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## I. INTRODUCTION

Before using your scooter, please read this manual carefully. It will provide you with all the information you will require. However, if you have any queries about the use, maintenance or safety of your scooter, please contact your local dealer. If you have any other questions please write to the address below.

The scooter is classified as a category C vehicle under the European wheelchair standard EN 12184. It is intended for the use of people of all ages who may have difficulty walking for longer distances or periods of time. It is ideal for outdoor use and suitable for users up to 120kg in weight (18.9st). Differing user weights can cause performance variation.

The scooter is designed to be driven on smooth man-made surfaces. It has been manufactured to comply with the requirements of the Medical Device Directive 93/42/EEC, the radio interference requirements of EEC Directive 89/336/EEC and the battery charger requirements of EEC Directives 73/23/EEC and 89/336/EEC. Electromagnetic fields, such as those emitted by shop alarms may be disturbed by this scooter. The function of the scooter may also be disturbed by Electromagnetic fields emitted by shop alarms.

We provide products of exacting quality that conform fully and reliably to the requirements of their intended use. The manufacturer is BS/EN ISO 9001 accredited, which is the internationally recognized standard for quality management systems. This accreditation guarantees quality in all areas of their business from development through to final delivery. Should you require any further assistance then please contact your local dealer.

## II. GENERAL WARNINGS

DO NOT OPERATE THE SCOOTER BEFORE READING AND UNDERSTANDING THIS INSTRUCTION MANUAL. IF YOU ARE IN DOUBT ABOUT THE MEANING OF THESE INSTRUCTIONS, OR ANY OF THE CAUTIONS AND WARNINGS, PLEASE CONSULT YOUR HEALTHCARE PROFESSIONAL, DEALER OR RELEVANT TECHNICAL PERSONNEL. FAILURE TO FULLY UNDERSTAND THE SCOOTER OPERATION MAY RESULT IN AN UNEXPECTED RESPONSE FROM THE EQUIPMENT WHICH CAN IN TURN LEAD TO POSSIBLE INJURY OR DAMAGE.

#### **NOTES**

Warning and Caution notices used in this manual apply to hazards and unsafe practices that could result in personal injury or damage to property.

#### WARNING

We supply an extensive range of mobility scooters to meet the varying needs of individual users. It is the responsibility of the individual user to decide which scooter is suitable for the user's intended purpose. With regards to restraints, seat positioning straps, posture correction or other positional aids and accessories, it is the obligation of the dealer to ensure the suitability of such equipment for the safe operation of the scooter.

Serious injury can occur in the event of a fall from a mobility scooter. We DO NOT RECOMMEND that a scooter user is transported in any type of vehicle when seated in the scooter. At this time, there are no approved Tie-down Systems for the transportation of a user in ANY moving vehicle whilst seated in a scooter. It is our opinion that users of mobility scooters should be transferred into the appropriate vehicle seating system and use should be made of the restraints available to the auto industry.

## III. QUICK START GUIDE

#### **ASSEMBLY**

When lifting always keep the back straight, bend the knees and use the lifting handles provided. Ensure your freewheel mechanism is fully engaged, so your scooter can not move while assembling. Set the tiller by rotating the tiller folding knob while moving the tiller upwards. Remove the basket from the footboard and place on the bracket located on the front of the tiller. Lift the seat onto the seat post and press down to ensure it is fully engaged.

#### **BATTERY CHARGING**

The battery MUST be charged for 12 hours before first use. Do not be tempted to use the scooter unless the battery has been fully charged as failure to do this will result in battery damage. Connect the battery charger to the mains supply and the charging socket located on the battery pack. Switch on the mains supply and then switch on the battery charger.

#### BATTERY DISPLAY KEY

RED light = Power On

YELLOW Light = Charging

GREEN Light = Charge Complete

Charge the scooter overnight after each use to maintain battery condition

#### SUITABLE TERRAIN

This scooter is designed for use on footpaths, for crossing roads and shopping. It should not be driven through mud, water, snow, sand, loose gravel, long grass or any other unsound surfaces.

## III. QUICK START GUIDE

#### CONTROL FUNCTIONS

Your scooter is equipped with the following features that can be found on the tiller fascia panel:

On/ Off Switch, Battery Gauge, Speed Control, Headlight, Horn and Directional Control Levers.

If you have previously used or owned a scooter before you MUST still read the Owner's Manual carefully to fully understand the controls and safety warnings. If you are in any doubt of their functions then please turn to pages 13 and 16 of this manual.

#### TRANSPORTING

Your scooter may be disassembled quickly and simply for transportation:

- 1. Lift off the front basket.
- 2. Remove the seat, leaving the seat stem in position.
- 3. Place the basket on the floor mat appropriately.
- 4. Lower the tiller, using the folding knob, to its lowest setting, locking in the basket. Make sure that there is at least 30mm between the tiller and battery pack.
- 5. Using the lifting handles provided carefully lift the scooter safely and securely into the luggage compartment of the vehicle.

#### **IMPORTANT**

When reassembling the scooter, remember to insert the battery locking pin, because failure to do so may result in the batteries disengaging during use. Always secure your scooter parts before transportation. Remember to engage the drive unit by pushing the freewheel lever forwards to stop the scooter from moving.

# IV. FEATURES



1	CONTROL PANEL
2	BASKET
3	FOLDING
4	LIGHTS
5	TYRES
6	BATTERIES
7	FREEWHEEL LEVER
8	SEATING
9	WIDTH ADJUSTABLE ARMRESTS

# V. GETTING ON OR OFF YOUR SCOOTER

#### GETTING ON TO YOUR SCOOTER

- 1. Ensure that the key switch is turned to the off position (Photo 5.1).
- 2. Push forward the seat swivel lever located under the seat on the right-hand side and rotate the seat to face you (Photo 5.2).
- 3. Put the armrests into the fully down position and use them to steady yourself as you gently lower yourself into the seat (Photo 5.3).
- 4. Push forward the seat swivel lever and gently swivel the seat to face forward (Photo 5.4).
- 5. Ensure that both feet are placed firmly on the floorboard of the scooter and the seat is secure (Photo 5.5).

#### GETTING OFF YOUR SCOOTER

- 1. Bring your scooter to a stop and turn the key switch to off.
- 2. Push forward the seat swivel lever located under the seat on the right-hand side and rotate the seat 90 degrees to exit (Photo 5.2).
- 3. Put BOTH feet on the ground and gently leave the seat using the arm rests to assist you out of the chair (Photo 5.4).









5.1

5.2

5.3

5.4



5.5

## VI. CONTROL PANEL

#### HAND CONTROLS

All the drive controls for the scooter are to be found on the Tiller Control Box (Fig 6.1).

#### THE PRESET SPEED KNOB

Turning this knob to the left reduces your available maximum speed. Turning it to the right increases the available maximum speed.

#### THE BATTERY GAUGE

This gives an approximation of battery charge and is illuminated for clarity. The gauge display is "RED" when approaching empty, "YELLOW" when charge is required, and "GREEN" when fully charged. As the scooter moves over differing terrain, the Battery Gauge will dip up and down, this is normal. For a more accurate indication, stop the scooter and note the reading. In cold, damp weather the gauge will dip faster as the capacity and efficiency of all batteries drops in such conditions.

#### TIP

If your battery gauge has gone into the "RED" section you can increase your remaining range by reducing your maximum speed. Remember you MUST charge your battery overnight as soon as you can to prevent battery damage. Operating the Lights The lights are operated by pressing the blue button on the front fascia panel. Press the button once to illuminate the lights, press the button again to switch the lights off. Switch the lights on to make yourself more visible in low levels of light.

#### OPERATING THE LIGHTS

The lights are operated by pressing the blue button on the front fascia panel. Press the button once to illuminate the lights, press the button again to switch the lights off. Switch the lights on to make yourself more visible in low levels of light.

## VI. CONTROL PANEL

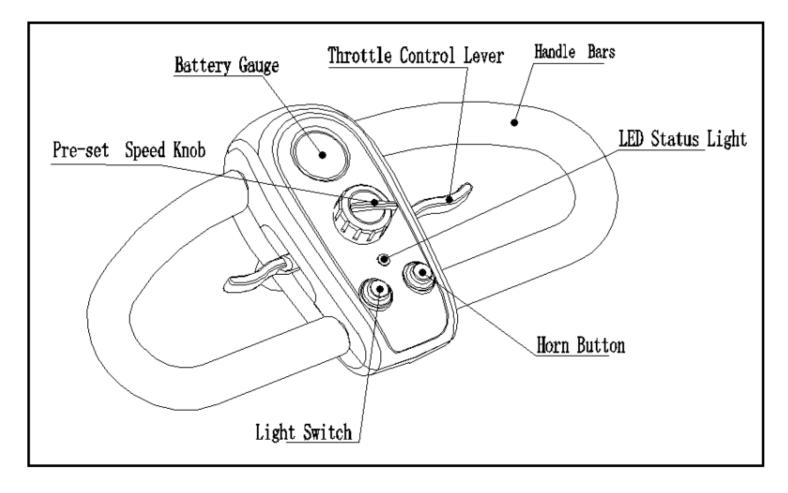


Fig 6.1

## VII. TILLER CONTROL FUNCTIONS

#### THROTTLE LEVER

The throttle lever offers finger-tip control of your scooter. It controls the speed as well as forward and reverse motion. To move the scooter in a FORWARD motion, PULL the lever with the RIGHT HAND or PUSH the lever with the LEFT THUMB (Photo 7.1). To move the scooter in a REVERSE motion, PULL the lever with the LEFT HAND or PUSH the lever with the RIGHT THUMB. The lever will return by itself when released and the scooter will slow to a stop (Photo 7.2). The more you move the lever, the more your speed increases up to its preset maximum. It is possible to operate your scooter using one side of the throttle lever. To do this you must PUSH and PULL on the chosen side of the throttle lever.

#### HORN BUTTON

Pressing the horn button produces a warning sound. Use this function to warn pedestrians of your presence when necessary (Photo 7.3).



P7.1



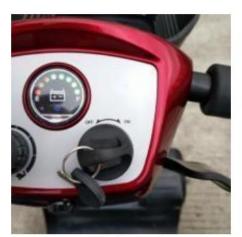
P7.2



P7.3

# VII. TILLER CONTROL FUNCTIONS

#### **KEY SWITCH**







P7.5



P7.6

The key switch switches the scooter ON and OFF. Please note that the key cannot be removed when it is in the ON position (Photo 7.4.). Make sure that this switch is in the OFF position BEFORE getting on or off the scooter. Remove the key to make sure the scooter is OFF (Photo 7.5). Turning the key to OFF whilst driving will cause the scooter to stop very abruptly. This is not recommended except in an emergency stop, as continual use of this function could result in damage to the scooter.

## VII. TILLER CONTROL FUNCTIONS

#### OFF BOARD CHARGING SOCKET

The socket to connect the off-board charger is located on the battery pack (Photo 7.6). To use the socket, swivel the plastic cover to the left or right to reveal the socket connections. The charger output plug can now be connected ready to accept charge current from the battery charger. After use, ensure that the plastic swivel cover is rotated back into place. This action helps prevent water from entering the socket connections.

#### WARNING

Do not attempt to charge your scooter outdoors or in damp/wet conditions. Failure to comply with this instruction may lead to an electric shock and is a potential fire hazard.

## VIII. FREEWHEEL MECHANISM

#### FREEWHEEL MECHANISM

A freewheel device disengages the power drive to allow manual operation (i.e. the scooter can be pushed at a walking pace). This safety function can protect your scooter from theft when parked. By pushing the lever that is located on the right-hand side of the scooter rear panel BACKWARD, you can engage the motor for you to drive. (P8).



P 8

#### **WARNING**

Use extreme caution in the freewheel mode especially on slopes/inclines. Letting go of your scooter whilst it is in freewheel can cause the scooter to roll unexpectedly. ALWAYS re-engage the freewheel device after use.

# IX. SEAT REMOVAL & ADJUSTMENT

#### REMOVING THE SEAT

#### Please note that these instructions are to be used as a guide only.

- 1. Lift armrests upwards for ease of access (Photo 9.1).
- 2. Stand behind the seat and fold the backrest down (Photo 9.2).
- 3. Grasp the seat base and, keeping a firm grip, lift the seat vertically, keeping your back straight. Bend knees if required (Photo 9.3).
- 4. Place seat at desired location for stowage, always keeping back posture straight, bend knees where required (Photo 9.4). Note: Exercise caution when lifting the seat.





P9.1 P9.2 P9.3 P9.4

## IX. SEAT REMOVAL & **ADJUSTMENT**

#### **SEAT ADJUSTMENT**

- 1. To adjust seat height, remove the seat as described (Photo 9.5).
- 2. Move the seat post to the new position and refit the seat pin.
- 3. Refit the seat (Photo 9.6).



#### ARMREST ADJUSTMENT

- 1. Pull the lock-pin out from the seat base (photo 9.7).
- 2. Loose the adjustable bolt (photo 9.8).
- 3. Move the armrests to the desired position and re-tighten the thumbwheel knobs to adjust the width of the armrest.



#### TILLER ADJUSTMENT

The scooter features a highly adjustable tiller which allows you to lock the tiller in the most comfortable driving position. This feature also lets you fold the tiller down fully, for transportation and stowage. The folding knob is located on the bottom of the tiller.

- 1. Support the tiller with your left hand.
- 2. Rotate the folding knob anticlockwise to release the tiller (Photo 10.1-10.2).
- 3. Move the tiller to the desired location.
- 4. Rotate the folding knob clockwise to lock the tiller (Photo 10.2).



P10.1



P10.2



P10.3

#### **BATTERY REMOVAL**

It is important to remove the seat and seat post first to allow better access to the batteries. Lift battery vertically out of its battery tray using the handle provided (Photo 10.4). Remember to keep the knees bent and the back straight.









P10.4

P10.5

P10.6

P10.7

#### BATTERY REPLACEMENT

To replace the batteries, reverse the sequence above Important: Remember to keep the knees bent and the back straight. When reassembling the scooter, remember to insert the locking pin, because failure to do so may result in the batteries disengaging during use. Ensure the battery wells are free from dirt and grit - this will affect the performance of the battery contacts.

#### OFF-BOARD BATTERY CHARGER

Your scooter is supplied with an off board charging facility (Photo 10.5). Please note that only chargers supplied by your local authorised dealer should be used.

- 1. Switch your scooter off at the key switch
- 2. Swivel the charge connector cover located on the battery pack and connect the charger (Photo 10.6).
- 3. Ensure that the charger plug is dry and intact before connecting it to the mains and switching it on.
- 4. A reset button is located on the battery. Please check that the button is pressed in (Photo 10.7).

#### **NOTE**

The charger is capable of charging from 240V to 100V, and 2 Amps. The off-board charger has 3 possible indications:

- 1. RED = Power is On.
- 2. YELLOW = Charging.
- 3. GREEN = Fully Charged.

Ensure the scooter is switched off before commencing the charging process. After charging, always swivels the charging socket cover back into place. This helps prevent water getting into the socket. (Photo 10.6) Please note that the scooter has a safety circuit to prevent it from being driven off during charging. If your scooter fails to respond to normal control after a charging period, please check that the battery charger has been completely disconnected from the scooter. The off-board charger must be kept dry in temperatures between -25°C and 40°C and not be subjected to mechanical damage. In all cases, the charger must only be repaired by an authorised dealer.

#### **WARNING**

You should only use the original charger which comes with this scooter. Using other brands' chargers may shorten your warranty period. Use of an incorrect charger may cause damage to your scooters, or potentially cause a fire. Use extreme caution with the battery and charger. You should manage an exhausted battery according to local laws. Don't put the battery near to any heating device Don't place excess weight on top of the battery, pierce it, or let it endure any high pressure

#### WARNING

No smoking or naked flames when charging batteries. DO NOT touch the battery pack terminals with metal objects. Only use approved replacement batteries. If damage to batteries or battery boxes is evident, contact your local dealer immediately - DO NOT attempt to service the batteries. Remove metallic jewellery when working with batteries. Wear gloves and goggles if moving leaking batteries. Replace damaged or leaking batteries immediately.

#### **FUSES**

There is a reset button as described previously. If a fault occurs, the button will pop out. Switch the scooter off, press the button in and switch the scooter back on. There is a 30A fuse fitted to the positive terminal of the battery. These fuses must be replaced by an authorised service agent. There is also a 2.5A fuse fitted in the charger and a fuse in the mains plug of the battery charger. These fuses must be replaced by an authorised service agent.

#### **IMPORTANT**

Our cartons comply with GB/T4857.18 (equal to ISO4180/2):

- 1. Compliant with test dropping from 500mm height
- 2. Pass transport testing requirements of 2.5m stacking.

#### NOTES FOR END USER

- 1. Please make sure there is no obvious damage to the outside of the carton, before opening it.
- 2. Reverse the packaging steps to remove the scooter, owner manual, warranty card, inspection report or quality certificates, and so on.
- 3. Read the owner's manual carefully to familiarise yourself with assembling or operating your scooter.
- 4. Turn on the scooter and check whether it operates normally.

## XI. TRANSPORTATION

#### **PACKAGING**

To pack the mobility scooter to prevent it from moving in the package, or being scratched, follow the below steps:

- 1. put the scooter into the prepared carton (Photo 11.1), like the position in Photo 11.2.
- 2. Cover the carton and fix the whole carton with professional ropes for packaging. (Photo 11.1 and Photo 11.2).



(P11.1)



(P11.2)



(P11.3)



(P 11.4)

## XI. TRANSPORTATION

#### **PACKAGING**

To pack the mobility scooter to prevent it from moving in the package, or being scratched, follow the below steps:

- 1. put the scooter into the prepared carton (Photo 11.1), like the position in Photo 11.2.
- 2. Cover the carton and fix the whole carton with professional ropes for packaging. (Photo 11.1 and Photo 11.2).

#### **IMPORTANT**

When reassembling the scooter, remember to insert the battery locking pin, because failure to do so may result in the batteries disengaging during use. Always secure your scooter parts before transportation. Remember to engage the drive unit by pushing the freewheel lever forwards to stop the scooter from moving. Don't sit on the scooter during transportation.



P11-5



P11-6



P11-7

## XI. TRANSPORTATION

#### PACKAGING & TRANSPORTATION ENVIRONMENT CONDITIONS

The mobility scooter can be transported by common transportation vehicles, but you need to protect it from strong impact, vibration or any snow or rain. For transportation, this scooter should be put into an environment between -20°C ~ 45°C temperature, with humidity below 93%, and with good ventilation.

#### **BASIC DRIVING**

#### **CAUTION**

It is advisable during the first few sessions of operating your scooter that the area around you is clear of obstacles and pedestrians. Before operating your scooter, ensure the seat height and position has been adjusted to your satisfaction and the tiller angle has been set for optimum safety and comfort. Please see the "General Warnings", "Getting on Your Scooter" and "Tiller Adjustment" sections in this handbook.

- 1. Make sure you are properly seated on the scooter and that the speed control knob is turned fully to the left.
- 2. Turn the key switch to the "ON" position.
- 3. On the tiller, use the throttle lever as described earlier. You will gently accelerate. Release and you will gently stop. Practise these two basic functions until you get used to them.
- 4. Steering the scooter is easy and logical. Be sure to remember to allow enough clearance when turning corners so that the rear wheels clear any obstacle.
- 5. Shortcutting a pavement corner can cause the back wheel to go off the pavement, causing problems if the corner is very rough. Always avoid this by steering an exaggerated curve around the obstacle.
- 6. When steering in a tight spot, such as entering a doorway or when turning around, stop the scooter and then turn the handlebar to where you want to go, then apply power gently. This will make the scooter turn very sharply. It is also recommended that the preset speed is set to a slower setting to aid control in tight spots.
- 7. Reversing requires attention exercise caution when reversing especially down slopes. When reversing, always turn the handlebars in the opposite direction to the way you want to go. The more you operate the throttle lever, the faster you will go. Reverse speed is 50% slower than forward speed. If the scooter does not move in reverse, carefully turn the speed control knob clockwise until the scooter moves gently backwards.

#### **IMPORTANT**

To preserve battery power there is a "sleep timer" feature built into the controller. Should the scooter be left ON, but not operated for 15 minutes the scooter will go into "sleep mode". To reset this, switch the scooter OFF and then back ON again.

#### HILL CLIMBING

This scooter will climb an incline of no more than 10° with a maximum user weight of up to 120kg (264 lbs) (Photo 12.1). Do not attempt to climb inclines more than this. Always reduce your speed when reversing on slopes. Do not reverse down hills more than 8° and always use extreme caution when reversing down hills. Do not attempt to drive with the wheels at different levels, e.g. along a pavement and road simultaneously. Hill climbing capability and distance travelled between battery charges will be affected by such things as:

- 1. The weight of the user.
- 2. Terrain
- 3. Steepness of hills.
- 4. Level of charge and the age of the batteries.
- 5. Extremes of temperature.
- 6. Use and weight of accessories.



P12.1



P12.2

#### TRAVELLING ACROSS SLOPES

Care should be taken traversing a slope, always reduce your speed.

#### **NOTE**

Were possible always travel up or down hills or ramps directly facing the slope of the hill. Do note traverse across the face of a slope more than 10°. Disregarding this advice could result in your scooter tipping.

#### **BRAKING**

To bring the scooter to a standstill simply let go of the throttle control lever. Remember to keep both of your hands on the handlebars whilst the scooter is braking. Releasing the control lever will stop your scooter in seconds.

#### **NOTE**

Automatic braking is not instantaneous and will engage within ½ a wheel turns once the scooter has stopped.

#### **EMERGENCY BRAKING**

The scooter must always be switched off at the key switch. When the scooter is stowed or not in use for a long period of time, always charge the batteries for 12 hours and then disconnect the battery pack before storing. If the scooter is to be stored for a long period of time remove the fully charged battery packs and store at or near room temperature.

#### USE ON THE PAVEMENT

When using your scooter on the pavement always be aware of pedestrians and situations which might require extra care. For example, near young children and pets. Remember, especially when driving in public places, to always drive with caution and regard for others. When manoeuvring in confined areas, including shops, ensure the minimum speed is selected (P12.3). If you leave your scooter outside a shop ensure that it does not obstruct the footpath or vehicular access. Always switch off and take your key with you.



P12.3

#### **CROSSING ROADS**

Crossing roads Your scooter is not capable of mounting and dismounting kerbs and other obstacles more than 45mm. Remember before crossing the road, drive forwards and position the scooter at 90° to the road, stopping about 30-60cm (1-2 feet) away from the edge of the pavement. Check that it is clear to cross. Select a medium to high-speed setting and when safe to do so, drive across without stopping.

#### **NOTE**

Heavier users will require higher speed settings.

#### **NOTE**

Low speed settings are recommended when travelling downhill, particularly in reverse. Also, reduce your speed when turning corners. The anti-tip devices fitted to the scooter must not be removed.

#### **TURNING CORNERS**

Always reduce your speed when turning corners, particularly when travelling downhill. Disregarding this advice could lead to your scooter tipping over.

#### USE OF MOBILE PHONES

Mobile telephones or two-way radio devices must not be used while operating the vehicle. Use of mobile phones or two-way radios can cause excessively strong electromagnetic fields. This may interfere with the vehicle's electronic systems. If mobile phones or mobile radios are required to be used, the vehicle must be brought to a halt and the power turned off before any such device is used.

#### **TYRES**

Your scooter has solid tyres. It is good practice to inspect the tyres for damage or wear regularly.

#### **CAUTION**

Routine use of emergency braking will cause damage to your scooter.

#### **CAUTION**

Transporting the scooter along a slope in freewheel mode can be dangerous. Take extra care if this is necessary. Always re-engage the freewheel device after use. Never sit on your scooter whilst in freewheel since the scooter will no longer automatically stop.

#### **GENERAL INFORMATION**

Batteries are the power source for almost all the mobility products available today. The design of batteries used in mobility products is significantly different from the batteries used to start a car for example. Car batteries are designed to release a large amount of power over a short period of time, whilst mobility batteries (commonly called deep cycle batteries) release their power evenly over a long period of time. Therefore, due to the lower production volumes and increased technological requirements, mobility batteries are typically more expensive. Commonly two 12-volt batteries are used together in a mobility product giving a total voltage of 24 volts. The size of the battery (e.g. 10Ah). The higher the number, the bigger the battery size, weight and, potentially, the greater the distance you can travel.

#### **BATTERIES**

Your scooter is fitted with batteries that require no maintenance, other than regular charging. If a battery is physically damaged, please use extreme caution when handling it.

#### **BEWARE**

Battery fluid is corrosive, and care should be always taken to avoid contact with it. If it comes into contact with the skin or clothing, wash immediately with soap and water. If it comes into contact with the eye, immediately flood the eye with running cold water for a minimum of 10 minutes and seek medical attention. Please do not dispose of batteries in normal waste, always recycle in accordance with local laws.

#### MAINTENANCE FREE

The battery used in the battery pack uses gel electrolyte which is totally sealed within the battery's outer case. As the name implies, no maintenance is required other than regular charging. As the battery case is sealed, you can safely transport this type of battery without fear of acid spilling. Furthermore, they are approved for transportation on aircraft, boats and trains. It is recommended that the batteries are always transported and stored upright. Only use batteries supplied by an authorised dealer.

#### **BATTERY CARE**

We have set out a battery care plan for maintenance free batteries. If a different care plan is followed, this may result in lower-than-expected performance from your mobility vehicle.

#### NOTE

Do not expose any part of the battery to direct heat and 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 smoke when in the vicinity of charging batteries. Exclude all naked flames from the area. Do not allow the batteries to freeze.

#### BATTERY PACK CARE PLAN

- 1. Only use the approved battery charger compatible with the vehicle to be charged.
- 2. Charge your batteries overnight, regardless of the amount of use your mobility device has had during the day.
- 3. Do not interrupt the charging cycle.

Do not leave the charger still connected to the batteries when the mains have been switched off. This will eventually deplete the battery charge.

- 4. If you leave your vehicle for an extended period (more than 5 days) first charge your batteries for 12 hours, then remove charger and ensure the batteries are disconnected.
- 5. Failure to allow for full recharge will damage the batteries and can lead to shortened distances and permanent failure.
- 6. Do not top up the charge of your batteries during the day except in an emergency. Wait until the evening for a full overnight charge.

#### **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.

7. The batteries need to be checked regularly for signs of damage. If any damage is apparent, contact your local mobility dealer immediately.

#### **CAUTION**

Take care not to short circuit the battery terminals. Remove all conductive jewellery (e.g. watches, necklaces etc.) before checking the batteries.

8. Following all the points above should result in a healthier battery, greater range for the vehicle user and a longer life for your batteries.

#### THE RANGE OF YOUR VEHICLE

Most manufacturers of mobility products state the range of their vehicles either in the sales literature or within the owner's manual. The range stated sometimes differs from manufacturer to manufacturer even though the battery size is the same. We measure the range of our vehicles in a consistent and uniform manner, but variances still occur due to motor efficiencies and overall product load weight. The range figures are calculated to I.S.O. Standard 7176, Part 4: Scooter Energy Consumption Theoretical Range. The range figures should be seen as a theoretical maximum and could be reduced if any single, or combination, of the following circumstances occur:

- 1. User heavier than 120kg.
- 2. Batteries whose age and condition are less than perfect.
- 3. The terrain is difficult or unsuitable e.g. very hilly, sloping, muddy ground, gravel, grass, snow and ice.
- 4. The vehicle climbs ramps regularly.
- 5. The ambient temperature is very hot or very cold.
- 6. Damage to one or more tyres.
- 7. Lots of start/stop driving.
- 8. Thick pile carpets within the home can affect range.

Always check that the batteries are sufficiently charged before setting off. Always ensure that your batteries are in good condition and that no leakage has occurred. Do not expose any part of your charger, battery, or scooter to direct heat (e.g. gas fires or naked flame).

#### **NOTE**

If you are out on your scooter and the battery gauge is reading low the remaining range can be increased slightly by decreasing the maximum available speed.

## XIV. GENERAL WARNINGS

#### PERSONAL & OPERATIONAL GUIDELINES

Drive profiles should only be adjusted by healthcare professionals and approved agents/dealers, who are totally conversant with the process. They must also fully understand the user's capabilities and the user's condition's ability to operate the scooter safely.

Incorrect setting may cause injury or damage to the user, bystanders, the scooter and/or nearby property.

To determine personal mobility limitations, practice combinations of bending, reaching, mount and dismount techniques. Practise the above techniques with the aid of an assistant.

**DO NOT** attempt to pick up objects that cause you to shift your weight in the seat or require you to bend excessively in any direction. Such action may result in the scooter tipping over, or in injury to the person or both.

**DO NOT** use an escalator to move the mobility scooter between floors as serious bodily injury could arise from such actions.

**DO NOT** drive on the road, dual carriageways or motorways.

**DO NOT** drive up, down or across inclines that have water, ice, oil or any other slippery substance on the surface. Failure to note the above conditions could cause loss of control.

**DO NOT** attempt to drive over kerbs or obstacles more than 45mm. Disregarding this warning could cause the mobility scooter to tip resulting in possible body harm.

## XIV. GENERAL WARNINGS

**DO NOT** make sharp turns in forward or reverse at high speeds.

**DO NOT** carry passengers on your scooter.

**DO NOT** attempt to tow another vehicle.

**DO NOT** operate the mobility scooter without first checking that it is safe to do so. Always be aware of your surroundings.

**DO NOT** attempt to use your mobility scooter without the anti-tipper wheels attached.

DO NOT attempt to fit parts, accessories or adapters that are not authorised.

**DO NOT** mount or dismount your mobility scooter without first withdrawing the ignition key. This will ensure that the power is off, and the scooter cannot move unexpectedly.

**DO NOT** leave the ignition key in your scooter whilst it is unattended. Children or inexperienced people may attempt to drive your scooter which may result in damage or personal injury.

**DO NOT** connect any medical device, such as a ventilator, life support machine etc to the scooters electrical system. Failure of the equipment may result in damage or personal injury.

**DO NOT** operate your mobility scooter whilst under the influence of alcohol, drugs or prescription medication that may impair judgements.

DO NOT operate your mobility scooter if you feel acutely unwell.

**DO NOT** operate your mobility scooter if your vision is seriously impaired.

If you have any doubts about medical conditions, health problems or treatments that may affect your ability to operate the mobility scooter safely, please consult your healthcare professional.

We specifically disclaim responsibility for all personal injury and personal damage that may occur during use which does not comply with the relevant national or local statutes.

**DO NOT** attempt to operate your scooter whilst standing next to it. Always ensure that you can operate all the controls from a seated position, and that the seat is securely locked into place.

### **ATTENTION**

Switch on the scooter lights (if fitted) to make yourself visible when there are low levels of light, day or night.

The rear body panel (where fitted) is designed to cover the Drive Assembly, Wiring Harness and Electrical Connectors.

**DO NOT** stand on any of the body panels, only the footboard.

**DO NOT** stand on the scooter seat.

**DO NOT** attempt to transfer into or out of the scooter seat without first checking that it is LOCKED into position. Attempting unsafe transfers can result in bodily injury and/or damage.

**DO NOT** drive your scooter if the seat is not LOCKED in the FORWARD position. The seat must be secured in the FORWARD-facing position BEFORE and DURING operation of the scooter. Attempting to operate scooter with the seat not secured in the FRONT facing position, could result in damage and/or bodily injury.

**DO NOT** operate the scooter without ensuring that the tiller is properly adjusted and secured. After making any adjustment to the tiller position you must check that the tiller is locked and secured into position BEFORE driving. To check, gently push and pull the tiller to make sure it is secured. An unsecured tiller could result in damage and/or bodily injury.

**DO NOT** attempt to climb, ascend, or descend ramps greater than 10 degrees, or transverse slopes with a gradient greater than 10 degrees.

**DO NOT** attempt to reverse down slopes more than 8 degrees. When negotiating ramps or inclines, if the throttle lever is released a roll back will occur. In FORWARD or REVERSE motion, the scooter will ROLL BACK approximately 30cm (1ft), before the brake engages. Check that all electrical connections are secure before using your scooter.

**DO NOT** under any circumstances, disconnect, cut, extend or otherwise modify ANY of the wiring harnesses installed within or connected to your mobility scooter.

**DO NOT** under any circumstances, disconnect, cut, extend or otherwise modify ANY of the wiring harnesses installed within or connected to your mobility scooter battery charger.

It is important that your mobility scooter battery charger is connected to a properly installed electrical socket with an earthed outlet.

Failure to comply with the above requirements could result in a possible SHOCK HAZARD.

**DO NOT** use any batteries that are not DEEP CYCLE GEL, AGM or SEALED LEAD-ACID type. Other types of batteries are NOT SUITABLE. Please read battery/battery charger information before installation.

This scooter has been tested to ISO 7176 Part 9 "Climatic Tests for Electric Wheelchairs."

The test confirms that the scooter user or their attendant, will have sufficient time to remove the mobility scooter from a rainstorm, whilst retaining normal operation of the mobility scooter.

**DO NOT** operate your mobility scooter during an electrical storm.

**DO NOT** leave your mobility scooter in a rainstorm of any kind.

**DO NOT** use your mobility scooter in a shower or leave it in a damp bathroom or sauna.

**DO NOT** leave your mobility scooter in a damp area for any length of time.

**DO NOT** Jet wash, hose down, or use an automated carwash on your mobility scooter.

Direct exposure to rain, sea spray or moisture could cause the mobility scooter to malfunction electrically and mechanically and may cause rusting.

### Maximum User Weight Limitations.

120kg (264 lbs)

### **DISPOSAL**



The symbol above means that in accordance with local laws and regulations your product should be disposed of separately from household waste. When this product reaches the end of its life, take it to the collection point designated by local authorities. The separate collection and recycling of your product at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects the environment. Ensure you are the legal owner of the product prior to arranging for the product disposal in accordance with the above recommendations.

### **CAUTION**

It is very important that you read this information regarding the possible effects of Electromagnetic Contamination, (EMC) on your mobility scooter. Sometimes this effect is also known as Electromagnetic Interference (EMI). EMC (EMI) from radio-wave sources.

Mobility scooters may be susceptible to EMC, which is interference from electromagnetic energy (EM) emitted from sources such as radio stations, TV stations, amateur (HAM) radio transmitters, two-way radios and mobile phones. The interference (from radio sources) can cause the mobility scooter to release its brakes, move by itself, or move in an unintended way. Permanent damage can also be done to the mobility scooter's control system.

The intensity of the interfering EM energy can be measured in volts per metre (V/m.). Each mobility scooter can resist EMC up to a certain intensity. This is known as the scooter's "immunity level". The higher the immunity level, the greater the protection. Current technology offers useful protection of at least 20 V/m. which provides protection from the more common sources of radiated EMC. There are several relatively strong Electromagnetic Fields present in the everyday environment. Most of these sources are obvious and easy to avoid, others are not so obvious and can be unavoidable. By following the warnings listed, your risk of exposure to EMC will be minimised.

### EMC sources can be broadly classified into three types:

- 1. Hand-held portable transceivers (transmitter-receivers with on-board antenna). Examples are Walkie-Talkies, CB Radio, security, emergency services and mobile phones. Note that some cellular phones can transmit signals while they are switched on but not being used.
- **2.** Medium range mobile transmitters such as those used on emergency services vehicles, taxis etc. These usually have antennae mounted on the outside of the vehicle.
- **3.** Long-range transmitters and transceivers, such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.

### **NOTE**

Other types of hand-held devices such as cordless phones, laptop computers, AM/FM radios, TV sets, CD players, cassette players and small appliances, such as electric shavers and hair dryers, are not likely to cause any EMC problems to your mobility scooter.

### MOBILITY SCOOTER ELECTROMAGNETIC CONTAMINATION (EMC)

EM energy rapidly intensifies the closer one moves to the transmitting antenna, the source. Because of this it is possible to bring strong EM fields unintentionally close to your mobility scooter's control system. Mobile hand-held radio type transceivers are of particular concern. Whilst such devices are in use, it is possible that the EM radiation can affect the mobility scooter's movement and braking.

### EMC sources can be broadly classified into three types:

- **4.** Hand-held portable transceivers (transmitter-receivers with on-board antenna). Examples are Walkie-Talkies, CB Radio, security, emergency services and mobile phones. Note that some cellular phones can transmit signals while they are switched on but not being used.
- **5.** Medium range mobile transmitters such as those used on emergency services vehicles, taxis etc. These usually have antennae mounted on the outside of the vehicle.
- **6.** Long-range transmitters and transceivers, such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.

### **NOTE**

Other types of hand-held devices such as cordless phones, laptop computers, AM/FM radios, TV sets, CD players, cassette players and small appliances, such as electric shavers and hair dryers, are not likely to cause any EMC problems to your mobility scooter.

### MOBILITY SCOOTER ELECTROMAGNETIC CONTAMINATION (EMC)

EM energy rapidly intensifies the closer one moves to the transmitting antenna, the source. Because of this it is possible to bring strong EM fields unintentionally close to your mobility scooter's control system. Mobile hand-held radio type transceivers are of particular concern. Whilst such devices are in use, it is possible that the EM radiation can affect the mobility scooter's movement and braking.

The following warnings are recommended to help prevent possible interference with your mobility scooter's control system:

- 1. Do not operate hand-held transceivers, such as CB radio or turn on cellular phones, whilst your mobility scooter is turned ON.
- 2. Be aware of nearby radio or television transmitters and try to avoid coming too close to them.
- 3. If you experience unintended movement or brake release, switch your scooter OFF as soon as it is safe to do so.
- 4. Adding accessories, components or modifying the mobility scooter, may increase susceptibility to EMC (EMI).

### **NOTE**

There is no easy way of assessing the effect of any modification on a scooter's EM immunity.

5. If you experience any EMC (EMI) related incidents, please report them to your dealer, noting if there is a possible source of EM transmission nearby.

#### **NOTE**

The LuXe Mobility X100 Sport mobility scooter complies with IEC 60601-1-2 standard EM requirements. Users should assemble or use the scooter according to the EM requirements owner's manual. Portable or mobile RF communication devices may affect the scooter, so please keep it away from EM interference such as mobile phones or microwaves. Please check the attachments for the guidance and manufacturer's declaration

### WARNING

This device or system should be kept away from other equipment. If they must be put together, please check whether the device or system can run normally.

You should consider the original manufacturer of the device or system as the sole supplier. Failure to do so may cause EMC increase and or decrease anti-EMC ability.

### **ATTACHMENTS**

### Guidance and manufacturer's Declaration-electromagnetic emission

The LuXe Mobility X 100 Sport is intended for use in the electromagnetic environment specified below. The customer or the user of the LuXe Mobility X100 Sport should assure that it is used in such an environment.

•	Carreliance	Electromagnetic			
<b>Emission Test</b>	Compliance	environment-guidance			
		The LuXe Mobility X100 Sport uses RF energy only			
		for its internal function.			
	~ .	Therefore, its RF			
RF Emission CISPR 11	Group 1	emissions Are very low			
		and are not Likely to			
		cause any Interference in nearby electronic equipment.			
RF Emission CISPR 11	Class B	The LuXe Mobility X100 Sport is suitable for use in all establishments,			
Harmonic Emissions		including domestic establishments and those			
IEC61000S-3-2	Class A	directly connected to the			
12001000202		public low-voltage power			
		supply network that			
Voltage fluctuation/flicker		supplies domestic			
emissions IEC61000S-3-3	Complies	buildings.			
1					

### Guidance and manufacturer's Declaration-electromagnetic emission

(SW-1000S scooter) is intended for use in the electromagnetic environment specified below. The customer or the user of the (SW-1000S scooter) should ensure that it is used in such an environment.

Immunity Test	IEC 60601 <b>Test</b> <b>Level</b>	Compliance Level	electromagnetic environment- guidance
Electrostatic discharge (ESD) IEC61000S-4-2	±6kV contact ±8kVair	±6kV contact ±8kVair	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000S-4-4	±2kVfor power supply lines ±1kVfor input/output lines	±2kV for power supply lines ±1kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000S- 4-5	±1 kV differential mod e ±2 kV common mode	±1 kV differential mod e ±2 kV common mode	Mains power quality should be that of a typical commercial or hospital environment.

Surge IEC 61000S- 4-5	±1 kV differential mod e ±2 kV common mode	±1 kV differential mod e ±2 kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines. IEC 61000S-4-11	<5% UT, (>95% dip is 40% UT (60% dip in, 70% UT, (30% dip in <5% UT, (>95% dip is 40%)	Mains power quality should be that of a typical commercial or hospital environment. If the use of the LuXe Mobility X100 Sport requires continued operation during power mains interruptions, it is recommended that the LuXe Mobility X100	
Power Frequency (50/60Hz) Magnetic Field IEC 61000S-4-8	3A/m		Sport be powered from an uninterruptible power supply or a battery. Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment

NOTE: UT is the AC mains voltage prior to application of the test level.

### Guidance and manufacturer's Declaration-electromagnetic emission

The LuXe Mobility X100 Sport is intended for use in the electromagnetic environment specified below. The user of the LuXe Mobility X100 Sport should ensure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	<b>Compliance Level</b>	electromagnetic environment- guidance
Conducted RF IEC 61000S-4-6  Radiated RF IEC 61000S-4-3	3 Vrms 150 kHz to 80 MHz 3 V/m 80 MHz to 2.5 GHz	3 Vrms 3V/m	Portable and mobile RF communications equipment should not be used closer to any part of the LuXe Mobility X100 Sport, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.  Recommended separation distance $d = 1.2 P$ $d = 80 \text{ MHz to } 800$ $MHz$ $d = 2.3 P 800 \text{MHz to } 2.5 \text{ GHz}$

	Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres. Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range.
	of the equipment marked with the following symbol:

Note 1: At 80MHz and 800MHz, the higher frequency range applies.

Note 2: This guidance may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the LuXe Mobility X100 Sport is used exceeds the applicable RF compliance level above, the LuXe Mobility X100 Sport should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the LuXe Mobility X100 Sport. Over the frequency range 150kHz to 80MHz, field strengths should be less than 3V/m.

Recommended separation distances between portable and mobile RF communications equipment and the LuXe Mobility X100 Sport

The LuXe Mobility X100 Sport is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The user of the LuXe Mobility X100 Sport can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the LuXe Mobility X100 Sport as recommended below, according to the maximum output power of the communications equipment.

Rated maximum	Separation distance according to frequence of transmitter /m					
output power of	150kHz <b>∼</b> 80	80MHz ~ 800	800MHz ~ 2.5			
transmitter /W	MHz	MHz	GHz			
	d = 1.2 P	d = 1.2 P	d = 2.3P			
0.01	0.12	0.12	0.23			
0.1	0.38	0.38	0.73			
1	1.2	1.2	2.3			
10	3.8	3.8	7.3			
100	12	12	23			

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

Note 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

# XVI. SPECIFICATIONS

Model	LuXe Mobility X100 Sport
Length	1000 mm
Rear Width	490 mm
Height	840 mm
Maximum Weight Capacity	120 kg (264 lbs)
Battery Capacity	12Ah
Maximum Safe Slope	10° at 120kg
Turn Radius	1500 mm
Minimum Safe Turn Space	2000 mm
Seat – Base Height	350 mm
Maximum Speed	4 mph (6km/h)
Wheel Diameter Front	177.8 mm * 63.5 mm
Wheel Diameter Rear	203.2 mm * 76.2 mm
Charger off-board	2A
Range	18km
Overall Weight	48kg
Seat Weight	12.5kg
Battery Weight	5.0kg
Front Basket Weight	0.8kg
Ground Clearance	45 mm
Controller (Dynamic)	DR50-A01 (Programmable
	by Dealer

# XVI. SPECIFICATIONS

According to prevent electric	Internal Power Class
shock category classification	
A.1.4	
According to prevent electric	B Class
shock category classification	
According to the	IPX4
classification on the degree	
of protection into the liquid	
In mixture with air of	Not AP/APG
flammable gas and oxygen or	
nitrous oxide mixture of	
flammable gas conditions,	
classify by the safety degree	
According to the operation	Continuous operation
pattern classification	
Volts of the mobility scooter	24VDC (2 units)
power	
Type of Power	D.C.24V

### SMALL DIFFERENCES FROM THESE MEASUREMENTS MAY OCCUR

## XVII. ROUTINE MAINTENANCE

The following table gives an indication as to when routine maintenance checks should be made.

Recommended Frequency	Daily	Weekly	Monthly	Annual
Clean and protect with petroleum				*
jelly				•
Ensure parking brake (where				*
fitted) is correctly adjusted				•
Check stabiliser wheels for wear			*	
Inspect motor brushes				*
Full service by dealer				*



#### **STORAGE**

When storing your scooter for long periods (more than one week), charge batteries for 12 hours and then disconnect the batteries to minimise battery discharge.

#### **ELECTRONIC FAULTS**

Do not attempt to investigate faults in the control box, the control pod or charger as the design and set up of the electronics.

### **CAUTION**

Disconnect batteries before changing LED.

### **WHEELS**

Note: Wheels should only be removed and refitted by authorised dealer.

## XVIII. SERVICE HISTORY

This section is designed to assist you in keeping a record of any service and repairs to your scooter. Should you decide to sell or exchange your vehicle in the future, this will prove most helpful to you. Your Service Agent will also benefit from a documented record and this manual should accompany the scooter when service or repair work is carried out. The Service Agent will complete this section and return the manual to you.

Customer Name:					Date:				
Date Purchased:					Scooter Model:				
Address:									
Colour:					Serial No:				
Year	1	2	3	4	Year	1	2	3	4
Service dates					Service dates				
Controller					Upholstery				
On/off switch					Seat				
Output plug					Back				
Operation					Armrest				
Dynamic braking					Wheels/tyres				
Programmable					Wear				
Settings									
Batteries					Bearings				
Levels					Wheel nuts				
Connections					Test run				
Discharge test					Forwards				
Motors					Reverse				
Wiring					Emergency Stop				
Noise					Left turn				
Brake					Right turn				
Brushes					Up/down slope				
Chassis			_		Over obstacle				
Condition					Parking brake				
					(where fitted)				
Steering					List items repaired/ac	djuste	ed	•	

# XVIII. SERVICE HISTORY

Electrics	1	2	3	4		
Connections						
Lights (where fitted)						
Dealer stamp					Dealer stamp	
Date: Sig	gned:				Date:	Signed:
Dealer stamp					Dealer stamp	
Date: Sig	ned:				Date:	Signed:

# XIX. TROUBLESHOOTING GUIDE

SYMPTON	POSSIBLE CAUSE	SOLUTION
	Batteries not charged for	Charge batteries for eight
Shortanad Danga	long enough	hours or more
Shortened Range	Batteries weak and cannot	Replace Battery Pack
	hold charge	
	Battery pack fault	Replace charger
	Charge fault	Contact local mobility
		dealer
	Charger loom or plug damaged	Check plugs and looms
	Loose connection	Try a wall socket in a
Battery pack not charging,		different room
or battery gauge shows	No output from wall	Unplug from wall &
empty after charging	outlet	change fuse
	Fuse in charger mains	Switch off and press
	plug brown	button back in
	Button on battery pack	Switch off and press
	has popped out	button back in
	Output fuse in charger	Unplug from wall and
	blown	contact dealer
Battery charging current	Faulty batteries	Replace battery pack
high	Scooter switched on	Turn scooter off
g.i	during charging	
	Brake-release lever	Engage brake-release
	disengaged	lever
	Flat batteries	Charge battery pack
	Scooter is not switched on	Ensure the key is
	with key	switched on
	Battery pack not engaged	Check battery pack is
Not driving	properly	fully engaged onto
Not driving		connectors
	Charger plugged in	Unplug charger
	Button on battery pack	Reset circuit-breaker
	popped out	button
	Disconnected loom or	Check all plugs & looms
	plugs	
	Control system fault	Contact dealer

## XIX. TROUBLESHOOTING GUIDE

Motor runs irregularly	Electrical dealer	Contact dealer		
and/or noisily	Control system fault	Contact dealer		
DO NOT ATTEMPT TO OPEN ANY PARTS OF THE SCOOTER CONTROL				

DO NOT ATTEMPT TO OPEN ANY PARTS OF THE SCOOTER CONTROL SYSTEM, BATTERY PACK, LOOMS, PLUGS OR BATTERY CHARGER.

THE CONTROL SYSTEM IS SAFETY CRITICAL AND THERE ARE NO USER SERVICEABLE PARTS.

Your scooter is fitted with a self-diagnostic controller that will give a sequence of audible beeps when an error is detected to help you, or the authorised service agent, determine the drive electronics fault. Should you switch on the scooter and hear the beeps, note the number of beeps, separated by a short delay between each sequence, and refer to the table below.

NO OF BEEPS	REPRESENTS	POSSIBLE CAUSE	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 high	Decrease speed while climbing
3	voltage	while overloading or climbing	Check battery connection
4	Electric current over limit	Electric current over limit of the	Check motor and relative wiring connections
	over mint	motor	Switch off and wait a few minutes
5	Freewheel lever Issue	The freewheel lever is on	Check the relative wiring of the freewheel lever  Confirm the lever
			is on the correct position

# XIX. TROUBLESHOOTING GUIDE

6	Accelerator variable resistor issue	When turning on the controller, accelerator variable isn't in the neutral position	Make sure the accelerator variable resistor is in the neutral position  Accelerator variable resistor may need recalibration
7	Speed limited variable resistor issue	Accelerator variable resistor, speed limited variable resistor or other wiring issue	Check all the accelerator variable resistor, speed limited variable resistor or other wiring
8	Motor voltage issue	Motor and other relative wirings issue	Check 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 the controller off and on again

### XX. WARRANTY

### WARRANTY CONDITIONS

- 1. The repair or replacement will be carried out by an authorised Dealer/Service Agent.
- 2. To apply the warranty conditions should your scooter require attention under these arrangements, notify the designated Service Agent immediately giving full information about the nature of the difficulty. Should you be operating the scooter away from the locality of the designated Service Agent work under the "Warranty Conditions" will be carried out by any other Service Agent designated by the manufacturer.
- 3. Should any part or parts of the scooter require repair or replacement because of a specific manufacturing or material defect within one year from the date on which the possession of the scooter was transferred to the original purchaser, and subject to it remaining with that ownership, then the part or parts will be repaired or replaced completely free of charge if returned to the authorised Service Agent.
- 4. Any repaired or replaced part will benefit from these arrangements for the balance of the warranty period applicable for the scooter.
- 5. Parts replaced after the original warranty has expired are covered for a further three months.
- 6. 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 other upholstery, tyres, inner tubes, batteries, arm pads, hand grips and other similar parts.
- 7. The above warranty conditions apply to all scooter parts for models purchased at full retail price.

## XX. WARRANTY

- 8. Under normal circumstances, no responsibility will be accepted where the scooter has required repair or replacement as a direct result of:
- (i) The scooter or part not having been maintained in accordance with the manufacturer's recommendations, where such exist. Or failing to use only the specified original equipment parts.
- (ii) The scooter or part having been damaged by neglect, accident or improper use.
- (iii) The scooter or part having been altered from the manufacturer's specifications, or repairs having been attempted prior to Service Agent being notified.

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

The scooter shown and described in this manual may not be 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 weighs, measurements, or other technical data shown in this manual. All figures, measurements, and capacities shown in this manual are approximate, and may not constitute precise specifications.

THIS IN NO WAY AFFECTS YOUR STATUTORY RIGHTS.

# XX. WARRANTY

Your local service agent:		
Your local service agent:		
Tour local service agent.		

