SWM

User Manual - Operation - Maintenance

Binsen

INDEX

FOREWORD

Welcome to SWM electric motorcycle - Binsen family!

The design and manufacture of your Binsen electric motorcycle is the best of its kind in the world. This user manual is designed to provide you with a guide to the proper operation and maintenance of this model. Please follow these instructions carefully to enjoy the best riding experience. More specific or major repairs or maintenance require skilled technician operation, and use of specialized tools and equipment. Officially authorized Binsen dealers have original accessories, experience, all tools and equipment required to provide service.

Binsen contains cutting-edge systems, technological design and manufactured components. Please follow the instructions in Chapter 4 of this manual to carry out proper maintenance. Regular maintenance from official authorized Binsen dealer network is necessary to maintain the top performance and safety.

We remind you that the user manual is a permanent part of the electric motorcycle and should be attached to the electric motorcycle when it is transferred.

Please read the user manual carefully before riding with Binsen, which contains certain information and advice to have a comfortable and safe riding experience. Please pay special attention to the precautions with the following highlights:

Danger

— **The instructions must be followed to avoid serious injury accidents.**

Warning

— **The instructions must be followed to avoid personal injury or device damage.**

Attention

— **Measures to be taken during operation, inspection and maintenance.**

Note:

1. Battery recycling

To protect the Earth, when the battery is not needed or meets the lifespan, please comply with local laws and regulations on waste product recycling and disposal, and pass them to local manufacturers with nationally recognized qualifications for recycling and disposal. Improper use or disposal may have an impact on the environment and human health.

2. This user manual is applicable for Binsen, both on-road and off-road version.

Chapter 1 Safety instruction

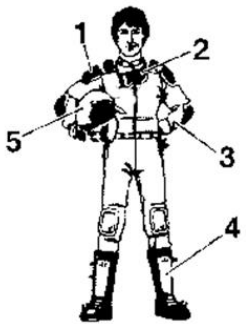
1.1 Safety precautions

I. For your safety riding, always wear suitable protective clothing, safety helmet, protective mask, dust glasses, gloves and other protective equipment.

II. Don't wear loose clothes, which may easily hook onto the lever, pedal or wheel and cause danger.

Warning

- **Don't wear improper helmet which increases the risk of serious injury or death in a collision;**



1. Protective clothing
2. Goggles
3. Gloves
4. High boots
5. Helmet

1.2 Safe riding rules

A. Check the condition of the bike and components based on the user manual before starting.

B. Drivers must obtain a corresponding driving license before riding.

C. Don't drink alcohol or take neurological drugs before riding.

E. Please be concentrate for your riding and:

- Keep safe distance with other vehicles;
- Don't scramble for the road;
- Make sure if there's obstacles/vehicles in the front/rear and overtake in a safe condition.

F. Strictly obey local traffic rules

- Always ride within the prescribed speed limit range.
- Always use turn indicator before turning or lanes changing.

G. The braking distance, on rainy days, is almost as twice as normal condition. Ride carefully if there's water on the road, and don't ride if the water level if above the motor.

1.3 Refitting

It is illegal to refit the electric motorcycle or replace with non-original part casually, which cannot guarantee the safety of electric motorcycle riding. Users must comply with the traffic management department's regulations on the use of electric motorcycle. We will not be responsible for the maintenance of the refitted bike.

1.4 Accessories

Don't use additional lighting device other than our original accessories to avoid premature battery depletion.
All accessories shall not block the light, reduce the ground clearance and the tilt angle, or limit the suspension, steering or control operation.

1.5 Part replacement

Replace with official original parts when necessary.

1.6 Loading

Please pay special attention when loading heavy objects or installing accessories. Large and heavy items may have adverse effects on the safety and performance, which will affect your riding experience, and even endanger personal safety.

Chapter 2 Bike details

2.1 Identification data

2.1.1 Vehicle identification number

The vehicle identification number is stamped on the right side of the steering pipe.

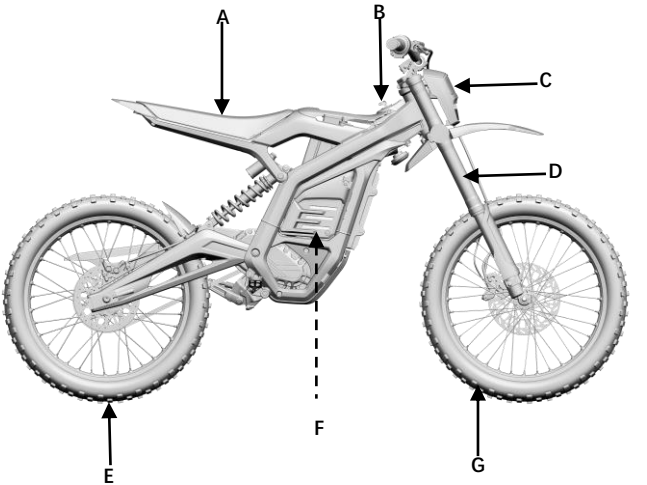
2.1.2 Motor serial number

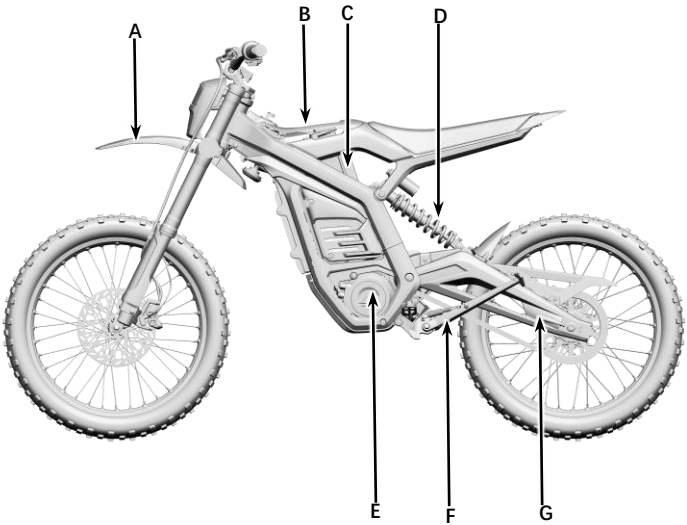
The motor serial number is stamped on the up side of the motor.

2.2 Main parts

2.2.1 Binsen - off-road version

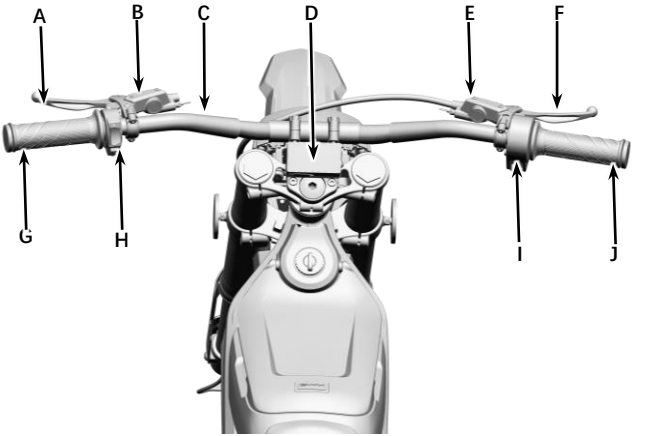
- **A.** Saddle
- **B.** Lock assy
- **C.** Head light
- **D.** Front suspension
- **E.** Rear wheel
- **F.** Battery
- **G.** Front wheel



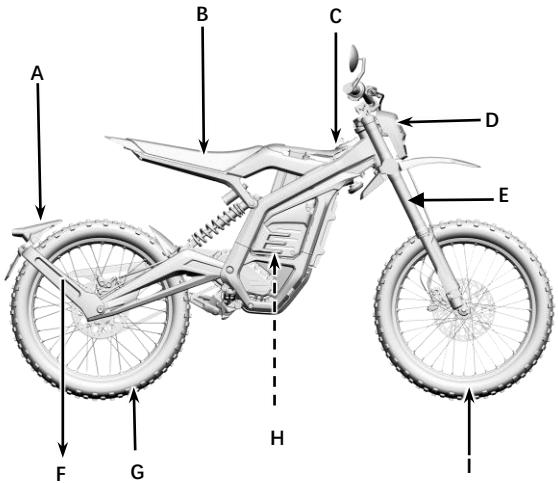


A. Front fender
B. Upper cover
C. Battery holder
D. Rear shock absorber
E. Motor
F. Side stand
G. Rear fork

A. Rear brake lever
B. Rear brake upper master cylinder
C. Handlebar
D. Dashboard
E. Front brake upper master
F. Front brake lever
G. Left handle grip
H. Left handle switch
I. Right handle switch
J. Right handle grip

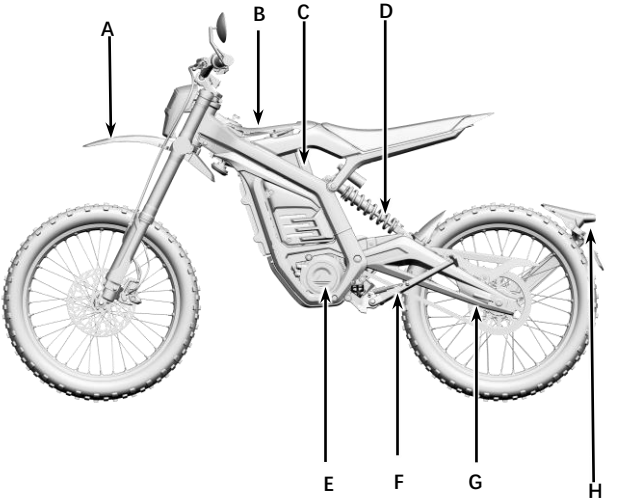


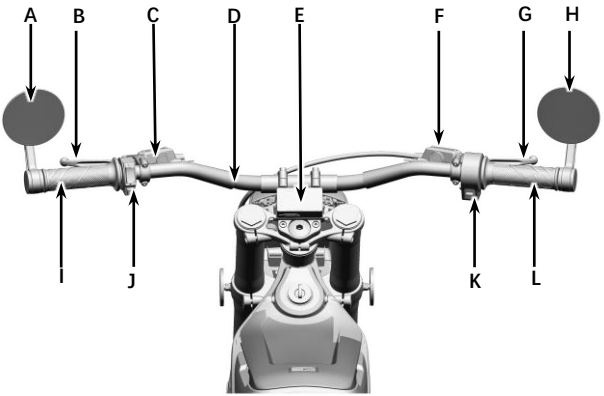
2.2.2 Binsen - on-road version



- **A.** Rear mudguard
- **B.** Saddle
- **C.** Lock assy
- **D.** Head light
- **E.** Front suspension
- **F.** Rear license bracket
- **G.** Rear wheel
- **H.** Frame
- **I.** Front wheel

A. Front fender
B. Upper cover
C. Battery holder
D. Rear shock absorber
E. Motor
F. Side stand
G. Rear fork
H. License plate light



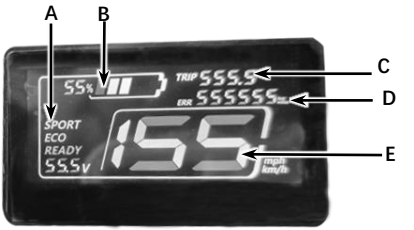


- **A.** Rear view mirror LH
- **B.** Rear brake lever
- **C.** Rear brake master cylinder
- **D.** Handlebar
- **E.** Dashboard
- **F.** Front brake master cylinder
- **G.** Front brake lever
- **H.** Rear view mirror RH
- **I.** Left handle grip
- **J.** Left handle switch
- **K.** Right handle switch
- **L.** Right handle grip

2.3 Dashboard

Dashboard function

A. **Mode:** Sport mode, ECO mode;
B. **Battery:** Remaining battery capacity display;
C. **Trip:** Mileage subtotal display, max. 999.9km;
D. **Mileage:** Total milage display, max. 99999km. It will remains displaying the max. value if real mileage exceeds;
E. **Speed:** Speed display. Valid range 0~199 km/h or mph;
F. **Button:** Long press the button to reset the Trip. Short press the button to switch between kilometer/mile unit.



2.4 Ignition switch

To switch on/off the motor.

Key position	Function	Note
	Power off	Key is removable
	Power on	Key is not removable
	Steering lock	Key is removable

Danger

- Do not switch the key during riding. All circuits will be cut off if the key is in "⊗" position.
- Operate the key only in stationary state of the bike to avoid any unpredictable accident.

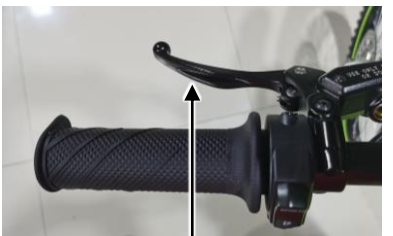
Warning

- Lock the steering and remove the key before leaving.
- If the motor can not be started then the key is in "↻" position, check the battery supply.
- Do not hook other metal stuffs with the key to avoid scratch of the bike.

2.5 Rear brake lever

Hold the rear brake lever to operate the rear brake. The brake light will be activated.

Please make sure the throttle is released while braking.



Rear brake lever

2.6 Front brake lever

Hold the front brake lever to operate the front brake. The brake light will be activated.

Please make sure the throttle is released while braking.

Front brake lever

2.7 Left handle switch

A. Horn button:

When the ignition switch is in the starting position, press the horn button to sound the horn. The electric motorcycle is quiet when riding, use the horn to warn pedestrians or other motorists when necessary.

B.Mode switch:

1) Press “SPORT” to enter sport mode to enjoy faster acceleration and greater power.
2) Press “EP” to enter ECO(economic) mode.

Note: Motor shuts off automatically when rear brake enables. This principle can be manually switched off in sport mode only.

2.8 Right handle switch

"P" mode switch

To enter/exit from "P" mode.

2.9. Throttle handle

Rotate the throttle handle to accelerate.

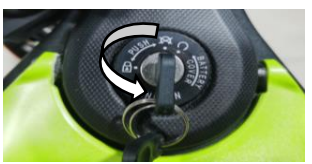
2.10 Battery set

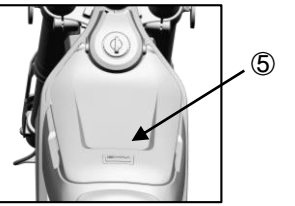
A. Battery function & illustration.

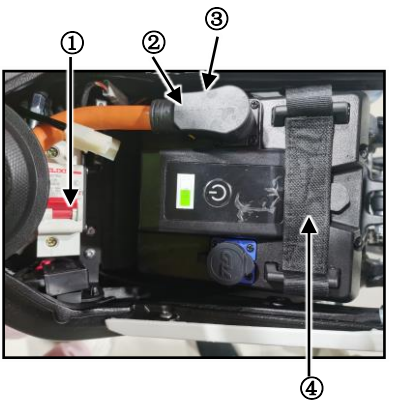
Function	Illustration
Doze mode	Battery enters doze mode in 10s if all following condition are met: 1. Battery is not in discharging state (no ACC signal) 2. Battery is not in charging state (no CIN signal) 3. No error warning Battery wakes if any of the following condition is met: 1. Valid ACC (key-on) signal (active high) 2. Valid CIN (charging) signal (active high) Display button pressed (Battery enters doze node again if there's no further operation in 10s)
Load capacity	The battery supports a load power of 2160W.
Display	LCD display of battery level, total voltage, and fault status

B. Assembly and disassembly of the battery set

1) Open the top cover⑤: Press the top cover⑤ when the key is in off position. Turn the key counter clockwise until a click sound from the buckle and rise up the cover;
2) Switch off the air circuit breaker①;
3) Press the button③ on the pointed side of plug② and remove the plug②.
4) Hold the belt④ and pull the battery out from the battery holder.
5) Reverse the above operation to assemble the battery.

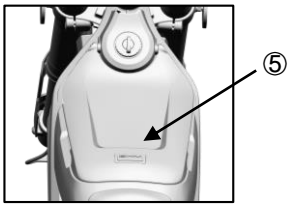


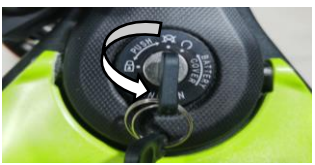




C. Charging

1) Open the top cover⑤: Press the top cover⑤ when the key is in off position. Turn the key counter clock-wise until a click sound from the buckle and rise up the cover;
2) Remove the dust cap from the charging port① and cover cap when the charging is completed.

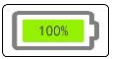




D. Battery display

The display content includes remaining battery, total voltage of battery set and error code.

Display method	Button operate	Display content	Button press during displaying
Automatic loop display	One press	Display remaining battery, total voltage and error with 2s interval and then screen shutdown.	Switch to manual loop display.
Manual loop display	Long press	Press button to display the next content. The screen shutdown with no operation in 5s.	Loop display
Error display	No press	Display error code automatically. The screen shutdown with no operation in 60s or the error is solved.	Switch to manual loop display.

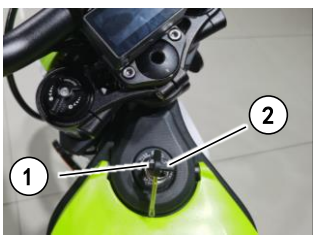
Display content	Definition	Illustration
Status Of Capacity	Remaining battery capacity	
OV	Battery overvoltage	
UV	Battery undervoltage	
OC	Battery overcurrent	
OT	Battery high temperature	
UT	Battery low temperature	
ERROR 01	Battery malfunction	
ERROR 02	Motor malfunction	
ERROR 03	Controller malfunction	
ERROR 04	Throttle grip malfunction	

2.11 Steering lock

Steering lock ① is integrated with ignition lock. To lock the steering:

A. Hold the handlebar and rotate counterclockwise.
B. Insert the key ② into the lock ①;
C. Press and turn the key ② to the lock position ;
D. Remove the key ②;

Reverse the above operation to release the steering lock.

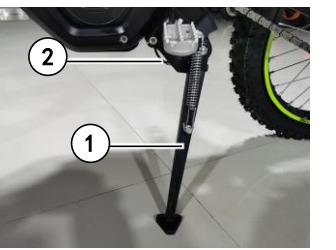


2.12 Side stand

This bike is equipped with side stand ① and side stand sensor ②.

Warning

- **Side stand is designed based on the bike itself. Don't sit with the load on the side stand to avoid deformation.**
- **Motor can be only start with side stand lift up. Motor shuts down immediately once the side stand is put down.**



Chapter 3 Operating instructions

3.1 Riding preparation

Follow the steps to check the bike before each riding:

A. Motor oil level: Insufficient oil can cause premature motor wear and damage.

B. Battery capacity: The endurance mileages are different based on riding circumstances. Charge the battery in time with referring to the battery display.

C. Transmission chain: Adjust the the chain with proper tightness to avoid loose chain (risk of chain detachment); severely wore of chain (risk of broken); too tight of the chain (risk of additional load to the driving device, causing premature wear, breakage, or damage to the drive shaft).

D. Tyre: Check if the tyres are worn out. Tyres with scratches or dents should be replaced, and the tread depth should comply with regulations. Check the tyre pressure. If the tire tread depth is not enough or the tire pressure is not suitable, it will damage the driving performance.

⚠ Warning

- **Improper tyre pressure is a common factor in tyre failure, and can lead to serious tyre rupture, tread separation or cause the electric motorcycle to lose control, which brings serious danger to life and health. Therefore, tyres must be checked regularly to ensure proper tyre pressure.**

E. Brake system: Check the brake oil when the motor is cold. If the oil level is below the min. scale mark, there might be oil leakage or damaged brake pads. Find an official dealer network to check the brake system, pipes, disc, brake pads and the brake lever as well.

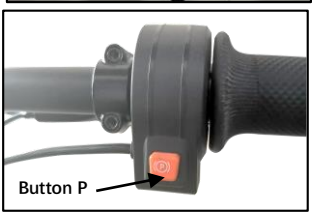
F. Throttle handle: Check the throttle handle with the key in the off position. Rotate and release the handle to check the smoothness and stability.

G. Lights and horn: Check if the lights and horn are working well.

H. Rear view mirror (if available): Sit on the bike and check the visual field in the rear view mirror.

I. Handlebar: Sit on the bike and check the handlebar position. No pipes/cables wrapped.

3.2 Riding operation



A. Starting

1) Turn the key clockwise;
2) Retract the side stand;
3) Hold the (front or rear) brake and short press the button P. When “Ready” displays on the dashboard, it’s ready to ride.

B. Parking

1) Lower the side stand, the parking mode activated automatically.
2) Double click the “P” button when the bike is stopped to enter parking mode.
3) Parking mode activates if there’s no operation in 30s when the bike is stationary.

C. Park mode logic

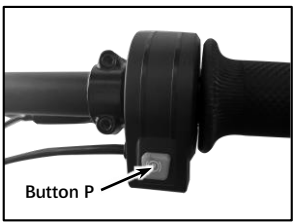
Park mode is activated if any of the following conditions are met:

1) The default state after power on is park mode.
2) No operation (no brakes) and no current output within 30s, park mode activates automatically.
3) Side-stand is in function.
4) The tile angle of the bike is over 60°.
5) Switch off of ignition key.
6) Battery charger is connected.
7) Motor system level 1 & level 2 fault
8) Battery system level 1 & level 2 fault
9) Double click the "P" button when the bike is stopped.
10) Side stand lowered.

3.3 TCS disable

A. Operate the bike in starting status, the dashboard shows Ready, and the bike is stationary;

B. Press and hold button P ⩾3 seconds; the buzzer will sound 3 times, TCS is disabled.



⚠ Attention

- **TCS is enabled by default;**
- **TCS default mode goes with every time switch-on of the key.**

3.4 Motor shut-off with rear brake - disable

A. Place the bike in “Ready” state and stationary;
B. Hold the right hand lever (front brake lever);
C. Switch EP/Sport button 4 turns and wait for 2 seconds. The function of “motor shut-off with rear brake” is disabled.

⚠ Attention

- **With factory/default setting, the motor shuts off automatically when rear brake enables. This function can be manually switched off in sport mode only with above steps.**
- **THIS IS A PERMANENT OPERATION. IT CAN’T BE REVERSED EVEN SWITCH-OFF/ON OF THE KEY.**
- **The above operation must be finished within 2 minutes after the bike is switched-on;**
- **If it’s not operated within 2 minutes, switch the bike off and then on again to re-do the steps.**

3.5 Energy recovery mode switch

A. Place the bike in "Ready" state and stationary;

B. Hold the right hand lever (front brake handle);

C. Switch EP/Sport button 3 turns and wait for 2 seconds.

⚠ Attention

- **There are four energy recovery modes, and the cycles are as follows: Level 2 → Level 3 → None → Level 1 → level 2.**
- **With factory/default setting, the energy recovery mode is in level 2.**
- **THIS IS A PERMANENT OPERATION. IT REMAINS AT THE SELECTED LEVEL EVEN SWITCH-OFF/ON OF THE KEY.**
- **The above operation must be finished within 2 minutes after the bike is switched-on.**
- **If it's not operated within 2 minutes, switch the bike off and then on again to re-do the steps.**

3.6 Operation after driving

Please charge the battery pack in time after use of the electric motorcycle. Please disconnect the charger and the power supply after charging. Please charge the battery in open areas or monitored places. It is recommended to switch off the circuit breaker or disconnect power cord from the battery (when the key is in off position) to reduce the battery consumption.

Attention

- **To maximize battery pack life, please charge the battery pack immediately after each riding, because battery pack life will be reduced by frequent deep discharges.**

Chapter 4 Maintenance

SWM has a regular electric motorcycle maintenance plan and carried out relevant operations before shipment to ensure the best performance and safety of Binsen.

Regular maintenance is a fundamental condition for ensuring the safety and reliability of the vehicle.

It should be noted that malfunctions caused by improper or incorrect operation are not covered by the warranty. Our company is not responsible for any accidents caused by mechanical malfunctions during use. All warranties, including the original warranty, material and labor costs need to be considered, while the pre-shipment processing mentioned in the maintenance plan is provided free of charge by the dealer. Warranty services or other reasons for repairs, settings, or replacement of parts, all operations must be carried out at an official dealer network recognized by SWM.

Regular inspection and maintenance

	Inspection item	Check list
Important parts check and maintenance	Battery	Voltage, charging port, etc., and check if there is any fault code
	Motor	Check if the motor is in good condition
	Controller	Undervoltage and overcurrent protection
	Charger	Charging current and charging voltage
	Main harness	Welding point, insulation, wear
Structure inspection and maintenance	Handle bar	Whether it can rotate flexibly
	Front and rear tyres	Crack, wear, pressure
	Frame, swingarm	Each welding spot, nut fastness
	Front suspension	Fastener, steering bearing
	Shock absorber	Shock absorber stroke, if there are any other abnormal conditions
	Chain	Tightness, wear

Continued

	Lights	Irradiation position, angle, circuit and insulation
	Rear view mirror	Rear view angle, range, screw fastening
	Front and rear tyres	Tyre pressure, tyre wear
	Brake system	Brake oil, brake disc, brake pads

4.1 Battery

A. Remaining battery capacity

This electric motorcycle uses a sealed ternary lithium battery. The battery needs to be fully charged before checking. Measure the positive and negative voltage of the discharge port with a multimeter. The normal full charged voltage is between 83-84V.

B. Battery appearance

Check if there's any damage on the upper and lower sealing covers of the battery and the display panel, which may lead to the risk of water ingress if the sealing fails. Please contact with an official dealer network when necessary.

Danger

- **Don't use the battery in an environment beyond the waterproof level. The internal waterproof of the battery may fail under changes in environmental conditions and use conditions.**
- **Don't immerse the battery in water, beverages or other liquid.**
- **Don't use or leave the battery in an environment near fire, heater or high temperature (>60℃).**
- **Don't use unauthorized chargers.**
- **Don't reverse the battery polarity connection.**
- **Don't connect the battery to an AC outlet or a DC automobile charging outlet.**
- **Don't use the battery for other devices or equipment.**
- **Don't burn or heat the battery.**

- Don't use metal objects such as wires to directly connect the positive and negative terminals of the battery to avoid short-circuit.
- Excessive mechanical impact on the battery is prohibited, such as impact, throwing, trampling, etc.
- Don't use nails or other sharp objects to pierce the battery.
- Don't disassemble the battery.

⚠ Warning

- Keep batteries out of reach of children. If any part of the battery is swallowed by a child, call emergency medical attention.
- Don't place the battery near microwave equipment or other cooking devices. If the battery is heated or subjected to strong electromagnetic radiation, it may leak, and will cause heating, smoking, or burning.
- It is prohibited to mix with other batteries because they have different capacity, chemical composition, manufacturing processes, etc., it may cause heating, smoking, or burning.
- If the battery is obviously abnormal in use or storage, such as emitting odor, heating, discoloration, deformation, or any abnormal phenomenon occurs during the charging process, please immediately remove the battery from the bike or charger, and stop using the battery. It may cause heating, smoking, or burning if continue to use the defective battery.
- If charging cannot be completed within the specified time, please stop charging.
- Don't place the battery near fire sources.
- Don't use the battery if water ingresses.
- Don't touch the battery with leakage problem. If the electrolyte accidentally gets into the eyes,

please don't rub the eyes. Wash the eyes with water immediately and seek for medical attention immediately.

- To prevent short circuit or damage to the battery during transportation and storage, it must be safely packed in a box or carton. Don't transport and store the battery together with any metal object.
- Don't leave the battery keep charging for a long time. Abnormal charging may cause heating, smoking, or burning.

⚠ Attention

- Don't use or leave the battery at high temperatures (>60℃, such as direct sunlight or in a very hot environment), to avoid overheat and fire or function failure, reducing of the battery lifespan or damage.
- Don't use the battery in the electrostatic environment where the power generation exceeds 1000V, otherwise the battery protection circuit may be damaged, resulting in unsafe risks.
- Read the charger instructions carefully before charging, operate with correct charging method.
- Check if there's obvious odor, heat or rusting before the first time use. Find an official dealer when necessary.
- Don't charge or discharge battery near flammable materials, otherwise it may cause a fire hazard.
- If the electrolyte leaks from the battery and comes into contact with skin or clothing, please rinse immediately with water, otherwise it will cause skin irritation.
- Battery with residual charge may cause fire. Use insulation tape to isolate the circuit terminals before liquidation, and recycle the battery according to local regulations.

- If the battery circuit terminal is dirty, wipe it with a dry cloth before use, otherwise it may affect the performance due to poor contact.
- Store the battery at room temperature, with capacity charged to 30%~60%. To prevent overdischarge of the battery, it is recommended to recharge the battery every 3 months according to the standard charging process. If the battery has been stored for more than one year, it is recommended to carry out a charge and discharge cycle every year according to the standard charge and discharge process to activate the battery.

4.2 Charger

A. The indicator of the charger turns to red while charging, and turns to green after full charge. If it remains in red light even exceed the standard charging time, please find an official dealer to check.

B. Switch off the ignition key before charging. Link the charger with battery charging port first and then insert plug into the 220V AC power socket.

C. When the charging is complete, remove the plug from 220 AC power socket first and then disconnect the charger with battery;

D. It is strictly prohibited to charge in damp, sun-exposed, rainy or windy environments.

F. Charge with the original charger delivered or equivalent charger from the original manufacturer. Different charger type may damage the battery or other severe hazard.

G. Check if the input voltage of the charger is consistent with the power supply voltage.

H. The charger will automatically shut off after fully charged. Don't keep the charger connect with power supply (max. 6 hours).

4.3 Motor

A. General check

1) Regularly check the tightness of the screws.
2) Regularly check the connection between the motor and controller, and the insulation condition.
3) Regularly check the fastening of the fuses.

Warning

- **When the temperature of the motor or the controller is too high, or battery level is too low, the vehicle will reduce the power automatically, which is not en error.**

Attention

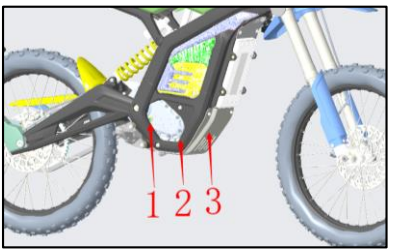
- Motor to be stored in a ventilated and dry place, not in wet acid and alkali conditions, and should not be stored with magnetic items.
- To avoid long period overloaded.
- To avoid water ingress.
- Motor installation must be operated in a well ventilated place.
- To ensure normal after-sales service, the coding and QR code labels can not be maliciously erased, polished or stained.
- Severe corrosive gas, media that affect the electrical insulation performance or strong magnetic field will affect the normal use of the drive unit.
- The working DC voltage is <115V. The working temperature of the motor is < 160℃.
- Don't pull the three-phase wire and sensor cable. Don't hit the motor with hard objects.

B. Motor oil replacement

1) Switch off the ignition key. Remove the lower protection ③.
2) Put a container right below the oil draining screw ②
3) Remove the screw ② with a hex wrench.
4) Disassemble the oil-level glass screw ①.
5) Drain the motor oil completely.
6) Fasten the screw ②.
7) Fill 160ml motor oil SAE 80W-90 from oil-level glass ①.
8) Fasten the screw ①.
9) Clean the oil on the motor surface and check if there's leakage.

⚠ Attention

- The first motor oil replacement cycle is 3000km, and the subsequent cycle is 5000km.
- The motor oil temperature is high during riding. Please wear protective clothing and safety gloves. Rinse with running water if you are burned by the hot oil and ask for medical treatment immediately.



4.4 Brake system

The front and rear brakes are disc brakes. Due to the wear of brake pads, the brake fluid will decrease over time.

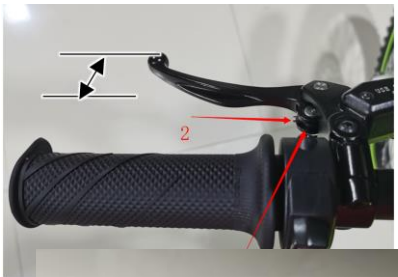
Brake fluid level and friction plate wear are the two most important factors need to be checked.

The braking system should be checked regularly to ensure there are no brake oil leakage.

A. Brake lever

Check whether the free clearance of the brake lever is within the specified range (15-30mm). Adjust it if necessary:

Loosen screw "1" and adjust screw "2" to move the the lever to an appropriate position.

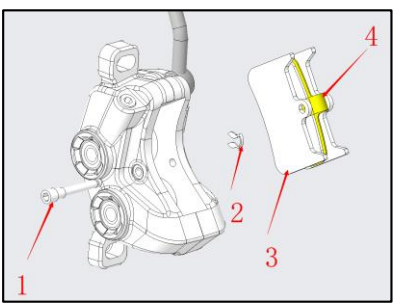


B. Brake pads

The wear of brake pads is related with driving conditions. Especially on damp and muddy roads, it is more prone to wear. It is recommended for an after-sales service for maintenance every three months.

Follow the steps to replace brake pads:

1) Remove circlip “2”.
2) Unfasten the screw “1”.
3) Remove part “3” and “4”.
4) Replace part “3” and “4” by reversing above steps.

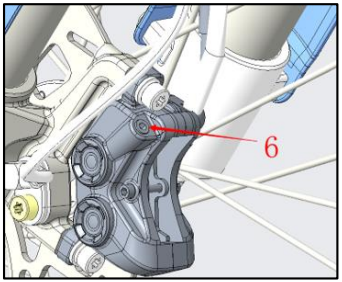


C. Brake oil

Brake oil level check

The brake oil cup is connected to the oil pump. There is a scale line on the transparent glass. Place the oil cup in a horizontal position, and the oil level should not be lower than the lower scale line.

If the brake oil in the cup is found to be turbidity, impurity, or odor, the brake fluid should be replaced.



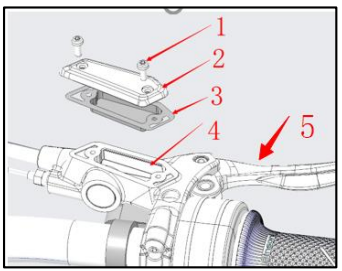
Brake oil filling and replacement

1) Unfasten screw "1".

2) Remove the oil cap "2".

3) Remove the rubber cap "3".

4) Fill brake oil into oil cap "4". (When loosening the vent bolt "6", the lever "5" must be hold tight.



D. Brake disc

Brake disc must be replaced if it's thickness is less than 2.5mm:

1) Refers to the relevant process to disassemble the front wheel (4.7) and rear wheel (4.8).
2) The tightening torque for the brake disc screw is 8~12N.m.

4.5 Suspension system

It is recommended to clean the surface of suspensions immediately after each riding, especially the sediment attached to the surface of the main pipe. When cleaning with a high-pressure water gun, do not flush the dust seals of the front suspension and the rear shock absorber upwards, to avoid sediment to be flushed into the oil seal, result in wear and oil leakage.

Don't clean with soluble or corrosive solvent, to avoid the dust-proof oil seal be damaged. Neutral detergent and soft cotton cloth are recommended.

Lubricating grease is recommended to be applied on the surface of the main tube after cleaning.

Check if there's damage, loosening, oil leakage or abnormal sound. Find an official dealer if necessary.

Warning

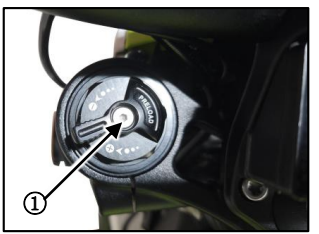
- **Improper operation of the suspension may cause damage or even an explosion, resulting in serious personal injury;**
- **Don't attempt to refit or disassemble the suspension;**
- **Protect suspension from crash, high temperatures or fire.**

A. Front suspension

Compression damping

Turn the screw ① on the left suspension to adjust the compression damping.

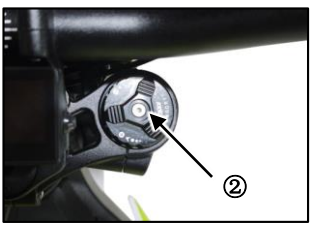
- "+" means to increase compression damping.
- "-" means to decrease compression damping.
- Turn the screw ① clockwise towards "+" to increase the compression damping.
- Turn the screw ① counterclockwise towards "-" to decrease the compression damping.



Rebound damping

Turn the screw ② on the right suspension to adjust the rebound damping.

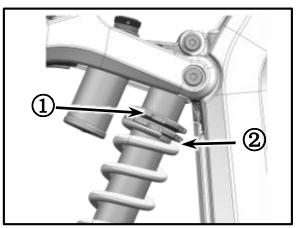
- "+" means to increase rebound damping.
- "-" means to decrease rebound damping.
- Turn the screw ① clockwise towards "+" to increase the rebound damping.
- Turn the screw ① counterclockwise towards "-" to decrease the rebound damping.



B. Rear shock absorber

Pre-load adjustment steps:

- Release the spring lock ① with adjusting wrench;
- Turn the adjusting ring ② with adjusting wrench;
- Turn the adjusting ring ② counterclockwise to reduce the preload of the spring;
- Turn the adjusting ring ② clockwise to increase the preload of the spring;
- Lock the spring ring ① with adjusting wrench after adjustment.



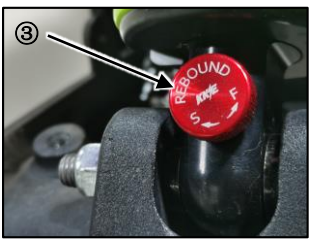
Attention

➢ **The damping and spring pre-load should be reasonably adjusted according to the road conditions and the weight of the rider. Don't adjust the damping to the maximum limit value, otherwise the shock absorber may fail and even cause the motorcycle to fall.**

Rebound damping

Turn the screw ③ at the bottom of the shock absorber to adjust the rebound damping.

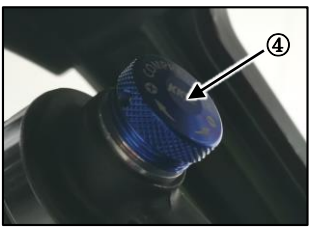
- "F" means to increase rebound damping.
- "S" means to decrease rebound damping.
- Turn the screw ③ clockwise towards "S" to decrease the rebound damping.
- Turn the screw ③ counterclockwise towards "F" to increase the rebound damping.



Compression damping

Turn the screw ④ at the top of the shock absorber to adjust the compression damping.

- "+" means to increase compression damping.
- "-" means to decrease compression damping.
- Turn the screw ④ clockwise towards "+" to increase the rebound damping.
- Turn the screw ④ counterclockwise towards "-" to decrease the rebound damping.

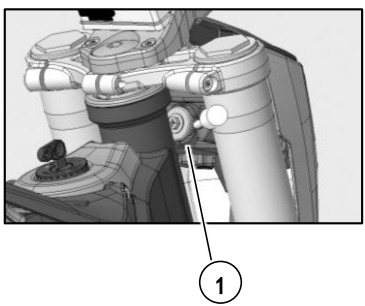


4.6 Headlight

Regularly check if the headlight angle is correct. Headlight angle must be re-adjusted after changing the angle of the bike at any time, because angle change of the bike will affect the angle of the headlight. Before adjusting the headlight, the suspension and tyre pressure must be properly adjusted. The headlight irradiation angle can be adjusted vertically. If the headlight irradiation angle is not appropriate, it will cause the beam to point too close or too far away.

Headlight angle adjustment:

1) Turn on the low beam of the head light. Place the bike perpendicular to the ground;
2) Ride on the bike and check the beam angle.
3) The adjust screw ① is located at the back side of the headlight.
4) Turn the screw ① until the correct beam angle is reached;
5) With the correct irradiation angle, the cutoff line of the low beam is 0.7-0.95m from the ground in a 10m distance.



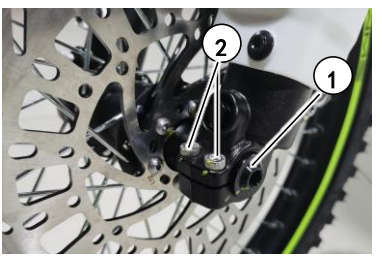
4.7 Front wheel

A. Dismounting

Place a lifting platform under the motor. Rise the platform to lift the front wheel. Unfasten the screw ① and ②. Hold the front wheel and pull out the axle.

Note:

The axle can be easily pulled out by slightly rotating.



Warning

- **Do not hold the front brake lever while dismounting the front wheel.**
- **Do not damage the brake disc.**

B. Mounting

Apply grease on the front wheel axle before mounting.

Reverse the dismounting process.

After the front wheel has been mounted, hold the front brake lever, press down a few times from the handlebar for running-in.

Note:

Torque of the s suspension mounting screw: 8~12N.m.

Torque of the front wheel axle nut: 22~28N.m.

Warning

- **Find an official dealer for correction if the max. tightening torque can't be reached to ensure a stable bearing for riding.**
- **After the front wheel is mounted, continuously operate the front brake lever until the damping recovers.**
- **Protect the brake disc from lubrication oil or grease which will affect the brake performance.**

C. Front wheel bearing check

Check if the bearing is damaged or wore. Replace the bearing if necessary.

Place the front wheel on the correction platform to check the deflection of the wheel rim. Manual rotate the wheel and check the deflection with dial gauge.

Replace the bearing if the deflection is found ⩾2mm.

D. Front wheel axle check

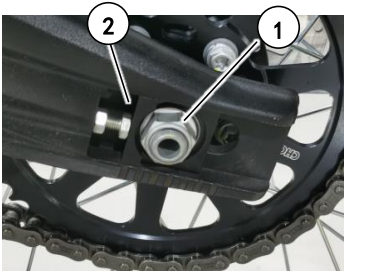
Place the front wheel axle on a V-shape platform.

Check the deflection with dial gauge. Replace the front wheel axle if the deflection is found ⩾0.2mm.

4.8 Rear wheel

A. Dismounting

Place a lifting platform under the motor. Rise the platform to lift the rear wheel. Unfasten the screw ① and ②. Pull the rear wheel axle ③ until the rear wheel can be pushed back. Remove the chain, pull out the rear wheel axle and remove the wheel carefully.



Attention

- **Do not hold/operate the rear brake lever after the rear wheel dismounted.**
- **Do not damage the brake disc.**
- **Clean the thread and nut of the rear wheel axle. Apply grease to avoid the thread is blocked.**

B. Mounting

Reverse the dismounting process.

Tight the axle screw with torque 72~78N.m.

Tight the tensioner screw with torque 8~12N.m.

Warning

- **Find an official dealer for correction if the max. tightening torque can't be reached to ensure a stable bearing for riding.**
- **After the rear wheel is mounted, continuously operate/press the shock absorber until the damping recovers.**
- **Protect the brake disc from lubrication oil or grease which will affect the brake performance.**

C. Rear wheel bearing check

Check if the bearing is damaged or wore. Replace the bearing if necessary.

Place the rear wheel on the correction platform to check the deflection of the wheel rim. Manual rotate the wheel and check the deflection with dial gauge.

Replace the bearing if the deflection is found ⩾2mm.

D. Rear wheel axle check

Place the rear wheel axle on a V-shape platform.

Check the deflection with dial gauge. Replace the front wheel axle if the deflection is found ⩾0.2mm.

4.9 Tyre

Tyres on a new bike are lack of ground adhesion. In this case, new bike should be ridden with appropriate speed and driving method of about 100km to ensure a safe subsequent riding and extend the service life of the tyres.

Tyres need to be checked regularly:

- Check the tyre pressure with barometer when the tyre is cold.
- Check if there's fracturing, pierced objects or abnormal wearing.
- Check the depth of the thread. Replace the tyre if the convex area reaches a wear amount of 2/3.

Tyre pressure has a certain impact on driving performance, it should be checked regularly.

Standard tyre pressure

State	Front tyre	Rear tyre
Off-road tyre	2.25 Bar	2.25 Bar

Note:

Recommended tyre pressure for track or forest road use: 1.00 ~ 1.50 Bar.

Contact with an official dealer if there's abnormal sound or vibration.

4.10 Chain

Keep the chain and sprocket clean.

A. Check the wearing, tightness and lubrication.

B. Check the swing of the chain:

C. Switch off the ignition key. Rise the rear wheel with a vehicle support to hold the bike.

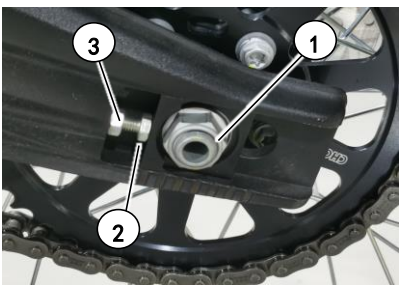
D. Normal swing range is 5~15mm.

E. Chain adjustment procedure:

1) Switch off the ignition key. Rise the rear wheel with a vehicle support to hold the bike.
2) Unfasten the rear axle nut ①;
3) Unfasten the adjusting bolts ② and lock nuts ③;
4) Adjust the left and right adjusting bolts equidistantly until the chain is adjusted to the specified range;
5) Fasten the rear axle nut ①;
6) Fasten the left and right lock nuts ③ to secure the adjustment bolts ②;
7) Apply a proper amount of chain oil.

Attention

➢ **After adjustment, the position of the left and right regulator should be located at the same scale marked on the swingarm.**



4.11 Side stand

Check if the side stand rotates smoothly. Clean the axle area if there's stiffness or abnormal sound. Apply with clean lubricating oil.

4.12 Front suspension

Check the front suspension with the following steps:
Ride on the bike.
Hold the brake lever and press a few times from the handlebar to check if the front suspension has normal stretch.
Contact with an official dealer if there's oil leakage or blocking.

4.13 Steering

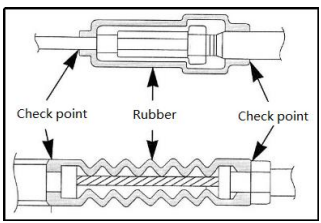
Rise the front wheel with a lifting platform placed under the motor. Check if the steering is smoothly or there's axial movement or blocking. Adjust the steering nut if necessary.

4.14 Fastening parts

All screws, nuts and fastenings need to be checked regularly based o the maintenance table.

4.15 Cable rubber

As a cable protection, the cable rubber. Do not flush water against the cables when you clean the vehicle. Clean the dirt on cables with soft cloth.



4.16 Bike cleaning

1) Clean the bike with sponge or a soft cloth with neutral cleaner and plenty of clean water;
2) Do not scratch the screen of the dashboard during cleaning.
3) Rinse the bike with plenty of water to remove all detergent residues;
4) Wipe and clean the bike with a soft dry cloth;
5) Check if there's damage of the bike after cleaning.
6) Do not clean tyres with strong acidic agents. If used, please clean it quickly and wipe it clean immediately.

Attention

- Some parts on the bike may be damaged by improper cleaning. Don't use high-pressure water gun to flush bearings, seals, electrical components and plugs. To extend the service life of the bike, regularly cleaning and maintenance should be carried out, and it is recommended to dry the bike right after cleaning;
- Clean tyre with water only. Any tyre maintenance product may reduce the ground friction of the tyre, and even result in premature aging.
- Don't use any harsh chemical products (such as highly corrosive cleaning agent, solvent or diluent, fuel/gasoline, rust remover or inhibitor, brake fluid, antifreeze, electrolyte) on plastic parts.

Warning

- After every cleaning, the brake system must be checked before riding.

4.17 Long-term storage

If the motorcycle will not be used for a long period (more than 30 days), it is recommended to consume the battery to about 60% to 80% of its capacity and disconnect the motorcycle from the battery pack.

Battery discharges slowly even in storing. Check the remaining capacity at least once a month. If it's below 30%, it should be recharged to 60%~80%.

Please fully charge the battery pack to ensure it returns to its optimal state before re-starting the bike after a long-term storage.

To extend the service life of the power system, the electric motorcycle should be stored in a cool and ventilated place.

Attention

- **Don't store the electric motorcycle with less than 30% of the remaining battery capacity, which will reduce the battery lifespan or even damage the battery pack. Battery pack over-discharged or damaged in such case is not covered by warranty.**

Chapter 5 Main technical parameters

5.1 Vehicle parameters

Dimension	1880*800*1100mm
Ground clearance	270mm
Wheel base	1250mm
Seat height	860mm
Waterproof grade	IP65
Suspension travel	200mm
Rear wheel travel	230mm
Power train	Permanent magnet synchronous motor + reducing gearbox

Max. power	6KW
Max. torque	350N.m
Battery	Ternary lithium battery
Charging time	3.5h
Front wheel	70/100-19/225kpa
Rear wheel	70/100-19/225kpa
Frame	Aluminum
Controller	Vector sine wave

Version	Max. speed	Unladen weight (Battery included)	Reference mass
Binsen - off-road	80Km/h	51Kg/63kg	138 Kg
Binsen - on-road	45 Km/h	53 Kg/65kg	140 Kg

5.2 Battery technical parameters

5.2.1 General parameter

Cell type	INR21700-5Ah
Nominal voltage	72V
Min. capacity	28.5Ah@1C/25℃/discharge
Nominal power	2160Wh
Voltage range	58~84V
Standard charging current	6A（0.2C）
Max. charging current	15A（0.5C）
Continuous discharge current	60A
Max.discharging current	90A(15s)
Starting power dissipation	≤20mA
Sleep power dissipation	400uA
Display power dissipation	0uA

Continued

Working temperature for charging	0 to 45℃
Working temperature for discharging	-20 to 60℃
Storage temperature	0 to 45℃
Storage period	6months@SOC35%@0~45℃
Cycle life (times)	600 (≥60%SOC@25±5℃)
	12A charging & 60A discharging
Humidity	< 85 % RH
Battery capacity reserve for transport	> 60%
Weight	12Kg
Colour	Black
Dimension（L*W*H）	370*164*142mm（±2mm）
Waterproof grade	IP65

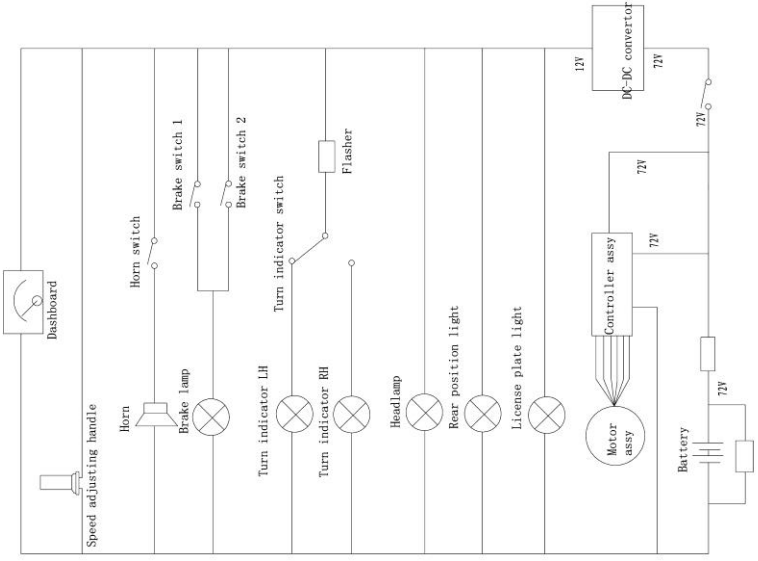
5.2.2 Protection parameter

No.	Function	Protection parameter	Delay	Recovery parameter	Delay	Tech requirement
1	Total voltage over-voltage protection	⩾84V	1s	⩽82V	1s	Error info display. Charging disabled.
2	Total battery low-voltage protection	⩽58V	1s	⩾60V	1s	Error info display. Discharging disabled.
6	Discharge over-current protection level 2	⩾180A	2s	Self-recovery	1min	Error info display. Discharging disabled.
	Discharge overcurrent protection level 1	⩾238A	200ms	Self-recovery	1min	Error info display. Discharging disabled.
7	Discharge high temperature protection	⩾65℃	0s	⩽60℃	0s	Error info display. Discharging disabled.
8	Discharge low temperature protection	<-20℃	0s	⩾-15℃	0s	Error info display. Discharging disabled.
9	Charging high temperature protection	⩾55℃	0s	⩽50℃	0s	Error info display. Charging disabled.
10	Charging low temperature protection	<0℃	0s	⩾5℃	0s	Error info display. Charging disabled.

Continued

No.	Function	Protection parameter	Delay	Recovery parameter	Delay	Tech requirement
11	Short-circuit protection	⩾667A	320μs	Automatic release after load removal	0s	Discharging disabled.
12	MOS high temperature protection	⩾85℃	5s	⩽75℃	0s	Error info display. Charging/discharging disabled.
13	Environment high temperature protection	⩾65℃	0s	⩽60℃	0s	Controller/BMS disabled. Output level 1 malfunction protection info.
14	Environment low temperature protection	⩽-30℃	0s	⩾-25℃	0s	Output level 3 malfunction protection info.

Chapter 6 Electrical schematic diagram


Dashboard
Speed adjusting handle
Horn
Horn switch
Brake lamp
Brake switch 1
Brake switch 2
Turn indicator LH
Turn indicator switch
Turn indicator RH
Flasher
Headlamp
Rear position light
License plate light
Motor assy
Controller assy
Battery
DC-DC convertor
12V
72V
72V
72V
72V
72V

Chapter 7 Troubleshooting

Fault	Analysis	Action
No power supply	The power supply is damaged or the plug-in is in poor contact	Check the ignition lock and plug-in. Repair or replace if necessary.
	The power plug is in poor contact with the battery socket	Check ignition lock plug and socket. Repair or replace if necessary.
	Low battery	Charge the battery.
	Battery low/high temperature	Try again with normal battery temperature.
	Fuse short circuit	Check the fuse. Repair or replace if necessary.
	Dashboard failure	Repair or replace the dashboard if necessary.
Unable to charge the battery	Battery low/high temperature	Try again with normal battery temperature.
	Charging cable poor connection with battery	Re-connect the charging cable with battery.
	Battery failure	Repair or replace the battery if necessary.
	Charger cable poor connection	Re-connect the cable with charger.
	Charger failure	Repair or replace the charger if necessary.

Continued

Fault	Analysis	Action
Motor doesn't work with normal power supply	Side stand switch protection	Retract the side stand
	Side stand switch damaged	Disconnect or replace the side stand switch
	Power-off-with-brake switch protection	Check brake switch
	Power-off-with-brake switch is damaged	Disconnect or replace the brake switch
	Tipping sensor reset failure after bike fallen	Switch off and on again of the key to reset the tipping sensor
	Tipping sensor failure	Disconnect or replace the tipping switch
	Throttle handle is not returned	Rotate the handle to initial position. Replace if necessary
	Throttle handle poor connection or damaged	Repair or replace if necessary
	Controller high temperature	Try again with normal controller temperature
	Controller poor connection	Re-connect the controller signal cable
	Controller failure or motor coding failure	Repair or replace if necessary
	Low battery	Charge the battery
	Motor high temperature	Try again with normal motor temperature
	Battery poor connection	Re-connect the battery cable
	Throttle handle poor connection	Re-connect the throttle handle cable

Continued

Fault	Analysis	Action
Motor doesn't work with normal power supply	Motor poor connection	Re-connect the motor cable
	Brake lever not returned or sensor failure	Check the brake lever and brake sensor
Accelerate failure or low max. speed	Fallen protection activated	Re-start the bike
	Temperature protection activated	Try again with bike normal temperature
	Power-off protection activated	Check if the cables and connectors of brake sensor, tipping sensor and side stand sensor are well connected
	Throttle handle failure	Check if the cable and connector of throttle handle are well connected
Abnormal sound during riding	Improper chain tightness	Adjust the chain tightness
	Improper brake system fixing or impurities	Tight the brake caliper; Clean the brake disc and pads.
Lack of speed or mileage range	Frequently brake or start; Overload	Avoid such driving habit
	Battery aging or performance deterioration	Replace the battery at an official dealer network
	Low environment temperature	Normal phenomenon
	Poor connection of connectors/plugs	Check all connectors/plugs
Other	Other failure not mentioned above	Find an official dealer network for help.

Chapter 8 Warranty and service booklet

8.1 Warranty conditions

During the period, warranty covers all new vehicles purchased from dealers authorized by SWM with defects in materials and technology, certain limitations as stated in this manual are also applicable. The warranty applies only to vehicles that have been correctly set-up, repaired, and pre delivered at authorized dealers. The warranty is applicable to vehicles that have been correctly operated and maintained in accordance with this manual and/or other relevant documents shipped with the vehicle.

8.2 Warranty period

A. Common use

Period: 12 months from the date of purchase or 10000 kilometers of travel mileage, whichever comes first.

Transfer: The warranty period can be transferred to the next owner if it's not exceeded.

B. Off-road use but not in competitive race

Period: 6 months from the date of purchase.

Transfer: The warranty period is only applicable for the original owner which can't be transferred.

C. Racing use

Period: 30 days from the date of purchase.

Transfer: The warranty period is only applicable for the original owner which can't be transferred.

8.3 Parts covered by warranty

The vehicle has been perfectly inspected before delivery. Under the provisions of this warranty, any defects found in any parts of the vehicle during the specified warranty period will be repaired or replaced free of charge.

8.4 Labor-hour

Defects found in the vehicle warranty components which requires manual repairing/replacement, the labor cost will be borne by SWM. Such operation must be carried out under the authorized dealer network. The labor cost for repairing/replacing parts without warranty is not included.

8.5 Limitation

The limited warranty described in the manual only applies to the warranty of your vehicle. SWM does not make any express, implied or other form of guarantee, and SWM does not assume or authorize anyone to assume any other obligations or responsibilities on its behalf. All commercial implied warranties, including warranties of merchantability or applicability for a specific purpose, are limited within the stated period of this warranty.

The warranty does not apply to all secondary, special, indirect, or punitive damages, including loss of use, loss of vehicle value, loss of profit or income, loss or damage to personal property, and is not liable for any third-party claims, even if informed that such damages may occur. SWM reserves the right to modify or improve any SWM vehicle, powertrain or any other SWM product design at any time, without any obligation to modify any previously manufactured or sold SWM products.

8.6 Warranty exclusions

- Service period expired or scope exceeded the specification in this user manual.
- The vehicle is not operated correctly accordingly or lack of appropriate maintenance.
- Change, replace, and install non original delivered accessories or non officially recognized parts.
- Damage caused by accidents, collisions, intentional destruction, improper operation, abuse, negligence, and races or equivalent intensity riding.
- Change, replace, and install non officially recognized motor, controller, and battery pack.
- Improper use/storage of the battery, prolonged storage (refers to **4.17**), over discharge, failure to charge in time lack of maintenance, resulting in battery loss and undervoltage that cannot be repaired. Or the battery appearance and waterproof performance has been damaged, resulted in damage to the circuit board and battery cells after water ingress.
- Reasonable deterioration.
- Vulnerable parts:
  1) Tyres
  2) Brake pads
  3) Brake discs
  4) Chain
  5) Handle grips
  6) Sprockets
  7) Bearings (motor bearing excluded),
  8) Oil seals
  9) Pedals
  10) Saddle
  11) Mudguard
  12) Fuses
  13) Spokes
  14) Plastic parts

- Damage, malfunction, or performance issue caused by ignoring the fault code which has already been displayed.
- Damage from incorrect chemical agents used.
- Malfunction or damage caused by human factors such as collisions, falls, speeding, and overloading.
- Unable to provide valid legitimate warranty vouchers. Or the VIN/motor numbers on the voucher does not match the vehicle.
- Already received compensation.

In addition, SWM product services are available to end users only and are not applicable to vehicles or accessories that are not authorized to be imported or distributed by SWM. Purchase shall not be made for resale purposes. SWM reserves the right to refuse or cancel your order and warranty services if it's purchased for resale purpose.

8.7 After-sales service and warranty coverage

Component	Warranty coverage	Period
Motor assy	Burnt coil, phase missing, demagnetization, open circuit, abnormal noise, wheel hub damaged due to material reasons	12 months
Lithium battery	Warranty covers in normal use of battery, and there's no external impact. If there are any faults such as abnormal voltage, charge error, and insufficient capacity (less than 70%) detected by discharge instruments. (the replaced battery inherits the remaining warranty period of the previous battery from the date of replacement.) Note: Charging temperature 0 ℃ ~ 35 ℃; Working temperature -10 ℃ ~ 45 ℃. Battery capacity declines upon different low temperature: -10℃: reference usable capacity 70%; 0℃: reference usable capacity 85%; 25℃: reference usable capacity 100%;	12 months
Controller, Charger	Performance failure or quality issue that cannot be repaired	12 months

Continued:

Component	Warranty coverage	Period
Circuit breaker, ignition lock, main harness, battery cover lock, head-light, tail light, horn, converter	Performance failure or quality issue that cannot be repaired	12 months
Brake assy	Oil leakage, ineffective brake (brake pads excluded)	12 months
Front suspension, Shock absorber	Oil leakage, damping loss	12 months
Dashboard, USB power supply, in-tegral switch, Accelerator	Performance failure or quality issue that cannot be repaired	12 months
Swingarm, handlebar, rear frame, frame, steering pipe, footrest bracket, footrest, rear suspension assy, swingarm axle, wheel rim, rear wheel axle, front wheel axle, front/rear wheel hub assy, elec-tronic throttle, battery cover	Performance failure or quality issue that cannot be repaired	12 months

8.8 Regular maintenance carried out by user

Maintenance list	Requirements
Front suspension, shock absorber, brake oil	Every 6 months
Brake pads replacement	Thickness <0.5mm
Brake disc replacement	Thickness <2.5mm
Vehicle bearings replacement	Abnormal sound or loosening observed
Tyre replacement	Convex thickness <2/3

8.9 Service schedule

Service time	Requirement	Operator signature
1st service at 300km/1 month	Check the fastening parts, chain tensioner, motor, wheels, spokes, lights.	
Every 1000km/3 months after 1st service	Check the safety parts, fastening parts, high current circuit, chain tensioner, motor, wheels, spokes, lights. Check if brake disc thickness is <2.5mm	

8.10 Responsibility of owner

- The owner is responsible for proceeding maintenance process according to the schedule listed in this user manual.
- Malfunctions directly caused by lack of maintenance or improper maintenance will void the warranty.
- All warranty must be carried out by an official dealer network. The following information may be requested: maintenance records, service date, battery pack historical data, etc., for completing warranty services.
- If the bike is sold, lent, or transferred, the user manual must be passed to the new user.
- Deliver the defective components or vehicle to an official dealer network for evaluation in 10 days if a failure happens.
- Always wear protective measures and personal safety equipment that comply with relevant regulations. It is necessary to understand and comply with the laws and regulations in relevant country or region before riding.
- SWM does not authorize any company or individual to assume any responsibility or guarantee obligations on its behalf. SWM reserves the right to dispose of the warranty parts from users. The ownership of all and components replaced and returned to SWM under this warranty shall belong to SWM.

Note:

We are committed to provide the best and fastest service to all our users. but certain delays caused by factors beyond our control should be considered. These factors include but are not limited to: shortage of parts, delay in transportation, force majeure, etc.

DELIVERY CERTIFICATE

Date

VIN

Model

Motor no.

The motorcycle has been made ready for delivery by performing all of the checks and pre-delivery actions as provided for by SWM MOTORCYCLES S.R.L., and fitted out with all the possible optional parts as requested by the Buyer.

The Buyer has been provided with this Warranty Booklet and the Use and Maintenance Manual and has received an explanation of the main drive system parts that the vehicle has been fitted with.

Dealer's stamp and signature

SWM MOTORCYCLES S.R.L. and its official sales organization state that the personal details of the purchaser, in accordance with the Law 675/1996 and later amendments, may take place without the Customer's consent, as implementation of obligations to provide Post-Sales Service.

CUSTOMER

Name: _____

Surname: _____

Address: _____

Town or City: _____

Postal Code: _____

Telephone no: _____

I hereby declare that I have today accepted delivery of the motorcycle as described above, equipped and fully compliant with my expectations. I also declare that I have received the herein Warranty Booklet and Use and Maintenance Manual. I hereby authorize SWM MOTORCYCLES S.R.L.to process my personal data for provisionof Post-Sales Service, pursuant to the Law 675/1996 and later amendments.

Customer's signature

Copy for SWM MOTORCYCLES S.R.L.

NOTICE OF TRANSFER OF OWNERSHIP

Date _____ Km/MI: _____

VIN _____

Model _____

Engine no. _____

The undersigned: _____

Name: _____

Surname: _____

Address: _____

City: _____ Postal Code: _____

Telephone no: _____

Mail in a closed envelope to: **SWM MOTORCYCLES S.R.L.** Servizio Assistenza Tecnica, Via Nino Bixio, 8 – 21024 Biandronno (VA) –Italy

SWM MOTORCYCLES S.R.L. and its official sales organization state that the personal details of the purchaser, in accordance with the Law 675/1996 and later amendments, may take place without the Customer's con sent, as implementation of obligations to provide Post-Sales Service.

CUSTOMER

I inform SWM MOTORCYCLES S.R.L. that today I have transferred the property of the vehicle to Mr.

Name: _____

Surname: _____

Address: _____

Town or City: _____

Postal Code: _____

Telephone no: _____

And I have handed over to him this Warranty Hand book and the Use and Maintenance Manual supplied with the bike.

Copy for SWM MOTORCYCLES S.R.L.

Space reserved for storing fiscal documents proving that scheduled maintenance services have been carried out.

SERVICE__________ DATE______ Km/MI______ Customer's signature________________ Dealer's stamp____________

SERVICE__________ DATE______ Km/MI______ Customer's signature________________ Dealer's stamp____________

SERVICE__________ DATE______ Km/MI______ Customer's signature________________ Dealer's stamp____________

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SERVICE__________ DATE______ Km/MI______ Customer's signature________________ Dealer's stamp____________

PIN or staple the Fiscal Receipt or the Fiscal Ticket proving the warranty services do have been performed.