



Read all information in this manual carefully
before you start riding your E-bike



BRERA

Pedal assisted bike

City Urban integrated battery

HORIZONTE

USER MANUAL AND MAINTENANCE



CAUTION

Please read all information in this manual carefully before riding this bicycle

Before using your new E-bike, read all the information in this manual. The warranty of good performing and safety is strictly connected to all instructions contained in this manual.

This E-bike confirms to the specifics and technical instructions listed in the manual on its release date. In the future there could be even relevant technical updates also relevant, not reported in this manual. For the most updated information always consult MANDELLI S.r.l.

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Original
Instructions



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1 PREFACE

1.1 General statement

This manual constitutes an integral and essential part of the pedal assisted bicycle, **City urban integrated battery Brera** model and must be delivered to the user.

Before riding the bike, it is essential that users read, understand and scrupulously follow the following instructions.

The manufacturer is not liable for damages caused to people and/or things or to pedal assisted bicycles if they are used incorrectly with respect to the given instructions.

Considering the continuous technological development, the manufacturer reserves the right to modify the **pedal assisted bicycles** without notice, without this manual being automatically updated.

1.1.1 Use of the manual

The Use and Maintenance Manual is an integral part of pedal assisted bicycles; it is therefore necessary to keep it intact and in a safe place throughout its entire life. This manual must always be available to the user.

1.1.2 Manufacturer and technical assistance

For any inconvenience or clarification request, you can contact the Assistance Service, which has competent and specialized staff, specific equipment and original spare parts.

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1.1.3 Safety symbols

The following graphic symbols will be used to identify the safety messages in this manual. They have the function of attracting the attention of the reader / user with the purpose of a **correct** and **safe** use of the pedal assisted bicycle.


| | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|
|  | CAUTION | Caution |
| Highlights behavioral rules to be followed in order to avoid a damage to the pedal assisted bicycle and/or the onset of dangerous situations. | | |


| | | |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------|
|  | DANGER | Residual risks |
| Highlights the presence of hazards that cause residual risks. The user must pay attention to avoid injuries or material damage. | | |



2 SAFETY NORMS

2.1 General safety rules

| | | |
|--------------------------------------------------------------------------------------------------------|----------------|------------------------------------------|
|  | CAUTION | Use of the pedal assisted bicycle |
| Every user must read the instruction manual; in particular, the chapter on safety instructions. | | |

| | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------------------------|
|  | CAUTION | Risks connected to the use of the pedal assisted bicycle |
| <ul style="list-style-type: none">• Despite the presence of safety devices, for a safe use of the pedal assisted bicycle you must take note of all the prescriptions related to the prevention of accidents reported in this manual.• Always stay focused while riding and DO NOT underestimate the residual risks associated to the use of a pedal assisted bicycle. | | |

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

- Acquire a full knowledge of the pedal assisted bicycle;
- Read the manual carefully to learn about operation, safety devices and all necessary precautions. All this will lead to a safe use;
- Maintain your pedal assisted bicycle with care.

2.2 Responsibility

Failure to comply with the operating instructions and safety requirements contained in this manual exempts the manufacturer from any liability.



If the maintenance of the pedal assisted bicycle does not comply with the instructions provided, with non-original spare parts or, in any case, in such a way that compromise its integrity or modify its characteristics, the manufacturer will be relieved of any responsibility relating to the safety of people and the faulty functioning of the pedal-assisted bicycle.



CAUTION

Unauthorized modifications

If you hear any unusual noises, or feel anything strange, stop the pedal assisted bicycle immediately. Then carry out a check and, if necessary, contact the Service Assistance.

For any information not understood or not deducible from this manual, it is recommended to directly consult the Assistance Service.

2.3 Warnings for users

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



2.4 Warnings for maintenance

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 the 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 (max 2 bar) and protect yourself with glasses with side shields.
6. Never use 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.



CAUTION

Original spare parts

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



2.5 Additional warnings

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

| | | |
|----------------------------------------------------------------------------------------------------------------|---------------|--------------------|
|  | DANGER | Protections |
| It is therefore strictly forbidden to modify or remove protections, control parts, labels and EU plates | | |

2.6 Unboxing and tune up

The pedal-assisted bicycle is delivered almost completely assembled.

To correctly assemble the pedal-assisted bicycle, proceed as follows:

1. Open the bicycle packaging box, paying attention to its opening direction. Open the box upper part, in order not let the content fall.
2. Remove the content (pedal-assisted bicycle, battery charger and accessories) from the packaging
3. Unscrew the securing screw of the handlebar stem to the head tube (Ref. A in Figure 1)

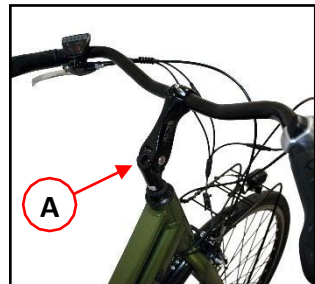


Figure 1 – Securing screw handlebar stem.



4. Rotate the handlebars while holding the front wheel until it is perpendicular to the front wheel. At this point, fix it by screwing the screw on the head tube (Ref. A in Figure 1), on the upper part of the fork steerer tube.

5. Unscrew the two screws on the handlebar connection and rotate the handlebar to the desired position. Once the handlebar has been adjusted, fix the screws (Ref. B in Figure 2). The tightening torques are near the screws.

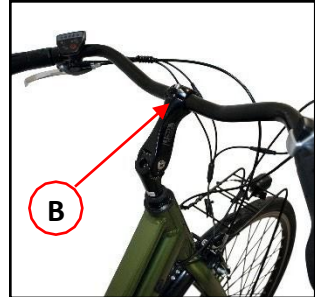


Figure 2 – Fixing screws and handlebar rotation

6. Adjust the height of the handlebar using the appropriate adjustable tube. Unscrew the two fixing screws, adjust the height and tighten the screws again (Ref. C Figure 3).



Figure 3 – Handlebar height regulation

7. Adjust the position of the brake levers so that they are in a suitable position and easily reachable by the user.
8. Adjust the desired seat height by unlocking the lever under the seat, raising or lowering the seat, then locking the lever again.



9. Install the two pedals, screwing them onto the threaded holes on the two cranks. Be careful to install the pedals in the same direction of the pedalling rotation.



CAUTION

Assembly

If you do not have the appropriate assembly tools or do not have the skills to correctly assemble the vehicle, contact an authorized Mandelli S.r.l center



3 BIKE DESCRIPTION

3.1 Frame and code number identification

Make sure the license plates are perfectly legible. Otherwise, apply a new one after requesting it to **MANDELLI S.r.l.**

3.1.1 CE Marking

The following data are shown on the CE plate applied to the pedal-assisted bicycle:

- Manufacturer data;
- Model;
- Year of construction;
- Unladen mass (kg);
- Maximum capacity (kg);
- Engine Power (W);
- Maximum assistance speed (km/h);
- Serial number;
- Battery model and technical data.

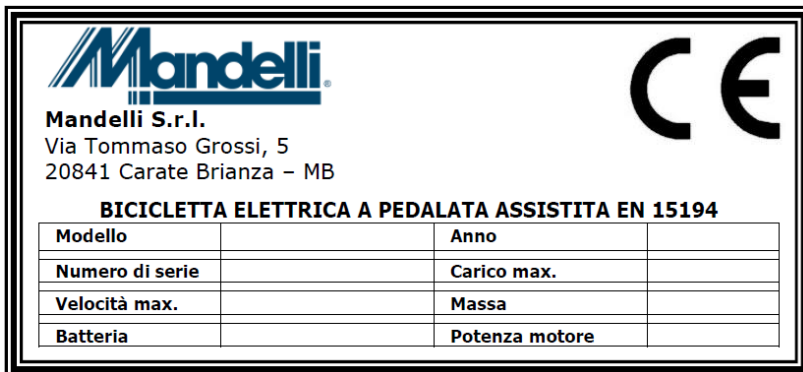



Figure 4 – Sample of identification plate



3.2 General description

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 specific pedal-assisted bicycle allow you to tackle routes with asphalted surfaces or with similar characteristics without roughness.

| | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------------|
|  | DANGER | Incorrect and unintended use |
| The bicycle was designed and built for the specified use; a different use and the non-compliance with the technical parameters established by the Manufacturer may constitute a dangerous condition for the users. | | |

This bicycle is very similar to a muscular bicycle, with the front set with the brake levers at the ends, the saddle in the central part, on which you can sit and operate the pedals. The pedal-assisted bicycle is equipped with a rechargeable battery and an electric motor, whose intervention occurs only when pedalling and progressively slow down as the speed of the vehicle approaches 25 km/h, and then stops completely when this speed is reached. To manage the assistance system there is a special control device located next to the left grip on the handlebar.

On the right side of the handlebar there is the control system for selecting the ratios of the rear gear.

The bicycle is available in two similar frames, which differs in the size. The upright position and the grips with palm rest reduce the pressure on the hands and guarantee excellent visibility to pedal into busy streets.

The mudguards protect from water and dirt and the luggage rack allows you to install the child seat or load small objects. It is equipped



with a reliable long-life battery that allows you to cover long distances with a single charge.

The wide and stable tires contribute to the comfort for urban travel and off-road trips. The tires allow to travel on asphalt roads and gravel.

There is also a low-speed movement function that can be activated with a specific manual control. It allows the bicycle to move at walking speed for parking movements or to push uphill with the driver alongside the bicycle.

3.3 *Technical sheet*



Figure 5 – Description of some pedal assisted bike details

| RIF. | DESCRIPTION | RIF. | DESCRIPTION |
|------|-----------------------------|------|--------------------------------|
| 1 | Handlebar and commands | 5 | Pedals |
| 2 | Engine and rear derailleurs | 6 | Front fork |
| 3 | Saddle | 7 | Front light |
| 4 | Battery | 8 | Luggage carrier and back light |



| ELECTRIC COMPONENTS | |
|----------------------------|---------------------------------------------------------------|
| DETAIL | DESCRIPTION / VALUE |
| Battery | KSHA38 36V 10 Ah 360 Wh cells Kais 21700 |
| Position | Integrated into the frame and cannot be removed without tools |
| Autonomy | 40-60 km (variable accordingly to the path) |
| IP rate | X5 |
| Display | LED with starting button max 6 km/h |
| Motor | Bafang rear hub 32 Nm |
| Assistance level | Five levels |
| Peddalling sensor | Central left side |
| Cables | Full waterproof |
| Battery charger | Included 2A |
| Recharge cycles | 500 (more than 60%) |
| Recharge timing | 7h (100%) |

| MECANICAL COMPONENTS | |
|-----------------------------|------------------------------------|
| DETAIL | DESCRIPTION / VALUE |
| Chassis | Aluminium city bike 28" |
| Size | Lady 43-46 cm |
| Fork | Hi-ten straight |
| Brake | V-brake for e-bike |
| E-bike levers | Aluminium |
| Rim | Aluminium with single iron eyelets |
| Shifter | Shimano TY21 7 speeds |
| Gear controls | Shimano TX50 |
| Handlebar bend | Hi-ten city bike 640 mm |
| Handlebar stem | Adjustable aluminium |



| | |
|-------------------------|----------------------------------------------------------------------------|
| Seatpost | Aluminium |
| Cassette | 7 Speed ATA no sound |
| Crankset | Aluminium 42T |
| Lights | Multivolt from display |
| Accessories | Central double stand, Ergonomic knobs, Luggage racks, Seatpost with handle |
| Tyre | 700x38 black |
| User max. weight | 100 kg |
| Weight | 21,90 kg |

3.4 Brake levers

The brake levers are located on the handlebars of the pedal-assisted bicycle, near the grips. These systems allow you to control, via mechanical cable control, the rim brake pads, the so-called V-Brake, which operates on the edges of the rim. The right lever controls the rear brake, the left one the front brake; the braking action is proportional to the force applied on the lever.

3.5 Speed control

The speed change control, on the right handlebar, acts on the derailleur to move the transmission chain on the various sprockets of the rear drive wheel. The red hand indicates the gear engaged: 1 is the shortest gear, i.e. you must make more pedal strokes to cover a stretch of road, 7 is the longest gear, i.e. you must make fewer pedal strokes to cover the same stretch of road. In practice, it is advisable to use short gears for climbs and long gears for flat terrain.

NOTE: for the correct functioning of the gearbox, it is advisable to always change the speed ratio with the pedals moving; furthermore, it is not recommended to change gear on steep climbs.



3.6 Assistance display and use

To manage the assistance system there is a light controller on the left side of the handlebar. This device allows you to vary the level of assistance, turn the lights on or off, view information regarding the battery status and activate the departure/walking assistance system.

3.6.1 Commands

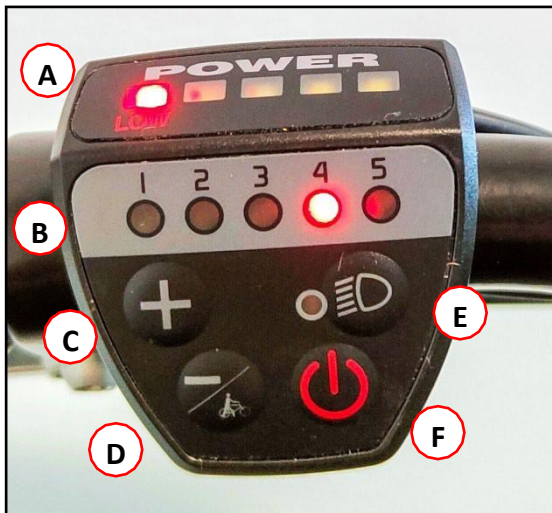


Figure 6 – Assistance device with the main functions

| PART | FUNCTION |
|------|-------------------------------------------------------------------------------------------------------------|
| A | The LED shows the charge status of the battery. When the battery is not charged enough the display flashes. |
| B | The LED shows the assistance intensity. 1 is the lower, 5 is the higher. |
| C | The button “+” is used to higher the assistance intensity. |



| | |
|---|----------------------------------------------------------------------------------------------------------------------------------------|
| D | The button “-” is used to lower the assistance intensity. Holding the button pressed, the assistance at starting/walking is activated. |
| E | The button turns on or off the lights |
| F | The red button turns on or off the bike assistance system. |

3.6.2 Assistance levels

Check the table underneath to know the assistance level you are selecting:

| LIVELLO | DESCRIZIONE |
|---------|----------------------|
| Level 1 | No assistance |
| Level 2 | Low assistance |
| Level 3 | Medium assistance |
| Level 4 | High assistance |
| Level 5 | Very high assistance |



CAUTION

Assistance system function

To find out in details about all the functions and settings of the assistance system, consult the use and maintenance manual provided by MANDELLI S.r.l.



3.7 Assistance activation

The assistance system is controlled via the controller, present on the handlebar, near the left grip. In particular, the assistance is activated or deactivated using the ON/OFF button (Ref. F in Figure 6). Once the system is activated, the management lights come on and it is possible to see the vehicle's activity status.

The engine power depends on the force exerted on the pedals, according to a multiplication factor based on the selected assistance level. The assistance decreases linearly until reaching 25 km/h. Once this speed is exceeded, the assistance is automatically deactivated.



CAUTION

Assistance activation

Before turning on the assistance it is necessary to correctly insert the battery at the top of the oblique frame post.

3.8 Assistance at starting / walking

The pedal-assisted bicycle model **Brera City urban integrated battery** is equipped with the starting and/or walking assistance function.

To activate it, proceed as follows:

- 1- Stand firmly on the bicycle or get off it and hold the handlebars firmly to prevent the bicycle from slipping;
- 2- Turn on the assistance system;
- 3- Hold the “ – ” button (ref. D in figure 6);
- 4- The function is activated after 1 sec.



The start/walk assist function is activated maintaining the button pushed and the bicycle travels at a speed of approximately 6 km/h as long as the “-” button is pressed. The bicycle then returns to the previously selected pedalling assistance level.



ATTENZIONE

Assistance at starting / walking

The starting/walking assistance must only be used when walking while pushing the bicycle.

Do not use while remaining on the seat.

3.9 Battery

The assistance system of the pedal-assisted bicycle requires the presence of a battery. Specifically, the battery is not removable from the user.

3.9.1 Battery charge status

By pressing the assistance activation button, you can directly view the battery charge status on the controller via a series of LED lights.

In particular, there are 5 LED lights (Ref. A in Figure 6) which light up based on the state of charge.

If the 5 LED lights are on, it means the battery is fully charged. As the battery discharges, the LED lights will turn off and the assistance system will turn off when the system's power battery is completely discharged.



3.9.2 Battery charge

The charge of the pedal-assisted bicycle's battery can only be done through the charging port on the right of the frame's inclined post.

Proceed as follows:

- 1- Turn off the assistance system of the pedal-assisted bicycle using the appropriate ON/OFF button (Ref. F in Figure 6).
- 2- Connect the supplied battery charger to the socket on the bicycle frame with the appropriate plug.
- 3- Connect the battery charger to a power socket (230 V / 50 Hz) and charge the battery for the time needed.



Figure 7 – Battery socket on the frame

| | |
|-------------------------------------------------------------------------------------------------------|-----------------------|
|  CAUTION | Battery charge |
| ALWAYS CONNECT THE PLUG TO THE BATTERY FIRST AND THEN THE CHARGE BATTERIES AT THE POWER SOCKET | |




3.10 Head light and rear light

To ensure visibility both during the day and at night, two lights are installed, one front and one rear. These devices are activated by pushing the button on the control device of the assistance system during the use of the pedal-assisted bicycle (Ref. E in Figure 6). The small light next to the on/off button stays on together with the headlights.

3.11 Troubleshooting

| PROBLEM | CAUSE/SOLUTION |
|------------------------------|-------------------------------------------|
| The system does not activate | Check that the battery is charged |
| Assistance is not working | Check that the battery has enough charge. |

| | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------|
|  | CAUTION | Troubleshooting |
| In case the assistance system does not activate even if the battery appears to be charged, contact the assistance service provided by MANDELLI S.r.l. or by an authorized service center. | | |



4 Terms of use and environment

4.1 Terms of 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 roughness.

Any modification of the state of construction can compromise the behaviour, safety and stability of the pedal-assisted bicycle and can lead to an accident.

Any other 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.

4.2 Environment

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 can be an asphalted surface or one with not excessively high roughness.

Furthermore, the place of use must be illuminated by the sun or artificial lights, to guarantee a 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 rear red light.



CAUTION

Prohibited environment

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 the bike characteristics (frame, wheels, etc.);
- In closed spaces, if they do not allow a safe use;
- In extremely dark environment.

4.3 *Incorrect use and warnings*

The actions described below, which obviously cannot cover the entire range of potential possibilities of "misuse" of the pedal-assisted bicycle, must be considered **absolutely prohibited**.



CAUTION

Prohibited use

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



DANGER

IT IS STRICTLY FOBIDDEN

- **Riding the pedal-assisted bicycle for uses other than those for which it was built; no passenger allowed.**
- **Ride the pedal-assisted bicycle in areas where there is a significant risk of explosion or fire.**
- **Ride the pedal-assisted bicycle in adverse weather conditions (heavy rain, hail, snow, strong wind, etc.).**
- **Carrying a passenger in addition to the driver.**
- **Riding the pedal-assisted bicycle under the influence of alcohol or drugs.**
- **Ride the pedal-assisted bicycle if your weight is higher than the permitted one.**
- **Charge the battery in an environment that is too hot or insufficiently 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.**




5 UPLIFTING AND TRASPORTATION

5.1 Uplifting

The weight of the pedal-assisted bicycle model **Brera City urban integrated battery** is such that it can be lifted and transported by one or two people, also due to its overall dimensions.

The optimal solution for carrying out the uplifting is to grasp the handlebar knob and the rear part of the saddle.


| | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------|
|  | DANGER | Crushing and impact |
| <ul style="list-style-type: none">• During the uplifting you must operate with extreme caution to avoid damage to people and things.• This operation must be performed by robust people. | | |

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

5.2 Transportation

To guarantee the safety of the transport in a van, 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 conditions.

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, can happen! | | |



6 FIRST RIDE

6.1 *Battery charge*

Before using the bicycle for the first time, the battery must be charged for at least 24 hours, using the appropriate supplied battery charger.

The pedal-assisted bicycle, **Brera City urban with integrated battery**, is equipped with an electric motor powered by a 36 V lithium ion battery. The battery is housed in the central part of the bicycle, under the inclined frame.

The average charging time varies from 4 to 8 hours, accordingly to the actual charging percentage.

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 3.8.2.



CAUTION

Battery charge

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



DANGER

Precautions when charging

- Always connect the plug to the battery and then the power plug to the mains.
- When the 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 supplied power supply.
- 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 while charging.
- If the battery smells badly while charging, immediately unplug it from the power supply and ventilate the room, do not touch the battery.

6.2 Preliminary check

Before each use, the driver must ensure the safety status of the pedal-assisted bicycle. Therefore, perform the following inspections before riding the electric bicycle.

6.2.1 Control devices

Check the efficiency and state of charge of the battery. The use in very cold environments quickly degrades the battery's efficiency. Check the chain tension and lubrication.

6.2.2 Wheels

Check the tire inflation pressure. Check the state of wear of the tread: there must not be cuts, cracks, foreign bodies, anomalous swellings, visible plies or any other damage.



6.2.3 Brake system

Check the brakes with a low-speed braking test in an obstacle-free area, first with the rear brake and then with the front one.

| | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------|
| | CAUTION | Negative check |
| <ul style="list-style-type: none">• If, during the preliminary checks, any kind of defects are found and even a single check is negative, DO NOT RIDE THE PEDAL-ASSISTED BICYCLE.• Immediately take all the measures to carry out an appropriate repair and, if necessary, contact the Assistance Service or an authorized workshop. | | |

6.2.4 Frame, handlebar and saddle position

Check that the frame, the seat and the handlebar are properly secured and positioned in the most comfortable configuration for the rider to have the complete control of the bicycle. Otherwise, before setting off, adjust the position and the seat, the handlebar and the brake systems.

| | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------|
| | DANGER | Frame position |
| <p>It is strictly forbidden to use the bicycle without having correctly fixed all the parts of the bicycle and without assuming a comfortable and safe driving position.</p> | | |

To adjust the seat position, unlock the seat hook, then raise or lower the seat and close the hook again.



6.2.5 Brake and suspension setting

Before using the pedal-assisted bicycle, adjust the position of the brake levers on the handlebars, to make their use easier.

| | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------|
| | DANGER | Regulation |
| <p>It is strictly forbidden to adjust the bicycle devices if you are not an expert and trained person. Incorrect adjustment can cause serious injuries.</p> <p>Therefore, if you are not able to adjust these functions, please contact specialised personnel.</p> | | |

The manufacturer is not responsible for injuries resulting from an incorrect adjustment of the pedal-assisted bicycle devices.

6.2.6 Lighting

Check the front and rear lights.




7 BIKE USAGE

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

- It is forbidden to carry a passenger in addition to the driver.
- It can be used only by experienced 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 as described in this manual.
- Never ride the pedal-assisted bicycle with removed parts.
- 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, not only for your own safety.

| | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------|
|  | DANGER | Risk of injury |
| <ul style="list-style-type: none">• Check that all controls are perfectly working.• Always respect the highway code.• Use appropriate protective equipment (helmet, etc.) | | |



7.1 *Riding your bike*

Before using the pedal-assisted bicycle in the traffic, it is advisable to familiarize with the bike.

The first uses must be made in private environments away from traffic, other cyclists, or any kind of obstacles.

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 approaching a curve, you must maintain a moderate speed (the smaller the curve radius, the lower the speed). When the driver stops pedalling or the speed reaches 25 km/h, the electric motor does not provide assistance and the bicycle will be completely managed by muscle pedalling.

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 minimum assistance level.

7.2 *Braking system*

Before braking, stop pedalling and then pull the two brake levers, first the rear, then the front one.

| | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------|
| | CAUTION | Driving conduct |
| <p>Be careful not to block the wheels when braking: you could lose control of the bicycle.</p> <p>It is very dangerous to brake when cornering: you could lose control of the bicycle.</p> | | |




7.3 Parking

The bicycle is equipped with a stand for lateral support. Before leaving the bicycle, check that the pedal-assisted bicycle is placed on solid ground and that remains in a stable position. The bicycle must be parked in a designated parking areas and, in any case, without obstructing the passageways, emergency exits, electric panels and fire stations.




8 MAINTENANCE

8.1 General RULES

| | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------|
|  | DANGER | Risk of injury |
| <p>During all maintenance works, follow appropriate safety measures. Consult the instructions on page. 11.</p> <p>All maintenance operations must be carried out with the battery disconnected from the pedal-assisted bicycle and from the battery charger and the bicycle must be supported in a stable manner, using the specific support elements.</p> | | |

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

After every ordinary maintenance intervention, a check on the perfect functioning of all the controls is mandatory.

| | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------|
|  | CAUTION | Negative check |
| <ul style="list-style-type: none">• In case one test is negative, DO NOT RIDE the pedal-assisted bicycle.• Immediately activate one adequate repair, and if necessary, contact the Assistance Service. | | |

This manual does not provide detailed information regarding disassembly and extraordinary maintenance, as these operations must always and exclusively be carried out by MANDELLI S.r.l. Assistance Service personnel or by authorized technicians.



The Assistance Service can provide all the information and respond to any request to take care of and maintain your pedal-assisted bicycle in perfect working order.

If non-original parts are fitted, the warranty becomes invalid!

8.2 Maintenance and daily inspection

8.2.1 Ce frame and pictogram inspection

Check the legibility and presence of the CE plate, the chassis number stamped directly on it and the warning stickers applied to the frame of the bicycle.

8.2.2 Wheels inspection

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, of the rim and the fixing of the rims to the hubs. If you need to replace the tyres, contact the Assistance Service or a qualified tire dealer.

8.2.3 Brake and cables inspection

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

Brakes precision adjustment

Brakes adjustment must only be carried out by authorized personnel.



8.3 Maintenance and weekly inspection

8.3.1 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 pressurized water towards the electrical parts, the engine and the battery, for which a sponge washing 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.

8.3.2 Lubrication and chain tension inspection

It is important to lubricate the chain regularly, to avoid excessive worn and to extend its life.

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

| | | |
|-------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------------|
|  | DANGER | Correct chain lubrication |
| Be extremely careful not to get lubricant on the brakes or on the tires of your bicycle. This can lead to serious injuries!! | | |



8.3.3 Frame and bolts inspection

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.

8.4 Maintenance and monthly inspection

8.4.1 Electric component and circuits

Check the condition and the 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 covered with insulating grease.

Check that all light bulbs and display lights come on correctly.



9 TECHNICAL ASSISTANCE AND SPARE PARTS

In case of need for technical assistance or for a prompt delivery of spare parts, it is recommended to provide the following data:

- Type of pedal-assisted bicycle.
- Serial number
- Construction year
- Quantity needed



CAUTION

Original spare parts

The manufacturer exempts itself from any liability for any kind of damage, generated by the use of non-original spare parts.



10 WAREHOUSE STORAGE

If the pedal-assisted bicycle has to be stored for a long period of inactivity, the following operations must be carried out:

- Store 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 the external electrical contacts with antioxidant products.
- Grease all the surfaces not protected by paint or anti-corrosion treatments.



11 COMPONENTS AND MATERIALS DISPOSAL



CAUTION

Material disposal

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

Indications for the 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 an authorized disposal centre.

Divide the materials according to their nature, appointing specialized and authorized disposal companies, in compliance with the laws' provisions.





12 WARRANTY RULES

MANDELLI S.r.l. does not assume responsibility for damage to things or people due to improper use of the vehicle.

The pedal-assisted bicycle is guaranteed for 24 months for the entire bicycle, except for the battery, whose guarantee is 12 months and is limited to correct use of the same. If the battery has been discharged below the permitted level, the manufacturer is not liable for any damage.

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. The following are not covered by the warranty except for obvious initial defects:

- tires following accidental punctures or breakages;
- braking pads, subject to wear;
- general wear material.