

## **MZ - MZ\_500R\_1991\_Manual\_de\_intretinere**

### OPERATING INSTRUCTIONS MZ 500R

#### Index

DEAR MZ FRIEND! With these operating instructions, we want to help ensure that your motorcycle will always be a reliable companion. The MZ 500 R is, as a result of our many years of experience in motorcycle construction, a robust, powerful, reliable and low-maintenance vehicle. To ensure that this remains the case, please observe the following instructions regarding treatment and care.

Starting and operating the vehicle requires that you carefully read these operating instructions, observe the instructions given here for proper use, possess the legal authorization valid for the country of use to operate this vehicle, and know and observe the conditions under which the vehicle may be used. The vehicle must remain in the technical condition handed over by the manufacturer. The manufacturer assumes no liability for damage caused by failure to observe the instructions and regulations, by the installation of non-original spare parts and accessories, or by improper repair work. We wish you 'Good travels'!

MOTORRADWERK ZSCHOPAU GmbH

### TABLE OF CONTENTS

#### 1. TECHNICAL DATA

- 1.1. Engine and Power Transmission
- 1.2. Carburetor
- 1.3. Chassis
- 1.4. Electrical System
- 1.5. Weights
- 1.6. Fill Quantities
- 1.7. Performance

#### 2. CONSUMABLES

#### 3. OPERATION

- 3.1. Controls
- 3.2. Starting and Riding
- 3.3. Instructions for the Break-in Period

#### 4. MAINTENANCE

- 4.1. General Information
- 4.2. Maintenance Schedule
- 4.3. Lubrication Points
- 4.4. Engine and Transmission Lubrication
- 4.5. Clutch
- 4.6. Brakes
- 4.7. Energy Supply

# BL Motorcycles Ltd

Professional Workshop Manual - English Translation

- 4.8. Wheels and Tires
- 4.9. Rear Wheel Drive
- 4.10. Electrical System
- 4.11. Notes for Winter Operation

## 5. TROUBLESHOOTING GUIDE

## 6. CUSTOMER SERVICE

## 7. COMPLETING THE MOTORCYCLES

### CIRCUIT DIAGRAM (FOLDING CHART)

#### 1. TECHNICAL DATA

- 1.1. Engine and Power Transmission

next point ; Index

Engine type Rotax 504 E

Operating principle 4-stroke SOHC, 4 valves

Displacement 494 cm<sup>3</sup>

Power 20 kW ECE (27 HP) at 6,500 rpm

Max. Torque 32 Nm at 4,500 rpm

Lubrication Dry sump lubrication for engine and transmission with 2-stage trochoid pump

Gears Number of gears 5

Neutral gear indicator in the speedometer, combined with oil level indicator

Lubrication Pump splash lubrication

Power transmission to the rear wheel Roller chain 5/8" x 1/4", 102 rollers

Gearbox-rear wheel ratio 2.11 (18/38 teeth)

#### 1.2. Carburetor

next point ; Index

Type Dell'orto PHF 34 GS

Intake manifold diameter 34 mm

Main jet 120

Needle jet 265

Throttle needle K28

Throttle needle position from above 3

Starting jet 60

Idle air jet 45

Idle correction jet 100

Idle mixture screw 1.5

Idle speed approximately 900 ... 1,100 rpm adjusted with throttle stop screw

# BL Motorcycles Ltd

Professional Workshop Manual - English Translation

Carbon monoxide content 2.5 to 4% at idle speed

## 1.3. Chassis

next point ; Index

Suspension front Telescopic fork with hydraulic damping, travel 185 mm

rear Shock absorbers with hydraulic damping, travel 135 mm, spring preload and angle adjustable

Wheels Cast wheels made of aluminum alloy

Rims front 1.85 x 18

rear 2.50 x 16

Tires front 90/90-18 S

rear 110/80-16 S

Tire pressure (overpressure) Solo front 170 kPa (1.7 kp/cm<sup>2</sup>)

rear 190 kPa (1.9 kp/cm<sup>2</sup>)

at permissible total mass front 170 kPa (1.7 kp/cm<sup>2</sup>)

rear 250 kPa (2.5 kp/cm<sup>2</sup>)

Brakes front Hydraulically operated disc brake

rear Simplex internal shoe brake

## 1.4. Electrical System

next point ; Index

Nominal voltage 12 V

Ignition Contactless capacitor ignition, fully electronic, with ignition adjustment

Ignition timing uninfluenced 3° BTDC at 1,500 rpm, adjustment continuous from 2,000 rpm to 29° BTDC at 6,000 rpm

Spark plug NGK D8 E-A

Electrode gap 0.7 mm

Generator 3-phase alternator 12V, 190W

Battery 12V / 14Ah

Bulbs Headlight H4, 12V, 60/55W, low beam asymmetrical

Parking light 12V/4W, socket BA 9s

Taillight 12V/5W, double filament lamp P25-2-12V (21/5W)

Brake light 12V/21W, double filament lamp P25-2-12V (21/5W)

Turn signal 12V/10W - DIN 72601-R 19/10

Indicator lights 12V/1.2W, socket W 2x4.6d (glass socket lamp)

Instrument lighting 12V/2W, socket W 2.1x9.5d (glass socket lamp)

Fuses Main fuse Fuse insert 16A

Direction indicator Fuse insert 4A

## 1.5. Weights

next point ; Index

# BL Motorcycles Ltd

*Professional Workshop Manual - English Translation*

Empty weight (with fuel and tools) 157 kg

Permissible total mass 330 kg

## 1.6. Fill Quantities

next point ; Index

Fuel tank 17.0 l

of which reserve 1.5 l

Engine oil 2.5 l

## 1.7. Performance

next point ; Index

Top speed 140 km/h, depending on load, weather conditions and seating position

Fuel consumption 3.5 ... 5 l/100 km

## 2. CONSUMABLES

next point ; Index

Engine and gearbox

Carburetor fuel unleaded normal

Engine oil SAE 10 W 40, SAE 15 W 50

Chassis

Brake fluid SAE 70 R3 or SAE I 1703

Rolling bearing grease or engine oil SAE 10 W 40

Electrical system

For a new battery, use accumulator sulfuric acid with a density of 1.28 g/cm<sup>3</sup> (in the tropics 1.23 g/cm<sup>3</sup>) at 25 °C and use only distilled water to refill the battery. Pole grease as corrosion protection for the battery connections.

## 3. OPERATION

### 3.1. Controls

next point ; Index

Image 1. Controls

Ignition-steering lock