MOTO GUZZI

GRISO

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USE+MAINTENANCE BOOK

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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.

⚠ 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 are 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:

OPT **optional**

catalytic silencer

VERSION:

I	**Italy**	SGP	**Singapore**
UK	**United Kingdom**	SLO	**Slovenia**
A	**Austria**	IL	**Israel**
P	**Portugal**	ROK	**South Korea**
SF	**Finland**	MAL	**Malaysia**
B	**Belgium**	RCH	**Chile**
D	**Germany**	HR	**Croatia**
F	**France**	AUS	**Australia**
E	**Spain**	USA	**United States of America**
GR	**Greece**	BR	**Brazil**
NL	**Holland**	RSA	**South Africa**
CH	**Switzerland**	NZ	**New Zealand**
DK	**Denmark**	CDN	**Canada**
J	**Japan**		

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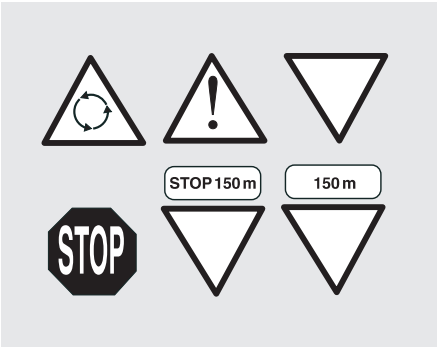
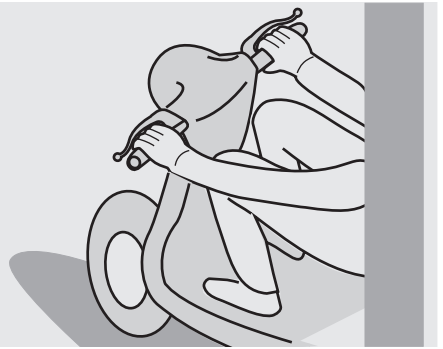
MOTO GUZZI

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.

The use of medicines, alcohol and drugs or psychotropic substances notably increases the risk of accidents.

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.

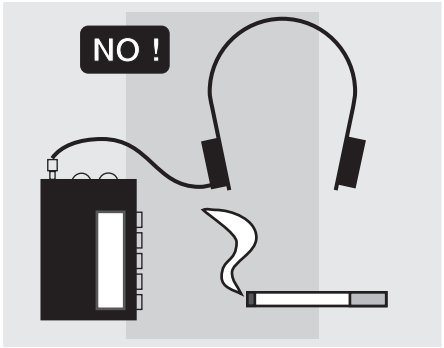
Avoid obstacles that could damage the vehicle or make you lose control of the vehicle.

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

⚠ 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.
Do not stand up or stretch your limbs while riding.

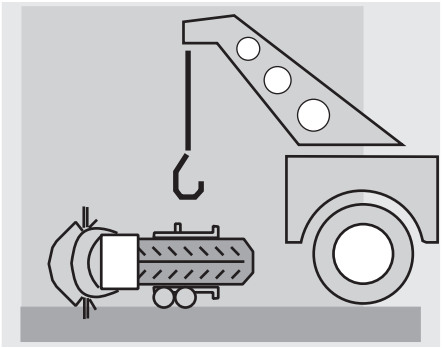
Do not stand up or stretch your limbs while riding.



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, fuel and coolant 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.



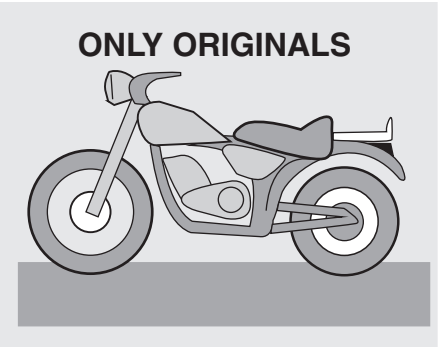
If in doubt, have the vehicle inspected at a **Moto Guzzi** Authorised Dealer and ask them to carefully check the frame, handlebars, suspensions, safety parts and all devices whose inspection is best left to a skilled mechanic.

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.



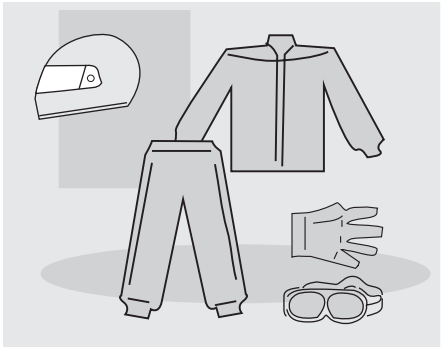
Making any modifications to the vehicle and/or removing the original components can adversely affect vehicle performance and safety or make it illegal to ride.

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.

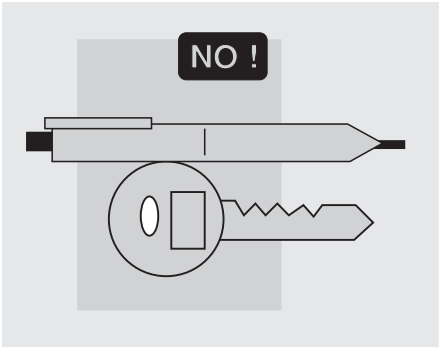


CLOTHING

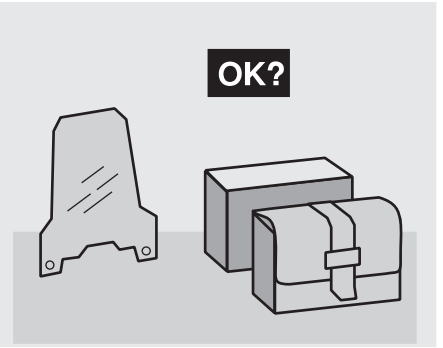
Always wear and fasten your helmet correctly before moving off. Make sure your helmet complies with applicable regulations, is not damaged, is the right size and keep the visor clean.

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).



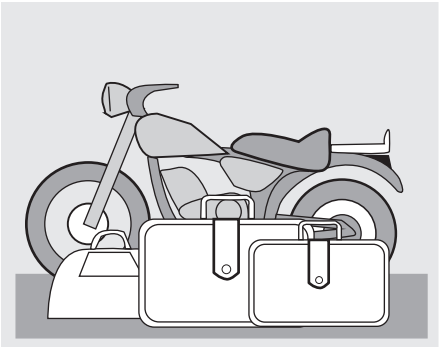
ACCESSORIES

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.



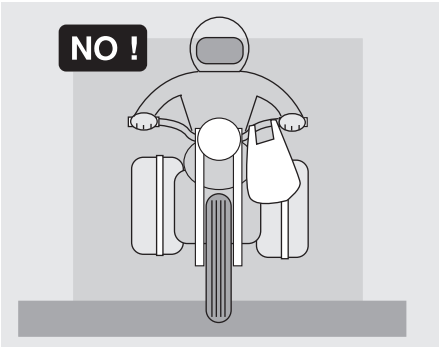
Make sure any accessories installed are fastened securely to the vehicle and will not affect safety during riding.

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.

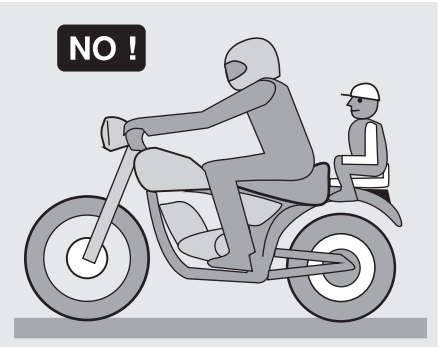
LOAD

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.

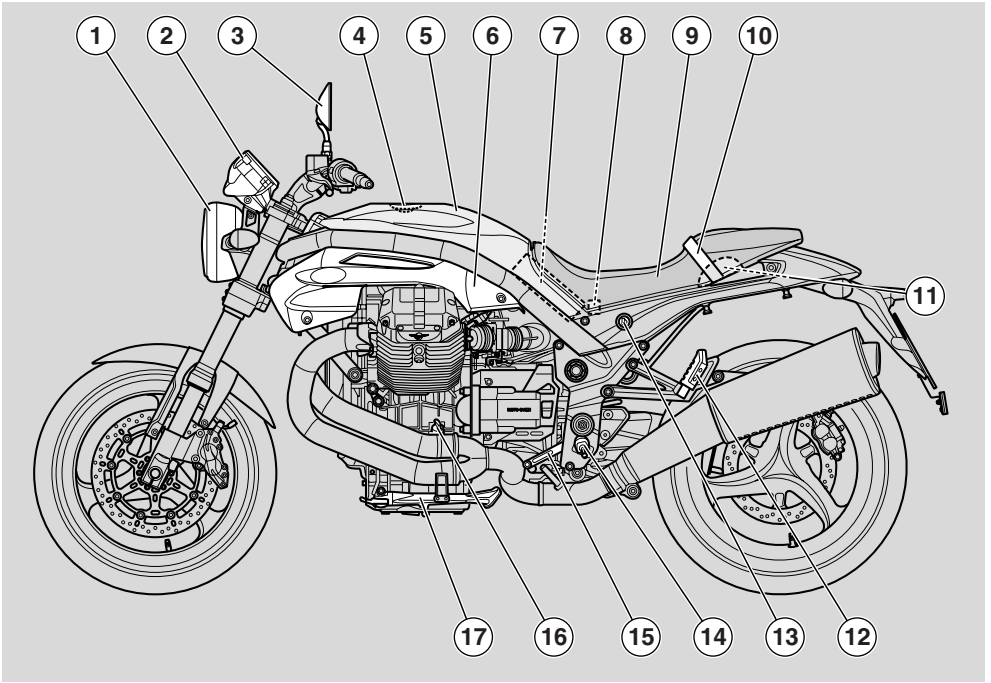
Do not carry any bags which protrude too much over luggage rack or cover the lights, horn or indicators.

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.

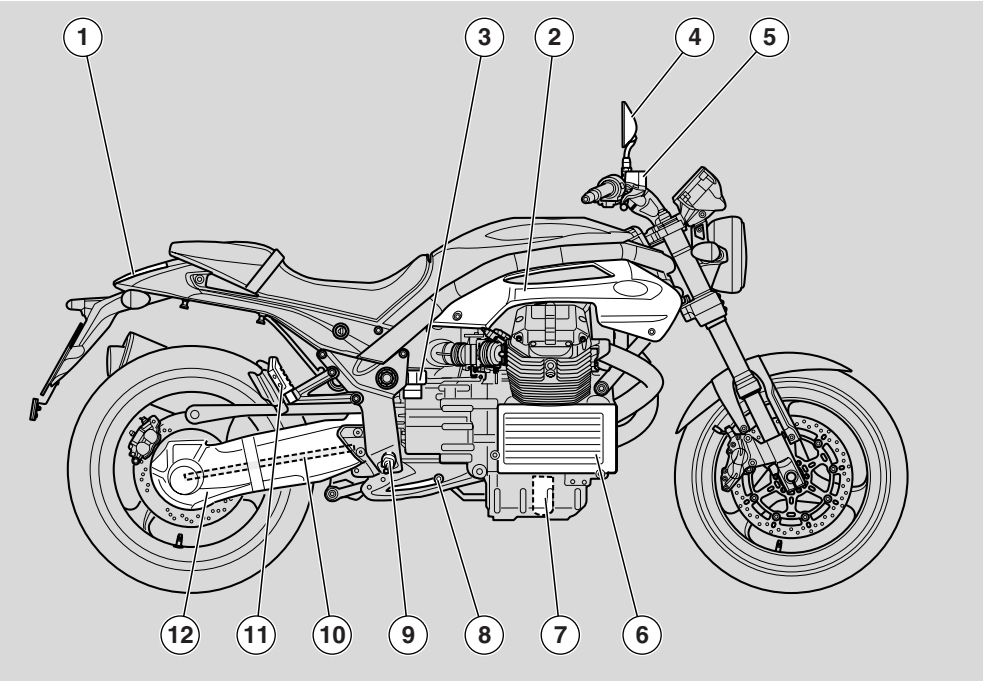
The overloaded vehicle will become unstable and handle poorly.

POSITION OF KEY COMPONENTS



KEY

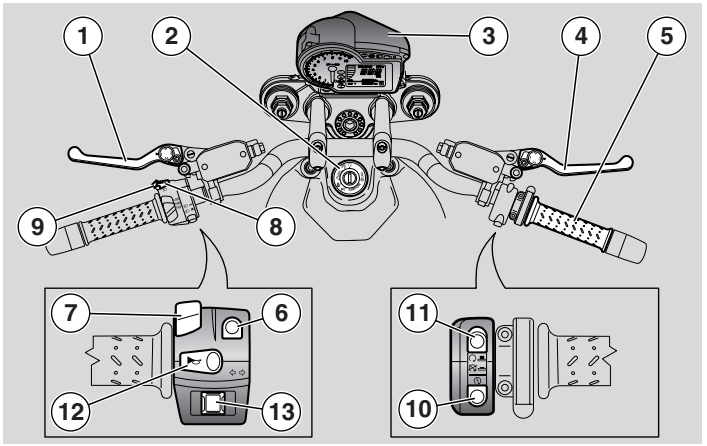
1) Headlight
2) Instrument panel
3) Left rear-view mirror
4) Fuel tank filler plug
5) Fuel tank
6) Left side body panel
7) Battery
8) Main fuse carrier (30A)
9) Passenger/rider seat
10) Passenger grab strap
11) Tool kit compartment
12) Left passenger footrest
13) Seat lock
14) Left rider footrest
15) Gear shift lever
16) Engine oil dipstick
17) Side stand



KEY

1) Tail light
2) Right side body panel
3) Rear brake fluid reservoir
4) Right rear-view mirror
5) Front brake fluid reservoir
6) Oil cooler
7) Engine oil filter
8) Rear brake lever
9) Right rider footrest
10) Cardan shaft
11) Right passenger footrest
12) Single-sided swinging arm

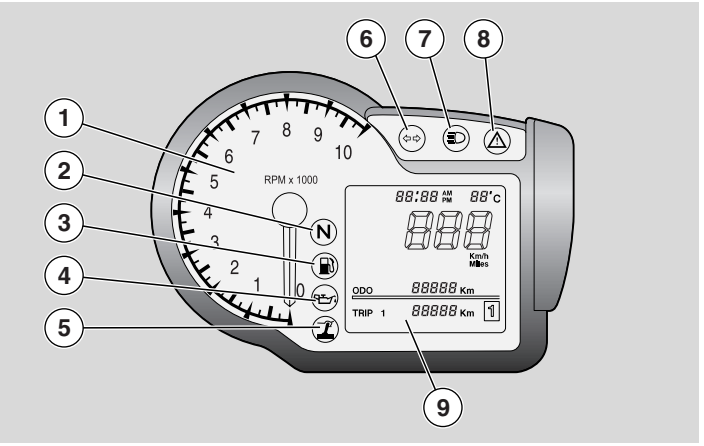
LOCATION OF INSTRUMENTS/CONTROLS



LOCATION OF INSTRUMENTS/CONTROLS - KEY

1) Clutch lever
2) Ignition switch/steering lock (○ - P⋮ - ⊠)
3) Instruments and indicators
4) Front brake lever
5) Throttle grip
6) Dimmer switch (≡D - ≡D)
7) Display functions switch
8) High beam flasher - passing button
9) SET push-button
10) Starter button (ⓘ)
11) Engine stop switch (○ - ⊠)
12) Horn button ( )
13) Turn indicator switch (⇦⇨)

INSTRUMENTS AND INDICATORS



LOCATION OF INSTRUMENTS/CONTROLS - KEY

1) Rev counter
2) Green neutral light (N)
3) Orange low fuel warning light ( )
4) Red engine oil pressure warning light ( )
5) Yellow side stand light ( )
6) Green turn indicator warning light ( )
7) Blue high beam warning light (≡D)
8) Red alarms/immobiliser warning light (⚠)
9) Multifunction digital display.

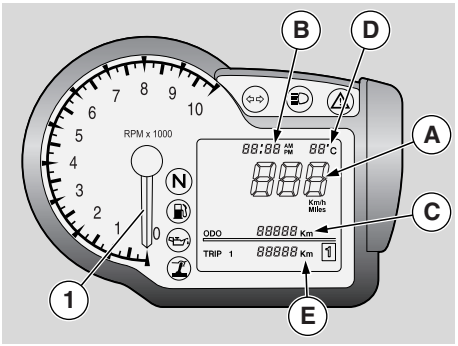
INSTRUMENTS AND INDICATORS TABLE

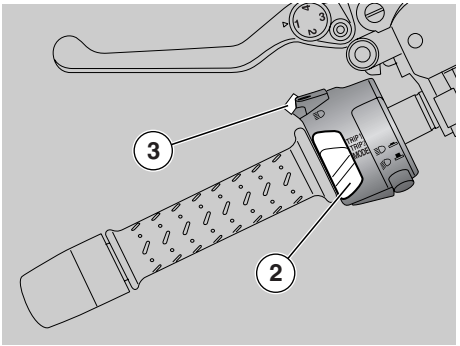
When the ignition key is turned to " ◯ " with the engine stopped, all warning lights come on for a LED check-up and go out after three seconds. If one or more warning lights do not come on at this stage, contact a **Moto Guzzi** Authorised Dealer.

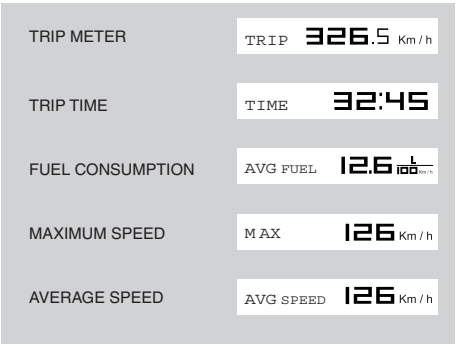
Description		Function
Multifunction digital display	**Speedometer (km/h - MPH)**	Displays current, average or maximum riding speed (in kilometres or miles) depending on presetting, see page 15 (MULTIFUNCTION COMPUTER).
	Odometer (KM - Mi)	Displays partial or total Km/miles run, see page 15 (MULTIFUNCTION COMPUTER).
	Ambient temperature (°C/°F)	Displays ambient temperature, the value is shown in the top right corner of the display. When temperature is close to 3° C (37 °F) the ice symbol should be displayed. Range in °C or °F is selected through the display, see page 15 (MULTIFUNCTION COMPUTER).
	Clock	Displays time (hour and minutes) as preset, see page 15 (MULTIFUNCTION COMPUTER).
	Battery voltage V BATT	Displays the battery voltage in Volts, see page 15 (MULTIFUNCTION COMPUTER).
	Lap timer	Displays the different lap times, as preset, see page 15 (MULTIFUNCTION COMPUTER).
	Diagnosis	In case a serious failure is detected, one that might jeopardise the vehicle or the rider's safety, the panel will show an icon indicating the failure cause (such as: oil pressure, maintenance intervals). **⚠ CAUTION** **If the wording " ⚠ SERVICE" appears during normal engine operation, it means that the ECU or the instrument panel have detected a failure. In most cases, the engine will keep running, although giving less performance. Immediately contact a Moto Guzzi Authorised Dealer.**
Revolution counter *rpm*		Indicates the number of revolutions of the engine per minute. **⚠ CAUTION** **Never exceed the engine max. speed rate, see page 48 (RUNNING-IN).**

Continued ▶

Description	Function
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 does not come on in this phase, contact a **Moto Guzzi** Authorised Dealer. **⚠ CAUTION** **If the engine oil pressure warning light remains on after the start or comes on during the normal operation of the engine, this means that the engine oil pressure in the circuit is insufficient. In this case, stop the engine immediately and contact a Moto Guzzi Authorised Dealer.**
Alarm led	Works as general alarm warning (excluded the engine oil pressure one) and gear shift indicator. **⚠ CAUTION** **If the LED " ⚠ " stays on after the engine is started or comes on during normal engine operation, it means that the control unit has detected a failure; immediately contact a Moto Guzzi Authorised Dealer.** **If LED warning light " ⚠ " flashes when the vehicle is off it means that immobiliser or optional anti-theft alarm have been enabled.**
Turn indicator warning light	Blinks when the turn indicators are on.
High beam warning light	Comes on when the high beam bulbs are on or when the headlight signaller is operated.
Low fuel warning light	Comes on when the quantity of fuel left in the tank is approx. 3.3 l. **In this case, top up as soon as possible, see page 28 (FUEL).**
Neutral indicator warning light	Comes on when the gear is in neutral.
Side stand down light	Turns on when the side stand is down.







MULTIFUNCTION COMPUTER

When you turn the ignition key to "⟳", the following instrument panel lights will turn on for 2 seconds:

- the "GRISO" logo

- all warning lights

- backlighting

Rev counter index (1) moves to maximum value, as set by the user.

After 2 seconds, all instruments will briefly show the current values of the corresponding parameters.

The display shows the following standard settings:

– speed (zone A)
– clock (zone B)
– odometer (zone C)
– ambient temperature (zone D)
– on-board computer and accessories functions (zone E)

CONTROLS

2) Switch with three positions: TRIP1 / TRIP2 / MODE
3) SET button; briefly press it to scroll the functions in the menus, press for several seconds to confirm selected option.

TRIP 1 AND 2

In TRIP 1 and 2 the data concerning trip 1 and 2 are shown.

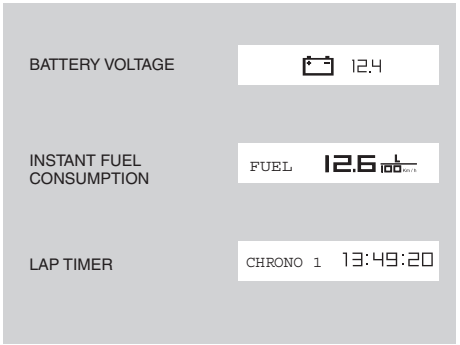
Indication of displayed trip meter is on the right, at the bottom.

Set selector (2) to the position corresponding to TRIP configuration to be displayed (TRIP 1 or TRIP 2).

At the bottom (F) are the following data:

– TRIP METER
– TRIP TIME
– FUEL CONSUMPTION
– MAXIMUM SPEED
– AVERAGE SPEED

Briefly press SET (3) to toggle between these parameters. Press it for several seconds to reset all data from selected TRIP meter.



MODE

MODE configuration features the functions allowing the user to interact with the system.

Set selector (2) to MODE position to select MODE configuration.

At the bottom (F), the following data are alternately displayed every time the SET button (3) is pressed:

– BATTERY VOLTAGE
– INSTANT FUEL CONSUMPTION
– LAP TIMER
– MENU (function disabled when vehicle is in motion)

BATTERY VOLTAGE and INSTANT FUEL CONSUMPTION do not allow interaction with the user.

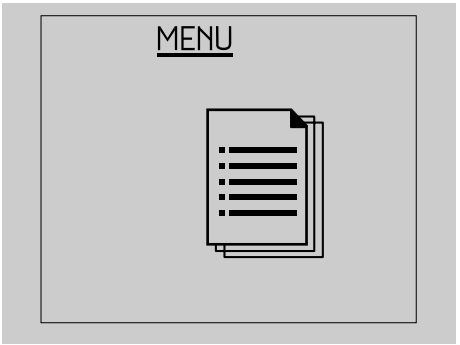
LAP TIME

From MODE configuration, briefly press SET button (3) and select LAP TIME function to use the lap timer. At the bottom (F) of the display "CHRONO" appears and the number of the last time measured is next to it, together with time measured.

Briefly press SET button (3) to start recording a new session with the lap timer.

Press again the SET button (3) within the first 10 seconds from when the timer starts, time measurement is cancelled and a new one is started. Press again the SET button (3) after 10 seconds have elapsed from timer start, time measurement is stopped, stored and a new one is started. Stop the time measurement session by pressing the SET (3) push-button for several seconds.

Acquisition ends as soon as 40 lap times are stored; “FULL” is displayed. Stop the vehicle, see page 49 (STOPPING) and enter the VIEW TIMES function of the LAP TIME menu to read the stored lap times.



MENU

If vehicle is stopped and selector is set to MODE, configuration menu of the MENU page can be accessed. To enter this function, confirm MENU selection [press SET button (3) for several seconds].

Configuration menu options are:

– EXIT
– SETTINGS
– LAP TIMER
– DIAGNOSTICS
– LANGUAGE

SETTINGS

When confirming SETTINGS selection (pressing SET button (3) for several seconds) the following options are displayed:

– EXIT
– TIME SETTINGS
– GEAR SHIFT INDICATOR
– BACK LIGHTING
– °C/°F
– 12H/24H
– CHANGE THE CODE
– CODE RECOVERY

Time settings

This mode allows you to set the clock. In this function, hours increase by one unit every time the SET button (3) is pressed; when value is 12 or 24, it goes back to 1 if the SET button (3) is pressed again.

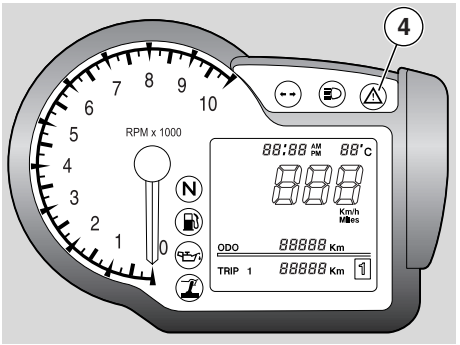
AM indication becomes PM or vice versa when time goes from 11:59 to 12:00.

Press the SET button (3) for several seconds to store the value and go to minutes setting mode. Minutes increase by one unit every time the SET button (3) is pressed; when value is 59, it goes back to 0 if the SET button (3) is pressed again.

Press the SET button (3) for several seconds to complete the procedure; the instrument panel sets back to SETTINGS menu.

Gear shift indicator

This function allows you to set the value for the Gear shift indicator threshold. As soon as you enter this function, the display shows “GEAR SHIFT INDICATOR” (if English is the selected language) and the rev counter scale indicates the threshold value.



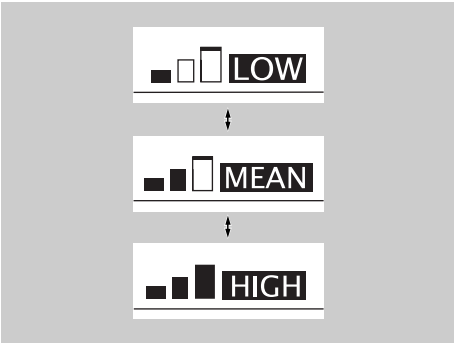
Briefly press the SET (3) push-button to increase threshold value by 100 RPM. Once the top limit has been reached, press the push-button again to decrease the value.

Press the SET button (3) for several seconds to complete the operation; the display sets back to SETTINGS menu.

When battery is connected for the first time, the instrument panel sets to running-in rpm value, the next time battery is connected it sets to last set value.

– RUNNING-IN RPM: 6500
– MINIMUM RPM (THAT CAN BE SET): 6000
– MAXIMUM RPM (THAT CAN BE SET): 8500

When the set threshold is exceeded, the alarm light (4) on the instrument panel flashes until the value goes below the threshold.



Back Lighting

This function allows you to set backlighting: three levels are available.

From this function, every time the SET button (3) is briefly pressed, the following icons are alternately displayed:

– LOW
– MEAN
– HIGH

Press the SET button (3) for several seconds to complete the operation; the instrument panel sets back to SETTINGS menu.

°C/°F

This function allows you to select the unit of measurement for ambient temperature. From this function, every time the SET button (3) is briefly pressed, the following two units of measurement are alternately displayed:

°C

°F

Press the SET button (3) for several seconds to store the data; the instrument panel sets back to SETTINGS menu.

12H/24H

This function allows you to select the time format. From this function, every time the SET button (3) is briefly pressed, the following formats are alternately displayed:

12H

24H

Press the SET button (3) for several seconds to store the data; the instrument panel sets back to SETTINGS menu.

Change the code

This function is used when the old code is available and is to be changed.

Within this function, the following message is displayed:

"INSERT THE OLD CODE"

As soon as the old code is acknowledged, the new code is requested; the following message is displayed:

"INSERT THE NEW CODE"

Once the operation is over, the display goes back to DIAGNOSIS menu. If you entered with the code, this operation will not be allowed.

Once the operation is over, the instrument panel goes back to SETTINGS menu.

Code recovery

This function is used when the old code is not available and you need to change it. In this case it is necessary to insert at least two keys in the ignition switch. The first key is already inserted, a second key is requested with the message:

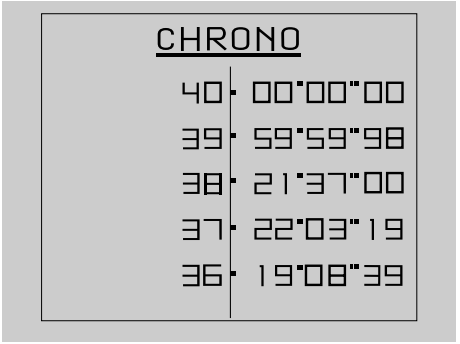
"INSERT THE 2nd KEY"

The instrument panel remains on in-between these two keys; if the second key is not inserted within 20 seconds the operation is aborted. When the second key is acknowledged, the new code is requested with the message:

"INSERT THE NEW CODE"

Once the operation is over, the display goes back to DIAGNOSIS menu. If you entered with the code, this operation will not be allowed.

Once the operation is over, the instrument panel goes back to SETTINGS menu.



LAP TIMER

When confirming LAP TIMER selection [pressing SET button (3) for several seconds] the following options are displayed:

– EXIT
– VIEW TIMES
– DELETE TIMES

View times

This function also displays the acquired lap times. Briefly press the SET button (3) to scroll the pages with the times measured; press it for several seconds to set the display to LAP TIME menu. If the battery is disconnected, stored times are lost.

Delete times

This function deletes the acquired lap times. Deletion should be confirmed. Once the operation is over, the display goes back to LAP TIMER menu.

DIAGNOSIS

This function interfaces with the systems fitted to the motorcycle to carry out diagnosis. To enable it, you need a special password only available to the **Moto Guzzi** Authorised Dealer.

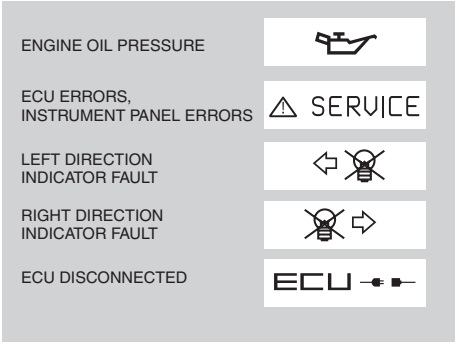
LANGUAGE

This function allows you to choose the language of any message displayed.

Available options are:

– ITALIANO
– ENGLISH
– FRANCAIS
– DEUTSCH
– ESPAGNOL

Once the operation is over, the display goes back to LANGUAGE menu.



SERVICE INTERVAL

When the scheduled service intervals are reached, an icon is displayed (symbol of a spanner).

Switches on first at: 1,500 km

Then switches on: every 10,000 km

ALARM DISPLAY

In case a serious failure is detected, one that might jeopardise the vehicle or the rider's safety, the display will show an icon indicating the failure cause, at the bottom (F).

Alarms are divided in two groups depending on their priority:

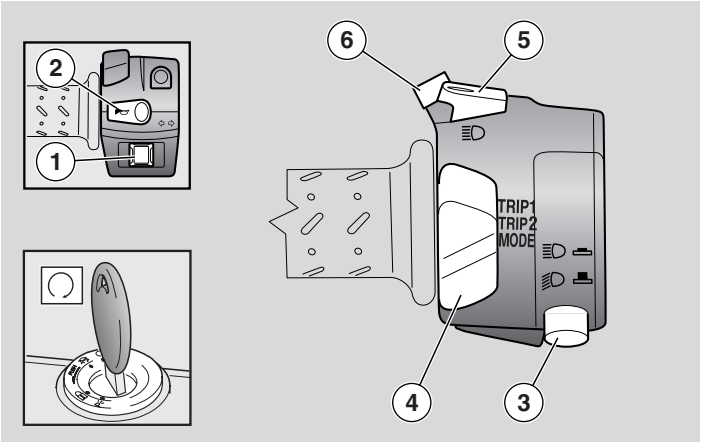
High priority: Engine oil pressure, Errors from control unit and instrument panel errors.

Low priority: Turn indicators and Control unit disconnect.

If there are many alarms with the same priority level, the relevant icons are displayed alternately.

High priority alarms do not allow you to display low priority ones.

If the alarm light and the SERVICE icon briefly come on, it does not mean that there is a failure.



CONTROLS ON LEFT HANDLEBAR

NOTE The electric components only operate when the ignition switch is in the "⟳" position.

1) **TURN 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.
2) **HORN BUTTON ( )**
   Press it to operate the horn.

NOTE The indicator LED flashing quickly indicates that one or both turn indicator bulbs are burnt out. For replacement instructions, please see page 77 (CHANGING THE FRONT AND REAR TURN INDICATOR BULBS).

3) **LIGHT DIMMER SWITCH**: Set it to "≡D" to operate the high beam; set it to "≡D" to operate the low beam.
4) **DISPLAY CONFIGURATION SELECTOR**:
   Select the displayed configuration, see page 15 (MULTIFUNCTION COMPUTER).
5) **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 flasher.

6) **SET BUTTON**
   Button to scroll and select the displayed menus, see page 15 (MULTIFUNCTION COMPUTER).

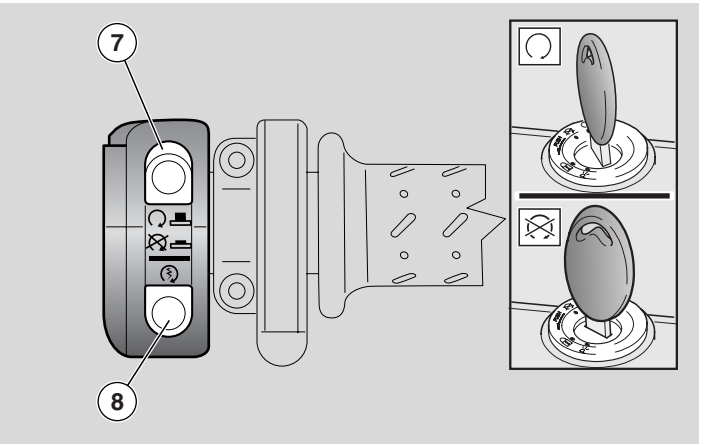
CONTROLS ON RIGHT HANDLEBAR

NOTE The electric components only operate when the ignition switch is in the "○" position.

7) ENGINE STOP SWITCH (○-⊗)

8) STARTER BUTTON (⊙)

When the starter button "⊙" is pressed, the starter motor will crank the engine. See page 43 (STARTING) for the starting procedure.



⚠ WARNING

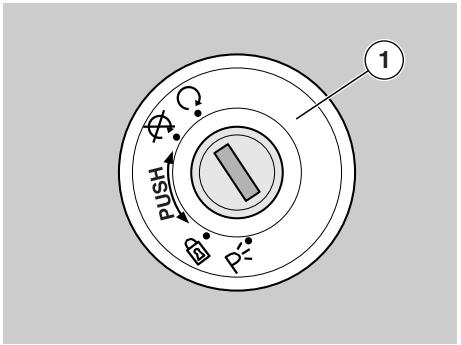
Do not operate the engine stop switch "○-⊗" while riding.

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

⚠ CAUTION

With the engine stopped and the ignition switch in position "○", the battery may wear down.

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



IGNITION SWITCH

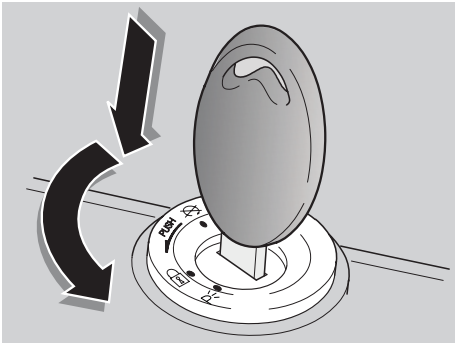
The ignition switch (1) is mounted to the top yoke of the steering shaft.

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).

NOTE Up to 4 keys can be stored. For this procedure it is advisable to contact a **Moto Guzzi** Authorised Dealer.



STEERING LOCK

⚠ WARNING

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

OPERATION

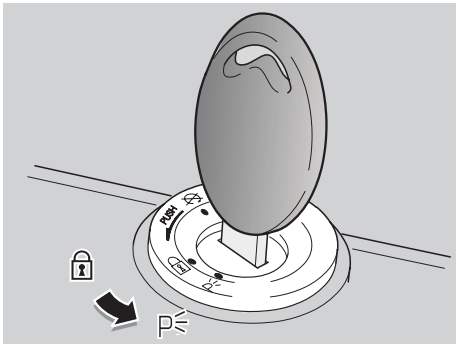
To lock the steering:

- Turn the handlebar fully to the left.
- Turn the key to " ".
- Press the key in and turn it to " " position.

NOTE If necessary, turn on the parking lights, see page 24 (PARKING LIGHTS).

- Remove 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.
	Neither the engine, nor the lights will operate.	It is possible to remove the key.
	The engine and the lights can be operated.	It is not possible to remove the key.
	The engine can not be started and the parking lights are on	It is possible to remove the key.



PARKING LIGHTS

The vehicle is equipped with front and rear parking lights. It is always recommended to park the vehicle in the suitable areas and in any case in lighted locations. If this is not possible, the parking lights are useful whenever it is necessary to park in a dark or poorly lit area and in any case to make the vehicle more visible.

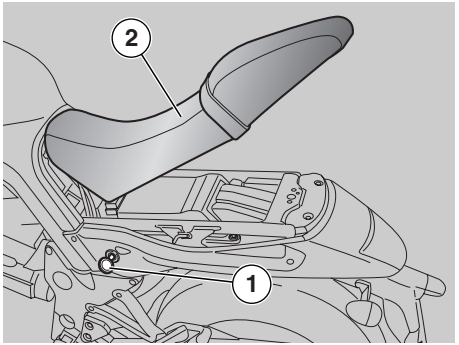
OPERATION

To turn the parking lights on:

- Lock the steering but do not remove the key (1), see page 23 (STEERING LOCK).
- Turn the key (1) to "P⇳" (PARKING) position.
- Check that both front and rear parking lights are on.
- Remove the key (1).

⚠ CAUTION

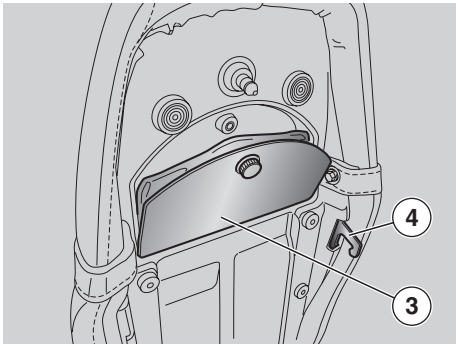
The parking lights drain the battery. Do not leave them on for long periods of time to avoid the battery from wearing down. A dead battery prevents you from starting the vehicle.



UNLOCKING/LOCKING THE SEAT

- Place the vehicle on the stand, see page 50 (PUTTING THE VEHICLE ON THE STAND).
- Insert the key (1) into the seat lock.
- Turn the key (1) clockwise and push softly onto the rear seat middle to facilitate pin release, then lift and slide out the seat (2) from behind.

NOTE Before lowering and locking the seat (2), make sure that you have not left the key in the tool kit compartment.



To lock the seat (2):

- Slide the seat front end into place.
- Lower the rear end and position the seat so that the two hooks (4) are correctly hooked to the frame fasteners.
- Push down on the middle of the rear end until the lock clicks shut.

⚠ WARNING

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

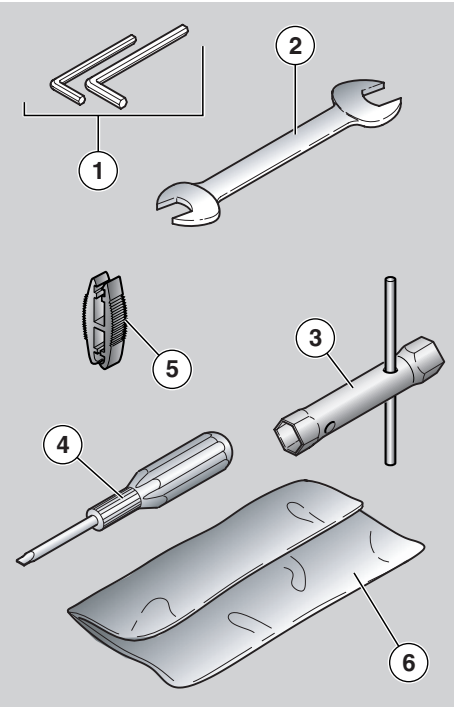
TOOL KIT COMPARTMENT

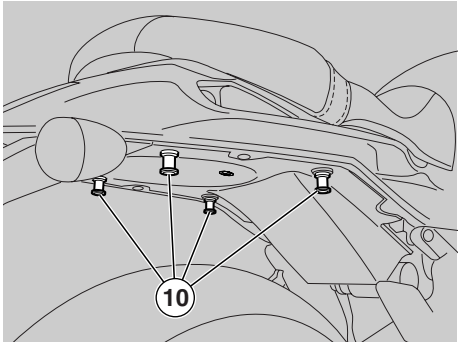
To gain access to the tool kit compartment:

- Remove the seat, see (UNLOCKING/LOCKING THE SEAT), in this page.
- Remove the cover (3).

The tool kit includes:

– 4, 5 mm bent Allen spanners (1);
– 10 - 13 mm double fork spanner (2);
– 21 - 22 mm socket spanner (3);
– double-ended cross-head/flat-blade screwdriver (4);
– fuse removing tool (5);
– tool box (6).





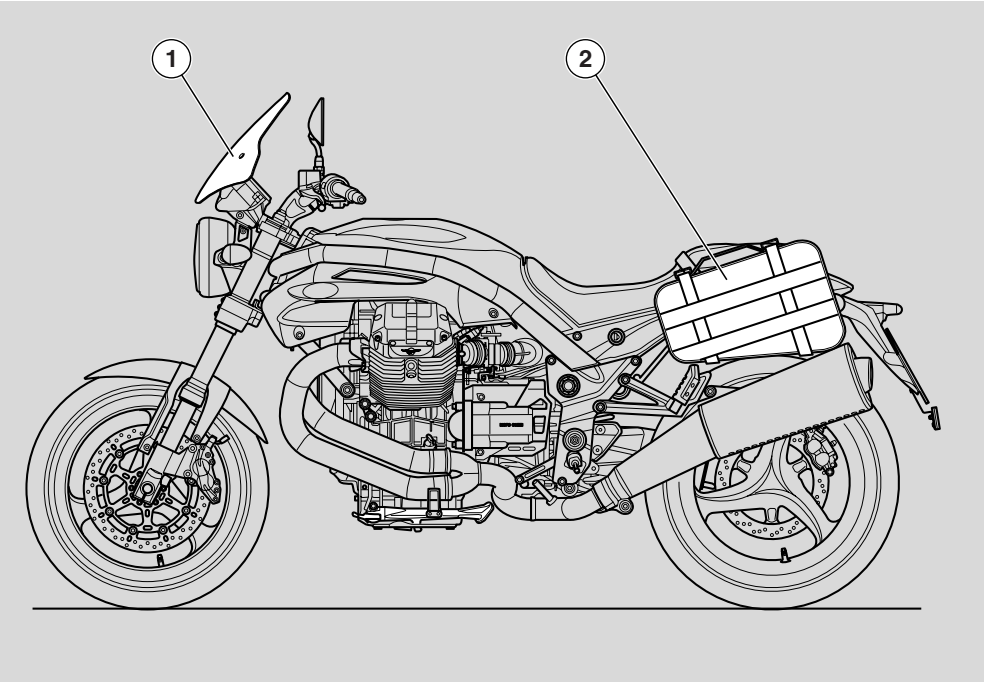
LUGGAGE ANCHOR POINTS

It is possible to fix a small luggage to the seat rear end, it can be positioned using elastic bands to be secured to the four elements (10).

Maximum allowed weight: 5 kg.

⚠ WARNING

Carry small luggage only and make sure it is fastened securely.



ACCESSORIES OPT

The following accessories are available:

1) headlight fairing
2) side panniers

– luggage rack
– luggage rack bag
– tank bag (two sizes available).

FUEL

⚠ WARNING

The fuel used in intern
al 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:

- Raise the flap (1).
- Insert the key (2) into the tank plug lock (3).
- Turn the key clockwise, pull and open the fuel flap.

FUEL TANK CAPACITY (reserve included): 17.2 ℓ

TANK RESERVE: 3.3 ℓ

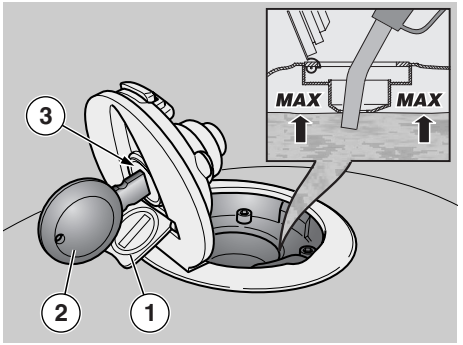
⚠ CAUTION

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.

⚠ 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:

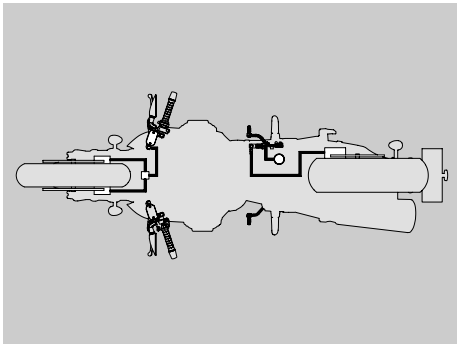
NOTE The plug can only be closed when the key (2) is inserted.

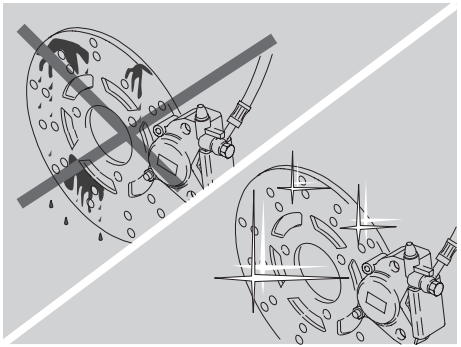
- With the key (2) inserted, press the plug and tighten.

⚠ WARNING

Make sure the plug is firmly closed.

- Remove the key (2).
- Close the flap (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.

⚠ 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 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

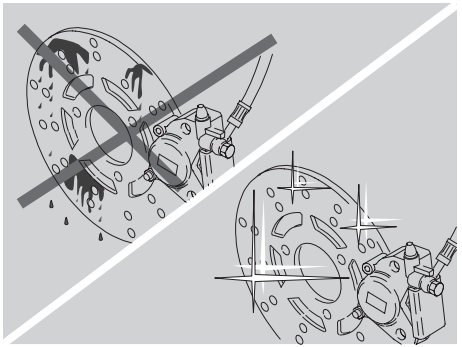
Ensure that the brake discs have not become contaminated with oil or grease, especially after maintenance or inspections.
Check that the brake hoses are not twisted or worn.
Prevent water or dust from accidentally getting into the circuit.
Wear latex gloves when servicing the hydraulic circuit.
Brake fluid can cause severe irritation in the event of contact with eyes or skin.

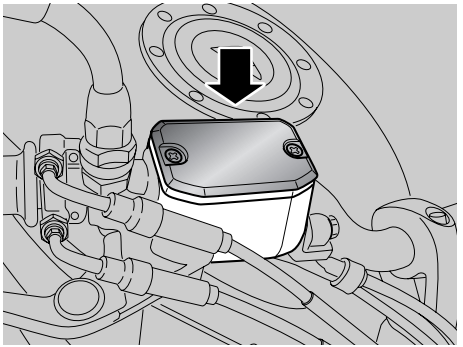
⚠ WARNING

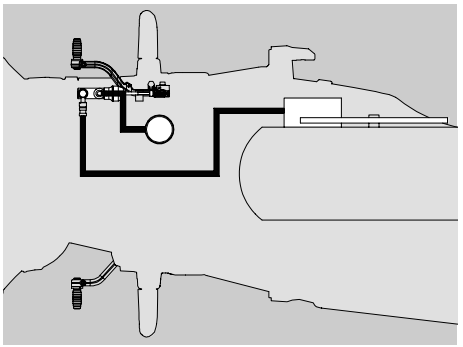
In the event of accidental contact, flush affected area thoroughly. If fluid has been spilled in the eyes, seek the assistance of an ophthalmologist or a doctor.
DO NOT RELEASE INTO THE ENVIRONMENT.
KEEP AWAY FROM CHILDREN.

⚠ CAUTION

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







DISC BRAKES

⚠ WARNING

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

A dirty disc 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 the brake fluid recommended in the lubricants table, see page 85 (LUBRICANT CHART).

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

The front brake is a twin-disc brake (one disc on either side of the wheel).

The rear brake uses a single disc (fitted to the right side of the wheel).

The following information applies to both braking systems.

Brake fluid level decreases as the brake pads wear down.

The front brake reservoir is located on the right handlebar, close to the front brake lever fitting.

The rear brake reservoir is located on the vehicle right side, close to the rear brake control lever.

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

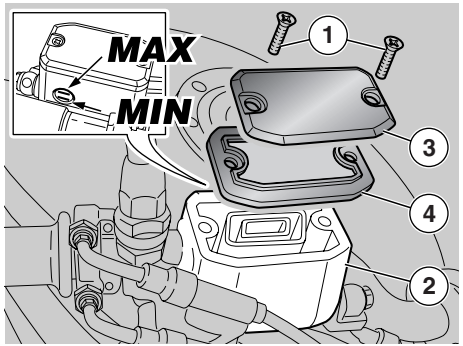
Check the brake discs for wear after the first 1500 km (930 mi) and then every 2000 km (1250 mi).

Before leaving, check brake fluid level in the reservoirs, see page 31 (FRONT BRAKE), page 32 (REAR BRAKE), and brake pad wear, see page 64 (CHECKING THE BRAKE PADS FOR WEAR).

Have the brake fluid changed every 20000 km (12500 mi) or every two years by a **Moto Guzzi** Authorised Dealer.

⚠ WARNING

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



FRONT BRAKE

CHECK

- Keep the vehicle upright, so as to keep the fluid in the reservoir (2) level with the plug (3).
- Make sure that the fluid level exceeds the "MIN" mark.
  MIN= minimum level

  MAX= maximum level

If the fluid is below the "**MIN**" mark:

⚠ CAUTION

Brake fluid level decreases as the brake pads wear down.

- Check brake pad wear, see page 64 (CHECKING THE BRAKE PADS FOR WEAR) and disc wear.

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

TOPPING UP

Carefully read page 29 (BRAKE FLUID - recommendations).

⚠ CAUTION

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 cross-head 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).

⚠ CAUTION

Do not rock the vehicle from side to side when topping up, or brake fluid may spill out.

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 reservoir (2) with recommended brake fluid, see page 85 (LUBRICANT CHART), until reaching correct level that is in-between the marks "**MIN**" and "**MAX**".

⚠ CAUTION

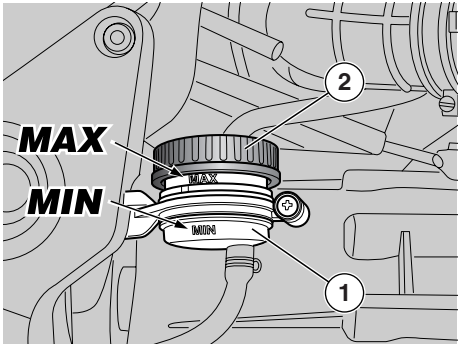
Do not exceed the "MAX" level mark.

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

- 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

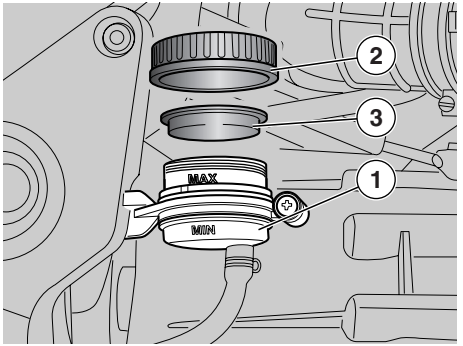
If the fluid is below the "**MIN**" mark:

⚠ CAUTION

Brake fluid level decreases as the brake pads wear down.

- Check brake pad wear, see page 64 (CHECKING THE BRAKE PADS FOR WEAR) and disc wear.

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



TOPPING UP

Carefully read page 29 (BRAKE FLUID - recommendations).

⚠ CAUTION

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

⚠ 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).

⚠ 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 reservoir (1) with recommended brake fluid, see page 85 (LUBRICANT CHART), until reaching correct level that is in-between the marks "**MIN**" and "**MAX**".

⚠ 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.

CLUTCH FLUID - recommendations

NOTE This vehicle is fitted with a hydraulically-controlled clutch.

⚠ CAUTION

Any sudden changes in play or hardness in the clutch lever are warning signs of problems with the hydraulic circuit.
Please contact a Moto Guzzi Authorised Dealer in case you have any doubts on the operation of the system and in case you are not able to carry out the normal checks.

⚠ CAUTION

Make sure the clutch hose is not twisted or worn.

Prevent water or dust from accidentally getting into the circuit.

Wear latex gloves when servicing the hydraulic circuit.

Clutch fluid is an irritant. Avoid contact with eyes or skin.

In the event of accidental contact, flush affected area thoroughly. Obtain medical attention or, if fluid has been spilled in the eyes, seek the assistance of an ophthalmologist.

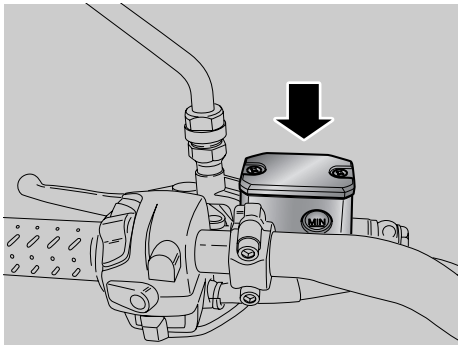
DO NOT RELEASE INTO THE ENVIRONMENT.

KEEP AWAY FROM CHILDREN.

When handling clutch fluid, take care not to spill it onto plastic or paint-finished parts or they will damage.

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

Use the fluid recommended in the lubricants table, see page 85 (LUBRICANT CHART).



The clutch reservoir is located on the left handlebar, close to the clutch lever fitting.

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

Before leaving, check the fluid level in the reservoir, see page 34 (CLUTCH), have it changed every two years by a **Moto Guzzi** Authorised Dealer.

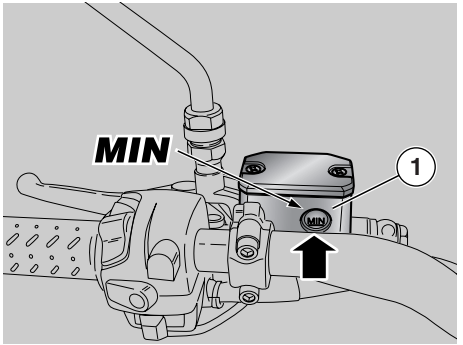
⚠ WARNING

Do not ride if the clutch hydraulic circuit is leaking.

CLUTCH

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

Every 10000 km (6250 mi) have the clutch inspected by a **Moto Guzzi** Authorised Dealer.

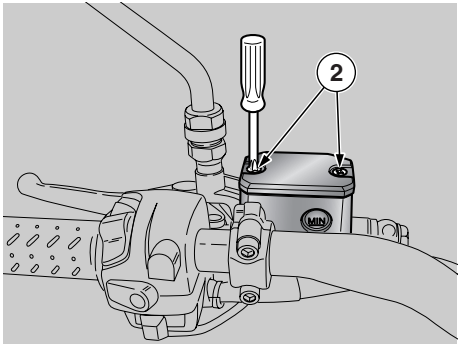


CHECK

- Place the vehicle on the stand, see page 50 (PUTTING THE VEHICLE ON THE STAND).
- Turn the handlebar partially to the right, so that the fluid inside the clutch reservoir is parallel to the reservoir edge (1) (see figure).
- Make sure that the fluid level exceeds the "**MIN**" mark.
- **MIN**= minimum level
- Top up if the fluid does not reach at least the "**MIN**" mark.

TOPPING UP

Carefully read page 33 (CLUTCH FLUID - recommendations).



⚠ CAUTION

Danger: clutch fluid could leak out. Never operate the clutch lever when the reservoir plug is loose or has been removed.

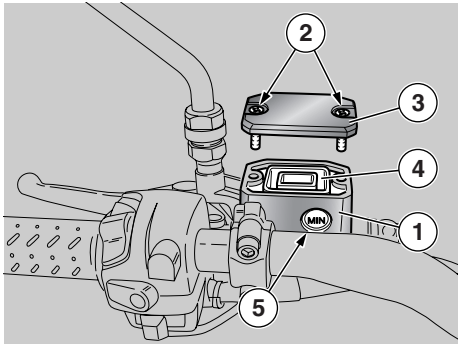
⚠ WARNING

Avoid long exposure of clutch fluid to air.
Clutch fluid is hygroscopic and will absorb moisture from the air.
Keep the clutch fluid reservoir open JUST LONG ENOUGH to top up level.

⚠ CAUTION

Place a cloth under the clutch reservoir to protect it from any fluid spillage.

- Unscrew the two screws (2) of the clutch fluid reservoir (1) using a small cross-head screwdriver.



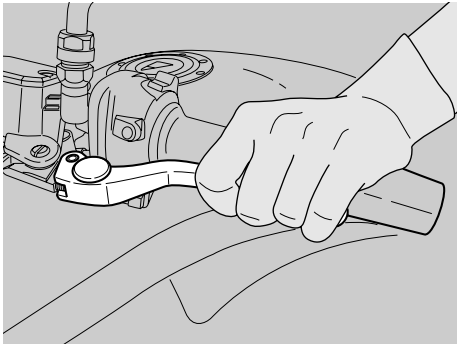
⚠ CAUTION

Do not rock the motorcycle from side to side when topping up or clutch fluid will spill out.
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.

- Raise and remove the plug (3) together with the screws (2).
- Remove the gasket (4).

NOTE As a reference to obtain "**MAX**" level, top up until fluid completely covers sight glass (5), keep the clutch reservoir upright.

- Top up reservoir (1) using recommended clutch fluid, see page 85 (LUBRICANT CHART), until reaching the correct level.



⚠ CAUTION

Do not exceed the "MAX" level mark.

- Fit back the gasket (4) in its seat correctly.
- Refit the cover (3).
- Fit and tighten the screws (2).

⚠ WARNING

Check the clutch for proper operation. If clutch lever travel is too long or in the event of clutch inefficiency, contact a Moto Guzzi Authorised Dealer, as the system may need bleeding.

TYRES

This vehicle is equipped with tubeless tyres.

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

⚠ WARNING

Check the inflation pressure at ambient temperature every two weeks.

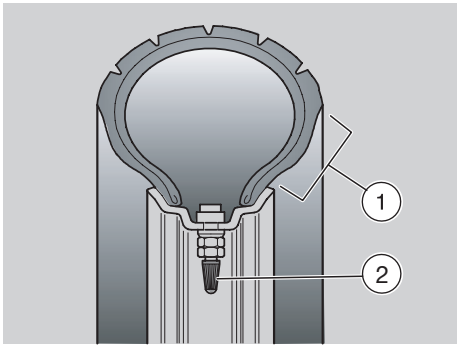
Check the conditions of the tyres and the inflation pressure at room temperature every 1500 km (930 mi), see page 82 (TECHNICAL DATA).

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 hard 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 hard braking.

Finally, the vehicle could skid during cornering.

⚠ 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.

⚠ WARNING

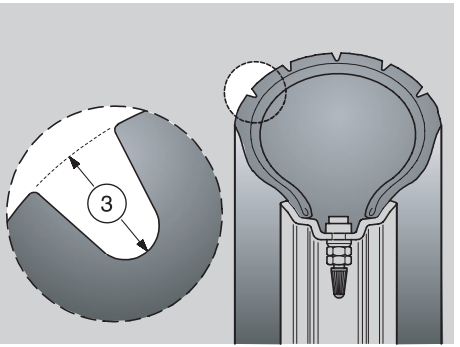
Spare tyres should be of the recommended type and model, see page 82 (TECHNICAL DATA); using different tyres then the specified ones negatively affects vehicle handling.

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 (USA 3 mm), anyway not less than required by the regulations in force in the country where the vehicle is used.

ENGINE OIL

⚠ 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

Put it in a sealed container and take it to the filling station where you usually buy it or to an oil salvage centre.

Wear latex gloves during servicing.

⚠ CAUTION

If the LED " " and the engine oil pressure icon " "come on during regular engine operation, it means that engine oil pressure in the circuit is low. If so, check engine oil level, see page 56 (CHECKING AND TOPPING UP ENGINE OIL LEVEL), should it be incorrect, immediately stop the engine and contact a Moto Guzzi Authorised Dealer.

⚠ CAUTION

If the engine oil pressure LED " " and the icon " ⚠ SERVICE" come on during engine normal operation, it means that the engine oil pressure sensor is faulty. In this case, check the engine oil level, see page 56 (CHECKING AND TOPPING UP ENGINE OIL LEVEL); if the level is not correct, contact a Moto Guzzi Authorised Dealer.

⚠ CAUTION

Proceed with care.

Do not spill the oil!

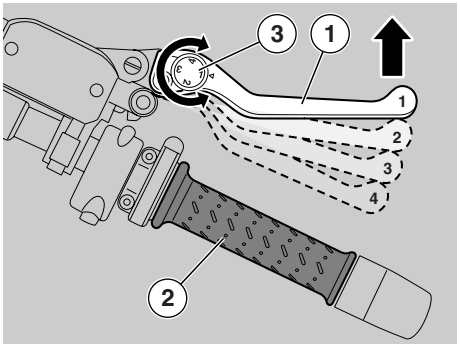
Take care not to smear any component, the area in which you are working and the surrounding area. Carefully remove any trace of oil.

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

Periodically check the engine oil level, see page 56 (CHECKING AND TOPPING UP ENGINE OIL LEVEL).

To change engine oil, see page 52 (SCHEDULED MAINTENANCE CHART) and page 57 (CHANGING ENGINE OIL AND OIL FILTER).

NOTE Use high quality oil, see page 85 (LUBRICANT CHART).



ADJUSTING THE FRONT BRAKE LEVER AND THE CLUTCH LEVER

The grab distance of the lever (1) [distance from the grip (2)] can be adjusted by rotating the adjuster (3).

Positions "**1**" and "**4**" correspond to an approximate lever-handgrip distance respectively of 105 and 85 mm.

Positions "**2**" and "**3**" correspond to intermediate distances.

◆ ★ Push the lever (1) forward and turn dial (3) until the required number matches the arrow.

CATALYTIC SILENCER

⚠ WARNING

Do not park the vehicle close to dried brushwood or in places where children are likely to come in contact with it, because the catalytic muffler reaches very high operating temperature. Pay utmost attention and avoid any contact until it has cooled down.

This vehicle fits a silencer with "platinum-palladium-rhodium" three-way metal catalytic converter.

This device provides for the oxidation of the CO (carbon monoxide) and of the HC (unburned hydrocarbons) contained in the exhaust gases, changing them into carbon dioxide and steam, respectively.

⚠ CAUTION

Use unleaded fuel only. Lead will damage the catalytic converter.

EXHAUST MUFFLER/EXHAUST SILENCER

⚠ WARNING

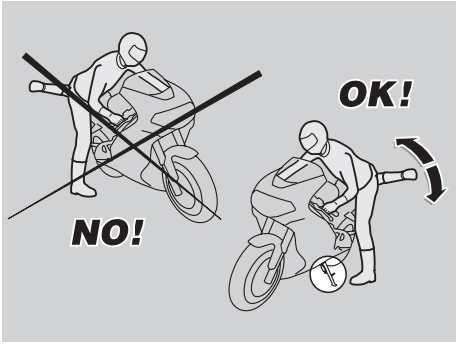
Tampering with the noise control system is prohibited.

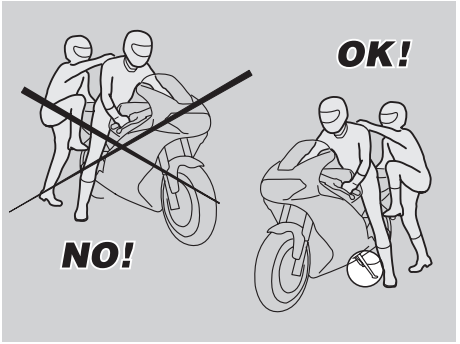
Owners are warned that the law may prohibit:

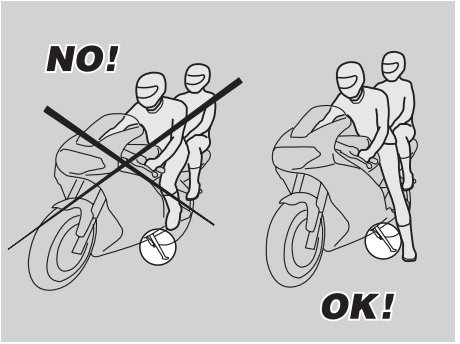
– The removal or rendering inoperative by any person, other than for purposes of maintenance, repair or replacement, of any device or element of design incorporated into any new vehicle - for the purpose of noise control - prior to its sale or delivery to the end purchaser or while it is in use;
– The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







GETTING ON AND OFF THE VEHICLE

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

⚠ 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.

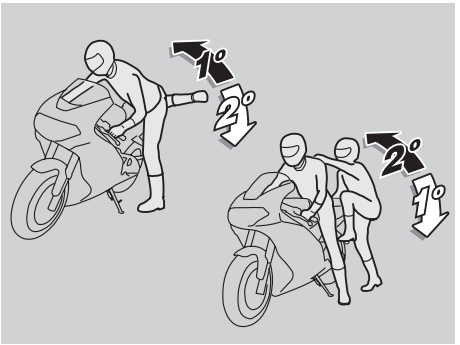
⚠ CAUTION

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

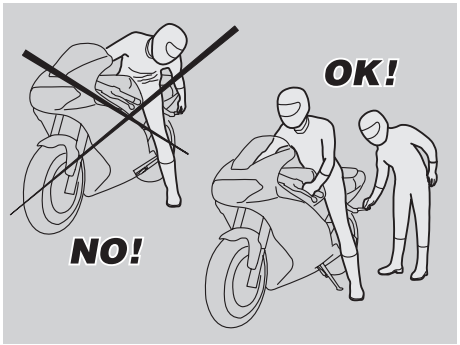
The stand has been designed to support the weight of the vehicle and a minimal load, without the added weight of rider and/or passenger.

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 get on and off the vehicle safely.

The vehicle is equipped with passenger footrests to make mounting and dismounting easier. The passenger must always use the left footrest 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 incorrect procedures that will 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 can not 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 footrest while seated astride the vehicle, because this might compromise the stability and balance of the vehicle.

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

GETTING OFF THE VEHICLE

- Select an appropriate location for parking, see page 49 (PARKING).
- Stop the vehicle, see page 49 (STOPPING).

⚠ 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 can not 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.

⚠ WARNING

Risk of falling and overturning.

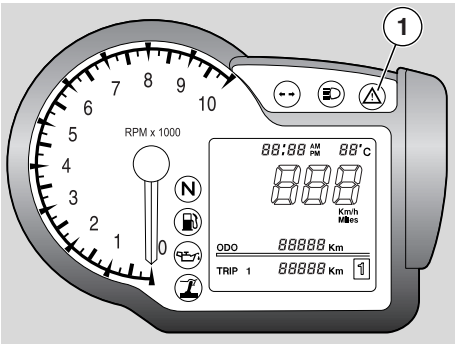
Make sure that the passenger has dismounted.

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 footrests.

⚠ CAUTION

Make sure that the vehicle is stable.



PRE-RIDE CHECKS

⚠ WARNING

Before starting, always perform vehicle pre-ride checks, to ensure safe operation see page 42 (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.

Any time the ignition switch is set to " ◯ ", the alarm LED " ⚠ " (1) on the instrument panel comes on for three seconds.

⚠ CAUTION

If the alarm LED " ⚠ " (1) and the " ⚠ SERVICE" diagnosis icon come on during engine normal operation, it means that the control unit has detected a failure. In most cases, the engine will keep running, although giving less performance. Immediately contact a Moto Guzzi Authorised Dealer.

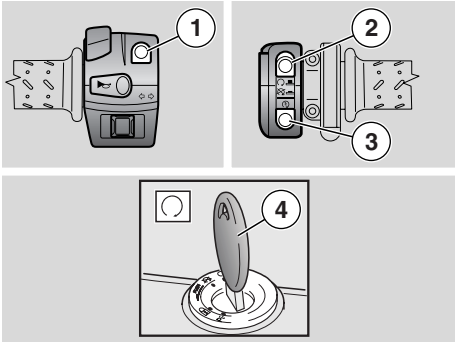
⚠ CAUTION

After the first 1500 km (930 mi) and every 10000 km (6250 mi) thereafter, the right display will show icon " 🔧 ".

In this case, have a Moto Guzzi Authorised Dealer perform all service operations as indicated in the scheduled maintenance chart, see page 52 (SCHEDULED MAINTENANCE CHART).

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.	29, 30, 31, 32, 64
Throttle	Check for smooth operation; throttle should snap fully open and closed at all positions of the steering. Adjust and/or lubricate as required.	65
Engine oil	Check and/or top up as required.	37, 60
Wheels / tyres	Check tyre surface, inflation pressure. Check for wear or damage. Remove any objects trapped in the tread.	35
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. Check stand switch for proper operation.	67, 72
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.	28
Engine stop switch (◯ - ⊗)	Make sure that it operates correctly.	22
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.	76, 77
Transmission fluid	Check. If level needs topping up, contact a **Moto Guzzi** Authorised Dealer.	60



STARTING

⚠ WARNING

This is a high-performance vehicle. We recommend that you become familiar 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 section "Safe Riding", see page 5 (SAFE RIDING).

⚠ WARNING

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

Avoid starting the engine in closed or badly-ventilated rooms.

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, you can start the engine in neutral or with a gear engaged and the clutch lever pulled in.

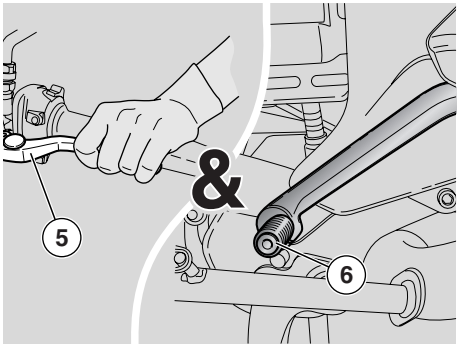
- Sit astride the vehicle, see page 39 (GETTING ON AND OFF THE VEHICLE).
- Make sure the stand is fully up.
- Make sure that the dimmer switch (1) is in position "≡D".
- Set the engine stop switch (2) to position "○".
- Turn the key (4) and set the ignition switch to position "○".

The following occurs:

– the parking lights come on;
– all warning lights on the instrument panel come on;
– the display shows the “GRISO” logo for two seconds;
– the rev counter indicator goes to end of scale;
– as soon as the first check routine is over, the warning lights go off, the instruments indicate the current value and the display shows the configuration set on the selector;
– the fuel pump puts the feed circuit under pressure and hums for approximately three seconds.

⚠ CAUTION

If the low fuel warning light "⛽" on the instrument panel comes on, it means that there are 3.3 litres of fuel left in the tank. Refuel as soon as possible, see page 28 (FUEL).



◆ Completely pull the front brake lever.
◆ Completely pull the clutch lever (5) and set the gear shift lever (9) to neutral [green LED "N" on].

NOTE Keep the clutch lever (5) completely pulled until the engine starts.

NOTE In case of low ambient temperature (close to or lower than 0°C – 32 °F), see page 44 (STARTING THE ENGINE FROM COLD).

◆ Press the starter button "(i)" (3), do not accelerate, and immediately release it, the control unit will manage the starting procedure on its own.
– The low beam comes on.

⚠ CAUTION

If the LED "🛢" on the instrument panel and the engine oil pressure icon "🛢" on the display are still on, or come on during engine normal operation, it means that the oil pressure in the circuit is low.

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

⚠ 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.

⚠ CAUTION

If the alarm LED "⚠" and the "⚠ SERVICE" diagnosis icon come on during engine normal operation, it means that the control unit has detected a failure. In most cases, the engine will keep running, although giving less performance. Immediately contact a Moto Guzzi Authorised Dealer.

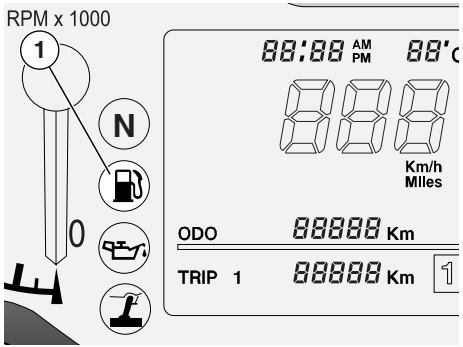
STARTING THE ENGINE FROM COLD

The vehicle is fitted with an automatic cold start device and does not require any precaution for cold starting.

In case of low ambient temperature (close to or lower than 0°C / 32°F), the automatic cold start switches on and increases the rpm until reaching optimum engine temperature and switches off automatically.

⚠ CAUTION

The automatic cold start can not be manually operated.



MOVING OFF AND RIDING

⚠ WARNING

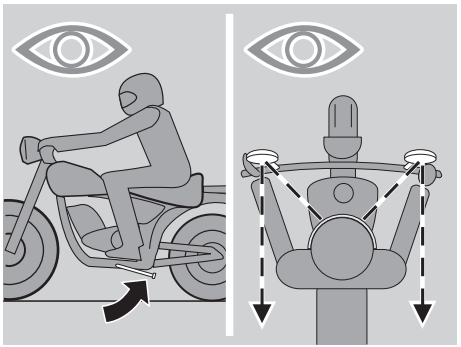
This is a high-performance vehicle. We recommend that you become familiar with it gradually using the greatest care.

Do not store any objects between the handlebar and the instrument panel, this could impair handlebar movement or hide the instrument panel from your vision.

NOTE Before moving off, carefully read section "Safe Riding", see page 5 (SAFE RIDING).

⚠ CAUTION

If the low fuel warning light " ⛽ " (1) on the instrument panel comes on when riding, it means that there are 3.3 litres of fuel left in the tank.



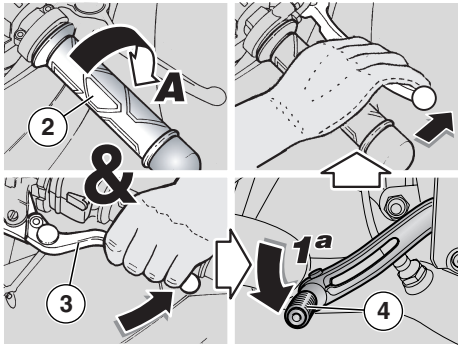
Refuel as soon as possible, see page 28 (FUEL).

⚠ WARNING

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

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

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



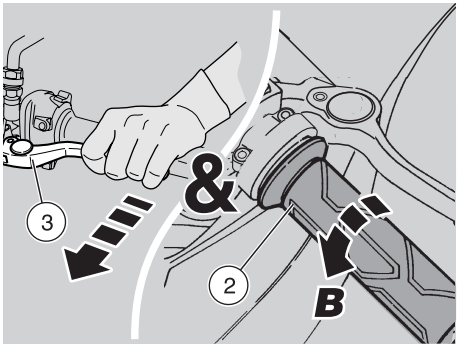
⚠ WARNING

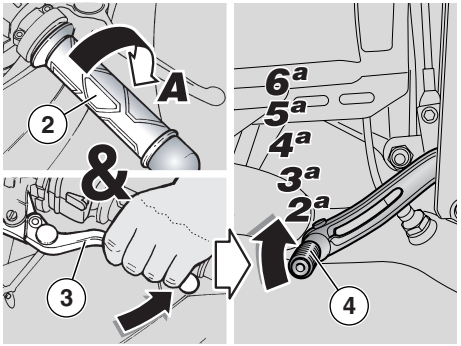
If you are riding with a passenger, give your passenger proper instructions to avoid problems when manoeuvring.

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

To move off:

- Start the engine, see page 43 (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 shift lever (4) to engage the first gear.
- Release the brake lever (you had pulled it when you started the engine).





⚠ 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.

⚠ CAUTION

Do not exceed recommended rpm, see page 48 (RUNNING-IN).

- Increase your speed by gradually rotating the throttle grip (2) (**Pos.B**), without exceeding the recommended rpm, see page 48 (RUNNING-IN).

To engage the second gear:

⚠ CAUTION

Work the controls quickly.

Never let the engine operate at too low a speed.

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

⚠ CAUTION

If the LED "" on the instrument panel and the engine oil pressure icon "" on the display come on during engine normal operation, it means that the oil pressure in the circuit is low.
If so, stop the engine immediately and contact a Moto Guzzi Authorised Dealer.

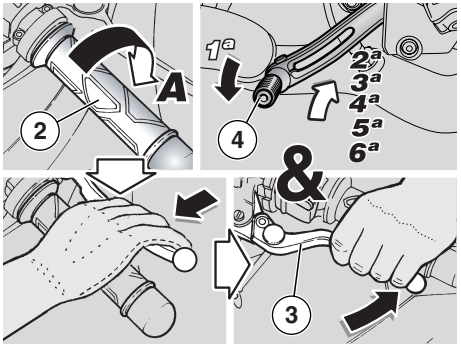
Change to a lower gear (downshift):

- 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.

⚠ 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 shift lever (4) to shift down.
- If you have pulled the brakes, release them.
- Release the clutch lever and accelerate moderately.

⚠ CAUTION

If the alarm LED " ⚠ " and the " ⚠ SERVICE" diagnosis icon come on during engine normal operation, it means that the control unit has detected a failure. 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.

⚠ WARNING

Avoid opening and closing the throttle repeatedly and continuously, or you may lose control of the vehicle. When you 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 turn, slow down or brake and take the turn at a moderate, constant speed or accelerate slightly; braking in a turn will greatly increase your chances of skidding.

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 running-in period.

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

NOTE The clutch might smell slightly during the first miles. It is not a fault; it will stop smelling as soon as the clutch plates have run-in.

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 (1250 mi) onward, the engine is ready to provide top performance.

Follow these recommendations:

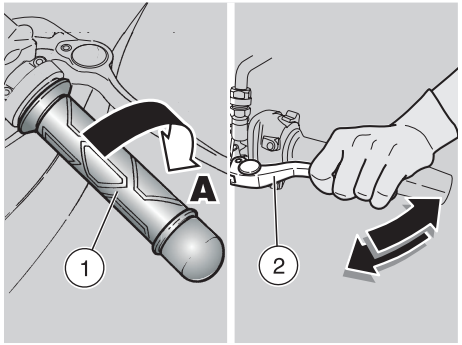
- Do not flip the throttle open abruptly with the engine running at low rpm - either during or after the running-in period.
- Until you have covered the first 100 km (62 mi), use the brakes gently and avoid hard, prolonged braking. This will help the brake pads bed in properly against the brake discs.
- During the first 1500 km (930 mi) never exceed 5000 rpm.

⚠ WARNING

After the first 1500 km (930 mi), have a Moto Guzzi Authorised dealer carry out the "Post running-in" checks specified in the periodic maintenance chart, see 52 (SCHEDULED MAINTENANCE CHART). Failure to perform these checks may lead to injury to yourself or other people and/or vehicle damage.

- After the first 1500 km (930 mi) and until 2000 km (1250 mi), ride more briskly, varying speed and using maximum acceleration for just a few seconds, this is to ensure better coupling of the components; never exceed 6000 rpm (see table).
- After the first 2000 km (1250 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 – 1500 (0 – 930)	5000
1500 – 2000 (930 – 1250)	6000
over 2000 (1250)	7600



STOPPING

⚠ WARNING

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

- Release the throttle grip (1) (**pos. A**) and gradually put on the brakes and shift down the gears at the same time to slow down, see page 45 (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 from 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 place to park your vehicle - observe local regulations and the indications given below.

⚠ 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.

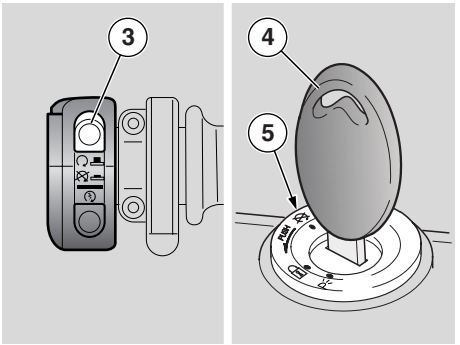
⚠ WARNING

The fall or excessive inclination of the vehicle may cause the fuel to flow out of the tank.

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

⚠ 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 in this page (STOPPING).
- Set the engine stop switch (3) to position "⊗".
- Turn the key (4) and set the ignition switch (5) to position "⊗".

⚠ WARNING

Carefully follow the indications for getting on and off the vehicle, see page 39 (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 23 (STEERING LOCK) and remove the key (4).

⚠ WARNING

Make sure that the vehicle is stable.

- Turn the key (4) and set it to "P".

PUTTING THE VEHICLE ON THE STAND

SIDE STAND

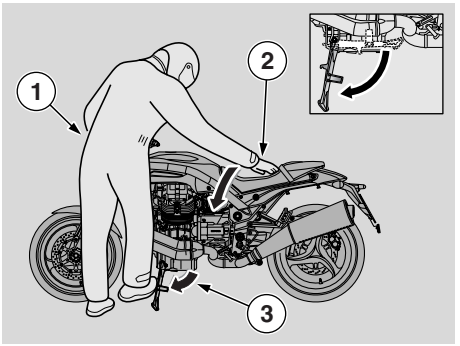
To put the vehicle on the side stand while seated astride the vehicle, see page 39 (GETTING ON AND OFF THE VEHICLE).

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

⚠ WARNING

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

- Select an appropriate location for parking, see page 49 (PARKING).
- Grasp the left grip (1) and place your right hand on the rear upper part of the vehicle (2).



- Push on the side stand with your right foot and lower it completely (3).
- Lean the vehicle to the side until the stand is resting on the ground.
- Rotate the handlebar fully to the left.

⚠ WARNING

Make sure that the vehicle is stable.

SUGGESTIONS TO PREVENT THEFT

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 anti-theft device.

Make sure you have all the necessary documents with you and that the excise 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

⚠ WARNING

Fire hazard.

Keep fuel and other flammable substances away from electric components.

Before proceeding to service or inspect 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 put any vehicle parts into your mouth: vehicle components are not edible and some of them are harmful or even toxic.

⚠ 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 42 (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.

Any time the ignition switch is set to " ◯ ", the light " ⚠ " on the instrument panel comes on for three seconds.

⚠ CAUTION

If the alarm LED " ⚠ " and the " ⚠ SERVICE" diagnosis icon come on during engine normal operation, it means that the control unit has detected a failure. 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 Moto Guzzi Authorised Dealer (CAN ALSO BE CARRIED OUT BY THE OWNER).

Component	End of running-in [1500 km (930 mi)]	Every 10000 km (6250 mi) or 12 months	Every 20000 km (12500 mi) or 24 months
Outer spark plugs (*)		③	
Engine oil filter (*)	③	③	
Fork	①		①
Light operation/beam setting		①	
Lighting system	①	①	
Safety switches			
Brake fluid		①	
Engine oil	③	③	
Tyres	①	①	
Tyre pressures (**)	④	④	
Engine idle rpm	④	④	
Battery terminals tightening	①		
Head bolts tightening	④		
Engine oil pressure warning light	at every start-up: ①		
Brake pad wear	①	before each ride and every 2000 km (1250 mi):①	
Bleed the oil drain line from the air box	every 5000 km (3125 mi): ②		

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.

(*) = If vehicle is used in competitions, change every 5000 km (3125 mi).

(**) = Check every two weeks or at the specified intervals.

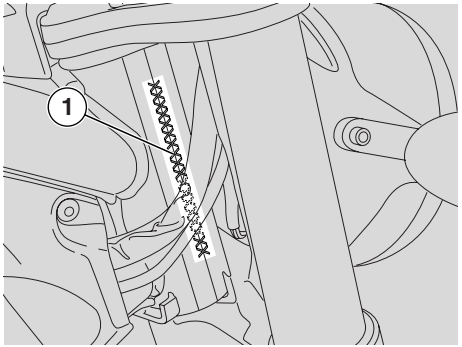
OPERATIONS TO BE CARRIED OUT BY THE Moto Guzzi Authorised Dealer.

Component	End of running-in [1500 km (930 mi)]	Every 10000 km (6250 mi) or 12 months	Every 20000 km (12500 mi) or 24 months
Gearbox fluid	③	④	③
Idle mixture (CO)		①	
Bowden cables and controls	①	①	
Steering bearings and steering play	①	①	
Wheel bearings		①	
Brake discs	①	①	
Air filter		①	③
Vehicle operation	①	①	
Brake systems	①	①	
Brake fluid			③
Fork fluid	after the first 10000 km (6250 mi) and then every 20000 km (12500 mi):③		
Fork oil seals	after the first 30000 km (18750 mi) and then every 20000 km (12500 mi):③		
Brake pads	every 2000 km/1250 mi: ① - if worn: ③		
Valve clearance adjustment	④	④	
Wheels / tyres	①	①	
Nut, bolt, screw tightening			
Battery terminals tightening	①		
Cylinder synchronisation	①	①	
Suspensions and trim	①		①

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 5000 km (3125 mi).

Component	End of running-in [1500 km (930 mi)]	Every 10000 km (6250 mi) or 12 months	Every 20000 km (12500 mi) or 24 months
Final transmission fluid	③	④	③
Fuel pipes		①	every 4 years:③
Brake lines		①	every 4 years:③
Clutch wear (*)		①	
Inner spark plugs			③
Generator belt	every 20000 km (12500 mi): ④, every 50000 km (31250 mi): ③		
Head stud bolts tightening	④		
Exhaust pipe flanges retaining bolts	①		

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 5000 km (3125 mi).



IDENTIFICATION DATA

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

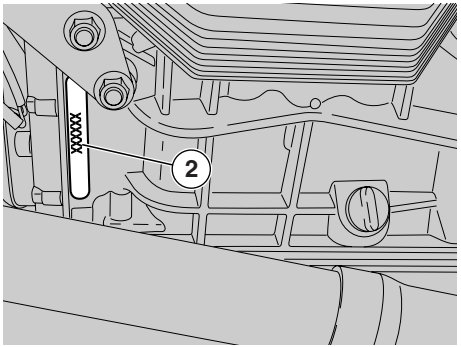
The frame number must be quoted when purchasing spare parts.

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.

Engine no. _____

JOINTS WITH SCREW CLAMPS

⚠ 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.

⚠ 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.

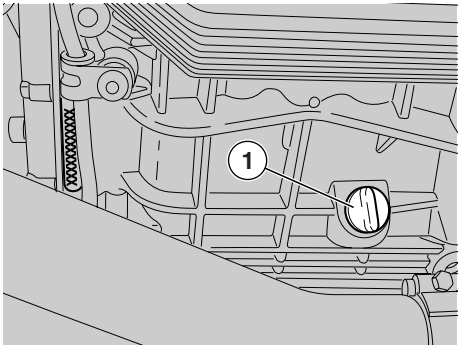
SCREW CLAMPS

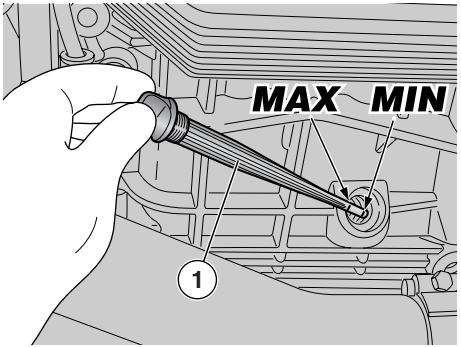
For removal and installation it is sufficient to use a common screwdriver.

⚠ 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 37 (ENGINE OIL) and page 51 (MAINTENANCE).

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

Periodically check engine oil level, see page 57 (CHANGING ENGINE OIL AND OIL FILTER), change the oil every 10000 km (6250 mi).

Check as follows:

⚠ CAUTION

The engine oil level must be checked with a warm engine and with the oil level dipstick (1) not 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 LED and the engine oil pressure icon "🛢" do not come on, see page 13 (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 43 (STARTING).
- Keep the vehicle in vertical position, the two wheels resting on the ground.
- Undo the filler plug/oil dipstick (1).
- Clean the oil dipstick (1) and refit, do not tighten.
- Take it out again and check oil level.
- Correct level is achieved when the oil is just below the **MAX** level mark.

⚠ 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).

⚠ 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 85 (LUBRICANT CHART).

Top up to correct level, see page 85 (LUBRICANT CHART).

CHANGING ENGINE OIL AND OIL FILTER

⚠ 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.

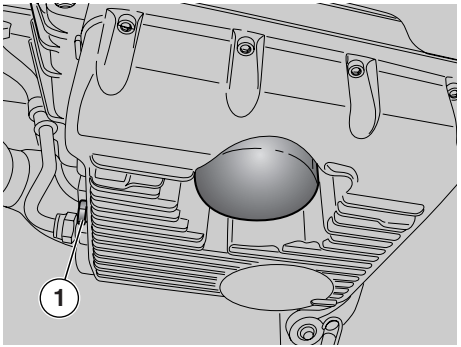
Carefully read page 37 (ENGINE OIL) and page 51 (MAINTENANCE).

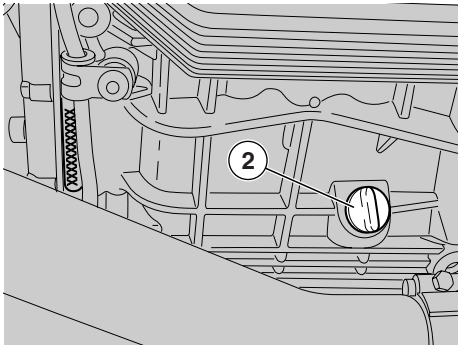
NOTE Halve maintenance intervals if you are riding in rainy or dusty conditions, on rough road surfaces or when the vehicle is used in competitions.

Periodically check engine oil level, change the oil every 10000 km (6250 mi), see page 56 (CHECKING AND TOPPING UP ENGINE OIL LEVEL).

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 20 minutes.





⚠ 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 plug (1).
- Unscrew and remove the drain plug (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 plug (1) and replace them if needed.
- Remove any metal debris collected by the drain plug (1) magnet.
- Tighten the drain plug (1).

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

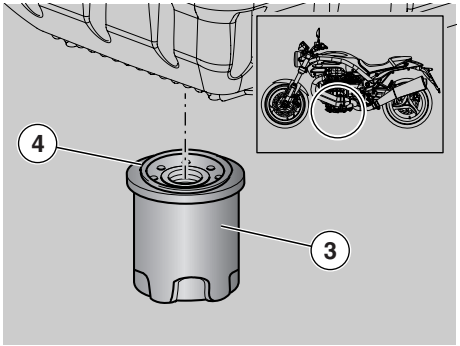
⚠ CAUTION

Do not dispose of oil in the environment. Put it in a sealed container and take it to the filling station where you usually buy it or to an oil salvage centre.

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 10000 km (6250 mi) or anyway each time you change the engine oil.



◆ Unscrew oil filter (3) and remove it.

⚠ CAUTION

Never reuse a filter.

◆ Spread a thin layer of oil on the sealing ring (4) of the new engine oil filter.
◆ Fit the new filter and screw by means of the special tool (tightening torque 18-20 Nm).

FRONT WHEEL

⚠ 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.

⚠ 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 it if damaged.

REAR WHEEL

⚠ CAUTION

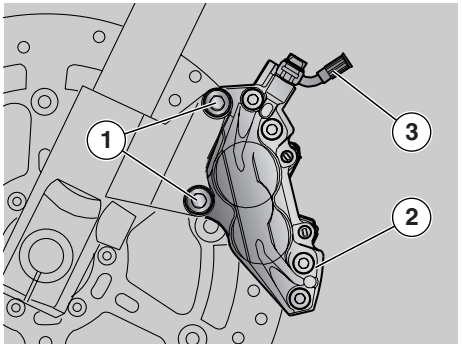
Disassembling and reassembling the rear wheel may prove difficult; these operations are best left to experienced mechanics.

If necessary, contact a Moto Guzzi Authorised Dealer.

⚠ 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 it if damaged.



FRONT BRAKE CALLIPER

Carefully read page 51 (MAINTENANCE).

⚠ WARNING

A dirty disc 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.

⚠ 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.

DISASSEMBLY

⚠ 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 kgm).

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

⚠ 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

⚠ 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.

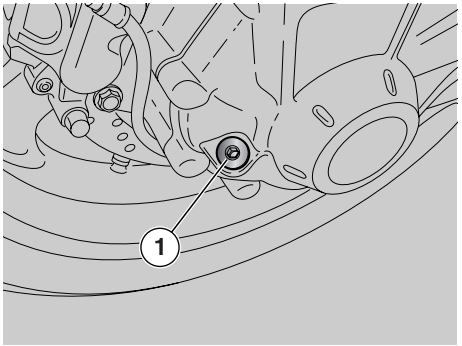
- Screw and tighten the two calliper retaining screws (1).

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

- Carefully remove the support.

⚠ 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 1500 km (930 mi) and then every 20000 km (12500 mi).

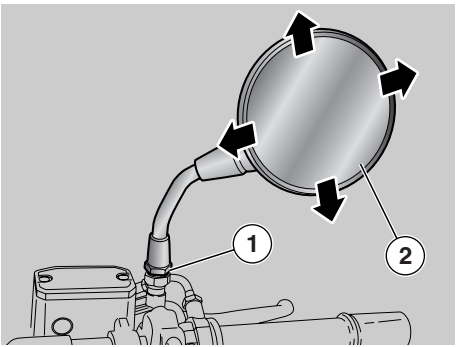
Check as follows:

- 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.

CHECKING GEARBOX FLUID LEVEL

- To check, top up and change gearbox oil, contact a **Moto Guzzi** Authorised Dealer.



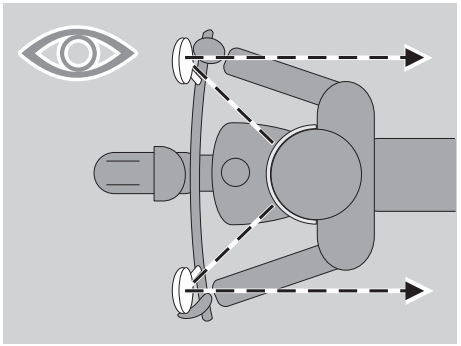
REAR-VIEW MIRRORS

⚠ WARNING

Do not ride with rear-view mirrors incorrectly set.
Before leaving, always ensure they are correctly set.

⚠ WARNING

Wear clean gloves or use a clean cloth to adjust rear-view mirrors position to keep the reflecting surface clean, and ensure proper visibility.



REMOVING THE REAR-VIEW MIRRORS

- Place the vehicle on the stand, see page 50 (PUTTING THE VEHICLE ON THE STAND).
- Loosen the locknut (1).

⚠ CAUTION

On reassembly, before tightening nut (1), ensure that the mirror support rod is correctly positioned in line with the handlebar.

- Slide up and remove the complete rear-view mirror unit.

Repeat the procedure to remove the other mirror, if necessary.

Setting the rear-view mirrors

- Sit astride the vehicle, see page 39 (GETTING ON AND OFF THE VEHICLE).

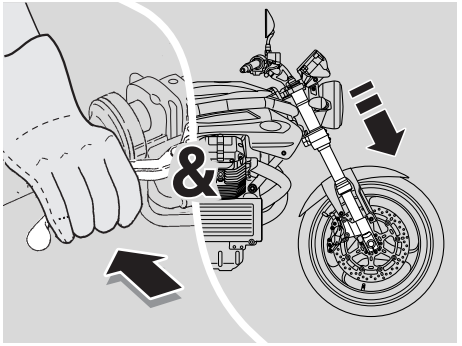
⚠ CAUTION

Handle parts with care.

- Turn mirror (2) and set correct slant.

Repeat the procedure to set the other mirror.

- Ensure there are no dirty residues.



INSPECTING THE FRONT AND REAR SUSPENSIONS

Carefully read page 51 (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 in competitions.

Have the front fork oil changed after the first 10000 km (6250 mi) and then every 20000 km (12500 mi).

Carry out the following checks after the first 1500 km (930 mi) and every 10000 km (6250 mi) afterwards:

◆ 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.

⚠ CAUTION

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

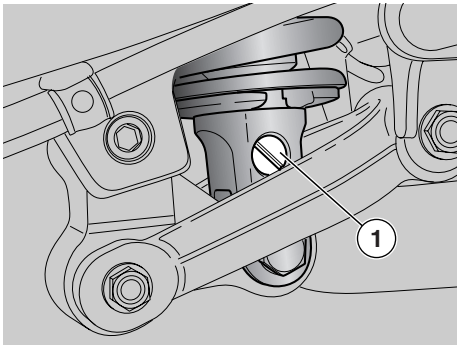
FRONT SUSPENSION

◆ Have the fork oil seals changed by a **Moto Guzzi** Authorised Dealer after the first 30000 km (18750 mi) and then every 20000 km (12500 mi).

REAR SUSPENSION

The rear suspension consists of a spring-shock absorber unit, fixed to the frame by means of a silent block and to the swinging arm by means of lever systems.

For setting adjustments, the shock absorber has
– an adjuster (1) for rebound hydraulic damping;
– an adjuster (2) for compression hydraulic damping;
– an adjusting ring nut (3) and a locking ring nut (4) for the adjustment of the spring preload.



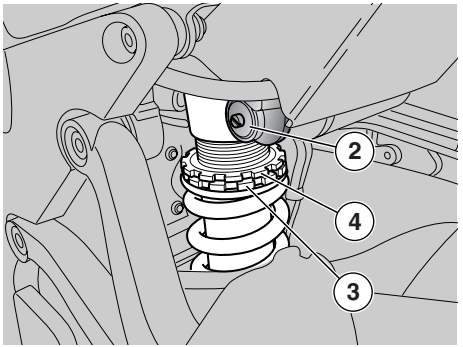
ADJUSTING THE REAR SHOCK ABSORBER

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

Check the rear shock absorber every 10000 km (6250 mi) and adjust as required.

The standard setting of the rear shock absorber is adjusted so that it is suitable for most driving conditions (low and high speed).

However, suspension setting may be modified to suit specific needs in accordance with vehicle use.



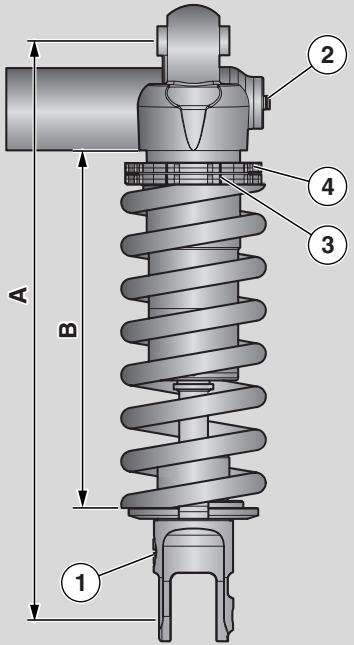
⚠ WARNING

Allow the engine and silencer to cool down before working the adjusters.

⚠ CAUTION

Before adjusting, first set the rear shock absorber to the stiffest setting [turn the adjusters (1-2) fully clockwise].
Do not force the adjusters (1-2) beyond their limit stops in either direction, or the threads may strip.

◆ Use the special spanner available at **Moto Guzzi** Authorised Dealer and unscrew the locking ring nut (4).
◆ Adjust spring preload (B) through the adjusting ring nut (3) (see table).



- After adjusting, tighten the ring nut (4).
- Work the screw (1) to set shock absorber rebound damping (see table).
- Work the screw (2) to set shock absorber compression damping (see table).

⚠ CAUTION

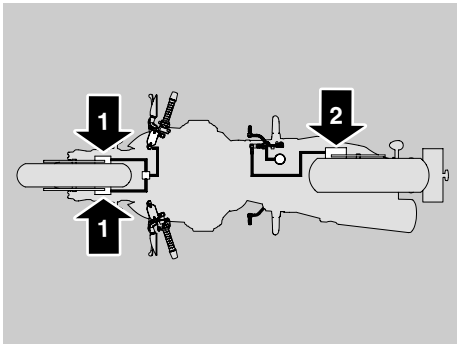
Set spring preload and rebound damping according to vehicle usage. When you increase spring preload, you will have to increase rebound damping accordingly to avoid unexpected jerking when riding. If necessary, contact your Moto Guzzi Authorised Dealer.

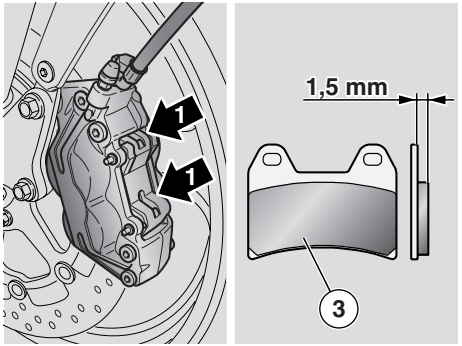
⚠ WARNING

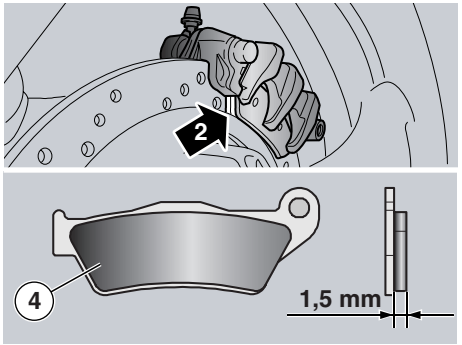
Racing settings may only be used during official competitions or sports events authorised by the competent authorities and taking place in closed circuits or, anyway, away from public roads. It is strictly prohibited to carry out adjustments for the use of the vehicle on racetracks and then ride it on roads or motorways.

Settings	Setting the rear suspension	Setting the front fork
Spring length (preloaded) (B)	161	5 notches
Rebound adjustment, ring nut (1)	Tighten fully (*) and then slacken (**) by 17 click positions	Tighten fully (*) and then slacken (**) by 1.5 turns
Compression damping, screw (2)	Tighten fully (*) and then slacken (**) by 1.5 turns	Tighten fully (*) and then slacken (**) by 1 turn

(*) = clockwise
(**) = anticlockwise







CHECKING THE BRAKE PADS FOR WEAR

Carefully read page 29 (BRAKE FLUID - recommendations), page 30 (DISC BRAKES) and page 51 (MAINTENANCE).

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 in competitions.

Check the brake pads for wear after the first 1500 km (930 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 50 (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);
– on vehicle opposite side, through the rim, to check the rear brake calliper (2).

⚠ WARNING

If brake pads were allowed to wear down to the metal substrate, metal contact with the brake disc would lead to rattling and the brake calliper sparking; this would result in loss of braking and brake disc damage, leading to 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 all brake pads changed.

⚠ WARNING

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

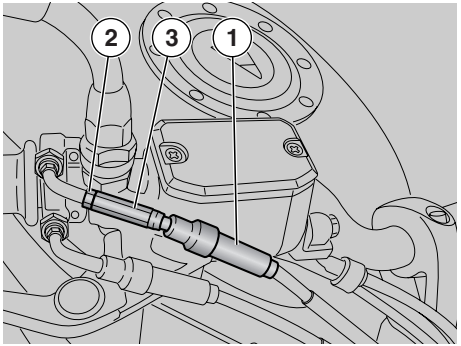
ADJUSTING THE THROTTLE CONTROL

Carefully read page 51 (MAINTENANCE).

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

Have the throttle control cables checked by a **Moto Guzzi** Authorised Dealer after the first 1500 km (930 mi) and then every 10000 km (6250 mi).

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

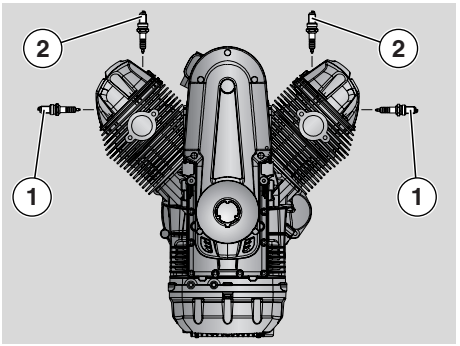


If not so:

- Place the vehicle on the stand, see page 50 (PUTTING THE VEHICLE ON THE STAND).
- Withdraw the protection (1).
- Loosen the lock nut (2).
- Rotate the adjuster (3) until obtaining the specified free play.
- When finished, tighten the lock nut (2) and check free play again.
- Refit the protection (1).

⚠ 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

⚠ CAUTION

The following instructions apply only to outer spark plugs (1). This vehicle is also fitted with two inner spark plugs (2); contact a Moto Guzzi Authorised Dealer to have them replaced.

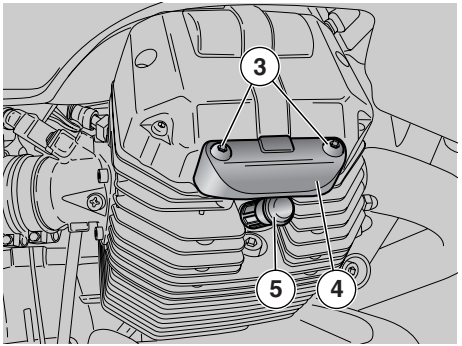
Carefully read page 51 (MAINTENANCE).

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

⚠ CAUTION

Check, clean or replace the outer spark plugs (1), one at a time.

Change the outer spark plugs (1) every 10000 km (6250 mi).



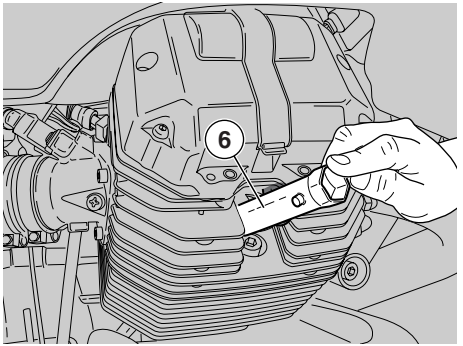
⚠ CAUTION

Even if only one outer spark plug (5) needs replacing, always change both.

⚠ WARNING

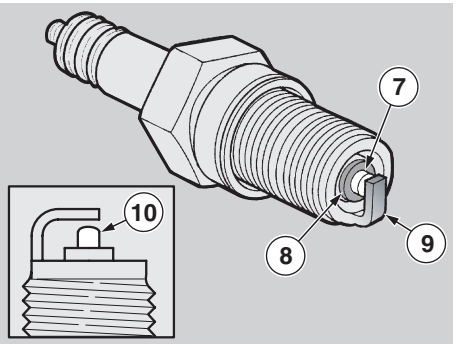
Before carrying out the following operations, let the engine and the silencer cool down to ambient temperature to avoid burns.

The following procedures apply to both cylinders.



Removal:

- Release the two screws (3) and remove the retainer (4).
- Remove the spark plug cap (3).
- 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 (6) included in the tool kit into the hexagonal seat of the spark plug socket.
- Unscrew the spark plug and remove it from its seat, making sure no dust or dirt can fall into the cylinder.



Inspection and cleaning:

⚠ CAUTION

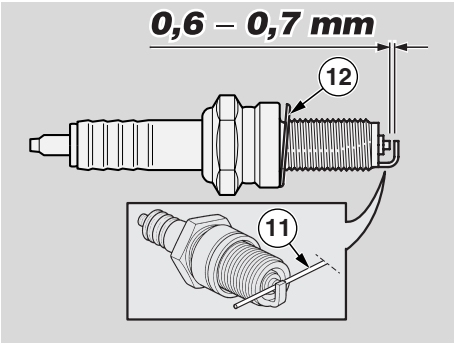
Do not clean the spark plugs with a wire brush and/or abrasive products, use compressed air only.

Key:

– centre electrode (7);
– insulator (8);
– side electrode (9).

- 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 (10) of the central electrode (7) is rounded from wear.



⚠ CAUTION

Only use recommended spark plugs, see page 82 (TECHNICAL DATA) or the engine performance and life-span might be impaired.

Electrode gap should be checked using a wire gauge (11) to avoid damaging the platinum coating.

◆ Check electrode gap with a wire gauge (11).

⚠ 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 (12) is in good condition.

Installation:

◆ Position the washer (12) 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.

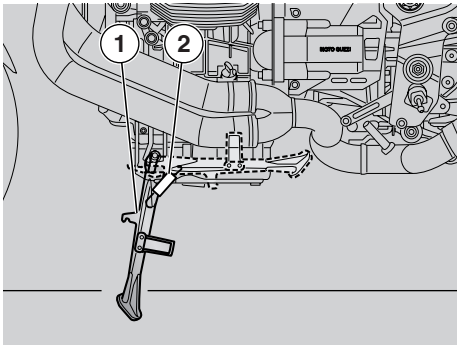
Spark plug tightening torque: 20 Nm (2 kgm).

⚠ 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 from coming off due to engine vibration.

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



CHECKING THE STAND

Carefully read page 51 (MAINTENANCE) and page 72 (CHECKING THE SWITCHES).

The vehicle is equipped with a stand:

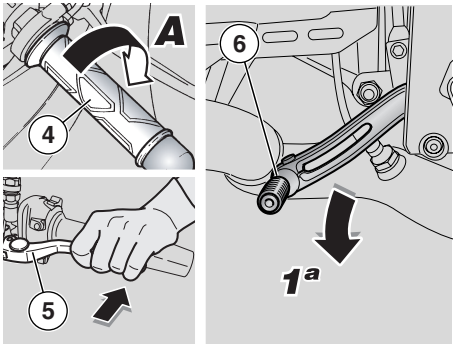
– side stand (1).

The stand features two positions:
– standard or up (at rest);
– down.

Operation of the stand is the rider's responsibility.

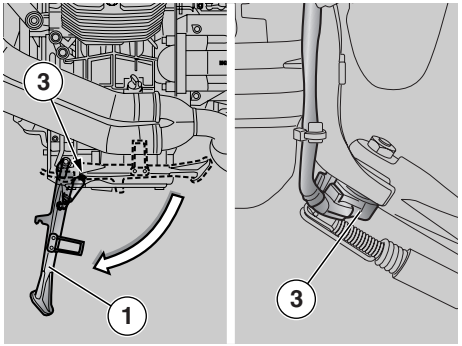
The stand should turn smoothly.

The spring (2) keeps the stand in the desired position (extended or retracted).



SIDE STAND

- Place the vehicle on the stand, see page 50 (PUTTING THE VEHICLE ON THE STAND).
- Check the spring (2): it 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 stand should turn smoothly: smear the joint with grease, if necessary, see page 85 (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, see page 43 (STARTING).
- With the throttle twistgrip (4) released (**Pos. A**), let engine idle and pull the clutch lever (5) fully in.
- 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 occurs:

– the engine must stop;
– the side stand down LED " " on the instrument panel should come on.

⚠ CAUTION

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

BATTERY

Carefully read page 51 (MAINTENANCE).

⚠ WARNING

Fire hazard.
Keep fuel and other flammable substances away from electric components.

Never invert the battery cables.
Ensure that the ignition switch is in position " " before connecting or disconnecting the battery, otherwise some components might damage.

Connect the positive cable (+) first and then the negative cable (-).
Disconnect in the reverse order.

NOTE This vehicle is fitted with a maintenance-free battery which seldom needs inspecting, but may need charging from time to time.

LONG INACTIVITY OF THE BATTERY

⚠ CAUTION

When the motorcycle will not be ridden for over twenty days, disconnect the 30-A fuses, otherwise the multifunction computer will keep drawing current and the battery will deteriorate.

NOTE Removing the 30A fuses resets the digital clock functions. To re-set these functions, see page 15 (MULTIFUNCTION COMPUTER).

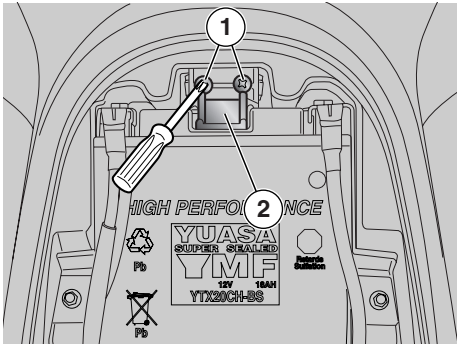
Should the vehicle not be ridden for more than fifteen days, it is necessary to charge the battery to avoid sulphation, see page 71 (CHARGING THE BATTERY).

- Remove the battery, see page 70 (REMOVING THE BATTERY) and arrange it in a cool and dry place.

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

- Recharge it completely, using a standard charge, see page 71 (CHARGING THE BATTERY).

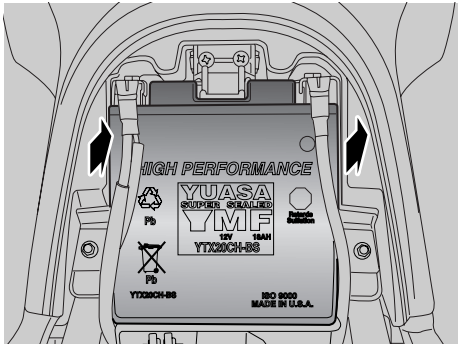
If you are leaving the battery installed to the vehicle, disconnect the cables from the terminals.



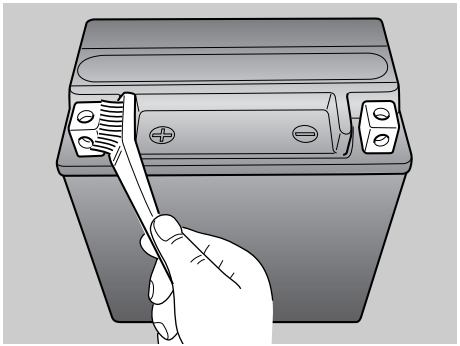
CHECKING AND CLEANING THE TERMINALS

Carefully read page 68 (BATTERY).

- Make sure that the ignition switch is in position "⊗".
- Remove the rider seat, see page 25 (UNLOCKING/LOCKING THE SEAT).

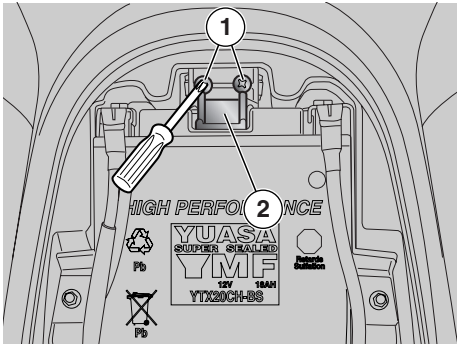


- Make sure that the cable terminals and the battery terminals are:
  - in good condition (and not corroded or covered with deposits);
  - covered with neutral grease or Vaseline.



If necessary:

- Remove the battery, see (REMOVING THE BATTERY), in this page.
- Clean off cable and battery terminals with a wire brush to remove all traces of corrosion.
- Install the battery, see page 71 (INSTALLING THE BATTERY).



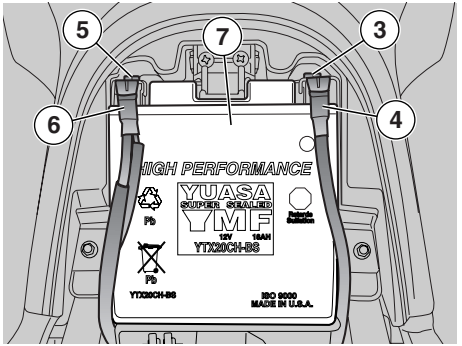
REMOVING THE BATTERY

⚠ CAUTION

Removing the battery resets the following functions: digital clock, trip info and lap times. To reset these functions, see page 15 (MULTIFUNCTION COMPUTER).

Carefully read page 68 (BATTERY).

- Make sure that the ignition switch is in position "⊠".
- Remove the rider seat, see page 25 (UNLOCKING/LOCKING THE SEAT).
- Loosen the two screws (1) and move aside the retainer (2).

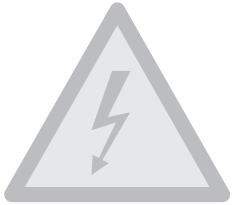


- Release and remove the negative (-) terminal screw (3).
- Move aside the negative cable (4).
- Release and remove the positive (+) terminal screw (5).
- Move aside the positive cable (6).
- Grasp the battery (7) firmly and remove it from its compartment, by raising it at right angle from its housing.

⚠ 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.



◆ Refit the rider seat, see page 71 (INSTALLING THE BATTERY).

NOTE For battery installation, see page 71 (INSTALLING THE BATTERY).

CHECKING BATTERY FLUID LEVEL

Carefully read page 68 (BATTERY).

This vehicle is fitted with a maintenance-free battery. It is not necessary to check battery fluid level.

CHARGING THE BATTERY

Carefully read page 68 (BATTERY).

◆ Remove the battery, see page 70 (REMOVING THE BATTERY).
◆ Be sure to have a suitable battery charger at hand.
◆ Set the battery charger to the required type of charge (see table).
◆ Connect the battery to the charger.

⚠ WARNING

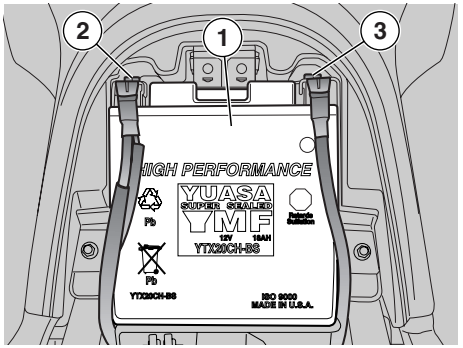
Charge or use the battery in a well-ventilated place. Do not inhale the gas produced by the battery under charging.

◆ Switch the battery charger on.

Recharge	Electric current (Ampere)	Time (hours)
Standard	1.8	8 – 10

⚠ WARNING

The battery keeps producing gases for some time after the battery charger has been switched off. Allow 5-10 minutes before refitting the battery.



INSTALLING THE BATTERY

Carefully read page 68 (BATTERY).

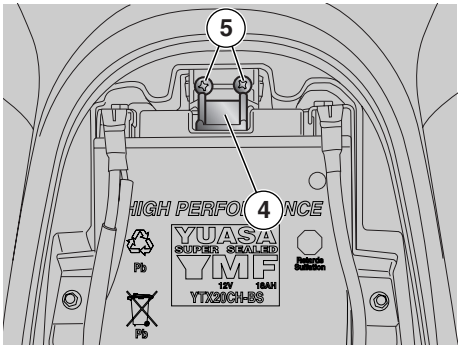
◆ Make sure that the ignition switch is in position "⊗".
◆ Remove the rider seat, see page 25 (UNLOCKING/LOCKING THE SEAT).

NOTE The battery (1) must be positioned in its compartment with the terminals facing up and towards the outside of the housing.

◆ Insert the battery (1) in its compartment.

⚠ WARNING

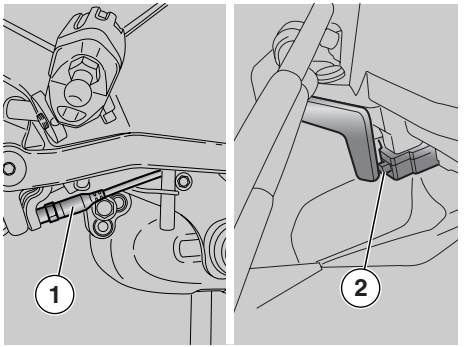
Upon reassembly, connect the positive cable (+) first and then the negative cable (-).



- Connect the positive (+) cable by tightening the terminal screw (2).
- Connect the negative (-) cable by tightening the terminal screw (3).
- Coat the terminals of cables and battery with neutral grease or Vaseline.
- Tighten the screws (5) to secure the retainer (4).
- Refit the rider seat, see page 25 (UNLOCKING/LOCKING THE SEAT).

⚠ CAUTION

Removing the battery resets the following functions: digital clock, trip info and lap times. To re-set these functions, see page 15 (MULTIFUNCTION COMPUTER).

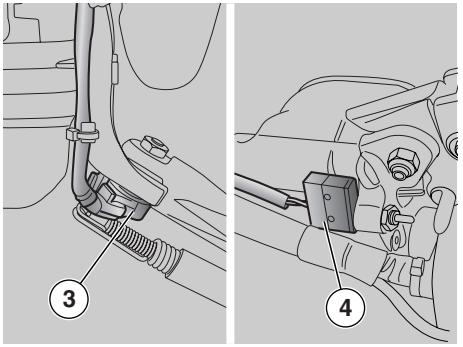


CHECKING THE SWITCHES

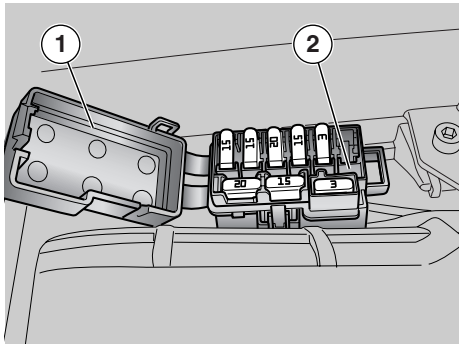
Carefully read p. 51 (MAINTENANCE).

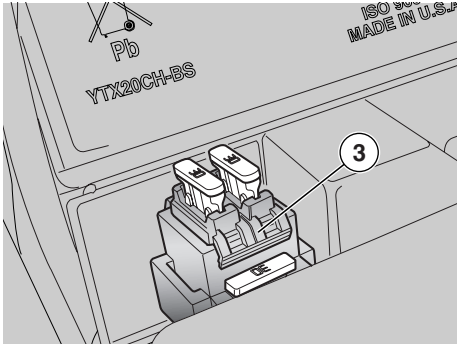
The vehicle is equipped with four switches:

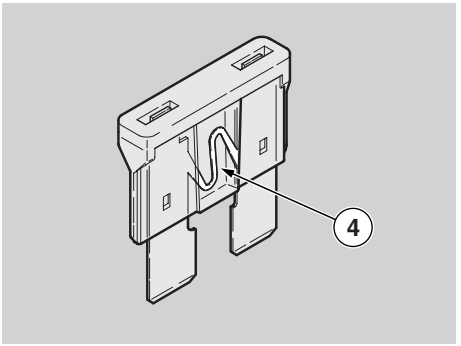
1) Stop light switch on the rear brake control lever;
2) Stop light switch on the front brake control lever;
3) Safety switch on the side stand;
4) Switch on the clutch lever.



- 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 read page 51 (MAINTENANCE).

⚠ 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.

First check the auxiliary fuses (2) and then the main ones (3).

Check as follows:

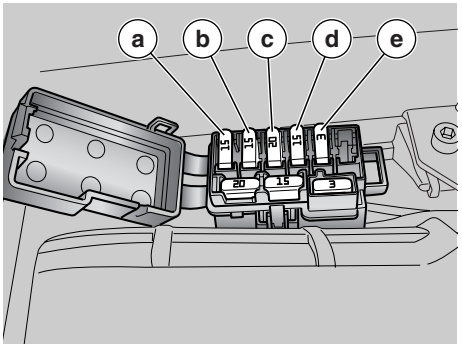
- Set the ignition switch to " ⊠ " to avoid an accidental short circuit.
- Remove the rider seat, see page 25 (UNLOCKING/LOCKING THE SEAT).
- Open the auxiliary fuses (2) carrier (1) cover.
- Extract and check the fuses one by one - a divided link bar (4) means that the fuse is blown.
- Before replacing 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 following functions: digital clock, trip info and lap times.

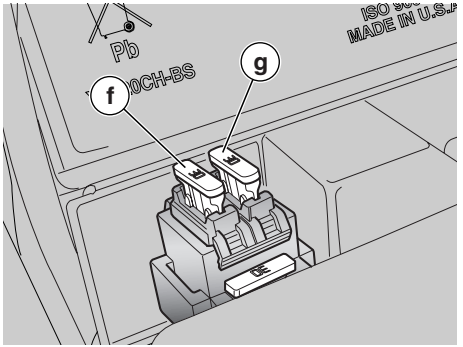
To reset these functions, see page 15 (MULTIFUNCTION COMPUTER).



ARRANGEMENT OF AUXILIARY FUSES

a) Stop, horn, lights and HAZARD button, light relay coil, heated handgrips (15A).
b) Parking lights, number plate light, passing (15A).
c) Fuel pump, coils, injectors, starter relay coil (20A).
d) Oxygen sensor burner, secondary injection relay coil, starter relay coil, speed sensor supply, engine kill, ECU power supply (15A).
e) Permanent positive, ECU power (3A).

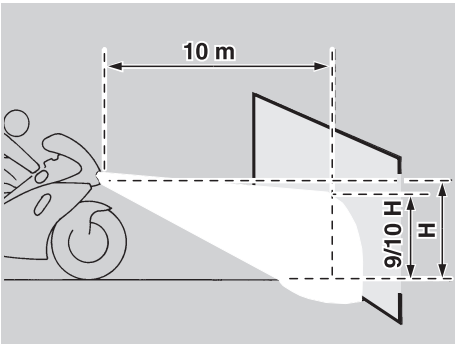
NOTE There are three spare fuses (3, 15, 20 A).



ARRANGEMENT OF MAIN FUSES

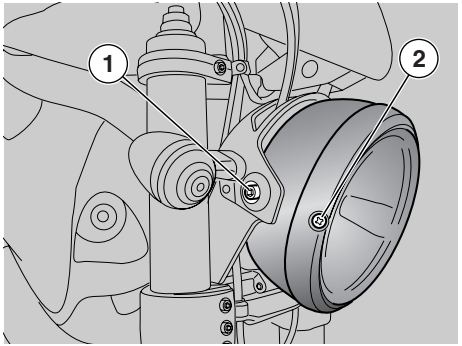
f) From battery to voltage regulator (30A).
g) From battery to key and C and D fuses (30A).

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).

⚠ CAUTION

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

When finished:

⚠ WARNING

Check for correct beam horizontal setting.

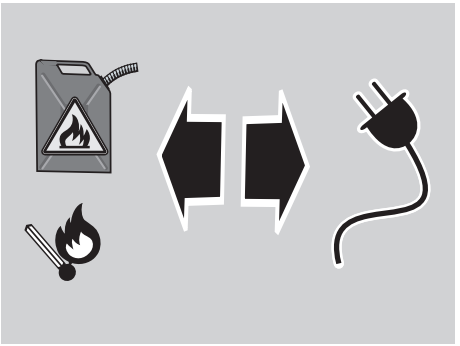
BEAM HORIZONTAL ADJUSTMENT

- Place the vehicle upright.
- Turn screw (2) to set headlight beam.

When finished:

⚠ WARNING

Check for correct beam vertical setting.



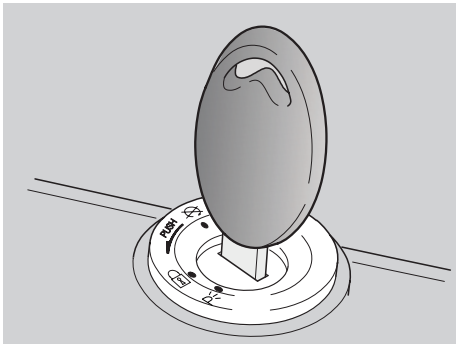
BULBS

Carefully read page 51 (MAINTENANCE).

⚠ WARNING

Fire hazard.

Keep fuel and other flammable substances away from electric components.



⚠ CAUTION

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

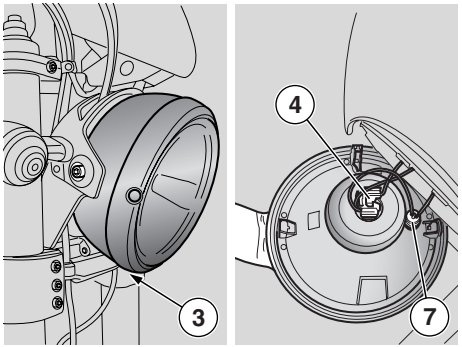
Wear clean gloves or use a clean, dry cloth to handle the new bulb.

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 73 (CHANGING THE FUSES).



CHANGING THE HEADLIGHT BULBS

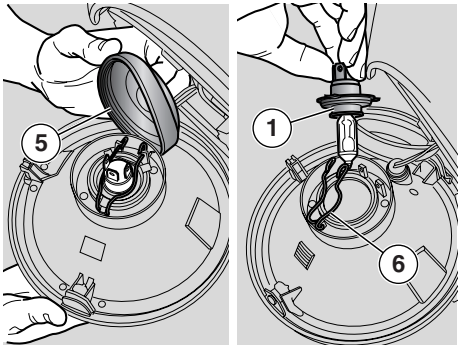
Carefully read page 75 (BULBS).

The headlight houses:

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

To change oil:

- Place the vehicle on the stand, see page 50 (PUTTING THE VEHICLE ON THE STAND).
- To remove the complete reflector from headlight body, loosen the screw (3).



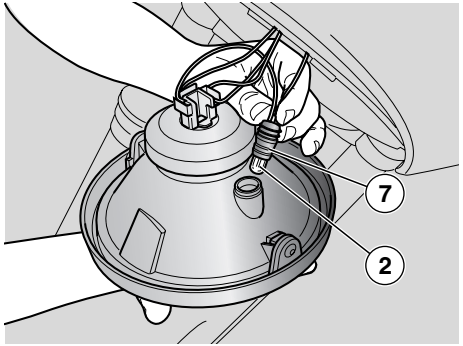
LOW/HIGH BEAM BULB

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 dust cover (5) with your fingers.
- Unhook the two ends of the retaining spring (6) positioned on the bulb holder.
- Extract the bulb (1) 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.

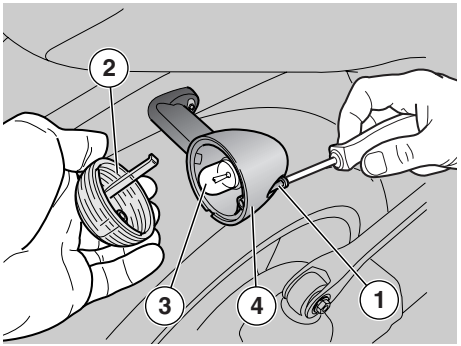


PARKING LIGHT BULB

⚠ CAUTION

To extract the bulb holder, do not pull the electric wires.

- Grasp the parking light (7) bulb holder and pull to extract.
- Withdraw the bulb (2) and replace it with one of the same type.
- Make sure the bulb is correctly located in the bulb holder.



CHANGING THE FRONT AND REAR TURN INDICATOR BULBS

Carefully read page 75 (BULBS).

- Place the vehicle on the stand, see page 50 (PUTTING THE VEHICLE ON THE STAND).
- Unscrew and remove the screw (1).

⚠ CAUTION

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

- Remove the lens (2).

⚠ 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.

⚠ 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.

⚠ CAUTION

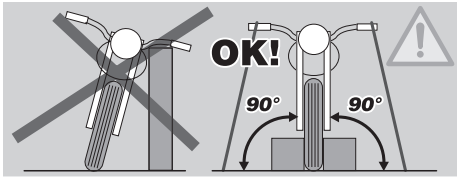
If the bulb holder (4) comes off, refit it into its seat so that the chamfered opening of the holder matches the hole for the screw.

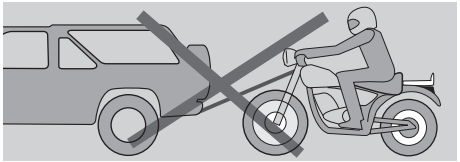
CHANGING THE TAIL LIGHT BULB

This vehicle fits a LED tail light, have it replaced by a **Moto Guzzi** Authorised Dealer.

REPLACING THE NUMBER PLATE BULB

Since this operation is quite complex, have it performed by a **Moto Guzzi** Authorised Dealer.





⚠ WARNING

Before transporting the vehicle, it is necessary to empty the fuel tank completely, see page 78 (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 28 (FUEL).

⚠ WARNING

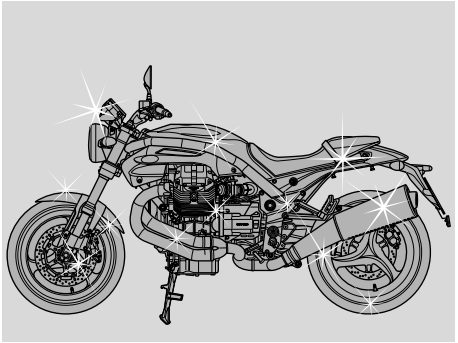
Fire hazard.
Allow some time for the engine and muffler to cool down completely.
Fuel vapours are harmful to human health.
Ensure the area is well ventilated before proceeding.
Do not inhale fuel vapours.
Do not smoke or use open flames.

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).

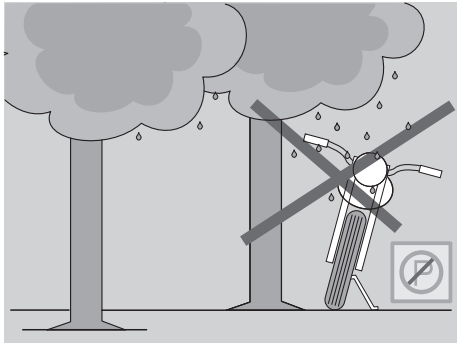
⚠ WARNING

Refit the filler plug after draining all fuel.



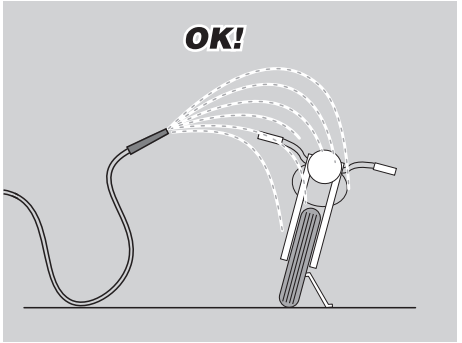
Clean the vehicle frequently if it is used in particular areas or conditions, such as:

- 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.



⚠ 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. Carry out the pre-ride checks, see page 42 (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.

⚠ CAUTION

Before washing the vehicle

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

⚠ CAUTION

Wash with mild soap and rinse with water not under pressure; please read this manual, on page 79 (CLEANING).

⚠ 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.

⚠ 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.

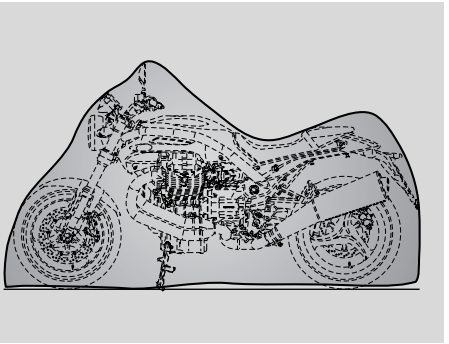
⚠ CAUTION

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, glove/tool kit compartment, ignition switch/steering lock.

Do not use alcohol, petrol or solvents to clean rubber and plastic parts and the seat; use water and mild soap only.

⚠ WARNING

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



LONG PERIODS OF INACTIVITY

⚠ CAUTION

If the vehicle will not be ridden for more than twenty days, disconnect the 30A fuses to avoid deterioration of the battery.

NOTE Removing the 30A fuses resets the digital clock. To re-set this function, see page 15 (MULTIFUNCTION COMPUTER).

When the vehicle will not be ridden for long periods, some precautions are necessary to avoid damage.

Do not postpone necessary repairs or you may 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 70 (REMOVING THE BATTERY) and page 69 (LONG INACTIVITY OF THE BATTERY).
- Wash and dry the vehicle, see page 79 (CLEANING).
- Polish painted surfaces with wax.
- Inflate the tyres, see page 35 (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 covers and clean the vehicle, see page 79 (CLEANING).
- Check the battery charge, see page 71 (CHARGING THE BATTERY) and install it, see page 71 (INSTALLING THE BATTERY).
- Fill the fuel tank, see page 28 (FUEL).
- Carry out the pre-ride checks, see page 42 (PRE-RIDE CHECKS CHART).

⚠ WARNING

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

TECHNICAL DATA

DIMENSIONS	Max. Length	2260 mm
	Max. Width	880 mm
	Max. height	1070 mm (rear-view mirrors excluded)
	Seat height	800 mm
	Wheelbase	1554 mm
	Minimum ground clearance	185 mm
	Weight in running order	240 kg
ENGINE	Model	Griso
	Type	90° traverse V-type, twin-cylinder, 4-stroke
	Number of cylinders	2
	Displacement	1064 cc
	Bore / stroke	92x80 mm
	Compression ratio	9.6: 1
	Starting	electric
	Engine idling rpm	1100 ± 100 rpm
	Clutch	Twin-plate, dry clutch
	Lubrication system	pressure-fed system, adjustment through valves and lobe pump
	Air filter	cartridge, dry
	Cooling	air
CAPACITIES	Fuel (reserve included)	17.2 ℓ
	Fuel reserve	3.3 ℓ
	Engine oil	oil and oil filter change 3600 cc
	Gearbox fluid	500 cc
	Transmission fluid	380 cc
	Fork fluid	520 ± 2.5 cu cm (per leg)
	Seats	2
	Max vehicle load	210 kg (rider + passenger + luggage)

DRIVE RATIOS	Ratio	Primary	Final	Final ratio
	1st	gears	17/38	with universal joint
	2nd	24/35	20/34	12/44
	3rd		23/31	
	4th		26/29	
	5th		31/30	
	6st		29/25	
FUEL FEED SYSTEM	Type		electronic injection (Weber - Marelli) with stepper motor	
	Throttle		Ø 36 mm	
FUEL SUPPLY	Fuel		Premium-grade unleaded petrol, minimum octane rating 95 (ROM) and 85 (MON).	
FRAME	Type		Tube frame with two cradles in high-strength steel	
	Steering head angle		26°30’	
	Trail		108 mm	
SUSPENSIONS	Front		hydraulic telescopic upside-down fork, Ø 43 mm; adjustable spring preload, compression and rebound damping.	
	Wheel travel		120 mm	
	Rear		single-sided with progressive linkage, monoshock with adjustable rebound and compression damping and spring preload	
	Wheel travel		110 mm	
BRAKES	Front		twin floating disc in stainless steel Ø 320 mm, calliper with 4 separated pistons	
	Rear		stainless steel disc - Ø 282 mm	
WHEEL RIMS	Type		3 hollow spokes in aluminium alloy, chill cast	
	Front		3.5" x 17”	
	Rear		5.5" x 17”	
TYRES	Type		DUNLOP D208 RR - METZELER RENNSPORT - PIRELLI DIABLO CORSA -MICHELIN PILOT POWER	
	Front		Size: 120/70 - ZR 17” 58 W	
			Inflating pressure: 2.3 atm (230 kPa)	
			Inflating pressure with passenger: 2.3 atm (230 kPa)	
	Rear		Size: 180/55 - ZR 17” 73 W	
			Inflating pressure: 2.5 atm (250 kPa)	
			Inflating pressure with passenger: 2.7 atm (270 kPa)	

SPARK PLUGS	Inner (long life)	NGK PMR8B
	Outer	NGK BPR6ES
	Spark plug electrode gap	0.6 – 0.7 mm
ELECTRICAL SYSTEM	Battery	12 V – 18 Amp/h
	Main fuses	30 A
	Auxiliary fuses	3 A – 15 A – 20 A
	Generator (with permanent magnet)	12 V – 550 W
BULBS	Parking light	12 V – 5 W
	Low beam bulb/high beam	12 V – 55 W / 60W H4
	Turn indicator light	12 V – 10 W
	Stop/rear parking lights	LED
	Instrument panel lighting	LED
	Number plate light	12 V – 5 W
WARNING LIGHTS	Turn indicators	LED
	Oil pressure	LED
	Neutral	LED
	Side stand down	LED
	High beam	LED
	Fuel reserve	LED
	Alarm, gear shift indicator	LED

LUBRICANT CHART

(Recommended) Engine oil: Agip RACING 4T 5 W 40.
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: Agip TRUCK GEAR 80 W 90.

(Recommended) Gearbox oil: Agip ROTRA MP/S 85 W 140.

(Recommended) Fork oil: IP F.A. 5W, IP F.A. 20W; or Agip FORK 5W or Agip FORK 20W.

Bearings and other lubrication points (recommended): IP BIMOL GREASE 481, IP AUTOGREASE MP; or 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 dripping point 150°C - 230°C, high corrosion protection, good resistance to water and oxidisation.
Battery terminals protectant: Neutral grease or Vaseline.

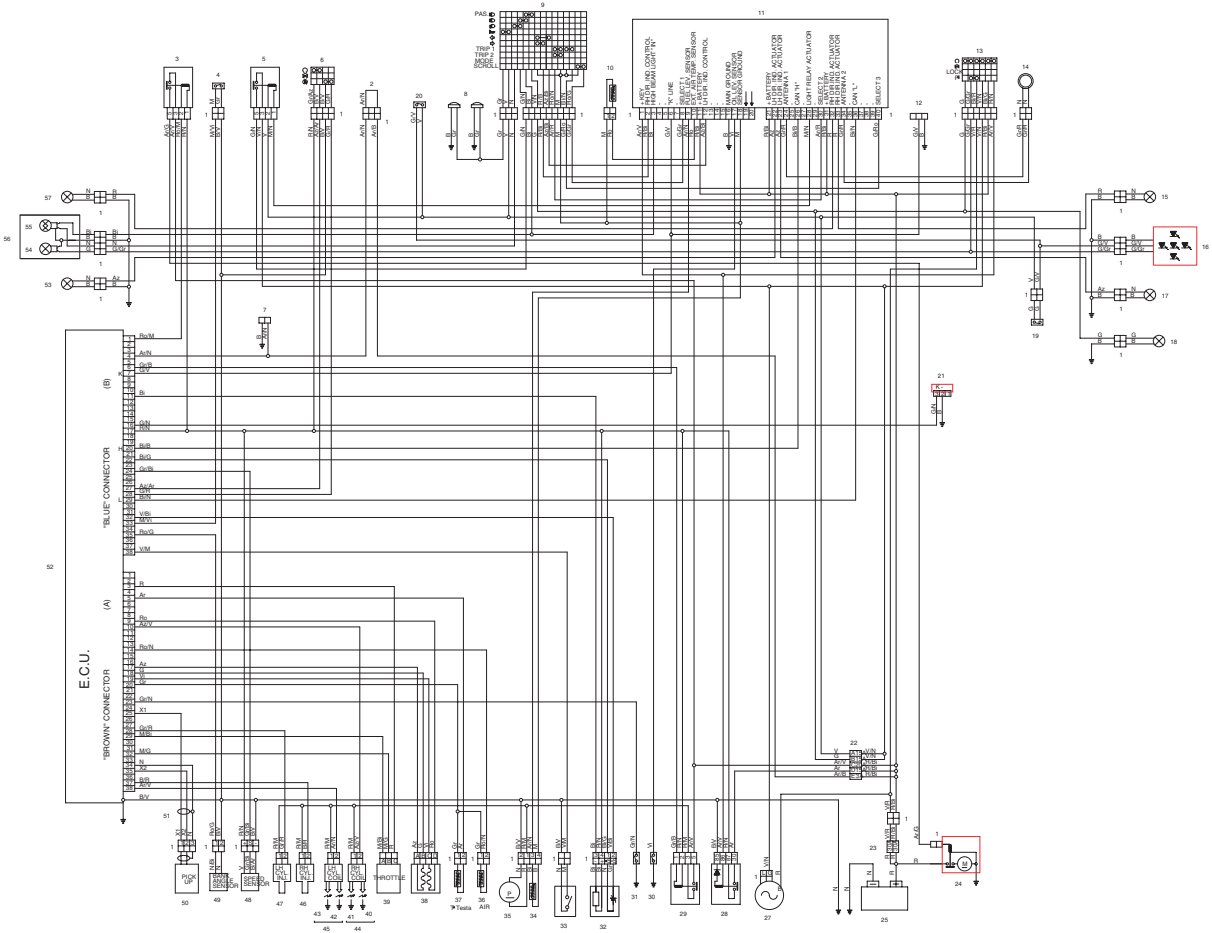
⚠ WARNING

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 loaded with IP Autofluid FR. DOT 4 (the braking system is also compatible with DOT5); as an alternative Agip 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.

WIRING DIAGRAM - Griso


E.C.U.
"BLUE" CONNECTOR (B)
"BROWN" CONNECTOR (A)
PICK UP
CRANK SENSOR
SPEED SENSOR
THROTTLE
INJ 1
INJ 2
INJ 3
INJ 4
COIL 1
COIL 2
COIL 3
COIL 4
Tesla
AIR
Cooling
Electric
Electric
Electric

WIRING DIAGRAM KEY - Griso

1) Multiple connectors
2) Diode presetting
3) Starter relay
4) Clutch switch
5) Light relay
6) Right dimmer switch
7) Capacitor presetting
8) Warning horn
9) Left dimmer switch
10) Instrument panel air temperature thermistor
11) Instrument panel
12) Instrument panel diagnostics
13) Key-operated switch
14) Immobiliser antenna
15) Rear right turn indicator
16) Tail light (LED)
17) Rear left turn indicator
18) Number plate light
19) Rear stop light switch
20) Front stop light switch
21) Diagnostics connector
22) Auxiliary fuses
23) Main fuses
24) Starter motor
25) Battery
26) -
27) Generator
28) Injection main relay
29) Injection secondary relay
30) Oil pressure gauge
31) Neutral switch
32) Lambda sensor
33) Side stand switch
34) Fuel reserve sensor
35) Fuel pump
36) Intake air temperature thermistor
37) Head temperature thermistor
38) Automatic choke
39) Throttle sensor
40) Rh cyl. inner spark plug
41) Rh cyl. outer spark plug
42) Lh cyl. inner spark plug
43) Lh cyl. outer spark plug
44) Rh cyl. double coil
45) Lh cyl. double coil
46) Rh cylinder injector
47) Lh cylinder injector
48) Speed sensor
49) Bank angle sensor
50) Pick-up
51) Pick Up cable shielding
52) E.C.U.
53) Front left turn indicator
54) Parking light bulb
55) Low/high beam lamp
56) Headlight
57) Front right turn indicator
58) Instrument panel diag
59) -
60) -
61) -
62) -
63) -
64) -
65) -

WIRE COLOURS

Ar Orange
Az Light blue
B Blue
Bi White
G Yellow
Gr Grey
M Brown
N Black
R Red
V Green
Vi Violet
Ro Pink

THE VALUE OF SERVICE

Thanks to ongoing technical updates and product-specific technical training, **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** Genuine Parts only!

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