

CANCELLED 15/5/2018 Ref AD608

GLIDING FEDERATION OF AUSTRALIAAIRWORTHINESS DIRECTIVE GLIDERS/POWERED SAILPLANES GFA/AD 208 GROB 19GLIDER/POWERED SAILPLANE TYPE AFFECTED: GROB ASTIR CS
All Serial Nos. 1001 to 1536SUBJECT: Replacement of Tailplane leading edge spherical locking bolt.AUTHORITY: Mandatory change requested by manufacturer under TM-306-17 Instruction 1.BACKGROUND: Spherical Locking bolt.
Cracks have been detected in the threaded section which was a cut thread, not a rolled thread, in the original bolt.REQUIRED ACTION:(1) Before next flight -

Inspect the bolt for cracks in the threaded section and the surrounding structure for condition.

If cracking in the thread is present, the bolt must be replaced before flight.

(2) Mandatory replacement - Deadline December 31st, 1981.

If cracking is not evident, the glider can fly until a replacement bolt is available. Maintenance release must be endorsed with the mandatory replacement date.

PARTS AVAILABILITY:

Replacement bolts with rolled thread may be purchased from E. Schneider Pty. Ltd. Two Wells Road, Gawler. S.A. 5118.

When ordering the spare bolt, please state the exact diameter of the ball of the installed bolt by $\pm 0,1$ mm (± 0.004 in). The new bolt may not have smaller diameter due to play in the locking mechanism of the fin. If already some play exists order a bolt with a 0.2mm (0.008) larger diameter.

Bolts will need to be ordered by September 15th, 1981 to meet mandatory replacement date.

1 spheric locking bolt 102-3500.21

1 special nut 102.3510.21

1 Toothed washer 10.5 DIN 6797 phr

REPLACEMENT INSTRUCTIONS:

To exchange the spheric locking bolt you need a screwdriver (appr. 10mm; 3/8in. wide) and an open-ended wrench 14 mm.

- Remove the tail unit from the vertical stabilizer.
- Note the installation depth (A) of the used bolt to insure the correct installation of the replacement bolt in order not to change the tailplane angle of incidence.
- Loosen the M10 - nut with the 14 mm wrench.
- Place the screwdriver into the slot of the ball and turn out the bolt.
- The new locking bolt (102-3500.21) has rolled thread and requires a special nut (102-3510.21)

- Mount the modified locking bolt (102-3500.21) with a toothed washer 10,5(DIN 6797 phr) and the nut (102-3510.21) according to detail No. 1. Adjust the bolt to the correct installation depth (A) and lock it by holding the ball with the screw-driver and tightening the nut with the wrench. Afterwards apply a small line of red color from the shaft of the bolt across the nut to the elevator surface to indicate unintentional rotation.

- In case of doubt determine the tailplane angle of incidence according to Flight Manual and inspection report.

- Inspect the interior attachment-spar of the fin for tightness with bolt installed. This can be checked visually from the rear through the opening of the spar. If the attachment spar moves, repair action must be taken before flight.

- Mount the tail unit properly and couple the control-rods. Check for safe installation. If the locking-plate in front of the fin moves less than 3 mm (0.12in.) from the "unlock" to the "locked" position the diameter of the ball is too small and not allowable play can be expected. (see detail No.2). A larger locking bolt must be installed.

- Please send the used bolt back to C.T.O.A., G.F.A. and inform us about the aircraft's total time and landings.

WEIGHT AND BALANCE CHANGE.

NIL

COMPLIANCE:

The above instructions are to be carried out by the holder of a DOT 1109 G.I. Certificate endorsed for C. of A. inspection F.R.P. All work details to be entered into the glider's log book.

This Directive is mandatory, issued in pursuance of Air Navigation Regulations under delegated authority from the Secretary of the Department of Transport Australia.

Douglas Lyon

DOUGLAS LYON
CHIEF TECHNICAL OFFICER AIRWORTHINESS
GLIDING FEDERATION OF AUSTRALIA

Date of issue: 7th August, 1981

