


TECHNICAL SPECIFICATIONS - ENGINE »

ENGINE	85 SX/XC	105 SX/XC
Design	Liquid cooled single cylinder two-stroke engine with reed valve intake	
Displacement	84.93 ccm	103.96 ccm
Bore/stroke	47 / 48.95 mm	52 / 48.95 mm
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	0.5 liter engine oil Motorex Topspeed 4T 15W50	
Ignition system	Moric Digital 2M1	
Spark plug	NGK BR 9 ECMVX	
Electrode gap	0.60 mm	
Carburetor	flat-slide carburetor, carburetor see table	
Coolant	1 liter, mixture 50% antifreeze, 50% distilled water, at least -25° C (-13° F)	
Air filter	wet foam type air filter insert	

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 10X1,25	Loctite 243 + 80 Nm
Nut for inner clutch hub	M 14X1,25	Loctite 243 + 60 Nm
Crankcase and cover bolts	M 6	8 Nm
Spark plug	M 14X1,25	20 Nm
Reed valve housing	M 14X1,5	75 Nm
Kickstarter	M 6	6 Nm
Shift lever	M 6	Loctite 243 + 12 Nm
Swingarm pivot	M 6	Loctite 243 + 12 Nm
Other bolts	M 5	6 Nm
	M 6	10 Nm

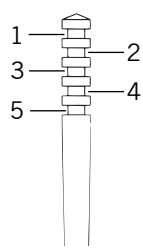
CARBURETOR SETTING »

VERGASERREGULIERUNG CARBURETOR SETTING KEIHIN PWK 28		85/105 SX/XC 2009					
MEERESHÖHE ALTITUDE ↓	TEMPERATUR TEMPERATURE →	- 20°C bis -7°C -2°F to 20°F	- 6°C bis 5°C 19°F to 41°F	6°C bis 15°C 42°F to 60°F	16°C bis 24°C 61°F to 78°F	25°C bis 38°C 79°F to 98°F	
3000 m 10000 ft ↑ 2301 m 7501 ft	LSO ASO LD IJ NADEL NEEDLE POS POS HD MJ	1,5 45 N5HG 2 118	1,75 42 N5HH 3 115	2 40 N5HH 2 115	2,25 38 N5HH 1 115	2,5 38 N5HH 1 115	
2300 m 7500 ft ↑ 1501 m 5001 ft	LSO ASO LD IJ NADEL NEEDLE POS POS HD MJ	1,25 48 N5HG 3 120	1,5 45 N5HG 2 118	1,75 42 N5HH 3 115	2 40 N5HH 2 115	2,25 38 N5HH 1 115	
1500 m 5000 ft ↑ 751 m 2501 ft	LSO ASO LD IJ NADEL NEEDLE POS POS HD MJ	1 50 N5HF 3 122	1,25 48 N5HG 3 120	1,5 45 N5HG 2 118	1,75 42 N5HH 2 115	2 40 N5HH 2 115	
750 m 2500 ft ↑ 301 m 1001 ft	LSO ASO LD IJ NADEL NEEDLE POS POS HD MJ	0,75 50 N5HF 4 125	1 50 N5HF 3 122	1,25 48 N5HG 3 120	1,5 45 N5HG 3 118	1,75 42 N5HH 2 115	
300 m 1000 ft ↑ Meeresniveau Sea level	LSO ASO LD IJ NADEL NEEDLE POS POS HD MJ	0,5 50 N5HF 5 125	0,75 50 N5HF 4 125	1 50 N5HG 3 122	1,25 48 N5HG 3 120	1,5 45 N5HG 2 118	

ENGLISH

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LSO = Luftregulierschraube offen
LD = Leerlaufdüse
POS = Nadel Clip Position von oben
HD = Hauptdüse



ASO = Air screw open from fully-seated
IJ = Idling jet
POS = Needle clip position from top
MJ = Main jet

**NICHT FÜR STRASSEN BETRIEB
UND SANDSTRECKEN**

**NOT FOR HIGHWAY USE
AND SAND TRACKS**

Kraftstoff: Super Bleifrei ROZ 95

Fuel: unleaded fuel with at least RON 95
USA = Premium PON 91