Product manual and maintenance manual

preface

Please read the instructions carefully before use.Do not use the vehicle without understanding the characteristics of the Zhen San Lun Electric Motorcycle.Familiarize yourself with the safety knowledge of the Zhen San Lun Electric Motorcycle and master the correct methods of use, storage, and maintenance, which can reduce motorcycle malfunctions, maintain optimal performance, and extend the service life of the electric motorcycle.The data, descriptions, and specifications indicated in this manual are determined based on the latest design of the vehicle at present.The product standards are valid for the current period, and our company reserves the right to continuously improve our products without prior notice.If there are discrepancies between the instructions and the actual product, the actual product shall prevail.Our company sincerely hopes that you will provide valuable feedback on the design, manufacture, quality, and other aspects of our vehicle and inform us in a timely manner so that we can make improvements. Providing you with more guidance and assistance and facilitate the repair services for your vehicle.

Thank you for choosing this three-wheeled electric motorcycle. I wish you a long journey of comfort and pleasure.

Important announcements

● Special Note: If the power supply is damaged or the charging system fails, it should be replaced and repaired at the repair shop designated by the manufacturer.

● Carrying capacity: The maximum allowable carrying weight of this type three-wheeled electric motorcycle is 275 kg. Overloading is strictly prohibited.

● Road surface: this type three-wheeled electric motorcycle can be driven on highways or urban roads.

The following lists the particularly important contents of this user manual. Please pay attention to them:

Danger: If not followed, serious personal injury may occur.

Warning: indicates that non-compliance with instructions may result in personal injury or damage to the device. Note: indicates that attention should be paid to minor hazards and that helpful information is provided.

Environmental protection: indicates the measures to maintain the emission level involving environmental protection requirements. Improper use of electric vehicles may cause environmental pollution. Please pay attention to the contents marked with "environmental protection" in this user manual.

Users shall not handle any faults that need to be sent to professional repair points or to the companys designated repair stations by themselves. Otherwise, the company shall not be liable for any consequences.

This manual shall be an integral part of the motorcycle and shall be attached to the motorcycle when it is transferred.

catalogue

Chapter 1 Safety Notice

Warning: When driving a three-wheeled electric motorcycle, you must pay attention to traffic safety. Before driving a vehicle, please read the instructions in the "Pre-driving Inspection" chapter carefully and fulfill the items to ensure the safety of drivers and passengers and the vehicle.

Rules of safe driving

1. Before starting the vehicle, the performance of the whole vehicle, brake system and lights and horn should be checked to see if they are normal and effective? Whether the fasteners are loose? This can prevent accidents and avoid damage to the vehicle.

2. The driver of a three-wheeled motor vehicle must pass the examination conducted by the traffic administration department and obtain a driving license before driving the vehicle. The vehicle shall not be lent to a person without a driving license.

3. In order to avoid other motor vehicles from harming you, you should try to be conspicuous when driving. For this reason, please pay attention to:

(1) Wear bright clothes.

(2) Do not get too close to other motor vehicles, and use the lights, horns and other signal devices correctly.

(3) It is strictly prohibited to compete for the road.

(4) Strictly abide by the traffic rules of each place.

(5) Excessive speed is the cause of many accidents, so the speed of driving should not exceed the range permitted by conditions.

(6) Turn on the turn signal when turning or changing lanes to attract the attention of other drivers.

(7) Be especially careful driving at intersections, parking lots and lanes.

(8) When driving the vehicle, both hands should be tightly grasped on the steering handle and both feet should be placed on the front foot combination. The passengers should hold the rear handrail with both hands and place their feet on the rear foot combination.

(9) Remember that the braking distance on rainy days is twice as much as on sunny days. You should be particularly careful when driving. When there are drainage holes and oil stains on the road, you should slow down when you do not know the road conditions.

guard

● In order to ensure personal safety, safety helmets, protective face masks, dust goggles and gloves should be worn when driving.

● Loose clothing is not allowed, as it may hook the handle, starter arm, footrest combination or wheels.

Modifications to vehicles

Note: Arbitrary modifications to electric vehicles or replacement of original equipment cannot ensure the safety of electric vehicle operation and are illegal. Users must comply with the traffic management departments regulations on vehicle usage. For any good suggestions regarding vehicle modifications, please write to our company to obtain approval before proceeding. Conversely, all consequences will be borne by the individual.

Cargo loading

Note: Electric vehicles have certain requirements for the distribution of load quality. Improper loading of goods will affect the performance and stability of vehicles.

● The center of mass of the cargo should be located low and close to the center of the vehicle. Distribute the load evenly on both sides to maintain balance as much as possible. When the center of mass of the cargo is far from the center of mass of the vehicle, it will affect the handling of the vehicle.

● Adjust the tire pressure and rear shock absorber spring appropriately according to the mass and driving conditions recorded.

● All goods must be firmly fixed to the vehicle to ensure stable operation.

● Do not tie large or heavy objects to the steering handle, front fork or mudguard, as this may cause instability or sluggish steering response.

● It is strictly prohibited to drive vehicles exceeding their maximum loading capacity. See the important Notice in the preface.

fittings of a machine

●The accessories produced by our company are specially designed and have been tested on electric vehicles. Since our company cannot test products from all other manufacturers, you are responsible for selecting, installing, and using accessories that are not produced by our company. Please comply with the "Safety Driving Rules" and follow the following points:

● Carefully check the accessories to ensure that they do not obstruct the view, reduce the ground clearance and side angle, restrict the movement of the suspension and steering mechanism, or limit control operation.

● Do not add electrical equipment, which may overload the capacity of your electric car, burn out the fuse, and cause the danger of the headlights not working at night, so that the vehicle cannot move.

Chapter 2 Vehicle Introduction and Identification

Vehicle identification

Vehicle identification code: ☆□□□□□□□□□□□□□□□□□□□☆

Please record the vehicle identification code in the space below. This will help you order spare parts from our company or for use in case your vehicle is stolen.

The vehicle identification code (VIN) is engraved on the front part of the right side beam of the vehicle, and the vehicle nameplate is riveted on the right side of the seat barrel.

Chapter 3 Pre-drive inspection

1. Check whether the tire pressure is sufficient before and after. The normal tire pressure of the front tire should be maintained at 250 kPa, and the normal tire pressure of the rear tire should be maintained at 250 kPa.

2. Check the tires for obvious cracks, protrusions and abnormal wear.

Note: Low tire pressure, tire cracking, damage and abnormal wear can affect the mileage or cause steering malfunction or tire blowout, resulting in accidents.

3. Check whether the air switch in the seat barrel is in the open state. If it is closed, please turn the switch to the "ON" position.

4. Check whether the functions of the speed control handle and brake handle are normal and effective.

5. Check whether the function of headlights,
steering and other signal lights is normal.

6. Check whether the function of horn is normal.

7. Check whether the steering is flexible, and whether the up, down, left, right and front and rear swaying direction is no gap, no loosening, too tight or jamming.

8. Check the rearview mirror range. From the riding position, you should be able to see the image of the rear

9.Check whether the battery voltage is sufficient to meet your riding needs.

10 meters away and 4 meters wide range in the rearview mirror.

Precautions for cycling

1. If you are driving an electric car for the first time, please practice on an open space and master the riding skills before driving on the road.

2. When using electric power, turn on the power switch and turn the remote switch to the "n" position. Slowly step down the accelerator pedal with your right foot to start the electric car. Make the electric car speed gradually reach the optimal state. Do not quickly step down the accelerator pedal, which is very dangerous.

3. The "buzzing" sound emitted by the motor when it starts is the sound of efficient magnetic field working, which is a normal phenomenon. When the motor speed reaches the optimal state, the sound will disappear.

4. Do not overload driving, and try not to brake or start frequently under the condition of ensuring safety. In case of emergency, please brake in advance, cut off power, or slide to slow down and brake.

5. When driving on slippery roads, try to reduce the speed, avoid sudden steering and braking, and keep a safe distance. 6. When riding at night, please turn on the headlights. Turn on the turn signal and slow down when turning.

7. Please use rainwater carefully. Do not ride in the area where the water depth exceeds the axis of the motor to avoid motor damage.

8. Do not ride the electric vehicle with one hand. Please consciously abide by the traffic rules and ride in the non-motorized lane.

Precautions after cycling

1. After using the electric vehicle, please turn the running switch to ""□"Place it in a safe place, turn off the power, and remove the key (lock it if there is a head lock). 2. When parking, please pull up the parking brake handle and lock it for theft protection.

3. Check the battery level in time and charge it in time to avoid affecting your normal use next time.

4. When storing the battery for a long time, please place the battery fully charged in a cool and dry place, and insist on recharging it every half month.

Chapter 4 Introduction to Driving Operation and Function

Power lock

1. There are two keys to the power switch lock. Please keep one key as a backup and keep it properly.

2. When using, insert the power lock key into the lock hole and rotate it clockwise to the "n" position. At this time, the power display light on the dashboard is on, indicating that the power is connected with the control lines.

3. When parking, turn the key counterclockwise to ""  "Position, main power off.

4. When parking the car with the head lock, turn the steering wheel to the left and put the key together

The lock core is locked into the power lock by about 3 mm and rotated counterclockwise to ""  "Pull out the key from the position and lock the steering wheel!

Note: In case of abnormal conditions, please quickly turn off the main power lock and cut off the power to ensure safety.

appearance

The instrument is an intuitive display of the working condition of each function of the vehicle. The battery meter has a low voltage protection device, when the battery voltage is insufficient.When the pointer is in the red zone, charge immediately or it will affect the battery life.

2. When the electric vehicle starts up, the voltmeter shows some fluctuations in voltage. This phenomenon is normal. The remaining electricity should be read when the vehicle is running smoothly to get a relatively accurate reading.

accelerator

1. The accelerator is a stepless speed control device used to control the speed of the car.

2. When starting to ride, turn the right handlebar to start accelerating, otherwise it will automatically reset and slow down.

3. When starting, please use your right hand to turn the accelerator handle and develop the habit of turning lightly to avoid driving danger caused by excessive force.

4. The operation of the accelerator handle can only be controlled by your right hand.

brake pedal

1. The brake pedal is a device to control the braking of the front and rear wheels. When the pedal is stepped down, the power supply from the controller to the motor is cut off, and the motor stops working. At the same time, the front and rear brakes are in effect, and the front and rear wheels stop turning.

2. The brake pedal can only be controlled by the right foot. When braking, the accelerator pedal will not continue to be pressed.

functional switch

1. The direction is as follows: on the left are the high and low beam switches, turn signal control switch, horn switch, and rear fog light switch. When driving at night, please maintain a safe distance from other vehicles and avoid using high beams for extended periods. If a vehicle is coming from the opposite direction, switch to low beams to avoid glare. When changing lanes or turning, please use the turn signal in advance to ensure your driving safety. To alert other vehicles and pedestrians to safety, please press the horn switch to enhance driving safety. Do not hold the horn switch for an extended period, and do not honk in areas where it is explicitly prohibited. In foggy weather, please turn on the rear fog light switch.

2. The directional switch integrates the right-side night running lights, headlights, and reverse gear switch; the first gear is the night running indicator switch for use at night or in low light conditions; the second gear is the headlights switch for use when there are no streetlights at night. The reverse gear switch is used for reversing and should be used with caution while paying attention to the conditions behind you.

The barrel

1. Do not put flammable and explosive items in the frame. If the charger needs to be placed in the bucket, it must be protected against shock. It can be stored in outer packaging and pay attention to moisture protection.

Chapter V use and maintenance of major components

Section 1 Charger

How to use the charger

1. Park and charge

When charging the battery in the electric vehicle, please turn off the power of the electric vehicles door lock, and connect the charger to the charging socket of the electric vehicle first, then connect to the 220V AC power socket.

2. Off-vehicle charging

When charging the battery separately, the charger should be plugged into the charging socket of the battery box first and then into the 220V AC power socket.

3. During charging, it is strictly prohibited to move the vehicle or cover any items on the charger, and ventilation and heat dissipation should be maintained.

4. The charging indicator light is red when charging. When it turns green, it indicates that the battery is basically full and enters the floating charge state. Generally, it will continue for 2 hours. If the red light does not turn green after the battery charging time (the charging time is generally 8-10 hours, depending on the battery usage) should stop charging and send to the after-sales service station for inspection.

5. After charging is complete, disconnect the plug on the 220V AC power socket first, and then disconnect the charging plug on the charger. Note: This procedure cannot be reversed.

Charger maintenance

1. Carry the charger with you, and take anti-vibration measures to avoid bumps and vibrations that may cause damage.

2. The environment where the charger is used should be dry and ventilated to prevent liquids and particles from entering the inside of the charger.

3. In areas with unstable grid voltage, when the grid voltage fluctuates more than AC 220± 20, it is recommended to use a small power regulator, otherwise it may cause insufficient impulse or device damage.

Charger operation method

1. When charging, first connect the charger output plug firmly to the battery box charging socket (or vehicle charging position charging socket), then insert the charger input plug into the 220V AC power supply socket (the charger indicator light is green at this time).

2. After the charging is completed, (the charger indicator light shows green), first pull out the charger input plug connected to the 220V AC power socket, and then pull out the charger output plug connected to the battery box charging socket (or vehicle charging position charging socket).

Note: This operation method cannot be reversed.

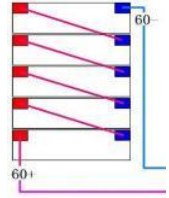
Section 2 Battery (environmental protection)

Battery capacity will gradually decay with the increase of use time and mileage, correct use and maintenance can effectively extend battery life.

The use and maintenance of batteries

1. When the newly purchased electric vehicle is used for the first time, please charge the battery fully before using it. When the battery is used for the first time, the battery power should be charged until the controller under-voltage protection (the first 5 charges should not be less than 10 hours, but should not exceed 12 hours). When charging, remember to operate according to the charger operation method.
2. The battery should be installed firmly to prevent damage from vibration during riding. The battery should not be thrown, rolled or pressed during transportation.
3. Pay attention to keep the battery dry and clean to prevent excessive self-discharge of the battery.
4. Avoid prolonged undercharging, never let the battery remain in a state of insufficient charge for a long time, and develop the habit of charging the battery after daily use. If unused for a long time, the battery should be fully charged and then placed in a cool, dry place, with regular top-ups (usually every 10-15 days).
5. When starting an electric vehicle, start slowly to avoid excessive instantaneous discharge which can damage the battery.
6. When riding, pay attention to not letting the battery discharge too much. After the battery discharges to the end voltage, continue to discharge it is called over-discharge. Develop the habit of shallow discharge and frequent charging. Generally, it is best to charge the battery once when it is deeply discharged by 50%.
7. Avoid overcharging. When the charger turns green, it can be charged for 2 hours. It is best not to use it immediately after being fully charged. Wait for about 10 minutes before using it.
8. Pay attention to the charging environment. The applicable temperature of the battery is-15-45℃, and the best charging environment is 25℃. Do not charge after being exposed to the sun. Try to reduce the temperature of the battery when charging, ensure good heat dissipation, and stay away from heat sources.

9. Avoid long time of high current discharge and prevent exposure to sunlight.
10. The battery should be charged in time after discharge, and should not be left for more than 12 hours.
11. Battery connection must be made using the battery connection wire provided by our company. Each battery is connected in series, positive and negative terminals should not cross, wires should not be squeezed against the battery box, wires should be arranged along the edge of the battery box, and each connection point must be firmly connected. Before connecting or disconnecting the battery box connection plug, please turn off the power supply first.
Note: Do not discard used batteries at will to avoid environmental pollution. Used batteries of this product shall be recovered by the enterprise or dealer or government designated outlets.



Section 3 Motor

Use and maintenance of motor

1. Do not overload when riding, when the electric vehicle cannot start normally due to obstruction, do not repeatedly attempt to start it; instead, remove the obstruction before attempting to start.

2. On rainy days, if the road surface is flooded with water exceeding the motors center axis, do not use the electric vehicle to drive through the waterlogged area; excessively deep water can easily cause the motor to leak, leading to motor failure (not covered by warranty).

3. The motor does not need to be maintained in daily use, but the installation nut of the motor shaft should be tightened. If the nut is found to be loose, it should be tightened in time or checked by professionals.

Chapter 6 Daily maintenance and professional maintenance

Customer daily use inspection

order number	inspection item	scope of examination
1	tyre	Whether the pressure is normal and whether the surface is worn severely
2	Front and rear brakes	Whether it works reliably
3	suona	Whether it works properly
4	lamps and lanterns	Whether it works properly
5	appearance	Whether the signal lights and indicator lights are working properly
6	ignition switch	Whether it works properly
7	rearview mirror	Whether it is clean, whether the observation range is normal
8	Brake pedal	Whether the rotation is flexible, no door movement or jam
9	knuckle spindle	Whether the nut is loose
10	Rear bridge, steel plate	Whether the nut is loose

Please check carefully according to this manual before driving.

Regular inspection and maintenance

order number	Check and maintain items	Check and maintain content
Conventional safety and performance items		
1	tyre	Pressure, tire wear
2	brake assembly	Brake travel, brake cable, brake pads, power off switch
3	suona	Welding points and insulation of the line
4	rearview mirror	The rear view angle, range and nut are strong
5	lamps and lanterns	Irradiation position, Angle, line and insulation
6	appearance	Instrument indication, line
7	Fasteners	Nut is tightened
8	accelerator	Itinerary location
Structural inspection		
1	Front and rear wheels	End jump, track jump, crack
2	accelerator	Flexibility of rotation
3	Fork, frame	All welding points and nuts are tightened
4	front fork	Fasteners, steering bearings
5	shock absorber	Damping travel and other anomalies
6	lockset	functional check
Important components		
1	cell	Voltage balance, electrolyte, line solder joints and insulation
2	any power-generating or power-driven machine	End cover, bearing, Hall, signal line, motor circuit and casing insulation
3	controller	Under voltage, transition protection
4	charger	Charging current, charging voltage
5	leader cable	Welding points, insulation and wear of the line

[Note]: 1. The front wheel shaft and central shaft should be regularly lubricated with an appropriate amount of grease (lithium base grease 3).

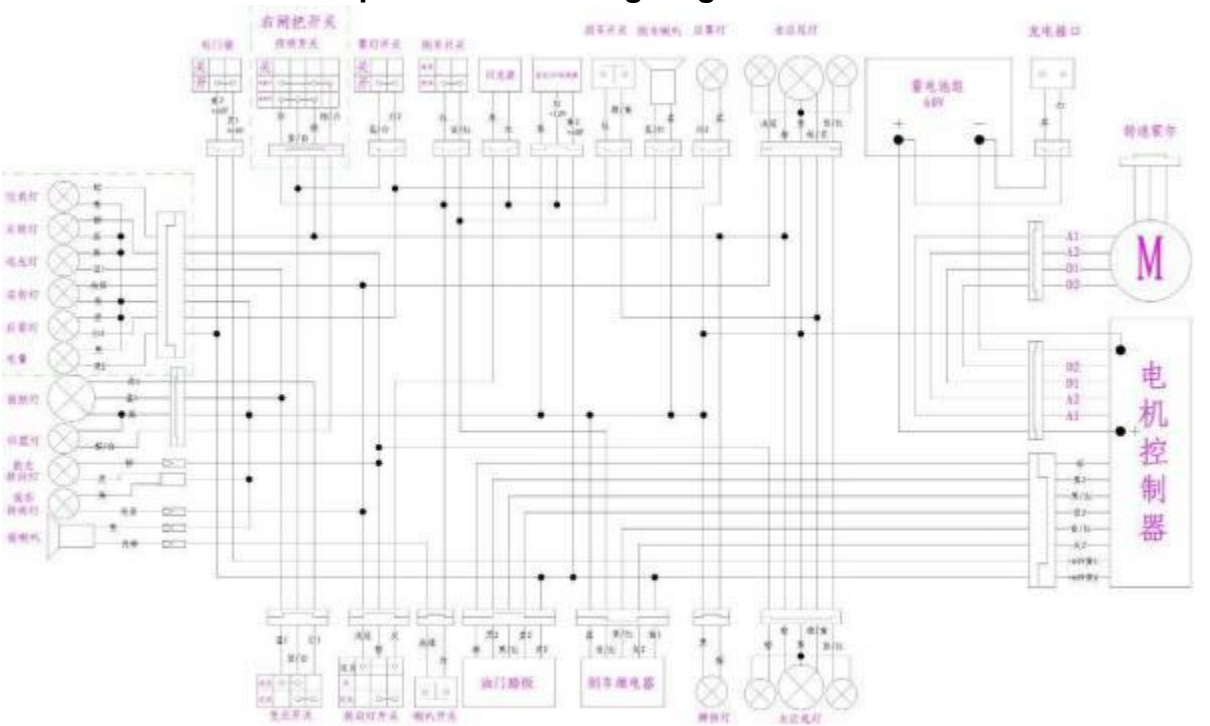
2. The failure caused by the lack of regular professional inspection is not within the warranty scope.

Chapter 7 Common Fault Reference disposal methods

fault phenomenon	failure cause	Exclusion method
Turn on the power, and the meter does not display	1. Power lock damage or plug contact is poor 2. Poor contact between power plug and battery socket 3. Circuit breaker circuit break 4. Instrument failure	1. Check the power lock and plug, repair or replace 2. Check the power plug and socket, repair or replace 3. Check whether the insurance device needs to be replaced 4. Check whether the instrument needs to be replaced
Turn on the power, the instrument shows normal, no speed adjustment	1. Insufficient battery power, under voltage 2. Accelerator damage 3. The power switch of the left and right brake handle is out of service 4. The controller and motor are faulty	1. Charge the battery fully 2. Replace the accelerator at the service station when necessary 3. Replace the power-off brake or switch at the service station 4. Repair or replace the controller or motor at the service station
Slow speed or insufficient range	1. Insufficient battery charging 2. Insufficient tire pressure 3. Frequent braking start, overload 4. Battery aging or vehicle attenuation 5. Low ambient temperature	1. Charge the battery fully 2. Check the tire pressure before each use 3. Develop good riding habits 4. Replace the battery 5. It is normal

The battery does not charge or is undercharged	1. The charger plug is not firmly connected to the battery charging socket. 2. The battery group connection wire is loose or fallen off 3. Charger failure	1. Check whether the plug is loose and the connection is secure. 2. Re-fix the battery pack connection wires 3. Go to the service station to repair or replace the charger

Chapter 8 Circuit Wiring Diagram



Chapter 9 Main technical parameters

1. Whole vehicle parameters	
Length × width × height, mm	3080× 1280×1730
wheel base,mm	2010
rear track,mm	1100
Whole vehicle preparation quality, kg	326
Number of passengers, people	
gross mass,kg	
Brake type (front/rear)	Disk brake/drums brake
Brake control mode (front/rear)	hand brake / foot brake
Wheel rim form (front/rear)	Board wheel / board wheel
Tire specification (front/rear)	Before 4.00-12 after 4.00-12
Tire pressure (front/rear), kPa	250/250
driving mode	through-drive
2. Electrical component	

production unit	Jiangsu Changfeng Vehicle Industry Co., Ltd.
rated voltage,V	72
Rated speed, r/min	3000
Rated output torque, N·m	
Rated output power, kW	
Battery type	lead-acid battery
Battery rated capacity, Ah	58
Battery nominal voltage, V	
Power consumption wh/km	
Overvoltage protection value, V	
Overcurrent protection value, A	
Charger input power supply voltage/frequency	
3. Main performance indicators	
Maximum speed, km/h	45
driving range,km	
climbing capacity,°	≥10°
Acceleration performance (0 -100M), S	

Chapter IX After-sales Service

Dear user:

Welcome to use our Electric Vehicle. In order to effectively protect your legitimate rights and interests, improve the product quality civil liability system, facilitate the fulfillment of the three guarantees obligations and responsibilities, please keep this card properly. With this card and the purchase receipt, you can obtain three guarantees services at the selling unit or designated repair points.

The "three guarantees" principle

1. When you buy a car, you should inspect it on the spot, adjust it correctly, and have the right to ask the sales staff for the correct use method and maintenance matters, and provide the valid invoice, warranty card and repair unit, address and contact number.

2. Users should operate and use the product correctly according to the product manual. In case of performance failures caused by manufacturing quality issues, the company shall uniformly fulfill the three guarantees obligations in accordance with the relevant provisions of the Quality Law of the Peoples Republic of China, the Consumer Rights Protection Law of the Peoples Republic of China, and the Regulations on the Responsibility for Repair, Replacement, and Return of Certain Goods.

3. The "three packages" period shall be calculated from the date of sale of electric vehicles (the purchase receipt must be issued).

4. The "three guarantees" period of the electric vehicle and charger shall be recalculated from the date of replacement, and consumers shall obtain new purchase receipts from the seller.

5. If the last day of the "three packages" period is a statutory holiday, the "three packages" period shall be extended to the day after the statutory holiday.

6. Fault parts will be replaced free of charge during the "three packages" period (Note: see the attached table).

7. After the product is sold, if it meets the conditions for return or exchange of the car and is damaged in appearance, the consumer shall bear the corresponding spare parts costs when returning or exchanging the car.

8. After the "three packages" period or beyond, the service station will still provide maintenance and repair services for electric vehicle faults and major parts, but will not Charge for repair and parts.

9. The Company "swears: within 5 years after the production of this product is stopped, the factory will guarantee the normal supply and maintenance of motors and other parts".

Scope and duration of "three packages" parts

(repair faults refer to non-manual conditions)

order number	name		Three-month warranty	Maintenance fault description
1	any power-generating or power-driven machine	Brushless hub motor	36 months	The bearing is broken, the casing is cracked and the winding is burned
		A toothed motor	24 months	
		Side motor	24 months	
2	cell	lead-acid cell	12 months	Capacity is less than 60%
3	electric device	Controller, charger	12 months	Performance failure
		Electronic instruments, accelerators, brake pads, power sensors	6 months	Performance failure
		Function switch, power lock, horn, flasher, relay	3 months	Performance failure
4	structure	Fork, frame	12 months	Breakage or weld detachment
		Flywheel, chain, crankshaft, spindle, hub, rear shock	6 months	Performance failure
		Seat cushion, front and rear brake	3 months	Performance failure
5	quick-	Gates, fuses, light bulbs	Non-3	

	wear part		package	

remarks

1. The warranty certificate shall be completed by the salesman with the assistance of the user when the user buys the car. The original receipt shall be collected by the seller and sent back regularly.
The company is ready to do a good job in after-sales service for products in time.
2. The company is still responsible for the maintenance of faults outside the scope of "three packages" and major components after the "three packages" period, but charges should be charged at discretion.
3. If the electric vehicle battery fails in performance within one year and cannot be used normally after repair, a new battery must be replaced within six months; if it exceeds six months, the battery must be replaced and maintained. For electric motorcycle batteries, if they fail in performance within six months and cannot be used normally after repair, a new battery must be replaced within three months; if it exceeds three months, the battery must be replaced and maintained.
4. After the "three packages" period, the company will supply the battery renewal at a preferential price, but the old battery must be recycled at a ratio of one to one and returned to the battery manufacturer to avoid environmental pollution.
5. The back rack and toolbox are for users to put some light items. For your safety, please do not carry people.

Not within the scope and content of the three guarantees

1. Fault caused by users failure to use, maintain and adjust as required.
2. The damage caused by the users own modification and disassembly, which is decomposed by the user to make the original fault damaged, and cannot be identified and analyzed technically.
3. Fault caused by improper use, improper storage or failure to maintain on time and accidents.
4. Vehicles without warranty cards or cards, invoices and physical objects do not match.
5. Wear and tear parts and consumables are not covered by "three guarantees". It mainly refers to plastic parts, lamps, brake pads and other wear and tear parts that are not listed in the warranty scope.
6. The maintenance and warranty manual specifies the scope of self-disassembly of damaged parts.
7. The cost of repairing without the consent of the authorized maintenance station.
8. Economic and time loss caused by the inability to use the vehicle normally, and losses caused by inconvenience.
9. Damage caused by force majeure (such as fire, flood, earthquake, lightning, etc.).

maintenance record

date	Warranty records	remarks