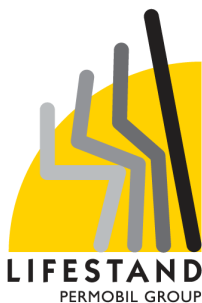


CE

EN

Owner's Manual

LSR



DEAR LIFESTAND OWNER

We congratulate you on your choice of LifeStand wheelchair. Our goal is for you to continue to feel satisfied with your choice of both vendor and wheelchair. Your LifeStand is designed to give you highest possible comfort and safety and to meet the requirements regarding safety and environment.

Before you begin using your wheelchair, it is important that you read and understand the content of these operating instructions and in particular the Safety Instructions.

EDITION INFORMATION

Edition	Publication date	Wheelchair S/N (from-to)	Modification
8	2017-04	71200 -	Notification that the "relax" function is an option.

Produced and published by LifeStand

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Order no: 205259-UK-0

WHERE TO FIND LIFESTAND

Contact us if you have any question regarding servicing or sales in the area where you live.

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INDICATIONS AND CONTRAINDICATIONS FOR THE USE OF STAND-UP WHEELCHAIRS

These indications and contraindications are based on general observations. The conditions for regular standing training varies from person to person and should be individually agreed with a doctor or therapist.

Only a doctor or therapist can decide which method and safe standing training can be achieved with the Lifestand wheelchair.

Indications

Lifestand wheelchairs are specifically developed for people who have lost their ability to stand (e.g. paraplegia, multiple sclerosis, cerebral palsy etc.). Standing is used for therapy and prophylaxis of:

- **Osteoporosis**

Without regular standing / vertical stress of the bones, bone density can steadily decrease. This leads to the risk of bone fractures and other complications.

- **Decubitus prophylaxis**

Whilst standing the pressure on the ischial tuberosity is reduced to a minimum.

- **Skeletal misalignments / back pain**

Whilst seated the spinal column is naturally elongated (kyphosis/hunchback). Standing facilitates a natural spinal position and therefore better upper body stability. This prevents the risk of a scoliosis.

- **Muscular atrophy**

Without regular leg movement, the risk of muscle shortening increases (muscular atrophy) and consequently contractures may develop. Regular, self-standing training help as movement therapy, thereby avoiding contractures and preventing possible associated pains and expensive operations.

- **Tonus regulation of spasticity**

Frequent standing helps to reduce spasticity and facilitates seat movement and positioning in the wheelchair or bed. This supports a peaceful sleep.

- **Deeper respiration**

Straightening the upper body through standing decreases the pressure of the abdominal cavity on the lungs. This improves and deepens respiration, facilitates breathing and can also help reduce the risk of pneumonia.

- **Gastrointestinal complications**

As with breathing, standing also reduces the pressure on the digestive system. This facilitates digestion (intestinal peristalsis) and helps with the improvement of bowel and bladder functions.

Contraindications



WARNING!

A Lifestand wheelchair can only be used upon prescription by a doctor. Here are the most common contraindications for the use of a Lifestand wheelchair.

- **Reduced bone density**

Should the bones already be very weak it is not recommended to stand. This could lead to fractures. In this case consult your doctor for a bone density measurement.

- **Poor circulation**

For heart or circulatory diseases standing should only occur under medical supervision (cardio training). Please consult a doctor in this case.

- **Severe mobility limitations or severe contractures**

GENERAL INFORMATION

Important information about the user manual

Congratulations on choosing a LifeStand stand-up wheelchair. Our goal is for you to continue to feel satisfied with your choice.

Before you begin using your wheelchair, it is important that you read and understand the content of this user's manual and in particular the section on Safety.

These instructions are primarily intended to inform you about the functions and characteristics of your wheelchair and to advise you on the best way of using it. They also contain important safety and maintenance information, as well as describing possible problems that can arise while operating this wheelchair.

Always keep this Owner's Manual on or near your wheelchair, since the need for important information can arise concerning its use, safety and maintenance. It is also possible to obtain information concerning our products from our home page on the Internet. You can find us at www.permobil.com.

All information, pictures, illustrations and specifications are based upon the product information that was available at the time that this owner's manual was printed. Pictures and illustrations that appear in the owner manual are representative examples and not intended to be exact depictions of different parts of the wheelchair.

We reserve the right to make changes to the product without prior notification.

If you are visually impaired, this document can be viewed in PDF format at www.permobil.com or alternatively ordered in large text.

Benefits of a daily standing

The use of any stand-up device should be done only under the prescription and supervision of a medical professional. At the outset, it is recommended that your introduction to regular standing be closely monitored by your physical or occupational therapist.

It has been documented that the regular and cyclical activity of going from the seated to the standing position may offer many benefits to those that are no longer able to stand on their own. The benefits are two fold: 1) there is the ability to once again function in daily activities that necessitate standing (reaching file cabinets and equipment in the workplace, accessing cupboards/stoves/shelving at home, as well as the ability to interact eye to eye); and, 2) the potential of physical benefits that result from repeated standing (these benefits may include improving of: range of motion, bone density, circulation,

bowel and bladder function, etc.).

Technical support

In the event of technical problems, you should contact your dealer or LifeStand at +33 (0)4 37 26 27 28.

Always state the wheelchair's serial number when contacting your dealer or LifeStand to ensure that the correct information is provided.

Spare parts & accessories

Spare parts and accessories must be ordered through your dealer. The expected service life of your wheelchair is five years.

Scrapping

Contact LifeStand for information about scrapping agreements in force.

Warranty

All wheelchairs are supplied with a two years warranty. Battery and charger are supplied with one year warranty.

Incident reporting

If an incident occurs please contact your nearest LifeStand representative. Normally the same person you contacted at purchase day. To prepare this contact there is a link on our homepage, on the internet, at www.permobil.com. Open up your country page and the contact page. Here is the needed contact information and a guidance document containing information we need to investigate the incident. Complete the information as much as possible. This is of great help for us.

To increase the product quality and to ensure that our product is safe through the whole life cycle we need you to send in Incident Reports. It is also stated in MEDDEV 2.12-1 and Annex 9 that the manufacturer shall *“Encourage users or those given specific responsibility for reporting incidents that have occurred with medical devices and that meet the criteria within these guidelines to report the incidents to the Manufacturer and or to the Competent Authority in accordance with national guidance”*. To meet the requirements and to ensure that our products shall remain safe in your hands we need your assistance. We hope you never need to use the information on this page but if there is an incident please contact us.

Product approval

This product fulfill the requirements according to EN 12183:2009, ISO 7176-14:2008, ISO 7176-21:2009 and ISO 7176-19:2001.

SAFETY RULES AND REGULATIONS

General

A stand-up wheelchair is a specialised device and special care must therefore be taken when it is used. Please read and follow all instructions, cautions and warnings in this manual before operating your LifeStand stand-up wheelchair. Incorrect use may both injure the user and damage the chair. In order to reduce these risks, you should read the Owner's Manual carefully, in particular the safety instructions and their warning texts.

LifeStand is not responsible for personal injuries or property damage resulting from any person's failure to follow the warnings and instructions in this manual. LifeStand is not responsible for injuries or damage resulting from failure to exercise good judgment.

The final selection and purchasing decision about the type of wheelchair to be used is the responsibility of the wheelchair user and his or her healthcare professional. LifeStand is not responsible for inappropriate selections of wheelchair models or features or improper fitting of the wheelchair.

Attention!

Throughout this manual the following symbol will be used to note items that have significant importance to safety concerns:



CAUTION!

Please use caution where this symbol appears.



WARNING!

Please use extreme caution where this warning symbol appears. Failure to observe warnings can lead to personal injury and property damage, including damage to the wheelchair.

Your wheelchair was configured specifically for your needs as prescribed by your healthcare provider. Consult your healthcare provider before changing the chair configuration or making any other adjustments. Some adjustments may reduce your wheelchair's performance or safety or may not be appropriate for your needs.

It is also of the utmost importance that you devote sufficient time to become acquainted with the different functions and adjustment possibilities of your wheelchair and its accessories before you begin using it.

Do not undertake to stand up for the first time in the chair without making sure that you have assistance in the immediate vicinity if you should need help.

Prepare for use

In order to make sure that nothing happened to the wheelchair while it was being delivered to you, you should check the following items before beginning to use it:

- that all products ordered are included in the delivery, including operating instructions and possible other documentation. If you suspect that something is missing, then contact your supplier or LifeStand for more information as soon as possible.
- that no transport related or other damages have occurred to the wheelchair and its accessories. If you discover that something has been damaged or in some other manner appears to be incorrect, then contact your supplier or LifeStand for more information as soon as possible before you continue the checks.

We recommend that you charge your wheelchair's battery before you begin using it. The chapter "Charging battery" describes how to do this.

Always be sure that tires are inflated properly before operating.

- If you experience that the wheelchair in any manner is not behaving as expected or if you suspect that something is wrong: abort the test as soon as possible and get in touch with your service contact or LifeStand for more information.

Warnings and precautions



CAUTION!

Operation

Do not allow children to operate the wheelchair without supervision. Do not operate the wheelchair on public streets or roadways. Obey all local pedestrian rules and be aware that vehicle drivers may have difficulty seeing you.

Do not operate your wheelchair under the influence of alcohol.

Consumption of alcohol may impair your ability to operate your wheelchair safely.

Some physical limitations or the use of medication, either prescribed or over the counter, may limit your ability to operate your wheelchair safely. Always consult with your physician about your physical limitations and medications.



WARNING!

Modifications

Any unauthorized modifications to the wheelchair may increase the risk of personal injury and property damage, including damage to the wheelchair.

All modifications to the wheelchair must be performed by a qualified service technician authorized by LifeStand to perform such service on LifeStand products.



WARNING!

Weight limitations

The maximum user weight for your wheelchair is set forth in the "Technical specifications" section of this Owner's Manual. Operation of the wheelchair by users who exceed the maximum allowable user weight can lead to personal injury and property damage, including damage to the wheelchair, as well as voiding any applicable warranty to the wheelchair.

Do not carry passengers on the wheelchair. Doing so can lead to personal injury and property damage, including damage to the wheelchair.



WARNING!

Going up and down a slope

Going up, lean the torso forward and avoid changing direction abruptly. Going down, lean backwards. It is also important to keep speed and direction under control. Make certain that the wheelchair is directed straight up or down the slope. Never attempt to traverse or make turns on a slope.

Do not drive the wheelchair where the slope is more than indicated in the technical specifications section of this Owner's Manual. There is a risk of tipping over. Use extreme caution when going up or down a slope.



WARNING!

Operation - Turning/Cornering

Turning your wheelchair at high speeds can create the possibility of the wheelchair tipping and personal injury. The possibility of tipping can be increased by high turning speed, sharp turns, uneven surfaces, abrupt changes in direction.

To protect against tipping, personal injury and property damage, reduce speed and reduce the sharpness of your turn.



WARNING!

Overcoming step

Whatever the obstacle, always approach slowly preferably assisted of an attendant.

The front wheels can be elevated off of the ground by (the attendant) stepping on the anti-tip tube on the rear of the chair and simultaneously pulling back and down on the push handles. While it is not recommended that the wheelchair be tipped back (the anti-tip wheels hitting the floor), it is possible to rotate the anti-tip protection to the up position (see section "Anti-tip protection"). Make certain to return the anti-tips to the down position before again operating the chair.



WARNING!

Elevation to standing position

Elevation to standing position and operation in standing position must only be done on a flat surface. When the wheelchair is in standing position, never reach out from the wheelchair due to the higher tipping risk.



WARNING!

Passengers

The wheelchair is not intended to transport passengers, regardless of the age of the passenger. The Maximum user weight stated in this Owner's Manual includes the user and any personal effects. The Maximum limit should not be exceeded. The wheelchair's maneuverability and stability can be degraded as a result.



WARNING!

Positioning belt

LifeStand positioning belt are designed to position the user only and will not protect you in an accident. Regularly check the state of the positioning belt.



WARNING!

Operation in different climates

Do not use the wheelchair when it is icy or slippery outdoors. These conditions may impair the performance and safety of the wheelchair, which could result in accident, personal injury and damage to property, including damage to the wheelchair.

Also bear in mind that certain surfaces on the wheelchair can be heated up or cooled down in the event of prolonged exposure to intense sunlight or cold respectively.



WARNING!

Transfer into and out of the chair

Be sure that the wheel locks are engaged before entering or leaving the wheelchair and before pivoting the armrest for transfer.

When transferring into or out of the wheelchair, every precaution should be taken to reduce the distance between the wheelchair and the place to which the user is transferring. Overextending this distance can cause the user to overexert, lose balance, or fall.

LifeStand recommends that users transfer in the presence of, or, with the assistance of an attendant.

Use caution when bending or reaching from the chair.

Do not use footplates or armrests as supports when transferring into or out of the wheelchair. The footplates and armrests are not designed to be weight-bearing structures. Excessive force may cause them to give way, resulting in personal injury or property damage, including damage to the wheelchair.





WARNING!

Transport

A wheelchair is not designed as a car seat and cannot offer the same degree of safety. It is recommended to transfer to the vehicle seat and use the vehicle-manufacturer-installed restraint systems whenever it is feasible. The unoccupied wheelchair should be stored in a cargo area or secured in the vehicle during travel.

The wheelchair with user seated in it must be transported only in vehicles approved for this purpose. Before using your wheelchair in a car, you should follow instruction in section "Transport".



CAUTION!

EMC Requirements

The electronics of a wheelchair can be affected by external electromagnetic fields (for example from mobile telephones). Similarly, the electronics of the wheelchair itself can also emit electromagnetic fields that can affect the immediate surroundings (for example certain alarm systems in businesses).

The limit values for Electromagnetic Compatibility (EMC) with respect to power wheelchairs is set in the harmonized standards for the EU in the Medical Devices Directive, No. 93/42/EEC. LifeStand's wheelchair's comply with these limit values.



WARNING!

Flame resistance

The material components have been tested against flammability. Padded parts fulfill the requirements according to EN1021-2:2006 and ISO7176-16. Plastic parts fulfil the requirements according to UL94.



WARNING!

Maintenance and service

Carry out only the service and maintenance which are stated in the Owner's Manual. All other service and maintenance must be performed by a qualified service technician authorized by LifeStand to perform such service on LifeStand products.

Do not use parts or accessories not authorized by LifeStand. Use of unapproved "aftermarket" accessories and parts may cause changes in the wheelchair, which may make the wheelchair unstable or uncontrollable. Such use may also void the warranty on the wheelchair.



WARNING!

Damages/malfunctions on the wheelchair and its accessories

If at any point you notice that the wheelchair and its various functions are not behaving as expected or if you suspect something is wrong, stop using your wheelchair as soon as possible, turn off the wheelchair and contact your healthcare provider or LifeStand for information.

It is extremely important that LifeStand be informed if the wheelchair or its accessories have been damaged during transport, during driving or for any other reason as soon as possible after the damage has occurred. There could be a risk that the wheelchair and its accessories can no longer be operated safely and without danger.



WARNING!

Disposal

Used wheelchairs and battery, or defect battery must be disposed of according to applicable local waste disposal regulations and in an environmentally friendly manner.



WARNING!

Filling air into tires

Check at regular intervals that the wheelchair's tires have the prescribed tire pressure (See section "Wheels"). Incorrect tire pressure can cause deteriorating maneuverability.



WARNING!

Storage

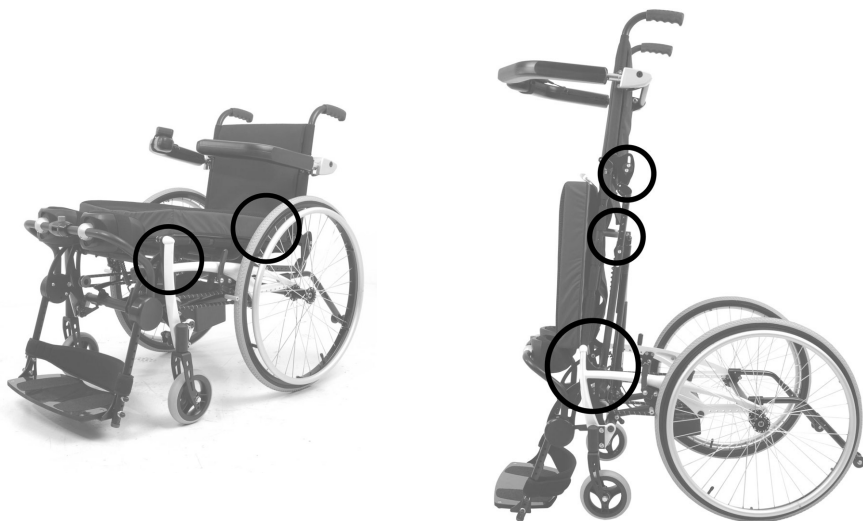
The wheelchair and its accessories must always be shut off when they are not being used. Never store the wheelchair in a room in which condensation can arise (mist or dampness on the surfaces) e.g. in pool areas, laundry rooms, or similar rooms.



WARNING!

Pinching points

In the following positions of the wheelchair there is an increased risk of pinching. Please exercise particular caution here. Pay attention to the marked areas on the gap between moving and stationary parts. Danger that loose items of clothing or hands could become pinched.



Pinching points on wheelchair

DESIGN & FUNCTION

General

The LSR is a manually propelled, power stand-up wheelchair for both outdoors and indoors use. It is intended for people with physical disabilities that can no longer stand on their own. The standing feature allows for greater freedom of movement and increased function. We recommend gradual progression in standing up under the guidance of a doctor or therapist before you use your LSR everyday. The greatest potential health benefits to standing occurs with the frequent cycling from the seated to the standing position.

The wheelchair consists of a chassis and a seat. The wheelchair is equipped with knee supports, legrest, footplate, push handles, backrest, armrests and any accessories/options such as side guards and positioning belts.



- | | |
|------------------|-----------------|
| 1. Control panel | 6. Push handles |
| 2. Seat | 7. Backrest |
| 3. Knee supports | 8. Armrest |
| 4. Legrest | 9. Rear wheel |
| 5. Foot plate | 10. Front wheel |

Overview

Standing function

The electric standing function makes it possible for the user to stand up in the wheelchair. This function is accessed from a control panel located on one arm rest (See section "Control panel").



Standing function

Relax function (optional)

The electric relax function moves the legrest upwards and the backrest backwards, for a relaxing position for the user. This function is accessed from a control panel located on one arm rest (See section "Control panel").



Relax function (optional)

OPERATION

General

The LSR is designed for both outdoors and indoors use.

For use indoors, attention must be paid when driving in narrow corridors, when passing through doors and entrances and when traveling on elevators and ramps, etc. Remember that there is a risk of pinching when using the electrical functions.

Outdoors you must remember to travel very slowly on steep downhill slopes and take great care on uneven surfaces, uphill slopes and sideways gradients. Always observe a good safe distance when driving near edges and precipices.

We recommend that you practice in an environment in which you feel safe so that you are very familiar with how the wheelchair and its accessories behave in different situations before you start to use the wheelchair in public locations.

Control panel

General

The control panel has two buttons to control the seat's functions.

The control panel is secured by means of velcro and can be fitted to either armrest in the position that best suits the user.

Left button (Arrow forward)

This button is used to operate the functions from sitting to standing position, or to move from relax to sitting position (if equipped with the "relax" function).

Right button (Arrow backward)

This button is used to move from standing to sitting position, or to move from sitting to a relax position (if equipped with the "relax" function).



Control panel

There is a socket at the front of the control panel for connecting the battery charger (See section "Charging battery").



WARNING!

Use the functions with great care and be aware of the danger of pinching.

Before using the electrical functions, it is extremely important that all the seat's settings are adapted to the current user. More detailed information on adjustments can be found on chapter "Adjustments".

Power module

The power module contains the control electronics of the functions and the battery. The front has several connections and an On/Off switch.

During long time storage, always put the On/Off switch to "Off". For proper operation, avoid humid environments, strong sunlight, temperatures over +50°C and below -20°C. An audible signal will occur when the battery are depleted.



WARNING!

Never use the wheelchair when the battery are depleted. You could be stranded.

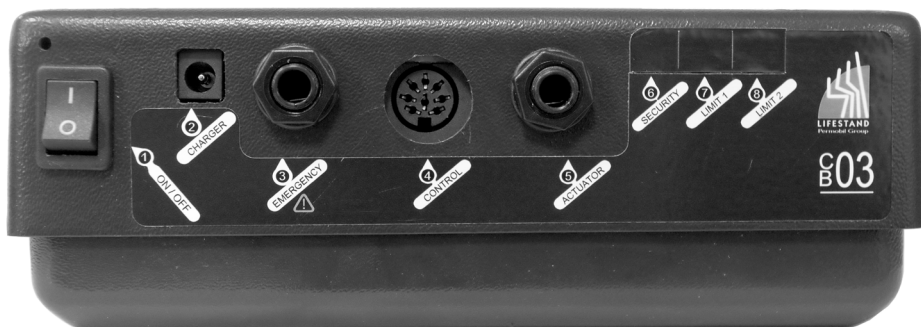
Emergency operation for seat function

If standing function cannot be operated in the normal way because of a fault other than discharged battery or a faulty adjustment device, the function can be operated manually by moving the actuator plug from outlet no. 5 "ACTUATOR" into outlet no. 3 "EMERGENCY".

The seat will now automatically move down. When the user is in seated position, move the plug back from outlet no. 3 "EMERGENCY" into outlet no. 5 "ACTUATOR".

If the plug is not removed from outlet no. 3 "EMERGENCY", the seat will recline further into the seating position (or relax position if equipped) and an audible signal will occur during the emergency operation.

A qualified service technician authorized by LifeStand must then be contacted to rectify the cause of the malfunction. Until it has been repaired, the electric function must no longer be used.



Power module

Charging battery

1. Connect the charger cable to the control panel or to the power module.
2. Connect the charger to a 230 volts wall socket. The light signal on the charger is orange during charging. When the battery are charged, a green light will be displayed on the charger.
3. Once charging is complete, unplug the charger from the wall socket before the cable is removed from the control panel.

It takes between 4-5 hours to charge the battery fully.

If the battery level falls too low, the power module will emit an audible signal that indicates that the battery need charging.

In that case, the battery has enough power for a further 6 cycles. We recommend that the user return to sitting position and charge the battery before using this function again.



WARNING!

To achieve the best life, the battery should not be discharged completely. Always charge the battery immediately after they have been discharged.

Use only the charger supplied with your wheelchair.

Ensure that the charging contact has been fully inserted in the charging socket.

Carefully read the instructions supplied with the charger before starting to charge the battery.

Standing and relax (optional) functions



WARNING!

Make sure that the wheelchair is on a flat and horizontal surface.

Make sure the brakes are activated.

Make sure that the knee supports are correctly secured (See section “Knee supports”).

Make sure that the armrests are correctly secured in the standing position (See section “Armrest”). During the use of electric functions to reach the standing or the relax position, keep your arms on the armrests. You might trap your fingers into the moving parts, especially around the armrests.

Always use the positioning belt during the use of electric functions.

Press the right or left button, depending on whether the seat is to be raised to the standing position or lowered to the normal or reclined position (if equipped with the “relax” function). To stop the system, release the button. You can stop at any intermediate position. Once the system has reached its end point, it will stop automatically.



Using the control panel, the position of the seat can be changed between relax, normal sitting and standing position (from right to left)



WARNING!

Stress on the muscles may be relieved by taking regular rest periods.

Make sure that the coiled cable never wraps around the arm rest, either in the position for the arm rest or the chest support, as it may be damaged when the arm rest swings round. If the cable is damaged due to being cut or squeezed, this is not covered by the warranty.

Armrest

Before standing may commence, the armrests must be secured in the right position. With the positioning belt, the armrests then provide support for the upper body during the standing process and in the standing position.

Secure the arm rests in the standing position

Lift the armrests and turn them inwards at the same time. With the outer angled section of the armrests in the horizontal position, lower the armrests again so that they are secured in the standing position.



Armrests in normal position



Armrests in the standing position



CAUTION!

Make sure that the coiled cable never wraps around the arm rest as it may be damaged when the armrest swings round.

Fold the armrest

The armrests can be folded backwards to facilitate when getting in and out of the wheelchair.



Armrests

Knee supports

Before standing may commence, the knee supports must be secured in the right position. The knee supports place pressure on the upper section of the shin when the wheelchair mechanisms work together to raise the body to the standing position.

Securing the knee supports

In order to secure the knee supports, turn each of them inwards so that they dock. The left knee support must be put in place first so that the right knee support can be secured in the knee support's locking mechanism.



locking button

Knee supports secured in the standing position

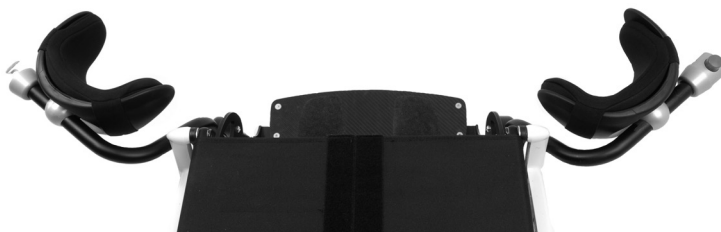


WARNING!

You must see fully the green part of the locking button before using the standing function. This green part indicates that the support is correctly locked.

Release the knee supports

In order to release the knee support, press the locking button and turn the knee support outwards.



Knee supports in released position



CAUTION!

The knee supports may only be released in sitting position.

DRIVING RULES



WARNING!

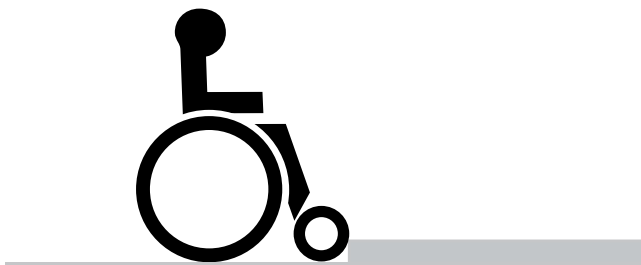
To prevent tipping with personal injury and property damage as a result, it is advisable to reduce the speed when turning or in slopes.

Never drive rapidly along narrow passages, on narrow sidewalks, etc. where an incorrect maneuver or incorrect steering can cause an increased risk of accidents.

Driving over obstacles

Driving over tall edges increases the risk of tipping over as well as the risk of damage to the wheelchair.

Negotiating obstacles must always be done with great care. Negotiating obstacles may sometimes be facilitated by not running perpendicular towards the Obstacle. Obstacles must not be negotiated with larger angle than 10° , ie. one pivot wheel must not pass the obstacle more than 90 mm before the other pivot wheel, as this increases the risk of tipping.



Driving over obstacles



WARNING!

Negotiating obstacles must always be done with great care.

Driving on sideways slopes

Driving on a sideways slope must always be performed with great care.

Avoid abrupt avoidance maneuvers and never maintain a speed higher than that at which you can maneuver the wheelchair in a safe and secure manner.

When driving on sideways slopes with an uneven surface (for example grass, gravel, sand, ice or snow) a great deal of extra care must be observed.



Driving on sideways slopes



WARNING!

Do not drive the wheelchair on side slopes steeper than $8,5^\circ$. There is a risk of tipping.

Driving downhill

You should always drive downhill at low speed and with great caution.

Avoid sudden evasive maneuvers and never drive so fast that you are unable to control the wheelchair safely without risks.

Never use rear wheel locks as a brake to slow or stop your chair.



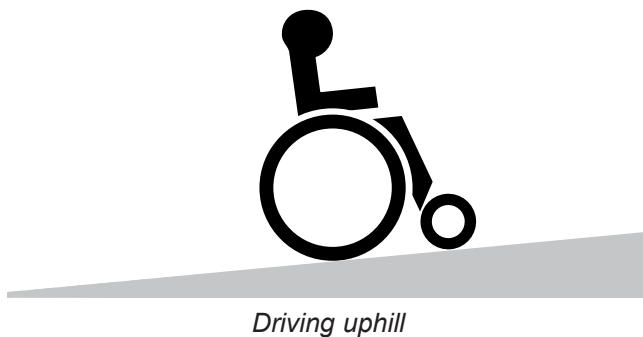
WARNING!

Do not drive the wheelchair on slopes steeper than 8,5°. There is a risk of tipping.

Driving uphill

You should always drive uphill with great caution. Always use anti-tip protection while driving uphill (See section "Anti-tip protection").

Avoid sudden evasive maneuvers and never drive so fast that you are unable to control the wheelchair safely without risks.



WARNING!

Do not drive the wheelchair on slopes steeper than 8,5°. There is a risk of tipping.

ADJUSTMENTS

Foot plate

For the best sitting comfort and to achieve the correct position for standing up, the distance between the foot plate and the seat must be adjusted to a suitable length. It is important that the seat cushion that the customer will then use is also used when adjusting the foot plate.

The length of the foot plate is then adjusted so that the user's thighs are parallel with the seat frame, but a little higher at the front of the cushion. The result will then be suitable pressure on the thigh and bottom when sitting, as well as a suitable hip rotation and extension in the standing position.

The length adjustment is carried out in fixed stages of 20 mm. The same screws are used to adjust the angle of the foot plate (to plus or minus 10 degrees).

1. Remove the foot plate, which is attached by two screws on the left and right side.
2. Fit the foot plate to the required hole configuration on the leg rest. Fit using the upper screws.
3. Adjust the foot plate to the required angle and secure with the lower screws.



Foot plate adjustment

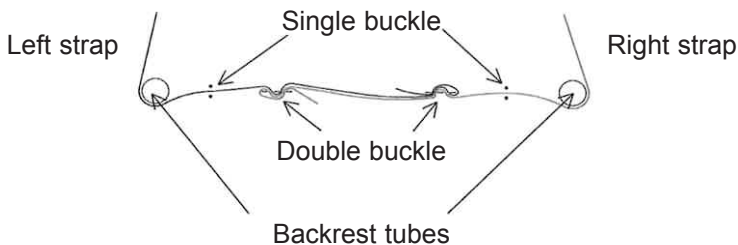
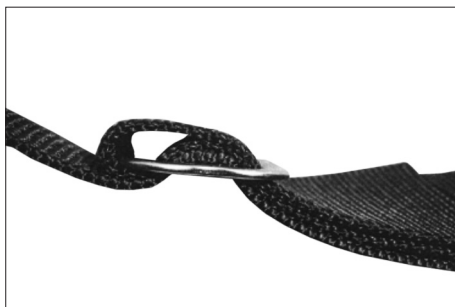
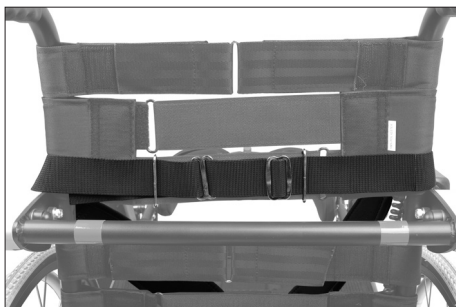
Positioning belt

To obtain optimum support for the user, especially when standing, the height and the length of the positioning belt can be adjusted.



WARNING!

Always wear your positioning belt while you are in your wheelchair. If signs of damage or wear appear, replace the positioning belt immediately through your LifeStand dealer.



Positioning belt adjustment



CAUTION!

Take care that when the positioning belt are not in use, that they do not get caught in the rear wheel spokes. When not in use, it is best that they be fastened and hang behind the chair backrest.

Knee supports

1. Loosen the screws (A) holding the knee support pads in place.
2. Adjust the distance between the pads and their angle to the required position.
3. Secure in the required position by tightening the screws (A).

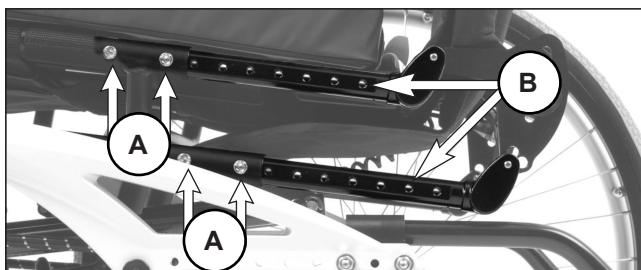


Knee supports adjustment

Seat depth

The seat depth can be adjusted in 8 fixed stages, from 41-55 cm.

1. Remove the screws securing the setting for the top and bottom of the seat frame on the left and right side of the seat (A).
2. Adjust to the required seat depth by counting how many holes are visible (B) on the seat frame inner tubes (See table below).
3. Secure the required setting using the screws previously removed (A).



Seat depth adjustment

Seat depth	Position	Visible holes (B)
41 cm	1	0
43 cm	2	1
45 cm	3	2
47 cm	4	3
49 cm	5	4
51 cm	6	5
53 cm	7	6
55 cm	8	7



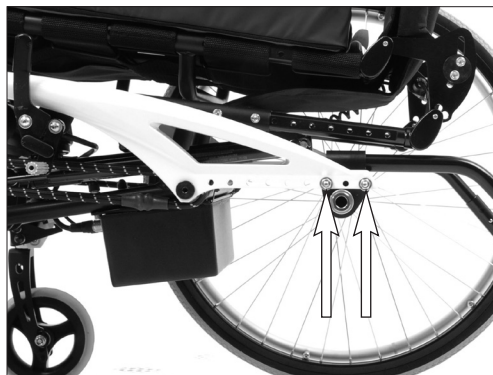
CAUTION!

The upper and lower seat frame must be adjusted identically. When reducing the seat depth, it is best to adjust the upper seat frame first. When increasing the seat depth, it is best to adjust the lower seat frame first.

Center of gravity

Once the seat depth has been adjusted, it may be necessary to adjust the center of gravity. This is done by moving the rear wheel's axle.

1. Remove the two screws and nuts on the left and right side of the chair that hold the rear wheel's axle in place.
2. Adjust the wheel's axle to the required position.
3. Secure the wheel's axle using two screws.



Center of gravity adjustment



CAUTION!

If the rear wheel's axle is moved forwards, the center of gravity moves backwards, which means that the front section of the wheelchair will be lighter and the wheelchair may more easily tip backwards.

If the rear wheel's axle is moved backwards, the center of gravity moves forwards, which means that the front section of the wheelchair will be heavier and the wheelchair will be more stable.



WARNING!

Adjusting the rear wheel's axle changes the center of gravity and driving properties of the wheelchair. For this reason, particular attention should be paid when the user then tries the chair for the first time.

Adjusting the center of gravity also requires adjustment of the brakes (See chapter "Brakes").

Armrest

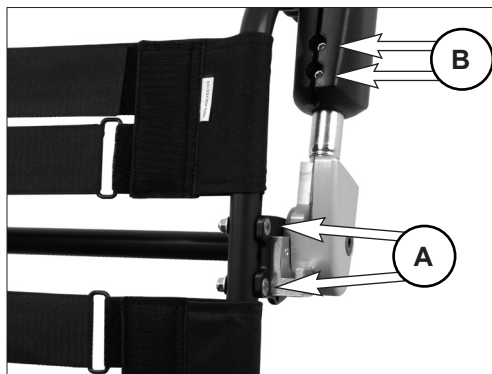
The height and depth of the armrest can be adjusted to provide the user with optimal comfort.

Adjust the height

1. Loosen the four screws (two by side) holding the armrest on the backrest (A).
2. Refit the armrest to the required hole configuration and secure using the four screws.

Adjust the depth

1. Loosen the two screws holding the armrest on the axle (B).
2. Refit the armrest to the required hole configuration and secure using the two screws, see picture.



Armrest adjustment



WARNING!

Do not subject the armrests to load when adjusting them. Risk of pinching.
Both armrests should be adjusted identically (same height and depth).

Backrest

Adjust the angle

For optimal comfort, the backrest angle can be adjusted in a range of 24°.

1. Undo the two screws on the left and right side that fix the backrest angle.
2. Adjust the backrest to the required angle and secure by tightening the screws again.



Backrest angle adjustment



CAUTION!

When moving from a sitting to standing position, the selected backrest angle can cause an undesirable effect. For example, it is possible that a straighter backrest angle that works well in a sitting position may have a tendency to cause a position that is inclined too far forward in a standing position.

Conversely, a reclined angle may cause a position that is too far inclined and unstable in a standing position. This can be adjusted using the backrest equalization system (see section "Backrest equalization system").

Backrest equalization system

The 'backrest equalization system' allows a more inclined or upright backrest angle in a standing position compared with the backrest angle in a seating position.

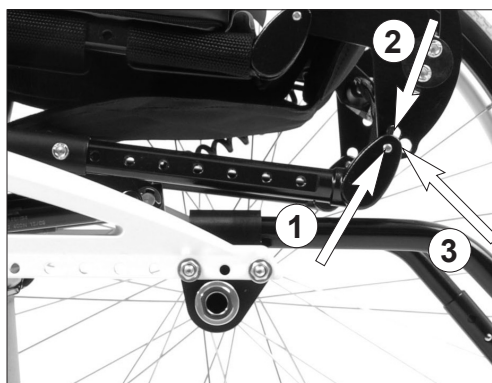
The upper and lower seat frame and the back rest frame are all fitted to the back joint attachment. The lower seat frame can be fitted in three different positions.

Remove the screw holding the back joint attachment under the seat frame and replace in the required position. Make sure that the wheelchair is both comfortable and secure in both sitting and standing position. Readjust the backrest angle if necessary.

Position 1: To get a constant angle on the backrest between sitting and standing.

Position 2: To get the backrest reclined backwards of 7° between sitting and standing.

Position 3: To get the backrest inclined forwards of 6° between sitting and standing.



Backrest equalization system adjustment

Anti-tip protection

The anti-tip protection is fitted to the rear of the wheelchair. Used correctly, it can prevent the wheelchair from tipping over. Using the anti-tip protection is recommended in all circumstances. However, it may sometimes be necessary to temporarily fold up the anti-tip protection; for example, in order to raise the front wheels from the ground in order to cross a curb or other obstacles.

Folding up the anti-tip protection

1. Press the lock button to release the anti-tip protection.
2. Turn the anti-tip protection upwards so that the wheels are in the upper position.
Turn the anti-tip protection down again as soon as possible.

Folding down the anti-tip protection

Turn the anti-tip protection downwards so that the wheels are in the lowest position. Make sure that the lock button secures the anti-tip protection in this position.



Anti-tip protection in down position



Anti-tip protection in up position



WARNING!

As the wheelchair may tip backwards when the anti-tip protection is not down, it is extremely important that it is always down when the wheelchair is in use. Using the wheelchair without having the anti-tip protection down may lead to the wheelchair tipping, causing personal injury and damage to the wheelchair.

Brakes

Brakes must be adjusted regularly. Adjustment is also required as soon as the rear wheel attachments have been moved.

1. Remove the two screws on the inside of the frame holding the brakes mechanism on the left or right side of the chair.
2. Move the brake mechanism to the required position.
3. Secure the brake mechanism to the required position by tightening the screws.



Brakes adjustment



CAUTION!

The air pressure of the tire has a huge impact on the ability of the brake to lock the wheel. Therefore make sure that the tires have the correct air pressure before adjusting the brakes (See section "Wheels").

TRANSPORT & STORAGE

Use in a vehicle

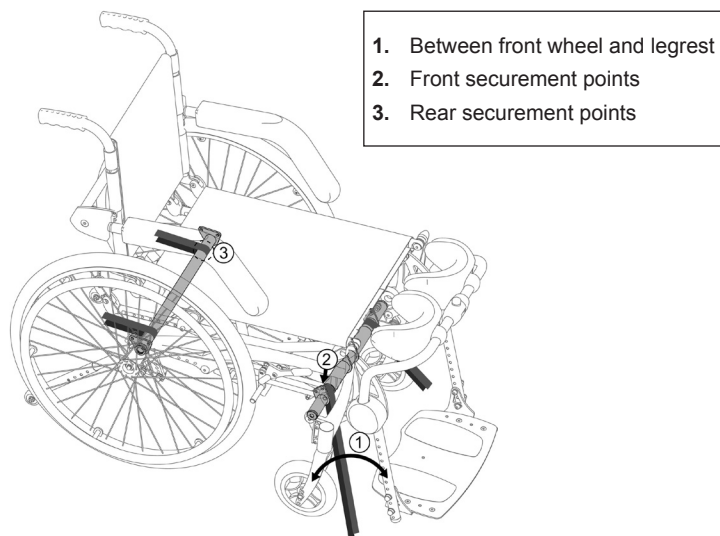
Securement in the vehicle

The wheelchair must be located in a forward-facing position.

The wheelchair must be locked into position in the vehicle with four-point strap-type with J-hooks end-fitting. There are 4 securement points on the wheelchair (See illustration "Location of securement points") which are identified with stickers on the wheelchair (See illustration "Sticker for location of securement points"). The wheelchair must not be secured onto any other part of the wheelchair including the seat.

You should use an approved attachment system suitable for the total weight of the wheelchair and user to secure the wheelchair. Wheelchair Tiedown and Occupant Restraint Systems (WTORS) you used must meet the requirements of ISO 10542 Part 2. Carefully check that the wheelchair is properly secured, there should be no play or looseness in any of the four wheelchair tie-down straps. Refer to the WTORS manufacturer's instructions to secure the wheelchair.

The wheel locks must be engaged.



Location of securement points



Sticker for location of securement points



WARNING!

A wheelchair is not designed as a car seat and cannot offer the same degree of safety. It is recommended to transfer to the vehicle seat and use the vehicle-manufacturer-installed restraint systems whenever it is feasible. The unoccupied wheelchair should be stored in a cargo area or secured in the vehicle during travel.

The wheelchair with user seated in it must be transported only in vehicles approved for this purpose.

Occupant belt restraint

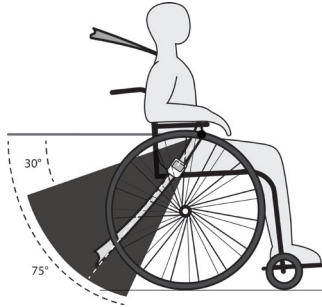
During transportation, it is essential that you are secured with a three-point belt restraint that is attached to the floor and a side of the vehicle.

- The pelvic-belt restraint should be worn low across the front of the pelvis, so that the angle of the pelvic-belt restraint is within the preferred zone of 30° to 75° to the horizontal (See illustration "Angle of pelvic-belt restraint"). A steeper (greater) angle within the preferred zone is desirable.
- Belt restraints should not be held away from the body by wheelchair components or parts, such as the wheelchair armrests or wheels (See illustration "Improper belt-restraint fit" and "Proper belt-restraint fit").
- Shoulder-belt restraint should fit over the shoulders.
- Belt restraints should be adjusted as tightly as possible, consistent with user comfort.
- Belt webbing should not be twisted when in use.

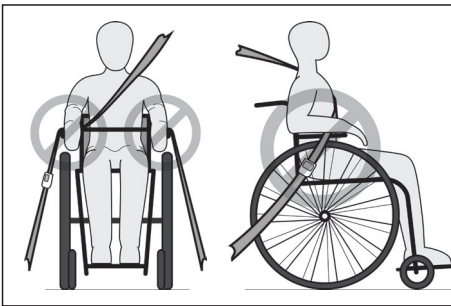


WARNING!

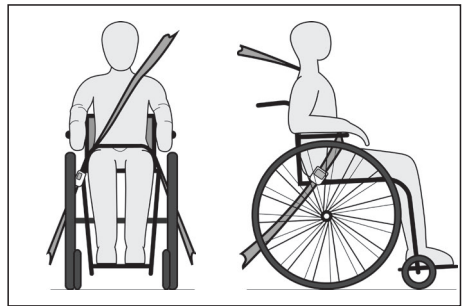
LifeStand positioning belts are designed to position the user only and not to protect you in the event of a motor vehicle accident. The positioning belts do not replace use of a vehicle mounted restraint.



Angle of pelvic-belt restraint



Improper belt-restraint fit



Proper belt-restraint fit



CAUTION!

LifeStand recommends that the wheelchair be equipped with a headrest and that this is used during transportation.

During transportation, the wheelchair must be in seated position and the backrest must be straight.



WARNING!

The wheelchair complies with the requirements of ISO 7176-19:2001 and has been designed and tested for use only as a forward-facing seat in a motor vehicle.

The wheelchair has been dynamically tested in a forward-facing orientation with the ATD restrained by both pelvic and shoulder belts (e.g. a shoulder belt as part of a three-point belt restraint).



WARNING!

Both pelvic - and shoulder - belt restraints should be used to reduce the possibility of head and chest impacts with vehicle components.

In order to reduce the potential of injury to vehicle occupants, wheelchair-mounted trays not specifically designed for crash safety should be removed and secured separately in the vehicle, or be secured to the wheelchair but positioned away from the occupant with energy-absorbing padding placed between the tray and the occupant.

When possible, other auxiliary wheelchair equipment should be either secured to the wheelchair or removed from the wheelchair and secured in the vehicle during travel, so that it does not break free and cause injury to vehicle occupants in the event of a collision. Postural supports should not be relied on for occupant restraint in a moving vehicle, unless they are labelled as being in accordance with the requirements specified in ISO 7176-19:2001.

The wheelchair should be inspected by a manufacturer's representative before reuse following involvement in any type of vehicle collision.

Alterations or substitutions should not be made to the wheelchair securement points or to structural and frame parts or components without consulting the wheelchair manufacturer.

Spill-proof sealed battery, such as "gelled electrolyte", should be installed on powered wheelchairs when used in a motor vehicle.

Care should be taken when applying the occupant restraint to position the seatbelt buckle so that the release button will not be contacted by wheelchair components during a crash.

Reduce the total size

In order to reduce the total size of the wheelchair for transport or storage, the backrest and wheels can easily be folded down or removed.

Removing the wheels

Removal: Press on the button in the center of the wheel and pull the wheel fully out.

Assembly: Press on the button in the center of the wheel and push the wheel axle into the wheel attachment until it stops and locks securely.



Removing the wheels



WARNING!

Make sure that the wheels are correctly secured before using the wheelchair.

Folding the backrest

To fold down the backrest, undo the two locking pins for the backrest joint by pulling on the cord on the rear of the backrest and carefully folding it forward at the same time.

To unfold it, carefully unfold the backrest until the locking pins secure the backrest in the fully unfolded position.



Folding the backrest



WARNING!

Make sure that the backrest is correctly secured before using the wheelchair.

Lifting points

If two attendants need to lift the wheelchair, please follow the instructions below. Make sure the wheelchair is in seated position, not in relaxed or standing position. The two attendants has to be positioned on right and left hand side of the wheelchair. With a firm grip with one hand on the backrest tube and the other on the chassis frame, the wheelchair can be lifted in a safe manner.



Lifting points on the wheelchair



WARNING!

There is a risk of pinching accidents when lifting the wheelchair.

MAINTENANCE AND REPAIRS

General

To ensure that your wheelchair works well, it is important for it to be used correctly and regularly maintained. A well maintained wheelchair lasts longer and has a lower risk of faults.

LifeStand recommends that your wheelchair is serviced at least once a year by a qualified service technician authorized by LifeStand.



CAUTION!

Some repairs may require tools that are not supplied with the wheelchair.



WARNING!

Any unauthorized alterations to the wheelchair and its systems may lead to an increased risk of accident.

All alterations to and interventions in the wheelchair's vital systems must be performed by a qualified service technician authorized by LifeStand. In case of doubt, always contact LifeStand.

Battery / storage

- Please note that a battery discharges itself and that a discharged battery can burst when it is cold.
- The wheelchair must not be stored in areas subject to condensation (steam or moisture on surfaces) for example, utility rooms or similar.
- The wheelchair may be stored in an unheated room. From the point of view of corrosion, it is best for the room to be a few degrees warmer than the surroundings as this keeps the room drier.
- The life of the battery depends entirely on regular charging.

Short-term storage

For the charging process to produce a battery with good capacity, the temperature in the storage room should not be lower than +5 degrees Celsius. If it is stored at a temperature below +5 degrees Celsius, there is a higher risk that the battery has not been fully charged when it comes to be used and also a higher risk of corrosion.

Long-term storage

The battery may be stored in an unheated room but it should be charged at least once a month for maintenance purposes.

Battery replacement

If the number of “stand up cycles“ with a fully charged battery decreases by 50% or more, it might be necessary to replace the batteries. Please contact a LifeStand dealer to have the batteries checked and if needed replaced. Do not attempt to replace the batteries yourself, only a LifeStand dealer is allowed to open the control box.



WARNING!

Any unauthorized alterations to the wheelchair and its systems may lead to an increased risk of accident.

All alterations to and interventions in the wheelchair's vital systems must be performed by a qualified service technician authorized by LifeStand. In case of doubt, always contact LifeStand.

Cleaning

Regular care and maintenance will prevent unnecessary wear and damage to your wheelchair. The following is general advice recommended by LifeStand. For severe soiling of the upholstery or damage to the surface finish, contact LifeStand for information.

Upholstery, fabric

For normal cleaning, wash the upholstery with lukewarm water and a mild non-abrasive soap. Use a soft cloth or brush. Before the surface dries, wipe off any water/soap residues with a clean, dry cloth. This procedure may be repeated to remove stubborn dirt or stains. Ink spots can sometimes be removed by washing with soap and water followed by isopropyl alcohol.

Do not use any cleaning method that is not listed above, as other methods may attack the textile and cause eventual degradation.

If necessary, the cover may be removed before cleaning. See also the washing instructions on the upholstery materials.

Metal surfaces

For normal cleaning it is best to use a soft cloth/sponge, hot water and a mild detergent. Wipe down carefully with a cloth and water, and dry off.

Remove scuff marks from semi-matt surfaces with soft wax (follow manufacturer's instructions).

Remove scuff marks and scratches from shiny surfaces using car polish, either liquid or paste. After polishing, apply soft car wax to restore the original surface gloss.

Plastics

For normal cleaning, wash plastic surfaces with a soft cloth, mild detergent and hot water. Rinse thoroughly and dry with a soft cloth. Do not use solvents or abrasive kitchen cleaners.

Control panel

Use a soft, damp cloth with a mild detergent. Do not use solvents or abrasive kitchen cleaners. The panel must not be rinsed with water or any other liquid.



WARNING!

Never hose the wheelchair down as the electronics may be damaged. The wheelchair must always be turned off when being cleaned.

Wheels

Filling tires with air

Check at regular intervals that the wheelchair's tires have the correct tire pressure. The correct tire pressure provides the best movement and comfort, and a lower risk of puncture. Therefore check regularly that the tires have a pressure of 750kPa (7.5 bar).

1. Unscrew and remove the plastic cap on the tire valve.
2. Connect the compressed air nozzle to the valve and adjust the tire pressure to the correct level.



Filling valve

Changing inner tube

1. Remove the relevant wheel by pressing the button in the center of the wheel axle and at the same time pulling the entire wheel out.
2. Release the air from the tire.
3. Take the tire off the wheel rim.
4. Replace the inner tube.
5. Put the tire back on the wheel rim and fill with air.
6. Replace the wheel by pressing the button in the center of the wheel and at the same time pushing the entire wheel into its mounting on the wheelchair.



WARNING!

The recommended tire pressure is 750 kPa (7.5 bar). Overfilling entails a risk of explosion.

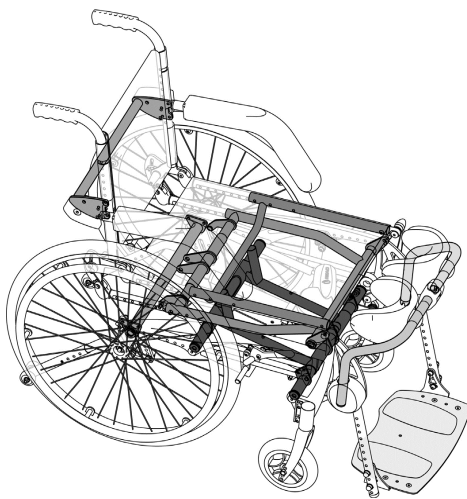
The incorrect tire pressure may result in lower stability and maneuverability.

Check regularly that the tires have the correct pressure.

REUSE

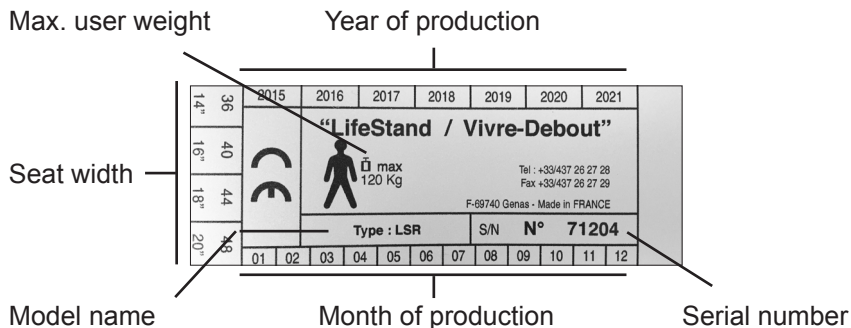
If the wheelchair is transferred to someone else. The other user must firstly undertake the following steps:

- Clean according to our cleaning instructions.
- A qualified service technician authorized by LifeStand must carry out maintenance and maintenance requests if required.
- The wheelchair must only be transferred in a perfect and complete condition, this means with user instructions and all components.
- All settings/positioning must be carried out through a qualified service technician authorized by LifeStand.



Reuse

SERIAL NUMBER LABEL



TECHNICAL SPECIFICATIONS

General

Product nameLSR

Dimensions and weight

Max. user weight120 kg

Seat width36/40/44/48 cm

Seat depth41/43/45/47/49/51/53/55 cm

Seat angle6°

Safe slope.....8,5 °

Overall width58 - 70 cm

Overall length96 - 106 cm

Overall height84 - 104 cm

Weight32 kg

Weight of the heaviest part.....2 kg

Wheels

Rear tire dimensions24"x1"

Camber.....0°

Rec. tire pressure750 kPa (7.5 bar)

Power Module

IP24

Output: 24V  /8A max

Operation mode: 10%, 2min/18min

Battery

Maintenance-free VRLA AGM battery

12V 2Ah (x2) protected by 10A fuse

Control Panel

Control force: 1,5N

