RQi

V 1.0

USER MANUAL

Attach the
SN Code here

The SN Code of your scooter.
Please see P.6 for detailed information.

CONTENTS

General Notice

- Please read this User Manual carefully for proper operation before riding the scooter.
- For your safety, please check whether the parts are in good condition according to this User Manual before riding. Contact your dealer in time in case of any problems.
- Please follow the traffic laws. Slow down on slippery roads in bad weather to allow greater braking distance for your safety.
- Please pay attention to deep water. It may cause rusting or failure of the motor, battery, or other parts if water level reaches wheel axle.
- Do not dismantle the scooter on your own. Please contact your dealer for replacement or purchase of original parts.
- For others' safety and preventing unnecessary damage to your scooter, do not lend your scooter to those who can't operate.
- Please keep the User Manual properly. The final explanation of this User Manual belongs to the manufacturer and is subject to change without notice.
- For more product information or maintenance need,
  please visit our website: www.niu.com/en

Precautions

- Rider and Passenger
  This scooter is not designed for a ride of more than 2 persons.
- Road Conditions
  This scooter is not designed for off-road use.
- This User Manual should be deemed as a permanent document of this scooter. If this scooter is transferred to others, this User Manual should also be handed over to the new owner.
- Reproduction or reprint of any part of this User Manual is strictly prohibited.

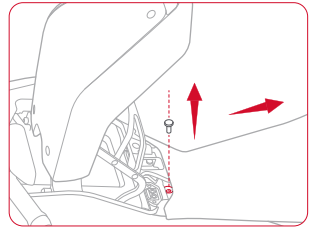
⚠ **ATTENTION:** Do not exceed speed limit and apply brakes cautiously. Always use side stand or central stand when parking.

⚠ **WARNING:** Failure to follow the instructions herein may lead to serious casualties, personal injury, or scooter damage.

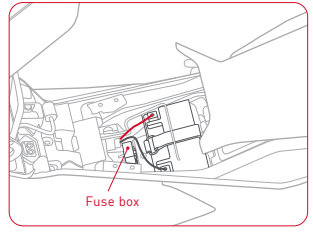
Safety Notice

- Using a helmet and protective goggles is strongly advised.
- You are advised to take proper training or exercise before using on open roads.
- Please follow the Operation Guide (P.26) to fully understand how to properly operate the scooter.
- It should be noted that the braking distance in bad weather will be much longer. Please avoid braking on paint markers, manhole covers, and oil stains to prevent slipping. Pay extra attention when riding through railway crossings, junctions, tunnels, and bridges. Slow down if road conditions are unclear.
- Do not use high beam indiscriminately. Continuous use of high beam may disturb the vision of other drivers and pedestrians.
- Do not use mobile phones or other electronic devices which may draw your attention while riding.
- Do not change the lane without signaling. Changing the lane at will is one of the major causes for accidents. When you need to change the lane, remember to switch on the Turn Signal Indicator first. Always check the vehicles approaching from behind before changing the lane.

Installation Guide

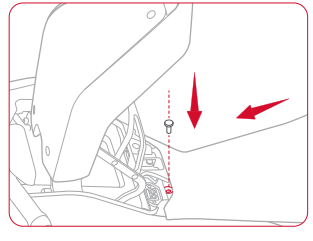


Step 1 Unscrew the mounting screw for the saddle and slide the saddle back to expose the battery compartment.



Step 2 Place the 12V battery in side the battery compartment under the floor board, with electrode terminals facing forward. Attach the red positive electrode terminal with red wire, and black positive electrode terminal with black wire. Then lock the battery in position with the rubber strap provided.

*Fuse arrangement diagram refer to page 52

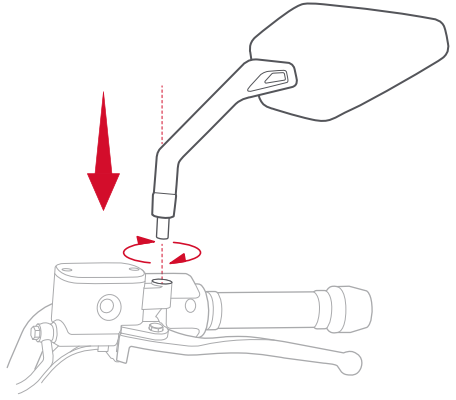


Step 3 Slide the saddle forward from behind to lock it in position. Please check if the hooks underneath the saddle are properly hooked to the frame. Place and tighten the mounting screw for the saddle, and the installation is complete.

Step 1 Open the Accessories Box to take the tools.

Step 2 Install the rearview mirrors into the mounting holes on dashboard and turn it clockwise. The bolt shall be screwed in for more than 15 mm.

Step 3 Adjust the rearview mirror to an appropriate position and then tighten nuts on the rearview mirror with a spanner. Properly set the dust cover.



Downloading the APP

Functions such as checking battery level, locating, and management can be implemented on the electric scooter through the app.

Step 1 Scan the QR code below to download the APP titled Niu E-Scooter.

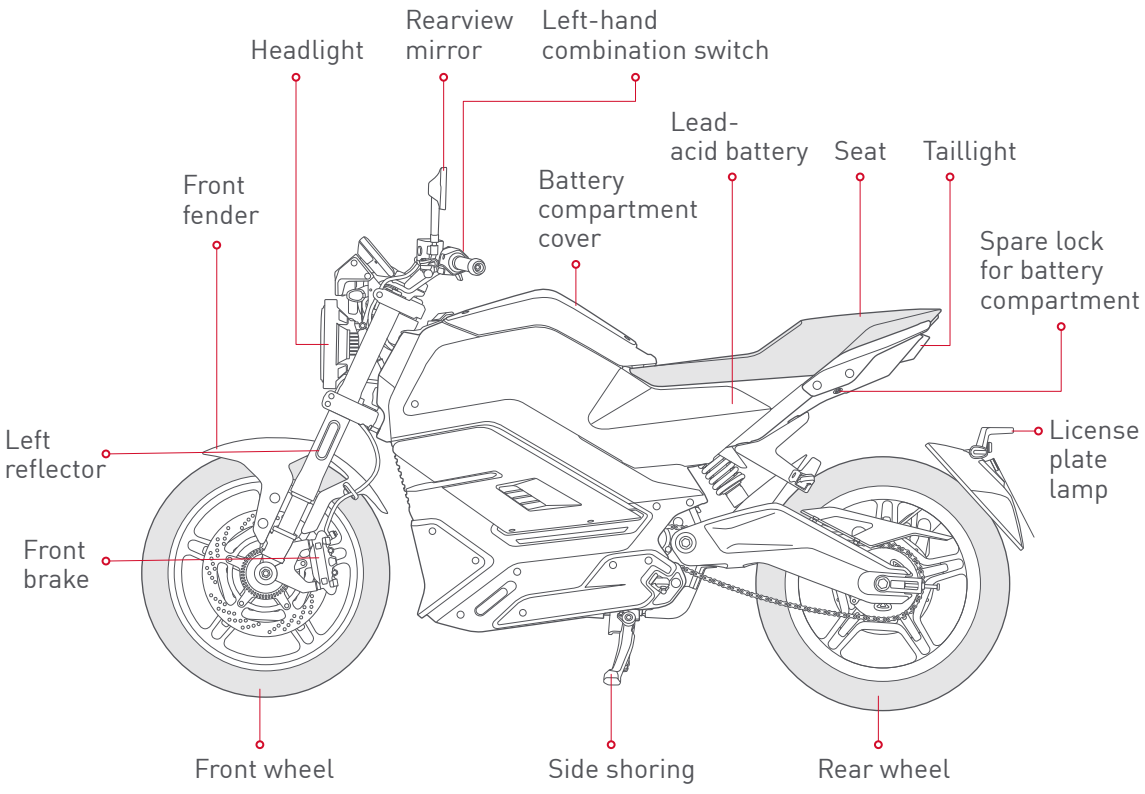
Step 2 Run Setup after downloading and register.

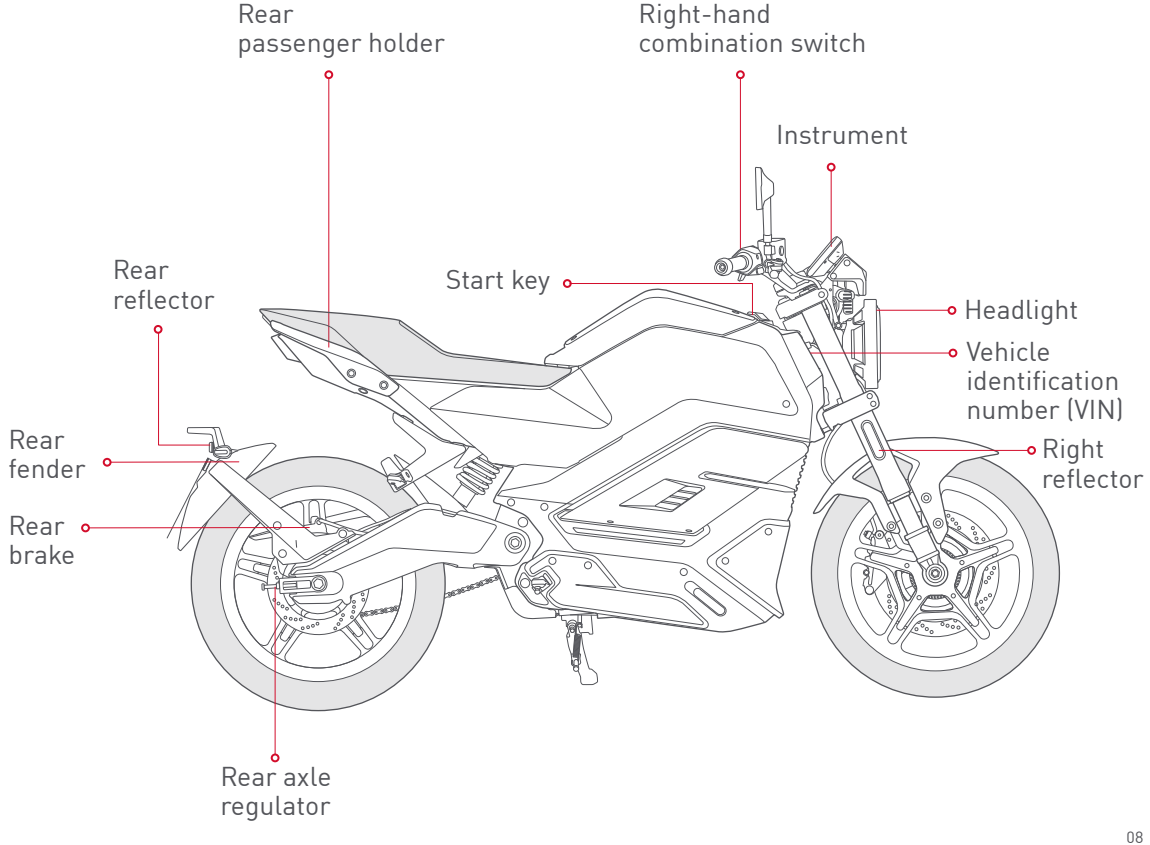
Step 3 Please scan the QR code on the inside of cover page for app registration.

NOTE:

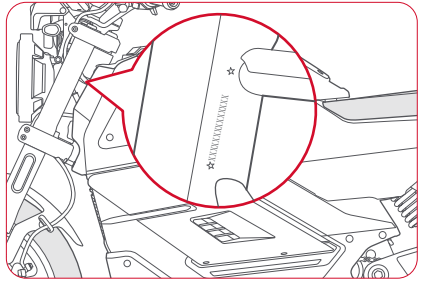
The mobile phone system is required to be at least Android 4.0 or iOS 8. Make sure that the mobile phone has been connected to the Internet when running the app (Wi-Fi / 2G / 3G / 4G).

Parts Info

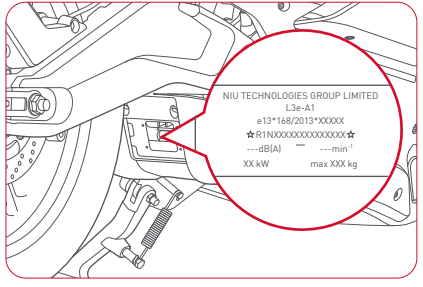

Headlight
Rearview mirror
Left-hand combination switch
Front fender
Lead-acid battery
Seat
Taillight
Battery compartment cover
Spare lock for battery compartment
License plate lamp
Left reflector
Front brake
Front wheel
Side shoring
Rear wheel


Rear passenger holder
Right-hand combination switch
Instrument
Start key
Rear reflector
Headlight
Vehicle identification number (VIN)
Right reflector
Rear fender
Rear brake
Rear axle regulator

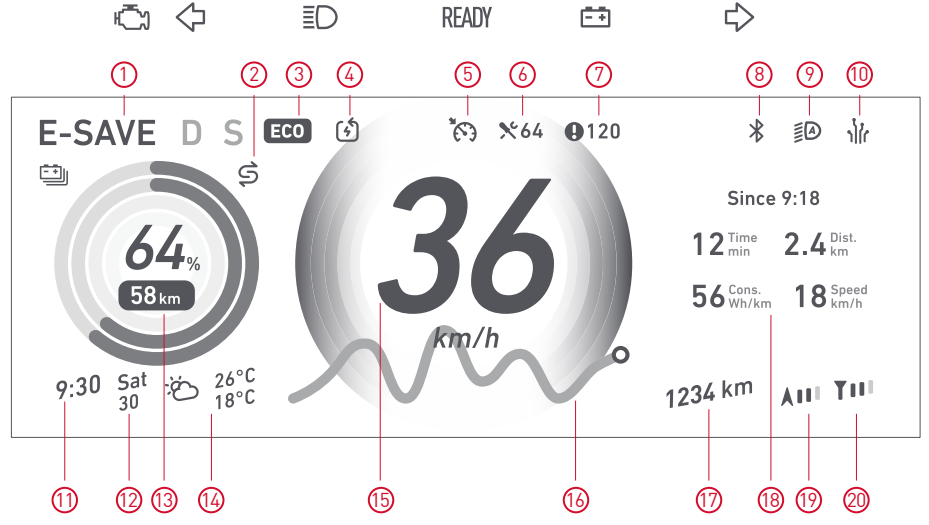
VIN location



Vehicle nameplate location



Dashboard and Combination Switches



OBD system	Right turn	READY Ready
Left turn	High beam	Low battery

①	Riding mode	Currently selected riding mode E-SAVE/DYNAMIC/SPORT;
②	Dual battery synchronization state	Displayed when two batteries have the same power;
③	Energy-saving state	Displayed at the time of efficient energy conversion (a speed of more than 3 km/h delivered per ampere of power output);
④	Power recovery	Displayed when power recovery is ongoing;
⑤	Cruise control	Displayed when the cruise control function is activated;
⑥	Maintenance rating	Displayed when the vehicle is not in good condition;
⑦	Error code	Displayed when the vehicle system reports an error;
⑧	Bluetooth state	Displayed when the vehicle is connected to Bluetooth;
⑨	Automatic headlight	Displayed when the automatic headlight function is activated ;
⑩	Cloud service state	Displayed when the cloud service function is activated;
⑪	Clock;	
⑫	Week and date;	

⑬	Real-time power	Current battery level and battery bar (two battery bars respectively represent the levels of two batteries), and the estimated remaining mileage;

⑭ Air temperature, current weather conditions and temperature;

⑮ Real-time speed;

⑯ Energy consumption curve, curve of change in energy consumption during riding;

⑰ Total mileage, total riding distance;

⑱ Riding data, total riding time, mileage, average energy consumption, average speed ;

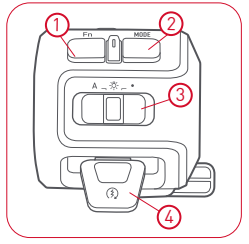
⑲ Satellite positioning signal;

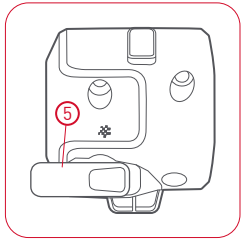
⑳ Mobile network signal.

Parking and Other

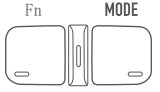
①	Real-time power	Displaying a single battery bar when only a single battery is available;
②	Navigation information	Enabled when connected to the meter through the APP of Niu Technologies.

Right-hand Combination Switch





① Function key (Fn)
② Mode selection (MODE)
③ Vehicle lamp adjustment
④ Start switch
⑤ Ejection mode



Function key (Fn)

Press this key to circularly switch the built-in meter display mode.

Mode selection (MODE)

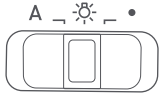
Press this key to circularly switch between DYNAMICS and SPORT modes.

Start switch

Pinch the brake (with the left or right hand), and press this key for being Ready To Go; in the Ready mode, press this key to switch to parking (P) mode.

Ejection mode

Press this key to activate the ejection mode and realize the ultimate acceleration for 30 seconds.



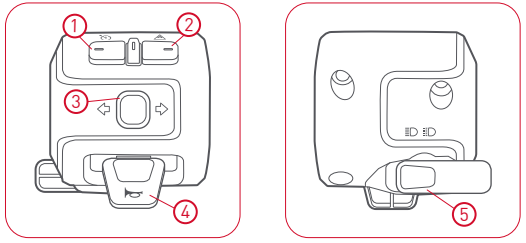
Scooter Light Adjustment

Push the button to the right to turn off low beam lights;

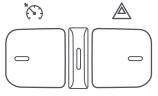
Push the button to the middle to turn on the outline marker light and the license plate light;

Push the button to the left to turn on the headlamp.

Left-hand Combination Switch



1. Cruise control
2. Hazard warning lamp (double flash)
3. Turn light
4. Horn
5. Overtaking light & high/low beam



Cruise control

Press this key to maintain the current running speed; and re-press this key or acceler-ate/brake to disable this function if necessary.

Horn

Press this key to sound the horn, and release it to stop.

Hazard warning lamp (double flash)

Press this key to make turn lights (left and right) flash simultaneously.

Overtaking light &high/low beam

Short press it to turn on the overtaking light (flashing), and push forward to turn on the high beam.

Turn light

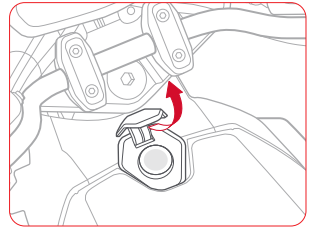
Turn left to turn on the left turn light;

Turn right to turn on the right turn light;

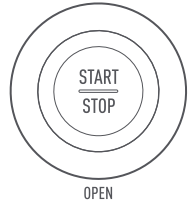
Press the middle position to reset and turn off the left/right turn light.

Key and Remote Control

How to start the vehicle

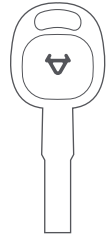


1.Open the protective cover of the vehicle start key

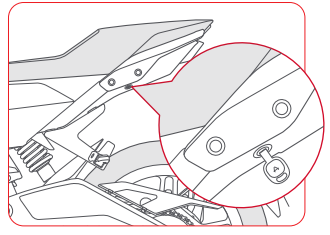


2.Short press it to power on (long press it to open the battery compartment)

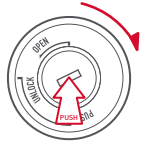
How to open the battery compartment with a spare key



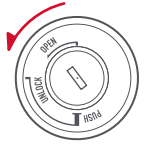
Spare key



Emergency key hole at the vehicle tail

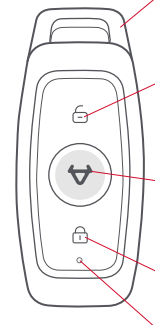


Insert the spare key into the emergency key hole, push it inward, and clockwise rotate to the "UNLOCK" position, to release the faucet lock.



Insert the spare key into the emergency key hole, and counterclockwise rotate to the "OPEN" position, to open the battery compartment cover.

Operation of Remote Control



Remote control

Spare key

When the vehicle cannot be powered on, spare key may be used to open the battery compartment/faucet lock.

De-alert key

1.Press this key to cancel the alert mode.

2.Hold this key to open the battery compartment.

Start key

It is similar to the one-key start key in function. Press this key to make the vehicle powered on/off remotely.

Lock key

Press this key after riding, to lock the vehicle.

Indicator

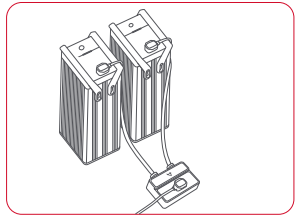
If the indicator flashes when you press any key on the remote control, it indicates that the remote control is working normally.

⚠ **ATTENTION:** Before using the remote control, please make sure that the batteries have been properly installed in the vehicle, and the straight-line distance between the remote control and the vehicle should be less than 50 m.

Battery, Charger, Motor and Controller

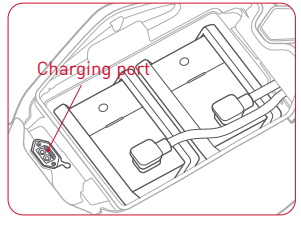
Battery use instructions

The vehicle is easily recharged via the battery charging port or built-in vehicle charging port.



External charging mode

Take out the batteries, and insert the charger plug into the battery charging port for external charging. By then, the battery level indicator will light up, and real-time power will be displayed.

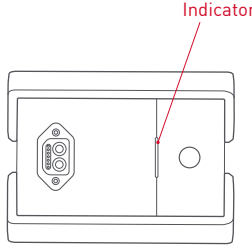


Vehicle charging mode

Put the batteries into the battery compartment, connect the power plug to the batteries, and then insert the charger plug into the vehicle charging port in the bucket seat to charge the vehicle. At this time, the charging indicator on the dashboard will light up, and real-time power will be displayed.

Battery level indicator instructions

- In the charging mode, current battery level is displayed; after it is fully charged, all the indicators are always on, no longer flashing.
- In the non-charging mode, press the battery level display key:
  - Under normal condition, the indicator displays the battery level.
  - If the remaining battery level occupies less than 20% of the total, the indicator will flash for a moment to remind you to charge.
  - If the all the indicators flash, it means the batteries are malfunctioning. In this case, please contact your local dealer.



Notes on Use of Batteries

- Before use, please confirm that the batteries are the original attached to the vehicle. The batteries of any other brands or models shall not be used.
- Make sure that the batteries are intact in appearance, and free from obvious phenomena such as damage, liquid leakage, heating, soaking, and smoking.
- In order to ensure the safety of transportation, the ex-factory battery level is usually set at a ratio of about 30%. Before use for the first time, you might find the low or zero battery level that is attributed to transportation, storage period, self-consumption and other factors. In this case, what you should do is just to charge batteries according to the charging instructions thereof.

⚠ **ATTENTION:** Waste batteries shall not be dismantled arbitrarily, but shall be recovered and processed by relevant specialized department.

Use Environment

Please use batteries at -10°C-45°C

Please avoid the soaking of batteries in water, beverages, corrosive liquids, etc.

Please avoid the exposure of batteries to any heat sources, open flames, flammable and explosive gases (liquid)

Please avoid the entry of metal foreign objects into the battery box

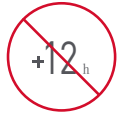
At low temperatures, the available battery capacity will be attenuated to different degrees. Specifically, 70%, 85% and 100% of the battery capacity are available at -10°C, 0°C, and 25°C, respectively. Once finding any phenomena such as peculiar smell, heating, and deformation, please stop using the batteries immediately, stay away, and contact the after-sales department.

⚠ **WARNING:** The battery is beyond the scope of maintenance by users. If finding any abnormality, please contact your local dealer for inspection and repair.

Charging Environment

Please use an original charger matched with original batteries, rather than a charger of any other brands or models.

Please charge batteries at 0°C-35°C.



Please charge batteries for at most 12h, to maximize their service life.

- The batteries are charged from fast to slow for the purpose of safety.
- At below 0°C, charging will be ceased to ensure the charging effect. If so, please move batteries to a suitable charging environment.
- During the charging process, the aluminum case of a charger will turn hotter. Please rest assured in this case. Please keep it away from children.

Precautions for Use of Batteries

- After almost depletion, batteries shall be fully recharged for the first time. It shall be repeated for 2-3 times to ensure the optimal effect and make the actual battery capacity more consistent with that displayed on the meter.
- When only about 20% (not less than 20%) of the battery capacity is left, timely recharging is required to extend the service life.
- The power-saving mode is recommended for normal riding. After starting the vehicle, gradually accelerate by operating the throttle handle, to extend the batteries' service life.
- As the batteries are recharged increasingly, there might exist deviations between the actual battery capacity and that displayed on the meter. Please fully recharge and discharge the batteries regularly (not more than three months). The internal battery cell and smart system can automatically calibrate the battery level, thus enhancing the experience.
- You'd better check the power plug of the battery every two months to confirm whether the contact spring has signs of carbon deposition, oxidation and blackening. If so, please repair the batteries at the designated outlet.

⚠ **WARNING:** Do not wash or expose batteries to the rain, let alone soaking them in water. Please keep the bottom of the battery compartment above water, to prevent the internal short circuit or permanent battery failure. In this case, it is strictly forbidden to recharge batteries due to the possible risks of fire, burning and explosion. Please immediately transfer them to the designated outlet for repair.

Storage Environment

- The batteries mounted on the vehicle will be consumed to support the operation of intelligent system and alarm system. Thus, even if the vehicle is kept idle for a period of time, the battery level displayed on the meter will decline. Generally, 5% of the battery capacity is lost after the vehicle is parked for 8h.
- Please store batteries at 0°C-25°C. Storage at 40°C or above is not allowed, because it will cause an irreversible capacity attenuation.
  If the vehicle will be kept idle for a long time (in winter, summer or other special circumstances), the batteries must be taken out and stored separately, maintained and recharged regularly, to avoid the complete depletion and irreversible damage. Otherwise, any battery failure caused therefrom is beyond the scope of warranty.
- The batteries shall be best stored when 50% of the battery capacity is left. If the proportion is less than 10% or more than 90%, long-term storage of batteries will cause an irreversible capacity attenuation.
- Self-consumption protection mode and technical standards for safe storage of lithium batteries:
  (1)If the vehicle will be kept idle for a long time, the batteries can be stored inside the vehicle (still connected to the battery plug) for at most one month to avoid the possible feeding or impossible repair.

  (2)If the vehicle will be kept idle for a long time, the batteries with the remaining capacity of not less than 50% can be stored separately or inside the vehicle (not connected to the battery plug) for at most three months to avoid the possible feeding or impossible repair.
- The batteries shall be stored in a place free of the falling risk, to avoid the possible uncontrollable damage, leakage, heating, smoking, fire or explosion.

Notes on Charger Use

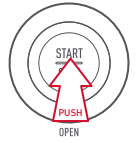
- The charger is for indoor use only.
- Charging in a confined space or a high temperature (exposed to the scorching sun) environment is strictly forbidden. Do not place a working charger in the bucket seat or tail box.
- Connect the charger's output plug to the battery port first, and then connect the charger's input plug to the mains supply to start charging. After full charging, disconnect the charger's input plug from the mains supply first, and then unplug the charger's output plug.
- Cut off the power supply in time when the green light is on. Do not connect the charger to the AC power supply for a long time in the non-charging condition.
- If finding any abnormal phenomena in the charging process, including the indicator exception, peculiar smell, or overheated charger casing, please stop charging immediately and repair or replace the charger.
- Do not disassemble or replace any charger components by yourself.
- The new charger shall be matched with the batteries in model.

ARE YOU READY?

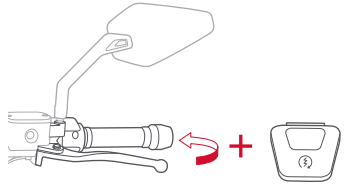
⚠ **ATTENTION:**Please check the vehicle components before riding. Once finding any abnormality, please repair in time or seek help from a specialized repairer.

- Check whether the pressures of front and rear tires are maintained at 250 kPa and 250 kPa respectively;
- Check whether any tire shows obvious signs of crack, bump and abnormal wear; (Notes: Low pressure, cracking, damage and abnormal wear of tires may affect the endurance mileage or cause steering failure or tire burst, and even an accident.)
- Check whether the air switch (if any) mounted in the bucket seat is opened. If the switch is closed, please turn it to the "ON" position;
- Check whether the speed control handle and brake lever are normal and effective;
- Check whether the headlight, turn light and other signal lamps function normally;
- Check whether the horn functions normally;
- Check whether the flexible steering is possible, and whether the steering handle shows any signs of gap, looseness, over-tightness or stuck in the process of moving it up and down, left and right, back and forth;
- Check whether the rider can observe the images within a scope of 10m (length) and 4m (width) through the rearview mirror;
- Check whether the battery level is sufficient for your riding needs.

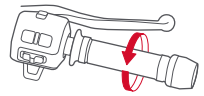
Start a smooth riding after the simple three-step preparation.



Step 1 Please wear a safety helmet, sit on the vehicle with key, and press the "Start" key;

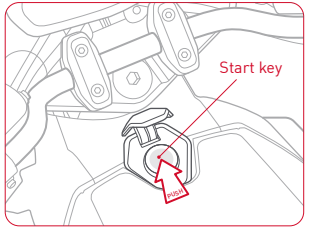


Step 2 Retract the side shoring/middle shoring, pinch the brake on the basis of ensuring safety, and press the "P" key on the right-hand combination switch, when the meter will display “READY”;

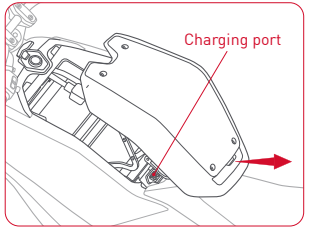


Step 3 Gently twist the throttle lever with your right hand, to start your first riding journey.

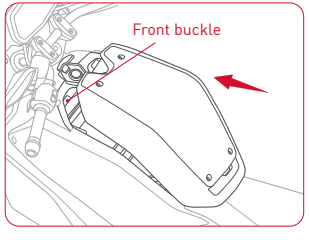
How to Open and Close the Battery Compartment



Step 1 Long press the “Start” key to unlock the battery compartment cover.



Step 2 Pull the battery compartment cover backward after buckling, to manually open the battery compartment. Then, you can put the batteries inside or take out the batteries for charging, or connect the charger to the vehicle charging port.



Step 3 Push the battery compartment forward to close its cover. After fastening the front buckle, please press it down until the rear buckle is buckled.

Maintenance and Repair

Regular maintenance and inspection

The brand value of the vehicle is highlighted in daily use through regular maintenance. Every vehicle may be calibrated at least three times during the first year after purchase, with eight inspection items covered. One year later, you can enjoy the special maintenance service. You can reserve any maintenance service online through our official website and APP.

Calibration in the run-in period: Your vehicle will be calibrated after the mileage reaches 500km (one month) since purchase, to keep it perfect;
First maintenance: Your vehicle will be elaborately maintained for the first time after the mileage reaches 1,500km (four months) since purchase;
Second maintenance: Your vehicle will be elaborately maintained for the second time after the mileage reaches 3,000km (10 months) since purchase, to achieve a longer service life.

All the maintenance items are as follows. Actual maintenance items can be flexibly selected by the vehicle model, mileage and riding time:

Category	Inspection item
Structural components	Vehicle nut fastener
	Vehicle bolt fastener
	Tires
Brake system	Brake oil
	Brake noise
	Braking effect
	Brake disc
Electric parts	Power lock, alerter
	Light
	Meter display
	Combination switch
	Charger voltage

Electric parts	APP function
Suspension+steering system	Front/rear shock absorber
	Handlebar steering
	Front wheel
Batteries	Battery box appearance
	Waterproofness
	Battery detection
	Charging test
Riding	Vehicle operation
	Vehicle noise
	Parking
Transmission system	Chain tightness and noise
	Sprocket teeth appearance

No	Item	Inspection and maintenance		400-600 km (within 1 month)	1,400-1,600 km (within 4 months)	2,900-3,000 km (within 10 months)	More than 3,000 km
							Every 1,500 km or six months
1	Plastic parts	Plastic parts appearance		√	√	√	√
2		Gap		√	√	√	√
3		Saddle	Suggest replacing every three years	√			
4	Structural components	Vehicle nut fastener		√		√	√
5		Vehicle screw fastener		√		√	√
6		Vehicle bolt fastener		√		√	√
7		Middle shoring/side shoring		√	√	√	√
8		Fastening of front and rear axles			√	√	√
9		Fastening of mounting brackets			√	√	√
10		Tires	Suggest replacing every 10,000 km	√	√	√	√

No	Item	Inspection and maintenance		400-600 km (within 1 month)	1,400-1,600 km (within 4 months)	2,900-3,000 km (within 10 months)	More than 3,000 km
							Every 1,500 km or six months
11	Brake system	Brake oil mass	Suggest replacing every two years			√	√
12		Brake noise		√	√	√	√
13		Braking effect				√	√
14		Brake appearance				√	√
15		Brake pad	Suggest replacing every 10,000 km			√	√
16		Spring leaf	Suggest replacing every 10,000 km				√
17		Brake hose	Suggest replacing every three years				√
18		Brake disc					√
19	Electric compo-nents	Power lock		√			√
20		Light					√
21		Meter display		√			√

No	Item	Inspection and maintenance		400-600 km (within 1 month)	1,400-1,600 km (within 4 months)	2,900-3,000 km (within 10 months)	More than 3,000 km
							Every 1,500 km or six months
22	Electric compo-nents	Switch	Suggest replacing every three years	√	√	√	√
23		Alerter and horn		√	√	√	√
24		Motor		√	√	√	√
25		Charger voltage		√		√	√
26		Controller		√	√	√	√
27		APP function		√	√	√	√
28	Line	Power connector			√	√	√
29		Controller plug		√	√	√	√
30		Brake switch plug					√
31	Sus-pen-sion+st eering system	Front and rear shock absorbers	Suggest replacing every 15,000 km				√
32		Handlebar steering		√		√	√

No	Item	Inspection and maintenance		400-600 km (within 1 month)	1,400-1,600 km (within 4 months)	2,900-3,000 km (within 10 months)	More than 3,000 km Every 1,500 km or six months
45	Trans-mission system	Chain tightness and noise		√	√	√	√
46		Sprocket teeth appearance		√	√	√	√

Brake repair

- Check regularly and relocate the brake fluid if necessary;
- Replace the brake fluid every two years;
- Replace the brake hose every three years and when it is broken or damaged.

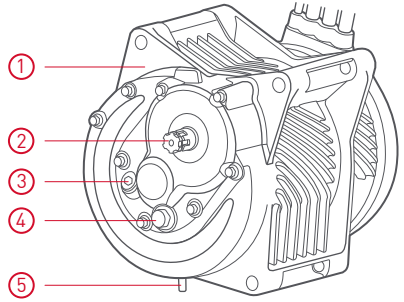
Vehicle Cleaning

Please wash the vehicle using tap water and some neutral detergent, and then wipe with a piece of soft cloth.

⚠ **ATTENTION:**Do not directly wash both sides and internal rear part of the battery box with a high-pressure water gun. Do not directly flush the side cover above the rear wheel inside which there are electronic components such as the charger and controller, to avoid any possible damage by water erosion.

Vehicle Storage Method

- Please put the vehicle in a flat, stable, well-ventilated and dry place;
- Please avoid the exposure of the vehicle to the strong sunlight and rain as much as possible, to minimize the damage or aging of parts and components;
- The batteries to be stored for a long term will be maintained in accordance with the Instructions on Battery Use and Maintenance;
- The batteries stored for a long term shall be fully charged before reuse;
- In case of finding any exception in parts,contact your dealer.



① Riding motor
② Reducer
③ Air duct
④ Oil filling plug
⑤ Oil drain plug

Reducer Exceptions and Troubleshooting

Common fault	Solution
Noise	Clean the gear oil, and detect the possible foreign matter inside the assembly
	Check whether the bearing is damaged
Too fast temperature rise in a short time	Check whether the vent plug is blocked
	Check whether the bearing is damaged
Too fast local temperature rise	Check whether the bearing is damaged

Common fault	Solution
Oil leakage	Check whether the oil drain plug is tightened
	Check whether the oil filling plug is tightened
	Check whether the reducer case is cracked
	Check whether any fastening bolt on the box-case end plane is loosened
	Check whether the oil seal is damaged

Care and Maintenance

1.Use

- If the controller does not work normally, the vehicle cannot be started directly;
- During its operation, the vehicle should be free from any intermittent or abnormal sound or vibration;
- If the gear oil is not filled (about 50mL of GL-5 85W-90/140 oil), the vehicle cannot be started directly.

2.Maintenance

The vehicle assembly will be maintained for the first time after the riding mileage reaches 3,000km. By then, it is necessary to replace the reducer gear oil, clean up the iron scraps on the oil drain plug and inside the reducer. In addition, it is required to clean the dust and foreign matters around the vent plug to keep it unobstructed, and check sensor signals and bolt tightening conditions.

After the first maintenance, the assembly will be checked as follows in accordance with relevant vehicle maintenance requirements:

- Check motor sensor signals, and replace in time once finding any disconnection or damage of signal line;
- Check whether any fastening bolt on the assembly suspension is loosened, to ensure they are tightened in a timely manner;
- Check the sealing surfaces and oil sealing conditions of the assembly, and replace if necessary to ensure the good sealing performance;
- Clean up foreign matters around the vent plug to keep it unblocked;
- It is necessary to replace the gear oil and remove the iron scraps for every four months or 7,000km (whichever comes first), which depends on the riding conditions.

Troubleshooting

Malfunction Description	Causes	Troubleshooting
No power output after turning on the power	No power supply	1.Check whether the battery plug is fixed well 2.Charge batteries
Failure to start the motor after turning on the power and rotating the speed control handle	1.In the brake state 2.In the parking state 3.Failure to retract the side shoring (if any) 4.Start switch fault	1.Check whether the brake lever is in the brake state 2.Refer to the "Starting Operation" section hereof 3.Retract the side shoring 4.Contact the after-sales service personnel and check the start switch
Insufficient endurance mileage	1.Insufficient battery charging 2.Insufficient tire pressure 3.Frequent braking and overload 4.Battery aging or normal attenuation 5.Reduction of battery capacity due to too low ambient temperature	1.Check whether the charge is damaged 2.Check the tire pressure before use each time 3.Develop a good riding habit 4.Replace batteries 5.Confirm it is a normal phenomenon

Malfunction Description	Causes	Troubleshooting
Failure to charge batteries	1.Failure to fix the charger plug 2.Too low battery temperature 3.Too high battery temperature	1.Check whether the plug is loosened 2.Wait for recharging the batteries at the proper temperature 3.Wait for recharging the batteries at the proper temperature
Failure to charge USB	1.Failure to fix the plug 2.Nonconformance of the USB cable to the mobile phone standard 3.Damage of the USB charger	1.Check whether the USB plug is fixed well 2.Please purchase the connection cable in line with the mobile phone standard 3.Contact the after-sales service personnel to replace damaged components

Malfunction Description	Causes	Troubleshooting
The charging indicator always green (not red)	Failure to connect the charger output port and battery charging plug well	Reconnect the charging plug
	Short circuit of charger output	Replace a charger
	Open circuit of battery connection line inside the battery box	Reconnect the battery cable
	Blown fuse inside the battery box	Replace a fuse of the same specificationsame specifica-tioncable
	Damage or circuit fault of red light-emitting tube of the charger	Replace a charger
Failure of normal transition (i.e., from red to green)	Too low battery pack voltage due to the open circuit of a single cell of the lithium-ion battery, as well as abnormal lithium battery temperature during charging	Replace lithium-ion batteries
	Increase of leakage current in the battery pack due to too high charging temperature, which further results in the failure of reduction in final current	Adjust the charging environment

Malfunction Description	Causes	Troubleshooting
Failure of normal transition (i.e., from red to green)	The charger's functional faults (for example,) severe vibration might cause the poor contact or open circuit of the charger control loop, the voltage out of control, and the overcharge of lithium-ion batteries	Replace a charger
Indicator not on	Damage of the charger or the indicator	Replace a charger
Green indicator of the charger is always on although the battery is not fully charged	Overtemperature protection of the charger	Adjust the charging environment
The indicator (if any) of the charger is not on although the battery runs out	Dead battery	Charge
Battery key and indicator flash (if any)	Dead battery, battery fault	Charge, contact the designated outlet for inspection

Malfunction Description	Causes	Troubleshooting
Power outage, black screen, or Code 130 phenomenon that occurs in the process of riding with a low battery level (such as 5%)	Dead battery	Charge
Significant decline or rise of battery level 1-2h later after parking	Dynamic internal calibration of battery cell power, which can make up for the inaccurate battery level	Use normally
Power outage, black screen, or Code 130 phenomenon that occurs in the process of riding with a battery level of about 15%	Normal dead battery Inaccurate battery level calculation after a long term of use	Fully charge and discharge
Significant decline or rise of battery level 1-2h later after parking	Normal dead battery Inaccurate battery level calculation after a long term of use	Use normally

Malfunction Description	Causes	Troubleshooting
Significant decline of battery level (displayed on the meter) overnight after parking	About 5% power consumption by the central control and alerter in 8h	Use normally. Power consumption of a vehicle (for positioning and star searching) will increase significantly when it parks in a place with poor GPS signals
Virtually high battery level displayed on the meter as the power consumption of central control and alerter is not considered	About 5% power consumption by the central control and alerter in 8h	Use normally
The Code 191 phenomenon occurs during riding, and the gear level is fixed at 1, with the constant power outage fault	Interrupted communication between the intelligent central control and battery BMS	Detect at the designated outlet

Malfunction Description	Causes	Troubleshooting
The Code 191 phenomenon occurs during riding, and the gear level is fixed at 1 occasion-ally, with the possible elimination of power outage fault	Deformation of plug pin, or loosening of battery plug after a long term of use	Plug and unplug the battery, and restart the vehicle to eliminate the fault Detect at the designated outlet
The deviation between the endurance mileage and that officially stated	Officially stated mileage refers to the riding distance of a vehicle in the specific environment and state, which is related to the speed, weight, road conditions, wind resistance, temperature, etc.	Understand the factors affecting the mileage via the official website, and test the battery capacity at the designated outlet
(if indicator bars are equipped) Keys and indicator bars are not on Keys and indicator bars flash	Battery depletion after a too long time of storage	Recharge to return to normal. If recharging fails, detect it at the designated outlet. Battery depletion and feeding after a long time of storage inside the vehicle are beyond the warranty scope.
Code 30 displayed on the meter although the battery is fully charged	Too long charging time	Use normally, appropriate-ly shorten the charging time

Malfunction Description	Causes	Troubleshooting
Heat emission in the charging process	The large internal current and high heat generated in the charging process, make the heat-conducting metal aluminum case turn hot, but it is conducive to prolonging the service life of the charger	Use normally, but avoid the contact during charging
Battery deformation and melting due to heat emission in the charging process	Plastic deformation and melting due to excessive heat accumulation	Exclude the possibility of high temperature, enclosed space, and charger wrapping. Please stop using the deformed charger immedi-ately
Too long charging time	The battery is charged usually for 8-10h. The battery level rises fast due to the constant current charging in the initial stage, but rises slowly due to the constant voltage charging later	Use normally. Choose a fast charger as the case may be (the specific model is officially stated)
Failure to normally use batteries and start the vehicle	Battery erosion by water after the vehicle is affected by water and rain	Stop use, and detect at the designated outlet. Artificial erosion of batteries by water is beyond the warranty scope

Malfunction Description	Causes	Troubleshooting
Battery case broken or cracked due to falling or impact	Damage caused by external use	Stop use and detect at the designated outlet. Artificial damage of batteries is beyond the warranty scope
Failure to start the vehicle kept idle for a long time after the main battery is plugged in	Feeding or damage of 12V lead-acid batteries	Charge via the emergency charging port, or detect and repair at the designat-ed outlet

Fault Code List			
Fault Code	Meaning	Causes	Troubleshooting
10	FOC stop working	Motor stucked	Check if the motor is stucked.
11		Undervoltage or overvoltage	Check if the charger is intact.
12		Overcurrent	Contact your dealer if happens often.
13		Controller overheat	Park the bike in shade and wait for it to cool down.
30	Battery 1overcharge	Battery in overcharge protection	Turn on headlight to discharge.Check if the charger is broken or wrong type.
31	Battery 1overcurrent	Battery in overcurrent protection	Stop charging and check if the charger is failed.
50	Battery 2overcharge	Battery in overcharge protection	Turn on headlight to discharge.Check if the charger is broken or wrong type.
51	Battery 2overcurrent	Battery in overcurrent protection	Stop charging and check if the charger is failed.
60	Communication Module failure	SIM card identification failure	Contact your dealer.
65		SN code are not written or Smart central controller serial code are not written	
67		SIM card unpaid or weak signal	

Fault Code List			
Fault Code	Meaning	Causes	Troubleshooting
80	stop charging	Charger in overtemperature protection	Remove the charger, and wait it to cool down before charging again. If the problem persists, contact your dealer.
81		Charger in overvoltage protection	Unplug and plug the charger again. If the problem persists, contact your dealer
82		Charger in overcurrent protection	
99	Communication Harness failure	Smart Central Controller or Harness Assembly failure	Contact your dealer.
110	FOC failure	MOSFET failure	Contact your dealer.
		MOSFET driver failure	
111	FOC varification failure	Non-original Controller or communication failure	Restart the bike. Contact your dealer if it does not work.
120	Motor failure	Motor Hall Sensor failure	Contact your dealer.
		Motor cord disconnected	
123	Motor Houle malfunctioning	Motor Houle signal failure	Unlock and lock the electric switch lock again. If the problem persists, contact your dealer.
124	Motor overtemperature	Motor overtemperature is too high.	Stop riding and let the motor cool down.

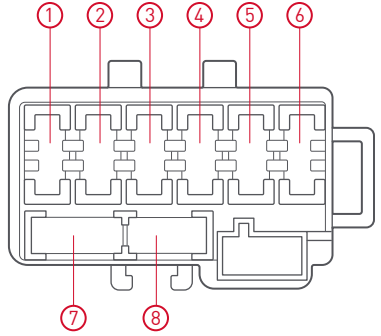
Fault Code List			
130	Battery 1 overdischarge	Battery level is too low and the BMS is about to enter protection mode	Stop riding and charge the battery.
131	Battery 1 overcurrent	Battery is undervoltage or overvoltage	Check if the charger is failed.
132	Battery 1 overtemperature	Battery temperature is too high	Stop riding and park the bike in the shade to let the battery cool down.
133	Battery 1 belowtemperature	Battery temperature is too low	Charge the battery after it reaches the operating temperature range.
134	Battery Pack 1 not discharging	Excessive voltage difference	Contact your dealer.
135	Battery Pack 1 not discharging	Short-circuit between positive and negative electrodes of battery pack or external discharge current exceeding short circuit protection value due to external connection	Contact your dealer.
136	Battery Pack 1 not charging/discharging	Exposure to water due to structural reasons or water detection sensor false alarm	
138		Charging MOS or Discharging MOS damaged	

		Fault Code List	
139	Battery Pack 1 not charging/discharging	Battery failure	Contact your dealer.
140	Twist Grip failure	Twist Grip Hall Sensor failure	
141		Twist Grip Open Circuit Failure	
142		Twist Grip Short-circuit failure	
150	Battery 2 overdischarge	Battery level is too low and the BMS is about to enter protection mode	Stop riding and charge the battery.
151	Battery 2 overcurrent	Battery is undervoltage or overvoltage	Check if the charger is failed.
152	Battery 2 overtemperature	Battery temperature is too high	Stop riding and park the bike in the shade to let the battery cool down.
153	Battery 2 belowtemperature	Battery temperature is too low	Charge the battery after it reaches the operating temperature range.
154	Battery Pack 2 not discharging	Excessive voltage difference	Contact your dealer

		Fault Code List	
155	Battery Pack 2 not discharging	Short-circuit between positive and negative electrodes of battery pack or external discharge current exceeding short circuit protection value due to external connection	Contact your dealer.
156	Battery Pack 2 not charging/discharging	Exposure to water due to structural reasons or water detection sensor false alarm	
158	Battery Pack 2 not charging/discharging	Charging MOS or Discharging MOS damaged	
159	Battery Pack 2 not charging/discharging	Battery failure	
161	Locked bike	The bike is remotely locked by the server.	
162	Anti-theft failure	Anti-theft failure	Restart the scooter or contact your dealer

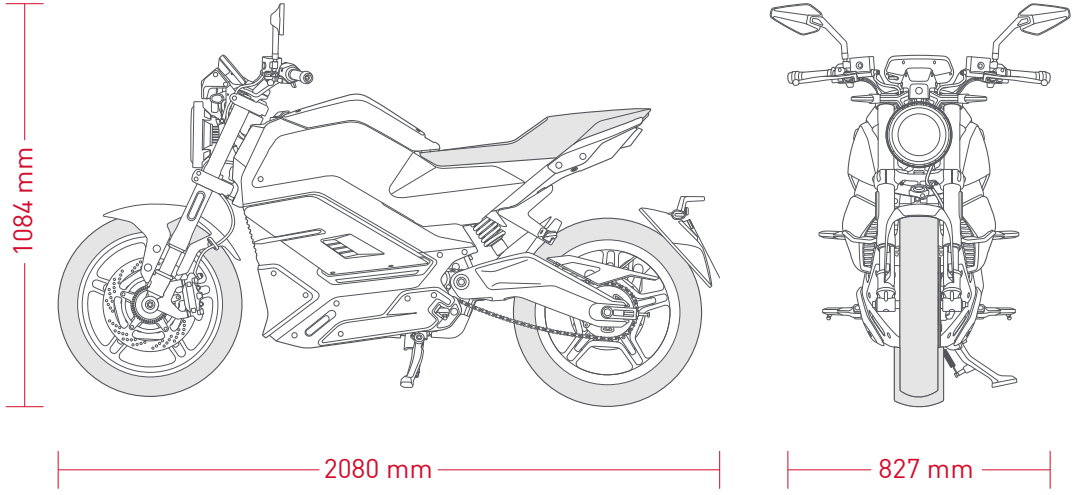
Fault Code List			
183	stop charging	Charger in short circuit protection	Remove the charger and check the battery circuit Contact your dealer
190	FOC Communication failure	Can not receive Controller's data	Contact your dealer.
191	Battery communication failure	BMS can't return data or returned data is incorrect	Check the Connector is properly plugged. Contact your dealer if happens often.
192	Battery 2 communication exception	BMS can't return data or returned data is invalid	Check physical connection of communication circuit

Fuse Arrangement Diagram



1. Main fuse
2. DCDC
3. DB/ECU
4. VCU
5. ACC fuse/LCU
6. FCU/OBD/Start key
7. Spare fuse
8. Spare fuse

Basic Parameters



		RQi
Features	Motor Rated Power	5000 W
	Battery Capacity	72 V 36 Ah*2
	Max.Speed	110 km/h
	Dimension	2080 x 827 x 1084 mm
	Product weight	186 kg
	Maximun Load	150 kg
	Number of seating positions	2
	Range	100 km
	Gradeability	30 %
Battery System	Voltage	72 V
	Standard Charging Current	11 A
	Maximun Discharging Current	180 A
Electrical System	Headlight/Turn/Indicator Taillight/Brake/Light Meter Panel	12 V LED
	Central Control Unit	12 V
	USB Charging	5 V/1 A
Power System	Motor	Tailored Motor by Quanshun
	Motor Control Mode	FOC Vector Control
	FOC Controller Max. Current	180 A
Frame	Front/Rear Damper	Hydraulic/Spring-air
	Front Tyre Specification	110/70-17
	Rear Tyre Specification	140/70-17

Frame	Brake System	Combined Braking System[CBS]
	Minimum Ground Clearance	167 mm
	Seat Heihgt	825 mm

Maintenance Record

Date		Mileage	
Notes:			
Dealer:			

Maintenance Record

	Mileage	

Maintenance Record

	Mileage	

Maintenance Record

	Mileage	

Maintenance Record

	Mileage	