

BL Motorcycles Ltd

Professional Workshop Manual - English Translation

MZ - MZ_RT_125_1953_Manual_de_intretinere

Index

Customer Service

Your motorcycle is simple to operate and undemanding in terms of maintenance and care. However, proper care and operation are, of course, necessary to keep the machine always ready for operation and reliable and to extend its lifespan. Therefore, make yourself familiar with these operating instructions immediately for your own benefit. Do not only read our instructions on proper operation, but also carefully observe our regulations regarding consumables and carry out the few maintenance tasks that we specify as necessary as we recommend them.

Pay particular attention to what we say in points 43, 50, 51 and 52 about the choice of the correct spark plug, about correct carburetor and ignition settings and about the exhaust system. If we warn you against conducting your own experiments in the points before that, it is only in your interest. The standard settings and values have been tested in long series of tests as the most favorable for this engine.

Our recognized contract workshops are happy to provide you with thorough information on all questions and practical advice beyond these operating instructions. We recommend that you visit our recognized IFA contract workshops not only for the execution of the free inspection work, but also whenever you yourself do not have the time and inclination to carry out the necessary care and maintenance work or if a repair should become necessary. In our recognized contract workshops you will find professional management, well-trained personnel. There, IFA original spare parts are used, there, work is done with IFA special tools, therefore, your machine is repaired quickly, carefully and ultimately most cheaply. Operating instructions for RT 125 - Miraculis <http://www.mz-b.de/miraculis/aw/mz/text/rt1250b/rt1250b.html>

1 of 57 03.11.2008 00:57

In your own interest, please note what we say under III. - Maintenance and care - about the use of IFA original spare parts.

VEB IFA MOTORRADWERK

Zschopau/Sa.

Table of Contents

General

0 IFA Customer Service

I. Operational Readiness and Operation

Consumables:

1 Fuel

2 Engine Oil

3 Mixing Ratio

4 Mixture Preparation

5 Lubricant for the Power Transmission

6 Lubricant for the Chassis

7 Spark Plug

8 Tire Pressure

9 Fuse

Operating Levers:

10 Fuel Tap

11 Tickler

12 Air Flap

BL Motorcycles Ltd

Professional Workshop Manual - English Translation

- 13 Throttle Twist Grip
- 14 Ignition and Light Switch
- 15 Dimmer Switch and Signal Button
- 16 Kick Starter Lever
- 17 Clutch Lever
- 18 Foot Shift Lever
- 19 Foot Brake Lever
- 20 Hand Brake Lever
- 21 Kickstand
- 22 Alternator Ventilation
- Operation:
 - 23 Commissioning the Motorcycle
 - 24 Running In
 - 25 Starting
 - 26 Moving Off
 - 27 Downshifting on a Hill
 - 28 Braking
 - 29 Stopping
 - 30 Putting Out of Service
- II. Technical Description
 - 31 Engine
 - 32 Engine
 - 33 Frame
 - 34 Front Fork
 - 35 Rear Wheel Suspension
 - 36 Axles
 - 37 Brakes
 - 38 Lighting System
 - 39 Technical Data
- III. Maintenance and Care
 - 40 Lubrication of Chassis Parts
 - 41 Air Filter Cleaning
 - 42 Spark Plug Maintenance
 - 43 Battery Maintenance
 - 44 Maintenance of Brakes and Hubs
 - 45 Fuel Filter Cleaning
 - 46 Refilling and Renewal of the Gearbox Lubricant
 - 47 Adjusting the Clutch
 - 48 Chain Maintenance
 - 49 Cleaning and Inspection of the Carburetor
 - 50 Cleaning the Exhaust System
 - 51 Inspection of the Electrical System
 - 52 Inspection of Residue Build-up in the Engine
 - 53 Tire Maintenance
 - 54 Cleaning the Motorcycle

BL Motorcycles Ltd

Professional Workshop Manual - English Translation

IV. Troubleshooting Guide

55 Engine Does Not Start

56 Charging Indicator Lamp Does Not Go Out After Starting the Engine

57 Engine Runs Irregularly

58 Engine Stops Suddenly

59 Consumption Is Too High

60 Battery Is Not Charged Enough

61 Headlight Does Not Burn

62 Horn Fails

63 What Does the Spark Plug Face Tell Us?

64 Flat Tire

Wiring Diagram

Lubrication Diagram

I. Operational Readiness and Operation

Consumables

1 Fuel

to the next point ; Index

The engine can be operated with any commercially available fuel. It must be clean and free of water.

2 Engine Oil

to the next point ; Index

The engine works with mixture lubrication, that is, the lubrication of the engine is done by adding engine oil to the fuel. Never add pure fuel alone.

3 Mixing Ratio of Oil and Fuel

to the next point ; Index

The correct mixing ratio for all operating conditions, including the running-in period, is 1:25, that is, 1 liter of oil is added to 25 liters of fuel. So for 5 liters of fuel, 200 ccm of oil are to be requested.

4 Mixture Preparation

to the next point ; Index

The oil-fuel mixture is best prepared outside the fuel tank in a special mixing jug with a stirring tool or tamper or in a canister that can be closed and shaken and swiveled vigorously. If no aids are available, it is permissible as an emergency to let the oil in previously measured correct quantity run into the inflowing fuel jet.

5 Lubricant for the Power Transmission

to the next point ; Index

The power transmission parts from the engine to the gearbox and the gearbox itself are lubricated together. Engine oil is to be used as lubricant. The filler opening for the lubricant is located on top of the gearbox housing. When unscrewing, the oil dipstick becomes visible, which has two markings. The oil level in the gearbox is ok when the wetting edge lies between the two markings. If it is below the lower marking, it must be refilled. The entire amount of lubricant must be renewed approximately every 12000 km. (For details, see point 47.)

The rear wheel chain must be lubricated separately. Every 1000 km with engine oil, every 5000 km (after thorough

BL Motorcycles Ltd

Professional Workshop Manual - English Translation

cleaning) with chain grease. (For details, see point 49.)

6 Lubricant for the Chassis

to the next point ; Index

As the lubrication diagram on the leaflet at the end of these operating instructions shows, a number of lubrication points on the chassis must also be regularly supplied. All high-pressure grease nipples are to be provided with grease, only engine oil should be used for the 3 cable lubrication nipples and the bearing bolts of the handlebar levers.

7 Spark Plug

to the next point ; Index

The correct insulator spark plug for the engine of the RT 125 must have a heat value of 225. Under no circumstances should plugs with a lower heat value be used, because this can cause serious damage to the engine.

The electrode gap must be 0.6 to 0.7 mm. For insulator plugs 0.55 mm.

8 Tire Pressure

to the next point ; Index

The air pressure in the tires changes and must therefore be regularly checked with an air pressure gauge, because not only the lifespan of the tire and tube, but also the driving comfort and road holding, and thus also the safety of the driver, depend on the correct tire pressure.

The correct tire pressure for the RT 125 is:

for solo riding:

front: 1.75 atü

rear: 2.00 atü

for pillion riding:

front: 1.75 atü

rear: 2.20 atü

These minimum air pressures must not be undercut.

9 Fuse

to the next point ; Index

The electrical system is fused. The fuse sits in the coil box and is accessible after removing the coil box cover.

Only a 40-amp fuse may be used. Under no circumstances may a blown fuse be replaced by wire, tinfoil or the like, because this can cause damage to the electrical system.

Operating Levers

10 Fuel Tap

to the next point ; Index

The fuel tap on the fuel tank is open when the lever points downwards. It is closed when it is horizontal and points to the right. If the lever is horizontal and points to the left, it is switched to reserve. The fuel tap should be closed after each ride.

11 Tickler on the Carburetor

to the next point ; Index

On the float chamber cover of the carburetor is the tickler, when pressed down the fuel in the float chamber rises and overflows. This causes an easy starting of the cold engine.

BL Motorcycles Ltd

Professional Workshop Manual - English Translation

The tickler must not be operated when the engine is warm.