0 MANUAL CONTENTS

0.1 Log 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 on the right margin, and the revision no. and the date will be shown on the bottom left hand of the page.

Rev no.	Pages	Reference	Revision Date	EASA Approval
1	0.1,0.2, 0.4, 0.5, 0.6, 0.7, 4-9, 4-55, 7-3, 7-4, 7-15, 7-21, 8-7	TN 8017 Necessary changes to the power plant	Nov. 2010	14. March 2011

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	0.3	April 2005			
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4.3 DAILY INSPECTION (continued)

4 Engine region (continued)

(11) Place deco valve handle to “OPEN”: check deco valves open → propeller can freely be turned.

(12) Place deco valve handle to “CLOSED”: check deco valves closed → compression on both cylinders can be felt when turning propeller and no audible hissing noises from deco valves. Check that the deco valve closes without delay after actuation.

(13) Deco valve control: check condition of Bowden inner, outer and thimble. Check securing of screwed joints and check condition of lock wire, fixing Bowden outer to adjuster threading on Engine mount.

(14) Turn engine over by hand with deco handle “CLOSED” (corresponds to deco valves closed). Pay attention to abnormal noises and/or sluggishness, which may indicate engine damage.

(15) Turn engine several times over with deco handle “CLOSED” and “OPEN” (corresponds to deco valves closed and open) to free oil residue in engine.

(16) Check rubber engine mounts (2 elements each above/below engine) for cracks and securing.

(17) Check condition of engine tower: fixing in fuselage free from play, cracks, damage, all components properly fixed.

(18) Check bolted joints between lift cylinder / engine tower and gas strut / engine tower for seating, condition and securing.

(19) Check bolted joint between lift cylinder, gas strut and engine bay bracket for seating, condition and securing.

(20) Check cables and limit switches in engine bay and at lift cylinder for condition and secure cable routing.

4.9 POST FLIGHT CHECKS

1. Switch off electrical instruments

2. Remove batteries and charge, when necessary

3. Remove insects and dust using chamois leather (See also chapter 8, Cleaning and Care)

4. When engine was used: Clean propeller, engine, fuselage and tail from oil and combustion residue. Additionally it is recommended to check the drive system components according to the pre-flight checklist, to make sure system is operational for next flight.

5. Close fuel cock.

6. Check if moisture has accumulated in air brake boxes and remove with sponge.

7. Check proper emptying of integral tanks.

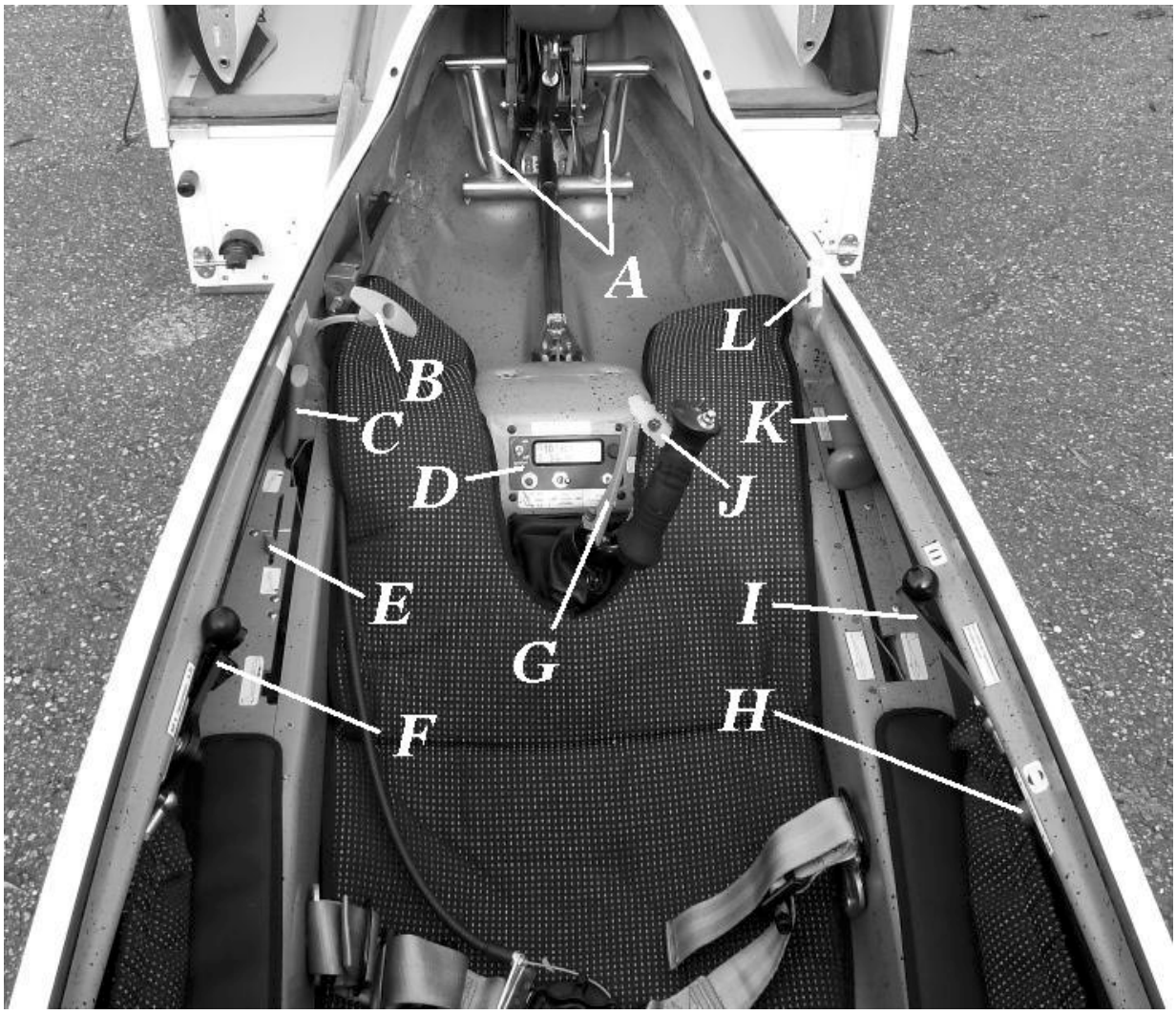
8. Check proper dumping of tail fin water tank.

9. Keep all water valves open for ventilation of wing water tanks and tail fin water tank.

10. Unlock wing air brake system.

For cleaning and care, see chapter 8.5

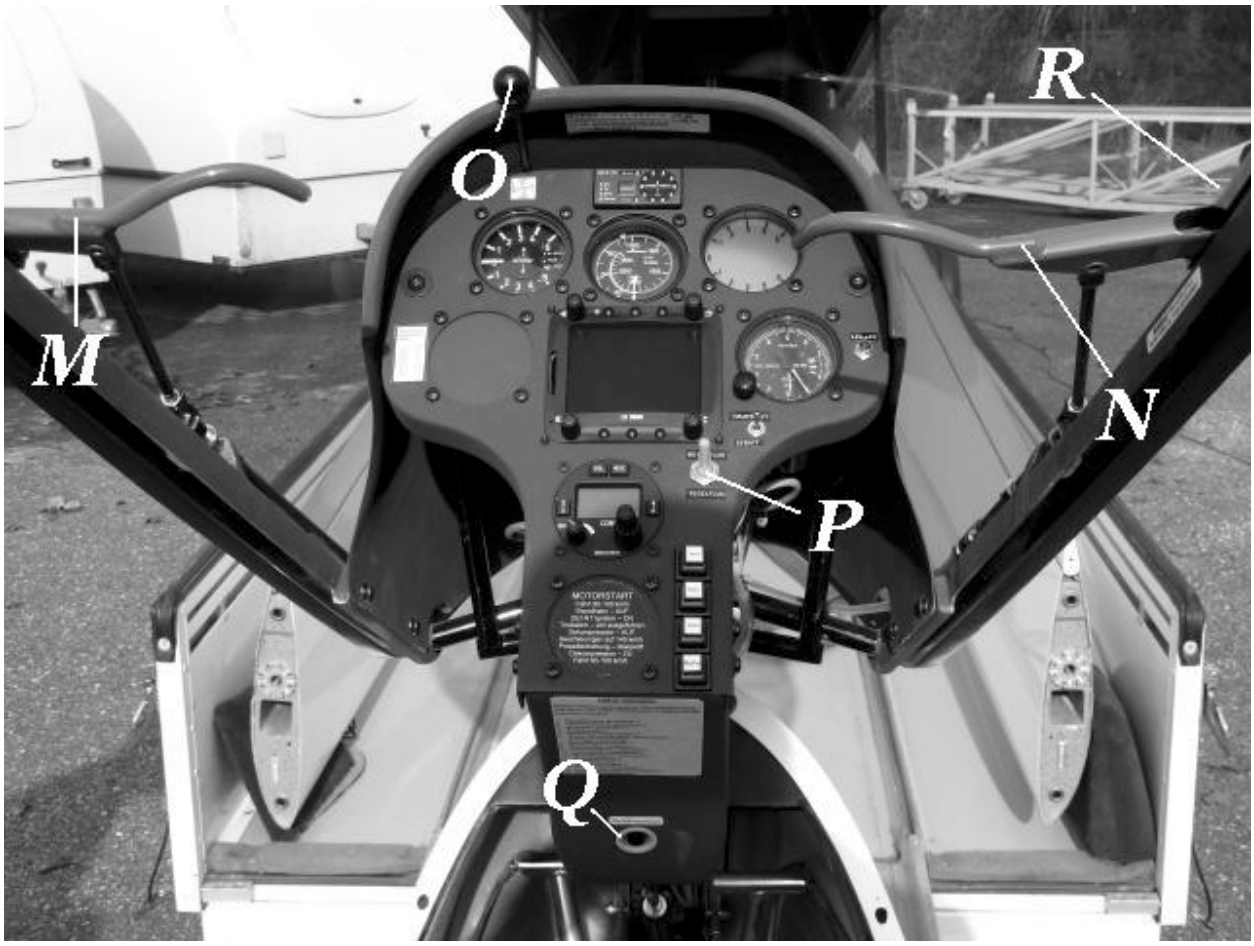
7.2 COCKPIT CONTROLS



Description of propulsion system see section 4.3, engine region

A - Rudder pedals and wheel brake (feet operated)
B - Tow cable release
C - Air brake handle
D - DEI-NT
E - Trim lever, also indicating trim position
F - Decompression handle
G - Trim locking lever
H - Fuel cock
I - Water ballast
J - Pedal adjustment
K –Landing gear lever
L - NOAH (optional, s. paragraph 9.3)

7.2 COCKPIT CONTROLS (continued)

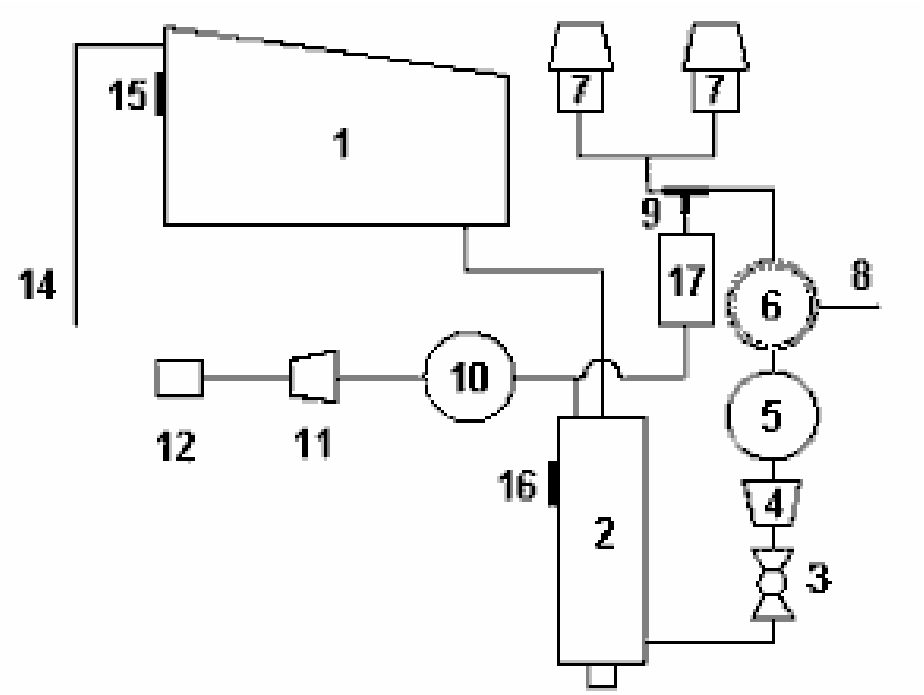


Description of propulsion system see section 4.3, engine region

M - Left canopy locking
N - Right canopy locking and emergency jettison
O - Ventilation
P - Static-Pitot switch
Q - Pressure switch for re-fuelling pump
R - Mirror for engine observation, optional on the right hand canopy frame

7.11 FUEL SYSTEM

Main components of fuel system:



No.	Description
1	Main tank
2	Feeder tank
3	Fuel cock operated from cockpit
4	Fuel filter
5	Electrical fuel pump
6	“Bing” membrane pump
7	Carburetor
8	Suction tube for membrane pump (to crankcase)
9	T-joint with reduction in return pipe
10	Electrical re-fuelling pump
11	Fuel filter
12	Quick connector for re-fuelling
13	Drain valve
14	Ventilation (Exit at fuselage under side behind landing gear box)
15	Optical fuel level sensor for tank full indication
16	Optical fuel sensor for reserve fuel indication
17	Return line check valve (upto serial no. 8526)

For further information for fuel and system operation, see sections 2.4 and 4.5 as well as in Maintenance Manual section 1.10.

7.12.1. **Engine Operation Elements** (continued)

7.12.1.5 Selector Switch for DEI-NT SETUP-Menu

The selector switch (5) allows change into other display levels of DEI-NT and entry of variable values, see section 7.12.2.

7.12.1.6 Deco Valve Lever

Lever for operating engine decompression valves is on the left hand cockpit rim (see section 7.2). Is used during engine start and for more rapid engine shut-off.

- Lever completely forward (Normal Position):
  ”CLOSED“ Position „Engine operation“, Deco valves closed.

- Lever pulled rearward
  „OPEN“ Position „Engine start“, Deco valves open.

7.12.1.7 Fuel Cock

Fuel cock at right cockpit rim (see section 7.2).
Fuel cock shuts supply to engine off. After closing cock, engine runs for about 5 seconds until standstill.
During normal operation, use of fuel cock for engine stopping is not recommended: Engine lubrication ceases after fuel cut-off.

- Sliding knob forward: fuel cock ”CLOSED“
- Sliding knob rearward: fuel cock “OPEN“

The fuel cock should be closed during transport and storage of the motor glider. Otherwise fuel may leak out of the carburettors into the engine bay.

7.12.1.8 Pressure Switch for electrical Re-fuelling System

Pressure switch for electrical re-fuelling system countersunk in instrument panel (see Section 7.2).
With ignition switched “OFF” the pressure switch operates the electrical re-fuelling pump. Re-fuelling operation can be stopped by pressing switch again. Automatic switch-off only when filling tanks completely.
With ignition switched “ON” the pressure switch stops the electrical fuel pump as long as the switch is pressed. This function is intended only for checking the electrical pump during ground runs.

8.4 GROUND HANDLING / ROAD TRANSPORT (continued)

8.4.5 Supporting Area for Road Transport

Fuselage: Tail skid or tail wheel
Main wheel
Fuselage shell in front of landing gear, minimum width of support 30 cm <11.8 in>.

Wing: Right spar at inner or outer main pin bushings.

Left forked spar at outer main pin bushing only, when both fork ends are supported. Otherwise use inner fork end only.

Shell at root, minimum width of support 15 cm <5.9 in>.

Shell at outer air brake end, minimum width of support 25 cm < 10 in>.

Horizontal Tail Unit: At any place, minimum width of support 8 cm <3.2 in>.

Note: The fuel cock should be closed during transport and storage of the motor glider. Otherwise fuel may leak out of the carburettors into the engine bay.

Note: Always keep wing discharge and drain orifices open for ventilation during trailer storage. Keep trailer vented to avoid corrosion due to condensation. Wing leading edge drainage applies only up to S/N 8500.

Note: To avoid water condensation in the fuel tanks, storing in the trailer should be either with tanks completely full or empty. Do not fill tanks until ventilation tubes spill over to avoid fuel overflow due to temperature variation.