



part# 977486



**USE+MAINTENANCE BOOK** 

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Mandello del Lario (LECCO)

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#### SAFETY WARNINGS

The symbols and warnings used throughout this manual have the following meanings:

Safety warning. This symbol attached to the vehicle or in the manual indicates a potential risk of personal injury. Failure to observe the indications preceded by this symbol may put your safety, that of other people and the vehicle at risk!

## **WARNING**

Indicates a potential hazard which may result in serious injury or even death.

## **A CAUTION**

Indicates a potential hazard which may result in minor personal injury or damage to the vehicle.

**NOTE** The word "NOTE" in this manual identifies important information or instructions.

#### **TECHNICAL INFORMATION**

The operations preceded by this symbol must be repeated on the opposite side of the vehicle.

Unless expressly indicated otherwise, reassembly is a reversal of the disassembly procedure.

The terms "right" and "left" are referred to the rider seated on the vehicle in the normal riding position.

# WARNINGS - PRECAUTIONS - GENERAL ADVICE

Before starting the engine, read this manual thoroughly paying special attention to section "SAFE RIDING".

Your and other people's safety largely depends on your reflexes and agility, but there are other key factors, such as your knowledge of the vehicle's operation and condition, as well as of the basic rules of "SAFE RIDING". Becoming thoroughly familiar with vehicle is essential to mastering safe riding techniques in traffic.

**NOTE** This manual must be considered as an integral part of the vehicle and must always accompany it, also in the event the vehicle is resold.

**Moto Guzzi** has taken care to ensure that the information provided in this manual is accurate and updated.

However, due to the ongoing design improvement of **Moto Guzzi** products, your vehicle's specifications may differ slightly from those outlined in this manual. For any clarification concerning the information contained in this manual, do not hesitate to contact your **Moto Guzzi** Authorised Dealer.

For control and repair operations not covered in this publication, for the purchase of genuine **Moto Guzzi** spare parts, accessories and other products, as well as for specific advice, refer exclusively to **Moto Guzzi** Authorised Dealers and Service Centres, which guarantee prompt and accurate service.

Thank you for choosing **Moto Guzzi**. Enjoy your ride!

All rights of electronic storage, reproduction and total or partial adaptation with any means reserved for all Countries.

**NOTE** Some countries have statutory emission and noise control regulations in place requiring that motor vehicles undergo periodical inspections.

Users in these countries must:

- contact a Moto Guzzi Authorised Dealer to have any components affecting compliance with such regulations replaced with components approved for use in that country;
- have their vehicles inspected at the required intervals.

Market versions are identified by the following symbols throughout the manual:

#### **VERSION:**

- Italy

  United
- SIO Slovenia
- Kingdom

  A Austria
- Israel
- P Portugal
- South Korea

Singapore

- SF Finland
- MAD Malaysia
- B Belgium
- HR Croatia
- GermanyFrance
- AUS Australia
- Spain
- United States of America
- GR Greece
- N Holland
- GH Switzerland
- **D** Denmark
- Japan

- R Brazil
- South Africa
- New Zealand
- DN Canada

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# **SAFE DRIVE**



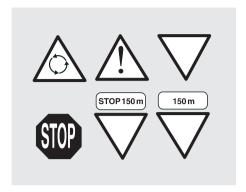
#### **BASIC SAFETY RULES**

To drive the vehicle, you must satisfy certain legal requirements (driving licence, minimum age limit, psychophysical fitness, insurance, vehicle licence tax, vehicle registration, number plate, etc.).

Begin to familiarise yourself with the vehicle by riding in low traffic areas and/or private ground.

Certain prescribed medicines, alcohol, drugs and psychotropic substances will affect your riding, thereby increasing the risk of an accident.

Your riding is also affected by your physical and mental condition - do not ride if you are feeling ill, upset, tired or sleepy.

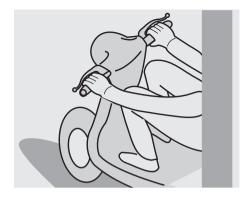


Most road accidents are caused by inexperienced riders.

NEVER lend your vehicle to a beginner and make sure any person borrowing your vehicle fills the legal requirements for driving.

Strictly observe all posted signs and national and local road regulations.

Avoid any sudden or risky manoeuvres that may endanger your and other people's safety (for example: wheelies, speeding, etc.), and adjust your riding style to road surface conditions, visibility, etc.



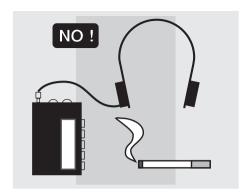
Avoid obstacles that could damage the vehicle or make you lose control of the vehicle.

Avoid riding in the slipstream of vehicles ahead in order to increase your speed.

## **A WARNING**

Always hold the handlebars with both hands and keep both feet on the footrests (or on the rider's footboards), in the correct riding position.

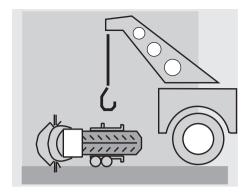
Avoid standing up or stretching your limbs while driving.



Do not allow yourself to become distracted by other persons or by smoking, eating, drinking, reading etc. when riding.

Use only the specified fuels and lubricants indicated in the "LUBRICANT CHART" and check oil and fuel levels at regular intervals.

If the vehicle has been involved in an accident, check the control levers, pipes and hoses, wires, the braking system and key components for damage.



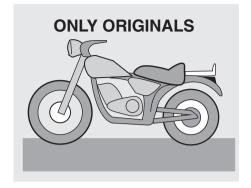
If in doubt, have the vehicle inspected at a **Moto Guzzi** Authorised Dealer and ask them to carefully check the frame, handlebars, suspensions, safety parts and all devices whose inspection is best left to a skilled mechanic.

Remember to report any malfunction to the technicians and/or mechanics to facilitate their work.

Never use the vehicle when the amount of damage it has suffered makes it unsafe to ride.

Never change the position, inclination or colour of: number plate, turn indicators, lights and horns.

Any modification made to the vehicle will invalidate the warranty.



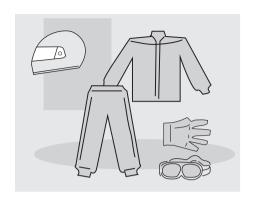
Making any modifications to the vehicle and/or removing the original components can adversely affect vehicle performance and safety or make it illegal to ride.

Observe applicable law and all national and local regulations concerning vehicle equipment.

In particular, avoid any modifications apt to enhance performance or alter the vehicle's original specifications.

Never race with other vehicles.

Do not ride off road.

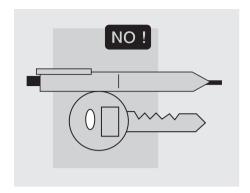


## **CLOTHING**

Always wear and fasten your helmet correctly before moving off. Make sure your helmet complies with applicable regulations, is not damaged, is the right size and keep the visor clean.

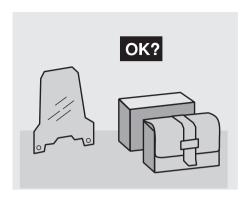
Wear protective clothing, preferably bright and/or reflective clothing. This will ensure you are easily seen by other road users and reduce the risk of an accident, besides affording improved protection in the event of a fall.

Wear tight-fitting clothing fastened at the wrists and ankles; make sure no strings, belts and ties are hanging loose; make sure no items of clothing or other objects can distract you or become entangled with moving parts or with the handlebars.



Do not ride with sharp or pointed objects in your pockets as they might cause injury in the event of a fall

(this includes keys, pens, glass vials, etc. note that the same applies to your passenger).



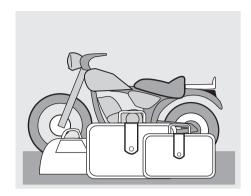
#### **ACCESSORIES**

The owner of the vehicle is responsible for the choice, installation and use of any accessory.

Any accessories installed must not cover the horns or lights or impair their operation, restrict suspension travel and steering angle, impair the operation of any vehicle controls or affect ground clearance or bank angle in a bend.

Avoid using accessories that may hamper access to vehicle controls, as this can slow down your reaction in an emergency.

Large fairings and windshields may affect the vehicle's aerodynamics and make it unstable, especially at high speeds.



Make sure any accessories installed are fastened securely to the vehicle and will not affect safety during riding.

Do not install or modify any electric devices in such a manner as to exceed vehicle capacity, as this may lead to a power shortage or failure causing the engine to stop suddenly or rendering the horn and lights inoperative.

**Moto Guzzi** recommends that you only use genuine **Moto Guzzi** accessories.

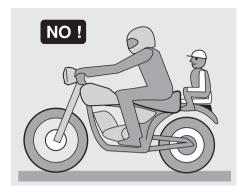
#### **LOAD**

Be careful not to overload the vehicle with exceeding luggage. Place your luggage as close as possible to the centre of gravity of the vehicle and make sure its weight is evenly distributed across both sides of the vehicle to keep it stable. Make sure that the luggage is firmly secured to the vehicle, especially before long trips.



Avoid fixing bulky, heavy and/or dangerous objects to the handlebars, mudguards and forks - this could slow down the vehicle's response in turns and would inevitably affect handling.

Do not secure bulky bags to the vehicle sides, as they could hit people or obstacles when riding, resulting in loss of control.



Do not carry any luggage unless firmly secured to the vehicle.

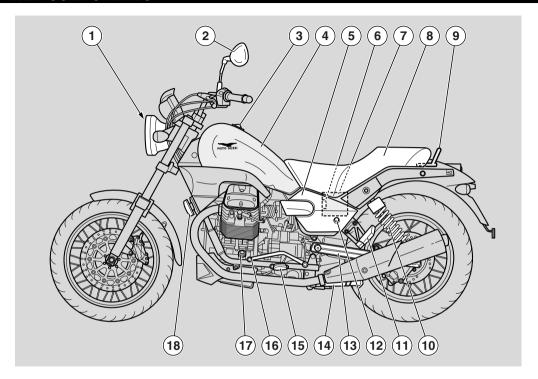
Do not carry any bags which protrude too much over luggage rack or cover the lights, horn or indicators.

Do not carry pets or children sitting on the glove compartment or on the luggage rack.

Do not exceed the maximum load capacity of each luggage rack.

The overloaded vehicle will become unstable and handle poorly.

#### **LOCATION OF KEY COMPONENTS**

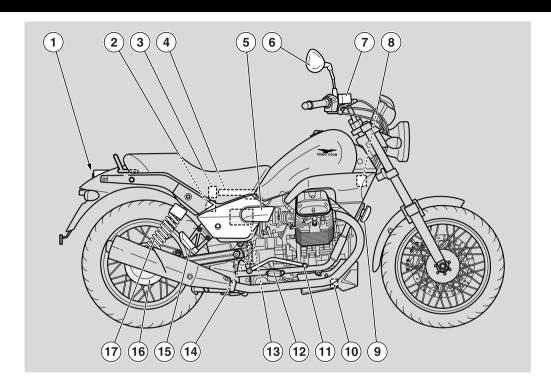


#### **KEY**

- Headlight
- Left rear-view mirror
- Fuel tank filler plug
- Fuel tank
- Left side body panel 5)
- Main fuse carrier (30A)

- Battery
- Passenger/rider seat
- Passenger grab handle
- 10) Left rear shock absorber
- 11) Left passenger footpeg
- 12) Seat lock
- 13) Rear swinging arm

- 14) Side stand
- 15) Left rider footpeg
- 16) Gear change lever
- 17) Engine oil dipstick
- 18) Left horn



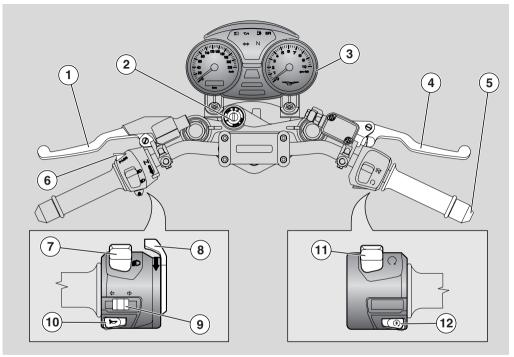
#### **KEY**

- 1) Tail light
- 2) Rear brake fluid reservoir
- 3) Auxiliary fuse carrier
- 4) Glove/tool kit compartment
- 5) Right side body panel
- 6) Right rear-view mirror
- 7) Front brake fluid reservoir

- 8) Air filter
- 9) Right horn
- 10) Engine oil filter
- 11) Rear brake lever
- 12) Right rider footpeg
- 13) Engine Control Unit (Magneti Marelli IAW 15RC CA)

- 14) Rear brake master cylinder
- 15) Right passenger footpeg
- 16) Cardan shaft
- 17) Right rear shock absorber

#### LOCATION OF INSTRUMENTS/CONTROLS

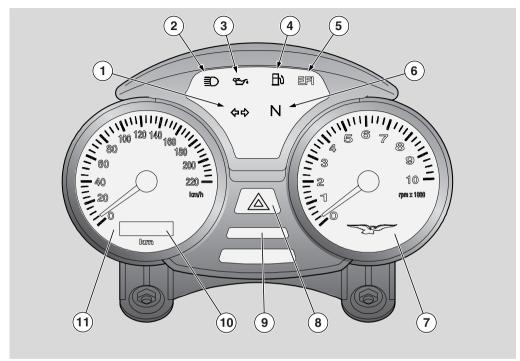


#### **LOCATION OF INSTRUMENTS/CONTROLS - KEY**

- 1) Clutch lever
- 2) Ignition switch/steering lock ( ∩-⋈- 🖟 )
- 3) Instruments and indicators
- Front brake lever
- 5) Throttle grip
- 6) High beam flasher passing button (≣□)

- 7) Dimmer switch (ﷺ ∰)
- 8) Choke lever (|x|)
- 9) Turn indicator switch (⟨□□⟩)
- 10) Horn button (►)
- 11) Engine stop switch ( ∩-⊗)
- 12) Starter button (17)

#### **INSTRUMENTS AND INDICATORS**



#### **LOCATION OF INSTRUMENTS/CONTROLS - KEY**

- 1) Green turn indicator warning light (妇)
- Blue high beam warning light (≣□)
- Red engine oil pressure warning light (♠
- 4) Amber low fuel warning light ( 📆)
- 5) Red " FFI " warning light
- 6) Green neutral light (►)

- 7) Rev counter
- 8) Red emergency indicator button ( 🛆 )
- 9) TRIP button (multifunction display)
- 10) Multifunction digital display
- 11) Speedometer

#### **INSTRUMENTS AND INDICATORS TABLE**

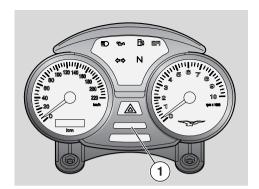
Description		Function		
Direction indicator warning light (⟨□□⟩)		It blinks when the direction indicator is on.		
High beam warning light ( ≣⊜ )		Comes on when the headlight high beam is on or when you flash the high beam.		
Engine oil pressure warning light		Comes on when the ignition switch is set to " ()" with the engine stopped as a lamp test. If the light fails to come on upon starting, contact a <b>Moto Guzzi</b> Authorised Dealer.		
		in the circuit is low. If so, stop the engine immediately and contact a <b>Moto Guzzi</b> Aut	gine oil pressure	
Fuel reserve ligh	nt ( 🚮 )	It comes on when the quantity of fuel left in the tank is approx. 4 litres.  When the light comes on, refuel as soon as possible, see page 23 (FUEL).		
Electronic fuel injection check light ( EF! )		It comes on for about three seconds whenever the ignition switch is set to " ()" with the engine stopped as a test of injection system operation. After starting the engine, the light must go out within 3 seconds.  If the light comes on during normal engine operation, it means that the electronic fuel injection system is not operating correctly. If so, stop the engine immediately and contact a Moto Guzzi Authorised Dealer.		
Neutral indicator light (►) Turns		Turns on when gearbox is in neutral.		
Rev counter (rpr	v counter (rpm) Indicates engine rpm.  Never exceed engine maximum speed, see page 41 (RUNNING-IN).		IN).	
Emergency flasher button ( <u></u> )		Flashes when pressed. It indicates that all four emergency warning lights (turn indicators) are flashing.		
Multifunction digital display	Total odometer/ trip (km/mi)	Gives total distance covered or distance covered since the trip meter was last reset (in km or miles).	To toggle be- tween readouts,	
	Clock	Indicates hours and minutes according to setting.	see page 15 (MULTIFUNC-	
	External temperature	Displays external temperature.	TION DIGITAL DISPLAY).	
Speedometer		Indicates road speed.		



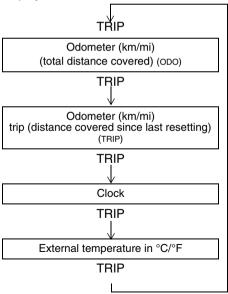
## MULTIFUNCTION DIGITAL DISPLAY

When you turn the ignition key to "\( \cap ", the following instrument panel lights will turn on:

- (Red) engine oil pressure light (☆→); this light stays on until the engine starts.
- All segments of the multifunction digital display come on for about 2 seconds to test their operation. Afterwards, the display will switch to total distance covered indication (ODO).
- The lights of both multifunction display instruments and of the hazard button come on.
- The EFI light turns on for about 3 seconds if the switch is set to " \( \cap \)".
- The pointers of both instruments go to full scale and then back to zero.



Press the TRIP (1) button repeatedly to display in the order:



#### Odometer (km/mi) (ODO)

Indicates total distance covered.

The figure will be stored for at least five years even in case battery is removed.

Each time the key is turned to on, total distance covered indication (ODO) is displayed, regardless of which function had been selected previously.

## Trip meter (km/mi) (TRIP)

Indicates the distance covered since last resetting in kilometres or miles.

To reset the trip meter, proceed as follows: enter "TRIP" mode pressing TRIP (1): the parameters indicated in the table on the side will be shown, one at a time.

Keep the TRIP button (1) pressed for more than 3 seconds.

#### Clock

Set the clock as follows:

enter "clock" mode pressing TRIP (1): the parameters indicated in the table on the side will be shown, one at a time.

Keep the TRIP button (1) pressed for more than 3 seconds to enter hour setting mode. Hour indication flashes Press the "TRIP" button and the hours indication will increase by 1 hour each second the button is held down. Three seconds after the "TRIP" button has been released, the hours will stop flashing. Set data are confirmed and setting automatically switches to seconds. Minutes indication flashes. Press the "TRIP" button and the minutes indication will increase by 1 minute each second the button is held down. Three seconds after the "TRIP" button has been released, the minutes will stop flashing and set data are confirmed.

**NOTE** The clock setting mode will only work when the motorcycle is at standstill and with the engine stopped.

#### External temperature in °C/°F

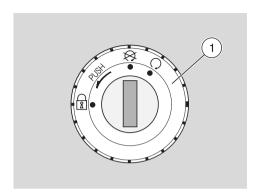
Indicates the external temperature reading. When external temperature drops below 3°C, the display will switch to the ICE mode to warn against possible black ice. When this mode is activated, the display will automatically switch from the current function to a flashing air temperature indication. The ICE mode remains enabled for 10 seconds and then the display switches back to the function displayed earlier. If the external temperature stays below 3° C, the ICE mode flashing indication is repeated every five minutes for three times maximum

If the air temperature sensor is faulty or disconnected, two flashing horizontal segments will be displayed.

### **HAZARD** button operation

Pressing the HAZARD button turns on all four turn indicators (the button will also flash when activated). The HAZARD blinker stavs on when the key is removed from the switch, but may not be turned off by simply pressing the hazard button again. In order to switch off the hazard blinker, you must first set the ignition switch to " \( \cdot \)" and then press the HAZARD button

#### MAIN INDEPENDENT CONTROLS



#### **IGNITION SWITCH**

The ignition switch (1) is mounted to the top yoke of the steering shaft.

**NOTE** The key operates the ignition switch/steering lock, the fuel tank lock and the seat lock.

Two keys are supplied together with the vehicle (one spare key).

**NOTE** Store the spare key in a safe place (other than the vehicle).



#### STEERING LOCK

## **A WARNING**

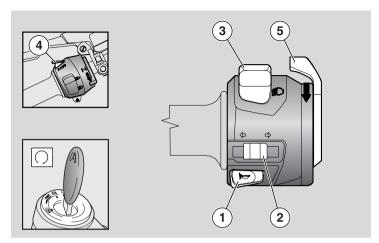
Never turn the key to position " (1) " when riding, or you will lose control of the vehicle.

#### **OPERATION**

To lock the steering:

- ◆ Turn the handlebar fully to the left.
- ◆ Turn the key to "⋈".
- ◆ Push in the key and turn it to position ( ↑).
- Extract the key.

Position	Function	Key removal
Steering lock	The steering is locked. It is not possible to start the engine or switch on the lights.	It is possible to remove the key.
$\otimes$	Neither the engine, nor the lights will operate.	It is possible to remove the key.
$\cap$	The engine and the lights can be operated.	It is not possible to remove the key.



#### **CONTROLS ON LEFT HANDLEBAR**

**NOTE** The electric components only operate when the ignition switch is in the "\()" position.

- 1) HORN BUTTON (►) Press it to operate the horn.
- 2) DIRECTION INDICATORS SWITCH (
  Move the switch to the left, before turning left; move it to the right before turning right. Push in to cancel the indicators after turning.

**NOTE** The indicator repeater light flashing quickly indicates that one or both turn indicator bulbs are burnt out. For replacement instructions, please see page 70 (CHANGING THE FRONT AND REAR TURN INDICATOR BULBS).

- 3) DIMMER SWITCH ( (□ (□ ) )
  In position " (□ ) " the high beam comes on, while if it is in position " (□ )", the low beam comes on.
- 4) HIGH BEAM FLASHER BUTTON ( D) Allows for the use of the passing lights in case of danger or emergency.

**NOTE** Release the button to turn off the high beam.

5) CHOKE LEVER (|\|) Move lever down (|\|) to activate engine cold start device. To disable the cold start, move the lever (|\|) to its initial position.

#### **CONTROLS ON RIGHT HANDLEBAR**

**NOTE** The electric components only operate when the ignition switch is in the "\(\cap\)" position.

## 6) ENGINE STOP SWITCH ( $\bigcirc$ - $\boxtimes$ )

## **A WARNING**

Do not operate the engine stop switch "  $\cap$  -  $\bowtie$  " while riding.

This switch serves as a safety or emergency switch. With the switch pressed in position " $\bigcirc$ ", it is possible to start the engine; the engine can be stopped by pressing the switch to position " $\bowtie$ ".

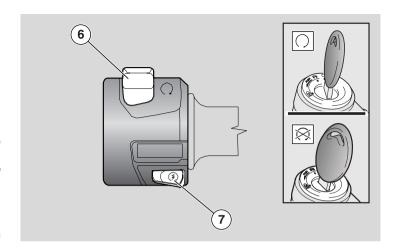
## **A** CAUTION

With the engine stopped and the ignition switch in position "  $\bigcirc$  ", the battery may run flat.

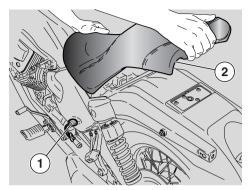
When the vehicle has come to a standstill and you have stopped the engine, set the ignition switch to position "\ointigon".

## 7) STARTER BUTTON ((1))

When the starter button "()" is pressed, the starter motor will crank the engine. For the starting procedure, see page 36 (STARTING).



#### **AUXILIARY EQUIPMENT**



#### **UNLOCKING/LOCKING THE SEAT**

- Place the vehicle on the stand, see page 43 (PUTTING THE VEHICLE ON THE STAND).
- ◆ Insert the key (1) into the seat lock.
- ◆ Rotate the key (1) anticlockwise, lift the seat (2) and pull rearwards.

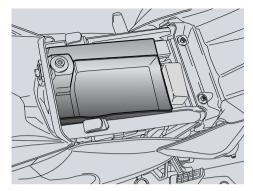
**NOTE** Before lowering and locking the seat (2), make sure that you have not left the key under the seat.

#### To lock the seat (2):

- Slide the seat front end into place and lower the rear end.
- Push down on the rear end until the lock clicks shut.

## **WARNING**

Before riding, make sure that the seat (2) is properly locked.



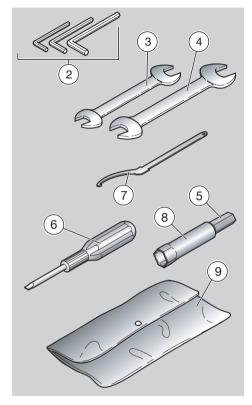
#### **GLOVE/TOOL KIT COMPARTMENTS**

To access the glove/tool kit compartments:

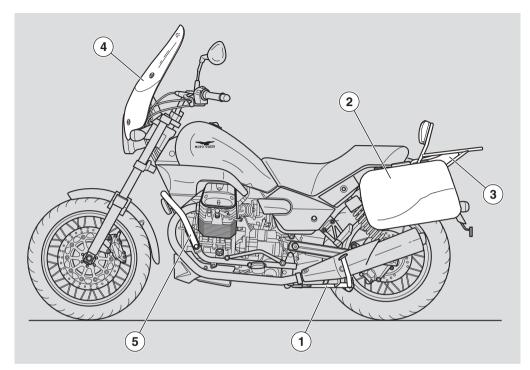
◆ Remove the passenger seat, see p. 20 (UNLOCKING/LOCKING THE SEAT).

#### The tool kit includes:

- 5, 6, 8 mm L-shaped Allen keys (2);
- 13 14 mm double fork spanner (3);
- 22 27 mm double fork spanner (4);
- 22 mm socket spanner for spark plug (5);
- double-ended crosshead/flat-blade screwdriver (6);



- shock absorber preload adjustment spanner (7);
- 14 mm hexagon adapter (8)
- tool box (9).



## WHERE PROVIDED (or as an accessory)

The following are available:

- centre stand (1)
- side panniers (2)
- luggage rack with back rest (3)
- tall windshield (4)
- engine crash bar (5)

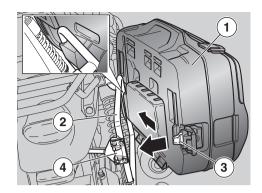
### **MORE ACCESSORIES**

The following are available:

- tank bag
- top case.

Please visit our web site for further details:

www.motoguzzi.it - Accessories



# INSTRUCTIONS FOR INSTALLING THE SIDE PANNIERS

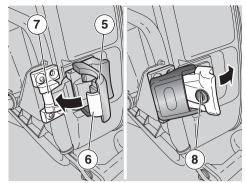
## **A** CAUTION

Carefully follow instructions for correct installation and correct distribution/fastening of any load when installing the side panniers, so to avoid affecting vehicle handling that might result in falls or serious accidents, that might also lead to death.

## Fastening the side panniers

 Approach the pannier front side (1) to the mount (2) taking care to fit the mount vertical rod inside its housing in the pannier.

Centre tab (3) in its seat (4) while supporting (and guiding) the pannier.

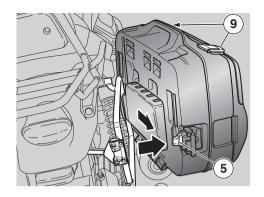


## **A** CAUTION

Make sure that the pannier hooking points are properly fitted in their seats.

◆ Block the fastener (5) by inserting the tab (6) in the seat (7).

Fit the key into the lock (8) and turn it clockwise by 90° (horizontal position) to lock it



## Removing the side panniers

- Ensure that the lock (8) is not locked (vertical position);
- Open fastener (5);
- Move the top case rear side away and slide the front hooking out.

To open the pannier cover, first release the relative locks with the key and then lift the two fasteners (9).

## **A** CAUTION

Maximum admitted weight for each side pannier is 5 kg; it is however advisable to balance the weight between the two panniers.

#### MAIN COMPONENTS

#### **FUEL**

## **A WARNING**

The fuel used in internal combustion engines is highly flammable and can become explosive under particular conditions.

It is important to refuel and service the vehicle in a well-ventilated area, with the engine off.

Do not smoke while refuelling or near fuel vapours, in any case avoid contact with naked flames, sparks and any other heat source or source of ignition to prevent fires or explosion.

Avoid spilling fuel, as it may ignite when in contact with hot engine parts.

In the event of accidental spillage, make sure that the area has completely dried before starting the engine.

Never fill the tank to the rim, as fuel expands from heat and when left under direct sunlight.

Tighten the filler plug securely after refuelling. Avoid contact with skin, do not inhale fuel vapours; do not swallow fuel or transfer it between different receptacles using a hose.

DO NOT RELEASE FUEL IN THE ENVIRONMENT.

#### KEEP AWAY FROM CHILDREN.

Use only premium grade unleaded petrol with 95 RON and 85 MON octane rating minimum.

#### To refuel, proceed as follows:

- Insert the key (1) into the tank plug lock (2).
- ◆ Turn the key counter clockwise, pull and remove the tank plug.

FUEL TANK CAPACITY (reserve included): 14 /

TANK RESERVE: 4 /

## **A CAUTION**

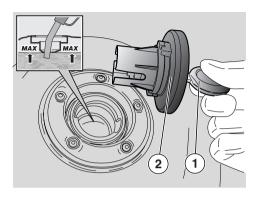
Do not add any additives or other substances to the fuel.

If you use a funnel or other tools, make sure that they are perfectly clean.

## **A WARNING**

Do not fill the tank up to the rim. Fuel level must always remain below the lower edge of the filler neck (see figure).

Refuel.



## After refuelling:

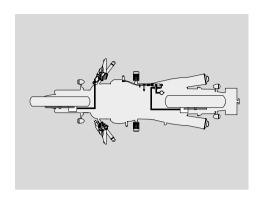
**NOTE** The plug can only be closed when the key (2) is inserted.

◆ With the key (1) inserted, press the plug and tighten.

## **A WARNING**

Make sure the plug is firmly closed.

◆ Remove the key (1).



#### **BRAKE FLUID - recommendations**

**NOTE** This vehicle is equipped with front and rear disc brakes operated by independent hydraulic circuits.

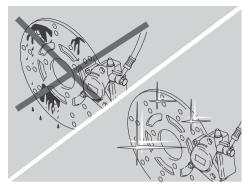
The following information applies to both braking systems.

## **A WARNING**

Sudden changes in brake lever play or a spongy feel of the lever may indicate problems with the hydraulic system.

Please contact a Moto Guzzi

Please contact a **Moto Guzzi**Authorised Dealer in case you have any
doubts on the operation of the braking
system and in case you are not able to
carry out the normal checks.



## **WARNING**

Ensure that the brake discs have not become contaminated with oil or grease, especially after maintenance or inspections.

Check that the brake hoses are not twisted or worn.

Prevent water or dust from accidentally getting into the circuit.

Wear latex gloves when servicing the hydraulic circuit.

If the brake fluid gets in contact with the skin or the eyes, it can cause serious irritations.



## **A WARNING**

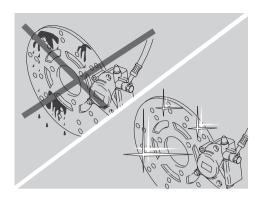
In the event of accidental contact, flush affected area thoroughly. If fluid has been spilled in the eyes, seek the assistance of an ophthalmologist or a doctor.

DO NOT RELEASE INTO THE ENVIRONMENT.

KEEP AWAY FROM CHILDREN.

## **A CAUTION**

When handling brake fluid, take care not to spill it on plastic or painted parts, or they will damage.



#### **DISC BRAKES**

#### **A WARNING**

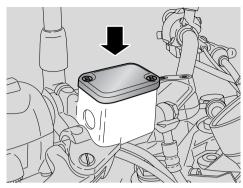
The brakes are key safety components and must be kept in perfect working order: check them before each ride.

A dirty disk will soil the pads, leading to loss of braking efficiency.

Dirty pads must be replaced, while dirty discs must be cleaned with a high-quality degreaser.

Have brake fluid changed every two years by a **Moto Guzzi** Authorised Dealer.

Use brake fluid meeting the specifications listed in the lubricant chart, see page 79 (LUBRICANT CHART).



**NOTE** This vehicle is equipped with front and rear disc brakes operated by independent hydraulic circuits.

The front braking system has a single disc (left side).

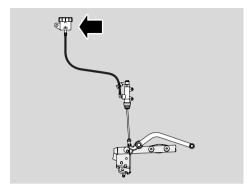
The rear braking system is the single disc type (left side).

The following information applies to both braking systems.

Brake fluid level decreases as the brake pads wear down.

The front brake fluid reservoir is located on the right handlebar, near the connection of the front brake lever.

The rear brake fluid reservoir is located behind the footpeg bracket, on the righthand side of the motorcycle.



**NOTE** Halve maintenance intervals if you are riding in rainy or dusty conditions, on rough road surfaces or when the vehicle is used for racing.

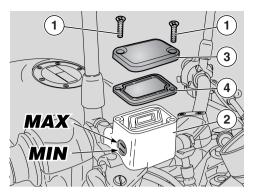
Have the brake discs checked by a **Moto Guzzi** Authorised Dealer after the first 1000 km (625 mi) and then every 2000 km (1243 mi).

Before leaving, check brake fluid level in the reservoirs, see page 26 (FRONT BRAKE), page 27 (REAR BRAKE), and check brake pads, see page 56 (CHECKING THE BRAKE PADS FOR WEAR).

Have the brake fluid changed every 20000 km (12427 mi) or every two years by a **Moto Guzzi** Authorised Dealer.

## **A WARNING**

Do not use the vehicle if the braking system is leaking fluid.



## FRONT BRAKE

## CHECK

- Place the vehicle on the stand, see page 43 (PUTTING THE VEHICLE ON THE STAND).
- ◆ Turn the handlebar fully to the right.
- Make sure that the fluid level exceeds the "MIN" mark.

MIN= minimum level

MAX= maximum level

If the fluid is below the "MIN" mark:

## **A CAUTION**

Brake fluid level decreases as the brake pads wear down.

 Check the brake discs and pads for wear, see page 56 (CHECKING THE BRAKE PADS FOR WEAR).

If the pads and/or the disc do not need replacing, top up fluid level.

#### **TOPPING UP**

Carefully read page 24 (BRAKE FLUID - recommendations).

## **A** CAUTION

Be careful, brake fluid may spill out. Do not operate the front brake lever if the screws (1) have been loosened or, most important, with the brake fluid reservoir plug removed.

 Unscrew the two screws (1) of the brake fluid reservoir (2) using a crosshead screwdriver.

## **WARNING**

Avoid prolonged exposure of brake fluid to air.

Brake fluid is hygroscopic and will absorb moisture from the air.

Keep the brake fluid reservoir open JUST LONG ENOUGH to top up level.

- Raise and remove the plug (3) together with the screws (1).
- ◆ Remove the gasket (4).

#### **A CAUTION**

In order not to spill the brake fluid while topping up, do not shake the vehicle. Do not add any additives or other products to the fluid.

If you use a funnel or other tools, make sure that they are perfectly clean.

◆ Top up the reservoir (2) with brake fluid, see page 79 (LUBRICANT CHART) until bringing level between the "MIN" and "MAX" marks.

## **A** CAUTION

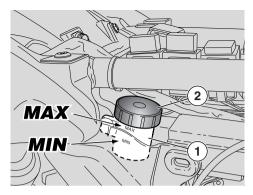
Do not exceed the "MAX" level mark.

Top up to "MAX" level only after changing the brake pads.

If topped up to "MAX" level with worn pads, brake fluid will spill out when you change the pads at a later time.

Check the brake for proper operation.

If brake lever travel is too long or in the event of loss of braking, contact a **Moto Guzzi** Authorised Dealer, as the system may need bleeding.



#### **REAR BRAKE**

#### **CHECK**

- Remove the right side body panel, see page 53 (REMOVING THE SIDE BODY PANELS).
- ◆ Keep the vehicle upright, so as to keep the fluid in the reservoir (1) level with the plug (2).
- Make sure that the fluid level exceeds the "MIN" mark.

MIN= minimum level
MAX= maximum level

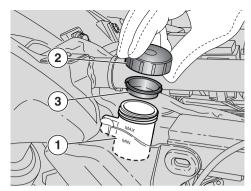
If the fluid is below the "MIN" mark:

## **A CAUTION**

Brake fluid level decreases as the brake pads wear down.

 Check the brake discs and pads for wear, see page 56 (CHECKING THE BRAKE PADS FOR WEAR).

If the pads and/or the disc do not need replacing, top up fluid level.



#### **TOPPING UP**

Carefully read page 24 (BRAKE FLUID - recommendations).

## **A CAUTION**

Be careful, brake fluid may spill out. Do not operate the rear brake lever if the brake fluid reservoir plug has been loosened or removed.

## **A WARNING**

Avoid prolonged exposure of brake fluid to air.

Brake fluid is hygroscopic and will absorb moisture from the air.

Keep the brake fluid reservoir open JUST LONG ENOUGH to top up level.

◆ Unscrew and remove the plug (2).

## **A CAUTION**

Make sure the fluid in the reservoir is level with the reservoir rim (horizontal) to avoid spilling fluid when topping up.

Do not add any additives or other products to the fluid.

If you use a funnel or other tools, make sure that they are perfectly clean.

- ◆ Remove the gasket (3).
- ◆ Top up the reservoir (1) with brake fluid, see page 79 (LUBRICANT CHART) until bringing level between the "MIN" and "MAX" marks.

## **A CAUTION**

Top up to "MAX" level only after changing the brake pads. If topped up to "MAX" level with worn pads, brake fluid will spill out when you change the pads at a later time.

Check the brake for proper operation.

If brake lever travel is too long or in the event of loss of braking, contact a **Moto Guzzi** Authorised Dealer, as the system may need bleeding.

#### **TYRES**

This vehicle is equipped with tube tyres.

**NOTE** Halve maintenance intervals if you are riding in rainy or dusty conditions, on rough road surfaces or when the vehicle is used for racing.

## **A WARNING**

Check the tyre condition and inflation pressure at room temperature every two weeks, see page 76 (TECHNICAL DATA).

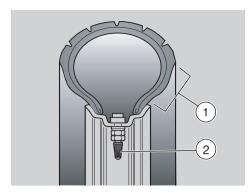
Check the conditions of the tyres and the inflation pressure at room temperature after the first 1000 km (625 mi) and then every 7500 km (4687 mi), see page 76 (TECHNICAL DATA).

Measuring pressure on hot tyres will lead to inaccurate measurement.

It is especially important to measure tyre pressure before and after a long trip.

Overinflated tyres will not absorb bumps when riding on rough road surfaces and resulting vibration is transferred through the handlebar, giving a harsh ride and reducing tyre grip especially during cornering.

Conversely, underinflation will put more stress on the sidewalls (1) and the tyre may slip on the rim or even come off the rim, leading to loss of control.



The tyres could come off the rims under harsh braking.

Finally, the vehicle could skid during cornering.

## **A WARNING**

Inspect tyre surface condition and check for wear, as worn tyres lead to poor road holding and handling.

Some of the tyres approved for this vehicle are equipped with wear indicators.

There are several kinds of wear indicators. For more information on how to check the tyres for wear, contact your Dealer.

Visually inspect the tyres for wear and have them changed if worn.

Have a tyre changed when worn or punctured, if the puncture in the tread is larger than 5 mm.

Have the wheels balanced after each tyre repair.

## **A WARNING**

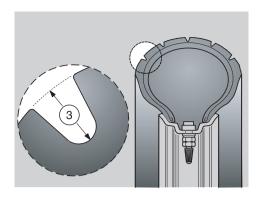
Use tyres of the specified type and model recommended by the manufacturer, see page 76 (TECHNICAL DATA). Using other than specified tyres may adversely affect handling.

Do not install tube tyres on tubeless tyre rims or vice versa.

Make sure that caps are in place on the valves (2), or the tyres may deflate suddenly.

Tyre replacement and repair, and wheel servicing and balancing are delicate operations that should be carried out using adequate tools and are best left to experienced mechanics.

For this reason, it is advisable to have these operations carried out by a **Moto Guzzi** Authorised Dealer or by a qualified tyre repairer.



If the tyres are new, they may still be covered with a slippery film: drive carefully for the first few miles. Never apply non-specific products to the tyres. Old tyres, even if not completely worn down, may become hard and provide poor grip.

If so, have them replaced.

#### **MINIMUM TREAD DEPTH (3):**

front and rear 2 mm ( ) amm), anyway not less than required by the regulations in force in the country where the vehicle is used.

#### **ENGINE OIL**

## **A WARNING**

Prolonged or repeated contact with engine oil may cause severe skin damage.

Wash your hands carefully after handling engine oil.

KEEP AWAY FROM CHILDREN.

DO NOT DISPOSE OF OIL IN THE ENVIRONMENT

Dispose of engine oil - stored in a sealed container - through the nearest waste oil reclamation firm or through the supplier.

Wear latex gloves during servicing.

## **A** CAUTION

If the engine oil pressure light " " " comes on during regular engine operation, it means that engine oil pressure in the circuit is low.

Stop the engine immediately, check and top up engine oil level, if needed, see page 49 (CHECKING AND TOPPING UP ENGINE OIL LEVEL); should it be incorrect, contact a **Moto Guzzi** Authorised Dealer.



## **A** CAUTION

Proceed with care.

Do not spill the oil!

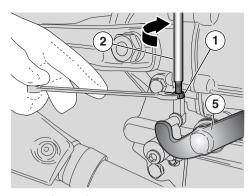
Take care not to smear any component, the area in which you are working and the surrounding area. Carefully remove any trace of oil.

In case of leakage or malfunction, contact a **Moto Guzzi** Authorised Dealer.

Periodically check the engine oil level, see page 49 (CHECKING AND TOPPING UP ENGINE OIL LEVEL).

For engine oil change instructions, see page 46 (SCHEDULED MAINTENANCE CHART) and page 50 (CHANGING ENGINE OIL AND OIL FILTER).

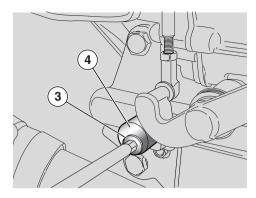
**NOTE** Use high-quality oil, see page 79 (LUBRICANT CHART).



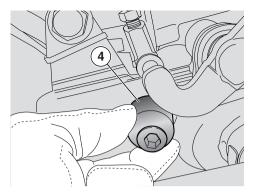
#### **ADJUSTING REAR BRAKE LEVER HEIGHT**

If necessary, it is possible to adjust the brake control lever height:

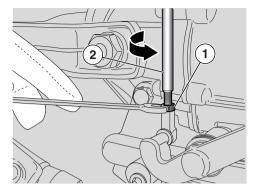
- ◆ Loosen the nut (1);
- ◆ Turn the linkage (2) clockwise until releasing it from the brake master cylinder;



- ◆ Loosen adjusting eccentric bushing (4) screw (3);
- ◆ Turn adjusting eccentric bushing (4) until reaching desired rear brake lever height;



◆ Tighten adjusting eccentric bushing (4) screw (3);



- Turn the linkage (2) counterclockwise until engaging it back to the brake master cylinder;
- ◆ Tighten the nut (1);

## **A CAUTION**

While adjusting the linkage, ensure that there is a play of approximately 1 mm between cylinder rod (2) and the cylinder itself so to avoid that the brake stays engaged thus causing early wear of the braking parts.

#### **A CAUTION**

Make sure that there is a certain idle stroke in the movement of the lever (5), to prevent the brake from remaining applied and the consequent untimely wear of the braking elements.

Lever (5) idle stroke: 4 mm (measured at the lever end).

## **A CAUTION**

When finished, make sure that the wheel rotates freely when the brake is released. Check the brake for proper operation.

If necessary, contact your **Moto Guzzi** Authorised Dealer.

## **A WARNING**

Ensure that cylinder rod (2) is correctly fitted to the rear brake master cylinder.

## EXHAUST MUFFLER/EXHAUST SILENCER

## **A WARNING**

Tampering with the noise control system is prohibited.

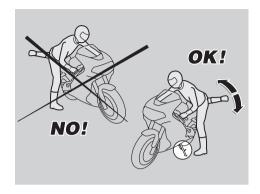
Owners are warned that the law may forbid:

- The removal or rendering inoperative by any person, other than for purposes of maintenance, repair or replacement, of any device or element of design incorporated into any new vehicle - for the purpose of noise control - prior to its sale or delivery to the ultimate purchaser or while it is in use;
- The use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

Check the exhaust muffler/silencer and the silencer pipes, making sure that they show no traces of rust or holes and that the exhaust system is operating properly.

If the exhaust system becomes noisy, immediately contact your **Moto Guzzi** Authorised Dealer.

#### INSTRUCTIONS FOR USE



## GETTING ON AND OFF THE VEHICLE

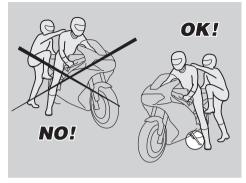
Follow the instructions below closely in order to avoid injury to persons and damage to property and to the vehicle, in the event the rider or the passenger should fall off the vehicle and/or the vehicle should fall or overturn.

#### **WARNING**

# Risk of falling and overturning. Proceed with care.

When getting on and off the vehicle, make sure nothing is restricting your movements; you should not be holding any objects in your hands, such as helmet, gloves or glasses.

Always get on and off the vehicle from the left side and with the side stand down.



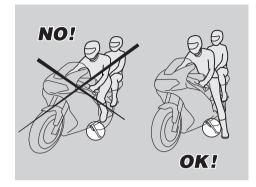
## **A CAUTION**

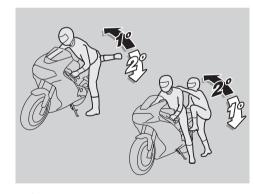
Do not rest your (and your passenger's) weight on the side stand.

The stand has been designed to support the weight of the vehicle and a minimal load, without the added weight of rider and/or passenger.

The purpose of the side stand is to prevent the vehicle from falling or overturning while rider and passenger get on the vehicle and the stand should not be used to support the weight of rider and passenger.

While getting on and off, the vehicle may become unstable due to its weight, and the vehicle may fall or overturn.





**NOTE** The rider must get on the vehicle first and get off last to ensure he/she has control and balance of the vehicle while the passenger is mounting or dismounting.



When getting on and off the vehicle, the passenger must move carefully to avoid causing imbalance.

**NOTE** The rider must instruct the passenger on how to safely get on and off the vehicle.

The vehicle is equipped with passenger footpegs to make mounting and dismounting easier. The passenger must always use the left footpeg to get on and off the vehicle.

Never get off or attempt to get off the vehicle by jumping or stretch your leg to put your foot on the ground to dismount. These are wrong procedures that would affect the stability and balance of the vehicle.

**NOTE** Any bags or objects strapped to the rear of the vehicle can represent an obstacle while getting on and off.

Swing your right leg over the seat in a controlled movement so as not to hit the

tail section or luggage at the rear and avoid resulting imbalance.

#### **GETTING ON THE VEHICLE**

 Grasp the handlebar correctly and get on the vehicle without resting your weight on the side stand.

**NOTE** If you cannot reach the ground with both feet when sitting astride the vehicle, place your right foot on the ground (if you lose balance, the side stand will prevent a fall on the left side) and be ready to put your left foot to the ground to help keep your balance.

 Place both feet on the ground, straighten the vehicle and make sure to balance it fully.

**NOTE** The rider must not fold out or attempt to fold out the passenger footpeg while seated astride the vehicle, because this might compromise the stability and balance of the vehicle.

- ◆ Ask your passenger to fold out both passenger footpegs.
- ◆ Instruct the passenger on how to safely get on the vehicle.
- Pull the side stand fully up using your left foot.

#### **GETTING OFF THE VEHICLE**

- ◆ Select an appropriate location for parking, see page 42 (PARKING).
- ◆ Stop the vehicle, see page 42 (STOPPING).

### **A WARNING**

Make sure the ground is firm and level and free from obstacles.

◆ Put your left heel on the side stand lever and push the side stand fully down.

**NOTE** If you cannot reach the ground with both feet when sitting astride the vehicle, place your right foot on the ground (if you lose balance, the side stand will prevent a fall on the left side) and be ready to put your left foot to the ground to help keep your balance.

- Place both feet on the ground and balance the vehicle keeping it upright.
- ◆ Instruct the passenger on how to safely get off the vehicle.

#### **A WARNING**

Risk of falling and overturning.

Make sure that the passenger has dismounted.

Do not rest your weight on the side stand.

- Lean the vehicle to the side until the stand is resting on the ground.
- ◆ Keep your hands firmly on the handlebar and get off the vehicle.
- ◆ Turn the handlebar fully to the left.
- ◆ Fold up the passenger footpegs.

### **A CAUTION**

Make sure that the vehicle is stable.





#### **PRE-RIDE CHECKS**

## **WARNING**

Check the vehicle before each ride to ensure correct and safe operation, see page 35 (PRE-RIDE CHECKS CHART).

Failure to perform these checks may lead to severe personal injury or vehicle damage.

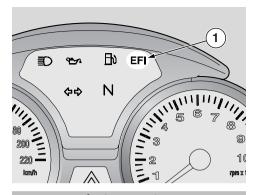
Do not hesitate to contact your **Moto Guzzi** Authorised Dealer if you need clarifications about the operation of vehicle controls or if you suspect or have identified a malfunction.

A quick pre-ride check takes just a few minutes and greatly improves your safety.

**NOTE** This vehicle is equipped with an electronic engine control unit capable of detecting abnormal operation in real time and storing faults.

Whenever the ignition switch is set to " ()", the wording " *EFI* " (1) appears on the right side of the multifunction display for approximately three seconds.

The wording " *EFI* " (1) is also displayed for three seconds after engine is started to indicate that a test for correct fuel injection operation is under way.



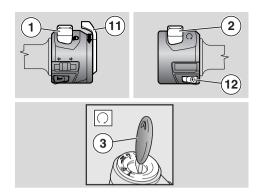
## **A** CAUTION

If the writing " [F] " (1) is displayed during the normal operation of the engine, this means that the electronic unit has detected a fault.

In most cases, the engine will keep running, although giving less performance. Immediately contact a **Moto Guzzi** Authorised Dealer.

#### **PRE-RIDE CHECKS CHART**

Part	Check	page
Front and rear disc brakes	Check for proper operation, check lever free play, fluid level and check for leaks. Check the pads for wear. If necessary, top up the fluid reservoirs.	
Throttle	Check for smooth operation; throttle should snap fully open and closed at all positions of the steering.  Adjust and/or lubricate as required.	
Engine oil	Check and/or top up as required.	29, 49
Wheels / tyres	Check tyre surface, inflation pressure. Check for wear or damage. Remove any objects trapped in the tread.	28
Brake levers	Make sure that they work smoothly. Lubricate the joints if necessary (rear brake control).	-
Clutch	Check clutch operation, free travel of control lever (free play with a cold engine must be less than 1 mm).  The clutch must not jerk and/or slip when operated.	-
Steering	Steering should rotate smoothly and evenly. There should be no play or looseness.	-
Side stand	Check its operation. No friction during up and down movement, springs must ensure full retraction. Lubricate joints and connections, if necessary.	60, 65
Fastening elements	Make sure that the fastening elements are not loose. Adjust or tighten as required.	-
Fuel tank	Check fuel level and top up, if necessary. Check the circuit for leaks. Make sure the filler plug is tightened securely.	23
Engine stop switch ( ) - >>)	Make sure that it operates correctly.	19
Lights, warning lights, horn, rear brake light switches and electrical devices	Check the proper operation of the acoustic and visual devices. Change the bulbs or repair if faulty.	69, 70, 71
Transmission fluid	Check. If level needs topping up, contact a <b>Moto Guzzi</b> Authorised Dealer.	53



#### **STARTING**

## **A WARNING**

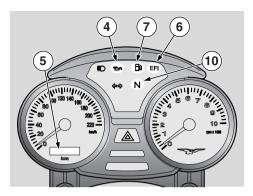
This is a high-performance vehicle and we recommend that you familiarise with it gradually using the greatest care.

Do not store any objects on the inside of the headlight fairing (between the handlebar and the instrument panel) as this could impair handlebar movement or hide the instrument panel from your vision.

**NOTE** Before starting the engine, carefully read "safe drive", see page 5 (SAFE DRIVE).

## **WARNING**

Exhaust gases contain carbon monoxide, which is extremely toxic if inhaled.



Do not start the engine in an enclosed space or poorly ventilated area.

Failure to observe this warning may lead to loss of consciousness or even death by asphyxia.

**NOTE** With the side stand down, the engine can be started only if the gear is in neutral; if you attempt to engage a gear with the stand down, the engine will stop.

With the side stand up, the engine can be started in neutral.

- Get on the vehicle and sit in the riding position, see page 32 (GETTING ON AND OFF THE VEHICLE).
- ◆ Make sure the stand is fully up.

- Make sure that the dimmer switch (1) is in position " 

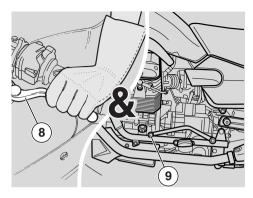
  □ ".
- ◆ Set the engine stop switch (2) to position " ".
- ◆ Turn the key (3) and set the ignition switch to position " ".

#### The following happens:

- The pointers of both instruments go to full scale and then back to zero.
- the engine oil pressure light (red) " → "
   (4) on the instrument panel comes on and stays on until after the engine is running;
- the multifunction digital display (5) turns on all digits for about two seconds as a test routine and then displays the total distance covered (ODO);
- whenever the ignition switch is turned to position " \( \)" the warning light " \( \)EF! " (6) comes on for three seconds;
- you will hear the fuel pump buzzing for about three seconds as it pressurises the fuel system.

## **A** CAUTION

If the low fuel warning light " \( \bigcap \)" (7) on the instrument panel comes on, it means that there are 4 litres of fuel left in the tank. Refuel as soon as possible, see page 23 (FUEL).



- Operate a brake to lock at least one wheel.
- ◆ Pull in the clutch lever (8) completely and shift the gear lever (9) to select neutral [the green light "\" (10) comes on].
- ♦ If you are starting the engine from cold, rotate the choke lever "|\|\|\|\|\|\|\|\|\|

# **A CAUTION**

To avoid excessive current draw from the battery, do not hold down the starter button "(1)" for more than fifteen seconds.

If the engine does not start within fifteen seconds, wait ten seconds before operating the starter button " (1) " again.

◆ Press the starter button "(3)" (12) without accelerating and release it as soon as the engine starts.

### **A CAUTION**

Avoid pressing the starter button " () " (12) when the engine is running, or the starter motor may damage.

If the engine oil pressure light " " (4) stays on after the engine is running or comes on during normal engine operation, it means that engine oil pressure in the circuit is low.

If so, stop the engine immediately and contact a **Moto Guzzi** Authorised Dealer.

 Keep at least one brake operated and do not accelerate until you are ready to move off.

## **A CAUTION**

Never move off abruptly with a cold engine.

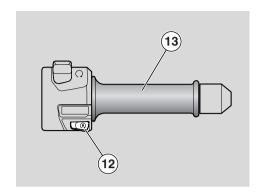
To reduce emissions and fuel consumption, ride slowly until covering several miles to warm the engine up to operating temperature.

◆ Rotate the choke lever "|x|" (11) upwards after warming up the engine.

# **A** CAUTION

If the wording " EF! " (6) appears on the instrument panel during normal engine operation, it means that the ECU has detected a fault.

In most cases, the engine will keep running, although giving less performance. Immediately contact a **Moto Guzzi** Authorised Dealer.



### STARTING THE ENGINE FROM COLD

If ambient temperature is low (close to or below 0°C/32°F), you may have trouble starting the engine at the first attempt.

### If so:

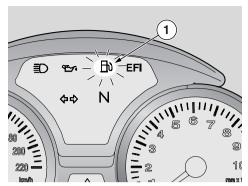
- ◆ Rotate the choke lever "|x|" (11) downwards.
- ◆ Hold down the starter button " (३)" (12) for at least ten seconds and open the throttle grip (13) slightly.

# If the engine starts:

- ◆ Release the starter button "(1)" (12) and the throttle grip (13).
- ◆ Rotate the choke lever "| **\**|" (11) upwards.
- ◆ If idle speed is erratic, flip the throttle grip (13) moderately several times.

## If the engine fails to start:

Wait a few seconds and repeat the COLD START PROCEDURE.



**MOVING OFF AND RIDING** 

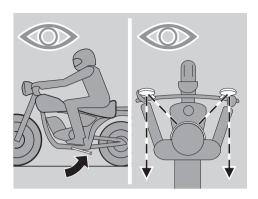
## **A WARNING**

This is a high-performance vehicle and we recommend that you familiarise with it gradually using the greatest care.

Do not store any objects on the inside of the headlight fairing (between the handlebar and the instrument panel) as this could impair handlebar movement or hide the instrument panel from your vision.

**NOTE** Before each ride, carefully read "safe drive", see page 5 (SAFE DRIVE).

# **A CAUTION**



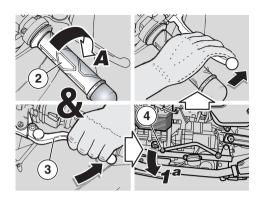
Refuel as soon as possible, see page 23 (FUEL).

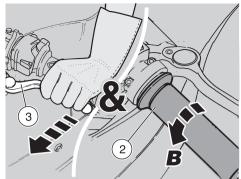
# **A WARNING**

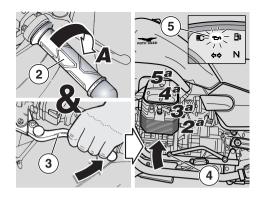
If you are riding solo, make sure the passenger footpegs are folded up before moving off.

While riding, keep your hands on the handlebar and your feet on the footpegs.

NEVER RIDE IN ANY POSITION OTHER THAN THE RECOMMENDED RIDING POSITION.







## **A WARNING**

If you are riding with a passenger, give your passenger proper instructions to avoid problems when manoeuvring.

Before moving off, make sure the stand is fully up.

### To move off:

- ◆ Start the engine, see page 36 (STARTING).
- ♦ Adjust the rear-view mirrors.
- ◆ With the throttle twistgrip (2) released (**Pos. A**), let engine idle and pull the clutch lever (3) fully in.
- ◆ Push down the gear change lever (4) to engage the first gear.
- ◆ Release the brake lever (you had pulled it when you started the engine).

## **A WARNING**

On moving off, release the clutch lever gradually, otherwise the engine may stall or the vehicle may jerk forwards.

Never accelerate abruptly or excessively when releasing the clutch lever, otherwise the clutch may "slip" (if released slowly) or the vehicle may do an unexpected "wheelie" (if you release the clutch quickly).

- ◆ Slowly release the clutch lever (3) while opening the throttle slightly (2) (**Pos.B**). The vehicle will start moving.
- Ride at slow speed until covering several kilometres/miles to warm the engine up to operating temperature.

## **A CAUTION**

Never exceed the recommended rpm, see page 41 (RUNNING-IN).

 Increase your speed by gradually rotating the throttle grip (2) (Pos.B), without exceeding the recommended rpm, see page 41 (RUNNING-IN).

To engage the second gear:

# **A** CAUTION

Work the controls quickly.

Never let the engine labour at too low a speed.

- ◆ Release the throttle twistgrip (2) (Pos.A), pull the clutch lever (3) and lift the gear change lever (4). Release the clutch lever (3) and accelerate.
- ◆ Repeat the last two steps and shift up.

## **A** CAUTION

If the engine oil pressure light " " (5) comes on during regular engine operation, it means that engine oil pressure in the circuit is low.

If so, stop the engine immediately and contact a Moto Guzzi Authorised Dealer.

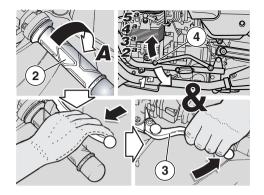
## Change to a lower gear (downshift):

- When riding downhill or when braking. use engine braking to increase braking effect
- ◆ When riding uphill, if the gear engaged is too high for your speed and engine rpm is dropping.

# **A CAUTION**

When shifting down, always select the next lower gear or you will cause the engine to race (exceed red line rpm limit).

Before and during a downshift, release the throttle grip and slow down a bit in order to avoid hitting the "red line".



## To shift down, proceed as follows:

- ◆ Release the throttle grip (2) (**Pos.A**).
- ◆ If necessary, apply the brakes moderately and slow down.
- ◆ Pull the clutch lever (3) and push down the gear change lever (4) to shift down.
- ◆ If you have pulled the brakes, release them.
- Release the clutch lever and accelerate moderately.

## **A CAUTION**

If the wording "FF!" appears during normal engine operation, it means that the ECU has detected a fault.

In most cases, the engine will keep running, although giving less performance, immediately contact a Moto Guzzi Authorised Dealer.

When the vehicle is at standstill with the engine running, avoid keeping the clutch pulled with a gear engaged for a long time or the clutch will overheat.

## **A WARNING**

Avoid opening and closing the throttle repeatedly and continuously, or you may lose control of the vehicle. When vou need to brake, close the throttle and use both brakes for smooth braking; take care to apply the right amount of pressure to both brakes.

Using one brake only gives less braking power and you could lock a wheel and lose grip.

To stop uphill, decelerate completely and use the brakes to keep the vehicle at standstill.

Do not use engine braking or the clutch may overheat.

When approaching a bend, slow down or brake in good time. Take the bend at moderate, steady speed or accelerate slightly. Late braking may put the vehicle into a skid.

Continued application of the brakes on long downhill grades may cause the brakes to overheat, thereby reducing braking efficiency. Shift down to use engine braking and apply both brakes intermittently.

Never ride downhill with the engine off!

If the road surface is wet or slippery (snow, ice, mud, etc.), ride slowly, do not brake or swerve suddenly, or you may lose grip and fall.

# **WARNING**

Watch out for obstacles or sudden changes in the road surface.

Rough roads, rails, manhole covers, road markings, large steel plates near roadwork become slippery in the wet and should be avoided or negotiated with the greatest care, riding carefully and keeping the vehicle upright.

Signal your intention to change lane or turn in good time using the turn indicators and avoid sudden swerving or movements.

Switch off the turn indicators as soon as you have finished turning.

Be extremely careful when overtaking or being overtaken.

When riding in the rain, the spray thrown up by the tyres of large vehicles will reduce your vision; the air wave created by a large vehicle may make you lose control of the vehicle.

### **RUNNING.IN**

Correct engine running-is essential to ensuring proper performance and durability.

Twisty, hilly roads are ideal for an effective running-in of engine, suspension and brakes.

Vary speed frequently during the runningin period.

This will allow engine parts to be alternately loaded and unloaded, allowing them to cool down when unloaded

While it is important to put some stress on engine components during running-in, it is equally important to avoid extreme load conditions.

NOTE From 2000 km (1243 mi) onward, the engine is ready to provide top performance.

### Follow these recommendations:

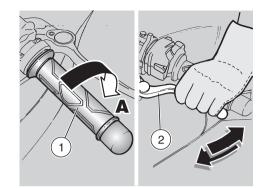
- ◆ Do not flip the throttle open abruptly with the engine running at low rpm - either during or after the running-in period.
- ◆ Until you have covered the first 100 km (62 mi), use the brakes gently and avoid harsh, prolonged braking. This will help the brake pads bed in properly against the brake discs.
- ◆ During the first 1000 km (625 mi) never exceed 5000 rpm.

## **A WARNING**

After the first 1000 km (625 mi) have a Moto Guzzi Authorised Dealer carry out the checks indicated in the column "after running-in" of the scheduled maintenance chart, see page 46 (SCHEDULED MAINTENANCE CHART). in order to avoid hurting yourself or other people and/or damaging the vehicle

- ◆ After the first 1000 km (625 mi) and until covering 2000 km (1243 mi), drive more briskly, varying speed and using maximum acceleration for just a few seconds, in order to ensure better coupling of the components; never exceed 6000 rpm (see table).
- ◆ After the first 2000 km (1243 mi) you may run the engine harder, however, without exceeding the maximum rpm allowed (7600 rpm).

Recommended maximum engine rpm			
Distance covered km (mi)	rpm		
0 – 1000 (0 – 625)	5000		
1000 – 2000 (625 – 1243)	6000		
over 2000 (1243)	7600		



### STOPPING

## **WARNING**

If you can, do not stop or slow down suddenly and avoid limit-braking.

◆ Release the throttle grip (1) (Pos.A), apply the brakes gradually and at the same time shift down in order to slow down, see page 38 (MOVING OFF AND RIDING).

When you have slowed down, before the vehicle comes to a stop:

◆ Pull the clutch lever (2) to prevent the engine stalling.

When the vehicle has come to a stop:

- ◆ Select neutral (green warning light "N" on).
- ◆ Release the clutch lever (2).
- ◆ If you need to stop only briefly, keep at least one brake applied.

### PARKING

It is very important to select an adequate to place to park your vehicle - observe local regulations and the indications given helow

## **A WARNING**

Park the vehicle on firm and level ground, to prevent it from falling.

Do not lean the vehicle against a wall, or lay it on the ground.

Make sure that the vehicle and any of its parts that are still hot do not pose a burn risk for any persons nearby, especially children. Do not leave the vehicle unattended with the engine running or the key in the ignition switch.

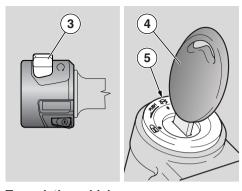
# **A WARNING**

Leaning the vehicle too far over or tipping it over may cause fuel to spill out of the tank.

The fuel used in internal combustion engines is highly flammable and can become explosive under particular conditions.

# **A CAUTION**

Do not rest your (and your passenger's) weight on the side stand.



## To park the vehicle:

- ◆ Select a suitable area for parking.
- Stop the vehicle, see page 42 (STOPPING).
- ◆ Set the engine stop switch (3) to position "⋈".
- ◆ Turn the key (4) and set the ignition switch (5) to position "⋈ ".

# **WARNING**

Follow the instructions on how to get on or off the vehicle, see page 32 (GETTING ON AND OFF THE VEHICLE).

- ◆ Following the instructions, direct your passenger (if you are carrying one) to dismount and then get off.
- Lock the steering, see page 17 (STEERING LOCK) and remove the key (4).

# **A WARNING**

Make sure that the vehicle is stable.



# PUTTING THE VEHICLE ON THE STAND

### Side stand

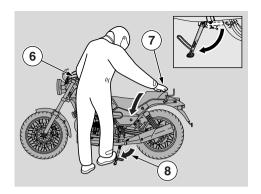
For instructions on how to the vehicle on the side stand while seated astride the vehicle, see page 32 (GETTING ON AND OFF THE VEHICLE).

If you have folded up the stand (say, to wheel the vehicle forward or backward), put the vehicle back on the stand as follows:

# **A WARNING**

Make sure the ground is firm and level and free from obstacles.

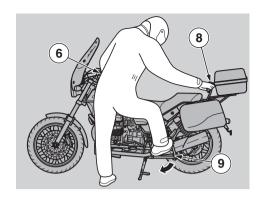
- ◆ Choose a suitable parking area, see page 42 (PARKING).
- ◆ Hold the left grip (6) firmly and place your right hand over the rear end of the vehicle (7).



- Push down the side stand (8) with your right foot and extend it completely.
- ◆ Lean the vehicle to the side until the stand is resting on the ground.
- ◆ Rotate the handlebar fully to the left.

# **A WARNING**

Make sure that the vehicle is stable.



### **CENTRE STAND**

# **A WARNING**

It is forbidden to position the vehicle on the centre stand while seated astride the vehicle in riding position.

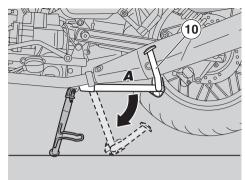
# **A WARNING**

Make sure the ground is firm and level and free from obstacles.

- Choose a suitable parking area, see page 42 (PARKING).
- ◆ Grasp the left grip (6) and the passenger grab rail (8).

# **A** CAUTION

The lowering of the side stand is suggested, for safety reasons, in order to prevent the vehicle from falling down or overturning in case of unbalance.



**NOTE** Do not let the side stand touch the ground. Keep the vehicle in vertical position.

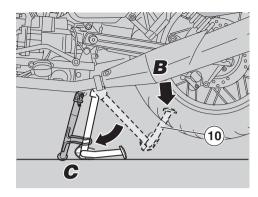
- Push down the side stand (9) with your right foot and extend it completely.
- ◆ Push onto centre stand lever (10) (Pos.
   A) and rest it onto the ground.

# **A CAUTION**

Proceed with care.

The positioning of the vehicle on the centre stand may be difficult, since the vehicle is very heavy. Release the handgrip (1) and grab handle (8) only when the vehicle is steady on the stand.

 Load your weight on the lever (10) (Pos.B) of the centre stand and at the same time move your centre of gravity towards the rear part of the vehicle (Pos.C).



# **WARNING**

Make sure that the vehicle is stable.

Let the side stand up.

# SUGGESTIONS TO PREVENT THEFT

## **WARNING**

Do not use any "brake lock" devices. Failure to heed this warning can seriously damage the braking system and lead to an accident thus provoking serious injuries or death.

NEVER leave the key in the ignition switch and always use the steering lock. Park the vehicle in a safe place, possibly in a garage or at a guarded parking place. When possible, use an additional antitheft device. Make sure you have all the necessary documents with you and that the road tax has been paid. Write your personal data and telephone number in this page to help trace the vehicle back to you in the event it is stolen and subsequently recovered.

SURNAME:	
NAME:	
ADDRESS:	
TELEPHONE NO.:	

**NOTE** Recovered vehicles are often traced back to the owner thanks to his/her details recorded in the Owner's Manual.

### MAINTENANCE

# **A WARNING**

Risk of fire.

Keep fuel and other flammable substances away from electric components.

Before proceeding to service or inspect of the vehicle, stop the engine and remove the key from the ignition, wait for the engine and the exhaust system to cool down and, if possible, lift the vehicle using adequate lifting equipment placed on firm and level ground.

Ensure the area is well ventilated before proceeding.

Be careful not to touch hot engine and exhaust system parts that might burn you.

Do not hold any mechanical piece or other parts of the vehicle with your mouth: the components are not edible and some of them are harmful or even toxic.

# **A CAUTION**

Unless expressly indicated otherwise, reassembly is a reversal of the disassembly procedure.

Wear latex gloves during servicing.

Normally, scheduled maintenance can be carried out by the owner, although some operations may require specific tools and technical training.

For periodic maintenance, servicing or technical advice, contact a **Moto Guzzi** Authorised Dealer, who will ensure prompt, accurate service.

Ask your **Moto Guzzi** Authorised Dealer to carry out a road test after a repair or scheduled maintenance operation.

In addition, perform the "Pre-ride checks" after each maintenance operation, see page 35 (PRE-RIDE CHECKS CHART).

**NOTE** This vehicle is equipped with an electronic engine control unit capable of detecting abnormal operation in real time and storing faults.

Whenever the ignition switch is turned to position "  $\bigcirc$  " the wording " *FFI* " appears on the instrument panel for three seconds

# **A** CAUTION

If the writing " FF| " (1) is displayed during the normal operation of the engine, this means that the electronic unit has detected a fault.

In most cases, the engine will keep running, although giving less performance. immediately contact a **Moto Guzzi** Authorised Dealer.

#### SCHEDULED MAINTENANCE CHART

OPERATIONS TO BE CARRIED OUT BY THE Authorised Dealer Moto Guzzi (CAN ALSO BE CARRIED OUT BY THE OWNER).

Component	End of running-in [1000 km (625 mi)]	Every 7500 km (4687 mi) or 12 months	Every 15000 km (9375 mi) or 24 months	
Spark plugs (*)		every 7500 km/6214 mi: ③		
Engine oil filter (*)	3	3		
Fork	0		0	
Light operation/beam setting		0		
Lighting system	0	①		
Safety switches		U		
Brake fluid		①		
Engine oil	3	3		
Tyres	0	①		
Tyre pressures (**)	4	4		
Engine idle rpm	4	4		
Battery terminals tightening	0			
Head bolts tightening	4			
Engine oil pressure warning light		at every start-up: ①		
Brake pad wear	0	① before each ride and every 2000 km (1243 mi):①		

① = check and clean, adjust, lubricate or change, if necessary; ② = clean; ③ = change; ④ = adjust.

Perform maintenance operations more frequently than the indicated intervals if you are riding in rainy or dusty conditions, on rough road surfaces or when the vehicle is used for racing.

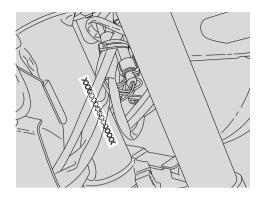
<sup>(\*) =</sup> If vehicle is used for racing, change every 3750 km (2343 mi).

<sup>(\*\*) =</sup> Check every two weeks or at the specified intervals.

### OPERATIONS TO BE CARRIED OUT BY THE Moto Guzzi Authorised Dealer.

Component	End of running-in [1000 km (625 mi)]	Every 7500 km (4687 mi) or 12 months	Every 15000 km (9375 mi) or 24 months		
Gearbox fluid	3	3			
Idle mixture (CO)		0			
Bowden cables and controls	0	0			
Steering bearings and steering play	①	①			
Wheel bearings		0			
Brake discs	①	①			
Air filter		0	3		
Vehicle operation	0	0			
Brake systems	0	0			
Brake fluid	ever	every 2 years: ③ or 20000 km (12427 mi)			
Fork fluid	after the first 7500 k	after the first 7500 km (4687 mi) and then every 22500 km (14000 mi): 3			
Fork oil seals	after the first 30000 k	after the first 30000 km (18750 mi) and then every 22500 km (14000 mi): ③			
Brake pads	eve	every 2000 km/1243 mi: ① - if worn: ③			
Valve clearance adjustment	4	4			
Wheels / tyres	•	0			
Nut, bolt, screw tightening					
Battery terminals tightening	①				
Cylinder synchronisation	0	0			
Suspensions and trim	①		①		
Final transmission fluid	3	3			
Fuel pipes		0	every 4 years: ③		
Brake lines		0	every 4 years: ③		
Clutch wear (*)		0			

① = check and clean, adjust, lubricate or change, if necessary (as specified in the Workshop Manual); ② = clean; ③ = change; ④ = adjust. Halve maintenance intervals if you are riding in rainy or dusty conditions, on rough road surfaces or when the vehicle is used for racing. (\*) = If vehicle is used for racing, check every 3750 km (2343 mi).



### **IDENTIFICATION DATA**

It is a good rule to report the frame and engine numbers in the space provided in this manual.

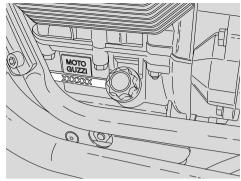
The frame number must be quoted when purchasing spare parts.

**NOTE** Altering a vehicle identification numbers is illegal and punished by the law with fines and imprisonment. In addition, altering the frame number invalidates the warranty.

### **FRAME NUMBER**

The frame number (1) is stamped on the right side of the steering tube.

Frame no.



#### **ENGINE NUMBER**

The engine number (2) is stamped on the left side close to the oil level plug/dipstick.

Engine no.

### **JOINTS WITH SCREW CLAMPS**

# **A** CAUTION

Remove ONLY the clamps indicated in the maintenance procedures.

This text is not to be intended as an authorisation to arbitrarily remove the clamps present on the vehicle.

## **A WARNING**

Before removing a clamp, determine whether removal may lead to leakage and, if so, take adequate measures to prevent leakage and protect the components positioned near the joint.

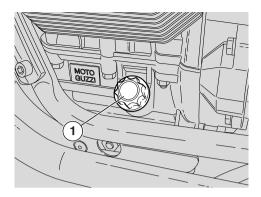
### **SCREW CLAMPS**

For removal and installation it is sufficient to use a common screwdriver.

# **A CAUTION**

Check the conditions of the clamp and if necessary replace it with a new one of the same type and dimensions, available on request from **Moto Guzzi** Authorised Dealers.

When tightening the clamp, make sure that the joint is sufficiently stable.



# CHECKING AND TOPPING UP ENGINE OIL LEVEL

Carefully read page 45 (MAINTENANCE) and page 29 (ENGINE OIL).

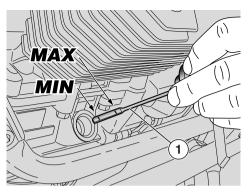
**NOTE** Halve maintenance intervals if you are riding in rainy or dusty conditions, or on rough road surfaces.

Periodically check engine oil level, change the oil every 7500 km (4687 mi), see page 50 (CHANGING ENGINE OIL AND OIL FILTER).

Check as follows:

### **A CAUTION**

The engine oil level must be checked with a warm engine and with the oil level dipstick (1) fully tightened.



If you check level when the engine is cold, oil level may have temporarily dropped below the "MIN" mark.

This is not a problem, provided that the engine oil pressure warning light " come on, see page 14 (INSTRUMENTS AND INDICATORS TABLE).

**NOTE** Letting the engine idle with the vehicle at standstill is not the correct procedure to warm engine and engine oil up to operating temperature for an oil check. Oil is best checked after a trip or after travelling approximately 15 km (10 mi) out of town (this is sufficient to bring engine oil up to operating temperature).

- Stop the engine, see page 42 (STOPPING).
- ◆ Keep the vehicle in vertical position, the two wheels resting on the ground.

- ◆ Undo the filler plug/oil dipstick (1).
- ◆ Check oil level on the dipstick (1).

**MAX** = maximum level

**MIN** = minimum level.

The difference between "MAX" and "MIN" amounts to approximately 400 cu. cm.

◆ Correct level is achieved when the oil is just below the MAX level mark.

# **A** CAUTION

Never exceed the "MAX" mark or let oil level drop below the "MIN" mark, as this may lead to severe engine damage.

If necessary, top up engine oil level as follows:

◆ Unscrew and remove the filler plug (1).

# **A** CAUTION

Do not add any additives or other products to the oil.

If you use a funnel or other tools, make sure that they are perfectly clean.

**NOTE** Use high-quality 5W - 40 oil, see page 79 (LUBRICANT CHART).

Top up to correct level, see page 79 (LUBRICANT CHART).

### **CHANGING ENGINE OIL AND OIL FILTER**

# **A CAUTION**

Changing engine oil and engine oil filter can prove difficult: these operations are best left to experienced mechanics.

If necessary, contact your Moto Guzzi **Authorised Dealer.** 

If you wish to perform these operations yourself, follow these instructions.

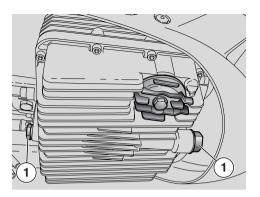
Carefully read page 45 (MAINTENANCE) and page 29 (ENGINE OIL).

**NOTE** Halve maintenance intervals if you are riding in rainy or dusty conditions, on rough road surfaces or when the vehicle is used for racing.

Periodically check the engine oil level, see page 49 (CHECKING AND TOPPING UP ENGINE OIL LEVEL), and have it changed every 7500 km (4687 mi).

# To change oil:

**NOTE** Warm oil is more fluid and will drain out more easily and completely; ideal temperature is reached after engine has been running for about twenty minutes.

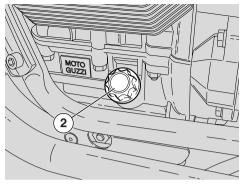


### **A CAUTION**

Oil becomes very hot when engine is warmed up; beware of scalds during the procedure described below.

- ◆ Place a container with more than 4000 cu. cm. capacity under the drain plugs (1).
- ◆ Unscrew and remove the drain plugs (1).
- ◆ Unscrew and remove the filler plug (2).
- ◆ Drain the oil into the container: allow several minutes for oil to drain out completely.
- ◆ Check the sealing washers of the drain plugs (1) and replace them if needed.
- ◆ Remove any metal debris attached to the drain plug (1) magnet.
- ◆ Screw and tighten the drain plugs (1).

Drain plugs (1) tightening torque: 12 Nm (1.2 kgm).



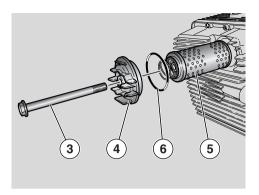
# **A CAUTION**

DO NOT DISPOSE OF OIL IN THE **ENVIRONMENT Dispose of engine oil** stored in a sealed container - through the nearest waste oil reclamation firm or through the supplier.

### CHANGING THE ENGINE OIL FILTER

NOTE Halve maintenance intervals if you are riding in rainy or dusty conditions, or on rough road surfaces.

Change the engine oil filter every 7500 km (4687 mi) (or every time you change the oil).



- Unscrew the screw (3) and remove the cover (4).
- ◆ Remove the engine oil filter (5).

## **A CAUTION**

Never reuse a filter.

- ◆ Spread a thin layer of oil on the sealing ring (6) of the new engine oil filter.
- ◆ Fit the new engine oil filter with the spring facing downwards.
- ◆ Refit the cover (4) and tighten the screw (3).

#### **FRONT WHEEL**

### **A CAUTION**

Disassembling and reassembling the front wheel may prove difficult; these operations are best left to experienced mechanics.

If necessary, contact a **Moto Guzzi** Authorised Dealer.

### **A WARNING**

Riding with damaged rims may be dangerous for the rider, other persons and the vehicle.

Check the conditions of the wheel rim and change if damaged.

# **A WARNING**

We advise against disturbing the wheel rim spokes.

### **REAR WHEEL**

## **A CAUTION**

Disassembling and reassembling the rear wheel may prove difficult; these operations are best left to experienced mechanics.

If necessary, contact a **Moto Guzzi** Authorised Dealer.

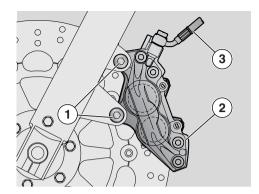
# **A WARNING**

Riding with damaged rims may be dangerous for the rider, other persons and the vehicle.

Check the conditions of the wheel rim and change if damaged.

# **A WARNING**

We advise against disturbing the wheel rim spokes.



### FRONT BRAKE CALLIPER

Carefully read 45 page (MAINTENANCE).

# **WARNING**

A dirty disk will soil the pads, leading to loss of braking efficiency. Dirty pads must be replaced, while dirty discs must be cleaned with a high-quality degreaser.

# **A CAUTION**

When disassembling and reassembling, be careful not to damage the brake hoses, the discs and the pads.

NOTE To remove the front brake calliper, the vehicle must be kept upright and safely supported, with the front wheel raised off the ground.

#### DISASSEMBI Y

### **A CAUTION**

Make sure that the vehicle is stable.

- ◆ Rotate the wheel manually until bringing the space between two wheel spokes before the brake calliper.
- ◆ Have someone keep the handlebar steady in a position as for riding, so that the steering is locked.

Brake calliper screws (1) tightening torque: 50 Nm (5 kam).

◆ Unscrew and remove the two brake calliper screws (1).

## **A CAUTION**

Do not operate the brake lever after removing the calliper, otherwise the pistons may slip out of their seats. leading to brake fluid leakage.

Should this happen, contact your **Moto** Guzzi Authorised Dealer, who will rectify the problem.

◆ Withdraw the brake calliper (2) from the disc. leaving it attached to the hose (3).

#### REASSEMBLY

## **A CAUTION**

Proceed with care, in order not to damage the brake pads.

◆ Position the brake calliper (2) to the disc so that the calliper mounting holes match the support holes.

# **WARNING**

On assembly, replace both calliper retaining screws (1) with new ones of the same type.

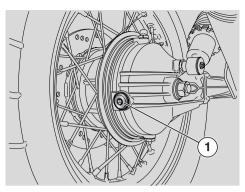
◆ Screw and tighten the two calliper retaining screws (1).

Brake calliper screws tightening torque: 50 Nm (5 kgm).

Carefully remove the support.

## **A CAUTION**

After reassembly, operate the brake lever repeatedly and check the braking system for proper operation.



### CHECKING THE CARDAN SHAFT **OIL LEVEL**

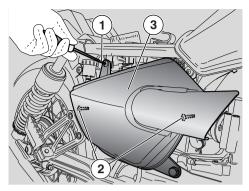
**NOTE** Halve maintenance intervals if you are riding in rainy or dusty conditions. or on rough road surfaces.

Check cardan shaft oil level at regular intervals; change the oil after the first 1000 km (625 mi) and then every 7500 km (4687 mi).

### Check as follows:

- ◆ Keep the vehicle in vertical position, the two wheels resting on the ground.
- ◆ Undo and remove the level plug (1).
- ◆ Check that oil level is just below the hole for the level plug (1). Top up if oil is below the specified level.

To top up or change cardan shaft oil. contact a Moto Guzzi Authorised Dealer



### REMOVING THE SIDE BODY **PANELS**

- ◆ Remove the rider seat, see page 20 (UNLOCKING/LOCKING THE SEAT).
- ◆ Unscrew and remove the screw (1).

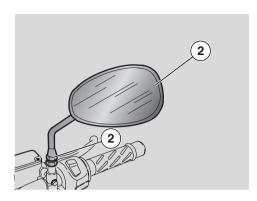
# **A CAUTION**

Handle plastic and paint-finished parts with care to avoid scratching or damage.

- ◆ Carefully disengage pins (2) from relevant retaining rubber blocks.
- ◆ Remove the side body panel (3).

NOTE Upon reassembly, make sure that the reference pins (2) are positioned correctly.

Repeat these operations to remove the other side body panel.



### **REMOVING THE REAR-VIEW MIRRORS**

The following information applies to both rear-view mirrors.

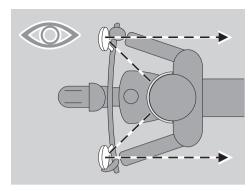
◆ Place the vehicle on the stand.

NOTE Collect the left mirror components separately from the right mirror components.

◆ Loosen the flap (1).

## **A CAUTION**

Hold the rear-view mirror (2), to prevent it from accidentally falling down.



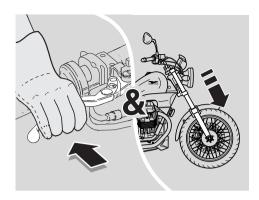
# **A CAUTION**

Handle plastic and paint-finished parts with care to avoid scratching or damage.

- ◆ Remove the rear-view mirror (2) pulling it upward.
- ◆ Collect the cover (1).

# **A CAUTION**

On refitting, adjust the rear-view mirrors and tighten the nuts to secure them firmly in place.



# INSPECTING THE FRONT AND REAR SUSPENSIONS

Carefully read page 45 (MAINTENANCE).

**NOTE** Have the front fork oil changed by a **Moto Guzzi** Authorised Dealer, who will ensure prompt, accurate service.

**NOTE** Halve maintenance intervals if you are riding in rainy or dusty conditions, on rough road surfaces or when the vehicle is used for racing.

Have the front fork oil changed after the first 7500 km (4687 mi) and then every 22500 km (14000 mi).

Carry out the following checks after the first 1000 km (625 mi) and then every 15000 km (9375 mi):

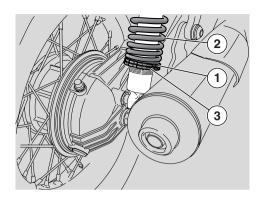
- Keep the front brake lever pulled in and push down on the handlebar repeatedly to compress the front fork. The fork should compress in a smooth movement and must show no traces of oil on the legs.
- Ensure that all components are properly tightened and check the front and rear suspension articulated joints for correct operation.

## **A CAUTION**

In the event of faulty operation or if you need qualified assistance, contact your **Moto Guzzi** Authorised Dealer.

### **FRONT SUSPENSION**

◆ Have the fork oil seals changed by a Moto Guzzi Authorised Dealer after the first 30000 km (18750 mi) and then every 22500 km (14000 mi).



### **REAR SUSPENSION**

For setting adjustments, the shock absorber has an adjusting ring nut (1) for spring (2) preload adjustment, and a locking ring nut (3).

**NOTE** It is possible to adjust spring preload in order to customise the vehicle trim according to the conditions of use.

# ADJUSTING THE REAR SHOCK ABSORBER

**NOTE** Halve maintenance intervals if you are riding in rainy or dusty conditions, on rough road surfaces or when the vehicle is used for racing.

Check the rear shock absorber every 15000 km (9375 mi) and adjust as required.

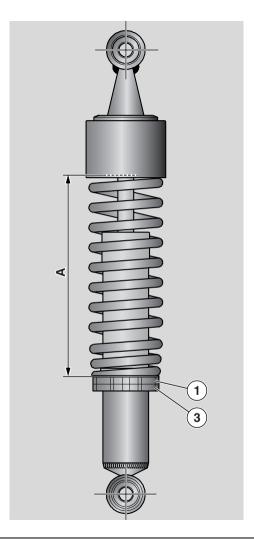
# **A** CAUTION

Do not force the adjuster (1) in either direction in order to avoid damage.

- ◆ Unscrew the locking ring nut (3) by means of the appropriate spanner.
- Using the special pin spanner included in the tool kit, turn the adjusting ring nut (1) to adjust spring (A)preload.
- Screw in to increase spring preload; undo to decrease it.
- ◆ When finished, tighten the ring nut (3).

# **A** CAUTION

To ensure vehicle stability, the same setting must be used on both rear shock absorbers. If necessary, contact a **Moto Guzzi** Authorised Dealer.



# CHECKING THE BRAKE PADS FOR WEAR

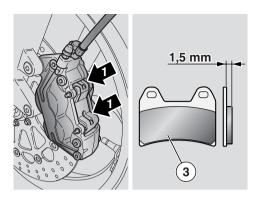
Carefully read page 45 (MAINTENANCE), page 25 (DISC BRAKES) and page 24 (BRAKE FLUID recommendations).

**NOTE** The following information applies to both braking systems.

**NOTE** Halve maintenance intervals if you are riding in rainy or dusty conditions, on rough road surfaces or when the vehicle is used for racing.

Check the brake pads for wear after the first 1000 km (625 mi), every 2000 km (1250 mi) afterwards and before each ride.

The rate at which brake pads will wear depends on vehicle usage, riding style and road surface condition.

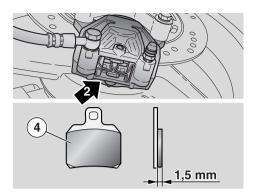


# **WARNING**

Check the brake pads for wear, possibly before each ride.

Outlined below is a quick brake pad inspection procedure:

- Place the vehicle on the stand, see page 43 (PUTTING THE VEHICLE ON THE STAND).
- Visually inspect the area between brake disc and brake pads proceeding as follows:
- look from above at the rear to check the front brake calliper (1);
- from below at the rear to check the rear brake calliper (2).



# **WARNING**

If brake pads were allowed to wear down until uncovering the metal substrate, metal-to-metal contact with the brake disc would lead to rattle and the brake calliper sparking; this would result in loss of braking and brake disc damage, causing a dangerous riding condition.

When the lining material of any one of the brake pads [whether front (3) or rear (4)] is worn down to nearly **1.5** mm, or when one of the wear indicators is worn away, have both brake pads changed.

### **A WARNING**

To have them replaced, contact your **Moto Guzzi** Authorised Dealer.

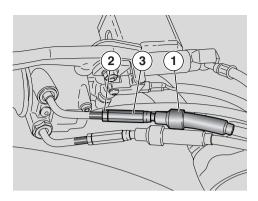
# ADJUSTING THE THROTTLE CONTROL

Carefully read page 45 (MAINTENANCE).

**NOTE** Halve maintenance intervals if you are riding in rainy or dusty conditions, on rough road surfaces or when the vehicle is used for racing.

Have the throttle control cables checked by a **Moto Guzzi** Authorised Dealer after the first 1000 km (625 mi) and then every 7500 km (4687 mi).

There should be **2-3** mm free play in the throttle twistgrip (measured at twistgrip edge).

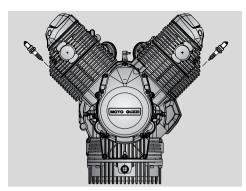


### If not so:

- Place the vehicle on the stand, see page 43 (PUTTING THE VEHICLE ON THE STAND).
- ◆ Withdraw the protection (1).
- ◆ Loosen the lock nut (2).
- ◆ Rotate the adjuster (3) until achieving the specified free play.
- ◆ When finished, tighten the lock nut (2) and check free play again.
- ◆ Refit the protection (1).

## **A** CAUTION

When finished, turn the handlebar to make sure its movement does not affect the engine idle rpm and check that the throttle grip - when opened and then released - returns smoothly to the closed position.



## **Spark plugs**

Carefully read page 45 (MAINTENANCE).

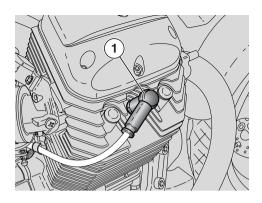
**NOTE** Halve maintenance intervals if you are riding in rainy or dusty conditions, on rough road surfaces or when the vehicle is used for racing.

## **A CAUTION**

Check, clean or change the spark plugs, one by one.

Change the spark plugs every 10000 km (6214 mi).

Periodically remove the spark plugs and clean them carefully, removing any carbon deposits; change them if necessary.



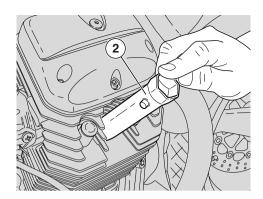
# **A** CAUTION

Always change the spark plugs as a set, even if only one needs replacing.

# **A WARNING**

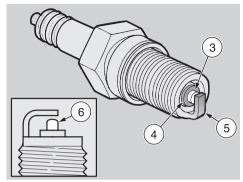
Before carrying out the following operations, let the engine and the silencer cool down to ambient temperature, in order to avoid burns.

The following procedures apply to both cylinders.



### Removal:

- ◆ Remove the spark plug cap (1).
- ◆ Remove any trace of dirt from the spark plug base.
- ◆ Fit the special socket included in the tool kit to the spark plug.
- Insert the spanner (2) with its handleincluded in the tool kit - into the hexagonal flat of the spark plug socket.
- Unscrew the spark plug and extract it from its seat, making sure no dust or dirt fall into the cylinder.



Inspection and cleaning:

## **A** CAUTION

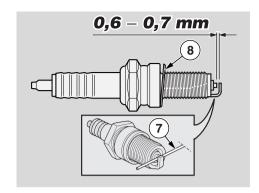
This vehicle is fitted with spark plugs with platinum electrodes.

Do not clean the spark plugs with a wire brush and/or abrasive products, use compressed air only.

### Kev:

- centre electrode (3),
- insulator (4);
- side electrode (5).
- Check electrodes and insulator for carbon deposits or traces of corrosion and blow them with compressed air if needed.

Always change a spark plug which has a cracked insulator, corroded electrodes, excessive deposits or when the tip (6) of the central electrode (3) is rounded from wear.



# **A** CAUTION

Make sure the new spark plug has the correct thread pitch and reach.

A thread reach which is too short will let carbon build up in the spark plug hole thread, leading to engine damage when the right spark plug is refitted subsequently.

Use recommended spark plugs only, see page 76 (TECHNICAL DATA). A spark plug of the wrong rating may shorten engine life and cause loss of performance.

Electrode gap should be checked using a wire gauge (7) to avoid damaging the platinum coating.

# **A CAUTION**

Never attempt to adjust electrode gap.

Electrode gap should be 0.6 - 0.7 mm. If not so, change the spark plug.

◆ Make sure that the washer (8) is in good condition.

### Installation:

- ◆ Position the washer (8) and screw in the spark plug by hand in order not to damage the thread.
- ◆ Tighten each spark plug by one half of a turn to compress the washer using the socket included in the tool kit.

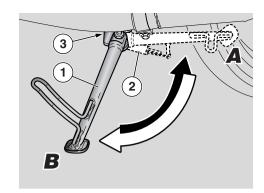
Spark plug tightening torque: 20 Nm (2 kgm).

## **A CAUTION**

The spark plug must be tightened firmly, otherwise the engine may overheat and severe damage may occur.

◆ Position the spark plug (2) cap (1) properly, to prevent it coming off due to engine vibration.

**NOTE** Repeat the above procedure for the spark plug of the other cylinder.



### CHECKING THE SIDE STAND

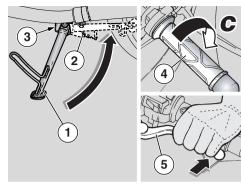
Carefully read page 45 (MAINTENANCE) and page 65 (CHECKING THE SWITCHES).

The side stand (1) has two positions:

- standard or folded up (at rest) (**Pos.A**);
- down (supporting the bike) (**Pos.B**). Operation of the stand is the rider's responsibility.

It is important that no components interfere with side stand (1) rotation.

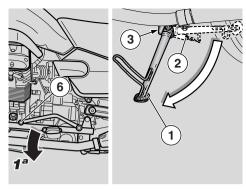
The springs (2) keep the stand in the desired position (extended or retracted).



### Check for the following:

- ◆ The springs (2) must not be damaged, worn, rusty or weakened.
- ◆ Make sure that the stand has no play in either position (extended and retracted).
- ◆ Lower the stand to make sure the springs let it extend completely.
- ◆ Pull the stand midway up and let go to make sure the springs let it retract completely.
- ◆ The side stand must rotate freely, if necessary grease the joint, see p.page 79 (LUBRICANT CHART).

The side stand (1) is equipped with a safety switch (3) that inhibits ignition or stops the engine whenever a gear is engaged while the side stand (1) is down.



To determine proper operation of the safety switch (3), proceed as follows:

- Sit astride the vehicle.
- ◆ Fold up the side stand (1).
- ◆ Start the engine, 36 page (STARTING).
- ◆ Release the throttle twistgrip (Pos.C), let engine idle and then pull in the clutch lever (5).
- ◆ Push down the gear change lever (6) to engage the first gear.
- ◆ Lower the side stand (1) to operate the safety switch (3).

## The following happens:

- the engine must stop:

If the engine keeps running, contact a Moto Guzzi Authorised Dealer.

#### **BATTERY**

45 Carefully read page (MAINTENANCE).

Check battery fluid level and terminal tightening after the first 1000 km (625 miles) and every 6000 km (3750 miles) afterwards.

### **A WARNING**

Risk of fire.

Keep fuel and other flammable substances away from electric components.

Battery fluid is toxic and corrosive: it contains sulphuric acid and contact with skin will cause severe burns. Wear protective clothing and a face or eye protection before servicing the battery. In case of contact with skin, rinse with plenty of fresh water.

In case of contact with eyes, rinse with plenty of water for fifteen minutes and contact an eye specialist without delay.

If battery fluid is accidentally swallowed, drink abundant water or milk, then continue with magnesia milk or vegetable oil and seek medical advice immediately.

The battery gives off explosive gases and must be kept away from flames and sources of ignition or heat; do not smoke near the battery.

Provide proper ventilation while the battery is under charging or in use and do not inhale the gases produced by the battery during the charging process.

KEEP AWAY FROM CHILDREN.

Avoid leaning the vehicle at steep angles or you might spill battery fluid.

# **A WARNING**

Never invert the battery cables.

Ensure that the ignition switch is in position "> " before connecting or disconnecting the battery, otherwise components miaht some damage.Connect the positive cable (+) first and then the negative cable (-). Disconnect in the reverse order.

Battery fluid is corrosive.

Do not spill it, especially on plastic parts.

If you have installed a "MAINTENANCE-FREE" battery, use a specific battery charger to recharge it (this will be the constant voltage/amperage or constant voltage type).

Using a conventional battery charger might damage your maintenance-free battery.

### LONG INACTIVITY OF THE **BATTERY**

If the vehicle remains unused for more than fifteen days, it is necessary to recharge the battery, in order to prevent sulphation, see page 63 (CHARGING THE BATTERY).

◆ Remove the battery, see page 62 (REMOVING THE BATTERY) and store it in a cool, dry place.

To avoid degradation in the wintertime or while the vehicle is stored away, check battery charge at regular intervals (monthly).

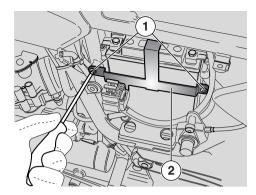
◆ Recharge the battery fully at a normal charge rate, see page 63 (CHARGING THE BATTERY).

If you are leaving the battery installed to the vehicle, disconnect the cables from the terminals.

### CHECKING AND CLEANING THE **TERMINALS**

### Carefully read page 61 (BATTERY).

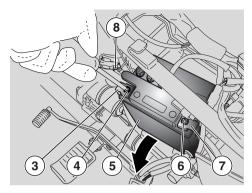
- ◆ Ensure the ignition switch is in the "⋈" position.
- ◆ Remove the rider seat, see page 20 (UNLOCKING/LOCKING THE SEAT).
- ◆ Remove the left side body panel, see page 53 (REMOVING THE SIDE BODY PANELS).
- ◆ Unscrew the two retaining screws (1) and remove bracket (2).



- Make sure that the cable terminals and the battery terminals are:
- in good condition (and not corroded or covered with deposits):
- covered with neutral grease or Vaseline.

### If necessary:

- ◆ Remove the battery, see page 62 (REMOVING THE BATTERY).
- ◆ Clean off cable and battery terminals with a wire brush to remove all traces of corrosion.
- ◆ Install the battery, see page 64 (INSTALLING THE BATTERY).



### REMOVING THE BATTERY

# **A CAUTION**

When the battery is removed, the digital clock is automatically reset. For setting instructions, see page (MULTIFUNCTION DIGITAL DISPLAY).

## Carefully read page 61 (BATTERY).

- ◆ Make sure that the ignition switch is in position "> ".
- ◆ Remove the rider seat, see page 20 (UNLOCKING/LOCKING THE SEAT).
- ◆ Remove the left side body panel, see page 53 (REMOVING THE SIDE BODY PANELS).
- ◆ Unscrew the two retaining screws (1) and remove bracket (2).
- ◆ Release and remove the negative (-) terminal screw (4).
- ◆ Move aside the negative cable (3).

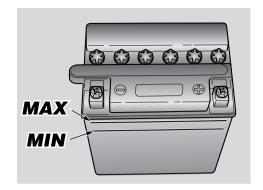
- ◆ Release and remove the positive (+) terminal screw (6).
- ◆ Move aside the positive cable (7).
- ◆ Disconnect the battery breather hose (8)
- ◆ Grasp the battery (5) firmly and lift it out of its compartment.

# **A WARNING**

Once removed, the battery must be stored in a safe place and kept away from children.

- ◆ Place the battery on a flat surface, in a cool and dry place.
- Fit the bracket (2) and refit the screws (1).
- Refit the left side body panel, see page 53 (REMOVING THE SIDE BODY PANELS).
- ◆ Refit the rider seat, see page 20 (UNLOCKING/LOCKING THE SEAT).

**NOTE** For the installation of the battery, see page 64 (INSTALLING THE BATTERY).



# CHECKING BATTERY FLUID LEVEL

To check the battery fluid level:

 Make sure that battery fluid level is between the "MIN"and "MAX" marks on the battery.

If not so:

◆ Remove the battery caps.

# **A CAUTION**

Top up with distilled water only. Do not exceed the "MAX" mark, because battery fluid expands when the battery is under charging.

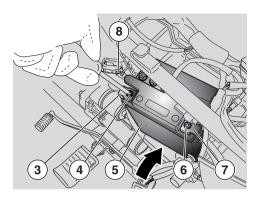
 Add distilled water until achieving correct level.

### **CHARGING THE BATTERY**

- ◆ Remove the battery, see page 62 (REMOVING THE BATTERY).
- ◆ Remove the battery caps.
- ◆ Check battery fluid level, see at the side (CHECKING BATTERY FLUID LEVEL).
- ◆ Connect the battery to a battery charger.
- ◆ Recommended charge rate is 1/10th of battery capacity.
- After charging the battery, check battery fluid level again and top up with distilled water if needed.
- ◆ Refit the caps.

## **A WARNING**

When you disconnect the battery charger, allow 5-10 minutes before refitting the battery, as it will keep producing gas for a few minutes.



### **INSTALLING THE BATTERY**

## Carefully read page 61 (BATTERY).

- ◆ Ensure the ignition switch is in the "⋈" position.
- ◆ Remove the rider seat, see page 20 (UNLOCKING/LOCKING THE SEAT).
- Remove the left side body panel, see page 53 (REMOVING THE SIDE BODY PANELS).
- ◆ Lift the battery retaining bracket (2) taking care not to scratch the tank (if necessary, protect the tank with soft cloth).

**NOTE** Place the battery (5) with the terminals pointing to the left side of the vehicle.

- Partially install the battery (5) into its seat.
- ◆ Connect the battery breather hose.

# **WARNING**

Upon reassembly, connect the positive cable (+) first and then the negative cable (-).

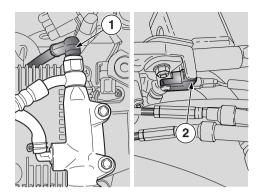
- ◆ Connect the positive (+) cable by tightening the terminal screw (6).
- ◆ Connect the negative (-) cable by tightening the terminal screw (4).
- ◆ Coat the terminals of cables and battery with neutral grease or Vaseline.
- ◆ Install the battery in the correct position, fully into its seat.

- Refit the bracket (2) and secure it with the screws (1).
- ◆ Refit the left side body panel, see page 53 (REMOVING THE SIDE BODY PANELS).

## **A** CAUTION

When the battery is removed, the digital clock is automatically reset. For setting instructions, see page 15 (MULTIFUNCTION DIGITAL DISPLAY).

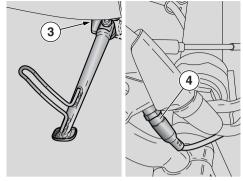
◆ Refit the rider seat, see page 20 (UNLOCKING/LOCKING THE SEAT).



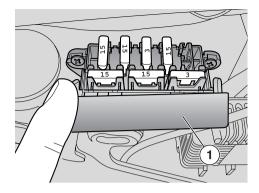
#### **CHECKING THE SWITCHES** 45 Carefully read page (MAINTENANCE).

### The vehicle is equipped with four switches:

- 1) Stop light switch on the rear brake control lever;
- 2) Stop light switch on the front brake control lever:
- 3) Safety switch on the side stand;
- Switch on the clutch lever.



- ◆ Clean the switch if caked with dirt or mud. The pin must move freely and return automatically to its initial position.
- Make sure that the cables are connected. correctly.



### **CHANGING THE FUSES**

Carefully 45 read page (MAINTENANCE).

## **A CAUTION**

Do not repair faulty fuses.

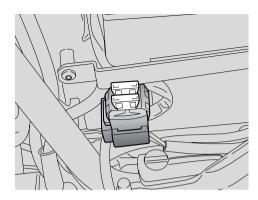
Never use a fuse of a rating other than specified.

This could damage the electric system or cause a short circuit, with the risk of fire.

**NOTE** If a fuse blows repeatedly, there might be a short circuit or an overload in the electric system.

In this case it is advisable to contact a Moto Guzzi Authorised Dealer.

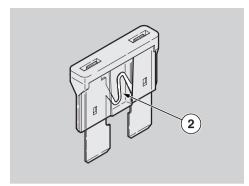
Checking the fuses is recommended whenever an electric component fails to operate or is malfunctioning, or when the engine does not start.



Check the auxiliary fuses first and then the main fuses.

## Check as follows:

- ◆ Set the ignition switch to " ⋈ ", to avoid an accidental short circuit.
- ◆ Remove the rider seat, see page 20 (UNLOCKING/LOCKING THE SEAT).
- Remove the side body panels, see page 53 (REMOVING THE SIDE BODY PANELS).
- Open the cover of the auxiliary fuse box (1).
- Extract and check the fuses one by one a divided link bar (2) means that the fuse is blown.
- Before replacing a fuse, identify the cause of the failure, if possible.
- Replace the blown fuse with a new one with equal current rating.

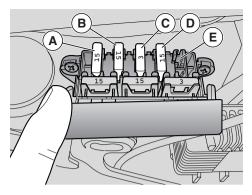


**NOTE** When you use one of the spare fuses, remember to add a new spare fuse into the proper seat.

◆ Repeat the above operations for the main fuses.

**NOTE** Removing the 30A fuses resets the digital clock.

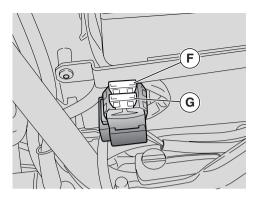
For setting instructions, see page 15 (MULTIFUNCTION DIGITAL DISPLAY).



### ARRANGEMENT OF AUXILIARY FUSES

- a) From key to safety lockout system/starting (15 A).
- b) From key to lights, stop light, horn, and turn indicators (15 A).
- c) From battery to fuel injection permanent power supply (3A).
- d) From battery to fuel injection (15A).
- e) Spare

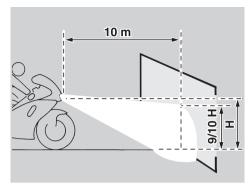
**NOTE** There are three spare fuses (3, 15, 15 A).



## **ARRANGEMENT OF MAIN FUSES**

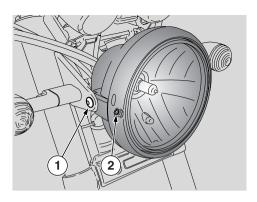
- f) From battery to voltage regulator (30A).
- g) From battery to key and C and D fuses (30A).

**NOTE** There is one spare fuse.



### **BEAM SETTING**

**NOTE** Beam inspection procedures may vary from country to country. Observe the law in force in the country of the user.



### **BEAM VERTICAL ADJUSTMENT**

- ◆ Place the vehicle upright.
- Slightly loosen screws (1) fixing the headlight and manually adjust headlight beam to the desired position.
- ◆ Once finished, tighten screws (1).

# **A** CAUTION

On reassembly, tighten the screws (1) moderately to avoid damage to the plastic material.

When finished:

# **A WARNING**

Check for correct beam vertical setting.

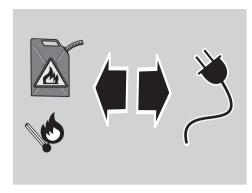
### **BEAM HORIZONTAL ADJUSTMENT**

- Place the vehicle on the stand, see page 43 (PUTTING THE VEHICLE ON THE STAND).
- ◆ Turn the screw (2) using a screwdriver until obtaining the desired beam setting.

### When finished:

## **A WARNING**

Check for correct beam vertical setting.



### **BULBS**

Carefully read page 45 (MAINTENANCE).

# **A WARNING**

Risk of fire.

Keep fuel and other flammable substances away from electric components.



# **A** CAUTION

Before proceeding to change a bulb, set the ignition switch to "A" and allow some time for the bulb to cool down.

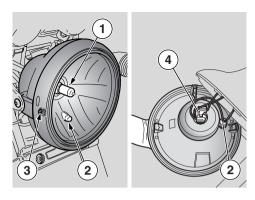
Wear clean gloves or use a clean, dry cloth to handle the new bulb.

Do not put your fingerprints on the bulb, as this may lead to overheating and failure.

If you have handled the bulb with bare hands, clean it with alcohol to avoid any damage.

DO NOT PULL ON THE WIRES.

**NOTE** Before changing a bulb, check the fuses, see page 65 (CHANGING THE FUSES).



# CHANGING THE HEADLIGHT BULBS

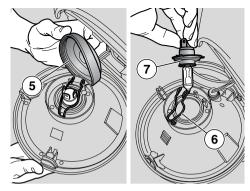
Carefully read page 68 (BULBS).

# The headlight accommodates:

- one low/high beam bulb (1) (upper);
- one parking light bulb (2) (lower).

### To change oil:

- Place the vehicle on the stand, see page 43 (PUTTING THE VEHICLE ON THE STAND).
- ◆ To remove the complete reflector from headlight body, loosen the screw (3).

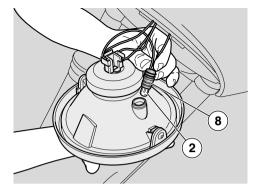


### LOW/HIGH BEAM BULB

- Do not pull on the wires to extract the bulb connector.
- Grasp the bulb connector (4) and pull to disconnect it from the bulb.
- ◆ Slip off the protection element (5) with your fingers.
- Unhook the two ends of the retaining spring (6) positioned on the bulb holder (7).
- ◆ Extract the bulb from its seat.

**NOTE** Insert the bulb into the bulb holder, making sure to match the locating slots.

◆ Fit a new bulb of equal rating.



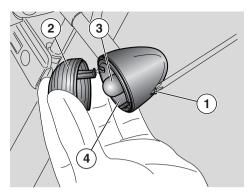
**PARKING LIGHT BULB** 

# **A** CAUTION

Do not pull on the wires to remove the bulb holder.

- ◆ Grasp the parking light (8) bulb holder and pull to extract.
- ◆ Remove the bulb (2) and fit a new bulb of equal rating.

**NOTE** Make sure the bulb is correctly located in the bulb holder.



### CHANGING THE FRONT AND REAR **TURN INDICATOR BULBS**

Carefully read page 68 (BULBS).

- ◆ Place the vehicle on the stand, see page 43 (PUTTING THE VEHICLE ON THE STAND).
- ◆ Unscrew and remove the screw (1).

# **A CAUTION**

While removing the lens, proceed carefully in order not to break the locating peg.

◆ Remove the lens (2).



### **A CAUTION**

Make sure that the lens locates correctly into its seat on refitting. Tighten the screw (1) moderately and carefully, to avoid damaging the lens.

- ◆ Press the bulb (3) slightly and rotate it anticlockwise.
- ◆ Extract the bulb (3) from its seat.

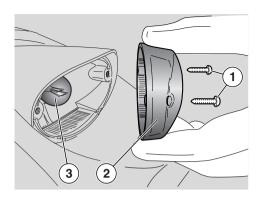
### **A** CAUTION

Insert the bulb into the bulb holder, so that the two pins slide into the slots in the holder.

◆ Fit a new bulb of equal rating.

## **A CAUTION**

If the bulb holder (4) comes off, refit it into its seat so that the chamfered opening of the holder matches the hole for the screw.



# CHANGING THE TAIL LIGHT BULB

Carefully read page 68 (BULBS).

Before changing a bulb, check the STOP light switches for proper operation, see page 65 (CHECKING THE SWITCHES).

- Place the vehicle on the stand, see page 43 (PUTTING THE VEHICLE ON THE STAND).
- ◆ Unscrew and remove the two screws (1).
- ◆ Remove the lens (2).
- ◆ Press the bulb (3) slightly and rotate it anticlockwise.
- ◆ Extract the bulb (3) from its seat.



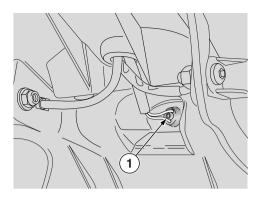
# **A CAUTION**

Insert the bulb into the bulb holder, so that the two pins slide into the slots in the holder.

Fit a new bulb of equal rating.

**NOTE** Make sure that the lens locates correctly into its seat on refitting.

Tighten the screws (2) moderately and carefully, to avoid damaging the lens.



# REPLACING THE NUMBER PLATE BULB

Carefully read page 68 (BULBS).

 Place the vehicle on the stand, see page 43 (PUTTING THE VEHICLE ON THE STAND).

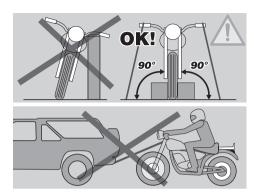
# **A CAUTION**

Do not pull on the wires to remove the bulb holder.

- ◆ Grasp the parking light (1) bulb holder and pull to extract.
- ◆ Remove the bulb and fit a new bulb of equal rating.

**NOTE** Make sure the bulb is correctly located in the bulb holder.

### **TRANSPORT**



# **WARNING**

Before transporting the vehicle, it is necessary to empty the fuel tank completely, see page 72 (DRAINING THE FUEL TANK), making sure that it is completely dry.

During transport, the vehicle must be firmly secured in an upright position to avoid fuel, oil and coolant leaks.

If stranded, do not have the vehicle towed - contact a roadside service firm instead.

### **DRAINING THE FUEL TANK**

Carefully read page 23 (FUEL).

# **WARNING**

Risk of fire.

Allow some time for the engine and muffler to cool down completely. Fuel vapours are harmful to human

health.

Ensure the area is well ventilated before proceeding.

Do not inhale fuel vapours.

Do not smoke or use open flames.

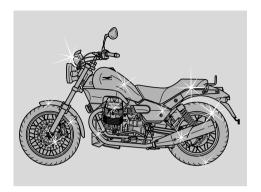
DO NOT RELEASE FUEL IN THE ENVIRONMENT.

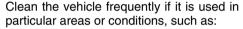
- Place the vehicle on the centre stand on firm and level ground.
- ◆ Stop the engine and wait until it has cooled down.
- ◆ Prepare a container large enough to hold the fuel in the tank and place it on the floor on the left side of the vehicle.
- ◆ Remove the fuel filler plug.
- ◆ Drain fuel using a manual pump or similar system. Do not damage the fuel pump assembly (fuel level sensor accommodated inside the tank).

# **A WARNING**

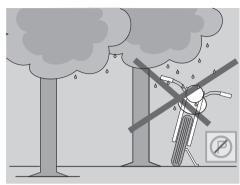
Refit the filler plug after draining all fuel.

### CLEANING



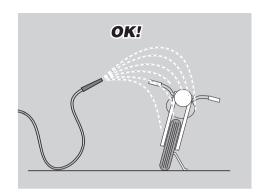


- ◆ Polluted areas (town and industrial areas).
- High salinity and humidity (sea areas, hot and damp climates).
- Seasonal/environmental conditions (road salt and chemicals spread on the roads in the wintertime).
- Make sure to clean off any industrial residue and pollutants, tar, dead insects, bird droppings, etc. from the body panels and fairings.
- Avoid parking the vehicle under trees. Resins, fruits or leaves falling from the trees may contain aggressive chemical substances that may damage the paintwork.



# **A WARNING**

After the vehicle has been washed, braking efficiency could be temporarily impaired because the friction surfaces of the braking systems may still be wet. Ride carefully as braking distance will be longer. Operate the brakes repeatedly to restore normal operation. Perform the recommended pre-ride checks, see page 35 (PRE-RIDE CHECKS CHART).



To remove dirt and mud from painted surfaces, use a low-pressure water jet on dirty areas, remove mud and dirt with a soft car body sponge soaked with abundant water and shampoo (2 - 4% parts of shampoo).

Then rinse with plenty of water and dry with chamois leather.

Clean the outer parts of the engine using a degreaser, small brushes and cloth.



# **A CAUTION**

Before washing the vehicle

- Empty the front and under-seat compartments. Remove the matting inside the under-seat compartment.
- 2) Make sure the compartments are properly closed.

## **A CAUTION**

Use only mild detergent to wash the vehicle, rinse with water, but do not use a water cleaner (see page 73 (CLEANING)).

## **A** CAUTION

To clean the lights, use a sponge soaked with water and a mild detergent, rubbing the surfaces delicately and rinsing frequently with plenty of water.

# **A CAUTION**

Polish with silicone wax only after carefully washing the vehicle.

Do not use polishing pastes on matt paints.

Do not wash the vehicle under the sun, especially in the summertime, when the body is still warm, as the shampoo will dry before you can rinse it away and could damage the paint.

Do not use fluids at a temperature higher than 40°C to clean the plastic components of the vehicle.

## **A CAUTION**

Do not aim high-pressure water/air jets or steam jets at the following parts: wheel hubs, controls on the right and left side of the handlebar, bearings, brake master cylinders, instruments and indicators, silencer exhaust, glove/tool kit compartment, ignition switch/steering lock.

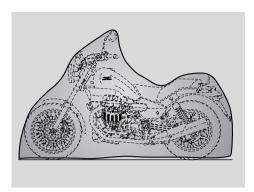
Do not use alcohol, fuel or solvents to clean the rubber and plastic parts: use only water and mild soap.

Do not use solvents or oil-derivated fluids (such as acetone, trichloroethylene, turpentine, fuel, thinners) to clean the seat. You can use detergents with surface-active agents up to 5% (mild soap, degreasing agents or alcohol).

Carefully dry the seat when clean.

# **A WARNING**

Do not apply protection waxes to the seat, or it may become slippery.



### **LONG PERIODS OF INACTIVITY**

## **A CAUTION**

If the vehicle remains unused for more than twenty days, disconnect the 30A fuses to avoid deterioration of the battery.

**NOTE** Removing the 30A fuses resets the digital clock. For setting instructions, see page 15 (MULTIFUNCTION DIGITAL DISPLAY).

When the vehicle is to remain unused for long periods, some precautions are necessary to avoid damage.

Do not postpone necessary repairs or you could forget them when you take the vehicle out of storage; a general check up is also recommended.

### Proceed as follows:

- ◆ Remove the battery, see page 62 (LONG INACTIVITY OF THE BATTERY) and page 62 (REMOVING THE BATTERY).
- ◆ Wash and dry the vehicle, see page 73 (CLEANING).
- ◆ Polish painted surfaces with wax.
- ◆ Inflate the tyres, see page 28 (TYRES).
- Store the vehicle in an unheated, dry place, away from sunlight, where temperature is reasonably steady.
- Wrap and tie a plastic bag around the exhaust pipe openings to keep moisture out.

**NOTE** Place the vehicle on stable supports to keep both wheels off the ground.

 Cover the vehicle avoiding plastic or waterproof covers.

#### **AFTER STORAGE**

**NOTE** Remove the plastic bags from the exhaust silencers.

- Remove the cover and clean the vehicle, see page 73 (CLEANING).
- ◆ Check battery charge, see page 63 (CHARGING THE BATTERY) and install it, see page 64 (INSTALLING THE BATTERY).
- ◆ Fill the fuel tank, see page 23 (FUEL).
- Perform the recommended pre-ride checks, see page 35 (PRE-RIDE CHECKS CHART).

### **A WARNING**

Test ride the vehicle at moderate speed in an area away from traffic.

### **TECHNICAL DATA**

**DIMENSIONS** Max. Length 2166 mm

Max. Width805 mmMax. height (handgrips)1068 mmSeat height770 mmWheelbase1467 mmMinimum ground clearance209 mm

Minimum ground clearance 209 mm
Dry weight 184 kg

**ENGINE** Type 90° traverse V-type, twin-cylinder, 4-stroke

Number of cylinders

Displacement 744 cc
Bore / stroke 80x74 mm
Compression ratio 9.6: 1
Starting electric

 $N^{\circ}$  Engine idling rpm 1100 ± 100 rpm

Clutch single disc, dry, with cush drive

Lubrication system pressure-fed system, adjustment through valves and lobe pump

Air filter cartridge, dry

Cooling air

GEARBOX Type mechanical, 5 gears with foot control on the left side of the engine

CAPACITIES Fuel (reserve included) 14 \( \ell \)

Fuel reserve 4  $\ell$ 

Engine oil oil and oil filter change 1780 cc

Gearbox fluid 1 ℓ

Fork fluid  $400 \pm 2.5$  cu cm (per leg)

Seats

Max vehicle load 180 kg (rider + passenger + luggage)

DRIVE RATIOS	Ratio 1st 2nd 3rd 4th 5th	Primary gears 16/21 = 1: 1.3125	Final 11/26 = 1: 2.3636 14/23 = 1: 1.6429 18/23 = 1: 1.2778 18/19 = 1: 1.0556 22/25 = 1: 0.9	Final ratio cardan 8/33 = 1:4.825
FUEL FEED SYSTEM	Type Throttle		electronic injection (Weber - Ma Ø 36 mm	arelli)
FUEL SUPPLY	Fuel		Premium-grade unleaded petrol, minimum octane rating 95 (ROM) and 85 (MON).	
FRAME	Type Steering head angle Trail		Tube frame with two cradles that can be disassembled, high-strength steel $27.5^{\circ}$ 138 mm	
SUSPENSIONS	Front Stroke Rear Wheel travel		hydraulic telescopic fork Marzo 130 mm die-cast light-alloy swinging arr adjustment 100 mm	cchi Ø 40 mm m, two shock absorbers with spring preload
BRAKES	Front Rear		stainless steel floating disc - opposed pistons stainless steel disc - Ø 260 mm	Ø 320 mm, callipers with four separate
WHEEL RIMS	Type Front Rear		spoke-type for tube tyres 2.5" x 18" 3.50" x 16"	
TYRES	Front Rear		Type: METZLER ME 33 - Size: Inflating pressure: 220 kpa Inflation pressure with passeng Type: METZLER ME 55 - Size: Inflating pressure: 220 kpa Inflation pressure with passeng	ler: + 30 kpa 130/90 - 16 67V

**SPARK PLUGS** Standard NGK BR8ES

> Spark plug electrode gap 0.6 - 0.7 mm

Resistor 5 k $\Omega$ 

**ELECTRIC SYSTEM** Battery 12 V - 14 Amp/h

> Main fuses 30 A

Auxiliary fuses 3 A - 10 A - 15 A Generator (with permanent magnet) 12 V - 330 W

**BULBS** Low beam/high beam (halogen) 12 V - 55/60 W H4

> Front parking light 12 V - 5 W

Turn indicator light 12 V - 10 W (RY 10 W orange lamp)

Stop/rear parking lights 12 V - 5/21 W

Instrument panel lighting LED EFI LED

Number plate light 12 V - 5 W

**WARNING LIGHTS** Neutral LED

> Turn indicators LED Fuel reserve LED High beam LED Engine oil pressure LED

#### **LUBRICANT CHART**

(Recommended) Engine oil (1800 cc): Magip RACING 4T 10 W 60.

As an alternative to recommended oils, top brand oils meeting or exceeding CCMC G-4 A.P.I. SG specifications can be used

(Recommended) Transmission oil (170 cc): See Agiip TRUCK GEAR 85 W 140.

(Recommended) Gearbox oil (1000 cc): Magip ROTRA MP/S 80 W 90.

(Recommended) Fork oil: Agip FORK 5W or Agip FORK 20W.

(Recommended) bearings and other lubrication points: Agip GREASE SM2.

As an alternative to recommended grease, use top brand rolling bearing grease that will resist a temperature range of -30°C +140°C, with dropping point 150°C - 230°C, high corrosion protection, good resistance to water and oxidisation.

Battery terminals protectant: Neutral grease or Vaseline.

# **A WARNING**

Use new brake fluid only. Do not mix different brands or types of oil unless you are sure that the different oil bases are compatible.

Recommended) brake fluid: the system is filled with BRAKE 5.1 DOT 4 (the braking system is also compatible with DOT 5).

As an alternative to the recommended product, top brand brake fluid meeting or exceeding SAE J1703, NHTSA 116 DOT 4, ISO 4925

specifications for synthetic brake fluid can be used.



#### **AUTHORISED DEALERS AND SERVICE CENTRES**



Thanks to ongoing technical updates and product-specific technical training, only **Moto Guzzi** Authorised Network engineers are familiar with every detail of this vehicle and have the special equipment required for correct maintenance and repair.

A vehicle kept in sleek running order is a reliable vehicle. Other key factors are pre-ride checks, proper maintenance at the recommended intervals and the use of **Moto Guzzi** sono Genuine Parts only!

To find contact information of the Authorised Dealer and/or Service Centre nearest to you, please consult the Yellow Pages or the map provided at our official web site:

# www.motoguzzi.it

When you demand **Moto Guzzi** Genuine Parts, you are purchasing products that have been developed and tested as early as the vehicle design stage. **Moto Guzzi** Genuine Parts systematically undergo strict quality control procedures to ensure total reliability and a long service life.

Moto Guzzi S.p.A. wishes to thank you for purchasing this vehicle and recommends the following:

- Do not release oil, fuel, polluting substances and components into the environment.
- Do not keep the engine running when not necessary.
- Avoid disturbing noise.
- Respect the environment.