

SUBJECT : Powerplant - propeller shaft

EFFECTIVITY : DG-400 all serial no's

ACCOMPLISHMENT : Latest Dec. 31st. 1996

REASON : 1. In spite of the improvements introduced with TN 826/25 another propeller shaft failed. In the meantime a new shaft with larger toothed surface was designed for the DG-800.
This shaft is to be installed to all DG-400's to prevent further accidents. The larger toothed surface allows lower tensioning torque of the shaft without the risk of the shaft rotating.

2. In some cases the drive belt damaged the front retaining rings at the pulleys and came off the upper pulley, also damaging the propeller.
Therefore stronger retaining rings must be installed.

INSTRUCTIONS : 1. Exchange the following manual pages against the new issues July 1996:
0.2, 1, 2, 14 a, 37, 38

2. Exchange the propeller shaft incl. the bearings against the new shaft 8 M 24 and the front drive belt retaining rings 4 M 12/2 and 4 M 14/2 according to working instruction no. 1 for TN 826/32.


3. File drawing 4 M 29 as enclosure to the maintenance manual.

MATERIAL : Manual pages see above
Drawing 4 M 29
Working instruction no. 1 for TN 826/32
Parts see working instruction


WEIGHT AND BALANCE : Influence negligible

REMARKS : Instruction No. 2 is 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 4, July 19th 1996

Author: 

LBA - approved:
The German original of this TN has been approved by the LBA under the date of July 24th 1996 and is signed by Mr. Walter. The translation into English has been done by best knowledge and judgement. In any case of doubt the German original is authoritative.



Type certification inspector:

DG Flugzeugbau GmbH

Postfach 4120 PLZ D-76625
Tel.: 0 72 57 / 89-0, Fax 89 22
Im Schollengarten 20

D-76646 Bruchsal-Untergrombach

WORKING INSTRUCTION No. 1 Page 1 of 1
for TN 826/32

Designation of parts see drawing 4 M 29

1. Extend the engine, switch off master switch
2. Remove Propeller, drive belt and propellershaft 4 M 24 according to maintenance manual Sect. 4.1.1. - 4.1.3.
3. Remove the upper drive belt pulley from the shaft acc. to sect. 4.2.1 - 4.2.5 old issue July 1984. The bearings may remain on the shaft.
4. Heat the pulley again. Push the preassembled shaft 8 M 24 incl. bearings etc. as far as possible into the pulley allowing assembly of the circlip 75x2.5 DIN 472.
5. Clean the toothed area of the shaft and its aluminium counterpart 4 M 1 with Acetone.
6. Install the assembly to the powerplant again according to sect. 4.1.5 up to 4.1.13 of the maintenance manual (new page 38 issued July 1996).

Install the new stronger drive belt retaining rings 4 M 12/2 and 4 M 14/2 to the front of upper and lower drive belt pulleys. Use bolts M4x10 DIN933-8.8.zn and secure with Loctite 72

7. Execute a test run.

Material:

1. Propeller shaft 4 M 24/1 assembled with washer 8 M 24/2, spacer 4 M 25, 2 ball bearings 6009 2Z, circlip DIN 471 45x1,75, bolt M12x20 DIN 933-8.8 zn and one extra nut M 4 DIN 985-8zn
2. Upper drive belt retaining ring 4M12/2
3. Lower drive belt retaining ring 4M14/2
4. 10 bolts M4x10 DIN 933-8.8zn
5. Loctite 72b

Bruchsal, July 1996

Author: *W. Dirks* W. DirksType certification inspector: *A. Schmidt*

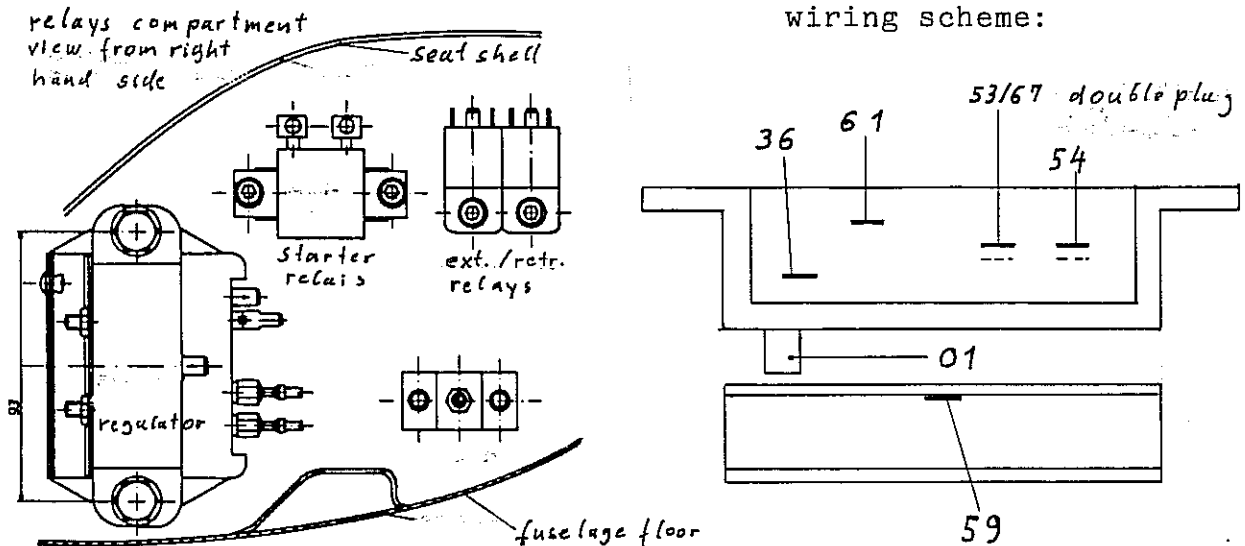
Z 33 Conversion kit Saprisa regulator

Installation instructions

Reason: The regulator Bosch type is no longer available and has a limited life time.

For replacement a regulator type Saprisa was modified so that it can be used instead.

Instructions: 1. Installation of the modified regulator 4 E 26. To fix the regulator 2 new holes dia. 8 mm must be drilled to the bulkhead (see sketch below). Plug the wires to the new regulator. The wires are marked with the numbers according to the scheme below.



2. Execute an engine test run. With old DEI versions, there may be malfunction of the DEI displays. In this case ship the DEI for modification to:

Utz Schicke
Elektroniklabor
Kanalstr. 32
D-76356 Weingarten

Material of the retrofit kit
Z 33:

Part-no.: 10180330

- 1 regulator 4 E 26
- 2 tubes 12 x 1.5 x 30
- 2 bolts M 8 x 60 DIN 931 - 8.8 zn
- 2 washers 8.4 DIN 125 Stzn
- 2 self locking nuts M 8 DIN 985 - 8 zn
- drawing 4 E 26

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Technical note

No. 826/33

Page 1 from 1

SUBJECT : Electrical system / regulator

EFFECTIVITY : DG-400 all ser. no's

ACCOMPLISHMENT : Latest Dec. 31st. 1996

REASON : A Bosch regulator 0212920001 was installed in the DG-400. These regulators have a limited life time.
In recent times more and more regulators have become defective. When failing they may generate smoke in the cockpit which can impair flight safety.
Therefore the regulator must be exchanged against type 4 E 26 which is already mentioned in the DG-400 maintenance manual as interchangeable type.

INSTRUCTIONS : 1. Check which regulator type is installed, compare with drawing 4 E 26.
2. If a Bosch regulator is installed, replace it by the new type 4 E 26 according to installation instruction Z 33.

MATERIAL : Installation instruction Z 33
drawing 4 E 26
Conversion kit Z 33

WEIGHT AND BALANCE : ./.

REMARKS : Instructions No. 2 is 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 4, July 19th 1996

Author:

W. OA

LBA - approved:

The German original of this TN has been approved by the LBA under the date of July 24th 1996 and is signed by Mr. Walter. The translation into English has been done by best knowledge and judgement. In any case of doubt the German original is authoritative.

Type certification inspector:

A. A. H.

DG Flugzeugbau GmbH
 Postfach 41 20
 D-76625 Bruchsal

Sender:

.....

Customer-no.:

Order for TN 826/32 and TN 826/33

for DG-400, serial-no: 4-....., reg.-no.:

	qty.	price	price
		DM	total
			DM
1. Retrofit kit propeller shaft:			
Propeller shaft 4 M 24/1 assembled with washer 8 M 24/2, spacer 4 M 25, 2 ball bearings 6009 2 Z, circlip DIN 471 45x1,75, bolt M12x20 DIN 933-8.8 zn and one extra nut M 4 DIN 985-8zn	500,00
2. Retrofit kit retaining rings:			
Upper drive belt retaining ring 4M12/2 Lower drive belt retaining ring 4M14/2 10 bolts M4x10 DIN 933-8.8zn	84,00
3. Bottle Loctite 72 b	90,54
4. Retrofit kit regulator Z 33	230,00
5. Packing and shipping costs			
Europe	65,00
Overseas	115,00

		total w/o tax	DM
		for EC countries VAT no.:
		or + 15 % tax	DM
		total	DM
			=====

I've enclosed the payment by cheque

I've transfered the payment to bank account:

DG Flugzeugbau GmbH
 D-76646 Bruchsal
 Volksbank Bruchsal, BLZ:663 900 00, Konto-Nr.: 758 701

Date:

Signature: