

S38

User Manual



HEARTWAY



Part No.:70031007

Version: 2025-01

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Electrically powered scooter Class C (EN 12184)



Heartway Medical Products. Co. Ltd. No. 6, Gongyequ 25th Rd., Baoshan Vil., Nantun Dist. Taichung City 408017, Taiwan (R.O.C.)



The users need to consult the instructions of the device for information on how to use it properly.

Moving of adult disabled persons by self-driving. Maximum user weight: 180 kg; Classified in Class C (EN12184) Maximum safe slope: 10° (For indoor and outdoor use).

The product is not intended for visually impaired people. The drivers need to mentally and physically suitable to drive the scooters. The fingers need to work functionally. The device can't be used by children until age of 12. The driving distance will be reduced if the power scooter is used frequently on slopes, rough ground or to climb kerb. The scooter is not for use as a seat in motor vehicle.



WARNING



All adjustments can be adjusted by both occupant and assistant. This vehicle is suitable for land and/or air transport. Please refer to our official website for general product information at www.heartway.com.tw

- The angle adjustment of backrest or the position change of the seat affects both balance and the stability of scooter
- This mobility (scooter) may come to a sudden stop at anytime during the operation.
- Don't operate your power scooter without completely reading and understanding this user manual!
- The overall length of this power scooter exceeds the limits specified Annex M of the technical specifications for interoperability relating to accessibility for persons with reduced mobility .
- The stopping distance on slopes can be significantly greater than on level ground .
- Do not operate the scooter with depleted batteries, since the occupant could be stranded.
- The end user is NOT allowed to change the parameter.
- The occupant can switch off the key to stop the scooter for any emergency stop .
- Please remove the battery package from the scooter unit before long term storage .
- S38 should be turned off prior to entering or existing the seat .
- Changing (adjustment/setting) the back-rest angle could seriously affect the overall scooter stability.

**WARNING**

Environmental conditions may affect the safety and performance of your power scooter. Water and extreme temperatures are the main elements that can cause damage and affect performance.

A) Rain, Sleet and Snow:

If exposed to water, your power scooter is susceptible to damage to electronic or mechanical components.

Water can cause electronic malfunction or promote premature corrosion of electrical components and frame.

B) Temperature:

Some of the parts of the power scooter are susceptible to change in temperature.

The controller can only operate in temperature that range between -25°C and 50°

At extreme low temperatures, the batteries may freeze, and your power scooter may not be able to operate.

In extreme high temperatures, it may operate at slower speeds due to a safety feature of the controller that prevents damage to the motors and other electrical components.

C) A warning not to operate the scooter if it is behaving abnormally or erratically



The following symbols are used in the scooter to identify warnings, mandatory actions and prohibited actions. It is very important that you read and understand them completely.



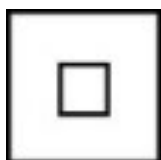
Caution. Observing notes and accompanying documents

Scooter Class C

It is classified in category C according to EN 12184.
It is compact, maneuverable and able to overcome obstacles outdoors.



For ambient conditions



Protection class II



Charger IP54 "dust and water resistant" / Scooter IPX4 "water resistant"



Does not meet the ISO 7176-19 standard and cannot be used as a seat in a motor vehicle.
Labeling on the product.



Devices for decommissioning the drive system Warning:
Switch on the drive system again before leaving a user unattended.



Charge the batteries fully before use.
Remove the key from an unattended scooter.



Year of manufacture see label on the product.



Heartway Medical Products Co., Ltd.

No. 6, Gongyequ 25th Rd., Baoshan Vil., Nantun Dist. Taichung
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Europäischer Bevollmächtigter / Authorized Representative
SUNGO Europe B.V.

Fascinatio Boulevard 522, Unit 1.7, 2909VA Capelle aan den
IJssel, The Netherlands

The scooter is designed for outdoor use for adults with mobility restrictions.
It is classified in category B according to EN 12184.
It is compact, maneuverable and not necessarily able to overcome obstacles outdoors. The maximum load is 160 kg.

INDICATIONS

Inability to walk or severe walking disability due to

- paralysis
- Loss of limbs
- extremity defect / deformity
- joint
- joint damage (not on both arms)
- other diseases

A supply with a scooter (or also electric wheelchairs) is indicated when the use of hand-driven wheelchairs is no longer possible due to the disability, but the correct operation of an electric motor drive is still possible.

CONTRAINDICATIONS

The supply of scooters is unsuitable for people:

- with severe balance problems
- with reduced and insufficient eyesight
- with severe cognitive impairments

CONFORMITY

This mobility meets the requirements of EN 12184: 2014 and the requirements for class I medical devices in accordance with Class I of Regulation MDR 2017/745 annex VIII.

SAFETY INSTRUCTION

◆ General



Always use a seat belt and keep your feet on the scooter all the time.



Never operate the scooter while you are under the influence of alcohol.



Never use electronic radio transmitters such as walkie-talkies, or cellular phones.



Do not rider your scooter in traffic.



Do not attempt to climb curbs greater than limitation show on Technical Specification.



Do not leave your hands and legs off the scooter when driving.



Make sure that there are no obstacles behind you while reserving your scooter.



Do not make a sharp turn or a sudden stop while riding your scooter.



Do not rider your scooter during snow in order to avoid accident on slippery road.



Do not allow unsupervised children to play near this equipment while the batteries are charging.



1. Don't operate scooter on public streets and roadways. Be aware that it may be difficult for traffic to see you when you are seated on the scooter. Obey all local pedestrian traffic rules. Wait until your path is clear of traffic, and then proceed with extreme cautions.
2. To prevent injury to yourself or others, always ensure that the power is switched off when getting on or off of the scooter.
3. Always check that the drive wheels are engaged (drive mode) before driving. Do not switch off the power when the scooter is still moving forward. This will bring the chair to an extremely abrupt stop.
4. Do not use this product or any available optional equipment without first completely reading and understanding these instructions. If you are unable to understand the warnings, cautions or instructions, contact a healthcare professional, the dealers or technical supports before attempting to use this equipment, otherwise, injury or damage may occur.
5. There are certain situations, including some medical conditions, where the scooter user will need to practice operating the scooter in the presence of a trained attendant. A trained attendant can be defined as a family member or care professional especially trained in assisting a scooter user in various daily living activities. Consult with your physician if you are taking any medication that may affect your ability to operate your scooter safely.
6. Do not attempt to lift or move a power scooter by any of its removable parts including the armrests, seats or shrouds. Personal injury and damage to the power chair may result.
7. Never try to use your scooter beyond its limitations as described in this manual.
8. Please do not sit on your scooter while it is in a moving vehicle.
9. Keep your hands away from the wheels (tires) while driving scooters. Be aware that loose fitting clothing can become caught in the drive tires.
10. Consult your physician if you are taking prescribed medication or if you have any certain physical limitations. Some medications and limitations may impair your ability to operate scooters in a safe manner.
11. Be aware when the drive mode is unlocked or locked.
12. Don't remove anti-tipper if there is any-tipper equipped with the scooter.
13. Contact with tools can cause electrical shock and do not connect an extension cord to the AC/DC converter or the battery charger.
14. Do not attempt to lift or move your scooter by any of its removal parts, such as the armrests, seats, or shroud.
15. When climbing an incline, don't drive at an angle up the face of the incline. Drive your scooter straight up the incline. This greatly reduces the possibility of a tip or a fall.
16. Don't climb a slope steeper than the scooter's limitation.
17. Don't attempt to have your scooter proceed backward down any step, curb or other obstacle. This may cause the scooter to fall or tip.
18. Always reduce your speed and maintain a stable center of gravity when cornering sharply. Don't corner sharply when driving scooters at higher speeds.

19. Operating in rain, snow, salt, mist conditions and on icy or slippery surfaces may have an adverse affect on the electrical system.
20. Never sit on your scooter when it is being used in connection with any type of lift or elevation product. Your scooter is not designed with such use in mind and any damage or injury incurred from such use is not the responsibility of Heartway.
21. Surfaces of the power scooter that can come into direct contact with the occupant's skin and/or assistant's skin during normal use and that are within occupant reach shall not exceed 41 °C. The motor surface can reach temperatures greater than 41°C after driving. Do not touch these parts when disassembling the scooter or wait until the motor is cooled down.
22. The programming of the controller shall only be carried out by personnel, which is authorized by his manufacturer. A wrong programming can result in safety hazards for the occupant!
23. Drive-wheel needs to be switched to engaged-mode while transporting the power scooter with a car or airplane.
24. Surface temperatures can increase when exposed to external sources of heat.
25. The maximum height of kerb the scooter can descend safely which 100mm

IMPORTANT NOTICE

Heartway Medical Product has designed and engineered power scooter to provide maximum utility. However, under no circumstances should you modify, add, remove, or disable any part or function of your power scooter. Personal injury and damage to the power scooter may result.

1. Do not modify your power scooter in any way not authorized by Heartway. Do not use accessories if they have not been tested or approved for Heartway products. Changing of controller parameter shall be only performed by authorized technicians due to the safety concern.
2. Get to know the feel of your power scooter and its capabilities. Heartway recommends that you perform a safety check before each use to make sure your power scooter operates safely.

◆ Inspections prior to using your power scooter:

1. If equipped with pneumatic tires, please check for proper tire inflations.
2. Please check all electrical connections and make sure they are tight and not corroded.
3. Please check all harness connections and make sure they are secured properly.
4. Please check the brakes.

◆ Weight limitation.

1. Please refer to the specifications table for weight capacity information. Power scooter is rated for a maximum weight capacity.
2. Stay within the specified weight capacity for your scooter. Exceeding the weight capacity voids your warranty.
3. Heartway will not be held responsible for injuries or property damage resulting from failure to observe weight limitations.
4. Don't carry passengers on scooters.
5. Carrying passengers on scooter may affect the center of gravity, resulting in a tip or a fall.

Tire inflation

1. If your scooter is equipped with pneumatic tires, it is necessary to check the air pressure at least one time a week.
2. Proper inflation pressures will prolong the life your tires and ensure the smooth operation while riding.
3. Inflating your tires from an unregulated air source could over-inflate them, resulting in a burs tire.

◆ Temperature



1. Some of the parts of the power scooter are susceptible to change in temperature. The controller can only operate in temperature that ranges between -25°C ~ 50°C .
2. At extreme low temperatures, the batteries may freeze, and your power scooter may not be able to operate. In extreme high temperatures, it may operate at slower speeds due to a safety feature of the controller that prevents damage to the motors and other electrical components.
3. The scooter can generally be operated at outside temperatures from -10° to $+45^{\circ}\text{C}$.
4. Some parts of the scooter tend to be temperature dependent. The controller works best at temperatures between -25°C and 50°C .
5. Below -15°C the batteries can freeze and the scooter may not work.
6. At extremely high temperatures $> 50^{\circ}\text{C}$, the safety function of the control, which prevents damage to the motors and other electrical components, can lead to slower maximum speeds.

The rapid development of electronics, especially in the area of communications, has saturated our environment with electromagnetic (EMI) radio waves that are emitted by television, radio and communication signals. These EM wave are invisible and their strength increases as one approach the source. All electrical conductors act as antennas to the EMI signals and, to varying degrees, all power scooters and scooters are susceptible to electromagnetic interference (EMI). The interference could result in abnormal, unintentional movement and/or erratic control of the vehicle. The United States Food and drug Administration (FDA) suggests that the following statement be incorporated to the user's manual for all power scooter like the S38. Power scooters may as susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy emitted from sources such as radio stations, TV stations, amateur radio (HAN) transmitter, two-way radios, cellular phones and alarm systems of shops. The interference (from radio wave sources) can cause the power scooter to release its brakes, move by itself or move in unintended directions. It can also permanently damage the powered scooter's control system. The intensity of the EMI energy can be measured in volts per meter (V/m). Each powered scooter can resist EMI up to a certain intensity. This is called "immunity level". The higher the immunity level the greater the protection. At this time, current technology is capable of providing at least 20 V/m of immunity level, which would provide useful protection against common sources of radiated EMI. Following the warnings listed below should reduce the chance of unintended brake release or powered scooter movement that could result in serious injury:

1. Do not turn on hand-held personal communication devices such as citizens band (CB) radios and cellular phones while the powered scooter is turned on.
2. Be aware of nearby transmitters such as radio or TV stations and try to avoid coming close to them.
3. If unintended movement or brake release occurs, turn the powered scooter off as soon as it is safe.
4. Be aware that adding accessories or components, or modifying the powered scooter, may make it more susceptible to interference from radio wave sources (Note: It is difficult to evaluate the effect on the overall immunity of the powered scooter).
5. Report all incidents of unintended movement or brake release to the powered scooter manufacturer, and note whether there is a radio wave source nearby.

TURN OFF YOUR POWERED SCOOTER AS SOON AS POSSIBLE WHEN EXPERIENCING THE FOLLOWING:

- Unintentional scooter movements.
- Unintended or uncontrollable direction.
- Unexpected brake release.

The FDA has written to the manufacturers of power scooters asking them to test new products to be sure they provide a reasonable degree of immunity against EMI. The FDA requires that a powered scooter should have an immunity level at least 20 V/m, which provides a reasonable degree of protection against more common sources of EMI. The higher the immunity level the greater the protection. Your powered scooter has an immunity level of 20 V/m which should protect against common sources of EMI.

WARNING

- The scooter itself can disturb the performance of the electromagnetic fields such as emitted by alarm systems of shops.
- The driving performance of the scooter can be influenced by electro magnetic fields.
- The scooter seat is tested according to EN1021 regarding resistance to ignition, but it is recommended to avoid users of flame near the scooters and smoking during sitting on the scooter.
- Seat belt is regarded as a standard device for this power scooter

The stopping distance on the slope can be significantly greater than on the level ground.

Indication/ Intended Purpose:

Moving of disabled by self driving.

This medical equipment is intended to provide mobility to persons restricted To a seated position, e.g. for patient , especially for the leg disabled person.



MODEL	S38
WEIGHT CAPACITY	160kg
SEAT: TYPE/SIZE	20"
DRIVE WHEEL	410 x 100 mm Pneumatic Tire, 35-40PSI
FRONT CASTER (WHEEL)	360 x 90 mm Pneumatic Tire, 35-40PSI
REAR CASTER (ANTI-TIPPER)	None
MAX SPEED	14.5 KM/H
BATTERY SPECIFICATIONS	12V 80 AH X 2
BATTERY RANGE	37 km
CHARGER TYPE	8 Amp, Off Board 100~240 Volt, 50/60Hz
CONTROLLER TYPE	S-Drive 200 AMP
MOTOR TYPE	20:1 1300W 4200RPM
WEIGHT: W/ BATTERY	148kg
WEIGHT: W/O BATTERY	94Kg
WEIGHT: BATTERY	54Kg
TURNING RADIUS	2000mm
SUSPENSION	Full
LENGTH	1665 mm
WIDE	780 mm
HEIGHT	1295 mm
SEAT WIDTH	508mm
SEAT HEIGHT	740mm
SEAT DEPTH	460mm
BACK HEIGHT	698mm
GROUND CLEARANCE	120mm
Rated slope	10 degree



WARNING

- Changing (setting) the back-rest angle adjustment could seriously affect the overall scooter stability.
- The temperature of scooter surface can increase when the scooter is exposed to external source of heat (e.g. sunlight)
- For any mechanical adjustment on the tiller or on the seat, be aware of trapping and squeezing of your fingers.

- How to remove the seat
- Please refer to the following instructions.
- Press the swivel lever
- Swivel the seat
- Pull the seat upward (Two persons are required to remove the seat)
- Removing the battery and seat from the scooter is allowed before transporting.



Heaviest part (Seat): 20 KG

The power scooter is simple to operate. However we recommend that you read carefully the following instructions to become familiarized with your new vehicle.

A Word of Caution:

Before you turn the power on, always be aware of the environment that surrounds you to select your desired speed. For indoor environments we recommend that you select the slowest speed setting. For outdoor operation of this vehicle we recommend that you select a speed that is comfortable for you to control it safely. The following steps are required to operate your vehicle safely with the controller.



1. Turning On & Off :

A) Magnetic card

To turn your device on, press the metal button on the right side of the tiller, the button will illuminate red. Then place the key card against the panel, the light will illuminate blue to indicate the scooter is now on.

To turn off your device, press the metal button.



B) Training the Magnetic Card please notice you cannot do paring when the power on.

- The scooter in the off state, press the metal button to make it light up red.
- Press the set button in this time and the metal button is flashing 3 times to be red light to do paring.

- After finishing, the panel will stay on 2 secs and turn on.
- The metal button with red light will go out if no action is taken within 30 secs

C) Decode the magnetic card

- The scooter in the off state, press the metal button to light on in red
- Press the set button in 3 sec ,the metal button is flashing 3 times then flashing 3 times quickly again(please release the button while flashing quickly)
- At this time, all paired magnetic card have been cleared and the pairing mode has been entered again.

2. Lights & Indicators:

To turn on/off the headlight, press the  button located on the tiller.

To indicate left, press the  button located on the tiller.

To indicate right, press the  button located on the tiller.

To turn on/off the hazard lights, press the  button located on the tiller.

3. Driving Forwards & Backwards

To change between forwards & backwards modes, press the forward/backward switch on the lower right side of the tiller.

To drive forwards, press the forwards button, then slowly pull the right-hand throttle lever towards the tiller handle. The more you pull the lever the faster you will move.

To drive backwards, press the backwards button, then slowly pull the right-hand throttle lever towards the tiller handle. The more you pull the lever the faster you will move.

4. Emergency Handbrake

When releasing the throttle lever, the electromagnetic brake engages. If needed, use the handbrake located on the left side of the tiller controls.

5. Sounding the Horn

To sound the horn, press the  button located on the tiller.

6. Time Setting

The current time is displayed on the tiller. To set the time, turn on the scooter, press the [Mode] & [Set] button  display will then flash.

7. Temperature Setting

The current temperature is displayed on the tiller.

To switch units, turn on the scooter, press the [Mode] button twice, the  display will then flash. Press the [Set] button to change the unit. To confirm, press  or wait 5 seconds.

8. Error Code

When something is wrong with the scooter,  is flashing in the power-on after several second, then the  is flashing and appear  error code.

9. warning function

Regardless of whether it is powered on or not , press the  button , the  and side light are flashing.

10. Odometer

Press and hold the  and then turn on the scooter with the key card and the [ODO] mileage is displayed  then after 5 seconds the scooter automatically turns on.

Parameter setting instructions

Enter Setting Mode

1. Hold the [Mode] button for 2 seconds to enter setting mode. The [88] will flash and
2. display the parameter value.
3. Press the [←] & [→] to choose the parameter value.
4. Press the [Set] button to set parameter setting. The [88] will flash and display the
5. setting value, then press the [←] & [→] to choose the setting value.
6. Press the [Set] button to revert to the 'parameter value' screen or exit the parameter
7. setting after 5 seconds of no operation.

2. Parameter table

parameter value	Description	Default Value	
P1	Forward and Reverse have opposite signs	F	b
P2	Headlight power saving mode	on	oF
P3	DRL on→KEY ON/OFF of→Headlight turn on	on	oF
P4	Left/Right side-light on→KEY ON/OFF of→Headlight turn on The left and right side lights move with the direction lights	on	oF
P5	Setting Wig-Wag- 1 Unipolar- 2	2	1
P6	Whether the direction lights & warning lights turn on the buzzer	on	on
P7	ERROR CODE Whether to turn on the buzzer when ERROR CODE appears	oF	on
P8	Whether the reversing sound turns on the buzzer	on	oF
P9	Battery type	Pb	Li, Pb
PA	Setting tire size	16	10,11,12,13,14, 16
Pb	Controller type	PG	PG, DY

ADJUSTMENT

Tiller Adjustment

For safety, only adjust the tiller when the device is stationary and switched off.

Adjust by pressing the tiller adjustment handle downward and adjusting the angle of the tiller. Once in the desired position, let go of the adjustment handle.



Seatbelt Fitting & Adjustment

This model has a seat belt fitted as standard. To adjust slide the plastic belt adjuster towards (longer) or away (shorter) from the seat belt lock.

Seat Forwards & Backwards Adjustment

Push the front lever on the side of the seat upwards to move the seat forward and backward.

Seat Rotation Adjustment

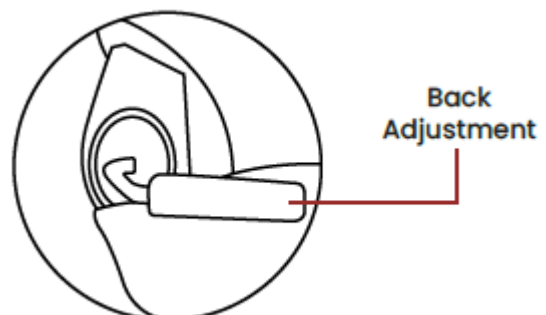
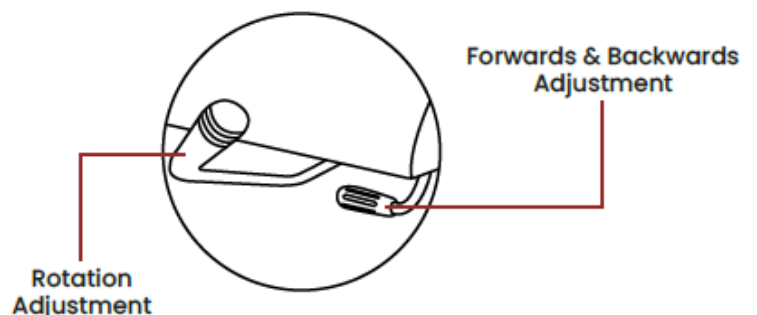
Push the swivel lever downwards to rotate the seat.

Seat Back Adjustment

Adjust the seat back lever for seating back angle. The maximum backrest angle is 105°.

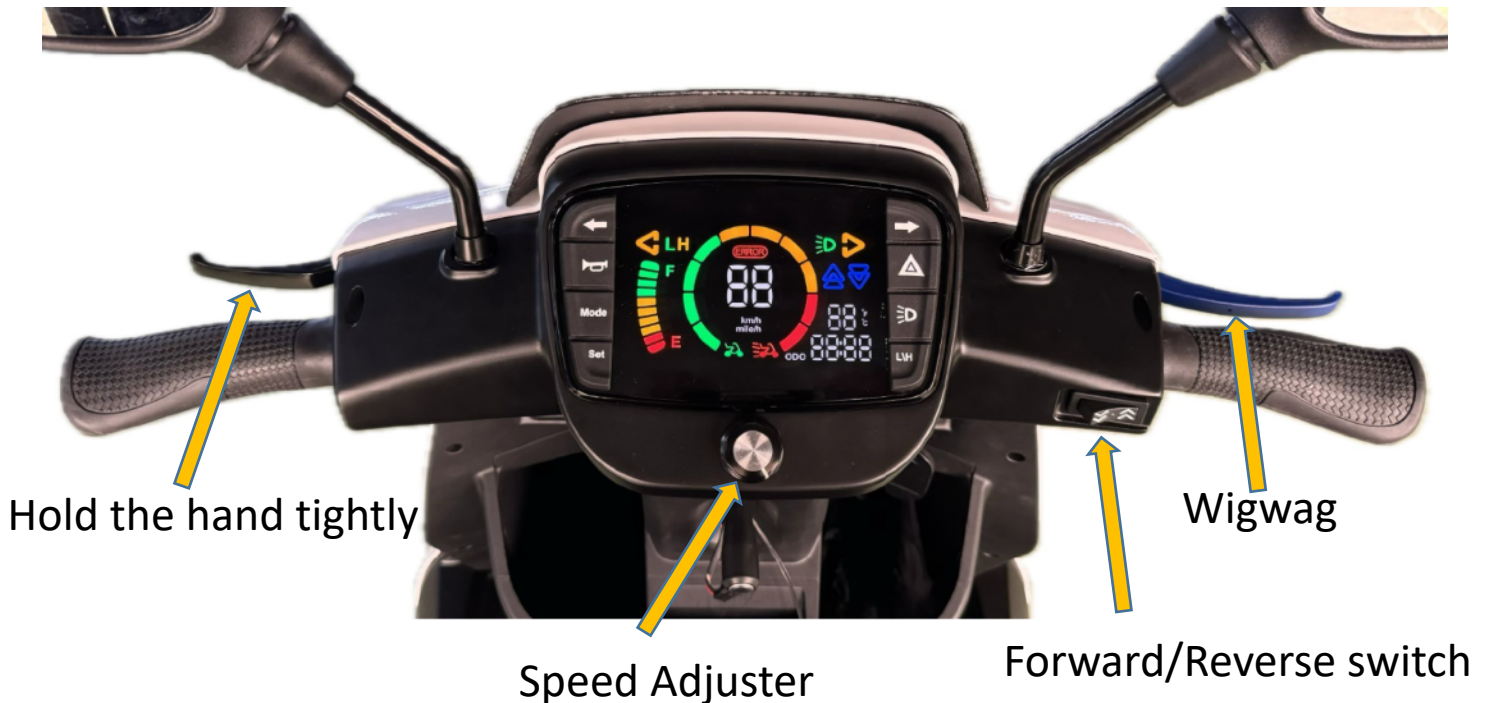
Seat Removal

To remove the seat, push the swivel lever, swivel the seat, then pull the seat upwards.



Controller ON/OFF Switch

Insert the key to turn the scooter power on (Turn the power off and remove the key). Push the finger lever control forward or backward to control the driving direction of the vehicle.



Returning of the finger lever control to its neutral position (Centre), will reduce the speed and stop the vehicle by automatically applying the electromagnetic brakes.

Speed Control

- Wig-wag Controlling: The wig wag lever control also controls the speed of your vehicle. The further away (forward/ backward) the finger lever control is from the neutral position, the faster the vehicle will go.

Notes:

- In case of emergency, let go of the finger lever control and the vehicle will come to a stop.

Free-Wheeling:

This device is fitted with an electromagnetic (EM) brake, located at the rear, that is designed to engage when the device is not in use or when the power is off. When the device is turned off, the EM brake can be disengaged to allow the device to be pushed manually (free-wheel mode).

When powering on the device, always ensure that the EM brake is engaged.

To engage the electromagnetic brake, push the lever to the engaged position (drive mode).

To disengage the electromagnetic brake, push the lever to the disengaged position (free-wheel mode).



WARNING

Only disengage the electromagnetic brake when the scooter is turned off and on a flat surface.



Free-Wheel Lever

Electromagnetic Brakes:

Your power scooter comes with Electromagnetic Brakes., i.e. an automatic magnetic disc safety brake which is also known as Fail-Safe brake. The electro-magnetic Brakes are automatic and work when the power scooter is ON but in a steady state (i.e. Wigwag is released to the neutral position), even when the scooter is on a slope. The Electromagnetic Brakes will also be set whenever the power scooter is OFF, but the motor levers are in the engaged (vertical) position.

Parking brake:

There is an automatic parking brake function included in the electromagnetic brake. The scooter will stop when the motor is engaged and the power switch is off or when the power switch is on and the wigwag is in the neutral position. If the scooter is in the free wheel mode (motor is disengaged), you can use the manual parking brake function by moving the engaging/disengaging lever back into the engaged position by an attendant.

Thermal Protection:

Your power scooter controller is equipped with a safety system called thermal rollback. A built-in circuit monitors the temperature of the controller and motor. In case of excessive heat of the controller and motor, the controller will cut-off the power to allow the electrical components to cool down. Although your power scooter will resume its normal speed when the temperature returns to a safe level, we recommend to wait for 5 minutes before restarting to allow the components to cool down.



WARNING

Storage

Your power scooter should be stored in a dry place, free from temperature extremes. When storing, disconnect the batteries from the power scooter. If you fail to store the unit properly, the frame can rust and the electronics can be damaged.

Please remove the battery package from the scooter unit before long term storage

- Batteries that are regularly and deeply discharged, infrequently charged, stored in extreme temperatures, or stored without a full charge may be permanently damaged, causing unreliable performance and limited service life.
- It is recommended that you charge the batteries periodically throughout periods of prolonged storage to ensure proper performance. You may wish to place several
- boards under the frame of your power scooter to raise it off of the ground during
- periods of prolonged storage.

If you plan on not using your power scooter for an extended period of time, it is best to:

Fully charge its batteries prior to storage.

Disconnect the batteries from the scooter.

- Store your power scooter in a warm, dry environment.
- Avoid storing your power scooter where it will be exposed to temperature extremes.
- Operating conditions (-20°C ~ +45°C) and Storage conditions (-40°C~+65°C)
- Make sure the batteries are fully charged before use after long-term storage

Batteries that are regularly and deeply discharged, infrequently charged, stored in extreme temperatures, or stored without a full charge may be permanently damaged, causing unreliable performance and limited service life.

It is recommended that you charge the power scooter batteries periodically throughout periods of prolonged storage to ensure proper performance.



WARNING

20

DO NOT operate this scooter with depleted batteries since the occupant could be stranded.

Please remove the battery package from the scooter unit before long term storage.



Forbidden! Although the travel scooter has passed the required IPX4 water spray test requirements, keep electrical connections away from sources of moisture, including direct exposure to water or body fluids, and incontinence. Check the electrical components frequently for signs of corrosion and replace if necessary.

Warning! The charger should only be used in a dry interior. Protect from moisture and wetness.

CHARGING INSTRUCTION

A. SPECIFICATION

MODEL ITEM	HPN0240WB 24V 8A
INPUT AC VOLTAGE	AC 100~240V 50-60HZ
OUTPUT DC VOLTAGE	24V
OUTPUT CURRENT	8A
LED INDICATOR	POWER /ON :BLUE ON CHARGING :ORANGE ON FULL CHARGE :GREEN ON ERROR :ORANGE LED FLASH
OPERATING TEMPERATURE	0℃ ~40℃
OPERATING HUMIDITY	20%~85% RH
STORAGE TEMPERATURE	-20℃ ~70℃
USED BELOW THE ALTITUDE	2000M
DIMENSIONS	L212mm*W 105mm*H 63mm
WEIGHT	1.3KG
IP Code	IP54

B. Product introduction:

The product is AC to DC switching-circuit designed lead-acid used charger. Best apply to 24V/80AH lead-acid battery.

Pre-charge、 constant current and constant voltage charging with this product.

C. Operating instruction:

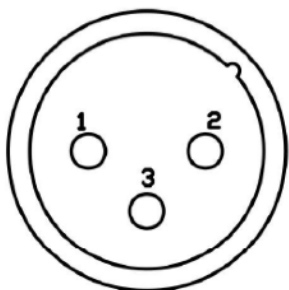
1. Turn off the power of loaded equipment on battery.
2. Make sure the battery charger output voltage is the same as the connecting battery.
3. Connect the connector of battery charger to the connector of battery after confirming the positive and negative pole.
4. Make sure the socket AC voltage ranges from 100~240VAC, then connect the power source to the charger, the LED(blue) light will turn on when power on.
5. The LED(orange) light will turn on when the battery is in charging When the battery is full charged, the LED light turns green.

D. Troubles Shooting:

1. Power LED (blue) is not on
Check whether plug socket (AC) has normal output, and the indicator does not shine, please return charger to supplier.
2. Charging LED (orange) light is not on.
 - ※ Check whether output connector of charger is correctly connected with battery set.
 - ※ Check whether battery is full-charged.
 - ※ If mention above are correct charger is likely to be defective. Please return it to charger supplier for check up.
 - ※ Charging LED (orange) light can not turn to green
Battery is likely to be defective and can't charge normally. Please return battery set to battery supplier.
 - ※ Charging LED (orange) light turn to green immediately.
Make sure battery is fully charged. If not, battery is likely to be defected. Please return battery set to battery supplier.

D. DC Connector pin definition:

Pin No.	3PIN
1	DC Output +V
2	DC Output -V
3	INHIBIT

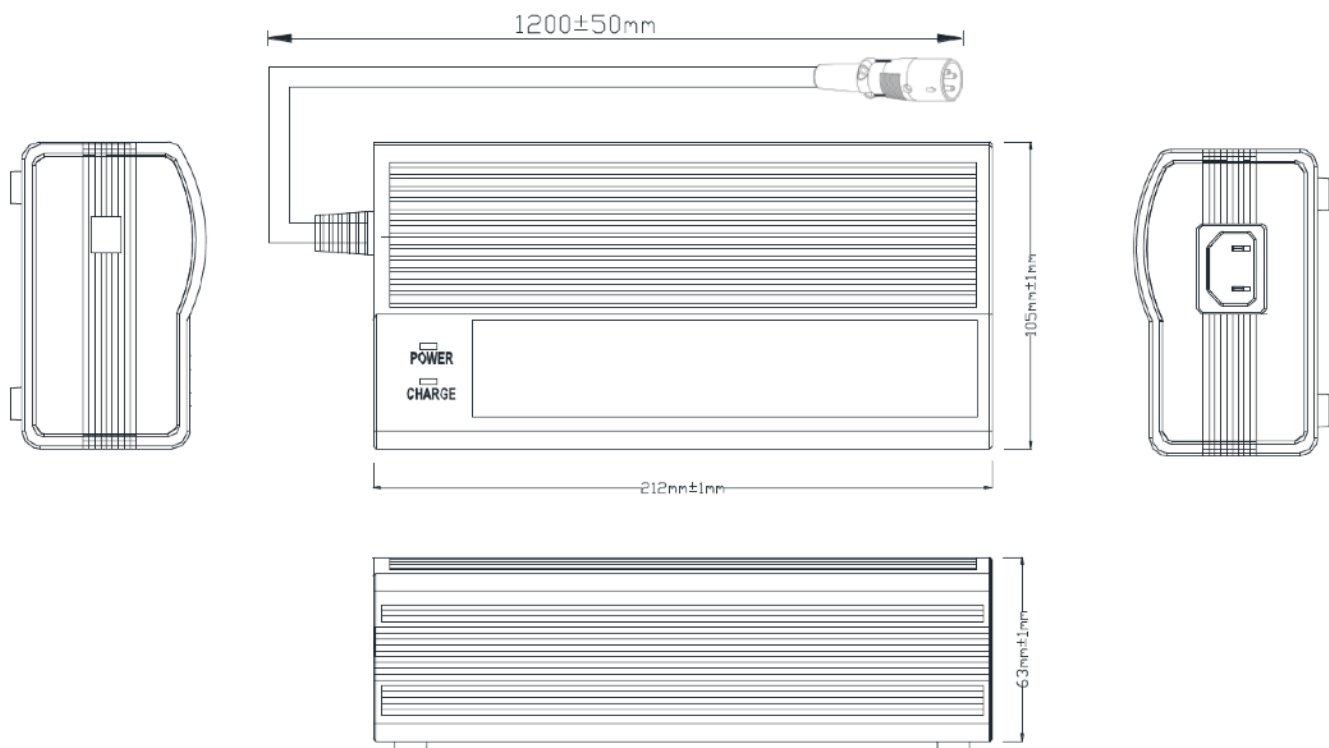


Off-Board Charger Port.
The off-board charger port is mounted on the tiller

CHARGING INSTRUCTION

F. Caution:

1. Users should read the instructions before attempting to use the battery charger.
2. Explosive gasses can be generated while charging, so the wheelchair and battery charger should to be kept away from sources of ignition. Such as flames and sparks.
3. Charging should be carried out with the wheelchair in a space at least twice its volume, with sufficient ventilation that there is no hazard due to build-up of flammable gas.
4. Only batteries of the specified type and capacity are to be charged.
5. The battery charger is intended for indoor use and is not to be exposed to rain or other sources of moisture.
6. Off-board battery chargers should not to be carried on wheelchairs.



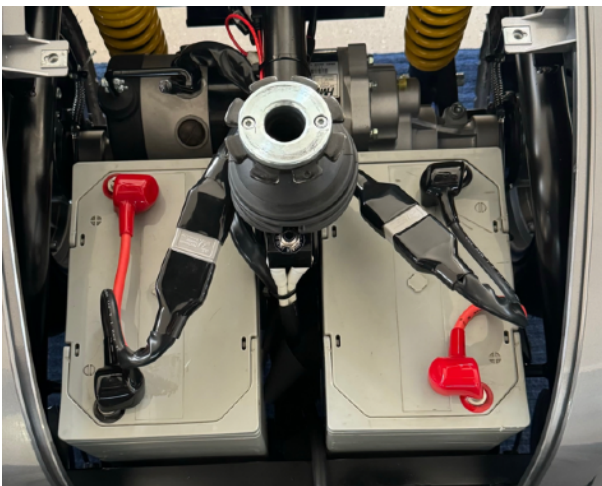
- Ensure that short circuits is not formed between the positive and negative terminals. Short circuits may lead to leaks, fires, or explosions.
- Do not use these batteries together with different type of the batteries such as Ni-MH or Ni-Cd and so on. It could lead to leaks, overheating, or explosions of the batteries, and human injury.
- If the battery catches on fire, please use dry powder fire extinguisher or carbon dioxide fire extinguisher. Do not use water to fire fighting.
- Do not expose batteries to heat or flames. This can cause leakage, fire, or explosion of the batteries.
- Do not dismantle, modify, or damage batteries. This can cause leakage, fire, or explosion of batteries.
- Replace batteries within the period recommended in battery user manual or indicated on the equipment. Overuse may cause internal short circuits or battery case damage which can lead to leakage, fire, or explosion of the batteries.
- When installing batteries, ensure that positive and negative polarity is correct. Connection with incorrect polarity can lead to excess current, fire, and damage to chargers.
- Batteries contain dilute sulfuric acid. Any acid leaked from damaged batteries should be immediately rinsed from clothing or skin. If acid comes in contact with eyes, rinse with a large quantity of water and seek medical attention immediately. Acid can burn skin and can cause blindness.
- Batteries showing signs of terminal corrosion, leakage, distortion of battery case, or any other abnormalities should not be used. Continued use could result in leakage, fire, or explosion of the batteries.
- Do not use or store batteries near transformers or other heat sources, inside of the car left outside, in direct sunlight, or in other high temperature environments. Doing so can lead to increased battery temperature, which can cause leakage, fire, or explosion.
- When installing batteries in metal enclosures, fill the space between the battery and enclosure with acid resistant, heat resistant insulating materials, to avoid contact between the battery and the enclosure. Batteries with acid leakage can create smoke and flames.
- When handling batteries wear rubber gloves and rubber shoes. Failure to do so can lead to electric shock, burns, or fire.
- Do not place batteries where they might be exposed to water as an electric leak may cause electric shock, or fire.
- Do not position batteries at more than 90° from the upright position as this can lead to leakage, fire, or explosion.
- Do not clean batteries with dry cloths or feather dusters as this can produce static electricity and cause explosions. Use damp cloths only.
- Attach all required insulator caps to battery terminals and link as specified. Failure to do so may result in electric shock, burns, short circuit, battery damage, fire, or explosion.

- When used in medical equipment, it should be equipped with not only this battery systems but another different backup system. Failure to do so could lead to injury in the event of this battery system failure.
- Do not directly connect batteries to power outlets or automobile cigarette lighter socket. This can lead to burns or overheating.
- Use batteries in the following temperature range. Discharge (equipment in use): $-15^{\circ}\text{C} \sim 45^{\circ}\text{C}$; Charge: $-15^{\circ}\text{C} \sim 45^{\circ}\text{C}$; Storage: $-15^{\circ}\text{C} \sim 40^{\circ}\text{C}$.
- Do not apply thinner, gasoline, benzene, lubricants, fats, or any other organic solvents or detergents. This may lead to the crack of the battery case, leakage, and fire.
- Batteries should be checked regularly. Batteries not conforming to specifications listed in the user's manual should be adjusted following user's manual. Continued use without adjustment could lead to damage or burns.
- Used batteries can be recycled. Do not dispose of directly without consulting sales company or our agents.
- When cleaning and inspecting batteries, first discharge static electricity from your body. Static electricity can cause sparks which can lead to explosions.
- Batteries' maximum discharge current should not exceed the specifications in the user's manual.
- Excessive discharge current can cause leakage, overheating, and explosion.
- Immediately after purchase, if any rust, cracks, deformities, overheating, or any other abnormality is discovered, discontinue use and contact the sales company. Continued use could result in leakage, overheating, or explosion.
- When using multiple batteries at the same time, the batteries themselves should be properly connected before they are connected to the charger or load. Firmly connect the positive terminal of the battery to the positive terminal of the charger or load. Incorrect polarity can lead to explosions or fires harming the batteries or equipment, and can cause injury to humans.
- Do not bump, drop, or strike batteries. Batteries should not be used in environments subject to strong vibration as these can damage the batteries.
- Do not use batteries in dusty environments as this can lead to short circuits (if batteries must be used in dusty environments they should be periodically inspected).
- Do not use batteries from different manufacturers in the same string. Small differences between the batteries can affect operational stability, and can significantly reduce battery life and lead to deformation and overheating. In case suitable batteries spec for the equipment is not known, consult with the manufacturer prior to use.
- In case of long periods of non-use, disconnect batteries from equipment. Batteries are heavy; care should be taken when handling to avoid back injury.
- Batteries are heavy; care should be taken when handling to avoid back injury.
- Battery powered equipment should be separated by the distances specified in manuals or on labels in order to prevent failure. In certain cases the minimum distances are specified by laws.

- Battery powered equipment should be inspected as specified in the user manual; except when inspections are regulated by law. For details please consult the manufacturer.
- Battery powered equipment requires special power distribution cabling set up that should be performed by professionals. In certain countries the work must be done by nationally certified electrical engineers.
- Certain countries have laws covering battery powered equipment that must comply with.
- Do not use batteries except for specified application. Inappropriate use could lead to leakage, fire, or explosion.
- To avoid making leak circuit by the acid leaked from batteries, take preventive measure on the circuit or place an insulating layer or insulating tray between the batteries and the frame.

To Change the batteries in your scooters:

- ◇ Remove the battery cover and captain seat.
- ◇ Unfasten the battery tie-down strap.
- ◇ Pull out the two grey connectors from the battery cable to disconnect the battery.
- ◇ Remove the old batteries from the battery wells.
- ◇ Place a new battery in each battery well.
- ◇ Check the terminal boots for correct position.
- ◇ Re-connect two grey connectors to the battery cable.
- ◇ Reconnect the battery tie-down strap.
- ◇ Reinstall the battery cover and seat back to the scooter.
- ◇ Removing the battery and seat from the scooter is allowed before transporting.



WARNING

- ◇ If your hand is wet or sweaty, Do NOT replace the batteries.
- ◇ Please always use two batteries of the same type at the same amp-hour capacity.
- ◇ Always replace both batteries at the same time. Please do not mix old and new batteries together.

Your power scooter is designed for minimal maintenance. However, like any motorized vehicle it requires routine maintenance. To keep your scooter for years of trouble-free operation, we recommend you follow the following maintenance checks as scheduled.

Maintenance Job	Daily	Weekly	Monthly	S e m i - Annual
Electrical System				
◇ Battery meter – Inspect the battery meter to determine if batteries are needed to be re-charged	✓			
◇ Controller / Display panel – Make sure they are not frayed or have any exposed wiring			✓	
◇ Check all plug & wiring connections for firm condition			✓	
◇ Have the batteries been fully charged before the daily operation	✓			
◇ Are all holder and screws firmly fixed and safe?	✓			
◇ Are all electric lighting system (if applicable) in working order	✓			
Tyres & Wheels				
◇ Have pneumatic tyres checked for necessary air pressure	✓	✓		
◇ Front & Rear wheels must be able to spin smoothly without any interference		✓		
◇ Rear & Front wheels must spin without wobbling			✓	
◇ Visually inspect the tire tread. If less than 1mm (1/32”), please have your tires replaced by your local dealer.			✓	
Others				
◇ Motor brushes. We recommend that your authorized dealer inspect the brushes every six-month if your power scooter or power wheelchair is not operating smoothly. If the inspection determines excessive motor bushes worn out, they must be replaced otherwise the motor damage will result.				✓

Scooters require a minimal amount of care and maintenance.
The following areas require inspection and/or care and maintenance.

Cleaning and Disinfection

- ⇒ Use a damp cloth and mild, non-abrasive cleanser to clean the plastic and metal parts of your power scooter. Avoid using products that may scratch the surface of your power scooter.
- ⇒ If necessary, clean your product with an approved disinfectant. Make sure the disinfectant is safe for use on your product before application.
- ⇒ Follow all safety instructions for the proper use of the disinfectant and/or cleaning agent before applying it to your product. Failure to comply may result in skin irritation or premature deterioration of upholstery and/or power scooter finishes.

BATTERY TERMINAL CONNECTIONS

- ⇒ Make certain that the terminal connections remain tight and uncorded.
- ⇒ The batteries must sit flat in the battery wells.
- ⇒ The battery terminals should face towards the inside of the scooter.

WIRING HARNESSES

- ⇒ Regularly check all wiring connections.
- ⇒ Regularly check all wiring insulation, including the charger power cord, for wear or damage.
- ⇒ Have your authorized dealer repair or replace any damaged connector, connection, or insulation that you find before using your scooter again.

AXLE BEARINGS AND THE MOTOR/TRANSAXLE ASSEMBLY

These items are all prelubricated, sealed, and require no subsequent lubrication.

WHEEL REPLACEMENT

If your scooter is equipped with pneumatic tires and you have a flat tire, you can have the tube replaced. If your scooter is equipped with a solid tire insert either the solid insert or the entire wheel must be replaced depending on the model. Contact your authorized dealer regarding replacement wheels for your scooters.



WARNING

- ⇒ Wheels on your scooter should only be serviced/replaced by a qualified technician.
- ⇒ Completely deflate pneumatic tires before dismantling the rim or attempting repair.
- ⇒ Be sure that the key is removed from the key switch and the scooter is not in free-wheel mode before performing this procedure repair.

CONSOLE, CHARGER, AND REAR ELECTRONICS

- ⇒ Keep these areas free of moisture.
- ⇒ Allow these areas to dry thoroughly if they have been exposed to moisture before operating your scooter again.

STORING YOUR SCOOTER

If you plan on not using your scooter for an extended period of time, it is best to:

- ⇒ Fully charge its batteries prior to storage.
- ⇒ Disconnect the batteries from the scooter.
- ⇒ Store your scooter in a warm, dry environment.
- ⇒ Avoid storing your scooter where it will be exposed to temperature extremes.
- ⇒ Operating conditions and Storage conditions (-10°C~+45°C)

Batteries that are regularly and deeply discharged, infrequently charged, stored in extreme temperatures, or stored without a full charge may be permanently damaged, causing unreliable performance and limited service life. It is recommended that you charge the scooter batteries periodically throughout periods of prolonged storage to ensure proper performance.

Disposal of Your Power Scooter

Your power scooter must be disposed of according to applicable local and national statutory regulations. Contact your local waste disposal agency or authorized dealer for information on proper disposal of power scooter packaging, metal frame components, plastic components, electronics, batteries, neoprene, silicone, and polyurethane materials.

CHECKS:

- Make sure to keep the controller clean while protecting it from rain or water. Never hose off your power scooter or place it in direct contact with water.
- Keep wheels free from lint, hair, sand and carpet fibers.
- Visually inspect the tire tread. If less than 1mm (1/32"), please have your tires replaced by your local dealer.
- All upholstery can be washed with warm water and mild soap. Occasionally check the seat and back for sagging, cuts and tears. Replace if necessary. Do not store your scooter in damp or humid conditions as this will lead to mildew and rapid deterioration of the upholstery parts.
- All moving mechanism will benefit from simple lubrication and inspection. Lubricate using petroleum jelly or light oil. Do not use too much oil, otherwise small drips could stain and damage carpets and furnishings etc. Always perform a general inspection of the tightness of all nuts and bolts.

S-Drive controller: Your scooter is fitted with an S-Drive controller, which continuously monitors the operating conditions of your scooter. If it detects a problem it will indicate with error message by flashing light on the upper panel. You must count the number of the flash, and see the list to check what kind of error has happened according to the number)

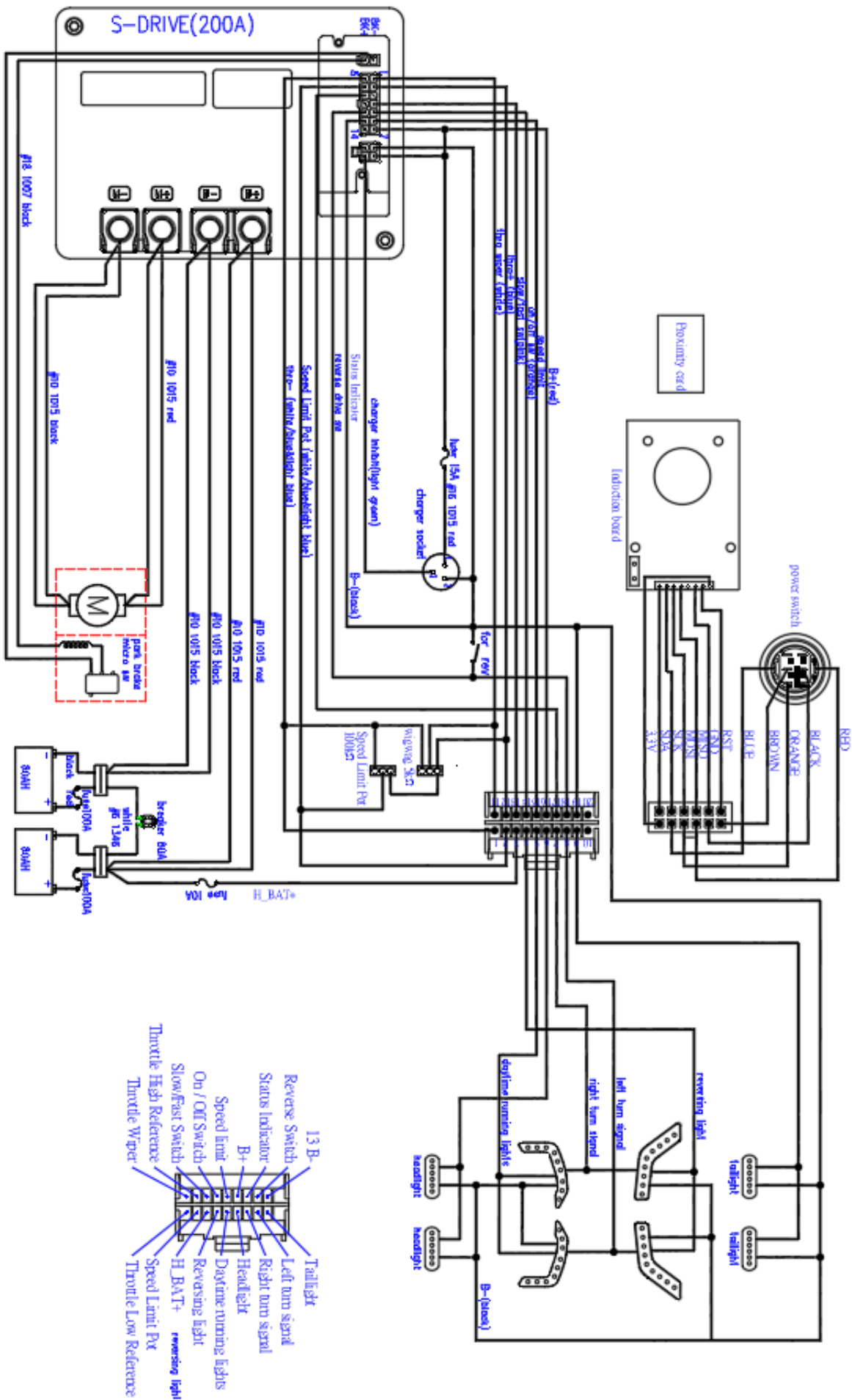
Flash	Description
1	The battery needs charging or there is a bad connection to the battery. Check the connections to the battery. If the connections are good, try changing the battery
2	There is a bad connection to the motor. Check all the connections between the motor and the controller
3	The motor has a short circuit to a battery connection. Contact your service agent.
4.	The freewheel switch is activated or the manual brake disengagement mechanism is operated. Check the position of the switch of lever.
5	Not used
6	The S-Drive is being inhibited from driving. Inhibit 2 is active. This may be because the battery charger is connected or the seat is no in the driving position.
7	A throttle fault is indicated. Make sure that the throttle is in the rest position before switching on the scooter.
8.	A controller fault is indicated. Make sure that all connections are secured.
9.	The parking brakes have a bad connection. Check the parking brake and motor connections. Make sure the controller connections are secured.
10.	An excessive voltage has been applied to the controller. This is usually caused by a poor battery connection. Check the battery connections.

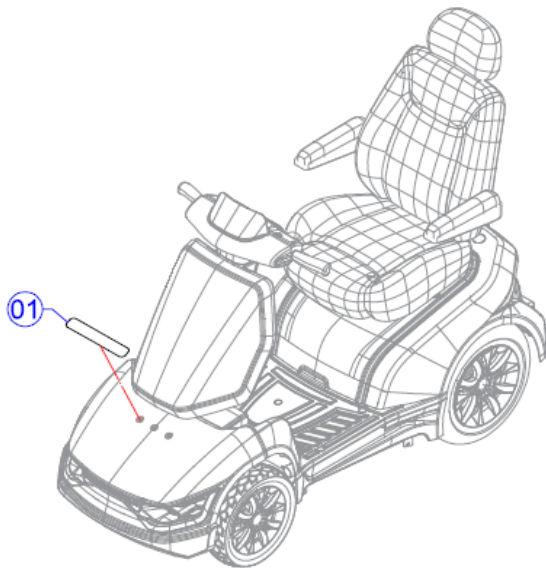
Note:

If you experience any technical problems, it is recommended that you check with your local dealer before attempting to troubleshoot on your own.

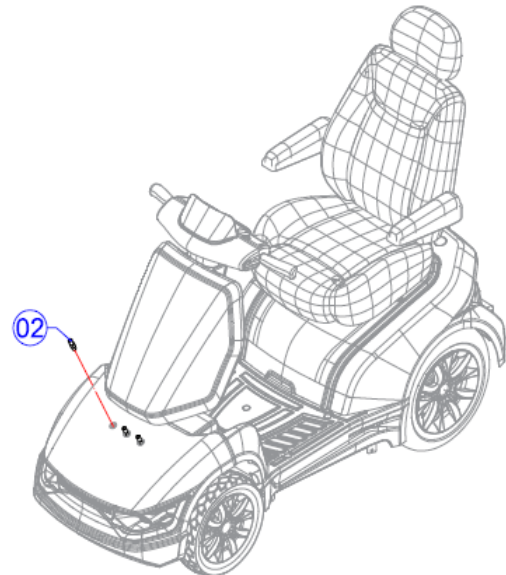
The following symptoms could indicate a serious problem with your power wheelchair. Contact your local dealer if any of the following arises:

- | | |
|---------------------------------|------------------------------------|
| 1. Motor noise | 6. Pulling to one side |
| 2. Frayed harnesses | 7. Bent or broken wheel assemblies |
| 3. Cracked or broken connectors | 8. Does not power up |
| 4. Uneven wear on any of tires | 9. Powers up, but does not move |
| 5. Jerky motion | |

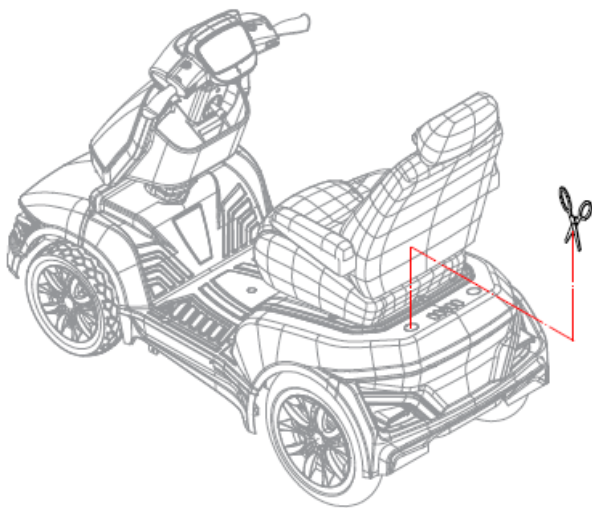




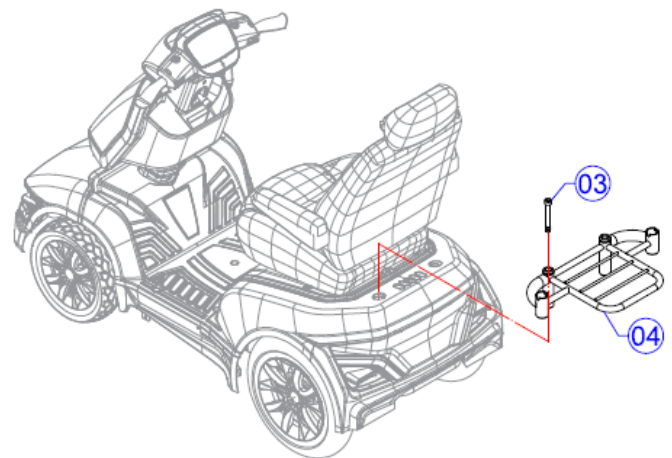
STEP1. Remove the ① sticker



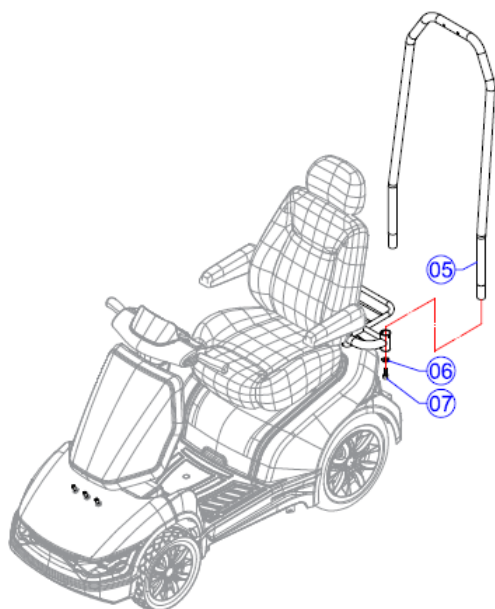
STEP2. Add the ② fixing screws



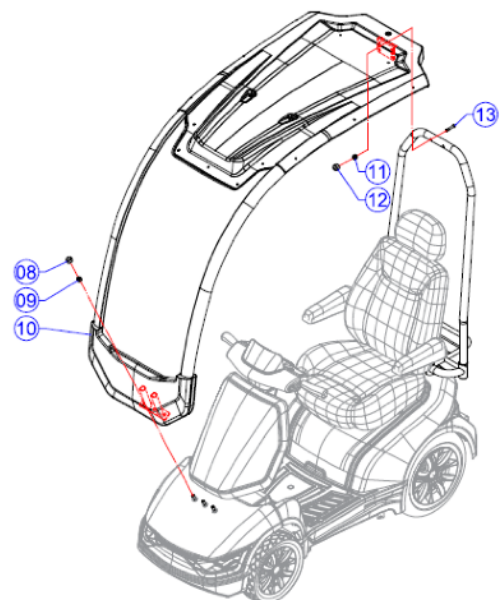
STEP3. Remove the round shape covers



STEP4. Fixing the ④ bracket with ③ Screw

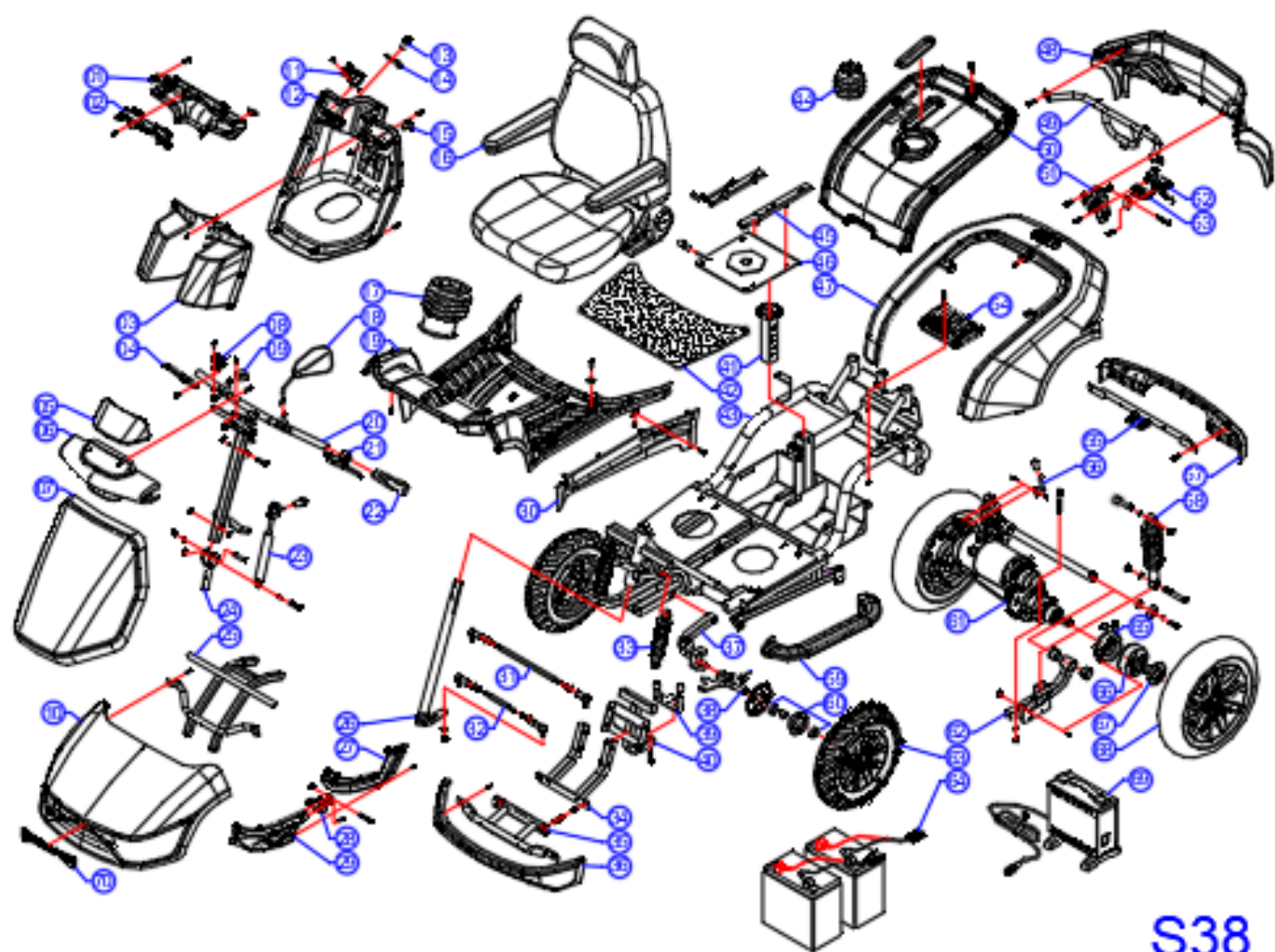


STEP5. Install the ⑤ bracket with ⑦ screw & ⑥ washer



STEP6. Attach the ⑩ canopy with ⑨ nut & ⑧ cap at the front.
And fixing ⑬ screw with ⑪ nut & ⑫ cap at the rear side

- | | | |
|-------------------------------|-------------------------------|-------------------------------|
| ① REAR HANDLE COVER | ②⑥ WELDED STEER STEM | ⑤① REAR BRAKE/DIRECTION LIGHT |
| ② CONTROL PANEL | ②⑦ FRONT INDICATOR | ⑤② TAIL LIGHT HOLDER |
| ③ LINED BACK COVER | ②⑧ HEADLIGHT | ⑤③ BACKLIGHT |
| ④ QUICK CONTROL DIAL | ②⑨ FRONT LAMP HOLDER | ⑤④ CONTROLLER |
| ⑤ LENS HOOD | ③⑩ SKIRT | ⑤⑤ REAR BUMPER WELDING |
| ⑥ FRONT HANDLE COVER | ③⑪ COUPLING BOLT(LONG) | ⑤⑥ RELEASE LEVER |
| ⑦ CHEST COVER | ③⑫ COUPLING BOLT(SHORT) | ⑤⑦ REAR BUMPER |
| ⑧ POTENTIOMETER | ③⑬ FRONT SUSPENSION | ⑤⑧ REAR SUSPENSION |
| ⑨ BUZZER | ③⑭ MID FRAME | ⑤⑨ BACKLIGHT |
| ⑩ FRONT COVER | ③⑮ FRONT BUMPER WELDING | ⑤⑩ BATTERY COVER UPPER |
| ⑪ TYPE C/USB CHARGING PORT | ③⑯ FRONT BUMPER | ⑤⑪ TRANSAXLE |
| ⑫ BACK COVER | ③⑰ FRONT WHEEL WELDING BAR | ⑤⑫ SUSPENSION BRACKET |
| ⑬ LIGHT BUTTON | ③⑱ WELDED FRONT WHEEL AXLE | ⑤⑬ FRONT TYRE |
| ⑭ MAGNETIC SENSOR BOARD | ③⑲ WELDED STEERING STEM | ⑤⑭ BATTERY |
| ⑮ CHARGING SOCKET | ④① FRONT FRAME | ⑤⑮ BRAKE BLOCK |
| ⑯ CAPTAIN SEAT | ④② SEAT SLIDING POST | ⑤⑯ BRAKE COVER |
| ⑰ HANDLE DUST COVER | ④③ FLOOR MAT | ⑤⑰ REAR HUB |
| ⑱ MIRROR | ④④ MAIN FRAME | ⑤⑱ REAR TYRE |
| ⑲ FOOT PEDAL | ④⑤ DUST COVER | ⑤⑲ CHARGER |
| ⑳ WELDED STEERING STEM | ④⑥ SEAT SLIDING RAIL | ⑥① FRONT FASCIA |
| ㉑ HAND BRAKE LEVER | ④⑦ SEAT BASE | |
| ㉒ HANDLE GRIP | ④⑧ REAR COVER | |
| ㉓ TILLER RAM MECHANISM | ④⑨ REAR UNDER COVER | |
| ㉔ FOLD BRACKET | ④⑩ REAR COVER BRACKET WELDING | |
| ㉕ FRONT COVER BRACKET WELDING | ⑤① BATTERY COVER | |



WARRANTY DECLARATION

Quality/ Warranty Declaration

Products are fit for purpose and of excellent quality and performance.

For valid warranty claims Heartway will, at their discretion, replace/ repair/ refund items mutually agreed to be defective.

Heartway's Warranty as Following:

Frame: Two-year limited warranty

Controllers: One-and-a-half-year limited warranty

Electronic Components and Charger: One-year limited warranty

Warranty Exclusion. The following items are not covered by warranty.

Motor brushes

Wheel Tires

Arm Pads

Seat Cushion

Fuses / Bulbs

Tiller Cover

Rear Shroud

Front Shroud

Batteries and Consumable parts

Any damage or defect of any nature occurring from the misuse, abuse of the product, improper operation or improper storage is not to be covered.

The warranty is to start from the date of arrival of our products. (maximum 60 days after dispatch from Heartway)

Normally, the average lifespan of a scooter will last 5-year long.

Heartway will be able to provide the spare-part support for five-year long after scooters

purchased. Note: If you encounter a damaged or cracked battery; please enclose it in a plastic bag and call the local authorized dealers immediately for instructions on disposal and recycling.





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