

Greencare[®]

MEASURED MOBILITY



USER GUIDE

GREENCARE DB1 – USER INFORMATION

Models covered	DB1J 13
	DB1S 13, 15, 16, 17, 18.
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This information is intended for wheelchair users, occupants or carers. It is also a useful reference for service professionals who are prescribing or handing over a wheelchair to a user. Guides are issued with serial numbers when supplied with a chair, and also for information with an accessory.

The Greencare DB1 Wheelchair is intended to provide mobility for people who are unable to walk. This guide is for all users. The information provided is intended to help users understand the wheelchair, and get the best performance out of it in safety. Different users may have specific requirements relating to them individually and their environment, both indoors and outdoors.

Greencare wheelchairs are built specifically to meet the needs of individuals who have been assessed by clinical professionals. Wheelchair service staff responsible for handing over a wheelchair to a user should explain its operation and compatibility with other equipment as necessary. Occupant transfers in and out of the wheelchair, and accessibility within the intended environment should be trialed, and the wheelchair adjusted accordingly.

Greencare component system modularity allows a chair to be fine tuned at handover, or subsequently after a trial period by a trained wheelchair technician. Greencare staff are available to assist with assessments and handovers. Users should take time to read and understand the wheelchair information before use. Users should understand how the wheelchair is intended to function for them and their responsibilities for its safe use and maintenance. A wheelchair used and maintained correctly should last 5 years or more.

A service checklist is included in this guide for user reference. Recommended frequency of service checks by a wheelchair technician depends upon an assessment of usage and environmental factors. For heavy frequent use a check every 6 months is recommended. For occasional use, a check every 36 months is adequate. Where appropriate the recommended service interval will be advised. If in doubt users should contact their local wheelchair service.

Our website www.greencaremobility.co.uk has downloadable copies of User, Assessment and Technical Service guides.



Introduction



Thank you for choosing a Greencare DB1 Wheelchair.

An advanced stylish modular wheelchair, with build options for occupant and attendant control. When received, it will have been built to order with fittings to meet an assessment of your need.

Please take the time to read all the information provided, and take care that all information is kept safe for future reference

The wheelchair description code and batch date are on a label on the rear cross brace. This can be read from the back of the chair. Each wheelchair has its own specific identification code serial number.

The serial number is a unique identification reference and is important in the provision of spares, and for advice regarding your specific wheelchair

Serial number of this chair is as indicated.

Other important information can be found on labels secured to the wheelchair, or provided with accessory items, such as a cushion, are additional guidance..

Labels should not be removed. Users are responsible for ensuring that this product is maintained and used safely and correctly.

Users requiring more specific advice about the DB1 wheelchair, or who need more information about other products from Greencare, can contact the Greencare website www.greencaremobility.co.uk

For technical service or repair users should contact their Approved Distributor or Wheelchair Service Centre.

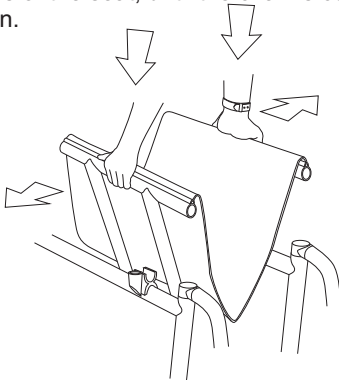
Please dispose of packaging responsibly.

PREPARING THE WHEELCHAIR FOR USE

Opening the wheelchair

Grip the armrests and push them apart as far as possible. This may be easier by tilting the wheelchair sideways slightly, so that the wheels on one side are clear of the ground.

Put hands on the seat canvas with fingers pointing into the middle of seat. Push down and out, with the flat of the hand on the two sides of the seat, until the chair is completely open.

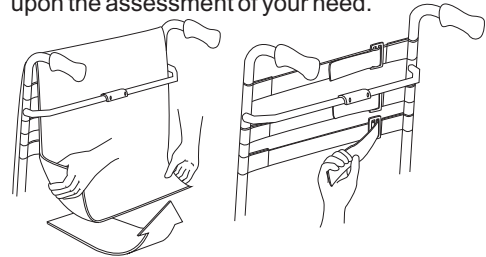


The Greencare frame is positively located in the open position. Press down on the seat rails and you will feel the frame going into the final open position. This positive open lock makes the frame rigid, the seat position comfortable, and also enables more effective maneuverability and control.

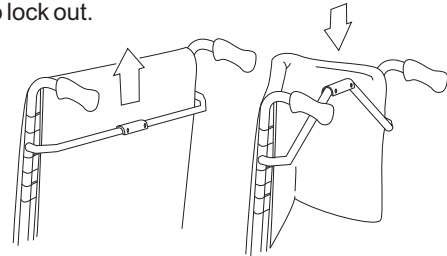
The Greencare DB1 backrest is available optionally as a non folding, or folding frame tube. If a non folding version has been fitted, the lifting weight of the frame is slightly less, but the chair will not fold down to the most compact size. Subsequent changes in method of use may mean a change of backrest specification to the other option. Modularity of build will allow this.

When fitted with a folding backrest, the upper push handle section will be folded down at the back of the wheelchair frame. To raise the backrest, lift the push handles. Backrest latches on each side will click into position when the push handle is fully up, provided that the back brace tension is released. When the backrest catches locate, push down on the back brace to tension chair back.

DB1 has the option of an integral lightweight easy folding cushion support backrest or tension adjustable cushion support backrest upholstery. The type provided will be based upon the assessment of your need.



For occupant comfort and support the backrest has an additional folding comfort brace. This unit operates on the over centre lock principle. It will need to be pressed down in the centre, to lock out, before the occupant sits in the wheelchair. Carers should take care when closing this brace, keeping fingers away from the closing surfaces, because it locates quickly to lock out.



The tension adjustable backrest has a support back cushion supplied separately. When the chair is packed in its carton. This cushion should be attached to the inner tension strap support frame by Velcro.

The tension back support requires to be set up to conform to the required shape. This should be set up for you at handover, when the chair frame has been opened.

Finally push the lower back flap upwards and under the seat so that the Velcro engages to close and secure the seat fabric assembly

If a separate seat cushion is provided, as part of the final specification it should now be placed in position on the seat (see page 16)

PREPARING THE WHEELCHAIR FOR USE

Closing the wheelchair

For transit and storage, foot plates should be swivelled upright, or detached. The footplate has an inbuilt friction grip which retains the upright position when folded.

Release the Velcro flap securing the back support to the underside of the seat. For some users this operation may require more effort than expected because velcro is such a strong connection. Where ease of operation is a priority, the velcro flap may be left to hang down without attaching.

The back support upholstery options as shown on the previous page, affect wheelchair folding. The thin lightweight integrated back cushion support, can be conveniently folded.

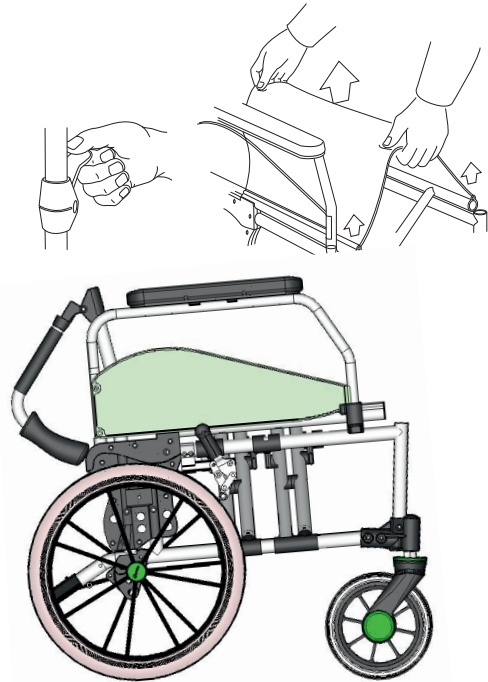
The thicker more supportive back cushion is attached by Velcro to inner tension adjustable support frame straps. This thicker cushion increases the folded width, and if the storing space available is limited, it is recommended that this thicker cushion is removed for folding to the minimum size.

The comfort locking brace assembly keeps the backrest tubes in line when the tension straps are set. This reduces backrest deflection, under tension pressure and occupant load. This brace has a central folding feature, which should be lifted to release when folding.

Backrests may be built with specially re enforced components for very heavy occupants or those who create excessive pressure.

On folding backrest models, press down the latch lever at the back of the hinge. This releases the backrest locking pin.

To fold the frame, grasp the middle of the seat canvas at the front and back, and give a sharp pull upwards. The frame will release from its location, and the two sides will start to come together.



Press the armrests inwards until the chair is fully closed.

A Velcro secured closing strap is provided at the top of the pushing handle to keep the wheelchair in the folded closed position.

This is particularly useful when the tension adjustable assembly with the thicker back cushion is left in place when the wheelchair is folded. This strap should be wrapped around the opposing push handles to keep the chair frame from accidentally re opening.

On occupant-propelled wheelchairs, the QD (quickly detachable) wheels can be removed to further reduce the individual component size, or reduce the weight for lifting.

Make sure that the folded wheelchair and detached components are stored securely and available for next use.

PREPARING THE WHEELCHAIR FOR USE

Setting up Backrests

Backrests are built according to occupant measurements and assessed requirements. They may include specially reinforced components for heavy occupants or those who create excessive pressure.

Backrests may be foldable, with a hinged push-handle which automatically locks into place when the back is lifted to the occupant supporting position. A folding back will allow storage in a car boot or small space.

When a chair is specified as needing specific storage requirements, this should be checked at the handover to ensure equipment compatibility. Rigid backrests are suitable when the wheelchair is not stored in a small space.

If the wheelchair is to be used in transport, accessibility to this should be checked at assessment and handover to ensure equipment compatibility. Backrests can be supplied to meet occupant requirements with a range of different support angles. When an adjustable reclining backrest is fitted, it allows the carer to set the backrest to a required occupant support position.

On reclining back chairs the backrest angle is cable controlled by operating levers on the push handles. The support height of reclining backrests will normally have an extension to the level of the occupants head, according to assessed need.

Backrest extensions are integrated into the backrest build and located on special upper frame tubes. They are supplied with adjustable tension straps and separate cushioning of similar construction to the main back support upholstery.

When the occupant is reclined, weight distribution reduces the rearward stability of the wheelchair. As a build standard, rear wheels will be set in the most stable position, usually with anti-tip stabilisers. With the backrest reclined, manoeuvrability is more difficult for the carer.

A situation in which frequent removal of the head support extension is required is in vehicle transportation. In this application an extended head support may be inconvenient for other aspects of normal use, because it restricts visibility and communication for general use. In such cases the backrest extension will be removable, with a separate option of individual push handles, which can be located at the required pushing height by adjustable fixings. The separate backrest components should be safely stored when not in use.

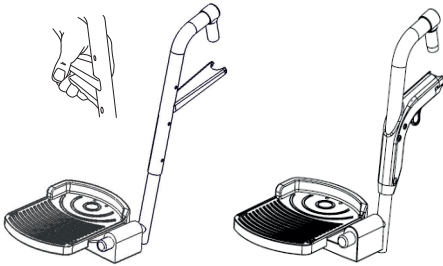


These illustrations show chairs with and without a backrest extension.



PREPARING THE WHEELCHAIR FOR USE

Setting up the Footrests



The chair that you have been supplied with will have a footrest specification configured to meet your assessed needs. Environment of use and functional operation determine the final specification required.

In addition to the configurable foot support plates, shown opposite, Greencare DB1 has a choice of detachable footrest brackets, and footrest support options including an angle adjustable type a rigid foot bar and a dynamic foot support for use in tight spaces

The lift and swing type bracket features a double locking action for increased security. The frame location stud for this is also smaller when footrests are removed for transfer. The swing type bracket swivels into position and releases with a single touch, these are easier for the occupant.

To attach the footrest brackets, locate the upper pivot spigot in the top of the front frame tube, press down or swivel to locate it in the forward facing position. To release depress the trigger on the underside of the mounting support feature. Footrest brackets should be swivelled away or removed for occupant transfer. It is possible to pivot the footrest bracket inwards or outwards depending on the user requirement. Footrest brackets should normally be removed for storage.

For complete footrest bracket removal, continue to lift so that the upper pivot clears the front tube location. When removed, place the footrests carefully in a safe position ready for the next use.

Lateral position, height and the angle of footrest support plates on the Greencare DB1 wheelchair are adjustable. This is set by means of three fixing screws on the underside of each unit. Each DB1 footrest has a choice of three alignment positions. This will normally be set to meet user need, with the central gap between footrests minimized, when the wheelchair is handed over. It is possible to adjust footrest height and position, if .

A jacking screw at the end of the footrest bracket stem adjusts the sideways angle of the footplate. When unloaded this will be slightly upward facing. It is normal for this to deflect under foot pressure, and it can be adjusted to be horizontal by this screw

The foot support plate height is adjustable by a range of fixing screw positions, and a series of threaded holes in the inner stem. Using this combination of holes, the footrest can be aligned and tightened in its location.

Footrest height settings are important. A correctly set footrest height will help to spread the load of the occupant weight, easing pressure, and improving the comfort.

The most comfortable seating position is usually obtained when the occupant thighs are horizontal and the hips and knees are at right angles. Footrest adjustments should be explained and completed at the handover.

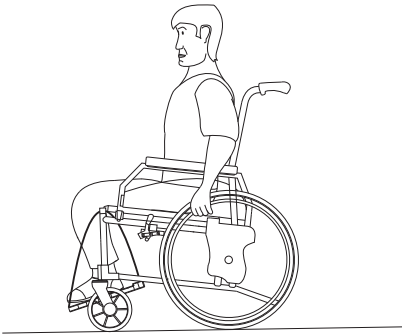
Footbar

As an alternative to separate type foot plates it is possible to fit a foot bar. This is a telescopic frame that fits into the footrest brackets and locates as previously described for the footrest. When fitted, the front of the chair becomes compact and is more manoeuvrable.

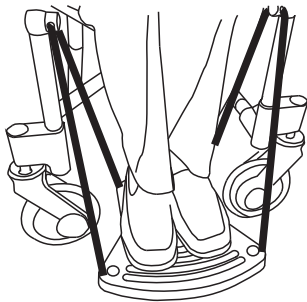
Dynamic Footboard

This is an option for indoor use in a compact environment like a kitchen. It is an option that can be fitted or removed as and when required. The dynamic footboard is suspended by cables set to measurements from the assessment. It allows the occupants to be able to get closer to objects like sinks, tables and etc.

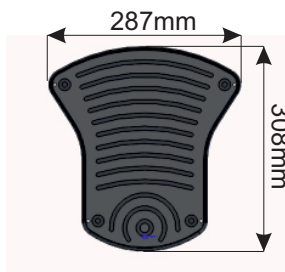
PREPARING THE WHEELCHAIR FOR USE



It also helps with moverability in confined spaces, which with the standard footrest would not be possible.



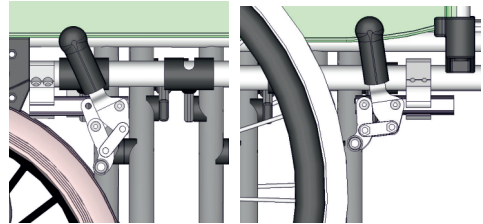
The dynamic footboard comes in one size but is able to fit most foot sizes comfortably. The height is set to length by the suspension cables and will be made to suit the user of the wheelchair. The footrest angle can also be adjusted by fixing the cable length shorter or longer, front to rear, and this can be held with a grub screw.



Setting up Brakes

The Greencare brake unit is a toggle action, requiring operation of a handle on either side. Brakes should exert sufficient pressure on tyres to hold the chair on an 8-degree slope. This test is not a usage recommendation. (Read section on outdoor safety.)

Brake shoe action of pressing onto the surface of a pneumatic tyre, requires the tyre to be fully inflated to the correct operating pressure of 3 bar. Puncture free tyres have a constant pressure.



When correctly set, brakes should be easily operated by occupant or carer, as required. A build option with an extended brake handle is available to reduce the operating effort.

This extended handle unit can be set up rigidly or to allow folding down if handle height reduction is required for side transfer.

When the extended handle is set for folding down, care should be taken to ensure that it is returned to the upright position for operation.



Handle options can be fitted retrospectively if user needs change.

PREPARING THE WHEELCHAIR FOR USE

The range of wheel positions on the Greencare frame system require brake settings to suit wheelchair configuration.

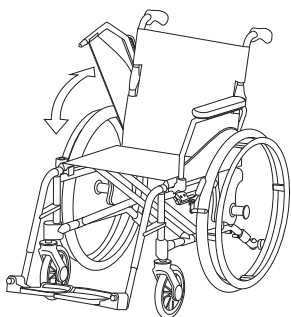
Brakes are clamped in position on the frame. Position of the clamp can be changed using a hexagonal Allen key. The brake clamps incorporate safety grips to maintain the set position during use. Users should frequently check that the brake is positioned effectively. Brake adjustment may be carried out by a competent person/carer if technical service support is not available.

Lubrication of the brake mechanism, with a none toxic lubricant will maintain effective operation over a long period of use. Lubricant on the operating face of the brake contact shoe should be avoided.

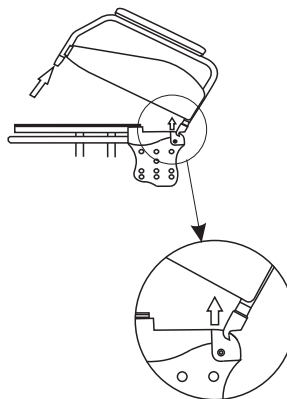
Cable operated brakes with levers on the pushing handle are an additional option to allow attendant to slow down the chair without having to reach for the brake handle. Holding back the speed when going downhill is an increasing benefit as the occupant weight increases. It is a recommendation on 150Kg and 175Kg occupant chairs.

Setting up Armrests and Supports

Armrests are latched at the front of the frame, in socket locations, and pivoted at the rear of the backrest location. They can be released at the front and pivoted upwards and back for transfer in and out of the chair. They are not be removable from the chair unless specially adapted for this purpose.



If needed for a special purpose, the armrest can be made detachable, which can help with the compactness of the wheelchair and also in side transfer (see page 11)



The armrest is removed by releasing the latch and pivoting on the rear of the arm rest. When it reaches a 30 degree angle the armrest will release vertically and can be removed.

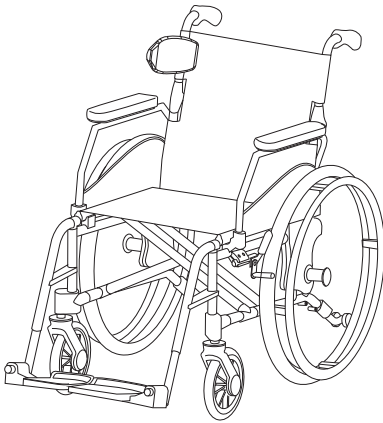
When not in use for transfer, armrests should be fully located in the front socket at all times. An armrest that is not fully located is prone to accidental damage.

The front socket has a quarter turn feature that releases the armrest. The armrest can be swivelled back into the front socket, where it will latch into position automatically.

The armrest should be secured in position at all times. It is not recommended that the armrests are grasped by the attendants to lift the chair and occupant. Heavy lifting operations should be avoided.

Thoracic supports are also available, these positioning accessories are most often used to improve occupant side stability and balance. They can also act as tactile reminders, to allow the occupant maintain optimised posture.

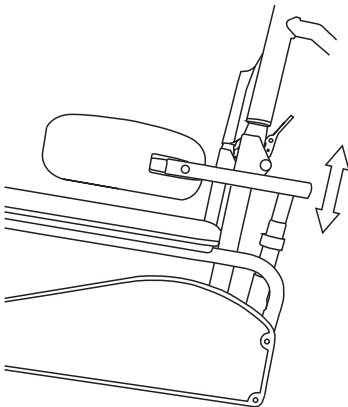
PREPARING THE WHEELCHAIR FOR USE



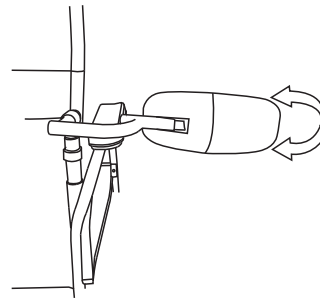
The adjustable thoracic support pads can offer a wide range of vertical, lateral, depth, and angle adjustments, while providing excellent anterior as well as lateral support. They are also contoured for a natural fit.

It is usual to fit thoracic supports with a none folding back. When a folding back is fitted the height adjustability of the thoracic pad position is restricted.

The thoracic support should not interfere with the occupants comfort. The support pad can be raised and swung away during transfers.



The thoracic supports can be used singly or as a pair depending on the users needs.



The adjustment of support pads positions may be done at the time of handover.

Greencare support pads are manufactured in a wipe clean durable material. They should be kept clean using a mild detergent

Greencare side panels may be produced in a semi transparent grade of structural plastic, which has some flexibility or rigid aluminium as determined by the assessment. They should be kept clean using a soft damp cloth, and mild detergent. They should not be rubbed with an abrasive pad.

The Greencare wheelchair has the possibility to fit an arm pad safety option, Armalight. This unit has an integral chargeable lighting system.

Tray Supports



PREPARING THE WHEELCHAIR FOR USE

A Greencare tray maybe supplied as part of a complete wheelchair or retrospectively should the user require it. Unlike standard tables, a Greencare tray is produced to function as a support in addition to a daily life convenience

Greencare trays come in two styles, the single arm supporting tray and the full width supporting tray. They are manufactured using cushioned support material.

The trays have been specifically designed for wheelchair use. They are fully removable and adjustable to fit different seat widths and depths, and to accommodate a range of occupants sizes and positions.



When used as a support, the full table tray is fixed and pushed up against the user, to help maintain posture.

Setting up Wheels

The chair that has been supplied should have the correct wheel configuration assessed for user needs. The Greencare DB1 frame has a number of wheel specification and position options.

The wheel on the chair received should be mounted to meet an assessment of the occupant weight distribution and meet a manoeuvrability and stability requirement.

It may however be found that after a few weeks use, another preference is established. Adjustment of wheel position is achieved through use of simple tools, but the implications of such a change require a systematic review and assessment. Users should not attempt wheel position changes,

When you first receive a chair, spin the wheels with the brakes off to check for free rotation. Greencare chairs can be fitted with a range of wheels. These cover different occupant weight ratings, and environments.

Fitting specifications available for occupant-controlled wheelchairs include both fixed, and quick release (QD) axle fittings, in 510mm dia (20 inch) 560mm dia (22inch) a 610mm dia (24inch)

Wheels fitted to occupant propelled chairs rated for tall or very heavy occupants include a 660mm dia (26inch) size.



Wheels fitted to attendant only chairs can be 315mm or importantly 405mm diameter. The 405mm wheel provides good performance and reduced effort in pushing for the carer.

Attendant propelled 405mm wheels are available with either fixed axle or quick release axles. The quick release axle allows the lifting weight to be reduced by removal the wheels for storage, e.g. in a car boot.

Other wheel specifications to meet environmental or user preferences are available on custom built chairs.

PREPARING THE WHEELCHAIR FOR USE

Quick Detachable (QD) wheels can be removed and fitted to the frame receiver by depressing the button in the end of the spindle, whilst pulling the wheel away from the wheelchair . This operation is easy with a little practice. When replacing these wheels always make sure that the spindle is fully engaged in the frame receiver. Do not attempt to remove or replace the wheel when the brake unit is in the on position.

Tyres on occupant-controlled wheelchairs may be pneumatic or flat free polyurethane. Tyres pick up dirt when used outdoors. After an outside trip, they should be wiped down with a damp cloth, before the chair is taken back into the house, also checking tyres to remove pebbles or thorns from the treads. A possible option through availability of QD wheels is a pair of wheels for indoor use with smooth tread tyres and a pair for outdoor use with outdoor tread tyres.

Users should check wheels regularly. Paying attention to security of spokes, and fit and condition of tyres.

General advice and routine maintenance

The purpose of a wheelchair is to provide mobility for people who cannot, or find it difficult to walk. For safety, wheelchairs should not be used for any other purpose.

Greencare DB1 wheelchairs can be set up or finely adjusted to suit user and carer needs. Build options cover active occupant use through to attendant controlled use. Users should contact their approved distributor or local service centre if they are having problems . An adjustment or alternative build configuration may help to improve operation or accessibility.

Users are responsible for keeping the wheelchair clean, day to day care, and using their wheelchair according to information provided in this guide.

Professional guidance and skills training should also be provided through the wheelchair-issuing centre. Users are recommended to ensure that they are confident in wheelchair use, within their environment. Users and carers, who are unfamiliar with wheelchair use, should pay particular attention to safety advice when transferring in and out of the wheelchair.

Users should understand what regular maintenance routines are required of them to keep the wheelchair in a serviceable condition. These are mainly based upon cleaning, general function checks and care of the wheelchair, and do not require the use of workshop tools. The User Guide includes a checklist of routine maintenance checks, which may be carried out by the occupant or carer or both as is practical. We recommend that, occupants and carers take an active interest in the wheelchair condition and its satisfactory operation.

If the wheelchair is to be used for transportation with the seated occupant, the specified wheelchair and occupant restraint system and fixing points should be used. Users, carers and vehicle operators should understand the use of the recommended Greencare DB1 wheelchair four-point tie down and occupant restraint method, as advised in this guide.

Preventive maintenance and consumable worn part replacement, through regular checks by the service centre qualified staff, are recommended for wheelchairs where the occupant has an active lifestyle, or is dependent on the wheelchair as the only means of mobility. Users should ensure that wheelchairs made available to service personnel are thoroughly cleaned

Our website www.greencaremobility.co.uk has reference information for users, therapists rehabilitation engineers and technicians, responsible for provision and ongoing service support of wheelchairs.

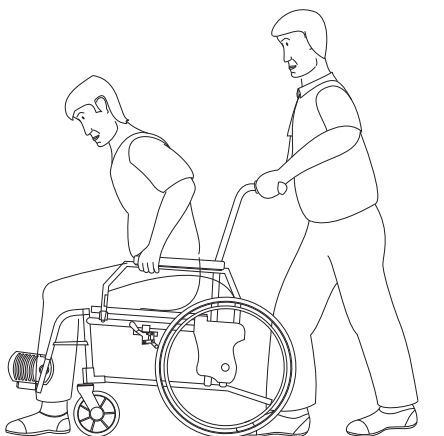
USING THE WHEELCHAIR SAFELY

Getting in and out.

For maximum safety, these operations should be carried out with the help, or co-operation of an attendant, even if this is only to hold the push handles and keep the wheelchair in position whilst the occupant is carrying out the transfer operations.

It will be usual for the occupant to transfer in and out of the wheelchair into another chair or supporting surface. The wheelchair should be positioned so that the distance from one support to the other is minimal, and can be achieved in a single assisted movement.

The occupant should always try to assist the attendant wherever possible to share the total effort. Wheelchair occupants may be heavier than they look, and handling operations are often carried out several times in a day, so getting organised is important in the long term. Carers should not attempt to lift a wheelchair occupant without help. If this is not possible a hoist may be required for these operations.



Getting in occupant standing forwards.

Making sure that the brakes are on, flip up the foot support plates to open up the standing space at the front of the chair. Footrests may be detached or swivelled away inwards or outwards for easier access.

The occupant may be able to help by pushing on the armrests to provide some body support whilst being lowered into the seat. Greencare have an available option of the forward support armrest which provides additional grip area for this operation. This is particularly recommended for very heavy occupants.

When the occupant is seated in the chair, the footrest plates may be pushed back down to locate the feet at the required position. At this point it may be necessary to set the footrest height and position.

Getting out occupant standing forwards.

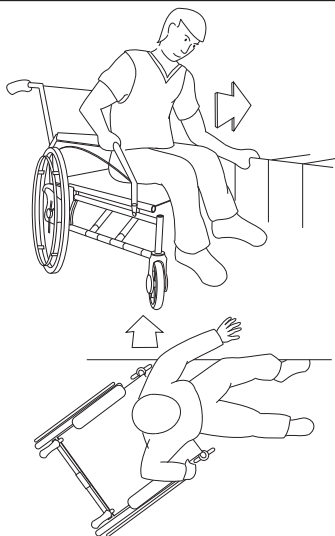
Making sure that the brakes are on, flip up the foot support plates to open up the standing space in front of the chair. Footrests may be detached or swivelled away inwards or outwards for easier access.

The occupant should place a hand on each armrest, bend slightly forward and place both feet well back and firmly on the ground, then push upwards to a standing position to assist the carer.

Occupant side transfer

The occupant normally controls this operation, with the carer available for assistance as required. Side transfer should not be attempted on slopes, or on slippery surfaces. If there is a gap between the two seat surfaces, it may help to slide along a smooth transfer board.

USING THE WHEELCHAIR SAFELY



When the wheelchair armrest is swivelled back or detached, it will allow sideways entry to the chair and vice versa, from another chair or car seat. Some physically active Independent users with upper body and arm strength may develop skill to carry out this manoeuvre without help.

We advise for safety reasons that an attendant should be available, to keep the next intended seating surface in the required location, near to the wheelchair, or to provide assistance if this becomes necessary during transfer. This is important for amputees who side transfer.

Making sure the brakes are on, the occupant should use arm strength to shift position. The effort and movement for side transfer needs good co ordination and balance. When transferring in and out of the car an additional lever point such as a handle above the car access door is useful. Side transfer is an instant operation when done by the skilled occupant. Transfer is easier when footrest assemblies are swung back out of the way, or removed so as not to interfere with the legs. Where possible feet should be firmly on the ground. The safest way to side transfer is to bend slightly forward when shifting the balance position

Side transfer requires the occupant to have the ability to use arm strength and leverage techniques to lift and move sideways, or at an angle in to the chair, avoiding the rear wheel that will be above the seat surface level.

On active propelled chairs, the wheel will be set at a position suitable for arm reach and control. This will normally mean that it will extend above the seat level.

Outdoor visibility

When out at night, or in poor visibility conditions, users should ensure that they and the wheelchair are visible to other road users and pedestrians, considering both clothing, and light reflective trim features.

Armalight pads can be fitted to Greencare wheelchairs. These have an integrated rechargeable safety lighting system, complete with battery charger. This provides a light indication of position and direction of the wheelchair in adverse visibility to road users and pedestrians up to 100metres.

GETTING AROUND SAFELY WITH HEAVY OCCUPANTS

Handling of Heavy occupants

Using a manual wheelchair with a very heavy occupant demands a lot. Accessibility to and from the wheelchair, and pushing or turning a total heavy weight requires a lot of effort. Comparative strength of the carer to push and control occupant weight may be a deciding factor for safe use.

A small lightweight carer may not be able to safely control a wheelchair with an occupant over 125Kg on a slope of 5 degrees or even less, without additional assistance.

Safe operation with a very heavy occupant may limit manual wheelchair use to level surfaces only, with slopes and kerbs being avoided. Very heavy occupants should understand that carers cannot put themselves at risk through unsafe handling practice.

Accessibility factors in the intended usage environment such as doors, kerbs or ramps may demand additional handling equipment, teamwork or other mobility solutions.

Build specifications for heavy occupants

We are all getting bigger. Supply of wheelchairs for a very heavy occupant is an increasing requirement. When a seating system is fitted the total occupant weight can also be increased significantly. The Greencare DB1 can be individually built in a relatively lightweight specification that will meet the identified needs of both occupant and carer.

Greencare have specific component features that will enable a wheelchair to be individually built to meet an identified need. In achieving this result, the assessment, trial, and handover process, together with ongoing preventative maintenance procedures become increasingly important. This should be advised to the user at the handover.

The total occupant weight loading on the wheelchair structure requires strengthening of load carrying components in keeping with the individual person, distributing and absorbing the occupant weight over the entire frame.

Integrated frame features for suppression of impact shocks, configured wheel specifications, in assessed combinations, for strength, are included in the final wheelchair build for a very heavy occupant.

Positioning the wheel relative to the occupant, for ease of manoeuvrability by a carer are important features. This needs to be trialed on an individual basis.

Larger diameter wheels are recommended for heavy occupant wheelchairs because they reduce the effort to push. Greencare recommend the availability of spare wheels for wheelchairs when the assessment indicates an increased level of vulnerability.

A buckled wheel, which for an independent lightweight user may be a small inconvenience, becomes a serious issue for a heavy weight person, creating increased risk for both occupants and carers. The final specification for an original heavyweight occupant wheelchair may also include additional service spares, that can be made immediately available, when required in an emergency.

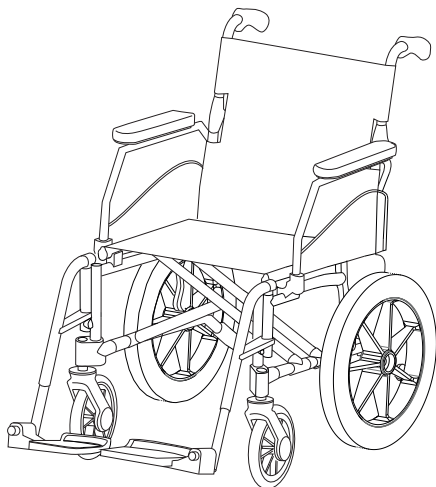
In some circumstances it will be necessary to reduce the warranty on component parts to 12 months because of the high usage levels in heavy occupant applications. This will be advised at the time of assessment.

GETTING AROUND SAFELY WITH HEAVY OCCUPANTS

Tight space environments

Greencare build wheelchairs to an assessed specification, which includes environmental access considerations. Users should understand that they have a responsibility to ensure that the environment is suitable for the wheelchair.

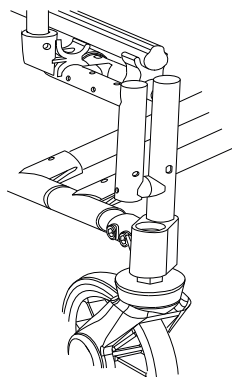
A relatively simple obstacle removal, may allow a door to open more fully or provide turning space that will allow wheelchair operation. General safety is improved when there is less clutter around on the floor.



Narrow access builds of occupant propelled wheelchairs, where handrim and wheel are built to a minimal width, are a practical solution to improve access through narrow doors. This reduces the area for the propelling occupant hand to grip, and operation of the chair may require a combined grip on the rim and the tyre. For this gloves may be an additional consideration.

Narrow access builds of attendant propelled wheelchairs may have an outriggering adaptation, over the wheels. This increases effective seat width on a reduced wheelbase. Outriggering creates an open space at the side of the seat frame, and a seat cushion must always be fitted over this open space.

Front outriggers offer a choice of footrest positions. This can be inboard for a compact turning or outboard to create more leg space between the frames. This feature will have been built to accommodate accessed users requirements.



The front outrigger has the appearance of a double frame at the front of the wheelchair (as shown above).

Optional footrest mounting points will be covered by a protective plug to prevent incorrect location when footrests are removed. Wheelchair users should not attempt to change footrest positions without consultation with the wheelchair service.

Spatial adaptations of the Greencare Db1 using a combination of different sized wheels, and frame build options are available to overcome specific environmental restrictions.

When such adaptations have been carried out, the correct use and any other special instructions will be advised to the user at the time of handover.

Building Regulations recognise the requirement for wheelchair access. Users have a responsibility to bring concerns about this to the attention of those responsible for public access.

GETTING AROUND SAFELY AND ENVIRONMENTAL FEATURES

Planning a trip

For a carer and occupant, pushing a wheelchair can be an enjoyment provided that there is mutual confidence and understanding. In this context both carer and occupant are both wheelchair users.

When first planning a trip, all users should check the distance and terrain to be covered, bearing in mind that steps and kerbs are obstacles that should be avoided if possible, and a slope going out is a hill coming back.

A combination of slope and camber is common in many areas. For new users, trying the chair out on typical surface conditions nearby is recommended, having friends along is also a good idea, before venturing on a longer trip.

Before taking a wheelchair outside, routine user safety checks on the main components, and occupant security, should be carried out. When brakes are set correctly they should hold the wheelchair from movement on an 8-degree slope in either the forwards or rearwards facing direction. This is a functional test, to be carried out as part of routine maintenance. Brakes should not be used to hold an occupied wheelchair on any slope.

Carers should be familiar with the occupant personal needs and the operation of the wheelchair. Where applicable, detachable features should be checked for security, before setting out on a journey. The carer should make sure that the occupant is comfortable and that clothes, rugs, covers, seat belt etc do not catch in the wheels.

The carer should walk at a sensible speed, maintaining a firm grip on the push handles, advising the occupant before changing position, tipping the chair or maneuvering, paying attention to the surface conditions, avoiding uneven or soft ground. Uneven ground affects the weight distribution and control of the wheelchair and should be avoided.

Kerbs and Active Occupant control.

Physically active, independent people require wheelchairs which allow them to safely negotiate kerbs and obstacles when necessary and generally achieve energy efficient control and manoeuvrability.

It can be hazardous for an occupant to attempt wheelie positions on wheelchairs which are stable above 10 degrees rearwards static stability, as physical effort needed to manoeuvre and pull a wheelie can be excessive, and difficult to maintain, consequently increasing the risk of accidentally tipping over backwards.

Maximum efficiency of hand propulsion occurs when occupant centre of gravity and wheel centre coincide, and is dependent on the occupant shape and size. The Greencare system allows the wheelchair to be tailored to optimise this.

Physically active people with upper body control may be capable of wheelchair skills with wheelchairs configured to fine wheel position balance settings, i.e. below 10 degrees rearward stability. These chairs should have anti tippers fitted, when supplied to inexperienced users, allowing the user to practice balancing techniques, in a supervised training environment, with the reassurance that the chair will not easily tip.

Tip outs may be inevitable for a very active user. Training is a significant factor in improving safe use. Anti tippers should not be removed until the occupant is able to deal with backwards falls and tip outs without injury occurring as a result.

Generally kerbs should be avoided, access ramps to be used wherever available. These are safer and require less effort.

GETTING AROUND SAFELY AND ENVIRONMENTAL FEATURES

It is nevertheless recommended that wheelchair users understand how to negotiate kerbs, and lower obstacles of similar shape, because of the need to be prepared for circumstances which may arise in an outdoor situation.

We recommend that even the most active or independent occupant should not be afraid to ask for assistance if there is any difficulty when using a wheelchair outdoors.

Active user balance may be practiced under supervision, as part of a wheelchair user training programme, when the anti tippers are fitted and positioned to suit the wheelbase configuration and occupant mass distribution.

Occupants who have perfected back wheel balancing skills may be able to negotiate a low kerb or thresh hold without assistance. In order to achieve this, the occupant should be able to hold the angular balance position of the moving wheelchair as in a wheelie, and also adjust body position, by leaning forwards to shift the combined weight and reduce the effort in rear wheel climbing.

The rigidity of the Greencare locked frame system assists in achieving stability and maintaining control during this operation.

Kerbs and Attendant control.

Method 1.

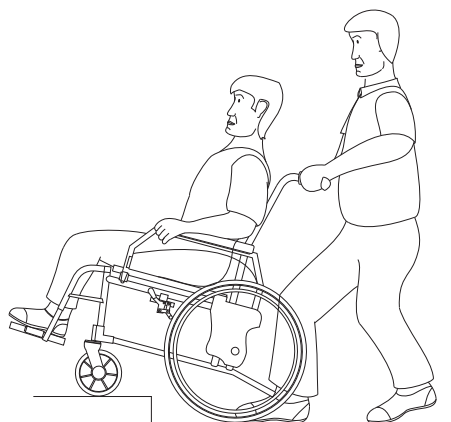
For an attendant carer controlling the wheelchair when going down a kerb in this method, direction of travel is maintained, but effort required is greater than in method 2.

The chair castors should be taken to the edge of the kerb. The carer should hold the chair handles firmly, pressing down with the foot on the rear tipping lever and at the same time tilting the chair back through pulling the push handles.

The rear wheels should then be taken to the kerb edge and the foot removed from the tipping lever, and the chair lowered down the kerb on its rear wheels. On reaching the ground level, the chair should be returned to stand on all four wheels and gently pushed forward in the required direction.

Going up a kerb is the reverse of this.

During this operation, the chair must be maintained in the balanced position on the rear wheels, and not be tipped forward or the occupant may fall out. If anti tippers have been fitted, this operation is more difficult to control, and they may require to be removed, or alternative method 2 adopted as below



Method 2.

An alternative method of descending a kerb, **used when anti tippers are fitted**, is to reverse the wheelchair from the direction of travel and descend the kerb backwards. In doing this the attendant needs to be aware of what is going on behind the wheelchair.

The attendant stands on the lower level with the wheelchair and occupant facing backwards away from the kerb. In this operation the wheelchair rear wheel is taken to the edge of the kerb, and allowed to descend to the lower level.

GETTING AROUND SAFELY AND ENVIRONMENTAL FEATURES



Safe slope (up to 8 Degrees)

For a carer and occupant, pushing a wheelchair can be an enjoyment provided that there is mutual confidence and understanding. In this context both carer and occupant are both wheelchair users, and can help each other

A combination of slope and camber is common in many areas. For new users, trying the chair out on typical surface conditions nearby is recommended, before venturing on a longer trip.

The effort to push a wheelchair up a slope, or control a wheelchair coming down can be very high. This is true for both occupant and attendant propelled wheelchairs.

The comparative pushing force required is greater when the slope is steep, when the occupant is heavy, or when the pushing attendant is small. Modern public buildings should provide permanent and safe wheelchair ramps with a slope angle which conforms to regulations.

General advice on recommended safe slope may need to be reviewed with a reduced angle. if the carer is relatively small or weak, and the occupant large and heavy. A review may also needed as a result of change of use, or wheelchair modification from its original assessed build configuration, such as when special seating is fitted.

Low seat to ground occupant propelled builds are available on DB1. These may have compact wheel features to reduce turning space and special builds for indoor use are also available. The rear wheel can be fitted in either the central, or maximum rearwards stability position. This is more suitable and convenient for an occupant who assists propulsion of the wheelchair by pushing along the ground with the feet. (see illustration below.)



However a foot propelling occupant is also at risk of rearwards tip out, should the force exerted by the propelling foot, overcome the stability of the wheelchair, at any time, on an upward slope. A simple object or raised ground surface could instigate this.

For this reason it is recommended that the foot propulsion method is used mainly indoors for tight space manoeuvrability.

Foot propulsion should not be used outdoors on active balance wheel settings, or where there are upward facing slopes.

It can be seen that for all users, learning the geography of an area is important. Users should check distance and terrain to be covered, bearing in mind that a slope going out is a hill coming back.

Forward journey planning can eliminate difficult manoeuvres, and steps,kerbs or soft ground may then be avoided, and the journey less exerting

GETTING AROUND SAFELY AND ENVIRONMENTAL FEATURES

Many buildings will have wheelchair lifts. Access ramps built according to current building regulations should be safe for wheelchair access. Local authority or public buildings, and employers should conform to regulations. A safe slope of up to 8 degrees is recommended. Such guidance advice, test data and regulations do not convey actual feel of a wheelchair in the intended environment. With supervision present for advice and possible fine tuning adjustment trails are recommended.

Use of Castors

The DB1 castor is a very adaptable. Wheel position and diameter can be set to suit needs of occupant and environment. Wheel positions that improve forwards stability are available. Forward stability setting may be suitable for seating adaptations or addition of accessories, such as elevated leg or stump support.



Castors are generally maintenance free, users are recommended to keep them clean, occasionally checking security of the fitting points for trouble free and safe operation.

Rough Terrain

Use on rough terrain can cause occupant discomfort and impact damage to a wheelchair. Driving over cobble stones and similar surfaces should be avoided. Reducing speed over rough terrain is recommended, frequent use over rough terrain increases the need for service maintenance and worn part replacement. Greencare supply castors which improve occupant comfort performance over a range of outdoor surfaces. These may be fitted if the assessment or review highlights such use, or after a period should the users find that the front castors are frequently dropping down gaps in the pavement.

If the wheelchair is crashed, forwards, into a kerb or similar impact, castors should be checked for security and damage. If in doubt users should contact the service department.

Accessories and additional equipment

Greencare DB1 is a modular wheelchair system. It can be originally built and customised or adapted with additional operating or comfort and support features, such as a reclining backrest or one handed operation. When additional accessories or fittings are used, or when more functionality is built into the wheelchair, any user additional information provided should also be read, before attempting to use.

When accessories are fitted the number of factors for consideration increases. Use is more complex, and safe routines should be practiced. Additions such as an elevating leg support, or a carry bag hanging from the push handles may have an adverse affect on stability. Shopping bags or other additional heavy loads should not be carried in a wheelchair unless specifically designed for the purpose. This particularly applies to hanging items over the push handles, which can overload the chair and affect stability resulting in injury if the occupant tips out of the chair when it is left unattended.

The installation of postural support or seating system will inevitably change the position of the occupant centre of gravity. Greencare DB1 frame and wheelbase system allows repositioning of the backrest and both front and rear wheels to optimise centre of gravity and combined stability of the adapted wheelchair and occupant.

When a major adaptation has been carried out a supervised stability assessment test, using purpose built measuring equipment, in a clinical rehabilitation environment is recommended, so that the effect of wheelchair adjustments can be assessed.

GETTING AROUND SAFELY AND ENVIRONMENTAL FEATURES

Use of Cushions

Users who spend long periods of time sitting in a wheelchair will usually require a cushion. This can be an important part of the postural specification. If the wheelchair is provided with a specialised or contoured cushion of other manufacture, there will be a separate instruction for its care and use.

For basic requirements, Greencare wheelchairs may be supplied complete with a cushion, which will be labelled accordingly. The following information is applicable.

The Greencare cushion has internal support foams that meet UK furniture regulatory requirements for fire retardancy. The outer cushion surface is a stretchy material that conforms to occupant shape. The underside of the cushion cover is a slip resistant material, which helps to maintain cushion position on the seat upholstery.

Care should be taken when transferring with a cushion in position. It is possible the occupant may slip down into the cushion during a transfer. Additional effort may be required to reach the required seating position. Some active occupants may be able to do this by pressing down on the armrests to gain leverage. For less active users, carers may be required to assist in transfers to ensure that the occupant is correctly seated and supported by the backrest of the wheelchair.

Cushions may be adapted with an additional velcro strip if this has been assessed as necessary. Greencare chairs are frequently built with a low set to ground height to accommodate an assessed cushion thickness, and maintain the stability of the wheelchair when the occupant is seated. Pressure relieving cushions are often thicker than comfort cushions.

If after a period of use a different specification or a thicker cushion is fitted this may effect wheelchair stability. If the occupant feels unstable there may be a need to review the chair configuration.

If a cushion is supplied to a wheelchair, the footrest height will have been set to provide the correct support including an allowance for the cushion thickness. If the occupant uses the chair set up in this way without a cushion, localised pressure on the body contact in the seating area will be increased. This could cause discomfort leading to skin damage.

Users and carers should check the cushion periodically. The Greencare cushion cover has a zip at the rear under side edge this allows access to the internal cushion components for service checks. If appropriate, there will be may also be an additional inner lining.

If the cushion cover becomes soiled it can be removed for washing. Normal washing temperature of 60 is normally adequate for domestic cleaning, but cleaning at 80 degrees centigrade and above may be necessary in a hospital environment. Cleaning agents containing phenol or alcohol should not be used. Do not tumble dry. But ensure the cover is fully dry before using again.

The support effectiveness of a cushion can be used over a period of use. If the cushion becomes damaged or loses its support and feels to bottom out, it should be brought to the attention of the wheelchair service, as a replacement may be required.

GETTING AROUND SAFELY AND ENVIRONMENTAL FEATURES

Use of Anti tippers

Anti tippers are available for all Greencare DB1 models, both occupant and attendant carer controlled configurations. Attendant controlled wheelchairs should not need anti tippers when the chair is being pushed, but they may be fitted where the occupant spends long periods in the wheelchair, in a static situation, or where the occupant is likely to move about frequently in the chair

Anti tippers fit into the lower rear frame. They can be set to allow a degree of rearwards pivotal movement for manoeuvre. Anti tippers are not substitutes for safe and responsible use. It is possible to remove anti tips for storage, or to allow a skilled occupant much more freedom, however, for normal use they should be replaced in the required position.

With a manual wheelchair, an important factor in considering what is a safe slope is the effort demanded from the occupant or attendant using the chair. Pushing up a steep slope over a long distance may demand a need to stop and rest, which in turn demands more effort to start back upwards again from a stopped position. Attendant operated hub brakes may be fitted to assist in such circumstances. Manoeuvre, which demands over exertion, may create risk of injury to both occupant and or carer, and should be avoided

Users should be aware that anti-tippers become less effective when the wheelchair is on an upward facing slope. We recommend that wheelchairs are not used on slopes greater than 8 degrees. Before taking a wheelchair outside, routine user safety checks on the main components, and occupant security, should be carried out.

Wheelchair skills training under the supervision of a knowledgeable person or professional is recommended for all new users. Users who are in doubt about safety and stability should contact their local wheelchair service for advice.



It is most important that the Assessment Teams are fully satisfied with user skills before allowing finely tuned balance settings, and removal or adjustment of anti tippers. In some instances a helmet may be advisable for head protection in the event of rearward tip-out.

Fire Precautions

Carelessness causes Fire. DB1 wheelchair uses FR material. This is not a solution. Prevention and safety is key. Smoking can cause fires, and is bad for you, A wheelchair occupant who smokes increases fire risk.

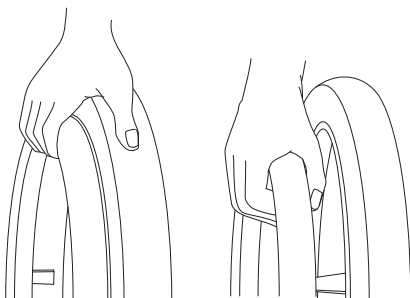
Never underestimate the speed at which a fire can take hold. Disabled persons are at greater risk than others in the event of a fire. The environment in which wheelchairs are used should incorporate safety precautions to minimise fire related risks. In buildings check that fire exits and emergency evacuation procedures are understood. The local fire brigade are available for advice on fire prevention. Do not park the chair against an open fire or intense heat source. When parking, the carer should position the chair so that the occupant can see and communicate as well as possible.

GETTING AROUND SAFELY AND ENVIRONMENTAL FEATURES

Use of Hand rims and Tyres

The fitting of polyurethane puncture free Greentyres eliminates punctures, and provides reassurance of the user and wheelchair not being stranded a distance from a service centre.

Use of polyurethane tyres demands that spoked wheel condition is maintained to the specified standard with spoke tension checked at recommended service intervals. Hand rims are provided for the occupant to grip and push round to propel the wheels. Best results will be obtained by a long pushing stroke that gives a continuous and smooth forward motion.



Wheels on lightweight DB1 models have aluminium hand rims and are best for active users with gloves, who apply hand pressure to the smooth surface revolving, as a means of retarding the wheelchair on a downhill slope.

Many users find that gripping across the tyre and hand rim at the same time gives better control. This is the required operating mode when the hand rim is set close to the wheel, to keep the overall width of the wheelchair down. We recommend that when operating in this way, wheelchair gloves are worn.

Hand rims can be removed to reduce overall width typically for door access. However this reduces wheel strength. Hand rim removal is acceptable for indoor use, if occupant is under 150Kg, provided that a carer is present, and alternative wheels are available as a back up.

Users with hand gripping difficulties may find larger comfortable section of the optional Greenrim, a practical feature which improves safety and confidence in use. Alternatively propelling wheel builds which reduce overall width of the wheelchair, using inwards mounted aluminium hand rims are often a solution to tight space access.

When using a hand rim to turn a chair round in a tight space, the occupant should push one wheel forward, whilst pulling the other wheel backwards, making sure that there are no obstructions or bystanders in the turning space required.

Use of Seatbelts (also posture belts)

DB1 seat belts can be positioned to locate correctly across the lap of the seated occupant. They are released and fixed with a buckle similar to that used in aircraft seats.

Seat belts and harnesses are a precaution for use outdoors, or for an occupant who needs to be positioned correctly.

Occupants who are unaware of their surroundings are more at risk of fall out during a journey, compared to those who see or react to a dynamic environment, with expected changes of speed and direction. Carers should understand that a seat belt does not allow irresponsible pushing of the wheelchair over uneven ground.

Seat belts should not be used to restrain someone without supervision. A seat belt that is never used and left to dangle and obstruct can become a hazard. In such circumstances, removal of the belt should be agreed and noted in an assessment report

Where additional support is part of the assessed need, a specialised belt or support adaptation may be fitted. Correct use of these should be individually assessed and separately advised.

TRANSPORTATION WITH OCCUPANT IN A VEHICLE

Belts should not be used as a means of securing an uncooperative wheelchair occupant in position.

A basic security seat belt may be required after a period of use, if the environment or method of use changes, or where the occupant feels a need for greater security in the wheelchair. The DB1 frame incorporates belt fitting points, and belts can be fitted retrospectively if not originally provided with the wheelchair.

Transportation of wheelchairs and occupants in vehicles

Users should understand that the greatest risk in transportation is when embarking and disembarking of the wheelchair occupant. A preferred initial consideration is for the wheelchair occupant to transfer to a standard vehicle seat during a journey, with the wheelchair stored separately and securely. This however is often not practical when other aspects of use are taken into account.

If transfer is possible the vehicle seat should be suitable for the occupant to sit in throughout the journey.

The occupant should also be able to carry out the transfer operation with minimal handling assistance from carers, in the restricted vehicle space. Carers should not get involved in unsafe lifting practices.

Storage areas in vehicles should be secure. A flying wheelchair or component part can cause a lot of damage and injury if it strikes anyone.

For the independent occupant who chooses to travel in a wheelchair, good accessibility into confined spaces is important when using the allocated spaces on public transport, such as low floor buses. Greencare DB1 S with short manoeuvrable frame and wheelbase is recommended for initial consideration for this aspect of use.

Use of Four point tie downs and occupant restraints in specialist vehicles

The DB1 wheelchair incorporates integrated attachment points for wheelchair and occupant restraints. Training is available for carers and transport providers by safety restraint manufacturers, such as Unwin Ltd

Attention should be given to the following important safety guidelines.

The wheelchair should be secured to the floor in a forwards facing direction.

The wheelchair and occupant should be secured to the vehicle independently.

The wheelchair tie down should be secured to the points indicated on the frame.

The occupant restraint is routed through the guides on the chair frame.

More than one person should not occupy the wheelchair.

Upper occupant restraint should be secured to the vehicle above shoulder height.

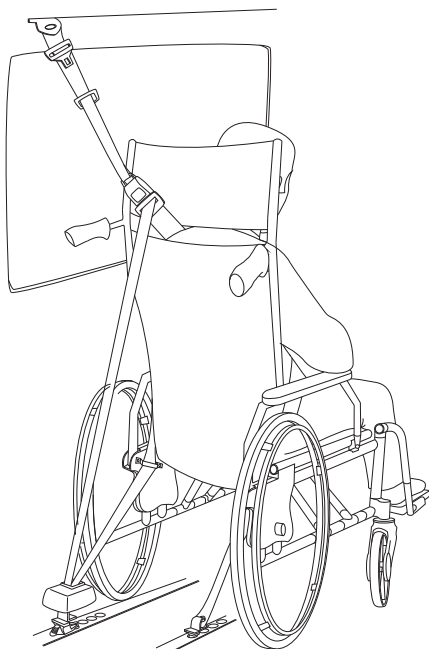
No component of the restraint should pass through the wheelchair wheels.

Modifications to allow the fitting of restraints should be approved by Greencare, or an authorised specialist.

The wheelchair back support frame should be configured or adapted to incorporate a head restraint feature.

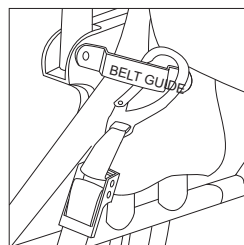
Loose fitting wheelchair attachments such as trays should be removed from the wheelchair unless there is an overriding risk assessed functional requirement.

TRANSPORTATION WITH OCCUPANT IN A VEHICLE



Transportation crash tested tie down restraints for both wheelchair and occupant are part of the actual road vehicle equipment. The transport provider should maintain them in a safe working condition.

Db1 has labelled fixing points for wheelchair downs. Excessive pressure applied by the tie down has an adverse effect on wheels, as pressure downwards increases, the area supporting the load is under compression and wheel strength is reduced. The hand rim on a wheelchair wheel has a stabilising effect. Under no circumstances should hand rims be removed from wheels that are used in transportation with tie downs. Please read instructions issued with WTORS for full guidance.



The driver of the vehicle carrying wheelchair users, has the significant responsibility of ensuring that everyone arrives safely. Minor surface bumps on the road, such as traffic calming features can result in unsettling occupant movement, or displacement of stored items. Journey planning eliminates the need for vehicle to encounter surface hazards.

Wheelchair posture belts and lap straps are not tested to meet the crash test standards, but we advise that they should continue to be used and remain in position during a journey to provide occupant security and support.

Head restraints are recommended. The wheelchair can be configured with these as an original specification item, or approved restraints fitted as part of the transport equipment



The illustrations on this page show DB1 fitted with the Unwin wheelchair tie down and occupant restraint system.

USER OR CARER ROUTINE MAINTENANCE CHECKLIST

DB1 MANUAL WHEELCHAIR SERVICE RECORD											
		Service Ref No.		To be completed at time of issue by wheelchair service centre It is essential for specification of any spare parts. This form to be included, and retained, with service information. When all tick boxes are completed issue a second form as sheet 2 if required.							
User / Client Name											
Address											
.....											
Greencare BTO Serial Number						Service Issue Date					
MODEL DESCRIPTION and SIZE											
OTHER FEATURES											
RECOMMENDED SERVICE INTERVAL assessed according to gcqa 017											
RECORD CHECKLIST		To ensure that your wheelchair remains in first class working order Please ensure that the following checks are carried out at recommended service intervals by an approved distributor/service agent.									
		TICK BOX when check is completed									
SERVICE No		1	2	3	4	5	6	7	8	9	10
WHEELS											
HANDRIMS											
TYRES											
BRAKES											
CASTORS											
FOOTRESTS											
ARMRESTS											
MOVING PARTS											
MANOEUVRABILITY											
FRAME											
ANTI TIPPERS											
HAND GRIPS											
UPHOLSTERY											
LABELLING											
ACCESSORY											
OTHER											
CHECKERS INITIALS											
DATE											
Greencare Mobility Riverside Park Road Middlesbrough TS2 1UU tel 01642 353492 fax 01642 223313 e mail info@greencaremobility.com						For safety, users should be aware of routine maintenance responsibilities Technical check reference information for service engineers is on gcqa 007					
						Form checked and issued by forWheelchair Service					

TECHNICAL DATA MEASUREMENTS

GREENCARE DB1 TECHNICAL DATA

gcqa034 rev E March 2011

Frame size and type with occupant performance test reference.

frame ref	seat width ref mm	seat depth build mm	chair total weight Kg	max occ weight Kg	rearward static stability in deg
DB1J13 (junior)	330	330 and 380	12.5 Kg	100	9,15 & 19
DB1S13 (short)	330	380 and 430	13.5 Kg	125	9,15 & 19
DB1S15 (short)	380	380 and 430	14.0 Kg	125	9,15 & 19
DB1S16 (short)	405	380 and 430	14.5Kg	125	9,15 & 19
DB1S17 (short)	430	380 and 430	15.5Kg	125	9,15 & 19
DB1S18 (short)	455	380 and 430	16.0Kg	125	9,15 & 19
DB1L17 (long)	430	430 and 480	16.0Kg	135	9,15 & 19
DB1L18 (long)	455	430 and 480	16.5Kg	135	9,15 & 19
DB1L19 (long)	480	430 and 480	17.0Kg	135	9,15 & 19
DB1L20 (long)	510	430 and 480	18.5Kg	150	9,15 & 19
DB1L22 (long)	560	430 and 480	19.0Kg	150	9,15 & 19
DB1XL20 (xt long)	510	480 and 530	20.0Kg	175 or 200	9,15 & 19
DB1XL22 (xt long)	560	480 and 530	21.0Kg	175 or 200	9,15 & 19
DB1XL24 (xt long)	610	480 and 530	22.0Kg	175 or 200	9,15 & 19

Functional Dimensions

Measurement description	Option setting	Dimension
Seat front edge to ground height	Standard build	495mm
Seat front edge to ground height	Lowest seat build option	415mm using 150mm front castor
Seat front edge to ground height	Highest seat build option With increasing adaptation	560mm using 200mm front castor
Backrest height from seat	Standard build option	480mm and 530mm
Backrest height from seat	With increasing adaptation	up to 850mm
Footrest height from seat	Range of positions	100mm to 500mm
Footrest leg angle reference	Range of support brackets	90 to 115 deg
Push handle centre to ground height	Standard build option	900mm and 950mm
Push handle centre to ground height	With increasing adaptation	Up to 1100mm
Armrest height from seat	Choice of three arm frames	220mm 250mm 280mm 310mm
360 deg turn DB1S mid position	610mm(24 inch) wheel	1250mm
360 deg turn DB1S mid position	315 mm and 405mm wheel	1200mm
360 deg turn DB1L mid position	610mm(24 inch) wheel	1300mm
360 deg turn DB1 L mid position	315 mm and 405mm wheel	1250mm
Wheelbase DB1 S	Range of positions	350mm to 450mm
Wheelbase DB1 L	Range of positions	400mm to 500mm
Wheelbase DB1XL	Range of positions	450mm to 550mm
Overall width all occ DB1 models (add width to advised dimension)	Std occ full grip wheel build Narrow access wheel build Hub brake occ wheel build	190mm plus seat width 155mm plus seat width 230mm plus seat width
Overall width all att DB1 models (add width to advised dimension)	315mm and 405mm wheel Hub brake att wheel build	130mm plus seat width 155mm plus seat width
Overall length fully assembled DB1S	610mm wheel mid pos	980mm
Overall length fully assembled DB1 L	610mm wheel mid pos	1030mm
Overall length fully assembled DB1XL	660mm wheel mid pos	1105mm
Length folded footrest detached DB1S	610mm wheel mid pos	650mm
Length folded footrest detached DB1L	610mm wheel mid pos	700mm
Length folded footrest detached DB1XL	660mm wheel mid pos	775mm
Width folded occupant standard	All std occupant propelled wheels 610mm (24inch)	330mm 300mm
Width folded attendant builds	315mm and 405mm wheel	270mm
Stump support height range from seat	Vertical adjustment	75mm
Elevating leg support angle	From seat angle	100 deg to horizontal

Seat Height from Ground Dimensions

Table of possible seat to ground height dimensions on Db1 wheelchair builds.
Measurements taken at the centre of seat upholstery under load tension. Castor mounting and rear wheel diameter options and settings as available from March 2011. Standard frame and wheel components as available from March 2010

axle position in modular castor fork	castor wheel diameter	rear wheel options (inches unless stated)	front frame connector type	castor mounting spigot type	seat to ground height	comment
twelve o clock offset	150mm	315mm, 20,22,24,26	std height A type	M14 thread x 10mm hex height	450mm	
centre	200mm	405mm, 22,24,26.	std height A type	M14 thread x 10mm hex height	500mm	
centre	190mm	405mm, 22,24,26.	std height A type	M14 thread x 10mm hex height	495mm	
centre	150mm	20,22,24,26	std height A type	M14 thread x 10mm hex height	475mm	
six o clock offset	200mm	20 attendant, 26 occ	std height A type	M16 thread x 35mm hex height	550mm	
six o clock offset	200mm	20 attendant, 26 occ	std height A type	M16 thread x 45mm hex height	560mm	highest
six o clock offset	200mm	24,26	std height A type	M16 thread x 10mm hex height	525mm	
six o'clock offset	190mm	24,26	std height A type	M14 thread x 10mm hex height	520mm	
six o clock offset	150mm	405mm, 22,24,26.	std height A type	M14 thread x 10mm hex height	500mm	
twelve o clock offset	150mm	405mm, 20,22,24	low height B type	M14 thread x 10mm hex height	420mm	lowest
centre	200mm	20,22,24,26	low height B type	M16 thread x 10mm hex height	470mm	
centre	190mm	20,22,24,26	low height B type	M14 thread x 10mm hex height	465mm	
centre	150mm	315mm, 20,22,24,26	low height B type	M14 thread x 10mm hex height	445mm	
six o clock offset	200mm	405mm, 22,24,26.	low height B type	M16 thread x 10mm hex height	495mm	
six o clock offset	190mm	405mm, 22,24,26.	low height B type	M14 thread x 10mm hex height	490mm	
six o clock offset	150mm	20,22,24,26	low height B type	M14 thread x 10mm hex height	470mm	

WARRANTY

Greencare guarantees the products supplied to be free from manufacturing defects, and will replace components where necessary free of charge, for a period of 24 months from the date of purchase.

This warranty is subject to the condition that the product has been used, adjusted and maintained in accordance with this user guide and maintenance instructions supplied by Greencare.

This does not affect your statutory rights.

Greencare wheelchairs are designed with the needs of disabled people in mind. We hope that our wheelchairs provide their users with the reliability, comfort and independence needed for a more improved lifestyle in a modern environment.

Greencare has a policy of constant product improvement and reserves the right to change specifications without prior notice.

In some circumstances it will be necessary to reduce the warranty on component parts to 12 months because of the high usage levels in heavy occupant applications. This will be advised at the time of assessment.

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