

Motor Glider Type: SF 25 C

Serial No.:

Aircraft checks:

after the first 25 hrs., after the first 100 hrs., then after every 100 hrs., minimum once a year. **Note: extraordinary checks see Pos. E. 4,**

Check list for the aircraft:

A: Cabine

Pos.	Type of Check	100 h	200 h	Remarks
A. 1	Check Canopy, Canopy bearing, lock, escape hatch, emergency window for function and integrity.	0	0	
A. 2	Check fittings and the four wing / fuselage mountings for deformation, cracks, play. (max play 0.1 mm)	0	0	
A. 3	Check bolts for faultless security and play (max play 0.1 mm)	0	0	
A. 4	Check seat belts and their fasteners as well as buckles	0	0	
A. 5	Check steering, controls and spoilers on fuselage, wings and landing gear for easy movability, play and defects.	0	0	
A. 6	Check all connections of steering, controls and spoilers for defects, play and faultless security. Check break lever for easy movability.	0	0	
A. 7	Check control cables (and controls), spoiler cables, wheel brake cables for twists and wear and tear (esp guides).	0	0	
A. 8	Check rudder pedals for play, heavy handling and security.	0	0	
A. 9	Check pedal adjustment (if installed) for function, apply grease if necessary (Teflon or Silicon spray)	0	0	
A. 10	Check cable pulleys and guide connectors for play and wear and tear.	0	0	
A. 11	Check even employment of spoilers (adjust if applicable – see maintenance manual page 21)	0	0	
A. 12	Check effective and right employment of wheel brakes (adjust if applicable – see maintenance manual page 14).	0	0	
A. 13	Check condition, function, markings of instruments incl. compass (by comparing with deviation table) and radio (radio test).	0	0	
A. 14	Check if labelling is complete (see operation manual page 11) and if operation and maintenance manuals are available.	0	0	

B: Fuselage

Pos.	Type of Check	100 h	200 h	Remarks
B. 1	Clean and look after your motor glider in accordance with the maintenance manual page 12.	0	0	
B. 2	Check wings, aileron and brake flaps for planking, covering and paint damage.	0	0	
B. 3	Check fuselage for deformation, covering and paint damage (esp on wheel cover and bottom of fuselage).	0	0	
B. 4	Check fin and elevator for planking, covering and paint damage.	0	0	
B. 5	Check wing folding hinge (if installed) including aileron for damage and play (max bolt play 0.1 mm).	0	0	
B. 6	Check folding hinge lock for faultless function and security.	0	0	
B. 7	Clean and lubricate the wing folding hinge (3 bolt and lock). Clean and lubricate the aileron gear at the wing folding hinge.	0	0	
B. 8	Lubricate aileron connections in fuselage (2 places, Pos 6).	0	0	
B. 9	Lubricate canopy bracket and lock (3 places, Pos. 8)	0	0	
B. 10	Lubricate engine cooling air vents (2 places) and control cables (Pos.10).	0	0	
B. 11	Lubricate wheel brake bearings (Pos.11)	0	0	
B. 12	Lubricate external brake cables (only for aircraft with a dual main wheel landing gear, Pos.12)	0	0	
B. 13	Lubricate spoiler hinges with spray oil if necessary (Pos. 13)	0	0	
B. 14	Lubricate aileron (6 places, Pos. 14)	0	0	

Pos.	Type of Check	100 h	200 h	Remarks
B. 15	Lubricate rudder bearing (2 places) and drive (2 places) (Pos.15)	0	0	
B. 16	Lubricate trim rudder (3 places, Pos 16) and drive bearing (1 place, Pos 16)	0	0	
B. 17	Lubricate telescope in trim rudder drive (accessible from the bottom of the elevator Pos 17)	0	0	
B. 18	Lubricate elevator bearing (3 places, Pos. 18)	0	0	
B. 19	Check fuselage frame with landing gear suspension and shock struts for damage and paint cracks	0	0	
B. 20	Movability, play and condition of wheels: Air pressure of Two-leg main landing gear (5.00x-5) 2,1 bar Air pressure of Two-leg main landing gear (380x150) 2,1 bar Air pressure of tail wheel and/or stabilisers 2,5 bar	0	0	
B. 21	Drain dynamic pressure hose assembly (accessible through bulkhead inspection plate in the tail)	0	0	
B. 22	Check pitot tube for play and hose assemblies for play, condition and tightness	0	0	
B. 23	Check drainage holes for blockage (esp in fuselage / landing gear, spoiler, lower rudder)	0	0	
B. 24	Check aileron bearing for play (axial and radial) and damage, check aileron mounting for damage and security.	0	0	
B. 25	Check aileron for sufficient gap to the wing (also when fully deployed)	0	0	
B. 26	Check aileron bearing for cracks, firm fit, axial and radial play. During annual inspections the aileron spar must be checked thoroughly for cracks where the bearing bushings are soldered to the spar. Please note: see TM653-73 for relevant serial numbers. Bearings already reinforced according to TM 653-73 are not subject to this special inspection.	0	0	
B. 27	Check mountings of horizontal stabilisers (3 places) for damage, firm fit, play and security.	0	0	
B. 28	Check elevator bearing and trim rudder for damage and play (axial and radial) and check elevator halves for firm fit.	0	0	
B. 29	Check vertical fin on fuselage for damage and firm fit (visual inspection)	0	0	
B. 30	Check rudder bearing and drive for damage, play (axial and radial) and fuses	0	0	
B. 31	Check rudder and elevator for sufficient gap (also when fully deployed)	0	0	
B. 32	Check guide rods (if installed), tail wheel and tail wheel fork for deformation, play, easy movability and wear and tear	0	0	
B. 33	Check for foreign objects	0	0	
B. 34	All fuel pipes (outside of the engine) have to be renewed every 8 years. Please note TM 653-28 , newest version.	0	0	
B. 35	Lubricate tail wheel pivot at lubricating nipple with grease gun	0	0	



Pos.	Type of Check	100 h	200 h	Remarks
B. 36	Visual check of fuel filter for contamination. Renew fuel filter if contamination or water is present, or after 500 h	0	0	
B. 37	Drain fuel lines and fuel tank with drain valve at fuselage bottom.	0	0	
B. 38	Check fuel tank and filler nozzle for leaks.	0	0	
B. 39	Check breather hole of fuel tank filler cap. On the lower side of the filler cap must be written " mit Lüftung " (with breather), and a blue gasket must be installed.	0	0	
B. 40	Check battery for good condition, remove corrosion from connectors and service them with connector grease.	0	0	

C: Engine

Pos.	Type of Check	100 h	200 h	Remarks
	<p>Attention: For the engine maintenance items C.1 to C.21 you have to use the Rotax maintenance schedule. This maintenance schedule is part off the Rotax Line maintenance manual (Rotax 914, Chapter 05-20-00).</p>			
C. 1	Check ignition switch if the key can be removed in either of the positions „L“, „R“ or „BOTH“	0	0	
C. 2	Switch ignition switch to „OFF“ and remove key	0	0	
C. 3	Check ignition switch for play	0	0	
C. 4	Dismantle engine covering and check for dirt and loose camlocs.	0	0	
C. 5	Check intake manifold, oil cooler and carburettor for tightness. Intake manifold cyl. 2 on the left front must have at least 8 mm distance to the coolant hose!	0	0	
C. 6	Check exhaust for leak-tightness and the screws for play	0	0	
C. 7	Check heating for leak-tightness	0	0	
C. 8	Clean water and oil cooler. Check cooler mounting for damage. Clean sump tank and check for damage and play	0	0	
C. 9	Check intake silencer and hose connections for play and damage.	0	0	
C. 10	Check all engine joints and connections for leaks	0	0	
C. 11	Inspect engine suspension and fasteners for secure fit, including damage from heat, deformation and cracks. Torque of the engine mount screws on firewall (to the shimmy dampers) 25 Nm	0	0	
C. 12	Check all Bolts and Nuts of attached parts for secure fit	0	0	
C. 13	Check air filter	0	0	
C. 14	Renew air filter			500 h
C. 15	Check fuel filter for foreign particles	0	0	
C. 16	Renew fuel filter			500 h
C. 17	Renew fuel check valve			at engine change
C. 18	Start the engine and run to operating temperature. Ignition check at 1800 RPM Propeller speed. Speed drop without ignition circuit: L/H _____ rpm R/H _____ rpm L/H to R/H Diff. _____ rpm	0	0	



Check oilfilter fastening by hand force after engine run up
(see Rotax maintenance manual 12-20-00 sec. 13.4)

Pos.	Type of Check	100 h	200 h	Remarks
C. 19	Check for foreign particles	0	0	
C. 20	Before check oil level, turn propeller over several times counter clockwise (looking from the front at the propeller) to ensure that oil in the crankcase has been returned to the oil tank. This process is finished when air is returning back to the oil tank and can be noticed by a murmur from the open oil tank. NB SB 912.026 newest edition	0	0	
C. 21	Mount engine cowling and check for tightness. Check that all locking bolts are complete.	0	0	

D: Propeller

Propeller: MTV21A-C-F/CF-175-05
HO-V352 F/170FQ+10

Serial-No.: _____

Pos.	Type of Check	100 h	200 h	Remarks
D. 1	Take off propeller spinner and check for cracks	0	0	
D. 2	Clean propeller thoroughly	0	0	
D. 3	Check bonding of leading edge and intactness of self adhesive PU edge protection. Comply with TM8 newest edition of MT-Propeller	0	0	only MT Propeller
D. 4	Check all hub parts for cracks and correct fixing.	0	0	
D. 5	Check propeller spinner and ground plate for cracks.	0	0	
D. 6	Check all safety means for correct installation.	0	0	
D. 7	Check flange bolts and stop nuts for tightness (torque of 45-47 Nm)	0	0	only MT Propeller
D. 8	Check flange bolts and stop nuts for tightness (torque of 80-90 Nm)	0	0	only Hoffmann Propeller
D. 9	Blades shake max 3 mm, blade ankle play max. 2°;	0	0	
D. 10	Check propeller blades for cracks, cracks in the joint to the blade ferrule of up to 0.25mm are acceptable; check adhesive of leading edge and that PU-tape is not damaged.	0	0	
D. 11	Cracks in the GRP coat of the blades and on the blade erosion sheath are not permitted.	0	0	
D. 12	Check propeller blades for radial cracks (see propeller manual)	0	0	
D. 13	Check propeller hub connection to the propeller shaft for oil leakage	0	0	
D. 14	Check balance weights for tightness (MTV21A-C-F only), remount spinner.	0	0	only MT Propeller

E. General

Pos.	Type of Check	100 h	200 h	Remarks
E. 1	Check carried out and recorded in the log book on page: All faults repaired	0	0	
E. 2	Have all ADs been complied with?	0	0	
E. 3	<p>All recorded repairs have to be carried out within the indicated period of time.</p> <p>The intervals between the maintenance and inspection works are subject to a tolerance of ± 10hr. These tolerances are not to be added up. Therefore, even if the 100hr inspection hasn't have taken place after 100hr but after 110hr, the 200hr inspection is due after 200hr ± 10hr not after 210hr ± 10hr. If the interval goes below the tolerance (eg the 100hr inspection is carried out after only 87hr), the following inspection date will be calculated from the last inspection (in above example the next inspection would therefore be already due at 187hr). The inspections are carried out by following maintenance check lists, in which type and method of the maintenance works are briefly recorded.</p> <p>These lists have to be photocopied and filled out for each case of maintenance.</p> <p>On each page of the checklist, the current inspection (eg 100hr inspection) has to be noted on the top of the list.</p> <p>All maintenance and repair works have to be signed by the supervisor with their initials.</p> <p>After the inspection, the completed check lists have to be filed in the aircraft file. The inspection has to be confirmed and recorded in the log book with date and motor glider maintenance number.</p> <p>Faults and their repair have to be recorded in the work / maintenance report.</p>			
E. 4	Tighten all connections (screws on engine mount, hose connections / clamps, cable pulls, etc) in new motor gliders, after an engine change and after every de- and installation of the engine			5 h

In case of translation differences between the English and the German version of this Check list for Maintenance the German version is legally relevant.