

Subject : Starter motor control in the control unit

Effectivity type: DG-800, DG-500
variant: DG-800A, DG-800B (not DG-808C), DG-500MB

Accomplishment : Dec. 31. 2013

Reason : About 8% of the control units produced for the motorgliders mentioned above have been sent in for repair with defective starter motor control. During repair it was found that the MOSFET transistors were defective and some of them failed short circuit which means that the starter motor may be activated under certain circumstances without pressing the starter button. Such occurrences mostly happened when switching on the master switch. If the powerplant is already extended this malfunction may cause harm to the pilot or other persons because of the rotating propeller.
The MOSFET transistors are protected against overload but may have been damaged due to fatigue or jump starting the engine by electric power directly applied to the starter motor.
The control unit was redesigned: An additional semiconductor switch will be installed which prevents the MOSFET transistors from receiving electric power without the starter button pressed. Due to this modification the terminal "43" on the upper side of the control unit will be moved forward a certain distance.

Instructions : 1. Remove the control unit and ship it to DG-Flugzeugbau for modification.
2. The control unit will be labelled after modification with a placard „MS“.
3. Re-install the control unit, be aware of the new position of wire terminal „43“. Secure the electric plug with a ty-rap to the control unit.

Material : /

Weight and balance : influence negligible

Remarks : Instructions No. 1 and 3 may be executed by the pilot/owner himself and are to be inspected and entered in the aircraft logs by a licensed inspector at latest with the next annual inspection.
EASA countries: Release the modification according to the regulations of Part M item M.A.801.

Bruchsal, date: 29.05.2013

Author: Modifications approved by EASA Date 25. July 2013
under Approval No. 10045875

Wilhelm 