USER SERVICE MANUAL

#### Notice to Users

Please read this Product Manual carefully before use for proper operation.

Please carefully check whether the parts are complete against this Product Manual before your ride for the sake of safety. Contact your dealer in time in case of any problems.

Please follow the traffic laws. Slow down on rainy or snowy days, on slippery roads. Increase the braking distance for the sake of safety.

The scooter can operate on rainy or snowy days, but it can't operate in water. When the water reaches middle axle, it may cause rusting or failure of the motor, battery or other parts. Do not dismantle the scooter on your own. Please contact the after-sales service for replacement or purchase of original parts. Do not lend your electric scooter to those who can't operate an Escooter for the safety of others and for prevention of unnecessary damage to your scooter.

Please keep the Product Manual and the Warranty Card properly.

#### **Precautions**

### 

This vehicle is not designed for a ride of more than 2 persons.

 $\Delta$  Please carefully read this Maintenance Manual.

Warning: Failure to follow the instructions herein may lead to serious casualties.

Caution: Failure to follow the instructions herein may lead to personal injury or damage of parts.

Note: Provide useful information.

This Product Manual should be deemed as a permanent document of your electric scooter. If this scooter is transferred to others, this Product Manual should be handed over to the new owner as well. Without the written consent of the Company, reproduction or reprint of any part of this Product Manual is prohibited.

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# **Safety Notice**

#### △Wear a safety hamlet

Using a quality safety hamlet is the priority for protection. Use proper protective goggles as well.

### △Know your vehicle

Your riding skills and mechanical knowledge is the foundation for safe riding. You are advised to practice your riding on open, quieter roads, and know the mechanical performance and operation methods first.

### △Know your riding skills

Always ride the scooter within your skill range. Know your riding skills and the operation methods of the scooter so as to prevent accidents.

### △Notice for Riding on Rainy Days

It should be noted that the braking distance on rainy days should be twice of that on sunny days. Always avoid the roads with paint markers, manhole covers and oil stains to prevent slipping. Pay extra attention when riding through railway crossings, iron fences and bridges. Slow down if road conditions are unclear.

# **Safety Notice**

### $\Delta$ Do not use the high beam light indiscriminately.

Continuous use of the high beam light on urban roads and pedestrian-packed roads may disturb the vision of the drivers and pedestrians and affect normal, safe driving. Do not use the high beam light when the road is well-lighted.

## $\Delta$ Do not make or receive calls while riding.

Making or receiving calls while riding is one of the main reasons for inattention and will easily cause accidents. Please stop the scooter before you make or receive calls.

#### $\Delta$ Do not change the lane at will.

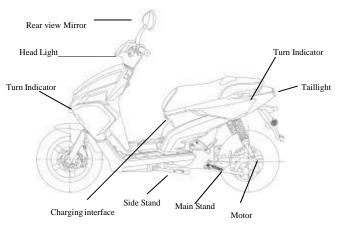
Changing the lane at will is one of the important reasons for accidents. When you need to change the lane, remember to switch on the Turn Indicator first. Check the scooters approaching from behind and change the lane when it's safe.

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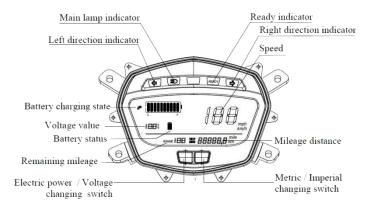
## **Parts Info**

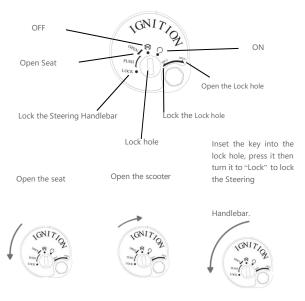
Diagram of Components and Parts



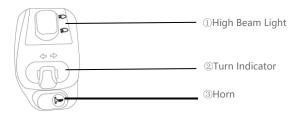
#### **Parts Info**

Diagram of Components and Parts

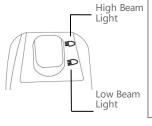




#### Left Combination

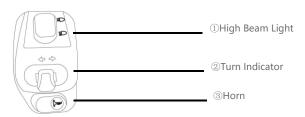


①High/Low Beam light: Press the upper part to turn on the high beam light; press the lower part to turn on the low beam light



Remarks: To signal overtaking, the rider may press and hold the Pass button to enable the High Beam Light and Low Beam Light Interchange Mode. Release the Pass button to return to the Low Beam Light.

∧ Left Combination



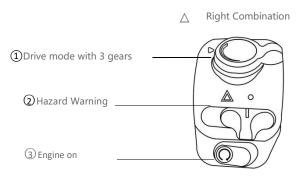
②Turn Indicator: Push the button left to turn on the Left Turn Indicator; push the button right to turn on the Right Turn Indicator. Press the button to reset and the Left/Right Turn.

Push the button left/right to turn on the Left/Right



Push the button to center to reset.





Parking

△ After you reach the destination, turn the key anticlockwise to ৷

Balance the scooter with your right foot. Unfold the side stand with your left foot to park the scooter. Turn the handlebar left to the fullest, press the key downward and turn it anticlockwise to lock.

Locking

 $\Delta$  The scooter can only be locked when the key is in oximes

#### △ Battery Use Environment

The battery is to be used at the ambient temperature range from  $-10^{\circ}$ C to  $45^{\circ}$ C.

Do not expose the battery to water, beverages or corrosive liquids to prevent possible leakage, overheat, smoking, fire or explosion.

Do not keep the battery close to heat source, open fire, inflammable and explosive gases and liquids, so as to prevent possible leakage, overheat, smoking, fire or explosion. Metal objects in the battery compartment may lead to leakage, overheat, smoking, fire or explosion. In case of undesirable odor, overheat or deformation of the battery, please disuse the battery immediately, keep away from the battery and contact the after-sales service.

**Warning**: The battery is not a repairable part by the user. In case of battery fault, please contact the after-sales service. Users dismantling the battery may lead to leakage, overheat, smoking, fire or explosion.

# **Battery Use and Maintenance Guide**

#### **△** Battery Charging Environment

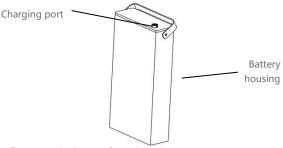
Please charge the battery at the ambient temperature range from 0°C to 35°C. The battery charging time should not exceed 24 hours. Overcharge will shorten the battery life.

**Attention:** Charging is not available at an ambient temperature below  $0^{\circ}$ C. Please charge the battery at an ambient temperature over  $0^{\circ}$ C.

**Warning:** Using non-original battery chargers may lead to leakage, overheat, smoking, fire or explosion.

## **Battery Use and Maintenance Guide**

#### **Battery Charging Methods**



- ①Remove the battery from the scooter.
- ②Plug the charging plug into the charging socket. When the charging indicator turns from green to red,the scooter is charging. After the charging indicator turns from red to green, charging is saturated.

#### Attention:

If the battery is not full after charging for over 24 hours, please stop charging and contact the after-sales service.

To maximize the battery life, users are advised to keep the battery percentage within the range of 20% to 80% as practicably as possible. Please use the accelerator handlebar gently in a normal ride.

Do not keep the battery at an ambient temperature over 40°C so as to prevent irreversible capacity loss of the battery.

At low temperatures, the lithium battery capacity will lose at varying degrees. To be more specific, the usable capacity at -10°C is 70%, that at 0°C 85% and that at 25°C 100%.

The best battery capacity for storage is 50%. Storage of battery less than 10% full or more than 90% full over a long period of time will cause irreversible capacity loss of the battery.

For storage over a long period of time, please keep the battery at an ambient temperature from -20°C to 40°C, and have a charge and a discharge at least once a month so as to minimize battery capacity loss in storage.

Do not keep the battery in places with the risk of falling. That's because falling may cause uncontrollable internal damage to the battery and may lead to leakage, overheat, smoking, fire or explosion.

# Dos and Don't s in Riding

## △ Checks before Riding

Please make the following checks before you ride the scooter. Do not overlook the importance of these checks. Complete them one by one before riding.

Check	Key Points
Description	-
Steering Handlebar	Steadiness     Flexible steering     No axial displacement or loosening
Braking	1) Braking handlebar has a 5 to 9mm idle travel. 2) The air pressure range of the front tyre is 20 to 25psi; the air pressure range of the rear tyre is 26 to 32psi.
Tyre	Normal air pressure     Proper tyre tread depth     No cracks or openings
Battery	Adequate for planned distance to travel
Lights	Check all the lights—High beam light, low beam light, brake light, turn indicator, etc. to ensure that they can work.
Horn	Check whether the horn can work.

# Dos and Don't s in Riding

### △ Braking Precautions

Always balance the scooter before braking.

If the tyres are locked resulting from excessive braking force, loosen the grip on the braking handlebar and the tyre will be working again and the scooter will be stabilized. If the front tyre is locked, the scooter will lose the ability to steer.

Try to maintain a 1:1 ratio of front and back braking force on slippery roads.

#### Attention:

The inexperienced drivers tend to use the rear brake only, which will accelerate the wear of the brake and result in a long stopping distance.

#### Warning:

Using the front brake or rear brake only is dangerous because of possible grip or control loss. Pay extra attention and use the brakes gently when riding on damp, slippery roads and around the corners.

Riders slamming on the brakes will be exposed to great danger.

To extend the service life of the scooter and for a safe, comfortable ride, users are advised to have the scooter checked and maintained on a regular basis. A scooter not used for a long period of time also needs to be checked on a regular basis.

#### △Regular Maintenance

The first maintenance should be conducted one month after purchase or after a travelling distance of 500km. An overall check and maintenance should be conducted in after-sales service every 6 months or 3000km thereafter. Regular check and maintenance are aimed for the safety of the scooter and the rider.

#### Attention:

If the scooter is frequently subject to such use conditions as overload, high-speed, bumpy roads, uphill and downhill riding, the maintenance cycle should be shortened.

Original parts made from quality materials and rigorously tested are recommended for guaranteed quality and service life, and for best scooter conditions and riding safety. Parts are under normal warranty.

## △ Daily Maintenance

If abnormalities are found during checks and the scooter needs cleaning, maintenance or parts replacement, users may have checks and maintenance in reference to the Home Repair Instructions or send the scooter to the dealer's for checks and maintenance.

#### Warning:

If incapable of repair or adjustment on his/her own, the scooter owner is advised to send the scooter to the dealer's for maintenance and adjustment for the sake of safety.

Always choose a smooth surface road for repair and adjustment and unfold the central stand before repair and adjustment. If it's necessary to repair the scooter during a ride, please mind the traffic.

### △ Brake Adjustment

If abnormalities are found during checks and the scooter needs cleaning, maintenance or parts replacement, users may have checks and maintenance in reference to the Home Repair Instructions or send the scooter to the dealer's for checks and maintenance.

### △ Scooter Washing

Please use a hose and wash the scooter with running water And neutral detergent. Wipe the scooter with a piece of soft cloth after washing. Do not use a piece of dry cloth to prevent scratching.

#### Warning:

Never use a pressure washer to wash the scooter.

Do not wash the two sides, the rear and the inner of the battery compartment with a pressure washer. Do not flush the upper side cover on the rear wheel where the charger, controller and other parts are installed, so as to prevent damage by water. If the scooter falls to the ground by accident, the AC high-voltage charger may be wetted. In that case, do not charge before the charger dries to prevent an electric shock. Repair in the service center is recommended. Do not use it before it's properly checked.

### △ Storage Method

Short-term Storage:

- 1) Keep the scooter on flat, steady surfaces in well-ventilated and dry places;
- 2) Charge the battery to 50% full before storage to ensure the service life of the battery;
- Avoid exposure to the sun and rain as practicably as possible to reduce damage or aging of the parts;
- 4) Charge the battery to 100% full for long-term storage;

5) If the scooters installed with batteries are stored indoor or in safe places like showrooms and storerooms or packed for short-distance transportation in transport vehicles, Connection of power cord and lithium battery should be disconnected to prevent potential electrical fault.

## △ Long-term Storage:

- 1) Remember to have a charge and a discharge at least every two months for long-term storage, and charge the battery to 50% full before storage to ensure the service life of the battery;
- 2) Please charge the battery to 100% full before use after long-term storage;
- 3) Check all the parts carefully and make sure that there is no abnormality before taking a ride on the road. In case of any abnormality, send the scooter to the dealer's for maintenance or repair.

# Vehicle and brake inspection

- 1. Front wheel brake
- 1) Check the brake fluid level through the sight glass at the center of the brake lever.
- 2) Place the vehicle in the center position of the main stand and rotating handle on a level ground
- 3) 2. Check for damage and scratches on the disc brake, and check for scratches and damages on the brake disc.
- 4) When wear is limited, please follow the recommended maintenance interval, so replace the brake discs and wear pads.
- 5) Check for any leakage of brake fluid between the brake line and brake cylinder.



# **Electrical inspection**

Charge the voltage check

Battery charging circuit

Charge current warning: Before checking, make sure that the battery is working properly

1. Check of the turning indication system

The turning indicator circuit is controlled by the power control unit, if not working, there must

To do the following operations:

Check whether the power-off switch is normal

Check that the light bulb is working

Check the function of the turning signal switch

Common faults and troubleshooting methods for electric vehicles

Fault phenomenon	fault diagnosis	Troubleshooting	
	The battery voltage is in an undervoltage state	charge immediately	
The indicator light on the dial is not on, and the motor does not rotate	Battery life has expired	change battery	
motor doco not rotato	lock broke	change the lock	
After the power lock is opened, the motor cannot	Adjust the three wires of the handle and controller to the wrong position	reconnect	
control high-speed operation (speeding)	Damaged components inside the controller	change controller	
The mater retates and stone at different times	Poor contact of battery contacts	Adjust or polish the contacts	
The motor rotates and stops at different times	Power lock not in contact when burned out	Replacing the power lock	
Short driving distance after charging the battery	End of battery life	change battery	
once	Battery voltage mismatch	Battery maintenance or replacement	
The battery cannot be charged or is not fully charged	End of battery life	Replacing the battery	
When charging, connect the power supply but the indicator light does not light up.	Check if the power supply has power.		
When charging, when the charging plug is inserted into the battery, both the green and red lights of the charger will light up			

If all the above situations are normal, it belongs to other faults. In this case, please send it to our company's user service department or authorized dealer for professional repair.

	Regular Maint	enance Check	list
	Brakes		Wheel Bearing
	Lights	Structural Check	Vibration Damper
Regular	Horn		Central Stand
Safety and Performance	Electric Parts		Steering Bearing
Check	Fuse		Battery
	Tyres		Main Wiring Harness
Structural Check	Lubrication		Control System

Regular Maintenance Checklist				
Fault Description Fault Cause		Hault (auso		Troubleshooting Method
No output after the power is on	Dead battery	1. Charge the battery.		
Motor failure when turning the steering handlebar after the power is on	1. Low battery voltage 2. The power off switch is enabled resulting from grasping the braking handlebar 3. The scooter not started	1. Charge the battery. 2. Do not grasp the braking handlebar when starting the scooter. 3. Refer to the "Start the Scooter" section of this Manual.		
Battery charge failure	The plug of the battery not properly connected with the battery socket	Check whether the plug is loosened.		

	Regular Maintenance	Checklist	
Fault Description	Fault Cause	Troubleshooting Method	
Check whether the plug is loosened.	1. Low battery 2. Under-inflation of tyres 3. Frequent braking and overload 4. Battery aging or normal capacity loss 5. Low battery capacity resulting from low ambient temperature	1. Charge the battery and check whether the plug is properly plugged in and whether the charger is damaged. 2. Check the tyre inflation before each use. 3. Develop good riding habits. 4. Replace the battery. 5. Normal phenomenon.	
Sudden stop during a ride	Dead battery	Charge the battery.	
	Identify the fault cause in reference to the meter panel fault codes.		

# **Technical Parameters**

Key Features				
Product Weight	88kg	Grade ability	Dynamic: 15°	
Rated Voltage	72V	Maximum Designed Speed	85km/h	
Maximum Load 265 Braking Distance		Braking Distance	≤4.5m (30km/h)	
Designed Capacity		2 Person		



## **Technical Parameters**

Frame			
Front Damper	Sleeve and oil damping		
Rear Damper	Spring and oil damping		
Front Tyre Specifications	120/70-12		
Rear Tyre Specifications	120/70-12		
Front Brake Mode	Manual Disc Brake		
Rear Brake Mode	Manual Disc Brake		
Maximum Ground Clearance	165mm		
Seat Height	800mm		
Batte	ry System		
Voltage	72V		
Capacity	30AH		
Standard Charging Current	8A		
Maximum Discharging Current	70A		

# **Technical Parameters**

Power System			
Motor	Permanent-magnet Brush-less Motor		
Motor Control Mode	FOC		
Motor Maximum Power	4000 W		
Controller Maximum Current	100A		
Elect	rical System		
Headlight	12 V		
Turn Indicator	12 V		
Taillight	12 V		
Brake light 12 V			
Meter Panel	12 V		
Central Control Unit 12 V			

# **Maintenance Record**

Date	Fault Description	Fault Cause and Troubleshooting Method	Service Station	Serviceman	Remarks

# **Maintenance Record**

Date	Fault Description	Fault Cause and Troubleshooting Method	Service Station	Serviceman	Remarks