

## TECHNICAL DATA – ENGINE 50 LC 2003

Engine	50 SX PRO JUNIOR LC	50 SX PRO SENIOR LC
Design	single cylinder 2-stroke engine, with reed valve inlet	
Displacement	49.0 ccm	
Bore/Stroke	39.5 / 40 mm	
Fuel	SUPER fuel, research octane no 95, mixed with 2-stroke oil	
Oil/gasoline ratio	1 : 40 when using high grade 2-stroke oil (Shell Advance Racing X) When in doubt, please contact your importer or use 1 : 33 mix ratio to be on the safe side	
Lubrication	mixture lubrication	
Crankshaft bearing	2 grooved ball bearing	
Connecting rod bearing	needle bearing	
Piston pin bearing	needle bearing	
Piston rings	1 rectangular ring	
Primary drive	straight cut spur gears, 16 : 57 Z	
Transmission oil	0.15-0,2 liter automatic gear oil Dexron II (Shell Donax TA)	
Spark plug	NGK BR 8 ECM	
Electrode gap	0.6 mm	
Carburetor	Dell'Orto PHVA 14 DS	Dell'Orto PHBG 19 BS
Air filter	wet foam type air filter insert	
Cooling liquid	0.5 litres, 40% antifreeze, 60% water, at least -25 °C (-13 °F)	

### BASIC CARBURETOR SETTING

Model	50 SX PRO JUNIOR LC	50 SX PRO SENIOR LC
Type	Dell'Orto PHVA 14 DS	Dell'Orto PHBG 19 BS
Main jet	80	85
Needle jet	211 FA	260 AU
Idling jet	45	48
Jet needle	A10	W9
Needle position from top	3.	3.
Air/Mixture reg. screw open	3.5	3.0
Slide	40	60
Starting jet	60	60

### TIGHTENING TORQUES - ENGINE

Primary gear nut	M14x1,25	40 Nm
Hexagon nut ignition rotor	M10x1,25	20 Nm
Nut of clutch hub	M10x1,25	Loctite 243 + 35 Nm
Cylinder head screws	M7	15 Nm
Cylinder base nuts	M8	18 Nm
Allan head screw-Stator	M5x25	Loctite 243 + 8 Nm
Oil plug	M16	5 Nm
Oil drain plug	M10	15 Nm
Other engine screws	M5	7 Nm
	M6	10 Nm
	M8	30 Nm