Maintenance manual DG-500 ELAN ORION

#### Manual amendments

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## Maintenance manual DG-500 ELAN ORION

### 3. Maintenance

## 3.2 Maintenance of the airframe

The sailplane is service free except for the care of the surfaces (see sect. 3.1) and greasing and oiling of the control system and all pins (see sect. 3.3).

After a landing in a soft field, the undercarriage box and tow hook should be thoroughly cleaned.

# 3.3 Greasing and oiling

- A The contact surfaces of the canopies to the fuselage are to be rubbed with colourless floor-polish (canopy and fuselage side) to reduce grating noise in flight. Polish at the beginning of the flight season and then every month.
- B Once a year your DG-500 ELAN ORION should be carefully checked and all bearings, including control surface hinges, should be cleaned and greased if necessary. The various greasing points are as follows:
  - Aileron drive connections at the inboard aileron.
  - Airbrake drive connection in airbrake box, also grease the brake paddle pivots.
  - Remove the access panels on the left hand cockpit walls and grease all the pushrod guides, but not those with Teflon linings, note see below.
  - Remove the baggage compartment floors and open the baggage compartment rear cover to grease all bearings.
  - Open the access panels (2 in the front and 2 in the rear cockpit). In the rear cockpit you have to remove the height adjustable seat pan first. Grease all accessible bearings (ball bearings and rod ends with universal bearings)
  - Remove the control column covers and grease all the bearings associated with the control columns.
  - Grease the rudder pedal adjustment slide.
  - Oil all hinge points on the undercarriage in the undercarriage box.
  - Clean and grease all control surfaces hinges.
  - Clean and grease the control hook ups for, ailerons, airbrakes and elevator control.
  - Clean and grease all pins and bushes of the wing and tailplane attachment.

**Note:** The greases we recommend are lithium based pressure-resistant anticorrosion greases or lithium-soap greases (multi-purpose greases for rolling element bearings).

**Note:** The sliding guides of the following parts are made from Teflon and should not be greased:

Landing gear controlhandle 5FW39 on 5St68/2 and airbrake control handle 5St69 on 5St68/.

If these parts have been greased inadvertently you have to disassemble the parts and to clean them completely with Acetone.