

BL Motorcycles Ltd

Professional Workshop Manual - English Translation

MZ - MZ_RT_125_1961_Manual_de_intretinere

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To the friends of MZ motorcycles! Your MZ 125/3 motorcycle is easy to operate and undemanding in terms of maintenance and care. These are necessary to keep the machine always ready for operation and reliable and to extend its service life.

Therefore, make yourself familiar with these operating instructions immediately for your own benefit. Do not only read our information about correct operation, but also carefully observe our regulations about consumables, and carry out the maintenance work that is necessary as recommended in these instructions. Pay particular attention to what we say about the choice of the correct spark plug, about the correct carburetor and ignition settings and about the exhaust system. If we warn you against carrying out your own experiments, this is only done in your interest.

The standard setting values have been determined in long series of tests as the most favorable for this engine.

Our authorized workshops are obliged to give you thorough explanations on all questions beyond these operating instructions and to provide practical advice. We recommend that you visit our authorized workshops not only for the free inspections, but also if a repair should be necessary. It goes without saying that only original parts may be installed.

Since the authorized workshops work carefully and efficiently with special tools, there is a guarantee that you will be served inexpensively. Your MZ motorcycle guarantees you full performance and constant operational readiness if you drive and maintain it according to our regulations. You will have a lot of fun riding your motorcycle. We wish you a safe journey at all times!

VEB Motorradwerk
Zschopau / Sa. Operating instructions for MZ motorcycle 125/3 - Miraculis
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Image 1. Machine, complete, from the left Operating instructions for MZ motorcycle 125/3 - Miraculis

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Image 2. Machine, complete, from the right 1 Technical data 1.1 Engine

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Working method Two-stroke scavenging method Reverse scavenging

Stroke 58 mm

Bore 52 mm

Number of cylinders and arrangement 1 cylinder, upright inclined 15° forward

Displacement 123 ccm

Compression ratio 8 : 1 Operating instructions for MZ motorcycle 125/3 - Miraculis

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Maximum power at 5200 rpm 6.5 HP

Maximum torque at 3600 rpm 0.95 kgm

Cooling Air (headwind)

Lubrication Oil mixture lubrication 1 : 25

Carburetor type Single-lever rotary slide nozzle needle carburetor

Type BVF 22 KNB 1-2 (Berliner Vergaserfabrik)

Setting Main jet 85 (80)

Idle jet 35

Needle nozzle 67

Part load needle in 3rd notch from above

Idle air screw about 2 1/2 turns open

Air filter Baffle plate wet air filter with intake silencer

Ignition Battery ignition

Spark plug Isolator M 14/240

Thread length 10 mm

Electrode gap 0.6 mm

Breaker contact gap 0.4 mm

Pre-ignition 4.5 mm BTDC

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Piston 2 compression rings Operating instructions for MZ motorcycle 125/3 - Miraculis
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Crankshaft bearing Number 3 ring groove bearings
Connecting rod bearing Roller bearing double row cageless, with separating disc

1.2 Transmission and power transmission

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Clutch Multi-disc clutch in oil bath

Clutch plates Steel plates and friction lining discs 'Original Cosid'

Number of pressure springs 6

Gearbox Number of gears 4

Neutral indicator electr. Indicator lamp in the headlight

Shifting by foot gearshift lever and automatic gearshift

Reduction in the gearbox 1st gear 3.05 : 1

2nd gear 1.805 : 1

3rd gear 1.285 : 1

4th gear 1 : 1 Operating instructions for MZ motorcycle 125/3 - Miraculis

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Motor/gearbox ratio 2.75 : 1 (12 : 33 teeth)

Gearbox/rear wheel 2.66 : 1 (15 : 40 teeth)

Overall gear ratio 1st gear 22.4 : 1

2nd gear 13.2 : 1

3rd gear 9.4: 1

4th gear 7.3 : 1

Kickstarter ratio 3.76 : 1

Power transmission Motor/gearbox Sleeve chain A 9.5x7.5 DIN 73232

Gearbox/rear wheel Roller chain 12.7x6.4x8.51 DIN 8180

1.3 Brakes

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Foot brake Internal shoe brake acts on rear wheel

Actuation Bowden cable, adjustable Operating instructions for MZ motorcycle 125/3 - Miraculis

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Hand brake Internal shoe brake acts on the front wheel

Actuation Bowden cable, adjustable

Brake drum diameter 150 mm

Brake lining Width 30 mm

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Material 'Original Cosid' riveted or glued on

1.4 Wheels

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Type Spoked wheels

Axes Plug axles, rear and front

Rims Drop center rims, front 1.60 x 19 rear 1.85 x 19

Tires front 2.75 x 19 rear 3.00 x 19

Air pressure front 1.4 atü (2.75 x 149) Operating instructions for MZ motorcycle 125/3 - Miraculis

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