

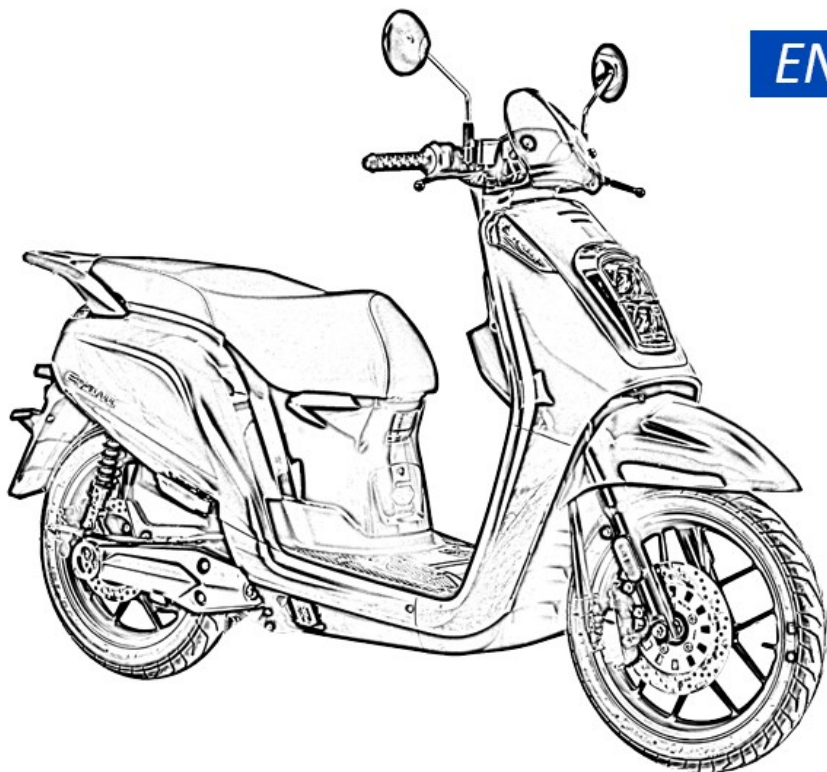


NIPPONIA

EN

*Owner's manual*

***E-VIBALL***



# Owner's Manual

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***E-VIBALL***

**Nipponia S.A.**

Thank you for purchasing the E-VIBALL scooter. This model is designed for safety, built for durability and perfected for daily street use.

The superior vehicle design and built-in technology will meet your expectations for an economical and eco-friendly lifestyle.

This Owner's manual contains basic instructions on how to operate, inspect and maintain your scooter. Please read it carefully and thoroughly. Correctly operating, maintaining and repairing your scooter will minimize any possible risks and result in its best performance.

The authorized Nipponia service points will be glad to provide you with more detailed instructions.

Important information contained in this manual is marked using the following symbols:

## **WARNING**

Important information or instructions. Failure to follow these instructions may result in heavy damage to your scooter, serious injury or even death.

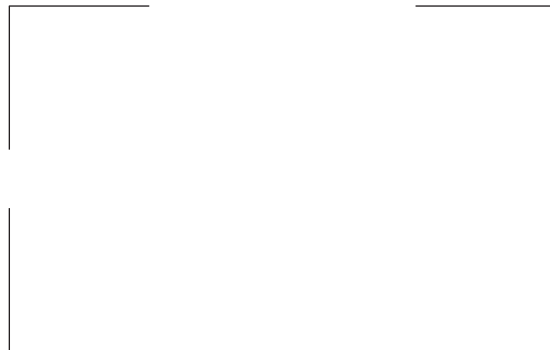
## **CAUTION**

**Important information or instructions. Failure to follow these instructions may result in damage to your scooter or minor injury.**

## **CAUTION**

- This manual is an integral part of the scooter and must always accompany it, even in the event of a resale.
- If you have any questions concerning the contents of this manual or need further information regarding the operation of your scooter, do not hesitate to contact your local Nipponia dealer.
- This booklet is compiled with the latest available information. However, due to constant improvements, modifications or alterations may be made without prior notification. Updated versions can be downloaded from the Nipponia website [www.nipponia.com](http://www.nipponia.com)

**Note:** Product and specifications are subject to change without prior notice.



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## Safe riding

1. Always perform the pre-operation inspection before driving.
2. The scooter should not be used by anyone who does not hold a valid driving license.
3. Many accidents involve motorcycles not seen by other drivers, so please pay attention to the following:
  - Wear brightly-coloured clothes.
  - Do not drive too close to other vehicles or in another driver's blind spot.
  - Avoid overtaking.
4. Always follow local traffic regulations.
  - Driving above the speed limit is the reason for many accidents. Driving speed must not exceed the limit specified by traffic regulations and allowed by road conditions.
  - Always signal when turning or changing lanes in order to attract the attention of the other drivers.
5. Never drive under the influence of alcohol or other drugs; it dramatically increases the risk of accidents.
6. Exercise special attention when driving over crossroads or parking area exits.
7. When driving you must hold the handlebars with both hands and place your feet on the footboard. The passenger should hold the handgrips or the driver and place his feet on the pillion steps.
8. This scooter is designed for on-road use only. It is not suitable for off-road use.

## Protective clothing

1. For your safety, the driver and passenger should both wear helmets. Use of additional safety apparel (gloves, glasses, protective wear) is recommended.
2. Do not wear loose clothing, as it may be caught by the handle levers, the kick starter or the wheels and could lead to an accident.

## Vehicle modifications

Making any modifications to the scooter or replacing the original components can affect its performance and safety and/or render it illegal for use. Observe applicable laws and all national and local regulations concerning vehicle equipment. Additionally, such modifications will cancel the warranty.

## Loading

Adding accessories or cargo to your scooter can adversely affect stability and handling if the weight distribution of the scooter is changed. Use extra care when riding a scooter with extra load. Here are some general guidelines to follow when loading cargo or adding accessories to your scooter:

1. All accessories must be fastened securely on the vehicle in order to minimize vibration that could cause instability.
2. Any extra load should be placed as close to the gravity centre as possible and must be equally distributed on both sides of the scooter to avoid imbalance and instability.
3. The tyre pressure must be adapted to the weight of the load and road conditions.
4. Make sure that any extra load is securely attached to the vehicle to prevent it from falling and being lost.
5. Do not hang any load on the handlebars or the suspension.
6. The total weight of the driver, passenger, accessories and cargo must not exceed the maximum load limit of the scooter.

**Maximum load: 160 kg**

(Total weight of rider, passenger, cargo and accessories)



## Accessories

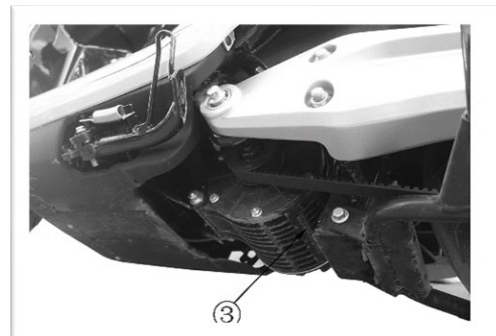
When installing accessories not approved by Nipponia, attention should be paid to the following points:

1. The installation of the accessories must not affect the suspension travel, the light position and the steering angle.
2. Avoid installing any accessories that could hinder your access to vehicle controls and movement of your hands and feet as it could impair your reaction in an emergency event.
3. Do not install a bulb with higher power than that specified. It could burn the fuse or cause problems to the electrical system due to low voltage.
4. Do not add a sidecar to the scooter.

## Serial number



1. VIN
2. Frame plate
3. Motor number



## Left side view

1. Side stand
2. Main stand
3. Left pillion step
4. Rear grip
5. VIN



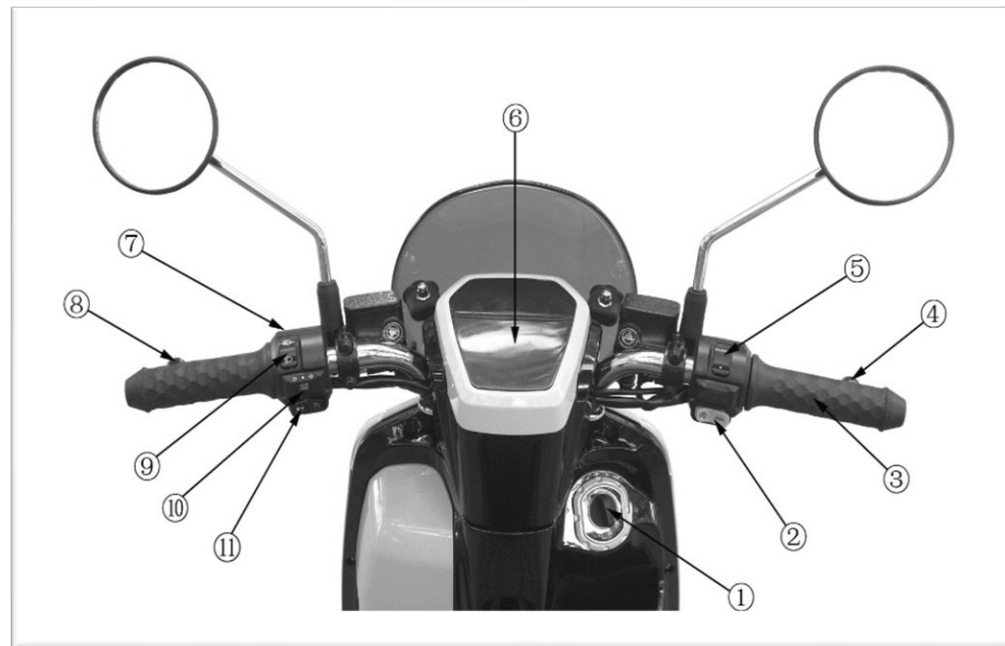
## Right side view

1. Charging port
2. Right pillion step
3. Luggage box



## Controls and instruments

1. Ignition switch
2. Start / Gear button
3. Throttle grip
4. Front brake lever
5. Hazard lights switch
6. Dashboard unit
7. Overtaking switch
8. Rear brake lever
9. High / Low beam switch
10. Turning switch
11. Horn / Cruise control button



## SMART KEY

This motorcycle is equipped with a keyless system. You can lock/unlock your vehicle remotely without using a key.



Smart key

1. “Unlock”: Press this button to unlock the system. A blue light on the ignition switch and the rear light will flash for 5 seconds, meaning that the motor can be activated. After 5 seconds, if you do not turn the switch, the vehicle will be locked again.
2. “START”: Press this button to locate your vehicle. The blue light of the switch and the rear light will flash 8 times. Also, the alarm will beep once.
3. “Lock”: Press this button to lock the vehicle. Then the alarm system will be immediately activated.

### **⚠ WARNING**

The smart key can be effectively operated up to 1.5 meter. The frequency range can reach 20m in an open space. The physical makeup of the surrounding environment (hills, trees, buildings, etc.) may affect the maximum frequency range.

#### Caution:

- If the smart key is soaked with fuel, grease or liquid please wipe it off immediately to avoid any damage.
- Do not dismantle the smart key, except for the battery replacement.
- If you lose the smart key, contact your local dealer for key replacement.
- Do not store mobile phone and other radio emitting devices in glove/storage compartments; radio frequency from this device may interfere with the smart key system.
- If the smart key is within the frequency range of the motorcycle, anyone can unlock the ignition switch to start the engine. To secure your motorcycle when you park, turn off the power switch.

## Notice:

- Smart key is an electrical device. It may not work normally if the electrical circuit is damaged.
- Do not let the smart key falling to the ground or put any load on it.
- Keep the smart key away from direct sunlight, high temperature or humidity.
- Do not scratch or puncture it.
- Do not store it with magnetized parts.
- Keep the smart key away from electrical device such as TV, Radio, Computer or Low frequency devices.
- When washing the motorcycle, keep the smart key away.

## MAIN SWITCH / STEERING LOCK

The main switch/steering lock controls the ignition and lighting systems. It is also used to lock the steering wheel. The main switch can be turned to the following positions:

### LOCKED

Turn the main switch from “OFF” to the “LOCKED” position. The steering is locked and cannot be turned, the motor and the electrical system are off.

### ON

All electrical circuits are supplied with power and the motor is active.

### OFF

The motor and the electrical system are off



## SEAT

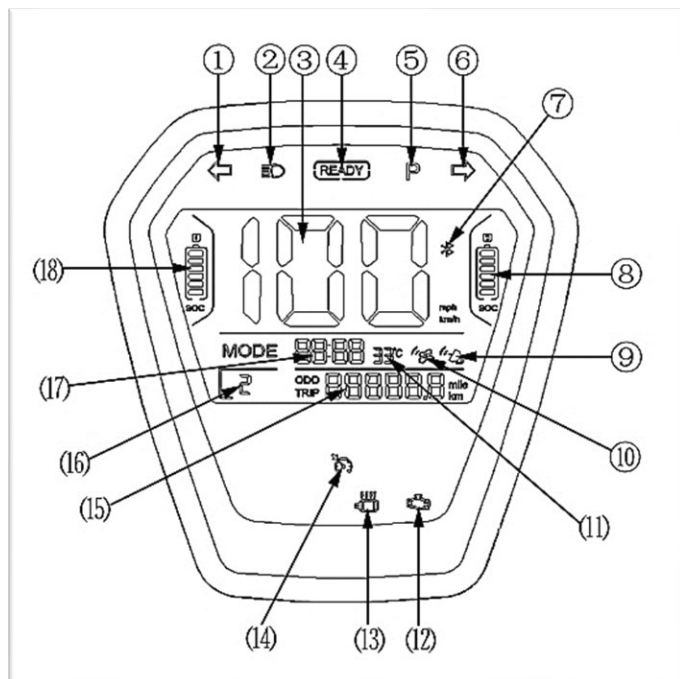
Turn the main switch from “OFF” to the “SEAT” position and press it to open the seat. The motor and the electrical system are off.

# MAIN COMPONENTS

EN

## ⚠ WARNING

Never turn the main switch to OFF or LOCK position, while the vehicle is moving, otherwise the electrical system will be switched off, which may result in loss of control or an accident. Make sure that the vehicle is stopped before turning the main switch. To turn the switch to ON or SEAT position you must first turn the switch to OFF position.



## DASHBOARD UNIT

### Left turn signal indicator (1)

The left turn signal indicator flashes whenever the turn signal switch is pushed to the left side.

### High beam indicator (2)

Indicates that the high beam switch is in ON position.

### Speedometer / Trouble code (3)

The speedometer shows the riding speed or the trouble code when there is problem with the motor.

### READY indicator (4)

After pressing the start button and the motor is active, this indicator is on. The "READY" indication remains on during driving.

### P-gear indicator (5)

This indicator is on when the side stand is on the ground.

### Right turn signal indicator (6)

The right turn signal indicator flashes whenever the turn signal switch is pushed to the right side.

### Bluetooth indicator (7)

This indicator is on when your mobile phone connects to the smart APP via Bluetooth function.



## **Battery 2 level gauge (8)**

The battery level gauge indicates the power remaining, on the left battery pack, before re-charging is required. When the last dash flashes, the power remaining is less than 15%.

## **Mobile network signal strength (9)**

When the network signal is strong, the indicator is always on. It flashes when the signal is weak.

## **GPRS signal strength (10)**

When the GPRS signal is strong, the indicator is always on. It flashes when the signal is weak.

## **Environment temperature indicator (11)**

It displays the environment temperature.

## **System failure (12)**

This indicator is on when the power system failure affects driving.

## **Power system overheat (13)**

This indicator is on when the power system temperature affects driving.

## **Cruise control indicator (14)**

This indicator is on when the scooter is in constant speed cruise mode.

## **Odometer (15)**

The odometer shows the total distance traveled and the trip distance is reset every time the main switch is turned off.

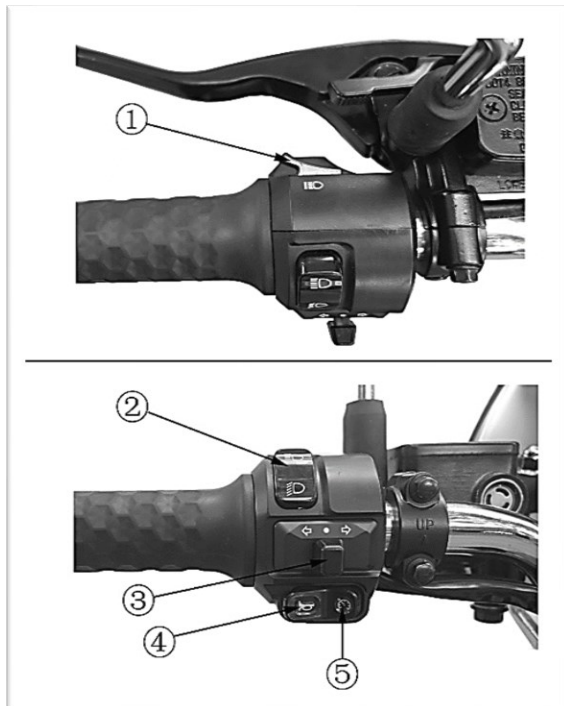
## **Gear indicator (16)**

Displays the current power train drive gear.

## **Clock (17) - Displays the current time.**

**Battery 1 level gauge (18)** - The battery level gauge indicates the power remaining, on the right battery pack, before re-charging is required. When the last dash flashes, the power remaining is less than 15%.

## HANDLEBAR SWITCHES - LEFT



1. Overtaking switch, 2. High / Low beam switch  
3. Turn signal switch, 4. Horn button,  
5. Cruise control button

### Overtaking switch (1)



Use this switch when you consider overtaking. While the switch is pressed, the high beam is on. When released, the low beam is on. This switch can be also used at night to increase visibility.

### High/Low beam switch (2)

Set the switch to position  for the high beam.

Set the switch to position  for the low beam.

### Turn signal switch (3)

Push this switch to  position to signal a left-hand turn or to  position to signal a right-hand turn. To turn-off the signal lights press the switch in the central position.

### Horn button (4)

Press this button to sound the horn.

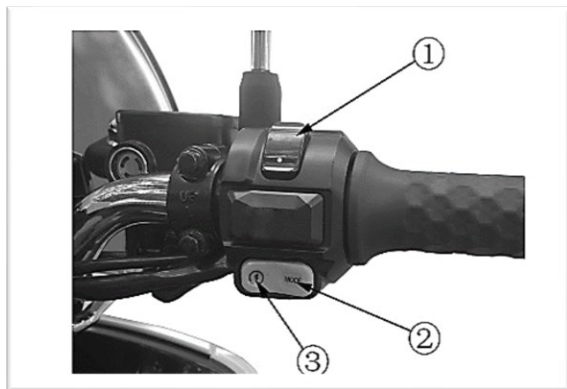
### Cruise control button (5)

This model is equipped with a cruise control system, designed to maintain a constant cruising speed. Press the cruise control button to activate cruise control functionality. It is available on all versions of L3e (75km/h) and L1e (45km/h) categories. Whenever the front or rear brake is applied, the cruise control function will be deactivated.

## ⚠ WARNING

- Do not activate the cruise control button in heavy traffic or in bad weather conditions.
- Do not activate the cruise control button when travelling uphill or downhill.

## HANDLEBAR SWITCHES - RIGHT



### **Hazard lights switch (1)**

Press this switch to turn on both signal lights.

### **Gear switch button (2)**

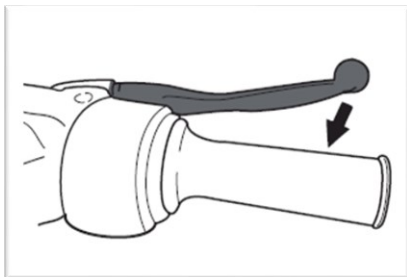
Press this button to switch gear (not available on 25 km/h version)

### **Start button (3)**

Press this button to activate the motor.

1. Hazard lights switch, 2. Gear switch button,  
3. Start button

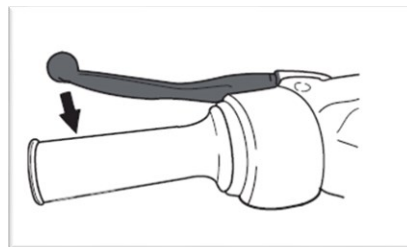
## FRONT BRAKE LEVER



The front brake lever is located on the right handlebar grip.

To apply the front brake, pull this lever towards the grip.

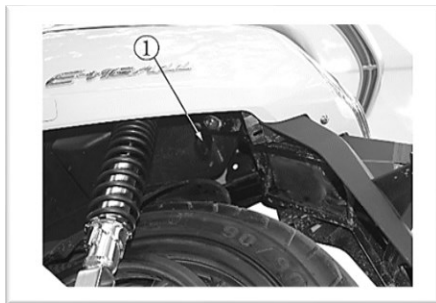
## REAR BRAKE LEVER



The rear brake lever is located on the left handlebar grip.

To apply the rear brake, pull this lever towards the grip.

## EMERGENCY MECHANICAL KEY



**Emergency mechanical key (1)**

This scooter is equipped with an emergency mechanical key.

The emergency mechanical key is used to open the seat in case of emergency.

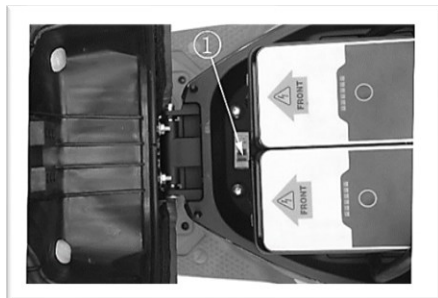
Insert the key into the seat lock at the bottom left side and rotate clockwise to open the seat lock.

To close the seat, lower the seat and push the rear part of the seat until you hear a clicking sound. This indicates that the seat is locked.

### CAUTION

Do not store the emergency mechanical key in the luggage box.

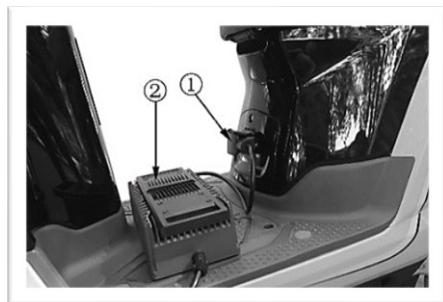
## POWER SWITCH



The power switch is located at the front of luggage box, under the seat.

If the vehicle remains inactive for a few days, you should turn off the power switch to maximize battery life.

## CHARGER AND CHARGING SOCKET



With the vehicle you will also receive a charger (2) to charge the battery of the vehicle. If the battery level gauge on the dashboard unit drops below two dashes, recharge the vehicle as soon as possible.

The charging socket (1) is located at the front of the seat and is directly connected to the battery (ies).

## SMART APP

View vehicle information anytime and anywhere.

- Comprehensive riding information
- Intimate vehicle service management
- Real-time dynamic experience
- Customized user interface

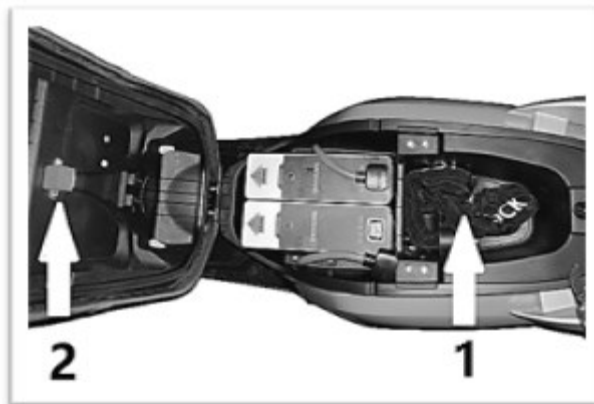
Please scan the QR code with your mobile phone, download and install the Smart app according to the separate instructions and enjoy intelligent travelling.



For more details about the Smart app, please read the manual for the Smart App. You can download it from [www.nipponia.com](http://www.nipponia.com).

## LUGGAGE BOX

The luggage box (1) is located under the seat. Its maximum loading capacity is 5kg.



Under the seat you will find an LED light (2). It is a sensor light that is activated by lifting the seat. Do not forget to remove the adhesive tape from the battery for first-time use. The LED light uses one CR2032 button battery.

### CAUTION

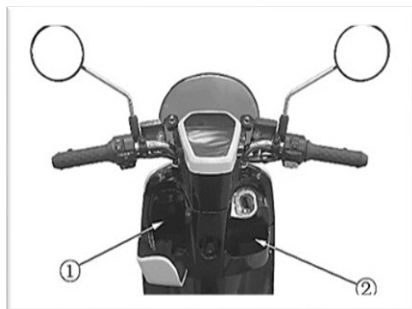
The luggage box is heated by the sun. Additionally, it is not entirely waterproof. Do not keep sensitive or valuable items inside the compartment.



# MAIN COMPONENTS

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## GLOVE COMPARTMENT



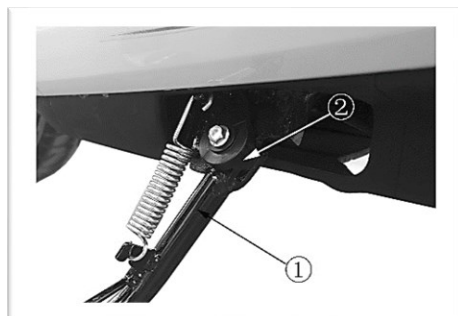
Push and then pull down the small lid of the left glove compartment to open it.

### CAUTION

Do not exceed the maximum load of 1kg in the glove compartment.

Left glove compartment (1),  
Right glove compartment (2)

## SIDE STAND



The side stand is located on the left side of the vehicle. Release the side stand by using your foot to step on the bracket of the side stand to set the vehicle in the upright position.

### CAUTION

The side stand retracts automatically when lifted. Make sure that your vehicle is stable enough when it is resting on the side stand.

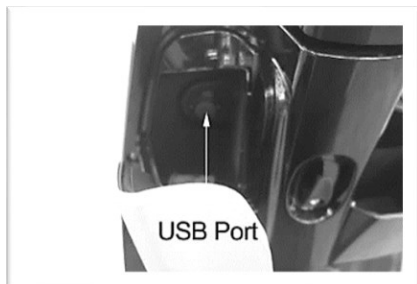
Avoid using the side stand to park the vehicle on slope level or soft ground.

Side stand (1), Side stand switch (2)

## **⚠ WARNING**


The side stand switch is a cut-off switch and is applied for your safety. It is used to prevent the starting of the motor when the side stand is down. If you do not raise the side stand the motor can not be started. Also when you are in motion and you put the side stand down, it will cut the engine off. It operates as a safety switch.

## **USB port**



The USB port is located in the left glove compartment. It provides 5V-2A output to charge your phone or other electronic devices.

## **CAUTION**

- The USB port is active only when the ignition switch is in  position.
- The port is not waterproof. Do not use it when it is raining.
- Do not use the device in very high temperatures.
- Do not use your mobile phone when charging.
- When USB port is not in use, cover it with the protective cap.

## BATTERY

This model can carry two 61.2V 28.6AH Li-ion batteries. The model can be purchased with either one or two batteries depending on country of purchase.

### CAUTION

Battery can be used at -10°C up to 45°C ambient temperature.

The operating capacity of the battery varies depending on the ambient temperature. The specific reference attenuation degree is 70% at -10 °C, 85% at 0 °C, 100% at 25 °C.

When using only one battery, make sure that the battery is positioned at the right side of the vehicle and connected to the cable at the right side. Before connecting the cable, first turn the main switch to OFF position and then turn-off the power switch.

The battery can be charged in two ways:

### 1. Charging with the battery removed

Charge the battery directly by removing it from its compartment. Connect the charger to the battery and connect the charger to a 220V power outlet.

### 2. On-board charging

Plug the scooter directly, without removing the battery, by connecting the charger to the socket at the front of the seat. Charge the battery (ies) as follows:

1. Make sure that the battery that needs to be charged is positioned correctly, according to the instructions above.
2. Connect the vehicle cable plug to the battery.
3. Insert the power cord of the charger into the charging socket.
4. Insert the other side of the power cord of the charger into a wall outlet.

## WARNING

While charging, the indicator light on the charger is RED. When the charging is complete the indicator light will turn to GREEN. If the GREEN light is flashing, it means it is in stand-by mode, indicating that no battery is detected.

## CAUTION

- To avoid any damage to the battery, use only the charger provided with your electric scooter.
- The charging environment should be dry, low temperature and ventilated. The recommended ambient temperature for charging procedure is 0°C - 35°C.
- Charge the battery frequently and avoid “Deep Discharge”. For maximum battery life, keep the battery level between 20% and 80%.
- Charge the battery for 5-7 hours depending on the frequency of use. Daily charging is recommended to ensure your vehicle has full power and can be used at any time.
- Avoid using your electric scooter when the battery charge indicator is at one dash.
- The battery is sealed and is NOT user-serviceable.
- The scooter includes a safe mode. As the battery discharges, the vehicle’s maximum speed drops to help the driver reach his destination. With 15% of battery life remaining, the scooter’s maximum speed will be reduced to 40 km/h or 20 km/h, depending on your vehicle version (L3e or L1e), see the table below. It is recommended that you charge the battery before it runs into this reserve.

## Charging the battery for the first time

1. Remove it from the battery compartment.
2. Connect the charger to the battery first and then connect the charger to a 220V power outlet.
3. Do a full 100% battery charge for the first time, checking the LED on the charger.
4. Repeat the same procedure for the first 4-5 charges. This will ensure that the battery will reach its full capacity.

## **⚠ WARNING**

- If the battery overheats (e.g. after long distance), avoid charging it as soon as you arrive – wait at least 15 minutes before connecting it to the charger.
- The Li-ion battery can not be charged below 0°C, the charging will stop. Charge the battery at a normal ambient temperature.
- The charger should be used only indoors. Avoid use in direct sunlight, heat or while raining.
- When the green light is on, disconnect the charger from the power supply.

## **SOC (State of Charge) of battery in relation with driving speed**

Below you will see how the driving speed decrease in relation with the SOC of battery, depending on the vehicle version. The indication of SOC in percentage (%) can be viewed through the Smart App.

### **1. L3e version (max. speed 75 km/h)**

SOC (%)	Max. speed (km/h)	SOC (%)	Max. speed (km/h)
100	74	50	69
95	74	45	67
90	74	40	66
85	74	35	65
80	74	30	64
75	73	25	63
70	73	20	61
65	71	15	56
60	70	10	42
55	70	-	-

2. L1e version (max. speed 45 km/h)

When SOC is at 25% the max. speed remains at 45km/h. Below 25% the max. speed decreases linearly with SOC reduction. At 10% the max. speed is 20km/h.

3. L1e version (max speed 25 km/h)

No change at the max speed in relation to the SOC reduction.

## Charging and discharging mode when 2 batteries are connected

1. General principle

When the 2 batteries' SOC is at a similar level, the 2 batteries are considered as a battery pack and discharged equally.

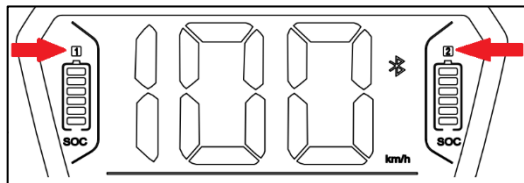
When the 2 batteries' SOC is not at a similar level, the higher SOC battery will be discharged first until it reaches the lower SOC of the 2<sup>nd</sup> battery. When the 2 batteries' SOC become equal, they will start to discharge together.

2. Charging and discharging mode

The charging and discharging mode of the batteries can be expressed in relation to the Voltage (V) and the SOC (%) of the batteries. The values of voltage and SOC can be viewed through the smart app. The condition that relates both values is common in both charging and discharging modes.

Condition	$ V1-V2  \leq 2V$ AND $ SOC1-SOC2  \leq 15\%$
Discharging mode	If the battery pack does not meet the condition, the higher voltage battery should be discharged first, until the battery pack meets the condition. Then the two batteries will start to discharge together as a battery pack.
Charging mode	If the battery pack does not meet the condition, the lower voltage battery should be charged first, until the battery pack meets the condition. Then the two batteries will start to discharge together as a battery pack.

## 3. SOC indication on the dashboard



There are 2 numbers (“1” & “2”) displayed at the top of the SOC dashes. When one number is displayed, it means the respective battery discharges. If there is no number displayed at the top of SOC, it means the battery is not discharging. If both numbers are displayed, it means that both batteries discharge together as a battery pack.

### CAUTION

The rated voltage is 61.2V. However, during charging and discharging, the voltage fluctuation should be between 47.6V and 71.4V. The voltage of full power should be 71.4V and the voltage of empty power should be 47.6V.

### Additional information

1. During the first use, fully discharge and then fully charge your battery (ies). After 2-3 times of charging and discharging (cycles), the battery will be balanced and the indications on the dashboard will be accurate.
2. The battery charge should be kept at least 20% until the next charge. Charging on time can prolong the battery life.
3. In normal use, it is recommended to start slowly and gradually accelerate. In this way, the distance range will be extended.
4. The actual capacity of the battery and the display on the dashboard may differ with the battery aging.
5. Discharge the battery regularly (no more than 3 months).
6. It is recommended to check the power plug of the battery every two months to ensure the condition of the connector. In case of carbon deposition or oxidation consult your local dealer.

## BATTERY STORAGE

If you do not use your vehicle for a long time, set the power switch to OFF position. Remove the battery (ies) from your vehicle. During this time, the batteries need to be charged once every 3 months at least to 50%.

- The battery should be stored in a dry, clean, and ventilated place. Keep away the direct sunlight and heat, by at least 2 meters. Ambient temperature should be between 5°C and 40°C.
- During the storage period, SOC should be kept between 50% and 80%.
- Please do not put the battery pack upside-down or drop the battery from a height. Also please avoid exerting any kind of shock or great pressure to any of its sides.

## WARNING

- Storing a battery that is out of charge may cause irreversible damage to the battery.
- Avoid contact with sparks, open flames, cigarettes, etc., and maintain enough ventilation when storing in a confined space.
- **STORE ALL BATTERIES OUT OF REACH OF CHILDREN.**

## CHARGER

The charger is used to charge the battery. In case of failure or other problems while charging, it is necessary to check whether the charger and other related parts are damaged. When the charger detects a fault, the indication light placed on the charger will flash. The following table shows the main failures and possible causes:



# BATTERY INFORMATION

EN

Charger state	Indicator state	Fault case
Standby	Green light flashing	No lithium battery pack detected
In charging	Red light comes on	In charging, no fault
Fully charged	Green light comes on	Fully charged, no fault.
Over voltage (current) fault	Red light flashes twice then go out for 3s (Cycle)	Output voltage is higher than 78V
Environmental temperature too higher or too lower	Red light flashes thrice then go out for 3s (Cycle)	Temperature is lower than -10°C or higher than 40°C
Charger overheats	Red light flashes four times then goes out for 3s (Cycle)	The temperature of the charger is more than 65°C
Output is under-voltage	Red light flashes five times then goes out for 3s (Cycle)	The battery voltage is lower than 38V
Abnormal input AC	Indicator light goes out	Input AC voltage is lower than 176Vac or higher than 264Vac
Other failure	The red-light flashes	The Charger internal fault

Note: Indicator flashes once for 1s, lights for 0.7sec. and turns off at 0.3s

## Pre-operation inspection

Always perform the pre-operation inspection, before driving your scooter.

It is important that pre-operation checks are carried out each time the vehicle is used. The procedure is simple and enhances the safety of the driver. Failure to do so, may result in vehicle damage or an accident.

If any item in the Pre-operation check list is not functioning properly, have it inspected and repaired before operating the vehicle. If you cannot correct or repair yourself, take the vehicle to your local dealer immediately.

## PRE-OPERATION CHECK LIST

CHECKPOINT	INSPECTION
Throttle grip	<ul style="list-style-type: none"><li>• Make sure that the operation is smooth. It should be able to turn smoothly and be fully opened and closed.</li><li>• If necessary, contact an authorized Nipponia service center.</li></ul>
Wheels and tyres	<ul style="list-style-type: none"><li>• Check tyre condition and wear.</li><li>• Check for any potential damage to the wheels or tyres.</li><li>• Inspect the air pressure of the tyre and adjust if necessary.</li></ul>
Brake levers	<ul style="list-style-type: none"><li>• Make sure that operation is smooth.</li><li>• Lubricate the lever joints if necessary.</li></ul>
Side stand	<ul style="list-style-type: none"><li>• Make sure that operation is smooth.</li><li>• Lubricate pivot if necessary.</li></ul>
Instruments, lights, signals and switches	<ul style="list-style-type: none"><li>• Check operation.</li><li>• If necessary, contact an authorized Nipponia service center.</li></ul>

Note: If you need assistance on how to perform any of the above -mentioned tasks, do not hesitate to contact an authorized Nipponia service center.

## WARNING

Before riding the vehicle, please make sure that you are fully familiar with all operating controls & their functions. Consult your local Nipponia dealer if you need more assistance.

## ACTIVATING THE MOTOR

1. Hold the smart key near to the scooter.
2. Press the main switch for 1 second to pair with the key. The blue light on the ignition switch will start flashing.
3. Turn the main switch to the ON position to activate the motor. The blue light will light.
4. Press the start button and the READY indication will light on the dashboard unit.
5. Push the vehicle off the main stand.
6. Keep at least one foot to the ground to support the scooter.
7. Adjust the rear-view mirrors.
8. Before taking off, turn on the signal light and make sure it is safe to go.

## BRAKING

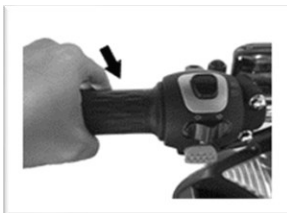
When you need to brake:

1. Close the throttle completely.
2. Apply both front and rear brakes simultaneously while gradually increasing the pressure.

**FRONT**



**REAR**



### **WARNING**

- Avoid braking while turning, otherwise the vehicle may skid or fall.
- When driving on a wet or slippery road the braking distance is longer than usual. Reduce the driving speed and brake in advance or you may lose balance and fall.
- Braking is more difficult on a wet road or on a downhill. Use both brakes alternatively, maintaining a low speed.

## **PARKING**

When parking:

1. Switch on the turn signal light in advance and check for approaching vehicles.
2. Close the throttle grip and apply the brakes slowly, so the brake light will turn on and warn vehicles from behind.
3. When the vehicle stops, switch off the turn signal light.
4. Turn the main switch to OFF position to turn off the motor.
5. Rest the scooter on the main stand.
6. To prevent from theft, always lock the steering when parking.

To lock the steering stem:

- Turn the steering to full left (or right).
- Press the main switch and turn it to “LOCKED” position. The steering is locked. After 5 sec the vehicle will be locked and the anti-theft system will be activated after 30 sec.
- To unlock, turn the main switch to “OFF” position and turn the steering to right (or left).

## **WARNING**

- Park the scooter on a flat and stable surface to prevent it from falling.
- When you park on a slope, position the scooter facing upwards to prevent it from falling.
- Avoid parking on a slope or soft ground, as the vehicle may fall.

## **CAUTION**

The condition and the good operation of your scooter depends on how frequently you perform the correct maintenance, periodic inspection, adjustment and lubrication. The following instructions will help you to keep your vehicle in a good condition.

## **WARNING**

- If you are not familiar with the maintenance work, contact with your local Nipponia dealer.
- Maintenance, replacement or repair may be performed by an authorized Nipponia service point.
- Making any modifications to the scooter or replacing the original components can affect its performance and safety and even make it illegal for use. Modifications will also cancel the warranty.

## **ANTITHEFT SYSTEM**

The anti-theft system is designed to protect your motorcycle from theft and vandalism.

1. When the main switch is not turned to “ON” position and the blue light is flashing, press the lock button on the smart key. The buzzer beeps once and the left and right turning lights will flash once. The antitheft mode is activated directly.
2. If you do not turn the main switch back to “ON” position within 5 seconds, then the antitheft mode is activated after 30 seconds.
3. When the vehicle is in antitheft mode and an unusual vibration or force applies to your vehicle or the main switch, then the buzzer and the left and right turning lights will beep and flash for 5 seconds making a warning sound.
4. When the motorcycle is in the antitheft mode, the warning can be deactivated by pressing the unlock button of the key.
5. Sensitivity of antitheft function can be adjusted through smart App.

## TYRES

To maximize the performance, durability and safe operation of your vehicle, always check the tyre pressure. Cracks, damage and wear on the tyres cause unsteady steering or even tyre blow-out. Note that the tyre pressure is measured with cold tyres, ideally when the temperature of the tyres equals the ambient temperature.

### Tyre pressure

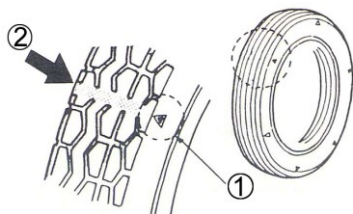
The tyre pressure must be checked and, if necessary, regulated before each ride, according to the following table:

Tyre pressure in cold state <b>Front: 225 kPa</b> <b>Rear: 225 kPa</b>
--

### WARNING

The tyre pressure must be adjusted in accordance with the riding condition (rider, passenger, cargo, accessories) and the road condition.

## Tyre wear condition



Check the tread wear indicator (1) which is a triangle imprinted on the side of the tyre. It points to a line of rubber that is built into the tyre that runs across the tread (2). If you notice this line is in the same level with the top of the tread grooves, you will need to replace the tyre.

If you are not familiar to this, please ask your local Nipponia dealer to help you.

### WARNING

- Do not overload your vehicle, since it will increase pressure on the tyres, affect braking and steering and may cause damage or even lead to an accident.
- Make sure that any extra load is securely attached to the vehicle and the weight distributed evenly from side to side to prevent it from falling and being lost.

### WARNING

- The tyres must be checked before each ride. If a tyre tread shows crosswise lines (minimum tread depth) or has a nail or glass fragments in it or if the sidewall is cracked, replace the tyre immediately.
- Have a dealer replace the tyres, especially the rear one as the electric motor is mounted on the rear wheel.



## Rim and Tyre information

Rim and tyre dimensions are shown in the following table:

**Front Tyre: 80/90-14"**

**Rear Tyre: 90/90-14"**

**Type: tubeless**

## Rims

The rims must be checked before each ride. If any damage is observed, then replace the rim immediately. Do not attempt even the minimum repair to the wheel. A deformed or cracked wheel must be replaced. Given the fact that the electric motor is mounted on the rear wheel, any damage, deformation or crack may be dangerous for the vehicle's balance.

### CAUTION

- The wheel should be balanced when the tyre or rim has been changed or replaced. An unbalanced wheel may result in poor performance, adverse handling characteristics and a shortened tyre life.
- After changing a tyre, drive at medium speeds until the tyre is broken-in, to get some traction.

## BRAKES

The scooter is equipped with hydraulic disk type front and rear brakes. Periodic maintenance and adjustment of the braking system should be performed to prevent accidents.

### CAUTION

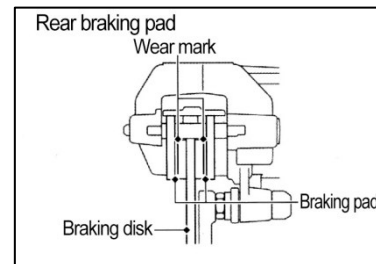
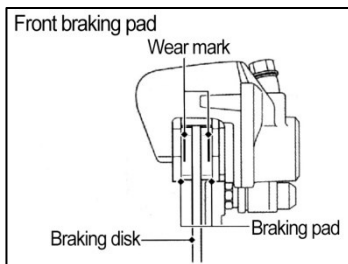
There should be no free play at the brake lever end. If there is free play, contact your Nipponia local dealer.

### ⚠ WARNING

A soft or spongy feeling in the brake lever can indicate the presence of air in the hydraulic system. If there is air in the hydraulic system, have a dealer bleed the system before operating the motorcycle. Air in the hydraulic system will diminish the braking performance, which may result in loss of control and an accident.

## BRAKE PADS

The front and rear brake pads must be checked for wear at the intervals specified in the periodic maintenance and lubrication chart.



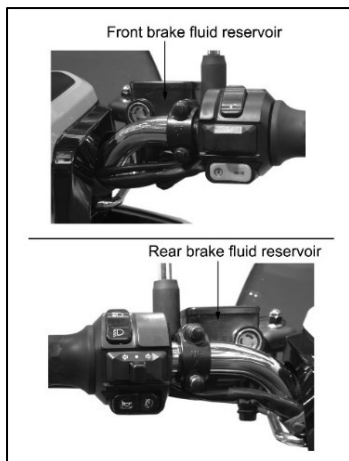
## Front and rear brake pads

Each front brake pad is provided with wear indicators, which allows you to check the brake pad wear without having to disassemble the brake. To check the brake pad wear, check the position of the wear indicators while applying the brake. If a brake pad has worn to the point that a wear indicator almost touches the brake disc, have a dealer replace the brake pads as a set.

## BRAKE FLUID

### WARNING

Insufficient brake fluid may allow air to enter the brake system, possibly causing it to become ineffective.



Before riding, check that the brake fluid in both reservoirs is above the minimum level mark and refill it if necessary. Low position brake fluid level may indicate worn brake pads and/or brake system leakage. If the brake fluid level is low, be sure to check the brake pads for wear and the brake system for leakage. When checking the fluid level, make sure that the top of the master cylinder is level by turning the handlebars. Use only the recommended quality brake fluid, otherwise the rubber seals may deteriorate, causing leakage and poor braking performance.

- It is suggested to use the same type of brake fluid. Mixing fluids may result in a harmful chemical reaction and lead to poor braking performance.
- Be careful that water does not enter the master cylinder when refilling. Water will significantly lower the boiling point of the fluid and may result in vapor lock.
- Brake fluid may deteriorate painted surfaces or plastic parts. Always clean up spilled fluid immediately.

- As the brake pads wear, it is normal for the brake fluid level to gradually go down. However, if the brake fluid level goes down suddenly, have a dealer check.

Recommended brake fluid:  
Brake Fluid DOT4

## Changing the brake fluid

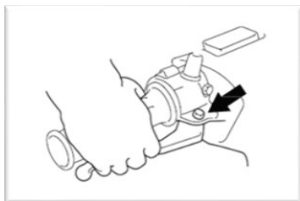
### WARNING

Have a dealer change the brake fluid at the intervals specified in the note, after the periodic maintenance and lubrication chart.

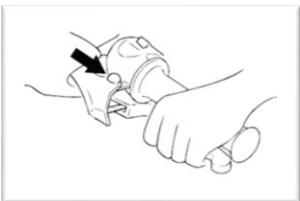
## LUBRICATING THE LEVERS

The pivoting points of the front and rear brake levers must be lubricated at the intervals specified in the periodic maintenance and lubrication chart.

### Front brake lever



### Rear brake lever



## TROUBLESHOOTING

Although the vehicles receive a thorough inspection before shipment from the factory and again prior to delivery to you, trouble may occur during operation. However, should your vehicle require any repair, take it to a dealer, whose skilled technicians have the necessary tools, experience, and knowhow to service the vehicle properly.

Use only genuine replacement parts. Imitation parts may look like parts, but they are often inferior have a shorter service life and can lead to expensive repair bills.

## CLEANING THE VEHICLE

Maintaining the vehicle clean, apart from keeping it attractive, will extend its lifespan and optimize performance.

### Before cleaning

Close all caps, covers, electrical connectors that are well install and water can be avoided to get into and remove the batteries, while you do the clean job.

### WARNING

- Please take notice that all functions of your scooter are based on electricity. Failure to seal all appropriate components as described before washing can lead to serious damage.

### CAUTION

- Do not use acid-based cleaners. If such funds used for stubborn stains, so use this only occasionally, dry it immediately after and then apply a corrosion protection spray.
- Always follow the manufacturer's instructions on care and cleaning agents.
- Use best only water and mild detergent or special cleaner from the dealer to the sensitive components of the vehicle to prevent damage. Dry the plastic parts then wipe with a soft, dry cloth or sponge.
- Protect particularly plastic parts, paint, headlight glass from harsh chemicals such as fuel, rust remover, brake cleaner or similar. The use of such agents may result in malfunction, damage and affect the security itself.
- Do not use a high-pressure washer or steam cleaner, causing water in storage can penetrate electrical components such as connectors or switches, lighting, and brake linings or damage, seals, paint and other surfaces.

## **Cleaning after normal use**

Remove dirt with warm water, a mild detergent, and a soft, clean sponge, and then rinse thoroughly with clean water. Use a toothbrush or bottlebrush for hard-to-reach areas.

## **Cleaning after riding in the rain, near the sea or on salt-sprayed roads**

### **CAUTION**

Since sea salt or salt sprayed on the roads during winter are extremely corrosive in combination with water, carry out the following steps after each ride.

- Clean the vehicle with warm water and a mild detergent.
- Do not use hot water, which increases the corrosive effect of the salt.
- Apply a corrosion protection spray on all metal, including chrome- and nickel-plated, surfaces to prevent corrosion.

## **After cleaning**

- Dry the vehicle.
- Wax all painted surfaces.

### **⚠ WARNING**

- Make sure that there is no oil or wax on the brakes or tyres.
- If necessary, clean the brake discs and brake linings with a regular brake disc cleaner and wash the tyres with warm water and a mild detergent.
- Before operating the vehicle, test the braking performance and tyres.



## STORAGE

### Short-term (for a few days)

- Always store your vehicle in a cool, dry place and protect it against dust with a vehicle cover.

### WARNING

Store the vehicle in a well air flow room with dry air if possible. A place with humidity will cause rust.

### Long-term (for weeks)

- Clean the vehicle.
- Lubricate all control cables and the pivoting points of all levers and pedals as well as of the side stand/ main stand.
- Check and, if necessary, correct the tyre air pressure, and then lift the vehicle so that both of its wheels are off the ground.

Alternatively, turn the wheels a little every month in order to prevent the tyres from becoming degraded in one spot.

- If you do not use the vehicle for a long time, set both power switches to OFF position. Remove the batteries and store them in a dry place with temperatures between 25°C and 45°C for optimal function. During this time, the batteries need to be charged once every three months up to 60%.

## SPECIFICATIONS

Motor	1500W (L1e)	3000W (L3e)
Battery	Li-ion 1 X 61.2V/28.6Ah	Li-ion 2 x 61.2V/28.6Ah
Maximum Range (km)	60 (80)	110 km
Motor controller	Vector (FOC)	Vector (FOC)
Maximum Power (kW/rpm)	2.0 kW @ 1250 rpm	3.0 kW @ 2600 rpm
Maximum Torque (Nm/rpm)	14.8 Nm @ 1250 rpm	11.0 Nm @ 2600 rpm
Full Charge Time (h)	8	8
Maximum Speed (km/h)	45 (25)	75
Gradeability Capacity	23%	23%
Front/rear brake	Disc	Disc
Front tyre	80/90-14	80/90-14
Rear tyre	90/90-14	90/90-14
Seat height (mm)	750	750
Weight (kg)	93	96
Wheelbase (mm)	1260	1260
Overall size (mm)	1850x690x1140	1850x690x1140
Charger (A)	8	8

Please read carefully the instruction manual of your vehicle before operating it in order to make yourself familiar with its handling. We explicitly point out that the instruction, maintenance, and care instructions given in the user's manual have to be complied with, in order to sustain your claims towards warranty. Only the strict compliance with the customer specifications stated in the user's manual ensures the prolonging of the natural life of your vehicle.

For more details regarding the warranty information, you may visit [www.nipponia.com](http://www.nipponia.com).

# MAINTENANCE SCHEDULE

EN

The Warranty can be granted only if the vehicle has been serviced in accordance with this maintenance schedule.

The inspection intervals are required, otherwise, no warranty can be granted.		After 1000 km	Every 3000 km	Every 6000 km	Remarks
PART	TO DO				
Common check (refer to page 33)	Inspect	I	I		
Throttle and grip	Inspect	I		I	
Fittings, buttons and seals	Inspect / adjust	I/A		I/A	
Front and rear brake pumps	Inspect	I		I	
Front and rear suspension system	Inspect	I		I	
Wires and connectors	Inspect	I		I	
Bearing of front and rear wheels	Inspect / replace	I		I	
Tyre condition	Adjust / clean	A/C	A/C		
Controller	Clean	C		C	
Charger	Clean	C		C	
Bearing of front fork	Adjust / clean	A/C		A/C	
Brake assembly - Lubrication	Inspect	I		R	
Brake fluid - Lubrication	Inspect / Replace	I			Replace every 10000 km.
Suspending system - Lubrication	Inspect	I		I	
Battery terminal - Lubrication	Inspect	I		I	
Bearing of front fork - Lubrication	Inspect	I		I	
Drive belt	Inspect / Replace				Inspect every 10000km. Replace every 15000 km.
A - ADJUST / C - CLEAN / I - INSPECT (Inspect or Clean or Lubricate or Replace, if necessary) / R - REPLACE					

# SERVICE PLAN

EN

<p>1000 km</p> <p>Stamp / Signature</p>	<p>4000 km</p> <p>Stamp / Signature</p>
<p>7000 km</p> <p>Stamp / Signature</p>	<p>10000 km</p> <p>Stamp / Signature</p>

VEHICLE IDENTIFICATION NUMBER: \_\_\_\_\_ NAME OF THE CUSTOMER: \_\_\_\_\_

MODEL: \_\_\_\_\_ SIGNATURE OF THE CUSTOMER: \_\_\_\_\_



# SERVICE PLAN

EN

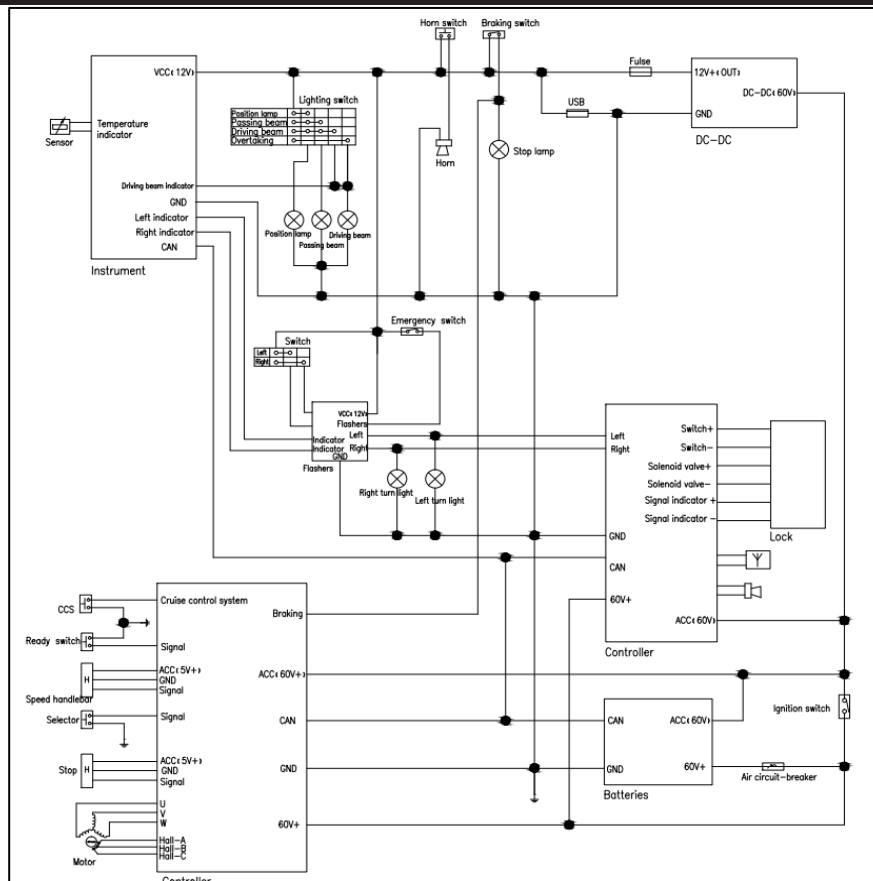
*The warranty can be granted only if the vehicle has been serviced in accordance with this service plan.*

<p>13000 km</p> <p>Stamp / Signature</p>	<p>16000 km</p> <p>Stamp / Signature</p>
<p>19000 km</p> <p>Stamp / Signature</p>	<p>22000 km</p> <p>Stamp / Signature</p>

VEHICLE IDENTIFICATION NUMBER: \_\_\_\_\_ NAME OF THE CUSTOMER: \_\_\_\_\_

MODEL: \_\_\_\_\_ SIGNATURE OF THE CUSTOMER: \_\_\_\_\_





**SPACE FOR NOTES**

**EN**



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