

- Subject : Bolt of bearing stand 5RU61 for the bell crank 5St19 located in the mid-fuselage
- Effectivity : DG-500 all models, all serial numbers
DG-500M all models, all serial numbers
- Accomplishment : Instruction 1: prior to next flight
Instruction 2: if necessary prior to next flight
Instruction 3: 1x per year
Instruction 4: every 1000 flight hours, first time latest up to 31.12. 2007
Instruction 5: optional
- Reason : The bolt of bearing stand 5RU61 which is the pivot for bell crank 5St19 failed in a DG-500 ELAN Trainer for an unknown reason. As the cause of the failure we suspect that the nut fixing the bell crank had become loose. Otherwise a bending load which may cause the failure can't be explained.
- Instructions :
 1. Check the actual torque of the nut which fixes bellcrank 5St19 to the bolt according to working instruction No. 1 for TN348/19. If the torque is 3 Nm (2.2 ft.lb.) or higher it can be assumed that the bolt was not overstressed during operation. Increase the torque to 12 Nm (9 ft.lb.).
 2. If the torque was less than 3 Nm (2.2 ft.lb.) the bolt must be replaced according to working instruction No. 2 for TN348/19. In such a case please send within 7 days after the check a note by e-mail to design@dg-Flugzeugbau.de.
 3. The torque must be checked annually and adjusted if necessary.
 4. As a protective measure the bolt must be changed every 1000 flight hours. If the glider has already more than 1000 flight hours at the time of the first execution of instruction 1 and if instruction 1 was positive the bolt should be replaced as soon as possible but not later than Dec. 31.2007 according to instruction 2.
 5. The periodical change of the bolt is not necessary when an additional bracket is installed according to working instruction No. 3 for TN348/19.
- Material : working instruction No. 1 for TN348/19

For instruction 2:
working instruction No. 2 for TN348/19
1 bolt M6x44 LN9037
1 lock nut M6 DIN985-8zn or M6 LN9348

For instruction 5:
working instruction No. 3 for TN348/19
bracket 5St122
Epoxy resin with hardener according to the list in the repair manual
Cottonflocks
Glassfibre fabric Interglas 92125
- Weight and balance : influence negligible

Remarks : Instructions 1 and 3 may be executed by the owner.
All instructions are to be inspected and entered in the aircraft logs by a licensed inspector with the next annual inspection.
Instructions 2 and 5 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.

The working instructions will be published on the DG web-site:
www.dg-flugzeugbau.de

Bruchsal, date:
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