SHOPRIDER®



'Sovereign'

Models: 888NR & 778NR

USER MANUAL

Please ensure that this manual is read and understood before using the scooter.

KB&SXXXXX

CE

Feb 2012

Contents Page

Introduction **3**

Intended Use **3**

Technical Specification **3**

Feature Guide **4**

Safety Advice **5**

Adjustments
- Tiller angle **6**
- Seat swivel / removal **6**
- Arm width adjustment **6**
- Arm angle adjustment **7**
- Seat height adjustment **7**

Tiller Controls **8**

Brake Release / Freewheel Operation **9**

Starting to Drive
- Getting Started **10**
- Moving Off **10**
- Steering **10**
- Reversing **10**
- Ramps / Slopes **11**

Transport and Storage **11**

Batteries and Battery Charger **12**

Maintenance **13 & 14**

Troubleshooting
- Circuit Breaker **14**
- Fuses **14**
- Check List **15**

Further Information **15**

Warranty

Introduction

Congratulations on your purchase of your Shoprider® scooter. This scooter incorporates comfort and style with the latest in technology. The scooter can be used in confined spaces both indoors and out. Direct drive rear transaxles and electromagnetic brakes give a safe and efficient ride. The scooter can be easily disassembled without tools and will fit into the boot of most vehicles for easy transport.

Intended Use

The scooter was carefully designed for indoor or outdoor use in pedestrian areas by a single occupant with limited mobility up to a maximum weight of 136kg (21st). It is not intended for road use.

The intended user should possess the necessary physical, visual and cognitive skills to operate the scooter safely. If you have any doubt, please consult your dealer / prescriber.

Technical Specification

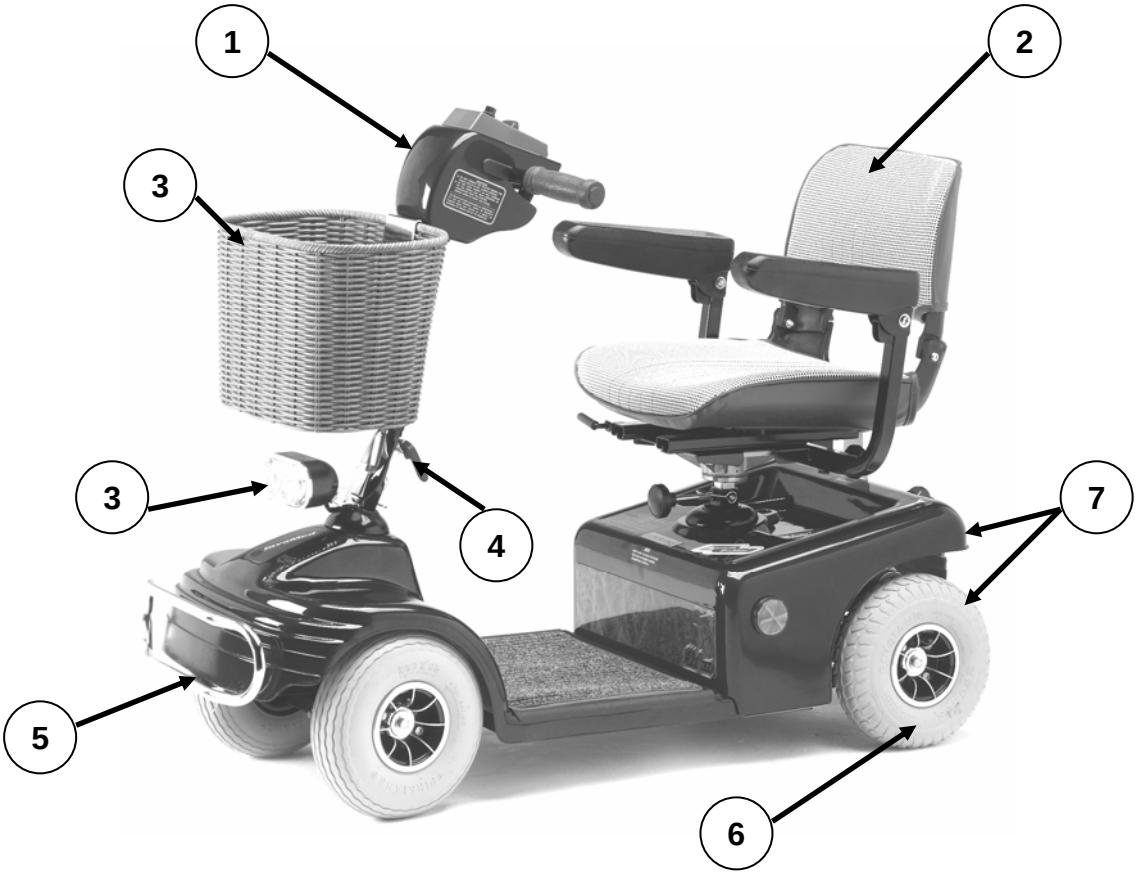
Class 1 Medical Device
Class B Indoor/Outdoor Vehicle

Overall Size		***Seat Dimensions***	
Length	*1250mm*	*Width*	*450mm*
Width	*540mm*	*Depth*	*400mm*
Height	*940mm*	*Height to floor*	*560-630mm*
Battery	*2 x 34Ah*	*Backrest height*	*680-800mm*
Height Total	*940mm*	*Range*	*32km (20m)**
Maximum user weight	*136kg / 21st*	*Battery charger (off board)*	*5 amp*
Max. climbing angle	*8º*		
Weight with batteries	*82kg(180lbs)*		
Max. Speed	*6km/h (4mph)*		

**Passenger weight, rough ground conditions, low temperatures and battery condition can affect maximum range.*

It is important that the user and carer reads and understands the safety advice given within this manual before operating the product to avoid possible injury to the user or bystanders and avoid damage to the scooter or surrounding property.

888NR – ‘Sovereign 4’



1. **Tiller control head**
2. **Detachable padded swivel seat with fold down back**
3. **Head light**
4. **Tiller angle adjustment lever (5 position)**
5. **Chrome front bumper**
6. **Pneumatic wheels with non-marking tyres**
7. **Anti-tip wheels**

778NR – ‘Sovereign 3’



1. **Tiller control head**
2. **Detachable padded swivel seat with fold down back**
3. **Head light**
4. **Tiller angle adjustment lever (5 position)**
5. **Pneumatic wheels with non-marking tyres**
6. **Anti-tip wheels**

Specifications as Sovereign 4 except:-

Overall Length	**1150mm**
Maximum Height	**956mm**
Weight	**76kgs**

Safety Advice

DO:

- Read this manual carefully before using your scooter
- Turn the power off when transferring to and from the scooter
- Select a slow speed when going down gradients (max 8°) or over uneven ground
- Keep your feet on the scooter whilst driving
- Ensure the seat is in a fixed position facing forwards before driving
- Ensure the batteries are fully charged before your journey
- Avoid rough or soft terrain and long grass wherever possible
- Be aware of other road users and pedestrians
- Turn the power off when not in use
- Follow the maintenance guide to ensure safe operation of the scooter
- Always remove the keys if leaving the scooter unattended. Unauthorised persons/children may use the scooter resulting in injury.

DO NOT:

- Carry passengers
- Exceed inclines over 8°
- Traverse inclines
- Attempt inclines if the surface is slippery
- Turn sharply at full speed as this may affect stability
- Use the scooter in high wind if a canopy is fitted (winds exceeding 38mph / 61kmph)
- Exit or enter the scooter unless the power is switched off
- Switch off the power whilst driving unless in an emergency – this will cause the scooter to stop abruptly
- Use the scooter where you cannot safely or legally walk
- Attempt to climb kerbs except drop down kerbs not greater than 50mm
- Use the scooter if under the influence of alcohol or any medication
- Use a mobile phone whilst driving
- Attempt to negotiate steps or escalators
- Sit on the scooter if being transported in a vehicle
- Attempt to tow any other devices
- Exceed the stated weight limit
- Connect any other devices to the batteries as this could cause permanent damage and void your warranty
- Use any other batteries/charger other than those supplied by *RMA*
- Travel through water or over soft terrain (mud, sand etc.)
- Travel on the road except when crossing between pavements
- Lift the scooter by the shroud assembly or any plastic part
- Sharply shift your centre of gravity as this could make the scooter unstable

Every care has been taken to ensure that your scooter will give you safe, reliable service provided you adhere to the advice given above.

Adjustments

Tiller Angle Adjustment *(Fig. 1)*
On the left hand side at the base of the tiller is a red adjustment lever. Push the lever in to release the pin and select the required tiller angle. Release the lever to re-locate the pin into one of the five angle positions.

Fig 1

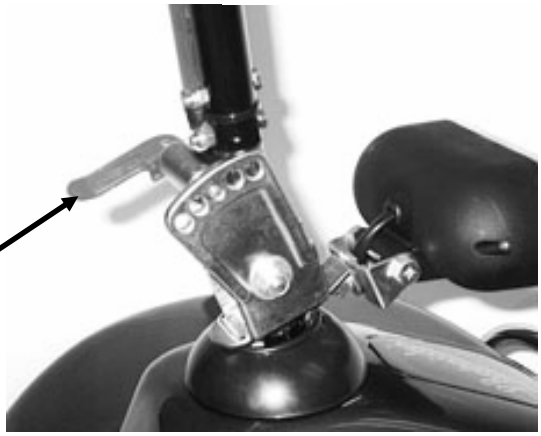
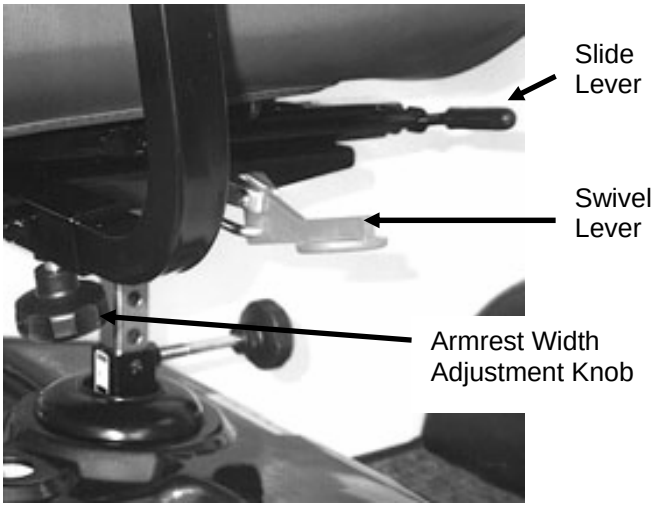


Fig 2

Seat Slide Adjustment *(Fig. 2)*
Pulling up on the lever allows the seat position to be adjusted forward or backward. Releasing the lever will lock the seat in position.

Seat Swivel Adjustment *(Fig. 2)*
Under the right of the seat is a red lever. Pulling up on the lever allows the seat to swivel to either side, allowing for easy manoeuvring on or off the scooter. ***Do not drive the scooter if the seat is not locked in the forward position.***



Armrest Width Adjustment *(Fig. 2)*
On the underside of the seat there are two hand knobs. Releasing the hand knob allows the arms to be adjusted to the required width, or removed for transportation.
Ensure the knobs are fully tightened before driving the scooter. Do not drive the scooter without the arms fitted.

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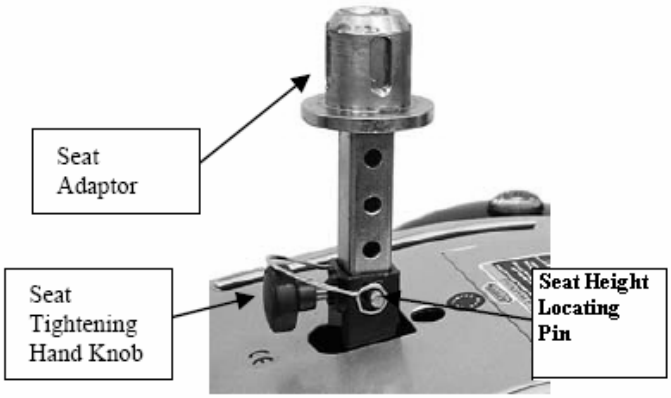
Armrest Angle Adjustment *(Fig. 3)*
Flip up the armrests to allow access to the adjustment screw and locknut. Unscrew the locknut and screw the bolt in or out to achieve the desired angle and re-tighten the locknut.
The scooter will be delivered with the arms parallel to the floor.

Fig 3



Seat Height Adjustment *(Fig. 4)*
To adjust the height of the seat, undo the seat-tightening knob under the front of the seat.
Pull the swivel adjustment lever *(Fig. 2)* upwards and at the same time lift the seat from the adaptor.
Remove the seat height-locating pin and set the seat to the desired height and reset the locking pin.
Reverse the above instruction to replace the seat and re-tighten the hand knob.

Fig 4

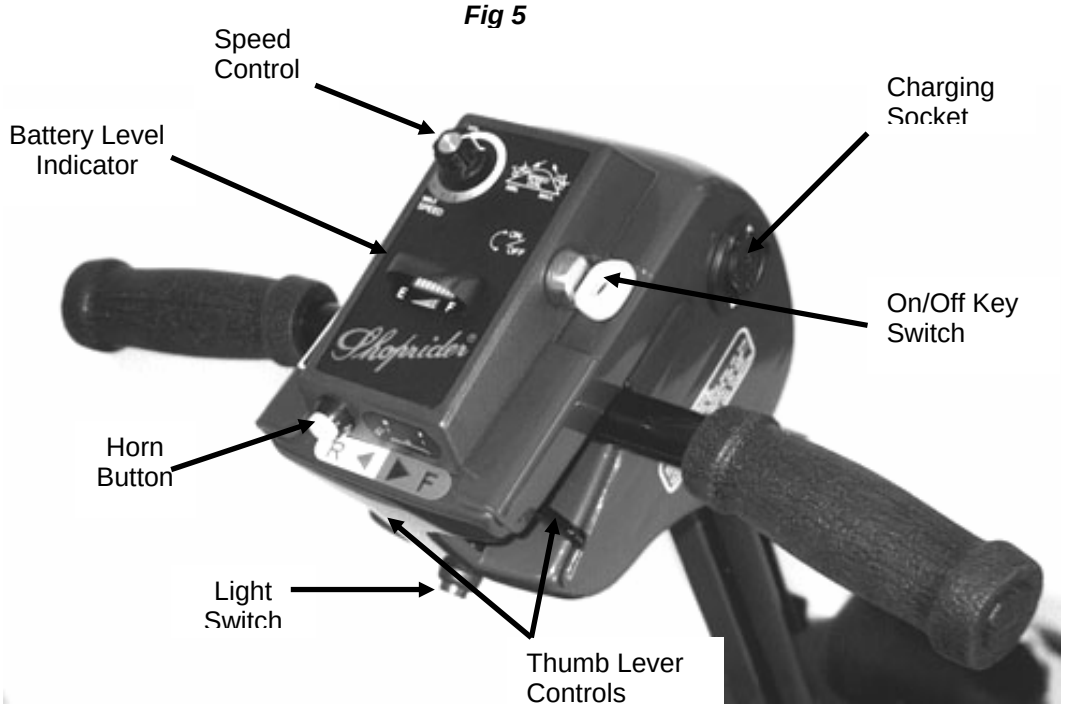


The higher the seat is adjusted, the more stability may be affected due to the higher centre of gravity.

✓ ***Note: If removing the armrests for transport, ensure that the knobs are re-tightened to avoid them rattling loose and falling out.***
Do not apply full body weight to the armrests for transferring. Pivot the seat or lift the arm up out of the way to transfer to another seat.

Tiller Controls *(Fig. 5)*

Fig 5



Thumb Lever Controls
The thumb lever controls the reverse and forward motion of the scooter. Pressing the right lever will drive the scooter forward, pushing the left lever will reverse the scooter. The amount of pressure applied to the levers will determine the speed the scooter travels up to the maximum speed selected. More pressure = more speed. Release the thumb lever and the scooter will automatically come to a safe stop as the electromagnetic brake is applied.

Horn Button
The yellow button operates the scooters horn. ***This should only be used to warn others of your presence and not as a rebuke of any form.***

Light Switch
The blue button operates the scooters lights. ***Using the lights continually can affect the range of the scooter.***

Battery Level Indicator Gauge
This gauge gives you a guide to the amount of charge left in the scooters batteries. This will give the truest reading when the scooter is in motion. ***Always fully charge the batteries before driving your scooter and never let the batteries become completely drained, as this may cause permanent damage to the batteries.***

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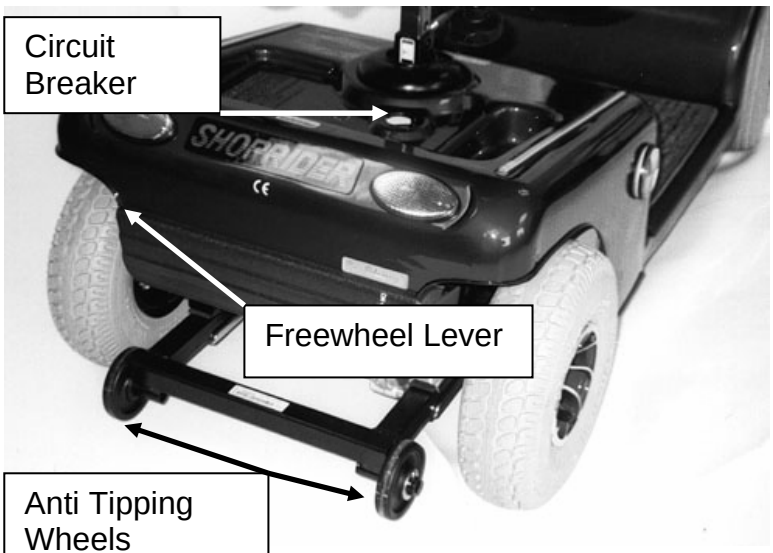
On/Off Key Switch
Insert the key supplied with the scooter and turn clockwise. The battery gauge needle will move. There may be a slight delay before the thumb levers operate as the controller checks the scooters circuits. ***Never leave the key in the switch unattended to prevent unauthorised use. Do not switch the power off to stop the scooter unless it is an emergency. The scooter will stop very abruptly if stopped in this way.***

Speed Control Dial
The speed control enables you to set the maximum speed of the scooter. “1” being slow, and “10” being the maximum. ***Always start at a slow speed until accustomed with the scooter. Do not put excessive pressure on the dial. Only turn as far as the stops.***

Charging Socket
See Batteries and Battery Charger (Page 12)

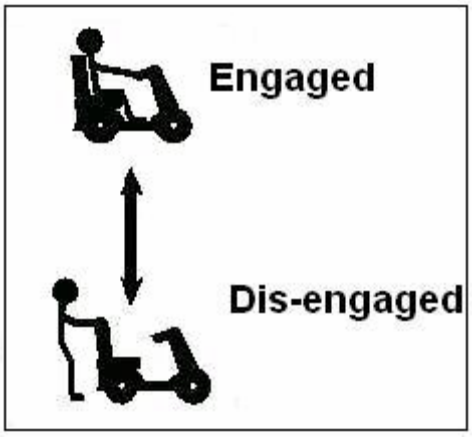
Brake Release / Freewheel Operation *(Fig. 6 & 7)*

Fig 6



The brake release lever is situated under the shroud at the left rear of the scooter. This lever allows you to disengage the drive mechanism and push the scooter in ‘freewheel’ mode. To disengage the drive, push the knob down to the ‘disengaged’ position (*Fig.7*). The scooter can now be pushed.
Simply pull the lever back to re-engage the drive mechanism (the scooter can now be driven). The scooter will not operate when the lever is in the disengaged position. The scooter must be turned off and on by the key switch to reset the circuits before it will resume normal operation. The scooter will bleep continually if the brake is disengaged when it is switched on.

Fig 7



Continued…..

Caution! Never leave the scooter unattended whilst in freewheel mode as it will roll away down an incline. 'Freewheel' mode should only be used in an emergency to move the scooter due to power failure. NEVER move the scooter in this mode whilst it is occupied.

Starting to Drive

Getting Started

Note: You must fully charge the batteries prior to first use (see 'Batteries and Charging')

Select an area with plenty of space.

Mount the scooter by either lifting the arm and sliding onto the seat or swivel the seat around to access the scooter. ***Ensure the seat is securely locked in the forward facing position before driving.*** Adjust the tiller and seat if necessary (*see 'Adjustments'*). ***DO NOT use the tiller to fully support you during transfers.***

Moving Off

Turn the key clockwise to turn on the power. Initially set the speed control to a low setting. Push your right thumb lever and the scooter will move forward slowly. The further you push the lever the faster the scooter will travel, but only to the maximum speed that has been selected. Release the lever and the scooter will come to a smooth controlled stop.

Caution! DO NOT **switch off the power to stop the scooter as this will cause the transmission to lock and the scooter will come to a sharp stop, which could possibly cause injury. This procedure should only be used in an emergency.**

Steering

Steering the scooter is light and easy. Ensure you give obstacles a wide clearance to avoid the rear wheels catching. When steering through limited spaces, turn the tiller in the direction that you wish to go and apply power gently. The scooter can turn very tightly with complete stability at **slow** speeds.

Caution! NEVER turn sharply at high speeds (when speed is set in the red area on the dial) as it can make the scooter unstable, which could lead to injury.

Reversing

Before reversing ensure the area behind the scooter is free from any obstacles or hazards. Adjust the speed setting to low before you reverse. Press the left thumb lever, and steer wide of all corners and obstacles.

Caution! Do not reverse onto a main thoroughfare.

Continued…

Ramps / Slopes
The stability of your scooter depends on several factors such as seat height, angle of gradient and the users height and weight. When approaching an incline, do so directly (*Fig. 8*) and not at an angle (*Fig. 9*) and avoid making turns where possible.

Fig 8

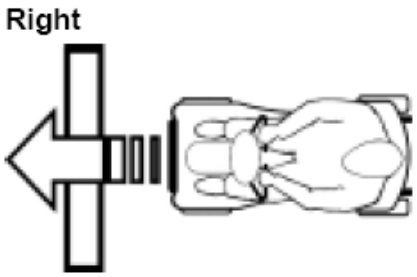
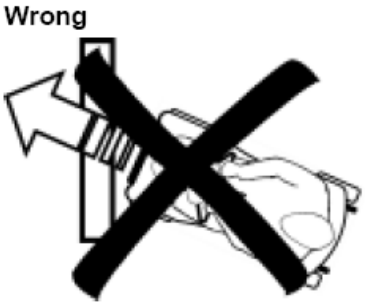


Fig 9

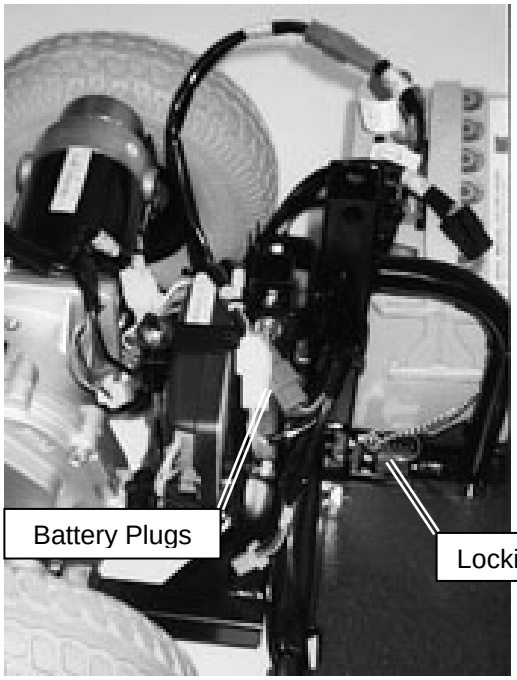


Surfaces
Your scooter will perform well over many surfaces. However, avoid long grass, loose gravel, sand and mud and ice.

Transport and Storage

The scooter is designed to be quickly and easily disassembled without tools into sections for transportation and storage:

Guidelines for Disassembly
Follow the following for the easy disassembly of your scooter:
(*Ensure the scooter is switched off before disassembling)*



1 – Fold down the back of the seat.
2 – Pull up on the red lever and at the same time lift and twist the seat off.
3 – Remove the hand-knob and clip that secures the seat adapter. Lift the seat adapter out of the seat post *(Fig. 4).*
4 - Remove the rear chassis cover, taking care to unplug the lights and the charger plug.
5 – Disconnect the battery plugs and orange multi-plug by depressing the small lip on the plugs.
6 – Remove the Velcro retaining straps and lift out the batteries.
7 – Remove the locking pin and separate the rear drive unit.
8 – Lower the tiller to its lowest level on the front chassis.

Continued…..

The scooter is now separated into components for easy transportation or storage.

Assembly is the reverse of the procedure.

Batteries and Battery Chargers

Batteries
The scooter is supplied with two maintenance free, sealed lead acid AGM batteries. These are fitted under the seat on the scooter.
Low temperatures, rough terrain and the weight of the user can affect Battery performance. Your battery gauge is a guide only on the level of charge remaining in the batteries.
An active user can use 30% of the battery capacity or more per day.
An inactive user may only use 50% of the battery capacity in a week.

Note: Batteries recommended by RMA MUST be used if they need to be replaced. An authorised RMA dealer must carry out battery replacement.

Battery Charger
Charge the batteries completely (8-12 hours) prior to first use. Never switch the scooter on when charging.
Batteries supplied with your scooter are specially designed for use on powerchairs and scooters and require an automatic battery charger. These chargers have an electronic switch that terminates the charge when the batteries are full.
The battery charger is a 5-amp automatic type off board. To charge the batteries connect the plug lead into the wall socket and switch on mains power, the green led should flash indicating standby mode. Plug the charging lead into the charge socket (*Fig. 5*) on the tiller, the orange led should light constant indicating the charge cycle is in progress.
When the charge cycle is complete the green led will light constant. A flashing orange led indicates inhibit. Try repeating the above procedure. Should the orange led continually flash contact your dealer.



Caution: Always charge the batteries in a well-ventilated indoor area. You must still maintain charging the batteries even if the scooter is not to be used for a prolonged period of time (2 to 3 weeks). Failure to do so could result in permanent damage and render the batteries unusable. Wherever possible do not interrupt the charge cycle until the batteries are fully charged. Continual interruption can permanently damage the batteries. If the charging lead should become damaged discontinue use immediately and seek a replacement from your dealer.
ONLY USE THE CHARGER SUPPLIED WITH YOUR SCOOTER. Do not leave the charger plugged into to the charger port after the charge is complete. ALWAYS remove the keys from the scooter when charging.

Continued…..



Disposing and recycling of used batteries
Batteries must always be recycled correctly. Do not dispose of them with your domestic refuge.



For further information regarding your nearest recycling facility please contact your local authority.

Maintenance

Cleaning the Scooter
When cleaning the scooter please pay attention to the following points:

- Only use a damp cloth and gentle detergent.
- DO NOT use any abrasive products.
- DO NOT use a hose or pressure washing equipment.
- AVOID water contact with any electrical components.
- DO NOT put the scooter through an automated car wash or similar.



Routine Maintenance
We recommend that the following checks be carried out on a periodical basis by a qualified person:

Scooters Maintenance and Inspection	**Daily**	**Weekly**	**Monthly**	**Annually**
Check / Charge Batteries	◆			
Check removable parts are secure	◆			
Check electrical connections are secure		◆		
Check tyre pressures (30 psi rear, 25 psi front)		◆		
Check tyre wear (minimum 2mm tread depth)		◆		
Lubricate wheel / castor bearings with a light oil			◆	
Complete inspection by an authorised Dealer				◆

If the transaxle/gearbox has a breather valve on top. Ensure the rubber cap is removed when in use. The rubber cap provides a seal when the scooter is in transit.

Continued…..

Wheels and Tyres
The wheels of your scooter have split rims. This allows any punctures to be repaired easily.
To change the wheels, remove the centre bolt and slide the wheel off its axle. Ensure that when refitting the wheel the retaining nut is fitted with a locking washer or the screw threads are treated with 'Loc-tite' or a similar thread locking compound. When changing a tyre the inner tube must be deflated. Remove the four bolts from the wheel and slit the rim. Tyre pressure is recommended to be kept at 30psi on the rear and 25psi on the front tyres.

✓ ***Note: Regularly check and maintain these tyre pressures as low tyre pressure can reduce the range of your scooter.***

Product Life Expectancy
Your scooter has been designed to provide the user with a long, reliable life provided it is correctly maintained and regularly serviced by an authorised dealer. However, due to inevitable wear and tear and technological improvements it is recommended that the average usable life of this scooter is five years.

✓ ***Note: Should any parts need replacing during routine maintenance please consult your local Dealer for approved spare parts for your scooter. Failure to do so may damage the scooter and void your warranty.***

Troubleshooting

Circuit Breaker
Your scooter is fitted with the latest in electronic controls that are programmed to protect the electrical system from abnormal overloads. Fitted for extra protection is a circuit breaker. Should there be a situation where your scooter stops for no apparent reason please check that the circuit breaker has not tripped. The circuit breaker is located is located through a hole in the shroud underneath the seat behind the seat post *(Fig. 6)*. Press this button to reset the circuit breaker.

✓ ***Note: Should the circuit breaker continue to trip turn off the scooter immediately and consult your dealer.***

Fuses
There are two 40 amp blade type fuses inside the battery pack to give protection against possible overload on the wiring.



⚠ **Note: Should the fuses need replacing please contact your dealer to ensure the correct sizes are fitted. Failure to do so could result in permanent damage to the scooter's electronics and possibly cause a fire hazard. Failure to do this will void your warranty.**

Continued…..

Check List
If your scooter fails to operate, please check the following:

- The unit is switched on.
- All plugs and connections are firmly fixed.
- Battery level shows full charge.
- Freewheeling device is in the drive position (*See Fig. 7*).
- Circuit breaker has not tripped.

If the freewheel device has been operated with the scooter switched on, the scooter will not operate until the key switch has been turned off and on again.

Note: Should your scooter fail to operate after checking these possible problems, consult your local RMA dealer immediately.

Further Information



Safety Information Regarding Electromagnetic Interference (EMI)
Scooters and powerchairs are designed to operate under certain conditions. However, radio waves or electromagnetic fields may affect the operation of the scooter. The source of EMI could be radio or television transmitters or portable devices such as mobile phones, portable CB radios etc.
Should any unintentional movement occur turn the scooter off as soon as safely possible.

Solar Energy
During periods of sunny weather, it is possible that surfaces of your scooter may reach high temperatures (as with motor vehicles). Please take precautions if leaving the scooter in direct sunlight for any period of time. Seek shade or cover the seat and hand controls to keep any temperature increases to a minimum.

Health Factors
Suitability for this product has been assessed on the user's current state of health. It is essential that the user regularly monitor their ability to use the scooter safely.

General Use
Take heed of the information given in this manual regarding safety and the maintenance of your scooter. If adhered to, your scooter should give you years of reliable mobility.

Storage and General Care
We recommend that the scooter is always stored in a dry environment such as a garage or shed to protect the chassis and other components from corrosion. Do not leave the scooter outside during rainstorms. If the scooter is wet, wipe with a dry cloth to ensure there is no ingress of water into the internal components of the scooter.

Continued…..

Product Stability
Scooters and powered wheelchairs are designed to allow the user flexibility of movement in restricted areas. Driving at maximum speed and attempting sharp turns can create a situation where the product becomes unstable. Therefore it is essential that the user pay attention the guidance set out in this manual.
For maximum stability the speed setting should be set up to 50% of the maximum available (halfway between the tortoise and the hare or just entering the red sector on the speed indicator depending on the model.

The main factors affecting stability are:

- Maximum speed setting
- Seat height
- User movement
- User's manoeuvres
- Gradients or slopes

Please keep your speed to a level where you can safely stop without having to make any erratic turns.
Do not load bags etc. on the back of the seat as this will affect the centre of gravity and could increase instability.
Do not lean outside of the 'footprint' of the product, especially whilst moving.
Avoid making turns on gradients or slopes.

Sleep Mode
Your scooter has a digital battery status indicator, which displays the current charge status of the batteries in your scooter.
The circuitry also detects changes in power draw from the batteries.
If you scooter is left switched on without use for about five minutes the electronics will go into 'sleep' mode to conserve power. You will see one bar on the battery status indicator oscillate from side to side. Simply switching the scooter off and back on will enable the scooter to operate as normal.

Constant Speed Use
As the circuitry senses changes in power draw it is possible that on journeys where your speed is constant for an extended period of time that you will see the single bar oscillate even though the scooter is in motion. This is due to the prolonged period of no change in power draw.
This is perfectly normal and by simply adjusting your speed for a moment will change the battery status indicator back to normal.

Driving in Pedestrian Areas
When using the scooter in pedestrian areas always lower your maximum speed to that of the pedestrians around you. Remember the stopping distance of your scooter and always allow enough space to stop safely to avoid collisions with pedestrians or other objects.

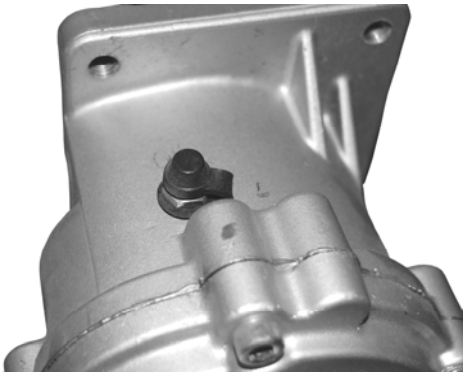
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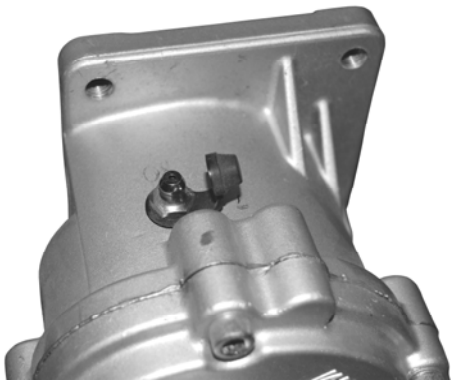
Emergency Procedures
Should your scooter behave erratically or become unresponsive whilst driving, release the wig-wag lever so it may return to it's neutral position and switch off the power at the key / switch. These procedures will stop the scooter and activate the braking system, preventing any further uncontrolled manoeuvres.

Note: Switching the power off at the key / switch can cause the scooter to stop abruptly and should only be used to stop the scooter during an emergency.

Gearbox Breather Cap
The Sovereign ***may*** have a breather cap fitted to the gearbox. This is NOT a grease nipple and should never be used to attempt to lubricate the gearbox. For shipping purposes, the cap is closed.
Before the scooter is commissioned for use, the cap should be opened. Failure to do so could result in an excessive pressure build up within the gearbox and damage may occur to the motor.

Please see images below:


Closed for shipping


Open for use

Notes

Warranty Terms and Conditions

This is to certify that your Shoprider® product is warranted for a period of 12 months from the date of original purchase. This warranty is not transferable.

Should a defect or operating fault arise within this period the Dealer from where the product was originally purchased should be notified immediately. Failure to register the fault may invalidate the warranty.
The Dealer from where the product was purchased is responsible for any warranty repairs.

If a fault occurs within this period due to faulty workmanship or materials that the product will be repaired (or replaced at the Companys discretion) free of charge.

Any unauthorised modifications will invalidate the warranty.

Parts which are subjected to normal wear and tear, accidental damage, neglect or misuse are excluded from this warranty. Normal wear and tear includes tyres, chassis covers, bulbs, seat coverings etc.

Component parts replaced outside this period carry a six-month warranty. (Standard terms and conditions apply for this period).

Model:

Serial No:

Purchase Date:

Dealer Stamp

Distributed by:-
Roma Medical Aids Ltds
York Road, Bridgend Industrial Estate,
Bridgend
CF31 3TB
Tel: 01656 674488 Fax: 01656 674499
Email: sales@romamedical.co.uk
www.romamedical.co.uk

Shoprider reserve the right to change specifications without prior notice

EC REP Wellkang Ltd
29 Harley St.
W1G 9QR
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Manufactured by:
Phisiang Machinery MFG. CO. LTD
No. 108 Hsin-He Rd, Hsin-Feng Hsiang, Hsinchu County, Taiwan