0.1 **Record of revisions**

Any revision of the present manual, except actual weighing data, must be recorded in the following table and in case of approved sections endorsed by the responsible airworthiness authority.

The new or amended text in the revised page will be indicated by a black vertical line in the right hand margin, and the Revision No. and the date will be shown on the bottom left hand of the page.

Rev. No.	Affected pages / section	Description	Issue Date	LBA Approval Date	Inserted Date Signature
1	0.3, 0.4, 2.5, 4.3, 5.2, 6.5, 6.7, 6.9, 7.1, 7.9, 7.10	TN 348/9	Oct. 97	26.11.97	
2	0.3, 0.4, 4.7, 7.7, 8.2	TN 348/15	Jan. 01	07.02.01	

0.2 List of effective pages

Note: Those manual pages which are similar for both the variant DG-500/20 ELAN and the type DG-500/22 ELAN are taken directly from the manual DG-500/22 ELAN without any change.

The special pages for variant DG-500/20 ELAN are marked in this list with /20 after the page no..

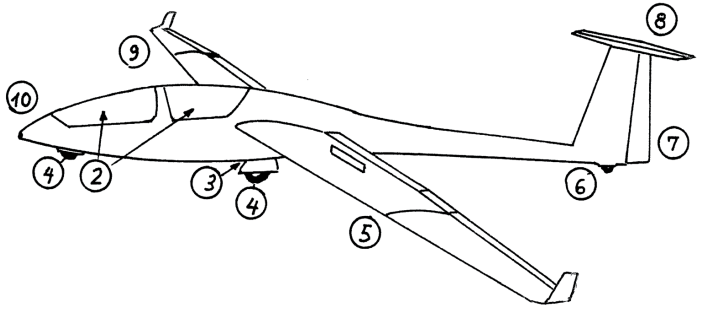
Section		page	issued	replaced	replaced
0		0.0/20	Febr.95		
		0.1/20	/		
		0.2	/		
		0.3/20	May 95	Oct. 97	Jan. 01
		0.4/20	Febr.95	Oct. 97	Jan. 01
		0.5	May 90		
1		1.1	„		
		1.2/20	June 95		
		1.3	May 90		
		1.4/20	Febr.95		
		1.5/20	„		
2	App.	2.1	May 90		
	„	2.2	„		
	„	2.3	„		
	„	2.4	„		
	„	2.5	„	Oct. 97	
	„	2.6/20	May 95		
	„	2.7	May 90		
	„	2.8	„		
	„	2.9/20	Febr.95		
3	„	3.1	May 90		
	„	3.2	„		
	„	3.3	„		
4	„	4.1	„		
	„	4.2	„		
	„	4.3	„	Oct. 97	
	„	4.4	„		
	„	4.5	„		
	„	4.6	„		
	„	4.7	„ /20	Jan. 01	
	„	4.8	„		
	„	4.9	„		
	„	4.10	„		
	App.	4.11	March 92		
	„	4.12/20	May 95		
	„	4.13	May 90		
	„	4.14	„		
	„	4.15	May 90		
	„	4.16/20	Febr.95		
	„	4.17/20	„		

0.2 List of effective pages (cont.)

Section		page	issued	replaced	replaced
5	"	5.1	May 90		
	"	5.2	"	Oct. 97	
	"	5.3	"		
	App.	5.4/20	Febr.95		
		5.5/20	"		
		5.6/20	"		
		5.7	May 90		
6		6.1	"		
		6.2	"		
		6.3	"		
		6.4	"		
		6.5	"	Oct. 97	
		6.6	"		
		6.7	"	Oct. 97	
		6.8	"		
		6.9	"	Oct. 97	
7		7.1	"	Oct. 97	
		7.2/20	Febr.95		
		7.3	May 90		
		7.4	"		
		7.5	"		
		7.6	"		
		7.7	" /20	Jan. 01	
		7.8	"		
		7.9/20	June 95	Oct. 97	
		7.10/20	Oct. 97		
8		8.1	May 90		
		8.2/20	June 95	Jan. 01	
		8.3	May 90		
		8.4	"		
		8.5	"		
9		9.1	May 90		

B Inspection after rigging

Walk around the aircraft



1. All parts of the airframe
   a) check for flaws such as bubbles, holes, bumps and cracks in the surface
   b) check leading and trailing edges of the wings and control surfaces for cracks
2. Cockpit area
   a) check the canopy locking mechanism
   b) check the canopy emergency release see sect. 7.15 (not each day, but min. every 3 month)
   c) check the main pin securing
      check the securing ropes of the headrest in the rear cockpit for wear and function
   d) check all controls for wear and function, incl. positive control check
   e) check the tow release system for wear and function incl. cable release check
   f) check for foreign objects
   g) check the instrumentation and radio for wear and function
   h) check the radio and other electrical equipment for function. If there is no electric power it must be assumed, that the battery is not in-stalled in the fin. **Flying is only allowed with the battery in the fin as otherwise the forward C.G. limit** may be exceeded.
   i) check the brake fluid level
3. C.G. Tow hook
   a) check the ring muzzle of the C.G. hook for wear and function
   b) check for cleanliness and corrosion
4. Main landing gear and nose wheel
   a) check the struts, the gear box, the gear doors and the tyre for wear; dirt in the struts can hinder the landing gear from locking over center the next time!

b) Tailwheel: Tyre 200 x 50 2 PR
Diameter 200 mm (7.87 in)
Tyre pressure 4 bar (58 psi)

c) Nosewheel: Tyre 260 x 85
Diameter 260 mm (10.2 in.)
Tyre pressure 2.5 bar (36 psi)

Option: See diagram 10 M.M.
The nose wheel is connected to the rudder control with springs.

7.5 **Tow hooks**
See diagram 5 M.M.
Safety release "Europa G 88" for winch launch installed near the C.G.
"nose release E 85" installed in the fuselage nose for aerotow.
Both hooks are operated by the same handle.

7.8 **Seats and safety harness**
The front seat is constructed as an integral inner shell.
The rear seat is height adjustable. The adjustment is by means of a strap similar to the shoulder harness.
As safety harness only symmetric 4-point harnesses fixed at the given fixing points are allowed.

7.9 **Baggage compartment**
Max. load 15 kg (33 lbs.).
Heavy pieces of baggage must to be secured to the floor.

7.10 **Waterballast system**
See diagram 6 M.M.
The wingtanks are constructed as double wall bags with a capacity of 80 l (21.1 U.S.gal) per wing. The dump valves are mounted in the wings and the control is hooked up automatically when rigging the glider.

8.1 **Introduction**
This section contains manufacturer's recommended procedures for proper ground handling and servicing of the sailplane. It also identifies certain inspection and maintenance requirements which must be followed if the sailplane is to retain that new-plane performance and dependability. It is wise to follow a planned schedule of lubrication and preventive maintenance based on climatic and flying conditions encountered.

8.2 **Inspection period, maintenance**
The "Instructions for continued airworthiness (maintenance manual) for the DG-500/20 ELAN have to be followed.

A Before each rigging all the connecting pins and bushes should be cleaned and greased. This includes the control connectors.

B 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.

C Once a year all the bearings and hinges should be cleaned and greased. See the greasing programme of the maintenance manual.
Each year the control surface displacements, adjustments and general condition must be checked. (See the maintenance manual).

8.3 **Alterations or repairs**
It is essential that the responsible airworthiness authority be contacted **prior to** any alterations on the airplane, to ensure that the airworthiness of the sailplane is not impaired. It is prohibited to execute the alteration without the approval of the airworthiness authority. The manufacturer will not be liable for the alteration or for damages resulting from changes in the characteristics of the aircraft due to alteration. So it is strongly recommended to execute no alternatives which are not approved by the aircraft manufacturer.
External loads such as external camera installations are to be regarded as alterations! Repair instructions can be found in the DG-500/20 ELAN repair manual. No repairs should be carried out without referring to the manual.