

Model:Challenger 2020

User's Manual

2020

www.rattanebike.com

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Part 1 Main Parts Introduction



- 1. Handlebar
- 2.Brake
- 3. Headlight
- 4. Suspension Front Fork
- 5.Rim
- 6. Fender
- 7.Valve
- 8. Brake Disc
- 9. Spoke
- 10.Reflector
- 11. Frame
- 12. Seat Post Clamp
- 13. Battery

- 14. Peddle
- 15. Crank Set
- 16. Crank
- 17. Chain
- 18. Saddle
- 19. Rear Rack
- 20. Seat Post Reflector
- 21. Flywheel
- 22. Caliper
- 23. Motor
- 24. Protector
- 25.Motor Wire
- 26.Derailleur

Part 2 Assembly Instructions

• Unboxing



• Image of the bike when you take it out of the box



Lossen the hub quick release to make enough space for the fork.



In case of the spring drops from the quick release, here are the original position images of both sides of the hub quick release.





The two feet of the front fork must be aligned with the hub quick release position before the fork can be installed.





Make sure the brake rotor is in the middle of brake pads so that it won't make noise during riding or braking. Tighten the quick release till it fully close to the hub.





• Install the handlebar

Loosen the screws on the handlebar, hold the handlebar in the middle of the joint, tighten the screws.



• Headlight Installation

Place the headlight at a right position, then tighten the screw.





• Pedals installation

"L" indicates the left side, "R" indicates the right side. Make sure tighten the screws connect the pedals and cranks.Twist to left when install the left side and twist to right when install the right one.





Part 3 How to use the part correctly

Battery and Charger

Make sure the charger is pressed to the end of charging connector when charging.





- Fully charge the battery for each ride to extend the life of battery
- Charger light in red means charging, charger light in green means fully charged.

- Two ways for charging:
 - 1. Charge the Ebike without removing the battery
 - 2. Remove the battery, and charge it.
 - Turn off the display and keep the key at power off position when charge the Ebike without removing the battery. Connect the plug of the charger into the battery charging port, plug into the wall plug or power strip.
 - ✓ Remove the battery to charge. Turn the key to the unlock position to remove the battery. Do not place the battery upside down, connect the plug of the charger into the battery charging port and then plug into the wall plug of power strip.

Electronic Control System

- The electronic control system includes controller, display, motor and battery.
- Keep the electronic control system away from water.
- Electric bike should not be washed with high-pressure water guns.

Part 4 Check before riding

- Make sure all components are tightened. Adjust the height of the handlebar and the seat post. DO NOT raise it above the safety line.
- Make sure the brakes can cut off the power supply to the motor, and whether it is sensitive and reliable.
- Make sure the front and rear axle nuts are tightened.
- Make sure the display, brake and light can work properly.
- Make sure the chain is tight.
- Make sure the pedals and all the connection parts are firm and would not loose, and whether the crank is flexible without jamming.
- Make sure the front and rear tire pressure and tire wear are suitable for your journey ahead.
- Make sure the throttle works well without jamming, and whether it feels tight or loose when pressing the throttle.
- Make sure the battery has been locked.

Part 5 Riding Guidance

- The electric bike has three riding modes:Pedal Mode, Electric Mode, and Pedal Assist Mode:
 - ✓ Pedal Mode: This mode does not require any power. It allows the E-bike to work as other regular bike. You will be automatically switched to this mode when the battery dies while riding.
 - ✓ Electric Mode: Turn on the display and press the throttle slowly to get started. When release the throttle slowly, the riding speed will gradually drop until power off.
 - ✓ Pedal Assist Mode:Accelerate slowly and use the pedal assist in the beginning of riding. When riding against the wind or climbing the hill,avoid using the pedal assist to protect the battery.
- This ebike will power off when braking. It ensures safety of riding.
- Do not carry people on the rear seat. The weight limit of the rear seat is 25kg.
- Do not ride exceed the speed limit set by the local traffic laws. Comply with the CLASS 3 maximum speed limit: 20MPH.

- Always wear a helmet that meets the standards and make sure having the necessary protection to ensure the safety when riding the ebike,
- Turn on the headlight when riding at night. Use the headlight for a long time will consume part of the electric energy and reduce the mileage.
- Avoid pressing the throttle frequently and rapidly to start the ebike when stationary to extend the service life of the motor, battery and electrical components.
- Turn off the display when parking or leaving the ebike to prevent accidents caused by accidentally turning the throttle and the ebike suddenly moving.

*Recommendation: Press the throttle slowly for safety.

Part 6 Adjustment of main parts and components

Display Instruction (MODEL: LCD-YL80C)

Appearance Dimensions



Turn on/off light

• Function Overview

YL80C display provides a variety of functions to meet your riding needs, including:

- ✓ Electricity display
- ✓ Motor power indication
- ✓ Boost gear adjustment and indication
- ✓ Speed display (including real-time speed, maximum speed and average speed)
- Mileage display (including single mileage and total mileage)
- \checkmark Assist in implementing control and display
- ✓ Backlight control and display
- ✓ Error Code Display

• Functional Area Distribution



YL80C Functional Area Distribution Interface

Button Definition

There are five buttons on the corresponding operation unit of YL80C instrument, of which the buttons **H e** are replaced by the words "**UP**" and "**DOWN**" respectively in the following instructions.

General Operations

Press the button for few seconds to turn on/off the display and controller. In the start up state, the electric bike can be turned off by pressing the button for a short time.

(If the electric bike has not been used for more than 10 minutes, the display will automatically shut down.)

• Display Interface

The interface shows the real-time speed and total mileage (km) by default. Press the "i" button briefly to display information switching between real-time speed (km/h), single mileage (km), total mileage (km), maximum speed (km/h), average speed (km/h) and riding power.



Display Interface Switch

• Electric Assistance Pushing Mode

Keep pressing the **DOWN** button, and the ebike will enter the electric assistance pushing mode. The ebike will run at a constant speed of 6 km/h. At the same time, the screen shows **A**.

Release the **DOWN** button and the electric bike will immediately power off.



Turn the Backlight On/Off

Press the headlight button briefly to turn on the taillight and the controller will turn on the headlight at the same time when the environment light is dark or driving at night. Press the headlight button again, the display taillight turns light and the controller off.

Assistance Level Selection

Press the UP/DOWN button for a few seconds to switch the assistance IPAS level, thus changing the output power of the motor. The default output power range of the display is level 0-3. Level 0 is no power. Level 1 is the lowest power. and level 3 is the highest power. The default level for the display is level 1.

Battery Indicator

The indicator shows the battery power status. The outer frame of the battery flashes at a frequency of 1HZ, indicating the need to charge immediately when the battery is under-voltage,









• Motor Power Indication

The output power of the motor can be known through the display.



• Error Code Display

The display will automatically show the error code When the electric control system is not working. See the table for the definition of the detailed error code.



Error Code	Definition	
21	Current Abnormality	
22	Throttle Abnormality	
23	Motor Abnormality	
24	Motor Hall Signal Abnormality	
25	Brake Abnormality	
30	Communication Abnormality	

Once the fault occurs, don't use the ebike for safety.

General Settings

Press the key for a few seconds to start the display. In the start up state, when the ebike is stationary, press the UP + **DOWN** button over 2 seconds. The display will access the display setting.

• Single Mileage Reset

TC stands for resetting the single mileage. Y/N can be selected through the UP/DOWN key. "Y" means reset. "N" means the contrary. Press the "i" button to confirm.



Backlight Brightness

BL stands for backlight. Parameters 1, 2, 3 can be set to indicate backlight brightness. BL-1 is the darkest, BL-3 is the brightest. The default value of the display is BL-1.



• Conversion of Imperial and Metric Units

U for units, 1 for imperial system and 2 for metric system. The default unit of the instrument is metric.



Password Settings

Press the "i" key to set the password, and the screen shows "P2" to indicate the password. Press the "i" key to shift numbers. change the number through the UP/DOWN key, and press the "i" key to confirm after the 4- digit password is set. The default boot password is 1212.



Password Switch Setting

Y indicates password required; N indicates password not required. Select Y and press the "i" key to enter the password modification. Select N and exit the password setting. Default setting is N.



Password Modification

Press the UP/DOWN to switch the number. Save the setting by pressing the "i" key for few seconds. Exit the setting and restart the display. After restart, the display shows P1,0000.

• Cruise Control

Press the throttle for 3 seconds at a speed

you want to activate the cruise control, the bike will run at the constant speed.

Exit Settings

Press "i" within 2 seconds to save the setting; press "i" more than 2 seconds to save the current setting and exit the



setting; press the DOWN more than 2 seconds to cancel the operation and exit the setting. The display will exit the setting automatically if there's no

operation input in one minute.

The adjustment of the saddle

Sit on the saddle with your feet on the ground. Be careful not to pass the safety line mark on the seat post to ensure the riding safety. After adjustment, lock the seat post clamp tightly.



The adjustment of brake system (Including brake and brake disc)

Adjust the brake tension according to your riding habits. Loosen the screw and adjust the brake wire to the suitable brake tightness. Loosen the screws to adjust the brake disc(abnormal noise or brake stuck when braking). Adjust the brake pad to keep the rotor in the middle position. Tighten the screws after each adjustment.



The adjustment of the derailleur

Adjust the screw on the shifting wire when it is hard to switch the shifter.

Loose screw 1 slightly when the shifter can't switch to the 7th gear; on the contrary, if it can't gear down to the 1st level, loose screw 2 slightly and try again.

Loosen screw 1 and 2 to make the derailleur move slightly away from the rim in case of the chain rubs the tire. Tighten the screw when the shifter can't switch to the highest gear.



Part 7 Common problems and solutions

- The battery cannot be charged, the display shows an abnormal battery power.
- ✓ Use a multimeter to check if the battery still have voltage.
- ✓ Check if the charger indicator is normal. (Red light means charging, green light means fully charged)
- ✓ The battery case is damaged, stop using the battery and contact us.
- The brakes make abnormal noise.
- ✓ Adjust the brake pads or brake discs, as we noted in the picture above.
- > The rear wheel motor makes abnormal noise.
- ✓ Lift the rear wheel off the ground and press the throttle to see if the rear works. Then contact us with a video for further solutions.
- > The derailleur is pressed or the chain falls.
- ✓ Try to strengthen or adjust the derailleur (refer to the relevant part in above)
- The ebike comes without keys.
- ✓ The keys are hung on the wires in front of handle bar , Check the wires in front of the handlebar and see if it falls into the box.

When an error code appears on the display.

Error Code	Definition		
21	Current Abnormality		
22	Throttle Abnormality		
23	Motor Abnormality		
24	Motor Hall Signal Abnormality		
25	Brake Abnormality		
30	Communication Abnormality		

- ✓ Error code 21 and 30 indicates controller problem.
- ✓ Error code 25 indicates brake problem. Do following steps to make sure which brake is defective:
- ✓ Unplug both brake wires to see if there is any error code shows on the display.
- ✓ Only unplug the front brake wire to see if there is any error code shows on the display.
- ✓ Only unplug the rear brake wire to see if there is any error code shows on the display.

- > It looks like the oil leaks from the front fork?
- ✓ This is a normal phenomenon that occurs after a bicycle has been used for a period of time.
- ➤ Can people sit on the back seat?
- ✓ The maximum loading of the back seat is 25kg. It is prohibited to sit on it.
- ➢ Water leak into the display.
- ✓ Do not ride in rainy days, and it is forbidden to ride in heavy rain. Add protection to the display if you ride in rainy days. Warranty will not cover the display problems caused by water damage.
- > The tire becomes flat.
- ✓ The tires will not be filled with air. Ride the bike after inflating the tires. (The pumping range is 17-18 psi)
- Can I refit the bike?
- ✓ The bike can be disassembled and refitted. But our warranty will not cover any bike problems after the refit.
- > Can I do some upgrades of the bike?
- ✓ We provide upgrade service for some accessories. Contact Rattan for more details.
- ➢ I need to return the bike, what should I do?

We only accept returns with original package. Any returns without original package will not be accepted.

Part 8 Use and Maintenance

Battery Maintenance

- ➢ Fully charge the battery for the first use.
- Do not use the battery in low power level.
- Must use the specified charger for charging.
- Do not charge the battery at high temperature (over 212 Fahrenheit/100°C). Charge at ventilate place.
- If the battery is not in use for a long time, charge the battery at least once a month to keep the battery active.
- ➤ Keep the battery away from water or any other liquid.
- Turn off the battery when not in use.
- Fully charged the battery before use each time. It will extend the battery life.
- If there are problems with the battery, do not charge it anymore and contact us for further solutions.

Frame Maintenance

Pay attention to the frame maintain. Wipe the bike and keep it dry.

Brake Maintenance

- Check brake pads regularly.
- Check the brake disc regularly to prevent deform.

- If it is a hydraulic brake, check regularly to see if any oil leakage.
- Clean the brake regularly.

• Motor Maintenance

- Do not try to disassemble the motor.
- If there is any problems with the motor, contact Rattan with a video.

• Tire Maintenance

- Check regularly to prevent air leak.
- Check spokes regularly.

• Derailleur Maintenance

- Check the rear derailleur regularly to see if it changed to every gear (contact us for the video about how to adjust the shifter).
- Check the rear derailleur guard to see whether it bent to affect the derailleur or not.

• Riding in Rainy Days

The ebike can not be used in rainy days.

• Common failures and check				
NO.	Problem	Possible reason		Remedy
1	The speed adjuster doesn't work or the maximum speed is too low	 Battery voltage is too low. Speed adjusting handle connection becomes loosed. The spring is stuck. 	* * *	Make sure the battery is fully charged Disconnect and reconnect the wire Change the spring
2	The motor doesn't work	 The connection of the battery wires become loosed. The left or right brakes don't bounce back after the cutting off of the power. Connecting wire of the motor wheels becomes loosed or damaged. 	✓ ✓	Repair and reconnect. Contact our support team.
3	Mileage shows on the display is not accurate	 Lack of charging Battery aged or damaged Going uphill, strong winds,brake frequently, riding with overweight load. Low tire pressure. 	* * * *	Full charged. Replace battery. Ride with pedals. Pump up the tires.
4	Charger does not work	 The charger socket doesn't work or the connection between the plug and the socket become loosed. The fuse inside the charger is burnt out. The connecting wire of the battery goes off or the fuse blown. 	× × ×	Fasten the socket and the connectors. Replace the fuse. Reconnect the connecting wire and change the fuse.
5	The indicating light doesn't turn green, the battery becomes seriously hot	The charger and the battery parameters don't match.		Furn to the supplier for djustment or replace the charger.
6	Others	 If your problem is not listed above. When the motor wheel, controller, charger or battery groups have inside damage. 	or sa	tact the designated store ales dealer for help. Do not open the above aponents by yourself, or warranty will be broke.

Part 9 After sales and Warranty

• After sales

Thanks for choosing Rattan Ebike as your green travel solution. Let's ride together to keep our earth and home green.

If you have any questions about our products, or would like to get the latest news, deals from us, please feel free to follow us at :



🔆 Website:	www.rattanebike.com
f Facebook:	Rattan ebike official
🞯 Instagram:	Rattan ebike
Service email:	info@rattanebike.com (Official Store)
	reibokservice@gmail.com (Amazon store)
	petreill2019@gmail.com (Amazon store)
Service hotline:	+1 909 - 319 - 0013
Herein Warehouse address	13825 NORTON AVE CHINO CA 91710

Note: to get the fastest service, please email us with the information of the store you purchased with.

• Warranty

The main parts of the warranty provisions

Component	Warranty period	Depreciation rate /day	Performance fai	lure Remark
Front fork handle bar	1 year	0.2%	 Natural seal off. Fracture key parts crack 	⁷ Except damaged caused by riders
Motor	1year	0.2%	 Internal gea break. Bearing bro The wheel F shell crackin Coil burned Magnets off Clamping stagnation o have strange noise 	ken. ub ng. Except damaged caused by rider r
charger	1 year	0.3%	Doesn`t wor	Disassemble personally will not be replaced.
controller	lyear	0.3%	 Short circui open circuit Burnout. Mousse tube damaged 	Disassemble personally will
Battery	1 year	0.3%	 Not working 	g Disassemble personally will not be replaced.
Display	1 year	0.2%	 Not working 	Disassemble personally will not be replaced.

• Common Part Warranty

Component	Warranty period	Depreciation rate/day	Performance failure	Remark
Switch	1 year	0.1%	Not work	
Freewheel/chain	1 year	0.1%	Skid, fracture freewheel stagnation	
Crank	1 year	0.1%	Not work	
Expansion brake	lyear	0.1%	Not work	Except damaged caused by rider
Throttle	1 year	0.1%	Not work	
Front and middle axle	1 year	0.1%	Quality problem	
Rim. Hub	1 year	0.1%	Bending, breaking	

• Other Parts Warranty

- Stem, seat post, pedal, kickstand, disc brake, for quality problems or electric plating damages, fracture, large area of blister can be replaced in six months (except for artificial damage)
- Saddle, luggage carrier, seat post clamp, spoke and fender for quality problems can be replaced in six months.
- Inner tube with leakage will be replaced in one month. The outer tire will be replaced in three months if it breaks naturally.

The warranty will be automatically expired if any unauthorized modification occurs. During the service ordering process, you must notify us of any unauthorized modifications, or any repairs or replacements not performed by Rattan, that have been made to your product. We will not be responsible for any damage to the product that occurs during the repair process that is a result of any unauthorized modifications or repairs or replacements not performed by Rattan.

The warranty will NOT cover the problems caused by any of the following causes.

- 1. Any misuse of the product, such as using the bike for commercial/rental uses, play dangerous act, etc., riding the bike on the abnormal road conditions
- 2. Any unauthorized modification to the product, such as disassemble the bike without direction by Rattan, faulty installation, repair, or maintenance by anyone other than Rattan.
- 3. The product has been in any accidents, such as traffic accidents
- 4. The product has been in extreme environment (including extreme temperature or humidity), extreme physical or electrical stress or interference, fluctuation or surges of electrical power, lightning, static electricity, fire, acts of God or other external causes
- 5. Anti-rust layer damage caused by misuse (the damage of anti-rust layer can lead to the corrosion and fracture of the parts).

Services

If you notice any problems under the warranty with your bike, please contact us at **info@rattanebike.com** with the Following Information:

- 1. Platform of the purchase, such as Amazon, Brand Store, etc. (If purchased on Amazon, Please also include the seller name on your order)
- 2. Order number/ID
- 3. The email and shipping address you used when placed order
- 4. Pictures/Short videos of the problems and a brief description of the problems

Parts and Labor.

Rattan may provide both parts and labor, but may direct that you replace certain readily installable parts yourself, as described below. In most cases, we do not require you send the defective parts back to us. If applicable law requires Rattan to return a replaced item to you, you agree to pay Rattan the retail cost of the replacement item and shipping.

Do-It-Yourself (DIY) Parts Service.

DIY Parts Service allows you to service your own product. If Rattan determines that DIY Parts Service is available to you, Rattan will ship to you a replacement part for your product. The replacement part will be accompanied by instructions on installation and any requirements for the return of the replaced part. Rattan reserves the right to decide if the labor costs relating to DIY Parts Service will be covered or not.

■ For any repair outside the Warranty.

Even if your problems are not covered by the Warranty, you can purchase the replacement parts from us. As the manufacturer, we offer competitive prices for the parts of our bikes. To purchase replacement parts from us, please contact us at info@rattanebike.com for further information.

*Note:

We DO NOT accept return of the bike except any unsolvable quality problem and we don't accept return of the bike for personal reason.

If you have any problems with the product, please contact us at info@rattanebike.com. Our dedicated customer support will be more than happy to assisting you.

Thanks for shopping with us. Let's keep riding to keep our planet clean and green