



	Details	2 h	10 h	12.5 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	5 y
52	Remove, check and de-carbonise rave valve (618 UL only)					X		X		X		X		X			
53	Replace cylinder head gasket, cylinder base gasket and exhaust gasket (8)					X (6)		X (6)		X		X (6)		X			
54	Inspect piston pin and bearing									X							
55	Inspect crankshaft and replace outer seals if necessary									X							
56	General overhaul of engine (9)															X	

Notes:

- (1) and after every replacement of gasket(s)
- (2) also after any damage
- (3) according to instructions of manufacturer
- (4) if carbon layer is more than 0.5mm thick, decarbonise
- (5) if piston ring sticks clean and replace if necessary
- (6) if used in very dusty atmosphere
- (7) wear limit see Service Information 5 UL 91
- (8) If cylinder has been dismantled
- (9) To be carried out every five years or every 300 hours whichever comes first. Contact authorized distributor or service center.
- (10) To be examined after every 12.5 hours of operation
- (11) Necessary only if piston rings are not freely moving

### SHOCK LOAD TESTING

The following is necessary for Rotax 2 stoke engines after a propeller strike (SLT)

Details	Engine									Gearbox Type			
	277	377	447	462	503	532	582	618	A	B	C	E	
1	Visual check of engine	X	X	X	X	X	X	X	X				
2	Where necessary remove and re-fit engine	X	X	X	X	X	X	X	X				
3	Removal of flywheel	X	X	X	X	X	X	X	X				
4	Check crankshaft radial run-out mag end	X	X	X	X	X	X	X	X				
5	Check crankshaft radial run-out PTO end	X	X	X	X	X	X	X	X				
6	Check crankshaft phasing (180°)		X	X	X	X	X	X	X				
7	Check flywheel woodruff key	X	X	X	X	X	X	X	X				
8	Refit flywheel	X	X	X	X	X	X	X	X				
9	Check ignition timing (points ignition engines)	X	X	X	X	X	X						
10	Remove propeller and strip down gearbox									X	X	X	X
11	Visual inspection of housing									X	X	X	X
12	Measure radial prop-shaft run-out									X	X	X	X
13	Measure axial prop-shaft run-out									X	X	X	X
14	Remove gearbox front									X	X	X	X
15	Measure & adjust pre-load of shock absorber									X	X		
16	Inspect rubber coupling											X	X
17	Remove main gear									X	X	X	X
21	Crack test gear set									X	X	X	X
18	Visually inspect gear and shaft									X	X	X	X
19	Visually inspect taperlock bush											X	X
20	Re-loctite taper lock bush and re-torque											X	X
21	Replace serrated washer with latest style washer as required									X	X	X	X
22	Reset pre-load on shock absorber									X	X		
23	Replace gearbox gasket and refill with oil									X	X	X	X
24	Install propeller as necessary									X	X	X	X

### GEARBOX SERVICING

The following maintenance is planned and necessary for Rotax Gearboxes

Details	100hr gearbox only		100hr gearbox service fitted to engine				Re-torque T/L bush		
	A	B	A	B	C	E	C	E	
1	Remove propeller			X	X			X	X
2	Drain oil			X	X	X	X	X	X
3	Remove gearbox			X	X				
4	Measure & adjust pre-load of shock absorber	X	X	X	X				
5	Re-torque back-plate mounting bolts, remove, replace & re-loctite if necessary			X					
6	Inspect rubber coupling					X	X	X	X
7	Remove gearbox front	X	X					X	X
8	Remove main gear	X	X	X	X			X	X
9	Visually inspect gear and shaft	X	X	X	X			X	X
10	Visually inspect taperlock bush							X	X
11	If applicable replace massive washer							X	X
12	Re-loctite taper lock bush and re-torque							X	X
13	Re-assemble including new gasket if necessary	X	X	X	X			X	X
14	Re-fit gearbox and propeller			X	X			X	X
15	Refill gearbox oil and wire lock			X	X	X	X	X	X

## STORAGE CHECKS

These checks do not include the routine maintenance that needs to be carried out when the engine is installed, such as oil and filter change, changing of spark plugs, coolant change, balance carbs or compression tests.

Work Required	Storage Period		
	> 12 months < 5 years (engine turned at least every 3 months)	> 12 months < 5 years (engine <b>not</b> turned at least every 3 months)	> 5 years Rotax specify that an overhaul is required at this time, but if the engine is found to be in good condition and you are happy, we will carry out a reduced inspection to establish the serviceability of the engine.
Top end strip down and inspection	✓	✓	✓
Decoke	✓	✓	✓
Drain cooling system and flush, remove water pump housing and refill fresh	✓	✓	✓
Strip & clean carb	✓	✓	✓
Check timing	✓	✓	✓
Check spark plugs and caps	✓	✓	✓
Where applicable check points and condensers	✓	✓	✓
Check starter	✓	✓	✓
Remove flywheel and inspect for corrosion	✓	✓	✓
Inspect fan belt and pulleys	✓	✓	✓
Strip & inspect gearbox	✓	✓	✓
Where applicable change oils (cross gear and gearbox)	✓	✓	✓
Check exhaust system & lubricate ball joints	✓	✓	✓
Replace exhaust springs	✓	✓	✓
Clean or replace air filter	✓	✓	✓
Strip & inspect fuel pump	✓	✓	✓
Operator to carry out CCBCT checks every 10 hours	✓	✓	✓
Replace oil seals on crankshaft cross shaft		✓	✓
Complete strip and inspection of engine			✓
Change all rubber parts such as hoses, crankshaft oil seals, fan belt, carb rubbers, water pump seals.			✓