EVA

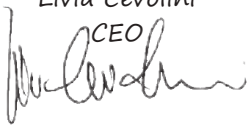
Dear customer,

it gives us great pleasure to welcome you to our family.
You are now the proud owner of an authentic piece of Italy's Motor Valley.
Our adventure first took shape between 2008 and 2009 in the capitol of speed, Modena, when the entrepreneurial vision of my family led us to imagine the future of electric vehicles from our own point of view.

In 2009, we seized an opportunity to develop an all-electric race motorcycle, and then raced this vehicle for two years, taking advantage of this experience to put innovative technological solutions to the test.
Building on our experience in racing, we set ourselves the goal to evolve our vision even further and create a street legal motorcycle - and Energica Motorcycle is the result of this.
The hard work and passion of out team of experts have created a pioneering motorcycle that you can now ride, which embodies the perfect balance between innovation, power, technology, design and safety.
This your Energica: a potent electric bike which combines an environmentally friendly powertrain with extraordinary performance, state of the art technology and a traditional passion for speed.

Enjoy the ride in the saddle of your Energica and live life to the full!

Livia Cevolini
CEO



Owner Manual - Translated version
Rev. 02 (02/2018)
Cod. ENF003100

Contents

INTRODUCTION

This booklet is an integral part of the motorcycle and must remain with it for its entire service life. If the event of a change of ownership, it must be handed over to the motorcycle's new owner.

Keep this manual carefully: If the quality of the booklet deteriorates or the booklet is lost, request a new copy from an Energica dealer or authorized workshop immediately.

The illustrations contained in this booklet are provided for example purposes only.

Information may differ slightly depending on the motorcycle software update version and from region to region.

The accuracy of all the information, specifications and illustrations contained in this document has been confirmed at the time of printing.

Update

To maintain the highest possible quality standards, this motorcycle is subject to continuous technological improvements. As a result, there may be some differences between your motorcycle and the information in this manual.

As continuous improvement is a key priority for Energica Motor Company, we reserve the right to modify the product at any time.

It may nevertheless be updated following the release of new software features by Energica Motor Company in due course; such information is not contained in this manual at the time of purchase. Energica Motor Company undertakes to keep its customers informed of any updates that are made to this manual. In the event of inconsistency between the information in this owner manual and the information given in the most recent updates, the latter will be valid.

The Energica sales and service network will be happy to give you detailed information on any updates available.

As you will certainly understand, therefore, any discrepancies in the data, figures and illustrations contained herein cannot be considered grounds for any complaint or claim.

Copying and disclosure

Information concerning trade marks

Warning symbols

This owner manual contains warnings which must be strictly observed not only to ensure your safety and that of others, but also to prevent damage to your motorcycle.

WARNING!

Failure to observe this instruction may create hazardous situations and cause severe injury or death.

CAUTION!

Failure to observe this instruction may damage the motorcycle and/or its components.

IMPORTANT!

Note offering guidance on how to carry out work in the most effective way and providing information on features of the product.

Environmental notice

Failure to observe this instruction may seriously harm the environment.

Warranty

It is in your best interest to ensure that your motorcycle remains safe and reliable to use. We therefore strongly recommend that you contact our after-sales network to undertake any work that requires specialist technical expertise. Our highly qualified personnel has the equipment necessary to carry out all work to a professional standard, and above all, uses only genuine spare parts, which are completely compatible with your motorcycle and ensure superior performance and durability.

This motorcycle has been configured specifically for the operating conditions and requirements for type approval in the country of initial purchase and registration. If the vehicle is to be used in a different country, modifications may be necessary to render the motorcycle suitable for the specific operating conditions and compliant with type approval requirements, should they be different. No warranty claims will be accepted for a vehicle which is not compliant with the type approval requirements of the country of use.

All motorcycles sold by Energica Motor Company come with a "Warranty Card".

During the warranty period, all rights pertaining to the warranty shall be forfeited if:

- One or more components of the motorcycle is tampered with, modified or replaced with a non-genuine part.
- The motorcycle is used for racing or sporting events in general.

- Any of the instructions in this manual are not observed, especially those concerning correct battery maintenance

Notice concerning the right to repair or refund (Lemon Law) for USA market

Should the motorcycle fail to meet applicable standards for quality and performance and Energica or its dealerships cannot rectify the fault or defect within a reasonable number of attempts, or if the motorcycle remains inoperable for a specific number of days, the customer is entitled to request that the vehicle be replaced or repurchased in accordance with the Lemon Law applicable in his or her state.

Lemon Law terms may vary from state to state. Where permitted by state law, Energica requires the customer to give due notification of any problems or service issues encountered, to give Energica the opportunity to make the necessary repairs, before exercising his or rights in accordance with the aforementioned Lemon Law. In all other states, Energica requires the customer to give due notification in writing of any problems or service issues encountered.

Written notification must be sent to Energica Motor Company Inc. at the following address:

Energica Motor Company Inc.
North America Operations Headquarters
127 Goodwin Circle, Suite B
Mooresville, NC 28115
E-mail: info@energicamotor.com

Traveling safely

WARNING! Before using the motorcycle, read the warnings below carefully.

This motorcycle has NOT been designed for use on rough terrain or off-road. It must therefore only be used on paved roads that have a smooth surface.

WARNING! Riding without a license is illegal and punishable by law. Make sure that you are in possession of the correct category of license for riding this motorcycle. See the paragraph “Technical specifications” for the technical specifications of the motorcycle.

WARNING! Do not ride the motorcycle if under the influence of alcohol and/or drugs.

WARNING! Riding under the influence of alcohol and/or drugs is illegal and punishable by law.

WARNING! Before using the motorcycle, the rider must check all the items listed in the column "Each time the bike is used" in the “Regular maintenance intervals” section of this manual.

WARNING! Safety is also dependent on the mechanical condition of the motorcycle. Observe the maintenance schedule and adjustment requirements contained in this manual exactly.

WARNING! Some medications may cause drowsiness or bring about other effects that slow down the rider's reflexes and reduce their ability to control the motorcycle, thus increasing the risk of accident.

Check the motorcycle helmet laws in your country or state; driving without a helmet may be punishable by fines. Make sure that your helmet complies with the relevant safety standards.

WARNING! Using the motorcycle without a helmet increases the risk of serious physical injury or even death.

WARNING! Wearing the correct clothing plays a key role in motorcycle safety. Motorcycles cannot protect riders against impacts in the same way that cars can protect drivers.

IMPORTANT! Avoid wearing loose clothing or accessories that could get caught in parts of the motorcycle.

What to do in the event of an accident

Energica Motor Company has always taken the safety of its customers and of its motorcycles very seriously, and uses superior quality materials and active and passive safety measures for all the safety-critical components and functions of its motorcycles.

Despite this, please follow these guidelines in the event of an accident:

WARNING! After an accident, do not touch high voltage components such as, for example, high voltage lines (with orange insulation) or components in contact with high voltage wiring with exposed metal cores.

WARNING! If the motorcycle is involved in an accident, follow these additional safety measures regarding the high voltage system: take all action necessary to make the accident site safe.
Notify the emergency response services (e.g. police or fire fighters) immediately that this is an electric vehicle with high voltage systems.
Turn off the ignition switch of the motorcycle.
Avoid breathing in any fumes released from the battery pack, and keep at a safe distance from the motorcycle.

WARNING! Avoid contact with any liquid escaping from the battery pack. Corrosion hazard.

WARNING! In the event of fire, do not attempt to extinguish it yourself. Call the local fire brigade immediately.

General safety information

The motorcycle contains high-voltage components. The high voltage used in these components is dangerous and may cause personal injury, serious burns, electric shock and even fatal injury if you do not take the correct precautions.

The high-voltage system does not contain any replaceable parts or require any maintenance by the user. Do not disassemble, remove or replace any of the high-voltage components, cables or connectors in the motorcycle. High-voltage cables can be recognized by their orange color.

IMPORTANT! Energica Motor Company shall not be held liable for death, personal injury or material damage resulting from the use or installation of non-approved accessories. The manufacturer can also not be held responsible for any damage or injury if the vehicle has been tampered with or if any maintenance work has been performed on the motorcycle by persons without the necessary specialization and/or qualification to work on electric vehicles with high voltage systems. Changes of any kind to the motorcycle must be granted advance written approval by the manufacturer.

This motorcycle is equipped with a high capacity lithium-ion polymer battery. The battery is housed in a watertight shell which contains the cells, the battery management system (BMS) and all the systems and devices necessary to ensure the safety of the vehicle. This solution keeps all high voltage components insulated, making any risk of accidental exposure to high voltage electricity extremely improbable. This battery is an intelligent device equipped with dozens of sensors and electromechanical devices constituting a closed, autonomous system that combines superlative vehicle performance with absolute rider safety in all weather conditions.

WARNING! Only Energica technicians are authorized to remove and/or open the battery pack.

Energica recommends always using the emergency cut-off switch ⊠ when performing any maintenance. See the paragraph "Right control switch" (emergency cut-off switch) for more information.

Observe the applicable laws and directives in your state when disposing of the lithium ion battery.

Information on waste disposal and recycling.

Energica Motor Company is committed to putting its credo of environmental responsibility into practice in its products.
Energica Motor Company is currently exploring recycling solutions and evaluating the possibility of reusing the used batteries of its products.
While Energica does not have a used battery collection program in place at the present time, it is already actively investigating solutions for the recycling and disposal of used batteries in each of the markets that its products are sold.
Meanwhile, an electric vehicle battery recycling process is already operational. When necessary, used batteries are collected and processed by third party recycling facilities specialized in the environmentally responsible recycling of batteries and/or parts of batteries.
The disposal of end-of-life batteries may require special processes.
More detailed information on disposal may be requested from your local authorities or from a specialized waste collection center.

IMPORTANT! Always unplug the charging cable before performing any work on the motorcycle, even if it is not currently on charge.

WARNING! Some liquids used in vehicles, such as brake fluid and coolant, are toxic. Care should therefore be taken not to inhale or swallow them, or allow them to come into contact with wounds. For safety reasons, read and follow the health advice and instructions for correct disposal of these liquids provided on their containers.

WARNING! In the event of an accident, do not touch high-voltage wires, connectors or components connected to cables.

WARNING! In the event of fire, do not attempt to extinguish it yourself. Call the local fire brigade immediately.

California Proposition 65

California State law requires the product to carry the following warning statements.

CAUTION: Certain motorcycles contain or release chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Moreover, certain fluids used in these vehicles and certain products deriving from the wear or usage of their components contain or release chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Warning required by California relative to perchlorate

CAUTION: Certain components of this motorcycle, such as the lithium batteries, may contain perchlorate. Special handling may apply for the maintenance or disposal of these components. See www.dtsc.ca.gov.

Reporting safety defects

For USA customers

If you believe that your vehicle has a defects which may cause any accident or injury (fatal or otherwise), you are required to notify the National Highway Traffic Safety Administration (NHTSA) immediately of the defect and report it to Energica Motor Company Inc.

On receipt of a complaint regarding safety, the NHTSA may decide to conduct an investigation. If a defect affecting the safety of a group of vehicles is found by this investigation, it may order the manufacturer to implement a recall campaign to rectify the defect. The NHTSA, however, will not arbitrate any disputes between the customer and the dealer or between the customer and Energica Motor Company Inc.

To contact the NHTSA:

- call the toll-free vehicle safety line: 1-888-327-4236 (TTY: 1-800-424-9153)
- access the website: www.safercar.gov
- write to:

Administrator
NHTSA Headquarters
1200 New Jersey Avenue, SE
Washington, DC 20590

Further information on the safety of motor vehicles is available from the website: www.safercar.gov

For Canadian customers

In addition to contacting the Defect Investigations and Recalls department of Energica Motor Company Inc., Canadian customers also wishing to report safety defects to Transport Canada may do so by calling the toll-free number 1 800 333 0510. Information on vehicle safety is also available from the website www.tc.gc.ca/roadsafety .

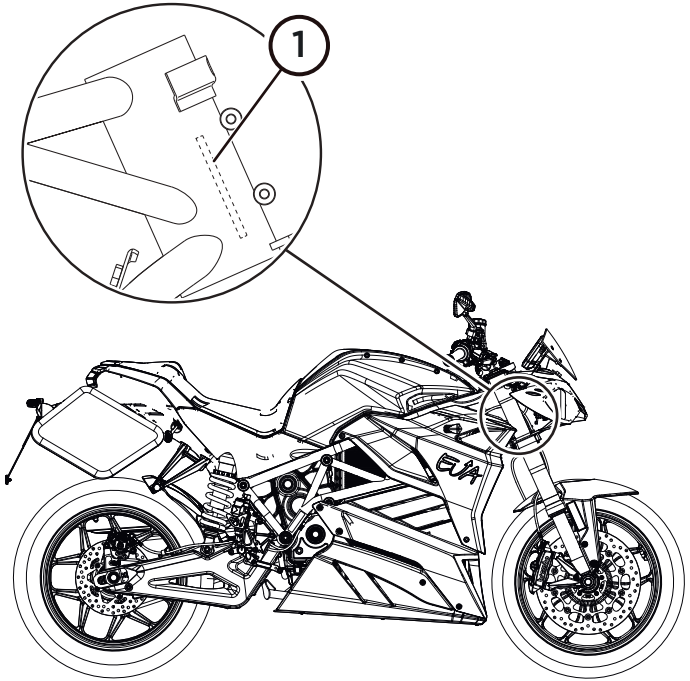
For UK, Europe and global market customers

If you believe that your vehicle has a defect which could cause an accident, injury or death, please contact your authorized Energica dealer immediately. If the issue cannot be resolved through your authorized Energica dealer, please contact Energica Motor Company S.p.A. directly by dialing +39 059 7231722, by writing to the e-mail address info@energicamotor.com or via the website www.energicamotor.com.

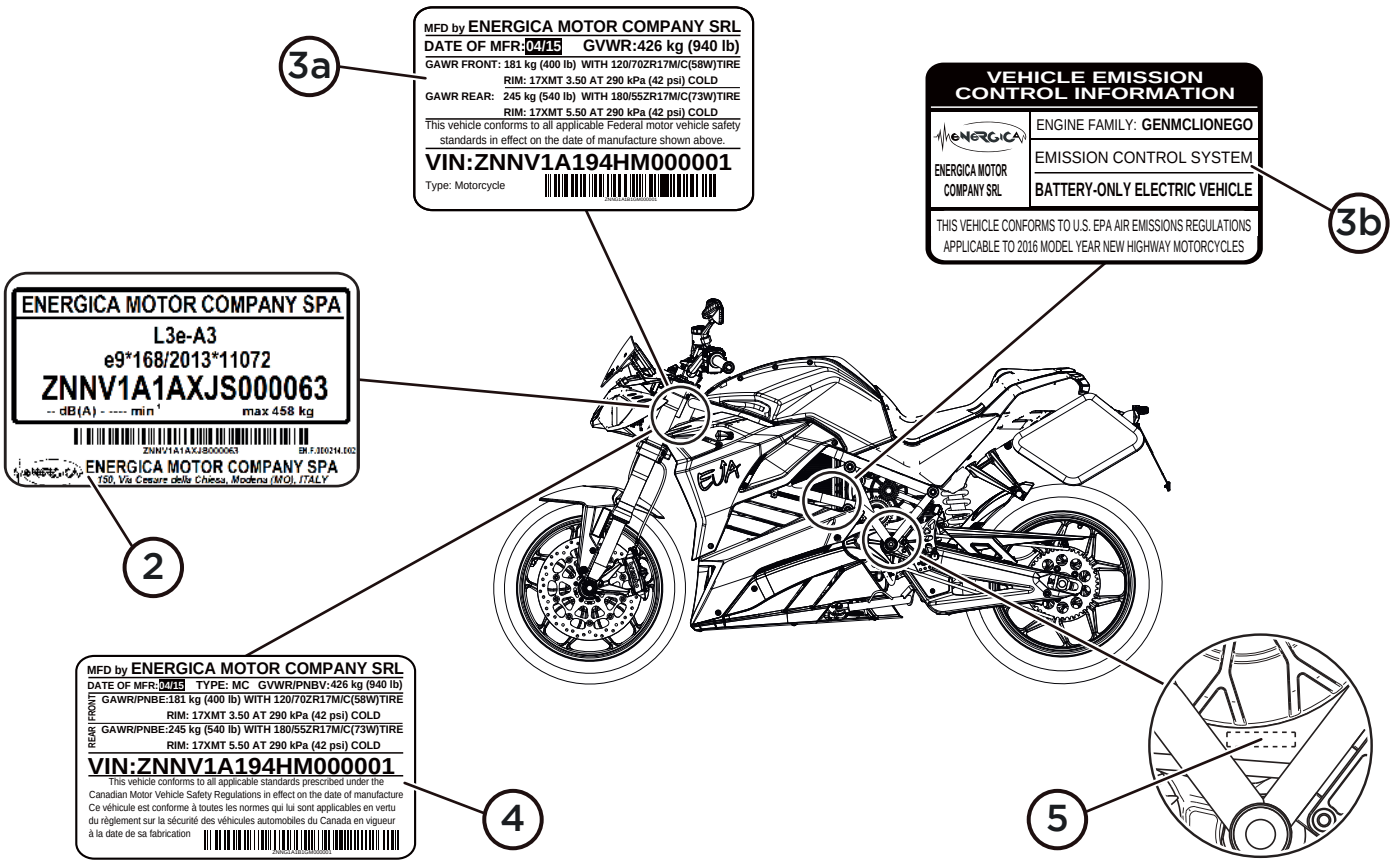
Motorcycle identification

Every motorcycle can be identified by a set of unique codes. The pictures below show where these are located on the motorcycle.

1. VIN
2. Identification plate (Europe)
3a. Identification plate (USA)
3b. EPA plate (USA)
4. Identification plate (Canada)
5. Electric motor code (ID)

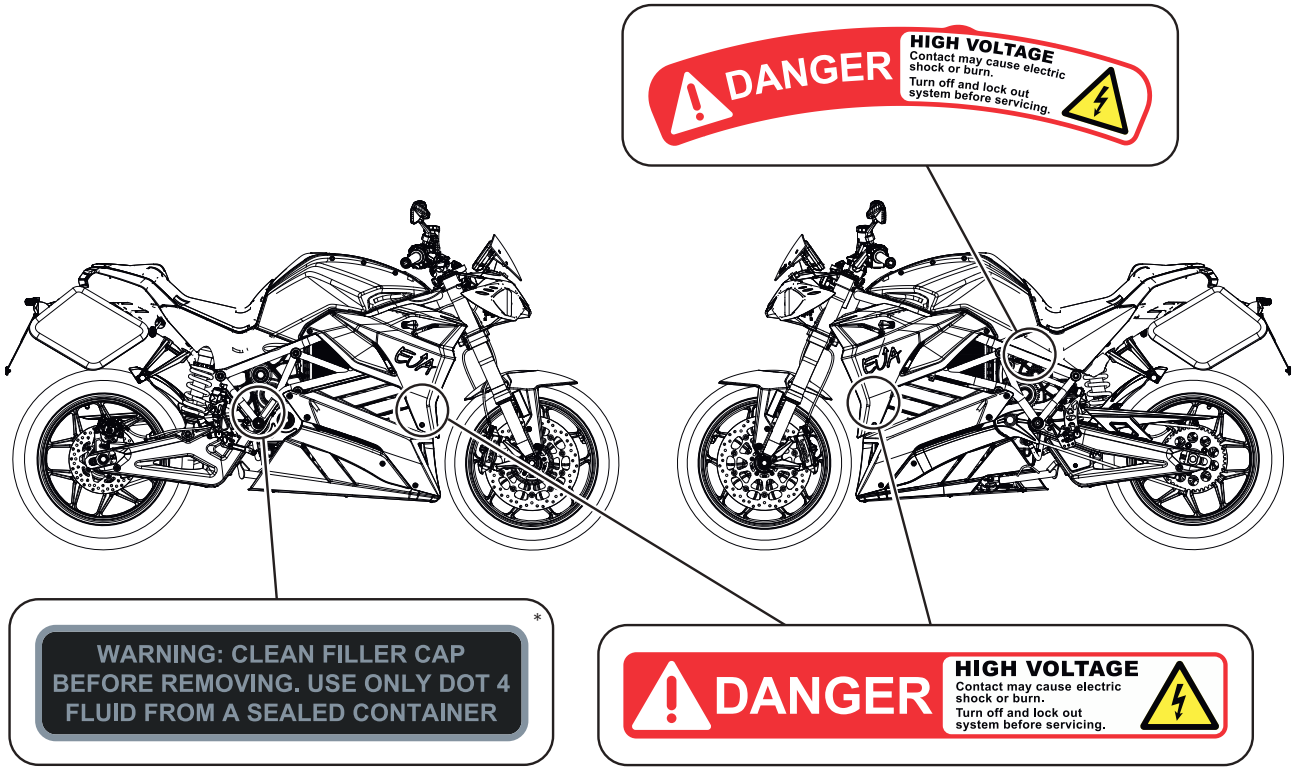


EN0001



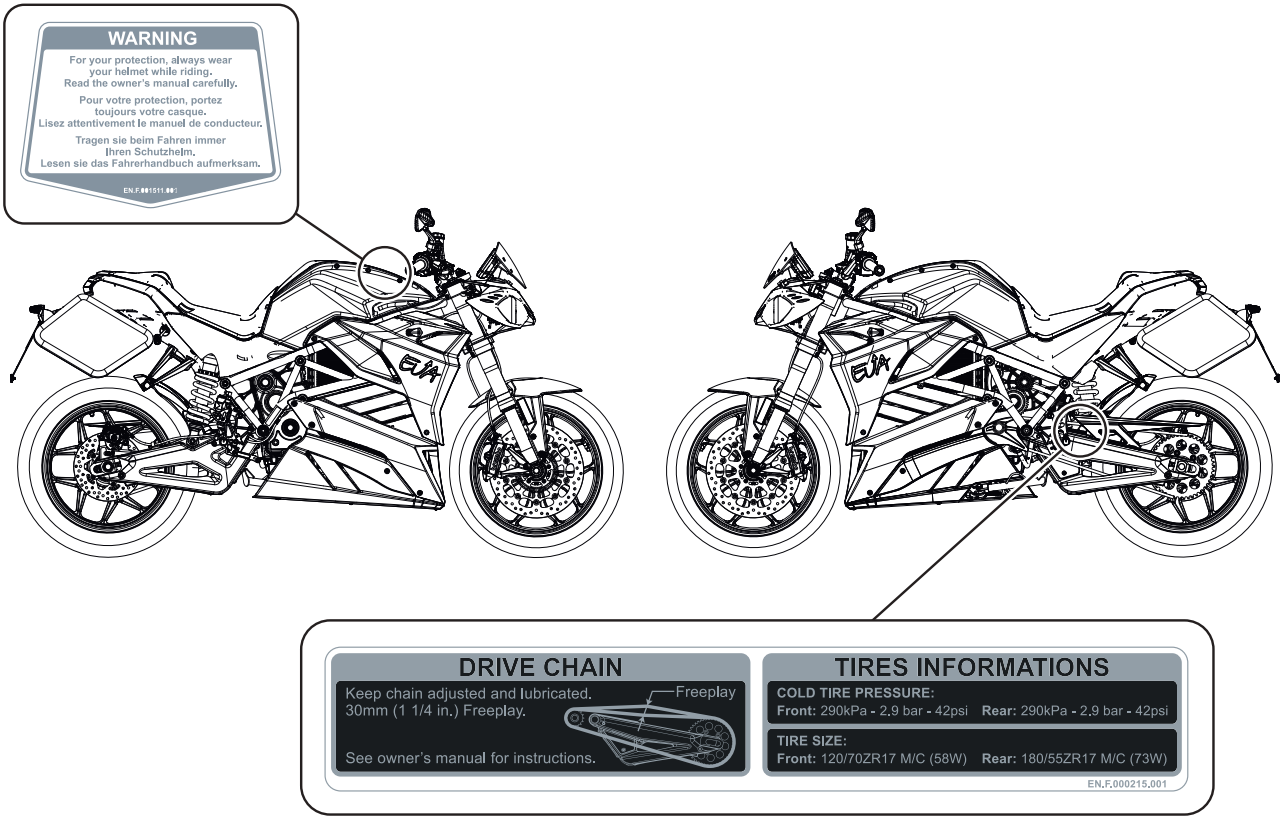
EN0002

Safety stickers



* Label applied to models sold in the United States and Canada

EN0003

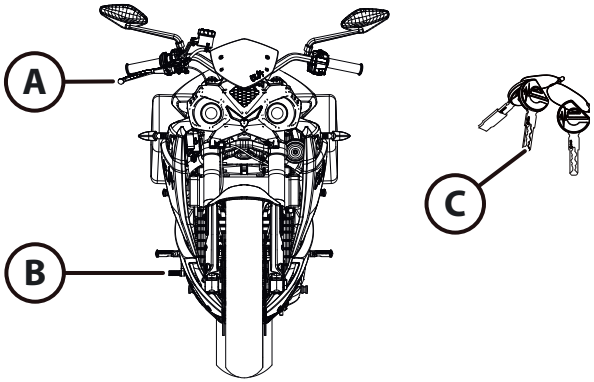


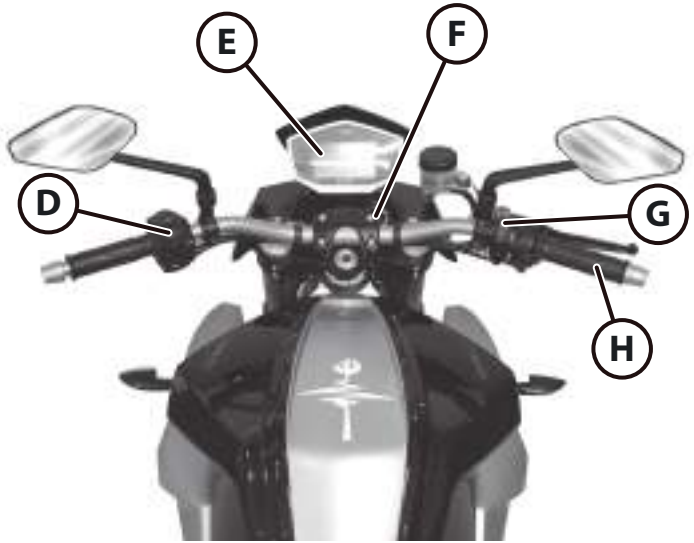
EN0004

DRIVING CONTROLS

Location of controls

A. Front Brake Lever
B. Rear Brake Pedal
C. Keys
D. Left control switch
E. Dashboard
F. Ignition Switch and Steering Wheel Lock with Key
G. Right control switch
H. Throttle twist grip

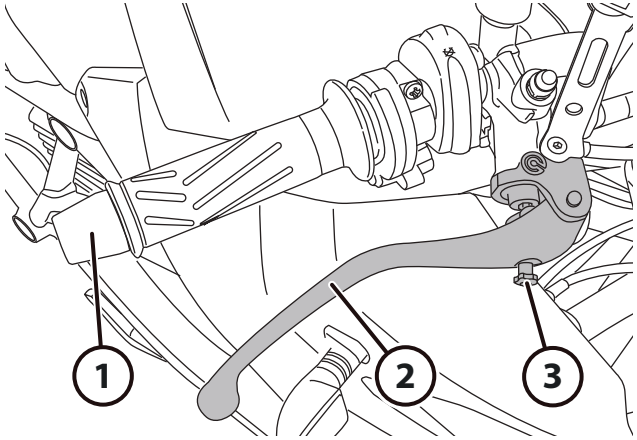




EN0005

A. Front brake lever

To apply the motorcycle's front brake, press the lever **(2)** towards the grip **(1)**. The brake is hydraulic and therefore requires very little manual force to actuate it.



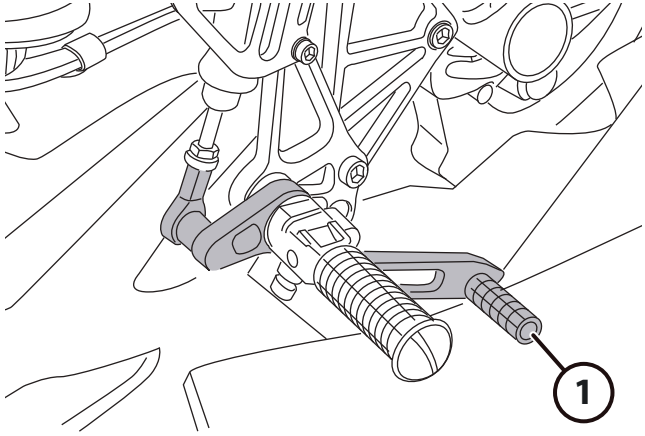
EN0006

You can adjust the span between the lever and the grip using the adjustment screw **(3)**. Find the setting that best suits your hand and enables to you use the brake lever comfortably.

Only adjust the span when the motorcycle is stationary and has been switched off.

B. Rear brake pedal

To apply the rear brake, depress the pedal **(1)** with your foot. The control system is hydraulic.



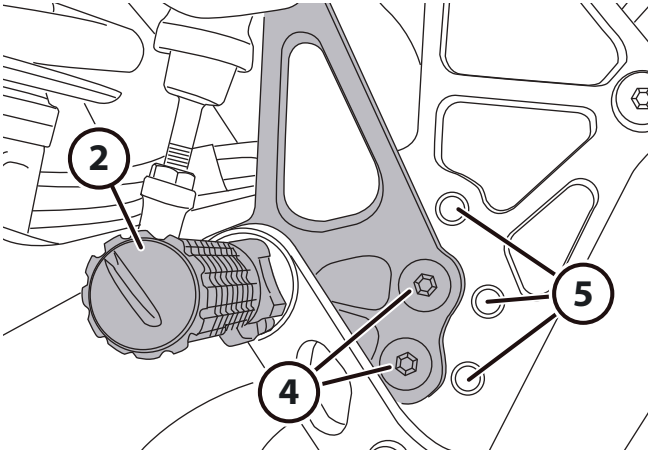
EN0007

The position of the footpegs and the pedal can be adjusted. You can also adjust the pedal stroke.

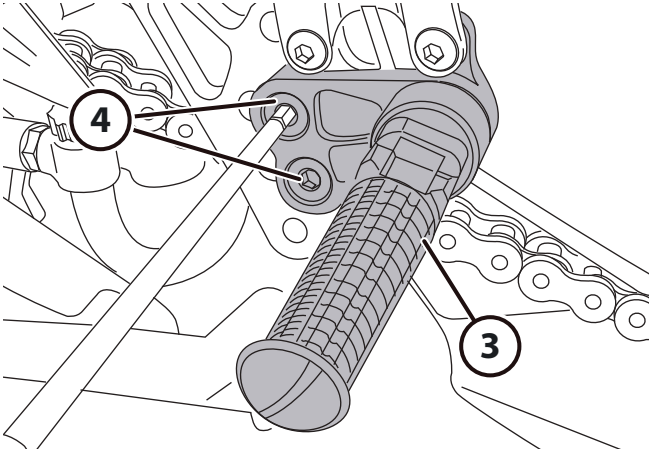
The steps described refer to a specific type of pedal; you should therefore check that your motorcycle is fitted with this particular pedal before performing them.

Adjusting the position of the footpegs (models fitted with adjustable footpegs)

To change the position of the footpegs on the right **(2)** and left **(3)**, unscrew the screws **(4)** and reposition them to suit you using the holes **(5)** in the plate.



EN0008

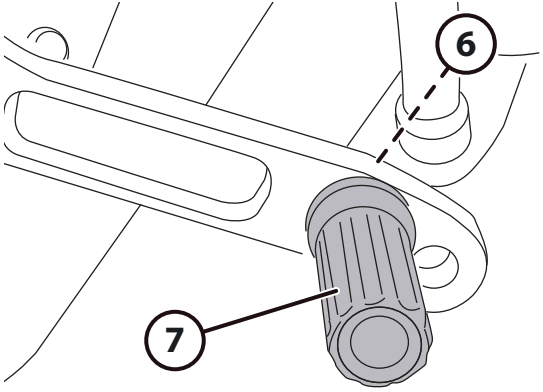


EN0009

Refer to the routine maintenance table for information on tightening the screws **(4)** correctly.

Adjusting rear brake pedal position (versions with adjustable pedal)

To change the position of the pedal to suit you, loosen the screw **(6)** on the back of the support pin **(7)**. Remove the "pin–screw" assembly, reposition it in the hole that best suits you and then retighten.



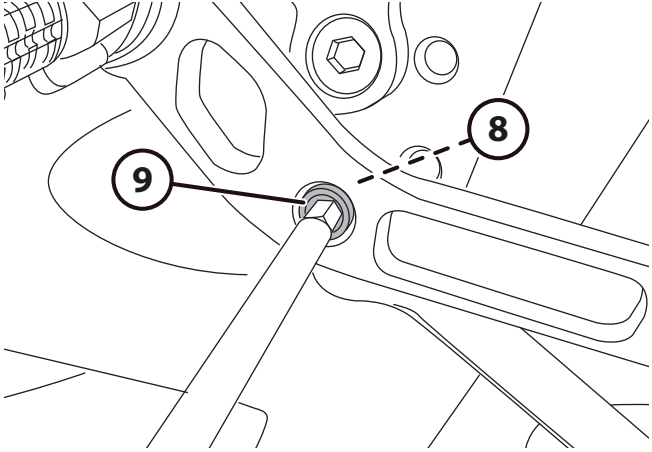
EN0010

Refer to the routine maintenance table for information on tightening the screw **(6)** correctly.

Adjusting the stroke of the rear brake pedal

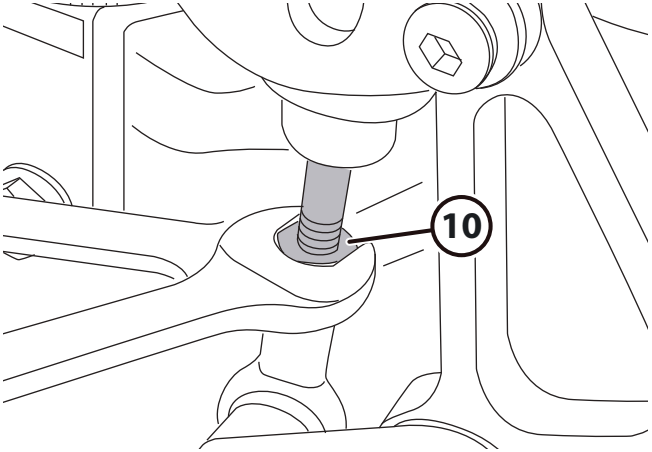
To change the stroke of the rear brake pedal:

Loosen the cam **(8)** on the back of the lever by undoing the screw **(9)**.



EN0011

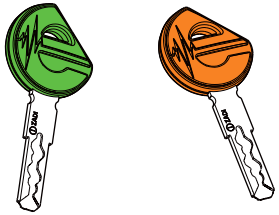
- Loosen the adjustment nuts **(10)** to adjust the brake lever.
- Find the optimum position and then retighten the two nuts **(10)**.
- Turn the cam **(8)** until the brake lever has 2 mm of play and tighten the screw **(9)**.



EN0012

C. Keys

The EVA comes with a MASTER key (orange or gray) in addition to the two ignition keys (green).



EN0013

Do not use the MASTER key for normal operation of the motorcycle.

Separate the MASTER key from the one you are using and keep it in a safe place.

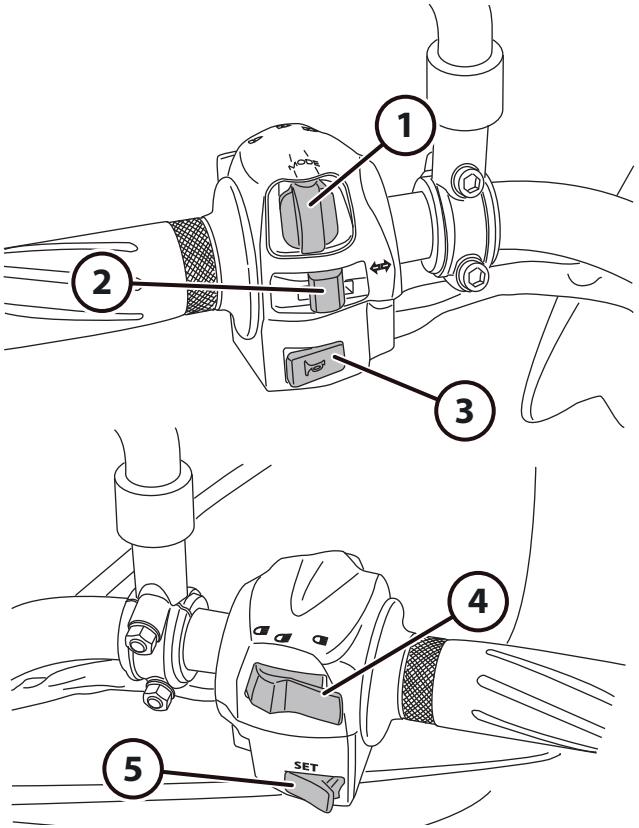
If you lose the key you are using, encode the spare key.

Encoding the spare key:

- Put the MASTER key in the ignition switch and turn it to ON: the display and the immobilizer light will switch on ( ).
- Turn the MASTER key to OFF and remove it: the display will switch off but the immobilizer light ( ) will remain on.
- Insert the replacement key and turn it to ON: the display will switch on and the immobilizer light ( ) will switch off for one second. The key has now been configured and can be taken out by turning it to OFF.
- Repeat this procedure for all the keys you have.
- Put the MASTER key back in and turn it to ON: the display will switch on and the immobilizer light ( ) will switch off. The procedure is now complete.

WARNING! You will need to perform the procedure described above on all the keys you have: Encoding just one key will prevent the others before it from being used.

D. Left control switch

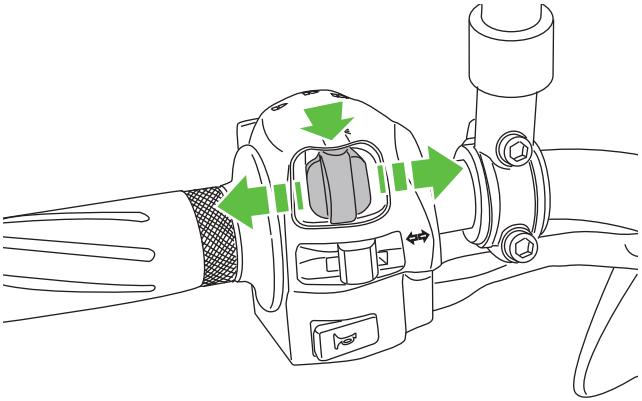


EN0014

1. "MODE" control

This enables you to navigate the menus in the display. The main controls are:

- "ENTER" (press once) = to confirm the item you have selected.
- Right = to navigate to the right within the menu.
- Left = to navigate to the left within the menu.



EN0015

The controls given above are represented in this booklet by the following symbols:

ENTER ▶▶	ENTER = press and hold
ENTER ▶	ENTER = press briefly
R MODE ▶▶	RIGHT = press and hold
R MODE ▶	RIGHT = press briefly
L MODE ◀◀	LEFT = press and hold
L MODE ◀	LEFT = press briefly

2. Control

Three-position turn indicator:

- Position = to turn left
- Position = to turn right
- Mid position (press and hold) = to activate hazard light mode (all four turn indicators).
- Mid position (press quickly) = to reset the position indicators.

Press the control to deactivate the turn indicator.

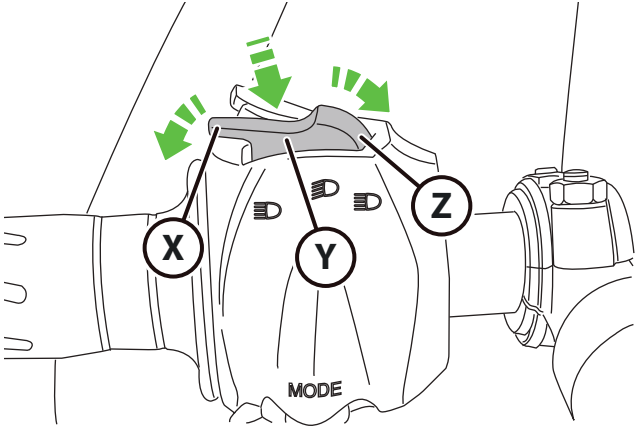
3. Control

Warning sound.

4. Light controls

This control has three positions:

- Left position **(X)** = high beam flashing.
- Mid position **(Y)** = low beams on.
- Right position **(Z)** = high beams on.



EN0016

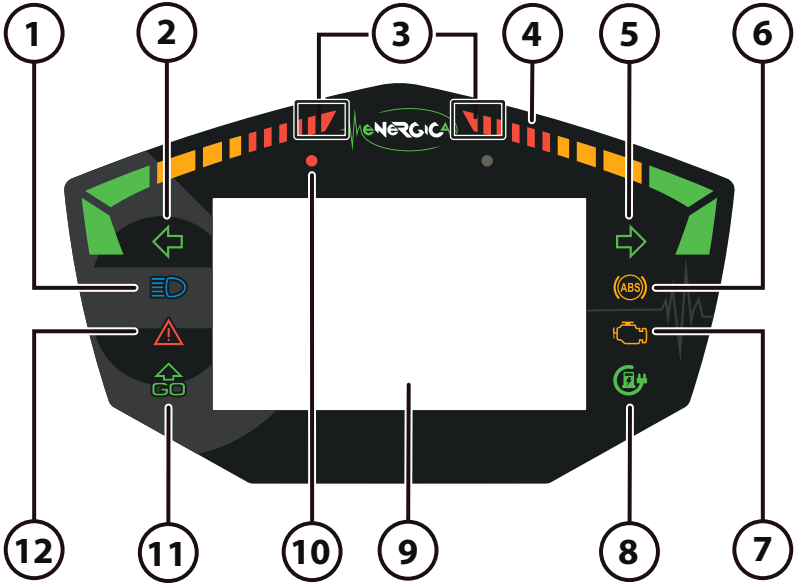
5. "SET" control

This enables you to access the profile screen.

See the paragraph "Display modes" (Profile screen) for more information.

E. Dashboard

1. High-beam headlights (blue light)
2. Left turn indicator (green light)
3. “Electrical Anti Blocking System” indicators (red)
4. Motor current indicator
5. Right turn indicator (green light)
6. ABS (amber light)
7. MIL (amber light)
8. Charge indicator (green light)
9. - Display
10. Immobilizer (red light)
11. GO (green light)
12. General alarm (red light)



EN0017

Explanation:

General alarm (FAULT)

If the red light is on:

- Battery completely drained. Charge the motorcycle as soon as possible.
- There is a fault in the motorcycle. For safety reasons, the input and output power of the battery pack (motor, AC/DC charging deactivated) are physically disconnected in the event of a fault.

WARNING! If the FAULT light comes on, stop the motorcycle as soon as possible, check whether there are any messages on the dashboard and go to the diagnostics menu to read the fault code(s). After checking the diagnostics menu, you can attempt to clear the malfunction by turning the key to the OFF position and then waiting five seconds before turning the key back to the ON position. If the fault persists, report the fault code(s) to your dealer.

GO

- Green light on: The motor is on and ready to go.
- Flashing green light: the motorcycle is in Park Assistance mode.

ABS

- Amber light off: The ABS is enabled and running.
- Amber light on (permanently): the ABS is still being initialized (the ABS system is recognized as enabled once the EVA has traveled a few meters).
- Amber light flashing (slowly): the ABS is disabled.
- Amber light flashing (quickly): the ABS is in the process of switching from "activated" to "deactivated" (or vice versa).

MIL LIGHT

The MIL light (Malfunction Indicator Light) illuminates in the event of certain faults or malfunctions detected by the self-diagnosis system of the motorcycle and listed in the Diagnostic Code list.

See the paragraph "Diagnostic codes" for more information on fault identification codes.

The MIL light remains lit as long as the fault/malfunction persists.

When the fault/malfunction is resolved, the light only extinguishes after the motorcycle has been switched off and then to GO state four times.

See the "DISPLAY" section for more information.

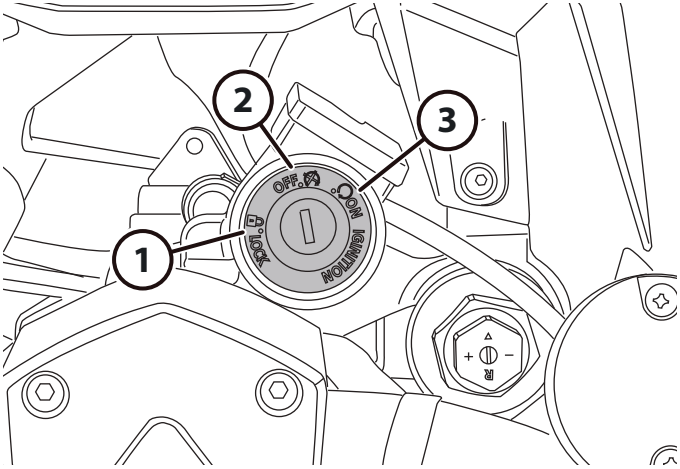
"Electrical Anti Blocking System" Indicators

The eABS prevents the rear wheel from losing its grip of the road when the accelerator is released with the simultaneous intervention of the battery regeneration system, which simulates the engine's braking effect. The eABS System does not act upon the braking system, but temporarily deactivates the battery regeneration system until the tire has regained a perfect grip of the road's surface. The intervention of the wheel's anti-blocking system is indicated by the activation of the last three red LED indicators to the right and left of the motor power indicator.

F. Ignition Switch and Steering Wheel Lock with Key

This is located below the dashboard and has three modes:

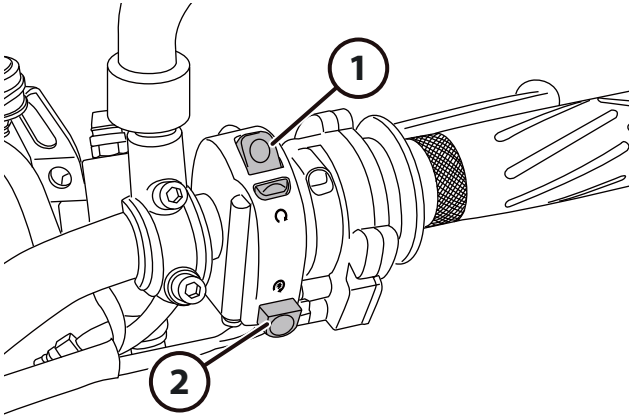
1. Steering lock (LOCK)
2. Stop (OFF)
3. Go (ON)



EN0018

IMPORTANT! Turn the key clockwise to put it into position **(3)**. From this position, turn the key counter-clockwise to position **(2)**. The key can be removed from here. You can reach position **(1)** by inserting the key, pushing it in and turning it counter-clockwise. You can remove the key from this position.

G. Right control switch



EN0019

1. Emergency switch

The emergency switch has two positions:

- Position ⟳ = motorcycle ready to move off.
- Position ⊗ = switches off the motor

If the event of a breakdown or accident, cut off the power to the motorcycle immediately by:

- Pressing the switch **(1)** to the ⊗ position
- Turning the key switch to OFF

The switch is used for safety purposes and/or in the event of an emergency. We do not recommended switching the motorcycle off while it is in motion.

2. Start motor

Control for starting the motor. When the green GO symbol (GO) is lit, the motorcycle is ready to move off.

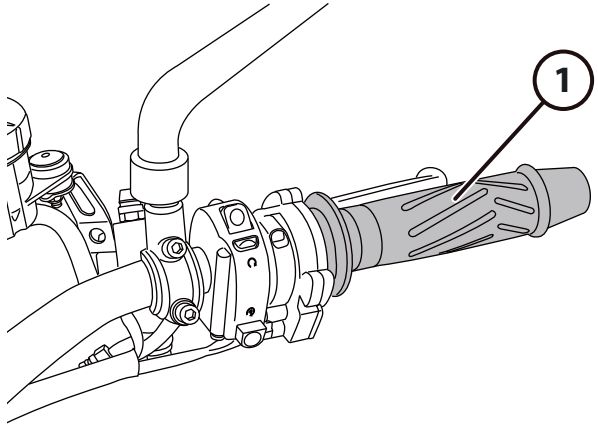
WARNING! When the motorcycle is stationary and the GO symbol is lit, the motorcycle will set off if the throttle grip is unintentionally or accidentally twisted by the rider or anyone else. Always take care not to operate the throttle if you are not intending to set the motorcycle in motion. When stationary, always disable the motorcycle with the emergency switch (⊗) or by turning the ignition switch off.

Read the information in the "INSTRUCTIONS FOR USE" section before using this control.

Always turn the ignition switch to OFF whenever the motorcycle is not being ridden. It is easy to forget that the motorcycle is active because it is completely silent. Getting off and onto the motorcycle while it is active may cause an accident.

H. Throttle twist grip

The grip **(1)** on the right-hand side of the handlebar controls the power supply to the rear wheel of the motorcycle.



EN0020

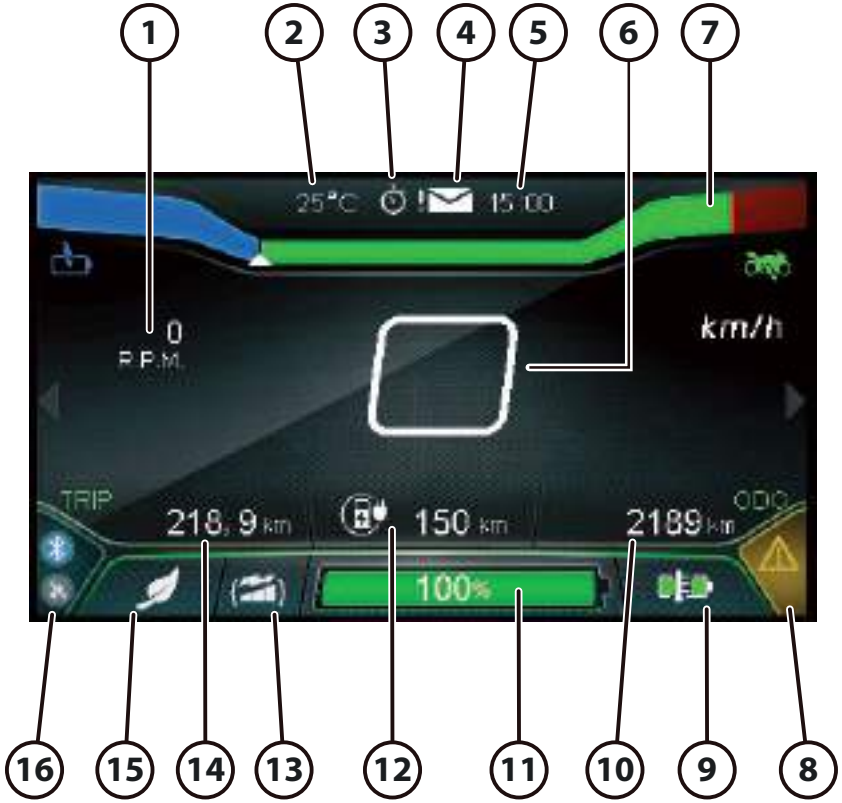
If you let go of the grip, it will return to its original position automatically and cut off the power supply to the motorcycle.

Read the information in the "INSTRUCTIONS FOR USE" section before using this control.

DISPLAY

Display overview

1. Tachometer
2. Air temperature
3. Chronometer function enabled
4. Multifunction icon
5. Clock
6. Tachometer
7. Current indicator
8. Diagnostic indicator
9. Battery temperature
10. Total odometer
11. Battery power left
12. Battery range left
13. Active regeneration profile
14. Trip odometer
15. Active power profile / LIMP mode
16. Connectivity



EN0021

1. Tachometer

This indicates the motor speed in revolutions per minute.

2. Air temperature

This function shows the temperature of the outside air and is expressed in °C or °F depending on the measurement system chosen.

The "Warning: ice" symbol is displayed at temperatures below 4°C (39.2°F) ❄.

3. Chronometer function enabled ⏱

See the "Display modes" (guide screens) section for more information.

4. Multifunction icon !✉

The appearance of this icon may vary depending on the information displayed.

For example:

!✉ “update message”

“charging stations”

5. Clock

This function shows the time.

See the "Display modes" (menu screens) section for more information.

6. Tachometer

This function shows the motorcycle's speed in km/h or mph depending on the measurement system chosen.

7. Current indicator

The indicator graphic will differ in appearance depending on the power profile and regeneration profile that have been selected.

EN0022

This type of display enables the user to check the energy consumption and the energy regeneration of the battery in real time based on the motorcycle's use.

If enabled, the consumption part will switch on (green band) when accelerating and the regeneration one will switch on (blue band) when decelerating.

8. Diagnostic indicator

This indicator will switch on if there is a potential fault in the motorcycle's electronic system.

The symbol refers the user to the diagnostics page, in which a graphical representation of the location of the fault and the relative identification code are displayed.

See the "Display modes" (menu screens) section for more information.

EN0023

See the "Diagnostics codes" section for more information about identification codes.

If there is an unidentifiable fault or the motorcycle is exhibiting unwanted behavior, please report it to an Energica dealer or authorized workshop.

9. Battery temperature

This function shows the temperature of the battery.

BLUE symbol	Low temperature ≤ 5°C / 41°F
GREEN symbol	Operating temperature 6°C to 40°C / 42.8°F to 104°F
YELLOW symbol	Medium temperature 41°C to 55°C / 105.8°F to 131°F
RED symbol	High temperature > 55°C / 131°F

If the RED symbol appears, slow down or switch off the motorcycle. Wait for the battery temperature to decrease.

10. Total odometer

This function shows the total distance the motorcycle has traveled.

The distance is expressed in kilometers or miles depending on the measurement system selected.

11. Battery power left

This function shows the battery's state of charge expressed as a percentage using the various graphics given below:

0 % - 19 % (red background)

EN0024

20 % - 39 % (yellow background)

EN0025

> 39% (green background)

EN0026

12. Battery range left

This function shows the estimated distance that you can travel based on the battery's state of charge.

The distance is expressed in kilometers or miles depending on the measurement system chosen.

The range indicated is estimated using the rider's driving style.

WARNING! An incorrect remaining range value may be indicated if all the instructions given in the chapters "Correct battery maintenance" and "Charging the battery" are not followed correctly.

The range values of the motorcycle given in the chapter “Technical specifications” (in paragraph relative to “Performance”) of this manual were measured and determined in accordance with European Union Regulation 134/2014 Annex VII.

In real usage, the effective range of an electric vehicle may vary in relation to a number of different factors in which even small changes may produce significant differences. These factors are:

- speed and riding style;
- power profile used;
- road conditions;
- temperature;
- type of tires used;
- usage of electrical accessories;
- state of charge of motorcycle.

In ECO mode, the motorcycle automatically controls all factors concerning power consumption (motor power, heating etc.) to minimize consumption. See the information in the “Profile screen”.

A sportier riding style and high speeds reduce the range of the motorcycle: this mode encourages a more conservative riding style.

13. Active regeneration profile

This shows the regeneration profile that is currently active.

See the "Display modes" (profile screen) section for more information on setting the profile type.

14. Trip odometer

This function shows the distance the motorcycle has traveled on the current trip.

The distance is expressed in kilometers or miles depending on the measurement system selected.

15. Active power profile

This shows the power profile that is currently active.

See the "Display modes" (profile screen) section for more information on setting the profile type.

LIMP mode (active)

LIMP mode is a strategy to protect the motorcycle against damage, which is implemented automatically by the VCU (Vehicle Control Unit).

This is a sophisticated and continuous supervisor function which reduces the power of the motorcycle if the battery is almost completely drained, if the motor temperature is not within the correct operating range or if the battery voltage is too low, and warns the rider that the strategy has been implemented by activating the LIMP indicator lamp.

If this occurs, simply charging the motorcycle and waiting for the battery to reach 100% charge so that all the cells within the battery pack are balanced correctly is normally sufficient to rectify the situation.

- Amber light permanently on: LIMP mode active.
- Amber light flashing: the motorcycle is entering or exiting LIMP mode.

When LIMP mode is implemented, the LIMP icon replaces the icon relative to the power profile selected previously.

WARNING! The motorcycle exits LIMP mode and the indicator lamp light extinguishes automatically when the fault is resolved.-

Example of active LIMP mode on vehicle:

EN0027

16. Connectivity

- Position calculated correctly (green)
- No GPS signal (off)
- Bluetooth® connection active (blue)
- Bluetooth® connection not active (off)

Pop-up

The pop-up screen is activated automatically whenever the dashboard needs to inform the user of any messages from the motorcycle, e.g. faults or warnings.

An example is given below:

EN0028

See the "User messages" section for more information on user messages.

Display modes

The display has a number of different display modes, each of which has a number of sub-screens:

- **Check screen**
- **Guide screens**
- **Profile screen**
- **Menu screens**
- **Battery charge screens**
- **Points of interest screen - Charging stations**

Check screen

EN0029

The check screen will be displayed until the system check condition is activated.

Guide screens

Push the "MODE" button on the left control switch to the right and left to access the four guide screens.

See the "Left control switch" section for more information.

- **Main screen**

EN0030

See the "DISPLAY" section for more information.

- **Consumption screen**

EN0031

This screen enables you to view your motorcycle's current consumption and average consumption.

EN0031

From the top:

- Motor torque indicator
- Current power indicator
- Current consumption indicator
- Average consumption indicator

The average consumption value may be reset in this screen by:

- ENTER ▶
- Pressing R MODE ▶ to select the average consumption item
- Pressing ENTER ▶ to confirm the reset

If you do not want to reset the value, press L MODE ◀.

- **Consumption screen with graph**

EN0032

This screen enables you to check your motorcycle's average consumption like on the previous page.

At the center of the screen is a graph showing the average consumption of your motorcycle over the last 10 Km (6.2 mi).

The trip odometer can be reset in the first three screens (main/consumption/consumption with graph) by:

- ENTER ▶
- Pressing ENTER ▶ to confirm the reset

EN0033

If you don't want to reset the data, L MODE ◀.

- **Chronometer screen**

This screen enables you to time a journey.

You can view this page by enabling the function in the menu screens. See the "Display modes" (menu screens) section for more information.

EN0034

To activate the chronometer:

- Press ENTER ▶ to activate the "START" button
- Press ENTER ▶ again to activate the chronometer

Every time you press the ENTER ▶ button, the chronometer will save the time and start again from zero.

To stop the chronometer:

- Press R MODE ▶ to activate the "STOP" button
- Press ENTER ▶ to stop the chronometer
- "RESET" is then activated
- Press ENTER ▶ to reset the last recorded revolution

When using the chronometer screen, you can exit the page you are viewing by pressing L MODE ◀◀.

The ⏱ symbol will appear when you activate the chronometer and is displayed on all the guide screens to indicate that the option is activated.

Profile screen

Pressing the "SET" button on the left control switch takes you to the profile screen.

See the "Left control switch" section for more information.

EN0035

See the "ABS system" section for more information.

The system will exit the profile screen if you do not press any buttons for ten seconds.

Press L MODE ◀ to navigate the four power profiles:

- ECO
- URBAN
- RAIN
- SPORT

The different power profiles enable you to change the settings for the torque output and the power output of the motorcycle.

Press ENTER ▶ to confirm the profile you have selected.

See the "Performance" section for more information on the motorcycle's performance profiles.

Press R MODE ▶ to navigate the four regeneration profiles:

- OFF
- LOW
- MEDIUM
- HIGH

Press ENTER ▶ to confirm the profile you have selected.

The different regeneration profiles enable you to recover energy during deceleration and then inject this into the battery as current. The motorcycle produces a different engine brake effect depending on which of the four profiles has been selected. The higher the profile, the greater the engine brake effect during deceleration.

If the battery is fully charged, the YELLOW symbol will start flashing on the guide screen.

The motorcycle will need to discharge slightly before the regeneration profile you require can be activated.

You can also set any of the profiles while the motorcycle is in motion:

- Regeneration profile: For safety reasons, after selecting a profile it will only be activated once an acceleration and subsequent deceleration process is complete.
- Power profile: For safety reasons, after selecting a profile it will only be activated once a deceleration and subsequent acceleration process is complete.

WARNING! The engine brake effect has not been activated until the symbol stops flashing. Take care when decelerating and braking.

Menu screens

Pressing the R MODE ▶▶ button on the left control switch takes you to the menu screens.

The menu can only be accessed when the motorcycle is stationary. If the vehicle speed exceeds 1.9 mph (3 km/h), the system automatically exits this menu without modifying the parameters.

EN0036

- Press R MODE ▶ or L MODE ◀ to navigate within the menu.
- Select "Exit" to return to the guide screens.

In the sub-menus:

- Select "SET" to confirm any settings you have entered.
- Select "Back" to exit the item selected.

- **Configurations**

1. LPR function

The LPR function prevents the battery from running down completely during long periods when the motorcycle is not in use. When this function is deactivated, a longer balancing period may be required.

The motorcycle must be left connected to mains power when the LPR function is active.

See the paragraph “LPR function (Long Period Rest)” for more information on the LPR function.

2. Setting the clock

This enables you to select and manage the clock function.

3. About

Displays information about the motorcycle and the firmware versions currently installed.

EN0037

- **Preferences**

1. Unit of measurement

This enables you to select the unit of measurement required for the individual items in the sub-menu.

- Distance
- Temperature
- Consumption

2. Language

This enables you to select the language you require.

3. Display

Used to set the screen backlight level and select display mode (day/night).

- Backlight % (sets brightness of the display backlight).
- Backlight when charging (backlight ON/OFF when charging).
- Display mode (selects day or night display modes, or sets automatic day/night mode switching controlled by light sensor integrated in dashboard).

4. Setting the lights

Charging light (activates or deactivates daytime running lights when vehicle is charging)

- **Chronometer**

1. Activate chronometer

This enables you to activate or deactivate the guide screen for the chronometer.

2. Last 50 laps

This enables you to view the last 50 laps timed by the chronograph.

Click ENTER ▶ the selected lap to view details of the lap: Time/Maximum Speed/Maximum rpm

Press L MODE ◀◀ to exit the page.

3. Delete

This enables you to delete all the laps timed by the chronograph from the "Last 50 laps" page.

- **Diagnostics**

Access the diagnostics screen, for viewing the location and codes of any faults identified.

See the "Diagnostics codes" section for more information about identification codes.

- **Connections settings**

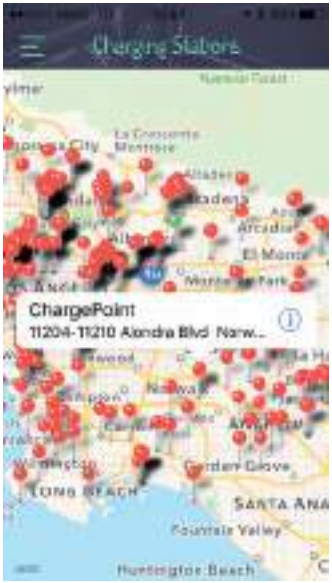
Accesses the section for pairing your smartphone with the motorcycle via Bluetooth®.

Visit the website www.energicamotor.com for detailed instructions for pairing your smartphone with the motorcycle.

Pairing a smartphone with the motorcycle via Bluetooth® allows access to the functions of the MyEnergica app and enables the charging station screen on the dashboard (see paragraph “Points of interest screen - Charging stations screen”).

The My Energica app allows Energica motorcycles to be paired with Apple® or Android™ devices via a Bluetooth® connection.

The My Energica app may be downloaded from the Apple Store® for Apple devices or from Google Play™ Store for Android™ devices.



EN0038

Battery charge screens

These screens cannot be selected using the ENTER ▶ button; they are activated automatically when the motorcycle is plugged into a charging socket.

These screens differ depending on the charging process being carried out and the current state of charge.

See the paragraph "Charging the battery" for information on how to charge the battery correctly.

- **AC charging screen**

EN0039

It takes approximately 3.5 hours to recharge the EVA from a battery state of charge of 0% to 95% (220-240V).

These values are given for indicative purposes only; the recharging times may vary depending on the outside temperature and the state of balance of the individual cells in the battery pack.

- **DC recharging screen (rapid)**

EN0040

It takes approximately 0.5 hours to recharge the EGO from a battery stare of charge of 0% to 80%.

These values are given for indicative purposes only; the recharging times may vary depending on the outside temperature and the state of balance of the individual cells in the battery pack.

- **Balancing screen**

State of balance of the battery cells.

EN0041

- **Charging complete screen**

EN0042

Points of interest screen - Charging stations

EN0043

The screen pops up automatically when recharging stations are located in the vicinity. When this occurs, the symbol is displayed at the top of the dashboard.

For the screen to pop up automatically, the GPS function must be active (icon displayed) and the My Energica app must be running on your smartphone and connected to the motorcycle via Bluetooth ® (icon displayed).

The My Energica app may be downloaded from the Apple Store® for Apple devices or from Google Play™ Store for Android™ devices.

Visit the Energica website for instructions for pairing your device correctly with you motorcycle.

GPS signal reception usually takes just a few seconds to establish. However, large buildings or other large objects in the vicinity may interfere with signal reception.

The first five charging stations located are listed in the Charging Stations screen, in order of distance with the closest first.

The following information is given for each charging station located:

- Charging system available (AC or DC)
- Distance to charging station (in Km or miles)
- Direction to charging station relative to motorcycle
- Green LED: Charging station in range
- Yellow LED: Charging station at limit of range
- Red LED: Charging station too far to be reached

The charging station search results displayed by the My Energica app may also be filtered by connector type (Type1 or Type2) or charging system (AC or DC).

When the Charging Station screen is active, press ENTER ▶ to navigate within the screen and press L MODE ◀ or R MODE ▶ to scroll through the stations found. Key information for each charging station is displayed in larger format.

To exit the screen for selecting charging stations L MODE ◀◀.

WARNING! Distances from the motorcycle to charging stations are indicative only. The distances from the motorcycle to charging stations are as the crow flies and do not represent the effective road distance.
While the app continuously recalculates the distance from the motorcycle to charging stations in consideration of the remaining range of the vehicle, we do not recommend depending entirely on the information given by the dashboard.

Energica Motor Company cannot be held responsible for any damages or loss caused by failing to reach a charging station.

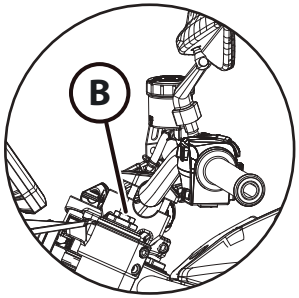
WARNING! Use the charging station locator screen with caution. Using the charging station locator screen when riding does not relieve the rider of the obligation to ride with due caution and attention.

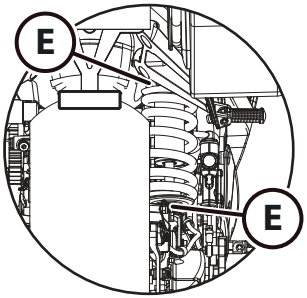
For safety and to reduce distraction, always plan the route before setting off.

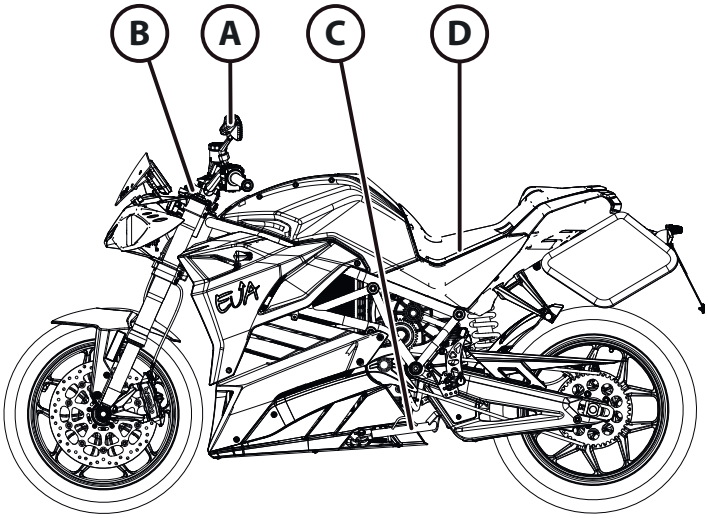
MAIN PARTS

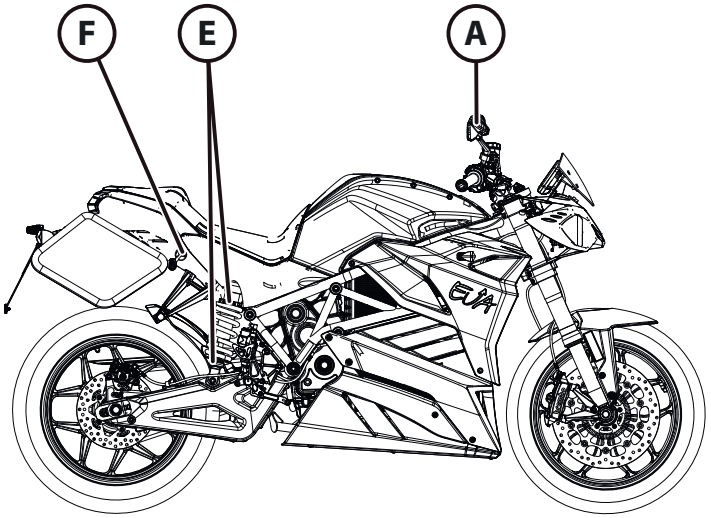
Location of parts

- **A.** Rear-view mirrors
- **B.** Front fork adjusters
- **C.** Kickstand
- **D.** Battery charging socket
- **E.** Rear shock absorber adjusters
- **F.** Seat lock





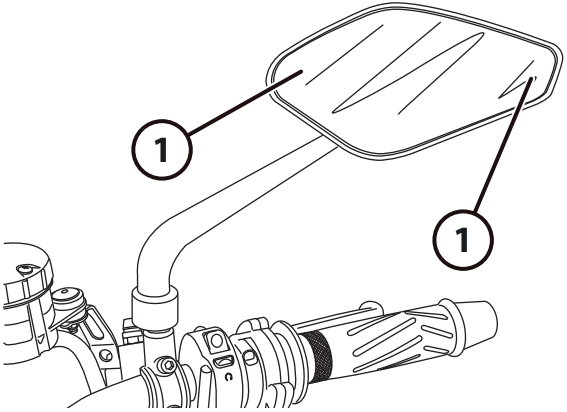




EN0044

A. Rear-view mirrors

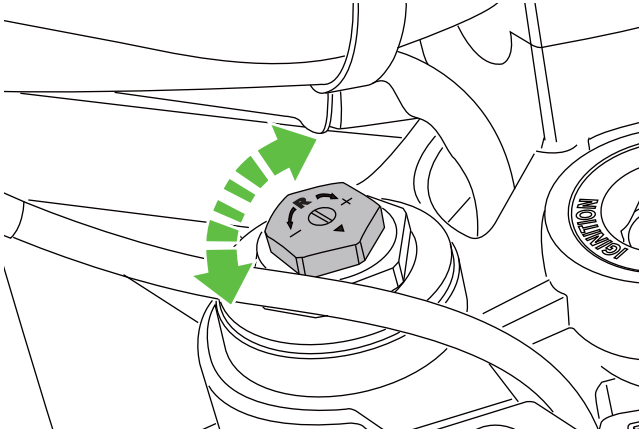
Press on the points (1) to adjust the rear-view mirrors.



EN0045

B. Front fork adjusters

To change the preload on the spring inside each fork tube, turn the hexagonal end of the adjuster with a hex wrench.



EN0046

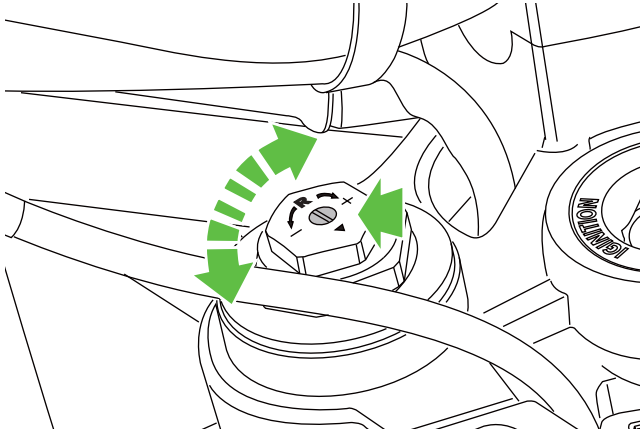
- Turning clockwise increases the preload on the spring.
- Turning counter-clockwise reduces the preload on the spring.

To adjust the preload on the spring, always start from the minimum preload (nut turned completely counter-clockwise).

Note of the number of rotations and set both forks to the same preload.

The factory setting is seven complete rotations from the starting position (fully loosened).

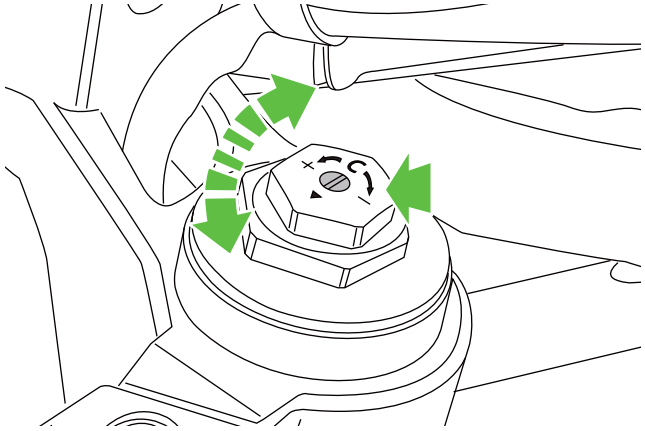
To adjust the extension damping action (right hand fork), turn the adjustment screw clockwise (+) to increase damping action or counterclockwise (-) to reduce damping action.



EN0047

The factory setting is one and a half rotations from the starting position (fully tightened).

To adjust the compression damping action (left hand fork), turn the adjustment screw clockwise (+) to increase damping action or counterclockwise (-) to reduce damping action.

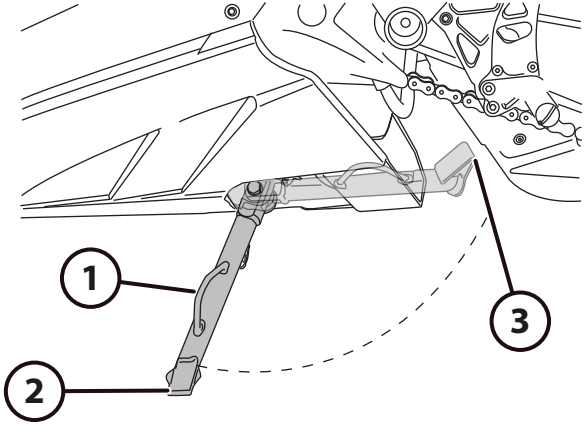


EN0048

The factory setting is two and a half rotations from the starting position (fully tightened).

C. Kickstand

Do not remain seated on the motorcycle when it is being supported by the kickstand.



EN0049

To use the kickstand, push down on the toe loop **(1)** with your foot (holding the motorcycle with both hands on the handlebar) until it reaches maximum extension **(2)**. Tilt the motorcycle until the kickstand is resting on the ground.

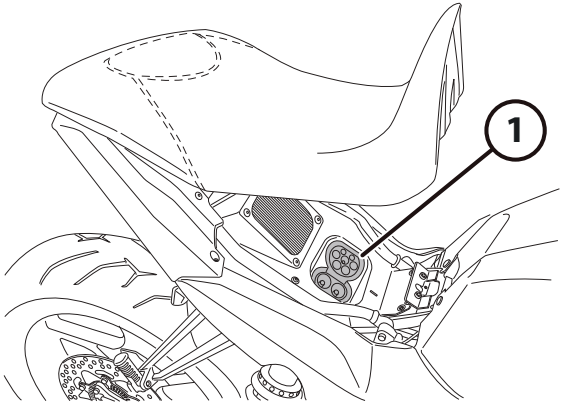
To return the kickstand to its "resting" position **(3)**, tilt the motorcycle to the right while lifting the toe loop with the top of your foot **(1)**.

Parking on soft or yielding ground could cause the motorcycle to tip over and suffer serious damage. Take care!

Carry out regular checks to make sure that the kickstand's holding system is in correct working order.

D. Battery charging socket

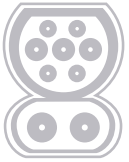
The battery charging socket **(1)** is located underneath the seat, and may be of a number of different standard types: check that the correct charging plug is used for the socket, referring to the following.



EN0050

Standard charging socket	
AC TYPE 1 (Max. current 14 A - Voltage 120 V / 240 V)	

AC TYPE 2 (Max. current 14 A - Voltage 120 V / 240 V)	

Rapid charging socket (optional)	
CCS DC TYPE 1 MODE 4 (DC) (Max. current 60 A - Voltage 330 V)	
DC TYPE 2 MODE 4 (DC) (Max. current 60 A - Voltage 330 V)	

The charging cable is locked into place when connected to the socket under the saddle by a safety system on the EVA: (when charging in either AC or DC mode).

- AC mode (complete charge and key inserted): press ENTER ▶ and follow the instructions on the dashboard.
- AC mode (complete charge and key removed): turn the key to ON, press ENTER ▶ and follow the instructions on the dashboard.
- DC mode (complete charge): the cable is automatically disconnected from the socket under the seat.

To stop charging before the process is complete, turn the ignition switch to ON, press ENTER ▶ and follow the instructions on the dashboard.

If the power supply cuts out, the EVA will stop charging and switch off.

To remove the cable from the socket, repeat the steps described above with or without the key in the ignition switch.

If there is an electrical failure, the cable can also be removed from the socket manually by pressing the metal bracket to the right of the charging socket.

If the motorcycle is not disconnected once 100% charge is reached, the charge cycle restarts every 2 hours to maintain maximum battery charge and ensure maximum range.

See the paragraph "Charging the battery" for more information on charging times and procedures.

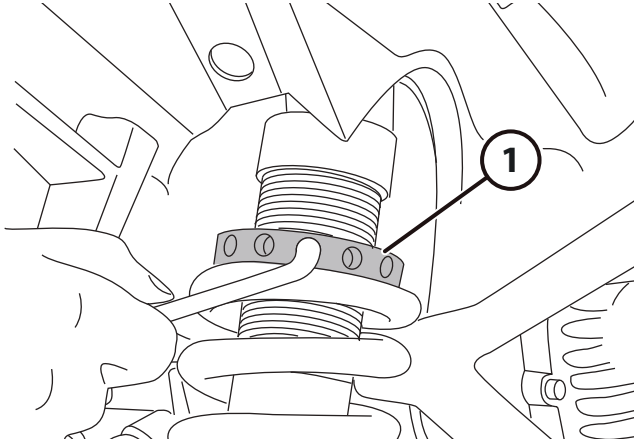
WARNING! During charging, the battery charger cooling fan situated in the compartment under the seat must be kept clear of any objects which could obstruct the air flow.

E. Rear shock absorber adjusters

Standard shock absorber

WARNING! The rear spring preload must be set correctly for the load carried by the motorcycle. A higher preload setting is necessary for heavier loads, and a lower preload setting is required for lighter loads.

To change the preload on the spring, turn the ring nut **(1)** using the special tool supplied with the motorcycle.

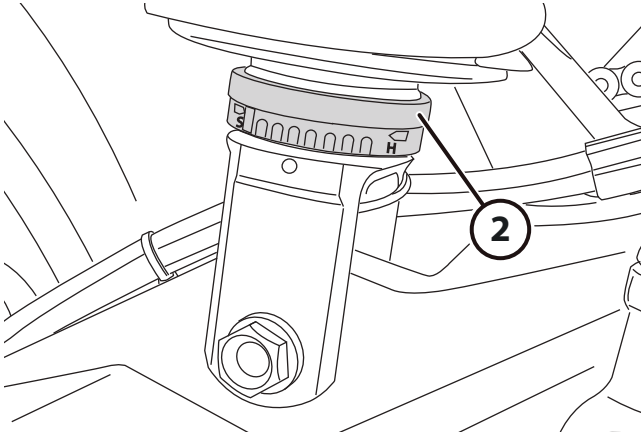


EN0051

- Turn clockwise (looking from above damper) to increase spring preload.

- Turn counterclockwise (looking from above damper) to reduce spring preload.

To adjust the extension damping action, turn the ring nut **(2)** at the bottom of the damper.



EN0052

The ring nut has seven adjustment settings. The letters "S" and "H" are printed on the side of the ring nut:

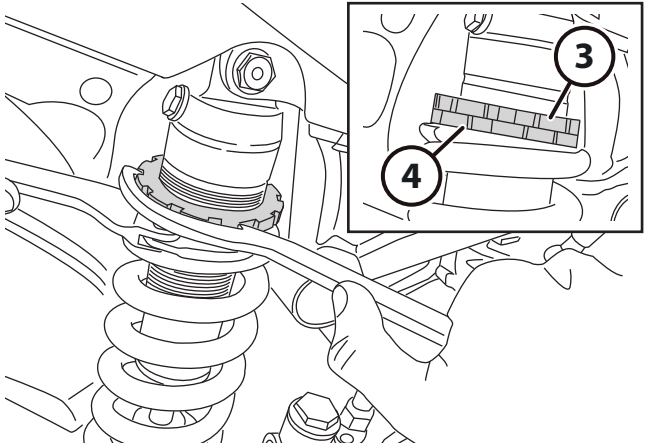
- Turning the ring nut towards “S” sets a weaker damping action.
- Turning the ring nut to "H" sets a stronger damping action.

The factory setting is two clicks from the initial position (S).

Optional shock absorber

WARNING! The rear spring preload must be set correctly for the load carried by the motorcycle. A higher preload setting is necessary for heavier loads, and a lower preload setting is required for lighter loads.

To change the preload on the spring, turn the adjustment ring nuts **(3)** and **(4)** using the special tools supplied with the motorcycle.



EN0053

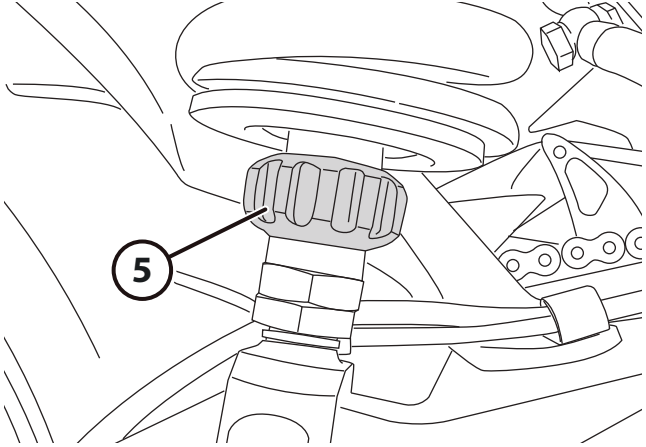
Loosen the upper ring nut **(3)** and then turn the lower ring nut **(4)** to make the adjustment:

- Turn clockwise (looking from above damper) to increase spring preload.

- Turn counterclockwise (looking from above damper) to reduce spring preload.

Once at the required setting, tighten the upper ring nut **(3)** with the special tools.

To adjust the extension damping action, turn the ring nut **(5)** at the bottom of the damper.



EN0054

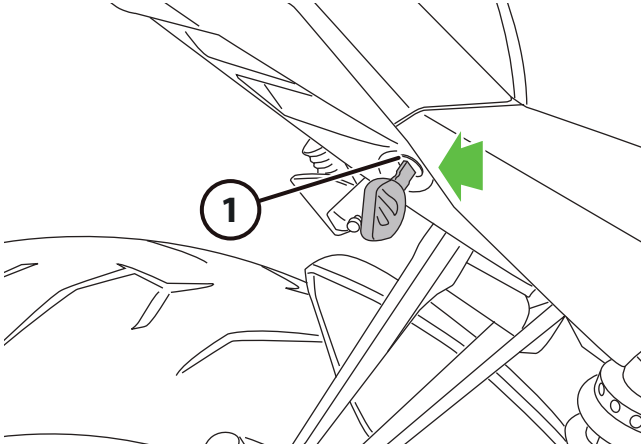
The ring nut **(5)** has 30 adjustment settings.

- Turn the ring nut clockwise (viewed from top of damper) to set a slower damping rate.
- Turn the ring nut counterclockwise (viewed from top of damper) to set a faster damping rate.

The factory setting is 14 clicks from the starting position (fully closed).

F. Seat lock

Insert the ignition key into the designated lock **(1)** and turn it to open the seat. This gives you access to the battery charging socket.



EN0055

See the paragraph "Charging the battery" for information on how to charge the battery correctly.

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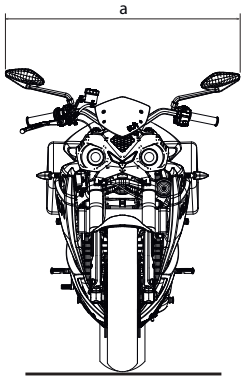
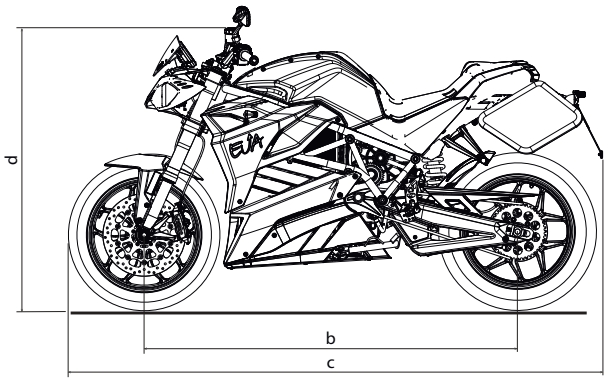
TECHNICAL SPECIFICATIONS





EN0056

Dimensions

a Maximum width	935 mm	36.8 in.
b Wheelbase	1491 mm	58.7 in.
c Overall length	2133 mm	84 in.
d Height	1085 mm	42.7 in.

Weights

Motorcycle weight:	282 Kg (621.7 lbs)
Weight at full load:	458 Kg (1009.7 lbs)
Maximum number of riders:	2
Maximum weight of rider, passenger and load:	176 Kg (388 lbs)

WARNING! Failure to observe the load limits could compromise maneuverability and cause the rider to lose control of the motorcycle.

Motor

The electric powertrain of the motorcycle means that it can be used a zero emissions vehicle. The electric motor is powered by a special high voltage battery. The extraordinarily high torque of the electric powertrain offers superior dynamic responsiveness and agility in all riding situations from acceleration to high speed cruising. The high voltage system is charged when the vehicle is parked using a specific cable, but also receives charge during use from the regenerative braking system. Energica motorcycles feature a quick charge system. However, the vehicle may also be charged from a regular household mains power socket.

The motorcycle is driven by a permanent-magnet synchronous (PMAC), oil-cooled motor.

Performance

Profile	Torque (with 100% battery charge)
Sport	180 Nm (132.8 ft. lb)/200 Nm (147.5 ft. lb)*
Urban	158 Nm (116.5 ft. lb)
Eco	110 Nm (81.1 ft. lb)
Rain	90 Nm (66.4 ft. lb)

* EVA 107 kW

The values listed in the table were measured in bench tests and are indicative only.

Maximum speed

- Sport mode: limited to 200 km/h (124.3 mi/h)
- Eco mode: limited to 90 km/h (55.9 mi/h)

Nominal continuous power (Eva 80)[1]: 109 HP (80 kW)
Nominal continuous power (Eva 107)[1]: 145 HP (107 kW)
Electric power consumption[1]: 144 Wh/km (231.8 Wh/mi)
Range[2]: 108 km (67.1 mi)

(1) In accordance with EU regulation 168/2013

(2) Distance measured in “SPORT MODE” and with ENERGY RECOVERY SYSTEM PROFILE “OFF” (in accordance with EU regulation 134/2014, Annex VII)

Battery

Capacity:	11.7 kWh
Nominal voltage:	300 V
Service life:	1,200 cycles
Indicative charge times	
• 240 V mains voltage:	3.5h (0-95%)
• 120 V mains voltage:	7h (0-95%)
Rapid charge time:	0.5h (0-80%)

These values are given for indicative purposes only; the recharging times may vary depending on the outside temperature and the state of balance of the individual cells in the battery pack.

See the paragraph "Remaining battery range" for more information concerning the battery.

Suspension and running gear

Frame

- Steel tubular trellis

Swingarm

- Cast aluminum

Front rim

- 3.5" x 17"

Rear rim

- 5.5" x 17"

Brakes

ABS

- Can be disabled

See the "ABS system" section for more information.

Front brake

- Hydraulic control using the lever on the right-hand side of the handlebar.
- Dual 330 mm (13 in.) Brembo floating discs
- 4-piston radial caliper

Rear brake

- Hydraulic control using the pedal on the right-hand side.
- Single 240 mm (9.4 in.) Brembo disc
- 2-piston caliper

Tires

Front tire

- Type: 120/70 ZR17
- Pressure: 2.9 bar / 42.1 psi

Rear tire

- Type: 180/55 ZR17
- Pressure: 2.9 bar / 42.1 psi

Repairing and replacing tires

The tires fitted to this motorcycle are capable of some degree of pressure retention, and take e very long tome to deflate if they suffer a minor puncture. If a tire appears slightly flat, carefully check to see if it is losing air anywhere.

We recommended using top-of-the range replacement tires.

Always balance a wheel after replacing its tire.

Do not remove or move the counterweights for balancing the wheels.

Take your bike to an Energica dealer or authorized service center to have your tires replaced, to be sure that the wheels are removed and refitted correctly. Some parts of the ABS system that require specific adjustments (sensors, tone wheels) are fitted on them.

WARNING! Never use tires with an inner tube: not following this rule could cause the tire to burst suddenly, with serious consequences for the rider and passenger.

WARNING! Inadequate inflation pressure is the one of the commonest causes of tire trouble and may result in cracking, tread separation or tire explosion, resulting in sudden loss of control of the vehicle and possible severe injury. Check the condition and inflation pressure of the tires regularly.

WARNING! Riding with punctured tires reduces control over the vehicle and may cause accidents. If necessary, replace the tires before the minimum tread limit specified by law is reached.

The tread depth is checked by inspecting the wear indicators in the main grooves of the tread.

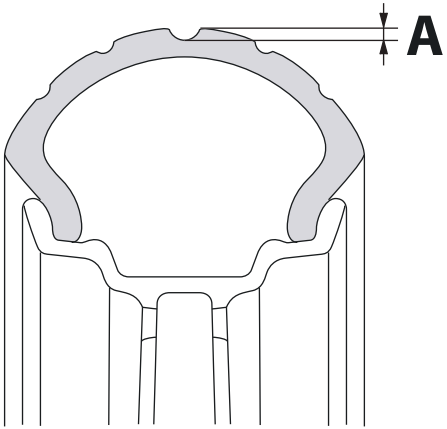
All tires have wear indicators incorporated in the main tread grooves. If the tread has worn down to the same height as the wear indicators, the tire has reached its wear limit and can no longer be used.

The positions of the wear indicators are identified on the sidewall of the tire by markings such as the letters TI or TWI, or by arrows.

The tires must be replaced when the minimum permitted tread depth is reached.

Minimum depth of the tread

Measure the minimum width **(A)** of the tread at the point of maximum wear.



EN0057

The value measured must not be less than 2 mm (0.1 in.) and never less than the minimum tread depth permitted by applicable legislation.

Check to see if there any cuts or cracks on the tire, especially at the sides; replace the tire if it is seriously damaged.

Headlamps/turn indicators

Lights	Nominal operating voltage
Front LED side lights	13.5V - 0.34W
LED high beam/low beam headlights	13.5V - 2x10W
LED turn indicators (EU type approval)	13.5V - 1.89W
Incandescent bulb turn signals - RY10W (USA type approval)	12V - 10W
Tail light	13.5V - 0.2W/2.1W
LED license plate light	13.5V - 1.62W

See the "Adjusting the headlamps" section for information on how to adjust the front headlamps.

To replace the turn signal bulbs, see the paragraph “Replacing turn signal bulbs”.

Visit an Energica dealer or authorized workshop to have your turn indicators or headlamps replaced. This will guarantee that they are removed and refitted correctly.

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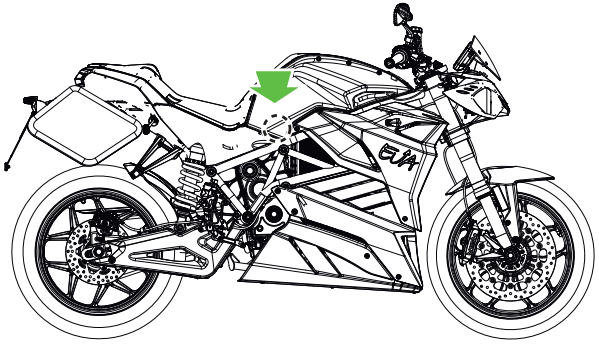
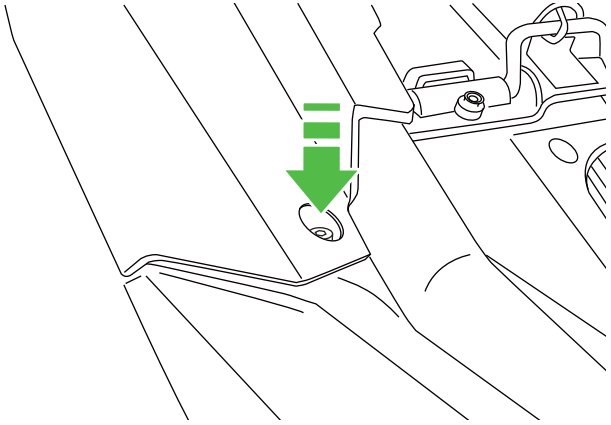
Fuses

The fuse box is located to the right of the motor.



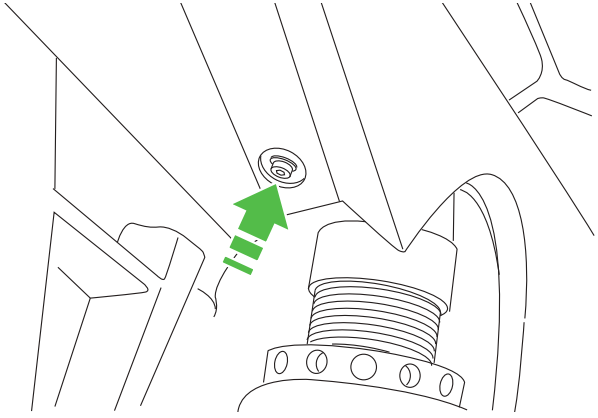
EN0060



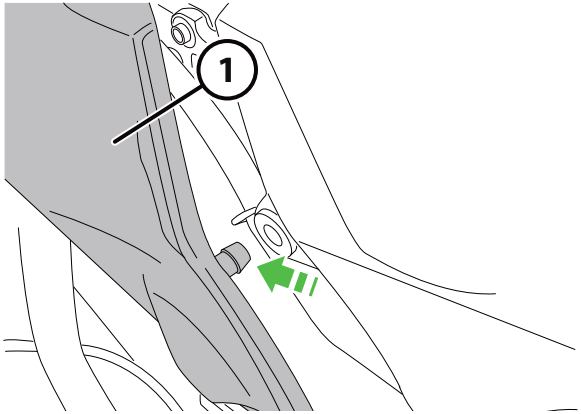
EN0061

To carry out any checks or replace the fuses:

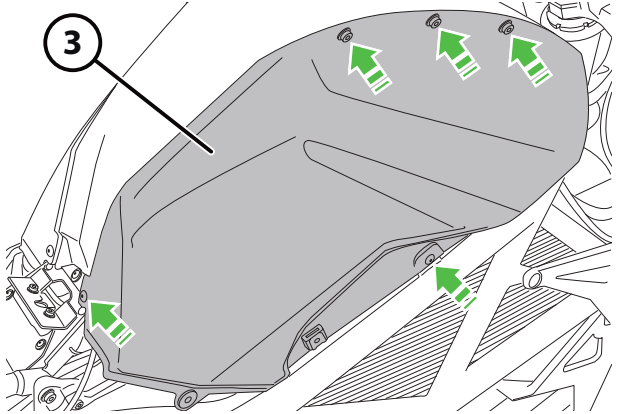
- Open the seat lock using the ignition key.
- Remove the right hand lateral cover, undoing the screws in the positions indicated, then release the indicated pin **(1)**.
- Remove the right hand upper lateral fairing **(2)**, disconnecting the right hand front turn signal connector.
- Remove the tank cover **(3)**.



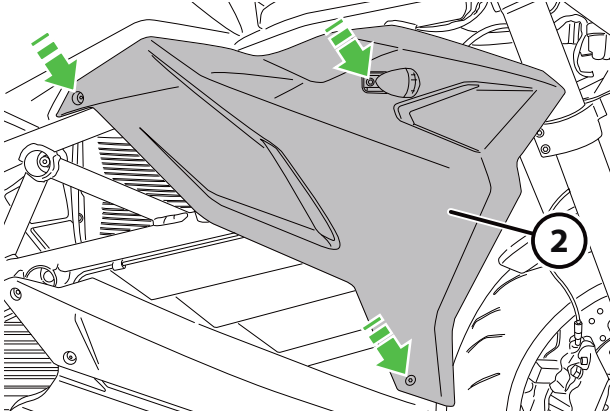
EN0062



EN0063

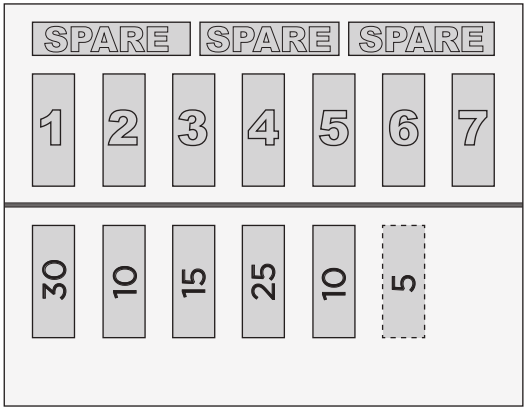


EN0065



EN0064

- Open the fuse box by pulling the two rubber tabs on the cover.

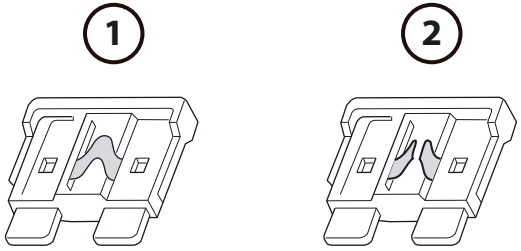


EN0066

Fuse box key		
Item	**Value**	**Description**
1	30	VCU (Vehicle Control Unit)
2	10	Drive (Power Train Controller)
3	15	ABS VR (ABS valves)
4	25	ABS MR (ABS pump)
5	10	AUS CIRCUIT (ChargeManager/ ConnectivityHub/OBD port)
6	5	USB port (if applicable)
7	-	Empty

A fuse that has blown will have a broken internal conductive filament.

1. Intact
2. Blown



EN0067

To prevent the risk of short circuiting, replace the fuses with the ignition key in the "OFF" position.

WARNING! Never use fuses with a different rating than that specified. Failure to observe this could damage the system or cause fires.

WARNING! Fuses are protection devices which blow and must be replaced in the event of overcurrent in the relative circuit. The replacement fuses used must have the same current rating as the original fuses. If fuses blow repeatedly, have the electrical system checked by an Energica dealer.

Liquids

	Type	dm^3 (liters)	fl oz
Gear-driven cams	ATF UNIVERSAL DEXRON VI	0.1	3,4
Front/rear braking circuit	DOT 4	Observe the indicated Min / Max levels	
Chain	Chain grease spray	-	-
Motor oil	ATF UNIVERSAL DEXRON VI	1.8	60,9
Inverter coolant	50% WATER–50% glycol	Observe the indicated Min / Max levels	

Tightening torque values

	Thread	Nm (tolerance ± 5%)	ft. lb (tolerance ± 5%)
Front axle	-	60	44,3
Rear wheel nut	-	70	51,6
Footpeg plate position adjustment screws	M8	25	18,4
Rear brake lever height adjustment screws	M6	10	7,4
Gear oil fill/drain plugs (Replace the washer at every oil change)	M16	25	18,4
Motor oil fill/drain plugs (Replace the washer at every oil change)	M6	25	18,4
Front brake caliper bolts	M10	40	29,5
Rear brake caliper bolts	M8	30	22,1

User messages

User messages appear on the display automatically whenever the dashboard needs to inform the user of any messages from the motorcycle, e.g. faults or warnings.

EN0028

The possible user messages displayed are shown in the following table.

Message Clearance*	Description
M	CONTACT SERVICE DEPARTMENT: UNKNOWN FAULT.
A+M	LEFT SIDE INDICATOR FAULT.
A+M	RIGHT SIDE INDICATOR FAULT.
A+M	HEADLIGHT FAULT.
A+M	STOP LIGHT FAULT.
M	SIDE LIGHT FAULT.
M	CHARGING INITIALIZATION FAILURE: REMOVE THE CABLE AND TRY AGAIN.
M	CM MODULE NOT RESPONDING. SOCKET NOT LOCKED OR CHARGING NOT POSSIBLE. CONTACT SERVICE.
M	CHARGING FAULT.
M	LEAKAGE ON HIGH VOLTAGE CIRCUIT. TURN OFF THE VEHICLE IMMEDIATELY.
A+M	FAULT IN CHARGING SOCKET LOCKING DEVICE.
M	CHARGING FAULT. DISCONNECT THE VEHICLE AND TRY AGAIN. CONTACT SERVICE IF THE FAULT PERSISTS.
M	INVALID BMS STATUS. CONTACT SERVICE.
M	WSS MALFUNCTION. ABS/eABS DISABLED.
A+M	KICKSTAND DOWN. RAISE IT BEFORE OPERATING THE VEHICLE.
A+M	APPLY THE FRONT BRAKE TO OPERATE THE VEHICLE.
A+M	DISABLE THE MOTOR SWITCH TO OPERATE THE VEHICLE.
A+M	THROTTLE OPEN. RELEASE IT BEFORE OPERATING THE VEHICLE.
M+C	LIMP MODE OFF: AVAILABLE POWER INCREASING.
M	LIMP MODE ON: BATTERY TEMPERATURE TOO HIGH.

Message Clearance*	Description
M	LIMP MODE ON: MOTOR TEMPERATURE TOO HIGH.
M	LIMP MODE ON: BATTERY LEVEL TOO LOW. RECHARGE THE BATTERY.
M	LIMP MODE ON: BATTERY CURRENT LOW.
M	LIMP MODE ON: CELL VOLTAGE LOW. RECHARGE THE BATTERY.
M	LIMP MODE ON: CELL VOLTAGE LOW (D). RECHARGE THE BATTERY.
M	LIMP MODE ON: BATTERY COLD.
M	LIMP MODE ON: BATTERY VOLTAGE LOW. RECHARGE THE BATTERY.
M	LIMP MODE ON: BATTERY VOLTAGE LOW (D). RECHARGE THE BATTERY.
M	LIMP MODE ON: MOTOR DRIVE TEMPERATURE TOO HIGH.
A+C	REDUCED MAINS POWER. POSSIBLE INCREASE IN CHARGING TIME.
M+C	CHARGING COMPLETE: REMOVE THE CHARGING CABLE.
M+C	BATTERY TOO COLD TO BE RECHARGED.
M	BATTERY PACK UNBALANCED: PERFORM A FULL CHARGE.
M	PERFORM A FULL CHARGING CYCLE TO RESET CHARGE INDICATOR.
M+C	VEHICLE FALL: MOTOR DISABLED.
M+C	BATTERY LOW. RECHARGE THE VEHICLE.
M+C	RELEASE THE FLASHING BUTTON.
M	TRICKLE CHARGE: BATTERY TOO COLD FOR NORMAL CHARGING.
M	CHARGING STATION NOT COMPATIBLE WITH THE VEHICLE.
M	LPR MODE ACTIVE.
M	FAST CHARGE CONTACTOR FAULT. OVERVOLTAGE AT SOCKET.

Message Clearance*	Description
M	IMMOBILIZER REGISTRATION ERROR. INVALID KEY.
M	DC FAST CHARGE NON PRESENT. Contact service to purchase optional accessory.
M	UNLOCK THE CHARGING CABLE? PRESS: MODE TO CONFIRM OR LEFT TO SKIP.
M	REMOVE THE CHARGING CABLE.
M	ABS COMMAND FAILED.
M+C	FAST CHARGE CYCLE COMPLETE.

*Message Clearance

A = automatic message clearance

M = manual message clearance (ENTER ▶)

C = message clearance with user action

Diagnostic codes

In the event of a fault detected by the motorcycle electronic system, a yellow "Diagnostic warning" icon will appear at the bottom right of the display.

EN0068

To identify faults, the "Diagnostics screen", accessed from the "menu screen", displays an image of the motorcycle with the affected area highlighted, together with the relative diagnostic code.

EN0023

Below is a table of possible diagnostic codes.

Label (DTC)	Description	MIL
P0562	VCU MAIN SUPPLY UNDERVOLTAGE	
P0563	VCU MAIN SUPPLY OVERVOLTAGE	
P1010	HV+ CONTACTOR SHORT CIRCUIT	
P1011	HV+ CONTACTOR OPEN CIRCUIT	
P1013	HV+ CONTACTOR ERROR	
P1018	HV- CONTACTOR SHORT CIRCUIT	
P1019	HV- CONTACTOR OPEN CIRCUIT	
P1021	HV- CONTACTOR ERROR	
P1025	PRECHARGE SEQUENCE FAILED	
P0A08	PSU OVER MAXIMUM TEMPERATURE	
P0A10	PSU OUTPUT TOO HIGH	
P0A09	PSU OUTPUT TOO LOW	
P1028	12V CIRCUIT ABNORMAL LOAD	
C1000	LEAK DETECTED BETWEEN HV CIRCUIT AND FRAME	
C1001	LEAK DETECTED BETWEEN CHASSIS AND HV+ RAIL	
C1002	LEAK DETECTED BETWEEN FRAME AND HV- RAIL	
P2504	CHARGER DC OVERVOLTAGE SHUTDOWN	
P2503	CHARGER DC UNDERVOLTAGE SHUTDOWN	
P1034	CHARGER DSP SPI COMMUNICATION ERROR	
P1035	CHARGER AC OVERVOLTAGE SHUTDOWN	
P1036	CHARGER AC UNDERVOLTAGE SHUTDOWN	
P1037	CHARGER HIGH TEMPERATURE SHUTDOWN (PRIMARY OR SECONDARY)	
P1038	CHARGER LOW TEMPERATURE SHUTDOWN	

Label (DTC)	Description	MIL
P1039	TRANSFORMER FAILURE. UNABLE TO PROVIDE POWER.	
P1040	CHARGER FAN OPEN CIRCUIT FAULT	
P1041	CHARGER FAN SHORT CIRCUIT FAULT	
P1042	CHARGER FAN LOCKED	
B1000	POSITION LIGHTS OPEN CIRCUIT FAULT	
B1001	POSITION LIGHTS SHORT CIRCUIT FAULT	
B1002	STOP LIGHTS OPEN CIRCUIT FAULT	
B1003	STOP LIGHTS SHORT CIRCUIT FAULT	
B1004	LEFT INDICATOR OPEN CIRCUIT FAULT	
B1005	LEFT INDICATOR SHORT CIRCUIT FAULT	
B1006	RIGHT INDICATOR OPEN CIRCUIT FAULT	
B1007	RIGHT INDICATOR SHORT CIRCUIT FAULT	
B1009	LOW BEAM OPEN CIRCUIT FAULT	
B1010	LOW BEAM SHORT CIRCUIT FAULT	
B1011	LOW BEAM UNDEFINED FAULT	
B1012	HIGH BEAM OPEN CIRCUIT FAULT	
B1013	HIGH BEAM SHORT CIRCUIT FAULT	
B1014	HIGH BEAM UNDEFINED FAULT	
B1008	INDICATOR LIGHTS CONTROL BLOCK FAULT	
P0120	THROTTLE FAULT (physical Error)	
P0121	THROTTLE FAULT (logic error)	
P0A07	WATER PUMP OPEN CIRCUIT FAULT	
P0A06	WATER PUMP SHORT CIRCUIT FAULT	

Label (DTC)	Description	MIL
P0A05	WATER PUMP LOCKED	
C1005	LOCKING DEVICE PROBLEM	
C1006	CM-VEHICLE COMMUNICATION ERROR	
C1007	CM INTERNAL ERROR	
C1008	EVSE EMERGENCY SHUTDOWN	
C1009	QCA ERROR	
C1010	PROTOCOL ERROR	
C1011	CM APPLICATION LAYER ERROR	
C1012	SLAC PROCESS ERROR	
P0500	FRONT WHEEL SPEED SENSOR FAILURE	
P2158	REAR WHEEL SPEED SENSOR FAILURE	
P2158 + P0500	FRONT AND REAR WHEEL SPEED SENSORS FAILURE	
P2162	WHEEL SPEED SENSOR COHERENCY FAILURE	
P1031	CHARGER DC CONNECTION FAILURE	
P1012	HV+ CONTACTOR WELDED	
P1020	HV- CONTACTOR WELDED FAULT	
P1014	FCHG CONTACTOR SHORT CIRCUIT	
P1015	FCHG CONTACTOR OPEN CIRCUIT	
P1016	FCHG CONTACTOR WELDED CIRCUIT	
P1017	FCHG CONTACTOR ERROR	
P1022	CHARGE CONTACTOR SHORT CIRCUIT	
P1023	CHARGE CONTACTOR OPEN CIRCUIT	
P1024	POSSIBLE CONTACTOR FAULT	

Label (DTC)	Description	MIL
P1026	PRECHARGE SEQUENCE FAILED – PRECHARGE CONTACTOR SHORT CIRCUIT	
P1027	PRECHARGE SEQUENCE FAILED – PRECHARGE CONTACTOR OPEN CIRCUIT	
C1003	UNSPECIFIED CM ERROR	
C1004	CP LINE PROBLEM OR EVSE NOT COMPATIBLE	
C1013	AC LINE ERROR	
C1014	UNCLASSIFIED CM ERROR	
C1015	FAST CHARGE NOT PRESENT	
C1017	ASSET MODULE – RUN	
P1000	BATTERY PACK UNDERVOLTAGE	
P1001	BATTERY PACK OVERVOLTAGE	
P1002	BATTERY PACK UNDER TEMP	
P1003	BATTERY PACK OVER TEMP	
P0514	ERROR READING TEMPERATURE	
P1049	DRIVE TEMPERATURE TOO HIGH	
P1030	CELL UNDERVOLTAGE VCU ALARM	
P1043	MAIN FUSE BLOWN	
P1044	CELL OVERVOLTAGE VCU ALARM	
P0516	BMS TEMPERATURE SENSOR SHORT CIRCUIT FAULT	
P0517	BMS TEMPERATURE SENSOR OPEN CIRCUIT FAULT	
P1005	ERROR READING VOLTAGE	
P1008	BMS MISREADING VOLTAGE	
P1006	ERROR READING VOLTAGE + BMS CELL UNDERVOLTAGE ALARM	
P1009	BMS MISREADING VOLTAGE + BMS CELL OVERVOLTAGE ALARM	

Label (DTC)	Description	MIL
U0110	DRIVE GENERIC ERROR	
U0111	BMS INTERNAL COMMUNICATION PROBLEM	
U0112	BMS BCMU LMU COMMUNICATION PROBLEM	
P1032	CHARGER CONTROL TIMEOUT SHUTDOWN. NO CONTROL FRAME RECEIVED WITHIN 1000ms.	
U1000	LOW LEVEL SAFETY ERROR	
P2637	TORQUE FEEDBACK ERROR	
U0028	VDB BUS OFF	
U0037	DTB BUS OFF	
U0031	VDB BUS OFF	
U0034	VDB BUS OFF	
U0040	DTB BUS OFF	
U0043	DTB BUS OFF	
U0412	BMS STATUS ERROR	
U0121	ABS TIMEOUT COMMUNICATION ERROR	
U0182	LOW BEAM MODULE COMMUNICATION ERROR – MODULE NOT RESPONDING	
U0182	HIGH BEAM MODULE COMMUNICATION ERROR – MODULE NOT RESPONDING	
P0117	MOTOR COOLANT TEMPERATURE CIRCUIT LOW (SHORT CIRCUIT)	
P0118	MOTOR COOLANT TEMPERATURE CIRCUIT HIGH (OPEN CIRCUIT)	
P0298	MOTOR OIL OVER TEMPERATURE	
P0A02	DRIVE COOLANT TEMPERATURE CIRCUIT LOW (SHORT CIRCUIT)	
P0A03	DRIVE COOLANT TEMPERATURE CIRCUIT HIGH (OPEN CIRCUIT)	
P0335	MOTOR POSITION ERROR	

Label (DTC)	Description	MIL
P1053	LOW LEVEL SAFETY ERROR	
P0610	LOW LEVEL SAFETY ERROR (uC Parameter error)	
P1054	LOW LEVEL SAFETY ERROR (uS Parameter error)	
P0601	LOW LEVEL SAFETY ERROR	
P1055	LOW LEVEL SAFETY ERROR	
P1063	LOW LEVEL SAFETY ERROR	
P1056	LOW LEVEL SAFETY ERROR	
P0603	LOW LEVEL SAFETY ERROR (watchdog error)	
P1057	LOW LEVEL SAFETY ERROR	
P1058	LOW LEVEL SAFETY ERROR	
P2641	LOW LEVEL SAFETY ERROR	
P1059	LOW LEVEL SAFETY ERROR	
P1060	LOW LEVEL SAFETY ERROR	
P1061	LOW LEVEL SAFETY ERROR	
P1062	LOW LEVEL SAFETY ERROR	

INSTRUCTIONS FOR USE

Checks before start-up

WARNING! Failure to carry out these checks before starting may result in damage to the motorcycle and injury to the rider and passenger.

Carry out the following checks before starting the motorcycle:

- Check the tire pressure. For information on the correct pressure, refer to the section "Tire Pressure".
- Check tire wear and integrity. Refer to the section “Minimum tire tread”.
- Check the condition of the chain. Adjust the chain tension and lubricate if necessary. For more information, refer to the sections "Adjusting the chain tension" and "Chain lubrication".
- Check the lights and turn indicators and their correct operation.
- Check the correct operation of the driving controls.
- Turn the throttle to ensure that it operates smoothly, without sticking.
- Check correct operation of the kickstand. Refer to the section “Kickstand”.
- Check the transmission oil level. Refer to the section “Checking the transmission oil level”.
- Check the front and rear brake fluid levels. Refer to the sections "Checking the front brake fluid level" and "Checking the rear brake fluid level".
- Make sure there are no leaks or loose or detached parts.
- Check for any active diagnostic codes. If any codes are active, see the relative section “Diagnostic Codes” in the manual and contact your dealer or another authorized Energica dealer.

WARNING! Do not install any additional electrical components on the motorcycle without prior approval from Energica. Certain electrical accessories may damage the motorcycle, interfere with the functions of other devices on the motorcycle, reduce range and shorten the lifespan of the batteries.

- Before using the motorcycle, the rider must check all the items listed in the column "Each time the bike is used" in the “Regular maintenance intervals” section of this manual.
- Safety is also dependent on the mechanical condition of the motorcycle. Observe the maintenance schedule and adjustment requirements contained in this manual exactly. Be aware of the importance of checking the items indicated before riding the motorcycle.

ABS system

In order to ensure the effectiveness of the full braking capacity of the motorcycle in emergency situations and under adverse road or weather conditions, it has been equipped with an ABS anti-lock braking system.

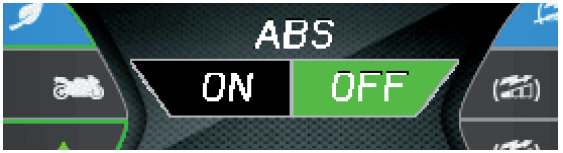
This is a hydraulic-electronic device which reduces the pressure within the braking circuit when a sensor installed on the wheel notifies the control unit that the wheel is about to lock up. This momentary drop in pressure allows the wheel to continue turning, maintaining an ideal level of grip between the tire and the ground. The control unit now restores pressure in the circuit and resumes braking action, and the cycle is repeated until the risk of locking up no longer exists.

The triggering of the braking mechanism is perceived as a slight "pulsing" resistance on the brake lever and pedal.

The control and management of the front and rear ABS systems are performed separately, i.e. operated by their respective brake controls on the motorcycle. The ABS does not therefore constitute an integral braking system that simultaneously manages the front and rear brakes.

The ABS function can be enabled or disabled through the profile screen.

For more information on how to access this function refer to the section "Display Mode" (profile screen).

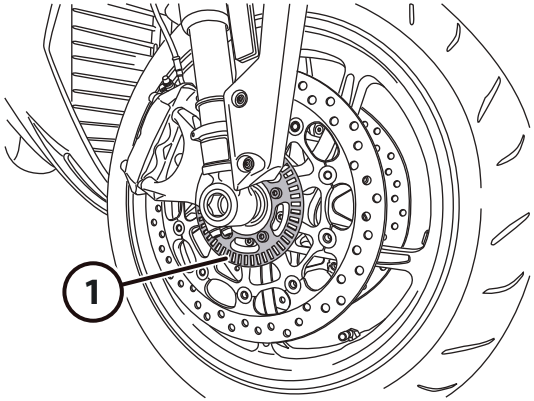


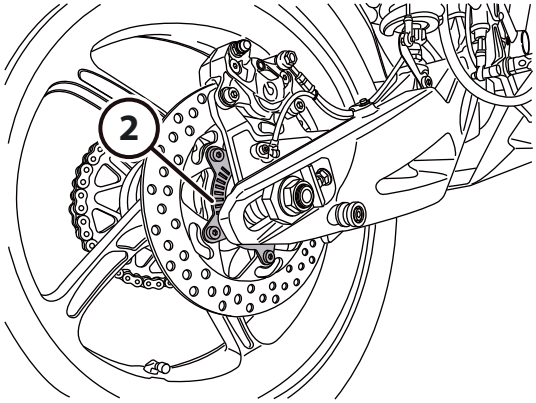
EN0035

- Within the profile screen, select the required power profile and regeneration profile.
- Automatically the ABS "ON/OFF" selector unlocks and you can change to the desired position using R MODE ▶ or L MODE ◀.
- ENTER ▶ to confirm your choice.

Enabling or disabling of the ABS system is only possible with the motorcycle stationary. When the motorcycle is in motion this option is automatically disabled.

It is important to check that the front **(1)** and rear **(2)** tone wheels are perfectly clean.





WARNING! Obstruction of the reading windows will prevent correct operation of the ABS system. If you are riding on very muddy ground, it is advisable to disable the ABS system as these conditions can cause unexpected malfunctions of the system.

WARNING! These functions offer additional aid to the rider when in critical conditions, and allow the rider to modify the behavior of the motorcycle accordingly for the situation. These functions do not, however, substitute the rider: they do not increase the limits of the motorcycle and are not a reason to ride at higher speed. They are not a substitute for riding responsibly and with due attention, and the rider must be ready at all times to react to sudden danger.

WARNING! If the ABS system is deactivated or unusable, operating the front or rear brake with sufficient force may cause the wheels to lock up. This may result in loss of control of the motorcycle and lead to death or serious injury. The motorcycle may be stopped without locking up the wheels by controlling the force applied to the brakes correctly.

EN0069

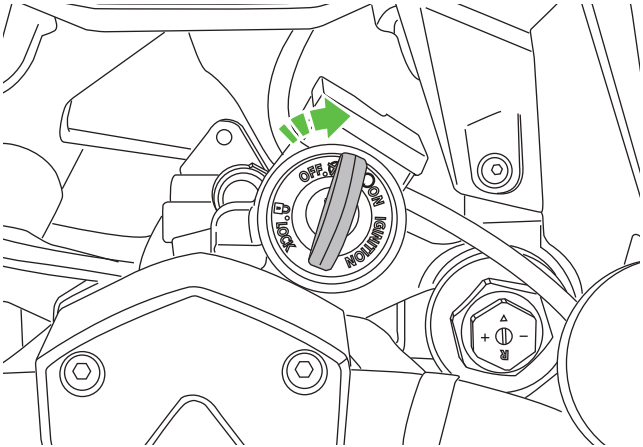
WARNING! The ABS control unit measures and compares the front and rear wheel speeds. Using tires other than the types indicated by Energica Motor Company may compromise the functionality of the ABS system and affect increase braking and stopping distances.

Starting the motor

Before starting the motor, make yourself familiar with the driving controls of the motorcycle. If you are unsure about using a control, contact an Energica service center.

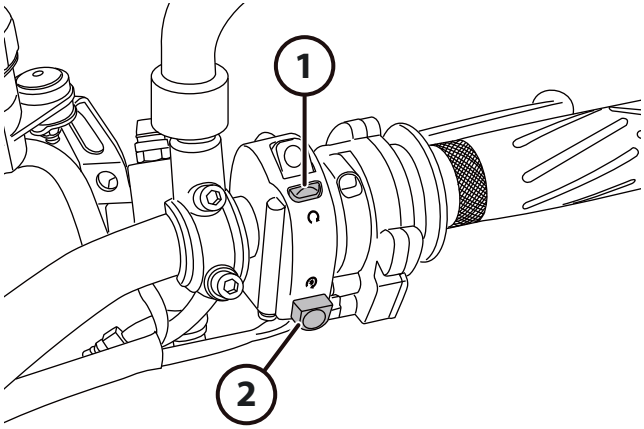
Next:

- Insert the key in the key switch and unlock the handlebar.
- Turn the key to "ON".



EN0070

- Raise the kickstand.
- Press the control ◯ **(1)** located on the right control switch.
- Pull the front brake lever and press the “START ENGINE” button **(2)**.



EN0071

- On the dashboard the GO icon will light up.

The motorcycle is ready to go.

WARNING! When the motorcycle is stationary and the GO symbol is lit, unintentional rotation of the throttle by the rider or third parties will set the motorcycle in motion. Always take care not to operate the throttle if you are not intending to set the motorcycle in motion. When stationary it is always advisable to disable the motorcycle using the emergency switch (⊗) or the key.

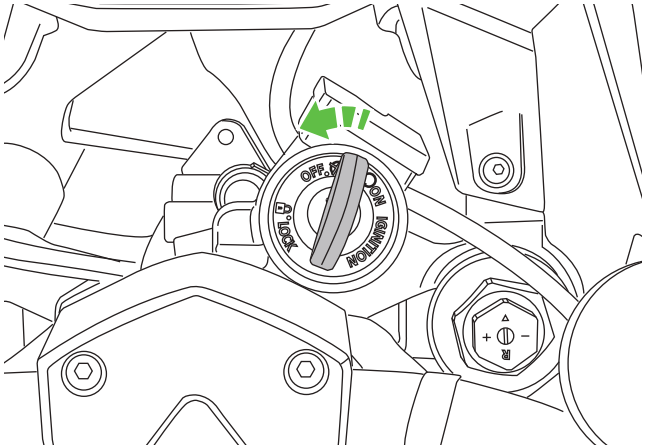
Moving off

Rotate the throttle twist grip progressively, to gain confidence in handling the motorcycle, avoiding sharp acceleration.

Due to the considerable torque produced by the motorcycle, apply the throttle with caution on slippery asphalt, especially when using the Urban and Sport profiles.

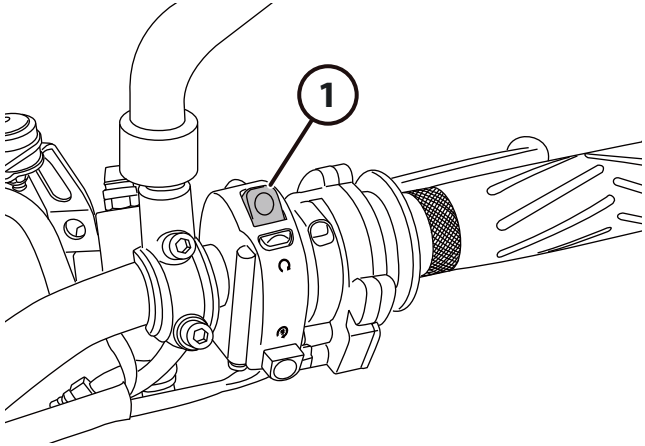
Stopping the motorcycle

- Reduce speed, and release the throttle grip.
- Apply the brakes and stop the motorcycle.
- Switch off the motor by turning the key to "OFF".



EN0072

In an emergency, press the emergency cut-off switch ⊠ **(1)**. See the paragraph "Right control switch" (emergency cut-off switch) for more information.



EN0073

PARK ASSISTANCE mode

PARK ASSISTANCE mode can be engaged only with the motorcycle stationary.

Reverse gear can be engaged by pressing the "START MOTOR" button, on the right control switch, for 2 seconds.

EN0074

For more information on the "START MOTOR" button, refer to the section "Right control switch."

To change from reverse to slow movement, press the "START MOTOR" button.

EN0075

By pressing on "START MOTOR", you can switch from slow forward to reverse as often as you want depending on the maneuvers you want to perform.

Exit from the PARK ASSISTANCE screen by pressing "START MOTOR" for 1 second.

Parking

- Park the stationary motorcycle on the kickstand.
- Turn the handlebar fully to the left.
- Using the key, turn the ignition switch to “LOCK” to engage the steering lock.

Correct battery maintenance

Please observe the instructions given as follows precisely to avoid the risk of voiding the battery warranty. Please read the “Warranty Card” included with the vehicle thoroughly for more information. The batteries must be recharged after each use and kept under charge when the vehicle is not used regularly.

It is recommended to discharge the battery until display of the "Low battery" message and SOC (state of charge) = 0% every 10-20 normal charging cycles. On reaching 0% you must recharge the motorcycle as soon as possible.

WARNING! If the battery's charge level reaches 0%, the motorcycle must be recharged within 24 hours.

Leave the motorcycle connected to the charger socket, preferably in LPR mode (see LPR function - Long Period Rest) when not in use. In this way the battery will be maintained at its optimum level of charge.

If the motorcycle is left disconnected from the charger for a long time, it may not be possible to recharge the battery, which could cause irreparable damage to it. If you are unable to recharge it, contact an Energica dealer or authorized workshop immediately.

WARNING! Incorrect battery maintenance may lead to irreparable power loss of the motorcycle. Follow the instructions given in this guide precisely.

WARNING! Using the charging cable with a worn or damaged wall socket may cause a fire. Periodically check the plug and charging cable, while the motorcycle is being charged.

WARNING! Never use extension cords, plug adapters or power strips. The use of cables or adapters not mentioned in the specifications of this manual could result in current overloads, electric shock or fires.

WARNING! Energica Motor Company cannot be held responsible for any damage to the motorcycle or property or personal injury caused by the use of charging cables other than those provided by the manufacturer together with the vehicle.

The battery does not contain components that can be maintained by the owner or by a service technician who is not authorized by Energica. Do not open the battery or tamper with it. Always contact your Energica dealer for maintenance operations on the battery.

We recommend charging the battery at temperatures between 0°C and +45°C (32°F and 113°F). We recommend using the motorcycle within a temperature range of -20°C to +45°C (-4°F to 113°F).

WARNING! Prolonged usage of DC charging mode and/or using this mode only may stress the batteries and reduce battery life.
We recommend using both DC and AC modes to charge the battery, preferring AC mode when possible.

LPR function (Long Period Rest)

LPR is a function which may be activated by the user to protect the battery against deterioration during prolonged periods with the motorcycle not in use (over 30 days).

This function maintains an optimum charge level and keeps the battery cells correctly balanced.

When LPR mode is active, the motorcycle wakes up periodically and runs a battery cell voltage test. If it is necessary to charge the battery or balance the cells, Eva automatically activates the charging system and implements the battery maintenance cycles necessary. This ensures that the battery is kept at an optimum state of charge of 85-87%.

To use LPR effectively, we recommend activating the function only at battery charge levels lower than 87%.

Maintenance cycles are performed automatically and periodically until the user deactivates the LPR function.

Contact an Energica dealer or authorized workshop for more information.

How to activate LPR mode

Activate the function as follows:

- Check that the battery charge level is below 87%;
- Press “MODE” to access the “Menu Screens”;

See the paragraph "Left control switch" and the paragraph "Menu Screens" for more information.

EN0037

- Select “Configuration”;
- Select LPR ON;
- When the message “LPR MODE ACTIVE” is displayed, switch off the motorcycle and connect the cable to the charging socket.

EN0028

How to deactivate LPR mode

Deactivate the function as follows:

- Press “MODE” to access the “Menu Screens”;

See the paragraph "Left control switch" and the paragraph "Menu Screens" for more information.

- Select “Configuration”;
- Select LPR OFF;
- Disconnect the charging cable.

General warnings concerning battery charging devices

WARNING! The incorrect usage of electric power may cause injury or damage due, for example, to electric shock or fire.

WARNING! Failure to check the mains power supply before use may cause damage to property or overload the mains supply.

Have your electric power supply checked by an electrician before using to charge the motorcycle.

WARNING! Using a charger no longer in proper working order or with worn contacts may cause fire or damage.
Only use charging devices in perfect condition. Charging devices must only be cleaned by suitable trained personnel.

WARNING! Using the improper charger settings or using an excessive charge current for the mains power supply may result in a risk of fire caused, for example, by overheating of the household power socket or by overloading the mains power supply.

WARNING! When using the standard charging cable, never set the charge current higher than the maximum permitted continuous current value of the wall socket.
Set the charge current appropriately for the mains power supply before charging from an outdoor household power socket.
If the charge process is interrupted, due to a temporary power outage, for example, the cycle resumes automatically once power is restored.

WARNING! Always observe the instructions and warnings indicated at public charge stations.
Failure to observe the instructions and precautions given may cause personal injury or damage to property resulting, for example, from electric shock or fire.

In extreme temperature conditions, charging is performed more slowly to protect the high voltage accumulator.

Charging cable

WARNING! Using a non-approved charging cable or charging station may cause personal injury or damage to property resulting, for example, from the cable igniting.
Contact the after-sales support service for information on approved charging cables.

WARNING! Using a damaged charging cable may cause injury or damage due, for example, to electric shock or fire.
Never use a damaged charging cable.

Read the user instructions and the relative safety warnings included with the charging cable thoroughly before using the charging cable itself.

Non-observance of safety warning for connection to the mains power supply.
Risk of injury or damage due, for example, to electric shock or fire.

Charging the battery

Before performing any charging operation, you must read the sections on Safety warnings and Recommendations on correct battery maintenance.

The amount of time required to fully charge the motorcycle depends on the remaining level of battery charge and the electricity supply available (voltage and amperage).

For optimum performance, the battery cell balancing process should be performed on a regular basis (at least every 15 days). The balancing operation is automatic and is complete when the dashboard display shows 100%.

WARNING! An incorrect remaining range value may be indicated if all the instructions given in the chapters "Correct battery maintenance" and "Charging the battery" are not followed correctly.

Longer charge times may be necessary if the battery cells are not balanced correctly.

After the normal charging cycle (battery charged to 98%), the cell balancing operation starts.

The type of charge that can be performed depends on the type of socket fitted to your motorcycle:

- AC charging: performs a normal charge cycle (battery 0% -95% in 3.5 hours with a mains voltage of 240V, or in 7 hours with a mains voltage of 120V).
- DC charging: performs a fast charge cycle (battery state of charge 0%-80% in 0.5 hours).

Battery charge times may vary depending on ambient temperature.

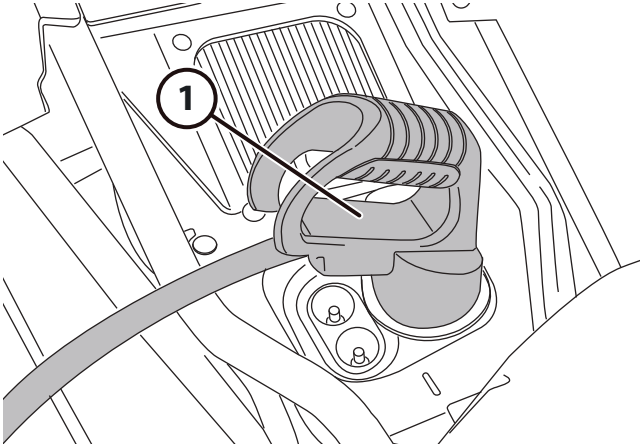
AC socket

With this type of socket it is only possible to perform AC charging operations, using a specific cable to connect to a domestic power outlet, or using external charging stations.

To carry out AC charging using standard domestic power outlets, the user must purchase a charging cable with the necessary specifications. A standard IEC 62196-3 cable (or J-1772 for models sold in the US and Canada) must be used.

WARNING! Never use extension cords, plug adapters or power strips. The use of cables or adapters not mentioned in the specifications of this manual could result in current overloads, electric shock or fires.

After lifting the saddle seat to access the charging socket, plug the cord into a wall outlet socket and connect the plug **(1)** to the motorcycle to start the AC charging cycle.



EN0076

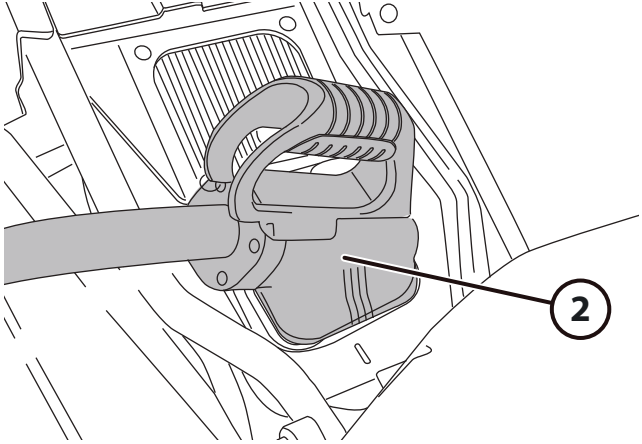
Once the battery charging cycle has started, do not disconnect the plug until it is complete. If you want to stop charging the battery, you must insert the key into the ignition switch and turn it to ON.

Unless unavoidable, we recommend that the charging cycle is not interrupted, as this will reduce the performance of the battery over time.

DC socket

With this type of socket you can perform AC and DC charging operations as required. To start AC charging simply follow the instructions in the previous section.

To start DC charging you need to connect to an external column fitted with a Fast Charge plug. To connect simply open the seat and connect the plug **(2)**.



EN0077

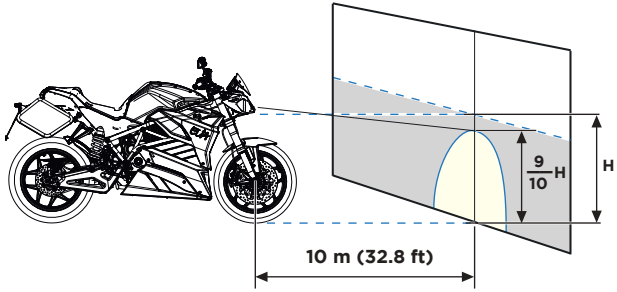
Once the battery charging cycle has started, do not disconnect the plug until it is complete. If you want to stop charging the battery, you must insert the key into the ignition switch and turn it to ON.

Unless unavoidable, we recommend that the charging cycle is not interrupted, as this will reduce the performance of the battery over time.

Charging in DC mode may stress the battery and shorten battery life. We recommend using both DC and AC modes to charge the battery, preferring AC mode when possible.

Headlamp adjustment

Check the headlamp alignment, and then place the motorcycle in a perfectly upright position in a darkened area, with the tires inflated to the correct pressure, with one person seated in the saddle, and facing a wall or screen at a distance of 10 meters (32.8 ft). Draw a horizontal line on the wall corresponding to the height of the center of the headlamps and a vertical line at right angles to the longitudinal axis of the motorcycle. Turn on the low beams.



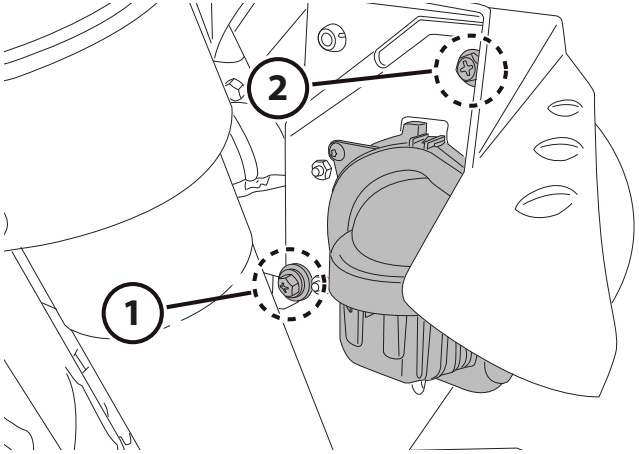
EN0078

The upper demarcation limit between the dark area and the lit area must be at a height not greater than 9/10 of the height of the headlamps from the ground.

If these parameters are not met, carry out the adjustment.

Left-side headlamp

Standing on the steering side of the motorcycle, turn the screws **(1)** to adjust the height of the light beam.



EN0079

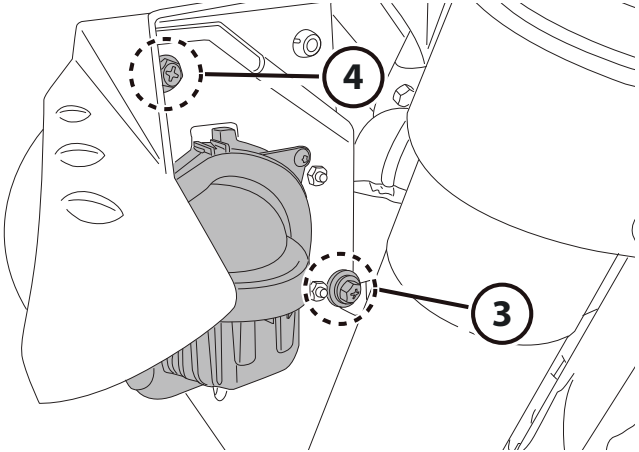
- Screw in to raise the light beam.
- Screw out to lower the light beam.

Turn the screws **(2)** to adjust the light beam from right to left.

- Screw in to move the light beam to the right.
- Screw out to move the light beam to the left.

Right-side headlamp

Standing on the steering side of the motorcycle, turn the screws **(3)** to adjust the height of the light beam.



EN0080

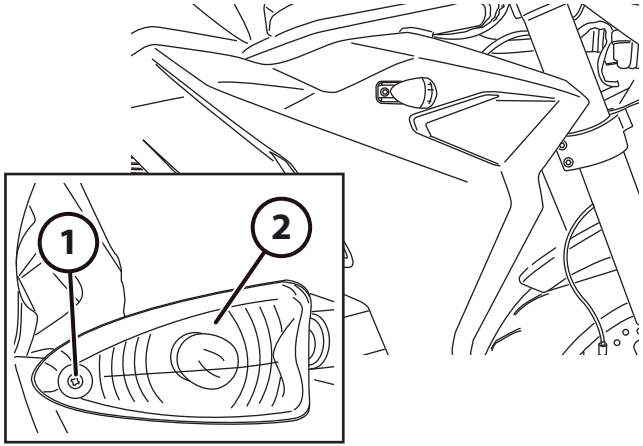
- Screw in to raise the light beam.
- Screw out to lower the light beam.

Turn the screws **(4)** to adjust the light beam from right to left.

- Screw in to move the light beam to the right.
- Screw out to move the light beam to the left.

Replacing turn signal bulbs (USA type approval)

To replace the incandescent bulbs, undo the screw (1) and remove the cover (2).



EN0081

After removing the cover, replace the old bulb with a new bulb.

Follow the same procedure in reverse order to reassemble.

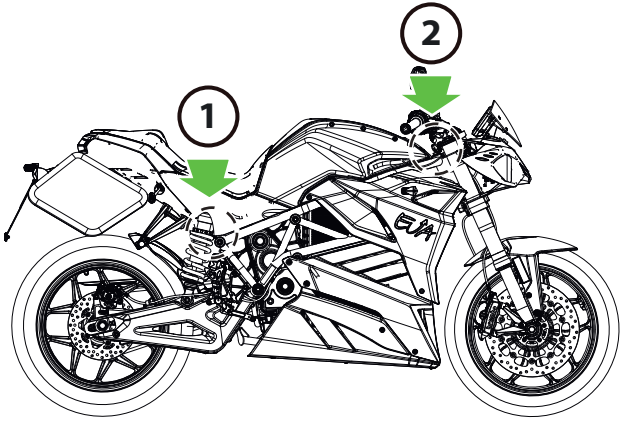
Lifting and transport

To perform lifting or transport operations, straps of sufficient capacity for the weight to be supported must be used.

The straps should be soft to avoid scratches or other damage to the motorcycle.

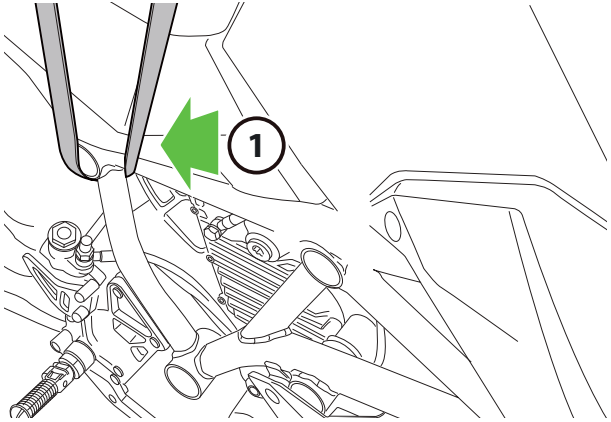
Lifting

Hoist the motorcycle at the points shown below.



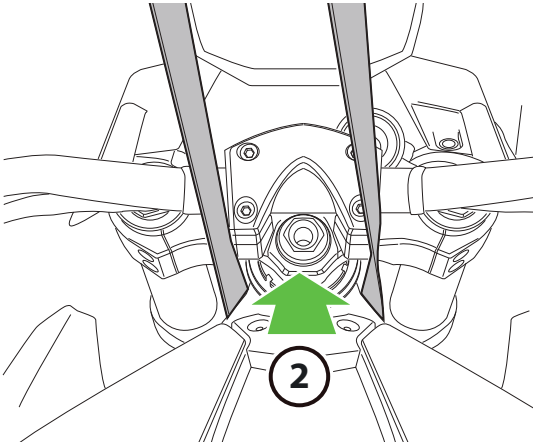
EN0082

Sling a strap round the chassis on each side, at point **(1)**.



EN0083

At the front, sling a belt round the steering column, at point **(2)**.



EN0084

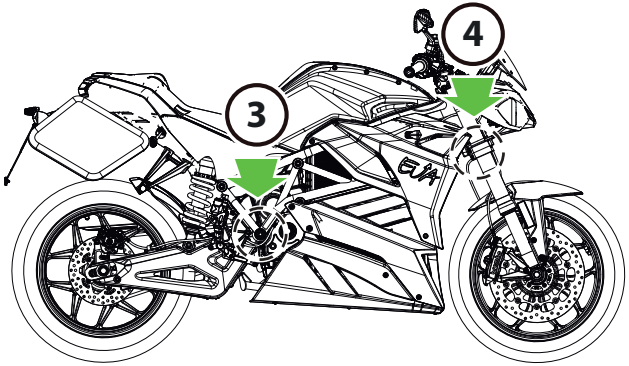
WARNING! Before the motorcycle is entirely lifted, check it is correctly balanced.

WARNING! During handling of the raised motorcycle, make sure the area is clear and that there are no obstacles that could create a hazardous situation.

Transport

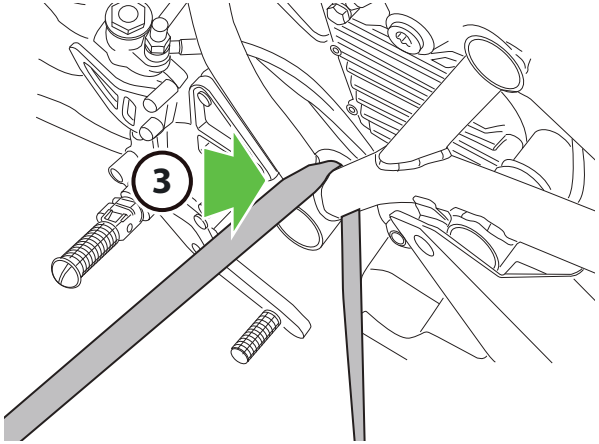
Transport the motorcycle on trailers, trucks or trolleys that have a flat surface and are suitable for the transport of motorcycles.

Hoist the motorcycle at the points shown below.



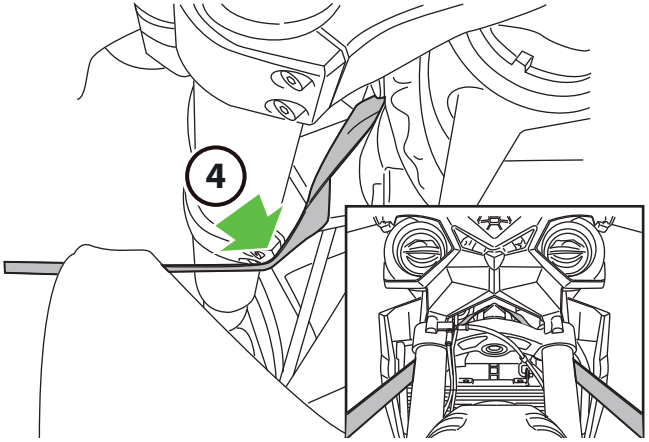
EN0085

Sling a strap round the chassis on each side, at point **(3)**.



EN0086

At the front, sling a strap round the chassis on each side, above the fork lower plates at point **(4)**.



EN0087

After anchoring the straps in the four points shown (two per side), tighten them to compress the front and rear shock absorbers slightly and increase the stability of the motorcycle.

Do not completely compress the front and rear shock absorbers, as this could damage them.

MAINTENANCE

Regular maintenance intervals

WARNING! Incorrectly performed maintenance and repairs may cause an accident.

Energica Motor Company recommends having all work on Energica motorcycles by a specialized service center and, preferably, by an authorized Energica dealer.

Authorized Energica dealers have the technical information and expertise necessary to perform all repair work correctly and reliably on Energica motorcycles.

See the Energica website to find your nearest Energica dealer.

The maintenance procedures necessary for the vehicle are indicated in the following service schedule:

LIST OF OPERATIONS AND TYPES OF INTERVENTION	ODOMETER READING/TIME INTERVALS* (km/mi)							
	On each use	1,000 km 600 mi 12 months	10,000 km 6,000 mi 24 months	20,000 km 12,000 mi 36 months	30,000 km 18,000 mi 48 months	40,000 km 24,000 mi 60 months	50,000 km 31,000 mi 72 months	60,000 km 37,000 mi 84 months
Throttle								
• check play and return of the grip	A	A	A	A	A	A	A	A
Chain								
• check tension, alignment and lubrication	A	IL	IL	IL	IL	IL	IL	IL
Brake fluid, front/rear								
• check fluid levels and for leaks	V	V	VR	VR	VR	VR	VR	VR
Brakes								
• check and adjust controls	A	A	A	A	A	A	A	A
• check hoses, calipers and screws	IV	IV	IV	IV	IV	IV	IV	IV
• replace the pads	I	I	I	I	I	I	I	I

I Check and, if necessary, repair/replace or clean
L Lubricate
R Replace
T Tighten to specified torque
A Check and adjust if necessary
X Perform
D Check wear/test function and replace if necessary
V Inspect visually for leakage and/or damage

LIST OF OPERATIONS AND TYPES OF INTERVENTION	ODOMETER READING/TIME INTERVALS* (km/mi)							
	On each use	1,000 km 600 mi 12 months	10,000 km 6,000 mi 24 months	20,000 km 12,000 mi 36 months	30,000 km 18,000 mi 48 months	40,000 km 24,000 mi 60 months	50,000 km 31,000 mi 72 months	60,000 km 37,000 mi 84 months
Tires								
• check wear and pressure	D	D	D	D	D	D	D	D
Rims								
• control for deformity or misalignment	I	I	I	I	I	I	I	I
Wheel bearings								
• check if loosened or damaged	I	I	I	I	I	I	I	I
Steering bearings								
• check if loosened or damaged	I	I	I	I	I	I	I	I
Fork								
• check operation and for oil leaks	A	AV	AV	AV	AV	AV	AV	AV

I Check and, if necessary, repair/replace or clean
L Lubricate
R Replace
T Tighten to specified torque
A Check and adjust if necessary

X Perform
D Check wear/test function and replace if necessary
V Inspect visually for leakage and/or damage

LIST OF OPERATIONS AND TYPES OF INTERVENTION	ODOMETER READING/TIME INTERVALS* (km/mi)							
	On each use	1,000 km 600 mi 12 months	10,000 km 6,000 mi 24 months	20,000 km 12,000 mi 36 months	30,000 km 18,000 mi 48 months	40,000 km 24,000 mi 60 months	50,000 km 31,000 mi 72 months	60,000 km 37,000 mi 84 months
Shock absorber								
• check operation and for excessive play	A	AV	AV	AV	AV	AV	AV	AV
Kickstand								
• check its operation	I	IL	IL	IL	IL	IL	IL	IL
Transmission oil								
• check the level	V	VR	VR	VR	VR	VR	VR	VR
Motor oil								
• check for leaks (visual inspection)	V	V	VR	VR	VR	VR	VR	VR
• clean filter		X	X	X	X	X	X	X
Kickstand switch								
• check its operation	I	I	I	I	I	I	I	I

I Check and, if necessary, repair/replace or clean
L Lubricate
R Replace
T Tighten to specified torque
A Check and adjust if necessary
X Perform
D Check wear/test function and replace if necessary
V Inspect visually for leakage and/or damage

LIST OF OPERATIONS AND TYPES OF INTERVENTION	ODOMETER READING/TIME INTERVALS* (km/mi)							
	On each use	1,000 km 600 mi 12 months	10,000 km 6,000 mi 24 months	20,000 km 12,000 mi 36 months	30,000 km 18,000 mi 48 months	40,000 km 24,000 mi 60 months	50,000 km 31,000 mi 72 months	60,000 km 37,000 mi 84 months
Suspension and running gear fasteners								
• check that all nuts, screws and bolts are tightened correctly		T	T	T	T	T	T	T
Lights, switches and indicators								
• check their correct operation	V	AI	AI	AI	AI	AI	AI	AI
Cooling system								
• check the level and for leaks. Top up if necessary.		VI	VI	VI	VI	VI	VI	VI
Coolant								
• replace		V	VR	VR	VR	VR	VR	VR
Brake light switches (front/rear)								
• check their correct operation	V	I	I	I	I	I	I	I

I Check and, if necessary, repair/replace or clean
L Lubricate
R Replace
T Tighten to specified torque
A Check and adjust if necessary

X Perform
D Check wear/test function and replace if necessary
V Inspect visually for leakage and/or damage

LIST OF OPERATIONS AND TYPES OF INTERVENTION	ODOMETER READING/TIME INTERVALS* (km/mi)							
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Head light direction, turn indicators and horn								
• check their correct operation	V	A	A	A	A	A	A	A
• adjust beam height if necessary	V	A	A	A	A	A	A	A
Inspect battery								
• verify the integrity of the outer casing and the cabling		VI	VI	VI	VI	VI	VI	VI
Inspect motor								
• check the cabling		VI	VI	VI	VI	VI	VI	VI

* Perform the specified procedure on reaching the first of the two service interval limits indicated (km / mi or months)

After 60,000 km (37,000 mi), repeat service at intervals of 10,000 km (6,000 mi).

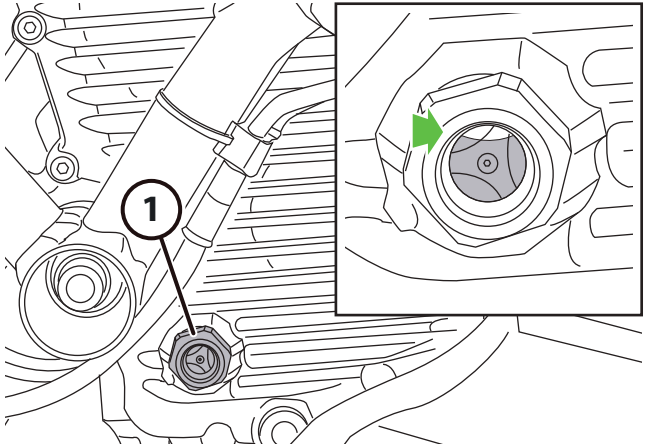
I Check and, if necessary, repair/replace or clean
L Lubricate
R Replace
T Tighten to specified torque
A Check and adjust if necessary

X Perform
D Check wear/test function and replace if necessary
V Inspect visually for leakage and/or damage

MAINTENANCE OPERATIONS

Checking the transmission oil level

The transmission oil level is visible through the sight glass **(1)** on the right side of the transmission casing.



EN0088

Check the oil level with the motorcycle perfectly vertical. The level should be as shown in the illustration.

If the level is low you must top it up.

To top up or replace the oil at the intervals specified in the periodic maintenance table shown in the manual, contact an Energica dealer or authorized workshop.

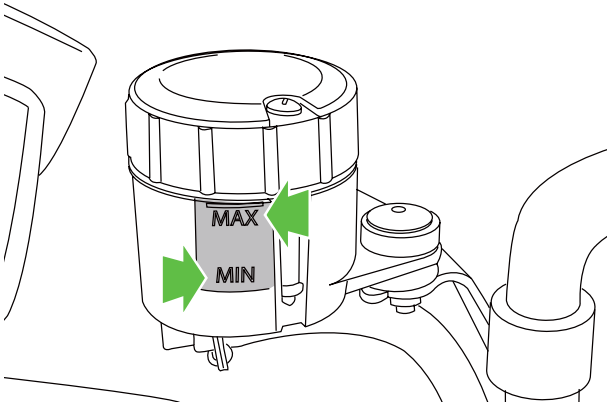
For the type of oil to be used refer to the section "Liquids".

Checking the front brake fluid level

The brake fluid level must not fall below the minimum mark indicated on the reservoir. Too low a level allows air into the circuit and makes the system inefficient.

WARNING! If the brake fluid in the reservoir is too low, this may cause a significant reduction in brake performance due to air bubbles in the braking circuit. Check the brake fluid level frequently.
The brake fluid level must never drop below the MIN marking (with brake fluid reservoir in perfectly horizontal position).
If the brake fluid level drops below the permitted minimum level, take your motorcycle to an Energica dealer or to a specialized service center to have the fault corrected.

Take your motorcycle to an Energica dealer or to a specialized service center to have the fluid topped up or changed at the intervals specified in the service schedule table given in the manual.



EN0089

Brake fluid is harmful to paintwork and plastic parts; do not allow it to come into contact with them. Brake fluid is corrosive and can cause damage and injuries.

Do not mix brake fluids of different qualities.

Check for perfect fitting of the seals.

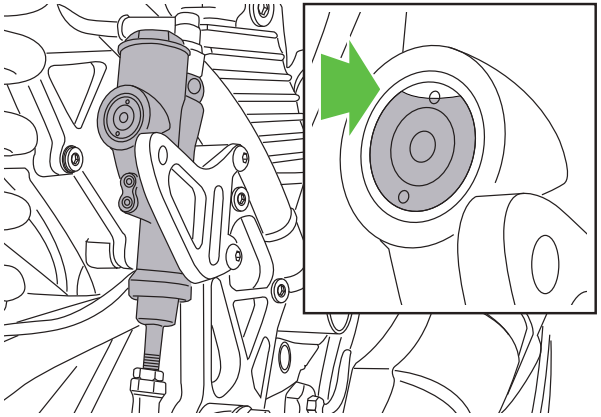
For the type of fluid to be used refer to the section "Liquids".

Checking the rear brake fluid level

The brake fluid level must not fall below the minimum mark shown in the illustration. Too low a level allows air into the circuit and makes the system inefficient.

WARNING! If the brake fluid in the reservoir is too low, this may cause a significant reduction in brake performance due to air bubbles in the braking circuit. Check the brake fluid level frequently.
The brake fluid level must never drop below the minimum marking.
If the brake fluid level drops below the permitted minimum level, take your motorcycle to an Energica dealer or to a specialized service center to have the fault corrected.

Take your motorcycle to an Energica dealer or to a specialized service center to have the fluid topped up or changed at the intervals specified in the service schedule table given in the manual.



EN0090

Brake fluid is harmful to paintwork and plastic parts; do not allow it to come into contact with them. Brake fluid is corrosive and can cause damage and injuries.

Do not mix brake fluids of different qualities.

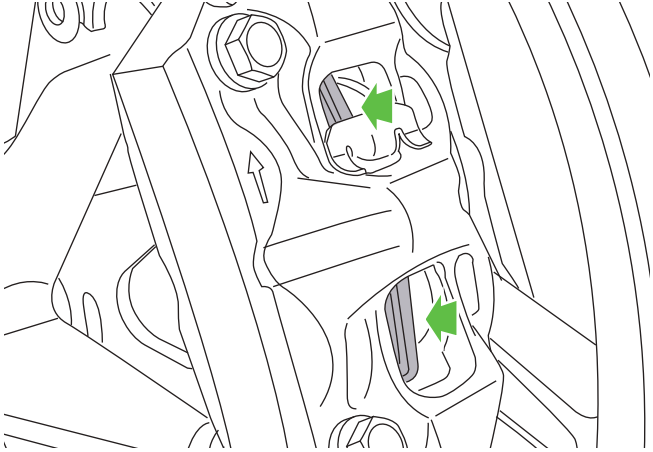
Check for perfect fitting of the seals.

For the type of fluid to be used refer to the section "Liquids".

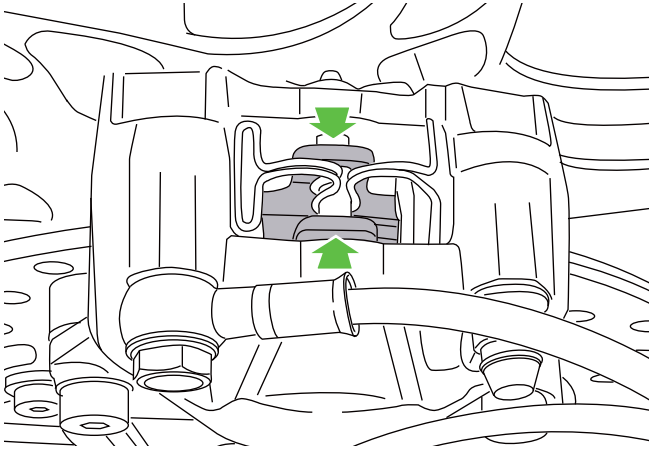
Checking brake pad wear

Check brake pad wear through the opening in the calipers. If the thickness of the friction material on either pad is approximately 2 mm (0.1 in) or less, replace both pads.

Take your motorcycle to an Energica dealer or to a specialized service center to have the pads replaced.



EN0091



EN0092

WARNING! Wear beyond the limit of the friction material will result in contact of the metal support with the disc brake, compromising braking efficiency, the integrity of the disc and the safety of the rider.

Checking brake disk wear. We recommend changing disks before they reach the minimum permitted thickness of 4.5 mm (0.2 in.). Take your motorcycle to an Energica dealer or to a specialized service center to have the disks replaced.

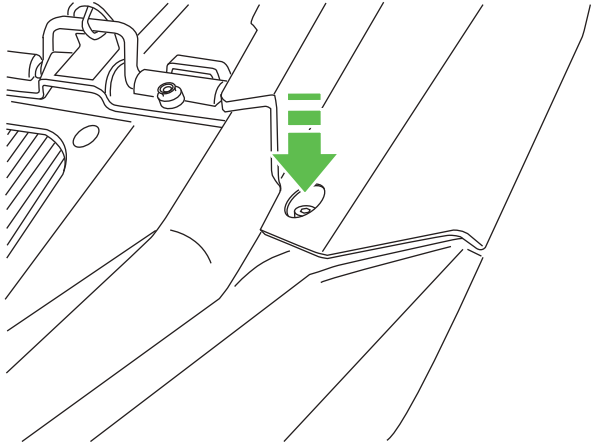
General inspection of the braking system

If you notice excessive play in the brake lever or pedal, even though the brake pads are in good condition, take your motorcycle to an Energica dealer or to a specialized service center to have the system inspected and bled.

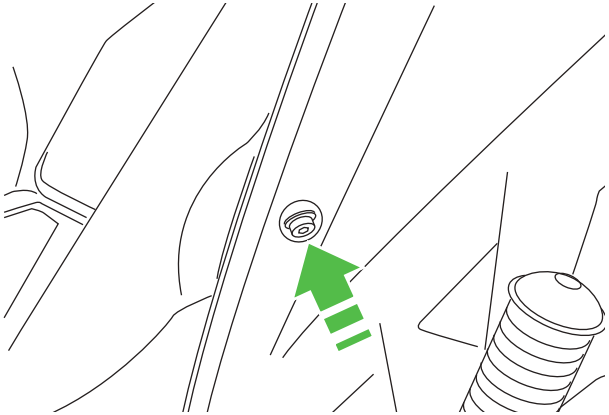
Checking the coolant level

To check the coolant level, it is necessary to remove some parts of the motorcycle:

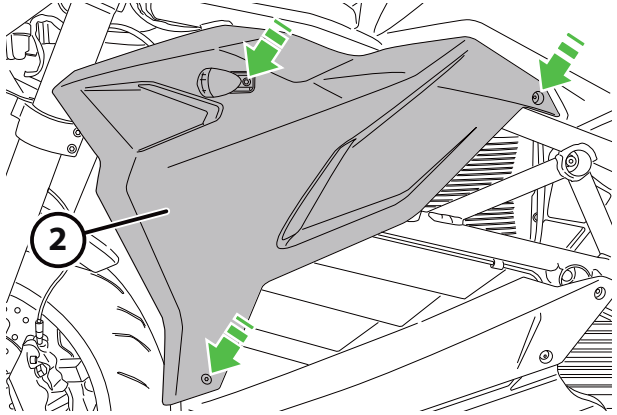
- Open the seat lock using the ignition key.
- Remove the left hand lateral cover, undoing the screws in the positions indicated, then release the indicated pin **(1)**.
- Remove the left hand upper lateral fairing **(2)**, disconnecting the left hand front turn signal connector .
- Remove the tank cover **(3)**.



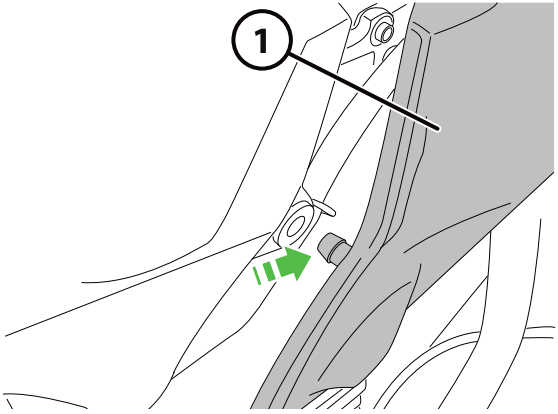
EN0093



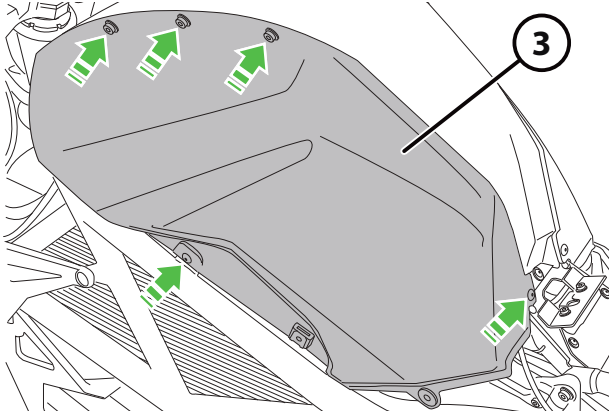
EN0094



EN0096

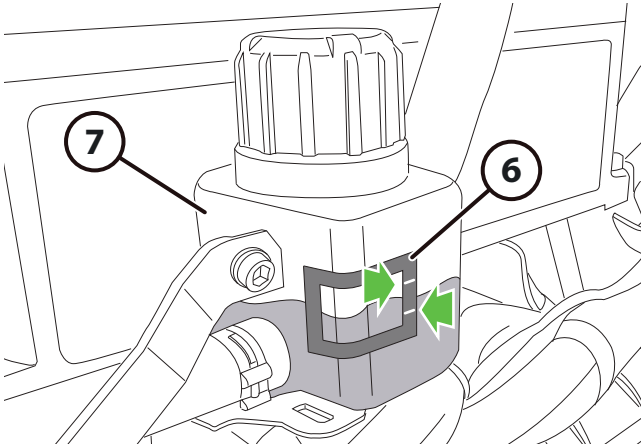


EN0095



EN0097

After removing the tank cover **(3)**, check the coolant level by referring to the label **(6)** on the reservoir **(7)**. The level must be between the minimum and maximum marks.



EN0098

These operations must be performed with the motorcycle perfectly vertical.

If the level is lower than the minimum mark, perform a top-up.

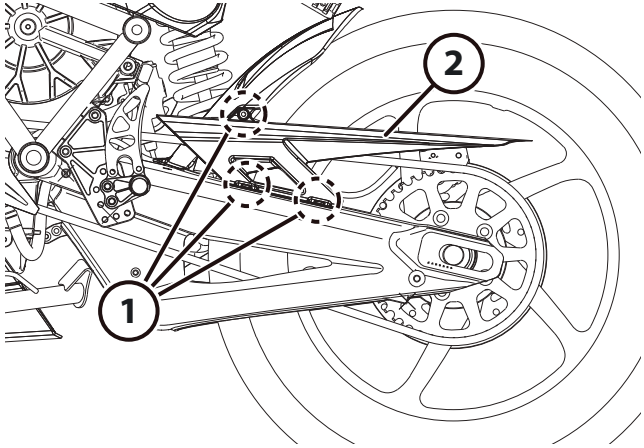
WARNING! The coolant may become very hot (up to 80°C / 176°F). To avoid possible burns, top up only when the coolant is at low temperature.

For the type of coolant to be used refer to the Liquids table.

After topping up, reassemble in reverse order.

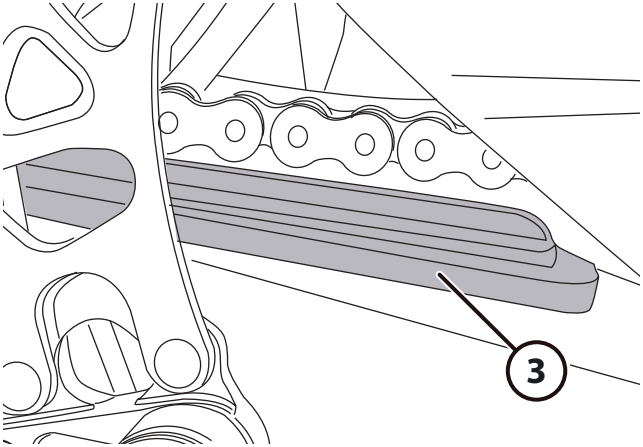
Adjusting the chain tension

Undo the three screws **(1)** and remove the chain guard **(2)**.

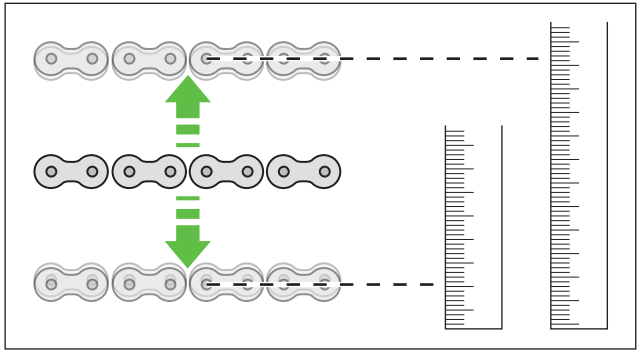


EN0099

Stand with the meter rule at the end of the upper guard pad **(3)**. Pressing the chain slightly downwards, obtain the minimum value. Then repeat the operation, pulling the chain upwards to obtain the maximum value. The difference should be 30 mm (1.2 in.). If not, perform the adjustment procedure.

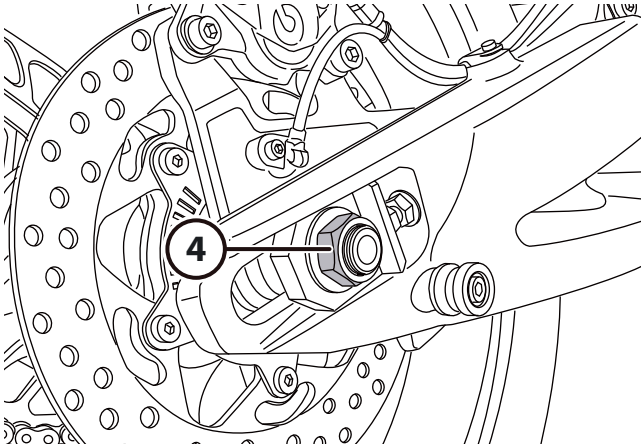


EN0100



EN0101

Slacken the rear wheel nut **(4)** to allow the wheel to slide.

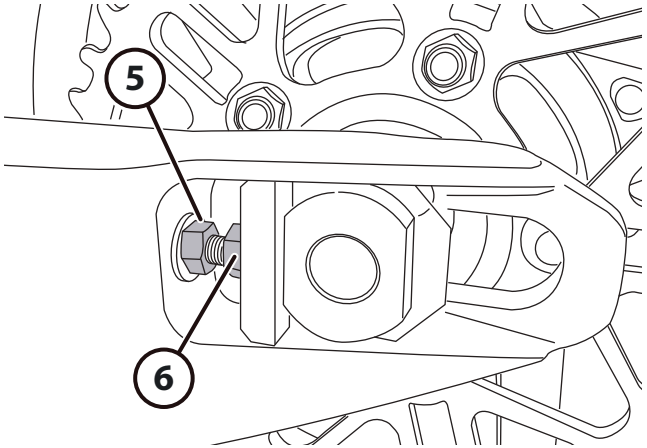


EN0102

Undo the check nuts **(5)** on the left hand side, restraining the adjuster **(6)**.

Do not allow the adjuster to turn, as this will alter the existing wheel alignment.

Repeat the operation on the right side.



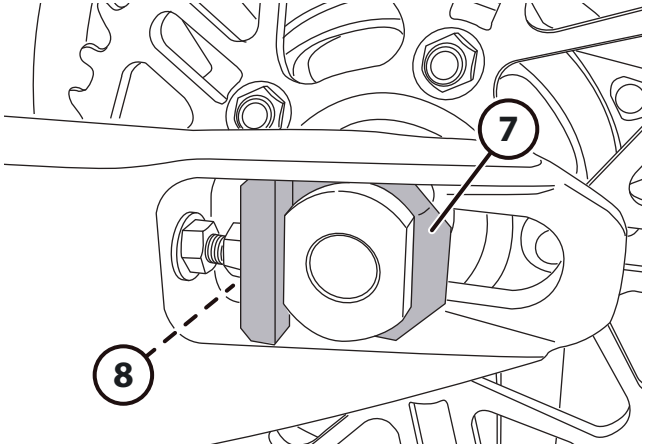
EN0103

After loosening the two check nuts **(5)**:

- Undo the adjusters **(6)** to increase chain tension
- Screw in the adjusters **(6)** if you want to loosen the chain

Loosen or tighten in progressive steps on one side at a time, and adjusting by the same number of turns on both sides, to maintain wheel alignment.

Check the free play of the chain, keeping the wheel pressed fully forward, so that the axle bearings **(7)** are in contact with the chain adjusters **(6)**.

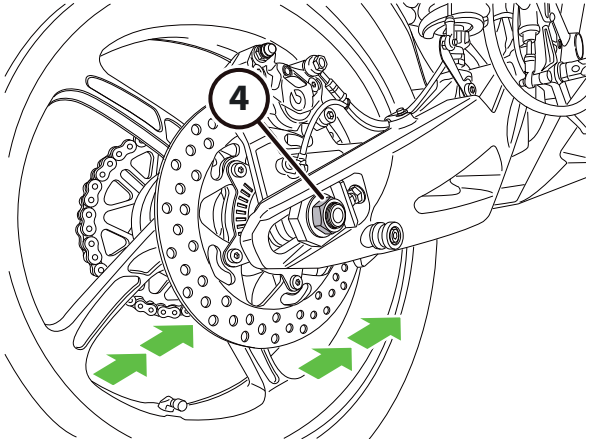


EN0104

Once the specified tension value is reached, tighten the check nuts **(5)**, taking care not to move the adjusters any further **(6)**.

If you are not sure you have maintained the wheel alignment, visually check the position of the two axle bearings **(7)** with the contact points **(8)** located within the swingarm slide. As before, the wheel must be held fully forward with the axle bearings touching the adjusters.

Insert an Allen key between the chain and the sprocket. Tighten the axle nut **(4)** to 80 Nm (59 dft. lb) while keeping the rear wheel pushed fully forwards against the adjusters.



EN0105

If the drive chain is too tight or too loose, adjust it until the measurement is within the specified values. An incorrectly tensioned chain will lead to early wear of transmission components.

After adjustment, refit the chain guard **(2)** using the three screws **(1)**.

Chain lubrication

Before lubricating the chain, it must be cleaned. Use special solvents and do not use steam jet cleaners which are too powerful. Dry the chain using compressed air or absorbent material, then lubricate it.

For the type of spray to use refer to the Liquids table. The use of non-specified lubricants may damage the chain, sprocket and motor pinion.

General cleaning

Depending on the roads you will be riding on, the motorcycle must be washed and cleaned periodically to preserve the brilliance of the metal and painted surfaces.

Use specific products, where possible biodegradable, avoiding detergents or solvents which are too aggressive.

Use only water and mild soap to clean the fairings, the seat and plastic parts.

Regularly clean aluminum components by hand. For aluminum, use special detergents which do NOT contain abrasive substances or caustic soda.

Use only soft cloths. Avoid the use of steel wool and abrasive sponges.

Never direct hot water or high pressure jets towards the motorcycle. The use of pressure washers may lead to seizure of moving parts and serious faults affecting the forks, wheel hubs, electrical system, headlamps (internal condensation) and fork seals, resulting in loss of the safety requirements for the motorcycle.

Use a degreasing product to clean any excessively dirty parts of the motorcycle, avoiding contact with fairings, seat, plastic parts and transmission components (chain, front sprocket, rear sprocket, etc.).

Rinse the motorcycle with warm water and dry all its surfaces with a chamois leather.

Carefully clean the tone wheels of the ABS system in order to ensure its perfect efficiency. Do not use harsh products, which could damage the tone wheels and sensors.

Periodic checking of the central battery compartment is recommended. The central compartment allows cooling of the battery. Keep the central battery compartment clean and prevent its obstruction by objects such as leaves, pebbles, paper or any foreign body.

Clean with compressed air or water jets. DO NOT use the high-pressure jets commonly found in car washes.

To clean the dashboard, do not use alcohol or derivatives. use only water and mild soap.

Special precautions are necessary for motorcycles with matte finish paintwork.

Do not:

- use wax-based products (polish);
- rub too vigorously;
- wash the motorcycle in an automatic roller car wash;
- use a pressure cleaner to wash the motorcycle;
- apply stickers to the paintwork (may leave permanent marks).

Prolonged periods with vehicle not in use

Energica strongly recommends that the motorcycle is left connected to the charger when not in use. This will ensure that the battery is maintained at optimum state of charge at all times (LPR mode).

If the motorcycle is not going to be used for a long period it is advisable to do the following:

- Wash and dry the motorcycle.
- Lubricate the drive chain. Refer to the section “Chain lubrication”.
- Check the pressure of the tires and inflate them if necessary. For the pressure values, refer to the technical specifications contained in the section "Tires".
- Use a servicing kickstand to support the motorcycle.
- Store the motorcycle in a dry place away from sudden temperature changes.
- Cover the motorcycle with a suitable tarpaulin that will not damage the paintwork or retain condensation.
- If not connected to a power supply, fully charge the motorcycle before leaving it unused for long periods.

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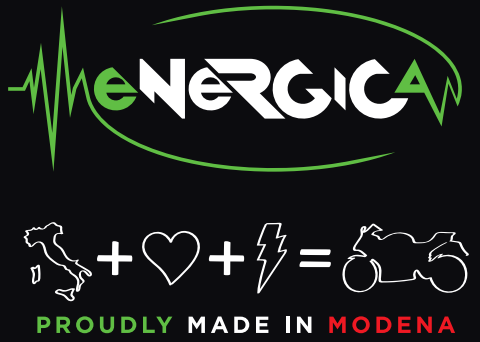

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