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Technical Note
No. 873/19

Subject : Powerplant control / extension-retraction switch unit

Effectivity : DG-800B with Solo engine and spindle drive Stross ELT 10

Accomplishment : If necessary
From serial no. 8-195 on during production

Reason : Due to the high power consumption of the Stross spindle drive there is the possibility of excessive wear of the contacts of the manual extension / retraction switch and of the switch which switches over from automatic to manual operation, as the full electric power is flowing through these switches.
To reduce the wear a solution was developed where the high power is switched via the relays in the control unit and only low power to control the relays is flowing through the switches. This means that a functioning control unit is necessary for the manual operation, but the DEI may be defective or switched off. A failure analysis showed that a defective control unit is very unlikely.
It is an advantage that the travel of the spindle drive is limited by the limit switches. So during manual operation it is not possible to drive against the stops.
The extension-retraction switch unit will be rotated by 180° to reduce the possibility of operating the change-over switch inadvertently.

Instructions :
1. Modification of the switch unit and of the wiring according to working instruction no. 1 for TN 873/19.
2. Exchange of the following manual pages against new pages issued May 2000 marked with TN 873/19:
   Flight manual: 0.2, 0.4, 0.5, 4.12, 7.6
   Maintenance manual: 1a, 2, 4, 4a, 21, 29, 93, wiring scheme 8E201, wiring scheme 8E203, wiring plan 8E218 (as addition to 8E202. resp. 204 resp. 205) only up to ser. no. 8-194
   wiring plan 8E205 issue H only from ser. no. 8-195 on (in aircraft log)

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Material : Manual pages see instruction 2
Working instruction no. 1 for TN 873/19
Drawing 8E217
New switch unit with wiring
2 x flat end terminals 6,3 mm
3 x heat shrink tubing pieces, large
4 x heat shrink tubing pieces, small
Strain relief shackle with 2 screws
Cover plate 8E217/1
1 x Ty-rap 4.8 x 360 mm

Weight and balance : influence negligible

Remarks : Instruction No. 1 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, date: 24. May 2000

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Type certification inspector:
Dipl. Ing. Swen Lehner

LBA – approved:

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