

BL Motorcycles Ltd

Professional Workshop Manual - English Translation

MZ - MZ_ES_125_150_1967_Manual_de_intretinere

Index

We welcome you

as the fortunate owner of a new ES and at the same time thank you for the trust you have shown in our nationally owned company through your purchase. Based on our forty years of experience in motorcycle construction, we have striven to provide you with a powerful and reliable vehicle. Now, however, it also depends on you whether you will only have pleasure from your ES in the future through proper treatment and care. This operating manual should help you with this. Please pay attention to 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 bill what you have done wrong!

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

It is also worth reading through for an "old motorcycle hand". 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 at your side with advice and help. 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. We hope that you will act according to our instructions and that this small handbook will become for you what it should be - a constant companion and advisor on your journeys. To this end, we wish you "Good Journey"!

VEB MOTORRADWERK ZSCHOPAU Operating instructions for MZ motorcycles ES 125 and ES 150
<http://www.mz-b.de/miraculis/aw/mz/text/es150b/es150b.html>

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Lubrication Chart

Maintenance Schedule (Folding Chart) Operating instructions for MZ motorcycles ES 125 and ES 150

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Wiring Diagram

Image 1. ES 125

Operating instructions for MZ motorcycles ES 125 and ES 150

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Image 2. ES 150 1. Technical Data 1.1. Engine

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ES 125 ES 150

Working Method Two-stroke scavenging Two-stroke scavenging Number of Cylinders 1 1

Cooling Type Air (wind) Air (wind) Stroke/Bore 58/52 58/56

Displacement 123 cm³ 143 cm³

Compression Ratio 9:1 9:1

Power at 5500 ... 5800 rpm 6.2 kW (8.5 HP) 7.3 kW (10 HP)

Max. Torque at 4000 rpm 1.10 kpm 1.35 kpm

Lubrication Mixture lubrication 33:1 (Two-stroke oil)

Connecting Rod Bearing caged needle bearing Crankshaft Bearing 3 pcs. ball bearing 6303

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Lubrication of all crankshaft main bearings by transmission lubricant

Fuel VK 'Normal' (yellow, RON 79) Operating instructions for MZ motorcycles ES 125 and ES 150

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1.2. Carburetor

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ES 125 ES 150

Type BVF 22 N 1-1 (slide valve, choke) BVF 24 N 1-1 (slide valve, choke)

Adjustment Values Bore in mm 22 24

Main Jet 87 92

Needle Jet 65 65

Needle Position from above 2...3 *) (3 for run-in period) 2...4 *) (4 for run-in period)

Starting Jet 70 75

Idle Jet 35 40

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

Air Filter Dry air filter with intake noise damper *) Observe spark plug condition!

1.3. Electrical System

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ES 125 ES 150

Ignition Battery Ignition Timing 3.0 mm BTDC fixed 3.0 mm BTDC fixed

Breaker Point Gap 0.4 mm 0.4 mm

Spark Plug 'Isolator' M 14/240 'Isolator' M 14/240

Electrode Gap 0.6 mm 0.6 mm

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

Charging Control Lamp (red) in speedometer Regulator RSC 60/6

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

Ignition Coil 6 V, under the left side panel

Headlight fixed - light emission 136 mm

Tail Light combined with light emission 95 mm

Brake Light Contact on the rear brake lever

Turn Signals on both sides of the handlebar end (switch on handlebar right)

Flasher Unit in the headlight housing

Horn under the fuel tank

High beam is activated by push button under the dimmer switch

Bulbs Operating instructions for MZ motorcycles ES 125 and ES 150

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Bilux 6 V, 45/40 W, low beam asymmetrical

Parking Light 6 V, 2 W, base BA 9s

Brake Light 6 V, 18 W, base S 8.5

Tail Light 6 V, 5 W, base S 8

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Turn Signal 6 V, 18 W, base S 8.5

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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ES 125 ES 150

Clutch Multi-plate clutch in oil bath

Shifting Foot shift left

Number of Gears 4

Gear Ratios 1st gear 3.05:1

2nd gear 1.805:1

3rd gear 1.285:1

4th gear 1:1 Operating instructions for MZ motorcycles ES 125 and ES 150

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Neutral Indicator electrical indicator lamp (green) in speedometer

1.5. Power Transmission

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ES 125 ES 150

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

Sleeve Chain A 9.5 x 7.75 (3/8 x 5/16 inch) 48 links

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

Roller Chain 12.7 x 6.4 x 8.51 (1/2 x 1/4 inch) 120 rollers

1.6. Chassis

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ES 125 ES 150

Frame closed pressed steel frame, folded

Type of Suspension front and rear long swing arm front

Shock absorbers with hydraulic damping, spring travel 150 mm Operating instructions for MZ motorcycles ES 125 and ES 150 <http://www.mz-b.de/miraculis/aw/mz/text/es150b/es150b.html>

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