

## TECHNICAL DATA - ENGINE 125 / 200 '98

Engine	125 SX	125 EXC	125 EGS	200 MXC	200 EXC, EGS
Design	Liquid-cooled single-cylinder two-stroke engine with intake and exhaust control				
Piston displacement	124.8 ccm			193 ccm	
Bore / stroke	54.25 / 54 mm (2.136 / 2.126 in)			64 / 60 mm (2.52 / 2.362 in)	
Fuel	SUPER fuel, research octane no 98, mixed with high grade two stroke oil			SUPER fuel, research octane no 95, mixed with high grade two stroke oil	
Oil / gasolin ratio	1:40 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	forged piston			cast piston	
Piston ring	one plain compression ring			two plain compression rings	
Dimension "X" <small>(upper edge piston - upper edge cylinder)</small>	0.60 mm (0.024 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 R 6918-B8			NGK BR 8 EG	
Electrode gap	0.60 mm (0,024 in)				
Dimension "Z" <small>(height of the control flap)</small>	42 mm (1.65 in)			46 mm (1.81 in)	
Primary drive	straight cut spur gears, primary ratio 23:73				
Clutch	multiple disc clutch in oil bath				
Transmission	6 speed, claw actuated				
Gear ratio					
1 <sup>st</sup> gear	13 : 32		12 : 33	13 : 32	12 : 33
2 <sup>nd</sup> gear	15 : 30		15 : 31	15 : 30	15 : 31
3 <sup>rd</sup> gear	17 : 28		17 : 28	17 : 28	17 : 28
4 <sup>th</sup> gear	19 : 26		19 : 26	19 : 26	19 : 26
5 <sup>th</sup> gear	21 : 25		21 : 25	21 : 25	22 : 25
6 <sup>th</sup> gear	22 : 24		20 : 20	22 : 23	22 : 20
Gear lubrication	0.7 l engine oil 20W-40 (Shell Advance VSX4)				
Rear wheel ratio	13:50	13:50	14:40	14:50	14:48 14:50
Available chain sprockets	13t / 14t / 15t for chain $\frac{5}{8} \times \frac{1}{4}$ "				
Available final sprockets	38t / 40t / 42t / 45t / 48t / 50t / 52t 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	USA: KOKUSAN 2K-2 EU: KOKUSAN 2K-3	KOKUSAN 2K-3	KOKUSAN 2K-2	KOKUSAN 2K-3
Generator output	no generator	12V 40 W 12V / 110 W	12V 110 W	12V 40 W	12V 110 W
Carburetor	flat-slide carburetor, carburetor setting see table				
Air-filter	wet foam type air filter insert				

<b>TOLERANCES AND FITTING CLEARANCES</b>	
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

<b>GASKET THICKNESSES</b>	
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	0.15 / 0.20 / 0.50 / 0.70 mm
Cylinder-head gasket	1.10 mm + O-ring

<b>BASIC CARBURETOR SETTING</b>			
	125 SX, EXC	200 EXC EUROPE	200 EXC, MXC USA
Carburetor	Keihin PWK 39	Keihin PWK 39	Keihin PWK 39
Carburetor setting number	290597	280197	280597
Main jet	190 (188)	180 (178, 182)	180 (178, 182)
Idling jet	48	45	45
Starting jet	85	85	85
Jetneedle	NOZH (N1EH)	N1EH (NOZH)	N1EH (NOZH)
Needle position from top	III	II	III
Throttle valve	6	6	6
Air adjustment screw open	1,5 turn	1,5 turn	1,5 turn

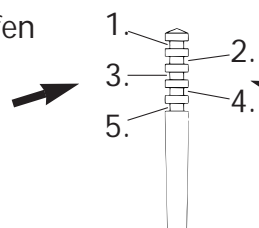
<b>TIGHTENING TORQUES</b>			
Flange bolts - cylinder-head	M 7	18 Nm	(25 ft.lb)
Nuts-cylinder base	M 8	30 Nm	(22 ft.lb)
Flywheel collar nut	M 12x1	60 Nm	(44 ft.lb)
Nut for primary sprocket (LH thread)	M 16x1.5	180 Nm	(133 ft.lb)
Nut for inner clutch hub	M 18x1.5	120 Nm	(88 ft.lb)
Crankcase and clutch cover bolts	M 6	8 Nm	(6 ft.lb)
Spark plug	M 14x1.25	20 Nm	(14 ft.lb)
Nut swingarm pivot	M 14x1.5	100 Nm	(74 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)

VERGASERREGULIERUNG  
CARBURETOR SETTING

# KTM 125 SX / EXC '98 EUROPA KEIHIN PWK 39

MEERESHÖHE <i>ALTITUDE</i>	TEMPERATUR →	-20°C bis -7°C <i>-2°F to 20°F</i>	-6°C bis 5°C <i>19°F to 41°F</i>	6°C bis 15°C <i>42°F to 60°F</i>	16°C bis 24°C <i>61°F to 78°F</i>	25°C bis 38°C <i>79°F to 98°F</i>	37°C bis 49°C <i>99°F to 120°F</i>
3000 m 10000 ft ↑ 2301 m 7501 ft	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 1/2 48 NOZH 4 190	1 3/4 45 N1EH 3 188	2 45 NOZH 2 185	2 1/4 42 NOZH 2 182	2 1/4 40 NOZI 2 180	2 1/2 38 NOZI 1 180
2300 m 7500 ft ↑ 1501 m 5001 ft	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 48 N1EH 4 192	1 1/2 48 NOZH 3 190	1 3/4 45 N1EH 2 188	2 45 NOZH 2 185	2 1/4 42 NOZH 2 182	2 1/2 42 NOZI 2 180
1500 m 5000 ft ↑ 751 m 2501 ft	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 1/4 50 N1EG 4 192	1 1/4 48 N1EH3 3 192	1 1/2 48 NOZH 3 190	1 3/4 48 N1EH 2 188	2 45 NOZH 2 185	2 1/4 45 NOZH 2 182
750 m 2500 ft ↑ 301 m 1001 ft	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 50 N1EF 4 195	1 1/4 50 N1EG 4 192	1 1/4 48 N1EH 3 192	STANDARD 1 1/2 48 NOZH 3 190 STANDARD	1 3/4 48 NOZH 3 188	2 45 NOZH 2 185
300 m 1000 ft ↑ Meeresniveau Sea level	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 52 N1EF 5 198	3/4 50 N1EF 4 195	1 48 N1EG 4 192	1 1/4 48 N1EH 3 192	1 1/2 48 NOZH 3 190	1 3/4 45 N1EH 2 188

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



AS = Air screw open from fully-seated  
IJ = Idling jet  
POS = Clip position from top  
MJ = Main jet

**NICHT FÜR STRASSEN BETRIEB**  
Kraftstoff: Euro-Super bleifrei ROZ 98  
**NOT FOR HIGHWAY USE**  
Fuel: Euro-Super unleaded ROZ 98

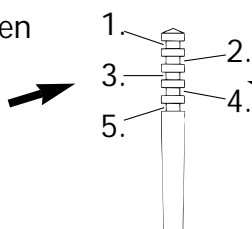
VERGASERREGULIERUNG  
CARBURETOR SETTING

# KTM 200 EXC '98 EUROPA

# KEIHIN PWK 39

MEERESHÖHE <i>ALTITUDE</i>	TEMPERATUR →	-20°C bis -7°C <i>-2°F to 20°F</i>	-6°C bis 5°C <i>19°F to 41°F</i>	6°C bis 15°C <i>42°F to 60°F</i>	16°C bis 24°C <i>61°F to 78°F</i>	25°C bis 38°C <i>79°F to 98°F</i>	37°C bis 49°C <i>99°F to 120°F</i>
3000 m 10000 ft ↑ 2301 m 7501 ft	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 1/2 45 N1EH 2 180	1 3/4 45 NOZI 2 178	2 42 NOZI 2 175	2 40 NOZH 1 172	2 1/4 40 NOZI 1 170	2 1/4 38 NOZI 1 170
2300 m 7500 ft ↑ 1501 m 5001 ft	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 1/4 45 NOZH 3 180	1 1/2 45 N1EH 2 180	1 3/4 45 NOZI 2 178	2 42 NOZI 2 175	2 40 NOZH 1 172	2 1/4 40 NOZI 1 170
1500 m 5000 ft ↑ 751 m 2501 ft	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 45 N1EH 3 182	1 1/4 45 NOZH 3 180	1 1/2 45 N1EH 2 180	1 3/4 45 NOZI 2 178	2 42 NOZI 2 175	2 1/4 42 NOZH 1 172
750 m 2500 ft ↑ 301 m 1001 ft	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 1/4 48 N1EG 3 185	1 45 N1EH 3 182	1 1/4 45 N1EH 2 180	STANDARD 1 1/2 45 N1EH 2 180	STANDARD 1 3/4 45 NOZH 2 178	2 42 NOZH 2 175
300 m 1000 ft ↑ Meeresniveau Sea level	LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ	1 50 N1EG 3 188	1 48 N1EG 3 185	1 45 NOZH 3 182	1 1/4 45 N1EH 2 180	1 1/2 45 N1EH 2 180	1 3/4 45 NOZH 2 178

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



AS = Air screw open from fully-seated  
IJ = Idling jet  
POS = Clip position from top  
MJ = Main jet

**NICHT FÜR STRASSEN BETRIEB**  
Kraftstoff: Euro-Super bleifrei ROZ 95  
**NOT FOR HIGHWAY USE**  
Fuel: Euro-Super unleaded ROZ 95