

TECHNICAL SPECIFICATIONS - ENGINE 105 SX 2004

Engine	105 SX
Design	Liquid cooled single cylinder two-stroke engine with reed valve intake
Displacement	103,96 ccm
Bore/stroke	52 / 48,95 mm (2,047 / 1,927 in)
Fuel	unleaded fuel with at least RON 95 (USA = Premium RON 91), mixed with high grade two-stroke oil
Oil/gasoline ratio	1 : 40 - 1 : 60 when using high grade two-stroke oil (e.g. Motorex 2T Crosspower), when in doubt, please contact your importer
Lubrication	mixture lubrication
Crankshaft bearing	deep-groove ball bearing, cylinder roller bearing
Connecting rod bearing	needle bearing
Piston pin bearing	needle bearing
Piston rings	1 compression ring
Primary drive	straight cut spur gears, 19 : 66 t
Clutch	multiple disc clutch in oil bath, hydraulic operated (Motorex Kupplungs-Fluid 75)
Transmission	6 speed, claw actuated
Gear ratio	1 st gear 11 : 29 2 nd gear 14 : 28 3 rd gear 16 : 26 4 th gear 19 : 26 5 th gear 21 : 25 6 th gear 20 : 21
Transmission oil	0.35 liter (0,0924 USgal) engine oil Motorex Topspeed 4T 15W50
Ignition system	Moric Digital 2M1
Spark plug	NGK BR 10 ECMVX
Electrode gap	0.60 mm (0,0236 in)
Carburetor	flat-slide carburetor, carburetor see table
Coolant	1 liter (0,264 USgal), 40% antifreeze, 60% water, at least -25° C (-13° F)
Air filter	wet foam type air filter insert

BASIC SETTINGS 105 SX 2004

BASIC CARBURETOR SETTING	
Carburetor	Keihin PWK 28
Main jet	118
Needle jet	2.6
Idling jet	45
Jet needle	N5HG
Needle position from top	III
Throttle valve	3.5
Starting jet	62
Air adjustment screw open	1.5

TIGHTENING TORQUES - ENGINE		
Flange bolts - cylinder-head	M 6	10 Nm
Nuts-cylinder base	M 8	30 Nm
Flywheel collar nut	M 12x1	60 Nm
Primary gear bolt	M 10x1.5	Loctite 243 + 80 Nm
Nut for inner clutch hub	M 14x1.5	Loctite 243 + 60 Nm
Crankcase and cover bolts	M 6	8 Nm
Spark plug	M 14x1.25	20 Nm
Reed valve housing	M 6	6 Nm
Kickstarter	M 6	Loctite 243 + 12 Nm
Shift lever	M 6	Loctite 243 + 12 Nm
Swingarm pivot	M 14x1.5	75 Nm
Other bolts	M 5	6 Nm
	M 6	10 Nm