

E-BIKE USER' MANUAL

XF800

CAUTION: READ THIS MANUAL BEFORE USING YOUR EQUIPMENT



Web: www.bezior.com

Congratulations

First of all, congratulation on your purchasing of our electric bicycle, it is a carefully designed and manufactured under strict quality control.

Please read this instruction manual carefully and thoroughly before riding, as it contains sufficient information, which is very important in safety, maintenance and simple assembly. It is the owner's responsibility for reading this manual before riding this bike.



The user's instruction manual if for outside battery model and inside battery model electric bike which includes two sections, one is mechanical section, and another is electric section. This instruction is applied to the electric bikes with following equipment:

For mechanical equipment:

Derailleur/disc brake/Internal gear hub;

For mechanical equipment, an electric bicycle differs only slightly from a non-electric bike.

For electric equipment:

- The battery-pack on the down tube .
- The motor in the middle drive.
- The controller is embedded in the motor .
- Operation panel is installed to handle bar.

SECTION I

MANUAL FOR MECHANICAL PARTS

Contents:

- Conditions for Riding This Electric Bicycles
- Selection and Set-up
- Safe Cycling and Safety Tips
- Routine Maintenance Check and Lubrication
- Assembly Instructions

1. Conditions for Riding this Electric Bicycles

This electric bicycle is designed for riding on a road or a paved surface where the tires do not lose ground contact, and this electric bicycle must be under proper maintained according to the instruction of this manual. The maximum weight of the rider and load is required to be less than 200lb (or 90kg).

Warning: You are warned that you take the consequences such as personal injury, damage, or losses.

2. Selection and Set-up

2.1Saddle and Handlebar Stem Adjustment

The seat can be easily moved either up or down. Adjust the seat to keep the rider's knee maintaining a slight bend when his foot is in the lowest pedaling position(refer to fig. 1). Handlebar stem is approximately on the same level as saddle or slightly lower. For some more adjustment tips, please refer to fig. 2 as below:

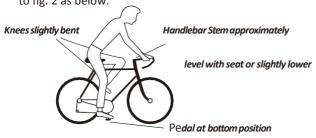
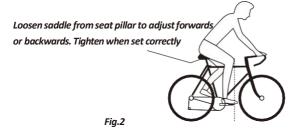


Fig.1



The saddle should be moved forwards or backwards so that

the knee is directly above the pedal when the crank is parallel to the ground.



Warning: If your seat post is not inserted up to the minimum insertion mark, the seat post may break (refer to fig. 3)

Once the saddle is at the correct height, make sure the seat post should be up to its minimum insertion mark.

Minimum Extension Mark (Fig.3)

 \triangle

Warning: handle stem minimum insertion mark on traditional quill stems must not be visible above the top of headset. If the stem is extended beyond the minimum insertion mark the stem may break or weaken the fork steering tube.

3. Safe Cycling and Safety Tips

3.1 Checking Points Before Riding

Before you ride your electric bicycle at any time, make sure it is in a safe operating condition. Particular check the following items:

- Electric bicycles nuts, bolts, quick-release and parts are fastened tight and no worn or damage;
- Riding position is comfortable;
- Steering is free with no excessive play;
- Wheels run true and hub bearings are correctly adjusted;
- Wheels are properly secured and locked to frame/fork; Tires
- are in good condition and inflated to correct pressure Pedals
- are securely tightened to pedal cranks
- Gears are correctly adjusted
- All reflectors are in position

After you have made any adjustment to your electric bicycle, check that all nuts and bolts are securely tightened and cables are free from kinks and fixed securely to the electric bicycles frame. Every six months, your electric bicycle should be professionally checked to ensure that it is in correct and safe working order. It is the responsibility of the rider to ensure all parts are in working order prior to riding this electric bicycle.

3.2 Do Not When Riding

- Do not ride without wearing an approved helmet, which must meet European standard or the same effect (comply with the law, rule or regulations in your local area);
- Do not ride on the same side of road as oncoming traffic;
- Do not carry a passenger unless the cycle is equipped to do so;
- Do not hang items over the handlebars to impede steering or catch in the front wheel;
- Do not hold on to another vehicle with another hand;
- Do not ride too close to another vehicle.

Warning of Wet Weather Riding: No brakes work as well under wet or icy conditions as they do under dry conditions. The braking distance in wet weather would be longer than those in dry, and you should take special precautions to assure safe stopping. Ride than normal and apply your brakes well in advance of anticipated stops.

Warning of Night Riding: we recommend you minimize the times you ride after dark. If you have to be out on your electric bicycle at night, you must comply with the relative law, rule or regulations in your local area, using a headlight(white) and taillight(red) on your electric bicycle in addition to the all-around reflectors fitted. For more safety, wear light colored clothing with reflective stripes. Check that the reflectors are firmly secured in the correct position and clean and not obscured. Damaged reflectors must be replaced immediately.

4. Routine Maintenance Check and Lubrication



A-Headset Remove, clean and regrease bearing yearly, checking if replacements required.	H-Mudguards Check the mudguards are clean and tight. Ensure the mudguards are secure and undamaged. Replace if necessary.	O-Bottom Bracket P- Clean,regrease yearly checking for wear.
B-Stem Nuts Ensure stem nuts and bolts are tight	I-Quick release Check the quick release is tight, ensure the mudguards are secure and undamaged, replace if necessary	P-Gears Front and Rear Lightly oil moving parts. Maintain adjustments of front and rear derailleurs.
C-Handlebars Check handlebar bolt is tight. Check brake lever securely mounted to bars and brakes stop smoothly and efficiently.	J-Wheel Hubs Grease bearings monthly. Adjust cones to avoid free play side to side.	Q-Chain cover Check the chain cover is secure and undamaged, replace it if necessary

D-Brakes Lightly oil exposed cables monthly. Maintain adjustment and replace brake blocks when worn, brake cables when frayed.	K-Reflector(Pedal) Check all fitting are secure.	R-Seat and Stem Nuts Be sure seat and stem nuts are tight
E-Battery light (front and rear) Ensure the front and rear battery light are secure and undamaged. Replace if necessary.	L-Cranks Grease bearing monthly, check that axle bolts and cotterpin bolts are tight, check for free play in bottom bracket.	S-Pedals Lightly oil bearings monthly
F-Front suspension unit Dealer adjustment only	M-Chain Keep light oiled weekly, clean and lubricate half yearly.	
G-Tyres Check for cuts and wear, Maintain pressure indicated on tires wall for maximum Efficiency.	N-Wheels Check that axles are sealed and secured properly. Rim should be kept free from wax, oil, grease and glue. Check for loose or missing spokes. (see warning below)	U-The electrical parts V-you can refer to the manual for the electrical parts.

Warning: As with all mechanical components, the bicycle is subjected to wear and high stresses. Different materials and components may react to wear or fatigue in different ways. If the design life of a component has been exceeded, it may suddenly fail possibly causing injuries to the rider. Any form of crack, scratches or change of coloring in highly stressed areas indicate that the life of the component has been reached and it should be replaced.

Warning: It is important to use only genuine replacement parts for several safety-critical components.

4.1To keep the electric bicycle functioning well, the following routine maintenance and lubrication is necessary for you.

- Half Yearly Remove and clean, lubricate chain, derailleur gears and all cables. Check and replace as required.
- NB Wash cycle weekly with warm soapy water and dry it by rubbing with a soft cloth.

Warning: When the rim becomes part of the brake system, it is very important to check the rim wear monthly and adjust the brake shoes accordingly to make the clearance at 1-1.5mm from the track of rim. The wear of rim may destroy the braking and result in personal injury to the rider or others.

5 . Assembly Instruction

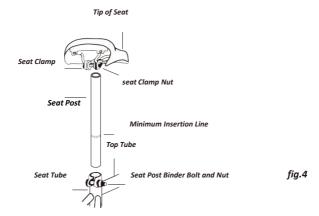
Here is some important information for electric bicycles assembly, which is very useful for your maintaining your electric bicycle, and especially helpful when you purchase our e-bikes which is partly assembled and packed in a carton.

Step 1: Preparation:

Take the electric bicycle and parts out of the carton and detach all parts that are tied to the frame. Be careful not to scratch the frame or cut the tire when removing the wrapping. And please do not rotate the handlebar either until disassembly, otherwise it may break the cables. Then carefully examine the carton for loose parts and make certain that no parts are left.

Step 2: Seat Assembly (refer to fig.4)

- 1) Loosen the seat clamp nuts(both sides)
- 2) Insert the seat post into the seat clamp. The seat post must extend at least 1/4 inch(6-7mm) above the top edge of the seat clamp.
- 3) Re-tighten the seat clamp nuts on both sides(hand tight).
- 4) Push the seat post into the seat tube of the electric bicycle frame and rotate the seat until the tip of the seat is directly above the top tube of the frame.



THE SEAT POST MUST BE INSERTED INTO THE SEAT TUBE AT A DEPTH WHERE THE MINIMUM INSERTION LINE IS NOT VISIBLE!!!

5) Open the seat post quick release lever(Fig. 5). Insert the seat post into the seat tube to a sufficient depth so that the minimum insertion line is no longer showing.

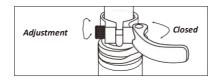
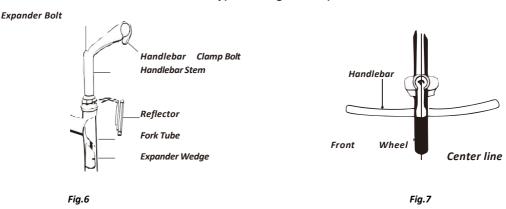


Fig 5 Opening and adjusting a quick release

6) When you are satisfied with the height of the seat post, close the sea post quick release lever. The tightness of the lever is adjusted by rotating the adjustment nut opposite the quick release lever. Turn the nut by hand to adjust the tension while holding the lever stable.

Step 3: Handlebar & Handlebar Stem Assembly(refer to fig. 6 and 7)



- As an usual situation, in our factory, the handlebar have been pre-assembled together with brake levers, shifter levers and grips. Be sure that the longer cable is fixed to the right lever (rear brake) and shorter cable to the left (front brake), or according to your local rule and practice (Note: In some area, such as UK, the cables are required to be arranged in the opposite way).
- Since your cycle may be fitted with an adjustable, a standard stem or an A-head stem(refer to fig.6), you
 must always check that all the bolts are tight before cycling. Based on the situation of standard handlebar
 stem, please follow the instruction below:
 - 1) Push the handlebar stem into the fork tube (head of the frame) to the minimum height line that is marked on the side of the handlebar stem. It might be necessary to loosen the expander bolt so that the stem can slide into the fork tube, until you get your desired height of the handlebar stem.
 - 2) Align the handlebar stem with the front wheel(see fig.7). Tighten securely the expander bolt with an adjustable wrench.

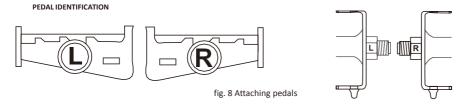
Note: Some models require a 6mm allen key. (Tightening torque: 18N.m or 14 foot lbs.torque)

- 3) Loosen the handlebar clamp bolt and nut from the stem.
- 4) Position the handlebar at the desired angle. Make sure that the stem is in the center of the handlebar
- 5) Tighten securely the handlebar clamp bolt (Tightening torque: 18N.mor 14 foot. lbs)
- 6) Be sure that your handlebar and stem assembles are properly tight before riding. The handlebar should not rotate in the stem. When you straddle and grip the front wheel between your knees, the handlebar should not be able to turn when you apply pressure horizontally. Refer to (fig. 7).

Note: Under the situation of A-head stem, you make the similar operation as the above. Compression bolt tightening torque: 23N.m or 17 foot lbs. torque; stem clamp bolt tightening torque: 12N.m or 9 foot. Lbs

Step 4 Attaching Pedals(refer to fig. 8):

- 1) The pedals are marked with either a "R" or "L" on the threaded end of the pedal axle.
- 2) Screw the pedal marked "R" into the right side of the crank assembly (chain side of electric bicycles). Turn the pedal (by hand) in the clockwise direction. Tighten securely with an adjustable wrench or the plate wrench special for pedals(Tightening torque: 34N.m or 26foot.lbs).
- 3) Screw the pedal marked "L" into the left side of the crank assemble. Turn the left pedal (by hand) in the counterclockwise direction. Tighten securely with an adjustable wrench or the plate wrench special for pedals(Tightening torque: 34N.m or 26foot.lbs)



Step 5 Front wheel installation:

- 1) Cut the wrapping rope, remove the front wheel, remove the front fork protection lever and the front wheel protection cover.
- 2) Make sure that the front wheel is in line with the rear wheel, then start installation. First pull the wheel upwards, put the disc brake pad into the front brake caliper, and then use 15 wrench to tighter the front hub fixing screw.
- 3) Adjust the adjusting screw of the disc brake to make the disc brake rotor without obvious friction



Step 6 Brake Adjustments:

The brake on your electric bicycle should have been adjusted correctly in our factory, however, as cables do stretch, it is important to check the adjustment of your brakes after your first riding. Most brakes will need some adjustment after being used a few times.

6.1 Basic Disc Brake Adjustment

The notes that follows are not exhaustive. If you need further assistance, please take your cycle to your local dealer or a professional cycle shop.

a. Brake Lever and Brake Pad Travel Adjustment

You can alter the amount of braking pressure by altering the travel of the brake lever and by the proximity
of the brake pads to the brake disc.

• To alter the travel of the brake lever adjust screw A (see fig. 9), unscrew screw A reduce the amount of lever travel and by tightening it increase the lever travel. If you have fully unscrewed screw A and the lever travel is still excessive you will have to adjust the space between the pads and the disc.

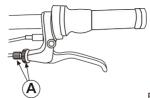


Fig.9 Brake Lever Adjustment

 Tighten screw A (Fig.9) up to the brake level. Go to Fig.11 and insert an allen key into the smaller hole inside allen key hole B. Rotating the allen key clockwise pushes the outer brake pad forward by approx.0.8mm After each turn, check the braking performance.





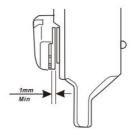
Fig.11 Disc brake pad adjustment

Fig 12 Disc brake pads adjustment

- Once the correct amount of travel has been reached, centre the brake Calliper on the disc by adjusting screw C(Fig.12).when the brake pads are centered on the disc the wheel should spin freely, though there may be a slight amount of noise until the pads "bed" in.
- If your cycle came from, or has recently been overhauled by a professional repair shop. you should be able to maintain good braking performance by adjuster screw C (refer to Fig.12)
- Once the correct amount of travel has been reached, center the brake caliper on the disc by adjusting screw C (fig.12). When the brake pads are centered on the disc the wheel should spin freely, though may be a slight amount of noise until the pad bed in.

b.Brake pad wear and replacement

• When you check your brake pads due to falling performance, check their thickness. If they are less than 1 mm (Fig. 13), they will need replacing.



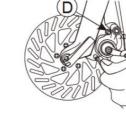


Fig.13

Fig.14

- To fit new pads, remove the brake calliper from the fork or frame by unscrewing allien bolts D(Fig.14). Unscrew (anti-clock wise), the smaller allen bolt inside allen bolt B(Fig.11). Lift up and pull the inner pad downward, using the protruding part. Slide a thin slot screwdriver under the outer pad and lift it up. Hold the screwdriver in this position and remove the pad with a pair of long nosed pliers.
- Remove the springs from the worn out pads and fit them onto the new pads. Replace the new pads, keeping them slightly inclined into the seat of the Caliper. Check that the spring hooks correctly onto the small piston. (When pulling downwards the pads should not come out). Refit the Caliper to the fork or frame and adjuster screw C(Fig.12) until the pads and the disc are centered and the wheel spins freely. Again there may be some noise from the brake until it "bed" in.

Step 7 Derailleur Gears Maintenance and Adjustment

To ensure that your derailleur gear works efficiently and to prolong its life, it must be kept clean and free from excessive dirt built up and should be properly lubricated.

Note: If the specific instruction manual is provided accompanied with your bike, please follow it.

Before Adjustment, please make sure of the following details:

- The right shifter controls the rear derailleur and sprocket.
- The largest rear sprocket generate low gear for hill climbing; the small rear gear sprocket develop high gear ratios for speed work and downhill riding.
- The small chain ring produce low gear ratios while the larger front chain ring produce high gear ratios
- To operate your derailleur gear system efficiently and reduce damage, wear and reduce noise to a minimum, avoid using the maximum crossover gear ratios of large chain ring/large rear sprocket, small chain ring/small rear sprocket

Note: For positive gear selection, observe these four precautions

- 1) change only when pedals and wheels are moving in a forward motion
- 2) reduce pedal pressure while changing gears
- 3) Never back pedal when changing gears
- 4) Never force the gear levers

7.1Rear Derailleur Adjustments:

Move the shifter all the way forward (toward seat) and with the chain on the smallest rear sprocket and largest front sprocket, check for cable slack at point "B". If there is slack, loosen the cable nut or screw, pull on the cable end with pliers and retighten the cable nut or screw while pulling cable taut(tightening torque: 5-7N.m or 4-5foot.lbs)

7.2 Top Adjustment

Turn the "H" adjusting screw(or top rear adjustment screw) on the gear mechanism so that, looking from the rear, the guide pulley is below the outline of the top gear.

7.3 Low Adjustment

- Turn the "L" adjusting screw (or low gear adjustment screw) so that the guide pulley moves to a position directly below the low gear.
- operate the shifting lever to shift the chain from top gear to 2nd gear.
- If the chain will not move to the 2nd gear, turn the cable adjusting barrel to increase the tension 1(counter clockwise).
- If the chain moves past the 2nd gear, decrease the tension 2(clockwise)
- Next, with the chain on the 2nd gear, increase the inner cable tension while turning the crank forward. Stop turning the cable adjusting barrel just before the chain make noise against the 3rd gear. This complete the adjustment Be sure to perform oil maintenance at each part of the transfer mechanism. The optimum oil is dry molybdenum oil or the equivalent.



The back derailleur:



Step 8: Tighten the front and rear hubs nuts securely.(Tighten torque: about 30 N.m for front wheel, about 25 to 30 N.m for rear wheel)Before riding, lift the front of the bicycle so that the front wheel is off the ground and give the top of the tire a few sharp downward strikes. The wheel should not wobble or come off

Step 9 Tire inflation instruction:

- 9.1 After the bicycle is assembled, please check whether the air pressure of the front and rear tires is within the normal value.
- 9.2 When refilling tires, you must refer to the inflation reference range on the side of the tire for refilling, generally between 20PSI (140Kpa).



SECTION II

MANUAL FOR ELECTRIC PART

The model instructed in this manual is made with "start aid". This electric assistance system will help riders to save their energy, while they enjoy their easy sports.

Here is the function of so-called "start aid": when you long press the down button for display for seconds, the bike can be started at speed of 6 km/h. After the bike moving forward, you can easily pedal on and release the "start aid" button.

Also, you can pedal 3/4 round of the chain wheel to start motor without using the "start aid" button.

Content

- 1. Important Safety Cautions
- 2. Meter Operation
- 3. Using and Charging the Battery
- 4. Meter operation
- 5. Using and Maintaining the Electric HubMotor
- 6. Maintaining the Controller
- 7. Simple Trouble Shooting
- 8. Diagram and Specification

1. Important Safety Cautions:

- We strongly advise wearing an approved helmet, which meet European Standards.
- Obey local road rules when riding on public roads.
- Be aware of traffic conditions.
- Parents need to ensure their children are supervised when riding any bicycle equipment.
- Have your bike serviced only by local authorized bicycle shops. Regular servicing will ensure a better and safe riding performance.
- Do not exceed more than 90kg load on bicycle, including rider.
- Do not "dink" or have more than one rider at a time on the bicycle.
- Ensure regular maintenance is carried out on the bike according this owner's manual
- Do not open or attempt to maintenance on any electrical components.
- Contact your local bicycle agent for qualified service and maintenance if needed.
- Never jump, race, perform stunts or abuse your bicycle.
- Never ride under the influence of intoxicating drugs or alcohol.
- We strongly recommend switching-on the lighting system, when riding in the dark, fog or poor visibility.
- When cleaning this bike, please wipe surface with a piece of soft cloth. For the very dirty spot, you can wipe it with a little neutral cleaning agent.

Warning: Do not wash this electric bike direct with spraying water, to avoid water entering electric components, which may result in damage of the electric components and then, the electric assistance bicycle

can not be normally used.

2. Operation

Your new electric bicycle is a revolutionary transporting means, applied with alloy aluminum frame, Lithium battery, a super high efficient electric hub motor and controller with pedal assistance system, to make easy biking. The above mentioned equipment will ensure high safe riding with excellent performance. It is important for you to learn the following guideline in order to get the best possible experience with your electric bicycle.

2.1 Checking Before Riding

- 2.1.1 please ensure tires are fully inflated to 45psi, before riding. Remember, performance of the bike is directly related to the weight of the rider and baggage/load, together with the stored energy in the battery;
- 2.1.2 Charge overnight, prior to riding the next day;
- 2.1.3 Apply chain oil periodically and clean if dirty or gummed up, using a degreaser, then wipe clean and oil bicycle chain again.

3. Switching on the battery

3.1This battery is inside the lower tube, and can be taken out easily .It is necessary to insert the key into the keyhole of the lower tube and take out the battery .



3.2 Procedure for Charging

Please charge the bike battery according to the following procedure:

- 3.2.1 Make sure the display is turned off. Then open the charging socket cover, which is situated at side of battery.
- 3.2.2 Insert the charger output plug into the battery securely and then, plug the main cable of the charger into a reachable AC outlet;
- 3.2.3 When charging, the LED on the charger will become red, showing the charging is on. It becomes

green, after the battery is fully charged.

3.2.4 To finish charging, you must disconnect the charger input plug first from the AC outlet, and after that, disconnect the charger output plug from the battery .Finally, close the cover on the charging socket and check the socket, if covered for sure!

⚠ Warning:

- 1) You should only use the charger provided with the electric bike, otherwise damage could occur to your battery and void the guarantee.
- 2) When charging, both battery and charger should be minimum 10cm away from the wall, or under a condition of ventilation for cooling. Place nothing around the charger, while in use!

3.3 About battery charging:

- Before using the bike for the first time, fully charge the battery.
- A normal charge lasts 6-8 hours (for bikes with battery with capacity of 13Ah).
- The charger port is positioned at the left side of the battery
- If required, battery can be removed from the bike.
- First, be sure the bike is turned-off.
- The display must be off.
- The battery light must be off.
- insert the key in the lock and turn it to unlock the battery box.



4. Meter operation:

4.1 Meter Instruction (For LCD display):



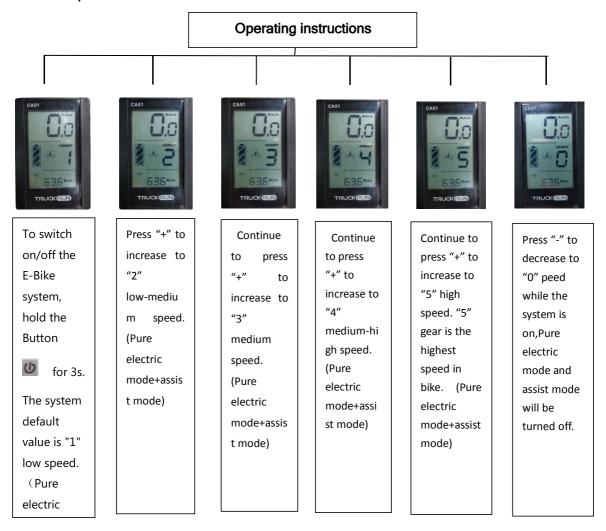




Noted:When the meter is turned on ,press and hold the "+" button for 3 seconds to turn the headlight and the meter background light on, and repeat operated to be turned off.



4.2 Meter operation:



If you don't need the electric power assistance, you need to turn off the meter.

4.3 6km/h assistance function

- When the bike is stopped and the display is turned-on, hold the DOWN key to activate the speed function
 of 6Km/h.
- This function is useful when user must push the bike by hand on a climb or on uneven terrain.
- Do not use this function when riding the bike.
- If pushing faster than 6km/h, the function automatically deactivates.
- Be careful when this function is turned-on.

4.4 Advantages of a Lithium Battery

Your electric bicycle is equipped with high quality lithium batteries, which are light and create no pollution to the environment, as a typical green energy source. As well as the above features, the lithium batteries have the following advantages:

- charging without memory effect
- big electric energy capacity, small volume, light in weight, with large current output,
- suitable for high power vehicles.
- long life
- A wide working range of temperature: -10° C

5. Using and Maintaining the Electric Hub Motor.

- To avoid damaging the motor, it is better to start the motor working after the bike has been pedaled from standstill. Under usual condition, our intelligent e-bikes are programmed in our factory, to start the electric assistance when pedaling 3/4 circle of the chain wheel.
- Do not use the bike in a rainstorm or thunderstorm. Nor use the bike in water. Otherwise, the electric motormay be damaged.
- Avoid any impact towards the hub motor, otherwise, the casting alloy aluminium cover and body may break.
- Make regular check on the screws on both sides of the hub motor, fasten them even if there is just a little bit loose.

6. Using and Maintaining the Battery Charger.

Before charging the battery, please read the bike owner's manual and the charger manual accompanied with your bike, if any. Also, please note the following points regarding battery charger.

- 6.1 To ensure a longer battery life and protecting it from damage, please use and maintain it according to the guideline below:
- 6.1.1 This charger is forbidden to be used under the environment with explosive gas and corrosive substances.
- 6.1.2 Never strongly shake, punch and toss this battery charger, to protect it from damage.
- 6.1.3 It is very necessary to protect the battery charger from rain and moisture!
- 6.1.4 This battery charger should be normally used under temperature, ranged between 0°C to +40°C
- 6.1.5 ALWAYS charge the battery after ridingyour bike;
- 6.1.6 If the bike is ridden less frequently, then a long and full charge each month will be necessary for assisting battery life and capacity.
- 6.1.7 If the battery will be not used and stored for quite a long time, it is necessary to be fully charged every months, and make a full discharge and recharge every three months.
- 6.1.8 Lithium battery should be used at the places which remain between 10° C to + 40° C in temperature and 65±20% in moisture, and stored under normal temperature 0° C to + 40° C, 65±20% in moisture.
- 6.2 It is necessary to check the cable connection to the motor often, to ensure the hub motor to work always normally.



Warning:

1) The battery life may be reduced after long storage without regular charging as

instructed above, due to long natural over discharge;

- 2) Never use any metals directly to connect the two poles of the battery, otherwise, the battery will be damaged due to short circuit.
- 3) Never put the battery near to fire or heating it.
- 4) Never strongly shake, punch and toss the battery.

When the battery pack is removed from the bike, keep it out of reach of children, to avoid any unexpected accident.

6.3 Maintaining the Controller.

It is very important to take care of this electronic component, according to the following guideline:Pay more attention to protect from raining and soaking water, which may damage the controller.

Note: In case the controller box may soak into the water, please switch off the power immediately and pedal without electric assistance. You can pedal with electric assistance as soon as the controller is dried up!

6.4 Pay more attention to protect from any strong shaking and punching, which may damage this controller.

6.5 The controller should be working under the temperature ranged from - 15°C to +40°C.

Warning: you may not open the controller box. Any attempt to open the controller box, modify or adjust the controller will void the warranty. Please ask your local dealer or authorized service to repair your bike.

7. Simple Trouble shooting.

The information below is for purpose of explanation, not as a recommendation for user to carry out repair. Any remedy outlined must be carried out by a competent person who is aware of the safety issues and sufficiently familiar with electrical maintenance.

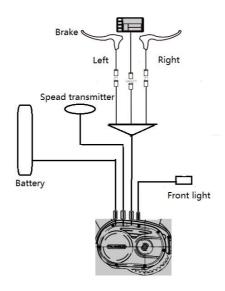
Trouble Description	Possible Causes	
	The motor cable waterproof connection joint is loose	Check if the connection is securely fixed. If loose , joint them tightly
After the main battery switching on, the	Brake lever have not well returned, which makes power off	Make the brake lever come back to its normal position without braking
motor does not generate assistance when press the "6km/h" button or	Battery Fuse is broken	Open the battery pack top handle, and check if the fuse is broken. If yes, please come to your dealer or authorized service for installing a new fuse
pedaling		If the above has no effect, please contact your vendor or authorized service

	Character Manager 1	
	Charging time is not enough	Please charge the battery according the
		instruction Chapter 3.3
	The environment temperature is so low	In winter or under 0°C,you'd better store
The distance per	that it affect the battery working	the battery in room
charge become	frequently going up slop, or going again	It will be normal if the riding conditions are
short (Note:	wind, or on the poor road condition	improved as regular
performance of	The tires are failed to be inflated	Pump the tires and ensure tires are fully
the bike battery is		inflated to 45psi for your bike.
directly related to	Frequently braking and starting	It becomes normal when the riding
weight of the		situation become better. No worry about
rider and any		such a trouble
baggage/load)	Battery have been stored without using	Make regular charging according to this
	for quite a long time	instruction manual
	Trouble from the power outlet.	Check and repair the power outlet.
	Poor contact between charger input plug	Check and insert the power outlet tightly
After plug the power	and power outlet.	
outlet, no charger		If the above has no effect, please
indicator LED is bright		contact your dealer or authorized
maicator 222 is singific		service
	Environment temperture is 40°C and	Charge the battery in an area under
	above.	40°C, or according to this instruction
		chapter 3.5
	Environment temperature is under 0°C.	Charge the battery in room, or
		according to this instruction chapter 3.5
	Failed to charge bike after riding,	Please contact your dealer or authorized
	resulting in over discharge.	service and try to recover the electric
		capacity
	The output voltage is too low to charge	No charging when he power supply is
	the battery.	lower than 100V

8. Diagram and Specification

Here are the main technical specification details regarding the bike. Manufacturer reserve the right , without further notice, make modifications to the product. For further advice, please contact your vendor.

8.1 Electric Circuit Diagram:



8. 2 Main Technical Specification Sheet

Here are some general technical Data for electric bikes:

Description	Information
SKU NO.	XF800
Maximum speed with electric assistance	40KM/H
Over current protective value	18+/-1A(under 48V)
Under voltage protective value	40V+/-0.5V(under rated 48V)

Please find the technical data regarding your bike motor below:

Description	Information
Motor Type	Middle drive motor
Rated voltage	48V

Please find the technical data regarding your bike battery and charger below:

Description	Information
Battery type	Lithium Battery
Voltage	48V
Capacity	13AH

More electric bike's installation and repair instructions. Any question about the item, please contact.

Detail Packing List	
Description	Quantity
E-Bike	1
Tools (13-15 spanner, 9-11 spanner, 8-10 spanner,14-17 spanner, eleven-shaped screwdriver, M6, M5, M4, M3 Allen wrench)	1
Manual	1
Кеу	2
Charger	1
Pedal	1
Fenders	1
Rear light	1