KRYOS

mbm®

USER MANUAL

INDEX

1. PREFACE

1.1 Generalities

This manual is an integral and essential part of the KRYOS pedal-assisted bicycle.
Before using the bicycle, users must read, understand, and strictly follow the following instructions. The manufacturer is not liable for damage to persons and/or property, or to the pedal-assisted bicycle, if it is used incorrectly with respect to the indicated instructions. In light of continuous technological development, the manufacturer reserves the right to modify components, including the frame, without prior notice and without automatically updating this manual.

1.2 Assistance

For any problems or clarifications, please contact your authorized dealer, who has competent and specialized personnel as well as specific equipment and original spare parts.

1.3 Graphic form of safety warnings

To identify safety messages, the following graphic warning symbols are used in this manual.
These symbols are intended to draw the reader's/user's attention to the correct and safe use of the pedal-assisted bicycle.

ATTENTION

It highlights behavioral rules to follow to avoid damage to the pedal-assisted bicycle and/or the emergence of dangerous situations.

DANGER

It highlights the presence of dangers that cause residual risks to which the user must pay attention in order to avoid accidents or material damage.

2. SAFETY WARNINGS

ATTENTION

USING THE PEDAL-ASSISTED BICYCLE
Every user must first read the instruction manual, especially the safety section.

ATTENTION

RISKS ASSOCIATED WITH USING A PEDAL-ASSISTED BICYCLE
- **Despite the use of safety devices, for safe use of the pedal-assisted bicycle, you must take note of all the accident prevention instructions in this manual.**
- **Always remain focused while riding and DO NOT underestimate the residual risks associated with using the pedal-assisted bicycle.**

2.1 General safety rules

Even if you are already familiar with pedal-assist bicycles, it is necessary to follow the instructions provided here, in addition to the general precautions to be observed when riding a motorized vehicle. Specifically:

• Become fully familiar with your pedal-assist bicycle;

• Read the manual carefully to understand its operation, safety features, and all the precautions necessary for safe use. All of this is to ensure safe use;

• Maintain your pedal-assist bicycle with care and in perfect working order;

• For any problems or questions, please contact your authorized dealer, who has competent and specialized staff, specific equipment, and original spare parts.

2.2 Responsabilities

Failure to follow the operating instructions and safety regulations contained in this manual releases the manufacturer from any liability. If the pedal-assisted bicycle is maintained in a manner that does not comply with the instructions provided, with non-original spare parts, or in any way that compromises its integrity or modifies its characteristics, the manufacturer will be held harmless from any liability related to the safety of persons or the malfunction of the pedal-assisted bicycle.

For any information not included or not deducible from this manual, we recommend consulting your authorized dealer directly.

ATTENTION

UNAUTHORIZED MODIFICATIONS
If you hear any unusual noises or feel anything strange, stop the pedal-assist bicycle immediately. Then inspect it and, if necessary, contact an authorized dealer.

2.3 Users warnings

1. Only experienced adults and children may use this pedal-assisted bicycle;
2. Do not consume alcohol or drugs before riding this pedal-assisted bicycle;
3. These pedal-assisted bicycle models are designed and built for outdoor use, on private and public roads and spaces;
4. Do not exceed the performance of this pedal-assisted bicycle for which it was designed;
5. Never ride this pedal-assisted bicycle with any parts removed;
6. Avoid uneven surfaces and obstacles;
7. Ride with both hands on the handlebars;
8. Replace any worn and/or damaged parts and check that the guards are functioning properly before use.

2.4 Maintenance warnings

1. All maintenance operations must be performed with the battery disconnected;
2. During each maintenance phase, operators must be equipped with the necessary safety gear;
3. The tools used for maintenance must be suitable and of good quality;
4. Do not use gasoline or flammable solvents as detergents, but always use non-flammable and non-toxic solvents;
5. Minimize the use of compressed air for cleaning (max 2 bar) and wear safety glasses with side shields;
6. Never use open flames as a means of illumination when carrying out inspections or maintenance;
7. After each maintenance or adjustment, make sure that no tools or foreign objects remain between the moving parts of the pedal-assisted bicycle.

ATTENTION

ORIGINAL SPARE PARTS
Use only original spare parts supplied by MBM srl. The manufacturer declines all liability for damage or loss of functionality resulting from the use of non-original accessories and parts.

2.5 Other provisions

The first thing to do when you first start using your bike is to check the presence and integrity of the guards and the functioning of the safety devices. If you find any defects, do not use the pedal-assisted bicycle!

DANGER

GUARDS
Therefore, it is strictly forbidden to modify or remove guards, controls, labels, and information plates..

3. UNPACKING AND SETTING UP

The pedal-assisted bicycle is delivered fully assembled and in working order.
Before each use, the rider must ensure the safety of the pedal-assisted bicycle.

DANGER

It is strictly forbidden to use the bicycle without having correctly secured all the parts and used the adjustments to assume a comfortable and safe riding position.

3.1 Saddle adjustment

Adjusting the saddle height is essential for proper use of a pedal-assist bicycle. Improper adjustment can cause structural damage to the frame.

Adjust the saddle height by operating the quick-release mechanism (Ref. A – Fig. 1).
Make sure the mechanism is tightened before testing the seat and using the bike. Do not raise the saddle beyond the limit mark on the seat post (Ref. B – Fig. 1).

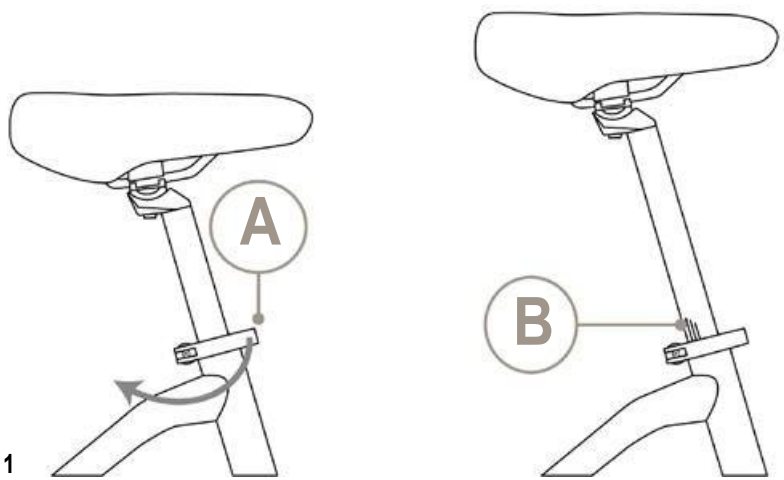


FIG. 1

DANGER

IMPORTANT WARNING:
For your safety, the seat post reference mark (B) should never be outside the tube into which the seat post is inserted.

ATTENTION

ASSEMBLY
If you do not have the appropriate adjustment equipment or do not have the skills, contact your authorized dealer.

3.2 Handlebar adjustment

For a comfortable riding position that doesn't cause neck or back pain, we recommend adjusting the handlebar stem height and handlebar bend rotation.

To adjust the handlebar stem height, remove the rubber protective cap (Ref. C – Fig. 2) and loosen the expander screw underneath, without removing it completely, using the appropriate Allen key. Then, proceed with adjusting the stem height, remembering never to exceed the minimum insertion limit (Ref. D – Fig. 2).

Once you've reached the desired height, tighten the expander screw.

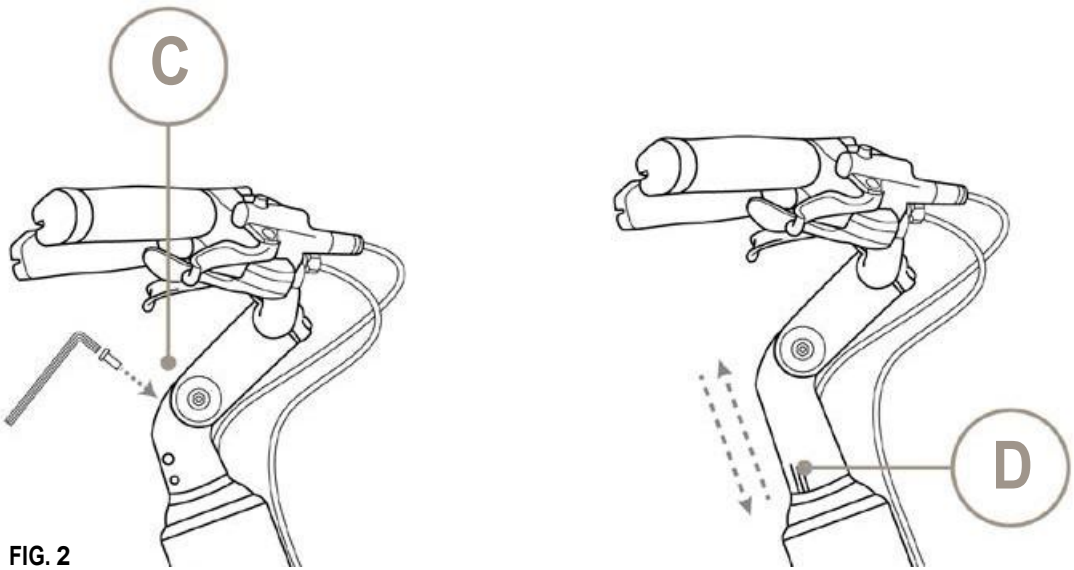


FIG. 2

DANGER

WARNING:
check that the limit switch signal is not visible.

ATTENTION

ASSEMBLY
If you do not have the appropriate adjustment equipment or do not have the skills, contact your authorized dealer.

For perfect ergonomics, rotate the handlebars by loosening the two fixing screws (Ref. E – Fig. 3). Make sure you have tightened the screws correctly before using the pedal-assisted bicycle.

ATTENTION

ASSEMBLY
If you do not have the appropriate adjustment equipment or do not have the skills, contact your authorized dealer.

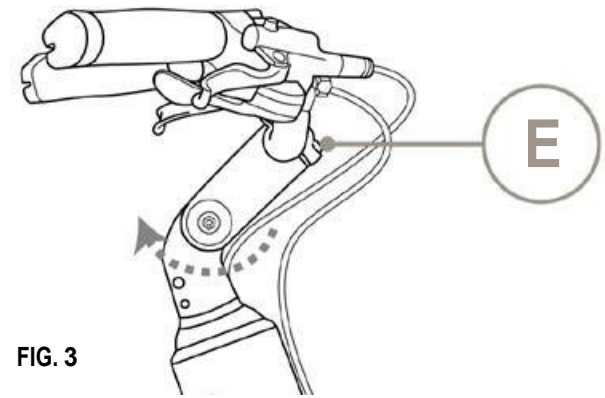


FIG. 3

3.3 Brakes adjustment

Brake levers (Ref. F – Fig. 4) are located on the handlebars near the grips (Ref. G – Fig. 4). These systems activate the braking system. The braking action is proportional to the force applied to the levers.
The right brake lever operates the rear brake, while the left brake lever operates the front brake.

To apply maximum braking power to the lever, the following adjustments can be made:
- Rotate the brake lever using the tightening screw (Ref. H – Figure 4.1) until the hand position is comfortable; Make sure the screw is tightened correctly before using the pedal-assisted bicycle.

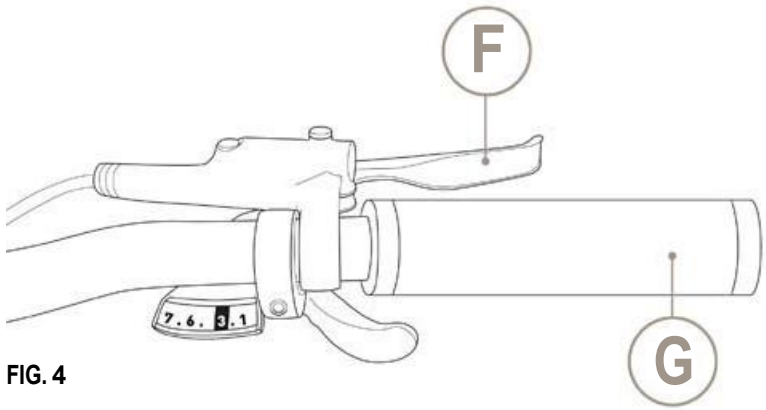


FIG. 4

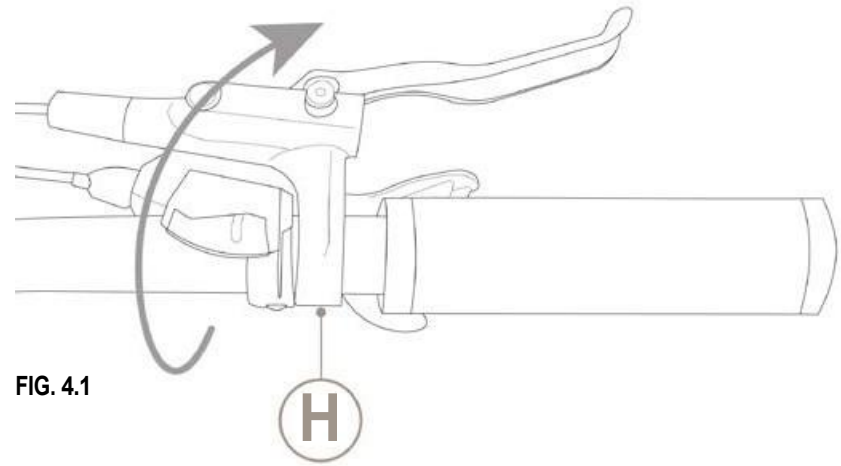


FIG. 4.1

Excessive force on the brake lever causes it to come into contact with the grip, limiting the braking action and possibly causing your fingers to be crushed.

It's important to visually inspect the braking system before using the pedal-assisted bicycle; check for damaged cables or lubricants on the braking surfaces of the brake discs. Check the brakes by braking at low speed on level, unobstructed terrain, first with the rear brake and then with the front brake.

ATTENTION

If any defects are found during the preliminary checks, and even one test fails,

DO NOT RIDE THE PEDAL-ASSISTED BICYCLE.
Immediately take all necessary steps to perform a proper repair and,
if necessary, contact an authorized dealer or an authorized workshop

3.4 Pedals assembly

Right pedal: it is identified by the letter “R” marked on its pin. To assemble the pedal, screw it in by turning the pin clockwise (Fig. 5).

Left pedal: it is identified by the letter “L” marked on its pin. To assemble the pedal, screw it in by turning the pin counterclockwise (Fig. 5).

ATTENTION

ASSEMBLY
To tighten the pedals correctly, you need to use a 15mm wrench.

ATTENTION

ASSEMBLY
If you do not have the appropriate adjustment equipment or do not have the skills, contact your authorized dealer.

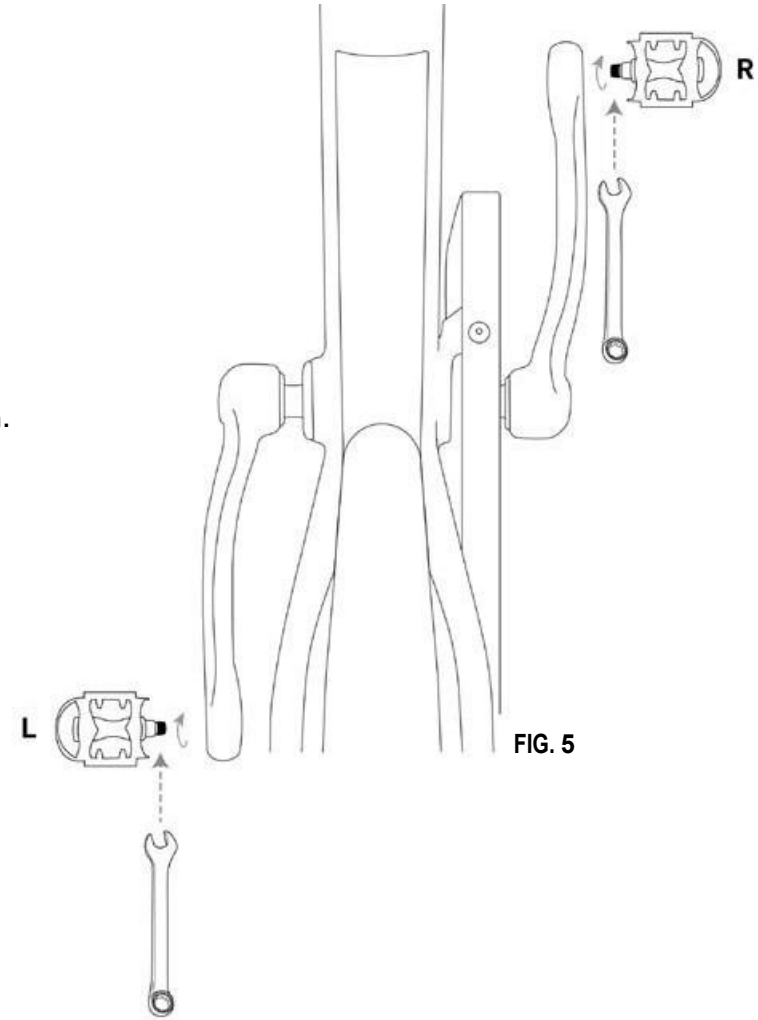


FIG. 5

3.5 First use of the bycicle

Before using the battery for the first time, it is in a dormant state (SLEEPING MODE) to preserve its lifespan. To start it, press and hold the display button for 3 seconds.
At the end of this procedure, the battery status will be active, even when the bicycle's power system is turned off.
Before riding for the first time, charge the battery for at least 8 hours and no more than 24 hours, using the supplied battery charger.
To remove the battery, recharge it, and follow the correct maintenance and storage procedures, proceed as described in Chapter 6.

3.6 Wheels check

Check tire pressure. Check treadwear. There should be no cuts, cracks, foreign objects, abnormal bulges, exposed plies, or other damage.

ATTENTION

Do not inflate the tires beyond the permissible value reported by the manufacturer on the side surface of the same

3.7 Front suspension adjustment

A pedal-assisted bicycle is equipped with a front suspension system that absorbs shock caused by bumps in the road while riding.

Depending on the route and load on the bicycle, the stiffness can be adjusted by rotating the preload knob (Ref. I - Figure 6). Rotate clockwise to stiffen the fork and vice versa.

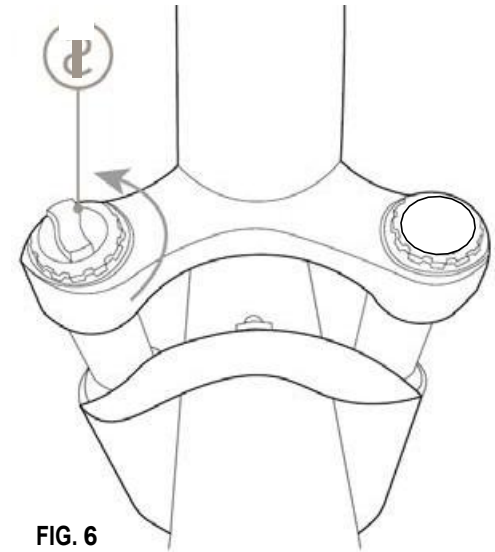


FIG. 6

4. DESCRIPTION OF THE BYCICLE

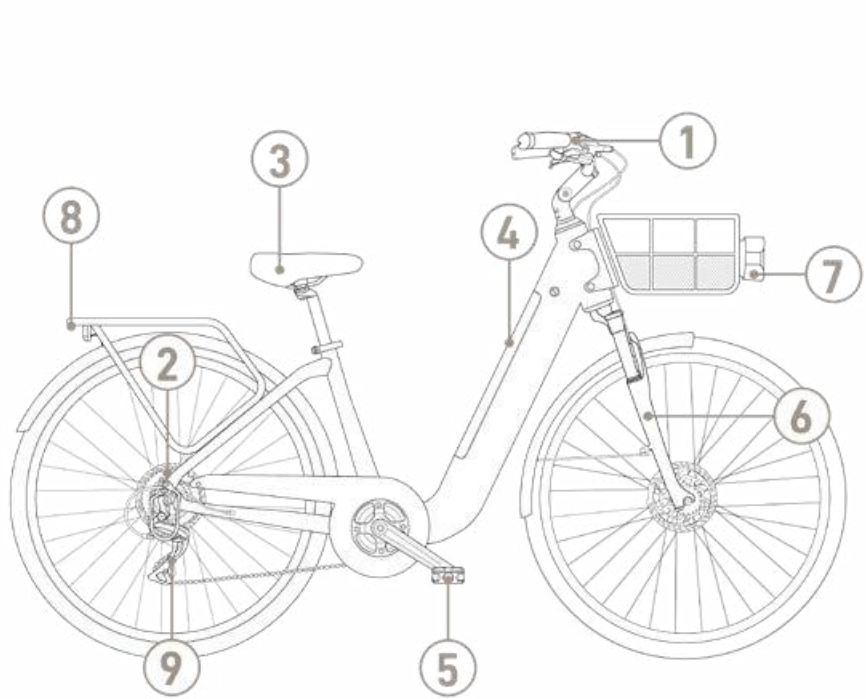
A pedal-assisted bicycle is designed and built for outdoor use, on private or public roads and spaces.
In particular, the components and type of pedal-assisted bicycle allow it to be ridden on asphalt or similar surfaces without any significant bumps.

DANGER

INCORRECT AND UNAUTHORIZED USE
The bicycle was designed and manufactured for the specified use; any other use or failure to comply with the technical parameters established by the manufacturer may constitute a dangerous condition for users.

A pedal-assisted bicycle is equipped with a rechargeable battery and an electric motor. The motor only engages when pedaling and gradually stops as the vehicle approaches 25 km/h, before coming to a complete stop at that speed.
The assistance system is managed via a dedicated display located on the left side of the handlebars. A gear adjustment control is located on the right side of the handlebars.

4.1 Technical data



1. IHANDLEBAR AND CONTROLS
2. MOTOR
3. SADDLE
4. BATTERY
5. PEDALS
6. SUSPENSION FORK
7. FRONT LIGHT
8. REAR LIGHT
9. GEAR

CODE	E267
FRAME	HYDROFORMED ALUMINUM
FORK	ALUMINUM SHOCK ABSORBER
CRANKSET	46 TEETH
GEAR	SHIMANO ACERA
GEAR COMMAND	SHIMANO M315 7 SPEED
BRAKES	SHIMANO MT501 HYDRAULIC
DISKS	SHIMANO RT26 180 F/160 R
TIRES	27.5x2.4 BLACK/BROWN WITH REFLEX BAND
SADDLE	BASSANO VOLARE SADDLE ICON PRO 3 ZONE
PEDALS	NON-SLIP POLYMERIC MATERIAL
LIGHTS	FRONT WITH HORN - REAR WITH STOP LIGHT AND INDICATORS
MOTOR	ETROTEK REAR HUB 48V, 250W, 50NM
BATTERY	ANT POWER 48V, 15AH, 720WH
MAX. ASSISTED SPEED	25 KM/H
DISPLAY	COLOR LCD WITH NFC CARD FOR SWITCHING ON
POWER LEVELS	5
WEIGHT	31 KG

4.2 Speed change

The pedal-assisted bicycle has an 8-speed gearbox integrated into the rear wheel hub. Gears are selected by pressing the levers located near the right handlebar grip. The indicator (Ref. L - Fig. 7) allows you to view the selected gear.

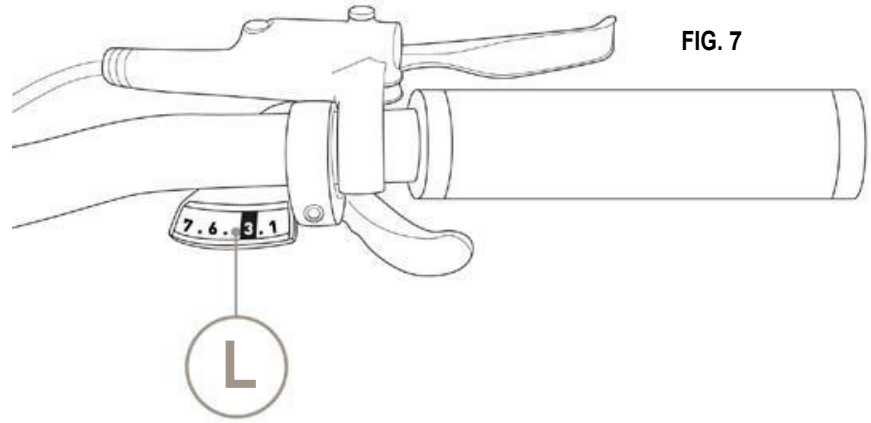


FIG. 7

4.3 Front and rear light

To ensure visibility both during the day and at night, two lights are installed, one front (Fig. 8) and one rear (Fig. 9), both integrated with the bicycle's electrical system.

Front light:

When the bike is turned on, the front light automatically provides daytime light. To turn the night light on/off, press and hold the “+” button on the display for 2 seconds.

Rear light:

To turn the rear light on/off, press and hold the “+” button on the display for 2 seconds. The rear light is equipped with a brake light that activates automatically when braking.

The directional lights can also be activated from the display by pressing the buttons. ⇦ ⇨ .

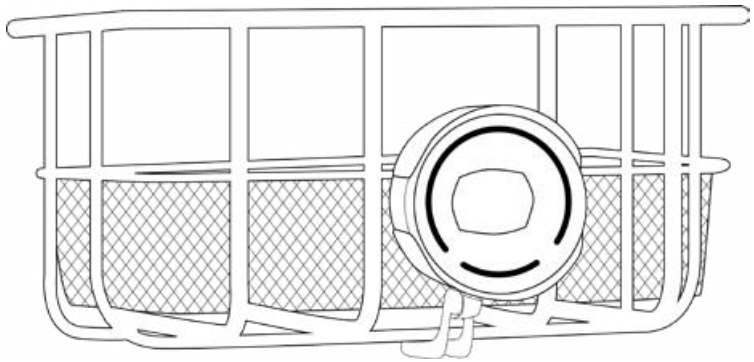


FIG. 8

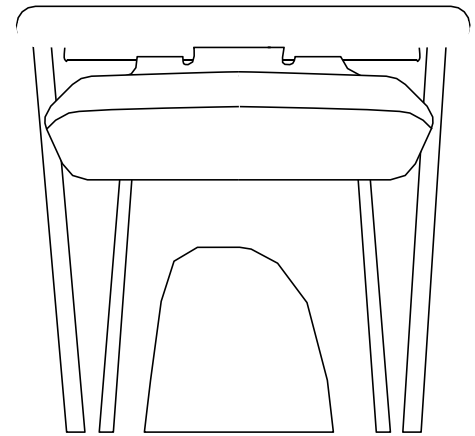


FIG. 9

5. DISPLAY

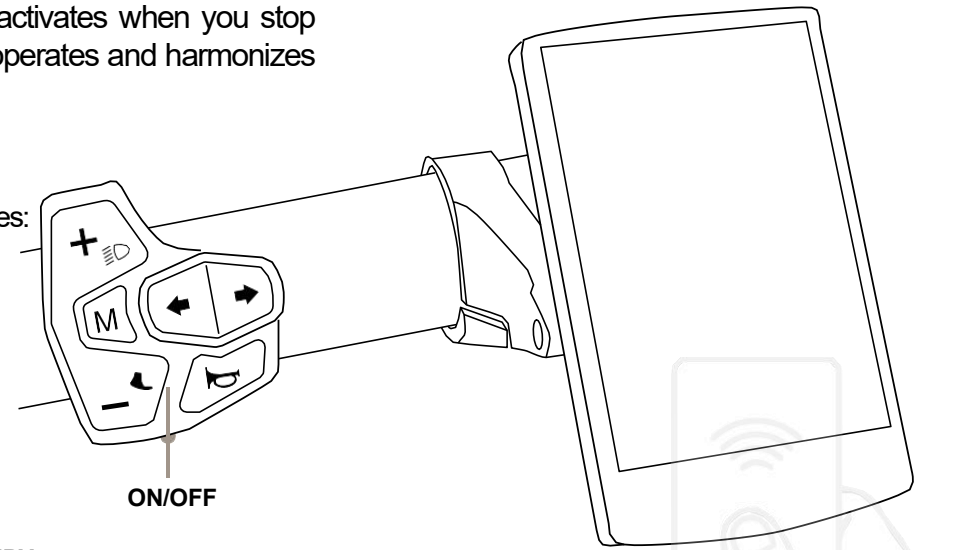
5.1 Features of the Etrotek power supply system

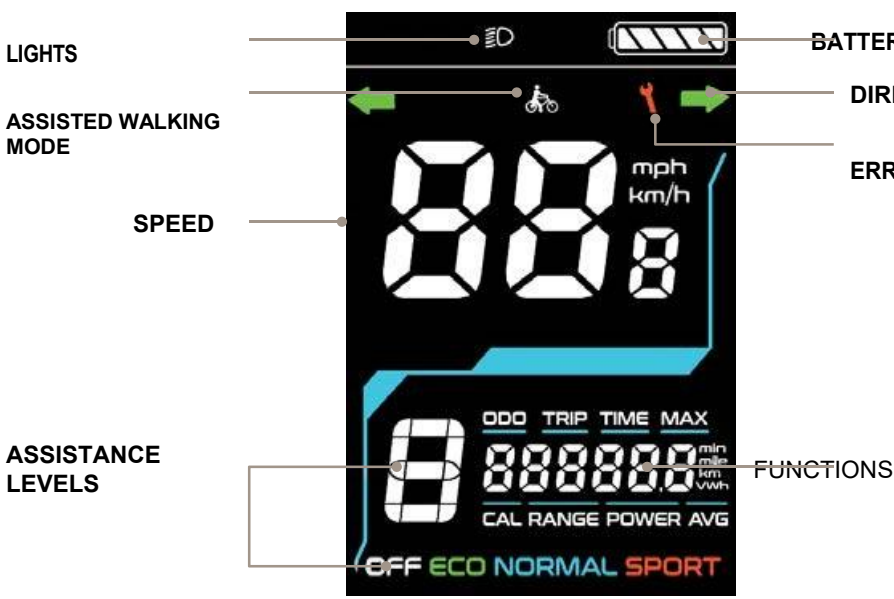
This pedal-assisted bicycle is equipped with an ETROTEK propulsion system. To start it, make sure the battery is sufficiently charged. Once a speed of 25 km/h is reached, the propulsion system automatically disengages. The system reengages when you start pedaling again and the speed is below 25 km/h. The motor deactivates when you stop pedaling. It restarts when you start pedaling again. The motor cooperates and harmonizes with the cyclist's effort.

5.2 Turning the Etrotek system on/off

The display, which allows you to manage the pedal assistance system, features:
A control located next to the left handlebar grip;
A pair of NFC cards

POWER ON: Press and hold the button for about 2 seconds.
Hold the NFC card near the bottom of the display screen.
POWER OFF: Press and hold the button for about 2 seconds.





ATTENTION **Using the display while driving can distract the cyclist and cause accidents. Always follow traffic regulations.**

5.3 Commands description

To navigate within the software there are 7 buttons that can be used with a short press, or with a press longer than 2 seconds.

BUTTON	SHORT PRESS (< 1 sec)	LONG PRESS (> 2 sec)
⏻		Allows you to turn the display on or off.
+	Allows you to increase the level of assistance; move between menu items.	Allows you to turn the e-bike lights on/off.
-	Allows you to decrease the assistance level; allows you to move between menu items.	Allows you to activate the Walk Assist mode (WALK).
M	Allows you to move between screens and confirm changes to settings.	Allows you to access the settings menu and return to the Home screen.
⇦ ⇨	They allow you to turn the right and left directional lights on or off.	/
	Allows the horn to be played.	Allows the horn to be played.

5.4 Screens description

After turning on the bike, the first Trip screen in the Home section appears. The Home section consists of 6 screens.
To scroll through the screens, press the M button.

From any Home screen, you can:
•Adjust the assistance level by pressing the + and - buttons;
•Enter walk assistance mode by holding down the - button;
•Adjust the e-bike lights by holding down the + button for 2 seconds;
•Use the horn and directional lights.

GENERAL COMPOSITION OF SCREENS
The Home section screens differ in how they display information. However, the following information can always be viewed on all Home screens:
•Battery charge status;
•Adjust the e-bike lights;
•Assistance level;
•Current e-bike speed (in km/h);

SCREEN 1 – DISTANCE

In addition to the information listed above, this screen allows you to view the distance traveled (in kilometers) since the last reset.

SCREEN 2 – TOTAL DISTANCE

This screen displays the total distance (in kilometers) traveled by the bicycle. This value cannot be reset.

SCREEN 3 – TRAVEL TIME

This screen allows you to view the travel time expressed in hours and minutes.

SCREEN 4 – POWER

On this screen you can view the power supplied by the engine expressed in Watts (W).

SCREEN 5 – MEDIUM SPEED

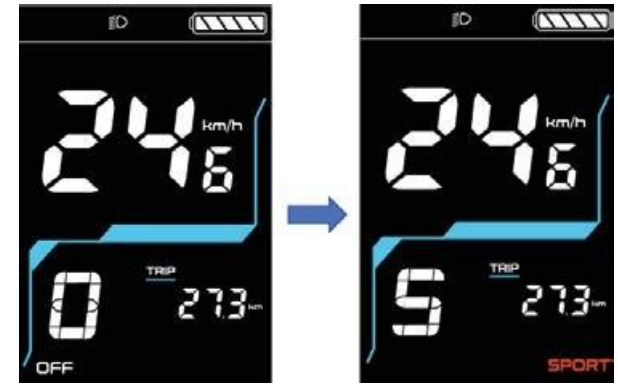
This screen allows you to view the average speed expressed in kilometres (km/h).

SCREEN 6 – MAX. SPEED

On the last screen you can view the maximum speed reached during the journey expressed in kilometres per hour (km/h).

5.5 Assistance levels

From any Home screen, you can change the assistance level by pressing the + button to increase it and the - button to decrease it. Assistance levels can be selected from 0 (no assistance) to 5 (maximum assistance).



5.6 Walking assisted mode

The system features a walk-assist function that allows the motor to be activated up to a maximum speed of 6 km/h.
To activate the walk-assist function, press and hold the - button.
The motor will activate in walk-assist mode, and the corresponding icon will appear on the display.
To deactivate walk-assist mode, release the - button.

The motor will deactivate in the following cases:
•Release the - button;
•Speed exceeding 6 km/h;
•E-bike wheel lockup.

5.7 Setting

With the bicycle stationary, you can access the Settings menu by pressing the M button for 2 seconds.

RESET TRIP

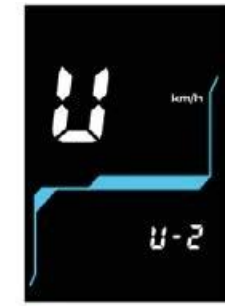
The Reset Trip (TC) option allows you to reset the trip data (but not the total distance traveled by the e-bike). Press the + or - buttons to select Y (yes) or N (no).
To save the desired setting, press the M button. To return to the Home screen, hold down the M button for 2 seconds.

DISPLAY LIGHTS

This setting allows you to adjust the display brightness. Selectable values range from 1 to 3. The default brightness is set to 3.
To save the desired setting, press the M button. To return to the Home screen, hold down the M button for 2 seconds.

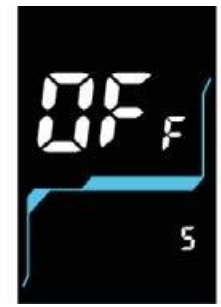
UNIT OF MEASURE

This setting allows you to choose the unit of measurement between kilometers per hour (km/h) and miles (mph). A value of 1 sets the unit of measurement to miles, while a value of 2 sets the unit of measurement to kilometers per hour.
To save the desired setting, press the M button. To return to the Home screen, hold down the M button for 2 seconds.



AUTO OFF

When not in use, the bike automatically turns off after 5 minutes. This setting allows you to change the time. To prevent the bike from automatically turning off, select OFF. To set it to automatically turn off after 30 minutes, select 30.
To save the desired setting, press the M button. To return to the Home screen, hold down the M button for 2 seconds.



5.8 Error code

The system detects an error, and the error code and corresponding icon are displayed on the display screen. The following table lists possible anomalies and their corresponding error codes:

ERROR	PROBLEM
10	Overvoltage protection
11	Undervoltage protection
12	Overload protection
13	Control unit/engine overheating protection
14	Controller voltage fault
15	PAS level output anomaly
16	MCU (control unit) self-diagnosis error
17	Transmission system fault
18	Pedal sensor failure
25	Brake lever malfunction
30	Communication error between display and controller

5.9 Technical assistance

In case of error codes, problems not listed above or for any type of system assistance (battery, engine and control unit), we recommend contacting the authorized distributor directly.

ATTENTION

The manufacturer declines all responsibility for damage to persons or property, as well as for malfunction of the unit in the event of:
- **Improper use of the unit.**
- **Incorrect use or inexperience, carelessness, or negligence with respect to the indications and instructions provided in this manual.**
- **Use of non-original spare parts.**

6. BATTERY

The bicycle provides pedaling assistance via an electric motor powered by the battery located in the down tube of the frame (Ref. M - Fig. 10).
The battery charge status can be viewed directly on the display.

6.1 Removing/Installing the battery

1. To remove the battery, make sure the assist system is turned off and proceed as follows:
2. Insert the battery lock/unlock key into the lock on the upper left side of the frame, near the handlebars, and turn the key clockwise;
3. Release and lift the battery while holding down the locking lever (Ref. N - Fig. 10);
4. Remove the battery completely, taking care not to hit the frame.

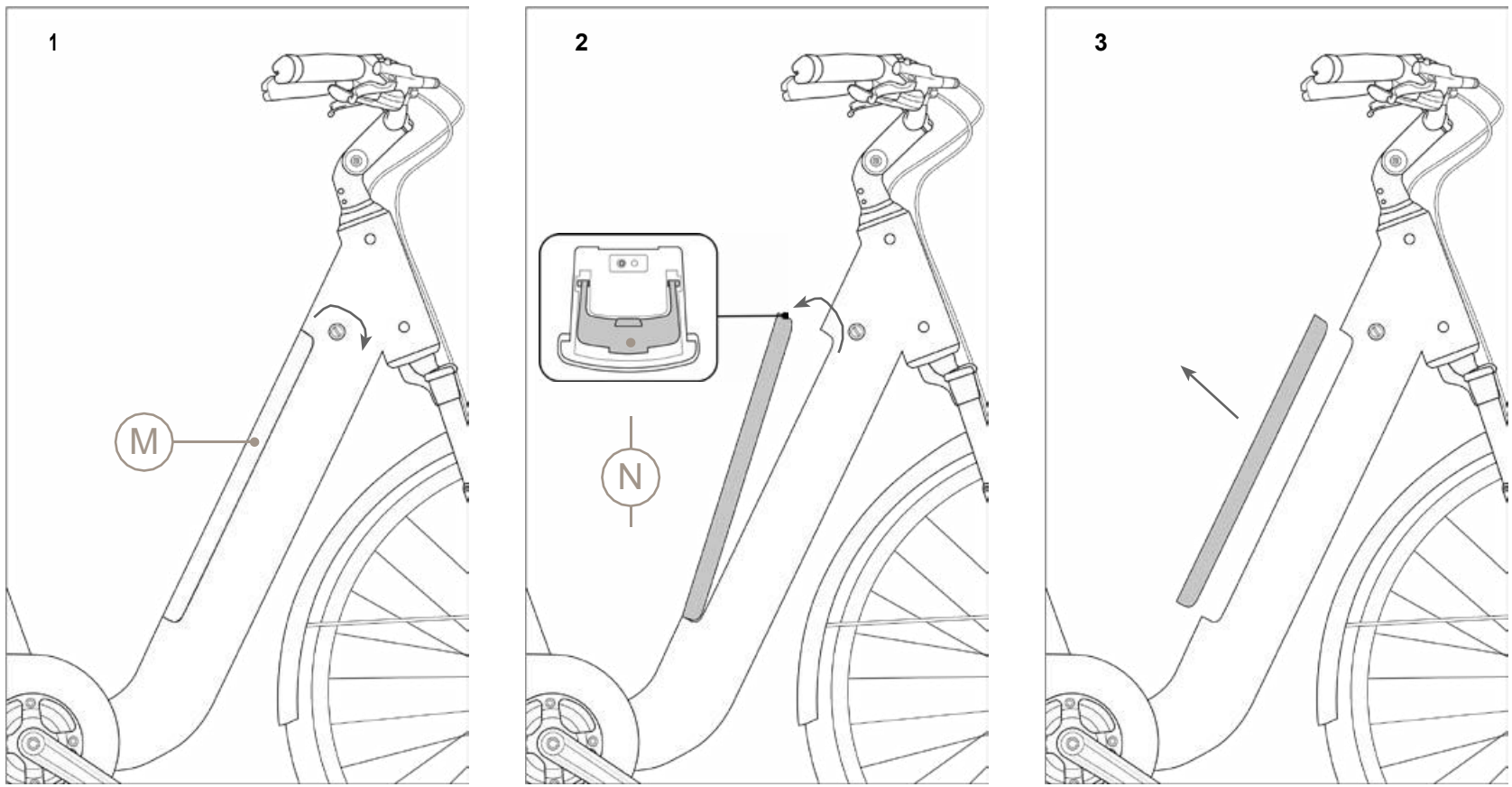


FIG. 10

1. To install the battery, proceed as follows (this procedure must be performed without the unlocking key; remove it if inserted):
2. Align the battery, first matching the electrical connector (Fig. 11-1);
3. Carefully insert the battery into the frame until you hear the lock click into place. The battery is now automatically locked.

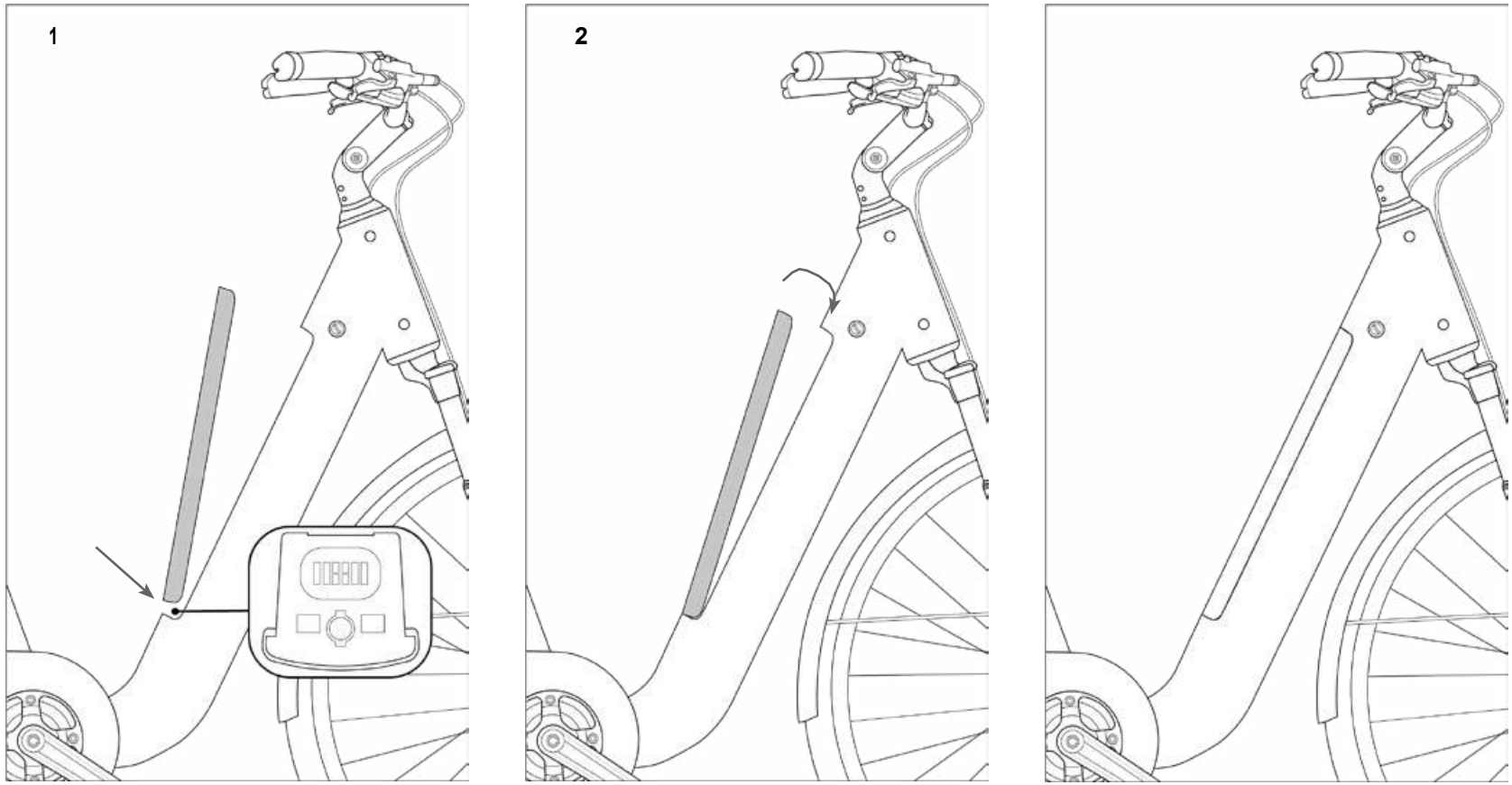


FIG. 11

6.2 Battery charging

Charging the battery of the pedal-assisted bicycle can be done in tw
ways.

Charging cable with assembled battery:

1. Activate the pedal-assist bicycle's power system using the button on the display;
2. Lift the rubber cap on the battery charging port, located on the left side of the frame (FIG. 12);
3. Connect the supplied battery charger to the appropriate connector;
4. Connect the battery charger to a power outlet (230 V / 50 Hz) and charge for the required time. The average charging time varies from 4 to 6 hours;
5. Once charging is complete, first disconnect the plug from the power supply and then the connector from the battery.

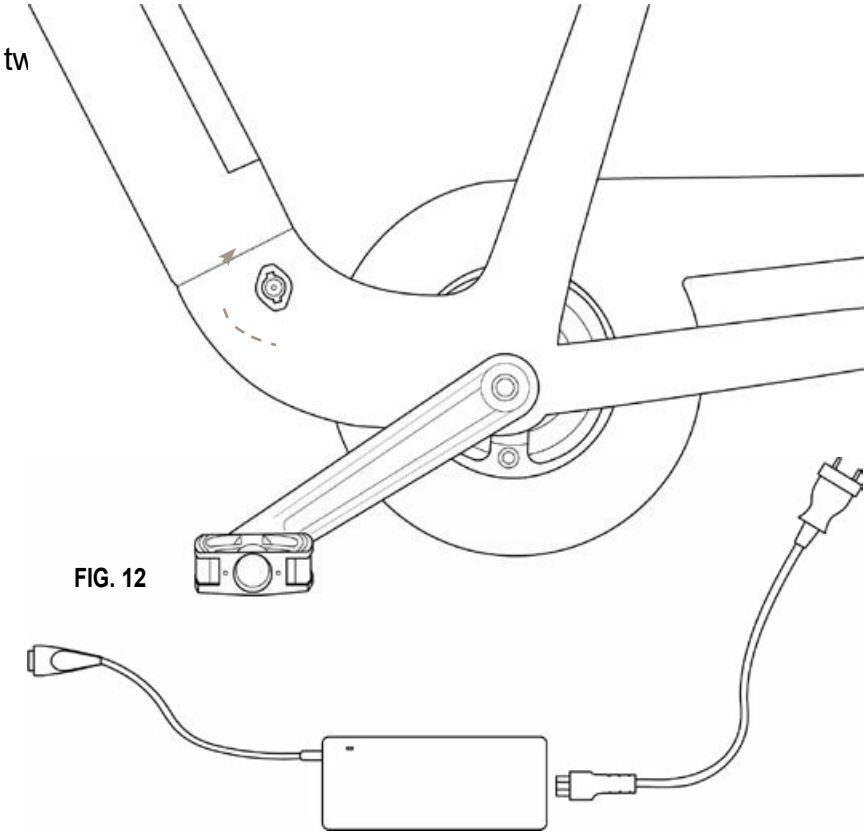


FIG. 12

Charging procedure for the battery removed from the frame:

1. Activate the pedal-assisted bicycle's assistance system using the button on the display;
2. Remove the battery following the instructions in section 6.1;
3. Connect the supplied battery charger to the appropriate connector (FIG. 13);
4. Connect the battery charger to a power outlet (230 V / 50 Hz) and charge for the required time. The average charging time varies from 4 to 6 hours;
5. Once charging is complete, first disconnect the plug from the power supply and then the connector from the battery.

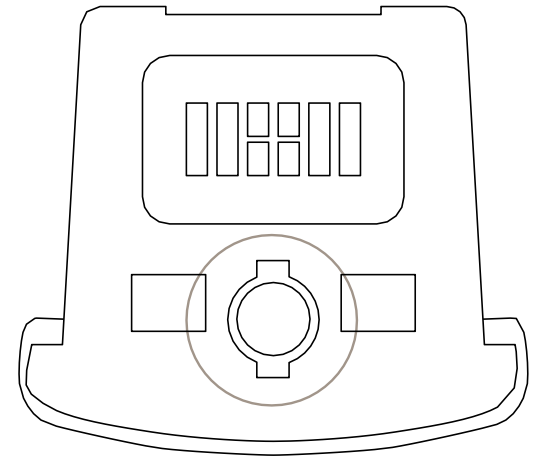


FIG. 13

ATTENTION

BATTERY CHARGING
Always connect the plug to the battery first and then the charger to the power outlet.

BATTERY CHARGE LEVEL

The battery should not be completely discharged to preserve its lifespan and avoid damaging it. In any case, it should be recharged at least every 2 months, even if the bicycle is not in use.

DANGER

PRECAUTIONS FOR PROPER CHARGING AND MAXIMIZING BATTERY LIFE
• Always fully charge the battery;
• If the battery charge level drops to 10% or below, fully recharge the battery within 12 hours.
Leaving the battery discharged will damage it. Cell replacement due to poor maintenance is not covered by the warranty.
• Use only the original power supply provided;
• Do not leave the battery charging for more than 24 hours;
• Always charge in a ventilated area;
• Do not charge the battery in excessively hot environments;
• Do not charge the battery near flammable liquids;
• Do not cover the battery in any way while charging;
• If the battery emits a bad odor, immediately unplug it from the power supply and ventilate the area. Do not touch the battery.

6.3 Battery storage

When the battery is not used for extended periods, charge it for 2 hours every 2 months and store it in a well-ventilated area at a temperature between 0°C and 25°C. Leaving the battery discharged will damage it. Cell replacement due to poor maintenance is not covered by the warranty.

To prevent the battery from completely discharging and damaging it, we recommend returning the battery to sleep mode when the bicycle is not used for extended periods.
There are two ways to put the battery into sleep mode:
A. Press and hold the display button for 3 seconds;
B. Press and hold the button on the battery for 10 seconds (Fig. 14).

To wake the battery, follow the procedure described in section 3.5.

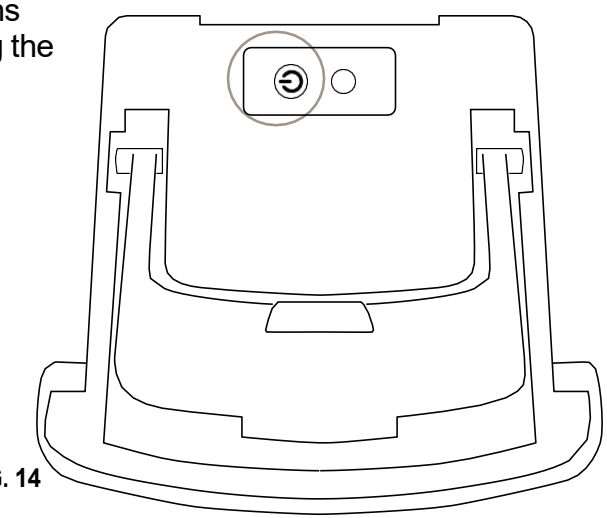


FIG. 14

6.4 Problem solutions

PROBLEM	SOLUTION
The system do not turn on	Check if the battery is full
	Check if the battery level is complete
The assisted mode do not work	

ATTENTION

PROBLEM SOLUTIONS

If the assistance system does not activate even if the battery is charged, contact your authorized dealer.

7. CONDITIONS OF USE AND PROPER ENVIRONMENTS

7.1 Proper usage

The pedal-assisted bicycle is designed and built to be used outdoors, on private or public roads and environments.
In particular, the components and the type of pedal-assisted bicycle allow you to tackle routes with asphalt surfaces, or with similar characteristics, without particular roughness.
Any modification to the state of construction can compromise the behavior, safety and stability of the pedal-assisted bicycle and can lead to an accident.
Other types of use, or the extension of the use beyond that intended, do not go to the destination attributed by the manufacturer, and therefore, the same cannot assume any responsibility for any resulting damages.

7.2 Environment of use

The pedal-assisted bicycle can be used outdoors, in the absence of adverse weather conditions (heavy rain, hail, snow, strong wind, etc.):

- Maximum permissible temperature: +40 °C;
- Minimum permissible temperature: 0 °C;
- Maximum permissible humidity: 70%;
- Charging temperature: 0 ÷+45°C.

The environment of use may have an asphalt surface or one with not excessively high roughness.

In addition, the place of use must be illuminated, by the sun or by artificial lights, in such a way as to guarantee the correct vision of the path and the controls of the pedal-assisted bicycle (recommended from 300 to 500 lux). The pedal-assisted bicycle is equipped with a front light with white light and a rear light with red light.

ATTENTION

Forbidden environments of use

The pedal-assisted bicycle must not be used:

- **In areas subject to risk of fire or explosion;**
- **In environments with a corrosive and/or chemically active atmosphere;**
- **In poorly lit environments;**
- **On excessively rough terrain, given the characteristics of the bicycle (frame, wheels, etc.);**
- **In enclosed spaces, if they do not allow safe use;**
- **In extremely dark environments.**

7.3 Improper uses and contraindications

The actions described below, which obviously cannot cover the entire range of potential possibilities of “misuse” of the pedal-assisted bicycle, are to be considered absolutely prohibited.

ATTENTION

FORBIDDEN OPERATIONS

STRICTLY PROHIBITED

- **Using the pedal-assisted bicycle for purposes other than those for which it was designed, i.e. passenger recreation;**
- **Riding the pedal-assisted bicycle in areas where there is a risk of explosions;**
- **Riding the pedal-assisted bicycle in adverse weather conditions (heavy rain, hail, snow, strong winds, etc.)**
- **Riding the pedal-assisted bicycle under the influence of alcohol or drugs;**
- **Riding the pedal-assisted bicycle if your weight exceeds the permitted weight;**
- **Charging the battery in an environment that is too hot or not sufficiently ventilated;**
- **Covering the battery while charging;**
- **Smoking or using naked flames near the charging area;**
- **Ride or stop on slopes (greater than 10%) or excessively uneven surfaces (with holes, depressions, obstacles, etc.)**
- **Perform any maintenance with the battery connected;**
- **Use non-original spare parts;**
- **Insert limbs or fingers between the moving parts of the bicycle;**
- **Use the pedal-assisted bicycle on unpaved or similar terrain;**

PERICOLO

8. LIFTING AND TRANSPORT

8.1 Lifting

The weight of the pedal-assisted bicycle model KRYOS is such that it can be lifted and transported by one person, also due to its overall dimensions. The optimal solution for carrying out the movement is to grab a handlebar grip and the rear part of the saddle.

DANGER

CRUSHING AND IMPACT

- **Extreme caution must be used when lifting to avoid injury to people and property.**
- **This operation must be performed by strong people**
- **The manufacturer is not liable for breakages due to lifting and/or transporting the pedal-assisted bicycle after delivery.**

8.2 Transportation

To ensure the safety of transport in vans, it is necessary to prevent the pedal-assisted bicycle from moving. This is achieved by securing it with straps or anchoring cables in good condition. In this regard, the attachment devices must be installed in such a way as not to damage the frame and other parts of the bicycle.

DANGER

INJURY RISK

ALWAYS make sure that the frame and handlebar adjustment screws are properly tightened before each use of the bicycle. Failure to do so could result in injury, even serious injury!

9. USE OF THE BICYCLE

The pedal-assisted bicycle has been designed and built for use in open spaces, with asphalt or similar surfaces, for amateur use.

- It can only be used by adults and experienced children;
- The use of the pedal-assisted bicycle is not recommended for pregnant women;
- Do not take alcohol or drugs before riding the pedal-assisted bicycle;
- Do not ask the pedal-assisted bicycle to perform more than it was designed for. Use the bicycle only in accordance with the methods and intended uses described in this manual;
- Never ride the pedal-assisted bicycle with disassembled parts;
- The pedal-assisted bicycle cannot be used on very wet, icy or slippery surfaces;
- Avoid very uneven surfaces and obstacles;
- Ride with both hands on the handlebars;
- Replace worn and/or damaged parts. If necessary, have it checked by authorised personnel;

Before setting off, carry out all the checks reported in the previous chapter and always remain concentrated while driving, for your own safety and that of others.

DANGER

INJURY RISK

- **Check that all controls are working perfectly;**
- **Always respect the highway code;**
- **Use appropriate protective devices (helmet, etc.)**

Before using the pedal-assisted bicycle in places open to traffic, it is advisable to familiarize yourself with the behavior of the vehicle.
The first uses must be made in private environments away from traffic, other cyclists and obstacles of any kind.
The driver must adapt the speed of the pedal-assisted bicycle to the conditions of the route and the presence of other vehicles or pedestrians. Especially when tackling curves, a moderate speed must be maintained (the smaller the radius of the curve, the lower the speed must be). When the driver stops pedaling or the speed reaches 25 km/h, the electric motor no longer provides assistance and the bicycle proceeds completely managed by the pedals.
It is essential to gain experience in riding the pedal-assisted bicycle, before proceeding at high speed.
If you do not want to use the motor, simply remove the battery or set the lowest level of assistance.

9.1 Bicycle parking

The bicycle is equipped with a stand for lateral support, therefore, before leaving the bicycle, check that the stand is fully extended and resting on stable ground.
The bicycle must be parked in designated parking areas and, in any case, without obstructing passageways, emergency exits, electrical panels and fire stations.

10. MAINTENANCE

PERICOLO

INJURY RISK
During all maintenance work, follow appropriate safety measures.
All maintenance operations must be carried out with the battery disconnected from the pedal-assisted bicycle and the battery charger;
the bicycle must be supported in a stable manner using appropriate support elements.

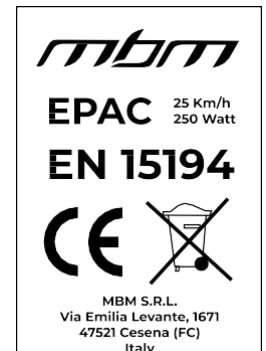
To maintain the full functionality of your pedal-assisted bicycle for a long time, it is necessary to carry out the maintenance as described, with correctness and professional skills.

After each routine maintenance intervention, a check of the perfect functioning of all the controls is mandatory.

10.1 Maintenance and daily check

10.1.1 Checking of plates and pictograms

Check the legibility and presence of the CE plate and warning stickers applied to the bodywork of the bicycle.



10.1.2 Wheels check

Using the special inflation valve on the rims, check the inflation pressure of the tires using a compressor and a gun with a pressure gauge, or a pump.
Check the condition of the tread, the rim and the attachment of the rims to the hubs. If you need to replace the tires, contact an authorized dealer or a qualified tire dealer.

ATTENTION

Do not inflate the tires beyond the permissible value reported by the manufacturer on the side surface of the same.

10.1.3 Braking system check

I freni devono essere regolati in modo da assicurare una frenata efficace e, allo stesso tempo, le leve di comando devono avere una corsa adeguata per poter modulare la frenata: in altre parole i freni non devono essere né troppo lenti né troppo tirati.

ATTENTION

Brake adjustments must be carried out by authorised personnel only.

10.2 Maintenance and weekly checks

10.2.1 Washing and cleaning

Cleaning the pedal-assisted bicycle is not only a matter of decorum, but also allows you to immediately detect any defects in the bicycle. In order not to damage or compromise the functioning of the various components, especially the electrical parts, cleaning must be carried out taking some precautions. It is absolutely forbidden to direct jets of pressurized water towards the electrical parts, the engine and the battery, for which we recommend washing with a sponge.
Before starting the pedal-assisted bicycle, dry it completely with low-pressure compressed air and check that there is no residual humidity left on the electrical components.

10.2.3 Lubrication and chain tension control

It is important to clean and lubricate the chain periodically to avoid corrosion due to atmospheric agents.

1. Clean the entire length of the links with a rag.
2. Spray all the links with a special spray grease for transmission chains.

DANGER

PROPER CHAIN LUBRICATION
Be extremely careful not to get lubricant on the brakes or tires of your bicycle. This can lead to serious injury!

10.2.4 Checking the frame and bolts

The supporting frame of the pedal-assisted bicycle and the welds must be free of visible defects such as:
cracks, deformations, incisions, corrosion, etc.
Make sure that all bolts of the pedal-assisted bicycle are well tightened.

10.3 Maintenance and monthly checks

10.3.1 Electrical circuits and components Checking

Check the condition and fastening of the battery cables: the sheaths of the electric cables must be in good condition and the terminals must be well tightened, not corroded and, if necessary, covered with specific protective and insulating grease.
Check that all the bulbs and warning lights are correctly turned on.

10.3.2Checking and adjusting the rear derailleur

Adjusting the lower and upper gear limit switches: Turn the two screws (Ref. N,O - Fig. 17) so that the chain does not come out.

The chain shifter must be in line with both the largest and smallest gears. (Fig. 18)

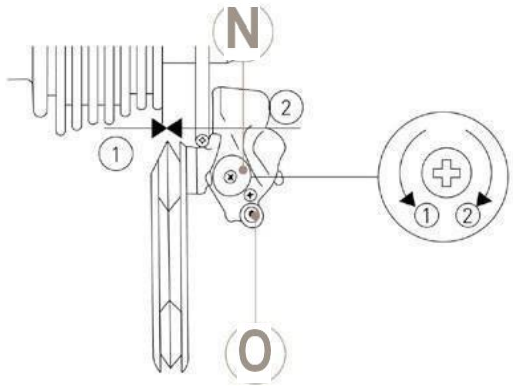


FIG. 17

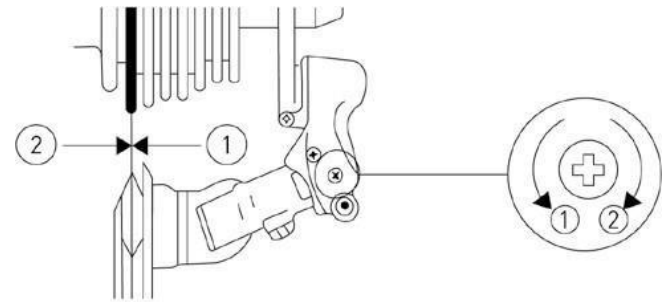


FIG. 18

Adjust the cable tension by acting on the appropriate control to ensure the immediate response of the rear derailleur to the command of the shifter located on the handlebar. (Fig. 19)
To prevent damage to the gearbox, it is recommended not to exert too much pressure on the pedals while changing gear.
Therefore, avoid changing gear when making an effort or riding on a slope.

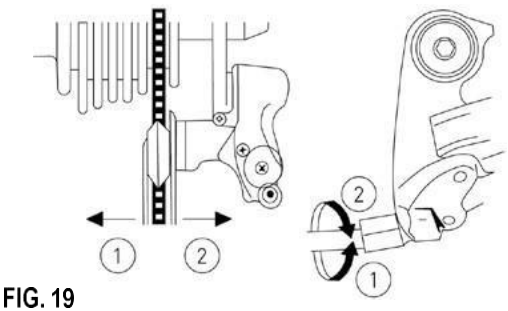


FIG. 19

11. WAREHOUSE STORAGE

If the pedal-assisted bicycle is to be stored and kept for long periods of inactivity, the following operations must be carried out:

- Store it in a dry and ventilated place;
- Perform a general cleaning of the pedal-assisted bicycle;
- Remove the battery from its seat and place it in a special storage site (fully charged and recharge it regularly);
- Leave the bicycle on a suitable support;
- Protect the exposed electrical contacts with antioxidant products;
- Grease all surfaces not protected by paint or anti-corrosion treatments.

12. DISPOSAL OF COMPONENTS AND MATERIALS

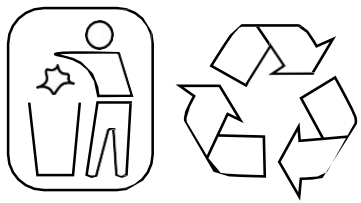
ATTENTION

DISPOSAL OF MATERIALS

The disposal of packaging, waste and vacuumed dust, replaced parts and/or the pedal-assisted bicycle as a whole at the end of its expected life must be carried out in an environmentally friendly manner, avoiding polluting the soil, water and air and in any case respecting the national and local legislation in force on the matter.

Indications for waste treatment:

- Ferrous materials, aluminum, copper: these are recyclable materials to be taken to a special authorized collection center.
- Plastic materials, fiberglass, gaskets, tires: these are materials to be taken to a landfill or a special recycling center.
- Batteries must be taken to authorized disposal centers.
- Divide the materials according to their nature, appointing specialized companies authorize to dispose of them, in compliance with the provisions of the law.



13. WARRANTY RULES

MBM S.r.l. guarantees that its bicycles are free from any manufacturing or workmanship defects.
This warranty covers the repair or replacement of any part recognized as defective, in compliance with the following conditions.

TERMS AND CONDITIONS

- Warranty period: the pedal-assisted bicycle is guaranteed for 24 months on the mechanical and electrical parts, except for the batteries and all components subject to wear. The batteries are covered by a conditional warranty for 24 months and limited to correct use of the same:
- first 6 months 100% coverage;
- from the 7th to the 12th month 50% coverage;
- from the 13th to the 24th month 25% coverage;
- If the battery has been left to discharge below the permitted level, the manufacturer is not liable for any damage.
- In order to make this warranty effective, you must fill out the online form which can be accessed via QR CODE or by connection g directly to the website warranty.mbmbike.it no later than 15 days from the date of purchase of the bicycle. The serial number and the photograph of the proof of purchase from the authorized dealer will be required. The serial number is printed on the label located in the battery sled and on the battery itself.
- Claims must be made through an official dealer by presenting the original tax document (receipt or invoice) and a printout of the confirmation of warranty activation that you will receive by email after completing the online form;
- The warranty includes the free replacement of any defective or prematurely worn parts provided that all the requirements have been respected and there is no evidence of improper use of the bicycle. The manufacturer's obligations are limited to the replacement of defective parts;
- Finally, our Technical Office will decide whether or not the defective part or bicycle falls within the conditions of this warranty;
- This warranty does not in any way cover the replacement of parts worn out by normal use of the bicycle;
- This warranty does not apply in any case to faults or damage caused by improper use of the bicycle, use of the bicycle for sports competitions, the application of non-original accessories, or improper maintenance interventions.

ACTIVATE YOU WARRENTY HERE

QR CODE

EXCLUSIONS

Normal wear and tear on parts subject to it, such as tires, chains, brakes, cables and sprockets in situations where there are no defects in materials.

- Bicycles serviced by an unauthorized MBM dealer;
- Modifications from the original packaging;
- Use of the bicycle for abnormal activities, such as racing and/or commercial activities, or for purposes other than those for which the bicycle was designed;
- Damage caused by failure to follow the owner's manual;
- Damage to paint and decals as a result of exposing the bicycle to or using it in severe conditions and climates;
- Labor costs for replacement parts;
- Transportation charges.

Except as provided in this warranty and subject to all other warranties, MBM and its employees and agents shall not be liable for loss or damage of any kind (including incidental and consequential loss or damage caused by negligence or default) arising out of or in connection with any MBM bicycle.

M.B.M. S.r.l. does not assume responsibility for damage to property or persons due to improper use of the vehicle.

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14. COMPLIANCE CE

Hybrid bikes with a maximum support speed of 25km/h comply with the requirements of:

- 2006/42/EC Machinery Directive
- 2014/30/EU Electromagnetic Compatibility Directive
- 2011/65/EU Rohs Directive

These bikes also comply with the following not harmonised standards:

- Electric bikes: EN 15194

Disclaimer

It is strongly recommended that you do not remove or replace any original equipment or modify the bike in any way that could change its design and/or function. Such modifications could seriously damage the handling, stability and other aspects of the bike, making it unsafe. Removing or modifying parts, or using non-original equipment as spare parts, may cause the bike to no longer comply with applicable standards and laws. To ensure safety, quality and reliability, use only original parts or MBM authorised spare parts for repair and replacement.

M.B.M. S.r.l.

Via Emilia Levante, 1671/73/75 | 47521 Cesena (FC) Tel.:

+ 39 0547 -300364

Fax: +39 0547-304326

Email: info@mbmbike.it

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