METRO MOBILITY

Owner's Manual

（S800）

CONTENTS

SAFETY INSTRUCTION

Distinguished guests, please read this manual carefully before using the scooter for the understanding of the precautions and scooter performance. Failure to follow the instructions may lead to scooter damage or serious personal injury.

1. Please obey local traffic regulations when using the product.
2. Do not try to refit the scooter without permission or use the scooter for other purpose.
3. In the event you feel dizzy, your vision is blurred due to health condition or medication, please must not operate the scooter.
4. 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.
5. Drunk driving is strictly prohibited in the any area.
6. Please check the brake system before driving the scooter.
7. Do not set the electric switch OFF before the scooter stops stably on smooth ground.
8. Don't remove anti-tipper wheel if the scooter is equipped with it.
9. Do not stop the scooter when climbing a slope or drive on the slope steeper than the limitation for the stability of the scooter and your safety.
10. Please ride with caution and keep a safe distance on the road with rain, oil and snow to prevent tires from slipping and rollover.
11. Please slow down and be careful when turning or reversing.
12. Please do not use the music entertainment system when driving the scooter, for it may cause distraction and traffic accident.
13. Please do not overload.
14. Please power off the scooter when it is not in use to prolong the service life of the battery and protects you from accident.
15. Please do not charge under the exposure of sun in the summer charge the battery indoors in winter when the outdoor temperature is lower than 10℃.

About Modifications

We have designed and engineered the power scooter for the maximum service life. However, under no circumstances should you modify, add, remove, or damage any part or function of the power scooter, otherwise, personal injury and damage to the mobility scooter may result in. Please use original accessories provided by us, untested or inapplicable accessories may lead to the breakdown.

Inspections prior to using your power scooter

1. If the scooter is equipped with pneumatic tires, proper tire pressure should be ensured before using it.
2. Please check all electric connections and make sure they are well connected and undamaged.
3. Please check all the harness connections and make sure that they are secured properly.
4. Please check the brake system and make sure that they are in good condition.

Load limitation

1. Please refer to the specifications table for weight capacity information. Mobility scooter is limited for a maximum weight capacity.
2. Stay within the specified weight capacity for your scooter. Overload will make your warranty void and we will not take responsibility for your injuries or property damage resulting from failures to observe weight limitation rules.
3. Don't carry passengers on the scooter designed only for one driver. Carrying passengers on the scooter may result in the change of the gravity center, and finally may causes rollover or tilt.

Tire pressure

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. Do not under-inflate or over-inflate your tires. It is critically important that 30-25 psi (2-2.4bar) tire pressure be maintained in pneumatic tires at all times.
4. Inflating your tires from an unregulated air source could over-inflate them, resulting in a burs tire.

Temperature

1. Some parts of the mobility scooter are susceptible to changes of temperature. The controller can only operate safely between -25℃and 50℃.
2. The batteries may freeze at extremely low temperature, and your mobility scooter may not be able to run at such low temperature. If at extremely high temperatures, it may operate at lower speed due to a safety feature of the controller that prevents the motor and other electrical components from damages.

ELECTROMAGNETIC INTERFERENCE (EMI)

The rapid development of electronic technology, especially in the area of communications, has saturated our environment with electromagnetic (EM) radio waves that are emitted by television, radio and communication signals. These EM wave is invisible and their intensity increases as source increase. All electrical conductors act as antennas to the EM signals and to varying degrees, all the power wheelchairs 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 scooters like S800. Mobility 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 make the scooter release its brakes, move by itself or move in unintended directions. It may also permanently damage the scooter's control system. The intensity of the EM energy can be measured in volts per meter (V/m). Each scooter can resist EMI up to a certain intensity, which is called interference resistance capacity, and the scooter has an interference resistance capacity of 20 v/m which would provide useful protection against common sources of radiated EMI.

the warnings listed below can reduce unintended brake release or uncontrolled move that may result in serious injuries:

1. Do not use portable CB transceiver or communication device like cell phone when the scooter is started.
2. Be careful and stay away from electromagnetic wave release equipment like radio, TV station, or etc.
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 refitting the scooter may make it more susceptible to interference from radio wave sources (Note: It is difficult to evaluate the effect on the overall interference resistance capacity of the mobility scooter).
5. Please report all the incidents of unintended movement or brake release to the manufacturer of the mobility scooter and note whether there is radio wave source nearby.

TECHNICAL SPECIFICATIONS

MODEL	**S800**
OVERALL LENGTH	1460mm
OVERALL WIDTH	730mm
OVERALL HEIGHT	1320mm
WEIGHT: W/ BATTERY	124kg
WEIGHT: W/O BATTERY	97kg
MAX. LOAD	180kg/1per
MAX. SPEED forward	15km/h
MIN. SPEED forward	4km/h
REVERSE SPEED	4km/h
TURNING RADIUS	2200mm
NARROWEST FOR TURNNING	2500mm
MAX.DRIVING SLOPE	12°
MAX.DRIVING RANGE	40±5km
DRIVING SYSTEM	Rear wheel with gear box
BRAKE SYSTEM	Intelligent electromagnetic brake
MOTOR	24V/800W
CONTROLLER	24V/140A
FRONT TIRE SIZE	13” * 5”
REAR TIRE SIZE	13” * 5”
BATTERIES	Lead-acid 12V/52AH *2pcs (75AH*2pcs)
CHARGER	AC 115/230V DC 24V 5A
MAX. CHARGING CURRENT	5A
CHARGING TIME to 80% charge	8h
CHARGING TIME to full charge	10h
SEAT WIDTH	500mm
SEAT DEPTH	480mm
SEAT HEIGHT from leg platform	490mm
BACKREST HEIGHT	660mm
ARMREST HEIGHT from seat	290mm
GROUND CLEARANCE	90mm

*** Measurements above are for reference only.**

COMFORT ADJUSTMENT

Adjustments for seating comfort

The flip-up armrest height can be adjusted by turning the adjustment dial.

Adjust the seat back lever for seating back angle.

Turn the swivel lever forward to rotate the seat.

Push the front lever forward or backward to move the seat forward or backward.

Adjustment of tiller position

16. Press down the lever and move it to your preferred position.

FEATURES


Control panel
Reflector mirror
Adjustable backrest
Flip-up armrest
Basket
Adjustable seat
Headlight
Shortage compartment
Tire
Foot pedal

GETTING ON & OFF THE SCOOTER

Getting on your scooter

1.Make sure that the key switch stays on “power off” position before getting on the scooter.

2. Turn the seat swivel lever located under the seat to make you feel comfortable and rotate the seat to face forward.

3. Put down the armrests and use them to steady yourself into the seat.

4. Make sure that your feet are placed firmly on the foot pedal and the seat you seated is secure and steady.

Getting off your scooter

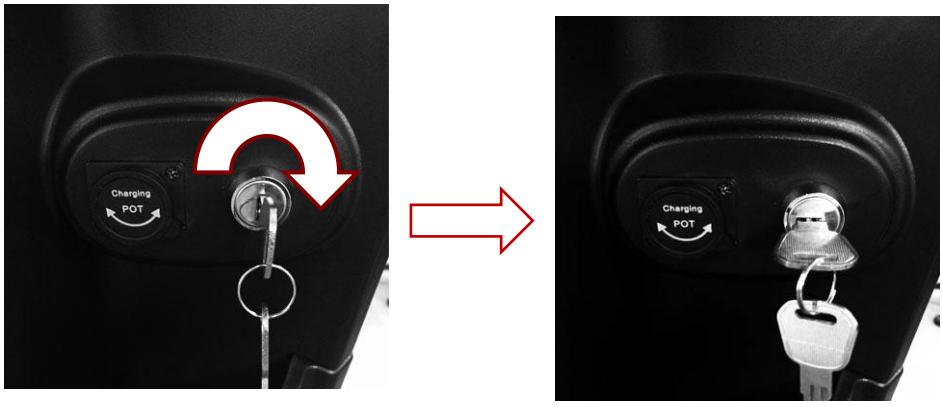
1.Ride the scooter to a suitable place for parking the scooter and turn the key switch to “power off “.

2. Turn the seat swivel lever located under the seat backward and rotate the seat 90 degrees if the user need to get off the scooter to a wheelchair.

3.Otherwise, you should put both feet on the ground and leave the seat by holding the armrests to leave the seat.

OPERATION OF TILLER CONTROL

Key switch



Power off Power on

Control Panel

Function

- Speed Control Knob

Turn this knob to the left can slow down. Turning it to the right can speed up.

- Headlight Button

Press the light button to turn on the lights in the dark or in the case of bad visibility and pressing it again can switch off the light.

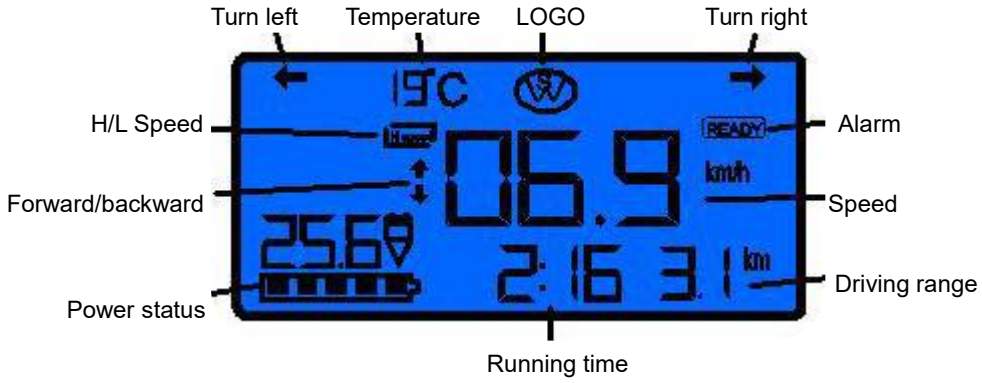
- Horn Button

Pressing the horn button to alert pedestrians and vehicle of your presence when necessary.

- Left/right Indicator Light Button

Press the button to show that your scooter is about to change direction.

Liquid Crystal Display（LCD）



Functions

- Power status: battery remaining capacity and charging indicator (5 squares battery icon+ voltage)
- Speed sensor: 2.5 digits + 1 decimal + "km/h " symbol
- High/low speed indicator: “H speed” or “Low speed” symbol
- Forward/backward indicator: ↑ or ↓ symbol
- Turn left/right indicator: ←or → symbol
- Odometer: driving range (99.9km max)
- Running time: running time consumed per use
- Temperature gauge: ºC mode
- Malfunction code: READY symbol flashing
- LCD back light: blue

Joystick

Move forward

Move backward

- For driving, please pull the right joystick (forward) or the left joystick (backward).
- If you release the joystick, you can stop the scooter. In the center position the intelligent electromagnetic brake system works also as a parking brake.
- For the sake of safety, when rolling down the slope with the manual brake free, the intelligent brake will work automatically if the running speed is more than 30% of the scooter's maximum speed.

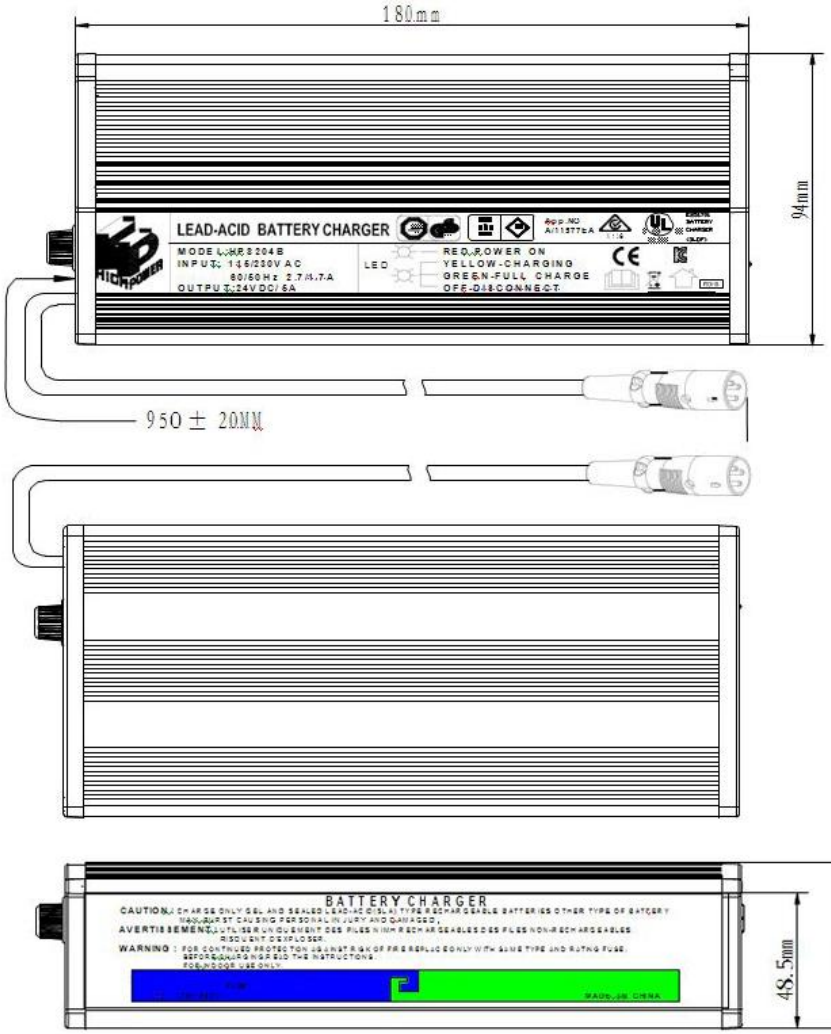
Engaged

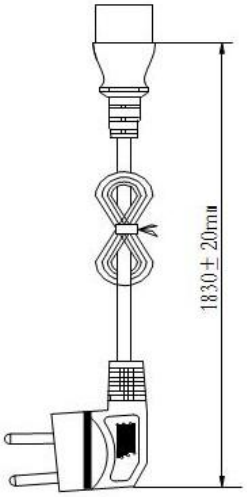
Disengaged

- Please be noted that the scooter will be at brake-free mode, when the manual brake is disengaged.
- To use the manual brake, you must move and lock the lever behind to the engaged position!

CHARGING INTRUCTIONS

Appearance & Dimensions





Specifications

Item	Off-board Battery Charger
Model	HP8204B
Efficiency	81% min.
Output Current	5A±0.2A max.
Output Voltage	29.8V±0.2V max.
Floating Voltage	31.2V±0.2V
Input Current	2.7A max.
Input Voltage	115Vac/230Vac 50/60HZ
Pulsating Current	0~5A
Protection	1. Over-current protection 2. Over-voltage protection 3. Reverse power protection 4. Short circuit protection
LED Indicator	Red: power on Orange: charging Green: full charged
Operating Temperature	0℃～40℃
Operating Humidity	20%~85%
Operating Height	0~2000m
Measure	L 180mm×W 93mm×H 53mm
Weight	0.83kg
Color	Black
* The charger can choose to work via 230V or 110V by switching the charger off and sliding the red tab on the end of the charger to the required setting by small screwdriver. The default setting is 230V.	

Operating Instruction

1. Switch your scooter off with the key switch.
1. Swivel the charge connector cover on the tiller and plug in.
2. Connect the other end with the battery.
3. Start to charge for the scooter.

Caution

- Before using the battery charger, please read all the instructions carefully.
- Please do not charge for the scooter outdoors, in confined space, or under the environment of high temperature, flammability gas, oil fog and vapor. Please do not place the charger in the seat cask or trunk when charging.
- Ensure the scooter is switched off before charging.
- Ensure that the charger plug is dry and intact before connecting with scooter.
- After charging, please remember to swivel back the charging cover to avoid dampening.
- The charger must be kept dry in the environment between -25°C and 40°C.
- Use only the original charger from our company. Other brand charger may shorten your warranty period, and unknown charger may cause damage and injury.
- In all cases, the charger must only be repaired by an authorized dealer.

Tip

- If some failure occurs, the reset button will pop out. Switch the scooter off, press the button in and switch on the scooter again.
- If your scooter fails to respond to normal control after a charging period, please check whether the battery charger has been completely disconnected from the scooter.

BATTERY INSTRUCTIONS & MAINTANENCE

Battery pack care plan

- Battery should be compatible to the scooter and with match charger, no mix use is allowed.
- The battery shall be checked whether it has been damaged, cracked, and whether the battery surface is clean before use.
- A new battery will achieve the best performance after 2or 3 complete cycles of charge and discharge. If batteries keep unused for more than a month, it will lose about 5% of capacity.
- Do not leave the charger connected with the batteries when the mains socket/plug is switched off.
- In the event of a short circuit, the battery management system will switch to protect mode, and the power cord in tandem with safety piece will fuse to give a double protect to battery. Once the fault is removed, the battery can work normally.
- If you leave your scooter for an extended period (more than 5 days), please charge your batteries for 12 hours, then remove charger and ensure the batteries are disconnected.
- If the battery need to be stored, you should disconnect the battery with charging equipment and the connection part of the load, it should be kept in cool, clean room. And you should conduct a supplementary power every 3 months during shortage.
- Please do not dispose of the battery out of use at will for the sake of environmental protection.

Caution

- Remember to remove the plug from your scooter when charger is off, to prevent driving away whilst attached. The scooter cannot be operated when being charged.
- The batteries need to be checked regularly for signs of damage. If any damage is apparent, contact your local mobility dealer immediately.
- Take care not to short circuit the battery terminals. Remove all conductive jewelry (e.g. watches, necklaces etc.) before checking the batteries.
- When charging always place on a hard surface in a room with good ventilation. You should not charge the batteries in outdoor conditions.
- Do not expose any part of the battery to direct heat (i.e. gas fires or naked flame).
- Do not allow the batteries to freeze.
- Do not dispose of batteries in normal waste. Always recycle in accordance with local laws.

Tip

If you ride the scooter with low battery capacity and not be able to charge in time, the driving range can be increased slightly by decelerating the maximum available speed.

SCOOTER MAINTENANCE

Proper routine maintenance of S800 can prolong its service life and check out the potential problems that may affect the running and performance of the scooter, regular items that required are listed as follows:

ROUTINE MAINTENANCE

1. Keep the scooter free of dust, dirt and liquids. To clean the product, use a cloth dampened with warm soapy water. Do not use chemicals, solvents or abrasive cleaners, as this may cause damage to the product.
2. Monthly check all vehicle components for loose, damaged or corroded components, such as connectors, terminals, or cables. Restrain all cables to protect them from damage. Replace damaged components.
3. Check the tire pressure and the degree of wear regularly to see whether they need to be changed.
4. Check the seat whether it is loose or shakes sharply before riding.
5. Check whether the electromagnetic brake meets the brake requirements, and the scooter can be placed on the appropriate slope for further inspection;
6. Check the motor to see whether it need to be replaced, especially after being used for one year.
7. Please develop good driving habits, and operate the scooter beyond the permitted range.
8. The scooter should be stored in the dry and ventilated place. Please do not place it in the water or very damp environment (humidity should be less than 85%).
9. If the scooter has not been used for a long time, please check the battery condition and keep the battery full charged and charge for it at least once a month.

PACKAGING & TRANSPORTATION

The scooter S800 can be disassembled into several parts quickly and simply for packaging and transportation, and you need to do as follows:

1. Switch off the scooter, and make sure the motor is engaged.
2. Disassemble the scooter into packed parts and put it into the packing box for transportation.

Caution

Please secure your scooter parts before transportation. Do not sit on your scooter when it is being transported in or on another vehicle.

Packaging and Transportation Environment Conditions

The mobility scooters can be transported by common transportation vehicles, but you need to prevent them from serious collision, vibrating or exposing in the snow or rain.

The packaged scooters should be placed in an environment with good ventilation between -20℃～45℃ , humidity should be less than 93%.

TROUBLESHOOTING & FAULT REPAIR

Failures	Possible causes	Solutions
Driving range shorten	Batteries not charged for enough time	Charge batteries for eight hours or more
	Batteries is aging to low capacity	Replace batteries
Battery cannot charge or battery gauge shows empty after charging	Battery fault	Replace batteries
	Charge fault	Contact with local dealer
	Charger plug damaged	Check plug
	Loose connection	Try a wall socket in a different room
	No output from wall outlet	Unplug from wall & change fuse
	Fuse in charger mains plug blown	Switch off and press button back in
	Button on battery pack has popped out	Switch off and press button back in
	Output fuse in charger blown	Unplug from wall and contact dealer
Battery charging current high	Battery fault	Replace batteries
	Scooter switched on during charging	switch off the scooter
The scooter cannot work	Brake-release lever disengaged	Engage brake-release lever
	Flat batteries	Charge battery pack
	Scooter is not switched on with key switch	Ensure the key switch is switched on
	The battery cable is loose.	Check battery cable
	Charger plugged in	Unplug charger
	Button on battery pack popped out	Reset circuit-breaker button
	Disconnected loom or plugs	Check all plugs & looms
	Control system fault	Contact with dealer
Motor runs irregularly and/or noisily	Electrical malfunction	Contact with dealer
	Control system fault	Contact with dealer

*** Do not attempt to disassemble any parts of the scooter control system, battery or battery charger.**

*** The control system is critically important and user should not deal with it arbitrarily.**

Your scooter is engineered with a self-diagnostic controller which continuously monitors the operating conditions of your scooter. If it detects a problem, it will indicate error message by flashing the READY on the LCD and sounding audible will beep simultaneously. You should count the number of flashes and beeps separated by a short delay between each sequence, and check the list below to see what kind of problem has happened according to the number.

Number of flashes/beeps	**Represent**	**Fault**	**Solution**
1	Battery power low	power not enough	The battery needs charging
2	Low battery voltage	Power not Enough	The battery needs charging
3	High battery voltage	Too higher voltage, while overloading or climbing	Decrease speed while climbing
			Check battery connection
4	Electric current over limit	Electric current over limit of motor	Check motor and relative wiring connections
			Switch off and wait a few minutes and switch on
5	Free-brake issue	The freewheel level is on	Check the relative wiring of the freewheel level
			Confirm the level is on the correct position
6	Accelerate the variable resistor issue	When turning on the controller, accelerate variable resistor isn't on the neutral position	Make sure the accelerate variable resistor is on the neutral position
			Accelerate variable resistor may need to recalibration
7	Speed limited variable resistor issue	Accelerate variable resistor, Speed limited variable resistor or other wiring issue	Check all the accelerate variable resistor, Speed limited variable resistor or other wiring
8	Motor voltage issue	Motor and other relative wirings issue	Check the motor and other relative wirings
9	Other issues	Some inner issues in the controller	Check all the connection and wirings
10	Pushing/ Slipping issues	The speed of pushing or slipping is over limited	Switch off and on the controller

WARRANTY

All equipment supplied by Metro Mobility is warranted by the company to be free from faulty workmanship or materials. If any defect is found within the warranty period, the company will repair, or at its discretion replace, the equipment without charge for materials or labour.

1. The repairing or replacement of any part will be carried out by authorized Dealers/Service Agents.

2. In the event of safety performance failure (the products fail to comply with safety requirements, have personal safety/property hazard, do not have the due service performance, or have other design/manufacturing/processing defect and cause quality problem and lead to accessory damage) within 7 days (including) after the sales date (the invoice date shall prevail) even you follow the instructions, you may choose to return, replace or repair the product;

3. Should any part or parts of the scooter need repairing or replacement as a result of a specific manufacturing or material defect within two years from the date on which the possession of the scooter was transferred to the original purchaser, and subject to it remaining within that ownership, then the part or parts will be repaired or replaced completely free of charge if returned to the authorized service agent. (Note: This guarantee is not transferable.)

4. Parts replaced after the original warranty has expired are covered for a further three months.

5. Items of a consumable nature will not generally be covered during the normal warranty period unless such items have clearly suffered undue wear as a direct result of an original manufacturing defect. These items include amongst others upholstery, tires, inner tubes, batteries, arm pad, hand grips and other similar parts.

6. The above warranty conditions apply to all scooter parts for models purchased at full retail price.

7. Under normal circumstances, warranty will be voided and no responsibility will be taken by manufacturer for the following reasons:

7.1 The scooter or parts that have not been maintained in accordance with the manufacturer’s instructions above or do not use the original accessories provided by manufacturer or agents.

7.2 The scooter or parts have been damaged for personal neglect, accident, modification or misuses.

7.3 The original technical specifications of the scooter or parts have been altered without authority of manufacturer, or the scooter or parts have been repaired by users themselves without approve from service agents.

Please keep a note of your local Service Agent's address and telephone number on the space provided. In the event of breakdown, please contact with them and give all the relevant details so that they can help you in time.

The scooter shown and described in this manual may not be exactly the same in every detail as your own model. However, all instructions are still entirely relevant irrespective of detail differences.

The manufacturer reserves the right to alter without notice any weights, measurements, or other technical data shown in this manual. All figures, measurements, and capacities shown in this manual are approximate, and do not constitute specification.

Your local service agent:
Metro Mobility USA LLC
Address: 114-02 15th Ave. Unit 2, College Point, NY, 11356.
Mike
888-616-3876
Support@metromobilityusa.com