British Gliding Association

Aircraft Inspection

Recommended

Number:	Issue:
036/06/2003	1

Date: 26 June 2003

Subject: Vertical Elevator Control Rod

Applicability: Grob G109 series

Accomplishment: At next Annual inspection
Repeat Annually for aircraft stored outside
Repeat every 3 years for aircraft stored exclusively in dry conditions

Reason: To detect corrosion inside the elevator control rod and mass balance weight located in the vertical fin and prevent failure of the rod and control disconnection.

Instructions:
1. Gain access to elevator rod in fin by removing rudder and Tailplane.
2. Remove nut and bolt from lower end of elevator control rod and withdraw rod through fin.
3. Remove tubular rivet at lower end of rod and withdraw balance weight (approx. 0.75 m long steel bar with “O” ring at top.
4. Inspect external area of control rod at a point where the top of the weight would be located. If necessary paint strip the area.
If any corrosion is found having penetrated through the control rod wall, replace the control rod assembly before further flight.
5. Inspect the rod internally as far as possible and the balance weight. Only light corrosion is permissible.
If severe corrosion is found replace the control rod assembly before further flight.
6. Remove any light corrosion found. (A long extension bar on a drill and a piece of emery will be required)

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7. Re-protect the rod internally and externally and the balance weight with primer and topcoat.
8. It is also recommended to treat the inside of the rod with protection fluid such as “Tube Oil” or “Lanolin” (PX1)
9. Re-assemble the control rod using a new “O” ring and tubular rivet. Special tools are required to replace the rivet (The Tubular rivet may be replaced by a 6mm nut and bolt provided adequate clearance exists when refitted to aircraft).
10. Refit control rod to aircraft.
11. Carry out duplicate inspection of rod installation. (Check that adequate clearance exists especially if using a 6mm nut and bolt)
12. Refit removed components.
13. Make logbook entry showing compliance and Pink Page entry indicating when next due.

In case of difficulty, Please contact Tim Dews at Airborne Composites.

Parts & materials required;

O ring	P/No 14-2/872
Tubular rivet	P/No LN340-1.4544.9
(Bolt/nut/washer	P/No LN9037 M6x26, LN9348M6, LN9025-6.4)
Protection fluid	Tube oil or PX1
Primer and paint	

Approved By
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