

Instructions for Use  
Multifunctional Wheelchair



**Serena**



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## **General information**

### **Preliminary remarks**

Thank you for having chosen a wheelchair from **Redgumbrand**

The Serena multifunctional wheelchair sets new standards in terms of flexibility and quality. The wheelchair convinces through its sophisticated construction. Due to its smooth-running functions and the individually adaptable seating position, the Serena multifunctional wheelchair is ideally suited for persons who are no longer capable of looking after themselves independently. The solid frame construction combined with the light-weight design offers maximum comfort both for the user and the assisting person.

Before operating the unit for the very first time, please read this manual carefully.

You will obtain vital safety instructions and valuable advice on the right use and maintenance of the wheelchair. If you have questions or require additional information, please contact the specialist retailer that supplied the wheelchair.

These instructions for use contain all information required to adjust and operate the Serena multifunctional wheelchair.

### **Declaration of conformity**

We declare under our sole responsibility that the Serena wheelchair described here conforms to the EU directive 93/42 for medical products.

### **Purpose**

The Serena wheelchair can be used both indoors and outdoors and serves for moving people with impaired mobility. Due to manifold setting possibilities and its easy handling, the Serena wheelchair facilitates mobility for care patients.

The wheelchair is designed for a maximum load of 130kg. You can verify this information on the label.

### **Indication**

Inability to walk or severe walking disability as a result of



- paralysis,
- loss of limbs,
- meromelia/limb deformation,
- joint contractures/damage to joints (not on both arms),
- other ailments.

## Contraindication

Use of the wheelchair is not suited for

- perception disorders,
- severe disturbances of equilibrium,
- loss of limbs on both arms,
- joint contractures/damage to joints on both arms,
- inability to sit.

## Signs and symbols

	Caution! Indicates information that is particularly relevant to safety. Follow the instructions for use.
	Important! Indicates information that is particularly useful in the respective context.

## Liability

**Redgumbrand** only assumes liability when products are used in accordance with the specified conditions and for the aforementioned purposes. We recommend using the products properly and maintaining them in compliance with these instructions. **Redgumbrand** does not assume liability for damage caused by components and spare parts not approved by **Redgumbrand**. Repairs may only be carried out by authorised specialist retailers or by the manufacturer themselves.

## Safety notes

In order to avoid toppling and dangerous situations, you should practice safe handling of your new wheelchair on a flat and familiar surface. In such case, an assisting person is recommended.

- Never leave children and youngsters unattended in the wheelchair.
- Prior to using the wheelchair, please check whether all parts attached have been fastened properly.
- The first attempts at moving the wheelchair should take place on a level and manageable surface.
- Familiarise yourself thoroughly with the function of the brakes.
- Please note that padded parts can become hot in direct sunlight and lead to skin injury on contact. Therefore, cover these parts or protect the wheelchair from direct sunlight.
- The wheelchair may not be misused for transporting several persons or loads. Observe the specific function of the wheelchair.

- Never use your wheelchair while under the influence of alcohol or other substances that may influence your ability to react or your physical and mental receptiveness.
- Please note that redistribution of weight due to body movements or loading the wheelchair can increase the risk of tipping over.
- By all means, use ramps to avoid obstacles.
- Cross grooves, tracks and similar impassibilities in a right angle (90°), if you cannot move around them.
- There is a danger of tipping over to the rear starting at an angle of 13°.
- To enhance the stability against tipping over to the rear, the anti-tippers must be mounted in the correct position.
- Avoid wheeling against obstacles (steps, kerbs) at full speed, as the occupant may fall out forward.
- Never stand on the foot plates to get in and out.
- Take note of a sufficient profile depth of your tyres (>1mm).
- Observe the road traffic regulations when on the road.
- The passive lighting on the wheelchair must at all times be visible to other road users.
- If possible, wear bright, noticeable clothes. You will then be seen better by other traffic participants.
- Do not use high-pressure cleaning devices or harsh, corrosive chemicals to clean the wheelchair!

## Product and delivery overview

### Inspection of delivery

The wheelchair is completely packed in a cardboard box. Please keep the packing, if possible, it may serve for storing the wheelchair at a later time.

Upon receipt, immediately check the content for completeness and sound condition. The content consists of:

- 1 covering box,
- 1 wheelchair preassembled,
- 1 seat cushion,
- 1 back cushion,
- 1 pair of side pads (optional accessory),
- 1 abduction pad (optional accessory),
- 1 headrest,
- 1 extension cushion (for seat depth 55cm),
- 1 pair of legrests,
- 1 instructions for use,
- 1 set of tools.

### Labelling and type plates

Type and manufacturer plates are mounted to the framework under the seat.



Plates must remain readable. Immediately replace unreadable or missing plates. The type plate is very important for identifying the product. It may not be removed.



## Features of the Serena wheelchair



1	Headrest	7	Foot plate	13	Armrest
2	Seat cushion	8	Steering wheels	14	Side part
3	Legrest	9	Seat & back adjustment	15	Drive wheels
4	Knee lever brake	10	Push handle	16	Quick-release axle
5	Calf pad	11	Assistant brake	17	Tip assist
6	Heel strap	12	Back cushion	18	Anti-tip roll

## Preparing the operating condition

Generally, your wheelchair is delivered completely assembled, folded. To make it ready for use, just a few easy and simple handgrips are required.



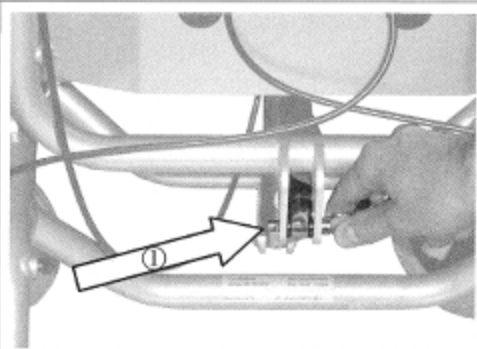
**Danger of getting trapped!**

Watch your fingers when folding and setting up the wheelchair and only grasp the parts illustrated.

### Backrest

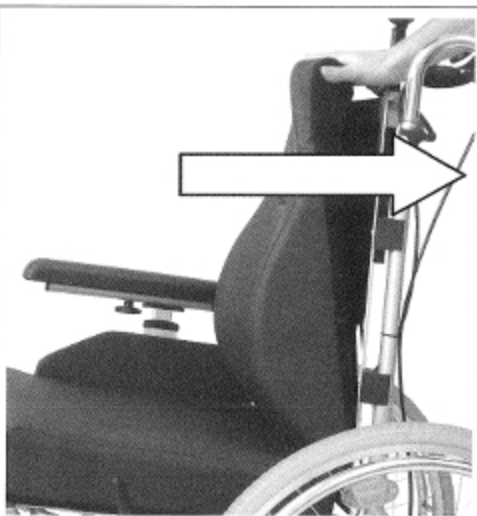
The backrest can be folded down to transport the wheelchair in a space saving manner.

To restore the function of the backrest, fold the backrest upwards again and fasten it to the gas spring with the connecting pin<sup>Ⓢ</sup>.



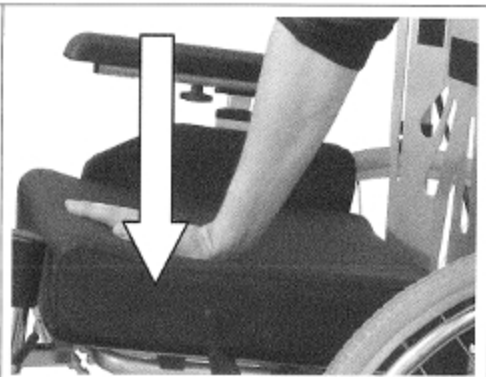
### Back cushion

The back cushion is secured to the backplate by means of a Velcro tape.



### Seat cushion

The seat cushion is secured to the seatplate using a Velcro tape. Make sure the seatplate ends flush with the backplate.

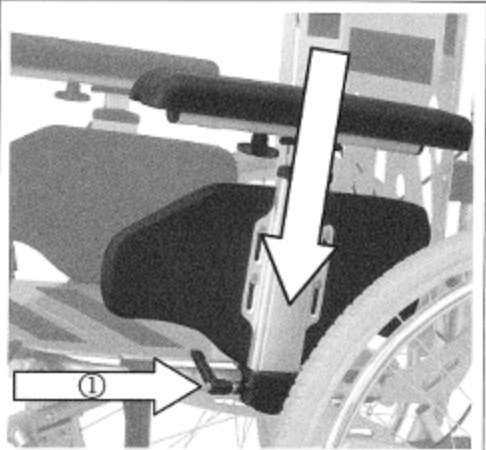


### Side parts

The side parts can be fixed with just a few handgrips.

To do this, move the side parts into the provided mounts.

Tighten the lever screw ① to attach the side part.

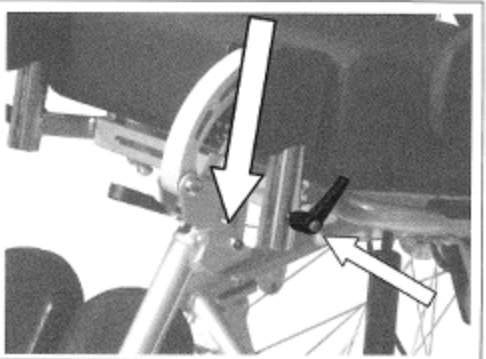


### Legrests

Mount the legrests in the front.

Make sure the legrests are firmly locked in position.

Fasten the legrests with the lever screw.

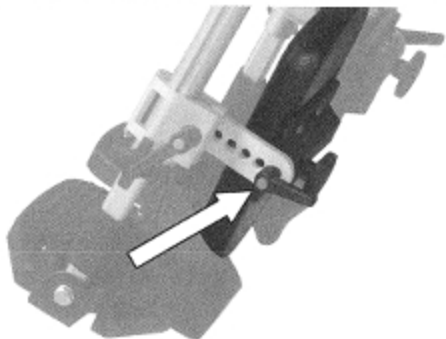


### Calf pads

The calf pads can be mounted with just a few handgrips.

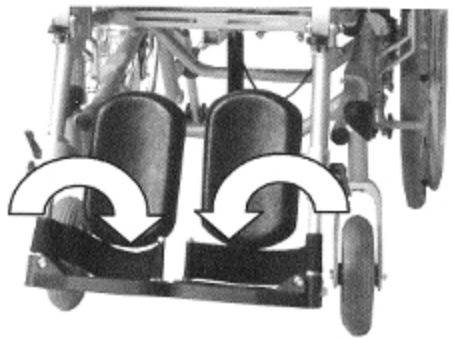
Insert the calf pad into the provided borehole on the legrest.

To attach the calf pad, tighten the lever screw.



### Foot plates

Tilt down the foot plates.

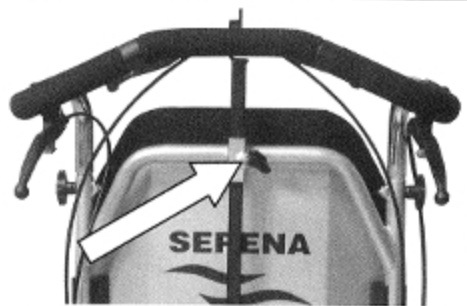


### Headrest

The headrest can be mounted quickly and easily.

Insert the fastening rod of the headrest into the opening on the backplate.

Tighten the lever screw to mount the headrest.



## Initial settings

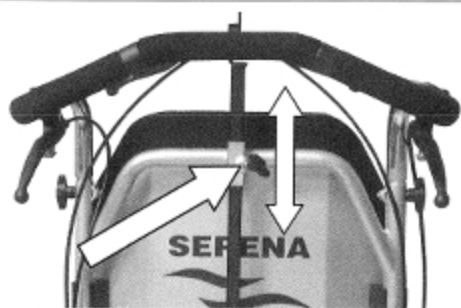
### Headrest

Both angle and position of the headrest can be adapted to the user.

#### Height of the headrest

Loosen the butterfly screw with which the headrest is fastened.

Move the headrest into the desired height position, then tighten the screw again.

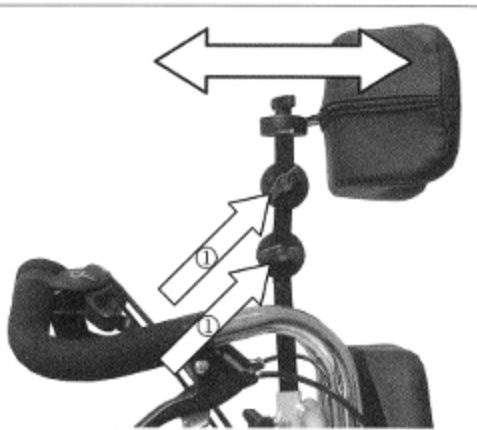


#### Depth of the headrest

Loosen both butterfly screws at the fastening of the headrest.

Move the headrest to the front or rear until the desired position is reached.

Tighten the butterfly screws screw again to lock the headrest in place.



### Angle of the headrest

You can tilt the headrest forwards.

To do this, loosen one of the two butterfly screws① and swivel the headrest forwards or backwards.

To lock the headrest in the desired position, tighten the screw again.



In addition, the headrest can be pivoted to the left or the right.

To do this, the butterfly screw② at the headrest must be loosened.

When you have moved the headrest into the desired position, fasten it again by means of the butterfly screw.



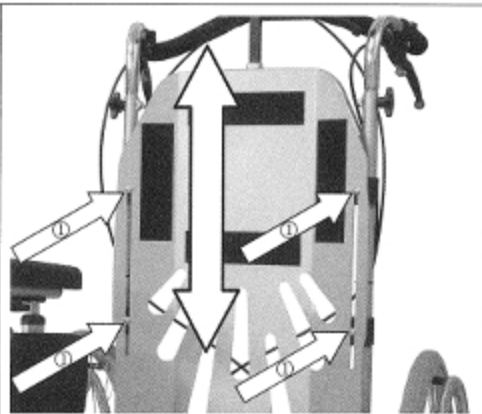
## Backplate

The backplate can be mounted on the back tube at two different height positions. In addition, the backplate is continuously adjustable in height. As a result, the Serena wheelchair also offers smaller persons a high degree of freedom of movement in the shoulder area.

To adjust the position of the backplate, you must first remove the back cushion.

Loosen the four fastening screws ① on the inside of the backplate, then move the backplate into position.

Tighten all screws screw again to fasten the backplate.



## Push handle

The push handle can easily be adapted to the requirements of the assisting person.

Loosen the butterfly screws on both sides of the push handle and take them out. Move the push handle into the desired position, then insert the butterfly screws into the boreholes again.

Make sure to tighten the butterfly screws again.



### Side pads (optional)

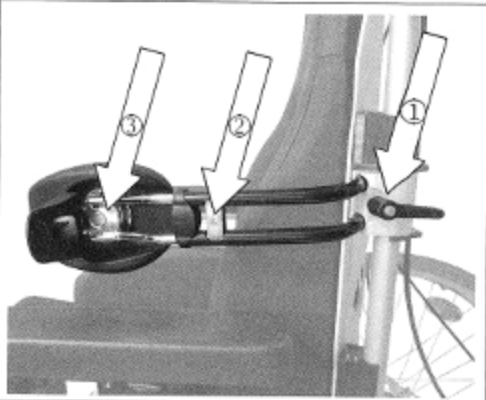
The side pads can be adjusted in height, width, depth and angle and thus be optimally adapted to the anatomical conditions of the user.

Loosen the lever screw① to adjust the height and width.

Unscrew the hexagon socket screw② to adjust the depth.

Loosen the hexagon socket screw③ to adjust the angle.

Tighten the screws again after you have carried out the desired adjustments.



### Armrests

The armrests can be adapted both in height and in their distance from the backrest to allow for comfortable seating without fatigue.

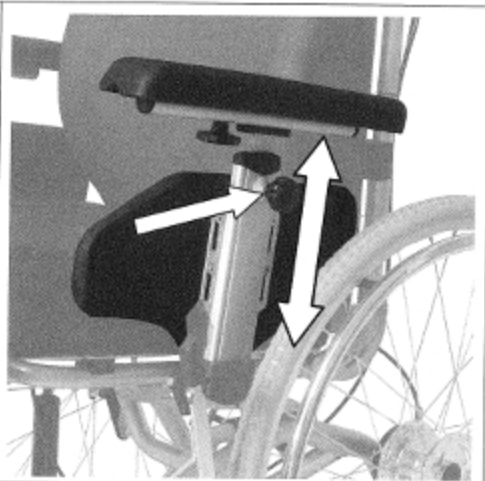
Height of the armrests

To adjust the height of the armrests, you must first loosen the star screw.

By pulling the star screw, you unlock the armrest position and can adjust the armrest in height.

Make sure the star screw clicks into place audibly when the desired height is reached.

Tighten the star screw again.



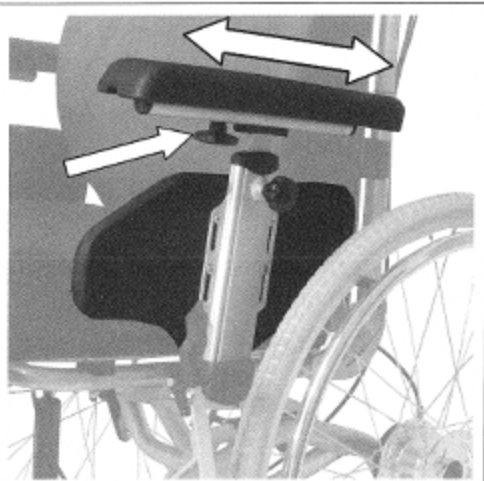


### Distance from the Backrest

The distance of the armrest from the back cushion can be adapted to your requirements.

Loosen the star screw and move the armrest into the desired position.

Finally, tighten the star screw again.

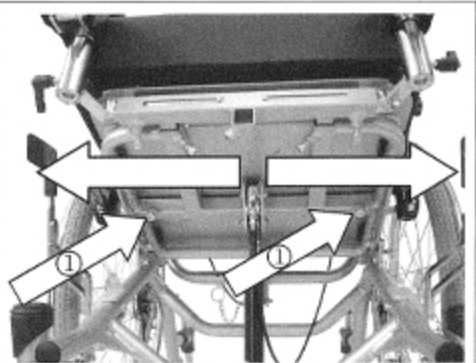


### Side parts

You can adjust the position of the side parts to your requirements.

Loosen the fastening screw ① under the seat and move the side part further towards the inside or outside.

Tighten the fastening screw again.



### Seat depth

To adjust the seat depth, a seat cushion extension is used in addition to fill the gap between the seat cushion and the backrest.

Detach the legrests and remove the seat cushion.

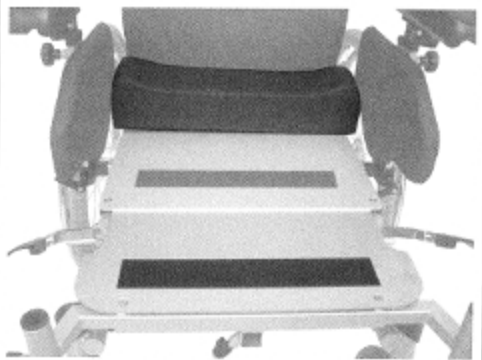
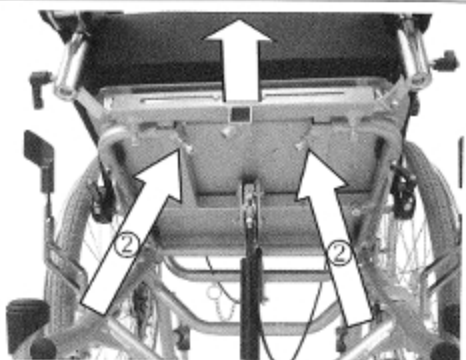
Unscrew the fastening screws ② underneath the seating surface.

Pull out the whole front structure as far as it will go.

Tighten the fastening screws ② again.

Place the small seat cushion onto the seating surface at the backrest.

Position the seat cushion on the seating surface again.

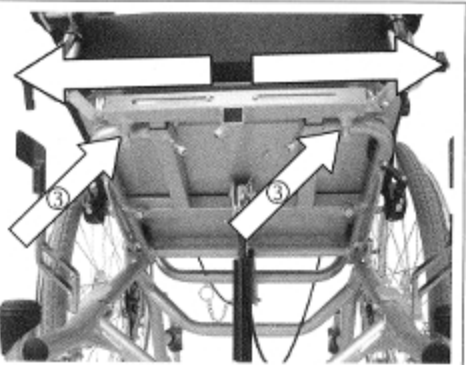


### Legrests

You can adjust the position of the legrests to your requirements.

Loosen the fastening screw ③ under the seat and move the side part into position.

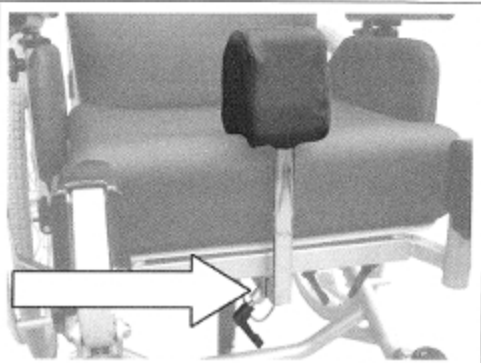
Tighten the fastening screw again.



**Abduction pad (optional)**

The abduction pad can be ordered as an optional accessory.

It can be mounted at the front of the seat. Move the pad into the desired position, then tighten the lever screw again.

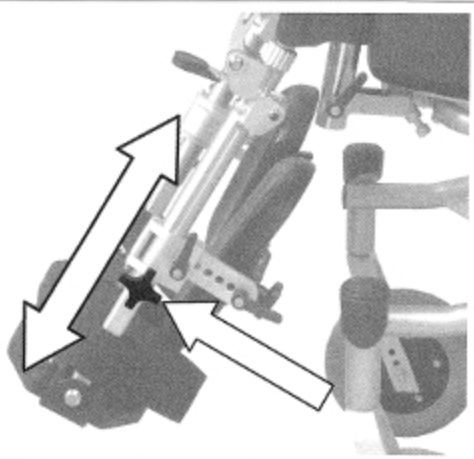
**Lower leg length**

The adjustment is right, when your thighs are horizontal with both feet resting on the footplate.

Loosening the butterfly screw allows you to easily adapt the lower leg length. Tighten the butterfly screw again after you have carried out the desired adjustment.

To modify the lower leg length, remove the butterfly screw completely.

Move the legrest into the desired position, then tighten the screw again.



### Calf pads

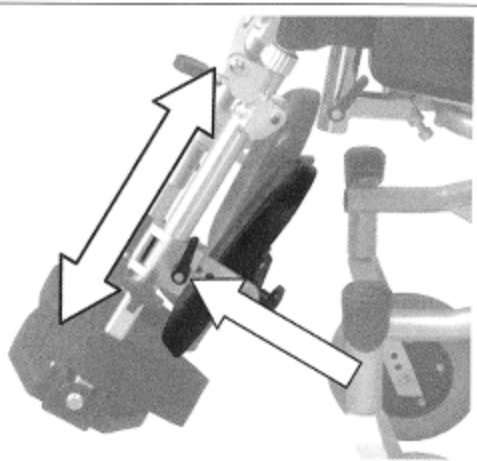
You can adjust the calf pads both in height and in depth.

#### Height

To adjust the height of the calf pads in line with your needs, loosen first the lever screws.

You now may move the position of the calf pads in upward or downward direction.

Finally, tighten the lever screw again.

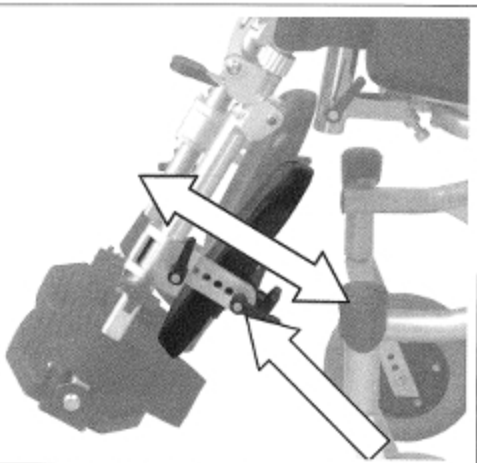


#### Depth

The depth of the calf pads can be adjusted with just a few handgrips.

Loosen the lever screw and move the calf pad into the desired position.

Finally, tighten the lever screw again.



## Steering wheels

The height of the steering wheels can be adjusted in three steps.

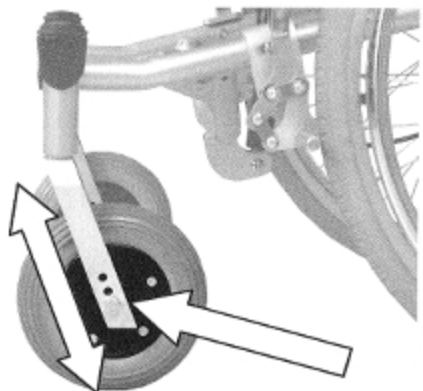


**Danger of tipping over!**

The danger of tipping over to the front may increase when adjusting the height of the steering wheels.

Remove the screws of the wheel axle and pull them out.

Mount the wheel in the desired height, then tighten the screws again.



## Using your wheelchair

### Seat & back angles

The seat unit and the backrest angle can be continuously adapted in their angle due to the support of a gas spring.



When adjusting the seat or back angle, hold the push handle with both hands; otherwise there is a danger of tipping over.



The adjustment can only be carried out under pressure applied by the user.

### Seat angle

To prevent the wheelchair from rolling away accidentally, operate the locking brakes first.

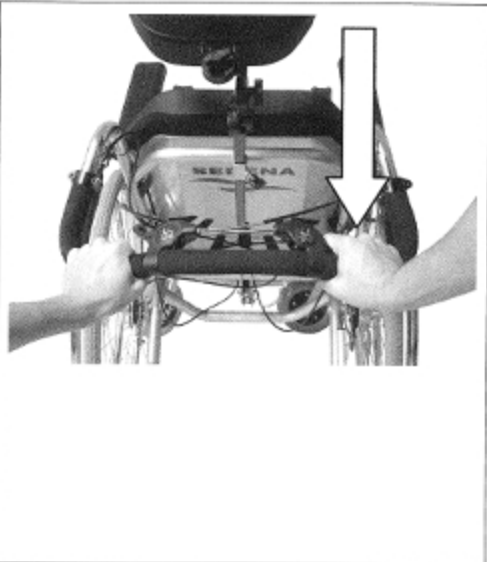
Hold the push handle with both hands.

Operate the right lever to continuously adjust the inclination of the seat.

Set the desired inclination of the seat by pushing the push handle in up or downward direction.

Release the lever in the desired position.

Check the position found so that it is firmly in place.



### Back angle

To prevent the wheelchair from rolling away accidentally, operate the locking brakes first.

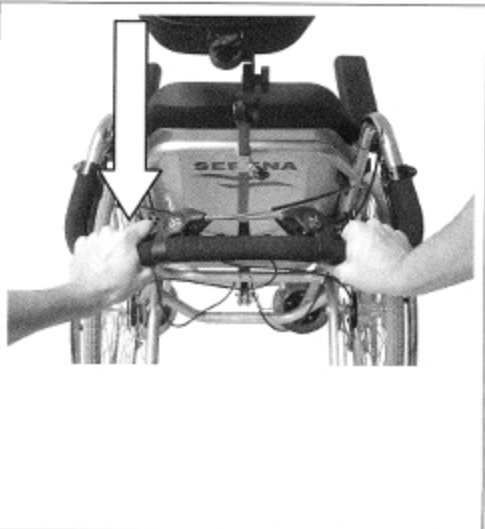
Hold the push handle with both hands.

Operate the left lever to continuously adjust the backrest.

Set the desired inclination by pushing the push handle in up or downward direction.

Release the lever in the desired position.

Check the position found so that it is firmly in place.

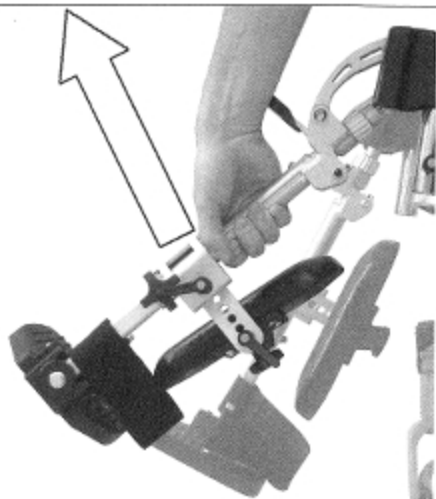


## Legrests

### Folding the legrests up

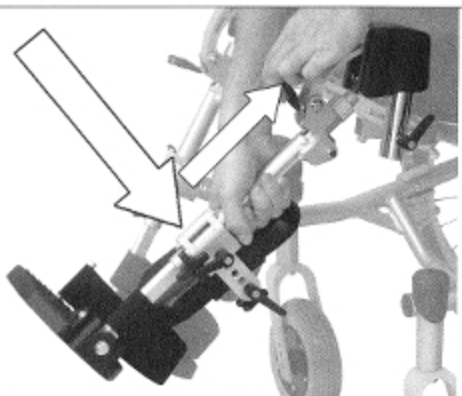
To fold the legrests up, move them upwards into the desired position.

The legrest will lock into place automatically.



### Folding the legrests down

To fold the legrest down again, adjust the lever and press the legrest downward.



### Removing the legrests

To remove the legrests, first fold the foot plates upwards.

Loosen the lever screw on the side of the legrests.

Pull the legrests in upward direction.

For assembly proceed in reverse order.

Make sure the legrests are firmly locked in position.

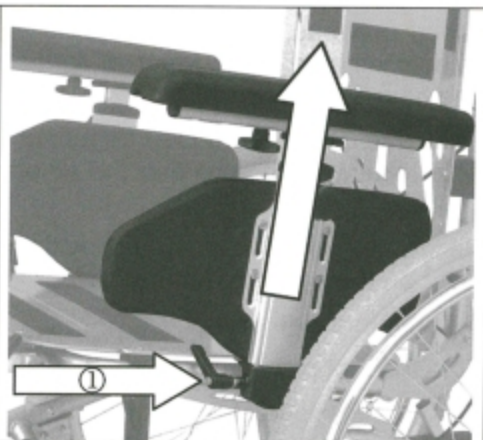


### Removing the side parts

The side part can be removed to facilitate getting in and out.

To do this, loosen the lever screw ① and detach the armrests.

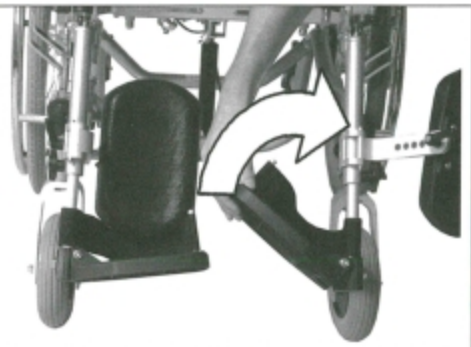
Make sure to tighten the lever screw again after the subsequent mounting.





### Folding the foot plates

Fold up the foot plates to facilitate getting in and out.



### Getting in and out

Getting in and out from the side

The wheelchair allows you to easily get in and out. The foot plates can be folded upwards, and the side parts and legrests can be removed. Place the wheelchair and the current or future seating surface as close beside one another as possible.

Should you wish to transfer from another wheelchair or another seating to the wheelchair, make sure that the wheels are secured by applying the locking brake.

Secure the wheelchair against accidental rolling away by adjusting the brake lever on the right and left-hand side.

Remove the side part.

Fold the foot plates upwards.

Remove the legrests. (Pivot the legrests of the other wheelchair or remove them if necessary, when you wish to transfer from one wheelchair to the other.)

Now slide sideways onto the seating surface.

Make sure you are sitting in the seat as far back as possible.

Finally, mount the side part and the legrests in their home position again.

Getting in and out from the front

Fold the foot plates upwards and remove the legrests. (Description see above.)

Place the wheelchair and the current or future seating surface as close to the front of one another as possible.

Should you wish to transfer from another wheelchair or another seating to the wheelchair, make sure that the wheels are secured by applying the locking brake.

Now slide onto the seating surface by twisting your body. Make sure you are sitting in the seat as far back as possible.

Finally, mount the legrests again, fold the foot plates down and rest your feet thereon.

### **Pushing the wheelchair and slowing down**

Pushing and slowing down with the help of an assisting person

If the wheelchair is steered by an assisting person, the assisting person has the possibility to use the available drum brake as main and locking brakes. This is particularly very advantageous when moving on slopes. The assisting person moves ahead the wheelchair by pushing the provided push handles.

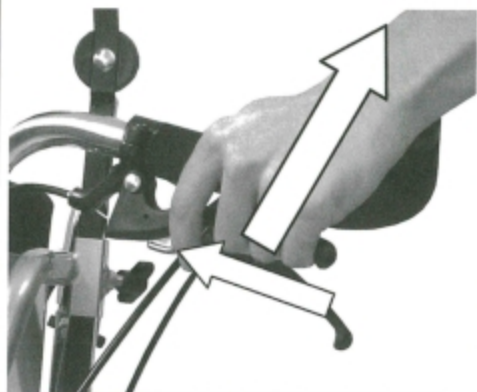
The speed can be slowed down at a controlled rate by operating the brake lever to a higher or lesser degree as required.



When in parking position, the brakes on both sides are locked by pushing the brake lever downward. Subsequently, move the metal button on the brake unit to the front.

The brake lever can now be released and will remain in its position.

To release the locking brake, operate the brake lever only once.



Moving ahead and slowing down without the help of an assisting person

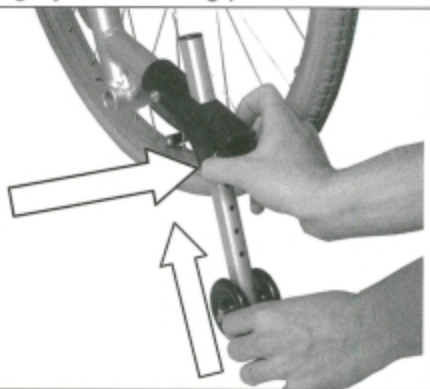
The occupant can move the wheelchair ahead by himself using the push rim. To slow down the wheelchair, the push rims can be used.

#### Anti-tilt wheels

The anti-tilt wheels prevent the wheelchair from tipping over to the rear. In addition, they can be used to facilitate tipping by an assisting person.

The wheels can be adjusted in height.

Pull the silver discs towards yourself and move the pipe along the mount in up or downward direction.



### Tip assists

The tip assists allow the assisting person to tip the wheelchair more easily and hence cross obstacles more easily.

Move the anti-tilt wheels into the topmost position first.

Step onto the lever with one foot and keep the balance using the push handle.



### Locking brake

The locking brake enables the user to park the wheelchair safely.

Apply the locking brake mechanism when the wheelchair stands still (tyre brake). For this purpose, push the lever forward until it locks by itself.

Now the wheelchair keeps locked, and you can transfer to another wheelchair or seating surface or park it.

You can release the locking brake by retracting the lever.



In a braking position



In a non-braking position

### Transport and folding

For transportation in a passenger car or simply to clear space, the backrest can be folded. It then only takes little space and can be easily stowed away.

In addition, the drive wheels can be removed easily.

Leave the wheelchair.

Remove the seat and back cushions. To do so, simply detach the cushions.

Pull out the attachment pin in the rear on the backrest.

Now you can fold the backrest.



To set up the backrest, please observe the instructions given under the chapter "Preparing the operating condition".

Make sure your wheelchair is secured against tipping over before detaching the drive wheels.

Press the black button on the quick-release axle to loosen the connection.

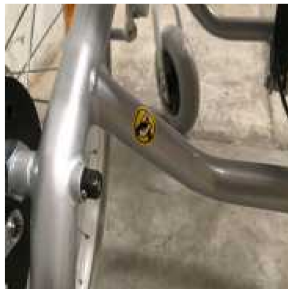
Subsequently, pull out the drive wheel.



**Transporting with a person**

This wheelchair meets the standard for being used as a seat within a authorised transport vehicle (ISO 7176-19). **Please note** - the vehicle being used to transport the wheelchair must be fitted with the correct rated safety straps and vehicle restraints for that vehicle. (this includes at a minimum a rated lap sash belt restraint)

It is also important to be aware of the nominated tie down points on the Serena Tilt In Space chair - refer the images below for the locations of these points



Front Castor Tie Down

Rear Bar Tie Down Point

Backrest Tie Down Point

## Safety belt

Optionally, a safety belt can be mounted. A safety belt safeguards and stabilises the person sitting in the wheelchair, since it prevents the user against tipping forward out of the wheelchair.

The safety belt is secured to the back tube in the rear on the right and left-hand side. Subsequent mounting of a safety belt should be carried out by a specialist retailer.

To unfasten the safety belt press the red button.

The length of the belt can be adjusted by moving the buckle and pulling the end of the belt.

The safety belt should not be fastened too tightly.



## Adjustments

Only trained specialists should adjust brakes. However, should you have sufficient experience; you may also carry out this adjustment yourself.



Caution! Incorrectly adjusted brakes may result in life-endangering consequences.

## Locking brake

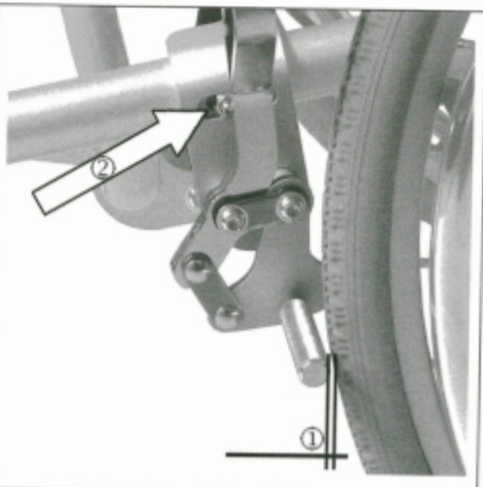
The distance between the brake bolts and the tyre cover must be 5mm at the narrowest point when the brake mechanism is opened to its maximum①.

To adjust/correct the distance, loosen the screw②.

Move the brakes into the correct position.

Afterwards, tighten the screw again and check the brake function.

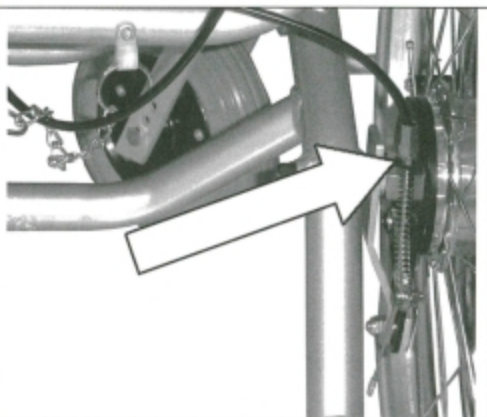
If the brake is in place, the wheelchair should be immovable.



### Drum brake

To achieve an optimum braking effect, the brake force is adjusted at the adjusting screw.

The brake effect is increased by unscrewing the adjusting screw.



Caution!

Make sure that there is equal adjustment on both sides of the wheelchair.



## Advice on product care

### Cleaning

- The frame parts of the wheelchair can be wiped using a damp cloth. In case of heavy soiling, use a mild cleaning agent.
- To clean the wheels use a damp brush with plastic bristles (do not use a steel brush!).
- The padding materials can be washed up to 40°C with mild soap solution and sanitised with disinfecting agents on an alcohol basis, where required.



Do not use a high-pressure or vapour cleaning device!

### Checking the wheelchair by user

Prior to each use, please check

- that the tyres are in order and have sufficient air pressure (given optional pneumatic tyres). Regularly check the profile depth of the tyres once a month. The profile depth should measure at least 1mm. Defective or worn tyres must be replaced.
- the operational reliability of the brakes. If the brake is in place, the wheelchair should be immovable. If the brake is released, the wheelchair should be easy to push. Should you notice any unfamiliar braking behaviour, immediately inform your specialist retailer and do not use the wheelchair any longer.
- the sound condition and cleanliness of the seat and backrest padding. If these are soiled, you can clean them in accordance with the instructions for cleaning. If they are damaged, contact your specialist retailer.
- all mobile parts for smooth movement and low-noise functioning. Squeaking noises indicate damage and should be examined with regard to their causes by a specialist retailer.
- all screw couplings and bolted connections are tight.

### Service notes for specialist retailers

We recommend having your whole wheelchair inspected by a specialist retailer once a year. In case of faults and defects on your wheelchair, return it to your specialist retailer immediately for repair.



In case of queries, please contact **your supplier**

phone No :



Use the enclosed service record to have an overview of the service status of your wheelchair.

### Disposal

If your wheelchair is not used anymore and is to be disposed of, please enquire from local disposal companies about the applicable regulations.

## Technical data

Model	Serena
<b>Measurements and weights</b>	
Seat width	40-45 (continuously adjustable) 48-53 (continuously adjustable)
Seat depth	45/55cm
Seat height	53cm
Seat angle	from 3° to the front to 33° to the rear (adjustable via a gas pressure cylinder)
Back angle	from 4° to the front to 35° to the rear (adjustable via gas pressure cylinder)
Overall width	61/69cm
Total length (incl. legrests)	131cm
Total length (without legrests)	101cm
Overall height	117cm
Backrest height	53-58cm
Armrest width	6cm
Armrest length	36cm
Lower leg length	40-48cm (continuously adjustable)
Weight empty	41kg
Max. load	130kg
<b>Tyres</b>	
Drive wheels	24" x 1 <sup>3</sup> / <sub>8</sub> " (solid)
Steering wheels	7" x 2" (solid)

Subject to technical modifications

## Service record

(Please use, if possible, the service codes provided on the bottom of this page for filling in the columns)

When													
What													
Reflectors, lateral													
Reflectors, rear													
Drum brake													
Occupant brake lever													
Assistant brake lever													
Push handles													
Side part, complete													
Seat cover													
Backrest cover													
Front/steering wheels													
Rear/drive wheels													
Tyre pressure <small>(for pneumatic tyres)</small>													
Tyre cover													
Push rim													
Framework, general													
Who													

C = checked S = substituted R = repaired



## Warranty

This warranty covers all defects in the product that are shown to be caused by material or production defects. The warranty period is 12 months from receipt of the notification of readiness for despatch or from delivery at the latest. Our warranty obligations do not include damage caused by natural wear and tear, with intent, by negligent or improper operation or use. The same applies to the use of inappropriate care products, lubricants or grease. In the case of complaints, please return the product together with the warranty slip completely filled in (see below).

**Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement part for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and failure does not amount to major failure.**

x

Guarantee slip	
Product:	Model designation
	Serial number
Specialist retailer:	
	Date and stamp
Send to:	