

TECHNICAL DATA - ENGINE 125 / 200 '99

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	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, 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	22 : 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	USA: KOKUSAN 2K-2	EU: KOKUSAN 2K-3	KOKUSAN 2K-3	KOKUSAN 2K-2
Generator output	no generator	12V 40 W	12V / 110 W	12V 110 W	12V 40 W
Carburetor	flat-slide carburetor, carburetor setting see table				
Air-filter	wet foam type air filter insert				

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

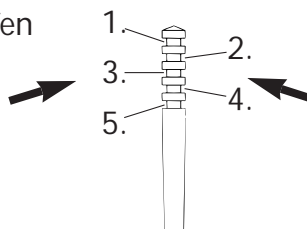
TIGHTENING TORQUES			
Flange bolts - cylinder-head	M 7	18 Nm	(25 ft.lb)
Nuts-cylinder base	M 8	30 Nm	(22 ft.lb)
Flywheel collar nut	M 12x1	60 Nm	(44 ft.lb)
Nut for primary sprocket (LH thread)	M 16x1.5	180 Nm	(133 ft.lb)
Nut for inner clutch hub	M 18x1.5	120 Nm	(88 ft.lb)
Crankcase and clutch cover bolts	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)

BASIC CARBURETOR SETTING							
	125 SX, EXC USA 125 EGS AUSTRALIA	125 SX, EXC EUROPE	125 EGS	200 MXC, EXC USA	200 EXC EUROPE	200 EGS	200 EGS AUSTRALIA
Carburetor	Keihin PWK 39	Keihin PWK 39	Keihin PWK 39	Keihin PWK 39	Keihin PWK 39	Keihin PWK 39	Keihin PWK 39
Carburetor setting number	120598	160598	130598	140598	170598	150598	140598
Main jet	190 (188/192/195)	190 (188/192/195)	150 (188/190/192/195)	180 (175/178/182/185)	180 (175/178/182/185)	180 (175/178/182/185)	180 (175/178/182/185)
Idling jet	48 (45/50)	48 (45/50)	45 (48/50)	45 (42/48)	45 (42/48)	45 (42/48)	45 (42/48)
Starting jet	85	85	85	85	85	85	85
Jetneedle	NOZH (NOZF/NOZG/NOZI)	NOZF (NOZG/NOZH/NOZI)	R1471J(NOZF/NOZG/NOZH/NOZI)	NOZH (NOZG/NOZI)	NOZG (NOZH/NOZI)	R1472J (NOZG/NOZH/NOZI)	NOZH (NOZG/NOZI)
Needle position from top	III	III	IV	III	II	IV	III
Throttle valve	6	6	6	6	6	6	6
Air adjustment screw top	1,5	1,5	1,5	1,5	1,5	1,5	1,5
Performance restrictor	–	–	–	–	–	slide stop 36mm	slide stop 36mm

VERGASERREGULIERUNG **KTM 125 SX / MXC / EXC** USA '99 **KEIHIN PWK 39**
 CARBURETOR SETTING

MEERESHÖHE ALTITUDE	TEMPERATUR →		-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	37°C bis 49°C 99°F to 120°F
3000 m 10000 ft ↑ 2301 m 7501 ft	LSCHR	AS	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4
	LD	IJ	48	45	42	40	38	38
	NADEL	NEEDLE	NOZH	NOZH	NOZH	NOZI	NOZI	NOZI
	POS	POS	3	3	2	1	1	1
	HD	MJ	175	172	170	168	165	165
2300 m 7500 ft ↑ 1501 m 5001 ft	LSCHR	AS	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2
	LD	IJ	50	48	45	42	40	38
	NADEL	NEEDLE	NOZG	NOZH	NOZH	NOZI	NOZI	NOZI
	POS	POS	4	3	3	2	1	1
	HD	MJ	178	175	172	170	168	165
1500 m 5000 ft ↑ 751 m 2501 ft	LSCHR	AS	1	1 1/4	1 1/2	1 3/4	2	2 1/4
	LD	IJ	52	50	48	45	42	40
	NADEL	NEEDLE	NOZG	NOZG	NOZH	NOZH	NOZH	NOZI
	POS	POS	4	4	3	3	2	1
	HD	MJ	180	178	175	172	170	168
750 m 2500 ft ↑ 301 m 1001 ft	LSCHR	AS	3/4	1	1 1/4	1 1/2	1 3/4	2
	LD	IJ	55	52	50	48	45	42
	NADEL	NEEDLE	NOZG	NOZG	NOZH	NOZH	NOZI	NOZI
	POS	POS	4	4	3	3	3	2
	HD	MJ	182	180	178	175	172	170
300 m 1000 ft ↑ Meeresniveau Sea level	LSCHR	AS	1/2	3/4	1	1 1/4	1 1/2	1 3/4
	LD	IJ	55	52	50	50	48	45
	NADEL	NEEDLE	NOZF	NOZG	NOZG	NOZH	NOZH	NOZI
	POS	POS	5	4	4	3	3	2
	HD	MJ	185	182	180	178	175	172

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

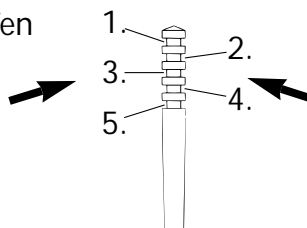
NICHT FÜR STRASSEN BETRIEB
 Kraftstoff: Super bleifrei ROZ 95
 NOT FOR HIGHWAY USE
 Fuel: Super unleaded ROZ 95

VERGASERREGULIERUNG
CARBURETOR SETTING

KTM 125 SX / EXC EUROPA '99 KEIHIN PWK 39

MEERESHÖHE ALTITUDE	TEMPERATUR →		-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	37°C bis 49°C 99°F to 120°F
	3000 m 10000 ft ↑ 2301 m 7501 ft	LSCHR LD NADEL POS HD	AS IJ NEEDLE POS MJ	1 1/2 48 NOZG 3 190	1 3/4 48 NOZH 3 188	1 3/4 45 NOZH 2 185	2 45 NOZH 2 180	2 45 NOZH 2 180
2300 m 7500 ft ↑ 1501 m 5001 ft	LSCHR LD NADEL POS HD	AS IJ NEEDLE POS MJ	1 1/2 48 NOZF 3 190	1 1/2 4 NOZG 3 190	1 3/4 45 NOZH 2 185	2 45 NOZH 2 182	2 45 NOZH 2 182	2 45 NOZH 2 180
1500 m 5000 ft ↑ 751 m 2501 ft	LSCHR LD NADEL POS HD	AS IJ NEEDLE POS MJ	1 1/4 50 NOZF 4 192	1 1/2 48 NOZF 3 190	1 3/4 48 NOZH 3 188	1 3/4 45 NOZH 2 185	1 3/4 45 NOZH 2 185	2 45 NOZH 2 182
750 m 2500 ft ↑ 301 m 1001 ft	LSCHR LD NADEL POS HD	AS IJ NEEDLE POS MJ	1 50 NOZF 4 195	1 1/4 50 NOZF 4 192	1 3/4 48 NOZG 3 190	1 3/4 48 NOZG 3 190	1 3/4 48 NOZH 3 188	1 3/4 45 NOZH 2 185
300 m 1000 ft ↑ Meeresniveau Sea level	LSCHR LD NADEL POS HD	AS IJ NEEDLE POS MJ	3/4 50 NOZD 4 200	1 50 NOZD 4 198	1 1/2 48 NOZF 3 190	1 1/2 48 NOZF 3 190	1 1/2 48 NOZG 3 190	1 3/4 48 NOZH 2 188

LSCHR = Luftregulierschraube offen
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AS = Air screw open from fully-seated
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NICHT FÜR STRASSEN BETRIEB

Kraftstoff: Euro-Super bleifrei ROZ 98

NOT FOR HIGHWAY USE

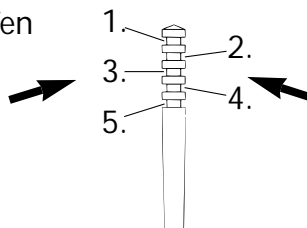
Fuel: Euro-Super unleaded ROZ 98

VERGASERREGULIERUNG
CARBURETOR SETTING

KTM 200 MXC / EXC EUR. USA '99 KEIHIN PWK39

MEERESHÖHE ALTITUDE	TEMPERATUR →		-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	37°C bis 49°C 99°F to 120°F
3000 m 10000 ft ↑ 2301 m 7501 ft	LSCHR	AS	1 3/4	1 3/4	1 3/4	2	2	1 3/4
	LD	IJ	45	45	42	42	42	40
	NADEL	NEEDLE	NOZH	NOZH	NOZI	NOZI	NOZI	NOZI
	POS	POS	2	2	2	1	1	1
	HD	MJ	180	178	175	172	170	170
2300 m 7500 ft ↑ 1501 m 5001 ft	LSCHR	AS	1 1/4	1 3/4	1 3/4	1 3/4	2	2
	LD	IJ	45	45	45	42	42	42
	NADEL	NEEDLE	NOZG	NOZH	NOZH	NOZI	NOZI	NOZI
	POS	POS	3	2	2	2	1	1
	HD	MJ	182	180	178	175	172	170
1500 m 5000 ft ↑ 751 m 2501 ft	LSCHR	AS	1 1/2	1 1/4	1 1/2	1 3/4	1 3/4	2
	LD	IJ	48	45	45	45	42	42
	NADEL	NEEDLE	NOZG	NOZG	NOZH	NOZH	NOZI	NOZI
	POS	POS	3	3	2	2	2	1
	HD	MJ	182	182	180	178	175	172
750 m 2500 ft ↑ 301 m 1001 ft	LSCHR	AS	1 1/4	1	1 1/4	1 1/2	1 3/4	1 3/4
	LD	IJ	48	48	45	45	45	42
	NADEL	NEEDLE	NOZG	NOZG	NOZG	NOZH	NOZH	NOZI
	POS	POS	4	3	3	2	2	2
	HD	MJ	185	182	182	180	178	175
300 m 1000 ft ↑ Meeresniveau Sea level	LSCHR	AS	1	1 1/4	1 1/2	1 1/4	1 1/2	1 3/4
	LD	IJ	48	48	48	45	45	45
	NADEL	NEEDLE	NOZF	NOZG	NOZG	NOZG	NOZH	NOZH
	POS	POS	4	4	3	3	2	2
	HD	MJ	188	185	182	182	180	178

LSCHR = Luftregulierschraube offen
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