the contact surfaces between fork and adapter and between adapter and spindle drive with Loctite 7063.
4. Mix UHU plus endfest 300 and apply a thin coat to the contact surfaces. Leave out the areas around the threads. Press parts together.
5. Mount the old bolts again, torque with 5 Nm (3.75 ft lb). Remove excess glue.
6. Let cure for 10 hours at 60°C.
7. Remove the old bolts. Install new bolts M5x12 DIN912-10.9 DAC and M5x20 DIN912-10.9 DAC, secure with Loctite 243. Torque with 5 Nm (3.75 ft lb).
8. Reinstall the spindle drive, use new self locking nuts. Refer to section 4.22 of the MM.

Material : drawing 5M210 revision e
Part no.: 30002019 UHU plus endfest 300
Part no.: 50051209 4 bolts M5x12 DIN912-10.9 DAC
Part no.: 50052509 4 bolts M5x20 DIN912-10.9 DAC
Part no.: 51100020 1 self-locking nut M10 DIN985-8 zn (spindle drive at engine)
Part no.: 51120020 1 self-locking nut M12 DIN985-8 zn (spindle drive at fuselage)
Part no.: 30000305 Loctite 243 10 ml
Part no.: 30000311 Loctite 7063 150 ml

Weight and balance : influence negligible

Remarks : Instructions 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:
April 14. 2008

Author:
Dipl. Ing. Wilhelm Dirks

Modifications approved by EASA Date 23. April 2008
under Approval No. EASA.A.C.09544

Direction of flight

notched taper pin
3 x 24 DIN 1471 St

M8 DIN985-8zn
8,4 DIN9021 Stzn (b)
8M233/2
8M226/1 (b)
M10 DIN985-8zn
(b)
10,5 DIN9021 Stzn
8M226/2 (b)
13 DIN125 Stzn
M12 DIN985-8zn
M12x70 DIN931-8.8zn
shortened to 55mm
(b) 8,4 DIN9021 Stzn
M8x62 LN9037 (b)
M10x65 LN9037 (b)
8M228
10,5 DIN9021 Stzn

M6x30 DIN 912-8.8 zn
secured with Loctite 243

5Mo200
M6 DIN985-8 zn
6,4 DIN9021 Stzn
M6 x 25 DIN7984-8.8zn
Wrapped twice with fabric tape
(Tesaband 651) 9mm wide
(b)

Spindle drive Stross BSA 10 RN1 C205
5M204
5M203

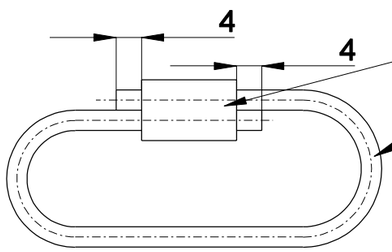
(e) M5x12 DIN 912-10.9 DAC
secured with Loctite 243
(e) M5x20 DIN 912-10.9 DAC
secured with Loctite 243

8M233/1
8M229
5M210/1
See detail A

Rubber boot at
firewall not shown

(e) glued with UHU plus endfest 300
postcured 10 h / 60°C

Detail A



Nicopress sleeve 28-3-M
Control cable 3,2mm
total length before
crimping 178mm
(d)

Teil 1	Stück 2
Oberflächenschutz: -	
Werkstoff: -	

Toleranzen nach Arbeitsanweisung BA 1
Schweißen nach Arbeitsanweisung SA 1

Ausg.	Änderung	ÄM	Tag	Name
e	mounting of 5M204 modified	TN 843/27	14.04.08	W.Dirks
d	cable length corrected		19.05.06	W.Dirks
c	Detail Sicherungsseil hineingefügt		20.01.06	v.d. Bos
b	Sicherung ergänzt	TM 843/24	17.05.05	W.Dirks
a	Hinweis ergänzt		02.12.03	Lehner

	Tag	Name
Gez.	22.01.03	M. Banucu
Gepr.		
Norm.		

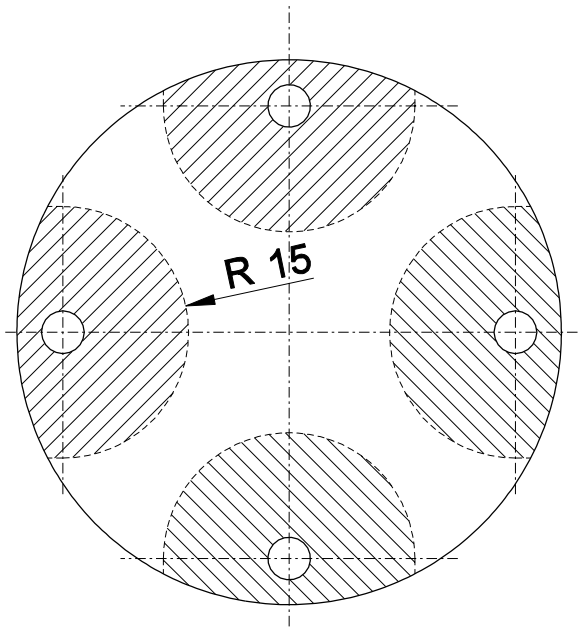
Maßstab 1:1
Maße ohne Toleranz-ang. nach:

Spindle drive Stross BSA 10 assembly

DG Flugzeugbau GmbH
76646 Bruchsal 4
Im Schollengarten 20

5M210

Hinweis zu TM843/27 Maßnahme 4
Note for TN843/27 instruction 4



Um ein Verkleben der Schrauben zu verhindern, sollte der schraffiert gezeichnete Bereich nicht mit Klebstoff eingestrichen werden, am Besten vorher abkleben.

To prevent the glue from fixing the bolts, glue should not be applied to the hatched areas. Best to tape the areas before applying the glue.