

COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF TRANSPORT

AIRWORTHINESS DIRECTIVE - GLIDERS

GFA/AD 100 GROB 3

Glider Types affected: Grob Astir CS, CS 77 and CS Jeans  
Serial Nos. 1180 to 1536 (CS)  
1613 to 1679 (CS 77)  
and 2001 to 2032 (CS Jeans)

Background:

It has been found that the rudder control lever mounted behind the main landing wheel box may be overstressed as a result of forcing the rudder hard against the stops either as a result of the pilot's actions or of the rudder swinging in the wind.

Required action:

The control lever mounted behind the main landing wheel box which is a casting shaped as shown in Fig. 1 which has lightening holes is to be replaced by a new control lever which is a solid casting without lightening holes.

The replacement control lever is obtainable from the glider supplier.

For Astir CS Serial No. 1180 - 1536 the replacement control lever is part No. 102 - 4209.

For Astir CS-77 Serial No. 1613 - 1679 the replacement control lever is part No. 102 - 4933.

For Astir CS Jeans Serial No. 2001 - 2032 the replacement control lever is also part No. 102 - 4933.

Additionally 3 hexagon nuts M6 LN 9348 and 1 hexagon nut M8 LN 9348 are required.

Procedure:

1. Derig the glider.
2. Fix the fuselage in place on the trailer dolly or on a trestle.
3. Remove the hatch behind the baggage compartment as the replacement of the rudder control lever must be carried out through the baggage compartment.
4. Move the rudder pedals to their rear most position so that the springs are unloaded.
5. If the control lever fitted is a casting without lightening holes no further action is required but if as is more likely the lever is a casting with lightening holes it must be replaced.
6. To replace the lever first detach the rudder cable from the left side of the rudder control lever.
7. For Astir CS detach from the right hand end of the control lever the push-pull rod with the connected rudder cable.  
For Astir CS 77 and Jeans detach the push-pull rod and the separate rudder cable.

8. Remove the control lever.
9. Install the replacement lever fitting the washer and spacer as shown in Fig. 3 or Fig. 4.
10. Reconnect the rudder cables and push-pull rod to the control lever. The hexagon bolt (M6) on the left side must be inserted from below.
11. Check that no tools or foreign objects are left in the fuselage.
12. Check the movement of the rudder. Set the rudder pedals in neutral and mark the neutral position behind the rudder then measure the movement to right and left and check against the details on page 17 of the Manual.
13. If the rudder deflections are outside tolerance the stops at the rear bulkhead or on the rear side of the undercarriage box have to be readjusted. Screwing in the stop screws leads to greater deflections. Screwing out the stop screws reduces rudder deflections.
14. The stop screws must be secured by the lock nuts.
15. Reinstall the hatch.
16. Enter details of the replacement in the modification section of the glider log book.

Compliance:

The requirements of this directive are mandatory and are to be carried out before April 30th, 1978.

This Airworthiness Directive is issued pursuant to Air Navigation Regulations under the Delegated Authority from the Secretary, Department of Transport.



Douglas Lyon.  
CHIEF TECHNICAL OFFICER AIRWORTHINESS  
GLIDING FEDERATION OF AUSTRALIA

Date of Issue: 4th April, 1978.

Distribution:

All owners of Astir CS Nos. 1180 - 1536  
" " " Astir CS 77 Nos. 1613 - 1679  
" " " Astir Jeans Nos. 2001 - 2032  
Department of Transport  
CTO/A and Ops  
RTO/As  
A.T.O.  
T.L.O.  
All Commercial Operators and Importers

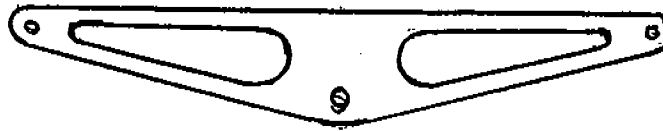


FIG.1 CONTROL LEVER WITH LIGHTENING HOLES  
( TO BE REPLACED)

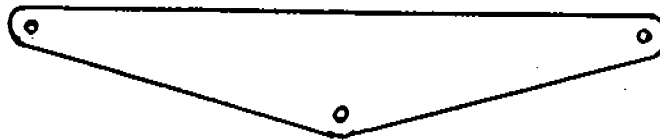


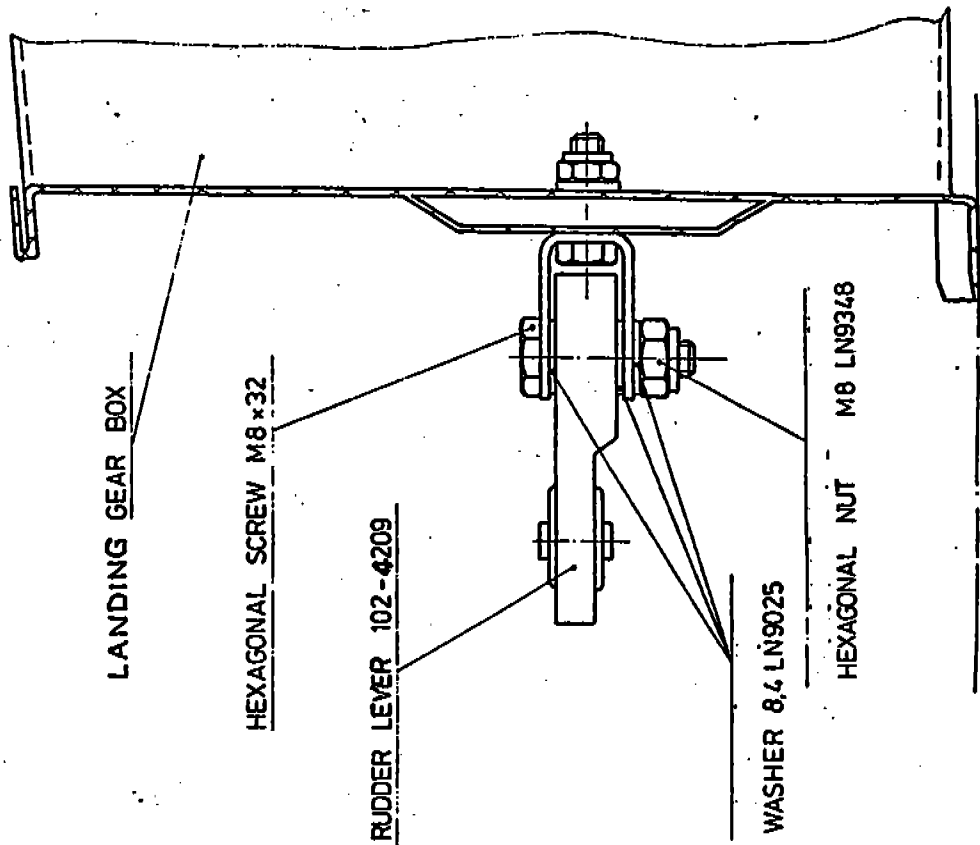
FIG 2 REPLACEMENT (SOLID) LEVER.

**B. GROB**  
FLUGZEUGBAU

TM 102-8

ASTIR CS  
ASTIR CS 77  
ASTIR CS JEANS  
L - 306

FORWARD  
ASTIR CS 1180—1199  
1300—1315

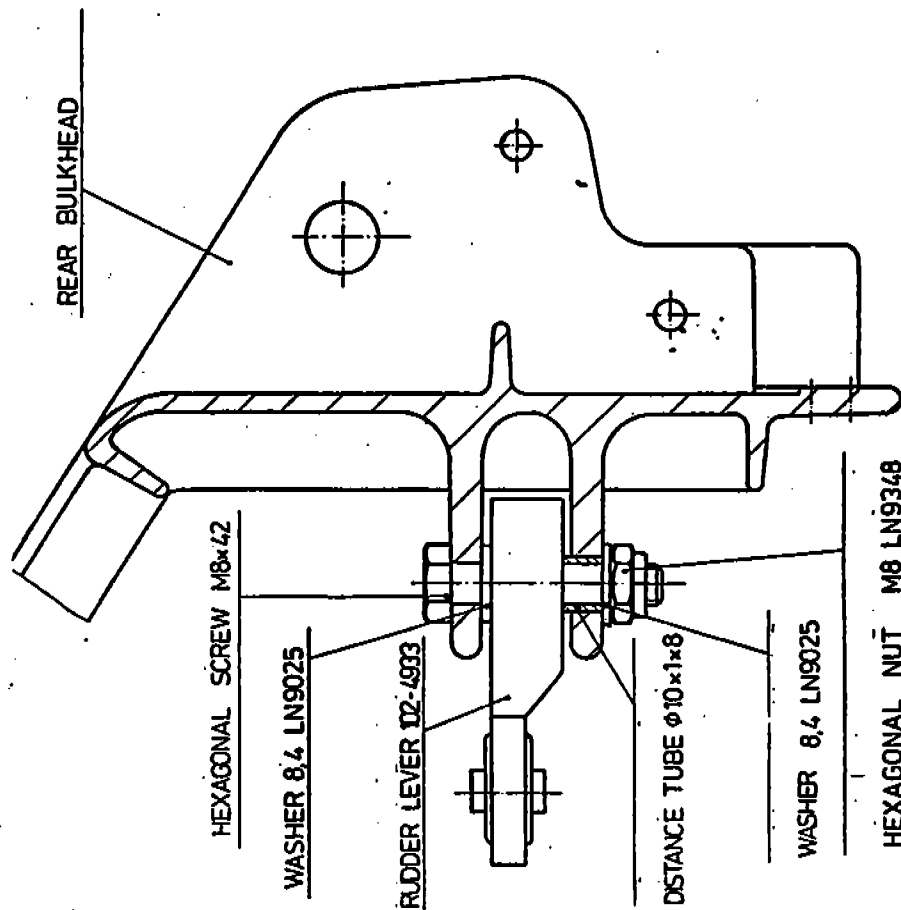


LOWER STRUCTURE OF FUSELAGE

FIG. 4

ASTIR CS 1200—1299  
1316—1536  
ASTIR CS 77  
ASTIR CS JEANS

FORWARD



LOWER STRUCTURE OF FUSELAGE

FIG. 3