

TECHNICAL DATA – ENGINE 125/250 SXS 2003

Engine	125 SXS	250 SXS
Design	Liquid-cooled single-cylinder two-stroke engine with intake and exhaust control	
Piston displacement	124,8 cm ³	249 cm ³
Bore / stroke	54 / 54,5 mm (2.16 / 2.18 in)	66,4 / 72 mm (2.62 / 2.84 in)
Fuel	unleaded SUPER fuel, research octane no 98, mixed with high grade two stroke oil	
Oil / gasolin ratio	1:40 when using high grade two stroke oil, 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	
Dimension "X" (upper edge piston-upper edge cylinder)	0,0 mm	0 + 0.1 mm (0 + 0.004 in)
Ignition timing	1.4 mm (0.056 in) (16.5°) BTDC	1.9 mm (0.076 in) BTDC
Spark plug	NGK R6385-105P	BR 8 ECM
Dimension "Z" (height of the control flap)	43 mm (1.72 in)	48.5 mm (1.9 in)
Primary drive	straight cut spur gears, primary ratio 23:73 t	straight cut spur gears, primary ratio 26:72 t
Clutch	multiple disc clutch in oil bath, hydraulic operated	
Transmission	5 speed, claw actuated	
Gear ratio		
1st gear	„KTM14V“ 14 : 31 „KTM31V“	14:28
2nd gear	„KTM16V02“ 16 : 30 „KTM30V“	16:26
3rd gear	„KTM19V“ 19 : 29 „KTM29V“	18:24
4th gear	„KTM19V“ 21 : 28 „KTM28V“	21:24
5th gear	„5S21“ 21 : 25 „5S25“	22:21
Gear lubrication	0.7 l engine oil 15W-50 (Motorex TOP SPEED 4T)	
Available chain sprockets	13t / 14t / 15t for chain 5/8 x 1/4"	
Coolant	1.2 litres, 40% anti freeze, 60% water, at least -25 °C (-13 °F)	
Ignition system	KOKUSAN 2K-1	
Generator output	no generator	
Carburetor	flat-slide carburetor, carburetor setting see table	
Air-filter	wet foam type air filter insert	

BASIC CARBURETOR SETTING

	125 SXS	250 SXS
Carburetor	Keihin PWK 39	Keihin PWK 38-S AG
Carburetor setting number	021201	110202
Main jet	188 (182/185/190)	178 (182)
Idling jet	48 (45/50)	50
Starting jet	85	85
Jetneedle	R 1469 D	N3CH (N3CW)
Needle position from top	II	III
Throttle valve	55 (6)	6,5
Air adjustment screw open	1,5	1