# ALLEGRO 2000/SW/F

# Ultralight Aircraft

Type Certificate DEAC e.V.Germany No.61173 and 1249 from December 23.1999 Type Certificate LAA Czech Republic No.05/2000 from October 17.2000



# **CHECK AND MAINTENANCE MANUAL**

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#### Table of Contents

Table of Contents	2
Maintenance intervals time toleration	2
1. Engine Installation & Engine Area	
2. Centre-section	
3. Wing	
4. Horizontal tail surface (HTS) and aerodynamic trim	
5. Vertical tail surface (VTS) and forward undercarriage	
6. Main fibreglass undercarriage and brakes	
7. Flap control	6
8. Wiring and instruments	
9. Control	6
10. Other	
	• • •

NOTICE: The first inspection is obligatory at reaching 25 hours of flying and has to be performed by the producer directly or at an authorized maintenance company.

If the first inspection is not done and not listed in the aircraft documentation the manufacturers guarantee will be considered void !!!

#### Maintenance intervals time toleration

+/- 5 hours

THE 5 HOURS CANNOT BE ADDED!

For example: 100 hour's maintenance executed at 95 hours

200 hour's maintenance at 200 hours +/- 5 hours and not at

195 hours +/- 5 hours

In case of a shortened 100 hour's interval:

100 hours maintenance executed at 85 hours already For example:

Next maintenance has to be executed than at 185 hours.

#### **NOTICE:**

Even if less than 100 hours were flown in the last 12 months a regular 50 hour technical inspection and the 100 hour inspection has to be done.

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### 1. Engine Installation & Engine Area

		Inspect After				
		50h	100h	200h	500h	
1.0	Engine compartment inspection – cleanliness					
1.1	Cooling system pressure test, hose inspection					
1.2	Coolant inspection - point of solidification	_				
	- or at least	once	e a year l	oefore w	inter	
1.3	Fuel system hose pressure test					
1.4	Oil system pressure test, hose inspection					
1.5	Coolant replacement	or	nce every	two yea	ırs	
1.6	Inspection of exhaust flange nut tightness at point where exhaust is attached to engine block					
1.7	Exhaust and exhaust weld pressure inspection - cracks					
1.8	Exhaust spring inspection					
1.9	Tightening of exhaust silencer clamps					
1.10	Fuel system hose replacement	or	nce every	two yea	ırs	
1.11	Fuel filter cleaning					
1.12	Fuel tank drain					
1.13	Cleaning of main intake filter in tank					
1.14	Tank vent inspection - obstructions					
1.15	Rubber engine blocks inspection - cracks					
1.16	Rubber engine blocks tightening					
1.17	Engine mount inspection – main welding junctions					
1.18	Check tension engine block and engine mounting					
1.19	Throttle cable lubrication and operation inspection –					
1.20	cockpit and engine compartment					
1.20	Choke cable lubrication and operation inspection – cockpit and engine compartment					
1.21	Rubber carburettor flange inspection - cracks					
1.22	Oil cooler mounting inspection and cleaning of outside dirt					
1.23	Oil tank mounting clip inspection					
1.24	Manual fuel pump inspection					
1.25	Oil cooler to engine bulkhead - inspection					
1.26	Electric fuel pump filter – inspection and cleaning					

Engine inspection and maintenance as specified in engine manufacturer's service manual.

#### 2. Centre-section

		Inspect After				
		50h	100h	200h	500h	
2.0	Main junctions of wings – airframe integrity inspection					
2.1	Main pin brace – centre section tightness inspection					
2.2	Main pin dismounting, pin check, mounting inspection					
2.3	Fuselage brace mounting – inspect without brace dismounting					
2.4	Fuselage brace mounting after brace dismounting, also below cockpit upholstery					
2.5	Brace case rivet inspection					

### 3. Wing

		Inspect After					
		50h	100h	200h	500h		
3.1	Rivet connection inspection main beam - metal wing cover						
3.2	Suspension inspection						
3.3	Ailerons suspension lubrication						
3.4	Ailerons control lever rivet inspection						
3.5	Control stops inspection						
3.6	Flap suspension inspection						
3.7	Flap dismounting, pin and case inspection						
3.8	Control lubrication in wing hatch						
3.9	Control clearance inspection						
3.10	Wiring inspection in wing tip arcs						

# 4. Horizontal tail surface (HTS) and aerodynamic trim

	_	Inspect After				
		50h	100h	200h	500h	
4.1	Aileron pins and control pin lubrication					
4.2	HTS third point bolt tightness inspection					
4.3	Main pin (bolt) tightness inspection					
4.4	Dismounting of HTS, bolt and fitting inspection					
4.5	Rivet inspection					
4.6	Aero. trim wire inspection and lubrication					
4.7	Aero. trim spring inspection on HTS					
4.8	Aero. trim. wire clip tightening					
4.9	Aero. trim. fitting lubrication					
4.10	Dismounting of HTS and fuselage inspection – HTS junction – pin lubrication					
4.11	Aero. trim lever inspection					

### 5. Vertical tail surface (VTS) and forward undercarriage

		Inspect After				
		50h	100h	200h	500h	
		_				
5.1	VTS fitting-pin lubrication					
5.2	Lubrication of VTS control pin wire and wires					
5.3	VTS drain outlet and stabilizer inspection					
5.4	VTS wires pin control dismounting and surface inspection					
5.5	VTS dismounting – pin and fitting inspection					
5.6	Lubrication of forward undercarriage leg casing – inspection					
5.7	Screw tightening: front leg – engine bulkhead					
5.8	Front wheel tire and tire-casing inspection – inflation of					
5.9	Fitting inspection – rear fuselage and brace fitting at tank					
5.10	Forward leg control rod and lever inspection					
5.11	Forward leg bearing lubrication					
5.12	Front leg dismounting, main tube wear inspection at main case					
5.13	Silentblock inspection – cracks, replace if necessary					
5.14	Wire pin lubrication - pedals					
5.15	Wire pin dismounting – pedals – surface inspection					
5.16	Pedal pin case lubrication					

### 6. Main fibreglass undercarriage and brakes

		Inspect After				
		50h	100h	200h	500h	
			_			
6.1	Undercarriage seating stiffness inspection					
6.2	Central screw tightening					
6.3	Fibreglass status inspection – under cockpit upholstery					
6.4	Tire and tire-casing inspection – replace if necessary					
6.5	Tire pressure check			Or Mo	onthly	
6.6	Brake lining inspection replace if necessary, brake lubrication, cleaning					
6.7	Bearing operation inspection + brake adjustment					
6.8	Shaft tightening at the point of fastening to undercarriage leg					
6.9	Aerodynamic wheel cover clamp inspection					
6.10	Aerodynamic wheel cover inspection					
6.11	Brake coupler lubrication, wire inspection					
6.12	Braking effectiveness inspection and adjustment					
6.13	For hydraulic brakes – system tightness inspection – event. fluid replenishment					
6.14	Brake fluid change	On	ice Every	Two Yea	ars	

### 7. Flap control

		Inspect After				
		50h	100h	200h	500h	
7.1	Flap control junction inspection – flap attachment to wing					
7.2	Control junction needle dismounting – surface control					
7.3	Rubber cover lubrication					
7.4	Torsion tube seating lubrication - bulkhead					
7.5	Drive unit bearing lubrication					
7.6	Rod disassembly and control lever inspection					
7.7	Fibreglass; inspect below drive unit, if cracked – consult manufacturer					
7.8	Servo drive spiral lubrication					
7.9	Servo drive carbon check – only by manufacturer					
7.10	Flap pin suspension lubrication – wing (see 3.6)					
7.11	Flap dismounting – pin suspension inspection (see 3.7)					

### 8. Wiring and instruments

		Inspect After					
		50h 100h 200h 5					
8.1	Battery test and recharge						
8.2	Battery main clamp tightness inspection						
8.3	All appliances functionality - inspection						
8.4	Inspect, starter lead-in, engine chassis						
8.5 8.6 8.7	Top panel cover /typ A only/disassembly – inspect Dashboard removal /typ A+B/ – hoses, mains inspection Inspect, lines around control stick (wear)		very Two very Two		•		
8.8	Static and dynamic systems tightness inspection						
8.9 8.10	Instrument calibration Compass compensation	On	ce Every Annı		ars		

#### 9. Control

			Inspect After					
		50h	100h	200h	500h			
9.1 9.2	Slide case and bearing lubrication Control stick pin inspection (main pin disassembly)	•	Or Mon	thly	•			
9.3	Stop inspection							
9.4	Rudder deflection inspection and control stick stop adjustments							

#### 10. Other

		Inspect After					
		50h	100h	200h	500h		
10.1	Riveted seat belt joint inspection	_	_				
10.1	Rear bulkhead inspection – boot – against perforation						
10.3	Cockpit and door covering inspection – cracks						
10.4	Overall check of fibreglass parts and fuselage - cracks						
Notes	5						
End of	Maintenance Manual						
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