### Introduction

Thank you for choosing a Sunrise Medical Sterling Scoota.

Before using your Scoota 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 Scoota please contact your local Sunrise Medical Service Agent. If you have any other questions please write or telephone the address below.

This Scoota is designed for comfort, safety and durability and has been exhaustively researched and tested by our experts.

It is intended for the use of people of all ages who may have difficulty walking distances or for periods of time. It is ideal for indoor and outdoor use and suitable for users up to 113kg in weight (250 lbs).

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 Directive 73/23/EEC and 89/336/EEC.

Sunrise Medical is dedicated to providing products of exacting quality which conform fully and reliably to the requirements of their intended use. We are BS ISO 9001 accredited which is the internationally recognised standard for quality management systems. This approval ensures we provide quality in all areas of our business from development through to final delivery.

#### SUNRISE MEDICAL LIMITED SUNRISE BUSINESS PARK HIGH STREET WOLLASTON WEST MIDLANDS DY8 4PS

**ENGLAND** 

Telephone 01384 44 66 88 Fax. 01384 44 66 99 International Telephone +44 1384 44 66 88 Fax.+44 1384 44 66 99 www.sunrisemedical.co.uk

SERIAL Number	Inspected by:

### Guarantee

#### Your guarantee

The guarantee form is supplied with this manual, please fill in the relevant details and return to us to register your entitlement.

THIS IN NO WAY AFFECTS YOUR STATUTORY RIGHTS

#### **Warranty conditions**

- 1 The repair or replacement will be carried out by an authorised Sunrise Medical Dealer/Service Agent.
- 2 To apply the warranty conditions should your Scoota require attention under these arrangements, notify the designated Sunrise Medical Service Agent immediately giving full information about the nature of the difficulty. Should you be operating the Scoota away from the locality of the designated Sunrise Medical Service Agent work under the "Warranty Conditions" will be carried out by any other service agent designated by the manufacturer.
- 3 Should any part of the Scoota require repair or replacement as a result of a specific manufacturing or material defect within twelve months from the date on which the possession of the Scoota was transferred to the original purchaser, and subject to it remaining within that ownership, the part or parts will be repaired or replaced completely free of charge if returned to the authorised Service Agent.

#### Note: This guarantee is not transferable.

- 4 Any repaired or replaced part will benefit from these arrangements for the balance of the warranty period applicable to the Scoota.
- 5 Parts replaced after the original warranty has expired are covered for a further twelve 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 others upholstery, tyres, inner tubes, batteries and other similar parts.



#### **Sunrise Medical Limited**

High Street, Wollaston, West Midlands DY8 4PS England Tel 01384 44 66 88 Fax 01384 44 66 99 www.sunrisemedical.co.uk

- 7 The above warranty conditions apply to all ,Scoota parts, for models purchased at full retail price.
- 8 Under normal circumstances, no responsibility will be accepted where the Scoota has required repair or replacement as a direct result of:-
  - a. The Scoota 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.
  - b. The Scoota or part having been damaged by neglect, accident or improper use.
  - c. The Scoota or part having been altered from the manufacturer's specifications, or repairs having been attempted prior to the 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 Scoota 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 specifications.

Your local service agent:	
Your local service agent:	

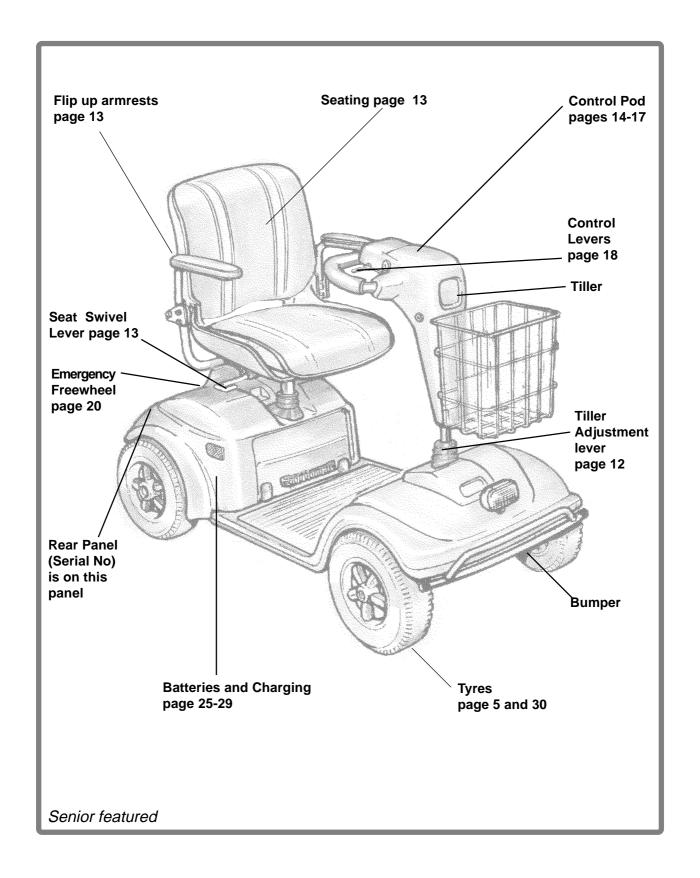




Please remember to fill in and post the guarantee registration card enclosed with this manual. **Sunrise Medical Limited** recommend that you do not undertake maintenance tasks other than those explained in this manual. Your local authorised Sunrise Medical service agent is fully trained by Sunrise Medical to carry out detailed maintenance as and when required. **Use only genuine Sunrise Medical replacement parts.** 

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# Features and options



### Safety warnings

#### **General safety warnings**

Safety is important with any vehicle that is power driven. Below are some essential tips to safeguard your use. These are not conclusive and should be read in conjunction with sections 4 - 11, which explain how to assemble, adjust, operate and maintain your vehicle.

This vehicle is not intended for use on normal roads, except for crossing between pavements.

Always ensure that your Scoota is switched off before attempting to mount or dismount.

Do not attempt to operate your Scoota whilst standing next to it.

Always ensure that you are able to operate all the controls from a seated position, that the rear view mirror (if fitted) is set correctly and that the seat is securely locked into place.

Always ensure you can be seen if you intend to use your Scoota in poor light.

#### **Turning Corners**

Always reduce your speed when turning corners, particularly when travelling down hill.

Disregard of this advice could lead to your Scoota tipping over.

#### **Kerb climbing**

#### Midi

Do not attempt to mount or dismount kerbs in excess of 5cm (2"). Midis are not a kerb climbing vehicle.

#### Senior

Do not attempt to mount or dismount kerbs in excess of 10cm (4").

Always mount and dismount kerbs with caution and directly facing the kerb.

Do not attempt to mount or dismount kerbs in reverse.

#### Hill climbing

Where possible always travel up or down hills or ramps directly facing the slope of the hill.

This Scoota has been tested to climb a continuous incline of no more than 50 metres at 11° (1 in 5) with a maximum user weight of 113kg (250lbs). Do not attempt to climb inclines in excess of this.

Do not traverse across the face of a slope in excess of 10° (1 in 6).

Always reduce your speed to the minimum setting when reversing down hills.

Do not attempt to drive along with the wheels at different levels, e.g. along the pavement and road simultaneously.

### Safety warnings

#### **Batteries**

Always check the batteries are sufficiently charged before setting off.

Always ensure that your batteries are in good condition and that no leakage has occurred.

Beware, battery fluids are corrosive and care should be taken at all times 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 at least 10 minutes and seek medical attention.

Try to keep batteries upright at all times, especially when transporting your Scoota.

# Always follow the procedures for battery charging set out in Section 10.

Always charge your batteries in a room with good ventilation.

Do not charge your batteries in outdoor conditions.

Do not expose any part of your charger, battery or Scoota to direct heat (i.e. Gas fires or naked flame).

#### Freewheel mechanism

Never sit on your Scoota whilst in freewheel since the Scoota will no longer automatically stop.

#### **Tyres**

Do not inflate your Scoota tyres using a powered airline. Always use the pump provided.

**Midi.** Each tyre pressure should be 207 Kilopascals (30 P.S.I).

**Senior.** Each tyre pressure should be 138 Kilopascals (20 P.S.I.).

#### **Emergency stop**

Removal of the ignition key or switching off the power at the On/Off button whilst moving will cause immediate and full braking. This method of stopping is not recommended except in an emergency.

#### **Transportation**

When disassembling the Scoota after use, avoid touching the motor since it may be hot.

Always stow your Scoota in the luggage compartment of your vehicle.

Always ensure your Scoota or Scoota parts are securely anchored when being transported.

Do not sit on your Scoota whilst it is being transported in or on another vehicle.

Do not attempt to carry passengers on your Scoota.

Do not attempt to tow another vehicle.

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### Safety warnings

#### 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 switched on or used.

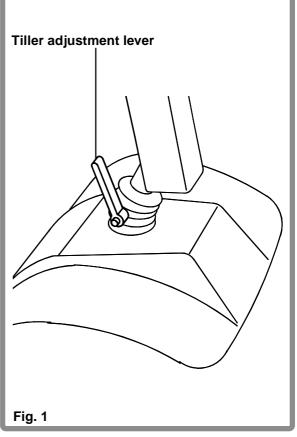
If you are in any doubt about your ability to drive the Scoota due to any medical condition or treatment, then consult your doctor.

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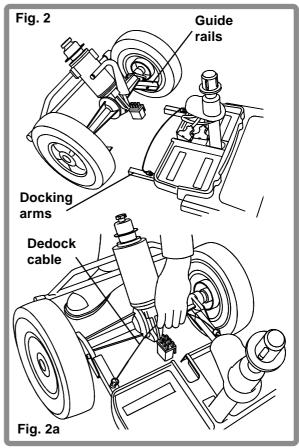
#### **Tiller**

First ensure that the tiller adjustment lever is fully tightened (Fig. 1).



#### Connecting the front and rear

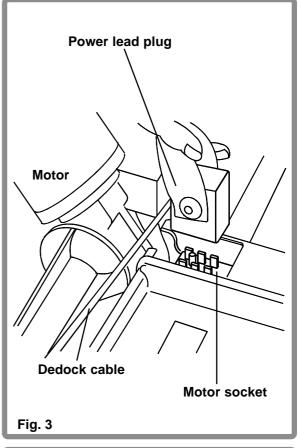
- (i) Position the front of the drive assembly directly behind the rear of the baseboard as in (Fig. 2).
- (ii) Take the tiller handlebar in one hand and the dedock cable, at the rear of the baseboard, in the other hand.
- (iii) Slide the baseboard docking arms onto the guide rails of the drive assembly (Fig. 2a).
- (iv) Push the baseboard back sharply so that the docking pins on the docking arms drop into the locked position on the guide rails. Once they have locked into position you will hear a 'click'.



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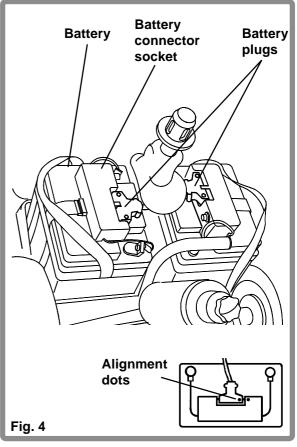
(v) Release the dedock cable and connect the power lead plug into the motor socket on the drive assembly, behind the seat stem (Fig. 3). Make sure this is securely located.



#### **Assembling the batteries**

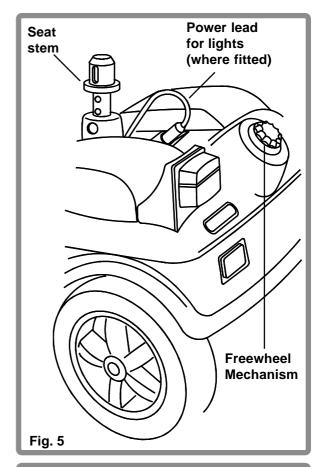
Locate and connect the batteries as follows:-

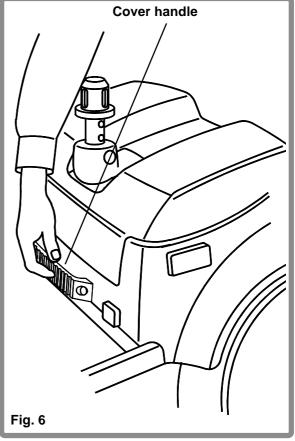
- (i) Place the batteries into their respective recesses in the baseboard (Fig. 4). Ensure that the battery connector socket, on the top of each battery, is facing inwards.
- (ii) Connect the battery plugs
  (Fig. 4) by locating one end of
  the connector and pushing
  down with the palm of your
  hand. The connector is spring
  loaded so it should locate easily.
  Remember to connect both
  batteries.



#### Fitting the rear cover

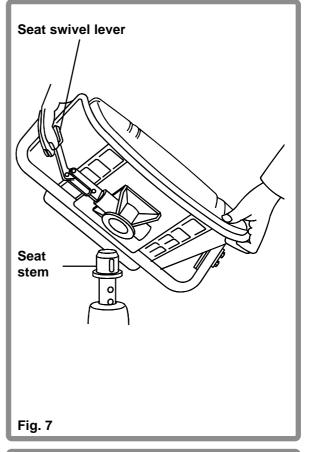
- (i) Locate the rear cover over the freewheel mechanism and seat stem (Fig. 5 and 6).
- (ii) Push gently downwards to secure the cover into position.To ensure that it is correctly fitted, push on the cover handle, which is at the front of the cover (Fig. 6).
- (iii) Note. If lights are fitted, ensure that the connecting lead and plug are free of the rear cover and located in the power socket (Fig. 5).





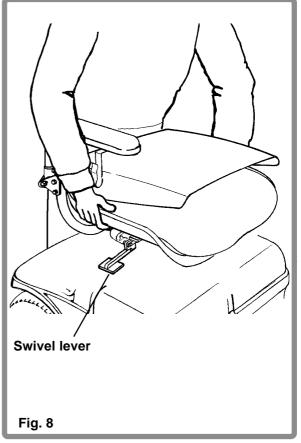
#### Fitting the seat

To fit the seat, lift the release/swivel lever as shown in (Fig. 7) and lower the seat onto the seat stem, turning the seat slightly to lock into position. Ensure that the seat feels secure before mounting.



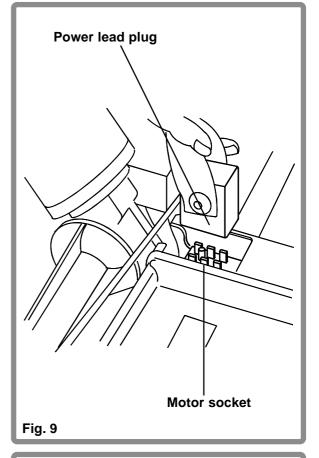
#### Disassembly

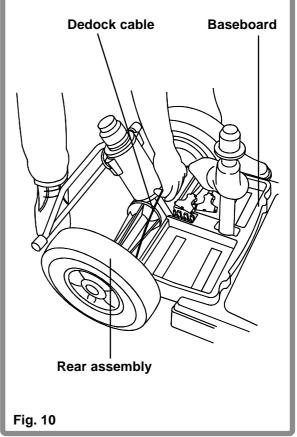
- Fold down the seat back. Hold the seat as shown in (Fig. 7 & 8) and lift the release/swivel lever. Pull upwards and the seat will come free of the seat stem.
- Remove the rear body cover by pulling the cover handle with one hand and lifting the cover over the freewheel mechanism and the seat stem with the other hand.
- Disconnect the battery plugs and remove the batteries by using the battery harnesses.



#### **Disassembly (continued)**

- 4. Disconnect the power lead plug from the motor socket on the drive assembly (Fig. 9).
- 5. Holding the tiller handlebar in the one hand, release the baseboard docking pins by lifting the dedock cable (Fig. 10) and pull the baseboard free of the rear assembly.





### Adjustments to your Scoota

Your Scoota has been designed with adjustable features which will ensure that you are in the safest and most comfortable position in which to operate the Scoota.

#### Seat height adjustment

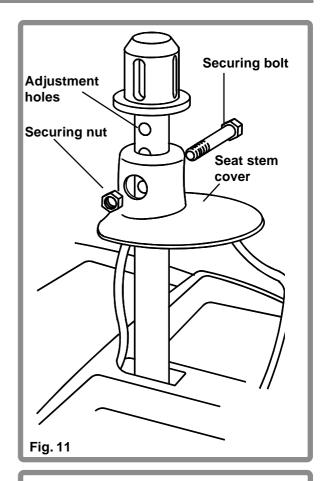
The seat height may be adjusted 10cm (4") in increments of 2.5cm (1") by removing the securing bolt from the seat stem. Raise or lower to the required location hole in the seat stem and refit the bolt (Fig. 11). Note: Ensure that the nut and bolt are replaced and tightened securely before mounting your Scoota.

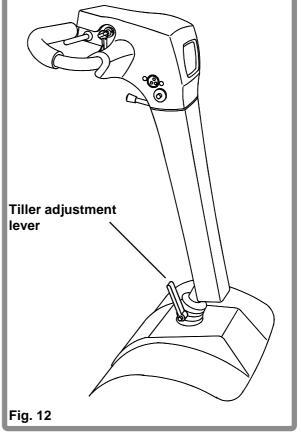
Note: It may be necessary to lift the cover on the seat stem for access to the nut and bolt.

#### Tiller adjustment

The angle of the tiller may be quickly and simply adjusted by turning the tiller adjustment lever and pulling or pushing the handlebars to the desired position (Fig. 12).

Note: Ensure that the lever is fully tightened before using your Scoota.





### Adjustments to your Scoota

#### **Armrests**

The armrests flip up and down allowing easy access on and off the Scoota (Fig. 13).

#### **Seat swivel**

For easy access on and off the Scoota the seat can be rotated and locked to the left or right side. This is achieved by lifting the seat swivel lever (Fig. 13). The seat can then be rotated fully through 360° and locked automatically at 90° increments by releasing the lever.

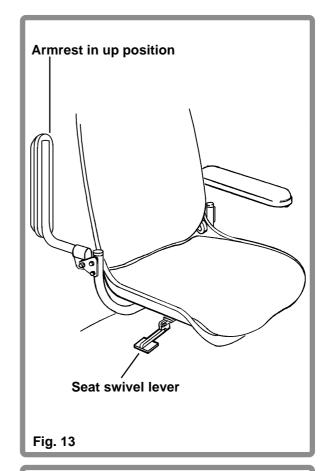
Note: Ensure that the lever properly engages to prevent the seat from turning before starting your Scoota.

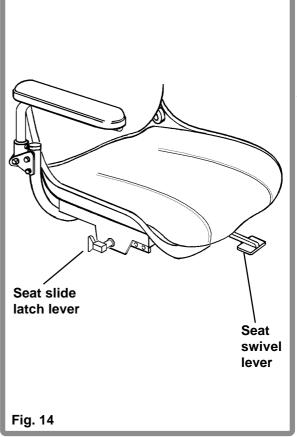
Note: Where a seat slide is fitted the swivel lever is located at the front of the seat (Fig. 14).

# Seat slide adjustment (where fitted)

The distance of the seat from the tiller may be adjusted backwards or forwards by the sliding seat mechanism. To operate, unlock the seat slide latch lever (Fig. 14) and push the seat backwards or forwards to achieve the position most comfortable for you. The seat slide has 5 positions. It will move one position backward and three positions forward from its original setting, in increments of 2.5cm (1"). The seat will automatically lock into position once it has located the new position setting.

Note: Do not adjust the seat whilst the Scoota is moving.





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#### On/Off

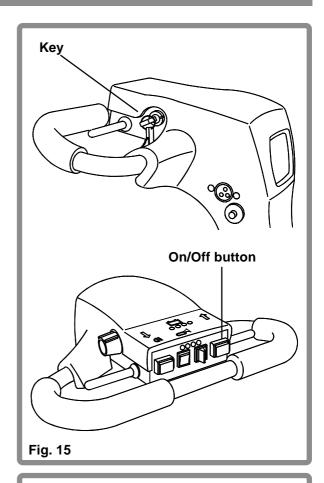
To activate the Scoota, turn the key provided clockwise and press the yellow On/Off button (Fig. 15). Press once to switch on and the button will illuminate to indicate that the Scoota is now on. Press again to switch off.

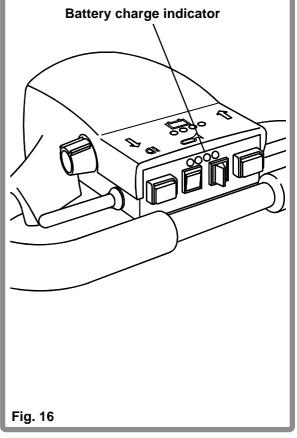
Note: Always ensure your Scoota is switched off before attempting to mount or dismount. Also, for security purposes turn the key to off and remove if you are leaving the Scoota unattended.

#### **Battery charge indicator**

The battery charge indicator (Fig.16) will light up once the Scoota is activated. This indicates the charged state of the batteries. Fully charged batteries will light up the right side of the display. When the batteries discharge during normal use, the light will move down the display. The display may fluctuate temporarily when accelerating from start or travelling uphill - this is normal. After approximately 5 seconds of inactivity the battery charge indicator lights will switch off automatically. They will illuminate again as soon as the Scoota is operated.

Note: Charge the batteries before the level gets too low and do not allow the batteries to stand for long periods in a discharged state as this will reduce their useful life.





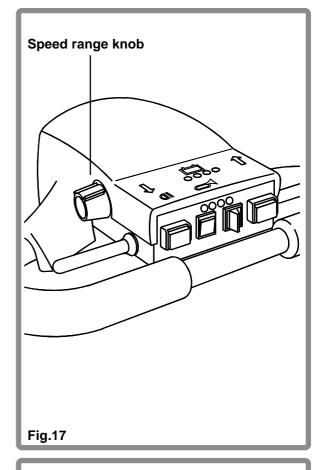
#### Speed range

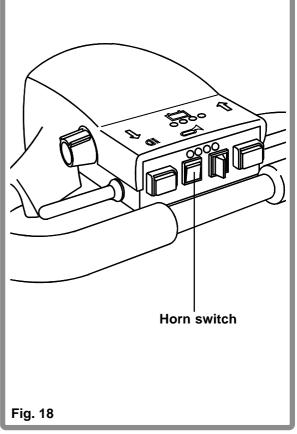
The speed range can be selected by turning the speed knob on the left side of the tiller head, see (Fig. 17). This allows you to limit your speed even when the control lever is fully depressed. Turn the switch away from you to increase the speed selected and towards you to reduce the speed selected. The maximum forward speed is up to 4mph and the reverse speed approximately 2mph.

Note: When using your Scoota indoors or reversing always remember to reduce your speed to ensure easier handling and safety.

#### Horn

The Scoota is fitted with a horn which, when activated provides an audible warning to alert passers-by of your approach (Fig. 18). To operate the horn press the black horn switch.



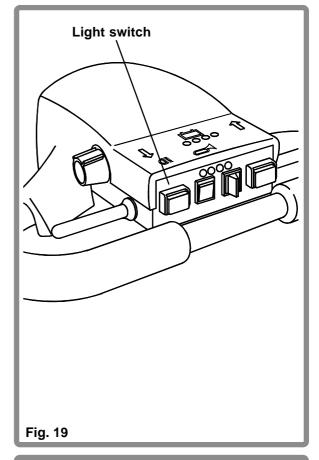


#### Lights

(where fitted)

The lights may be activated by pressing the blue switch once (Fig. 19). Pressing it again will switch the lights off.

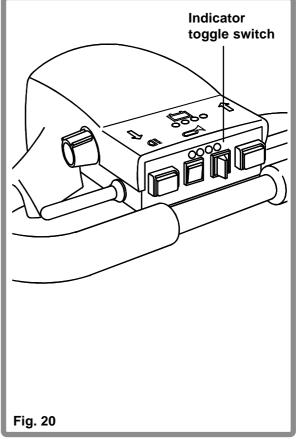
Note: Excessive use of the lights will use up more energy from your batteries and reduce the range of your Scoota between charges.



#### **Indicators**

(where fitted)

To operate the direction indicators move the green toggle switch in the direction you wish to travel (Fig. 20). To cancel the indicators move the toggle switch to the central position.



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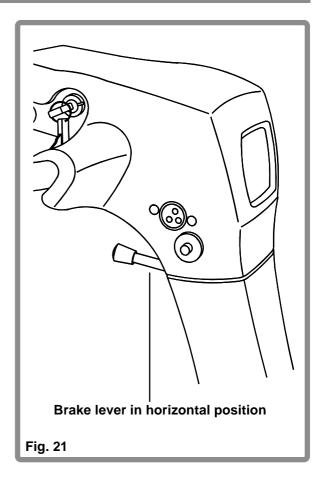
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#### Parking brake

(where fitted)

The parking brake is situated in the tiller stem, just below the charging socket (Fig. 21). It is operated by pushing the brake lever down flat into the horizontal position. To release the parking brake, lift the brake lever into a vertical position.

Note: The parking brake is useful if parking on a slope or incline, however always remember to release it before starting and moving away on your Scoota.

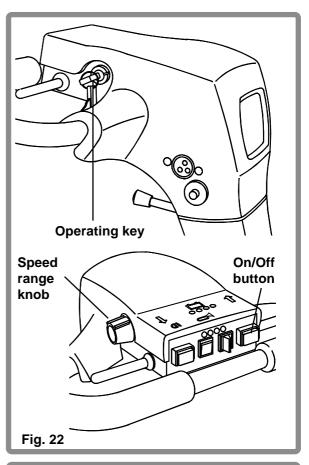


### Operating your Scoota

Before operating your Scoota ensure the seat height has been adjusted to your satisfaction, the seat position has been secured and the tiller angle has been set for optimum safety and comfort.

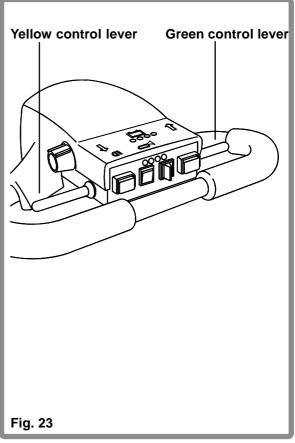
#### Scoota operating procedure

- (i) Insert the key as shown in (Fig. 22) and turn clockwise.
- (ii) Switch on by pressing the on/off button once.
- (iii) Using the speed range knob select the speed required.



#### **Control levers**

- (i) The control lever (Fig. 23) controls the speed of the Scoota. The further it is pulled the faster you will travel until you have reached the maximum speed you have selected.
- (ii) To travel forwards pull the green lever. To reverse pull the yellow lever.
- (iii) If single handed use is required, you can push the green lever to reverse and pull it to accelerate. Similarly you can push the yellow lever to accelerate and pull it to reverse.
- (iv)To stop simply release the control lever you are using.

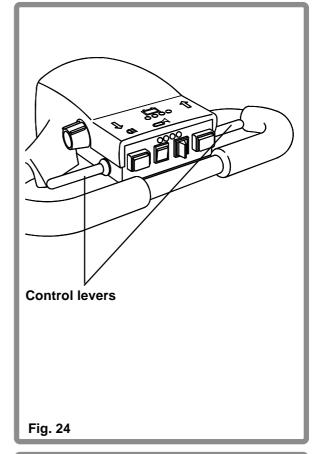


### Operating your Scoota

#### **Braking**

To stop the Scoota, simply release the control lever with your fingers, (Fig. 24) keeping you hands on the handlebar for stability. Two types of braking will automatically operate:-

- (i) Automatic regenerative braking which slows the Scoota to a standstill within 1 - 2 seconds.
- (ii) Automatic disc braking which comes in to effect about 2 seconds after releasing the control lever and holds the Scoota in position even if you are on a hill.



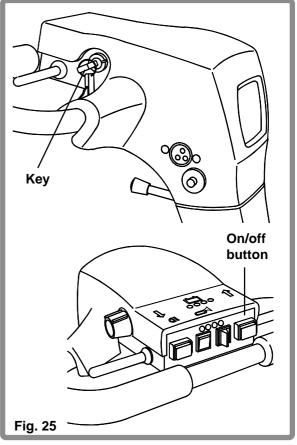
#### **Emergency stop**

In the unlikely event of an unwanted movement of the Scoota, pressing the on/off button (Fig. 25), or switching off at the key, will bring the Scoota to an emergency stop.

Note: Whilst very effective, emergency stopping is extremely abrupt and not recommended in normal use.

#### **Switching off**

The Scoota may be switched off either at the on/off button or at the key switch. For security purposes, never leave the key in the Scoota if unattended, since it can not be operated without the key. Always keep the spare key in a safe place.



### Operating your Scoota

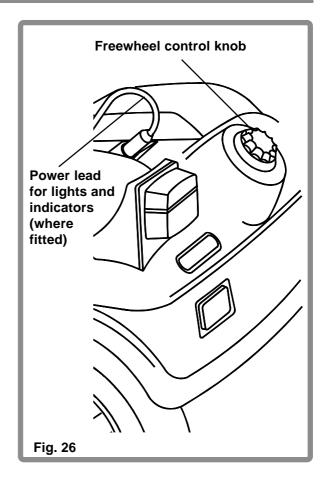
#### Freewheel mechanism

Every care has been taken to ensure your Scoota remains trouble free. However in the event of an unforeseen failure a freewheel device disengages the drive assembly to allow manual operation.

The freewheel mode is selected by turning the freewheel knob at the rear of your Scoota clockwise (Fig. 26). Once freewheel has been selected it will be accompanied by a continuous sounding of the horn. This is to warn you that the Scoota is now in freewheel and will not stop automatically. To stop the horn sounding turn your Scoota off. To turn the freewheel mode off, simply turn the freewheel knob anticlockwise.

Note: Never sit on or try to operate your Scoota whilst it is in freewheel since it will no longer automatically stop.

Do not attempt to lift the Scoota or the drive assembly by using the freewheel knob.



#### **Mounting & dismounting kerbs**

#### Midi

# Your Scoota has not been designed to kerb climb.

It is capable of mounting and dismounting obstacles of up to 5cm (2").

#### **Senior**

Your Scoota is capable of mounting and dismounting kerbs and obstacles of up to 10cm (4").

#### **Mounting kerbs**

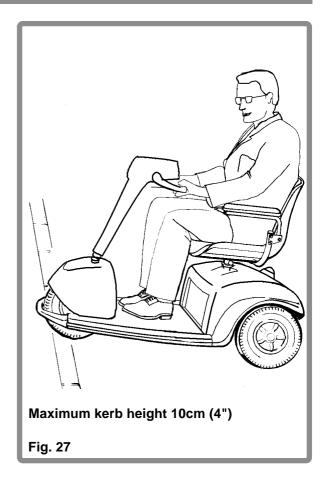
Remember when climbing kerbs, to drive forwards and face the kerb at 90 degrees. Stopping about 30-60cm (1-2 feet )away, select a medium to high speed setting and drive up without stopping. Leaning forwards will also help maximise your stability (Fig. 27).

Note: Heavier users will require higher speed settings.

#### **Dismounting kerbs**

To dismount a kerb, face the kerb at 90 degrees and select a low speed setting. Move forward and slowly allow your Scoota to drop gently, front wheel(s) first from the kerb. The rear stabilising wheels may make contact with the kerb when dismounting - this is normal.

Note: Low speed settings are strongly recommended when dismounting kerbs, travelling down hill, reversing and particularly when turning corners.



#### **Travelling across slopes**

Care should be taken when traversing across a slope. Do not traverse across the face of a slope in excess of 10 degrees (1 in 6) (Fig. 28).

Note: Disregard of this advice could result in your Scoota tipping.



#### Hill climbing

Your Scoota is designed to travel up or down most reasonable slopes (Fig. 29), up to 11 degrees (1 in 5). However both hill climbing capability and the distance travelled between battery charges will be adversely affected by such things as:-

- 1. The weight of the user
- 2. Terrain (e.g. grass or gravel)
- 3. Steepness of hills
- 4. Continuous length of hills.
- Level of charge and the age of batteries
- 6. Extremes of temperature.



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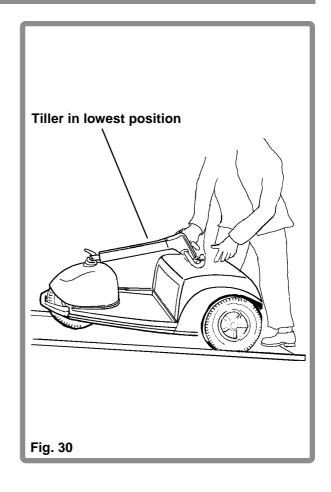
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#### **Transportation**

Your Scoota can be disassembled quickly and simply for transportation by car - see section 5. Alternatively, if you wish to use a ramp to load your Scoota into the back of a car then:

- (i) Remove the seat (see page 10)
- (ii) Lower the tiller, using the adjustment lever, to its lowest setting (see page 12).
- (iii) Select the minimum speed setting, and standing alongside the Scoota drive it forward up the ramp. Switch the Scoota off, release the freewheel knob at the rear of the Scoota and push the Scoota fully into the car (Fig.30).

Note: Remember to re-engage the drive assembly by turning the freewheel knob anti clockwise, to stop the Scoota moving in transit. Always secure your Scoota before transportation.



# Pavement and road use (U.K. only)

It is illegal to drive faster than 4mph on the pavement. To drive on the road your Scoota must be equipped with lights, indicators, a mirror and a manually operated parking brake.

When using your Scoota on the pavement always be aware of pedestrians and situations which might require extra care. For example, young children and pets. Remember, especially when driving in public places, to drive with caution and regard for others at all times. When manoeuvring in confined areas, including shops, ensure the minimum preset speed is selected. If you leave your Scoota outside a shop ensure that it does not obstruct pedestrians, and remember to keep the key with you for security.

We advise you very strongly to read the highway code before using your Scoota on public highways. Always look behind you to see if it is safe to move off.

Remember:- Mirror

Signal Manoeuvre

#### **General information**

Batteries are the power source for almost all of the modern 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. its available power) is expressed in amps per hour (e.g. 30amp/hr.). The higher the number, the bigger the battery size, weight and, potentially, the greater the distance you can travel.

#### **Battery types**

Your Scoota will be fitted with one of two types of batteries either lead acid or maintenance free.

#### Lead acid

In this type of battery the charge is generated and carried by a dilute sulphuric acid solution. As a result, this type of battery needs regular maintenance to ensure its optimum performance. Extra care must be taken when transporting the batteries due to potential spillage of the acid.

#### **Maintenance free**

This type of battery uses a different method of carrying the electrolyte commonly referred to as 'gel', that 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.

#### **Battery care**

Because of the different characteristics of the two types of batteries, each must be cared for in a different way. Below is set out a Battery Care Plan for each type of battery. This has been agreed between Sunrise Medical and the battery manufacturers to enable you to get the best out of your 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.

#### Lead acid battery care plan

- 1 Only use an approved Sunrise Medical charger compatible with the vehicle to be charged.
- 2 Charge your batteries every night regardless of the amount of use your mobility device has had during the day.
- 3 The charge cycle may be interrupted if necessary, but it is always better to leave the battery charging cycle to finish.
- 4 If you leave your vehicle for an extended period (more than 5 days) disconnect the main battery lead.
- 5 Every two weeks check the level of the acid/water mixture to ensure it is correct. It may need topping up with distilled water. This should be carried out one hour after charging to allow the electrolyte to settle.
- 6 You may top up charge your vehicle during the day if required. However, ensure you charge your vehicle fully overnight.
- 7 Once every month charge your batteries for 24 hours, this ensures your battery cells are fully charged.
- 8 Following all the seven points above should result in a healthier battery, greater range for your vehicle and a longer life for your batteries.

#### Maintenance free battery care plan

- 1 Only use an approved Sunrise Medical charger compatible with the vehicle to be charged.
- 2 Charge your batteries every night, regardless of the amount of use your mobility device has had during the day. This applies even if you don't use your mobility device.
- 3 Do not interrupt the charging cycle. Allow at least 8 10 hours continuous charging each night. After heavy use or if you have bigger batteries, you may need to allow 10-14 hours continuous charging.
- 4 Do not leave your batteries on charge for more than 48 hours.
- 5 If you leave your vehicle for an extended period (more than 5 days) disconnect the main battery lead.
- 6 On return from an extended period away from your vehicle (more than 5 days), fully charge your batteries for 24-48 hours before use.
- 7 Do not top up the charge of your batteries during the day. Wait until the evening for a full overnight charge. If you must charge during the day, then we recommend an 8 hour minimum charge cycle.
- 8 As a general rule, maintenance free batteries take longer to fully charge than lead acid batteries.

# Maintenence free battery care plan (continued)

- 9 Charge the batteries once a month for 24 hours to ensure each battery cell is fully charged.
- 10 Following all the nine points above should result in a healthier battery, greater range for the vehicle user and a longer life for your batteries.

Do not expose any part of the battery to direct heat (i.e. naked flame, gas fire).

When charging always place on a hard surface in a room with good ventilation.

You should not charge your batteries in outdoor conditions.

#### The range of your vehicle

Most manufacturers of mobility products state the range of their vehicles either in the sales literature or within the Owners Manual.

The range stated sometimes differs from manufacturer to manufacturer even though the battery size is the same. Sunrise Medical measure the range of their 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 7178, Part 4: Scoota Energy Consumption Theoretical Range. This test is carried out in controlled conditions with new, fully charged batteries, on a level test surface and a user weight of 75kg.

The range figures stated should be seen as a theoretical maximum and could be reduced if any single, or combination, of the following circumstances occur:

- 1 User weight heavier than 75kg.
- 2 Batteries whose age and condition are less than perfect.
- 3 The terrain is difficult e.g. very hilly, sloping, muddy ground, gravel, grass, snow and ice.
- 4 The vehicle climbs kerbs regularly.
- 5 The ambient temperature is very hot or very cold.
- 6 Incorrect tyre pressures in one or more tyres.
- 7 Lots of start/stop driving.
- 8 Also thick pile carpets within the home can affect range.

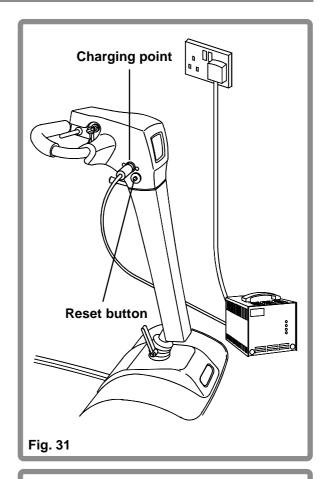
All this technical information may seem complicated and a little daunting, but please remember, that the battery sizes available on your Sunrise Medical Sterling Scoota should give sufficient range to cope with the majority of customer's lifestyles.

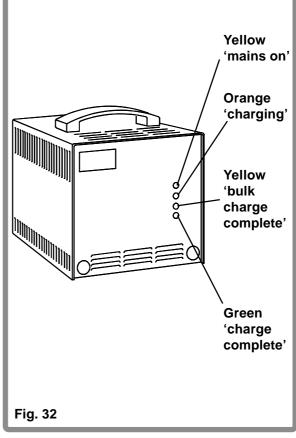
#### How to charge the batteries

- 1 Ensure your Scoota is switched off.
- 2 To commence charging, connect the charging plug to the charging socket on the side of the tiller (Fig. 31).
- 3 Now connect the charger to the mains supply and switch on (Fig. 31). The yellow 'mains on' indicator should light up immediately, followed shortly afterwards by the orange 'charging' indicator (Fig. 32).

# Important: Ensure that the plug is dry and intact before connecting the mains supply.

- 4 The battery is fully charged when the green 'charge complete' light illuminates. It is not necessary to disconnect the batteries as soon as the green light is lit, but do not leave the batteries connected to the charger for more than three days.
- 5 If the battery is required for use before the 'charge complete light' shows, then it is possible to obtain restricted use once the 'bulk charge' light has illuminated. At that point the battery is about 85% 90% charged. It is essential to provide a full recharge at the first opportunity.
- 6 Do not leave the charger connected to the battery with the mains disconnected or switched off. This could result in damage to your battery being caused by deep discharge over a period of time.
- 7 Always switch off at the mains before disconnecting the batteries.





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#### Fault finding guide

If after connecting the charger to the tiller charging socket and the mains supply the charger does not behave as expected, check all connections to ensure an error has not been made. If it continues to be unresponsive check for the following (Fig. 33):

#### No lights

The mains supply is not reaching the charger, check that the mains is working, that the mains plug and fuse are in correct working order. Otherwise consult: Sunrise Medical or your local Sunrise Medical agent.

#### Flashing lights

This indicates that the battery voltage is too low (over discharged batteries or batteries of the wrong voltage or type).

# Consult Sunrise Medical or your local Sunrise Medical agent.

The charger has a designed in safety feature which prevents it from commencing to charge if the battery voltage is lower than 8 volts for a 12 volt battery or lower than 16 volts for a 24 volt battery. This low voltage battery condition is usually the result of very deep discharge or totally worn out batteries.

#### Yellow mains on light only

Disconnect the mains supply. If still lit, the battery has been connected the wrong way round. Check all connections to the battery terminals are the correct way round.

If the yellow light goes out, the battery is not properly connected or may be flat. Check the integrity of the battery connections and consult Sunrise Medical or your local Sunrise Medical agent.

Important safety warnings:
Do not stand the charger on carpet or any other soft surface.
Always place on a hard surface in a room with good ventilation.
Do not expose any part of your charger or battery to direct heat (i.e. naked flame, gas fire).

You should not charge the

batteries in outdoor conditions.

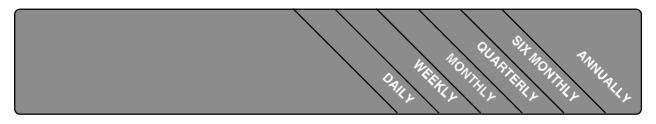
Yellow 'mains on'
Orange 'charging'
Yellow 'bulk charge complete'
Green 'charge complete'

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### Routine maintenance

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



Battery charge check	0					
Electrolyte level (wet cell batteries only)		0				
Inspection of connectors		0				
Wipe over with damp cloth		0				
Check tyre pressure - Each tyre						
Midi Inflate to 207 Kilopascals (30PSI)						
Senior Inflate to 138 Kilopascals (20 PSI)						
Long overnight battery charge			0			
Seat swivel, tiller, seat slide (where fitted)			0			
Inspection of wiring for chafing and wear				0		
Battery terminals				0		
Clean and protect with petroleum jelly						
Check tyres for wear				0		
Ensure parking brake (where fitted)				0		
is correctly adjusted						
Check stabliser wheels for wear				0		
Inspect motor brushes					0	
Full service by dealer						0

N.B. If wheels are removed and refitted, ensure that the nyloc nuts are replaced with new items

#### Storage

When storing your Scoota for long periods (in excess of one week), 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 is of a safety critical nature.

## Service history

This section is designed to assist you in keeping a record of any service and repairs to your Scoota. 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 Scoota when service or repair work is carried out. The Service Agent will complete this section and return the manual to you.

Customer Name.				_	Date Scoota pure	chased			
Address		Model							
		_	Colour						
Postcode			Serial No.						
YEAR	1	2	3	4	YEAR	1	2	3	4
Service dates					Service dates		ĺ		
Controller					Upholstery				
On/off switch					Seat				
Output plug					Back		İ		
Operation					Armrests		i		
Dynamic braking					Electrics				
Programmable					Condition				
settings					of loom				
Batteries		·			Connections				
Levels					Lights (where				
Connections					fitted)				
Discharge test					Test run				
Wheels/tyres					Forwards				
Wear					Reverse				
Pressure					Emergency				
Bearings					stop				
Wheel nuts					Left turn				
Motors					Right turn				
Wiring					Up/down slope				
Noise					Over obstacle				
Connections					Parking brake				
Brake					(where fitted)				
Brushes					List items repaired/adjusted				
Chassis					-				
Condition									
Steering									
Dealer stamp					Dealer stamp				
Date:	Sign	ed:			Date:	Sig	gned:		
Dealer stamp					Dealer stamp				
Date:	Sign	ed:			Date:	Sig	gned:		

### **Sunrise Medical**

Your new Sterling Scoota is manufactured in the West Midlands by Sunrise Medical. With over 30 years experience, we are one of the longest established mobility equipment manufacturers in the UK. All our Scootas, Wheelchairs, Powerchairs and Stairlifts undergo rigorous tests to ensure that they meet our requirements of comfort, safety and durability. Our success is based on the strong traditions of quality, value for money and genuinely caring for our customers.

We pride ourselves not only on designing and building the most innovative products but also on our commitment to offer an excellent standard of customer service both during and after sale.



In addition to your new Sterling Scoota Sunrise also manufactures oxygen concentrators, nebulizers, hoists and stairlifts. We have a vast range of aids to daily living which include the Merlin Bath Lifter, bed accessories and walking sticks.

Should you require any information on our full range of products please call us on 01384 44 66 88 or write to us at:

#### **Sunrise Medical Limited**

Sunrise Business Park High Street Wollaston West Midlands DY8 4PS



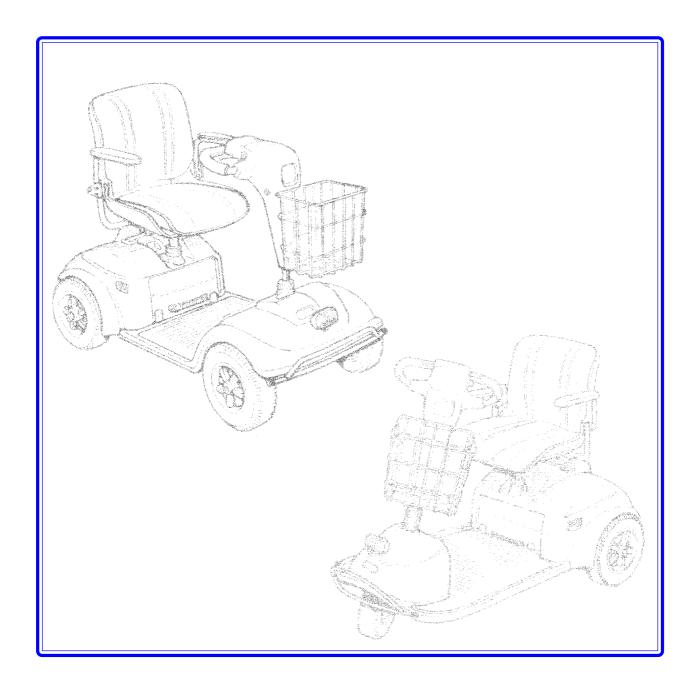








# MIDI & SENIOR

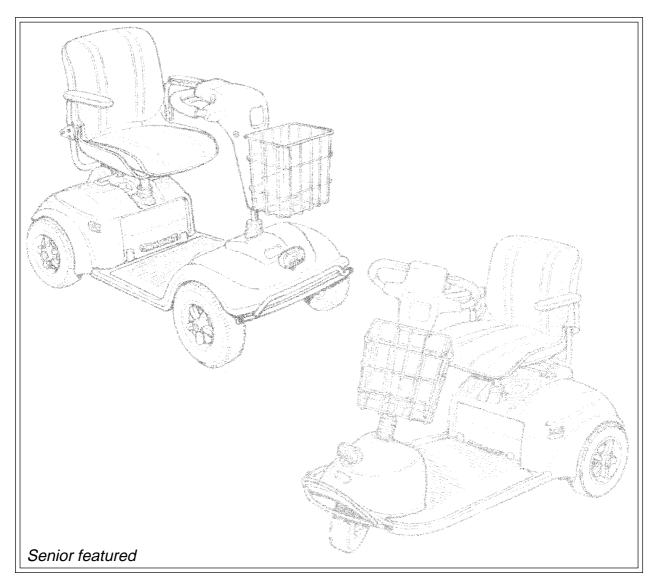


Owner's Manual



ENGLISH

### (STERLING) MIDI & SENIOR



How to use this manual

We at Sunrise Medical want you to get the best out of your Sterling Scoota. This Owner's Manual will familiarise you with the Scoota and its features. It contains hints on everyday usage and general care in addition to information on the high quality standards which we adhere to and details about the guarantee.

Your Scoota will reach you in excellent condition having been personally inspected before leaving our factory. By following the guidelines for maintenance on page 30 your Scoota will maintain its first class condition and give you complete satisfaction.

# Contents

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