



Talaria-Owner's-Manual-TL4000 L1E

TALARIA POWER TECH (CHONGQING)CO, LTD.

STING TL4000 L1E Owner's Manual



Contents

I. Introduction	1	VIII. Charging and Battery Information.....	23
(I) Introduction	1	(I) Definition of charging through the battery discharge port	25
(II) About This Manual.....	1	(II) Battery charging and charger usage	26
II. Useful Information for Safe Riding.....	2	(III) Remove the Battery	28
(I) Useful Information for Safe Riding	2	(IV) Install the Battery	29
III. Identification Numbers.....	3	IX. Troubleshooting	29
(I) Electric motorcycle Identification Number	3	(I) Precautions for Electric Motorcycle.....	31
(II) Motor Identification Number	4	(II) General Troubleshooting	32
IV. General Information.....	5	(III) Dash Fault Code and Description and Troubleshooting	33
(I) Major Technical Parameters	5	X. After-sale Service.....	42
(II) Electric motorcycle Outline Parameter.....	7	(I) Warranty Description	44
(III) Electrical Diagram	8	(II) User's Note.....	44
V. Safety Information	9	XI. Maintenance Service.....	44
(I) Position Diagram of Anti-Theft Alarm	9	(I) Owner's Responsibilities	46
(II) General Safety Precautions	10	(II) Scheduled Inspection	46
(III) Position of Warning Signs.....	11	XII. Service and Maintenance Record Card	53
VI. Controls and Components	12	Maintenance Items	55
(I) Handlebar Controls.....	12	Maintenance Record Card.....	56
(II) Diagram of Dash	13	Customer Information Card	56
(III) Top View	18		
(IV) Left Side View	19		
(V) Right Side View	20		
VII. Starting and Operating Diagram	19		
(I) Pre-ride Inspection.....	21		
(II) Riding Operation	22		

I. Introduction

(I) Introduction

Dear Customer,

Thank you for choosing TALARIA products. We will be truly grateful if you can give us any opinions or suggestions about the products. Your satisfaction is our ultimate goal.

As a professional designer and manufacturer of electric motorcycles, we develop and produce electric motorcycles featuring innovative appearance, comfortable riding experience, easy operation, strong power, long endurance mileage, and high safety and reliability, making them a new generation of ideal eco-friendly transportation and entertainment tool. In order to ensure the best experience of the electric motorcycle, please read the Owner's Manual carefully beforehand, so you can fully understand the performance, operation and maintenance of the electric motorcycle and make sure that it is operating with maximum performance, less failure and longer service life.

Do not lend the electric motorcycle to persons that are unable to ride. Always wear a helmet when using this electric motorcycle. Follow the traffic regulations strictly and ride in the slow lane.

Slowdown in rainy and snowy days and on slippery roads and

keep a safe following distance to ensure safety.

We are constantly improving our products, so the products delivered to the customers may be different from those described herein. We reserve the right of final interpretation.

For 24-hour updates and additional information about your motorcycle, visit the TALARIA official website:

<http://www.talaria.cn>

(II) About This Manual

This manual is only used for TL4000 L1E Electric Motorcycle produced by TALARIA. It covers the information on electric motorcycle introduction, usage, troubleshooting, after-sales and maintenance for the electric motorcycle.

A good place to locate information about the motorcycle is in the index of the manual.

The terms "right" or "left" refer to the rider's right or left when sitting on the motorcycle.

II. Useful Information for Safe Riding

(I) Useful Information for Safe Riding

This manual contains the word **WARNING** to indicate something that could hurt you or others. It also contains the word **CAUTION** to indicate things that could damage your electric motorcycle.

CAUTION! Please read this manual carefully and completely before operating this electric motorcycle. Do not attempt to operate this electric motorcycle until you have attained adequate knowledge of its controls and operating features and have been trained in safe and proper riding techniques. Regular inspections and proper maintenance, along with good riding skills, help you safely enjoy the capabilities and the reliability of this electric motorcycle.

Disregarding the aforementioned, however, may render the warranty invalid.



This symbol is located in various locations on the electric motorcycle to inform you that exposure to high voltage can cause shock, burns and even death.

The high voltage components on the electric motorcycle should be serviced only by technicians receiving special training. High voltage cable or wiring has an orange covering. Do not probe, tamper with, cut, or modify high voltage cable or wiring.

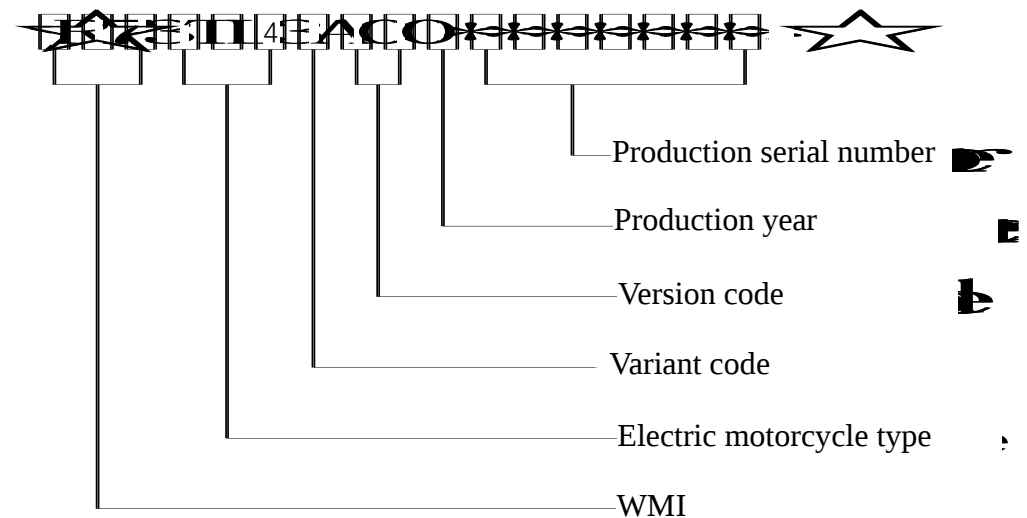
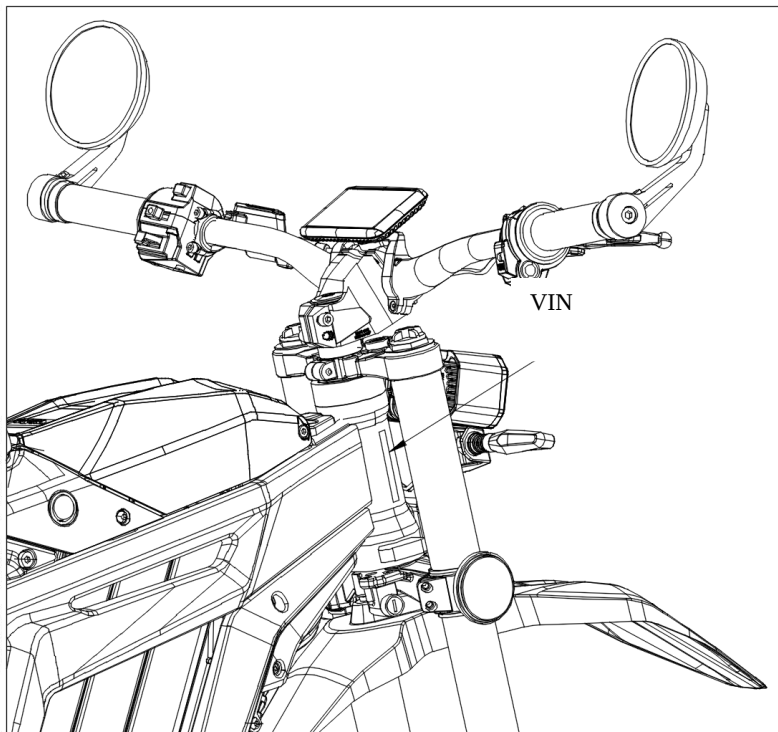
III. Identification Numbers

(I) Electric motorcycle Identification Number

Caution: For convenient maintenance, repair, and service, each of our electric motorcycle has a unique Electric motorcycle Identification Number and motor number, so the dealer can provide you with better services.

The Electric motorcycle Identification Number (VIN) is a 17-digit number located on the right side of the vertical tube of the frame. Do not alter or remove this number as it is the legal identifier for your moped.

VIN Breakdown will help you understand the significance of each digit or character.



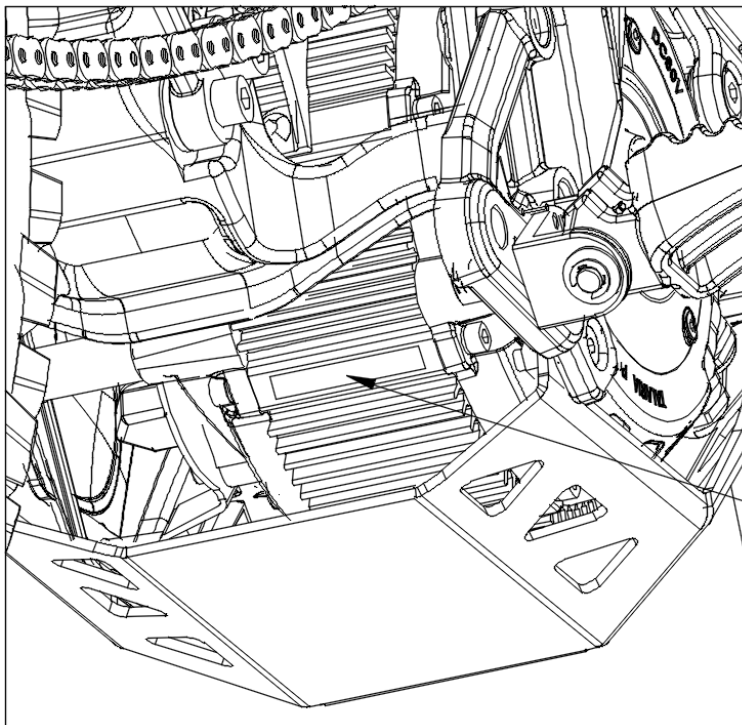
III. Identification Numbers

(II) Motor Identification Number

The Motor Identification Number is stamped on the motor shell (2).

☆159ZW6030413NA☆; internal management code in another line: electric motorcycle model (6 digits) + manufacturing year, month and day (2 digits respectively) + manufacturer identification number (1 digit) + serial number (4 digits):

For example, ☆TL4000-22122030001☆



Motor Identification Number

IV. General Information

(I) Major Technical Parameters

The Technical Parameter List will help you get to know your moped in depth.

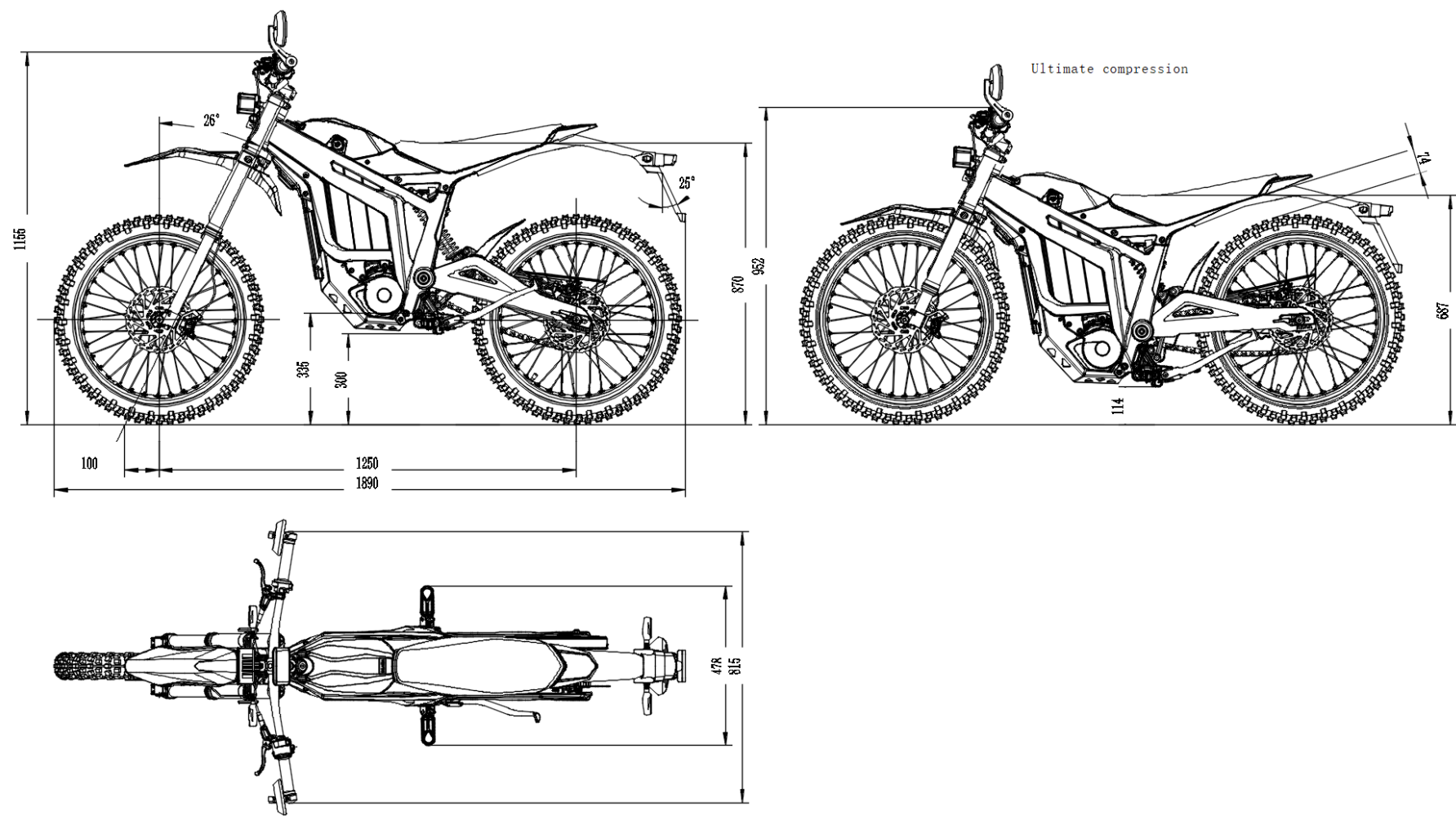
PARAMETER ITEM	PARAMETER VALUE
Electric motorcycle Dimension	1890mm × 815mm × 1155mm
Wheelbase	1250mm
Electric motorcycle Weight	55kg (exclude battery) /68kg (Include battery)
Rated load	75kg
Min. Ground Clearance	300mm
Seat Height	840mm
Rake	26°
Max. Climb Ability	≥45°
EEC Homologation Limited Top Speed	45km/h (or 25km/h)
Rated Motor Output Power	4000W
EEC Homologation Limited Motor Output Power	3500W (or 1500W)
Peak Motor Output Power	8000W
Maximum torque of drive wheel	375N.m
Battery Pack	60V45Ah Lithium-ion battery pack
Range / Charge	76km @ 45km/h; 120km @25km/h
Charging Time	2-4h (depending on the charger)
Charger Input Voltage	AC110/220V-50/60Hz
Optional Riding Modes	Economy/sports mode
Rim Size	Fr.: 1.9×14; Rr.:1.9×16

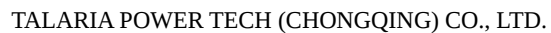
IV. General Information

Tire Size	Fr.: 70/100-19; Rr.: 80/100-19
Front Fork	Adjustable hi-performance dual crown fork with 200mm travel
Rear Suspension	Adjustable 85mm travel shock absorber with linkage
Brake	Fr. & Rr. Hydraulic disc brakes
1 st Transmission	Hi-efficiency quiet running gearbox
2 nd Transmission	Chain (420-106)
Lamps Type	LED
Dash Type	TFT

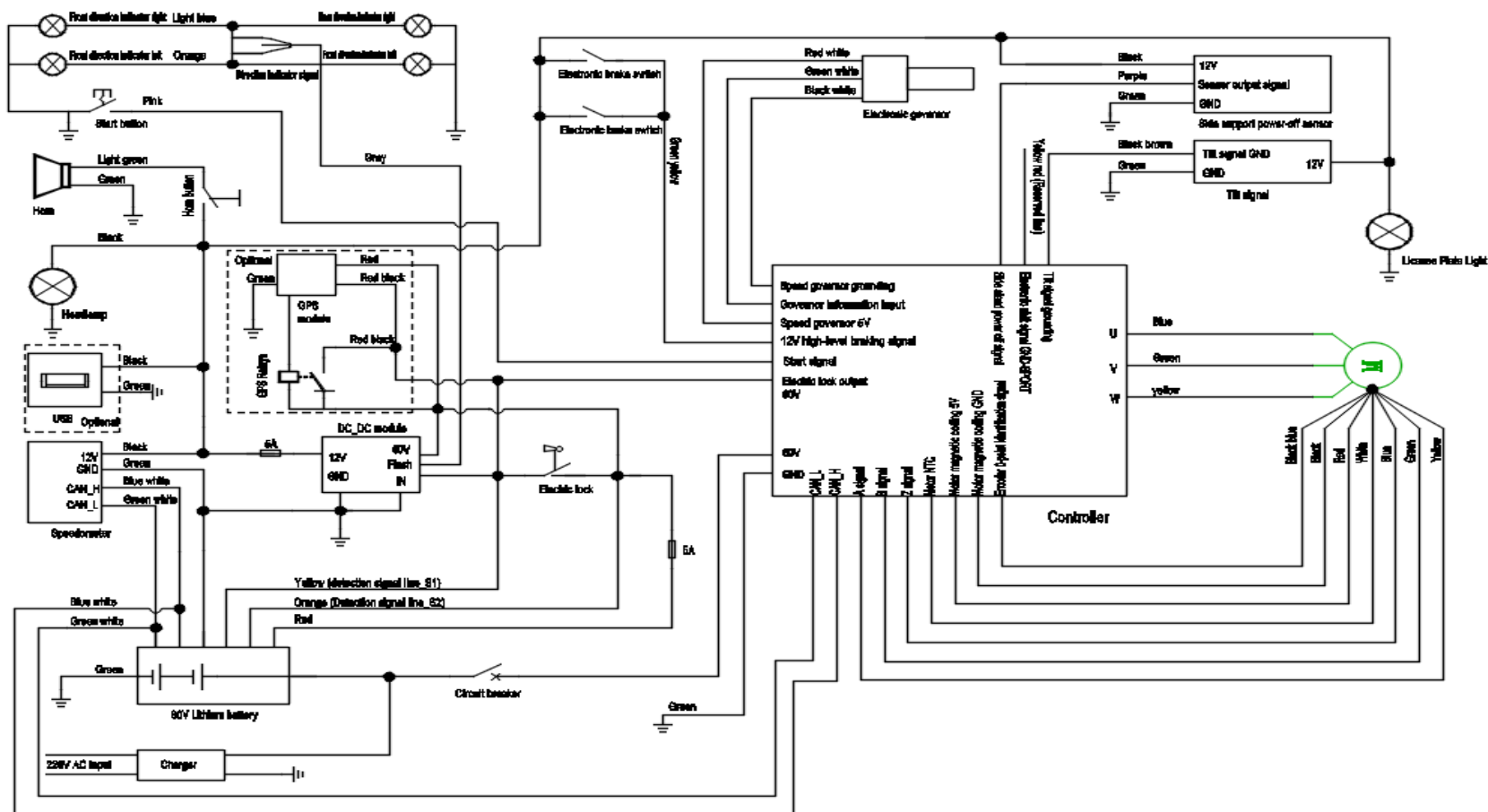
IV. General Information

(II) Electric motorcycle Outline Parameter



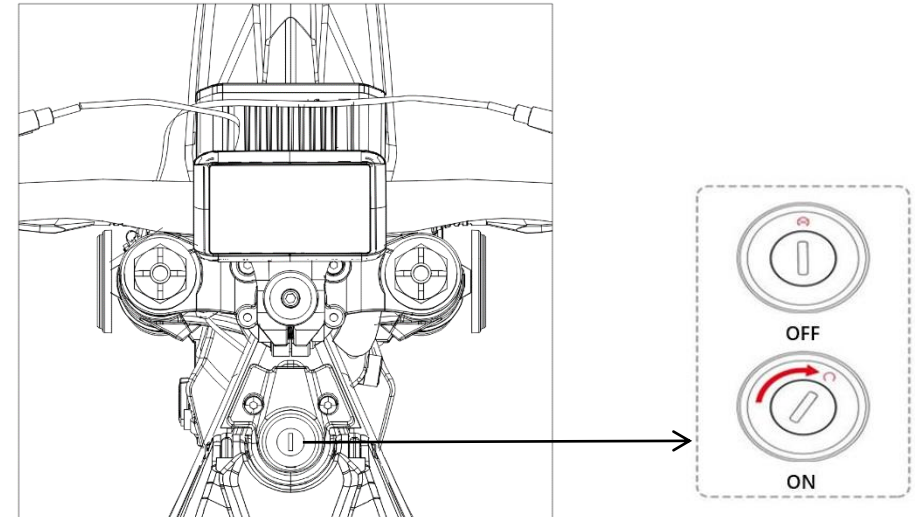
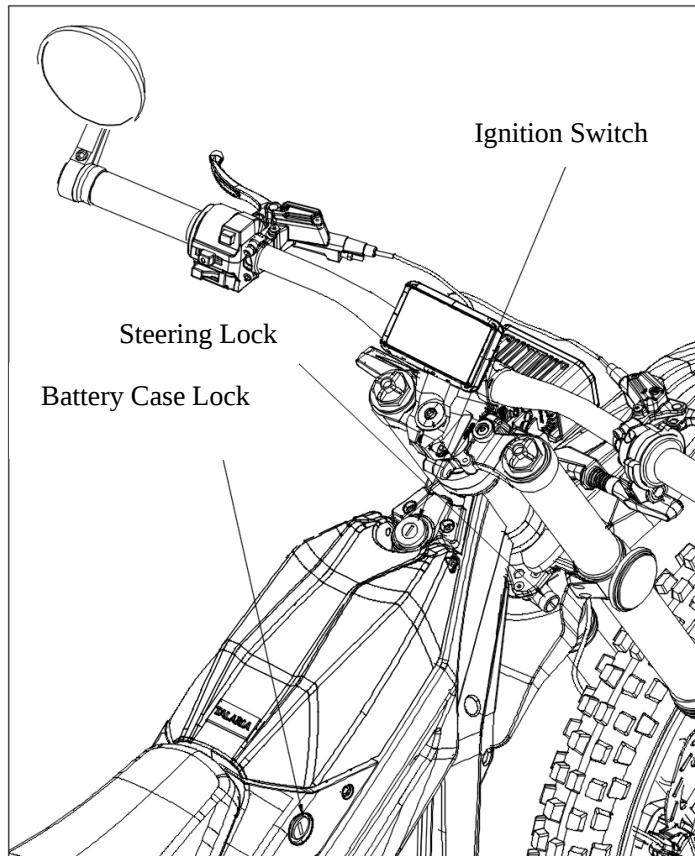


(III) Electrical Diagram



V. Safety Information

(I) Position Diagram of Anti-Theft Alarm



- 1. Ignition Switch:** Turn the key clockwise, and the whole electric motorcycle is powered on; turn it anticlockwise, and the whole electric motorcycle is powered off, and then remove the key.
- 2. Steering Lock:** Turn the handlebar to the leftmost position, insert the key and turn it anticlockwise to lock the steering, and then remove the key; insert the key and turn it clockwise to unlock the steering, and then remove the key.
- 3. Battery Case Lock:** Insert the key and turn it anticlockwise, and then open the Battery Case Lock.

V. Safety Information

(II) General Safety Precautions

Please follow the traffic rules and maintain a safe running speed. (The maximum speed is 45km/h or 25km/h depend the version you order)

Before operating the electric motorcycle, please read this manual and practice in an open and safe place, so you can master the riding skills and be familiar with the structure of this electric motorcycle. This is the basis of safe riding.

CAUTION!

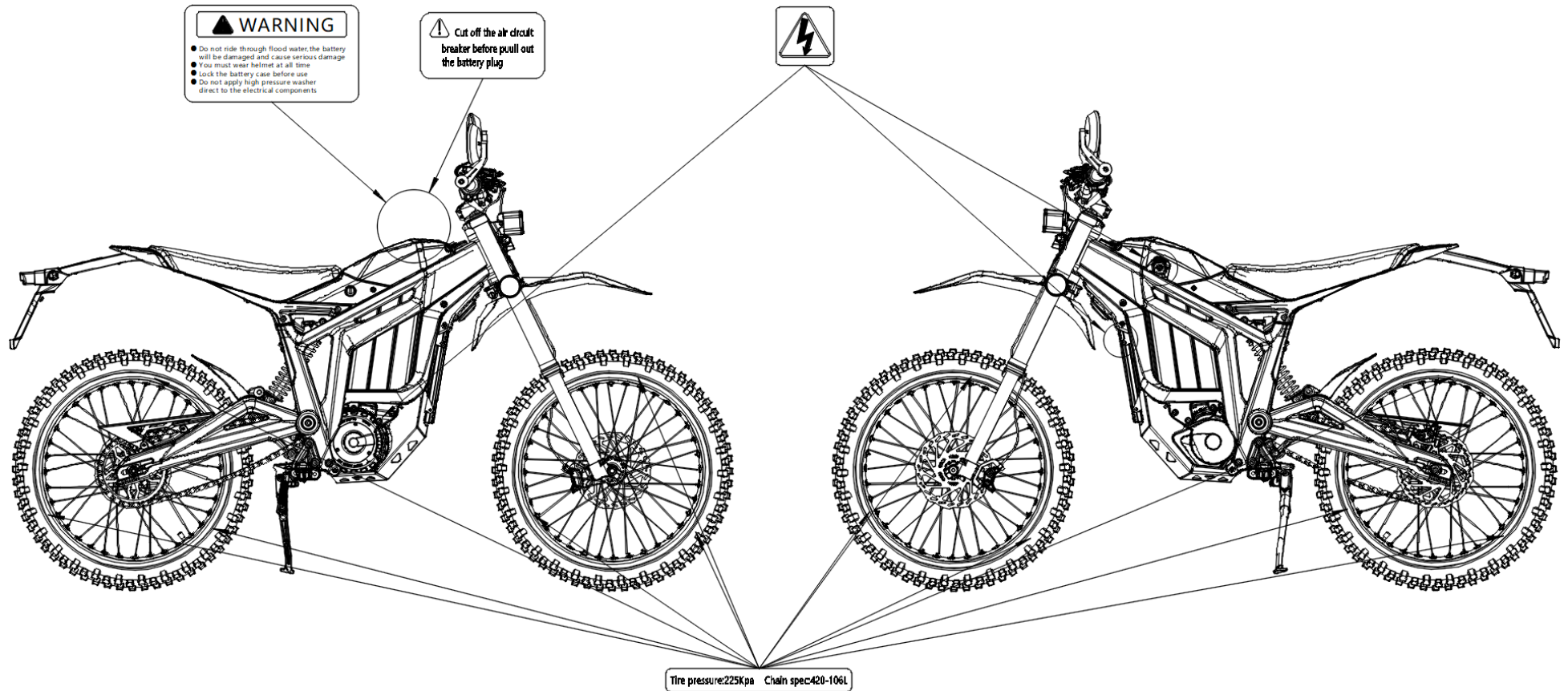
Persons not skilled in or unable to ride should not use this electric motorcycle. It is extremely dangerous to ride with a single hand or no hand on the handlebar, or after drinking alcohol. Wet roads in rainy or snowy days are also very dangerous. Do not ride at high speed. Be careful when turning. Use the brake in advance at any abnormal circumstances to prevent any accidents. Wear qualified helmet and buckle the fasteners.

Wear loose clothes in bright color with no puff sleeves to make sure you can move freely. Do not wear slippers or high heels.

Avoid heavy load. The control feeling is different to ride with and without load. Too heavy load will severely influence the operating and may put you in danger. Only 1 passenger is allowed on this motorcycle. Additional ones may cause safety risks and component damage.

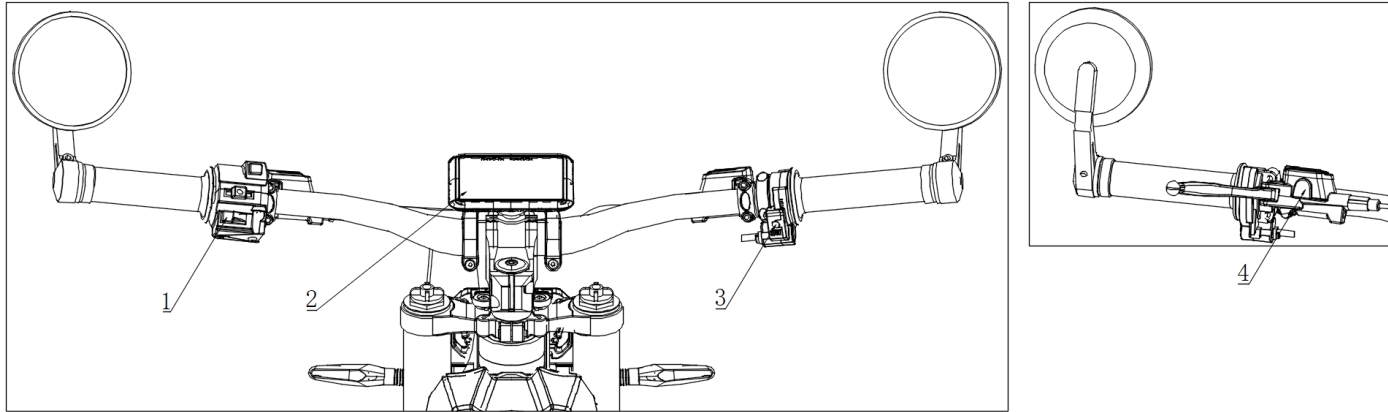
V. Safety Information

(III) Position of Warning Signs



VI. Controls and Components

(I) Handlebar Controls



1-1 Horn button

1-2 Dash (see the next page for instructions)

1-3 Starting button, the assembly of throttle. Trigger the button before normal starting of the electric motorcycle, and it is allowed to run when the instrument shows READY.

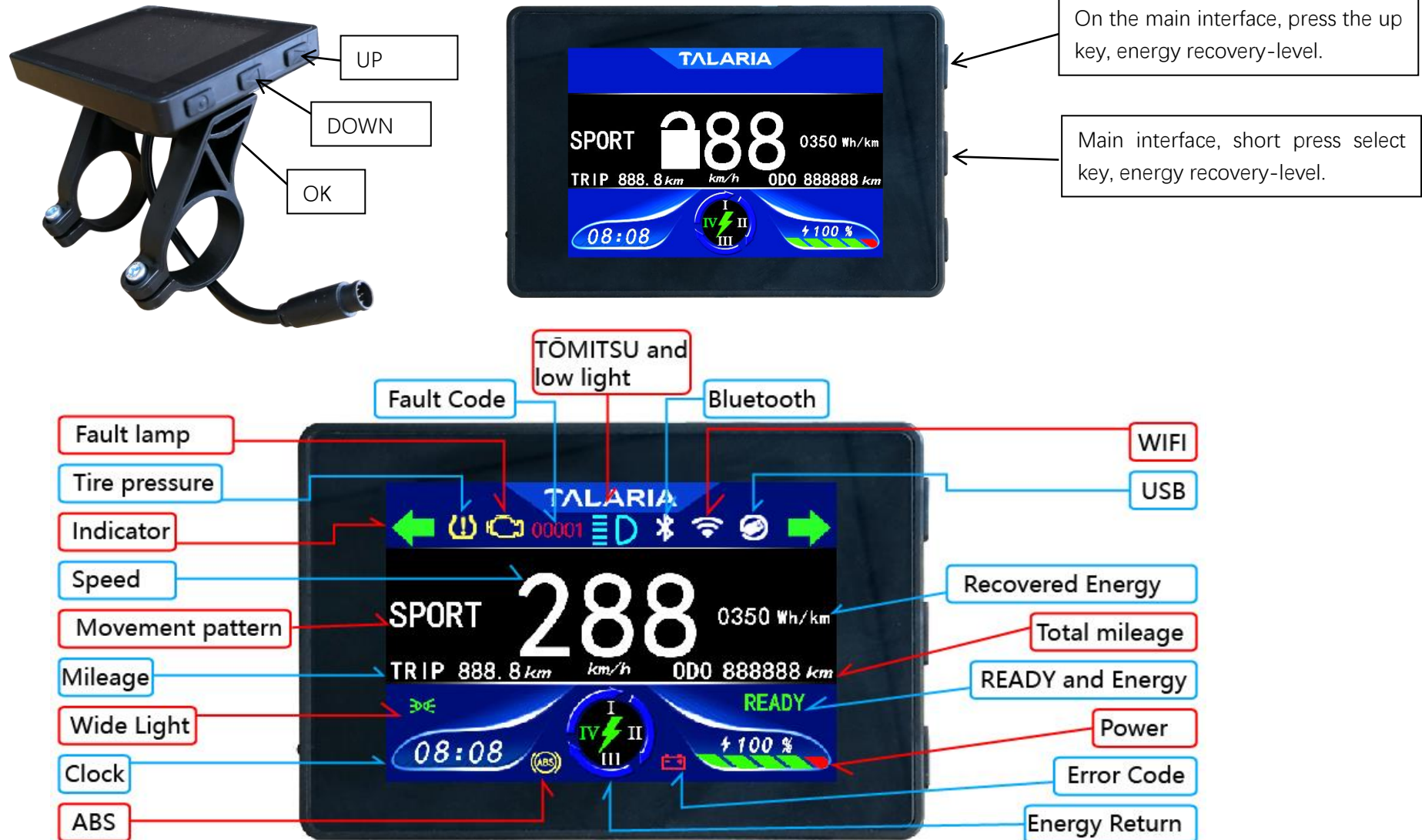
1-4 Oil level sight glass

Special note:

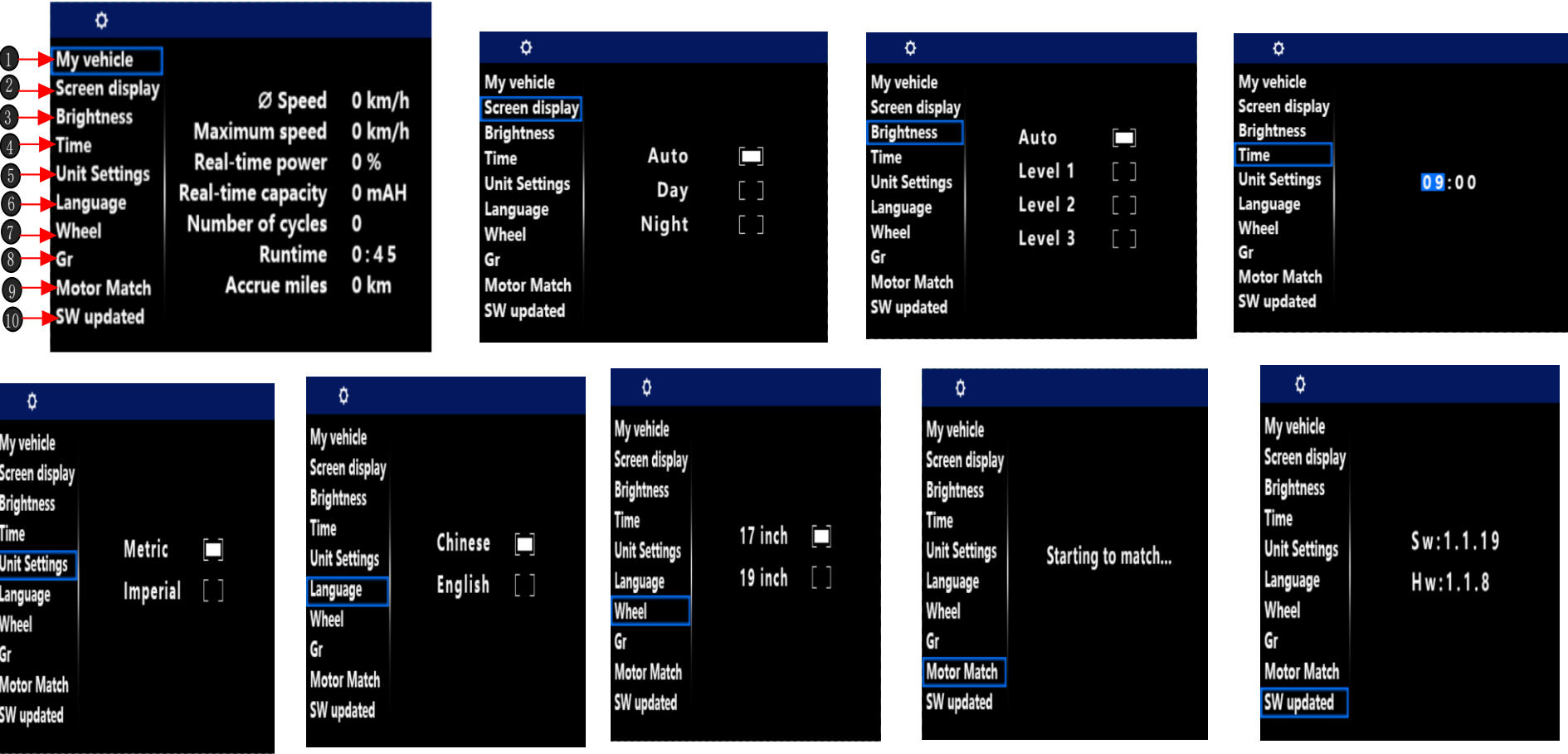
- a. At the "ECO" mode, the electric motorcycle is set at the running mode of limited power and maximum speed, which is suitable for beginners and the need of longer battery life.
- b. At the "SPORT" mode, the electric motorcycle is set to full-power output, which is suitable for entertainment and off-road riding.
- c. To avoid overcharge and protect the battery, energy recovery intervenes only when battery SOC is below 90%.

VI. Controls and Components

(II) Diagram of Dash



VI. Controls and Components



VI. Controls and Components

Functions of the dash buttons:

3-1 The button 1 can be used for display switch among RT SPEED, AVG SPEED, MAX SPEED, TIME and ODO after entering the main interface. It can also be used to exit the current setting dialog box after entering the setting interface.

3-2 Setting button: Press for 2 times to enter the setting interface, as shown in Figs. 3 and 4. Press the buttons 3 and 4 to select the upper and lower option, press the button 2 to enter the selected setting dialog box, press the buttons 3 and 4 again to select the parameters and set the parameters using the button 2. Press the button 1 to exit the current parameter setting interface, and press the button 2 for 2 times to directly enter the main interface. (During riding, the button 2 cannot be used to enter the setting interface). Press the button 2 for more than 1s, and the USB icon of the dash is on, and the USB port is available (Note: The drive capacity of the port is 5V/500mA; higher capacity may damage the USB port).

3-3 After entering the main interface, the buttons 3 and 4 can be used to set the grade of kinetic energy recovery. Press the button 3 to decrease the grade within the scope of grade 4 to 0; press the button 4 to increase the grade within the scope of grade 0 to 4. Grade 4 indicates that the motor has the maximum drive towards the tire, and grade 0 indicates no energy recovery.

Display of the dash interface:

3-4 Number 5: battery power.

3-5 Number 6: charging icon (Bluetooth and Wi-Fi icons will be used, but not enabled yet).

3-6 Number 7: riding mode (ECO\SPORT).

3-7 Number 8: failure icon.

3-8 Number 9: energy consumption.

3-9 Number 10: electric motorcycle status (WAIT\READY).

VI. Controls and Components

3-10 Number 11: grades of energy recovery (0, 1, 2, 3 and 4). The arrows for grade 0 circulation are in white; the arrows for grade I circulation are in light blue, and the corresponding I symbol is in light blue and the others in white; the arrows for grade II circulation are in light blue, and the corresponding II symbol is in light blue and the others in white; the arrows for grade III circulation are in light blue, and the corresponding III symbol is in light blue and the others in white; the arrows for grade IV circulation are in light blue, and the corresponding IV symbol is in light blue and the others in white.

3-11 Number 12: real-time riding speed. Press the button 1 to switch the display of RT SPEED, AVG SPEED, MAX SPEED, TIME and ODO.

Dash setting interface:

3-12 Brightness: adjust brightness of the dash backlight from grade 1 to 5, in which grade 1 is lowest and grade 5 is the highest.

3-13 Clock: dash time setting.

3-14 System: system setting, including metric and imperial unit display, power display in percentage or voltage, gear ratio and energy recovery. The operating steps are as follows: enter the System option, press the buttons 3 and 4 to skip among the setting items, press the button 2 to select them, then press the buttons 3 and 4 again to set the parameters, and press the button 2 to confirm the setting.

3-15 Auto off: not available yet.

3-16 Wheel: wheel diameter.

3-17 Advance setting: not available yet.

3-18 Battery: battery information.

3-19 Factory Setting: restore factory setting.

VI. Controls and Components

3-20 Password: not available yet.

3-21 Information: Basic information, including AVG SPEED, MAX SPEED, TRIP and ODO.

3-22 Screen direct: not available yet.

3-23 Exit: exit the setting interface, which can also be achieved by pressing the button 2 for 2 times.

VI. Controls and Components

(III) Top View

3-1 Front Right Turn Signal

3-2 Front Brake Lever

3-3 Right Rearview Mirror

3-4 Right Handlebar Grip (Plus throttle)

3-5 Ignition Switch

3-6 Battery Case Cover

3-7 Foot peg

3-8 Seat

3-9 Rear Right Turn Signal

3-10 Front Left Turn Signal

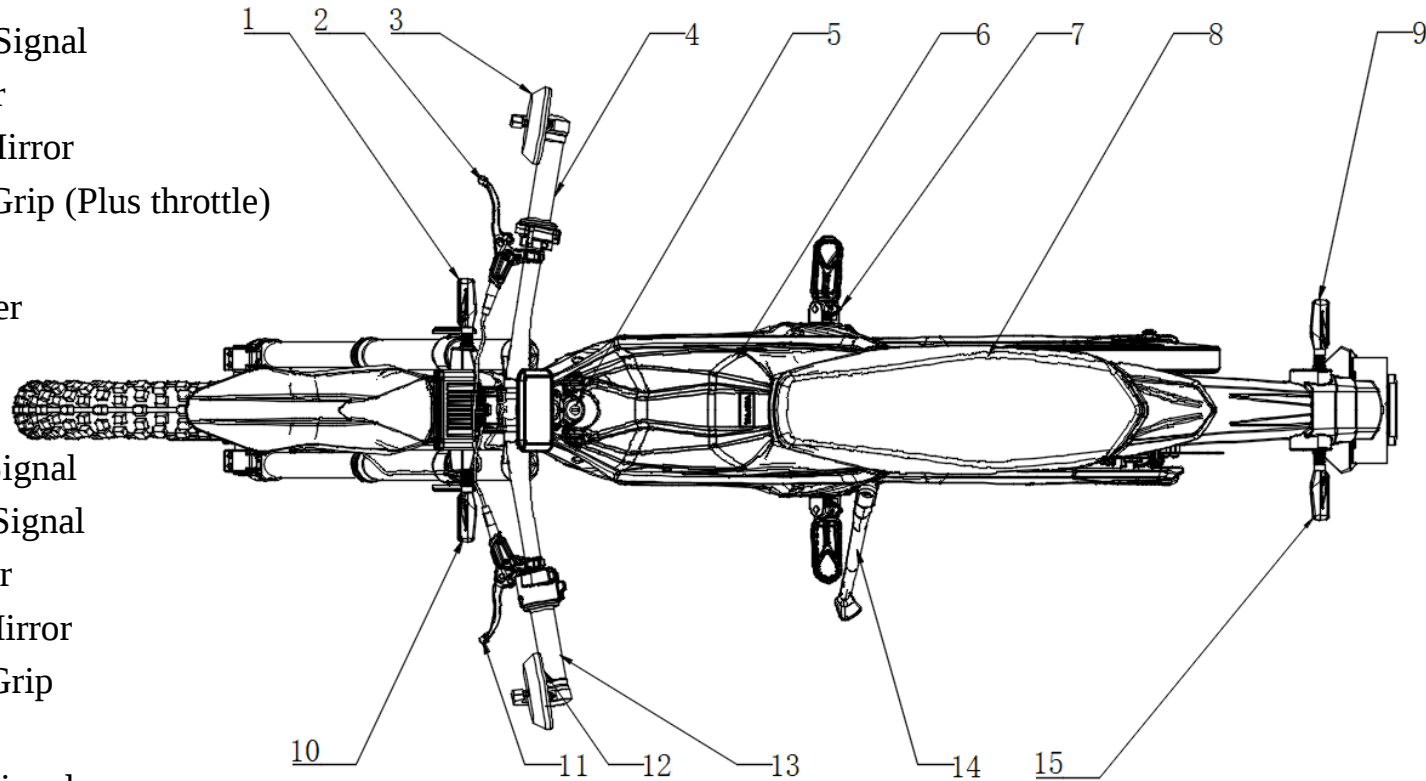
3-11 Rear Brake Lever

3-12 Left Rearview Mirror

3-13 Left Handlebar Grip

3-14 Side Kickstand

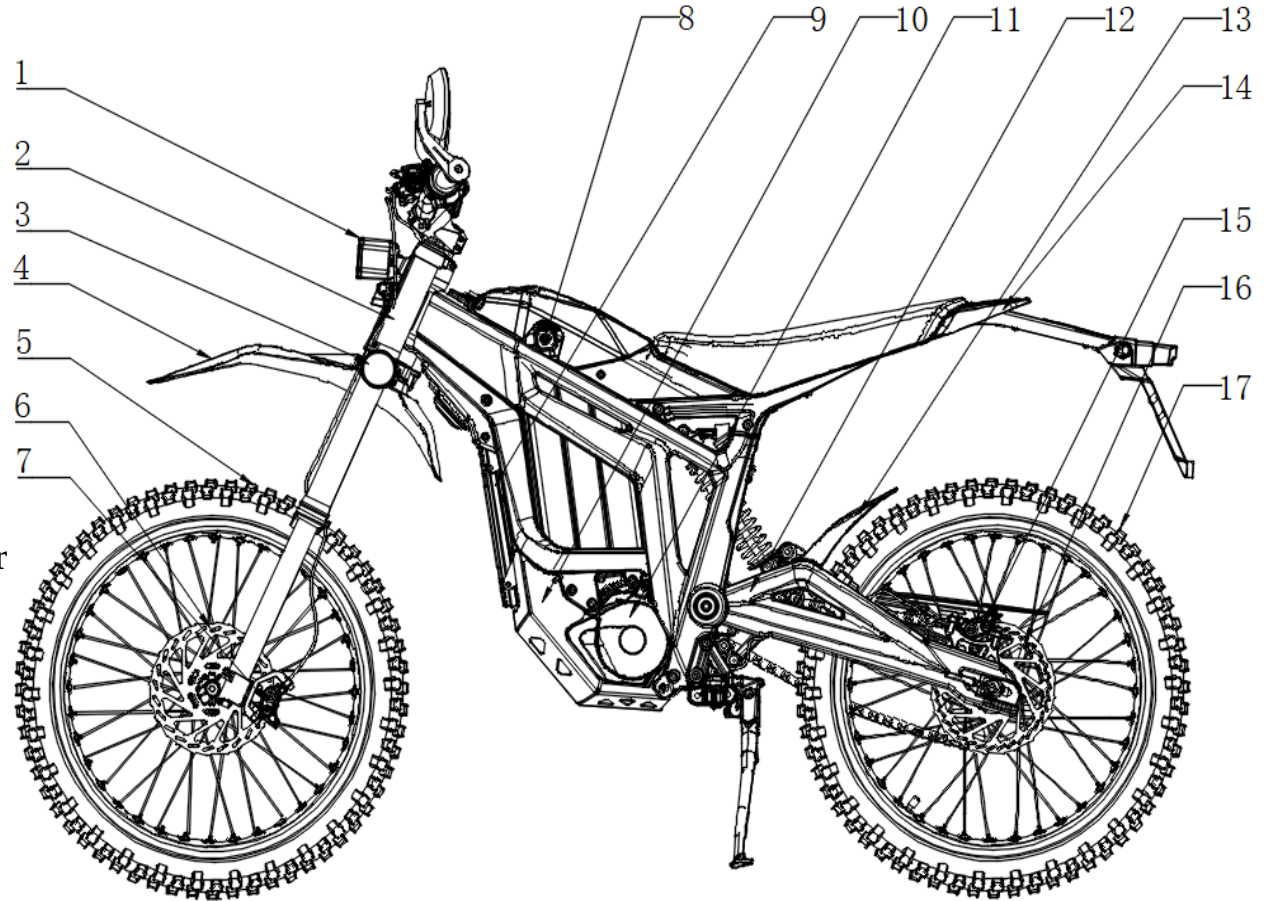
3-15 Rear Left Turn Signal



VI. Controls and Components

(IV) Left Side View

- 4-1 Headlight
- 4-2 Front Fork
- 4-3 Left Reflector
- 4-4 Front Fender
- 4-5 Front Wheel
- 4-6 Front Disc Brake Disc
- 4-7 Front Disc Brake Pump
- 4-8 Battery Charging Port
- 4-9 Controller
- 4-10 Motor Protective Cover
- 4-11 Gearbox Decorating Cover
- 4-12 Rear Fork
- 4-13 Rear Wheel Fender
- 4-14 Rear Fender
- 4-15 Rear Disc Brake Pump
- 4-16 Rear Disc Brake Disc
- 4-17 Rear Wheel



VI. Controls and Components

(V) Right Side View

5-1 Rear Reflector

5-2 Tail Light

5-3 Sprocket

5-4 Chain Guide

5-5 Chain

5-6 Rear Shock Absorber

5-7 Motor Assembly (including gear box)

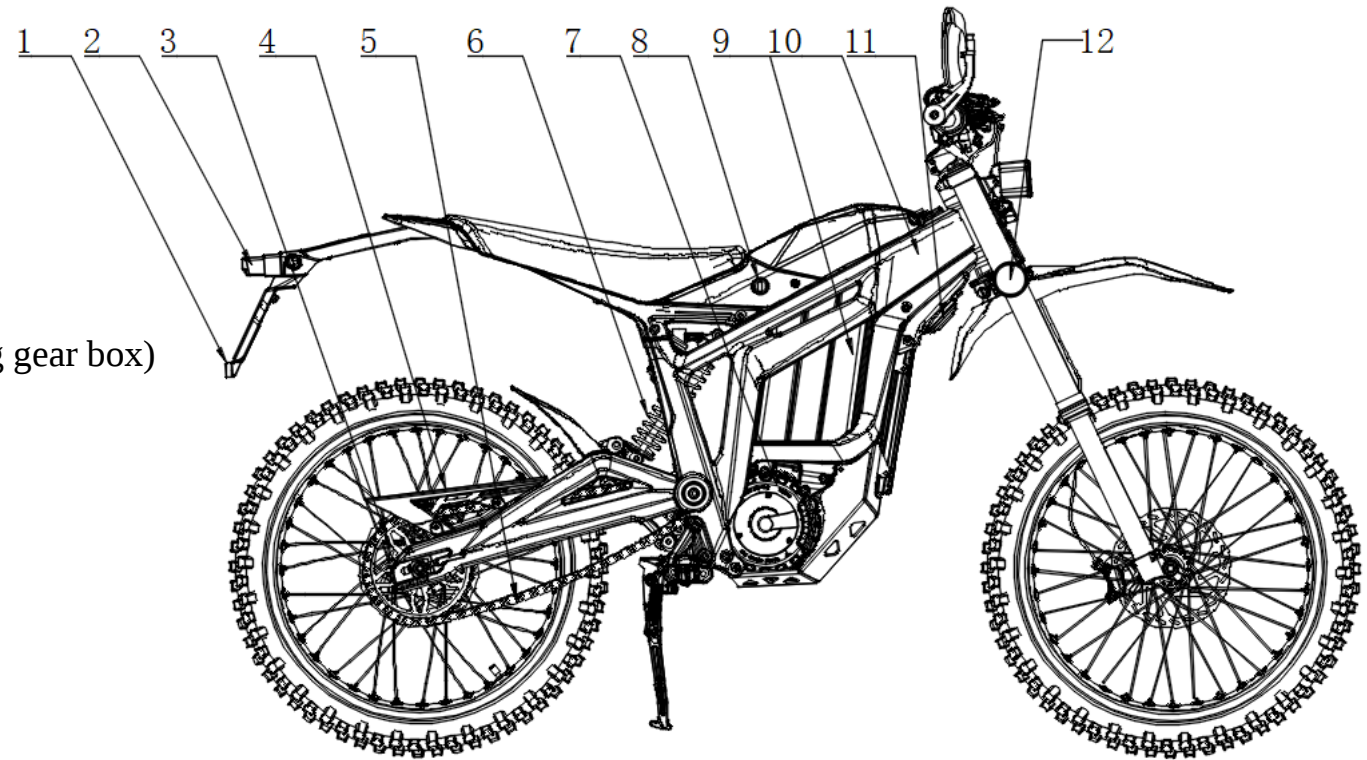
5-8 Battery Case Lock

5-9 Lithium-ion Battery Pack

5-10 Frame

5-11 Horn

5-12 Right Reflector



VII. Starting and Operating

(I) Pre-ride Inspection

Before operating your TL4000 L1E Electric Motorcycle, check the following to make sure the electric motorcycle is secure and intact:

- **Battery pack:** Make sure that the remaining power indicated on the Dash is enough for you to ride to the destination and come back for charging.
- **Brake:** Squeeze the brake lever and press the brake pedal individually while pushing the motorcycle to see if it rolls. You should be able to lock-up the wheels completely by applying the brakes.
- **Throttle:** With the key switch in the OFF position, apply the throttle and release to verify that the throttle is smooth and returns correctly.

- **Tire**

1. Tire pressure inspection.

Abnormal tire pressure, damages and wears will cause safety risks.

Insufficient tire pressure may cause abnormal wears, malfunctioning steering, low running speed and short endurance mileage.

Excessive tire pressure may cause abnormal wear, compromised comfort and even tire burst, leading to potential safety hazards. The tire depression of the surface in contact with the ground is used to determine whether the air pressure is proper. Generally, normal air pressure of front tires is 225KPa and that of rear tires is 225KPa. (Insufficient air pressure will influence the running speed and endurance mileage)

2. Before riding, please check whether any fracturing or abnormal wears on the tires.

3. Before riding, please check whether any nails, stones or glasses pricking into the tires.

VII. Starting and Operating

4. Depth of tire threads. The tire should be replaced if 2/3 of the tread on it are worn off.

5. Before riding, please check whether there are any loosened spokes.

- **Electric system:** Inspect the headlight, steering light and brake/tail light for any dysfunction.

(II) Riding Operation

- **Starting**

1. Check whether the circuit breaker in the front of the battery case is switched on, and then well lock the battery case. Insert the key into the Ignition Switch, rotate to the right to the ON position, and then check the switches, dash and horns for normal function, squeeze the front and rear brake lever, and check whether the braking function is normal.

2. Motor start: After finishing the above step, retract the kickstand (the dash indicates WAIT), sit on the motorcycle steadily, and press the START button on the throttle. The dash indicates READY, meaning that the electric motorcycle is ready to ride (READY and the current riding mode ECO or SPORT are displayed alternatively). Twist the throttle slowly and stably to start the electric motorcycle. The electric motorcycle is equipped with the function of power-cut protection when the kickstand is supporting the electric motorcycle, the motor will not run.

VII. Starting and Operating

- **Speed adjusting**

The throttle is usually disabled. Twist it inward to accelerate and outward to decelerate; release it to automatically reset, and then the motor stops operation. Operate the throttle slowly and gently. Please do not twist the throttle aggressively, otherwise may cause danger or damage components.

- **Usage of brake**

1. Reset the throttle quickly, hold the left and right brake levers, and squeeze with appropriate force.
2. Control the squeeze force towards the brake levers according to the practical circumstances, and the most reasonable way is to gradually increase the force and avoid sudden full brake, so as to prevent danger arising from wheel lock and skid.
3. Always make judgement in advance. Avoid hard brake, sudden turning or other operations that may cause sideslip or tumbling. It is extremely dangerous, especially in rainy days.

- **Precautions in riding**

1. In the premise of ensuring safety, ride smoothly as far as possible, and avoid sudden acceleration or deceleration, so as to save electricity, protect components, and improve the endurance mileage and electric motorcycle service life.
2. Sideslip may easily happen on wet roads in rainy or snowy days. Please stay focus and be responsive. Brake function may be slightly compromised after the electric motorcycle is washed or ridden through puddles. In this case, ride slowly and be careful. Brake gently for several times until the brake goes back to work normally.
3. Please avoid riding in heavy rain or water. If the water level is higher than the wheel center, it may adversely affect the motor and brake. The electric motorcycle can be used in rainy and snowy days, and long-time deep wading must be avoided. Once the water depth exceeds the height of controller and other electrical components, damages may be caused

VII. Starting and Operating

to the electrical components.

4. The kickstand is used for supporting the electric motorcycle only. Do not sit on the electric motorcycle with the kickstand stretched out, or it may be damaged.

5. Do not park the electric motorcycle at a place where the ground is tilted or soft, or it may fall over.

6. The electric motorcycle contains a lot of electrical components. Please avoid long-time exposure to rain or using high pressure washer to rinse the parts with electrical components.

- **Parking**

1. Pay attention to your back and slow down to approach the parking site.

2. Use the brake to park the electric motorcycle, reset the throttle, turn OFF the Ignition Switch and remove the key after the electric motorcycle stopped.

3. After parking, stretch out the kickstand to support the electric motorcycle. Make sure you have turn off the electric motorcycle, and well lock the steering and battery case locks before leave and take the key with you.

- **Adjustment of shock absorber resistance**

Adjust the shock absorber resistance according to the instructions for front and rear shock absorbers in the accessory package.

Turn to direction + to increase the resistance (high)

Turn to direction - to decrease the resistance (low)

Turn to direction + to increase the pressure (high)

Turn to direction - to decrease the pressure (low)

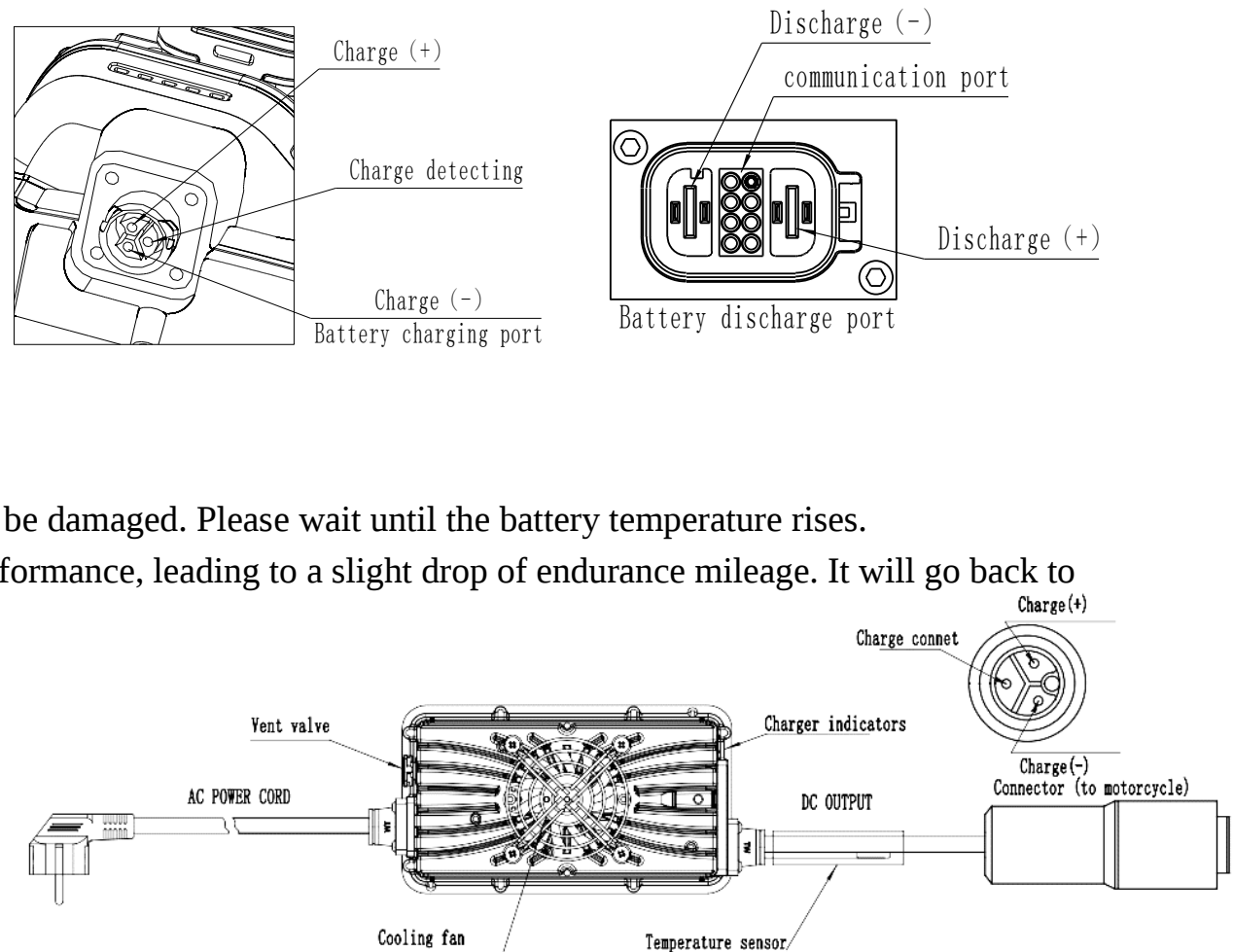
VIII. Charging and Battery Information

(I) Definition of charging through the battery discharge port

The electric motorcycle uses high-performance high-rate lithium battery with a safe voltage of 60V. The battery can be used at the ambient temperature of -20°C – 50°C , optimally at 10°C – 30°C . Too low or too high temperature will adversely affect the performance and lifetime of the battery, so please do not use it at a temperature beyond this range.

CAUTION:

1. Do not charge the battery under 0°C , or it may be damaged. Please wait until the battery temperature rises.
2. Too low temperature will affect the battery performance, leading to a slight drop of endurance mileage. It will go back to normal when the temperature rises.



4. Please charge the battery frequently. The lithium battery used in this electric motorcycle operates with no memory effect, so

VIII. Charging and Battery Information

it can be charged at any time, which is also favorable for the battery to stay healthy.

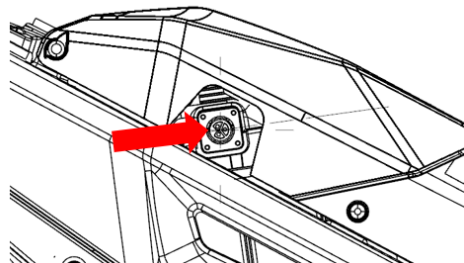
5. In case of long-term storage, charge the battery to about 50%, turn off the circuit breaker and disconnect the discharge plug. Charge the battery once every 3 months to prevent it from losing activity and avoid compromised performance.

CAUTION:

Sideslip may happen in the case that only front brake or rear brake is used. It is safer to use combined braking.

When the motor temperature and controller temperature is high, or the battery power is too low, the electric motorcycle will automatically operate with low power protection to ensure the operation safety of the electric motorcycle. This is not a fault.

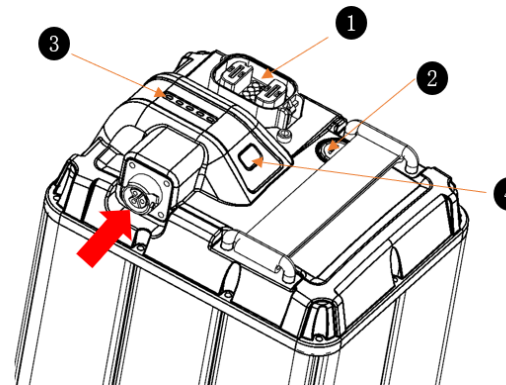
(II) Battery charging and charger usage



Battery charges on the electric motorcycle

2-1 Battery discharge port

2-3 Battery indicator



Battery charges separately

2-2 Air valve

2-4 Activation Button

1. The electric motorcycle uses a customized lithium-ion battery charger. Do not use other chargers, or it may cause battery

VIII. Charging and Battery Information

damage or danger.

2. Check whether the input voltage of the charger is consistent with the grid voltage AC110V/AC230V.
3. The charger output port can be directly inserted into the battery charging outlet on the left side of the electric motorcycle for charging, or battery can also be charged separately.
4. When charging, the charger and battery charging port must be connected in place before connecting the charger to the grid socket. After charging, disconnect the charger and grid socket first, and then disconnect the charger and battery after the indicator light goes out. If you plug the charger into the grid socket first, and then, the charger and battery charging port, please be sure to complete the operation within 3S. Otherwise, the charger will run the protection, and automatically shut down because the battery cannot be detected!
5. When the red indicator light of the charger flashes, it indicates that charging is ongoing. When the green indicator light is on for a long time, it indicates that the battery is fully charged. The time needed to fully charge the battery depends on the remaining power of the battery and the user's choice of charger. Usually, the stock charger will cost about 4 hours to fully charge an empty battery.
6. The charger will turn off automatically after the battery is fully charged. But you should always avoid connecting the charger to the grid socket for a long time, which shall not exceed 6 hours.
7. It is strictly forbidden for users to disassemble the battery by themselves, which may cause damage and danger.
8. When the battery enters deep sleep, it can be awakened with the activating button or by connecting the charger.

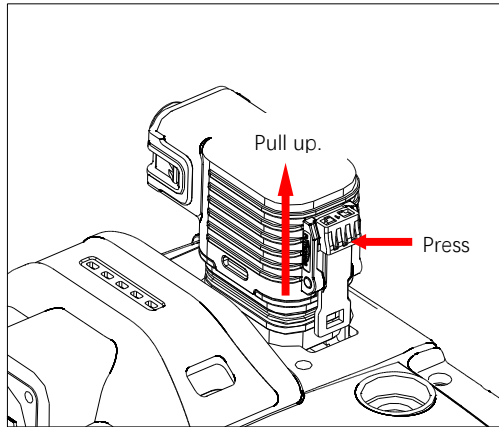
Charging precautions

VIII. Charging and Battery Information

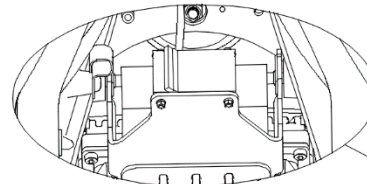
1. When charging, please park the electric motorcycle or put battery in a safe place out of the reach of children.
2. The internal temperature of the battery that has just been discharged is high. Do not charge it immediately. Charge the battery after ventilation and heat dissipation for 30 minutes is recommended.
3. Avoid using the battery immediately after it is fully charged. Let it stand for 10 minutes before using.
4. It is strictly forbidden to cover the charger with any object when using it. This charger is for indoor use. Please use it in a dry and well-ventilated environment.
5. In case you find peculiar smell or high temperature during charging, or the battery is not fully charged after charging for a long time, please stop charging immediately and send it to the local dealer for maintenance.

(III) Remove the Battery

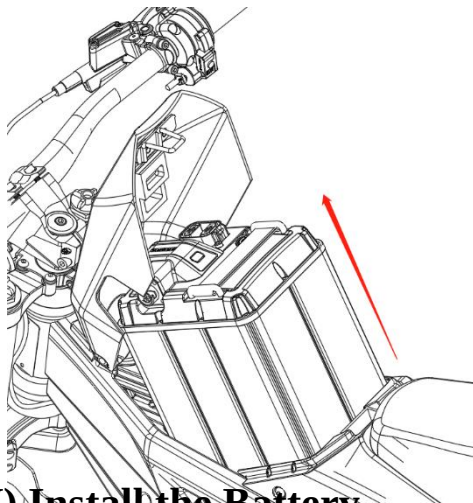
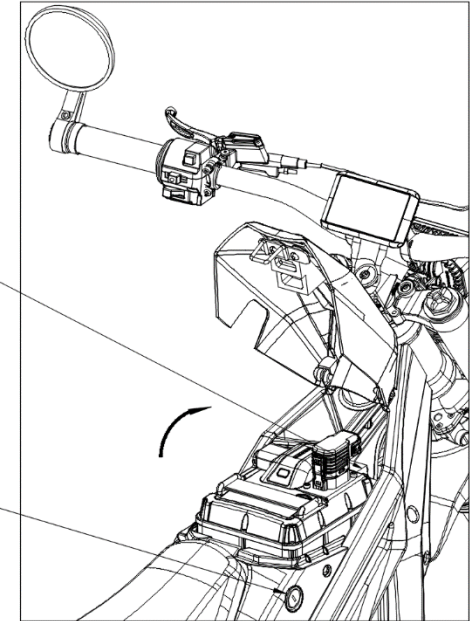
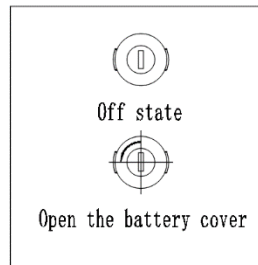
VIII. Charging and Battery Information



Disconnect the discharge plug from the battery



Circuit breaker position



(IV) Install the Battery

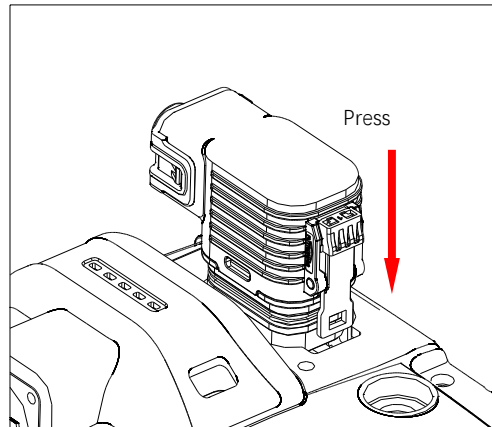
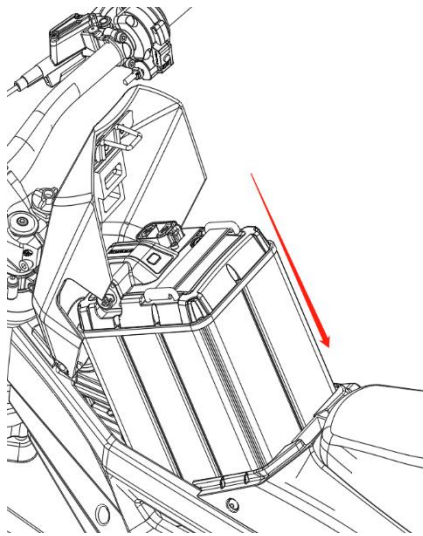
1. Turn off the electric motorcycle, use the electric motorcycle key to open the battery case lock on the right side of the electric motorcycle, then open the battery case cover forward, and you can see the battery.

2. Switch off the circuit breaker in front of the battery, remove the discharge plug on the battery, then pull up to take out the battery and close the battery case cover.

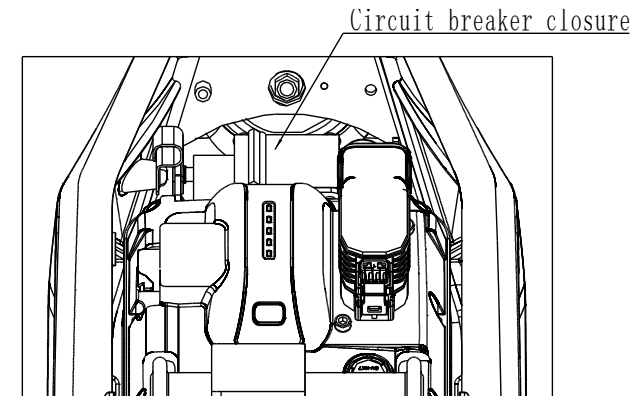
CAUTION:

The circuit breaker must be switched off before plugging in and out the battery plug.

VIII. Charging and Battery Information



The discharge plug is connected to the battery.



The circuit breaker is located in the battery compartment, near the front of the battery

1. Use the key to open the battery case cover.
2. Put in the battery from the top, pay attention to the front and rear direction of the battery (the charging port should toward the left), and plug in the discharge plug. Then switch on the circuit breaker, close and lock the battery case cover, and remove the key.

CAUTION:

The discharge plug must be plugged in place; otherwise, the electric motorcycle cannot correctly identify the battery, which will result in failure to start.

IX. Troubleshooting

(I) Precautions for High Voltage Electrical Components

TL3000 L1E Electric Motorcycle contains electrical components. The high voltage of these components is dangerous and can cause personal injury, severe burns, electric shock or even fatal injury unless appropriate preventive measures are taken.

Always follow the instructions on the label of each component, which is very important for your safety.

Do not touch, attempt to remove or replace any high-voltage components, wiring (identified by orange outer protection) or connectors. In the event of an accident with the electric motorcycle, do not touch any high-voltage wire connector or assembly connected to the wire. In case of fire of the electric motorcycle, use a carbon dioxide or class-D dry chemical fire extinguisher to put out the fire. After the fire is extinguished, please do not start the bike, and send it to the authorized dealer to repair.

CAUTION! The operating voltage of the electric motorcycle is high. During and after start-up and when the electric motorcycle is turned off, the system components may be too hot to touch by hand. Pay attention to high voltage and high temperature. Follow the label instructions everywhere on the electric motorcycle.

CAUTION! The high-voltage system of the electric motorcycle is maintenance-free. Disassembly, removal or replacement of high-voltage components, cables or connectors may cause severe burns or electric shock, which may lead to severe injury or death. High-voltage cables are made in orange for easy identification (see response information in the latter part of this manual).

Note: All electric motorcycles have been carefully inspected before delivery. But there will inevitably be some technical problems even after inspection. The following information serves as a guide to help you identify the problem and repair it by

IX. Troubleshooting

yourself if possible. If you cannot solve the problem of TL3000 L1E Electric Motorcycle, please send it to an authorized dealer at your convenience.

(II) General Troubleshooting

SYMPTOM	POTENTIAL CAUSE	POTENTIAL SOLUTION
The electric motorcycle cannot be started.	1. The battery pack is out of power; 2. Circuit breaker is not switched on; 3. motor phase wires are incorrectly connected or loose.	1. Charge the battery. 2. Switch on the circuit breaker. 3. Check the U, V and W phase wires connections.
The charger does not work.	No AC power supply.	Check the AC power supply socket, and check the fuse/voltage of AC power supply.
Handlebars shake	Incorrect tire pressure	Inflate to correct tire pressure.
	Deformed front tire	Replace the front tire with the same tire supplied from the factory.
	Worn Tire (tire tread is over worn)	Replace the tire with the same tire supplied from the factory.

IX. Troubleshooting

(III) Dash Error Code and Description and Troubleshooting

S/N	ERROR CODE (EUROPE STANDAR D VERSION)	FAULT DESCRIPTION	CAUSE ANALYSIS	SOLUTION	SUGGESTION
1	00001	Protection IC fault	The inner communication of the chip is disconnected	Restarting	If the error code still shows on the dash, please send the electric motorcycle to the nearest dealer to inspect and repair.
2	00002	Battery Cell disconnection	The cell is not firmly welded, resulting in dry joint or fracture of connecting piece and poor contact of sampling line.	Restarting	If the error code still shows on the dash, please send the electric motorcycle to the nearest dealer to inspect and repair.
3	00003	Voltage of battery cells are not balanced.	The difference of battery cells is more than 500mV, this error code will display on the dash.	Restarting	If the error code still shows on the dash, please send the electric motorcycle to the nearest dealer to inspect and repair.
4	00004	Battery capacity measurement error	Don't have this error for STING's battery. Just a default/setting error.		
5	00005	Storage error	Record devices got failure.	Restarting	If the error code still shows on the dash, please send the electric motorcycle to the nearest dealer to inspect and repair.
6	00006	Time display error	Time device got failure.	Restarting	If the error code still shows on the dash, please send the electric

IX. Troubleshooting

					motorcycle to the nearest dealer to inspect and repair.
7	00007	Discharge MOS error	Discharge circuit got failure	Restarting	If the error code still shows on the dash, please send the electric motorcycle to the nearest dealer to inspect and repair.
8	00008	Charge MOS error	Charge circuit got failure	Restarting	If the error code still shows on the dash, please send the electric motorcycle to the nearest dealer to inspect and repair.
9	00009	Overcharge error	1. Charging voltage is higher than single battery cell's over charge protection voltage 4250mV. 2. Misinformation of BMS	Restarting	It does not affect riding at this time, but charging is not available. If the error code still shows on the dash, please send the electric motorcycle to the nearest dealer to inspect and repair.
10	0000A	Level 1 over discharge error	Low voltage protection of battery discharge	Users are advised to charge in time.	
11	0000B	Level 2 over discharge error			
12	0000C	Level 1 over discharge current error	The battery discharge current is greater than the level 1 overcurrent protection threshold.	Stop the over current discharge or reduce the discharge current for 1 minute, the error will disappear automatically.	If the error code still shows on the dash, please send the electric motorcycle to the nearest dealer to inspect and repair.
13	0000D	Level 2 over discharge current	The battery discharge current is greater than the level 2	Stop the over current discharge or control the	If the error code still shows on the dash, please send the electric

IX. Troubleshooting

		error	overcurrent protection threshold.	discharge current less than 110A, or check whether there's the short circuit? If yes, eliminate the short circuit.	motorcycle to the nearest dealer to inspect and repair.
14	0000E	Over charging-current error	The charging current is greater than the protection threshold.	Check to see the charger is the right one to match the battery.	If the error code still shows on the dash, please send the electric motorcycle to the nearest dealer to inspect and repair.
15	0000F	Soft start failure error	When the battery is connected with load, the external load capacitance is too large, resulting in failure to start directly.	Please power on and start the electric motorcycle according to the instructions.	
16	00010	Overtime pre-charge error	1. BMS fault. 2. Charger is damaged or does not match.		If the error code still shows on the dash, please send the electric motorcycle to the nearest dealer to inspect and repair.
17	00020	MOS temperature sensor fault error	MOS temperature sensor fault	Restarting	If the error code still shows on the dash, please send the electric motorcycle to the nearest dealer to inspect and repair.
18	00030	Cell temperature sensor fault error	Cell temperature sensor fault	Restarting	If the error code still shows on the dash, please send the electric motorcycle to the nearest dealer to inspect and repair.

IX. Troubleshooting

19	00040	Battery discharge overtemperature error	When the battery pack is discharging, the battery pack inner temperature is overheated	Stop to ride the electric motorcycle until the discharge overtemperature protection unlocked.	It's strongly suggested to use the bike follow the owner's manual.
20	00050	Battery charge overtemperature	The high battery cell temperature caused this error.	Stop to charge the battery until the charge overtemperature protection unlocked.	It's strongly suggested to charge the battery follow the owner's manual.
21	00060	Battery discharge low temperature error	When the battery pack discharges in very low temperature, the battery will carry out the protection function for low temperature.	Stop to ride the electric motorcycle until the low temperature protection unlocked.	It's strongly suggested to use the electric motorcycle follow the owner's manual.
22	00070	Battery charge low temperature error	When the battery pack is charged in very low temperature, the battery will carry out the protection function for low temperature.	Stop to charge the battery until the low temperature protection unlocked.	It's strongly suggested to charge the battery follow the owner's manual.
23	00080	Battery discharge MOS overtemperature error	It's caused by MOS overtemperature when the battery pack is discharging.	Stop to ride the electric motorcycle until the overtemperature protection unlocked.	It's strongly suggested to use the electric motorcycle follow the owner's manual.
24	00090	Battery charge, MOS overtemperature error	It's caused by MOS overtemperature when the battery pack is charging.	Stop to charge the battery until the discharge overtemperature protection unlocked.	It's strongly suggested to charge the battery follow the owner's manual.
25	000A0	Soft-start circuit overtemperature error	If the temperature is high when use the soft-start, will cause the discharge MOS not work, and	Stop to ride the electric motorcycle until the overtemperature	

IX. Troubleshooting

			lead the entire soft-start circuit to be overtemperature.	protection unlocked.	
26	000B0	Storage error	It's caused by the faulty operation during the production.	Send the electric motorcycle to the nearest dealer to repair.	
27	000C0	Discharge fuse failure error	Don't have this error for STING's battery. Just a default/setting error.		
28	000D0	Charge fuse failure error	Don't have this error for STING's battery. Just a default/setting error.		
29	000E0	Level 3 over current error	Short circuit in the external circuit causes this error.	Inspect and eliminate the short circuit.	If you don't have the professional tools, or you can find the short circuit, please send the electric motorcycle to the nearest dealer to inspect and repair
30	000F0	Level 4 over current error	Short circuit in the external circuit causes this error.	Inspect and eliminate the short circuit.	If you don't have the professional tools, or you can find the short circuit, please send the electric motorcycle to the nearest dealer to inspect and repair
31	00100	Setting error	It's caused by the faulty operation during the production.	Send the electric motorcycle to the nearest dealer to repair.	

IX. Troubleshooting

32	00300	Controller phase wire over current error	Controller phase wire current is equal or greater than the protection threshold.	1. Turn off the electric motorcycle, and switch off the circuit breaker. Then, check the whether the motor phase wire terminal got loose, or broken. And then, check whether the motor outlet phase sequence corresponds to the U / V / W on the controller. Finally, check whether the magnetic encoder output wire corresponds to the yellow, green and blue wires on the harness assy. 2. Check whether anything stuck the rear wheel.	If the solution cannot solve the error, please send the electric motorcycle to the nearest dealer to inspect and repair.
33	00400	Controller busbar over current error	Controller busbar current is equal or greater than the protection threshold.	1. Turn off the electric motorcycle and switch off the circuit breaker. Then, check the whether the motor phase wire terminal got loose, or broken. And then, check whether the motor outlet phase sequence corresponds to the U / V / W on the controller. Finally, check	If the solution cannot solve the error, please send the electric motorcycle to the nearest dealer to inspect and repair.

IX. Troubleshooting

				whether the magnetic encoder output wire corresponds to the yellow, green and blue wires on the harness assy. 2. Check whether anything stuck the rear wheel.	
34	00500	Controller MOS error	Controller MOS welding loose or MOS is broken	Replace the controller assy.	
35	00600	Tip-over sensor error	1. The electric motorcycle tip-over. 2. Tip-over sensor got a poor contact, or tip-over sensor broken.	1. Turn off the electric motorcycle, righting it. 2. Restart the electric motorcycle, and the fault is eliminated;	If the solution cannot solve the error, please send the electric motorcycle to the nearest dealer to inspect and repair.
36	00700	Throttle error	1. Throttle connection loose. 2. The throttle didn't return back to the proper position before start. 3. The throttle is broken.	1. Check the throttle connection is loose or broken. 2. Make sure the throttle return to the proper position before the start. 3. If the throttle connection is no problem, and throttler return to the proper position, still have the throttle error. Then, just replace a new throttle.	
37	00800	Low battery protection error	When the battery is low, the low battery protection will run	It is recommended to charge in time.	

IX. Troubleshooting

			automatically.		
38	00900	Over voltage protection error	When the voltage of the battery is equal or greater than the protection threshold, the over voltage protection will run automatically.	Please use Talaria's stock charger to charge the battery.	If the solution cannot solve the error, please send the electric motorcycle to the nearest dealer to inspect and repair.
39	00A00	Magnetic encoder error	Magnetic encoder got a poor contact, or it's broken.	1. Check whether the magnetic encoder got a poor contact? If yes, repair it. 2. If the magnetic encoder is well contacted, it means it's broken. Please replace a new magnetic encoder.	If the solution cannot solve the error, please send the electric motorcycle to the nearest dealer to inspect and repair.
40	00B00	Motor phase wire failure error	Motor phase wire loose or incorrect connection caused the error	Turn off the electric motorcycle and switch off the circuit breaker. Then, check the whether the motor phase wire terminal got loose, or broken. And then, check whether the motor outlet phase sequence corresponds to the U / V / W on the controller. Finally, check whether the magnetic encoder output wire corresponds to the yellow, green and blue wires on	If the solution cannot solve the error, please send the electric motorcycle to the nearest dealer to inspect and repair.

IX. Troubleshooting

				the harness assy.	
41	00C00	Motor overtemperature error	High-power operation for a long time, high motor temperature or poor contact or damage of temperature sensor	It is recommended to use it after the temperature protection is removed, or check whether the motor encoder plug is loose.	
42	00D00	Motor temperature sensor fault	Long time peak power riding will cause the motor to be overtemperature, or motor inner temperature sensor got a poor contact, or motor inner temperature sensor is broken.	1. Stop riding until the motor's temperature return to normal. 2. Check whether the magnetic encoder is loose or broken. If it's broken, need to replace with new one.	
43	00E00	Controller overtemperature error	Long time peak power riding will cause the controller to be overtemperature	Stop riding until the controller return to the normal temperature.	If the solution cannot solve the error, please send the electric motorcycle to the nearest dealer to inspect and repair.
44	00F00	Controller temperature sensor error	Long time peak power riding will cause the controller to be overheated, or controller temperature sensor got a poor contact, or controller	Stop riding until the controller return to the normal temperature.	If the solution cannot solve the error, please send the electric motorcycle to the nearest dealer to inspect and repair.

IX. Troubleshooting

			temperature sensor to be broken.		
45	01000	Current sensor error	Failure of current sensor	Please send the electric motorcycle to the nearest dealer to inspect and repair.	
46	02000	Motor lack of phase error	1. Circuit breaker is not switched on. 2. Motor phase wires (U/V/W) loose or incorrect connection.	1. Switch on the circuit breaker, and restart the bike. 2. Turn off the bike, and switch off the circuit breaker. Then, check the whether the motor phase wire terminal got loose, or broken. And then, check whether the motor outlet phase sequence corresponds to the U / V / W on the controller. Finally, check whether the magnetic encoder output wire corresponds to the yellow, green and blue wires on the harness assy.	If the solution cannot solve the error, please send the electric motorcycle to the nearest dealer to inspect and repair.
47	03000	Motor locked-rotor protection error	During the riding, if the rear wheel is stuck, and cannot rotate, or the motor, gearbox, brake, chain are stuck, will cause the	1. Turn off the electric motorcycle, as well as to switch off the circuit breaker. Then, put the bike	If the solution cannot solve the error, please send the electric motorcycle to the nearest dealer to inspect and repair.

IX. Troubleshooting

			discharge current load to be equal or greater than the protection threshold. Then, cause the error.	on a lifer, to check whether the rear wheel can rotate normally, if anything stuck the rear wheel, please eliminate it. And please also check whether there're things stuck the motor, gearbox, chain and brake. If yes, please eliminate it. 2. Choose the right road condition to ride the bike.	
48	04000	Communication Error	CAN communication wire loose, fall off or hardware failure.	Turn off the bike, as well as to switch off the circuit breaker. Then, check the all the CAN connections on the bike to see whether there's the loose or breaks. (Dash connection, controller connection, battery pack communication connection. These 3 positions have CAN connections). If there's the loose or breaks, just repair them, and re-start the bike, the error will be solved.	If the solution cannot solve the error, please send the electric motorcycle to the nearest dealer to inspect and repair.

X. After-sale Service

(I) Warranty Description

Dear customer:

For the sake of your rights and interests, please keep this owner's manual properly. Please inspect and test the electric motorcycle when you purchase, and ask the salesman to offer valid invoice, warranty card, repair addresses, contact phone number, and other information.

If you find any quality-related problems while using this electric motorcycle, you are entitled to get the after-sale service for warranty accord to the warranty policy from the dealer, where you ordered the electric motorcycle, by providing the purchase invoice and warranty card.

If the above parts fail during the warranty period and cannot be used normally after maintenance, they will be replaced free of charge.

(II) User's Note

1. For services beyond the warranty scope, or after expiration of the warranty period, the dealer will also offer payable after-sale service
2. Failures caused by the user's fault to use, maintain and adjust the product in accordance with the provisions of the manual, will be out of the warranty scope, and after-sale service will be charged.
3. Failures caused by user's dismantling, repairing and refitting, as well as non-compliance with instructions, will be out of the warranty scope, and after-sale service will be charged.
4. Failures caused by improper storage by the user or accidents by force majeure, will be out of the warranty scope, and after-sale service will be charged.
5. There is no warranty card or purchase invoice, or the electric motorcycle does not match the information on the

X. After-sale Service

purchase invoice and warranty card, the after-sale service offered by the dealer will be paid.

6. Consumables of wear parts (such as tires, brake pads, etc.) are not in the scope of warranty.

7. Failures caused by collision, impact, overload and chemical corrosion, will be out of the warranty scope, and after-sale service will be charged.

8. Repair the electric motorcycle in the unauthorized maintenance stores will cause the warranty to be invalid.

9. Any failures by DIY refitting will cause the warranty to be invalid.

XI. Maintenance Service

(I) Owner's Responsibilities

Listed below are the responsibilities afforded to the owner:

This Owner's Manual should be considered a permanent part of this electric motorcycle and should remain with it even if the motorcycle is subsequently sold.

Perform routine care and maintenance of your electric motorcycle as detailed in this Owner's Manual.

Use only Talaria approved parts and accessories for this electric motorcycle.

The user is responsible for learning and obeying all country and local laws governing the riding of an electric motorcycle.

Always wear a regionally approved helmet, goggles, appropriate boots, and all other appropriate safety equipment when operating an electric motorcycle.

(II) Scheduled Inspection

To prolong the lifetime of your electric motorcycle and ensure safe and comfortable riding, periodical inspection and maintenance is recommended. If stored for a long term, the motorcycle should also be inspected regularly.

A new motorcycle should be subject to inspection and maintenance after running for 300KM.

Be careful when you inspect the electric motorcycle.

Park the electric motorcycle at an open and flat place.

Riding inspection should be carried out in a safe place. Pay attention to the surrounding environment and conditions.

Any abnormality found through the inspection should be eliminated before you use the motorcycle. If it is difficult to solve it by yourself, you can send the electric motorcycle to the dealer's facility for inspection.

CAUTION:

The front and rear brakes are disc brakes. If the brake pads are severely worn, shall replace them in time.

XI. Maintenance Service

Keep the disc brake system clean in daily use to avoid sand accumulation for a long time, especially oil stain.

Inspection for operating parts

- **Check the shock absorber** for any bending, deformation, damage, looseness, oil leakage and other faults. Shake the handlebar up and down to check for any abnormal sound caused by foreshock fault.
- **Brake inspection:**
 1. Check whether the free clearance of the brake lever is within the specified range (15-30mm). If the measured result does not meet the requirements, it shall be adjusted.
 2. When driving at low speed on a dry and flat road, use the front and rear brakes respectively to check their braking function.

- **Inspection for tire and other parts:**

1. When the tire is cool, check the air pressure with a tire barometer.
2. Check for any cracks, damages, foreign matters and abnormal wear.
3. Check whether the rim spokes are loose.
4. Check the tension of the chain. It should be 10–20mm from the top and bottom of the chain.

Stones, glass, nails and other foreign matters on the ground will damage your tire as it is in long-term contact with the ground. Therefore, when riding, make sure to observe the road surface to avoid the places where the tire may be damaged. In addition, regularly check the tire for any obvious cracking and other damage, whether it has been penetrated by stones, glass and other foreign matters, and whether there is abnormal wear.

- **Inspection for tire tread depth**

Check the tire wear and the tread depth. Replace the tire 2/3 of the tread are worn off. When the tire makes abnormal noise and swings during riding, please send it to the dealer's maintenance facility for inspection and maintenance. It is

XI. Maintenance Service

recommended to set the locking torque of the middle axle as 30N.m and the locking torque of rear axle nut as 40N.m. The locking torque of the front axle screw depends on the front fork.

Caution: Hold the brake lever tightly. If the brake still can't achieve the ideal braking function, check whether the disc is clean. If the problem is still not solved, send it to the dealer's maintenance facility for inspection.

- **Battery inspection**

The electric motorcycle uses a sealed ternary lithium-ion battery. Fully charge the battery before inspection, and then use a multimeter to measure the cathode and anode voltage. The full voltage should be between 65.5–67.2. Otherwise, please send it to the dealer's maintenance facility for inspection.

Caution: Please turn off the electric motorcycle and switch off the circuit breaker before removing or installing the battery. If the battery cannot be pushed in, do not operate it by force. Pull out the battery and check whether it is stuck by something.

- **Fuse replacement**

If the dash, horn, lamps and other parts still not work after switch on the circuit breaker and turn on the electric motorcycle, it is probably because the fuse is broken. Turn off the electric motorcycle and switch off the circuit breaker before replacing the fuse.

1. Open the battery case cover and pull out the battery. Open the fuse box which is located in the front of the battery case.
2. Remove the broken fuse, install spare fuse, close the fuse box, install the battery and close and lock the battery case cover.

CAUTION:

The fuse should be installed firmly. If it is loose, it may cause the fuse to heat up and results in other faults and hazards.

XI. Maintenance Service

Replace the fuse with those of the specified model and corresponding specification. If the fuse is out of specification, it may not have the function of fuse protection.

If the new fuse is broken again in a short time, check for the causes other than the fuse.

Avoid strong impact to the fuse with water flow.

● Inspection for brake oil level

Inspect the brake oil level for front and rear brake through the brake oil view lens. If the brake oil level is low, then, need to open the brake oil container cap to add the specified mineral oil for the disc brake.

Note: Before checking the brake oil level, the electric motorcycle should remain upright.

1. Remove the two M3 screws from the brake oil container cover.
2. Add the specified mineral oil for disc brake.
3. Check the sealing cover for any wears or damages, and make sure it's in

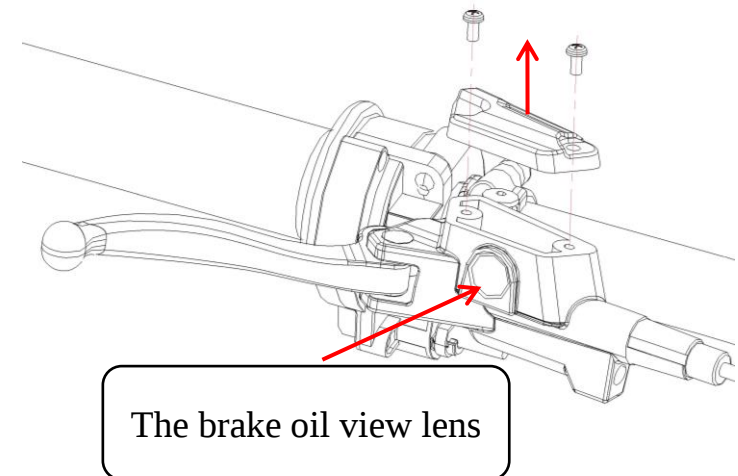
the correct position.

CAUTION:

Do not spill the brake oil on the paint surface; otherwise, it may cause cracks on the surface of the paint parts.

Before removing the brake oil container cover, be sure to place a clean rag under the brake oil container.

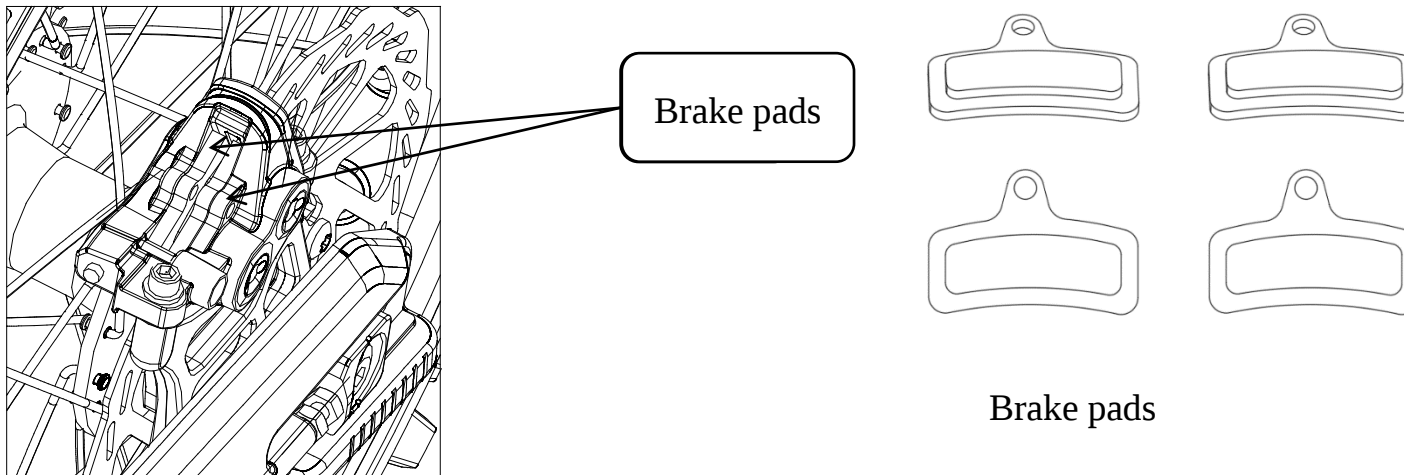
At low brake oil level, there may be brake pad wear or leakage of hydraulic system. Check the brake pads for wear and/or the hydraulic system for leakage before riding. Add the specified mineral oil for disc brake. Do not use other kinds of brake oil. Fixing the brake oil container cover and tighten the M3 screws. The tighten torque is 1.5N.m.



XI. Maintenance Service

- **Inspection for brake pads**

Check the brake pads and visually check the brakes by observing the remaining brake pad materials on both sides of the brake caliper.



Replace the brake pads when the free clearance of the brake lever exceeds the specified range (15–30mm), Or the total thickness of less than 3 mm brake pads, please replace the brake pads.

- **Inspection for brake disc**

Inspect the thickness of the brake disc regularly and replace the disc if the thickness is less than 1.9 mm.

WARNING! When use new brake discs or new brake pads, at first, it should be lightly squeeze and hold the brake for several times at low speed (less than 20km/h), so as to generate appropriate braking friction.

- **Tire inflation**

XI. Maintenance Service

WARNING! Under-inflation is a common cause of tire damages and may result in severe tire cracking, tire tread separation, "blowout", or unexpected loss of motorcycle control, causing serious injury or death.

Tire pressure should be checked and adjusted to the proper tire pressure levels before each ride. Tire pressure should be checked using an accurate gauge when the tires are cool. Always replace the valve stem cap when finished adjusting tire pressures.

Front tire: 225Kpa; Rear tire: 225Kpa

- **Cleaning The Drive Chain.**

WARNING! Always wear safety glasses when cleaning the chain to prevent eye injuries.

WARNING! Never place your hand or any other body part between the chain and sprockets. Work with the chain only in the middle between the two sprockets; failure to do so could result in serious injury.

WARNING! Do not allow any of the drive chain cleaner to get on the brake rotors or brake pads. If the brake rotors or brake pads are contaminated with cleaner, it will impair the motorcycle's ability to stop. This could result in serious injury or death.

WARNING! Never have the motor spinning the wheel during cleaning. Turn the wheel only by hand. Failure to do so could result in serious injury or death.

Follow the manufacturer's instructions for the chain cleaner you are using; below are the general guidelines.

1. Remove the key from the key switch.
2. Set the motorcycle on a stand or lift so the rear wheel is free to spin. While turning the wheel by HAND, spray the inside of your entire chain with a good coating of chain cleaner and let it sit for a few minutes.
3. Using a brush, fill the bristles with spray from the chain cleaner. Begin gently scrubbing the chain on the top of your

XI. Maintenance Service

swingarm using the brush.

4. Do this for the entire length of the chain. Now do the same thing for the inside/bottom of the chain.
5. Using the brush, clean both sides of the rear sprocket. Let this soak for 5 minutes.
6. Using a water hose, rinse the entire chain. Then, using a clean rag, wipe any residual moisture from the chain.

- **Drive Chain Lubrication.**

WARNING! Always wear safety goggles when lubricating the drive chain to prevent eye injuries.

WARNING! Never have the motor spinning the wheel. Turn the wheel only by hand. Failure to do so could result in serious injury.

WARNING! Never place your hand between the chain and sprockets. Work with the chain only in the middle between the two sprockets. Failure to do so could result in serious injury.

WARNING! Do not allow any of the lubricant to get on the brake discs or brake pads. If the brake rotors or brake pads are contaminated with lubricant, it will impair the motorcycle's ability to stop. This could result in serious injury or death.

Follow the manufacturer's instructions for the chain cleaner you are using; below are the general guidelines. Do not allow any of the lubricant to get on the brake pads.

To Lubricate The Drive Chain:

1. Turn the wheel backwards slowly and spray the lubricant on the inside of the chain links.
2. Turn the wheel backwards slowly and spray the lubricant on the outside of the chain links.
3. Let the electric motorcycle stand for 30 minutes to allow the lubricant to penetrate the links rollers.

- **Checking the drive chain**

1. Remove the key from the ignition switch, as well as to switch off the circuit breaker.

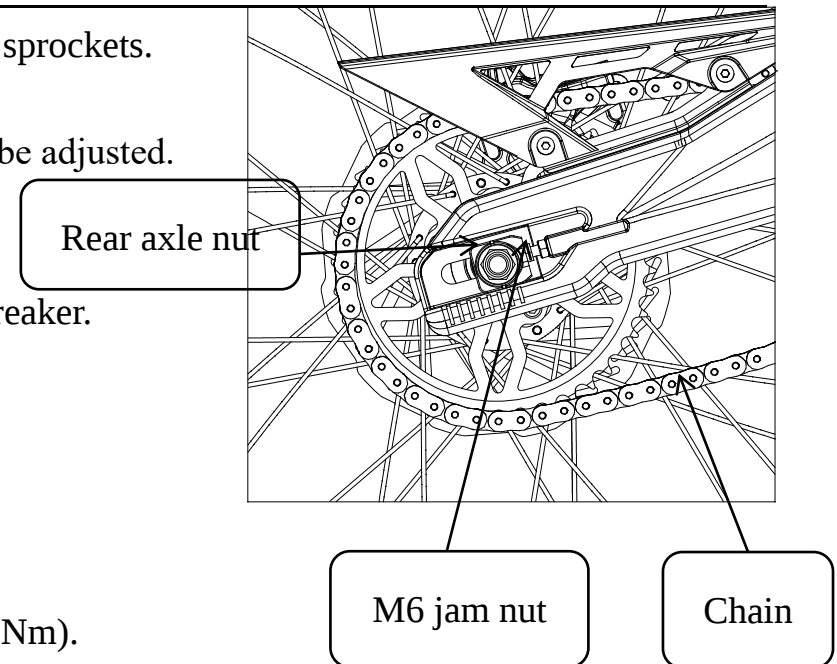
XI. Maintenance Service

2. Using a ruler, grasp the chain halfway between the front and rear sprockets.
3. The chain shall have a tension of 15mm–25mm.
4. If the chain's free play is not within specifications it will need to be adjusted.

- **Adjusting the drive chain**

Note: Adjust both sides equally.

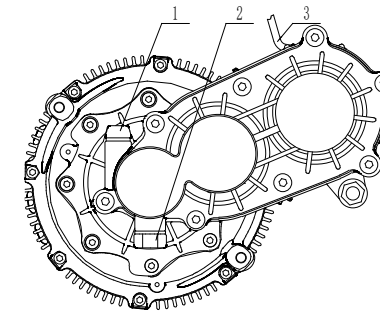
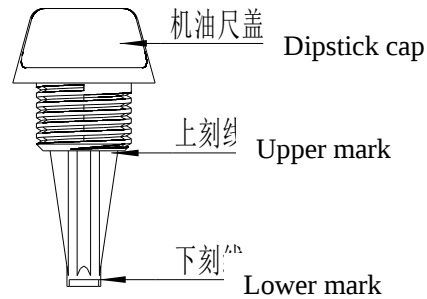
1. Remove key from the ignition switch and switch off the circuit breaker.
2. Loosen the rear axle nut on right side of the electric motorcycle.
3. Loosen the (left and right) M6 jam nuts.
4. Turn the (left and right) M6 adjustment bolts 1/4 turn at a time until the chain adjustment is within specification.
5. Tighten left and right jam nuts to secure the chain.
6. Tighten the axle nut on right side of moped. Torque 75 lb·ft (102 Nm).
7. Test ride the electric motorcycle.
8. Recheck the chain for proper adjustment after the test ride and readjust, if necessary.



- **Maintenance of motor-gearbox assembly and controller**

XI. Maintenance Service

- 1-Dipstick cap and oil filler
- 2-Oil drain bolt
- 3-Gas vent



Motor-gearbox assembly

1. Regularly check whether the screws of the motor-gearbox assembly are loose and whether the gear oil is between the upper and lower tik marks. It is strictly prohibited to ride when the gear oil is insufficient, because it will cause damage to the gearbox. After changing the gear oil during the run-in period for 300km, change the gear oil every 5000km (gear oil model: CL-5 85W/90,75ml-90ml). Loosen the screw of dipstick cap on the gearbox, then loosen oil drain bolt, and the gear oil flows out through the oil drain hole. If no gear oil flows out, clean the magnetic core of the oil drain bolt, reinstall it into the gearbox, and add new gear oil with an amount of 70–90ml.

- 2. Regularly check whether the wiring of motor and controller is loose or insulated.
- 3. Regularly check whether the fuse is loose.
- 4. Do not ride the electric motorcycle in deep water, otherwise, the motor may work incorrectly.
- 5. It's not recommended to use high-pressure washer to flush the motor and controller.

XII. Service and Maintenance Record Card

Maintenance Guide

MAINTENANCE	MAINTENANCE REQUIREMENTS	REMARKS
300KM or 1 month	Check the fasteners of the entire electric motorcycle (motor, wheels, brake, spokes, etc.) to make sure all the fasteners are tightly fastened. And check the tension of the chain to make sure it's in the proper tension range.	
After the first maintenance Each 1000KM or 3 months	Check the fastening status of the safety components of the entire electric motorcycle (motor, wheels, brake, spokes, etc.) to make sure all the components are well fastened. Check the high-current circuit electrical components to make sure all the electrical components are in a good condition to ensure a safety riding. Check the tension of the chain to make sure it's in the proper tension range.	
2000KM or 6 months	Check the high-current circuit electrical components to make sure all the electrical components are in a good condition to ensure a safety riding. Check the brake oil level and brake pads to make sure it's sufficient enough to ensure the brakes work properly. Check the tension of the chain to make sure it's in the proper tension range.	

WARNING! TL3000 L1E electric motorcycle is designed for the use of on-road riding accord to EEC homologation. It's not designed for hard offroad riding. If you want to go offroad riding, we strongly suggest to order TL3000 MX version. And above maintenance guide is only applied to TL3000 L1E electric motorcycle for on-road riding. Please be well noted about this.

XII. Service and Maintenance Record Card

Maintenance Record Card

Maintenance record card			
Date	Odometer reading	Maintenance	Note

Customer Information Card

Basic information	Vehicle Model	TL3000 L1E 25KM/H ☐ TL3000L1E 45KM/H ☐	
Owner's Name		Date of purchase	
VIN			