MZ - MZ_ETZ_250_1983_Manual_de_intretinere

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Dear MZ Friend! With this operating manual, we want to contribute to ensuring that your motorcycle is always a reliable companion. Thanks to our many years of experience in motorcycle construction, the MZ is a robust, efficient, reliable, and low-maintenance vehicle. To ensure that it always remains so, please observe the following instructions for treatment and care.
We wish you 'Good Journey'!
VEB Motorradwerk Zschopau
Operation of the IFA Combine for Two-Wheeled Vehicles

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1. Technical Data

1.1. Engine and Power Transmission

Engine Type: EM 250
Operating Principle: Two-stroke reverse scavenging
Power: 15.45 kW (21 HP) at approximately 5500 rpm (12.5 kW at approximately 5000 rpm for Germany)
Max. Torque: 27.4 Nm (2.8 kpm) at approximately 5200 rpm (24.5 Nm at approximately 4500 rpm for Germany)
Lubrication: Mixture lubrication 50:1
Gearbox: Number of gears 5
Neutral Indicator: Yellow indicator light - only for luxury version
Power Transmission to Rear Wheel:
Roller Chain: 0.8 B-1-130 TGL 11796 for sprocket with 18 and 19 teeth (solo version)
0.8 B-1-128 TGL 11796 for sprocket with 15 teeth (sidecar version)
Gearbox-Rear Wheel Ratio: 2.52 (19:48 teeth) or 2.67 (18:48 teeth) solo version
3.2 (15:48 teeth) sidecar version

1.2. Carburetor

Type: 30 N 2-5
Intake Manifold Diameter: 30 mm
Main Jet: 130 or 135 (120 for 12.5 kW engine)
Needle Jet: 70 (with transverse bore)
Part-Load Needle: C 6
Part-Load Needle Position from Above: 3 ... 4 (4 for the break-in period)1)
Starting Jet: 110
Idle Jet: 45
Idle Air Screw: Approximately 1 turn open 1)
Note spark plug appearance! The lower plate of the needle holder counts.

1.3. Chassis

Suspension:
Front: Telescopic fork with hydraulic damping
Travel: 185 mm
Rear: Shock absorbers with hydraulic damping
Travel: 105 mm, spring preload adjustable

Wheels: Wire spoke wheels
Rims:
Front: 1.60 x 18
Rear: 2.15 B x 18

Tires:
Front: 2.75 x 18
Rear: 3.50 x 18

Tire Pressure (Overpressure):
Solo
Front: 170 kPa (1.7 kp/cm²)
Rear: 190 kPa (1.9 kp/cm²)
At Permissible Total Mass
Front: 190 kPa (1.9 kp/cm²)
Rear: 250 kPa (2.5 kp/cm²)

Brakes:
Front: Simplex internal expanding shoe brake or hydraulically operated disc brake
Rear: Simplex internal expanding shoe brake

1.4. Electrical System

Nominal Voltage: 12 V
Ignition: Battery ignition
Ignition Timing: 2.5 +0.5 mm (20° 15' ... 22° 15') before top dead center, fixed setting
Breaker Contact Gap: 0.3 +0.1 mm (Dwell angle 132° ± 5° at idle)
Spark Plug: Isolator ZM 14-260 or comparable foreign types (multi-range spark plugs)
Electrode Gap: 0.6 mm
Generator: Three-phase 14 V, 15 A, with rectifier and regulator
Battery: 12 V, 9 Ah
Bulbs:
Headlight: 12 V, 45/40 W, TGL 11413, low beam asymmetrical
Parking Light: 12V, 4 W, base BA 9s, TGL 10833
Taillight: 12V, 5 W, base BA 15s
Brake Light: 12V, 21 W, base BA 15s
Turn Signal: 12 V, 21 W, base BA 15s
Indicator Lights and Instrument Lighting: 12V, 2 W, base BA 7s TGL 10833
Fuses:
Main Fuse: 2 x Fuse A 16 TGL 11135 (16 A)
Turn Signal System: Fuse 4 A TGL 11135 (4 A)
Alternator Excitation: Fuse 2 A (miniature fuse)

1.5. Masses

Empty Mass (with fuel and tools): 151 kg (version with drum brake)
153 kg (version with disc brake)
Permissible Total Mass: 330 kg

1.6. Filling Quantities

Fuel Tank: 17.0 l
Of which Reserve: 1.5 l

Gearbox Oil: 0.9 l

1.7. Performance

Top Speed: 125 ... 130 km/h depending on load, weather conditions and seating position
Acceleration: from 0 to 80 km/h 6.6 s
Fuel Consumption: 3.5 ... 5 l/100 km

2. Consumables

Engine: Carburetor fuel 88 octane (RON), mixed in a ratio of 50:1 with two-stroke engine oil. Example: Mix 10 l of fuel with 0.2 l of two-stroke engine oil.
Gearbox: Gear oil SAE 80 or unalloyed engine oil SAE 40 for summer and winter. In the DDR, GL 100 oil is used.
Chassis: Gear oil SAE 80 and roller bearing grease

Electrical System:
For a new battery, use accumulator sulfuric acid with a density of 1.28 g/cm3 (in the tropics 1.23 g/cm3) at 25°C and only distilled water to refill the battery.
Pole grease as corrosion protection for the battery connections.
Hypoid oil (viscous gear oil) for the breaker lubrication felt.

3. Operation
3.1. Operating Elements

Figures 1 ... 8 show all the operating elements required to operate the motorcycle and their function. Please familiarize yourself with them before the first start.