



# Scheduled Maintenance checks

## Inspection Sheet / Maintenance Schedule

### 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) \_\_\_\_\_  
Type of oil used \_\_\_\_\_  
Type of fuel used \_\_\_\_\_

#### AIRCRAFT OPERATOR

Name \_\_\_\_\_  
Contact \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

Tel / Fax \_\_\_\_\_  
E-mail \_\_\_\_\_

#### MAINTENANCE FACILITY

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

Tel / Fax \_\_\_\_\_  
E-mail \_\_\_\_\_

This check is applicable (circle one)      15h\*    50h    100h    200h

\*Shaded column for first 15 hr. only (from new or overhauled engine)

## Maintenance Schedule

TBO is 1500 hours or 12 years for i and iS(a) engines - 1200 hours or 12 years for the UL520T. (whichever comes first ) For engines with a serial number higher than 250000 : TBO is 2000 hours or 12 years for i and iS(a) engines - 1500 hours or 12 years for the UL520T. (whichever comes first ) After reaching this time limit the engine should be shipped to an authorized ULPower overhaul facility.

### Six year replacement parts include:

- Venting and return hose between breather and oil/air separator
- All fuel lines (except fuel line(s) cross)
- Oil lines to/from oil cooler

Perform the following inspection tasks at the intervals shown. Check our interactive maintenance manual for more info. (available from website [www.ulpower.com](http://www.ulpower.com))

**Legend:** X = do the task at indicated time, but at least once a year  
 X/T = do the task at indicated time  
 Blank= No task required

Inspection Items	Check (Hr)				Signature
	15	50	100	200	
<b>Visual inspection of the engine</b>					
a) General inspection of the engine for damage and abnormalities, including obstructions, cracks, wear and condition of cooling air ducts, baffling, cylinder cooling and oil cooler. Take note of changes caused by temperature.	X	X	X	X	
b) Thoroughly inspect engine for missing or loose bolts, nuts, pins, etc. Replace as necessary.	X	X	X	X	
c) Inspection of all temperature and pressure sensors.	X	X	X	X	
d) Inspection of all oil lines for damage, including leakage, hardening from heat, porosity, loose connections and secure attachments. Verify routing for kinks and restrictions like restricted elbows.	X	X	X	X	
e) Inspect all fuel lines, filters, injectors and pressure regulator for damage, including leakage, hardening from heat, porosity, loose connections and secure attachments. Verify routing for kinks and restrictions like restricted elbows.	X	X	X	X	
f) Verify the complete electrical wiring system including tight fit of connectors, damage and wear.	X	X	X	X	
g) Check exhaust system for cracks (especially when cabin heating is taken from around the exhaust).	X	X	X	X	
<b>Verification of engine suspension</b>					

# Scheduled Maintenance checks

Inspection Items	Check (Hr)				Signature
	15	50	100	200	
a) Inspect engine mounts, dampers and fasteners for secure fit, including damage from heat, deformation, cracks. Replace as necessary.	X	X	X	X	
<b>Engine external parts</b>					
a) Inspect attachment screws and nuts of all external parts for security and fit. Inspect safety wiring. Inspect oil cooler dampers. Replace as necessary.	X	X	X	X	
<b>ECU</b>					
Check connections are secure. Verify air pressure sender route/line is secure and free of blockages		X	X	X	
<b>Oil level</b>					
a) Remove magnetic drain plug from bottom of oil sump and clean magnet pickup Drain old oil and inspect for foreign particles. Record findings	X	X	X	X	
b) Replace copper sealing washers of drain plug and refit to oil sump. Torque to 25Nm	X	X	X	X	
c) Refill oil sump with approx. [3 litres (iSA: 4l) 4 cylinder] [4 litres of oil (iSA 5l) 6 cylinder].  For correct volume and type of oil, refer to Op. Manual.	X	X	X	X	
<b>! Turbo engine = replace oil every 50 hours or annually</b>	X	X	X	X	
d) Inspect oil level and add oil as necessary to maximum mark. For correct type of oil, refer to Operating Manual.  Record quantity of oil added  <b>NOTE: If using AVGAS, recommended oil change is 50 hours</b>	X	X	X	X	
e) For aerobatic engines I(S)a only: add 250ml Teflon oil additive (ULP-Partn° L0100120)	X	X	X	X	
<b>Oil filter</b>					
a) Remove oil filter from engine and install new oil filter. Wipe clean mating surface. Lubricate mating sealing ring of new oil filter with clean engine oil. Screw on new filter by hand and torque to 15Nm.	X	X	X	X	
b) Cut open old oil filter without producing any metal chips and inspect filter mat. Record findings.	X	X	X	X	
<b>Air filter</b>					
a) Inspection of the air filter. Replace as necessary.	X	X	X		
b) Replace air filter.				X	
<b>Fuel filters</b>					
a) Remove all fuel filters from aircraft and install new ones. *	X			X	

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Inspection Items	Check (Hr)				Signature
	15	50	100	200	
*For UL520T clean the fuel pre filters and replace the fuel fine filters	x			x	
<b>Cylinder heads (See note "Cylinder head bolts torque")</b>					
Check torque of cylinder head bolts. Re-torque as necessary (36Nm) - Do not loosen first. Cylinder heads to be re-torqued : <u>1</u> / <u>2</u> / <u>3</u> / <u>4</u> / <u>5</u> / <u>6</u>	X		X	X	
<b>Rocker tappet</b>					
a) Check tappet-valve clearance and adjust as necessary (0.15mm ±0.05mm cold inlet and exhaust) (0.006in ±0.002in) Record results	X/T	X/T	X/T	X/T	
<b>Throttle valve</b>					
a) Inspect free movement of throttle lever. Inspect that throttle cable allows full travel of throttle lever.	X	X	X	X	
b) Inspect throttle cable. Replace as necessary.			X	X	
<b>Spark plugs</b>					
a) Renewal of spark plugs.				X	
<b>Spark plug connectors</b>					
a) Verify security of connectors on both spark plug and ignition coils.	X	X	X	X	
<b>Boost control valve (for UL520T only)</b>					
a) Clean filter and check pneumatic lines	x	x	x	x	
<b>Waste gate (for UL520T only)</b>					
a) Clean filter and check connection with control valve	x	x	x	x	
<b>Turbo compressor (for UL520T only)</b>					
a) Inspection of the turbo bracket for secure fit	x	x	x	x	
b) Inspection oil supply/oil return line from turbo	x	x	x	x	
<b>Check of compression</b>					
a) Inspect compression by differential pressure method. Record results Leak test need to be done at least once a year In case running leaded fuel, leak test required every 50Hr				X	
<b>Engine test run</b>					
a) Start the engine and run to operating temperature. Smoothly apply throttle to full power. Check temperatures and pressures are within limits. Record oil pressure, fuel pressure and engine speed (rpm) Bring engine to idle speed. Record engine speed (RPM)	X	X	X	X	



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Inspection Items	Check (Hr)				Signature
	15	50	100	200	
b) After engine test run, if replaced, check oil filter torque (15Nm)	X	X	X	X	
c) After engine test run, inspect oil level and add oil as necessary to maximum mark.	X	X	X	X	
d) After engine test run, adjust idle speed lever position if necessary. Record new engine idle speed.	X	X	X	X	
<b>General note</b>					
a) All service instructions and service bulletins are complied with.	X	X	X	X	

## Engine back to operation

All the stated checks or listed work has been carried out as to the recommendations of the engine manufacturer and was recorded in the engine log book.

Next check due at : \_\_\_\_\_ hr. (TS\_\_\_\_) (engine hours)

or before date \_\_\_\_\_

Name / Signature

Location / Date

\_\_\_\_\_

\_\_\_\_\_