

Moonlite

Directions for use



INNOVATE." BUILD FOR THE FUTURE

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# **IMPORTANT:** DO NOT USE YOUR WHEELCHAIR UNTIL THIS MANUAL HAS BEEN READ AND UNDERSTOOD.

# Amendment record

ISSUE	PAGE	AMENDMENT	DATE
1	All	First Issue	July 2007
2	All	Second Issue	August 2007

# 1. Important information

Please read this information carefully or have the complete contents of this user manual explained to you in detail. If there are any points you are not absolutely clear about ask your healthcare specialist\* to clarify them, during any official handover, before attempting to use this equipment for the first time.



This manual contains important hints and information on:

- Safety
- Operation
- Care and maintenance

The contents of this manual are intended to cover all the general points relating to your new wheelchair. As part of our ongoing product improvement and development programme, changes may take place at short notice. This wheelchair may have been prescribed specifically for you and may have features not detailed in this literature. In order to ensure you gain maximum benefit and full enjoyment from your wheelchair, arrangements may have been made to carry out an official handover shortly after delivery. Your healthcare specialist\* will notify you of this in advance. If not please contact your Wheelchair Service.

Prior to delivery, your wheelchair will have undergone a thorough pre delivery inspection by our factory trained staff. Before using your wheelchair, you should have received appropriate instruction from your healthcare advisor, therapist or rehabilitation engineer.

The visiting healthcare specialist\* will carry out a series of final safety checks. Account will be taken of your clinical requirements as well as your social and environmental needs, including all necessary adjustments to ensure optimum comfort.

Neither Sunrise Medical (the equipment manufacturers) nor the distributor or prescribing Authority (NHS) will accept responsibility for damage or injury caused by misuse or non-compliance with instructions or advice set out in this manual.

\* Your Healthcare Specialist may be a Rehabilitation Engineer or Occupational Therapist or Wheelchair Service Personnel.

Dealer signature and stamp

#### 1.1 Important symbols in this manual

$\mathbf{\hat{\mathbf{z}}}$	THIS SYM This symb caution tha wheelchain personal ir
	porconarii

BOL WARNS YOU OF A RISK! ol is used to give a warning or at is related to the safe use of the r. Follow the instructions to avoid njury or damage to the product. This symbol indicates hints and suggestions, which should help make operating the wheelchair easier and point out any special functions.

This symbol indicates hints and suggestions that should not be carried out while operating the wheelchair. This symbol indicates the use of different tools and other adjustments or when service/ maintenance may be required. It should only be carried out by suitably trained or competent persons.

## **1.2 Wheelchair Identification**

Each wheelchair carries a unique identification/serial number that is printed on the serial number label. This label is fitted on the left hand side of the wheelchair on the rear vertical or horizontal frame tube. (Fig. 1)



This label also carries the model

code designation, which includes the wheelchair size and colour.

In the event of any queries please have this information to hand if contacting Sunrise Medical. Sunrise Medical can be contacted as follows:

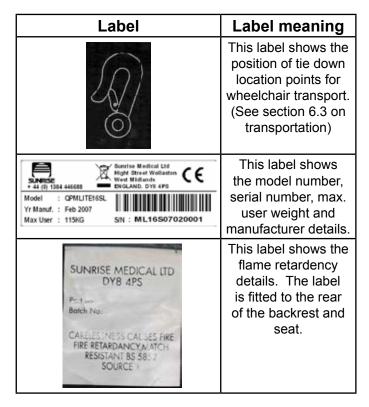
Sunrise Medical Ltd High Street. Wollaston West Midlands DY8 4PS

**Telephone:** Telefax:

+44 (0) 1384 446666 +44 (0)1384 446644

e-Mail: Company website: sunmail@sunmed.co.uk www.sunrisemedical.com

## 1.3. Labels Fitted to the Wheelchair



# 1.4. Rules and regulations

- The wheelchair is manufactured to meet the requirements of BS EN 12183
- The Upholstery meets the requirements of ISO 7176-16 and the fire and furnishing regulations SI1324. Other materials wherever possible are ignition retardant.

#### 1.5. Modifications and alterations

Making any unauthorised modifications or using nonapproved parts, may change the wheelchair structure and create an unsafe condition.



Neither Sunrise Medical nor your wheelchair provider will accept responsibility for damage caused by misuse or noncompliance with instructions or advice set out in this manual.

 $\Lambda$ 

Users attempting to use the wheelchair beyond the manufacturer's recommendations may put themselves at risk of serious injury or even death.

# 2. Intended user

#### 2.1 Intended user

The Breezy Moonlite with 22" Wheels is a self-propelled wheelchair intended for use by persons with disabilities or difficulty in walking but who are capable of propelling themselves, up to a maximum weight of 115 kg (18 stone).

The Breezy Moonlite with 12" Wheels is an attendant push (transit) wheelchair intended for use by persons with disabilities who are unable to propel themselves and require the assistance of an attendant or carer to push them in the wheelchair, up to a maximum weight of 115 kg (18 stone). Section 12 shows the wheelchair specification.

The maximum weight limit for the wheelchair includes both the user and the weight of any accessories such as trays, cushions headrests or oxygen bottles that may be fitted to the wheelchair. Such items may affect the stability of the wheelchair and it is recommended that a risk assessment be carried out prior to their use.

- Users who intend to propel themselves should be aware of the physical demands involved particularly with regard to their overall weight and any accessories that may be fitted to the wheelchair, their intended route, the type of surface terrain they intend to travel over, slopes and the overall distance to be travelled, including any return journey, the prevailing weather conditions such as temperature both hot and cold, wind effect (wind chill effect) and precipitation (rain/sleet/snow).
- Journeys should be planned so that users do not exert themselves beyond their physical capabilities.
- Users should also be competent in controlling the wheelchair, taking into consideration any physical demands and visual demands such as recognition of different terrains, ability to avoid obstructions, pot holes, manhole covers and gratings, pedestrian and highway traffic, signs /obstructions and dangers e.g. when crossing roads and manoeuvring between parked cars or in heavily pedestrianised areas such as shopping centres and malls.
- Attendants and carers who are pushing occupants in their wheelchairs should be aware of the physical demands of pushing someone who may be significantly heavier than themselves and the effort required to control the wheelchair and occupant on different types of terrains, slopes and inclines.
- This wheelchair has been designed to be used at walking pace.



Should the physical capabilities required to push the wheelchair be beyond the user, carer or attendant, consult with your wheelchair provider. In such cases a powered wheelchair may be more appropriate for your needs.



Self-propelling users, attendants and carers should not use the wheelchair beyond their capabilities. If in doubt consult your wheelchair provider or healthcare professional for further advice and information.



Should there be any changes in your condition or ability (including factors such as body weight) you should seek advice from your wheelchair provider or healthcare professional for further advice and information.

#### 2.2 Intended use

Your wheelchair is intended for use in the home, the office, public places and buildings, on pavements, pedestrian paths and firm surfaces. It is intended to assist with the mobility of the user on the seat and should not be used as a ladder or as a means of pulling or transporting items, or similar.



Do not use the wheelchair on soft surfaces such as sand, deep snow, slush or mud as this may affect the stability.



Care should be exercised when using the wheelchair on wet or slippery surfaces such as wet cobbles or icy pavements, as these may cause the wheels to slip or may cause carers/attendants controlling the wheelchair to slip.



# Using your wheelchair during darkness or poorly lit areas

When using your wheelchair during darkness or in poorly lit areas, then consideration should be given to the use of high visibility markers or reflectors that can be fitted to the wheelchair or the use of high visibility/ reflective clothing such as fluorescent waistcoats, belts or armbands, particularly in poorly lit areas or when crossing the road.

# Maximum safe slope

The maximum safe slope for this wheelchair is 10 degrees. (This represents a slope of approx 1 in 6).

See further notes and guidance in section 5.4 on wheelchair stability.



#### Users, carers and attendants attempting to use the wheelchair beyond the manufacturer's recommendations may put themselves at risk of serious injury or even

death.

# 3. Wheelchair Features

# 3.1 Description of the wheelchair

The Breezy Moonlite self-propelling folding wheelchair is fitted with 59cm (22") diameter wheels and the Breezy Moonlite attendant push (transit) wheelchair is fitted with 31cm (12") diameter wheels.

The standard configuration for the wheelchair is shown in Fig. 2 below which identifies the key components.

- 1. Push handle
- 2. Backrest
- 3. Armrest
- 4. Footrest
- 5. Footplate
- 7. Brake





See section 4.4 for instructions on how to fold and un-fold the wheelchair.

See section 6 on transportation for further details. Instruction is also given for transporting the wheelchair when not occupied.

See section 12 for the specification details on the wheelchair.

#### 3.2 Wheelchair weights

(The larger the wheelchair the more mass it will have).

The following parts of the wheelchair are removable; footrests and quick release wheels if fitted.

The approx. weights of these parts are as follows:

Footrest & footplate	0,7 Kg each
Quick Release wheels (if fitted)	1,2 Kg each
Total chair weight:	11,9 Kg (12") 13,5 Kg (22")
Transportation weight:	10,5 Kg (12")
(with detachables removed)	9,7 Kg (22")

#### 3.3 General warnings

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The removal of detachable parts that are supplied either as standard as prescribed or recommended by the user's prescriber, healthcare professional or wheelchair dealer, other than for the purpose of storing or transporting the wheelchair is not recommen ded and may compromise the correct use of the wheelchair by the user and the provision of any beneficial effects from the complete equipment.

Take precautions when using your wheelchair to avoid fire risks, such as avoiding smoking or parking against open fires or heat source.



Do not store your chair in direct sunlight. Direct heat such as sunlight will increase the temperature of parts on the wheelchair such as the frame or upholstery and they may be hot to touch.



Low temperatures such as frost will have the opposite effect and may make parts of the frame very cold to touch.



DO NOT hang items such as bags or ruck sacks on the back of the push handles, as this can overload the chair and affect the stablity of the wheelchair - causing it to tip over.



DO NOT exceed the occupant weight limit for your chair and do not carry more than one person. If you feel that your body weight may have changed then contact your healthcare specialist.



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Using a cushion raises the seated position and may reduce the stability of your wheelchair.



Some features and accessories may affect stability. Your healthcare professional can provide guidance on the stability of your wheelchair and should be consulted when cushions and accessories are being used.

#### 4. Wheelchair set - up for use

Your wheelchair should be delivered already assembled. You should remove any packaging before use. If you have not used a wheelchair or are uncertain about any of the features of your wheelchair then please contact your healthcare professional, wheelchair dealer or your wheelchair service and ask for assistance. If you have been informed that you must receive specific instructions about your wheelchair before using it, then it is important that you await this instruction for your own safety. This advice also applies to carers or attendants who are not familiar with the use of the wheelchair in order to ensure the safety of the occupant. Before using the wheelchair ensure that the following adjustments/set up have been carried out. It is recommended that any adjustments to your

It is recommended that any adjustments to your wheelchair be carried out by suitably trained or qualified personnel. The information on adjustments below is intended for Healthcare Specialists.

#### 4.1 Footrest removal and attachment

To detach the footrest assembly:

Pull the handle C upwards and swing the footrest outwards and lift out of the frame. (Fig. 3)

To attach the footrest assembly: Locate the footrest in the front frame and swing it round to the centre of the wheelchair until it locks securely into position.



Keep fingers and other items aw

items away from the footrest attachment assembly

attached to prevent injury or to property.

4.2 Footplate adjustment

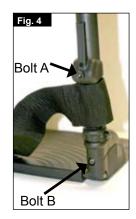
Both the height and the angle of the footplate are adjustable.

Tools required: 5mm Allen

#### Height adjustment

With the user sitting in the wheelchair, lower the footplate and ensure that it is in a comfortable position for their feet. The safest position is usually with thighs horizontal, and hips and knees at right angles.

If the position is not comfortable the footplate can be adjusted as follows:





when it is being damage

- Slacken Bolt A
- Slide the footplate stem up or down to the desired position to position the footplate at the correct height
- Re-tighten Bolt A securely after adjustment. (Fig. 4)

# Angle adjustment

To adjust the angle of the footplate screw Bolt B in or out which will move the footplate to the desired angle. (Fig. 4)

# 4.3 Heel loops

Heel loops may be fitted to the footplates. These should be turned to the rear of the wheelchair when the footplates are in the down position.

# **4.4 Folding and unfolding the wheelchair for use** Unfolding the backrest:

To put the backrest in the upright position, push the handles upwards and forwards until they lock in.

#### Keep fingers and other items away from the folding mechanism when the backrest is being folded to prevent injury or damage to property.

Folding the backrest:

The backrest can be folded to make storage of the wheelchair easier.

# Do not operate under load as may cause lever to break.

To fold the backrest, stand behind the wheelchair, press the two small levers (A) positioned on each side of the backrest (just above the armrests). Fold the backrest down. (Fig. 5)



Fig. 6

# Unfolding the complete wheelchair (Fig. 6)

- 1. Take hold of one or both of the push handles and pull the backrest into the upright
- position. Make sure that it is locked in this position. Ensure both push handles are locked in position.
- 2. Turn the fingers towards the MIDDLE of the seat and push down on the side of the seat with the flat of the hand until the chair is completely open.
- 3. The wheelchair is fully open when the seat is taut and flat.



Never put your fingers round the sides of the seat because they can get trapped between the seat and the frame.

# Folding the wheelchair for storage (Fig. 7)

1. Turn the heel loops, if fitted, to the front of the footplate and then flip up the footplates.

- 2. Grasp the middle of the seat fabric at both front and rear and give a sharp pull upwards. This will partially close the chair.
- 3. Push both sides together to fold the chair completely. Ensure that the seat is not trapped in the frame when fully folded.
- 4. If required, fold the backrest down by pulling up the levers and lowering the push handles.

# 4.5 Brakes

The wheelchair brakes can be applied as follows: **Moonlite (self-propelling)** 

- Push the brake handle forward firmly.
- Ensure the brakes on both sides are applied.

The brakes can be released as follows (Fig. 7a):

 Pull the brake lever fully backwards to ensure that the brake bar is clear of the wheel. Ensure the brakes on both sides are released.



When releasing the brakes ensure the chair is stationary on a flat/level surface. Always apply

the brakes when getting into and out of the wheelchair. Wheel brakes are not designed to slow the weelchair down when it is moving.



Wheel brakes hold the chair in place when it is at a complete stop.



It is recommended that any adjustments to your wheelchair brakes be made by suitably trained or qualified personnel.



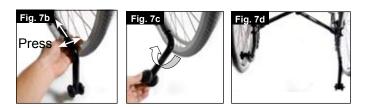
Keep fingers and other items away from the area where the brake contacts the tyre when it is being applied or released to prevent injury or damage to property.

# 4.6 Anti-tip tubes

For fitting please follow the directions. Before using the 22" wheel model please ensure the Anti-tips are fitted correctly and Anti-tip wheel is facing downwards towards the ground. Using it without Anti-tips is not recommended, unless an attendant is in control of the chair.



There are no Anti-tips fitted as standard to the attendant version, therefore make sure that you are physically capable of pushing the user and chair on a slope particularly up hill and that you are prepared if the chair tips backwards. (Fig. 7b - 7d)





#### Moonlite (attendant push)

The wheelchair brakes are applied by the attendant. These allow the attendant to operate the brakes and control the brakes whilst moving e.g. uphill or downhill as well as being used as a parking brake when the wheelchair is stationary.

# To operate these brakes:

Grip the lever handles at the rear of the backrest on the

push handle and squeeze gently to operate the brakes. The handles have a locking mechanism which operates to lock the brake when it is squeezed to keep the brakes applied. (Fig. 8)



operate the hub brakes

#### To release the brakes:

Gently squeeze the handles and flip the lock trigger off. Take care when releasing

the brakes to ensure that the wheelchair is not going to go out of control by holding the push handles securely e.g. when on a slope.



Keep fingers and other items away from the attendant brake ratchet when it is being applied or released to prevent injury or dam age to property.

# 5. Wheelchair operation

#### 5.1 Getting into and out of your wheelchair

Getting into your wheelchair independently (Fig. 9)

- . The wheelchair should be pushed up against a wall or solid piece of furniture;
- The brakes should be on;
- The footplates should be hinged up:
- The user can then lower himself into the chair;
- The footplates should then be pushed down and the feet rested on them in front of the heel loops.

#### Getting out of your wheelchair independently (Fig. 10)

- The brakes should be on;
- · The hinged footplates should be hinged up;
- With one hand on each armrest, the person should bend slightly forward to bring the body weight to the front of the seat, and with both feet firmly on the ground, one foot well back, push up into the upright position.

#### When standing, do not



stand on the footplates or the wheelchair will

tip up. It is easier and safer to get into your wheel chair if you turn the footplates up and out of the way or take them off the wheelchair.

# 5.2 Seat belt



Before using your wheelchair ensure the seat belt is worn.

The seat belt is fitted to the wheelchair as shown in the illustrations. The seat belt comprises 2 halves. They are fitted using the existing seat stay retaining bolt fitted through the eyelet on the belt. The belt is routed under the rear of side panel. (Fig. 11)

Adjust the belt position so buckles are in the centre of the seat. (Fig. 12)

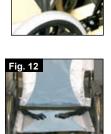


Fig. 1'

Adjust seat belt to suit the user's needs as follows:

To increase the belt length	To reduce the belt lenght	>
R	A	
Feed free belt through slide ad- justers and male buckle to provide more belt length.	Feed free belt back through male buckle and slide adjusters.	Ensure belt is not looped at male buckle.

When fastened check space between belt and user. When correctly adjusted it should be possible to insert the flat of the hand between the belt and user. (Fig. 13)



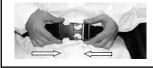


Generally the Lap Belt should be fixed so that the straps sit at an angle of approximately 45°, and when correctly adjusted should not allow user to slip down in the seat. (Fig. 14)



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#### 5.2 Seat Belt continued





**To fasten buckle:** Firmly push male buckle into female buckle. **To release belt:** Press exposed sides of male buckle and push towards centre whilst gently pulling apart.



If in doubt about the use and operation of the seat belt then ask your healthcare profes sional, wheelchair dealer, carer or attendant for assistance.

Do not rely on the seat belt only when the wheelchair and occupant are transported in a vehicle. Use the separate occupant lap and diagonal restraints provided in the vehicle. See section 6 for details on transportation.

#### 5.3 How to use your wheelchair

Whenever using your wheelchair you should carry out the following checks before setting out:

- Ensure that the brakes are secure and are functioning correctly by applying the brake and ensuring that the brake bar makes contact with the tyre.
- Check that the front castors swivel freely and the wheels rotate freely and the tyres are free from damage.
- Check that the rear wheels are free from damage including any damaged, loose or bent spokes on self-propelling wheels.
- Check that the seat and backrest are not damaged by cuts or tears or that there is no sign of excessive sagging.
- Ensure that any removable parts have been refitted to the wheelchair
- Check that any detachable parts such as footrests which when refitted are secured and will not detach when using the wheelchair.

#### **Occupant control**

Occupant control (self-propelled) chairs have hand rims fitted on the outside of the rear wheels.

- By gripping the hand rims and pushing or pulling round the hand rim, the wheelchair can be propelled either forward or backwards.
- By pulling one wheel backwards and one wheel forwards using the hand rims. The wheelchair can be turned around in a tight space.
- Check that there are no obstacles or people on the turning space before starting this procedure.

Many pavements and roads slope towards the kerb and this may cause the wheelchair to veer to one side.

To counteract this it may be necessary to steer the wheelchair in the opposite direction. Avoiding uneven or soft ground and utilising drop kerbs whenever possible may make the journey more comfortable. The tyre grip of the wheelchair is affected by the surface over which the wheelchair is pushed. Therefore, extra care should be taken when weather conditions cause wet or icy surfaces.

- Make sure that the brakes are always on when the chair is not being pushed.
- Make sure that both feet are safely on the footplates and that clothing is safely tucked in and cannot catch in the wheels.
- Use both hands on the push handles to control the chair.
- Look well ahead to avoid hazards (e.g. furniture, doors, etc.)
- Avoid steep and uneven surfaces because the chair may tip over.
- Avoid soft surfaces because the castors may get stuck.
- Try to achieve a smooth steady ride.



# DO NOT turn too quickly.

DO NOT propel the wheelchair at speeds in excess of normal walking pace.



DO NOT hang items such as bags or ruck sacks on the back of the push handles, as this can overload the chair and affect the stability of the wheelchair - causing it to tip over.

# Attendant pushing

Keep in contact with the person in the chair. If you stop to look in shop windows or talk to people, remember to turn the chair so that the person in the chair does not have to turn or lean.



There are no anti-tips fitted as standard to the attendant version of the Moonlite, therefore make sure that you are physically capable of pushing the user and chair on a slope parti cularly up hill and that you are prepared if the chair tips backwards.



Ensure that all parts of the user's body and clothing, including any rugs or blankets, are clear of the moving parts such as the wheels.

## Getting up and down kerbs

This should only be attempted when a carer or attendant are controlling the wheelchair.

Carers/attendants should bear in mind that they will be supporting more of the user's weight when the wheelchair is tipped rearwards and the heavier the user the more weight they will have to support. If there is any doubt that this cannot be supported then seek dropped kerbs or ramps and do not put the user or yourself at risk of injury.

# The wheelchair should never be tipped forwards as the occupant may fall out.

# Getting up a kerb (Fig. 15)

First method:

- The wheelchair footplates (or, if longer, the user's feet) should be taken to the edge of the kerb;
- The attendant should hold the wheelchair push handles firmly and tilt the chair back, use one foot on the tipping lever to assist and carefully tilt the wheelchair backwards
- 10

Fig. 15

Fig. 15a

Fia. 1

- The wheelchair should be brought forward until the back of the wheels touch the kerb;
- The front wheels should be lowered down on the path;
- With the push handles held firmly the attendant should lift and push the wheelchair forward.

Second method (Fig. 15a) :

- The wheelchair should be turned around so that the back wheels are against the kerb;
- The attendant should hold the wheelchair push handles firmly and push down with one foot on the tipping lever, tipping the wheelchair backwards balancing it on the large wheels;
- Using his body weight, he should then pull the wheelchair off the kerb and up onto the pavement.

# Getting down a kerb (Fig. 16)

- The wheelchair castors should be taken to the edge of the kerb.
- The attendant should hold the wheelchair push handles firmly and push down with one foot on the tipping lever, tipping the wheelchair backwards balancing it on the large wheels.
- The large wheels should be taken to the edge of the kerb.
- The wheelchair should be lowered slowly down the kerb on its back wheels before the castors are lowered gently down onto the ground.



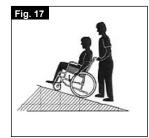
The wheelchair should never be tipped forwards as the occupant may fall out.

# Going down a steep slope (Fig. 17)



The use of the wheelchair on slopes greater than the maximum recommended may put the user at risk. If such slopes are unavoidable then:

- It is safer for the attendant to take the wheelchair down backwards.
- The occupant may be able to help by controlling the wheels or the brakes.



• The user weight will have a significant effect on controlling the wheelchair – the heavier

the user the more difficult it will be to control the wheelchair.

Refer to Section 2.2 for the Maximum safe slope that this wheelchair can be used on.

## 5.4 Wheelchair stability

Certain routines and movements may affect the stability of the wheelchair.

The following factors can affect the wheelchair stability:

# \Lambda User body movement

	REACHING - BENDING FORWARD
X	DO NOT lean your body forward out of the wheelchair further than the length of the armrests as this may affect your stability.
X	DO NOT attempt to pick up objects from the floor or to reach out at switches by bending forward or reaching between your knees as this may affect your stability.
X	DO NOT attempt to reach objects by sliding forward to the edge of the wheelchair seat as this may affect your stability.



Leaning forwards when going up slopes can improve the rearwards stability and leaning the upper body uphill when moving across a slope can improve sideways stability.

	REACHING - BENDING BACKWARDS
X	DO NOT reach back any further than your arm will extend without changing your sitting position as this may affect your stability.
X	DO NOT lean over the top of the backrest as it will shift the centre of gravity, risking tipping over.
X	DO NOT hang heavy loads or objects on the backrest. They may make the wheelchair unstable, especially on an incline.

Assistive devices such as grab sticks can be used to reduce the upper body movement. Contact your healthcare specialist for further details.



## Body weight proportions:

Upper torso weight and height, lower limb amputation, obesity, asymmetrical body positions (leaning to one side) and muscle spasms may affect stability.

## **Operating environment:**

Hills, slopes, ramps, sloping pavements, dropped kerbs also affect stability, especially if contact is made with small obstacles on slopes or hitting obstacles. Sloping surfaces should never be attempted sideways. These can cause the user to slide forwards or fall forwards out of the wheelchair.



#### Accessories or other equipment:

Accessories generally affect the stability of the wheelchair. Seat cushions raise the centre of gravity and reduce the stability of the wheelchair in all directions, backrest cushions will move the centre of gravity forwards, which improves the rearwards stability but reduces forward stability.

If you or your carer/attendant require further advice about stability and its effects then ask your healthcare professional, wheelchair dealer, or wheelchair service for further information.

# 6. Transporting your wheelchair

If the wheelchair is to be transported unoccupied, it may be stored as luggage whilst you are travelling in a vehicle or a plane. The wheelchair may be folded to reduce the space of the wheelchair. Ensure that the wheelchair is properly secured to prevent it moving during transit.

6.1 Lifting a wheelchair into the boot of a car (Fig. 18)

Where possible ask for assistance.

- It is recommended that any detachable parts are removed before lifting the wheelchair
- The folded wheelchair (with footrests detached, and wheels if applicable) should be placed close to and parallel with the car boot.



- The person should grip convenient fixed parts of the wheelchair, one hand well forward and the other well back.
- Keeping their back straight the person should bend hips and knees, straighten their legs and lift up the chair (vertically) and balance it on the edge of the boot.
- With the weight taken by the wheels resting on the edge of the boot, the chair should be tilted towards the person; when nearly horizontal, it can be slid into the boot.

## 6.2 Storage in a plane

- Ensure that any detachable parts are secured with the wheelchair or separately so they do not get lost during loading and un-loading.
- Inform the airline you are travelling with and follow their instructions with respect to transfer and loading of the wheelchair from one location to another.

# When the wheelchair is removed from storage or the luggage area:

- Check that the wheelchair has not been damaged during the transportation for example by other unsecured luggage or objects falling onto the wheelchair or by impact damage.
- Ensure that any detachable parts removed are replaced when the wheelchair is put back into use.



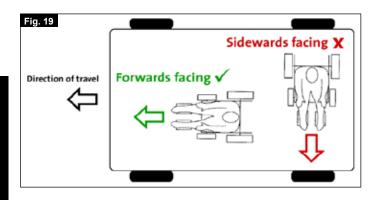
# Always follow the checklist in Section 7.1 before using your wheelchair to make sure that it is functioning correctly.

**6.3 Transportation of your wheelchair within a Vehicle** A wheelchair secured in a vehicle will not provide the equivalent level of safety and security of a vehicle seating system. Sunrise Medical recommends that the user transfers to the vehicle seating and uses the vehicleinstalled restraint system wherever possible. Sunrise Medical recognises that it is not always practical for the user to be transferred and in these circumstances, where the user must be transported whilst in the wheelchair, the following advice must be followed:



The occupied wheelchair must be located in a forward facing position and secured by the wheelchair tie down and occupant restraint straps (WTORS tie downs meeting the requirements of ISO 10542 or SAE J2249) in accordance with the WTORS manufacturer's instructions. Refer to the section 'Tie down Instructions' for further information on transporting your wheelchair.

The wheelchair's use in other positions within a vehicle has not been tested e.g. transportation in a side facing position must not be carried out under any circumstances. (Fig. 19)



ENGLISH

Wherever possible remove and stow safely away from the wheelchair all auxiliary equipment, for example:

Crutches Loose cushions Tray tables

Alterations or substitutions must not be made to the wheelchair securement points or to structural and frame or components without consulting the manufacturer. Failure to do so will invalidate the ability of the wheelchair to be transported within a vehicle.

The wheelchair should be inspected by a Sunrise Medical Authorised Dealer before re-use following involvement in any type of vehicle impact.

Both pelvic and upper torso restraint belts must be used to restrain the occupant to reduce the possibility of head and chest impacts with the vehicle components. (Fig. 20)



A head restraint suitable for transportation (see label of headrest) must be fitted and suitably positioned at all times during transportation.

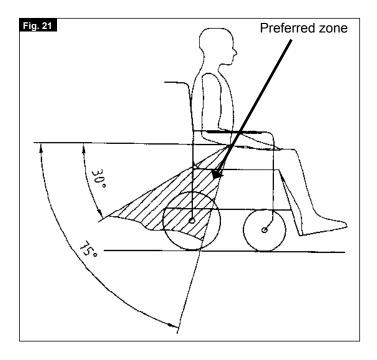
Postural supports (lap straps, lap belts) should not be used or relied on for occupant restraint in a moving vehicle unless they are labelled as meeting the requirements specified in ISO 7176-19:2001 or SAE J2249.

The manual brakes must be firmly applied.

# **Occupant Restraint Instructions**

The pelvic restraint belt must be worn low across the front of the pelvis so that the angle of the pelvic belt is within the preferred zone of 30 to 75 degrees to the horizontal.

A steeper (greater) angle within the preferred zone is desirable i.e. closer to, but never exceeding 75°. (Fig. 21)



ENGLISH

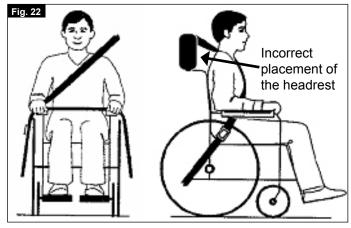
# Restraint belts must not be held away from the body by wheelchair components or parts such as the armrests or wheels.

The upper torso restraint belt must fit over the shoulder and across the chest as illustrated.

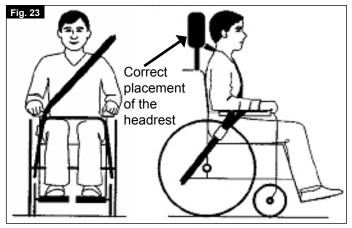
Restraint belts must be adjusted as tightly as possible consistent with user comfort.

Restraint belt webbing must not be twisted when in use. The lap and diagonal restraints should be routed through the gap between the seat and backrest as shown in figure 24.

Restraints should not be held away from the body by wheelchair components such as armrest or wheels



Pelvis restraints should make full contact across the front of the body near the junction of the thigh and pelvis

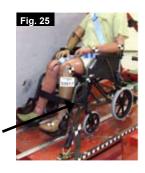




1. Confirm that the vehicle is suitably equipped to transport a passenger in a wheelchair and has access that is suitable for your wheelchair type.

2. Sunrise Medical Ltd. recommends:

The use of a lower leg restraint, placed around the shins and around the front frame just above the castors. (Fig. 25). Lower leg restraint



- a) That the wheelchair be secured by a 4-part (webbing) Tie Down Restraint system, conforming to ISO 10542 or SAE J2249 with non-adjustable front straps and adjustable rear straps, which typically use Karabiner clips/S hooks and tongue and buckle attachments.
- b) Sufficient space should be available around the wheelchair to enable clear access to attach, tighten and release the wheelchair and occupant tie down restraints and safety belts.
- c) The tie down restraints should be fitted to the main frame of the wheelchair as indicated in the diagrams on the following page, and not to any attachments or accessories, e.g. not around the spokes of wheels, brakes or footrests.
- d) The tie down restraints should be attached as close as possible at an angle of 45 degrees and tightened securely in accordance with the manufacturer's instructions.
- e) The safety of the user during transportation depends upon the diligence of the person securing the tie down restraints and they should have received appropriate instructions and/or training in their use.



The attachment points to the chair are the inner front side frame just above

the castor and the rear side frame. The straps are fitted around the side frames at the intersection of the horizontal and vertical frame tubes.

The tie down symbol (Fig.26) on the wheelchair frame indicates the position of the wheelchair restraint straps. The straps are then tensioned after the front straps have been fitted to secure the wheelchair.

# Transportability – positioning of wheelchair tie down restraints on wheelchair (Fig. 28 - 30)7

A self-propelling wheelchair secured with front and rear wheelchair tie down restraints. Positioning of the restraint straps is shown in more detail below.



Position of the front wheelchair tie down restraint and the tie down label. The position is the same for both the self-propelling (Moonlite 8 Series) and the

attendant push wheelchairs

(Moonlite 9 Series).

Position of the rear wheelchair tie down restraint and the tie down label on the self-propelling wheelchair (Moonlite 8 Series).

Position of the rear wheelchair tie down restraint and the tie down label on the attendant push wheelchair (Moonlite 9 Series).







# 7. Wheelchair cleaning and maintenance

Your wheelchair is designed to require the minimum amount of maintenance. Your dealer, or repair/contractor, is equipped with facilities, including maintenance and spare parts manuals, to carry out repairs/maintenance to keep the wheelchair and user mobile in the event of a problem or accident.

## 7.1 Recommended checks

We recommend that users carry out the following checks prior to using the wheelchair.

## Brakes:

• Ensure that the brakes are secure and are functioning correctly by applying the brake and ensuring that the brake bar makes contact with the tyre.

#### Front wheels (castors):

- Check that the front castors swivel freely and the wheels rotate freely and the tyres are free from damage.
- Check the castor mounting for tightness and play.

## Rear wheels:

- Check that the rear wheels are free from damage including any damaged, loose or bent spokes on selfpropelling wheels.
- Check for any flexing or excess movement in the wheels.
- Check the tyre pressures are correct for pneumatic tyres 375Kpa (60psi).

# Upholstery:

- Check the seat and backrest for any damage, tears, cuts, etc and that there is no sign of excessive sagging. Damaged upholstery may need replacing.
- Check the retaining screws for damage and tightness.

# Folding Pivot Points, Footplate Pivot:

• Occasional (every 12 months) lubrication of pivot points (using three-in-one oil or similar light oil) will ensure ease of operation.

#### Handgrips:

• Check that the handgrips on the push handles are secure and not damaged.

#### Accessories:

• Check that any detachable parts, such as footrests, which when refitted are secured and will not detach when using the wheelchair.

# Lapstrap:

- Check the lap belt and securing components for any sign of frays or damage and replace if necessary.
- Ensure that the buckle works correctly.

We recommend that, at least once a year, your dealer or repair contractor carry out a thorough inspection and service of your wheelchair.

#### 7.2 Cleaning the wheelchair

- If dirty or dusty, the upholstery should be wiped with a damp cloth. Marks may be removed with tepid soapy water.
- Make sure that your wheelchair is dry before use.
- If dirty, the paintwork may be cleaned with a damp cloth and the paintwork protected by applying a household polish or proprietary car wax in accordance with the manufacturer's instructions.



It is important that should the wheelchair be used by more than one person it is cleaned thoroughly to ensure that there is no cross infection.

## 7.3 Service and maintenance

Sunrise Medical has issued guidelines on the planned preventative service levels for manual wheelchairs. These guidelines are based on the type of usage that the wheelchair receives in the service period.

The table below shows the service frequencies, which are recommended but can be revised accordingly following assessment of the user at time of issue (including any risk assessments), use of existing service maintenance/service history records, changes in user circumstances e.g. transportation. If required, Sunrise Medical is available to offer further guidance.

User Category	Definition	Service Frequency
Attend- ant Push	Transit wheelchair – indoor use mainly, occasional shop- ping mall trips.	First Service 12months Subsequent Service 5 years
Self pro- pelled	Spoked self propelling wheels, Indoor and outdoor use.	First Service 12months Subsequent Service 2 Years
Trans- ported and Special Seating	Wheelchair and occupant are transported regularly to school/day centre & subject to clamping effects or where additional forces or clinical fatigue conditions may cause fatigue. Such as spasms, stress relieving.	6 Months

Users should ensure the recommended checks are carried out before wheelchair usage, see Section 7.1.



Only use fasteners and spares that have been recommended by Sunrise Medical. Using non approved fasteners or spares may void your warranty.



If you think there is something wrong with your wheelchair then contact your Healthcare Professional or your wheelchair dealer or repair contractor and ask them to check the wheelchair.

# 8. Features and accessories

The following equipment is available and may be fitted to your wheelchair.

# 8.1 Quick release self - propelling wheels (Fig. 31 + 32)

Your wheelchair may be fitted with quick release wheels. Quick release wheels can be removed from the wheelchair to make it lighter for lifting a



make it lighter for lifting and easier to store.

To remove wheel: Press the button (1) in the centre of the wheel and slide the axle and wheel out of the axle bush fully.

To replace wheels: Reverse the above procedure and depress the centre button of the axle and push the exposed



axle into the wheel bush. When the axle/wheels are fully inserted, release the centre button.



Make sure that the button is fully released and that the wheel is secure in the axle bush by pulling the wheel gently away from the wheelchair. The wheel should remain in the same place.



Always ensure that the quick release wheels are fully engaged with the locking ball bearings on the axle shaft fully engaged and visible on the inner side of the axle bush.



Never mount the quick release rear axles with the release button positioned inside the frame. This will cause the wheels to release when the chair is folded.



Do not alter the position of the wheels in the wheel mounting blocks without the approval of the person prescribing the wheelchair.

# 9. Disposal / recycling of materials

#### If the wheelchair has been supplied to you free of charge it may not belong to you. If it is no longer required follow any instructions given by the organisation issuing the wheel chair in order that it may be returned to them.

The following information describes the materials used in the wheelchair in relation to their disposal or re-cycling of the wheelchair and its packaging.

Specific waste disposal or recycling regulations may be in force locally and these should be taken into

consideration when disposal arrangements are made.

(This may include the cleaning or de-contamination of the wheelchair before disposal.)

Aluminium: Castor forks, wheels, side frames, armrests frame, leg rests, push handles

Steel: Fasteners, QR axle

**Plastic:** Handgrips, tube plugs, castor wheels, footplates, armpads and 12" wheel/tyre

**Packaging:** Low density polythene bag, cardboard box **Upholstery:** Woven polyester with PVC coatings and expanded combustion modified foam.

Disposal or recycling should be done through a licensed agent or authorised place of disposal. Alternatively your wheelchair may be returned to your dealer for disposal.

# 10. Warranty

Please keep a note of your local service agent's address and telephone number in the space below.

In the event of a breakdown, contact them and try to give all relevant details so they can help you quickly. The products 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.

# THIS IN NO WAY AFFECTS YOUR STATUTORY RIGHTS.

## Warranty conditions

 The repair or replacement will be carried out by an authorised Sunrise Medical dealer/service agent.
To apply the warranty conditions, should your product 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 product 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 wheelchair require repair or replacement, as a result of a specific manufacturing or material defect, within 24 months from the date on which the possession of the product 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 wheelchair.

5) Parts replaced after the original warranty has expired are covered for a further 24 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, and similar parts, on powered products this will also include batteries, motor brushes etc .

7) The above warranty conditions apply to all product parts, for models purchased at full retail price.

8) Under normal circumstances, no responsibility will be accepted where the product has required repair or replacement as a direct result of:

a) The product or part not having been maintained or serviced in accordance with the manufacturer's recommendations, as stated in the Owners Manual and or Service Manual. Or failing to use only the specified original equipment parts.

b) The product or part having been damaged by neglect, accident or improper use.

c) The product or part having been altered from the manufacturer's specifications, or repairs having been attempted prior to the service agent being notified.

# Your statutory rights are not affected!

# 11. Wheelchair dimensions

#### The overall dimensions are shown below:

Seat widths	16 "	18"
Self propelled	620 mm 24.4"	670 mm 26.4"
Attendant push	605 mm 22.4"	655 mm 24.4"

# 12. Wheelchair specification

The wheelchair size should suit your needs in terms of the seat width and seat depth. If in doubt consult your healthcare professional or the wheelchair prescriber or the wheelchair dealer.

#### **Breezy Moonlite Specification:**

Armrest	Fixed arm
Upholstery	Grey / Black
Brakes	Wheel lock type
Castor	200 mm Diameter solid
Wheels	31 cm (12.5") solid tyre or QR 56 cm (22") solid
Push handles	Fixed 85 cm (33") ground to handle
Footrest	Swing away removeable
Backrest height	43 cm (17")

Standard reference		min.	max.	Standard reference		min.	max.
	Overall length with legrest	770 mm (12")	1060 mm (22")		Seat plane angle	5,2° (12")	7,5° (22")
	Overall width	605 mm	670 mm		Effective seat depth	420 mm	430 mm
	Folded length	770 mm	1060 mm		Effective seat width	410 mm	460 mm
	Folded width	340 mm	340 mm		Seat surface height at front edge	480 mm	480 mm
	Folded height	650 mm	650 mm		Backrest angle	73°	73°
	Total mass	11,8 (12")	13,5 (22")		Backrest height	420 mm	430 mm
	Mass of the heaviest part	1,7 kg (22" wheel)	1,7 kg (22" wheel)		Footrest to seat distance	365 mm	490 mm
	Static stability downhill	10°	10°		Leg to seat surface angle	118°	118°
	Static stability uphill	10°	10°		Armrest to seat distance	180 mm	180 mm
	Static stability sideways	10°	10°		Front location of armrest structure	340 mm	340 mm
	Energy consumption	N/A	N/A		Hand rim diameter	490 mm	490 mm
	Dynamic stability uphill	N/A	N/A		Horizontal location of axle	- 35 mm (22")	+ 35 mm (12")
	Obstacle climbing	N/A	N/A		Minimum tunring radius	780 mm (22")	840 mm (12")
	Maximum speed forward	N/A	N/A				
	Minimum braking distance from max. speed	N/A	N/A				

The wheelchair conforms to the following standards:

a) Requirements and test methods for static, impact and fatigue strengths (ISO 7176-8)	Yes •
b) Climatic test in accordance with ISO 7176-9	Yes •
c) Requirements for resistance to ignition in accordance with ISO 7176-16.	Yes •

Manufacturer Address: Sunrise Medical High Street, Wollaston, West Midlands DY8 4PS

## HEALTHCARE AUTHORITY DETAILS

## **REPAIR CONTRACTOR / DEALER**

Due to our policy of continuous improvement in the design of our wheelchairs, product specifications may vary slightly from the examples illustrated.

All weight/dimensions and performance data are approximate and provided solely for guidance.

Sunrise Medical complies with the EU Medical Devices Directive 93/42/EEC



All wheelchairs must be used in accordance with the manufacturer's guidelines.

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