

GOTRAX

K2

OPERATING MANUAL



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PREFACE

Dear Users:

Welcome to buy our products, and sincerely hope that you will provide us with valuable advice and suggestions when using our products. Your satisfaction is the best wish of our company.

The company is a manufacturers to design electric vehicle professionally. The electric vehicle we designed, developed and produced has the advantages of novel appearance, comfortable riding, easy operation, strong power, long cruise range and safe and reliable. It is the ideal new generation of green transportation. In order to make the electric car a better service for you, please read the instruction manual carefully before using, fully understand the performance and use and maintenance methods of the vehicle. so that you can use the car correctly, give play to the best performance, reduce malfunction and prolong service life.

Do not lend to people who can not drive electric cars. When you drive, you must wear safety helmets and obey traffic rules strictly. Please drive in slow lane.

As the company's products are constantly improving and the products are different from the real products, please take the material object as the criterion, and the final interpretation right belongs to the company.



Precautions For Safe Driving

Please obey the traffic rules and control the speed within the safe speed. (the maximum speed of this car is 80km/h)

Before you drive, please familiarize yourself with the contents of the instructions and find an open and safe field to master the driving essentials of the car and be familiar with its structure, which is the basis for safe driving.

Warning

1. Do not lend it to or let it be used by people who are not familiar with it or who cannot drive it. It's dangerous to drive by one hand or drive after drinking.
2. We must pay more attention to safety when driving in rain and snow
3. The wet and slippery road in rain and snow will bring danger! Avoid driving at high speed. swerve carefully and brake ahead of time to prevent accidents.
4. Wear a helmet of good quality and fasten the buckle belt.

Correct Dress:

Wear clothes with bright colors, not tight, without open cuffs and your body can move freely. Please do not wear slippers or high heels when driving vehicles.

The load should not be too heavy

When loading and unloading, the vehicle handling sense is different. Too much loading will seriously affect the operation and risk. The rated occupant of the vehicle is 1 people. Maximum load 75KG, please do not overload, so as not to cause driving safety hazards and parts damage.

! Pay Attention To

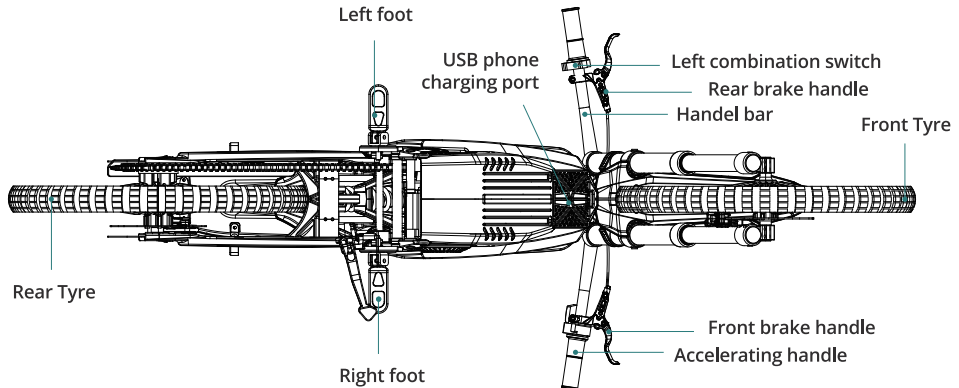
In order to facilitate maintenance, repair and service, the company has a unique frame number and motor number for each vehicle, so as to help the marketing unit to provide you with better service.

The frame number is engraved on the side of the vertical pipe in the direction of the frame. The motor number is engraved on the motor body.



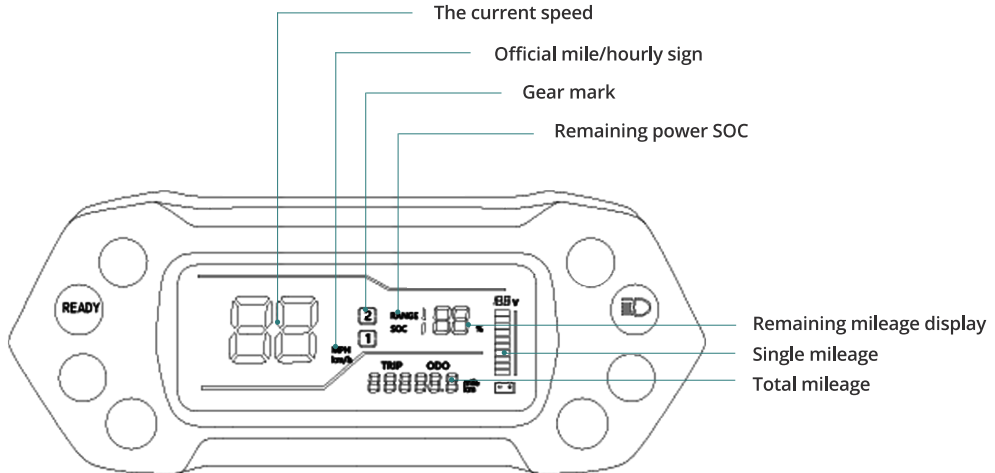
Schematic Diagram Of Vehicle And Parts

Please refer to the figure to identify the vehicle body parts and be familiar with the vehicle





Function And Operation Of Each Part



Each Area Function:

Combination switch used to set up the power mode, turn the signal switch, start the alarm horn.

Battery meter. You can click to view the remaining battery power.

USB power interface. Supply power to USB devices with maximum current 1 A.

Electric door lock. Start motor and vehicle function in 0 N operation position,

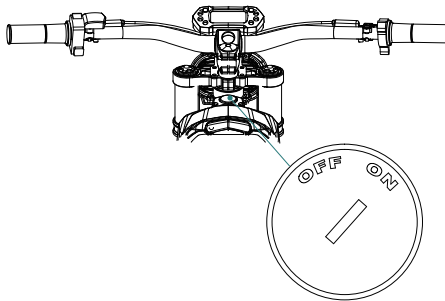
Switch Adjustment And Setting:

combination switches have power mode switches 1 and 2. When the switch is in 1 position, the vehicle is set to "economical" mode and the vehicle is the operation mode of limiting power and maximum speed. This mode is suitable for beginners and continuous driving.

When the switch is in 2 position, it is in "motion" mode and the vehicle is full power output, which is suitable for play and off-road conditions.

Description of Instrument Button Functions:

1. After the meter is powered on, press and hold the right button to switch the display of metric and imperial units;
2. After the meter is powered on, press and hold the left button to switch the remaining mileage and SOC





Correct Use And Driving Operation

Starting Method

Before starting: standing on the left side of the car to check the vehicle.

1. first opens to the ON position. Then close the battery bin, insert the lock key into the lock, turn right to the ON position (operation), and check whether the switches, instruments and speakers are normal, and hold the brake handle back and forth to check the braking function.
2. motor starting: the side bracket is collected. After the driver sits down on the electric car, slowly and steadily turns the handle to start. The vehicle has a power-off protection of side bracket. When the side bracket supports the vehicle, the motor can not start.

Speed Adjustment

The speed control handle is usually closed and turn it inward to speed up and turn it outside to slow down. Relaxing it will automatic reset and motor will stop. Gently turn the speed control handle to avoid speeding up too quickly.

The speed control handle can be used to speed up and slow down. Please turn it smoothly and soft and do not operate violently, avoiding danger or damage to vehicle parts.

Use Of Brake

1. Quickly reset the speed regulating handle, hold the left and right brake handle, and apply appropriate force.
2. The grip force on the brake handle should be controlled according to the actual situation, and the gradual increase is the most reasonable.
3. Try to make a judgment in advance, so as to avoid sharp braking, sharp steering and other operations that may cause side slip and fall, especially when the road is slippery on rainy days, which is extremely dangerous.

Caution When Driving

1. On the premise of ensuring safety, drive as smoothly as possible to avoid rapid acceleration and deceleration, so as to save electricity, protect vehicle body parts, and improve the endurance and service life of the vehicle.
2. In rainy and snowy weather, the road surface is easy to slip when it is wet and slippery. After cleaning the vehicle or wading through water, the braking effect may be reduced. At this time, you should drive the vehicle slowly, pay attention to safety, and gently brake several times until the brake returns to normal.
3. Please avoid riding in heavy rain or on waterlogged road. If surface water surpass center of wheels, motor and brake may be affected. This electric car can be used in the rain and snow, but not for wading deeply long time. Once the water depth over the controller and other electrical components, appliances may be damaged.

4. Pay attention to

The side bracket can only be used to support the vehicle. It is forbidden to open the side bracket and sit on the vehicle. This will damage the side bracket.

Don't park your car on a tilt or in a soft spot to prevent it from toppling over!

The electric vehicle contains many electrical components. Do not get wet for a long time or use a high pressure water gun to flush parts with electrical components.

5. Parking method

- 1.** Pay attention to the rear situation and slow down to the parking place.
- 2.** Use brake to stop the car, reset the speed control handle. After the car stops, close the electric door lock and take off the key.
- 3.** After parking, you should stand on the left side of the car and stops the car firmly by opening the side bracket. When you leave, please lock the electric door lock, the front direction lock and the battery lock and take away the key.

Warning

It is strictly prohibited to turn the speed control handle before you seat. In case of accidents, the electric lock key will be closed immediately after getting off the bus.



Use Of Battery And Charger

1. Our car has lithium-ion batteries with high-performance high-magnification, safe (60 v) voltage and can be used at the environment temperature from 0 °C to 45 °C. The using effect at the ambient temperature 10-30 °C is the best. The low or high ambient temperature will affect the battery performance and service life. Do not use it at a temperature beyond the allowable range. The battery should not be charged at 0 degrees centigrade.

Warning

It is forbidden to charge the battery below 0 degrees,, otherwise it will damage the battery. The battery can be recharged after the battery temperature rises.

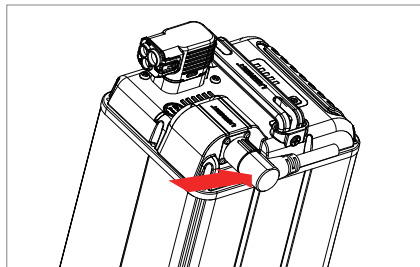
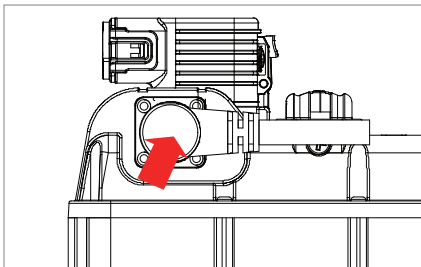
2. When the temperature is too low, the battery performance will be affected. It is normal to reduce the mileage in a small amount. The battery performance will automatically recover after the temperature rises.
3. The car battery have perfect protection function. It can avoid the battery damage caused by overcharge and over-discharge but long-term use depth discharge will affect battery performance. When power is low, the battery should be charged as soon as possible.
4. Charge frequently. The lithium battery used in this car has no memory effect, and can be charged at any time. Charging at any time helps keep the battery healthy.
5. When you do not use it for a long time, please charge the battery to 60% . The battery needs to be charged once every 3 months to avoid losing its activity and affecting the performance.

! Be Careful

Using only front brake or rear brake is prone to sideslip and combined braking is safer.

When the motor temperature and the controller temperature is too high, or the battery power is too low, in order to protect the safety of the whole vehicle, the vehicle will automatically reduce the power to operate. This is not a fault.

Battery Charge And Charger Use



1. The car uses a lithium battery charger. Please do not use other chargers, so as not to damage batteries or cause any danger.
2. Check whether the input voltage of the charger is in line with the grid voltage AC 110V - 220V.
3. The charger can be directly inserted into the battery charging socket on the left side of the car body.
4. The right is the lithium battery used by the car and the left silver socket is the charging socket, and the charger's output plug (battery end) is inserted first, and then the charger is inserted into the plug.

5. The indicator light of the charger is flashing, indicating that it is full. When the indicator light is always on, it indicates that it is full. The time to charge fully depends on the battery's remaining power and charger specifications users selected. The time to charge fully is about 4.5-5 hours.
6. when the charger is full, it will shut down automatically, but you should avoid connecting the charger to the power grid for a long time. The longest time can not exceed 6 hours.
7. it is strictly forbidden to disassemble the battery by itself, so as to avoid damage and danger.

Precautions For Charging

When charging, please place it in a safe place where children are not allowed to touch.

Avoid being used when the battery is just full. After being full of power, stand for 10 minutes and then use it.

When the charger is used, it is forbidden to cover any object. Please use it in a dry and well ventilated environment.

When you are charging, if you find that peculiar smell or the temperature is too high or charger is still not full after charging for a long time, please stop charging immediately and send it to the maintenance service.

Use And Maintenance Of Motor And Controller.

1. Regularly check whether the motor screws are loose.
2. Regularly check whether the connection between motor and controller is loose and the insulation status.
3. Regularly check whether the fuse is loose.
4. Do not drive in the over-deep water, so as not to affect the electrical work.



Check Before Driving

Tire Inspection

1. Whether the tire pressure is normal. Note:

Abnormal tire pressure, damage, abnormal wear and tear, etc. will cause safety hazards.

A lack of air pressure can lead to abnormal wear and tear, poor steering, low speed and short endurance.

High tire pressure can lead to abnormal wear, flat tire and it is uncomfortable and even cause safe hidden trouble. You can judge whether the pressure is appropriate according to the partial depression when tires connect the land. In general, normal front wheel pressure is 225 kpa and the rear wheel is 225 kpa, (under-inflated will affect the speed and endurance mileage)

2. Whether the tires have cracks and abnormal wear.
3. There are no nails, stones, glass and other foreign bodies embedded in the tires.
4. The depth of tire tread and the bump on the tire should be replaced when 2/3 of the wear is worn out.
5. Whether the spokes of the wheel ring are loose.

Pay Attention To

Abnormal tire pressure, damage, abnormal wear and tear, etc. will cause driving safety hazards. A lack of air pressure can lead to abnormal wear and tear, poor steering, low speed and short endurance mileage.

Excessive tire pressure will lead to abnormal wear, poor comfort, and even puncture, causing safety hazards.

Warning

The car has a 300km running time, and the new car should be maintained for the first time after 300km. After the grinding period, a maintenance is carried out at 1000 KM

Check the meter, horn and brake

1. Open the electric door lock to check whether all parts of the meter function display normally.
2. Operate the switch and check whether the horn works normally.
3. Hold the left and right brake handles respectively to check whether the front and rear brakes work normally.

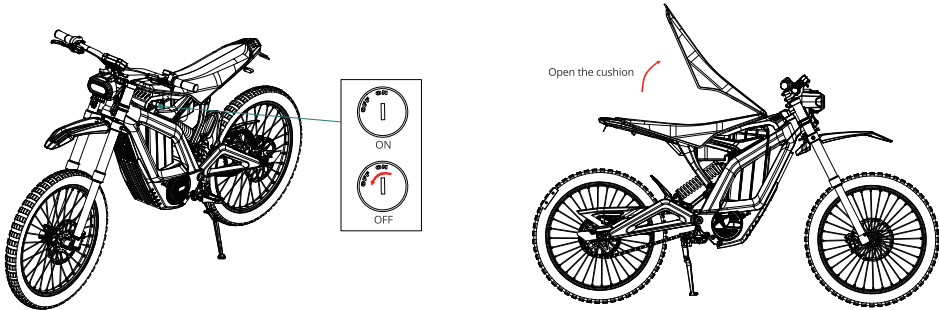
Check Handlebars And Seat Cushions.

Whether the handlebar seat cushion is well adjusted and fixed reliably.

If you find any problem after inspection, please read the related content of this manual or contact the dealer to provide you with perfect after-sales service.

1. Close the electric lock, use the vehicle key to open the battery lock on the right side of the car body, and then open the seat forward to see the battery.

2. remove the discharge and communication plug on the battery, then pull up to take out the battery and close the seat.



Install The Battery

1. Use the key to open the seat.
2. Put the battery from the top, pay attention to the front and rear direction of the battery (the charging socket is facing the left side of the car body), and plug in the communication and discharge plug. close the seat and lock it, and remove the key.



Regular Inspection And Simple Maintenance

In order to extend the service life of the vehicle and make it safe and comfortable, please check and maintain the vehicle regularly. When the vehicle is stopped for a long time, regular inspection should also be carried out.

When the new car is running 300KM, it should be inspected and maintained.

Take full care of safety during inspection

1. Park your car in a wide, flat area.
2. When inspection is required, it should be carried out in a safe place and pay attention to the surrounding environment and conditions.
3. If any abnormality is found through inspection, please drive after removing the abnormality. If it is difficult for you to solve, you can entrust the maintenance station to check.

! Pay Attention To

The front and rear brakes are disc brakes. When the brake friction plates wear badly, the friction material thickness is 2.3 mm. It is recommended to replace when the wear amount exceeds 1.2 mm or when the use of 1000Km mileage, whichever comes first) the friction plate should be replaced.

In daily use, please keep the disc brake system clean, avoid attaching sediment for a long time, especially avoid oil pollution.

Inspection Of Operation Site.

1. Check whether the front shock absorber is bent, deformed and damaged.

the front shock absorber has no damage, looseness, oil leakage, etc. Shaking handlebars up and down to check whether there is abnormal sound caused by the front shock absorber. when the front shock absorber is abnormal, please go to the service shop for inspection and maintenance. For daily adjustment and maintenance on shock reduction, please refer to the instruction manual of front shock absorber.

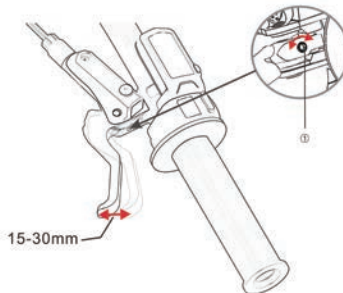
2. Check the rear shock absorber

Check the rear shock absorber to see if there is any damage, looseness, oil leakage, etc.; shake the shock absorber spring to check whether the spring is loose, or the bearing and bushing in the cradle are stuck; check abnormal wear and damage, lubrication, acquire service at the service shop.

3. Brake inspection

Check the free clearance of the brake lever and check if the moving distance of the ball end of the handle is contained within the specified range (15-30mm). If it does not meet the requirements after measurement, it should be adjusted. The adjustment method is shown in the figure:

Check the gap of brake handle to see if it is within the specified range (1, 5-30mm). If the measurement fails to meet the requirements, it shall be adjusted.



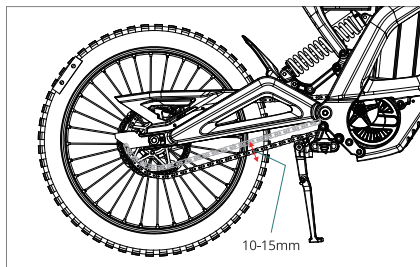
Attachment: Diagram of adjusting brake clearance:

4. Braking effect and inspection

Run on dry and flat road at low speed and use the front and rear brakes respectively to check their respective braking effect.

Inspection of tires, etc

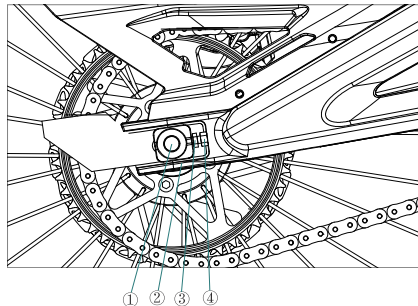
1. Check the air pressure with the tire barometer when the tire is cooling.
2. Check for cracks, damages, foreign matters and abnormal wear and tear.
3. Check whether the spokes of the wheel ring are loose.
4. Check the tension of the chain. The distance between chain top and bottom is 10-15mm. (note: manufacturer has been adjusted the tensioning of leather when they leave the factory. Please do not adjust them privately.)



Method Of Adjusting Chain Looseness:

Note: This method should be proceeded simultaneously on both left and right sides.

1. Pad the vehicle on a platform and let the rear wheels float properly.
2. Use No.18 sleeve and No.8 Allen Wrench to loose bolt ① appropriately and use No.10 open end wrench to loose bolt ④.
3. Use No.10 open end wrench to loose bolt ③.
4. Adjust the chain to appropriate looseness (observe the dividing rule ② to see if they are on the same scale)
5. Fasten bolts on both sides under the sequence ④①



Attachment: Diagram of adjusting chain

If vehicle tire contacts with the ground for a long time, stone, glass, nails and other foreign bodies on the ground will cause damage on your tires. So you should pay attention to watch the road when driving and avoid driving where something may damage the tires. In addition, you should regularly check whether the tires have obvious crack damage, foreign bodies such as stones, glass piercing in it, reasonable abnormal wear and tear.

5. Check the depth of tire groove

Please check tire for wear and the depth of tire groove, and replace the tire when the wear reaches 2/3 of the bump(The height of lug is 7mm). When there is abnormal sound and swing of the tire during driving, please go to the maintenance station to check and repair it. It is recommended that the locking torque of the middle axle is 30n.m, and the locking torque of the rear axle nut is 40n.m.

! Pay Attention To

Hold the brake handle tightly. If it still can't achieve the desired braking effect, the disc should be checked for cleanliness, but if the problem still cannot be solved and it should be sent to the maintenance station for inspection.

Battery inspection

The car uses a sealed ternary lithium battery, which needs to be filled during inspection, and then uses a multimeter to measure the positive and negative voltage. The full voltage should be normal between 66.5 and 67.2. Otherwise. If not, please go to the maintenance station for inspection.

! Pay Attention To

Please close the electric door lock before getting out or loading the battery.

If the battery cannot be pushed in, do not force it. Pull out the battery to check whether the battery is stuck due to foreign matter.

Replace fuse

If vehicle instrument, horn and lamps still cannot work after opening electric lock, it is possible that fuse is fused. Before changing fuse,

1. Open the battery cover and pull out the battery. Open it and you can see the fuse box and open the fuse box.

2. Remove the broken fuse, take out the spare fuse from the cover and install it. Close the fuse box, install the battery and close the battery cover.

Pay Attention To

The fuse should be fixed firmly. If it is loose, the fuse may heat up and cause other hazards.

To replace fuse, we must use the fuse with the corresponding specification. If it exceeds the specification, it will not lead to fuse protection.

If a fuse is broken after a short time, the reason should be checked excluding the fuse.

Prohibit water flow to flush fuse parts.



Main Technical Parameters

No.	Type	Parameter
01	Overall Dimension	1845X780X1040mm
02	Wheel Base	1295mm
03	Overall Weight	72kg
04	Rated Load	100kg
05	Minimum Ground Clearance	270mm
06	Height of Seat	815mm
07	Top Rake	26 degrees
08	Maximum Gradeability	70%
09	Maximum Speed	80Km/h
10	Power System	High Speed Mid-set Brushless DC Motor
11	Motor Rated Power	3500W
12	Maximum Output Power	5700W
13	Maximum Torque of Driving Wheel	210N.m
14	Battery Type	High-rate Ternary lithium battery 60V40AH
15	Endurance Mileage Per Charge	70-100Km

16	Charging Time	6-8h (Depend on charger)
17	Overcurrent Protection	AC110/220V-50/60Hz
18	Power Mode	Economic/Sport Mode
19	Body Structure	Dual beam cradle type - Aluminum forged frame
20	Rim Type	Rim- Aluminum 19*1.4 /19*1.6
21	Tire Type	Off road tire-70/100-19, 80/100-19
22	Front Suspension System	Shoulder inverted front fork -200mm stroke-adjustable damping
23	Rear Suspension System	Multi-link hydraulic spring central air chamber - 80mm stroke- adjustable damping
24	Front Brake Type	Manual- Four hydraulic piston-203mm disc
25	Rear Brake Type	Manual- Four hydraulic piston-203mm disc
26	Second Gearing System	420 Chains 122 sections
27	Light System	Full LED light
28	Dashboard	LCD
29	Phone Charging Port	USB-5V 1A



Common Fault Symptoms And Troubleshooting

No.	Failure	Cause	Troubleshooting
1	Motor not work after connect to power	Battery connection loose	Check the connection of cable
		Speed control cable connection loose	Check the connection of cable
		Motor cable loose	Check the connection of cable
		Brake handle not bounce back or brake handle failure	Check the brake handle and brake switch
2	Speed control failure or low maximum speed	Low battery voltage	Check the battery voltage to see whether it is lower than 50V
		Failure of central speed control	Contact the service shop for changing central speed control
3	Short Endurance Mileage Per Charge	Low tire pressure	Inflate to appropriate pressure: 225KPa
		Insufficient charge or charger failure	Keep battery fully charged or check the connection of charger's plug
		Inappropriate adjustment of brake	Adjust the clearance between disc and brake pad through adjusting and correction of the position of main pump and lower pump

3	Short Endurance Mileage Per Charge	Battery aging or damage	Change Battery
		Driving Uphill, upwind, frequent acceleration and deceleration, heavy load	It is normal under such circumstances
4	Charger Not Charging	Plug of battery set is loose	Open the cover of battery case and fasten the plug
		Charger does not work	Replace a new dedicated charger
5	Abnormal Noise while Driving	Inappropriate chain looseness	Adjust the looseness of chain
6	Other Failures	When you encounter a fault that cannot be eliminated by yourself under the above guidance or a fault that cannot be determined.	In case of any case above, Please consult your local GOTRAX distributor, do not open the above parts without authorization, otherwise you will lose the company's warranty.





After-Sales Service And The Scope Of Warranty

Respected Users:

In order to better protect your rights and interests, please keep this handbook properly. Check and debug the car on the spot when buying the car, and ask the salesperson to provide the correct operation method and maintenance. Provide effective bill, security card and repair address, contact the telephone, etc.

When you use this car, if you have any quality problems, Please consult your local GOTRAX distributor.

No.	Warranty Detail	Warranty Range	Warranty Condition
Warranty Period xx Months			
1	Lithium Battery	Insufficient Capacity, Quality Failt	Except for human factors, the fail component shall be originally sealed
2	Controller	Failure and cannot be repaired	Except for human factors, the fail component shall be originally sealed
3	Charger	Failure and cannot be repaired	Except for human factors, the fail component shall be originally sealed
Warranty Period xx Months			
1	Motor	Line set damaged and cannot run normally	Except for human factors

Warranty Period xx Months			
1	Frame	Deformation, fracture	Except for crash, accident or other human factors
2	Bottom Fork	Deformation, fracture	Except for crash, accident or other human factors
3	Brake	Oil leakage, cannot brake normally	Brake oil, brake disc, brake lining are not included
4	Front and Rear Shock Absorber	Oil leakage, no damping, deformation, fracture	Except for crash, accident or other human factors
5	Dashboard	No display	The shell should be intact; Except for human factors
6	USB Power Supply	Cannot be charged normally	Except for human factors
7	Integral Switch	Failure and cannot be repaired	Except for human factors
8	Central Speed Control	Failure and cannot be repaired	Except for human factors
If the above components fail during the warranty period and cannot be used normally after repair, then it will be replaced free of charge.			

The following items are vulnerable

Tires, brake skins, directional wrist sets, fenders, oilers, glue, speed control cables, seat cushions, and other quality problems may be replaced or repaired with compensation.

Principle Of The Warranty

The company shall charge for the repair and replacement of parts which beyond the scope of the "three guarantees" and after the "three guarantees" period according to the specific circumstances

Notice To Users

1. Use the warranty card on the manual to the sales office or our company's special service point for warranty service.
2. The factory promises that if the motor, controller, charger, lithium battery and other major components fail after the period of three packages, the maintenance fee will only be appropriate.

It Does Not Belong To The Scope And Content Of "Three Guarantees"

1. Failure caused by the user's failure to use, maintain and adjust in accordance with the "instructions for use".
2. The user disassembles and refits by himself, as well as the failure caused by non-compliance with the use rules.
3. Failure caused by improper storage of users or accidents.
4. No warranty card, invoice or ticket, card or goods are inconsistent.
5. Consumables of vulnerable parts (brake cable, bearing, etc.) is not within the scope of "three packages".

6. If the warranty period is exceeded.
7. Damage caused by collision, impact, overload and chemical corrosion.
8. Repair without the consent of the special maintenance unit.
9. The insurance company has paid compensation.

! Pay Attention To

The user must carry out the mandatory maintenance project in the left side of the form "regular maintenance record card" on time in the after-sales department.

If the user fails to carry out the compulsory maintenance project on time, the warranty is deemed to be abandoned.



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