

AT200K-35, AT200K-35X,
AT200K-35R, AT200K-35H

OWNER'S MANUAL

ALTIS

E - POWERSPORTS



READY
FOR
TAKEOFF

This Owner's Manual contains important safety information.
Read this Owner's Manual carefully before riding and keep it
in a safe place after reading it.

The rider must have a valid driver's license.

www.altispowersports.com



Introduction

Thank you for purchasing ALTIS electric motorcycle. We wish you a safe and enjoyable ride on your future journey!

Read this Owner's Manual carefully before operating this vehicle and keep it in a safe place after reading it. It contains instructions on your vehicle's operation, troubleshooting and maintenance, as well as guidelines on how to safeguard yourself and others from trouble and injury.

It provides the latest information at the time of printing. As our products are constantly being improved, there may be some differences between your vehicle and that described in this manual. Please refer to the actual product.

We reserve the right to make changes to this manual at any time without prior notice and assume no liability for such changes.

Unauthorized modifications to your vehicle are prohibited.

People who are 14 years of age or older are permitted to use this vehicle.

This manual applies to the following models: AT200K-35, AT200K-35X, AT200K-35R, AT200K-35H, with illustrations based on the AT200K-35 model. (AT200K-35 and AT200K-35X are not intended for riding on roads.)

If you have any questions about this manual, consult after-sales service from whom you purchased your vehicle.

© 2026 Altis Powersports Inc. All rights reserved.

No part of this manual may be reproduced without written permission of Altis Powersports Inc.

Printed in April, 2026



Table of Contents

1. Important Information

1.1	Warning Symbols	4
1.2	Vehicle Warning Labels	5
1.3	Vehicle Information	7
1.4	Smartphone App	9

2. Safe Riding

2.1	Safety Guidelines	10
-----	-------------------------	----

3. Vehicle Overview

3.1	Main Components	14
3.2	Electrical Components	16
3.3	Meter	18
3.4	NFC Cards and Mechanical Keys	20
3.5	Charging Port	21
3.6	Kickstand Kill Switch	23
3.7	Seat	23
3.8	Front Shock Absorber	24
3.9	Rear Shock Absorber	24

4. Operating Guidelines

4.1	Meter Settings	25
4.2	OTA Update	40

5. Riding Guidelines

5.1	Pre-Ride Check	42
5.2	Starting	43
5.3	Riding	45
5.4	Braking	45
5.5	Walk Mode	46
5.6	Parking	46

6. Battery and Charging

6.1	Battery	47
6.2	Battery Installation and Removal	48
6.3	Charger	49
6.4	How to Charge	50

7. Maintenance

7.1	Maintenance Schedule	53
7.2	Motor & Controller	55
7.3	Gear & Oil	55
7.4	Tires	56
7.5	Brake Fluid	58
7.6	Brake Pads and Brake Discs	59
7.7	Kickstand	60

Table of Contents



7.8	Throttle Grip	60
7.9	Chain & Spoke.....	61

8. Troubleshooting

8.1	List of Fault Codes	63
-----	---------------------------	----

9. Other Information

9.1	Caring for Your Vehicle.....	71
9.2	Storing Your Vehicle	71
9.3	Transporting Your Vehicle.....	72

10. Specifications

11. Index

12. Electrical Schematic

1. Important Information

1.1 Warning Symbols

Particularly important information is distinguished in this manual by the following symbols.

To ensure your safety and the safety of others, when the following symbols appear, be sure to read their contents carefully and follow the instructions.



DANGER

Failure to follow the instructions will result in serious injury or death.



WARNING

Failure to follow the instructions may result in serious injury or death.



CAUTION

Failure to follow the instructions may result in injury.



NOTICE

Special precautions are required to prevent damage to your vehicle or other property.

Your safety and the safety of others are very important. It is your responsibility as the owner to operate your vehicle safely and properly. Operation procedures related to the safety symbols and other information are provided in this manual to help you make the right decisions regarding safety.

The information is intended to alert you of potential hazards that may harm you or others.

Be sure to follow these instructions to safely operate and properly maintain your vehicle.

1.2 Vehicle Warning Labels

Read all warning labels on your vehicle carefully. These labels contain important safety information that must be observed while riding.



High-temperature
warning label



High-voltage
warning label



WARNING

When charging, connect the charger to the battery first and then plug it into an electrical outlet to prevent the charger from burning out.

Charging port warning label



Important Information



WARNING

- This vehicle is designed and manufactured for off-road use only. it does not conform to Federal Motor Vehicle Safety Standards, and operation on public streets, roads, or highways is illegal.
- Rider should wear full set protective apparel and gear to avoid physical injury.
- Rider should have off-road riding knowledge and skills, and beginners must ride under supervision and guidance of parents.
- To reduce risk of injury, we strongly recommend that you read the owner's manual before riding.

Safe riding warning label 1



NOTICE

If you need to replace the battery, perform the following steps:

1. Turn off the vehicle.
2. Open the seat lock and flip the seat forward.
3. Remove the battery pressure plate and replace the battery.
4. Check that the battery is properly installed and energized.

Safe riding warning label 2

Tire pressure:225Kpa Max rider weight:220lbs Chain spec:520X3

Chain/Tire pressure/Load warning label

1.3 Vehicle Information

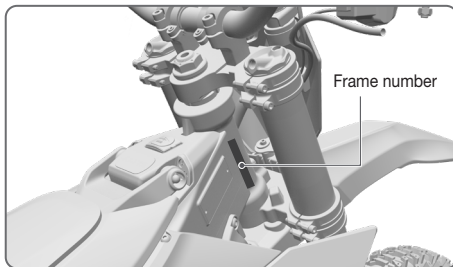
The frame number, vehicle nameplate and motor number are unique identifications of your vehicle.

These are required when registering your vehicle. They may also be required by after-sales service when ordering replacement parts.

Refer to the illustrations below to find the information on your vehicle.

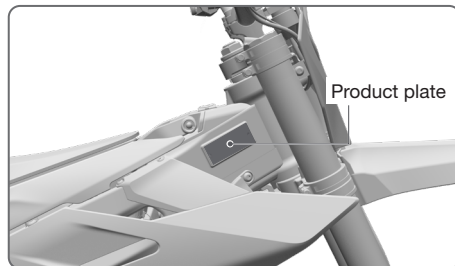
▼ Frame Number

The frame number is located on the right side of the steering column.



▼ Vehicle Nameplate

Your vehicle nameplate is located on the right side of the body and near the steering column.

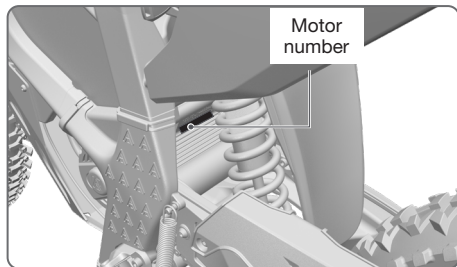




Important Information

Motor Number

The motor number is located at the rear of the motor.



1.4 Smartphone App

You can use the app installed on your smartphone to register and OTA upgrade your vehicle.

App features may be updated with new versions of the app.

- For iOS devices, search for "HiRiders" in App Store to download.
- For Android devices, search for "HiRiders" in Google Play Store to download.

2. Safe Riding

2.1 Safety Guidelines

As the owner, you are responsible for operating your vehicle safely and properly. Each rider should be familiar with the following requirements before riding your vehicle.

- The rider should undergo proper training in safe riding techniques and obtain the relevant certification.
- Operate this vehicle in compliance with local traffic safety regulations.
- Follow all warnings, instructions, and maintenance requirements provided in this manual.

▼ Riding Equipments

Riding equipments are essential to ensure your safety and comfort. Be sure to select the appropriate certified riding equipments based on the actual weather and road conditions.

Helmet

Choose a helmet that meets national standards, is highly visible, and fits properly.



WARNING

A helmet must be worn at all times while riding. A full-face helmet with face shield is recommended.

Gloves

Full-finger leather gloves with abrasion resistance are recommended.

Boots

Wear protective boots that fit well without affecting your riding.

Clothing

Protective, highly visible, long-sleeved jacket and durable trousers for riding (or a motorcycle riding suit).

Rain Gear

When riding under rainy or wet conditions, it is recommended to wear a raincoat or waterproof riding suit. For long-distance riding, it is recommended to carry rain gear. Keeping the body dry improves the rider's comfort and helps maintain alertness, which can prevent accidents.



▼ Tips for Safe Riding

- Make sure that you are physically fit and mentally focused before riding. Do not drink alcohol or take medication before or during riding.
- Ride cautiously and keeping your hands on the handlebars and feet on the footrests.
- Always pay attention to other vehicles around you, stay alert, and be prepared for emergency braking or evasive maneuvers.
- Accelerate and brake smoothly, switch on the turn signal lights before turning or changing lanes, and use your horn if necessary.
- Avoid riding while fatigued, as fatigue and inattention can impair your ability to exercise good judgement and ride safely.
- Keep your vehicle properly maintained and in good riding condition.
- Your vehicle's braking performance may be reduced under wet conditions, such as slippery roads, so be sure to ride cautiously at lower speed.
- The braking distance will increase in rain or snow, so reduce speed and ride carefully. Whenever possible, avoid riding in bad weather such as heavy rain or strong wind.
- Do not ride through deep water when the water surface is higher than the center of the motor axle. Deep water may get into the motor and cause it to malfunction.

▼ If You are Involved in a Crash

Personal safety is your top priority. If you or anyone else has been injured, take time to assess the severity of the injuries and whether it is safe to continue riding.

Call for emergency assistance if necessary. Also follow local laws and regulations if another person or vehicle is involved in the crash.

If you decide to continue riding, turn off the power switch and evaluate the condition of your vehicle.

Check the battery for damage, ensure all critical nuts and bolts are securely fastened, and inspect the handlebar, brakes and wheels. Ride slowly and cautiously.

After an accident, have your vehicle inspected and repaired by a qualified service facility as soon as possible. During transport, keep the following in mind:

- If your vehicle is extensively damaged in a crash, there may be a risk of electric shock. Do not touch any electrical components (refer to 16) or their connecting wires.
- Avoid contact with the brake fluid. A serious crash may cause leakage of the brake fluid. Avoid contact of the brake fluid with your skin or eyes.

Safe Riding



DANGER

This vehicle uses a high-voltage lithium battery. Improper handling during an accident may result in serious injury or death.

In the event of an accident, follow the procedures and instructions described in this manual.

▼ Battery

If the battery emits an unusual odor, there may be a malfunction. Immediately park your vehicle in a safe outdoor location and away from flammable materials, turn off the power switch, and contact after-sales service as soon as possible.

(For information on how to charge the battery, refer to 49)

Do not attempt to disassemble or modify the battery.

▼ Braking System

Observe the following guidelines:

- Avoid excessive emergency braking.
Sudden braking may cause tires to slip and reduce your vehicle's stability. Reduce speed before turning.
- Exercise caution on low traction surfaces.
The tires slip more easily on such surfaces and braking distances are longer.
- Repeated braking, such as when descending long, steep slopes can seriously overheat the brakes, reducing their effectiveness.
- For optimal braking performance, operate both the front and rear brakes together.

▼ Accessories and Modifications

Modifications to this vehicle are strictly prohibited.

Modifying your vehicle may also void your warranty and make your vehicle illegal to operate on public roads.

The user alone shall be responsible for any quality issues or consequences resulting from unauthorized modifications.



Improper accessories or modifications may cause accidents and pose a risk of serious injury or death to you and others.

Follow all instructions in this manual regarding accessories and modifications.

▼ Loading Guidelines

This vehicle is designed for one rider only. Do not carry any additional passenger to avoid accidents.

Maximum load capacity: 220 lbs.

Overloading affects your vehicle's handling, braking and stability. Avoid overloading and keep within specified load limits.

Always ride at a safe speed when carrying heavy loads.

Secure the load properly on your vehicle. Make sure the load does not shift side to side while riding, and adjust it if necessary.

Do not place any items near the lights or motor.

Do not place any items near the handlebar, as they may interfere with handlebar operation.

Do not carry items that are excessively heavy or bulky.



Overloading, improper loading or carrying too many people may lead to accidents and cause serious injury or death.

Follow the loading guidelines in this manual for safe loading.

3. Vehicle Overview

3.1 Main Components

- 1 Left handlebar switch
- 2 Meters
- 3 Right handlebar switch
- 5 Seat
- 6 Rear fender
- 7 Rear shock absorber
- 8 Footrest
- 9 Kickstand
- 10 Front fender



Vehicle Overview



11 Right brake lever
(brake switch)

12 Left brake lever
(brake switch)

13 Steering lock

14 Front shock absorber

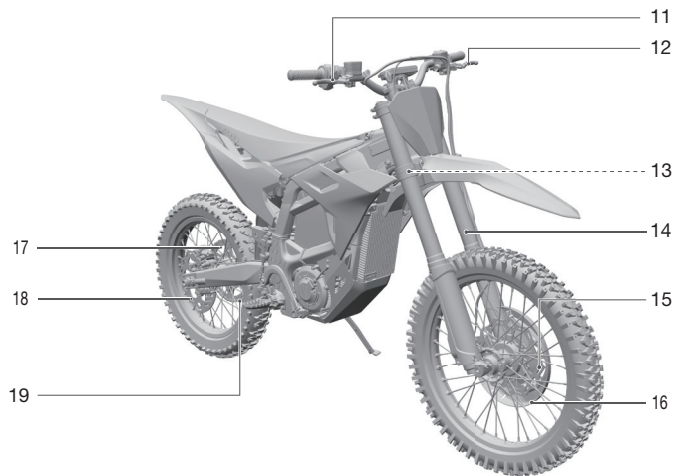
15 Front disc brake pad

16 Front disc brake guard

17 Rear sprocket

18 Rear disc brake pad

19 Chain

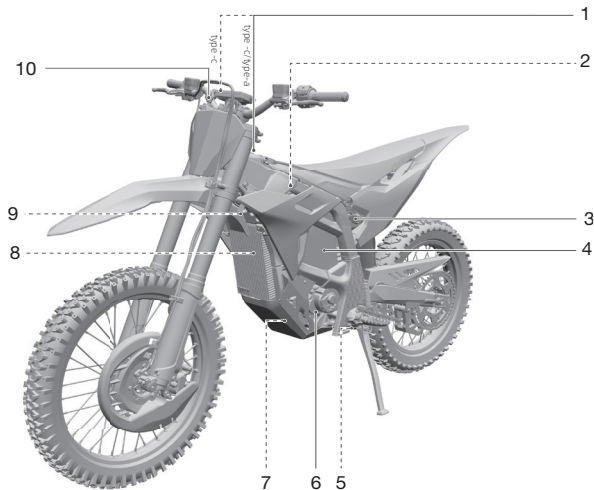




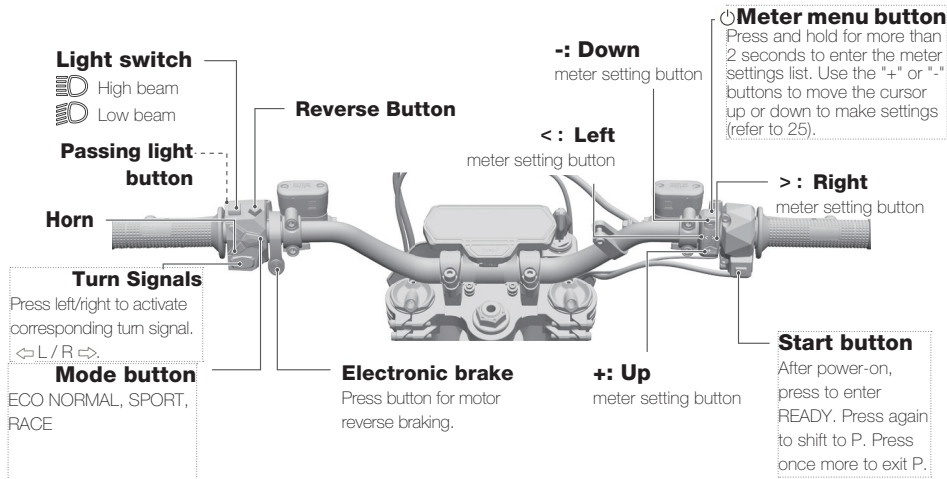
Vehicle Overview

3.2 Electrical Components

- 1 Power Outlet 5V
- 2 Charging Port
- 3 Seat lock
- 4 Battery
- 5 Kickstand kill switch
- 6 Motor
- 7 DC - DC Converter
- 8 PCU
- 9 Horn
- 10 Ignition lock



Vehicle Overview



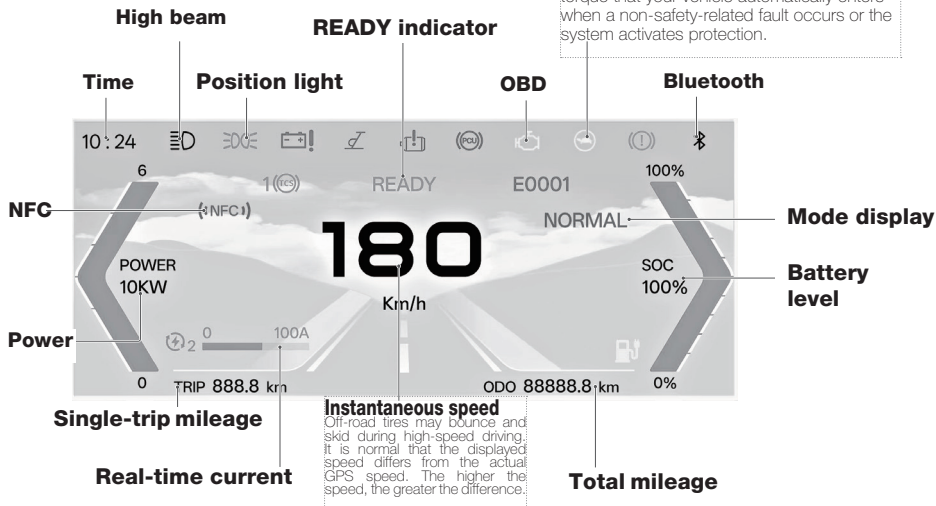
Vehicle Overview

3.3 Meter

▲ Main Screen

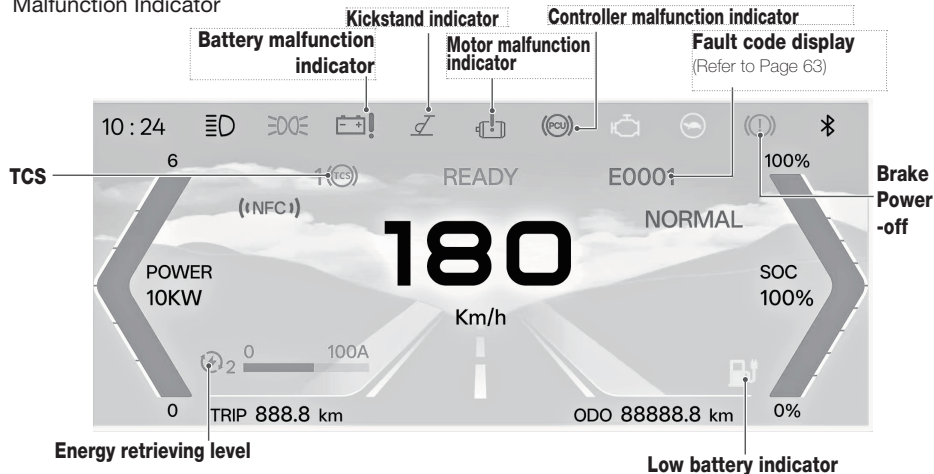
Limp mode

A safe driving mode with limited speed and torque that your vehicle automatically enters when a non-safety-related fault occurs or the system activates protection.



Vehicle Overview

Malfunction Indicator



NOTICE

When your vehicle is turned on, all the indicators will briefly light up and then turn off. If any of the above indicators fails to operate as described, contact after-sales service for troubleshooting.

Vehicle Overview

3.4 NFC Cards and Mechanical Keys

Your vehicle is equipped with two NFC cards (one main card (red), one secondary card (black)) and two mechanical keys.



NOTICE

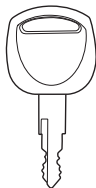
Always carry an NFC card or a spare mechanical key with you when using your vehicle, and store them securely after use to prevent loss.

If you lose any key or NFC card, contact after-sales service.



Main card: red

Secondary card: black



→ NFC Card Instruction (refer to 36)

→ Mechanical keys instruction (refer to Page 45)



NOTICE

The NFC wireless communication system uses low-intensity radio waves. It may interfere with medical devices such as pacemakers.

Operating Range

The operating range of the NFC card is within 30 mm of the NFC reading area.

The NFC wireless communication system may not work properly under the following conditions.

- When there are facilities nearby that generate strong radio waves or noise (e.g., TV towers, power stations, broadcasting stations, or airports).
- When you carry the NFC card with other wireless communication devices, such as laptops, radios or mobile phones.
- When the NFC card comes into contact with metal or is covered by metal objects.

Precautions for Using the NFC Card

- Do not bend or press the NFC card forcefully, or place heavy items on it.
- Store the NFC card properly, away from direct sunlight, high temperatures and high humidity.
- Do not scratch or pierce the NFC card.
- Do not store it near magnetized products such as magnetized key chains.
- Always keep the NFC card away from electrical products (e.g., TVs, radios, computers or low-frequency massage devices).
- Keep the NFC card away from liquids. If it gets wet, dry it immediately with a soft cloth.
- Keep the NFC card away from your vehicle while washing your vehicle.



- Do not burn the card.
- Do not wash the NFC card in an ultrasonic cleaner.
- If fuel, wax or grease adhere to the NFC card, wipe it off immediately.
- Do not disassemble the NFC card.
- Do not lose your NFC card. If it is lost, you will need to register a new NFC card and contact after-sales service.
- Do not change the usage scenarios or conditions, expand the transmission frequency range, increase the transmission power (including adding RF power amplifiers), or modify the transmission antenna without authorization.
- Do not produce harmful interference to other legitimate radio stations, or claim protection from harmful interference.
- It must withstand interference from industrial, scientific, and medical (ISM) application equipment emitting RF energy, or from other legitimate radio stations.
- If it generates any harmful interference with other legitimate radio stations, stop using the card immediately and take measures to eliminate the interference before resuming.
- When using micro-power equipment in aircraft and electromagnetic environment protection areas, such as military and civilian radio stations, including radio astronomy observatories, weather radar stations, satellite ground stations (including measurement and control, ranging, receiving and navigation stations), and

airports, which are planned and built in accordance with national laws, regulations and standards, be sure to comply with regulations related to electromagnetic environment protection and issued by relevant authorities.

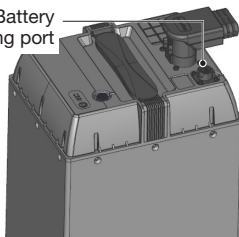
3.5 Charging Port

The battery charging port is located at the side of the battery as shown. Please press to open the charging port cover .

→For precautions regarding the use of the battery, refer to 47.

→ For instructions on how to charge the battery, refer to 50.

Battery
charging port

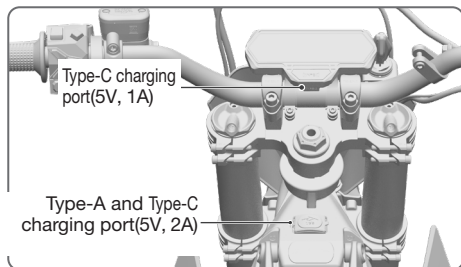


Vehicle Overview

▼ USB Charging Ports

There are two USB charging ports located on the right side of the meter and in front of the seat (see illustration). Open the covers to use.

Types of the USB charging ports:
Type-A/Type-C



Precautions for Use

- Handle the USB charging plug carefully. Do not shake the plug side to side or up and down while inserting or removing it.
- The USB charging port provides voltage output only after the power is turned on.
- To prevent foreign matter or water from entering the USB charging port, keep the cover closed when not in use.
- To prevent any damage caused by movement or vibration during riding, place your connected devices securely.
- Disconnect all devices and charging cables, and close the cover before washing your vehicle.
- Do not operate the connected devices during riding.



NOTICE

Do not use devices that generate heat or exceed the allowable power capacity.

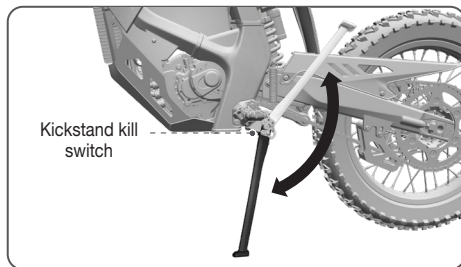
Do not use the charging ports when they are wet.

Make sure the charging cables of connected devices do not interfere with steering or riding.

Vehicle Overview

3.6 Kickstand Kill Switch

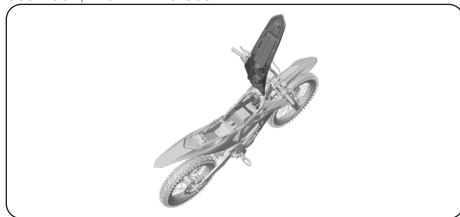
This vehicle is standardly equipped with a kickstand kill switch. If the kickstand is not retracted, the motor will not operate, and your vehicle cannot be used.



3.7 Seat

The seat lock is located on the left rear side of your vehicle, see page 14.

Insert the mechanical key, turn clockwise to unlock the seat lock, then lift the seat.

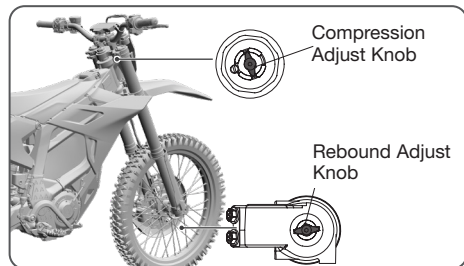


When closing the saddle, it will lock automatically. Please remember to remove your mechanical key and cover the saddle lock cap.

Vehicle Overview

3.8 Front Shock Absorber

Front shock compression and rebound are adjustable to suit riding preferences.



▼ Compression Damping Adjustment

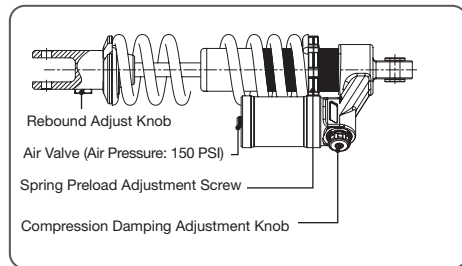
Rotate clockwise to increase compression damping; counterclockwise to decrease.

▼ Rebound Damping Adjustment

Rotate clockwise to slow rebound; counterclockwise to speed it up.

3.9 Rear Shock Absorber

The rear shock compression and rebound are adjustable to suit your riding preferences.



▼ Rebound Adjust

Rotate clockwise to slow rebound; counterclockwise to speed up rebound.

▼ Spring Preload Adjustment Screw

Rotate clockwise to increase preload; counterclockwise to decrease preload.

▼ Compression Damping Adjustment Knob

Rotate clockwise to increase compression damping (firmer); counterclockwise to decrease (softer).

4. Operating Guidelines

4.1 Meter Settings

The meter offers Day, Night and Automatic screen theme modes, and supports both English and Spanish for user settings. Day mode and English are used for illustration in this manual.

The meter lights up when your vehicle is turned on. Confirm that your vehicle is in P mode, and then you can perform relevant operation settings.

→ For instructions on how to start your vehicle, refer to Page 43.

▼ Password Setting

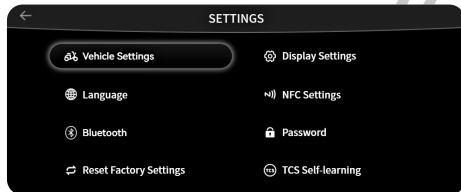
A verification password is required the first time you access the meter settings screen. The default password is "0000". If you want to change or reset the password, refer to Page 38.

▼ Main Screen

Press and hold the Meter Menu Button for more than 2 seconds to enter the main interface setting list (as shown in the figure). Use the +, -, >, < and buttons to move the cursor up, down, left and right. Press the Meter Menu Button to enter the corresponding menu.

Select "Exit" and press the Meter Menu Button to exit the menu.

Press and hold the Meter Menu Button to return to the previous menu.



- Vehicle Settings (Please refer to Page 26)
- Display Settings (Please refer to Page 33)
- Language (Please refer to Page 35)
- NFC Settings (Please refer to Page 36)
- Seat Lock (Please refer to Page 23)
- Bluetooth (Please refer to Page 38)
- Password (Please refer to Page 38)
- Reset Factory Settings (Please refer to Page 39)
- TCS Self-Learning (Please refer to Page 31)

Operating Guidelines

4.1.1 Vehicle Settings

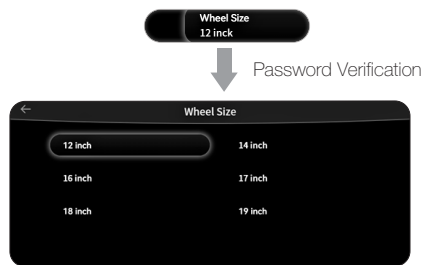
▼ Wheel Size Setting

Enter your vehicle Settings menu and select Wheel Size.

Press the Meter Menu Button; after password verification, you will enter the setting page.

Use the +, -, >, and < buttons to move the cursor up, down, left, and right to select 12inch/14inch/16inch/18inch/19inch.

Press the Meter Menu Button to save and return to the previous menu.

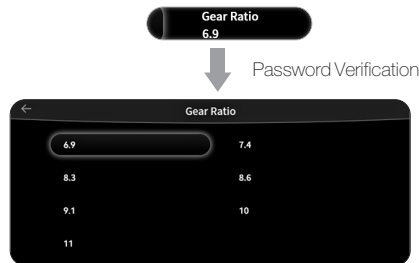


▼ Gear Ratio Setting

Enter your vehicle Settings menu and select Gear Ratio.

Press the Meter Menu Button; after password verification, you will enter the setting page.

Use the +, -, >, and < buttons to move the cursor up, down, left, and right to select values such as 6.9/7.4/8.3/8.6/9.1/10/11. Press the Meter Menu Button to save and return to the previous menu.



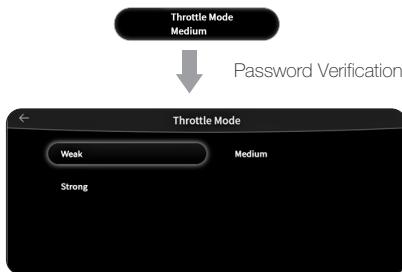


▼ Throttle Setting

Enter your vehicle Settings menu, select Throttle Mode and press the Meter Menu Button. After password verification, you will enter the setting page.

Use the +, -, > and < buttons to move the cursor up, down, left and right. You can select one of the three modes: Weak / Medium / Strong.

Press the Meter Menu Button to save and return to the previous menu.

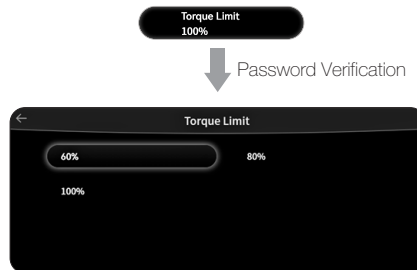


▼ Torque Limit

Enter your vehicle Settings menu, select Torque Limit and press the Meter Menu Button. After password verification, you will enter the setting page.

Use the +, -, > and < buttons to move the cursor up, down, left and right. You can select 60% / 80% / 100%.

Press the Meter Menu Button to save and return to the previous menu.

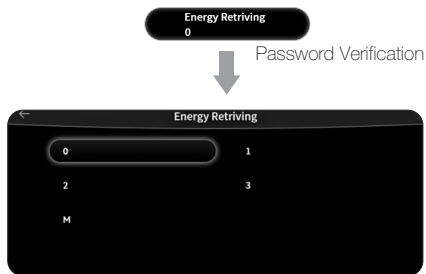




Operating Guidelines

▼ Energy Retrieving

Enter your vehicle Settings menu, select Energy Retriving and press the Meter Menu Button. After password verification, you will enter the setting page. Use the +, -, > and < buttons to move the cursor up, down, left and right. You can select the energy recovery level: 0/1/2/3/M. Press the Meter Menu Button to save and return to the previous menu.

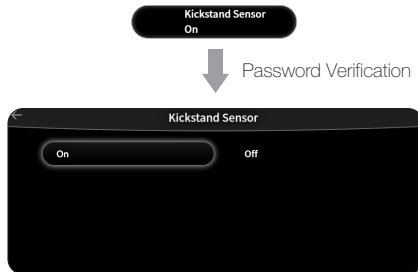


It can also be set using the "+" or "-" buttons on the meter.

▼ Kickstand Switch Enable Control

Enter your vehicle Settings menu, select Side Sensor and press the Meter Menu Button. After password verification, you will enter the setting page.

Use the +, -, > and < buttons to move the cursor up, down, left and right. Select On to enable or Off to disable. Press the Meter Menu Button to save and return to the previous menu.



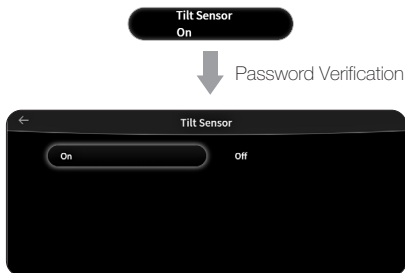


▼ Tilt Enable Control

Enter your vehicle Settings menu, select Tilt Sensor and press the Meter Menu Button. After password verification, you will enter the setting page.

Use the +, -, > and < buttons to move the cursor up, down, left and right. Select On to enable or Off to disable.

Press the Meter Menu Button to save and return to the previous menu.

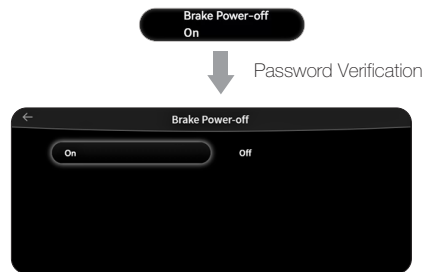


▼ Brake Power-Off Enable Control

Enter your vehicle Settings menu, select Brake Power-off and press the Meter Menu Button. After password verification, you will enter the setting page.

Use the +, -, > and < buttons to move the cursor up, down, left and right. Select On to enable or Off to disable.

Press the Meter Menu Button to save and return to the previous menu.





Operating Guidelines

▼ RACE Gear Enable Control

Enter your vehicle Settings menu, select RACE Gear and press the Meter Menu Button to enter the settings. After password verification, you will enter the setting page.

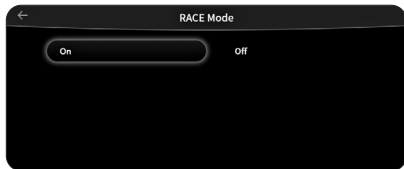
Use the +, -, > and < buttons to move the cursor up, down, left and right. Select On to enable or Off to disable.

Press the Meter Menu Button to save and return to the previous menu.

RACE Mode
Off



Password Verification



NOTICE

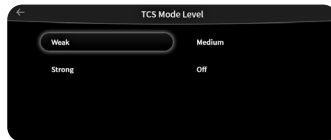
Only the NFC master card (red card) and mechanical key for starting your vehicle can access this settings page.

A Liability Waiver will appear after the setting, so be sure to read it carefully.



▼ TCS Settings (TCS will be continuously updated via OTA)

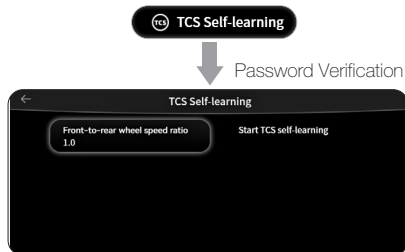
Enter your vehicle Settings menu, select TCS Mode Level, and press the Meter Menu Button. After password verification, you will enter the settings page. Use the +, -, > and < buttons to move the cursor up, down, left and right. You can select Off / Weak / Medium / Strong. Press the Meter Menu Button to save and return to the previous menu.



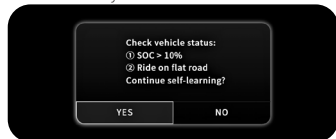
Operating Guidelines

▼ TCS Self-Learning Procedure

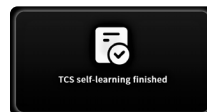
Enter your vehicle Settings menu, select TCS Self-learning, and press the Confirm. After password verification, you will enter the settings page.



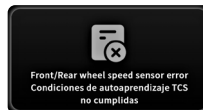
After entering, the meter will pop up a reminder: "Please check your vehicle status: ① Ensure your vehicle power is above 10% ② Ride on a flat road surface" and ask "Do you want to continue self-learning?"



If "Yes" is selected, the meter will send ": Enter self-learning mode". The meter will pop up a reminder: Please start your vehicle and ride at a constant speed (± 2 mph) for more than 3 seconds. The display will return to the main interface during riding.



Upon successful self-learning, the meter will pop up and display "Tcs self-learning finished".



If the pop-up shown above appears, it means the self-learning conditions are not met, and the front/rear wheel speed sensor is abnormal.



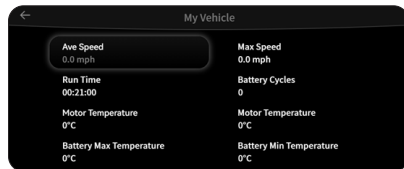
Operating Guidelines

▼ Riding Information

Navigate to the Vehicle Settings menu, select "My Vehicle", and press the Meter Menu Button to enter your vehicle information display page. The information displayed includes:

Press "←" to return to the previous menu.

 Vehicle Settings

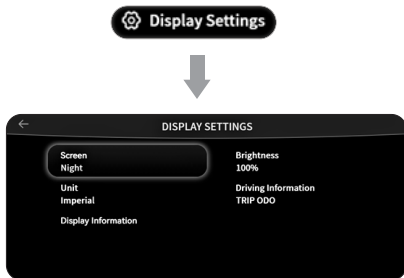




4.1.2 Display Settings

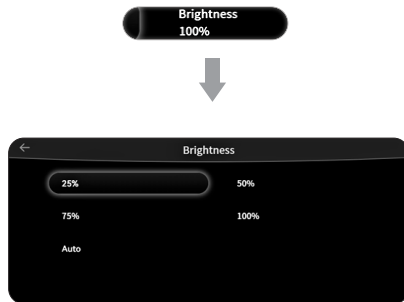
▼ Screen Theme settings

Enter the Display Settings menu, select Screen and press the Meter Menu Button to enter the setting page. Use the +, -, > and < buttons to move the cursor up, down, left and right. You can select Day / Night / Auto. Press the Meter Menu Button to save and return to the previous menu.



▼ Screen Brightness Adjustment

Enter the Display Settings menu. Use the +, -, >, and < buttons to move the cursor up, down, left, and right. Select Brightness and press the Meter Menu Button to enter the settings. You can choose 25% / 50% / 75% / 100%. Press the Meter Menu Button to save the settings and return to the previous menu.

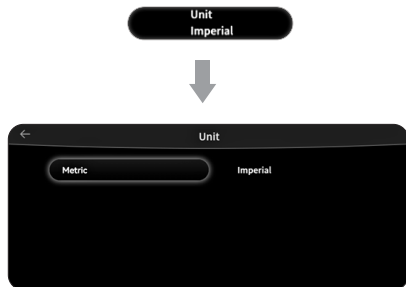




Operating Guidelines

▼ Conversion Between Imperial and Metric Units

Enter the Display Settings menu, select Unit and press the Meter Menu Button to enter the settings. Use the +, -, > and < buttons to move the cursor up, down, left and right. You can select Metric / Imperial. Press the Meter Menu Button to save and return to the previous menu.



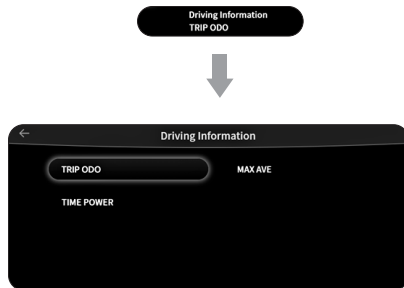
▼ Riding Information

Enter the Display Settings menu, select Driving Information and press the Meter Menu Button to enter the settings. Use the +, -, > and < buttons to move the cursor up, down, left and right. You can select one of the three display modes: TRIP ODO / MAX AVE / TIME POWER.

TRIP ODO: Mileage of this trip and total mileage

MAX AVE: Maximum speed and average speed

TIME POWER: Riding time and instantaneous current

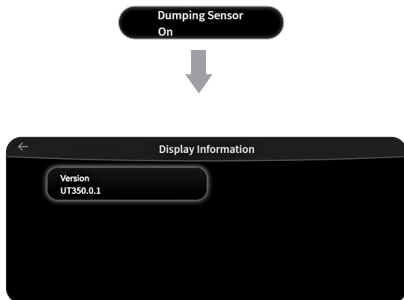




Operating Guidelines

▼ Meter information

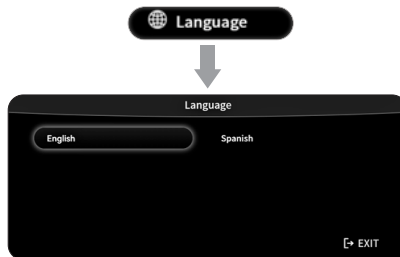
Navigate to the "Display Settings" menu, select "Display Information", and press the Meter Menu Button to enter the meter information menu. The version of the current meter firmware will be displayed.



4.1.3 Language Selection

The meter allows users to choose between Spanish and English. Press and hold the Meter Menu Button to enter the settings page.

Use the + or - buttons to move the cursor up and down, and select Language. Press the Meter Menu Button to enter the language selection interface. Move the cursor to switch between English and Spanish. Press the Meter Menu Button to confirm the setting and return to the previous menu.

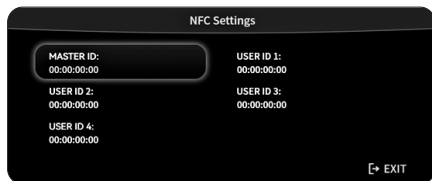




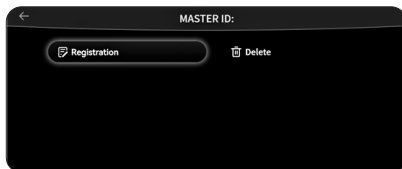
Operating Guidelines

4.1.4 NFC Settings

Enter the Display Settings menu, select NFC Settings, and press the Meter Menu Button to enter the NFC binding list. MASTER ID refers to the master card ID, and USER ID refers to the user card ID. The default value is 00:00:00:00 when your vehicle is not bound with card.

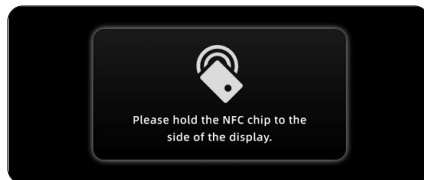


Select any card and press the Meter Menu Button to enter the binding and unbinding page.



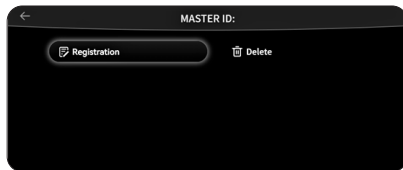
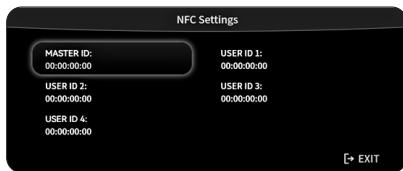
▼ NFC Registration

Enter the NFC card information binding and unbinding page. Select Registration and press the Meter Menu Button. A window will pop up prompting you to bring the NFC card close. At this time, place the NFC card near the meter's sensing area (see Page 34). After successful recognition, it will return to the previous page and display the NFC card information.



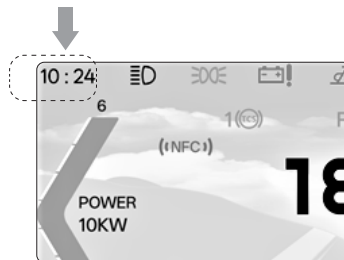
▼ NFC Deregistration

Enter the NFC card information binding and unbinding page. Select Delete and press the Meter Menu Button. The NFC card information will be deleted and return to the previous page, displaying the NFC card list information.



4.1.5 Time Display

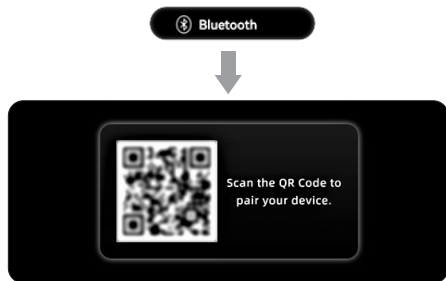
Displays uptime when not connected to the App. Displays real-time clock when connected.



Operating Guidelines

4.1.6 Bluetooth Connection

Press and hold the Meter Menu Button to enter the settings menu. Use the +, -, >, and < buttons to move the cursor up, down, left, and right. Select the Bluetooth option and press the Meter Menu Button to enter the Bluetooth QR code interface. You can scan the QR code with your mobile APP. After successful connection, the interface will automatically return to the main screen, and the Bluetooth icon will light up.

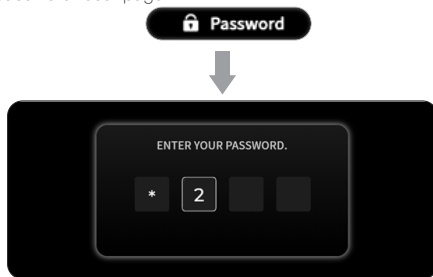


NOTICE

For Bluetooth connection, the distance between the meter and the smartphone should be under 10 m.

4.1.7 Password Setting

The default meter password is 0000. You can reset the password here if you forget it. Press and hold the Meter Menu Button to enter the system settings. Use the + or - buttons to move the cursor up and down, and select Password. Press the Meter Menu Button to enter the password reset page.

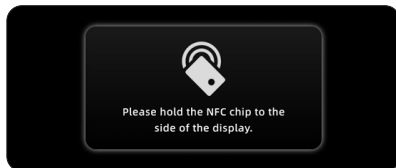


NOTICE

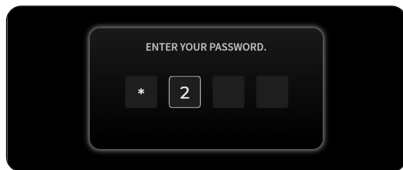
This settings page can be accessed only with the NFC main card (red).



Select "Reset Password" and press the Meter Menu Button to display the NFC main card (red) authentication window. Place the NFC main card (red) near the left side of the meter for authentication (refer to Page 41).



After the NFC main card (red) is authenticated, you will be prompted to "Enter your Password". Use the "+" or "-" buttons to toggle between the numbers "0-9", and press the Meter Menu Button to switch digits. Once you've finished, you will be prompted to "Confirm your Password". Repeat the previous operation to confirm the password. Finally, press the Meter Menu Button to successfully reset the password.



4.1.8 Restore Factory Settings

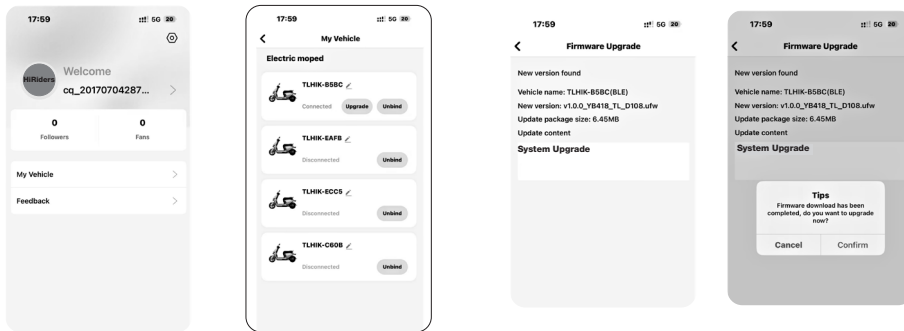
Press and hold the Meter Menu Button to enter the settings menu. Use the + or - buttons to move the cursor up and down. Select Reset Factory Settings and press the Meter Menu Button to enter the confirmation page. Press Confirm and the meter will restart automatically to restore factory settings. Press exit to return to the previous menu.

↩ Reset Factory Settings



Operating Guidelines

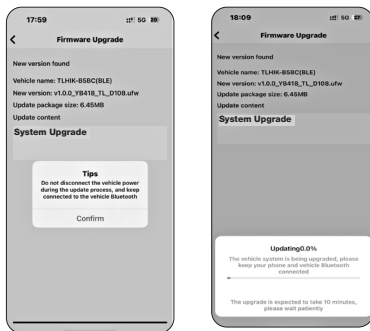
4.2 OTA Update



After the meter is turned on, it needs to pair with the mobile App first. After successful pairing,, the OTA upgrade will be initiated and confirmed via the mobile App.Tap My Vehicle in the App to enter your vehicle pairing interface, then tap Upgrade to view the available new software information. On the software update details page, select the latest version to upgrade. After confirmation, the system will automatically run the upgrade process.

On the software update details page, select the latest version to upgrade and tap Download Now to start firmware download.Wait for the pop-up prompt indicating that the firmware download is complete.

Operating Guidelines



When the progress bar shows 100%, the upgrade is complete. The meter may temporarily go black during the upgrade, which is normal.

Confirm whether the upgrade is ready according to the pop-up prompt.

After confirmation, tap OK, and the meter will start the firmware upgrade automatically.

A temporary black screen may appear on the meter, which is normal during the upgrade process.



5. Riding Guidelines

5.1 Pre-Ride Check

Check the following items every time before you ride your vehicle to ensure that it is in safe working condition.

Always follow the check items, maintenance procedures, and maintenance schedule specified in this manual (refer to Page 53).

Battery level	Check the remaining level of the battery, and recharge it if necessary.	Page 47
Meter	Check for any damage or dirt, and see if any malfunction indicators appear when the meter lights up.	Page 18

Lights	Check that all the lights are working properly.	Page 16
Handlebar	Check if it operates smoothly in all steering positions.	--
Brake levers	Check if the braking operates smoothly.	Page 45
Front and rear brakes	Check the brake fluid level and brake pad wear.	Page 59
Tires	Check the tire condition and tread. Inflate or deflate it if necessary.	Page 56
Kickstand switch	Check that it is working properly.	Page 60



5.2 Starting

There are two ways to start your vehicle, as shown below.

If your vehicle stops running for a long time while turned on, it will enter parking mode.

Press the Start button to restore power.

If the brake power-off function is disabled in the meter settings (see Page 23), releasing parking mode by gently squeezing the brake lever will also be disabled.

- When SOC > 20% and the battery remains idle for 20 days, the output will be turned off.
- When $10\% < \text{SOC} \leq 20\%$ and the battery remains idle for 5 days, the output will be turned off.
- When $5\% < \text{SOC} \leq 10\%$ and the battery remains idle for 3 days, the output will be turned off.
- When $\text{SOC} \leq 5\%$ and the battery remains idle for 1 day, the output will be turned off.
- In the above four cases, the battery will enter low-power mode, and the NFC card startup function will be unavailable.

In the above four situations, the battery will enter sleep mode, and the NFC card start function will be unavailable. You need to press the battery light panel button for 3 seconds or charge the battery to activate it, then you can start your vehicle with the NFC card or mechanical key.



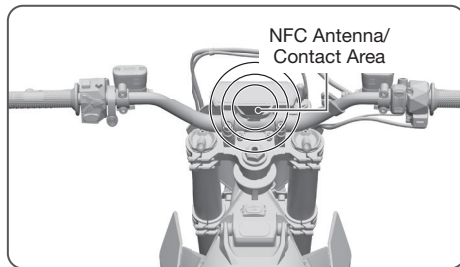
NOTICE

- Start your vehicle Using the NFC Card (refer to Page 43)
- Start your vehicle with the mechanical key. (refer to Page 44)
- Start Vehicle with Password (refer to Page 44)

5.2.1 Starting your vehicle using the NFC Card

Place the NFC card near the NFC reading area on the left side of the meter. When your vehicle receives the NFC unlock signal, your vehicle will be turned on.

Retract the kickstand and press the "Start" switch (or lightly squeeze the brake lever $\geq 0.8\text{S}$) to exit the parking mode and enter the riding mode.



For instructions on how to turn off the power, refer to Page 46.

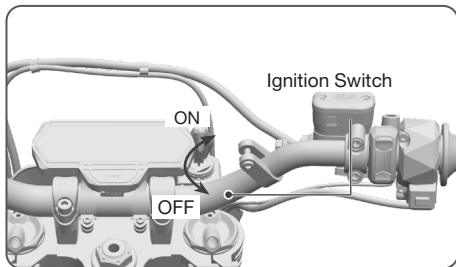


Riding Guidelines

5.2.2 Ignition Switch to Start

Insert the mechanical key into the ignition switch on the front of your vehicle. Turn clockwise to power on your vehicle; turn counterclockwise to rotate off the power.

Kick up the side stand, press the Start button (or gently squeeze the brake lever), and your vehicle will exit parking mode and enter riding mode.



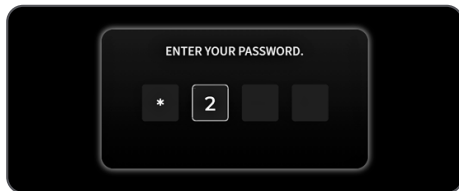
NOTICE

When starting your vehicle with the ignition switch, the power can only be turned off by the ignition switch.

For details on turning off the power, please refer to Page 45.

5.2.3 Start Vehicle with Password

Press and hold the Meter Menu Button for 2 seconds, and the meter will display a startup pop-up. Enter the correct password to start your vehicle.



Press and hold the Meter Menu Button for 5 seconds to display the power-off prompt. Tap Yes to turn off your vehicle.



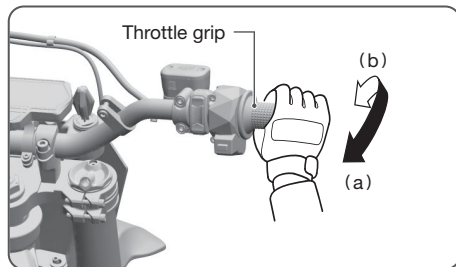
5.3 Riding

Before starting, check the traffic around you and use the turn signal lights to indicate your intended direction.

Make sure that the surrounding conditions are safe for riding, then slowly rotate the throttle grip to set off.

Acceleration: Turn the throttle grip in direction (a).

Deceleration: Turn the throttle grip in direction (b).



WARNING

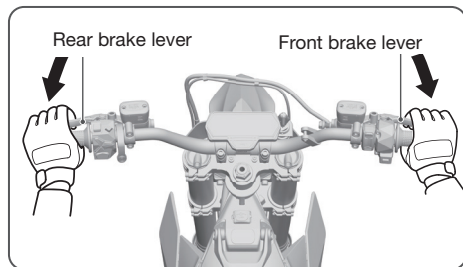
Do not twist the throttle grip rapidly to avoid sudden acceleration, which may result in an accident.

5.4 Braking

When approaching a turn or coming to a stop, reduce speed and begin braking in advance.

Switch on the turn signal lights in advance and be mindful of vehicles and pedestrians around you. Return the throttle grip to its initial position, and then squeeze the brake levers, first slowly then gradually faster.

When operating the front/rear brake lever, the brake switch will be automatically turned on, cutting off the motor's power output.



Riding Guidelines



WARNING

Avoid excessive force or emergency braking (especially when your vehicle is leaning to make a turn), as this may cause slipping or turn over.

Braking on wet roads may cause slipping and result in danger. reduce speed and ride cautiously.

Repeated braking, such as when descending long, steep slopes can seriously overheat the brakes, reducing their effectiveness.

For safety, operate both front and rear brakes together, and use the brakes intermittently to reduce speed.

5.5 Walk Mode



Please note: Enter the push assistance. Engage P gear or long-press the gear to exit this mode.

After releasing P, press and hold the Gear Button for 3 seconds to enter Walk Mode. Shift to P or press and hold the Gear Button for 3 seconds again to exit Walk Mode.

5.6 Parking

Park your vehicle on a solid, flat surface using the kickstand.

If you must park on a slight incline or loose surface, ensure that your vehicle is stable, and prevent it from moving or tipping over.

- 1 Turn off your vehicle.
There are three ways to turn off your vehicle.
 - NFC card: When your vehicle is in standby mode, tap the NFC card on the meter's NFC reading area to turn off your vehicle.
 - Ignition Switch: Turn off the ignition switch to turn off your vehicle.
 - Password: Enter the password on the meter to turn off your vehicle.
- 2 Lower the kickstand and gently lean your vehicle to the left until its weight rests on the kickstand.
- 3 Turn the handlebar all the way to the left. After confirming that your surroundings are safe, get off your vehicle from the left side.



NOTICE

Do not park your vehicle in a location that could obstruct traffic.

Make sure that the power is turned off before leaving your vehicle. Carry the NFC card or spare mechanical key with you to prevent others from operating your vehicle.



6. Battery and Charging

6.1 Battery

This model is equipped with a battery, which is located at the center of the frame (refer to Page16页).



WARNING

Do not attempt to disassemble or modify the battery.

With repeated charging and discharging, the battery capacity will decrease.

When the battery capacity decreases, the distance that you can ride will gradually decrease, even if the power level displayed is full (fully charged).

The discharging performance will gradually decline depending on your riding conditions and your vehicle life.

Your vehicle's mileage may decrease when operated in extreme hot or cold conditions.

If your vehicle will be stored for an extended period, use the original charger to charge the battery every three months, keeping the battery level between 40% and 60%.

If the battery is completely discharged due to prolonged storage and your vehicle cannot be started, connect the charger to recharge the battery for at least 30 minutes before trying to start your vehicle again.

Do not wait until the battery is fully discharged before charging. It may greatly affect the battery life.



DANGER

Improper use of the battery may result in electric shock or fire, which may lead to serious injury or death.

Do not attempt to disassemble the used battery. It should be recycled and handled by a professional recycling service.



NOTICE

The discharge capacity of lithium batteries will weaken in low-temperature conditions ($< 0^{\circ}\text{C}$), and the output power of the entire vehicle will decrease. During use, as the battery temperature rises, the discharge capacity will gradually increase.



NOTICE

If the battery shuts down due to a fault or long-term storage, press and hold the light panel button for 3 seconds to wake up the battery before charging and discharging.

Battery and Charging

6.2 Battery Installation and Removal

This model uses a high-voltage lithium battery. Follow the relevant safety precautions and proceed with the steps below.

Contact after-sales service if you have any questions during the installation and removal process.

▼ Battery Removal

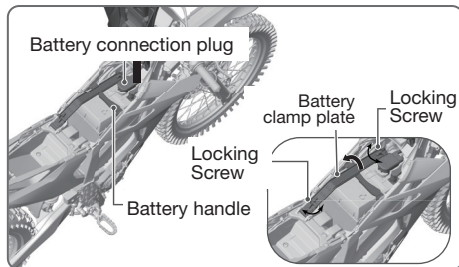
1 Make sure your vehicle is completely turn off.

For instructions on how to turn off your vehicle, refer to 46.

2 Open the seat (refer to Page 23).

3 Remove the battery connection plug.

4 Loosen the locking clip, rotate the battery clamp plate 90° clockwise, and then remove the battery by holding the battery handle.



▼ Battery Installation

Install the battery in the reverse order, connect the plug and close the seat.

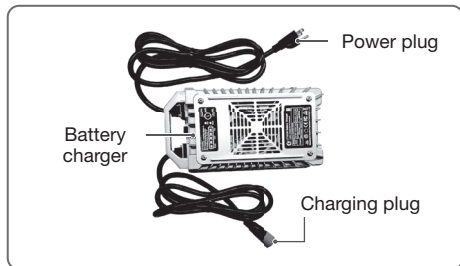
Turn on your vehicle and check if the electrical system is functioning properly (refer to 43).

Battery and Charging

6.3 Charger

Store the battery charger in a place away from direct sunlight and rain.

During charging, you can check the battery's charging status through the indicator lights on the charger.



▼ Charger Indicator Lights

No load	Green LED Flickering
Charging	Slow Charge Red LED Flickering(2Hz)
	Normal Charge Red LED constant ON
	Fully charged Green LED constant ON
Malfunction	Low battery voltage Red LED flicker 4 times Green LED flicker 1 time
	Battery overvoltage Red LED flicker 4 times Green LED flicker 1 time
	Reverse Polarity Red and Green LED flickering alternately
	Short circuit Red and Green LED flicker at the same time
	Input under-voltage / Over-voltage Red LED Flickering(5Hz)
	Over-temperature protection Red LED flicker 2 times Green LED flicker 1 time



WARNING

If the charger or battery malfunctions, stop charging immediately and take your vehicle and charger to after-sales service for inspection, repair, or replacement of parts.

Battery and Charging

6.4 How to Charge

▼ Charging Environment

Charge your vehicle in a well-ventilated, dry and shaded place where it is legally allowed.

Ambient temperature: 0°C (32°F) - 45°C (113°F) .



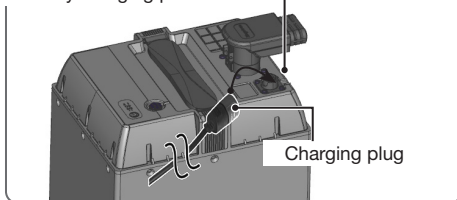
Never charge the battery in a damp or dewy location, or in areas with flammable or explosive materials, volatile flammable gases, or excessive dust.

Do not allow non-professionals to disassemble the internal structure of the battery to prevent accidents.

▼ Charging Method

Always use the battery charger provided with this vehicle to charge the battery.

Battery charging port



When charging, the battery must be in a stable state. Connect the charger to the battery port and then to a household socket.

▼ Charging Time

Charging a fully discharged battery takes about 4 hours. The charging time may be longer at higher or lower ambient temperatures. Do not charge for more than 12 hours to prevent reducing the battery's service life.



▼ Precautions for Charging

- When charging, please insert the battery end first, then the power plug. If there is a "pop" sound, it is normal.
- When stopping charging, please unplug the power plug first, then unplug the battery end plug.
- The charger is dedicated to this vehicle and should not be used for other vehicles to avoid damage.
- The charger outputs direct current (DC), indicated by "+" and "-" polarities. Ensure the correct polarity when connecting.
- The charger must not be immersed in water. If the plug or charger has been immersed in water, stop using it immediately.
- Keep the charger away from explosive gases and avoid flames or sparks while in use.
- The charger generates heat while operating. Make sure it has proper ventilation and avoid placing it on sofas or other flammable objects.
- The output voltage of the charger exceeds DC 42 V. Use it in a safe manner, and do not open the charger if you are not a professional to avoid electric shocks or failures.
- The charger is fan-cooled and may produce some noise (sound of airflow from the rotating fan blades), which is not a malfunction.
- If the charger or power outlet is damaged or deformed, or the power cord is frayed, stop using and have it replaced by a professional.
- Do not charge the battery while it is covered. Make sure there is proper ventilation around the battery.
- Do not charge in places where there is risk of lightning.
- Do not overload a power outlet with too many power cords.
- Do not plug or unplug the charger by pulling the cable.
- Do not repeatedly charge the battery after it is fully charged.
- Read this manual carefully before use. If there are any abnormalities with the indicator lights or the charger casing is overheating, stop charging immediately and have it inspected by a professional.
- If the power supply is damaged or the charging system malfunctions, take your vehicle to after-sales service center for repair or replacement.

Battery and Charging



WARNING

In the event of a fire involving your vehicle or battery, follow these guidelines:

- If smoke is emitted from the battery, move away from your vehicle immediately, contact the fire department, and prepare to extinguish any fire.
- Use an ABC dry powder extinguisher or an electrical fire extinguisher to put out the fire. If the fire is out of control, contact the fire department.
- After extinguishing the fire, contact after-sales service to handle the disposal of the battery. Do not attempt to handle it.
- Depending on the location of the fire, your vehicle's power may still be on. Make sure to cut off the power after extinguishing the fire.

7. Maintenance

Keeping your vehicle in good condition is crucial for your safety, the safety of properties, and the prevention of accidents.

It is the owner's responsibility to perform maintenance. Be sure to inspect your vehicle before each ride and perform the periodic checks specified in the maintenance schedule.



WARNING

Riding your vehicle without proper maintenance or proper troubleshooting may result in serious accidents, leading to injury or death.

Be sure to follow the inspection and maintenance recommendations provided in this manual.

7.1 Maintenance Schedule

▼ Initial Maintenance

Items	Mileage/km	Time/M	Remarks
Motor			
Motor gear oil change	1000	-	
Electrical			
Electrical functions	1000	-	Inspect
Fuses	1000	-	
Braking			
Brake discs	1000	-	Inspect
Brake pads	1000	-	
Brake fluid	1000	-	
Brake fluid lines	1000	-	Check for damaged surfaces or crushed lines, and proper sealing
Wheels			
Tire condition	1000	-	Inspect
Tire pressure	1000	-	
Suspension			
Front shock absorber	1000	-	Check for oil leaks
Rear shock absorber	1000	-	
Steering			
Steering bearing	1000	-	Inspect
Others			
Bolts and nuts	1000	-	Check for looseness
All moving parts	1000	-	Check for proper operation and adequate lubrication



Maintenance

Periodic maintenance (perform maintenance for items that reach interval first)

Items	Mileage/km	Time/M	Remarks
Electrical			
Electrical equipment	1000	6	Inspect; reduce the interval by 50% after two years
Fuses	5000	12	
Cables	5000	12	Check for breakage or detachment from mounting positions; reduce the interval by 50% after two years
Wheels			
Tire condition	1000	6	Inspect; If you have driven aggressively before, you need to check before each use.
Tire pressure	1000	6	
Spoke	1000	6	
Wheel bearings	2000	12	Inspect
Braking			
Front and rear brake systems	1000	6	Inspect
Brake discs	1000	6	
Brake pads	1000	6	
Brake fluid	1000	6	
Brake lines	1000	6	
Brake fluid level	1000	6	
Motor			
Motor gear oil change	3000	-	Check if the breather valve is clogged by foreign matter. Check the gear oil level and replenish if necessary
	5000	-	Replace gear oil

Items	Mileage/km	Time/M	Remarks
Suspension			
Suspension system	2000	12	Inspect
Rear shock absorber	1000	6	Check for oil leaks and service the shock absorber if necessary
Front shock absorber	2000	12	
Frame			
Frame	2000	12	Inspect
Steering			
Steering bearing	2000	12	Inspect
Drive train			
Chain	500	-	Inspect and clean. Adjust, lubricate or replace if necessary
	8000	-	Replace chain
Motor sprocket	5000	-	Inspect
Rear sprocket	5000	-	
Others			
All moving parts	2000	12	Check for proper operation and adequate lubrication
Bolts and nuts	2000	12	Check for looseness

7.2 Motor & Controller

The controller of the electric motorcycle is a key component of your vehicle that controls the motor's start, operation and other functions.

Follow the rules below:

- Do not modify the motor by yourself, doing so can easily lead to fire or accidents.
- Do not ride your vehicle in deep water, and do not allow the water level to exceed the height of the rear wheel axle.
- Frequently check the motor's fastening condition. If any screws are found to be loose, have them tightened by a service technician immediately.

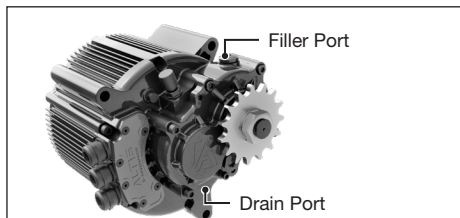


If your vehicle has been parked for a long time in the rain without protection, inspect the controller and motor for any signs of water ingress before riding. If water is found in the controller or motor, it is recommended that you do not use your vehicle for some time until the water has disappeared.

7.3 Gear & Oil

Gear Oil Capacity (Reducer): 35 mL

Fill with GL-5 85W/90 gear oil .



Maintenance

7.4 Tires

To operate your vehicle safely, select the correct type and size of tires, and make sure the tires are in good working condition with adequate tread depth and proper tire pressure.



WARNING

Using excessively worn or incorrectly pressurized tires can lead to accidents, resulting in serious injury or even death.

Follow the tire pressure and maintenance instructions provided in this manual.

▼ Checking the Tire Pressure

Check the tire pressure with a gauge at least once a month, or whenever you feel the air pressure is low, while the tires are cold. Adjust the tire pressure according to your weight and the road conditions.

Maximum front tire pressure (cold): 225 kPa

Maximum rear tire pressure (cold): 225 kPa

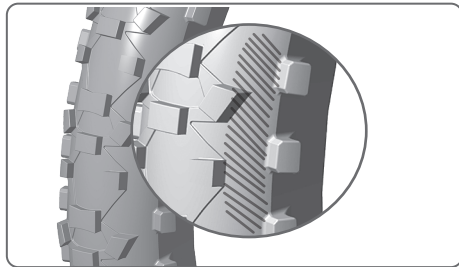
Overinflated tires will give you a bumpy ride, are often damaged by poor road conditions and may lead to uneven tire wear.

Make sure that the valve cap is securely tightened. If necessary, replace the valve cap with a new one.

▼ Visually Inspect of Tires

Checking for Damage

Check the tire for cuts, cracks, exposed fabric or tire cords, or nails or other foreign matter stuck in the sidewalls or tread. Also check the tire sidewalls for any bulges or swelling.



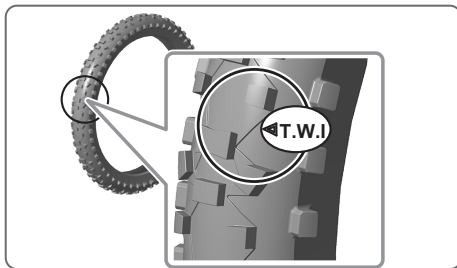


Checking Tread Depth

Check the tread wear indicators.

If they become visible, replace the tires immediately.

Minimum tread depth: 2 mm



WARNING

Riding with severely worn tires will reduce the riding performance of your vehicle and may cause accidents.

▼ Tire Replacement

If the inner tube of a tire is punctured or damaged, you should have it replaced as soon as possible. Repaired tires, which do not perform as well as new ones, may rupture during riding. If you have to use a patched inner tube or use sealant to temporarily repair the inner tube, ride at a lower speed and with caution. Replace the tire before your next ride.

Follow the rules below:

- Use the recommended tires or their equivalents of the same size, construction, speed rating, and load range.
- Do not overload. Riding with an overloaded vehicle may cause accidents.
- All wheels and brake-related parts (including tires) should be replaced by a technician with professional skills and experience.



WARNING

Installing improper tires may affect the handling and stability of your vehicle, leading to accidents and causing serious injury or even death.

Always use the size and type of tires recommended in this manual. (Refer to 73)

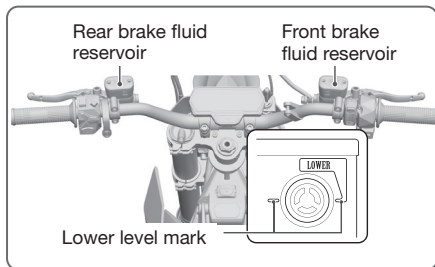
Maintenance

7.5 Brake Fluid

Turn the handlebar. When the brake fluid level is flush with the marked line, check if the fluid level is above the lower level mark.

If the brake fluid level in the reservoir is below the lower level mark, have your vehicle inspected by after-sales service.

Recommended brake fluid grade: DOT4



NOTICE

Brake fluid can damage plastic and painted surfaces. If any fluid spills over, wipe it off immediately and clean thoroughly.

7.6 Brake Pads and Brake Discs

Check the condition of the wear indicators on the front and rear brake pads.

If the brake pads are worn to the bottom of the wear mark, the pads need to be replaced.

Brake pad wear limit: 2.5 mm

Check the wear condition of the front and rear brake discs.

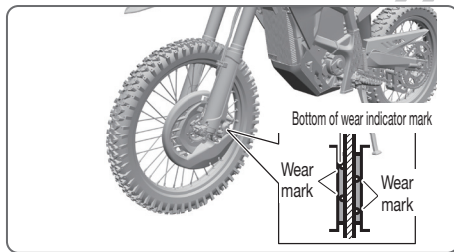
If the brake discs are worn to the thickness specified by the manufacturer, the discs need to be replaced.

Brake disc wear limit: 2.5 mm



WARNING

Failure to replace the brake discs in time may result in extended braking distance or brake failure, which may cause accidents or injury.



Maintenance

7.7 Kickstand

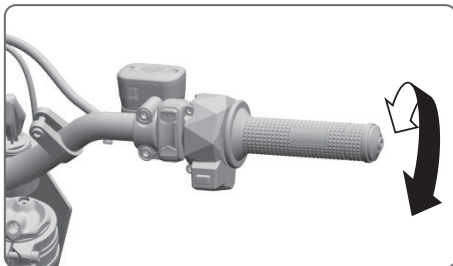
Check that the kickstand operates smoothly. If the kickstand is stiff or makes abnormal noise, clean the pivot area and lubricate the pivot bolt with clean grease.

Check the spring for damage or loss of tension.

Check the kickstand for deformation or crack, if any, contact after-sales service for repair in time.

7.8 Throttle Grip

With your vehicle turned off, check that the throttle grip can be rotated smoothly between the fully-closed and fully-open positions, and returns automatically without being stuck.



7.9 Chain & Spoke

Check and adjust the chain tension.

Loosen the rear axle nut and adjust the chain slack by loosening or tightening the adjusting nut.

While adjusting the chain, keep the front and rear sprockets aligned to prevent chain wear caused by improper adjustment. After adjustment, re-tighten the rear axle nut and tighten the screw fastening nut.

Standard chain slack: 10 - 15 mm

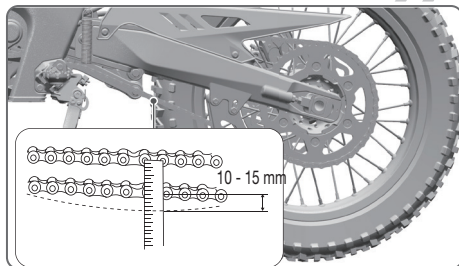


WARNING

A chain that is too slack or too tight can cause chain slip or breakage, posing a safety risk. Have the chain inspected and adjusted regularly at an authorized service center.

Chain Specifications

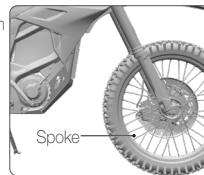
520X3/112L



Spoke torque

Standard torque of spokes: 1.5~4.5 N.m

Loose spokes can cause the hub to wobble or rock, and continued driving can damage the hub. In aggressive driving situations, it is necessary to check for loose spokes before each trip.



WARNING

Loose spokes will cause the wheel hub to lose support, and continuing to drive will threaten your personal safety. Please keep checking and adjusting the spokes as necessary.



8. Troubleshooting

8.1 List of Fault Codes

When a vehicle malfunction occurs, a malfunction indicator will be displayed on the meter along with a fault code (refer to Page 18).

Fault Code	Cause	Solution
E0001	The CAN communication of the meter is disconnected.	Check if the meter plug is loose. If the problem continues, please contact after-sales service.
E0101	The battery is overcharged and the total voltage is too high.	Unplug the charger or install the battery and ride to solve the problem; if the problem continues, please contact after-sales service.
E0102	The battery is over-discharged and the total voltage is too low.	Using the original charger for charging to solve the problem; if the problem continues, please contact after-sales service.
E0103	The battery is overcharged, and the voltage of a single cell is too high.	Unplug the charger or install the battery and ride to solve the problem; if the problem continues, please contact after-sales service.
E0104	The battery is overcharged, and the voltage of a single cell is too low.	Using the original charger for charging to solve the problem; if the problem continues, please contact after-sales service.
E0105	The battery voltage is unbalanced.	Using the original charger for charging to solve the problem; if the problem continues, please contact after-sales service.
E0106	The battery temperature is too high to be charged.	The problem can be solved when the battery temperature drops to the normal charging range; if the problem continues, please contact after-sales service.
E0107	The battery temperature is too low to be charged.	The problem can be solved when the battery temperature rises to the normal charging range; if the problem continues, please contact after-sales service.



Troubleshooting

Fault Code	Cause	Solution
E0108	The insulation resistance value of your vehicle is too low with electricity leakage.	It is recommended to contact the after-sales service for troubleshooting. The troubleshooting steps are as follows: ① Power off the entire vehicle and remove the motor's three-phase wires and signal wires. Power on your vehicle: check if the fault code exists (other fault codes can be ignored at this time). If the fault code disappears, the motor needs to be replaced; ② If the fault code exists, further troubleshooting is required by sequentially replacing the following components (Battery, DCDC, MCU, Harness wire).
E0109	The battery discharge temperature is too high.	The problem can be solved when the battery temperature drops to the normal charging range; if the problem continues, please contact after-sales service.
E0110	The battery discharge temperature is too low.	The problem can be solved when the battery temperature rises to the normal charging range; if the problem continues, please contact after-sales service.
E0111	The temperature difference between the highest and lowest cell of the battery is too large.	The problem can be solved when the battery temperature drops to the normal range; if the problem continues, please contact after-sales service.
E0112	The temperature difference between the highest and lowest cell of the battery is too large when the battery is discharging.	
E0113	The battery discharge current is too high.	Check whether your vehicle can ride normally or whether there is a short circuit. Reinstalling the battery can solve the problem; if the problem continues, please contact after-sales service.



Fault Code	Cause	Solution
E0114	The battery charging current is too high.	Check if the charger is original. Inspect whether the charging port is short-circuited. Re-plugging the charging plug can solve the problem; if the problem continues, please contact after-sales service.
E0115	The battery is overdischarged seriously.	Using the original charger for charging to solve the problem; if the problem continues, please contact after-sales service.
E0116	The signal acquisition of the internal cells of the battery is disconnected.	Please contact after-sales service.
E0117	The battery charging MOS is damaged.	
E0118	The battery discharging MOS is damaged.	
E0119	The battery temperature acquisition signal is disconnected.	
E0120	The temperature of the charging MOS is too high.	The problem can be solved when the battery temperature drops to the normal range; if the problem continues, please contact after-sales service.
E0121	The temperature of the discharging MOS is too high.	
E0122	There is an error occurs in IC.	Please contact after-sales service.
E0123	Regenerative Overcurrent Fault	Stop your vehicle and wait for 2 seconds to reset.
E0124	Charge Disabled Fault	Contact after-sales service.
E0125	Fuse Over-Temperature Fault	The fault will clear when the battery temperature returns to the normal range.
E0126	Shunt Over-Temperature Fault	
E0127	Balancing Circuit Over-Temperature	If the problem continues, please contact after-sales service.
E0128	Pre-charge Failure Fault	After turning off the vehicle, disconnect the battery discharge plug, wait for 3 seconds, then reconnect it.



Troubleshooting

Fault Code	Cause	Solution
E0129	Fuse Blown Fault	Please contact after-sales service.
E0130	CAN Communication Timeout	
E0131	Main Negative Relay Welding	
E0132	Thermal Runaway Fault	
E2141	When the controller temperature reaches 90°C(194°F), the power will be reduced (the electronic control malfunction indicator will flash); when the temperature reaches 130°C (212°F) , the power will be off then shift into P.	Turn off the vehicle, wait for more than 3 minutes, and turn on again to reset the fault. If the problem continues, contact after-sales service to replace the controller.
E2142	The electronic control system does not receive the battery CAN message within 3 seconds: ① The battery communication is disturbed. ② The battery CAN wire is broken.	Check if the battery CAN line is disconnected. If no disconnection is found, turn on again to reset the fault. If the problem continues, contact after-sales service to replace the main cable, power cable, and battery in sequence.
E2143	The current of the controller exceeds the maximum limit of software or hardware.	Turn on again to reset the fault. If the problem continues, contact after-sales service to replace the controller.
E2144	The bus voltage remains below 112V for more than 1 second: ① Low SOC. ② Insufficient remaining battery capacity, with rapid degradation and high loss.	Turn on again and reset the fault when the bus voltage is higher than 116V, and charge the battery in time. If the battery cannot be charged, it may be damaged and needs to be replaced. If the problem continues after the battery is fully charged, the controller needs to be replaced.
E2145	① The energy retrieval is disabled if your vehicle speed exceeds the maximum speed when going downhill. ② The controller has a hardware fault. ③ Driving the motor when the wires of motor position sensors A, B, Z are broken or the position sensor signals are abnormal.	Turn on again to reset the fault. If the problem continues, contact after-sales service to replace the controller.

Fault Code	Cause	Solution
E2146	① The wire of throttle grip is broken or damaged. ② The speed control signal of the main cable is disconnected. ③ The controller has a hardware fault.	Check if the signal wire of the throttle grip is broken. If the problem continues, contact after-sales service to replace the throttle grip, main cable, controller, etc. in sequence.
E2147	The hardware of the current sensor is damaged.	Turn on again to reset the fault. If the problem continues, contact after-sales service to replace the controller.
E2148	The power MOSFET of the controller is damaged.	
E2149	The temperature sensor of the controller is damaged.	
E2150	EBS Signal Voltage Abnormal: ① EBS signal wiring open circuit ② EBS switch itself damaged This fault does not affect your vehicle's power performance, but the EBS switch cannot be used for brake control.	Check if the EBS related signal wire is broken. If the problem persists, contact after-sales service or service provider to replace the EBS switch and main cable.
E2151	Battery detected in discharge-disabled state; vehicle cannot be turned on(Ready).	Turn off and on again to reset the fault.If the problem continues, contact after-sales service or service provider to replace the power cable, battery, and controller in sequence.
E2152	① Throttle A channel broken or damaged ② Main cable A channel speed signal broken ③ Controller hardware fault	Check the connection wires of Channel A electronic throttle for open circuit. If the problem continues, contact after-sales service or service provider to replace the electronic throttle, main cable and controller in sequence.



Troubleshooting

Fault Code	Cause	Solution
E2153	① Throttle B channel broken or damaged ② Main cable B channel speed signal broken ③ Controller hardware fault	Check the connection wires of Channel B electronic throttle for open circuit. If the problem continues, contact after-sales service or service provider to replace the electronic throttle, main cable and controller in sequence.
E2154	① Front wheel speed sensor damaged or demagnetized ② Related signal transmission path (cable) damaged ③ Induction disc damaged, deformed, or covered (e.g. thick mud, dust, excessive iron filings) ④ Incorrect clearance between rear wheel speed sensor and induction disc This fault does not affect vehicle power performance, but disables the TCS function.	Check the associated signal wire of the front wheel speed sensor for open circuit. If the problem continues, contact after-sales service or service provider to replace the front wheel speed sensor, main cable and controller in sequence.
E2155	① Rear wheel speed sensor damaged or demagnetized ② Related signal transmission path (cable) damaged ③ Induction disc damaged, deformed, or covered (e.g. thick mud, dust, excessive iron filings) ④ Incorrect clearance between rear wheel speed sensor and induction disc This fault does not affect vehicle power performance, but disables the TCS function.	Check the associated signal wire of the rear wheel speed sensor for open circuit. If the problem continues, contact after-sales service or service provider to replace the rear wheel speed sensor, main cable and controller in sequence.

Fault Code	Cause	Solution
E2156	Communication timeout between MCU and IMU 6-axis sensor. Functions related to the IMU 6-axis sensor are disabled (e.g., tilt protection function unavailable).	Turn off and on again to reset the fault. If the problem continues, contact after-sales service or service provider to replace the controller.
E3161	① Motor overload output: low speed with high torque. ② Motor mechanical malfunction: mechanical jamming between the bearing and the rotating shaft.	Release the throttle completely and your vehicle will return to normal. If the problem continues, contact after-sales service to replace the motor and controller in sequence.
E3162	When the motor temperature reaches 130°C(266°F), the power will be reduced (the electronic control malfunction indicator will flash); when the temperature reaches 130°C (266°F) , the power will be off with vehicle P gear.	Turn off and wait for more than 2 minutes, then turn on again to reset the fault. If the problem continues, contact after-sales service to replace the motor and controller in sequence.
E3163	① The motor temperature signal wire of the main cable is broken. ② The internal temperature sensor of the motor is damaged or its temperature signal wire is broken. ③ The motor temperature sampling circuit of the controller is abnormal.	Check the associated signal wire of the motor temperature sensor for open circuit. If the problem continues, contact after-sales service or service provider to replace the main cable, motor and controller in sequence.
E3164	① The motor position sensor is damaged or its signal wire is broken. ② The signal wire of the motor position sensor of the main cable is broken. ③ The controller has a hardware fault.	First, check if the wire of the motor position sensor is broken. If no breakage is found, turn on again to reset the fault. If the problem continues, contact after-sales service to replace the wiring harness, motor, and controller in sequence.



Troubleshooting

Fault Code	Cause	Solution
E3165	Any one or more phases of the motor's three-phase lines U, V, W are broken.	Check whether the three-phase wires are broken. If the problem continues, contact the after-sales service to replace the motor and controller in sequence.
E3166	When descending long slopes, motor speed > 9600 rpm. For an 18-inch drive wheel, this corresponds to a vehicle speed exceeding 140 km/h.	Please slow down and stop immediately. Power off and on again to reset the fault. If the problem continues, contact after-sales service or service provider to replace the controller and motor in sequence.

9. Other Information



9.1 Caring for Your Vehicle

Regular cleaning and polishing help to ensure the long service life of your vehicle. A clean vehicle makes it easier to find potential faults.

After riding, allow the motor, brakes and other high-temperature parts to cool down before cleaning.



Do not use high-pressure cleaners to clean your vehicle, as it may damage the moving parts or electrical components.

Water adversely affects braking effectiveness. After cleaning the brakes, ride at low speed and apply the brakes intermittently to help dry the brakes.

Do not clean the lithium battery or battery terminals with water or detergents.

Do not clean the area under the seat with water, as this may cause a short circuit in the electrical components.

Do not wax the tires, brakes or matte finishes.

Wash your vehicle with cold water immediately after riding on roads with high content of salt spray or near the sea. Do not use warm water, as it may accelerate the chemical reactions with salt and increase corrosion.

9.2 Storing Your Vehicle

If you store your vehicle outdoors for an extended period of time, use a motorcycle cover to protect the entire vehicle.

If you intend to store your vehicle for an extended period of time, follow these guidelines:

- To prevent deterioration of the performance of the battery, store your vehicle in a dry, well-ventilated, and shaded place.
- Check the battery level at least once every two months and recharge as necessary.
- After rain, remove the motorcycle cover to keep your vehicle dry.

Other Information

9.3 Transporting Your Vehicle

If you need to transport your vehicle, use a dedicated motorcycle trailer, or a flatbed truck or trailer equipped with a loading platform, lifting platform and tie-downs.

When towing your vehicle, do not allow the wheels to touch the ground.



Towing your vehicle may seriously damage its drive train.

If you need to move your vehicle manually, make sure to wear protective gloves. Take care to prevent your body parts from being pinched by your vehicle components during transport, especially by the wheel hub, front and rear brakes.

▼ Environmental Protection

Use environmental-friendly cleaning agents.

We recommend using biodegradable detergents when washing your vehicle. Avoid cleaning agents that contain chlorofluorocarbons, which may damage the atmospheric ozone layer.

▼ Recycle Wastes

This vehicle uses lithium battery, which can harm the environment if not properly disposed of or discarded. If your vehicle requires replacement of battery or accessories, or is ready for disposal, contact after-sales service.

▼ Waste Liquid Disposal

Dispose of waste liquids (such as used brake fluid) properly to avoid environmental pollution.

10. Specifications



▼ General Specifications

Image				
Model	AT200K-35	AT200K-35X	AT200K-35R	A200K-35H
L x W x H (mm)	2085*840*1230	2085*840*1230	2013x840x1230	2100x840x1095
Wheelbase (mm)	1400	1400	1400	1400
Curb weight (without battery) (lbs)	207	207	266	266
Maximum load capacity (lbs)	220	220	220	220
Passenger capacity (person)	1	1	1	1
Seat height (mm)	920	920	860	920
Minimum ground clearance (mm)	320	320	255	320
Tire specification	Front	80/100-21	80/100-21	80/100-21
	Rear	100/90-18	100/90-18	100/90-18
Tire pressure (kPa)	Front 225/Rear 225	Front 225/Rear 225	Front 225/Rear 225	Front 225/Rear 225
Brake type	Left Front Disc/Right Rear Disc	Left Front Disc/Right Rear Disc	Left Front Disc/Right Rear Disc	Left Front Disc/Right Rear Disc
Front shock absorber type	Inverted shock absorber	Inverted shock absorber	Inverted shock absorber	Inverted shock absorber
Rear shock absorber type	Airbag rear single shock absorber	Airbag rear single shock absorber	Airbag rear single shock absorber	Airbag rear single shock absorber
Maximum speed (km/h)	120	120	115	120
NEDC	120km/45kph	120km/45kph	120km/45kph	120km/45kph
Climbing ability	40°/35km/h	40°/35km/h	40°/35km/h	40°/35km/h

▼ Motors

Motor type	Mid-drive motor	Mid-drive motor	Mid-drive motor	Mid-drive motor
Drive method	Chain drive	Chain drive	Chain drive	Chain drive
Maximum power (kW)	55	55	55	55
Rated power (kW)	20	20	20	20
Maximum torque (N·m)	123	123	123	123
Gear ratio	8.85(2.58motor 14/48sprocket)	8.85(2.58motor 14/48sprocket)	8.85(2.58motor 14/48sprocket)	8.85(2.58motor 14/48sprocket)
Rear output torque (N·m)	1054	1054	1054	1054



Other Information

▼ Battery

Battery Type	Lithium battery	Lithium battery	Lithium battery	Lithium battery
Nominal capacity (Ah)	35	35	35	35
Total voltage (V)	144	144	144	144
Total weight (lbs)	54	54	54	54
Cell Type	Semi-solid	Semi-solid	Semi-solid	Semi-solid

▼ Charger

Charging specifications	168V10A	168V10A	168V10A	168V10A
Charging method	Off-board	Off-board	Off-board	Off-board
Charging time (h)	4	4	4	4

▼ Electrical components

Headlight/position light	LED	LED	LED	LED
Front/rear turn signal light	○	○	LED	LED
Tail light/license plate light	○	○	LED	LED
Rearview mirror	○	○	●	●
Front/rear reflector	○	○	●	●
USB port	●	●	●	●
Type-C port	●	●	●	●
Communication protocol	CAN2.0B	CAN2.0B	CAN2.0B	CAN2.0B
OTA	●	●	●	●
Meter	4.01-inch TFTdisplay	4.01-inch TFTdisplay	4.01-inch TFTdisplay	4.01-inch TFTdisplay
Kickstand switch	●	●	●	●
NFC start	●	●	●	●
P mode parking	●	●	●	●
Safety device	Tilt power-off module	Tilt power-off module	Tilt power-off module	Tilt power-off module
Insulation monitoring	●	●	●	●
TCS	●	●	●	●
Brake Mode	"F/R" hand brakes	"F/R" hand brakes	"F" hand brakes "R" foot brake	"F/R" hand brakes



A

App 9

B

Battery 47

Battery Installation and Removal 48

Bluetooth Connection 38

Brake Fluid 58

Brake Pads and Brake Discs 59

Braking 45

C

Caring for Your Vehicle 71

Chain, Spoke 61

Charger 49

Charging Port 21

D

Display Settings 33

E

Electrical Components 16

F

Front Shock Absorber 24

G

Gear Oil 55

H

How to Charge 50

I

Ignition Switch to Start 44

K

Kickstand 60

Kickstand Kill Switch 23

L

Language Selection 35

List of Fault Codes 63

M

Main Components 14

Maintenance Schedule 53



Altis Powersports Inc.
www.altispowersports.com