


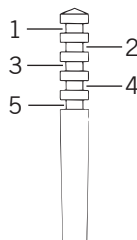
TECHNICAL SPECIFICATIONS – ENGINE 85 SX 2005

Engine	CR-85
Design	Liquid cooled single cylinder two-stroke engine with reed valve intake
Displacement	84.93 ccm
Bore/stroke	47 / 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 10 ECMVX
Electrode gap	0.60 mm
Carburetor	flat-slide carburetor, carburetor see table
Coolant	1 liter, mixture 50% antifreeze, 50% 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

VERGASERREGULIERUNG CARBURETOR SETTING KEIHIN PWK 28		85 SX 2005					
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	

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

Kraftstoff: Super Bleifrei ROZ 95

NOT FOR HIGHWAY USE

Fuel: unleaded fuel with at least RON 95

USA = Premium RON 91

TOLERANCES AND FITTING CLEARANCES	
Piston fitting clearance	0.045 – 0.07 mm
Piston fitting clearance - wear limit	0.10 mm
Piston ring end gap	max. 0.4 mm
Connecting rod bearing - radial clearance	max 0.03 mm
Clutch springs - length	new = 34 mm, minimum length = 33 mm
Crankshaft web	47 mm ± 0,05 mm between bearing thrust faces

GASKET THICKNESSES	
Crankcase	0.5 mm
Clutch cover	0.5 mm
Cylinder bottom gasket	as required
Available cylinder bottom gaskets	0.2/0.3/0.5 mm
Cylinder-head gasket	O-rings (for 105: form rings)
Outer clutch cover	O-ring
Water pump cover	O-ring

TIGHTENING TORQUES - ENGINE		
Flange bolts - cylinder-head	M6	10 Nm
Nuts-cylinder base	M8	30 Nm
Flywheel collar nut	M12x1	60 Nm
Primary pinion bolt	M10x1.5	Loctite 243 + 80 Nm
Nut for inner clutch hub	M14x1.5	Loctite 243 + 60 Nm
Crankcase and cover bolts	M6	8 Nm
Spark plug	M14x1.25	20 Nm
Reed valve housing	M6	6 Nm
Kickstarter	M6	Loctite 243 + 12 Nm
Shift lever	M6	Loctite 243 + 12 Nm
Swingarm pivot	M14x1.5	75 Nm
Other bolts	M5	6 Nm
	M6	10 Nm

TIGHTENING TORQUES - CHASSIS		
Hexagon bolt - brake caliper	M8	Loctite 243 + 25 Nm
AH bolt rear brake pads	M6	5 Nm
Flat head bolt - brake discs	M6	Loctite 243 + 10 Nm
Hexagon nut - front wheel spindle	M10x1,5	40 Nm
Hexagon nut - rear wheel spindle	M20x1.5	80 Nm
Hexagon nut - swingarm bolt	M14/M16x1.5	75 Nm
Clamping bolts - top triple clamp	M8	20 Nm
Clamping bolts - bottom triple clamp	M8	15 Nm
Bolt - handlebar clamp	M8	20 Nm
AH screw - handlebar mount	M10	Loctite 243 + 40 Nm
Hexagon nut - fork fist	M6	10 Nm
Steering head nut	M20	10 Nm
HH screw - upper/lower shock absorber	M12	60 Nm
Rear sprocket screws	M8	Loctite 243 + 35 Nm
Ball joint for push rod	M6	Loctite 243 + 10 Nm
Engine carrier screw	M10	45 Nm
Reifenhalter	M8	12 Nm
Rim lock	M4,5/M5	5 Nm
Outrigger screw connection	M8	Loctite 243 + 35 Nm
Other chassis bolts/nuts	M6	10/15 Nm
	M8	25/30 Nm
	M10	45/50 Nm