

ALLEGRO 2007

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

Registration Number
Serial number

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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:

For example: 100 hours maintenance executed at 85 hours already

Next maintenance has to be executed than at 185 hours.

NOTICE:

Even if less than 100 hours were flown within the last 12 months a regular technical inspection in the extend of 100 hour`s maintenance has to be done.

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 year before winter		
1.3	Fuel system hose pressure test		■		
1.4	Oil system pressure test, hose inspection	■			
1.5	Coolant replacement			once every two years	
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 status and number inspection	■			
1.9	Tightening of exhaust silencer clamps	■			
1.10	Fuel system hose replacement			once every two years	
1.11	Fuel filter cleaning – event. seal change	■			
1.12	Fuel tank drain	■			
1.13	Cleaning of main intake filter in tank		■		
1.14	Tank vent inspection - obstructions	■			
1.15	Engine silentblock inspection - cracks				■
1.16	Engine silentblock tightening		■		
1.17	Engine mount inspection – main welding junctions	■			
1.18	Screw tightening at point of contact – engine block – engine mounting		■		
1.19	Throttle wire lubrication and operation inspection – cockpit and engine compartment				■
1.20	Choke wire lubrication and operation inspection – cockpit and engine compartment	■			
1.21	Rubber carburettor flange inspection - cracks		■		
1.22	Oil cooler mounting tightness inspection and cleaning of outside dirt	■			
1.23	Oil tank mounting clip tightness inspection	■			
1.24	Manual fuel pump inspection		■		
1.25	Oil cooler tightness 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 Monthly
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				Once Every Two Years

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	500h
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 Top panel cover /typ A only/disassembly – inspect				Once Every Two Years ■
8.6 Dashboard removal /typ A+B/ – hoses, mains inspection				Once Every Two Years ■
8.7 Inspect, lines around control stick (wear)		■		
8.8 Static and dynamic systems tightness inspection	■			
8.9 Instrument calibration				Once Every Two Years
8.10 Compass compensation				Annually

9. Control

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

