



D A H U

EN

Use and maintenance manual

(Translation of original instructions)

• D A H U

ROAD R₍₁₎

• D A H U

ROAD R₍₂₎

• D A H U

ROAD R₍₃₎

SE
MOTOBIKE

Made in Italy



Discover the **uniqueness** of the **G.O.A.T.**



4000 W
OF PURE POWER



1300 WH
LITHIUM ION BATTERY



45 KM/H
AND MORE



70 KM
AUTONOMY



60%
UPHILL



HANDMADE
IN ITALY



100% GREEN
HEART



WORLD
CHAMPION

GENERAL INDEX

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The Manufacturer reserves the exclusive right to make any aesthetic, functional or commercial modifications to the motobike with the purpose of improving the performance of the Product, without prior notice.

0.1 INTRODUCTION

Dear Customer,
thank you for purchasing our product.
Our motobike DAHU is a combination of innovation, design and power and has been designed and manufactured in Italy.

The innovative concept of electric motor motobike, will revolutionize your cycling habits and open up new horizons; the 11-speed shift, together with 4.000 W of maximum generated power, offers an extremely sporty and efficient driving, without detracting anything from the healthy pleasure of cycling.

This motobike has been manufactured using the highest quality materials in compliance with all the applicable standards and regulations.

Before using Your new motobike, we strongly recommend that you read and familiarize with the information and instructions contained in this use and maintenance handbook (hereafter referred as “Manual”).



Preserve this manual for future consultations.

0.2 IDENTIFICATION OF THE MODELS

DAHU-R1 motobike



Version with forks OHLINS

DAHU-R2 motobike



Version with forks FORMULA

DAHU-R3 motobike



Version with forks
ROCKSHOX (front)
MARZOCCHI (rear)

0.3 DESCRIPTION OF SYMBOLS

This manual contains a series of symbols that are intended to draw your attention to particularly important information and instructions. Their meaning is the following:

**Hazard:**

This symbol indicates a potential falling hazard and the consequent risk of personal injury and damage (to both yourself and third parties).

**Attention:**

This symbol indicates that improper behaviour may result in damage to property or the environment.

**Note:**

This symbol indicates important information designed to help you get the best out of Your motobike.

**Tightening instruction:**

Respect the correct tightening torques in order to ensure safety when using your motobike. This is only possible by using a torque wrench. If you do not possess such a tool, we recommend that you ask a qualified technician to carry out this operation. Incorrect tightening torques may cause the breakage or detachment of components, resulting in dangerous damages. The correct tightening torques are indicated in section 2 of this manual.

0.4 NOTES FOR PARENTS AND LEGAL GUARDIANS

Parents and legal guardians are responsible for the supervision of any action and for the safety of minors in their care. In case of use of the minor, the parent or a legal guardian is reliable for the safe condition of the motobike and its suitability for the User.

This motobike is NOT suitable for use by children.

The best way to verify this is to allow him/her to ride it in the environment the motobike was designed to be used in.



The driving of the motobike is only permitted to licence holders for driving of vehicles under the L1eB category.

The motobike use requires any User to get acquaintance to the vehicle. For this reason, the owner is always responsible for his/her motobike while in use.

0.5 “WEEE” DECLARATION



Directive 2012/19/EU

The mark that appears on the product and associated documentation indicates that it must not be disposed of with normal household waste at the end of its working life.

In order to avoid health or environmental damages resulting from incorrect disposal of waste materials, the User is requested to separate this product from other types of waste and recycle it responsibly in order to favour the sustainable reuse of recyclable materials.

Private users are invited to contact the company from whom they purchased the product or the relevant local authority for all the information necessary about recycling this type of product.

Commercial users are invited to contact their supplier and check the terms and conditions stipulated in the sales contract.

This product must not be disposed of together with other commercial waste.

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I.1 SAFETY INFORMATION

I.1.a Correct use

- The motobike has been designed to be used on roads and courses subject to restrictive regulations provided for by the rules of the road.
- Before using the motobike in a certain area, it is necessary to seek further information about the standards in force on use of electric motor vehicles of the area in question and to check other restrictions, such as:
 - Age requirement;
 - Necessary equipment to travel on certain roads/courses;
 - Need of a specific license;
 - Restrictions on the limited use areas.
- Using the motobike for purposes different from the intended one may result in hazardous riding conditions, falls and accidents. Short-circuits may occur inside the battery pack, resulting in fires.
- ALWAYS use the motobike as described in this use manual and in any additional documentation.
- **The DAHU motobike is a high-performance vehicle**, and therefore, it must be ridden carefully for your and others safety.
- Always and MANDATORILY wear and fasten the helmet, which must be approved according to the laws in force in the country of use.

- Protective clothing suitable for motorcycle use is advised in case of fall (for instance. back protector, gloves, joints guards, etc.).

I.1.b Improper use

- Do not add accessories not certified by the Manufacturer.
- Do not transport other people beyond the rider.
- Never attempt to modify your motobike or install additional accessories on it on your own; always seek the assistance of an Authorized Dealer.
- Possible errors made during works not carried out in a workmanlike manner may damage your motobike and compromise its operation and safety. This may result in hazardous riding conditions, falls and accidents.
- The User can only carry out the routine operations described in this manual.



IT IS ABSOLUTELY PROHIBITED to install any type of seat or trailer for children transport.



The use of motobike racks is strongly discouraged as it may cause damages to the safety components of the motobike. The failure of these components may result in hazardous riding conditions, falls, accidents and property damage.

1.1.c Legal Regulations

- The information and instructions provided in this manual on how to use your motobike are intended to supplement, but in no way replace, the locally applicable generic and/or specific STANDARDS, REGULATIONS, PROVISIONS or LAWS.
- All road Users are required to comply with the traffic regulations applicable in their Country.
- **The DAHU motobike, being a high-performance vehicle,** implies particular requirements for its riding, such as mastery of the vehicle and skill in off-road riding.

1.1.d Residual hazards

- Fire hazard



In the event of smoke or flames emanating from the battery pack, stop the motobike immediately and put the fire out using an extinguisher suitable for batteries and electrical systems, if possible. If there is a risk of fire spreading to surrounding objects, promptly contact the Fire Service.

Strong impacts due to improper use, storage in overheated environments (e.g. inside a motor vehicle exposed to strong sunlight), or falls may result in short-circuits inside the battery pack, causing it to catch fire.



When you transport a motobike inside a vehicle, remember: motor vehicles cabins may overheat if exposed to strong sunlight. High temperatures may result in short-circuits inside the battery pack which may ignite. Park your vehicle in a shaded area and make sure that the ambient temperature remains below 50° C.



It is advised to deflate the motobike tyres upon prolonged transports and high temperatures.

- Use the motobike in compliance with the intended use;
- Always store the motobike in a environment where the temperature remains between -10° C and +50° C;
- Keep the motobike away from heat sources such as heaters, radiators, stoves, etc.
- Electrical hazards
The use of non-standard, damaged or faulty battery chargers and electrical cables may generate potentially fatal electric shocks.
 - Always use the battery charger supplied with the motobike;
 - Do not attempt to dismantle the battery pack and battery charger;
 - Keep the motobike and battery charger out of the reach of children and animals;
 - Ensure that the battery charger does not come into contact with water or other liquids;

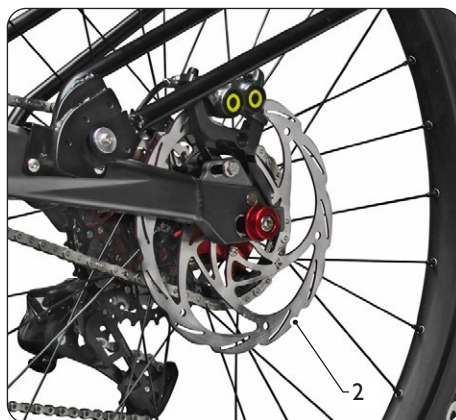


- Do not leave the battery pack or battery charger where they may be exposed to direct sunlight or heat sources (heaters, stoves, etc.);
 - Never use the battery charger or the batteries if they are damaged or show malfunctions in any way;
 - Never use the battery charger if the cables insulation or any of the plug connectors are damaged. In such cases, grasp the plugs only by the insulated parts.
- Generic hazards
- Injury hazard: always keep your hands, feet and any other part of your body away from the motobike moving parts (wheels, chain, gears);
 - In the event of rain, snow or slippery road conditions, reduce your speed and increase your distance from other vehicles;
 - In order to preserve the electric motor (1), it is recommended to avoid water pools the level of which can exceed the height of the pedals;
 - Do not leave your motobike inside motor vehicles that are exposed to direct sunlight.




⚠ The brake disks (2) may reach very high temperatures following a long descent.

i Do not touch the brake disks immediately after a descent. Allow them to cool down for at least 5 minutes before touching them. In order to check the temperature, touch them momentarily with an exposed finger. If they are still very hot, wait a few minutes and then repeat the check until the disks have cooled down.



I.1.e At first use

 **Danger of serious falls and accidents. The motobike is delivered assembled, it must only be composed as described by the Manufacturer.**

- Use the motobike only in a seated position suitable for You;
- Adjust the height and position of the saddle;
- Adjust the rearview mirror;
- Completely charge the battery pack (see chapter “4.6 - BATTERY PACK CHARGE”).


I.1.f Before each use


 **An unsafe motobike may result in hazardous riding conditions, falls and accidents.**


- Before using your motobike, always:
 - Check that it functions correctly and safely; it is important to bear in mind that the motobike may have fallen or been knocked over, or been tampered with by strangers while left unattended. Inspect the motobike components; if you notice any defects, promptly contact the Authorized Dealer;
 - Do not attempt to carry out any operations other than those described in this manual on your own. For any operations not described in this document, contact the Authorized Dealer. Do not use the motobike until it has been restored to perfect working conditions.

- If you find any defects while inspecting your motobike, promptly contact the Authorized Dealer. It is possible to correct minor defects without outside assistance only if the relevant repair procedures are described in this manual.
- Promptly contact the Authorized Dealer if the repair procedures failed to produce the desired effect or if they are not described in this manual, since it means that it is not possible to perform them without assistance.
- Do not use the motobike until you are certain that it is safe.

 **Any tampering or damaging following a fall won't be considered as a defect of the motobike.**

 **The motobike may start unexpectedly while operating the check procedures. Finger and arm injury hazard, accident hazard.**

 **Make sure that the motobike electric motor is disabled by disconnecting the battery pack before carrying out any check. Visually inspect the fixing screws to ensure that they have been tightened correctly.**

 **Visually inspect all the motobike components for incisions, breakages, deep cracks and any other mechanical damage. If you find any defects, contact the Authorized Dealer.**



- Always and MANDATORILY wear and fasten the helmet, which must be approved according to the laws in force in the country of use.

1.2 TAKING CARE OF THE BATTERY PACK



An improper use of lithium batteries may cause fires, explosions or chemical hazard.

- The battery charger supplied with your motobike must only be used to charge lithium ion batteries. Do not use it to charge lead, NiCd-NiMh batteries or accumulators.
- Do not attempt to charge the battery pack when it is hot. Make sure it is at room temperature before charging it.
- The battery will heat up slightly while it is being recharged, however, the charging process must be interrupted immediately if the battery pack starts to overheat.
- Make sure that the battery pack does not come into contact with water or other liquids. If it does, avoid using it and have it checked by the Authorized Dealer.

1.3 WHICH OPERATIONS THE USER CAN CARRY OUT ON THE MOTOBIKE WITHOUT ASSISTANCE



Possible errors made during works not carried out in a workmanlike manner may damage your motobike and compromise its safety and guarantee. This may result in hazardous riding conditions, falls and accidents.

- The user must only carry out the operations described in this manual and for which he possesses the correct tools.
- The characteristics of each motobike component must not be modified.
- All operations on warranted parts must be carried out by means of the Manufacturer's consent. The motor parts can only be managed by the Manufacturer itself, as well as all the other electronic parts. With regard to the mechanical parts, during the Warranty period, directly contact the Manufacturer to receive information on the trusted dealer most comfortable for You.

1.4 SAFETY PRESCRIPTIONS DURING USE

- The motobike can be used traditionally, namely through pedals, or with the aid of the electric motor.



We recommend that you familiarize with the motobike use before using the electric motor.

- Only use the motobike if you are capable of riding it safely and carrying out braking manoeuvres at high speeds;
- Wear a safety helmet when using the motobike;
- Ride with care;
- When pedalling, always make sure that you're ready to brake;
- Do not ride under the effects of alcohol and/or narcotic substances;

- Ride so that you always have complete control over your motobike and that you do not find yourself in difficulty in the event of unexpected hazardous conditions;
- In wet conditions, braking efficiency is reduced and braking distance is increased;
- Wear suitable clothing that does not limit movements or obstruct visibility when riding your motobike.

! **Increased load will have an adverse effect on motobike handling while it is in motion and increase the braking distance.**

- Overloading the motobike may cause some its components to damage or break. This may result in hazardous riding conditions, falls and accidents. Do not exceed the maximum permitted load (100 kg).

1.5 PRECAUTIONS FOR MOUNTING ACCESSORIES OR COMPONENTS FOR MODIFICATIONS

! **The use of non-standard accessories and/or components on your motobike may damage it and compromise safe operation. This may result in hazardous riding conditions, falls and accidents.**

- Do not add accessories or equipment to the motobike and do not try to modify it in any way.

1.6 WHO CAN RIDE THIS MOTOBIKE

- The rider must:
 - Must possess a driving licence for vehicles under the L1eB category (only for DAHU-R approved versions).
 - Be capable of riding a motobike, i.e. that be aware of the basic principles of cycling and have the sense of balance necessary to ride and control the motobike;
 - Be capable of mounting on, and dismounting from, a stationary motobike with confidence. This is especially important in the case of ergonomic saddles if the rider is unable to touch the ground with his/her feet when seated;
 - Be physically suited for the specifications of the motobike, and must not exceed the permitted weight limit;
 - Be physically and mentally able to take on roads and off-road trails.
 - Have enough stamina to control the motobike safely for a period of almost two hours, since it allows to reach high speeds for prolonged periods of time.

! **The motobike is not designed to compensate for infirmity or lack of physical fitness. To ride the motobike, a constant and heavy effort is required.**

1.7 WARRANTY CONDITIONS

- By purchasing this motobike, the User has high quality product designed, assembled and manufactured in Italy.

1.7.a Pre-requisites for the warranty request

- The Manufacturer guarantees the motobike against manufacturing defects or failure of the components listed below for **2 years** (starting from the date of purchase):
 - Defects or breakages of the frame;
 - Malfunctions and/or breakages of the motobike components (handlebars, brake levers, wheels, pedals, etc.);
 - Electric motor and electronic control unit;
 - Display.
- The warranty does not cover motobike components that are subject to wear. Faulty components will be repaired or replaced free of charge during the warranty period.
- All repairs and replacements carried out under warranty must be performed by an Authorized Dealer and only after receiving approval from the Manufacturer.
- The warranty and respective conditions may be transferred to possible new owners of the motobike, without prejudice to the duration of the warranty itself, from the first date of purchase.

- In order to validate the warranty period, the new owner must be in possession of proof of purchase (invoice or receipt indicating the purchase data and identification data of the motobike). The warranty period runs from the date of purchase and product registration.

- The warranty does not cover component failures resulting from normal use of the motobike and wear (e.g.: tyres, inner tubes, chain, brake disks, etc.).
- The owner is responsible for maintaining the motobike in good conditions, using it with care and ensuring that all the advised maintenance interventions are carried out.

1.7.b Warranty of the battery pack

- The battery pack immediately suffers from an aging process and its energy storage capacity decreases over time and travelled kilometres.
- Based on use, the battery pack capacity could decrease during the warranty period
- The Authorized Dealers can check if the storage capacity falls within the intended limits in function of time, travelled kilometres and of the number of performed recharges.



IT IS MANDATORY to use the battery charger supplied with the motobike upon its purchase.

1.7.c Exclusion from warranty

- The warranty shall not apply if the motobike is used for racing or sports competitions.
- The warranty shall be declared null and void if the motobike is used incorrectly or in any way other than that for which it has been designed (see paragraphs “Correct use” and “Improper use”).
- In particular, the warranty shall be invalidated in the event of:
 - Insufficient or incorrect maintenance and/or tampering with the components (see paragraph “Periodic maintenance program”);
 - Repairs are not carried out by an Authorized Dealer;
 - Failure to repair worn or damaged components, or incorrect repair thereof;
- Malfunctions and/or breakages caused by incorrect use.
- The warranty shall only be valid if original components are used, including those which have been replaced.
- Parts that are subject to wear, as well as the operations carried out by the Authorized Dealer, are normally excluded from the terms of the warranty.
- Some operations cannot be covered by warranty as they depend on the frequency and conditions of use (wheels and frame components alignment, elimination of noises and/or vibrations).
- The Manufacturer reserves the right to deliver and/or install components that may differ to the damaged parts, while meeting the same quality and technical specifications, under the terms of the warranty.

1.8 IDENTIFICATION SERIAL NUMBER

- The use of the services under warranty does not imply its extension beyond the established duration (see paragraph “Pre-requisites for the warranty request”).
- The motobike is equipped with a serial number stamped on the steering tube (**see figure at the side**).
- Communicate the stamped serial number upon every request for assistance or in order to order spare parts.



2.1 OVERALL DIMENSIONS



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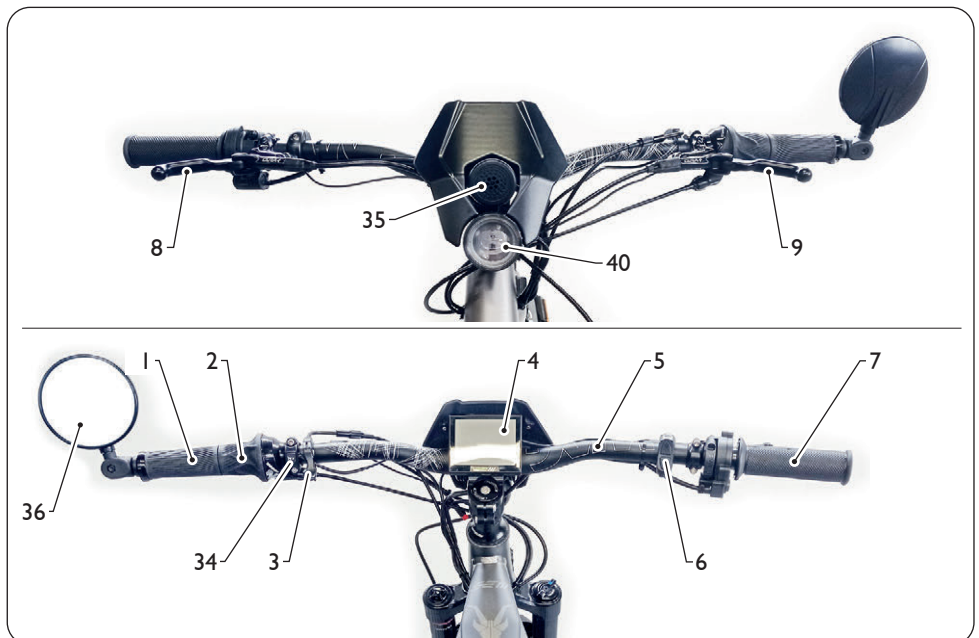
2.2 TECHNICAL DATA

CHARACTERISTICS	Independent pedal-assisted electric motorbike with dual transmission and engine management via throttle grip and pedal assistance
FRAME	SEM aluminium 6082 alloy T6 frame with printed parts, cold deformation technology and CNC machined parts - Frame measures: M, L e XL
SWINGARM	Aluminium SEM swingarm, 6082 T6 alloy with progressive system
MOTOR	SEM brushless motor with 4.000 W maximum peak integrated in the frame by means of sumps obtained from a solid block with SEM Inverter
ASSISTANCE LEVELS	N.9 control mappings manageable by push-button control: - Map 0: engine off, muscle use only - Map from 1 to 9: progressive increase in power managed by pedal assistance combined with the accelerator
SPEED	45 km/h (limit enforced by the category of approval) *
BATTERY	Lithium-Ion battery - 52V - 25Ah - 1300Wh
ELECTRIC RECHARGE (220V)	4,5 ore - 58.8V - 5A
AUTONOMY	70 km *
DISPLAY	Motor and battery check function: - Battery charge display - Instantaneous speed - Indication of type of mapping used - Total distance - Trip distance - Alarms and/or malfunctions report
FRONT FORK	<u>Mod. DAHU-R1</u> OHLINS DH38 double plate <u>Mod. DAHU-R2</u> FORMULA Nero C double plate <u>Mod. DAHU-R3</u> ROCHSHOX Domain RC 29" single plate
SHOCK-ABSORBER	<u>Mod. DAHU-R1</u> OHLINS TTX 22 M <u>Mod. DAHU-R2</u> FORMULA Mod <u>Mod. DAHU-R3</u> MARZOCCHI Bomber CR
SUSPENSIONS	200 mm front and rear stroke
DISC BRAKES	FORMULA CURA 4, hydraulic brakes with 203 mm front and rear disc
PEDAL TRANSMISSION	SRAM GX 11 speed 11 - 42
ELECTRIC TRANSMISSION	Dedicated chain transmission
FRONT COVER	VITTORIA - mod. Agarro 29 x 2.6 or similar
REAR COVER	VITTORIA - mod. Agarro 27.5 x 2.6 or similar
SEAT TUBE	Telescopic seat post Excursion of 80 / 100 / 125 mm
STANDARD EQUIPMENT	LT rearview mirror, Side kickstand, License plate holder, Rear mudguard, Acoustic and electronic buzzer, Low beam LED headlight, Rear parking LED light with stop and license plate light
NON-INCLUDED ACCESSORIES	SEM tubular wheelstand

* Indicative depending on User weight, track characteristics and riding technique.

2.3 MOTOBIKE COMPONENTS IDENTIFICATION

- | | | | |
|----|-----------------------------------|----|---|
| 1 | Left grip | 22 | Electric motor chainring |
| 2 | Shift grip | 23 | Shift group |
| 3 | Saddles handling lever | 24 | Pedals chain |
| 4 | Display | 25 | Swingarm |
| 5 | Handlebars | 26 | Rear shock absorber |
| 6 | Keys control unit mapping | 27 | Saddle |
| 7 | Throttle grip | 28 | Pedals chainring |
| 8 | Front brake lever (right) | 29 | Right pedal |
| 9 | Rear brake lever (left) | 30 | Frame |
| 10 | Rechargeable battery pack | 31 | Front fork |
| 11 | Front wheel | 32 | Ignition / switch-off key (ON/OFF) |
| 12 | Front disc brake | 33 | Fairing |
| 13 | Electric motor | 34 | Acoustic buzzer activation key |
| 14 | Crank-shafts | 35 | Electronic acoustic buzzer |
| 15 | Left pedal | 36 | Left rearview mirror |
| 16 | Electric motor pinion sump | 37 | Kickstand |
| 17 | Adjustable telescopic tube | 38 | License plate holder chassis with reflectors |
| 18 | Electric motor pinion | 39 | Rear mudguard |
| 19 | Electric motor transmission chain | 40 | Low beam LED headlight |
| 20 | Rear disc brake | 41 | Rear LED parking light
(with stop light and license plate light) |
| 21 | Rear wheel | | |





The Manufacturer reserves the exclusive right to make any aesthetic, functional or commercial modifications to the motobike with the purpose of improving the performance of the Product, without prior notice.

2.4 TIGHTENING TORQUES

- As shown by the **picture at the side**, the corresponding tightening torque (Nm) to be used is stamped on the head of the screws.
- If no specific information has been provided by the Manufacturer, refer to the following tightening torques.



<i>Threaded fitting</i>	<i>Thread</i>	<i>Tightening torque (Nm)</i>
Pedals	9 / 16"	30
Handlebars fitting screws	M6	8
Saddle screws fitting	M6	10
Front wheel pin	-	<i>See indication on fork</i>
Rear wheel pin	M8	19
Shift actuator screw	M10	11

- If no specific information has been provided by the Manufacturer in the table, please refer to the tightening torques indicated on each screw.

2.5 REMOVAL FROM PACKAGING

- The motobike is shipped packaged and protected in order to preserve its mechanical and aesthetic integrity. Carefully remove the packaging and dispose of it as prescribed by the local regulations in force.
- The motobike is shipped with the front wheel, handlebars and pedals dismantled.

! **The packaging elements (plastic bags, expanded polystyrene , straps, etc.) must not be left within the reach of children as they are potentially dangerous.**

2.6 ASSEMBLY AND ADJUSTMENTS

! **Before carrying out any operation, make sure the battery pack is disconnected.**

2.6.a Front wheel assembly

i *Before the wheel assembly, remove the stops, specifically supplied for transport, from the brake calliper.*

i *The brakes must never be activated after the removal of the wheel. Use the stops specifically supplied for transport and remove them from the brake calliper before reassembling the wheel.*

- Insert the wheel between the fork, making sure the brake disc is positioned between the brake calliper pads.
- Insert the pin (1b) inside the holes on the fork and screw it.
- Tighten the two locking screws (2b).

! **Check that the wheel is mounted firmly and correctly.**

i *To disassemble the wheel, work in reverse order.*



2.6.b Handlebars assembly

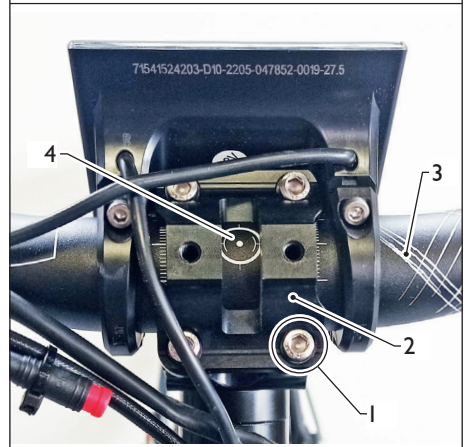
- Undo the four screws (1) and remove the locking support (2) of the handlebars.



- Position the handlebars (3) into the seat, position the locking support (2) and screw the four screws (1), without tightening them.

Check, through the centring symbols (4), that the handlebars are perfectly centred.

Screw the four screws (1) completely.



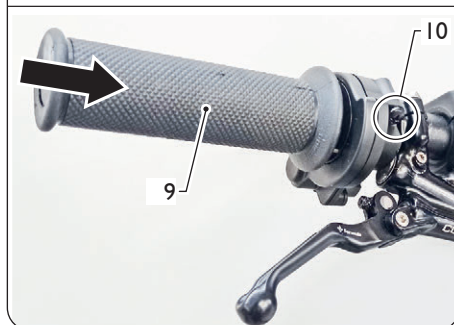
- Use the two screws (5) to fix the support chassis (6) of the acoustic buzzer and of the headlight.



- Install the fairing (7) by screwing the respective four screws (8).



- Insert the throttle grip (9) into the handlebars.
- Tighten the two locking screws (10) of the throttle grip (9).

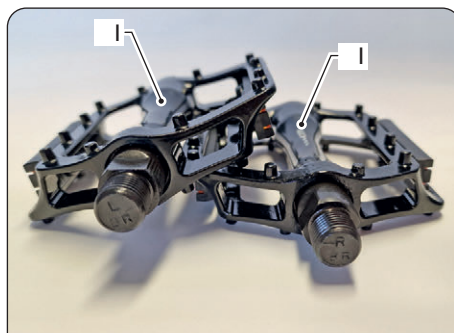


i To disassemble the handlebars, work in reverse order.

2.6.c Pedals assembly

i The pedals are different and marked with the letters "R" (right) and "L" (left).

- Mount the pedal (1) on the crank-shaft by screwing the corresponding Allen screw, paying attention to mount the right pedal ("R" symbol) on the right side of the right crank-shaft and the left pedal ("L" symbol) on the left side of the left crank-shaft.



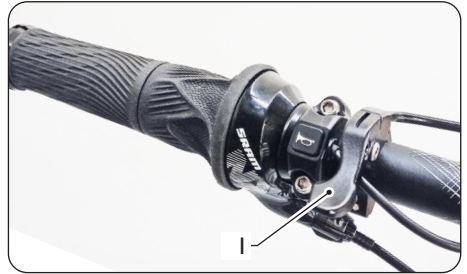
i To disassemble the pedals, work in reverse order.



2.6.d Saddle adjustments

SADDLE HEIGHT ADJUSTMENT

- Use the lever (1) on the handlebars to automatically adjust the height of the saddle.



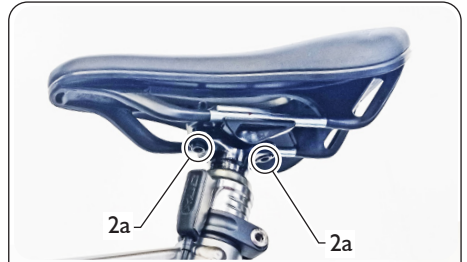
SADDLE INCLINATION ADJUSTMENT



Adjust the saddle based on the configuration installed on your motobike.

With two screws

- Loosen the two locking screws (2a) of the saddle.
- Adjust the saddle inclination as desired.
- Once the adjustment is complete, tighten the two locking screws (2a).



With one screw

- Loosen the locking screw (2b) of the saddle.
- Adjust the saddle inclination as desired.
- Once the adjustment is complete, tighten the locking screw (2b).

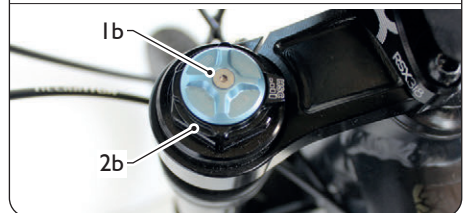


2.6.e Front fork adjustments

With fork ÖHLINS (Mod. DAHU-R1)

COMPRESSION (left-hand side)

- Work on the upper ring (1b) to adjust low compression speed; Rotate the ring towards symbol "arrow +" to increase compression, vice versa to decrease it. Standard setting: "all open".
- Work on the lower ring (2b) to adjust high compression speed. Rotate the ring towards symbol "arrow +" to increase compression, vice versa to decrease it. Standard setting: "all open".



REBOUND (left-hand side)

- Remove the lower cover (3b) and work on the knob (4b) to adjust the fork rebound. *Standard setting: "all open".*


PRESSURE ADJUSTMENT (right-hand side)
Main inner tube adjustment

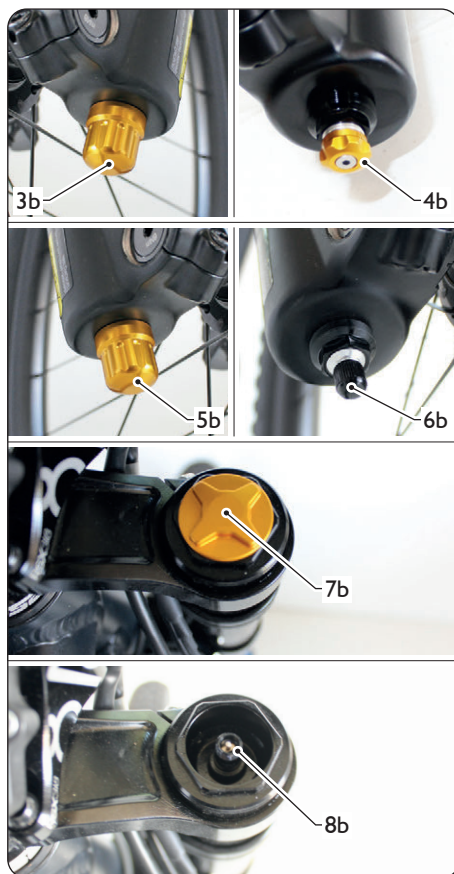
- To adjust the stroke, remove the lower cover (5b), remove the cap (6b), connect a manual pump with the corresponding pressure gauge to the fitting and adjust the desired pressure.


Secondary inner tube adjustment

- To adjust the stroke, remove the upper cover (7b), connect a manual pump with the corresponding pressure gauge to the fitting (8b) and adjust the desired pressure.


To adjust the two inner tubes, refer to the table stamped on the fork. *Standard setting: set for a weight of 80 kg.*

 For further information on the fork, consult the ÖHLINS' manual delivered upon purchasing the motobike.


With fork FORMULA (Mod. DAHU-R2)

 For further information on the fork, consult the FORMULA manual delivered upon purchasing the motobike.

With fork ROCKSHOX (Mod. DAHU-R3)

 For further information on the fork, consult the ROCKSHOX manual delivered upon purchasing the motobike..

2.6.f Rear shock absorber adjustments

With shock absorber ÖHLINS (Mod. DAHU-R1)

COMPRESSION

- Work on the knob (1b) to adjust the low compression speed; Rotate the knob clockwise to increase compression, vice versa to decrease it.
Standard setting: "all open".
- Work on the lever ring (2b) to adjust the high compression speed; Rotate the ring from "1" to "3" to increase compression, vice versa to decrease it.
Standard setting: position "1".

REBOUND

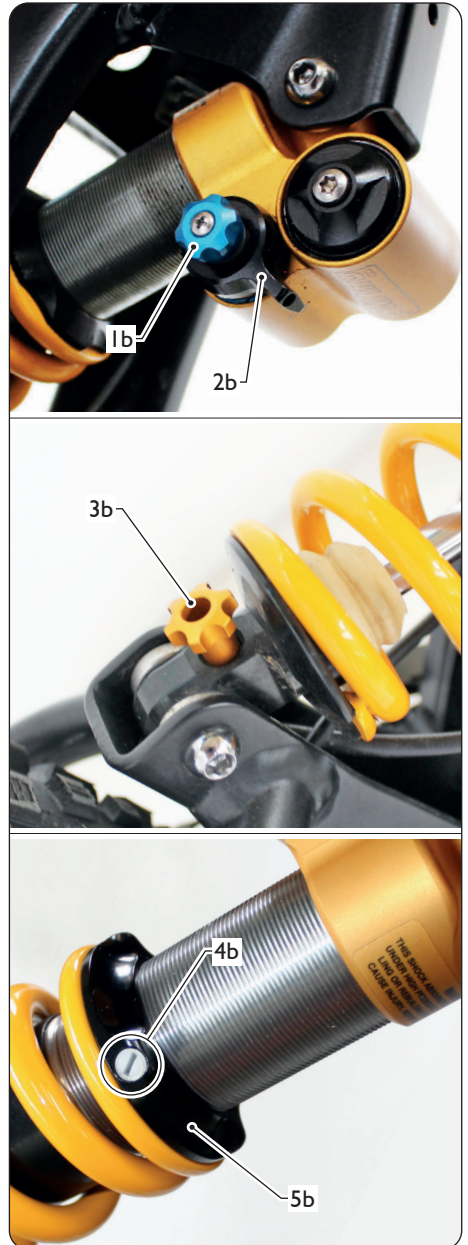
- Work on the knob (3b) to adjust the shock absorber rebound; Rotate the knob clockwise to increase the rebound, vice versa to decrease it.
Standard setting: "all open".

SPRING PRELOAD


- To adjust the hardness of the shock absorber compression, loosen the grub screw (4b) and work on the corresponding ring (5b); Rotate the ring clockwise to increase the hardness, vice versa to decrease it.
Standard setting: set for a weight of 80 kg.




For further information on the shock absorber, consult the ÖHLINS manual delivered upon purchasing the motobike.




With shock absorber FORMULA (Mod. DAHU-R2)

 For further information on the shock absorber, consult the FORMULA manual delivered upon purchasing the motobike

With shock absorber MARZOCCHI (Mod. DAHU-R3)

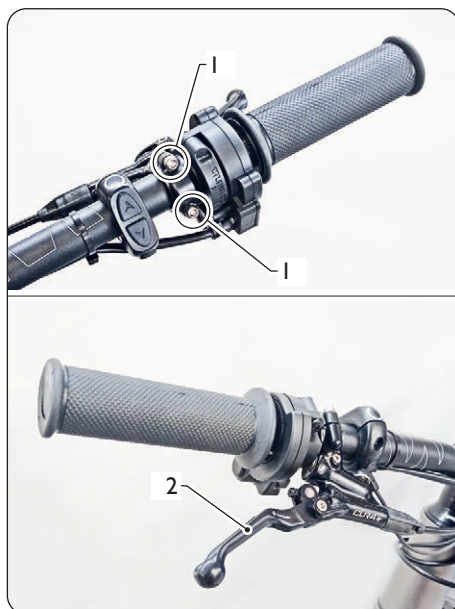
 For further information on the shock absorber, consult the MARZOCCHI manual delivered upon purchasing the motobike.

2.6.g Brake levers adjustments

 The operations described below are valid for both brake levers.

LEVER INCLINATION ADJUSTMENT

- Loosen the two locking screws (1) of the lever (2).
- Adjust the lever (2) inclination as desired.
- Tighten the locking screws (1) of the lever (2).



LEVER DISTANCE ADJUSTMENT

- Depending on the desired distance between the lever and the knob, work on the adjustment screw (1) through a cylindrical hexagon-socket head wrench.



For further information on the brake system, consult the FORMULA manual delivered upon purchasing the motobike.



2.7 OPTIONAL ACCESSORIES

- A few optional accessories are available at the Authorized Dealer's premises.
- Contact the Authorized Dealer for any doubt or clarification.

2.8 DESCRIPTION OF THE MOTOBIKE

2.8.a Brakes

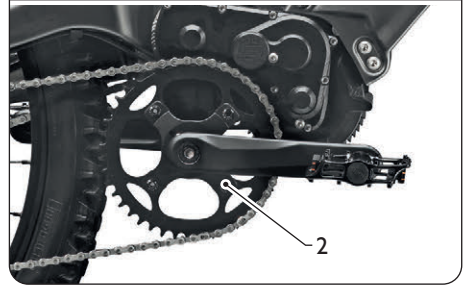
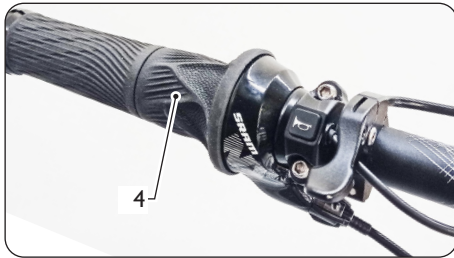
- The motobike is equipped with two independent disc brakes (1).
- The left lever activates the brake of the rear wheel while the right lever activates the brake of the front wheel.
- Ride with great prudence as long as the braking system has not been broken in.
- Put your brakes to breaking in; the general rule is the following: approximately 30 short braking until stop starting from medium speed.
- Once the braking system is broken in, a very high braking force will be available.



An excessively strong activation of the levers may cause the wheels to block, with the consequent risk of fall.

2.8.b Shift

- The motobike is equipped with a shift (1), a gear (2) and a “spool” with 11 speeds (3).
- The shift, which can be managed by means of the selection grip (4) on the handlebars, offers the optimal gear for each speed and helps overcoming slopes more easily.



2.8.c Frame and forks

- The motobike is equipped with a robust aluminium frame (1), complete of front fork (2) and swingarm (3), both cushioned.

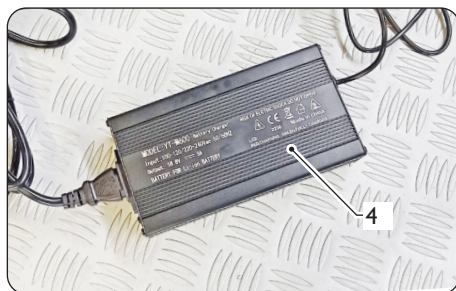


2.8.d Motor and electric devices

- The electric traction system is composed of a battery pack (1) and of a “brushless” SEM electric motor (2).



- The battery pack (1), installed on the motobike chassis, is enclosed inside the frame (3).



- Together with the battery pack, the specific charger (4), complete of the cables necessary for recharge, is supplied.

- The system is equipped with an electronic control unit for managing the pedalling and throttle assistance.
The mappings can be selected using the buttons (5) on the handlebar.



- On the handlebars are also located the activation key (6) of the acoustic buzzer and the display (7) for the visualization and management of the motobike parameters.



For a complete description of the commands and of the display, please consult section 5.


2.8.e Telescopic saddle

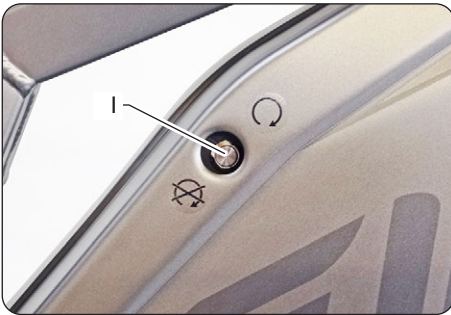
- The telescopic handling system (1) allows to adjust the saddle height during riding, depending on the envisaged route, by means of the corresponding lever (2) on the handlebars.



3.1 BEFORE EACH USE OF THE MOTOBIKE

 An **UNSAFE** motobike may result in hazardous riding conditions, falls and accidents.

 Before each check, make sure the motobike is switched off, namely that the key (I) is in switch-off position “OFF” (key extracted).




- Before using your motobike, check that it is able to work safely.
- Before each use of the motobike, check the following components:
 - Wheel spokes;
 - Wear and concentricity of the rims;
 - Possible damages and foreign bodies on the tyres;
 - State of wear of the steering tube and of the saddle tube;
 - Functionality and state of wear of the gears and suspensions.
 - Cables, guides, wires and general state of connecting items;
 - The handlebars and saddle fitting;
 - The wheel hubs fastening nuts or screws; they must be fully tightened;


- The tyres pressure;
- The efficiency of the front and rear brakes.

- If you find any defects while inspecting you motobike, promptly refer to the Authorized Dealer.

 **Finger and arm injury hazard; accident hazard.**

 **Visually check that all the fixing screws are screwed correctly.**

 **Visually check there are no for incisions, breakages, deep cracks and any other mechanical damage on each part of the motobike.**

 **If you find any defects while inspecting you motobike, promptly refer to the Authorized Dealer.**

3.2 WHEELS AND TYRES CHECK

3.2.a Wheels fixing check

- By working on one wheel first and the on the other, vigorously shake the wheel group transversely to the direction of travel; the locking mechanism of the wheel group must not move.



Squeaking or creaking must not be heard.



3.2.b Tyres check

- Check for the absence of external damage, foreign bodies and wear on the tyres; the entire surface of the tyre must comply with the original profile.
 - The cord weft located under the rubber layer must not be exposed;
 - The tyres must not be dented or cracked.
- Remove any foreign bodies (thorns, stones, fragments of glass, etc.) using your hands or a plier (proceed with caution).
- Check if there are air leaks after this operation. In case of air leak, it is necessary to replace the inner tube.



3.2.c Tyres valve check

- Due to the strains and a insufficient pressure of the tyres, the tyre and the inner tube may move on the rim and originate an oblique position of the valves. In this case, the base of the valve (I) may tear during travel, causing a sudden loss of pressure of the tyre.



- If necessary:
 - Deflate the tyre;
 - Loosen the valve nut (if present) and try to correct the valve position;
 - Screw the valve nut (if present);
 - Inflate the tyre.

3.2.d Tyres pressure check

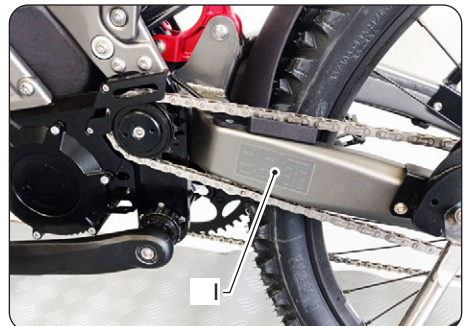
- Due to an insufficient pressure of the tyres:
 - The tyre and the inner tube may move on the rim and originate an oblique position of the valves. In this case, the base of the valve may tear during travel, causing a sudden loss of pressure of the tyre;
 - The tyre may detach from the rim;
 - Faults frequency increases.

! Always respect the correct pressure, indicated on the label applied to the swingarm.

AXLE	SIZE	PRESSURE	
		kPa	bar
FRONT	29" x 2,6	160	1,6
REAR	27,5" x 2,6	160	1,6



The higher the body weight and load are, the higher the tyre pressure must be. The reference pressure values are indicated in paragraph "Technical data". The values shown are purely indicative. In case of doubts, please refer to the Authorized Dealer.



- Undo the protection cap (1).
- Check pressure with a pressure gauge or with a pump equipped with a pressure gauge.
- If necessary, inflate or deflate the tyre (by pressing the internal valve).
- Screw the protection cap (1).



3.2.e Wheels check

- Check, by tapping with a screwdriver, that the spokes (1) are tense and not loose. If loose spokes are encountered, it is necessary to refer to an assistance centre.
- Raise the front wheel and make it spin using your hand.

The rim and the tyre must spin in a perfectly circular manner. No eccentricities or twisting are permitted.

- Work in the same way to check the rear wheel.
- Check that there are no foreign objects on the wheel groups (example: twigs, fabric residues, wires, etc.), remove them if necessary.
- Check that the wheel groups have not been damaged by foreign objects.



3.3 TELESCOPIC AND SADDLE CHECK



If the telescopic is not inserted deeply enough, it may detach from the frame during travel and cause hazardous riding conditions, falls and accidents.

- Forcing with your hands, try to rotate the saddle and the tube inside the frame.



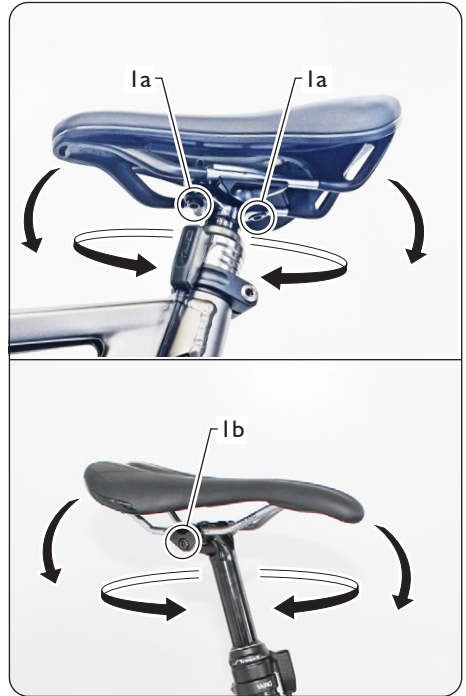
The saddle and the tube must not move.

With two screws

- If they move, correctly fix them by working on the screws (1a) of the saddle.

With one screw

- If they move, correctly fix them by working on the screw (1b) of the saddle.



3.4 HANDLEBARS CHECK



If the handlebars and their fitting are not mounted correctly or are damaged, they may originate hazardous riding conditions, falls and accidents.

- If defects are detected on these components or in case of doubts, do not use the motobike and refer to the Authorized Dealer.
- Visually inspect the handlebars and their fitting.
- Block the front door between your legs, grasp the handlebars (1) at the two extremities and, forcing with your hands, try to turn the handlebars in both directions.
- Always forcing with your hands, try to rotate the handlebars inside the fitting.



No parts should move or displace.

Squeaking or creaking must not be heard. If the handlebar components move, fix them correctly. Then proceed with a new test.

- Always on the handlebars, check for correct fixing of the brake levers (2) and of the grips. Try to remove the levers with your hand (one at a time).



No parts should move or displace.

Squeaking or creaking must not be heard. If they move, fix them correctly then proceed with a new test.

- Keep the front brake pulled and move the motobike back and forth with short and sudden movements; The steering group must not show any play.



Squeaking or creaking must not be heard.

- In case of defects, please refer to the Authorized Dealer.

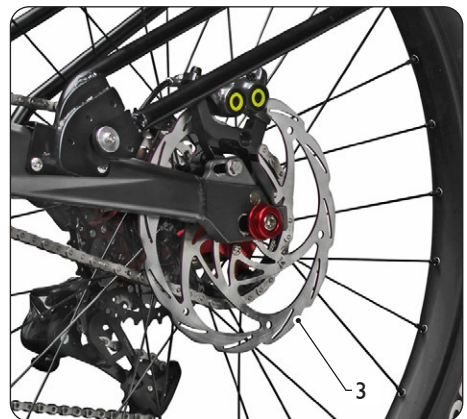
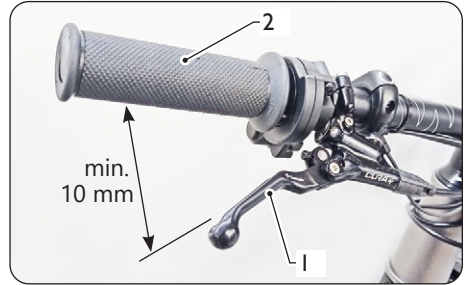


3.5 BRAKES CHECK

⚠ Danger of serious falls. Non-operating brakes always cause hazardous riding conditions, falls and accidents. A malfunction of the brakes may represent a life-threatening danger.

- Check Your braking system with particular attention.
- If defects are detected on these components or in case of doubts, do not use the motobike and refer to the Authorized Dealer.
- From standing position, pull both brake levers until stop. The minimum distance between the brake lever (1) and the handlebars grip (2) must be at least 10 mm.
- Try to move the motobike back/forth; both wheels must remain blocked.
 - Dirty brake discs (3) must be cleaned immediately.

⚠ The presence of oil and/or grease on the brake discs may reduce the braking action and originate hazardous riding conditions, falls and accidents.



- Visually check the braking system starting from the lever and proceeding with the tubes and brakes. The tubes (4) must not show cracks or bends.

- Check that brake disc is not damaged. It must be free from notches, breakages, deep scratches and other mechanical damage.

! Check that there are no oil leaks from the tubes.

- Firstly, raise the front wheel, then the rear wheel and make them spin with your hand. The brake disc must rotate freely.

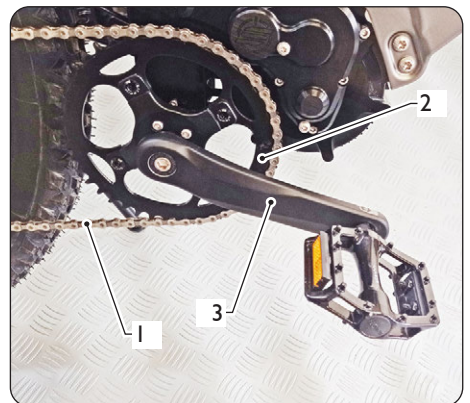


3.6 PEDAL CRANKS FIXING AND CHAIN CHECK

- Make sure there are no external objects and remove them if necessary.

- Check that the chain (1) is not damaged. The chain must not show, in any point, damages caused, for instance, by bent plates of the chain, pins to be rescrewed which protrude, etc., or jammed and/or locked chain links.

- Check that the gear (2) is fixed to the right pedal crank (3), ensuring there is no play.

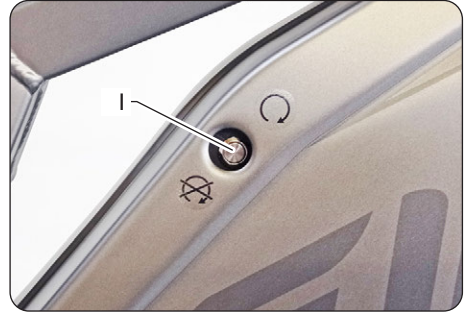


! See paragraph “6.5.e - Chains tensioning” and proceed with chain (1) tensioning and regulation before first use or after a prolonged storage.

3.7 ELECTRIC MOTOR CHECK (and corresponding pinion and chain)

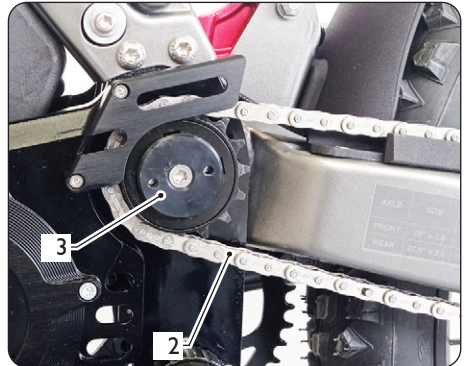
⚠ A defective or damaged electric motor may cause a short circuit, with the consequent danger of fire.

- Visually check that all the electrical cables are intact and installed correctly.
- Switch on the motobike by moving the key (1) to ignition position “ON” (key pressed).
- In case of malfunctions, pay attention to the error signal on the display.
- Check that the chain (2) is not damaged. The chain must not show, in any point, damages caused, for instance, by bent plates of the chain, pins to be rescrewed which protrude, etc., or jammed and/or locked chain links.



⚠ Every 3.000 km replace the pinion (3) of the electric motor.

i To replace the pinion, pleas consult what is indicated in paragraph “6.5.f - Electric motor pinion replacement”.



⚠ See paragraph “6.5.e - Chains tensioning” and proceed with chain tensioning and regulation before first use or after a prolonged storage.

3.8 VARIOUS ACCESSORIES CHECK



The Manufacturer do NOT approve any modification execution or accessory application on the motobike.

Any modification, application or removal of non-authorized accessories may undermine the motobike safety and void the warranty.



The Manufacturer does not certify nor homologate the installation or eventual modifying of any third part.



Any installation or modification non-authorized by the Manufacturer immediately voids the warranty.

3.9 OTHER CHECKS

- Possible damaged components of the motobike may have sharp edges which could cause wounds.
- Check for the presence of possible damages on all the components.
- Have damaged parts repaired or replaced immediately by the Authorized Dealer.



Use your motobike only after a complete check.

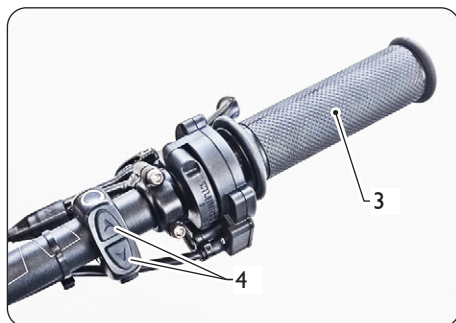
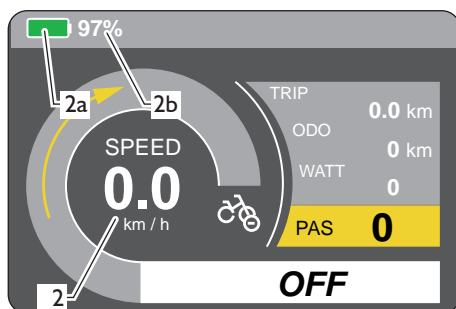
4.1 USE OF THE MOTOBIKE

! Before proceeding with the activation operations, make sure you have carried out all the checks described in the chapter “3.1 - Before each use of the motobike”.

- Raise the kickstand.
- Get on the motobike and sit on the saddle; firmly grasp the handlebars grip.
- To use the motobike “traditionally”, i.e. pedalling, put your feet on the pedals and start pedalling.

! Given the sensibility of the electronic system, we recommend **NOT** to place your feet on the pedals during ignition phase of the motobike. If that happens, switch the motobike off and back on, making sure not to place your feet on the pedals.

- To use the motobike through the electric motor, switch on the motobike by moving the key (1) to ignition position “ON” (key pressed); the display (2) and the lights switch on.
- Choose the desired mapping (see chapter “5.3 - DISPLAY”) by working on the respective keys (4) and use the pedals and/or the throttle (3) to start the motobike.
- Check the battery pack charge status by means of the corresponding “battery” icon (2a) and/or the field “%” (2b) on the display. The “battery” icon completely in green and the 100% indicate the maximum charge of the battery pack, while the empty icon and a low % indicate low battery, so it is necessary to charge it.



! At the end of each use (or in case of EMERGENCY), **ALWAYS** switch off the motobike by moving the key (1) to switch off position “OFF” (key extracted).

4.1.a Temperatures of use

- This motobike has been designed to work in all environmental conditions, but extreme heat and cold may hinder its functions.
- During use, power components will increase their own temperature and, for this reason, we recommend its use with environment temperatures between 0° C and 40° C.



During motobike use through the electric motor, keep your feet on the pedals. A wrong position of the body may result in hazardous riding conditions, falls and accidents.

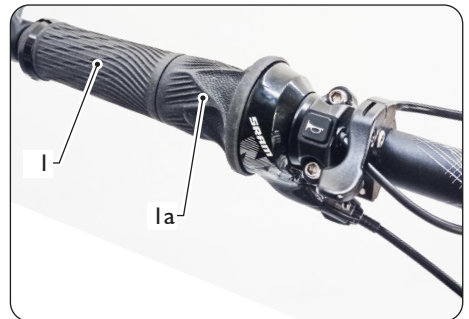
4.2 USE OF THE SHIFT

- The motobike is equipped with a chain shift. At every gear change, the chain moves to a different crown of the cassette.
- To move from one speed to another, use the selection grip (1a) and rotate it forward to decrease speed or backwards to increase it.



Gear change can only be performed during travel.

- The shift is equipped with a selection grip (1a), obtained from the left grip (1). There are 11 speeds available, splittable into:
 - “Long” speeds (from 1° to 4°)
Speeds to be used when long distances must be travelled up to the maximum permitted speed with a low pedalling frequency.
 - “Medium” speeds (from 5° to 8°)
Speeds to be used after the start with a medium pedalling frequency.
 - “Short” speeds (from 9° to 11°)
Speeds to be used for start with a medium pedalling frequency.



4.3 USE OF THE BRAKES

- To activate a brake, pull the corresponding lever towards the handlebars.
 - Right lever (1a): front brake;
 - Left lever (1b): rear brake.



Danger of falls and accidents.

- **An excessively strong activation of the brake may cause the wheels to lock and originate slipping or overturning.**
- **It is necessary to familiarize with the brakes activation. Start by pedalling slowly and activating the brake levers with moderation.**
- **Perform some braking exercises on a flat section at reduced speed.**
- **Dose the brakes and activate the two levers simultaneously.**
- **Pay attention when you activate the front brake lever; the presence of sand, gravel, etc. may cause the front wheel to slip resulting in falls.**




Avoid long sections as long as the braking system is not broken in. Once the braking system is broken in, a very high braking force will be available.





65% (approximately) of the total braking force is obtained from the front brake. The maximum braking performance is obtained by activating the two levers simultaneously.

4.4 HOW TO TRANSPORT THE MOTOBIKE


- The motobike transport must be performed exclusively inside the car luggage compartment or inside vehicles.


 If necessary, remove the front wheel as indicated in paragraph “6.5.b - Front wheel disassembly”.

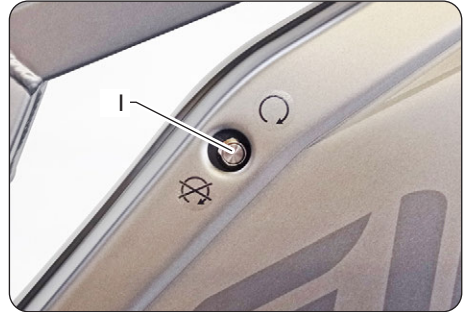
 The brakes must never be activated after the removal of the wheel. Use the stops specifically supplied for transport and remove them from the brake calliper before reassembling the wheel.

 **Before transporting the motobike, make sure the motobike is switched off, namely that the key (I) is in switch-off position “OFF” (key extracted).**

 **During transport, do not place objects on the motobike.**

 **This motobike cannot be fixed to car transport systems (motobike racks, rear or external luggage racks or similar).**

 **The use of bicycle racks is strongly discouraged as it may damage the safety components of the motobike. The failure of these components may originate hazardous riding conditions, falls, accidents and damages to property.**



4.5 REMOVAL AND INSERTION OF THE BATTERY PACK

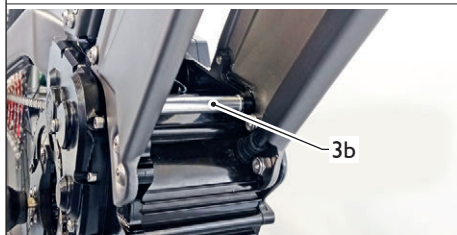
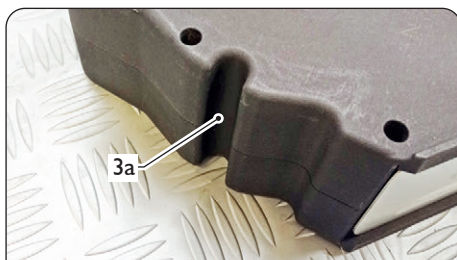
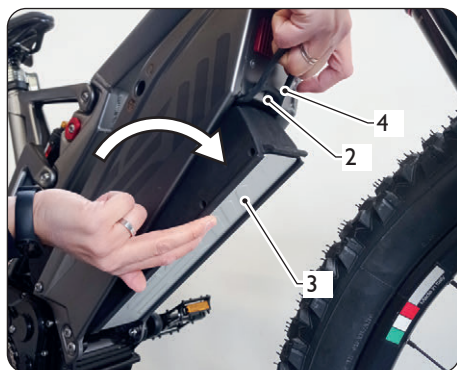
REMOVAL OF THE BATTERY PACK

- Make sure the motobike is switched off, namely that the key (1) is in switch-off position "OFF" (key extracted).
- Remove the safety plate by turning the clip screw (2) half a turn (anticlockwise).
- While supporting the battery pack (3) with one hand, hold and extract the fixing rubber band (4) upwards.
- Remove the battery pack downwards.

! **Do not put the battery pack into contact with water or other liquids. If that happens, do not use it and have it checked by the Authorized Dealer.**

INSERTION OF THE BATTERY PACK


- To insert the battery pack, work in reverse order to what is described above:
 - Take care to place the recess (3a) of the battery pack (3) to the support pin (3b) envisaged inside the chassis;
 - Turn the battery pack (3) and insert it in its own seat, envisaged inside the chassis;
 - While holding the battery pack (3) with one hand, hold and reposition the fixing rubber band (4) to the hook envisaged on the battery pack;
 - Position and fix the safety plate, turning the clip screw (2) half a turn (clockwise).




4.6 BATTERY PACK CHARGE

4.6.a Battery pack check


- The battery pack is supplied partially charged.
- Charge the battery pack as indicated in paragraph "Battery pack charge".


 Before using the motobike, completely charge the battery pack.


4.6.b Battery pack charge

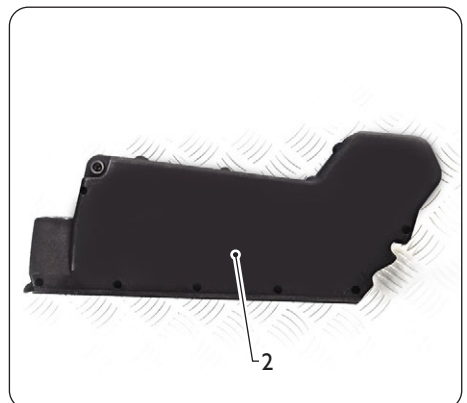
 **EXCLUSIVELY** use the battery charger (1) supplied as a standard.

- Remove the battery pack (2) from the motobike to charge it.

 The battery pack can be charged at any moment without compromising its duration, however, for a higher duration over time of the battery itself, it is good practice not to charge it too often nor leave it out of charge for more than two months.

 Make sure that mains voltage corresponds to what is indicated on the label of the battery charge.

 Connect the charge connector (3) to the socket (4) on the battery pack **BEFORE** connecting the plug (5) to the power socket.



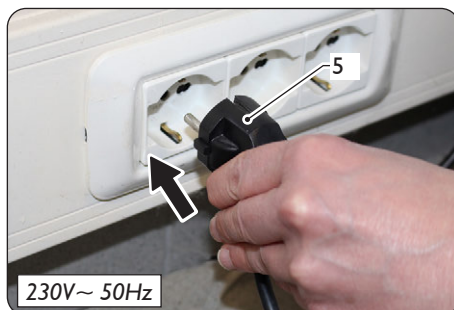
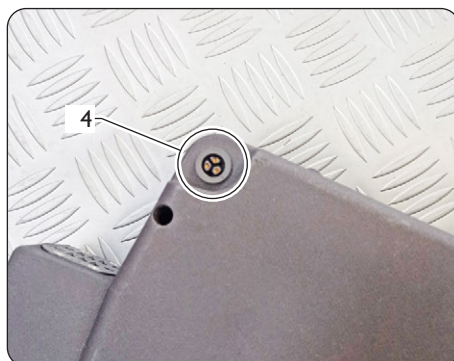
! Charge the battery pack in a covered and dry place, far from sources of heat and flammable materials and equipped with an electrical system and rooms in accordance with the law.

- Connect the charge connector (3) to the socket (4) on the battery pack.
- Connect the plug (5) of the power cord to the power socket.
- Charge begins.
- The red led lights up on the battery charger indicating charging phase; when the led becomes green, battery pack is charged.

! Disconnect the plug (5) from the power socket **BEFORE** disconnecting the charge connector (3) from the socket on the battery pack.

- Disconnect the plug (5) of the power cord from the power socket.
- Disconnect the charge connector (3) from the battery pack socket (4).

i At the end of each use, completely charge the battery pack. The complete discharge may damage the battery pack.



4.7 NOTES ON THE AUTONOMY OF THE BATTERY PACK

- Autonomy may vary a lot depending on the mode and temperature of use, travelled route, on the storage temperature and age of the battery pack (averagely, after 3-4 years, autonomy is reduced down to 40%).
- Battery pack autonomy is highly dependent on the type of mapping used (selectable via the relevant button on the handlebar).
- The main factors which affect the battery pack autonomy are:

<i>Factors</i>	<i>Importance</i>	<i>Consequences on autonomy</i>
Weight of the User and of the load	2	Decreases as the weight of the User and possible accessory loads increases.
Tyres pressure	1	Decreases as the tyres pressure decreases.
Slope	3	Decreases as slope increases.
External temperature	1	Decreases by approximately 15% if temperature is lower than 0° C.
Speed	3	Decreases exponentially as speed increases.
Wind	2	Highly decreases with unfavourable wind at speeds higher than 15 km/h, almost non-existent variations at low speed.
Mapping of the electronic control unit	3	Decreases as the selected mapping increases.
Restart from stationary position	3	Decreases as the frequency of "stop & go" increases since absorption during acceleration phase is very high.

Importance: 1 - Low importance

2 - High importance

3 - Extreme importance



To ensure a higher duration of the battery pack, at the end of each use of the motobike, always press the switching off key.

4.8 TAKING CARE OF THE BATTERY PACK

4.8.a Battery pack power reduction

- In order to safeguard against overloads or overheating, the battery pack is equipped with an automatic function that reduces the power according to the power level and temperature.



Removing, recharging and storing the battery pack without respecting the instructions provided by the manufacturer compromises its duration and safety.

4.8.b Maintenance, cleaning and storage (battery pack)



At the end of each use, completely charge the battery pack. The complete discharge may damage the battery pack.

- Make sure that the battery pack is kept clean at all times.
Clean it thoroughly using a soft, dry cloth.
- Do not immerse the battery pack in water (or other liquids) or clean it using water jets. If the battery pack stops working, contact the Authorized Dealer.
- Never place the battery pack on a dirty surface. It is important to avoid encrustations on the recharging socket and the contacts.
- For maximum battery pack duration, treat it with care and, above all, respect the following storage conditions:
 - Temperature 16 ÷ 25° C
 - Humidity 0 ÷ 80 %
 - Charge level 70 %

4.9 WHAT TO DO AFTER AN INCIDENT

- Following a ruinous fall or an accident, promptly refer to the Authorized Dealer to have the motobike checked before re-using it.
- Reuse the motobike only after it has been opportunely inspected and, if necessary, repaired by the Authorized Dealer.
- In case of a fall, all the components of the motobike (example: handlebars, handlebars fitting, pedal cranks, pedals, etc.) which hit against a hard flooring must be checked and, if necessary, replaced.



Possibly damaged and not replaced components may originate hazardous riding conditions, falls, accidents and damages to property.



Due to the fall, short circuits may occur inside the battery pack and the latter may ignite.

- **After a fall or accident, leave the motobike outdoors for one hour, at a safe distance from possible flammable materials.**
- **Use a finger to briefly and carefully touch the battery pack. If an unusual heat development is perceived, leave the motobike in that position.**



Do not continue using it for any reason.

As soon as the battery pack cools down, transport the motobike to the Authorized Dealer for the necessary verifications.



In the presence of flames or smoke from the battery pack, promptly stop the motobike.



Put out the fire using a fire extinguisher suitable for batteries and electrical systems, if available. If the fire extinguisher suitable for batteries and electrical systems is not available, wait for the fire to quench and that all the motobike components have cooled down. After that, immediately transport the motobike to the Authorized Dealer.

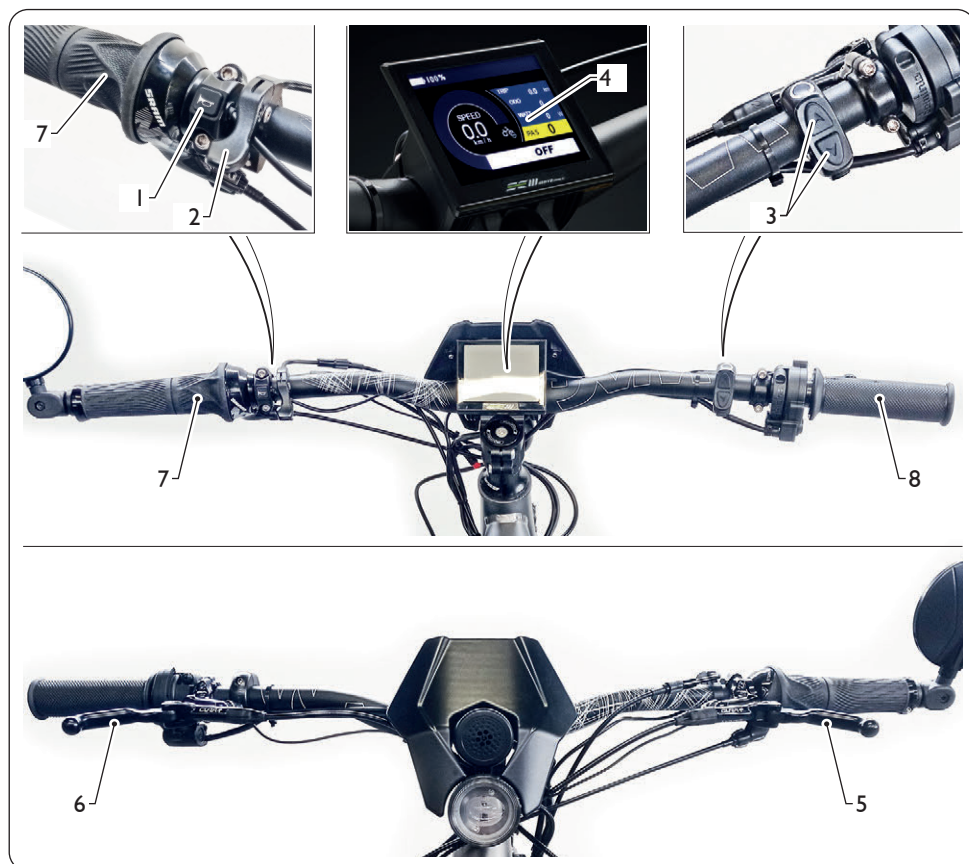


In case of risk that the fire spreads to nearby objects, immediately inform the Firefighters.

- **Reuse the motobike only after it has been opportunely inspected and, if necessary, repaired by the Authorized Dealer.**

5.1 HANDLEBARS COMMANDS

- 1) **Black key “Horn”**
Press this key to activate the electronic acoustic buzzer.
- 2) **Saddle height adjustment lever**
Work on this lever to adjust the saddle height.
- 3) **Black keys “choice of pedalling assistance”**
These keys allow you to choose the most suitable programme for your route from the nine programmes in the memory.
- 4) **Display**
Display for visualization and management of the motobike parameters.
- 5) **Rear brake**
- 6) **Front brake**
- 7) **Gear shift knob**
- 8) **Throttle grip**



5.2 BRIEF INDICATIONS FOR START UP

- This paragraph summarises the most important information for correct use of the electric motor.

! Entirely charge the battery pack.

i The battery pack charge must be carried out when the battery pack is not mounted on the motobike.

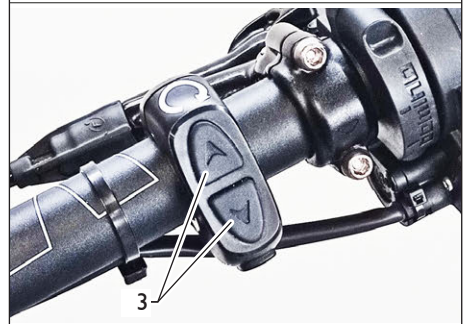
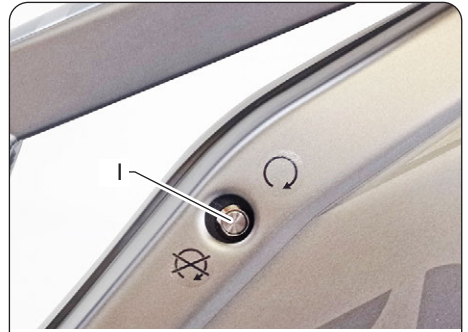
! Given the sensibility of the electronic system, we recommend **NOT** to place your feet on the pedals during ignition phase of the motobike. If that happens, switch the motobike off and back on, making sure not to place your feet on the pedals.

- Switch on the motobike by taking the key (1) to ignition position “ON” (key pressed); the display (2) switches on.
- Select the desired service programme using the keys (3).

i For information on programmes in memory, see paragraph “5.3 - Digital instrument”.

! Pay close attention to the programme set. Setting one of the programmes (1 to 9) by pressing the pedals and/or turning the accelerator (4) causes the motorbike to start immediately.

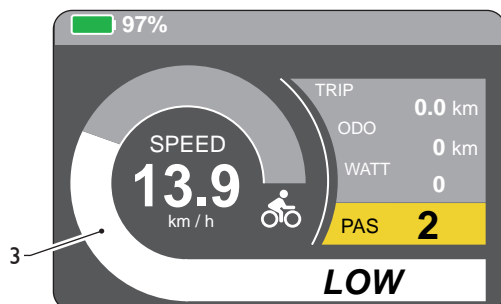
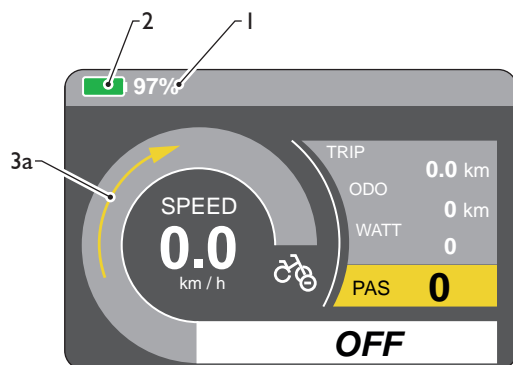
- At this point, the motobike is ready for use.
- To switch off the motobike (or in case of EMERGENCY), move the key (1) to switch off position “OFF” (key extracted).



5.3 DISPLAY

5.3.a Visualization display

- 1) **“Battery charge percentage” field**
Shows the charge (in %) of the battery pack.
- 2) **“Battery” icon**
Graphically indicates the state of charge of the battery pack. Approximate value.
- 3) **Graphic indication of Watts used**
Graphically indicates the use of watts, i.e. instantaneous consumption, while riding the motorbike. The higher the indicator rises in the direction of arrow (3a), the more Watts are consumed.



5) Indication of loaded programme

Indication of In field (5) the name of the selected programme is displayed and in field (5a) the number is displayed; there are nine programmes:

Programme "PAS 0" - OFF (Icon)

With this programme loaded, there is no pedalling assistance and therefore the bike can be used in muscle mode.

Programs 1 to 3 (Icon)

Selecting one of these programs enables pedalling assistance;

PAS 1 = ECO (minimum assistance)

PAS 2 = LOW (low assistance)

PAS 3 = NORMAL (normal assistance)

Programs 4 to 6 (Icon)

Selecting one of these programs increases the pedalling assistance with additional use of the throttle;

PAS 4 = HIGH

PAS 5 = POWER

PAS 6 = S-LOW

Programs 7 to 9 (Icon)

Selecting one of these programs enables operation of the bike only with use of the throttle;

PAS 7 = S-NORMAL



PAS 8 = S-HIGH

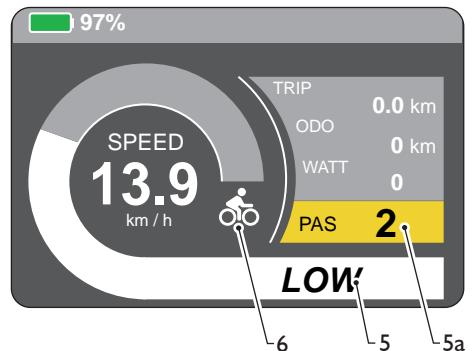
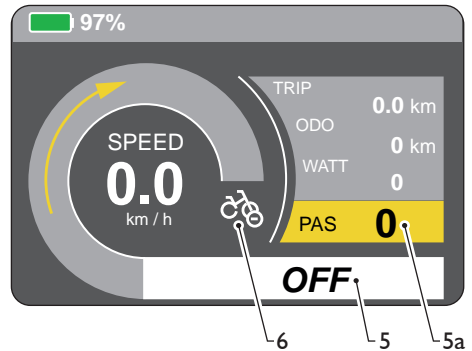
PAS 9 = S-POWER



Increasing the number of the programme increases the power delivered by the engine.



When switching from programme "PAS 0" to any other programme the icon (6) changes from "" to "". After selecting an assistance programme, if the motorbike is not used for about one minute, the control unit exits the loaded programme to return to programme "PAS 0".



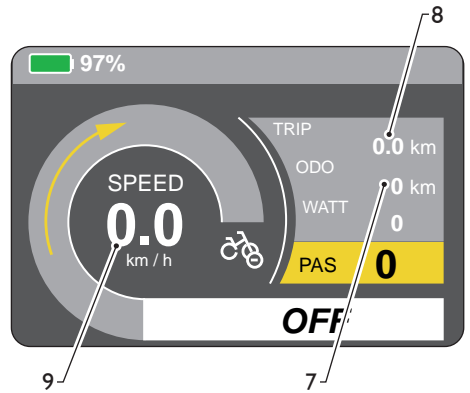
- 7) **ODO**
Indicates the number of kilometres travelled, which cannot be reset.

- 8) **TRIP**
Indicates the partial km travelled since the last reset.

- 9) **SPEED**
Indicates the instantaneous driving speed.



In case of inactivity for more than one minute, any selected program will return to "PAS 0" - OFF status.



5.3.b Function keys

1) **Programme change**

Pressing key (1) increases the programme number, pressing key (2) decreases it.

2) **Reset TRIP**

Pressing key (2) and key (3) simultaneously for a few seconds resets the trip meter (TRIP) to zero.

3) **Brightness reduction function**

Pressing and holding button (1) for about two seconds reduces the brightness of the display to a minimum.

To increase brightness, press button (1) again for a few seconds and the display will increase its brightness.



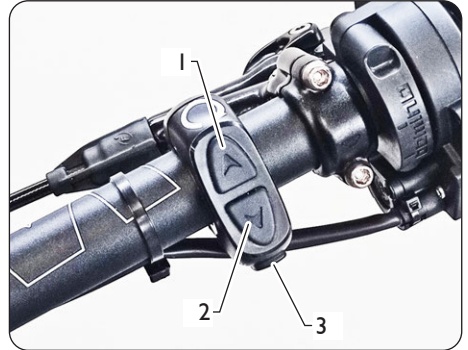
Press and hold buttons (1) and (2) simultaneously for a few seconds to enter the Menu, where it is possible to change units of measure and set the brightness of the display.


4) **Changing units of measurement**

Enter the menu and change the unit of measure from Km/h to mph and vice versa.


5) **Display brightness setting**


Enter the menu and select one of the 3 brightness levels available. The selected level is stored by default.



 The interventions described in paragraph "6.1 - CLEANING AND CARE" can be performed by the User. Every other intervention **MUST** be carried out by the Authorized Dealer or qualified personnel.

6.1 CLEANING AND CARE

 **Before performing any cleaning and/or maintenance intervention, remove the battery pack from its support and store it respecting all maintenance instructions.**

 **Insufficient care and cleaning may result in hazardous riding conditions, falls and accidents. A careful care preserves the motobike over time. Breakages or damages caused by negligence or incorrect maintenance may void the warranty.**

- Carry out the interventions described below to safeguard the safety and functionality of the motobike and of its components.

- After each use of the motobike

Check the following parts:

- As first step, carry out a generic cleaning of the motobike (especially if it is used on particularly dirty and/or muddy surfaces);
- Wheel spokes;
- Wear and concentricity of the rims;
- Possible damages and foreign bodies on the tyres;
- State of wear of the front wheel quick release device;
- Functionality and state of wear of the gears and suspensions/shock absorbers;
- Functionality and state of wear of the hydraulic brakes (check for possible leaks);
- Lubricate chains and pinions after riding on wet surfaces; after every washing with water; after prolonged sandy routes.

6.2 PERIODIC MAINTENANCE PROGRAM

- After the first month of use or after travelling from 300 to 500 Km

Check the state of wear of the following parts (by going to an Authorized Dealer):

- Chains;
- Pinions;
- Crowns teeth;
- Rims;
- Brake discs;
- Clean chain, pinion and sprockets;
- Lubricate chains and pinions. Use a lubricant suitable for chains;
- Check for correct tightening of all the screws.

Every 3.000 km replace the pinion (4) of the electric motor.

- Every six months or after travelling for 3.000 Km

Have the following parts checked:

- Hub;
- Steering group;
- Pedals;
- Shift and brakes cables (the Teflon sheaths must not enter in contact with oil or lubricants);
- Adaptor oil level.

- Every year or after travelling for 6.000 Km

- Adaptor oil replacement.

- Go to the Authorized Dealer in order to disassemble, check, clean, grease (lubricate) and/or replace whenever necessary any original SEM spare part.

- **After using the motobike under intense rain conditions or after washing with water**

Clean and grease the following parts:

- Chains;
- Pinions;
- Crowns teeth;
- Gears system;
- Brakes (excluding the surface of the discs);
- Clean the suspensions/shock absorbers rods.



Kindly keep in mind that not all the lubricants and maintenance products are suitable for the motobike.

Please inform yourselves about the application of the various products asking Your Authorized Dealer.

The use of unsuitable lubricants or maintenance products may damage or compromise correct operation of your motobike.

Do not let maintenance products or oils contaminate the pads and the surfaces of the brakes, as this would cause a drastic reduction in their performance.



Failure to inspect and repair damages of your motobike resulting from falls or accidents may result in hazardous riding conditions, falls and accidents.



Do not hesitate to return your motobike to the Authorized Dealer for the indicated inspections. This is the only way to be certain of identifying and repairing worn and damaged parts safely

6.3 MOTOBIKE CLEANING

- Proceed as follows:

- Using a delicate water jet, remove rough dirt such as soil, mud, small stones, sand, grass, etc.;
- Spray the entire motobike with a suitable detergent;
- Accurately rinse every part of the motobike with a delicate water jet; Washing with water can be integrated with the use of a sponge or a soft cloth;
- Dry the motobike using a soft cloth.




Do not point the water jet towards the display and the electrical components.


- Cleaning and lubricating the chains:

- Pour a few drops of chain detergent onto a clean lint-free cotton cloth;
- Rub the cloth on the chains;
- Make the chains move forward and rub the soaked cloth on the remaining part of the chains;
- For the chain of the pedal system: Use the original SEM fix wheel stand or a support to raise the rear wheel so that it is not in contact with the ground, then rotate forward the pedal crank very slowly in order to distribute the lubricant and make sure the whole chain has been lubricated. If no support is available ask for the help of a second person.

- For the chain of the electric traction system: lubricate the electric transmission chain. Ride your motobike for a short section at minimum speed in order to distribute the lubricant along the whole chain.
- Apply a small quantity of motobike chain lubricant to the links of the chains themselves.


 **The use of an excessive quantity of lubricant or of an inappropriate product may cause dripping onto the brake disc, dirtying it and significantly reducing the motobike braking efficiency.**

- Remove excessive lubricant from the chains with a clean, dry and lint-free cotton cloth.

 **ONLY use lubricants that are specifically indicated for motobike chains.**

- Manually clean the rims and the brake discs using a clean, dry and lint-free cotton cloth using a suitable degreaser.
- In case of doubt about specific product for the motobike maintenance, please contact the Authorized Dealer.
- Manually clean residual dirt with a clean and lint-free cotton cloth, using a suitable detergent.

- If it is desired, it is possible to spray the visible frame part of the motobike with a suitable spray wax or with a similar protective product. Once the time prescribed by the product has passed, polish the motobike with a clean and lint-free cotton cloth.

 **The presence of spray wax or other protective products on the brake discs will significantly reduce braking efficiency. Clean the brake discs using a suitable degreaser (contact the Authorized Dealer).**

 **The following components must not be treated with wax and/or protective products:**

- **Electric motor;**
- **Brake pads;**
- **Brake discs;**
- **Grips;**
- **Brake levers;**
- **Saddle;**
- **Tires;**
- **Display;**
- **Battery pack.**

6.4 PARKING YOUR MOTOBIKE



When the motobike is resting on a wall or on a fence, even the slightest contact may cause it to tip over. This may result in injuries to persons or animals and damage to property.

Only park your motobike in a position where it does not constitute an obstacle.

Keep children and animals away from the motobike when it is parked.

Do not park your motobike close to objects that are easy to damage, such as motor vehicles and similar.

- How to park the motobike correctly:
 - Position the motobike on a flat and stable surface;
 - Lower the stand;
 - Turn the handlebars in the direction in which the motobike is leaning;
 - Ensure that the motobike is stationary and stable. If it seems that the motobike may fall over, position it elsewhere and/or in another manner.

6.5 EXTRAORDINARY MAINTENANCE INTERVENTIONS


6.5.a Disassembly and reassembly of the wheel groups


- It is necessary to disassemble the wheel groups when it is needed to repair tyres or other components of the wheel.
- The front wheel disassembly can also be useful when transporting the motobike (example: in the boot of a car).


6.5.b Front wheel disassembly

With fork ÖHLINS (Mod. DAHU-R1)

- Loosen the two locking screws (1b).
- Undo and remove the pin (2b) from the fork.
- Remove the wheel from the fork, paying attention not to damage the brake disc and the calliper.
- Insert the stop supplied for transport between the brake calliper pads.


 *The brakes must never be activated after the removal of the wheel. Use the stops specifically supplied for transport and remove them from the brake calliper before reassembling the wheel.*

 *For wheel assembly, work in the opposite direction.*


 **Once the wheel has been reassembled, check that it is firmly and correctly mounted (see chapter “3.2 - Wheels and tyres check”).**



With fork FORMULA (Mod. DAHU-R2)

 *For further information on the fork, consult the FORMULA manual delivered upon purchasing the motobike.*

With fork ROCKSHOX (Mod. DAHU-R3)

 *For further information on the fork, consult the ROCKSHOX manual delivered upon purchasing the motobike..*

6.5.c Rear wheel disassembly

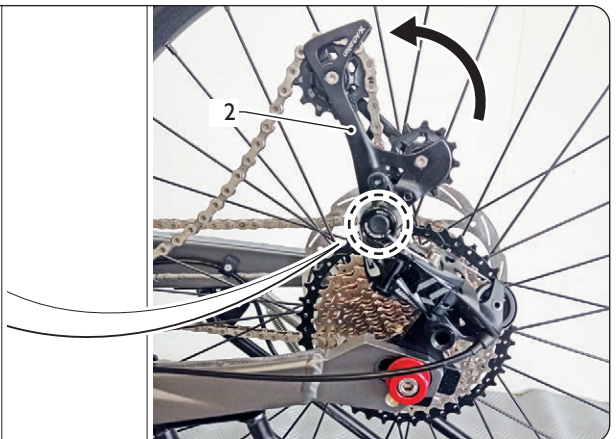
- Use the shift selection grip (1), move the chain of the pedals on the smallest pinion.
- Turn the motobike upside down and position it in a stable way.



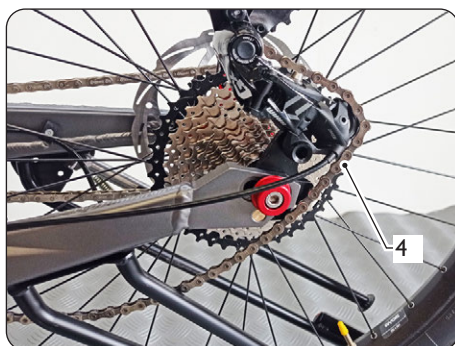
Pay the utmost care in order to avoid damaging the dashboard located on the handlebars. Use supports to keep the handlebars raised from the ground.



- Rotate the chain tensioner (2) of the forward shift and keep them in this position by pressing the locking key (3). The pedals chain loosens in this manner.



- Remove the pedals chain (4) from the pinion and position it on the swingarm.



- Use a specific tool to open the “fake mesh” and remove the transmission chain (5) of the electric motor.



- From both sides, loosen the fixing screws (6).
- With the help of two allen wrenches, simultaneously loosen the two screws located on the supports (7) of the rear wheel.
- On both sides, work on the respective screws (8) and take the rear wheel in the most possible advanced position, towards the centre of the motobike.

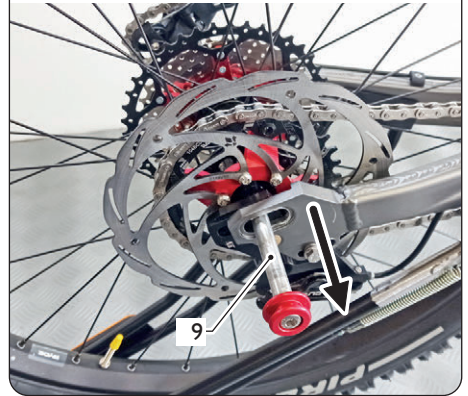


- Later, entirely undo one of the two screws, remove the corresponding support (7) and remove the pin (9) from the opposite side.
- Remove the wheel from the swingarm, taking care not to damage the brake disc itself.
- Insert the supplied transport stop between the pads of the brake calliper.

i The brakes must never be activated after the removal of the wheel. Use the stops specifically supplied for transport and remove them from the brake calliper before reassembling the wheel.

i For wheel assembly, work in the opposite direction.

! Once the wheel has been reassembled, check that it is firmly and correctly mounted.




6.5.d Brake pads wear check

- If you experience a non-effective braking and a loud and/or scrappy metal noise is heard when braking, it is necessary to have the state of wear of the pads checked by Your Authorized Dealer.

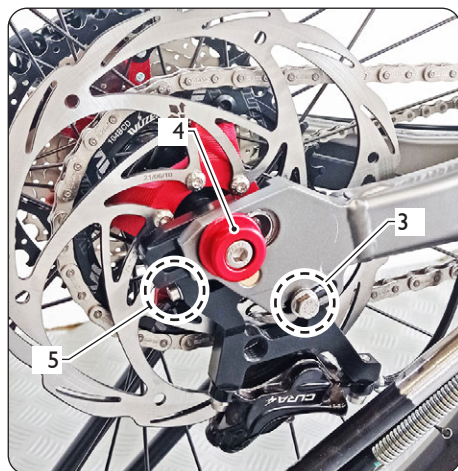


6.5.e Chains tensioning

 Check the chain (1) tension by pressing it and check that the chain itself slightly touches the skid (2) by approximately 2 mm.

In case it is necessary to tension the chains:

- Loosen the fixing screw (3) of the caliper support;
- With the help of two allen wrenches, simultaneously loosen the two screws located on the supports (4) of the rear wheel;
- Work on the screws (5) to adjust tension: undo the screws (5) to increase tension and screw them to decrease it;
- Tighten the screw (3) and the screws (4).



6.5.f Electric motor pinion replacement

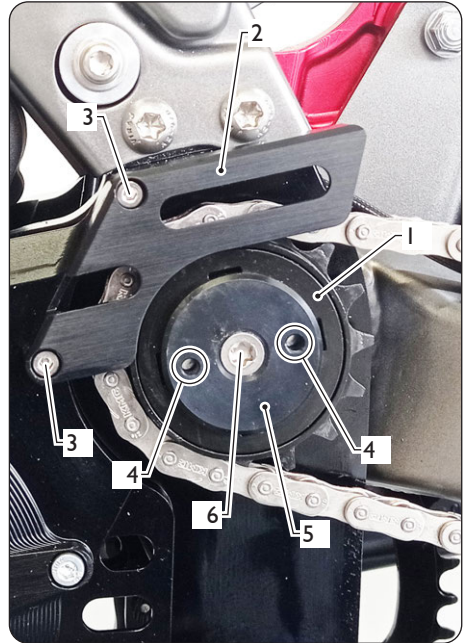
! Every 3.000 km, replace the pinion of the electric motor.

- For the removal of the pinion (1), remove the protection casing (2) by undoing the two screws (3).
- Using a specific compass wrench, work on the two holes (4) and lock the washer (5).

i If no compass wrench is available please contact an Authorized Dealer.

- Unscrew the central fixing screw (6).
- Remove the washer (5) and the pinion (1).

i Once the pinion has been replaced, reassemble it by working in the opposite direction.



6.5.g Adaptor oil check and/or replacement



Use oil
SAE 5W-40
Quantity = 80 ml

Level check

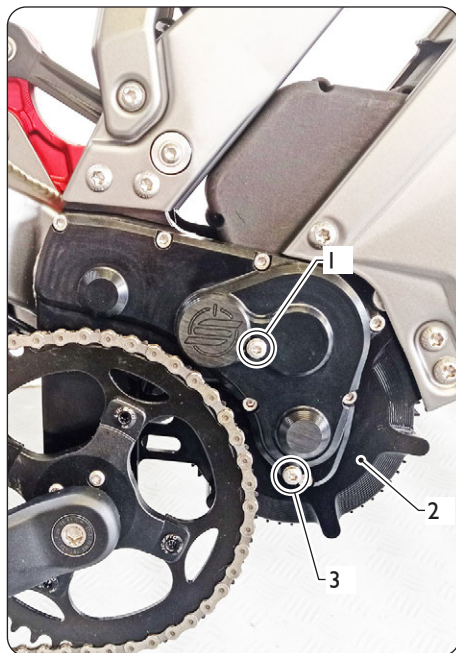
- Undo the screw (1) and check that oil lightly touches the lower edge of the hole, restore its level if necessary by adding oil through the screw hole (1).
- Fasten the screw (1).

Oil replacement

- Once a year (or every 6.000 km), it is necessary to replace the adaptor oil (2) of the electric motor.
- The level screw (1) and drain screw (3) are located on the adaptor.
- To drain the oil to be replaced, remove the level screw (1) and drain screw (3) and make waste oil flow out completely.
- Fasten the drain screw (3).
- Fill the adaptor with new oil through the hole of the level screw (1).
- Fasten the level screw (1).




Waste oil must be considered as special waste.
Dispose of it according to the local standards in force.
It is prohibited to disperse it in the environment.




6.6 FLAT TYRE


- In case a tyre runs flat and, after inflating it, deflates again, it may be pierced or damaged.
- To replace the tyre, please refer to the Authorized Dealer or to a tyre dealer.

 **A wrong repair may result in hazardous conditions while riding. Only carry out this repair if you are able to and if the necessary tools are at your disposal**

6.7 OTHER INTERVENTIONS

- If the User needs to request the battery only, as a spare part, the code to notify will be YT52KG2500-21A SP220627, while if a new battery charger is requested, the code to notify will be YT-M600.

 **The user may not use any other type of battery because the control unit is programmed to recognize only the above battery model.**

 **SEM S.r.l. declines any responsibility in case of accidents caused by the User for not observing these requirements.**

- For all the maintenance interventions not described in this section, refer to the Authorized Dealer.

6.8 PROLONGED STORAGE

- It is advised to store the motobike in environments with an ambient temperature included between 0° C and 40° C. **High temperature may damage the battery pack.**
- In case of long inactivity:
 - Disconnect the battery pack and charge it; charge it at least every 2 months;
 - Check the tyres pressure (1 bar) and inflate them at least every 4 months.

6.8.a Storage (battery pack)



Before a prolonged period of inactivity, completely charge the battery pack. The complete discharge may damage the battery pack.

- Make sure that the battery pack is kept clean at all times.
Clean it thoroughly using a soft, dry cloth.
- For maximum battery pack duration, treat it with care and, above all, respect the following storage conditions:
 - Temperature 16° ÷ 25° C
 - Humidity 0 ÷ 80 %
 - Charge level 70 %

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7.1 TROUBLESHOOTING

7.1.a Inconveniences and possible solution

- In case of problems during use of the motobike, first check if the inconvenience is included between those described in the following table. This may allow to find the correct solution without the need of going to the Authorized Dealer.
- If the problem or the relative solution is not amongst those described, please consult the Authorized Dealer before reusing the motobike.

Problem	Possible cause	Possible solution
The display or the electric motor cannot be activated.	<i>Ignition key set to switch off position "OFF" (key extracted).</i>	Move the ignition key to ignition position "ON" (key pressed).
	<i>Malfunction of the battery pack although it is charged.</i>	Try to disconnect and reconnect the battery pack, taking care its grafting occurs correctly. If the problem persists, the battery pack may be defective; contact the Authorized Dealer.
	<i>Battery pack overheated.</i>	Wait for the battery pack to cool down.
	<i>Battery pack not connected correctly.</i>	Remove and reposition the battery pack, taking care its grafting occurs correctly.
	<i>Battery pack out of charge.</i>	Charge the battery pack using the specific battery charger.
	<i>Damaged electrical contacts on the battery pack and/or on the connector.</i>	Check that all the contacts are clean. If the problem persists even with clean contacts, please contact the Authorized Dealer.
The display does not supply data despite the motobike is moving.	<i>Damaged display.</i>	Contact the Authorized Dealer.

There is no "I" in **TEAM Sem**

Idea & project manager: Giorgio

Administration manager: Lori

Technical engineer : Ema

CNC specialized operator: Renato

Production manager: Hassan

Production assistant: Olti

Sales & customer care: Elena

Graphic support: Dario

Good mood supervisor: Brina

Giorgio Lori Ema
Renato Hassan

Olti Elena Dario
BRINA



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