

TECHNICAL DATA - ENGINE 125 / 200 2001

Engine	125 SX	125 EXC	200 MXC	200 EXC
Design	Liquid-cooled single-cylinder two-stroke engine with intake and exhaust control			
Piston displacement	124.8 ccm		193 ccm	
Bore / stroke	54 / 54,5 mm (2.126 / 2.145 in)		64 / 60 mm (2.52 / 2.362 in)	
Fuel	unleaded SUPER fuel, research octane no 95, mixed with high grade two stroke oil			
Oil / gasolin ratio	1:40-1:60 when using high grade two stroke oil (Shell Advance Racing X). When in doupt, please contact your importer			
Crankshaft bearing	1 deep-groove ball bearing / 1 cylinder roller bearing			
Connecting rod bearing	needle bearing			
Piston pin bearing	needle bearing			
Piston	cast piston			
Piston ring	one plain compression ring	two plain compression rings		
Dimension "X" <small>(upper edge piston- upper edge cylinder)</small>	0.0 mm (0.0 in)		0.55 mm (0.22 in)	
Ignition timing	1.4 mm (0.055 in) (16.5°) BTDC		1.6 mm (0.063 in) (17°) BTDC	
Spark plug	NGK BR9 EVX		NGK BR 8 EG	
Electrode gap	0.60 mm (0,024 in)			
Dimension "Z" <small>height of the control flap</small>	42,9 mm (1.69 in)		46 mm (1.81 in)	
Primary drive	straight cut spur gears, primary ratio 23:73			
Clutch	multiple disc clutch in oil bath, hydraulic operated (Shell HF-E15)			
Transmission	6 speed, claw actuated			
Gear ratio				
1st gear	13 : 32	12 : 33	13 : 32	12 : 33
2nd gear	15 : 30	15 : 31	15 : 30	15 : 31
3rd gear	17 : 28	17 : 28	17 : 28	17 : 28
4th gear	19 : 26	19 : 26	19 : 26	19 : 26
5th gear	21 : 25	21 : 25	21 : 25	17 : 19
6th gear	22 : 24	20 : 20	22 : 23	22 : 20
Gear lubrication	0.7 l engine oil 20W-40 (Shell Advance VSX4)			
Available chain sprockets	13t / 14t / 15t for chain $\frac{5}{8} \times \frac{1}{4}$ "			
Coolant	1.2 litres, 40% anti freeze, 60% water, at least -25 °C (-13 °F)			
Ignition system	KOKUSAN 2K-1	KOKUSAN 2K-3	-	KOKUSAN 2K-3
Generator output	no generator	12V / 110 W	-	12V 110 W
Ignition system USA	KOKUSAN 2K-1	KOKUSAN 2K-2		
Generator output	no generator	12V 40 W		
Carburetor	flat-slide carburetor, carburetor setting see table			
Air-filter	wet foam type air filter insert			
200 EXC Separate lubrication				
lubrication	Separate lubrication			
engine oilShell	Shell Advance Ultra 2 or 2-stroke engine oil for a mixture ratio 1:50 and for separate lubrication .			
oil tank	1,3 liter (0,34 US Gallons)			

TIGHTENING TORQUES - ENGINE			
Flange bolts - cylinder-head	M 7	18 Nm	(13 ft.lb)
Nuts-cylinder base	M 8	30 Nm	(22 ft.lb)
Flywheel collar nut	M 12x1	60 Nm	(44 ft.lb)
Nut for primary sprocket (LH thread)	M 16x1.5	180 Nm	(133 ft.lb)
Nut for inner clutch hub	M 18x1.5	120 Nm	(88 ft.lb)
Crankcase and clutch cover bolts	M 6	8 Nm	(6 ft.lb)
Spark plug	M 14x1.25	20 Nm	(14 ft.lb)
Other screws	M 6	10 Nm	(7 ft.lb)
	M 8	25 Nm	(19 ft.lb)
	M 10	45 Nm	(33 ft.lb)

TOLERANCES AND FITTING CLEARANCES	
Piston fitting clearance	125 = 0.06 mm 200 = 0.085 mm
Piston ring end cap	max. 0.40 mm
Connecting rod bearing - radial clearance	0.025–0.035 mm
Transmission shafts end float	0.20–0.40 mm
Clutch springs - length	new = 39 mm, minimum length = 38 mm

GASKET THICKNESSES	
Crankcase	0,5 mm
Clutch cover	0,5 mm
Clutch driving cylinder	0.30 / 0.50 / 0.75 mm
Cylinder bottom gasket	as required
Available bottom gasket	0.07 / 0.15 / 0.20 / 0.25 / 0.40 / 0.50 / 0.75 mm
Cylinder-head gasket	1.10 mm + O-ring

BASIC CARBURETOR SETTING					
	125 SX	125 EXC USA 200 MXC/EXC USA	200 EXC AUS 200 EXC SGP	125 EXC EU	200 EXC EU
Carburetor	Keihin PWK 39	Keihin PWK 38 AG	Keihin PWK 38 AG	Keihin PWK 38 AG	Keihin PWK 38 AG
Carburetor setting number	250200	270200	280200	260200	290200
Main jet	185 (182/188)	180 (185)	180 (185)	148 (180/185)	180 (185)
Idling jet	48 (45/50)	45 (48)	45 (48)	35 (45/48)	35 (45/48)
Starting jet	85	85	85	85	85
Jetneedle	R 1469 D (R 1470 D)	NOZ G (NOZ H)	NOZ G (NOZ H)	R 1472 N (NOZ G/NOZ H)	R 1475 J (NOZ G/NOZ H)
Needle position from top	III	III	III	IV	III
Throttle valve	55	6.5	6.5	6.5	6.5
Air adjustment screw open	1,5	1,5	1,5	1,5	1,5
Performance restrictor	–	–	slide stop 36mm	–	slide stop 36mm