RALEIGH TM/MC

Power Assisted Bicycle Owner's Manual

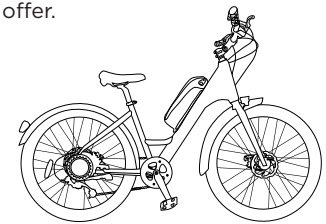
This manual contains important safety, performance and maintenance information. Read the manual before taking your first ride on your new power assisted bicycle, and keep the manual handy for future reference.

Imported by Raleigh Canada, Toronto, Canada M4S 2B8

Contents

Welcome Word

Congratulations on buying a power assisted bicycle! Whether it is to make your daily commute to work easier, extend your riding time, help you keep up with your friends or family or simply to enjoy all the comfort, efficiency and fun that this type of bicycle allows, we are confident that you will appreciate all the features and benefits your new bicycle has to offer.



Safety Information

Although modern power assisted bicycles look a lot like their regular counterparts, there is quite a lot of technology behind them and some notable differences in their riding behaviour, handling, and maintenance requirements.

This manual has been created to provide you with the instructions needed to safely handle and operate your power assisted bicycle, understand its function, perform maintenance, and adjust its parameters. It is important that you carefully read and understand this manual before you ride your power assisted bicycle. It should also be kept handy for future reference. This document is not a complete service manual. We recommend that you seek advice from a qualified bicycle technician if anything is unclear.

Note that some manufacturers may not honour their warranty if the handling and operation has not been done properly.

The following symbols will be used throughout the manual. They represent important Warnings and Cautions about the proper handling and operation of your power assisted bicycle. They should be carefully observed because failure to do so might result in serious injuries, damage, or loss of performance of the system.

For other information not related to the Power Assist system but regarding your bicycle such as part assembly, adjustments, maintenance, or riding basics, please refer to your Owner's Manual provided separately at the time of purchase.

Indicates important information or a caution about the proper use of a component of the system.

Indicates a warning about important safety information.

Safety Recommendations

Always use your power assisted bicycle according to the local laws and regulations.

Don't attempt to alter or disassemble any component of the Power Assist system. Maintenance should only be performed by a qualified bicycle technician.

Only use the original equipment provided to operate and charge the system. For replacement parts, contact the bicycle dealer where the product was purchased.

A power assisted bicycle handles differently than a regular, human powered bicycle. The acceleration can be surprisingly effective and you should get familiar with its behaviour progressively before riding on public roads or crowded bicycle-designated paths.

Power assisted bicycles are heavier than most other bicycles. Always keep in mind that the required distance needed for braking may be longer than what you are used to on a regular bicycle. This also calls for more attention to the maintenance of your brake system and tires.

Always look far in front of you while riding to make sure you have sufficient time to react if any situation occurs. Avoid looking at the LCD controller unit for a long period. Instead, learn how to operate it with only a quick glance.

A power assisted bicycle is not suited for use by children or certain persons with reduced physical or mental capabilities. Make sure you know and understand local laws and regulations regarding this type of vehicle.

Laws and regulations regarding the limitations and use of a power assisted bicycle vary among countries and even sometimes among states and provinces. Make sure you know and understand local laws and regulations if you plan to travel with your power assisted bicycle.

Important information about battery storage

Do not store the battery in a cold environment, even for a short period. If you must leave or store your power assisted bicycle outside or in a place that is not heated, you should remove the battery and store it inside, at room temperature. Cold temperatures can damage the battery.

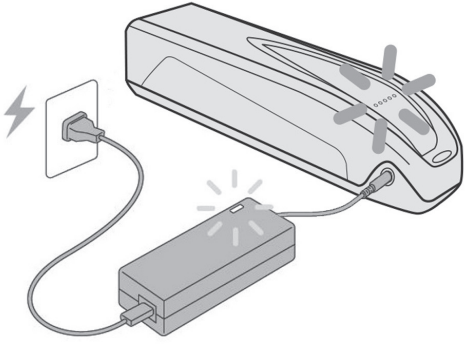
Store the battery away from high heat sources such as direct sunlight or inside a vehicle during summer.

Make sure to follow all the instructions described in section **Storage** when storing the bicycle for a long period.

Quick Start Instructions

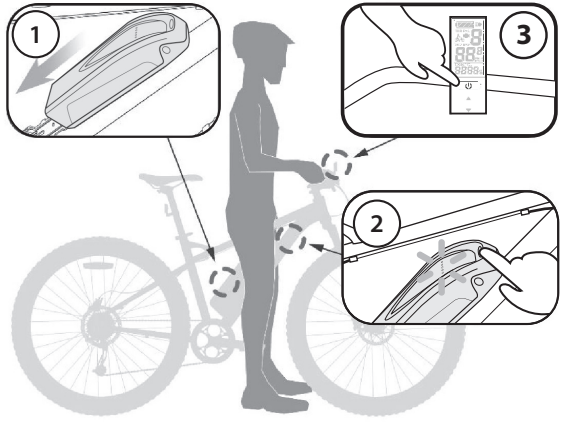
STEP 1: Charge the battery

1. Connect the AC power plug into the charger.
2. Plug the AC power plug into an electrical outlet. The LED indicators on the charger will light up.
3. Lift the battery's plastic protector cap and connect the charging plug into the battery's charging port. The LED indicators on the battery will light up, confirming that charging is underway. Let the battery charge until it is fully charged.
4. The light on the charger will turn green when fully charged.
5. Pull the charging plug from the battery and replace the plastic protector cap.



STEP 2: Turn the system on

1. Slide and lock the battery onto its support on the frame. Mount the bicycle and stand still over it or sit on the saddle with a foot resting steady on the ground.
2. Press the power button ⏻ on the battery. LED indicators will light up and show the battery is on.
3. Press the power button ⏻ on the LCD controller until the screen lights up.

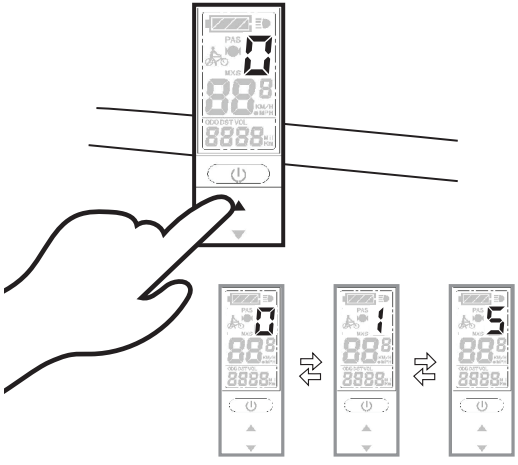


Do not turn the Power Assist system on unless you are on the bicycle and seated properly with at least one foot on the ground. An unexpected ignition of the power assistance while mounting the bicycle can result in serious injuries.

STEP 3: Select your assistance level

1. Press the button ▲ on the LCD controller to switch to a higher power assistance mode.
2. Press the ▼ button on the LCD controller to switch to a lower power assistance mode.

Note: *Level 1 provides the least power assistance, while level 5 provides the most.*

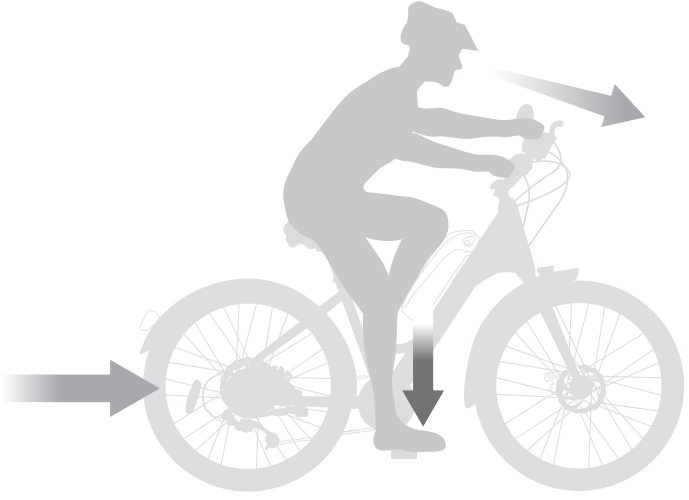


Be careful if you decide to start off with a high power assistance mode as the first pedal stroke may result in an unexpectedly quick acceleration!

STEP 4: Start off

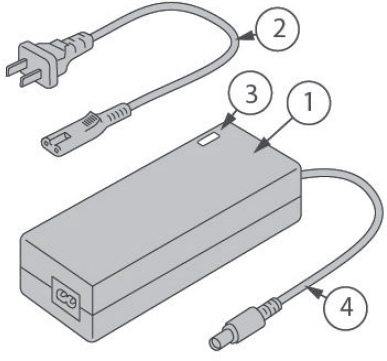
1. Make sure the path in front of you is clear.
2. Hold on to the handlebar with both hands and push on the pedals. The Power Assist will quickly kick in!

Note: *The Power Assist will only stay engaged when the rider is pedalling.*



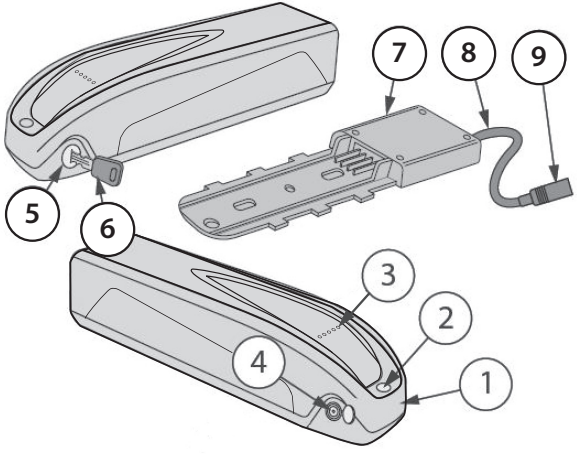
RIDE SAFELY!

Parts List



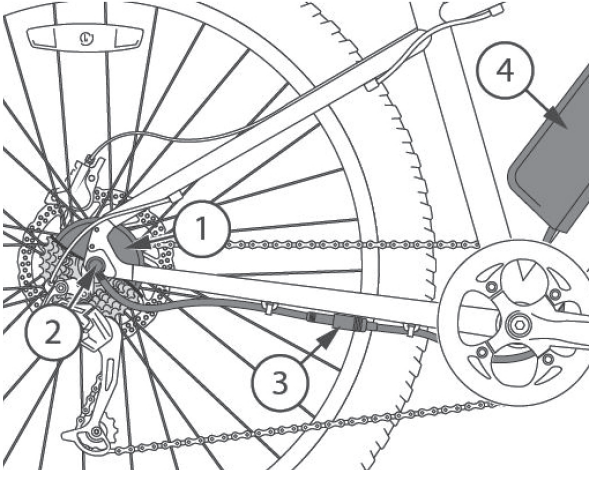
Charger unit
1. Charger block
2. AC power cord
3. LED indicator
4. Charging plug

**Charger may not be exactly as shown.*

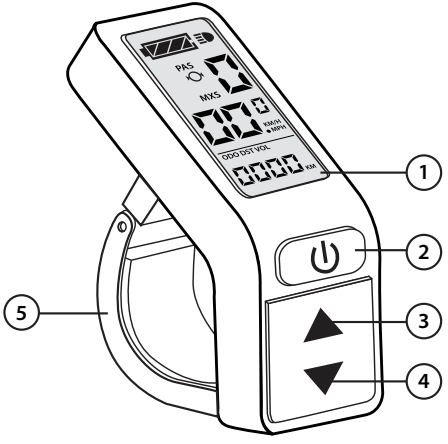


Battery unit
1. Battery casing
2. Power button switch
3. Charge level LED indicators
4. Charging socket
5. Key lock
6. Key
7. Battery support base
8. Power cord
9. Coupler

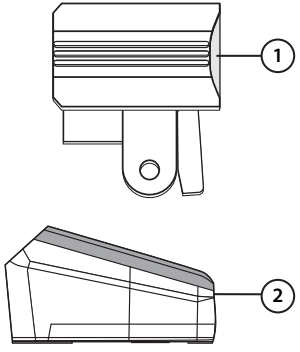
The battery unit has been built and sealed by the manufacturer. Do not attempt to open the battery casing for any reason. Only the original equipment manufacturer is allowed to perform maintenance or repair on the battery.



Motor unit
1. Rear hub motor shell
2. Power cord junction cap
3. Power cord coupler
4. Battery casing



LCD Controller unit
1. LCD screen
2. Power button
3. Up button
4. Down button
5. Handlebar bracket



Lights
1. Front headlight (white)
2. Rear taillight (red)

Features

Charger unit
- Converts input electrical current from wall outlet to charge the battery.
- Red LED light while charging battery.
- Green LED light once battery is charged.

Battery unit
- Stores energy to power the motor unit.
- Lithium-ion type
- Charging plug
- Key lock to secure on the bicycle's frame

Motor unit
- Provides power assistance to the bicycle's drivetrain.
- Gear drive rear hub motor type

LCD controller unit
- Built-In LCD screen
- On / Off control for the system
- Power assistance mode control
- Displays information such as:
    - Current speed
    - Maximum speed
    - Current Power Assist mode
    - Battery level
    - Trip distance
    - Malfunction error code

Sensor unit
- Built-in sensor unit
- Detects pedalling
- Measures speed

Lights
- Front headlight (white)
- Rear taillight (red)

Technical details

Battery
- Voltage: 36 V
- Capacity: 10.4 Ah
- Energy content: 374 Wh
- Operating temperature
    - Discharge: 14 to 104°F (-10 to 40°C)
    - Charging: 32 to 104°F (0 to 40°C)
- Storage temperature: 41 to 104°F (5 to 40°C)

Motor unit
- Power: 250 W
- Max drive torque: 45 Nm
- Assistance cut-off speed: 32 km/h*

**Power assistance cut-off speed required by Canadian regulations. May be different in a different country.*

Power Assist Modes

Choosing a power assistance mode
Once the system is powered up, you may want to choose your power assistance level. This will change the amount of power assistance that the motor provides you while pedalling.

It is recommended to start off with the lowest level of assistance and increase it gradually if needed. Doing so will offer much smoother acceleration, helping you to keep control over your speed as well as to save the battery's capacity.

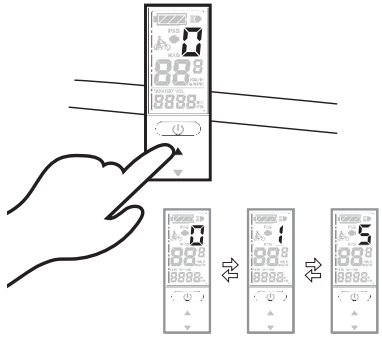
Keep the assistance level lower while riding casually on flat surfaces. Increase the assistance level when approaching an incline to help you climb with less effort.

If you wish to walk beside the bicycle on an incline or if the bicycle is heavy to push because of the load it is carrying, you may want to use the Walk mode that will make the bicycle self propel at a speed of 6 km/h.

Switching to Walk mode will instantly ignite the motor and propel the bicycle to a steady speed of 6 km/h even with no pressure on the pedals. Make sure you are holding your bicycle steadily and that the path in front of your bicycle is clear. Walk mode will automatically shut down once you release the button.

Power Assist level and modes
Your Power Assist system can be used at many levels and on different modes. Get to know each of the options available so you can choose the right one for each riding situation.

The LCD screen unit shows which Power Assist level or mode you're currently in. Use a Power Assist level according to the current riding conditions. Choose a high assistance level when going uphill or against a head wind and switch to a lower assistance level if you are riding on a flat road or with a tail wind.



To shift through Power Assist levels:
Switch through the 6 Power Assist levels (0 > 1 > 2 > 3 > 4 > 5) using the LCD controller's ▲ and ▼ buttons.

Power assistance modes

Level 0 – No assistance
At this level, there will be no power assistance coming from the motor. Use this level to save battery capacity while descending.

Level 1 – Minimum assistance
Compensates for the Power Assist system's own weight without reaching high speed. Use on flat surface with low wind resistance. Operating range is at its highest.

Level 2 – Low assistance
Helps to reach a steady, slightly higher speed than normal. Use on flat surface with low to medium wind resistance. High operating range.

Level 3 – Intermediate assistance
Maintains a steady speed on variable-incline surfaces with medium wind resistance. Optimal balance between power assistance and operating range.

Level 4 – High assistance
Reach greater speeds. Use on long inclines and against strong wind resistance. Expect a reduced operating range if riding with this assistance level for a long period.

Level 5 – Maximum assistance
Reach the highest speeds or get maximum help to climb steeper inclines. Keep a close watch on your battery capacity if using this mode for a long trip.

Walk mode
Use Walk mode when walking beside your bicycle and you're in need of power assistance. For example, when walking your bike up an incline or carrying heavy luggage. As soon as Walk mode is activated, the motor will propel the bike at a steady speed of 6 km/h until the button is released.

To activate Walk mode:
Press and hold Down ▼ button for 2 seconds (from any mode). Walk mode will instantly shut down once you release the button.

Switching to Walk mode will instantly ignite the motor and propel the bicycle to a steady speed of 6 km/h even with no pressure on the pedals. Make sure you are holding your bicycle steadily and that the path in front of your bicycle is clear. Walk mode will automatically shut down once you release the button.

Operating range

The distance you will be able to ride with a single battery charge depends on many factors. Some are under your control and some are not. The factors you have no control on are weather conditions such as wind direction, wind strength, and temperature. Difficult road surfaces also influence the range you can achieve. Loose and irregular ground surfaces will increase your tires' rolling resistance and therefore require more power and decrease the range you can cover. Hills will also affect battery range. The more hills you climb, and the steeper the grade, the more battery power that is required.

The factors you have control over are the following:

- The power assistance level you choose
- Tires pressure and condition
- The weight of cargo you are carrying
- Condition of the battery

Here are some tips to help you reach maximum range of a battery charge:

- Only use the power assistance you need for each condition during your ride. You may not need maximum assistance while riding on flat ground or with a tail wind.

- After a stop, start off again on an easy gear combination and shift up progressively as you gain speed. Think of it as driving a car with a manual transmission where you would not start accelerating in a high gear.

- Keep your tires inflated at the recommended pressure. This will significantly reduce the rolling resistance of your tires and require less power to propel the bicycle.

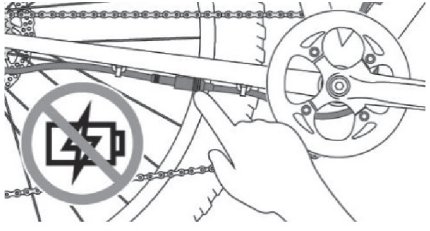
- Only bring the necessary equipment to keep your overall weight as low as possible.

- Always charge your battery according to the instructions described in section **Charging the battery** of this manual to extend its life and performance.

It is recommended that you plan your ride to make sure you can make it back home on a single charge or have a charging stop planned in advance.

Using Your Power Assisted Bicycle

General handling instructions



Disconnect the power cord coupler next to the hub motor before proceeding to mechanical adjustments, maintenance or before shipping your bicycle with a transport company.

Disconnect and remove the LCD controller unit when packing the bicycle for travelling to prevent damage to these components.

Power assisted bicycles are considerably heavier than regular bicycles, therefore you should take extra caution before lifting your bicycle and use a proper lifting technique in order to not hurt your back.

If you are using a bicycle rack to transport your power assisted bicycle on your vehicle, make sure it can support the bicycle's weight.

Do not move your bicycle while the battery is connected and charging to prevent damage to the power cord and connections.

Your bicycle's Walk mode is designed to help you push your bicycle uphill. See section ***Walk mode,*** *to learn how to use this function.*

Always advise shipping companies that you are shipping dangerous goods and follow their requirements for packaging, or ask your bicycle dealer for recommendations regarding the packaging of your battery for transport.

Specific riding manoeuvres

There are some manoeuvres that should be avoided when riding a power assisted bicycle. A sudden ignition of the Power Assist system in an unexpected situation can cause the bicycle to accelerate when it is not required and handle erratically.

In the following riding situations, it is recommended not to put pressure on the pedals to avoid sudden acceleration from the Power Assist system:

- While walking beside the bicycle,
- While taking a curve at high speed,
- While riding on a patch of water, mud, snow, ice, or any slippery surface,
- While lifting the front wheel up to clear an obstacle.

Handling the battery

Never submerge the battery in water and avoid washing it with a high-pressure washer. Although it has been designed to be water resistant, the battery's shell is not fully sealed.

Never attempt to modify or disassemble the battery. This could lead to serious injuries, cause serious damage and will void the manufacturer's warranty. Only a qualified bicycle technician should perform repair or maintenance on any parts of the Power Assist system.

Only use genuine parts provided by the manufacturer to charge the battery and always follow the charging instructions and warnings.

Do not place the battery near heat sources or throw in fire.

To prevent battery leakage, do not leave your power assisted bicycle or battery under direct sunlight for prolonged periods or inside a vehicle on a hot day.

If a battery has suffered a strong impact it may be damaged. You should have it checked by a qualified dealer to make sure it is safe to use before riding your power assisted bicycle again.

Always respect the battery's operating temperature limits described in section ***Technical details.***

If the battery starts leaking, stop using it immediately and contact a qualified dealer for instructions.

If leakage from the battery occurs, avoid touching it as it is corrosive. If the liquid comes in contact with your clothes, wash them with clean water. If the liquid gets on your skin, wash thoroughly with water. Additionally, if it comes in contact with your eyes, do not rub but wash thoroughly under clean water and contact a physician.

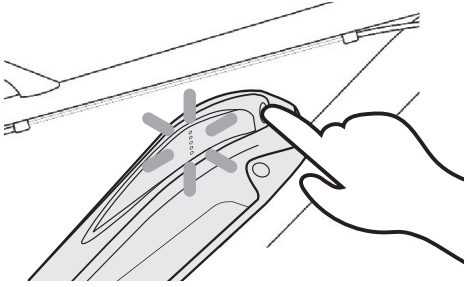
When charging your battery, make sure the connectors are clean and free of water or dirt before connecting the charger.

The warning labels on the battery and charger present important information for your safety. Make sure to follow the instructions carefully.

Turning the Power Assist system on

Do not turn the Power Assist system on until you have mounted the bicycle and are seated properly with at least one foot on the ground. An unexpected ignition of the power assistance while mounting the bicycle can result in serious injuries.

This Power Assist system has an auto shut off function. If there is no operation or input from the buttons on the LCD controller for some time, it will shut down automatically.

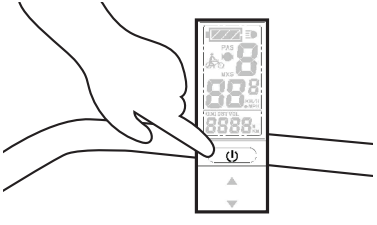


1. <u>First</u> turn the battery power on

• Press and hold the Power button ⏻ on the battery casing. The LED indicator will light up confirming the battery is On.

2. <u>Then</u> turn the LCD controller on

• Press and hold the LCD controller's power button ⏻ for 2 seconds. The LCD screen will light up.

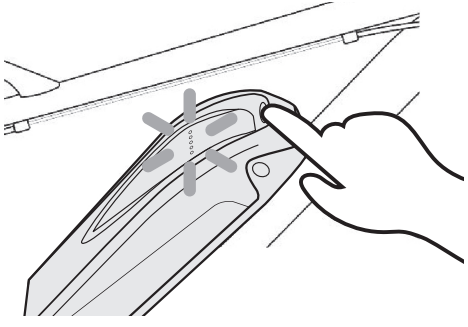


In the event that an error logo shows up when the LCD screen lights up do not ride your bicycle. Contact a qualified dealer to have your power assist system checked.

Turning off the Power Assist system

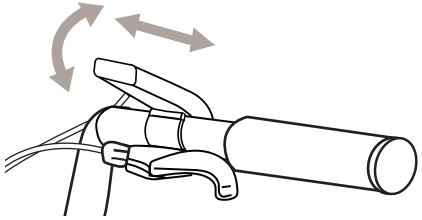
Do not get off the bike before having turned the Power Assist system Off. An unexpected ignition of the power assistance while getting off the bike can result in serious injuries.

Press and hold the Power button ⏻ on the battery casing. The button's LED indicator will turn off. The motor and LCD controller won't receive power anymore. The LCD screen will quickly shut down. The power assist system is then Off.



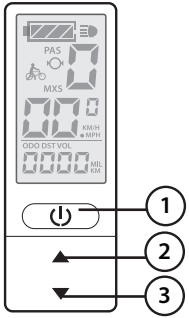
Settings Menu

Positioning the LCD controller
Position the LCD controller on the left hand side of your handlebar, facing up, slightly at an angle so it's easy to look at, and close to your hand so you can easily reach it while holding on to the grip.

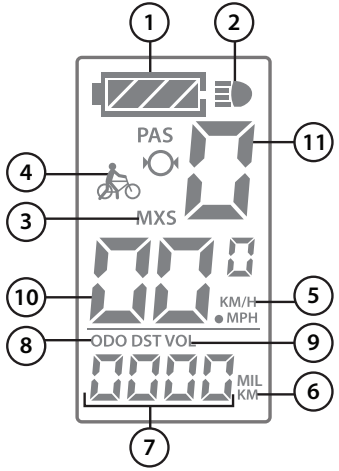


LCD controller buttons description

1. POWER button
2. UP button
3. DOWN button



LCD screen icons description



1. Battery charge level status
2. Headlights/LCD screen backlight status
3. Maximum speed
4. Walk mode activated icon
5. Current speed unit displayed
6. Current distance unit displayed
7. Distance display
8. Current trip distance / Odometer displayed
9. System voltage status
10. Speed display
11. Current Power Assist level

LCD controller commands

Turning the system ON or OFF:
Press and hold the Power button ⏻ for 2 seconds to turn the system On or Off (the battery power must have been turned on before).

Switch to a higher Power Assist level:
Press the Up ▲ button to switch to a higher Power Assist level

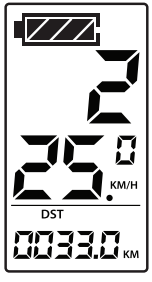
Switch to a lower Power Assist level:
Press the Down ▼ button to switch to a lower Power Assist level

Activate Walk mode:
Press and hold the Down ▼ button for 2 seconds from any level to activate Walk mode. Keep the button pressed for the time you need the Walk assistance. Walk mode will instantly shut down once you release the button.

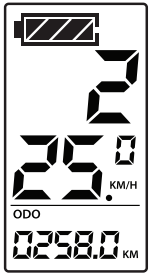
Switching to Walk mode will instantly ignite the motor and propel the bicycle to a steady speed of 6 km/h even with no pressure on the pedals. Make sure you are holding your bicycle steadily and that the path in front of your bicycle is clear. Walk mode will automatically shut down once you release the button.

Switch to a different LCD screen mode
Press the Power button ⏻ briefly to switch between different LCD screen modes (1 > 2 > 3) displaying information about your speed, travelled distance and Power Assist system status.

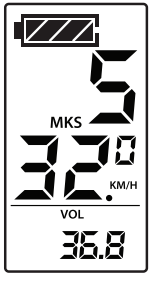
LCD screen Mode 1 (default) displays:
- Battery charge level
- Current Power Assist level
- Current speed
- Current trip distance



LCD screen Mode 2 displays:
- Battery charge level
- Current Power Assist level
- Current speed
- Odometer



LCD screen Mode 3 displays:
- Battery charge level
- Current Power Assist level
- Maximum speed
- Current system voltage



Reset the latest trip data:
(Wait at least 5 seconds after the LCD controller has been turned On.)

Press and hold both the Up ▲ and Down ▼ buttons for 2 seconds until the current values are flickering.

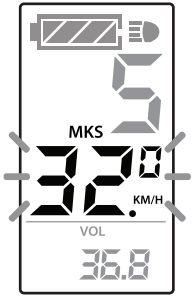
Then, while they are still flickering, briefly press the Power button ⏻ to reset the values to zero.

Turn the bike lights On / Off:
With the LCD controller On, press and hold the Up ▲ button for 2 seconds until the backlight is lit.

Press and hold the Up ▲ button for 2 seconds again to turn it Off.

Adjusting the system parameters
To access Parameters Adjustment Menu: (within 5 seconds after turning the LCD controller On).

Press and hold both the Up ▲ and Down ▼ buttons for 2 seconds to access the first parameter menu: Maximum speed.



Maximum speed
This is the system's cut-off speed limit. When this speed value is reached when riding, the motor will stop providing power assistance.

The maximum speed value has been set at the factory according to the country, state or province where your bike has been distributed.

Press the Power button ⏻ to proceed to the next parameter: Wheel diameter.

Wheel diameter

The wheel diameter value has been set at the factory according to your bike's specific configuration. Do not modify the default value of this parameter. Proceed to the next parameter.

Press the Power button ⏻ to proceed to the next parameter: Speed/Distance unit.

Speed / Distance unit
The unit used to measure and display speed and distance on the LCD screen can be adjusted to the user's preference between Metric (KM/H – KM) and Imperial (MPH – Mil) standards.

To set the speed / distance unit:
Use the Up ▲ or Down ▼ button to set the desired value while it is flickering.

Press and hold the Power button ⏻ for 2 seconds to exit the Parameters Adjustment Menu.

Parameters adjustment mode quits automatically when there is no input given to the controller for 1 minute.

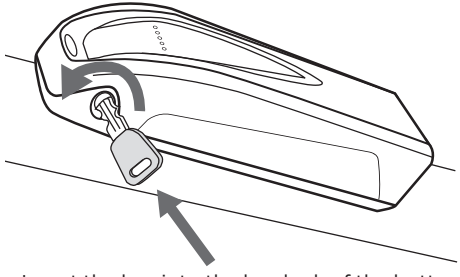
Battery

Removing or inserting the battery

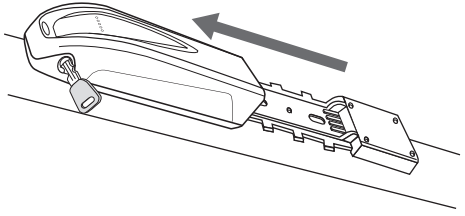
Your key is needed to lock the battery to prevent it from unintentional detachment or theft.

Put the provided spare key in a safe place in the event that you lose the first key. Take note of the key number that was provided to you along with your key set to make a new spare if needed.

To remove the battery:

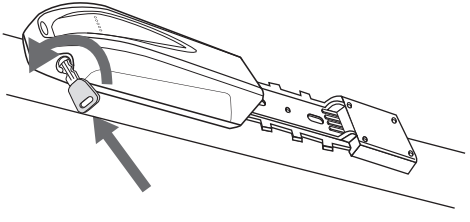


- Insert the key into the key lock of the battery.
- Turn the key half a turn, counter-clockwise (to the left) to unlock the battery.

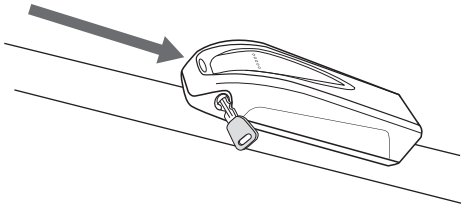


- Firmly push the battery along the battery holder bracket towards the front, being careful not to hit the bike frame.

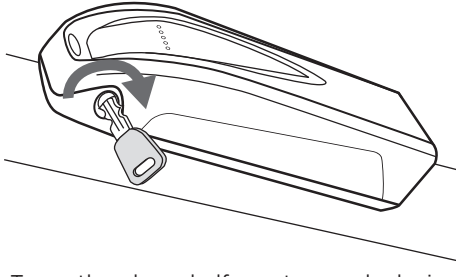
To insert the battery:



- Insert the key into the key lock of the battery.
- Turn the key half a turn, counter-clockwise (to the left) to unlock the battery.



- Check the battery holder bracket to ensure there isn't any water accumulation. Then align and firmly push the battery along the battery holder bracket towards the rear.



- Turn the key half a turn, clockwise (to the right) to lock the battery in position.

Charging the battery

It is recommended to take the battery off its support base and to place it in a room at a moderate temperature and humidity before charging it.

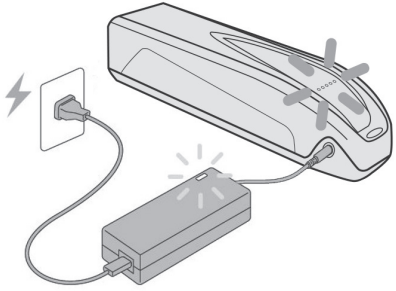
It is possible to charge the battery while it is on the bike but in this situation, you should make sure the bike is resting in a stable position so it can't move or fall during the charging process.

To charge the battery:

- Connect the AC power plug into the charger.
- Plug the AC power plug into an electrical outlet. Check that the LED indicator on the charger lights up to confirm that power is going through.
- Lift the rubber protector cap and insert the charging plug into the socket on the battery.
- To check the battery change level, press the power button on the battery.
- Let battery charge until it is fully charged.
- When the light on the charger changes from red to green, the battery is fully charged.
- Pull the charging plug from the battery and replace the rubber protector cap.

If the battery is not fully charged after 7 hours, unplug the battery and contact a qualified bike technician to have the battery checked.

A battery will wear out with age. Following the best charging and storing procedure will extend its life to a maximum. However, when an abnormally short battery capacity after a full charge is observed, it is likely that it needs to be replaced.



Battery capacity indicator

The battery capacity is shown in the top left of the display. The number of bars represents the remaining capacity of the battery as a percentage (as shown below).

- Capacity 70% or more

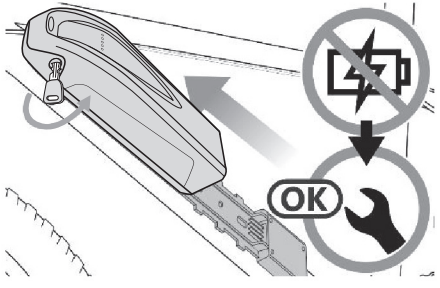
- Capacity less than 15%

- Voltage shortage – shutting down

Maintenance and Storage

Besides your bicycle's regular mechanical maintenance, for which the requirements can be seen in the user manual that was provided with your bicycle, the rider does not need to provide any maintenance specifically for the Power Assist system. Do not attempt to open any of the Power Assist system components. All service or repairs should only be carried out by a qualified bicycle technician.

Always remove the battery before proceeding to regular bicycle inspection, maintenance, or repair so there is no risk of injury from an electric shock or sudden motor ignition.



Servicing, maintenance or repairs must be carried out only by a qualified bicycle technician.

Minimum battery care

As for every battery powered product, it is good to discharge and charge the battery at regular intervals. When possible, run down the battery capacity completely before putting it to a complete charge.

It is normal for a battery to heat up under normal use. It is recommended to let it cool down before putting it to charge.

Do not expose your bike to extreme heat (more than 104°F/40°C) or cold (less than 14°F/-10°C).

Never leave the charger cord connected to the battery's charging port for a prolonged period. It should be disconnected after a complete charge period, or at least after a maximum of 24 hours.

Make sure to follow the instructions and to respect the minimum charge periods described in the section ***Storing your power assisted bike*** *when storing your bike for a prolonged period such as the off season.*

Storage

Battery care

Before storing your bike for the off season, run the battery capacity down to zero, let it cool down, then put it to a complete charge cycle. When not used for a long period, a battery will lose some of its capacity.

The battery must be maintained above 70% of its capacity during the storing period. It is recommended to charge to full every 3 months.

Storage environment

Store the battery in a dry, tempered room away from humidity at room temperature (around 68°F/20°C).

Do not store the battery in a cold environment such as a garage or shed in the winter, even for a short period. Cold temperatures can damage the battery.

Store the battery away from high heat sources such as direct sunlight or inside a vehicle during summer.

Cleaning

The bicycle user manual that was provided to you separately contains a more detailed bicycle washing procedure and recommendations. It is suggested to refer to it.

Never submerge any of the components of the Power Assist system in water.

Always wait for the battery to cool down before washing your bike. A sudden change of temperature can damage your battery.

Wash your bicycle with water and mild soap. Do not use a high-pressure washer to prevent water from making its way inside the sealed components. Make sure that the plastic protector cap is closed on the battery charging port.

Keep the battery port and power cord coupler's contact prongs and holders clean. Use a damp cloth to remove grit, dust, mud, etc.

Disposal

Check with your local waste management services for the proper way to dispose of the components of the Power Assist system. **Do not dispose of these components with other household waste.** Check for a local battery recycling program to dispose of the battery.

Troubleshooting

DO NOT RETURN TO STORE!
For troubleshooting and questions, please contact: **1-800-268-6407**

Don't attempt to alter or disassemble any component of the Power Assist system. Maintenance should only be performed by a qualified bicycle technician.

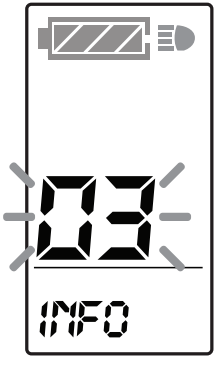
This section describes, only for reference purposes, some malfunctions that could happen related to the Power Assist system.

For other mechanical issues not related to the Power Assist system, such as a derailleurs or brakes malfunction, please refer to the Troubleshooting section of your bicycle's owner's manual provided separately at the time of purchase.

System malfunction sign

The LCD controller unit can communicate a problem related to the Power Assist system to the user through an error code.

If an abnormality is detected, the LCD screen will display the related error code flickering as per the example below:



If such an error code should appear on your LCD screen, please contact a qualified bicycle technician or get in touch with our customer service for instructions as soon as possible.

Error Codes

The information provided in this section is for reference only. Refer to the following most common error code list applicable to your power assisted bicycle:

Error Code	Description
03_info	Motor hall signal abnormality
06_info	Motor or controller has short circuit abnormality

Troubleshooting guide

Problem	Possible Causes	Solution
Pedalling feels stiff.	• Improper tire pressure (may be too low).	• Add air.
	• Either the LCD display or battery or both turned off.	• Make sure the LCD display is illuminated and the lights on the battery are on.
	• Battery is low.	• Charge battery.
Pedal assist is not activated.	• Battery is empty.	• Check the battery and charge if needed.
	• Are you overusing the battery? Is it above or below the operating temperature, and/or with excessive cargo weight?	• Turn off the battery and bring indoors to cool off. Try again later.
	• You're pedalling over 32 km/h (19 mph).	• Check the speedometer; assistance is only provided up to 32 km/h (19 mph).
	• You're not pedalling.	• You must pedal for the Power Assist to activate.
	• Internal connections may be loose.	• Contact a qualified bicycle technician or place of purchase.
	• Either the LCD display or battery or both are turned off.	• Make sure the LCD display is illuminated and the lights on the battery are on.
	• Motor temperature exceeds 100°F (38°C).	• Turn off the battery and bring indoors to cool off. Try again later.
The battery loses its charge very fast.	• The battery may be almost expired.	• Contact the place of purchase to order a new battery.
The battery won't charge.	• Are the charger cords connected properly to the battery and the wall?	• Make sure plugs are clean and fully connected. If the battery still won't charge, contact the place of purchase.

Problem	Possible Causes	Solution
There is an odour, smoke or fluid coming from the battery.		• Stop using the battery and contact the place of purchase.
LCD display won't turn on after pressing Power button.	• Is the power on the battery turned on?	• Make sure the battery is charged and turned on.
	• Is the battery pushed down all the way into the battery holder and locked on battery holder?	• Make sure battery is pushed down securely onto battery holder and locked on bike before turning on LCD display.
The travelling distance seems to be short per charge.	• This can depend on the amount of cargo weight, road, wind, hills and temperature conditions.	• This is normal. If the battery is empty, recharge it.
	• The battery is towards the end of its life after many charges.	• Replace the battery with a new one by a qualified technician.
Pedal assist cuts out, and/ or getting error code on LCD display	• There is a loose connection somewhere on bicycle electrical system	• Shut off battery and try unplugging and re-plugging all connection points. Check for any broken or damaged pins or debris. Re-plug all connections points being very careful to line up all pins correctly to ensure none are broken or damaged. Turn the bike back on to see if issue resolved.