TECHNICAL DATA – ENGINE

Engine	125 VC '95 SX	125 VC '95 EXC, EGS
Design	Liquid-cooled single-cylinder two-stroke engine	
Piston displacement	124,8 cc	
Bore / Stroke	54,25/54 mm	
Fuel	SUPER fuel, research octane no 98, mixed with two-stroke oil	
Oil / gasoline ratio	1:40 when using 2-stroke competition oil. When in doubt, please contact your importeur or use 1:30 mix ratio to be on the safe side.	
Crankshaft bearing	1 cylindrical roller bearing – 1 deep-groove ball bearing	
Connecting rod bearing	needle bearing	
Piston pin bearing	needle bearing	
Piston	light alloy, forged	
Piston ring	1 plain compression ring	
Dimension "X" (upper edge piston - upper edge cylinder)	0,55 - 0,65 mm	
Ignition timing BTDC	0,9 mm (13 degrees) BTDC	
Spark plug	NGK BR 10 EG	NGK B 10 EGV
Electrode gap	0,6 mm	
Dimension "Z" (height of the control flap)	34,5 mm	
Primary drive	straight cut spur gears	
Clutch	multiple disc clutch in oil bath	
Transmission	6 speed, claw actuated	
Gear ratios	see Table	
Gear lubrication	0,5 l engine oil SAE 30	
Coolant	1,1 litres, 40% anti freeze, 60% water, at least –25° C (–13° F)	
Ignition	PVL: digital ignition system	SEM: K11 COMET (60G-05)
Generator output	no generator	SEM: 12V 130W
Carburettor	flat-slide carburettor, basic setting see table	
Air filter	wet foam-type air filter insert	

BASIC CARBURETOR SETTING

	SX, EXC, EGS open version	EGS throttled version
Carburetor type	VHSB 37 FD	VHSB 37 FD
Main jet	212 (210,215)	190 (210,212,215)
Needle jet	DP 266 (DP 265)	DP 264 /DP 266)
Idling jet	40	40
Jet needle	K 74	K 55
Needle position	3rd from top	2nd from top
Air adjust. screw open	2 turn	2,5 turn
Throttle valve	40	40
Starting jet	70	70
Spare part number	502.31.001.944	502.31.001.544
Regulation number	210693	021193

GEAR RATIOS

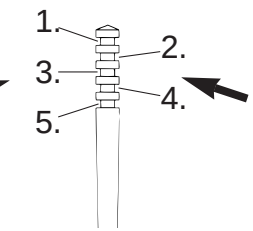
Primary ratio	Transmission	Original final drive ratio	Available chain drive sprockets	Available final drive sprockets
18:61	SX / E-XC / E-GS 1st gear 13:32 12:34 2nd gear 15:30 15:31 3rd gear 14:23 14:23 4th gear 15:21 15:21 5th gear 21:25 21:25 6th gear 20:21 20:20	SX 13:50 EXC, EGS 13:48 13:45 13:40 13:38	13 t for chain 5/8 x 1/4"	38 t 40 t 45 t for chain 5/8 x 1/4" 48 t 49 t 50 t 52 t

Tolerances and gasket clearances		
Piston fitting clearance	0,07 mm	
Piston ring end gap	0,1–0,3 mm	
Connecting rod bearing - radial clearance	0,021–0,028 mm	
Transmission shaft end float	0,1–0,2 mm	
Clutch spring length	2,6 Ø – 38 mm	
Gasket thicknesses		
Crankcase	0,3 mm	
Clutch cover	0,3 mm	
Ignition cover	0,5 mm	
Water pump cover	0,5 mm	
Cylinder base	as required	
Available cylinder base gaskets	0,05/0,10/0,15/0,3 / 0,5 / 0,75 mm	
Cylinder head gasket	1,2 mm + O-ring 2x60	
Tightening torques		
Collar nuts cylinder base	M 8	30 Nm (22 ft.lbs)
Cylinder head bolts	M 7	20 Nm (15 ft.lbs)
Collar nut flywheel (LH thread)	M 12x1	55-60 Nm (40 - 43 ft.lbs)
Nut for primary gear	M 14x1,5	90-95 Nm (65 - 67 ft.lbs)
Nut for inner clutch hub	M 16x1,5	90-95 Nm (65 - 67 ft.lbs)
Crankcase and cover bolts	M 6	8 Nm (6 ft.lbs)
Swing arm pivot	M 14	100 Nm (74 ft.lbs)
Other screws	M 6 M 8 M 10	10 Nm (7 ft.lbs) 25 Nm (19 ft.lbs) 45 Nm (33 ft.lbs)

VERGASERREGULIERUNG / CARBURETOR SETTING — KTM 125 SX/EXC '95 EUROPA DELL'ORTO VHSB37FD

MEERESHÖHE / *ALTIDUDE*	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	2	2 1/2	3	3	3
	LD	*IJ*	40	40	38	38	38	38
	NADEL	*NEEDLE*	K74	K74	K74	K74	K74	K74
	POS	*POS*	3	2	2	2	2	2
	HD	*MJ*	212	210	208	205	205	205
	ND	NJ	265	265	264	264	262	262
2300 m *7500 ft* ↑ 1501 m *5001 ft*	LSCHR	*AS*	1 1/2	1 3/4	2	2 1/2	2 3/4	3
	LD	*IJ*	40	40	38	38	38	38
	NADEL	*NEEDLE*	K74	K74	K74	K74	K74	K74
	POS	*POS*	3	2	2	2	2	2
	HD	*MJ*	215	212	210	208	208	208
	ND	NJ	266	266	265	264	264	262
1500 m *5000 ft* ↑ 751 m *2501 ft*	LSCHR	*AS*	1 1/2	1 3/4	2	2 1/4	2 1/2	3
	LD	*IJ*	42	40	40	40	38	38
	NADEL	*NEEDLE*	K74	K74	K74	K74	K74	K74
	POS	*POS*	3	3	2	2	2	2
	HD	*MJ*	218	215	212	210	210	208
	ND	NJ	268	266	266	265	264	264
750 m *2500 ft* ↑ 301 m *1001 ft*	LSCHR	*AS*	1 1/2	1	1 1/2	**STANDARD** 2 **STANDARD**	2 1/2	3
	LD	*IJ*	45	42	40	40	38	38
	NADEL	*NEEDLE*	K74	K74	K74	K74	K74	K74
	POS	*POS*	4	3	3	3	2	2
	HD	*MJ*	220	218	215	212	210	208
	ND	NJ	268	268	266	266	265	264
300 m *1000 ft* ↑ Meeresniveau *Sea level*	LSCHR	*AS*	1 1/2	2	1 1/2	1 1/2	2	2 1/2
	LD	*IJ*	45	42	42	40	40	38
	NADEL	*NEEDLE*	K74	K74	K74	K74	K74	K74
	POS	*POS*	4	3	3	3	2	2
	HD	*MJ*	220	218	215	215	212	210
	ND	NJ	270	268	268	266	266	265

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



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

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

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