

TECHNICAL DATA - ENGINE 125 / 200 2000

| Engine | 125 SX | 125 EXC | 200 MXC | 200 EXC |
|--|--|-----------------------------|------------------------------|---|
| 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 | unleaded SUPER fuel, research octane no 95, mixed with high grade two stroke oil | | | |
| Oil / gasolin ratio | 1:40-1:60 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>(Kolbenoberkante-Zylinderoberkante)</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 BR9 EVX | | NGK BR 8 EG | |
| Electrode gap | 0.60 mm (0,024 in) | | | |
| Dimension "Z" <small>(Höhe der Steuerklappe)</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 | 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 | KOKUSAN 2K-3 | - | KOKUSAN 2K-3 |
| Generator output | no generator | 12V / 110 W | - | 12V 110 W |
| Ignition system USA | KOKUSAN 2K-1 | KOKUSAN 2K-2 | | |
| Generator output | no generator | 12V 40 W | | |
| Carburetor | flat-slide carburetor, carburetor setting see table | | | |
| Air-filter | wet foam type air filter insert | | | |
| Lubrication | 125 SX | 125/200 EXC | 200 MXC | mixture librication / 200 EXC - EUROPA separate librication |

| 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 (13 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 | 125/200 MXC, EXC | 125 EXC throttled | 200 EXC throttled |
| Carburetor | Keihin PWK 39 | Keihin PWK 38 AG | Keihin PWK 39 | Keihin PWK 38 AG |
| Carburetor setting number | 100499 | 120499 | 030799 | 040799 |
| Main jet | 190 (188/192) | 180 (185) | 142 | 180 |
| Idling jet | 48 (45/50) | 45 (48) | 35 | 35 |
| Starting jet | 85 | 85 | 85 | 85 |
| Jetneedle | R 1467 D (R 1468 D) | NOZ H (NOZ I) | R 1472 N | R 1475 J |
| Needle position from top | III | III | V | IV |
| Throttle valve | 55 | 6 | 6 | 6 |
| Air adjustment screw open | 1,5 | 1,5 | 1,5 | 1,5 |
| Performance restrictor | – | – | – | slide stop 36mm |

TECHNICAL DATA - ENGINE 200 EXC SINGAPORE 2000

| | |
|--|--|
| Engine | 200 EGS Singapore |
| Design | Liquid-cooled single-cylinder two-stroke engine with intake and exhaust control |
| Piston displacement | 193 ccm |
| Bore / stroke | 64 / 60 mm (2.52 / 2.362 in) |
| Fuel | unleaded SUPER fuel, research octane no 95, mixed with high grade two stroke oil |
| Lubrication | separate librication |
| Engine oil | Shell Advance VSX 2 or 2-Stroke engine oil for a mixture ratio 1:50 and for separate lubrication |
| 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 <small>(upper edge piston - upper edge cylinder)</small> | two plain compression rings |
| Dimension "X" | 0.55 mm (0.22 in) |
| Ignition timing | 1.6 mm (0.063 in) (17°) BTDC |
| Spark plug | NGK BR 8 EG |
| Electrode gap <small>(height of the control flap)</small> | 0.60 mm (0,024 in) |
| Dimension "Z" | 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 | 12 : 33 |
| 2nd gear | 15 : 31 |
| 3rd gear | 17 : 28 |
| 4th gear | 19 : 26 |
| 5th gear | 17 : 19 |
| 6th gear | 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-3 |
| Generator output | 12V 110 W |
| Carburetor | flat-slide carburetor, carburetor setting see table |
| Air-filter | wet foam type air filter insert |
| Oiltank | tank capacity 1,3 liter (3,4 US gallons) |

| TOLERANCES AND FITTING CLEARANCES | |
|---|-------------------------------------|
| Piston fitting clearance | 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 |

| BASIC CARBURETOR SETTING | |
|---------------------------|----------------------|
| | 200 EXC Singapore |
| Carburetor | Keihin PWK 38 AG |
| Carburetor setting number | 120499 |
| Main jet | 180 (185) |
| Idling jet | 45 (48) |
| Starting jet | 85 |
| Jetneedle | NOZ H (NOZ I) |
| Needle position from top | III |
| Throttle valve | 6 |
| Air adjustment screw open | 1,5 |
| Performance restrictor | – |

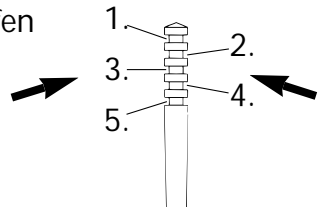
| TIGHTENING TORQUES | | | |
|--------------------------------------|-----------|--------|-------------|
| Flange bolts - cylinder-head | M 7 | 18 Nm | (13 ft.lb) |
| Nuts-cylinder base | M 8 | 30 Nm | (22 ft.lb) |
| Flywheel collar nut | M 12x1 | 60 Nm | (44 ft.lb) |
| Nut for primary sprocket (LH thread) | 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 EUROPA / USA 2000 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 | AS | 1 1/2 | 1 3/4 | 2 | 2 1/4 | 2 1/2 | 2 3/4 |
| | LD | IJ | 45 | 42 | 40 | 38 | 38 | 38 |
| | NADEL | NEEDLE | R1468D | R1469D | R1469D | R1469D | R1469D | R1469D |
| | POS | POS | 2 | 3 | 2 | 3 | 1 | 1 |
| | HD | MJ | 185 | 182 | 180 | 178 | 175 | 175 |
| 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 | 48 | 45 | 42 | 40 | 38 | 38 |
| | NADEL | NEEDLE | R1468D | R1468D | R1469D | R1469D | R1469D | R1469D |
| | POS | POS | 3 | 2 | 3 | 2 | 2 | 1 |
| | HD | MJ | 188 | 185 | 182 | 180 | 178 | 175 |
| 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 | 50 | 48 | 45 | 42 | 40 | 38 |
| | NADEL | NEEDLE | R1467D | R1468D | R1468D | R1469D | R1469D | R1469D |
| | POS | POS | 3 | 3 | 2 | 3 | 2 | 2 |
| | HD | MJ | 190 | 188 | 185 | 182 | 180 | 178 |
| 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 | 52 | 50 | 48 | 45 | 42 | 40 |
| | NADEL | NEEDLE | R1467D | R1467D | R1468 | R1468D | R1469D | R1469D |
| | POS | POS | 4 | 3 | 3 | 2 | 3 | 2 |
| | HD | MJ | 192 | 190 | 188 | 185 | 182 | 180 |
| 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 | 48 | 45 | 42 |
| | NADEL | NEEDLE | R1467D | R1467D | R1467D | R1468D | R1468D | R1469D |
| | POS | POS | 5 | 4 | 3 | 3 | 2 | 3 |
| | HD | MJ | 195 | 192 | 190 | 188 | 185 | 182 |

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

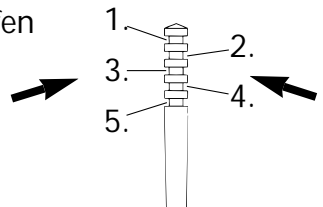
NICHT FÜR STRASSEN BETRIEB

Kraftstoff: Euro-Super bleifrei ROZ 95
NOT FOR HIGHWAY USE
Fuel: Euro-Super unleaded ROZ 95

VERGASERREGULIERUNG CARBURETOR SETTING **KTM 125 MXC/EXC EUR/USA 2000 KEIHIN PWK 38 AG**

| 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 LD IJ NADEL NEEDLE POS POS HD MJ | 1 1/2 48 NOZH 3 175 | 1 3/4 45 NOZH 3 172 | 2 42 NOZH 2 170 | 2 1/4 40 NOZI 1 168 | 2 1/2 38 NOZI 1 165 | 2 3/4 38 NOZI 1 165 |
| 2300 m 7500 ft ↑ 1501 m 5001 ft | LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ | 1 1/4 50 NOZG 4 178 | 1 1/2 48 NOZH 3 175 | 1 3/4 45 NOZH 3 172 | 2 42 NOZI 2 170 | 2 1/4 40 NOZI 1 168 | 2 1/2 38 NOZI 1 165 |
| 1500 m 5000 ft ↑ 751 m 2501 ft | LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ | 1 52 NOZG 4 180 | 1 1/4 50 NOZG 4 178 | 1 1/2 48 NOZH 3 175 | 1 3/4 45 NOZH 3 172 | 2 42 NOZH 2 170 | 2 1/4 40 NOZI 1 168 |
| 750 m 2500 ft ↑ 301 m 1001 ft | LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ | 3/4 55 NOZG 4 182 | 1 52 NOZG 4 180 | 1 1/4 50 NOZH 3 178 | 1 1/2 48 NOZH 3 175 | 1 3/4 45 NOZI 3 172 | 2 42 NOZI 2 170 |
| 300 m 1000 ft ↑ Meeresniveau Sea level | LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ | 1/2 55 NOZF 5 185 | 3/4 52 NOZG 4 182 | 1 50 NOZG 4 180 | 1 1/4 50 NOZH 3 178 | 1 1/2 48 NOZH 3 175 | 1 3/4 45 NOZI 2 172 |

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

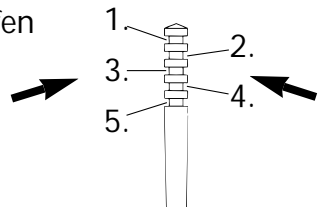
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Kraftstoff: Euro-Super bleifrei ROZ 95
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Fuel: Euro-Super unleaded ROZ 95

VERGASERREGULIERUNG CARBURETOR SETTING **KTM 200 MXC/EXC EUR/USA 2000 KEIHIN PWK 38 AG**

| 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 LD IJ NADEL NEEDLE POS POS HD MJ | 1 3/4 45 NOZH 2 180 | 1 3/4 45 NOZH 2 178 | 1 3/4 42 NOZI 2 175 | 2 42 NOZI 1 172 | 2 42 NOZI 1 170 | 1 3/4 40 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 NOZG 3 182 | 1 3/4 45 NOZH 2 180 | 1 3/4 45 NOZH 2 178 | 1 3/4 42 NOZI 2 175 | 2 42 NOZI 1 172 | 2 42 NOZI 1 170 |
| 1500 m 5000 ft ↑ 751 m 2501 ft | LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ | 1 1/2 48 NOZG 3 182 | 1 1/4 45 NOZG 3 182 | 1 1/2 45 NOZH 2 180 | 1 3/4 45 NOZH 2 178 | 1 3/4 42 NOZI 2 175 | 2 42 NOZI 1 172 |
| 750 m 2500 ft ↑ 301 m 1001 ft | LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ | 1 1/4 48 NOZG 4 185 | 1 48 NOZG 3 182 | 1 1/4 45 NOZG 3 182 | 1 1/2 45 NOZH 2 180 | 1 3/4 45 NOZH 2 178 | 1 3/4 42 NOZI 2 175 |
| 300 m 1000 ft ↑ Meeresniveau Sea level | LSCHR AS LD IJ NADEL NEEDLE POS POS HD MJ | 1 48 NOZF 4 188 | 1 1/4 48 NOZG 4 185 | 1 1/2 48 NOZG 3 182 | 1 1/4 45 NOZG 3 182 | 1 1/2 45 NOZH 2 180 | 1 3/4 45 NOZH 2 178 |

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AS = Air screw open from fully-seated
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