

**E. Inspection procedure for increase of service time**

**1. General**

The results of fatigue tests of wingspar sections have demonstrated recently that the service time of GFRP/CFRP gliders may be extended to 12000 hours, if for each individual glider (in addition to the obligatory annual inspections) the airworthiness is demonstrated according to a special multi-step inspection program particularly with regard to the service life.

**2. Dates**

When the glider has reached a service time of 3000 hours, an inspection must be done in accordance with the inspection program mentioned under point 3.

If the results of this inspection are positive or if any defects found have been duly repaired, the service time of the glider is extended by another 3000 hours to a total of 6000 hours (first step).

The above inspection program must be repeated when the glider has reached a service time of 6000 hours. If the results of this inspection are positive or if any defects found have been duly repaired, the service time of the glider is extended to 9000 hours (second step).

When the glider has reached a service time of 9000 h the above inspection program must be repeated.

If the results of the inspection are still positive, or if any defects found have been duly repaired, the service time may be extended to a total of 10000 hours (third step).

Proceed analogous when reaching 10000 and 11000 hours (4. + 5. step).

Maintenance and Inspection

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3. Ask the manufacturer for the necessary inspection document
4. The inspection must only be done by the manufacturer or by a licensed repair station or inspector.
5. The results of the inspections have to be recorded in an inspection test report wherein moments are required for each inspection instruction.  
If the inspections are done outside the manufacturer's facilities, a copy of the records must be sent to the manufacturer for his evaluation and information.
6. The annual inspection is not affected by this inspection program.

**F. Exchange of the waterbags**

Tie a piece of nylon cord (3mm) diameter and at least 5m long, to the nylon cord sticking out of the wing root rib. Unscrew the screw cap of the valve. Pull the valve body with the tank out of its suspension in direction of the wing tip. Then pull the valve body and tank out of the wing through the opening in the root rib. Unknot the nylon cords from the tank and open the hose clamp at the valve.

Attach the new tank and reverse the above procedure to install the tank.  
Fill the tank and check for water tightness.

**16. Instrument- und equipment list**

**1. Airspeed indicators** (Measurement range 0- 300 km/h)

Manufacturer	Type	Specification nr.
Winter	6 FMS 4	TS 10.210/10
Winter	6 FMS 5-2	TS 10.210/03
Winter	6 FMS 4 (Diameter 80mm)	TS 10.210/15
	0-300 km/h Part nr. 6421369	
	0-160 kts Part nr. 6423369	
Winter	7 FMS 4(Diameter 58mm)	TS 10.210/19
	0-300 km/h Part nr. 7421369	
	0-160 kts Part nr. 7423369	
PZL	PSO 6	
PZL	PR-400 S	

The airspeed indicator must have the speed range markings see Flight manual page 6.

**2. Altimeters**

Manufacturer	Type	Specification nr.
Winter	4 FGH 10 (Diameter 80mm)	TS 10.220/46
	1.000-10.000m Part nr.4110	
	3.000-30.000ft Part nr.4330	
Winter	4 FGH 20(Diameter 58mm)	TS 10.220/47
	1.000-10.000m Part nr.4220	
Winter	4 FGH 40 (Diameter 58mm)	TS 10.220/48
	1.00-20.000ft Part nr.4550	
PZL	PW 12	

Or any other TSO C 1ob specified and approved altimeter with fine range pointer 1 turn max. 1000 m, 3000 ft.

**3. Four piece safety belt and shoulder harness ( symmetrical )**

Manufacturer	Type	Specification nr.
Gadringer	BAGU IV-B	40.070/16
	BAGU 5202 G	40.070/32
	SCHUGU 2700 G	40.071/05
Autoflug	SCHUGU FAG-7 D/O	40.070/30
	BAGU FAG-7 H/O	40.071/21
Schroth	4-01-0.104	40.073/11

In addition for cloud flying.

**4. VHF transceiver**

Manufacturer	Type	Specification nr.
Dittel	FSG-40 S	10.911/45
	FSG-50	10.911/71
	FSG-60 M	10.911/72
	FSG-70,71 M	10.911/81
	FSG-90	10.911/98JTSO
	FSG 2T	LBA.0.10.911/103JTSO
Becker	AR 3201-(1)	10.911/76
	AR 2008/25 (A)	10.911/48
	AR 4201	JTSO-2C37 D, ED-23A
Filser	ATR 720 A	10.911/74
	ATR 720 C	10.911/83
	ATR 600	O.10.911/106JTSO
	ATR 500	LBA.0.10.911/113JTSO

or other instruments certified for aircraft use according to TSO or JTSO or ETSO standards may be installed.

**5. Compass**

Manufacturer	Type	Specification nr.
PZL	B - 13	FD 19/77
	B - 13 KJ	
Ludolph	FK 16	10.410/3
Airpath	C 2300	
Hamilton	H I 400	TSO C 7c Type1
Bohli	46 MKF 1	

The compass is to be compensated in the glider.

**6. Variometer**

Manufacturer	Type	Specification nr.
Winter	StV 55 (Diameter 58)	
	StV 5 (Diameter 80)	
	5 StVL	10.230/11
	5 StVLM	10.230/12
	5 StVM5 (Diameter 58)	TS 10.230/14
	± 5m/s Part nr. 5451	
	± 1000 ft/min Part nr. 5452	
	± 10 kts Part nr. 5453	
	5 STV 5 (Diameter 80)	TS 10.230/13
	± 5m/s Part nr. 5251	
PLZ	± 1000 ft/min Part nr. 5252	
	± 10 kts Part nr. 5253	
	PRO 4 (Diameter 58)	
	PRO 03 (Diameter 80)	

**7. Turn and bank indicators**

Manufacturer	Type	Specification nr.
Apparatebau Gauting	WZ-402/31 12 V	10.241/8

or a certified artificial horizon.

**8. Outside air temperature gauge**

Manufacturer	Type	Specification nr.
Stoerk	TF 00-059 K (-20 - +40°C)	

**9. Instruments which are not part of the minimum equipment:**

Transponders: Transponders certified for aircraft use according to TSO or JTSO or ETSO standards may be installed.

Other instruments and equipment (eg. variometers, gliding computers or flight data recorders):

Instruments and other equipment may be installed if they do not in themselves, or by their effect upon the sailplane, constitute a hazard to safe operation.

Caution: If additional instruments or equipment are to be installed after production of the glider, it must be assured that they will be installed in the places provided by the design. If installed in other places it must be assured that they are secured safely.

Electrical instruments and equipment must be connected via appropriately rated fuses, the power consumption of each single part should not exceed 3A.

After installation raise a new weight and balance report.