

FW-06 Instruction Manual for the Electric Motorcycle

**User Manual** 

Please read the Manual thoroughly before use. Do not ride this motorcycle without fully understanding its features.

#### **Preface**

Many thanks for your purchase of our FW-06 electric motorcycle. We wish you a safe and enjoyable ride in future.

Please read this User Manual carefully before riding this motorcycle. It contains instructions on the bike's operation, troubleshooting and maintenance, as well as guidance on prevention of vehicle faults and protecting yourself and others from personal injury.

This User Manual contains the latest information of this product before it was printed. With the continuous improvement of this product, there may be slight differences between your motorcycle and this User Manual. Hence all specifications are as per the actual product.

FELO Technology(Shanghai) Co., Ltd. reserves the right to revise this book at any time without any advance notices, and shall assume no responsibilities for such revision.

If you have any questions about this User Manual, please consult the authorized dealer from whom you purchased your motorcycle. © 2022 FELO Technology(Shanghai) Co., Ltd. All rights reserved.

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# **Preface**

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# **Important Information**



#### Overview

In this User Manual, particularly important information is distinguished with the following symbols.

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(!) Attention Failure to follow the instructions may result in your injury.

Take special measures to prevent damage to your electric motorcycle or other property.

Your and others' safety is very important, and it is your responsibility as the owner to operate your motorcycle safely and properly.

Safety symbol-related operation steps and other information have been provided in this User Manualto help you make the right decisions regarding safety.

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

Please be sure to follow such instructions on the safe operation and proper maintenance of your motorcycle.

### **Important Information**

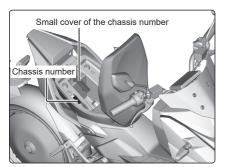


### Vehicle information

The chassis number and product label are unique to your motorcycle, and are used to identify your motorcycle.

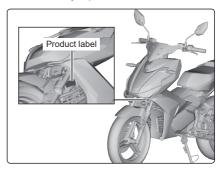
They are required when registering your motorcycle. They may also be required by your dealer when you order any parts for replacement.

You can refer to the location shown below to find the information of the vehicle you purchased.



#### Chassis number

The chassis number is engraved on the chassis. Please open the small chassis number cover in the cushion for confirmation



#### Product label

The product label is installed at the bottom of the headstock. This label displays the information related to the production of the vehicle.



# **Important Information**

#### **FELO MOTO APP**

You can link and manage your motorcycle by using the FELO MOTO APP installed in your cell phone.

Battery information

· Riding statistics

· Motorcycle inspection

· Track history

You can search "FELO MOTO" in the APP Store to download FELO MOTO APP, or scan the QR code below to access the official website, and download FELO MOTO APP or its instruction manual.



### Riding safety



# Safety guidelines

#### Owner's responsibility

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

- The rider shall have received training for safe and proper riding skills, and possess relevant certificates.
- Please observe local traffic safety regulations when riding the motorcycle. The motorcycle can carry only one passenger.
- Please follow the warnings and maintenance requirements in this User Manual.

### Riding gear

Make sure you wear the helmet, goggles and eye-catching protective clothing that conform to national certifications. Take measures to protect yourself against weather and road conditions while riding.

#### Helmet

We recommend that you choose a helmet in eye-catching colour with the proper size that complies with national standards.

Failure to wear a helmet may increase the risk of serious injury or death during a crash.

#### Gloves

Select a pair of high-abrasion and full-finger leather gloves.

#### Boots

Select a pair of protective boots that fit your feet without affecting your riding.

#### Clothing

Select an eye-catching long-sleeved shirt with protective effect, and a pair of durable pants (or a protective suit) suitable for riding.

#### Precautions for safe riding

Make sure you are healthy and able to stay focused before riding. Do not drink alcohol or take drugs before or during riding.

- Ride carefully, and keep your hands on the handlebars and your feet on the footrest at all times.
- Keep an eye on the vehicles around you and stay alert, Maintain readiness for any emergency braking or avoidance move.
- Accelerate and brake your motorcycle smoothly. Turn on your turning signal light before turning or changing lanes, and use your horn when necessary.
- Avoid riding when feeling tired. Fatigue and negligence can impair your capability to make proper judgements and ride safely.
- Please maintain your motorcycle properly, and keep it in good conditions at all times.
- The motorcycle's braking performance may be reduced in wet conditions, such as slippery roads, so make sure to ride slowly and carefully.

# Riding safety



#### Handling Accidents

Personal safety is your first priority. If you or anyone else is injured, carefully assess the severity of the injury and determine whether it is safe to continue riding.

If necessary, please call for emergency assistance. If other people and vehicles are involved in the crash, you need to follow local laws and regulations.

If you decide to continue riding, turn the power switch to the OFF) position, and assess the conditions of your motorcycle.

Check the power battery for leakage. Check whether the key nuts and bolts are tightened. Check whether the handlebars, brakes and wheels work properly. Please ride your motorcycle slowly and carefully.

If there is damage that would not be immediately manifested, please take your motorcycle to a qualified repair shop as soon as possible for a thorough inspection.

Please note the following after a crash:

- If your motorcycle is damaged in a severe crash, there may be a risk of electric shock. Do not touch any electrical components (see Page 11) or their connecting wires.
- Avoid touching the power battery's electrolyte.
   A severe crash may cause leakage of the power battery's electrolyte.
   A severe crash may cause leakage of the power battery's electrolyte.
   Avoid contact of the electrolyte with skin or eyes.
   The power battery's electrolyte is corrosive. If you are accidentally exposed to the electrolyte, flush the contact area with plenty of water, and seek immediate medical attention.
- Use a fire extinguisher suitable for electrical fires.

### **⚠** Warning

This motorcycle uses the 96 V lithium battery. If you dispose it improperly after an accident, it may cause serious injury or death.

In the event of an accident, please follow the methods and instructions described in this User Manual.

#### Power battery

If the power battery emits a smell, it may be faulty. Immediately park your motorcycle in a safe outdoor place, and keep it away from flammable materials. Turn the power switch to the QQ (OFF) position, and contact your authorized dealer. (On how to charge the power battery, see Page 38.)

Do not disassemble or modify the power battery on your own.

#### Brake

Please follow the guidelines below:

- Avoid excessive emergency braking.
   Sudden braking may reduce the stability of your motorcycle.
   Slow down your motorcycle before turning if conditions permit, or you may slip and fall on the ground.
- Please be careful when riding on surfaces with low friction.
   Tires are more likely to slip on such surfaces, so the motorcycle needs longer braking distance.
- In roads with long and steep slopes, repeated braking may cause the brake to get overheated severely, thus affecting the braking effectiveness.

# Riding safety



- For complete braking effect, operate both front and rear brakes simultaneously.
- Abnormal noises that do not affect using may occur after a long-time riding, but it is normal.

#### Accessories and modifications

We strongly recommend that you do not add any accessories to or make modifications to the original design of your motorcycle, They may cause safety hazards.

Modifications to your motorcycle may invalidate your warranty service, and make your motorcycle illegal for operation on public roads.

Before you decide to add any accessory to your motorcycle, please firstly determine which modifications are safe and legal.

### 

Improper accessories or modifications may cause accidents that can put you and others at a risk of serious personal injury or death.

Please follow all instructions regarding accessories and modifications specified in this User Manual.

#### Loading guidelines

 Overloading may affect the operating, braking and stability of your motorcycle. Please avoid overloading, and follow the specified loading limits.

Maximum load: 150 kg

- · When carrying heavy loads, please keep your ride at a safe speed.
- Securely fasten the load on the vehicle. Make sure the load is not prone to move from side to side while riding, and adjust it if necessary.
- Do not place any objects near the light or motor.

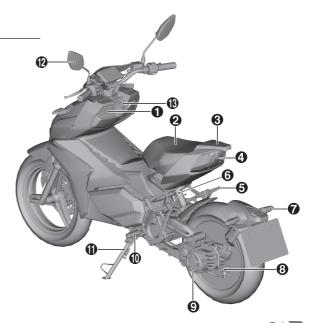
### 

Overloading, improper loading or carrying too many people may cause an accident resulting in serious injury or death.

Please follow the loading guidelines specified in this User Manual.

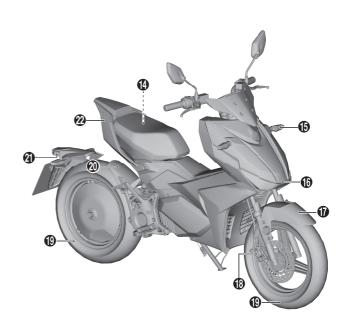


- **1** GLOVE BOX
- **MAIN CUSHION**
- PASSENGER CUSHION
- REAR TAIL LIGHT/BRAKE LIGHT
- **6** PASSENGER FOOTREST
- **6** REAR SHOCK ABSORBER
- **7** REAR TURN SIGNAL LIGHT
- REAR BRAKE
- GEAR BOX
- RIDER FOOTREST
- SIDE STAND
- REAR-VIEW MIRROR
- (B) POWER SWITCH





- STORAGE COMPARTMENT
- FRONT TURN SIGNAL LIGHT
- (f) HEADLIGHTS
- **1** FRONT FENDER
- FRONT BRAKE
- (P) TIRES
- REAR FENDER
- LICENSE PLATE LIGHT
- **@** GRAB RAIL



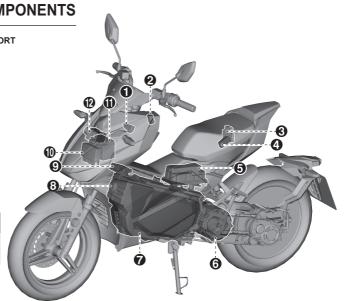


### MAIN ELECTRICAL COMPONENTS

- **1** POWER BATTERY CHARGING PORT
- USB CHARGING PORT
- O POWER OFF SWITCH
- OBD
- 6 MCU
- MOTOR
- POWER BATTERY BOX
- O HORN
- DC-DC CONVERTER
- vcu
- 12 V BATTERY
- ABS CONTROLLER

### Caution

If the electrical system fails, please take your motorcycle to a qualified repair store as soon as possible for an overall inspection and repair.





1 Clock

The clock is displayed in the 24-hour system. The VCU is automatically calibrated according to the network.

2 Speed display

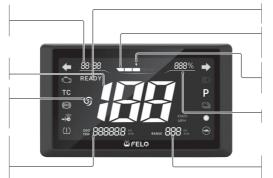
Displays the current speed of the motorcycle.

3 Sport mode

It lights up when the sport mode is used, and it goes off in other scenarios. (For information on how to switch among riding modes, see Page 22.)

4 Odometer

The odometer displays the total distance driven by this motorcycle. When the reading exceeds 99,999.9, the display will be automatically reset. The total mileage will be displayed alternately with the subtotal mileage.



- 5 READY indicator
  The vehicle is in the standby status.
- Real-time power scale display
  It displays the remaining power capacity
  of the power battery. Each bar represents
  20% of the total power capacity.
- 7 Charging status indicator
  This indicator lights up when the
  vehicle's power battery is being
  charged.
- 8 Real-time battery capacity display
- 9 Remaining mileage Remaining mileage estimated

Remaining mileage estimated by VCU.

When the OBD diagnostic mode is used, the OBD error code will be displayed here.

#### Meter

#### Display inspection

When the power switch is turned to the  $\bigcirc$  (ON) position, all modes and numeric fields will be displayed. The sport mode indicator, READY indicator, and charging status indicator will normally light up in the corresponding application scenarios.

If any of the above display indicators fails to light up, please contact your authorized dealer for troubleshooting.



- Left-turn indicator
  This indicator flashes when the left-turn indicator or hazard warning light is turned on.
- 2 Fault indicator
  This indicator lights up when OBD has a fault code
- TC indicator
  This indicator lights up when the
  ETCS traction control function is
  activated.
- 4 ABS indicator
  The ABS indicator flashes when
  the motorcycle speed is 55 km/h;
  the ABS indicator goes off when
  its speed is >5 km/h; the ABS
  indicator is always on when ABS
  malfunctions
- 5 Smart key error indicator
  This indicator lights up when the
  smart key is out of power, there is
  a mismatch error, or the smart key
  is damaced.



- 7 Right-turn indicator
  This indicator flashes when the right-turn indicator or hazard warning light is turned on.
- High beam indicator
  This indicator lights up when the high beam is turned on.
- 9 Parking mode indicator The Gear P indicator lights up when the side stand of the motorcycle stays up. After the side stand is retracted, press the electric start switch (See Page 15), and the Gear P indicator will go of
- Low battery warning indicator
   This indicator lights up when the remaining battery capacity is less than 10%. At this time, the sport mode cannot be activated.
- Low speed mode indicator
  When the remaining battery capacity
  is less than 5%, the motorcycle will
  go into the low speed mode, and this
  indicator will light up At the same time,
  the motorcycle cannot be driven at a
  speed of more than 30 km/h.

### **Indicators**

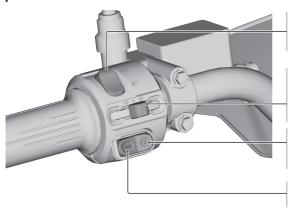
### Display inspection

When the power switch is turned to the (ON) position, all the indicators will light up temporarily, and then go out. If any of the above indicators fails to operate as described above, please contact your authorized dealer for troubleshooting.



### **Switch**

### Left handlebar switch



- 1 Dimmer switch
  - High beam
  - **≣O** Low beam
- 2 Turn indicator switch
  - Left-turn indicator flashes.
  - Right-turn indicator flashes.
  - O Switch off the turn indicator.
- 3 Sport mode switch (Gear S)

Sport mode (Gear S): press and hold this switch (Gear S) to enter the sport mode. See Page 22.

4 Horn button 📢

When the horn button is pressed, the horn sounds.



# Switch (continued)

#### Right handlebar switch

#### Hazard warning switch

Turn on the hazard warning indicator (all turn indicators flash at the same time,)

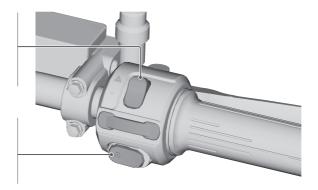
O Turn off the hazard warning indicator

The hazard warning indicator is used in emergency circumstances, or when a vehicle is parked in a place where a traffic accident may occur to draw the attention of other drivers.

#### 6 Electric start switch

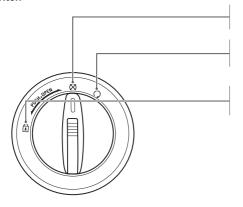
In the parking status, retract the side stand first, then tap this switch to release the parking gear (Gear P), the READY indicator on the instrument will light up.

In the non-riding status, tap this switch to activate the parking gear (Gear P), the Gear P indicator on the instrument will light up.





#### Power switch



Turns off the power system.

2 ( ) ON

Turn on the power system, and prepare to start the motorcycle.

3 LOCKED

Lock the steering handlebar.

### Caution

Leaving the power switch in the (ON) position without riding will completely drain the battery capacity.

Please do not turn on the power switch while riding.



### Key

Your motorcycle is equipped with one smart key and two mechanical keys.

If you lost your keys, please contact your dealer.



Please keep the key with you. Do not store the key combination in the storage compartment.

#### Use of the smart key

To use the smart key, it needs to satisfy the operating range, see Page 23.

If the smart key error indicator on the instrument lights up, please shake the smart key to release its sleep status, and then check if the smart key is out of power. If you need to replace the battery, please use the CR2032 type button battery.







Smart key front side

Smart key rear side

Inside of the smart key

#### Use of the mechanical key

To use the mechanical key, you need to insert the mechanical key into the corresponding keyhole, while turning the knob.







### Storage device

#### Storage compartment

The storage compartment is located under the main seat cushion.

(To open the main seat cushion, see Page 30.)

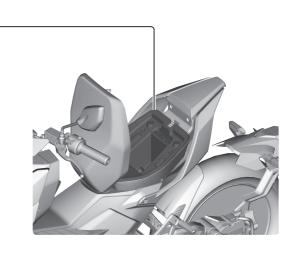
Do not exceed the maximum load carrying capacity for the storage compartment.

Maximum load carrying capacity: 10 kg

We recommend that you keep the plastic file bag containing the manual, motor vehicle registration certificate and insurance policy in the storage compartment for reference whenever needed.

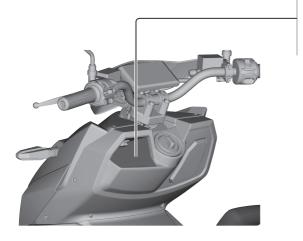


Please do not store any valuable or fragile items inside it.









#### Glove box

The glovebox is located on the left side below the steering handlebar.

Maximum load carrying capacity: 1.5 kg

# Caution

Please do not store any valuable or fragile items inside it. When you leave the motorcycle, please take out the items from the glovebox to avoid any loss.



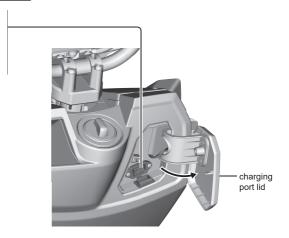
# **Charging port**

#### Power battery charging port

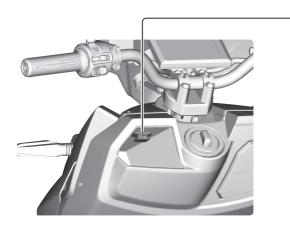
The power battery charging port is located on the right side of the glovebox. Please open the charging port lid, and then use it.

(For precautions on how to use the power battery, see Page 37.)

(On how to charge the power battery, see Page 38.)







#### **USB** charging port

The USB charging port is located on the upper side of the glovebox. To use it please open the lid.

The USB charging port type is Type-A.

Maximum output power: 10 W (5 V/2 A)

#### Precautions for use

- Please use the USB charging plug carefully. When it is plugged in or out, please do not shake it from side to side or up and down.
- Only after the power is turned on will the USB charging port have voltage output.
- To prevent foreign objects or water from entering the USB charging port, please close the lid when it is not in use.
- To prevent any damage caused by the device movement or vibration during riding, please place your connected device properly.
- Please remove the device and charging cable, and close the lid before you clean the motorcycle.
- · Please do not operate the connected device during riding.

### Caution

- Please do not use any device that generates heat or exceed the power allowed.
- · Please do not use the charging port when it is wet.
- Be careful not to let the charging cable of connected device affect steering operation and riding.



# Riding mode

#### Basic introduction

This motorcycle has 3 speed modes:

Normal mode:

This mode can be applied to flat roads, congested roads, heavy rain, and other environments. The maximum speed in this mode is 80 km/h.

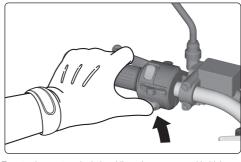
· Sport mode:

This mode can be applied to uphill sections, unblocked sections, good weather and other environments. The maximum speed in this mode is 110 km/h.

· Low speed mode:

When the remaining battery capacity is below 5%, the maximum speed is limited to less than 30 km/h to save power. At this time, the low-speed mode indicator (((a)) in the meter lights up.

### Switching method



To enter the sport mode during riding, please press and hold the S-gear Switch. Once the S-gear switch is released, you will exit the sport mode.





# Smart key system

#### Technical parameters for the smart key

Frequency range: 2400 MHz
Usage: Electric motorcycle VCU
Temperature: -20°C - 60°C

Rated voltage: 3 V

Antenna type: BT adopts the bracket steel antenna.

Gain: 1.37 dbi

#### VCU technical parameters

Frequency range: 700-2690 MHz Usage: Electric motorcycle VCU Temperature: -20°C - 60°C

Rated voltage: 12 V

Antenna type: Bracket steel antenna for 4G and BT, ceramic

antenna for GPS.

Gain: 1.37 dbi



#### Basic introduction

The smart key system enables you to operate the power switch without inserting the mechanical key in the keyhole.

The system performs two-way verification between the motorcycle and smart key to verify whether the smart key has been registered.

The smart key system uses low-intensity radio waves. which may affect medical devices (e.g. cardiac pacemakers).

### Caution

You should always carry your smart key with you when getting on or off or riding your motorcycle.

Do not put the smart key in the glovebox and storage compartment.

If the power switch is in the (ON) position, the motorcycle can be operated even without a certified smart key.

Lock the steering handlebar and power switch when you leave your motorcycle.

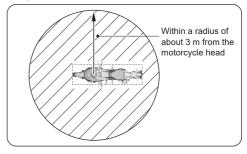
#### Operating range

The working range may vary when the power switch is locked or unlocked.

The smart key system may not work properly under the following circumstances.

- · When the smart key battery runs out of power.
- 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 smart key with wireless communication devices, such as laptops, radios or cell phones.
- . When the smart key is in contact with metal or covered by a metal object.

The system can work in the shaded area as illustrated.





#### Precautions when using the smart key:

- Do not drop the smart key or place any heavy objects on it.
- Protect the smart key well, and keep it far away from direct sunlight, high temperature and high humidity environments.
- . Do not scratch its surface or pierce it.
- Do not store it near magnetized products (e.g. magnetized key chains).
- Always keep it far away from electrical products (e.g. TVs, radios, computers or low-frequency massage equipment).
- Keep it far away from liquids. If it is wet, please dry it immediately with a soft cloth.
- . Keep it far away from the motorcycle, when cleaning the motorcycle .
- · Do not burn it.
- · Do not place it in an ultrasonic cleaner.
- If it is exposed to the fuel, wax or lubricating grease, remove them immediately.
- Do not disassemble it except for battery replacement. You can only remove its cover. Do not disassemble other parts of the smart key.
- Do not lose it. If it is lost, you need to register a new smart key.
   Please contact your authorized dealer.
- You are not allowed to modify its use scenarios or use conditions, expand the transmission frequency range, increase the transmission power (including extra RF power amplifier), or change the transmission antenna without permission.
- It is not allowed to interfere with other legitimate radio stations in a harmful manner, or propose for protection from harmful interference.

- It is necessary to withstand interference from industrial, scientific and medical (ISM) application equipment that emits RF energy, or interference by other legal radio stations.
- If it generates any harmful interference with other legitimate radio stations, you must immediately stop using it, and take measures to eliminate such interference before proceeding to use it.
- The use of micro-power equipment in aircraft and electromagnetic
  environment protection areas, such as military and civilian radio
  stations, including radio astronomy observatories, weather radar
  stations and satellite earth 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 should be in compliance with regulations related to
  electromagnetic environment protection and issued by authorities of
  relevant industries
- It is forbidden to use various remote controllers in the vicinity of an area within a radius of 5,000 meters from the centre point of an airport runway.



### Burglar alarm system

#### Basic introduction

The burglar alarm system reduces the risk of the motorcycle to be stolen. When the power switch is in  $\bigotimes$  (OFF) or  $\widehat{\mathbb{A}}$  (LOCKED) position, and the system has been set, the alarm will be activated once the sensor detects any vibration or movement of the motorcycle.

The burglar alarm system uses low-intensity radio waves which may affect medical devices (e.g. cardiac pacemakers).



The burglar alarm system cannot work when the remaining battery capacity of the motorcycle is low.

### If the burglar alarm system cannot work

If any of the following conditions occurs, it means that the power battery runs out, or there is a system fault. Please consult your authorized dealer.

- The alarm does not sound.
- The alarm sounds, but the alarm sound gradually disappears.
- · The alarm keeps on sounding without stopping.

### ABS (anti-lock brake system)

This motorcycle is equipped with ABS (only on front wheel) that can prevent the brake from being locked during the emergency brake.

- The ABS will not reduce the braking distance. In some cases, the ABS may result in a longer braking distance than usual.
- The ABS does not work at a speed of less than 5 km/h.
- . During braking, the brake handle may rebound slightly, which is normal.
- Always use the recommended tires to ensure that the ABS works properly.

### 

- Regardless of whether the Anti-lock Brake System is provided, an accident may occur during the braking process when you make a turn. Emergency braking during a turn may cause a sideslip, which cannot be controlled by the Anti-lock Brake System.
  - So you need to slow down sufficiently in the straight section before making a turn, and do not brake your motorcycle during the turn.
- Improper operation of the Anti-lock Brake System may cause an accident.
   The Anti-lock Brake System cannot cope with poor road conditions, misjudgment, and incorrect brake methods. When you ride in poor road conditions, you need to maintain good judgment and ride safely at a slow speed.
- Use your brake system carefully on slippery roads or turns. Using the emergency brake on uneven or smooth roads may cause your motorcycle to lose control.
- Following a vehicle too closely may easily lead to a rear-end collision. When the riding speed is high, the braking distance will be increased accordingly. Make sure to maintain a safe braking distance between your motorcycle and the vehicle in front of you.



# Ramp parking function

The ramp parking function can prevent the motorcycle from skidding while parking on a ramp. You can enable this function by following the steps below:

- 1 To make the motorcycle enter the riding mode or turn on the READY indicator, see Page 33.
- 2 Hold the brake handle.
- 3 Tap the electric start switch to activate the ramp parking function. See Page 15.

### **ETCS** traction control

ETCS traction control can effectively prevent the wheels from slipping while the motorcycle is in motion. If the VCU detects that the difference of the instantaneous speed between the front and rear wheels is too big, the current output will be limited, making the speed of the front and rear wheels remain basically the same.

 When ETCS traction control is activated, the TC indicator of the meter will light up, see Page 13.

# **Riding Guidelines**



### Preparation before riding

Please check the following items when you ride your motorcycle every time to ensure that it is in safe working conditions.

Be sure to follow the inspection items, maintenance procedures and maintenance schedule specified in this User Manual.

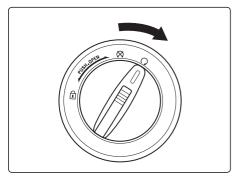
Inspection items	Inspection contents	Reference page
Battery capacity	Check the remaining capacity of the power battery, and recharge it if necessary.	Page 12
Steering handlebar	Check whether it operates smoothly in all steering positions.	-
Speed-control handle	Check the free gap of the speed-control handle.	Page 52
Brake handle	Check whether the braking operates smoothly.	Page 34
Front/ Rear brake	Check the brake fluid level and brake pad wear.	Page 49-50
Meter/Light/Switch	Check whether meters, lights and switches work properly.	Page 12-16
Side stand switch	Check whether it is fully functional.	Page 51
	Check whether there is any damage.	-
Wheel and tire	Check the tire condition, tire tread and tire pressure, and adjust them if necessary.	Page 46-48





### Start the motorcycle

You should always carry your smart key or mechanical key with you when riding your motorcycle. (See Page 17)



- 1 Make sure the power-off protection switch is turned on (for information on how to open the cushion, see Page 30).
- 2 Unlock the steering handlebar lock (See Page 31)
- 3 Unlock the power switch (See Page 32)

### Caution

If the motorcycle overturns, you must first turn the power switch to the  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ 

(OFF) position, and then carefully inspect it.

### **Riding Guidelines**



#### Cushion

#### Open the main cushion

#### Mechanical mode:

- 1 Using a mechanical key, see Page 17.
- 2 Turn the power switch counter-clockwise.
- 3 The power switch is automatically reset while the main cushion is open.

#### Smart mode:

- 1 Carry the smart key or run the APP, enable your cell phone's Bluetooth, and then approach your motorcycle.
- 2 Tap the switch, and turn it counter-clockwise from the XX (OFF) position within 7 s.
- 3 The power switch is automatically reset while the main cushion is open.
- This method does not work if you want to open the cushion after turning off the power-off switch, the cushion can only be opened using the mechanical key.

# Caution

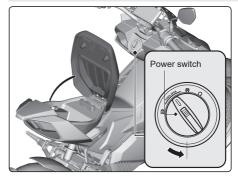
Another individual can unlock the motorcycle before the power switch indicator goes off. So please wait until the power switch indicator goes off before leaving your motorcycle.

#### Close the main cushion

Close and press down on the tail of the saddle until it is locked. Pull the saddle up slightly to ensure that it is firmly locked.



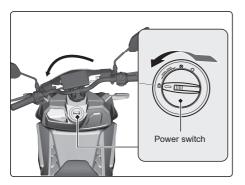
Do not lock your keys in the storage compartment under the saddle. If you need to turn off the power-off switch and lock the cushion, please keep the mechanical key safely, because only the mechanical key can open the cushion at this time. If the mechanical key is locked in the storage compartment and the power-off switch is turned off, please contact your dealer for a solution.



# (S) (S)

# **Riding Guidelines**

### Steering handlebar lock



#### Lock the steering handlebar

Mechanical mode:

- 1 Turn the steering handlebar to the left as far as it can go.
- 2 Insert the mechanical key, and press the power switch while turning it to the (LOCKED) position.
- 3 The steering handlebar is locked. Wait for about 7 s for the power switch indicator to go off; the electronic lock is locked.

#### Smart mode:

- 1 Carry the smart key or run the APP, enable your cell phone's Bluetooth, and then approach your motorcycle.
- 2 Press the power switch while turning it from the \( \omega \) (OFF) position to the \( \omega \) (LOCKED) position.
- You need to turn the power switch counterclockwise within 7 s when the power switch indicator lights up. Otherwise, you need to tap the power switch again.
- 3 The steering handlebar is locked. Wait for about 7 s for the power switch indicator to go off: the electronic lock is locked.



Although the steering handlebar can be locked by turning it right, it is not the designed locking method and may therefore damage your motorcycle. Do not use this method to lock the steering handlebar.

#### Unlock the steering handlebar lock

Mechanical mode: Insert the mechanical key, and press the power switch while turning it to the X (OFF) position.

Smart mode: Tap the power switch, and press the power switch while turning it to the (OFF) position.

### **Riding Guidelines**





When you leave your motorcycle, please make sure that the power switch is in  $\bigwedge$  (OFF) or  $\bigcap$  (LOCKED) position.

The steering handlebar cannot be locked, when the power switch is turned to (OFF) position and the power switch indicator does not light up. To lock the steering handlebar, please tap the power switch first if the key is available.

Another individual can unlock the motorcycle before the power switch indicator goes off. So please wait until the power switch indicator goes off before leaving your motorcycle.

#### Unlock the power switch

Mechanical mode:

Insert the mechanical key, and turn the power switch to the O(N) position to unlock the motorcycle's power supply.

Smart mode:

- 1 Carry the smart key or run the APP, enable your cell phone's Bluetooth, and then approach your motorcycle.
- 2 Tap the power switch, and turn it to the () (ON) position within 7 s to unlock the motorcycle's power supply.
- . When the smart key system cannot work properly, see Page 55.

### Caution

If you lose your key during riding, you can still continue to use your motorcycle, and turn off the power switch. However, once the power switch is turned off, you will not be able to operate your vehicle.

Please contact your dealer for a new key.

#### Lock the power switch

- 1 Park the vehicle stably on the ground.
- 2 Turn the power switch to X (OFF) or (LOCKED) position.

# Caution

When you leave your motorcycle, please make sure that the power switch is in \( \omega \) (OFF) or \( \omega \) (LOCKED) position.

The steering handlebar cannot be locked, when the power switch is turned to  $\bigotimes$  (OFF) position and the power switch indicator does not light up. To lock the steering handlebar, please tap the power switch first if the key is available.

Another individual can unlock the motorcycle before the power switch indicator goes off. So please wait until the power switch indicator goes off before leaving your motorcycle.

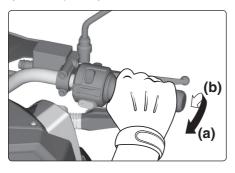
The power supply of the motorcycle can be directly disconnected by the power-off switch. It is strictly forbidden for the user to disconnect the power-off switch without locking the power switch. Otherwise, it will affect the life of the battery pack and cause irreversible damage to the battery pack.





### Riding

Before starting your motorcycle, please check the traffic condition around you. Adjust the rear-view mirror, and turn on the turn signal light to indicate your riding direction.



- 1 Start the power supply, and retract the side stand. (For information on how to start the power supply, see Page 29.)
- 2 Press the Electric start switch on the right handlebar. If the parking mode indicator (at Gear P) goes off, and the READY indicator lights up, you can begin the ride.
- If the READY indicator fails to light up, the motor cannot be started, and you cannot ride your motorcycle.
- 3 Acceleration and deceleration.

Acceleration: Turn the speed-control handle in direction (a). Deceleration: Turn the speed-control handle in direction (b).

4 Slow down before entering a corner, and slowly turn the speed-control handle in the direction (a) when exiting the corner.

Be sure to use the turn signal light before turning around.

# **Riding Guidelines**



### **Braking**

Turn off the speed-control handle, and then hold the front and rear brake handles at the same time. The brake light at the rear of the motorcycle will light up when braking.

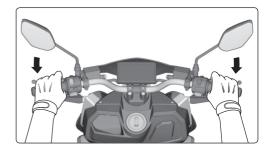
### Caution

When you are about to make a turn or stop during riding, you need to brake the motorcycle in advance.

Turn on the direction light in advance, keep an eye on vehicles coming from the side and rear, and hold the front and rear brake handles tightly to speed up your motorcycle gradually.

### ⚠ Warning

- Avoid excessive force or emergency braking (especially when the motorcycle turns to one side); otherwise it may slip to one slide or turn over.
- Braking on wet roads may cause skidding or even danger. Please slow down and ride carefully.
- In roads with long and steep slopes, repeated braking may cause
  the brake to get overheated severely, thus affecting the braking
  effectiveness. To ensure safety, operate the front and rear brakes
  simultaneously, and use the brakes intermittently to slow down.



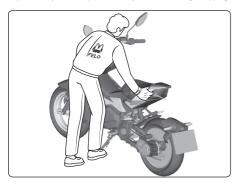




## **Parking**

Please park your motorcycle on the solid and flat ground with the side stand, and lock the steering handlebar.

If you have to park on the slightly tilted or loose ground, make sure to park stably, and keep the motorcycle from moving or tipping over.



- 1 Turn the power switch to the XX (OFF) position.
- 2 Lower the side stand.

Slowly tilt the motorcycle to the left until its weight shifts onto the side stand.

3 Lock the steering handlebar by turning it fully to the left (for more information, see Page 31).



When you leave your motorcycle, please make sure that the power switch is in  $\bigotimes$  (OFF) or  $\widehat{\mathbf{n}}$  (LOCKED) position.

Another individual can unlock the motorcycle before the power switch indicator goes off. So please wait until the power switch indicator goes off before leaving your motorcycle.



# **Battery charging**

This model is equipped with two batteries: one lead-acid battery (small) and one power lithium battery (large). They are located on the front of the motorcycle body and in the center of the chassis respectively (As shown in Page 11).

## 

Do not disassemble or modify the power battery on your own.



The ex-factory battery of this model is in sleep mode, and needs to be charged and activated before its first use. This operation is recommended to be performed by your authorized dealer.

#### Basic introduction

#### The power battery has the following features.

- As the power battery is repeatedly charged and discharged, the battery capacity will decrease over time.
   When the battery capacity decreases, the distance you can ride will gradually become shorter, even if the power scale shown is full (fully charged).
- Depending on your riding conditions and the service time of your motorcycle, its discharge performance will gradually decline.
   The mileage will decrease when the motorcycle is operated in extreme hot or cold environments.
- If you have not used your motorcycle for a long time, the power battery will go into the sleep mode. The VCU is powered by a 12 V battery. When the 12 V battery is about to run out of power, the VCU will activate the BMS system, making the power battery charge the 12 V battery. After the 12 V battery is fully charged, the power battery will continue to enter the sleep mode, and the 12 V battery will continue to supply power to the VCU.

## Caution

- Once both batteries run out of power, the motorcycle's burglar alarm system will fail to work, and your motorcycle will be at an increased risk of being stolen. So please charge the power battery in time.
- Because the battery can be self-discharged, its capacity will drop when the motorcycle is not in use.
- If you want to store your motorcycle for a long time and keep the batteries healthy, please charge them once every 3 months with the official charger to keep the battery pack capacity at 40-60%.
- If the motorcycle runs out of power due to storage for a long time and cannot be started, please connect the charger to charge the whole motorcycle for over 30 min, and then start it.
- Please do not wait for the battery completely runs out of power before recharging it. It may greatly affect the battery life.



#### Please follow the rules below

- Please use original power batteries of the motorcycle, and do not use power batteries of other brands or other models.
- Please prevent the power battery from contacting water, beverage or corrosive liquid.
- Please prevent the power battery from approaching heat sources, open flames, flammable and explosive gases (liquids), etc.
- · Please prevent the power battery from excessive physical shocks.
- · Please prevent metal objects from contacting the terminal on the power battery.
- If you find any irregularity (e.g. power battery overheating, smoke or unusual smell), stop using the motorcycle immediately, stay away from it, and contact your authorized dealer.

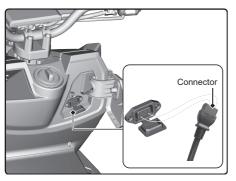
## 

- Improper use of the power battery may result in an electric shock or fire, which may lead to death or serious injury.
- Do not dissemble the waste battery on your own. You need to deliver it to professional departments for disposal and recycling.
- The battery warranty will be canceled if any of the following situations occurs during the use and storage of the motorcycle:
  - 1 The motorcycle has been parked for over 3 months without regular charging. (see Page 36)
  - 2 The power battery is damaged due to human errors, such as accidental motorcycle collision, water immersion, fire, accident, or disassembly and modification by users.
  - 3 The battery capacity of the motorcycle is less than 10%, and fails to be charged for 7 days, causing it to be severely over-discharged.
  - 4 The motorcycle's warranty period has expired (The warranty period begins from the date of purchase, and specific time is subject to the date on the purchase invoice.)
  - 5 The maximum capacity of battery is higher than 70% of the designed capacity.



#### How to charge

Please always use the power battery charger supplied with the motorcycle to charge your power battery.



Make sure that the power switch is in the  $\bigotimes$  (OFF) position during charging. Open the charging port lid and insert the charging connector of the charger into the charging port.

#### Charging environment

Please charge the power battery in the following locations.

- · Park the motorcycle on a firm horizontal ground.
- Charge it at the ambient temperature between 0 °C and 40 °C.
- · A well-ventilated and non-humid location.
- . Charge it in places permitted by laws and regulations.

#### Charging time

It takes about six hours to fully charge the zero-charged power battery. The charging time may be longer under higher or lower ambient temperatures. Do not charge it for more than 12 h to prevent the service life of the power battery from being affected.

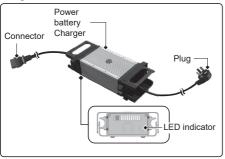


#### About charger

Please store the power battery charger far away from direct sunlight and rain.

During charging, you can judge the charging status according to the meter display.

#### Charger 1:



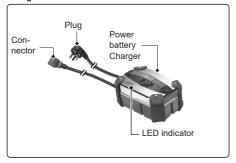
#### Charger indicator

Description on the	ne charger indicator status
Charger status	Indicator
Standby status	Red indicator stays still.
Charging capacity of less than 50%	Red indicator flashes.
Charging capacity of more than 50%	Yellow indicator flashes.
Charging capacity of 100%	Green indicator flashes.
Completed	The green indicator is on.
Overcurrent and short circuit fault	Red and green indicators flash alternately.
Overvoltage and open circuit fault	Red, green and red indicators flash alternately
Over-temperature	Red, green, red and green indicators flash alternately
Reverse connection fault	Red, green, red, green and red indicators flash alternately.
Battery fault	Red, green, red, green, red and green indicators flash alternately.

If the battery or charger fails to work, please contact your authorized dealer.



#### Charger 2:



#### **Charger indicator**

	Description on the	e charger indicator	status
	Charger status	Indicator	Remarks
RUN	Standby	Green indicator is always on.	
	Charging	Green indicator flashes.	
	Fully charged	Green indicator is always on.	
	No load (short circuit, undervoltage and reverse connection)	Red and green indicators flashes alternately (0.5 s).	Check output voltage
ALM	Communication fault	Yellow (mixed red and green) indicator flashes.	Check communication line
	Abnormal AC input	The yellow (mixed red and green) indicator is always on.	Check the AC input voltage
	Output over- voltage	Red indicator flashes.	Check whether the output connection is normal, and check the output voltage.
	Internal over- heating	The red indicator is always on.	
Flashing p	riority: Abnormal AC	C input > Output ov	ervoltage > No

Flashing priority: Abnormal AC input > Output overvoltage > No load > Communication fault > Internal overheating

# (3)

# **Riding Guidelines**

#### Instructions for the Charger

Please follow the rules below when using the charger:

- When the battery is charged using the charger, insert the charger into the motorcycle body first, and then insert the power plug. If you hear a "click", it is normal.
- At the end of charging, pull out the power plug first, and then the plug from the motorcycle body.
- This adapter shall be unique to the specific motorcycle, and cannot be borrowed for used by other motorcycles to avoid any damage.
- The DC output of the adapter is marked with "+" and "-" symbols. During usage, please note that these symbols are the same with those of the load.
- Do not immerse the adapter into water. When the plug or the adapter is immersed in water, stop using it immediately.
- When the adapter is used, keep it away from explosive gases, and try to avoid any flames or sparks.
- Heat is generated when the adapter is in use. Therefore, you should ensure that its surrounding environment is well ventilated, and it cannot be placed on sofas or other flammable objects.
- The output voltage of the adapter exceeds DC42V. Please use it safely. Do not open it on your own if you are not professionally-trained, to avoid any electric shocks or failures.
- Because the adapter is fan-cooled, it is normal to hear noises (
  i.e. the airflow sound generated by rotation of fan blades) during
  operation.
- If the charger or the power socket is damaged or deformed, or the power cable is damaged, stop using it immediately, and ask professionals to replace the damaged part.
- . Do not charge when the electric motorcycle is covered. Keep its

surroundings well ventilated during charging.

- Do not charge the battery in places where there is a risk of thunderstorms.
- . Do not plug too many power cables into the same power outlet.
- Do not plug/unplug the charger by pulling the cable.
- Do not repeat charging after charging is completed.
- Please read this User Manual carefully before using this charger. If the indicator displayed is abnormal, or the charger cover is overheated, stop charging immediately and ask professionals for inspection and maintenance.

## 

If a fire occurs in the motorcycle or its batteries, please comply with the following principles:

- If the power battery emits smoke, please stay away from this
  motorcycle immediately, contact the fire department, and prepare to
  extinguish any fire.
- ABC dry powder fire extinguishers or electrical fire extinguishers can be used to put out any fire. If the fire is out of control, please contact the fire department.
- After the fire is extinguished, please contact the dealer to deal with waste batteries. Do not dispose of them on your own.
- The motorcycle's voltage may not be cut off depending on the location of the fire. After the fire is extinguished, the power must be cut off.



# Importance of maintenance

Always keep your motorcycle well maintained. This is very important to keep your body safe, protect your properties, achieve the optimal performance of your motorcycle, and prevent your motorcycle from any faults.

## 

Failure to carry out normal maintenance or correct any malfunctions before riding may result in serious or fatal accidents.

Follow the inspection and maintenance recommendations and maintenance schedule specified in this User Manual.





## **Maintenance schedule**

					Evei	y two years
				E	very year	
			Eve	ery 10,000 km		
		E	very 5000 km			
	A	After 1,000 km				
Items	Inspection before riding					
▲ Check brake discs		0	•	•	•	•
▲ Check front wheel brake pads	I	0	•	•	•	•
▲ Check rear wheel brake pads	I	0	•	•	•	•
▲ Check the brake fluid level of the front wheel brake	I	0	•	•	•	
▲ Check the brake fluid level of the rear wheel brake	I	0	•	•	•	
▲ Check if the brake pipeline is damaged		0	•	•	•	•
▲ Check the bearing clearance of the steering head		0	•	•	•	•
▲ Check steering column bearing lubrication		0	•	•	•	•
▲ Check the state of tires	I	0	•	•	•	•
▲ Check the tire pressure	I	0	•	•	•	•
▲ Check if the front and rear shock absorbers leak	I	0	•	•	•	•
▲ Check if the lights, signals and switches work normally	I	0	•	•	•	•
▲ Replace gear oil		0		•	•	•
▲ Check if the side stand screw is loose		0	•	•	•	•
▲ Check the belt and replace it if necessary*	I			•	•	•
▲ Check if the wheel bearing is loose or damaged		0	•	•	•	•
▲ Check parts and cables	I	0	•	•	•	•



						Eve	ry two years
					E	very year	
				Eve	ery 10,000 km		
			E	very 5000 km			
		F	After 1,000 km				
	Items	Inspection before riding					
	Check the motorcycle frame				•		•
	Check the rocker arm				•		•
	Check if nuts, bolts and fasteners are loose		0	•	•	•	•
	Check if rubber parts are damaged		0	•	•	•	•
<b>A</b>	Check if the rocker arm bearings can rotate smoothly, and whether they are damaged		0	•	•	•	•
	Lubricate all moving parts and check their movement		0	•	•	•	•
<b>A</b>	Check if the motor pulley and gearbox pulley are damaged*		0	•	•	•	•
<b>A</b>	Check if the overall wiring harness is damaged		0	•	•	•	•
<b>A</b>	Replace the brake fluid of the front wheel brake						•
<b>A</b>	Replace the brake fluid of the rear wheel brake					•	•

- ▲: Work that must be performed
- o: One-time cycle
- : Periodic cycle
- I: Inspection is required (when necessary, cleaning, adjustment, lubrication or replacement should be done)
- \*: When replacing the belt, you need to replace the motor pulley and gearbox pulley at the same time. Similarly, when replacing the pulley, you need to replace the belt as well. Otherwise, damage may occur again.





# Parts and components maintenance

#### Parts replacement

To ensure reliability and safety, please use genuine parts or equivalent products.

When you need to replace any parts, please consult your authorized dealer.

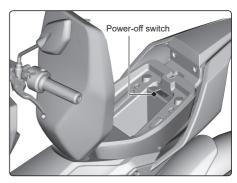
## 

Installing non-genuine parts may make your motorcycle unsafe, thus causing an accident such as a serious injury or even death.

Please use certified genuine parts or equivalent products that have been specially designed for your motorcycle.

#### Power-off switch

Power-off switch is located in the storage compartment.





#### Motor and controller

The controller of a motorcycle, one of the most important parts and components, is a core control device that is used to control the start and operation of the motorcycle's motor.

Please follow the rules below

- Please do not modify the motor on your own, otherwise your motorcycle will be vulnerable to spontaneous combustion or traffic accidents.
- Please do not ride in deep water, much less ride in water which exceeds the rear wheel's central axis.
- Please check the fastening status of the motor more often. If you find that the screw is loose, please let maintenance personnel to reinforce it in time.

## Caution

If your vehicle is parked for a long time in rain without protection, you need to check whether there is any water in the controller and motor before riding. If water is found in the controller or motor, it is recommended that you do not use the vehicle for a while until the water condition disappears.

#### Check tire pressure

Visually check the tires and measure the tire pressure with the barometer at least once a month or whenever you feel that the tire pressure is insufficient.

Always check the tire pressure when the tires are cool. The maximum tire pressure is shown below:

2-person riding:

Front wheel: 225 kPa

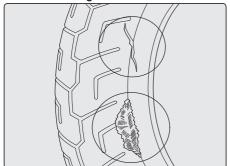
Rear wheel: 280 kPa

## 

Operating this motorcycle with abnormal tire pressure may result in serious personal injury or death due to loss of vehicle control.



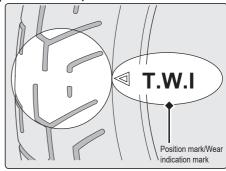
#### Check tire damage



Check the tire for cuts, cracks, exposed fabric or tire threads, or nails or other foreign objects embedded in the tire side or tread.

Also check the tire side walls for bulges or swelling.

## Check tread depth



Check the indication marks of the tread wear. If any wear indication marks are visible, please replace the worn tire immediately.

Minimum tread depth: 2 mm



Riding with severely-worn tires will reduce the riding performance of the motorcycle and potentially cause accident.



#### Please follow the rules below

- Use recommended tires or an equivalent products with the same size, structure, speed rating and load capacity.
- Do not install any inner tube in the tubeless tire of this motorcycle.
   Excessive heat may cause the inner tube to burst.
- Only tubeless tires can be used for this motorcycle. The rim is designed to use tubeless tires.
- Do not overload. Riding an overloaded vehicle may cause an accident.
- The replacement of all wheels and brake-related parts (including tires) shall be completed by the maintenance personnel with professional skills and operating experience.

# 

Installing unsuitable tires may affect the operation and stability of this motorcycle, and cause accidents, such as serious injury or even death.

Use the size and type of tires recommended in this User Manual. (See Page 40)



#### Check brake fluid

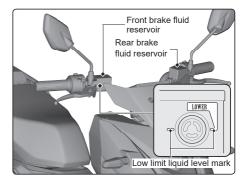
Turn the steering handlebar, and check whether the brake fluid level is above the mark of the lower limit to the fluid level, when the brake fluid level is aligned with the mark line.

If the brake fluid level in the reservoir is below the mark of the lower limit to the fluid level, or if the free stroke of the brake handle exceeds its limit, please refer the motorcycle to your authorized dealer for service.

Recommended brake fluid: DOT 3 brake fluid or equivalent products

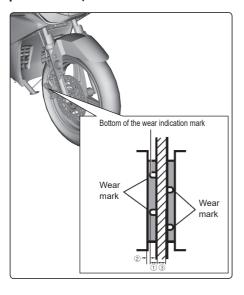
# Caution

Brake fluid can damage plastic and painted surfaces. If any fluid spills over, please wipe it immediately, and clean the affected area completely.





#### Check brake pads and brake discs



Check the condition of the wear-and-tear marks on the front and rear brake pads.

If the wear-and-tear of the brake pads has reached the bottom of indication mark, the pads need to be replaced.

Check the state of wear-and-tear on the front and rear brake discs.

If the front and rear brake discs are worn to the manufacturer's specified thickness, the brake discs need to be replaced.

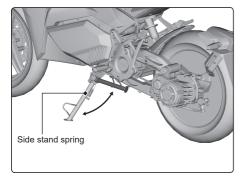
- 1 Limit for usage: 3mm
- ② Brake pad usage limit: 2mm
- The brake disc must be replaced if its thickness is below 3.5mm



- Please replace the brake pads at an authorized dealer. Make sure to replace the left and right brake pads at the same time.
- Your safety may be at risk if the brake pads are severely worn, and you fail to replace them in time.



#### Side stand



#### Inspection

- Check whether the side stand works smoothly. If the side stand is stiff or rattling, clean the pivot area and lubricate the pivot bolt with clean grease.
- Check the springs for damage or loss of elasticity.
- Sit on the motorcycle and put away the side stand.
- Turn on the motor, and lower the side stand as far as it can go. At this time, the motor will not run even if you turn the speed control handle.

If the motor does not stop and you can still ride the motorcycle even after you have lowered the side stand, please have your motorcycle inspected and repaired at an authorized dealer.

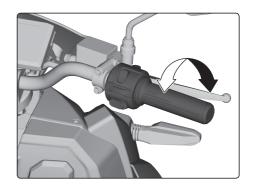


#### Speed-control handle

#### Inspection

When the power switch is in the  $\bigotimes$  (OFF) position, check whether the speed-control handle can be turned from the fully-closed to the fully-opened position smoothly.

If the speed-control handle does not operate smoothly or return automatically, please refer the motorcycle to your authorized dealer for service.

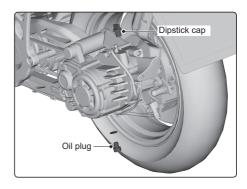




#### Replace gear oil

- Support the motorcycle with a stand so that the front and rear wheels are lifted from the ground.
- Place the oil tray under the gearbox to collect the oil, remove the dipstick cap and oil plug until the gearbox oil is completely drained.
- After the oil plug is installed, refill the gearbox with 350 ml oil.

Oil type: GL5 80W-90



# **Troubleshooting**



## Motorcycle cannot ride.

If you place the power switch in the  $\bigcap$  (ON) position, but the display still show nothing.

#### Please check the following items:

- Check whether the power battery is charged. If the motorcycle cannot be started because it has not been charged for a long time, please charge it with a charger, and wait for 30-60 min before trying to start again.
- Check whether the power battery temperature is too high.
   After the motorcycle has climbed uphill or ridden at a full speed for a long time, the protection circuit against the temperature rise of the power battery will start to work. making the motorcycle unable to ride.
  - Turn the power switch to the \( \omega \) (OFF) position, and wait for the temperature of the power battery to drop. After the power battery temperature drops, you can keep on riding.
- Check whether the power-off switch is in the ON position. (See Page 45)
- Check whether the side stand is retracted. (See Page 35)
- Make sure that the speed-control handle is completely closed.
- · Make sure the brake handle is fully released.

If the problem has not been solved, please refer the motorcycle to your authorized dealer for service.

## The power battery cannot be charged.

#### Please check the following items:

- Have you charged your motorcycle in a very hot place (e.g. a place exposed to direct sunlight)?
- . Charge the motorcycle in the recommended location. (See Page 38)
- Have you charged your motorcycle immediately after riding?
- Have you charged your motorcycle in a very cold place?
- · Has the plug been firmly plugged into the electrical outlet?
- Was the external connection circuit live? Did the voltage satisfy the requirements?
- · Was the cable or the plug damaged?

If the problem has not been solved, please refer the motorcycle to your authorized dealer for service.

## **Troubleshooting**



# When the smart key system cannot work properly

When the smart key system cannot work properly, please execute the following operations.

- First confirm whether your smart key is within the normal operating range (See Page 24).
- Confirm whether the smart key battery is charged. If not, please replace the battery of the smart key.
- Check whether there is any communication fault in the smart key system. The smart key system uses low-intensity radio waves. The smart key system cannot work properly in the following situations.
  - When there are facilities that generate strong radio waves or noise (e.g. TV towers, power stations, radio stations, or airports) nearby.
  - When you carry the smart key with wireless communication devices, such as laptops, radios or cell phones.
  - When the smart key is in contact with metal or is covered by a metal object.
- Check whether you are using a registered smart key. Please use a registered smart key. Only a registered smart key can activate the smart key system.
- Make sure that the smart key you are using is not damaged. If you
  use a damaged smart key, the smart key system cannot be activated.
  Please contact your authorized dealer.
- Check the situation of the power battery in the motorcycle and the connection cable of the power battery. If the power capacity of the power battery is low, please contact your authorized dealer.

If the smart key system cannot be started for other reasons, please contact your authorized dealer.

## Tire puncture

Repairing a tire puncture or removing a wheel needs special tools and professional skills.

We recommend you leaving such work to your authorized dealer.



Riding a motorcycle with a repaired tire is dangerous. If the temporary repair failed, an accident may occur, thus causing serious injury or death.

If you have to ride a motorcycle with repaired tires, please ride it slowly with caution. Your riding speed shall not exceed 50 km/h until the repaired tire is replaced.

# **Troubleshooting**



#### **Bulb fault**

All bulbs on the motorcycle are LEDs. If any of the LEDs fails to light up, please contact your authorized dealer for service.

(For the specific location of each bulb, see Page 9-10.)

## Turn signal light fault

If the turn signal light is faulty, the front or rear turn signal light on the same side of the faulty light will flash rapidly after the turn signal light is turned on, the turn signal light icon in the corresponding direction on the instrument will also flash rapidly.



## Maintenance of the motorcycle

Regular cleaning and polishing can ensure that your motorcycle has a long service life. A clean motorcycle makes it easier to detect potential faults.

Particular attention shall be paid to the fact that anti-icing seawater and salt applied on roads can accelerate corrosion.

Be sure to completely clean your motorcycle after riding on the on roads that have been treated with the above methods

- Cleaning
  - Wait for the motor, brakes and other hot parts to cool before cleaning.
- 1 Completely rinse the motorcycle with water from a hose to remove loose dirt
- 2 If necessary, remove dust and dirt on its surface with a sponge or soft towel dipped in a neutral detergent.
- Take special care when cleaning headlight lenses, panels and other plastic components to prevent scratching. Prevent water from entering electrical components.
- 3 Completely rinse the motorcycle with plenty of clean water and wipe it with a clean and soft cloth.
- 4 Afterwards, lubricate all moving parts.
- Make sure no lubricant spills over on any brakes or tires. The braking
  performance of oil-contaminated brake discs and pads will be greatly
  reduced, and may cause an accident.

- 5 Apply a layer of wax on plastic exterior parts to avoid corrosion.
- Avoid using products that contain strong degreasers or chemical solvents. These substances can damage the metal parts, paint layer and plastic parts of your motorcycle.
- Do not wax tires and brakes.
- If your motorcycle is equipped with parts with the matte finish, do not wax the matte finish.
- · Precautions for cleaning

Follow the following guidelines when cleaning:

- Do not use high-pressure water guns:
   High-pressure water guns can damage moving parts as well as electrical parts.
- Dry brakes:
  - Water on brakes can reduce braking performance. After cleaning, riding at a low speed and using the brakes at intervals will help dry them.
- Do not clean the power battery or power battery box in water or with detergents.
  - This may lead to a starting fault and malfunction.
- Do not directly flush the part below the saddle with water:
   If water enters the saddle compartment, it may damage your documents and other items



- Do not directly rinse the parts near the headlight with water:
   The inner lampshade of the headlight may temporarily fog up after cleaning or when riding in the rain, which makes no impact on the function of the headlight.
  - However, if you find a large amount of water or ice collecting in the lampshade, please contact your authorized dealer for inspection.
- Do not apply wax or polishing compounds to the matt paint finish.
  - Clean the matt finish with the soft cloth or sponge, plenty of water and neutral detergent. Dry it with a soft and clean cloth.

#### · Aluminium assembly

Aluminium assemblies may be corroded after exposed to dirt, mud, or road salt. Clean aluminium assemblies regularly by following the guidelines below to prevent them from scratches:

- Do not use hard brushes, steel wool or detergents containing abrasives.
- Do not ride or scratch on curbs.

#### Panel

Follow the rules below to prevent scratches and damage:

- Clean panels gently with a sponge and sufficient water.
- Clean with diluted cleaner and wash thoroughly with enough water to remove stubborn dirt.
- Avoid applying gasoline, brake fluid or degreaser on gauges, panels or headlights.



## Storage of motorcycle

If you place your motorcycle outdoors, you should consider to cover it with a full-body shield.

- If your motorcycle is not in use for a long time, please follow the guidelines below to store it.
  - To prevent the power battery performance from degrading, store your motorcycle in a cool place.

Recommended temperature: 0-25°C

 Before storing your motorcycle for a long time, please fully charge its power.

Check the power battery coulombmeter every two months.

## Caution

Do not store your motorcycle for a long time when there is only one bar left in the battery indicator, as that may cause power battery malfunction.

- Clean your motorcycle and wax all paint finishes (except for matt paint finishes). Apply anti-rust oil to all chromium-plated parts.
- Support your motorcycle with the repair bracket, and then insert stop blocks to lift two tires above the ground.
- After raining, remove the body cover from the motorcycle, making it dry.



## Transportation of the motorcycle

If you want to transport your motorcycle, you need a motorcycle trailer, or a flatbed truck or trailer equipped with the loading platform, lifting platform and motorcycle straps.

Before transportation, try to keep the front wheel of your motorcycle to point straight ahead of the trailer or truck. At the same time, bind the fixed parts of the motorcycle body with crossbars or sturdy and inelastic straps, such as the chassis, front forks, rear flat forks, etc.



Towing the motorcycle may seriously damage its transmission devices.

If you need to move the motorcycle manually, make sure to wear protective gloves To prevent body parts from being pinched by the motorcycle during transportation, especially rims, front and rear brakes and other parts.

## **Environment Protection**

Owning and riding the motorcycle is enjoyable, but you must do your duty to protect the environment.

- Choose a proper detergent
  - Clean your motorcycle with a biodegradable detergent. Avoid sprays containing chlorofluorocarbons (CFCs). They can destroy the protective ozone layer of the atmosphere.
- Waste recycling
  - Place engine oil and other toxic wastes in approved containers, and then deliver them to a recycling center.
  - Call the local or national public affairs or environmental services office to find local recycling centers in your area, and obtain instructions on how to dispose non-recyclable wastes.
  - Do not pour used engine oil from gearboxes into rubbish bins or drain pipes, or on the ground.
  - Used engine oil, gasoline, coolants and detergents contain toxic substances that may harm cleaners, or pollute drinking water, lakes, rivers and oceans.
    - When disposing of power batteries
      - If your motorcycle cannot be repaired any more, please consult your authorized dealer for disposal of the power batteries.

# **Technical parameters**



L*W*H (mm)		1,830*755*1,095
Wheel base (mm)		1240
Equipment weight	(kg)	125
Maximum load (kg	g)	150
Maximum lua	Glove box	1.5
Maximum lug- gage weight (kg)	Storage com- partment	10
Maximum weight	allowed (kg)	275
Maximum axle weight allowed (kg)	Front	94
	Rear	181
Number of passengers		2
Minimum turning	radius (m)	2.1
Seat height (mm)		800
Minimum ground clearance (mm)		162
Castor angle (°)		27
Transmission type		Belt drive

	Front and rear discs	
ation	110/80-14M/C(4PR)53P	
ition	140/70-14M/C(6PR)68P	
Front (MAX)	225	
Rear (MAX)	280	
ake fluid	DOT3	
ber	Vertical type	
ber	Hydraulic damping type	
	Central installation	
r (W)	5,000	
ower (W)	10,000	
	110	
	140	
%)	15%	
	rition Front (MAX) Rear (MAX) rake fluid rber ber r (W) power (W)	

<sup>\*</sup> The NEDC is the test data at the constant speed of 60 km/h under NEDC working conditions. The actual value varies due to various factors such as the wind speed, road surface, load, operating habits, etc. The values on this parameter page are for your reference only.

<sup>\*</sup> The promotional pictures, functions, performance and other parameters in this User Manual are for your reference only. Please refer to the actual item.

<sup>\*</sup> The final interpretation right is owned by FELO Technology(Shanghai) Co., Ltd.

# **Technical parameters**



# Lithium battery

Cell type	INP58P
Cell capacity (mAh)	58,000
Serial and parallel mode	26S 1P
Battery weight (kg)	35
Battery voltage	96 V*
Battery capacity	58 Ah
Installation location	Body
Removal mode	Non-removable

## **Electric installation**

Headlight	LED
Front direction light	LED
Rear direction light	LED
Tail light	LED
Meter	LCD
Side reflector	With
Rear reflector	With

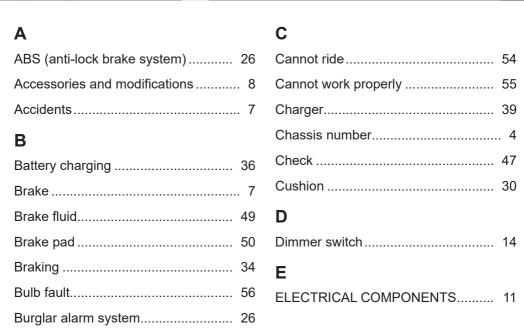
## **Fuse**

Power-off switch	63 A ×1
Fuse	5 A ×1, 7 A ×1, 150 A ×1

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<sup>\*</sup> The operating voltage of battery is 96 V.





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