



## GFA AIRWORTHINESS DIRECTIVE

- TYPE AFFECTED:** DG-500 M
- SUBJECT:** Inspection, modification and possible replacement of the propeller mounting plate.
- BACKGROUND:** Overseas and local experience has shown that the propeller mounting plate may crack. If this part fails the propeller may be lost.
- DOCUMENTATION:** DG Flugzeugbau Technical note 843/8 the relevant parts of which forms part of this AD. Note that Items 2, 3 and 4 of the Technical Note will be promulgated as a separate AD.
- ACTION REQUIRED:**
1. Before next flight the propeller mounting plate, 5M2, must be inspected for cracks in accordance with Appendix A of this AD. If any cracks are found this part must be replaced before next flight.
  2. Within 10 hours of engine operation DG part 5M75 must be installed as shown in Appendix A.
  3. The inspection of the propeller mounting plate must be repeated every 25 hours of engine operation.
- Parts may be obtained from DG Flugzeugbau or their Australian Agents.
- WEIGHT AND BALANCE:** Not affected
- IMPLEMENTATION:** Inspection for the propeller mounting plate cracks must be performed by persons rated Replacement of Components any type.
- Replacement of the mounting plate (if necessary) and installing part 5M75 must be performed by persons rated for Annual Inspections on the DG-500M.
- COMPLIANCE:** The requirements of this GFA Airworthiness Directive are mandatory. This Directive is issued pursuant to the Rules and Regulations of the Gliding Federation of Australia.

SIGNED:

  
CHIEF TECHNICAL OFFICER AIRWORTHINESS

For and on behalf of:

THE GLIDING FEDERATION  
OF AUSTRALIA

## APPENDIX A

### EXTRACTS FROM TN 843/8

#### REASON:

On an inspection cracks were found in the propeller mounting plate 5M2 (s. maintenance manual diagram 11) near to the bolts connecting the plate to attachment 5M4. Prior to the next flight the propeller mounting plate must be inspected for cracks in the affected area. This item is also added to the 25 hour inspection of the powerplant. In addition an aluminium plate 5M7 must be inserted between propeller mounting plate and washers to avoid undesirable stressing of the propeller mounting plate.

#### INSTRUCTIONS:

The critical areas (at the lower end) of the propeller mounting plate must be inspected for cracks. To accomplish this first remove the bolts at the front face of the propeller mounting plate including washers, then clean the plate with a cloth. Now have a close look at the surrounding of the fixing bolts and the edges (s. sketch) using a magnifying glass (magnification min. 5x). Due to remains of lubricant soaked into the cracks they are easy to detect.

Because cracks might also start from the impressions of the washers check this area very carefully. If cracks are detected or only suspected the propeller mounting plate must be replaced by a new part 5M2.

Moreover an aluminium plate 5M75 must be inserted between propeller mounting plate and washers for better stress distribution. Use longer bolts M12 x 30 DIN 912-8.8zn instead of existing bolts to fix the propeller mounting plate.

