

EREBUS PRO



EREBUS PRO 28"



USER MANUAL

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1. PREFACE

This manual constitutes an integral and essential part of the EREBUS PRO model pedal-assisted bicycle. Before commissioning it is essential that users read, understand and scrupulously follow the following provisions. The manufacturer is not liable for damage caused to people and/or things or to the pedal-assisted bicycle if it is used incorrectly with respect to the instructions indicated. With a view to continuous technological development, the manufacturer reserves the right to modify the components, including the frame, without notice and without automatically updating this manual

1.2 Assistance

For any inconvenience or request for clarification, contact the authorized dealer, who has competent and specialized personnel as well as specific equipment and original spare parts. The manufacturer exempts itself from any responsibility for damages of any nature caused by the use of non-original spare parts.

1.3 Graphic form of safety warnings

To identify safety messages, the following graphic warning symbols will be used in this manual.

They have the function of attracting the attention of the reader/user for the purposes of correct and safe use of the pedal-assisted bicycle.



ATTENTION

Highlights behavioral rules to follow in order to avoid damage to the pedal bicycle assisted 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 injuries or material damage.



2. SAFETY WARNINGS



ATTENTION

USE OF THE PEDAL-ASSISTED BICYCLE

Every user must have first read the instruction manual, in particular the chapter on safety instructions.



ATTENTION

RISKS CONNECTED WITH THE USE OF THE PEDAL-ASSISTED BICYCLE

- Despite the application of safety devices, for safe use of the pedal-assisted bicycle, all the prescriptions relating to the prevention of accidents reported in this manual must be taken note of.
- Always stay focused while riding and **DO NOT** underestimate the residual risks associated with using a pedal-assisted bicycle.

2.1 General safety rules

Even if you are already familiar with the use of pedal-assisted bicycles, it is necessary to follow the instructions given here, in addition to the general precautions to be observed when driving a motor vehicle. In particular:

- Acquire full knowledge of the pedal-assisted bicycle;
 - Read the manual carefully to learn about the operation, the safety devices and all the precautions necessary for the safe use of the vehicle. All this to allow safe use;
 - Maintain the pedal-assisted bicycle with care and in perfect working order;
- For any inconvenience or request for clarification, contact the authorized dealer without hesitation, who has competent and specialized staff, specific equipment and original spare parts.

2.2 Responsibility

Failure to comply with the operating instructions and safety requirements contained in this manual exempts the manufacturer from any liability. If maintenance of the pedal-assisted bicycle is carried out in a manner that does not comply with the instructions provided, with non-original spare parts or in any case in such a way as to compromise its integrity and modify its characteristics, the manufacturer will be relieved of any responsibility relating to the safety of people. and the faulty functioning of the bicycle a assisted pedaling. For any data not understood or deducible from this manual, it is recommended to consult the authorized dealer directly.



ATTENTION

UNAUTHORIZED MODIFICATIONS

If you hear any unusual noises or feel anything strange, stop the electric bicycle immediately.
Then carry out a check and, if necessary, contact your authorized dealer.



2.3 Warnings for users

1. It can only be used by experienced adults and children;
2. Do not take alcohol or drugs before riding the pedal-assisted bicycle;
3. These pedal-assisted bicycle models are designed and built to be used outdoors, on roads and in private and public environments;
4. Do not ask the pedal-assisted bicycle to perform in excess of that for which it was designed;
5. Never ride the pedal-assisted bicycle with parts removed;
6. Avoid irregular surfaces and obstacles;
7. Ride with both hands on the handlebars;
8. Replace worn and/or damaged parts and check that the protections work correctly before use

2.4 Maintenance warnings

1. Any maintenance work must be carried out with the battery disconnected;
2. During each maintenance phase, operators must be equipped with the necessary accident prevention equipment;
3. The tools used for maintenance must be suitable and of good quality;
4. Do not use petrol or flammable solvents as detergents, but always use non-flammable and non-toxic solvents;
5. Limit the use of compressed air for cleaning as much as possible (max 2 bar) and protect yourself with glasses with side shields;
6. Never resort to the use of naked flames as a means of lighting when carrying out inspection or maintenance operations;
7. After any maintenance or adjustment work, make sure that no tools or foreign bodies remain between the moving parts of the pedal-assisted bicycle;



ATTENTION

ORIGINAL SPARE PARTS

Use exclusively original spare parts supplied by M.B.M. S.r.l. Single-member. Any liability of the Manufacturer for damage or loss of functionality caused following the use of non-original accessories and parts is excluded.

2.5 Other provisions

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



DANGER

GUARDS

It is therefore strictly forbidden to modify or remove the guards, controls, labels and indication plates.



3. UNPACKING AND SETING UP

The pedal-assisted bicycle is delivered fully assembled and functional.

Before each use, the driver must ensure the safety status of the pedal-assisted bicycle.



DANGER

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

3.1 Saddle adjustment

Adjusting the saddle height is an essential prerogative for the correct use of the pedal-assisted bicycle. Incorrect adjustment can cause structural damage to the frame.

Adjust the height of the saddle by operating the quick release mechanism (Ref. A – Fig. 1).

Check that the mechanism is tightened before testing the seat and using the vehicle. Do not lift the saddle beyond the limit switch mark located in the post (Ref. B – Fig. 1).

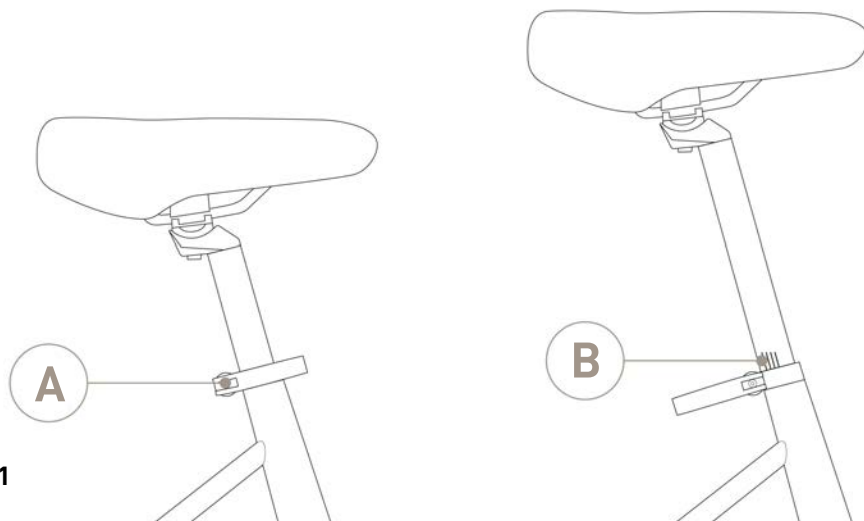


FIG. 1



DANGER

IMPORTANT WARNING:

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



ATTENTION

ASSEMBLY

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



3.2 Handlebar adjustment

For a comfortable posture on the bicycle, which does not cause neck or back pain, we recommend adjusting the handlebar post height and handlebar bend rotation.

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

Adjust the desired height and tighten the expander screw.

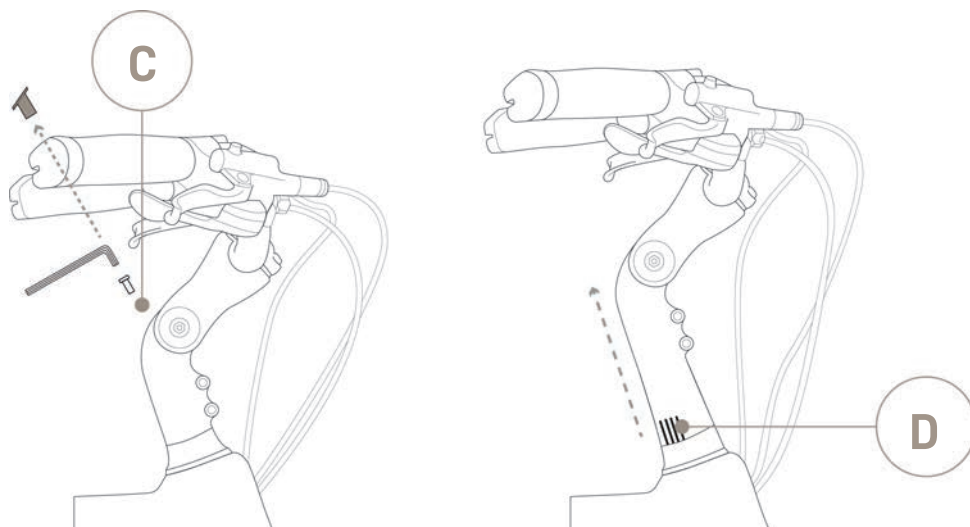


FIG. 2



WARNINGS:
Check that the limit switch
signal is not visible.

For perfect ergonomics, rotate the handlebar 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 tools for adjustment or do not have the skills, contact your authorized dealer.

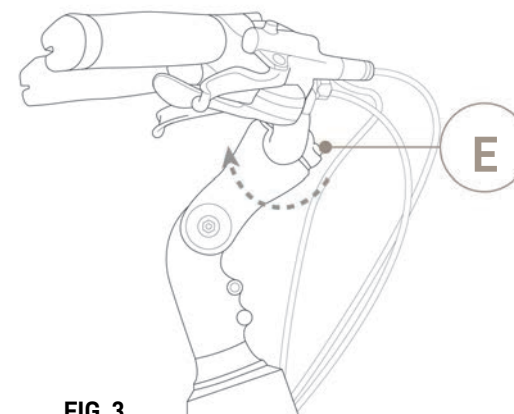


FIG. 3



3.3 Brake adjustment

The brake levers (Ref. F – Fig. 4) are located on the handlebar near the grips (Ref. G – Fig. 4). These systems allow the braking system to be activated. The braking action is proportional to the force applied on the levers. The right brake lever activates the rear brake while the left brake lever activates the front brake

To apply maximum braking power to the lever you can make the following adjustments:

- Rotate the brake lever using the tightening screw (Ref. H - Figure 4) until you reach a comfortable hand position; Check that you have tightened the screw correctly before using the pedal-assisted bicycle.

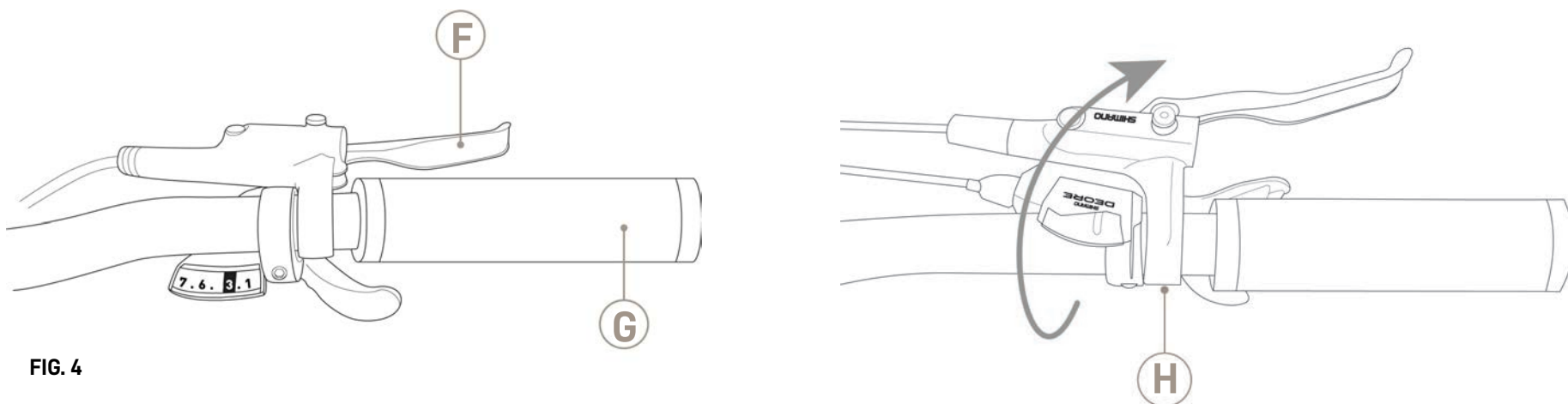


FIG. 4

Excessive travel of the brake lever leads to it coming into contact with the grip, limiting the braking action and possibly causing the fingers to be crushed.



ATTENTION

It is important to carry out a visual check of the braking system before using the pedal-assisted bicycle; check that there are no damaged cables or lubricants on the braking surfaces of the brake discs. Check the operation of the brakes with a low-speed braking test on flat, obstacle-free terrain, first with the rear brake and then with the front one.

If, during the preliminary checks, defects of any kind are found and even a single check is negative, **DO NOT RIDE THE PEDAL-ASSISTED BICYCLE.**

Immediately take all measures to carry out an appropriate repair and, if necessary, contact your authorized dealer or an authorized workshop.



3.4 Pedal assembly

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

Left pedal: it is identified by the letter "L" marked on its pin. To mount the pedal, screw by turning the pin counterclockwise.



ATTENTION

ASSEMBLY

For correct tightening of the pedals it is necessary to use a 15 wrench

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

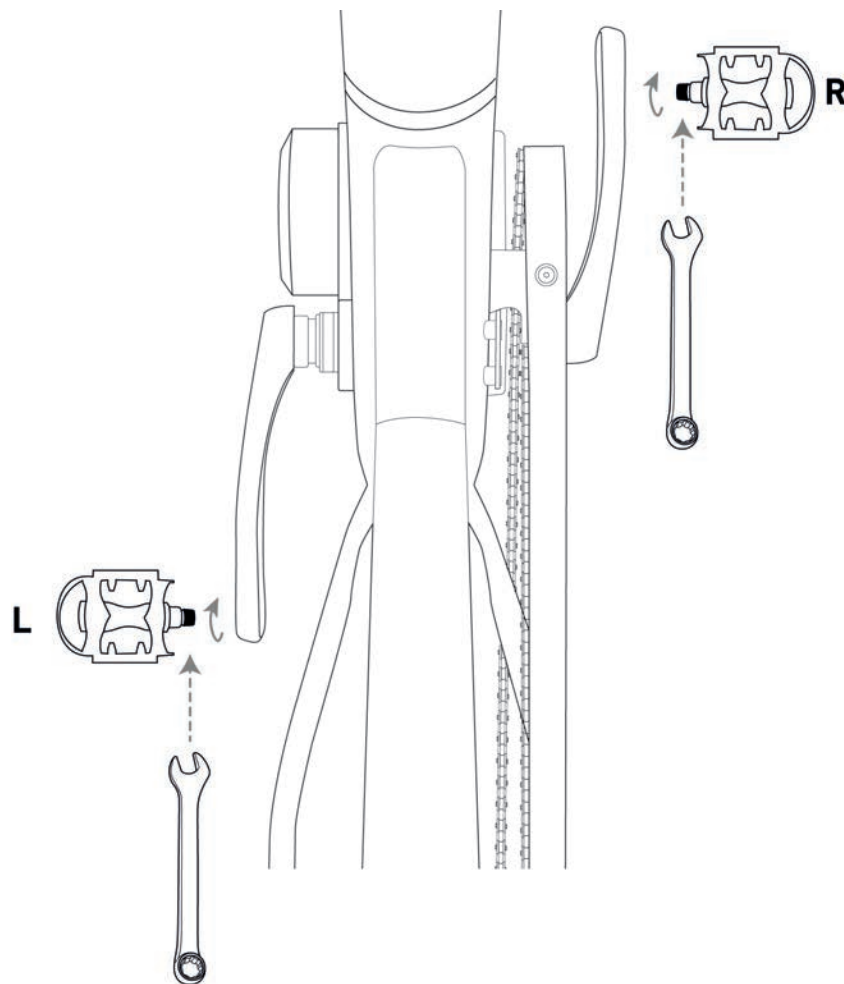


FIG. 5



3.5 Battery charging

Before using the bicycle for the first time, the battery must be charged for at least 8 hours, using the battery charger supplied. The pedal-assisted bicycle is equipped with an electric motor powered by a lithium ion battery. The battery pack is positioned inside the frame in the oblique tube of the vehicle. The average charging time varies from 4 to 6 hours. The charging operation can be carried out in a well-ventilated box with the battery installed on the bicycle.

To charge the battery proceed as in paragraph 6.2



ATTENTION

BATTERY CHARGER

Always connect the plug to the battery first and then the battery charger to the power socket.

The battery must not be completely discharged to preserve its life and to avoid the risk of damaging it. In any case, it must be recharged at least every 3 months even if the bicycle is not used.



DANGER

PRECAUTIONS DURING CHARGING

- Always connect the plug to the battery and then the power plug to the mains;
- When charging is completed, always first remove the plug from the mains and then the plug from the battery;
- Always recharge the battery completely;
- Always use the original power supply supplied;
- Do not leave the battery charging longer than necessary;
- Always recharge in a ventilated environment;
- Do not recharge the battery in too hot environments;
- Do not recharge the battery near flammable liquids;
- Do not cover the battery in any way while charging;
- If the battery emits a bad smell, immediately unplug it from the power supply and ventilate the room.

Do not touch the battery.



3.6 Front suspension

The pedal-assisted bicycle is equipped with a front suspension system which allows to dampen the stresses caused by the roughness of the route. The suspension model is adjustable using special adjustment controls in the upper and lower part of the forks. In particular, it is possible to vary the preload of the forks by rotating the lever in the upper part to the left (Ref. I - Fig. 6) based on the characteristics of the user and the terrain. The blue knob positioned at the top right (Ref. I - Fig. 6), however, allows you to block the compression, effectively transforming the suspension from cushioned to rigid.

Furthermore, it is possible to adjust the return speed of the suspension itself by rotating the red knob positioned in the lower right part of the fork (Ref. J - Fig 6.1).

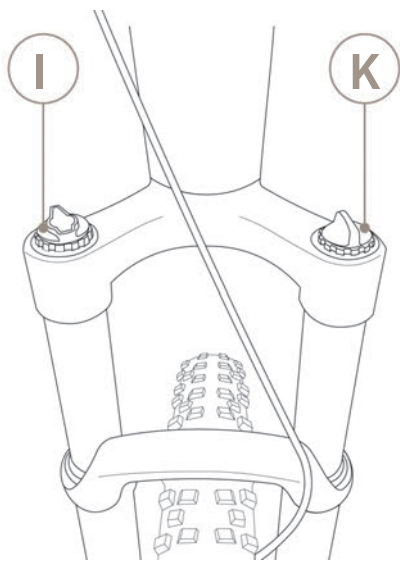


FIG. 6

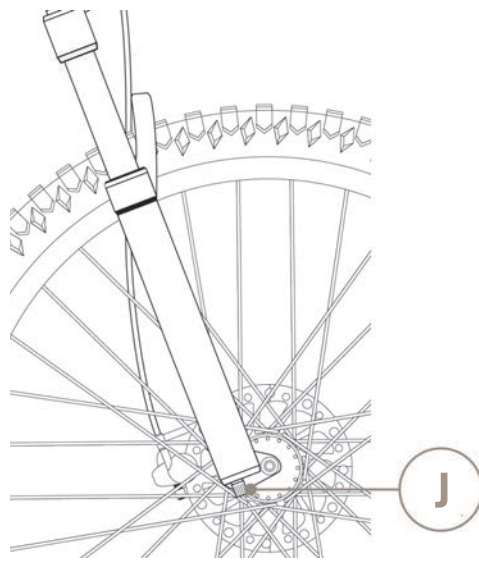


FIG. 6.1



DANGER

It is strictly forbidden to adjust the bicycle devices if you are not an expert and trained person to do so. Incorrect adjustment can cause even serious injuries.

Therefore, if you are not able to regulate these functions, contact specialized personnel. The manufacturer is not responsible for injuries resulting from incorrect use adjustment of pedal-assisted bicycle devices.

3.7 3.7Wheels check

Check the tire inflation pressure.

Check the state of wear of the tread: there must be no cuts, cracks, foreign bodies, anomalous swellings, visible plies or other damage



ATTENTION

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



4. DESCRIPTION OF THE BICYCLE

The pedal-assisted bicycle is designed and built to be used outdoors, on roads and in private or public environments.

In particular, the components and the type of pedal-assisted bicycle allow you to tackle routes with asphalted surfaces or with similar characteristics without particular roughness.



DANGER

INCORRECT AND UNPLANNED USE

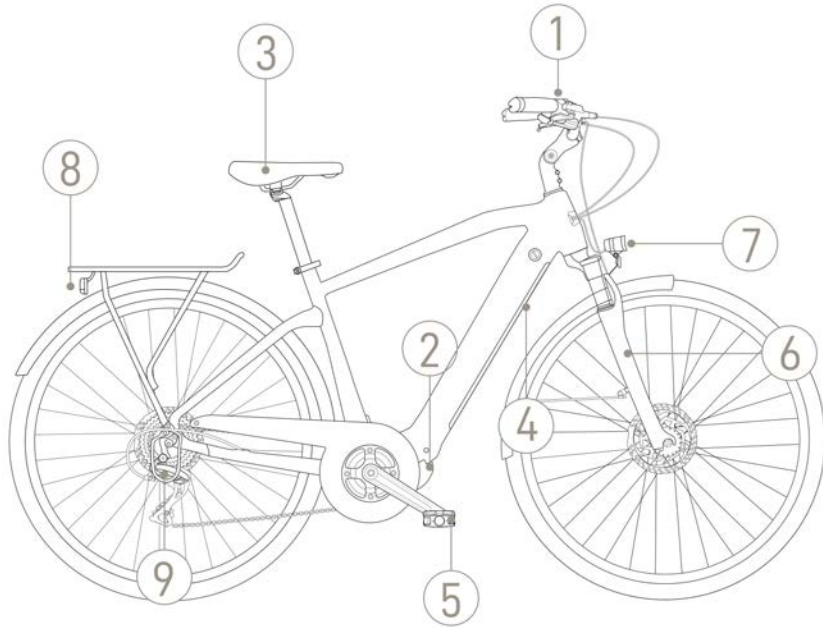
The bicycle was designed and built for the specified use; a different use and failure to comply with the technical parameters set by the Manufacturer may constitute a dangerous condition for users.

The pedal-assisted bicycle is equipped with a rechargeable battery and an electric motor, whose intervention occurs only when pedaling and progressively stops as the speed of the vehicle approaches 25 km/h, and then stops completely at this speed.

To manage the assistance system there is a special display located on the left side of the handlebar. On the right side of the handlebar there is a control system for adjusting the gears.



4.1 Data sheet



- 1. HANDLABER AND COMMANDS
- 2. MOTOR
- 3. SEDDLE
- 4. BATTERY
- 5. PEDALS
- 6. SUSPENSION FORK
- 7. HEAD LIGHTS
- 8. REAR LIGHTS
- 9. GAERBOX

CODE	E819U
FRAME	HYDROFORMED ALUMINUM
FORK	RIGID CUSHIONED
CRANKSET	38 TEETH
GEARBOX	SHIMANO DEORE M5120 SHADOW
SPEED CHANGE	11 SPEED
BRAKE	SHIMANO MT200 HYDRAULIC
DISKS	SHIMANO RT10 CENTER LOCK 180 F/160 R
TIRES	28X2.00
SEDDLE	BASSANO VOLARE SADDLE ICON PRO 3ZONE CITY
PEDALS	NON-SLIP POLYMER MATERIAL
LIGHTS	SPANNINGA 40 LUX
MOTOR	OLI EDGE 90NM
BATTERY	PHYLION INTEGRATED BN-21L, 36V, 17.4 AH, 630 WH
PEED MAX ASSISTANCE	25 KM/H
DISPLAY	COLOURED FUCTION DISPLAY LCD
POWER LEVELS	5
WEIGHT	27 KG



4.2 Speed change

The pedal-assisted bicycle has an 11-speed gearbox integrated into the rear wheel hub. The gears can be selected by rotating the lever positioned on the right handlebar grip. The indicator (Ref.L - Fig. 7) allows you to view the selected ratio.

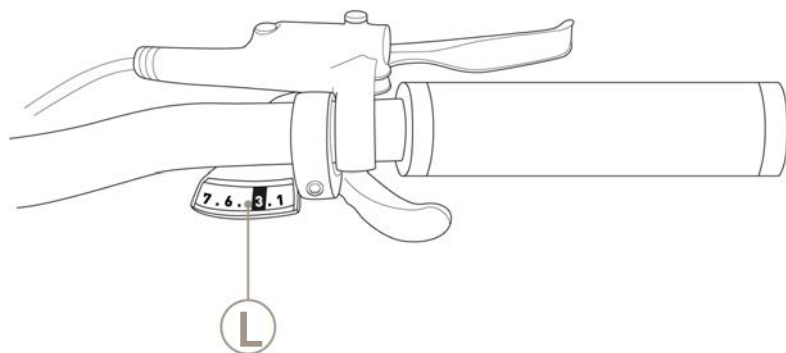


FIG. 7

4.3 Front and rear lights

To ensure visibility both during the day and at night, two lights are installed, one at the front (Fig. 8) and one at the rear (Fig. 9). These devices are operated via the display.

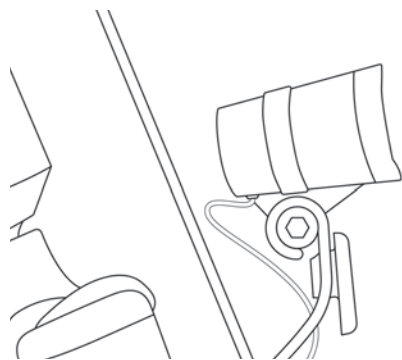


FIG. 8

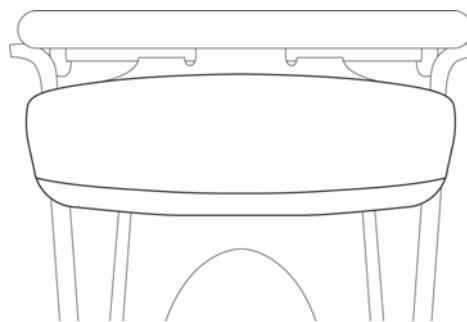


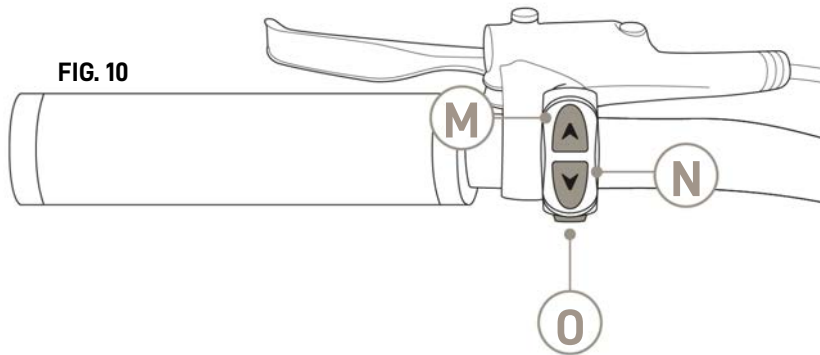
FIG. 9



5. DISPLAY

The pedal-assisted bicycle has, in the center of the handlebar, a display that allows you to manage the operation of the electric motor.

Near the left handlebar grip there are 3 buttons, which can be used with a short press or prolonged, thanks to these it is possible to control the functions of the display. (Fig. 10)



button	short pression/ < 1 second	long pression/ > 2 seconds
(O) POWER	allows you to: scroll through the Home screen from one main screen to another; scroll between Home and Menu; confirm the action while making changes.	allows you to: turn the display on and off; from the Menu and Advanced section, return to the last Home screen viewed.
(M) UP	allows you to scroll through the menu items, moving up. allows you to increase the level of assistance.	from any main screen it allows you to change the operating mode of the lights.
(N) down	allows you to scroll through the menu items, going down. allows you to reduce the level of assistance.	from any main screen allows you to activate Walk mode.
(M + N) DOWN + UP	-	from the main screens, pressing the two keys simultaneously allows you to access the menu.

5.1 Turning the system on/off

To activate the system, press the "POWER" button until the power-on screen appears or press the "ON" button on the battery. To turn off the display, press and hold the "POWER" button until the shutdown screen appears, or, press the "OFF" button on the battery. If the E-Bike is not used for a variable amount of time, depending on the battery, the system will automatically turn off.



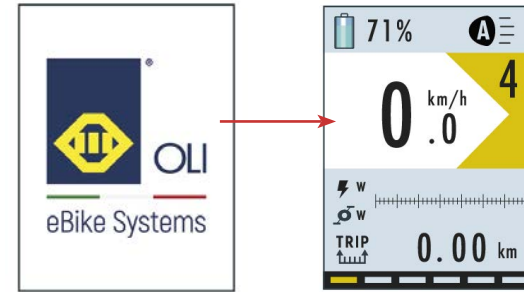
After switching on, the first "Distance" screen of the Home section is displayed.

The Home section consists of 6 screens.

To scroll between the screens you need to press the POWER button.

From any screen in the Home section you can:

- Adjust the assistance level by pressing the UP and DOWN buttons;
- Enter "Walk" mode by holding down the DOWN button;
- Adjust the brightness of the e-bike lights by holding down the UP button for 2 seconds;
- Enter the Menu section by holding down the UP and DOWN buttons simultaneously for 2 seconds.

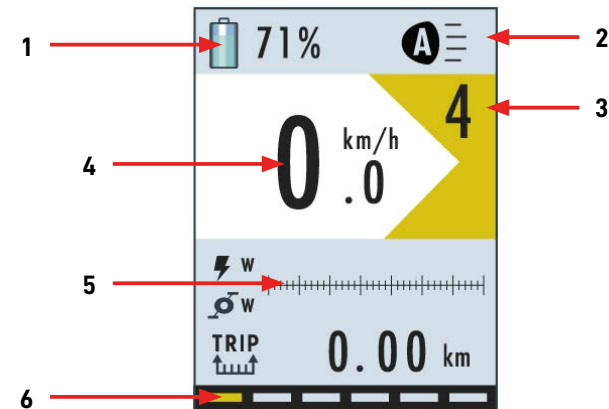


5.2 General screen composition

The section screens differ in type information display

However in screens 1, 2, 3 and 4 is always possible to view the Following information:

1. Percentage of battery state of charge;
2. Adjustment of the e-bike lights;
3. Level of assistance;
4. Current speed of the e-bike (in km/h);
5. Power graphic display: 6 is displayed in the upper bar engine power, in the lower one, the cyclist's power.
6. Navigation bar;



TRIP SCREEN 1 – DISTANCE

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



🕒 SCREEN 2 – TIME

Indicates the time spent moving since the last reset.
The value is expressed in hours:minutes:seconds.



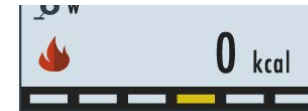
🔄 SCREEN 3 – CADENCE

Indicates the instantaneous rotation speed of the pedals in rotations per minute (rpm).



🔥 SCREEN 4 – ENERGY

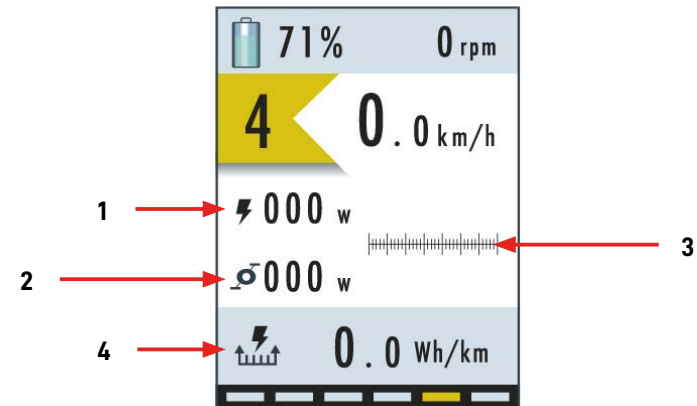
Indicates the energy consumed by the cyclist in kilocalories (kcal) since the last reset.



⚡ SCHERMATA 5 – RACE







On this screen, different from the previous ones, you can view the following information:

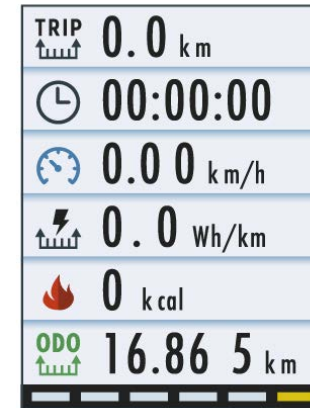
1. Indicates the instantaneous power delivered by the motor in Watts (W).
 2. Indicates the instant power expressed by the cyclist in Watts (W).
 3. Power graphic display: in the top bar is the engine power is shown, in the lower bar, the power of the cyclist
 4. Indicates the average energy consumption in Watt-hours per kilometer (Wh/km) calculated since the last reset.
- This data allows you to adjust the level and therefore



SCREEN 6 – SUMMARY

This screen summarizes the variable parameters of the previous screens.

-  **TRIP** Indicates the distance traveled in kilometers (km) since the last reset.
-  Indicates the time spent moving since the last reset.
-  Indicates the average speed in kilometers per hour (km/h) recorded since the last reset.
-  Indicates the average energy consumption in Watt-hours per kilometer (Wh/km) calculated since the last reset.
-  Indicates the energy consumed by the cyclist in kilocalories (kcal since the last reset).
-  **ODO** Indicates the total distance traveled by the e-bike in kilometers (km). This value cannot be reset.



5.3 Assistance levels

From any screen in the Home section it is possible to change the assistance level by pressing the UP button to increase it and the DOWN button to decrease it.

Below is the multiplying factor for each level of assistance:

- Level 0: 0% (motor not active);
- Level 1: 50%;
- Level 2: 100%;
- Level 3: 200%;
- Level 4: 300%;
- Level 5: 400%



5.4 WALK Mode

The system is equipped with a walking assistance function that allows you to activate the motor up to a maximum speed of 6 km/h.

To activate the walking assistance function, press and hold the DOWN button.

The motor will activate in Walk mode and the relevant icon will appear on the display.

To deactivate Walk mode, release the DOWN button.

The engine will deactivate in the following cases:

- Release of the DOWN key;
- Speed greater than 6 km/h;
- Locking the e-bike wheel.



ATTENTION

If the zero assistance level is set, the motor is disabled and it is not possible to use the walking assistance function.

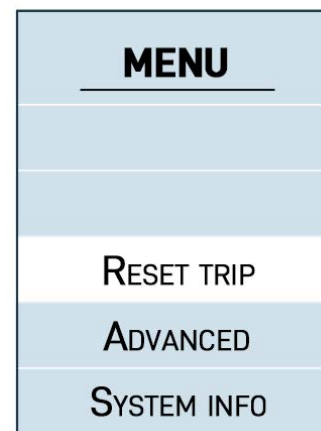
5.5 Menù

To enter the Menu, from the Home screen, press and hold the UP and DOWN buttons simultaneously for 2 seconds.

From the Menu page:

- Use the UP and DOWN keys to scroll between the items; the currently selected item is highlighted in the center in the white line;
- Press the POWER button to confirm and open the page of the selected item; the "Back" item takes you back to the first screen of the Home section.

From any screen, by holding down the POWER button for 2" you can return to the last Home screen viewed



RESET TRIP

The "Reset trip" item allows you to reset all the route data (with the exception of the total distance traveled by the e-bike) Resetting trip ...

by returning the counters to zero. Pressing the POWER button immediately starts the reset.

The warning "Trip reset..." appears on the display for a few seconds; once the reset is complete, the Menu page is displayed again.



SYSTEM INFO

In this screen it is possible to view the versions of the firmware, of the installed HMI and of the combined motor.

Press the POWER button to return to the Menu.



ADVANCED INFO

From the Menu section you can access the "Advanced" section by selecting the relevant item.

From the Advanced page:

- Use the UP and DOWN keys to scroll between the items; the selected item is highlighted in the center of the white line;
- Press the POWER button to confirm and open the page of the selected item;



SCREEN BRIGHTNESS

From this screen you can adjust the brightness of the screen.

Use the UP and DOWN keys to scroll between values from 1 to 10. The selected value is highlighted in the center in the white line. Press the POWER button to confirm and return to the "Advanced" page.

Select the "Back" item and press the POWER button to return to the "Advanced" page without setting any values.



LANGUAGE

From this screen you can select the language.

Use the UP and DOWN keys to scroll through the available items.

The selected language is highlighted in the center in the white line.

Press the POWER button to confirm and return to the "Advanced" page.

Select the "Back" item and press the "POWER"

button to return to the "Advanced" page without changing the language.

LANGUAGE
ITALIAN
ENGLISH
FRANÇAIS
DEUTSCH
ESPAÑOL

UNIT OF MEASURE

From this screen it is possible to select the unit of measurement with which they are calculated:

- Instantaneous speed;
- Average speed;
- Average consumption;
- Lap distance;
- Total distance;

Use the UP and DOWN keys to scroll through the available items. The selected value is highlighted in the center in the white line.

Press the POWER button to confirm and return to the "Advanced" page.

Select the "Back" item and press the POWER button to return to the "Advanced" page without changing the unit of measurement.

UNIT
KM
MILES
BACK

WEIGHT

From this screen you can set your body weight by choosing a value between 50 and 150 kilograms. Use the UP and DOWN keys to scroll through the available items. The selected value is highlighted in the center in the white line.

Press the POWER button to confirm and return to the "Advanced" page.

Select the Back item (placed after item 150) and press the POWER button to return to the "Advanced" page without changing the weight.

WEIGHT
68
69
70
71
72



IMPORTANT

**Setting this data is not necessary for the correct functioning of the e-bike.
The value has the sole purpose of making the calculation of calories consumed reliable.**



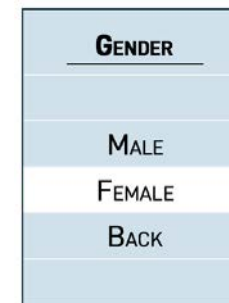
GENDER

From this screen you can set your gender.

Use the UP and DOWN keys to scroll through the available items. The selected value is highlighted in the center in the white line.

Press the POWER button to confirm and return to the "Advanced" page.

Select the Back item and press the power button to return to the "Advanced" page without changing your gender.



**Setting this data is not necessary for the correct functioning of the eBike.
The value has the sole purpose of making the calculation of calories consumed reliable.**

IMPORTANT

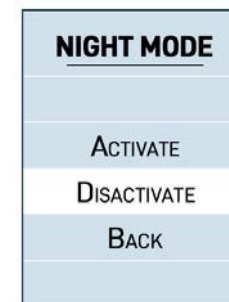
NIGHT MODE

From this screen you can choose the configuration for night mode:

- "Automatic": by selecting this item, the night mode is automatically set via the twilight sensor inside the display, which detects the ambient brightness.
- "Active": night mode always active;
- "Disable": night mode always deactivated;

Use the UP and DOWN keys to scroll through the available items. The selected value is highlighted in the center in the white line. Press the POWER button to confirm and return to the "Advanced" page.

Select the "Back" item and press the POWER button to return to the "Advanced" page without changing the configuration.



5.6 Error code

In the event of an anomaly, the system signals the problem to the user by displaying a danger icon combined with a 4-character error code, which allows the type of error to be traced.



- Depending on the type of fault, the system could prevent the engine from starting or make it run at reduced power.
- Where "request assistance" is indicated, the intervention of a specialized technician is required

WARNINGS



The following table lists possible anomalies and 4 character code displayed in error messages.

ERROR	PROBLEM	SOLUTION
0001	Communication problem with the battery. It is possible that the battery status data may be displayed incorrectly.	Check that the wiring and battery contacts are intact and connected correctly.
0101	Communication problem between drive unit and HMI.	Check that the wiring is intact and connected correctly.
0104	Speed sensor not detected.	Check that the speed sensor is installed and connected correctly. Check that the alignment between the magnet and the speed sensor is correct.
0105	Non-compliant torque transducer signal. Reduced power operation.	Request assistance.
0106	Non-compliant torque transducer offset.	Request assistance.
0801	Engine rotation sensor fault.	Request assistance.
0802	Pedal rotation sensor fault.	Request assistance.
0804	Excessive drive temperature. The temperature sensor inside the drive has detected a temperature above the danger threshold.	Turn off the system temporarily to allow the components to cool. If the problem persists, request assistance.
0805	Excessive engine temperature. The engine has reached a temperature above the danger threshold.	Turn off the system temporarily to allow the components to cool. If the problem persists, request assistance.
0806	Peripheral bus voltage not compliant.	Request assistance.
0808	Rotor blocked. The engine failed to start due to a mechanical lock or a problem with the internal wiring of the drive unit.	Request assistance.
0809	The battery voltage is higher than the maximum allowed.	Possible battery defect, try with a different battery or a new one.
0810	Current sensor signal not compliant.	Request assistance.
0811	The drive has detected an overcurrent.	Request assistance.
1101	Communication problem between drive unit and HMI. Check that the wiring is intact and connected correctly.	Check the cable connections by dismantling the motor.
1102	A button on the control panel is stuck in the pressed position.	Try moving the buttons on the control panel. If the problem persists, request assistance.



5.7 Technical assistance

Ordinary and extraordinary maintenance must be carried out in accordance with the instructions contained in this manual.



AVVERTENZE

The manufacturer declines all responsibility for damage caused to people or things, as well as for faulty operation of the unit in the event of:

- **Improper use of the unit;**
- **Error in use or incompetence, imprudence and negligence with respect to the indications and instructions reported in this manual;**
- **Use of non-original spare parts.**

REQUEST FOR ASSISTANCE

In the event of error codes requiring assistance, problems that could not be resolved with the suggested instructions, problems not indicated or for any type of assistance, we recommend contacting the retailer directly.

Data to report in the request for assistance:

- Model (see identification plate);
- Serial number (see identification plate);
- Year of construction (see indicative plate);
- HMI version;
- Engine version.

The correct reference of data in the request for assistance guarantees rapid and accurate responses.



6. BATTERY

The bicycle provides pedal assistance through an electric motor powered by the battery located in the down tube of the frame structure (Fig. 10.).

It is possible to view the battery charge status directly on the display.

6.1 Battery removal/installation

To remove the battery make sure the assistance system is turned off and proceed as follows:

1. Insert the battery lock/unlock key into the appropriate lock in the upper left part of the frame, near the handlebars, and turn the key anti-clockwise. (Ref. K - Fig.10.1);
2. Keeping the key turned and release the battery (Ref.2 - Fig. 10.1);
3. Remove the battery completely, being careful not to hit the frame.

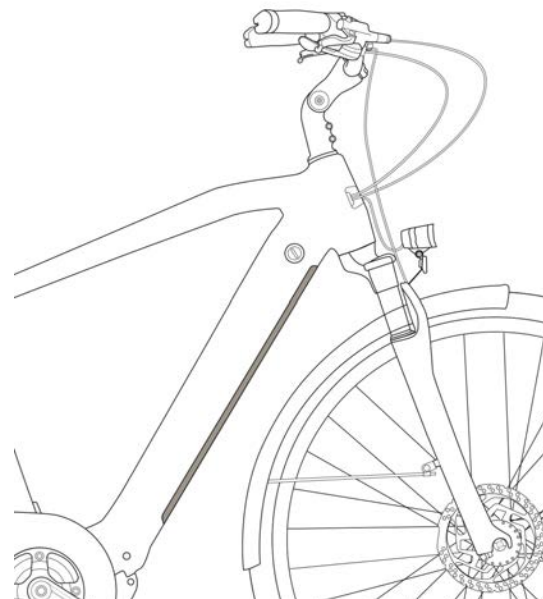
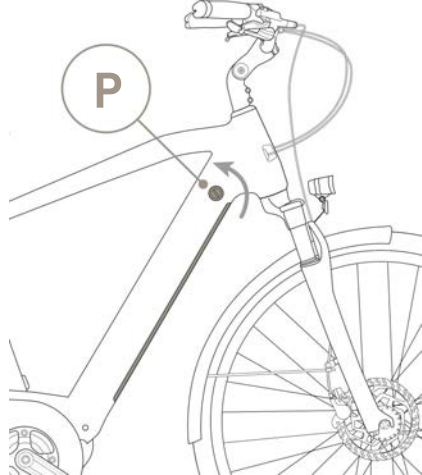


FIG. 11

FIG. 11.1

1



2



3



To install the battery proceed as follows (this procedure must be performed without the release key, remove it if inserted):

1- Align the battery by first matching the electrical connector (Fig. 11.2-1);

2- Carefully insert the battery into the frame until you hear the lock click. At this point the battery is already automatically blocked.

FIG. 11.2

1



2



3



6.2 Battery charging

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

- The first by connecting the battery charger directly to the frame via the appropriate socket located on the saddle tube (Fig. 12).
- The second mode involves removing the battery. To charge the battery proceed as follows:
 1. Turn off the assistance system of the pedal-assisted bicycle using the appropriate button;
 2. Remove the battery;
 3. Connect the supplied battery charger to the socket with the appropriate plug (Figure 12.1)
 4. Connect the battery charger to a power socket (230 V / 50 Hz) and charge the battery for the necessary time.

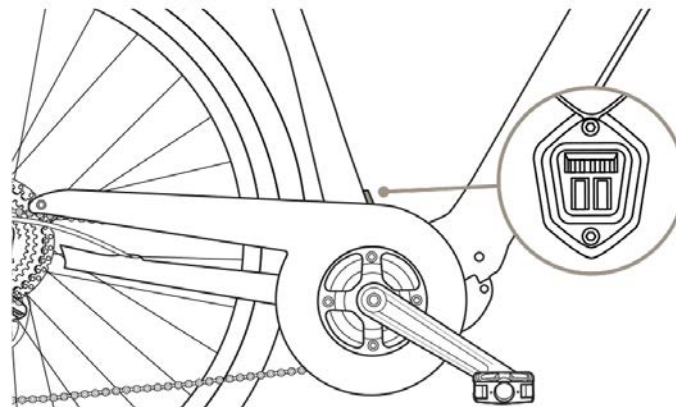


FIG. 12

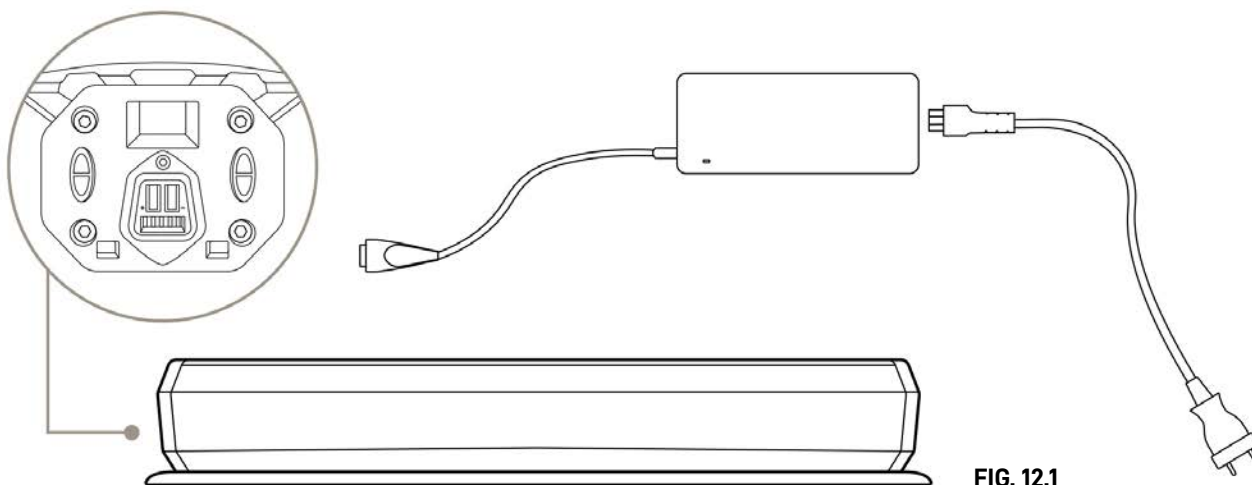


FIG. 12.1



ATTENTION

BATTERY CHARGER

Always connect the plug to the battery first and then the battery charger to the power socket.



6.3 Problem resolutions

PROBLEM	CAUSE/SOLUTION
System does not turn on	Check if the battery is charged
Assistance does not activate	Check if the level of battery is charged enough



ATTENTION

PROBLEM RESOLUTIONS

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

7. CONDITIONS OF USE AND EXPECTED ENVIRONMENTS

7.1 Expected use

The pedal-assisted bicycle is designed and built to be used outdoors, on roads and in private or public environments.

In particular, the components and the type of pedal-assisted bicycle allow you to tackle routes with asphalted surfaces, or with similar characteristics, without particular roughness.

Any modification to the state of construction can compromise the behaviour, 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 the intended one, do not correspond to the intended use attributed by the manufacturer, and therefore, the manufacturer cannot assume any responsibility for any resulting damage.

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 temperature allowed: +40 °C;
- Minimum temperature allowed: 0 °C;
- Maximum humidity allowed: 70%;
- Charging temperature: 0 – 40 °C;

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

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



**ATTENTION****FORBIDDEN ENVIRONMENT OF USE**

The pedal-assisted bicycle must not be used:

- In areas subject to fire or explosion risk;
- In environments with a corrosive and/or chemically active atmosphere;
- In poorly lit environments;
- On excessively rough terrain, given its characteristics (frame, wheels, etc.);
- In closed 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 ACTIONS**

- Performing prohibited operations invalidates the warranty;
- The manufacturer declines all responsibility for any damage to things or people resulting from the execution of prohibited operations

**DANGER****ABSOLUTELY FORBIDDEN**

- Use the pedal-assist bicycle for uses other than those for which it was built, i.e. for pleasure for a passenger;
- 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 wind, etc.)
- Riding the pedal-assisted bicycle under the influence of alcohol or drugs;
- Ride the pedal-assisted bicycle if your weight is greater than the permitted weight;
- Charge the battery in an environment that is too hot or not sufficiently ventilated;
- Cover the battery while charging;
- Smoking or using open flames near the charging area;
- Transit or stop on sloping surfaces (greater than 10%) or excessively bumpy surfaces (with potholes, depressions, obstacles, etc.)
- Carry out any maintenance with the battery connected;
- Use non-original spare parts;
- Insert your limbs or fingers between the moving parts of the bicycle;
- Use the pedal-assisted bicycle on unpaved terrain or with similar characteristics;



8. LIFTING AND TRANSPORT

8.1 Lifting

The weight of the EREBUS model pedal-assisted bicycle 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 grasp a handlebar knob and the rear part of the saddle.



DANGER

CRUSHING AND IMPACT

- During lifting you must operate with extreme caution to avoid damage to people and things.
- This operation must be performed by sturdy people.

The manufacturer is not responsible for breakages due to lifting and/or transporting the pedal-assisted bicycle after delivery.

8.2 Transport

To guarantee the safety of transport in vans it is necessary to prevent the movement of the pedal-assisted bicycle. This is achieved by binding it with anchoring bands or cables in good condition. In this regard, the attachment devices must be installed so as not to damage the frame and other parts of the bicycle.



DANGER

RISK OF INJURY

ALWAYS make sure that the frame and handlebar adjustment screws are well tightened
Before each use of the bicycle. Otherwise, injuries, even serious ones, could result **DANGER**



9. USE OF THE BICYCLE

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

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

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



DANGER

RISK OF INJURY

- **Check that all controls are working perfectly;**
- **Always respect the highway code;**
- **Use appropriate protective equipment (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 travel speed of the pedal-assisted bicycle to the conditions of the route and the presence of other vehicles or pedestrians. Above all, when negotiating curves, you must maintain a moderate speed (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 controlled by the pedals.

It is essential to gain experience in riding a pedal-assisted bicycle before proceeding at high speed. If you do not want to use the engine, simply remove the battery or set the lowest assistance level.



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 the designated parking areas and, in any case, without obstructing the passageways, emergency exits, electrical panels and fire stations.

10. MAINTENANCE



PERICOLO

RISK OF INJURY

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 specific support elements.

To maintain the full functionality of your pedal-assisted bicycle for a long period of time, it is necessary to carry out maintenance as described, with correctness and professional skills. After every ordinary maintenance intervention, a check on the perfect functioning of all the controls is mandatory.

10.1 Maintenance and daily checks

10.1.1 Checking of labels and pictograms

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

10.1.2 Wheels check

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



ATTENTION

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



10.1.3 Check brake operation

The brakes must be adjusted to ensure effective braking and, at the same time, the control levers must have adequate travel to be able to modulate braking: in other words the brakes must be neither too slow nor too tight.



Brake adjustment must only be carried out by authorized personnel.

ATTENTION

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 it. To avoid damaging or compromising the functioning of the various components, especially the electrical parts, cleaning must be carried out taking certain precautions. It is absolutely forbidden to direct jets of pressurized water towards the electrical parts, the engine and the battery, for which washing with a sponge is recommended.

Before starting the pedal-assisted bicycle, dry it completely with low-pressure compressed air and check that there is no residual moisture left on the electrical components.

10.2.2 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 links with special spray grease for drive chains.



DANGER

CORRECT CHAIN LUBRICATION

Be extremely careful not to get lubricant on the brakes or tires of the vehicle bicycle. This can lead to serious injuries!

10.2.3 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 on the pedal-assist bicycle are well tightened.



10.3 Maintenance and monthly checks

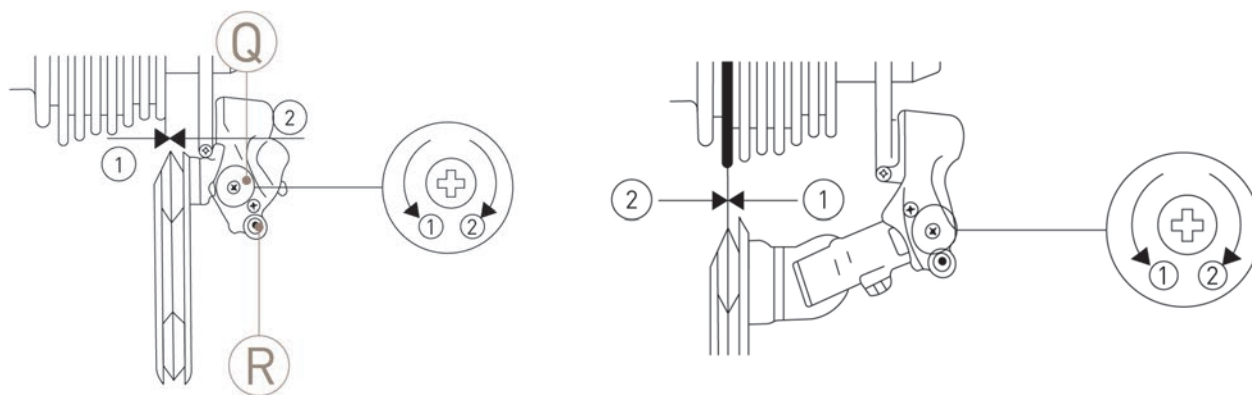
10.3.1 Electrical circuits and components check

Check the condition and fastening of the battery cables: the sheaths of the electrical 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 bulbs and warning lights come on correctly.

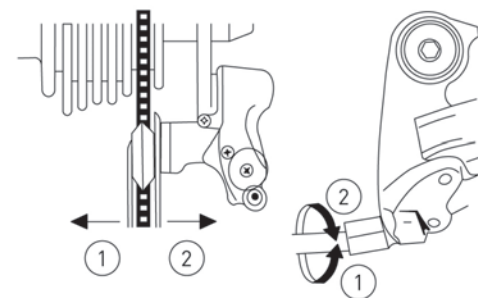
10.3.2 Checking and adjusting the rear derailleur

Adjustment of the lower and upper gearbox limit switches: Turn the two screws (Ref. Q,R - Fig. 14) so that the chain does not come out. The chain shifter will need to be in line with both the larger and smaller gears. (Fig. 15)



Adjust the tension of the cable by acting on the appropriate control to guarantee the immediate response of the rear derailleur to the control of the lever placed on the handlebar. (Fig. 16)

To prevent damage to the gearbox, it is recommended not to put too much pressure on the pedals while changing gears. Therefore avoid shifting when making an effort or driving on a slope,



12. WAREHOUSE STORAGE

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

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

13. DISPOSAL OF COMPONENTS AND MATERIALS



ATTENTION

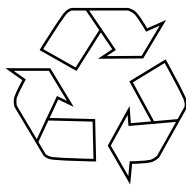
DISPOSAL OF MATERIALS

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

Indications for waste treatment:

- Ferrous materials, aluminium, copper: these are recyclable materials to be given to a specific authorized collection centre.
- Plastic materials, fibreglass, gaskets, tyres: these are materials to be sent to landfill or to a specific recycling centre.
- Batteries must be taken to authorized disposal centers.

Divide the materials according to their nature, appointing specialized companies authorized for disposal, in compliance with the provisions of the law.



14. WARRENTY RULES

MBM S.r.l. Unipersonale 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, subject to the following conditions.

TERMS AND CONDITIONS

This warranty covers the repair or replacement of any part recognized as defective, subject to 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 24 month limited warranty for correct use of the same:

If the battery has been allowed to discharge below the permitted level, the manufacturer is not liable for any damage.

- In order to make this guarantee effective, you must complete the online form which can be accessed via QR CODE or by connecting directly to the warranty.mbm bike.it website no later than 15 days from the date of purchase of the bicycle. The serial number and photograph of proof of purchase from the authorized dealer will be required. The serial number is printed on the label located in the battery slide and on the battery itself.

- Claims must be made through an official retailer by presenting the original tax document (receipt or invoice) and a printout of the confirmation of activation of the guarantee which you will receive via e-mail after completing the online form;

- The warranty provides for the free replacement of any defective or prematurely worn part as long as 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;

- Lastly, our Technical Department will decide whether the defective part or bicycle falls within the conditions of this warranty or not;

- This warranty does not cover in any way the replacement of parts worn 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.

EXCLUSIONS

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



A CTIVATE HERE

WARRENTY



- Bicycles serviced by an unauthorized MBM distributor;
- Changes compared to the original packaging;
- Use of the bike for abnormal activities, such as competition and/or commercial activities, or for purposes other than those for which the bike was designed;
- Damage caused by failure to follow the user manual;
- Damage to paint and decals as a result of exposing the bike to or using it in harsh conditions and climates;
- Labor costs for replacing parts;
- Transportation fee.

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

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

15. COMPLIANCE

Hybrid bicycles with a maximum support speed of 25km/h meet the requirements:

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

These bicycles also comply with the following non-harmonised standards:

- Electric bicycles: EN 15194

Disclaimer

We strongly recommend that you do not remove or replace any original equipment or modify your bicycle in any way that could change its design and/or operation. Such modifications could seriously damage the handling, stability and other aspects of the bicycle, making it unsafe. The removal or modification of parts, or the use of non-original equipment as spare parts, may make the bike no longer compliant with applicable standards and laws. To guarantee safety, quality and reliability, use only original parts or authorized MBM spare parts for repairs and replacements.





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