techtron® Ultra 5000

Instruction Manual

Welcome to techtron®. By combining passion, drive and intellect with market leading research and cutting-edge technology, we innovate and deliver premium quality products that excite, inspire and challenge the sector. Striving for perfection, embracing new ideas and investing in the future is our ethos.
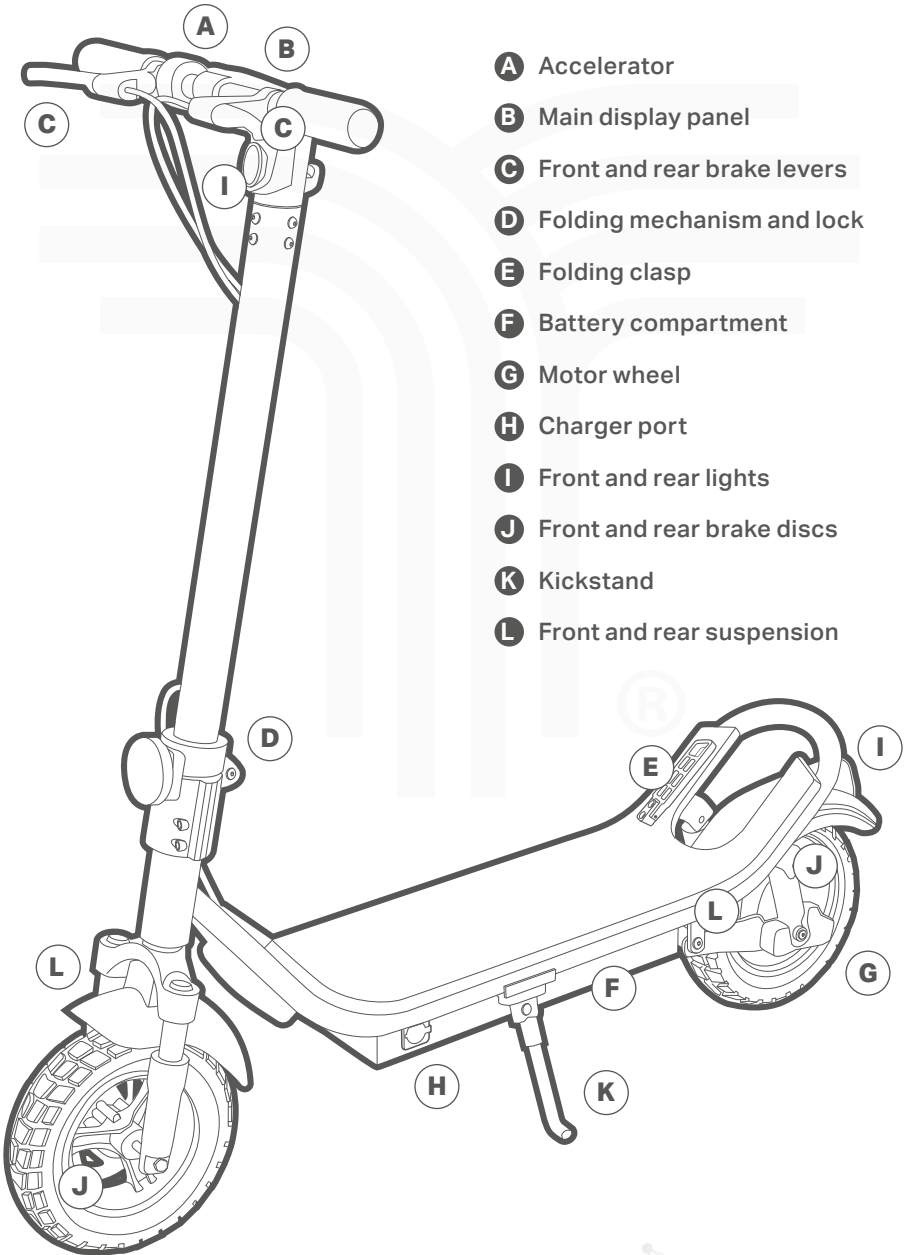
Future Tech. Today

Contents

IMPORTANT! Read carefully and keep for future reference.

Product and Accessories

A Accelerator

B Main display panel

C Front and rear brake levers

D Folding mechanism and lock

E Folding clasp

F Battery compartment

G Motor wheel

H Charger port

I Front and rear lights

J Front and rear brake discs
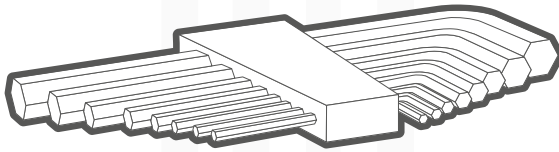
K Kickstand
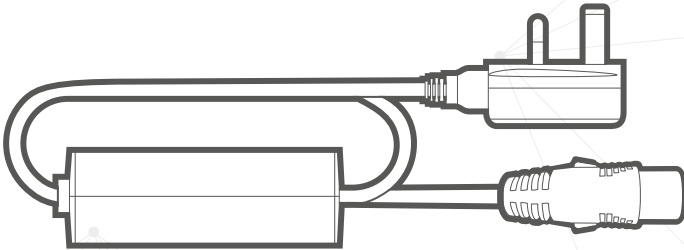
L Front and rear suspension

M4 hex screws **x6**
(Standpipe)

M3 hex screws **x2**
(Bottle holder)

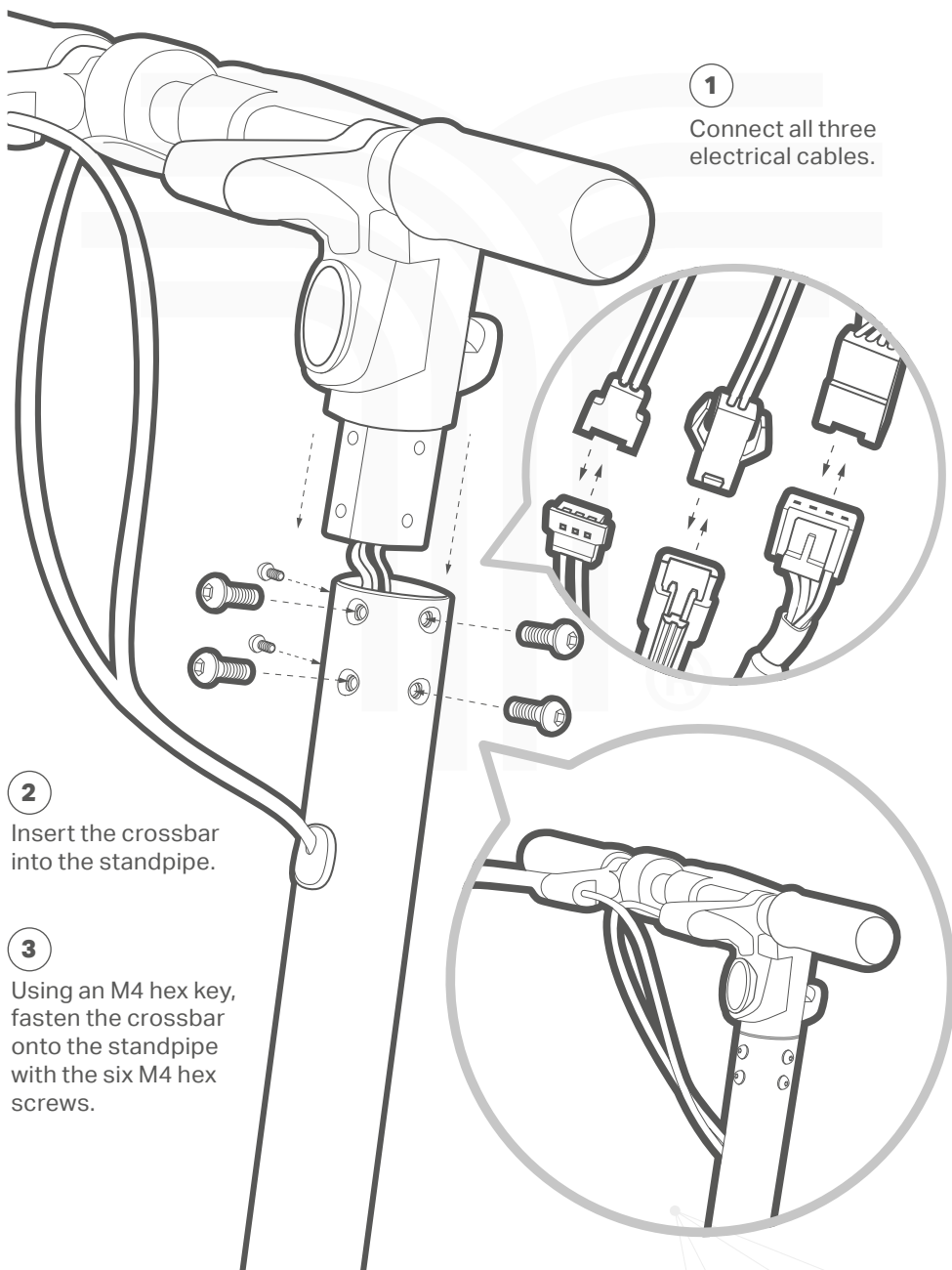Hex key set **8pc**

Charging adaptor **x1**

Assembly

1

Connect all three electrical cables.

2

Insert the crossbar into the standpipe.

3

Using an M4 hex key, fasten the crossbar onto the standpipe with the six M4 hex screws.
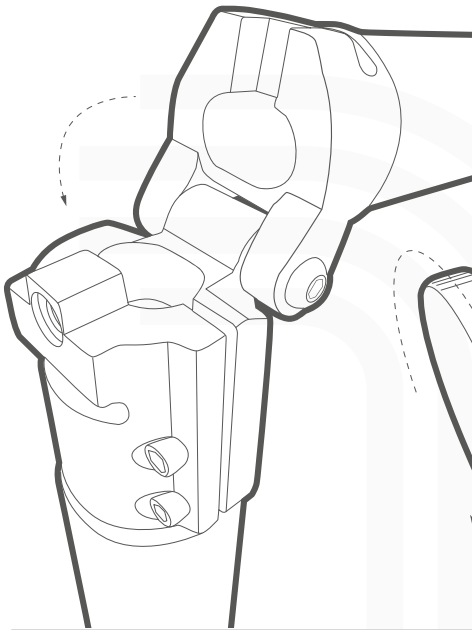
4 Fold the eScooter standpipe to its upright position.
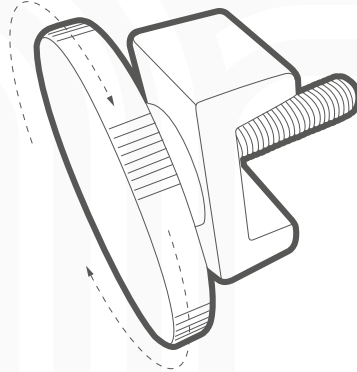
5 Insert and screw the locking mechanism tightly into place.
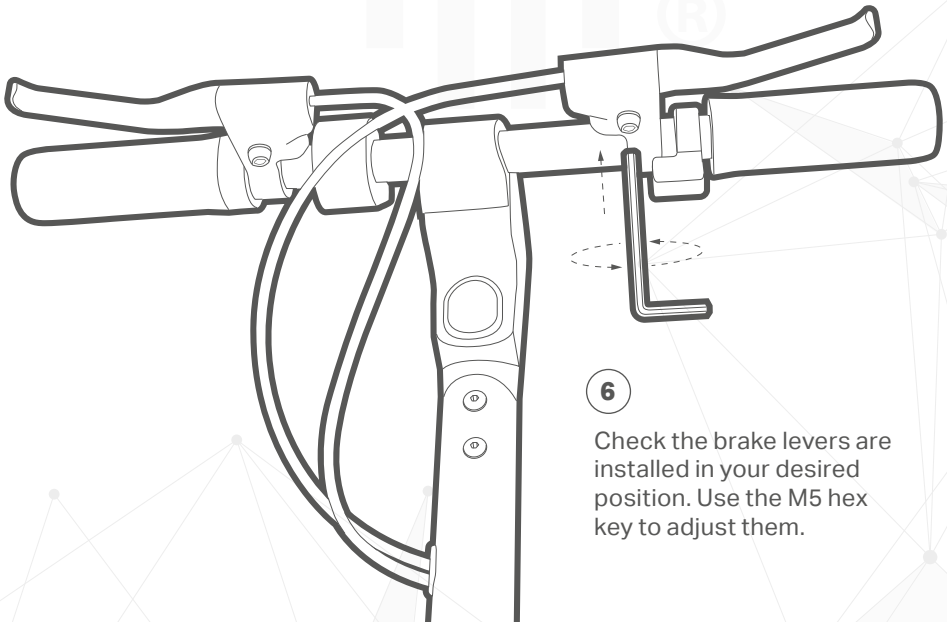
6

Check the brake levers are installed in your desired position. Use the M5 hex key to adjust them.

Folding

Folding mechanism

The Ultra 5000 can be easily folded for transporting. First unscrew the locking bolt in *figure 1*, then collapse the standpipe and hook onto the folding clasp as shown in *figure 2*.

1

ON

OFF

2

ON

OFF
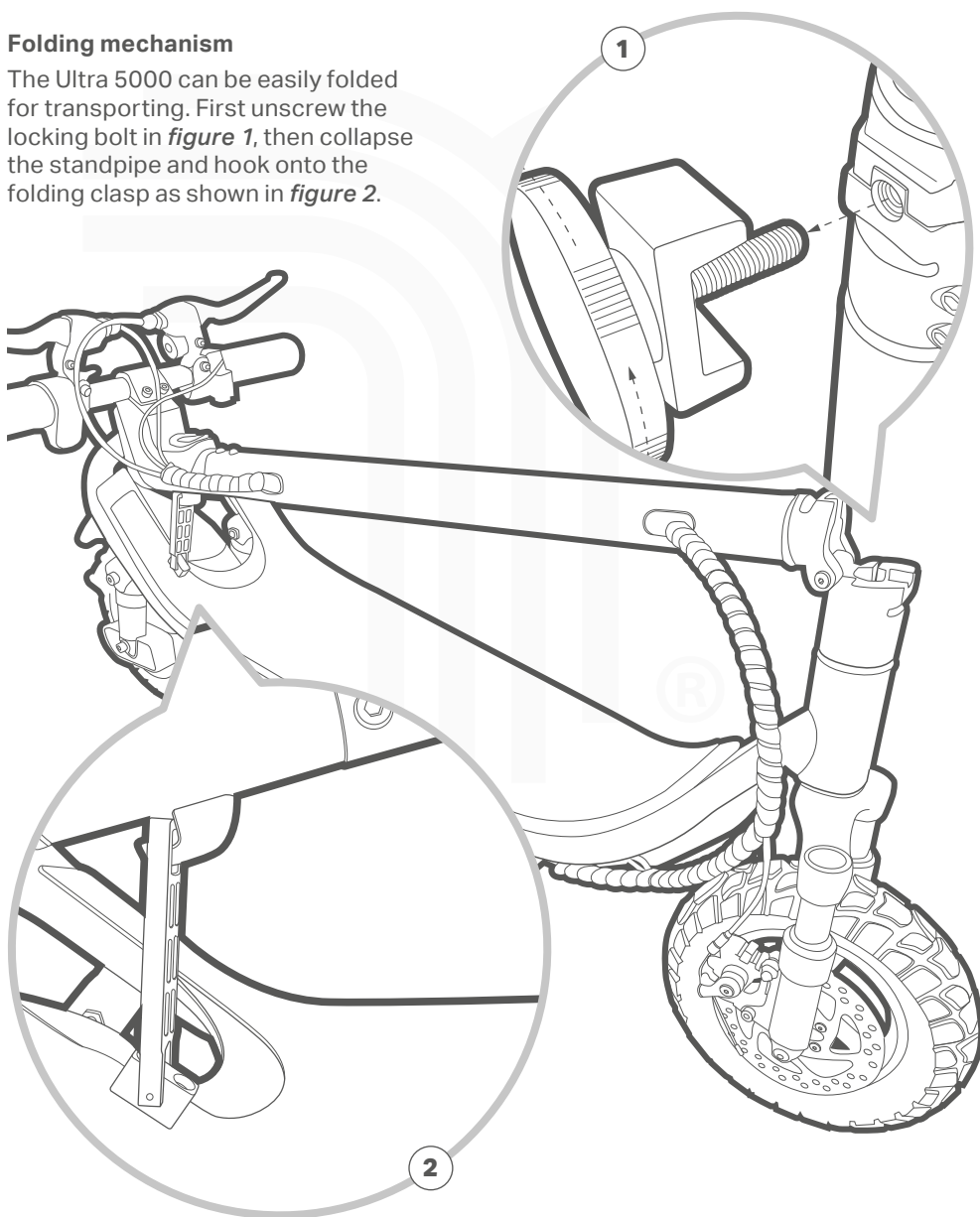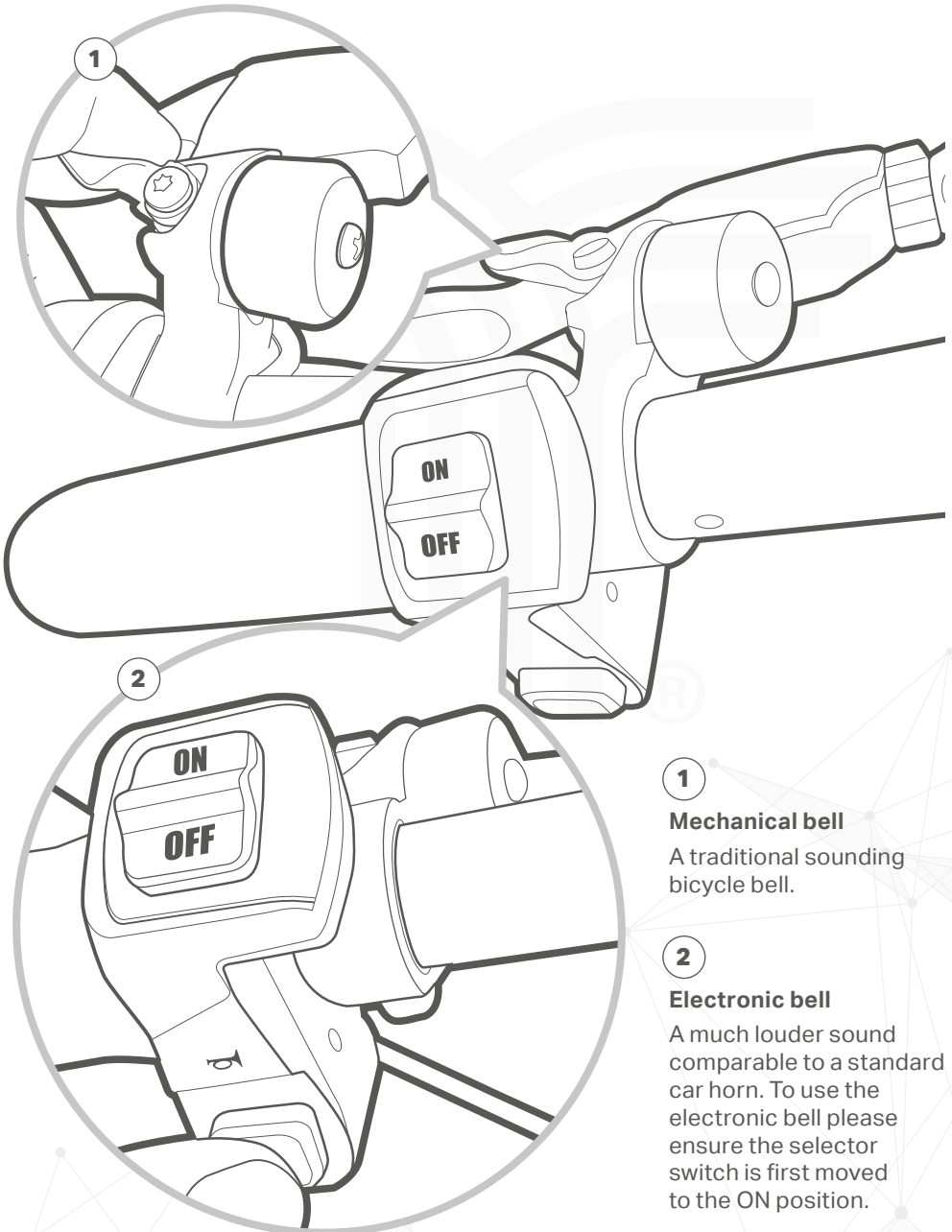
1

Mechanical bell

A traditional sounding bicycle bell.

2

Electronic bell

A much louder sound comparable to a standard car horn. To use the electronic bell please ensure the selector switch is first moved to the ON position.

Charging
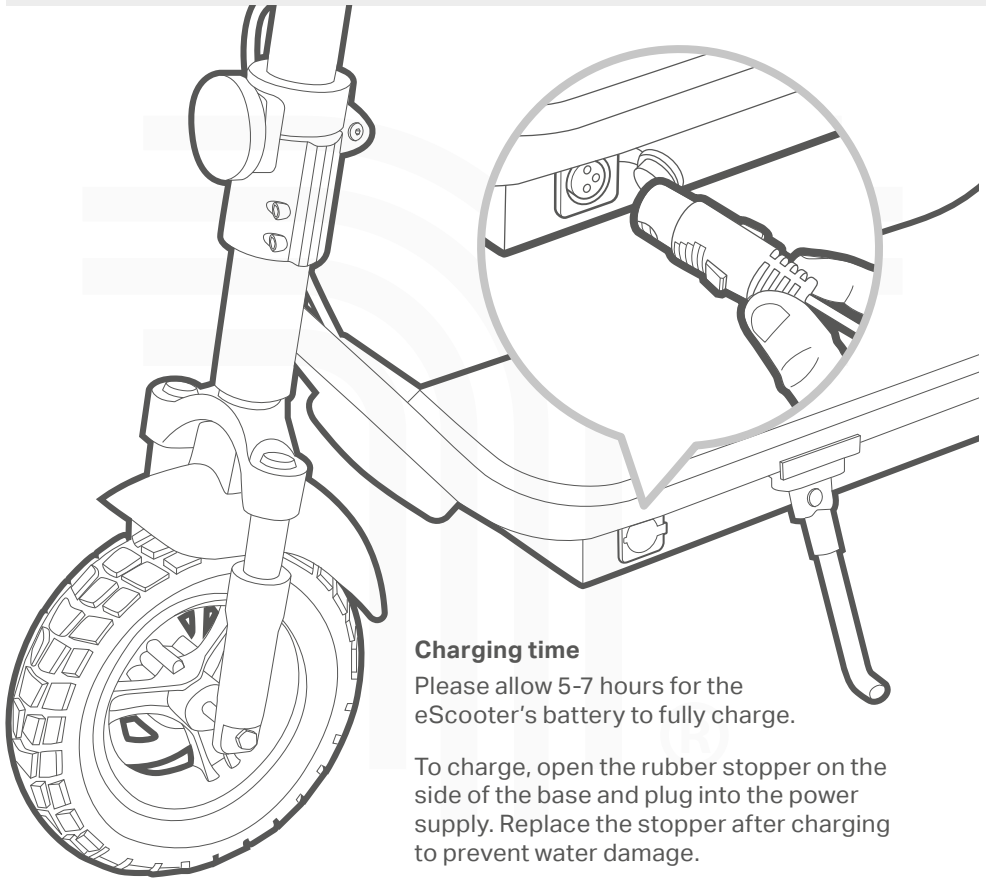
Charging time

Please allow 5-7 hours for the eScooter's battery to fully charge.

To charge, open the rubber stopper on the side of the base and plug into the power supply. Replace the stopper after charging to prevent water damage.
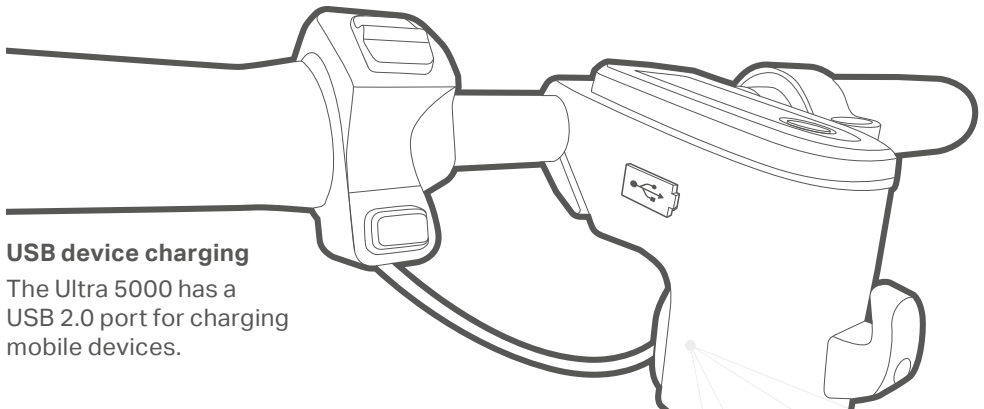
USB device charging

The Ultra 5000 has a USB 2.0 port for charging mobile devices.

Speed mode presets

The Ultra 5000 comes with three pre-configured factory default speed modes (these can be changed via the techtron® smart app - see page 12).

Factory default speed modes		
Mode	**Default**	**Maximum***
Eco	15km/h	25km/h
Drive (D)	20km/h	25km/h
Sport (S)	25km/h	40km/h

Sport mode (S) is actually capable of a maximum speed of 40km/h, which can only be achieved using the techtron® smart app. Please note the UK speed limit for eScooters is currently 15.5mph (25Km/h) at the time of going to print.*

The display can also be configured to show speed in mph or km/h using the smart app.

Display panel button

With a quick double click of the power button, the user can toggle between the device's three speed mode presets. The eScooter's lights can also be turned ON/OFF by a single press of the button. To turn the eScooter ON/OFF, hold down the button for three seconds.

Battery level indicator

Five bars along the centre of the display panel indicate the current charge status. When a single bar is displayed, this indicates battery power is less than 10% and the eScooter will eventually slow to a natural stop when the remaining power is used.

We advise the eScooter be recharged when power drops to a single bar.
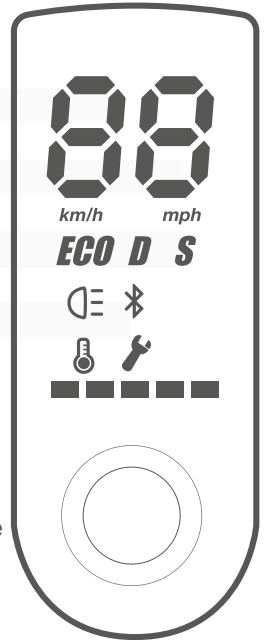
Power saving

When not in use the techtron® eScooter will power down automatically after 15 minutes.

Cruise control

To activate cruise control, maintain the same speed for 10 seconds, the device will then beep when the mode is activated. Cruise control will deactivate when applying the brake.

Diagnostics

Thermometer and spanner icons are briefly displayed on the control panel at start-up, indicating the eScooter's diagnostic check. These will only stay on permanently if a problem is detected.

Thermometer: Indicates there is a problem with the motor temperature. If the temperature of the motor is more than 90˚C, the eScooter will stop working in order to protect the motor.

Spanner: Indicates an electrical fault, which also displays a fault code.

Please consult the troubleshooting guide (page 19) for further detail.

*Speed is adjustable by the techtron® smart app at individuals' own liability. techtron®or Multibrands™ International Ltd will not be held responsible for accidents, injuries to any party, through misuse or illegal operation in anyway.

11

techtron® Smart App

Your eScooter can be configured using the techtron® smart app. Use it to set up your desired settings such as riding mode and speed limiter. You can even lock the eScooter to prevent unauthorised access.

Please note - the eScooter will remember all settings applied in the techtron® smart app even when Bluetooth® is disconnected.

1

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t-664969

0.0
km/h

71%

Light: ON	Settings	Unlocked	Connection

Speed mode 3	Trip Info	Cruise: ON

2

Settings

Unit: Metric	⬤
Riding mode	Speed Mode 3 ›
Mode 3 speed limit value	25Km/h
Cruise control	OFF
Zero Start	ON

techtron®
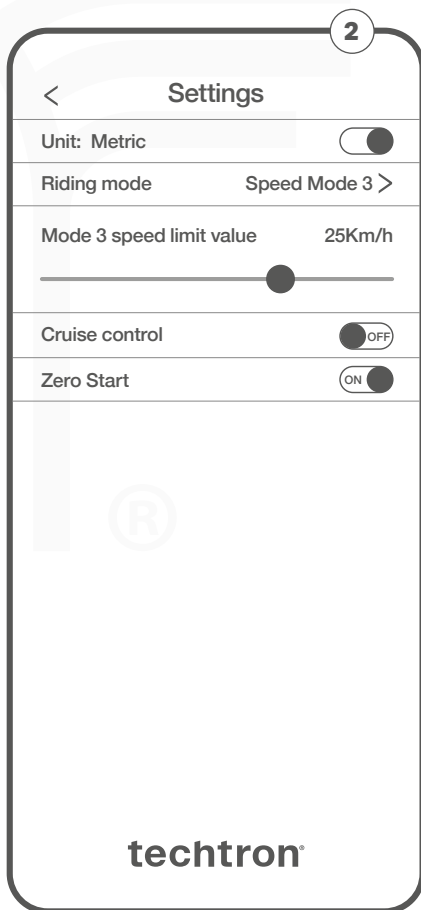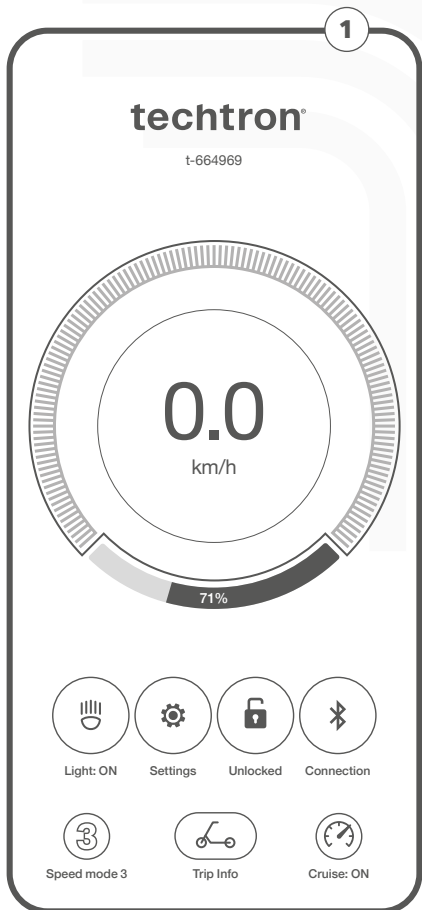
Download to your smart device via the Apple App Store or Google Play.

GET IT ON
Google Play

Download on the
App Store

Apple App Store

Google Play

(3)

Trip Info

Mileage for this journey	0.0Km
Total mileage	46.9Km
Scooter temperature	29.7℃
Total driving time	6H 44M 42S
Current speed	0.0Km/h
Current	0.0A
Voltage	52.0V
Power	1.0W
Error code	0
Warning code	0
Electronic control version	80.f.1 (0610001d)
Bluetooth version	6.9.6 (1b)
App Version	1.1.7
Firmware upgrade	>

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(1) Home screen

View the remaining range of your eScooter, so you can plan your journey.

Light - Turn the main lights On/Off.

Settings - Access further controls.

Lock - Secure your eScooter against unauthorised access.

Connection - Discover and pair your eScooter to your smart device.

Riding mode - Toggle between riding modes.

Trip info - View the latest trip information.

Cruise control - Quickly toggle this option On/Off.

(2) Settings

Unit - Change the unit of measurement used to display your speed from km/h to mph.

Cruise control - Maintain a constant speed for those longer journeys.

Riding mode - Choose your preferred speed preset (options vary depending on model).

Speed limiter - Control the maximum speed the eScooter can go.

Zero start - Enable the option to start your eScooter from stationery position (enabling this option can reduce battery range).

(3) Trip info

View your eScooter's latest trip information, anything from total driving time to voltage and power statistics.

The device firmware can also be upgraded by the user from this menu (internet connection required).

Maintenance and Warranty

1

Manually adjusting the brakes
(front and rear wheels)

To tighten the brakes, simply insert the M5 hex key into the slot and turn counterclockwise to release the pressure plate screw. Return the brake line to make the exposed tail length slightly longer, then lock the pressure plate screw.

If the brakes are too tight, release the pressure plate screw again and pull the brake cable to make the exposed tail length slightly shorter, then lock.
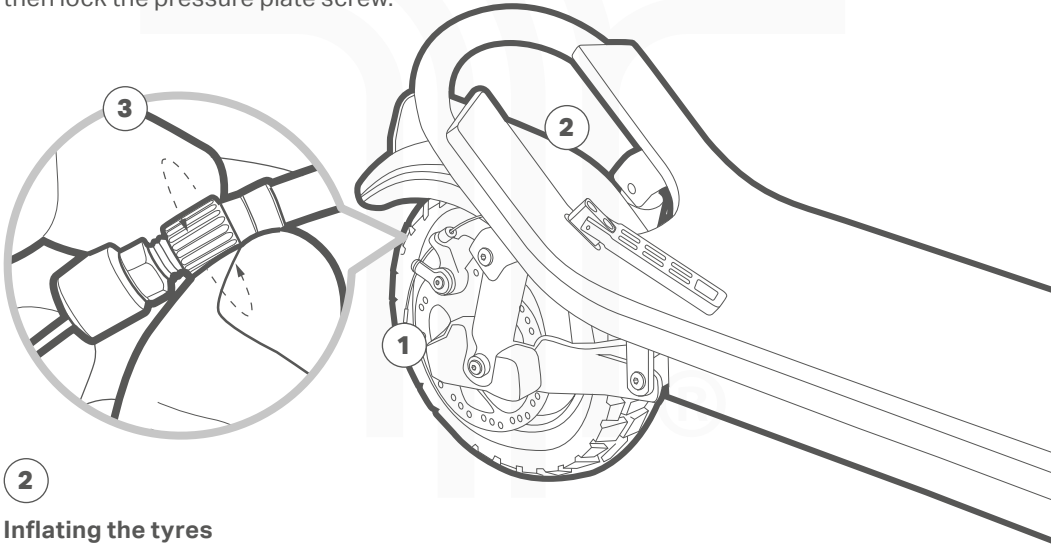
2

Inflating the tyres
(front and rear wheels)

Having the ideal tyre pressure will result in the best traction, control, mileage, speed and ultimately the best ride! In addition, this will help to reduce the chance of punctures.

Simply remove the valve cap on each tyre and top up to the appropriate level. The Ultra 5000 tyres are rated for a maximum of 50psi. However, the optimum pressure will ultimately depend on the weight of the rider. Please see table (right) for further details.

Recommended tyre pressures	
Load	Pressure
Under 70kg	36psi (2.5bar)
70-100kg	44psi (3.0bar)
100-120kg	50psi (3.5bar)

(3)

Fine tuning loose or tight brakes (front and rear wheels)

The brakes can be fine tuned by hand. Turn the screw counterclockwise to tighten the brakes and clockwise to loosen.
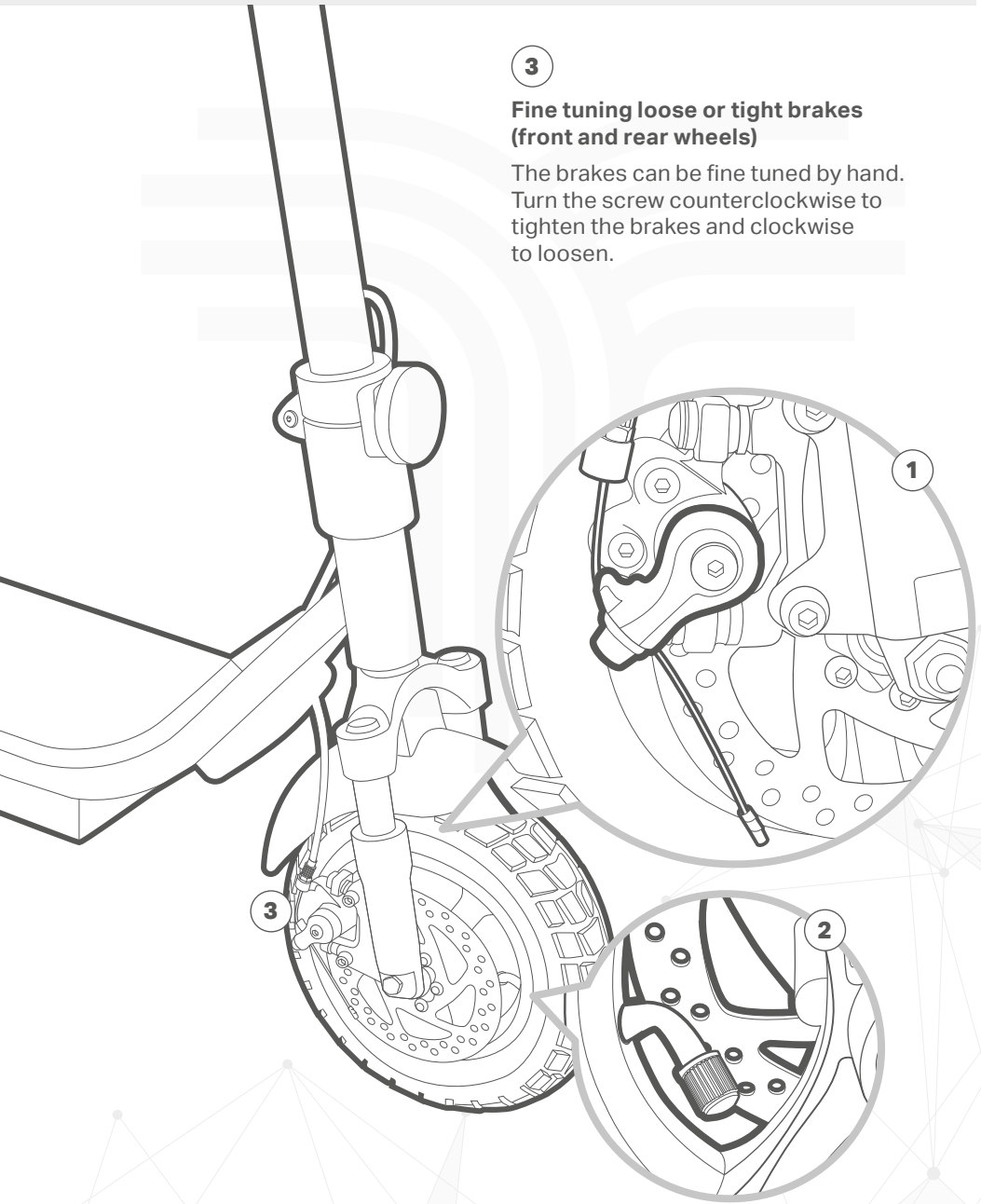
Maintenance and Warranty

Cleaning and storage

Use a soft cloth dipped in a small amount of water to wipe the eScooter; for any difficult to clean areas, you can use toothpaste and gently brush with a toothbrush, then use a damp cloth to clean.

Do not use alcohol, petrol, kerosene, or other corrosive, volatile chemical cleaning solvents, as this will seriously damage the appearance and internal structure of the body. Do not use pressure washers to clean. Ensure that the charging cable has been unplugged and the rubber stopper on the charging port is closed. Otherwise, there may be a chance of electric shock or serious failure due to internal water intake.

Warranty policy

techtron® offers a one-year guarantee on rechargeable batteries. Two-year guarantee against parts and/or manufacturing defects, Terms & Conditions/Exclusions apply, please see website for further details.

Product registration

For exclusive offers, product support and information on the latest techtron® innovations, register your product by returning the enclosed warranty card, or complete the form on the website with your serial number and details - https://techtron.co/pages/warranty

Battery maintenance and disposal

Do not touch the battery contacts, and do not open or expose the shell. Avoid metal objects touching the battery contacts, as this will cause a short circuit, damage to the battery, or even personal injury.

Please refer to the model specifications in this manual for your eScooter's charging requirements. Only use a charger with the correct voltage otherwise there will be a risk of damage to components or fire.

Ensure batteries are disposed of responsibly. Recharge the battery and store after use, in order to preserve battery life. Do not place the battery in high temperatures higher than 50°C or below -20°C, or it may lead to battery failure, overheating, or even risk of fire. Always store in a cool dry place fully charged. A battery will be at optimum performance at a standard room temperature. Warranty may be invalid if the battery is removed.

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environment safe recycling.

All product images shown in this instruction manual are for illustrative purposes only and may differ slightly from the actual product.

Helmets and clothing

Wearing a cycle helmet is recommended when riding an eScooter, but it is not a legal requirement. Always make sure that your cycle helmet conforms to current regulations, is the correct size, and is securely fastened. Wear light-coloured or fluorescent clothing so that other road users can see you at night or whenever visibility is reduced.

As with any vehicle, the faster the user is travelling, the more braking distance is required. Please respect pedestrians' right of way when riding the techtron® eScooter.

Riding safely

Please check the eScooter before riding. Check for loose parts and general tyre wear and tear.

Always start the eScooter by pushing off with your foot first, this reduces the start load on the motor, ensuring a longer battery life.

The techtron® eScooter is designed to perform best on smooth dry surfaces, therefore avoid riding on uneven gravel, sand, grass, slick or wet surfaces. Never ride over curbs or jump. The eScooter is not designed for this type of riding and any damage caused to the eScooter while riding in this manner will void the warranty.

techtron® accepts no liability for any injuries caused to rider or damage to property which may arise while riding the eScooter. Never ride the eScooter with more than one person, as this may lead to loss of control. It is the rider's responsibility to ensure they comply with all local laws and regulations that may apply while riding the eScooter.

Model specifications

Model	Ultra 5000
Range	40km
Power	500W (Peak 1000W)
Top Speed	40 km/h*
Speed Modes	3
Hill Incline	20%
Rider Age	18+ years
Max. Load	120kg
Battery	48V 12Ah
Charger	54.6V / 2.0A
Storage Temp	-20˚C to 45˚C
Working Temp	-10˚C to 40˚C
Rider Height	150cm - 200cm
Frame Material	Steel and Aluminium
Suspension	Front and rear
Current Limit	21A
Motor Type	Brushless DC
IP Rating	IPX4
Foldable	Yes
Tyre Size	10" Pneumatic
Brakes	Front and rear

Any enquiries regarding maintenance, accessories, security or warranty, please visit the techtron® website:
www.techtron.co

or email us:
info@techtron.co

Rules of the road and licensing guidance

For the latest up-to-date safety, licensing guidance and rules of the road for UK eScooter users, please consult the UK Government website:

www.gov.uk/guidance/e-scooter-trials-guidance-for-users

*Speed is adjustable by the techtron® smart app at individuals' own liability. techtron®or Multibrands™ International Ltd will not be held responsible for accidents, injuries to any party, through misuse or illegal operation in anyway.

17

Troubleshooting

Error codes and what they mean

Faults with techtron® eScooters rarely happen, but if you're unfortunate enough to encounter a problem, just cross reference the error code shown on the scooter's display panel with the ones listed in the table opposite.

If the fault can't be resolved through simple troubleshooting, and providing your scooter is in warranty, then get in touch with our customer services team. Let us know the error code displayed on your scooter, or give us an idea of the problem you're having and we'll do our very best to get you back up and riding as soon as possible.

Thermometer and spanner icons are briefly displayed on the control panel at start-up, indicating the eScooter's diagnostic check. These will only stay on permanently if a problem is detected. Maintenance of this kind should only be checked and rectified by a qualified technician.

Thermometer: Indicates there is a problem with the motor temperature. If the temperature of the motor is more than 90˚C, the eScooter will stop working in order to protect the motor.

Spanner: Indicates an electrical fault, which also displays a fault code.
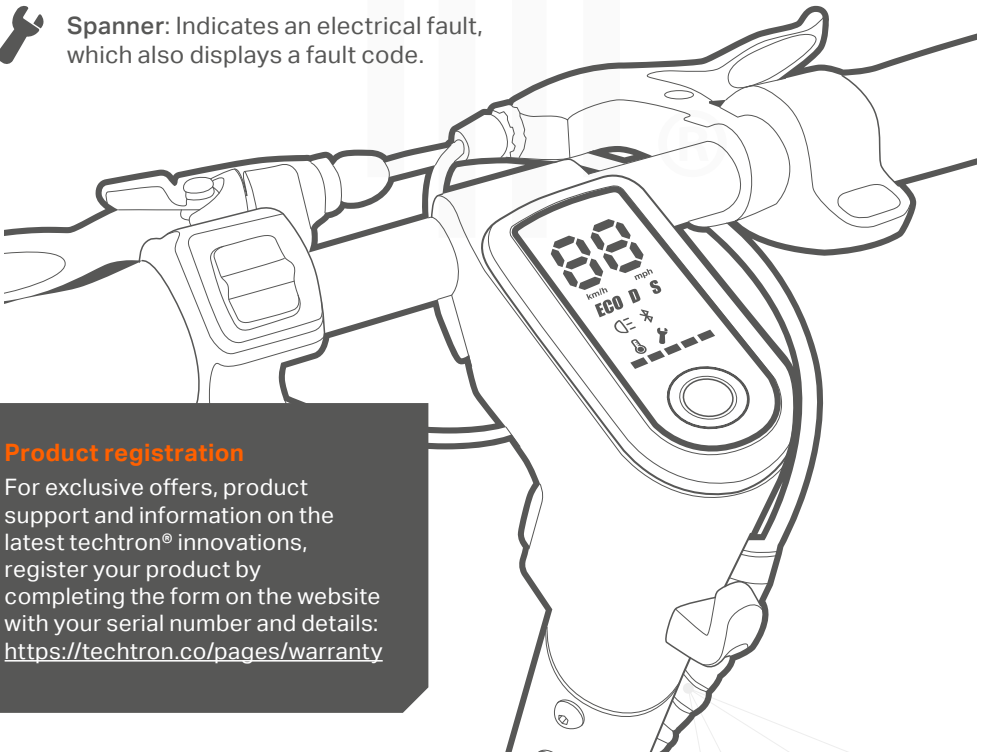
Product registration

For exclusive offers, product support and information on the latest techtron® innovations, register your product by completing the form on the website with your serial number and details: https://techtron.co/pages/warranty

Error code	Description	Solution
4	Short circuit	Check for a short circuit in the wiring/installation or replace the controller to eliminate the fault.
9	Sub-motor communication failure (dual drive models only)	Check the connection line between the sub-controller and the main controller.
10	Dashboard communication failure	First check whether the connection line between the instrument panel and the controller assembly line is normal or not. Then shut down and restart the eScooter, after re-plugging the assembly line interface. If fault has not disappeared, instrument or controller may need to be replaced to eliminate the fault.
11	Abnormal sensor	Check the line of the phase line of the controller or motor.
14	Throttle hall abnormal	Check whether the throttle is reset to zero, whether the throttle cable and throttle are normal or not. Unplug the throttle cable and restart the eScooter to troubleshoot the problem.
15	Brake hall abnormal	Check whether the brake is reset to zero position or not, check the brake line and the brake normal or not. Try unplugging the electronic brake wiring and restarting the eScooter to eliminate the problem.
16	Motor hall abnormal	Check that the motor hall wiring is normal or not. If problem occurs when braking, the motor or controller will need to be replaced.
19	Auxiliary motor hall abnormality (dual-drive models only)	Check that the secondary motor hall wiring is normal. Replace motor or controller to eliminate the problem.
21	BMS/BMS communication abnormal	BMS/BMS communication abnormal (non-communication battery is ignored).
50	Bus high voltage	Check the battery voltage is normal, cycling failure. Replace the battery or controller to eliminate the problem.
53	System overload	Shutdown and restart the eScooter. If the error code is still displayed, the controller needs to be replaced.
55	Controller high temperature alarm	If the temperature of the controller is too high, allow the eScooter to cool and then restart. If vehicle fails to boot, the controller will need to be replaced.

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