

TECHNICAL SPECIFICATIONS - ENGINE CR-60 / CR-63 '98

Engine	CR-60	CR-63
Design	Liquid cooled single cylinder two-stroke engine with reed valve intake	
Displacement	59.41 ccm	63.58 ccm
Bore/stroke	43.5 / 40 mm(1.71/1.57 in)	45 / 40 mm (1.77/1.57 in)
Compression ratio	9.1 : 1	
Fuel	SUPER fuel, research octane no 95, mixed with high grade two stroke oil	
Oil/gasoline ratio	1 : 40 when using high grade two stroke oil (i.ex. Shell Advance Racing X), when in doubt, please contact your importer	
Lubrication	mixture lubrication	
Crankshaft bearing	2 deep-groove ball bearing	
Connecting rod bearing	needle bearing	
Piston pin bearing	needle bearing	
Piston rings	1 compression ring	
Primary drive	straight cut spur gears, 23:75 t	
Transmission	6 speed, claw actuated	
Gear ratio	1 st gear 13 : 37 2 nd gear 16 : 34 3 rd gear 18 : 31 4 th gear 21 : 30 5 th gear 23 : 28 6 th gear 24 : 26	
Transmission oil	0.30 liter (0.0792 USgal) engine oil 10W40 (z B. Shell Advance Ultra 4)	
Ignition system	contactless controlled ignition (Selettra NW21)	
Spark plug	Champion C 55	
Electrode gap	0.60 mm (0.0236 in)	
Carburetor	Mikuni VM 24	
Coolant	0.55 liter (0.145 USgal), mixture coolant : water = 2 : 1, at least -25° C (-13° F)	
Air filter	wet foam type air filter insert	

TOLERANCES AND FITTING CLEARANCES			
Crankshaft	run out of crank stud	max. 0.050 mm	0.00196 in
Conrod bearing	radial play	max. 0.030 mm	0.00118 in
Piston	fitting clearance	0.03 - 0.05 mm	0.00118 – 0.00196 in
Piston ring	end gap	max. 0.15 mm	0.00590 in
Clutch springs	length min.	27 mm	1.06 in
Transmission shafts	end float	0.10 - 0.20 mm	0.00394 – 0.00787 in

TIGHTENING TORQUES - ENGINE		
Hexagon nut – primary gear	M 10	60 Nm (44 ft.lb)
Collar nut – flywheel	M 10x1.25	40 Nm (30 ft.lb)
AH screw – cylinder head	M 7	15 Nm (11 ft.lb)
Collar nut – cylinder base	M 8	25 Nm (18 ft.lb)
Hexagon screw – inner clutch hub	M 10	60 Nm (44 ft.lb)
Oil drain screw	M 8	12 Nm (9 ft.lb)
Crankcase and cover bolts	M 6	10 Nm (7 ft.lb)
Other screws – engine	M 5	6 Nm (5 ft.lb)
	M 6	10 Nm (7 ft.lb)

BASIC CARBURETOR SETTING	
Carburetor	Mikuni VM 24
Main jet	200
Needle jet	N-8
Idling jet	30
Jet needle	5114-3
Needle position from top	3.
Throttle valve	2.0
Starting jet	20