



SERVICE STATION MANUAL

897237



Norge GT 8v



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This manual provides the main information to carry out regular maintenance operations on your scooter. This manual is intended to **Moto Guzzi Dealers** and their qualified mechanics; several concepts have been deliberately omitted as they are considered unnecessary. As it is not possible to include complete mechanical notions in this manual, users should have basic mechanical knowledge or minimum knowledge about the procedures involved when repairing scooters. Without this knowledge, repairing or checking the vehicle may be inefficient or even dangerous. As the vehicle repair and check procedures are not described in detail, be extremely cautious so as not to damage components or injure individuals. In order to optimise customer satisfaction when using our vehicles, **Moto Guzzi s.p.a.** commits itself to continually improve its products and the relative documentation. The main technical modifications and changes in repair procedures are communicated to all **Moto Guzzi Sales Outlets and its International Subsidiaries**. These changes will be introduced in the subsequent editions of the manual. In case of need or further queries on repair and check procedures, consult **Moto Guzzi CUSTOMER DEPARTMENT**, which will be prepared to provide any information on the subject and any further communications on updates and technical changes related to the vehicle.

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NOTE Provides key information to make the procedure easier to understand and carry out.

CAUTION Refers to specific procedures to carry out for preventing damages to the vehicle.

WARNING Refers to specific procedures to carry out to prevent injuries to the repairer.



Personal safety Failure to completely observe these instructions will result in serious risk of personal injury.



Safeguarding the environment Sections marked with this symbol indicate the correct use of the vehicle to prevent damaging the environment.



Vehicle intactness The incomplete or non-observance of these regulations leads to the risk of serious damage to the vehicle and sometimes even the invalidity of the guarantee.



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Carbon monoxide

If you need to keep the engine running while working on the vehicle, please ensure that you do so in an open or very well ventilated area. Never let the engine run in an enclosed area. If you do work in an enclosed area, make sure to use a fume extraction system.

CAUTION



EXHAUST EMISSIONS CONTAIN CARBON MONOXIDE, A POISONOUS GAS WHICH CAN CAUSE LOSS OF CONSCIOUSNESS AND EVEN DEATH.

Fuel

CAUTION



FUEL USED TO POWER INTERNAL COMBUSTION ENGINES IS HIGHLY FLAMMABLE AND CAN BECOME EXPLOSIVE UNDER SPECIFIC CONDITIONS. IT IS THEREFORE RECOMMENDED TO CARRY OUT REFUELLING AND MAINTENANCE PROCEDURES IN A VENTILATED AREA WITH THE ENGINE SWITCHED OFF. DO NOT SMOKE DURING REFUELLING AND NEAR FUEL VAPOURS, AVOID ANY CONTACT WITH NAKED FLAMES, SPARKS OR OTHER SOURCES WHICH MAY CAUSE THEM TO IGNITE OR EXPLODE.

DO NOT DISPERSE FUEL IN THE ENVIRONMENT.

KEEP OUT OF THE REACH OF CHILDREN.

Hot components

The engine and the exhaust system components become very hot and remain hot for some time after the engine has been switched off. Before handling these components, make sure that you are wearing insulating gloves or wait until the engine and the exhaust system have cooled down.

Used engine oil and transmission oil

CAUTION



IT IS ADVISABLE TO WEAR LATEX GLOVES WHEN SERVICING THE VEHICLE.

THE ENGINE OR GEARBOX OIL MAY CAUSE SERIOUS INJURIES TO THE SKIN IF HANDLED FOR PROLONGED PERIODS OF TIME AND ON A REGULAR BASIS.

WASH YOUR HANDS CAREFULLY AFTER HANDLING OIL.

HAND THE OIL OVER TO OR HAVE IT COLLECTED BY THE NEAREST USED OIL RECYCLING COMPANY OR THE SUPPLIER.

DO NOT DISPOSE OF OIL IN THE ENVIRONMENT

KEEP OUT OF THE REACH OF CHILDREN.

Brake and clutch fluid



BRAKE AND CLUTCH FLUIDS CAN DAMAGE THE PLASTIC OR RUBBER PAINTED SURFACES. WHEN SERVICING THE BRAKING OR THE CLUTCH SYSTEM PROTECT THESE COMPONENTS WITH A CLEAN CLOTH. ALWAYS WEAR PROTECTIVE GOGGLES WHEN SERVICING THESE SYSTEMS. BRAKE AND CLUTCH FLUIDS ARE EXTREMELY HARMFUL FOR YOUR EYES. IN THE EVENT OF ACCIDENTAL CONTACT WITH THE EYES, RINSE THEM IMMEDIATELY WITH PLENTY OF COLD, CLEAN WATER AND SEEK MEDICAL ADVICE. KEEP OUT OF THE REACH OF CHILDREN.

Battery electrolyte and hydrogen gas

CAUTION



THE BATTERY ELECTROLYTE IS TOXIC, CORROSIVE AND, AS IT CONTAINS SULPHURIC ACID, MAY CAUSE BURNING IF IT COMES INTO CONTACT WITH THE SKIN. WHEN HANDLING BATTERY ELECTROLYTE, WEAR TIGHT-FITTING GLOVES AND PROTECTIVE APPAREL. IN THE EVENT OF SKIN CONTACT WITH THE ELECTROLYTIC FLUID, RINSE WELL WITH PLENTY OF CLEAN WATER. IT IS PARTICULARLY IMPORTANT TO PROTECT YOUR EYES BECAUSE EVEN TINY AMOUNTS OF BATTERY ACID MAY CAUSE BLINDNESS. IN THE EVENT OF CONTACT WITH THE EYES, RINSE WITH PLENTY OF WATER FOR FIFTEEN MINUTES AND CONSULT AN EYE SPECIALIST IMMEDIATELY. IF THE FLUID IS ACCIDENTALLY SWALLOWED, DRINK LARGE QUANTITIES OF WATER OR MILK, FOLLOWED BY MILK OF MAGNESIA OR VEGETABLE OIL AND SEEK MEDICAL ADVICE IMMEDIATELY. THE BATTERY RELEASES EXPLOSIVE GASES; KEEP IT AWAY FROM FLAMES, SPARKS, CIGARETTES OR ANY OTHER HEAT SOURCES. ENSURE ADEQUATE VENTILATION WHEN SERVICING OR RECHARGING THE BATTERY.

KEEP OUT OF THE REACH OF CHILDREN.

BATTERY LIQUID IS CORROSIVE. DO NOT POUR IT OR SPILL IT, PARTICULARLY ON PLASTIC COMPONENTS. ENSURE THAT THE ELECTROLYTIC ACID IS COMPATIBLE WITH THE BATTERY BEING ACTIVATED.

Maintenance rules

GENERAL PRECAUTIONS AND INFORMATION

When repairing, disassembling and reassembling the vehicle, strictly follow the recommendations reported below.

BEFORE DISASSEMBLING COMPONENTS

- Before dismantling components, remove dirt, mud, dust and foreign bodies from the vehicle. Use the special tools designed for this bike, as required.

COMPONENTS REMOVAL

- Do not loosen and/or tighten screws and nuts using pliers or any other tools than the specific wrench.
- Mark the positions on all connection joints (pipes, cables, etc.) before separating them, and identify them with different distinctive symbols.
- Each component needs to be clearly marked to enable identification during reassembly.
- Clean and wash the dismantled components carefully using a low-flammability detergent.

- Keep mated parts together since they have "adjusted" to each other due to normal wear.
- Some components must be used together or replaced altogether.
- Keep away from heat sources.

REASSEMBLING COMPONENTS

CAUTION

BEARINGS MUST ROTATE FREELY, WITHOUT JAMMING AND/OR NOISE, OTHERWISE, THEY NEED TO BE REPLACED.

- Only use ORIGINAL Moto Guzzi SPARE PARTS.
- Comply with lubricant and consumables use guidelines.
- Lubricate parts (whenever possible) before reassembling them.
- When tightening nuts and screws, start from the ones with the largest section or from the internal ones, moving diagonally. Tighten nuts and screws in successive steps before applying the tightening torque.
- Always replace self-locking nuts, washers, sealing rings, circlips, O-rings (OR), split pins and screws with new ones if their tread is damaged.
- When assembling the bearings, make sure to lubricate them well.
- Check that each component is assembled correctly.
- After a repair or routine maintenance procedure, carry out pre-ride checks and test the vehicle on private grounds or in an area with low traffic density.
- Clean all coupling surfaces, oil guard rims and gaskets before refitting them. Smear a light layer of lithium-based grease on the oil guard rims. Reassemble oil guards and bearings with the brand or lot number facing outward (visible side).

ELECTRIC CONNECTORS

Electric connectors must be disconnected as described below; failure to comply with this procedure causes irreparable damage to both the connector and the wiring harness:

Press the relative safety clips, if applicable.

- Grip the two connectors and disconnect them by pulling them in opposite directions.
- If any signs of dirt, rust, moisture, etc. are noted, clean the inside of the connector carefully with a jet of compressed air.
- Ensure that the cables are correctly fastened to the internal connector terminals.
- Then connect the two connectors, ensuring that they couple correctly (if fitted with clips, you will hear them "click" into place).

CAUTION

DO NOT DISCONNECT CONNECTORS BY PULLING THE CABLES.

NOTE

THE TWO CONNECTORS CAN ONLY BE CONNECTED IN ONE DIRECTION: CONNECT THEM THE RIGHT WAY ROUND.

TIGHTENING TORQUES

CAUTION

REMEMBER THAT THE TIGHTENING TORQUES FOR ALL FASTENING ELEMENTS ON WHEELS, BRAKES, WHEEL AXLES AND ANY OTHER SUSPENSION COMPONENTS PLAY A KEY ROLE

IN ENSURING VEHICLE SAFETY AND MUST COMPLY WITH SPECIFIED VALUES. CHECK THE TIGHTENING TORQUES OF FASTENING ELEMENTS ON A REGULAR BASIS AND ALWAYS USE A TORQUE WRENCH TO REASSEMBLE THESE COMPONENTS. FAILURE TO COMPLY WITH THESE RECOMMENDATIONS MAY CAUSE ONE OF THESE COMPONENTS TO LOOSEN OR EVEN DETACH, CAUSING A WHEEL TO LOCK OR COMPROMISING VEHICLE HANDLING. THIS MAY LEAD TO FALLS, WITH THE RISK OF SERIOUS INJURY OR DEATH.

Running-in

Engine run-in is essential to ensure engine long life and correct operation. Twisty roads and gradients are ideal to run in engine, brakes and suspensions effectively. Vary your riding speed during the run-in. This ensures that components operate under both "loaded" and "unloaded" conditions, allowing the engine components to cool.

CAUTION

THE CLUTCH MAY EMIT A SLIGHT BURNING SMELL WHEN FIRST USED. THIS PHENOMENON SHOULD BE CONSIDERED NORMAL AND WILL DISAPPEAR AS SOON AS THE CLUTCH DISCS GET ADAPTED.

IT IS IMPORTANT TO STRAIN ENGINE COMPONENTS DURING RUN-IN, HOWEVER, MAKE SURE NOT TO OVERDO THIS.

CAUTION

THE FULL PERFORMANCE OF THE VEHICLE IS ONLY AVAILABLE AFTER THE SERVICE AT THE END OF THE RUN-IN PERIOD.

Follow the guidelines detailed below:

- Do not twist the throttle grip abruptly and completely when the engine is working at a low revs, either during or after run-in.
- During the first 100 Km (62 miles) use the brakes gently, avoiding sudden or prolonged braking. That is to permit the adequate adjustment of the pad friction material to the brake discs.



AFTER THE SPECIFIED MILEAGE, TAKE THE VEHICLE TO AN OFFICIAL Moto Guzzi DEALER FOR THE CHECKS INDICATED IN THE "AFTER RUN-IN" TABLE IN THE SCHEDULED MAINTENANCE SECTION TO AVOID INJURING YOURSELF, OTHERS AND /OR DAMAGING THE VEHICLE.

Vehicle identification

SERIAL NUMBER LOCATION

These numbers are necessary for vehicle registration.

NOTE

ALTERING IDENTIFICATION NUMBERS MAY BE SERIOUSLY PUNISHABLE BY LAW. IN PARTICULAR, MODIFYING THE CHASSIS NUMBER IMMEDIATELY VOIDS THE WARRANTY.



ENGINE NUMBER

The engine number is stamped on the left side, close to the engine oil level check cap.



This number consists of numbers and letters, as in the example shown below.

ZGULPS010YMXXXXXX

KEY:

ZGU: WMI (World manufacturer identifier) code;

LP: model;

S01: version variation;

0: free digit

Y year of manufacture

M: production plant (M= Mandello del Lario);

XXXXXX: serial number (6 digits);

CHASSIS NUMBER

The chassis number is stamped on the right hand side of the headstock.

Dimensions and mass**WEIGHT AND DIMENSIONS**

Specification	Desc./Quantity
Max. length	2195 mm (86.4 in)
Max. width	880 mm (34.6 in)
Max. height (to the windshield)	1430 - 1480 mm (56.3 - 58.3 in)
Saddle height	810 mm (31.9 in)
Minimum ground clearance	185 mm (72.8 in)
Wheelbase	1495 mm (58.8 in)
Kerb weight	257 Kg (566.6 lb)

Engine**ENGINE**

Specification	Desc./Quantity
Type	traverse-mounted twin-cylinder four-stroke V 90°
No. of cylinders	2
Cylinder arrangement	V of 90°
Bore / stroke	95 x 81.2 mm (3.74 x 3.20 in)
Engine capacity	1151 cm ³ (70 cu.in.)
Compression ratio	10.8 : 1
Electric	starter
Engine idle speed	1100 ± 100 rpm