Vehicle guide

preface		_/1
chapter 1	Brief introduction	<u>on</u> /3
The warnir	ng symbols in this i	manual / 3
List of vehi	cle parameters / 4	
chapter 2	Quick start	/5
Before ente	ring the vehicle /B	efore driving / 5
Power swit	chers / Vehicle dri	ving / 6
Vehicle bra	ke / 7	
Battery cha	rging and precauti	ons / 8
Vehicle use	considerations / I	Oriving under dangerous conditions /
chapter 3	Before driving in	setructions /0

9

Keys / Door locks / 10

Brake system / 11

Hand brake / 12

Electric glass lift / External rearview mirror / 13

Seat adjustment / 14

Safety belt / Seat belt precautions / 16

Front and rear combination lamps / 17

Sun visor / 18

Charging port / 19

chapter 4 Gauges and controls /20

Instrument and console / 20

Large screen monitors / 21

Warning lamp and indicator lights / 24

Headlights / Light control / Position light / 27

Rain wipers and water sprinklers / Front windshield sprinkler / 28

PTC panel switch / Front defrost vents / 30

Power battery diagram / 31

chapter 5 Emergency situation /28

Replacing tires / Replacement steps / 32

Vehicle maintenance

Chapter 1: Emergency situation	/36
Chapter 2: Preparation before startup	
Chapter 3:Maintenance contents	/42

Preface

Thank you for choosing Top-AutosSop your elaborate ant passenger brand electric car.

This manual is an important reference material for your safe driving of our vehicles. Please read the manual carefully before first using the vehicle to understand the functions, precautions, maintenance and safety information of the vehicle, to make full use of the excellent performance of the vehicle to ensure safe and trouble-free driving, and to maintain your vehicle correctly.

This manual applies to the general explanation and description of the standard equipment and optional parts of our small car products. This manual describes all the models and configurations of the same series.

The information and specifications in this manual are the most accurate information until the date of publication. Top-AutosSop reserves the right to terminate or change the specifications or design at any time without advance notice, and is not subject to

any obligation.

See other manuals or information data for supplementary information.

Chapter 1. Brief introduction

This manual provides important instructions and tips on daily driving and routine maintenance to familiarize you with vehicle handling. The more you know about your vehicle, the more you can drive safely. Any improper operation may damage your vehicle, and may also leave your vehicle without warranty rights.

Special attention:

- 1. Minors, people with a history of heart disease, mental illness and epilepsy shall not drive.
- 2. When using the car, the driver should use it in the area stipulated by the local government department.

The warning symbols in this manual

- \triangle Note: When using the vehicle, how to reduce the damage to the vehicle and the vehicle equipment and avoid injury to the personnel? In this manual, the solution to this question is included in the annotation with \triangle .
- \diamond We must fulfill our due responsibilities and obligations in the protection of the environment. The correct use of vehicles and the legal disposal of waste cleaning products and lubricating materials are the important steps to achieve this goal. This manual highlights this information with the \diamond symbol.

List of basic vehicle parameters

project	unit	parameter
cabinet minister	mm	2850
total width	mm	1400
overall height	mm	1540
wheel base	mm	1940
Front / rear wheel distance	mm	1200/1230
Front / rear suspension	mm	474/429
Number of doors	individual	5
Minimum ground clearance (full load / half load)	mm	130
minimum turning radius	m	≤4.75
maximum gradability	%	≥15
tyre size	1	145/70 R12
Number of tires	individual	4

Chapter 2: Quick Start

Before entering the vehicle:

- Check whether the windows, rearview mirrors and car lights are clean and without damage;
- Check whether the tire air pressure is normal;
- Inspect the vehicle for damage.

Before driving:

- Make sure your vehicle is in good condition and you know how to use it safely;
- Adjust the seat position;
- Adjust the Angle of the internal and external rearview mirrors;
- Check whether the gear is placed in the "N" gear position;
- Whether the right-hand brake is pulled up.

△ Please check whether the windows, front and rear windshields are damaged, and all lights, signal transmission system and alarm indicators are normal.

Power switch

There is one button to start the vehicle. Please short-press one button and the start button switches to the ON state. Turn on and off before applying power, and make sure the car gear is in the "N" position.

If the neutral indicator "N" on the combined instrument and the READY indicator is on, the vehicle is in normal condition, you can drive it.



Vehicle driving

Forward (D and S):

- 1. Push the gear to the "D" position, and the combined instrument forward gear indicator "D" is on;
- 2. Release the hand brake, the parking brake indicator on the combined instrument is off;
- 3. Gently step on the accelerator pedal;

Note: The D file is an economic model, which can get a larger range.

- 4. Push the gear to the "S" position, and the instrument motion indicator "S";
- 5. Release the hand brake, the parking brake indicator on the combined instrument is off;
- 6. Gently step on the accelerator pedal.

Note: S gear is the sport mode, which can get a higher speed, but the range will be relatively shortened.

Go backwards:

- 1. Release the hand brake and the parking brake indicator light on the combined instrument will go off;
- 2. Tap the accelerator pedal lightly.
 - \triangle When starting the vehicle, please slowly press on the accelerator

Vehicle brake

Brake in driving:

- Release the accelerator pedal and then gently press the brake pedal to slow down the vehicle.
- Press on the brake pedal until the vehicle completely stops;
- Shift switch in the "N" gear, pull the handbrake;
- Long press the OFF start button to enter the OFF state.
- Close all the car windows;
- Lock all the doors.

Battery charging and precautions

- 1. The charging interface is located in the rear of the vehicle. Open the protective cover of the charging port.
- 2. Charging can only use a household 220V power supply or matching special charging pile / cabinet to charge batteries (3 square copper core wire specifications).
- 3. Connect the charging line plug to the car's charging socket with a 220V 16A household power supply. The charging time should be completed at an ambient temperature of $0^{\circ}\text{C}^{\sim}40^{\circ}\text{C}$.
- 4. After charging, unplug the 220V power socket end (charging pile / cabinet), unplug the charging cable into the trunk for next use. Lock the protective cover to prevent dust, moisture and other sundries from entering the charging outlet and affecting the safety and service life.
- 5. Charging indication:

LED indicator light flashing: normal charging;

LED indicator green flashing: charging end, battery capacity reaches 100%.

6. The 3-hole socket for household 220V 16A power supply and special charging pile / cabinet must be well grounded to ensure the personal safety; the power outlet or connection (to ensure reliable quality) must be able to withstand continuous 16A current.

7. Ensure the safety of electricity use. Please do not charge in the outdoor environment on rainy days, and do not splash the water near the charging port during the charging period.

Vehicle use considerations

- 1. Before driving, make sure that the charging cable has been removed and withdrawn in the car, and check whether the instrument indicator light and alarm indicator light are normal;
- 2. Do not turn on the power supply of the vehicle for a long time, so as to avoid the power loss of the power battery;
- 3. In some cases, the speed of the vehicle can drive normally is a system protection and a normal phenomenon;
- 4. For other usage instructions and precautions, please read the user manual.

 \triangle If your electric car has been flooded or damaged other way, please do not start the car, so as not to burn the engine and other related parts, please contact a special electric car service station to solve the problem.

Driving on the vehicles under dangerous conditions

When driving on water, snow, ice, mud, sand, or similar hazardous roads, follow the following recommendations:

- Drive carefully, because the braking range on dangerous roads will increase;
- Try to avoid sharp braking and sharp steering;
- When braking, gently press the brake pedal until stop;
- If you are trapped in the snow, mud or sand, you must accelerate slowly to avoid the rear wheel skid;
- When trapped in snow and ice or mud, lay a layer of stones, or salt under the rear wheel, or use the tire chain or other anti-skid materials to increase adhesion.

Chapter 3: Instructions before driving

Keys.

Equipped with two keys suitable for all the keyholes in the car, a remote control key and a mechanical key.

 \triangle When leaving the vehicle, take note that: 1. Do not leave the key on the car.

2. Lock the car door. 3. Keep your keys with you.

The left front door can be locked from the outside by turning the key clockwise.

To open the left front door, turn the key counterclockwise.



- \triangle Do not leave children or animals alone in the car:
- 1 not to cause suffocation, especially in hot weather.
- 2. They may make the vehicle move accidentally.

Brake system

The conventional braking system is designed to meet the braking performance of various operating conditions (including vehicle full load conditions).

The brake line adopts the front and rear double circuit hydraulic brake system and the front and rear disc braking.

If a brake oil circuit has a fault, you can still use the remaining oil circuit to brake, once this situation occurs, you should use more strength to step on the brake pedal, and the brake distance is longer than normal, before continuing to drive, please go to the Top-Autoshop designated service shop to repair the brake system.

If the pedal height does not return to the normal position, or the pedal stroke is too large, please contact the

designated service store of Top-Autoshop. This may be a warning of brake failure.

- \triangle 1. The brake is overheated and the braking efficiency is reduced, so do not use the brake continuously.
- 2. If the brake element is wet, the brake may temporarily lose performance, so after driving over the water or washing the car, you should drive at a lower speed, keep a good distance, slightly press the brake pedal, check the braking performance, and repeat this action until the braking performance is restored. on the brake pedal all the time when driving, otherwise the brake pads and discs will wear prematurely.

Handbrake

The hand brake lever is on the right side of the front seat.

The role of the hand brake: after pulling the hand brake, the rear wheel locks dead.

Use of hand brake: pull the hand brake lever upward, and the hand brake indicator light on the instrument is on.

Release of the hand brake: press the button at the top of the control lever, slightly lift the control lever, and press down, and the hand brake indicator light on the instrument goes out.





Check the stroke of the hand brake by recording the number of times from the relaxed position to the full pull-up.

Vehicles on a fairly steep ramp should be firmly pulled up on the hand brake. If you hear the "click" sound greater than or less than the specified number of times, the braking effect of the hand brake decreases, please go to the designated service store of Top-Autoshop to adjust the hand brake.

Electric glass lift:

Through the window lift switch on the door's inner guard plate, you can operate the door and window glass. Take the left door as an example:

- 1. The left and right window glass are independently controlled by the glass lift button;
- 2. Press the glass lift button down, the glass will go down, release the button, and the glass will stop going down;
- 3. Move the glass lift button upward, the glass rises, release the button, and the glass stops rising.



External rearview mirror:

Adjust the external rearview mirror to see both sides of the road and determine the location of



the objects seen in the mirror.

Manually adjust the exterior mirror lens angle to the ideal position for a good surrounding line of sight.

The outer rearview mirror is a convex mirror, so the object in the mirror looks closer than it is.

△ Improper adjustment of the rearview mirror will affect the surrounding line of sight, thus increasing the possibility of accidents. Therefore, please adjust the Angle of the rearview mirror before driving, and check whether the mirror is damaged. Since the object seen in the outside rearview mirror is closer than the actual one, be careful not to cover the driver's back view range.

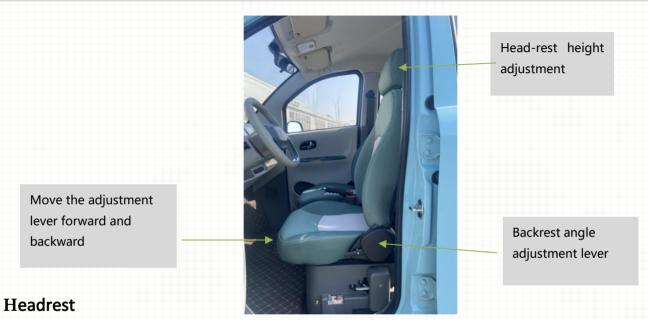
Seat slip adjustment

Pull up the control lever below the left front of the seat to move the seat forward or backward, and unslide the seat to the ideal position.

 $\triangle \bullet$ When the vehicle is running, do not adjust the driver's seat to avoid the vehicle out of control.

Seat tilt adjustment

Pull up the lever on the outside of the seat cushion to adjust the seat back and release the lever at the desired angle.



The headrest is used to reduce the risk of neck injury: press the switch, pull up or press the headrest to adjust its height.

 \triangle Do not drive without a good headrest, adjust its height to make the back of the head contact part in the middle of the headrest. After the adjustment, fix the position of the headrest. Before driving, please make sure that the headrest has been adjusted and fixed.

Safety belt (if equipped)

1 Wear the seat belt

Slowly pull the seat belt tongue out across the inner shoulder and chest, then insert the tongue into the locking mechanism on the seat side until engagement (pull check).

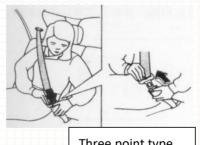
2 Unfasten the seat helt

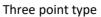
Press the red button on the locking mechanism, the tongue will automatically pop up and the seat belt will untie.

- 3. Put the tongue back in place, the retractor will roll back, and the baffle keeps the tongue in the appropriate position.
- 4. Each seat belt can only be used by one person, not shared by two people (not even by children). Loose clothes can affect the function of seat belts (such as coat, etc.).

Seatbelt precautions:

- 1. Adjust the seat back in the normal position.
- 2. Passengers sit tight to the seat back.
- 3. Keep your seat belt close to your chest.

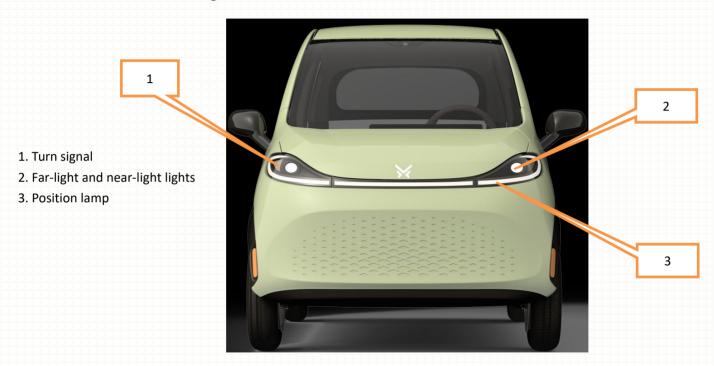


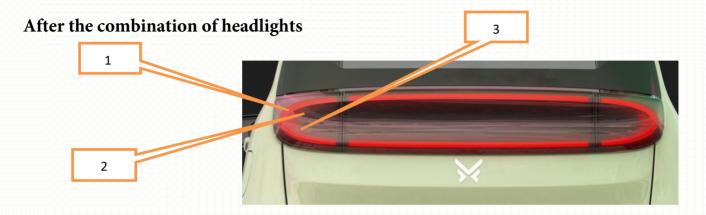




two point type

Front combination headlights





- 1. Position lamp / brake lamp
- 2. Ornering lamp
- 3. Back-up lamp

Sun visor

Protect the driver from strong light.



Charging port:

The charging port is located at the rear of the vehicle.

The method of opening the charging port protective cover: (the opening handle is located on the left side of the main driver floor), open the sealed charging port cover with your hand and plug the charging socket.

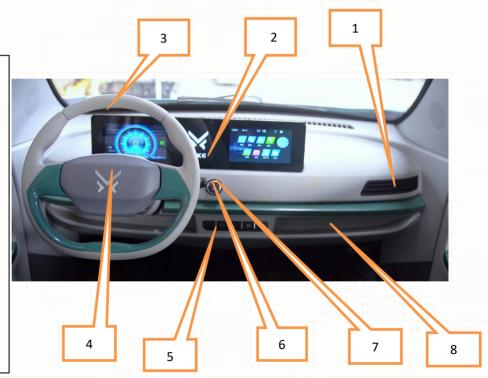


Closing method of the charging port protective cover: hold the charging socket with your hand, remove the sealed charging port cover with your fingers and pull out the charging cable.

To avoid entering the water vapour and affecting the safety of the vehicle, please make sure that the charging port cover is completely closed.

Chapter 4. Instrument and Control Device

- 1. Air conditioning outlet
- 2. Large-size screen monitors
- 3. Steering wheel
- 4. Horn switch
- 5. Panel switch
- 6. Start with one click
- 7. Gear shifter
- 8. Small storage boxes



Large-size screen monitors:



- 1. High beam indicator: turn on when the high beam is on.
- 2. READY indication: the READY light is on, indicating that the vehicle is ready and the vehicle is available when the speed is 0.
- 3. Rear fog indicator light: the indicator light is on when the rear fog light is turned on.
- 4. Left turn indicator: the indicator flashes when the left turn is on.
- 5. Right turn indicator: the indicator flashes when the right turn is on.
- 6. Position light indication: the indicator light is on when the position light is on.
- 7. Gear display: display the current gear status of the vehicle, N means that the current gear is in the "N" position.



- 8. Voltage display: display the current voltage value of the vehicle, and 24.0V means that the current vehicle voltage is 24.0V.
- 9. Brake fault indication: when the light is on, the current brake fluid is lower than the valve value, please increase the brake fluid in time.
- 10. Total mileage display: shows the current cumulative mileage of the vehicle, 888,888 km indicating that the vehicle has travelled 888,888 kilometres.
- 11. Speed display: shows the current speed of the vehicle, 68 km/h indicates the current speed of the vehicle of 68km / h.
- 12. Power display: display the current remaining power percentage of the vehicle.
- 13. Subtotal mileage shows: showing the current single mileage of the vehicle, 8888.8km means that the vehicle has travelled 8888.8 kilometres in a single mileage.
- 14. Charging tip: When the light is on, the vehicle is currently insufficient and needs to be charged.
- 15. Interface information: the current function interface is displayed, and the main interface indicates that the current display position is the main interface.
- 16. Volume display: display the size of the current volume value, 15 means that the current volume value is 15.
- 17. Time display: display the current setting time, 15:33 indicates that the current setting time is 15:33.
- 18. Brightness mode: displays the current brightness mode, and "Little Sun" indicates the daytime mode.

- 19. USB Display: When the icon is lit, there is a U disk insertion.
- 20. Home page key: Click this icon to return to the main page, and the icon is not displayed on the home page.
- 21. Side circumference button: power button. Click the ACC to open or close the large screen.
- 22. Side USB socket: connect to the U disk.

* Please pay attention

- 1. The range is for reference only. Due to different vehicle driving conditions, different driving habits and other reasons, there may be errors. When the power is not enough, please charge the car in time.
- 2. Due to display screen content updates, there may be a delay in updating this manual. Please take these circumstances into account.

Warning lamp and indicator lights (if equipped)

icon	name	explain	icon	name	explain
	Left / right turn indicator light	Turn left / right turn on or press double flash off.	 ■D	Near light indicator light	The indicator is on when the low light is operating.
■ D	High light indicator light	The indicator lamp is lit when the high-beam lamp is working.	存	Safety belt not illuminated (if equipped)	The main driver seat belt is not fastened, and the indicator light is on.
却	Front fog lamp indicator lamp (if equipped)	The indicator light is on when the front fog lamp is operating.	(P)	Parking brake light	When the vehicle handbrake is in the braking state, the light is lit, and when the indicator light is lit, the instrument will have a sound alarm reminder.

3005	Light indicator light	The small light switch is on, and the indicator light is on.	()	Brake level low warning lamp	When the lamp is lit, the brake fluid level is low.
O≢	Rear fog lamp indicator light	The indicator light is on when the rear fog lamp is operating.	≕ !	Power battery fault indicator lamp	Red indicator lights on when the power battery fails.
	Low voltage battery voltage low warning lamp (if configured)	The warning light is on when the LV battery is below 9V.	Ü	Motor and controller overheating warning lamp	When the temperature of the motor and controller is too high, the lamp is on.
&	System fault indicator light	The light is on when the power system fails.	Ţ##	Charge indicator lamp is required	When the instrument pointer points to 20% or less, the lamp is lit and should be charged in time.

Power battery	When the power battery		Vehicle	The electric power system is
charging	starts to charge, the		readiness	malfault and the vehicle can
	light is on, and the		indicator	run normally.
	indicator is red. It		light	
	will flash during	DEADA		
	charging, and the	KEAUT		
	color changes from red			
	to yellow, and green			
	when full and stop			
	flashing.			

* Please pay attention

When the above fault indicator or warning light is lit, please contact the after-sales service store designated by Top-Autoshop as soon as possible, and operate according to the maintenance suggestions to avoid unnecessary damage to your car.

Empty gear indicator:

Push the gear to the "N" position and the N indicator will be on the instrument cluster.

Forward gear indicator:

Change the gear to the "D" position and the D indicator will be on the instrument cluster.

Movement gear indicator lamp:

Change the gear to the "S" position and the S indicator will be on the instrument cluster

Light-control



Close the location

The switch is in this position, and all the car lights are turned off.

Position lamp



Switch in this position, small light, license plate light and interior background light lit.

Headlight



The switch is in this position, the headlight is on, lifted for the near light, down for the high beam, and can open the super light.

disk type



Cornering lamp



Move the combination switch forward, turn on the right light to work. Move the combination switch backward, and turn on the left light to start work.

Please check the lights of the whole car regularly. If there is any damage, please replace it in time to avoid accidents.

Wipers and water sprinklers

Front windshield wiper

Operating the wiper and sprinkler when the ignition switch is switched to the ON(OFF) position - the wiper shutdown gear;

(LO) - windshield wiper low speed;

(HI) - windshield wiper high-speed gear

Disk type

 \triangle The wiper blade can not be normal after wear, will affect the front line of sight, should be replaced in time. In the case of no water, the wiper will scratch the glass, but also cause the wiper pieces to premature wear.

Front windshield sprinkler (sprinkler, scraping) - front sprinkler mark. When the wiper is in the "ON" position, dial the combined switch handle toward the steering wheel to spray water. If the lifting time is less than 1 second, the wiper is only scraped once; If the lifting time is more than 2 seconds, the wiper will automatically stop working after scraping several times.

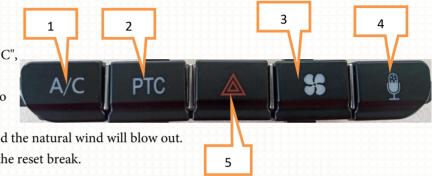
- \triangle When the wiper washing tank has no water, it will be unable to wash the windshield, bringing hidden dangers to your driving safety, so:
- 1. If you are driving, please stop to replenish the washing liquid. When the sprinkler reservoir is too low, do not use the sprinkler to prevent damage to the spray pump.
- 2. Before starting the drive, check the position of the washing fluid. In cold weather, the windshield will freeze, obstructing the line of sight. Before using the washer, heat the windshield with warm air. When there is no water in the detergent tank, do not use the scrubber or use the washer continuously for more than 10 seconds to avoid overheating and damaging the washer motor. In cold weather, the washing liquid may swell and damage the washing tank, causing the washer to fail. So in cold weather, fill the washing tank with 3 / 4 of the volume.

PTC panel switch:

- 1. First press the fan switch, and then press "A / C", and the cold wind will blow out
- 2. Press the "PTC", the heating system starts to work (the hot air will blow out)
- 3. Press the fan switch, the fan starts to work, and the natural wind will blow out.
- 4. Press the connect voice button, and then press the reset break.
- 5. Press to open the double flash, and then press to reset.

Note: Switswitches are self-locked. Press lock and press off again.

1: A / C switch 2: PTC switch 3: fan switch 4: voice switch 5: double flash off

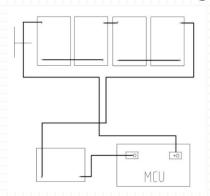


Frost vent

Through the air outlet, guide the heating to the front air window for defrosting and defogging.



Schematic diagram of the battery cable



Trial and maintenance of power battery: the use and maintenance of the battery should strictly comply with the provisions in the manual of the battery manufacturer. Battery charging must be used with a special charger, charging in a well-ventilated environment, it is strictly prohibited to charge under sun exposure, fireworks and flammable items are strictly prohibited in the charging places. After the end of the battery life, the company is responsible for the recycling and safe treatment of the waste battery. Users shall not abandon the disposal at will, to avoid environmental pollution.

Warn:

If you want to store the vehicle for a long time, you should disconnect the main power switch after full charge, and then put it in a cool, dry place, and then supplement it every 1 month. Good ventilation should be maintained when charging or using the battery.

Note: When installing the battery again, ensure that the simultaneous pipe of the battery is smooth. When washing the car, avoid soaking water around the battery.

The fuse is located near the battery. If the fuse is often broken, if there is a short circuit or overload in the electrical system, please find the maintenance service station of our company for repair.

Chapter 5: Emergency situation

Replace the tire

To avoid accidents when replacing tires, it is recommended to replace them at professional maintenance points. If you need to replace it yourself, please follow the following suggestions:

- Drive the vehicle away from the lane to a safe place without vehicle traffic;
- Park the vehicle on the horizontal road surface;
- Pull on the hand to brake;
- Get all the passengers off;
- Place some obstacles that can be used behind the diagonal wheel and in front of the wheel to be replaced to secure the wheel.

Replacement steps

- Steel wheel configuration model, please first pry down the wheel decoration cover;
- Use the wheel nut wrench to loosen each wheel nut once, but do not remove the nut until the wheel rises off the ground;
- The positioning points of the front and rear jack at the bottom of the car are shown in the figure below (Figure 1);

• Put the jack vertically into the designated position near the front or rear of the wheel to be replaced. Turn the jack screw clockwise by hand until the top of the jack makes contact with the bottom of the car. Insert the jack adjusting rod into the jack screw hole, turn the adjusting lever handle clockwise, lift the vehicle until the wheel leaves the ground (about 3cm), do not lift the vehicle too high;



Figure 1

iron rim

- Loosen the wheel nut by turning it counterclockwise using a wheel wrench;
- When the jack touches the vehicle and begins to lift the vehicle, check the position of the jack again to

prevent slipping;

- Turn the wheel nut counterclockwise to remove the nut, and then remove the wheel;
- Install the spare tire in place, and tighten the wheel nut clockwise by hand;
- Rotate the counterclockwise jack adjustment lever shake handle, so that the vehicle is down to the ground;

- Tighten the wheel nut diagonally with the wheel nut wrench;
- Put the semicircle gap on the wheel trim cover at the valve nozzle and plug into the wheel (the aluminum wheel omit this operation);
- Use the appropriate wheel nut, if the inappropriate wheel nuts are not properly fastened, the wheel will be loose or fall off, causing the vehicle out of control;
 - Ensure that the wheel nuts are properly positioned and fastened reliably;
 - Do not use the oil or grease on the wheel bolts to avoid the loosening of the nuts.
 - \triangle When using the jack, the vehicle may be unstable and even cause accidents, so:
 - 1. The jack should be placed in the correct jacking position;
 - 2. When installing the jack, it should be made perpendicular to the ground;
 - 3. Do not enter the raised vehicle, do not start the raised vehicle;
 - 4. Before lifting, let all passengers get off to a safe place;
 - 5. Jacks can only be used to replace the wheels;
 - 6. Do not use a thousand pounds to lift the vehicle on an inclined surface or on a smooth surface;
 - 7. The jack should be positioned on the nearest side of the wheel to be replaced, and at the same time, fix the wheel and replace the diagonal of the wheel;
 - 8. Before lifting, make sure that the hand brake has been pulled up.

 Special note: if you are not sure about the safe replacement of wheels, please contact the nearest Top-Autoshop designated after-sales service store.

Self-rescue after entering the soft road surface

When your vehicle is trapped in a soft road pit, you need to free the vehicle from the pit. Please transfer the gear from forward to reverse gear, and then from reverse to forward gear. Meanwhile, gently press the accelerator pedal. If the vehicle remains stuck after several operations, rescue should be requested.

Chapter 1. Emergency situation

Fault inspection and trouble shooting. Check and eliminate the charging faults.

Fault phenomenon	Analysis of causes	The exclusion method	
	The charger is damaged, and the	Replace the charger, replace the damaged power	
	battery pack has a short circuit	battery, and replace the single before the sufficient	
	The length of the charging cable		
Total power loss after	exceeds 5m, resulting in excessive		
full charge	line loss;	Return the charging cable back to the standard	
	The cross-section of the charging	length;	
	cable is too thin to meet the standard	Replace the standard charge cable line	
	requirements		
Fill the indicator	Check the wiring harness and battery	Reconnect and tighten	
light on the boot	cable for loose or damaged charger		
The battery is normal,	Check the battery voltage level	Reconnect and replace the damaged appliances	
but it is not charged	first, and check the battery polarity		

If after the recommendation above, the charger still can not work normally, please contact the authorized service station.

In the case of insufficient battery power, please use the charger matching the model to charge in time. It is forbidden to open fire when charging, let alone use the wrench to tighten the parts.

If the electric vehicle is started and if it cannot start normally, it can be fixed. The following are several emergency maintenance methods for relatively common problems.

Fault phenomenon	Long term the cause of the failure	The exclusion method
	1. The battery voltage is too low	1. To power the battery well enough
The accelerator pedal fails or	2. The accelerator pedal wire is loose	2. Re-welding
has a low maximum driving speed	3. The accelerator pedal spring has stuck	3. Clean up or change the accelerator
	or failed	pedal
	1. The battery voltage is too low and the	1. Fully charge the battery
The motor is not working after	controller is protected	2. Re-welding
the power supply	2. The accelerator pedal wire is loose	3. Find a professional or repair
	3. Motor hub wiring plug is loose or damaged	
The subsequent mileage of one charge is insufficient	1. Tire pressure is insufficient	1. Enough gas
	2. Insufficient charging or faulty charger	2. Fully power or check the charger
	3. Battery aging	plug

		3. Replace the battery
The charger does not charge	 The charger socket is off or the plug is loose to the socket Broken charger fuse Battery pack wiring is off Brake to hold dead 	 Fighten the sockets and connectors Replace the same model of the fuse Welding connection line
Cycling is laborious and slow	 Tire pressure is insufficient The battery voltage is low The front and rear wheel axle gear loses oil, or the axle gear is too tight rotation is not flexible 	 Adjust the brake Enough gas Chargeing of accumulators Clean and grease
There are abnormal sounds in cycling	 The screws and nuts are loose The front and rear wheels touch the front fork and the car frame The balls in the front and rear middle axis are worn or broken 	 Tighten the loose screws and nuts Adjust the front and rear wheels Replace the ball
Other faults	When you encounter a fault that cannot be resolved or cannot be judged under the above	In the above situation, please find a dealer or a designated authorized

guidance.	repair station for repair

Chapter 2: Preparation before startup

Use the vehicle correctly, and develop good driving habits, before each driving trip should understand the condition of each part of the vehicle, and do the following inspection work:

- 1. To ensure travel safety, the seat and other functions are to be used in normal use.
- 2. Make sure you and other passengers are seated before departure. Adjust the driver's seat as much as possible, with good sight and effectively control the steering wheel, brake and accelerator pedal.
 - 3. Check whether the indicators on the instrument panel are normal instructions. If there is a fault display, it must be removed before driving.
 - 4. Move the front occupant seat as far back as possible.
 - 5. Check all tire wear and surface patterns. Note if there are stones, nails, glass or other sharp objects on the tread.

 Check whether the tire has scratches or cracks, check whether the tightening degree of the tire nut and the tire pressure is appropriate, and replace the tire (including the spare tire) that is seriously worn.
 - 6. Check the external turn signal and other indicator lights on the instrument panel for proper operation.

7. The remaining power displayed on the instrument should be checked before departure to ensure that the requirements of this trip can be met.

Chapter 3. Maintenance content

The meaning of maintenance

The performance of the vehicle will change with the increase of the mileage and the influence of various reasons, resulting in the deterioration of the power performance and reliability of the vehicle. Therefore, in the process of using the vehicle, it is necessary to carry out the maintenance of the vehicle, which can not only extend the service life of the battery, and improve the performance of the vehicle, but also can find hidden dangers in time to prevent the occurrence of failure.

Maintenance precautions

During maintenance, if the parts must be disassembled, follow the User Manual and advise you to contact the authorized service station for further work.

If you want to mark the parts to prevent reassembly errors and facilitate assembly, you should mark the parts that do not affect the performance, and do the following:

- 1. Echarge parts in the order of removed parts;
- 2. Determine the parts you want to replace and the parts to use again;
- 3. If you need to replace the bolts, nuts, etc., always use the same specification.

If the following parts are removed, always replace the new parts:

- 1. pad
- 2. gland
- 3. O molding ring
- 4. cotter
- 5. self-locking nut
- 6. Trim it with the bolts and nuts

Replacement of parts should use the original parts of the same specification, so as not to affect the performance of the vehicle.

During maintenance, pay attention not to splash out lubricating oil, brake oil, etc., because these will cause certain corrosion to rubber and paint.

Maintenance of safety precautions

Special care should be taken during vehicle maintenance to prevent accidental damage. Please strictly observe the following precautions:

- 1. After the motor starts to run, avoid the hands, clothes and tools in contact with the output shaft of the motor, and remove the ring, gloves, ties and other things first;
- 2. Do not smoke near the power battery, and do not touch the electrode of the battery and the exposed part of the conductive metal by hand;
 - 3. When using the jack to raise the vehicle, people cannot enter the vehicle;
 - 4. When operating at the bottom of the vehicle, a protective device needs to be used to prevent falling objects or liquids from harming the eyes. In addition, there should also be eye-washing products;
 - 5. It is strictly prohibited to place the wrench and other tools on the battery to prevent short circuits in the battery.

Current maintenance

Daily maintenance refers to the daily routine technical maintenance of electric vehicles so that the vehicle is often in a complete and intact technical state. Its main content focuses on inspection and dust removal, including the cleaning of the body surface, the safety structure and the fastening condition of various parts.

Daily maintenance can be carried out by the driver before driving, on the way and after the driving, do not take up a lot of time. Daily maintenance only takes a few minutes, can ensure the safety and comfort of driving, and also eliminate potential safety risks, is very necessary for the driver. Meanwhile, you should perform at least the following inspection or cleaning work:

- 1. Visinspect the tire, if the tire position is low, use a barometer to measure the tire pressure and inflate in time, ensure that the tire pressure is between 225-250 kPa, and check whether the hub nuts are loose and fall off;
- 2. The total voltage of the power battery must be checked before driving every day. If it is insufficient, it should be charged in time;
- 3. Check whether the important electrical parts can work normally, such as the horn, combination instrument, wiper, headlights, brake signal light, turn signal, headlights, etc. If there is a problem should be immediately repaired;
- 4. Clean the inside and outside of the car, remove the dust and soil inside and outside the car, wipe the paint of the car body, and remove the frost, snow, water and soil above the front windshield, rearview mirror and the lights outside the car, to ensure that the surface is clean. Can use a vacuum cleaner, wool dust, and wipe material for cleaning.

Periodic inspection

Your vehicle should be inspected regularly daily as necessary

- 1. Clean the dust on the heat sink of the motor and the controller to ensure that the motor and the controller radiator are not covered by sediment and affect the heat dissipation effect;
- 2. Check the pressure of the tire, check the tire wear and no foreign matter;
- 3. To ensure battery life and endurance, it is recommended that users regularly contact the nearest Top-Autoshop designated service store to check the situation of power battery and other electrical parts;
- 4. To avoid corrosion, it is recommended that users store the vehicle in clean, rainproof, ventilation and dry places, stay away from fire sources, avoid corrosion of acid, alkali, oil and harmful substances; disconnect the vehicle during storage, and recharge the battery every two months.
- 5. Check whether the parking handle and brake pedal work correctly;
- 6. Check whether the car's headlights, side lights, side turn signals and tail lights are on;
- 7. Check the beep.

Other self-maintenance

Inspection of the brake pedal and the parking brake:

1. Brake pedal working stroke check: turn off the motor power, gently press the brake pedal until there is resistance, and then measure this distance. If the working schedule is not within the range of 4-8 mm, then contact the authorized service station for adjustment;

- 2. Parking brake check: when you slowly pull up the parking brake handle, if the continuous click, the juster is correct; otherwise, you have to the authorized service station for maintenance and adjustment;
- 3. Tire maintenance: the use of excessive wear or improper inflatable tires, easy to cause accidents, and endanger the safety of passengers. The impact on the road edge, the beating on the pit, the unexpected obstacles on the collision and often driving on the bad road surface are the important causes of tire damage and avoid the above conditions as far as possible when driving.

Giving the tire appropriate gas can make the driving state to the ideal degree, but also can extend the service life of the tire. In addition to the threat to safety, it will also make the tire wear uneven, make your driving more unstable, and more prone to damage due to overheating, insufficient inflation will make the consumption of the battery accelerated.

We recommend that you check your tires visually every day, at least with a pneumatic pressure every month, and please check the pressure in the tire when cooling (1 hour after stopping).

Regularly check whether the tire is damaged, and eliminate any items that may penetrate the tire (stones, glass, metal, etc.), they may seriously damage the tire body, such as found tire side or bottom having prominent parts and uneven, tire bottom cut or cracks. If the tire bottom has excessive wear, must be replaced in time. Tire replacement must be checked by a professional to ensure safe use.

Replace the wiper blade:

- if the blade of the wiper cannot fully clean the windshield;
- the wiper blade may have been worn or cracked and must be replaced;

The wiper blade



* Please pay attention

- Please fully charge the vehicle for the first time after purchase or long-term storage. When in normal use, please replenish the battery in time. It is forbidden to maintain power loss for a long time; and maintain and charge the battery every other month.
- Never short-circuit the positive and negative terminals at the input and output ends of the battery pack;
- Keep away from children; stay away from fire and heat source, do not put into fire;
- Severe vibration, shock and extrusion are strictly prohibited;
- Pay attention to waterproofing, to prevent the battery pack from encountering water shower, and water immersion;
- Charging working temperature: 0~40°C; discharge working temperature: -20~40°C; charging time increases when the temperature is below 0 degrees (heating start).
- There are no accessories for maintenance in the battery box, so it is strictly prohibited to remove them by yourself. If any problem, please contact the company's after-sales service department or dealer;
- It is strictly prohibited to use the non-ant customer-matching approved charger to charge the battery box.

Vehicle external lights

• You should check the work of the external lights at least once a month. If the lights are damaged will reduce your visibility and make other drivers misunderstand your driving intentions, bad for your safety. If the vehicle light is found to be damaged, it should be purchased and replaced according to the specified model and specification.

 You should regularly check the headlights (including far and near beams), turn signals, taillights, brake lights, and hazard indicators.

Check and replace the fuse

If some electrical parts do not work properly, the fuse may be burned off, and it should be checked as soon as possible. The fuse is located under the front engine room and the dashboard. Close the ignition switch before opening the safety box cover. Refer to the labels on the safety box cover for each fuse arrangement and function.

The following shall be followed when checking the fuse:

- 1) Check the fuse carefully, if it does not work, immediately replace the fuse with the same specification;
- 2) When replacing a fuse, replace it according to the current rating indicated on the fuse box. We should not use a fuse whose current rating is higher than the original one, and we also cannot install other wires on the fuse (the fuse must meet the standard);
- 3) If you replace a standard fuse and it fails quickly, have it checked and repaired by an authorized service center.