Cyrusher

ASSEMBLY GUIDE

Recreation Series

RANGER 2.0

RANGER

ATTENTION

Please read this manual carefully before using the Cyrusher electric bicycle. If you do not understand this information, or if you do not cover the issues covered in this manual, please contact the dealer.

Ranger-2.0 | Warranty Card

Customer

Name:

Address:

Tell:

Dealer

Name and address:

Date of Purchaase:

TABLE OF CONTENTS

01 / ABOUT THIS GUIDE

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.Our QA mechanics have assembled and tested your bike beforehand. If installed, remove the battery from the bike to start the assembly.To assemble your bike, work on a clean area with enough space to maneuver.Finally,You can adjust your saddle position and the tilt on your handlebar items for comfort.

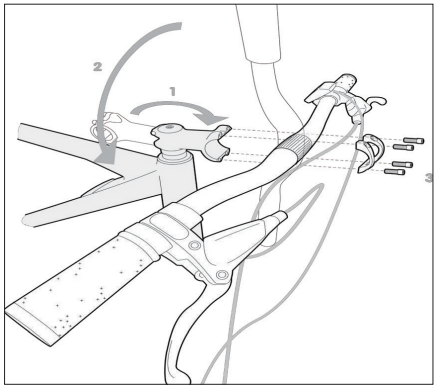
It is also important that you should check all screws and parts are tight and properly fixed. We recommend a pre-trip inspection before your first rides. your first ride on a new Ranger2.0 is taken in a controlled environment, away from cars, obstacles, and other cyclists.

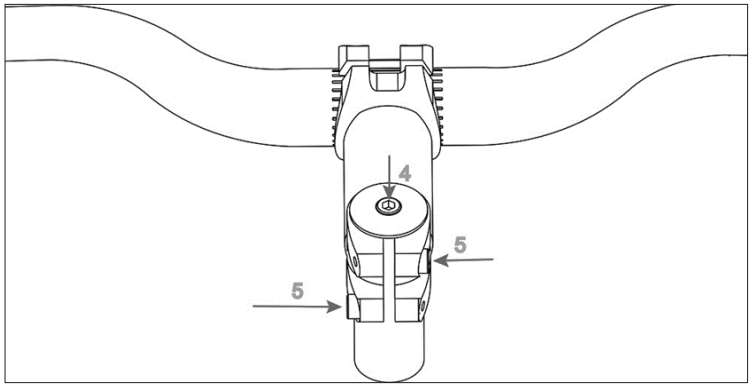
If you have questions or comments, please don't hesitate to contact us:

https://www.cyrusher.com/pages/contact

02 /
ASSEMBLY INSTRUCTIONS

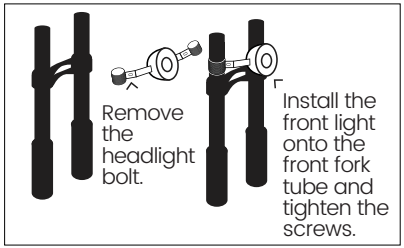
Part1 Installing Your Handlebar





1. Point the headset towards the front of the bike.
2. Place the handlebar in the handlebar mount being careful with the wires.
3. Face the mounting brackets on the front end of the mount with the round edges facing outward.
4. Insert the screws into the screw holes and tighten alternating sides until secure(4mm allen wrench with 6NM tight torque)
5. Verify your front tire lines up with your headset.
6. Tighten screws on stem end (4mm allen wrench with 6N strength) and top of the stem (5mm allen wrench with 6-8N strength).
7. Check all headset items are tight.
8. Screw 3: Tight torque 6NM
   Screw 4: Tight torque 6-8NM
   Screw 5: Tight torque 6NM

Part2 Installing Your Headlight & Installing Your Pedals



❶

If included, attach headlight by removing front headlight bolts and positioning headlight before loosely screwing bolts back in place. Finally, adjust the headlight to the desired position then tighten.

❷

"L" is for the Left Pedal and it goes on the Left Crank Arm.

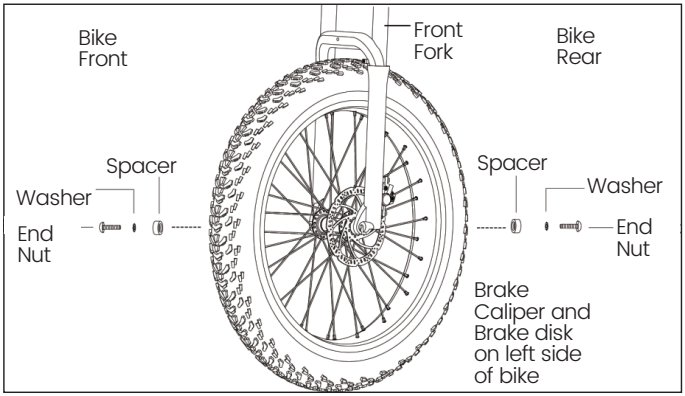
❸

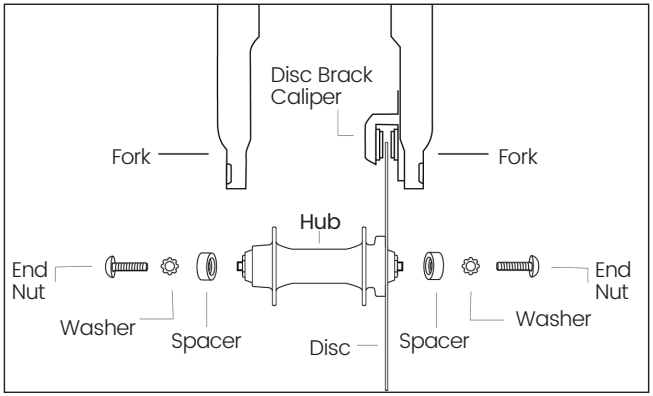
"R" is for the Right pedal and it goes on the Right Crank Arm (Chain Side).

- Identify the Left and Right markings on the pedals. They can only be installed in their respective side.
- Sitting on your bike the pedals go on the Left and Right side respectively.
- Keep the pedal Horizontal while hand screwing to get the thread started. Then Use your 15mm wrench to tighten them.
- Both pedals tighten towards the front of the bike. The left pedal is reverse threaded to allow this.
- The pedals need to be very tight, be sure to retighten after your first couple rides.

⚠**Warning: Incorrect installation will cause damage. Please read the instructions and watch our videos if needed.**

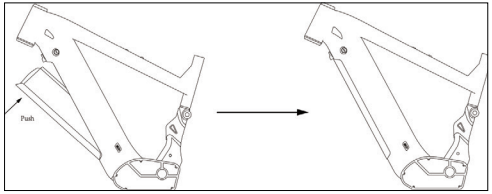
Part3 Installing Your Front Wheel





1. Insert the front wheel between the front fork on the bike. Be sure to align the disk between the brake caliper as shown in Figure 2.
2. Now on the outside add the spacer, washer and end nut on each side and hand turn until almost tight.
3. Using 5mm allen wrench, tighten each side end nut putting your weight into the wrench.
4. The end nut must be very tight, be sure to re-tighten after your first couple ridesits tight torque shall be 15-18NM.

Part4 Installing / Removing Your Battery & Recharging Your Battery



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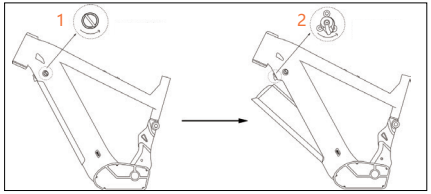
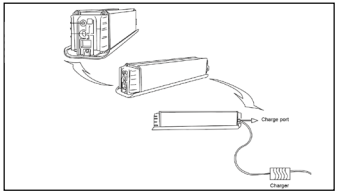
1. Turn the key counterclockwise to release the lock.
2. Place the bottom of the battery into the socket and forcefully push the upper side into the frame until the battery locks and makes a clicking sound. Turn the key clockwise to lock the battery.



❷

1. Turn off the LCD display. Release the first lock with the key.
2. Hold the battery with your left hand. Rotate the locking switch below the lower sleeve counter clockwise with your right hand. Grasp it with both hands and remove it.



❸

There are two ways to charge your battery.
1. Recharge the battery on E-Bike directly
2. Remove battery from the E-Bike and recharge separately

- Charging time varies from 8 to 10 hours.Never charge a battery for more than 12 hours at a time.
- The red light indicates the charging status; The green light indicates that it is fully charged.
- Insufficient charging will not influence the battery lifecycle. AVOIDING deep discharge is helpful to protect the battery and extend its lifecycle.
- 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 even when it is in static without use.
- 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.
- 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 . You are recommended tocharge it in room temperature.

03 /
OPERATIONAL INSTRUCTIONS

Part1 LCD meter functional area distribution

Part2 Routine operation

1.Power on/off

Long press [⏻] to power on/off the display.When in the power-on state, long press [⏻] (for 1 s) to turn off the instrument panel power.

⚠ **The display will automatically shut off if it is not used for more than 5minute(time adjustable by the user).**

2.Assist gear selection off

In manual shift mode, press [^] or [v] to switch power-assist levels, adjusting the power-assist ratio. The levels range from 1 to 9, with 1 being the lowest and 9 being the highest.

3.Display interface splay interface

When in the power-on state, press the power button to toggle the mileage display mode, cycling through the following information:Trip Odometer(Trip).Odometer (ODO),Riding time (Time).

4.Headlight switch / Display mode switch

Press [^] (more than 1 s) to activate the headlight (requires controller support) and toggle between day/night display modes. Press [v] (more than 1 s) again to turn off the headlights and toggle the display mode.

5.Walk boost mode (6km pushing)

Press and hold [v] (more than 1 s) , the electric bicycle enters the walk boost mode. The speed display shows real-time speed, and the gear indicator shows 'P'. Release the down button to exit the walking mode.

⚠ **Some controllers may not support this feature.**

Figure 5-Walking mode switching display interface

6.Turning on/off lights and horn

Press the [←] [→] to turn on the lights.Long press the left turn signal or the right turn signal for hazard lights. Press [📯] to turn on the horn.

Part3 Parameter setting

In the power-on state, press [M] twice in quick succession (interval between presses < 0.3 s) to enter the MENU parameter setting state. In this state, you can adjust the instrument parameters.
Press [M] twice again to exit the setting state (interval between presses < 0.3 s).

In the MENU setting state, the [M] is for confirmation. Use the [+] / [−] to select the item to be adjusted.Press [M] to make the parameter flash for adjustment. Use the [+] / [−] to adjust the parameter value.Press [M] to save the setting. To exit the MENU state, press [M] twice in succession on the function selection interface.

1.Brightness setting

Press [M] to enter brightness adjustment. Use the [+] / [−] to adjust the brightness from 1 to 5, where 1 is the dimmest backlight and 5 is the brightest. After setting, press [M] to confirm and return to the main menu.

Figure 1-
Brightness setting

Figure 2-Automatic
shutdown time setting

2.Automatic shutdown time setting

Adjust gear using the [+] / [−] keys, where 1 to 9 minutes represent the automatic shutdown time. 'OFF' indicates canceling the automatic shutdown function.

3.Switching between metric and imperial systems setting

Press [+] / [−] to switch between km/h and MPH display, setting metric/imperial units.
'0' represents metric, '1' represents imperial.

4.Automatic gear shifting setting

Press [+] / [−] switch between manual and automatic transmission,
'0' represents manual transmission, '1' represents automatic transmission.

Figure 3-Switching
between metric
and imperial
systems setting

Figure 4-Automatic
gear shifting setting

5.Battery mode setting

Press [+] / [−] to switch between voltage mode and percentage mode, setting metric/imperial units.
'0' represents voltage mode, '1' represents percentage mode.

6.Advanced setting

Press [+] / [−] to adjust the displayed password value to enter the advanced settings interface.If the password is entered correctly, enter the submenu interface. The password is a 4-digit number, and the default password is '1801'.

7.Restore factory setting

Press [+] / [−] to aselect factory reset.
'OFF' represents no factory reset, 'AES' represents factory reset.

Figure 5-Battery mode setting

Figure 6-Advanced setting

Figure 7-Restore factory setting

Part4 Advanced setting

Enter the advanced settings menu. The speedometer position displays 'ADS', indicating entry into the advanced settings. Press [⏻] briefly to enter the password input state. The speedometer position simultaneously displays 'PS0', prompting for the password input. Press [+] / [−] to set the password value (0~9) and to switch between password items. The password is a 4-digit number, with the default password being '1801'. After adjusting the password, press the [M] to confirm entry. If the password is incorrect, 'Error' will be displayed. If the password is correct, entry into the advanced settings submenu will occur.

1.Voltage

Press [+] / [−] to switch display between 24V/36V/48V/52V/60V//UBE.

2.Gear

Press [+] / [−] to set the gear range.Options include 3/5/9/6 gear. '3' indicates 3-speed control; '5' indicates 5-speed control; '6' indicates 6-speed control; '9' indicates 9-speed control.

Figure 1-Voltage

Figure 2-Gear

3.Speed limit

Press [+] / [−] to adjust the speed limit value.Users can set the speed limit value according to their needs.After adjustment, press [⏻] to confirm and exit.

4.Current limit

Press [+] / [−] to adjust the current limit value. Users can set the current limit value according to their needs. After adjustment, press [⏻] to confirm and exit.

Figure 3-Speed limit

Figure 4-Current limit

Figure 5-Wheel diameter

Figure 6-Speed sensor magnet

Figure 7-Assist sensor magnet

Figure 8-Handlebar 6KM

5.Wheel diameter

Press [+] / [−] to switch display.Select the corresponding wheel diameter, with the unit in inches. Incorrect wheel diameter may result in abnormal speed.

6.Speed sensor magnet

Press [+] / [−] to adjust the number of speed sensor magnets from 1 to 15.Users can set the number of speed sensor magnets according to their needs.After adjustment, press [⏻] confirm and exit.

7.Assist sensor magnet

Press [+] / [−] to adjust the number of assist sensor magnets from 1 to 24. Users can set the number of assist sensor magnets according to their needs.After adjustment, press [⏻] confirm and exit.

8.Handlebar 6KM

Press [+] / [−] to select gear for handlebar 6KM function switching from 0 to 3.
'0' means handlebar 6KM is turned off, no gear differentiation;
'1' means handlebar 6KM is turned on, no gear differentiation;
'2' means handlebar 6KM is turned off, gear differentiation is enabled;
'3' means handlebar 6KM is turned on, gear differentiation is enabled.

9.Assist direction

Press [+] / [−] to select gear for assist sensor direction. '0' represents positive, '1' represents negative.

Figure 9-Assist direction

Part5 Error code display

UKS6 can provide error indication for whole vehicle faults. When [ ] is detected, the LCD screen displays [ ] , and the error code and description are shown at the top of the screen: Please refer to the error description in the instrument display area (different protocols have different error codes).

Figure 1-Fault warning display interface

04 /
TROUBLE SHOOTING

Error Codes

Error Code	Error	Notes
E001	Open Throttle Fault	Throttle has not returned to the start position on start-up. Check to see if the throttle can return to the start position or if there is something blocking the throttle unit.
E005	Throttle Fault	Throttle may be damaged. Check the throttle or throttle cable for damage.
E006	Low Voltage Protection	The battery voltage is too low to operate. Incorrect battery was used on the bike. The battery is in sleep mode or not functioning correctly.
E007	Over Voltage Protection	The battery voltage is too high to operate. Incorrect battery was used on the bike. Check to be sure that the correct battery is being used on the bike
E008	Motor Hall Signal Fault	At least one of the motor's hall sensor wires have been disconnected or damaged. Disconnect and reconnect the motor cable.
E009	Motor Phase Line Fault	At least one of the motor's phase wires has been disconnected or damaged.Or phase line connector fault.
E0010	High Temperature Fault	The controller has reached the highest allowable temperature.Allow the controller to cool down before using the e-bike again.
E0011	Motor High Temperature Protection	Allow the motor to cool down and check if it recovers.
E0012	Current Sensor Fault	The controller's current sensor has become disconnected or damaged. Contact technical support.
E0014	Motor Temperature Sensor Fault	The motor temperature sensor fault. Contact technical support.
E0015	Controller Temperature Sensor Fault	The controller temperature sensor fault. Contact technical support.
E0021	Motor Speed Sensor Fault	The motor speed sensor has become disconnected or damaged.Check if motor cable loose. Disconnect and re-connect the cable. If doesn't recover, contact technical support.
E0025	Torque Signal Fault	Torque sensor-torque signal fault. Contact technical support.
E0026	Speed Signal Fault	Torque sensor-speed signal fault. Contact technical support.
E0030	Communication Fault	Poor connection between the controller and the display. Check all cable connectors. Check for corrosion damage.

Solutions

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

Seek New Paths

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