

BOLZZEN

SHIPER

ELECTRIC SCOOTER
USER MANUAL

 www.bolzzén.com



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BEFORE READING MANUAL

This manual contains important information to help you use your scooter in the safest way possible.

⚠ DANGER Indicates a hazardous situation that will result in serious injury.

⚠ WARNING Indicates a hazardous situation that could result in serious injury.

⚠ CAUTION Indicates a hazardous situation that could result in minor or moderate injury.

BEFORE READING MANUAL

✓ Please read this manual carefully before using this Scooter

ⓘ General safety guidelines and restrictions

Even if your scooter is within the warranty period, you may be liable for any accident caused by any of the following causes.

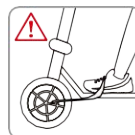


1. Be careful of water!

This product and components are **NOT** waterproof. Do not let water get into your scooter and components.

*Never use your scooter if the road is wet due to rain, snow or hailstone.

*If you wash your scooter the electrical components may be vulnerable for water ingress so please take extreme care when doing so as this can result in malfunction and/or permanent damage.



2. Beware of folding and moving parts!

If parts of the body, such as a finger or hair, get caught in the moving or folding parts of the scooter, this may lead to severe injuries. Please be careful.



3. No stunts or tricks

Stunts and tricks such as jumping, wheel-stands etc are strictly prohibited as they can cause malfunction, permanent damage & increase risk of accidents resulting in injury.



4. No companion boarding

This scooter is intended for one adult only, so children, infants, or two people are prohibited from boarding.



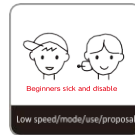
5. Self-maintenance

Do not open or modify any electrical component including but not limited to batteries, controllers or motors. Doing so will void your warranty. Changing of brake pads, tubes, tyres and other general **non-electrical** maintenance is encouraged.



6. Laws and regulations

Certain States and Territories of Australia either prohibit the use of, or have specific laws in place for the use of this Bolzzen scooter. Please comply with the applicable laws and regulations of your location and operate this scooter safely, legally and with enjoyment.



7. Novice riders

Novice riders who are not experienced in riding electric scooters should avoid high speed mode riding and recommend low speed riding.



8. Use of brakes

Sudden braking should be done safely. To do this you will need to apply equal amount of pressure to both front and rear brakes. Using excess pressure on the front opposed to the rear could result in the scooter overturning forwards.

With this in mind, it is certainly not recommended to only use the rear brakes which will reduce stopping power and cause uneven wear of your brake pads.



9. Riding on inclines

Acceptable gradeability is different for each scooter. Excessive inclines exceeding the specification may cause damage to the electrical components due to temperature cut, overcurrent or low voltage cut, which may cause the scooter to malfunction.



10. Safety warning when lifting the product

Please always lift the scooter with at least one other person. When lifting the scooter, please use correct lifting procedures to avoid injury.



11. Safety gear

For your safety, be sure to wear a full face helmet and other protective gear (knees, elbows, hands, upper body) and do not wear inappropriate footwear such as thongs, high heels etc. that can hinder safe riding.

2 Precaution before riding

1 Night riding should be avoided where possible. If doing so, all scooter lights should be switched on and a high visibility vest is strongly encouraged.

2 Select the mode that best suits your riding ability. In order to handle sudden situations, be prepared to slow down and brake at all times.

3 When turning left / right, slow down to avoid the danger of overturning or slipping, then turn safely.

4 When crossing a pedestrian crossing, dismount and walk alongside the scooter.

5 Do not ride in a way that threatens any other means of transport, such as pedestrians, bicycles, motorcycles, cars and trucks etc.

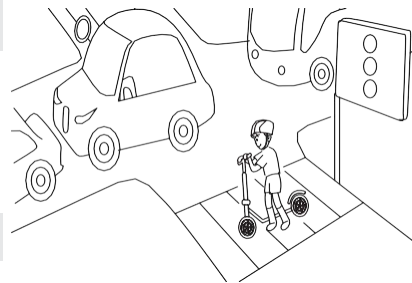
6 When passing speed bumps and road obstacles, be sure to slow down.

7 When decelerating or braking, do not stop with your foot, but by using the brake appropriately.

8 Beware of the risk of burns due to heat from the motor and brake (especially disc rotor) after riding.

9 Always keep two hands firmly on the handlebars whilst riding. Due to small diameter of scooter wheels/tyres relaxed or one-handed riding will almost certainly result in an accident.

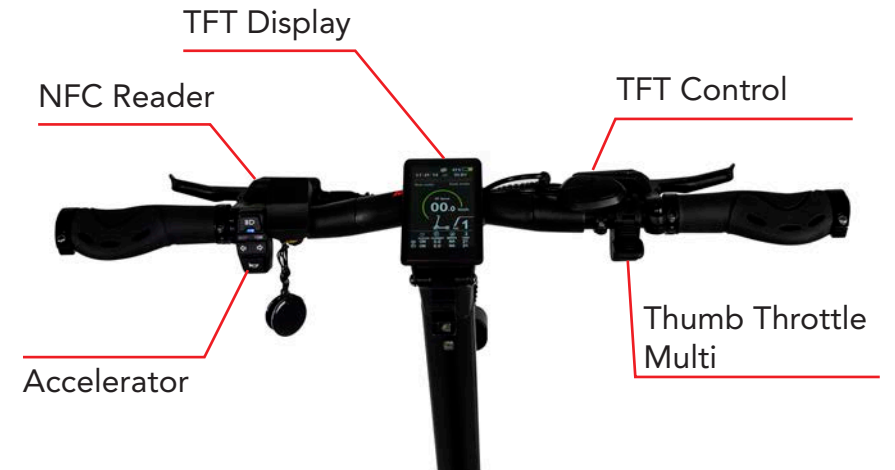
10 Do not ride with the kick stand down.



SCOOTER DIMENSIONS



Handlebar



COMPONENTS LIST / DIAGRAM



HOW TO FOLD / UNFOLD



LOCK HANDLE BAR



TFT Display Instructions



5.1 Screen size: 3.5inch color TFT screen.

5.2 Kilometer: Can be set according to customers' preference.

5.3 Intelligent power indicator contains below: It can provide a stable power indication through the optimization algorithm. The power is not affected by the startstop fluctuation of the motor. If the system supports battery communication, the accurate percentage of power will be displayed.

5.4 Adjusting 5 levels backlight brightness 1st level is the darkest, 5th is the brightest.

5.5 ECO and 1-5 levels: Can be set according to customers' preference.

5.6 Mileage indicator: Odometer/Trip distance/ Riding time.

5.7 Clock display: inner small battery, keeps time when the display is closed

5.8 Power indicator Real time power indicator, digital or analog.

5.9 Error code indicator.

5.10 Speed limit adjustment function: total speed limit and gear speed limit can be set.

5.11 Current limit adjustment function

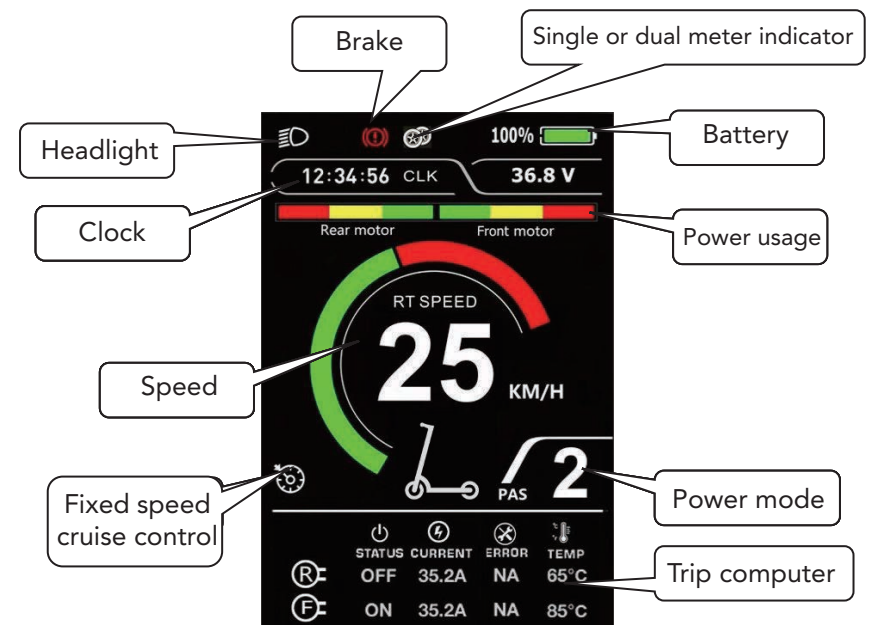
5.12 USB charging port: charging for mobile devices. Current: 500mA/5V.

5.13 Software upgrade: Software can be upgraded through UART.

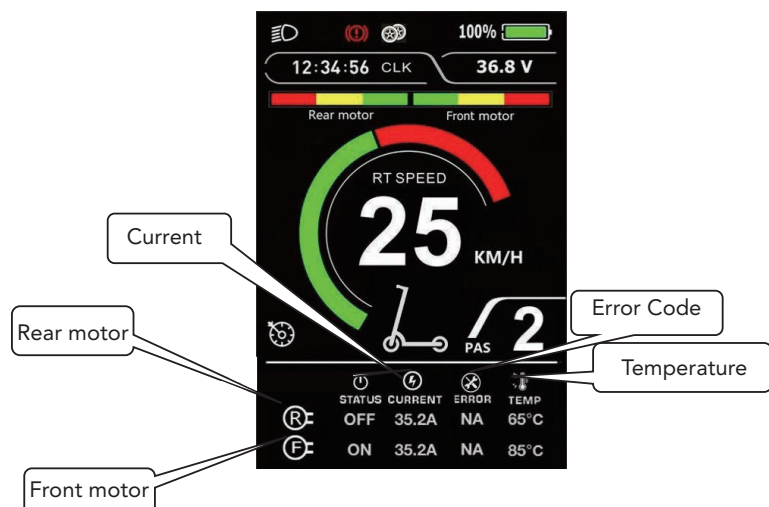
5.14 Speed measurement magnets (number of pole pairs) adjustment function: the number of speed measurement magnets (magnetic poles) can be set.

5.15 Parameter level setting: you can set the level parameter.

TFT Display Instructions



STATUS



6.1 Display interface: The default value is information mode, click M key to switch to the status interface

6.2 Speed model: AVG SPEED/MAX SPEED/RT SPEED

6.3 Headlight indication: When the headlight is working, is displayed

6.4 Brake indication: When the brake is working, is displayed

6.5 Power mode level: showing current power levels

6.6 Speed indication: Km/h or MPH

6.7 Clock information can be displayed.

6.8 Real-time current information can be displayed.

6.9 Motor status can be displayed: ON and OFF.

6.10 Error code can be displayed. Please refer to the common error code.

Error code	Error descriptions
“1” is shown at the bottom of the screen	Motor is out of phase
“2” is shown at the bottom of the screen	Hall fault
“4” is shown at the bottom of the screen	Handlebar fault
“5” is shown at the bottom of the screen	Under voltage protection
“6” is shown at the bottom of the screen	Controller fault
“7” is shown at the bottom of the screen	Communication error
“8” is shown at the bottom of the screen	Over-temperature protection

6.11 Real time temperature can be displayed

FUNCTIONAL DESCRIPTION



7.1 Power On/Off Press and hold Power button for 1 second, to turn display on/off. The display will automatically shut down when there is no activity for 10 minutes (time interval can be set).

*If the password function has been activated, you need to input the right password when starting.

7.2 Powermode Operating

Short press UP/DOWN button can change the power levels. Available power levels include ECO, 1,2,3,4 and 5.

7.3 Headlight/Display Model Change

Press and hold UP button for 1 second, the backlight brightness will be lowered and headlight will be on (controller support is needed). Press and hold UP button for 1 second again, headlight will be off and will return to full brightness display.

*The backlight brightness has 5 levels and users can adjust it according to their preference.

7.4 Data Cleanup

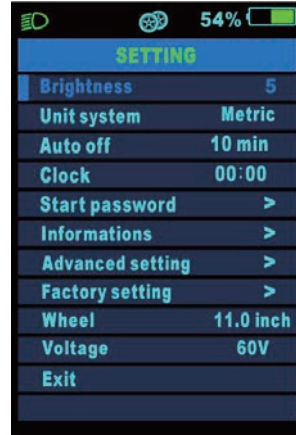
Pressing and holding UP & DOWN buttons concurrently for 1 second can reset temporary data, including AVG Speed / MAX Speed / Trip / Time

*These temporary data will not be erased when power is off.

MENU PARAMETER SETTING

With the scooter power on, fast press the M button twice (time interval must be within 0.3S), the system will enter the parameter setting menu. Press M button twice again to exit setting state (time interval must be within 0.3S).

In the MENU setting interface, press M button to confirm and press POWER to cancel. Press UP or DOWN to select parameter you'd like to adjust. Press M button, the parameter to be set will be blinking. If you want to adjust parameters, please press UP or DOWN. Then press M to save and press POWER or select EXIT to go back to the main menu. In the function selection interface, press M button twice consecutively or select EXIT to exit menu.



Function select menu

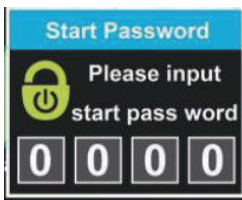
8.1 Brightness: Press M button to enter the setting menu. Adjusting the brightness 1-5 by pressing UP/DOWN button. 1 is the darkest, 5 is the brightest. Press M to confirm and return to the main menu.

8.2 Unit system: Metric/Imperial

8.3 Auto off: Press UP/DOWN button to change the auto power off time. The number from 1 to 10 represents time (minutes) to shut down and the default value is 10 minutes. Please press M to confirm or press POWER to cancel the settings.

8.4 Clock: Press M button to enter the clock setting menu. Press UP/DOWN button to set Hour/Min. Press M to confirm or press POWER to cancel the settings. After setting the parameters, press M to confirm and return to the main menu.

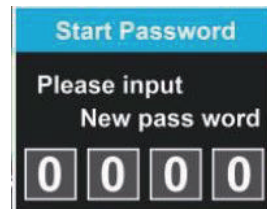
8.5 Activate password and set: Press M button to enter password setting interface. Select ON/OFF to turn on or off the start password. Select Reset the Password to enter the new password setting interface. Select Back or press the POWER button to return to the main menu. the default password is "0000".



enter the password



selections



enter the new password

8.6 Information: Press M button and choose Information to enter information menu. It will show speed mode and mileage mode information. After finish setting, press M button or POWER to choose return to main menu.

Information	
AVG Speed	10.5km/h
Max Speed	65.7km/h
Trip	123.8km
ODO	5832km
Hardware version	2.0
Software version	1.1
Exit	

Information display

8.7 Advance setting: Press M to enter into Advance Setting interface and press UP/DOWN to adjust the password and enter the advance setting. Enter the correct password to enter the submenu. The password is 4 digits and the default value is "2112". If the power-on password is turned on, the advanced setting password is the power-on password. The options and functions are as follows.



☆Speed limit→**%

☆Cruise→OFF/AUTO/MANUAL

☆ABS ON/OFF

☆Speed magnets number:1~88

☆Assist level parameter:

Assist1/ Assist2/ Assist3/ Assist4/ Assist5 parameters can be set.

ASSIST 1	
Speed limit	20%
EABS level	1
F start level	1
R start level	1
F current	15
R current	15
Exit	

Speed limit: 1-100%

EABS level: 1-5

F start level: 1-5

R start level: 1-5

F current is limited

R current is limited

☆Export→NO/YES.

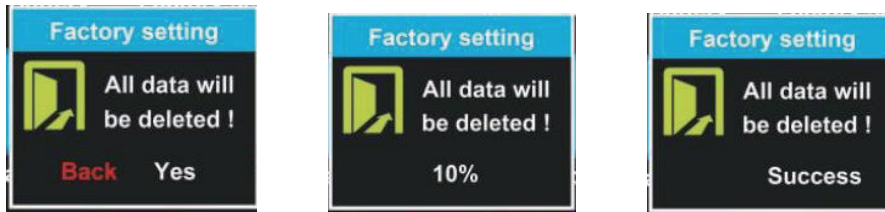
When the switch is on, the speed is limited to 25% and non-zero start.

☆Temp protection: 80-155°C

☆Zero start→N/Y

☆Select Exit or POWER button to return to the main menu.

8.8 Factory Setting: Enter Factory settings menu. Select YES will restore all parameter to factory settings.



Factory setting

8.9 Wheel size setting: Press UP/DOWN button to switch wheel size: 8-14 inches. Wrong wheel size selection will lead to abnormal speed. Press M button to confirm current setting or press POWER button to cancel current setting.

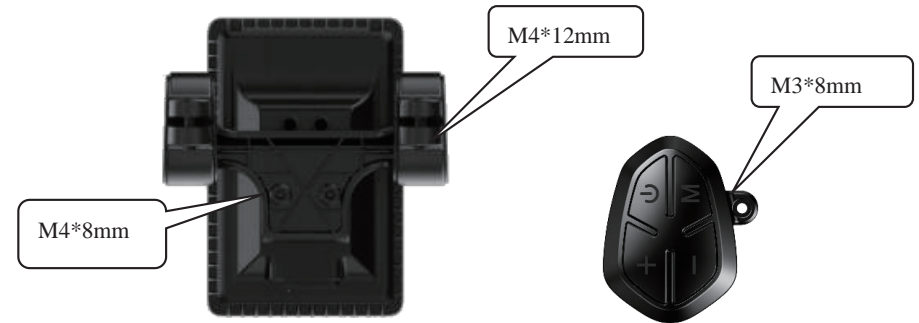
8.10 Voltage

Power system: 48V/60V/72V

8.11 Exit

ASSEMBLY INSTRUCTIONS

9.1 Please pay attention to the screw's torque value. Damages caused by excessive torque are not covered by the warranty.



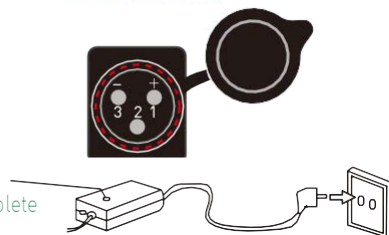
9.2 Clamps are suitable for 3 sizes of handlebar, 31.8mm, 25.4mm, and 22.2mm. Customers can choose according to their own demands. Handlebar of 25.4mm and 22.2mm must be assembled with the corresponding adapter rings.



Gasket installation diagram

CHARGING YOUR SCOOTER

3P charger connector



1) Basic charging method

1. Open the charger port cap and connect it to the connector of the charger and connect it to the household outlet.
2. Charging status indicator
 - (Red) Charging
 - (Green) Charging complete
3. Be sure to close the charger port cap when driving or storing except when charging.
4. When connecting the connector to the charger port, there may be metallic sparks due to voltage difference, but this is normal.

2) Basic charging method * Failure of the charger and abnormal conditions can cause electric shock and fire. Learn the correct usage and prevent safety accidents in advance.

<p>Manufacturers and sellers are not responsible for any problems arising from any disassembly, modification, or mixing with other chargers.</p>	<p>2. The charger is forbidden to be used in places subject to high humidity, heat, flammable materials, confined spaces, or where there is no ventilation such as in a car.</p>
<p>3. The charger is not waterproof. It is thoroughly controlled to prevent moisture from entering the charger.</p>	<p>Children and pets should not be allowed to approach the charger when they come into contact with them, as they may cause an electric shock.</p>
<p>If the charger lamp does not light, charger fall down, strong external shock, long time charge, or cable cover damage, discontinue use immediately and contact the service center</p>	<p>Unplug the charger when you are away from the home for long periods.</p>

WARNING

7. Use only genuine charger.
8. Do not insert conductors into the charging port.
9. Do not touch the plug for about 10 seconds after unplugging the charger. There is a risk of electric shock from instantaneous discharge.
10. Do not remove the terminal during charging. Otherwise you may charge the internal circuit of the charger and cause malfunction.
11. Do not operate the product during charging.
12. Charging terminals should be firmly contacted during charging and should not be used if terminals are corroded or damaged.
13. When disconnecting the charger from the product, it is safe to hold the terminal without holding the wire.
14. Be sure to keep the charger disconnected from the product after the charging is complete. The charger must be disconnected if it is not used for longer than a few days, as there is a risk of overcharging when charging more than the time indicated on the product specifications.

SAFETY PRECAUTIONS FOR LITHIUM BATTERY



- 1) **Care** Lithium batteries should be protected from direct exposure to children and pets.
- 2) **Performance**
 1. Lithium battery is affected by external temperature. In the winter, when the temperatures are low, the performance of the battery may be temporarily deteriorated and the mileage and power output is reduced.
 2. Lithium battery has a characteristic that discharge performance is reduced by more than 15% when charging / discharging 300 times or more. If usage time is shortened due to long usage, it should be replaced with a genuine one through the nearest point.
- 3) **Charging**
 1. Lithium battery should be used only with genuine battery and charger supplied from the manufacturer. Any problems caused by use of battery made by the manufacturer, mixed use, or using the charger are not covered by the manufacturer.
 2. Charging the lithium battery with a non-genuine charger may cause malfunction or fire.
 3. The lithium battery should be charged in a well-ventilated, dry place and around the charger in a place where there is no flammable material.
 4. Lithium battery should be charged at 0 ~ 45°C and discharged within -10 ~ 60°C. The sub-battery must be charged at 0 to 50°C and discharged within -20 to 75°C. Charging or discharging at a temperature outside this range may cause malfunction, fire or explosion.
 5. In case of moving from cold outside to warm indoor, please charge it after 1 ~ 2 hours. This is to prevent condensation from occurring inside the product due to the temperature difference.
- 4) **Storage**
 1. Lithium batteries should be kept away from snow, rain and direct sunlight. Do not store or charge them in a trunk or hot room. Select a dry place and store at room temperature (10 ~ 20 °C).
 2. When storing for more than 3 months, charge the remaining battery level to 70 ~ 80% (do not store full charge).
- 5) **Trouble symptom, safety**
 1. Lithium battery should be discontinued immediately if it is damaged or there is leakage of battery, sour odor, appearance deformation, etc. Please contact the place of purchase to get technical support and service.
 2. If overheat, smoke, or ignition is detected in a product with lithium battery, immediately stop charging and use, move the product outdoors as soon as possible, and then use a fire extinguisher to extinguish flames. Do not spray water or immerse the product in any situation, which can lead to more danger.
 3. Lithium battery pack has very high energy density, so if you charge the battery for a long time and there is a case of short-circuit, leakage, bad battery, etc., it can lead to ignition. Therefore, you should avoid charging for a long time without a person being present to avoid the risk of unexpected fire.
- 6) **Misuse** If the lithium battery is short-circuited, the polarity is changed, or if the battery is impacted, malfunction or fire may result. If you think that the battery has been impacted, you should stop charging and using it and visit the nearest service center for inspection.
- 7) **Water inflow** It should be controlled to prevent water inflow into the lithium battery. There is a risk of fire or electric shock if the charger is connected while moisture is present.
- 8) **Caution** Disconnect the battery from the main unit except when recharging and reinstalling. Do not use for any other purpose.
- 9) **Disposal** When disposing of the lithium battery, the battery should be separated from the product at the point of purchase or near the service center and the charge and discharge terminals are not short-circuited. Dispose of it as industrial waste.

DANGER Battery disassembly prohibited
Battery disassembly, modification, and repair are not covered under warranty.

SAFETY GUIDELINES BEFORE DRIVING

1) Required checking before use

1. Check throttle and handle

- Operate the accelerator throttle lever about 2 ~ 3 times to check whether it returns to the home position.
- Be careful that excessive throttle leaning and manipulation of the throttle can cause malfunction due to internal parts damage.
- Check for free gap in the handlebars before using.



2. Check brake and cable

- The brake braking force is sufficient to check the operating condition. If the braking force is significantly lowered, use it immediately after inspection and action.
- Check that the brake pad is not worn, that the cable is not loose, that the cable is not damaged, and that there is no leakage in the case of hydraulic brakes
- If there is an unusual feeling or noise during operation, check for breakage, wear, and deformation of the inner wire of the brake cable.
- Check that the bolts and nuts of the brake fixing parts are not loose and that the disc is not deformed or damaged.



3. Check tire pressure and abnormal tread wear

- Check the front and rear tires for wear and punctures and check the value marked on the surface of the tire. When the air pressure is shortened, the possibility of puncture increases, so check always.
- It is necessary to judge the replacement time by observing the appearance of the tire such as tire damage, uneven wear.



4. Tightening check such as folding part and handle part

- Make sure that the bolts and nuts of all parts of the product are tight and safe from loosening. Check the fastening condition and clearance of the folding and fixing parts of the handle (folding knob, swing arm, etc. folding related parts, suspension arm bolt, swing arm bolt).



* In these cases, stop driving immediately.

If you encounter any of the following situations while driving, stop driving immediately and contact your nearest branch or service center for proper measures.

If you provide pictures and videos to get an accurate diagnosis, professional counseling is available.



- Unusual heating of the motor
- Abnormal noise is generated
- Brake braking status error
- Product smoke, ignition, sour odor
- Error messages on the instrument panel
- When rain or wet with water or in a similar situation
- When the throttle is not returned to its original position
- When other driving is judged to be unreasonable
- When the battery doesn't fully charge and shorter riding distance after a full charge (Battery explosion may cause due to faulty battery cell or battery cell breakdown)

CARE AND MAINTENANCE

Maintenance and self-maintenance Electric products can be damaged by various factors.

The life span of each part varies depending on riding style and conditions.

Parts that exceed their service life may cause accidents. Ensure to replace required parts to prevent safety accidents.

Check the replacement timing of consumable parts The components and suspension parts of the swing arm, tyres, wheels, bearings, discs, brakepads, cables and folding parts, various brackets and other consumable parts require periodic inspection and must always be checked.



EXTERNAL DAMAGE INSPECTION

1. Replace parts that may be damaged.
2. If the product is exposed to strong sunlight for a long time, discolouration may occur.
3. In case of jumps, slight impacts such as turning, collision, etc, when riding frequently, for a long time on poor road conditions or riding for thousands of kilometers or more, fatigue breakdown may happen so please check the parts replacement schedule for each component and replace accordingly for safety.
4. Fatigue breakdown and maintenance parts may differ from the example conditions depending on the riding style and operating conditions.
Also check parts other than the replacement cycle (maintenance parts) at all times to check for any signs of abnormality.



IMPORTANT CHECKLIST

✘ Metal vibration may occur due to motor vibration and the vibration of the brake disc and pad during the load section that accelerates during driving. (About 15 ~ 30Km, different for each product)

This is a phenomenon in which all rotations (fans, automobiles, ships, etc.) are vibrating at a specific rotational frequency (rpm) rather than the product. However, if the continuous noise or metal noise is large, there is a possibility that the disk will become bent and deformed.

✘ Please note that after running, there is a risk of burns due to the heat on the motor and brake (especially disk rotor) side.

✘ Be careful that the bolts of the motor, rim, and motor shaft may become loosened due to the ABS function.

✘ For inspection and repair, remove the side cover, attach the power switch, and attach it with the product's standard bolt. When tightening, carefully remove the cover of the wiring.

Bolts other than the rule bolts (long bolts) can cause serious damage to the battery casing (battery cells), which can cause fire or safety accidents.

✘ Folding parts and joints where movement occurs due to product characteristics can naturally damage the surface or paint surface during use, especially when operating in incorrect operation and form.

✘ Folding parts and joints where movement occurs due to product characteristics can naturally damage the surface or paint surface during use, especially when operating in incorrect operation and form.

✘ When inspecting the product, keep two wheels away from the ground and work on a safe workstation