

Alternative Maintenance Schedule for all 2-stroke Rotax aircraft engines

		Notes	10 h	25 h	50 h	75 h	100 h	125 h	150 h	175 h	200 h	225 h	250 h	275 h	300 h	Chapter
1	Retorque Cylinder Head Nuts	1, 2	X													11.3
2	Retorque Exhaust Manifold Screws	2	X													11.4
3	Check Rewind Starter Rope		X		X		X		X		X		X		X	11.5
4	Check Electric Starter Gear	3	X					X							X	11.6
5	Inspect Spark Plugs	4	X	X		X		X		X		X		X		11.7
6	Replace Spark Plugs				X		X		X		X		X		X	11.8
7	Check Ignition System		X					X							X	11.9
8	Check & Clean inside of Spark Plug Caps		X					X							X	11.10
9	Check of V-Belt Tension	1	X					X							X	11.11
10	Replace V-Belt & Protection Washer														X	11.11
11	Lubricate Exhaust Ball Joints	10			X		X		X		X		X		X	11.12
12	Check Exhaust Springs	11	X		X		X			X		X			X	
13	Replace Exhaust Springs							X							X	11.13
14	Check & Lubricate Control Cables	5														11.14
15	Check Propeller Balancing & Tracking	5														11.15
16	Inspect Propeller Mounting Bolts	5														11.16
17	Clean & Oil Air Filters	6			X		X		X		X		X		X	11.17
18	Replace Air Filters	18														11.17
19	Check Fuel Filter	5	X		X			X				X				11.18
20	Replace Fuel Filter	5					X			X					X	11.18
21	Adjust Carburetors	14	X					X							X	Repair Manual
22	Complete service of Carburetors							X							X	Repair Manual
23	Replace Carburetor Needle & Needle Jets	13						X							X	11.20
24	Check Fuel Pump & Fuel Pressure		X					X							X	11.21
25	Flush Cooling System & Replace Coolant	15														
26	Check Gearbox Oil Level		X		X			X				X				11.22
27	Replace Gearbox Oil	12	X				X			X					X	11.22
28	Inspect Gearbox Rubber Coupling		X					X							X	
29	Replace Gearbox Rubber Coupling	17														
30	Replace Rotary Valve Lubrication Oil	7						X							X	11.24
31	Inspect Piston Rings & Crown	8						X							X	11.25
32	Complete Top-End Service	9						X							X	11.26 to 11.31
33	Inspect Crankshaft Big-End Bearing	9						X							X	Repair Manual
34	Inspect crankshaft, pistons and cylinders	19														Repair Manual
35	General Overhaul	20														Repair Manual

IMPORTANT: Adherence to the preservation procedures as described in Rotax documentation is vital to reliability and extending engine life. Failure to comply with this requirement will nullify this maintenance schedule.

1. Only for air cooled engines types 447 and 503
2. Also after replacment of gaskets
3. Applicable to engines equipped with the Rotax Magneto Side Electric Starter
4. Inspect for correct operation, clean and re-gap
5. Refer to Aircraft Maintenance Manual for further information
6. More frequently if operated in dusty conditions
7. Only for liquid cooled engines type 462, 532, 582 and 618
8. Inspect through exhaust port for a) free movement of rings and b) carbon deposits on piston crown (max allowable 0,5mm thick)
9. Only if aircraft is operated in extremely dusty conditions - disassemble cylinder heads and cylinder, remove pistons, measure pistons and cylinders, (replace components which exceed 60% of wear limit). Note: crankshaft big-end bearing axial clearance also subject to 60% of wear limit
10. Use heat resistant lubricant, eg. Loctite Anti-Sieze or Copperslip
11. Check for wear and/or corrosion, replace if necessary
12. Use EP or EPX grade gear oils with viscosity of 85W140. Also refer to Rotax documentation
13. Refer to latest version of Rotax documentation for correct calibrations
14. Adjust idle and synchronise cable actuation, refer to Repair Manual for further information
15. at 150 hours or annually whichever comes first. Refer to Rotax Documentation for coolant specifications and requirements.
16. Inspect for cracks or abnormalities through inspection hole on side of gearbox. Applies to Gearbox Types C & E
17. Every 600 hours. Applies to Gearbox Types C & E
18. At 600 hours, provided, if equipped with Genuine Rotax K&N Air Filters and if they have have been cleaned and treated according to Rotax/K&N instructions, refer to Maintenance Manual.
19. Only for engine types 462, 582 and 618
Inspect and measure crankshaft, pistons and cylinders at 150 hours after each overhaul only if the crankshaft was not replaced at the last overhaul.

20. Engine types 447 and 503 - initial overhaul only required at 750 hours thereafter every 300 hours

Engines types 462, 582 and 618 - initial overhaul at 600 hours and thereafter every 300 hours

Engine type 532 - initial overhaul at 300 hours and thereafter every 150 hours

Notwithstanding the requirements of Rotax documentation, crankshaft renewal shall be required only if 60% of wear limit is exceeded or other indicators for renewal are present

A maximum of 10 years is allowed between overhauls.

All engine related rubber and plastic components to be replaced after 10 years of operation.

In all cases the latest version of Rotax documentation should be consulted for further information or guidance

NOTE: If the engine has the crankshaft replaced at the recommended overhaul time, the next overhaul will be as if the engine is new (ie. For a Rotax 582 at 600 hrs)