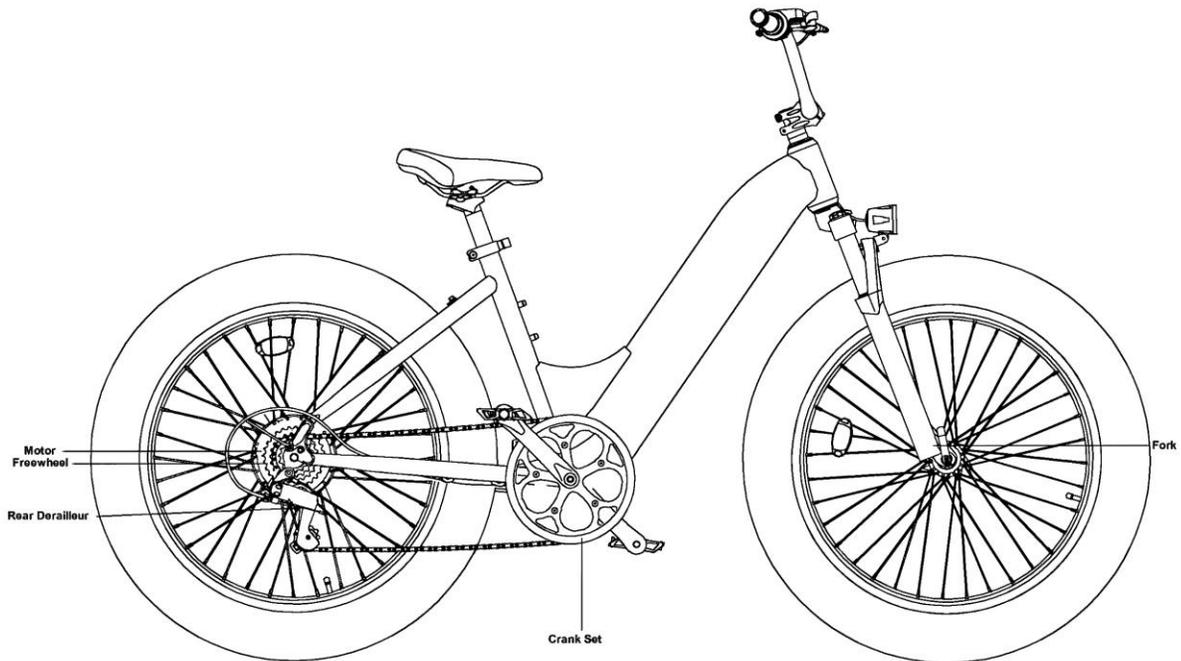
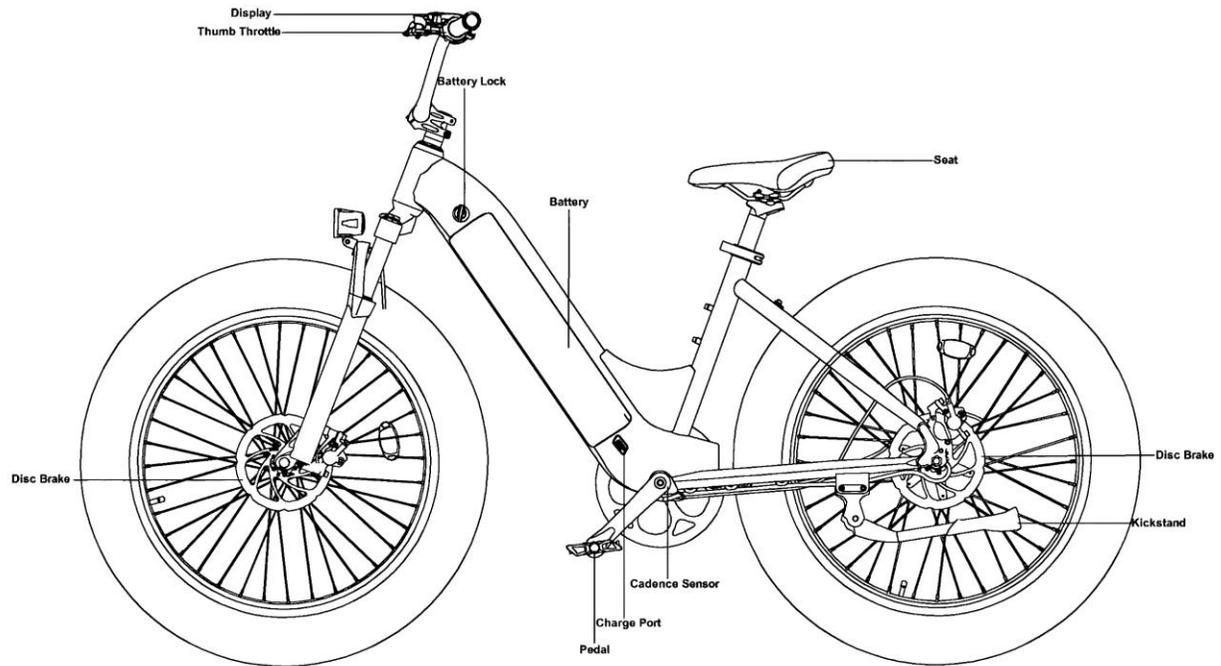


## Instructions to Set Up Your VELOWAVE ROVER

### Diagram





## **We know you are excited about getting going but please:**

- ✓ Reseat and charge the battery before the first ride
- ✓ Make sure the pedals are tight
- ✓ Make sure the front wheel is installed properly and tight
- ✓ Inflate the tires properly
- ✓ Check that all screws are properly torqued
- ✓ Carry out a fine adjustment of the gears and brakes
- ✓ Learn how to use the LCD display
- ✓ Wear a helmet before riding

Please Note: Your bike may need further adjustments after assembly.

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**If you have any trouble with setup, please contact us online or through our email address: [support@velowavebikes.com](mailto:support@velowavebikes.com)**

**Please always include your order ID when reaching out to us.**

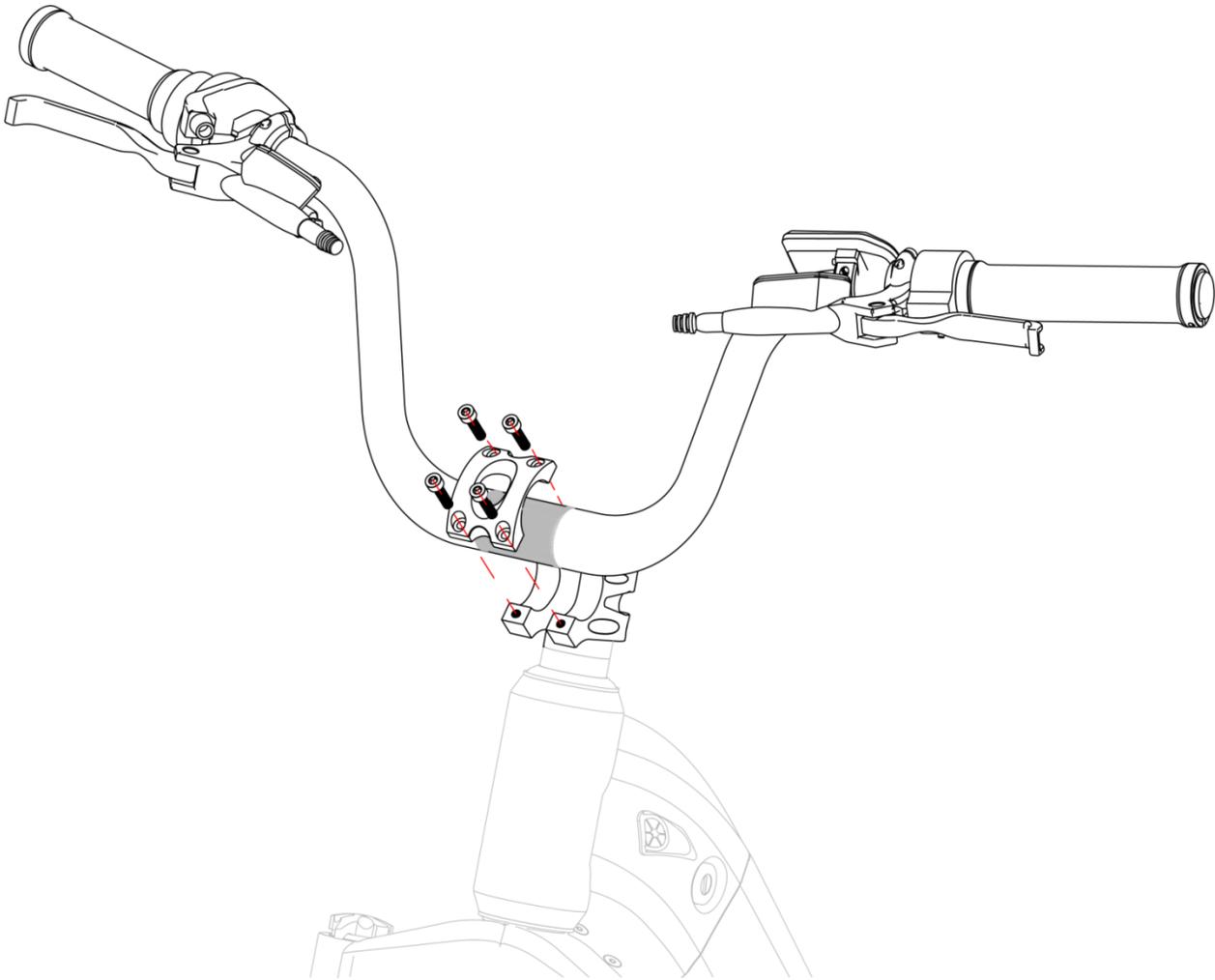


## Assembling Your E-Bike

- 1) **Read all of the instructions carefully.** Be familiar with the proper operation of all items.
- 2) This quick guide is intended to list the steps needed to assemble your bike with some mechanical skills. It is not a complete manual or training. If you do not feel comfortable or lack some of the skills to assemble it yourself, reach out to a cyclist friend, a local bike mechanic or one of our support technicians for guidance.
- 3) Our QA mechanics have assembled and tested your bike beforehand.
- 4) To assemble your bike, work on a clean area with enough space to maneuver.
- 5) If installed, remove the battery from the bike to start the assembly.
- 6) Inspect the bike completely to be sure no damage occurred during shipping.
- 7) The kickstand is designed to support the bicycle only. Not the rider mounted.
- 8) You can adjust your saddle position and the tilt on your handlebar items for comfort.
- 9) Check all screws and parts are tight and properly fixed. We recommend a pre-trip inspection before your first rides.

## Installing Your Handlebar

- 1) Place the handlebar in the handlebar mount being careful with the wires.
- 2) Face the mounting brackets on the front end of the mount with the round edges facing outward. Adjust the handlebar angle to your comfortable riding posture.
- 3) Secure the mounting brackets with four screws. (4mm allen wrench with **6N** torque)
- 4) Verify your front tire lines up with your headset.
- 5) Check whether all headset items are tight.



## Installing Your Front Wheel

- 1) Insert the front wheel in between the front fork on the bike. Be sure the fork is resting on the outside of the axle.
- 2) Align the disk between the brake caliper as shown in Figure 2.
- 3) Insert the skewer into the wheel axle as seen shown. Keep the spring, cam follower, and lever on the **LEFT** side, nearest the disk brake. Keep the adjustment nut and spring on the **RIGHT** side. (See Figure 2)
- 4) Screw the skewer into the end nut until almost tight.
- 5) Lift the lever up until parallel with the front fork. You should feel the axle tighten into the front forks. Your front wheel is now installed.

Figure 1

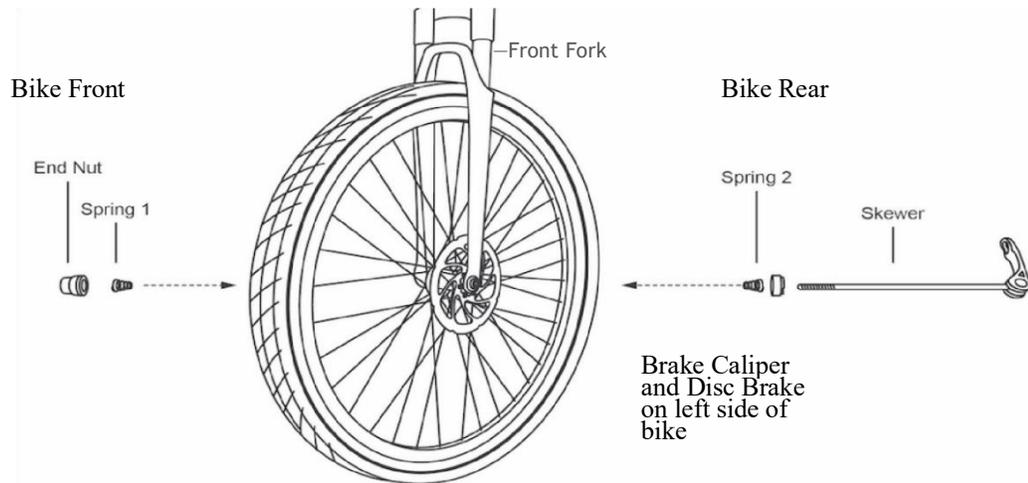
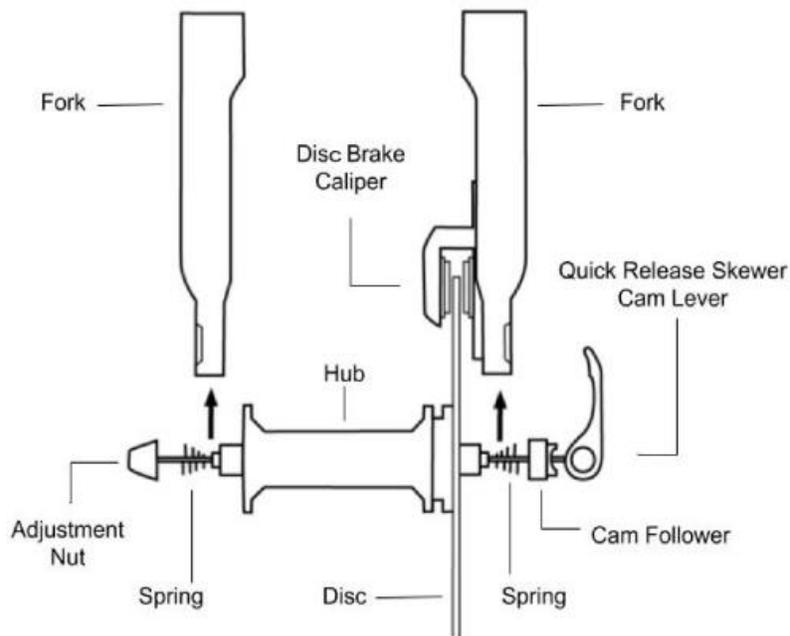
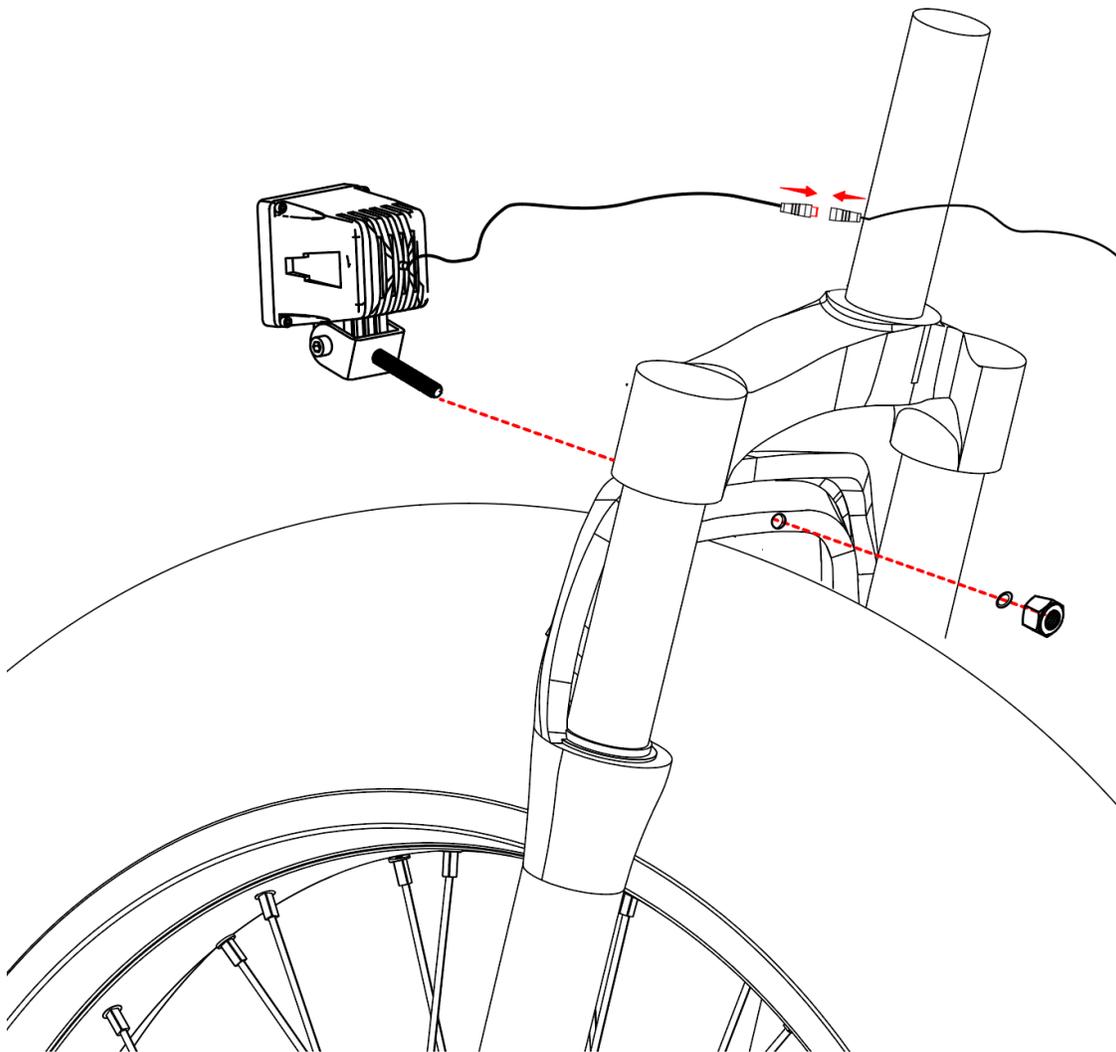


Figure 2



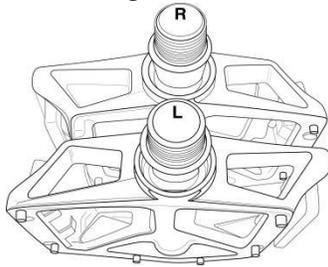
## Installing Your Headlight

- 1) Place the headlight with its bracket in front of the fork gantry. Push the screw provided on the headlight through the installing hole on the fork gantry. Tighten the fixing nut onto the screw. (You might need to secure the fixing nut tightly so the screw doesn't turn).
- 2) Connect the headlight cable with the wire coming out from the downtube.

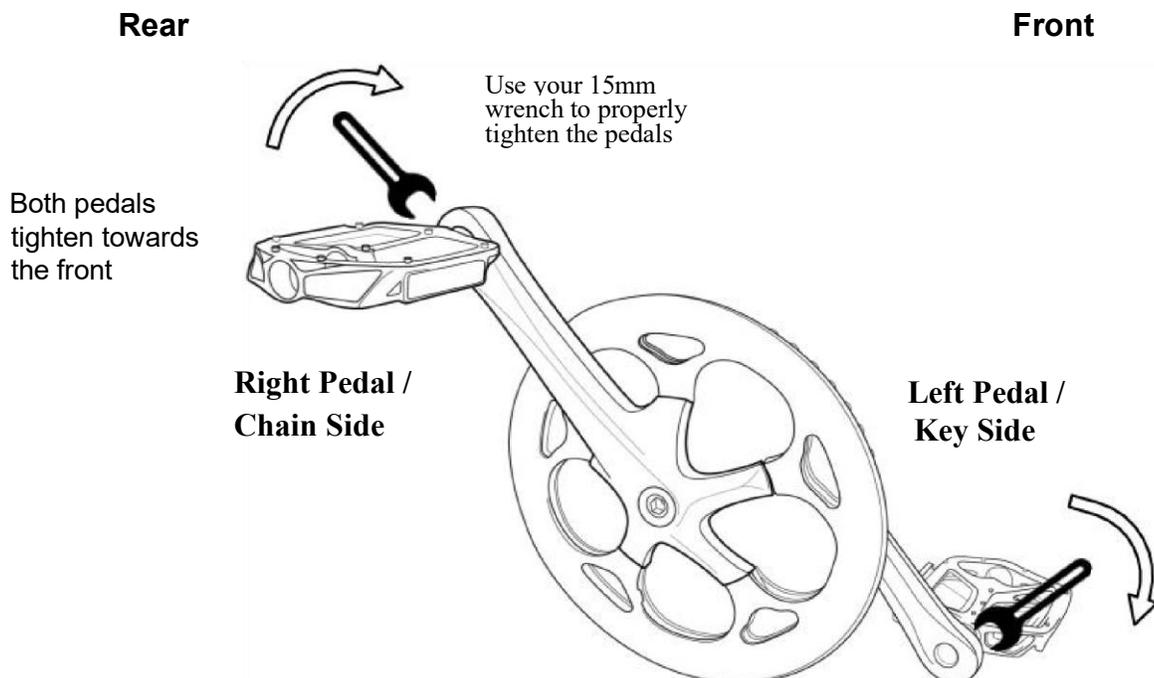


## Installing Your Pedals

- 1) **Warning:** Incorrect installation will cause damage. Please read the instructions and watch our videos if needed.
- 2) Identify the Left and Right markings on the pedals. They can only be installed in their respective side.
  - a. L is for the Left Pedal and it goes on the Left Crank Arm.
  - b. R is for the Right pedal and it goes on the Right Crank Arm (Chain Side).



- 3) Sitting on your bike the pedals go on the Left and Right side respectively.
- 4) Keep the pedal Horizontal while hand screwing to get the thread started. Then Use your 15mm wrench to tighten them.
- 5) Both pedals tighten towards the front of the bike. The left pedal is reverse threaded to allow this.
- 6) **The pedals need to be very tight (at least 25-35N.m torque), be sure to retighten after your first couple rides.**



## Preparations Before Riding

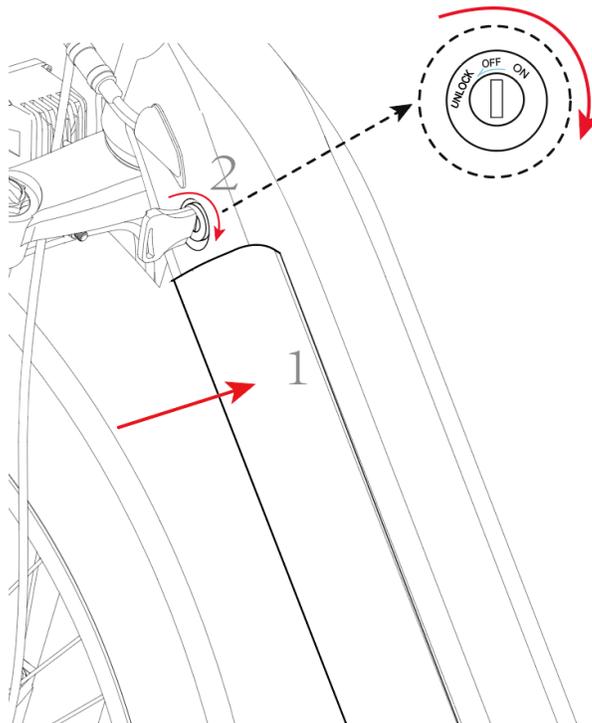
- 1) **Read all instructions carefully**, be familiar with the proper operation of all items. Check for detailed information and guidance on our product page.
- 2) **Warning:** Basic electric precautions should always be followed to avoid issues or malfunction.

## How to Power on the Bike

There are 3 gears in the power lock located at the upper side of the downtube. From clockwise direction: **Unlock** gear - **Lock/Power OFF** gear - **Power ON** gear.

### **To Lock the Battery and Power on the bike**

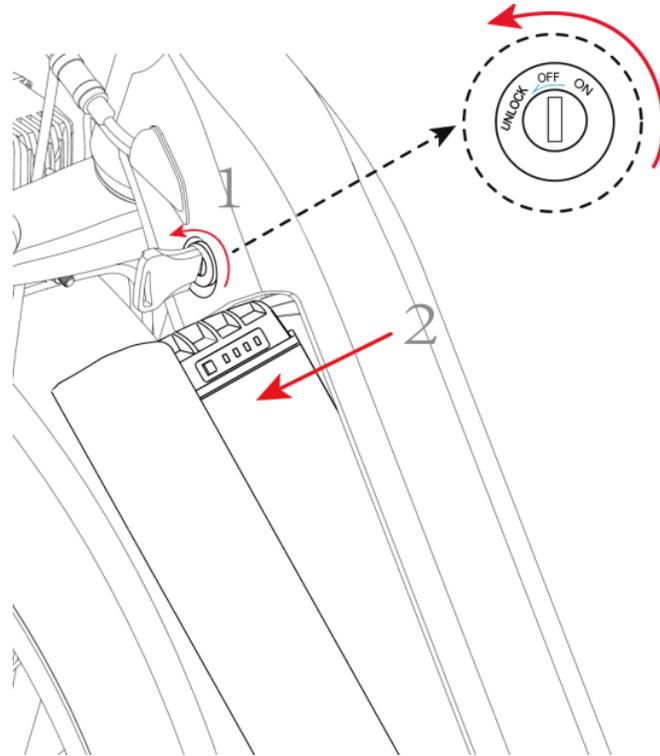
- 1) Put the key at the UNLOCK gear. Place the battery into the downtube, press tightly and turn the key clockwise to the LOCK gear. The battery will be locked. If the battery is not locked in place, the key will not be able to be taken off.
- 2) **From the LOCK gear, turn the key clockwise to the ON gear first. Press the  button on the display to power on the bike.** Now the bike is powered on.



## To unlock and Remove the Battery

- 1) Turn off the LCD display. Turn the key to the OFF gear to power off the bike.
- 2) Push the key inward and turn counterclockwise to unlock the battery. The battery will pop out.
- 3) Hold the battery with two hands and take it out from the tube.

Note: The battery weighs heavy and should be handled with care.



## When the Battery is Removed

- Do not touch the “+” and “-” terminal contacts on the top of the battery.
- Be careful not to drop or damage the battery when released from the bike.
- Avoid damaging the exposed connector terminals and keep them clear from debris.

## How to Use the Display



### 1) Power on/off

Press the  button to turn on the display. Your bike will be **ON**. Press again to turn it off. The display will automatically shut down when there is no operation or riding for 5 minutes.

### 2) Adjust the assist level

Short press “+” or “-” button to change the assist level from 0 to 5. 0 is without assist. 5 is the max assist level.

### 3) Headlight

If your bike is installed with a headlight, press and hold “+” button for 1 second to switch on or switch off the headlight.

### 4) Walking mode

Press and hold “-” button for 2 seconds to shift into walking mode, the display indicates P and the bike will be propelled at walking pace. Release the button to exit the walking mode.

### 5) Information menu

Press the  button for 1 second to shift into information menu, it will show TRIP, ODO and TIME.

### 6) Parameter setting menu

With the display powered on, if you quickly press the  button twice, it will shift into the parameter setting menu. Users are NOT supposed to change the factory default settings. You may exit by quickly pressing the  button twice again or leave it without operation for 30 seconds.

## How to Charge Your Bike

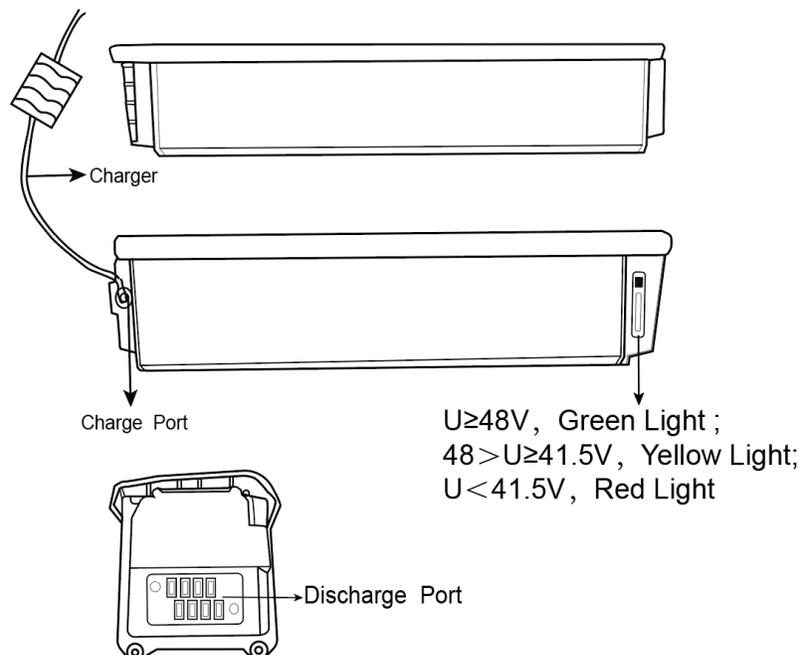
The battery can be charged when locked on the bike or unlocked and removed from the bike.

- 1) Remove the rubber cover on the charging port and insert the charger into the charging port.
- 2) Plug the charger into the power outlet. When the charger is plugged in, the LED light on the charger will turn RED to show that the battery is charging.
- 3) Charge the battery, making sure not to charge longer than 12 hours at a time. When the battery is fully charged, the LED will turn GREEN and charging will be stopped.

**Note:** The charger is designed to automatically stop charging when the battery is full, but unnecessary wear of the charging components could occur if the charger is left attached to the battery and a power source for longer than 12 hours. Detach the charger as soon as possible once the green light indicates a complete charge, to avoid unnecessary wear of charging components.

- 4) Once the battery is charged, unplug the charger from the power outlet.
- 5) Unplug the charger from the battery. Store the charger in a safe place for future use.

**Note:** The battery capacity indicator located at the right top of the battery indicates the battery capacity status. GREEN light indicates the voltage is higher than 48V, rest battery charge higher than 60%; YELLOW light indicates the voltage is in between of 48V and 41.5V, rest battery charge from 20% to 60%; RED light indicates the voltage is less than 41.5V, rest battery charge less than 20%. It's recommended to charge the battery in time when it's under yellow light status.





### **Notes of Charging and Storage:**

- 1) *Charging time of a 48V 15Ah battery takes about 8 to 10 hours when charging with a standard 2A charger.*
- 2) *Pay attention to check whether the surface temperature of the battery case rises too high during charging. It is FORBIDDEN to cover the battery during charging.*
- 3) *Due to high temperature in summer time, it is NOT advisable to charge it immediately after riding. In winter, it is FORBIDDEN to charge the battery in environment below 0°C. It is recommended to charge the battery in room temperature.*
- 4) *If the battery will not be used for a long period, take it off from the bike and discharge its capacity to 60%-80% for stock. Disconnect it from the charger and place it in a dry, ventilated place without direct sunlight. In order to maintain a long lifecycle, it is recommended to charge the battery every two months.*

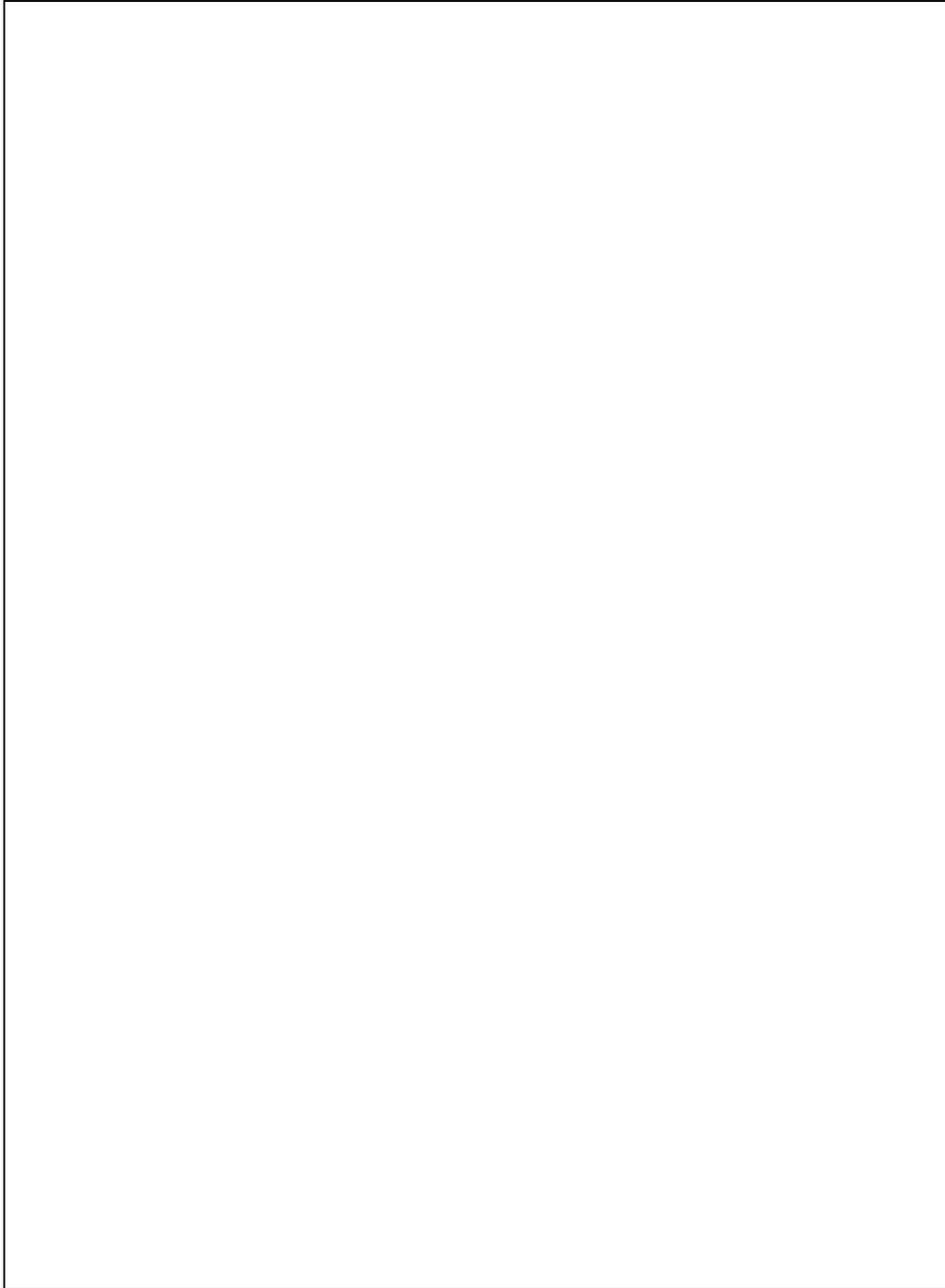
## Error Code

Error Code	Error	Notes
4	Open Throttle Fault	Throttle has not returned to the start-up position. Check if the throttle gets stuck. Try to return the throttle to the start-up position.
5	Throttle Fault	Throttle may be damaged. Check if the cable or throttle is damaged.
6	Low Voltage Protection	The battery voltage is too low to operate. Please charge the battery properly.
7	Over Voltage Protection	The battery voltage is too high to operate. Check if incorrect battery is used on the bike.
8	Motor Hall Signal Fault	The motor's hall sensor wire has been disconnected or damaged. Try to disconnect and reconnect the motor cable and check if it recovers. If not, contact technical support for help.
9	Motor Phase Line Fault	The motor's phase wire has been disconnected or damaged. Try to disconnect and reconnect the motor cable and check if it recovers. If not, contact technical support for help.
10	Motor High Temperature Fault	The motor has reached the highest allowable temperature. Allow the motor to cool down before using the e-bike again.
11	Motor High Temperature Fault / Motor Temperature Sensor Fault	Allow the motor to cool down and check if it recovers; The motor's temperature sensor has become disconnected or damaged. Contact technical support for help.
12	Controller Current Sensor Fault	The controller's current sensor has become disconnected or damaged. Re-start to check if it recovers. Contact technical support for help.
14	Controller High Temperature Fault	The controller has reached the highest allowable temperature. Allow the controller to cool down before using the e-bike again.
15	Controller Temperature Sensor Fault	The controller's temperature sensor has become disconnected or damaged. Contact technical support for help.
21	Motor Speed Sensor Fault	The motor's speed sensor has become disconnected or damaged. Check if the motor cable is loose. Disconnect and re-connect the cable. If it doesn't recover, contact technical support for help.
30	Communication Fault	Poor connection between the controller and the display. Check all cable connectors. Check for corrosion damage.

## Basic Trouble Shooting

SYMPTOMS	CAUSES	SOLUTIONS
Throttle and pedal assist not working	● Battery off	● Turn on battery
	● Battery installation	● Reseat battery
	● LCD display not on	● Turn on LCD display
	● Discharged battery	● Charge battery
	● Brake sensors engaged	● Inspect brake lever
Reduced speed	● Low battery power	● Charge battery
Reduced battery range	● Low battery power	● Charge battery
	● Low tire pressure	● Inspect tire
	● Heavy load on bike	● Adjust bike load
	● Driving on rough terrain	● Adjust route
	● Using throttle only	● Include pedal assist
Battery does not charge	● Charger not properly connected	● Inspect connections
	● Battery temperature	● Read the user manual for best practices
	● Damaged charger	● Replace charger
	● Issue with battery	● Contact Support Team
E-bike making strange noises	● Loose hardware	● Tune-up and inspection needed
	● Issue on drivetrain	● Maintenance needed
	● Issue with motor	● Contact Support Team

Label of Your VELOWAVE

A large, empty rectangular box with a thin black border, intended for the user to provide a label for their VELOWAVE product.

**VELOWAVE**

**To find out more, please visit our website at**

***[www.velowavebikes.com](http://www.velowavebikes.com)***