

BL Motorcycles Ltd

Professional Workshop Manual - English Translation

MZ - MZ_TS_125_150_250_1974_Manual_de_intretinere

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We welcome you as the happy owner of a new MZ and thank you for the trust you have shown in our state-owned enterprise with your purchase. Based on our fifty years of experience in motorcycle construction, we have endeavored to provide you with a powerful and reliable vehicle. Now it depends on you whether you will only have joy from your MZ in the future through correct handling and care. This operating manual is intended to help you with this. Please note everything that is recommended about fuel and oil, running-in, maintenance and care, as well as economical driving, before someone explains to you on the basis of a workshop invoice what you have done wrong!

We deliberately chose an informal tone to make studying it palatable to you, and hope in your own interest that you actually do so. Only those who are really familiar with their vehicle will drive without breakdowns and economically in the long run.

Even for an 'old motorcycle hand' it is worth reading through. You will certainly be reminded of valuable tips that you may have long forgotten!

Of course, a widely branched network of MZ contract workshops is also available to help you with advice and assistance. Their addresses can be found - together with the guarantee conditions - in the guarantee and inspection booklet. We would like to draw your special attention to the latter so that you do not lose your claim to guarantee services. And now 'Have a good trip'!

VEB MOTORRADWERK ZSCHOPAU Operating Instructions for MZ Motorcycles TS 125 - TS 150 - TS 250
<http://www.mz-b.de/miraculis/aw/mz/text/ts1525b/ts1525b.html>

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Figure 2. TS 250 1. Technical Data 1.1. Engine

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TS 125 TS 150 TS 250 Working Method Two-stroke loop scavenging Two-stroke loop scavenging Two-stroke loop scavenging

Number of Cylinders 1 1 1

Cooling Type Air (wind) Air (wind) Air (wind)

Stroke/Bore 58/52 58/56 65/69

Displacement 123 cm³ 143 cm³ 243 cm³

Compression Ratio 10 : 1 10 : 1 9.5...10 : 1 Operating Instructions for MZ Motorcycles TS 125 - TS 150 - TS 250

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Power at 6000 ... 6300 rpm 7.35 kW (10.0 DIN-PS = 11.0 SAE-PS) 8.45 kW (11.5 DIN-PS = 12.5 SAE-PS) 14.0 kW (19 DIN-PS = 21 SAE-PS)

Max. Torque 1.25 kpm at 5000 ... 5500 rpm 1.50 kpm at 5000 ... 5500 rpm 2.6 kpm at 4600...5600 rpm

Lubrication Mixture lubrication 33: 1 (two-stroke oil) 50:1

Crankshaft Bearings 3 pieces ball bearings 6303 c 3 f2 bearing 6305 c 3 f and 1 bearing 6302

Lubrication of all crankshaft main bearings by transmission lubricant

Fuel VK 88 (ROZ 88)

1.2. Carburetor

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Type BVF 22 N 1-3 (slide valve, cold start carburetor) BVF 24 N 1-1 (slide valve, cold start carburetor) BVF 30 N 2-3 (slide valve, cold start carburetor)

Setting Values Bore in mm 22 24 30

Main Jet 90 95 140

Needle Jet 65 65 70

Needle Position from Above

1) 2...3 (3 for running-in period) 2...4 (4 for running-in period) 4...5 (5 for running-in period)

Start Jet 70 75 110 Operating Instructions for MZ Motorcycles TS 125 - TS 150 - TS 250

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Idle Jet 35 40 35

Idle Air Screw 1...2 turns open 2...3 turns open 1.5 turns open

Air Filter Dry Air Filter with Intake Noise Damper

1) Observe spark plug appearance! (The lower plate of the needle holder counts!)

1.3. Electrical System

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Ignition Battery ignition Battery ignition Battery ignition

Ignition Timing 3.0 -0.5 mm before TDC fixed 3.0 -0.5 mm before TDC fixed 3.0 -0.5 mm before TDC fixed

Breaker Contact Gap 0.3 +0.1 mm 0.3 +0.1 mm 0.3 +0.1 mm

Spark Plug 'Isolator' M 14/260 'Isolator' M 14/260 'Isolator' M 14/260

Electrode Gap 0.6 mm 0.6 mm 0.6 mm

Generator DC, 6 V, 60 W, briefly 90 W

Charging Control Lamp (red) in the speedometer

Regulator RSC 60/6

Battery 6 V, 12 Ah (lead-acid flat battery)

Ignition Coil 6 V, under the left side panel

Headlight Light emission 170 mm Operating Instructions for MZ Motorcycles TS 125 - TS 150 - TS 250

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Tail Light combined with Light emission 100 mm

Brake Light Contact on the rear brake lever

Flasher Unit in the headlight housing

Horn under the fuel tank

Headlight Flasher is operated by a push button under the low beam switch

Bulbs Bilux 6 V, 45/40 W Low beam asymmetrical

Parking Light 6 V, 4 W, Socket BA 9s

Brake Light 6 V, 21 W, Socket BA 15s

Tail Light 6 V, 5 W, Socket BA 15s

Turn Signals 6 V, 21 W, Socket BA 15s

Charging Control 6 V, 1.2 W

Neutral Indicator 6 V, 1.2 W

Speedometer Illumination 6 V, 1.2 W

1.4. Transmission

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Clutch Multi-disc clutch in oil bath (friction discs with cork content) Operating Instructions for MZ Motorcycles TS 125 - TS 150 - TS 250 <http://www.mz-b.de/miraculis/aw/mz/text/ts1525b/ts1525b.html>

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Shifting Foot shift left

Number of Gears 4 4 5

Gear Ratio 1st Gear 3.05 : 1 2.77 : 1

2nd Gear 1.805 : 1 1.80 : 1

3rd Gear 1.285 : 1 1.23 : 1

4th Gear 1 : 1 0.92 : 1

Neutral Indicator electrical indicator lamp (green) in the speedometer

1.5. Power Transmission

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Ratio Engine-Transmission 2.31 : 1 = 16 : 37 teeth 2.43 : 1

Ratio Transmission-Rear Wheel 3.2 : 1 = 15 : 48 teeth 3.0 : 1 = 16 : 48 teeth 2.23 : 1 = 21 : 47 teeth

Roller Chain 12.7 x 6.4 x 8.51 (1/2 x 1/4 inch) 120 rollers 12.7 x 7.75 x 8.51 (1/2 x 5/16 inch) 126 rollers

1.6. Chassis Operating Instructions for MZ Motorcycles TS 125 - TS 150 - TS 250

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Frame closed pressed steel frame, folded closed pressed steel frame, folded Central tube frame, welded

Elastic Engine Mounting

Type of Suspension front Telescopic fork and rear long swingarm front telescopic fork with hydraulic damping, spring travel 185 mm rear shock absorbers with hydraulic damping, spring travel 105 mm, spring hardness adjustable

Wheels Wire-spoked wheels

Rims, front/rear 1.6x18 / 1.85Bx18 1.6x18 / 1.85Bx18 1.85Bx16 / 2.15Bx16

Tires, front 2.75-18 2.75-18 3.00-16

rear 3.00-18 3.00-18 3.50-16

Tire Pressure front 1.5 atm (overpressure) 1.5 atm (overpressure) 1.5 atm (overpressure)

rear 1.9 atm (overpressure) for solo riding 2.1 atm with passenger 1.9 atm (overpressure) for solo riding 2.1 atm with passenger 1.9 atm (overpressure) for solo riding 2.1 atm with passenger

Brakes Central brakes 160 mm diameter front, 150 mm diameter rear, 30 mm shoe width

Brake Actuation mechanical, by cables for both brakes TS 250 rear with linkage

1.7. Dimensions and Masses

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