



DEUX 7 User's Manual

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1. Greetings



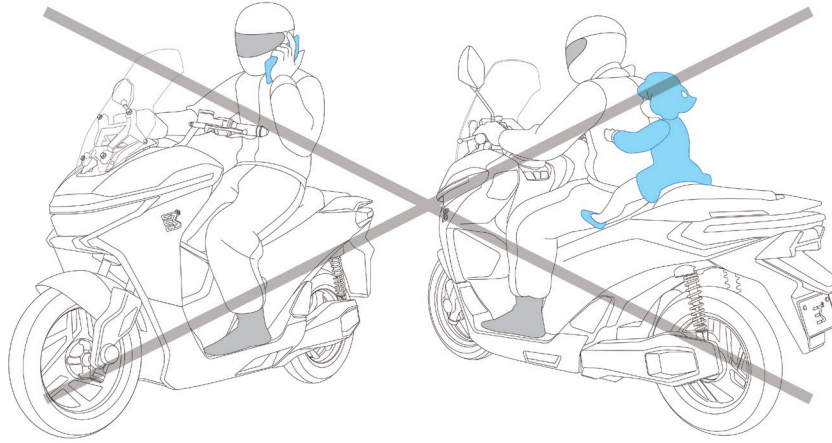
Welcome to E3 Mobility. E3 Mobility pursues Electricity, Environment, and Efficiency as its priority values, and was established with the goal of developing future transportation means and operating systems using electricity.

Presenting a new future for the sprint scooter type, the E3 brand has secured identity and competitiveness. For a pleasant ride with the eco-friendly electric motorcycle DEUX 7, please read this manual carefully.

2. Precautions

2.1 Safety

Obey the Road Traffic Act to ensure safe driving and have a fun on driving with relaxation!

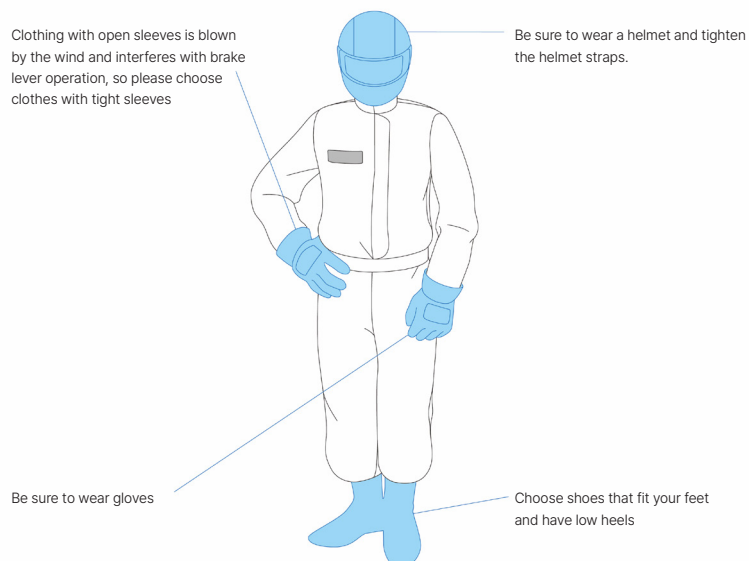


Always observe the following precautions before driving:

- Please wear your helmet tightly and tighten your chinstrap.
- Please observe the speed limit by the law
- While driving, do not use your phone.
- Please try not to accompany the child on board
- Please avoid a quick stop while driving.
- During the daytime, turn the head lamp downwards.
- Please also wear helmets for passengers.

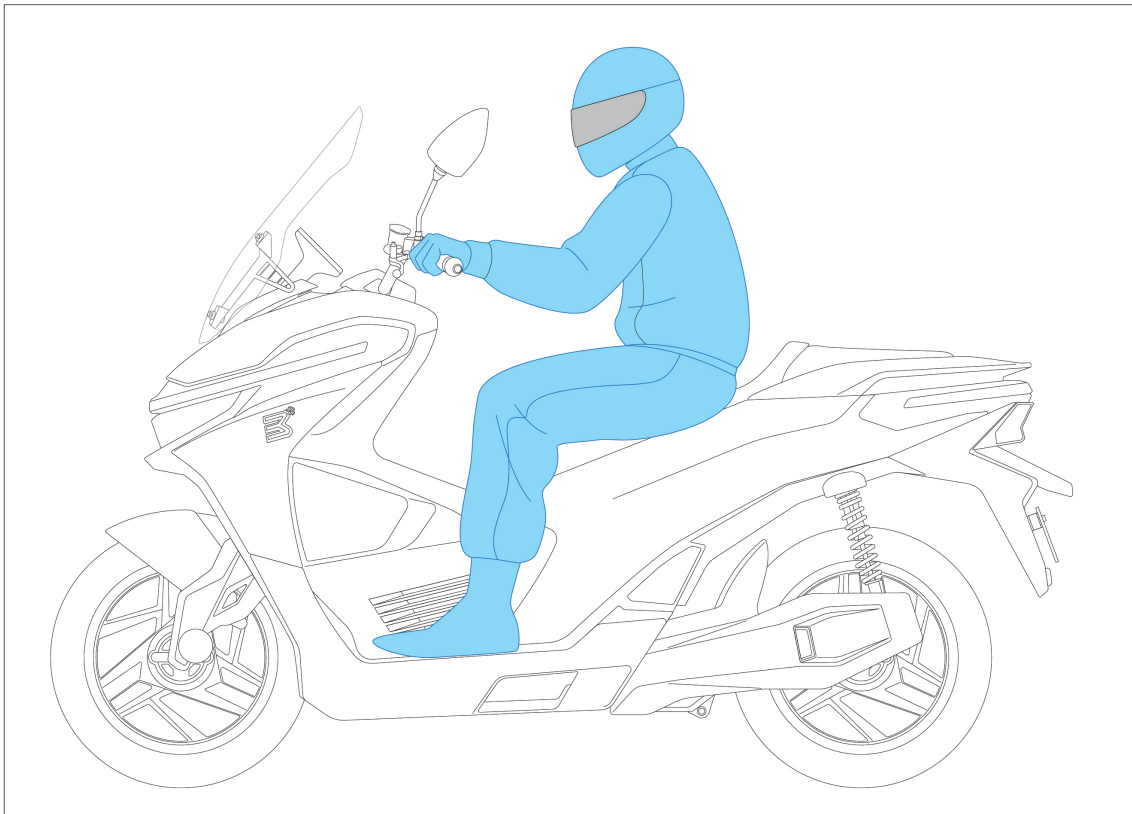
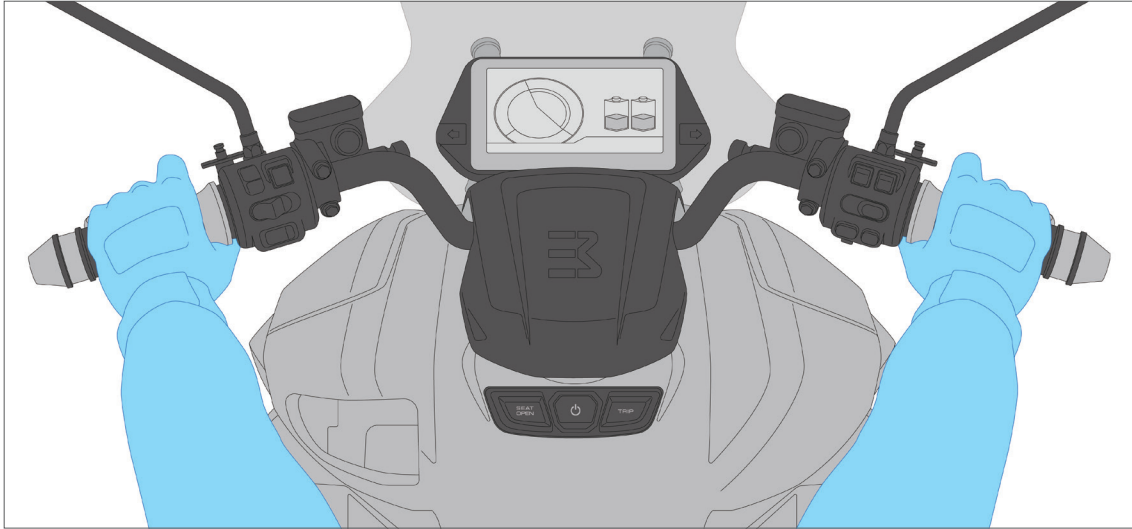
2.2 What to wear

For your own safety, wear equipment that can protect your body.



2.3 Vehicle operation

Please observe proper vehicle controls for your safety.



- When driving, hold the steering wheel tightly with both hands and do not perform stunts such as jumps.
- Please be aware of safety when driving on wet or unpaved road.
- There is a risk of injury to the driver when driving excessively, which can be the cause of motor failure.

2.4 Damage and theft

Please observe the correct driving method to prevent damage.

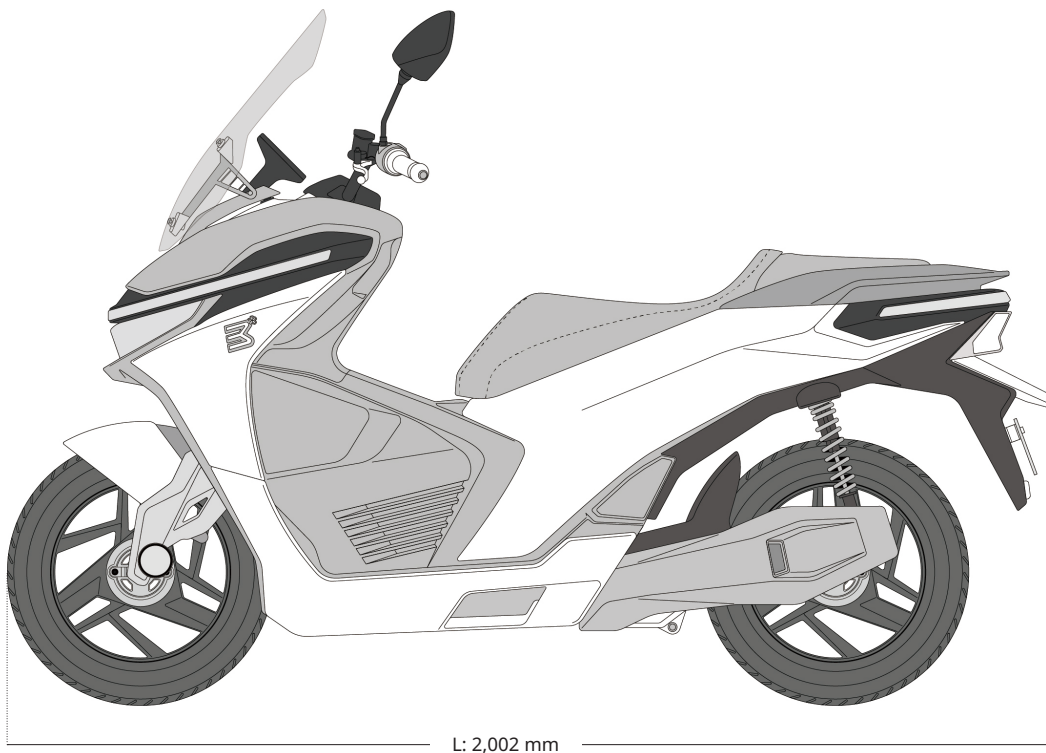


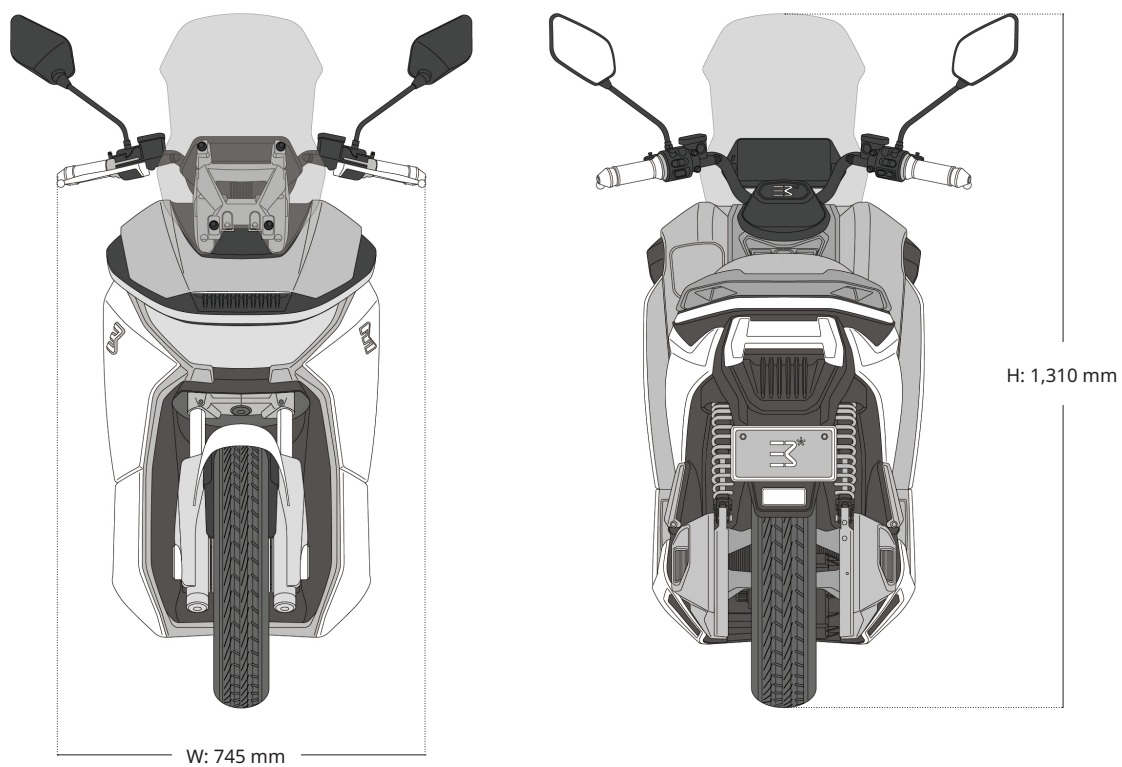
- It is forbidden to drive in the water at a depth of 5 cm or deeper to prevent motor or circuit failure
- Before driving, check the safety condition of the product, including lamps, horns, brakes, tires (including the appropriate air pressure), and wheel alignment.
- If the vehicle is stored outdoors or in a damp place, there may be a damage.
- Do not drive while the battery is low.
- Be careful not to damage the battery when charging and be careful not to shock the battery.
- In the event of theft, the location of the vehicle can be tracked via GPS.
- Please observe the speed limit by the law.
- The vehicle has a capacity of two persons. Please do not ride with more than two persons.

3. About DEUX7

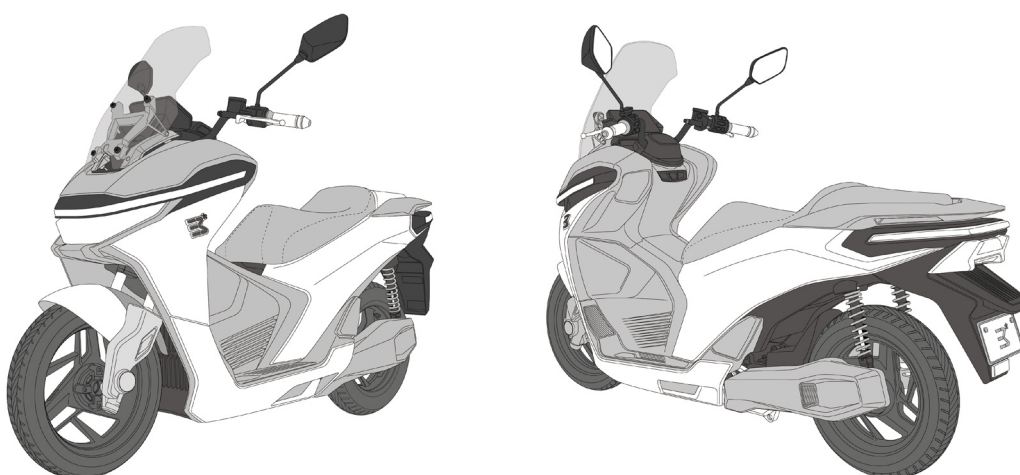
3.1 Specification

Dimension		Performance	
Length	1950 mm	Type	2 wheel EV
Width	740 mm	Top Speed	96 km/h
Height	1080 mm	Power	HYundai Kefico 7.0 kW
Seat Height	765 mm	Gradeability	55.2%
Wheelbase	1320 mm	Charge Time	Swapping BATT. Sys.
Front Tyre	110 / 70-R14	Front Suspension	Telescopic
Rear Tyre	130 / 70-R13	Rear suspension	Dual Link + Shock Absorber
Curb Weight	140 kg	Front Brake	Single Hydraulic Disk
Gross Weight	270 kg	Rear Brake	Single Hydraulic Disk





3.2 Design

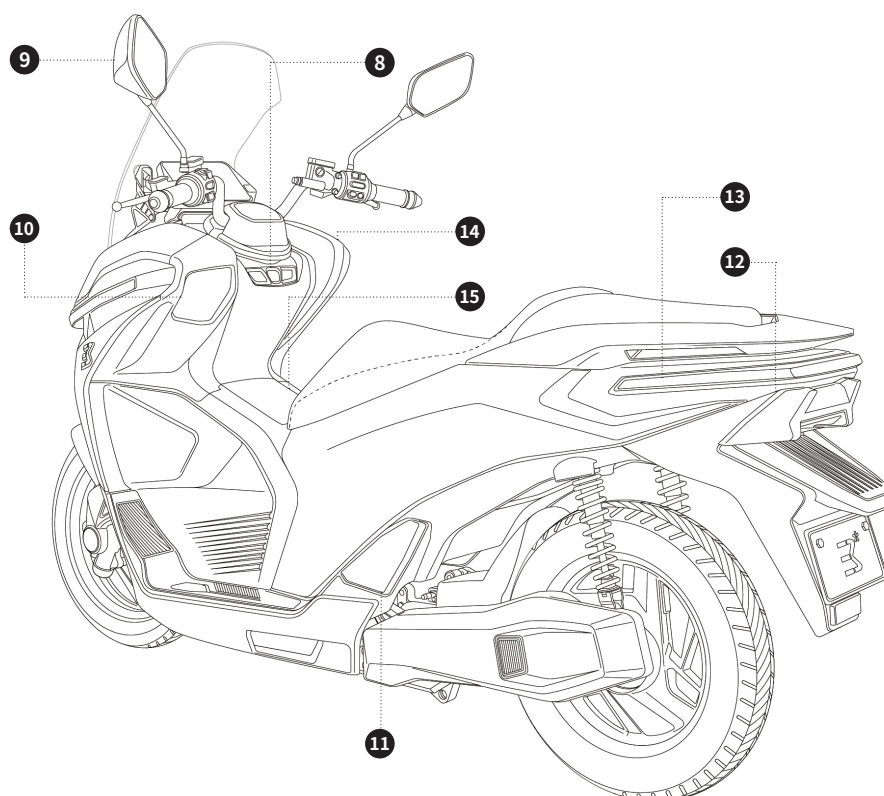
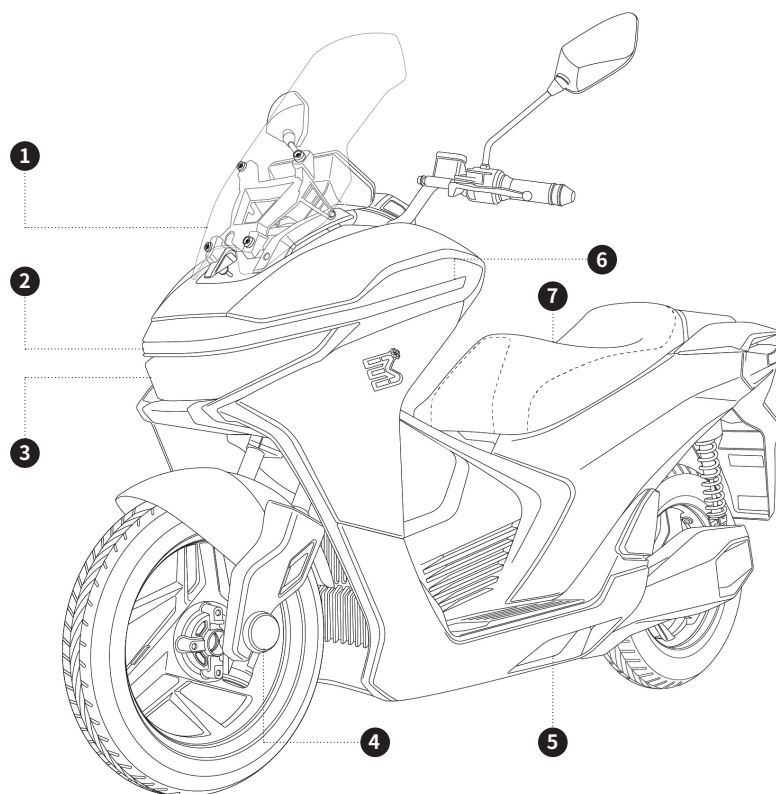


The Deux7 will be the ikon of an electric bike.

The Deux7 offers an impressive design, cruiser-type seat position and dual-link suspension for the driver with convenience.

3.3 Part Name

1. Windscreen 2. Daytime running light 3. Headlight 4. Side Reflector 5. Side Stand 6. Direction indicator 7. Seat
8. Power button 9. Side mirror 10. Bottle holder 11. Pillion Step 12. Tail light 13. Direction indicator light
14. Storage (USB) 15. Center Console Storage



4. Performance

4.1 Power Output

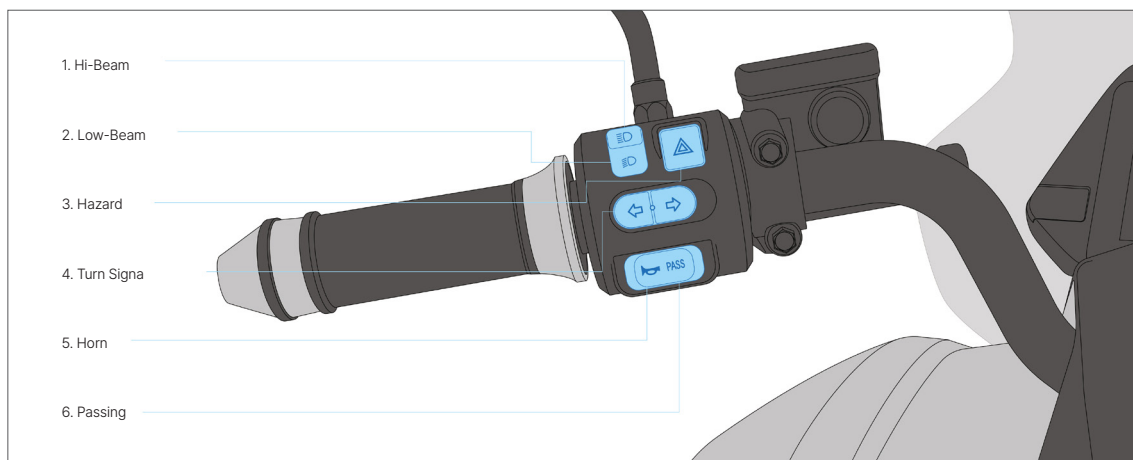
Equipped with a 6.8kW water-cooled motor, it provides 9.1 HP/30Nm of power and torque and can drive up to a maximum speed of 96 km/h, providing drivers with driving pleasure.

4.2 Driving distance (Mileage)

DEUX 7 is equipped with dual batteries and can travel more than 100km at a constant speed of 30km/h.

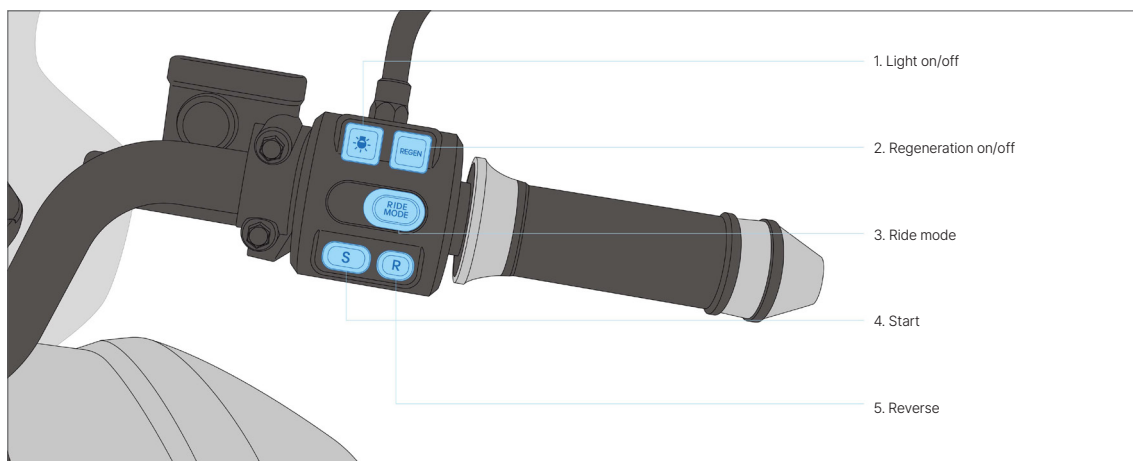
5. How to Operate

5.1 Left Side Switch



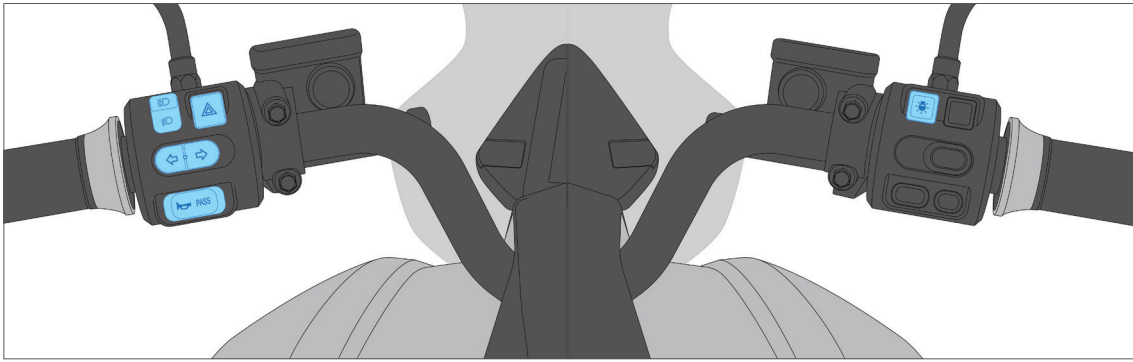
1. Hi-Beam : Set the headlight to high beam status.
2. Low-Beam : Set the headlight to low-beam state.
3. Hazard / Emergency light : When used in emergency, both direction indicators flicker.
4. Turn Signal Light : When turning, slide the button to turn on the turn signal
If you slide back to neutral state after changing direction, it will be off.
5. Horn : When you press the horn button, the horn sounds and stops when you release your hand.
6. Passing : When the passing button is pressed, the high beam turns on and when the button is released, it turns off

5.2 Right Side Switch



1. Light on/off / Headlight on/off : Turns the headlight on/off.
2. Regeneration on/off / Regenerative braking on/off : Turns the regenerative braking function on/off.
3. Ride mode / Ride mode change : Change the riding mode, (Circular type: Eco > Smart > Sport > Eco ...)
4. Start / Start the engine : After pulling the left brake lever, press the button to start the engine.
(Warning Sign lights up when pressed twice)
5. Reverse / Going backward : When the reverse button (R) on the right handle is pressed, the vehicle will go backwards at a speed of 2km/h with a warning sound and emergency lights operating.
(Check the safety behind you before going backward.)

5.3 How to operate lamps



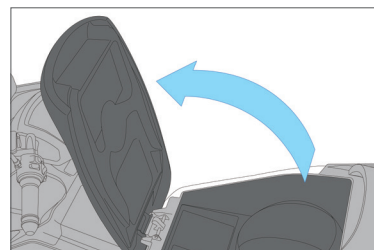
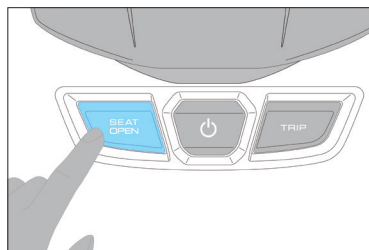
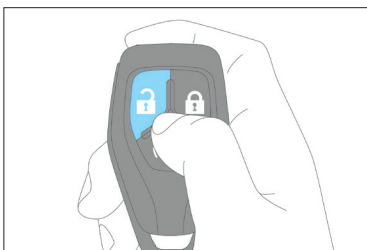
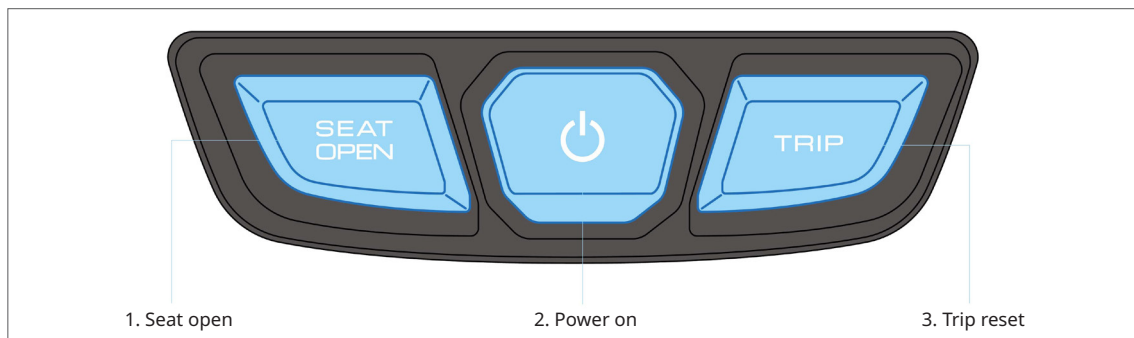
By operating each switch, the corresponding lamp can be operated.

- Emergency lights
- headlight
- turn signal lights
- horn

1. The seat cover can only be opened when the power switch is off.

2. Press the headlight button on the right to turn on the headlight. When the high/low beam switch on the left is in the low beam state, the low beam turns on, and when it is in the high beam status, the high beam turns on.

5.4 How to open the seat cover



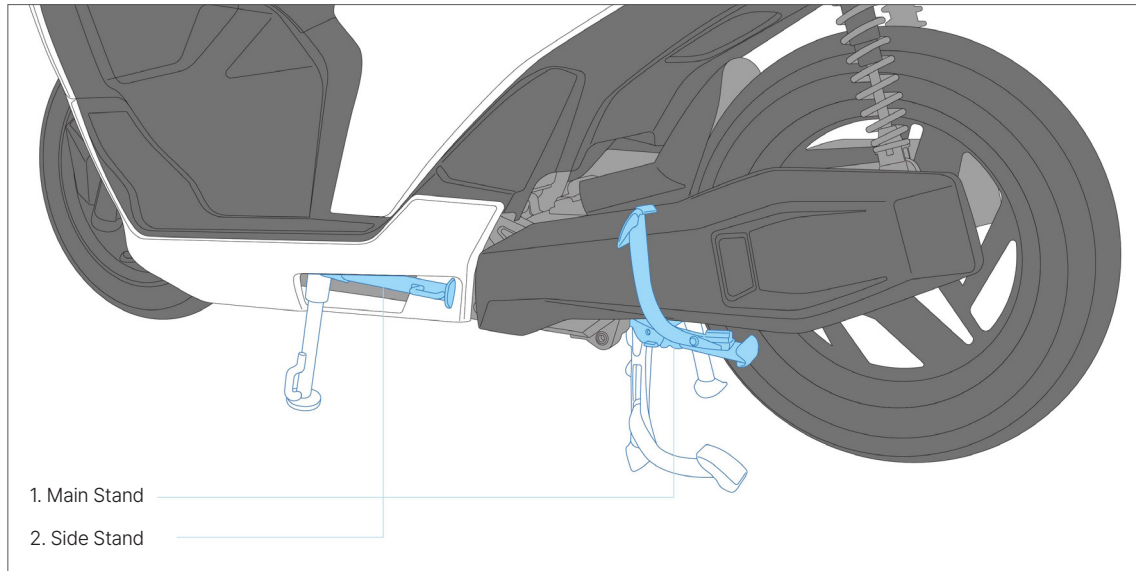
1. The seat cover can only be opened when the POWER OFF.

1) After operating the key fob unlock button, press the seat open button to open it with a sound.

- In the power on state, there is no response when the unlock button is pressed.

5.5 Main stand and Side stand

Please fold the side stand and main stand first before driving. After stopping, park with the side stand or main stand lowered.



Main stand

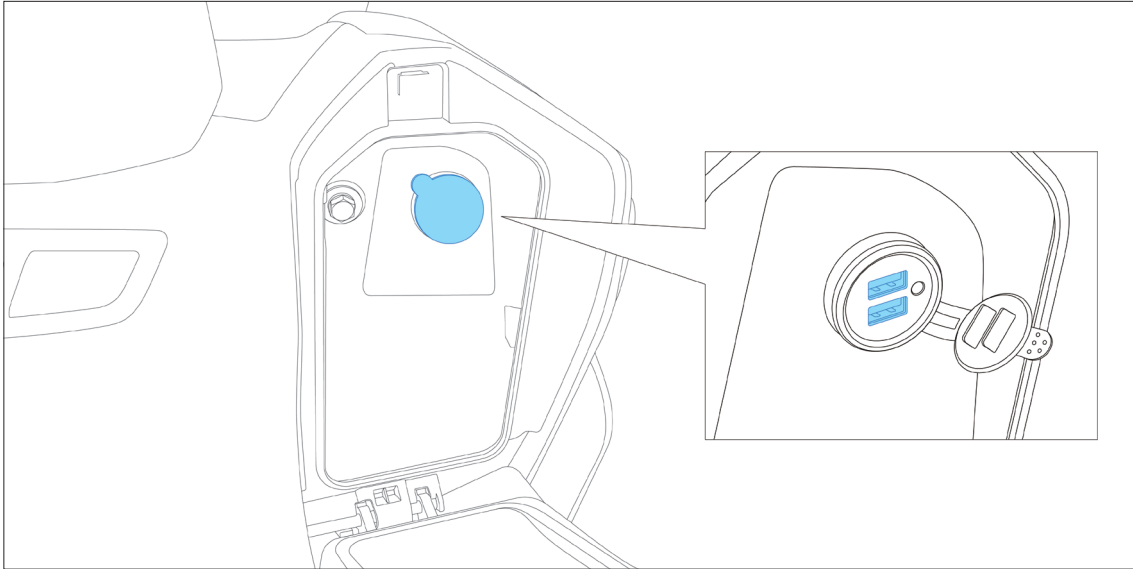
- When starting the vehicle by folding the main stand, stand on the left side of the vehicle, hold the left handle with your left hand, hold the rear seat handle with your right hand, and push forward to fold the stand.
- When parking with the main stand, stand on the left side of the vehicle, hold the left handle with your left hand, hold the rear seat handle with your right hand, and put your weight on your right foot and press the step of the main stand, the stand will unfold forward and the vehicle will be able to park while lifting the rear wheel.

Side Stand

- Unfold or fold the side stand with your feet.
- Since the side stand and the safety sensor are interlocked, the motor is automatically shut off when the side stand is unfolded. Therefore, fold the side stand before each ride and do not extend it while the vehicle is moving.
- When an operator is parking a vehicle, please use the main stand to prevent slipping or overturning.

5.6 How to use the equipment

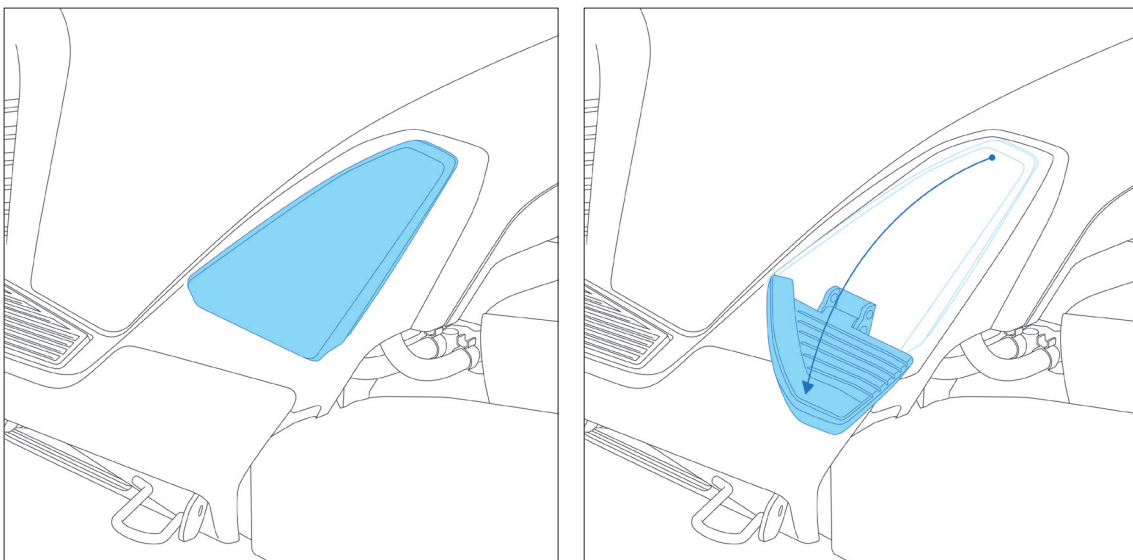
USB port



- Use the USB charging port in the power on state.
- It supplies 5V 10W output.
- Before using electrical accessories, use products that meet the rated voltage and power standards.
- When using electrical accessories, excessive power rated voltage can severely damage the vehicle's electrical system and electrical components.

Pillion Step bar

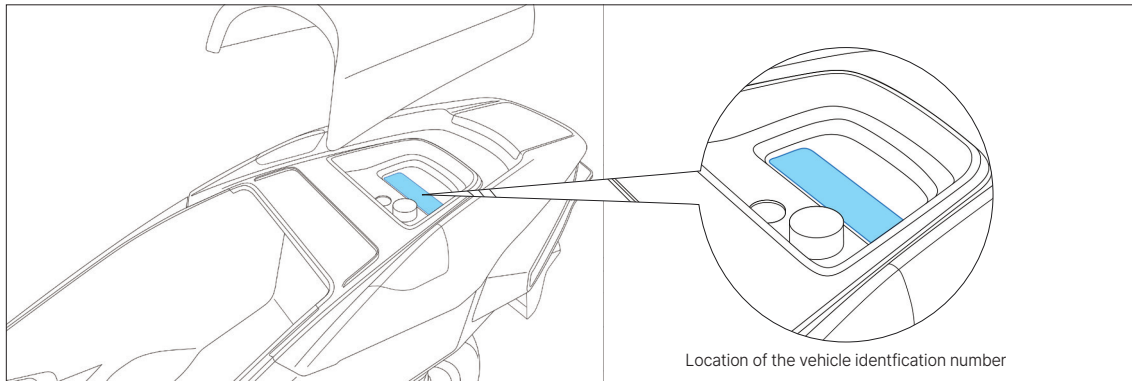
- There is a pillion step bar for the rear seat passenger. Hold the pillion step bar at the top and lower it down.



5.7 Vehicle Identification Number

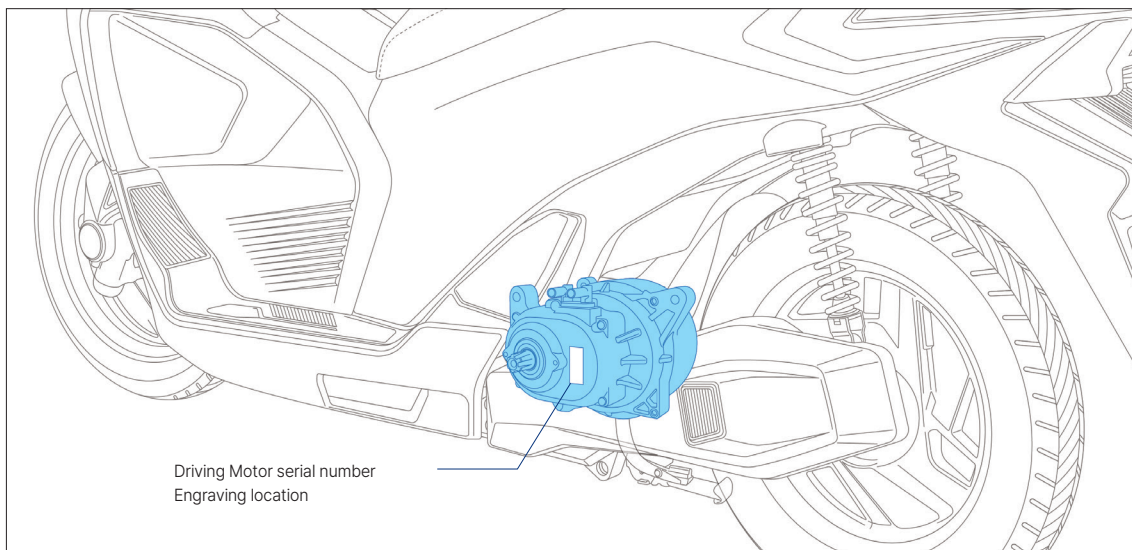
The vehicle identification number is required for parts ordering and vehicle registration. In addition, if the vehicle is stolen, it is necessary to arrange to be found the vehicle by the police, so please record it on a separate sheet together with the registration number of the license plate and keep it in a separate place from the vehicle.

Vehicle Identification Number



- The vehicle identification number is engraved on the frame under the rear seat

Driving Motor Quality Certification Number



- Driving Motor Serial Number is engraved on the left side of the driving motor.

6. Preparing for Departure

6.1 Driving description

Before driving, please obey the correct driving and riding practices, and follow the guidelines listed below to protect yourself and other drivers on the road.

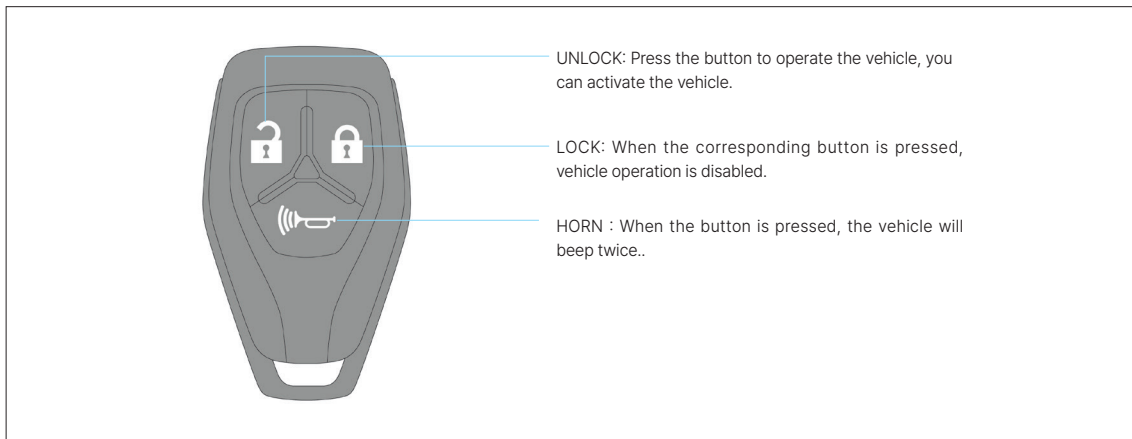
- If you are physically or mentally unable to drive, please refrain from driving.
- Be prepared for dangerous situations by observing the laws and paying attention to road and traffic conditions.
- Always wear protective gear such as a helmet and gloves and boots.
- Before every ride, check all parts including lights/brakes/tire treads and tire pressure. If maintenance or repair is required, visit the service center.
- Turn off the motor before performing any inspection or maintenance work.
- Reduce your speed when passing through slippery surfaces such as wet pavements and manhole covers.

6.2 Pre-driving checklist

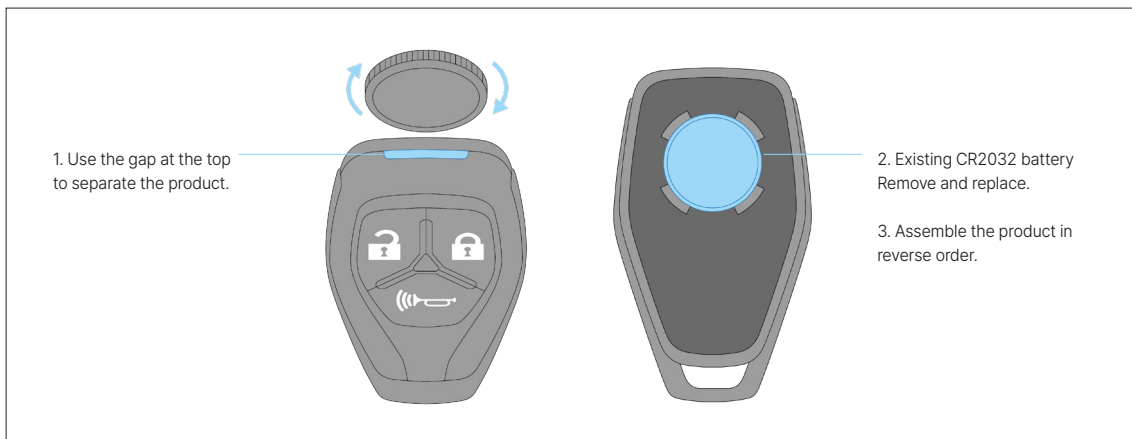
For safe driving, check the following before driving.

- Check that the tire pressure is within the normal range and is the recommended pressure.
*Front 34 psi, Rear 36 psi.
- The surface of the tire must not be cracked, damaged, excessively worn, punctured by objects, or attached.
- The tire tread must be deep enough to exceed 0.8mm.
- Check that the chain is tensioned properly, cleaning and lubrication are required.
- There must be no leaks from the suspension or powertrain, and there must be no external abnormalities.
- The cooling air intake or heat sink must be clean and unobstructed.
- The warning symbol on the dashboard should not light up after powering on the system.
- The battery must have sufficient power for driving.
- All handle switches, buttons, headlights, taillights, turn signals and horns must be in working order.
- The brake system should work normally.
- Brake pad remaining amount must be left enough so that it does not affect driving.
- If the motor continues to run when the throttle grip is returned to the original position after operating the throttle grip, death or serious injury may occur due to sudden start and poor braking. Therefore, stop driving and contact the near service center.

6.3 Smart Key System



A key fob is essential for driving DEUX 7 of E3 mobility, and the vehicle cannot be operated without the key fob. To turn on the power, press the UNLOCK button on the key fob and then press the POWER BUTTON on the vehicle.



- The keyfob is equipped with a CR2032 battery. If the keyfob is discharged, the battery can be replaced as shown above.

6.4 How to enable and disable the Smart Key

- Be careful not to lose the key fob.

*If there is no key fob, the vehicle cannot be operated.

- To operate the vehicle, press UNLOCK to unlock the vehicle.

- After pressing UNLOCK, press the POWER button within 30 seconds.

*If you do not press the POWER button within 30 seconds after pressing UNLOCK, the vehicle enters the self-locking mode to prevent theft.

- To open the seat cover, press the KEYFOB Unlock button.

*The power should be 'off' state.

- After driving, press the LOCK button.

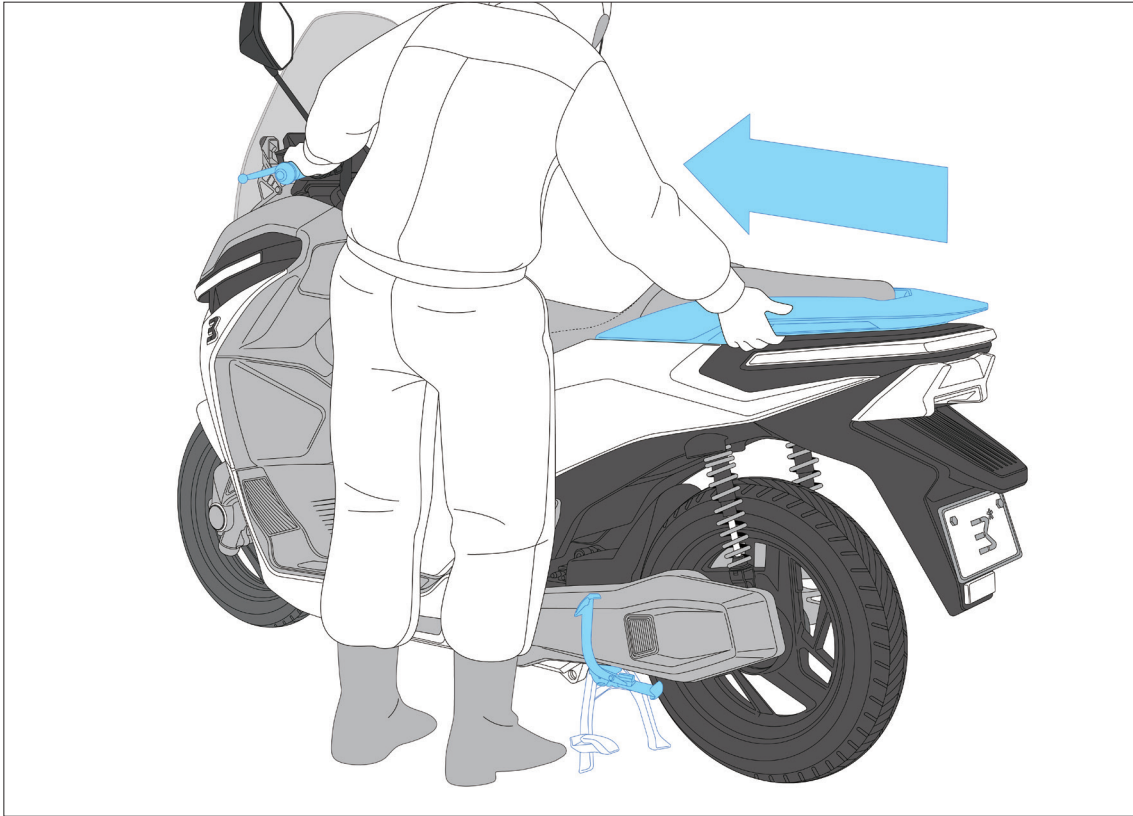
- If the key fob is damaged, please visit the service center.

- Disassembling the key fob yourself may damage it and void the warranty.

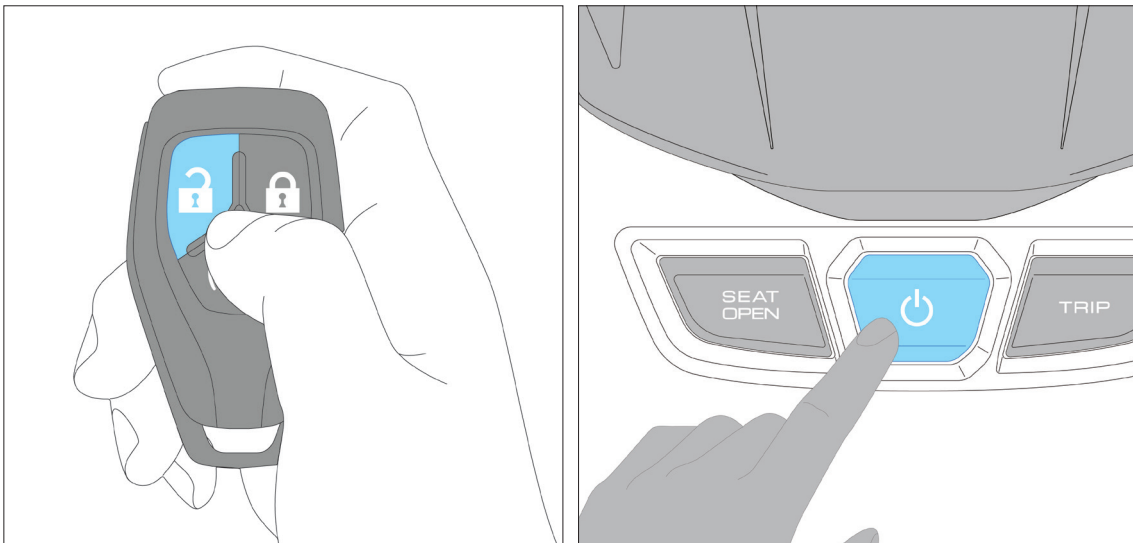
- It is possible to set a driving prohibition to prevent theft of the vehicle.

6.5 The right way to drive

6.5.1 How to start driving

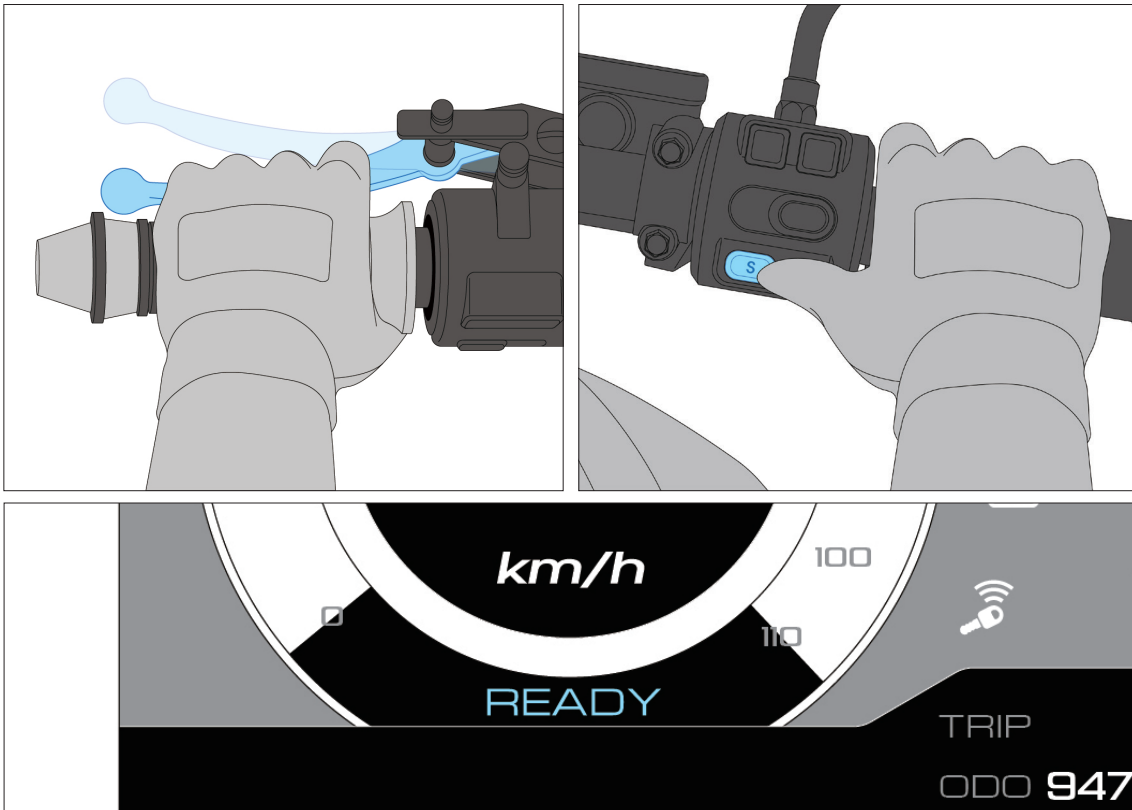


1. Before departure, fold up the main stand, get on the left side of the car, and sit on the seat exactly. Be careful not to fall with your feet on the ground at this time.

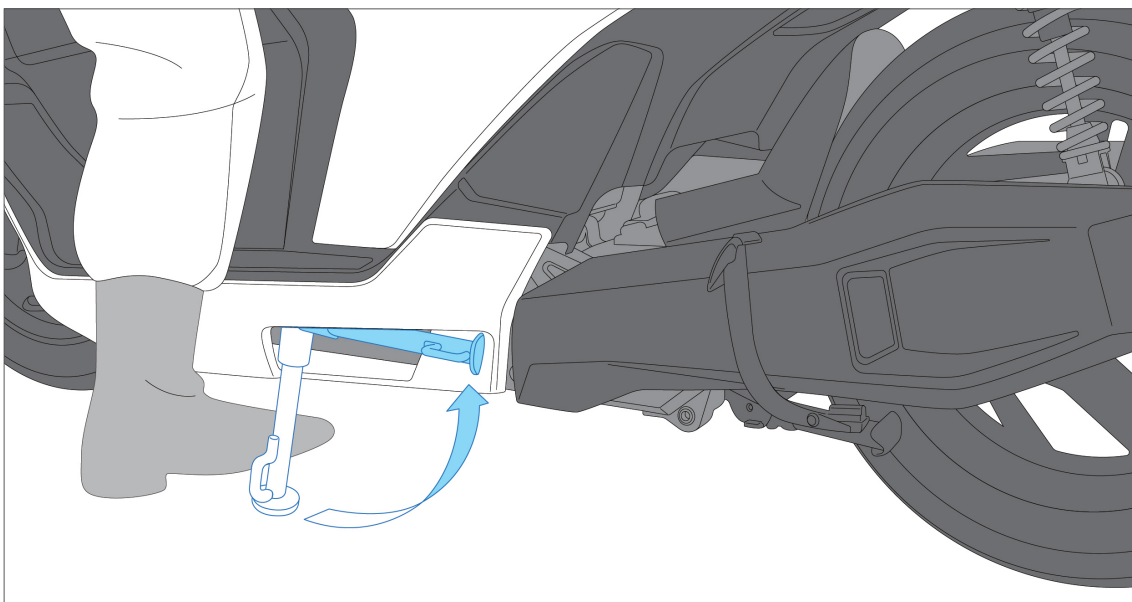


2. Press the unlock switch on the key fob.

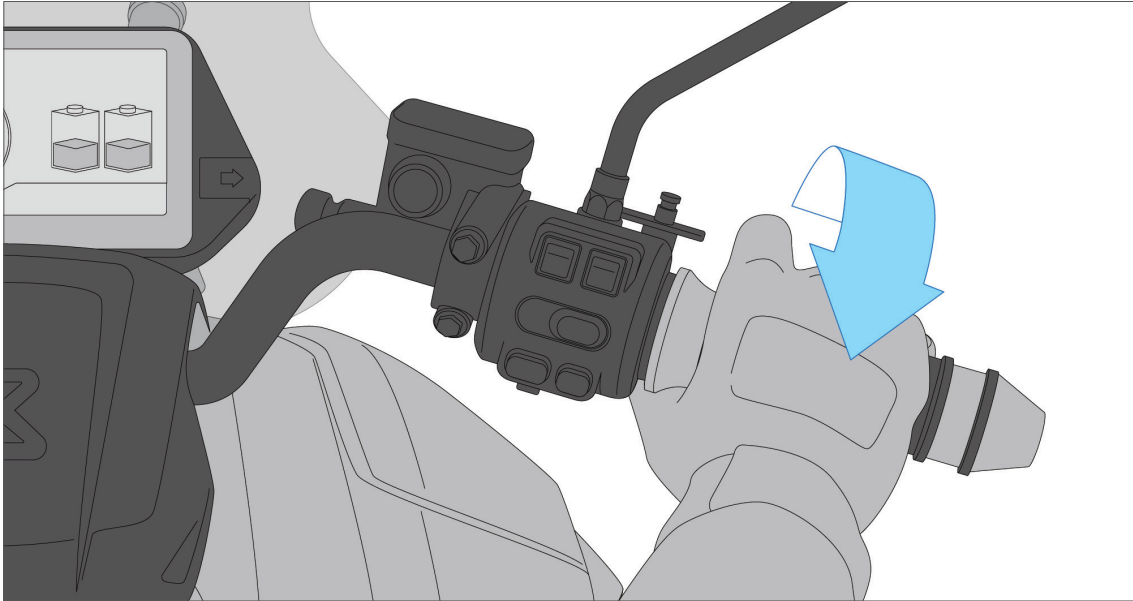
3. Press the Power on button in the center of the vehicle. (The vehicle is activated with cluster lighting.)



4. If you press and hold the Start button on the right with the brake on the left applied, the Ready sign on the cluster lights up. (If you press the Start button on the right twice, the vehicle will be in Hold state, and the Warning lamp [General warning lamp] will be turned on. If you press it again, the Ready sign on the cluster is turned on. * Vehicle Departure is possible only when the Ready sign is lit.)



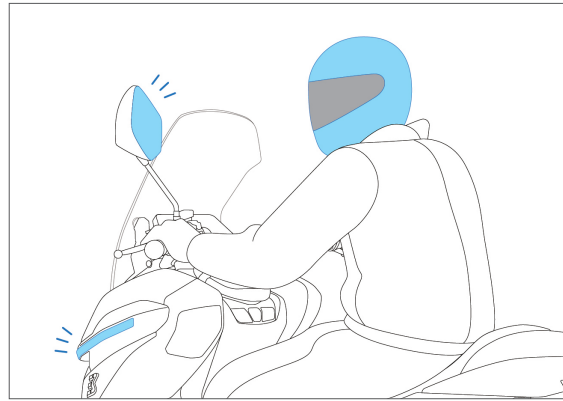
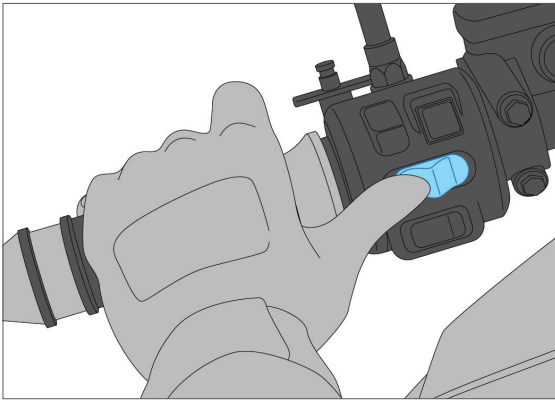
- If the side stand is lowered, fold it up.
- The vehicle will not start when the side stand is down



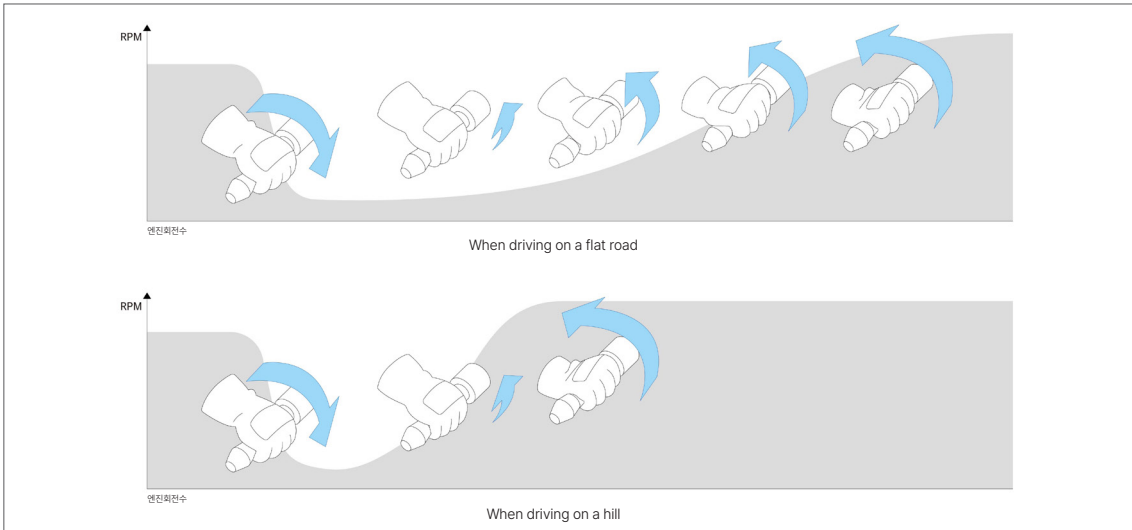
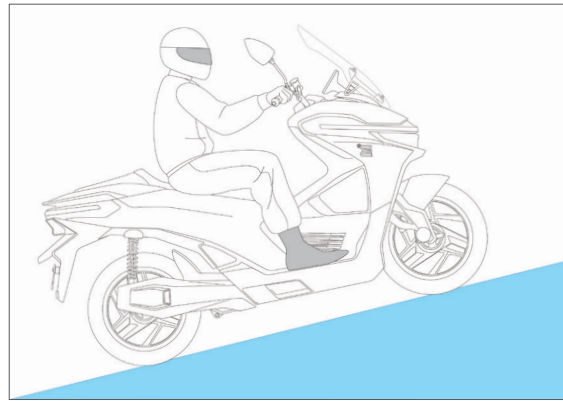
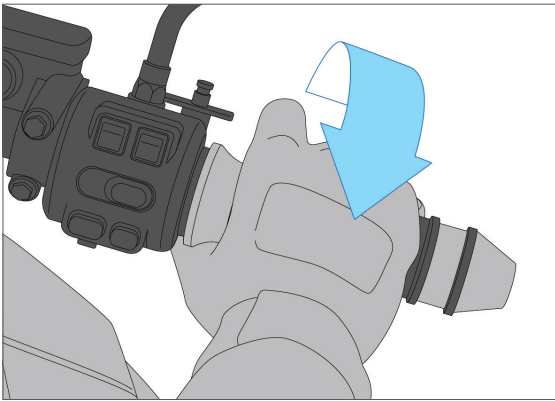
5. Slowly pull the throttle grip and the vehicle will start smoothly.

- If you pull the throttle grip suddenly, there is a risk of sudden acceleration. Be careful and check the operation of the throttle grip before starting the engine.

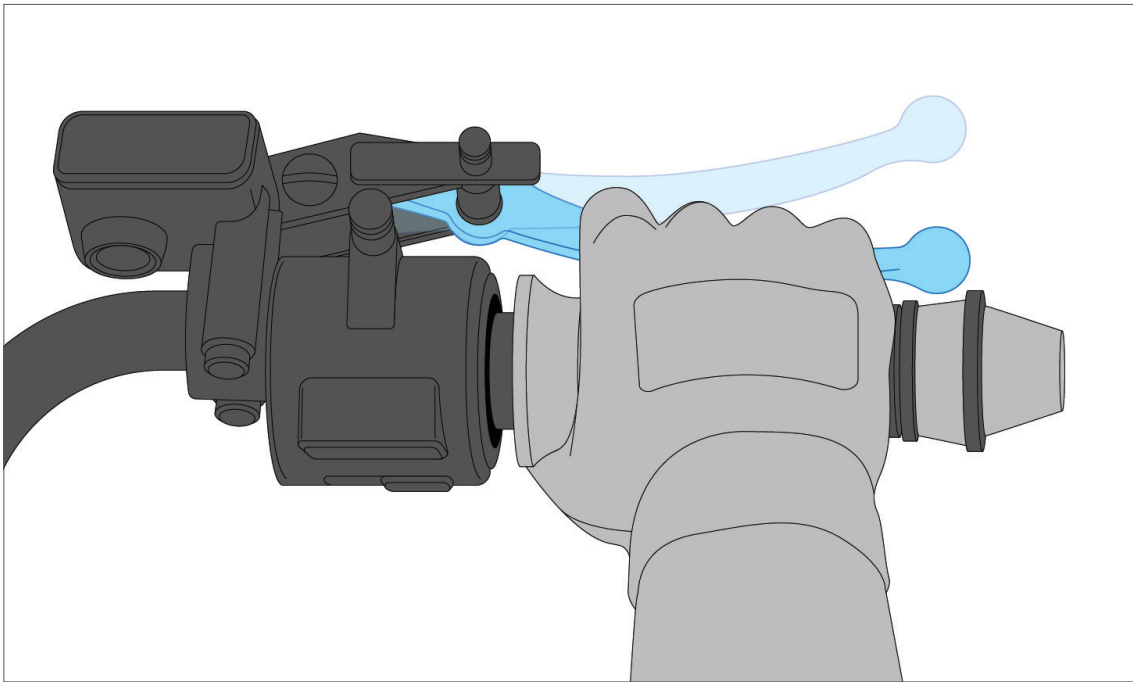
6.5.2 How to keep driving



- Before departure, turn on the turn signals and check the safety of the rear before departure.

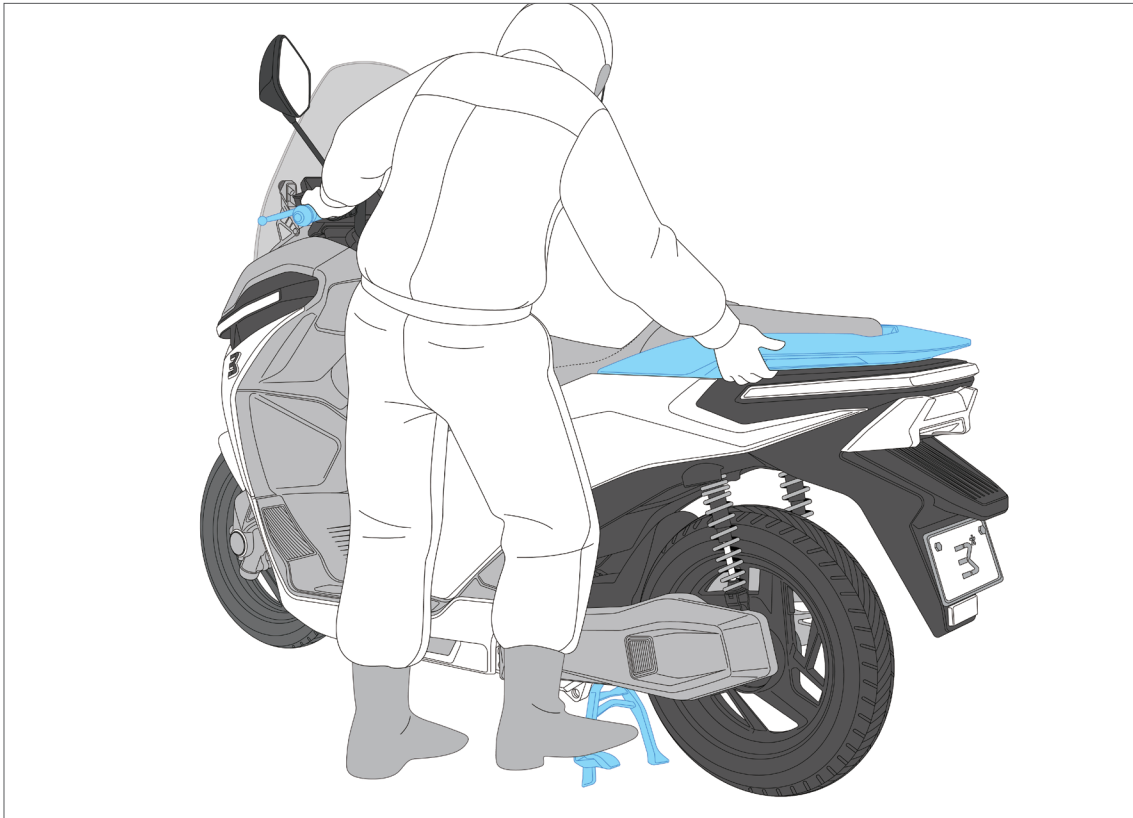


- Adjust the speed with the throttle grip. Pulling the throttle increases the speed. When driving on a normal flat road, turn slowly.
- It is recommended to apply the throttle grip a little faster when entering a hill.



- Use the front and rear wheels at the same time for the brakes. Return the throttle grip to the initial position and hold the brake lever. Brakes gently at the beginning and hard at the end are a good way to operate the brakes.
- If only one brake is used, the vehicle may slip sideways, resulting in death or serious injury.
- When the road surface is wet, such as in the rain, if you apply the sudden brake, the tire may slip and easily fall sideways, so please be careful.
- For better braking effect, distributing braking force in a front:7, rear:3 ratio on a dry road surface and a front:6, rear:4 ratio on a rainy or slippery road shortens the braking distance and prolongs the life of the brake.
- In case of rain or wet road surface, the stopping distance of the brake becomes longer. Drive at a reduced speed and apply the brakes in advance.
- When going downhill, reduce the speed by returning the throttle grip to the original position, and drive slowly while applying the brake.
- The brake condition may deteriorate when passing through a puddle or driving in the rain. After driving in a puddle, move to a safe place and operate the brake lightly while driving at low speed to dry the moisture inside the brake.
- On snowy or icy roads, tires are easy to slip, so driving at low speeds is recommended.
- When driving at high speed, in places where there is a speed bump, the lower part of the vehicle may touch the bump and cause a rollover accident, so please pass at a low speed.
- Please refrain from driving on rough mountain roads with this vehicle, because it can cause cables and wires to be damaged due to severe vibration while driving.

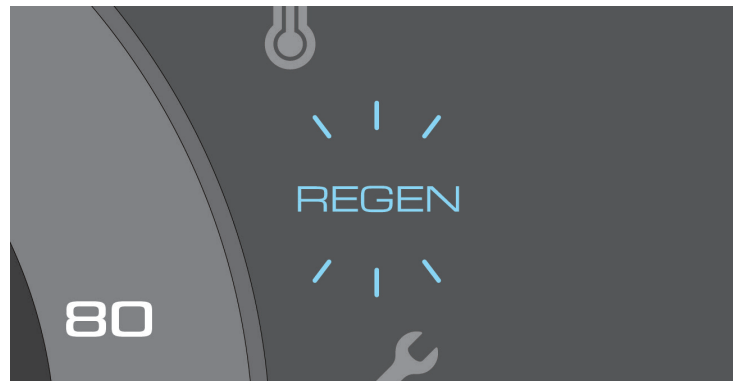
6.5.3 End of driving



- When the vehicle is stopped, hold only the brake lever, and do not operate the throttle grip.
- Turn on the turn signal in advance and stop slowly, paying attention to the vehicles behind and on the side.
- Return the throttle grip to its original position and apply the front and rear brakes. At this time, the brake light turns on, notifying the vehicle in the rear to stop.
- Put the turn indicator switch back to the original position and turn off the power.
- Place the vehicle on a flat surface out of the way of traffic. Standing on an uneven surface may cause it to fall over.
- Park the vehicle on a flat surface using the main stand.
- Hold the handle with your left hand, raise the rear grip with your right hand, and fold down the main stand with your right foot.

7. Braking

7.1 Regenerative Braking

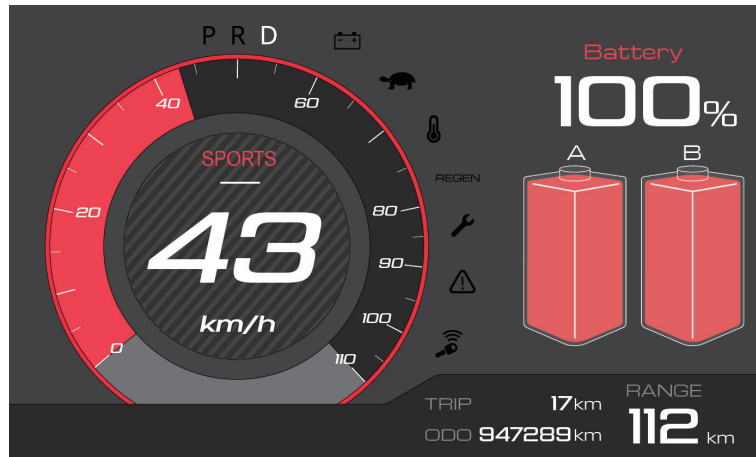


- When the throttle is released while moving and the vehicle is driving, the regenerative braking function converts some of the kinetic energy into electrical energy and reuses it in the battery.
- When the regeneration function is activated, braking force is applied to the rear wheel, and the higher the regeneration intensity setting, the stronger the braking force
- If the battery level is too low or too high, the function may not work even if the throttle is released.

8. Power Mode

8.1 Sport mode

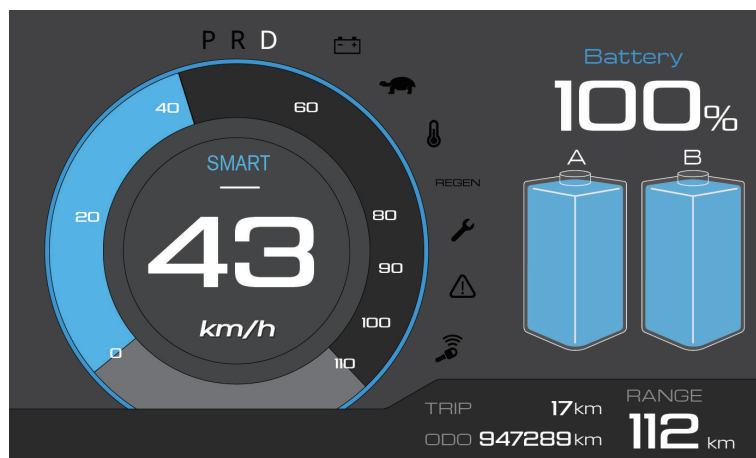
Sport mode increases the power of the vehicle, providing driving pleasure



Please note the following when using this mode.

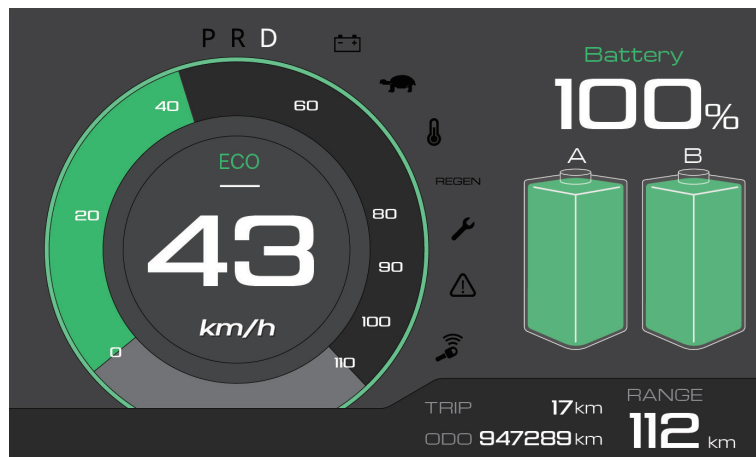
- Beware of wet or slippery surfaces.
- Power consumption increases, and the remaining battery power may decrease.
- If activated continuously for a long time, the temperature of the battery and power system will rise rapidly during high-speed driving, and system protection may be activated, and the power of vehicle may decrease. In this case, please lower the speed of the vehicle to cool the battery.

8.2 Smart Mode



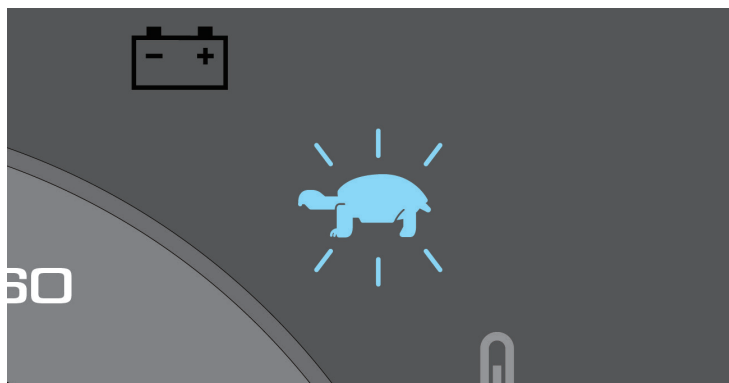
- Smart mode is a mode that can adjust the ideal power output to improve safety and energy efficiency.
- It is recommended to turn on Smart mode on slippery roads or on daily driving.

8.3 Eco Mode



Eco mode is a mode that minimizes power to extend battery life and helps drivers to drive reasonably.

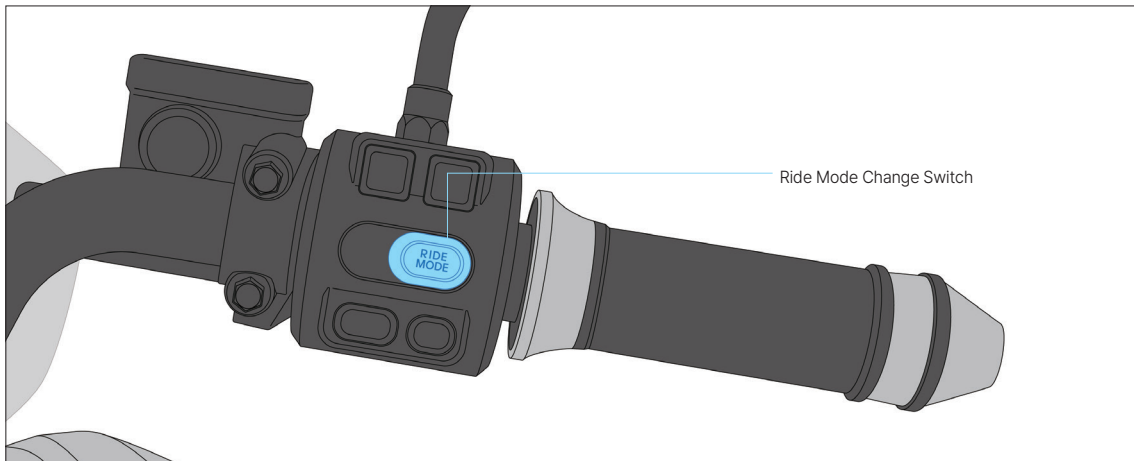
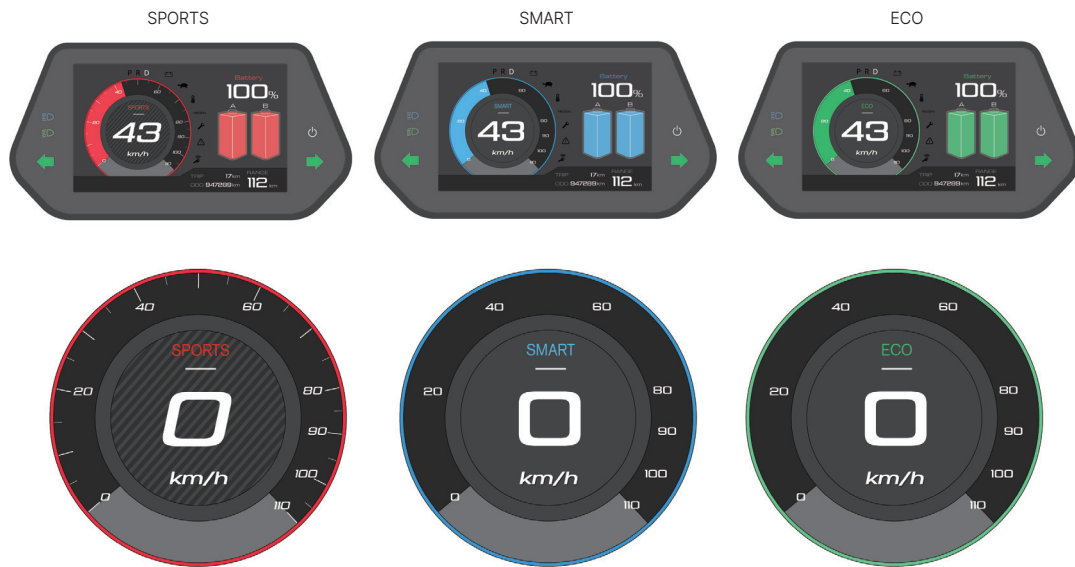
8.4 Power-down Mode



Power-down mode is activated when the battery level is low or the temperature of the vehicle system is not within the normal range.

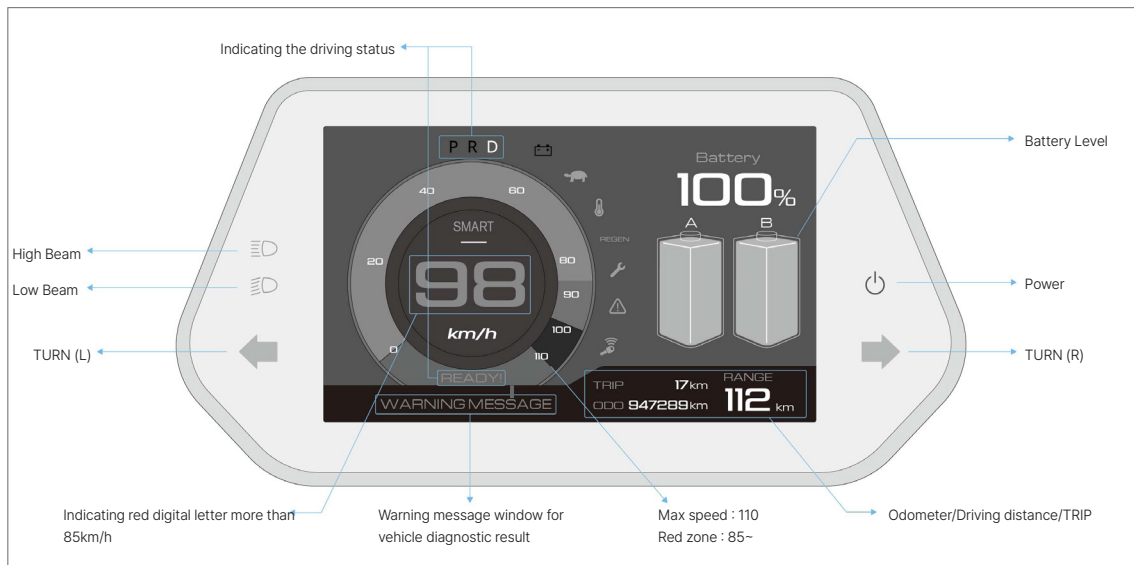
When the icon is lit, the vehicle slows down due to the speed limit. In that case, park the vehicle in a safe place and reset or turn on the ignition after a certain period of time.

9. How to change the type of mode



The vehicle driving mode can be changed through the Ride Mode Change Switch. Each time you press it, it changes in the order of Sport - Eco - Smart.

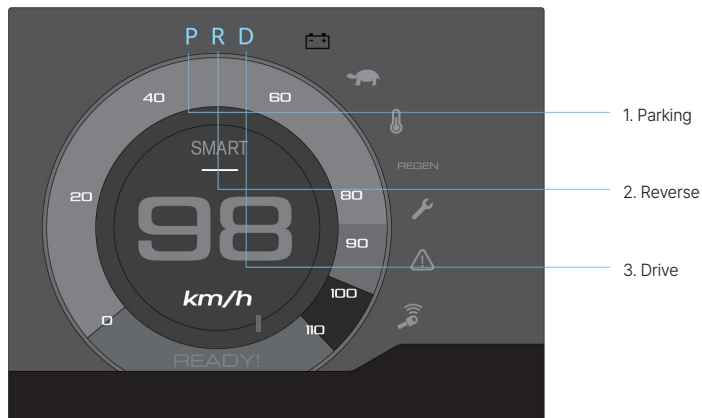
10. Cluster



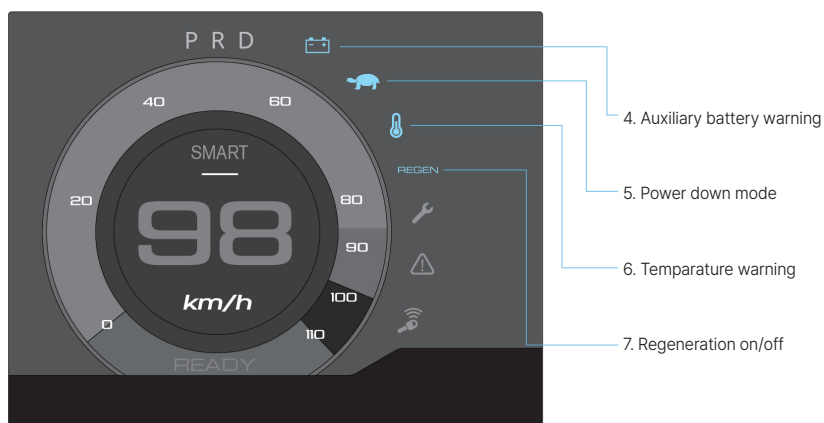
The cluster informs the driver of vehicle information such as the remaining battery level, vehicle speed, and vehicle status (errors).

When an error code occurs, a warning message is lit at the bottom of the screen along with the corresponding error code.

10.1 Notification symbol



1. Parking : When the red light is on, the motor is in a parking state and driving is impossible.
2. Reverse : When the reverse button is pressed, the red light is on.
3. Drive : When the vehicle is driving, the white light is turned on.

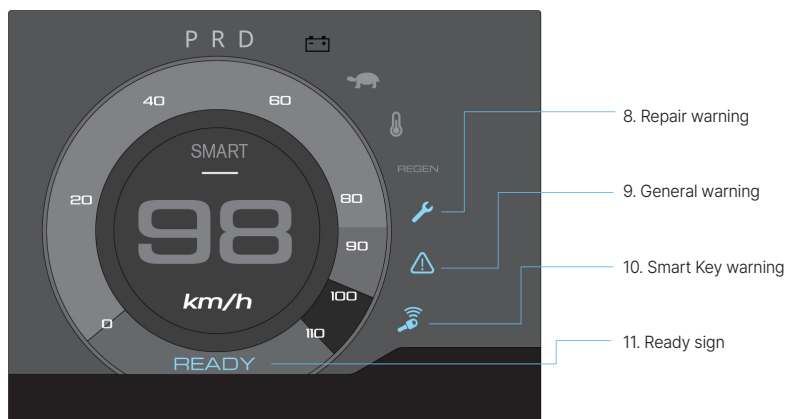


4. Auxiliary battery warning : When the auxiliary battery is faulty, it turns red.

5. Power down mode : Turns on green when the vehicle switches to low speed mode due to an error or low battery.

6. Temperature warning : Turns on when an error related to the drive motor, controller, or cooling system is detected. When the temperature rises, red lights up, and when the temperature goes down, it lights blue.

7. Regeneration on/off : Lights green when the regenerative braking function is activated.



8. Repair warning : When a fatal error is detected in the vehicle, it turns red. (Vehicle cannot be operated)

9. General warning : When an error is detected in the vehicle, it turns yellow. (Vehicle can be driven)

10. Smart Key warning : If the smart key is not near the vehicle, it turns red.

11. Ready sign : When the engine is running normally, the driving ready indicator lights up in green.

10.2 Warning symbol



Repair mode : A situation in which system damage is suspected and an immediate inspection is required.

Text	Action
STOP RIDING	Situation in which vehicle operation must be terminated due to an abnormality in the vehicle
SERVICE CENTER	A driver can drive, but the vehicle does not operate normally, or it is difficult to drive
CHANGE BATTERY	Situations that require battery replacement



Warning mode : Situation where it is possible to drive but needs inspection as soon as possible







Text	Action
CHECK SYSTEM	It is possible to drive, but the vehicle may not operate normally in the future, so an inspection is required as soon as possible.
SIDE STAND	The vehicle does not work because the side stand is lowered



Power down mode: Temporarily decreases the output. Please stop driving for a while and try driving again.

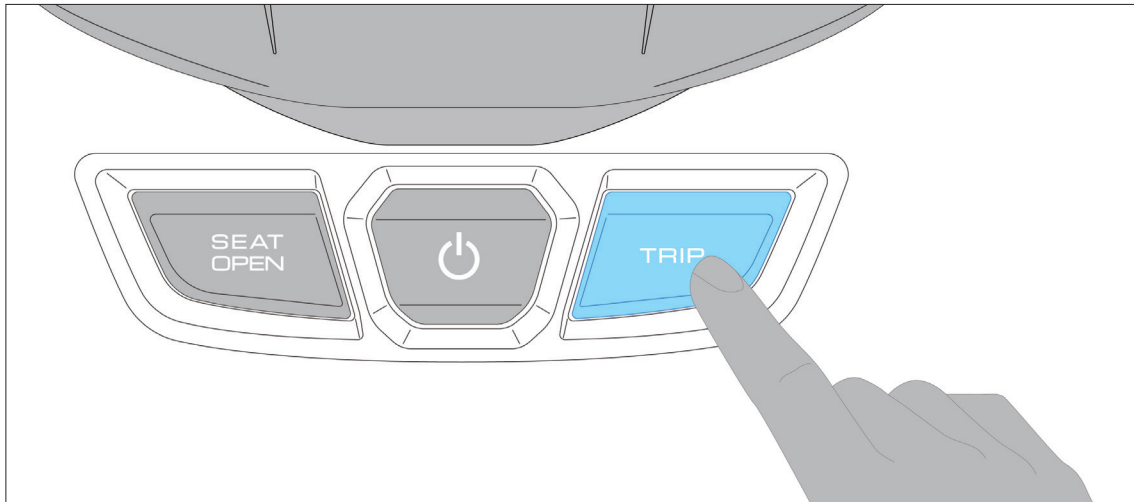
Symbol	Action
Symbol Lighting	In a situation where the output is lowered, stop driving and reboot the vehicle after a certain period of time.

10.3 Indicating Light

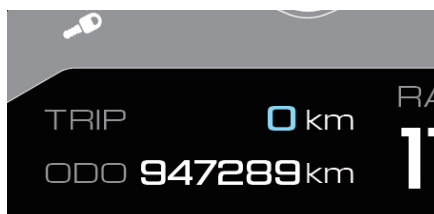
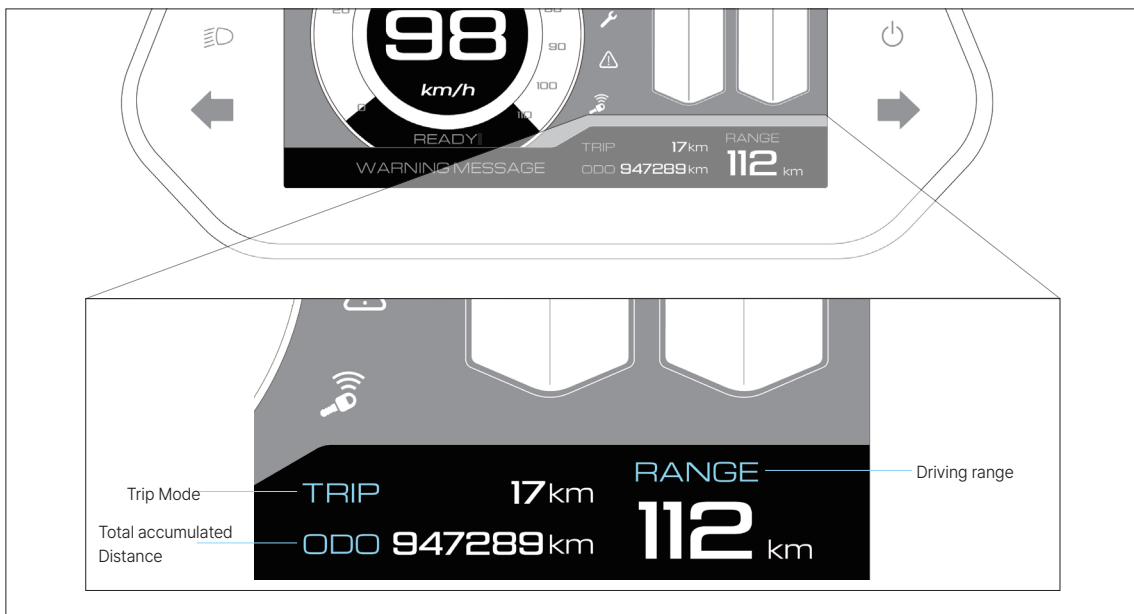
Icon	Name	Function Description
P	Parking	When the side stand is activated (when it goes down), it lights up and driving is impossible.
R	Reverse	When the reverse button is pressed, it turns red.
D	Drive	When the vehicle is running, it turns white.
READY	Ready sign	When the engine is started normally, the drivable indicator light turns green.
	Auxiliary battery warning	When the auxiliary battery is faulty, the red light is on.
	Warning lamp	Lights yellow when an error is detected in the vehicle. (Vehicle can be driven)
REGEN	Regeneration on/off	When the regenerative braking function is activated, the green light is on.
	Repair warning	When a fatal error is detected in the vehicle, it turns red. (Vehicle cannot be operated)
	Temperature warning	Lights up when an error related to the drive motor, controller, or cooling system is detected. When the temperature rises, the red light turns on, and when the temperature decreases, the blue light turns on.
	Smart Key warning	When the smart key is not near the vehicle, the red light turns on.
	PDM(Power down mode) : Low speed mode warning	If the vehicle's error, battery shortage, high/low temperature, over/low voltage and current are not normal operating conditions or the output is limited, the green light is on.

11. How to change the trip mode

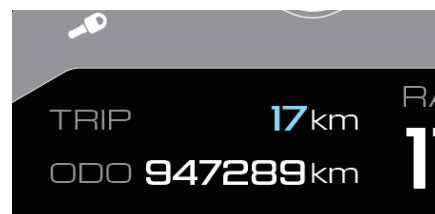
The trip mode informs you to figure out the driving distance.



- Press the TRIP button to reset the TRIP distance displayed on the cluster.



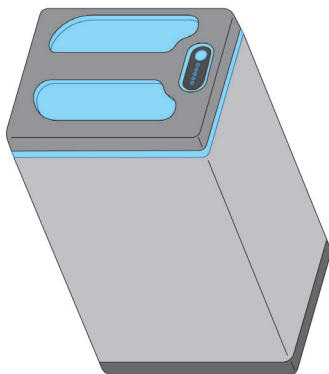
Start of Trip Mode



End of Trip Mode

- You can use the trip mode to know the distance between the starting point and the ending point.
- The accumulated distance [ODO] displays the total mileage from the start of the first operation of the vehicle.
- Driving range [RANGE] displays the distance that can be driven with the remaining battery power.

12. Dual Battery



The battery of E3 Mobility is a 48V dual battery pack and has the following features.

- Multi-layer safety protection: With the battery management system and solid physical protection, the safety of the battery can be maintained while storing a large amount of energy inside.
- Smart data storage function: You can record driving data, charging/discharging status, system status, etc. and check them through the app. Counterfeit batteries do not exist as charging and discharging also require strict certification to prevent battery theft.
- Battery change at the station: battery change at a nearby station is quicker and faster than refueling.

12.1 Battery Information

Information related to the remaining battery charge, driving range, and current status can be checked through the cluster and the app.

Parameter	Values
Nominal Voltage	51.8V
Number of Cell	14S6P
Total Capacity (DOD 93%)	27.62Ah (typ.) 26.78Ah (min.)
Total Energy (DOD 93%)	1.421kWh (typ.) 1.375kWh (min.)
Size	311±2.0 × 168±1.0 × 135±1.0mm
Weight	9.9 ±0.3 Kg
Un-mating Force of between Connectors (Male & Female connector)	80~100N
Ingress Rating	IP67
Transportation	UN38.3

12.2 Precautions for handling


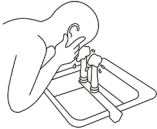



<ul style="list-style-type: none"> - Do not connect or disconnect without instructions. 	
<ul style="list-style-type: none"> - Do not disassemble or repair the battery arbitrarily. - Disassembling the charger will void the warranty. 	
<ul style="list-style-type: none"> - Do not place near open flame. - Do not wrap or cover the charger. Covering the charger may cause overheating, which may cause malfunction or fire. - Do not store or use the charger in a place exposed to a heat source or direct sunlight. 	
<ul style="list-style-type: none"> - Do not store or use the charger in damp or raining places. - Store and charge the charger in a well-ventilated, dry and dust-free place. 	
<ul style="list-style-type: none"> - Do not short the battery terminals. - Do not directly discharge the battery. 	
<ul style="list-style-type: none"> - Do not drop the battery. - Please be careful when handling it as it may be damaged by impact. - Do not dispose of the battery in heat or water, or drop, hit, disassemble, or destroy the battery. 	
<ul style="list-style-type: none"> - Do not stack batteries. 	

- The battery may become hot after a certain period of use. Please be careful when exchanging.
- Check that the connector on the battery is clean and free of attachments.
- Do not disassemble the battery and change its shape or structure.
- If you notice any abnormalities such as leakage, damage or deformation of the battery, stop using the vehicle, immediately turn off the motor and power, and contact the service center.
- When the charger does not work, check that the battery and charger are correctly connected, and that the AC power voltage of the charger meets the charging conditions, check the charger for overheating/overcurrent in turn, reconnect after a few seconds after disconnecting the power. If the solution is still not resolved, contact the service center.
- For storage, store the battery indoors rather than outdoors
- When storing the battery for a long time without removing it when not driving in winter, be sure to store the battery in a fully charged state.
- In the case of lithium-ion batteries, self-discharge is significantly less, but when stored for a long time in a state with insufficient charge (low voltage) of the battery, it may be over-discharged and, in severe cases, cannot be regenerated.

12.3 How to deal with an emergency while using the battery

If the battery leaks smoke, steam, hissing or electrolyte.	<ol style="list-style-type: none"> 1. Contact the Emergency Response Team. 2. Ensure the safety of your surroundings. 3. Evacuate from the danger area.
If the battery is overcharged or discharged	<ol style="list-style-type: none"> 1. Contact the emergency response team. 2. Ensure the safety of your surroundings. 3. Remove the battery from the charger. 4. Move the battery to a safe place. 5. Evacuate from the danger area.
If the battery is wet or submerged in water	<ol style="list-style-type: none"> 1. Contact the Emergency Response Team. 2. Ensure the safety of your surroundings. 3. Remove the battery from the charger. 4. Move the battery to a safe place.
If the battery has been dropped from a high place or the housing is defective.	<ol style="list-style-type: none"> 1. Contact the Emergency Response Team. 2. Ensure the safety of your surroundings. 3. Remove the battery from the charger. 4. Move the battery to a safe place.

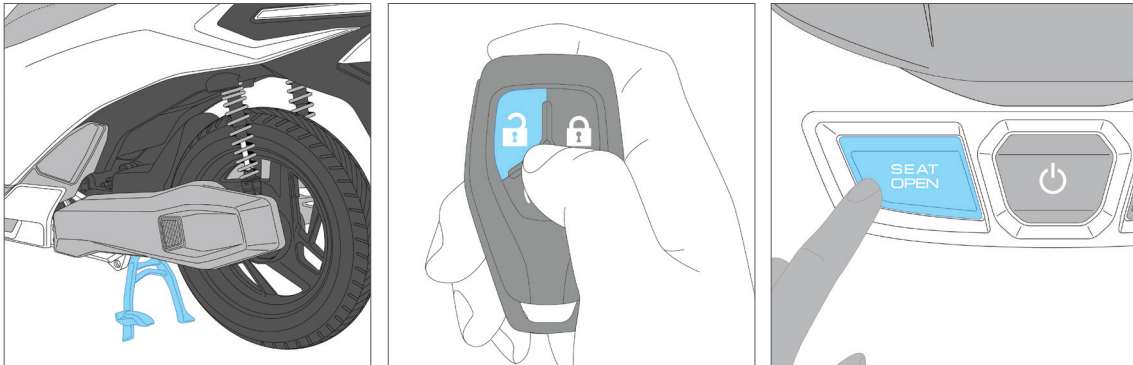
12.4 First aid procedures in emergency

In case of inhalation	Move person to fresh air and seek medical advice immediately.	
If it gets into your eyes	Flush eyes for at least 15 minutes with water and seek medical advice immediately.	
In case of skin contact	Remove contaminated clothing and flush the affected area for about 30 minutes with water and seek medical advice immediately.	
In case of ingestion	Drink two large glasses of water. Do not induce vomiting and seek medical advice immediately.	
In case of electrical shock	In case of burns cover wound sterile, do not use ointment or wadding and seek medical advice immediately. In case of unconsciousness, respiration detectable loosen tight fitting clothing, bring injured in the recovery position and seek medical advice immediately.	

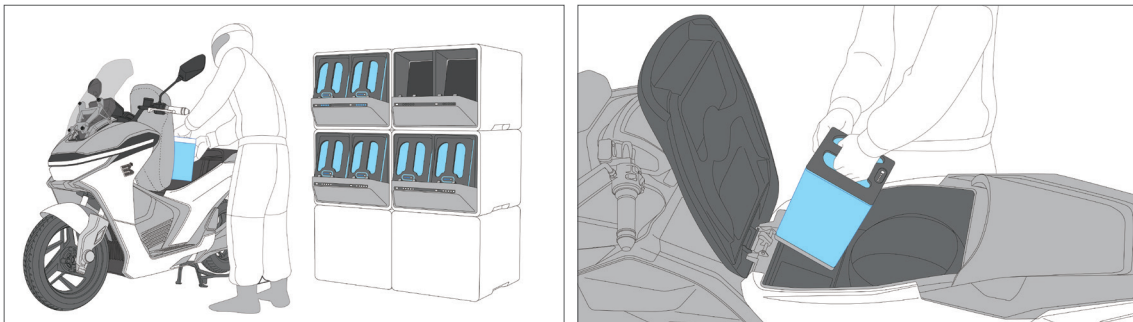
- The First Aid Procedures as illustrated above are just basic activities to counteract long term injuries in a general way. The exposed person must always be placed under professional medical care and observation, to avoid shock or hypothermia phenomena.

12.5 How to charge and replace the battery

1. Remove the battery from the vehicle.

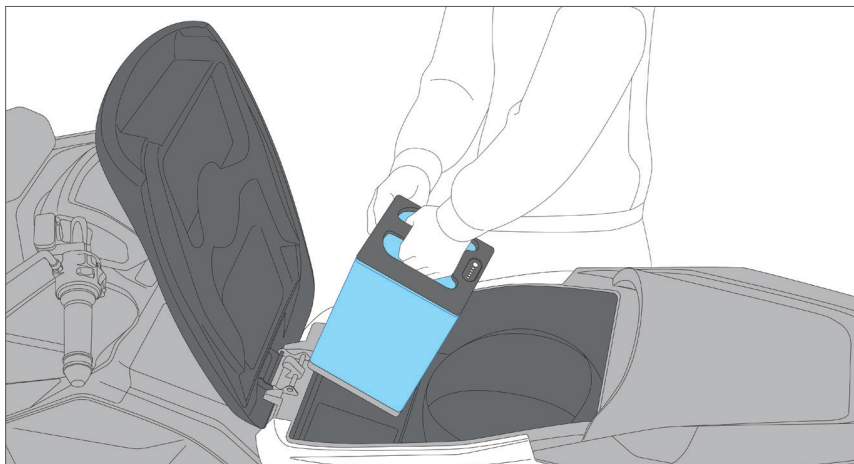


- Please park your vehicle using the main stand. Press the Seat Open button to open the lower cabinet.
(The lower cabinet does not open when the power is on, and the smart key is locked. Operate with the power off and the smart key unlocked)



- Grasp the handle of the battery and lift it out of the vehicle

4. Install the battery in the vehicle.



- If you put a new battery in the battery compartment, close the seat, and turn on the system power, the vehicle can be driven.

13. Cleaning and Maintenance

Through daily maintenance that a driver can do, the durability of the vehicle can be increased.

13.1 Parts Cleaning

- Clean the exterior with a soft cloth, sponge or brush moistened with water and detergent.
- To maintain a quiet and smooth chain, apply chain lubricant every 500 km, and also lubricate when passing through rain or puddles.
- Do not use organic solvents, strong detergents, acid or alkaline cleaners, abrasives, polishing pads, steel wool, metal brushes, or sandpaper to prevent damage to the external surface.
- Do not use wax or polish on the non-glossy surface, and do not strongly wipe or rub the exterior surface.
- Do not use a powerful water jet or blower to clean. High pressure or excessive humidity can ruin the vehicle.
- Do not use detergent or wax on brake parts to prevent brake damage.

13.2 Maintenance Tips

- Always keep the battery in the vehicle and close the seat cover to prevent damage to the battery.
- The vehicle may be damaged by sunlight and rain, so please park the vehicle in a dry, shaded, cool place if possible.

14. Daily Routine Checks

When inspecting, pay sufficient attention to safety. In the inspection area, set up the main stand on a flat surface before working. During inspection and maintenance, keep fire strictly prohibited, and be especially careful in the vicinity of the battery.

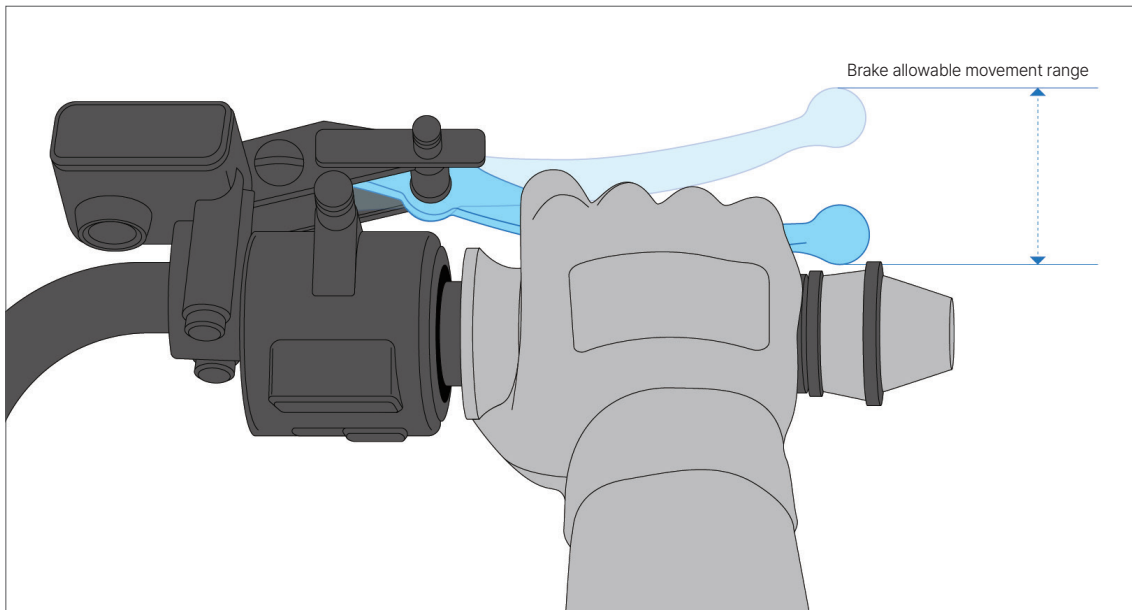
When a tool is needed for inspection and maintenance, use an appropriate tool.

For safety, perform inspection and maintenance within the range that suits your knowledge and skills, and visit the service center for difficult parts.

Checklist	What to check
Brake	<ul style="list-style-type: none">- Brake lever (operational state, The distance between handle and lever)- Brake pad (wear condition)- Rods and cables (loosening, rattling and damage)- Hose and pipe (oil leakage, damage, and installation condition)- Wheels (damage to rims and wheel discs)
Tire	<ul style="list-style-type: none">- Tire (air pressure, wear condition)- State of low speed and acceleration
Indicators	<ul style="list-style-type: none">- Lamps (lights, tail lights, instrument panel, blinker lights are working properly)
Abnormal during operation	<ul style="list-style-type: none">- Steering wheel (operational state)- Tightening of bolts and nuts- Speedometer operating status- Throttle grip operating condition- Operating status of each switch
Battery	<ul style="list-style-type: none">- Battery state of charge

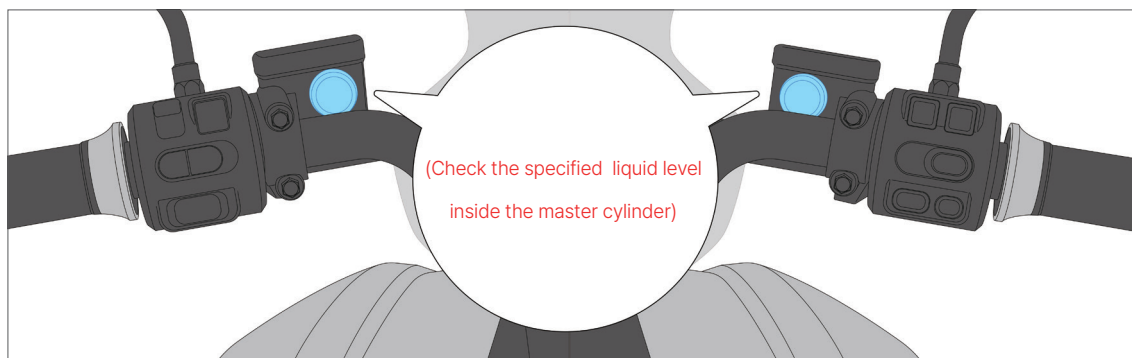
- Regular inspection, maintenance, and replacement of parts, such as tires and brake pads, that can be directly related to accidents if they are used until they are all worn out are important.

14.1 Brake check



Brake levers require an adequate allowable movement range. With the brake lever released, lightly hold the lever and pull until resistance is felt to check the allowable movement range. Check if the brake lever allowable movement range is not adequate or if the pulling force feels loose. Brake levers require an adequate allowable movement range.

* If the brake allowable movement range is long, the stopping distance is long and the reaction time is slow, which can become dangerous, if the allowable movement range is short, the stopping distance will be shorter, but it may adversely affect the brake system (pads, etc.). Be sure to follow the specified allowable movement range.



Put the main stand on a flat surface and inspect it. Check that the liquid level inside the master cylinder is above the specified line. If the brake fluid level decreases, the brake system is leaking, so immediately replenish the brake fluid for the brake hose and parts related to the brake hose connection part.

* When the brake fluid is lower than the specified line, braking force may decrease and an accident may occur. Please check the fluid condition as well as the wear condition of the brake pads.

* If the brake hose ruptures due to deterioration, aging, or tire interference, an accident may occur due to inability to brake, so please check it.

* Old rubber is more likely to become brittle and break. Check the elasticity and crack condition of parts made of rubber, such as brake hose, and replace those that are difficult to maintain until the next inspection to prevent malfunctions in advance.

14.2 Tire Inspection

Check the condition of the tire tread and check the air pressure. If the condition of the tire tread is abnormal, check it with a tire pressure gauge and adjust it to the specified air pressure.

- If the air pressure is low, the steering wheel may feel heavy or vibrate, causing severe tire wear and excessive fuel consumption.
- If there is a lot of air pressure, the steering wheel operation becomes lighter, but vibration is generated and the riding comfort is not good, the wear of the center of the tire may be severe.

Inspect tire treads and sides for cracks and damage

- Abnormal wear / Check if there is abnormal wear such as uneven wear on the tread of the tire.
- Foreign objects such as metal fragments and stones / Check the tread surface and side of the tire for nail, stone, etc.
- Check whether the depth of groove / groove depth is insufficient with the wear limit display, and if it appears with the wear limit display, as it has reached the limit of use, replace it with a new tire immediately.

If there is an abnormal air pressure, cracks, damage, or abnormal wear on the tire, the handle may shake and you may be injured by a rollover due to a puncture, therefore please carry out daily inspections.

- * If you install a tire that does not meet the standard, it may lead to an accident due to wear, puncture, and interference between the vehicle and the tire.
- * Please dispose of waste tires in a designated place.

15. Regular inspection and maintenance

Regular inspection and maintenance are essential for safe operation.

Since a vehicle is made up of many parts, parts deteriorate and wear out over a long period of time.

Inspection and maintenance predict changes in advance by checking the status, preventing major troubles in advance, and driving safely until the next inspection.

For each part maintenance check, please check before operation based on the checklist written in the user's manual.

Entry		3 months (500km)	6 months (3000km)	9 months (6000km)	12 months (12000km)	Remarks
●	Battery					
●	Controller					
●	Motor					
●	Throttle grip operation					
●	Brake liquid					
●	Brake operation					
●	Brake pad wear					
●	Brake device					
●	Headlight					
●	Side stand					
●	Nuts, bolt status					
▲	Wheel/ Tire					
▲	Steering wheel's					

● / If you don't have tools or maintenance data, or if you don't have the skills, get a maintenance check from our dealer or designated service shop.

▲ / For safety, get the maintenance check from our dealer or designated service shop

15.1 Warranty

- If the installed battery is damaged due to over-discharge because the battery has not been replaced for more than 30 days, if the vehicle is left outside for a long time, or if the seat is not closed for a long time, the warranty is not covered due to the user's negligence.

- Damage caused by the user's improper disconnection of the battery connector is the user's negligence and is not covered by the warranty.

15.2 Recall

The purpose of this system is to prevent accidents caused by defects in vehicle structure and equipment in advance and to protect customers.

If there is a concern that the structure, device, performance, etc. of the product manufactured by our company does not conform to safety regulations, it means that the product is repaired free of charge after notifying the Ministry of Land, Infrastructure and Transport. Even if it does not meet the security standards, if it is determined that there is a need for a response, a separate special service is provided.

15.3 Special Services Offered

Even if it does not meet the security standards, if we determine that it is necessary from the viewpoint of securing safety or if we determine that it is necessary for the purpose of improving product quality, we will contact the customer directly and repair it for free.

16. Troubleshooting Chart

TROUBLE SHOOTING				
Phase	Problem	Cause	Methods of diagnosis	Solution
Before POWER ON	CAN communication unavailable	BMS Non-operational	Check the battery level	BMS Charging
			Check the right mounting	BMS Case Check
			Charging attempt (CAN communication)	Replace the BMS
		MCU Non-Operational	Hardware Diagnostics	Controller Exchange
	High voltage cannot be formed	VCU Non-operational	5V Confirmation	Controller Exchange
		BMS Non-operational	Check the battery level	BMS Charging
			Check the right mounting	BMS Case Check
			Charging attempt	Replace the BMS
		MCU Non-Operational	CAN Diagnostics	Controller Exchange, Reprogramming
		Motor Non-operational	CAN Diagnostics	Check the inside/outside of the motor connector
		Wiring Harness	Wiring check	Replace the wiring part
After POWER ON	No engine start	Button failure	CAN Diagnostics / Hardware Checks	Replace parts
		KEY FOB	Key fob lock/unlock status check	KEY FOB Status Check
		Side Stand	Check your hardware	Raising the Side Stand
		Seat cover open	Check your hardware	Seat cover closed
Smart Key Non-Operation		Battery	Check your hardware	Replace the Battery
		Component failure	Check your hardware	Replace a part
Battery		The battery cannot be charged in the vehicle	Check your hardware	Replace the Battery
		Battery replacement in the vehicle	Case check	Parts check
		Vehicle battery not recognized	CAN Diagnostics	Replace the Battery
Bluetooth connection failed		Bluetooth failure	CAN Diagnostics	Parts Inspection
Cluster connection failed		Communication failure	CAN Diagnostics	Parts Inspection
		Component failure	Check your hardware	Parts Inspection
Lamps cannot be lit		Parts failure	Check your hardware	Replace a part
		Wiring failure	Check your hardware	Wiring check
Vehicle parts failure		Damage to vehicle parts	Check your hardware	Replace a part

17. After-sales Service

17.1 Inspection Service

- We provide inspection services for the safety of our customers.
- After the first inspection at the service center after 1,000 km or 2 months, it is recommended to perform regular inspection and maintenance every 3,000 km or 6 months. (Fee paid in advance)

Service mileage (x1,000 km)	1	4	7	10	13	16	19	22	25	28	31	34	37
See all functions	C	C	C	C	C	C	C	C	C	C	C	C	C
Part lubrication	L	L	L	L	L	L	L	L	L	L	L	L	L
Brake liquid	C	C	C	C	C	C	R	C	C	C	C	C	R
Gear Oil	R			R			R			R			R
Chain (when installed)	L / A	L / A	L / A	L / A	L / A	L / A	L / A	L / A	L / A	L / A	L / A	L / A	L / A
Belt (when installed)	C / A	C / A	C / A	C / A	R	C / A	C / A	C / A	R	C / A	C / A	C / A	R
Cooling system	C	C	C	C	C	C	C	C	C	C	C	C	C
Sprocket fixed plate	C	C	C	C	C	C	C	C	C	C	C	C	C
C: Check R: Replace A: Adjust L: Lubrication Check													

Service Cycle (Months)	2	6	12	18	24	30	36	42	48	54	60	66	72
See all functions	C	C	C	C	C	C	C	C	C	C	C	C	C
Part lubrication	L	L	L	L	L	L	L	L	L	L	L	L	L
Brake liquid	C	C	C	C	R	C	C	C	R	C	C	C	R
Gear Oil	R		R		R		R		R		R		R
Chain (when installed)	L / A	L / A	L / A	L / A	L / A	L / A	L / A	L / A	L / A	L / A	L / A	L / A	L / A
Belt (when installed)	C / A	C / A	C / A	C / A	C / A	C / A	C / A	C / A	C / A	C / A	C / A	C / A	C / A
Cooling system	C	C	C	C	C	C	C	C	C	C	C	C	C
Sprocket fixed plate	C	C	C	C	C	C	C	C	C	C	C	C	C
C: Check R: Replace A: Adjust L: Lubrication Check													

	Regular Inspection	Paid Inspection
Check Cycle	<ul style="list-style-type: none"> • 1 month after shipment • For 2 years one time per every 1 year after 1 month inspection (3 times in total) 	<ul style="list-style-type: none"> • Every 1 year after the free inspection period • Occasionally when an abnormality occurs while driving the motorcycle
Check Items	<ul style="list-style-type: none"> • Battery full charge check, chain belt tension • Brake oil, coolant level, tire air pressure and more • Check of driving speed and cluster • Periodic checklist items in the regular check notebook other than the above 	<ul style="list-style-type: none"> • Check battery charge status and drive component performance • Items with quality problem
Cost	<ul style="list-style-type: none"> • In case of vehicle abnormality: free of charge (limited to 2 year warranty parts) 	<ul style="list-style-type: none"> • E3 Parts and Mechanic Repair Costs (by company policy)

17.2 Onsite Service

- If the customer's vehicle is inevitably unable to operate, we provide prompt service by emergency dispatch at the request of the customer.
- When requesting onsite service, please be aware that there may be delays or changes depending on the circumstances of the service shop.
- In case of paid repair, a round-trip travel fee will be charged.

17.3 Happy Call Service

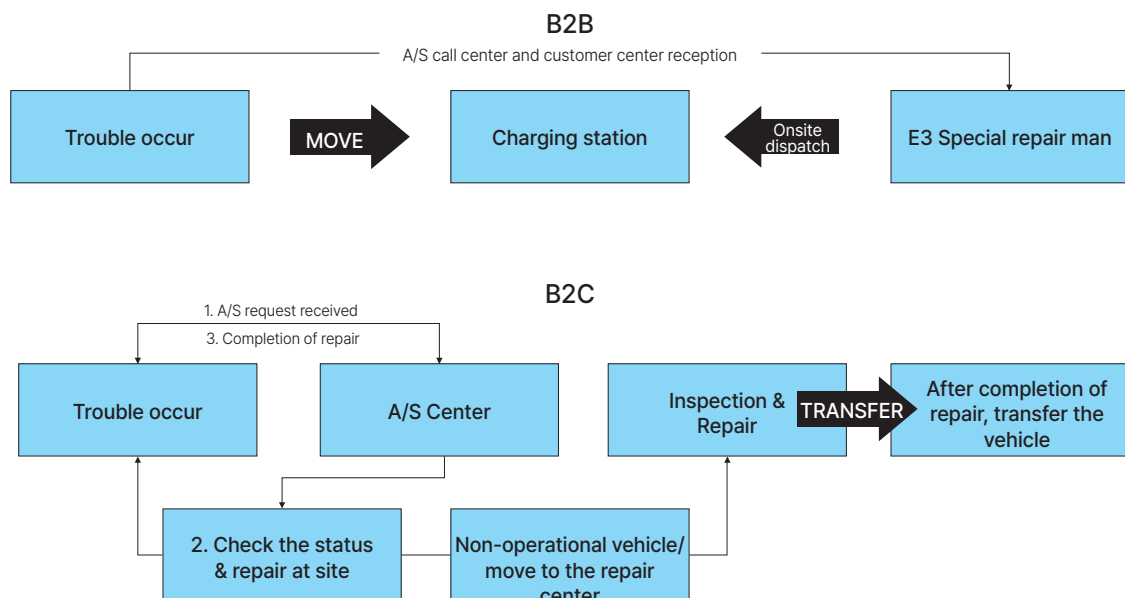
- If an abnormality occurs in the vehicle, the driver can determine the condition of the vehicle through a telephone inquiry.
- When a customer receives a repair, we are improving the quality of the service by checking whether the customer is satisfied through a 1:1 confirmation phone call about the condition of the vehicle within 2-3 days.

17.4 Service Center

For the service center, reservations and vehicle information can be searched through the website.

The A/S service center homepage operates a resource center for trouble diagnosis and countermeasures, E3 user manual, periodic checklist, recall information, etc.

The service center provides on-the-spot service, and customers can undergo vehicle inspections depending on the situation.



17.5 Where to Buy Genuine Parts

- Be sure to use genuine parts to extend the life of the vehicle and maintain its performance in good condition.
- You can purchase genuine parts from dealers, service centers, and website.

18. Warranty

18.1 Terms of Warranty

The motorcycle sold by E3 Mobility Co., Ltd. is designed and manufactured to comply with all motorcycle-related laws and regulations, so if you manage and use it according to the inspection and maintenance intervals and usage guidelines specified in the user manual, the vehicle will always be safely maintained in optimal condition and best performance. We guarantee as follows in accordance with our warranty regulations and related laws such as the Consumer Protection Act.

Under the warranty, products delivered from E3 Mobility to customers can be repaired free of charge for defects that occur within the warranty period when operated under normal use and correct maintenance conditions.

To receive warranty repairs, please be sure to fill out the warranty registration form.

When receiving warranty repairs or other inspections, please bring your warranty registration certificate and product warranty to the service provider.

*Warranty repairs are made by replacing or repairing parts, but the defective parts replaced at this time are the property of our company.

18.2 Contents of Warranty

Products delivered from E3 Mobility to customers fall within the warranty repair period when the vehicle is normally maintained and used in accordance with the inspection and maintenance cycle and usage guidelines in the issued user manual, if the technical analysis reveals that the failure is due to a defect in the material or workmanship of each component constituting the vehicle, the vehicle will be repaired or replaced free of charge.

In the event of significant defects related to driving and safety, etc., with a vehicle that is not used for a for-profit corporation or individual business purpose, we guarantee it in accordance with the Consumer Damage Compensation Regulations.

18.3 Warranty Period

- 1) Damaged parts due to consumer's fault or negligence are not covered by the warranty.
- 2) The warranty period applies only when both the period of use and mileage are within the warranty period.
- 3) The warranty period is applied from the date of delivery of the new vehicle, and if either of the warranty period or mileage expires first, the warranty period is deemed to have expired.
- 4) For warranties of defects or defective parts, reasonable treatment must be taken as soon as possible after the defect is discovered, and the vehicle must arrive at the service center designated by E3 Mobility Co., Ltd. within normal business hours to determine the defect.

* For details, please refer to the product warranty certificate or list of parts covered under warranty.

Category	24 months 30,000km	12 months 10,000km	Parts Excluded from Warranty
Dedicated parts	<ul style="list-style-type: none"> - Traction motor - Motor Control Unit (MCU) - Vehicle Control Unit (VCU) - Electronic Water Pump (EWP) - DC-DC converter - Heat Exchanger (Radiator) 	<ul style="list-style-type: none"> - Other (coolant reservoir tank) 	<ul style="list-style-type: none"> - Consumable parts
Body frame	<ul style="list-style-type: none"> - Frame Body - Steering Stem - Handle bar - Casting wheel - Front / Rear Cushion - Main stand - Side stand - Cables (throttle, brake, cluster) 	<ul style="list-style-type: none"> - Brake Lever - Brake Caliper - Brake panel - Seat - Rearview mirror - Covers 	<ul style="list-style-type: none"> - Tire - Accessories - Brake shoe /pad - Brake Disc - Hoses / Piping - Consumable parts
Electric parts	<ul style="list-style-type: none"> - Cluster - Smart Key - Wire Harness - Various switches 	<ul style="list-style-type: none"> - Headlight - Taillight - Horn 	<ul style="list-style-type: none"> - Consumable parts
Scope	It is 24 months from the date of purchase. Even within this period, if the mileage exceeds 30,000 km, the warranty period is deemed to have expired.	It is 12 months from the date of purchase, and even within this period, if the mileage exceeds 10,000 km, the warranty period is deemed to have expired.	

18.4 Exclusions from the Warranty

Even within the warranty period, warranty is not provided for the following items.

1. Failure that occurred after repair at a general repair shop not designated by our company
 2. Failure due to improper use ignoring the instructions in the user manual
(Exceeding the maximum load capacity, exceeding the number of passengers, etc.)
 3. Failure caused by using parts other than genuine parts designated by our company
 4. Failure caused by an accident and failure caused by the impact of the accident
 5. Malfunctions caused by the user's inexperienced operation or careless handling
 6. Damage caused by negligence of regular inspections specified by our company
 7. Damage caused by arbitrarily disassembling and remodeling to change the performance, deformation of the body, deformation of suspension, deformation of electric and light equipment, etc.
 8. In case the exact mileage cannot be determined by arbitrarily manipulating the operation and accumulated distance due to a malfunction of the odometer
 9. Failures caused by natural disasters (typhoons, floods and fires, etc.) and damage that occurs over time
(Natural discoloration of the painted surface, peeling of the surface plate, and other natural aging)
 10. Consumables required for vehicle operation as follows are worn out parts and are not covered by the warranty.
Fuse tubes, strip fuses, light bulbs, exterior parts, tires, front and rear brake discs and pads, plastic, and rubber products (seal strips, seal tapes, rubber plugs, rubber footrest pads)
 11. Damage to the vehicle caused by the misuse of lithium-ion batteries is not covered under warranty.
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- If the vehicle has been exposed to a temperature of 49°C or higher for more than 24 hours
 - If the vehicle has been stored at a temperature of -25°C or lower for more than 7 days
 - When the vehicle is left unattended for more than 3 months with the lithium-ion battery discharged or nearly discharged
 - Lithium-ion battery in contact with flame
 - In the event of physical damage to the lithium-ion battery or intentionally shortening the life of the battery.
 - When a lithium-ion battery is partially immersed in water or other liquid
 - If you do not follow the correct charging method
 - If the lithium-ion battery has been disassembled or serviced at a place other than the designated service center
 - If you use an incompatible charger
 - In case of serious damage caused by failure to repair the battery

18.5 Duties of the vehicle owner

1. For safe riding, be sure to read the user's manual before riding.
2. For safety, refer to the user's manual before riding and check for any abnormalities in each part.
3. If there is a problem during use, please contact the service center.
4. Be sure to wear protective equipment such as a helmet before driving.
5. When starting, be sure to raise the side stand before starting.
6. Please obey the Road Traffic Act when driving.
7. On days with poor visibility or on slippery roads, reduce your speed and maintain a safe distance.
8. Please refrain from driving on deep-water roads. Passing water at wheel axle height may damage the motor, battery, and other accessories.
9. Do not disassemble the vehicle arbitrarily.
10. When replacing parts, purchase genuine parts and contact the service center.
11. For the safety of others and to avoid damage to the vehicle body, do not hand over the vehicle to a person unable to drive.
12. Please keep the User's manual safe.
13. The maximum occupancy of this vehicle is 2 people. It is not possible to board more than 3 people.
14. Drive only on paved roads. Off-road driving is not possible.
15. This user manual is a permanent document for Deux 7. When transferring to another person, be sure to transfer it together with the user's manual.
16. No part of this user manual is permitted to be altered or reproduced.

WARNING: Failure to properly read the user's manual may result in serious injury or damage to the vehicle body.

CAUTION: Do not drive above top speed and use your brakes carefully. Always use the side stand or main stand when parking.

18.6 Conduct of warranty repair

1. This warranty is issued only for motorcycles sold by our company at the time of delivery of the new vehicle and is valid only for those with the seal of our company.
2. The place of warranty repair is limited to the service center designated by our company, and the parts are genuine parts of our company.
3. If the customer wishes to receive warranty repair, the customer must present the vehicle and warranty to the person in charge of warranty repair who is normally working at the service center in paragraph (2) above.

* After the motorcycle is shipped, even if the specifications for the same motorcycle are changed, there is no obligation to apply the changed specifications to the motorcycle that has already been shipped.

18.7 Succession of Warranty

If the owner changes due to the sale or donation of the vehicle within the warranty period, the warranty can be inherited only for the remaining warranty period, so the successor must also take over the warranty for the vehicle.

If there is any interpretation difference in the matters described in this warranty, it will be handled at the discretion of E3 Mobility Co., Ltd.

18.8 Certificate of Warranty

Vehicle receipt, warranty certificate receipt				
Customer	Full Name*	(seal)	E-mail*	
	Date of Birth*		Gender	M, F
	Address*			
	Telephone number	() -	Mobile Phone*	
Usage	<input type="checkbox"/> For commuting to school <input type="checkbox"/> For commuting to work <input type="checkbox"/> Short-distance travel <input type="checkbox"/> For leisure <input type="checkbox"/> Rural & fishing villages <input type="checkbox"/> For delivery <input type="checkbox"/> For work <input type="checkbox"/> For quick service <input type="checkbox"/> Traditional market <input type="checkbox"/> Other ()			
Vehicle name			Date of Registration	Y M D
Vehicle identification number				

19. Customer Center

19.1 E3Mobility Homepage on the website

If you visit our website, you can get various information about E3mobility.

19.2 Customer Center

If you have any questions, you can inquire on the website or by phone.

Homepage – Menu – Customer Center

Land line number:

19.3 A/S Center

A/S centers in Korea can be visited without a separate reservation with a total of n number of places, if you make a reservation, you can receive the service quickly. (This part varies by branch, so please inquire.)

The land line number of each branch office

Metropolitan Area: ~

Provincial Area: ~