



Saxon

Owners Manual



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Service Department: 0870 458 3000

If you have any questions about your new scooter,
please contact one of the help line numbers below
and our staff will be happy to assist you.

For Technical Assistance / Service Engineer Callouts

Horizon Service Centre **0870 458 3000**

Service@horizon-mobility.com

For Any Other Queries

Horizon Head Office **0870 458 1500 - Tel**

0870 458 1501 - Fax

Or contact us on the Internet at

Website

www.horizonmobility.com

e-mail

enquiries@horizonmobility.com

Support@horizonmobility.com

HORIZON MOBILITY

WARRANTY

LIMITED LIFETIME WARRANTY

FOR THE LIFETIME OF YOUR HORIZON PRODUCT, FROM THE DATE OF PURCHASE,
HORIZON WILL REPAIR OR REPLACE, AT OUR OPTION, TO THE ORIGINAL PURCHASE-
ER, FREE OF CHARGE, ANY OF THE STRUCTURAL FRAME COMPONENTS, FOLLOWING
EXAMINATION BY AN AUTHORIZED REPRESENTATIVE OF HORIZON, FOUND TO BE
DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP

THREE YEAR WARRANTY

FOR THREE (3) YEARS FROM THE DATE OF PURCHASE, HORIZON WILL REPAIR OR
REPLACE, AT OUR OPTION, TO THE ORIGINAL PURCHASER, FREE OF CHARGE, ANY
OF THE FOLLOWING PARTS FOUND UPON EXAMINATION BY AN AUTHORIZED REPRE-
SENTATIVE OF HORIZON TO BE DEECTIVE IN MATERIAL AND/OR WORKMANSHIP:
ELECTRONICS, MOTOR/GEARBOX ASSEMBLY

WARRANTY EXCEPTIONS

MOTOR: IF DAMAGE OCCURS TO THE COMMUTATOR OF A MOTOR AS A RESULT OF
NOT REPLACING THE MOTOR BRUSHES AFTER HEAVY WEAR TO BRUSHES, OR ANNU-
ALLY AT TIME OF SERVICE. MOTOR BRUSHES ARE CLASSSED AS WEAR ITEMS AND
ARE NOT WARRANTED

BRAKE: ONE YEAR WARRANTY FOR ELECTRICAL FUNCTION OF THE BRAKE.
BRAKE PADS ARE WEAR ITEMS AND ARE NOT WARRANTED

BATTERY WARRANTY

BATTERY WARRANTY IS COVERED BY THE MANUFACTURERS OF THE BATTERY AND
NOT BY HORIZON

WARRANTY SERVICE IS ONLY CARRIED OUT BY HORIZON. DO NOT RETURN PARTS
UNDER WARRANTY TO HORIZON WITHOUT PRIOR CONSENT, ALL TRANSPORTATION
COSTS AND ANY DAMAGE CAUSED IN SHIPPING ARE THE RESPONSIBILITY OF THE
ORIGINAL PURCHASER.

WARRANTY EXCLUSIONS

- ABS, AND OTHER PLASTIC BODY PANELS
- BATTERIES (BATTERY MANUFACTURER PROVIDES A SIX-MONTH LIMITED WAR-
RANTY)
- TYRES AND TUBES
- BULBS, FUSES AND OTHER ELECTRICAL CONSUMABLES
- UPHOLSTERY AND SEATING
- Repairs and/or modifications made to any part of the vehicle without specific
prior written consent from Horizon
- ANY CIRCUMSTANCES BEYOND THE CONTROL OF HORIZON
- Labour, service calls, shipping, and other charges incurred for repair of the
product unless specifically authorized by HORIZON

Introduction

- **The New Saxon**

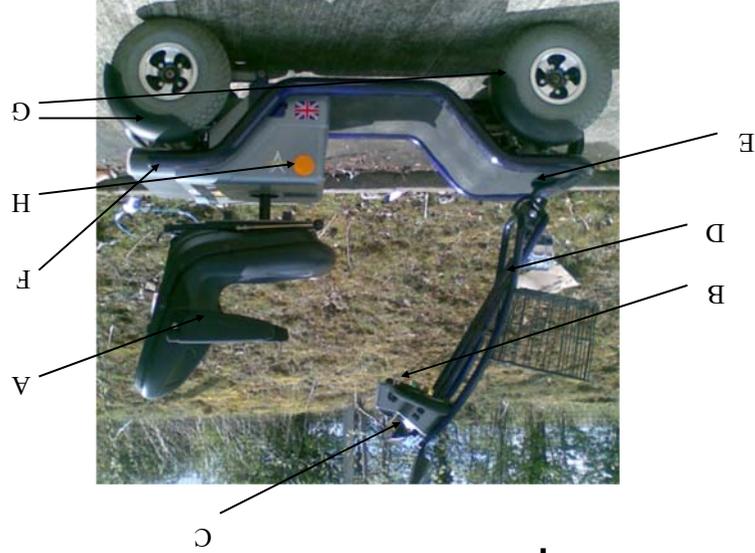


Fig. 1

Thank you for choosing the Saxon from Horizon Mobility Limited. Your vehicle has been designed, developed and manufactured at our new factory in Cheltenham United Kingdom. We at Horizon want you to obtain the very best from your new Saxon mobility vehicle. This Owners Manual contains operating instructions, tips on everyday use, battery charging and care instructions, as well as general care and service information to keep your Saxon in the same excellent condition that it left our factory.

Provided you follow the simple guides contained in this manual your Saxon vehicle should provide many miles of motoring pleasure. Therefore it is very important you the operator read this entire manual carefully before first using your vehicle, and keep it with you when you are out as an easy reference guide.

Features and Specification



- A) Seat and adjustments (pages 8-11)
- B) Control Levers (page 17)
- C) Dashboard (pages 13-15)
- D) Steering Column (pages 13-17)
- E) Column Adjustment (pages 11-12)
- F) Manual Freewheel (page 16)
- G) Wheels & Tyres (page 5 & 28)
- H) Batteries and their Charging (pages 5 & 22-26)

Fig. 2
Index

Fault codes

The Horizon Saxon has a fault diagnostic system built into the electronics. The reverse warning buzzer is used to sound a two-digit code to indicate the nature of the fault. The table below lists general faults and their codes. If in doubt telephone your Main Dealer or Horizon Customer Care and by holding the telephone next to the vehicle he may be able to tell you the problem and whether you can do anything about it.

Code	Probable Fault	Solution
1 - 1	Motor short, controller failure	Contact Main Dealer or Horizon
1 - 2	Controller software fault	Contact Main Dealer or Horizon
1 - 3	Motor internal fault or short	Motor brushes shorted or worn
2 - 1	Throttle pot faulty or wire broken	Contact Main Dealer or Horizon
2 - 2	Improper key/throttle sequence	Switch off wait 10secs and try again
2 - 3	Improper key/throttle sequence	Switch off wait 10secs and try again
3 - 2	HPD fault (open throttle)	Contact Main Dealer or Horizon
3 - 3	Throttle Fault	Contact Main Dealer or Horizon
3 - 4	Electromagnetic brake fault	Broken wire or replacement brake
4 - 1	Low battery voltage	Charge batteries, loose terminal
4 - 2	Over-voltage	Battery charger plugged in

Service record

Date	Service	Engineer
	Pre - Delivery Inspection	
	Delivery Inspection	
	1 st Annual Service	
	2 nd Annual Service	
	3 rd Annual Service	
	4 th Annual Service	
	5 th Annual Service	

Routine Maintenance and service history

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

	Day	Week	Month	Quarter	Annual
Charge batteries	■				
Inspect battery terminals		■			
Wipe vehicle over with damp cloth		■			
Check tyre pressures (25—30P.S.I.)			■		
Check seat swivel and slide system				■	
Check rear for wire chaff and wear					■
Check tyres for damage and wear			■		
Check front suspension for damage				■	
Check manual brake function					■
Inspect motor brushes					■
Full service by main dealer					■

Bulbs and Fuses

	Voltage	Rating
Headlight bulb	12v	21 watt
Front indicator bulbs	12v	5 watt
Rear indicator bulbs	12v	5 watt
Rear red tail light bulbs	12v	10 watt
Main ignition fuse (denoted by a red dot)		5 amp
Main 12volt fuse (denoted by a white dot)		8 amp
Main Battery circuit breaker (dealer only)		70 amp
Main charger circuit breaker (dealer only)		35 amp

Wheels and tyres

If wheels are removed ensure that the axle shafts are well greased before replacing wheels. Always use the “Binx” self-locking nuts provided with the scooter. If lost contact your dealer for a new one as the thread is not a standard metric one. If you remove the rear wheels always ensure you replace the drive keys in the drive shafts to prevent damage to the drive and ensure the vehicle operates correctly.

Electronics repair

Never try to open the control box, adjust the electronic controller or fix faults in either the rear control systems or dashboard, the electronics have a number of safety critical systems incorporated in them which must not be compromised in any way. Contact your main dealer for help and assistance.

Safety Warnings and Operating Tips

General Safety

Safety is very important with any vehicle, especially a motor driven vehicle. The following warnings are not conclusive and should be read in conjunction with this complete manual, which explains operation, function, care and adjustments for your vehicle.

If you are in any doubt about your ability to drive your vehicle due to a medical condition or treatment, always consult your doctor before proceeding.

Always ensure your vehicle is switched off and the key removed before mounting, dismounting or adjusting either the seat or steering column.

Always ensure you are seated comfortably and securely with the armrests down and that both the seat and steering column are securely locked in their correct positions.

Ensure you have read this manual and familiarised yourself with all the controls before using your vehicle for the first time.

Before switching your vehicle on, ensure you can reach all controls from a comfortable seated position and ensure that your rear view mirrors are adjusted properly.

Before driving your vehicle ensure that the lights are clean and work properly, ensure your tyres are correctly inflated and undamaged, and that your batteries are charged.

Always reduce speed when turning corners especially when travelling downhill, over uneven terrain or at high speed.

Never try to mount or dismount a kerb at an angle, always approach straight on and at a steady speed. Never charge an obstacle at high speed. Wherever possible look for and use drop kerbs, as these are safer and more comfortable.

Wherever possible always drive straight up or down slopes not across them.

Failure to observe these general safety tips could lead to your vehicle starting unexpectedly, being uncontrollable or tipping over.

Batteries

Before each journey always check that the batteries are sufficiently charged.

Always follow the procedures for battery care and charging set out on pages 21-26 of this manual.

Though your vehicles batteries are sealed, try to keep batteries upright on a flat surface at all times, especially when being transported. When being transported ensure your batteries are located securely in place to prevent damage or injury

Regularly check that your batteries are not damaged, are in good condition with clean terminals and that no leakage has occurred.

Warning: battery fluids are very corrosive and every care should be taken at all times to avoid contact with it. If it comes in contact with the skin, clothing or other surfaces, wash immediately with generous amounts of soap and water. If it comes in contact with the eyes, immediately flood the eyes with running fresh cold water for at least 10 minutes and seek immediate medical advice. If it is swallowed seek immediate medical advice.

Wheels and Tyres

Regularly check your wheels, tyres and steering for damage or foreign objects that might cause improper performance or a puncture.

Check your tyres regularly for uneven wear. Seek advice from the Horizon Service Department or your local Horizon dealer if found.

Do not inflate your vehicles tyres using a powered airline at a garage. Always use a bicycle hand pump or a manual foot pump.

Tyres should be inflated to a pressure of 25-30 P.S.I. dependant on the desired comfort of ride .

Freewheel Lever

The freewheel lever for your vehicle is located at the rear beside the inside edge of the right-hand rear wheel.

Never attempt to use the freewheel lever on steep slopes.

Never sit on the vehicle while it is in freewheel as the vehicle will no longer automatically stop.

Once fully charged the yellow light will go out and the green charger light will come on. Charging is now complete but if the vehicle is not required it may be left on, as the charger is fully automatic and will keep the batteries "topped up" without fear of damage.

Never leave the charger connected to the vehicle batteries with the mains switched off, as this could shorten battery life or cause permanent battery damage.

Always plug the charger into the vehicle before plugging it into the mains and turning it on.

Always switch off the mains before unplugging the charger from the vehicle.



Fig. 15

While the charger is plugged into your vehicle its drive system is disabled.

If you turn on your vehicle whilst it is charging your batteries the battery indicator may still not have risen, this is because the gauge will only reset when the batteries are full, the gauge will not elevate one bar at a time whilst charging.

Charging instructions

Ensure your Saxon is switched off and the key removed.

Always charge your vehicle in a well-ventilated room with no exposed flame present.

Place your battery charger on a hard flat surface; never place it on the carpet or a surface likely to block the ventilation louvers in the base of the charger casing.

Never expose any part of your charger or batteries to direct heat or naked flame (e.g. gas fire).

Never charge your vehicle outside or in an excessively damp room.

Never plug your charger in if any part of the charger or mains plug is wet.

Plug the charger into the charger socket on the steering column A (Fig. 13).

Fig. 13

Fig. 14



Ensure that the mains plug is dry and free from damage before plugging it into the mains socket and switching it on (Fig 14).

The yellow light should come on immediately and should remain on while the vehicle is charging.

Once the batteries are charged the green charged light will illuminate.

Transporting your Saxon

The Saxon is not designed to be dismantled to fit in to a motor vehicle. However it will fit into a hatchback or estate type vehicle.

If you require to transport your Saxon the seat and batteries can be removed but remember that the batteries are very heavy (up to 24.3kg/ 53.6lbs each).

Always ensure your Saxon and its parts are securely stowed and anchored when being transported.

Never sit on your Saxon whilst it is being transported in another vehicle.

Never attempt to tow another vehicle with your Saxon or tow the Saxon with another vehicle.

Do not carry passengers on your Saxon it is both dangerous and illegal.

Mobile telephones and two-way radios

Mobile telephones, two-way radios and "walkie-talkie" devices must never be used while operating your vehicle.

The use of mobile telephones or two-way radios can cause excessively strong electromagnetic fields that may interfere with the vehicle's electronic systems.

If you need to use a mobile telephone or two-way radio, bring the vehicle to a complete stop and turn off the ignition key before switching the device on.

Turning

Always reduce speed when turning corners especially when travelling downhill, over uneven terrain or at high speed.

Emergency stop

Switching off the ignition key will cause your Saxon to come to a sudden and complete halt using full braking. This method to stopping is not recommended except in an emergency as regular use could damage the electromagnetic brake.

Hill climbing (Maximum Safe Slope)

Wherever possible climb or descend slopes, hills or ramps directly facing the slope of the hill rather than traversing across the slope.

The Saxon has been tested in accordance with EN 12184:1999 8.4.2 to climb a continuous incline of more than 5 metres and less than 50 metres at 1° (1 in 5) with a maximum user mass of 158kg (350lbs) (including luggage). Never attempt to climb inclines in excess of this. For continuous inclines of more than 50 metres in length you should never climb a slope of greater than 9.5° (1 in 6) with 158kg (350lbs) maximum user mass (including luggage).

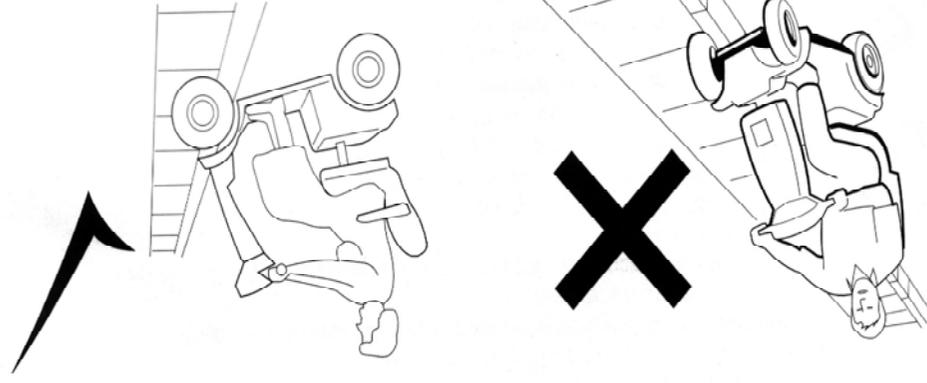
Kerb climbing

Never attempt to mount or dismount a kerb in excess of 100mm (4"), and where possible choose the lowest height kerb available.

Do not attempt to mount or dismount kerbs in reverse as your vehicle has less power and will be less stable.

Always mount or dismount kerbs at right angles slowly and steadily. Never race at a kerb or try to negotiate one at an angle.

Fig. 3



Maintenance free VRLA batteries generally take longer to recharge than other types of batteries so be patient, leave them on charge overnight, as the charger is fully automatic.

Regularly check the connections on each battery terminal for signs of corrosion and security. If any corrosion is present clean the lead terminal completely with a wire brush or similar lightly abrasive product, ensuring you do not touch both terminals at once. Re-grease the terminals using petroleum jelly (such as Vaseline) never use ordinary grease products.

Once greased replace the battery connections, tightening the terminal bolts down securely. Cover the terminal connections, bolts and wire tails with petroleum jelly. Ensure the front and rear battery retaining clamps are fitted securely and are not touching any battery terminals.

Vehicle range

It is a requirement that manufacturers state the range of their products in their literature or Owners Manuals. There is a common European Standard for measuring the range of a mobility vehicle, this is set out in ISO 7176 Part 4: Energy consumption of electric wheelchairs and scooters for determination of theoretical range.

The tests are carried out in controlled environmental conditions with new, fully charged batteries, on a level test surface.

The range figures stated should be considered as a theoretical maximum distance obtainable and not what you will generally obtain from your Saxon in everyday use.

Range will reduce due to battery age and state of charge, hilly terrain or slopes, grass, mud or snow, regular kerb climbing, low air temperature, incorrect tyre pressures, stop/start driving, worn motor brushes or vehicle due a service.

The technical considerations for range may seem daunting and complicated but please remember that battery size and motor efficiency will be the two main factors in determining range. Your Horizon Mobility Saxon has probably the highest battery capacity available on a mobility vehicle today, coupled with a highly efficient 24volt transaxle drive system you should find the range of your vehicle is sufficient for the majority of your everyday needs.

Only ever use the Horizon approved charger supplied with your vehicle.
Do not interrupt the charging cycle of your charger.

Fig. 12



Charge your batteries every night regardless of the amount of use your vehicle has had during the day. Keeping your batteries topped up will extend their life and ensure the vehicle achieves desired range performance .

Do not top up your batteries during the day, wait until you have finished with the vehicle for the day or the evening then leave them charging overnight for a full charge.

If you are not using your Saxon today leave it connected to the charger until required. Leave the charger switched on, this will not damage your batteries as long as the mains connection is left switched on and will only use what power the batteries require to remain topped up as the charger is fully automatic. Turning the mains connection off will begin discharging the batteries and could eventually shorten their life or cause them damage.

If you leave your vehicle for an extended period of time (more than a week) disconnect at least one main battery terminal (the grey two pin connectors under the rear battery cover). If leaving your vehicle for a long time, once a month plug your batteries back in and leave on charge until fully charged, remember to unplug the batteries once again once charged.

Failure to recharge your batteries will damage them and lead to shortened lifespan and performance or permanent failure.

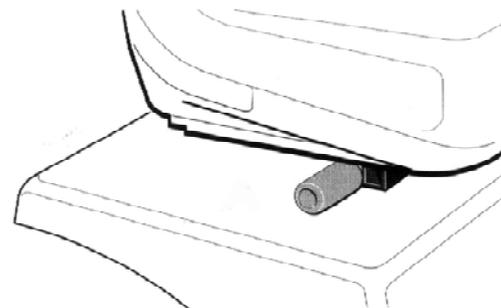
Assembly and adjustments of your Saxon

Seat removal and replacement

Depending on seat option fitted operate the seat back adjustment lever by pulling upwards and while holding lever up fold the seat back down.

Operate the seat swivel lever on the side of the seat and turn the seat so that it turns freely (not locked).

Fig. 4



Grasp the sides of the seat and pull upwards until clear of the vehicle seat post.

To put the seat back on the vehicle grasp the seat on either side then carefully line up the socket in the top of the vehicle seat post with the seat spigot. Raise the seat to the vertical position; it should now drop into place. If it is slightly stiff and doesn't drop into place turn the seat while pressing down on the seat of the cushion until the seat locks into place.

Always ensure that the seat has locked into place by trying to turn the seat before attempting to drive the vehicle.

Seat adjustment

Your Saxon has been designed so that the seat is adjustable for both height and reach to ensure you are in the safest and most comfortable position when operating your vehicle.

Always adjust the seat to a suitable driving position as far forward on the vehicle as is comfortable to do so rather than brining the steering column back to enable you to reach as this will make steering slightly more difficult and reduce vehicle stability.

Batteries and charging systems

General information

The batteries used as the power source of your Saxon mobility vehicle are significantly different from other types of batteries such as the ones used to start your car. Car batteries are designed to release large amounts of power quickly whilst mobility vehicle batteries (common term for which is deep cycle) are designed to release power slowly and evenly.

Mobility batteries are generally more expensive than other types of batteries, this is because the technology used is more complicated and production runs are much smaller.

Battery size for mobility vehicles is always described in amps per hour (e.g. 50Ah/hr). The higher the number the larger the battery size, weight and capacity, so potentially the greater the distance you can travel.

Battery type

Your Saxon mobility vehicle is supplied with "valve regulated lead acid" batteries utilising a "Gel" electrolytic compound rather than the cheaper "glass mat" technology that tends to have a shorter life expectancy. Battery capacity is 50Ah/hr, 05A/hr, depending on specification.

The Gel battery is totally maintenance free other than regular charging. The battery case is totally sealed so transporting this type of battery is completely safe as long as the case is not cracked or split. It is the only type of battery approved for transport on an aircraft.

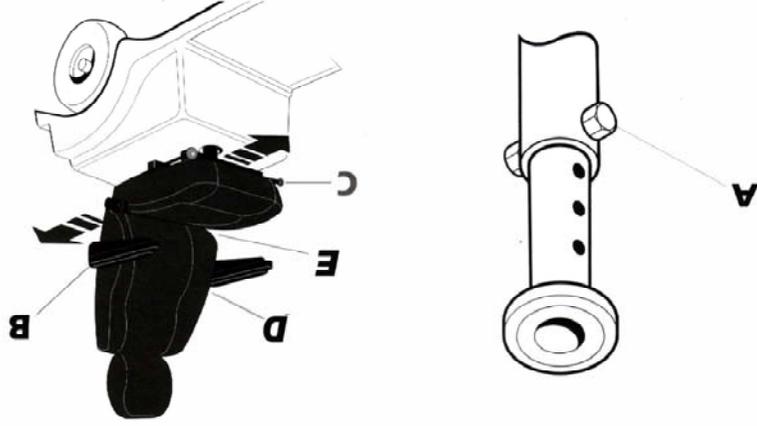
Horizon want you to get the best from your vehicle so we do not recommend that you use any other type of battery except GEL VRLA maintenance free types.

Battery care

The batteries fitted to your Saxon are expensive so prolonging their life is in the best interests of you, the owner. Your batteries will last longer and provide better performance if you follow the care instructions below. If you do not follow the care plan agreed with the battery manufacturers then it might result in lower performance than expected from your vehicle and shorter battery life.

Where a rear basket or box has been fitted together with a flashing beacon we recommend you do not try to swivel your seat as it may come into contact with the beacon pole.

Fig. 5



Seat

height adjustment

To adjust the seat height, first follow the above steps for seat removal.

Remove the battery cover by releasing the locking toggles located at front corners and rear centre edge of the cover. Lift the cover gently and turn through 90°. The lighting loom plug should be released by pressing the rear end of the latch while gently pulling the two halves apart.

Remove the nut and bolt A. (Fig. 5) located halfway down the seat post by means of two 13mm metric spanners. Slide the seat post inner up or down as required before reinserting the bolt through the post. Replace the nut and retighten securely to ensure the seat post is locked into place.

The Saxon seat post has been designed so that it may be adjusted 100mm (4") in increments of 25mm (1").

Seat slide adjustment

The Saxon seat has been designed to slide 125mm in 6 positions. To adjust the seat pull outwards gently on lever C. (Fig.5) at side of seat and slide seat back or forward to the most comfortable position for you. Release lever and gently try moving seat to ensure slide mechanism has automatically locked back into place.

Use on a road

Your Saxon vehicle is designed to be used on the Public Highway, but remember cars and other motor vehicles are travelling a lot faster than you are so anticipate their movements and indicate your intentions in plenty of time for them to react.

To drive a mobility vehicle on the Public Highway it must be equipped with lights, indicators, rear view mirror and an efficient braking system.

We advise you to read the Highway Code before using your Saxon on the Public Highway, and familiarise yourself with all its requirements.

Flashing beacon

It is a legal requirement in the UK for a mobility vehicle to display a flashing orange beacon when used on a dual carriageway with a speed limit in excess of 50mph.

We recommend that you consider using an orange flashing beacon in country lanes and other narrow roads where visibility may be restricted.

Transportation

Your Saxon may be transported in a suitable vehicle by removal of the seat and lowering the steering column. It is recommended that ramps be used, as the Saxon is a very heavy vehicle.

Loading the Saxon using ramps:

- a) Remove the seat
- b) Lower the steering column using the adjustment ratchet handle
- c) Turn on the vehicle and select the slow mode.
- d) Turn the speed limiter to minimum by rotating it fully anticlockwise
- e) Stand beside the vehicle drive is carefully forwards up the ramp(s) making sure that the wheels are centrally located on the ramp(s).
- f) Switch the electronic freewheel switch on and push the vehicle fully into the vehicle.
- g) Turn off the electronic freewheel switch and ignition switch off
- h) Secure the vehicle into the back of the motor vehicle using straps over the rear bumper supports

Other seat adjustments

(Where fitted)

If your vehicle has the optional orthopaedic seat fitted then your seat has three further adjustments.

Armrest adjustment

The armrests can be adjusted for height by rotating the thumb wheel B (Fig.5) located in the centre of each armrest base panel.

Backrest adjustment

The backrest angle can be adjusted by pulling up on lever E. (Fig. 5). Sit in the seat, being careful not to lean back. Lift the lever at the base of the backrest E. (Fig. 5). Lean forwards or back carefully until the seat back is in the correct position. To lock backrest in place release lever E. (Fig. 5)

Lumbar support adjustment

The orthopaedic seat has an adjustable lumbar pad, which can be increased or decreased in protrusion by turning the large knurled knob D. (Fig. 5) on the side of the backrest.

Never try adjusting the seat of your Saxon whilst the vehicle is in motion.

Rear basket, Trolley or crutch holder

(Where fitted)

Accessories such as crutch holders can easily be removed by following the instructions provided with these items.

A crutch holder may be removed by undoing the locking knob underneath the rear of the accessory bracket, then grasping the item near its base slide it out of the side of the seat mounted accessory bracket.

To fit the rear basket onto its mounting bracket grasp the basket by either side and carefully locate the two lower forks of the mounting bracket into the lower mounting hole of the basket. Ensuring the basket is vertical and that the upper locating tongues on the bracket have gone under the basket locating bars press down on the basket until it locates securely on its bracket.

To remove the rear basket grasp the basket on either side and lift.

Note: Never place a load of more than 9kg (18lbs) in the basket.

A rear Insulated Shopping Trolley may be fitted to the rear of the Saxon seat.

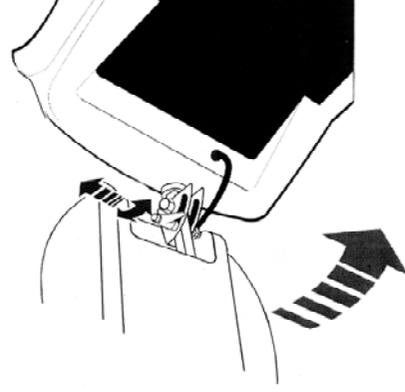
To fit the Insulated Shopping Trolley, locate the two lower mounting bracket tongues into the lugs on the seat bracket then lift the curved locating bracket on the trolley over the round locating bar on the seat back.

Note: Never place a load of more than 10kg in the trolley.

If your vehicle is fitted with a rear flashing beacon this may be removed by first unplugging it from the beacon socket beside the right rear light cluster, then grasping the pole firmly near its base pull it out of the mounting tube.

Folding, raising and adjusting the steering column

Fig. 6



Operate the ratchet handle at the base of the steering column, turning it anti-clockwise until the steering column moves. If required you can pull the lever outwards whilst holding the lever out turn clockwise release the lever and undo anti-clockwise again

To tighten carry out the reverse, turning it clockwise until the steering column is secure. If required you can pull the lever outwards whilst holding the lever out turn anti-clockwise release the lever and tighten clockwise again .

Use on pavements

If you leave your Saxon for 15 minutes or more without touching a control lever the vehicle will automatically power down. To restart the vehicle you must first turn off the ignition switch for a period of at least 15 seconds before turning the key back on.

Note: If you are not going to use your Saxon for an extended period of time (two weeks or more) always disconnect at least one battery unless the vehicle is being charged.

When using your Saxon on a pavement or in pedestrian areas you should always be aware of pedestrians. Your Saxon is a large heavy vehicle that could cause serious injury if it hits a pedestrian, especially an elderly person, a pushchair, young child or pet, all of which may cause situations where extra care is required. Always use the slower mode and travel well within your capability to stop quickly.

When manoeuvring in a confined area ensure the minimum speed is selected.

The Saxon is not designed to manoeuvre in tight shops, therefore where possible leave your vehicle outside the shop making sure that it doesn't obstruct pedestrians.

In the UK it is a legal requirement that you only use the slow (6kph/4mph) mode on pavements or in pedestrian areas.

Your Saxon is designed to climb or descend most reasonable slopes up to 14° (1 in 4), however both hill climbing capability and distance travelled between battery charges will be adversely effected by:

1. User weight
2. Ground surface such as gravel, grass or soft earth
3. Steepness of terrain
4. Continuous length of hills climbed
5. Battery age and level of battery charge
6. Air temperature – the colder it is the less the range

Always use a lower speed setting when descending speed hills or ramps, especially in reverse.

Braking

To stop your Saxon vehicle simply release the control lever, whilst maintaining your grip on the handlebars. The vehicle will slow down and come to a stop using the regenerative braking system.

Once the vehicle comes to a stop the electromagnetic parking brake will engage holding the vehicle in position, even on a steep hill.

Emergency stop

If an emergency arises and you must stop the vehicle quickly switch off the ignition key by turning it one turn anti-clockwise. The electromagnetic parking brake will instantly engage.

Switching on

Never switch your Saxon on before mounting the vehicle. Always make sure you are comfortably seated with the seat and steering column properly adjusted and locked in place before switching the ignition key on.

To switch on the Saxon insert the ignition key into the ignition switch and turn one turn clockwise.

Switching off

Always switch off your Saxon and remove the key before dismounting the vehicle.

Lower the column until it almost rests on the battery cover then tighten the adjustment lever at the base of the column to hold the steering column in place. This will prevent the steering column scratching the battery cover whilst in transport.

To raise the steering column, turn the ratchet handle at the base of the steering column anti-clockwise to release the adjuster.

Lift the column by the handlebar grips until it is in the correct position then turn the ratchet lever clockwise until secure. Test the column before trying to mount the vehicle to ensure that it is locked in place.

To adjust the steering column for reach first adjust the seat until you are seated correctly as far forwards as is comfortable.

Slacken the column locking ratchet handle by turning anti-clockwise. Pull or push the column by gripping the handlebars until you are seated comfortably while being able to reach all the controls.

Once set turn the locking ratchet handle at the base of the column clockwise to lock the column into position.

Never try adjusting the steering column of your Saxon whilst it is motion.

Miscellaneous dismantling

Further dismantling of the vehicle is not recommended, as the batteries are very heavy and not easily lifted.

Accessories such as crutch holders can easily be removed by following the instructions provided with these items.

A crutch holder may be removed by undoing the locking knob underneath the rear of the accessory bracket, then grasping the item near its base slide it out of the side of the seat mounted accessory bracket.

If your vehicle is fitted with a rear flashing beacon this may be removed by first unplugging it from the beacon socket beside the right rear light cluster, then grasping the pole firmly near its base pull it out of the mounting tube.

Controls and functions

Dashboard functions



Fig. 7

The Sax- on controls have been designed to be ergonomic and user friendly, using large easily operated rocker switches for all essential functions with colour coded illumination incorporated into them to provide visual confirmation of function selected. The switch illumination makes operation in poor light easier.

Ignition Switch



Insert your ignition key into the ignition switch set into the left front edge of the dashboard. Turn clockwise once.

The battery level indicator will light up and your scooter may now be driven.

Operating Instructions and Tips

Mounting and dismounting kerbs

Your Saxon is capable of mounting or dismounting kerbs or obstacles up to 100mm (4").

To mount a kerb drive forwards slowly so that you face the obstacle at 90°. Stop about 300mm (1 foot) away from the obstacle, select a medium speed setting and drive up the obstacle without stopping. Lean forwards for larger kerbs or obstacles.

To dismount a kerb or obstacle face it a 90°, and select a low speed setting. Move forwards slowly and steadily as the front wheels of your Saxon drop down the kerb, keep going slowly and steady until the rear wheels also descend.

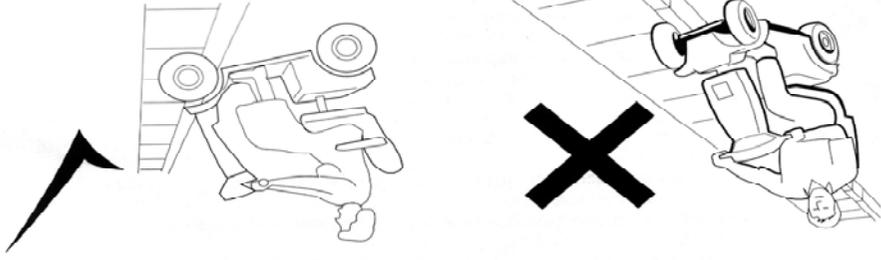
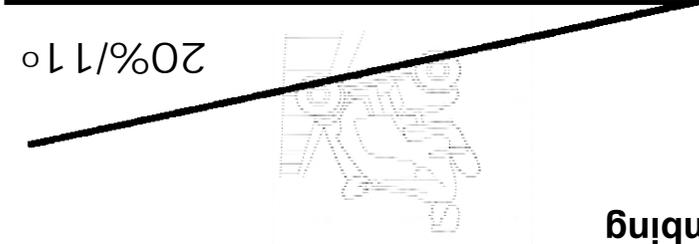


Fig. 10

Traversing slopes

Hill climbing

Care should be taken when traversing across a slope. Do not traverse across a slope of more than 11°, disregard of this could result in your vehicle tipping.



Controls

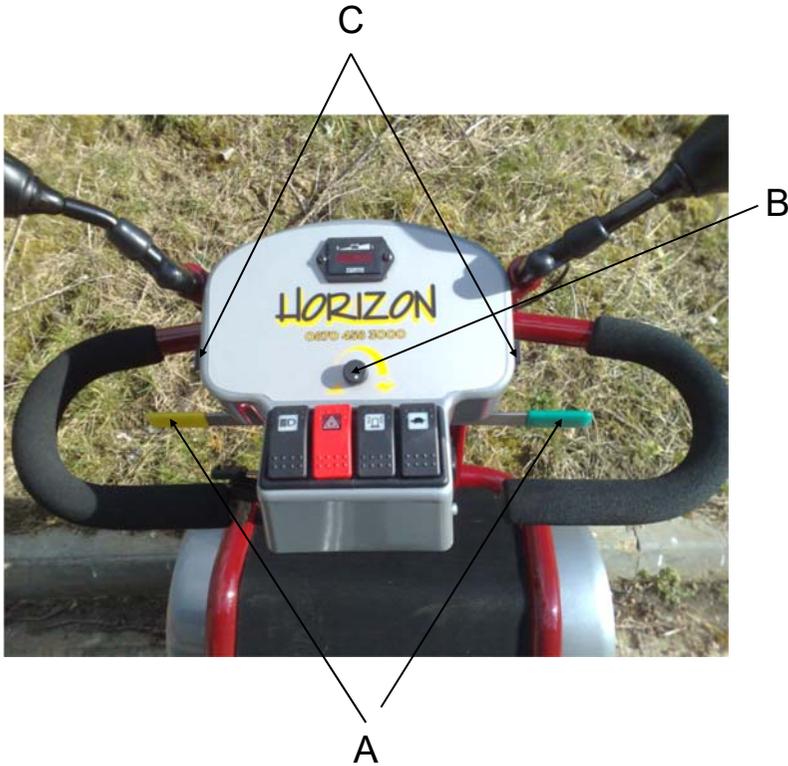


Fig. 9

The throttle lever regulates the speed and direction that your vehicle moves in. The further you move the lever the faster the vehicle will move until you have reached the maximum speed you selected using the Mode switch and speed limit knob.

Note: Attempting to drive before the vehicle is switched on or before it has gone through its power up routine (approximately 3 seconds after the ignition is turned on) will result in a fault condition. The vehicles reverse warning buzzer will sound intermittently (See page 28).

Mode



Press this rocker switch to engage high-speed mode (8mph). The switch will stay down. When high-speed mode is activated the switch will illuminate white.

Note always start in 4mph mode with this switch turned off. It is illegal to drive your vehicle on a pavement or pedestrian area in high-speed mode.

Speed Limiter



The knob set into the right front of the dashboard B (Fig. 9) . In each mode you can limit the maximum speed the vehicle will travel by turning this knob. The further you turn it anti-clockwise the slower your Saxon can travel.

Lights



Press this rocker switch to turn on the lights. The switch will stay down and illuminate green. Your headlight and red rear lights will illuminate only if the ignition key is switched on.

Note: Excessive use of the lights will use battery power and reduce the range of your vehicle.

Horn



Press either switch to activate the horn. The switch returns automatically to off when you stop pressing. Use the horn to warn other road users or passers-by of your approach.

Optional extra, but this device is a requirement under the road traffic act if you wish to travel on a dual carriage way B (Fig. 8)

Flashing Beacon



Manual freewheel lever

Your Saxon has a manual freewheel lever that disengages the electromagnetic parking brake from the drive system to allow the vehicle to be pushed.

Ensure the ignition key is switched off, as the controller will automatically engage the regenerative brake if the ignition key is switched on, making it almost impossible to push the vehicle. The reverse warning buzzer will sound intermittently to warn that the ignition is switched on.

Behind the right rear light there is a lever, pull down on this lever to disengage the brake system; the vehicle may now be pushed.

The Saxon has a safety system incorporated into it that will re-engage the regenerative braking system if the vehicle starts to move at more than 3mph.

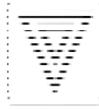
Note: Do not try towing your Saxon. For your safety there is no way of disengaging the safety braking system but this makes the Saxon impossible to tow without causing controller/motor damage.

Indicators



The two press switches C (Fig. 9) on either side of the dashboard are direction indicators. The switch will return to off but the indicators will flash for approximately 20 flashes before switching off automatically. Fitted on both front and rear of the vehicle to indicate to other road users the direction you wish to turn.

Hazard Warning Lights



press the red rocker switch to activate your vehicle hazard warning lights, all the direction indicators, both front and rear will flash together when activated. The switch will stay down and illuminate flashing red when activated. To cancel press the rocker switch back. The Hazard lights work with the ignition key switched off and/or removed to warn other road users or pedestrians of a possible obstruction caused by your vehicle.

Battery level indicator



The battery level indicator is located in the centre front edge of the dashboard and indicates the charge state of your batteries. When fully charged the red indicator light will be on the far right of the meter, as your batteries discharge the indicator moves left in 10 stages. When there is only 20% left in your batteries the last two bars will flash. When this reduces to 10% the last bar will flash indicating your vehicle is about to stop.

Note: Always charge your batteries before they get into a discharged condition, as regular deep discharging will shorten your battery life.

Note: Never allow your batteries to stand in a discharged state for long periods of time, as this will reduce your battery life.