

## 2) Inspection sheet/maintenance schedule

### 2.1) Identification

#### AIRCRAFT

Registration number \_\_\_\_\_

Aircraft make \_\_\_\_\_

Aircraft model and S/N \_\_\_\_\_

TSN (time since new) \_\_\_\_\_

Propeller make \_\_\_\_\_

Propeller model and S/N \_\_\_\_\_

#### ENGINE

Engine type \_\_\_\_\_

Engine S/N \_\_\_\_\_

TSN (time since new) \_\_\_\_\_

TSO (time since overhaul) \_\_\_\_\_

Used operating media:

coolant \_\_\_\_\_

- mixing ratio \_\_\_\_\_

fuel \_\_\_\_\_

oil \_\_\_\_\_

#### AIRCRAFT OPERATOR

Name \_\_\_\_\_

Contact \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Tel. / fax / e-mail \_\_\_\_\_

#### MAINTENANCE FACILITY

Maintenance work shop \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Tel. / fax / e-mail \_\_\_\_\_

Certificate \_\_\_\_\_

Next check due at: \_\_\_\_\_

hr. (TS\_\_)

(engine hr.)

## 2.2) Maintenance schedule - mandatory maintenance

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Inspection items	check (hr.)				signature
	25	50	100	200	
<b>2.2.1) Engine cleaning</b>					
a) Engine cleaning See 12-00-00 section 2.1	X	X	X	X	
<b>2.2.2) Visual inspection of the engine</b>					
a) General inspection of the engine for damage and abnormalities. Inspect cooling air ducts, baffling and cylinder cooling fins for obstructions, cracks, wear and condition. Take note of temperature influence.	X	X	X	X	
b) Inspection of temperature and oil pressure sensors. Check for secure fit and condition.	X	X	X	X	
c) Inspection of all coolant hoses for damage, leakage, hardening from heat, porosity, for loose connections and secure attachments. Verify routing for kinks and restricted elbows. See 12-00-00 section 2.2	X	X	X	X	
d) Inspection of leakage bore at the base of the water pump for signs of leakage. See 12-00-00 chapter 2.2	X	X	X	X	
e) Inspection of the expansion tank for damage and abnormalities. Verify coolant level, replenish as necessary. Check radiator cap. Inspect rubber plate on expansion tank base for secure fit. See 12-00-00 section 3.1	X	X	X	X	

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	25	50	100	200	
f) Inspect the overflow bottle for damage and abnormalities. Verify coolant level, replenish as necessary. Check line from expansion tank to overflow bottle for damage, leakage and clear passage. Verify venting bore in cap of overflow bottle for clear passage. See 12-00-00 section 3.1	X	X	X	X	
g) Inspect all oil lines for damage, leakage, hardening from heat, porosity, security of connections and attachments. Verify routing for kinks or restricted elbows. See 12-00-00 section 2.2	X	X	X	X	
h) Inspect all fuel lines for damage, leakage, hardening from heat, porosity, secure connections and attachments. Verify routing for kinks or restricted elbows. See 12-00-00 section 2.2	X	X	X	X	
i) Verify the complete electrical wiring system for security, damage and wear. See 12-00-00 section 6.1	X	X	X	X	

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	25	50	100	200	
<b>2.2.3) Verification of engine suspension</b>					
a) Inspect engine mounts and fasteners for security fit, damage from heat, cracks and deformation. See 12-00-00 section 2.3	X	X	X	X	
<b>2.2.4) Engine external parts</b>					
a) Check attachment screws and nuts of all external parts for security and fit. Check safety wiring, renew as necessary.	X	X	X	X	
<b>2.2.5) Check of propeller gear box</b>					
a) Verification of the backlash See 12-00-00 section 7.1	X	X	X	X	
b) Verification of the friction torque Actual friction torque ____ Nm _____ in.lbs. See 12-00-00 section 7.2	X	X	X	X	
<b>2.2.6) Oil level check</b>					
a) Before checking oil level, turn propeller over several times to ensure that crankcase oil 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.  See 12-00-00 section 5.1	X	X	X	X	

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Inspection items	check (hr.)				signature
	25	50	100	200	
<b>2.2.7) Oil change</b>					
a) Remove oil drain screw from oil tank. Drain old oil and dispose as per environmental regulations. See 12-00-00 section 5.2	X	X <sup>(1)</sup>	X	X	
b) Remove oil filter from engine and install new oil filter. Lubricate mating sealing ring of new oil filter with engine oil. Screw on new filter by hand. After the engine test run, tighten again by hand. See 12-00-00 section 5.3	X	X <sup>(1)</sup>	X	X	
c) Cut oil filter housing without producing any metal chips and inspect filter mat. Findings: _____ _____ See 12-00-00 section 5.3	X	X <sup>(1)</sup>	X	X	
d) Renew gasket ring of drain screw on oil tank. Fit drain screw and tighten to 25 Nm (220 in.lb).	X	X <sup>(1)</sup>	X	X	
e) Refill oil tank with approx. 3 litres of oil. For oil quality refer to Operator's Manual and Service Information 18 UL 97 D/E. See 12-00-00 section 5.2	X	X <sup>(1)</sup>	X	X	
( <sup>1</sup> for engine operation with AVGAS. See Service Information 18 UL 97 D/E.					

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	25	50	100	200	
<b>2.2.8) Cleaning of the cooling system</b>					
a) Flushing of the cooling system. See 12-00-00 section 3.3				X	
<b>2.2.9) Check of the air filter</b>					
a) Inspection of the air filter. See 12-00-00 section 2.4	X	X	X	X	

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	25	50	100	200	
<b>2.2.10) Check of the carburetors</b>					
a) Checking carburetor synchronization. Mechanical or pneumatic synchronization. See 12-00-00 section 4.1	X	X	X	X	
b) Verification of the idle speed. See 12-00-00 section 4.2	X	X	X	X	
c) Verification of the float chamber venting. Check venting lines for condition, secure attachment, clear passage and routing for kinks and restrictions.	X	X		X	
d) Check free movement of the carburetor activation (throttle lever and starting carb). Ensure that the Bowden cable allows the full travel of the throttle lever. See 12-00-00 section 4.3	X	X	X	X	
f) Removal and installation of the carburetors in the course of carburetor verification <sup>(1)</sup> . See 12-00-00 section 4.4				X	
<b>2.2.11) Inspection of the carburetor sockets</b>					
a) Inspect the carburetor sockets for damage abnormalities, cracks, wear condition and unserviceabilities. Take note of temperature influence. See 12-00-00 section 4.7				X	

(1) ■ **ATTENTION:** Only qualified technicians, authorized by the Aviation Authority and after successful attendance of the relevant ROTAX® training course are permitted to carry out this work in accordance with the ICR Manual.

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Inspection items	check (hr.)				signature
	25	50	100	200	
<b>2.2.12) Verification of the V-belt tension</b>					
a) On engines with an external alternator, check the attachment and the V-belt tension. See 12-00-00 section 2.6	X	X	X	X	
<b>2.2.13) Spark plugs</b>					
a) Remove all spark plugs, verify caloric value, clean the spark plugs. Check electrode gap and adjust as necessary. Renew as required. See 12-00-00 section 6.2	X	X <sup>(1)</sup>	X		
b) Renewal of spark plugs. ■ ATTENTION: Apply heat conduction compound on spark plug thread. See 12-00-00 section 6.2	X		X <sup>(1)</sup>	X	
( <sup>1</sup> applicable only on engine type 912 S / ULS)					
<b>2.2.14) Spark plug connectors</b>					
a) Verify security of spark plug connectors. Minimum pull-off force is 30 N (7 lb).	X			X	
<b>2.2.15) Check of compression</b>					
a) Check compression by differential pressure method. Test pressure ___ hPa (psi) pressure drop (%) cyl. 1 ___ cyl. 2 ___ cyl. 3 ___ cyl. 4 ___ See 12-00-00 section 2.5			X <sup>(2)</sup>	X	
( <sup>2</sup> recommended)					

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	25	50	100	200	
<b>2.2.16) Engine test run</b>					
a) Start the engine and run to operating temperature. Check of ignition circuits at 4000 rpm engine speed. Speed drop without ignition circuit: A _____ rpm      B _____ rpm Check carburetor preheating. Fully activate preheating and record rpm drop. Rpm drop _____ . Preheating OFF, bring engine to idle speed and record idle speed. _____ rpm. After engine test run, re-tighten the oil filter by hand. See 12-00-00 section 2.7	X	X	X	X	
<b>2.2.17) General note</b>					
a) All Service Informations and Technical Bulletins are complied with.	X	X	X	X	

**Engine back to operation**

On the engine identified as per point 2.1, on the \_\_\_\_\_ the \_\_\_\_hr. check at \_\_\_\_hr. (TS\_\_) was carried out according to recommendations of the engine manufacturer and was recorded in the Engine Log book.

\_\_\_\_\_  
(location) , (date)

\_\_\_\_\_  
test person

\_\_\_\_\_  
(authorized aircraft mechanic)

\_\_\_\_\_  
(certificate no.)

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