



part# MG977472

**V850**  
**V1100**  
**BREVA**



**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!

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**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:

-  **optional**
-  **catalytic silencer**
-  **Model V 850 IE**
-  **Model V 1100 IE**
-  **Model with ABS**

VERSION:

- |                                                                                                           |                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
|  <b>Italy</b>           |  <b>Singapore</b>                 |
|  <b>United Kingdom</b> |  <b>Slovenia</b>                 |
|  <b>Austria</b>        |  <b>Israel</b>                   |
|  <b>Portugal</b>       |  <b>South Korea</b>              |
|  <b>Finland</b>        |  <b>Malaysia</b>                 |
|  <b>Belgium</b>        |  <b>Chile</b>                    |
|  <b>Germany</b>        |  <b>Croatia</b>                  |
|  <b>France</b>         |  <b>Australia</b>                |
|  <b>Spain</b>          |  <b>United States of America</b> |
|  <b>Greece</b>         |  <b>Brazil</b>                   |
|  <b>Holland</b>        |  <b>South Africa</b>             |
|  <b>Switzerland</b>    |  <b>New Zealand</b>              |
|  <b>Denmark</b>        |  <b>Canada</b>                   |
|  <b>Japan</b>          |                                                                                                                     |

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**SAFE DRIVE**



## BASIC SAFETY RULES

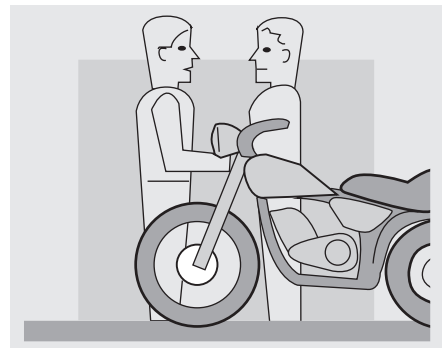
To drive the vehicle, you must satisfy certain legal requirements (driving licence, minimum age limit, psychophysical fitness, insurance, vehicle licence tax, vehicle registration, number plate, etc.).

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



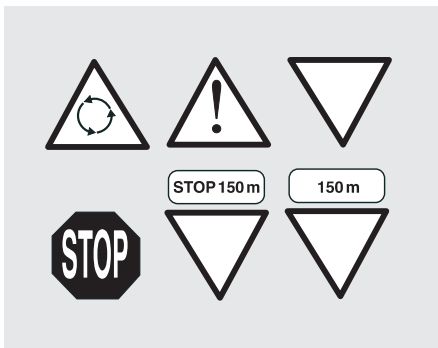
Certain prescribed medicines, alcohol, drugs and psychotropic substances will affect your riding, thereby increasing the risk of an accident.

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



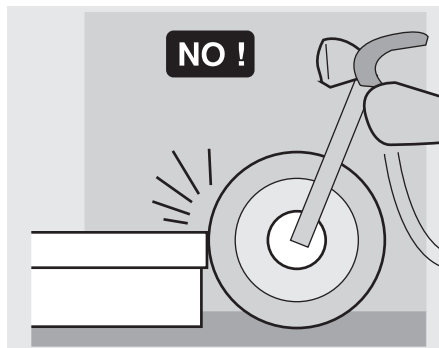
Most road accidents are caused by inexperienced riders.

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



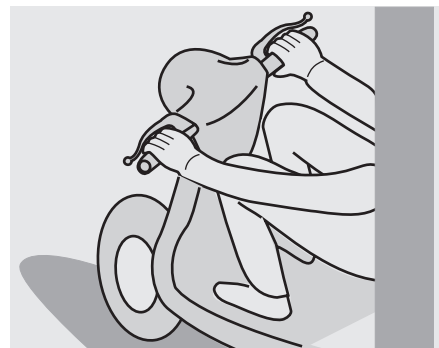
Strictly observe all posted signs and national and local road regulations.

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



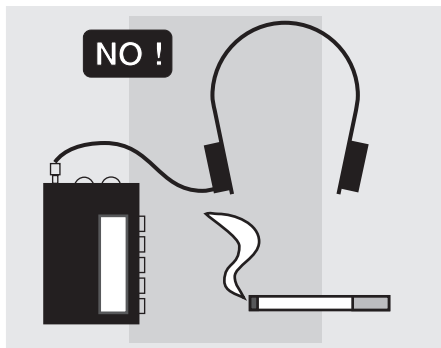
Avoid obstacles that could damage the vehicle or make you lose control of the vehicle.

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



### **⚠ WARNING**

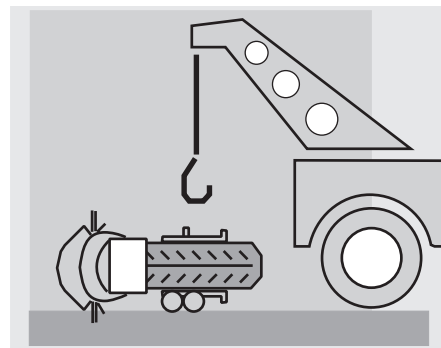
**Always hold the handlebars with both hands and keep both feet on the footpegs (or on the rider's footboards), in the correct riding position. Do not stand up or stretch your limbs while riding.**



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 and fuel levels at regular intervals.



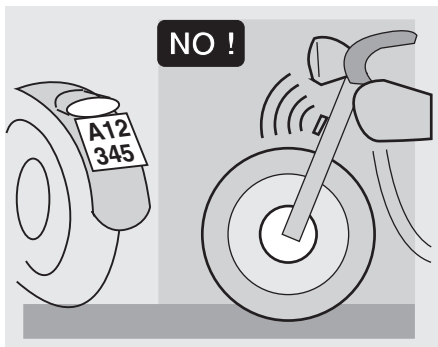
If the vehicle has been involved in an accident, check the control levers, pipes and hoses, wires, the braking system and key components for damage.

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

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

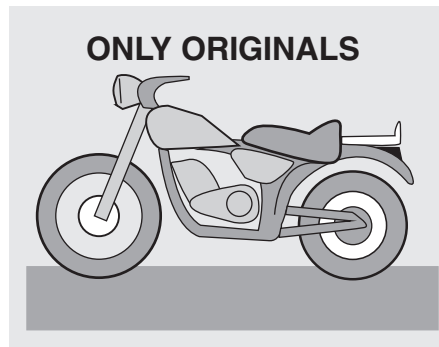
Never use the vehicle when the amount of damage it has suffered makes it unsafe to ride.





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

Any modification made to the vehicle will invalidate the warranty.



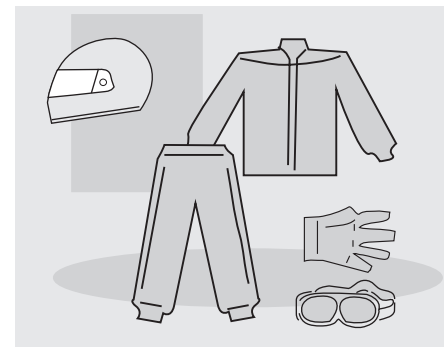
Making any modifications to the vehicle and/or removing the original components can adversely affect vehicle performance and safety or make it illegal to ride.

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

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

Never race with other vehicles.

Do not ride off road.

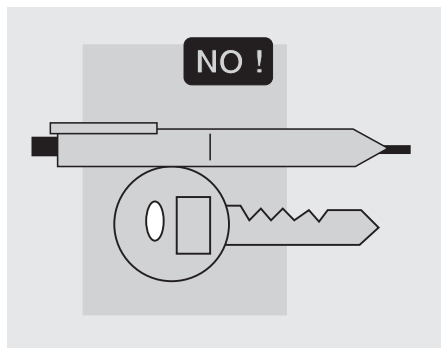


## **CLOTHING**

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

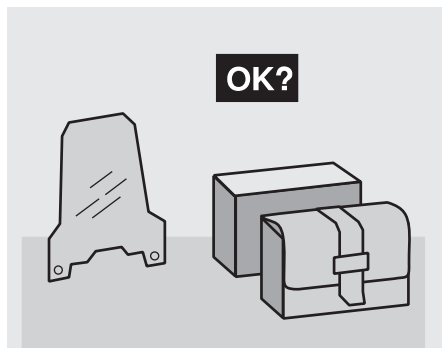
Wear protective clothing, preferably bright and/or reflective clothing. This will ensure you are easily seen by other road users and reduce the risk of an accident, besides affording improved protection in the event of a fall.

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



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

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



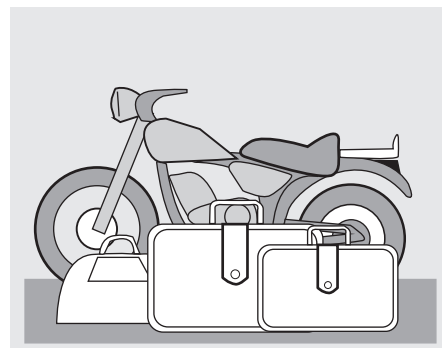
## ACCESSORIES

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

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

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

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



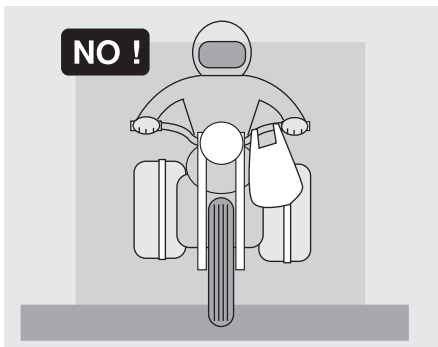
Make sure any accessories installed are fastened securely to the vehicle and will not affect safety during riding.

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

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

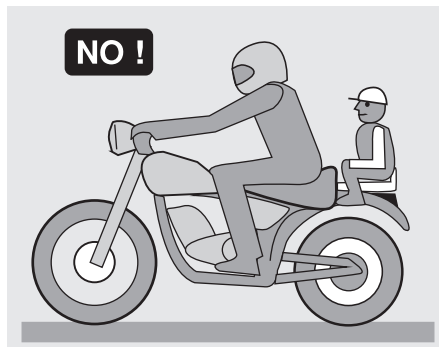
## LOAD

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



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

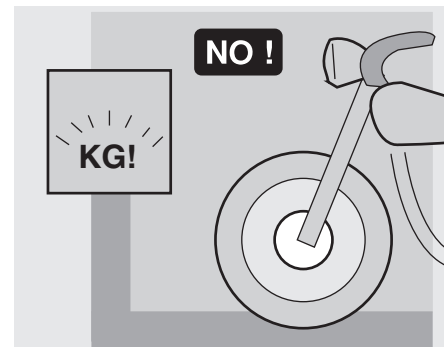
Do not secure bulky bags to the vehicle sides, as they could hit people or obstacles when riding, resulting in loss of control.



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

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

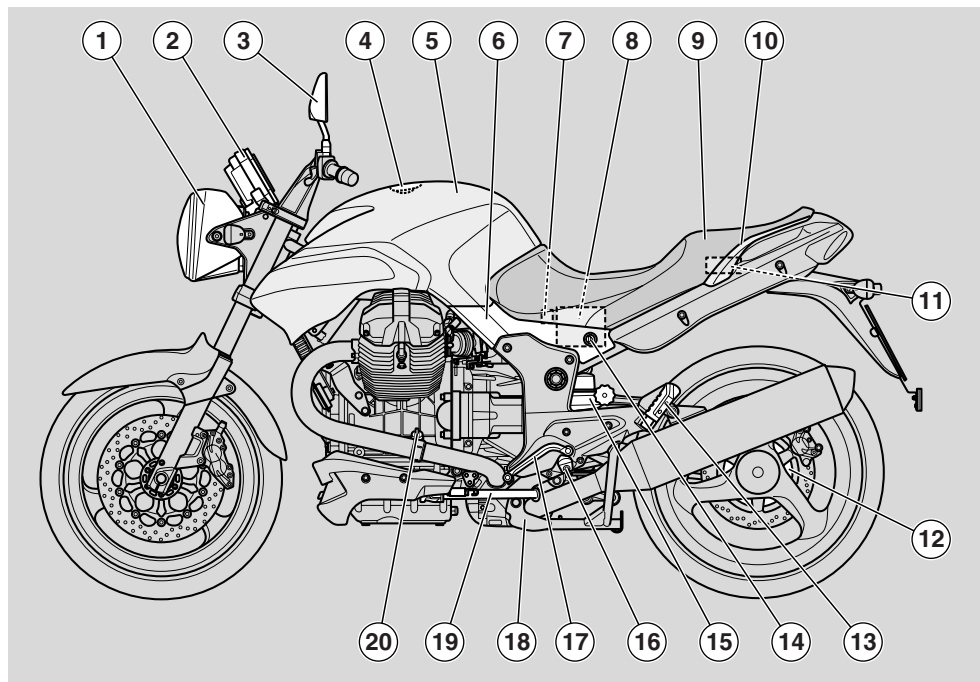
Do not carry pets or children sitting on the glove compartment or on the luggage rack.



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

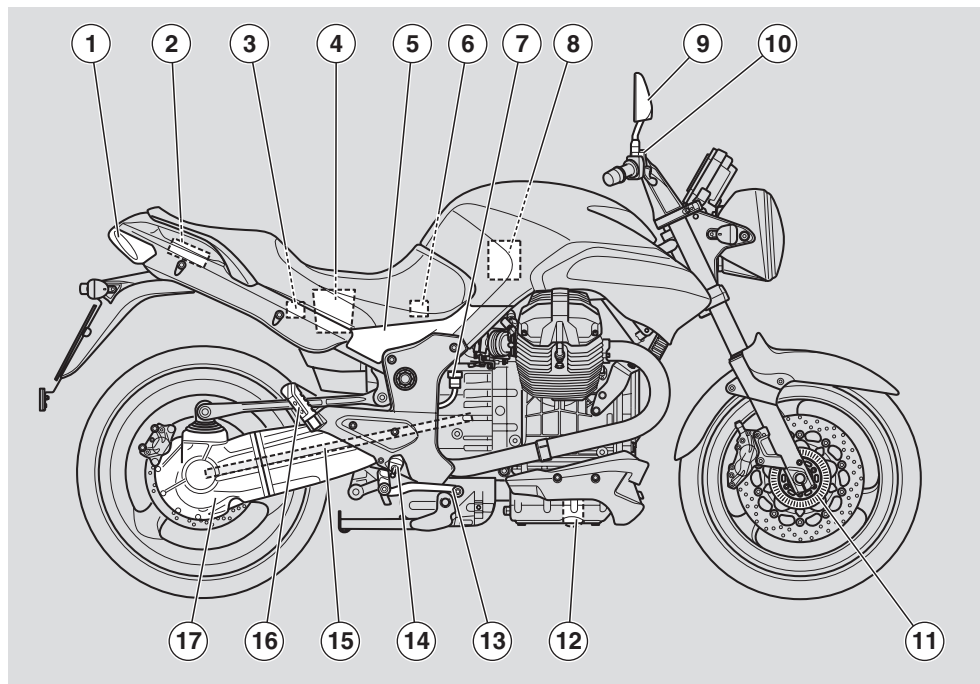
The overloaded vehicle will become unstable and handle poorly.

## POSITION OF KEY COMPONENTS



### KEY

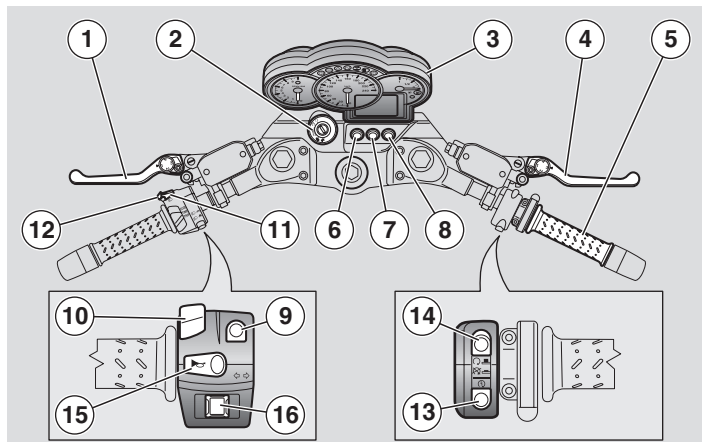
- |                           |                             |                         |
|---------------------------|-----------------------------|-------------------------|
| 1) Headlight              | 8) Battery                  | 15) Rear shock absorber |
| 2) Instrument panel       | 9) Passenger/rider seat     | 16) Left rider footpeg  |
| 3) Left rear-view mirror  | 10) Passenger grab handle   | 17) Gear shift lever    |
| 4) Fuel tank filler plug  | 11) Tool kit compartment    | 18) Centre stand        |
| 5) Fuel tank              | 12) Rear phonic wheel (ABS) | 19) Side stand          |
| 6) Left side body panel   | 13) Left passenger footpeg  | 20) Engine oil dipstick |
| 7) ABS fuse carrier (ABS) | 14) Seat lock               |                         |



## KEY

- |                               |                                 |                               |
|-------------------------------|---------------------------------|-------------------------------|
| 1) Tail light                 | 8) Air filter                   | 15) Cardan shaft              |
| 2) Glove compartment          | 9) Right rear-view mirror       | 16) Right passenger footpeg   |
| 3) Auxiliary fuse carrier     | 10) Front brake fluid reservoir | 17) Single-sided swinging arm |
| 4) Glove compartment          | 11) Front phonic wheel (ABS)    |                               |
| 5) Right side body panel      | 12) Engine oil filter           |                               |
| 6) Main fuse carrier (30A)    | 13) Rear brake lever            |                               |
| 7) Rear brake fluid reservoir | 14) Right rider footpeg         |                               |

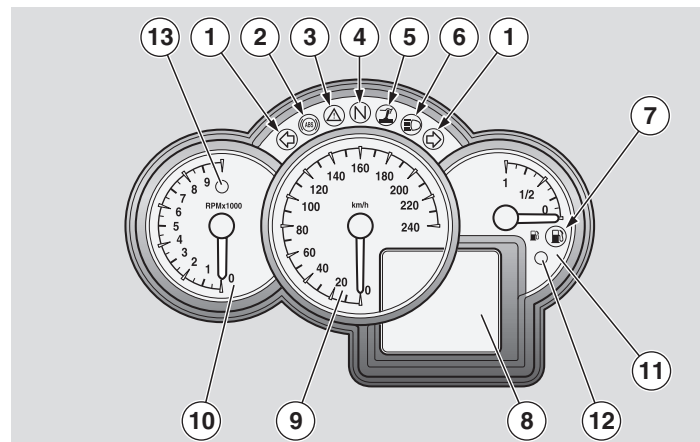
## LOCATION OF INSTRUMENTS/CONTROLS



### LOCATION OF INSTRUMENTS/CONTROLS - KEY

- 1) Clutch lever
- 2) Ignition switch / steering lock (○-⊗-Pz)
- 3) Instruments and indicators
- 4) Front brake lever
- 5) Throttle grip
- 6) Hazard emergency push-button
- 7) ABS on/off switch  
(only for vehicles equipped with ABS)
- 8) Handgrips heating on/off switch (OPT)
- 9) Dimmer switch (≡▷-≡◁)
- 10) Display functions switch
- 11) High beam flasher - passing button
- 12) SET push-button
- 13) Starter button (ⓘ)
- 14) Engine stop switch (○-⊗)
- 15) Horn button (📢)
- 16) Turn indicator switch (↔)

## INSTRUMENTS AND INDICATORS



### LOCATION OF INSTRUMENTS/CONTROLS - KEY

- 1) Green turn indicator warning light (↔)
- 2) Amber ABS light (Ⓜ) (Anti-lock Braking System)
- 3) Red alarm light
- 4) Green neutral light (N)
- 5) Amber "stand down" light (I)
- 6) Blue high beam warning light (≡▷)
- 7) Amber low fuel warning light (🛢)
- 8) Multifunction digital display  
(Clock, ambient temperature, Odometer, trip data, Lap timer, alarm display, maintenance warning indicator)
- 9) Speedometer
- 10) Rev counter
- 11) Fuel level indicator
- 12) Red antitheft light
- 13) Red gear shift light

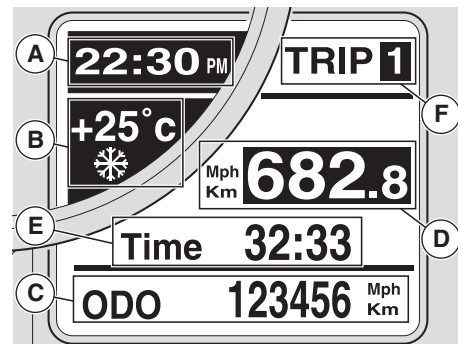
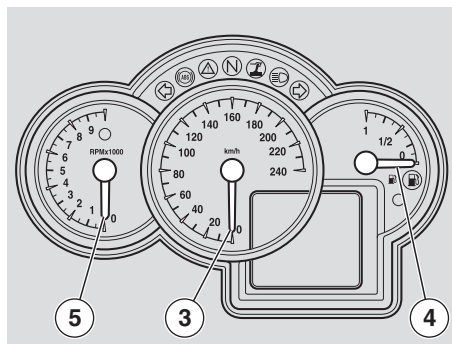
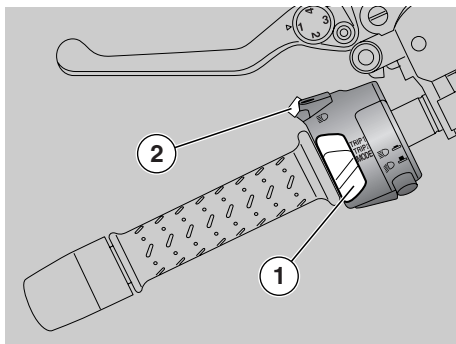
## INSTRUMENTS AND INDICATORS TABLE

| Description                                                                    | Function                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Direction indicator LED (↔)                                                    | Flashes when the relevant direction indicator is on and all at the same time when the emergency button is activated                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| ABS LED (Anti-lock Braking System) (ABS) (Only for vehicles equipped with ABS) | Carries out the ABS system check routine. After the key is turned on, it stays on until speed is above 5 km/h, then turns off. Turns on in case of faults.<br><b>Should the light come on during engine normal operation, the ABS is automatically disabled, because this means that there is a failure in the ABS system. Should this be the case, contact a Moto Guzzi Authorised Dealer as soon as possible.</b>                                                                                                                                               |
| Alarm LED (⚠)                                                                  | It indicates alarms for engine oil pressure, fuel electronic injection and immobilizer.<br><b>⚠ CAUTION</b> If LED "⚠" stays on after the engine is started or comes on during normal engine operation, it means that the electronic control unit has detected a failure; immediately contact a <b>Moto Guzzi</b> Authorised Dealer. If this comes on and the icon "🔧" appears on the multifunction display, this means that the engine oil pressure in the circuit is low. If so, stop the engine immediately and contact a <b>Moto Guzzi</b> Authorised Dealer. |
| Neutral indicator LED (N)                                                      | Turns on when gearbox is in neutral                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Side stand down LED (⚓)                                                        | Turns on when the side stand is down.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| High beam LED (≡)                                                              | Comes on when the headlight high beam is on or when you flash the high beam.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Fuel reserve light (🛢)                                                         | Comes on when the quantity of fuel left in the tank is 4 ℓ.<br>Besides the light coming on, after 2 Km, the multifunction LCD display shows the distance covered since the fuel reserve started being used.<br><b>When the light comes on, refuel as soon as possible, see page 32 (FUEL).</b>                                                                                                                                                                                                                                                                    |

Continued ►

| Description                                                                                                             |                               | Function                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Multifunction LCD display</b>                                                                                        | <b>Clock</b>                  | Displays time in 12 or 24 hour format. Format is selected via display, see page 17 (MULTIFUNCTION LCD DISPLAY).                                                                                                                                                                                                                                                               |
|                                                                                                                         | <b>Temperature</b>            | Displays ambient temperature, the value is shown in the top left 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 17 (MULTIFUNCTION LCD DISPLAY).                                                                                                             |
|                                                                                                                         | <b>Odometer (km/mi)</b>       | Gives total distance covered (in km or miles). Range in km or mi is selected through the display, see page 17 (MULTIFUNCTION LCD DISPLAY).                                                                                                                                                                                                                                    |
|                                                                                                                         | <b>Trip info TRIP 1 and 2</b> | Gives data concerning Trip 1 and 2, partial distance covered is shown in the middle while at the bottom is one of the following: Trip time, Fuel consumption, Instant fuel consumption, Maximum speed or Average speed, see page 17 (MULTIFUNCTION LCD DISPLAY).                                                                                                              |
|                                                                                                                         | <b>Mode</b>                   | In this position access is given to the functions: "Lap timer", "Menu", "Battery voltage". Should the bike be running and the speed be different from zero, it is impossible to enter the "Menu" function. See page 17 (MULTIFUNCTION LCD DISPLAY).                                                                                                                           |
| <b>Speedometer</b>                                                                                                      |                               | Indicates road speed.                                                                                                                                                                                                                                                                                                                                                         |
| <b>Rev counter (rpm)</b>                                                                                                |                               | Indicates engine rpm.<br><b>When maximum rpm set is exceeded, the red gear shift light on the instrument panel will come on.</b>                                                                                                                                                                                                                                              |
| <b>Fuel level indicator</b>                                                                                             |                               | Gives fuel level in the tank. With full tank the index points number one, as soon as the level is decreasing the index will move down. When the light "  " comes on, this means that there is less than 5 +- 1 % of fuel in the tank. If so, refuel as soon as possible, see page 32 (FUEL). |
| <b>Antitheft LED</b>                                                                                                    |                               | Indicates that option external antitheft system is available.                                                                                                                                                                                                                                                                                                                 |
| <b>Gear shift indicator LED</b>                                                                                         |                               | Comes on when set rpm are exceeded. Activation threshold can be set through the display, see page 20 (GEAR SHIFT INDICATOR).                                                                                                                                                                                                                                                  |
| <b>"HAZARD" EMERGENCY PUSH-BUTTON</b>                                                                                   |                               | Turns on when pressed. It indicates that all four emergency warning lights (turn indicators) are flashing.                                                                                                                                                                                                                                                                    |
| <b>ABS push-button (only for vehicles equipped with ABS)</b>                                                            |                               | For disabling procedure see page 26 (CONTROLS ON THE INSTRUMENT PANEL).                                                                                                                                                                                                                                                                                                       |
| <b>HEATED HANDGRIPS PUSH-BUTTON</b><br> |                               | With engine running, press for several seconds to activate handgrips heating. Press briefly to adjust heating. Press again for several seconds to turn heating off. See page 26 (CONTROLS ON THE INSTRUMENT PANEL).                                                                                                                                                           |





## MULTIFUNCTION LCD DISPLAY

### CONTROLS

- 1) Switch with three positions: TRIP1 / TRIP2 / MODE
- 2) SET push-button; press briefly to scroll functions available inside MENUs, press longer to confirm selection.

Turn the key to "ON", the display will show the starting page with "Moto Guzzi" wording for 2 seconds.

The display will carry out a starting check routine and then display the configuration set for switch (1).

Available configurations are:

- TRIP 1
- TRIP 2
- MODE

The display always shows these data:

- CLOCK (zone A)
- AMBIENT TEMPERATURE (zone B) (when temperature is below 3° C (37° F), the ice icon "❄" is displayed below the value)
- Displayed configuration (zone F) (TRIP 1, TRIP 2 or MODE).

The other areas show specific information.

### TRIP 1 AND 2

In TRIP1 and 2 the data concerning trip 1 and 2 are shown.

To select TRIP 1 or TRIP 2:

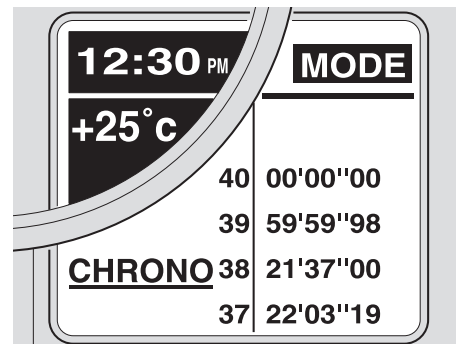
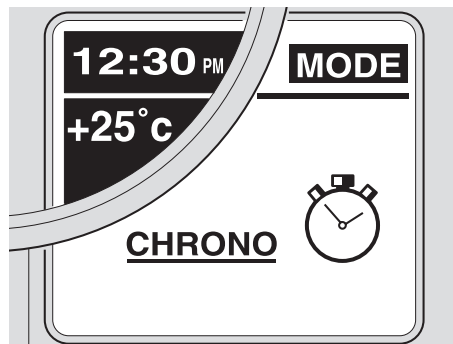
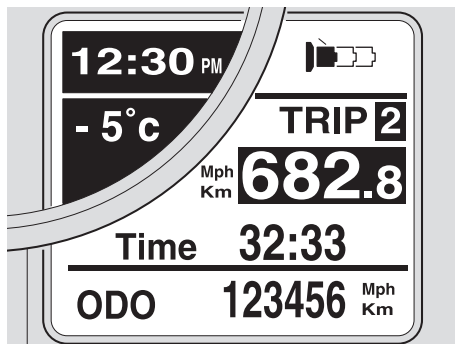
- ◆ Position switch (1) in the position corresponding to TRIP configuration to be displayed.

At the bottom of the display, in zone C, the ODOMETER is displayed, regardless of the selected TRIP. The active configuration is shown in zone F, centre zone D always shows the partial distance covered, while zone E can show the following data:

- TRIP TIME;
- FUEL CONSUMPTION;
- INSTANT FUEL CONSUMPTION;
- MAXIMUM SPEED;
- AVERAGE SPEED;

Data can be selected in a sequence by briefly pressing the SET(2) push-button. To reset all the trip values for the selected TRIP

- ◆ press the SET (2) push-button for several seconds.



Should the heated handgrips be fitted (**OPT**) and active, the display will show a special icon, instead of the selected TRIP, and the TRIP indication is given in the area below. The icon identifies three levels of heating.

## MODE

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

To enter the MODE function:

- ◆ Set the selector (1) to MODE position. Briefly press the SET (2) push-button to display the following functions one after the other:
  - LAP TIMER;
  - MENU (function disabled when vehicle is in motion);
  - BATTERY VOLTAGE;

## LAP TIMER

When the vehicle is on a track, the lap timer allows the user to measure the lap time and store data that can be later retrieved.

To enter the LAP TIMER function:

- ◆ Confirm selection on CHRONO by pressing the SET (2) push-button for several seconds.

The display will show the following options:

- EXIT
- TIMING
- VIEW TIMES
- DELETE TIMES;

Options can be selected in a sequence by briefly pressing the SET(2) push-button.

- ◆ To exit this function, confirm the EXIT option by pressing the SET (2) push-button for several seconds.

## TIMING

To turn on the TIMING:

- ◆ confirm selection on TIMING by pressing the SET (2) push-button for several seconds.

The display will show the actual value and the previous three values stored. To the left of the value is the lap number.

To start the timing:

- ◆ Briefly press the SET (2) push-button. If you press the SET push-button again within the first 10 seconds from when the timer starts recording, the lap timer will reset.

After 10 seconds, if you push it again, the data will be stored and the next lap timer will start recording.

Press the SET (2) push-button for several seconds to cancel the lap timer session. The counter on the display is reset. Briefly press the SET (2) push-button to restart the session.

To go back to LAP TIMER:

- ◆ Press the SET (2) push-button for several seconds.

**NOTE** 40 is the maximum number of sessions that can be recorded, further data can be stored only if the previous set is deleted.

Data acquisition stops when key is turned off. When key is turned back on, although the display will not be set to LAP TIMER function the data are stored in the memory, therefore the following data acquired will follow the previous sessions stored. Stored data will be lost if battery is disconnected.

## VIEW TIMES

This function also displays the acquired lap times.

To enable VIEW TIMES option:

- ◆ Confirm selection on "VIEW TIMES" by pressing the SET (2) push-button for several seconds.

To scroll the pages:

- ◆ Briefly press the SET (2) push-button.

To go back to LAP TIMER:

- ◆ Press the SET (2) push-button for several seconds.

## DELETE TIMES

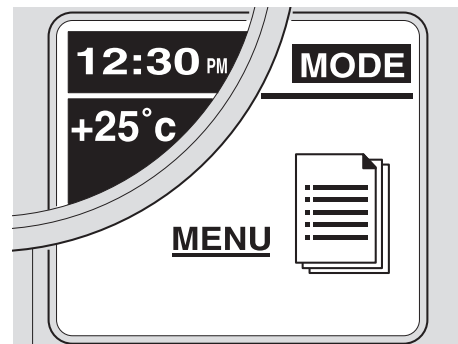
This function deletes the acquired lap times.

To delete data:

- ◆ press the SET (2) push-button for several seconds.

Data deletion is to be confirmed.

Once done, the display will go back to LAP TIMER function.



## MENU

This function can be selected only when vehicle is stopped. It allows the user to set the layout for displaying the parameters of the various configurations.

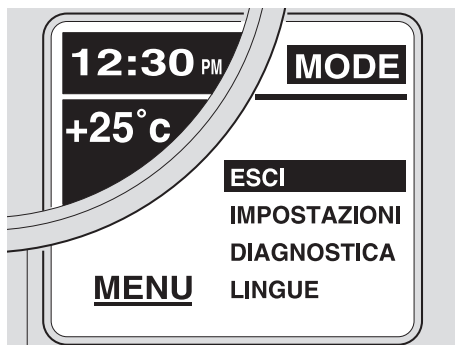
To enter the MENU function:

- ◆ With the MODE configuration displayed, confirm selection on MENU by pressing the SET (2) push-button for several seconds.

The display will show the following options:

- EXIT
- SETTINGS
- DIAGNOSIS (function can be accessed only by authorised personnel)
- LANGUAGE;

Options can be selected in a sequence by briefly pressing the SET(2) push-button.



## SETTINGS

This function allows you to set and customise the layout of the parameters to be displayed for the various configurations.

To enter the SETTINGS function:

- ◆ Confirm selection on SETTINGS by pressing the SET (2) push-button for several seconds.

The display will show the following options:

- EXIT
- TIME SETTINGS
- GEAR SHIFT INDICATOR
- BACK LIGHTING
- °C/°F
- KM/MILES
- 12H/24H
- IMMOBILIZER LED
- CHANGE THE CODE

Options can be selected in a sequence by briefly pressing the SET(2) push-button.

## TIME SETTINGS

This function allows you to set the clock.

To enter the TIME SETTINGS function:

- ◆ Confirm selection on TIME SETTINGS by pressing the SET (2) push-button for several seconds.

To set the hour value:

- ◆ Briefly press the SET (2) push-button to increase hour value that is increased by one unit every time the push-button is pressed.
- ◆ Press the SET (2) push-button for several seconds to shift to minute setting; press it briefly to increase value, value is increased by one unit every time the push-button is pressed.

To store the set data and go back to SETTINGS function:

- ◆ press the SET (2) push-button for several seconds.

## GEAR SHIFT INDICATOR

This function allows you to set the value for the Gear shift indicator threshold.

To enter the GEAR SHIFT INDICATOR function:

- ◆ Confirm selection on GEAR SHIFT INDICATOR by pressing the SET (2) push-button for several seconds.

The display shows "Gear shift indicator" and the rev counter scale indicates the threshold value currently set.

To set the Gear shift indicator threshold:

- ◆ Briefly press the SET (2) push-button to increase threshold value by 100 rpm at a time. As soon as the value reaches the maximum limit, it is decreased by the same amount if the SET (2) push-button is pressed again.

To store the set threshold and go back to SETTINGS function:

- ◆ press the SET (2) push-button for several seconds.

The set value is stored until it is set again.

**NOTE** When the threshold is exceeded, the red light in the rev counter flashes; take engine rpm below threshold value and the red light should go off.

## BACK LIGHTING

This function allows the user to adjust the lighting power of the instrument panel.

To enter the BACK LIGHTING function:

- ◆ Confirm selection on BACK LIGHTING by pressing the SET (2) push-button for several seconds.

The display shows three levels for lighting intensity:

- LOW
- MEAN
- HIGH

Levels can be selected in a sequence by briefly pressing the SET(2) push-button.

To store the set level and go back to SETTINGS function:

- ◆ press the SET (2) push-button for several seconds.

### °C/°F

This function allows you to select the unit of measurement for ambient temperature.

To enter the °C/°F function:

- ◆ Confirm selection on °C/°F by pressing the SET (2) push-button for several seconds.

The display shows two units of measurement:

- °C
- °F

Units of measurement can be selected in a sequence by briefly pressing the SET(2) push-button.

To store the selected range and go back to SETTINGS function:

- ◆ press the SET (2) push-button for several seconds.

### KM/MILES

This function allows you to select the unit of measurement for speed.

To enter the "KM/MILES" function:

- ◆ Confirm selection on "KM/MILES" by pressing the SET (2) push-button for several seconds.

The display shows two units of measurement:

- KM
- MILES

Units of measurement can be selected in a

sequence by briefly pressing the SET(2) push-button.

To store the set unit and go back to SETTINGS function:

- ◆ press the SET (2) push-button for several seconds.

### 12H/24H

This function allows you to select the time format.

To enter the 12H/24H function:

- ◆ Confirm selection on "12H/24H" by pressing the SET (2) push-button for several seconds.

The display shows two formats:

- 12H
- 24H

The formats can be selected by briefly pressing SET (2).

To store the chosen format and go back to SETTINGS function:

- ◆ press the SET (2) push-button for several seconds.

### IMMOBILIZER LED

This function allows you to enable/disable the alarm led flashing inside the fuel level gauge indicator.

It is used in case an external antitheft system is connected to the vehicle.

### CHANGE THE CODE

Allows the user to change his personal code. During the procedure the user is prompted to enter the old code.

## CODE RECOVERY

Allows the user to set a new user code when the old one is not available. During the procedure the user is prompted to insert 2 of the programmed keys.

## DIAGNOSIS

This function interfaces with the systems fitted to the motorcycle to carry out diagnosis. To enable the function, a password is needed that is available only to **Moto Guzzi** service centres.

## LANGUAGE

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

To enter the LANGUAGE function:

- ◆ Confirm selection on LANGUAGE by pressing the SET (2) push-button for several seconds.

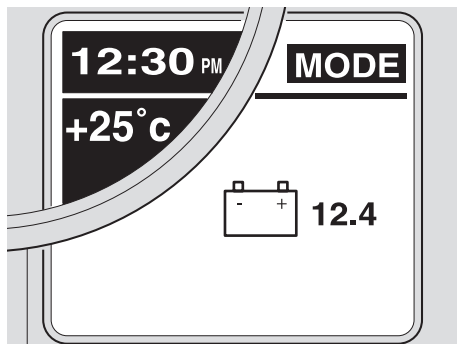
Available languages are:

- ITALIANO
- ENGLISH
- FRANCAIS
- DEUTSCH
- ESPAGNOL

The languages can be selected by briefly pressing SET (2).

To store the set unit and go back to LANGUAGE function:

- ◆ press the SET (2) push-button for several seconds.

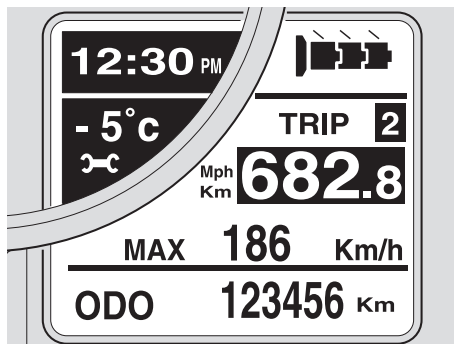


### BATTERY VOLTAGE

This function shows battery voltage and does not allow the user to interact.

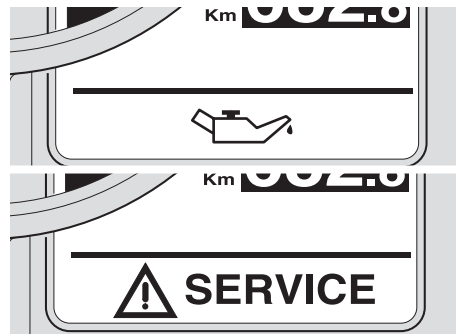
To enter the function:

- ◆ From the MODE configuration, repeatedly press the SET (2) push-button until the desired page is displayed.



### SERVICE

When the vehicle is due for maintenance (after the first 1000km - 625 mi and then every 10000km 6250 mi) the display will show the icon of a wrench “” in the area dedicated to the ice icon. Should both icons be active, they will be displayed alternately.



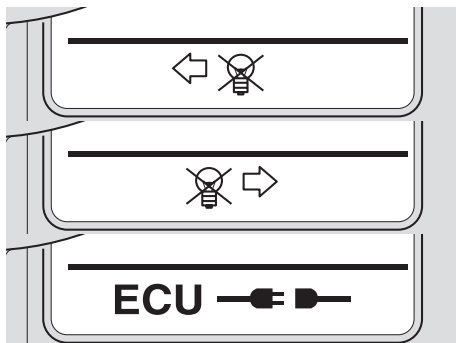
### ALARM DISPLAY

If a serious failure is detected --something that might jeopardise the vehicle or the rider's safety-- the display will show an icon indicating the cause of the failure, in the area where the odometer usually is.

Alarms are divided in two groups depending on their priority:

– High priority:

- ◆ Oil pressure, Errors from control unit, Errors from instrument panel.

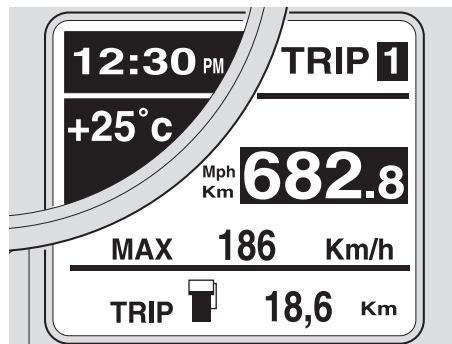


– Low priority:

◆ Direction indicators, Control unit disconnected.

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.

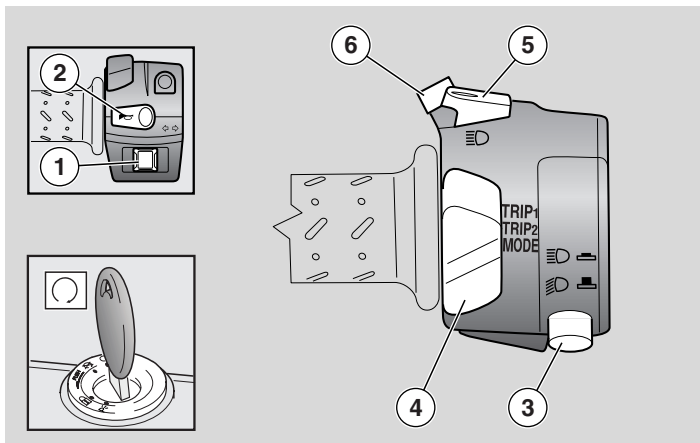


### KM COVERED W/FUEL RESERVE

When the fuel reserve light is steadily on, the display indicates the km covered in this condition. The value is displayed in area C, where the ODOMETER usually is.

If the vehicle is using the fuel reserve when the engine is started, kilometres covered with fuel reserve on are displayed after 40 seconds from engine start-up, the ODOMETER can be viewed this way as well.

## MAIN INDEPENDENT CONTROLS



- 3) **LIGHT DIMMER SWITCH:** Set it to “” to operate the high beam; set it to “” to operate the low beam.
- 4) **LCD CONFIGURATION SELECTOR:** Select the LCD displayed configuration, see page 17 (MULTIFUNCTION LCD DISPLAY).
- 5) **HIGH BEAM FLASHER BUTTON ()**  
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 17 (MULTIFUNCTION LCD DISPLAY).

## CONTROLS ON LEFT HANDLEBAR

**NOTE** The electric components only operate when the ignition switch is in the “” position.

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

**NOTE** When the indicator repeater light flashes quickly, this indicates that one or both turn indicator bulbs are burnt out. For replacement instructions, please see page 84 (CHANGING THE FRONT AND REAR TURN INDICATOR BULBS).



## 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 48 (STARTING) for the starting procedure.

### ⚠ WARNING

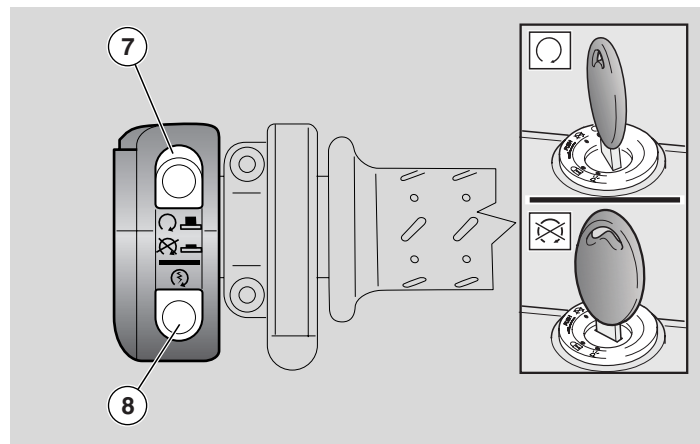
**Do not operate the engine stop switch "○-⊗" while riding.**

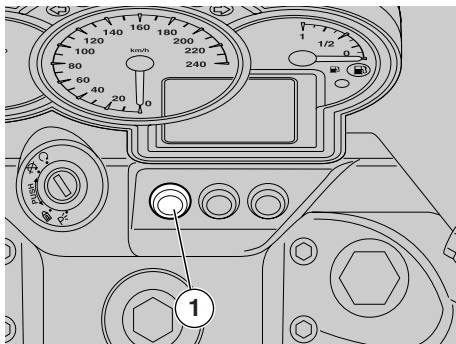
This switch serves as a safety or emergency switch. With the switch pressed in position "○", it is possible to start the engine; the engine can be stopped by pressing the switch to position "⊗".

### ⚠ 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 "⊗".**



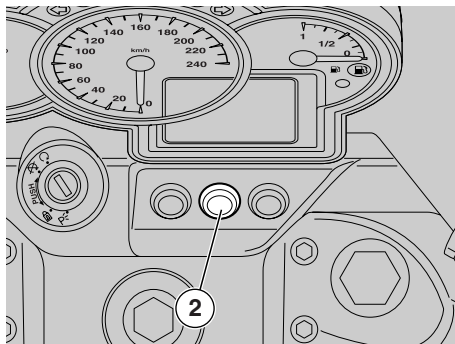


## CONTROLS ON THE INSTRUMENT PANEL

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

### 1) "HAZARD" EMERGENCY PUSH-BUTTON

Press it to operate all four turn indicators and the corresponding lights on the instrument panel; the actual push-button is flashing. The HAZARD blinker stays on when the key is removed from the switch, but may not be turned off by simply pressing the hazard button again. Take the key to "○" and press the push-button again to disable the Hazard function.



### 2) ABS DISABLING PUSH-BUTTON (only for vehicles equipped with ABS )

Disable the system as follows:

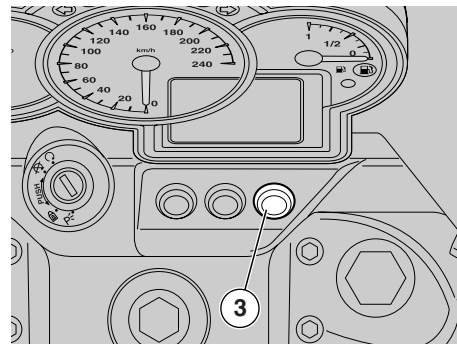
- ◆ Set ignition switch to "○".
- ◆ Press and hold the SET (2) push-button for several seconds.

After about three seconds the light () on the instrument panel will start blinking.

- ◆ Immediately release push-button (2).
- ◆ Now the ABS light on the panel will carry on blinking slowly meaning that the ABS is completely disabled.

Re-enable the ABS as follows:

- ◆ Stop the vehicle and the engine setting the ignition switch to "⊗".



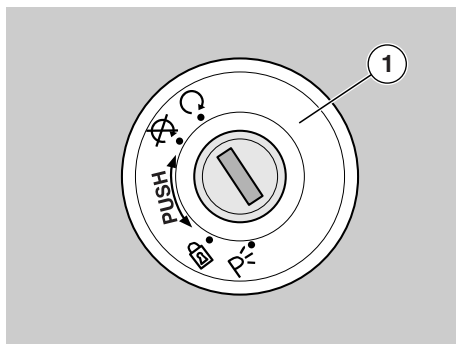
◆ Take the switch back to "○" and start the engine.

◆ With engine running, the ABS will be re-enabled when speed gets above 5 km/h.

**NOTE** In case of failure or when ABS is disabled, the motorcycle acts as if it is not equipped with this system.

### 3) HEATED HANDGRIPS PUSH-BUTTON

Press for several seconds to activate handgrips heating. Press briefly to adjust heating. Press again for several seconds to turn heating off. When the engine is stopped, the handgrip heating switches off, too; it will turn on again when the engine is started again, and will be set to last selected power level.



## IGNITION SWITCH

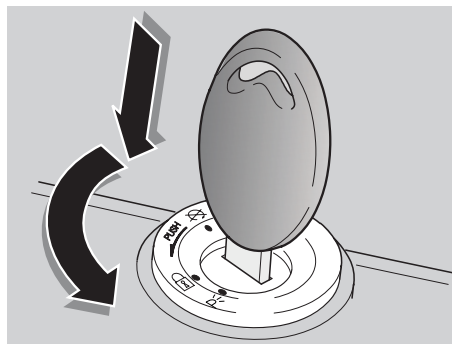
The ignition switch (1) is mounted to the top yoke of the steering shaft.

**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** It is possible to program up to 4 keys. It is advisable to contact a **Moto Guzzi** Authorised Dealer for this procedure.



## STEERING LOCK

### ⚠ WARNING

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

## OPERATION

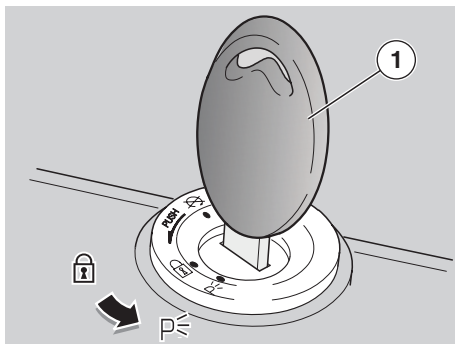
### To lock the steering:

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

**NOTE** If necessary, turn on the parking lights, see page 28 (PARKING LIGHTS).

- ◆ Remove the key.

| Position                                                                                             | Function                                                                                | Key removal                           |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------|
| <br>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.     |



## OPERATION

### To turn the parking lights on:

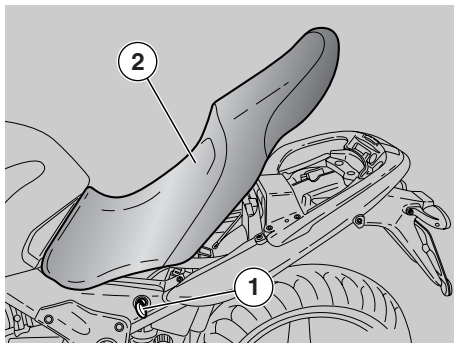
- ◆ Lock the steering but do not remove the key (1), see page 27 (STEERING LOCK).
- ◆ Turn the key (1) to “P” (PARKING) position.
- ◆ Check that both front and rear parking lights are on.
- ◆ Remove the key (1).

## ⚠ 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.**

## PARKING LIGHTS

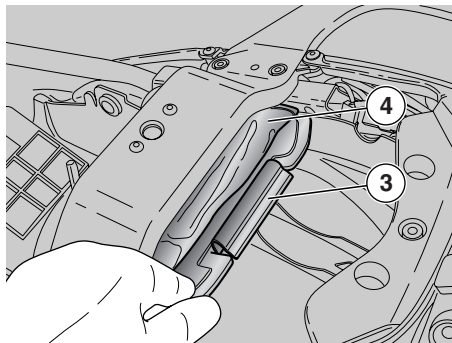
The vehicle is equipped with front and rear parking lights. It is always recommended to park the vehicle in the suitable areas and in any case in lighted locations. If this is not possible, the parking lights are useful whenever it is necessary to park in a dark or poorly lit area and in any case to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



### UNLOCKING/LOCKING THE SEAT

- ◆ Place the vehicle on the stand, see page 55 (PUTTING THE VEHICLE ON THE STAND).
- ◆ Insert the key (1) into the seat lock.
- ◆ Turn the key (1) clockwise, 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 glove/tool kit compartments.

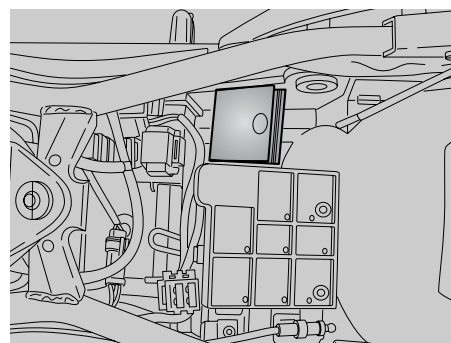


### To lock the seat (2):

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

### **⚠ WARNING**

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



### GLOVE/TOOL KIT COMPARTMENTS

**To gain access to the glove compartment:**

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

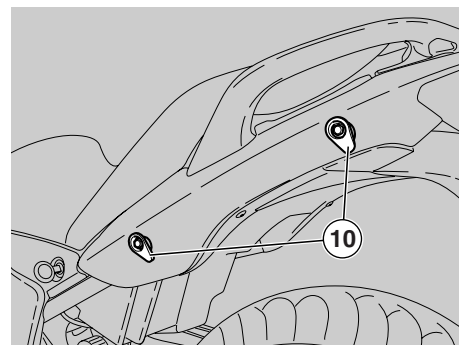
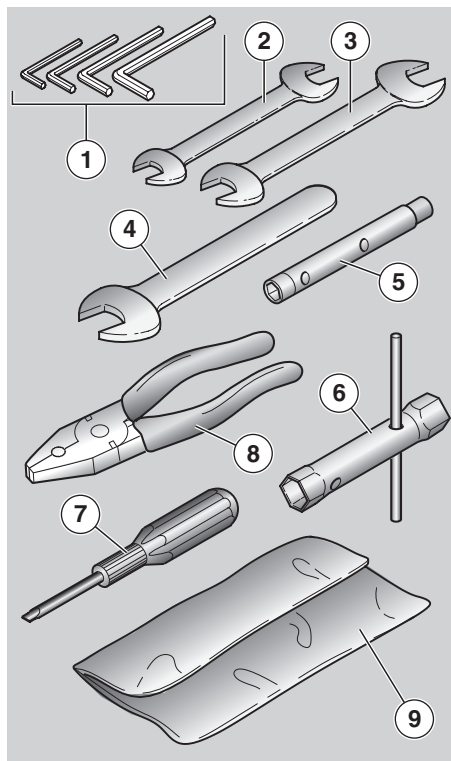
**To gain access to the tool kit compartment:**

- ◆ Remove the cover (3).
- ◆ Remove the bag (4) from its seat.

### The tool kit includes:

- 3, 4, 5, 6 mm bent Allen spanners (1);
- 8 - 10 mm double fork spanner (2);
- 13 - 14 mm double fork spanner (3);
- 19 mm fork spanner (4);
- 8 - 10 mm socket spanner (5);
- 17-21 mm socket spanner for spark plug (6) and fork preload adjustment;
- double-ended cross-head/flat-blade screwdriver (7);
- pliers (8)
- tool box (9).

**Maximum allowed weight: 5 kg inside the glove compartment + 5 kg inside the tool kit compartment.**



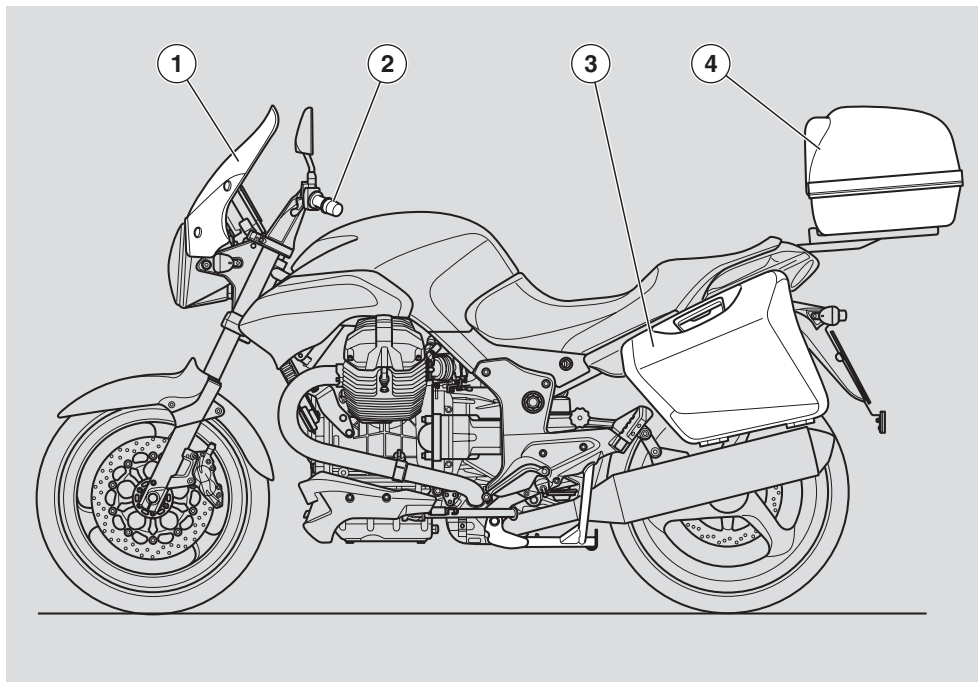
### LUGGAGE ANCHOR POINTS

A small piece of luggage can be fitted on the seat rear end; it can be positioned using elastic bands to be secured to the 4 elements (2 each side) (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) windshield
- 2) heated handgrips
- 3) side panniers
- 4) top case
- electronic antitheft system

## MAIN COMPONENTS

### FUEL

#### **⚠ WARNING**

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

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

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

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

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

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

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

**DO NOT RELEASE FUEL IN THE ENVIRONMENT.**

**KEEP AWAY FROM CHILDREN.**

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

**To refuel, proceed as follows:**

- ◆ 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): 23 ℓ

TANK RESERVE: 4 ℓ

#### **⚠ CAUTION**

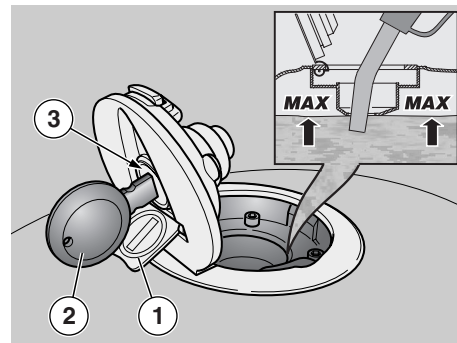
**Do not add any additives or other substances to the fuel.**

**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.

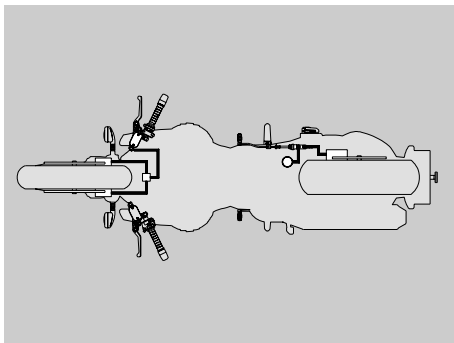
- ◆ With the key (2) inserted, press the plug and tighten.

#### **⚠ WARNING**

**Make sure the plug is firmly closed.**

- ◆ Remove the key (2).
- ◆ Close the flap (1).





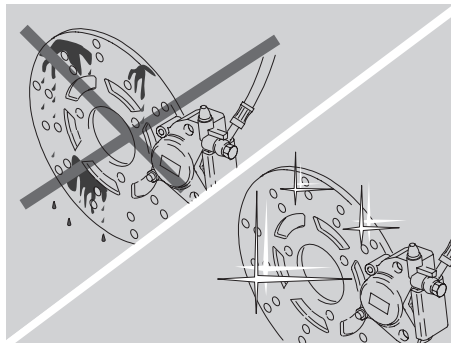
## **BRAKE FLUID - recommendations**

**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**

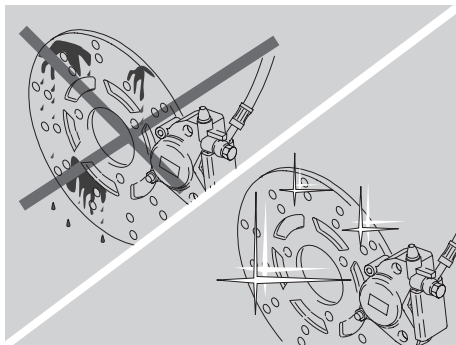
In the event of accidental contact, flush affected area thoroughly. If fluid has been spilled in the eyes, seek the assistance of an ophthalmologist or a doctor.

**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

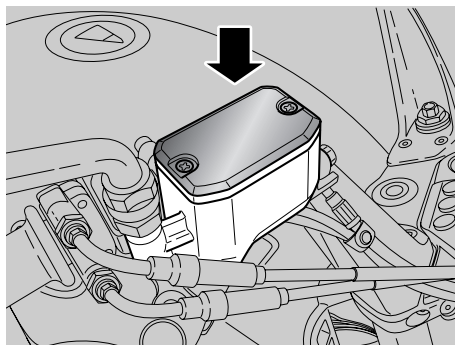
The brakes are key safety components and must be kept in perfect working order; check them before each ride.

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 93 (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).

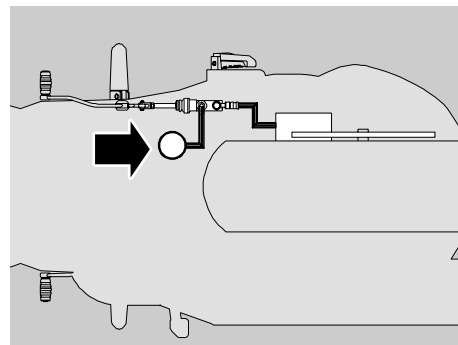
The rear brake uses a single disc (fitted to the right side of the wheel).

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.

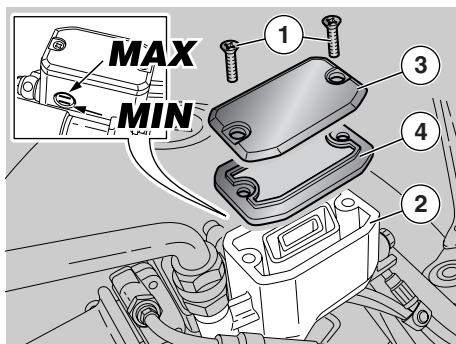
Check the brake discs for wear after the first 1000 km (625 mi) and then every 2000 km (1250 mi).

Before leaving, check brake fluid level in the reservoirs, see page 35 (FRONT BRAKE), page 36 (REAR BRAKE), and brake pad wear, see page 70 (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

- ◆ Place the vehicle on the stand, see page 55 (PUTTING THE VEHICLE ON THE STAND).
- ◆ Turn the handlebar fully to the right.
- ◆ Make sure that the fluid level exceeds the "MIN" mark.  
**MIN**= minimum level  
**MAX**= maximum level

If the fluid is below the "MIN" mark:

### ⚠ CAUTION

**Brake fluid level decreases as the brake pads wear down.**

- ◆ Check brake pad wear, see page 70 (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 33 (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 93 (LUBRICANT CHART), until reaching correct level that is in-between the marks "MIN" and "MAX".

### ⚠ CAUTION

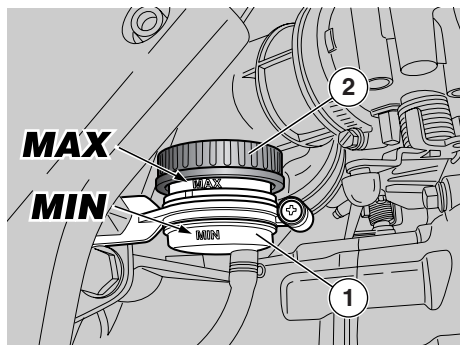
**Do not exceed the "MAX" level mark.**

**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

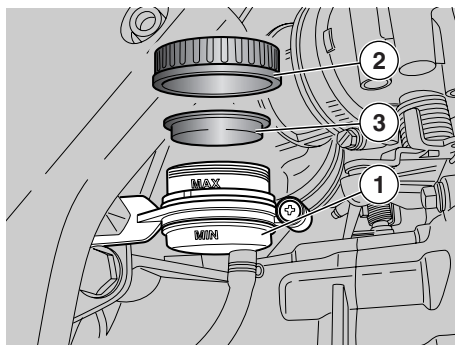
If the fluid is below the "MIN" mark:

### ⚠ CAUTION

Brake fluid level decreases as the brake pads wear down.

- ◆ Check brake pad wear, see page 70 (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 33 (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.

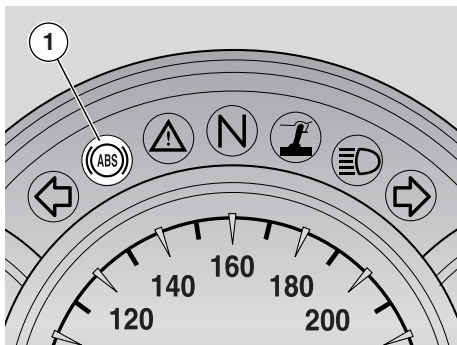
- ◆ Remove the gasket (3).
- ◆ Top up reservoir (1) with recommended brake fluid, see page 93 (LUBRICANT CHART), until reaching correct level that is in-between the marks "MIN" and "MAX".

### ⚠ 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.



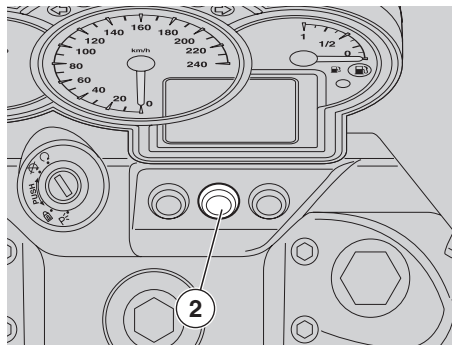
### ABS (only for vehicles equipped with ABS )

ABS is a device preventing wheel locking in case of emergency braking, thus increasing vehicle stability under braking if compared to a standard braking system. When brake is operated, the tyre might lock and lose grip and this makes the vehicle difficult to handle.

A position sensor “picks up” from the phonic wheel (fixed to the vehicle wheel) the wheel status thus detecting its possible lockup.

The signal is managed by a control unit that adjusts the pressure inside the braking system depending on that signal.

**NOTE** When the ABS triggers, the rider can feel a vibration in the brake lever.



### **WARNING**

**The ABS system does not prevent skidding in a curve. Emergency braking with the vehicle tilted, handlebar turned, bumpy road surface, or in poor grip conditions creates a condition of instability quite hard to handle. It is therefore recommended to drive carefully and wisely and brake gradually. Do not be careless and rely on the system only. Braking in a curve is governed by special physical rules that the ABS can not eliminate.**

After the key is turned on, the light (1) stays on until speed is above 5 km/h, then turns off. Should the light stay on permanent, it means that a failure was detected and the ABS is disabled.

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

### Running with ABS active

Warning light (1) stays off.

Should a failure occur, the light comes on permanent indicating the fault. The ABS is automatically disabled.

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

### Running with ABS not active

Light (1) flashes, the system was disabled on purpose (not by accident).

### Disabling the ABS

It is possible to disable the ABS via switch (2), see page 26 (ABS DISABLING PUSH-BUTTON (only for vehicles equipped with ABS)).

### **WARNING**

This vehicle features a two-channel ABS, i.e., the system works both on the front and the rear wheel.

It is important to always check that the phonic wheel is clean and periodically check that the sensor gap is the same over all 360 degrees.

In case of removal and refitting of the front wheel, it is equally important to ensure that the gap between phonic wheel and sensor complies with specifications. Have the checks and adjustments performed by a **Moto Guzzi** Authorised workshop.

### **WARNING**

With the ABS system, brake pad quality is important; do not use non-approved friction materials or braking efficiency would be impaired and the vehicle would not be safe.



### **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.

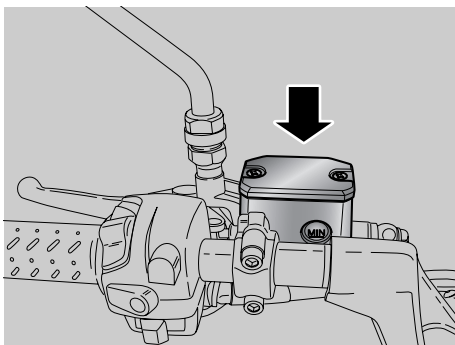
**DO NOT RELEASE INTO THE ENVIRONMENT.**

**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 93 (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 39 (CLUTCH), have it changed every two years by a **Moto Guzzi** Authorised Dealer.

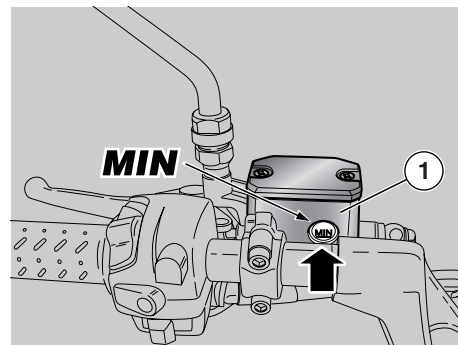
### **⚠ WARNING**

**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.

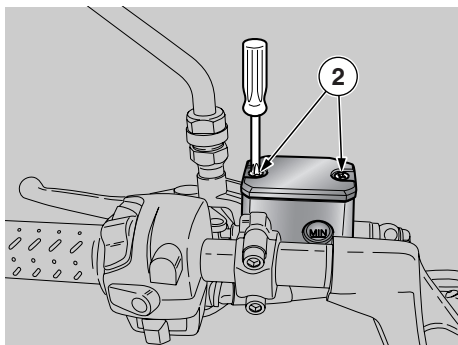


## **CHECK**

- ◆ Place the vehicle on the stand, see page 55 (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 38 (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.

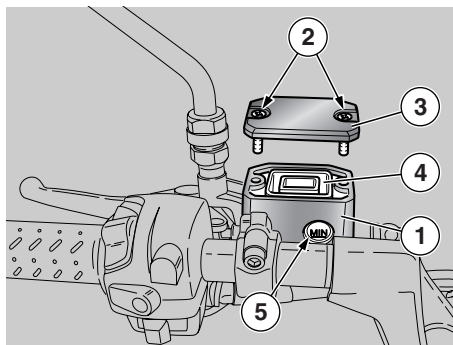
Clutch fluid is hygroscopic and will absorb moisture from the air.

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.

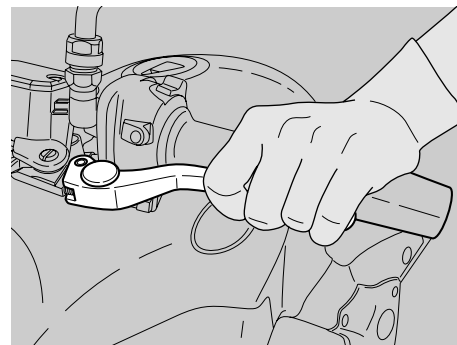
Do not add any additives or other products to the fluid.

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 93 (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 free 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.

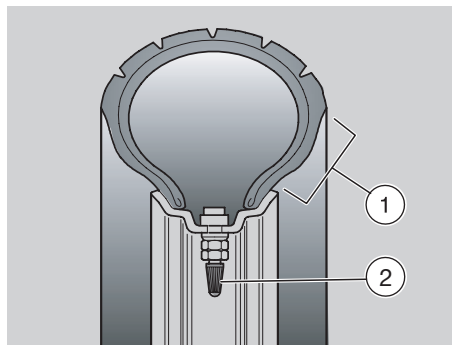
Every 1000 km (625 mi) check tires for wear and check their inflating pressure at ambient temperature, see page 90 (TECHNICAL DATA).

Measuring pressure on hot tyres will lead to inaccurate measurement.

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

Over-inflated 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, under-inflation 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

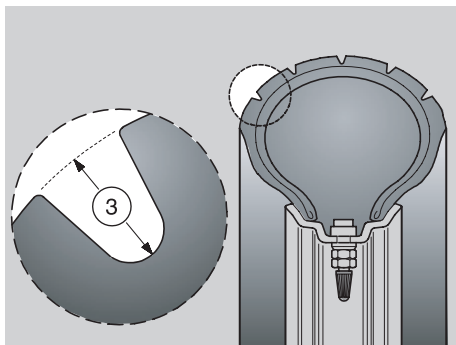
Spare tyres should be of the recommended type and model, see page 90 (TECHNICAL DATA); using different tyres than the specified ones negatively affects vehicle handling.

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 (  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**

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

Wear latex gloves during servicing.

### CAUTION

If the alarm LED “” and the engine oil pressure icon “” come on during engine normal operation, it means that the engine oil pressure in the circuit is low.

If so, check engine oil level, see page 62 (CHECKING AND TOPPING UP ENGINE OIL LEVEL), should it be incorrect, immediately stop the engine and top up. To have the system inspected, contact your **Moto Guzzi** Authorised Dealer.



### CAUTION

Proceed with care.

Do not spill the oil!

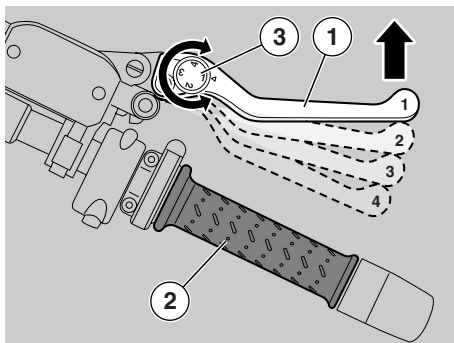
Take care not to smear any component, the area in which you are working and the surrounding area. Carefully remove any trace of oil.

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

Periodically check the engine oil level, see page 62 (CHECKING AND TOPPING UP ENGINE OIL LEVEL).

To change engine oil, see page 58 (SCHEDULED MAINTENANCE CHART) and page 63 (CHANGING ENGINE OIL AND OIL FILTER).

**NOTE** Use high quality oil, see page 93 (LUBRICANT CHART).



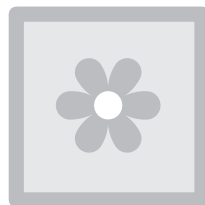
### ADJUSTING THE FRONT BRAKE LEVER AND THE CLUTCH LEVER

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

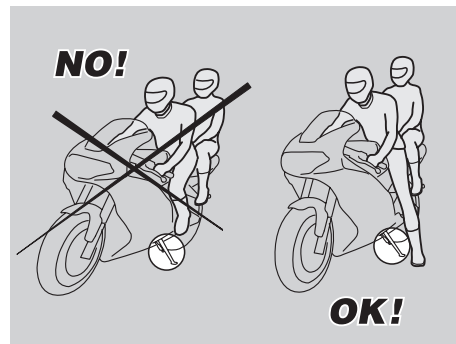
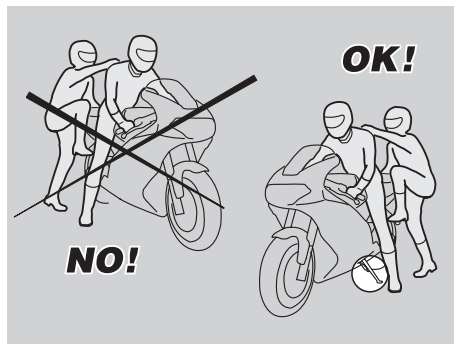
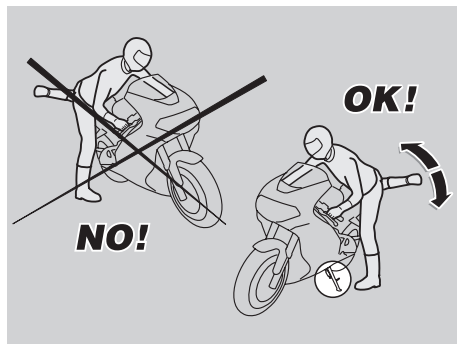
**Tampering with the noise control system is prohibited.**

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.

## INSTRUCTIONS FOR USE



### 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.

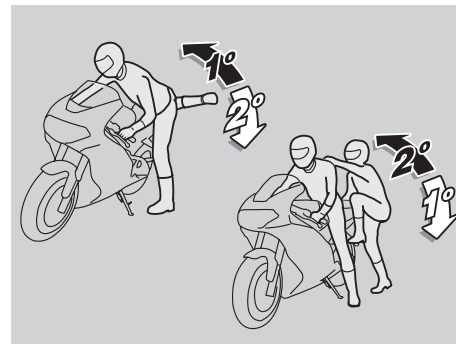
#### **⚠ CAUTION**

**Do not apply the load of your weight or of the passenger's weight onto the side stand.**

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

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

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



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



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

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

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

Never get off or attempt to get off the vehicle by jumping or stretch your leg to put your foot on the ground to dismount. These are 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 footpeg while seated astride the vehicle, because this might compromise the stability and balance of the vehicle.

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

### GETTING OFF THE VEHICLE

- ◆ Select an appropriate location for parking, see page 54 (PARKING).
- ◆ Stop the vehicle, see page 54 (STOPPING).

### **⚠ WARNING**

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

- ◆ With the left shoe heel, extend the side stand completely.

**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 footpegs.

### **⚠ 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 47 (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.

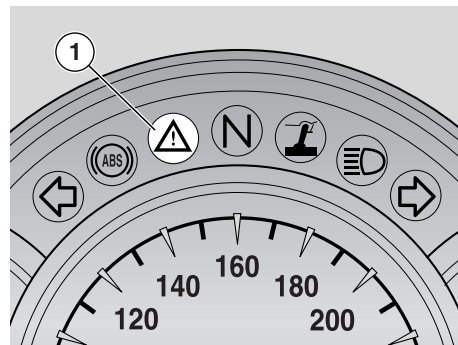
A quick pre-ride check takes just a few minutes and greatly improves your safety.

**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.



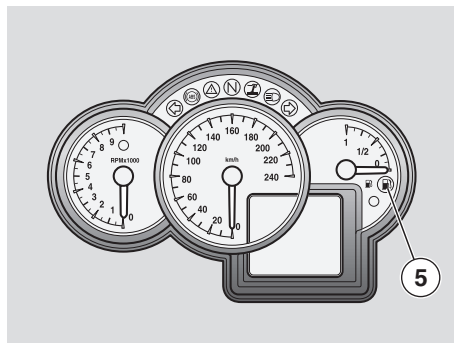
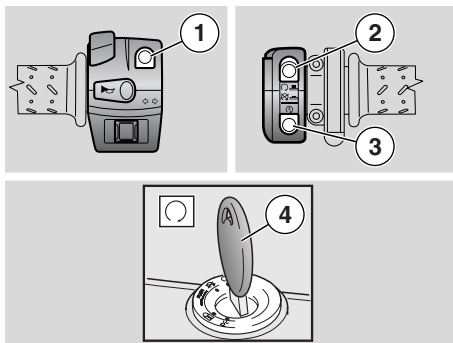
### ⚠ CAUTION

After the first 1000 km (625 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 58 (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.<br>Check the pads for wear.<br>If necessary, top up the fluid reservoirs.                                     | 33, 34, 35, 36,<br>70 |
| Throttle                                                                                                                              | Check for smooth operation; throttle should snap fully open and closed at all positions of the steering.<br>Adjust and/or lubricate as required.                                                  | 71                    |
| Engine oil                                                                                                                            | Check and/or top up as required.                                                                                                                                                                  | 42, 62                |
| Wheels / tyres                                                                                                                        | Check tyre surface, inflation pressure. Check for wear or damage.<br>Remove any objects trapped in the tread.                                                                                     | 41                    |
| Brake levers                                                                                                                          | Make sure that they work smoothly.<br>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).<br>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<br>Centre stand                                                                                                            | Check its operation. No friction during up and down movement, springs must ensure full retraction.<br>Lubricate joints and connections, if necessary.<br>Check stand switch for proper operation. | 73, 78                |
| 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.<br>Check the circuit for leaks.<br>Make sure the filler plug is tightened securely.                                                                    | 32                    |
| Engine stop switch (○ - ✕)                                                                                                            | Make sure that it operates correctly.                                                                                                                                                             | 25                    |
| 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.                                                                                              | 83, 84                |
| Transmission fluid                                                                                                                    | Check. If level needs topping up, contact a <b>Moto Guzzi</b> Authorised Dealer.                                                                                                                  | 66                    |
| Phonic wheels (only for vehicles equipped with ABS)  | Ensure that the phonic wheels are perfectly clean                                                                                                                                                 | 37 (ABS)              |



## 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.

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

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

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

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

- ◆ Sit astride the vehicle, see page 44 (GETTING ON AND OFF THE VEHICLE).
- ◆ Make sure the stand is fully up.

- ◆ Make sure that the dimmer switch (1) is in position "⏏".
- ◆ Set the engine stop switch (2) to position "⏏".
- ◆ Turn the key (4) and set the ignition switch to position "⏏".

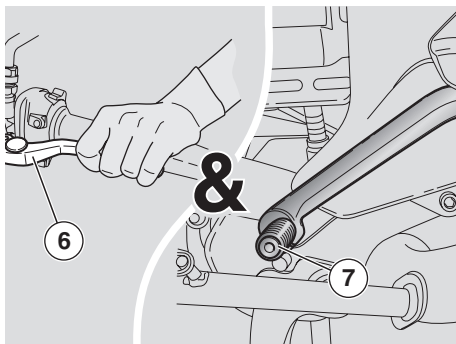
### The following occurs:

- the parking lights come on;
- all warning lights on the instrument panel come on;
- the LCD will show "Moto Guzzi" wording for 2 seconds;
- the speed indicator and fuel gauge indexes reach end of scale, rpm index moves to max. set value;
- as soon as the first check routine is over, the warning lights go off, the instruments indicate the current value and the LCD displays 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 "⏏" (5) on the instrument panel comes on, it means that there are 4 litres of fuel left in the tank. Refuel as soon as possible, see page 32 (FUEL).





- ◆ Completely pull the front brake lever.
- ◆ Completely pull the clutch lever (6) and set the gear shift lever (7) to neutral [green LED “N” on].

**NOTE** Hold the clutch lever (6) completely pulled until the engine starts.

**NOTE** In case of low ambient temperature (close to or lower than 0°C – 32 °F), see page 49 (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 alarm light “⚠” and the engine oil pressure icon “🛢” 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.

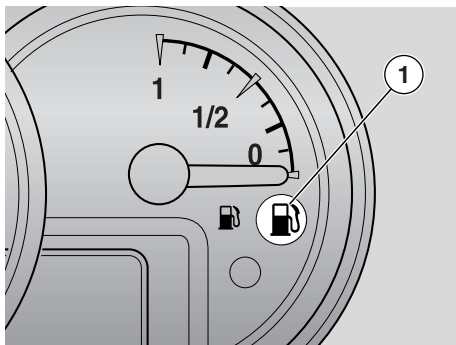
### STARTING THE ENGINE FROM COLD

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

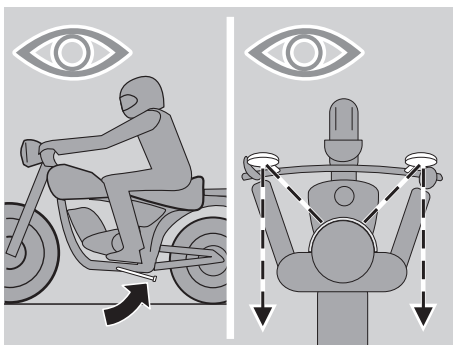
This is a high-performance vehicle. We recommend that you become familiar with it gradually using the greatest care.

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 4 litres of fuel left in the tank.



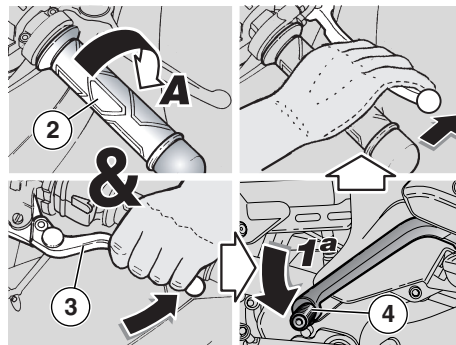
Refuel as soon as possible, see page 32 (FUEL).

### ⚠ WARNING

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

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

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



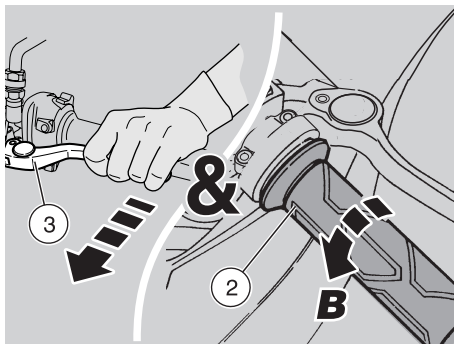
### ⚠ WARNING

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 48 (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).

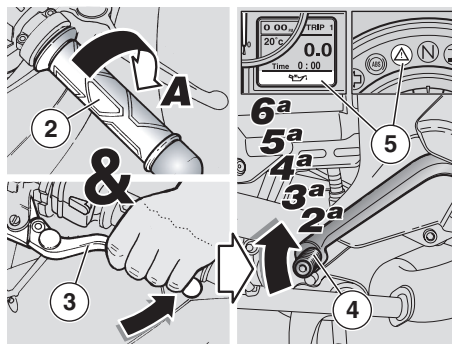


### ⚠ WARNING

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 53 (RUNNING-IN).

- ◆ Increase your speed by gradually rotating the throttle grip (2) (**Pos.A**), without exceeding the recommended rpm, see page 53 (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 alarm LED "⚠" (5) and the engine oil pressure icon "⚠" (5) come on during engine normal operation, it means that the engine oil pressure in the circuit is low.

If so, check engine oil level, see page 62 (CHECKING AND TOPPING UP ENGINE OIL LEVEL), should it be incorrect, immediately stop the engine and top up. To have the system inspected, contact your **Moto Guzzi** Authorised Dealer.

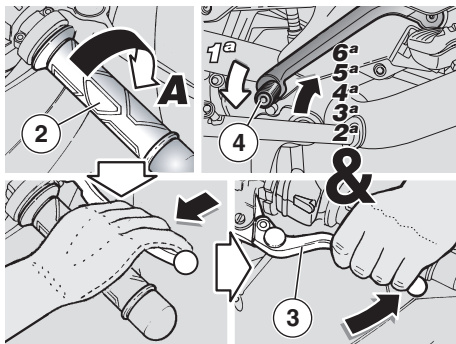
**Change to a lower gear (downshift):**

- ◆ 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** It is possible that during the first period of use the clutch slightly smells as if something was burnt inside. This condition is normal and will stop as soon as clutch plates 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:

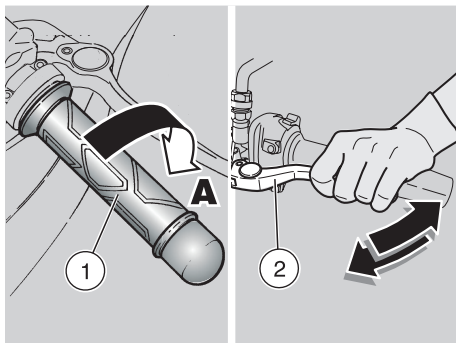
- ◆ Do not flip the throttle open abruptly with the engine running at low rpm - either during or after the running-in period.
- ◆ Until you have covered the first 100 km (62 mi), use the brakes gently and avoid harsh, prolonged braking. This will help the brake pads bed in properly against the brake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

## WARNING

After the first 1000 km (625 mi), have a **Moto Guzzi** Authorised dealer carry out the "Post running-in" checks specified in the periodic maintenance chart, see page 58 (SCHEDULED MAINTENANCE CHART). Failure to perform these checks may lead to injury to yourself or other people and/or vehicle damage.

- ◆ After the first 1000 km (625 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 – 1000 (0 – 625)             | 5000 |
| 1000 – 2000 (625 – 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 50 (MOVING OFF AND RIDING).

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

- ◆ Pull the clutch lever (2) to prevent the engine stalling.
- When the vehicle has come to a stop:
- ◆ Select neutral (green warning light "N" on).
  - ◆ Release the clutch lever (2).
  - ◆ If you need to stop only briefly, keep at least one brake applied.

## PARKING

It is very important to select an adequate to place to park your vehicle - observe local regulations and the indications given 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 when the engine is on or the key is inserted into the ignition switch.

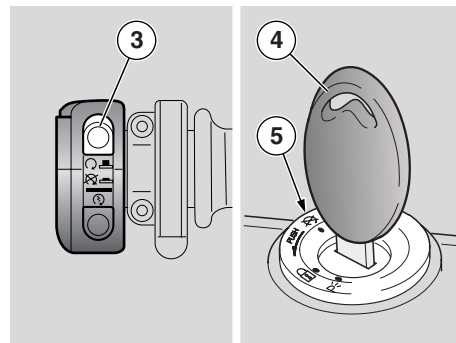
### ⚠ WARNING

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 apply the load of your weight or of the passenger's weight onto 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 "X".
- ◆ Turn the key (4) and set the ignition switch (5) to position "X".

### ⚠ WARNING

Carefully follow the indications for getting on and off the vehicle, see page 44 (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 27 (STEERING LOCK) and remove the key (4).

### ⚠ WARNING

Make sure that the vehicle is stable.



## PUTTING THE VEHICLE ON THE STAND

### SIDE STAND

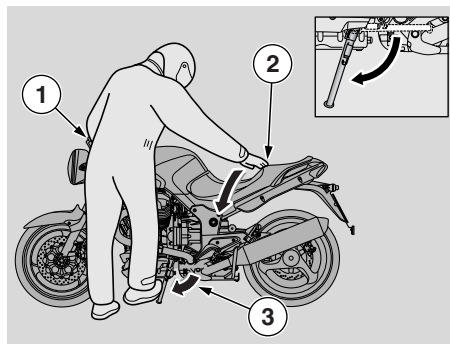
To put the vehicle on the side stand while seated astride the vehicle, see page 44 (GETTING ON AND OFF THE VEHICLE).

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.**

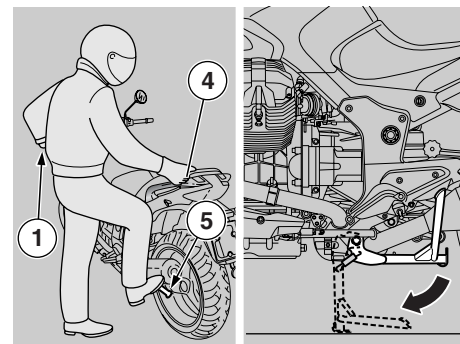
- ◆ Select an appropriate location for parking, see page 54 (PARKING).
- ◆ Grasp the left grip (1) and place your right hand on the rear upper part of the vehicle (2).



- ◆ 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.**



### CENTRE STAND

#### **WARNING**

**It is forbidden to position the vehicle on the centre stand when sitting astride the vehicle.**

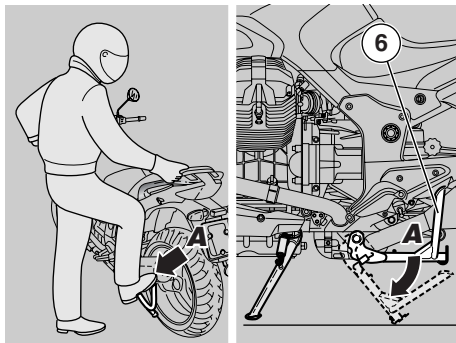
#### **WARNING**

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

- ◆ Select an appropriate location for parking, see page 54 (PARKING).
- ◆ Grab the left handgrip (1) and handle (4).

#### **CAUTION**

**For your safety, the side stand down condition is indicated to avoid vehicle tipping over.**



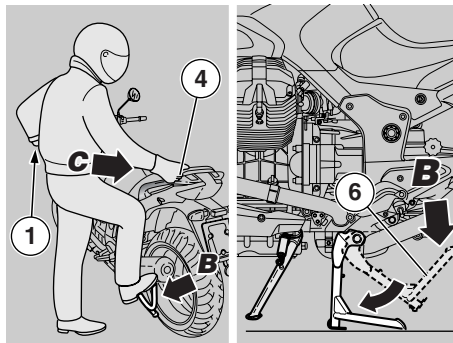
**NOTE** Do not rest the side stand to ground. Keep the vehicle upright.

- ◆ Push down the side stand (5) with your right foot and extend it completely.
- ◆ Push onto centre stand lever (6) (**Pos. A**) and rest it onto the ground.

### ⚠ CAUTION

Proceed with care.

The positioning of the vehicle on the centre stand may be difficult, since the vehicle is very heavy. Release the handgrip (1) and handle (4) only when the vehicle is steady on the stand.



- ◆ Load your weight onto the centre stand lever (6) (**Pos. B**) and move your centre of gravity to the back of the vehicle (**Pos.C**).

### ⚠ WARNING

Make sure that the vehicle is stable.

- ◆ Fold up the side stand.



## SUGGESTIONS TO PREVENT THEFT

### CAUTION

When a disc lock is used, remember to remove it before moving off. Failure to heed this warning can seriously damage the braking system and lead to an accident thus provoking serious injuries or death.

NEVER leave the key in the ignition switch and always use the steering lock. Park the vehicle in a safe place, possibly in a garage or a protected place. When possible, use an additional antitheft 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 of the vehicle, stop the engine and remove the key from the ignition, wait for the engine and the exhaust system to cool down and, if possible, lift the vehicle using adequate lifting equipment placed on firm and level ground.

Ensure the area is well ventilated before proceeding.

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

Do not 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 47 (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 Authorised Dealer **Moto Guzzi** (CAN ALSO BE CARRIED OUT BY THE OWNER).

| Component                                    | End of running-in<br>[1000 km (625 mi)] | Every 10000 km<br>(6250 mi) or 12 months        | Every 20000 km<br>(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                                               |                                           |
| 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 |                                           |
| Drain fluid from oil drain tube from 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.**

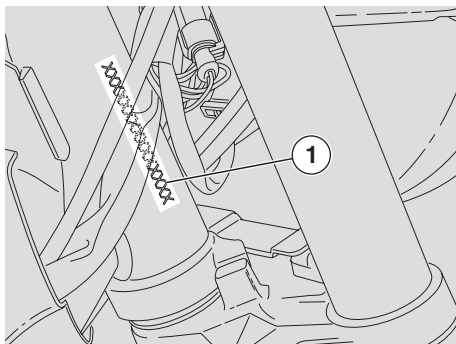
(\*) = If vehicle is used in competitions, change every 5000 km (3125 mi).

(\*\*) = 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<br>[1000 km (625 mi)]                                   | Every 10000 km<br>(6250 mi) or 12 months | Every 20000 km<br>(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.<br><b>Halve maintenance intervals if you are riding in rainy or dusty conditions, on rough road surfaces or when the vehicle is used for racing.</b><br>(*) = If vehicle is used for racing, check every 5000 km (3125 mi). |                                                                           |                                          |                                           |

| Component                                                                                                                                                                                                                                                                                                                                                          | End of running-in<br>[1000 km (625 mi)]                    | Every 10000 km<br>(6250 mi) or 12 months | Every 20000 km<br>(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 <b>1100</b>                                                                                                                                                                                                                                                                                                                                      |                                                            |                                          | ③                                         |
| Generator belt                                                                                                                                                                                                                                                                                                                                                     | every 20000 km (12500 mi): ④, every 50000 km (31250 mi): ③ |                                          |                                           |
| Head stud bolts tightening                                                                                                                                                                                                                                                                                                                                         | ④                                                          |                                          |                                           |
| Exhaust pipe flange bolts                                                                                                                                                                                                                                                                                                                                          | ①                                                          |                                          |                                           |
| ① = check and clean, adjust, lubricate or change, if necessary (as specified in the Workshop Manual); ② = clean; ③= change; ④= adjust.<br><b>Halve maintenance intervals if you are riding in rainy or dusty conditions, on rough road surfaces or when the vehicle is used for racing.</b><br>(*) = 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.

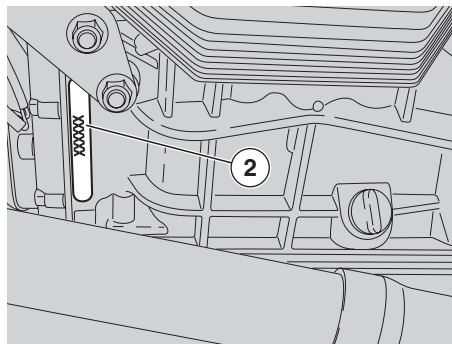
The frame number must be quoted when purchasing spare parts.

**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/dipstick.

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.

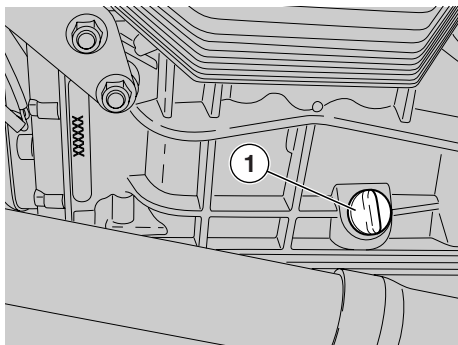
## SCREW CLAMPS

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 42 (ENGINE OIL) and page 57 (MAINTENANCE).

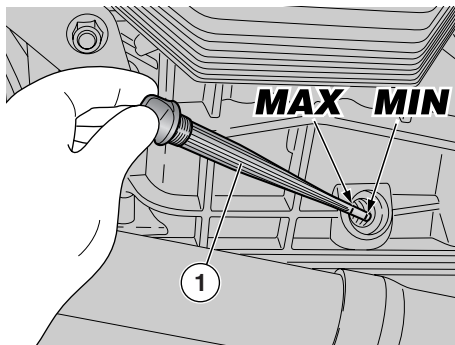
**NOTE** Halve maintenance intervals if you are riding in rainy or dusty conditions, or on rough road surfaces.

Periodically check engine oil level, change the oil every 10000 km (6250 mi), see page 63 (CHANGING ENGINE OIL AND OIL FILTER).

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 alarm light "⚠" and the engine oil pressure icon "🛢" do not come on, see page 15 (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 54 (STOPPING).
- ◆ 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 10W - 60 oil, see page 93 (LUBRICANT CHART).

Top up to correct level, see page 93 (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.

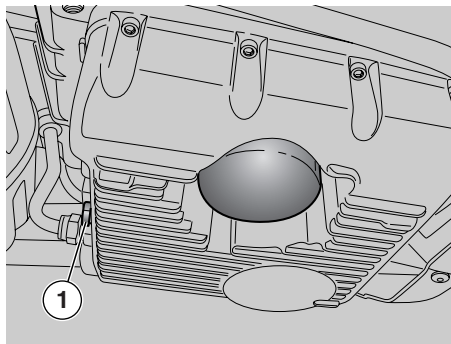
Carefully read page 42 (ENGINE OIL) and page 57 (MAINTENANCE).

**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 62 (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.

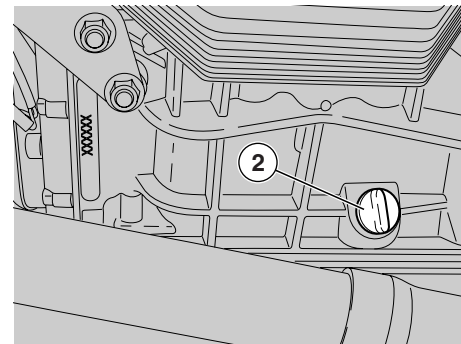


### ⚠ CAUTION

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).**



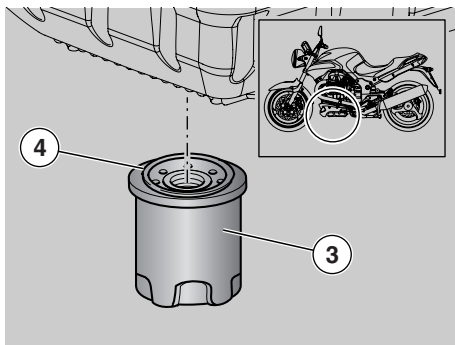
### ⚠ CAUTION

Do not dispose of oil in the environment. Dispose of engine oil - stored in a sealed container - through the nearest waste oil reclamation firm or through the supplier.

## CHANGING THE ENGINE OIL FILTER

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

**Change the engine oil filter every 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 engine oil filter and screw finger tight.

## 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.

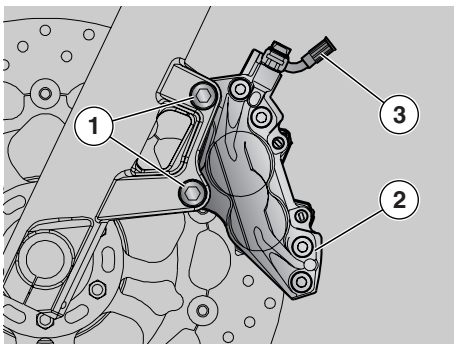
If necessary, contact a **Moto Guzzi** Authorised Dealer.

### ⚠ 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 57 (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 callipers, 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

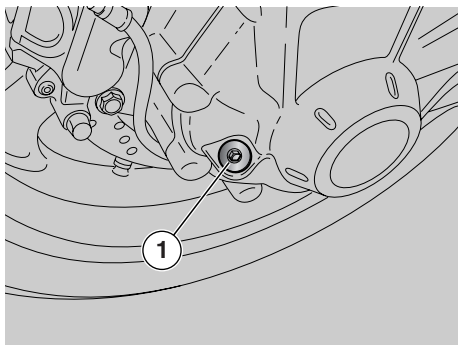
On assembly, replace both calliper retaining screws (1) with new ones of the same type.

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

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

### ⚠ CAUTION

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



### CHECKING THE CARDAN SHAFT OIL LEVEL

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

Check cardan shaft oil level at regular intervals; change the oil after the first 1000 km (625 mi) and then every 20000 km (12500 mi).

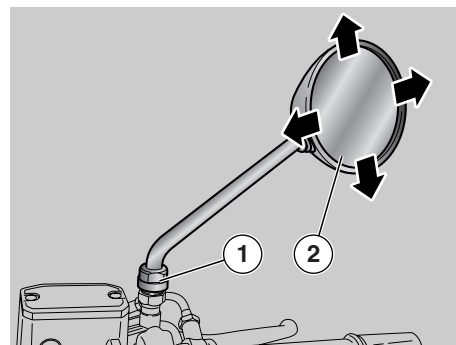
#### Check as follows:

- ◆ 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.



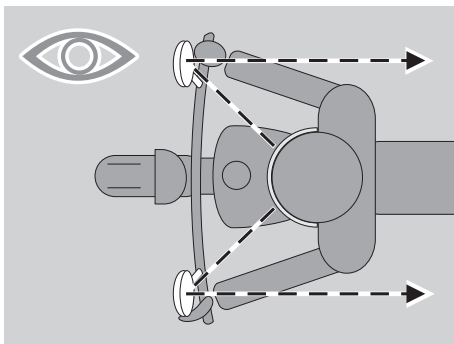
### REAR-VIEW MIRRORS

#### ⚠ 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 55 (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.

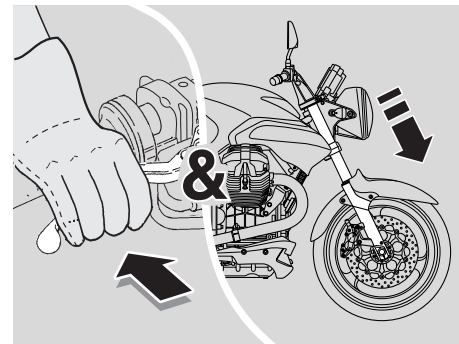
### Setting the rear-view mirrors

- ◆ Sit astride the vehicle, see page 44 (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 57 (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 1000 km (625 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

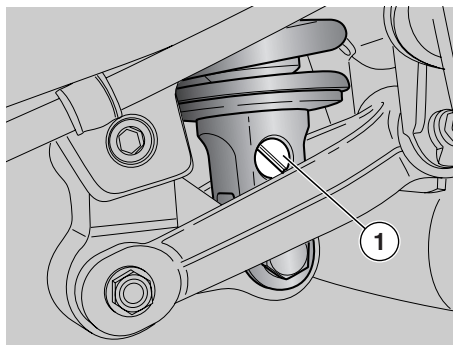
- ◆ Have the fork oil seals changed by a **Moto Guzzi** Authorised Dealer after the first 30000 km (18750 mi) and then every 20000 km (12500 mi).

## REAR SUSPENSION

The rear suspension consists of a spring/damper unit that is connected to the frame and to the rear swinging arm through cush drive rubbers and a linkage system, respectively.

For setting adjustments, the shock absorber has

- an adjuster (1) for rebound hydraulic damping;
- an adjusting knob (2) for spring (3) preload adjustment.



## ADJUSTING THE REAR SHOCK ABSORBER

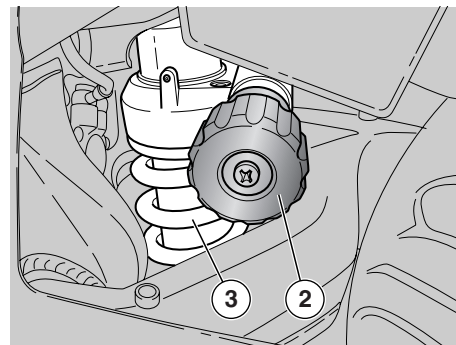
Check the rear shock absorber every 10000 km (6250 mi) and adjust as required.

Standard rear shock absorber setting is made to suit most riding conditions at low and high speed, for carrying the rider with luggage.

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.



## AVAILABLE SETTINGS

**Standard setting:**

rider only.

**Medium load setting:**

(such as for rider & passenger or with luggage).

**Maximum load setting:**

(such as for rider, passenger and luggage).

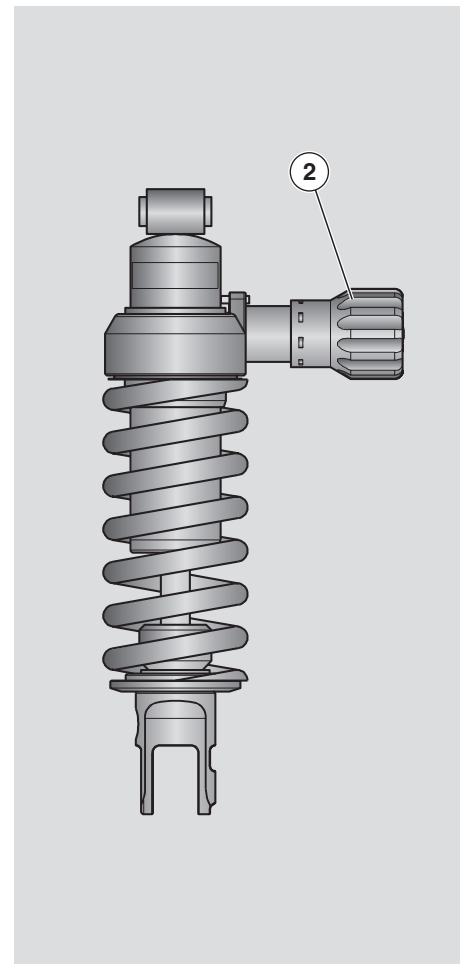
### ⚠ WARNING

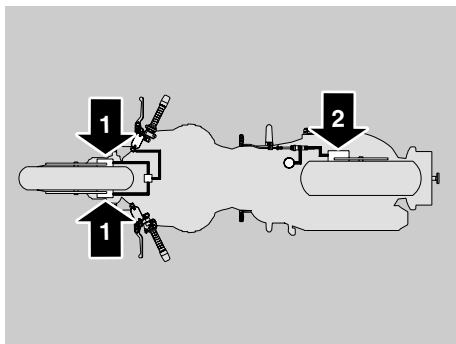
Set spring preload and rebound damping according to vehicle usage. When you increase spring preload, you will have to increase rebound damping accordingly to avoid unexpected jerking when riding. If necessary, contact your **Moto Guzzi** Authorised Dealer. Test ride the vehicle until the optimum setting is obtained.

## SHOCK ABSORBERS SETTINGS

|                | Rear shock absorber                     |                                                           | Fork                            |
|----------------|-----------------------------------------|-----------------------------------------------------------|---------------------------------|
| Load condition | Preload                                 | Rebound                                                   | Preload                         |
|                | Click from completely discharged (soft) | Click from completely preloaded (screw completely closed) | Turns from completely preloaded |
| standard       | 8 (std)                                 | 14 (std)                                                  | 8.5 (std)                       |
| medium load    | 35                                      | 11                                                        | 8.5 (std)                       |
| maximum load   | max                                     | 8                                                         | 8.5 (std)                       |

**std = standard factory calibration**





## CHECKING THE BRAKE PADS FOR WEAR

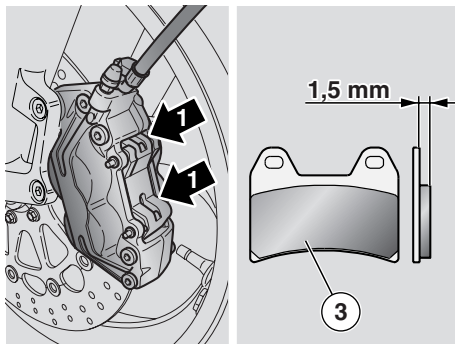
Carefully read page 33 (BRAKE FLUID - recommendations), page 34 (DISC BRAKES) and page 57 (MAINTENANCE).

**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 1000 km (625 mi), every 2000 km (1250 mi) afterwards and before each ride.

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

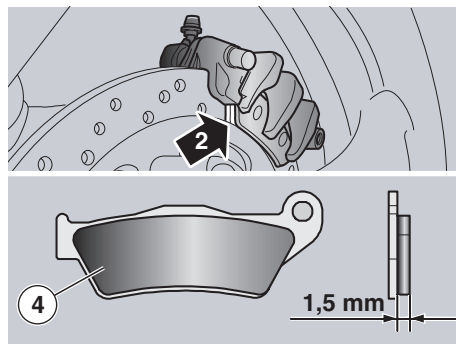


### ⚠ WARNING

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

Outlined below is a quick brake pad inspection procedure:

- ◆ Place the vehicle on the stand, see page 55 (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).



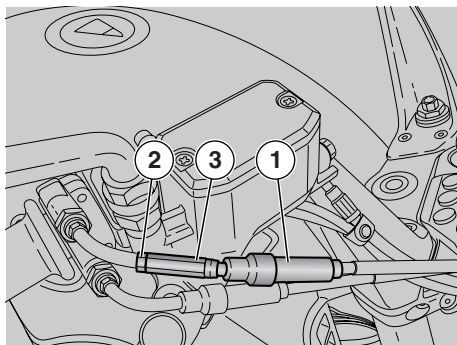
### ⚠ WARNING

If brake pads were allowed to wear down to the metal substrate, metal-to-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**.



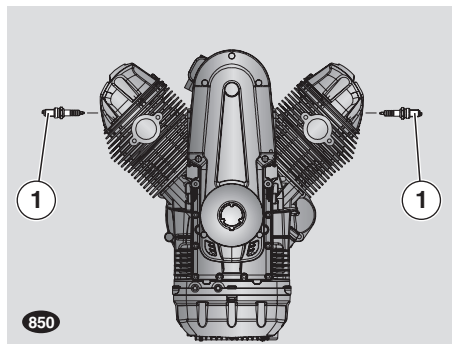
## ADJUSTING THE THROTTLE CONTROL

Carefully read page 57 (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 1000 km (625 mi) and then every 10000 km (6250 mi).

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

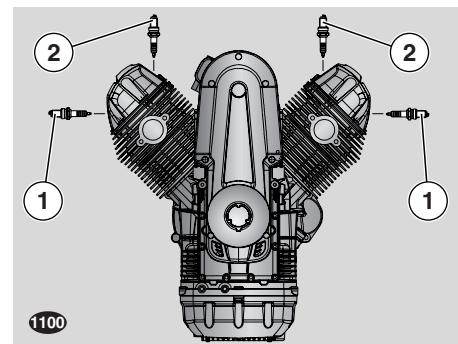


If not so:

- ◆ Place the vehicle on the stand, see page 55 (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). 1100 version is also fitted with two inner spark plugs (2); contact a **Moto Guzzi** Authorised Dealer to have them replaced.

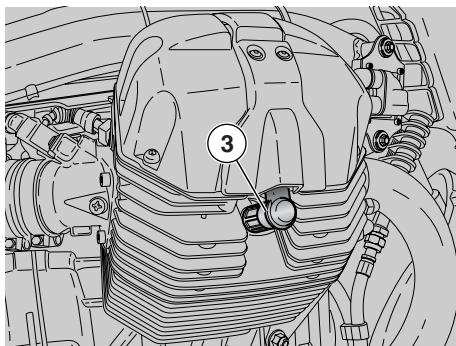
Carefully read page 57 (MAINTENANCE).

**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).



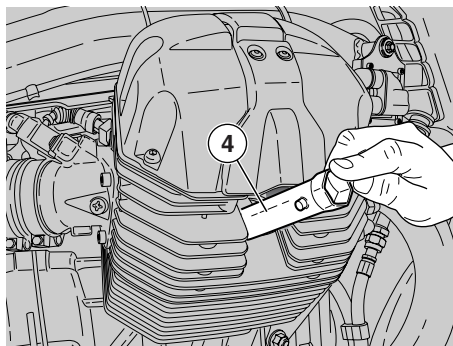
### ⚠ CAUTION

Even if only one outer spark plug (1) needs replacing, always change both.

### ⚠ WARNING

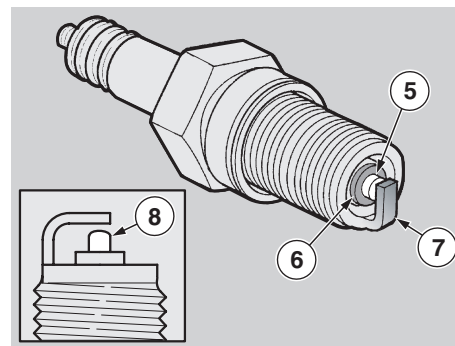
Before carrying out the following operations, let the engine and the silencer cool down to ambient temperature to avoid burns.

The following procedures apply to both cylinders.



### Removal:

- ◆ 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 (4) 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.

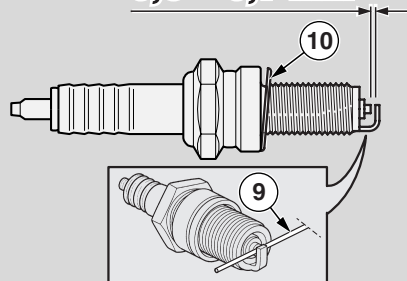
### Key:

- centre electrode (5);
- insulator (6);
- side electrode (7).
- ◆ 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 (8) of the central electrode (5) is rounded from wear.



**0,6 – 0,7 mm**



### **⚠ CAUTION**

Only use recommended spark plugs, see page 90 (TECHNICAL DATA) or the engine performance and life-span might be impaired.

Electrode gap should be checked using a wire gauge (9) to avoid damaging the platinum coating.

- ◆ Check electrode gap with a wire gauge (9).

### **⚠ 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 (10) is in good condition.

#### **Installation:**

- ◆ Position the washer (10) 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.

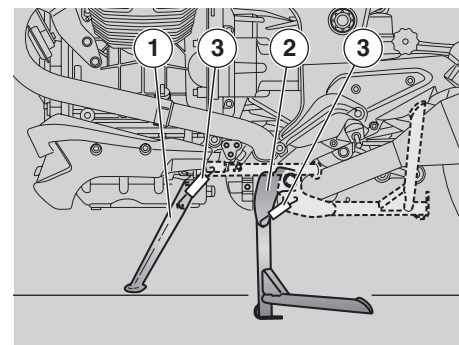
**Spark plug tightening torque: 20 Nm (2 kgm).**

### **⚠ CAUTION**

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

- ◆ Position the spark plug cap properly, to prevent it coming off due to engine vibration.

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



### **CHECKING THE STAND**

Carefully read page 57 (MAINTENANCE) and page 78 (CHECKING THE SWITCHES).

The vehicle is equipped with two stands:

- side stand (1);
- centre stand (2).

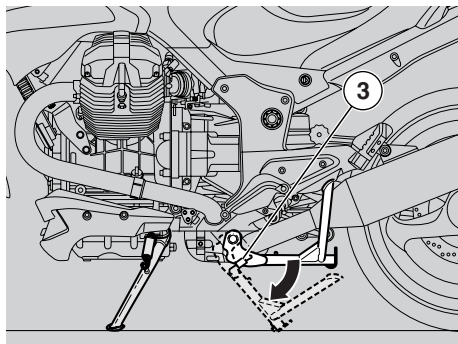
The stand features two positions:

- standard or up (at rest);
- down.

Operation of the stand is the rider's responsibility.

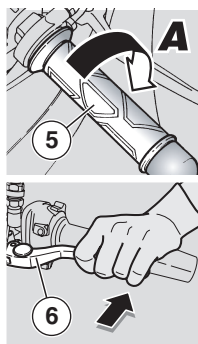
The stand should turn smoothly.

The springs (3) keep the stand in the desired position (extended or retracted).



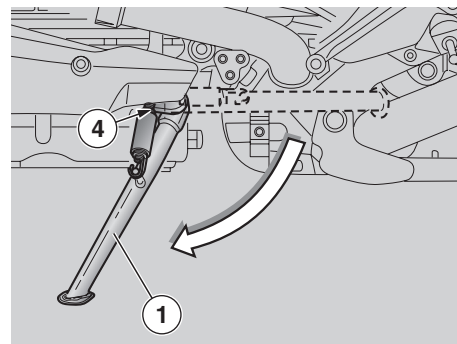
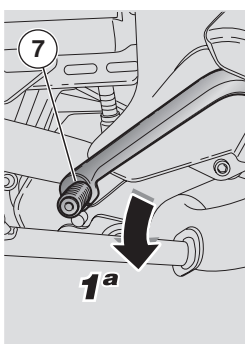
### CENTRE STAND

- ◆ Place the vehicle on the side stand, see page 55 (PUTTING THE VEHICLE ON THE STAND).
- ◆ The springs (3) must not be damaged, worn, rusty or weakened.
- ◆ Ensure that the stand has no play when up.
- ◆ Move the stand and release it, check that the springs move it completely back.
- ◆ The stand should turn smoothly: smear the joint with grease, if necessary, see page 93 (LUBRICANT CHART).



### SIDE STAND

- ◆ Place the vehicle on the centre stand, see page 55 (PUTTING THE VEHICLE ON THE STAND).
- ◆ The springs (3) 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 93 (LUBRICANT CHART).



The side stand (1) is equipped with a safety switch (4) 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 (4), proceed as follows:

- ◆ Sit astride the vehicle.
- ◆ Fold up the side stand (1).
- ◆ Start the engine, see page 48 (STARTING).
- ◆ With the throttle twistgrip (5) released (**Pos. A**), let engine idle and pull the clutch lever (6) fully in.
- ◆ Push down the gear shift lever (7) to engage the first gear.
- ◆ Lower the side stand (1) to operate the safety switch (4).

The following occurs:

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

### ⚠ CAUTION

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

## BATTERY

Carefully read page 57  
(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 "X" 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 following functions: digital clock, trip info and lap times. To re-set these functions, see page 17 (MULTIFUNCTION LCD DISPLAY).

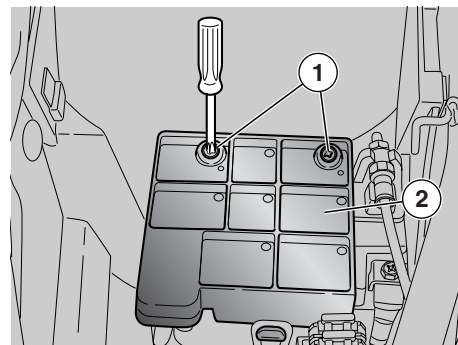
Should the vehicle not be ridden for more than fifteen days, it is necessary to charge the battery to avoid sulphation, see page 77 (CHARGING THE BATTERY).

- ◆ Remove the battery, see page 76 (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 77 (CHARGING THE BATTERY).

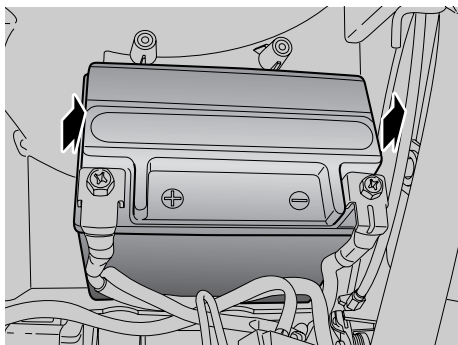
If you are leaving the battery installed to the vehicle, disconnect the cables from the terminals.



## CHECKING AND CLEANING THE TERMINALS

Carefully read page 75 (BATTERY).

- ◆ Make sure that the ignition switch is in position "X".
- ◆ Remove the rider seat, see page 29 (UNLOCKING/LOCKING THE SEAT).
- ◆ Loosen the two screws (1) and move aside the cover (2).

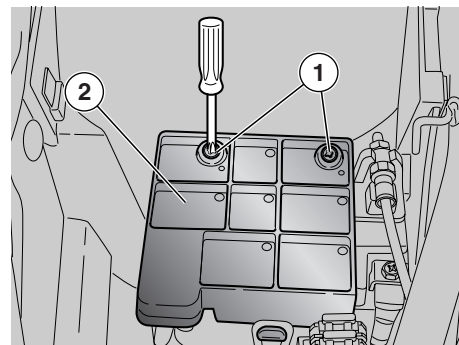


- ◆ Make sure that the cable terminals and the battery terminals are:
  - in good condition (and not corroded or covered with deposits);
  - covered with neutral grease or Vaseline.



**If necessary:**

- ◆ Remove the battery, see (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 78 (INSTALLING THE BATTERY).



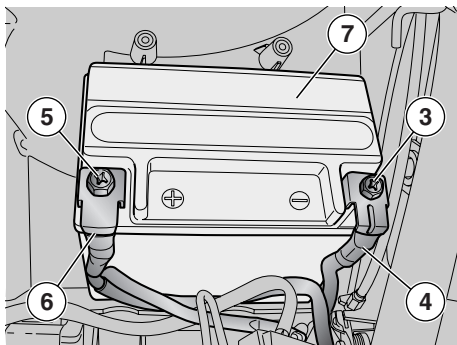
**REMOVING THE BATTERY**

**⚠ CAUTION**

**Removing the battery resets the following functions: digital clock, trip info and lap times. To re-set these functions, see page 17 (MULTIFUNCTION LCD DISPLAY).**

**Carefully read page 75 (BATTERY).**

- ◆ Make sure that the ignition switch is in position "⊗".
- ◆ Remove the rider seat, see page 29 (UNLOCKING/LOCKING THE SEAT).
- ◆ Loosen the two screws (1) and move aside the cover (2).

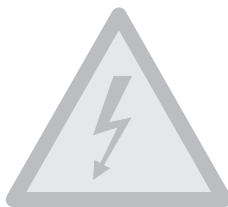


- ◆ Release and remove the negative (-) terminal screw (3).
- ◆ Move aside the negative cable (4).
- ◆ Release and remove the positive (+) terminal screw (5).
- ◆ Move aside the positive cable (6).
- ◆ Grasp the battery (7) firmly and lift it out of its compartment.

### **⚠ 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 78 (INSTALLING THE BATTERY).

**NOTE** For battery installation, see page 78 (INSTALLING THE BATTERY).

### **CHECKING BATTERY FLUID LEVEL**

**Carefully read page 75 (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 75 (BATTERY).**

- ◆ Remove the battery, see page 76 (REMOVING THE BATTERY).
- ◆ Be sure to have a suitable battery charger on hand.
- ◆ Set the battery charger for the type of charge as indicated in the table.
- ◆ Connect the battery to the charger.

### **⚠ WARNING**

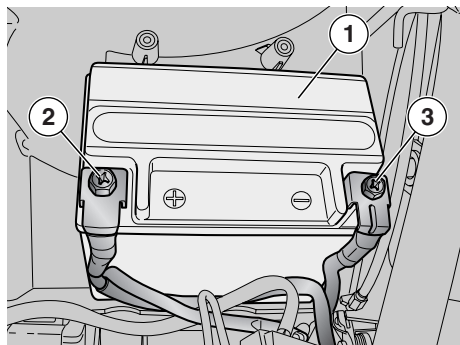
**Charge or use the battery in a well-ventilated place. Do not inhale the gas produced by the battery under charging.**

- ◆ 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 75 (BATTERY).

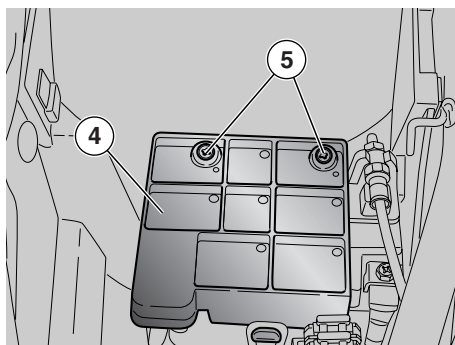
- ◆ Make sure that the ignition switch is in position "X".
- ◆ Remove the rider seat, see page 29 (UNLOCKING/LOCKING THE SEAT).

**NOTE** The battery (1) should be positioned in its housing with the terminals facing the vehicle front end.

- ◆ Insert the battery (1) in its compartment.

### ⚠ WARNING

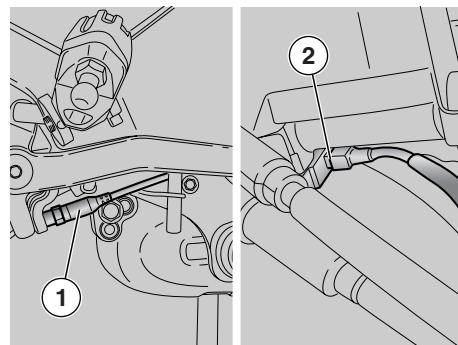
Upon reassembly, connect the positive cable (+) first and then the negative cable (-).



- ◆ 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.
- ◆ Install the battery in the correct position, fully into its seat.
- ◆ Tighten the screws (5) to secure the cover (4).
- ◆ Refit the rider seat, see page 29 (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 17 (MULTIFUNCTION LCD DISPLAY).

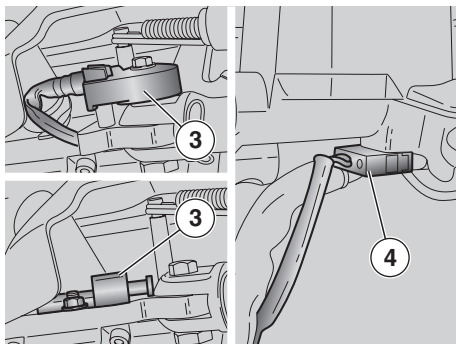


## CHECKING THE SWITCHES

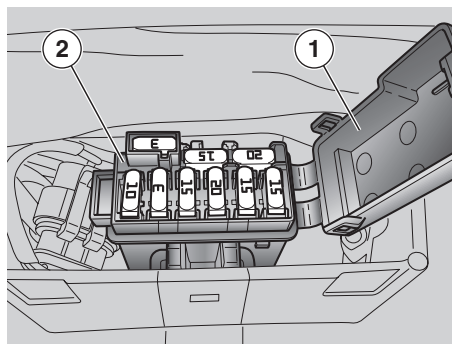
Carefully read page 57 (MAINTENANCE).

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 57  
(MAINTENANCE).

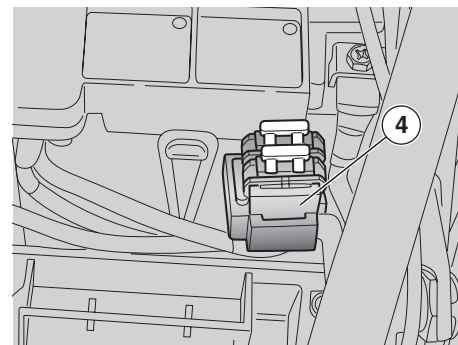
### ⚠ CAUTION

**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.**

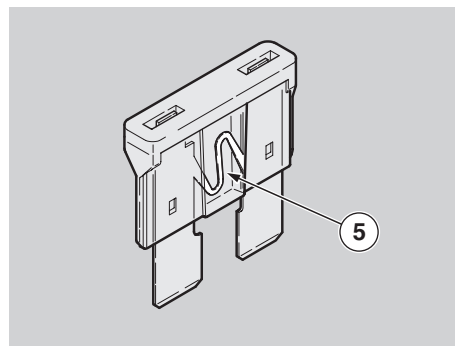
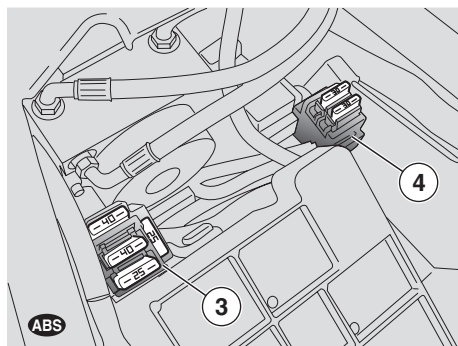
**NOTE** If a fuse blows repeatedly, there might be a short circuit or an overload in the electric system.



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 auxiliary fuses (2), ABS fuses (3) **ABS** and then main fuses (4).



### Check as follows:

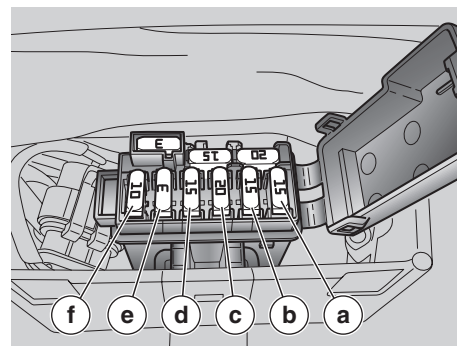
- ◆ Set the ignition switch to " ⏻ " to avoid an accidental short circuit.
- ◆ Remove the rider seat, see page 29 (UNLOCKING/LOCKING THE SEAT).
- ◆ Open the auxiliary fuses (2) carrier (1) cover.
- ◆ Extract and check the fuses one by one - a divided link bar (5) means that the fuse is blown.
- ◆ Before 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 re-set these functions, see page 17 (MULTIFUNCTION LCD DISPLAY).

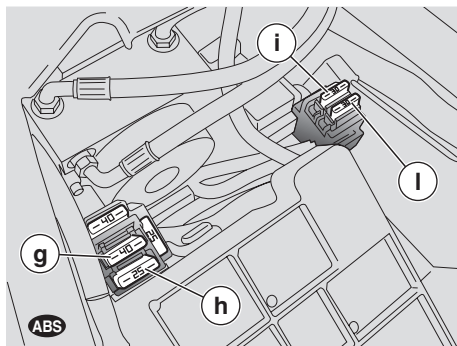


### ARRANGEMENT OF AUXILIARY FUSES

- a) Stop, horn, HAZARD button light, light relay coil (15A).
- b) Parking lights, starter relay coil, passing (15A).
- c) Fuel pump, coils, injectors (20A).
- d) Lambda burner, secondary injection relay coil, starter relay coil, speed sensor power (15A).
- e) Permanent positive, ECU power (3A).
- f) ABS (10A) **ABS**.

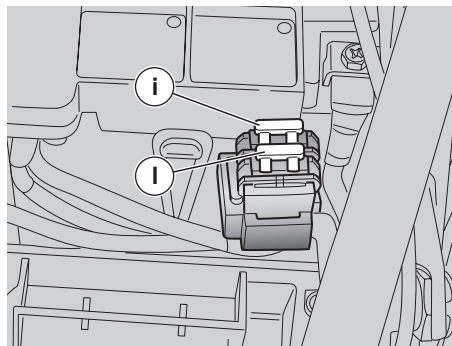
**NOTE** There are three spare fuses (3, 15, 20 A).





### LAYOUT OF THE ABS FUSES

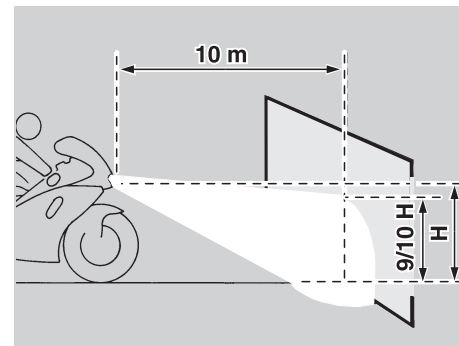
- g) ABS (40A) .
- h) ABS (25A) .



### ARRANGEMENT OF MAIN FUSES

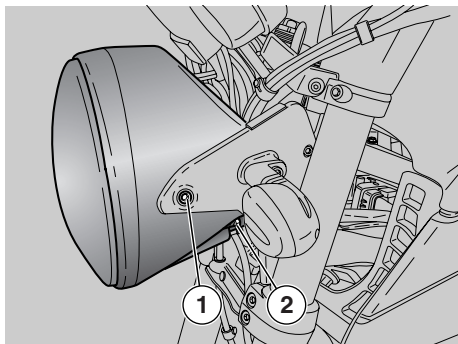
- i) From battery to voltage regulator (30A).
- j) From battery to key and C and D fuses (30A).

**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.



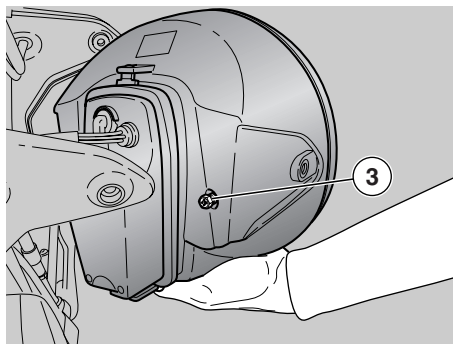
### BEAM VERTICAL ADJUSTMENT

- ◆ Place the vehicle upright.
- ◆ Adjust headlight beam, turn screw (2).

**When finished:**

#### **WARNING**

**Check for correct beam horizontal setting.**



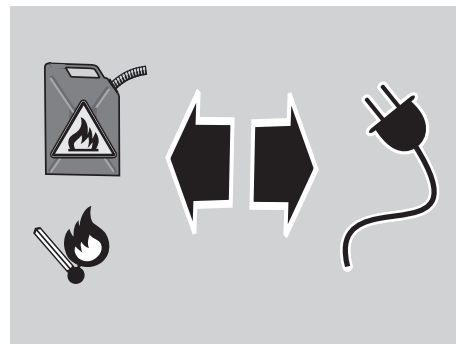
### BEAM HORIZONTAL ADJUSTMENT

- ◆ Place the vehicle on the stand, see page 55 (PUTTING THE VEHICLE ON THE STAND).
- ◆ Remove the two screws (1) (one each side).
- ◆ Hold the light up and turn screw (3) to set the beam.
- ◆ Refit the light and start both screws (1) in their thread and check for beam correct setting.
- ◆ If it is correct, tighten both screws (1).

**When finished:**

#### **WARNING**

**Check for correct beam vertical setting.**



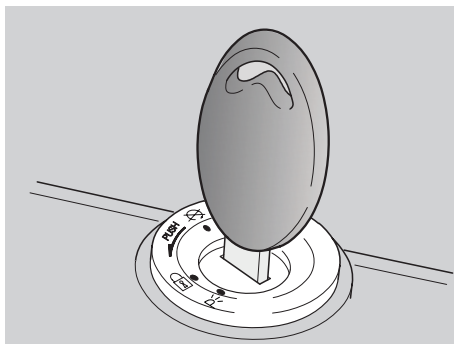
### BULBS

**Carefully read page 57 (MAINTENANCE).**

#### **WARNING**

**Fire hazard.**

**Keep fuel and other flammable substances away from electric components.**



## ⚠ CAUTION

Before changing a bulb, move the ignition switch to position “” and wait a few minutes, so that the bulb cools down.

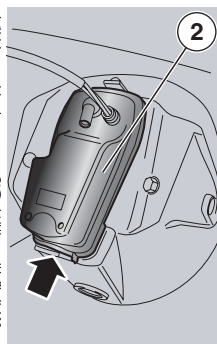
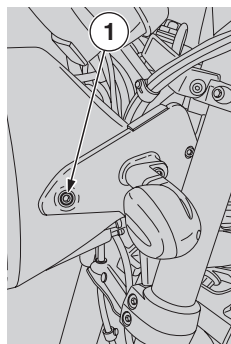
Wear clean gloves or use a clean, dry cloth to handle the new bulb.

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 79 (CHANGING THE FUSES).



## CHANGING THE HEADLIGHT BULBS

Carefully read page 82 (BULBS).

The headlight houses:

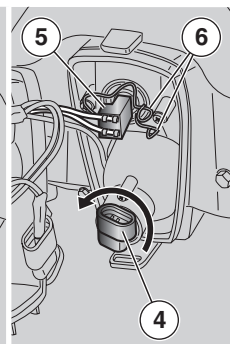
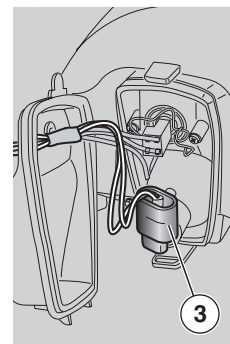
- one high beam bulb (lower).
- one low beam bulb (upper);
- one parking light bulb (lower);

To change oil:

- ◆ Place the vehicle on the stand, see page 55 (PUTTING THE VEHICLE ON THE STAND).

Applies to high and low beam bulbs only.

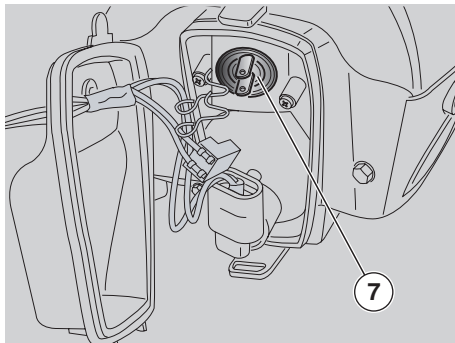
- ◆ Remove the two side screws (1) to remove the headlight.
- ◆ Remove the cover (2), push it up, release it from lower tab and slide out the top tang from its seat.



## HIGH BEAM BULB

Do not pull on the wires to extract the bulb connector.

- ◆ Disconnect the connector (3).
- ◆ Turn the ring nut counter clockwise and remove the bulb body (4).
- ◆ Change with a new one.
- ◆ Refit the bulb body in the housing and turn clockwise until it locks in place.
- ◆ Connect the connector (3).



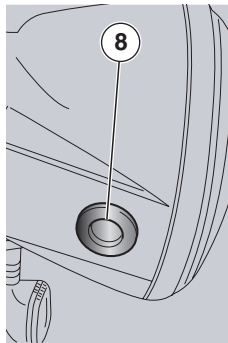
### LOW BEAM BULB

**Do not pull on the wires to extract the bulb connector.**

- ◆ Grasp the bulb connector (5) and pull to disconnect it from the bulb.
- ◆ Release the two ends of the spring (6).
- ◆ Extract the bulb (7) from its seat.

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

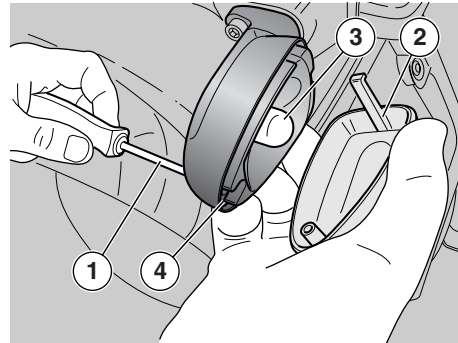
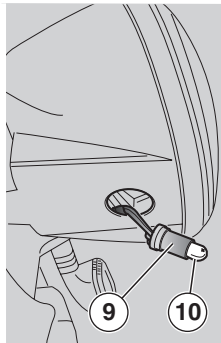
- ◆ Fit a new bulb of equal rating.
- ◆ Engage the springs (6).
- ◆ Connect the connector (5).



### PARKING LIGHT BULB

**Do not pull on the wires to extract the bulb connector.**

- ◆ Remove the rubber element (8).
- ◆ Grasp the parking light (9) bulb holder and pull to extract.
- ◆ Remove the bulb (10) and fit a new bulb of equal rating.
- ◆ Refit the bulb holder (9) in its seat and the rubber element (8).



### CHANGING THE FRONT AND REAR TURN INDICATOR BULBS

**Carefully read page 82 (BULBS).**

- ◆ Place the vehicle on the stand, see page 55 (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

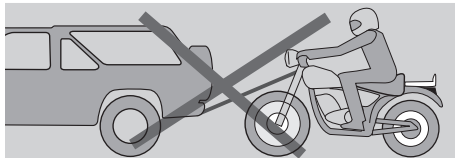
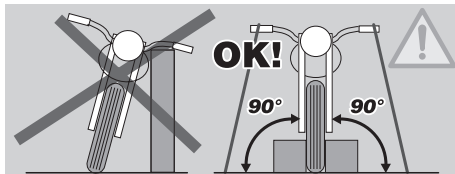
**If the bulb holder (4) comes off, refit it into its seat so that the chamfered opening of the holder matches the hole for the screw.**

## **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 86 (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 32 (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.

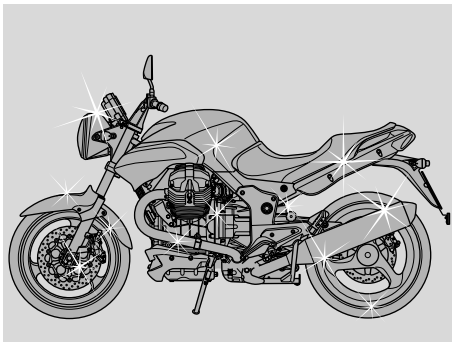
Do not smoke or use open flames.

**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).

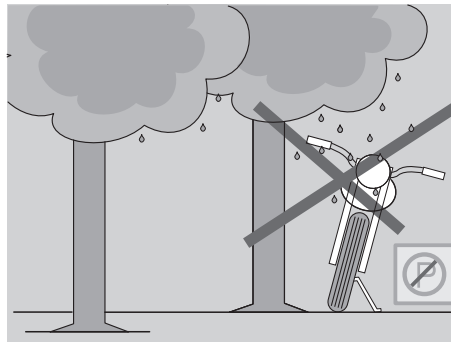
### **⚠ WARNING**

Refit the filler plug after draining all fuel.



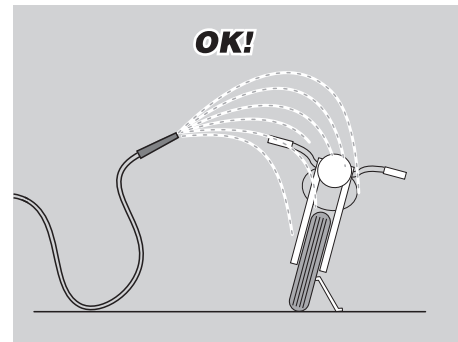
Clean the vehicle frequently if it is used in particular areas or conditions, such as:

- ◆ 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 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 47 (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;
- 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 87 (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 exhaust, glove/tool kit compartment, ignition switch/steering lock.

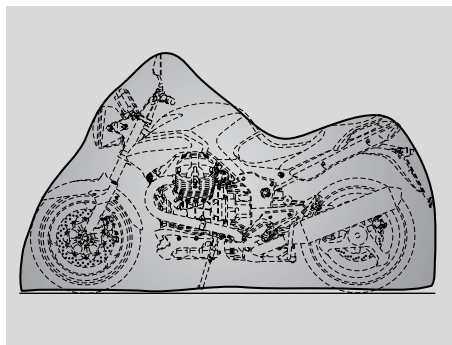
Do not use alcohol, fuel or solvents to clean the rubber and plastic parts: use only water and mild soap.

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

Carefully dry the seat when clean.

### **⚠ 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 following functions: digital clock, trip info and lap times. To re-set this function, see page 17 (MULTIFUNCTION LCD DISPLAY).

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 76 (REMOVING THE BATTERY) and page 75 (LONG INACTIVITY OF THE BATTERY).
- ◆ Wash and dry the vehicle, see page 87 (CLEANING).
- ◆ Polish painted surfaces with wax.
- ◆ Inflate the tyres, see page 41 (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 87 (CLEANING).
- ◆ Check the battery charge, see page 77 (CHARGING THE BATTERY) and install it, see page 78 (INSTALLING THE BATTERY).
- ◆ Fill the fuel tank, see page 32 (FUEL).
- ◆ Carry out the pre-ride checks, see page 47 (PRE-RIDE CHECKS CHART).

### WARNING

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

## TECHNICAL DATA

|                   |                          |                                                                      |
|-------------------|--------------------------|----------------------------------------------------------------------|
| <b>DIMENSIONS</b> | Max. Length              | 2195 mm                                                              |
|                   | Max. Width               | 870 mm                                                               |
|                   | Max. height              | 1125 mm                                                              |
|                   | Seat height              | 800 mm                                                               |
|                   | Wheelbase                | 1495 mm                                                              |
|                   | Minimum ground clearance | 185 mm                                                               |
|                   | Weight in running order  | 248 kg                                                               |
| <b>ENGINE</b>     | Model                    | Breva V 850 IE - Breva V 1100 IE                                     |
|                   | Type                     | 90° traverse V-type, twin-cylinder, 4-stroke                         |
|                   | Number of cylinders      | 2                                                                    |
|                   | Displacement             | 877 cc <b>850</b>                                                    |
|                   |                          | 1064 cc <b>1100</b>                                                  |
|                   | Bore / stroke            | 92x66 mm <b>850</b>                                                  |
|                   |                          | 92x80 mm <b>1100</b>                                                 |
|                   | Compression ratio        | 9.8: 1                                                               |
|                   | Starting                 | electric                                                             |
|                   | Engine idling rpm        | 1100 ± 100 rpm                                                       |
|                   | Clutch                   | twin-plate, dry                                                      |
|                   | Lubrication system       | pressure-fed system, adjustment through valves and gear pump         |
|                   | Air filter               | cartridge, dry                                                       |
|                   | Cooling                  | air                                                                  |
| <b>GEARBOX</b>    | Type                     | mechanical, 6 gears with foot control on the left side of the engine |
| <b>CAPACITIES</b> | Fuel (reserve included)  | 23 ℓ                                                                 |
|                   | Fuel reserve             | 4 ℓ                                                                  |
|                   | Engine oil               | oil and oil filter change 3600 cc                                    |
|                   | Gearbox fluid            | 500 cc                                                               |
|                   | Transmission fluid       | 380 cc                                                               |
|                   | Fork fluid               | 400 ± 2.5 cu cm (per leg)                                            |
|                   | Seats                    | 2                                                                    |
|                   | Max vehicle load         | 230 kg (rider + passenger + luggage)                                 |

|                         |                     |                   |                                                                                                                                                                                            |                      |
|-------------------------|---------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <b>DRIVE RATIOS</b>     | Ratio               | Primary           | Final                                                                                                                                                                                      | Final ratio          |
|                         | 1st                 | gears             | 17/38                                                                                                                                                                                      | with universal joint |
|                         | 2nd                 | 23/36 <b>850</b>  | 20/34                                                                                                                                                                                      | 12/44                |
|                         | 3rd                 | 26/35 <b>1100</b> | 23/31                                                                                                                                                                                      |                      |
|                         | 4th                 |                   | 26/29                                                                                                                                                                                      |                      |
|                         | 5th                 |                   | 31/30                                                                                                                                                                                      |                      |
|                         | 6th                 |                   | 29/25                                                                                                                                                                                      |                      |
| <b>FUEL FEED SYSTEM</b> | Type                |                   | sequential, timed, multipoint Magneti Marelli electronic injection IAW5A, alpha-n system with stepper motor; 2 45mm throttle bodies with Weber IWP162 injectors, closed loop lambda sensor |                      |
|                         | Throttle            |                   | Ø 45 mm                                                                                                                                                                                    |                      |
| <b>FUEL SUPPLY</b>      | Fuel                |                   | Premium-grade unleaded petrol, minimum octane rating 95 (ROM) and 85 (MON).                                                                                                                |                      |
| <b>FRAME</b>            | Type                |                   | Tube frame with two cradles that can be disassembled, high-strength steel                                                                                                                  |                      |
|                         | Steering head angle |                   | 25° 30'                                                                                                                                                                                    |                      |
|                         | Trail               |                   | 110 mm                                                                                                                                                                                     |                      |
| <b>SUSPENSIONS</b>      | Front               |                   | hydraulic telescopic fork - Ø 45 mm                                                                                                                                                        |                      |
|                         | Stroke              |                   | 120 mm                                                                                                                                                                                     |                      |
|                         | Rear                |                   | single-sided swinging arm with progressive linkage, monoshock with adjustable rebound and with ergonomic knob for preload adjustment.                                                      |                      |
|                         | Wheel travel        |                   | 140 mm                                                                                                                                                                                     |                      |
| <b>BRAKES</b>           | Front               |                   | twin floating disc in stainless steel Ø 320 mm, callipers with 4 separated pistons                                                                                                         |                      |
|                         | Rear                |                   | disc in stainless steel Ø 282 mm, calliper with two parallel pistons                                                                                                                       |                      |
| <b>WHEEL RIMS</b>       | Type                |                   | 3 hollow spokes in aluminium alloy, chill cast                                                                                                                                             |                      |
|                         | Front               |                   | 3.5" x 17"                                                                                                                                                                                 |                      |
|                         | Rear                |                   | 5.5" x 17"                                                                                                                                                                                 |                      |
| <b>TYRES</b>            | Type                |                   | METZELER Roadtec Z6 - MICHELIN Pilot Road - DUNLOP D220 ST Sportmax                                                                                                                        |                      |
|                         | Front               |                   | Size: 120/70 - ZR 17" 58 W<br>Inflating pressure: 2.5 atm (250 kPa)<br>Inflating pressure with passenger: 2.5 atm (250 kPa)                                                                |                      |
|                         | Rear                |                   | Size: 180/55 - ZR 17" 73 W<br>Inflating pressure: 2.8 atm (280 kPa)<br>Inflating pressure with passenger: 2.8 atm (280 kPa)                                                                |                      |

## SPARK PLUGS

Inner (long life)  
Outer  
Spark plug electrode gap

NGK PMR8B **1100**  
NGK BPR6ES **850** - **1100**  
0.6 – 0.7 mm

## ELECTRICAL SYSTEM

Battery  
Main fuses  
ABS fuses **ABS**  
Auxiliary fuses  
Generator (with permanent magnet)

12 V – 18 Amp/h  
30 A  
40 A – 25 A  
3 A – 15 A – 20 A – (10A only **ABS** )  
12 V – 550 W

## BULBS

Parking light  
Low beam  
High beam  
Turn indicator light  
Stop/rear parking lights  
Instrument panel lighting  
Number plate light

12 V – 5 W  
12 V – 55 W H7  
12 V – 65 W H9  
12 V – 10 W (orange)  
LED  
LED  
12 V – 5 W

## WARNING LIGHTS

Turn indicators  
ABS  
Alarm  
Neutral  
Side stand down  
High beam  
Fuel reserve  
Antitheft  
Gear shift indicator

LED  
LED  
LED  
LED  
LED  
LED  
LED  
LED  
LED

## LUBRICANT CHART

**(Recommended) Engine oil:**  **Agip** RACING 4T 10W 60.

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

**(Recommended) Transmission oil:**  **Agip** ROTRA MP 80 W 90.

**(Recommended) Gearbox oil:**  **Agip** ROTRA MP/S 85 W 90.

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

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

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

**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 filled with  **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.



**ASK FOR GENUINE SPARE PARTS ONLY**



## AUTHORISED DEALERS AND SERVICE CENTRES

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### 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](http://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.